Analytical Resources, Incorporated
Analytical Chemists and Consultants

17 June 2021

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

RE: Gasco Siltronic - US Moorings

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

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

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

Associated Work Order(s)	Associated SDG ID(s)
21E0106	N/A

Shelly Fishel

Digitally signed by Shelly Fishel
Date: 2021.06.17 15:25:31 -07'00'

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

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

Analytical Resources, Inc.

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

Shelly Fishel, Project Manager

Cert# 100006-012

ANCHOR QEA
1201 3rd Avenue, Suite 2600, Seattle, WA 98101

21E0106

ENVIRONMENTAL SAMPLE CHAIN OF CUSTODY

COC ID: ARI-20210504-142706

POC: # Delaney Peterson (360-715-2707)
1605 Cornwall Avenue, Bellingham, WA 98225

Project: GascoSiltronic: US Moorings
Client: NW Natural

Sample Custodian: HS
Lab: Analytical Resources Inc.

COC Sample Number	Field Sample ID	Sample Type	Matrix	Collected Date	Collected Time	# Containers	Lab QC*	Test Request	Method	TAT**	Preservative
001	USMPDI-028SG-210504	N	SE	05/04/2021	0:00	1	☐				
								PAHs and Alk. PAHs	SW8270ESIM	30	4°C
								TPH	NWTPHDx	30	4°C
								Total solids (ARI)	SM2540G	30	4°C
002	USMPDI-030SG-210504	N	SE	05/04/2021	0:00	1	☐				
								PAHs and Alk. PAHs	SW8270ESIM	30	4°C
								TPH	NWTPHDx	30	4°C
								Total solids (ARI)	SM2540G	30	4°C
003	USMPDI-031SG-210504	N	SE	05/04/2021	0:00	1	☐				
								PAHs and Alk. PAHs	SW8270ESIM	30	4°C
								TPH	NWTPHDx	30	4°C
								Total solids (ARI)	SM2540G	30	4°C
004	USMPDI-035SG-210504	N	SE	05/04/2021	0:00	1	☐				
								PAHs and Alk. PAHs	SW8270ESIM	30	4°C
								TPH	NWTPHDx	30	4°C
								Total solids (ARI)	SM2540G	30	4°C

Comment:

Relinquished By:	Received By:	Relinquished By:	Received By:	Relinquished By:	Received By:
Signature	Signature	Signature	Signature	Signature	Signature
Print Name C. OREICO	Print Name Jacob Heath	Print Name	Print Name	Print Name	Print Name
Company AQ	Company ARI	Company	Company	Company	Company
Date/Time 5/5/21 930	Date/Time 05/06/2021 1140	Date/Time	Date/Time	Date/Time	Date/Time

* Lab QC Requested for sample when box is checked ** TAT = Turn Around Time in DAYS # POC = Project Point of Contact

Date Printed: 5/4/2021

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Cooler Receipt Form

ARI Client: Anchor QEA

Project Name: Gasco Siltronic : US Moor. Mgs

COC No(s): _____ NA

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

Assigned ARI Job No: 21E0106

Tracking No: 7736 4251 1616 NA

Preliminary Examination Phase:

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

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

Time 1140 1.8

If cooler temperature is out of compliance fill out form 00070F

Temp Gun ID#: DOO506

Cooler Accepted by: JS Date: 05/06/2021 Time: 1140

Complete custody forms and attach all shipping documents

Log-In Phase:

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

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

Samples Logged by: JS Date: 05/07/2021 Time: 1435 Labels checked by: JS

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

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

Additional Notes, Discrepancies, & Resolutions:

By: Date:

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Anchor QEA, LLC	Project:	Gasco Siltronic - US Moorings	
1201 3rd Ave, Suite 2600	Project Number:	[none]	**Reported:**
Seattle, WA 98101	Project Manager:	Delaney Peterson	06/17/2021 08:03

ANALYTICAL REPORT FOR SAMPLES

Laboratory ID	Sample ID	Matrix	Date Sampled	Date Received
21E0106-01	USMPDI-028SG-210504	Solid	05/04/21 00:00	05/06/21 11:40
21E0106-02	USMPDI-030SG-210504	Solid	05/04/21 00:00	05/06/21 11:40
21E0106-03	USMPDI-031SG-210504	Solid	05/04/21 00:00	05/06/21 11:40
21E0106-04	USMPDI-035SG-210504	Solid	05/04/21 00:00	05/06/21 11:40

Anchor QEA, LLC	Project: Gasco Siltronic - US Moorings	
1201 3rd Ave, Suite 2600	Project Number: [none]	**Reported:**
Seattle WA, 98101	Project Manager: Delaney Peterson	17-Jun-2021 08:03

Case Narrative

Client: Anchor QEA, LLC
Project: Gasco Siltronic - US Moorings
Work Order: 21E0106

Sample receipt

Samples as listed on the preceding page were received 06-May-2021 11:40 under ARI work order 21E0106. For details regarding sample receipt, please refer to the Cooler Receipt Form.

Alkyl PAH - EPA Method SW8270E-SIM

The sample(s) were extracted and analyzed within the recommended holding times.

Initial and continuing calibrations were within method requirements.

Internal standard areas were within limits.

The surrogate percent recoveries were within control limits except Perylene-d12 which was out of control low in the method blank (BLK) and has been flagged.

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

The blank spike (BS/LCS) percent recoveries were within control limits except Naphthalene, 2-Methylnaphthalene, Indeno(1,2,3-cd)pyrene and Dibenzo(a,h)anthracene which were out of control low and have been flagged.

Sample specific QC was performed in association with sample 21E0106-02 in batch BJE0383. The matrix spike/matrix spike duplicate (MS/MSD) percent recoveries were within advisory control limits except Fluorene, Phenanthrene, Fluoranthene and pyrene which were out of control low and Anthracene which was out of control high and have been flagged . The MS/MSD relative percent difference (RPD) were within advisory control limits.

Wet Chemistry

The sample(s) were prepared and analyzed within the recommended holding times.

Initial and continuing calibrations were within method requirements.

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

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

Diesel/Heavy Oil Range Organics - WA-Ecology Method NW-TPHDx

The sample(s) were extracted and analyzed within the recommended holding times.

Initial and continuing calibrations were within method requirements.

The surrogate percent recoveries were within control limits.

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

Anchor QEA, LLC	Project: Gasco Siltronic - US Moorings	
1201 3rd Ave, Suite 2600	Project Number: [none]	**Reported:**
Seattle WA, 98101	Project Manager: Delaney Peterson	17-Jun-2021 08:03

Case Narrative

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

Anchor QEA, LLC	Project: Gasco Siltronic - US Moorings	
1201 3rd Ave, Suite 2600	Project Number: [none]	**Reported:**
Seattle WA, 98101	Project Manager: Delaney Peterson	17-Jun-2021 08:03

Case Narrative

QUALIFIERS AND NOTES

Qualifier	Definition
U	This analyte is not detected above the reporting limit (RL) or if noted, not detected above the limit of detection (LOD).
J	Estimated concentration value detected below the reporting limit.
E	The analyte concentration exceeds the upper limit of the calibration range of the instrument established by the initial calibration (ICAL)
D1	Surrogate was not detected due to sample extract dilution
D	The reported value is from a dilution
*	Flagged value is not within established control limits.
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference

Analytical Resources, Incorporated
Analytical Chemists and Consultants

USMPDI-028SG-210504

Form I
ORGANIC ANALYSIS DATA SHEET
EPA 8270E-SIM
Alkyl PAH Parents

Laboratory:	Analytical Resources, Inc.				
Client:	Anchor QEA, LLC				
Project:	Gasco Siltronic - US Moorings				
Matrix:	Sediment	Laboratory ID:	21E0106-01 A	SDG:	21E0106
Sampled:	05/04/21 00:00	Prepared:	05/17/21 13:40	File ID:	NT1421060710.D
% Solids:	47.16	Preparation:	EPA 3546 (Microwave)	Analyzed:	06/07/21 19:42
Batch:	BJE0383	Sequence:	SJF0173	Initial/Final:	21.22 g Wet / 0.5 mL
Instrument:	NT14	Column:	ZB-5MS	Calibration:	EF00008
Cleanups:	GPC, Silica Gel				

CAS NO.	COMPOUND	DILUTION	CONC: (ug/kg dry)	Q	DL	RL
493-02-7	trans-Decalin	5	25.0	U	0.1	25.0
493-01-6	cis-Decalin	5	25.0	U	2.4	25.0
91-20-3	Naphthalene	5	8.7	J, D	2.2	25.0
90-12-0	1-Methylnaphthalene	5	2.9	J, D	1.9	25.0
91-57-6	2-Methylnaphthalene	5	4.1	J, D	2.2	25.0
92-52-4	Biphenyl	5	25.0	U	1.7	25.0
581-42-0	2,6-Dimethylnaphthalene	5	25.0	U	1.9	25.0
208-96-8	Acenaphthylene	5	4.1	J, D	1.3	25.0
83-32-9	Acenaphthene	5	9.4	J, D	2.3	25.0
132-64-9	Dibenzofuran	5	2.9	J, D	2.1	25.0
2245-38-7	2,3,5-Trimethylnaphthalene	5	25.0	U	2.2	25.0
86-73-7	Fluorene	5	7.4	J, D	2.3	25.0
95-15-8	Benzo(b)thiophene	5	25.0	U	1.8	25.0
85-01-8	Phenanthrene	5	60.8	D	4.7	25.0
120-12-7	Anthracene	5	22.3	J, D	0.2	25.0
86-74-8	Carbazole	5	4.7	J, D	3.6	25.0
832-69-9	1-Methylphenanthrene	5	8.8	J, D	2.5	25.0
206-44-0	Fluoranthene	5	150	D	6.8	25.0
132-65-0	Dibenzothiophene	5	4.6	J, D	3.3	25.0
129-00-0	Pyrene	5	157	D	5.1	25.0
56-55-3	Benzo(a)anthracene	5	61.6	D	7.1	25.0
218-01-9	Chrysene	5	91.6	D	3.5	25.0
205-99-2	Benzo(b)fluoranthene	5	65.1	D	4.0	25.0
205-82-3	Benzo(j)fluoranthene	5	39.9	D	3.4	25.0
207-08-9	Benzo(k)fluoranthene	5	39.3	D	4.0	25.0
197-97-2	Benzo(e)pyrene	5	60.2	D	3.1	25.0
50-32-8	Benzo(a)pyrene	5	85.3	D	4.9	25.0
193-39-5	Indeno(1,2,3-cd)pyrene	5	51.9	D	1.9	25.0
53-70-3	Dibenzo(a,h)anthracene	5	8.3	J, D	3.4	25.0
191-24-2	Benzo(g,h,i)perylene	5	72.9	D	2.6	25.0

Analytical Resources, Incorporated
Analytical Chemists and Consultants

USMPDI-028SG-210504

Form I
ORGANIC ANALYSIS DATA SHEET
EPA 8270E-SIM
Alkyl PAH Parents

Laboratory:	Analytical Resources, Inc.				
Client:	Anchor QEA, LLC				
Project:	Gasco Siltronic - US Moorings				
Matrix:	Sediment	Laboratory ID:	21E0106-01 A	SDG:	21E0106
Sampled:	05/04/21 00:00	Prepared:	05/17/21 13:40	File ID:	NT1421060710.D
% Solids:	47.16	Preparation:	EPA 3546 (Microwave)	Analyzed:	06/07/21 19:42
Batch:	BJE0383	Sequence:	SJF0173	Initial/Final:	21.22 g Wet / 0.5 mL
Instrument:	NT14	Column:	ZB-5MS	Calibration:	EF00008
Cleanups:	GPC, Silica Gel				

CAS NO.	COMPOUND	DILUTION	CONC: (ug/kg dry)	Q	DL	RL
1985-5-0	Perylene	5	86.3	D	2.2	25.0
239-35-0	Benzo(b)naphtho(2,1-d)thiophene	5	25.0	U	25.0	25.0

SURROGATES	ADDED: (ug/kg dry)	FOUND: (ug/kg dry)	% REC	QC LIMITS	Q
Naphthalene-d8	149.89	66.8	44.6	30 - 160	
Acenaphthene-d10	149.89	73.2	48.8	30 - 160	
Phenanthrene-d10	149.89	84.4	56.3	30 - 160	
Chrysene-d12	149.89	95.4	63.6	30 - 160	
Perylene-d12	149.89	92.1	61.4	30 - 160	

Data File: \\target\share\chem3\nt14.i\20210607.b\NT1421060710.D

Date : 07-JUN-2021 19:42

Client ID:

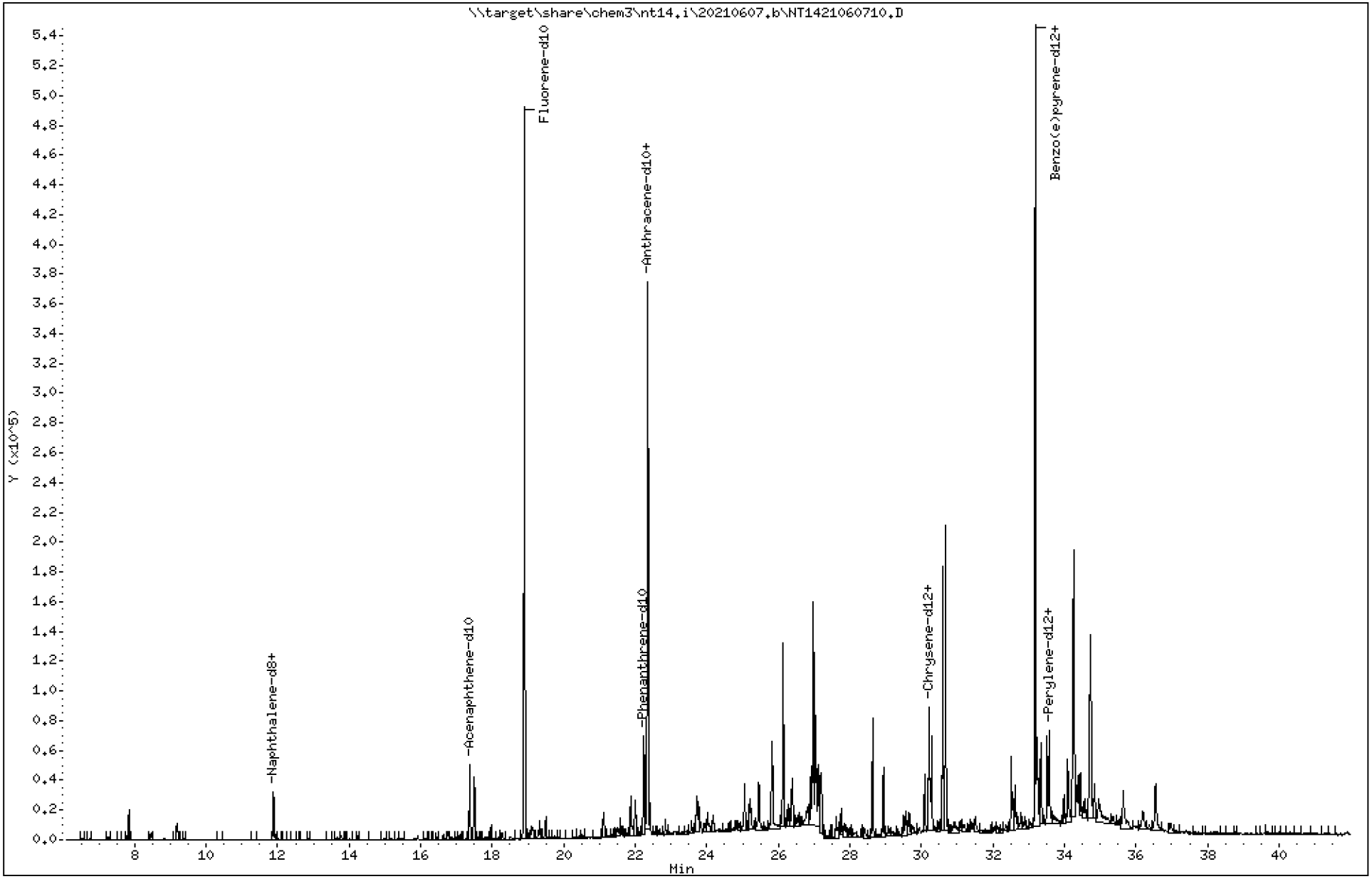
Instrument: nt14.i

Sample Info: 21E0106-01

Operator: VTS

Column phase: Rxi-17Sil MS

Column diameter: 0.25



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Date : 07-JUN-2021 19:42

Client ID:

Instrument: nt14.i

Sample Info: 21E0106-01

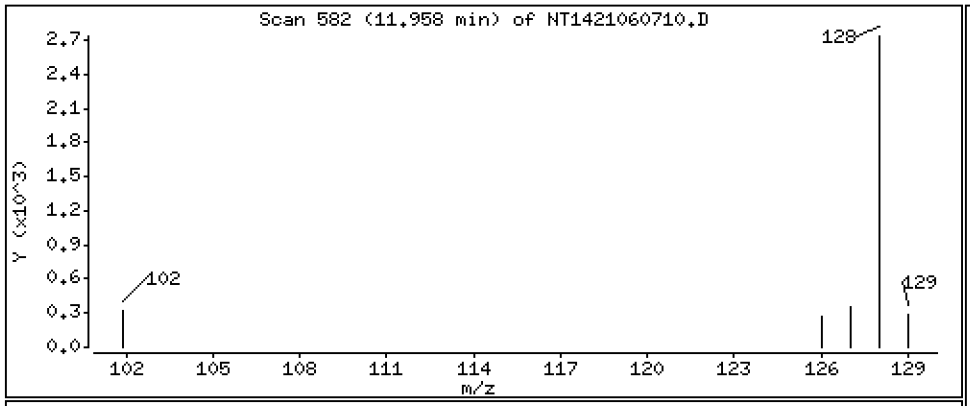
Operator: VTS

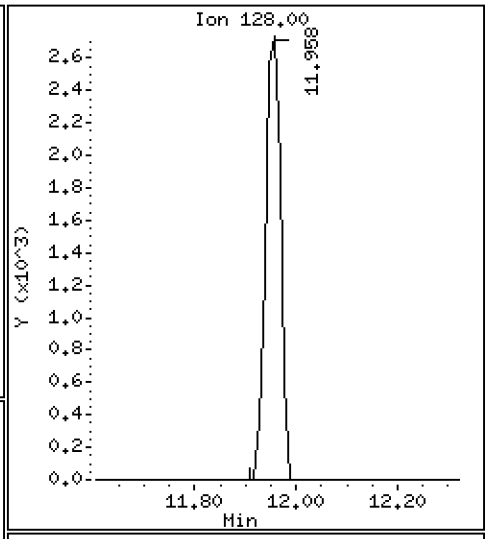
Column phase: Rxi-17Sil MS

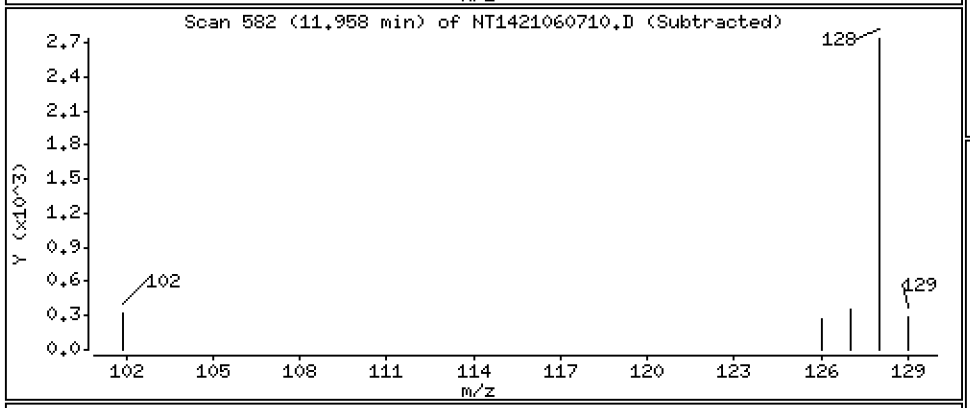
Column diameter: 0.25

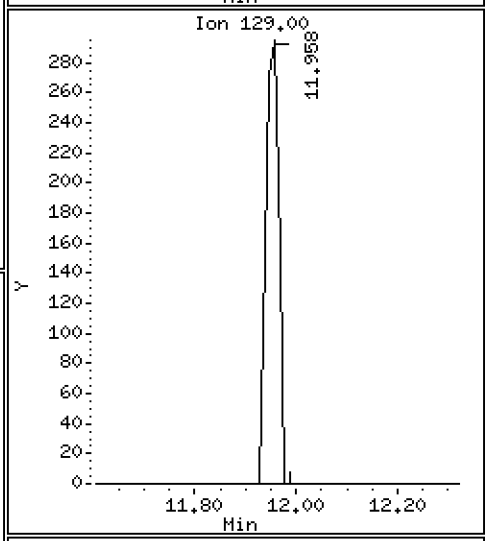
7 Naphthalene

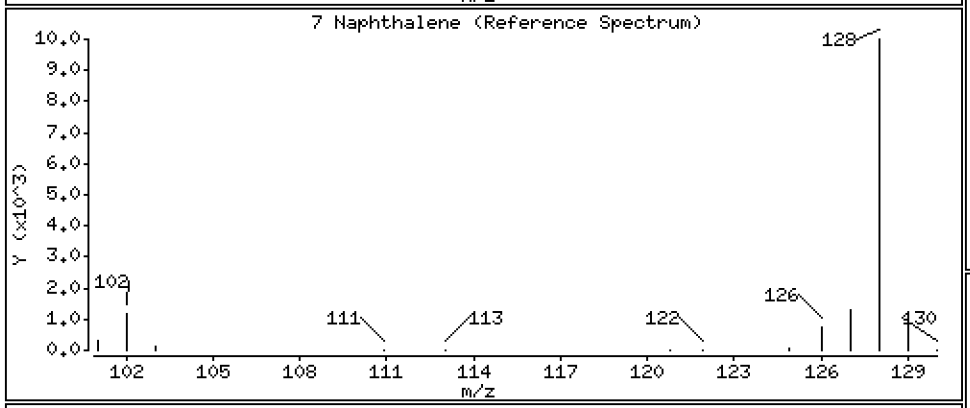
Concentration: 0.1745 ug/mL

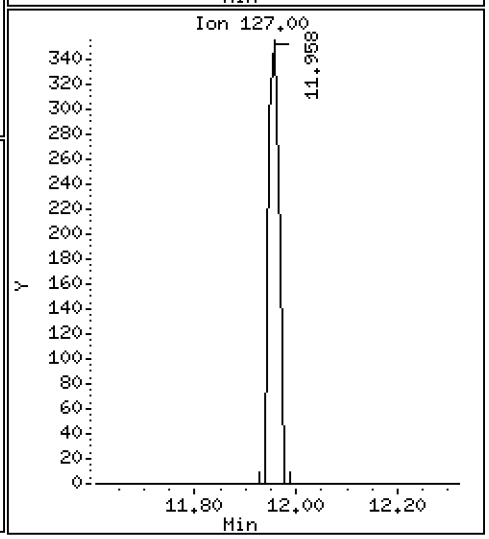


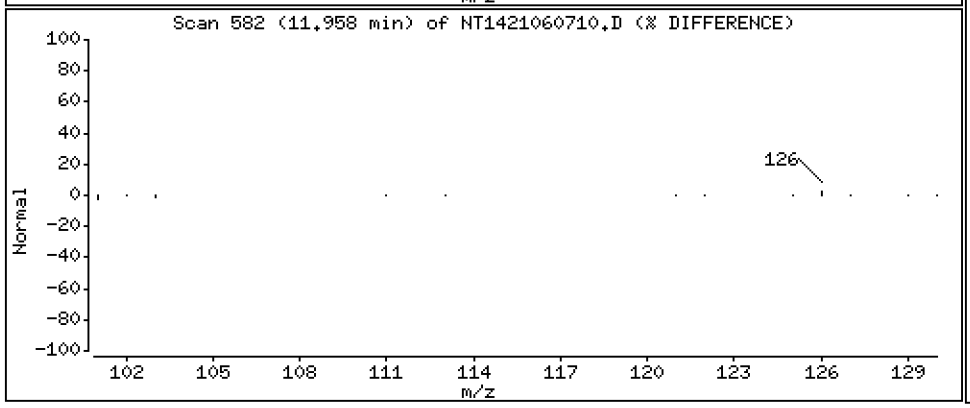












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Date : 07-JUN-2021 19:42

Client ID:

Instrument: nt14.i

Sample Info: 21E0106-01

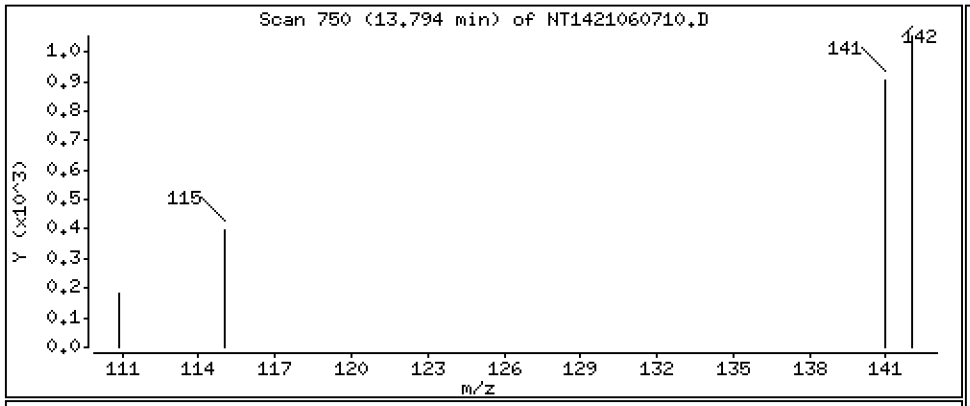
Operator: VTS

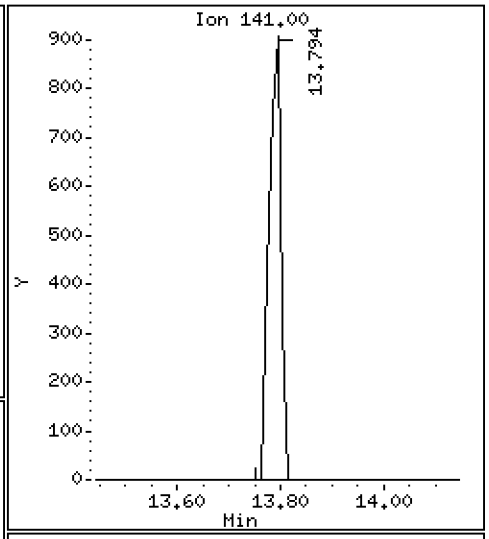
Column phase: Rxi-17Sil MS

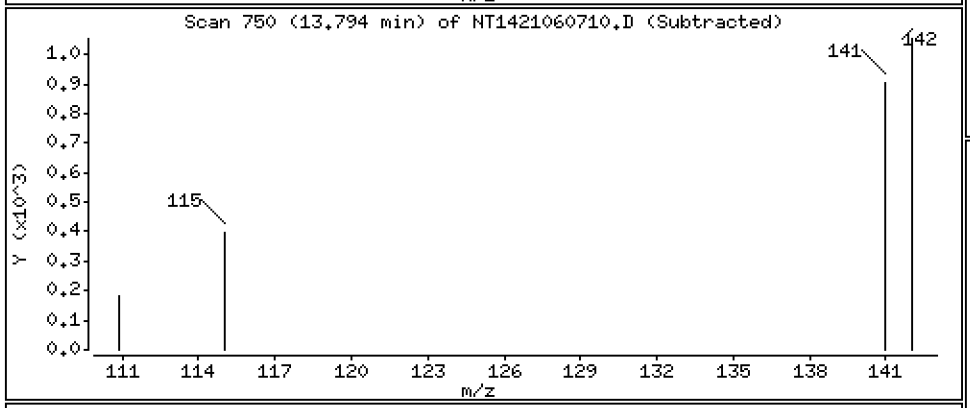
Column diameter: 0.25

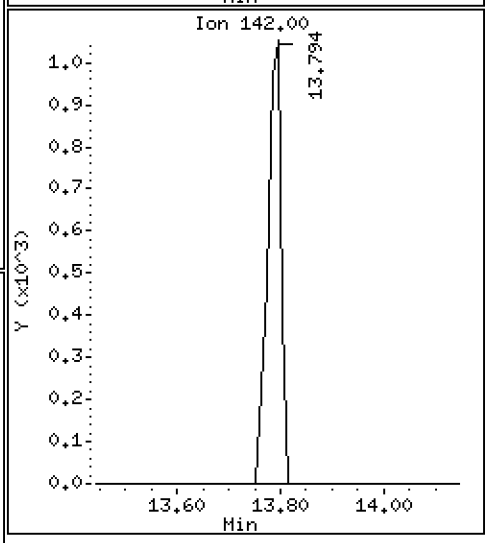
16 2-Methylnaphthalene

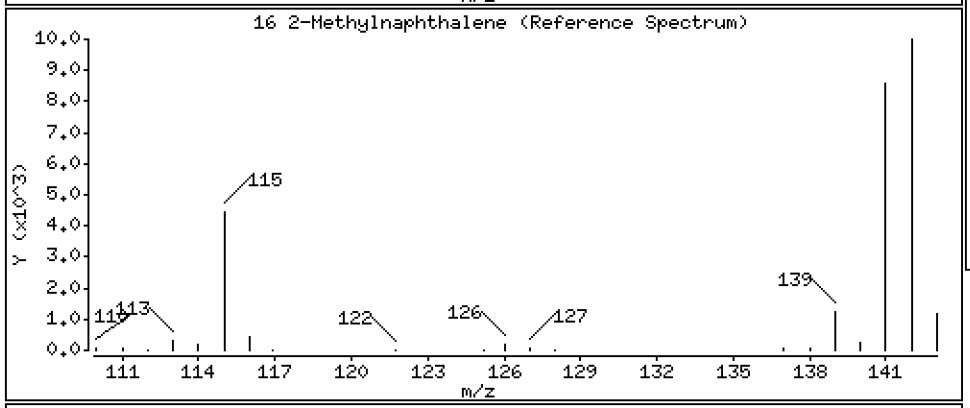
Concentration: 0.08255 ug/mL

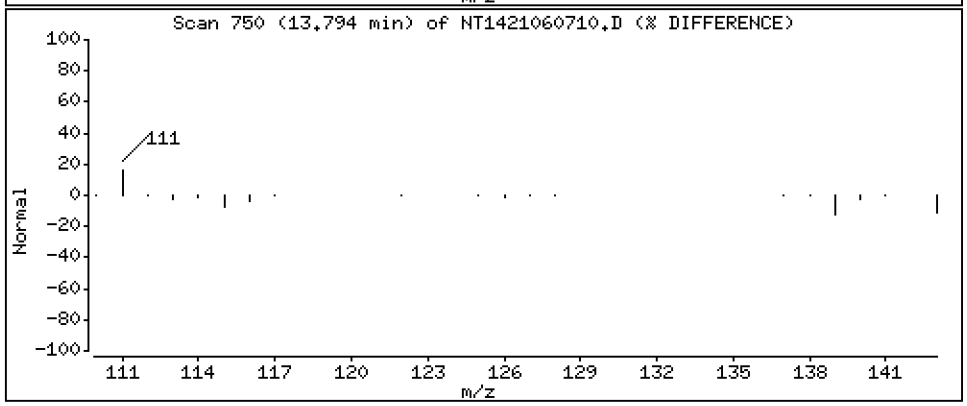












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Date : 07-JUN-2021 19:42

Client ID:

Instrument: nt14.i

Sample Info: 21E0106-01

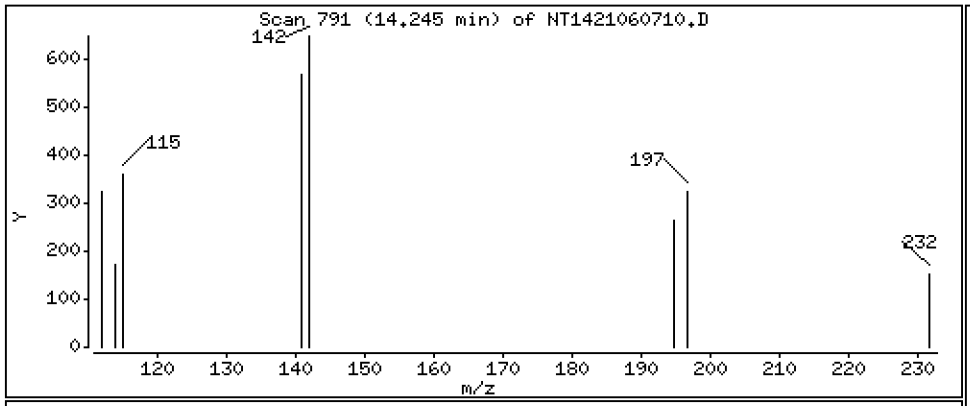
Operator: VTS

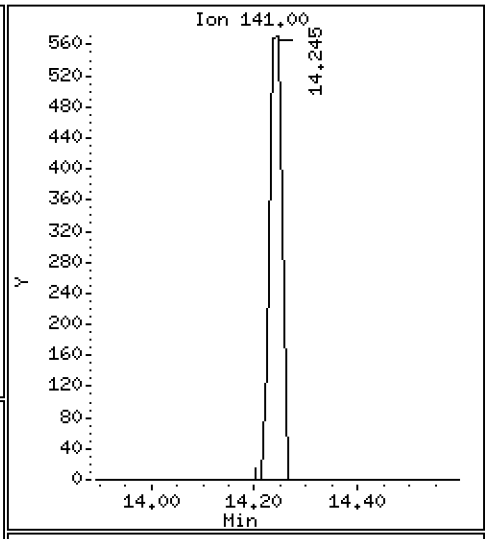
Column phase: Rxi-17Sil MS

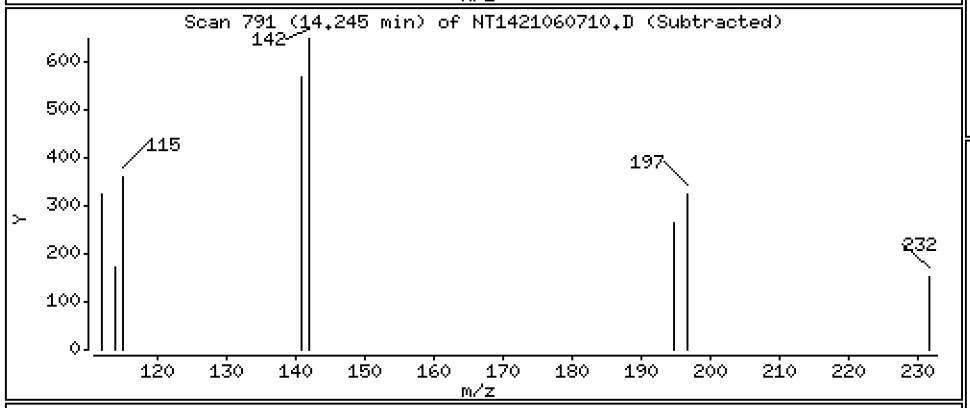
Column diameter: 0.25

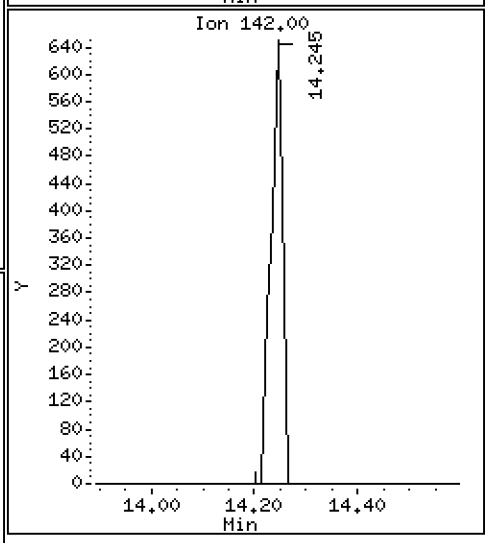
17 1-methylnaphthalene

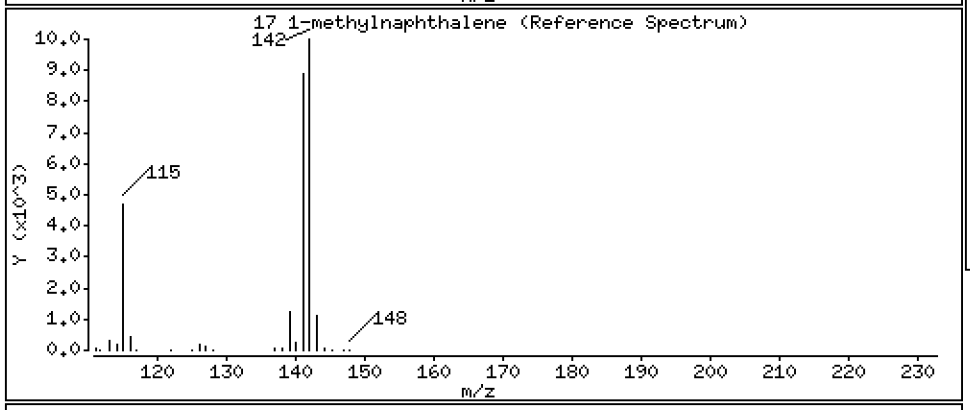
Concentration: 0.05771 ug/mL

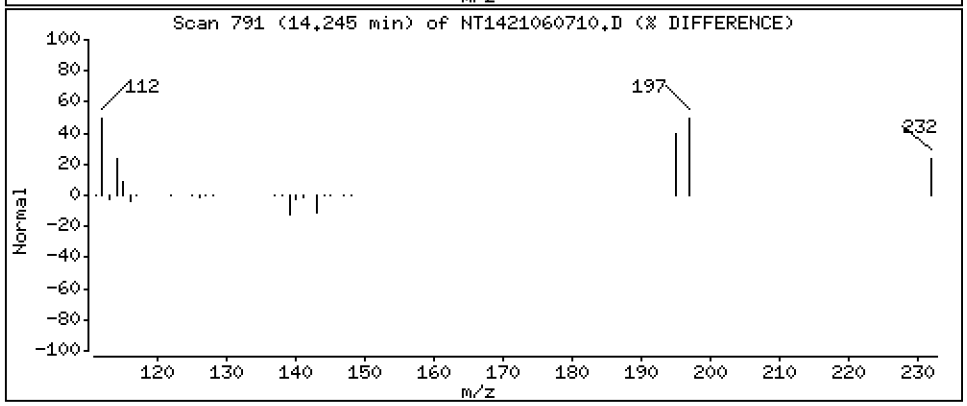












Data File: \\target\share\chem3\nt14.i\20210607.b\NT1421060710.D

Date : 07-JUN-2021 19:42

Client ID:

Instrument: nt14.i

Sample Info: 21E0106-01

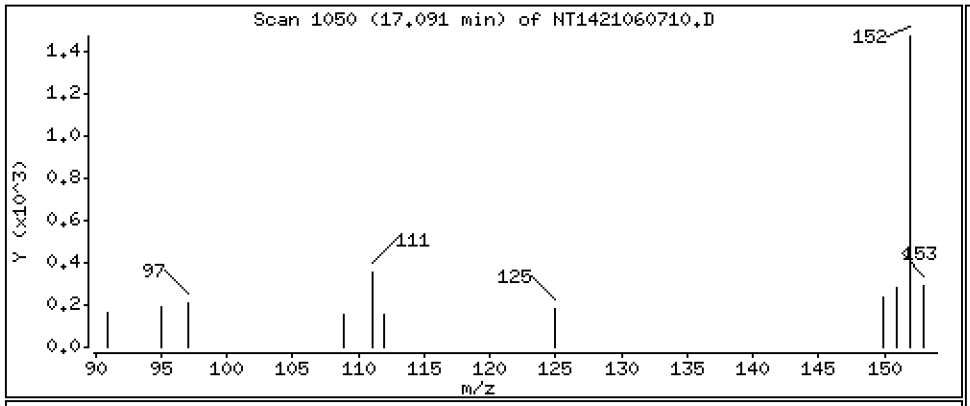
Operator: VTS

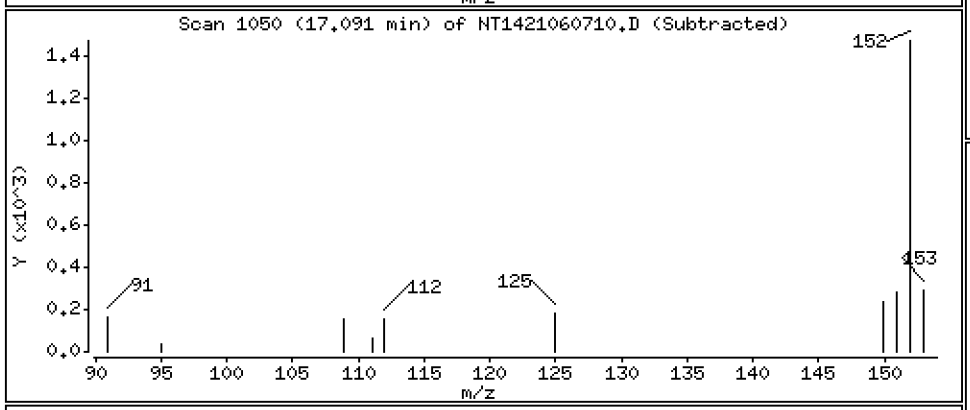
Column phase: Rxi-17Sil MS

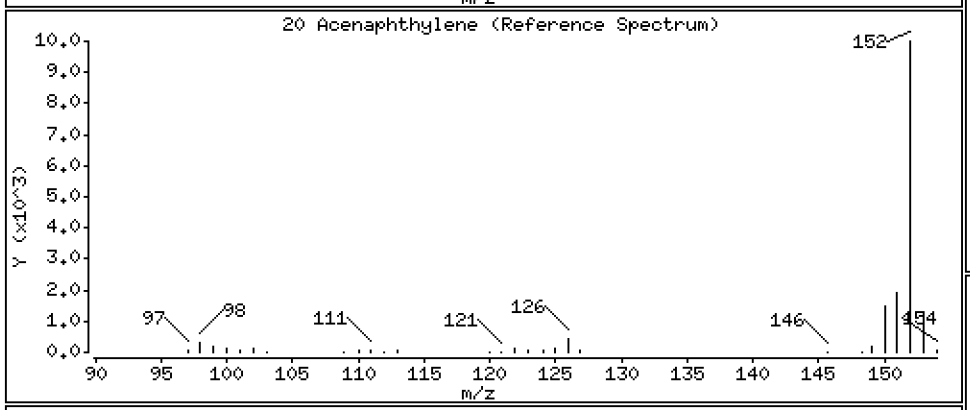
Column diameter: 0.25

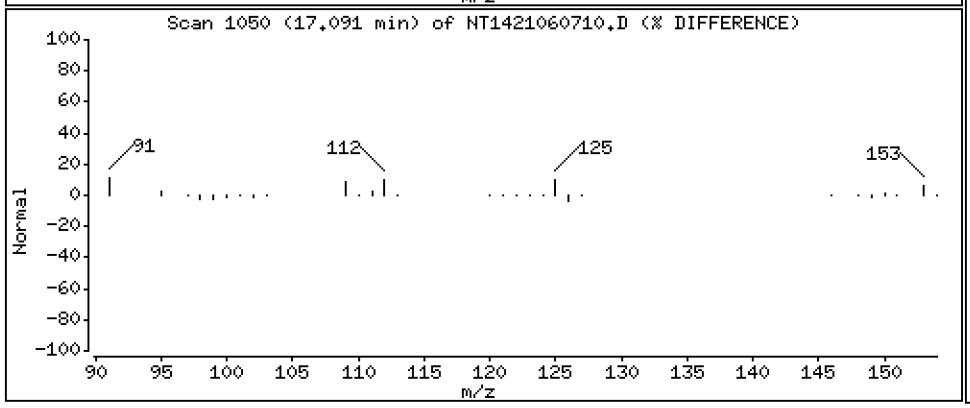
20 Acenaphthylene

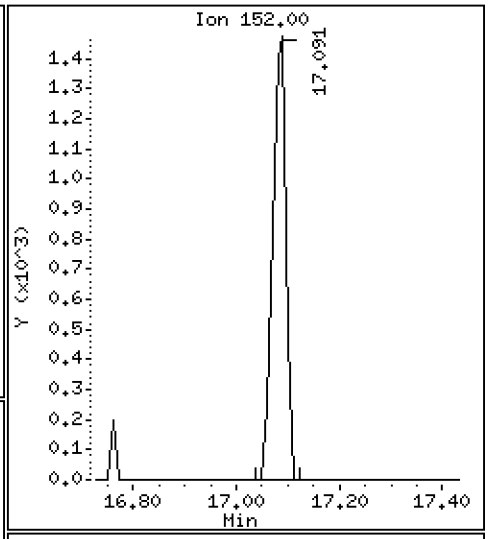
Concentration: 0.08203 ug/mL

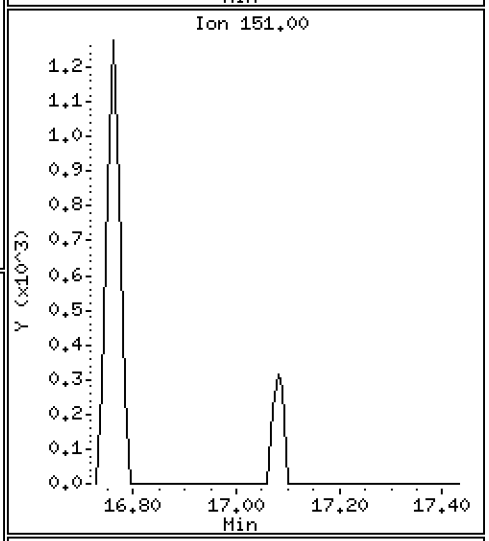


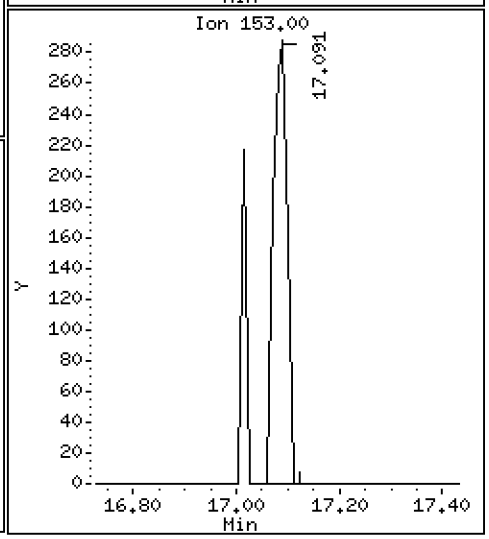












Data File: \\target\share\chem3\nt14.i\20210607.b\NT1421060710.D

Date : 07-JUN-2021 19:42

Client ID:

Instrument: nt14.i

Sample Info: 21E0106-01

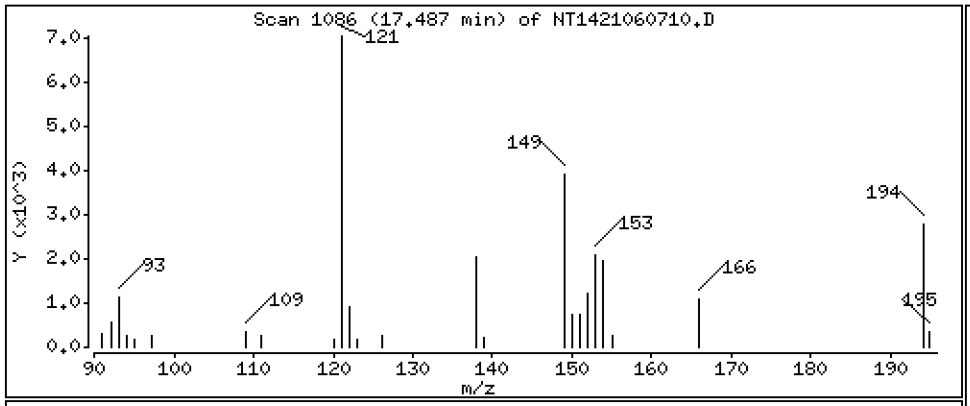
Operator: VTS

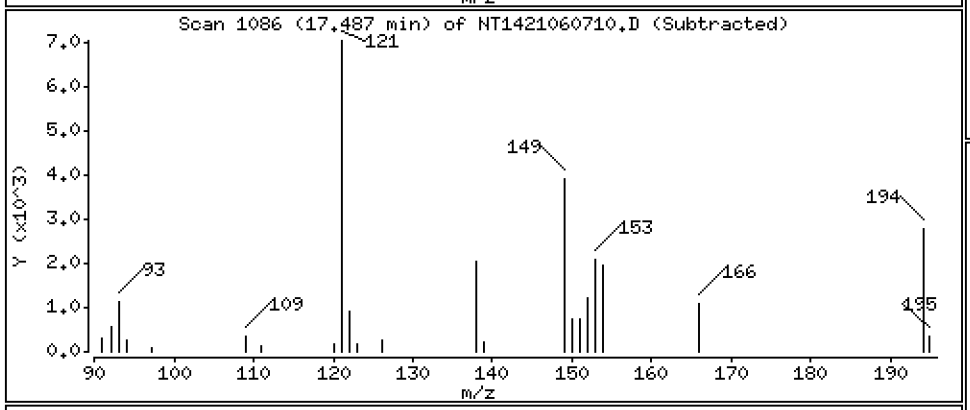
Column phase: Rxi-17Sil MS

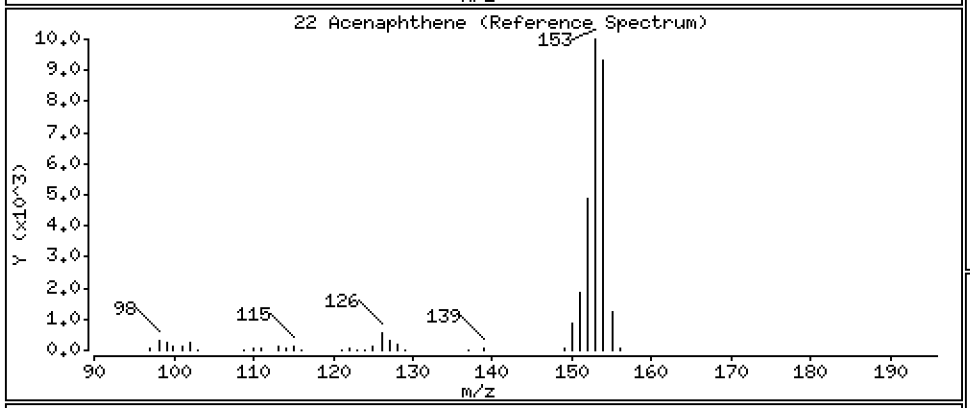
Column diameter: 0.25

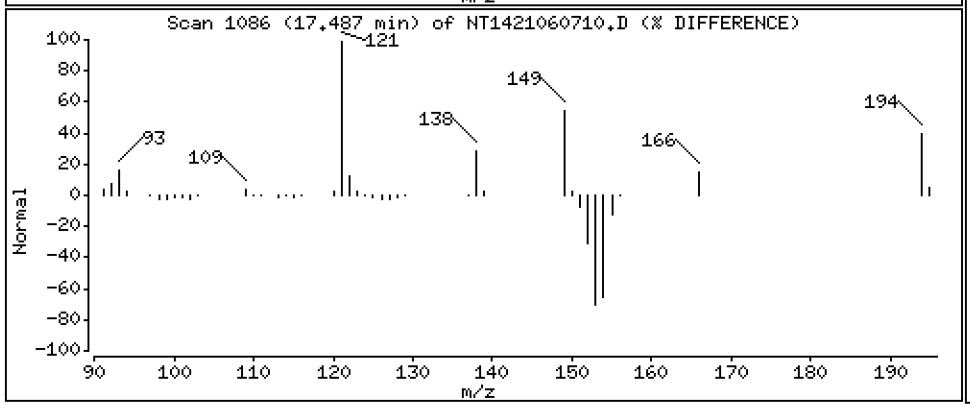
22 Acenaphthene

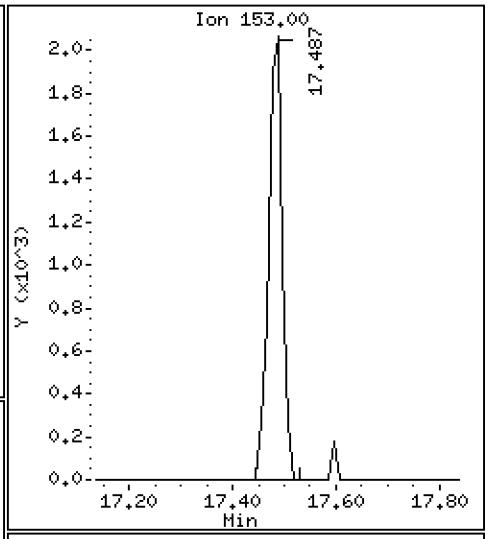
Concentration: 0.1872 ug/mL

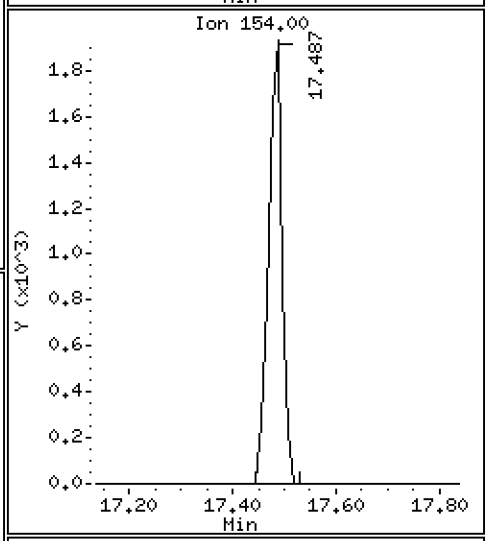


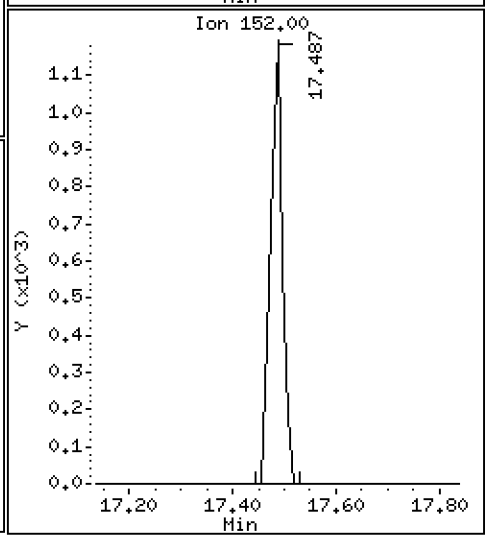












Data File: \\target\share\chem3\nt14.i\20210607.b\NT1421060710.D

Date : 07-JUN-2021 19:42

Client ID:

Instrument: nt14.i

Sample Info: 21E0106-01

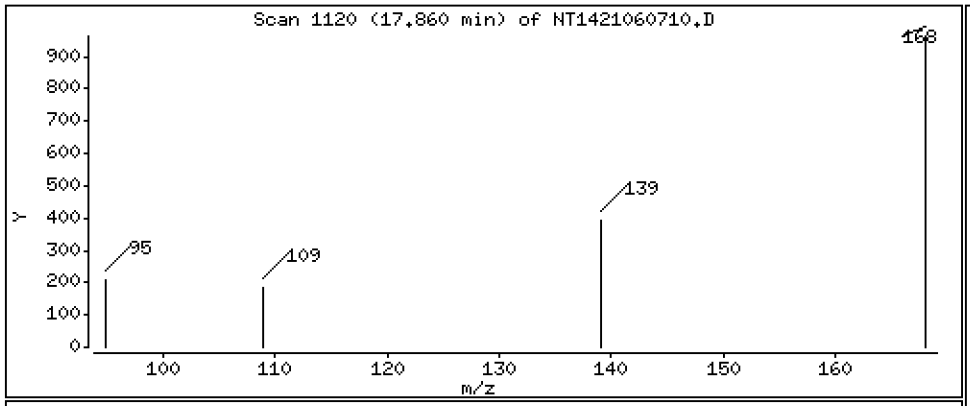
Operator: VTS

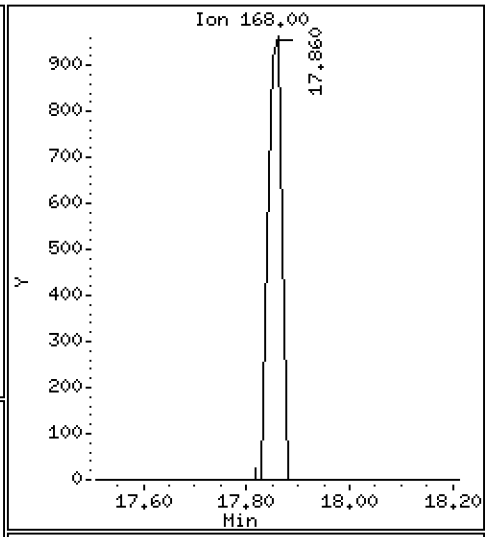
Column phase: Rxi-17Sil MS

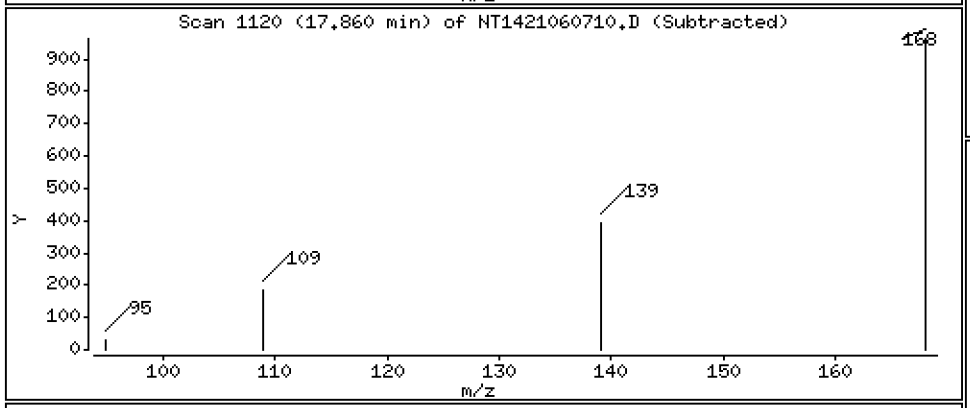
Column diameter: 0.25

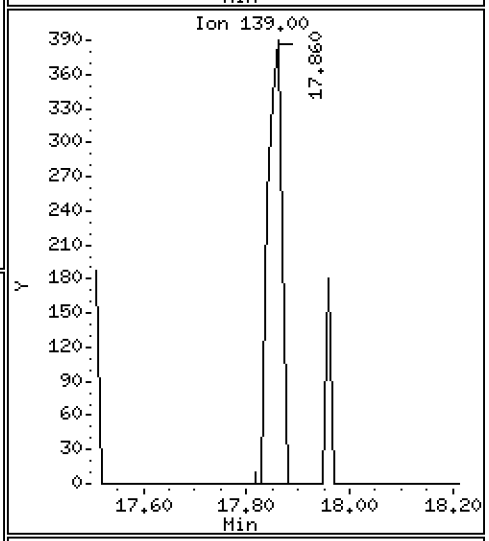
23 Dibenzofuran

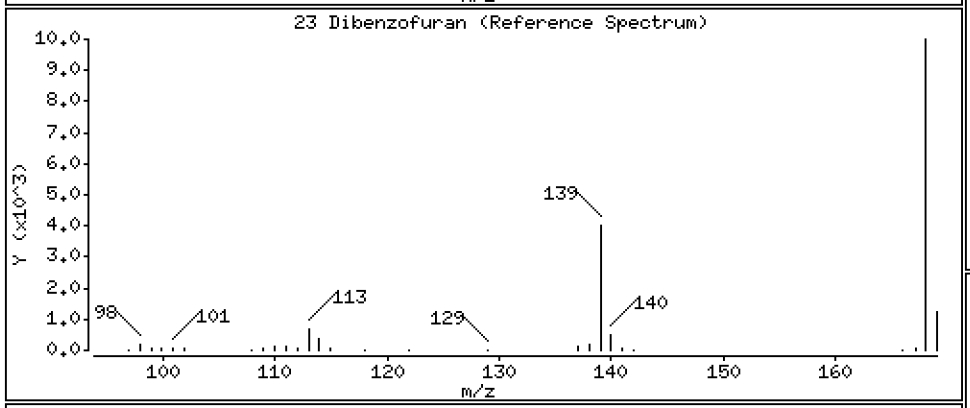
Concentration: 0.05901 ug/mL

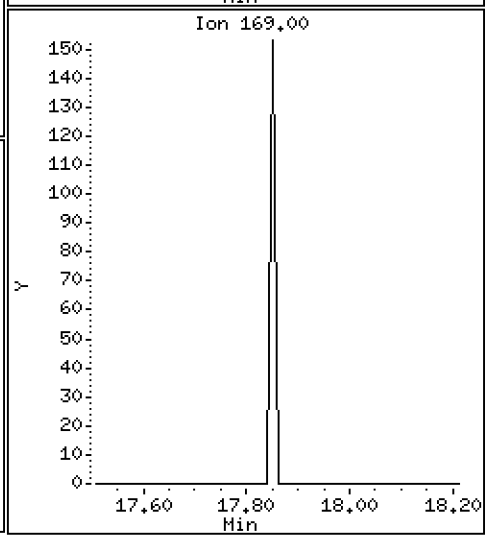


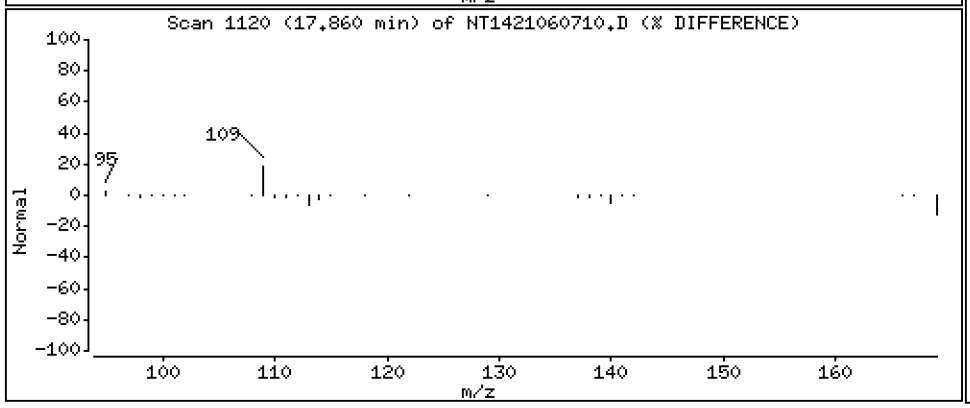












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Date : 07-JUN-2021 19:42

Client ID:

Instrument: nt14.i

Sample Info: 21E0106-01

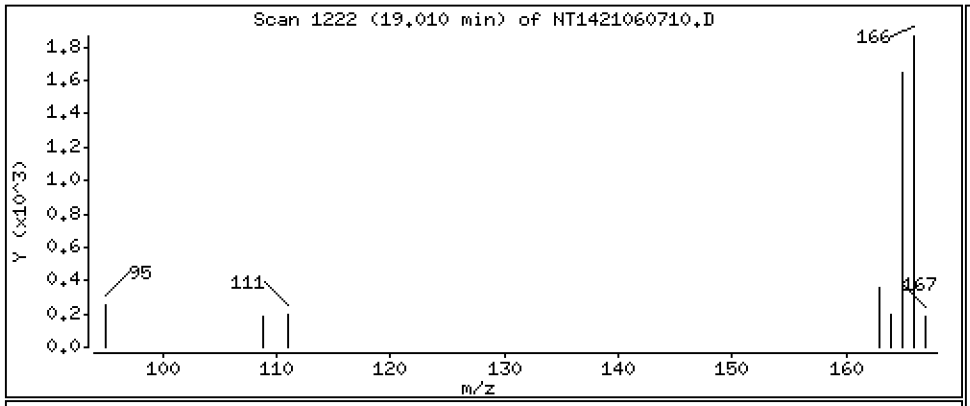
Operator: VTS

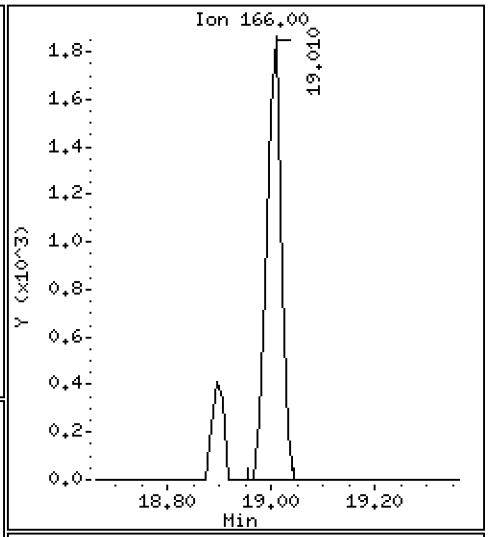
Column phase: Rxi-17Sil MS

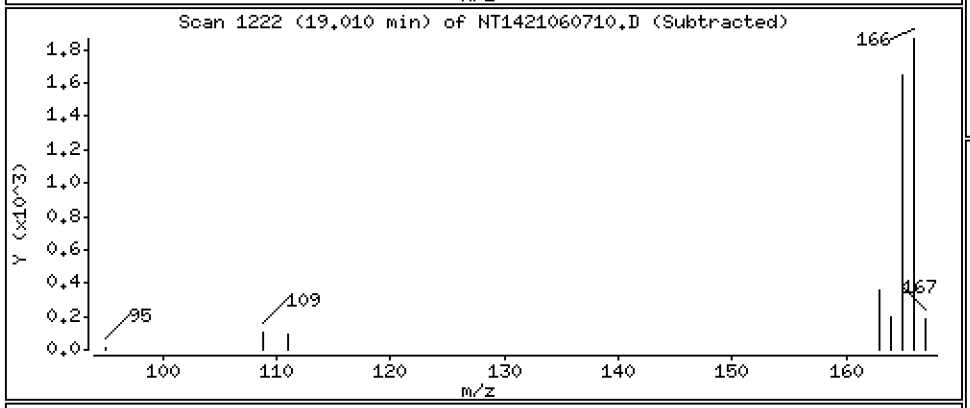
Column diameter: 0.25

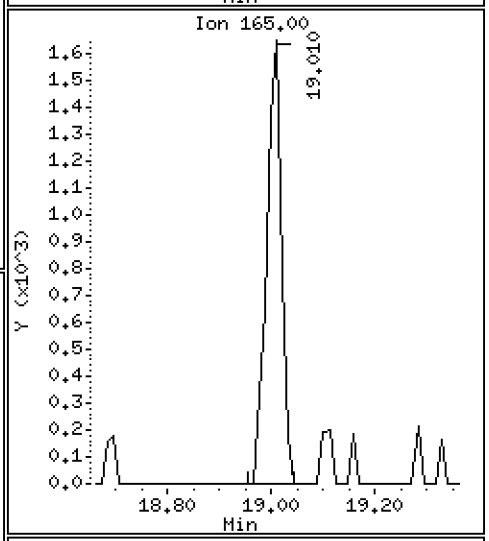
26 Fluorene

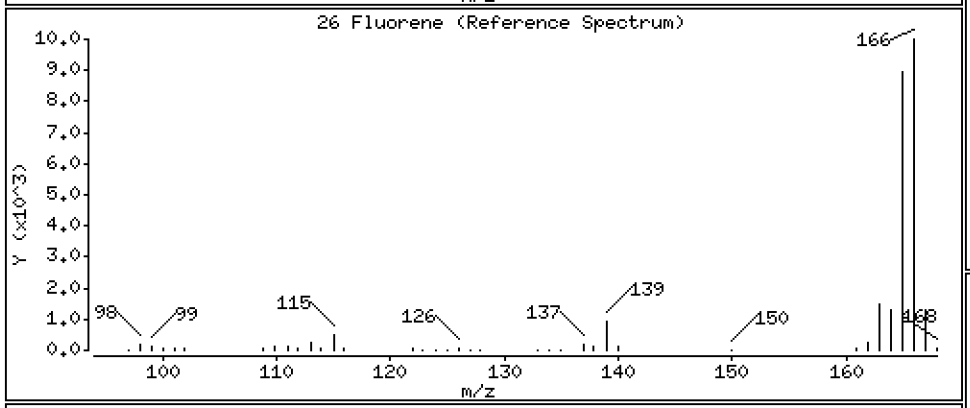
Concentration: 0.1483 ug/mL

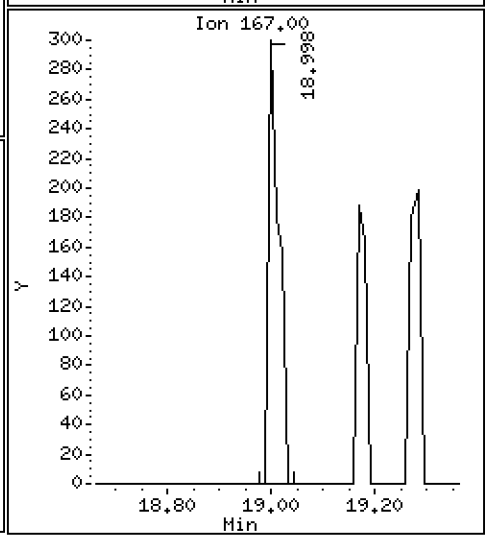


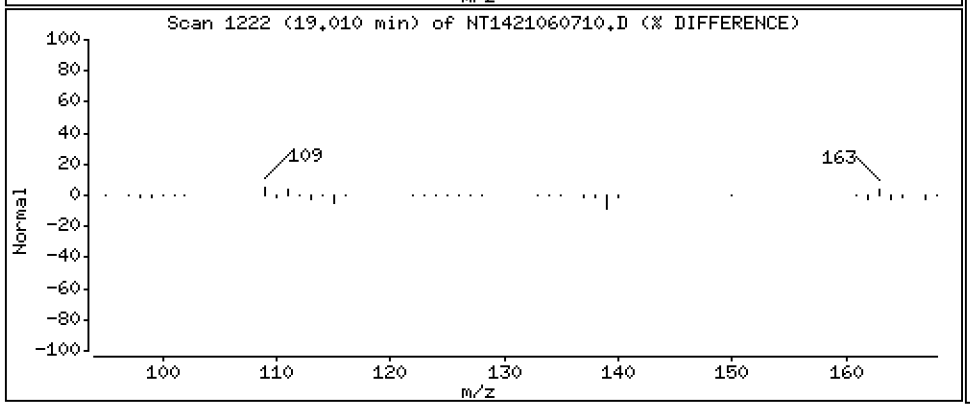












Data File: \\target\share\chem3\nt14.i\20210607.b\NT1421060710.D

Date : 07-JUN-2021 19:42

Client ID:

Instrument: nt14.i

Sample Info: 21E0106-01

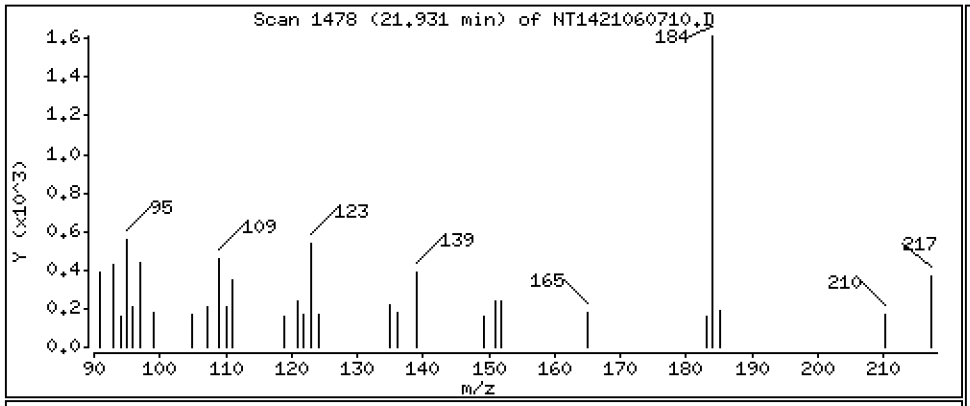
Operator: VTS

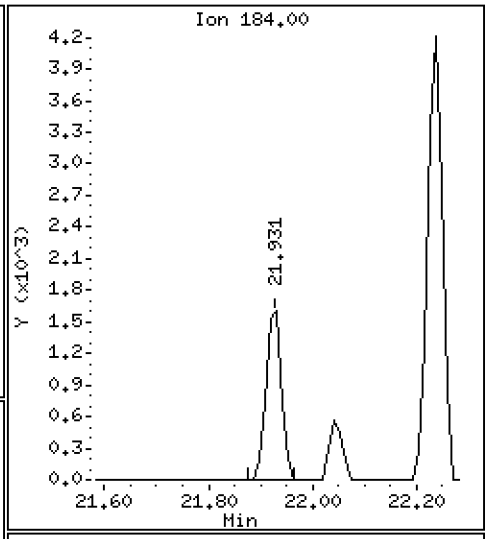
Column phase: Rxi-17Sil MS

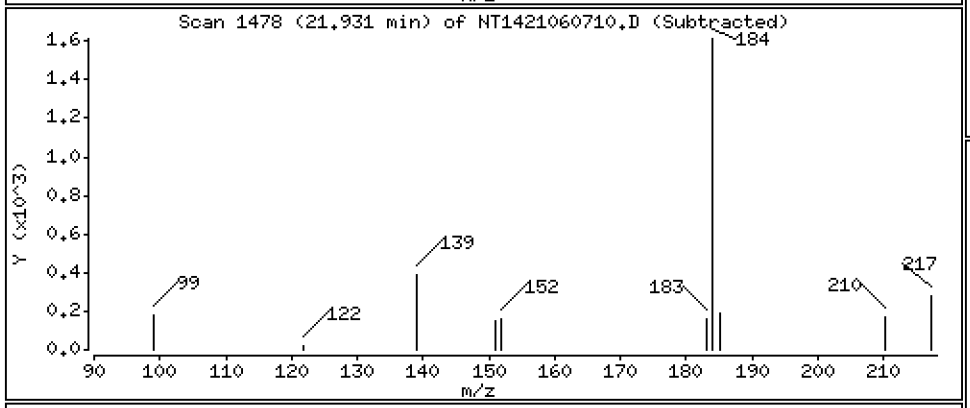
Column diameter: 0.25

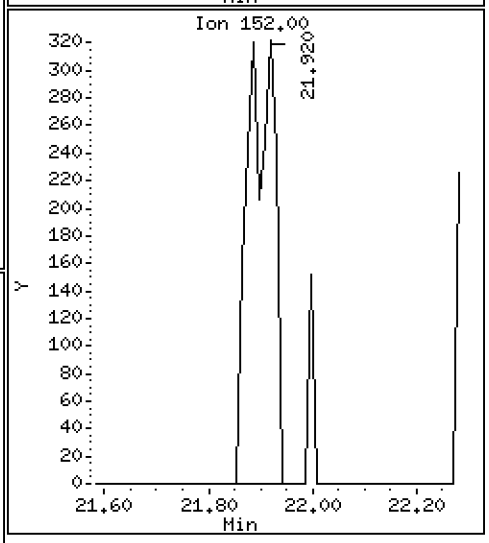
30 Dibenzothiophene

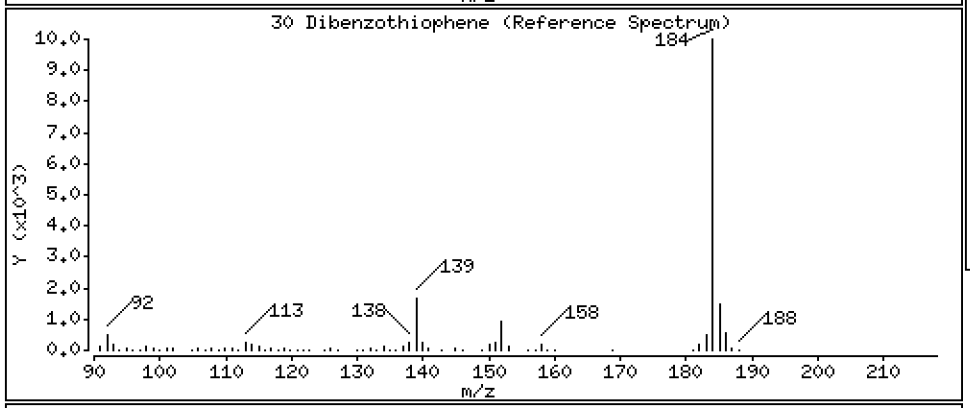
Concentration: 0.09240 ug/mL

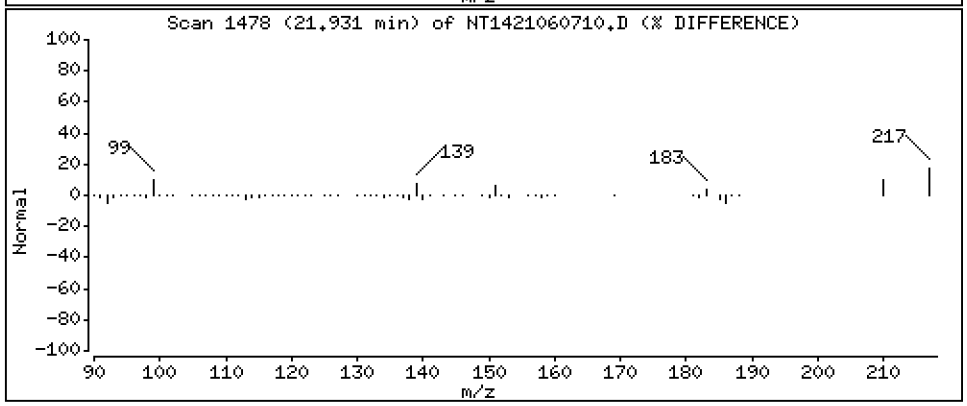












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Date : 07-JUN-2021 19:42

Client ID:

Instrument: nt14.i

Sample Info: 21E0106-01

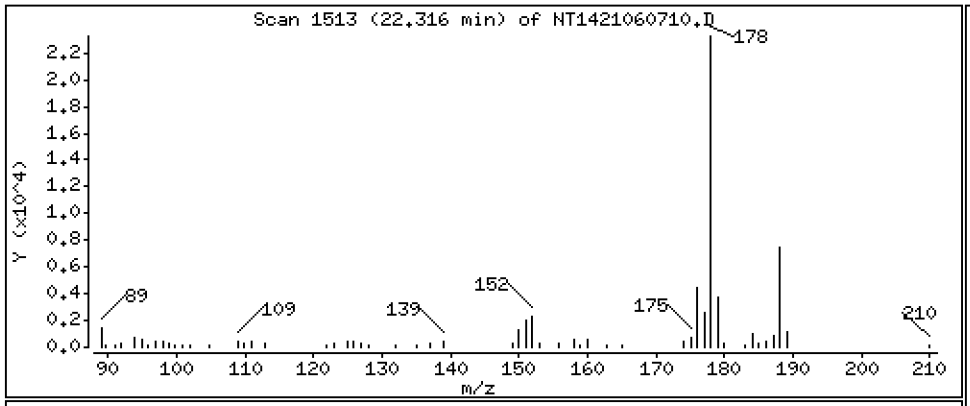
Operator: VTS

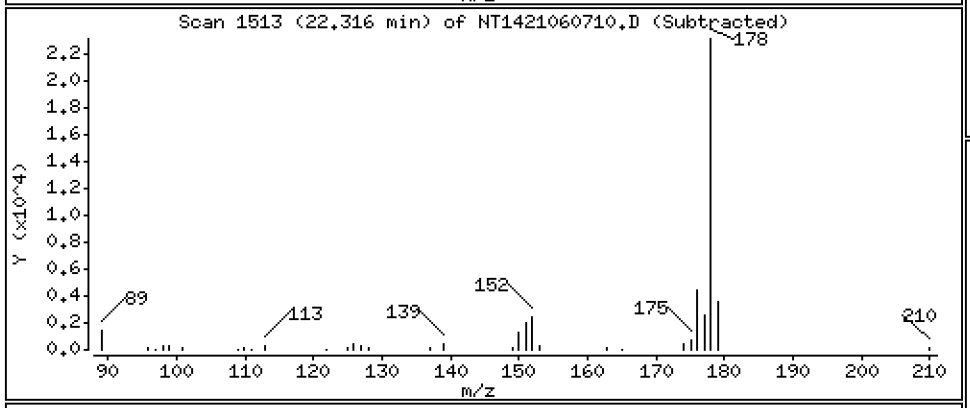
Column phase: Rxi-17Sil MS

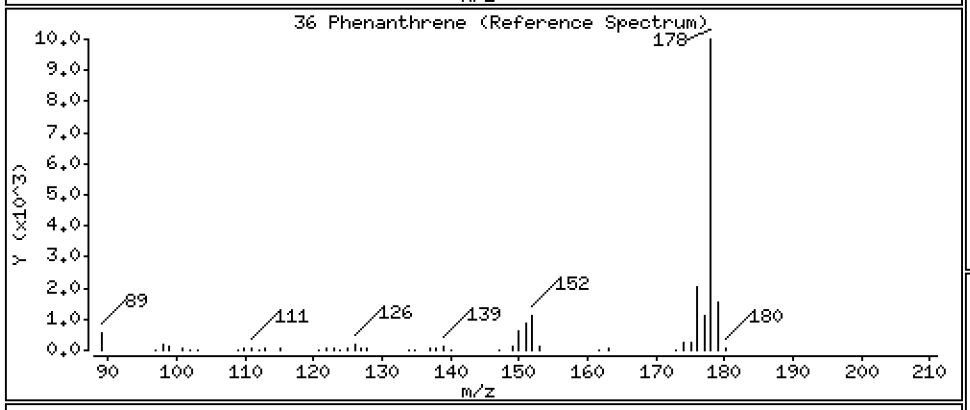
Column diameter: 0.25

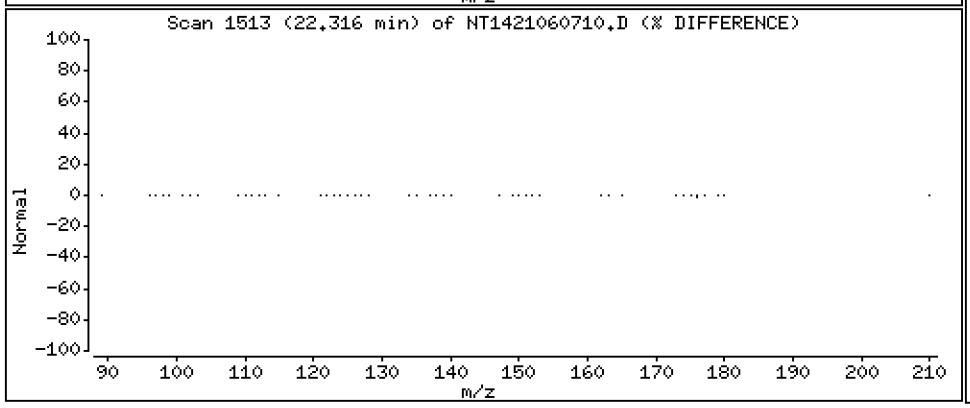
36 Phenanthrene

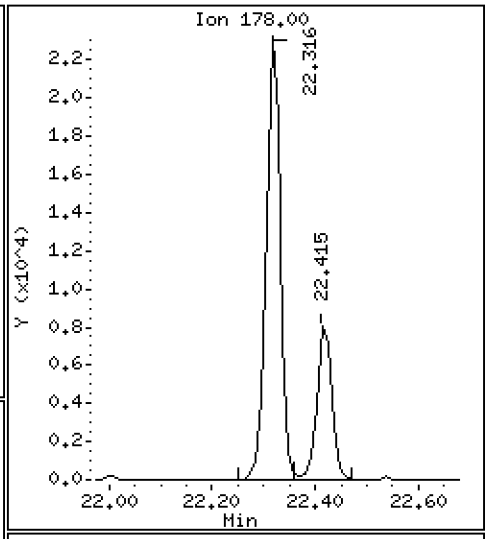
Concentration: 1.216 ug/mL

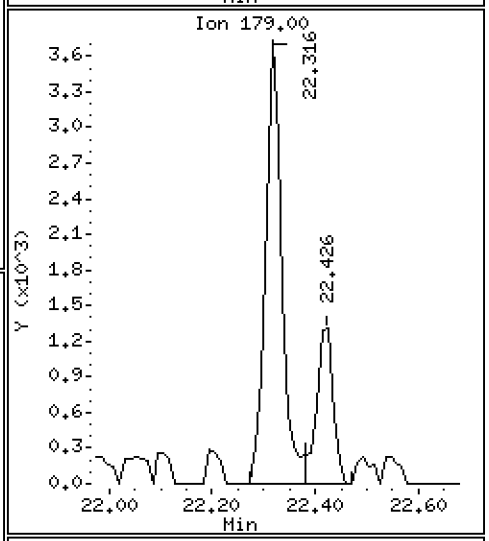


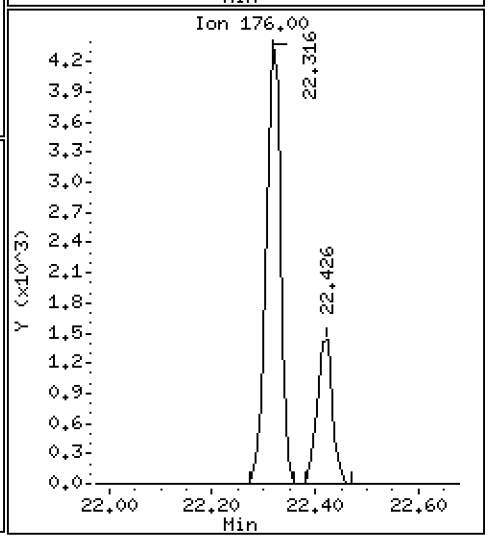












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Date : 07-JUN-2021 19:42

Client ID:

Instrument: nt14.i

Sample Info: 21E0106-01

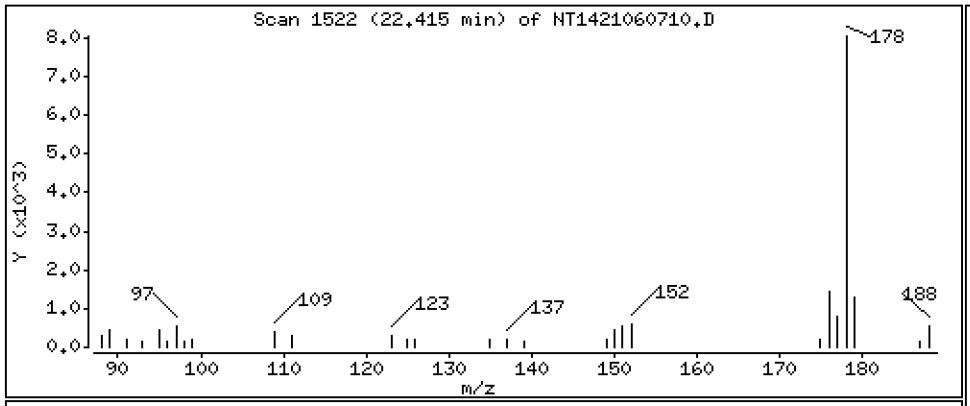
Operator: VTS

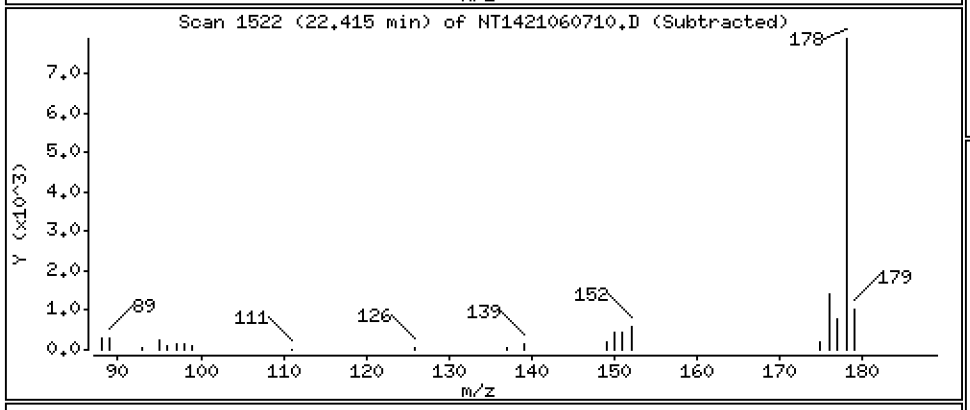
Column phase: Rxi-17Sil MS

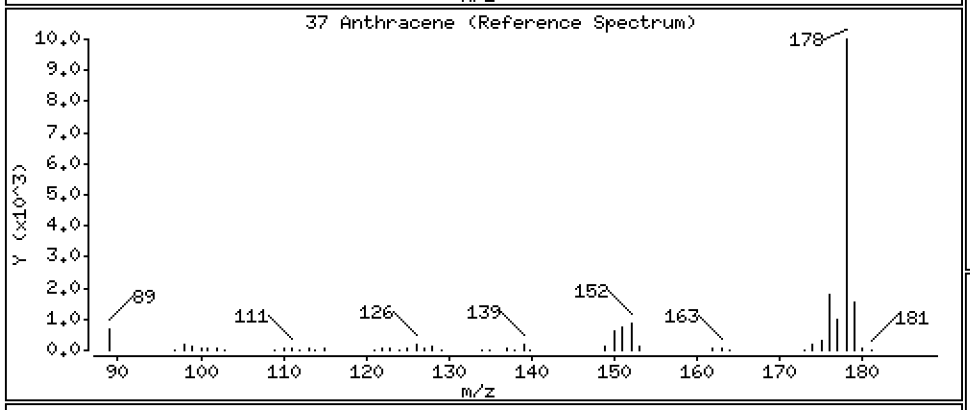
Column diameter: 0.25

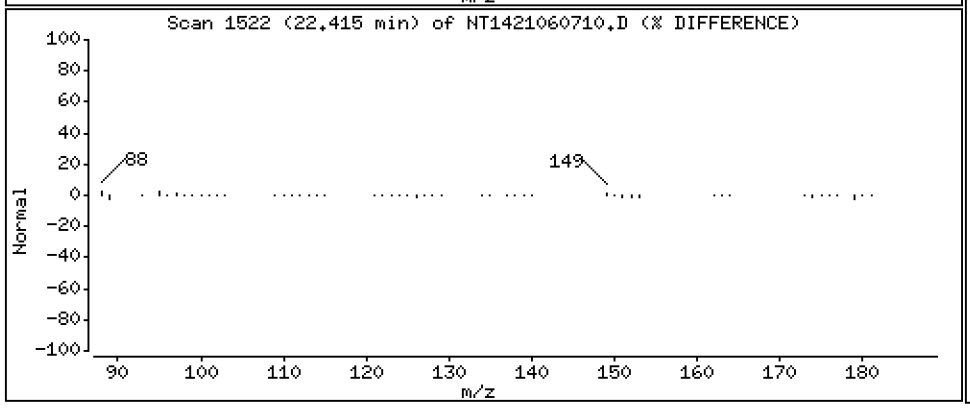
37 Anthracene

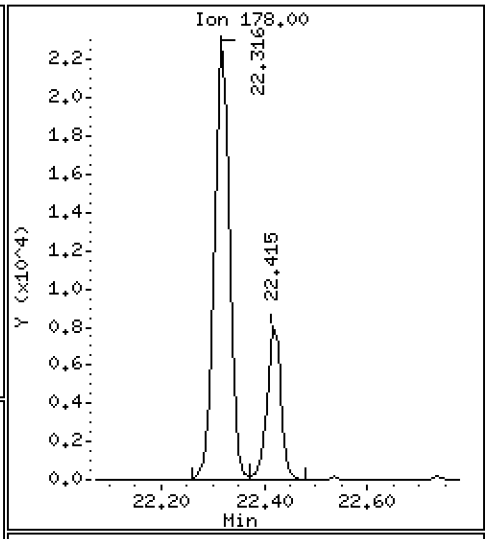
Concentration: 0.4453 ug/mL

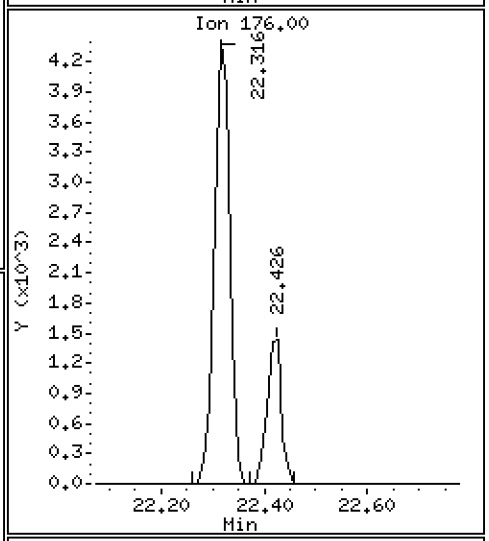


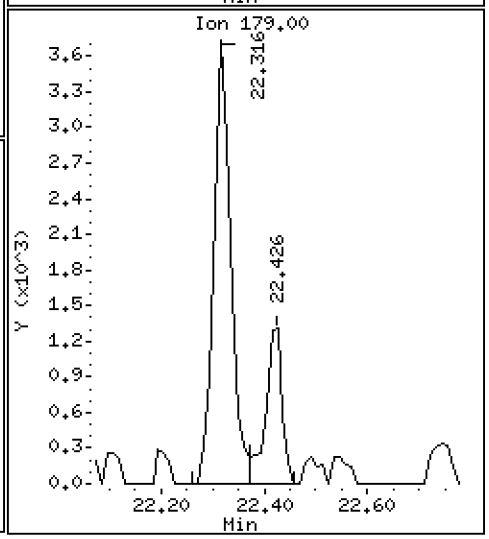












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Date : 07-JUN-2021 19:42

Client ID:

Instrument: nt14.i

Sample Info: 21E0106-01

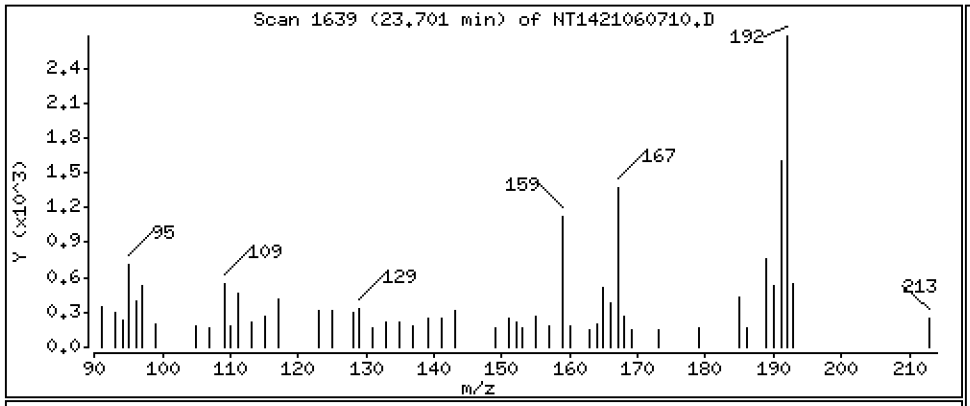
Operator: VTS

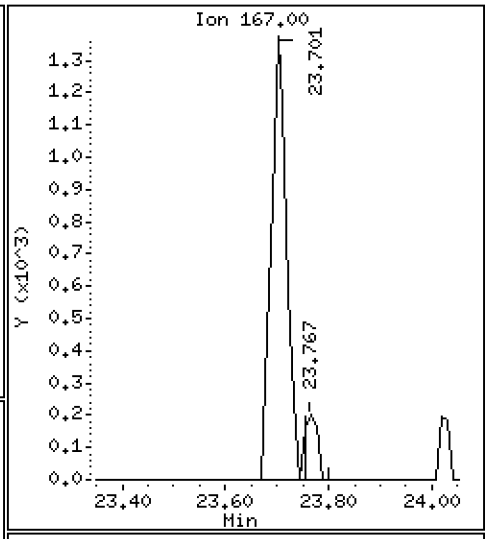
Column phase: Rxi-17Sil MS

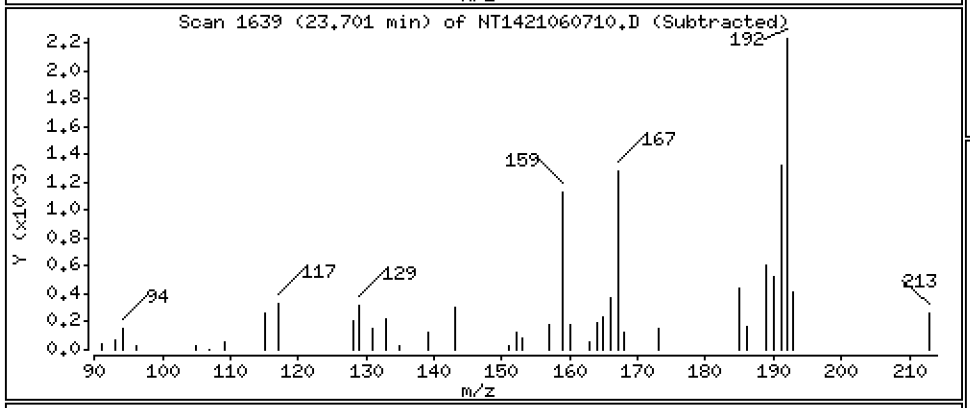
Column diameter: 0.25

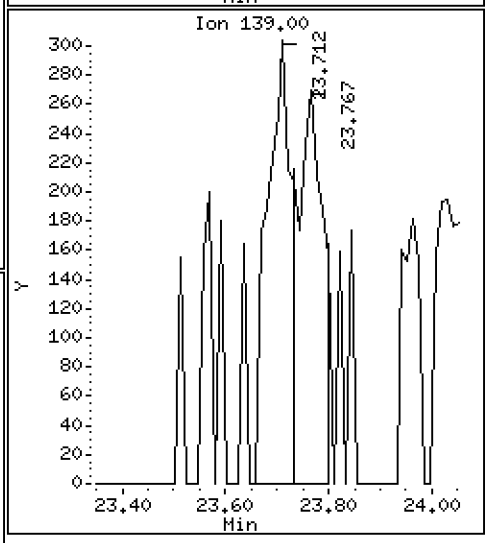
42 Carbazole

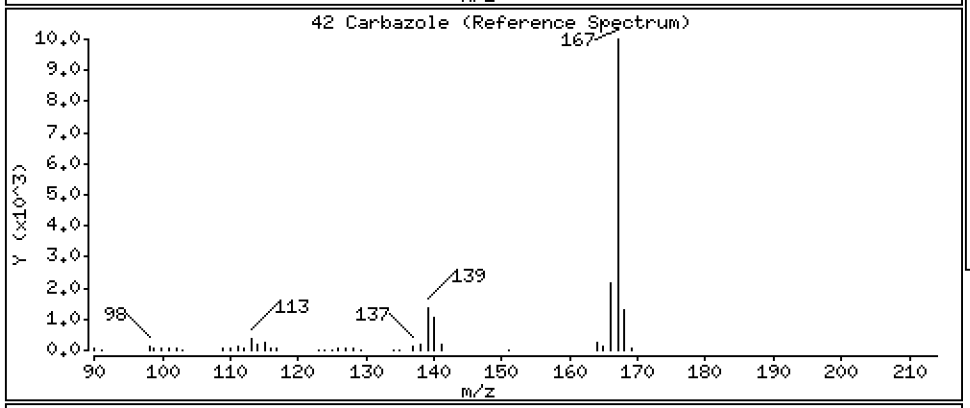
Concentration: 0.09344 ug/mL

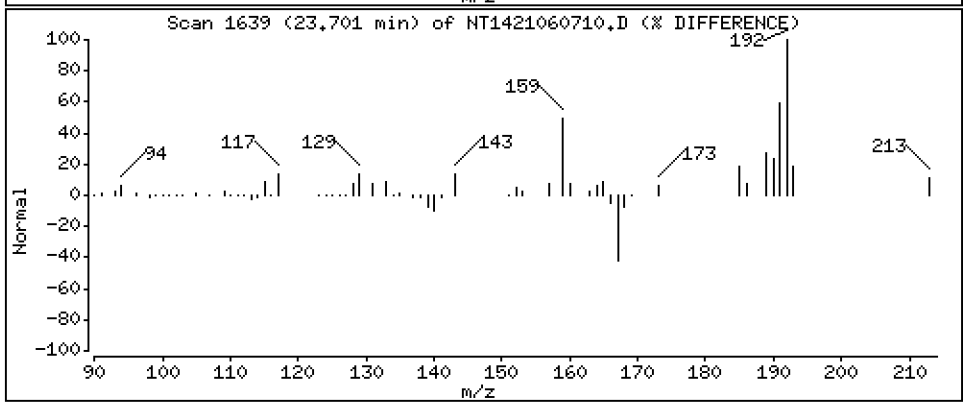












Data File: \\target\share\chem3\nt14.i\20210607.b\NT1421060710.D

Date : 07-JUN-2021 19:42

Client ID:

Instrument: nt14.i

Sample Info: 21E0106-01

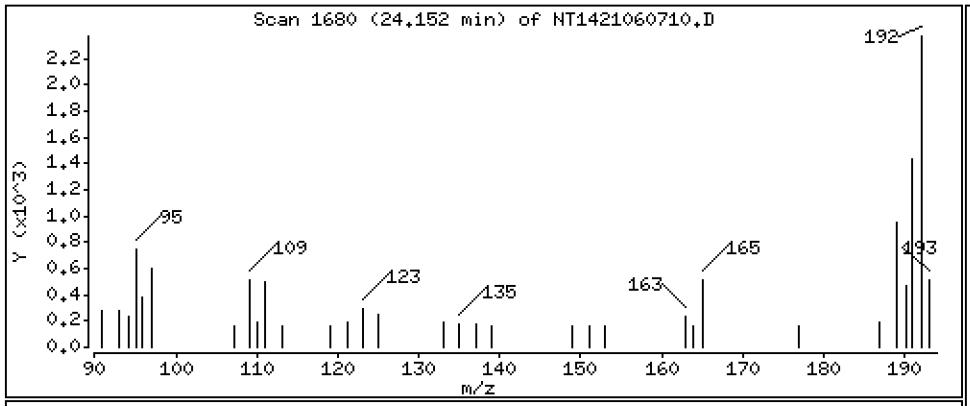
Operator: VTS

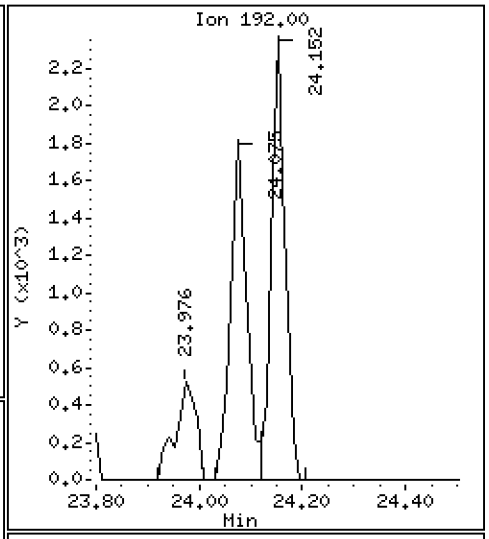
Column phase: Rxi-17Sil MS

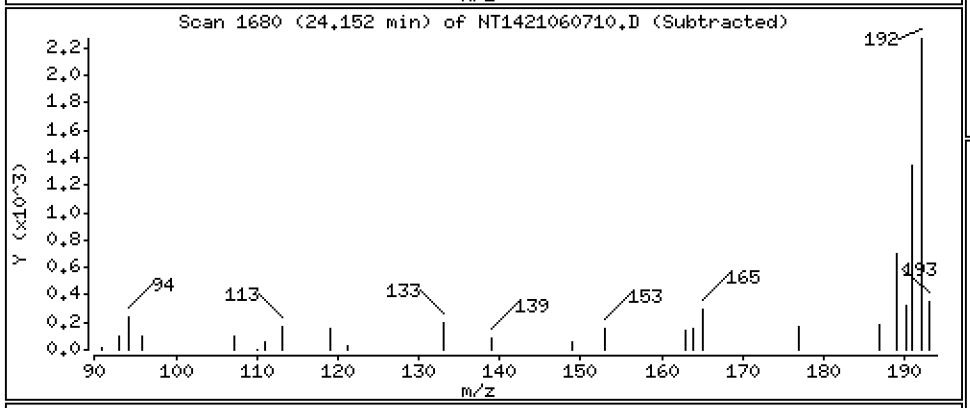
Column diameter: 0.25

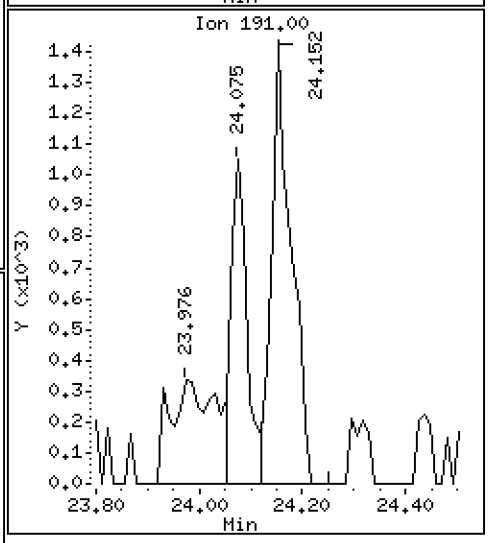
43 1-Methylphenanthrene

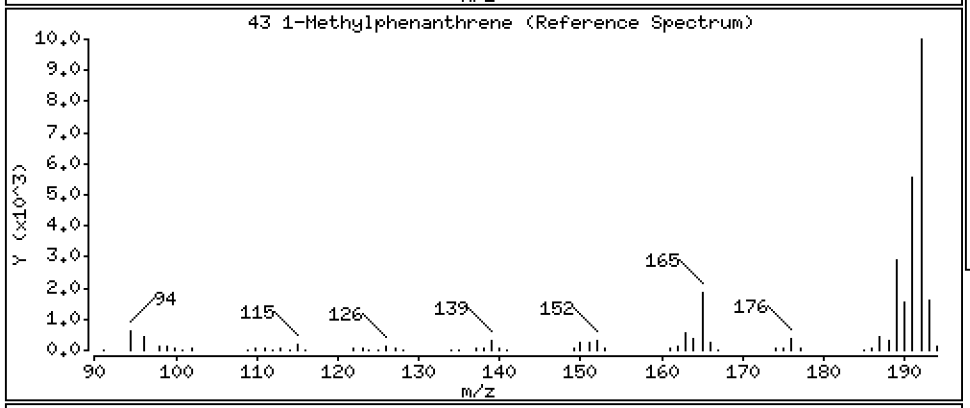
Concentration: 0.1756 ug/mL

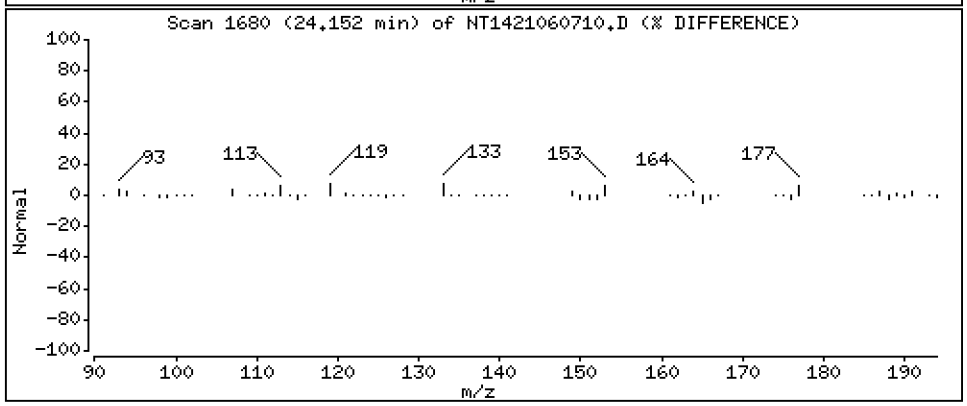












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Date : 07-JUN-2021 19:42

Client ID:

Instrument: nt14.i

Sample Info: 21E0106-01

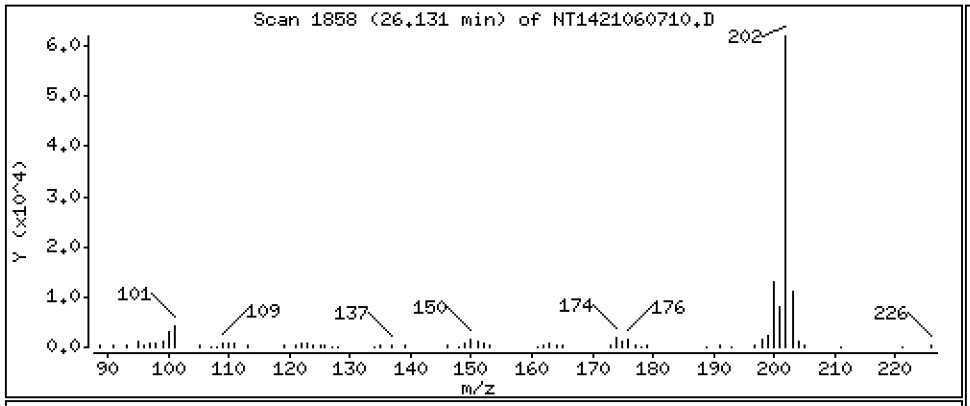
Operator: VTS

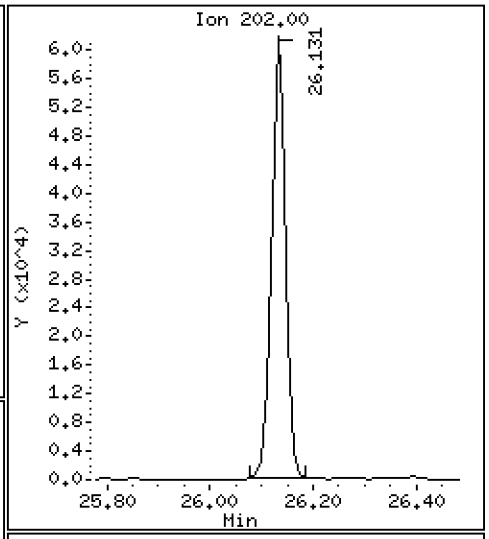
Column phase: Rxi-17Sil MS

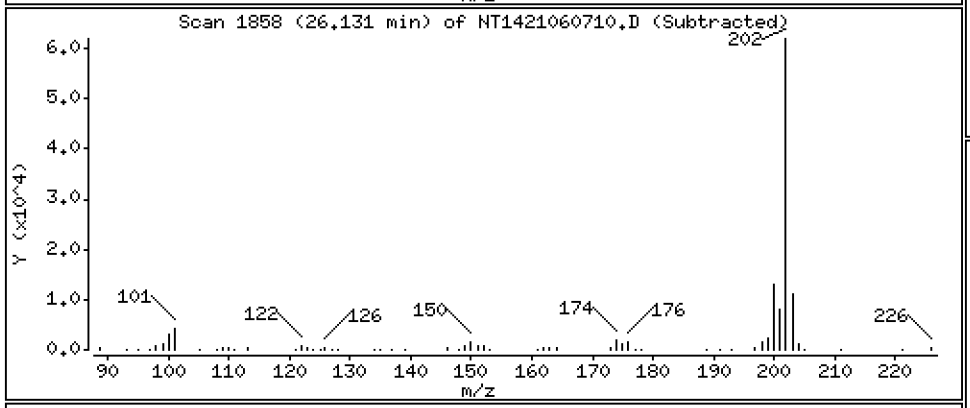
Column diameter: 0.25

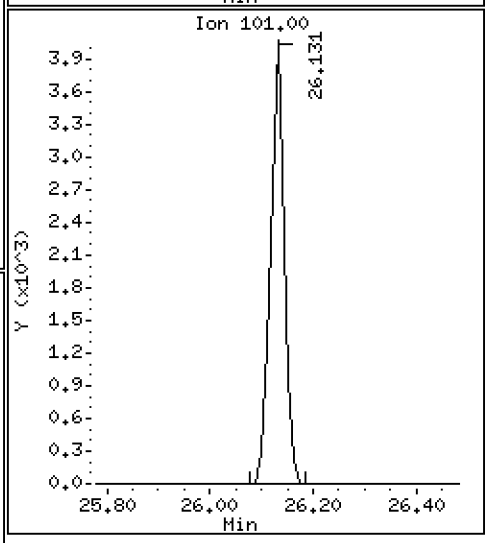
44 Fluoranthene

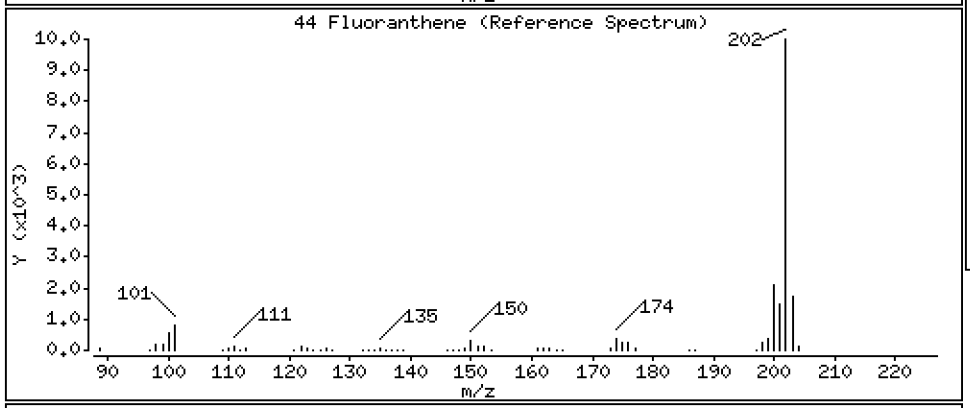
Concentration: 2.994 ug/mL

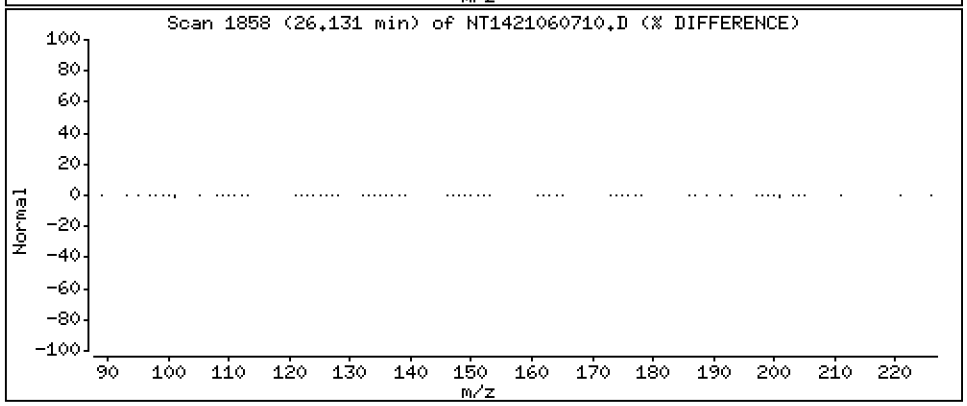












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Date : 07-JUN-2021 19:42

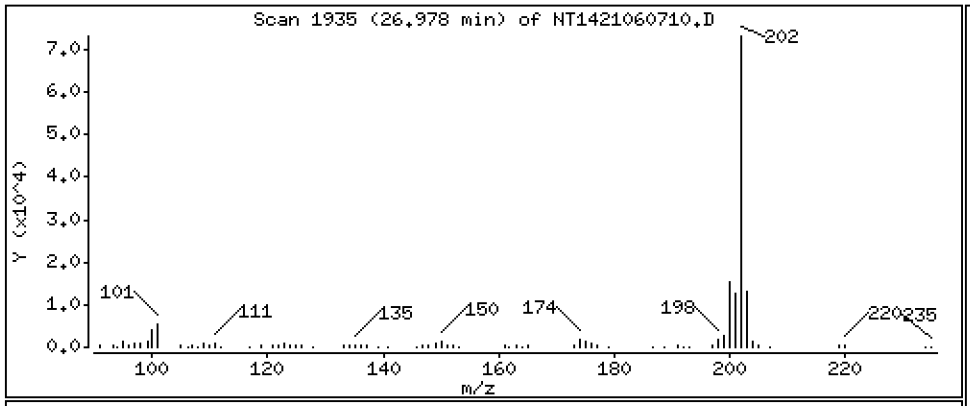
Client ID: Instrument: nt14.i

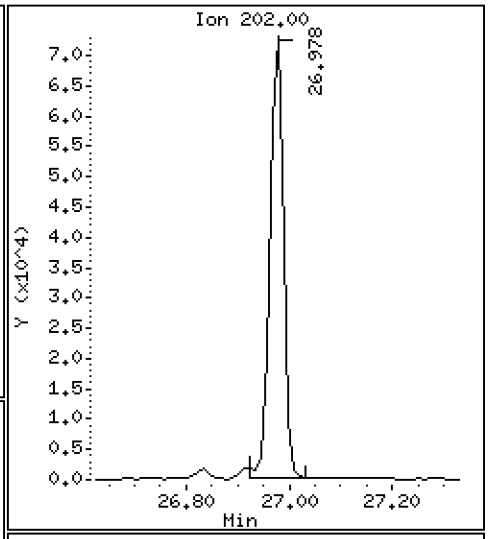
Sample Info: 21E0106-01

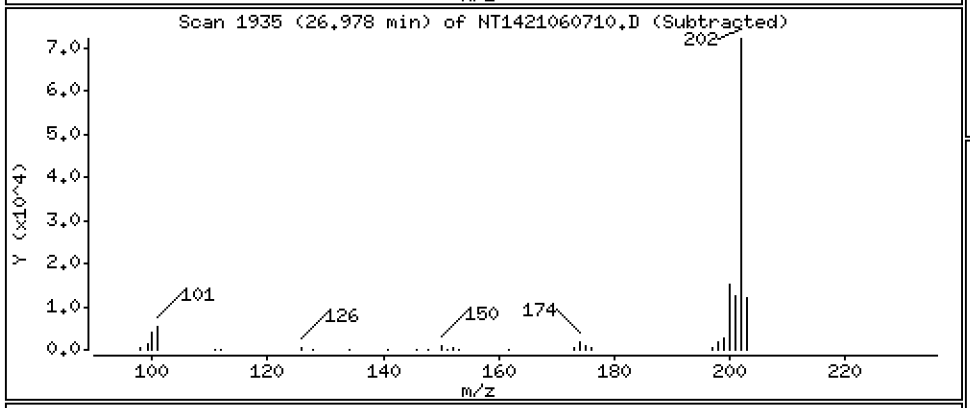
Operator: VTS

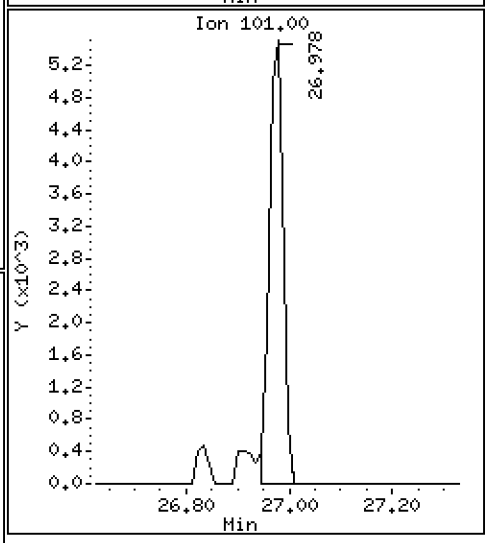
Column phase: Rxi-17Sil MS Column diameter: 0.25

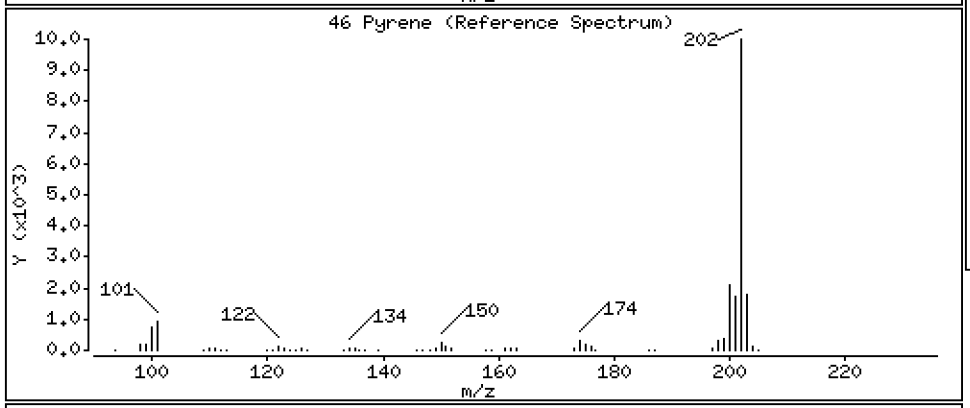
46 Pyrene Concentration: 3.141 ug/mL

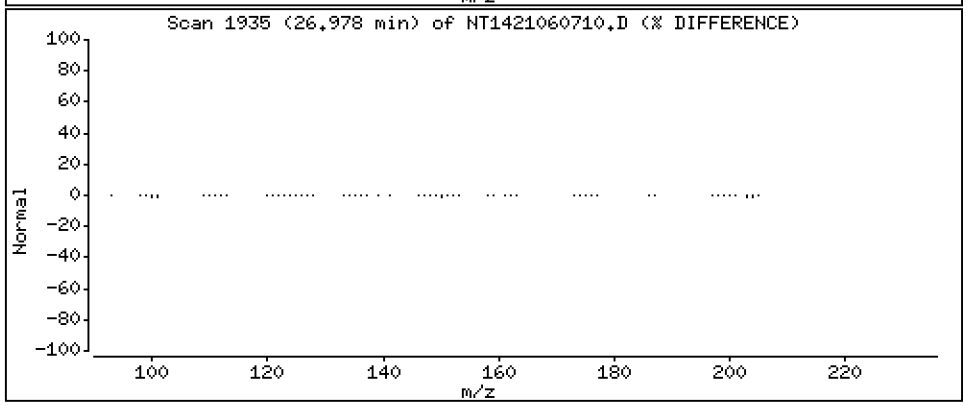












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Date : 07-JUN-2021 19:42

Client ID:

Instrument: nt14.i

Sample Info: 21E0106-01

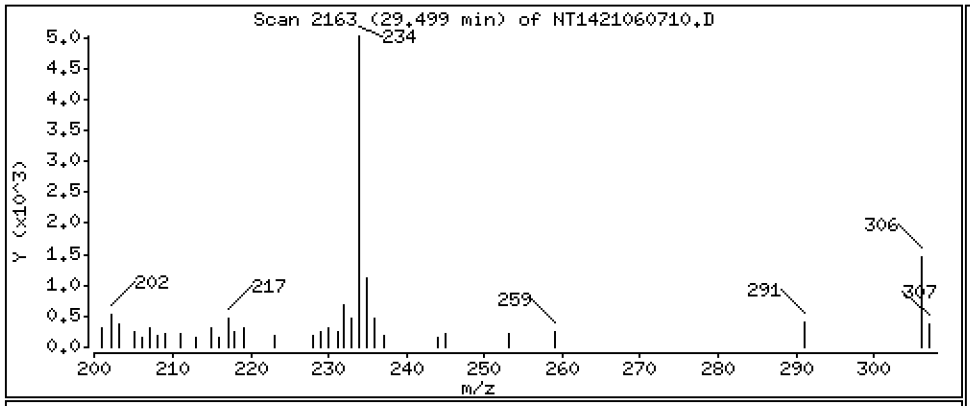
Operator: VTS

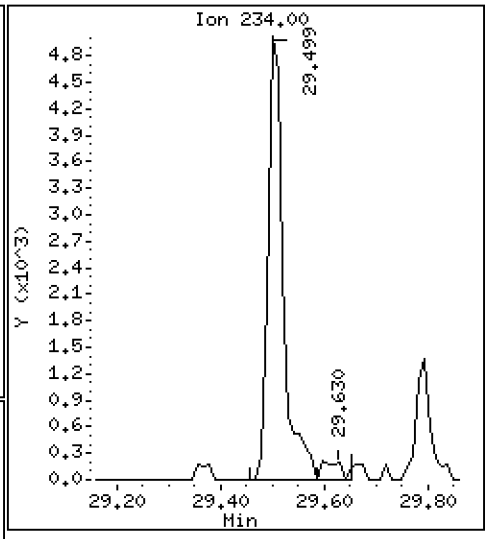
Column phase: Rxi-17Sil MS

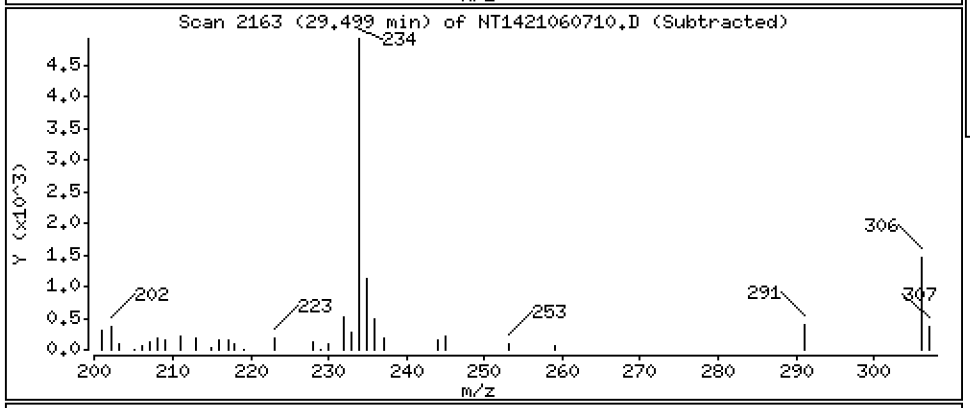
Column diameter: 0.25

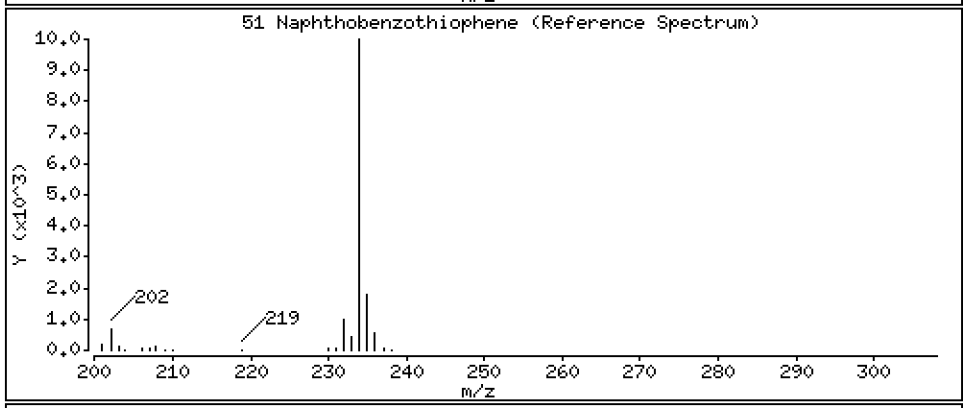
51 Naphthobenzothiophene

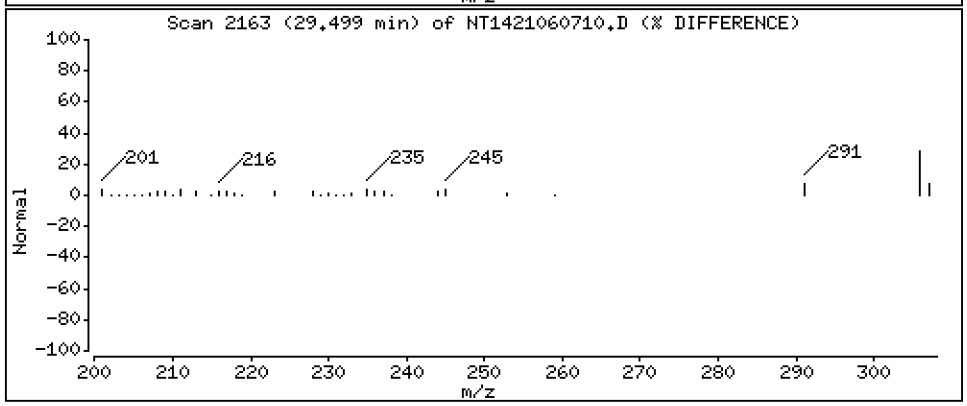
Concentration: 0.2339 ug/mL











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Date : 07-JUN-2021 19:42

Client ID:

Instrument: nt14.i

Sample Info: 21E0106-01

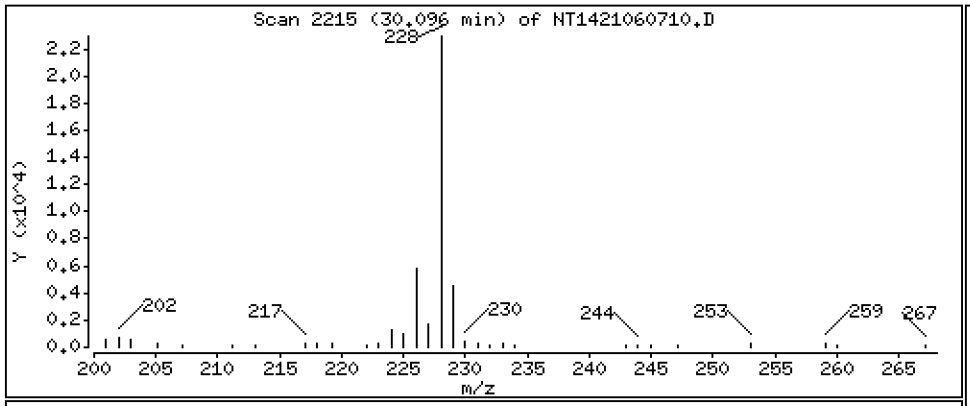
Operator: VTS

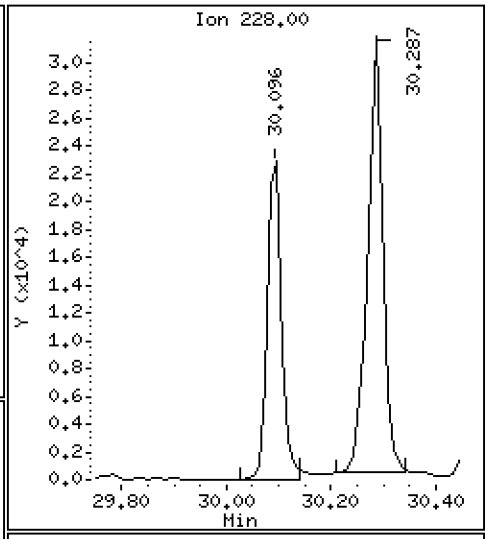
Column phase: Rxi-17Sil MS

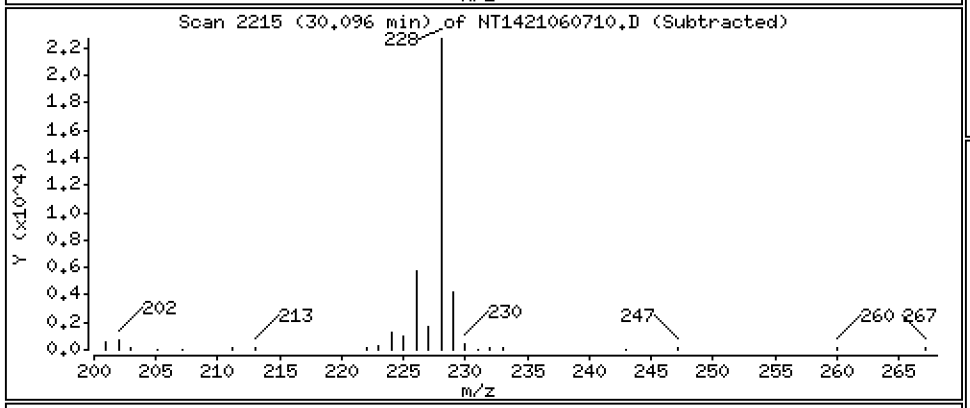
Column diameter: 0.25

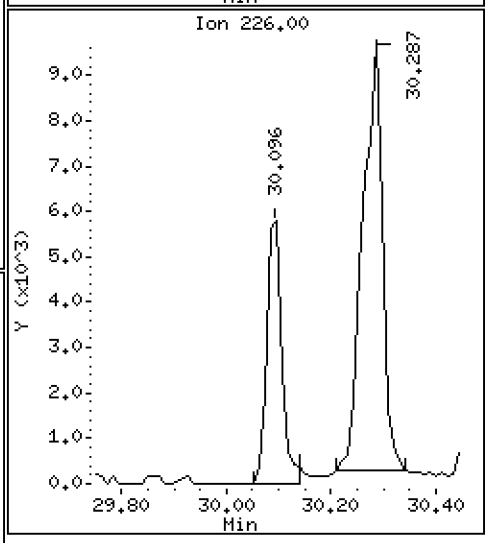
55 Benzo(a)anthracene

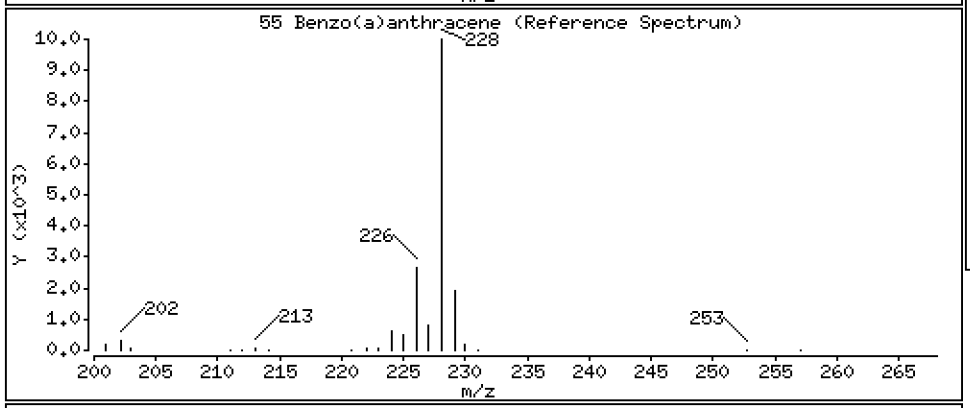
Concentration: 1.234 ug/mL

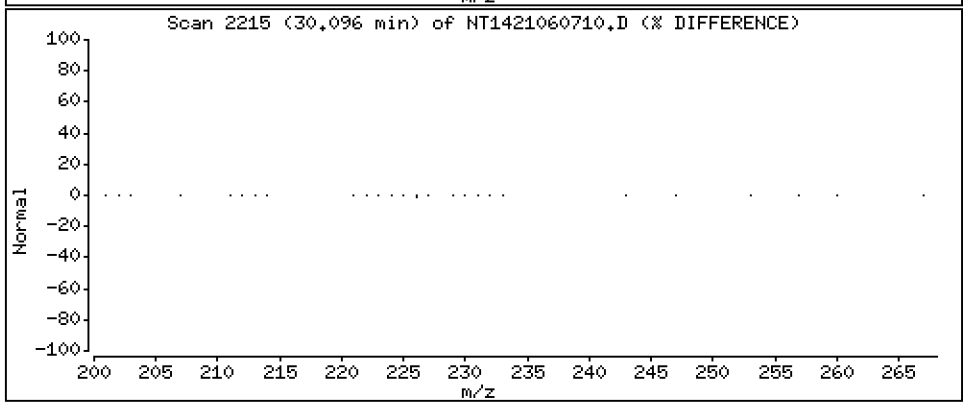












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Date : 07-JUN-2021 19:42

Client ID:

Instrument: nt14.i

Sample Info: 21E0106-01

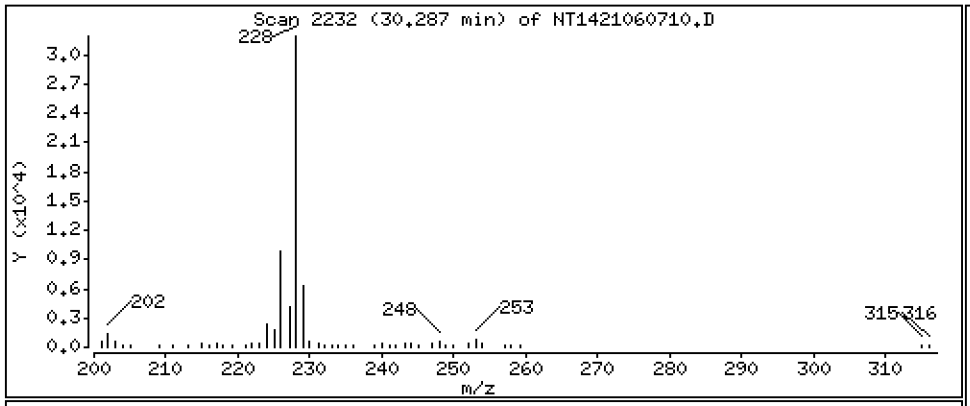
Operator: VTS

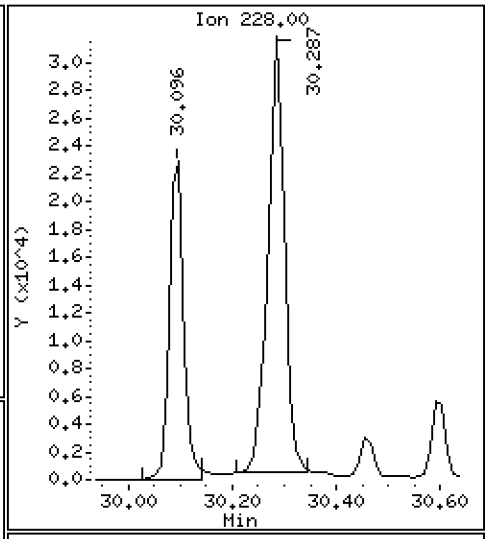
Column phase: Rxi-17Sil MS

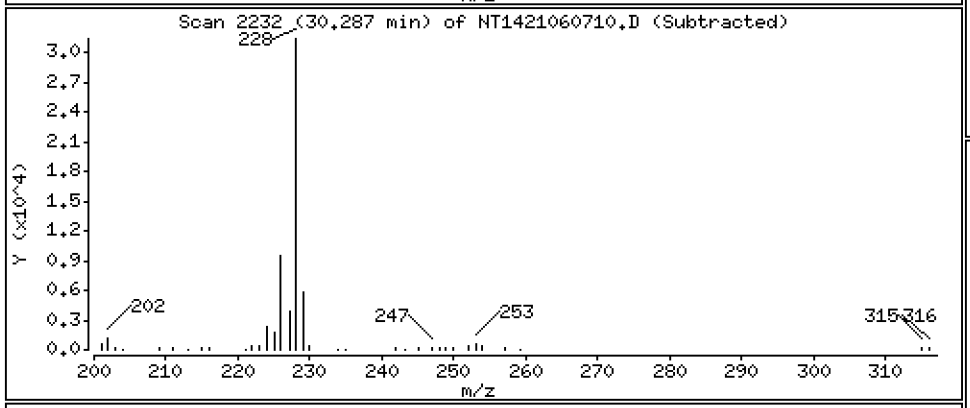
Column diameter: 0.25

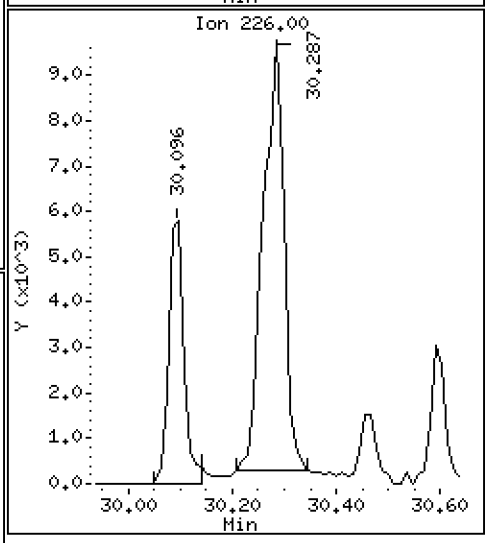
57 Chrysene

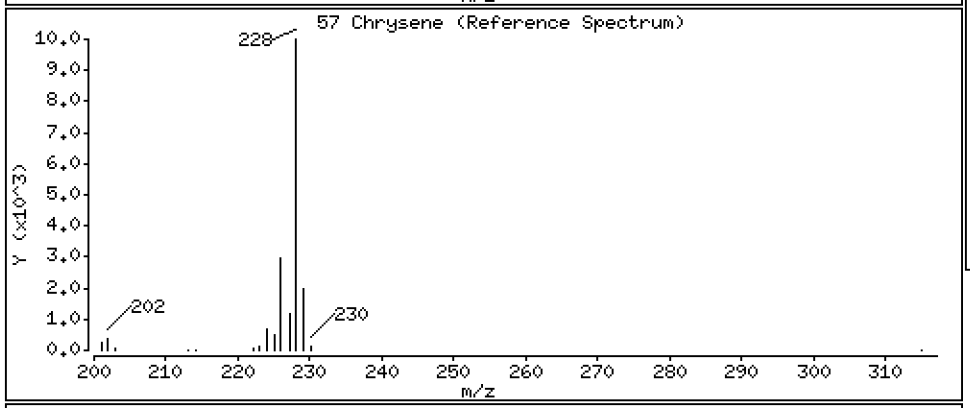
Concentration: 1.834 ug/mL

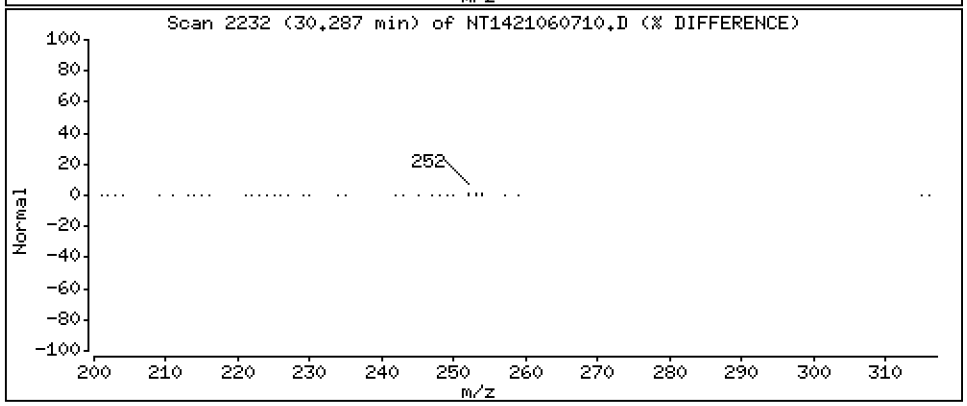












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Date : 07-JUN-2021 19:42

Client ID:

Instrument: nt14.i

Sample Info: 21E0106-01

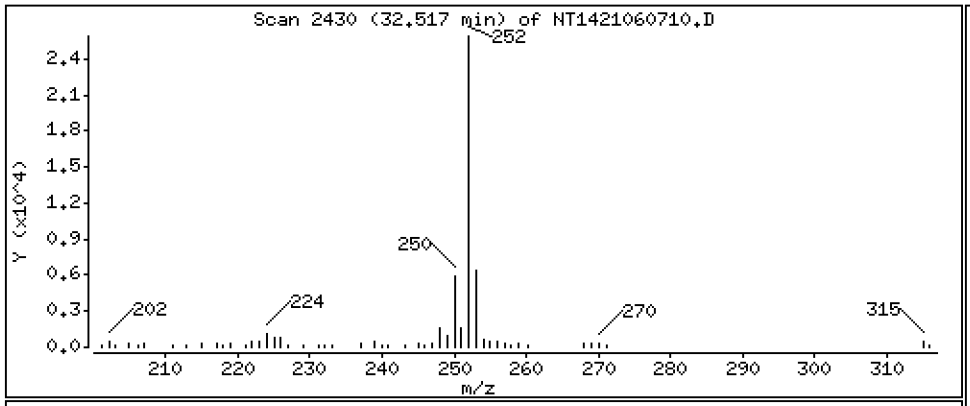
Operator: VTS

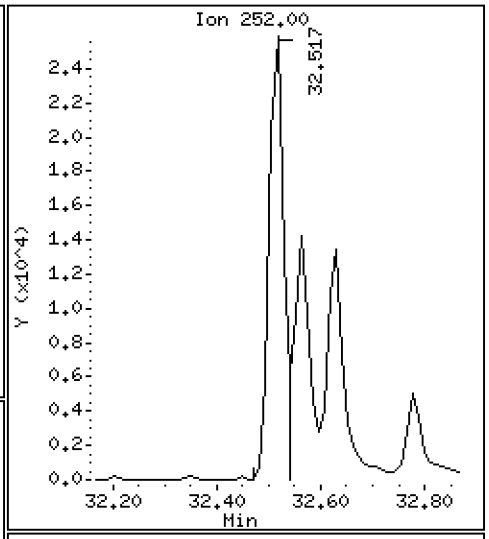
Column phase: Rxi-17Sil MS

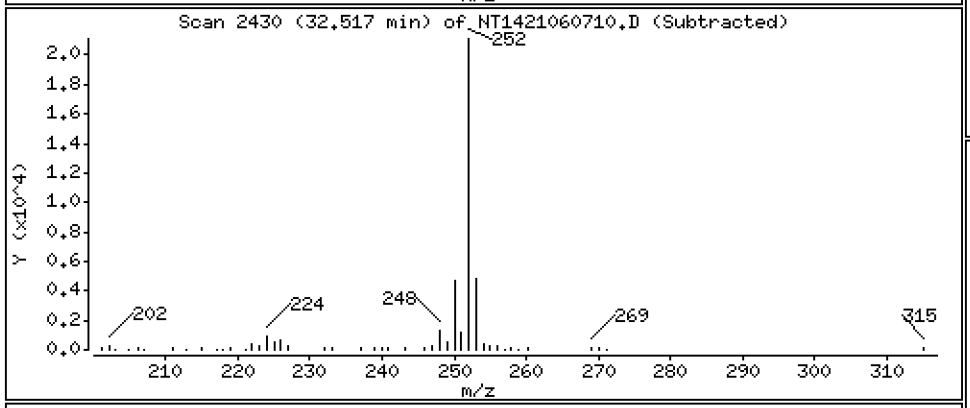
Column diameter: 0.25

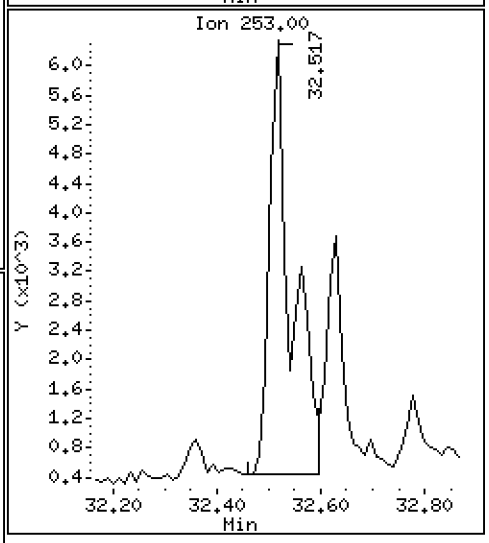
62 Benzo(b)fluoranthene

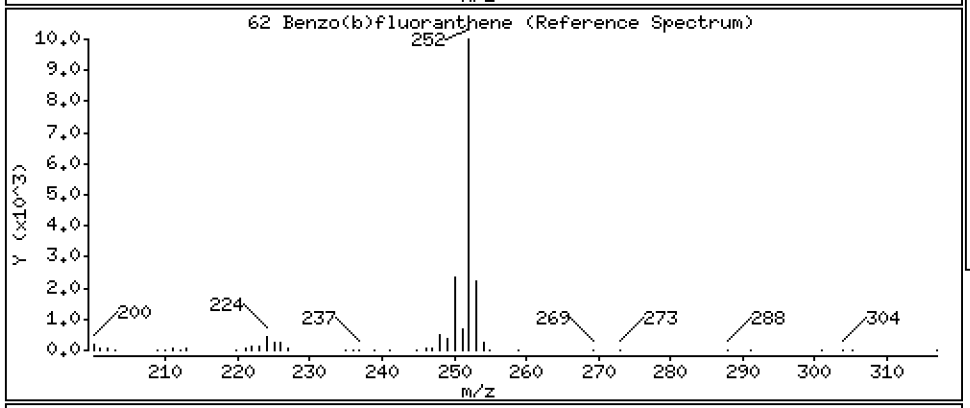
Concentration: 1.302 ug/mL

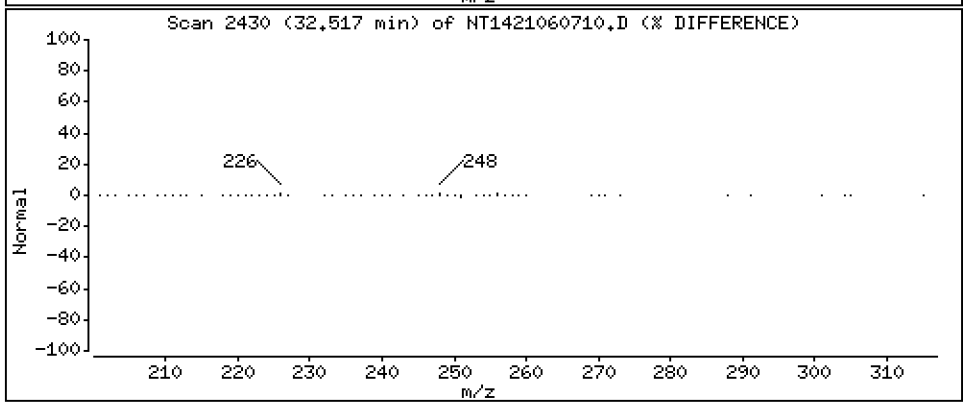












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Date : 07-JUN-2021 19:42

Client ID:

Instrument: nt14.i

Sample Info: 21E0106-01

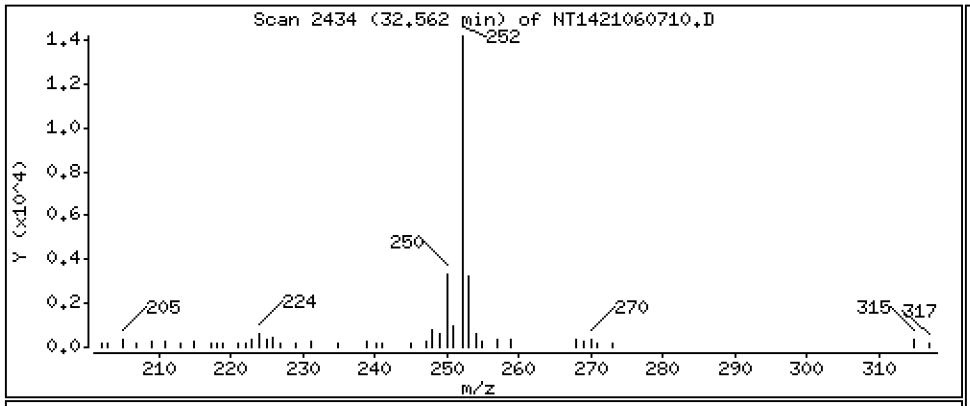
Operator: VTS

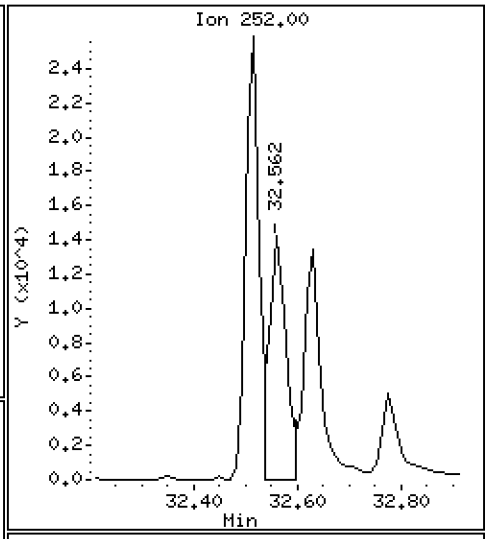
Column phase: Rxi-17Sil MS

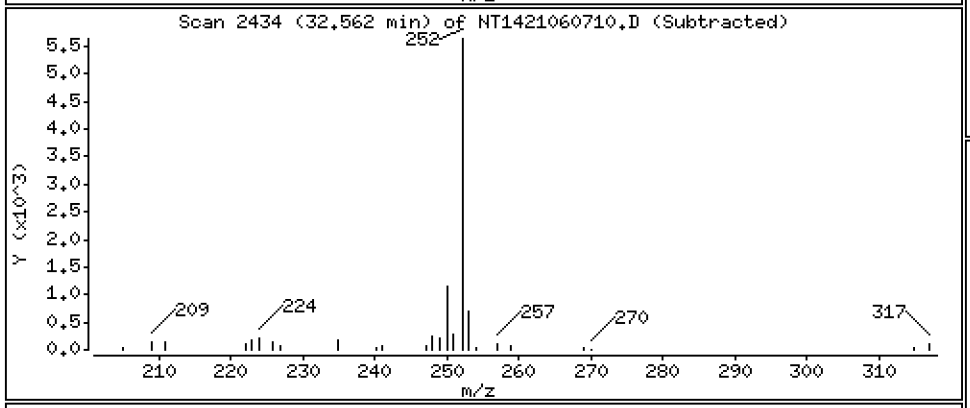
Column diameter: 0.25

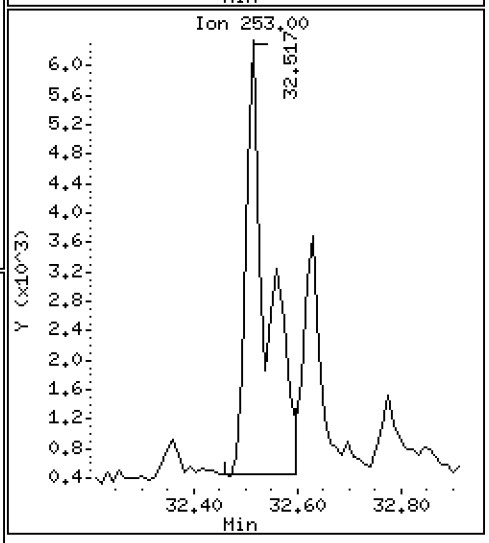
63 Benzo(k)fluoranthene

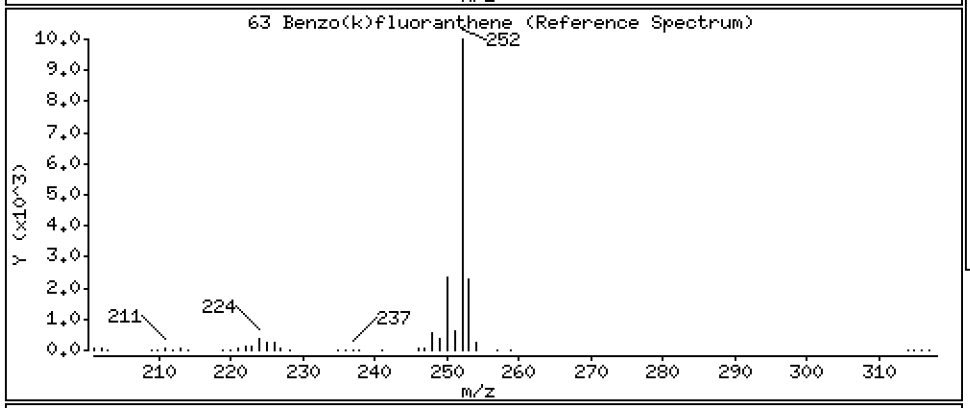
Concentration: 0.7873 ug/mL

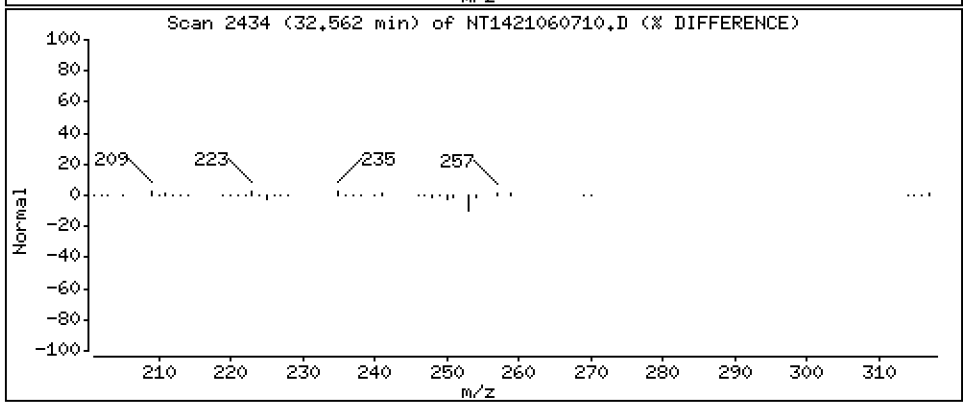












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Date : 07-JUN-2021 19:42

Client ID:

Instrument: nt14.i

Sample Info: 21E0106-01

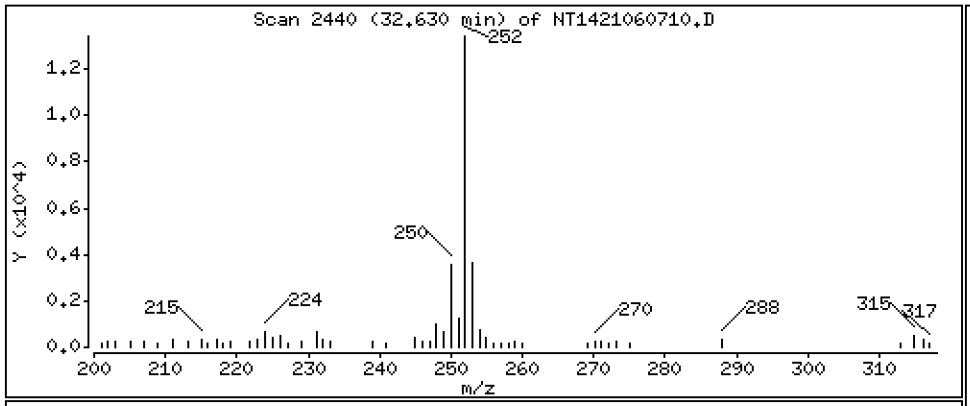
Operator: VTS

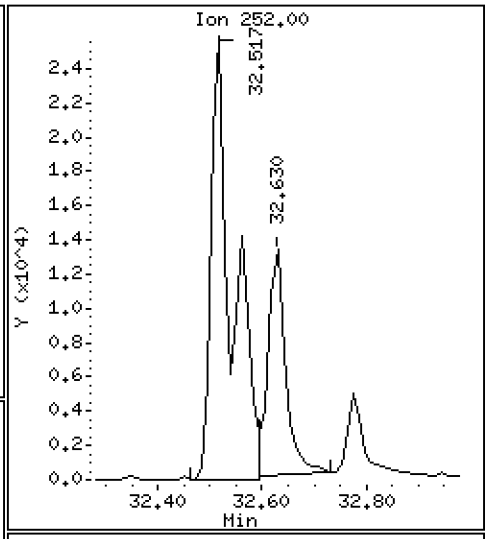
Column phase: Rxi-17Sil MS

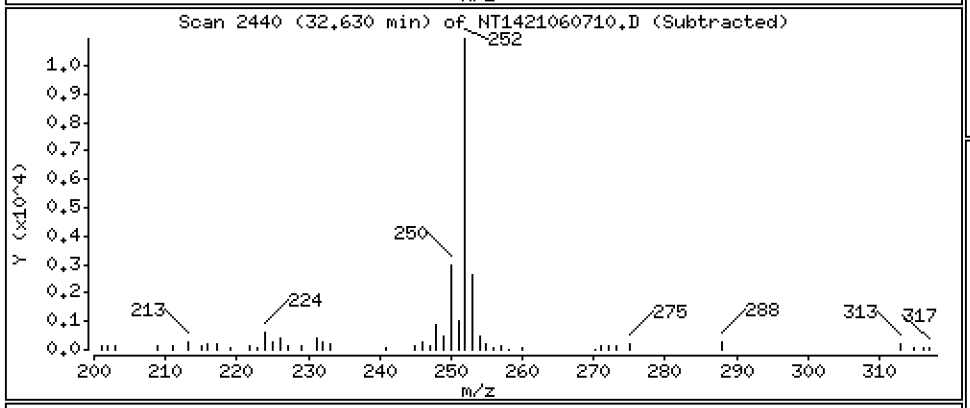
Column diameter: 0.25

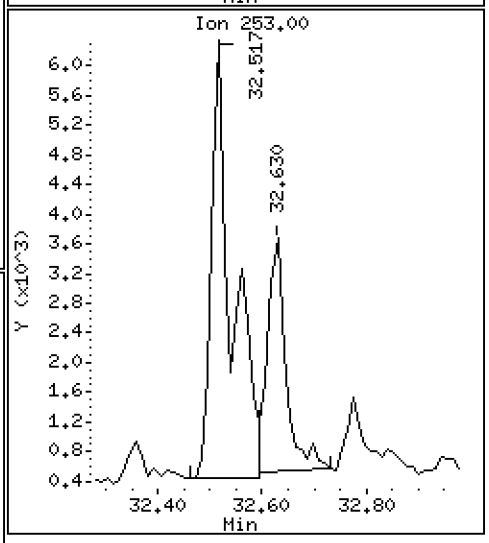
293 Benzo(j)fluoranthene

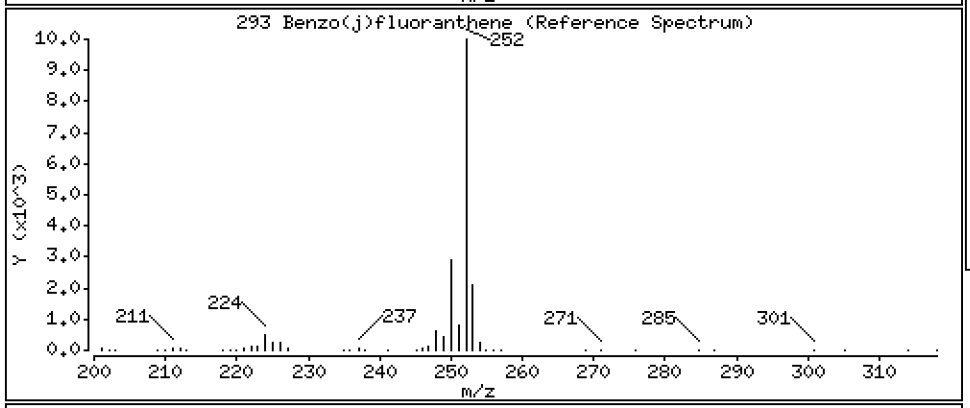
Concentration: 0.7994 ug/mL

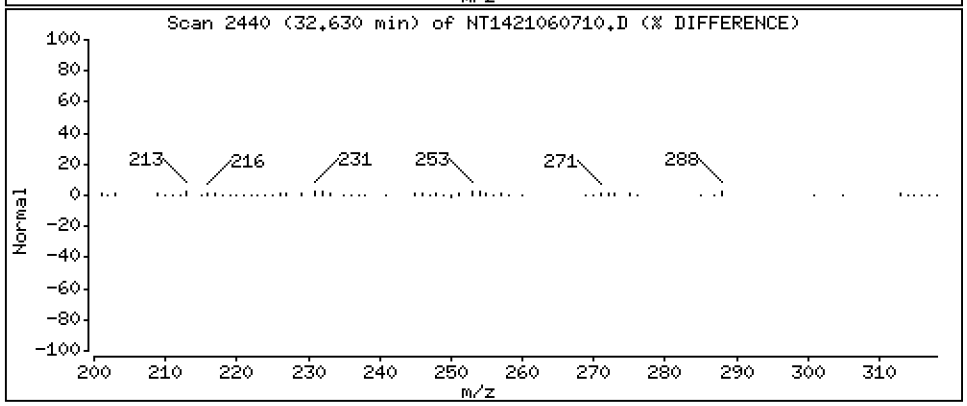












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Date : 07-JUN-2021 19:42

Client ID:

Instrument: nt14.i

Sample Info: 21E0106-01

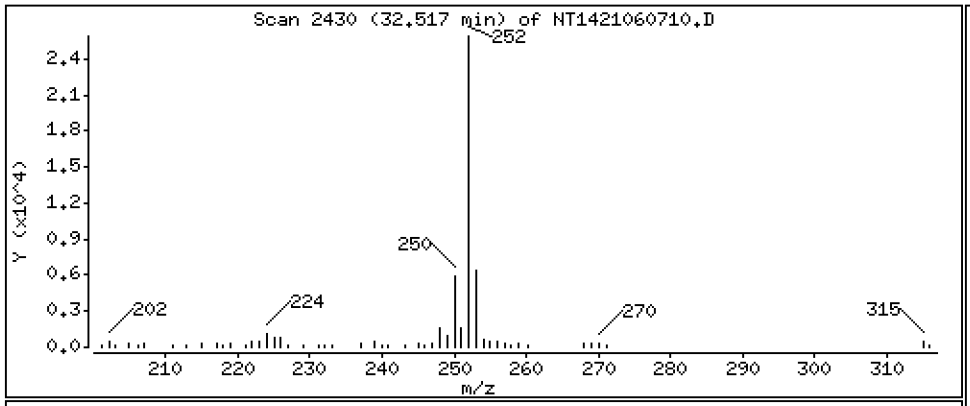
Operator: VTS

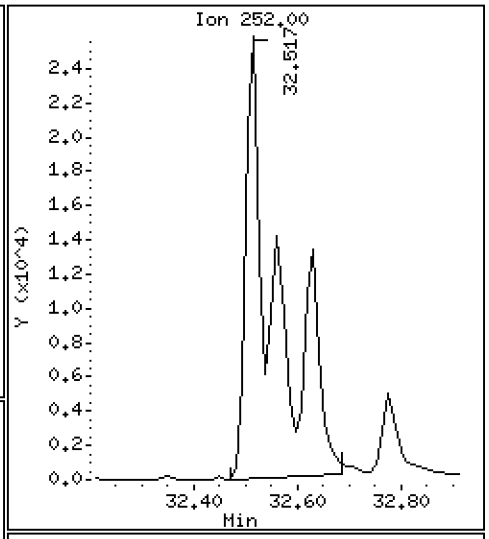
Column phase: Rxi-17Sil MS

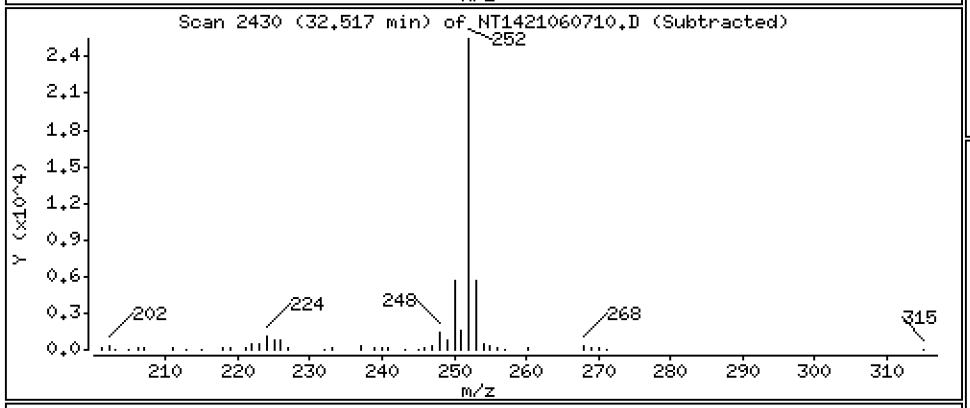
Column diameter: 0.25

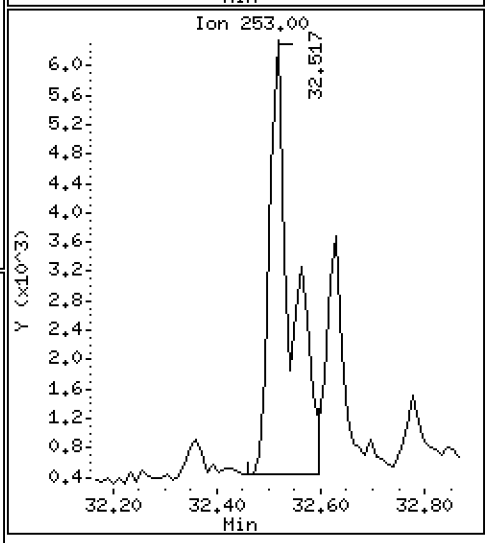
246 Total Benzofluoranthenes

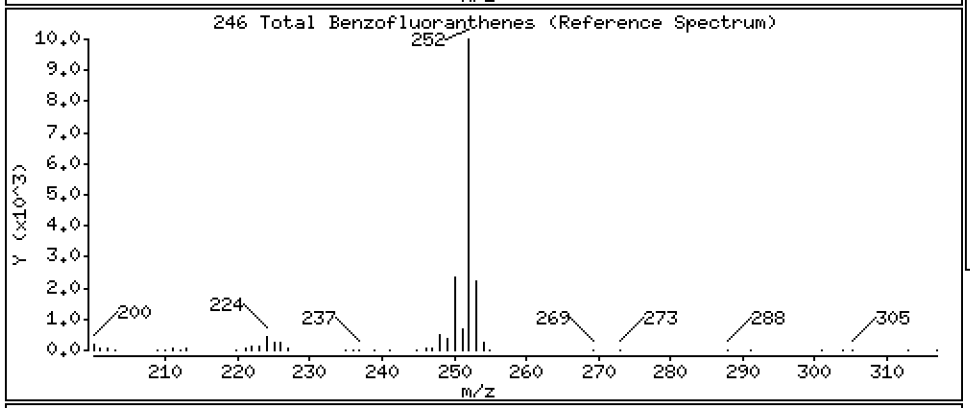
Concentration: 2.781 ug/mL

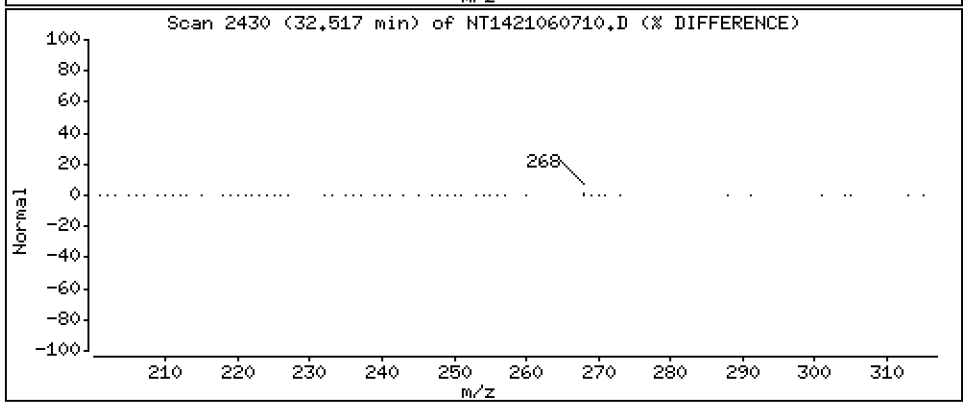












Data File: \\target\share\chem3\nt14.i\20210607.b\NT1421060710.D

Date : 07-JUN-2021 19:42

Client ID:

Instrument: nt14.i

Sample Info: 21E0106-01

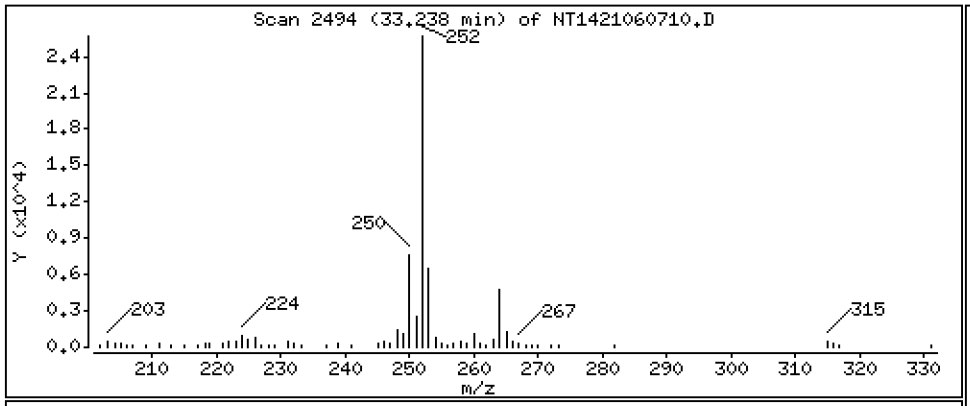
Operator: VTS

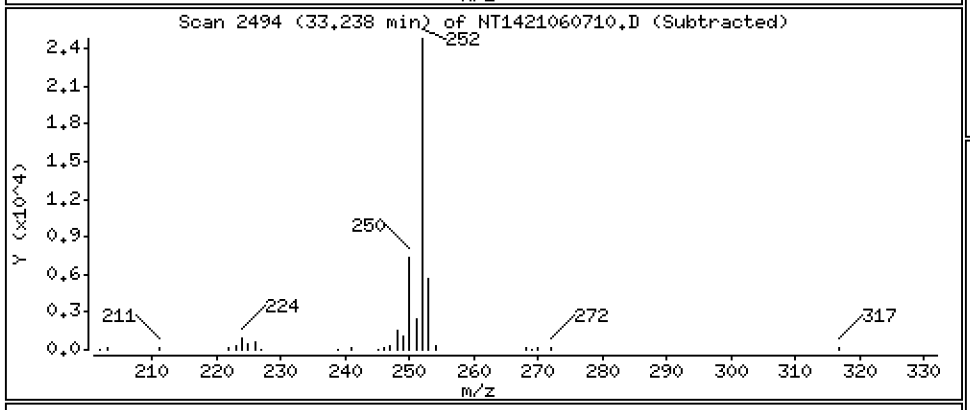
Column phase: Rxi-17Sil MS

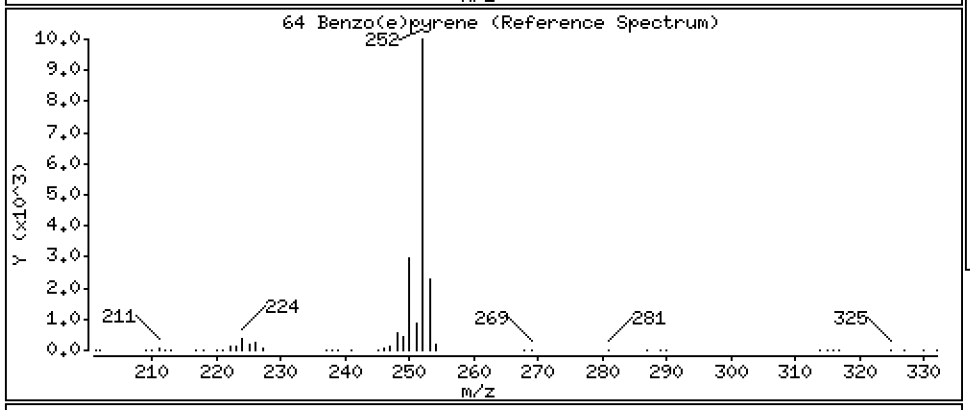
Column diameter: 0.25

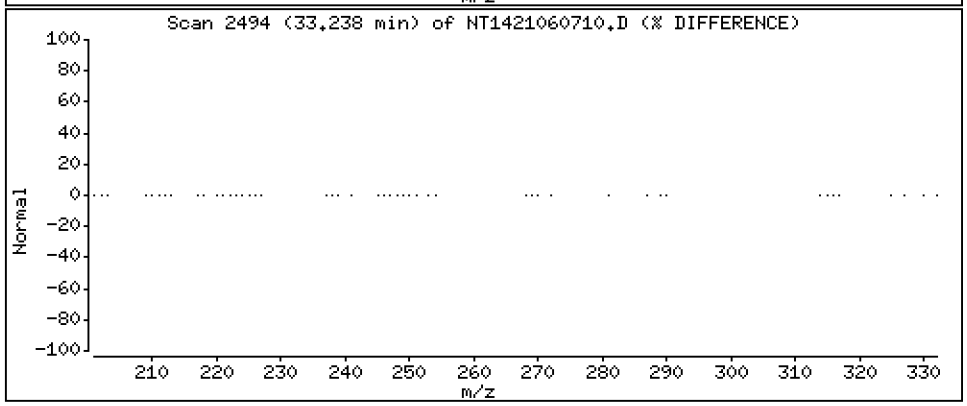
64 Benzo(e)pyrene

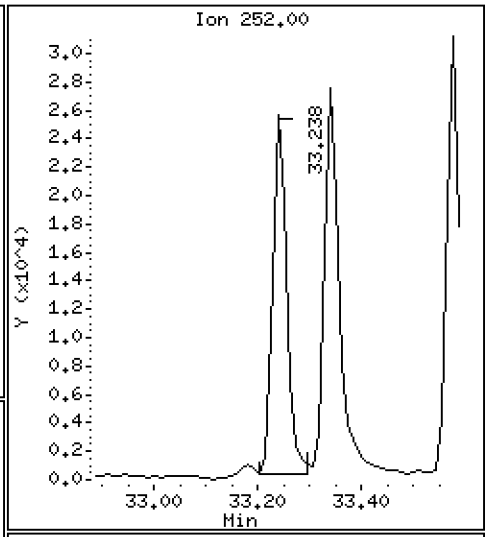
Concentration: 1.204 ug/mL

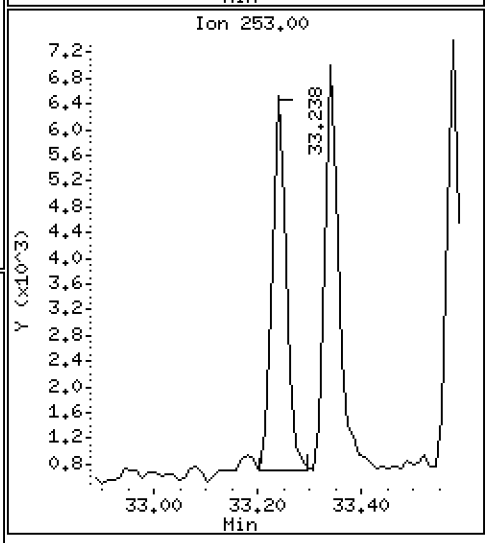












Data File: \\target\share\chem3\nt14.i\20210607.b\NT1421060710.D

Date : 07-JUN-2021 19:42

Client ID:

Instrument: nt14.i

Sample Info: 21E0106-01

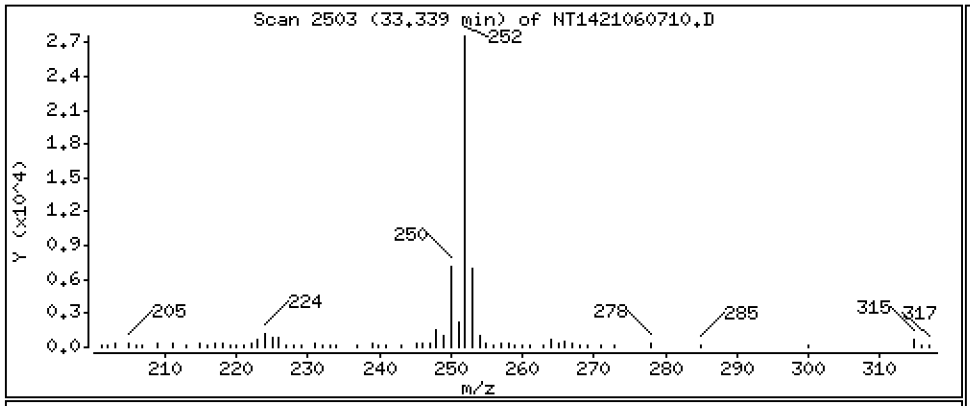
Operator: VTS

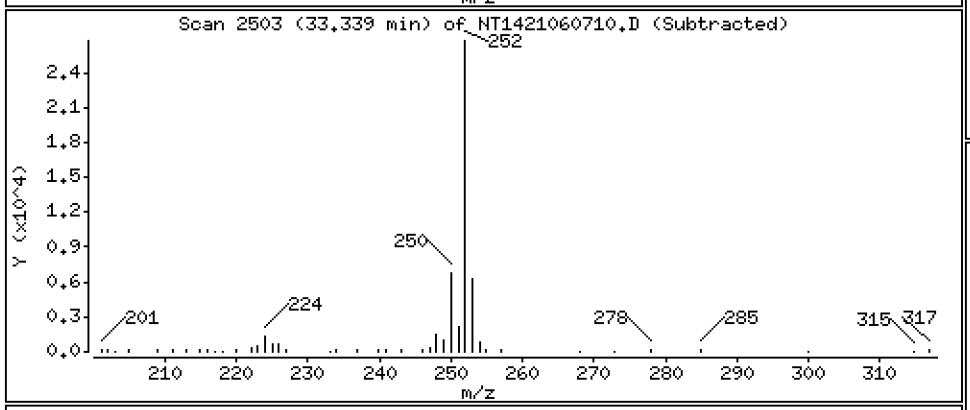
Column phase: Rxi-17Sil MS

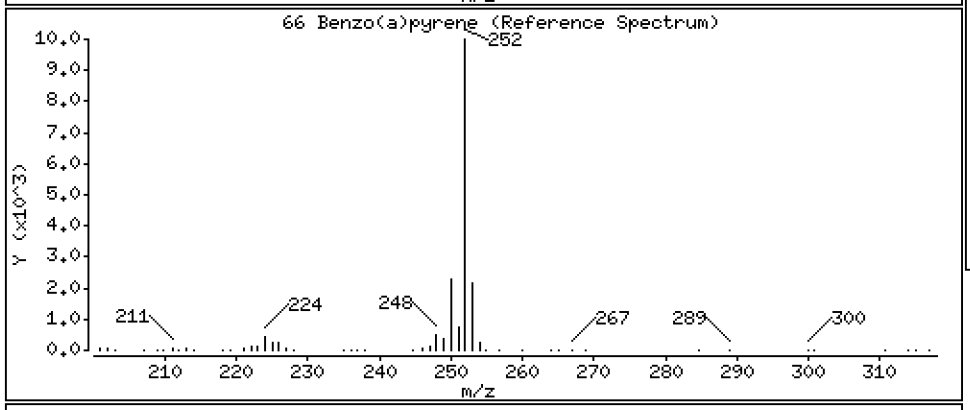
Column diameter: 0.25

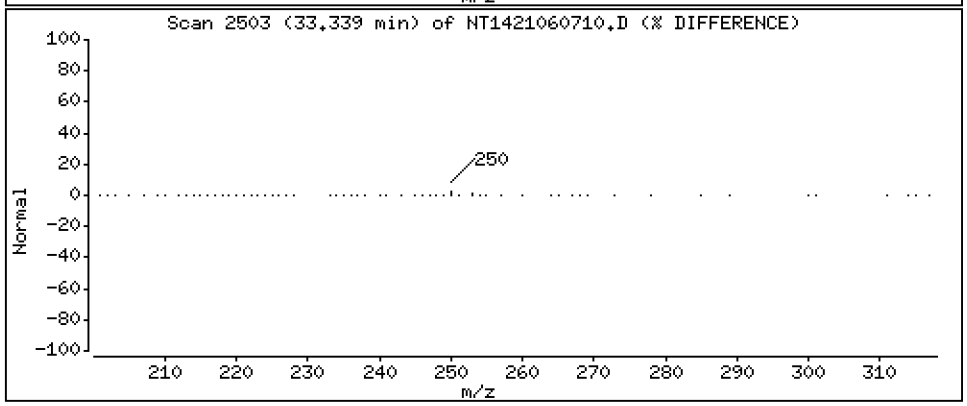
66 Benzo(a)pyrene

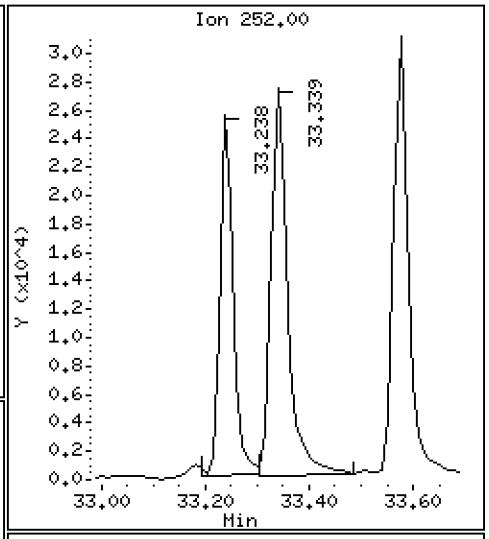
Concentration: 1.708 ug/mL

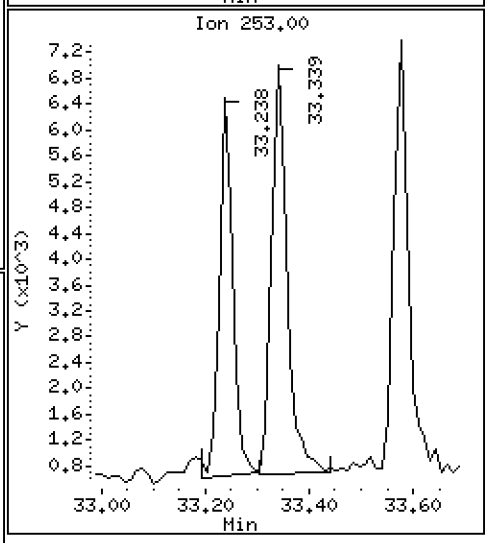












Data File: \\target\share\chem3\nt14.i\20210607.b\NT1421060710.D

Date : 07-JUN-2021 19:42

Client ID:

Instrument: nt14.i

Sample Info: 21E0106-01

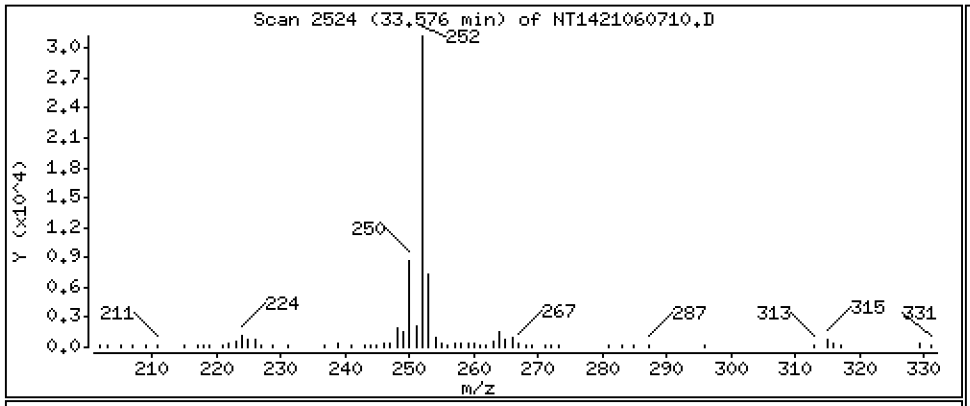
Operator: VTS

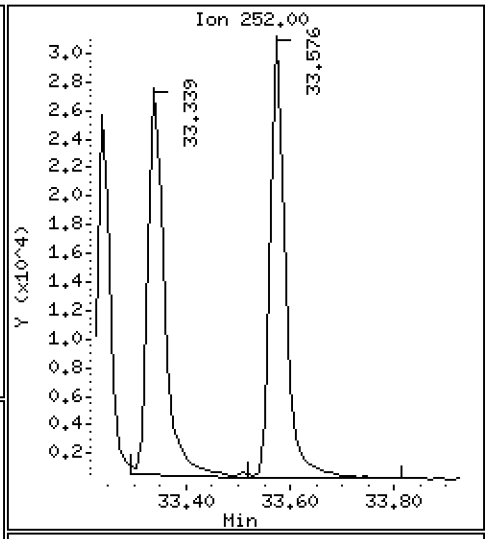
Column phase: Rxi-17Sil MS

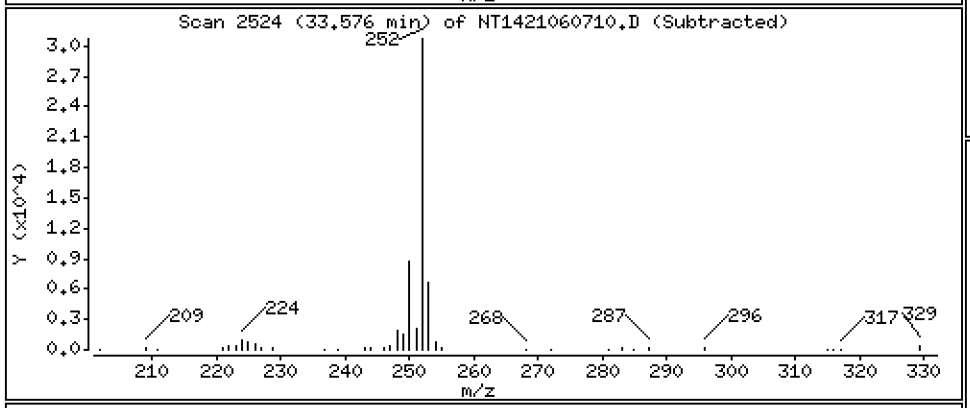
Column diameter: 0.25

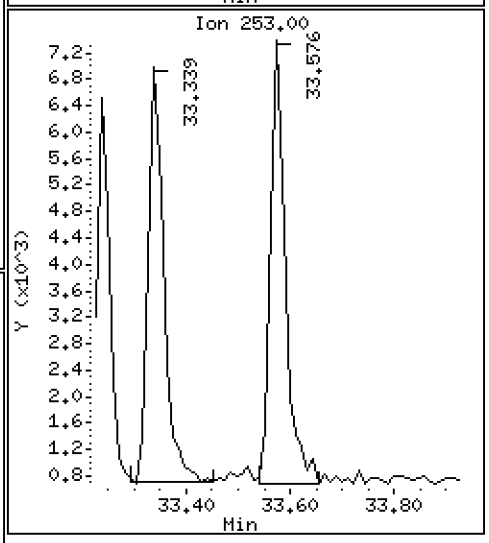
68 Perylene

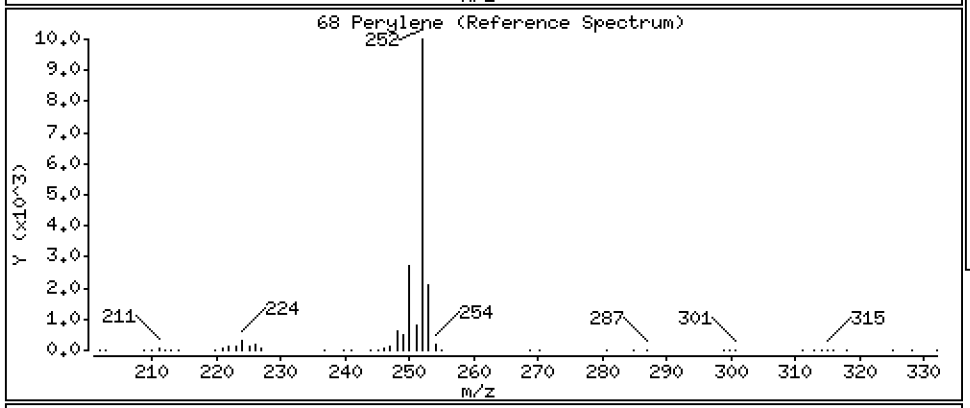
Concentration: 1.727 ug/mL

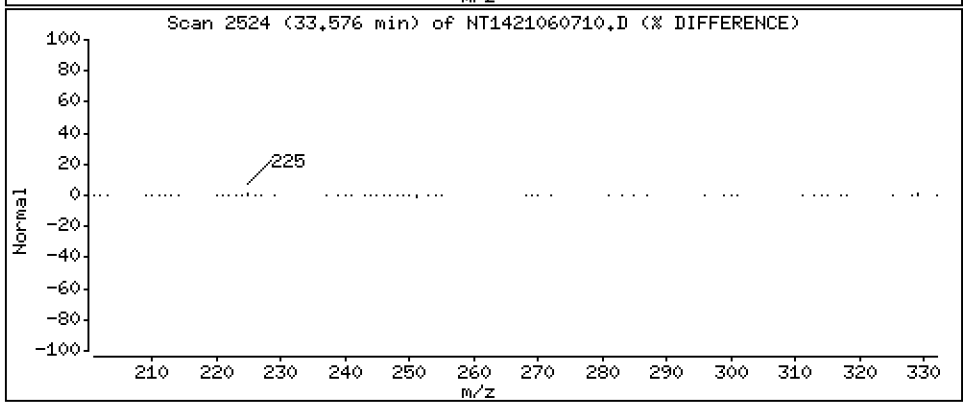












Data File: \\target\share\chem3\nt14.i\20210607.b\NT1421060710.D

Date : 07-JUN-2021 19:42

Client ID:

Instrument: nt14.i

Sample Info: 21E0106-01

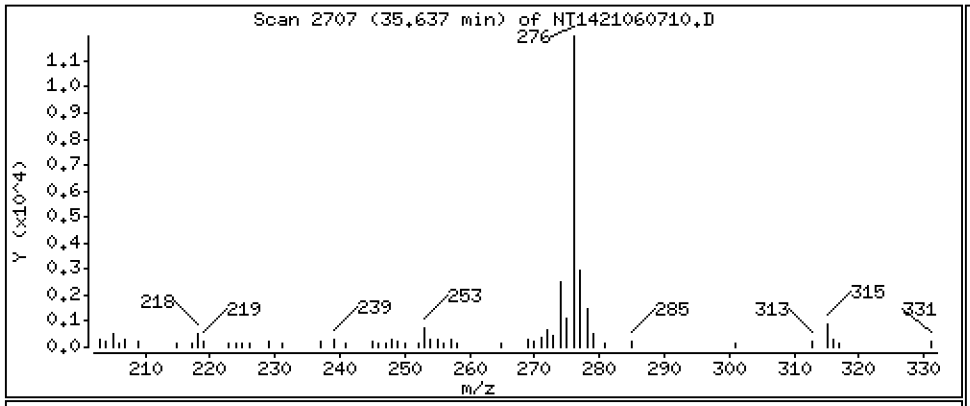
Operator: VTS

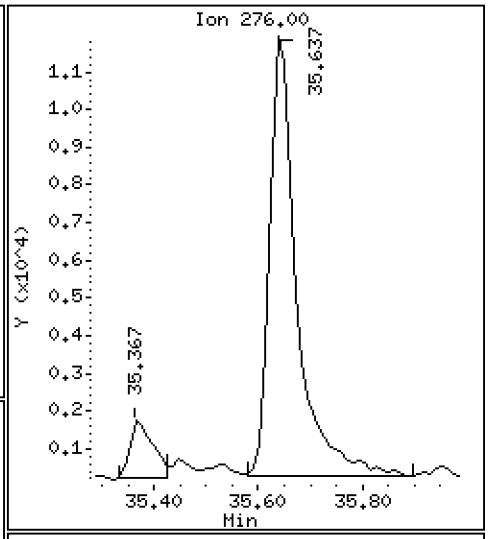
Column phase: Rxi-17Sil MS

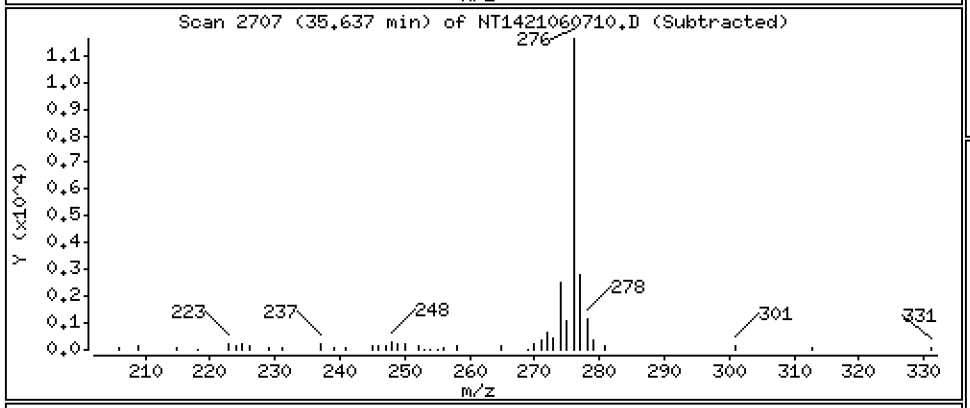
Column diameter: 0.25

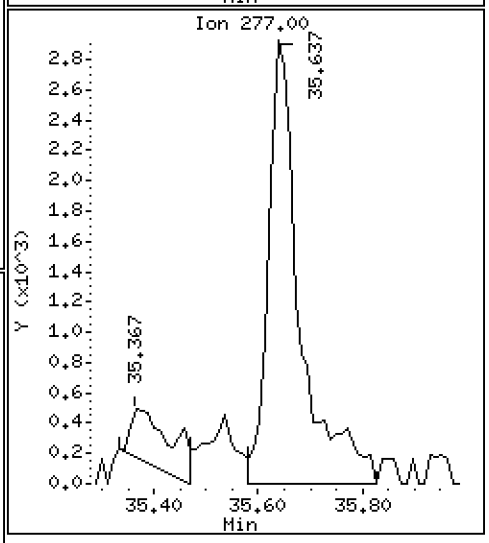
69 Indeno(1,2,3-cd)pyrene

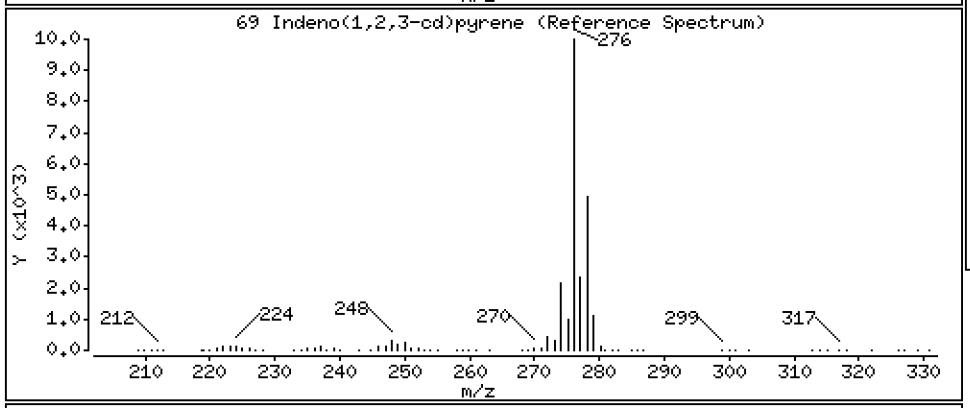
Concentration: 1.039 ug/mL

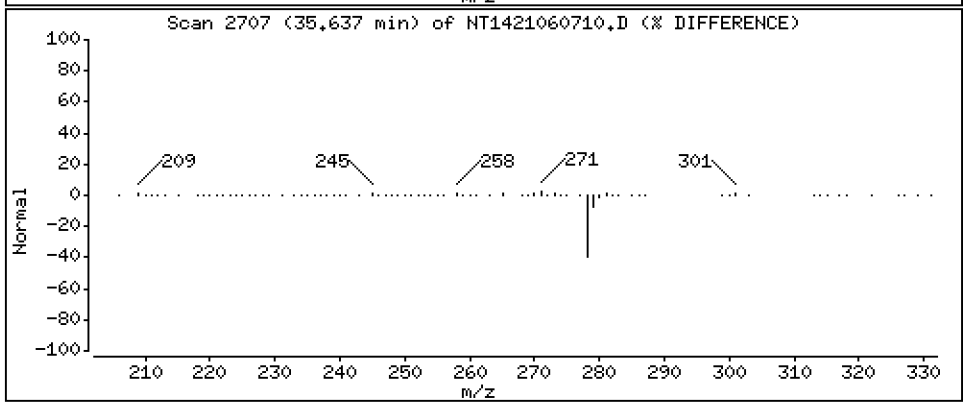












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Date : 07-JUN-2021 19:42

Client ID:

Instrument: nt14.i

Sample Info: 21E0106-01

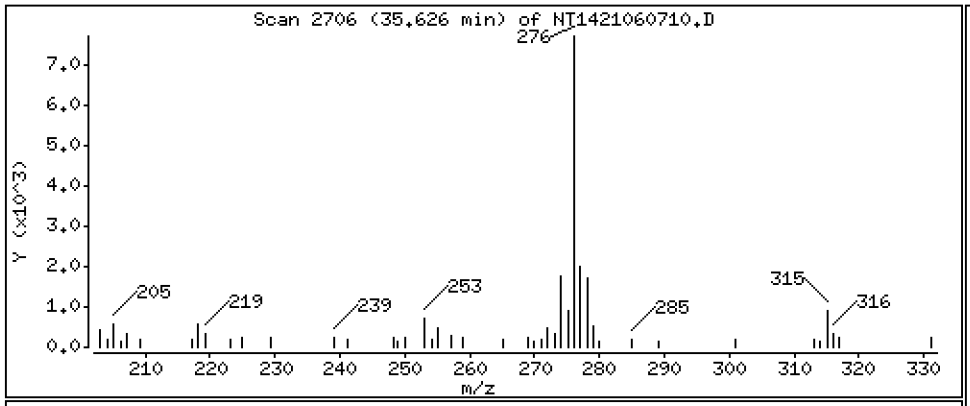
Operator: VTS

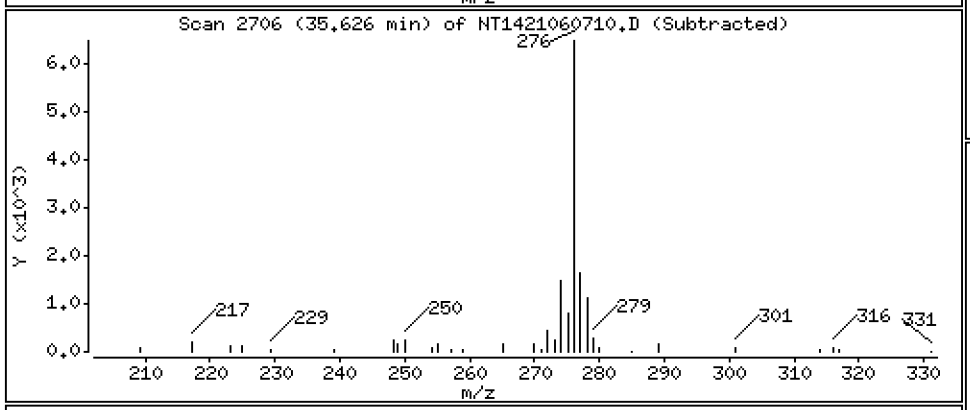
Column phase: Rxi-17Sil MS

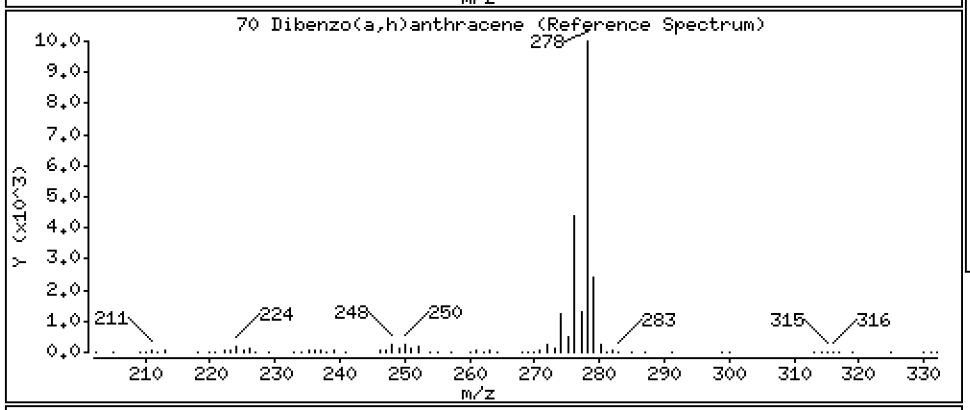
Column diameter: 0.25

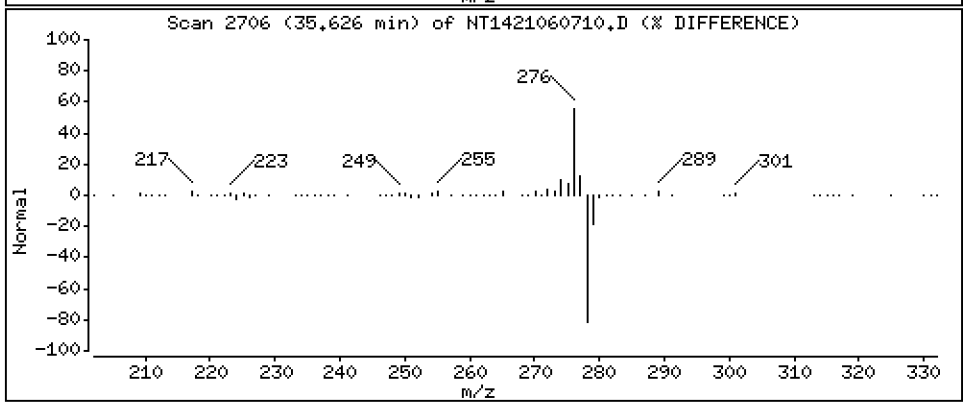
70 Dibenzo(a,h)anthracene

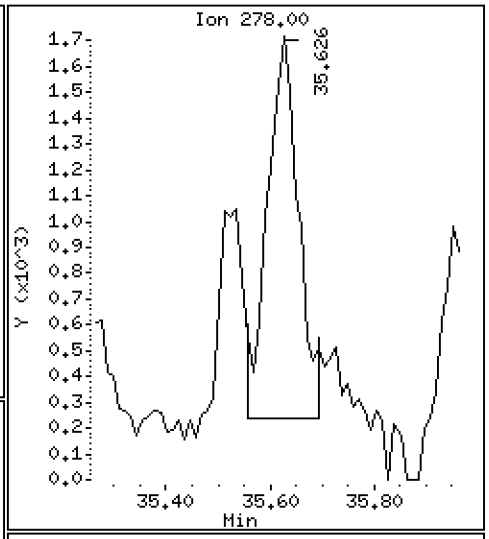
Concentration: 0.1656 ug/mL

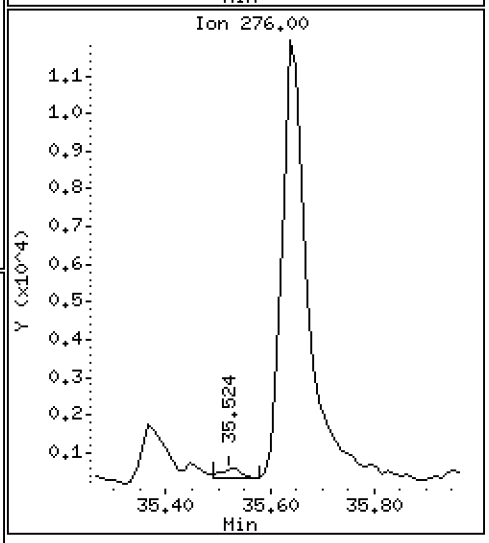












Data File: \\target\share\chem3\nt14.i\20210607.b\NT1421060710.D

Date : 07-JUN-2021 19:42

Client ID:

Instrument: nt14.i

Sample Info: 21E0106-01

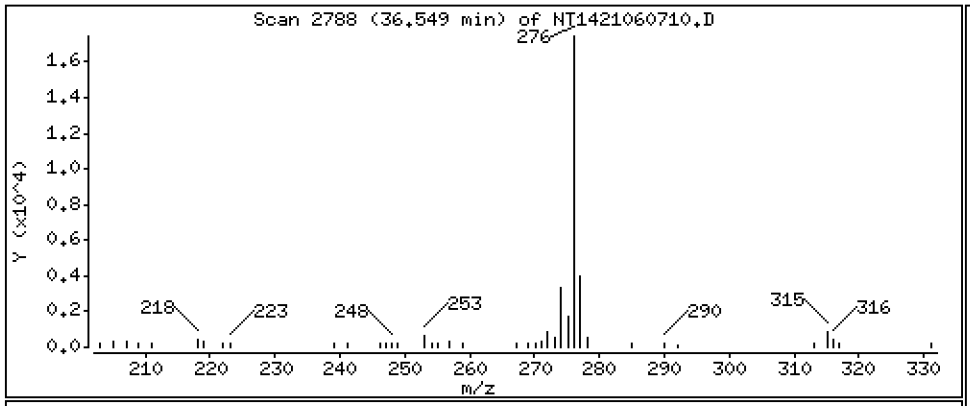
Operator: VTS

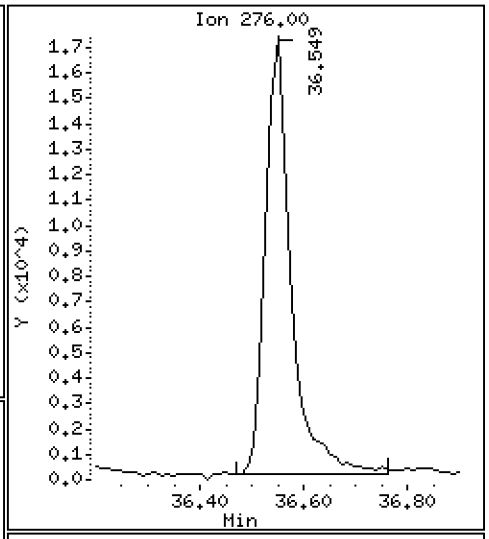
Column phase: Rxi-17Sil MS

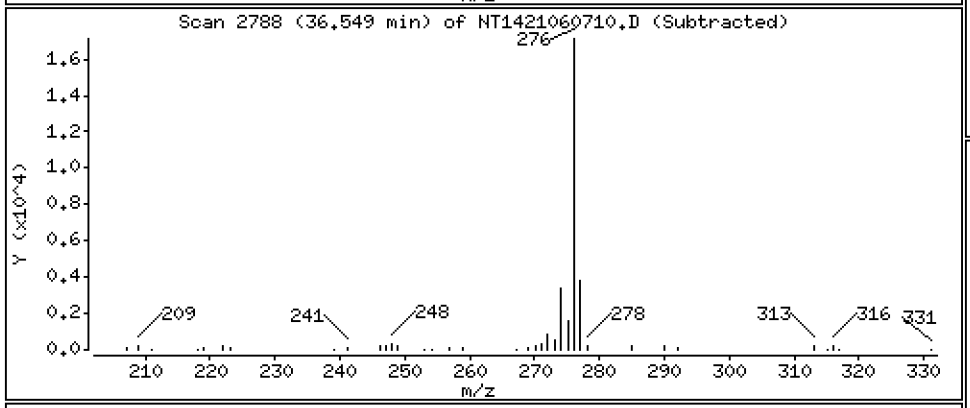
Column diameter: 0.25

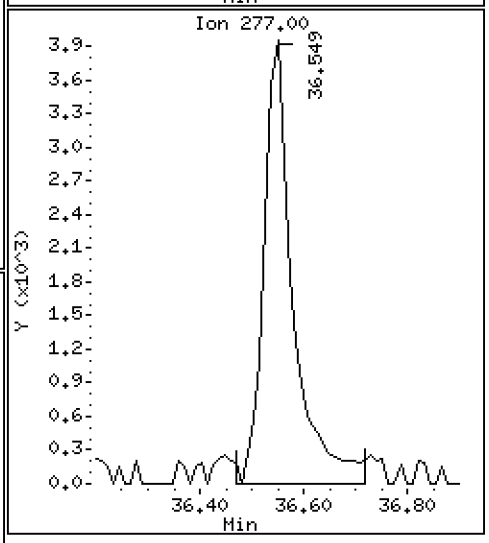
74 Benzo(g,h,i)perylene

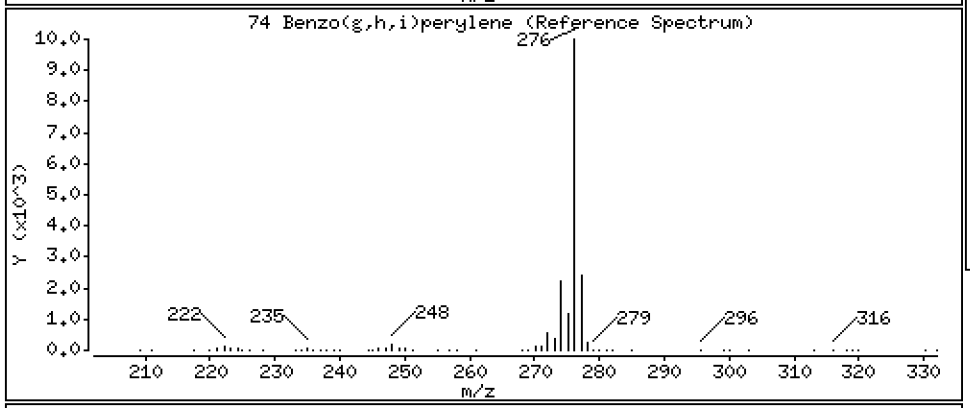
Concentration: 1.458 ug/mL

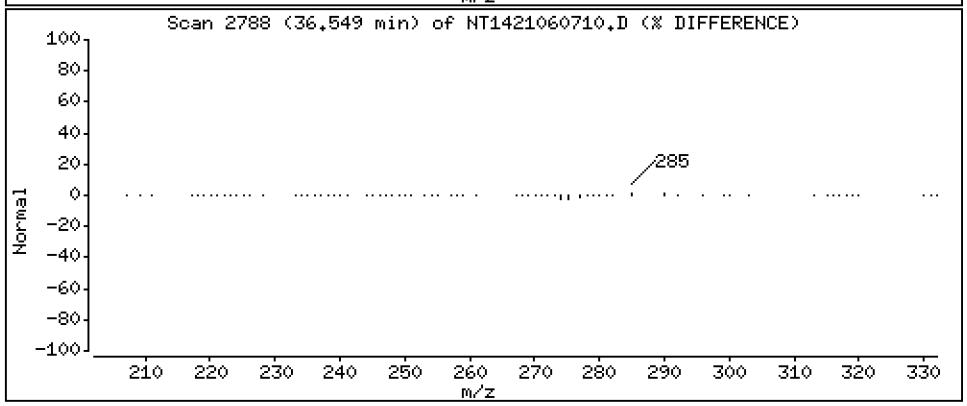












ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt14.i\20210607.b\NT1421060710.D
Lab Smp Id: 21E0106-01
Inj Date : 07-JUN-2021 19:42
Operator : VTS Inst ID: nt14.i
Smp Info : 21E0106-01
Misc Info :
Comment : 1ul Injection
Method : \\target\share\chem3\nt14.i\20210607.b\ALKYLPNA.m
Meth Date : 12-Jun-2021 14:57 yev Quant Type: ISTD
Cal Date : 29-MAY-2021 18:49 Cal File: NT1421052914.D
Als bottle: 37
Dil Factor: 5.00000
Integrator: HP RTE Compound Sublist: TARGETS.sub
Target Version: 4.14
Processing Host: ORGDATA102

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/mL)
1 trans-Decalin	138	Compound Not Detected.					
2 cis-Decalin	138	Compound Not Detected.					
$ 6 Naphthalene-d8	136	11.887	11.887	(0.629)	43852	0.26738	1.337(R)
7 Naphthalene	128	11.957	11.957	(0.633)	5719	0.03489	0.1745
12 Benzo(b)thiophene	134	Compound Not Detected.					
16 2-Methylnaphthalene	141	13.794	13.794	(0.730)	1582	0.01651	0.08255
17 1-methylnaphthalene	141	14.244	14.244	(0.754)	1076	0.01154	0.05771
18 Biphenyl	154	Compound Not Detected.					
19 2,6-Dimethylnaphthalene	156	Compound Not Detected.					
20 Acenaphthylene	152	17.091	17.080	(0.904)	2920	0.01641	0.08203
$ 21 Acenaphthene-d10	164	17.365	17.365	(0.919)	29512	0.29298	1.465(R)
22 Acenaphthene	153	17.486	17.486	(0.925)	4107	0.03743	0.1872
23 Dibenzofuran	168	17.860	17.860	(0.945)	1921	0.01180	0.05901
24 1,6,7-Trimethylnaphthalene	170	Compound Not Detected.					
* 25 Fluorene-d10	176	18.896	18.896	(1.000)	352791	2.00000	
26 Fluorene	166	19.009	19.009	(1.006)	3740	0.02966	0.1483
30 Dibenzothiophene	184	21.931	21.931	(1.161)	3290	0.01848	0.09240
$ 35 Phenanthrene-d10	188	22.238	22.238	(0.995)	60117	0.33794	1.690(R)
36 Phenanthrene	178	22.315	22.326	(0.999)	46368	0.24321	1.216
* 250 Anthracene-d10	188	22.348	22.359	(1.000)	369755	2.00000	
37 Anthracene	178	22.414	22.425	(1.003)	15977	0.08907	0.4453
42 Carbazole	167	23.701	23.701	(1.061)	3193	0.01869	0.09344
43 1-Methylphenanthrene	192	24.151	24.151	(1.081)	4811	0.03511	0.1756
44 Fluoranthene	202	26.130	26.130	(1.169)	125986	0.59871	2.994
46 Pyrene	202	26.977	26.977	(1.207)	137473	0.62815	3.141
51 Naphthobenzothiophene	234	29.498	29.509	(1.320)	10999	0.04677	0.2339
55 Benzo(a)anthracene	228	30.095	30.095	(0.907)	44818	0.24678	1.234
$ 56 Chrysene-d12	240	30.219	30.219	(0.911)	55962	0.38181	1.909(R)
57 Chrysene	228	30.286	30.286	(0.913)	65275	0.36680	1.834
62 Benzo(b)fluoranthene	252	32.517	32.517	(0.980)	49058	0.26046	1.302(M)
63 Benzo(k)fluoranthene	252	32.562	32.562	(0.981)	31822	0.15746	0.7873(M)
293 Benzo(j)fluoranthene	252	32.629	32.629	(0.983)	29774	0.15989	0.7994
246 Total Benzofluoranthenes	252	32.517	32.562	(0.980)	102595	0.55612	2.781(M)

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/mL)
* 251 Benzo(e)pyrene-d12	264	33.181	33.181	(1.000)	468246	2.00000	
64 Benzo(e)pyrene	252	33.237	33.237	(1.002)	44462	0.24085	1.204
66 Benzo(a)pyrene	252	33.339	33.339	(1.005)	57360	0.34156	1.708
$ 67 Perylene-d12	264	33.519	33.519	(1.010)	58329	0.36865	1.843(R)
68 Perylene	252	33.575	33.575	(1.012)	59788	0.34531	1.727
69 Indeno(1,2,3-cd)pyrene	276	35.636	35.636	(1.074)	40952	0.20775	1.039
70 Dibenzo(a,h)anthracene	278	35.625	35.614	(1.074)	6054	0.03313	0.1656(M)
74 Benzo(g,h,i)perylene	276	36.549	36.549	(1.101)	56796	0.29164	1.458

QC Flag Legend

R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt14.i
Lab File ID: NT1421060710.D
Lab Smp Id: 21E0106-01
Analysis Type: SV
Quant Type: ISTD
Operator: VTS
Method File: \\target\share\chem3\nt14.i\20210607.b\ALKYLPNA.m
Misc Info:

Calibration Date: 07-JUN-2021
Calibration Time: 13:18
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
25 Fluorene-d10	323874	161937	647748	352791	8.93
250 Anthracene-d10	339912	169956	679824	369755	8.78
251 Benzo(e)pyrene-d1	416427	208214	832854	468246	12.44

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
25 Fluorene-d10	18.90	18.40	19.40	18.90	0.00
250 Anthracene-d10	22.36	21.86	22.86	22.35	-0.05
251 Benzo(e)pyrene-d1	33.18	32.68	33.68	33.18	0.00

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

REVIEW SUMMARY FOR FILE - NT1421060710.D

Lab ID: 21E0106-01
nt14.i, 20210607.b\ALKYLPNA.m, 07-JUN-2021 19:42

RT	CO-ELUTION COMPOUNDS
	NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
NONE			

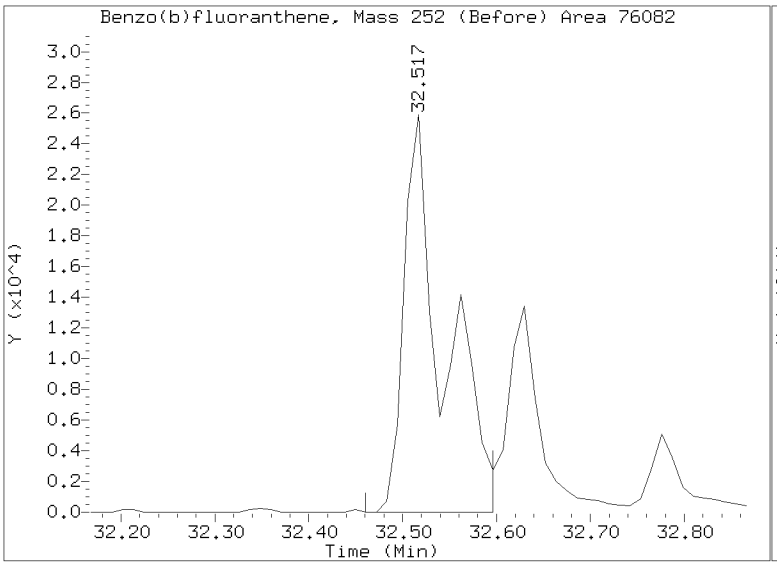
RRT check based on Ccal File: NT1421060702.D

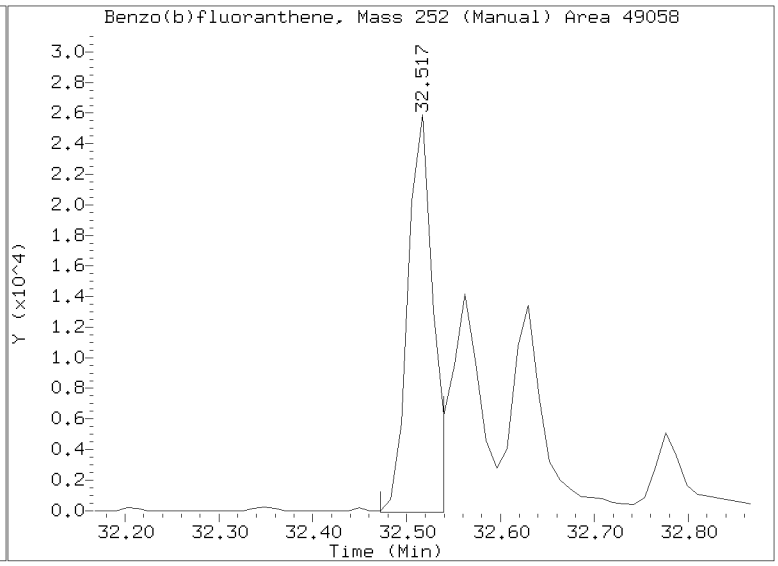
On Column LOD for nt14.i, 20210607.b\ALKYLPNA.m, TARGETS.sub = 0.0000

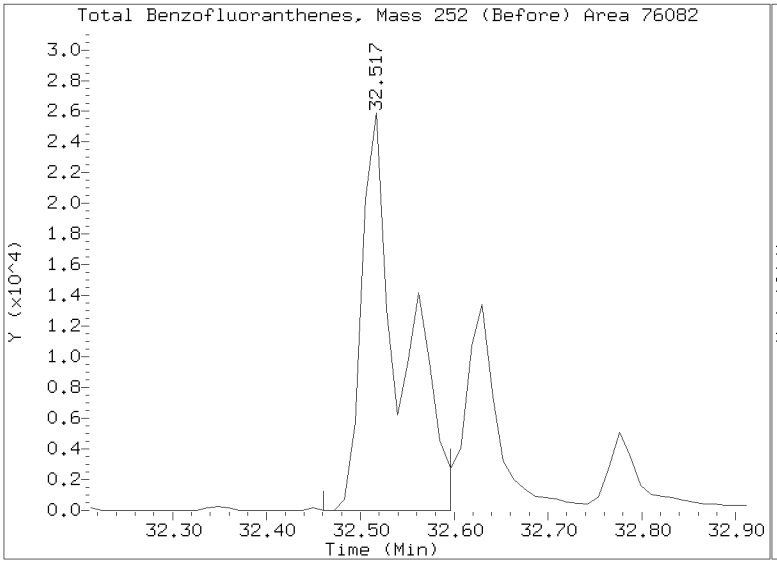
* Only compounds listed in the work order have been verified by the analyst *

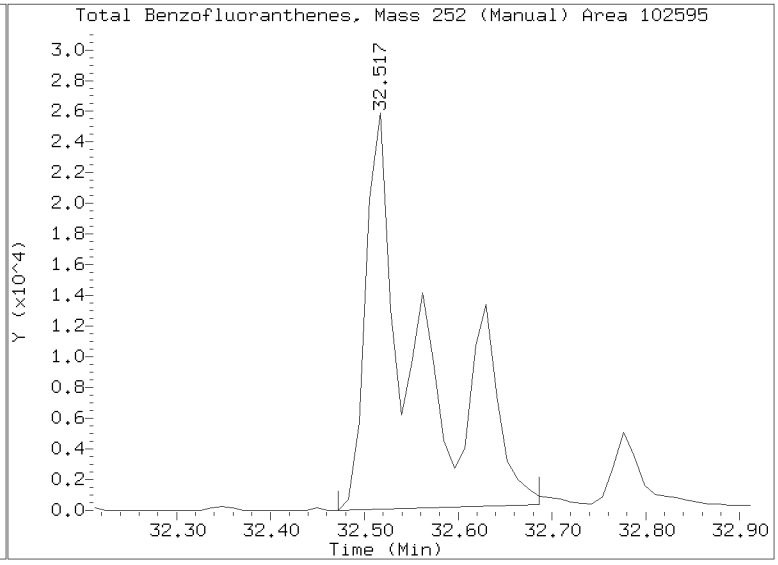
Quant Ion Manual Peak Adjustment Report

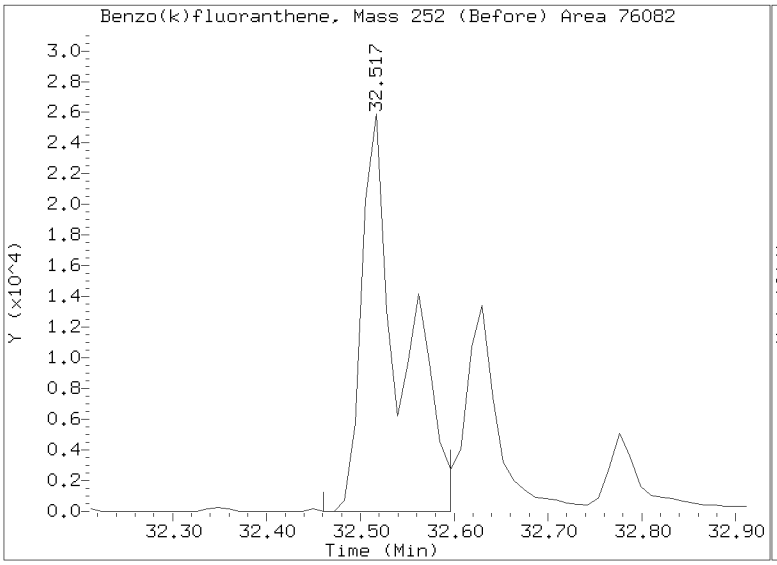
Datafile: //target/share/chem3/nt14.i/20210607.b/NT1421060710.D
Injection Date: 07-JUN-2021 19:42
Lab ID:21E0106-01 Client ID:
Report Date: 06/12/2021 15:50

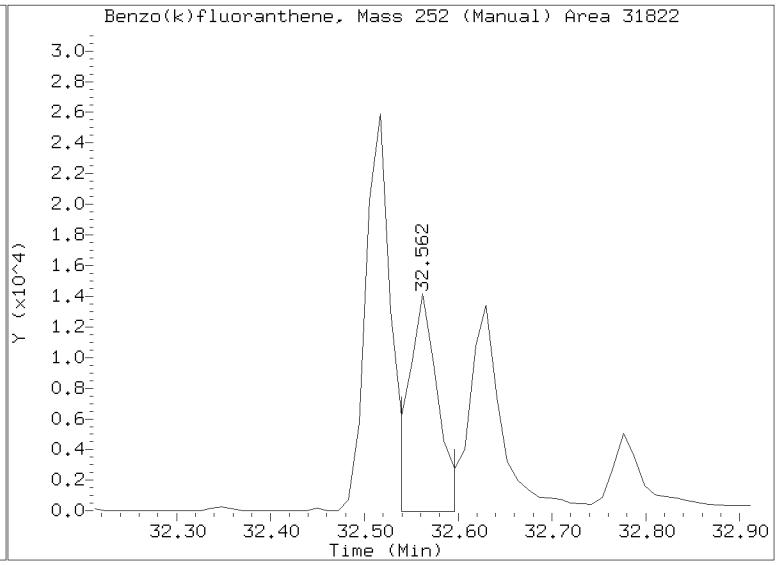






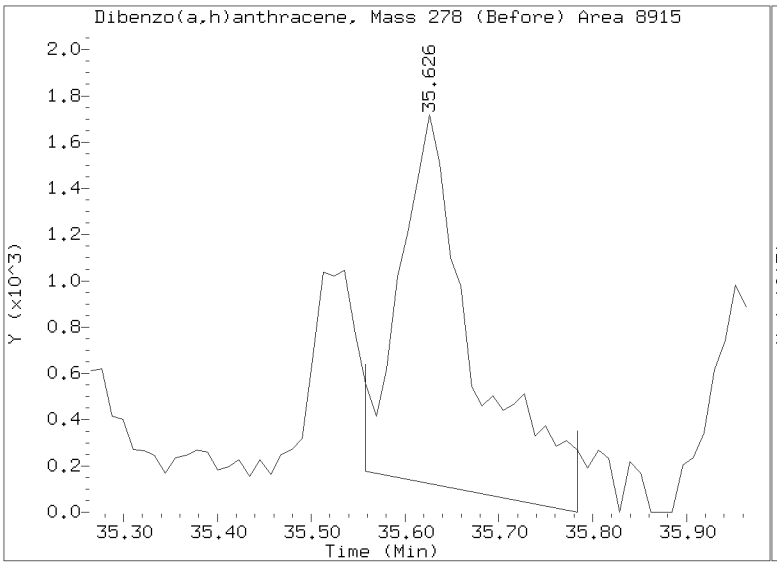


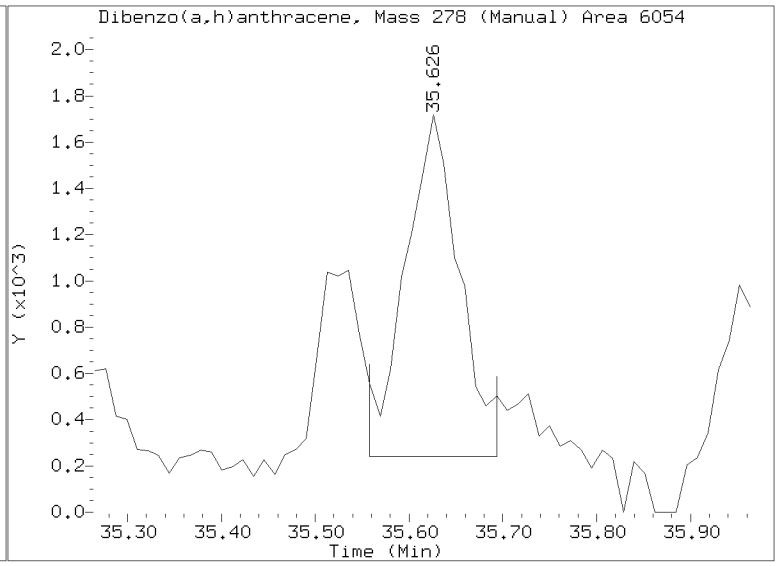




Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt14.i/20210607.b/NT1421060710.D
Injection Date: 07-JUN-2021 19:42
Lab ID:21E0106-01 Client ID:
Report Date: 06/12/2021 15:50





Analytical Resources, Incorporated
Analytical Chemists and Consultants

USMPDI-028SG-210504

Form I
ORGANIC ANALYSIS DATA SHEET
EPA 8270E-SIM
Alkyl PAH Ranges

Laboratory:	Analytical Resources, Inc.				
Client:	Anchor QEA, LLC				
Project:	Gasco Siltronic - US Moorings				
Matrix:	Sediment	Laboratory ID:	21E0106-01 A	SDG:	21E0106
Sampled:	05/04/21 00:00	Prepared:	05/17/21 13:40	File ID:	NT1421060710S.D
% Solids:	47.16	Preparation:	EPA 3546 (Microwave)	Analyzed:	06/07/21 19:42
Batch:	BJE0383	Sequence:	SJF0198	Initial/Final:	21.22 g Wet / 0.5 mL
Instrument:	NT14	Column:	ZB-5MS	Calibration:	EF00019
Cleanups:	GPC, Silica Gel				

CAS NO.	COMPOUND	DILUTION	CONC: (ug/kg dry)	Q	DL	RL
C1DEC	C1-Decalins	1	5.0	U	0.5	5.0
C2DEC	C2-Decalins	1	1.3	J	0.5	5.0
C3DEC	C3-Decalins	1	5.0	U	0.5	5.0
C4DEC	C4-Decalins	1	5.0	U	0.5	5.0
C1NAPH	C1-Naphthalenes	1	1.0	J	0.4	5.0
C2NAPH	C2-Naphthalenes	1	1.6	J	0.4	5.0
C3NAPH	C3-Naphthalenes	1	1.4	J	0.4	5.0
C4NAPH	C4-Naphthalenes	1	1.2	J	0.4	5.0
C1FLR	C1-Fluorenes	1	1.1	J	0.5	5.0
C2FLR	C2-Fluorenes	1	1.3	J	0.5	5.0
C3FLR	C3-Fluorenes	1	1.5	J	0.5	5.0
C1DBTPH	C1-Dibenzothiophenes	1	0.8	J	0.7	5.0
C2DBTPH	C2-Dibenzothiophenes	1	1.6	J	0.7	5.0
C3DBTPH	C3-Dibenzothiophenes	1	1.9	J	0.7	5.0
C4DBTPH	C4-Dibenzothiophenes	1	5.0	U	0.7	5.0
C1PHNANT	C1-Phenanthrenes/Anthracenes	1	6.7		0.9	5.0
C2PHNANT	C2-Phenanthrenes/Anthracenes	1	6.6		0.9	5.0
C3PHNANT	C3-Phenanthrenes/Anthracenes	1	3.1	J	0.9	5.0
C4PHNANT	C4-Phenanthrenes/Anthracenes	1	1.5	J	0.9	5.0
C1FLPYR	C1-Fluoranthenes/Pyrenes	1	12.5		1.0	5.0
C2FLPYR	C2-Fluoranthenes/Pyrenes	1	5.7		1.0	5.0
C3FLPYR	C3-Fluoranthenes/Pyrenes	1	2.4	J	1.0	5.0
C4FLPYR	C4-Fluoranthenes/Pyrenes	1	2.1	J	1.0	5.0
C1BAACYR	C1-Benzo(a)anthracenes/Chrysenes	1	11.0		0.7	5.0
C2BAACYR	C2-Benzo(a)anthracenes/Chrysenes	1	4.4	J	0.7	5.0
C3BAACYR	C3-Benzo(a)anthracenes/Chrysenes	1	2.3	J	0.7	5.0
C4BAACYR	C4-Benzo(a)anthracenes/Chrysenes	1	1.1	J	0.7	5.0
C1BZTPH	C1-Benzothiophenes	1	5.0	U	0.4	5.0
C2BZTPH	C2-Benzothiophenes	1	5.0	U	0.4	5.0
C3BZTPH	C3-Benzothiophenes	1	5.0	U	0.4	5.0

Analytical Resources, Incorporated
Analytical Chemists and Consultants

USMPDI-028SG-210504

Form I
ORGANIC ANALYSIS DATA SHEET
EPA 8270E-SIM
Alkyl PAH Ranges

Laboratory:	Analytical Resources, Inc.				
Client:	Anchor QEA, LLC				
Project:	Gasco Siltronic - US Moorings				
Matrix:	Sediment	Laboratory ID:	21E0106-01 A	SDG:	21E0106
Sampled:	05/04/21 00:00	Prepared:	05/17/21 13:40	File ID:	NT1421060710S.D
% Solids:	47.16	Preparation:	EPA 3546 (Microwave)	Analyzed:	06/07/21 19:42
Batch:	BJE0383	Sequence:	SJF0198	Initial/Final:	21.22 g Wet / 0.5 mL
Instrument:	NT14	Column:	ZB-5MS	Calibration:	EF00019
Cleanups:	GPC, Silica Gel				

CAS NO.	COMPOUND	DILUTION	CONC: (ug/kg dry)	Q	DL	RL
C1NPBTP	C1-Naphthobenzothiophenes	1	5.0	U	2.5	5.0
C2NPBTP	C2-Naphthobenzothiophenes	1	5.0	U	2.5	5.0
C3NPBTP	C3-Naphthobenzothiophenes	1	5.0	U	2.5	5.0
C4NPBTP	C4-Naphthobenzothiopenes	1	5.0	U	2.5	5.0
C1DBA	C1-Dibenzo(a)anthracenes	1	1.7	J	0.7	5.0
C2DBA	C2-Dibenzo(a)anthracenes	1	5.0	U	0.7	5.0
C3DBA	C3-Dibenzo(a)anthracenes	1	5.0	U	0.7	5.0

Data File: \\target\share\chem3\nt14.i\20210607.b\SIM.b\NT1421060710S.D

Date : 07-JUN-2021 19:42

Client ID:

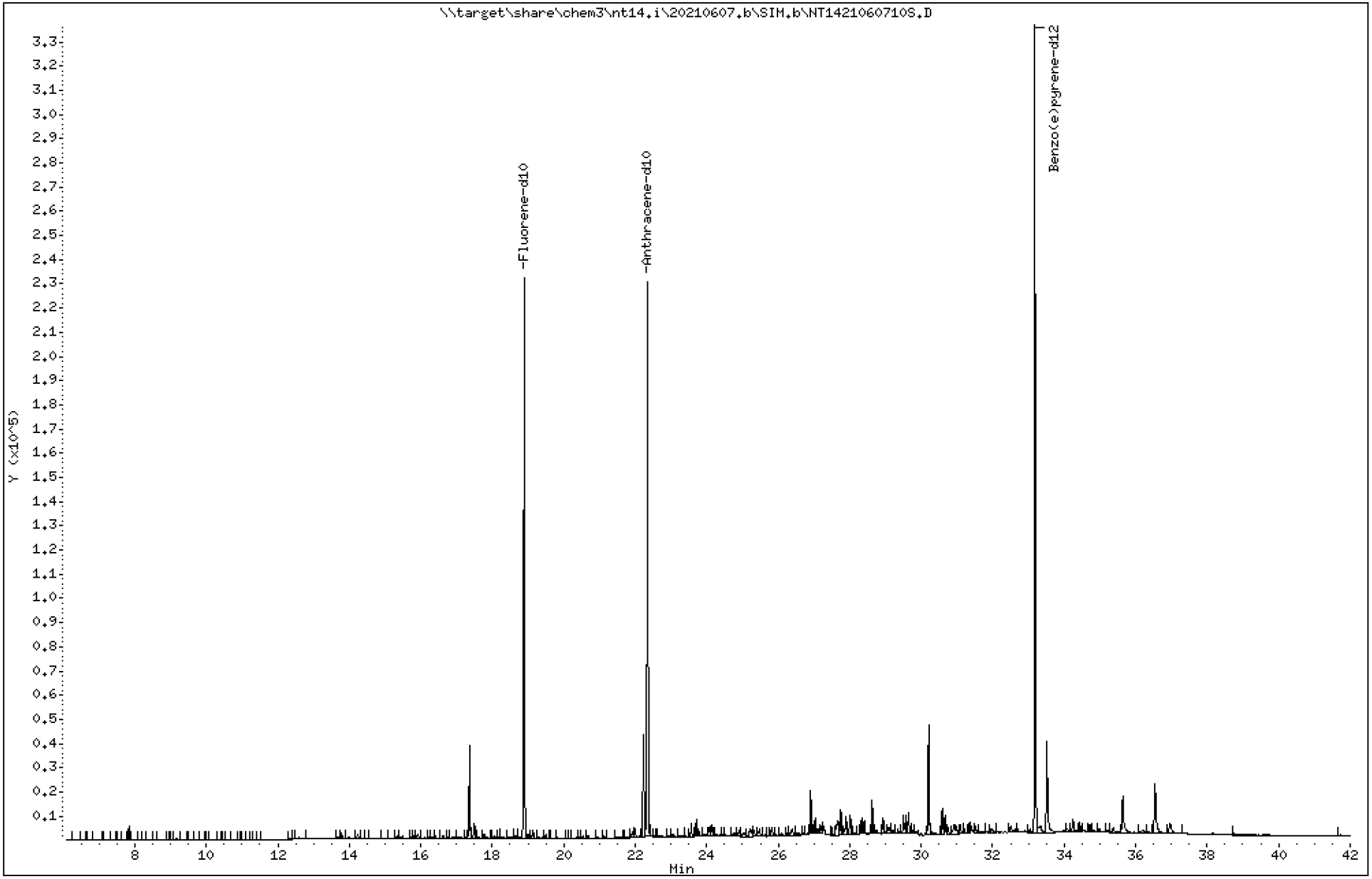
Instrument: nt14.i

Sample Info: 21E0106-01

Operator: VTS

Column phase: Rxi-17Sil MS

Column diameter: 0.25



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Date : 07-JUN-2021 19:42

Client ID:

Instrument: nt14.i

Sample Info: 21E0106-01

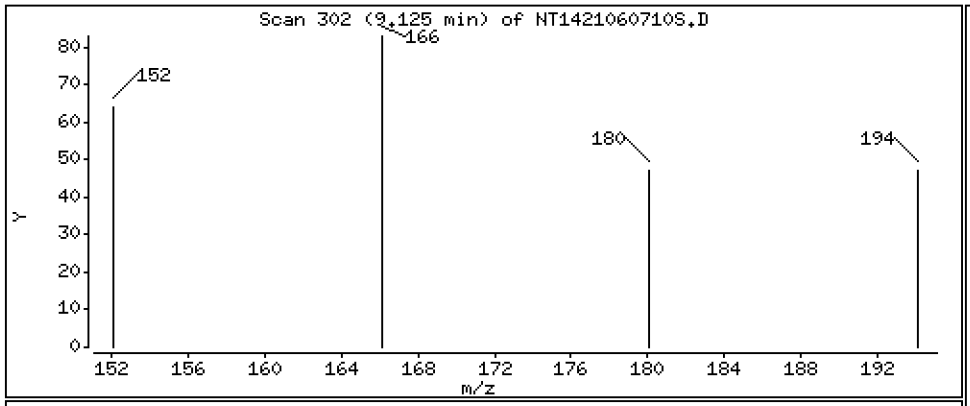
Operator: VTS

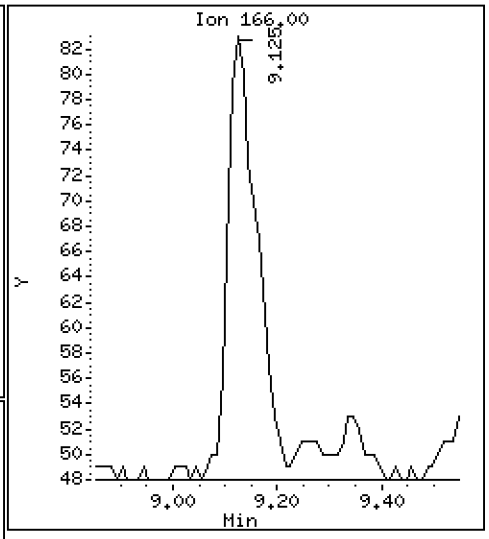
Column phase: Rxi-17Sil MS

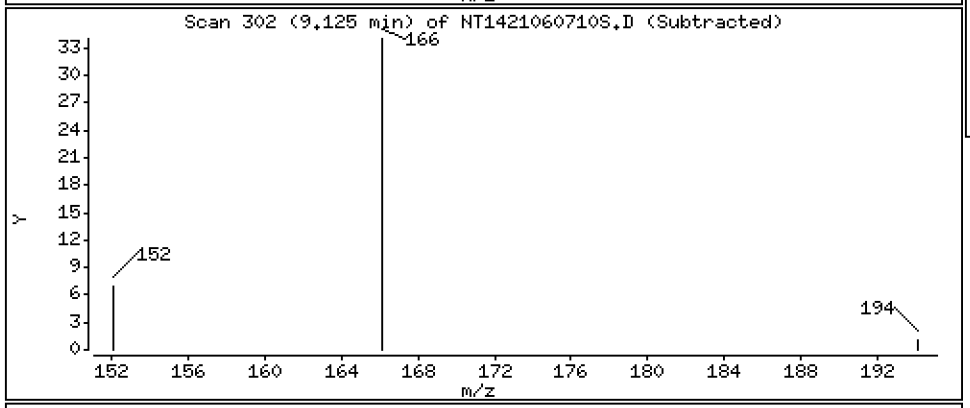
Column diameter: 0.25

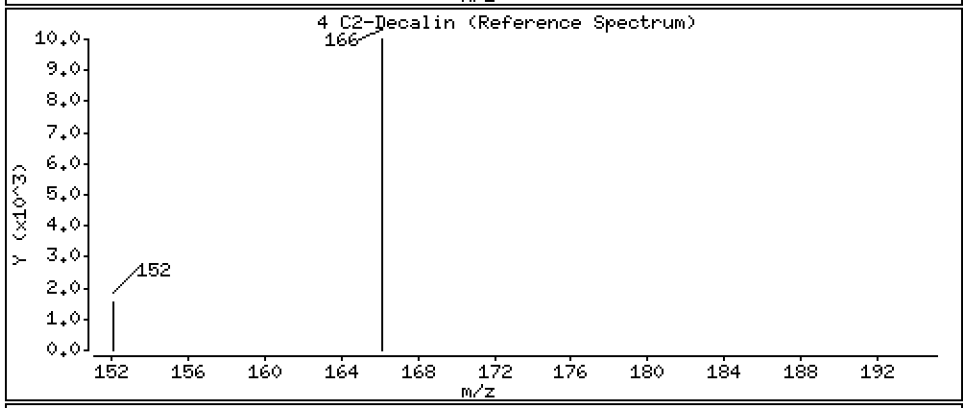
4 C2-Decalin

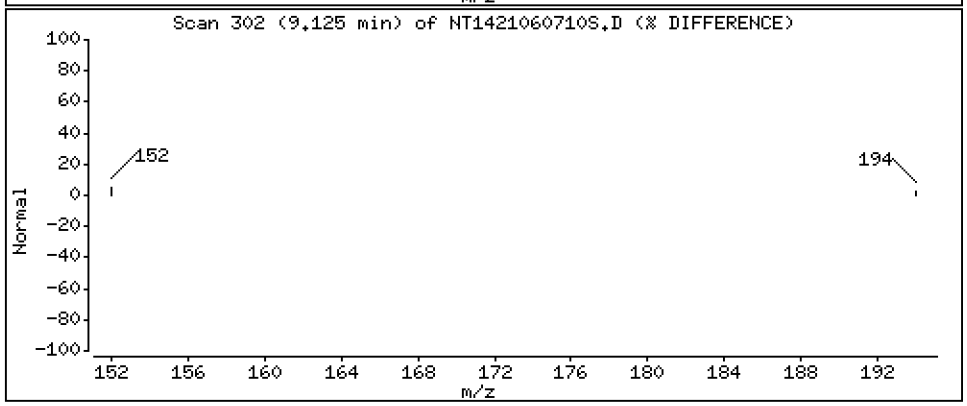
Concentration: 0.02554 ug/mL











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Date : 07-JUN-2021 19:42

Client ID:

Instrument: nt14.i

Sample Info: 21E0106-01

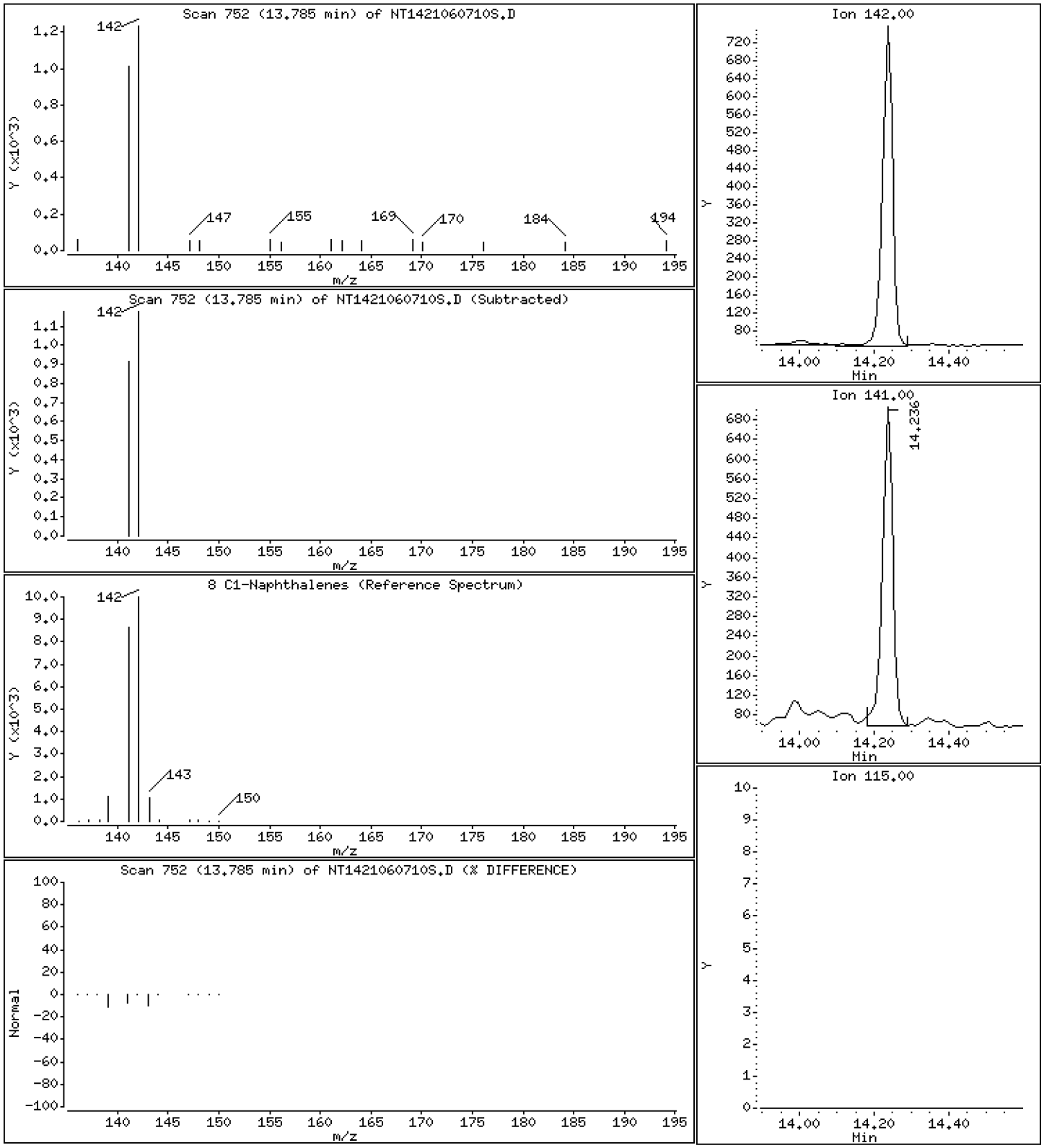
Operator: VTS

Column phase: Rxi-17Sil MS

Column diameter: 0.25

8 C1-Naphthalenes

Concentration: 0.02066 ug/mL



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Date : 07-JUN-2021 19:42

Client ID:

Instrument: nt14.i

Sample Info: 21E0106-01

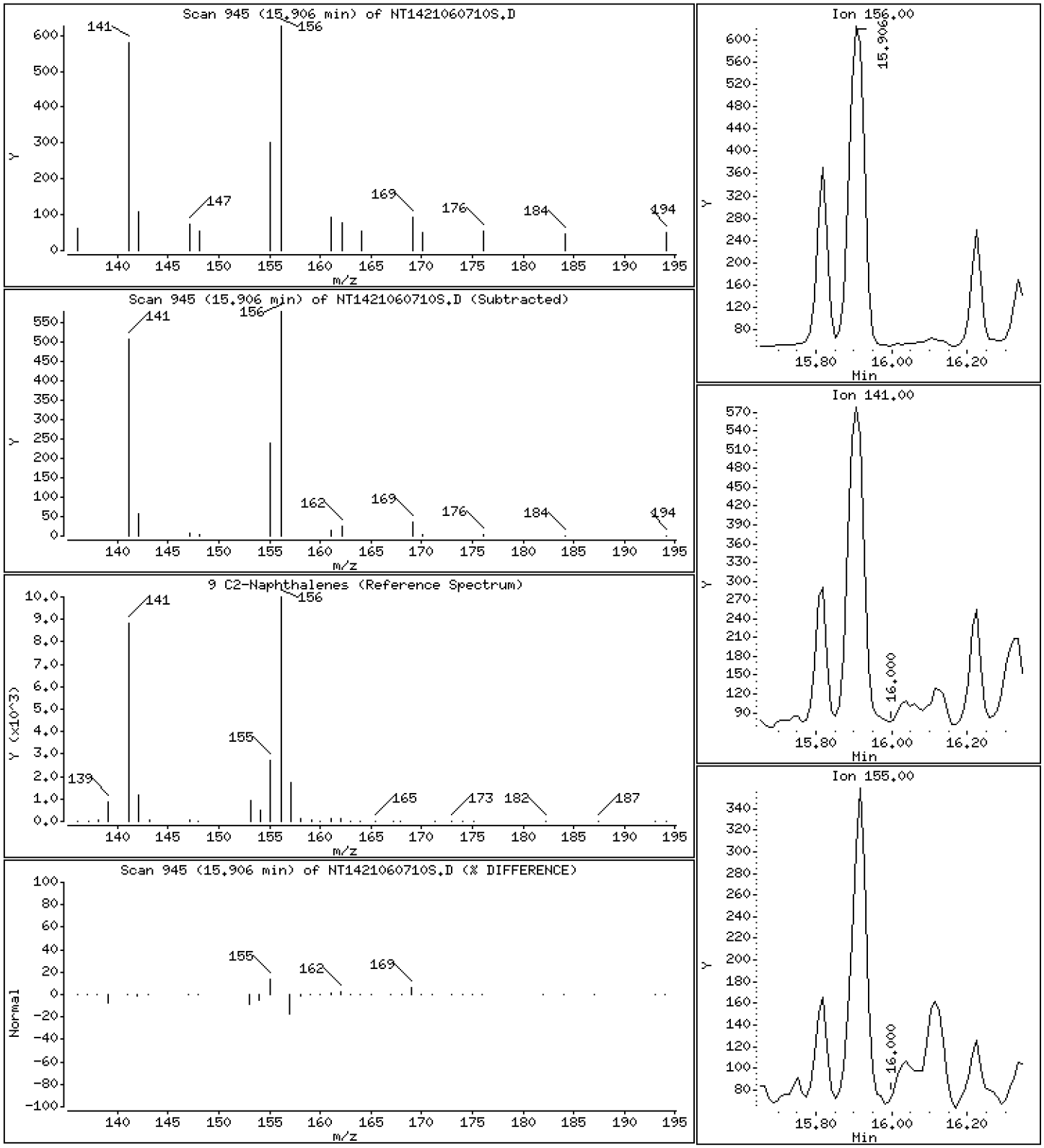
Operator: VTS

Column phase: Rxi-17Sil MS

Column diameter: 0.25

9 C2-Naphthalenes

Concentration: 0.03137 ug/mL



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Date : 07-JUN-2021 19:42

Client ID:

Instrument: nt14.i

Sample Info: 21E0106-01

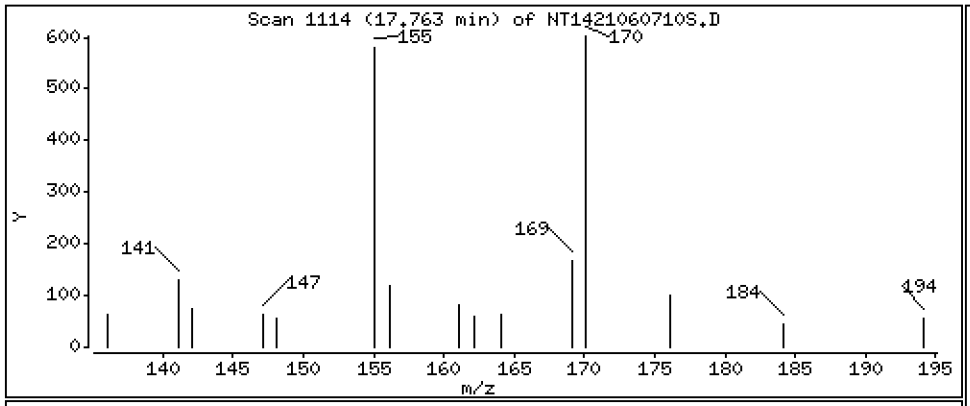
Operator: VTS

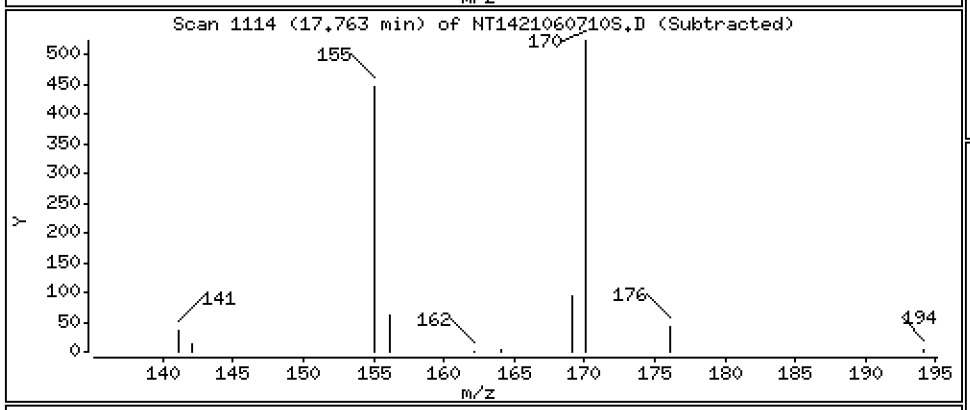
Column phase: Rxi-17Sil MS

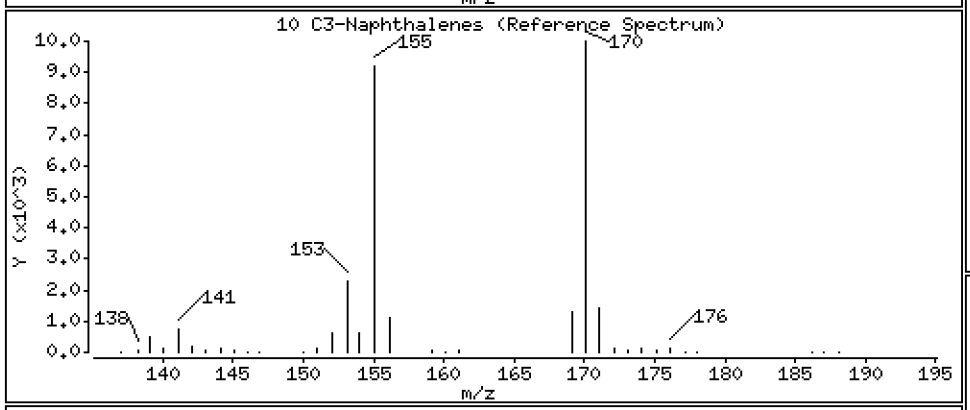
Column diameter: 0.25

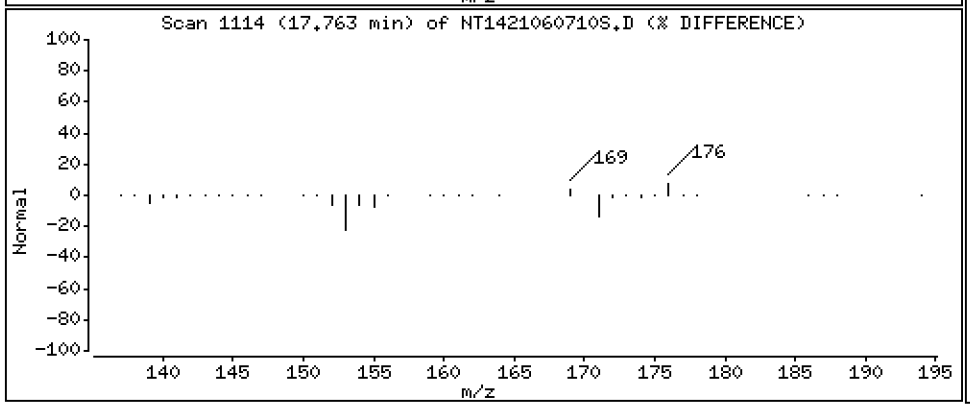
10 C3-Naphthalenes

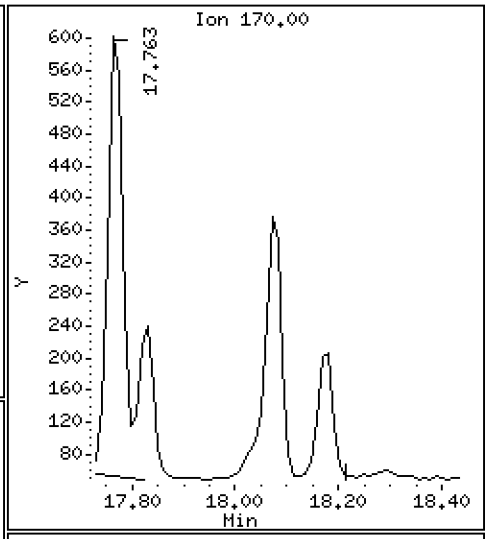
Concentration: 0.02850 ug/mL

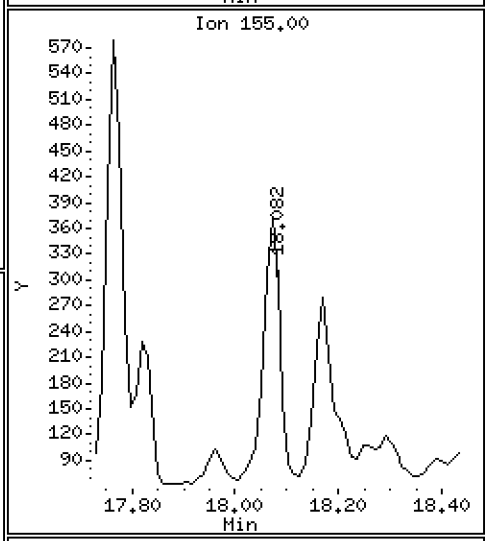


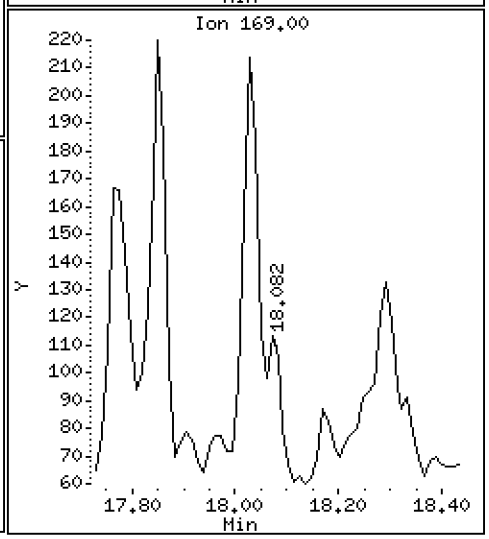












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Date : 07-JUN-2021 19:42

Client ID:

Instrument: nt14.i

Sample Info: 21E0106-01

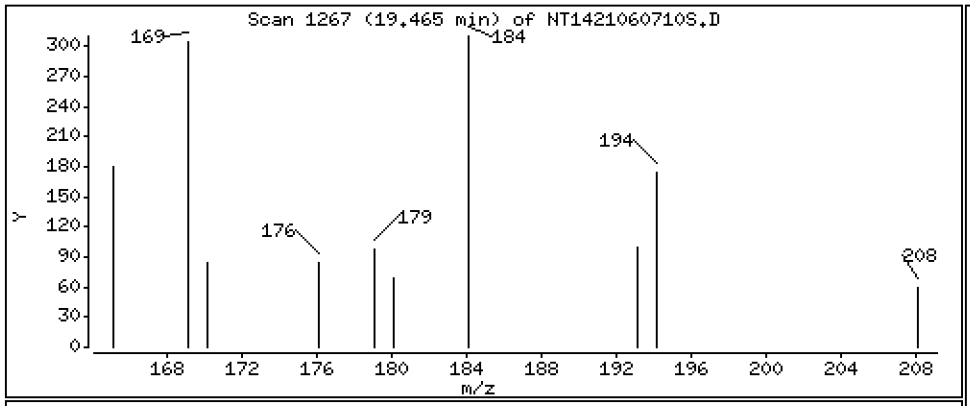
Operator: VTS

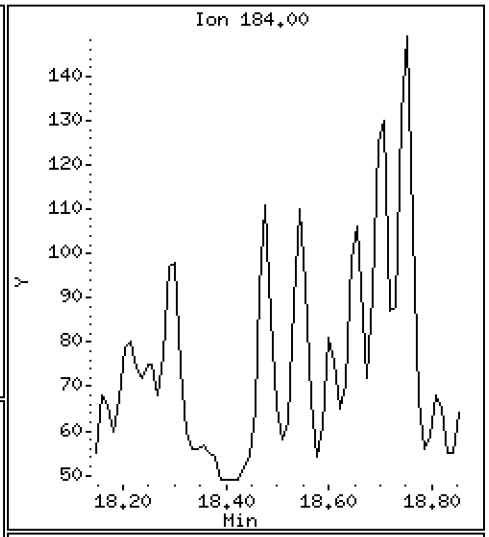
Column phase: Rxi-17Sil MS

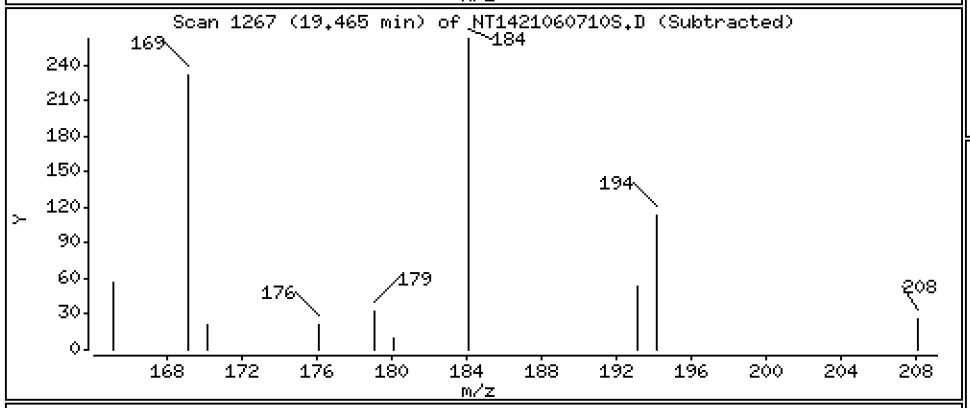
Column diameter: 0.25

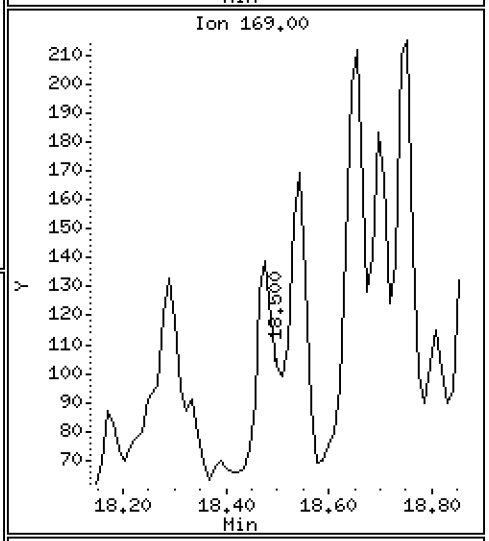
11 C4-Naphthalenes

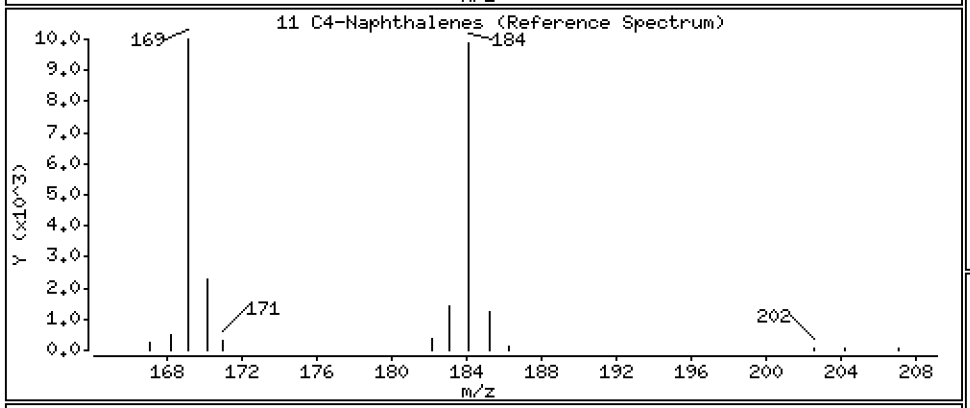
Concentration: 0.02494 ug/mL

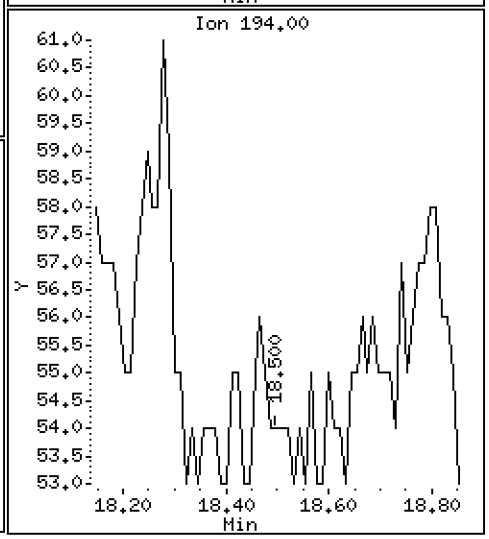


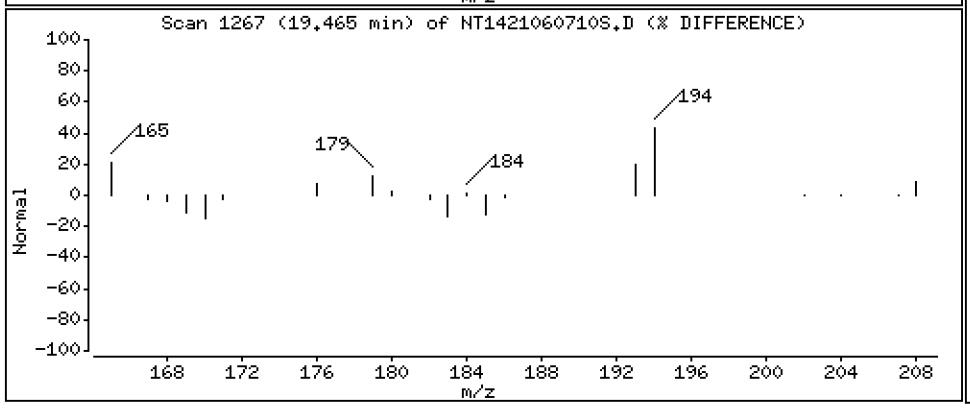












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Date : 07-JUN-2021 19:42

Client ID:

Instrument: nt14.i

Sample Info: 21E0106-01

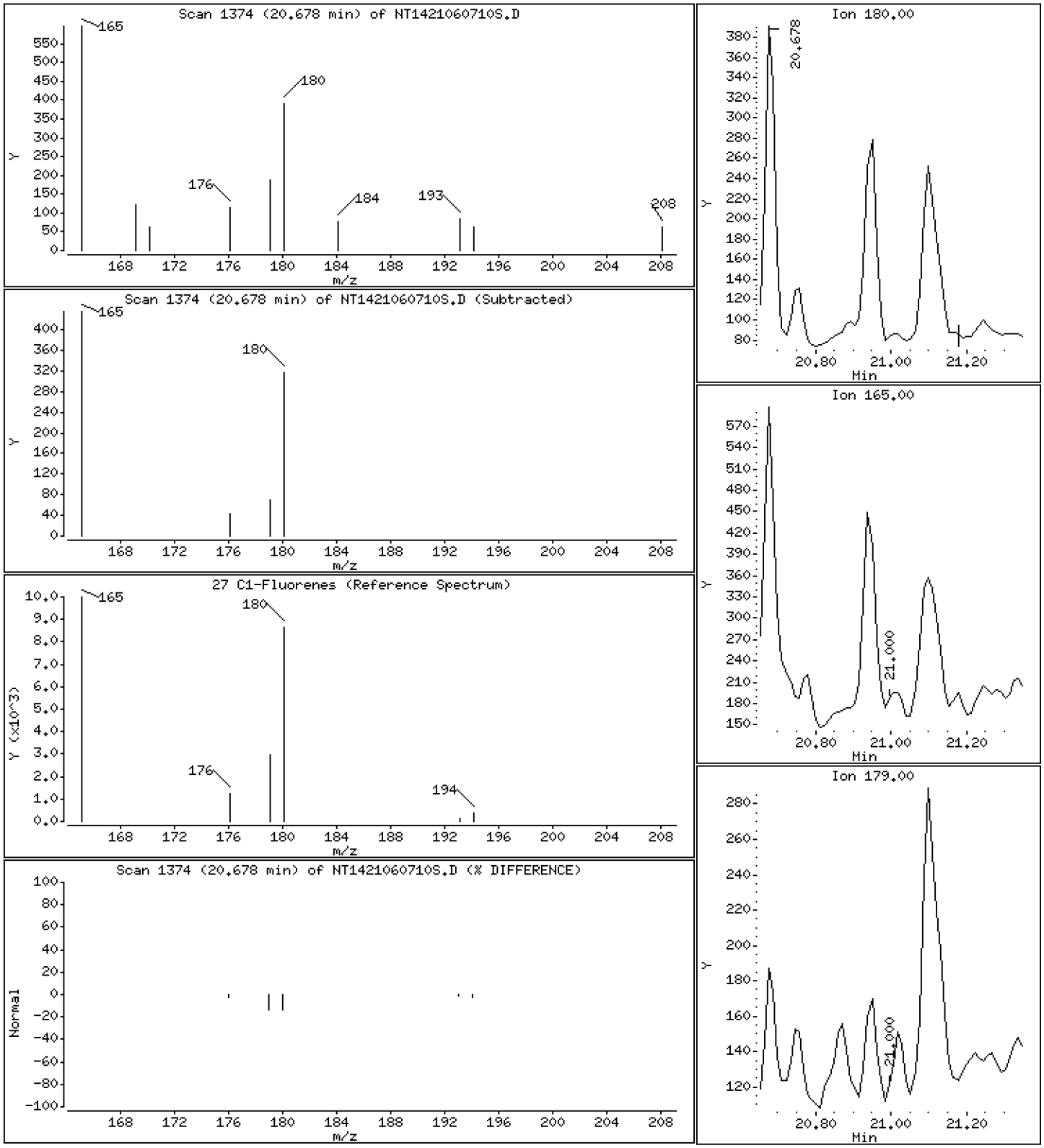
Operator: VTS

Column phase: Rxi-17Sil MS

Column diameter: 0.25

27 C1-Fluorenes

Concentration: 0.02292 ug/mL



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Date : 07-JUN-2021 19:42

Client ID:

Instrument: nt14.i

Sample Info: 21E0106-01

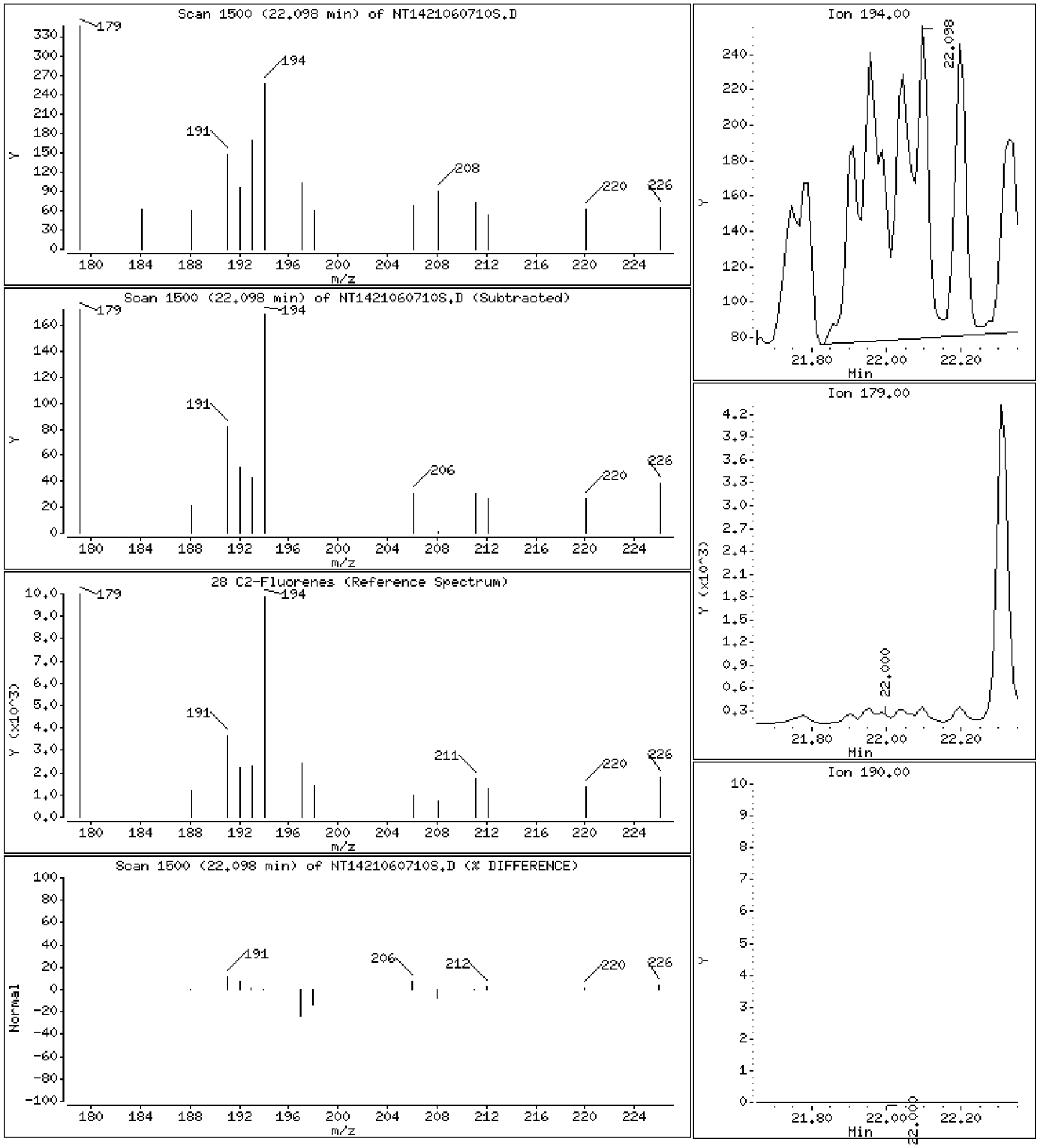
Operator: VTS

Column phase: Rxi-17Sil MS

Column diameter: 0.25

28 C2-Fluorenes

Concentration: 0.02701 ug/mL



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Date : 07-JUN-2021 19:42

Client ID:

Instrument: nt14.i

Sample Info: 21E0106-01

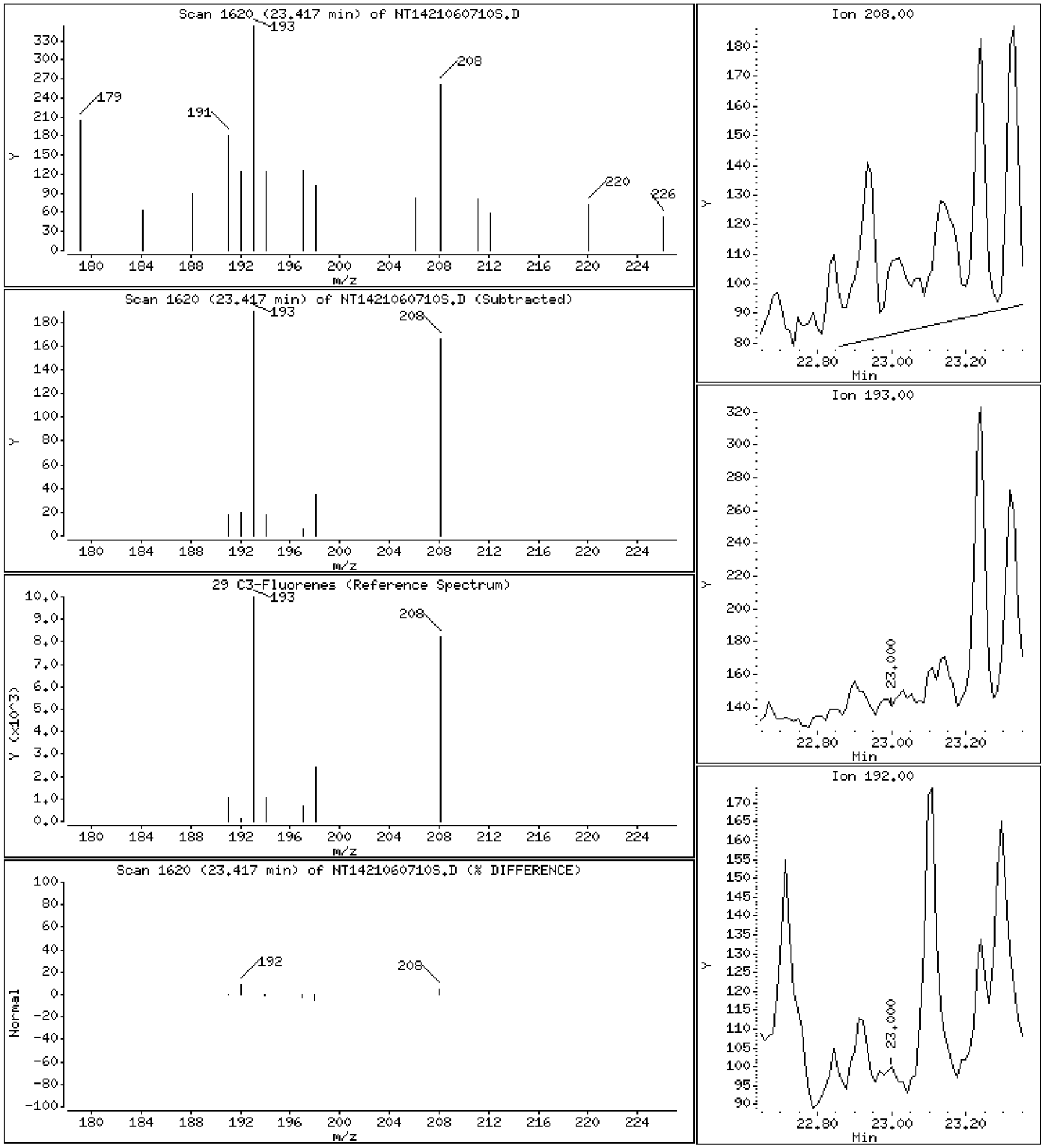
Operator: VTS

Column phase: Rxi-17Sil MS

Column diameter: 0.25

29 C3-Fluorenes

Concentration: 0.03021 ug/mL



Data File: \\target\share\chem3\nt14.i\20210607.b\SIM.b\NT1421060710S.D

Date : 07-JUN-2021 19:42

Client ID:

Instrument: nt14.i

Sample Info: 21E0106-01

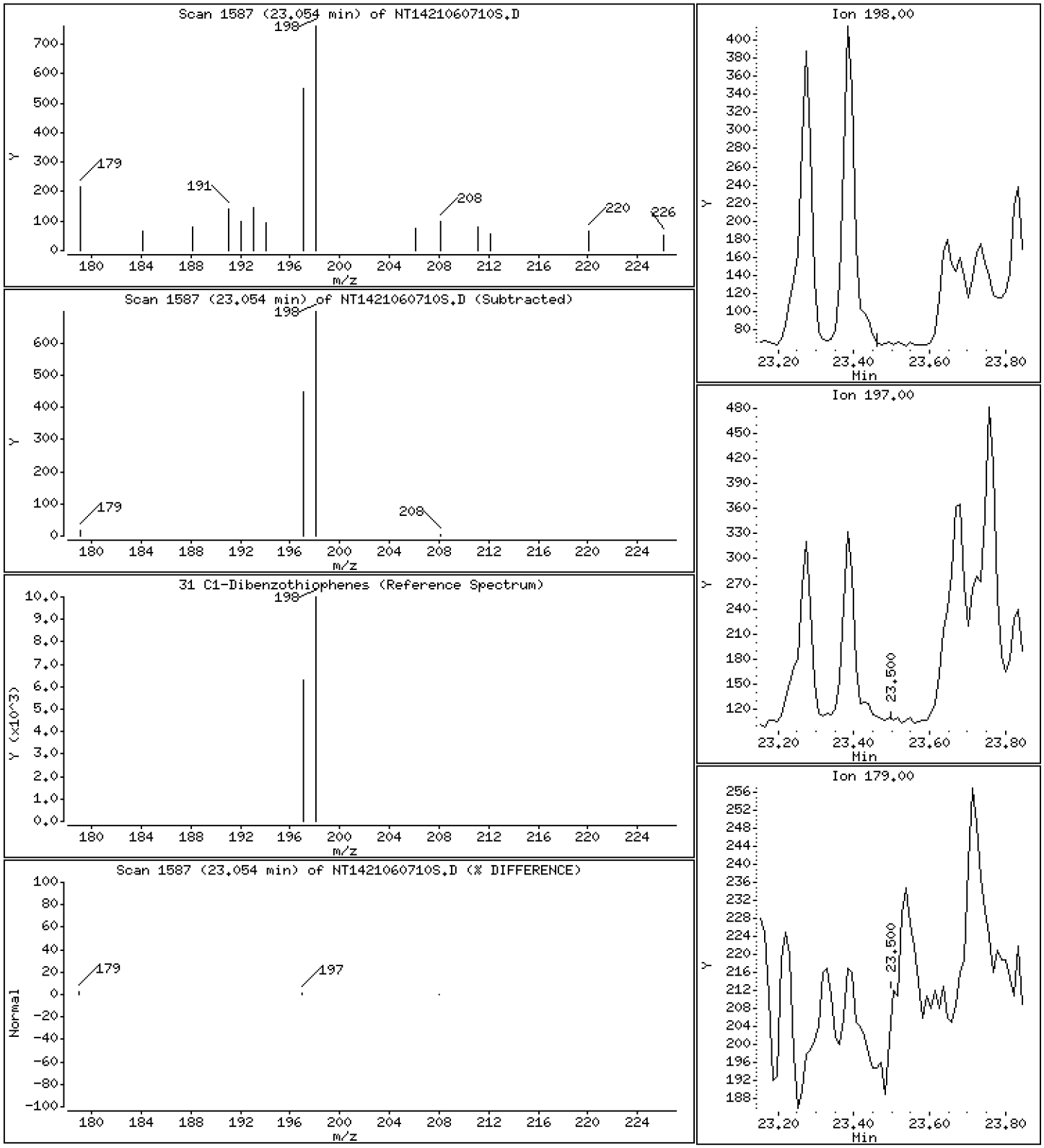
Operator: VTS

Column phase: Rxi-17Sil MS

Column diameter: 0.25

31 C1-Dibenzothiophenes

Concentration: 0.01504 ug/mL



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Date : 07-JUN-2021 19:42

Client ID:

Instrument: nt14.i

Sample Info: 21E0106-01

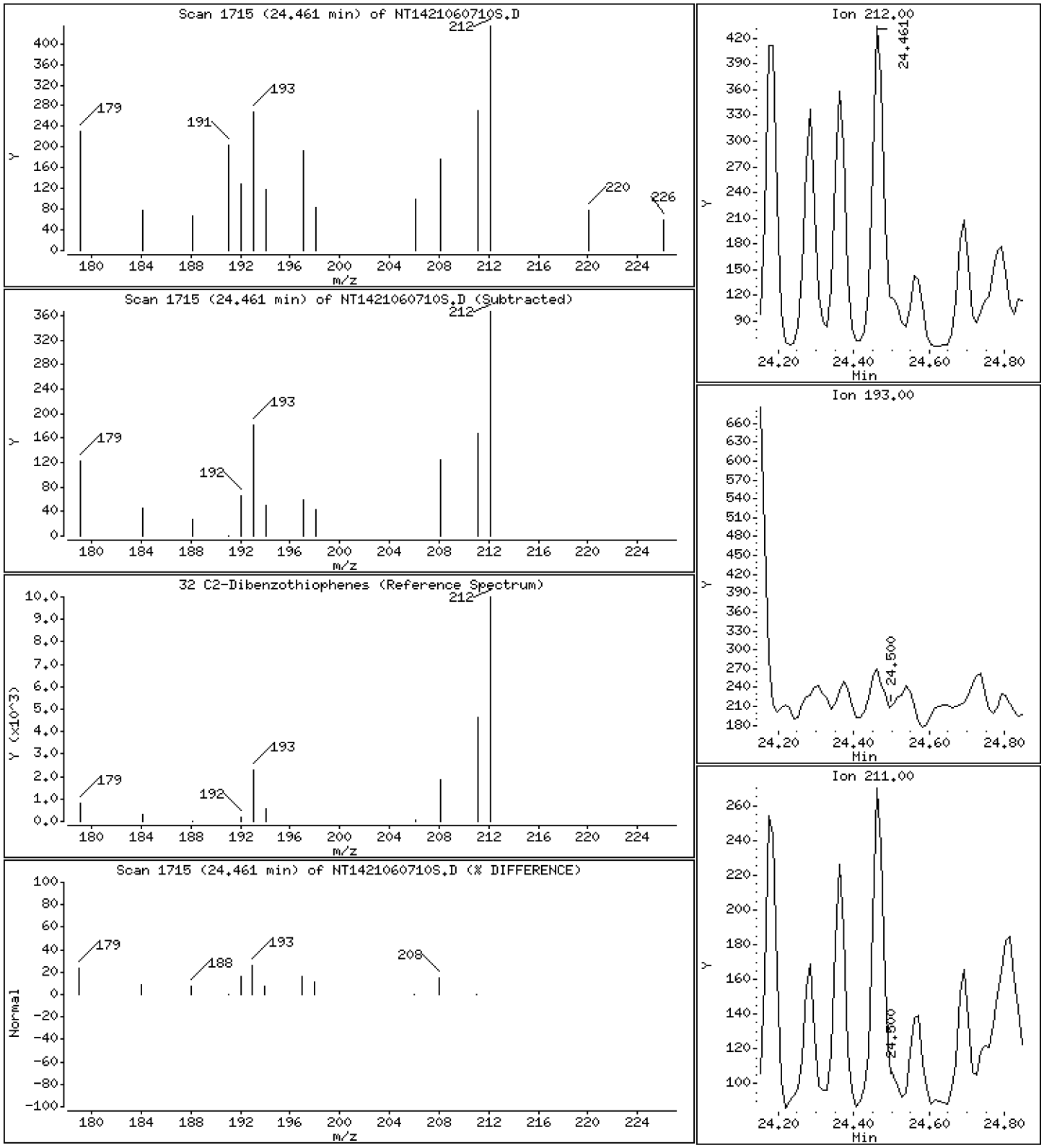
Operator: VTS

Column phase: Rxi-17Sil MS

Column diameter: 0.25

32 C2-Dibenzothiophenes

Concentration: 0.03284 ug/mL



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Date : 07-JUN-2021 19:42

Client ID:

Instrument: nt14.i

Sample Info: 21E0106-01

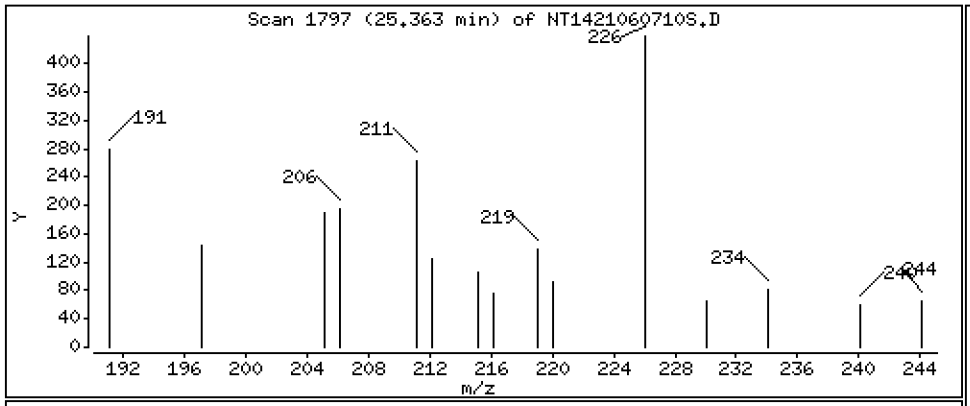
Operator: VTS

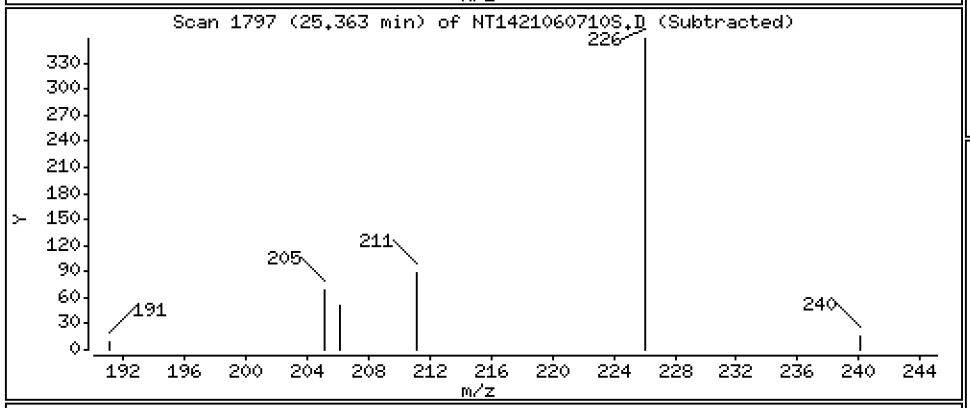
Column phase: Rxi-17Sil MS

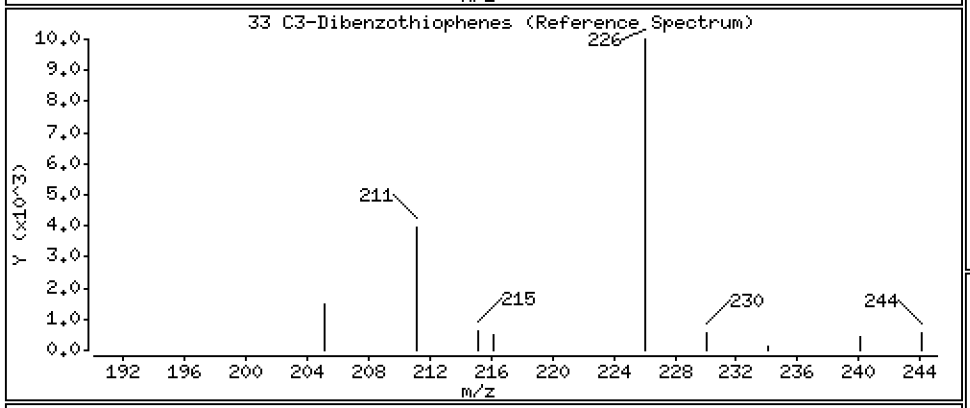
Column diameter: 0.25

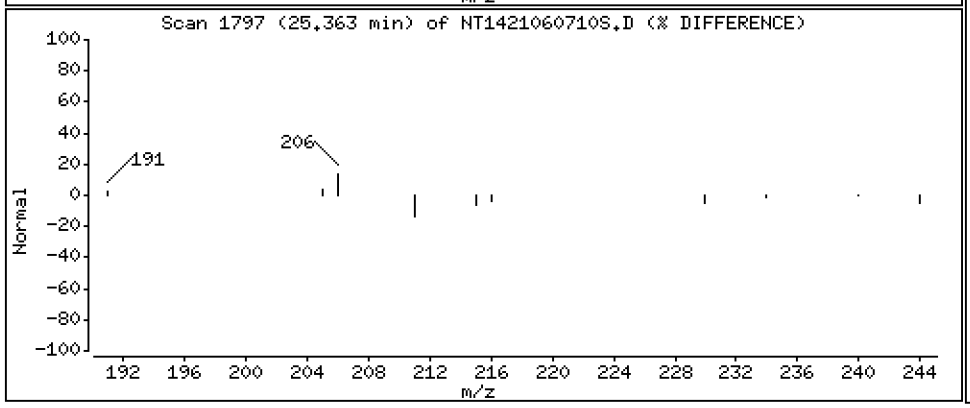
33 C3-Dibenzothiophenes

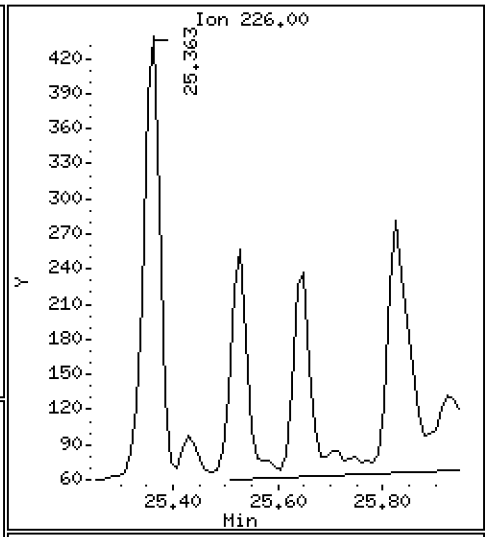
Concentration: 0.03754 ug/mL

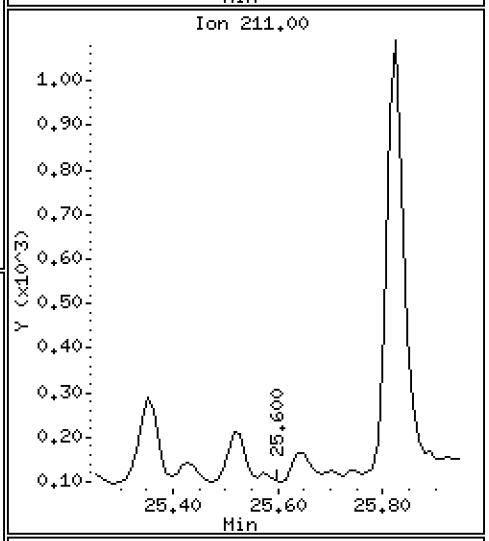


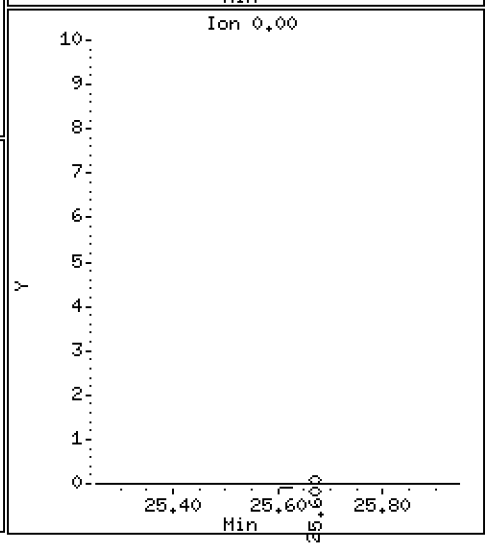












Data File: \\target\share\chem3\nt14.i\20210607.b\SIM.b\NT1421060710S.D

Date : 07-JUN-2021 19:42

Client ID:

Instrument: nt14.i

Sample Info: 21E0106-01

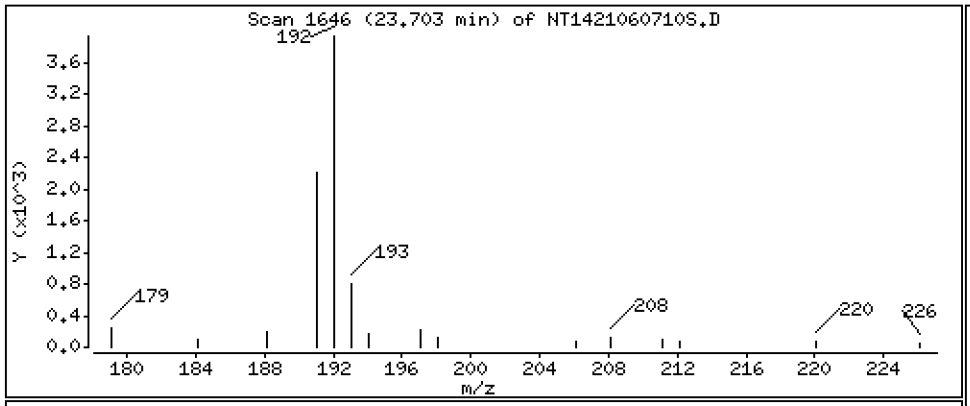
Operator: VTS

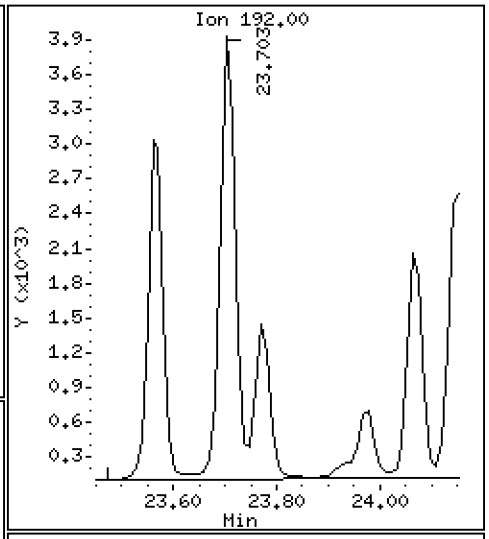
Column phase: Rxi-17Sil MS

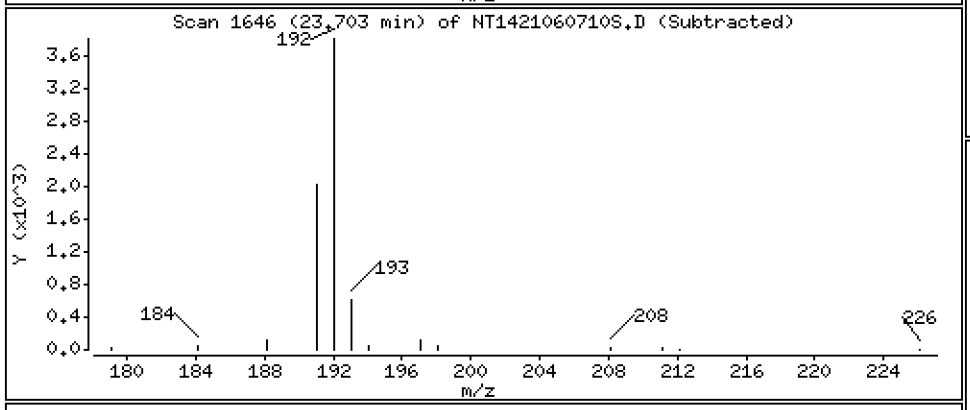
Column diameter: 0.25

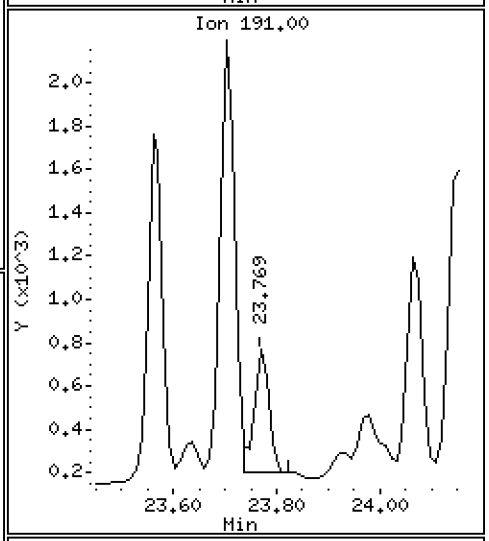
38 C1-Phenanthrenes/Anthracenes

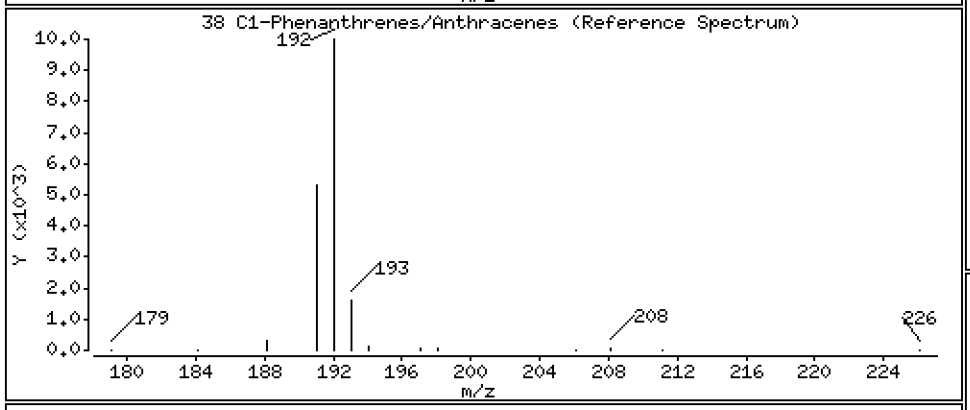
Concentration: 0.1332 ug/mL

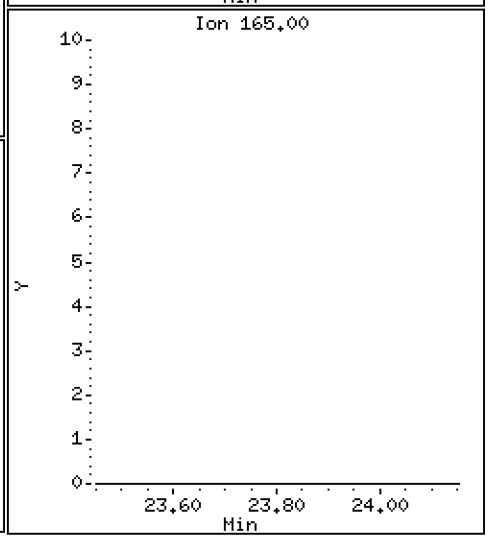


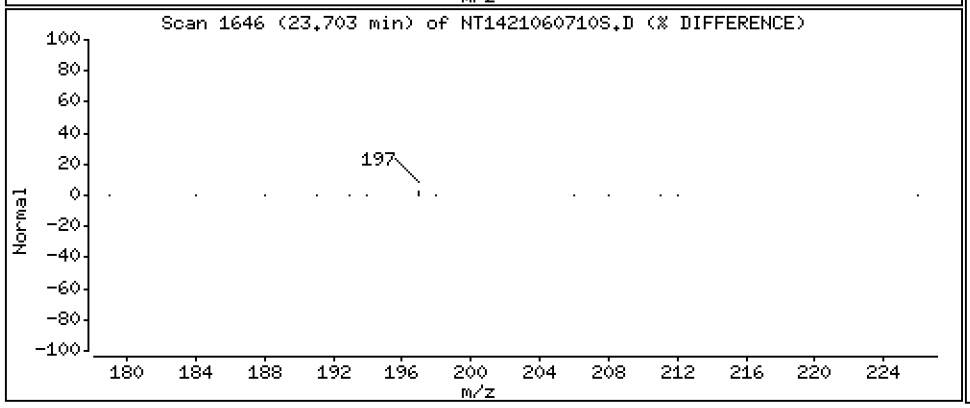












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Date : 07-JUN-2021 19:42

Client ID:

Instrument: nt14.i

Sample Info: 21E0106-01

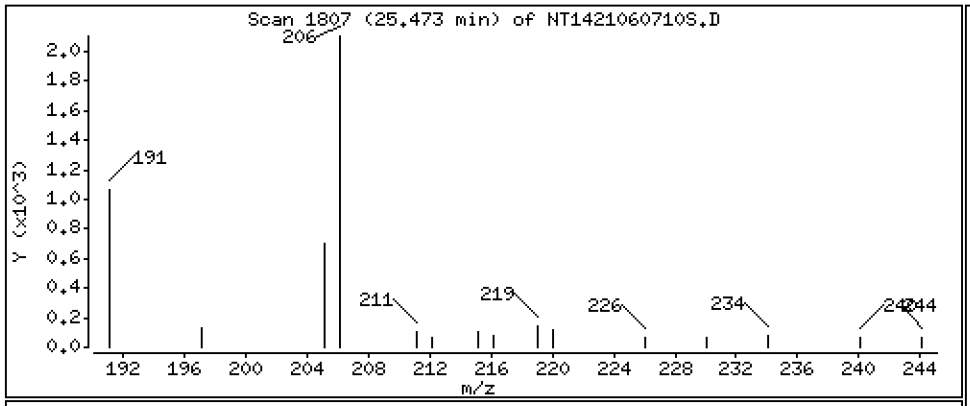
Operator: VTS

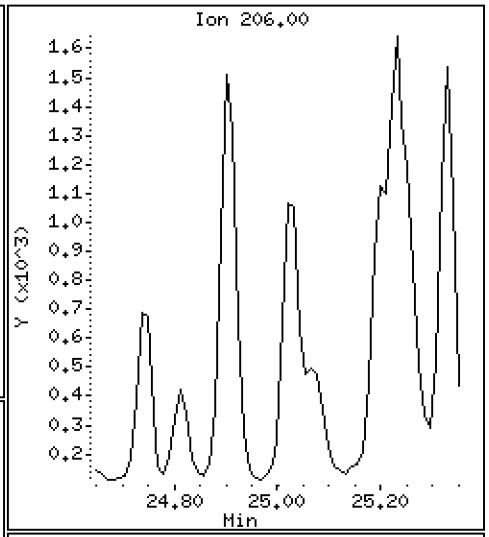
Column phase: Rxi-17Sil MS

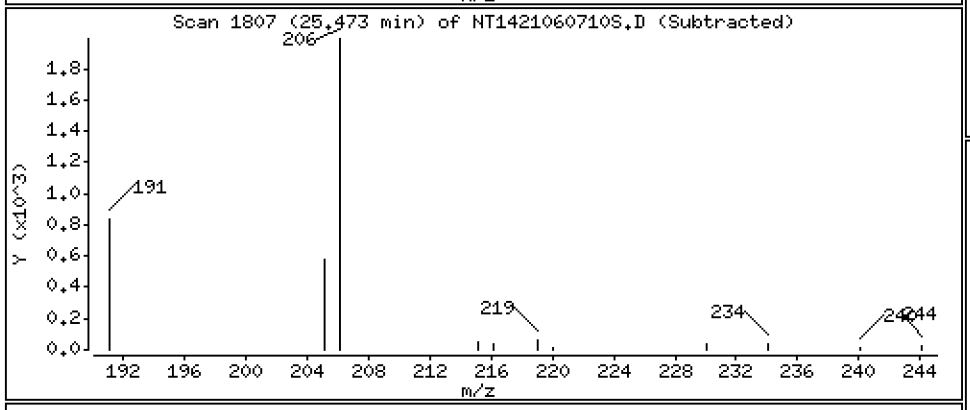
Column diameter: 0.25

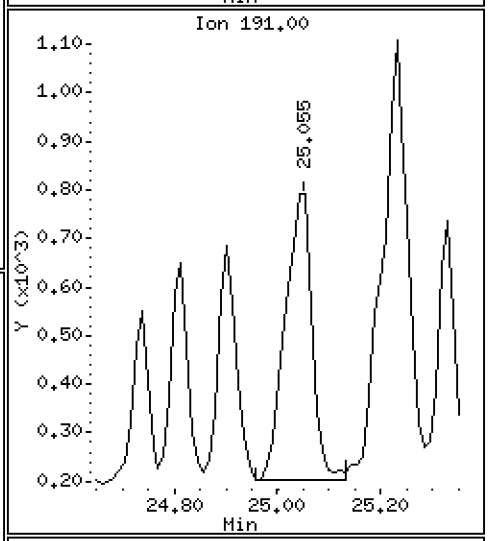
39 C2-Phenanthrenes/Anthracenes

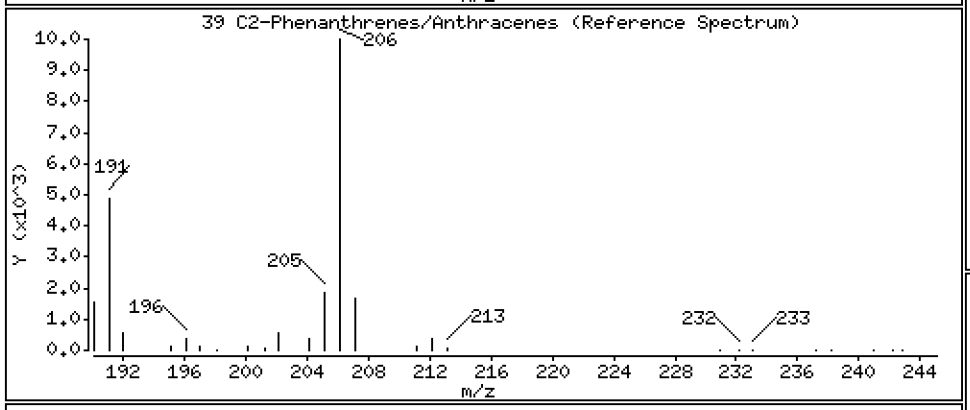
Concentration: 0.1323 ug/mL

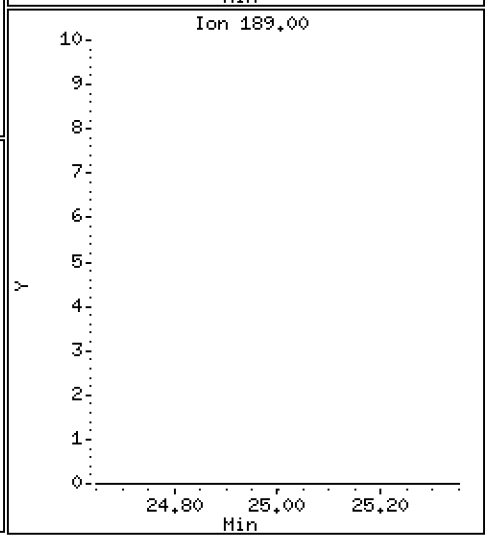


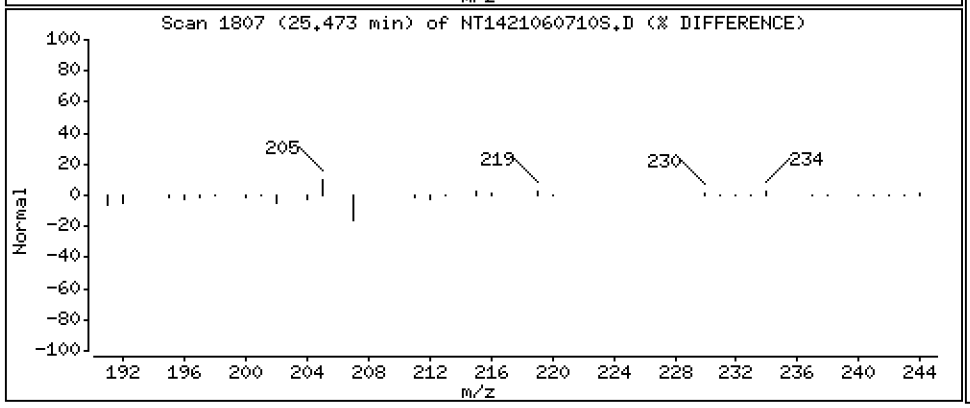












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Date : 07-JUN-2021 19:42

Client ID:

Instrument: nt14.i

Sample Info: 21E0106-01

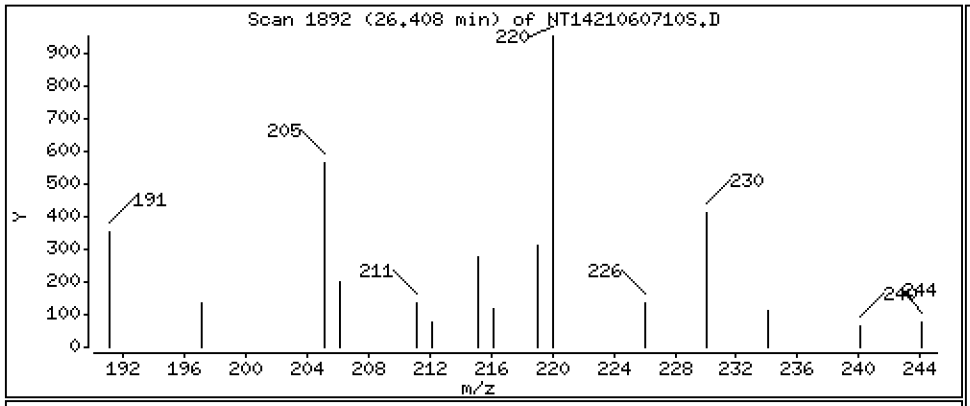
Operator: VTS

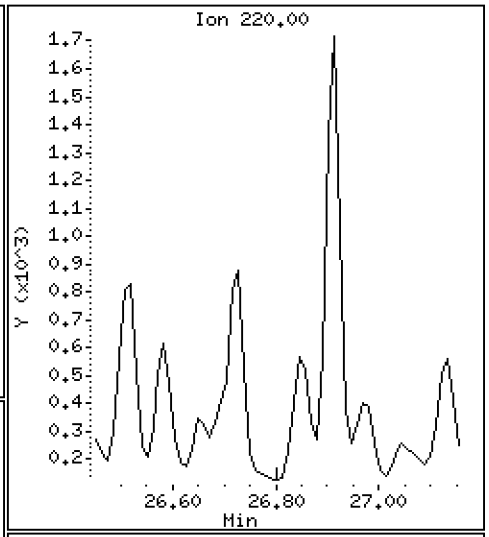
Column phase: Rxi-17Sil MS

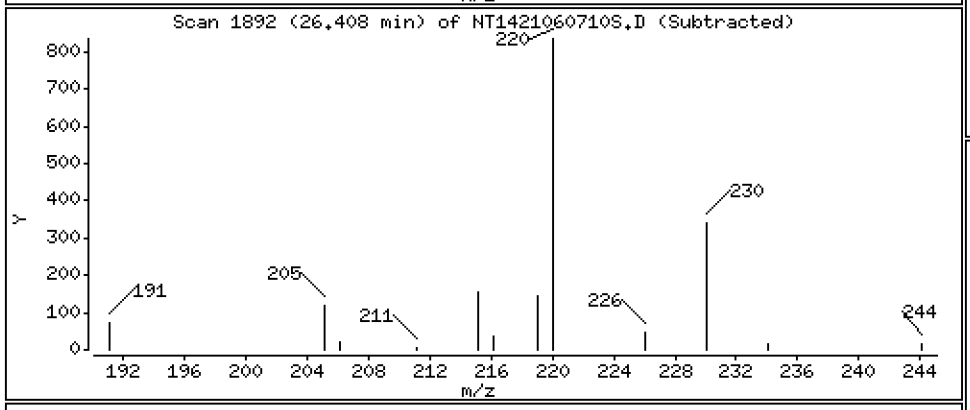
Column diameter: 0.25

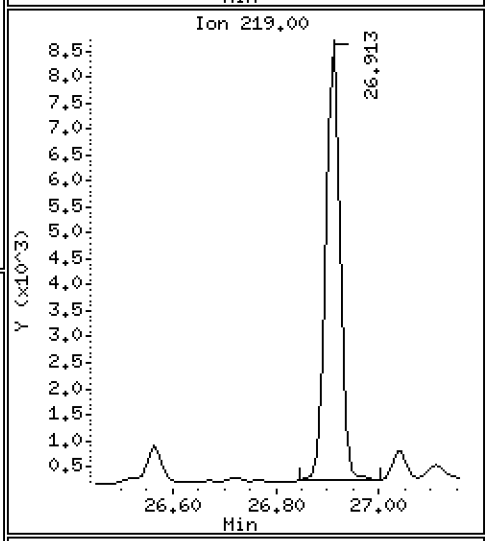
40 C3-Phenanthrenes/Anthracenes

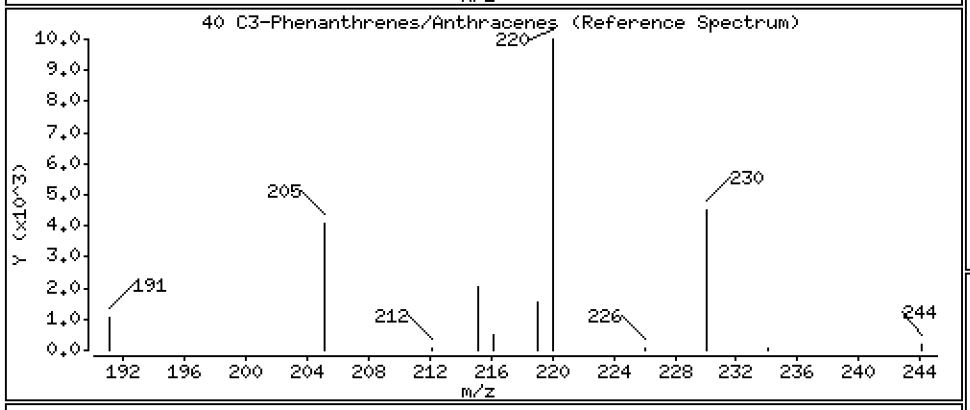
Concentration: 0.06264 ug/mL

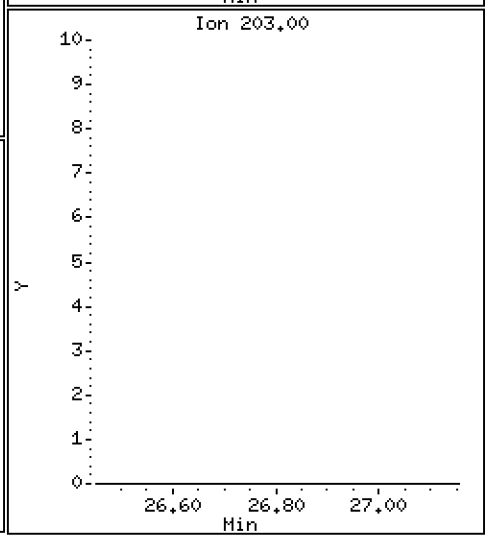


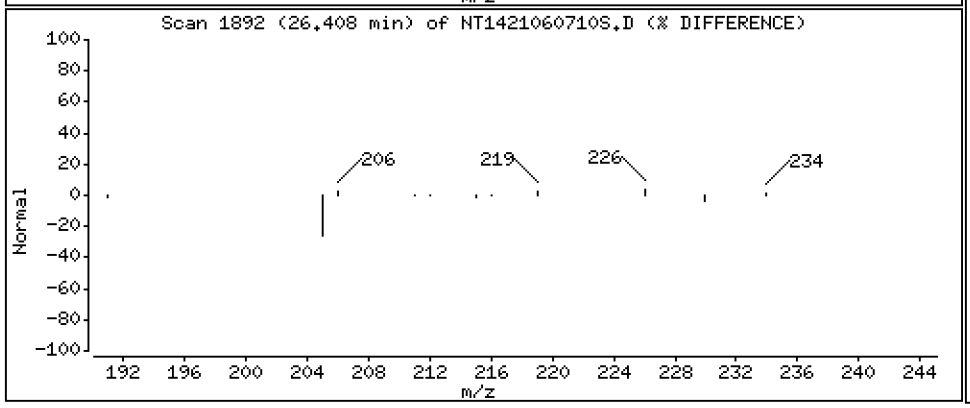












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Date : 07-JUN-2021 19:42

Client ID:

Instrument: nt14.i

Sample Info: 21E0106-01

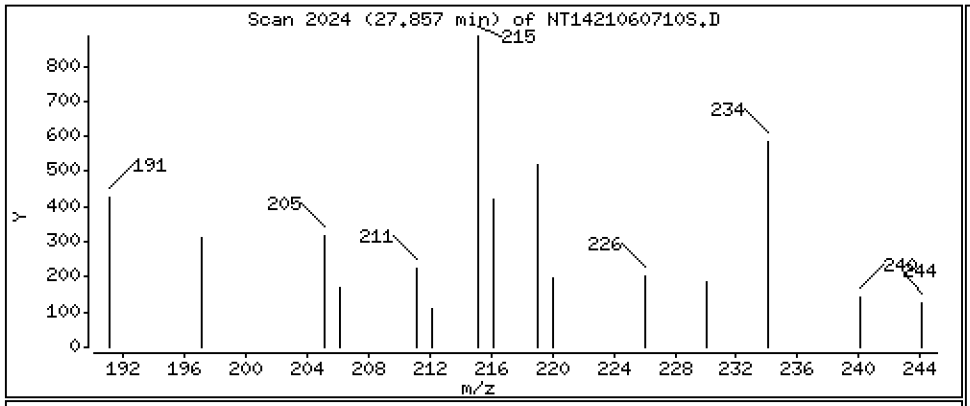
Operator: VTS

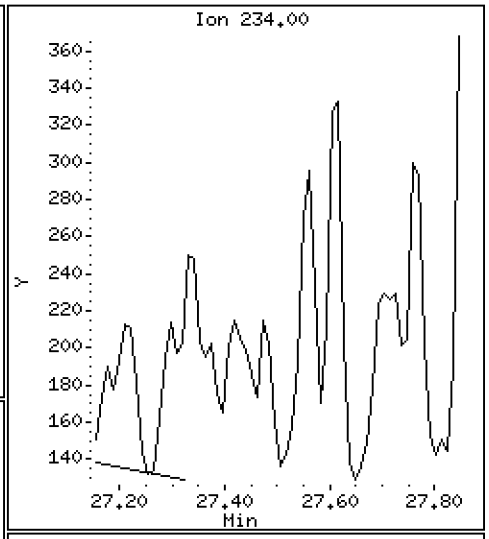
Column phase: Rxi-17Sil MS

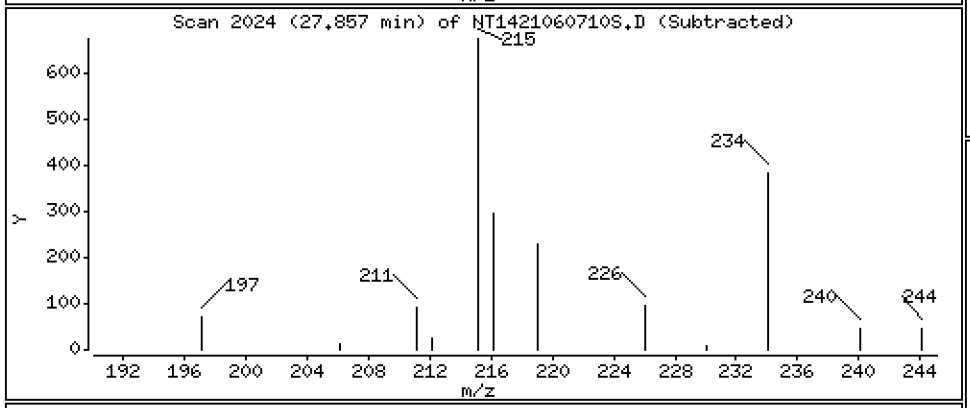
Column diameter: 0.25

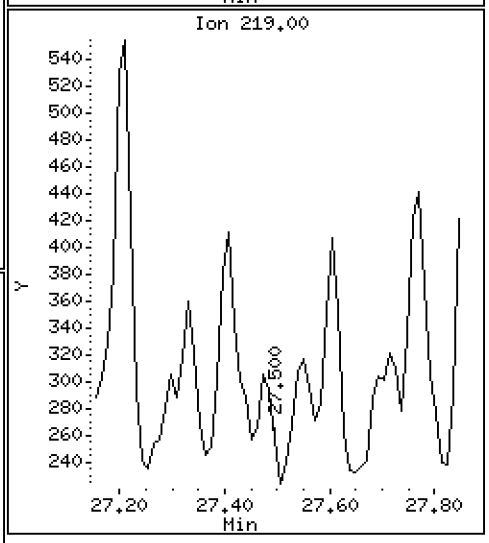
41 C4-Phenanthrenes/Anthracenes

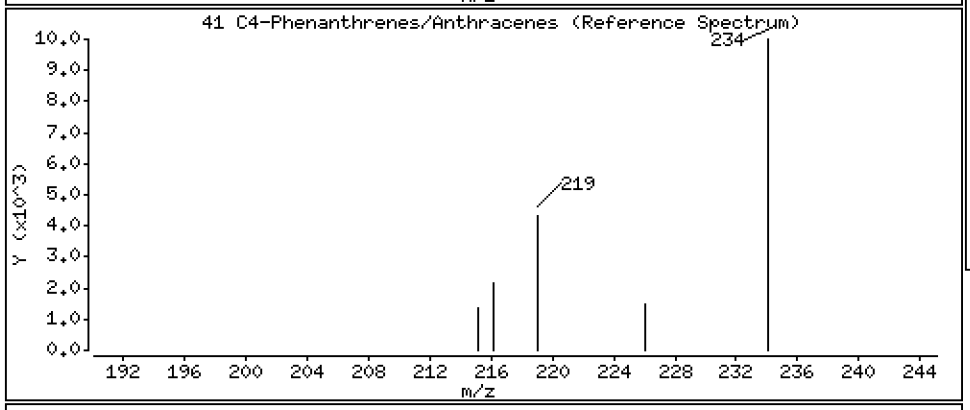
Concentration: 0.02957 ug/mL

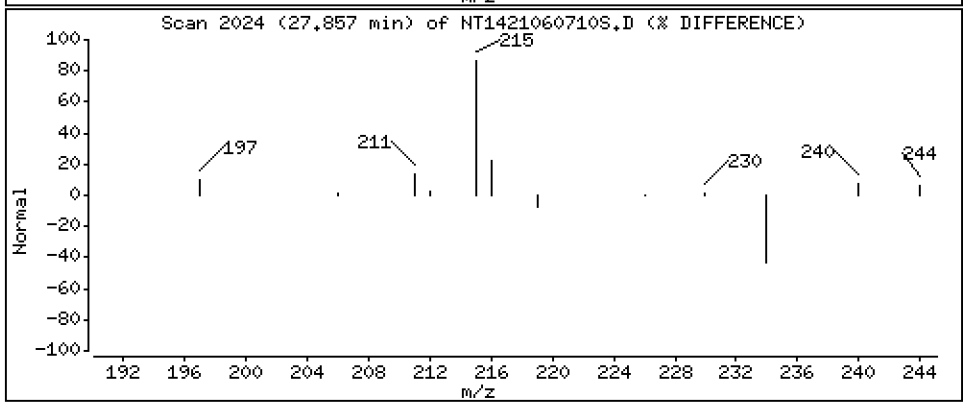












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Date : 07-JUN-2021 19:42

Client ID:

Instrument: nt14.i

Sample Info: 21E0106-01

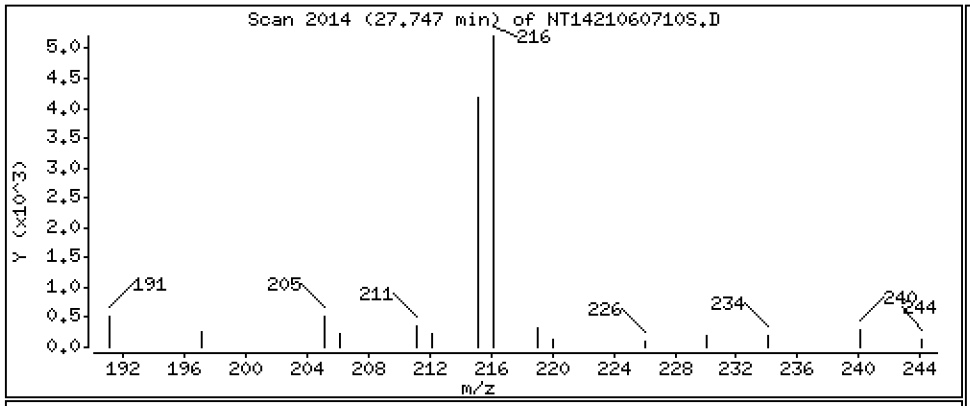
Operator: VTS

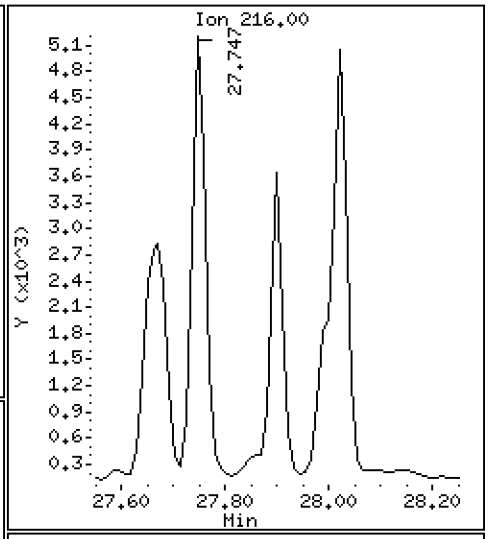
Column phase: Rxi-17Sil MS

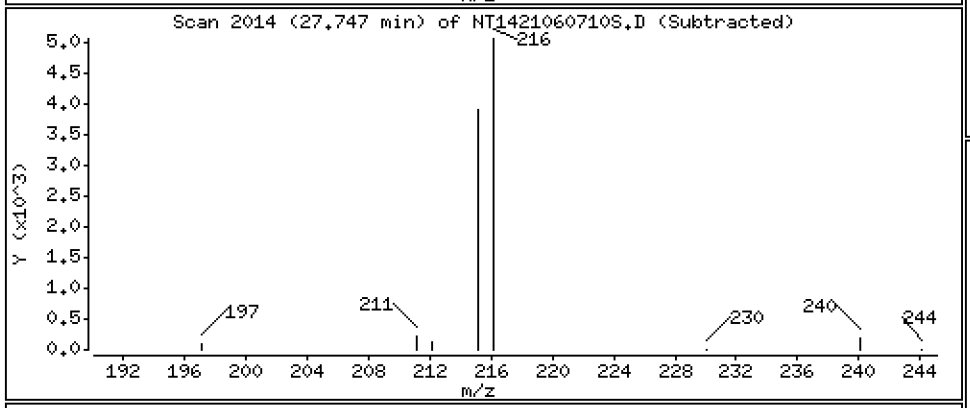
Column diameter: 0.25

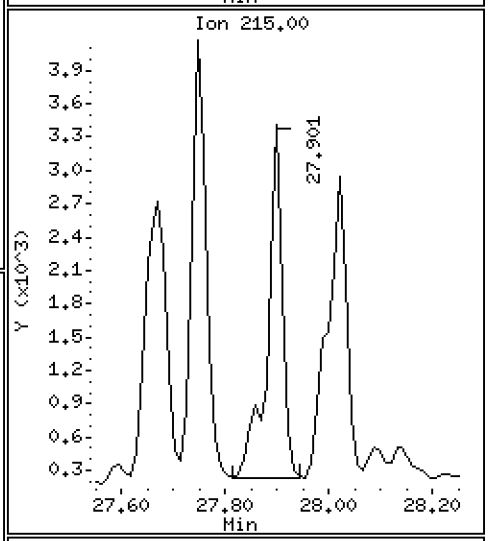
48 C1-Fluoranthenes/Pyrenes

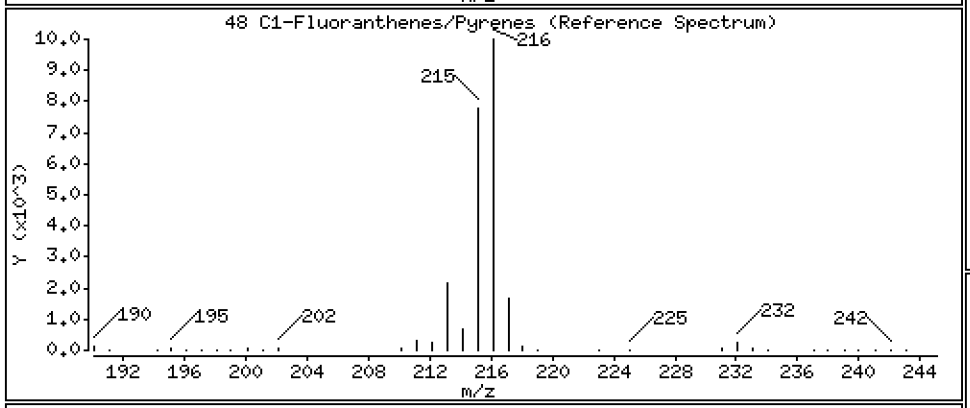
Concentration: 0.2506 ug/mL

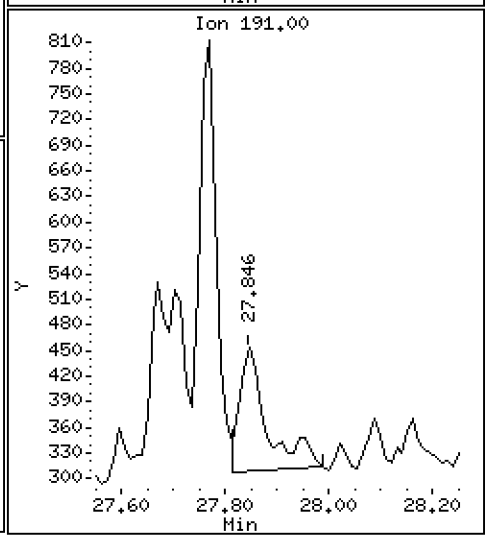


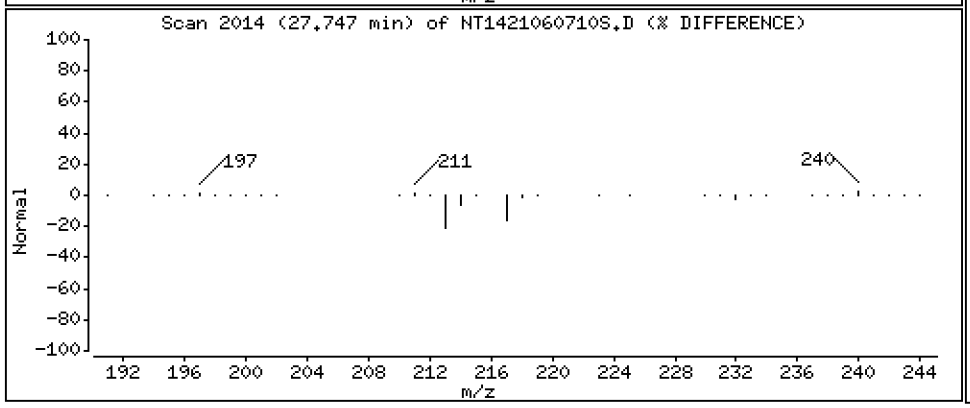












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Date : 07-JUN-2021 19:42

Client ID:

Instrument: nt14.i

Sample Info: 21E0106-01

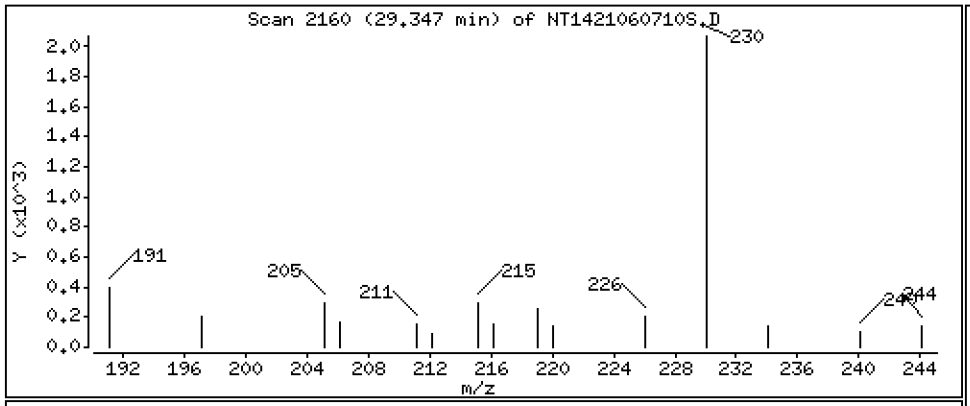
Operator: VTS

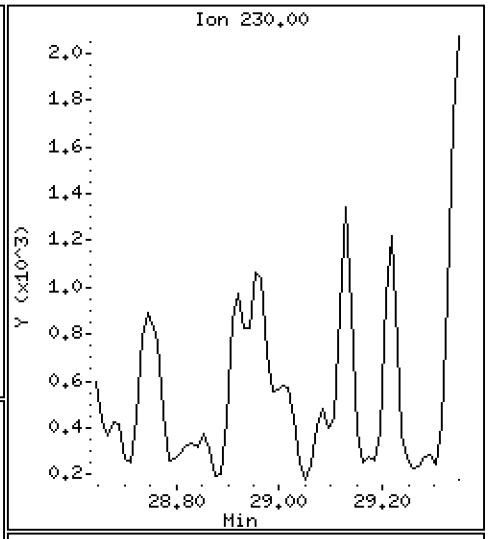
Column phase: Rxi-17Sil MS

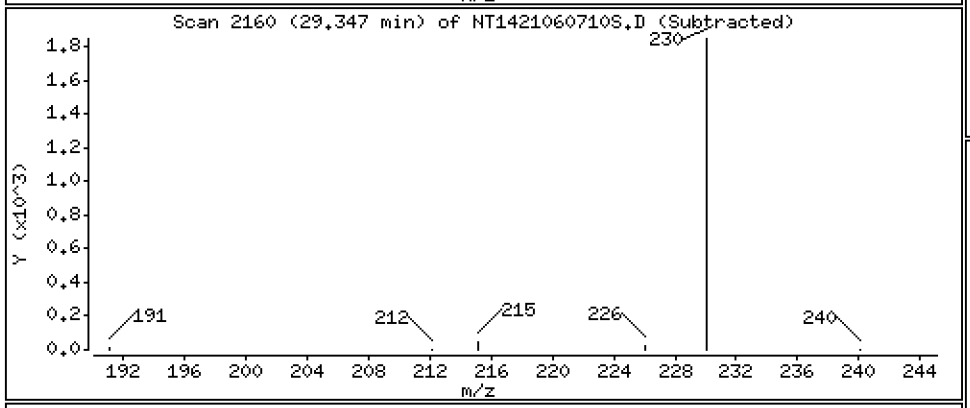
Column diameter: 0.25

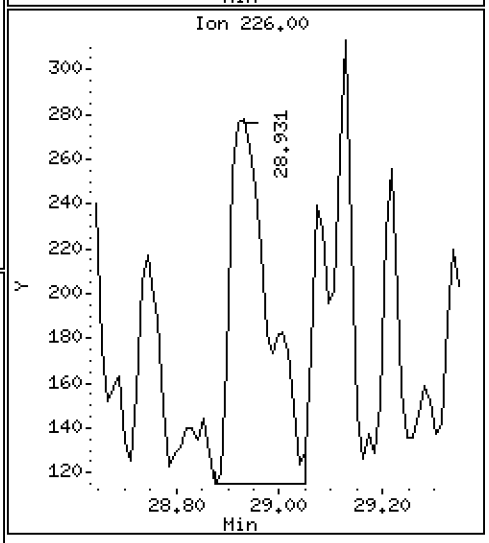
49 C2-Fluoranthenes/Pyrenes

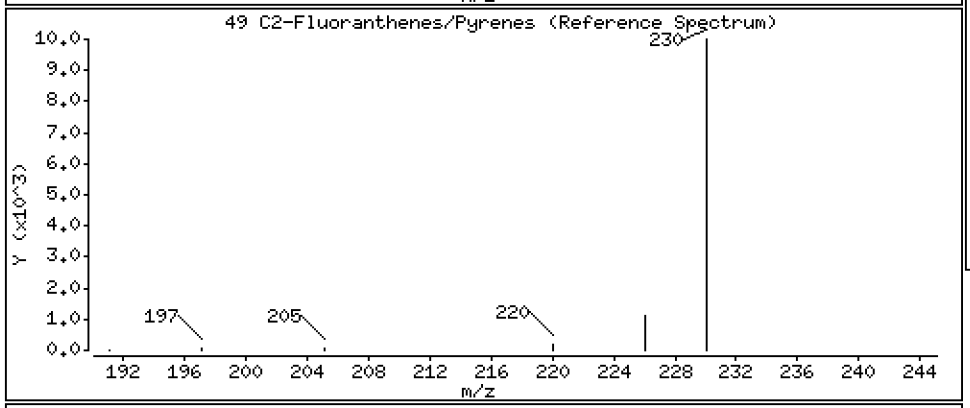
Concentration: 0.1135 ug/mL

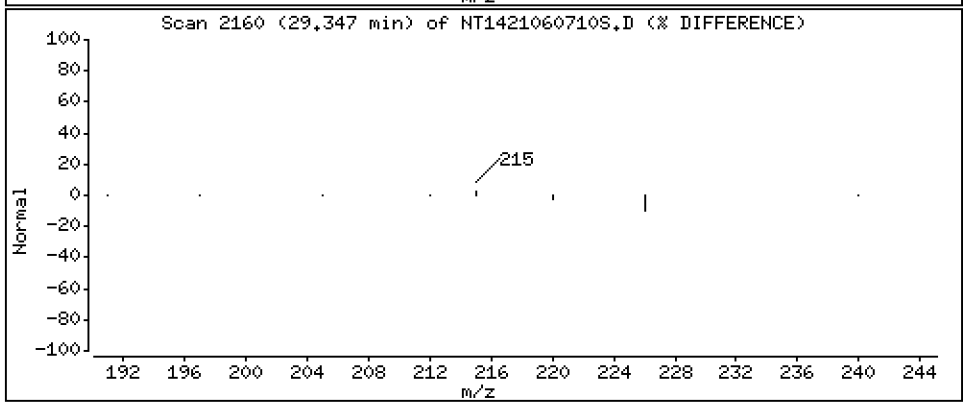












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Date : 07-JUN-2021 19:42

Client ID:

Instrument: nt14.i

Sample Info: 21E0106-01

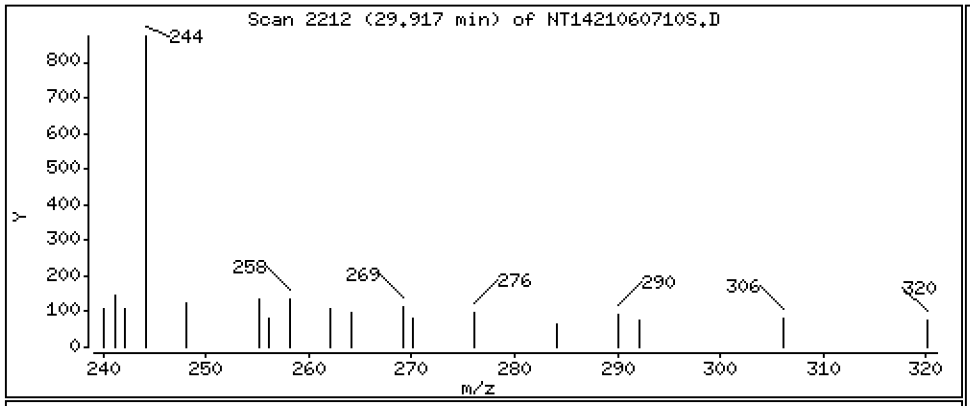
Operator: VTS

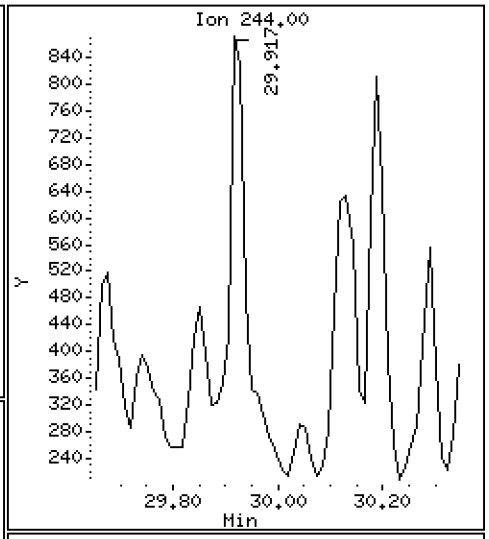
Column phase: Rxi-17Sil MS

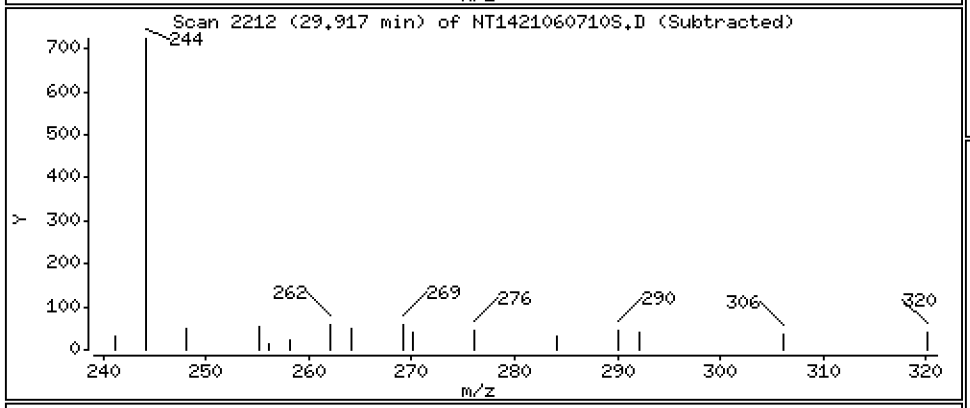
Column diameter: 0.25

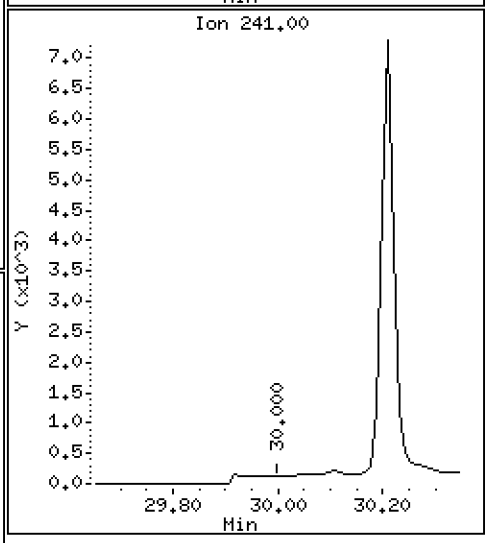
50 C3-Fluoranthenes/Pyrenes

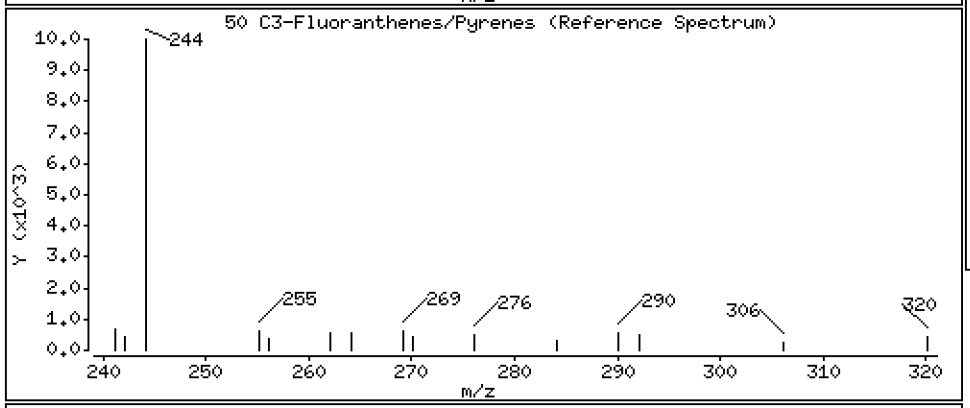
Concentration: 0.04848 ug/mL

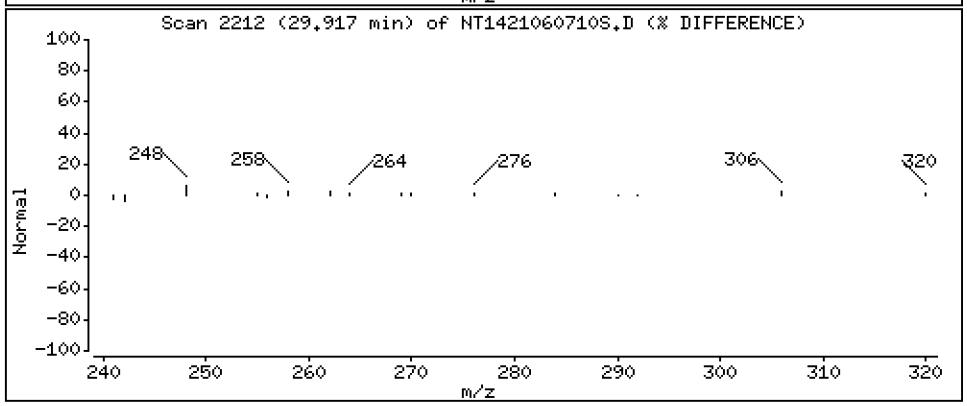












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Date : 07-JUN-2021 19:42

Client ID:

Instrument: nt14.i

Sample Info: 21E0106-01

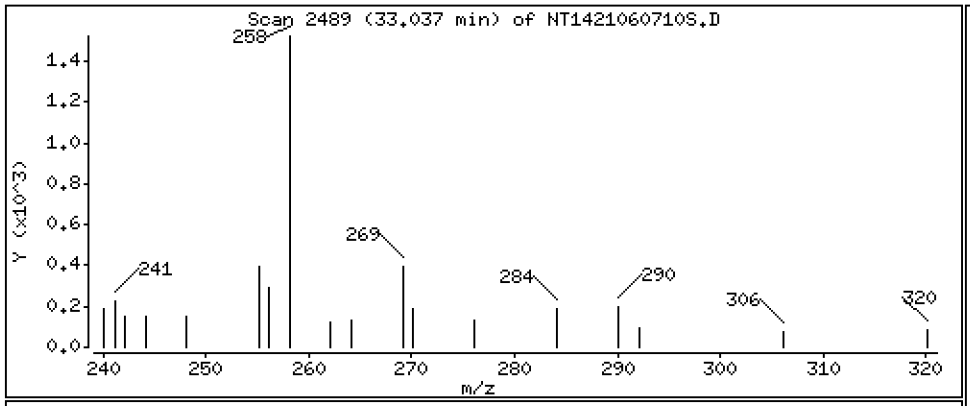
Operator: VTS

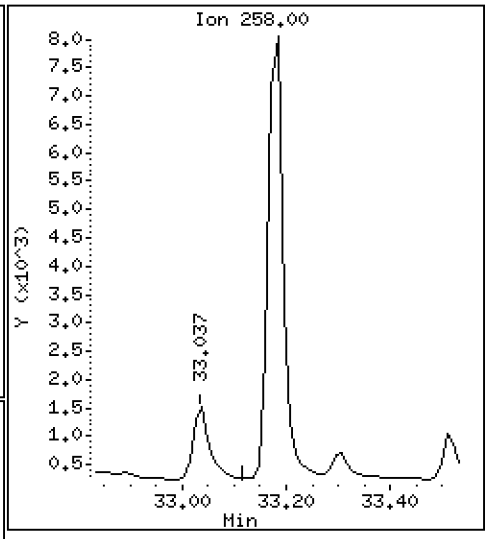
Column phase: Rxi-17Sil MS

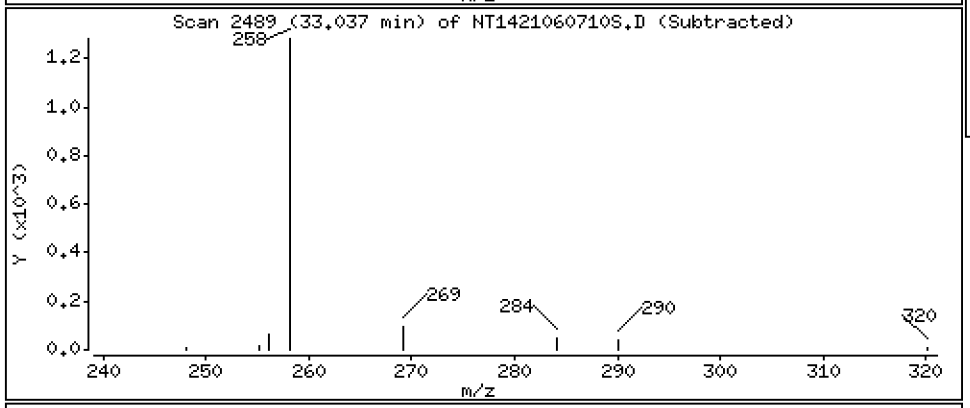
Column diameter: 0.25

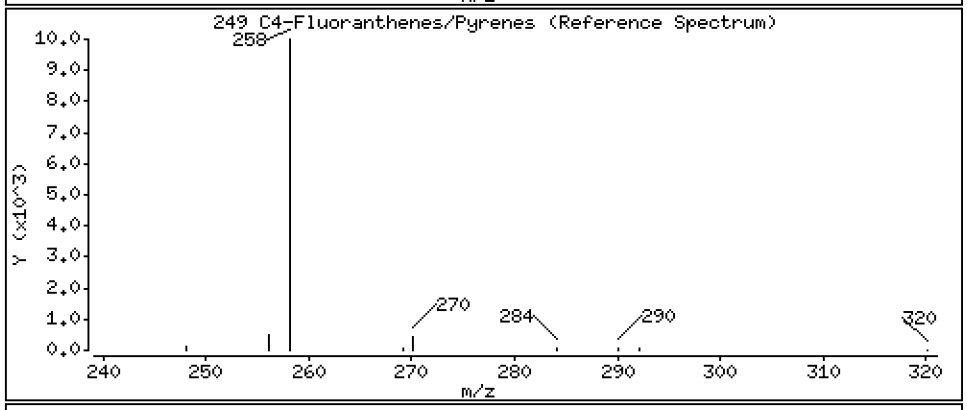
249 C4-Fluoranthenes/Pyrenes

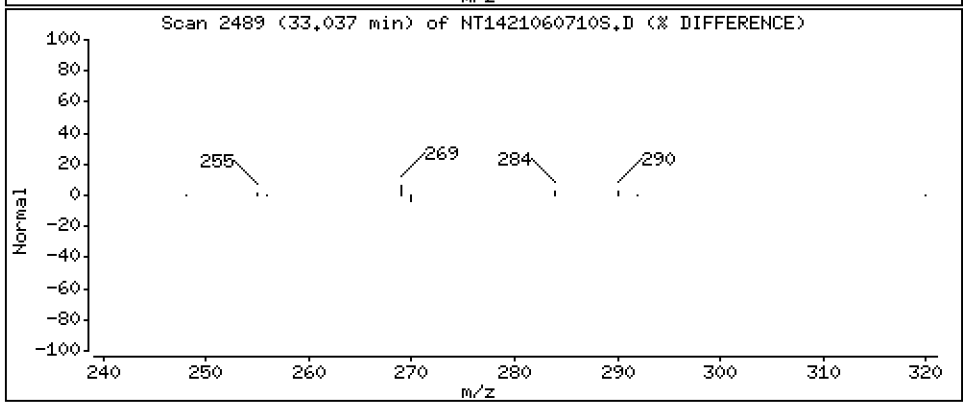
Concentration: 0.04154 ug/mL











Data File: \\target\share\chem3\nt14.i\20210607.b\SIM.b\NT1421060710S.D

Date : 07-JUN-2021 19:42

Client ID:

Instrument: nt14.i

Sample Info: 21E0106-01

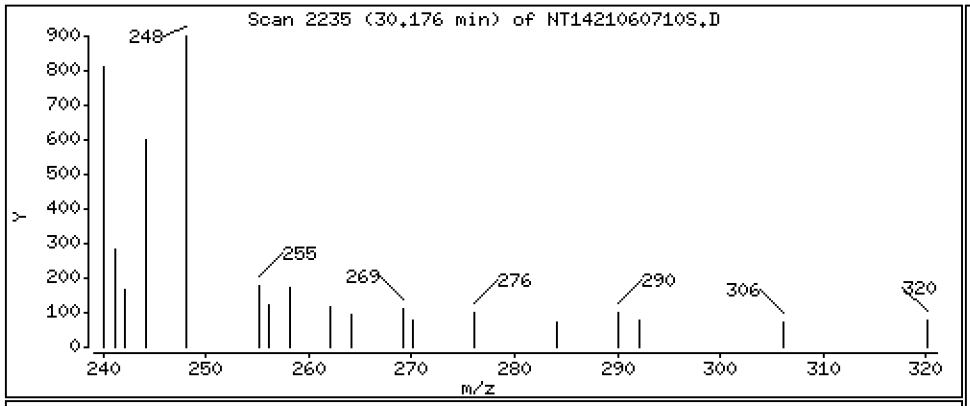
Operator: VTS

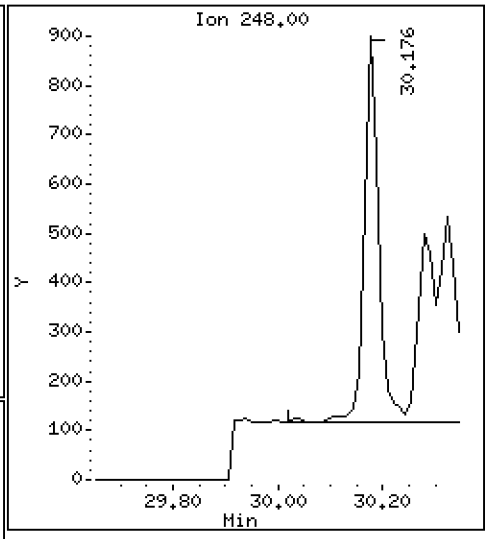
Column phase: Rxi-17Sil MS

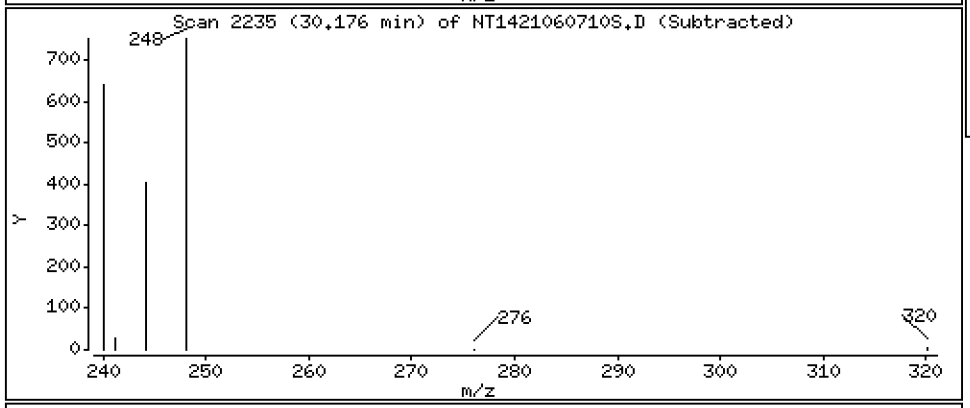
Column diameter: 0.25

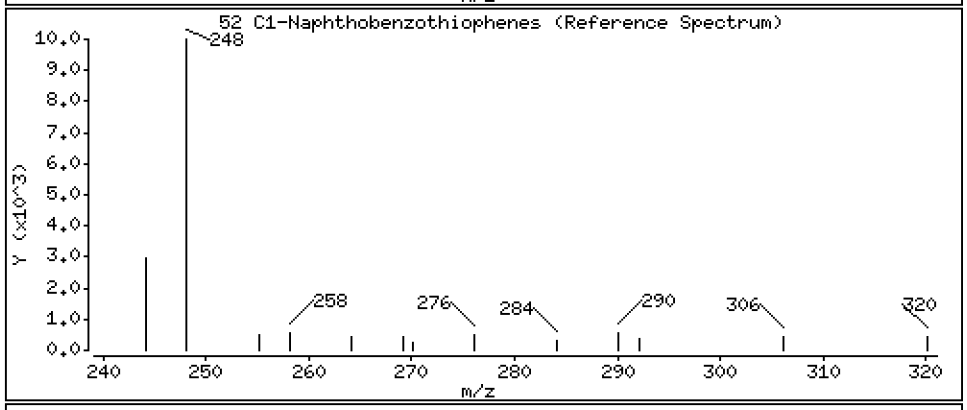
52 C1-Naphthobenzothiophenes

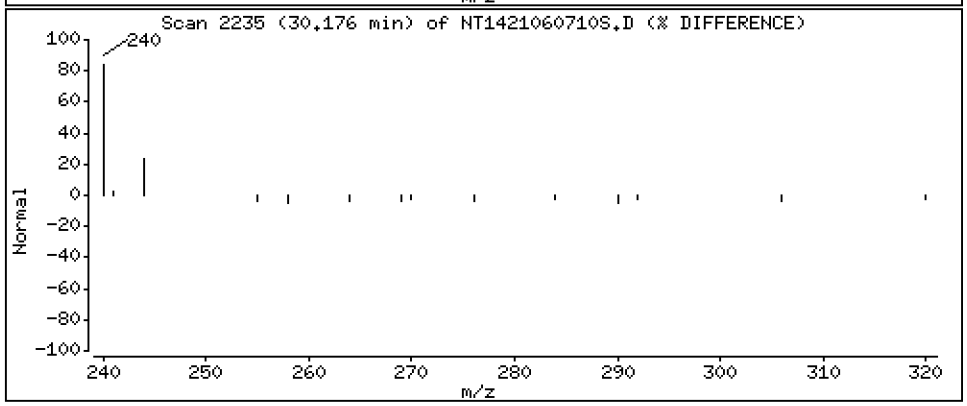
Concentration: 0.03844 ug/mL











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Date : 07-JUN-2021 19:42

Client ID:

Instrument: nt14.i

Sample Info: 21E0106-01

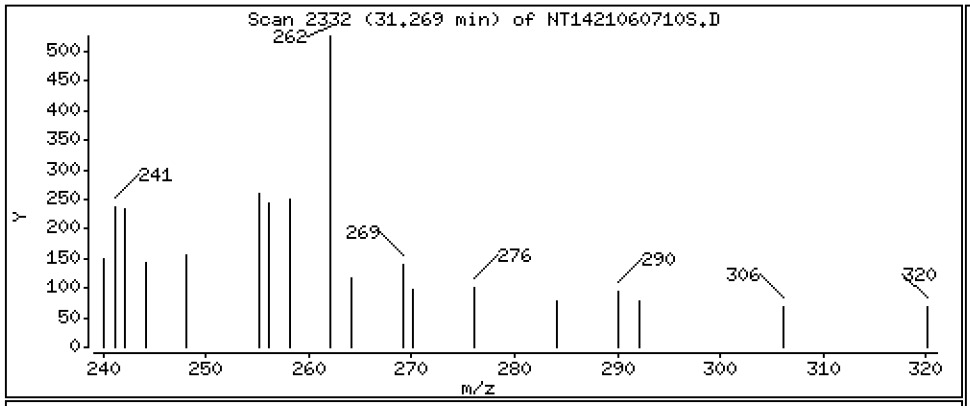
Operator: VTS

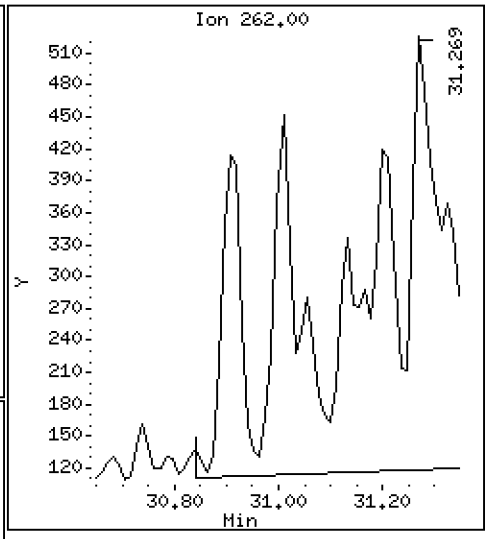
Column phase: Rxi-17Sil MS

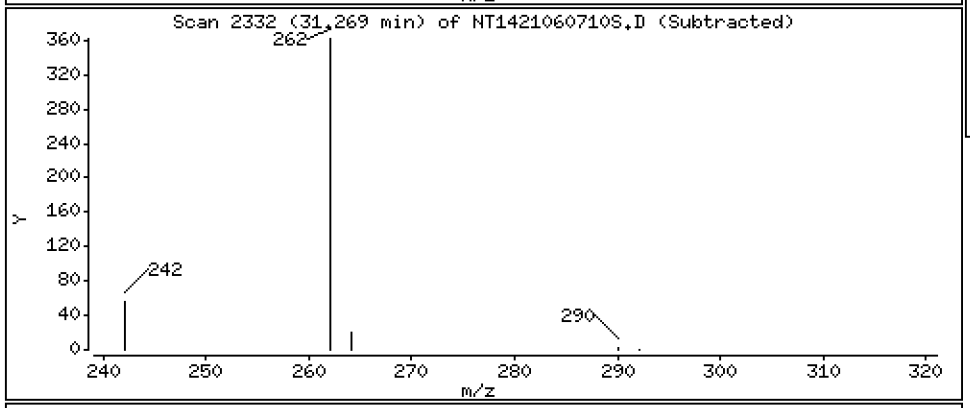
Column diameter: 0.25

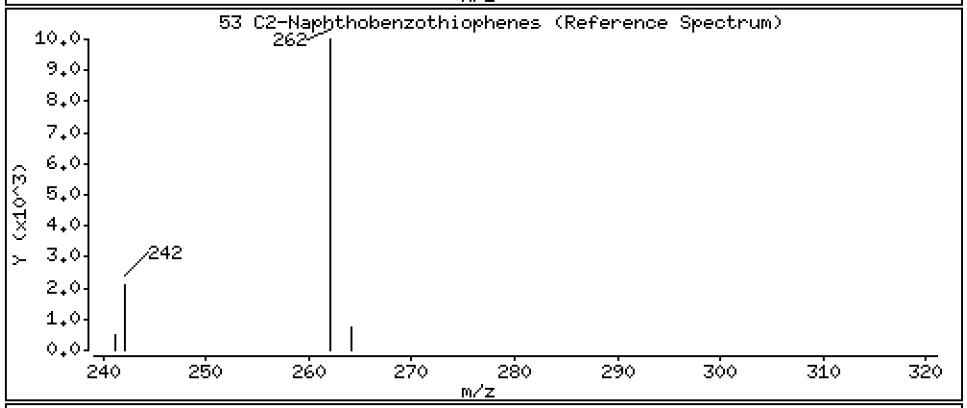
53 C2-Naphthobenzothiophenes

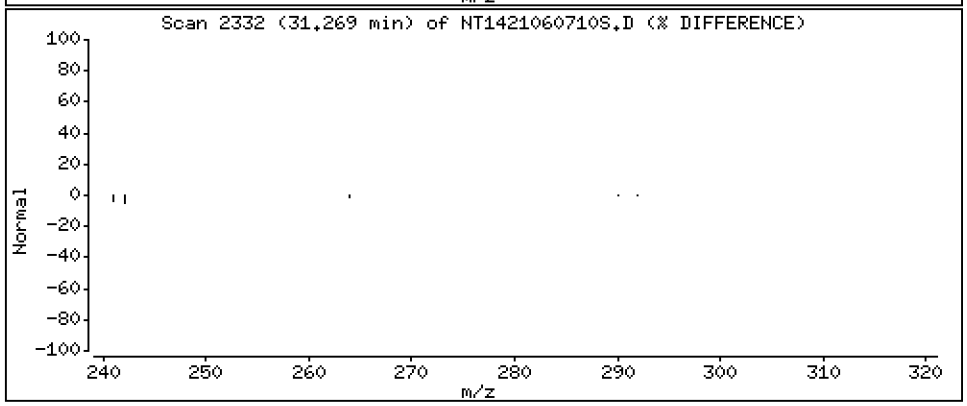
Concentration: 0.03210 ug/mL











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Date : 07-JUN-2021 19:42

Client ID:

Instrument: nt14.i

Sample Info: 21E0106-01

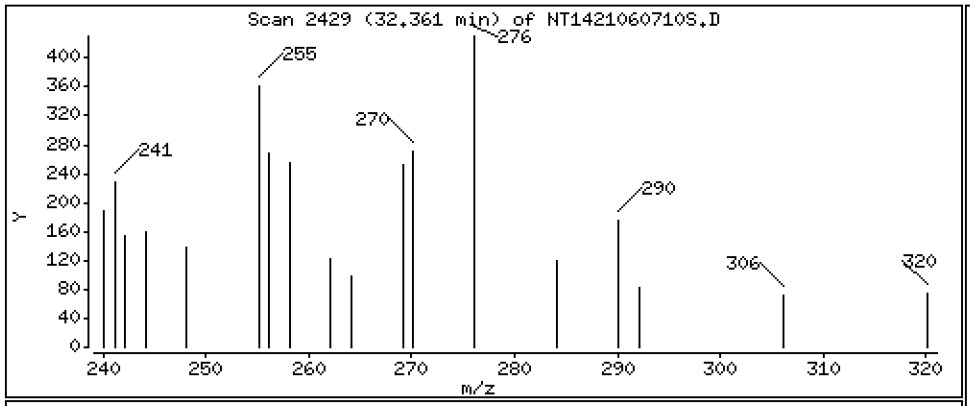
Operator: VTS

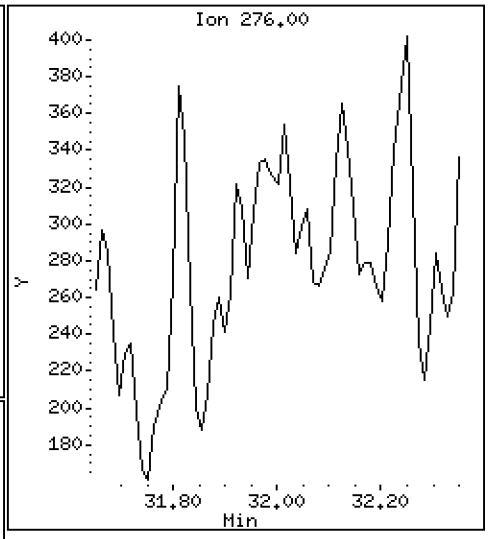
Column phase: Rxi-17Sil MS

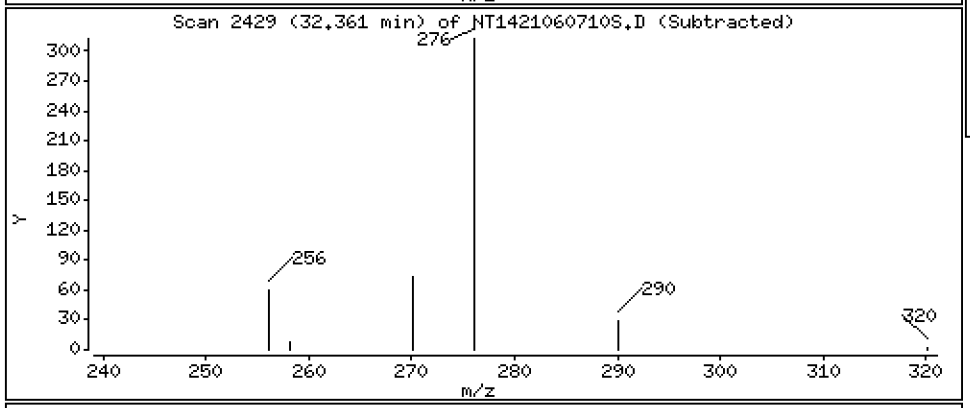
Column diameter: 0.25

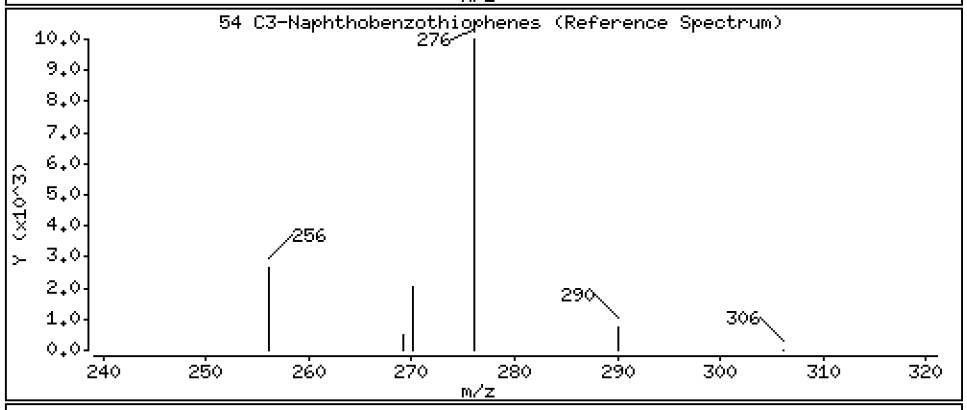
54 C3-Naphthobenzothiophenes

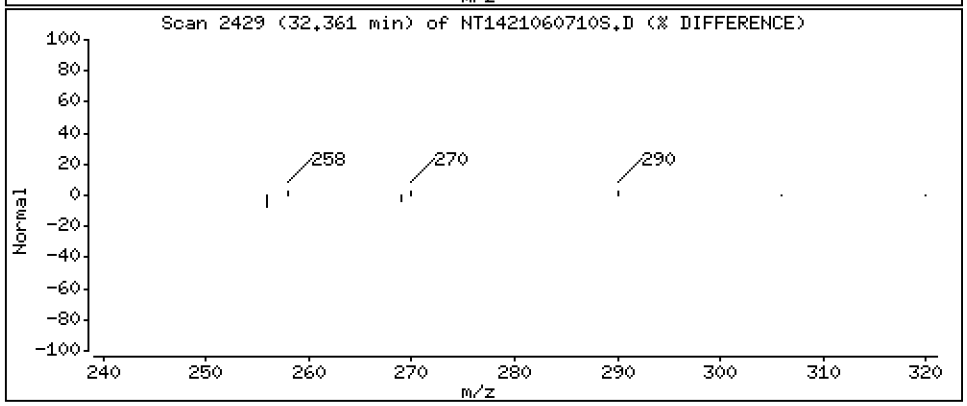
Concentration: 0.03536 ug/mL











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Date : 07-JUN-2021 19:42

Client ID:

Instrument: nt14.i

Sample Info: 21E0106-01

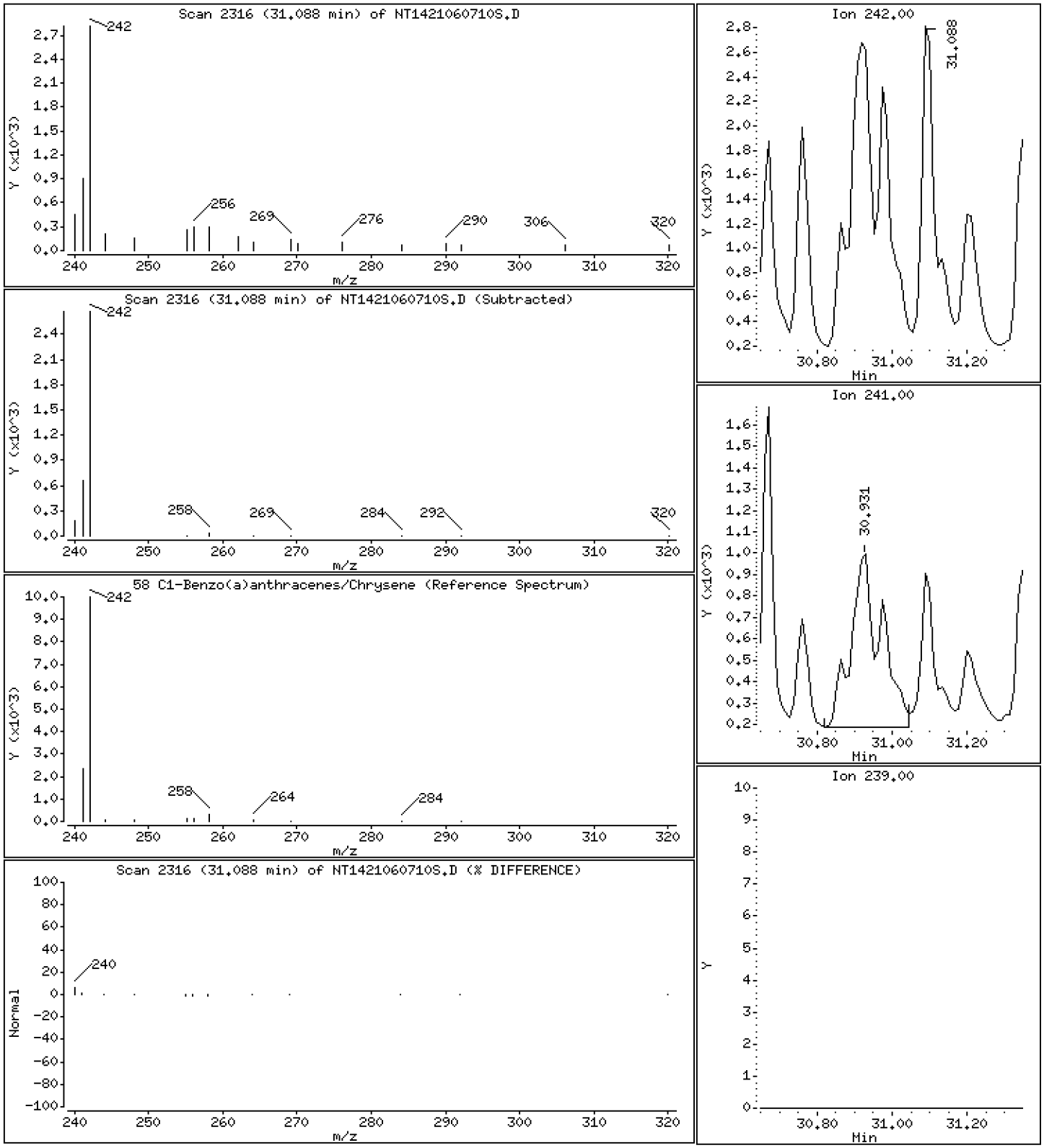
Operator: VTS

Column phase: Rxi-17Sil MS

Column diameter: 0.25

58 C1-Benzo(a)anthracenes/Chrysene

Concentration: 0.2205 ug/mL



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Date : 07-JUN-2021 19:42

Client ID:

Instrument: nt14.i

Sample Info: 21E0106-01

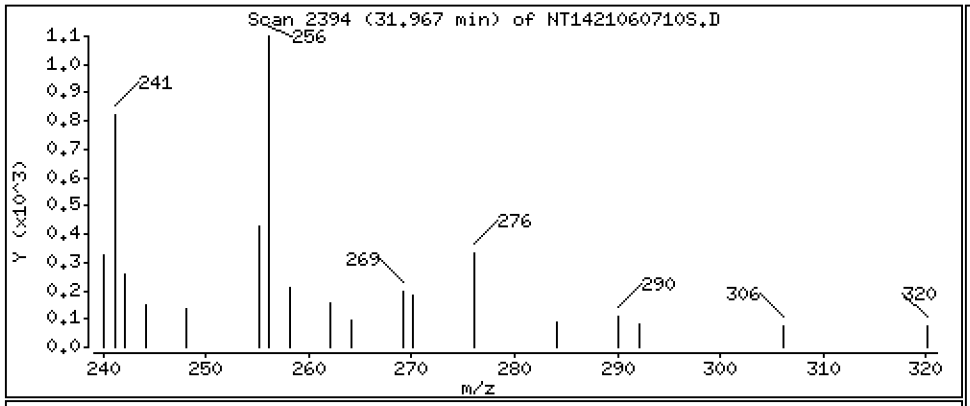
Operator: VTS

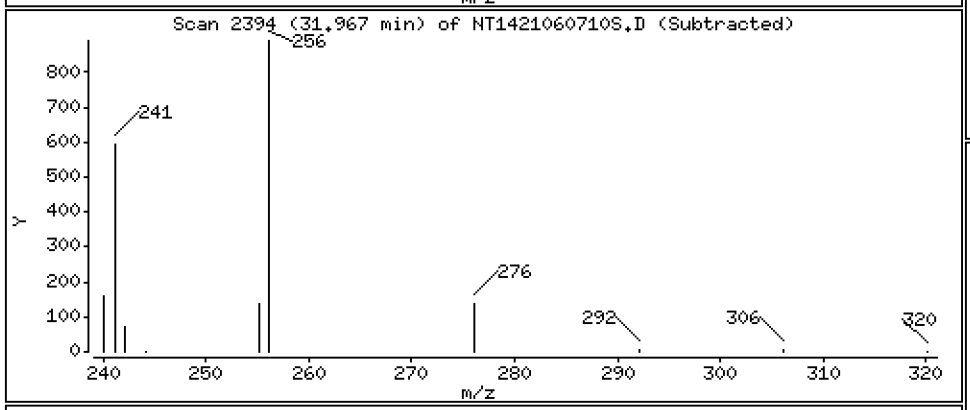
Column phase: Rxi-17Sil MS

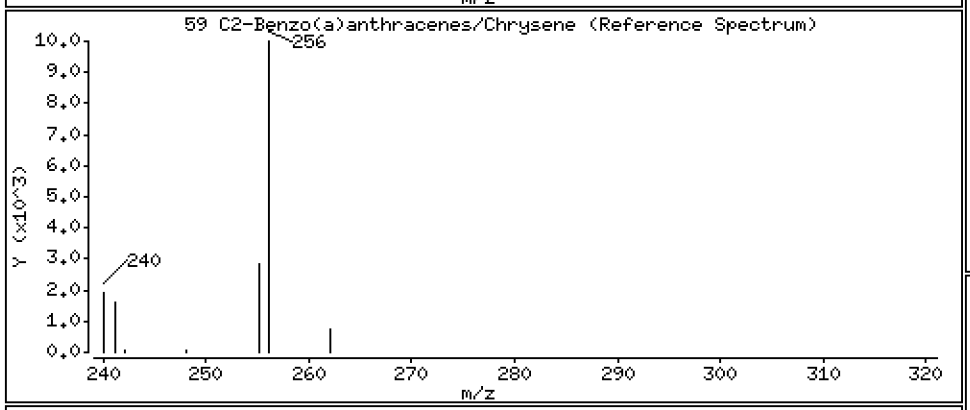
Column diameter: 0.25

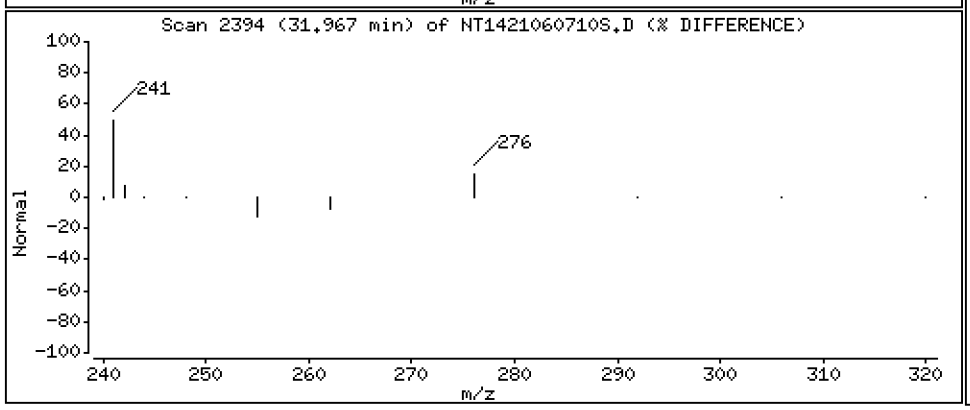
59 C2-Benzo(a)anthracenes/Chrysene

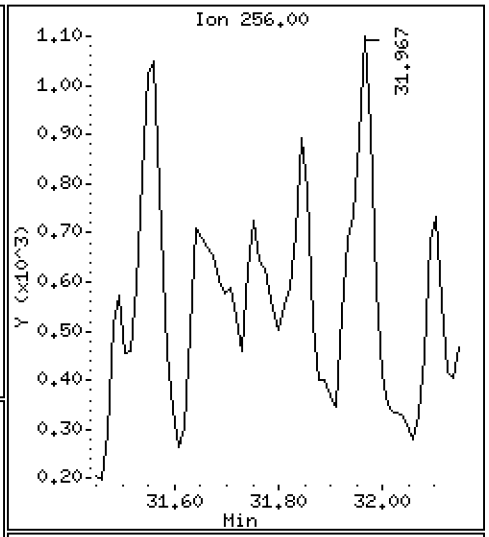
Concentration: 0.08813 ug/mL

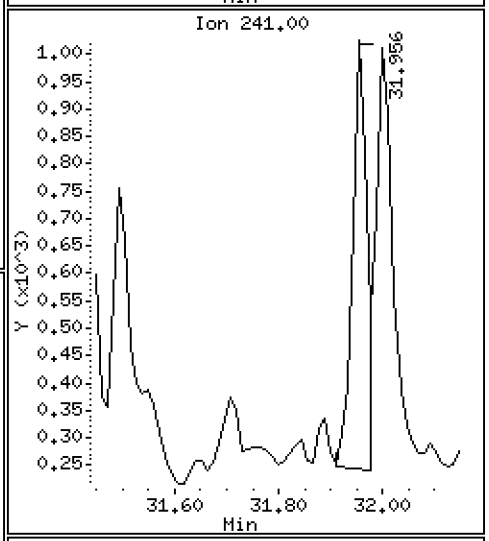


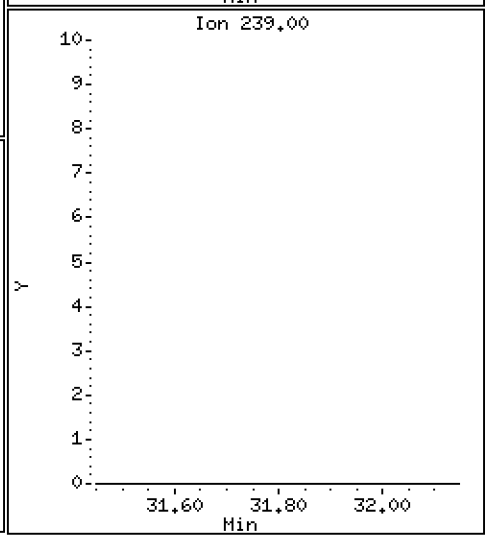












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Date : 07-JUN-2021 19:42

Client ID:

Instrument: nt14.i

Sample Info: 21E0106-01

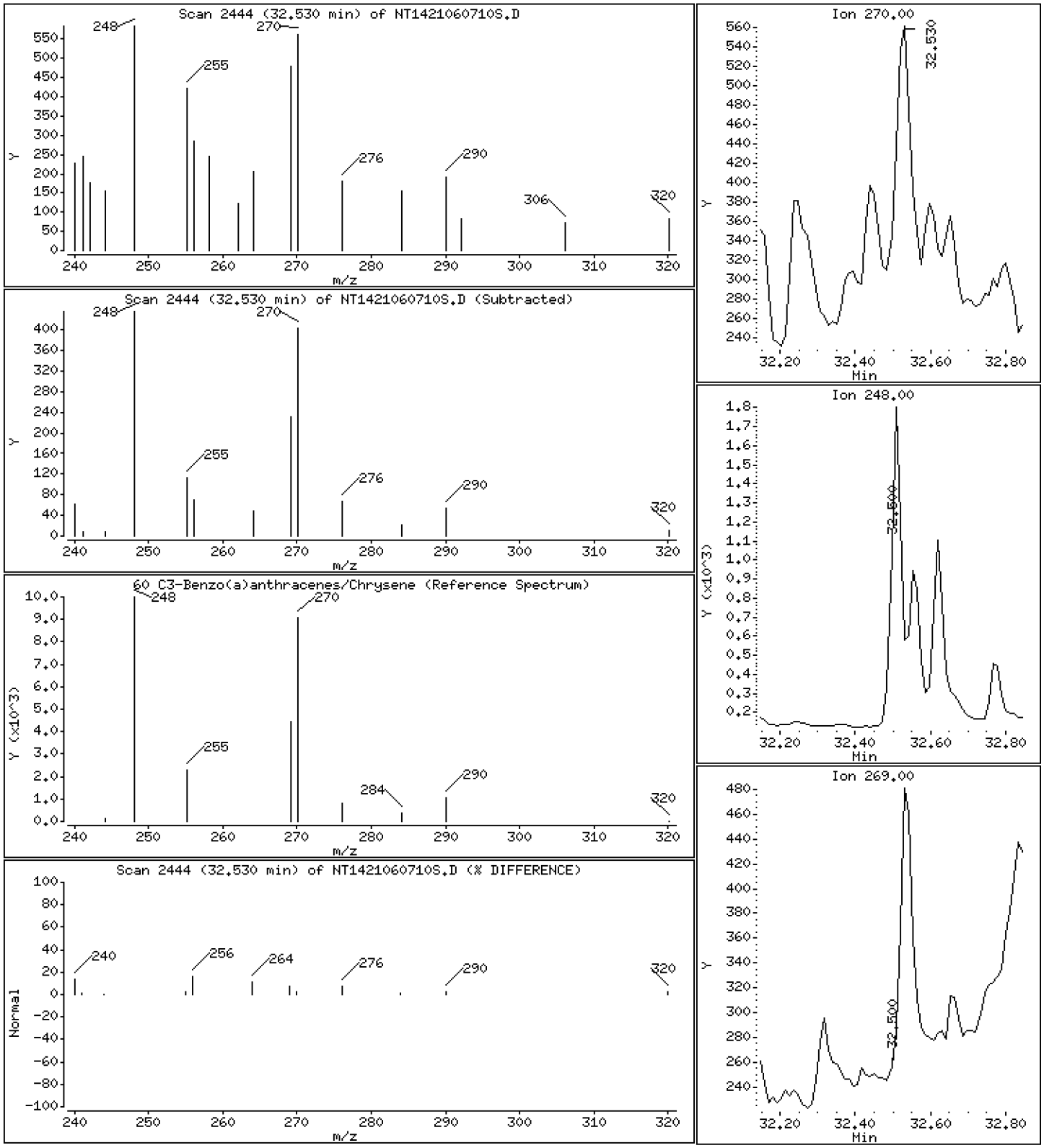
Operator: VTS

Column phase: Rxi-17Sil MS

Column diameter: 0.25

60 C3-Benzo(a)anthracenes/Chrysene

Concentration: 0.04656 ug/mL



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Date : 07-JUN-2021 19:42

Client ID:

Instrument: nt14.i

Sample Info: 21E0106-01

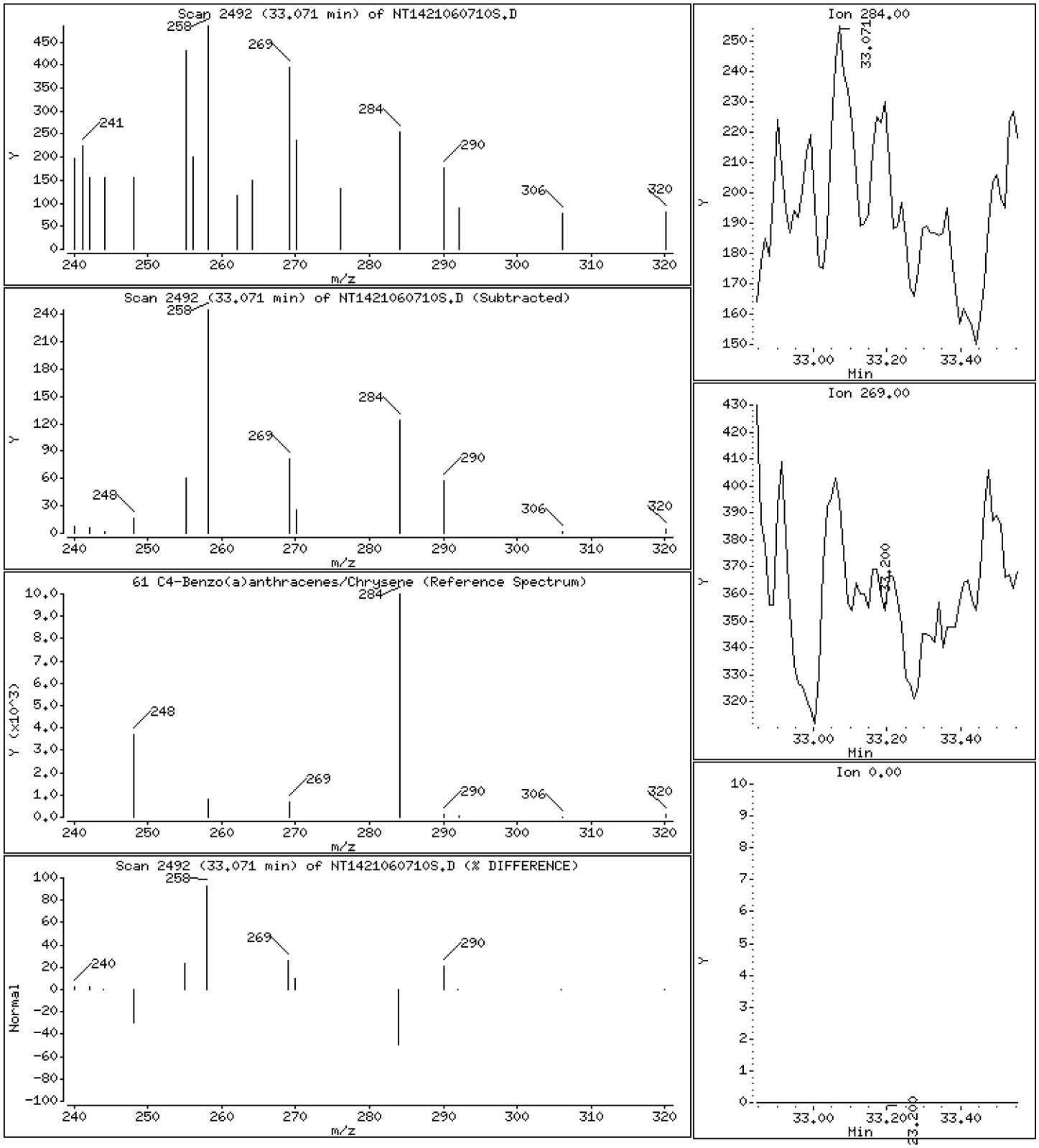
Operator: VTS

Column phase: Rxi-17Sil MS

Column diameter: 0.25

61 C4-Benzo(a)anthracenes/Chrysene

Concentration: 0.02128 ug/mL



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Date : 07-JUN-2021 19:42

Client ID:

Instrument: nt14.i

Sample Info: 21E0106-01

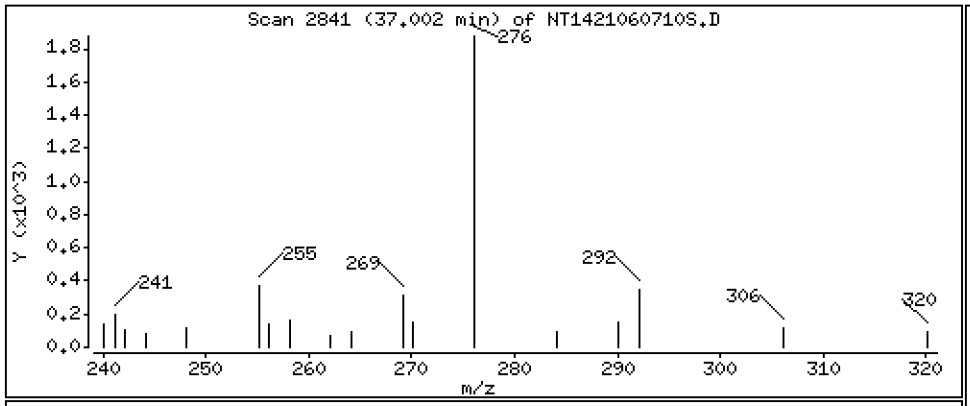
Operator: VTS

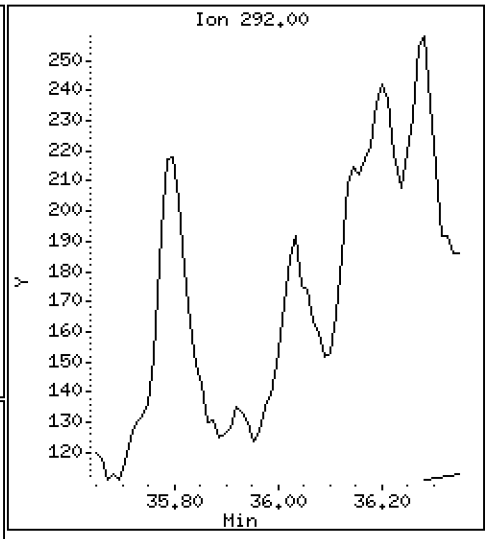
Column phase: Rxi-17Sil MS

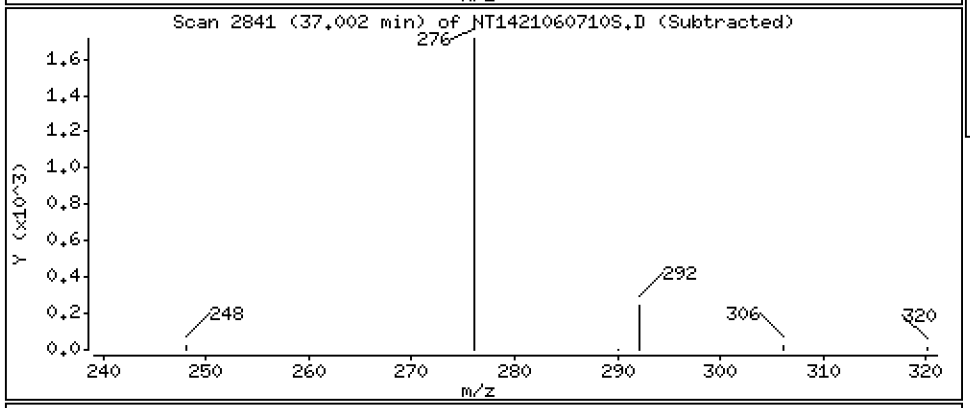
Column diameter: 0.25

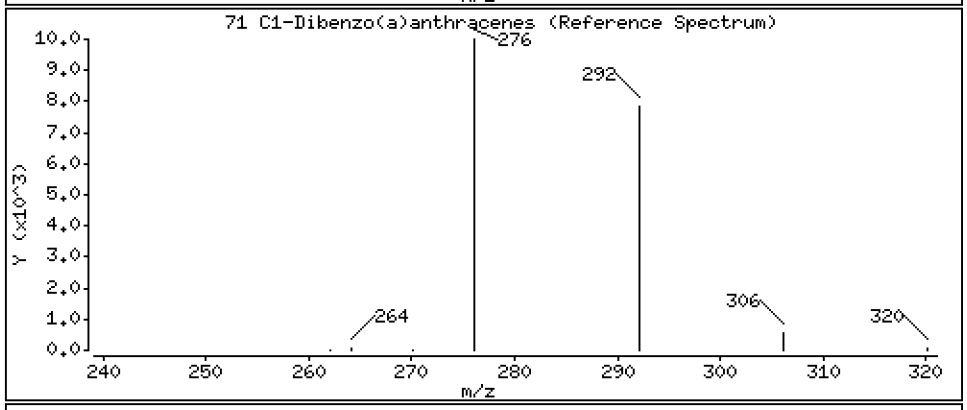
71 C1-Dibenzo(a)anthracenes

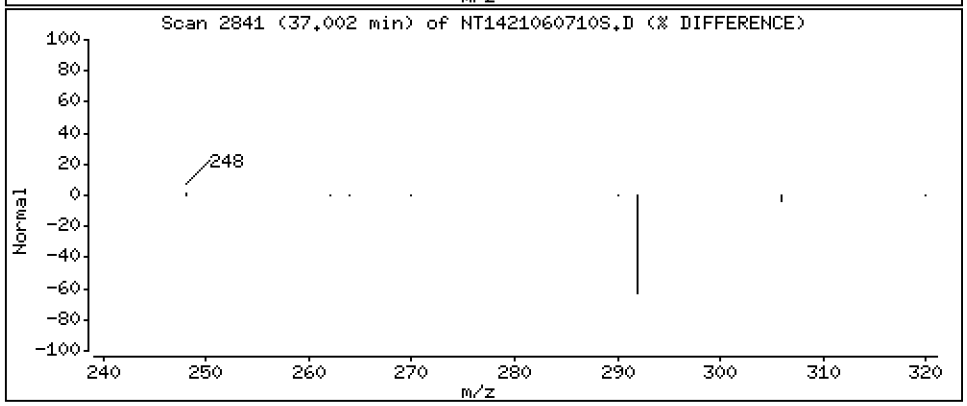
Concentration: 0.03329 ug/mL











ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt14.i\20210607.b\SIM.b\NT1421060710S.D
Lab Smp Id: 21E0106-01
Inj Date : 07-JUN-2021 19:42
Operator : VTS Inst ID: nt14.i
Smp Info : 21E0106-01
Misc Info :
Comment : 1ul Injection
Method : \\target\share\chem3\nt14.i\20210607.b\SIM.b\ALKYLRANGES.m
Meth Date : 15-Jun-2021 10:38 yev Quant Type: ISTD
Cal Date : 29-MAY-2021 18:49 Cal File: NT1421052914.D
Als bottle: 37
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ALKYLRANGES.sub
Target Version: 4.14
Processing Host: ORGDATA102

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/mL)
3 C1-Decalin	152	Compound Not Detected.					
4 C2-Decalin	166	9.125	9.200	(0.483)	518	0.02554	0.02554(M)
5 C3-Decalin	180	Compound Not Detected.					
247 C4-Decalin	194	Compound Not Detected.					
8 C1-Naphthalenes	142	13.784	14.246	(0.729)	3906	0.02066	0.02066(M)
9 C2-Naphthalenes	156	15.906	16.000	(0.842)	5930	0.03137	0.03137(M)
10 C3-Naphthalenes	170	17.763	18.082	(0.940)	5387	0.02850	0.02850(M)
11 C4-Naphthalenes	184	19.464	18.500	(1.030)	4714	0.02494	0.02494(M)
13 C1-Benzothiophenes	148	Compound Not Detected.					
14 C2-Benzothiophenes	162	Compound Not Detected.					
15 C3_Benzothiophenes	176	Compound Not Detected.					
27 C1-Fluorenes	180	20.678	21.000	(1.094)	3333	0.02292	0.02292(M)
* 25 Fluorene-d10	176	18.897	18.896	(1.000)	406826	2.00000	
28 C2-Fluorenes	194	22.097	22.000	(1.169)	3927	0.02701	0.02701(M)
29 C3-Fluorenes	208	23.416	23.000	(1.239)	4835	0.03021	0.03021(M)
31 C1-Dibenzothiophenes	198	23.054	23.500	(1.220)	3088	0.01504	0.01504(M)
32 C2-Dibenzothiophenes	212	24.461	24.500	(1.294)	6742	0.03284	0.03284(M)
33 C3-Dibenzothiophenes	226	25.362	25.600	(1.342)	7707	0.03754	0.03754(M)
34 C4-Dibenzothiophenes	240	Compound Not Detected.					
* 250 Anthracene-d10	188	22.350	22.359	(1.000)	430773	2.00000	
38 C1-Phenanthrenes/Anthracenes	192	23.702	23.800	(1.060)	27834	0.13319	0.1332(M)
39 C2-Phenanthrenes/Anthracenes	206	25.472	25.000	(1.140)	27658	0.13235	0.1323(M)
40 C3-Phenanthrenes/Anthracenes	220	26.407	26.800	(1.182)	13090	0.06264	0.06264(M)
41 C4-Phenanthrenes/Anthracenes	234	27.856	27.500	(1.246)	6180	0.02957	0.02957(M)
48 C1-Fluoranthenes/Pyrenes	216	27.747	27.900	(1.241)	61436	0.25060	0.2506(M)
49 C2-Fluoranthenes/Pyrenes	230	29.347	29.000	(1.313)	27829	0.11352	0.1135(M)
50 C3-Fluoranthenes/Pyrenes	244	29.916	30.000	(1.339)	11886	0.04848	0.04848(M)
249 C4-Fluoranthenes/Pyrenes	258	33.036	33.183	(1.478)	10183	0.04154	0.04154(M)
52 C1-Naphthobenzothiophenes	248	30.176	30.000	(1.350)	10532	0.03844	0.03844(M)
53 C2-Naphthobenzothiophenes	262	31.268	31.000	(1.399)	8793	0.03210	0.03210(M)
54 C3-Naphthobenzothiophenes	276	32.361	32.000	(1.448)	9686	0.03536	0.03536(M)
248 C4-Naphthobenzothiophenes	290	Compound Not Detected.					
58 C1-Benzo(a)anthracenes/Chrysen	242	31.088	31.000	(0.937)	46688	0.22054	0.2205(M)

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/mL)
59 C2-Benzo(a)anthracenes/Chrysen	256	31.966	31.800	(0.963)	18657	0.08813	0.08813(M)
60 C3-Benzo(a)anthracenes/Chrysen	270	32.530	32.500	(0.980)	9856	0.04656	0.04656(M)
61 C4-Benzo(a)anthracenes/Chrysen	284	33.070	33.200	(0.997)	4505	0.02128	0.02128(M)
* 251 Benzo(e)pyrene-d12	264	33.183	33.181	(1.000)	545830	2.00000	
71 C1-Dibenzo(a)anthracenes	292	37.001	36.000	(1.115)	11640	0.03329	0.03329(M)
72 C2-Dibenzo(a)anthracenes	306	Compound Not Detected.					
73 C3-Dibenzo(a)anthracenes	320	Compound Not Detected.					

QC Flag Legend

M - Compound response manually integrated.

Data File: NT1421060710S.D
Report Date: 15-Jun-2021 10:41

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt14.i
Lab File ID: NT1421060710S.D
Lab Smp Id: 21E0106-01
Analysis Type: SV
Quant Type: ISTD
Operator: VTS
Method File: \\target\share\chem3\nt14.i\20210607.b\SIM.b\ALKYLRANGES.m
Misc Info:

Calibration Date: 07-JUN-2021
Calibration Time: 13:18
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

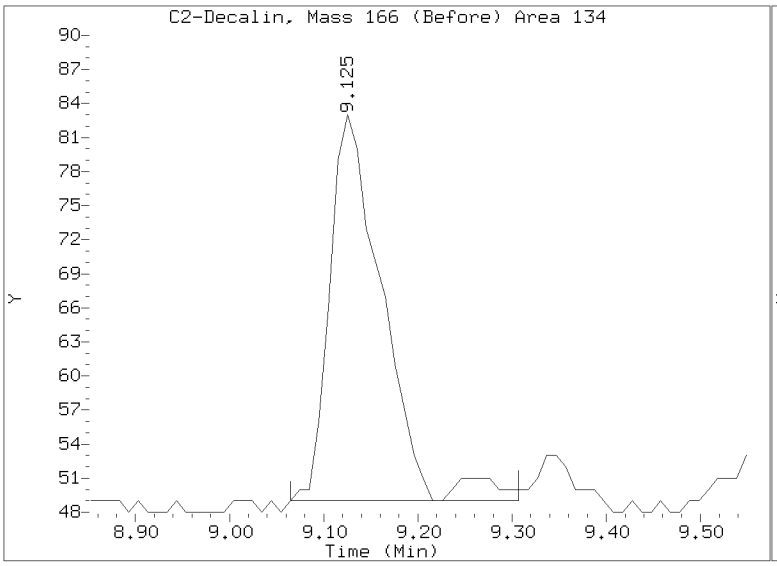
COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
25 Fluorene-d10	311077	155539	622154	406826	30.78
250 Anthracene-d10	331614	165807	663228	430773	29.90
251 Benzo(e)pyrene-d1	416427	208214	832854	545830	31.07

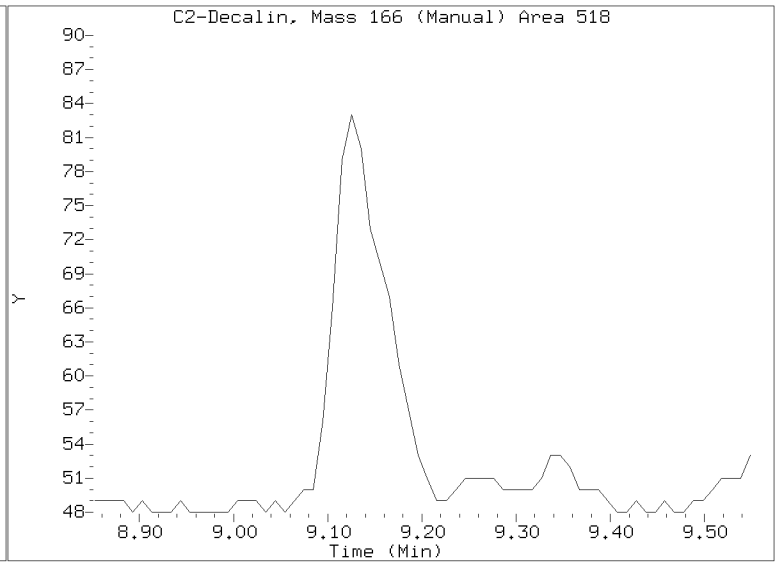
COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
25 Fluorene-d10	18.90	18.40	19.40	18.90	0.01
250 Anthracene-d10	22.36	21.86	22.86	22.35	-0.04
251 Benzo(e)pyrene-d1	33.18	32.68	33.68	33.18	0.01

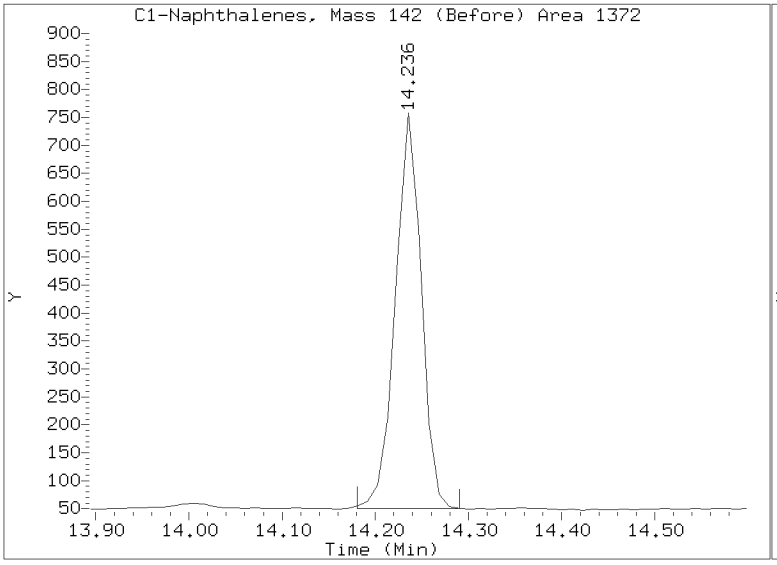
AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

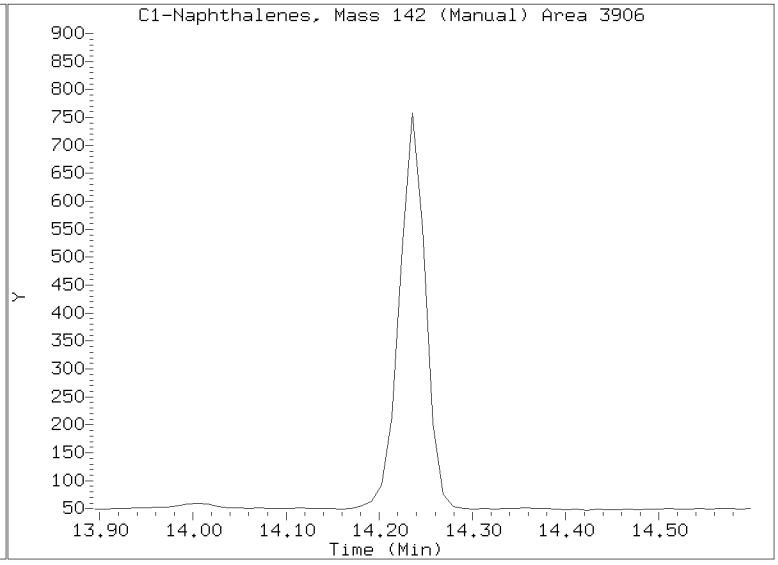
Quant Ion Manual Peak Adjustment Report

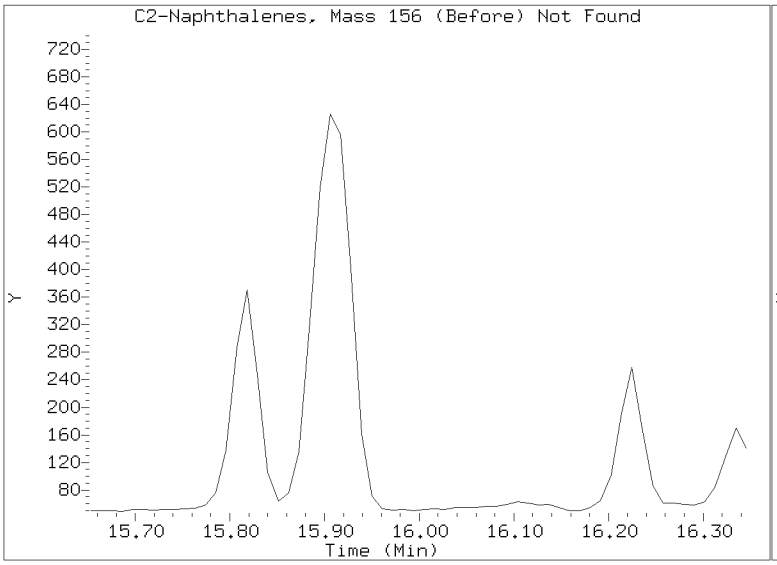
Datafile: //target/share/chem3/nt14.i/20210607.b/SIM.b/NT1421060710S.D
Injection Date: 07-JUN-2021 19:42
Lab ID:21E0106-01 Client ID:
Report Date: 06/15/2021 10:41

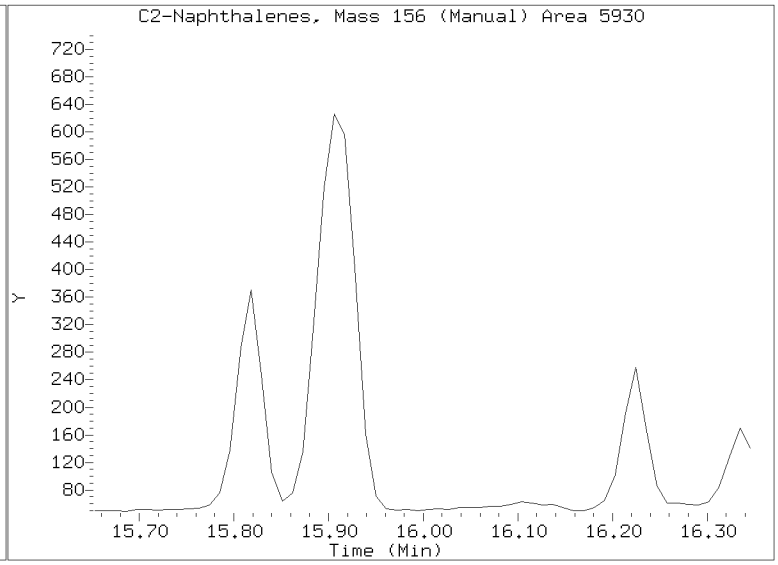












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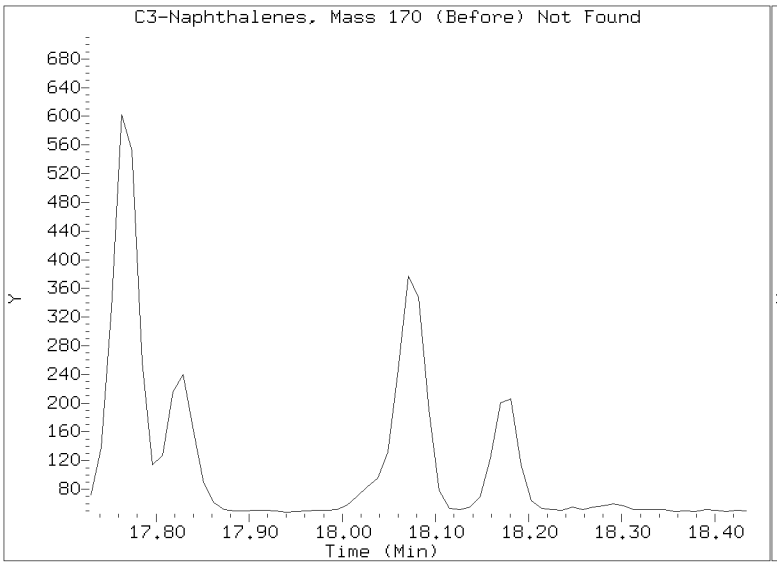

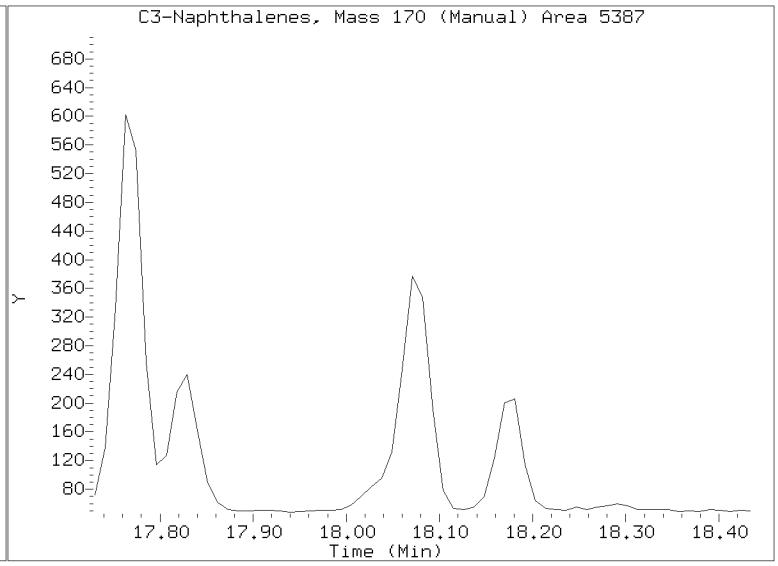

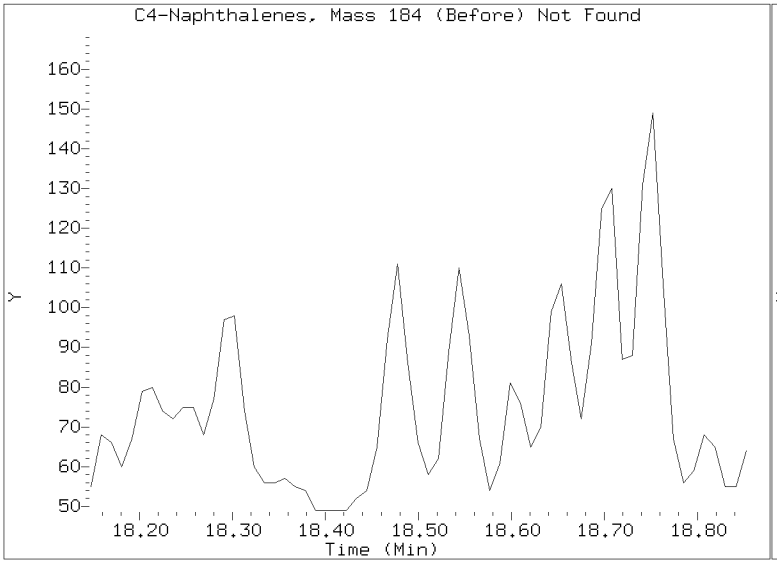

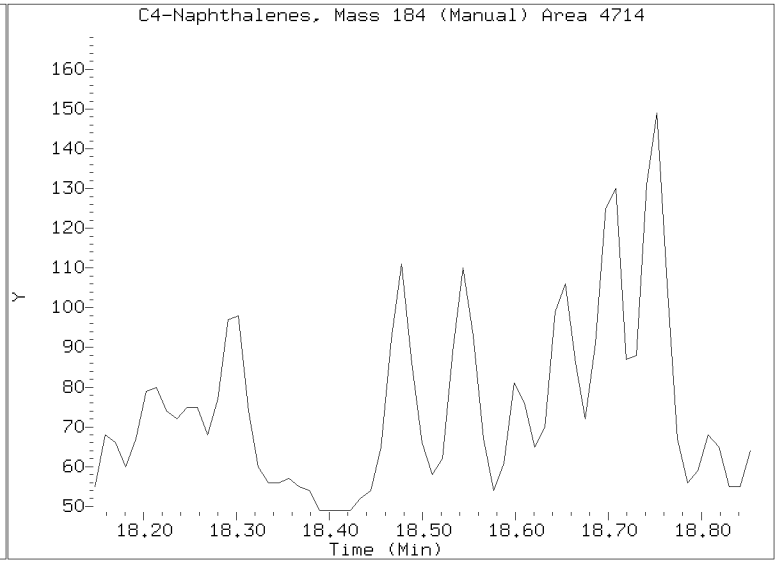

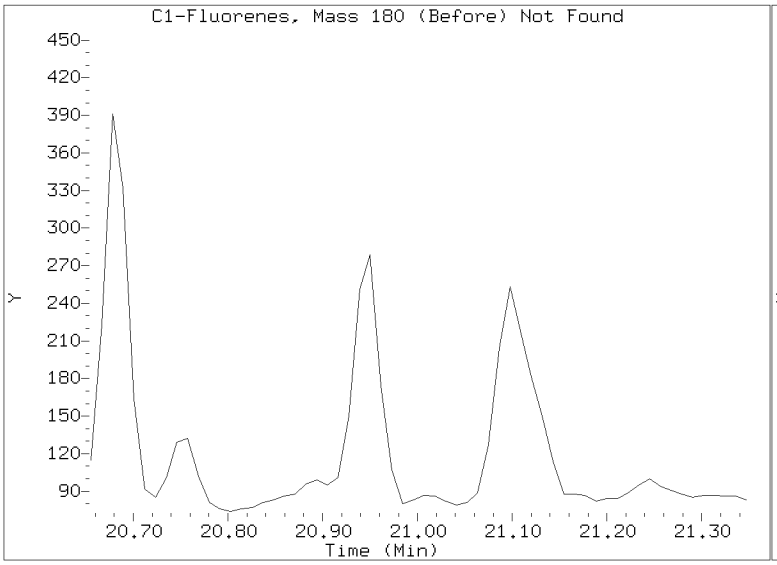

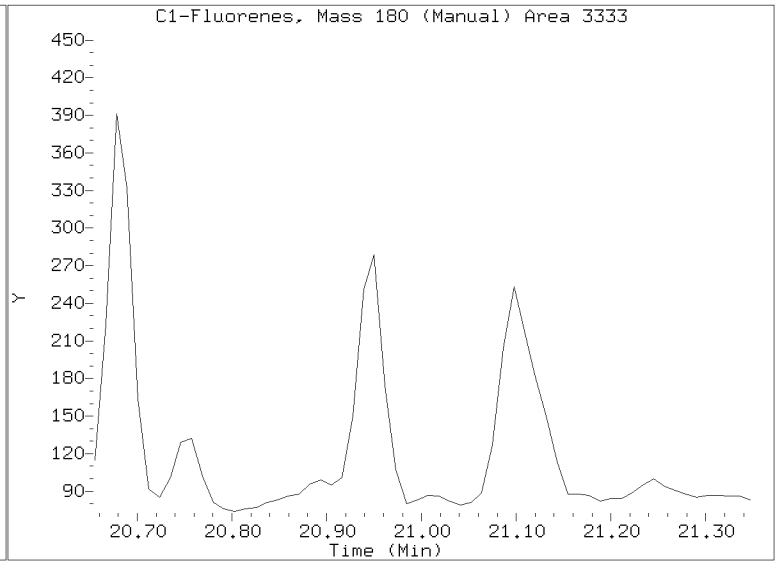

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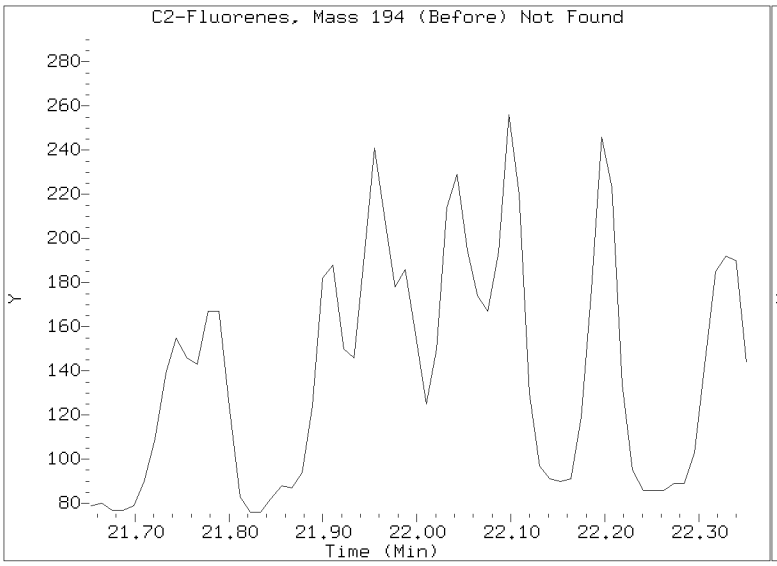

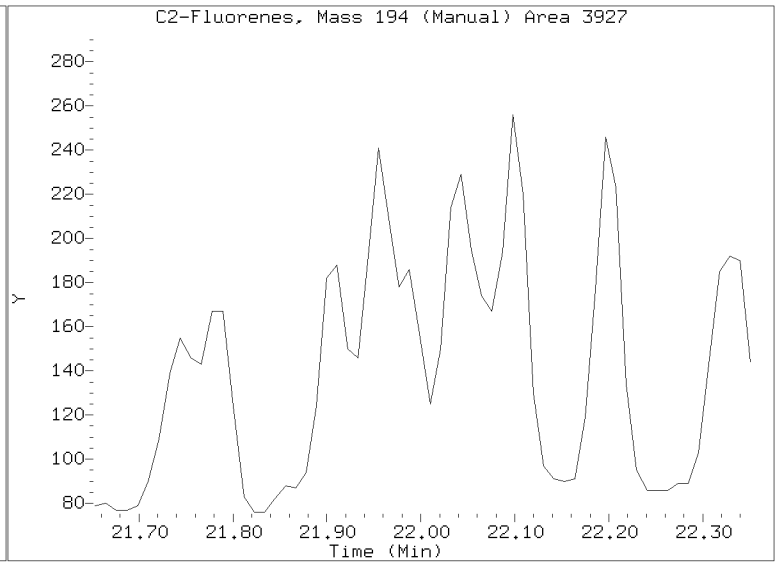

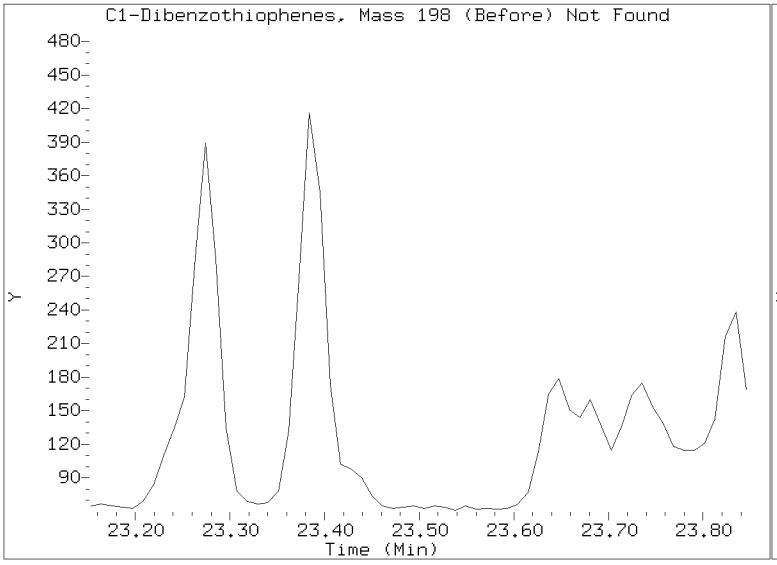

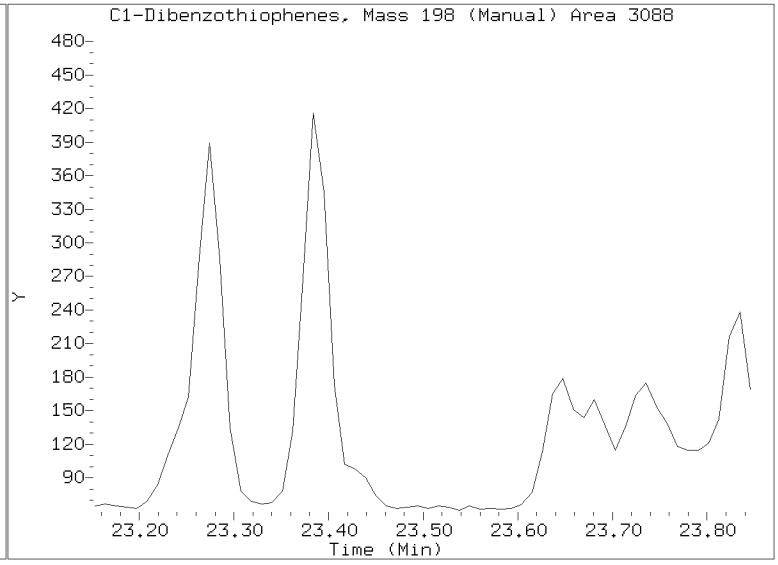

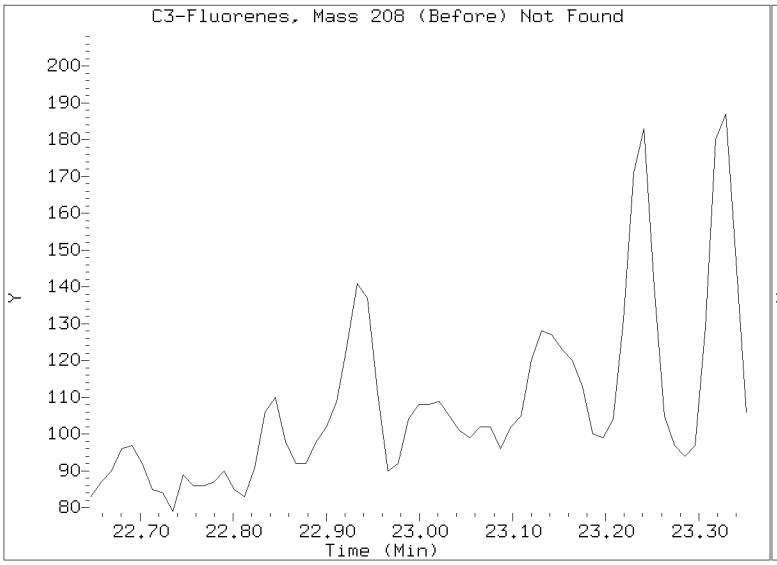

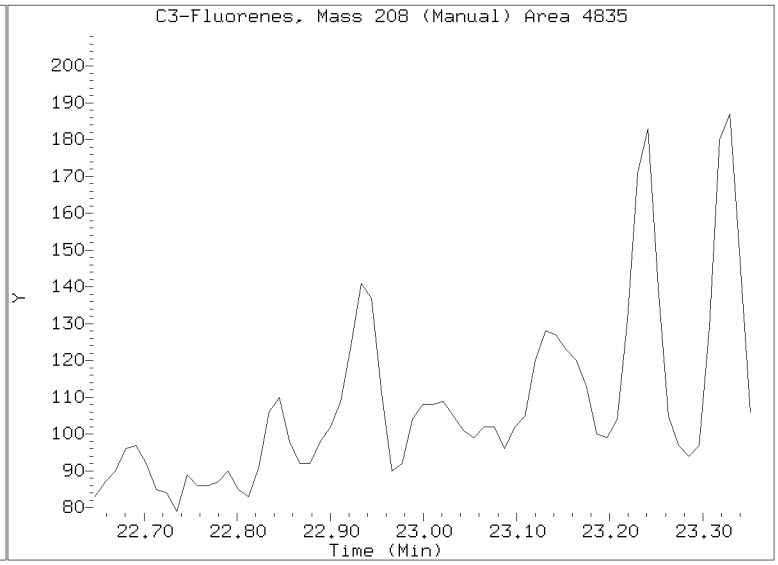

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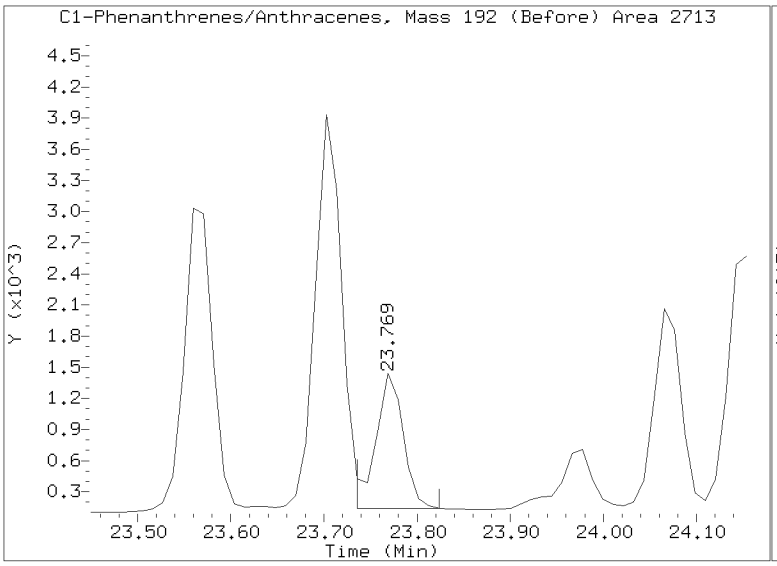

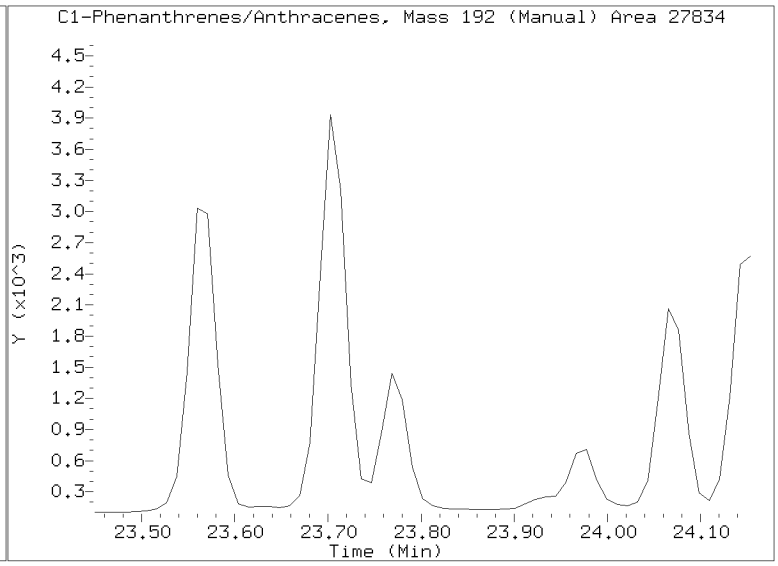

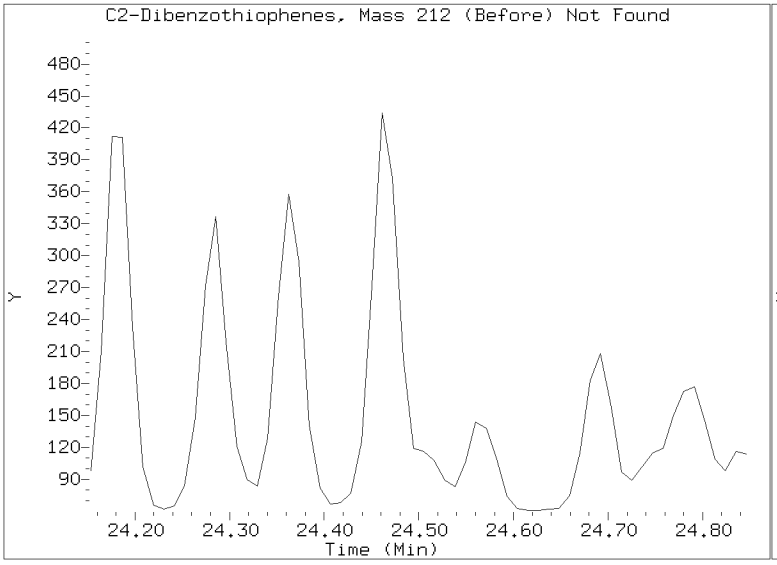

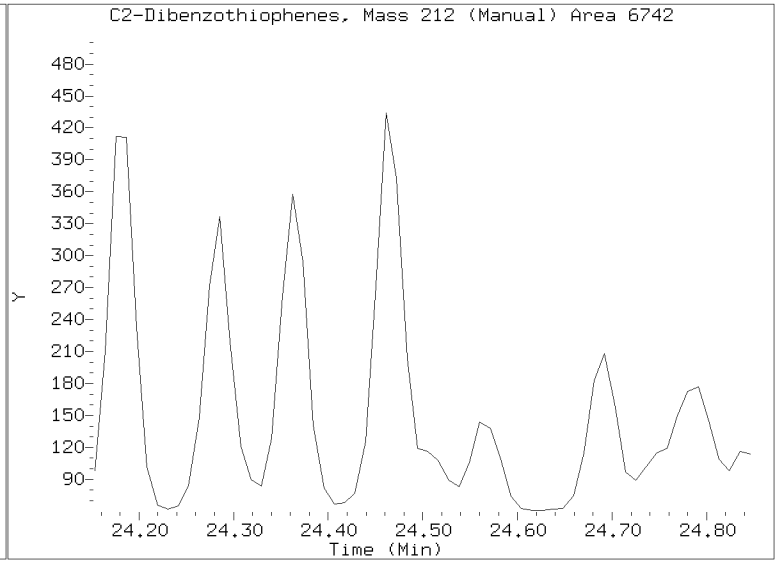

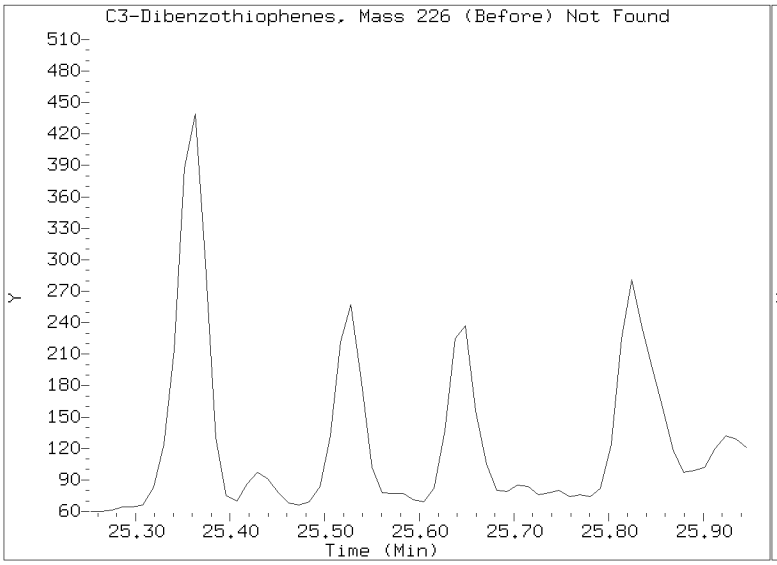

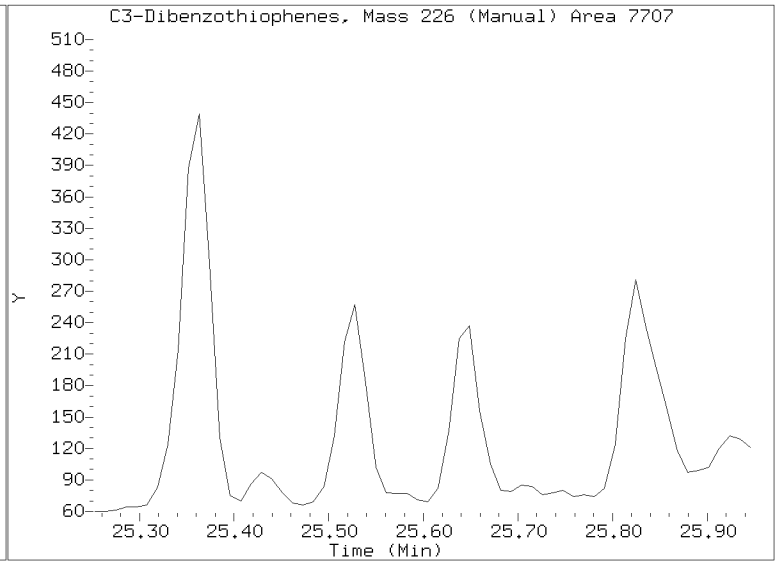

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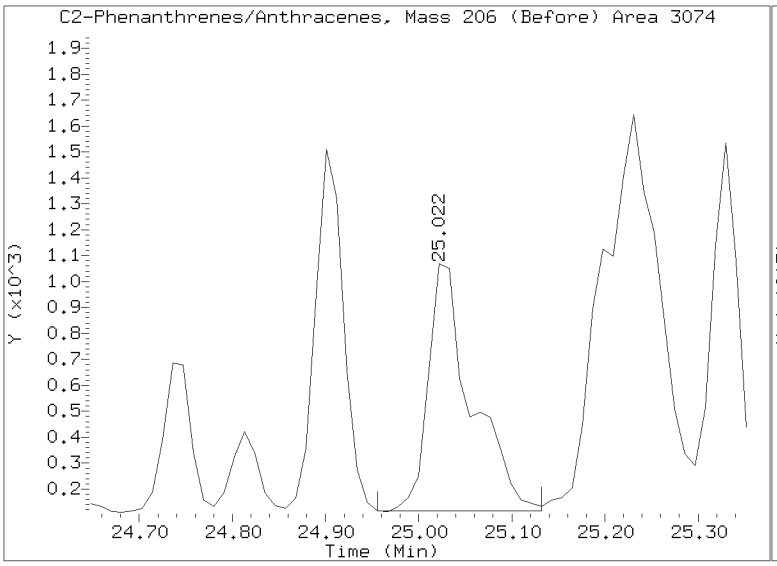

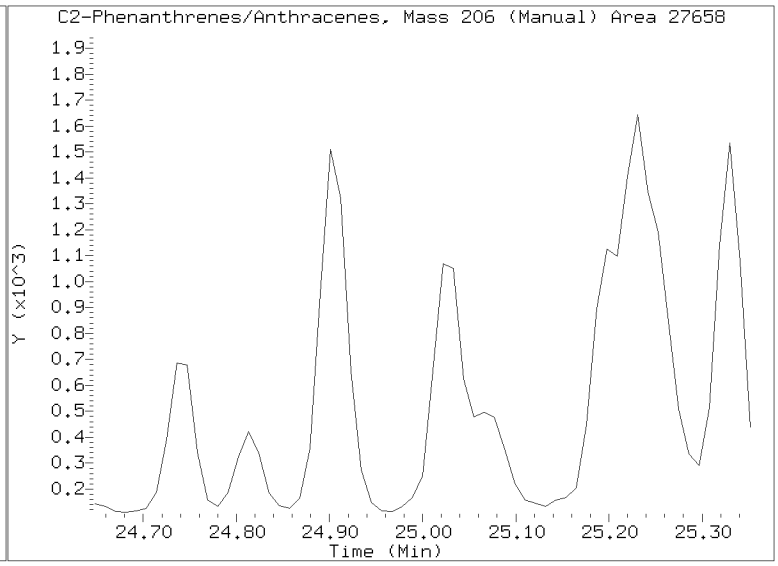

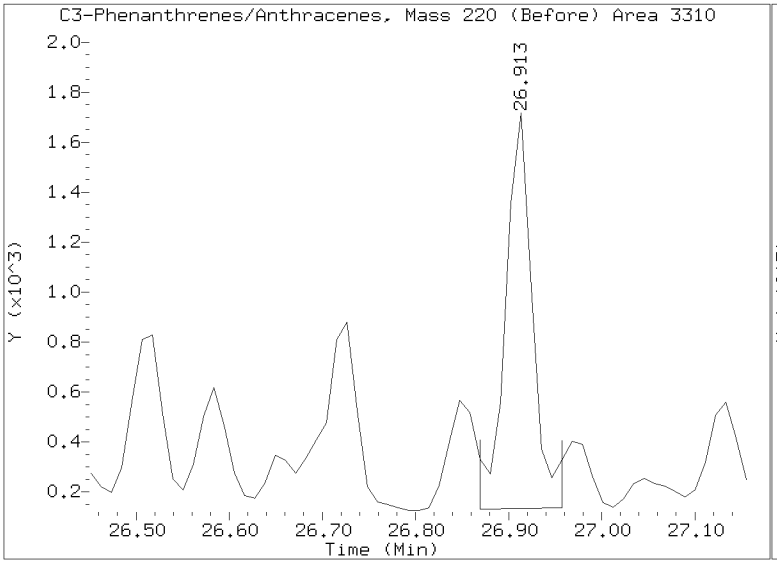

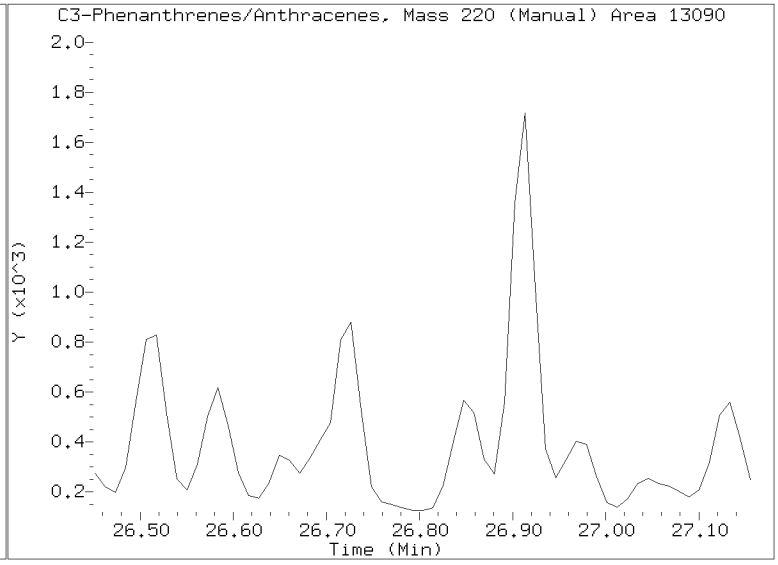

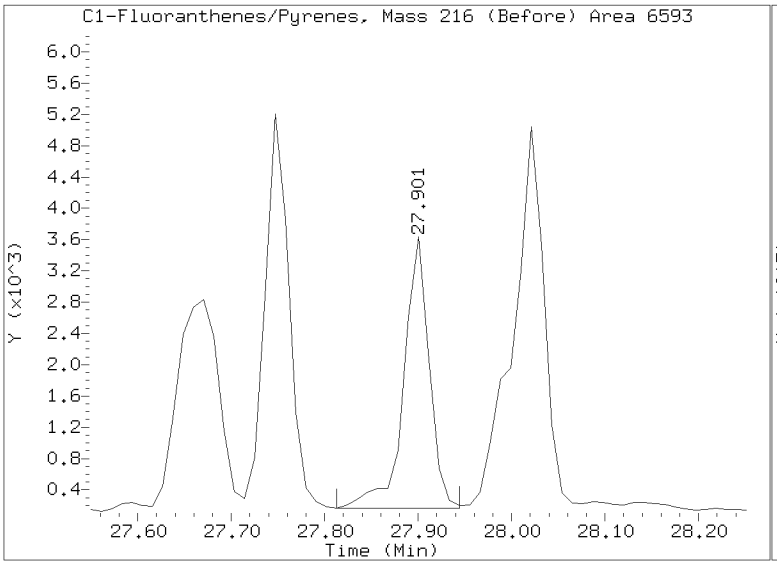

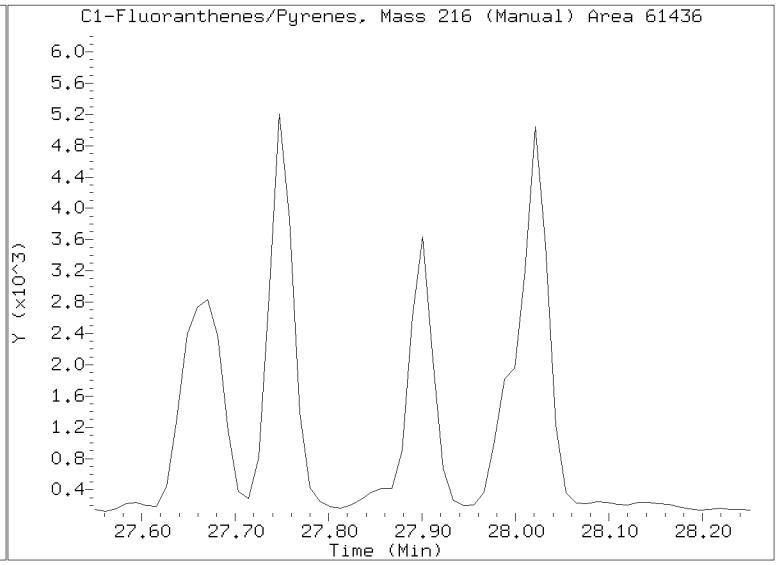

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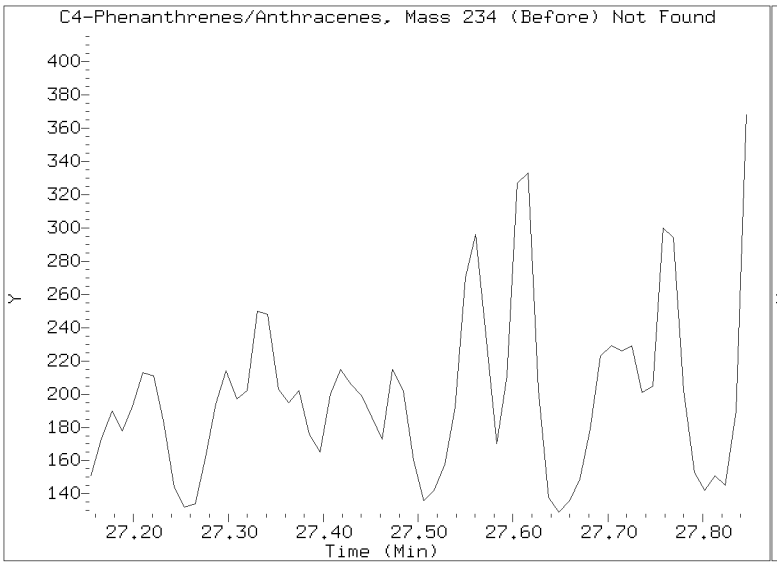

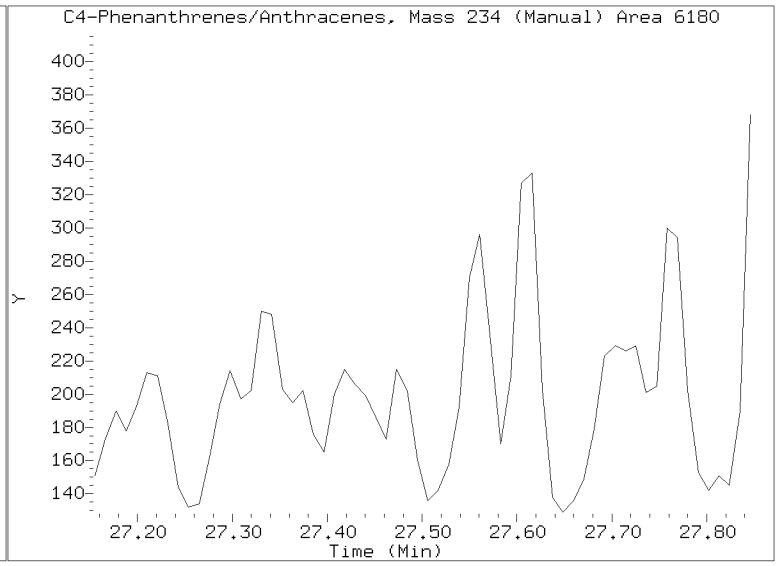

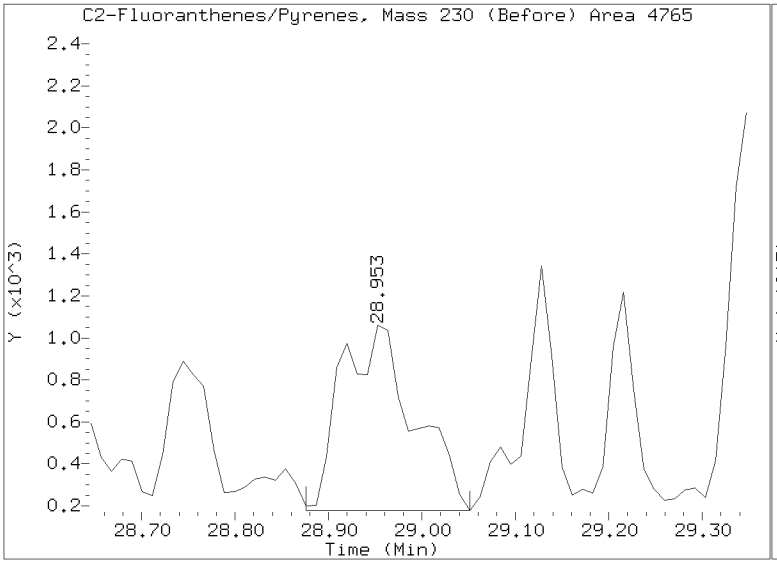

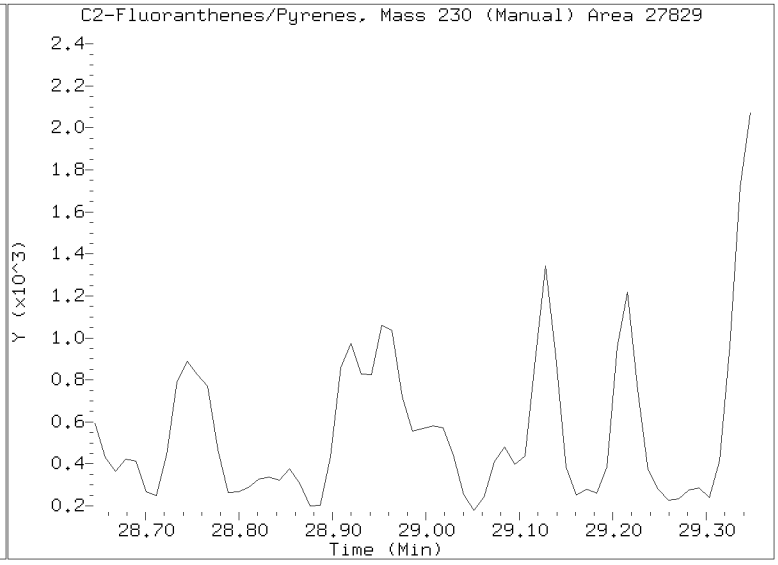

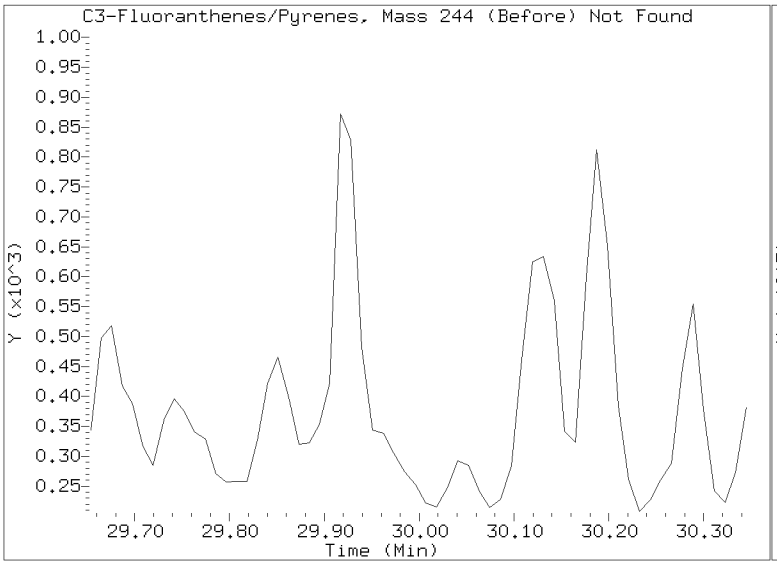

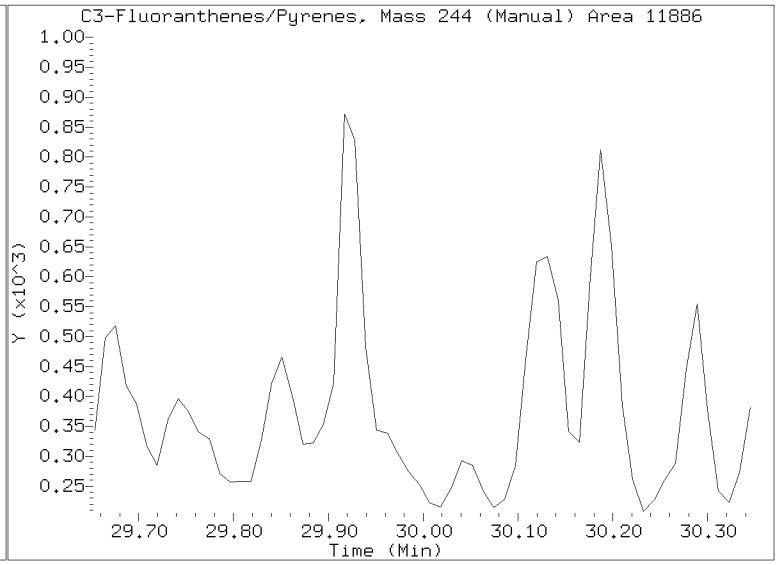

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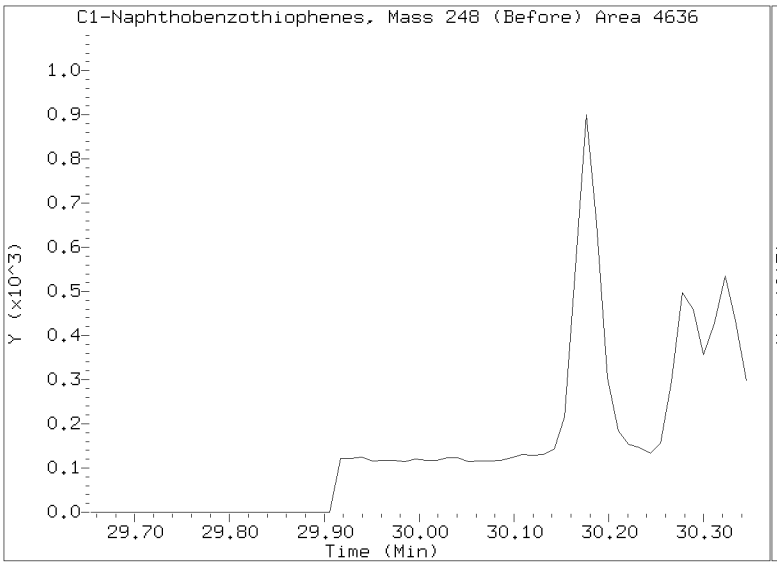

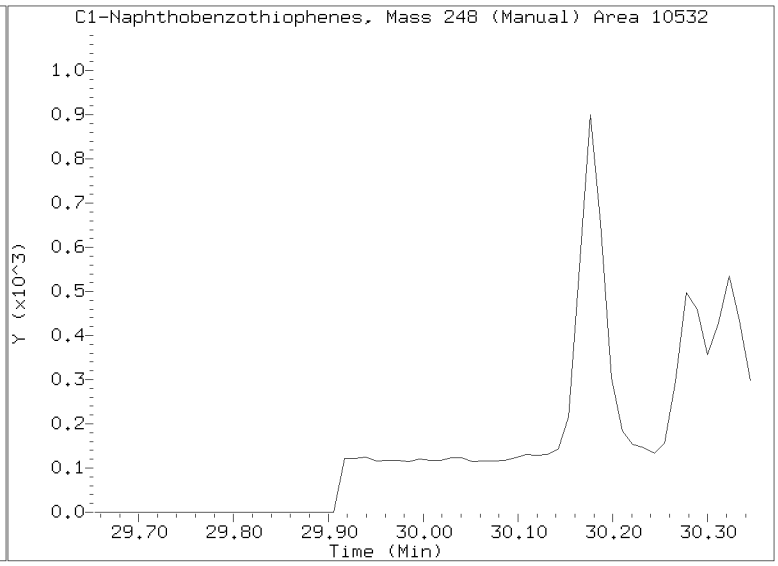

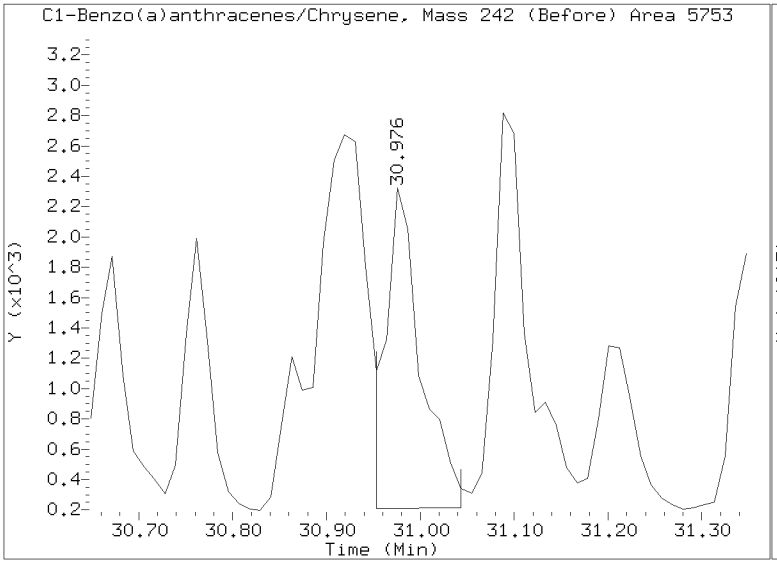

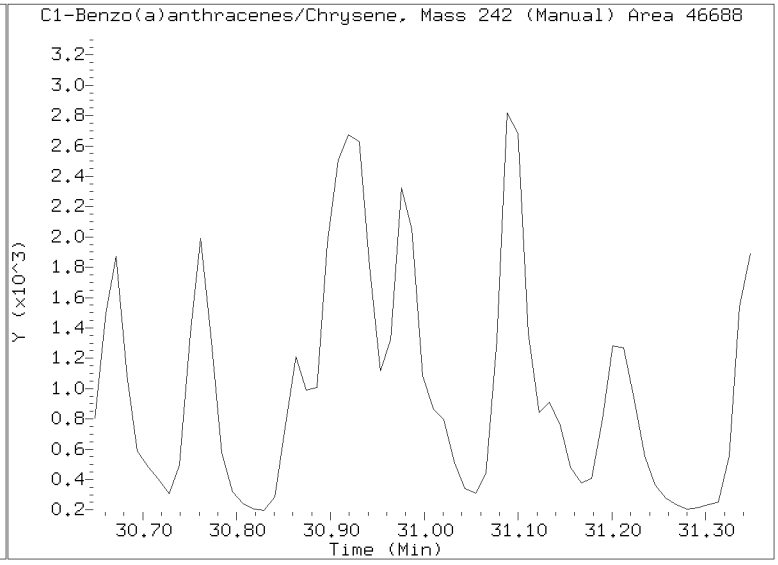

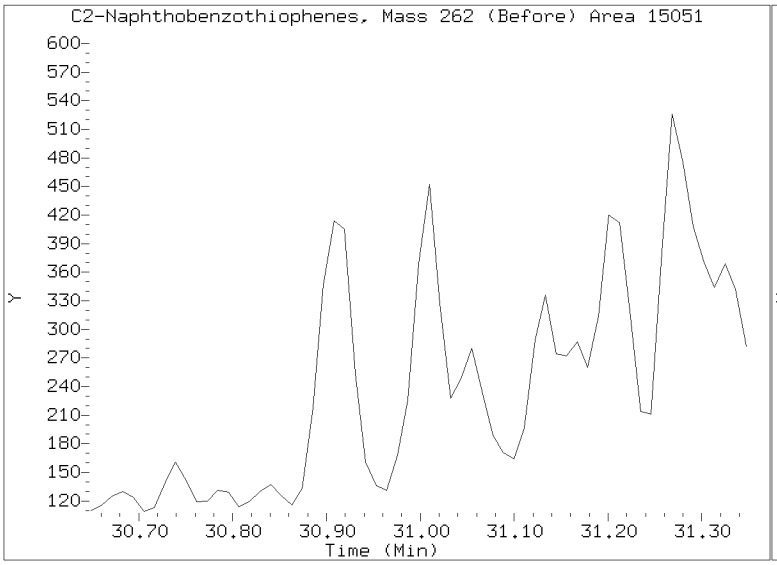

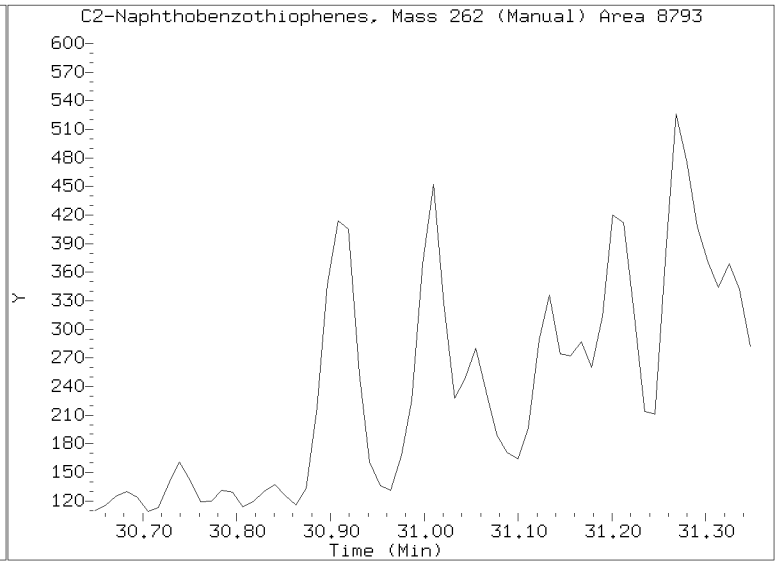

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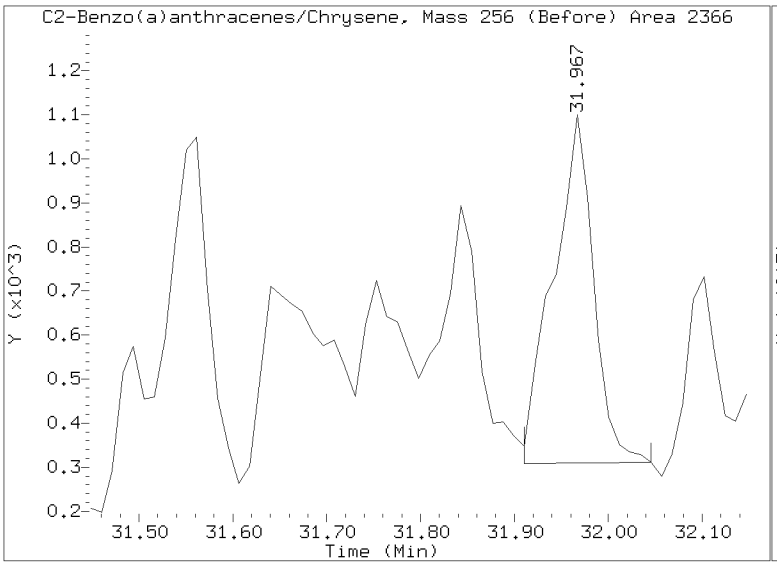

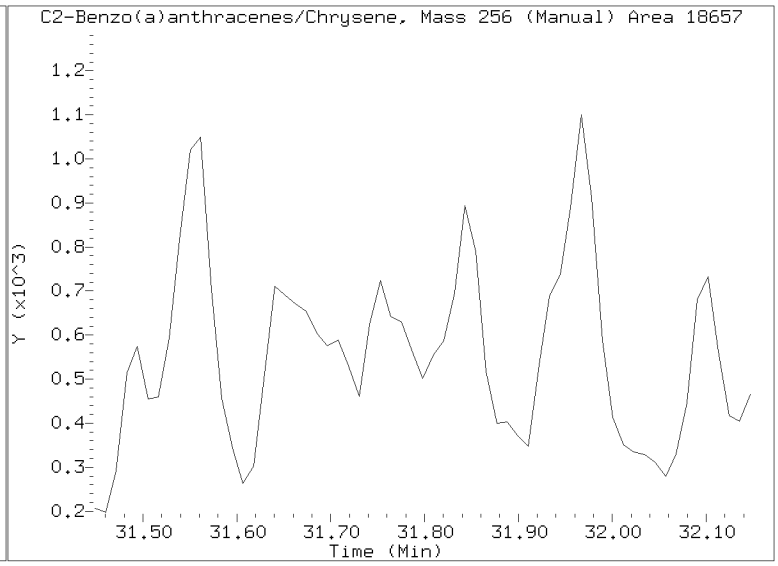

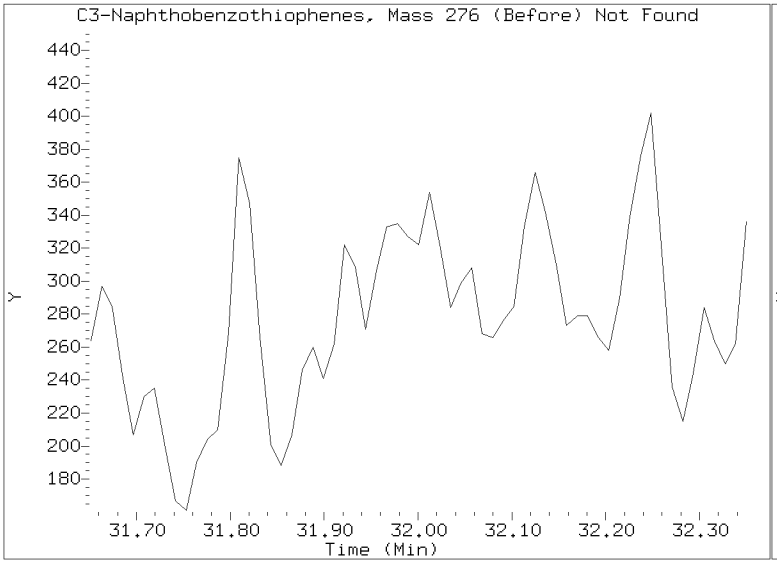

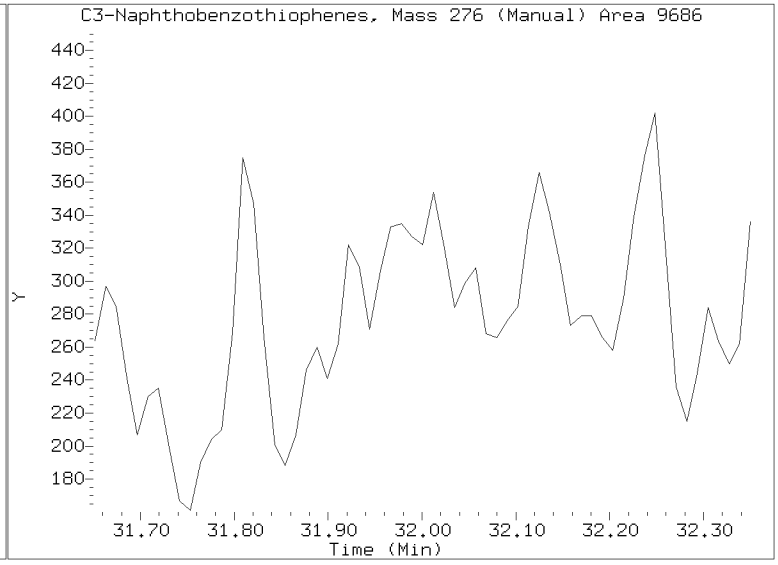

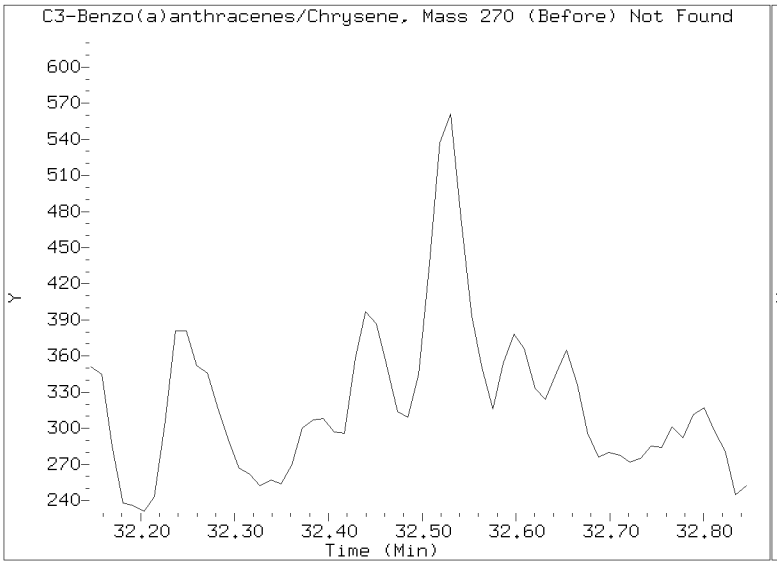

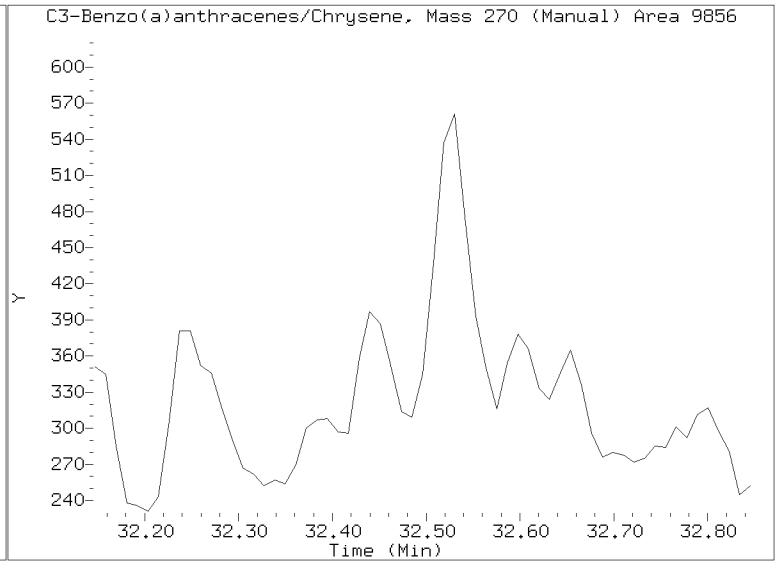

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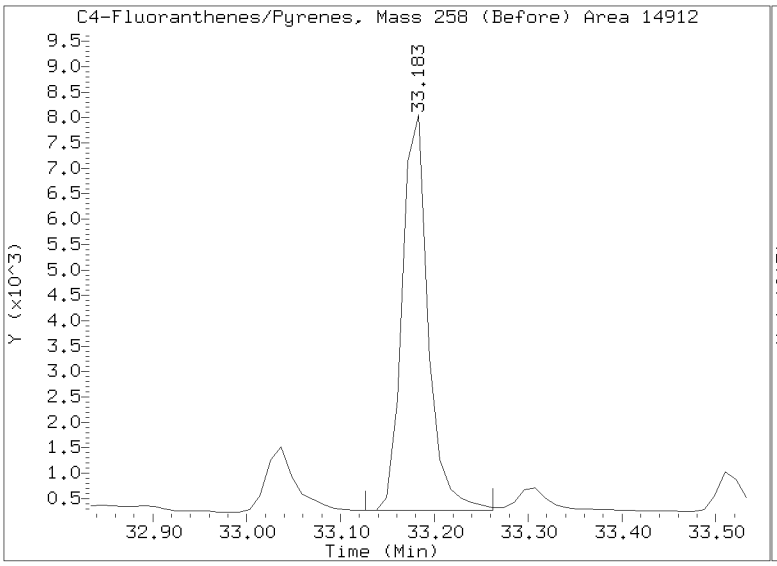

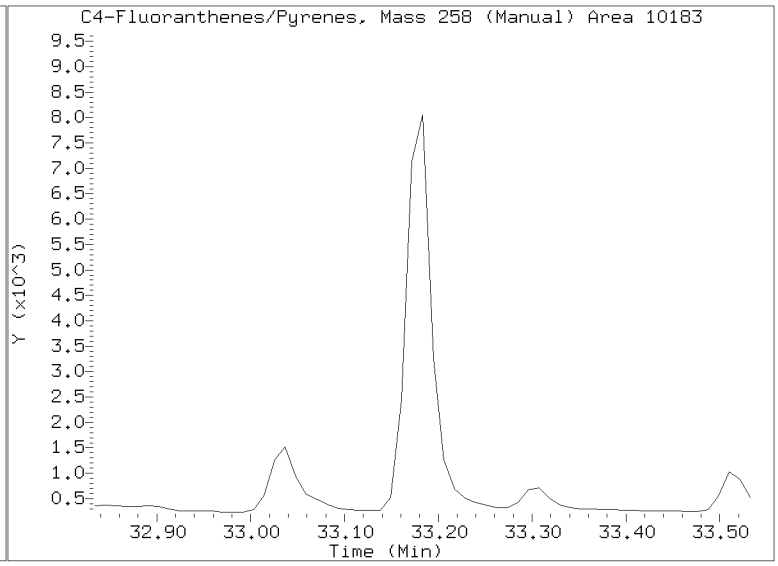

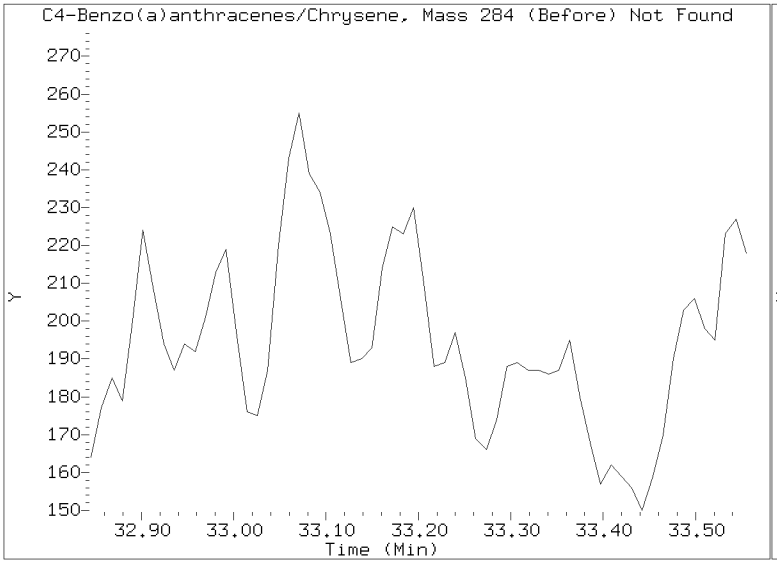

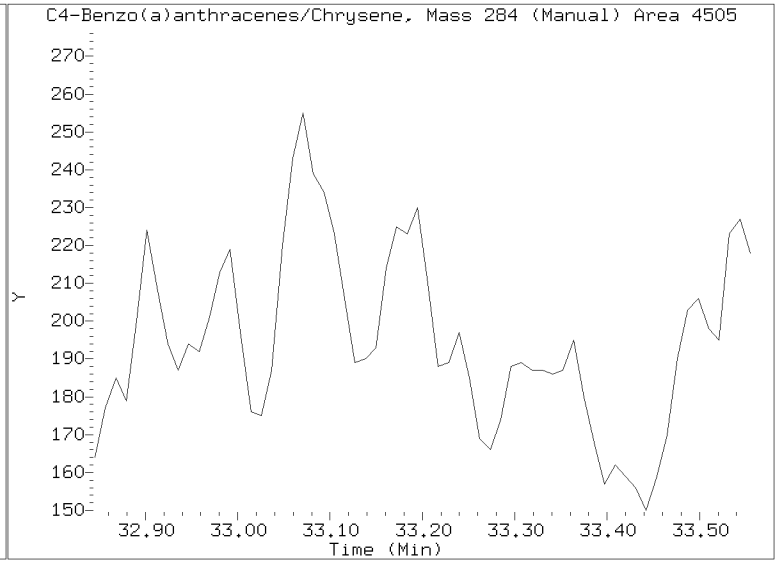

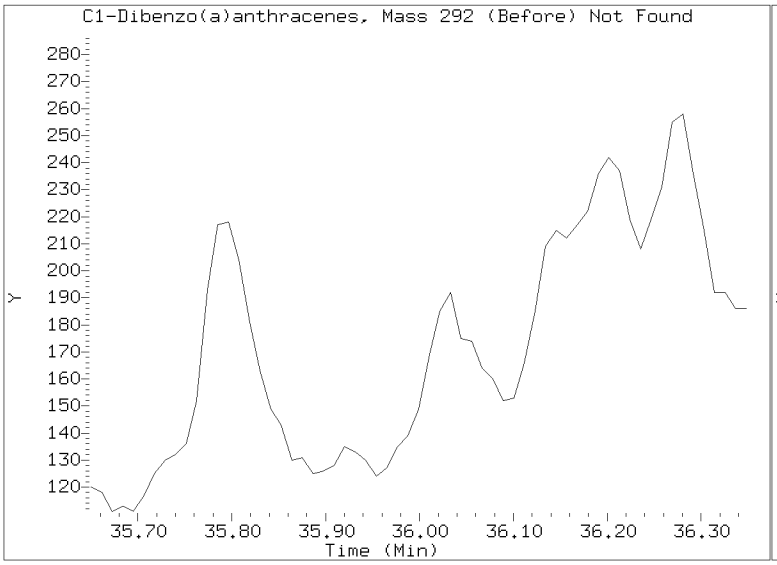

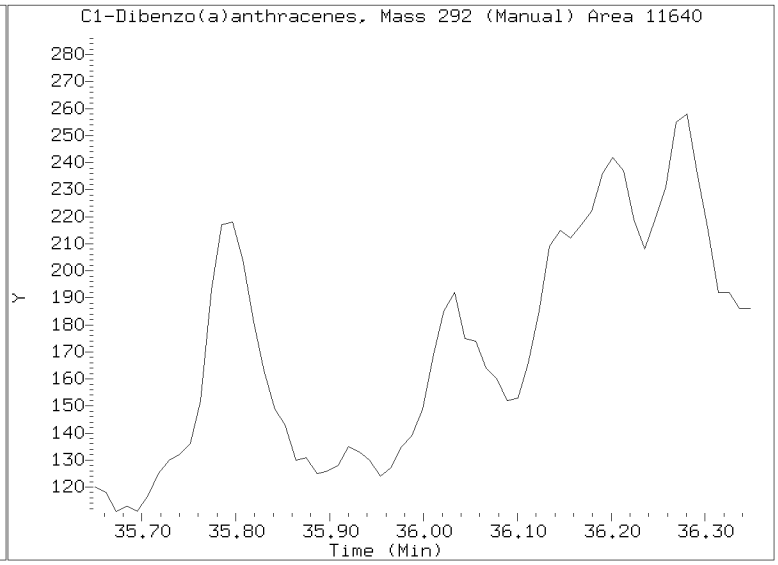

SIM ALKYL PNA RANGE ION WINDOWS - NT1421060710S.D

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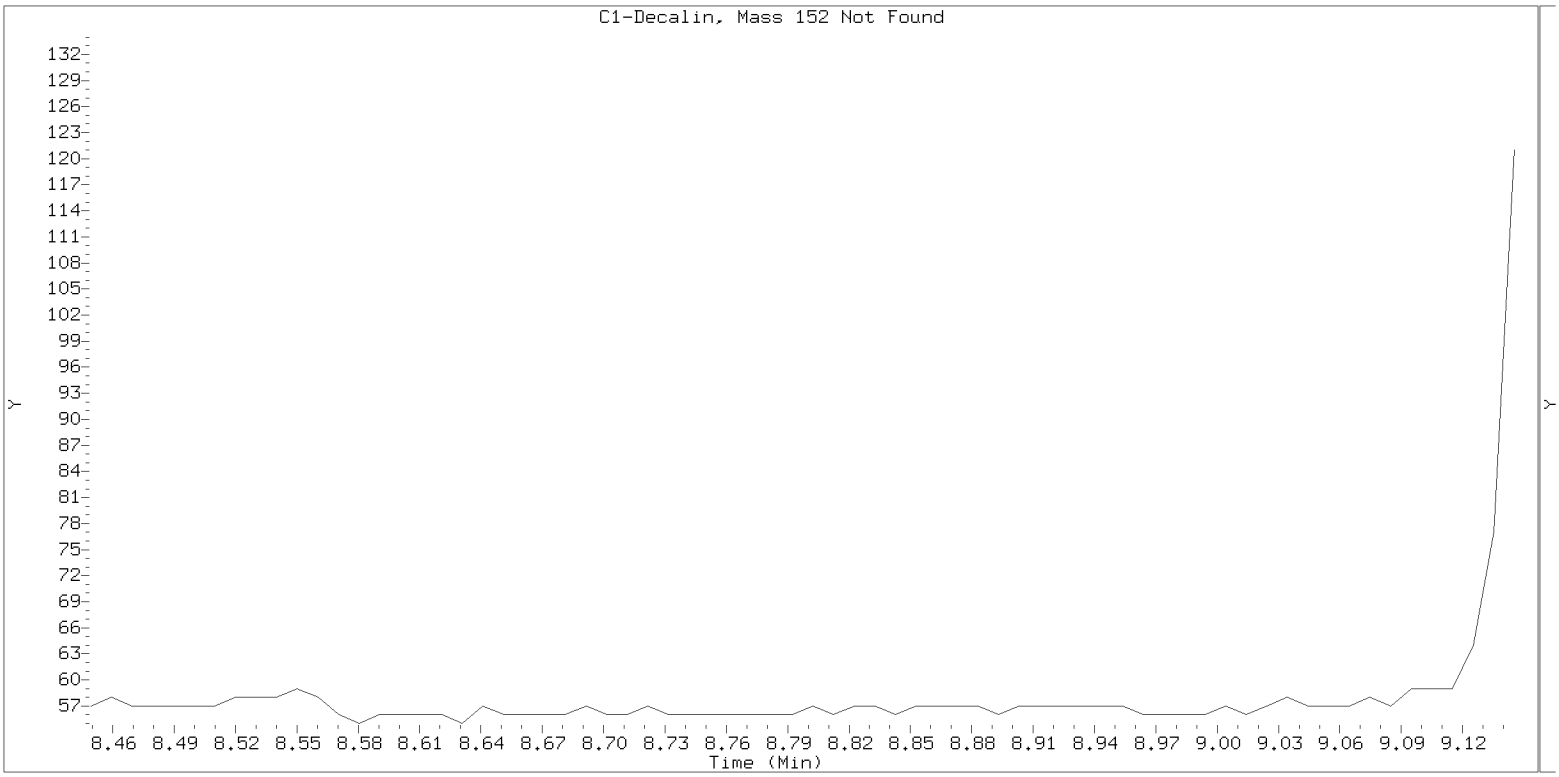

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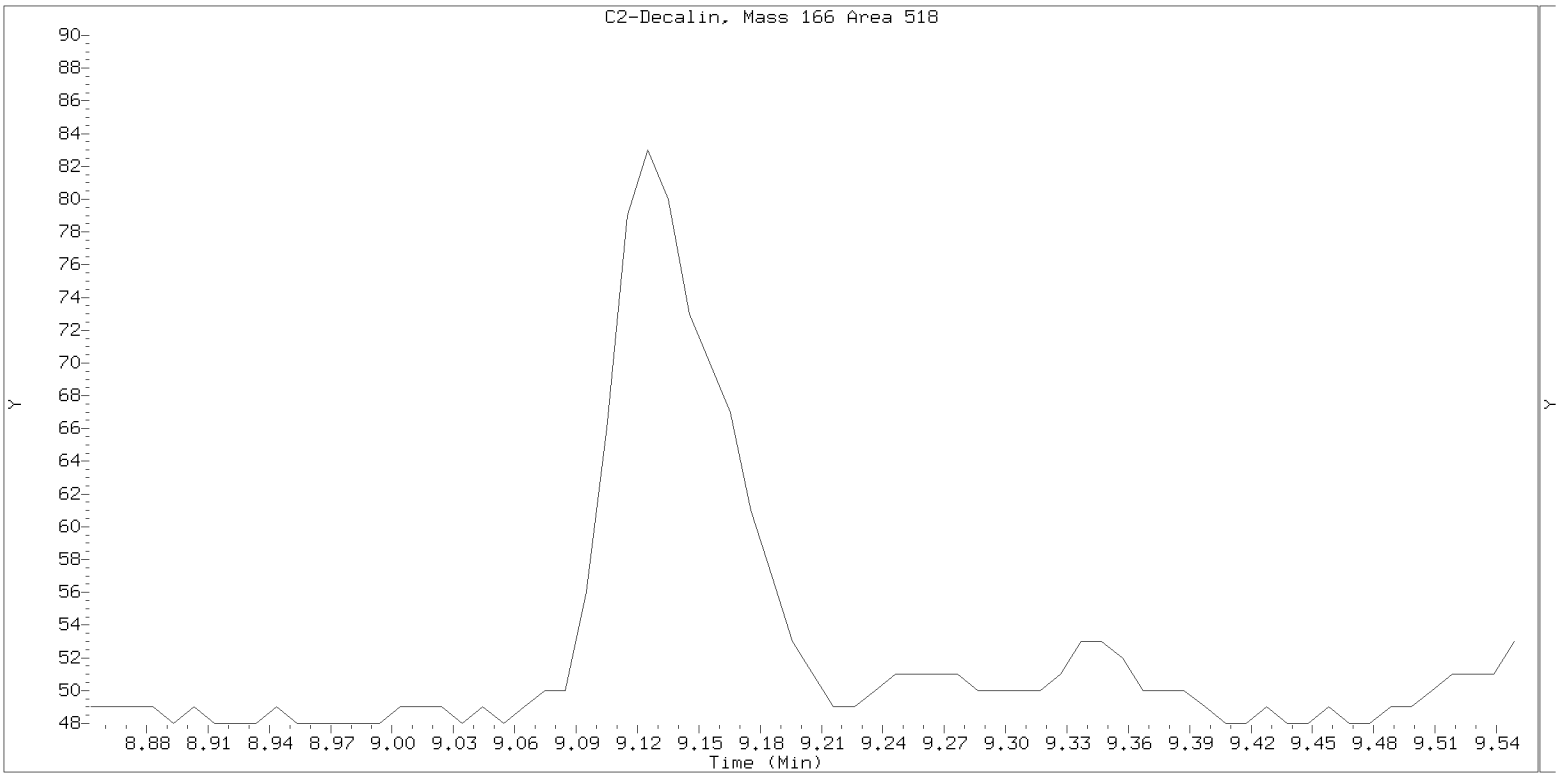

SIM ALKYL PNA RANGE ION WINDOWS - NT1421060710S.D

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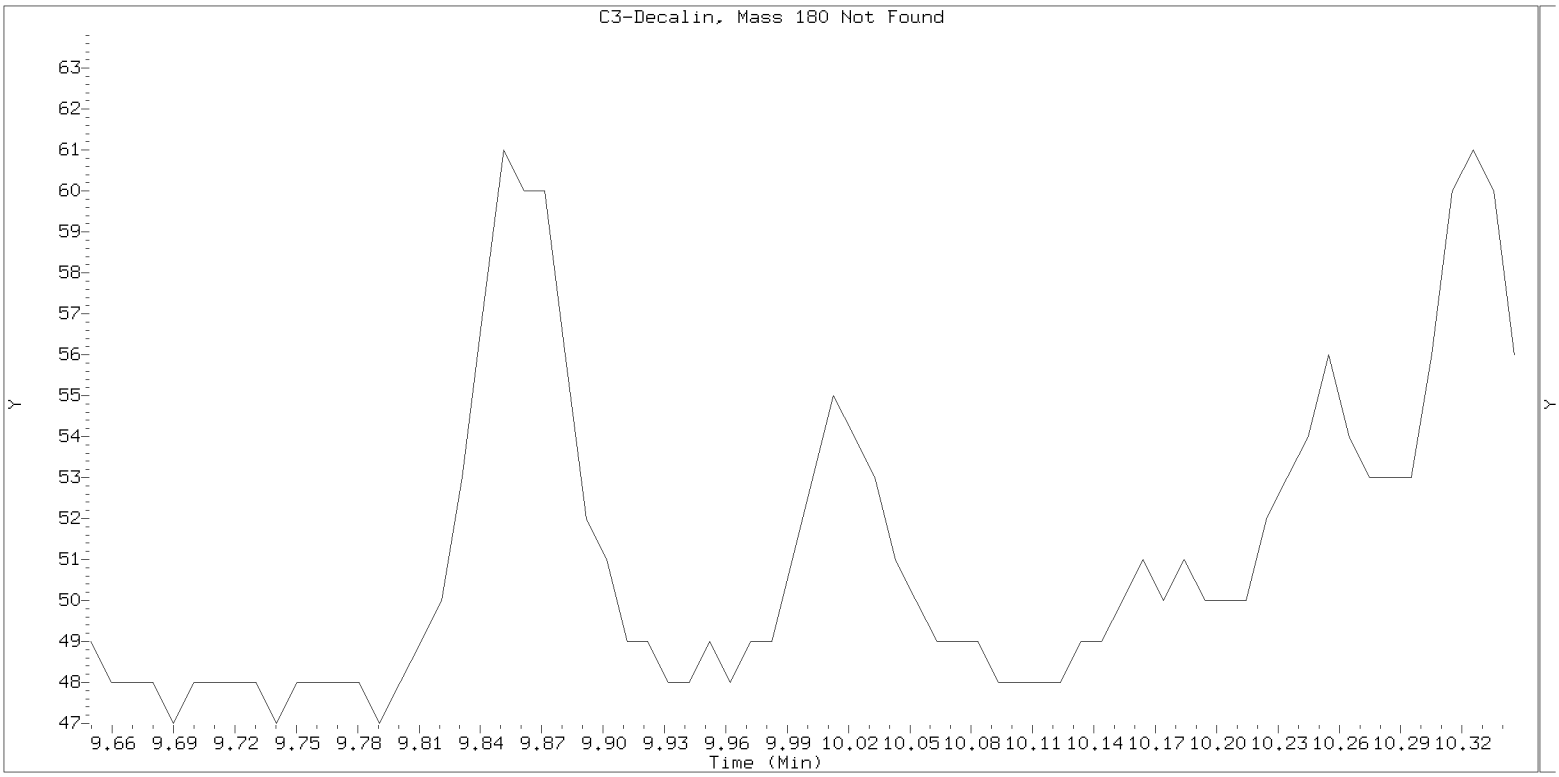

SIM ALKYL PNA RANGE ION WINDOWS - NT1421060710S.D

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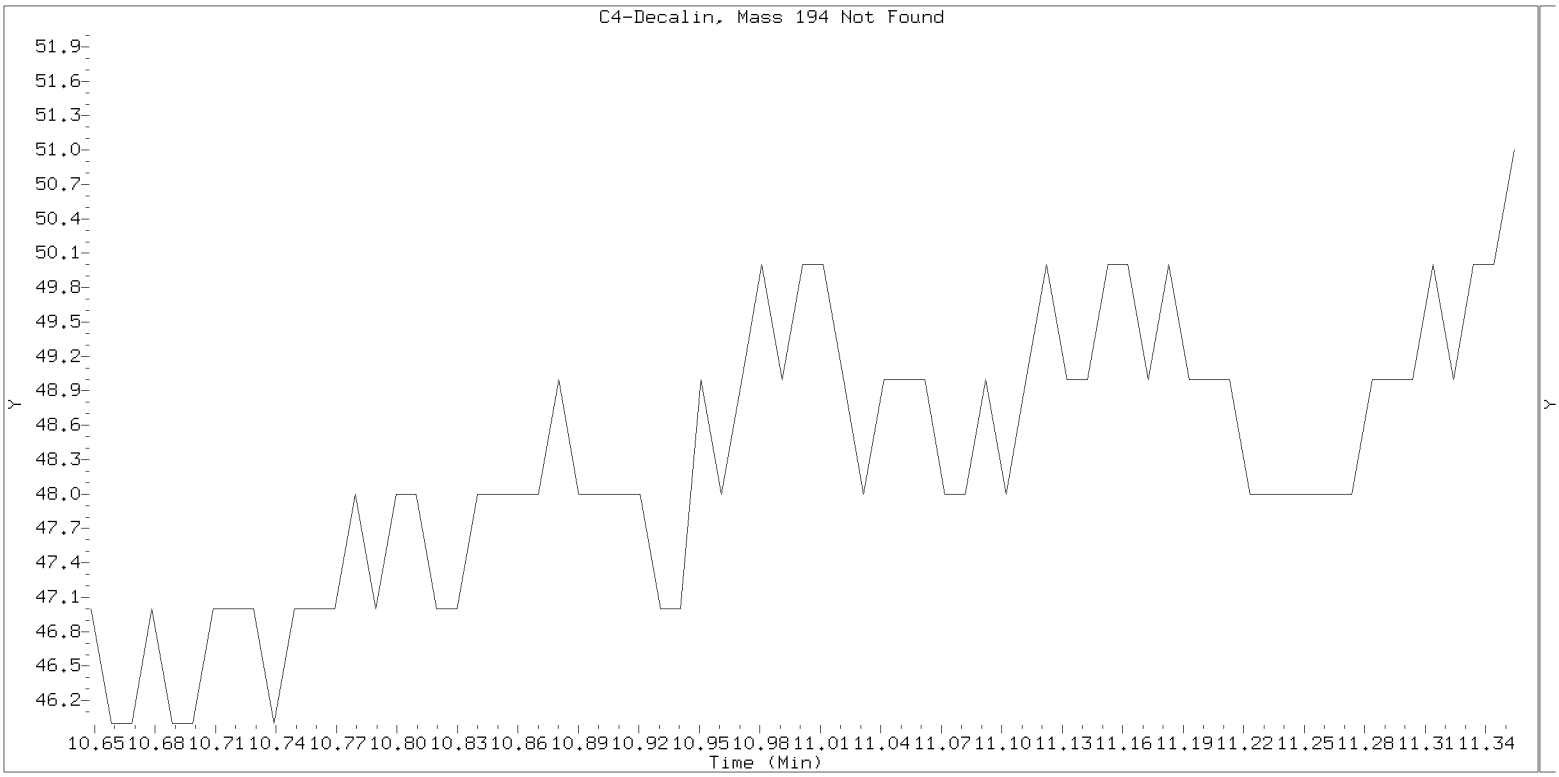

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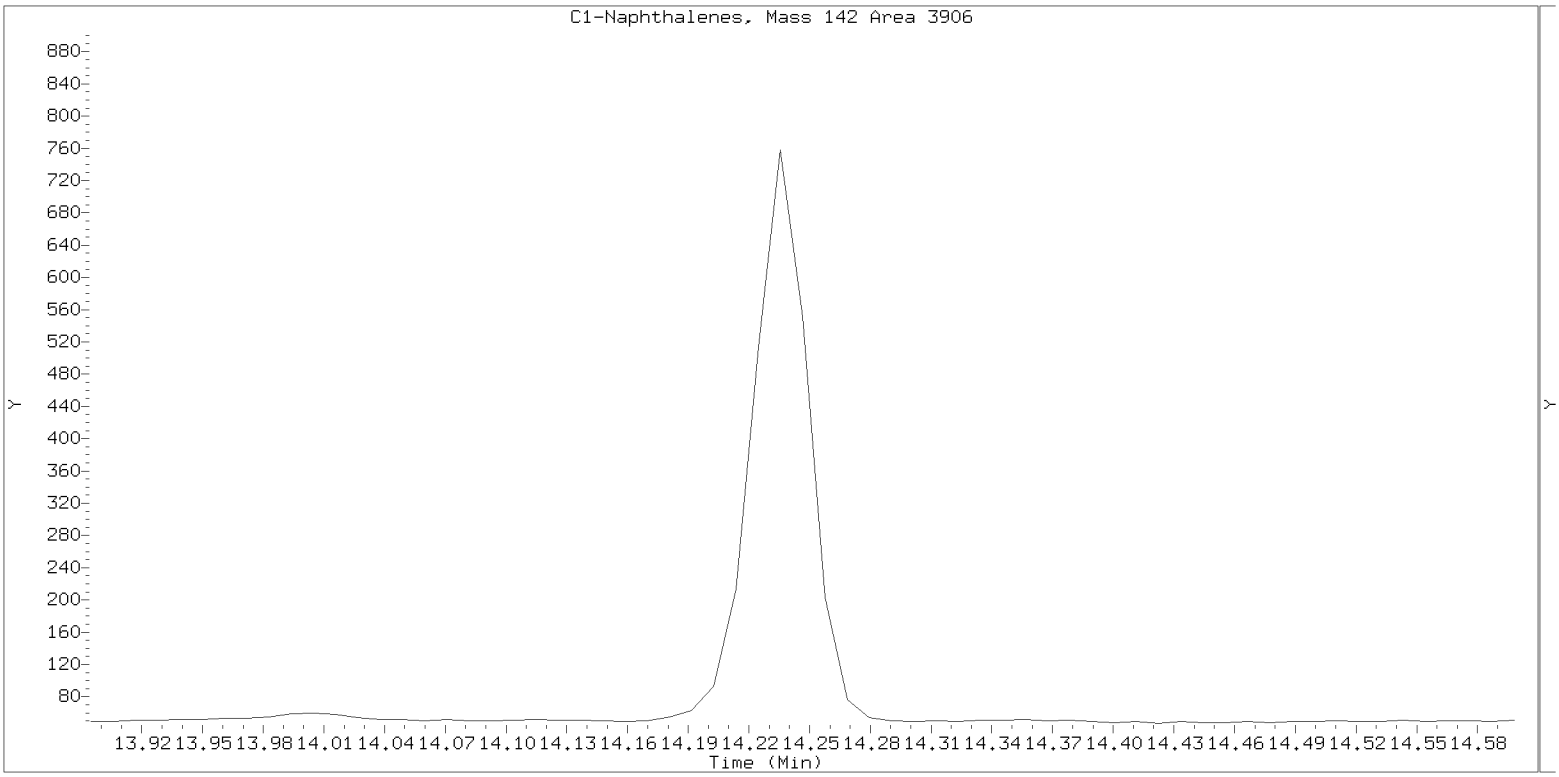

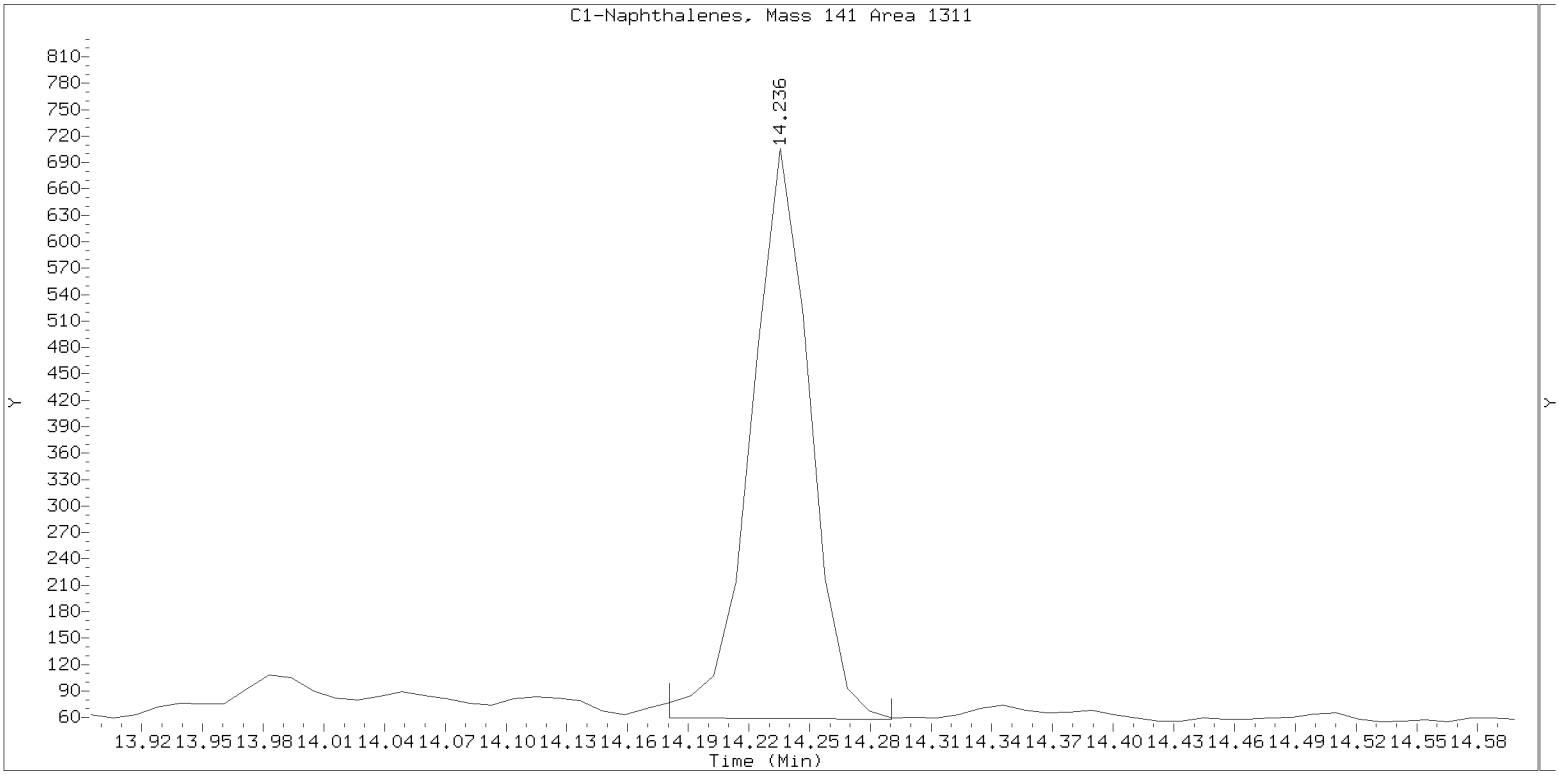

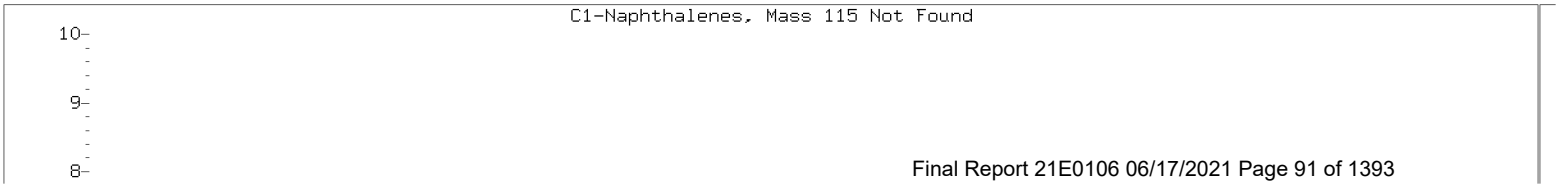

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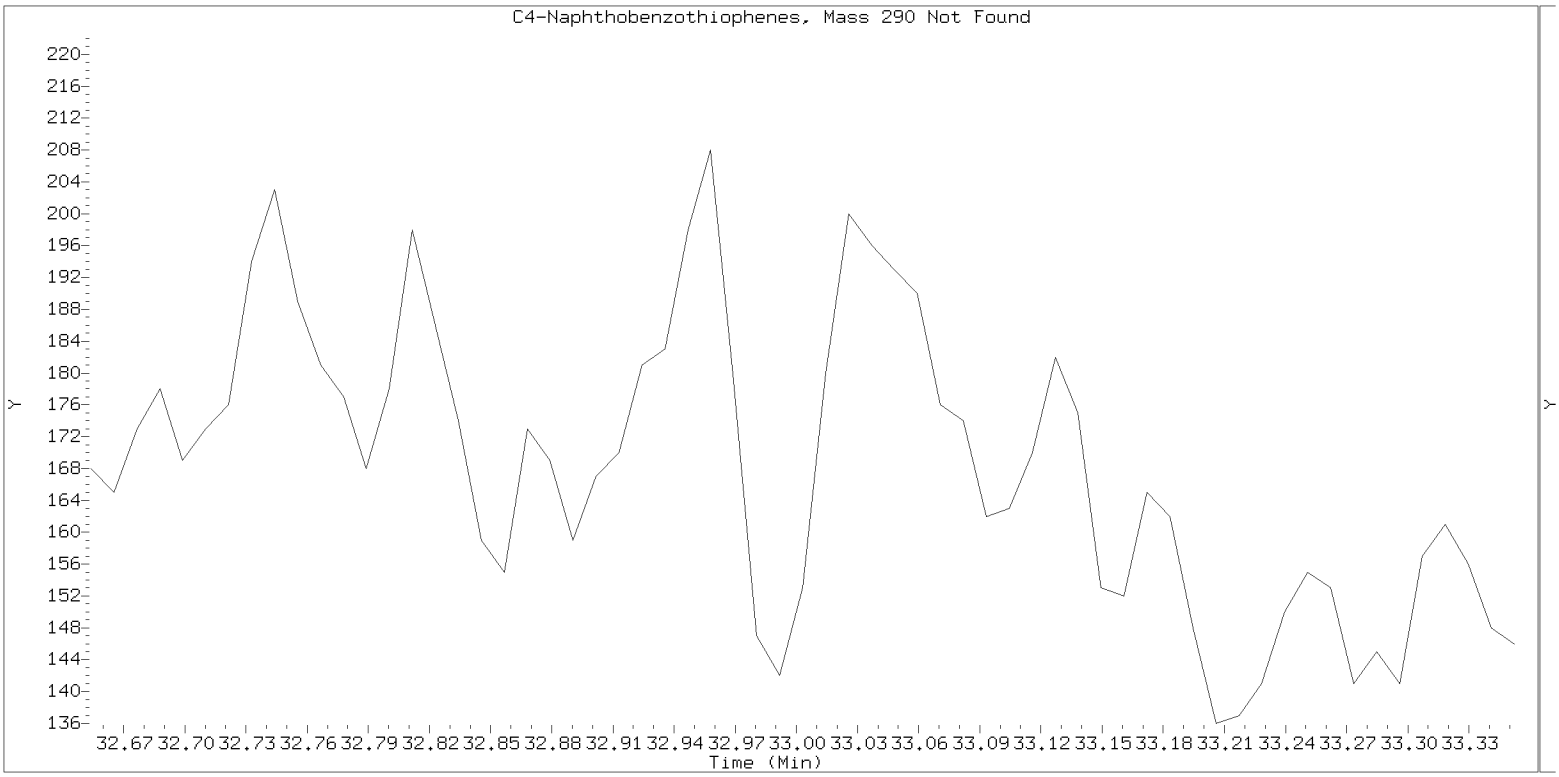

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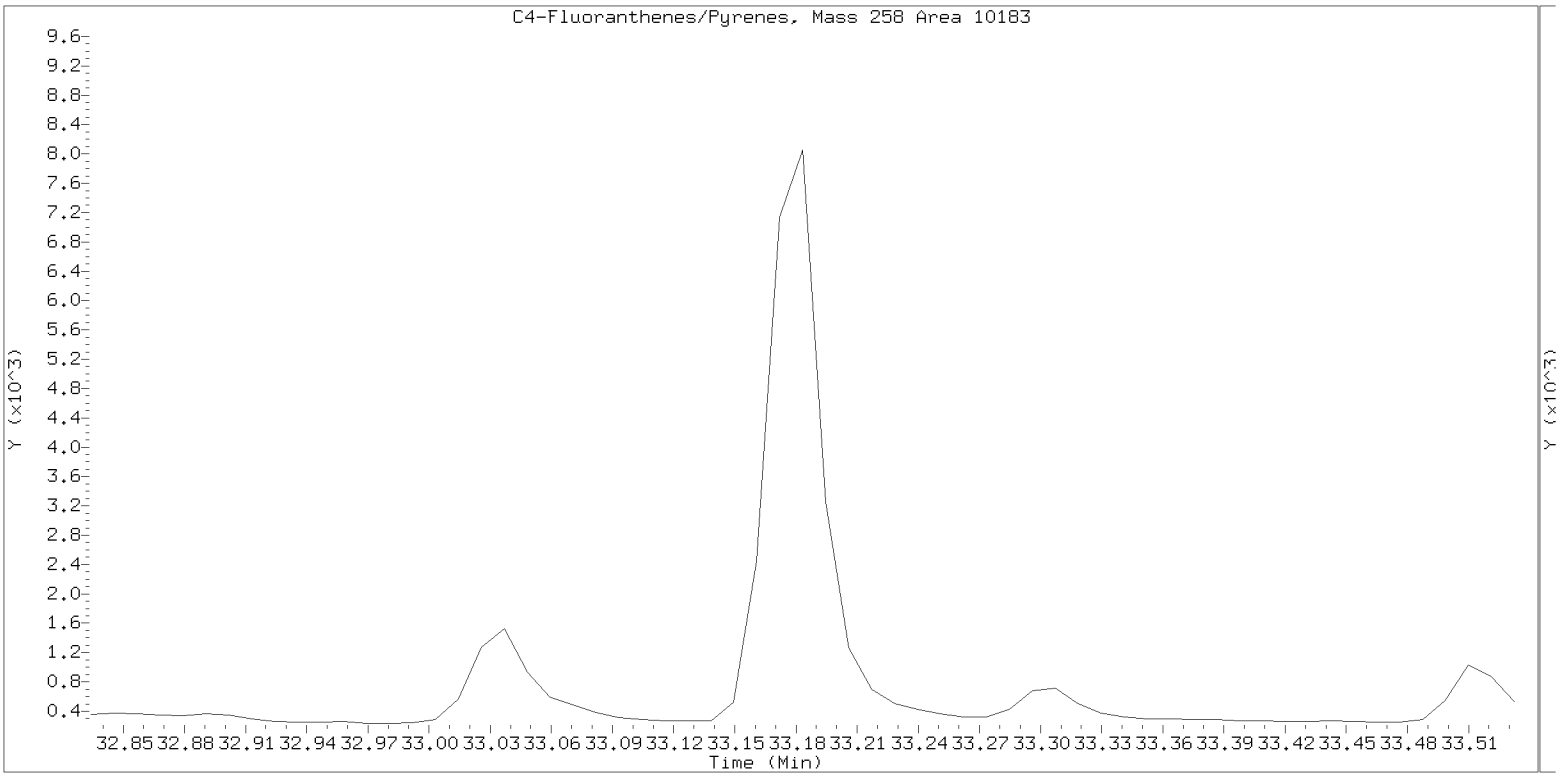

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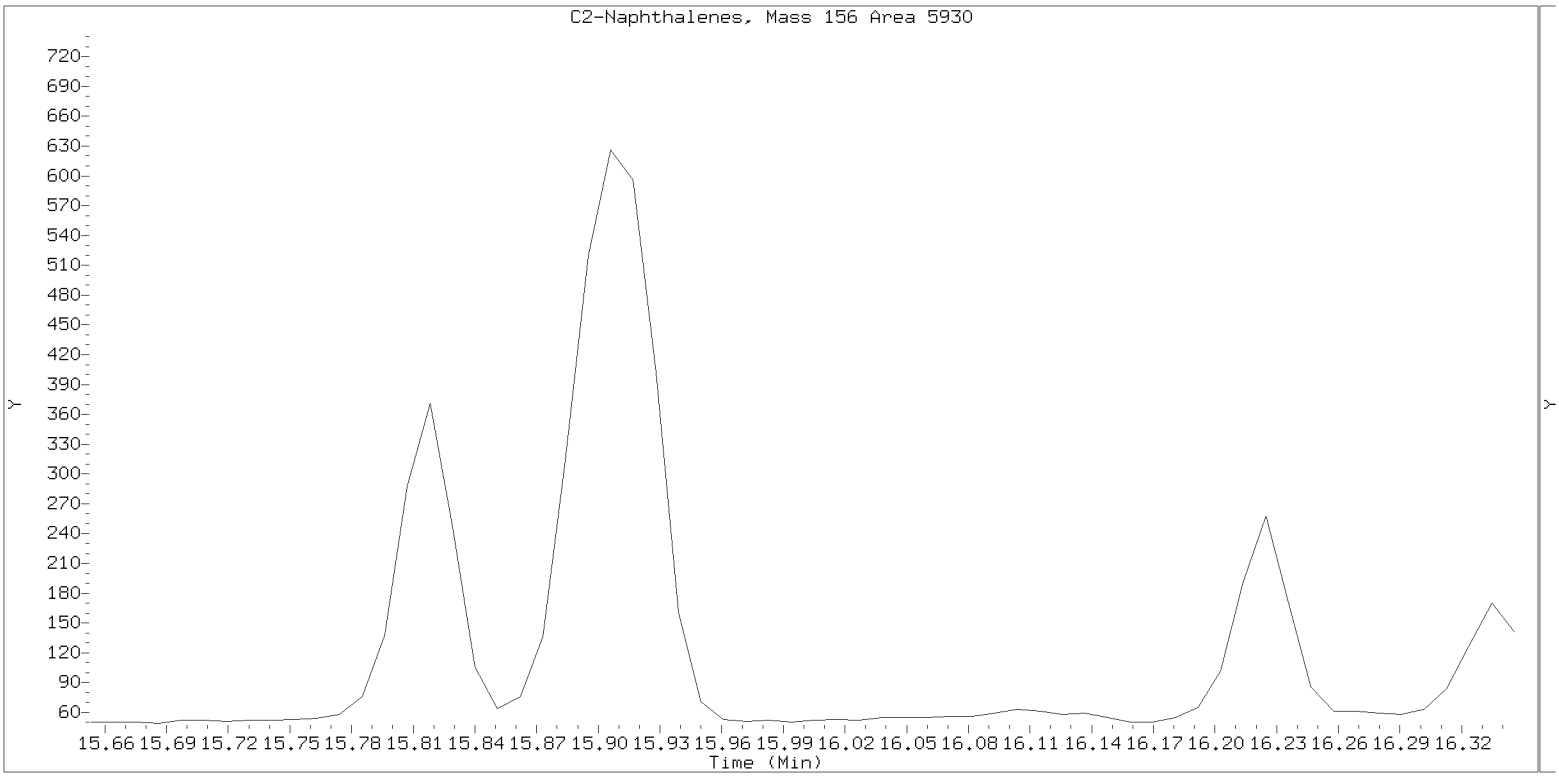

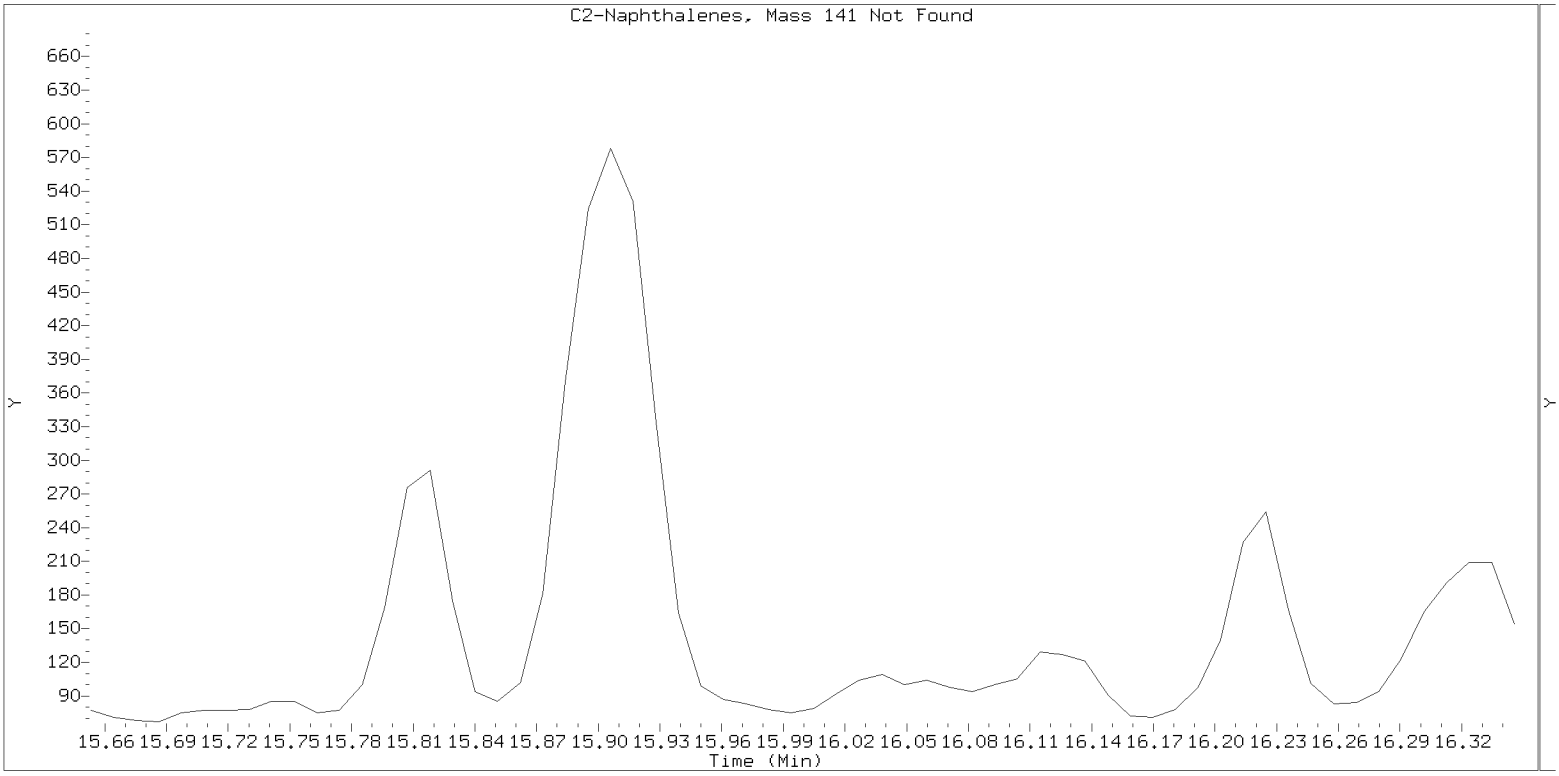

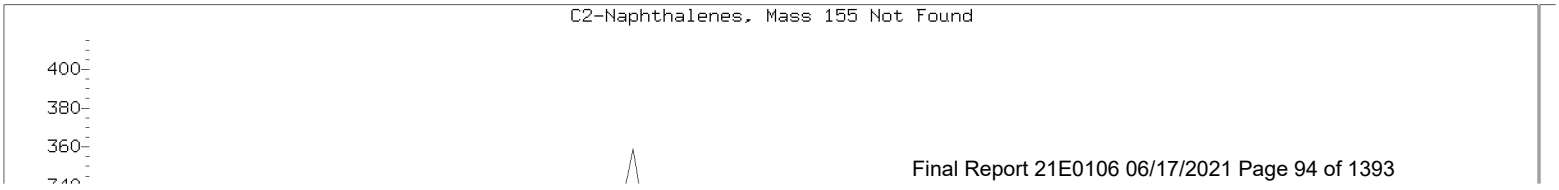

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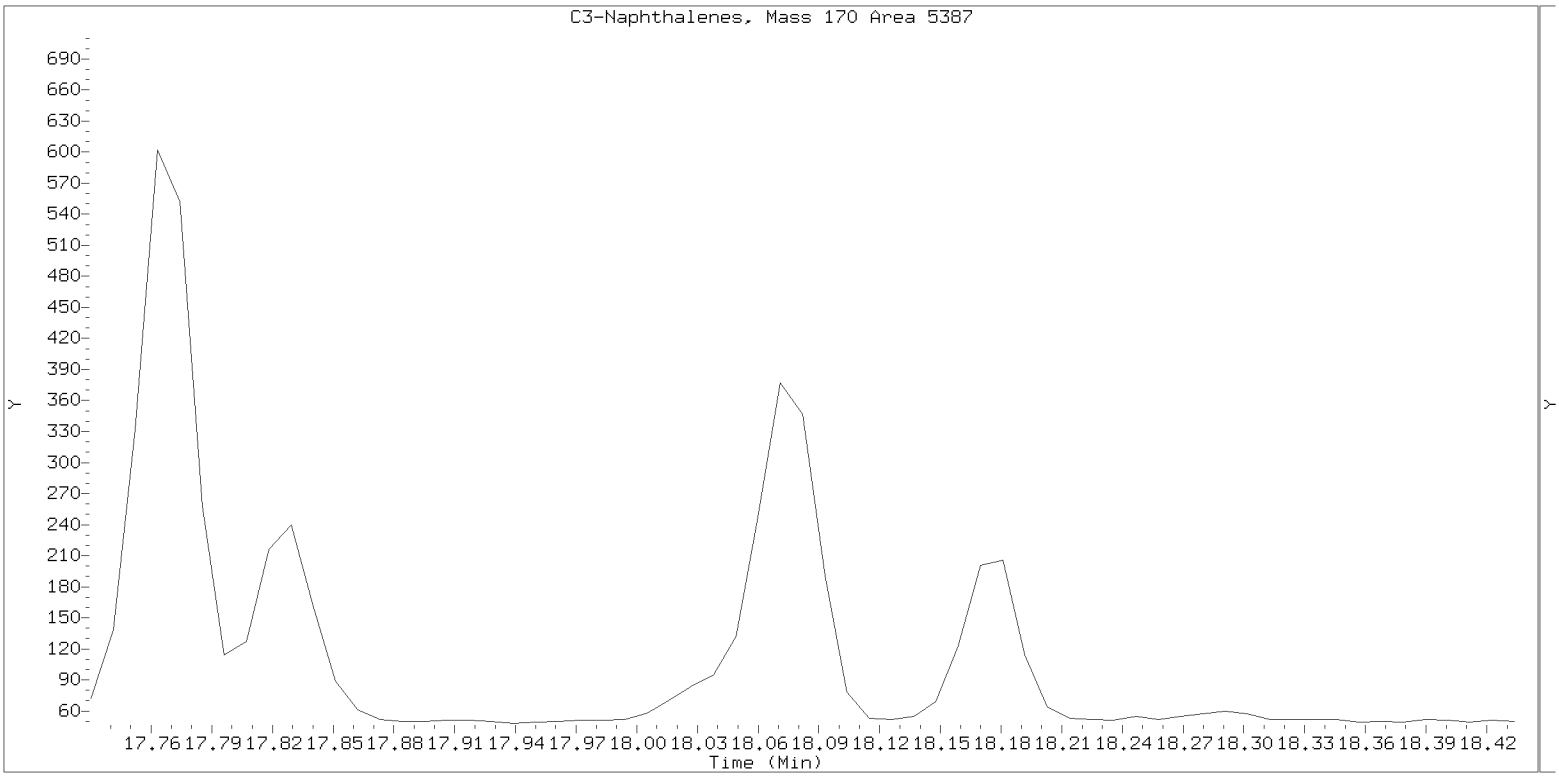

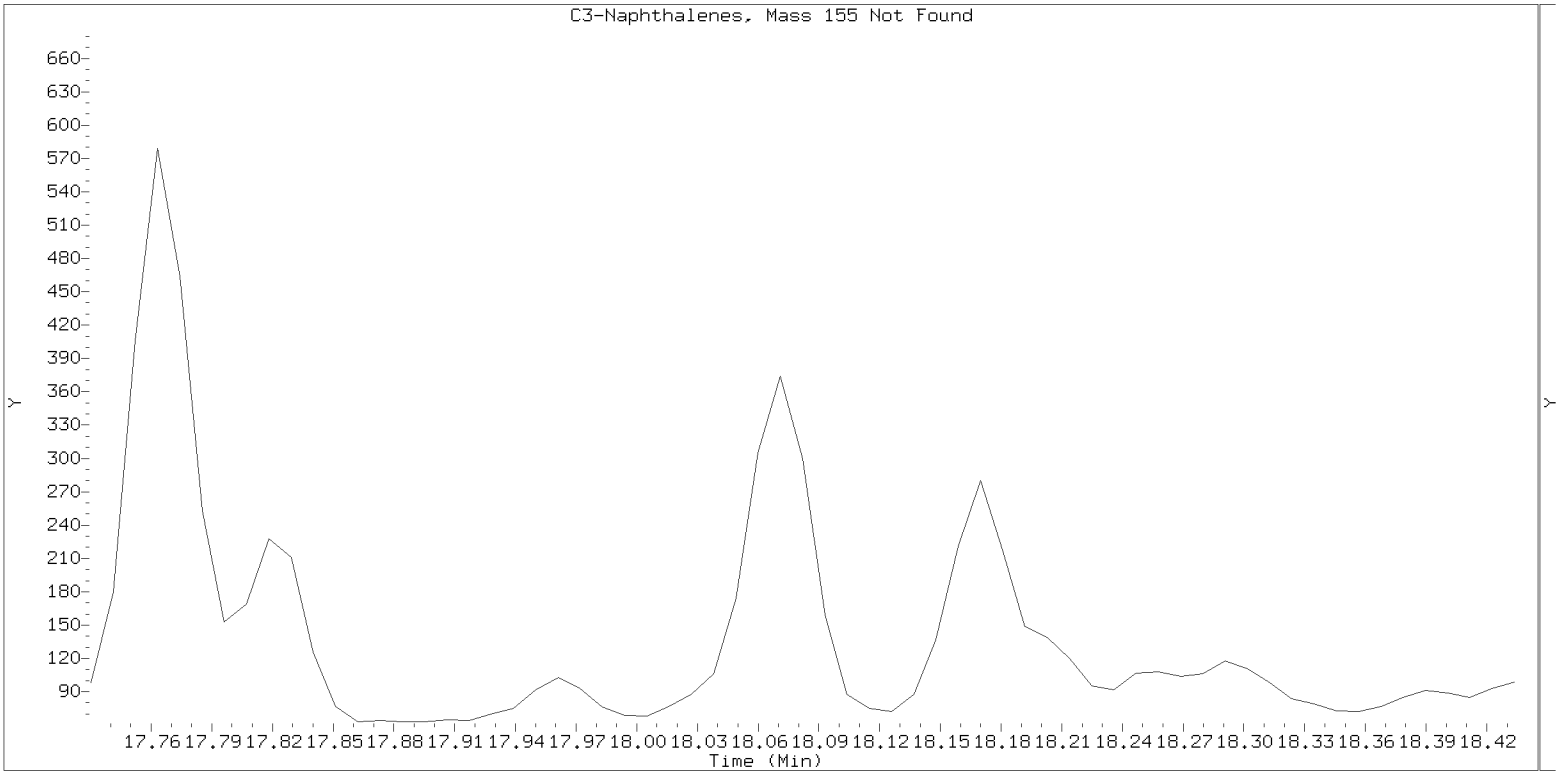

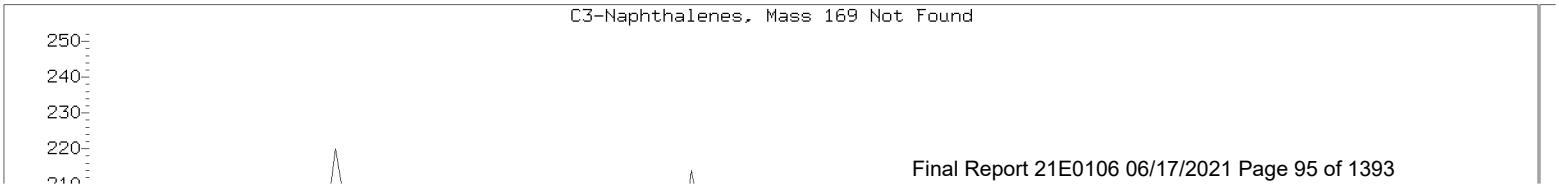

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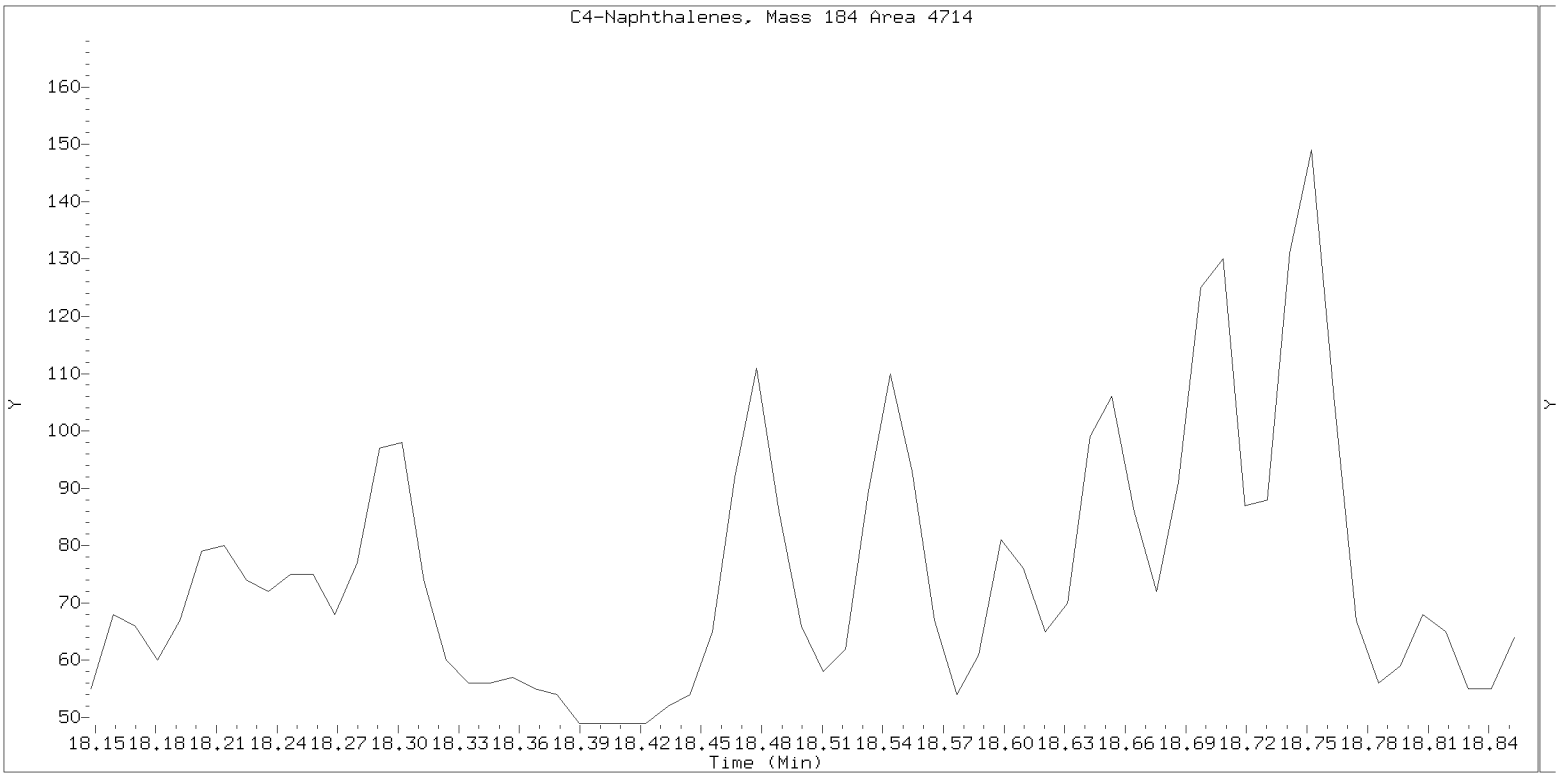

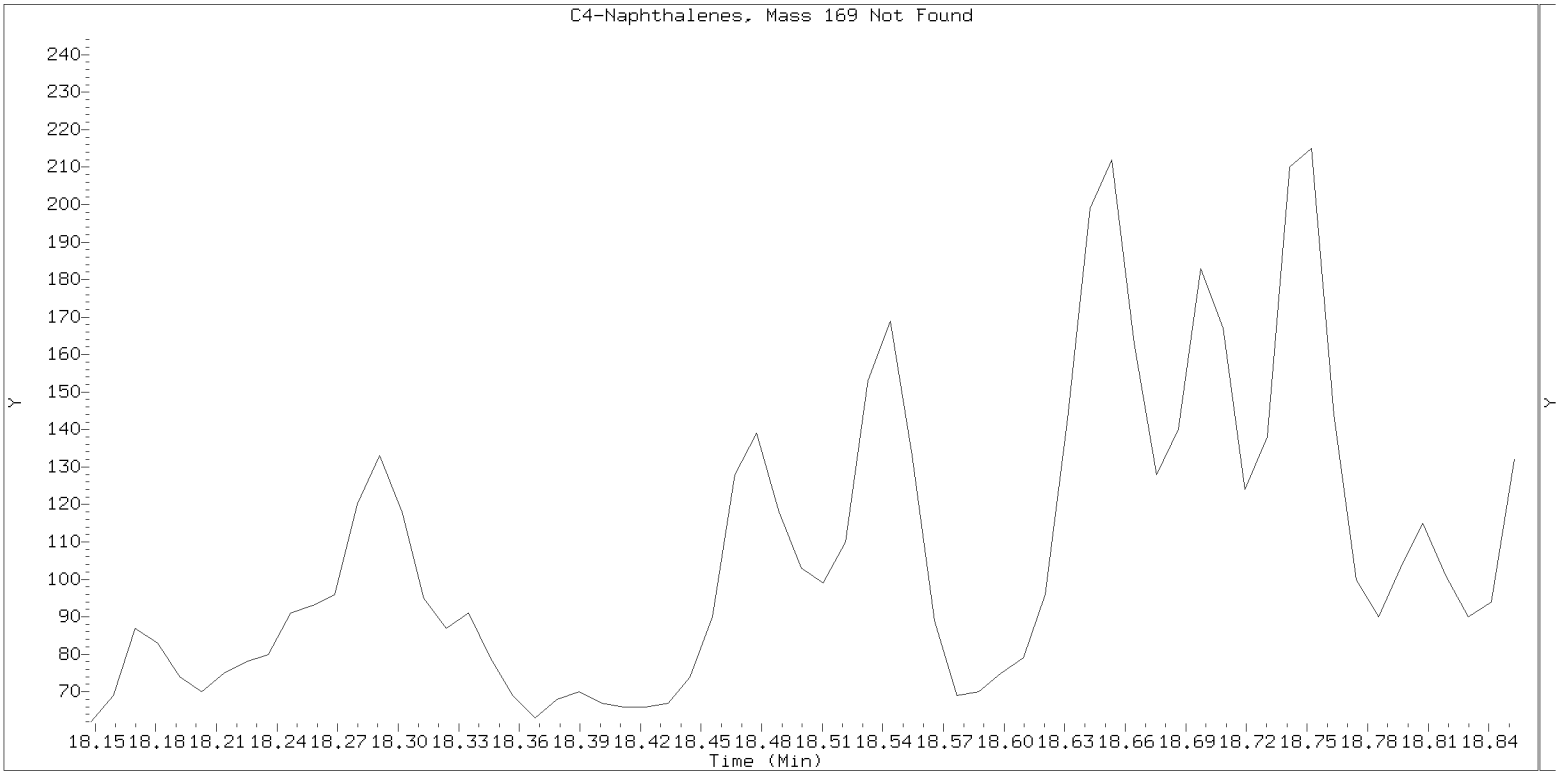

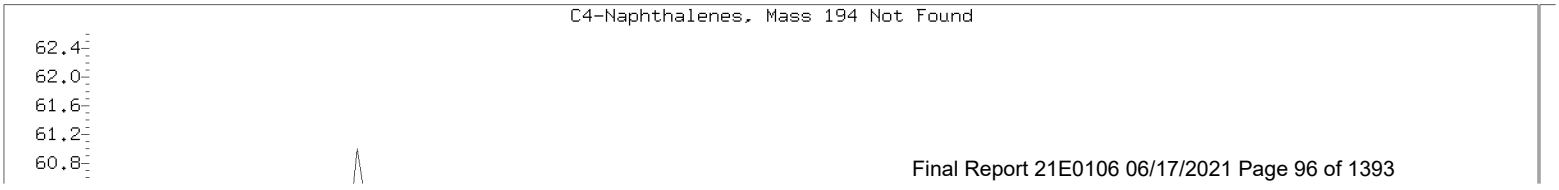

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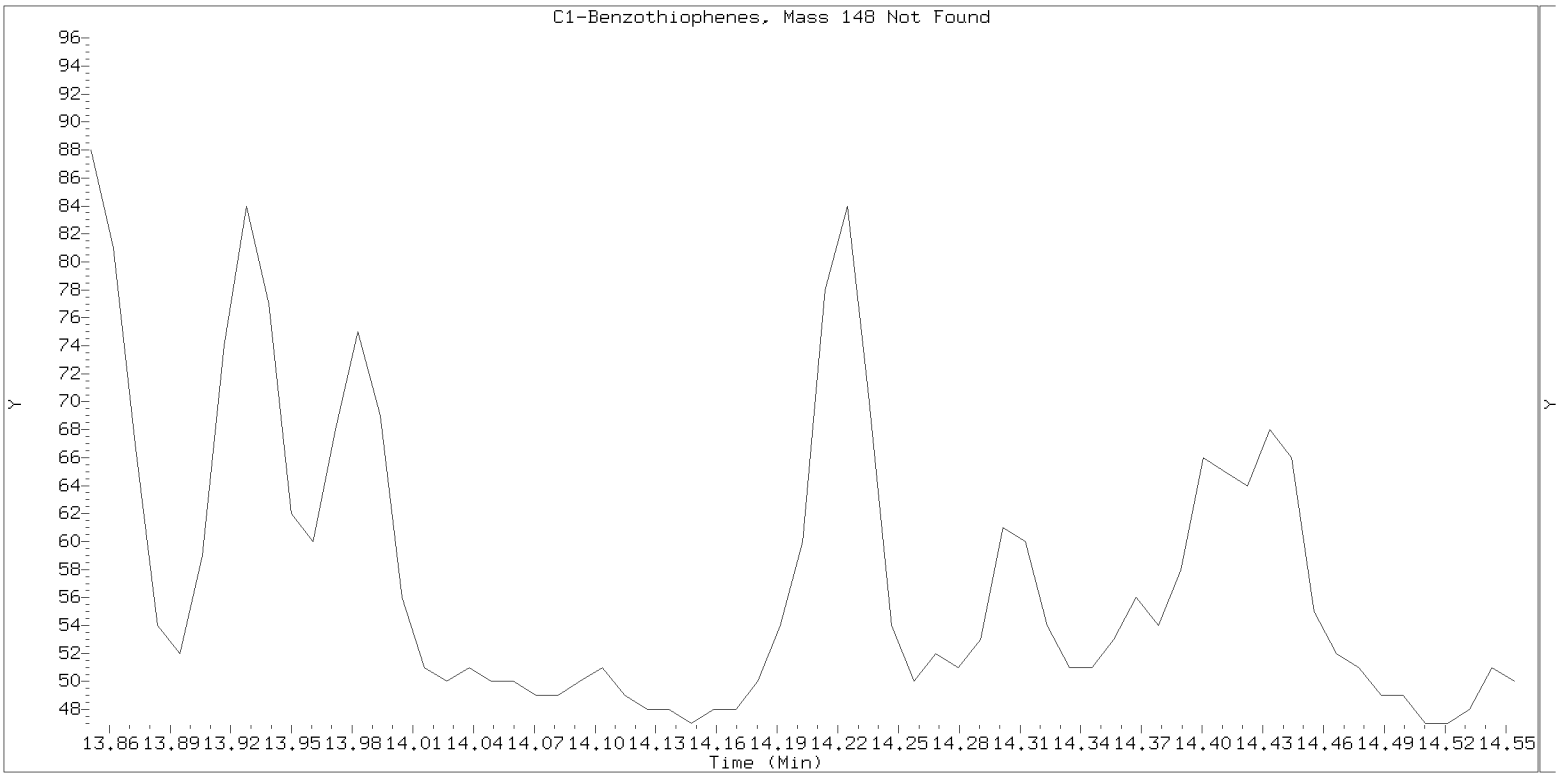

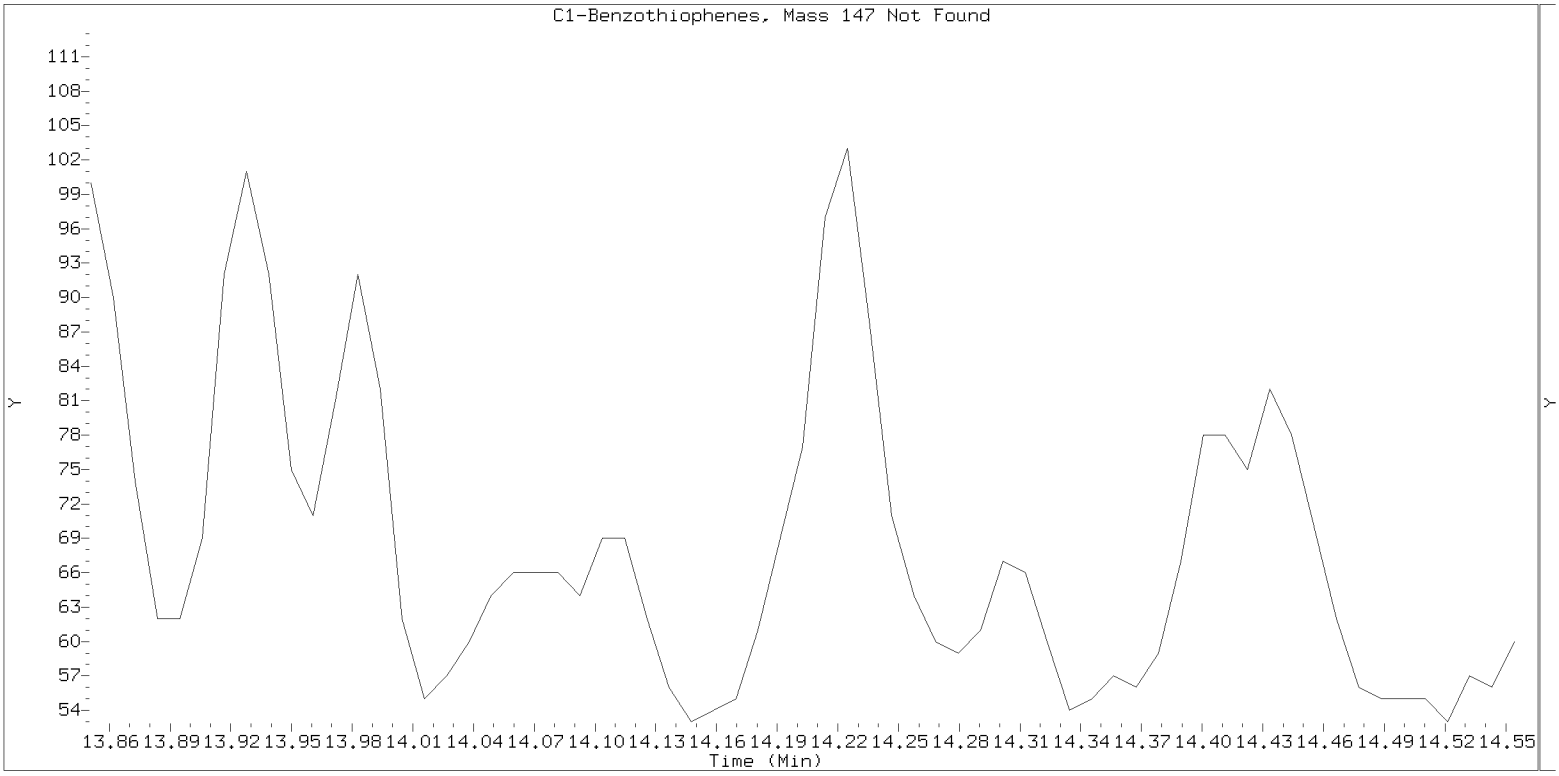

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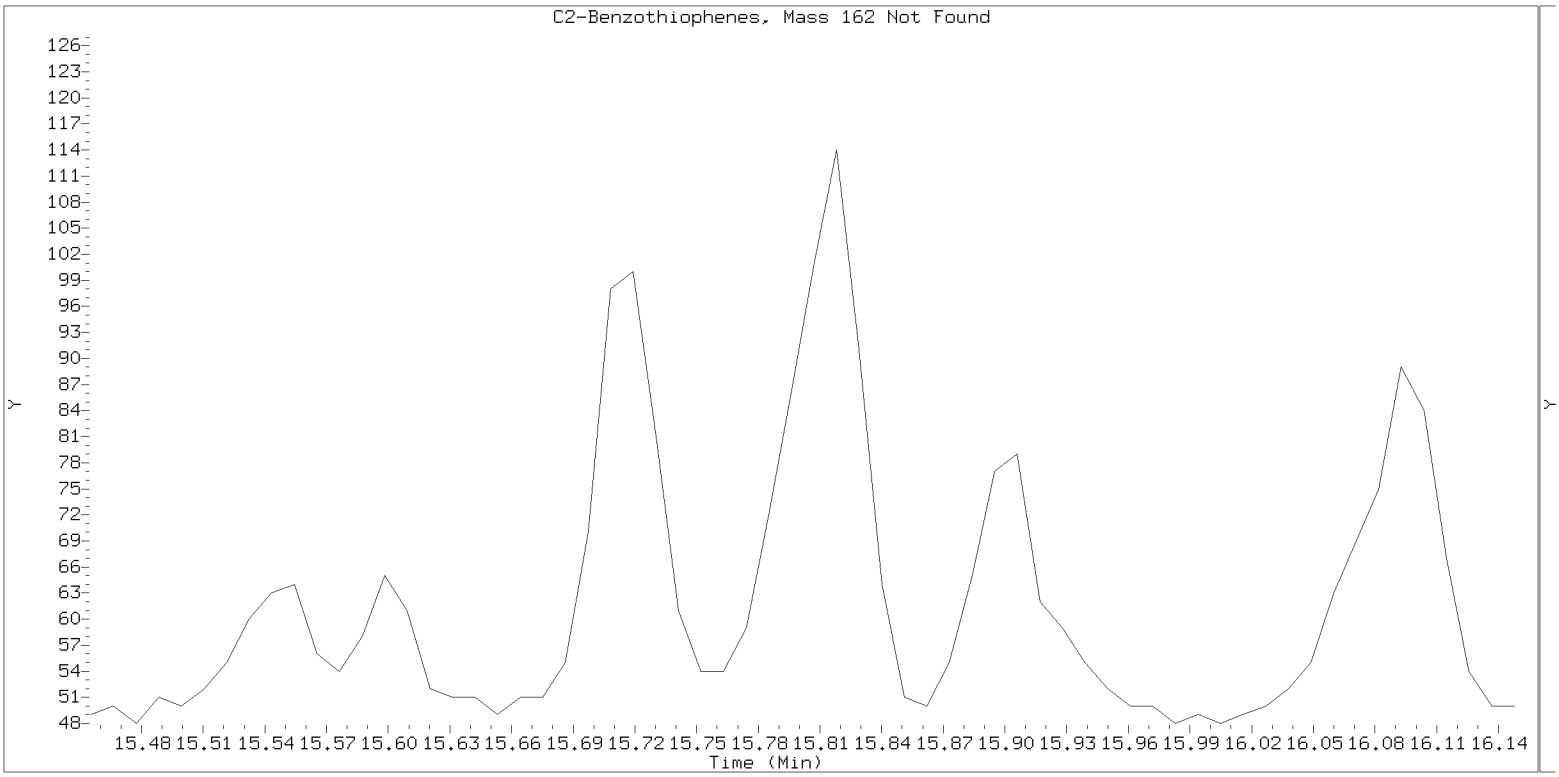

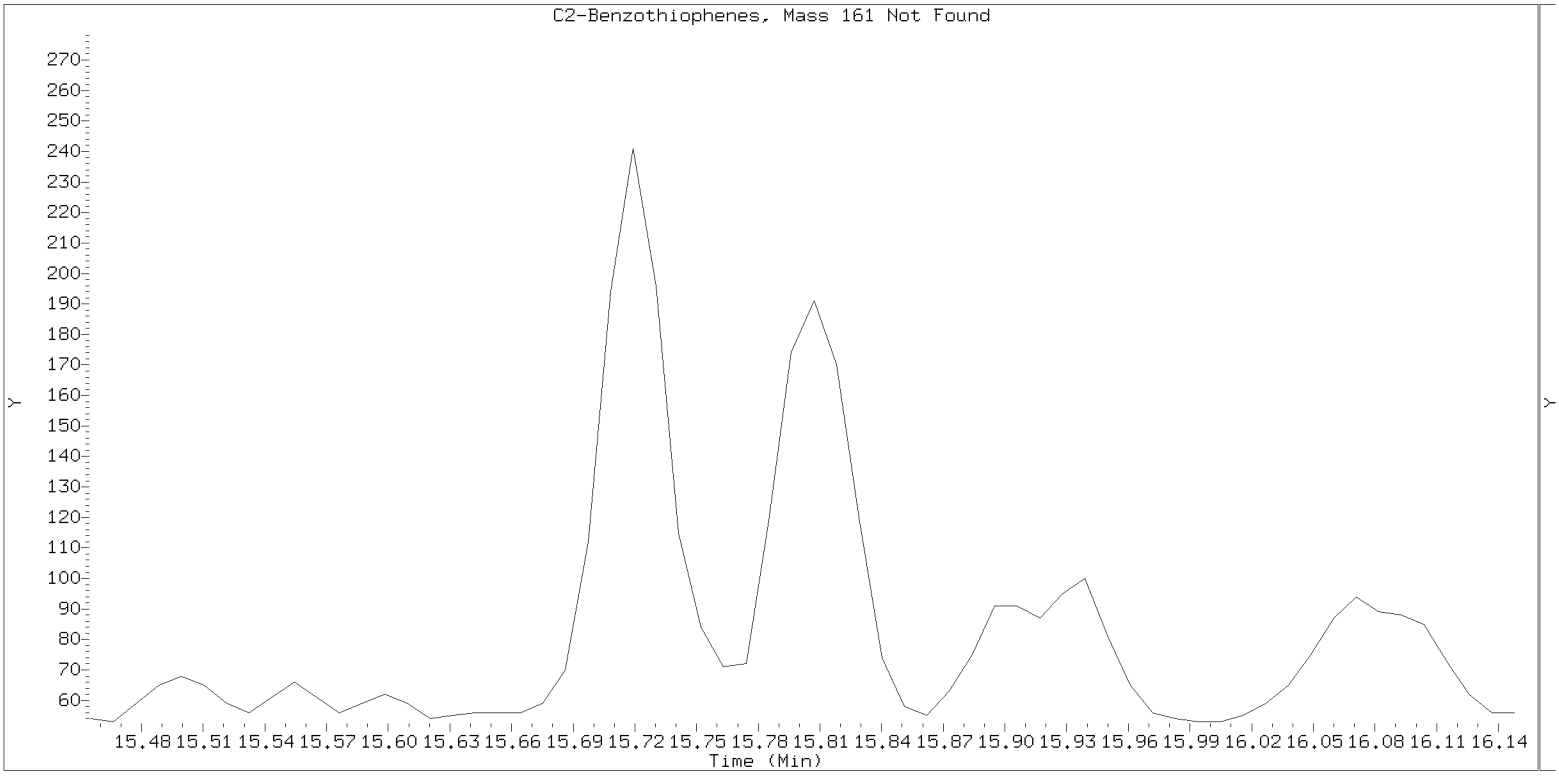

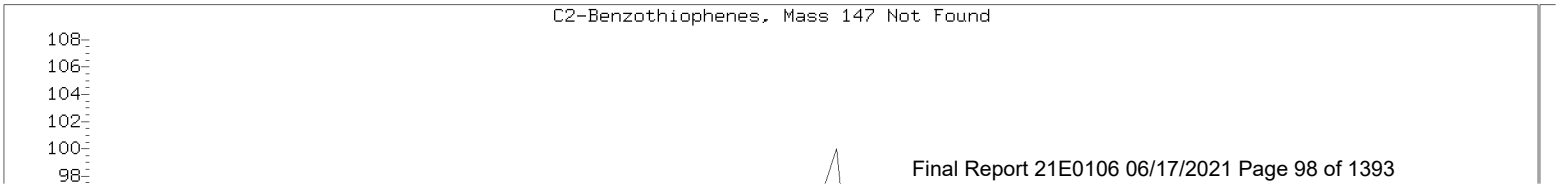

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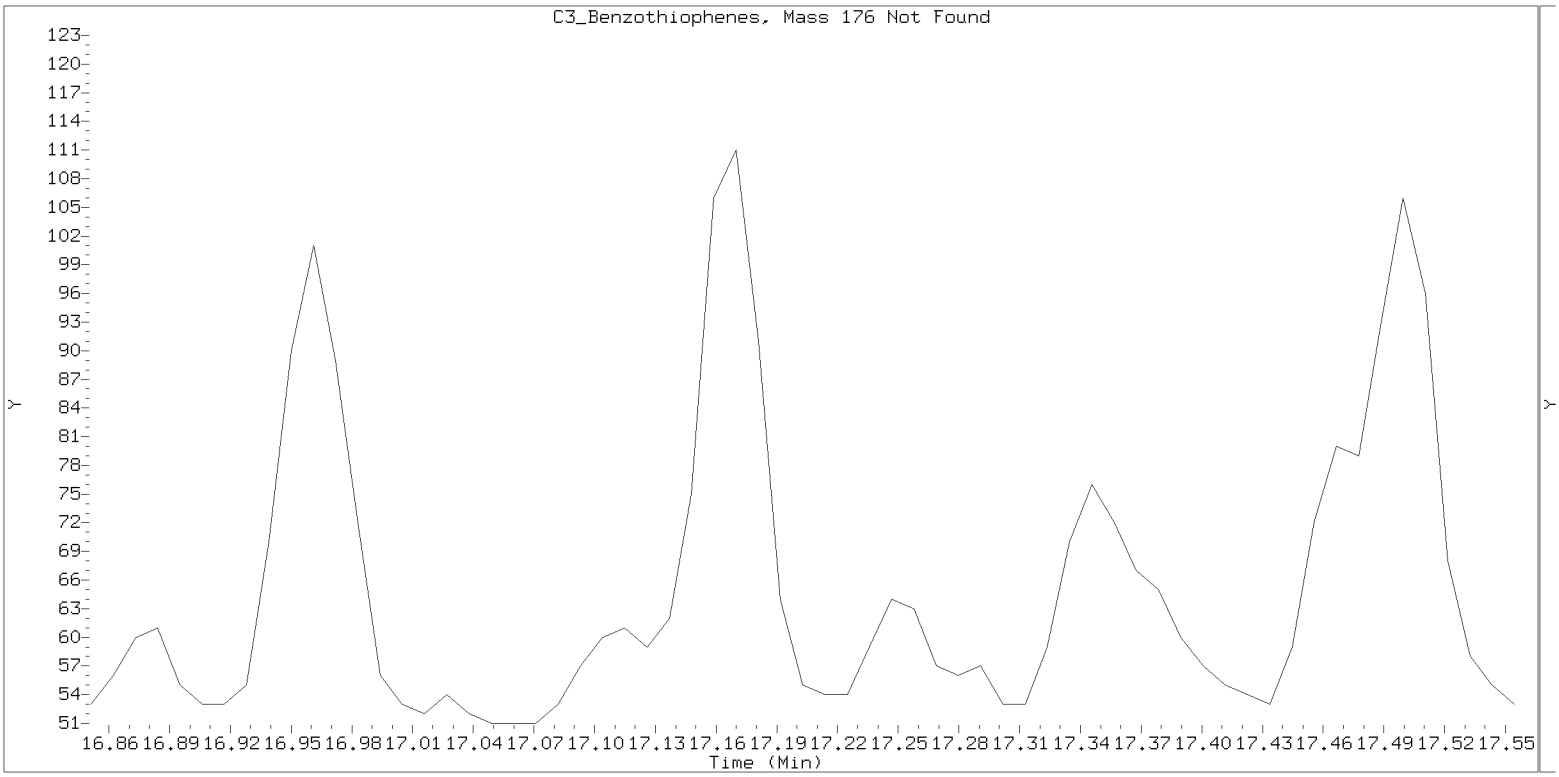

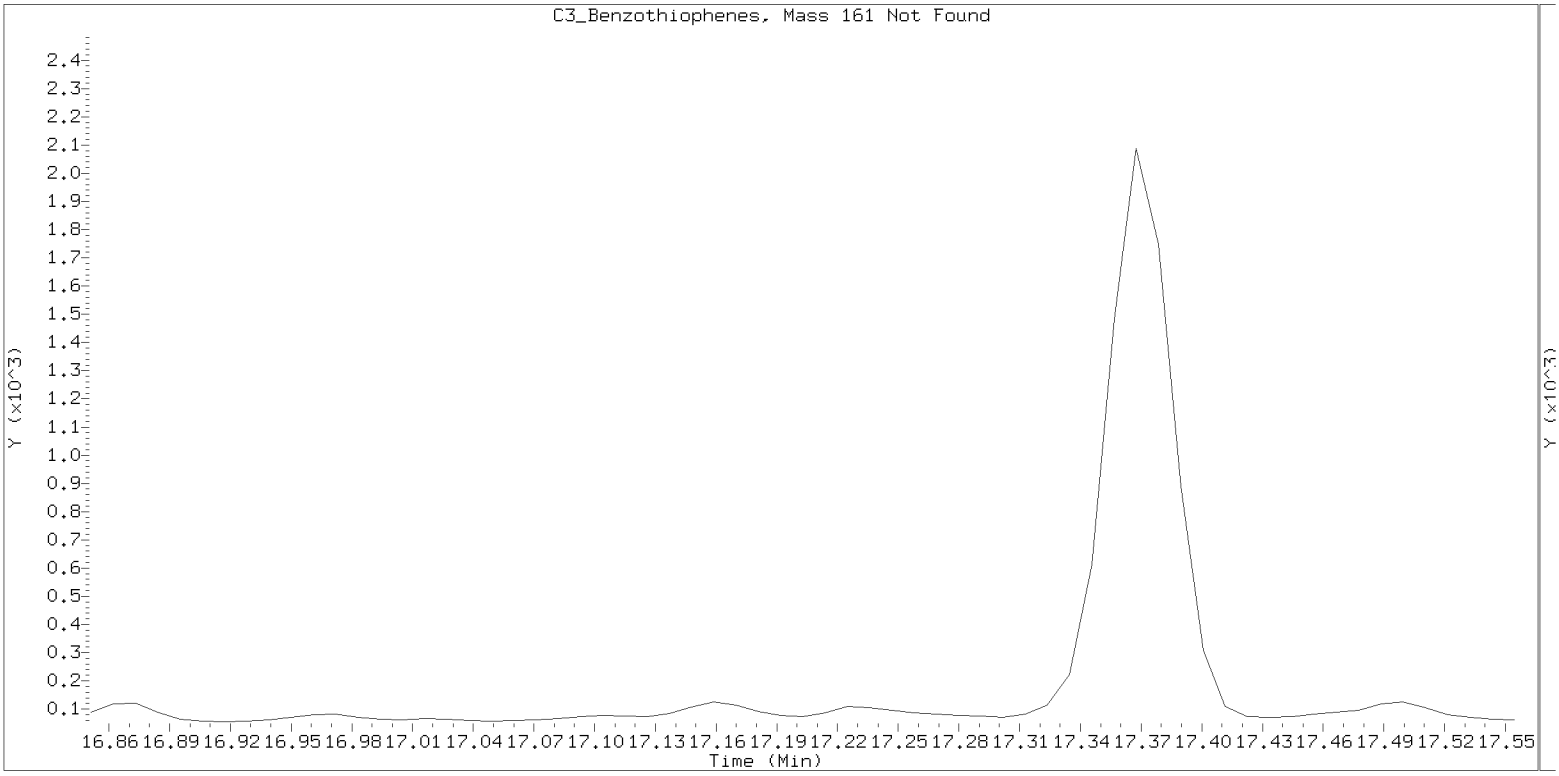

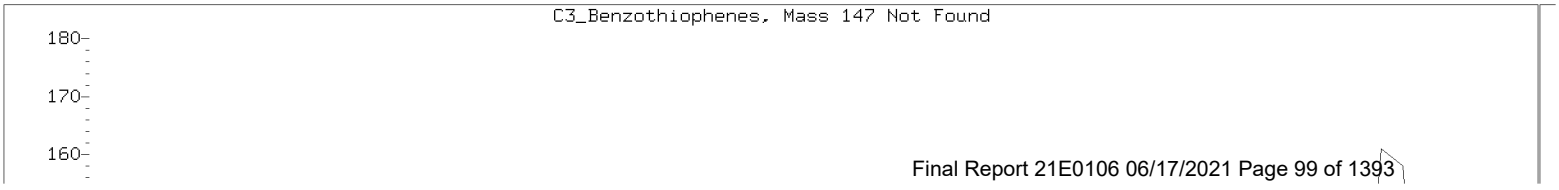

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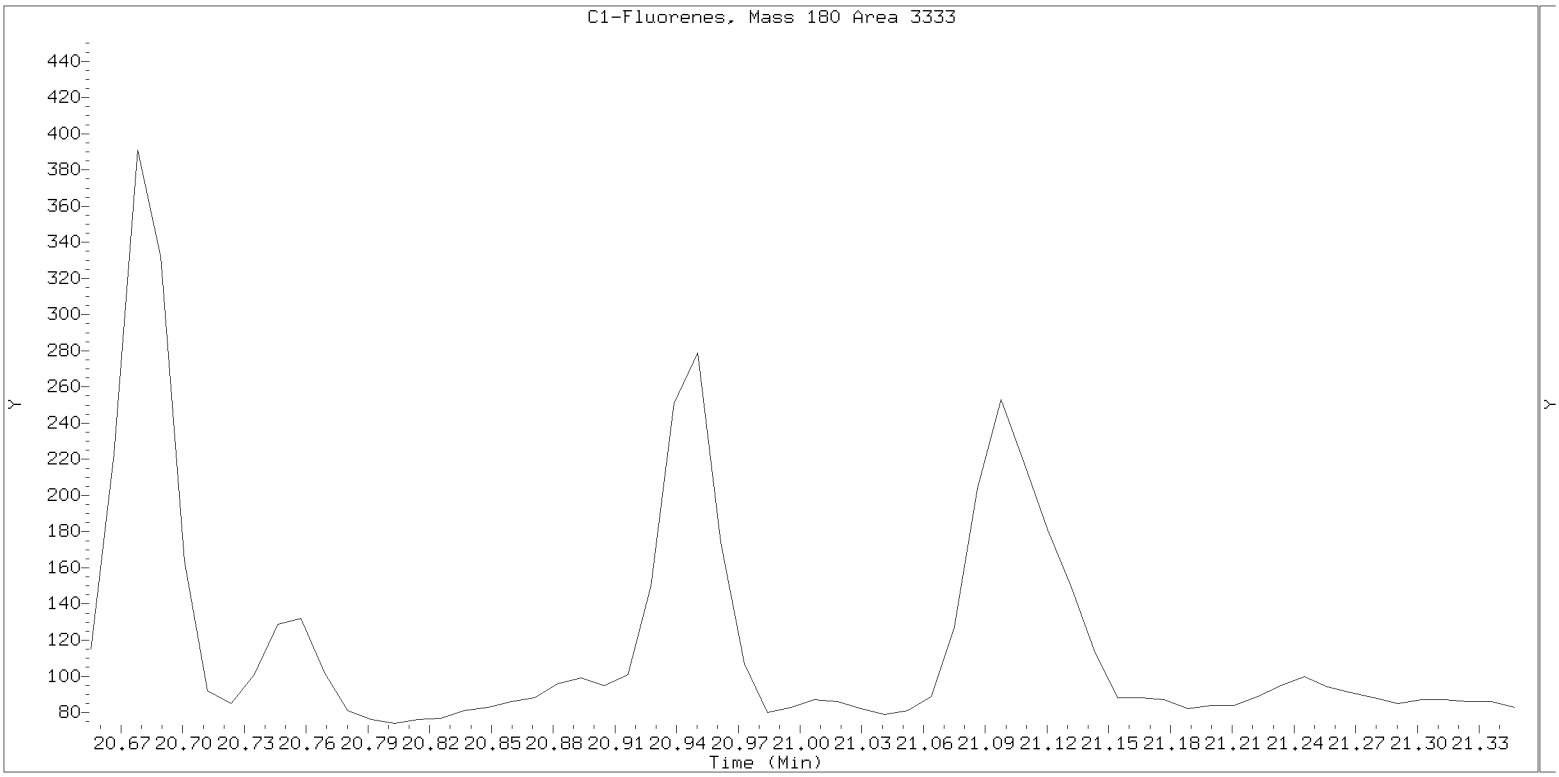

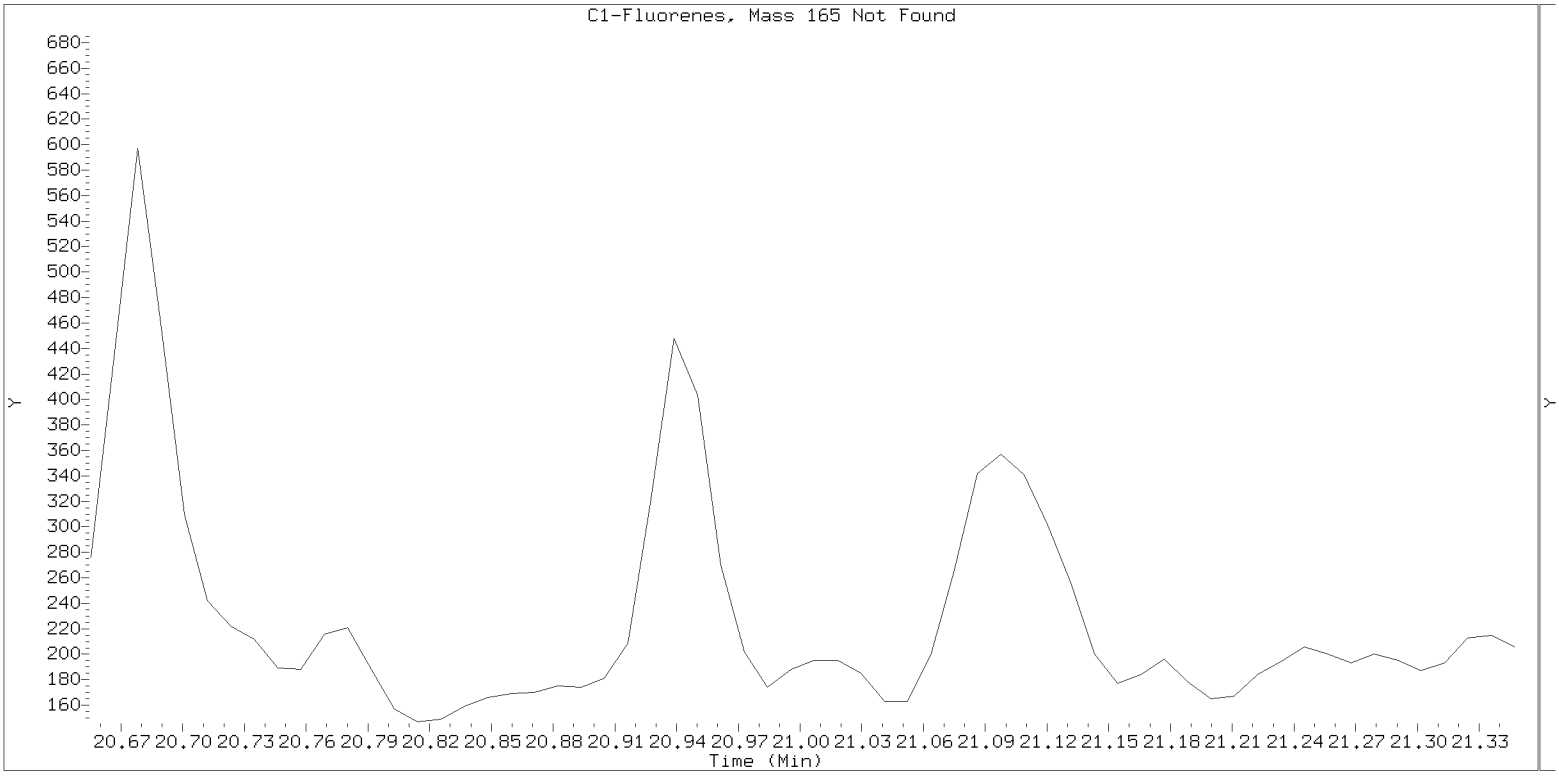

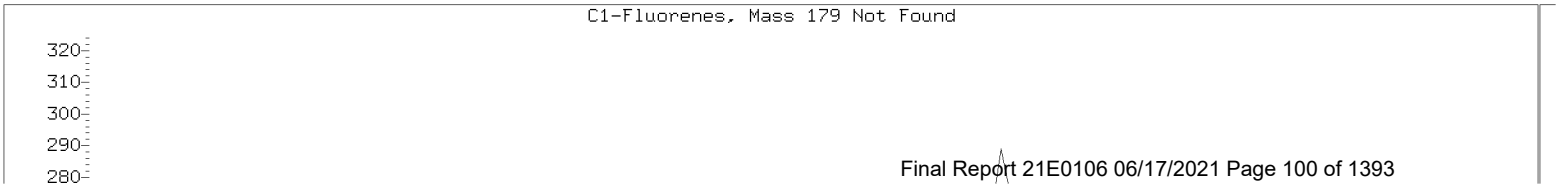

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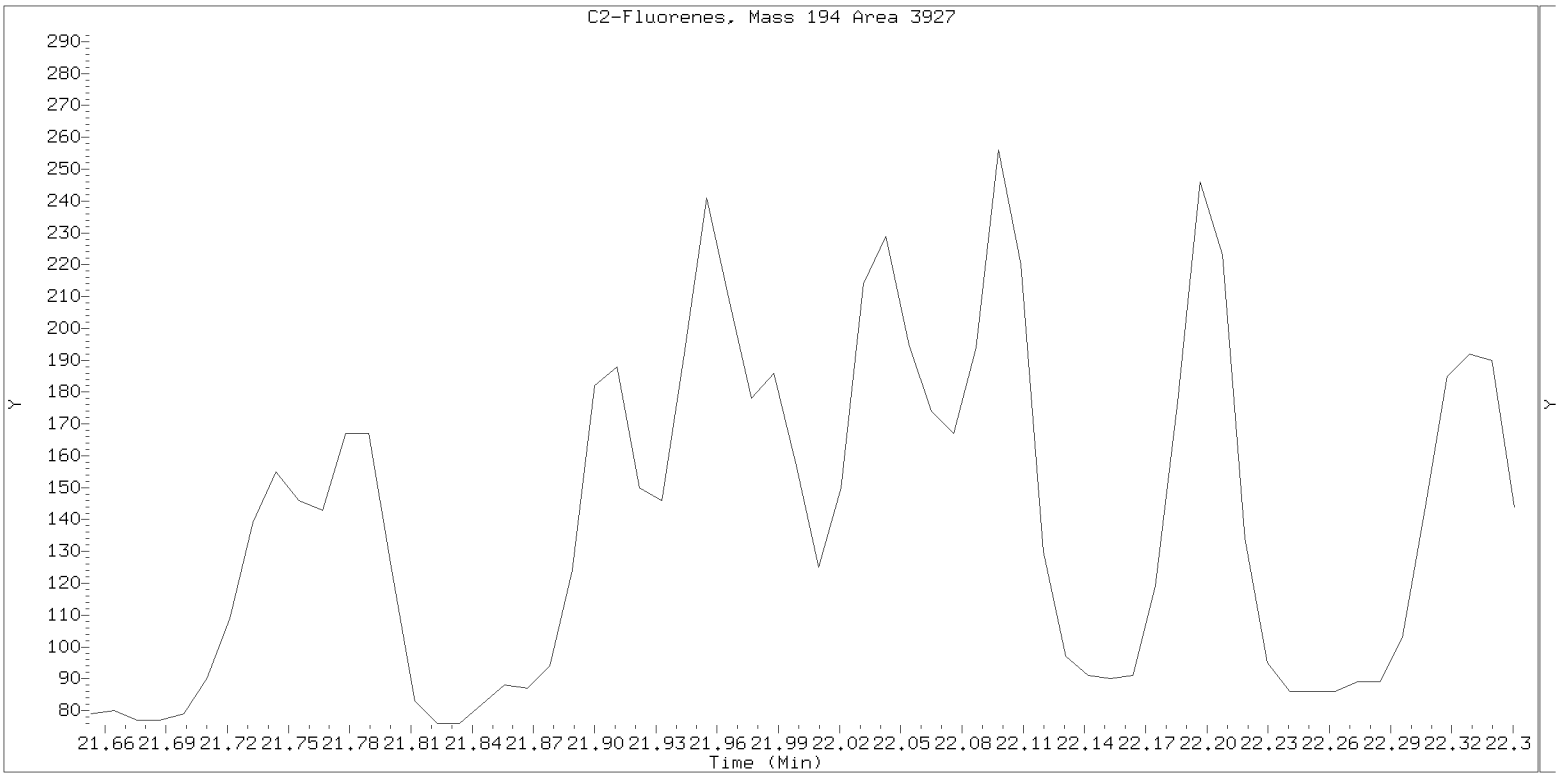

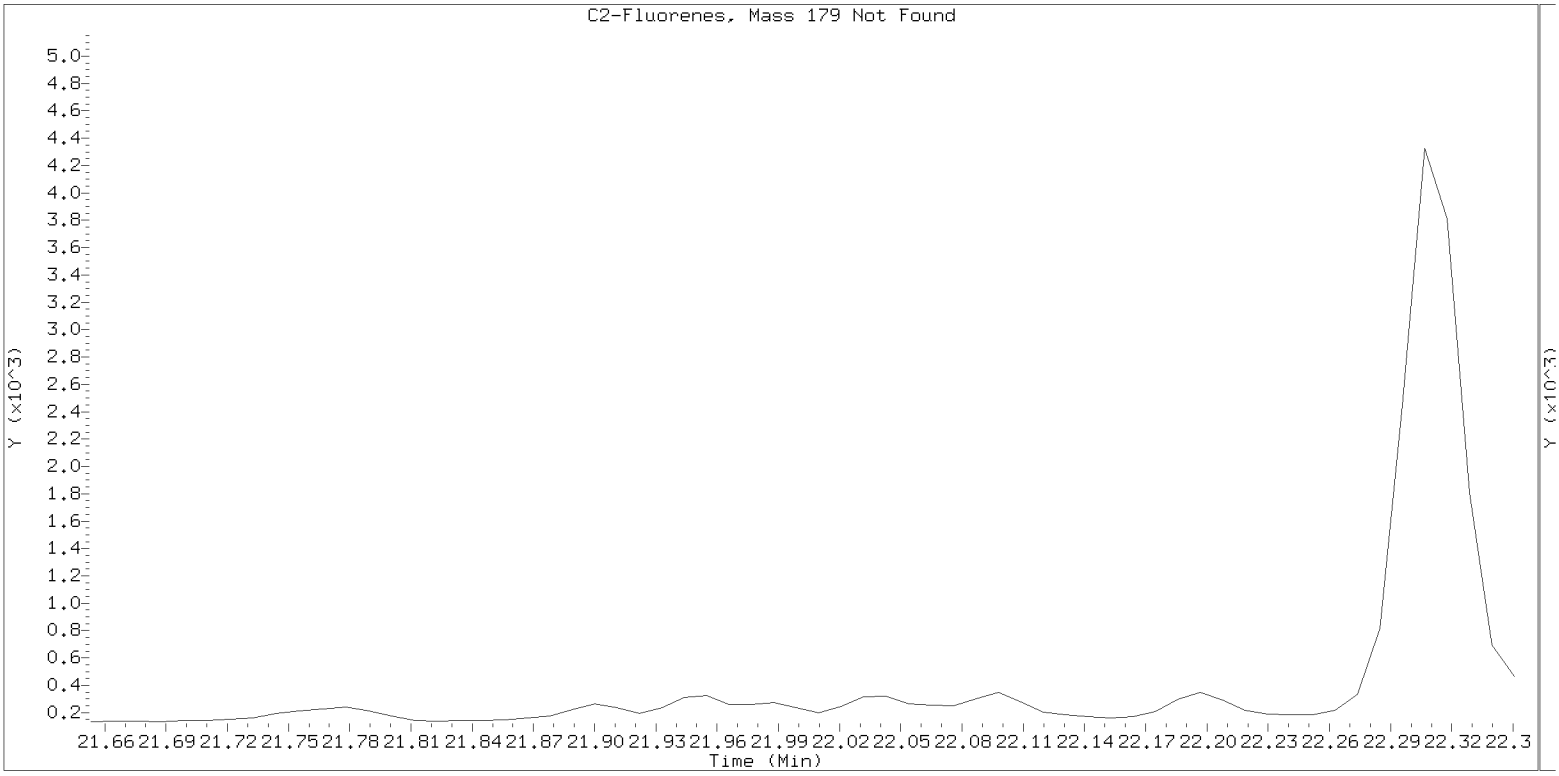

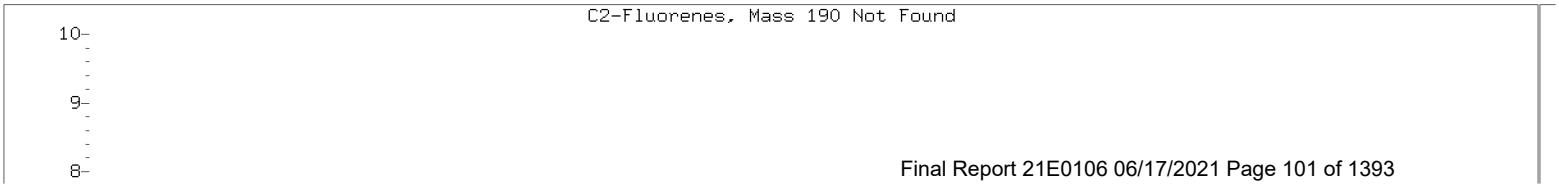

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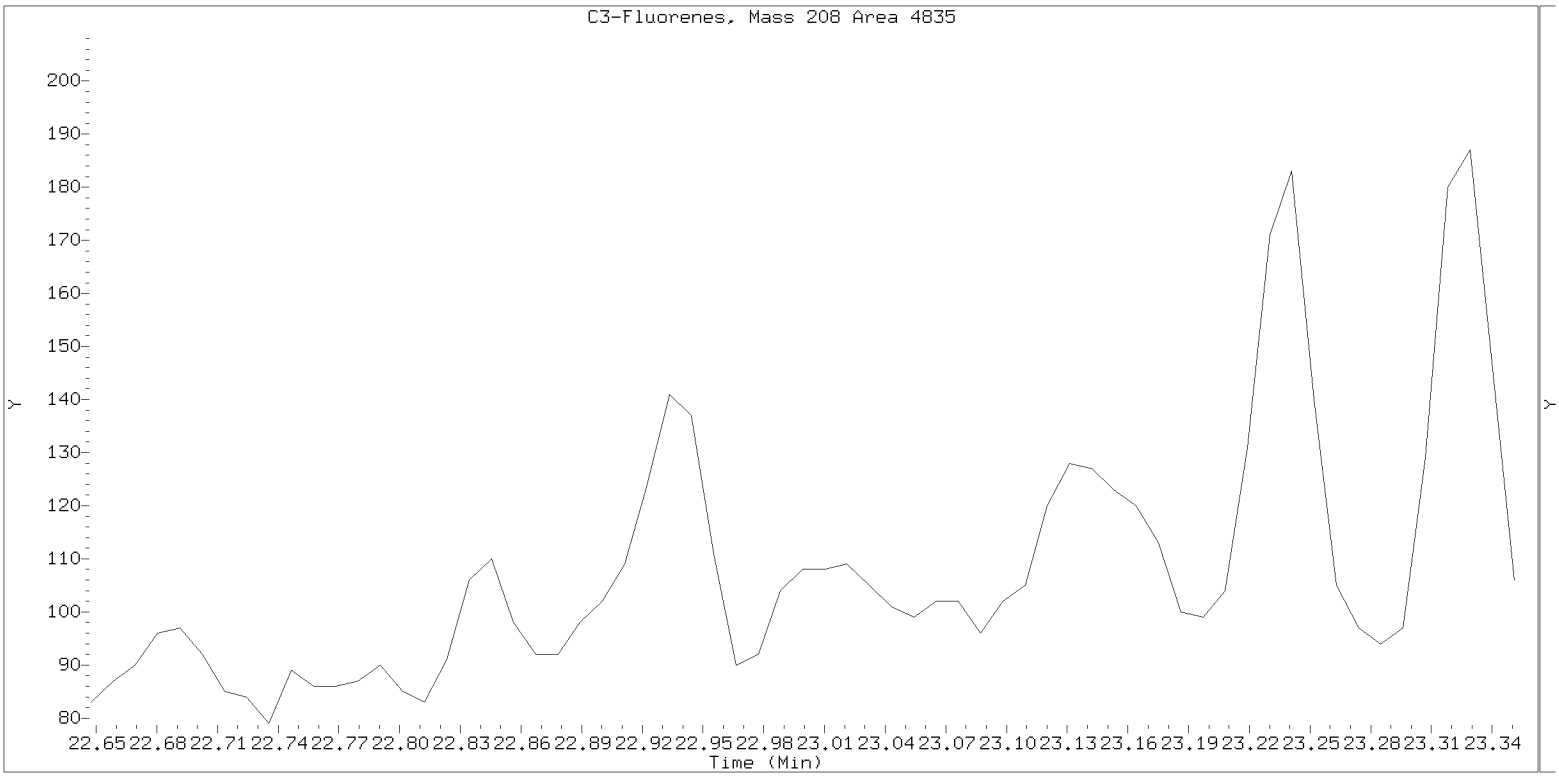

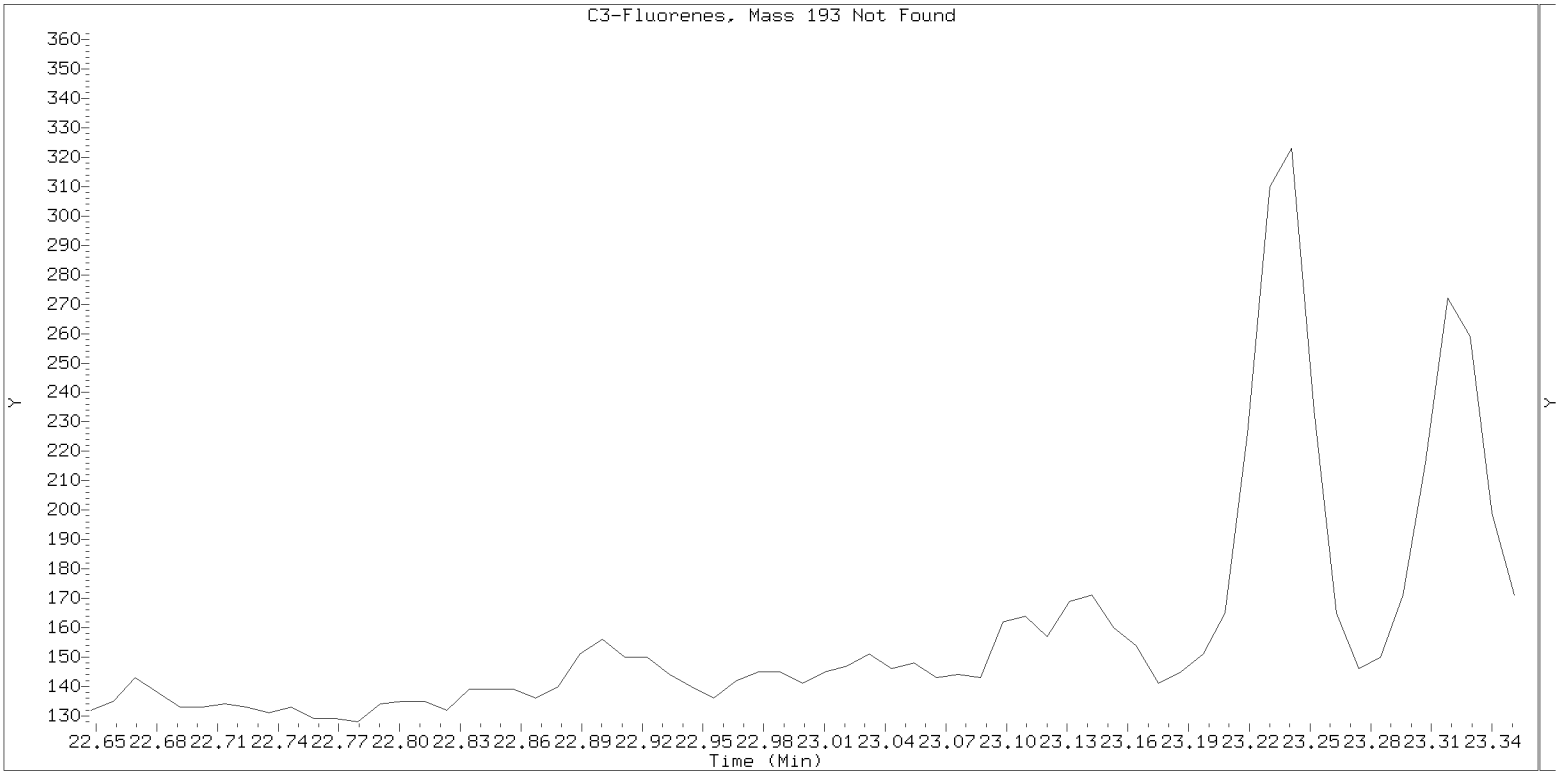

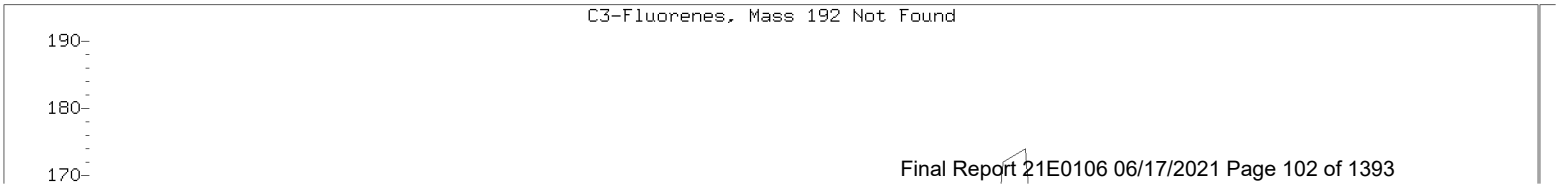

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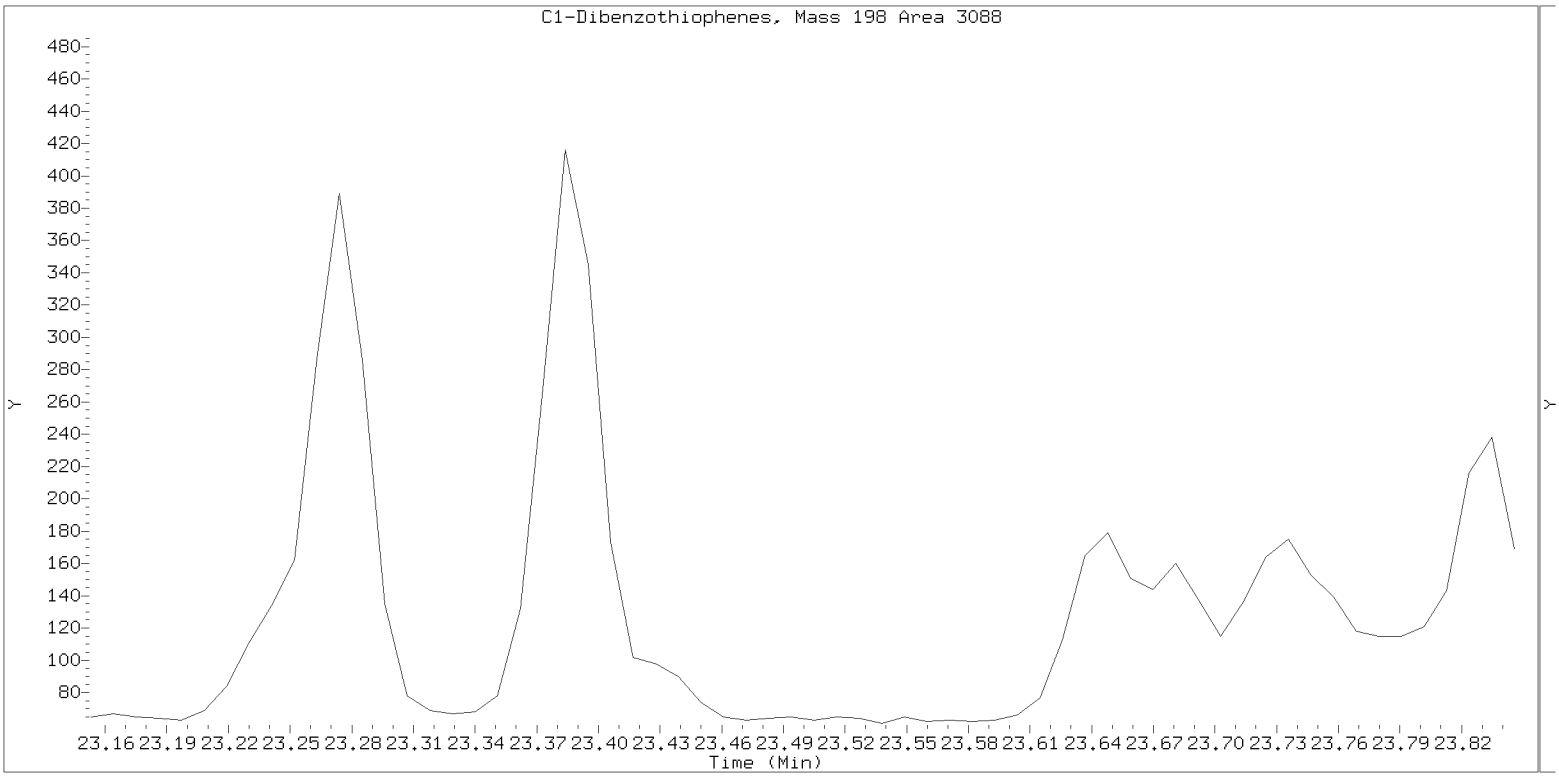

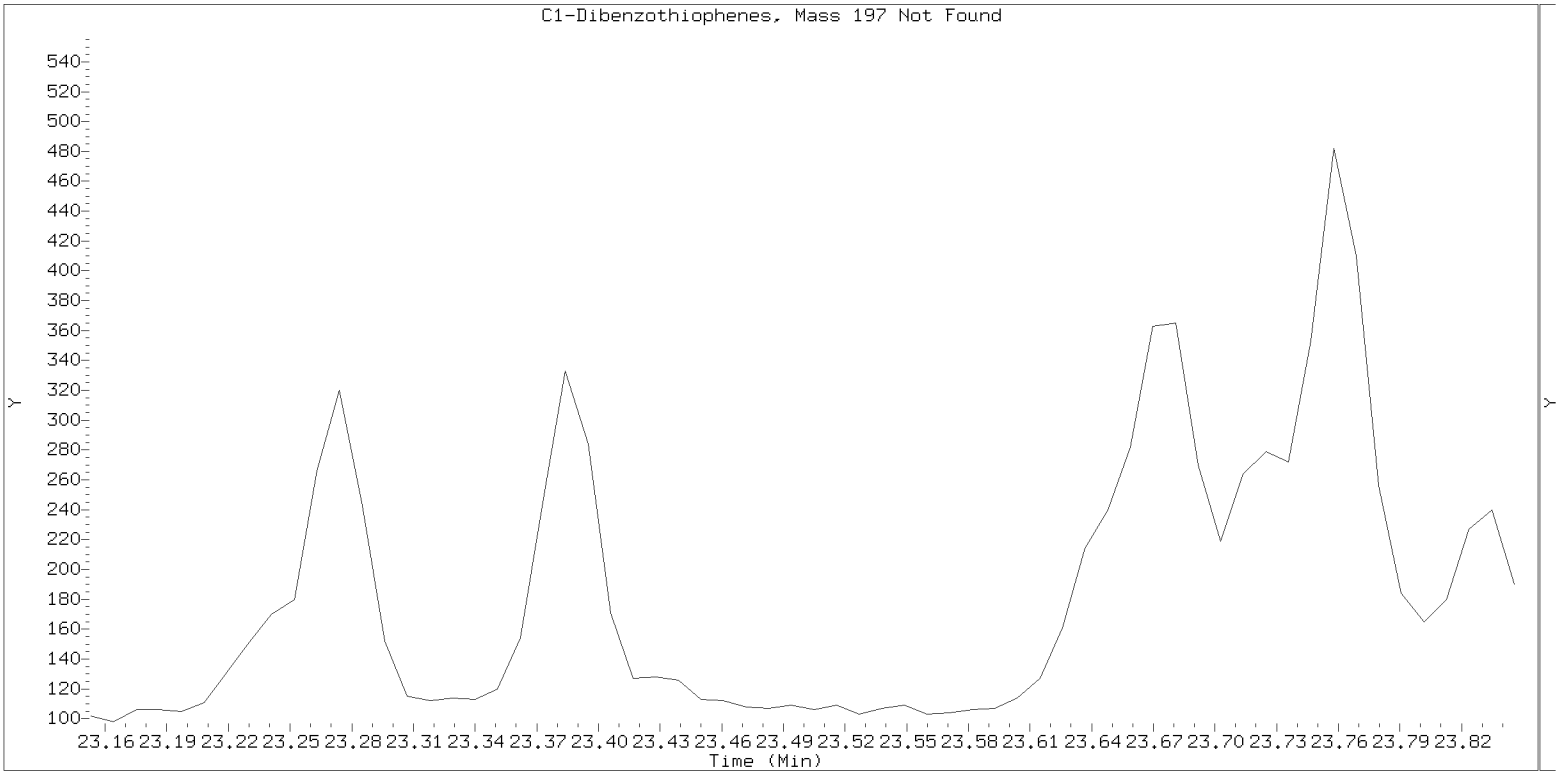

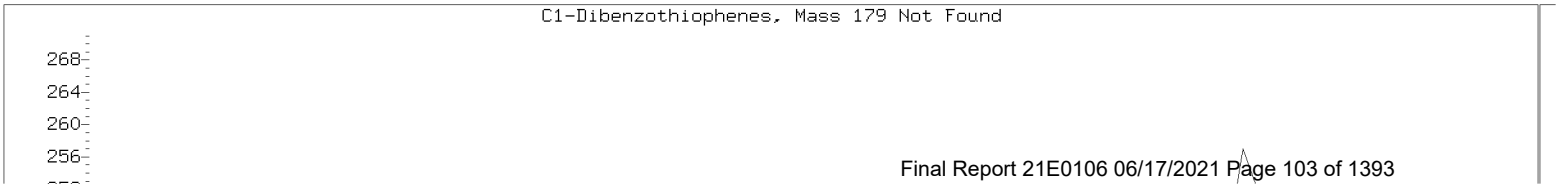

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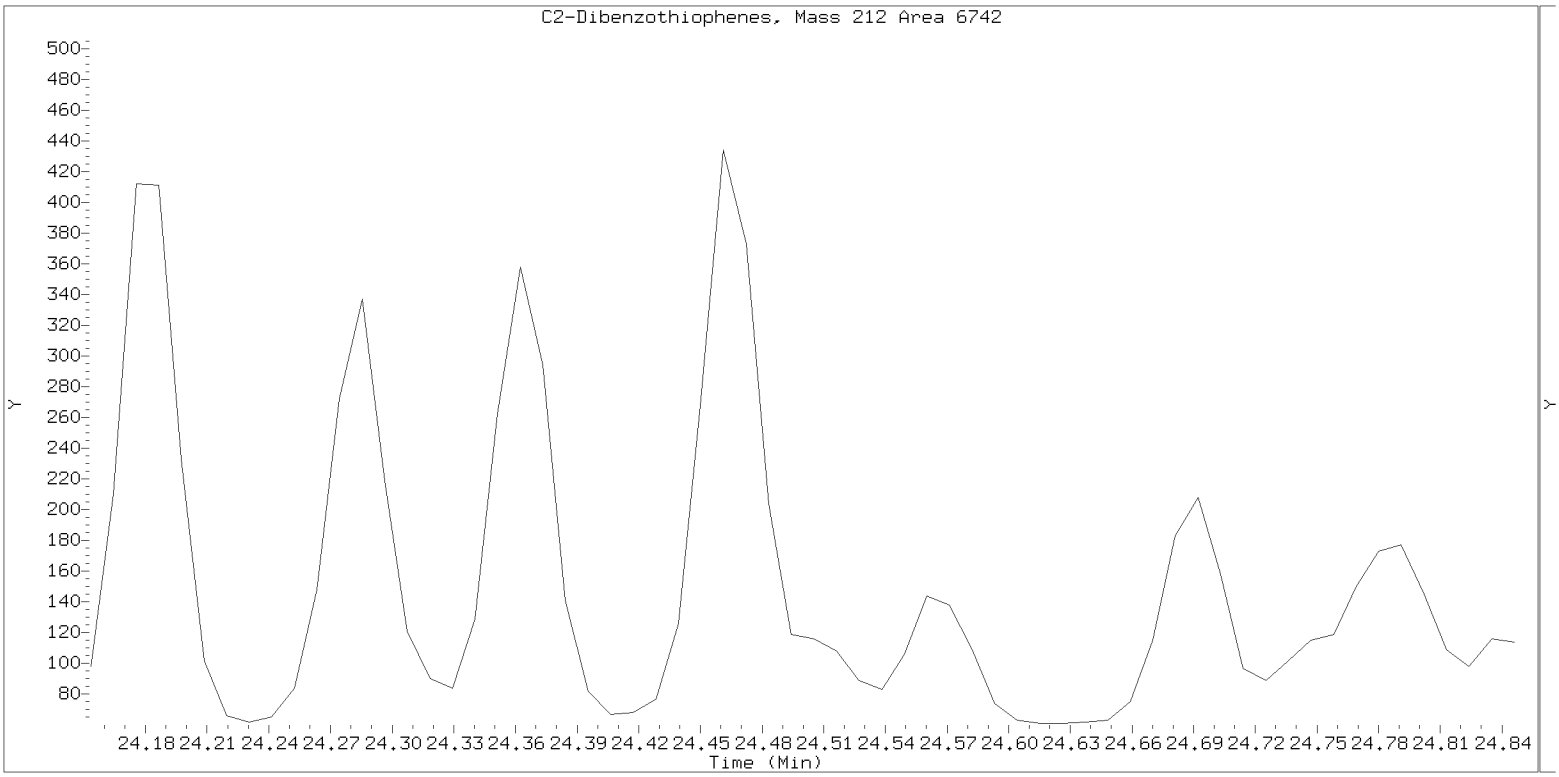

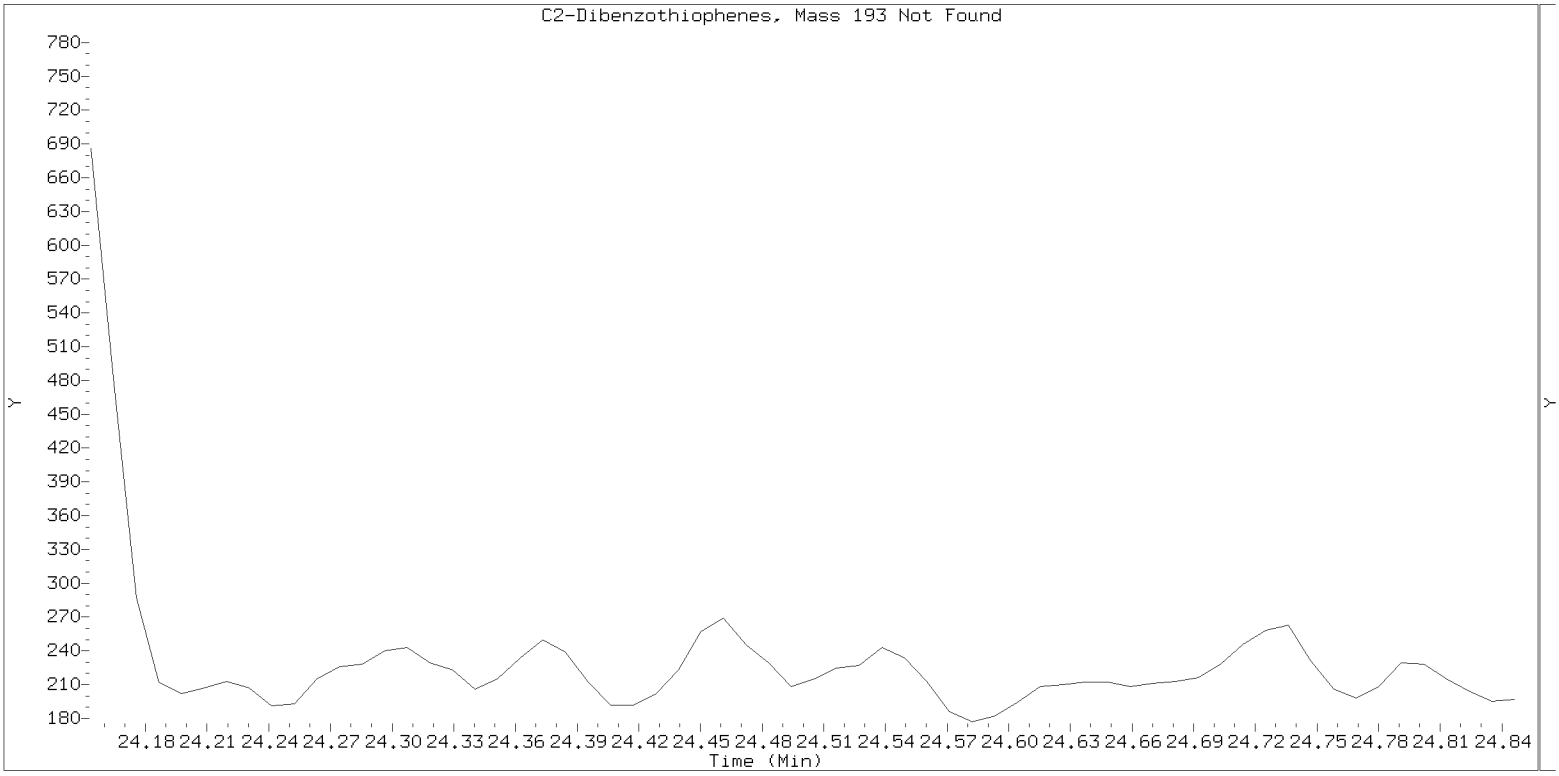

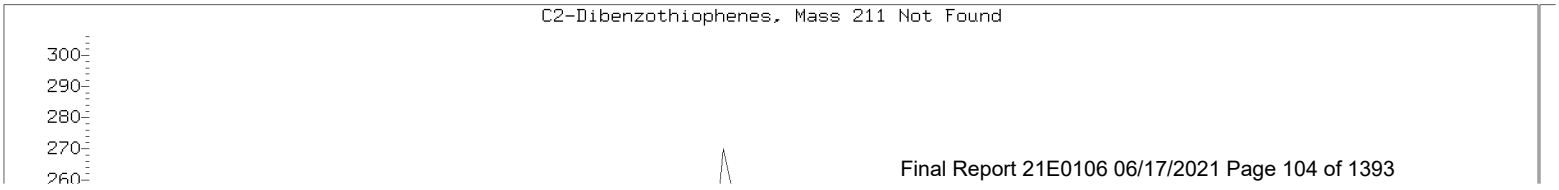

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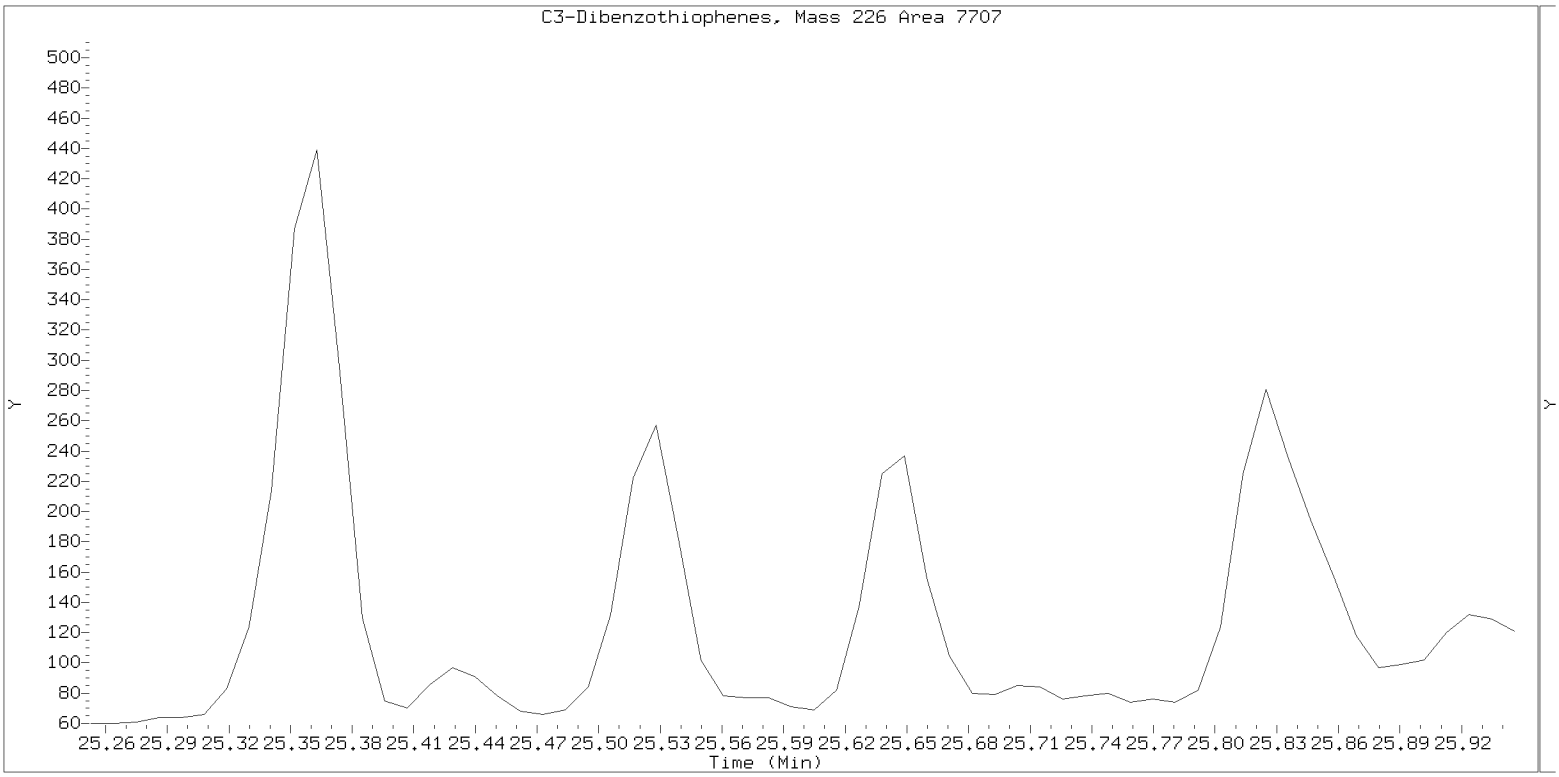

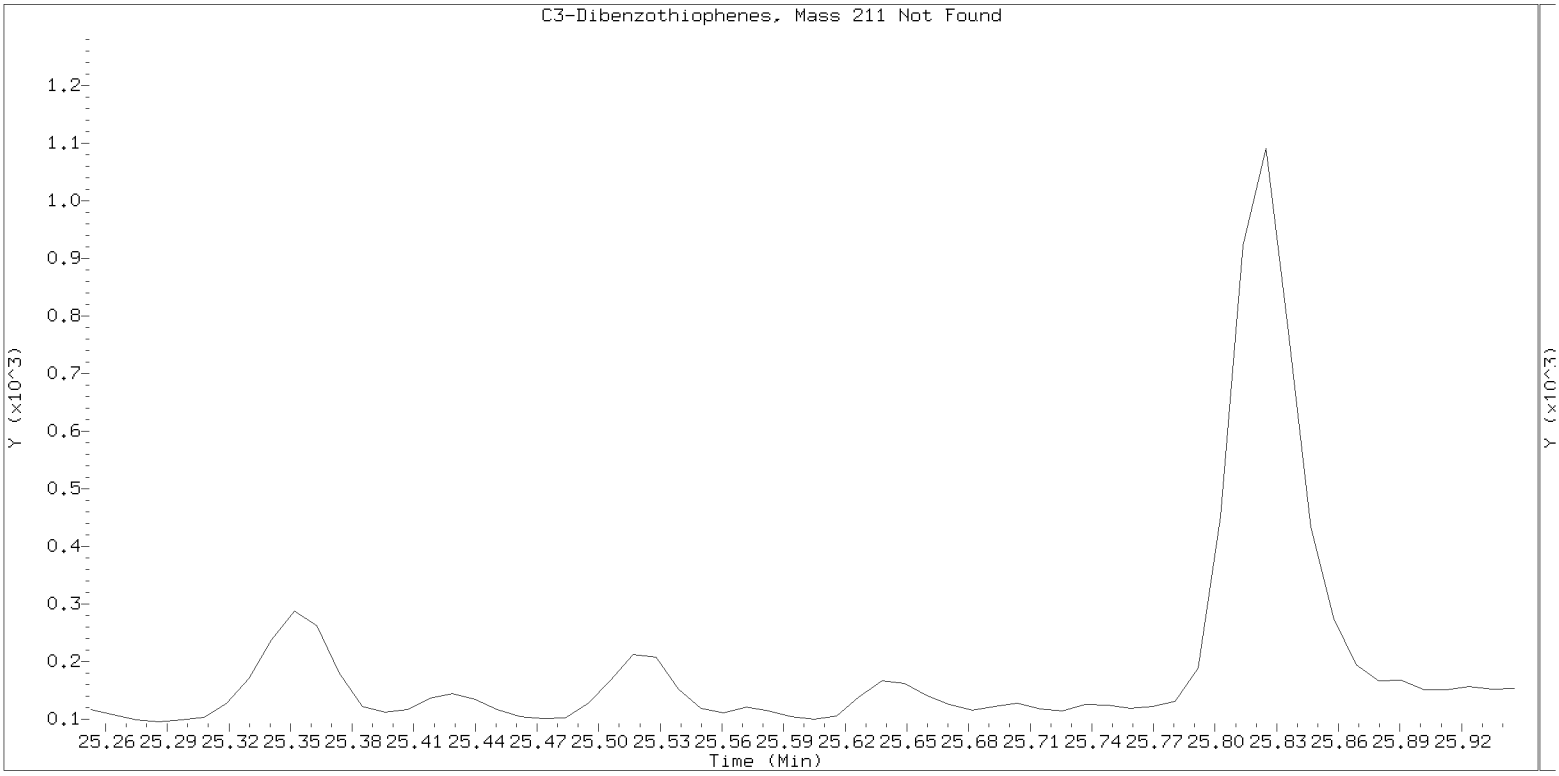

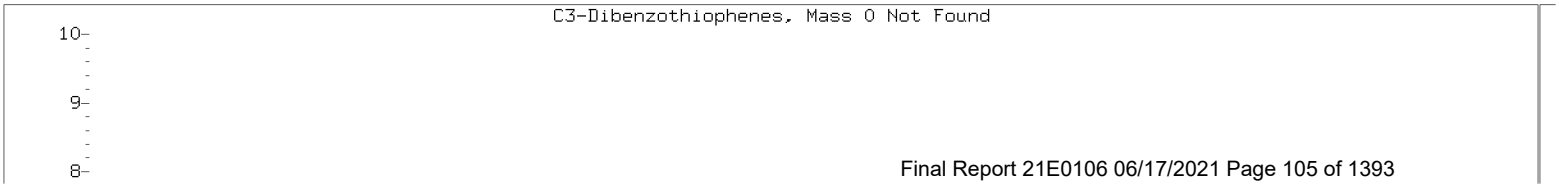

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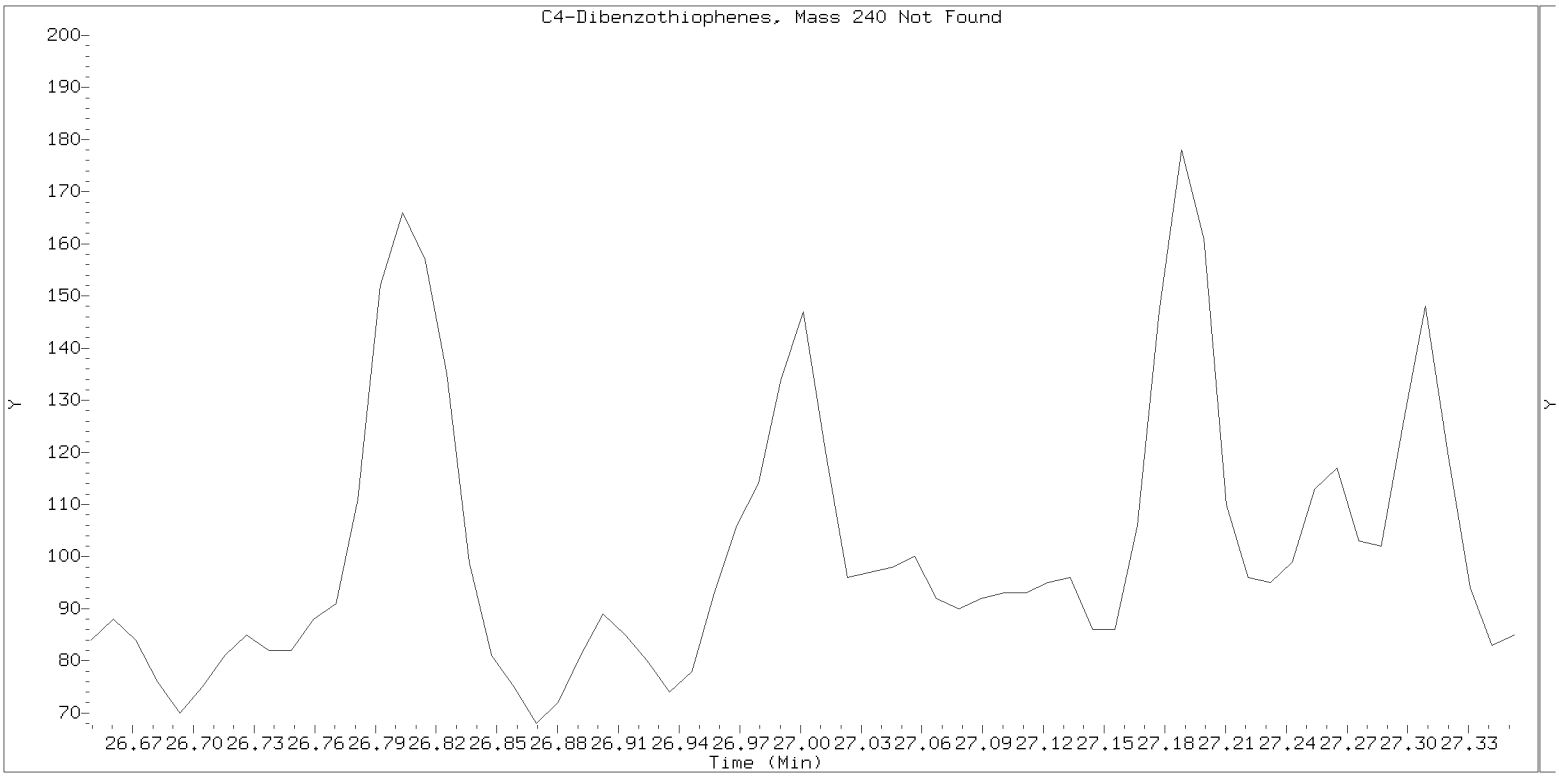

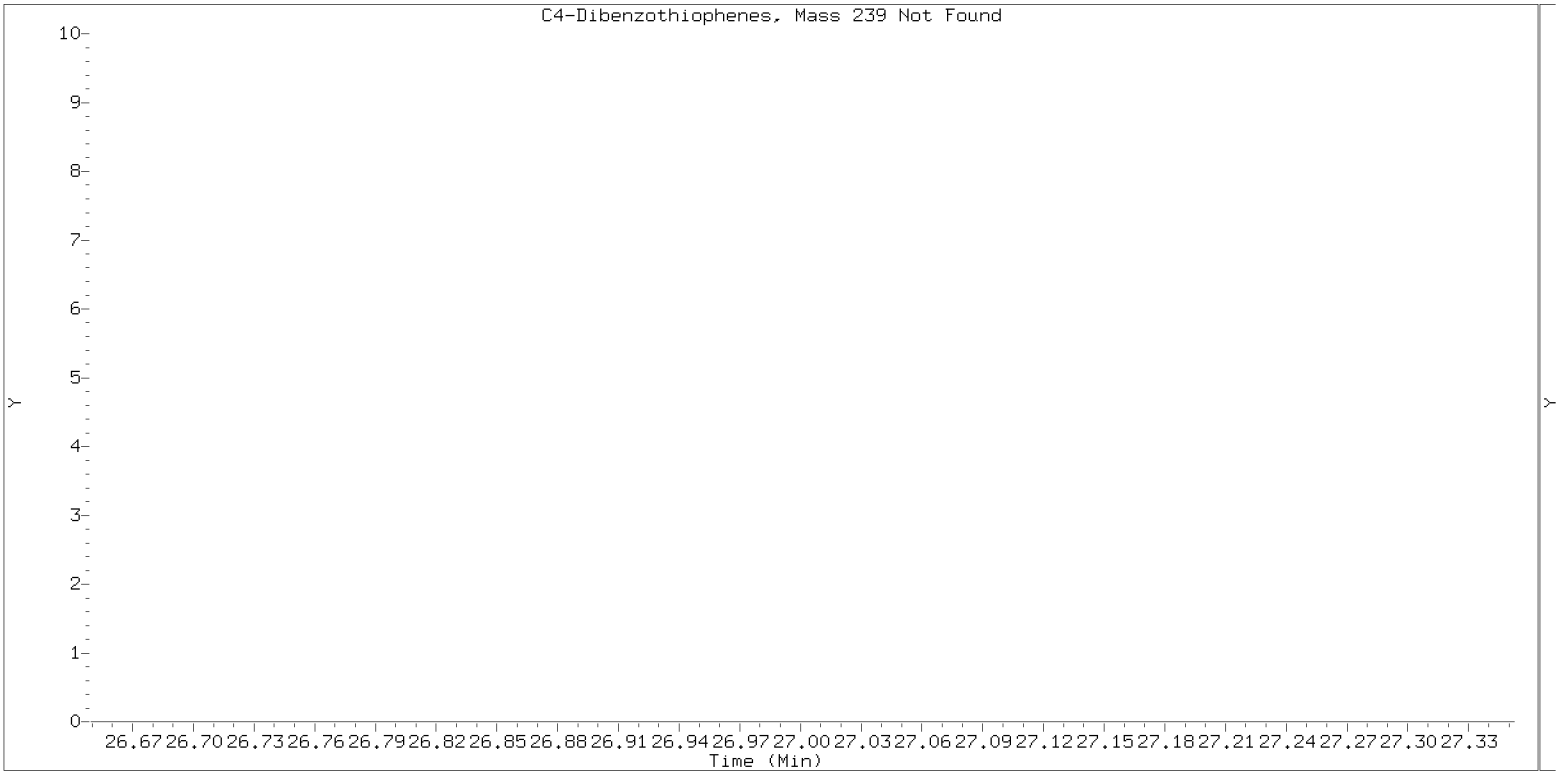

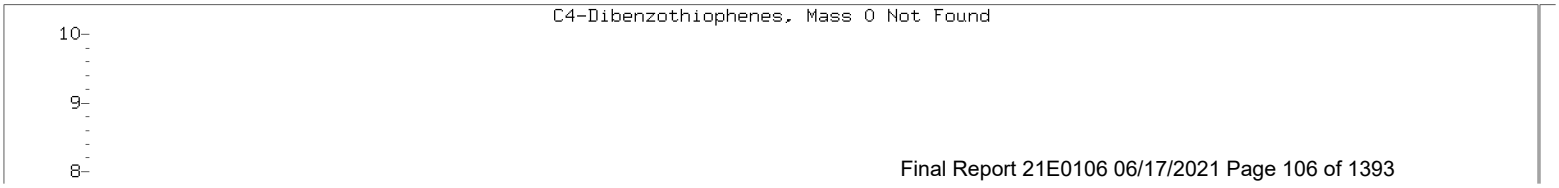

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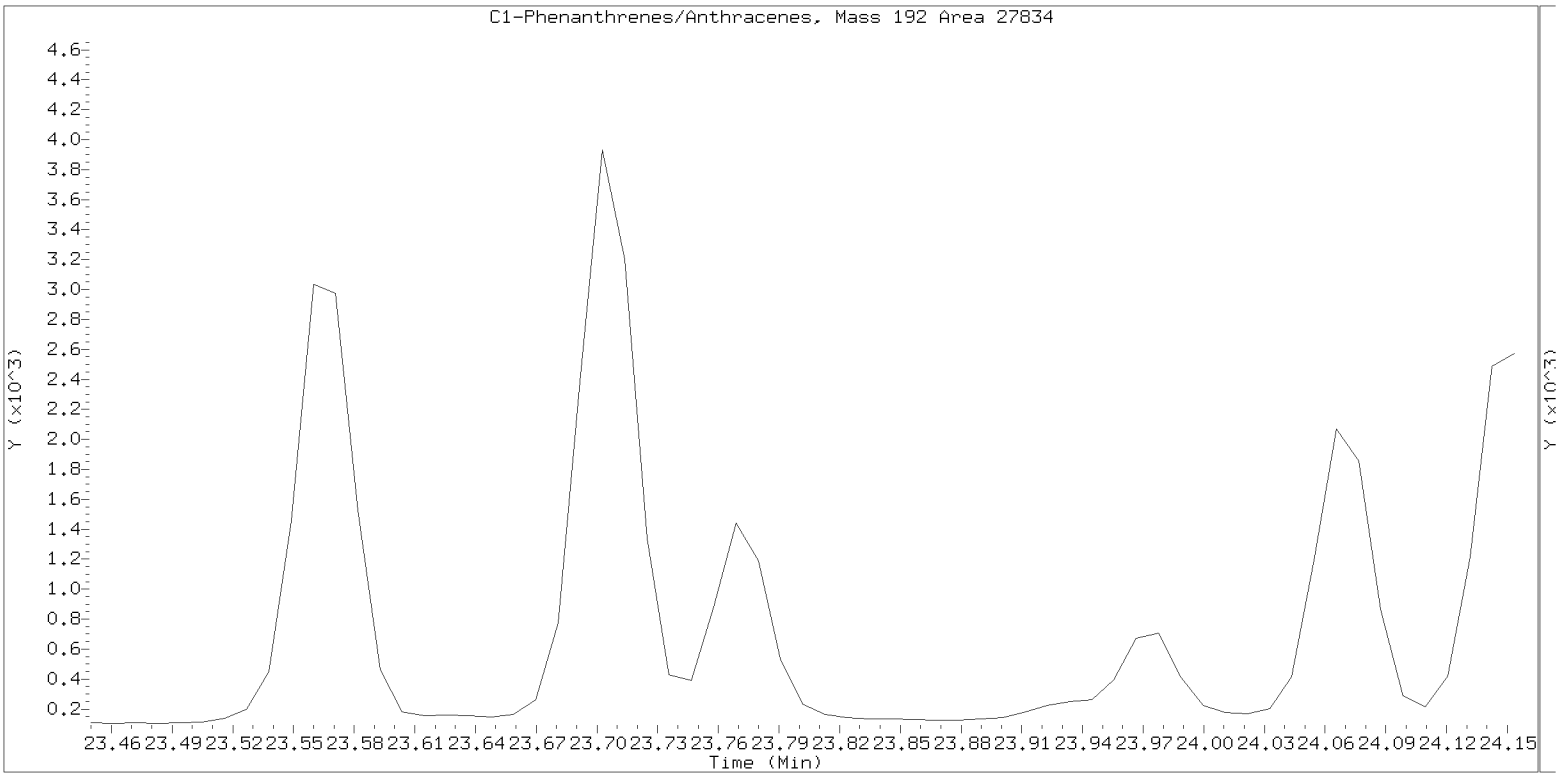

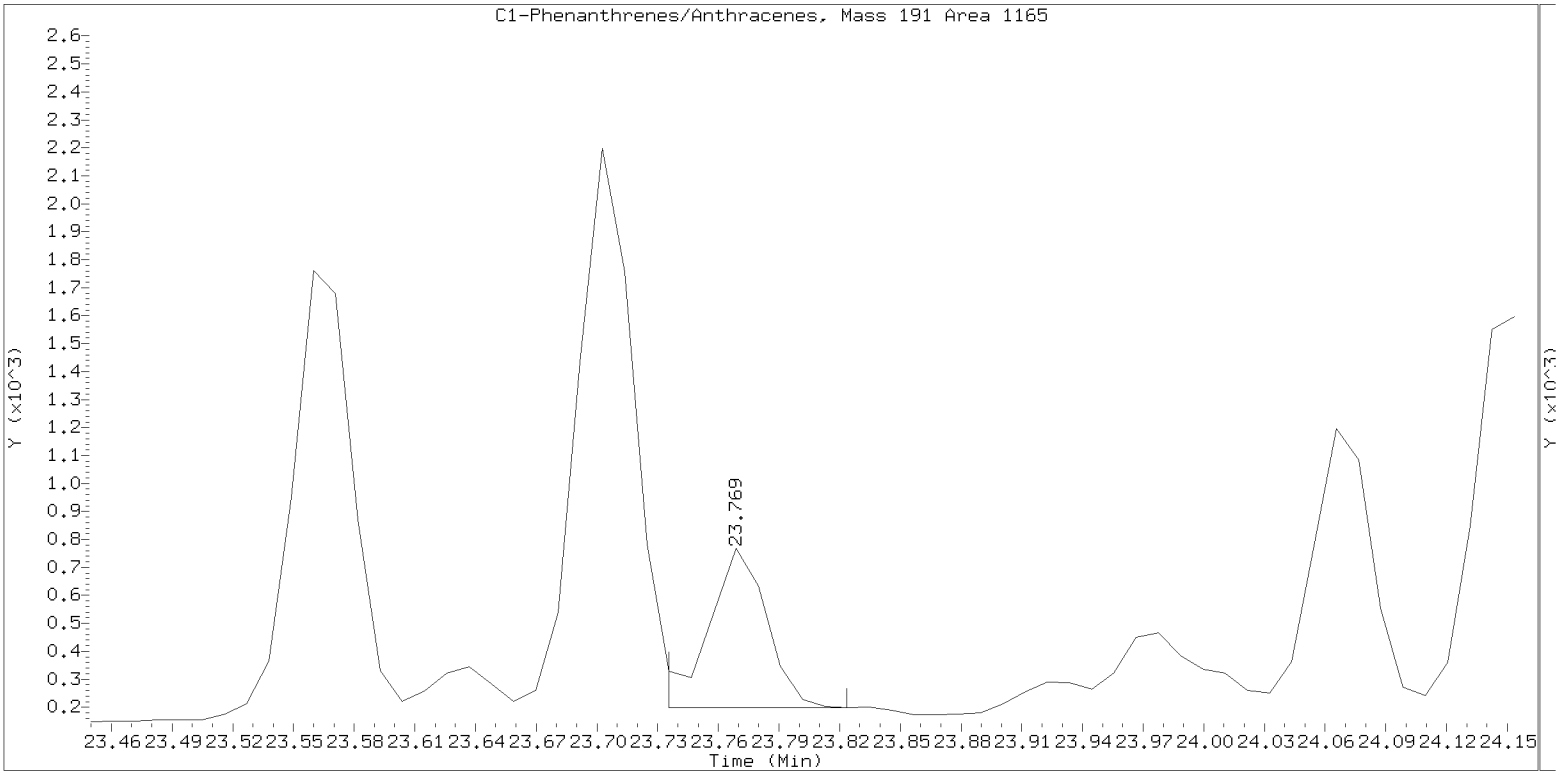

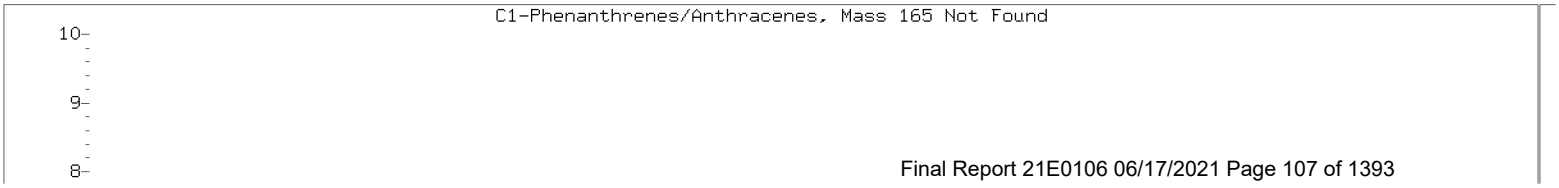

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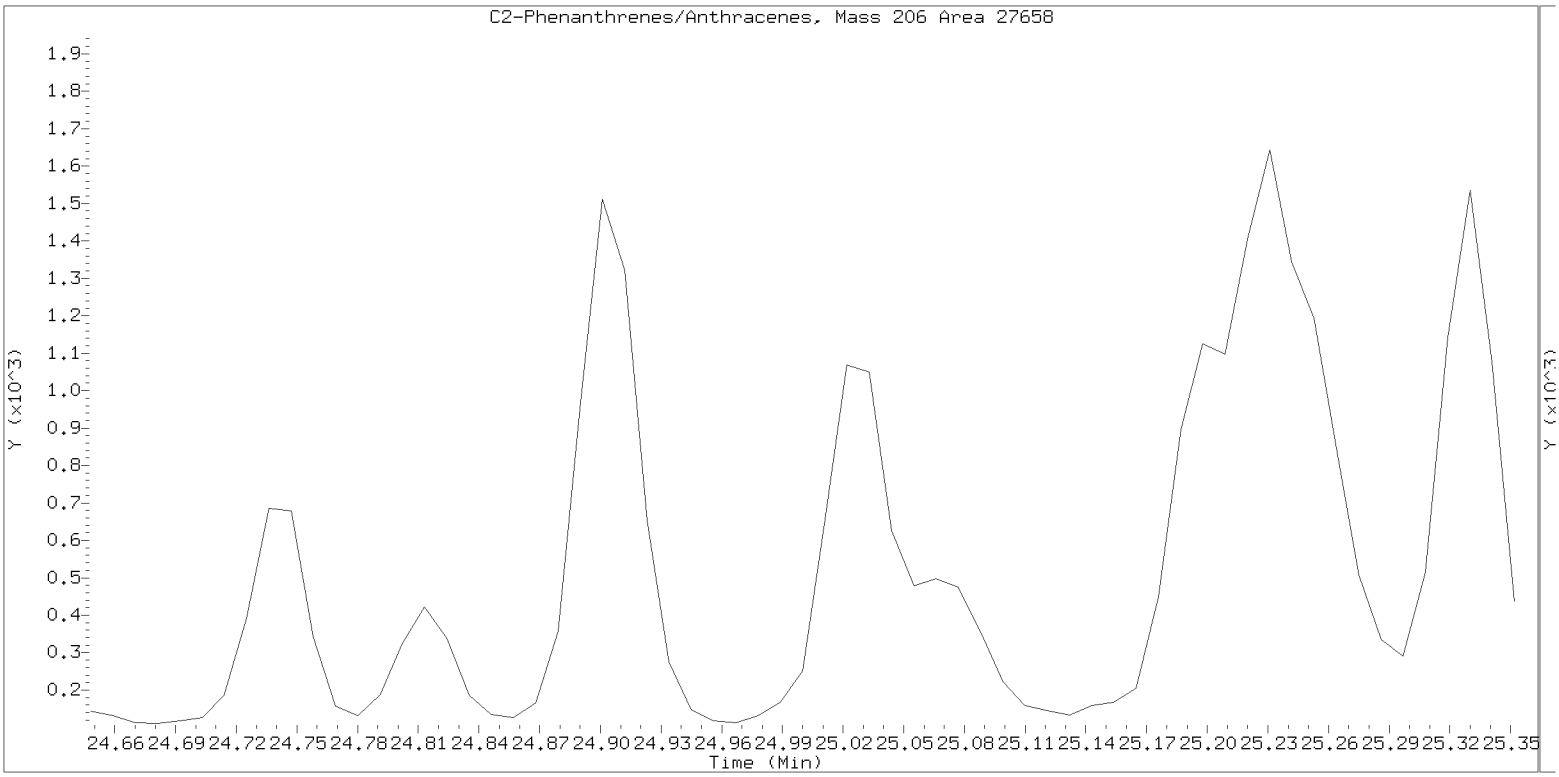

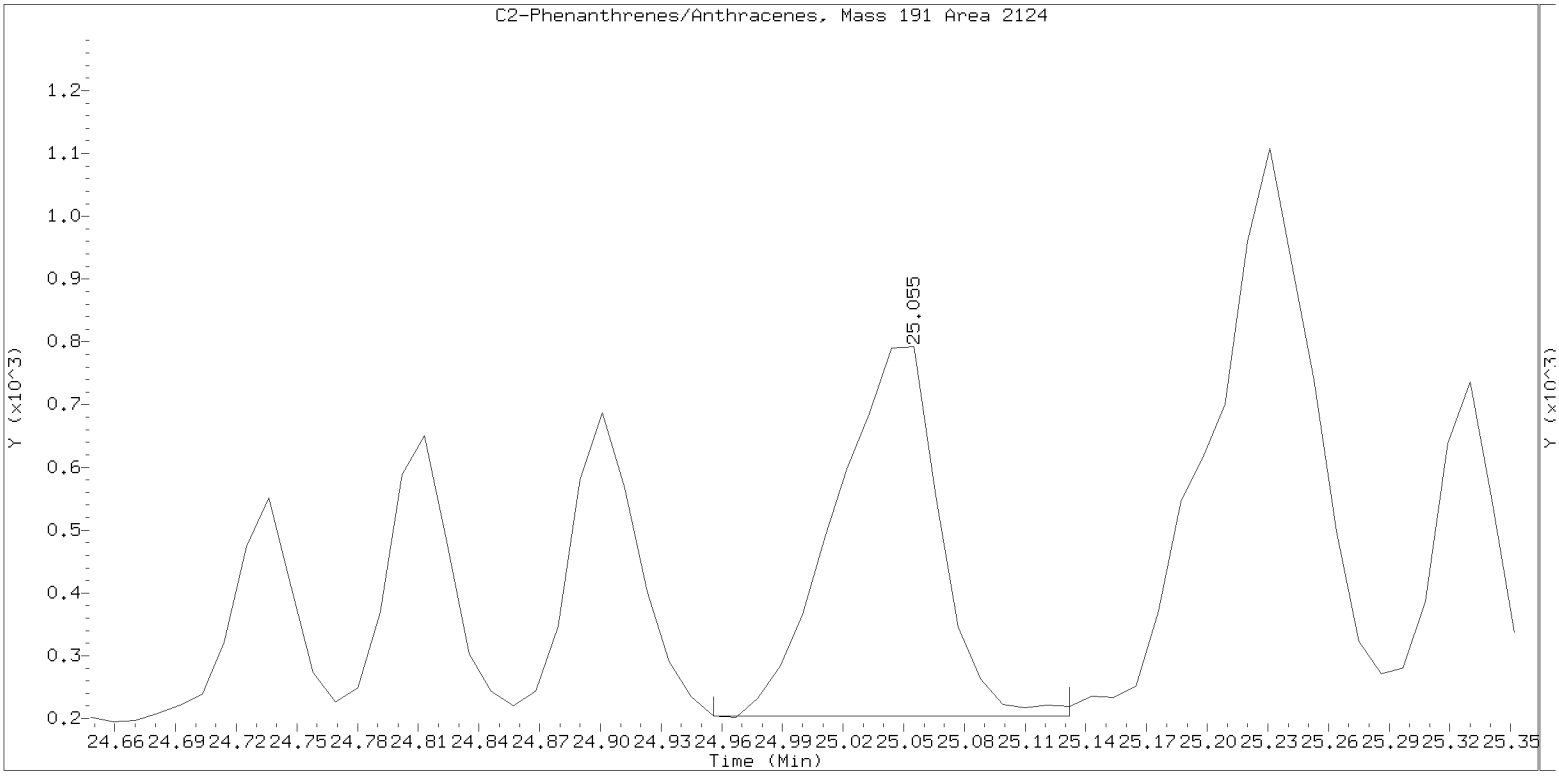

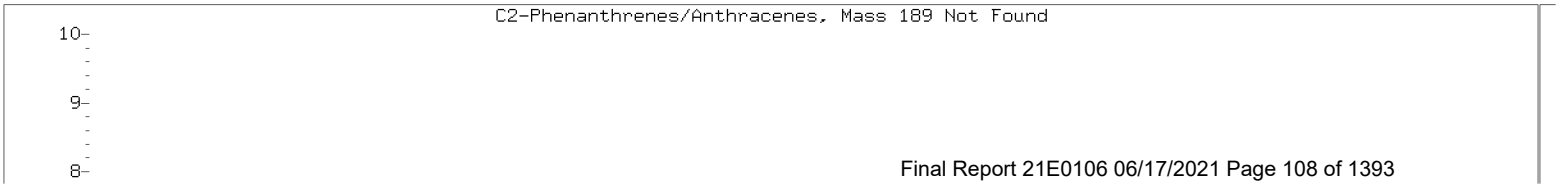

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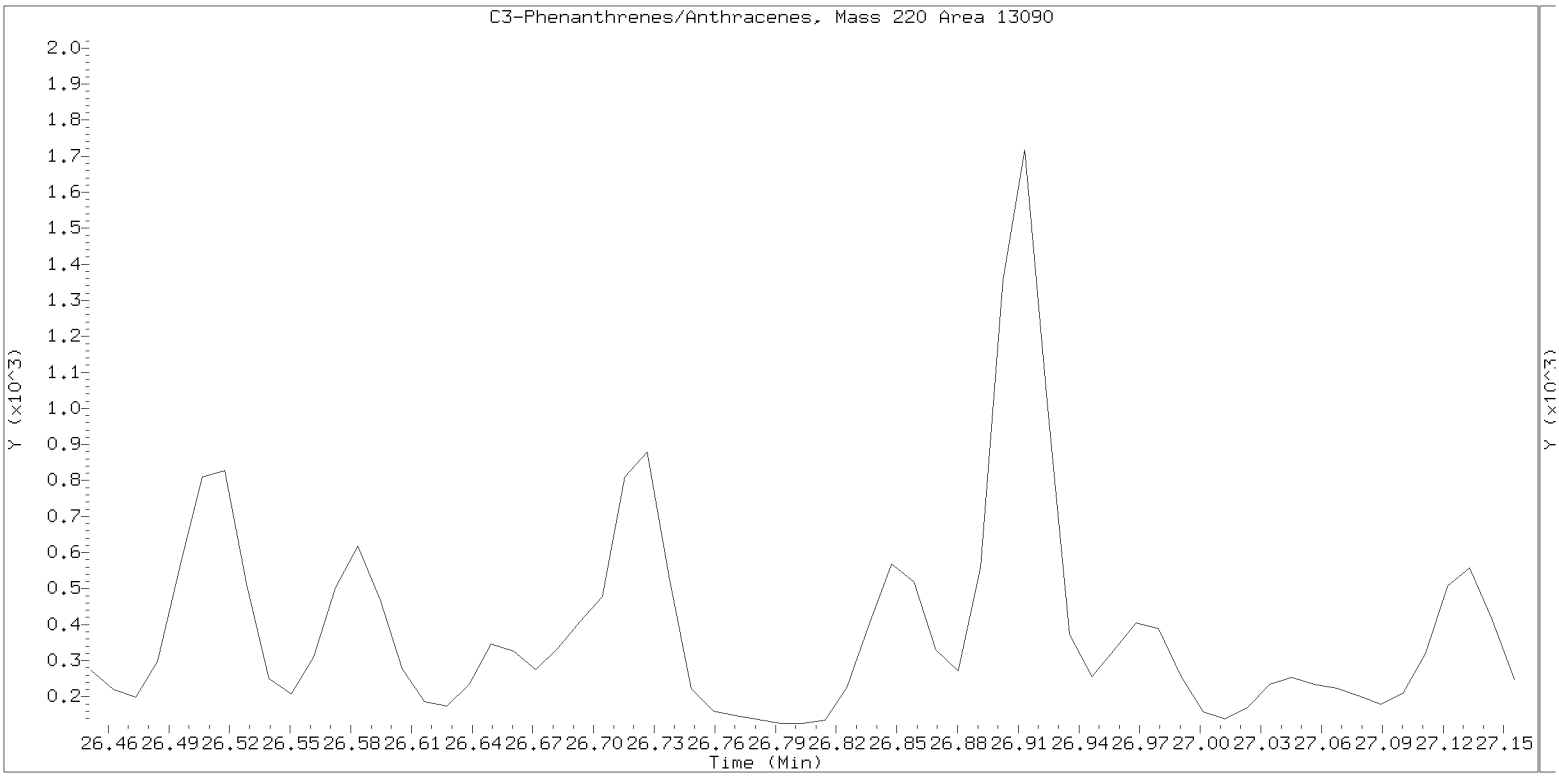
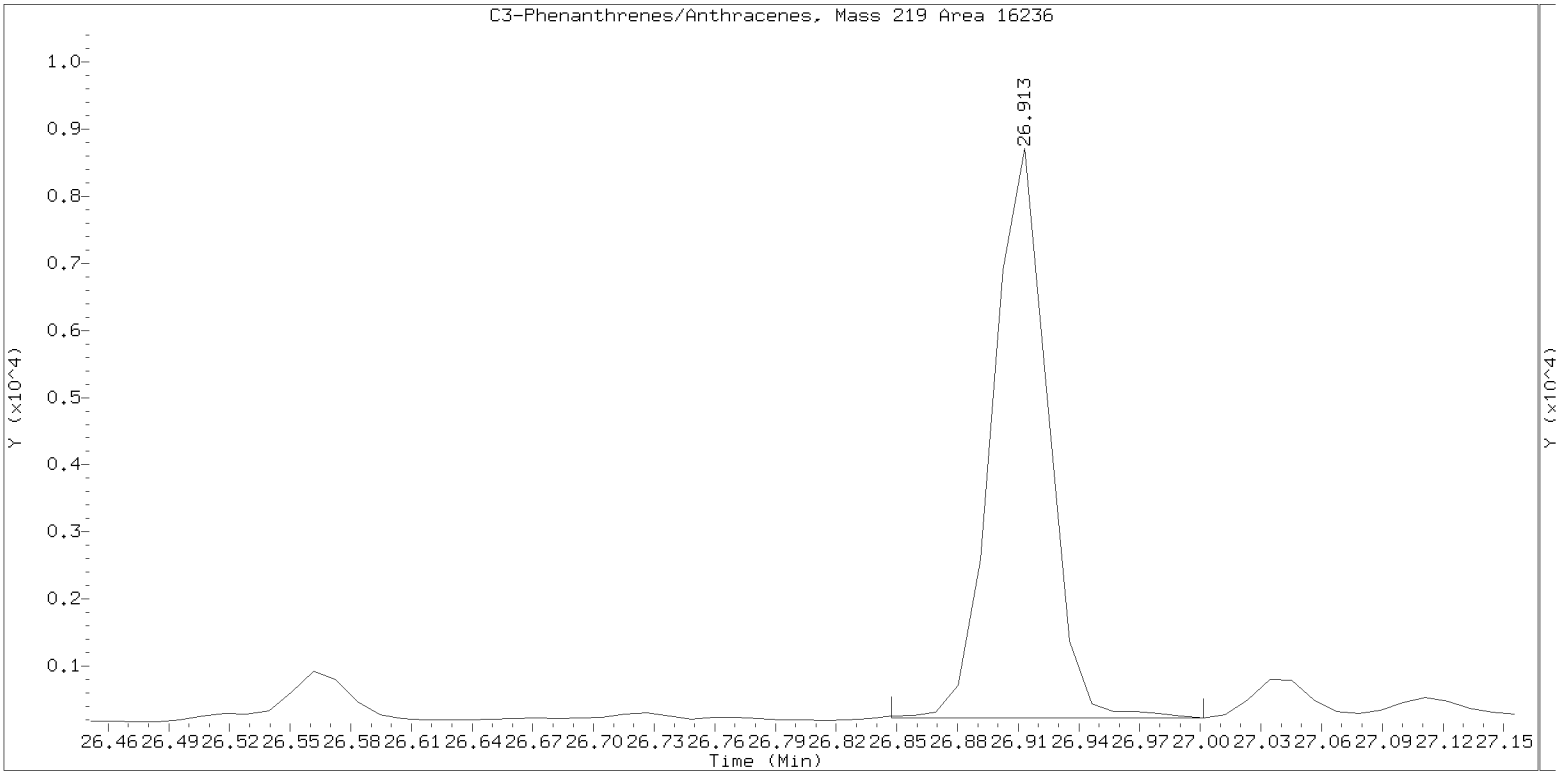
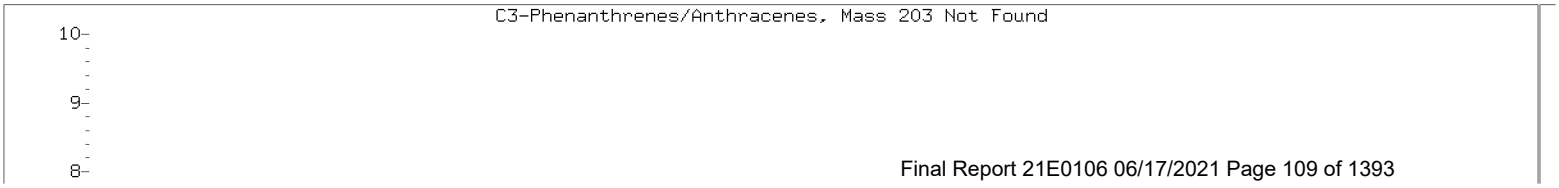
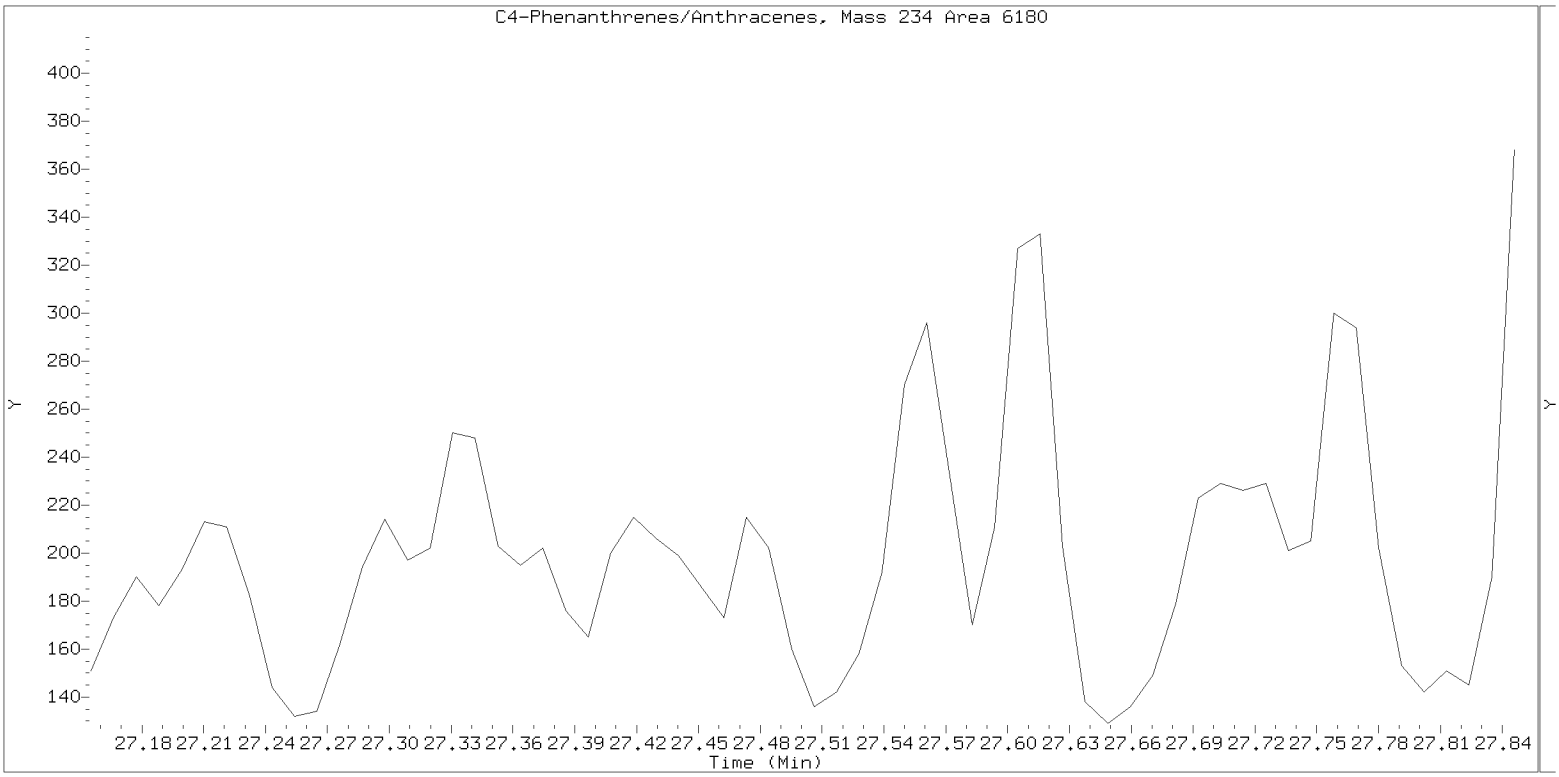


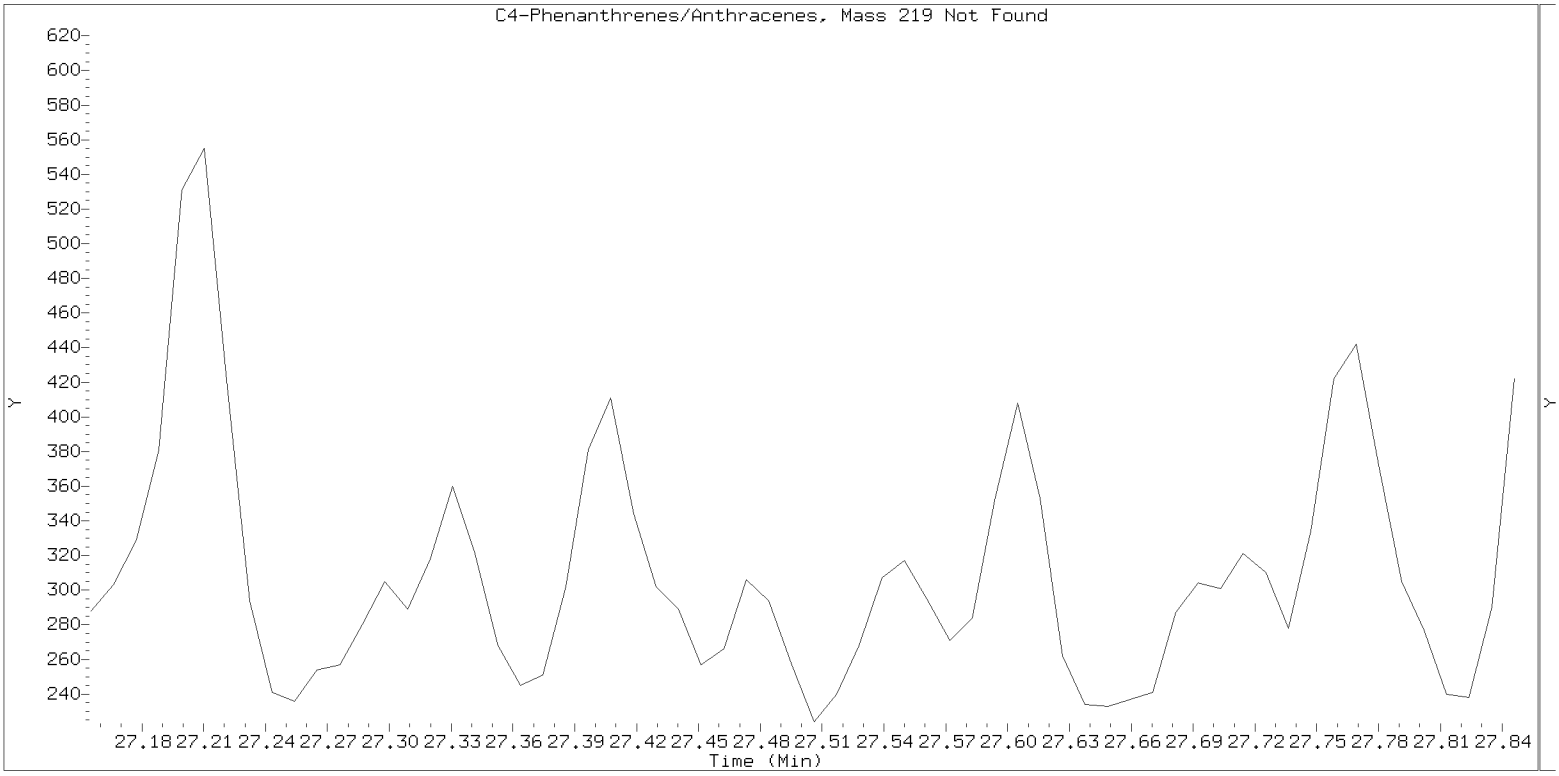




SIM ALKYL PNA RANGE ION WINDOWS - NT1421060710S.D

Lab ID: 21E0106-01
nt14.i, SIM.b\ALKYLRANGES.m, 07-JUN-2021 19:42





SIM ALKYL PNA RANGE ION WINDOWS - NT1421060710S.D

Lab ID: 21E0106-01
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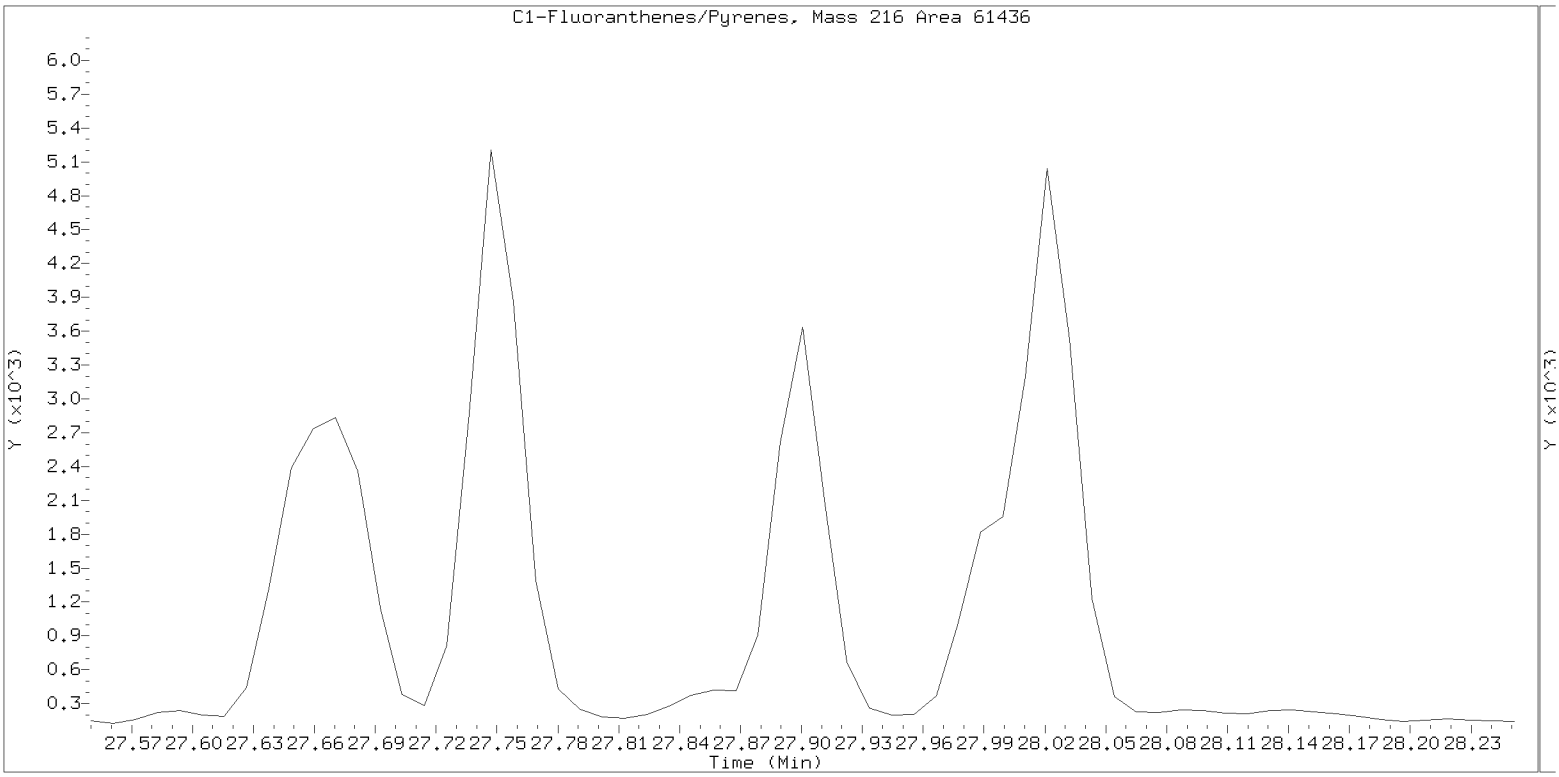

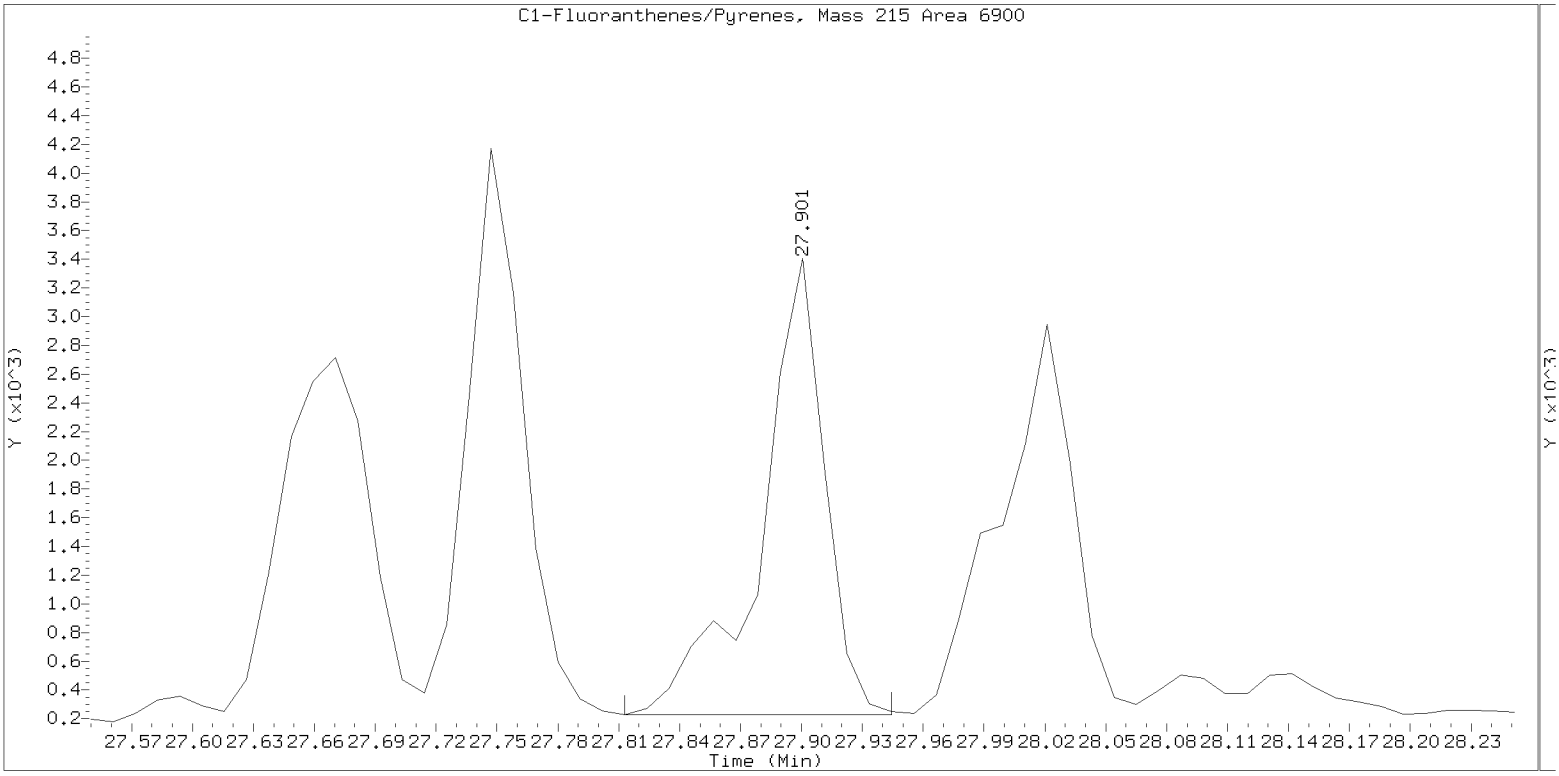

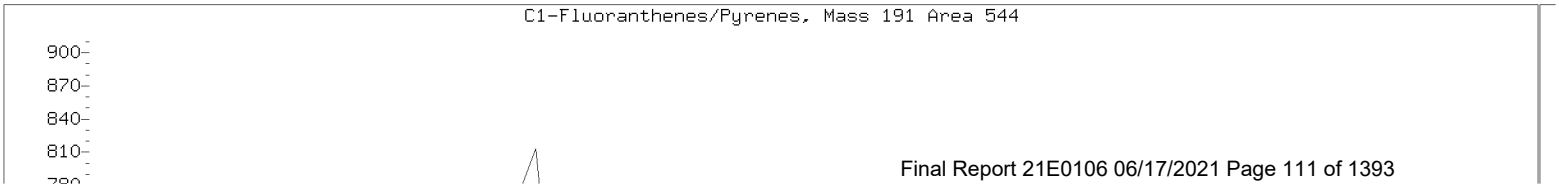

SIM ALKYL PNA RANGE ION WINDOWS - NT1421060710S.D

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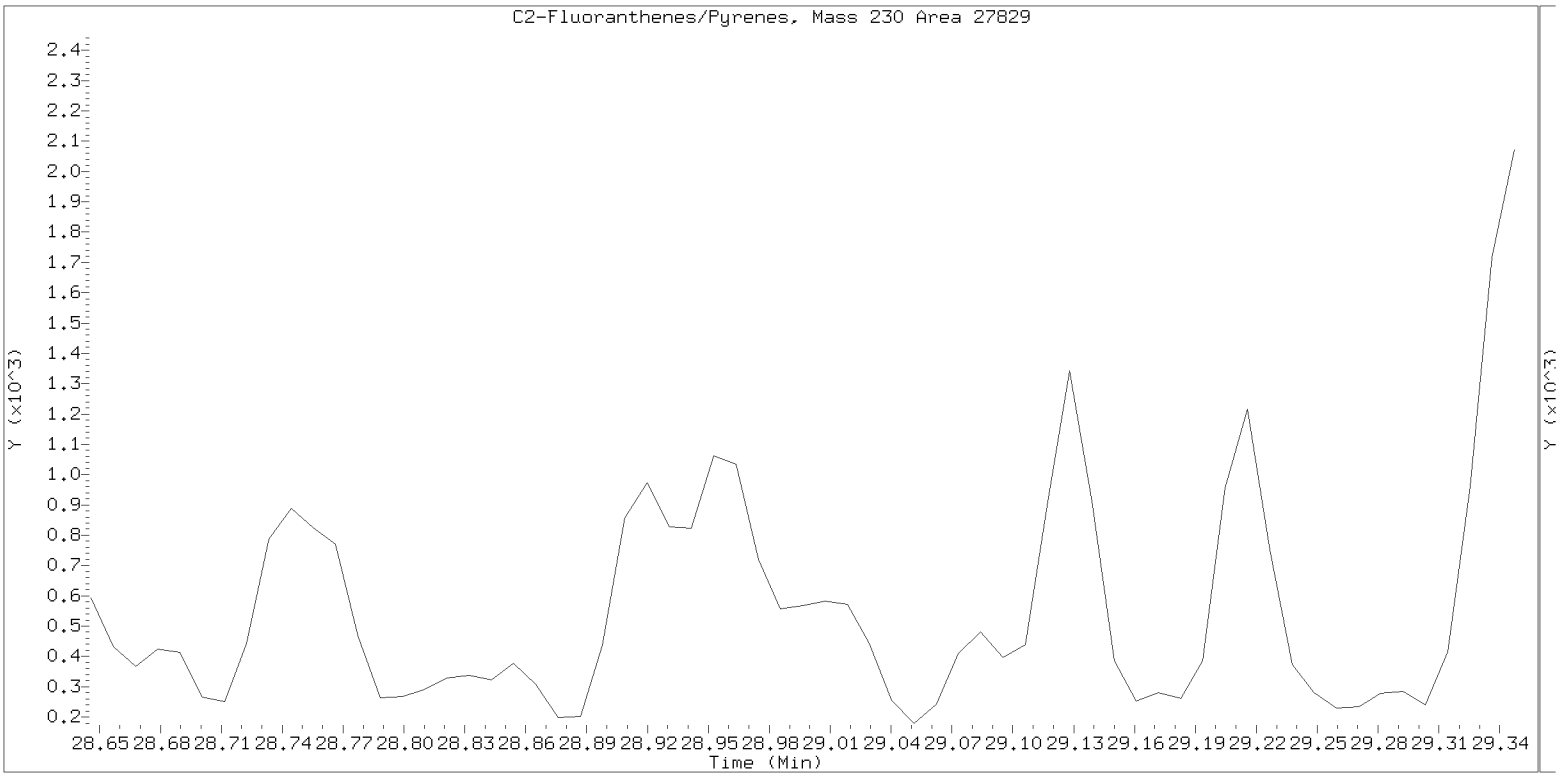

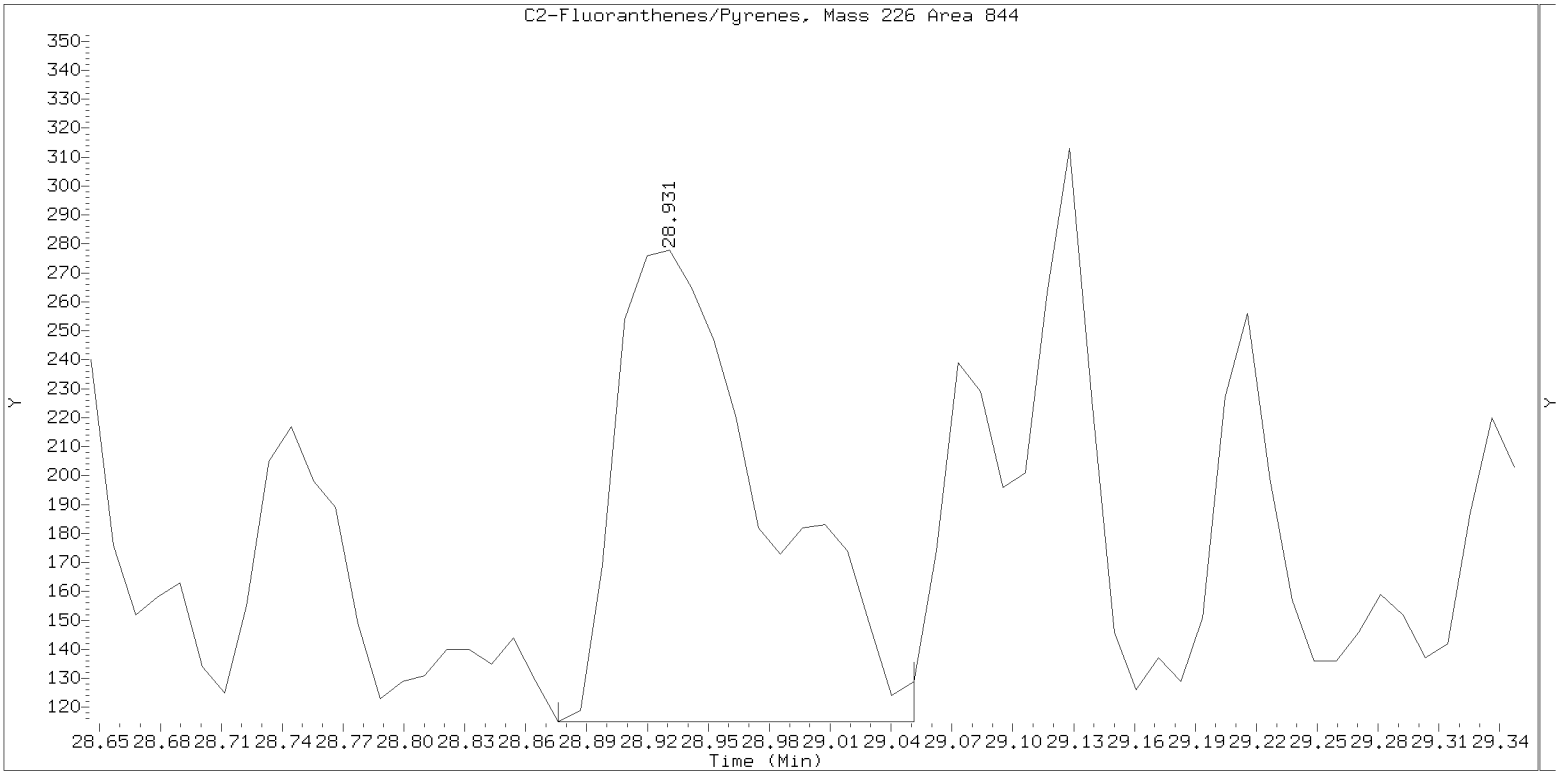

SIM ALKYL PNA RANGE ION WINDOWS - NT1421060710S.D

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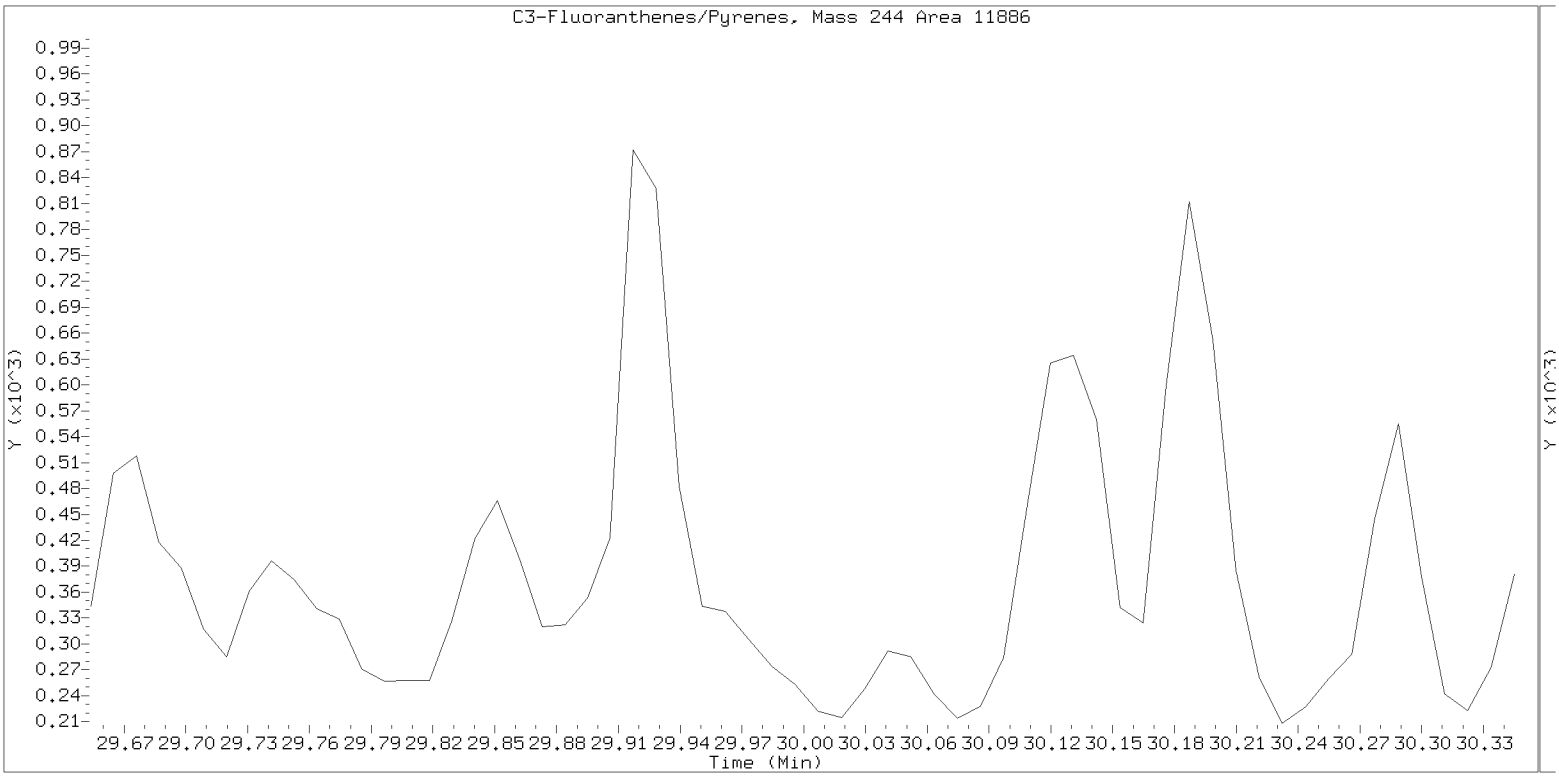

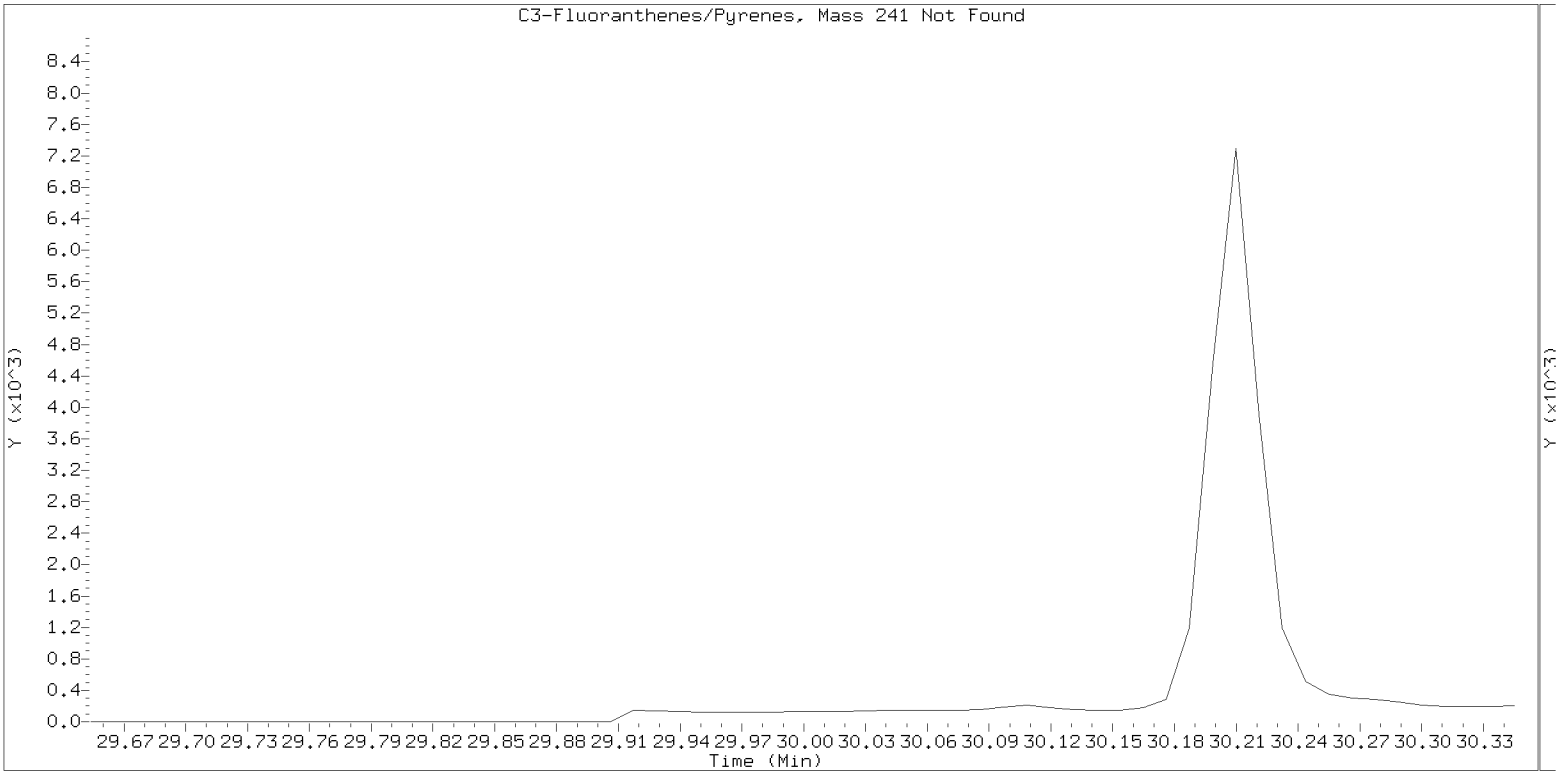

SIM ALKYL PNA RANGE ION WINDOWS - NT1421060710S.D

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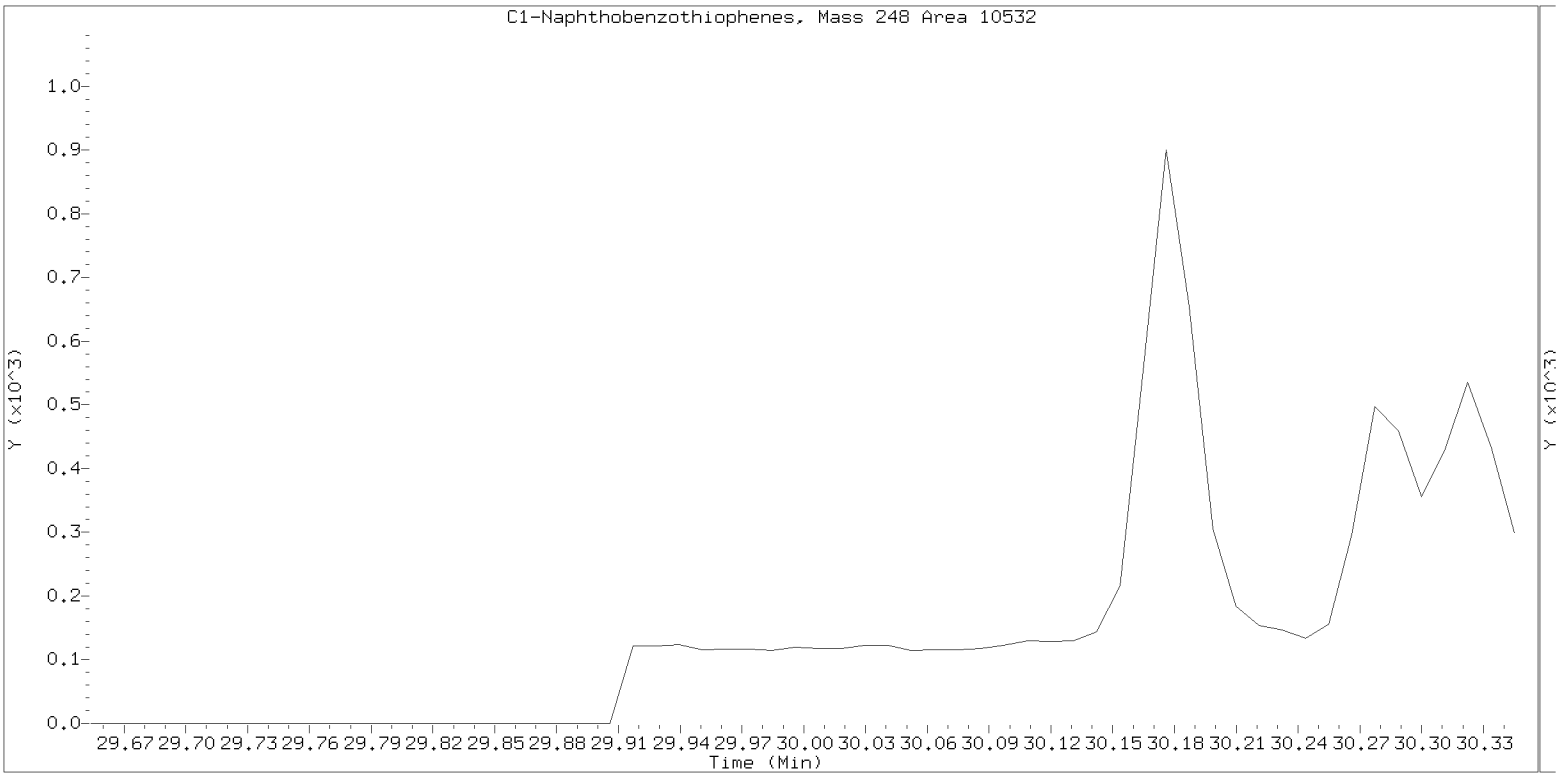

SIM ALKYL PNA RANGE ION WINDOWS - NT1421060710S.D

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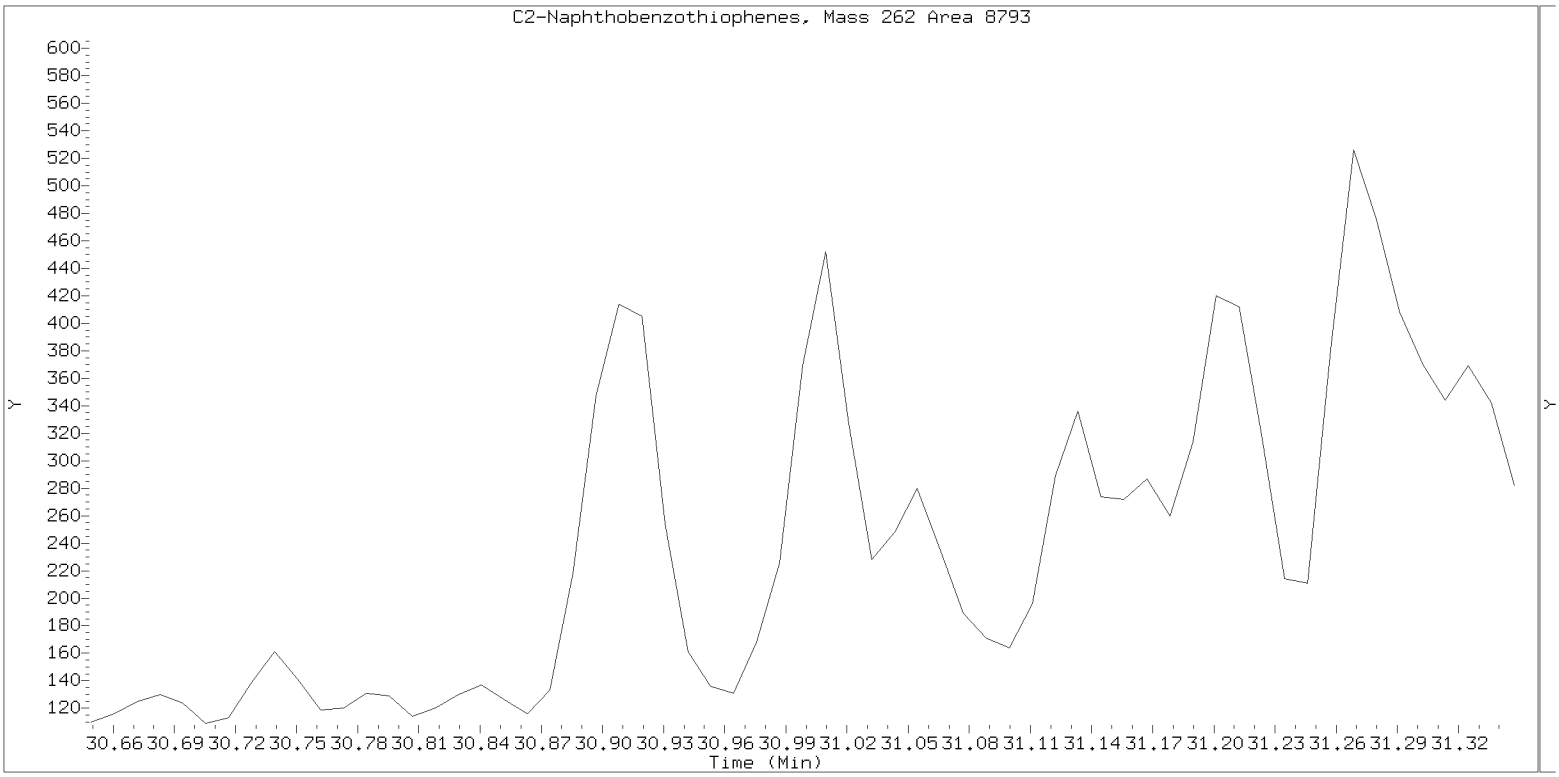

SIM ALKYL PNA RANGE ION WINDOWS - NT1421060710S.D

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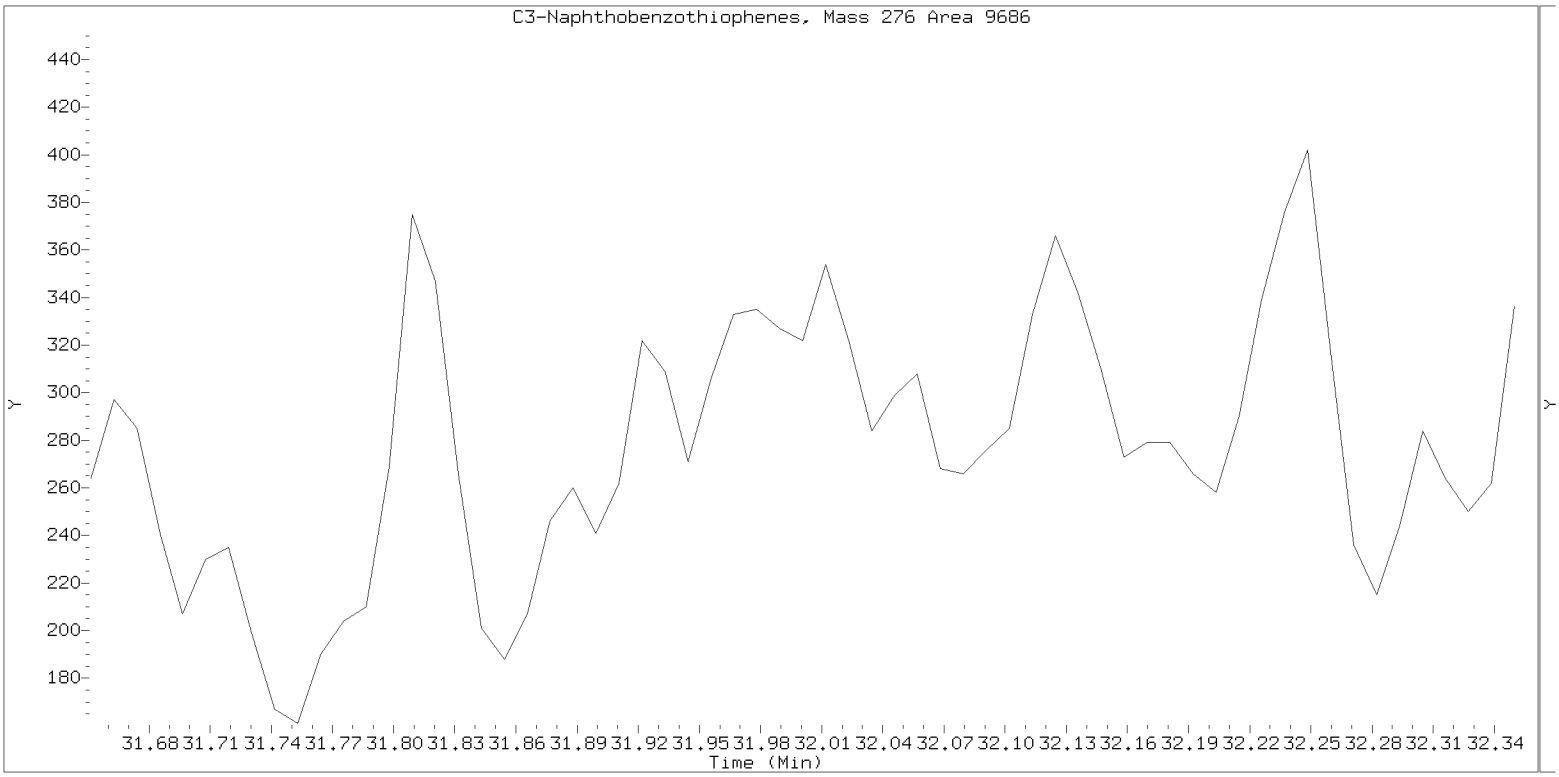

SIM ALKYL PNA RANGE ION WINDOWS - NT1421060710S.D

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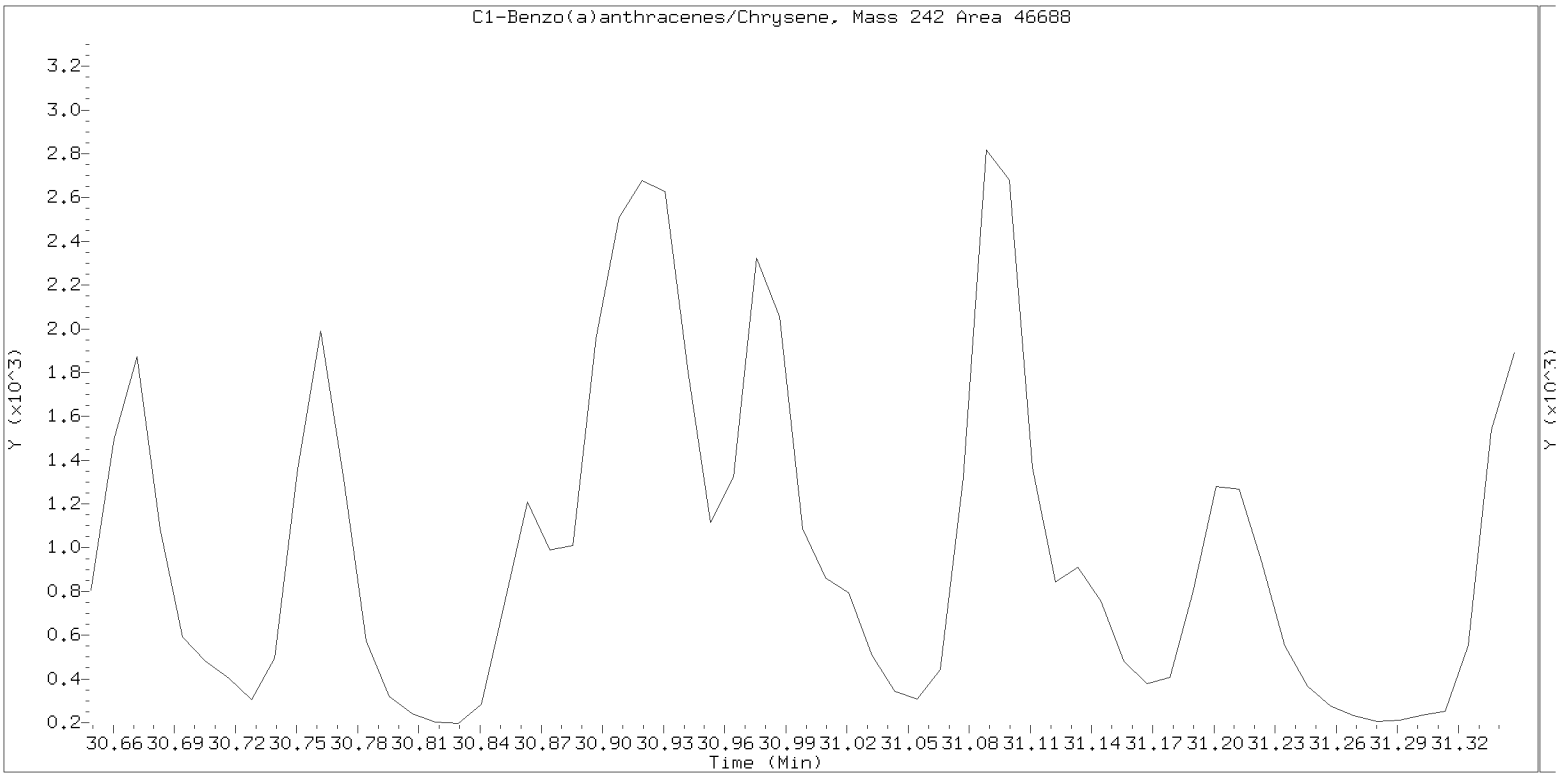

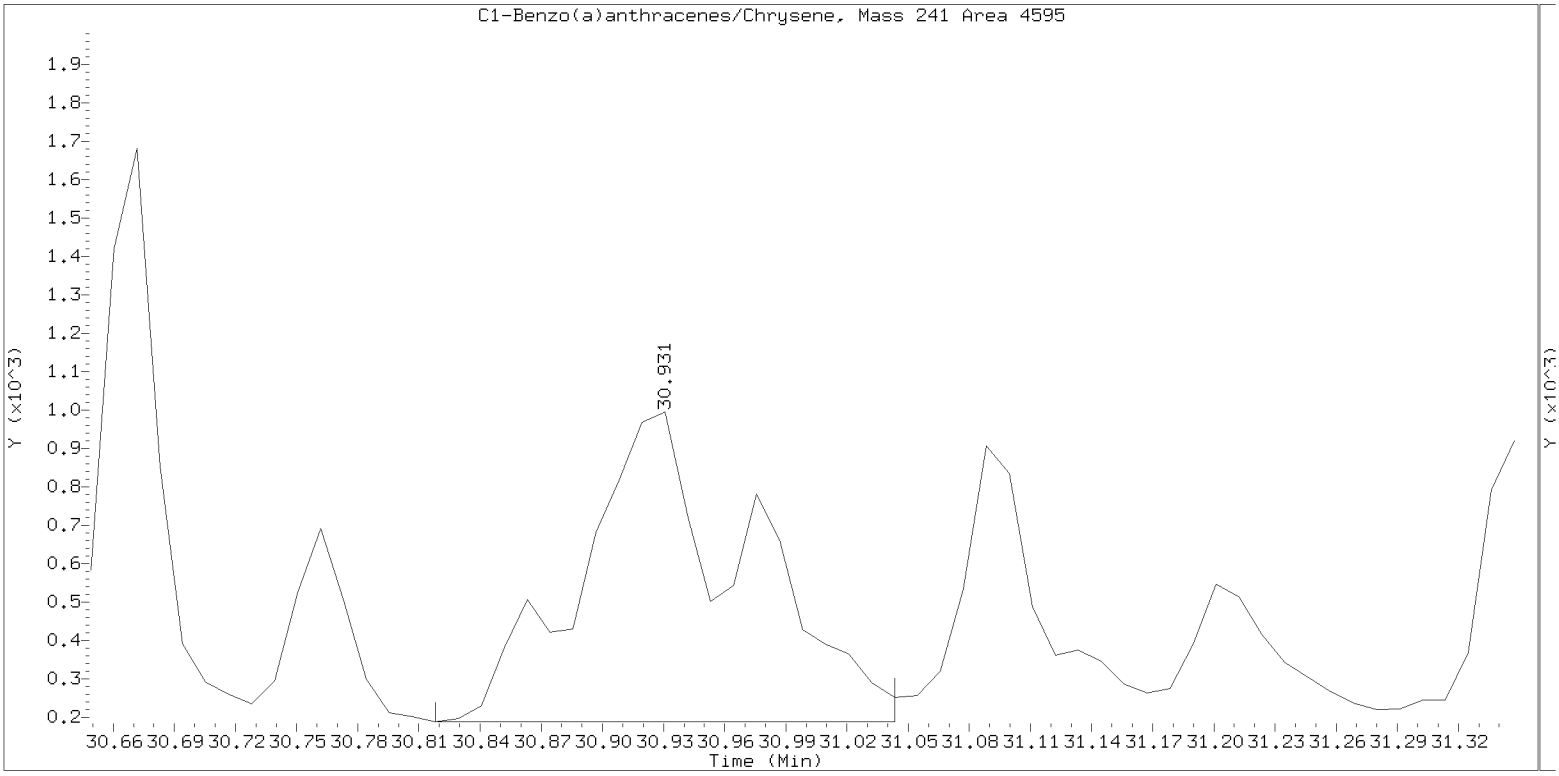

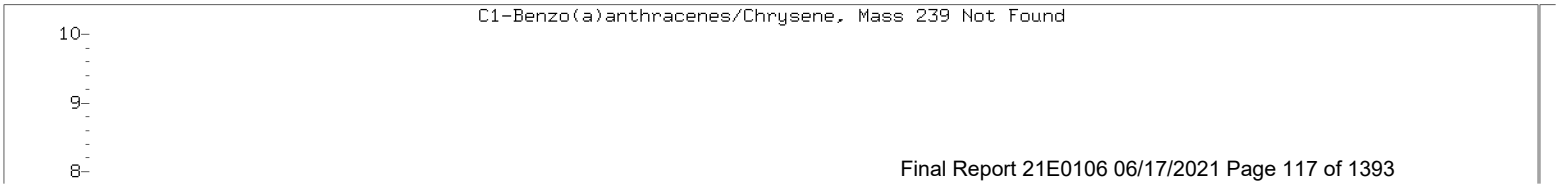

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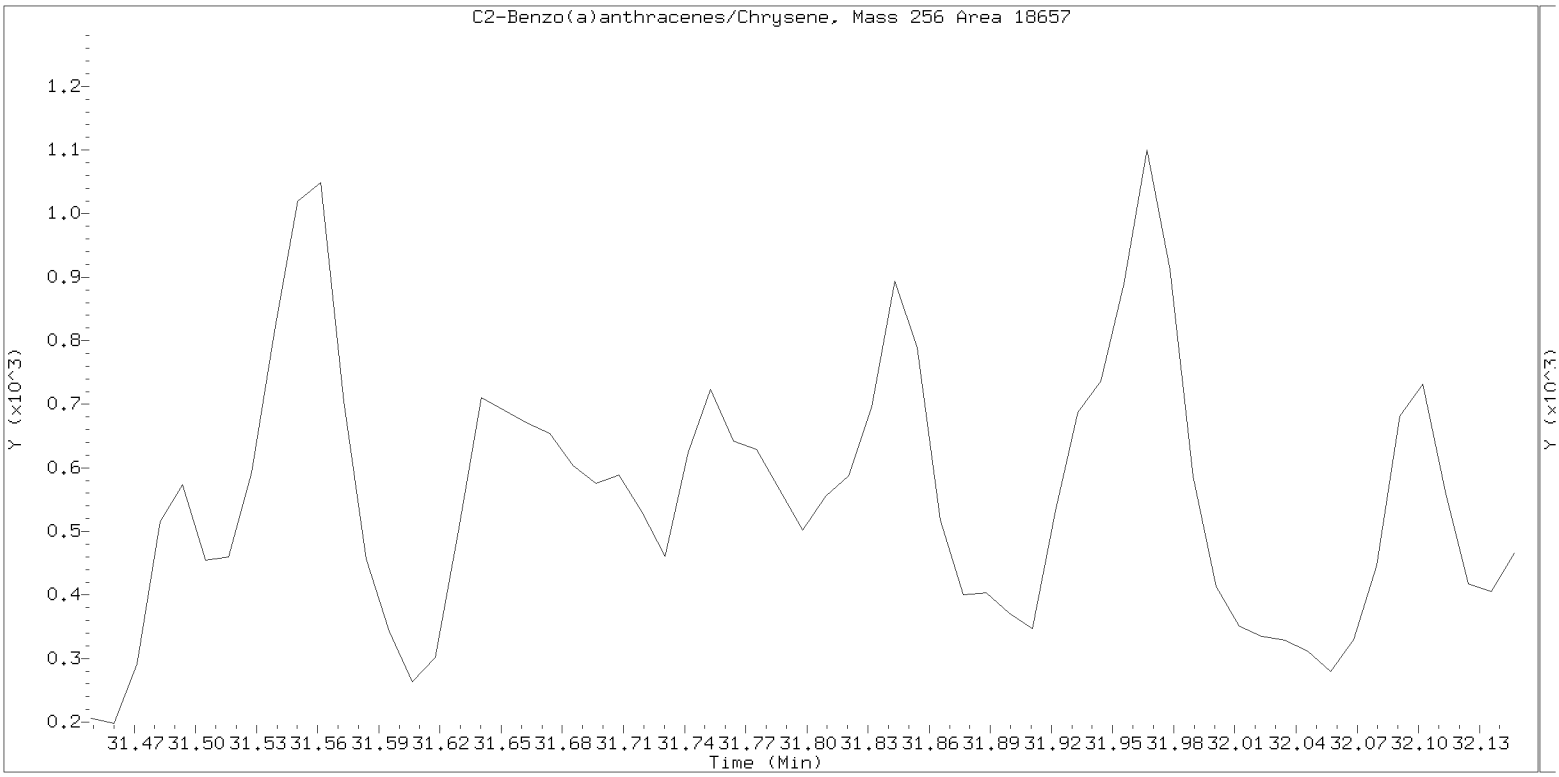

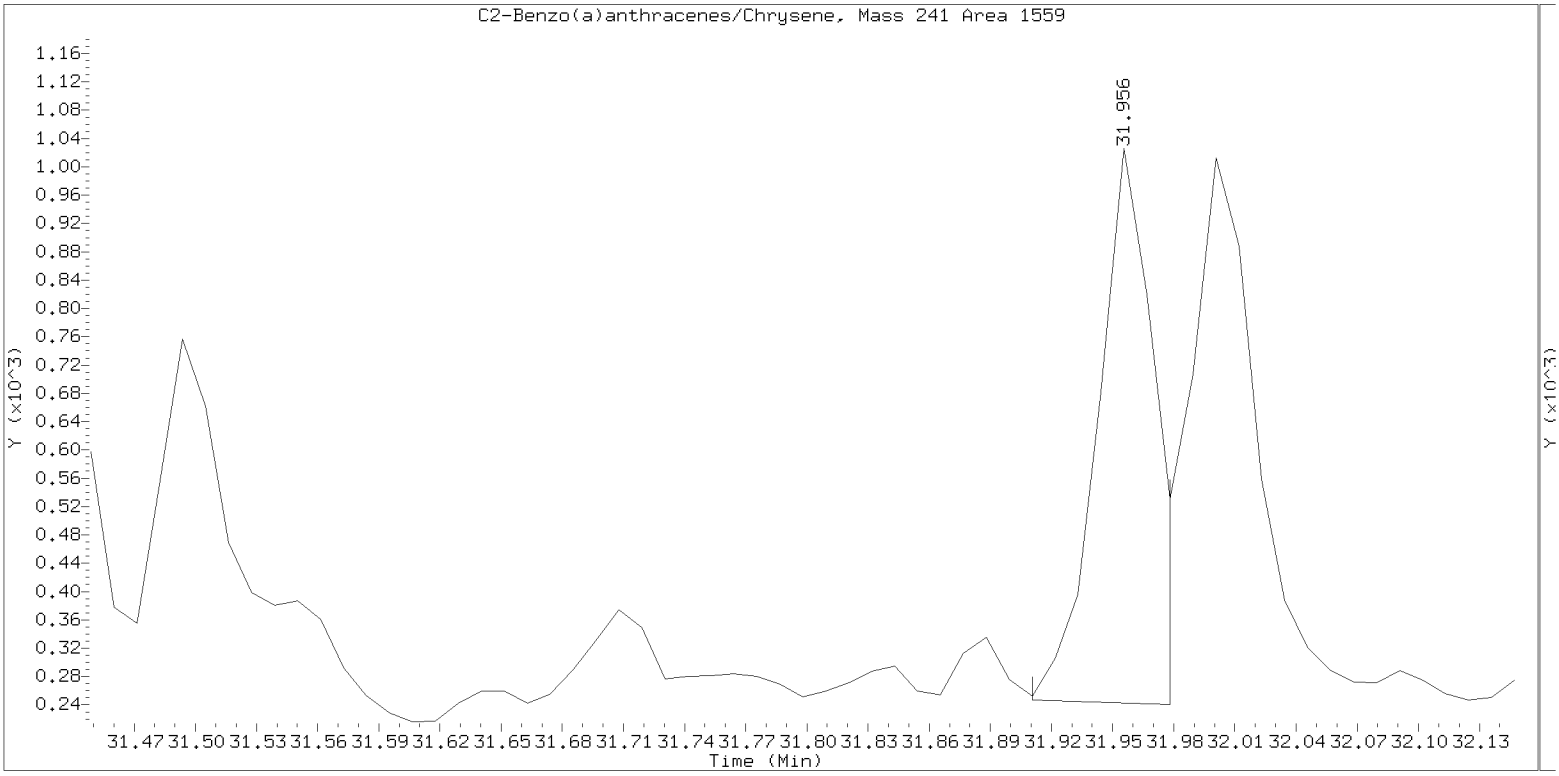

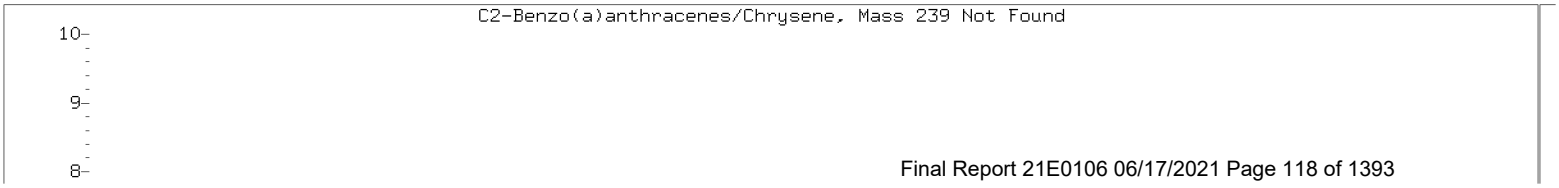

SIM ALKYL PNA RANGE ION WINDOWS - NT1421060710S.D

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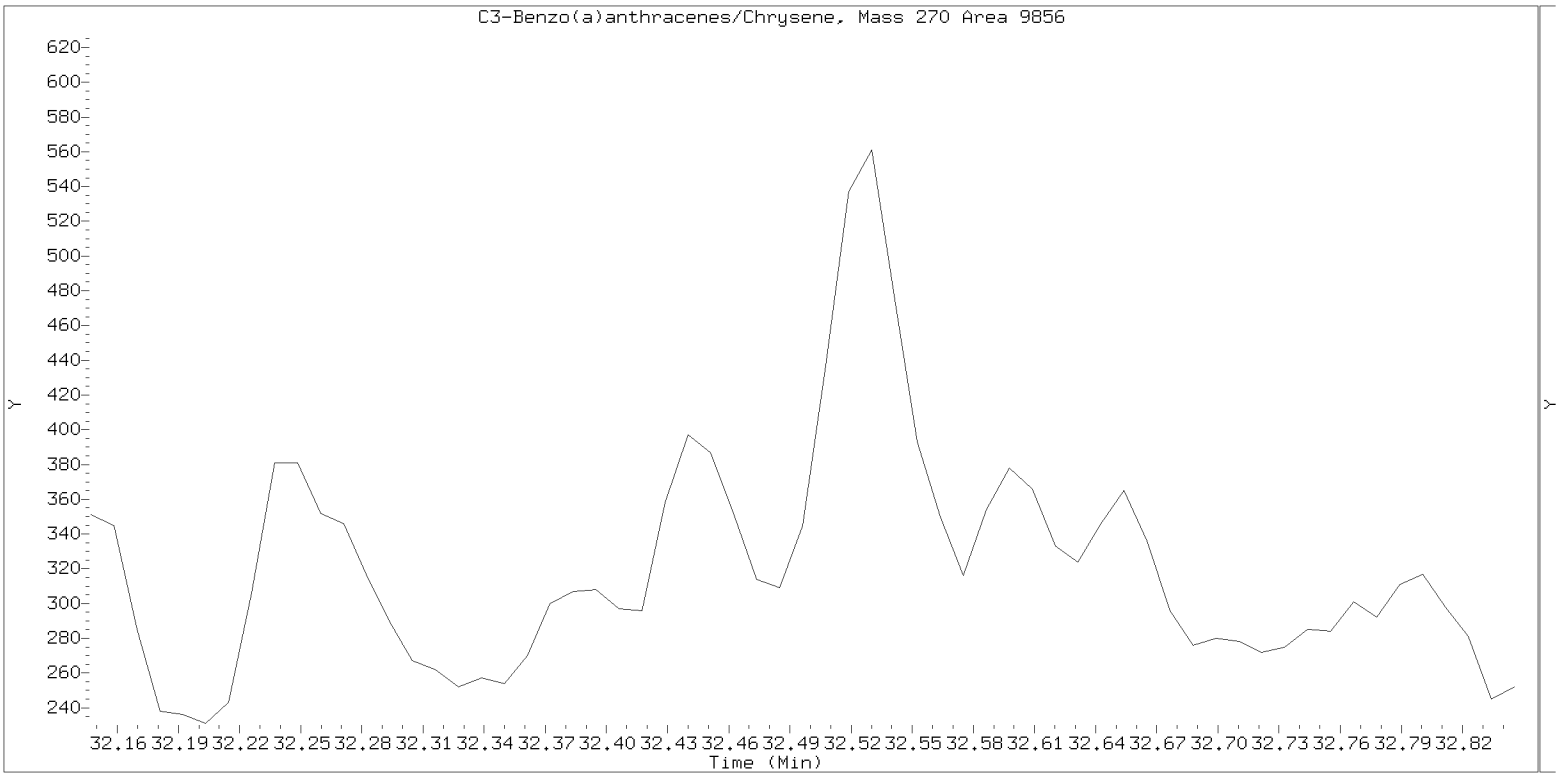

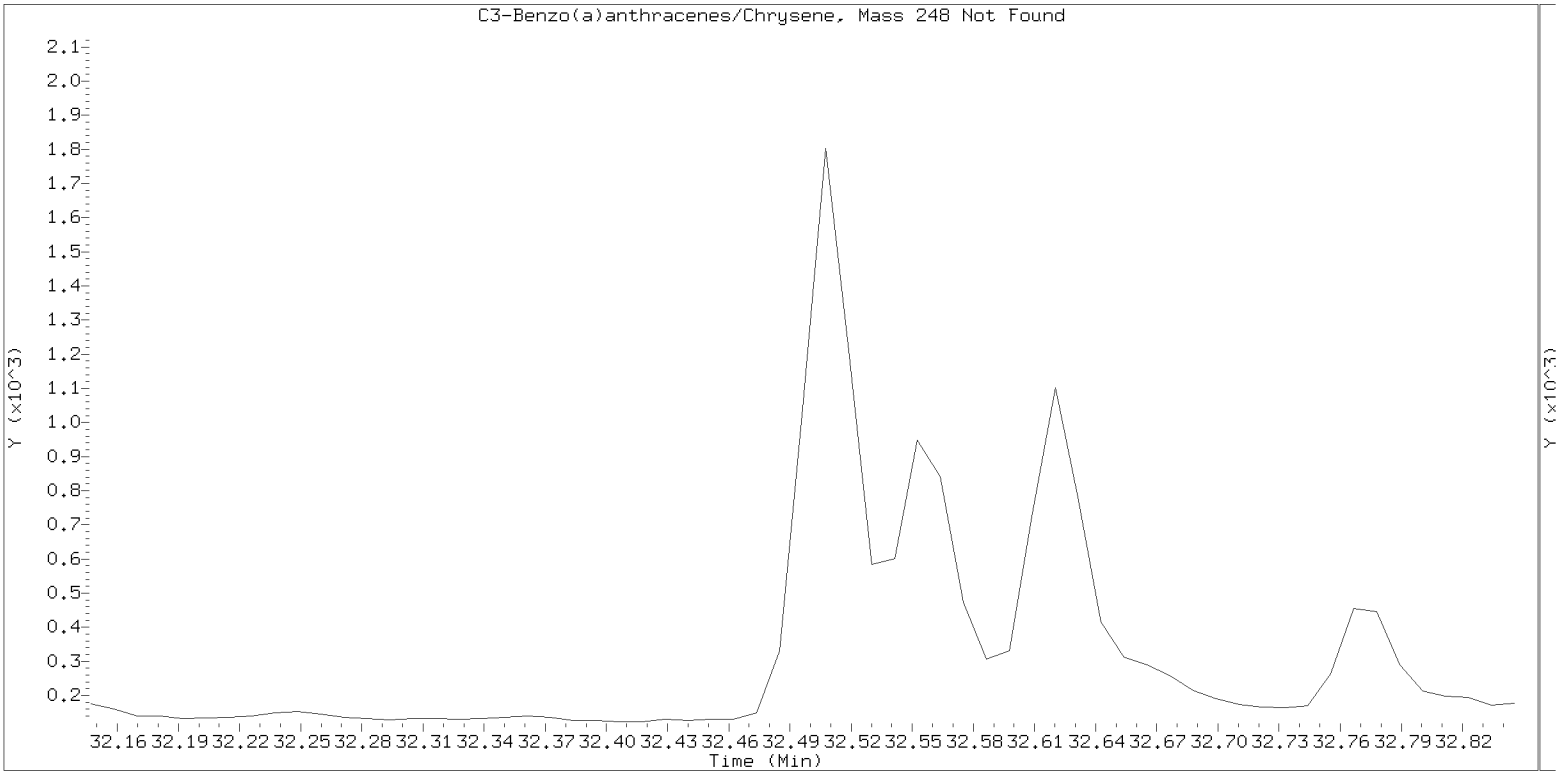

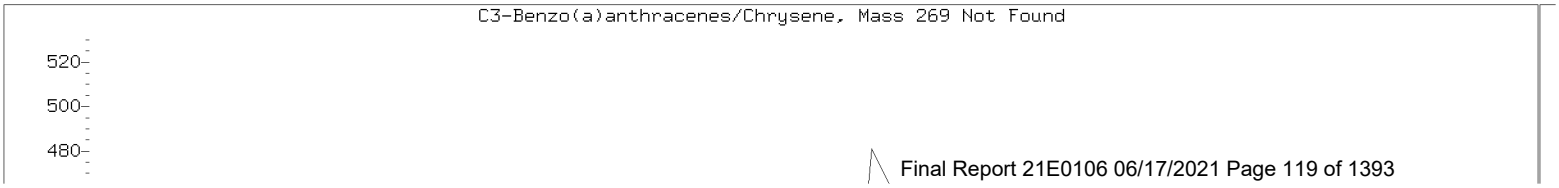

SIM ALKYL PNA RANGE ION WINDOWS - NT1421060710S.D

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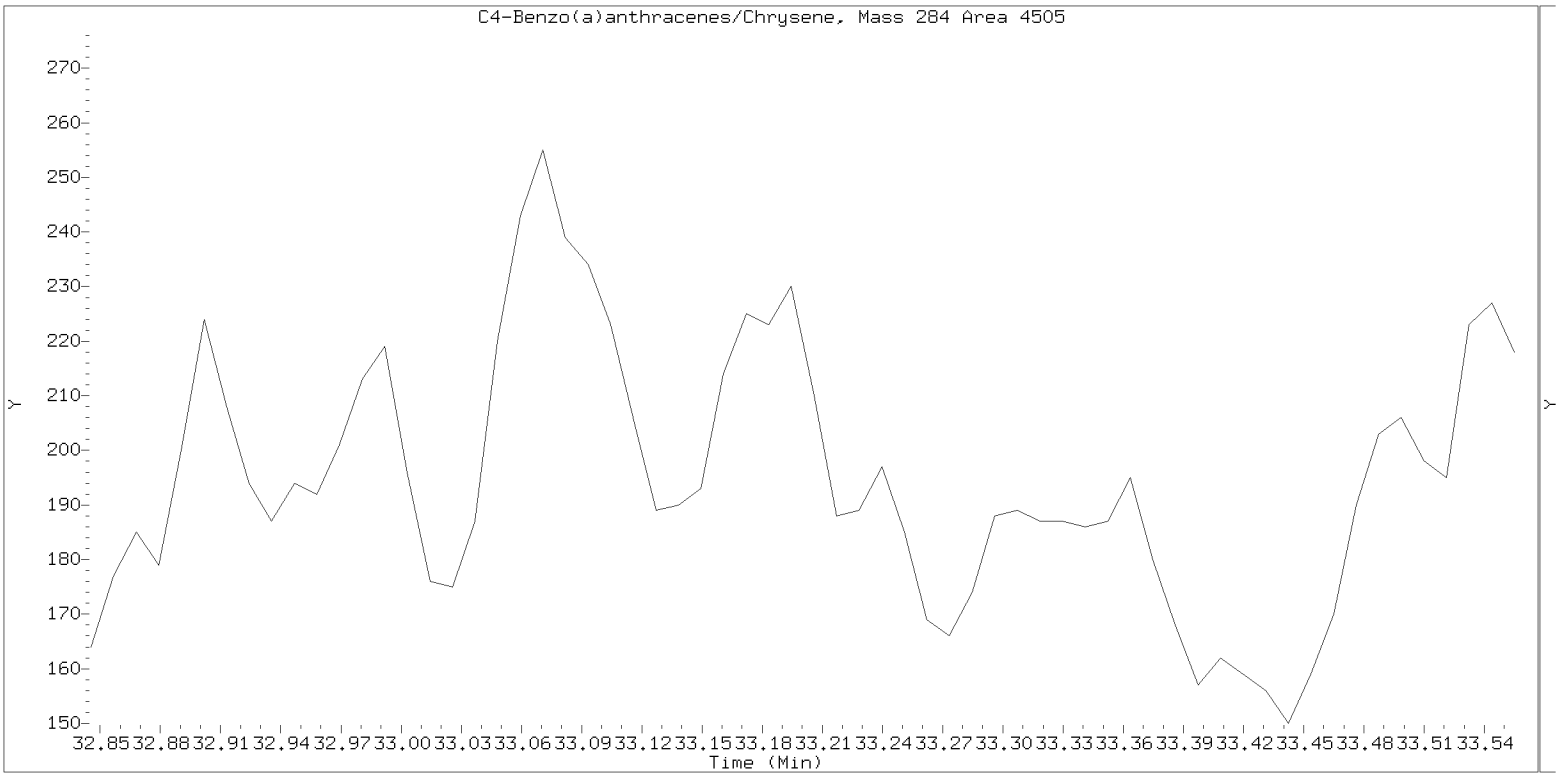

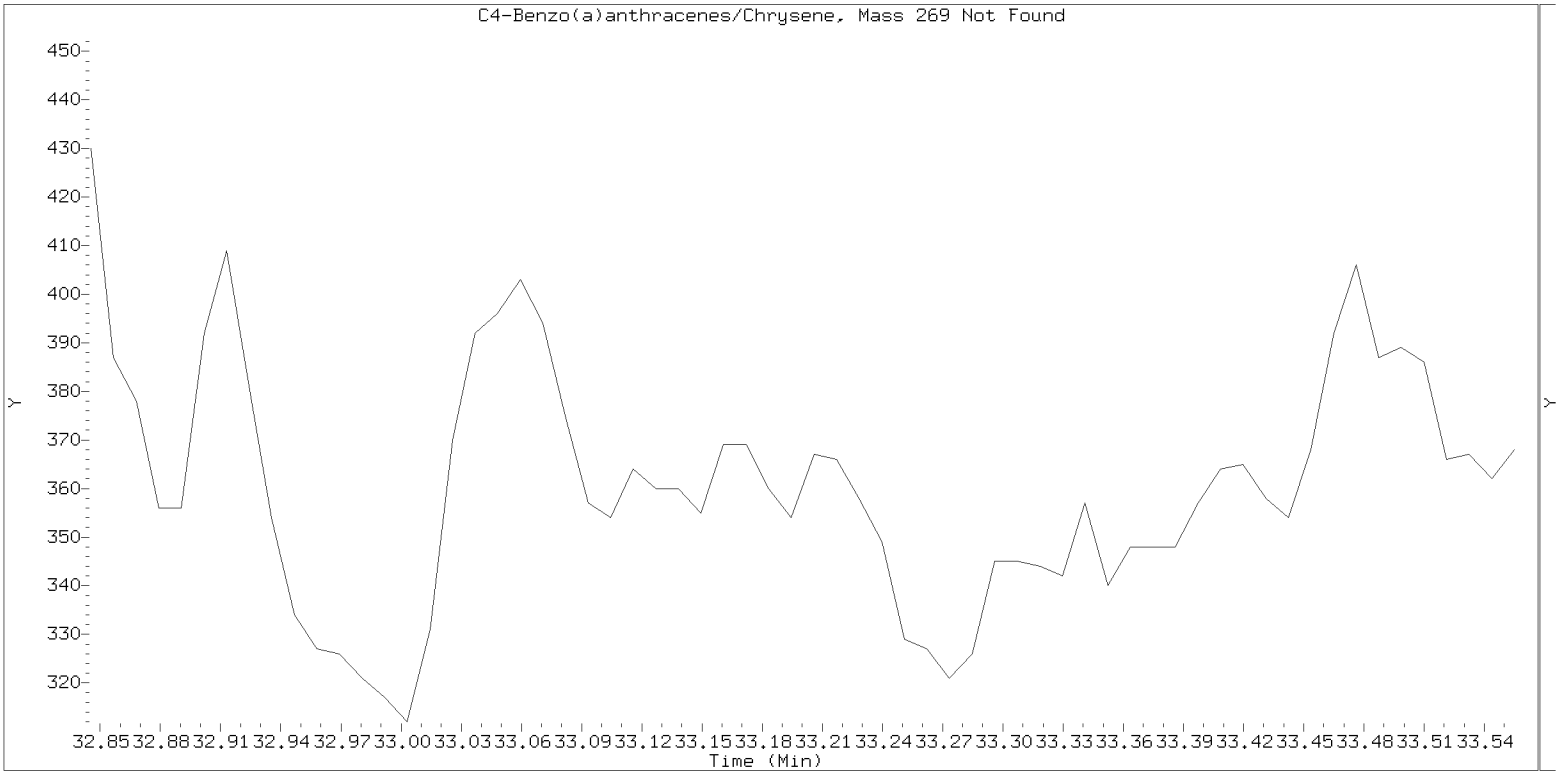

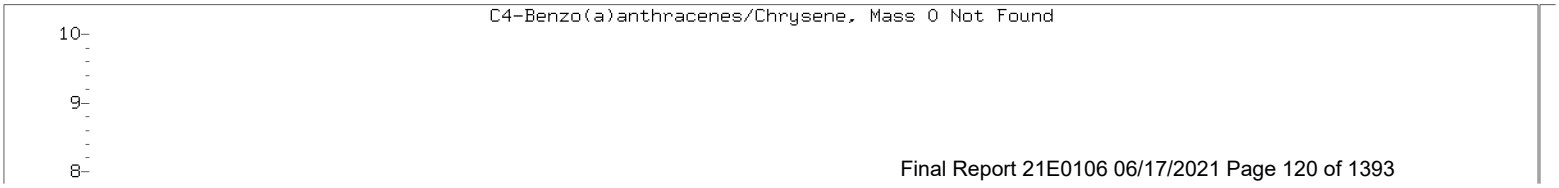

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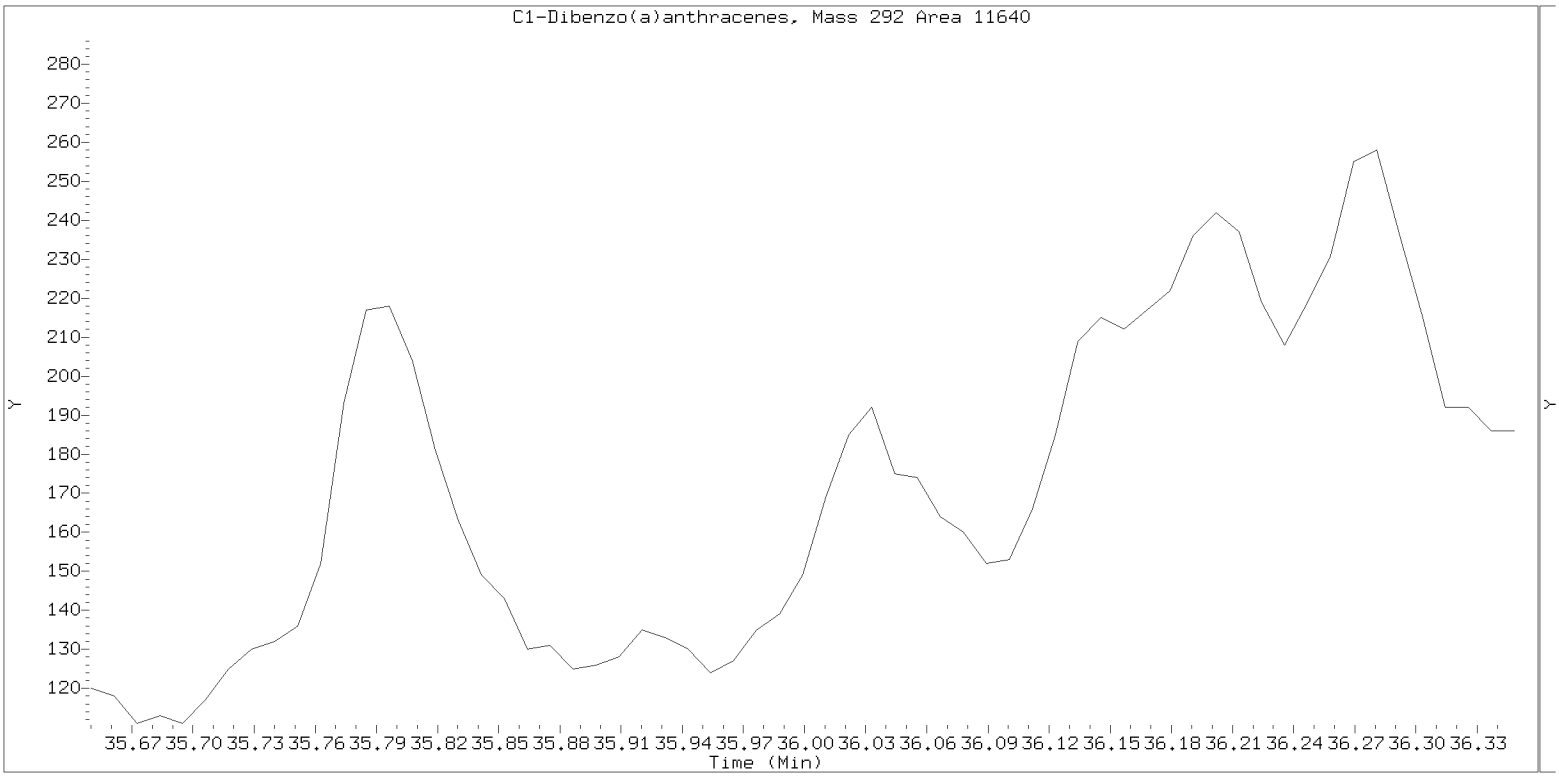

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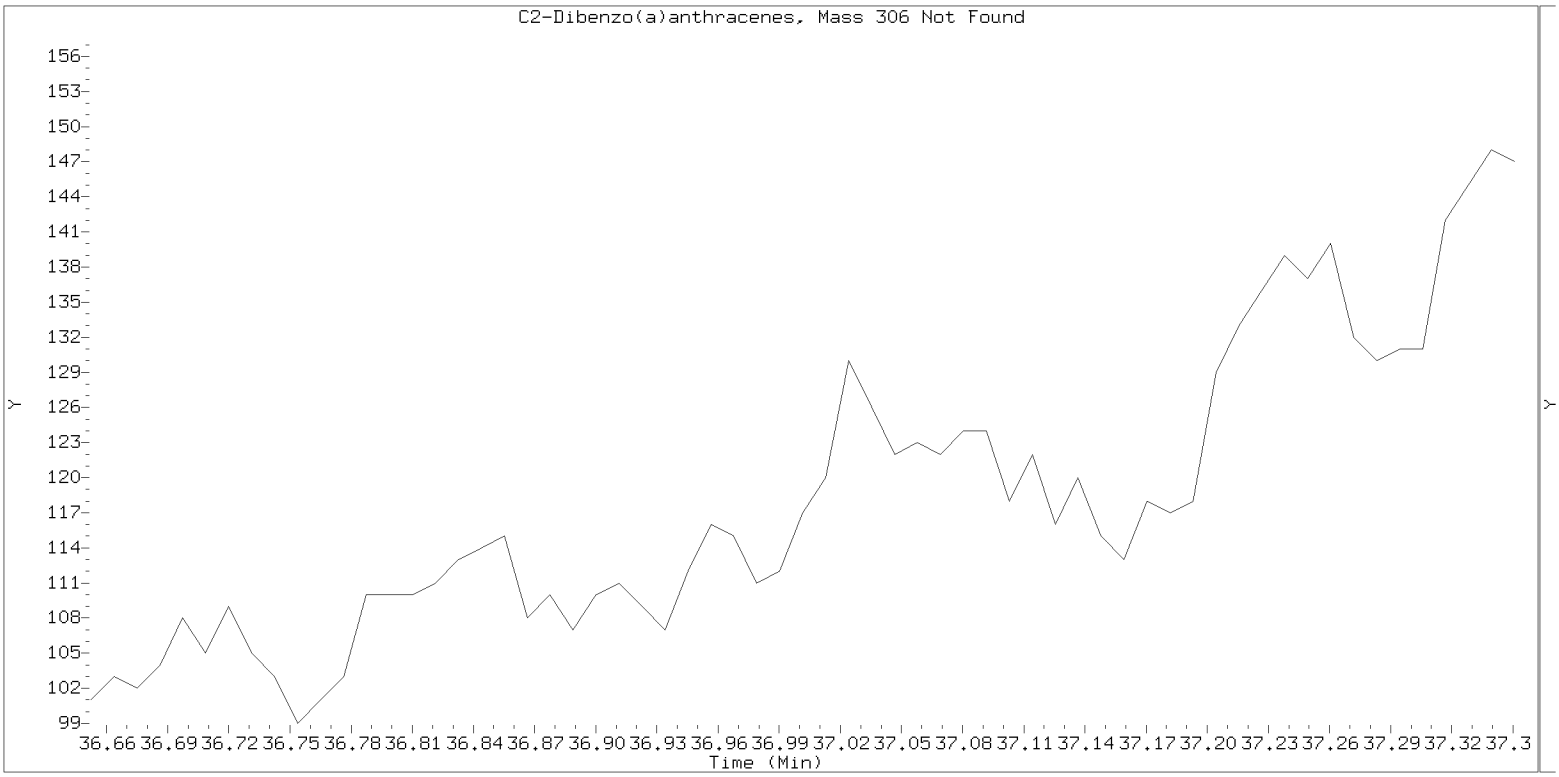

SIM ALKYL PNA RANGE ION WINDOWS - NT1421060710S.D

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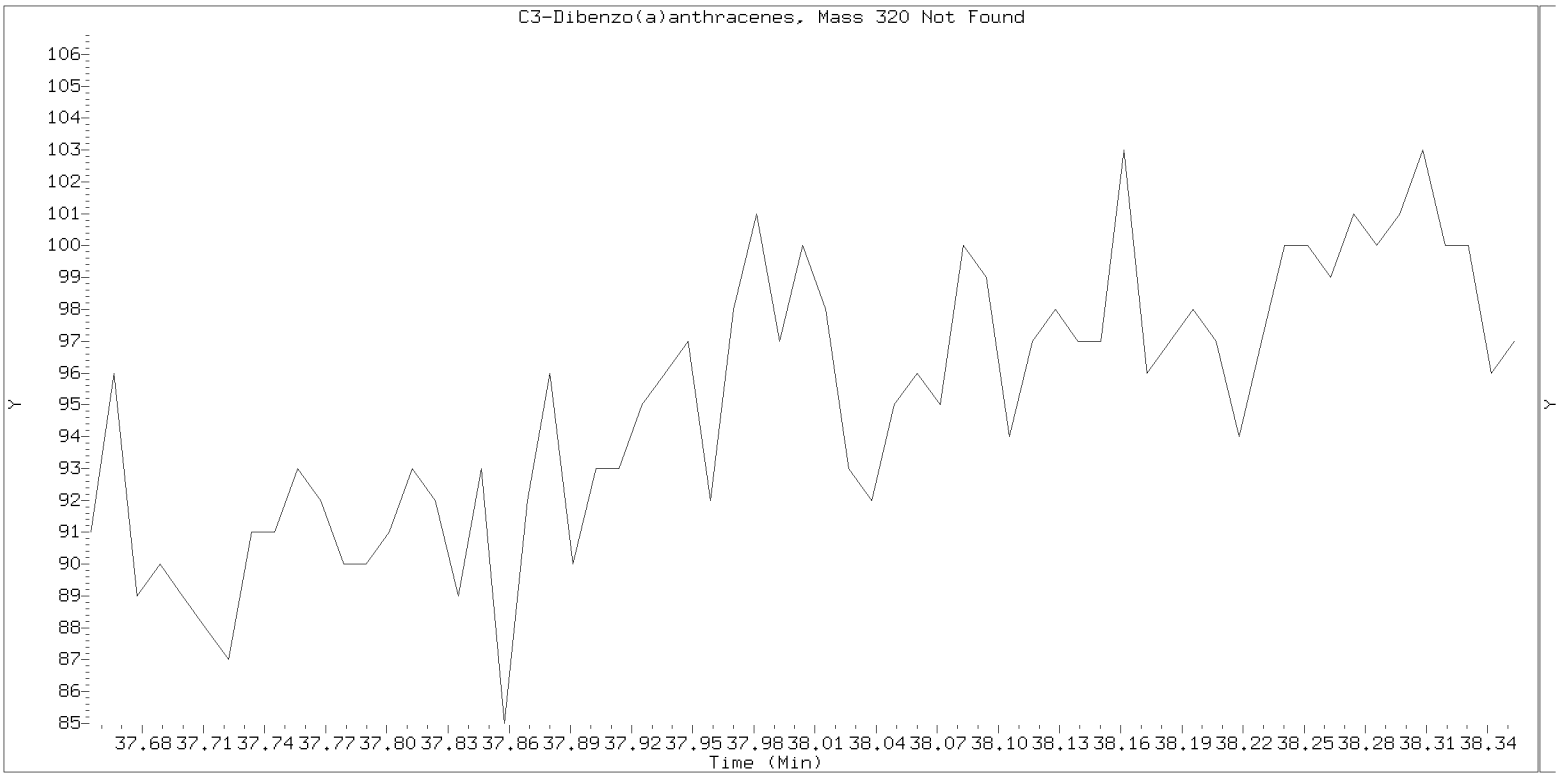


Analytical Resources, Incorporated
Analytical Chemists and Consultants

USMPDI-030SG-210504

Form I
ORGANIC ANALYSIS DATA SHEET
EPA 8270E-SIM
Alkyl PAH Parents

Laboratory:	Analytical Resources, Inc.				
Client:	Anchor QEA, LLC				
Project:	Gasco Siltronic - US Moorings				
Matrix:	Sediment	Laboratory ID:	21E0106-02 A	SDG:	21E0106
Sampled:	05/04/21 00:00	Prepared:	05/17/21 13:40	File ID:	NT1421060711.D
% Solids:	58.79	Preparation:	EPA 3546 (Microwave)	Analyzed:	06/07/21 20:30
Batch:	BJE0383	Sequence:	SJF0173	Initial/Final:	17.01 g Wet / 0.5 mL
Instrument:	NT14	Column:	ZB-5MS	Calibration:	EF00008
Cleanups:	GPC, Silica Gel				

CAS NO.	COMPOUND	DILUTION	CONC: (ug/kg dry)	Q	DL	RL
493-02-7	trans-Decalin	5	25.0	U	0.1	25.0
493-01-6	cis-Decalin	5	25.0	U	2.4	25.0
91-20-3	Naphthalene	5	8.6	J, D	2.2	25.0
90-12-0	1-Methylnaphthalene	5	3.3	J, D	1.9	25.0
91-57-6	2-Methylnaphthalene	5	4.3	J, D	2.2	25.0
92-52-4	Biphenyl	5	25.0	U	1.7	25.0
581-42-0	2,6-Dimethylnaphthalene	5	25.0	U	1.9	25.0
208-96-8	Acenaphthylene	5	6.6	J, D	1.3	25.0
83-32-9	Acenaphthene	5	48.3	D	2.3	25.0
132-64-9	Dibenzofuran	5	35.5	D	2.1	25.0
2245-38-7	2,3,5-Trimethylnaphthalene	5	25.0	U	2.2	25.0
86-73-7	Fluorene	5	44.7	D	2.3	25.0
95-15-8	Benzo(b)thiophene	5	25.0	U	1.8	25.0
85-01-8	Phenanthrene	5	105	D	4.7	25.0
120-12-7	Anthracene	5	20.5	J, D	0.2	25.0
86-74-8	Carbazole	5	9.8	J, D	3.6	25.0
832-69-9	1-Methylphenanthrene	5	8.5	J, D	2.5	25.0
206-44-0	Fluoranthene	5	189	D	6.8	25.0
132-65-0	Dibenzothiophene	5	25.0	U	3.3	25.0
129-00-0	Pyrene	5	199	D	5.1	25.0
56-55-3	Benzo(a)anthracene	5	96.5	D	7.1	25.0
218-01-9	Chrysene	5	121	D	3.5	25.0
205-99-2	Benzo(b)fluoranthene	5	96.4	D	4.0	25.0
205-82-3	Benzo(j)fluoranthene	5	58.1	D	3.4	25.0
207-08-9	Benzo(k)fluoranthene	5	58.5	D	4.0	25.0
197-97-2	Benzo(e)pyrene	5	92.0	D	3.1	25.0
50-32-8	Benzo(a)pyrene	5	135	D	4.9	25.0
193-39-5	Indeno(1,2,3-cd)pyrene	5	86.0	D	1.9	25.0
53-70-3	Dibenzo(a,h)anthracene	5	19.3	J, D	3.4	25.0
191-24-2	Benzo(g,h,i)perylene	5	110	D	2.6	25.0

Analytical Resources, Incorporated
Analytical Chemists and Consultants

USMPDI-030SG-210504

Form I
ORGANIC ANALYSIS DATA SHEET
EPA 8270E-SIM
Alkyl PAH Parents

Laboratory:	Analytical Resources, Inc.				
Client:	Anchor QEA, LLC				
Project:	Gasco Siltronic - US Moorings				
Matrix:	Sediment	Laboratory ID:	21E0106-02 A	SDG:	21E0106
Sampled:	05/04/21 00:00	Prepared:	05/17/21 13:40	File ID:	NT1421060711.D
% Solids:	58.79	Preparation:	EPA 3546 (Microwave)	Analyzed:	06/07/21 20:30
Batch:	BJE0383	Sequence:	SJF0173	Initial/Final:	17.01 g Wet / 0.5 mL
Instrument:	NT14	Column:	ZB-5MS	Calibration:	EF00008
Cleanups:	GPC, Silica Gel				

CAS NO.	COMPOUND	DILUTION	CONC: (ug/kg dry)	Q	DL	RL
1985-5-0	Perylene	5	97.8	D	2.2	25.0
239-35-0	Benzo(b)naphtho(2,1-d)thiophene	5	25.0	U	25.0	25.0

SURROGATES	ADDED: (ug/kg dry)	FOUND: (ug/kg dry)	% REC	QC LIMITS	Q
Naphthalene-d8	150.00	68.7	45.8	30 - 160	
Acenaphthene-d10	150.00	77.8	51.9	30 - 160	
Phenanthrene-d10	150.00	83.5	55.7	30 - 160	
Chrysene-d12	150.00	97.7	65.1	30 - 160	
Perylene-d12	150.00	96.8	64.5	30 - 160	

Data File: \\target\share\chem3\nt14.i\20210607.b\NT1421060711.D

Date : 07-JUN-2021 20:30

Client ID:

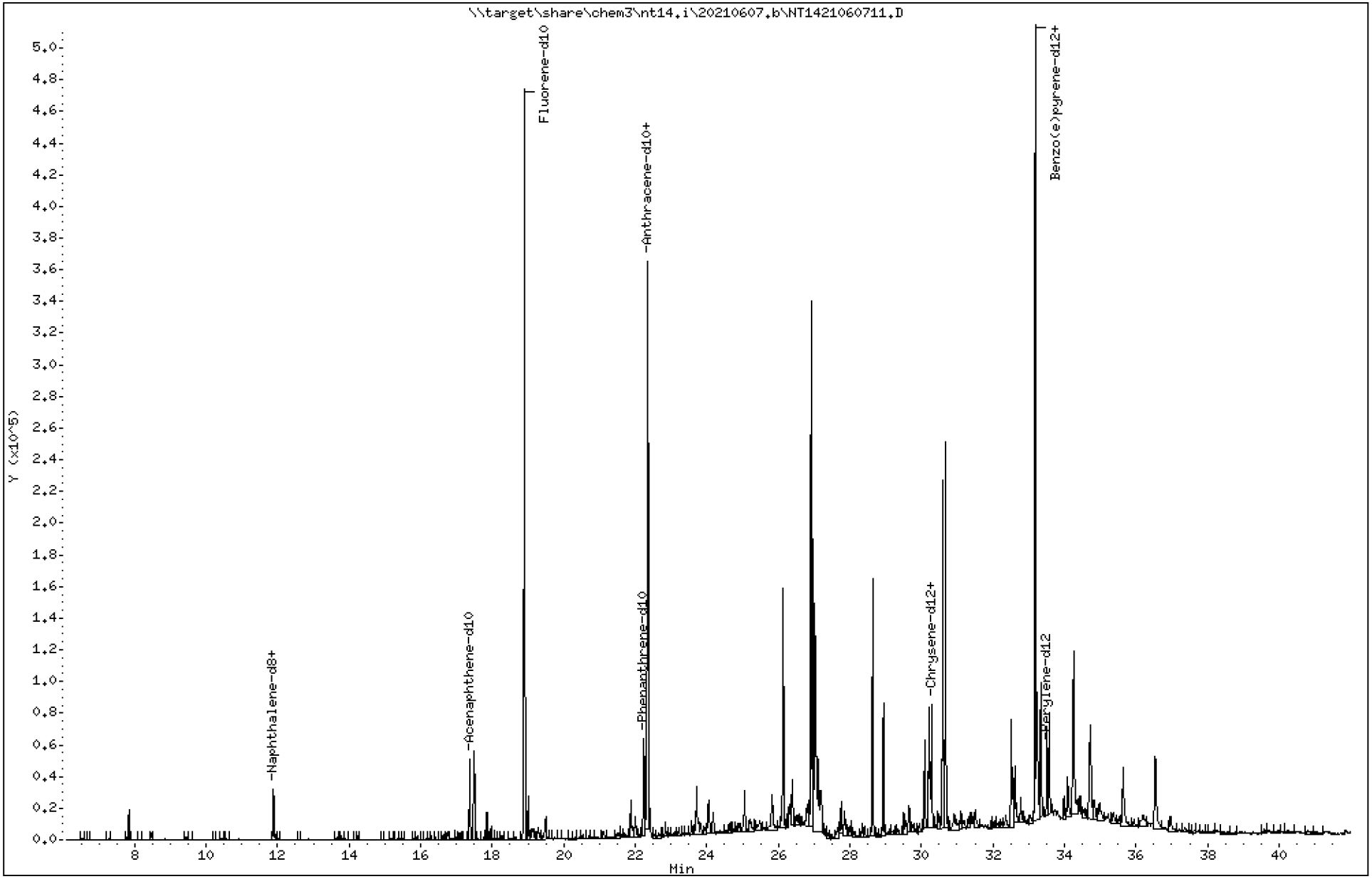
Instrument: nt14.i

Sample Info: 21E0106-02

Operator: VTS

Column phase: Rxi-17Sil MS

Column diameter: 0.25



Data File: \\target\share\chem3\nt14.i\20210607.b\NT1421060711.D

Date : 07-JUN-2021 20:30

Client ID:

Instrument: nt14.i

Sample Info: 21E0106-02

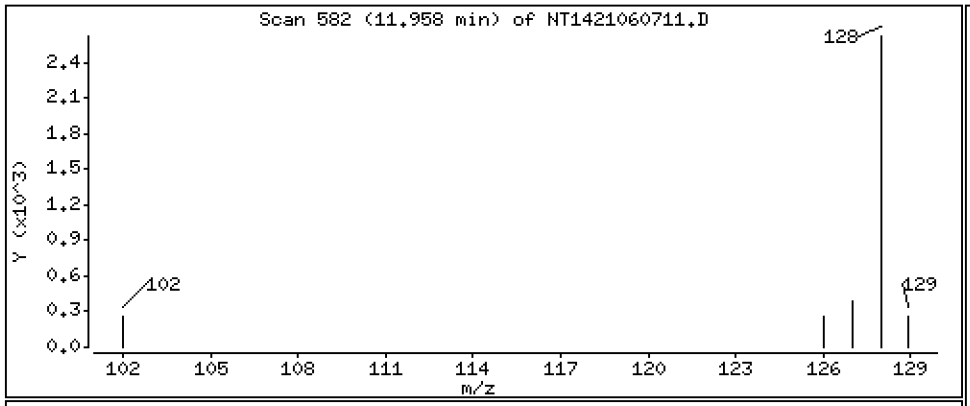
Operator: VTS

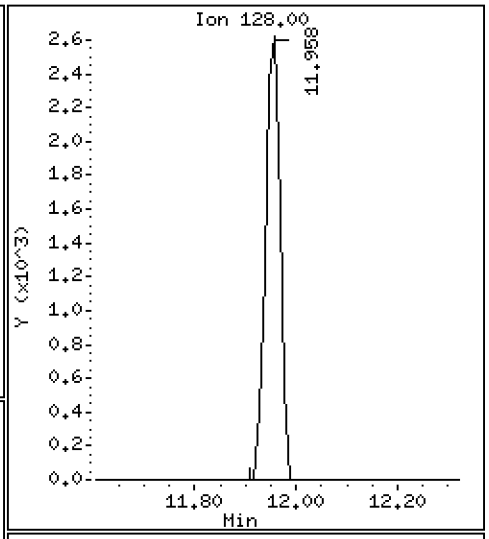
Column phase: Rxi-17Sil MS

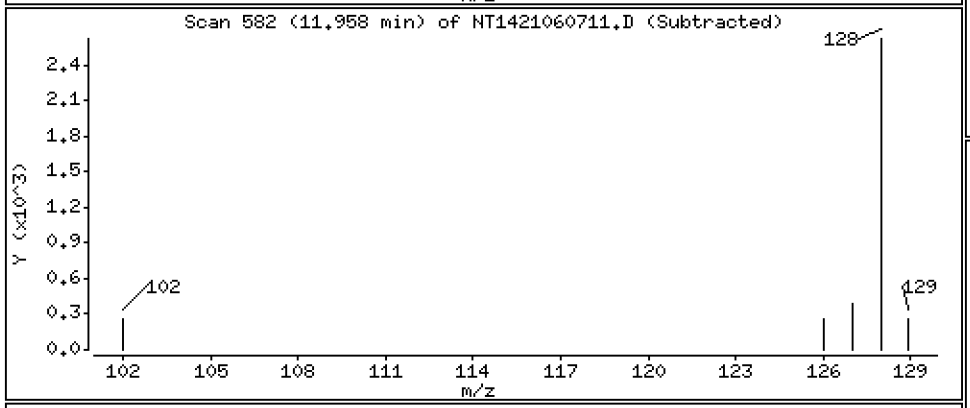
Column diameter: 0.25

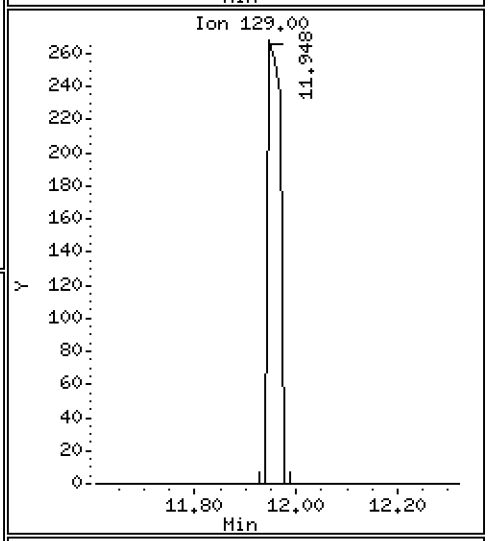
7 Naphthalene

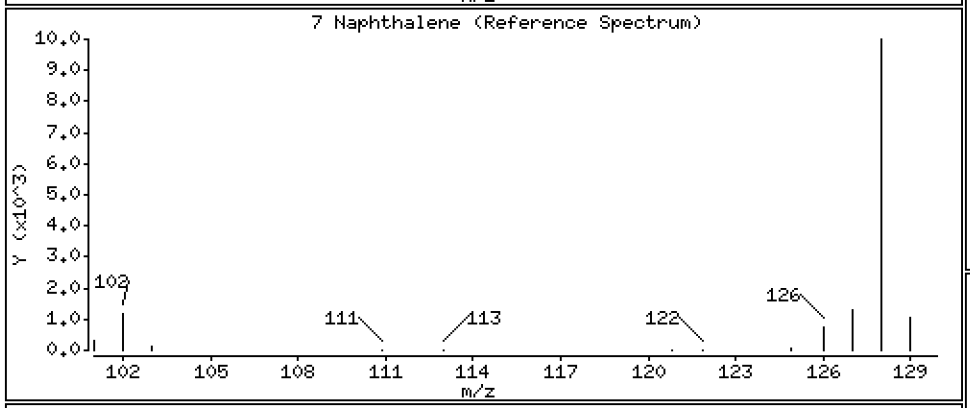
Concentration: 0.1714 ug/mL

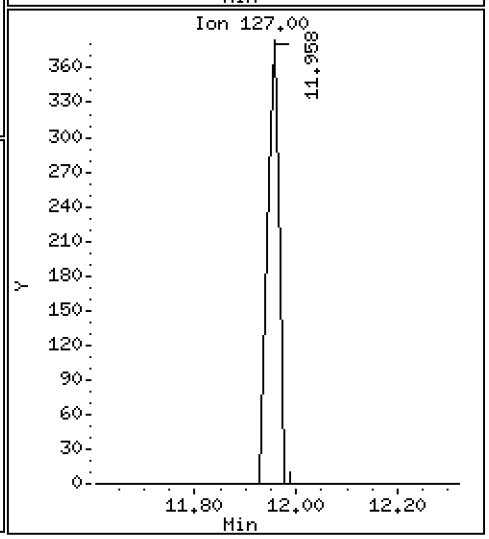


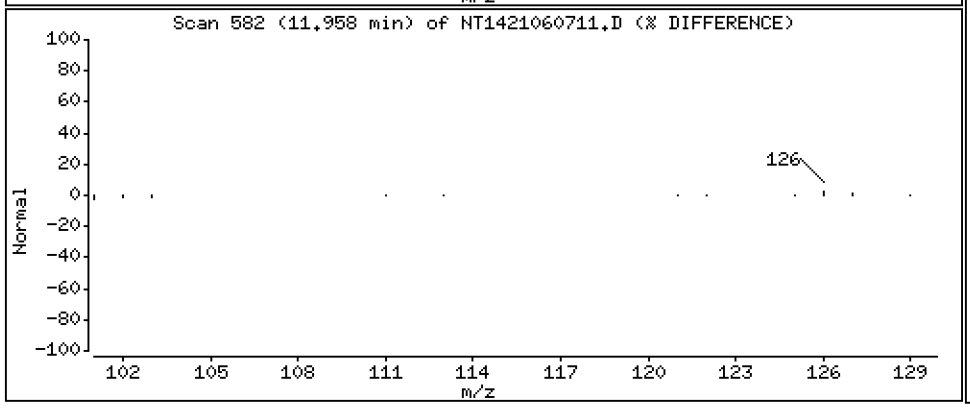












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Date : 07-JUN-2021 20:30

Client ID:

Instrument: nt14.i

Sample Info: 21E0106-02

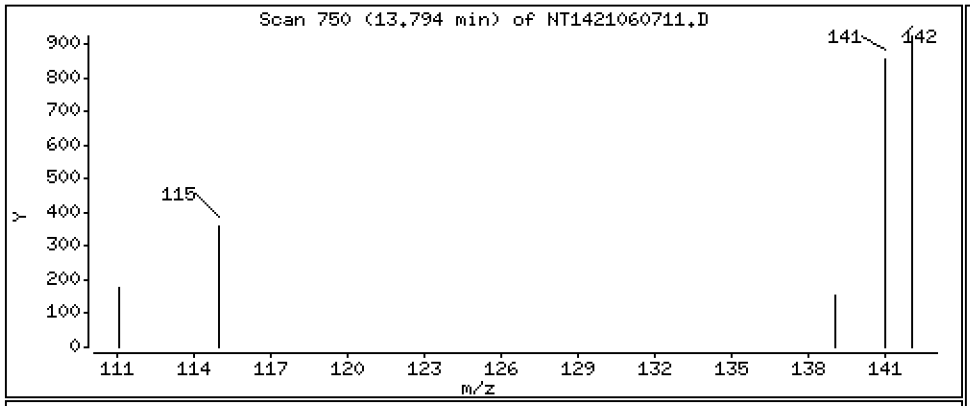
Operator: VTS

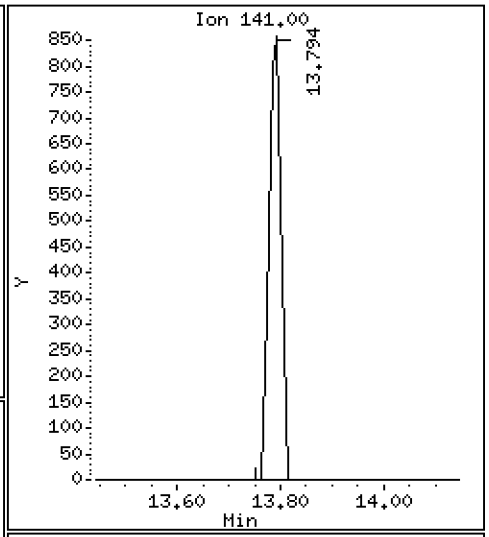
Column phase: Rxi-17Sil MS

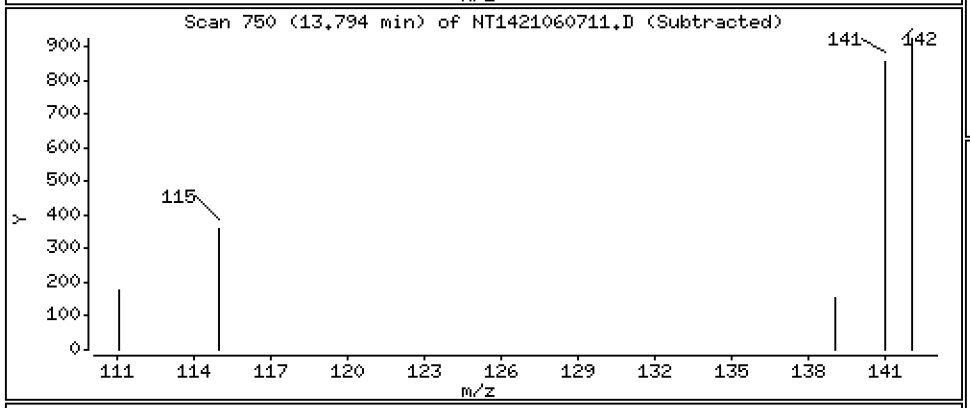
Column diameter: 0.25

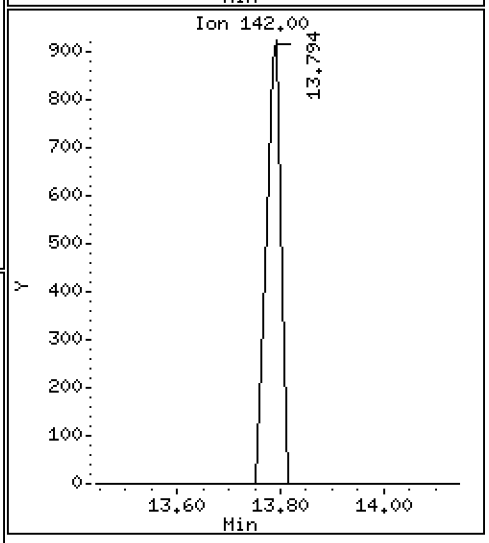
16 2-Methylnaphthalene

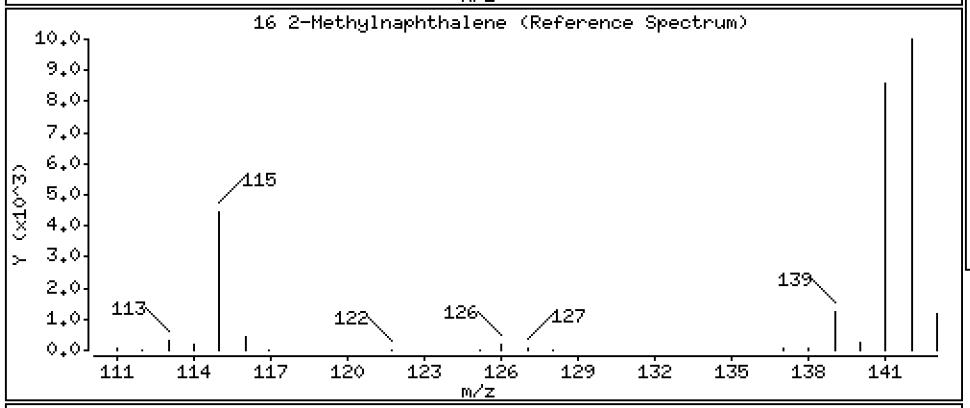
Concentration: 0.08673 ug/mL

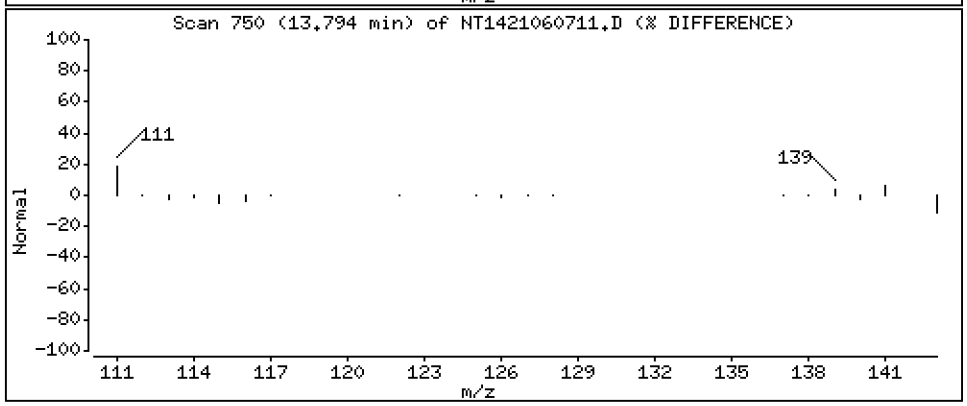












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Date : 07-JUN-2021 20:30

Client ID:

Instrument: nt14.i

Sample Info: 21E0106-02

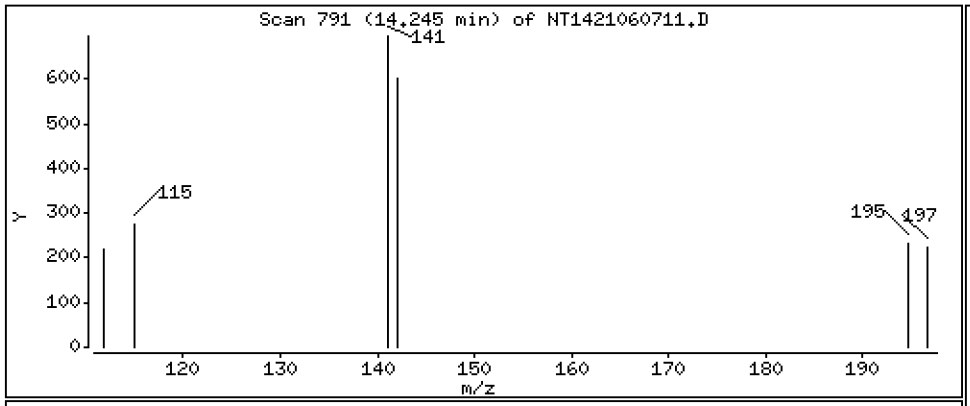
Operator: VTS

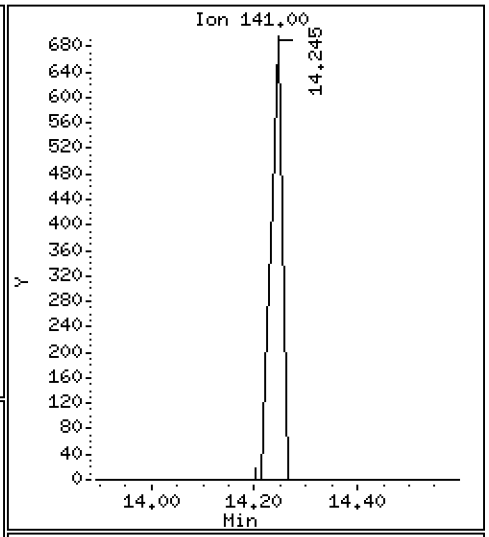
Column phase: Rxi-17Sil MS

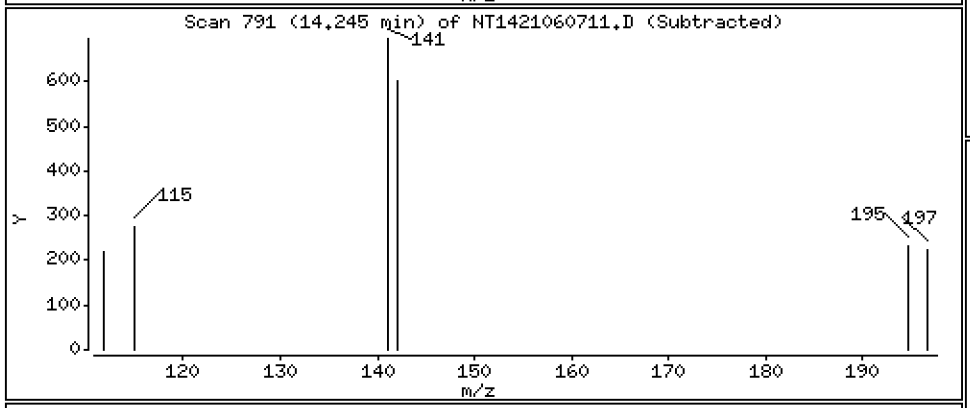
Column diameter: 0.25

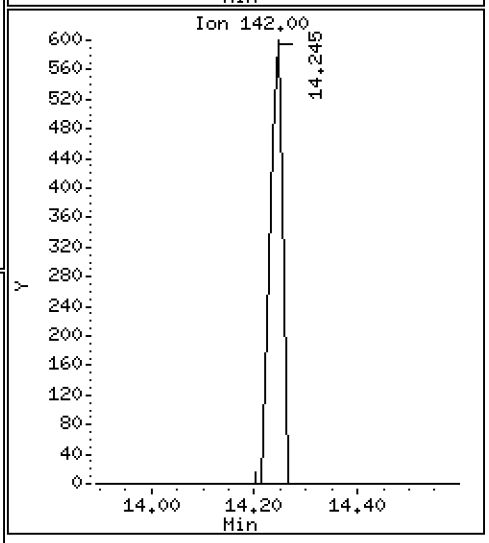
17 1-methylnaphthalene

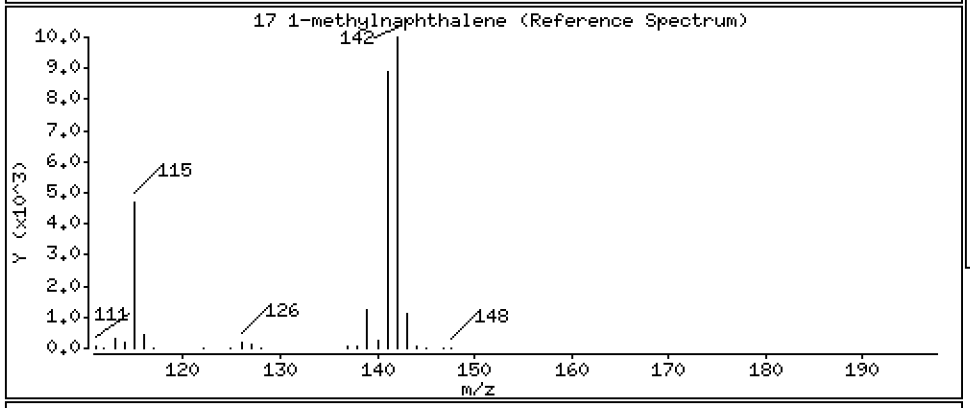
Concentration: 0.06671 ug/mL

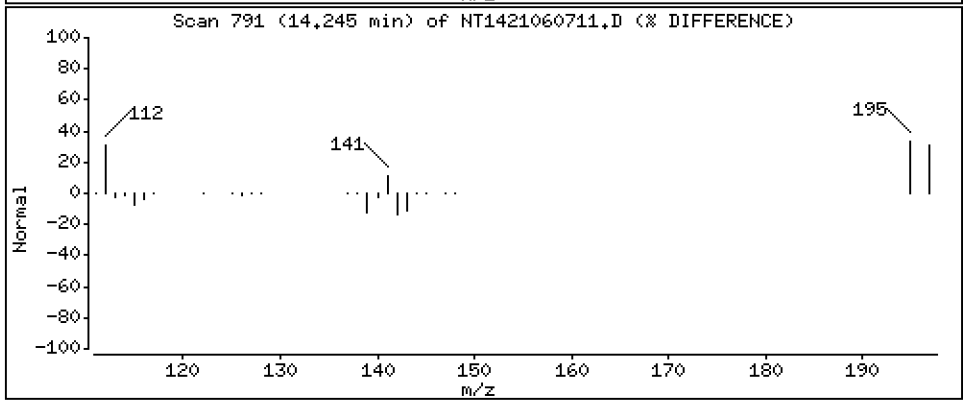












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Date : 07-JUN-2021 20:30

Client ID:

Instrument: nt14.i

Sample Info: 21E0106-02

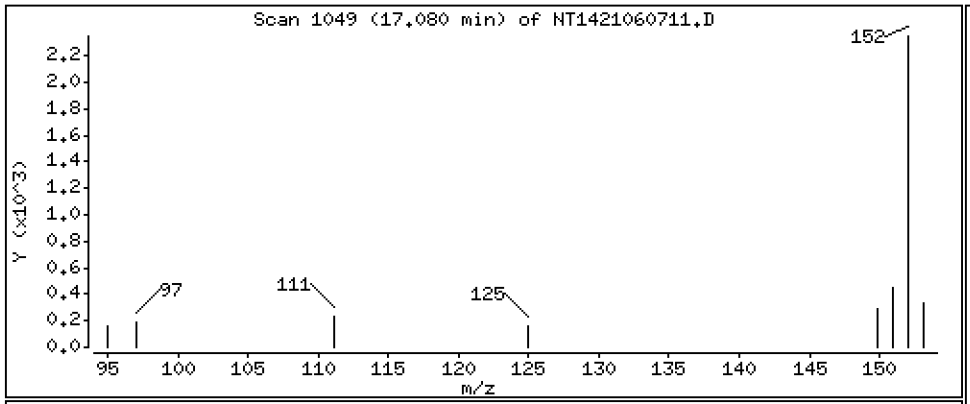
Operator: VTS

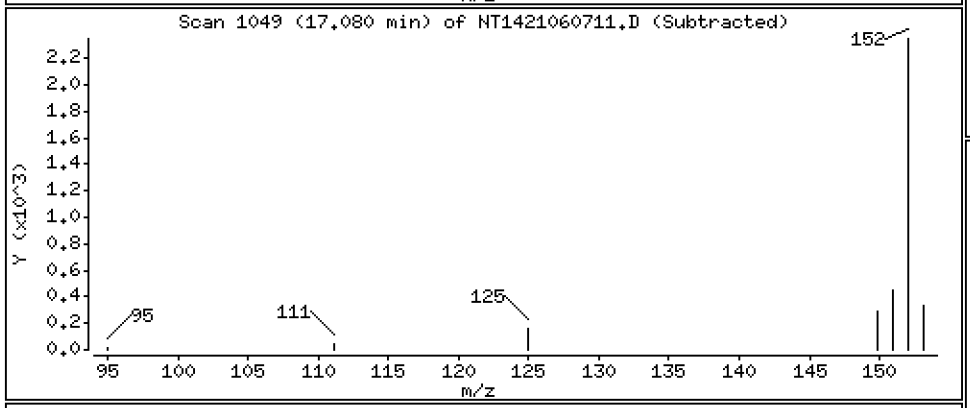
Column phase: Rxi-17Sil MS

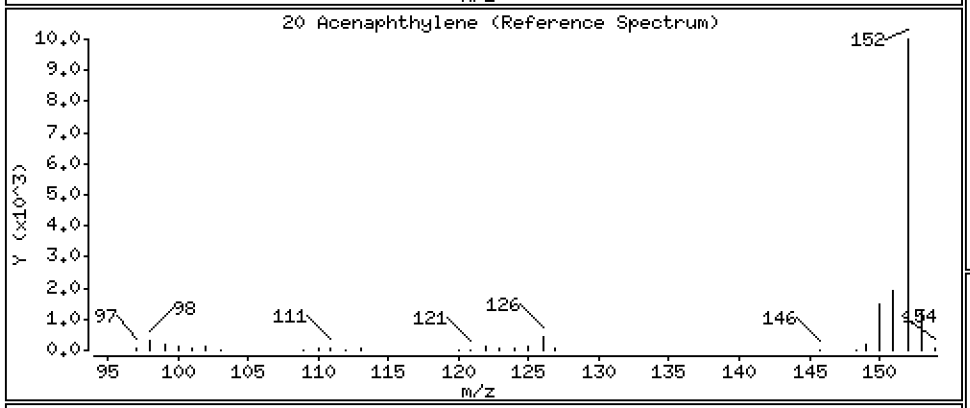
Column diameter: 0.25

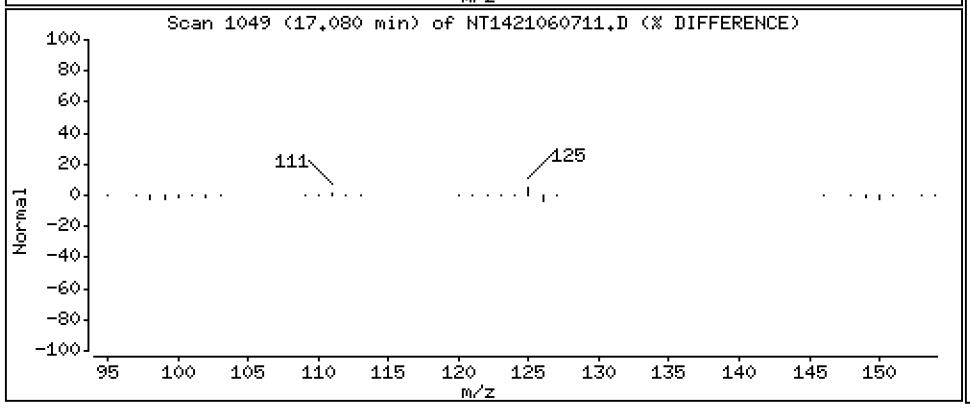
20 Acenaphthylene

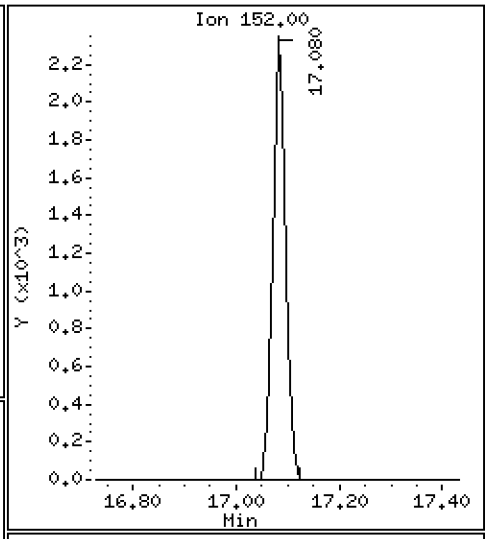
Concentration: 0.1317 ug/mL

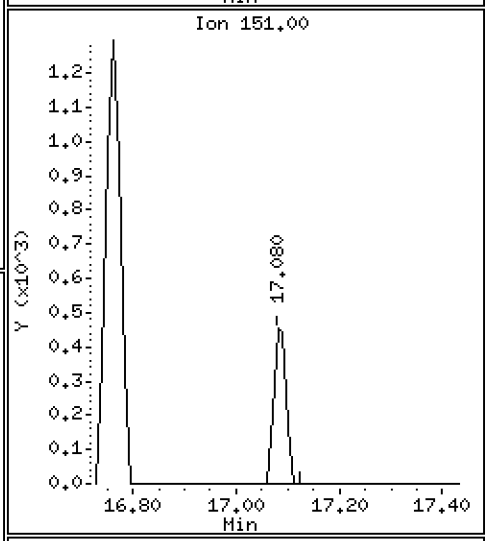


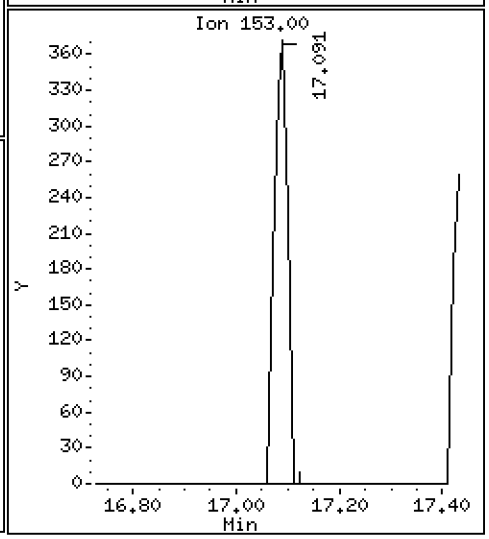












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Date : 07-JUN-2021 20:30

Client ID:

Instrument: nt14.i

Sample Info: 21E0106-02

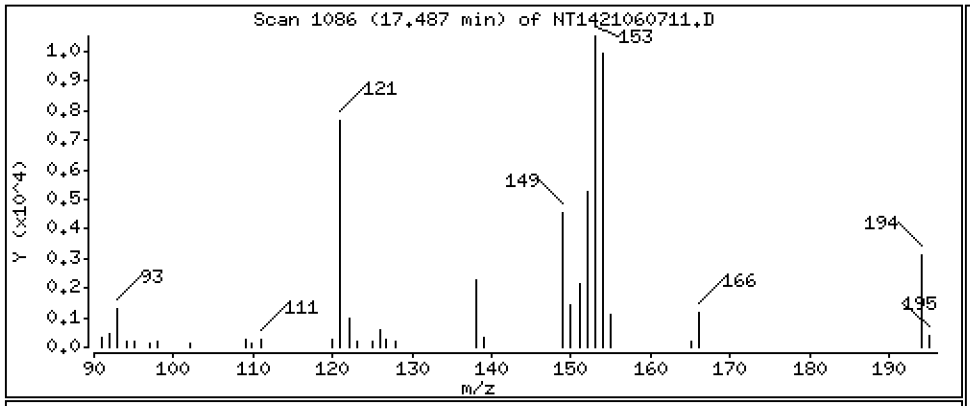
Operator: VTS

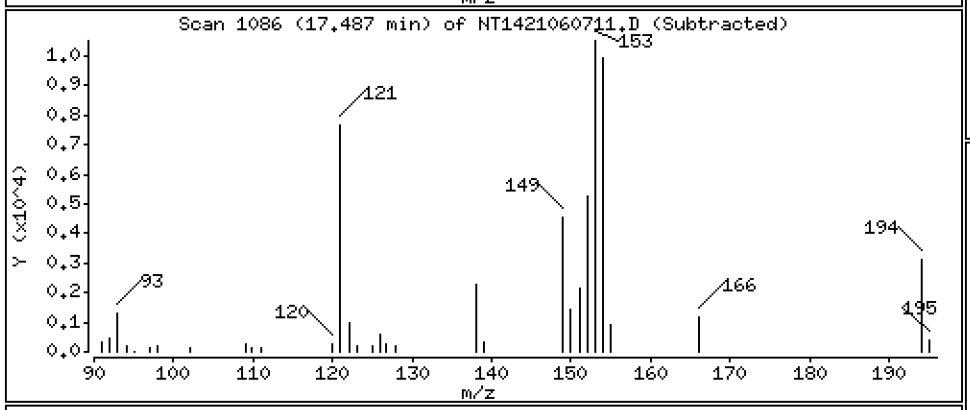
Column phase: Rxi-17Sil MS

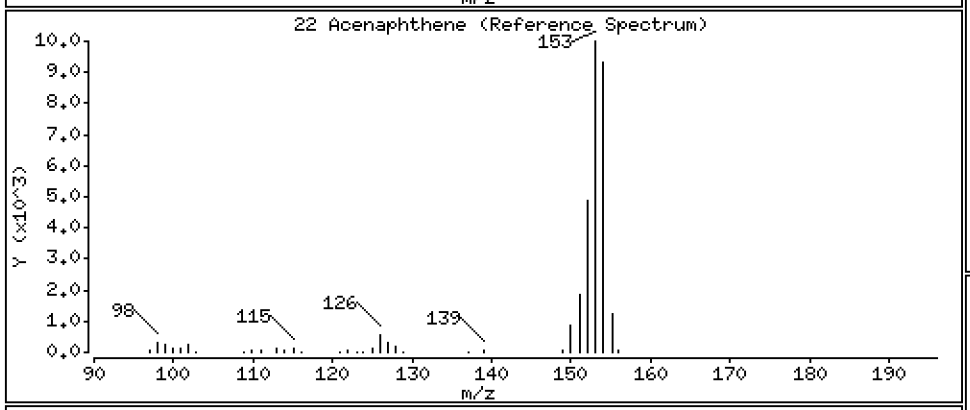
Column diameter: 0.25

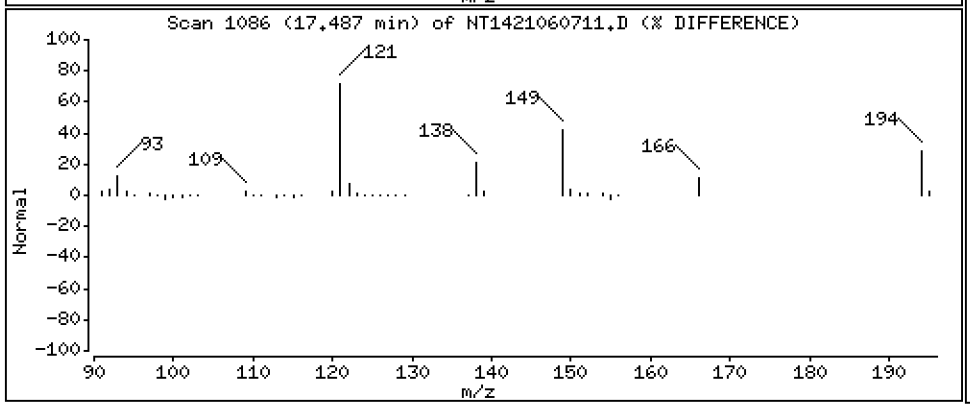
22 Acenaphthene

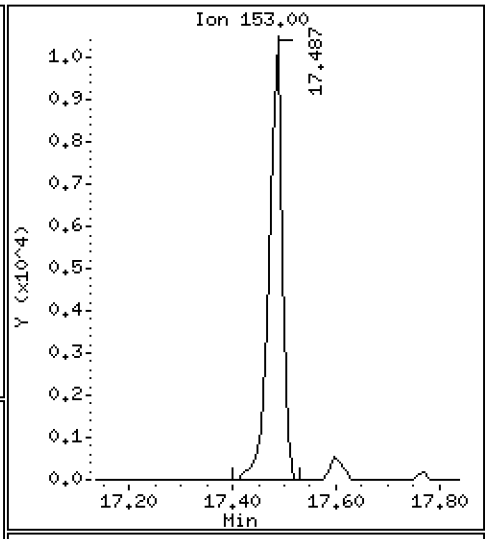
Concentration: 0.9651 ug/mL

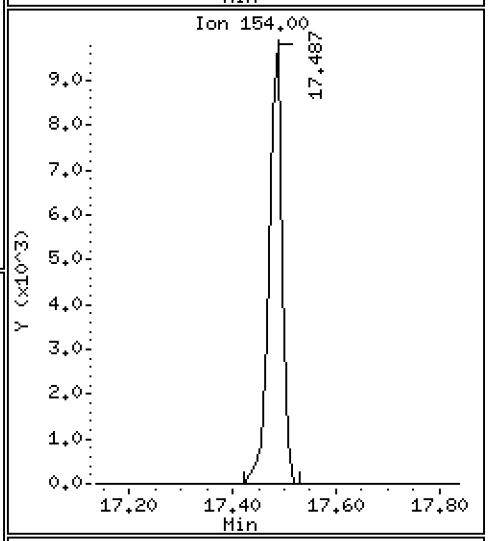


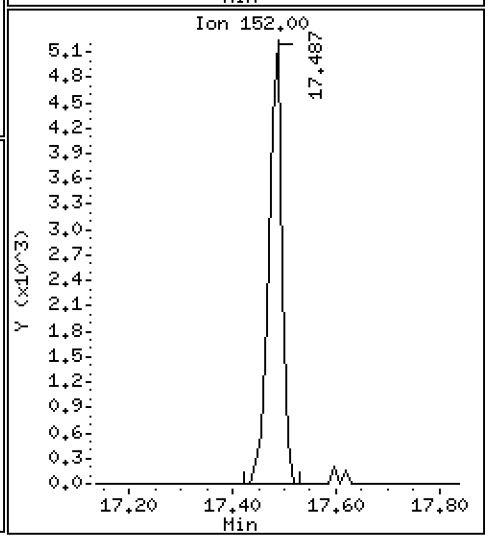












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Date : 07-JUN-2021 20:30

Client ID:

Instrument: nt14.i

Sample Info: 21E0106-02

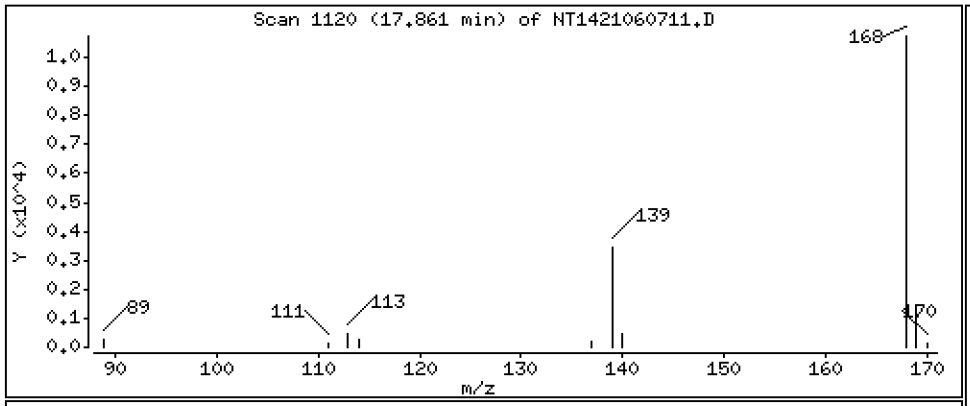
Operator: VTS

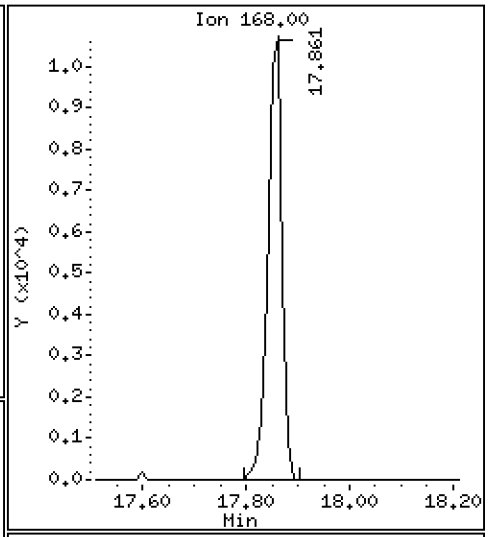
Column phase: Rxi-17Sil MS

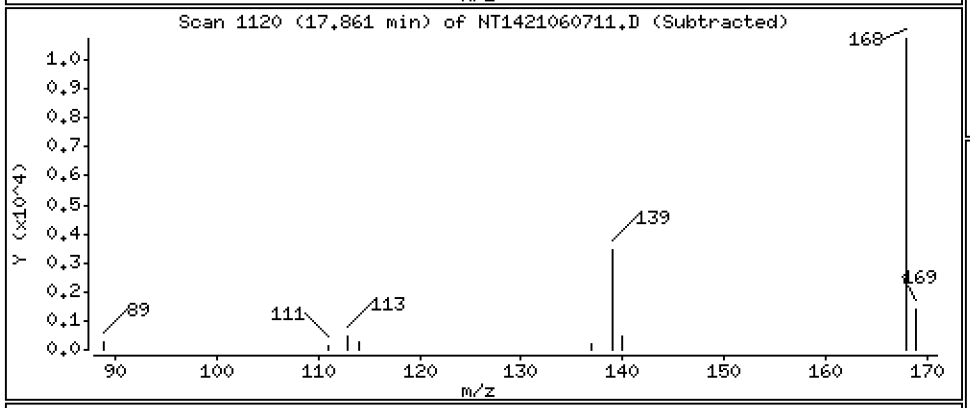
Column diameter: 0.25

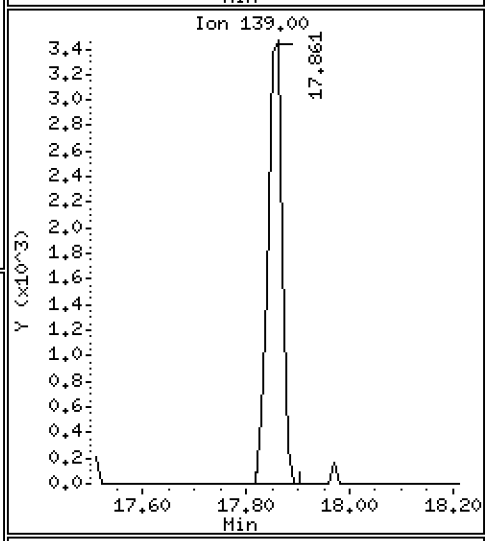
23 Dibenzofuran

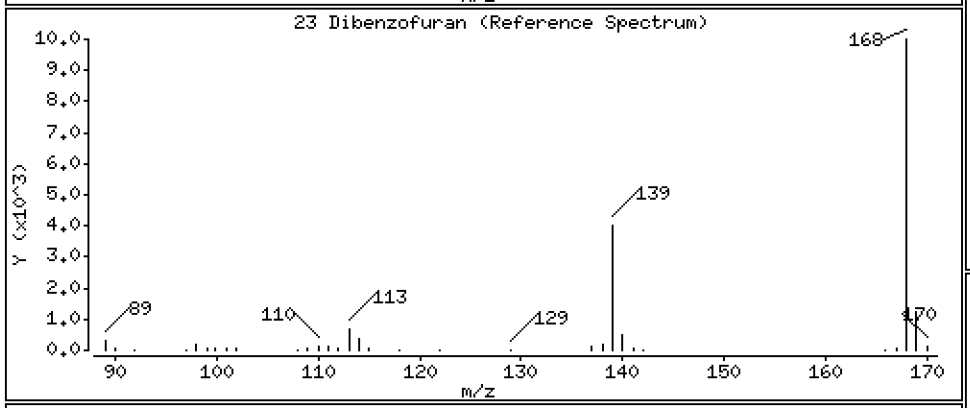
Concentration: 0.7101 ug/mL

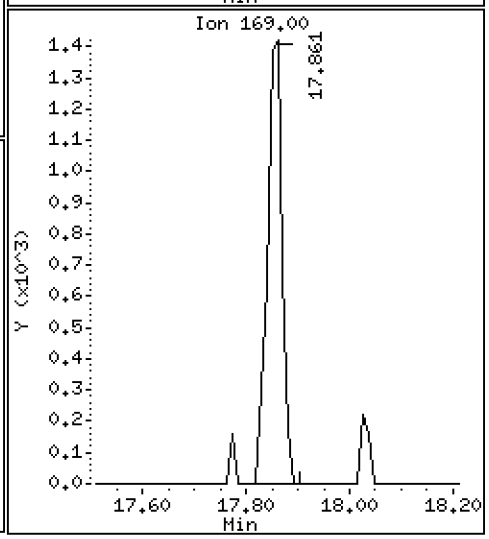


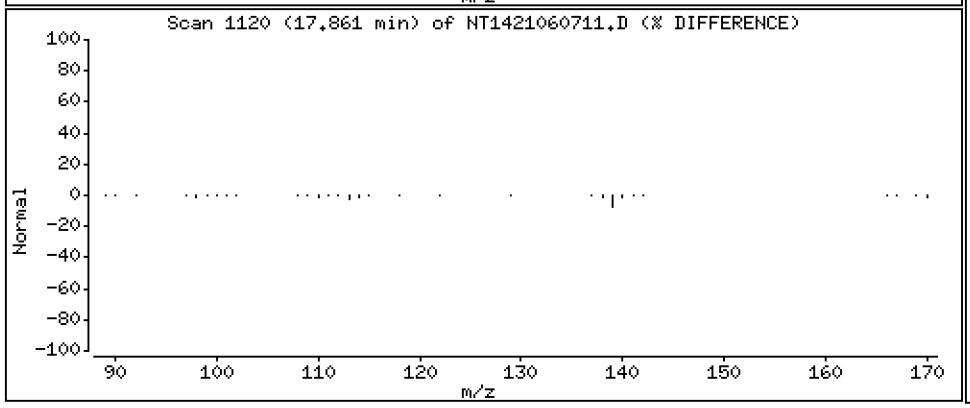












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Date : 07-JUN-2021 20:30

Client ID:

Instrument: nt14.i

Sample Info: 21E0106-02

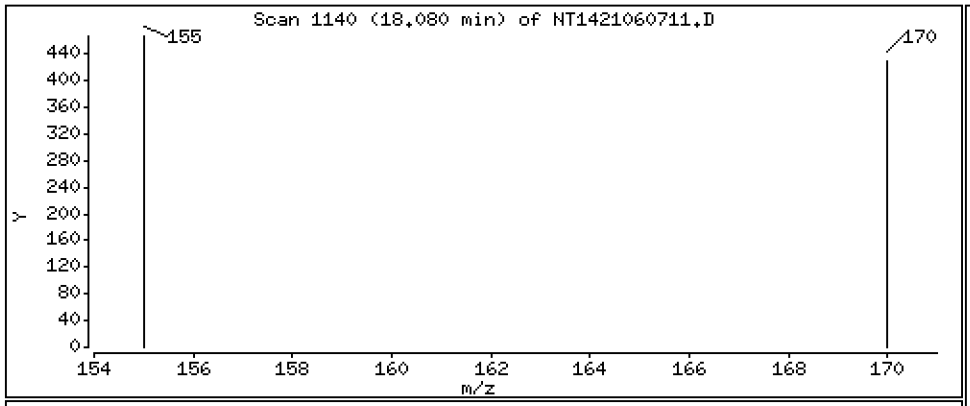
Operator: VTS

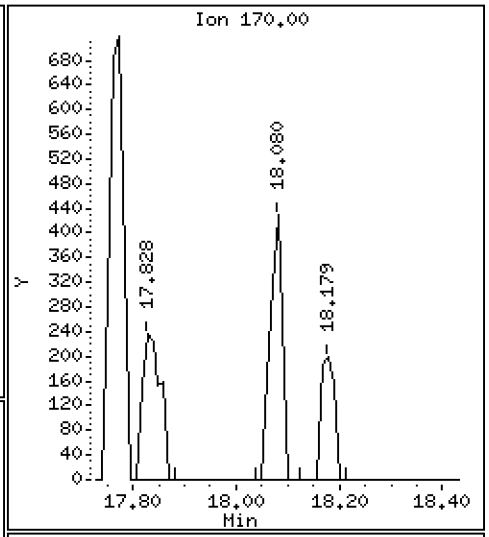
Column phase: Rxi-17Sil MS

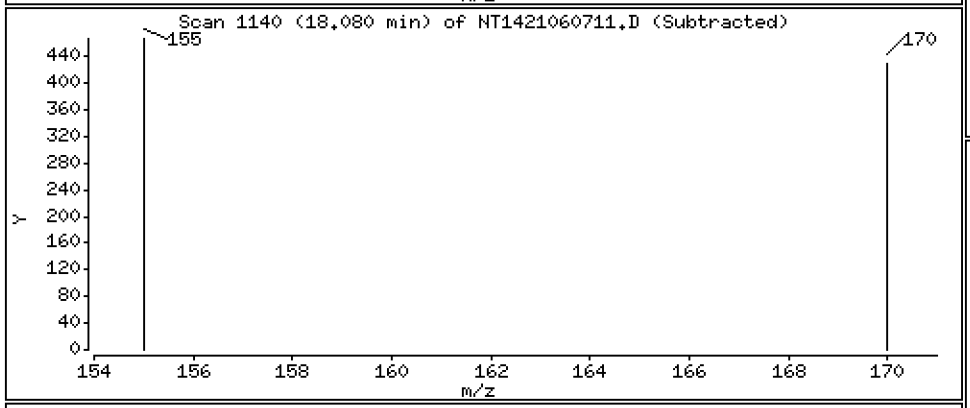
Column diameter: 0.25

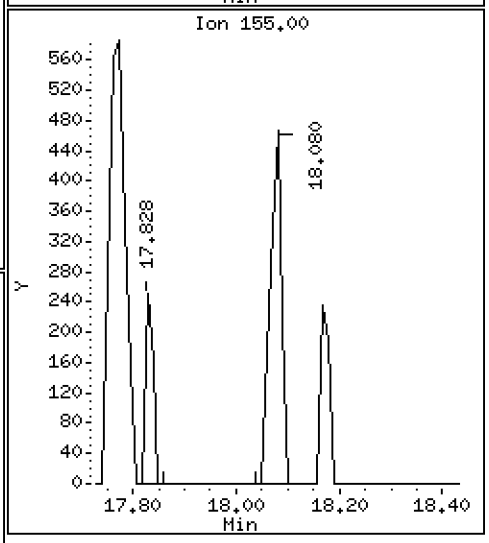
24 1,6,7-Trimethylnaphthalene

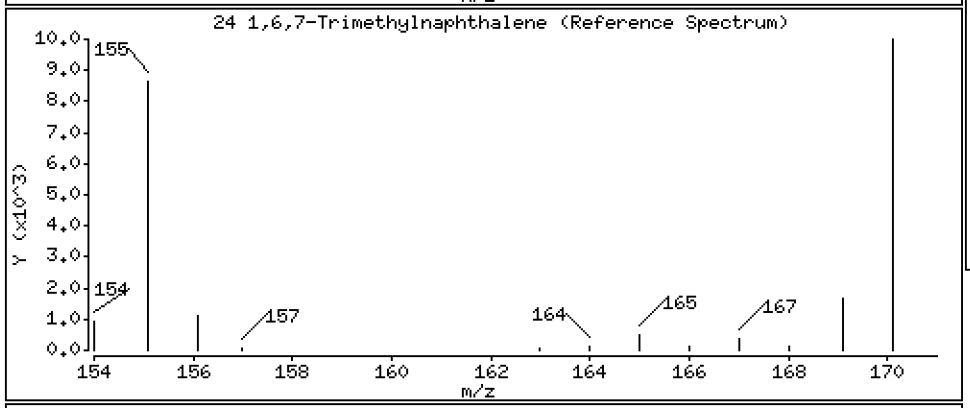
Concentration: 0.03861 ug/mL

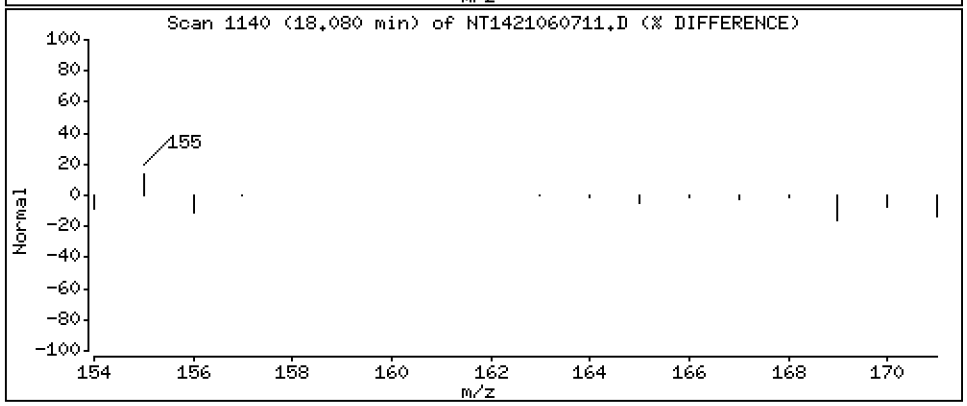












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Date : 07-JUN-2021 20:30

Client ID:

Instrument: nt14.i

Sample Info: 21E0106-02

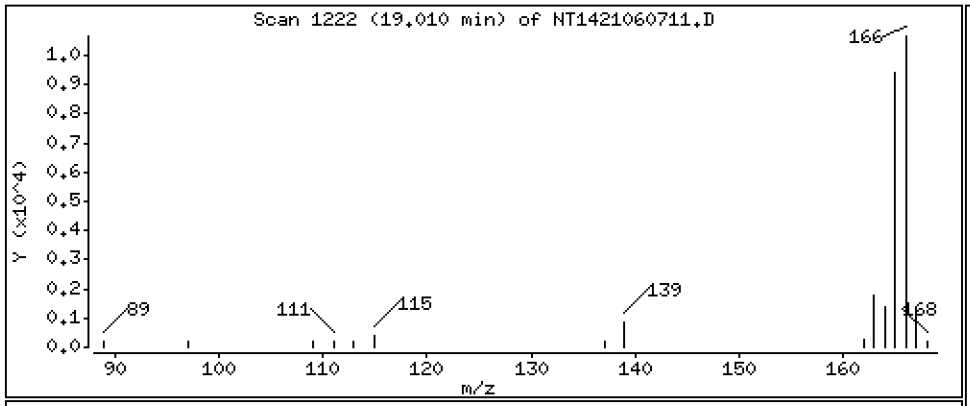
Operator: VTS

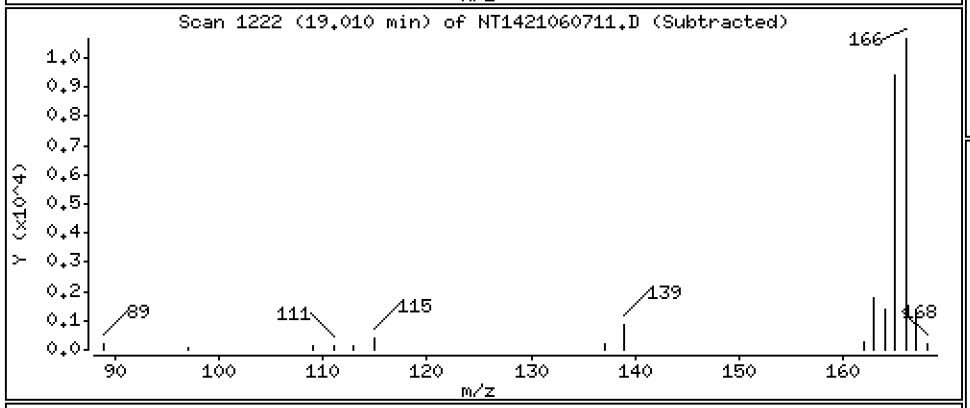
Column phase: Rxi-17Sil MS

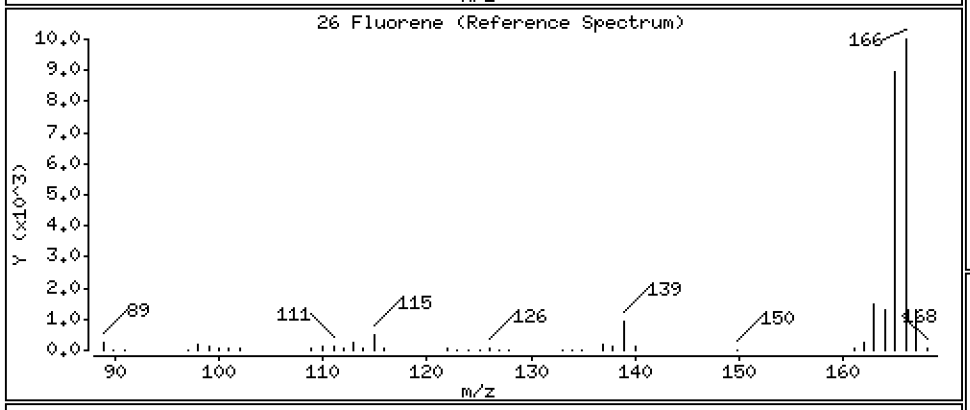
Column diameter: 0.25

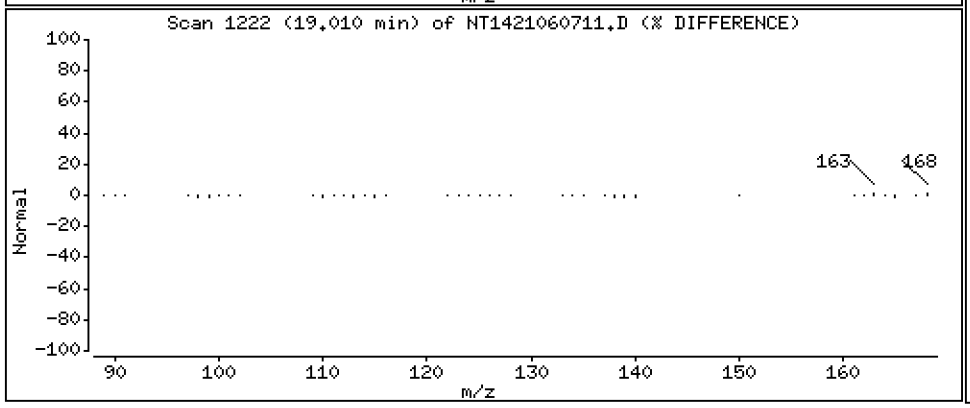
26 Fluorene

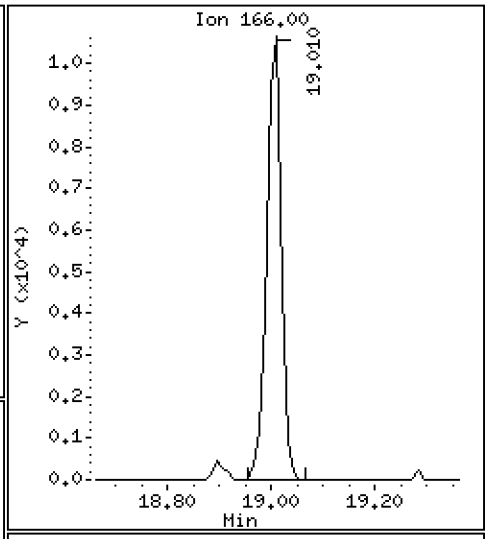
Concentration: 0.8946 ug/mL

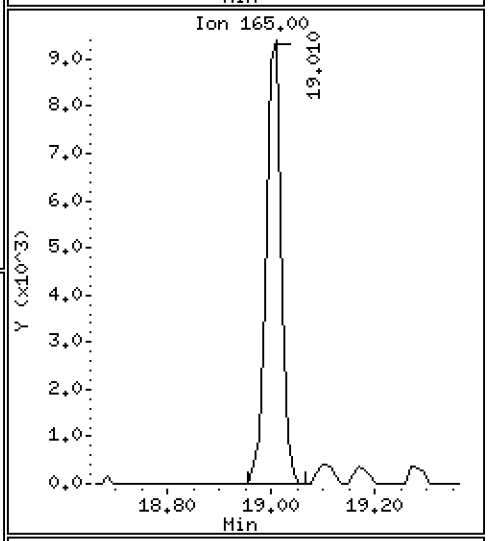


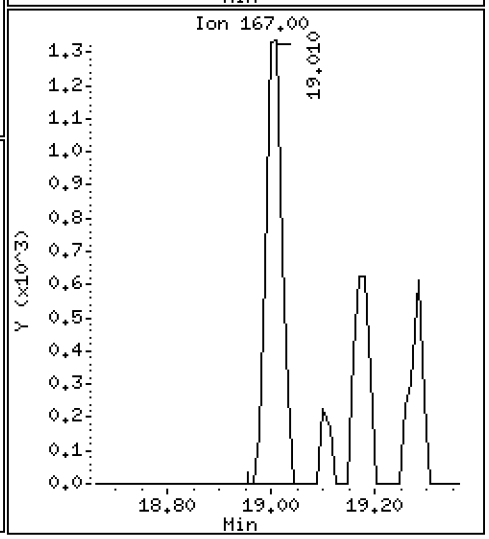












Data File: \\target\share\chem3\nt14.i\20210607.b\NT1421060711.D

Date : 07-JUN-2021 20:30

Client ID:

Instrument: nt14.i

Sample Info: 21E0106-02

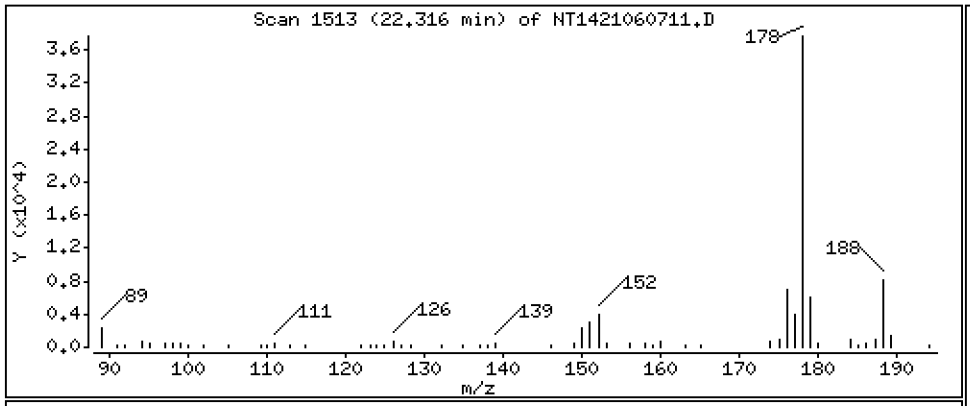
Operator: VTS

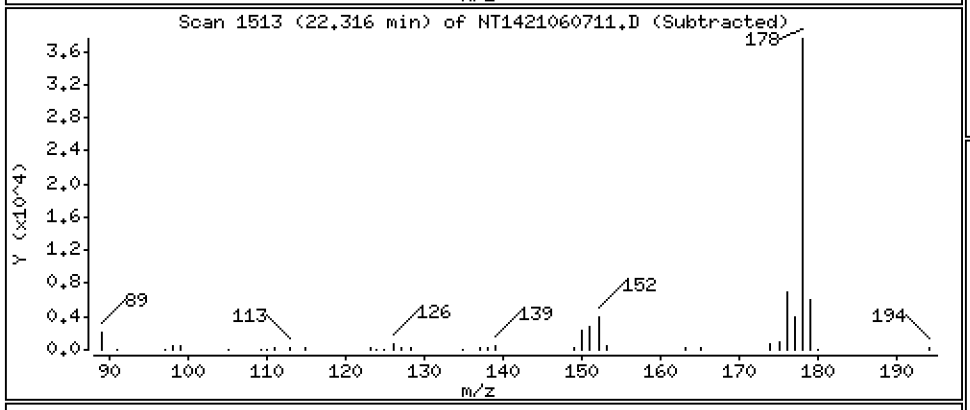
Column phase: Rxi-17Sil MS

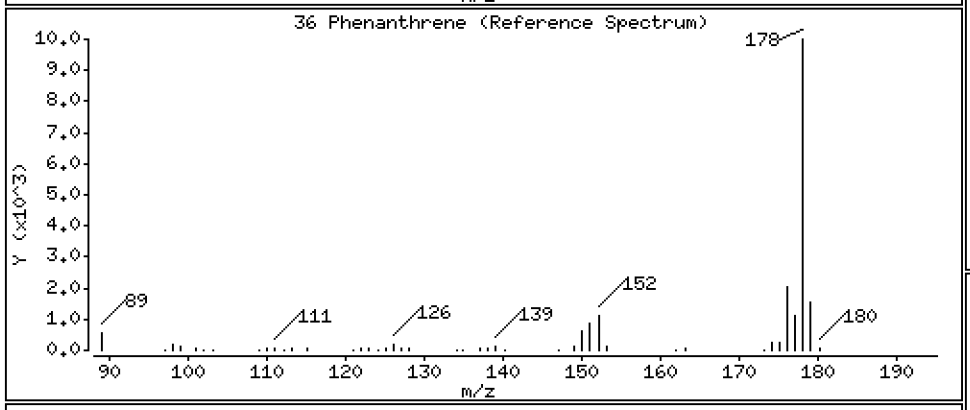
Column diameter: 0.25

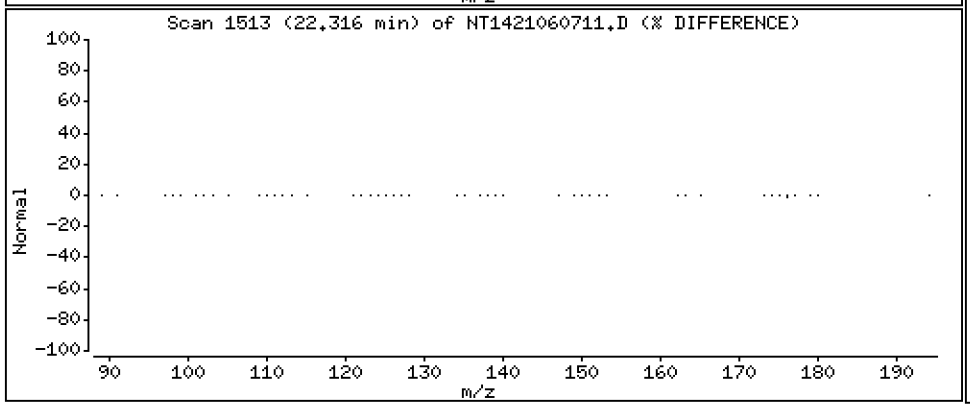
36 Phenanthrene

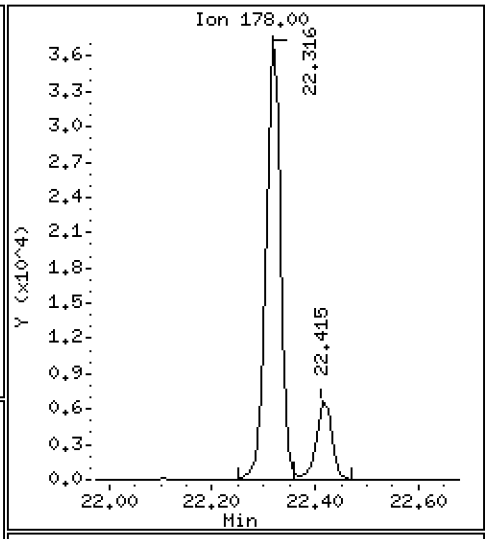
Concentration: 2.093 ug/mL

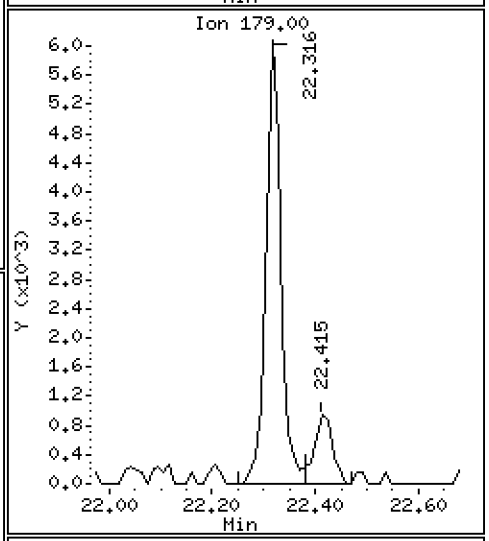


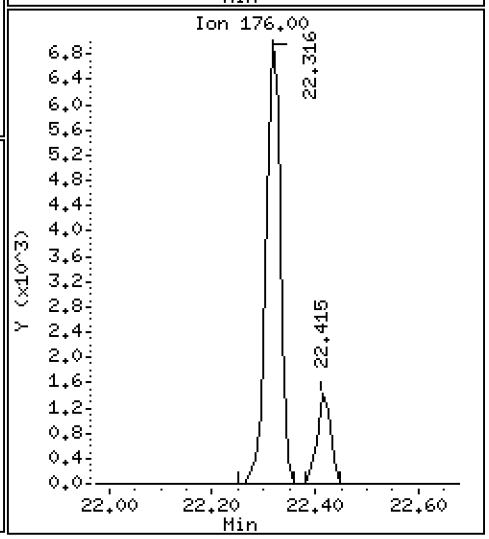












Data File: \\target\share\chem3\nt14.i\20210607.b\NT1421060711.D

Date : 07-JUN-2021 20:30

Client ID:

Instrument: nt14.i

Sample Info: 21E0106-02

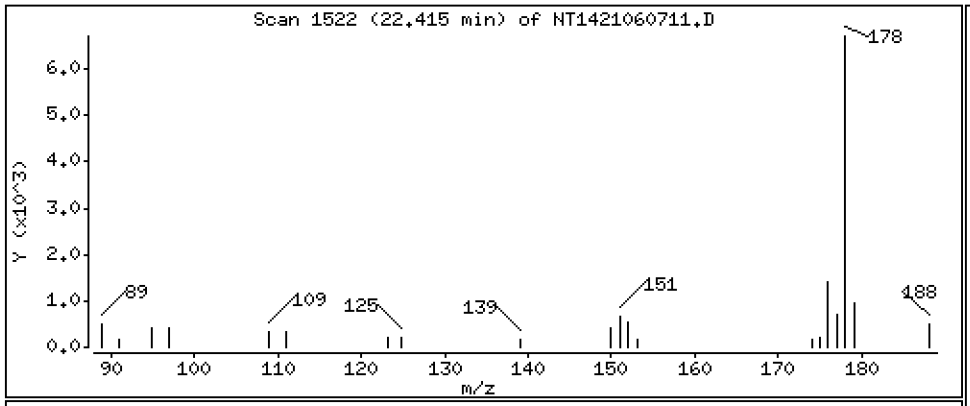
Operator: VTS

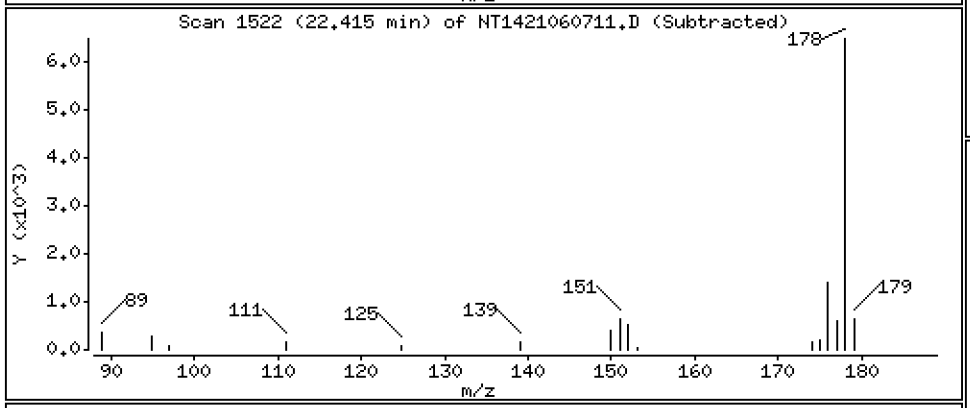
Column phase: Rxi-17Sil MS

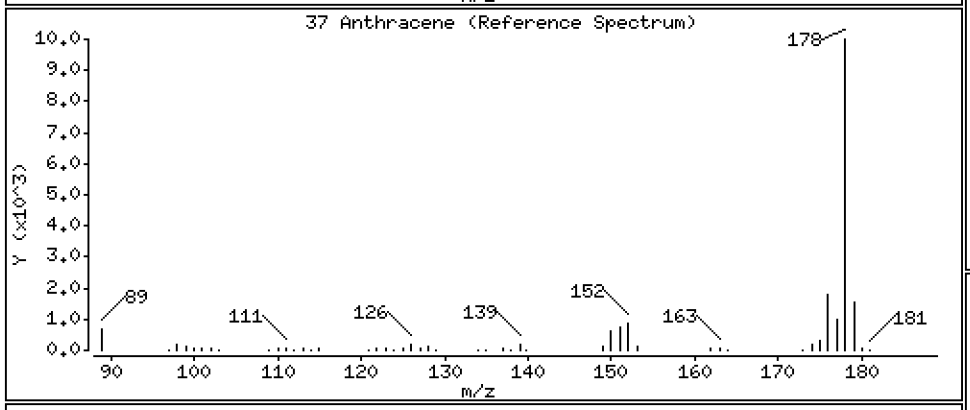
Column diameter: 0.25

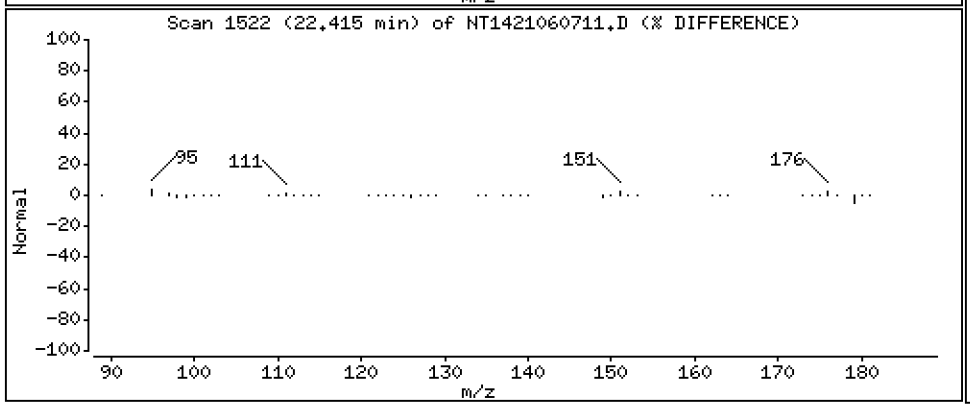
37 Anthracene

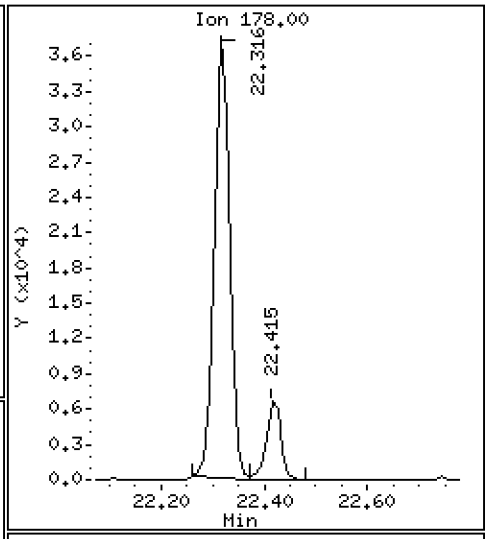
Concentration: 0.4096 ug/mL

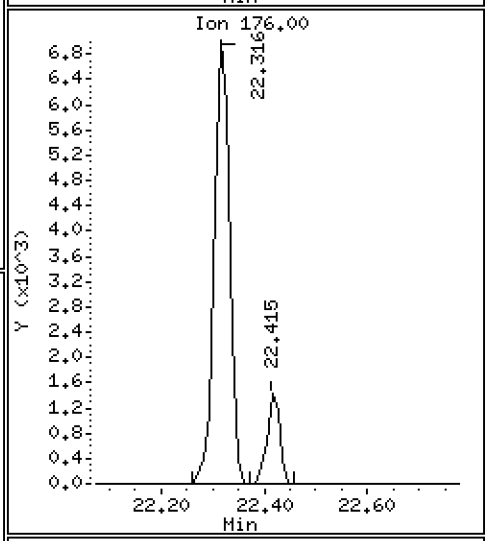


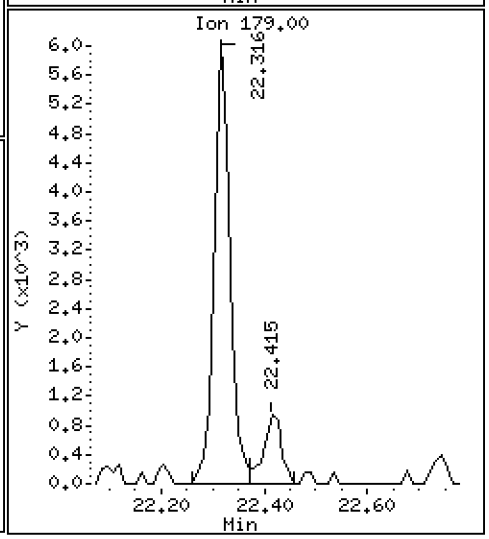












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Date : 07-JUN-2021 20:30

Client ID:

Instrument: nt14.i

Sample Info: 21E0106-02

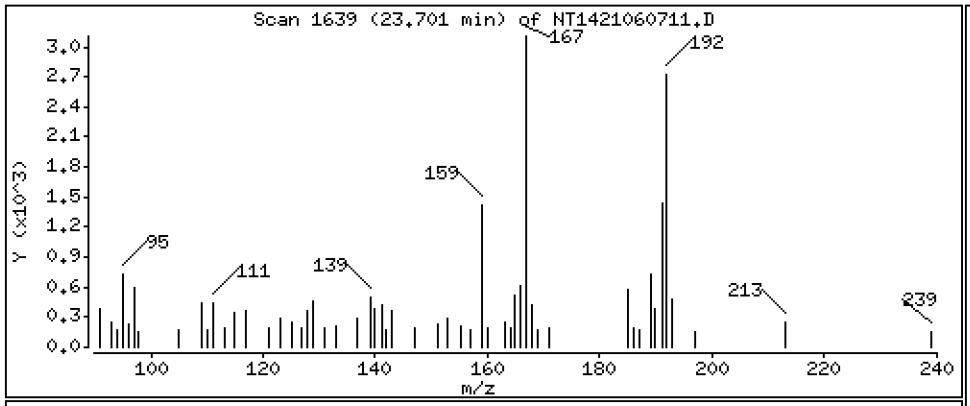
Operator: VTS

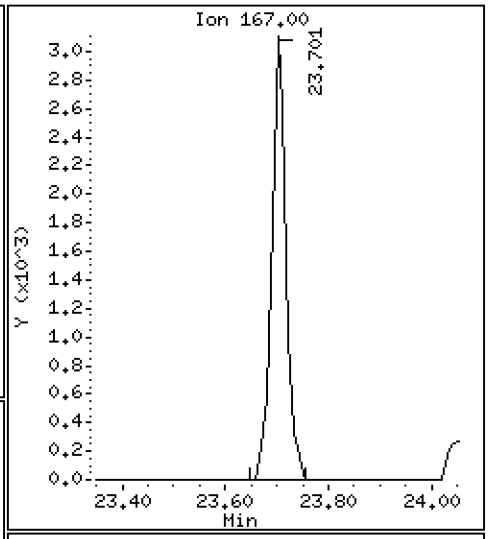
Column phase: Rxi-17Sil MS

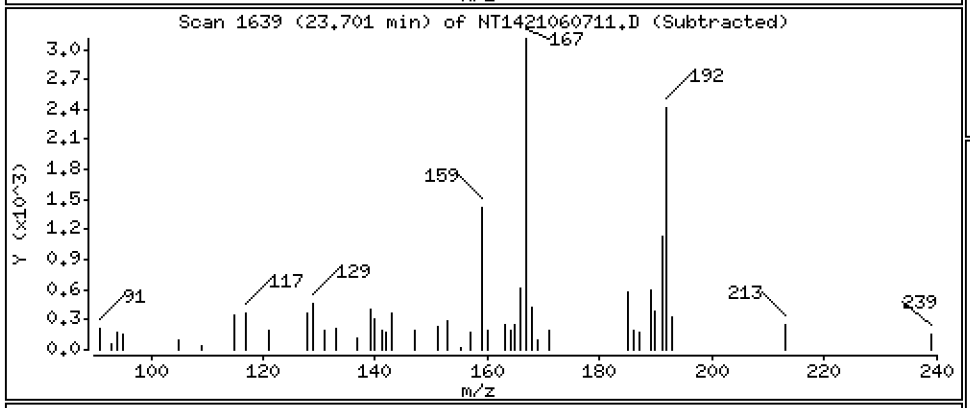
Column diameter: 0.25

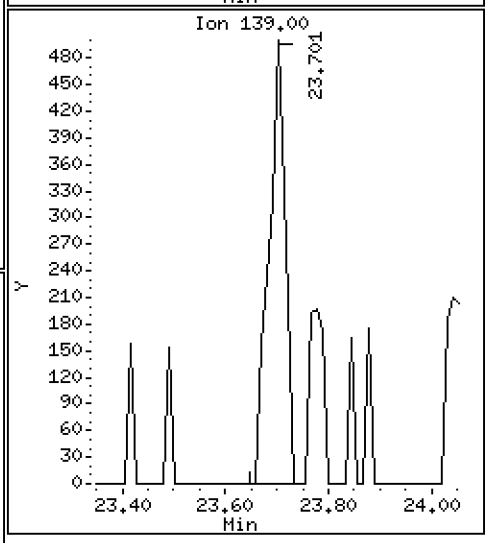
42 Carbazole

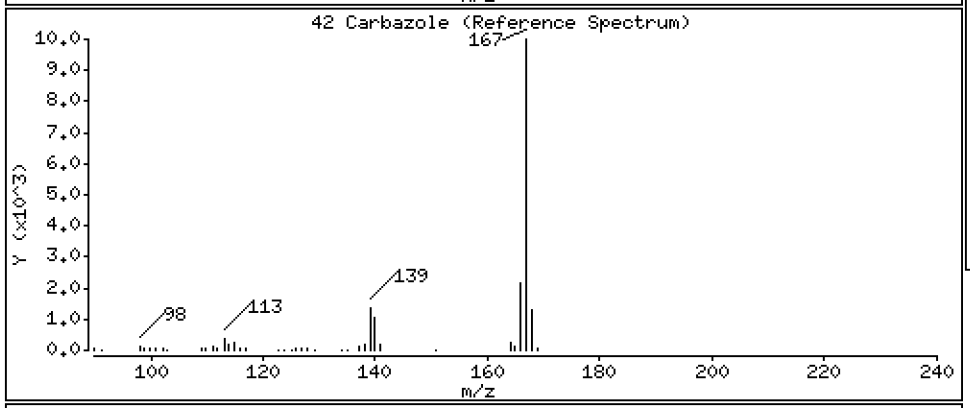
Concentration: 0.1967 ug/mL

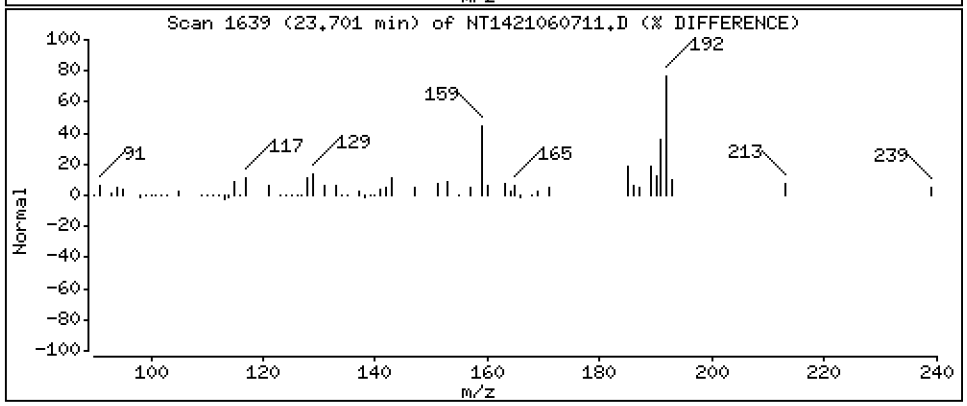












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Date : 07-JUN-2021 20:30

Client ID:

Instrument: nt14.i

Sample Info: 21E0106-02

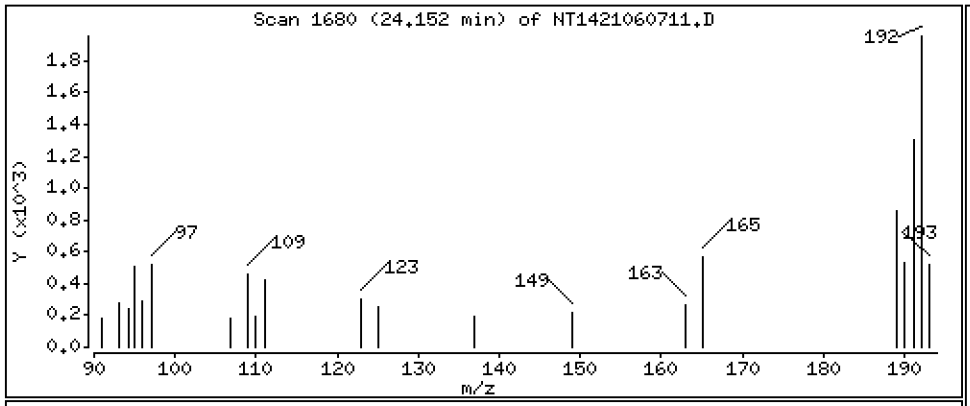
Operator: VTS

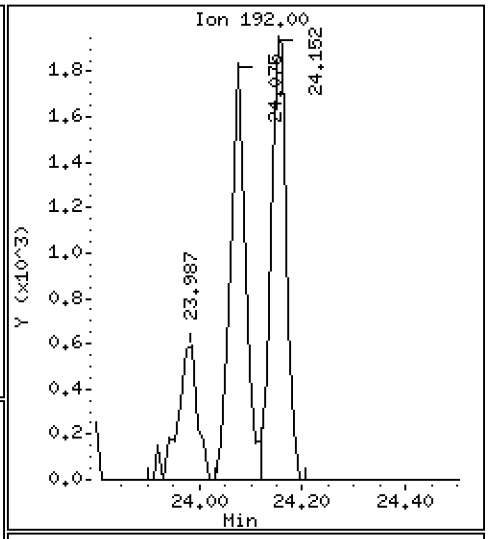
Column phase: Rxi-17Sil MS

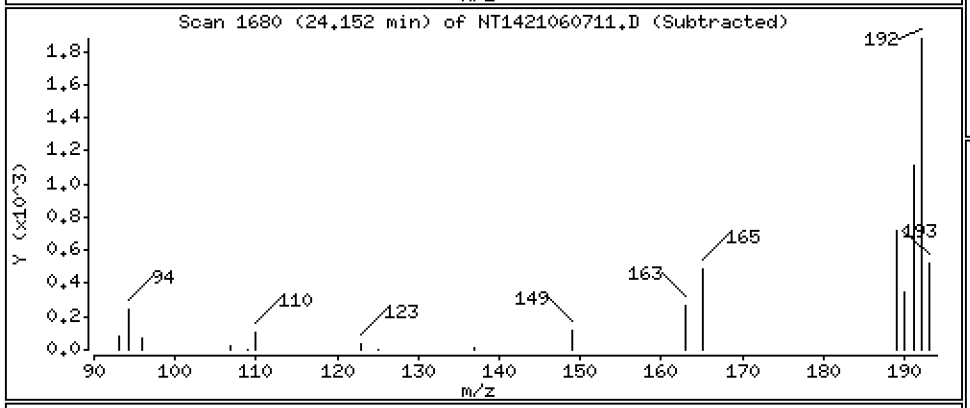
Column diameter: 0.25

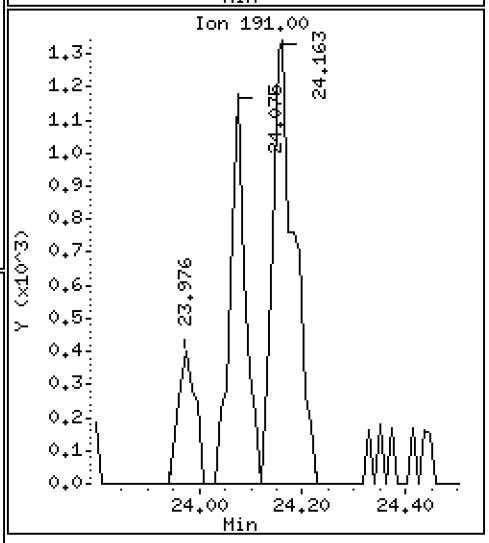
43 1-Methylphenanthrene

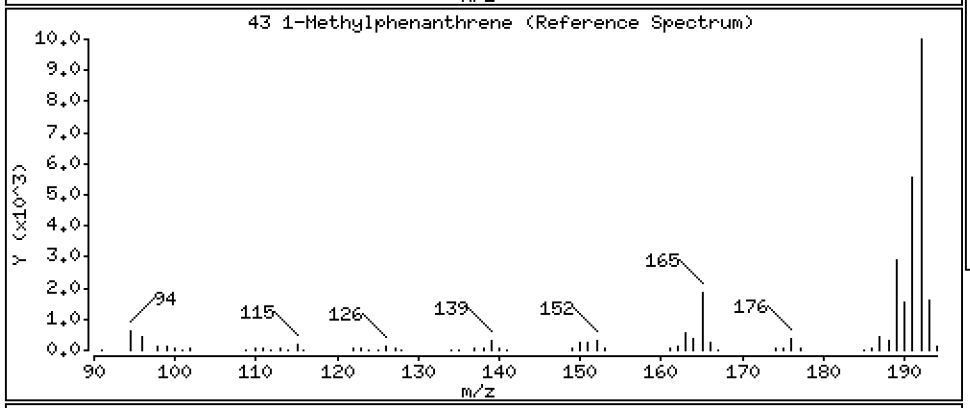
Concentration: 0.1702 ug/mL

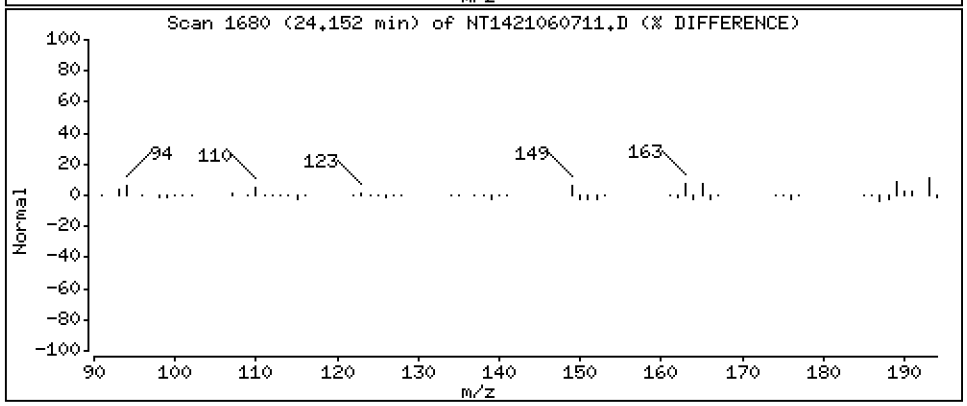












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Date : 07-JUN-2021 20:30

Client ID:

Instrument: nt14.i

Sample Info: 21E0106-02

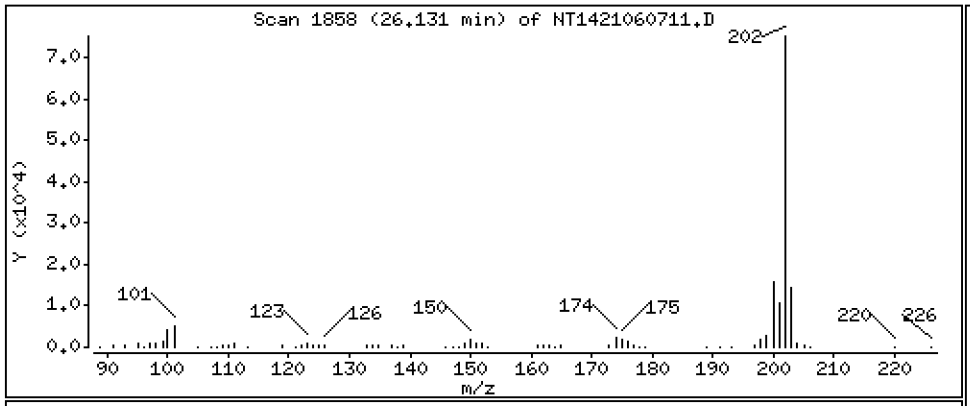
Operator: VTS

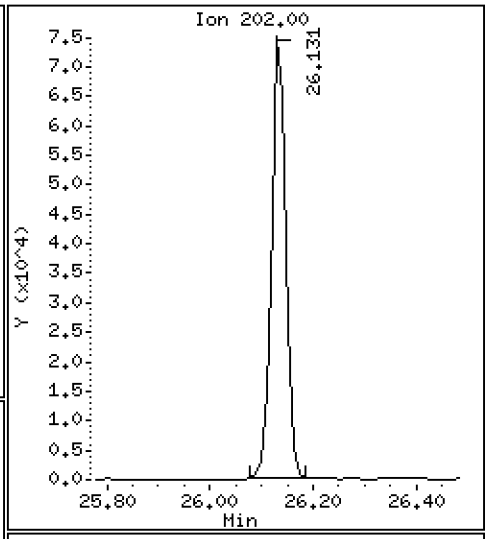
Column phase: Rxi-17Sil MS

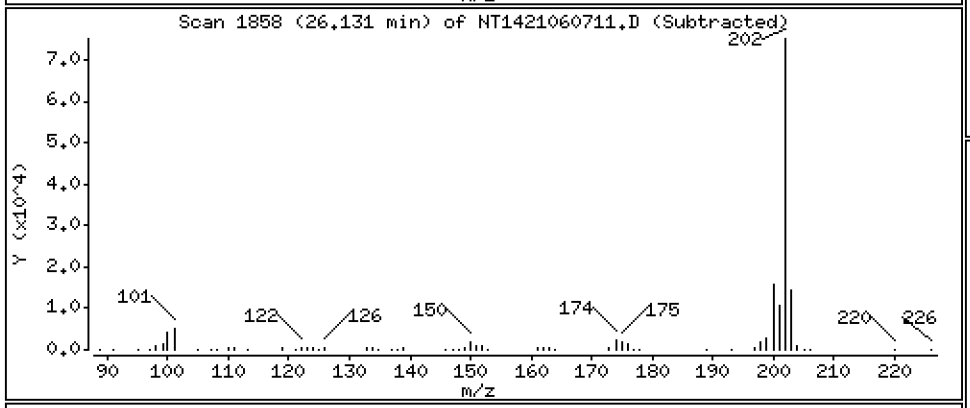
Column diameter: 0.25

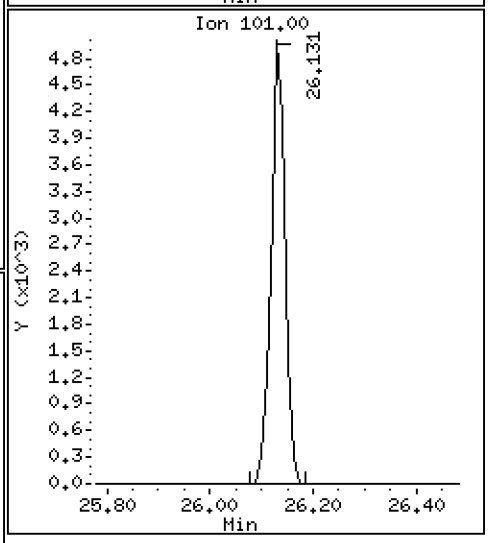
44 Fluoranthene

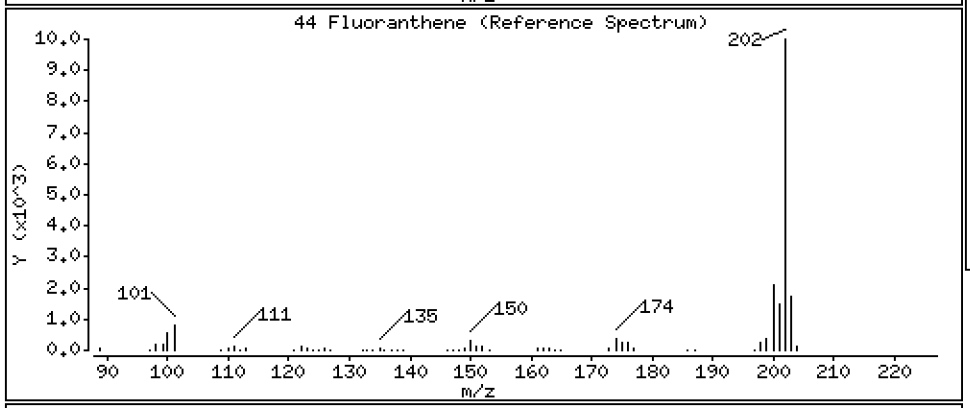
Concentration: 3.777 ug/mL

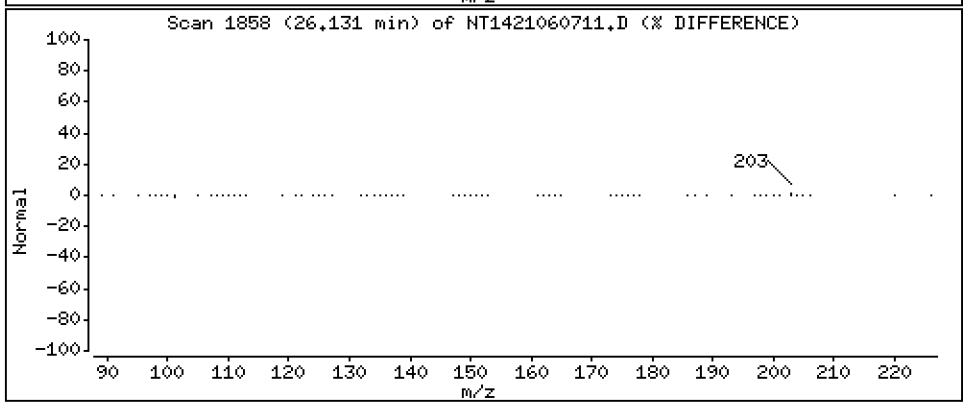












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Date : 07-JUN-2021 20:30

Client ID:

Instrument: nt14.i

Sample Info: 21E0106-02

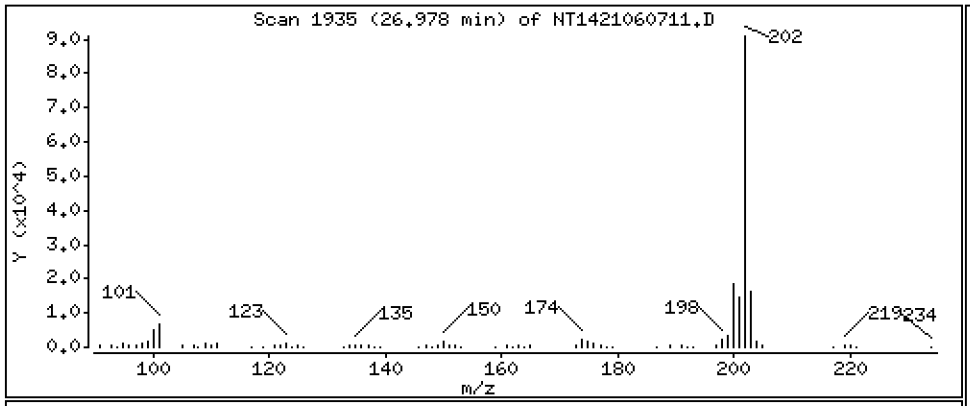
Operator: VTS

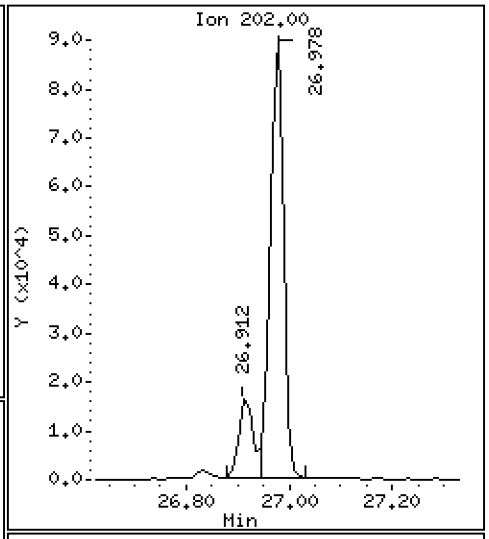
Column phase: Rxi-17Sil MS

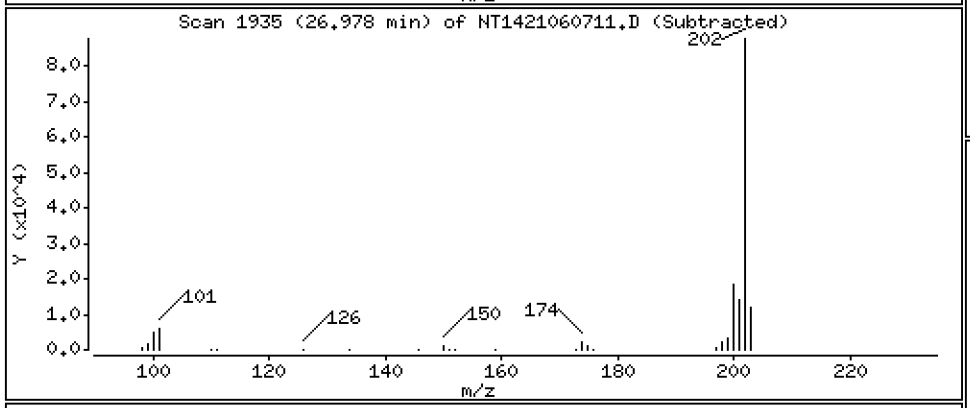
Column diameter: 0.25

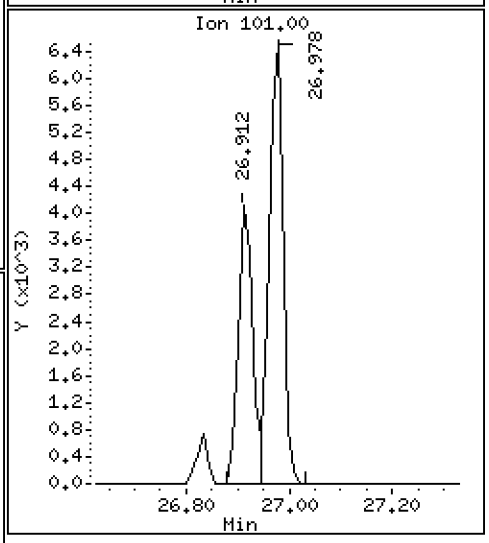
46 Pyrene

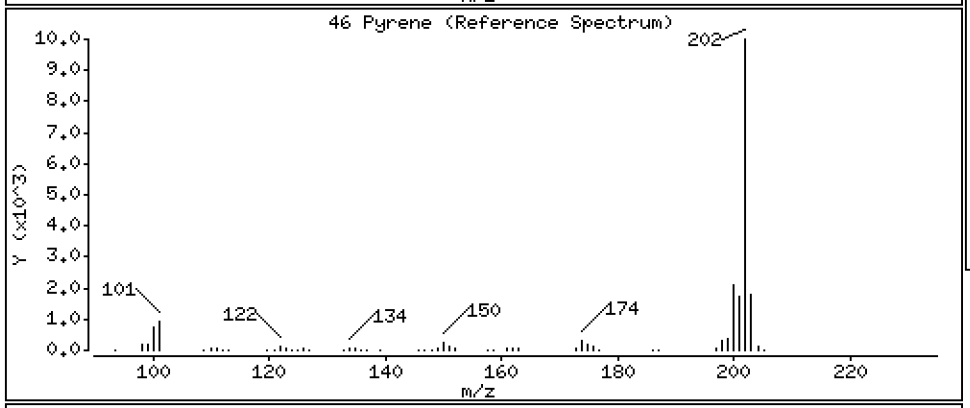
Concentration: 3.982 ug/mL

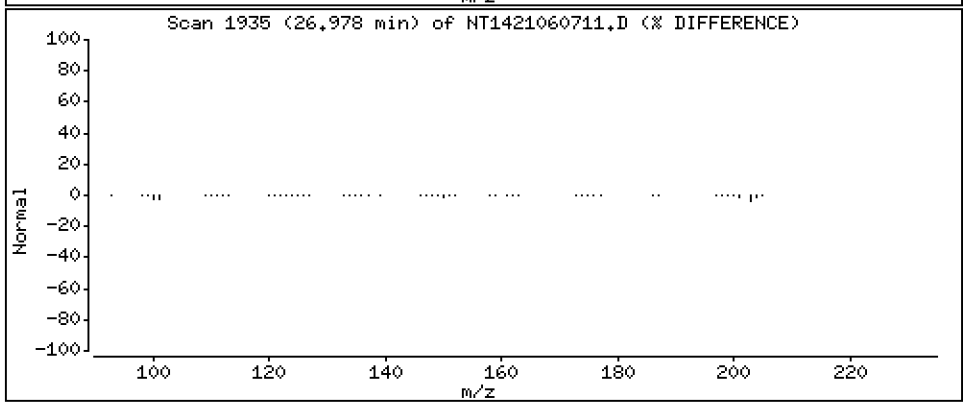












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Date : 07-JUN-2021 20:30

Client ID:

Instrument: nt14.i

Sample Info: 21E0106-02

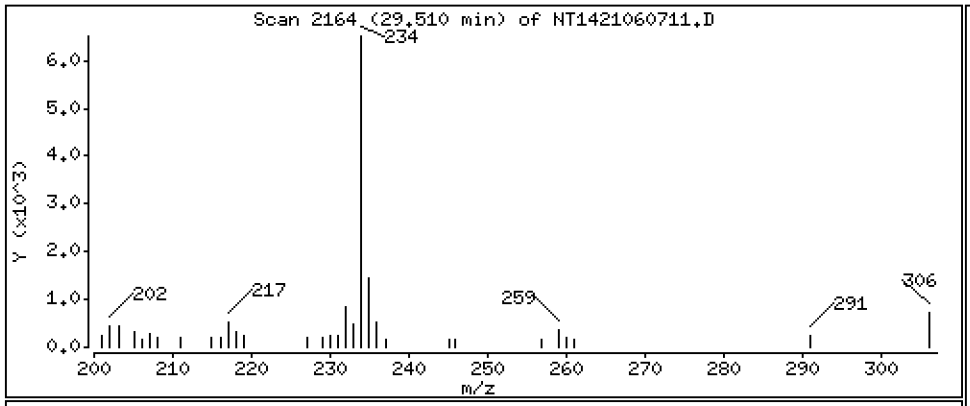
Operator: VTS

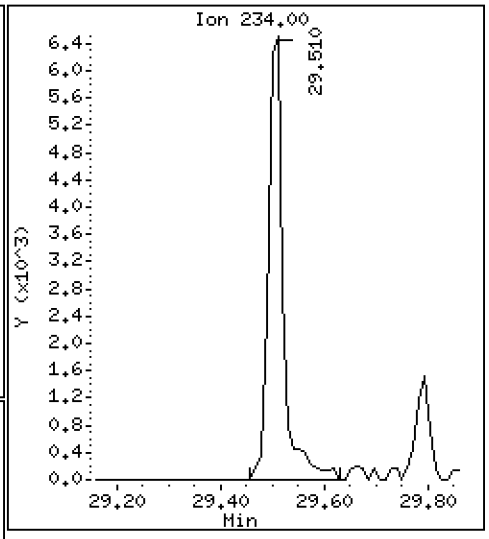
Column phase: Rxi-17Sil MS

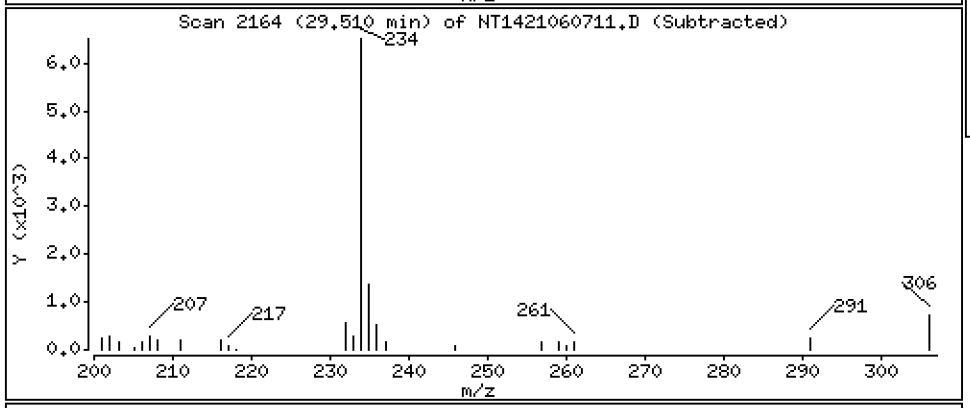
Column diameter: 0.25

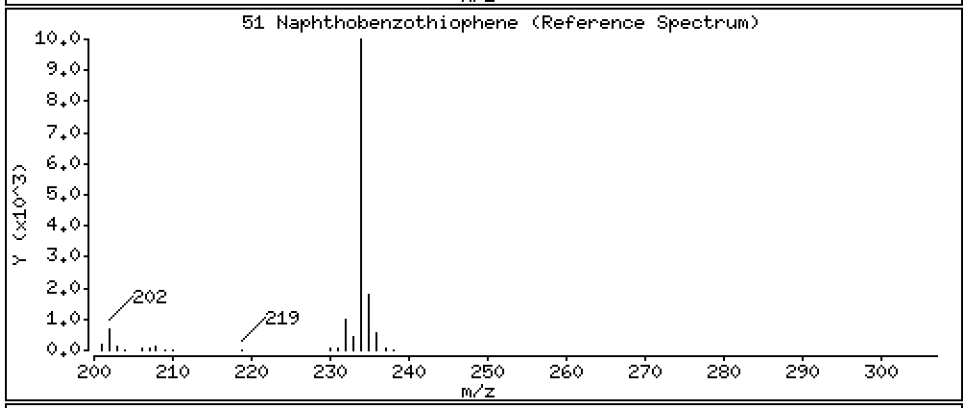
51 Naphthobenzothiophene

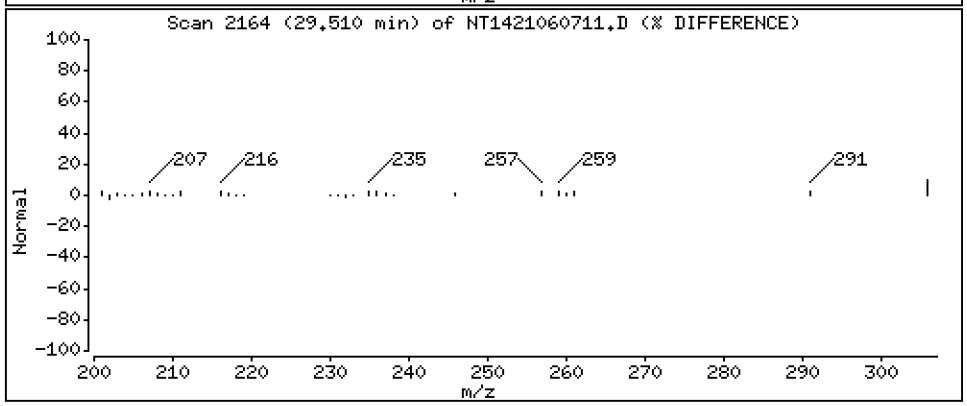
Concentration: 0.3103 ug/mL











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Date : 07-JUN-2021 20:30

Client ID:

Instrument: nt14.i

Sample Info: 21E0106-02

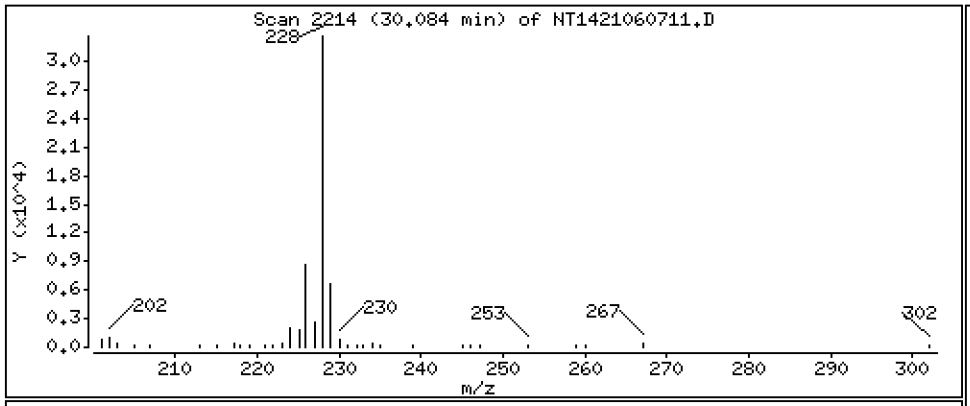
Operator: VTS

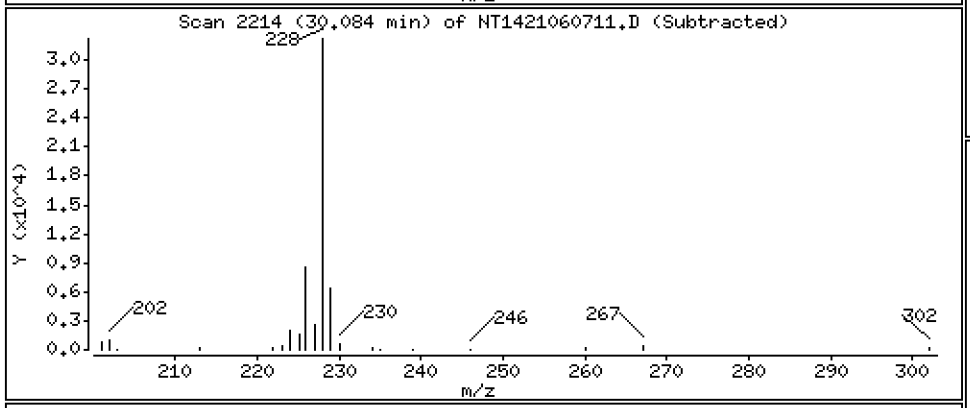
Column phase: Rxi-17Sil MS

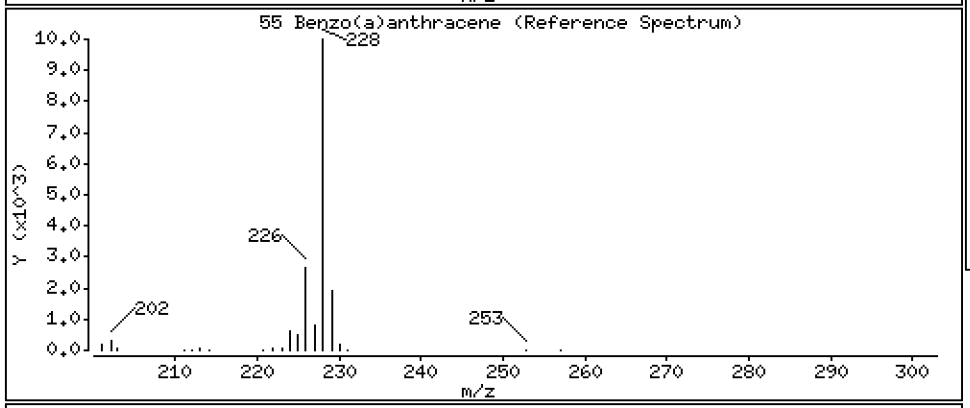
Column diameter: 0.25

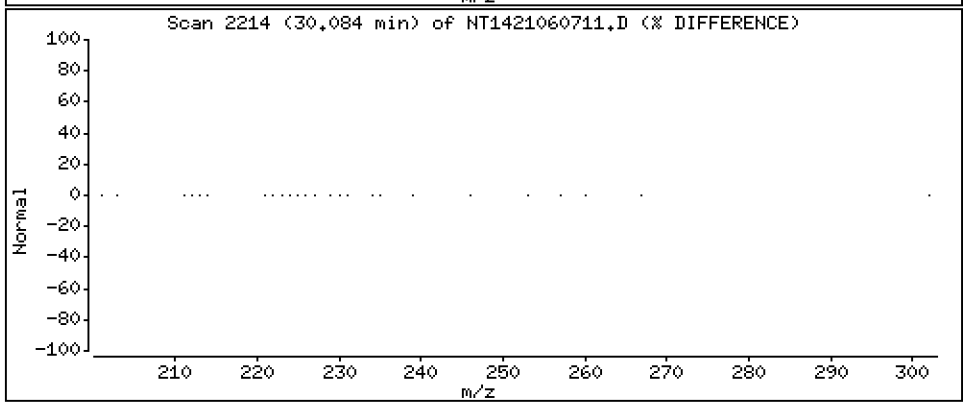
55 Benzo(a)anthracene

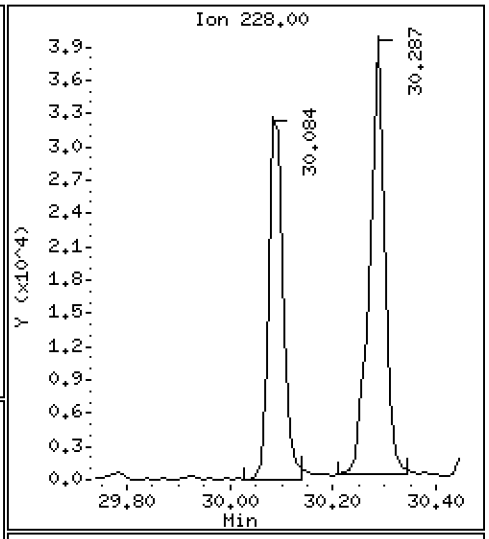
Concentration: 1.930 ug/mL

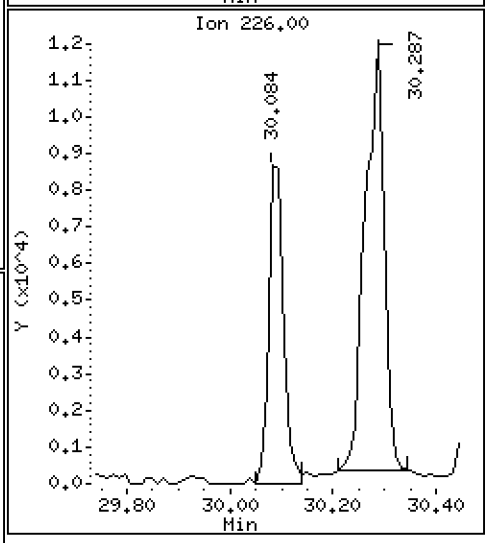












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Date : 07-JUN-2021 20:30

Client ID:

Instrument: nt14.i

Sample Info: 21E0106-02

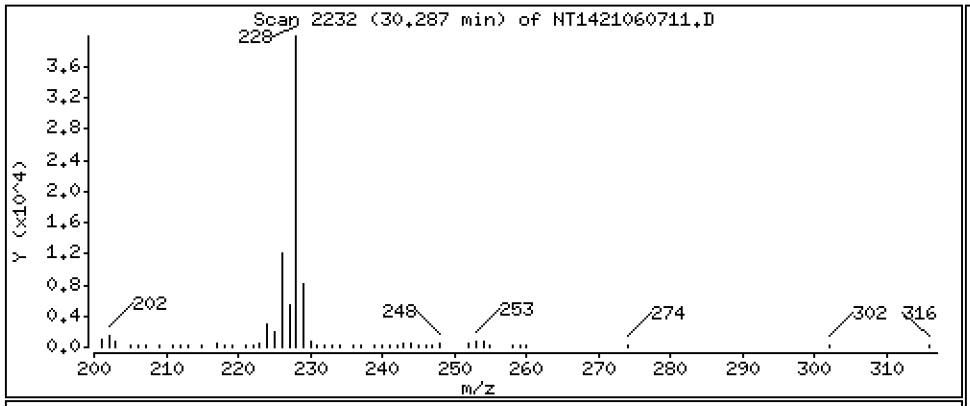
Operator: VTS

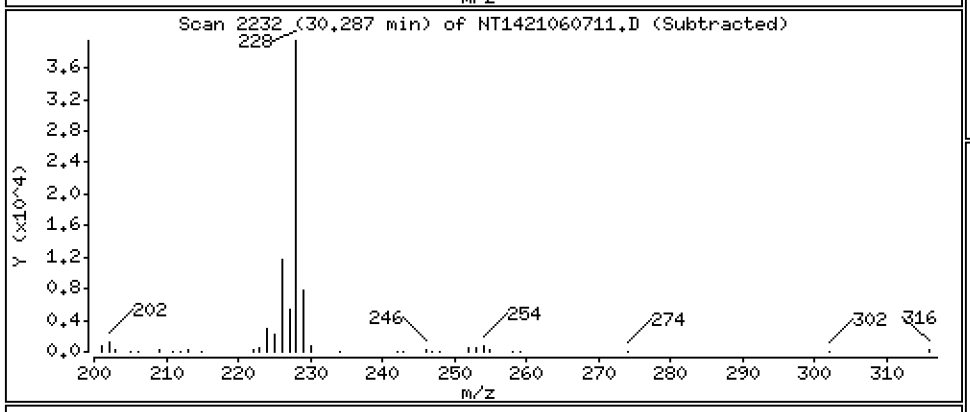
Column phase: Rxi-17Sil MS

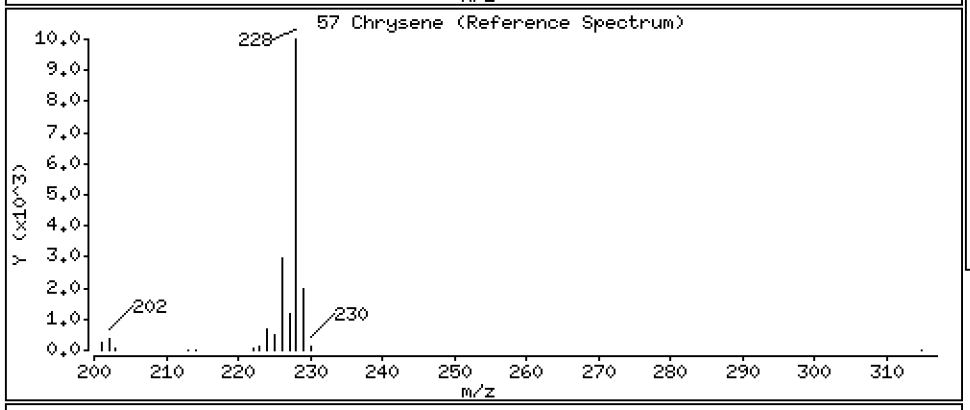
Column diameter: 0.25

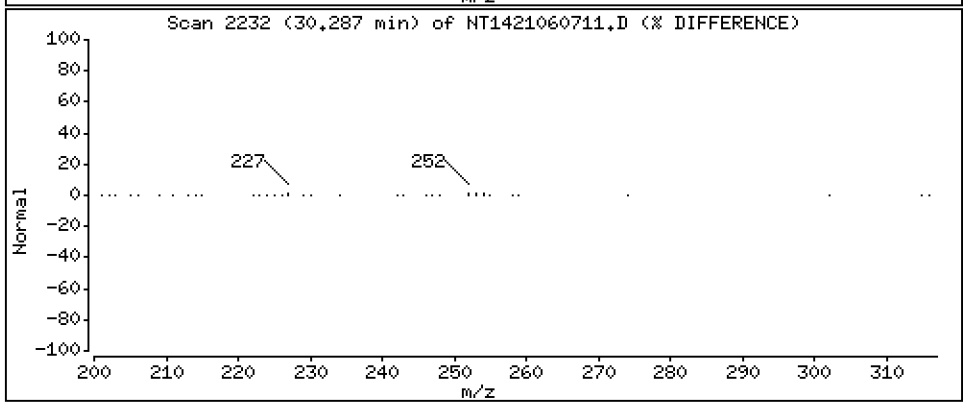
57 Chrysene

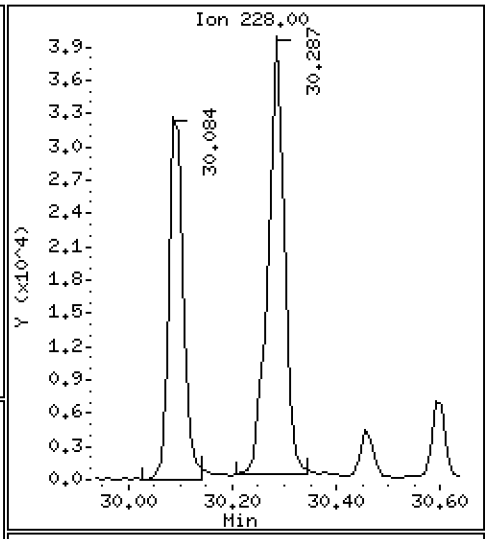
Concentration: 2.421 ug/mL

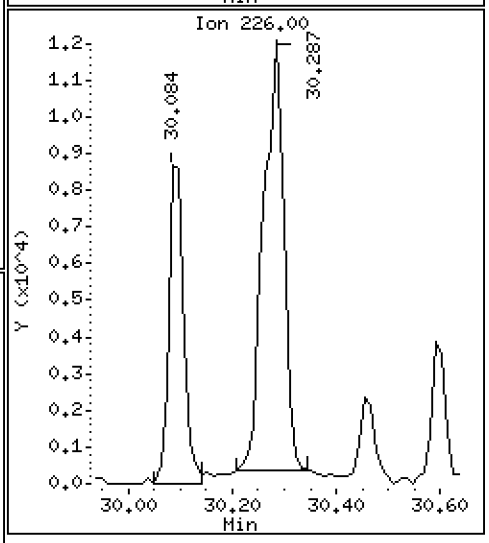












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Date : 07-JUN-2021 20:30

Client ID:

Instrument: nt14.i

Sample Info: 21E0106-02

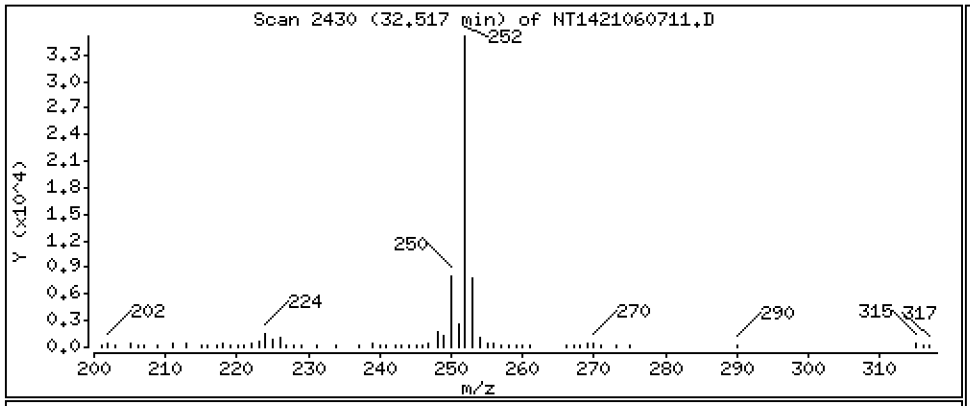
Operator: VTS

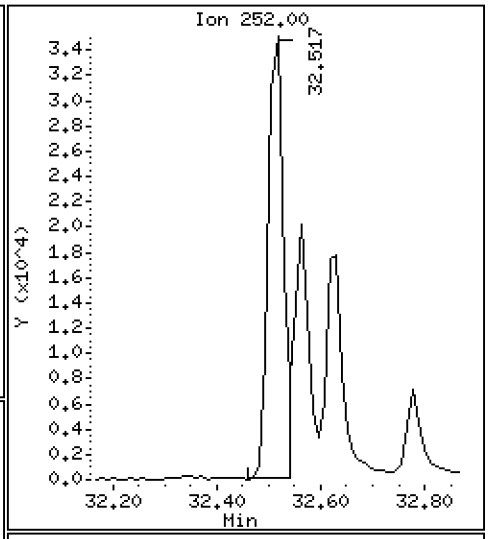
Column phase: Rxi-17Sil MS

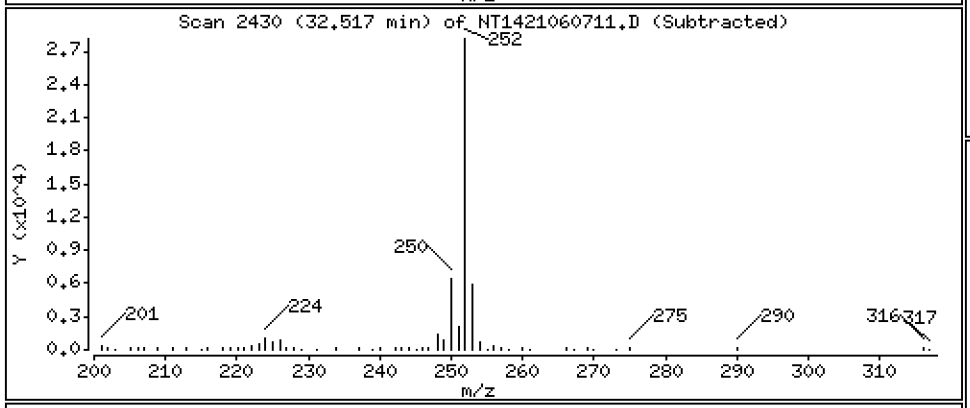
Column diameter: 0.25

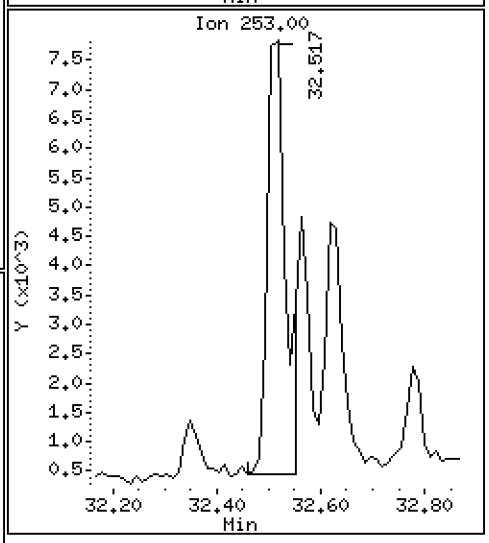
62 Benzo(b)fluoranthene

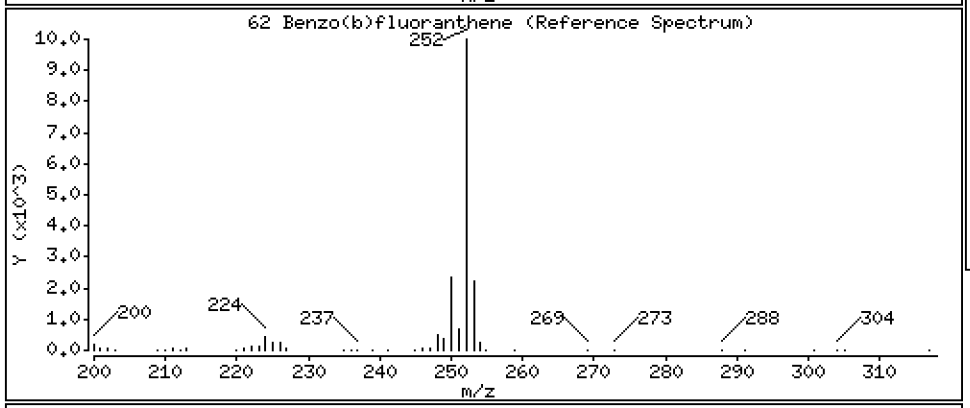
Concentration: 1.927 ug/mL

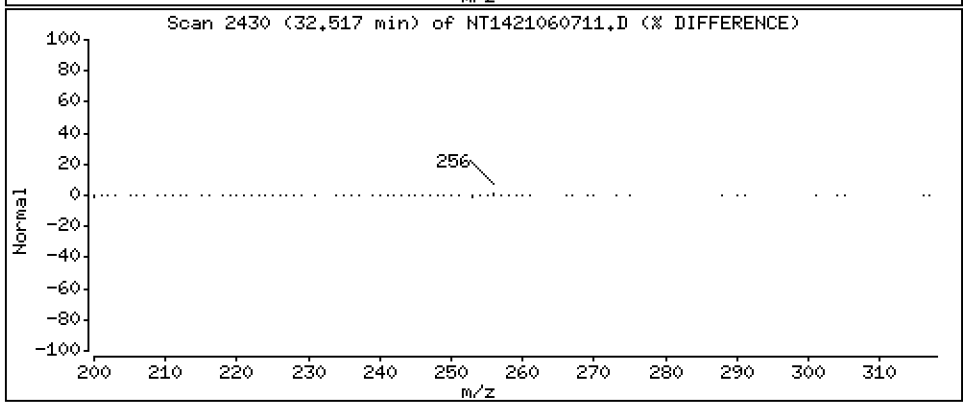












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Date : 07-JUN-2021 20:30

Client ID:

Instrument: nt14.i

Sample Info: 21E0106-02

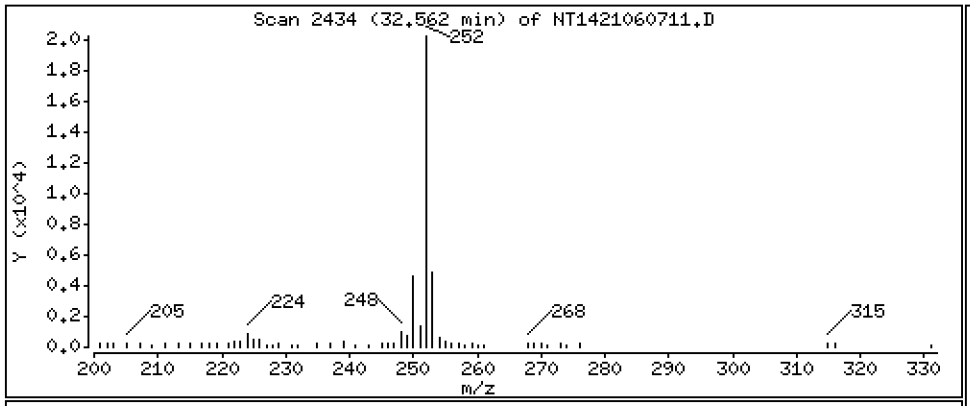
Operator: VTS

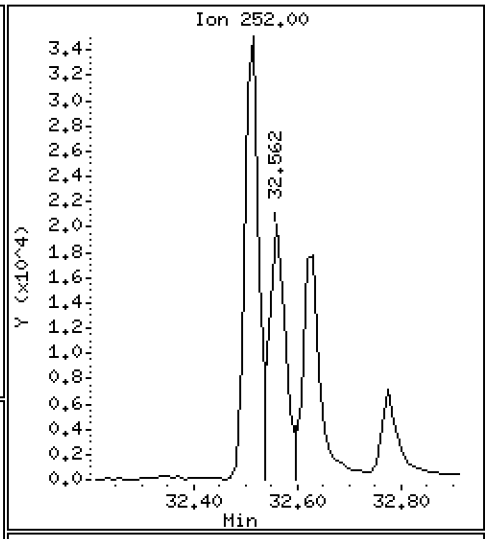
Column phase: Rxi-17Sil MS

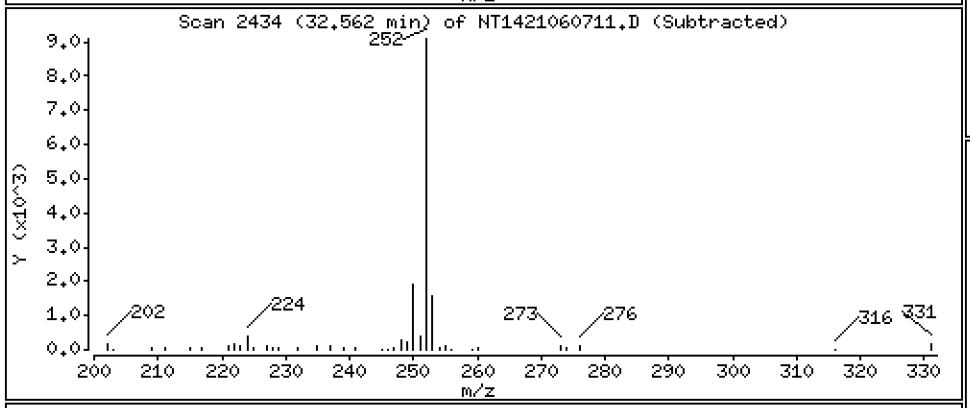
Column diameter: 0.25

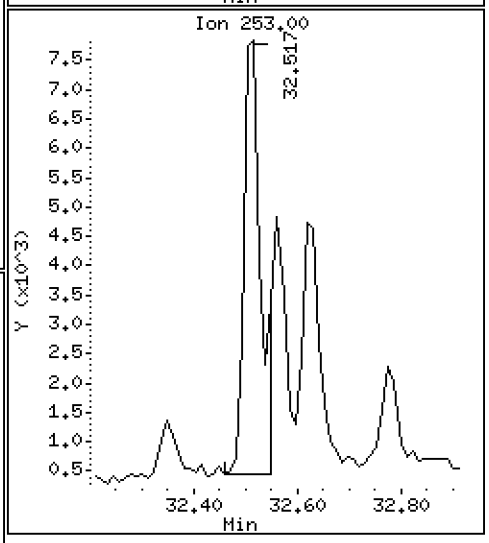
63 Benzo(k)fluoranthene

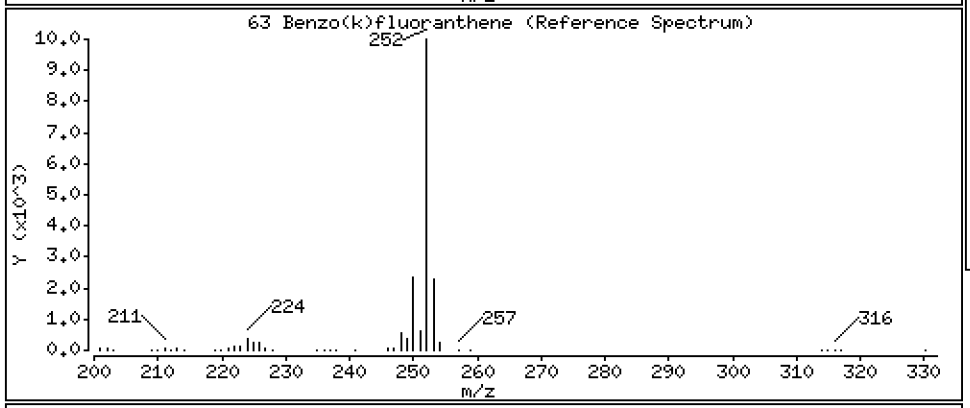
Concentration: 1.169 ug/mL

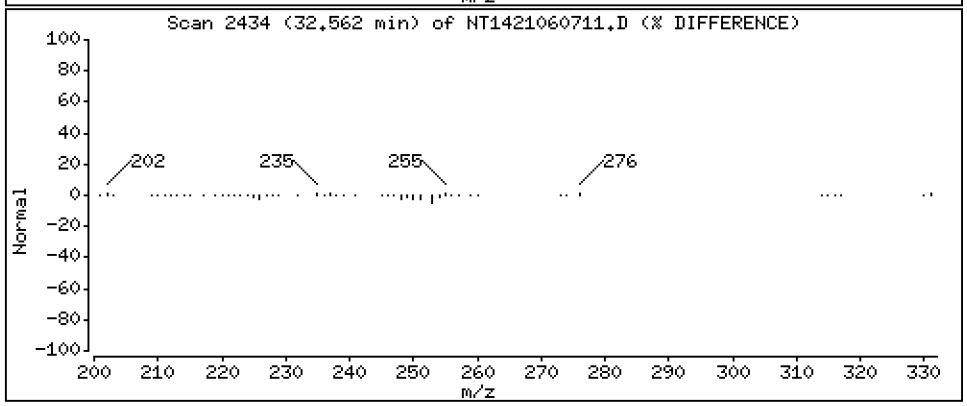












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Date : 07-JUN-2021 20:30

Client ID:

Instrument: nt14.i

Sample Info: 21E0106-02

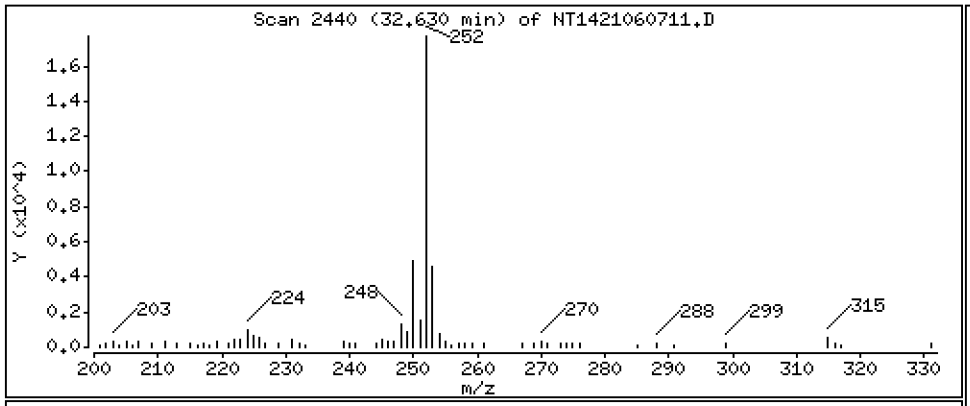
Operator: VTS

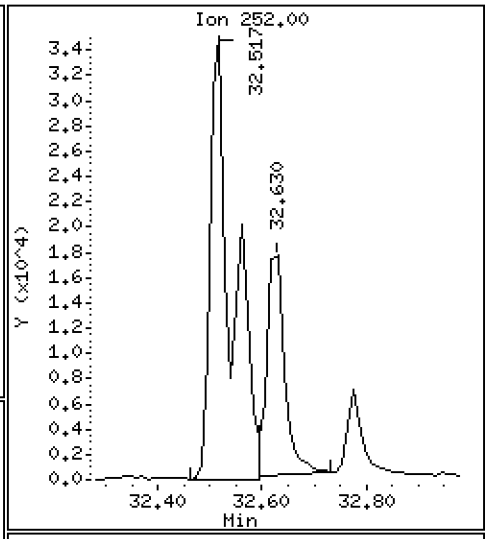
Column phase: Rxi-17Sil MS

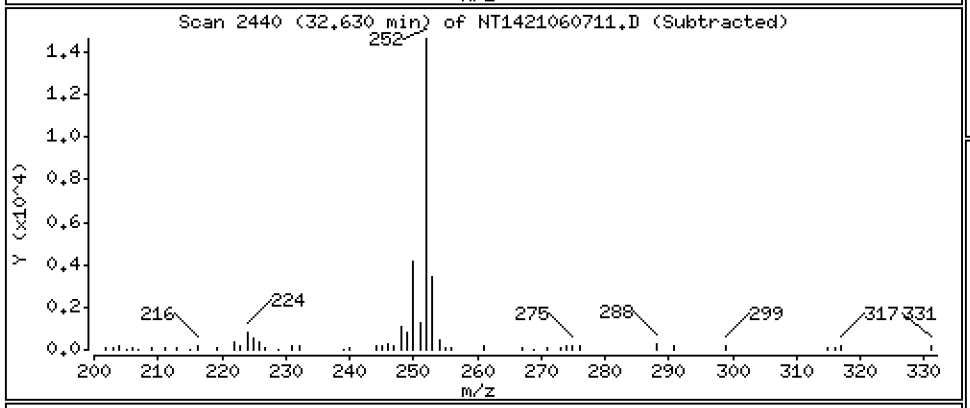
Column diameter: 0.25

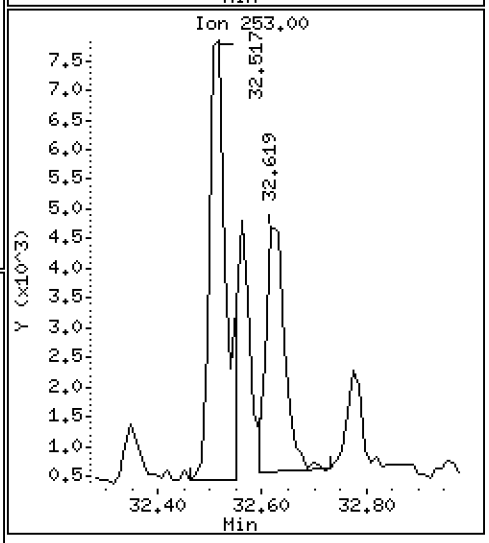
293 Benzo(j)fluoranthene

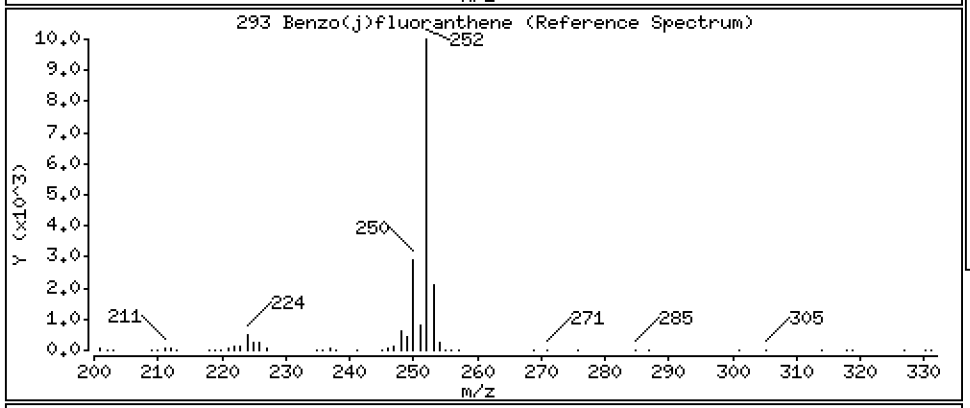
Concentration: 1.163 ug/mL

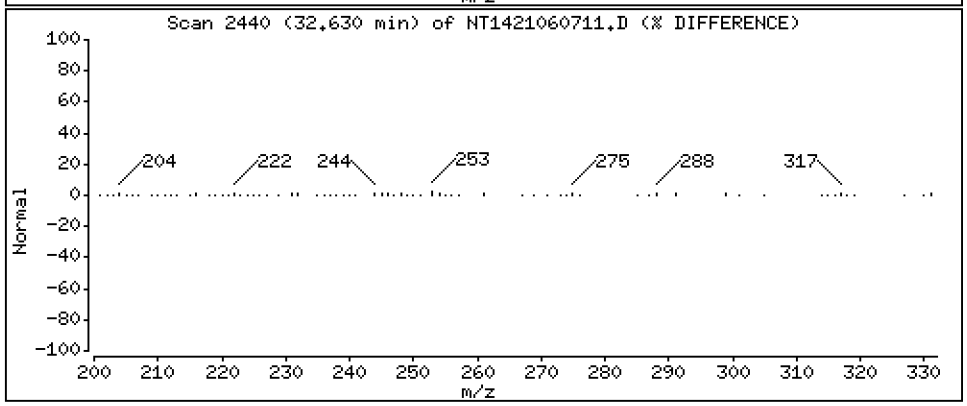












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Date : 07-JUN-2021 20:30

Client ID:

Instrument: nt14.i

Sample Info: 21E0106-02

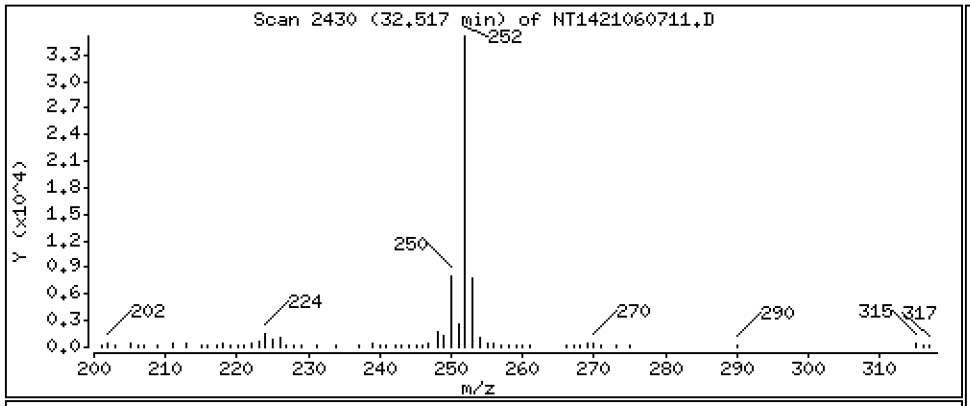
Operator: VTS

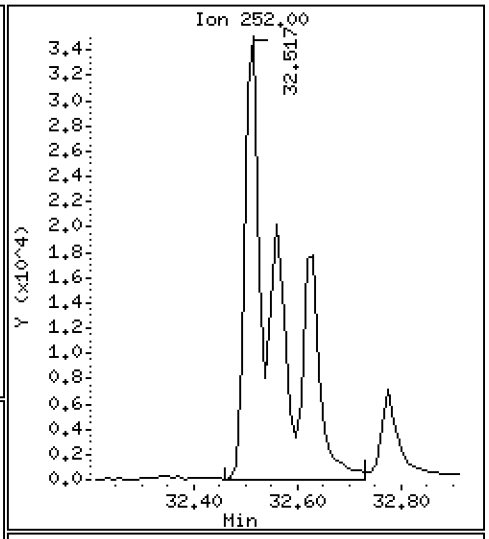
Column phase: Rxi-17Sil MS

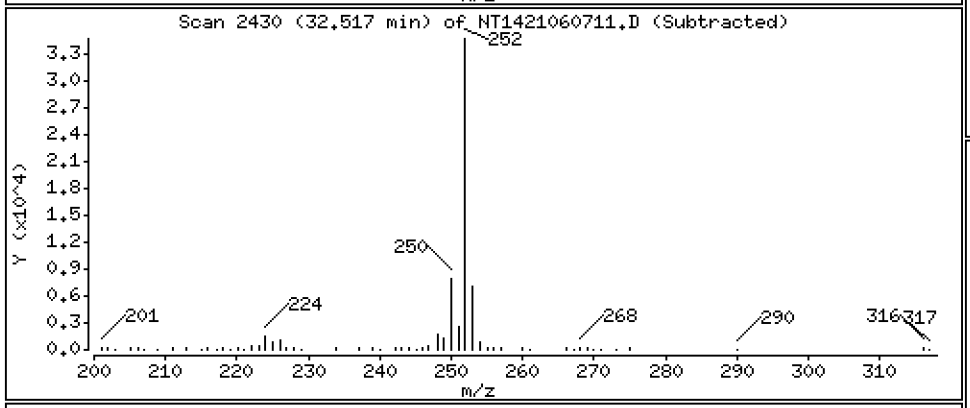
Column diameter: 0.25

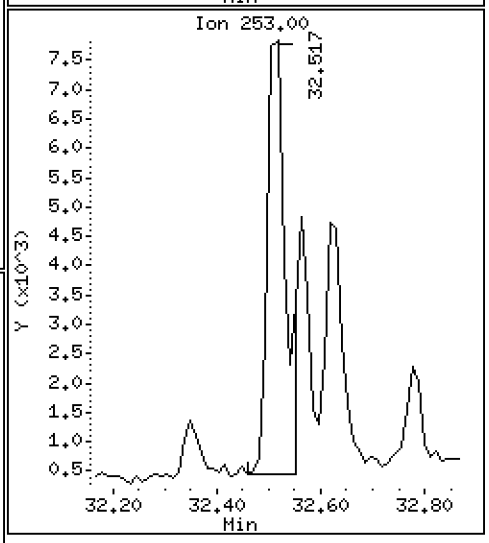
246 Total Benzofluoranthenes

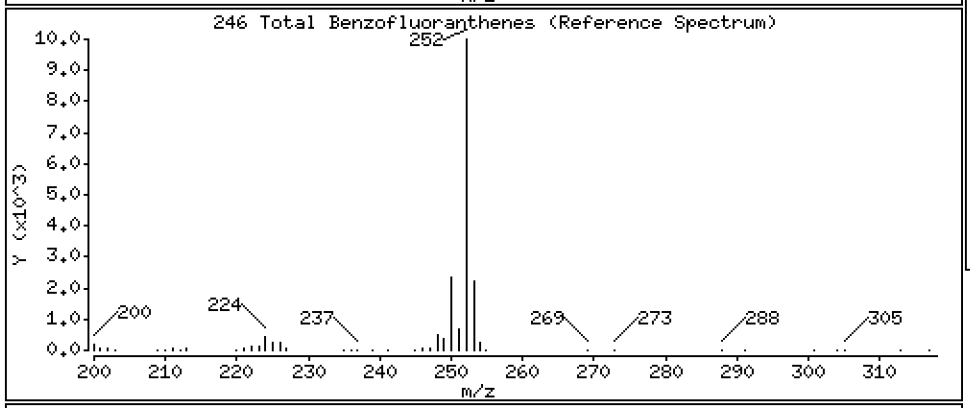
Concentration: 4.356 ug/mL

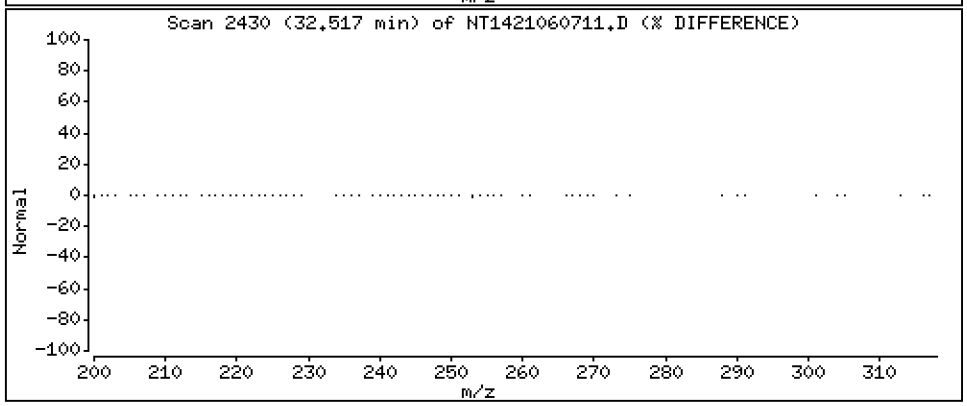












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Date : 07-JUN-2021 20:30

Client ID:

Instrument: nt14.i

Sample Info: 21E0106-02

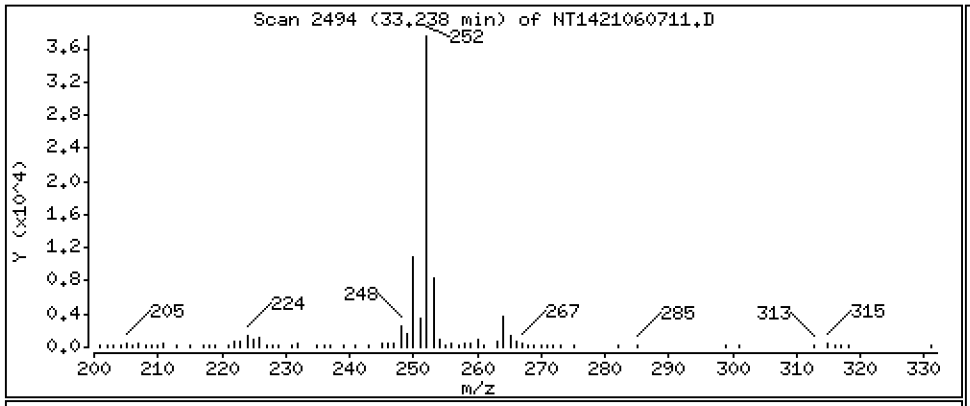
Operator: VTS

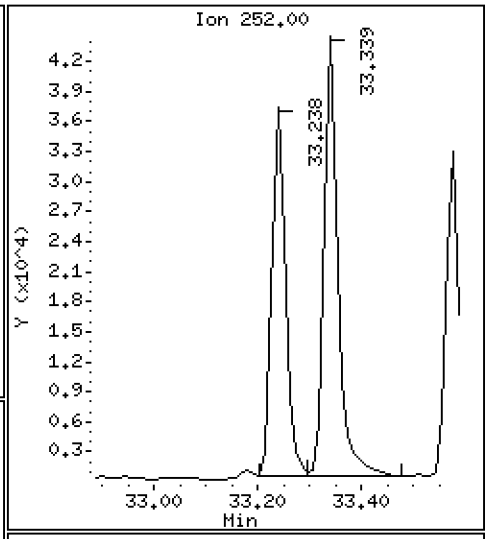
Column phase: Rxi-17Sil MS

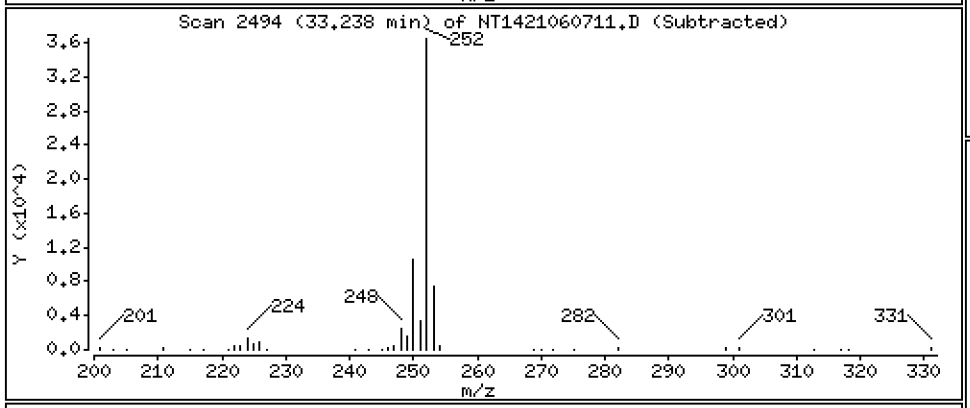
Column diameter: 0.25

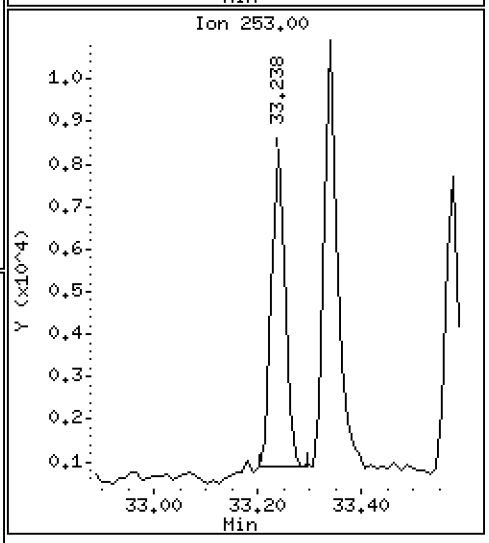
64 Benzo(e)pyrene

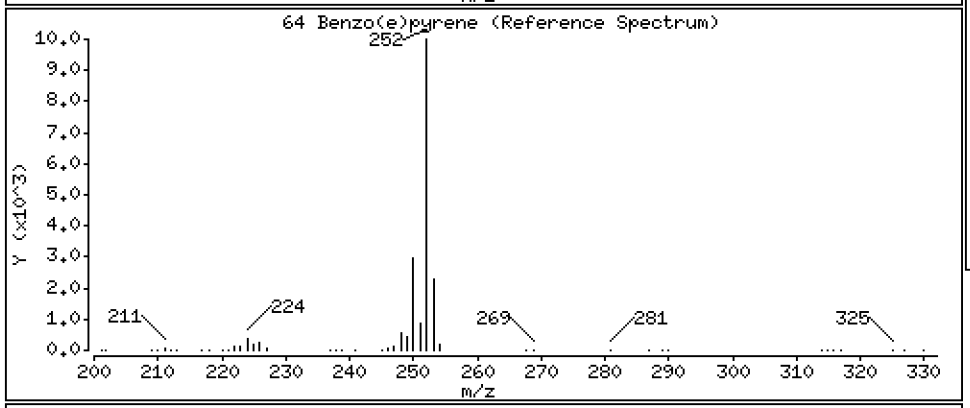
Concentration: 1.840 ug/mL

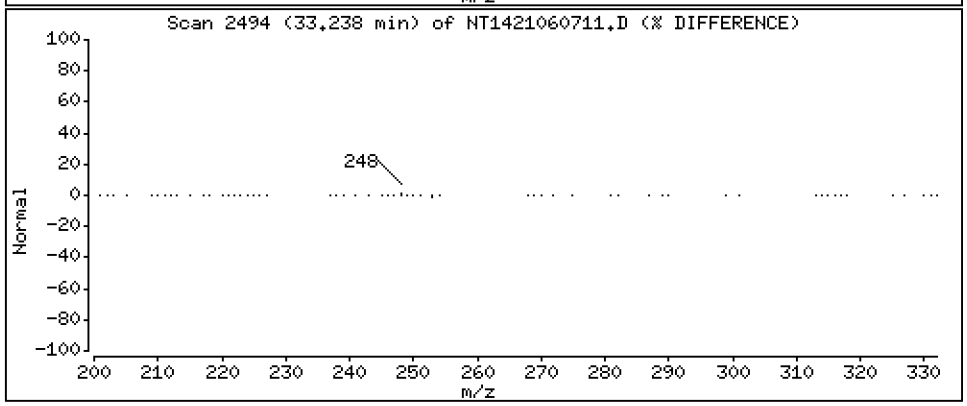












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Date : 07-JUN-2021 20:30

Client ID:

Instrument: nt14.i

Sample Info: 21E0106-02

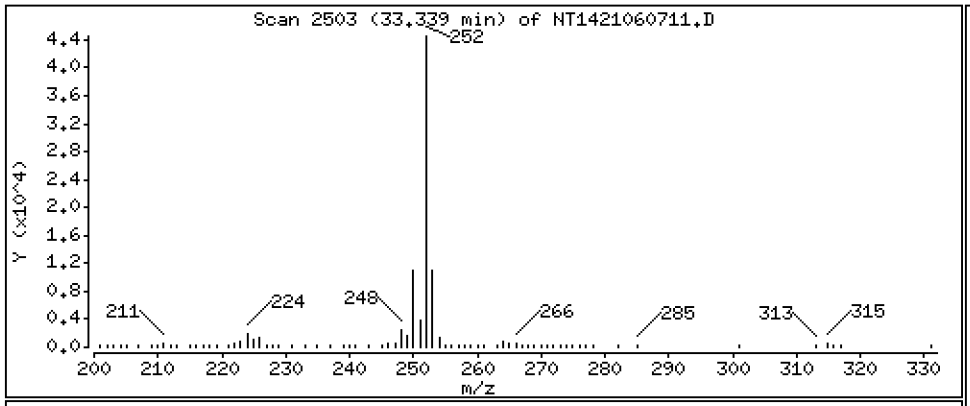
Operator: VTS

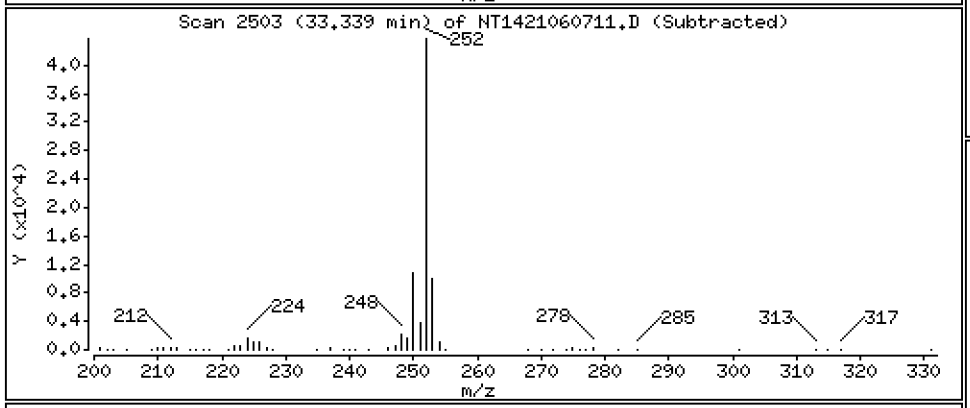
Column phase: Rxi-17Sil MS

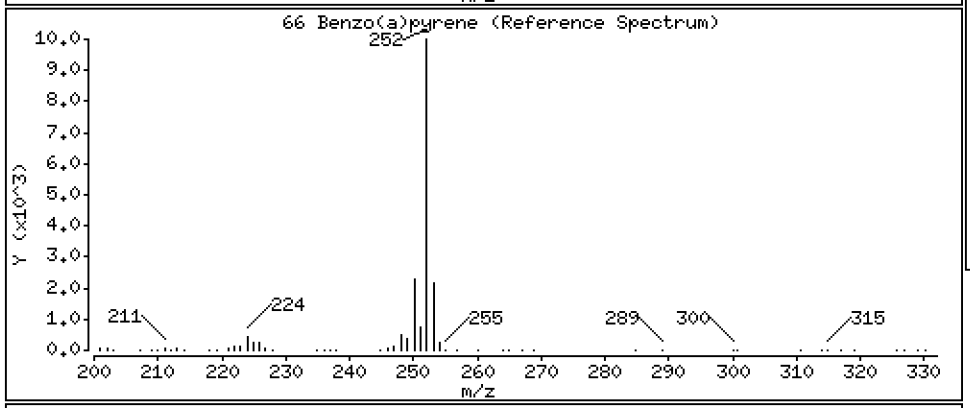
Column diameter: 0.25

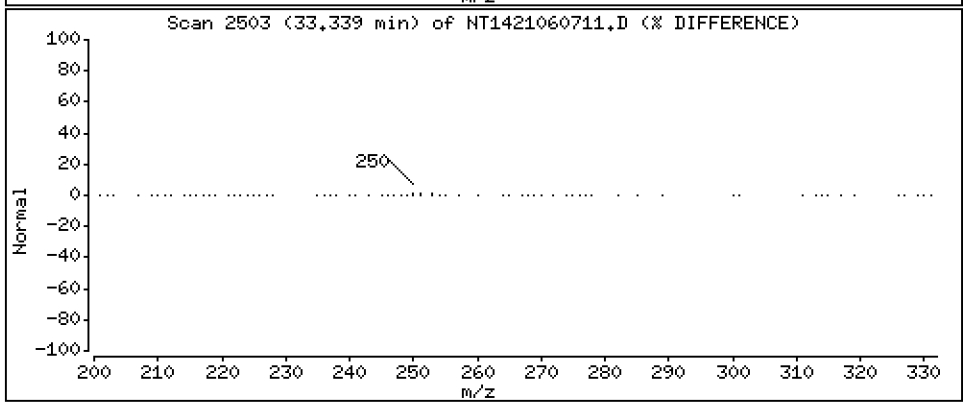
66 Benzo(a)pyrene

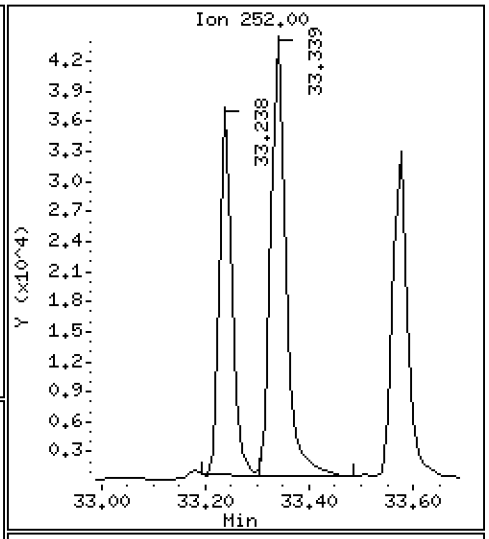
Concentration: 2.697 ug/mL

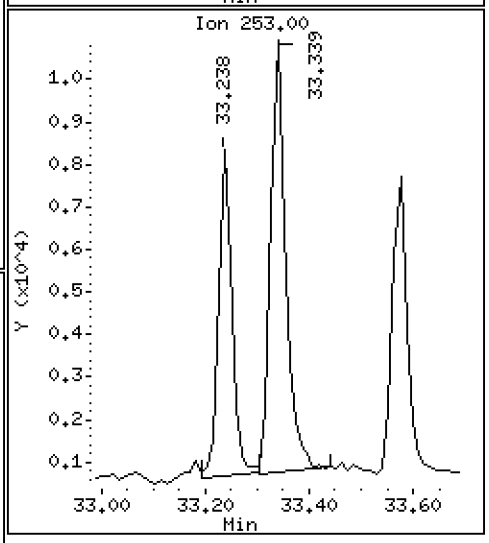












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Date : 07-JUN-2021 20:30

Client ID:

Instrument: nt14.i

Sample Info: 21E0106-02

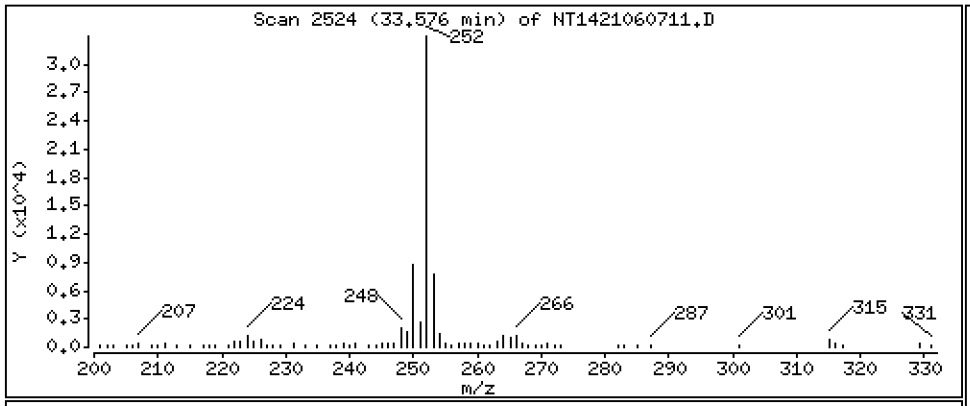
Operator: VTS

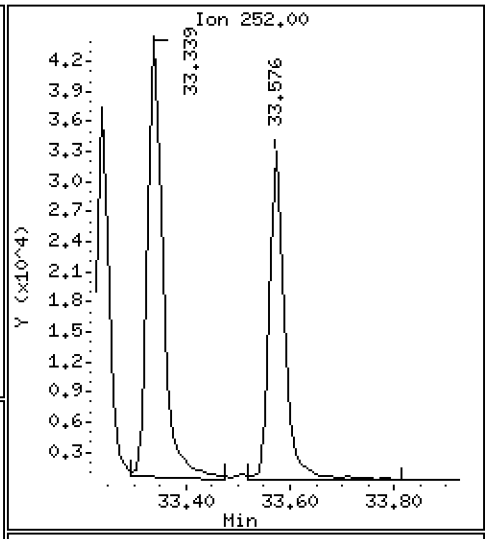
Column phase: Rxi-17Sil MS

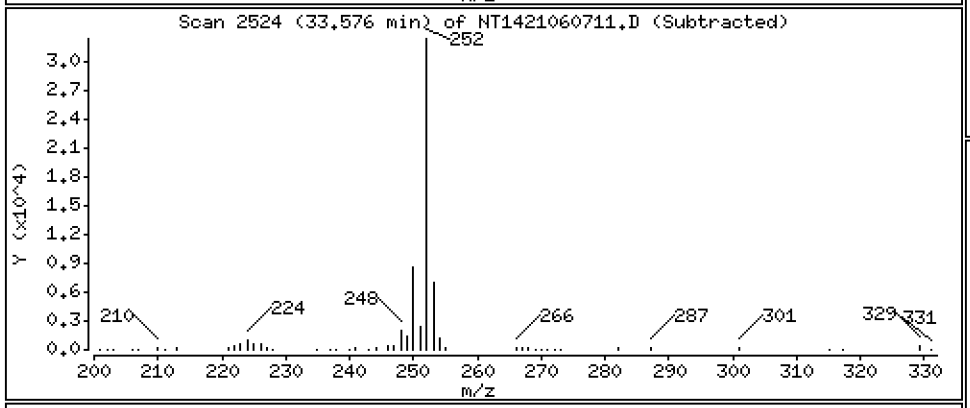
Column diameter: 0.25

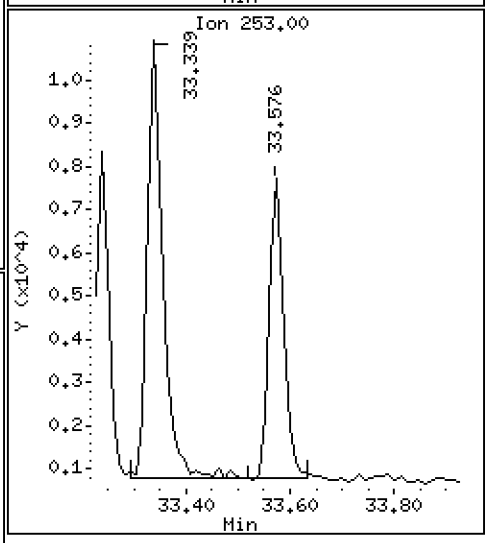
68 Perylene

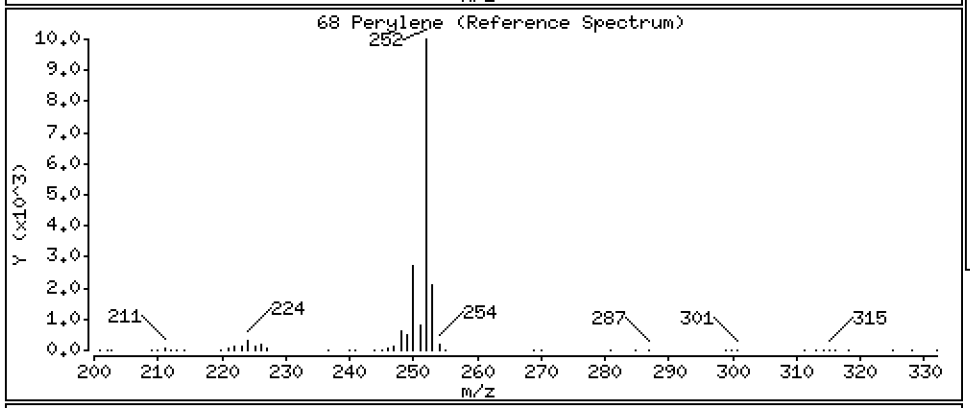
Concentration: 1.957 ug/mL

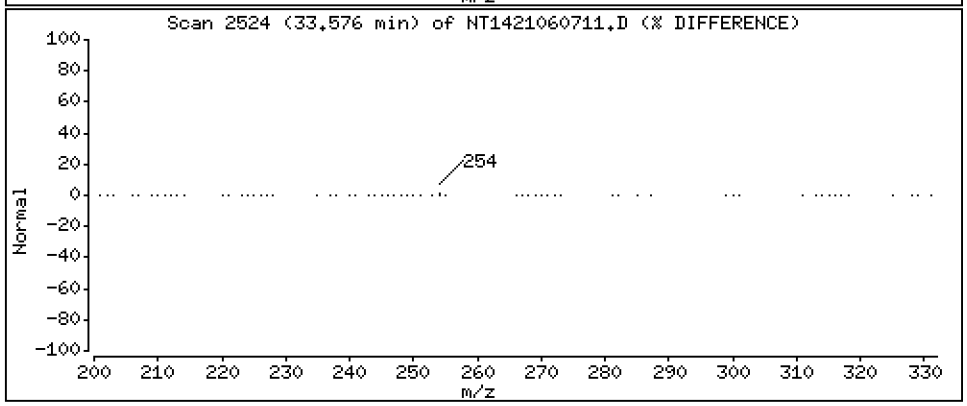












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Date : 07-JUN-2021 20:30

Client ID:

Instrument: nt14.i

Sample Info: 21E0106-02

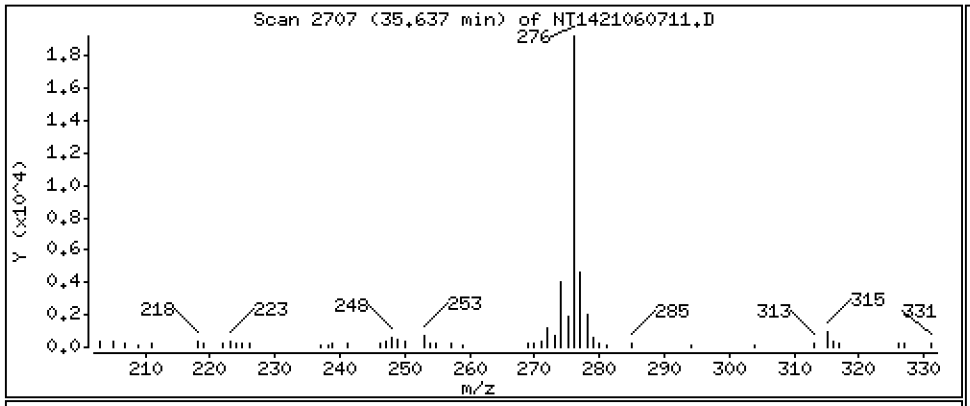
Operator: VTS

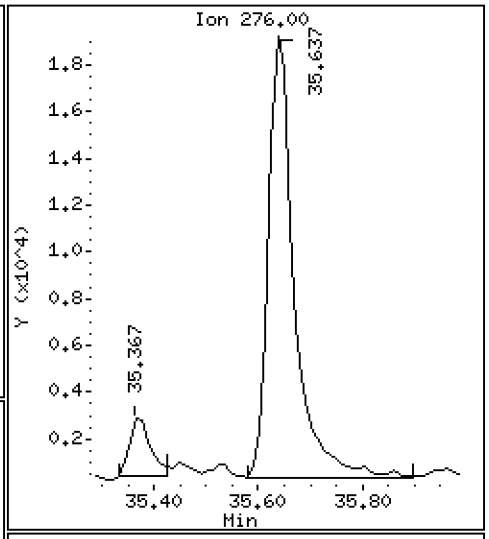
Column phase: Rxi-17Sil MS

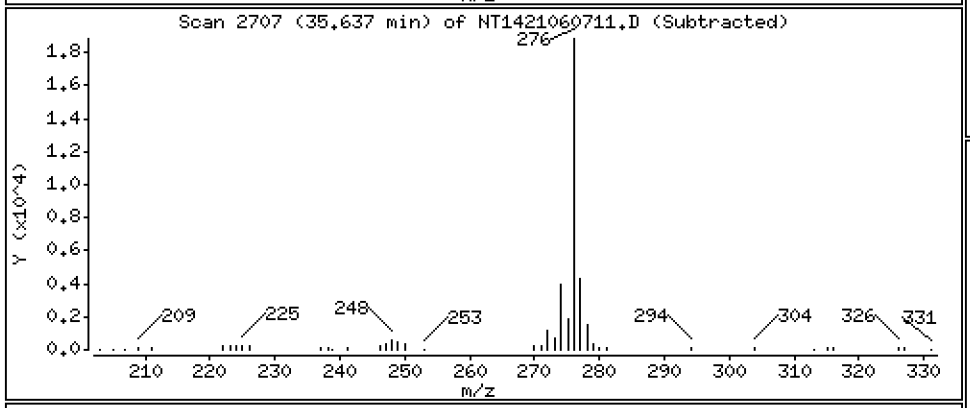
Column diameter: 0.25

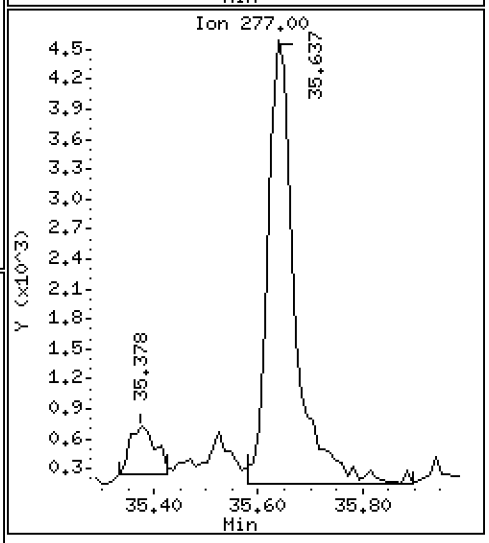
69 Indeno(1,2,3-cd)pyrene

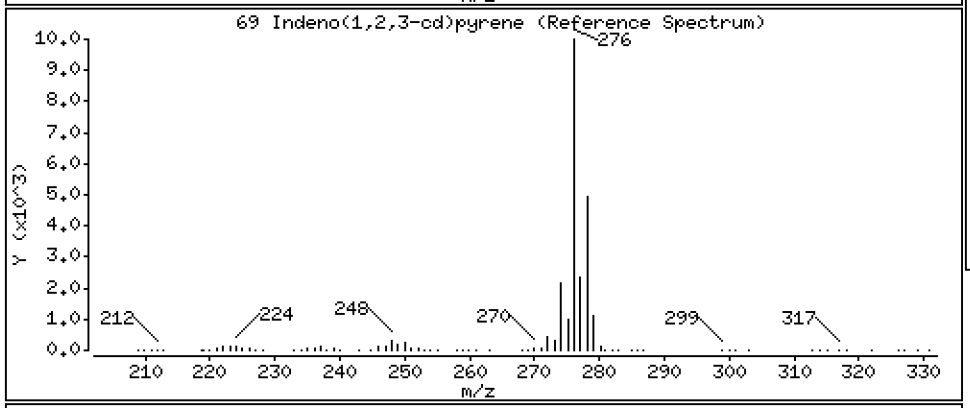
Concentration: 1.721 ug/mL

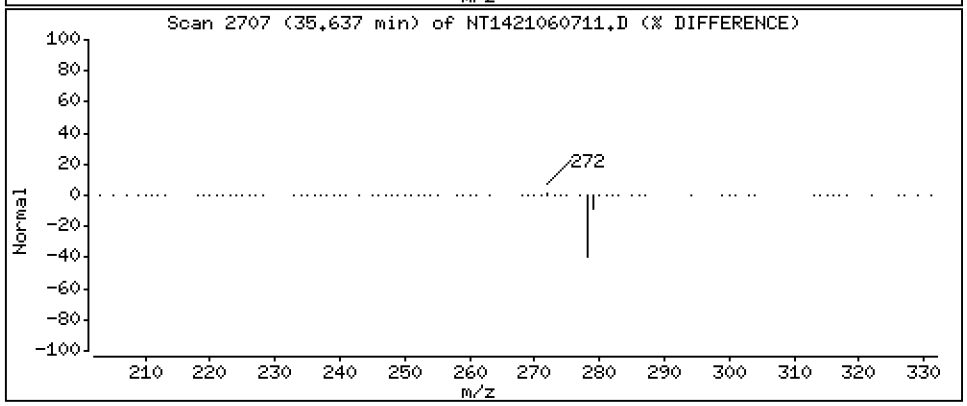












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Date : 07-JUN-2021 20:30

Client ID:

Instrument: nt14.i

Sample Info: 21E0106-02

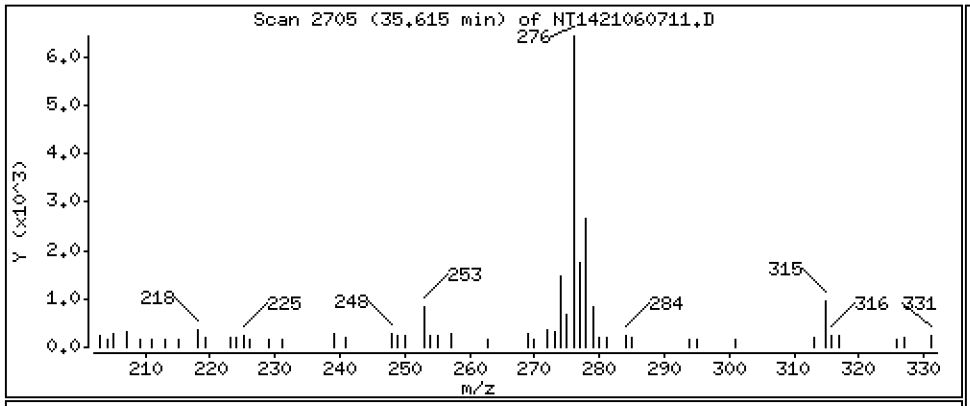
Operator: VTS

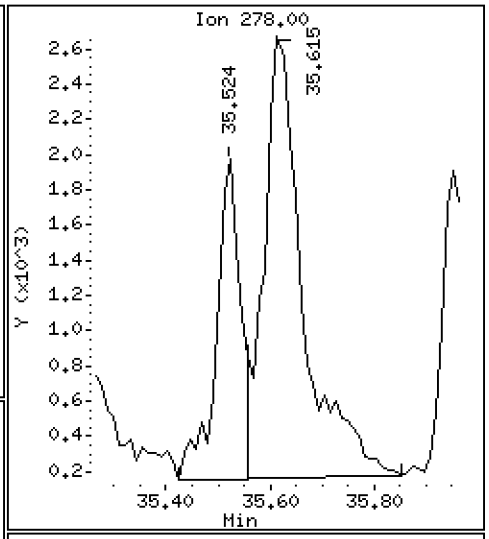
Column phase: Rxi-17Sil MS

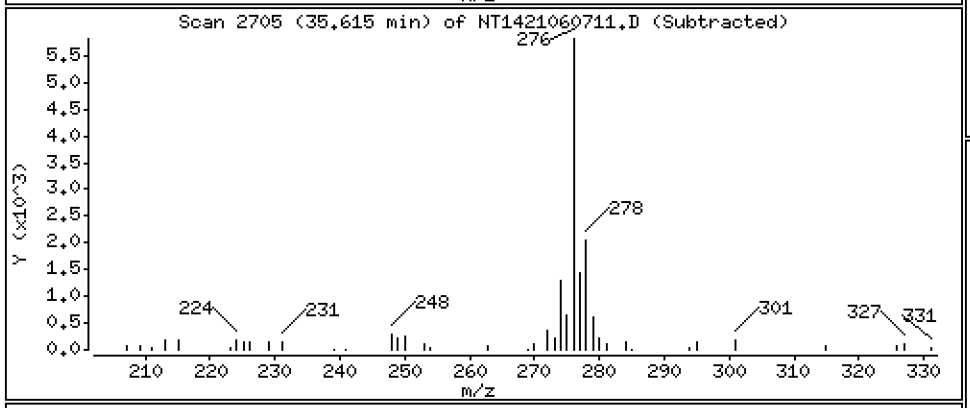
Column diameter: 0.25

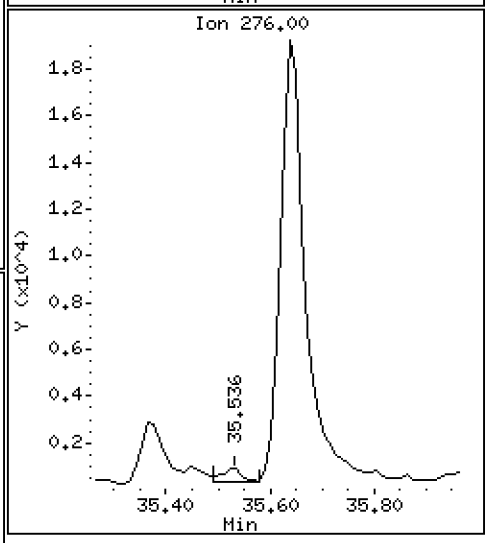
70 Dibenzo(a,h)anthracene

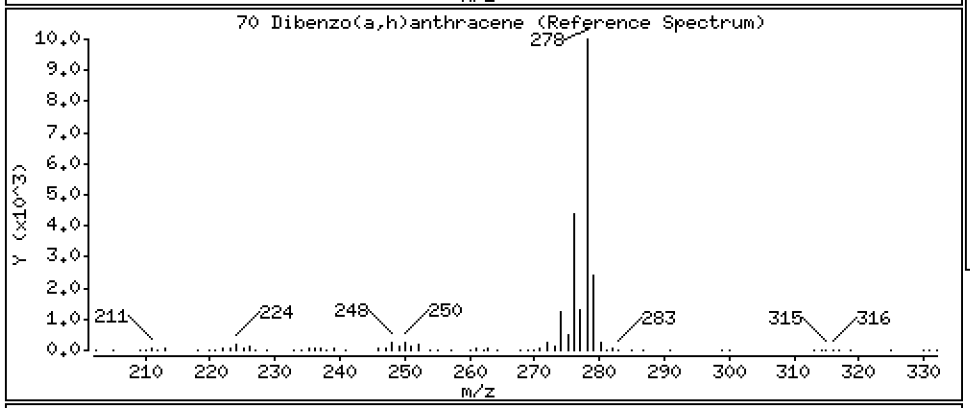
Concentration: 0.3851 ug/mL

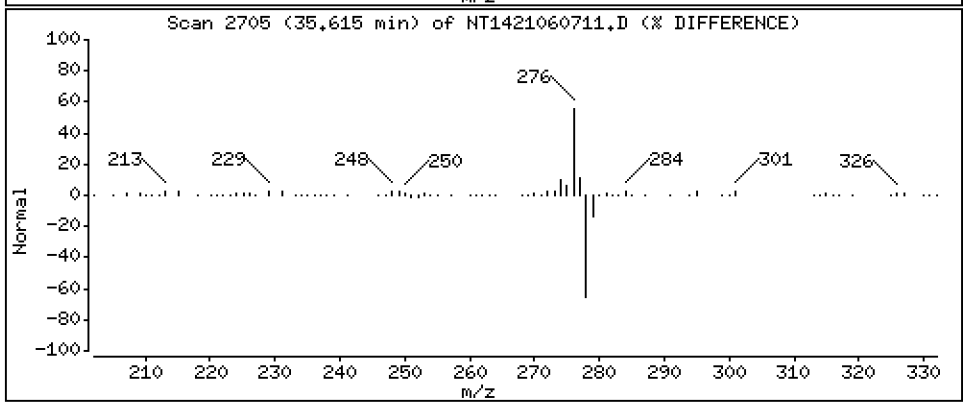












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Date : 07-JUN-2021 20:30

Client ID:

Instrument: nt14.i

Sample Info: 21E0106-02

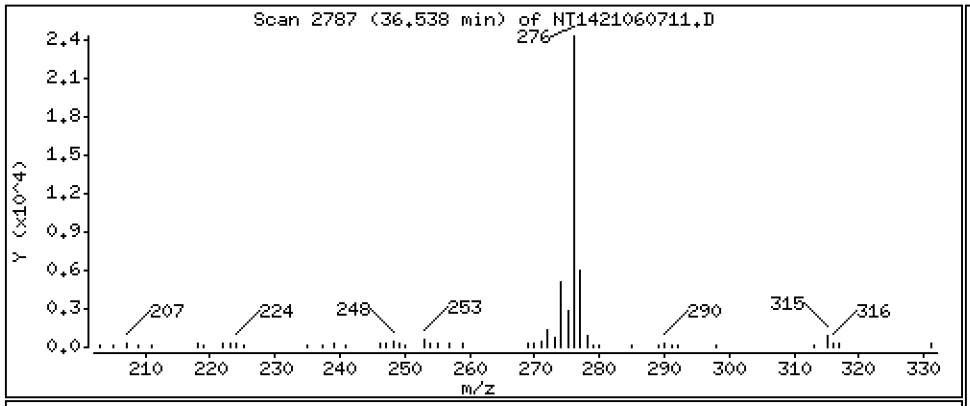
Operator: VTS

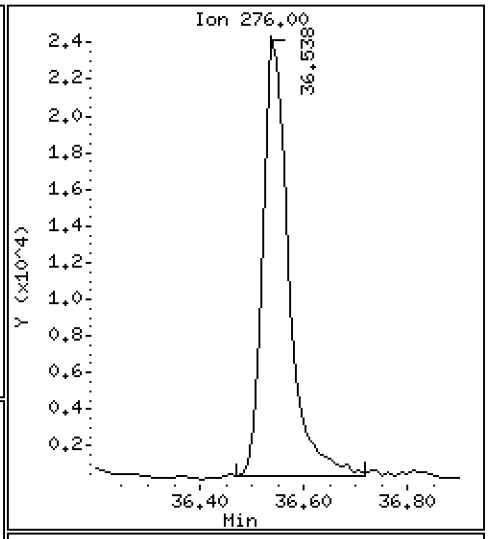
Column phase: Rxi-17Sil MS

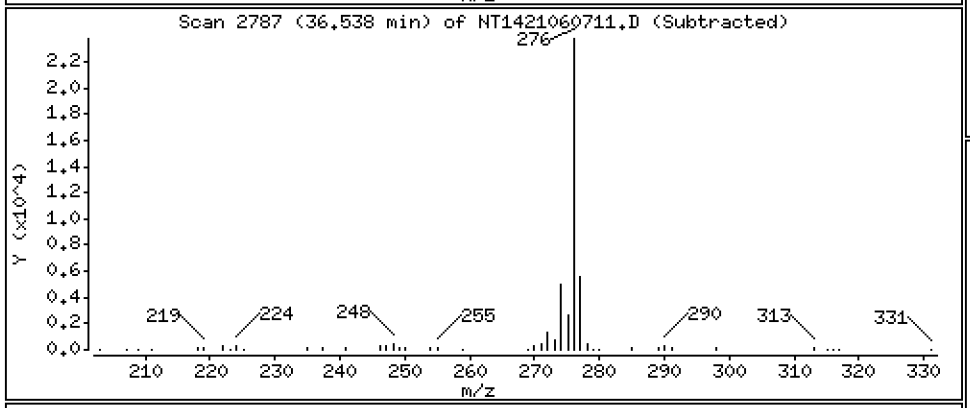
Column diameter: 0.25

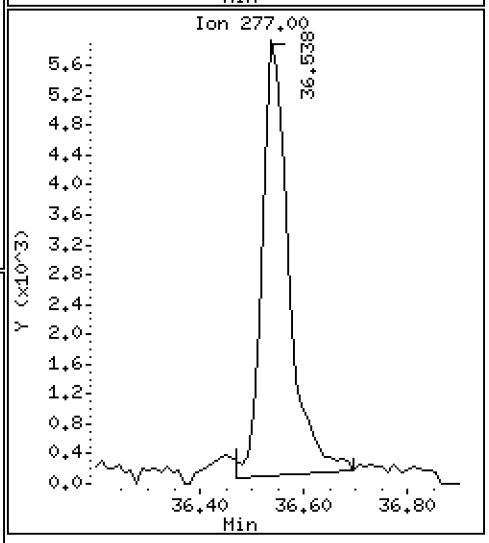
74 Benzo(g,h,i)perylene

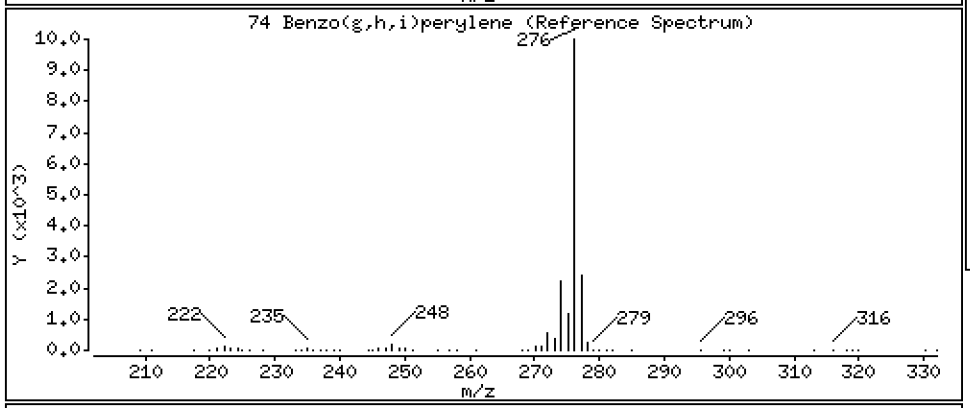
Concentration: 2.200 ug/mL

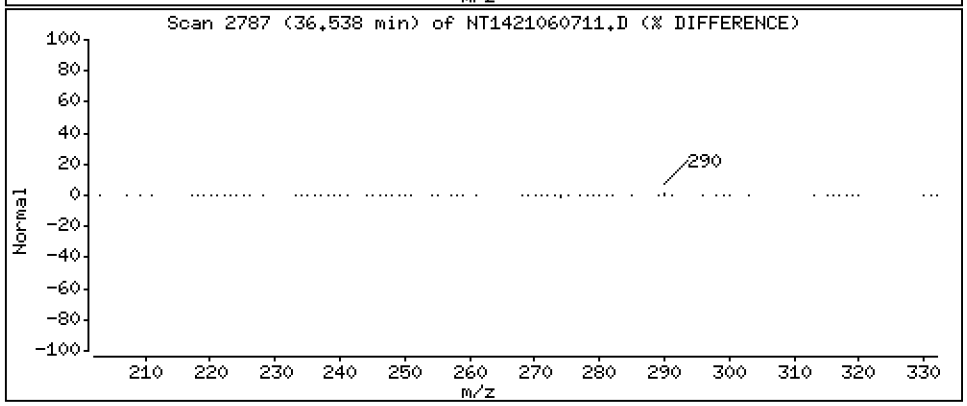












ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt14.i\20210607.b\NT1421060711.D
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Inj Date : 07-JUN-2021 20:30
Operator : VTS Inst ID: nt14.i
Smp Info : 21E0106-02
Misc Info :
Comment : 1ul Injection
Method : \\target\share\chem3\nt14.i\20210607.b\ALKYLPNA.m
Meth Date : 12-Jun-2021 14:57 yev Quant Type: ISTD
Cal Date : 29-MAY-2021 18:49 Cal File: NT1421052914.D
Als bottle: 38
Dil Factor: 5.00000
Integrator: HP RTE Compound Sublist: TARGETS.sub
Target Version: 4.14
Processing Host: ORGDATA102

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/mL)
1 trans-Decalin	138	Compound Not Detected.					
2 cis-Decalin	138	Compound Not Detected.					
$ 6 Naphthalene-d8	136	11.887	11.887	(0.629)	42457	0.27494	1.375(R)
7 Naphthalene	128	11.957	11.957	(0.633)	5290	0.03428	0.1714
12 Benzo(b)thiophene	134	Compound Not Detected.					
16 2-Methylnaphthalene	141	13.794	13.794	(0.730)	1565	0.01735	0.08673
17 1-methylnaphthalene	141	14.244	14.244	(0.754)	1171	0.01334	0.06671
18 Biphenyl	154	Compound Not Detected.					
19 2,6-Dimethylnaphthalene	156	Compound Not Detected.					
20 Acenaphthylene	152	17.080	17.080	(0.904)	4415	0.02634	0.1317
$ 21 Acenaphthene-d10	164	17.365	17.365	(0.919)	29533	0.31138	1.557(R)
22 Acenaphthene	153	17.486	17.486	(0.925)	19942	0.19303	0.9651
23 Dibenzofuran	168	17.860	17.860	(0.945)	21764	0.14202	0.7101
24 1,6,7-Trimethylnaphthalene	170	18.080	18.080	(0.957)	771	0.00772	0.03861
* 25 Fluorene-d10	176	18.896	18.896	(1.000)	332176	2.00000	
26 Fluorene	166	19.009	19.009	(1.006)	21243	0.17891	0.8946
30 Dibenzothiophene	184	Compound Not Detected.					
$ 35 Phenanthrene-d10	188	22.239	22.238	(0.995)	57249	0.33419	1.671(R)
36 Phenanthrene	178	22.315	22.326	(0.999)	76866	0.41869	2.093
* 250 Anthracene-d10	188	22.348	22.359	(1.000)	356066	2.00000	
37 Anthracene	178	22.414	22.425	(1.003)	14151	0.08192	0.4096
42 Carbazole	167	23.701	23.701	(1.061)	6471	0.03934	0.1967
43 1-Methylphenanthrene	192	24.151	24.151	(1.081)	4491	0.03404	0.1702
44 Fluoranthene	202	26.130	26.130	(1.169)	153075	0.75541	3.777
46 Pyrene	202	26.977	26.977	(1.207)	167862	0.79650	3.982
51 Naphthobenzothiophene	234	29.509	29.509	(1.320)	14052	0.06205	0.3103
55 Benzo(a)anthracene	228	30.084	30.095	(0.907)	65144	0.38609	1.930
$ 56 Chrysene-d12	240	30.219	30.219	(0.911)	53201	0.39069	1.953(R)
57 Chrysene	228	30.287	30.286	(0.913)	80044	0.48414	2.421
62 Benzo(b)fluoranthene	252	32.517	32.517	(0.980)	67455	0.38549	1.927(M)
63 Benzo(k)fluoranthene	252	32.562	32.562	(0.981)	43903	0.23383	1.169(M)
293 Benzo(j)fluoranthene	252	32.629	32.629	(0.983)	40239	0.23258	1.163
246 Total Benzofluoranthenes	252	32.517	32.562	(0.980)	149336	0.87129	4.356(M)

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/mL)
* 251 Benzo(e)pyrene-d12	264	33.181	33.181	(1.000)	435025	2.00000	
64 Benzo(e)pyrene	252	33.238	33.237	(1.002)	63114	0.36800	1.840
66 Benzo(a)pyrene	252	33.339	33.339	(1.005)	84151	0.53936	2.697
$ 67 Perylene-d12	264	33.519	33.519	(1.010)	56916	0.38719	1.936(R)
68 Perylene	252	33.575	33.575	(1.012)	62960	0.39139	1.957
69 Indeno(1,2,3-cd)pyrene	276	35.637	35.636	(1.074)	63033	0.34418	1.721
70 Dibenzo(a,h)anthracene	278	35.614	35.614	(1.073)	13080	0.07702	0.3851
74 Benzo(g,h,i)perylene	276	36.538	36.549	(1.101)	79600	0.43996	2.200

QC Flag Legend

R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt14.i
Lab File ID: NT1421060711.D
Lab Smp Id: 21E0106-02
Analysis Type: SV
Quant Type: ISTD
Operator: VTS
Method File: \\target\share\chem3\nt14.i\20210607.b\ALKYLPNA.m
Misc Info:

Calibration Date: 07-JUN-2021
Calibration Time: 13:18
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
25 Fluorene-d10	323874	161937	647748	332176	2.56
250 Anthracene-d10	339912	169956	679824	356066	4.75
251 Benzo(e)pyrene-d1	416427	208214	832854	435025	4.47

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
25 Fluorene-d10	18.90	18.40	19.40	18.90	0.00
250 Anthracene-d10	22.36	21.86	22.86	22.35	-0.05
251 Benzo(e)pyrene-d1	33.18	32.68	33.68	33.18	0.00

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

REVIEW SUMMARY FOR FILE - NT1421060711.D

Lab ID: 21E0106-02
nt14.i, 20210607.b\ALKYLPNA.m, 07-JUN-2021 20:30

RT	CO-ELUTION COMPOUNDS
	NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
NONE			

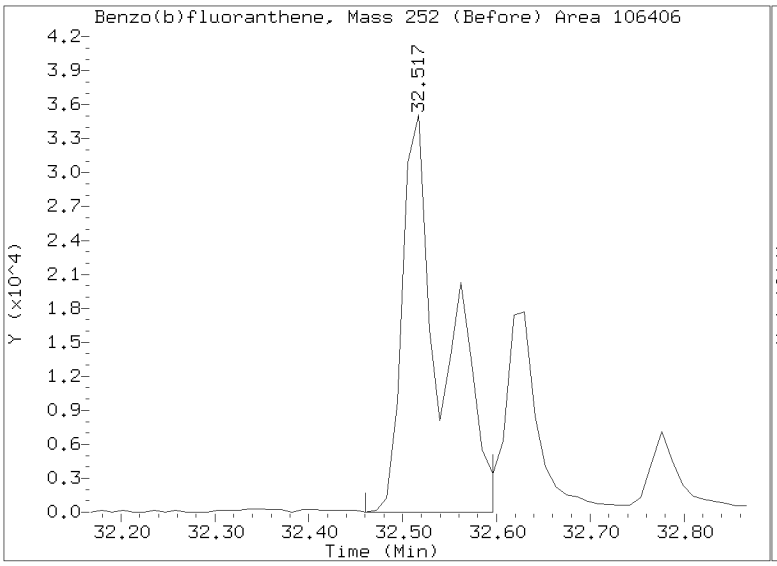
RRT check based on Ccal File: NT1421060702.D

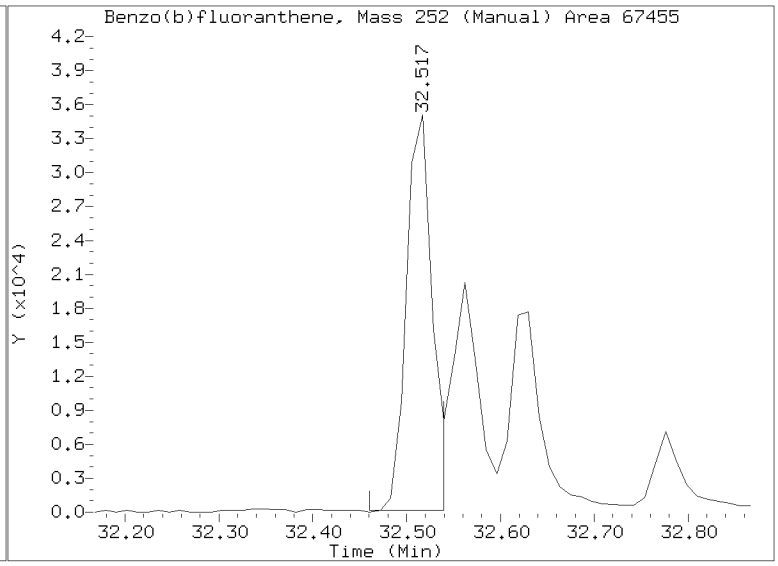
On Column LOD for nt14.i, 20210607.b\ALKYLPNA.m, TARGETS.sub = 0.0000

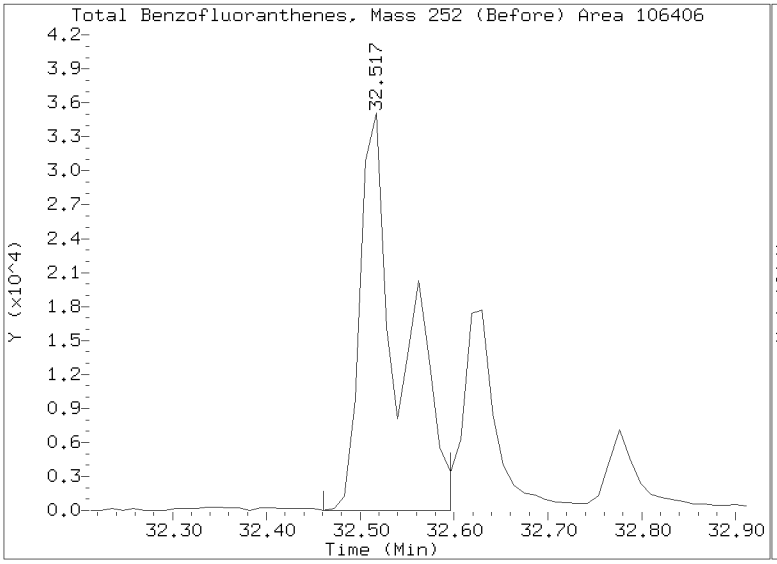
* Only compounds listed in the work order have been verified by the analyst *

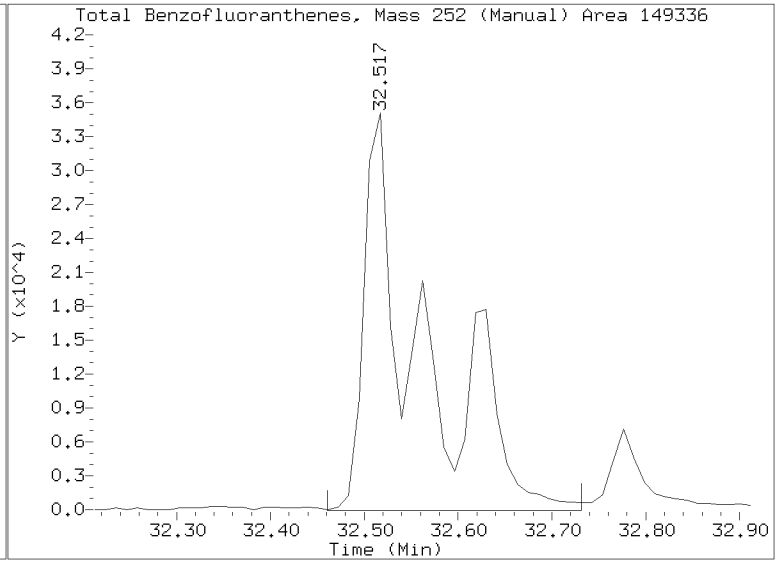
Quant Ion Manual Peak Adjustment Report

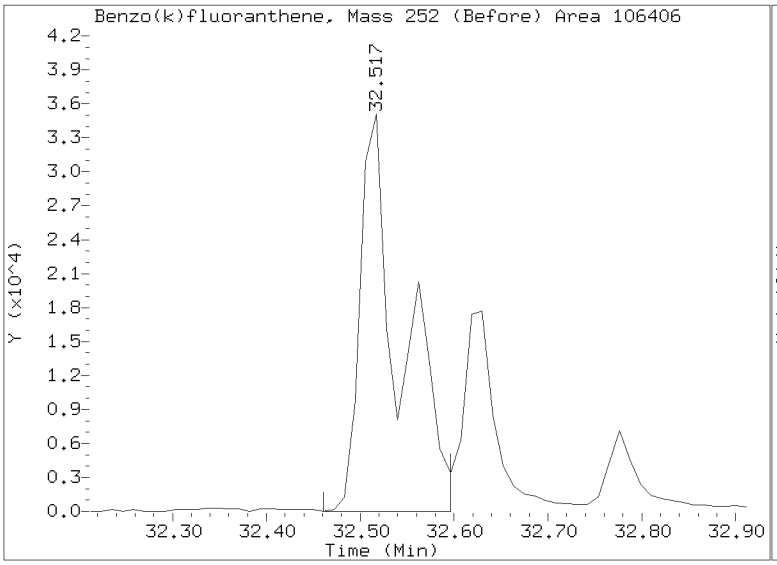
Datafile: //target/share/chem3/nt14.i/20210607.b/NT1421060711.D
Injection Date: 07-JUN-2021 20:30
Lab ID:21E0106-02 Client ID:
Report Date: 06/12/2021 15:50

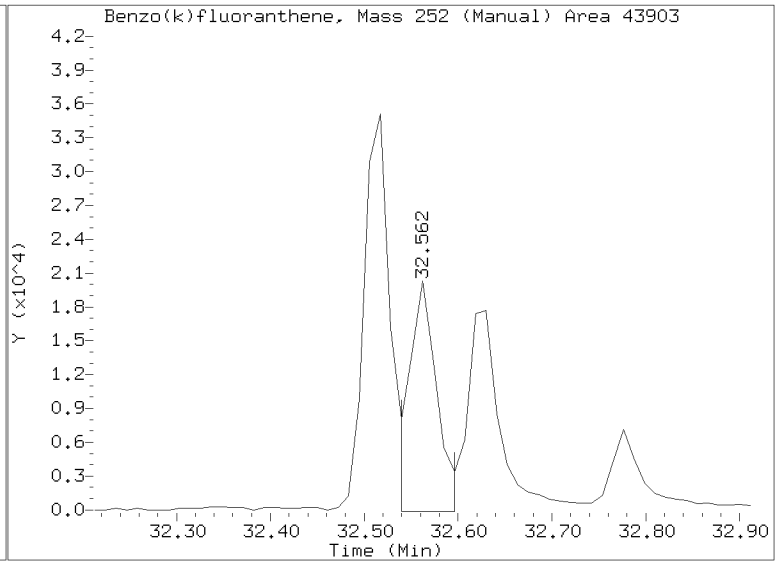












Analytical Resources, Incorporated
Analytical Chemists and Consultants

USMPDI-030SG-210504

Form I
ORGANIC ANALYSIS DATA SHEET
EPA 8270E-SIM
Alkyl PAH Ranges

Laboratory:	Analytical Resources, Inc.				
Client:	Anchor QEA, LLC				
Project:	Gasco Siltronic - US Moorings				
Matrix:	Sediment	Laboratory ID:	21E0106-02 A	SDG:	21E0106
Sampled:	05/04/21 00:00	Prepared:	05/17/21 13:40	File ID:	NT1421060711S.D
% Solids:	58.79	Preparation:	EPA 3546 (Microwave)	Analyzed:	06/07/21 20:30
Batch:	BJE0383	Sequence:	SJF0198	Initial/Final:	17.01 g Wet / 0.5 mL
Instrument:	NT14	Column:	ZB-5MS	Calibration:	EF00019
Cleanups:	GPC, Silica Gel				

CAS NO.	COMPOUND	DILUTION	CONC: (ug/kg dry)	Q	DL	RL
C1DEC	C1-Decalins	1	5.0	U	0.5	5.0
C2DEC	C2-Decalins	1	5.0	U	0.5	5.0
C3DEC	C3-Decalins	1	5.0	U	0.5	5.0
C4DEC	C4-Decalins	1	5.0	U	0.5	5.0
C1NAPH	C1-Naphthalenes	1	1.1	J	0.4	5.0
C2NAPH	C2-Naphthalenes	1	2.2	J	0.4	5.0
C3NAPH	C3-Naphthalenes	1	2.3	J	0.4	5.0
C4NAPH	C4-Naphthalenes	1	1.3	J	0.4	5.0
C1FLR	C1-Fluorenes	1	1.3	J	0.5	5.0
C2FLR	C2-Fluorenes	1	5.0	U	0.5	5.0
C3FLR	C3-Fluorenes	1	1.2	J	0.5	5.0
C1DBTPH	C1-Dibenzothiophenes	1	1.2	J	0.7	5.0
C2DBTPH	C2-Dibenzothiophenes	1	1.6	J	0.7	5.0
C3DBTPH	C3-Dibenzothiophenes	1	1.5	J	0.7	5.0
C4DBTPH	C4-Dibenzothiophenes	1	5.0	U	0.7	5.0
C1PHNANT	C1-Phenanthrenes/Anthracenes	1	7.2		0.9	5.0
C2PHNANT	C2-Phenanthrenes/Anthracenes	1	5.7		0.9	5.0
C3PHNANT	C3-Phenanthrenes/Anthracenes	1	3.2	J	0.9	5.0
C4PHNANT	C4-Phenanthrenes/Anthracenes	1	5.0	U	0.9	5.0
C1FLPYR	C1-Fluoranthenes/Pyrenes	1	15.3		1.0	5.0
C2FLPYR	C2-Fluoranthenes/Pyrenes	1	6.3		1.0	5.0
C3FLPYR	C3-Fluoranthenes/Pyrenes	1	3.1	J	1.0	5.0
C4FLPYR	C4-Fluoranthenes/Pyrenes	1	2.8	J	1.0	5.0
C1BAACYR	C1-Benzo(a)anthracenes/Chrysenes	1	15.1		0.7	5.0
C2BAACYR	C2-Benzo(a)anthracenes/Chrysenes	1	6.0		0.7	5.0
C3BAACYR	C3-Benzo(a)anthracenes/Chrysenes	1	4.0	J	0.7	5.0
C4BAACYR	C4-Benzo(a)anthracenes/Chrysenes	1	1.4	J	0.7	5.0
C1BZTPH	C1-Benzothiophenes	1	5.0	U	0.4	5.0
C2BZTPH	C2-Benzothiophenes	1	5.0	U	0.4	5.0
C3BZTPH	C3-Benzothiophenes	1	5.0	U	0.4	5.0

Analytical Resources, Incorporated
Analytical Chemists and Consultants

USMPDI-030SG-210504

Form I
ORGANIC ANALYSIS DATA SHEET
EPA 8270E-SIM
Alkyl PAH Ranges

Laboratory:	Analytical Resources, Inc.				
Client:	Anchor QEA, LLC				
Project:	Gasco Siltronic - US Moorings				
Matrix:	Sediment	Laboratory ID:	21E0106-02 A	SDG:	21E0106
Sampled:	05/04/21 00:00	Prepared:	05/17/21 13:40	File ID:	NT1421060711S.D
% Solids:	58.79	Preparation:	EPA 3546 (Microwave)	Analyzed:	06/07/21 20:30
Batch:	BJE0383	Sequence:	SJF0198	Initial/Final:	17.01 g Wet / 0.5 mL
Instrument:	NT14	Column:	ZB-5MS	Calibration:	EF00019
Cleanups:	GPC, Silica Gel				

CAS NO.	COMPOUND	DILUTION	CONC: (ug/kg dry)	Q	DL	RL
C1NPBTP	C1-Naphthobenzothiophenes	1	5.0	U	2.5	5.0
C2NPBTP	C2-Naphthobenzothiophenes	1	5.0	U	2.5	5.0
C3NPBTP	C3-Naphthobenzothiophenes	1	5.0	U	2.5	5.0
C4NPBTP	C4-Naphthobenzothiopenes	1	5.0	U	2.5	5.0
C1DBA	C1-Dibenzo(a)anthracenes	1	3.0	J	0.7	5.0
C2DBA	C2-Dibenzo(a)anthracenes	1	5.0	U	0.7	5.0
C3DBA	C3-Dibenzo(a)anthracenes	1	5.0	U	0.7	5.0

Data File: \\target\share\chem3\nt14.i\20210607.b\SIM.b\NT1421060711S.D

Date : 07-JUN-2021 20:30

Client ID:

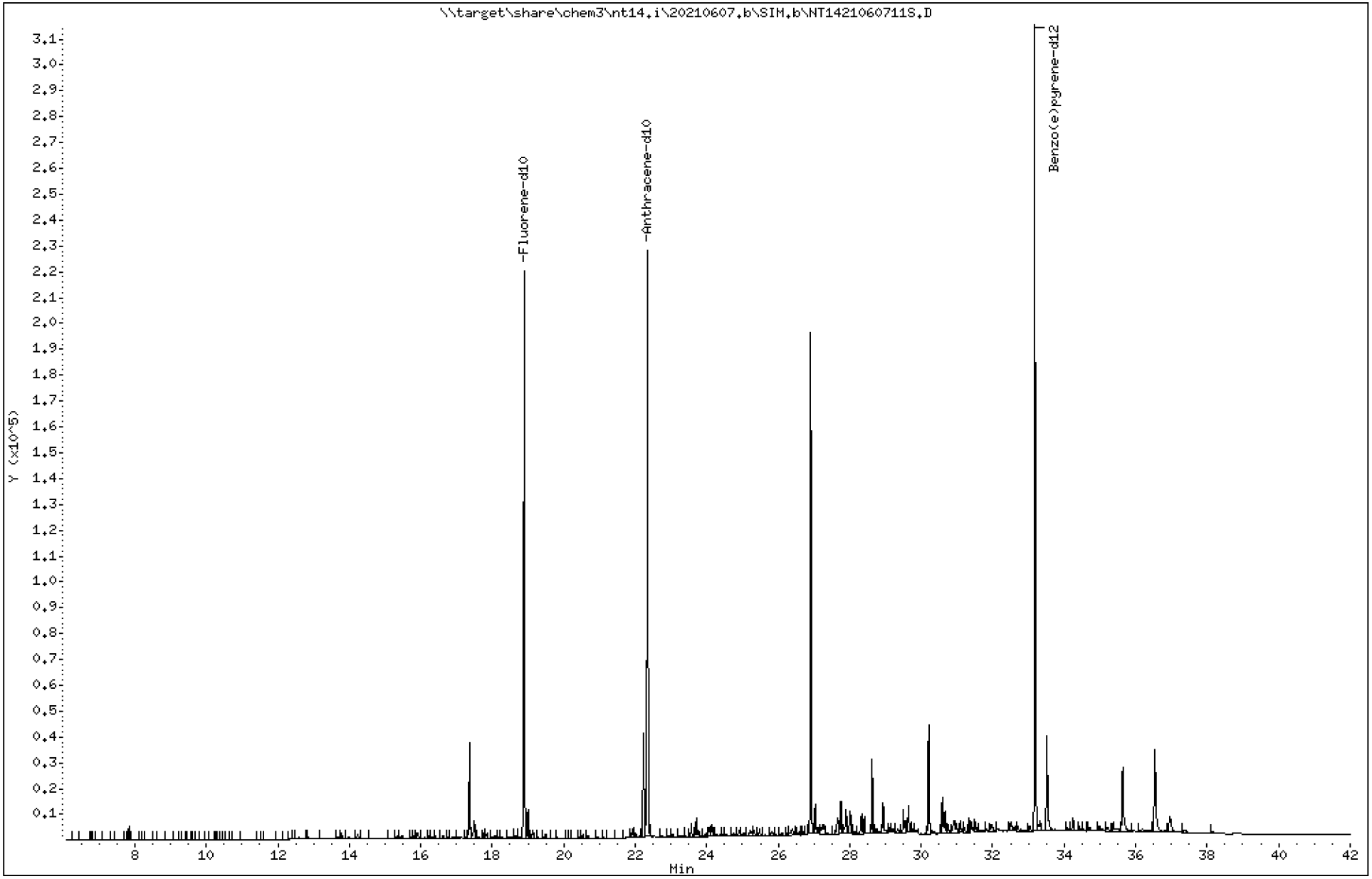
Instrument: nt14.i

Sample Info: 21E0106-02

Operator: VTS

Column phase: Rxi-17Sil MS

Column diameter: 0.25



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Date : 07-JUN-2021 20:30

Client ID:

Instrument: nt14.i

Sample Info: 21E0106-02

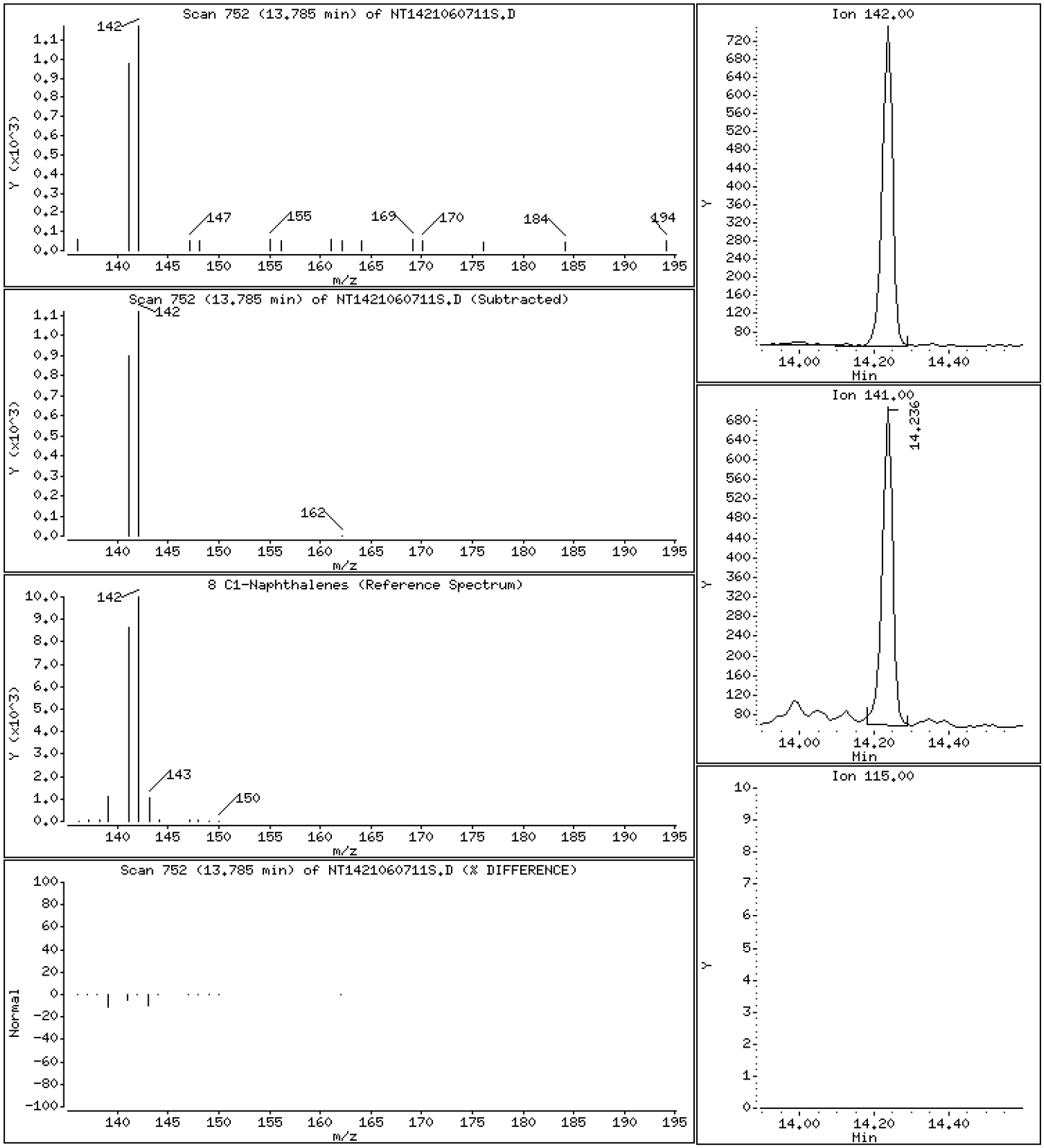
Operator: VTS

Column phase: Rxi-17Sil MS

Column diameter: 0.25

8 C1-Naphthalenes

Concentration: 0.02153 ug/mL



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Date : 07-JUN-2021 20:30

Client ID:

Instrument: nt14.i

Sample Info: 21E0106-02

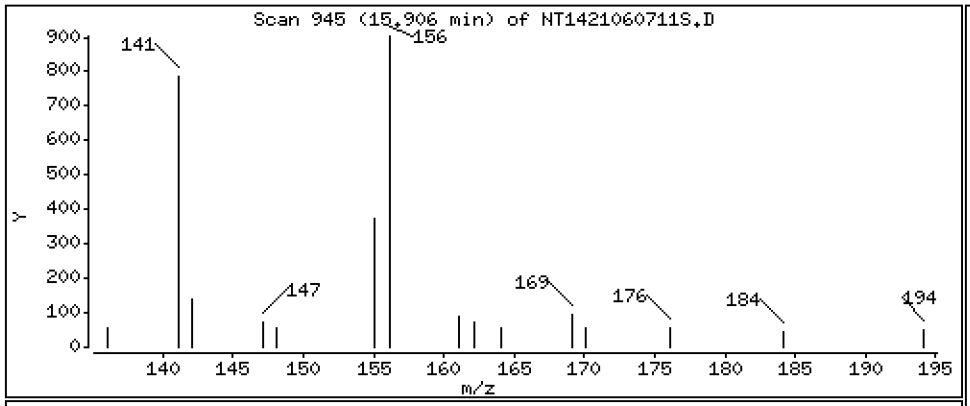
Operator: VTS

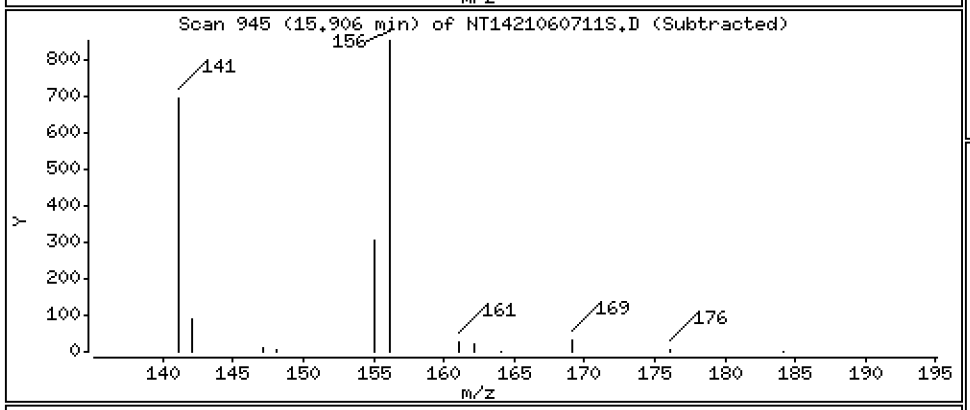
Column phase: Rxi-17Sil MS

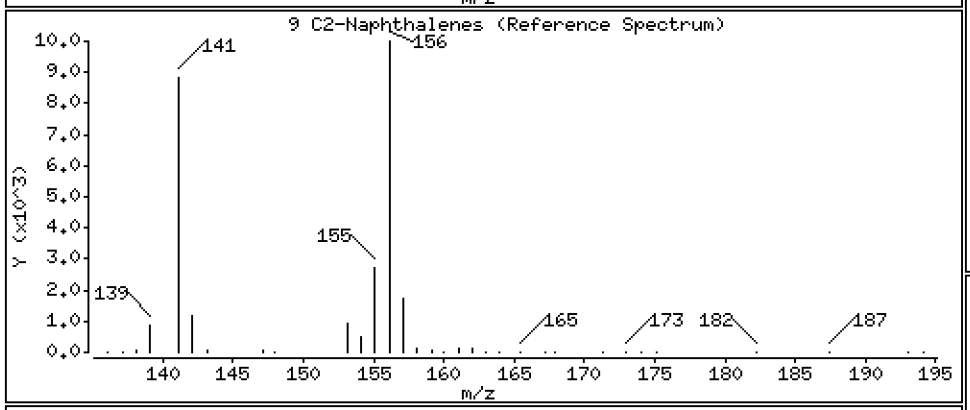
Column diameter: 0.25

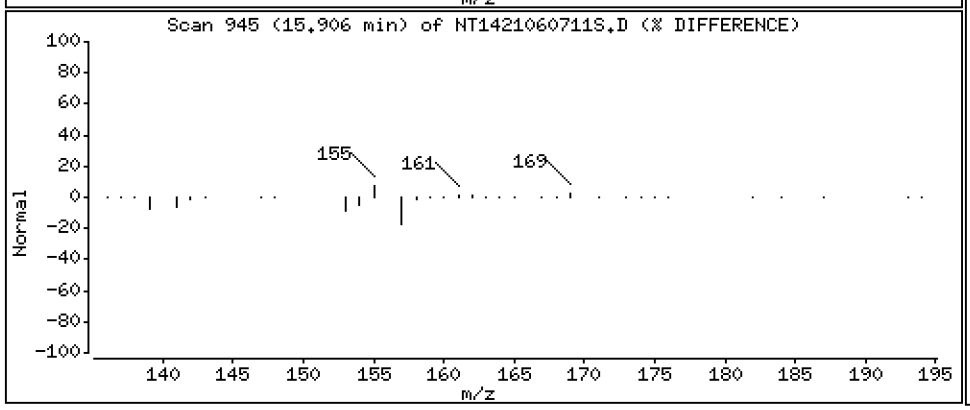
9 C2-Naphthalenes

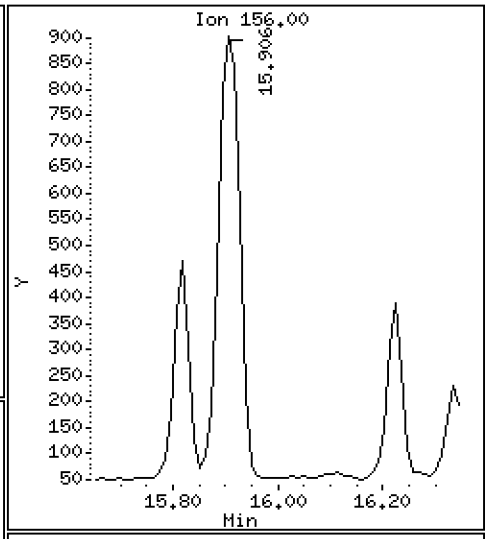
Concentration: 0.04456 ug/mL

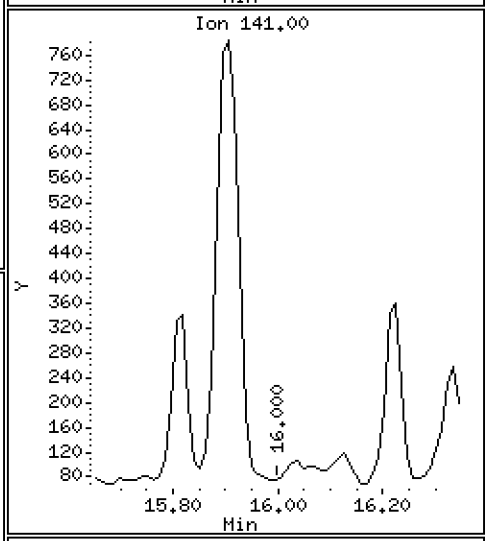


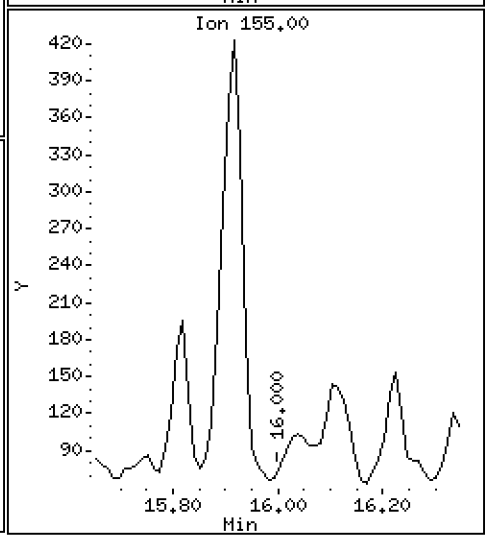












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Date : 07-JUN-2021 20:30

Client ID:

Instrument: nt14.i

Sample Info: 21E0106-02

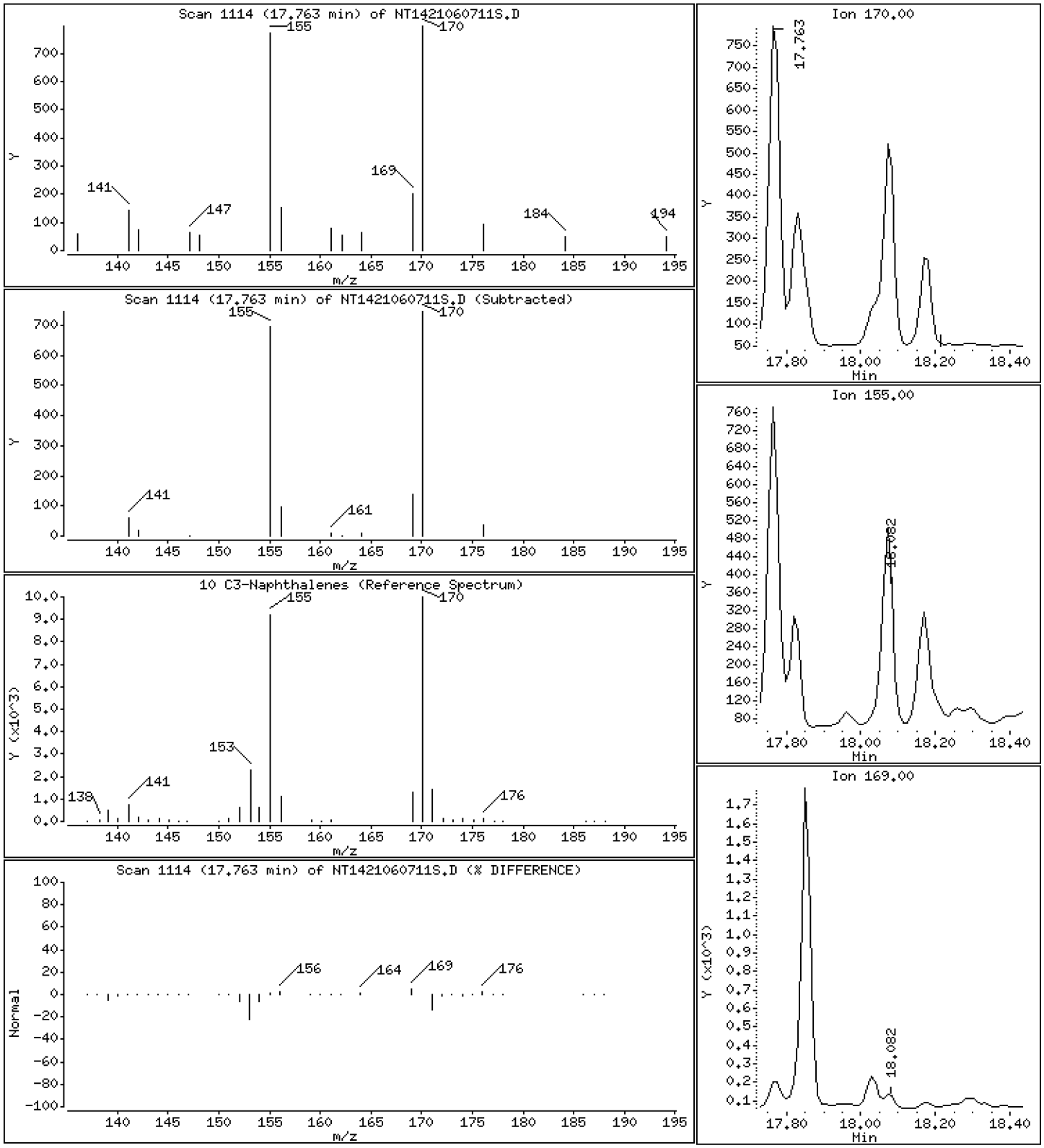
Operator: VTS

Column phase: Rxi-17Sil MS

Column diameter: 0.25

10 C3-Naphthalenes

Concentration: 0.04605 ug/mL



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Date : 07-JUN-2021 20:30

Client ID:

Instrument: nt14.i

Sample Info: 21E0106-02

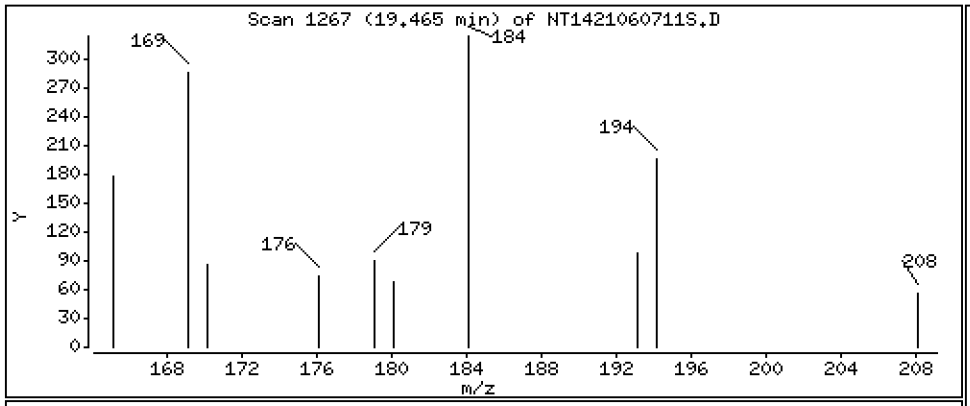
Operator: VTS

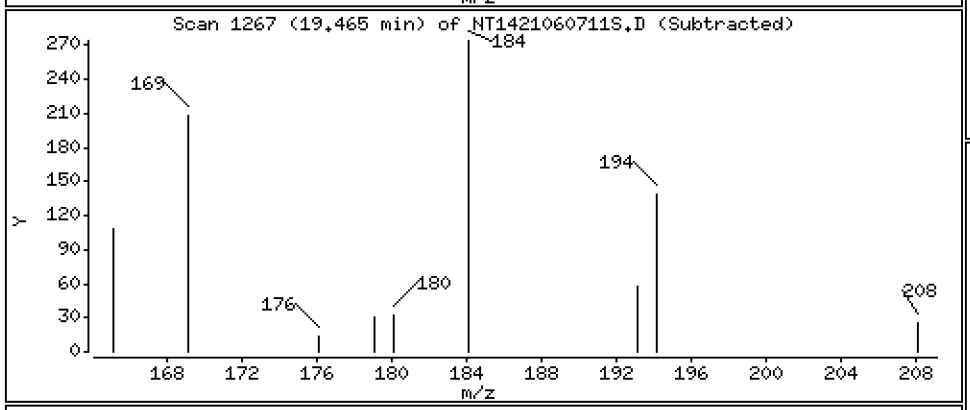
Column phase: Rxi-17Sil MS

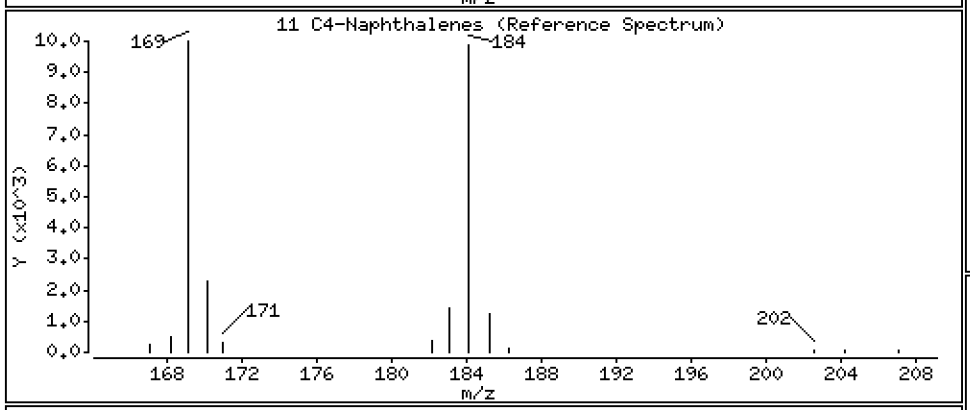
Column diameter: 0.25

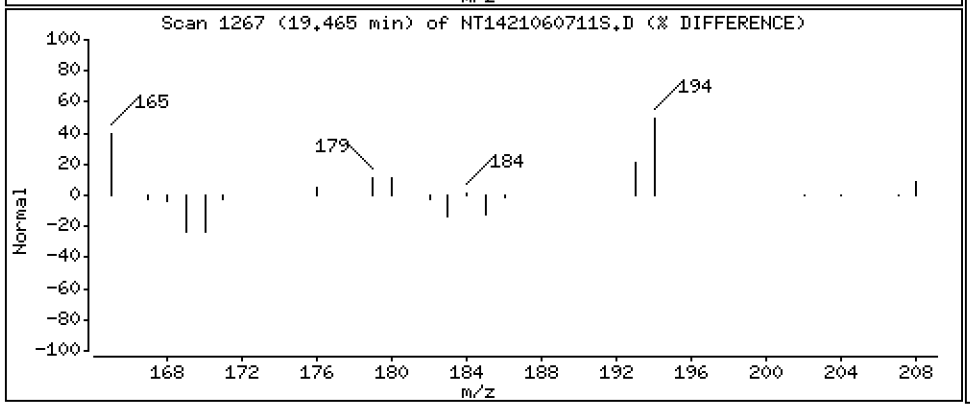
11 C4-Naphthalenes

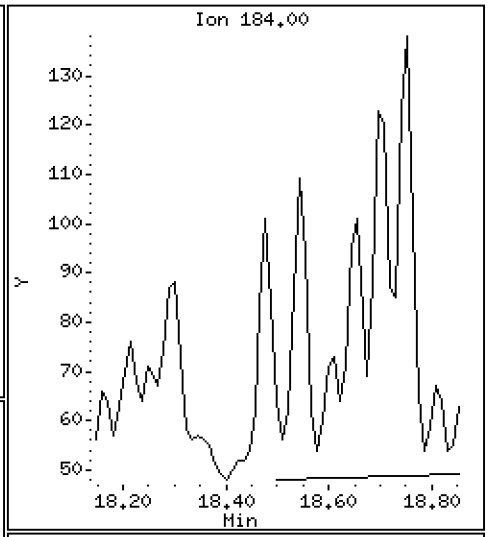
Concentration: 0.02547 ug/mL

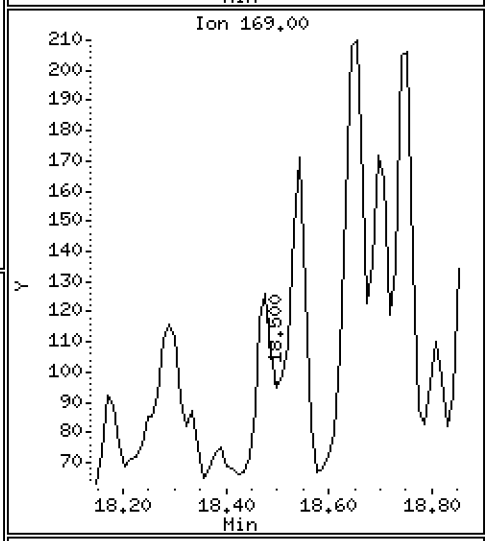


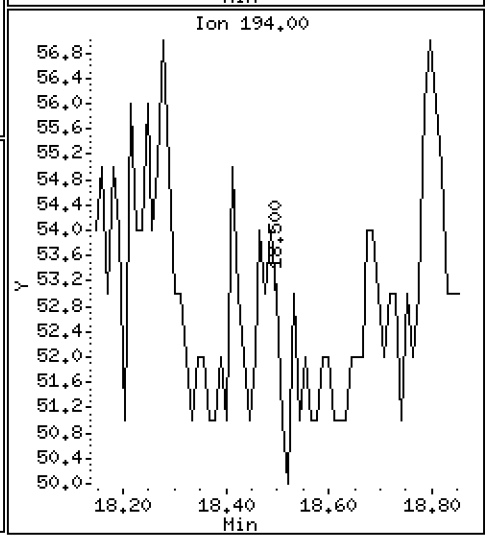












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Date : 07-JUN-2021 20:30

Client ID:

Instrument: nt14.i

Sample Info: 21E0106-02

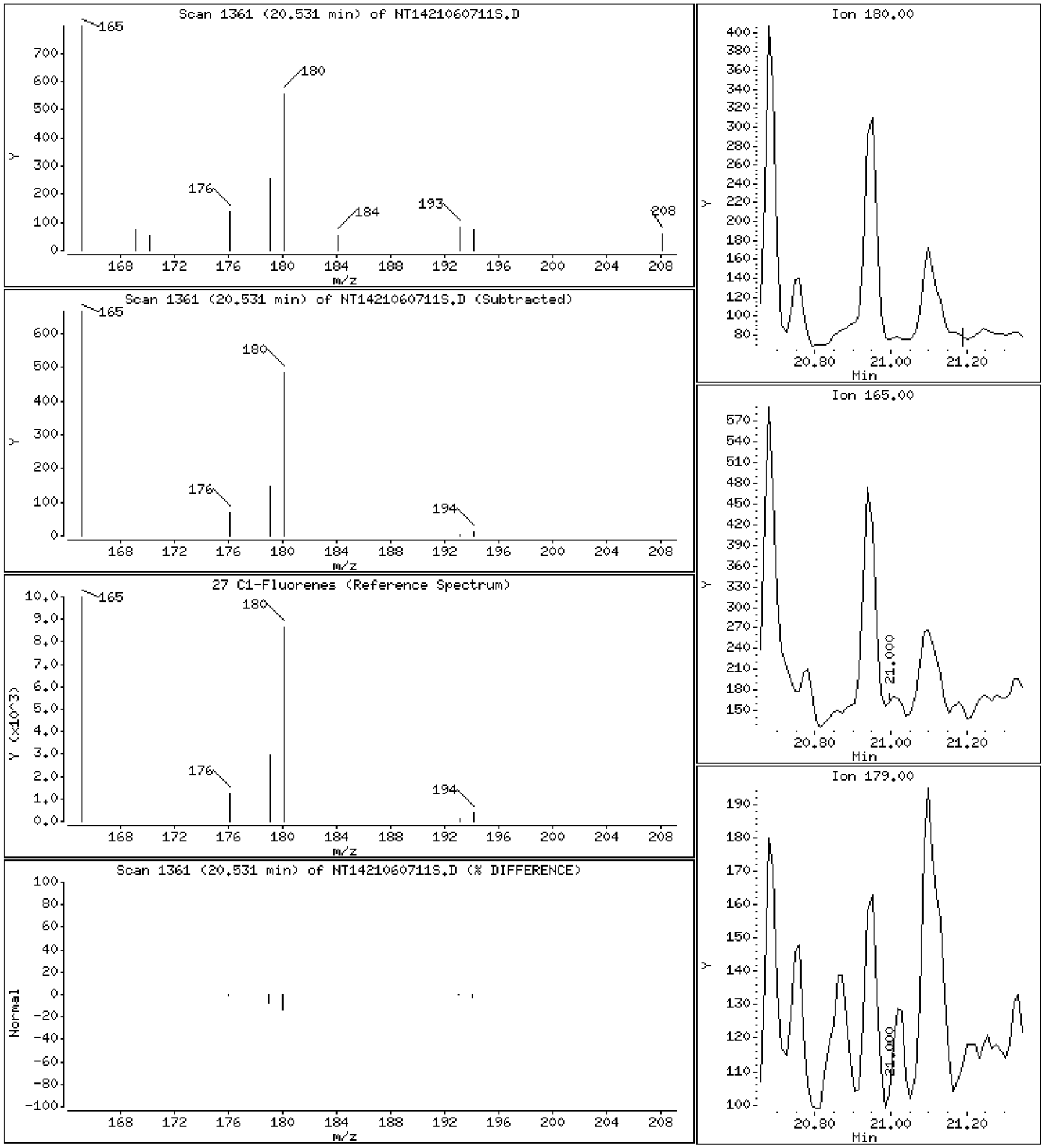
Operator: VTS

Column phase: Rxi-17Sil MS

Column diameter: 0.25

27 C1-Fluorenes

Concentration: 0.02676 ug/mL



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Date : 07-JUN-2021 20:30

Client ID:

Instrument: nt14.i

Sample Info: 21E0106-02

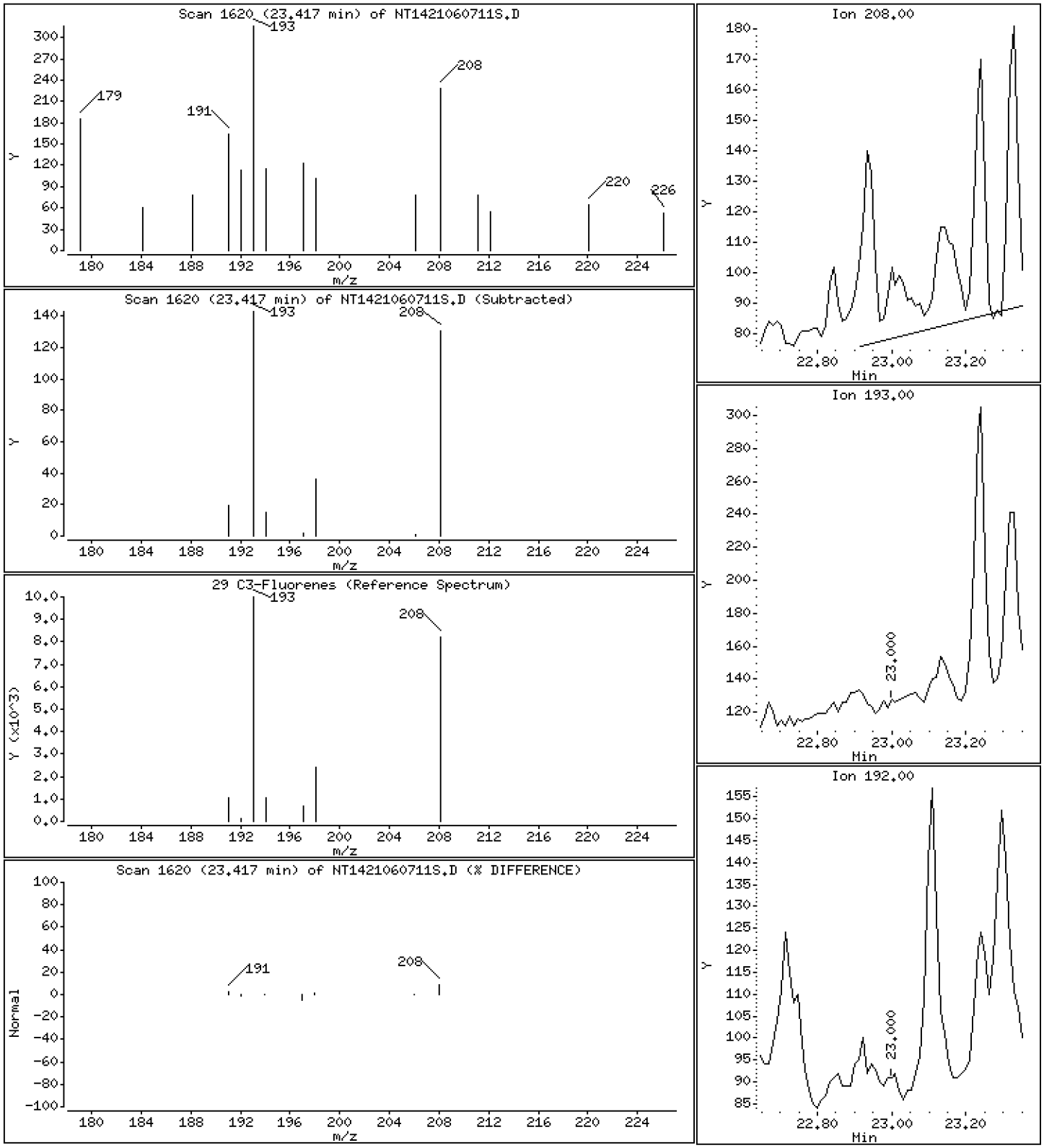
Operator: VTS

Column phase: Rxi-17Sil MS

Column diameter: 0.25

29 C3-Fluorenes

Concentration: 0.02355 ug/mL



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Date : 07-JUN-2021 20:30

Client ID:

Instrument: nt14.i

Sample Info: 21E0106-02

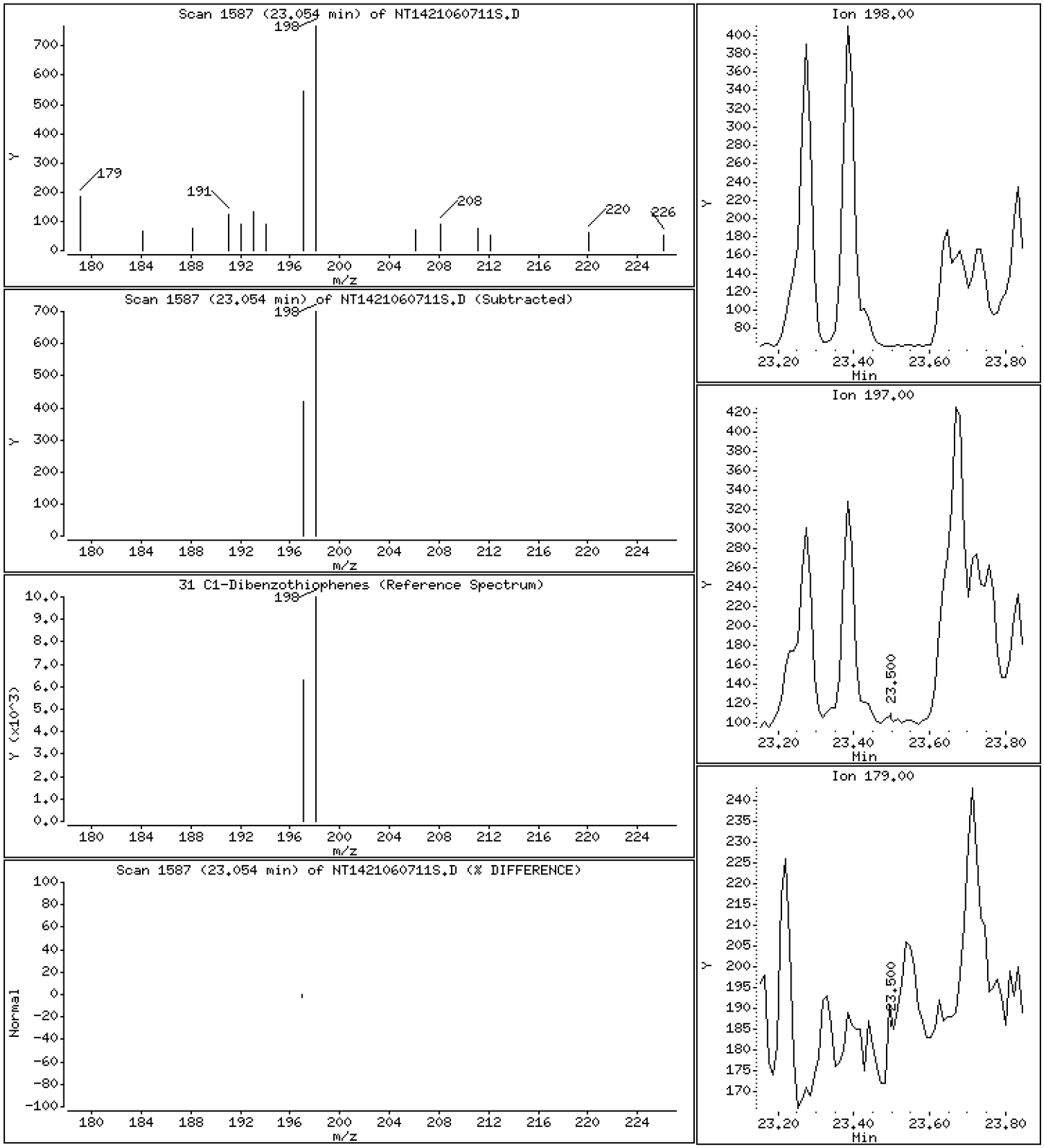
Operator: VTS

Column phase: Rxi-17Sil MS

Column diameter: 0.25

31 C1-Dibenzothiophenes

Concentration: 0.02341 ug/mL



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Date : 07-JUN-2021 20:30

Client ID:

Instrument: nt14.i

Sample Info: 21E0106-02

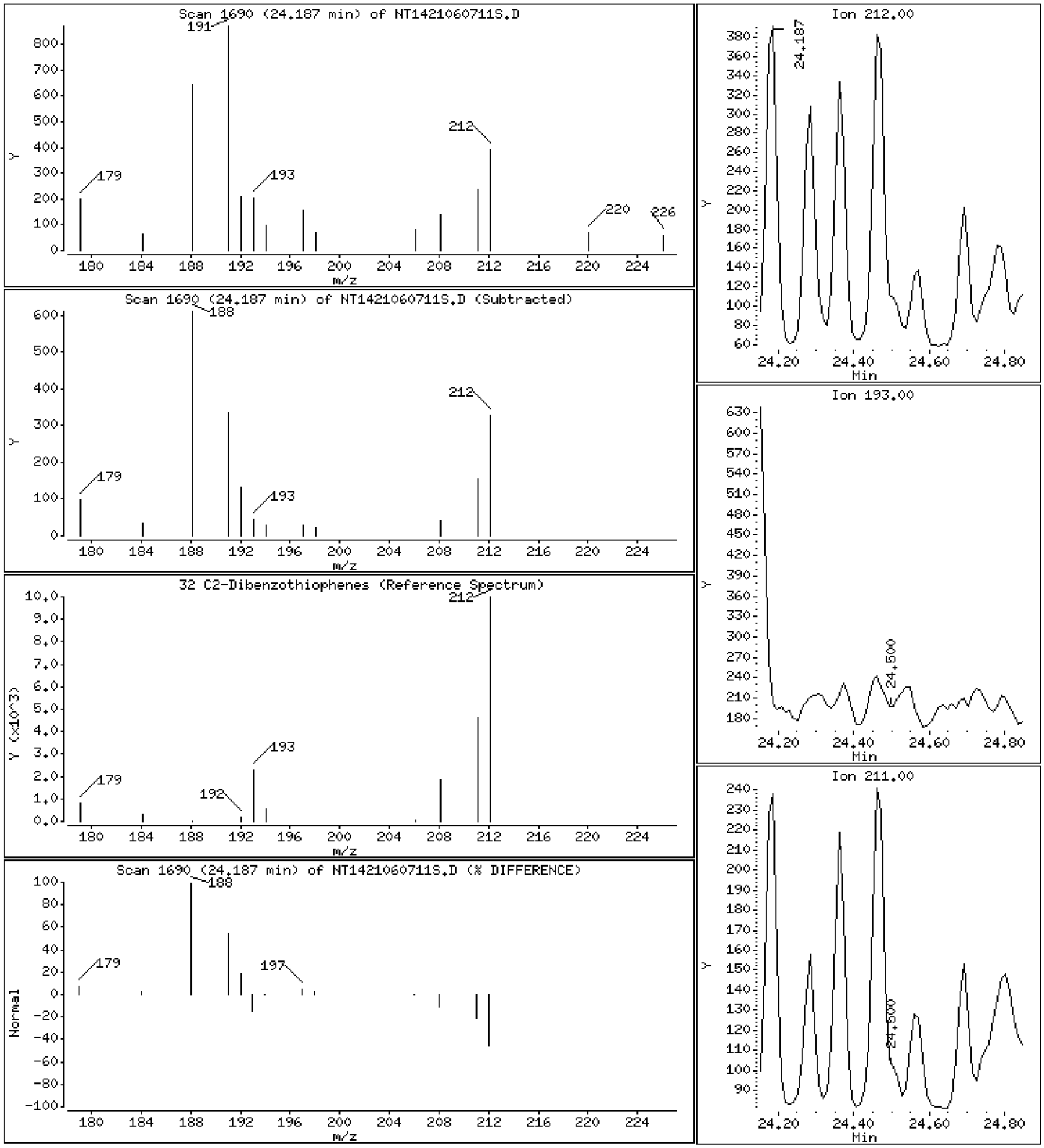
Operator: VTS

Column phase: Rxi-17Sil MS

Column diameter: 0.25

32 C2-Dibenzothiophenes

Concentration: 0.03184 ug/mL



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Date : 07-JUN-2021 20:30

Client ID:

Instrument: nt14.i

Sample Info: 21E0106-02

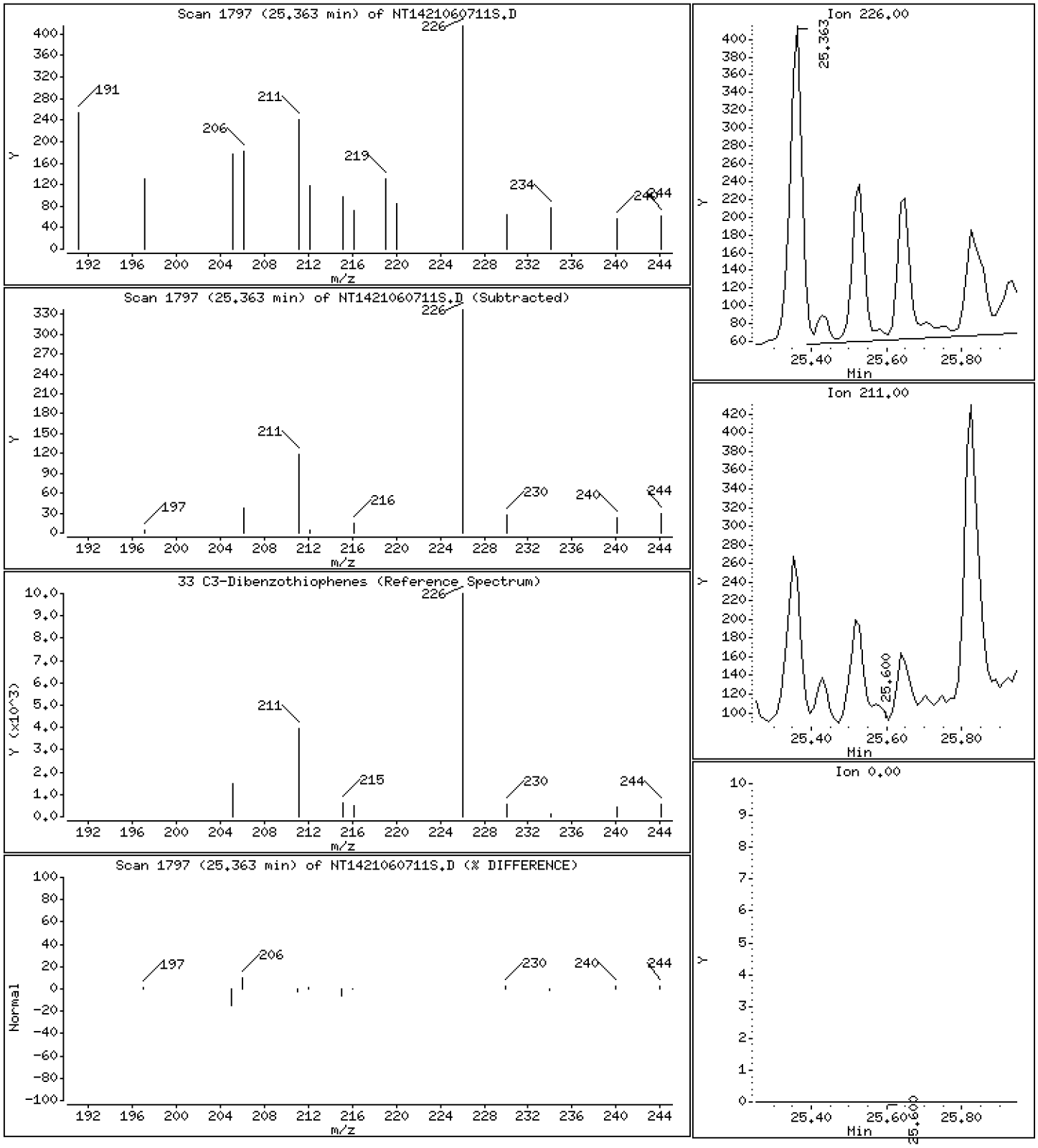
Operator: VTS

Column phase: Rxi-17Sil MS

Column diameter: 0.25

33 C3-Dibenzothiophenes

Concentration: 0.02973 ug/mL



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Date : 07-JUN-2021 20:30

Client ID:

Instrument: nt14.i

Sample Info: 21E0106-02

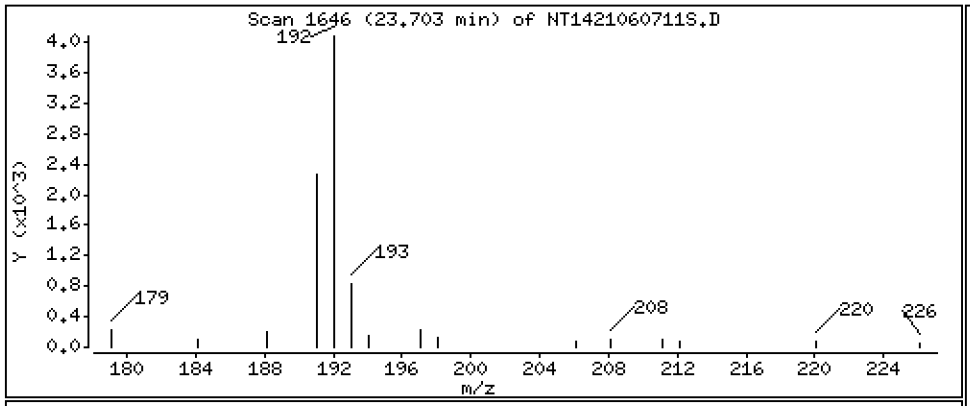
Operator: VTS

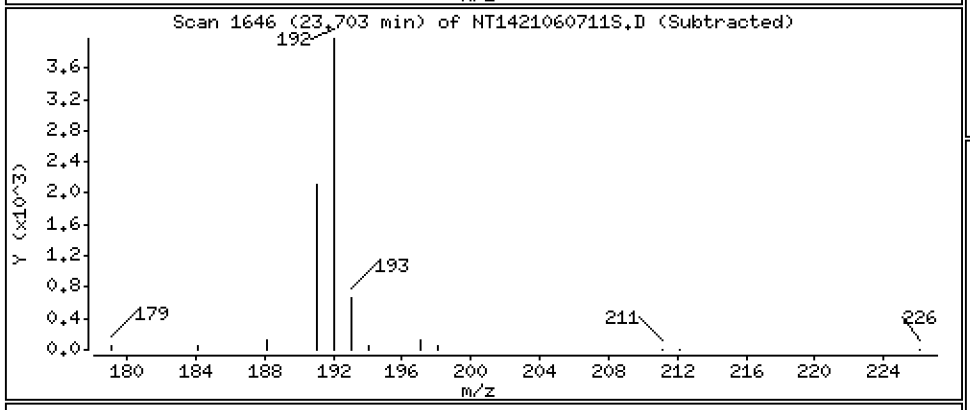
Column phase: Rxi-17Sil MS

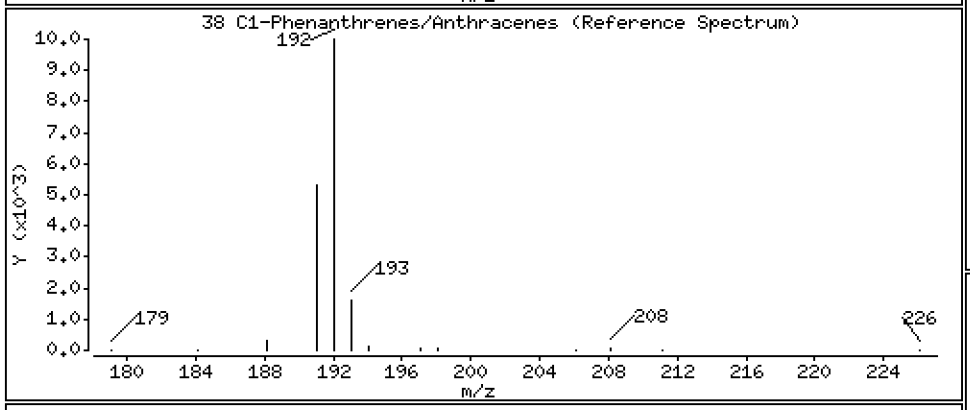
Column diameter: 0.25

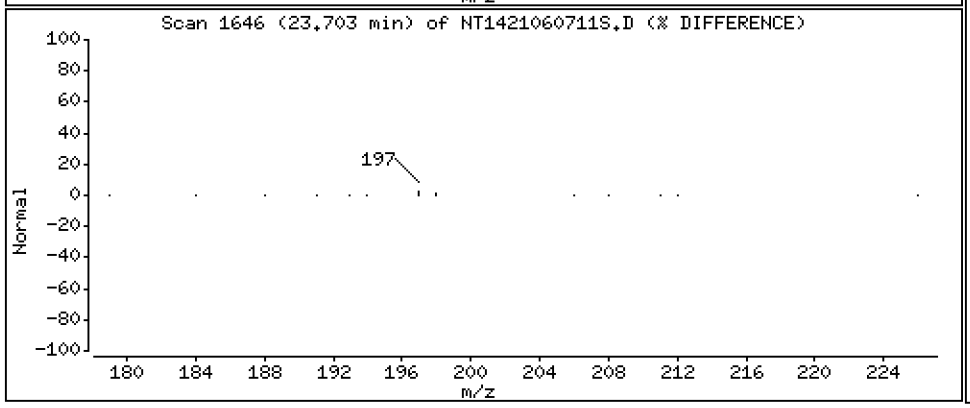
38 C1-Phenanthrenes/Anthracenes

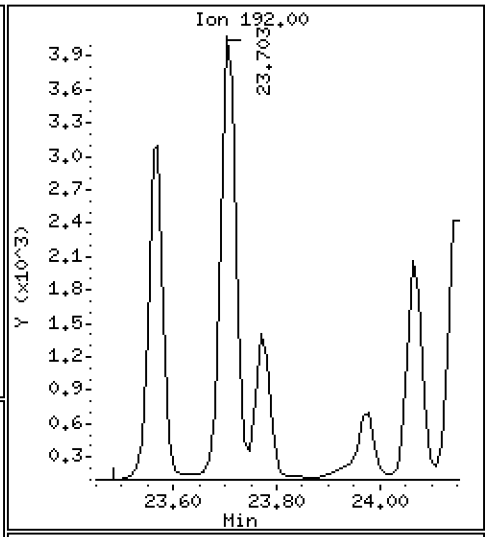
Concentration: 0.1430 ug/mL

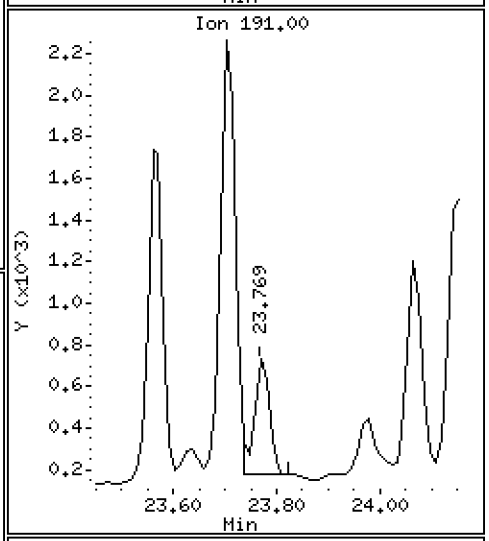


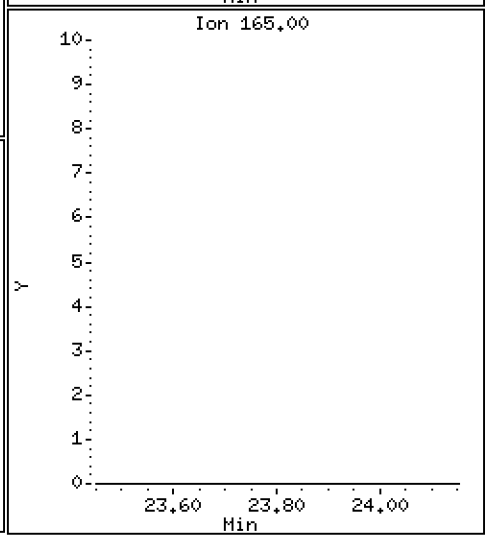












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Date : 07-JUN-2021 20:30

Client ID:

Instrument: nt14.i

Sample Info: 21E0106-02

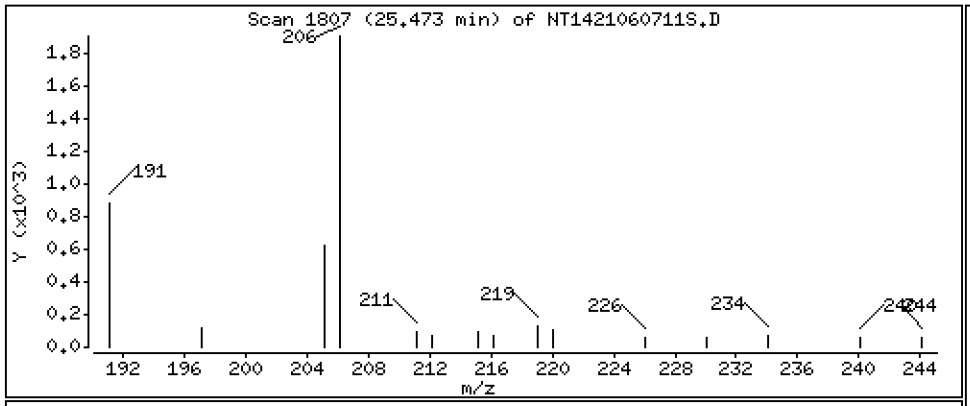
Operator: VTS

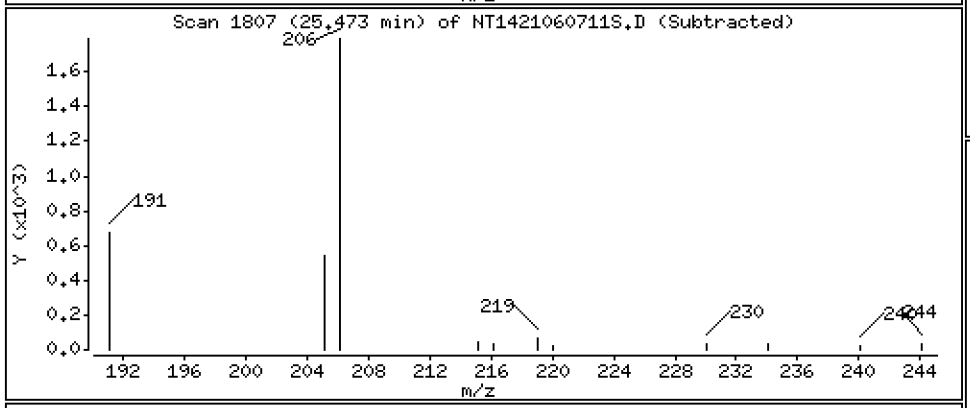
Column phase: Rxi-17Sil MS

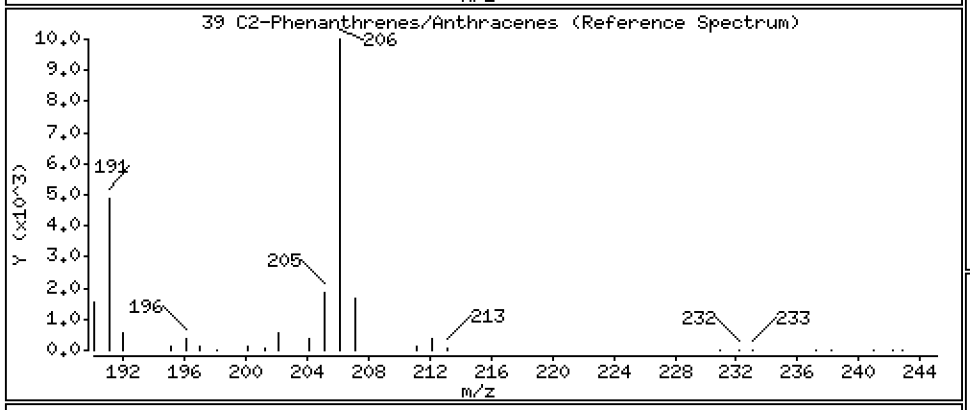
Column diameter: 0.25

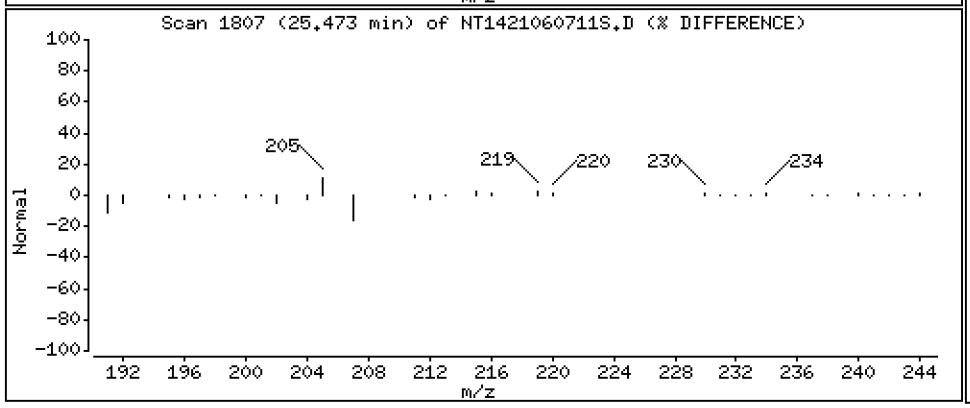
39 C2-Phenanthrenes/Anthracenes

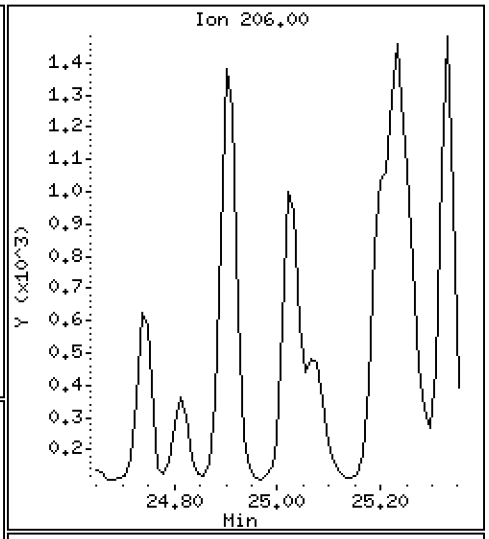
Concentration: 0.1132 ug/mL

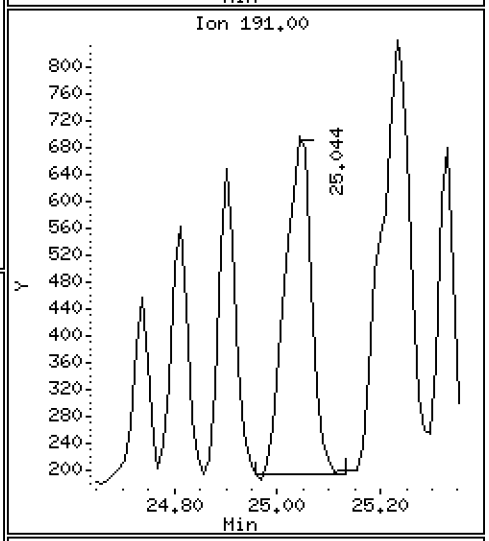


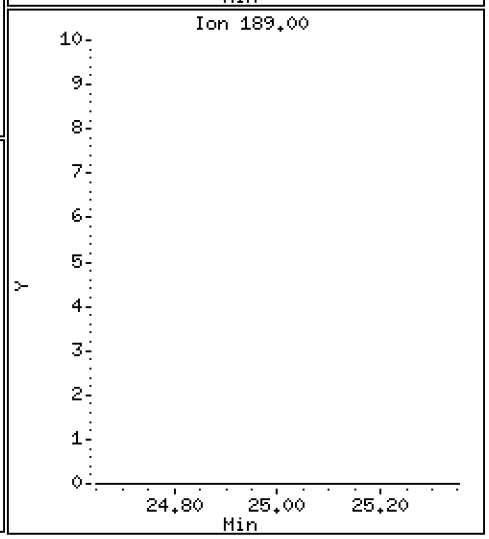












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Date : 07-JUN-2021 20:30

Client ID:

Instrument: nt14.i

Sample Info: 21E0106-02

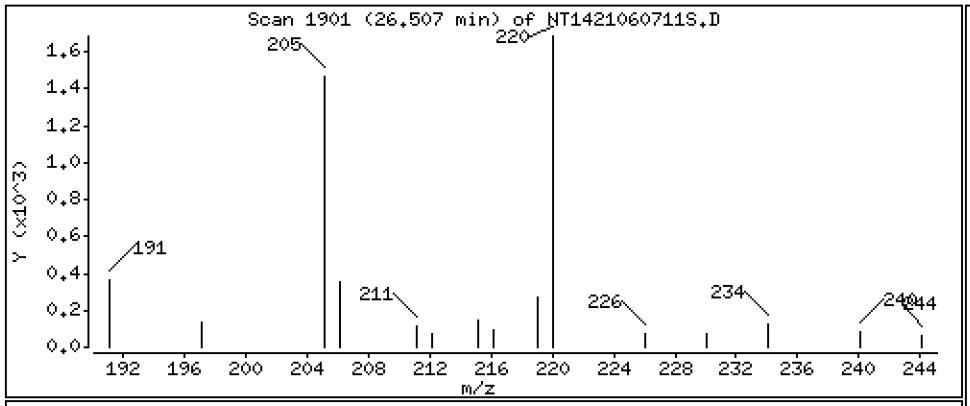
Operator: VTS

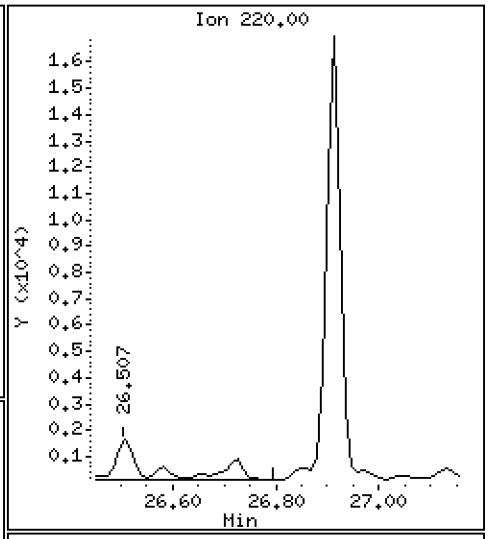
Column phase: Rxi-17Sil MS

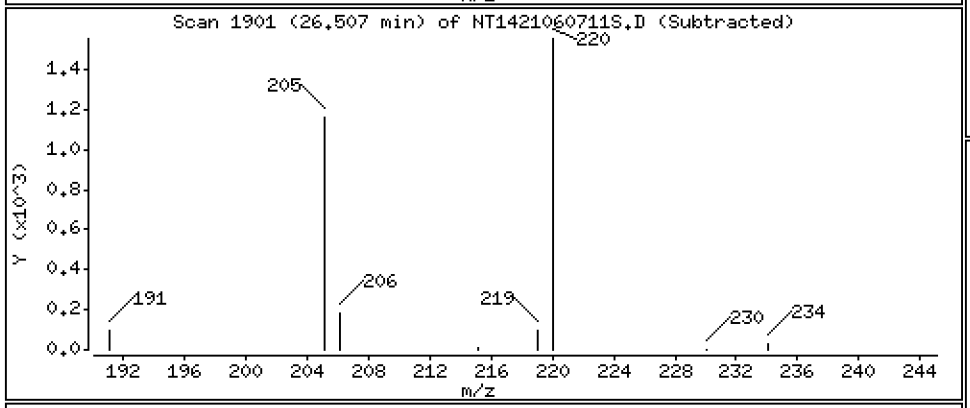
Column diameter: 0.25

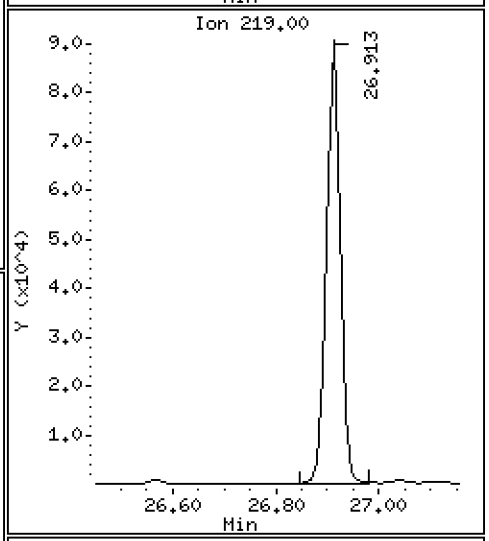
40 C3-Phenanthrenes/Anthracenes

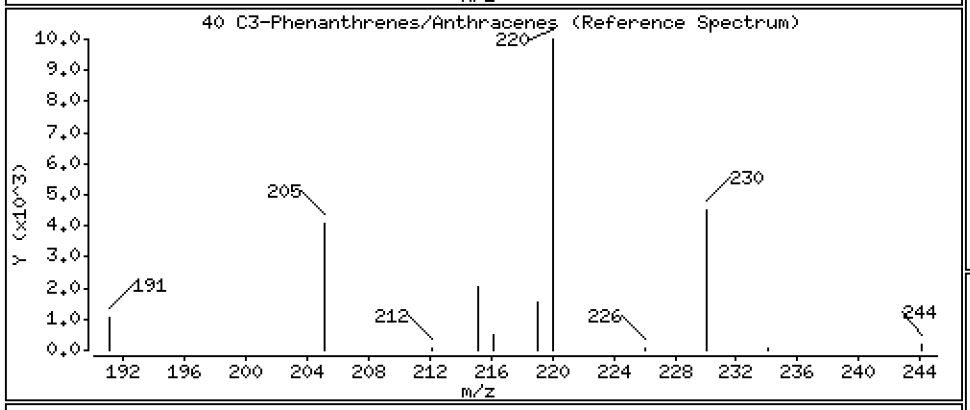
Concentration: 0.06398 ug/mL

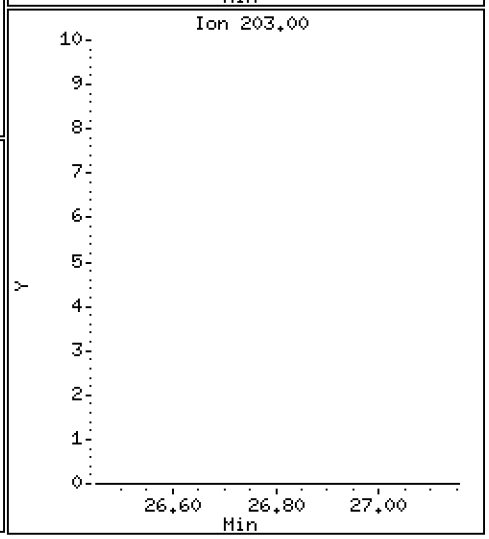


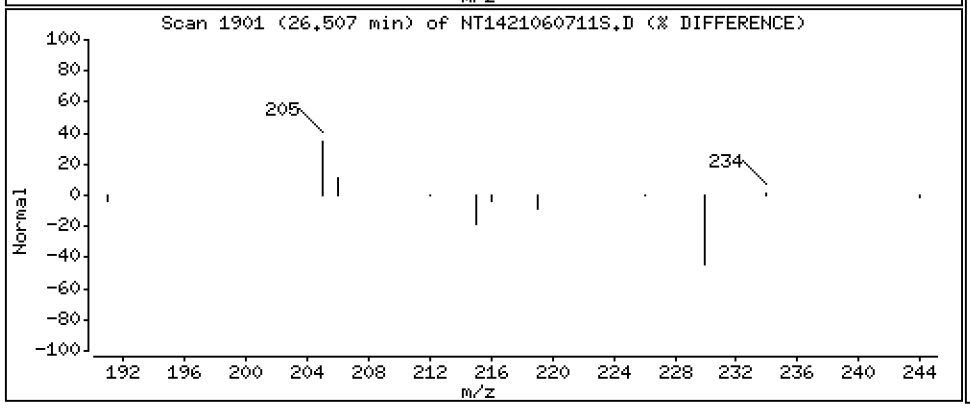












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Date : 07-JUN-2021 20:30

Client ID:

Instrument: nt14.i

Sample Info: 21E0106-02

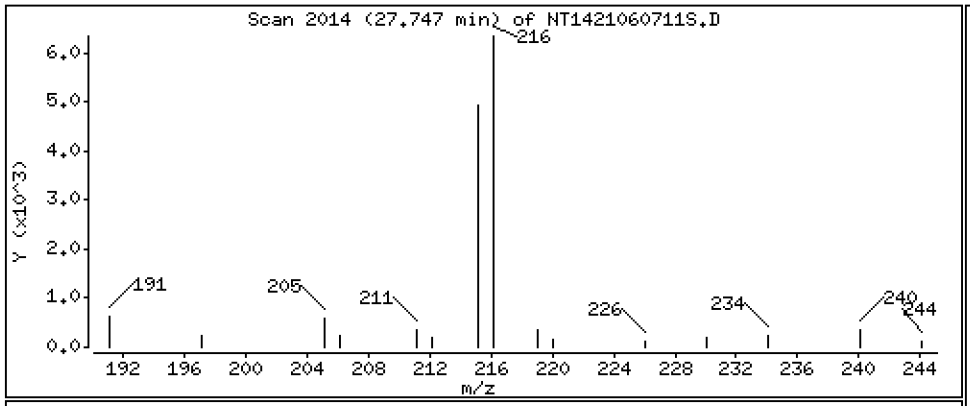
Operator: VTS

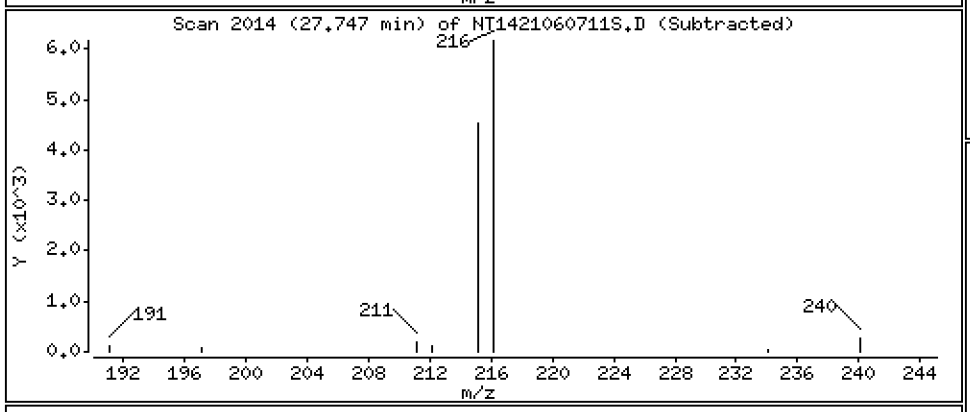
Column phase: Rxi-17Sil MS

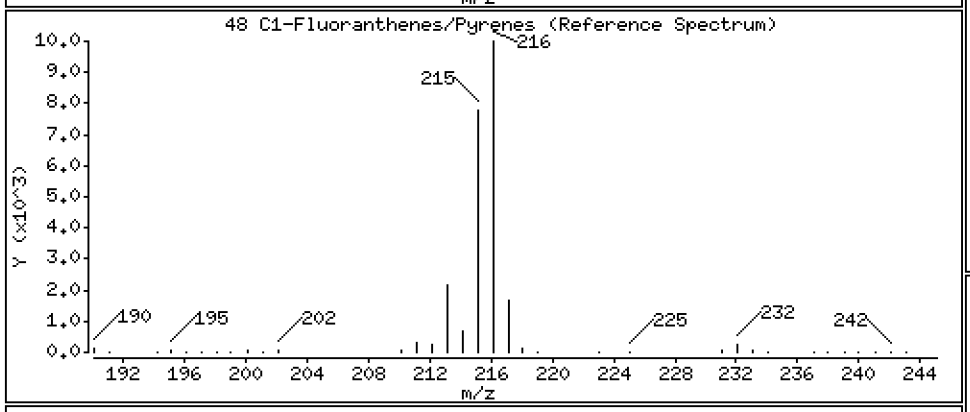
Column diameter: 0.25

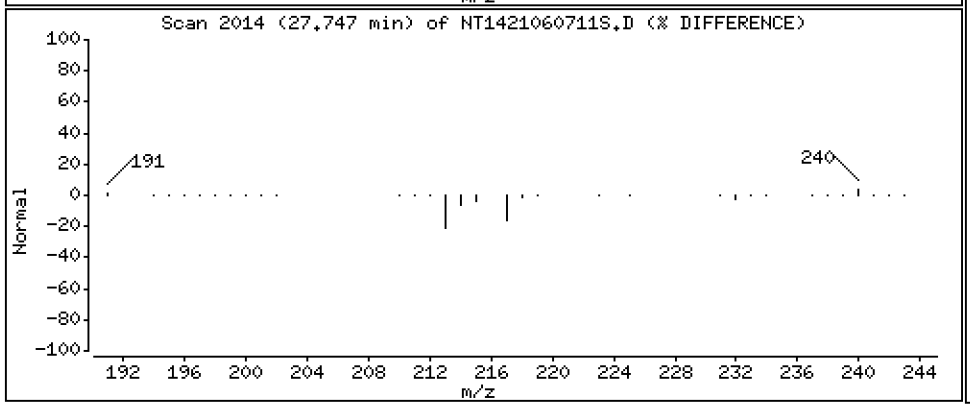
48 C1-Fluoranthenes/Pyrenes

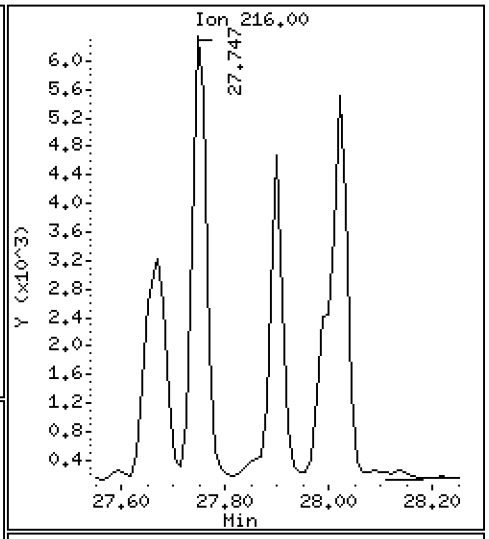
Concentration: 0.3056 ug/mL

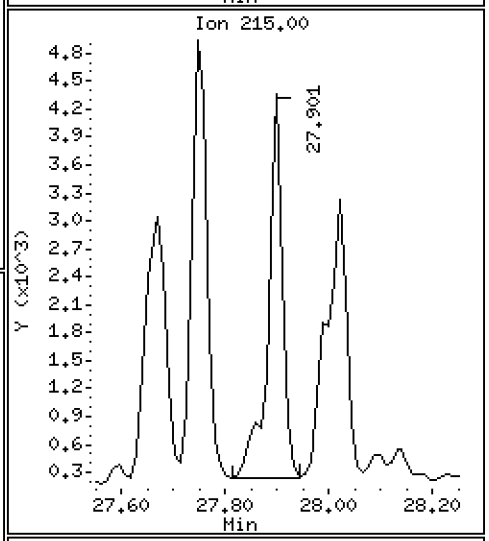


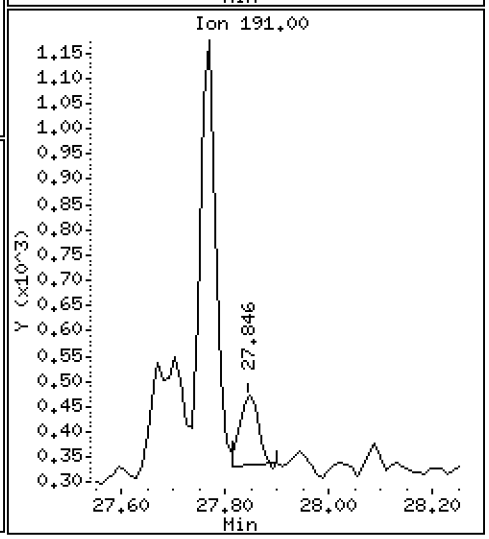












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Date : 07-JUN-2021 20:30

Client ID:

Instrument: nt14.i

Sample Info: 21E0106-02

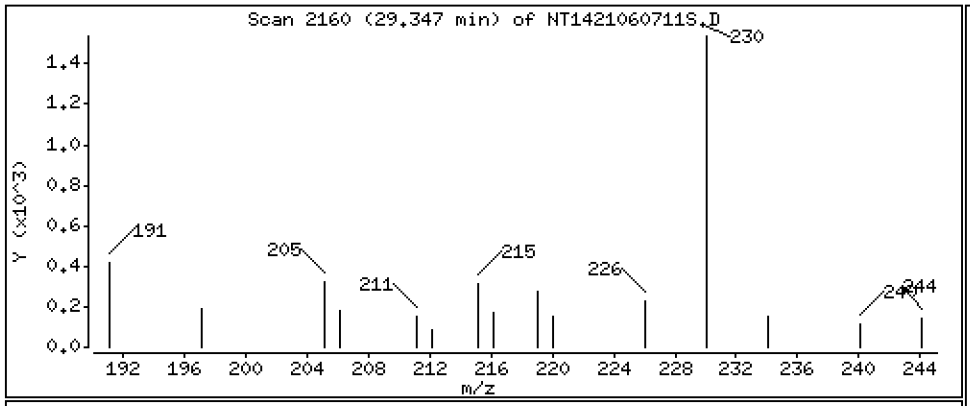
Operator: VTS

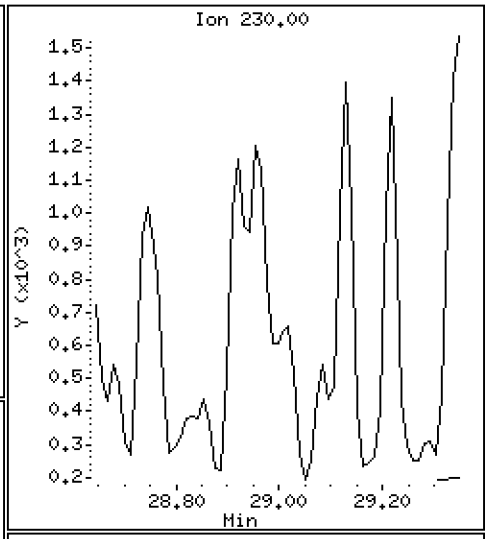
Column phase: Rxi-17Sil MS

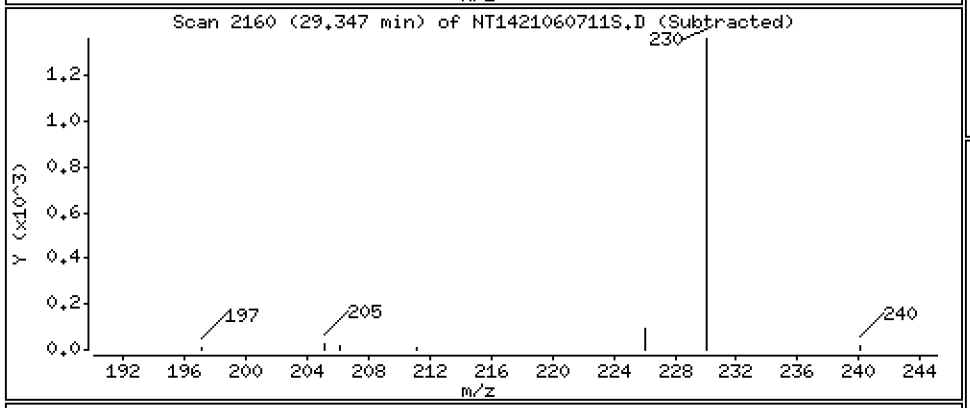
Column diameter: 0.25

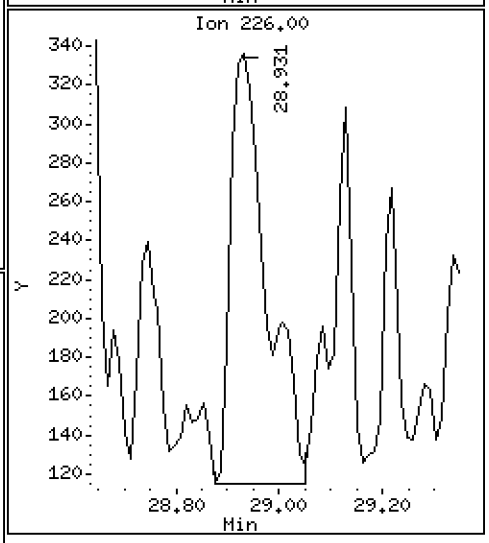
49 C2-Fluoranthenes/Pyrenes

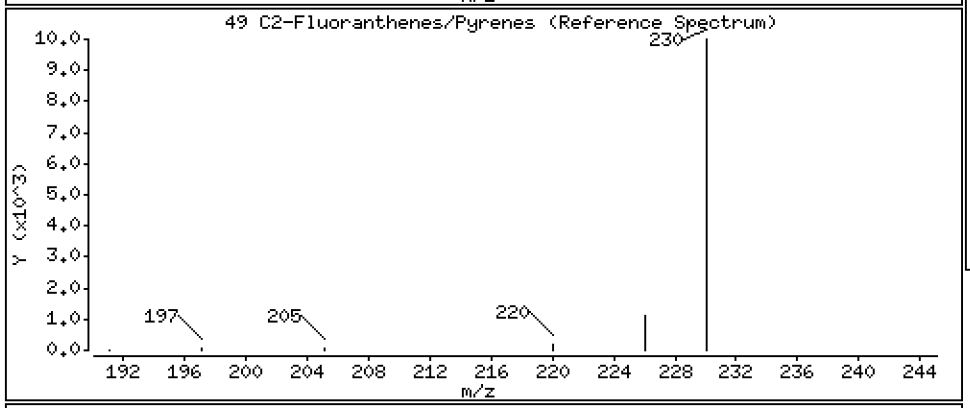
Concentration: 0.1262 ug/mL

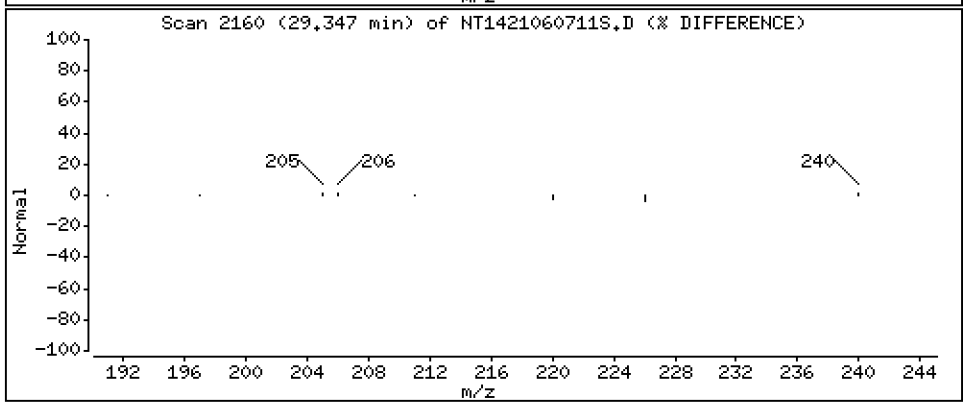












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Date : 07-JUN-2021 20:30

Client ID:

Instrument: nt14.i

Sample Info: 21E0106-02

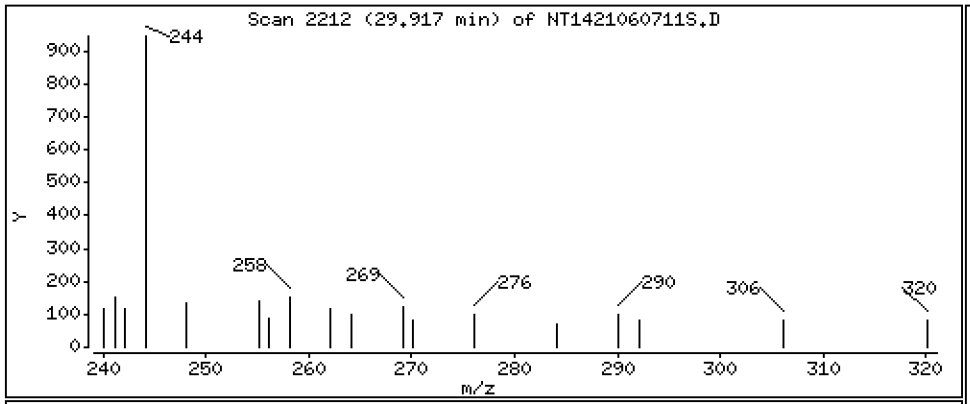
Operator: VTS

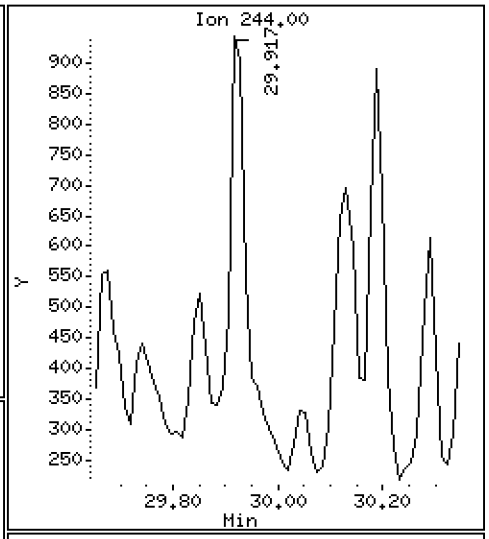
Column phase: Rxi-17Sil MS

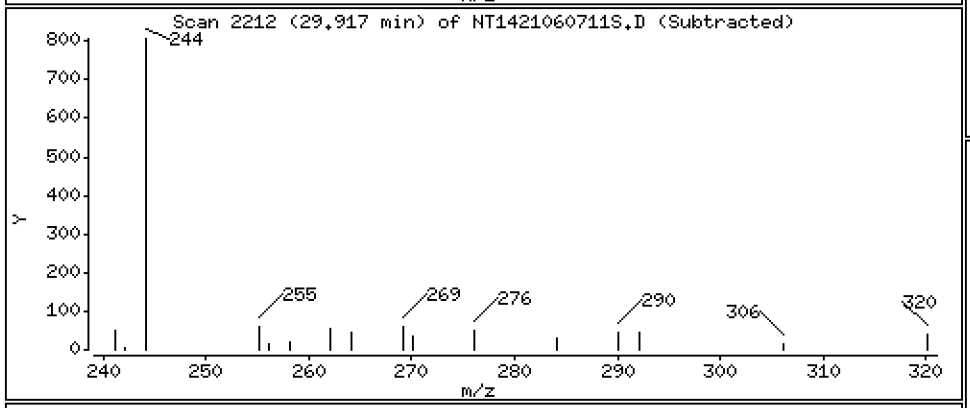
Column diameter: 0.25

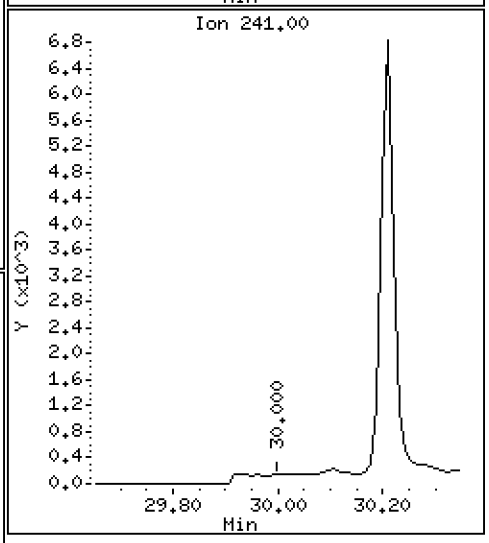
50 C3-Fluoranthenes/Pyrenes

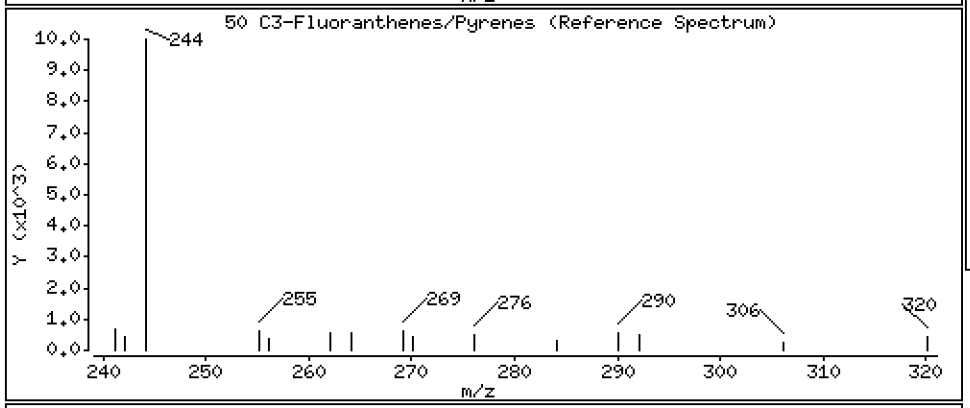
Concentration: 0.06198 ug/mL

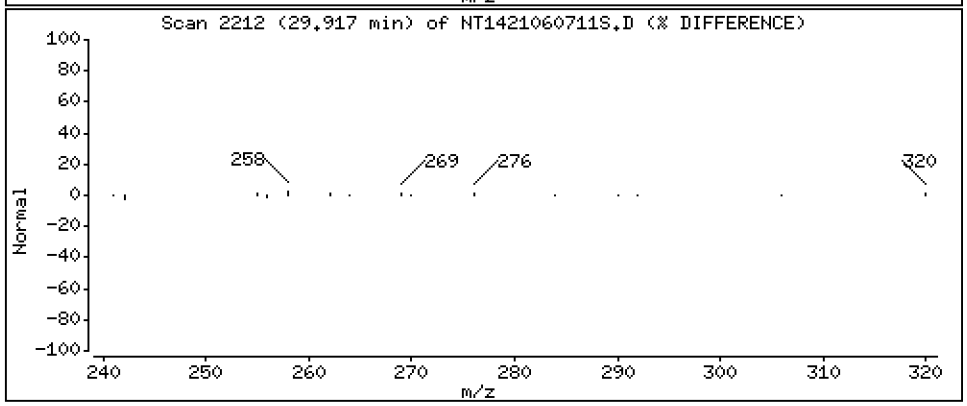












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Date : 07-JUN-2021 20:30

Client ID:

Instrument: nt14.i

Sample Info: 21E0106-02

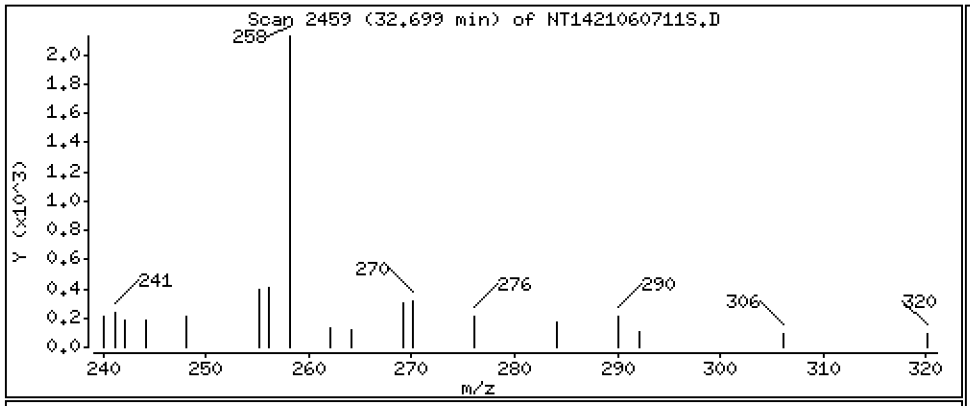
Operator: VTS

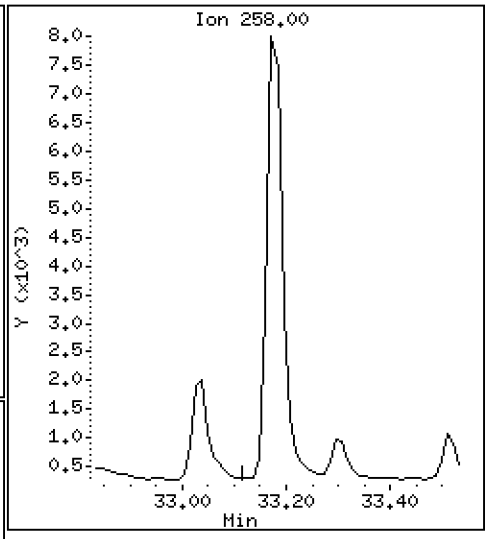
Column phase: Rxi-17Sil MS

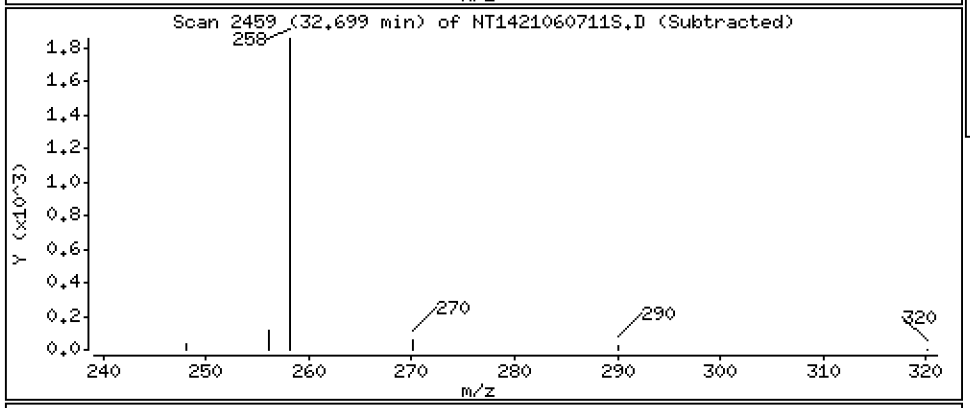
Column diameter: 0.25

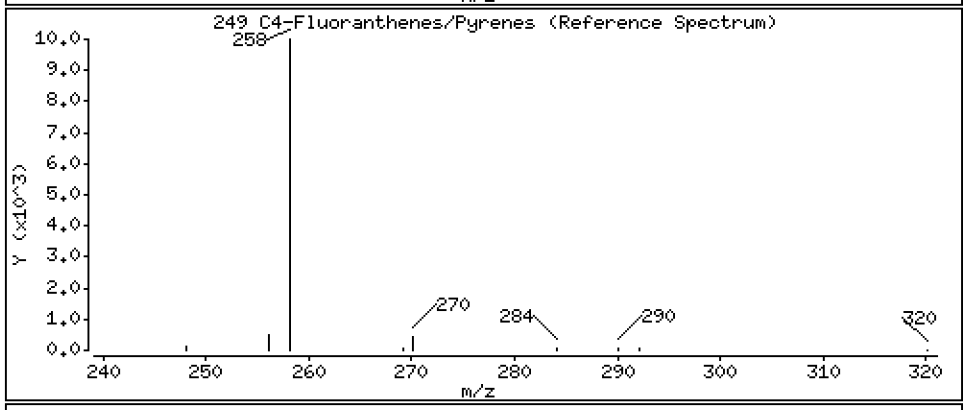
249 C4-Fluoranthenes/Pyrenes

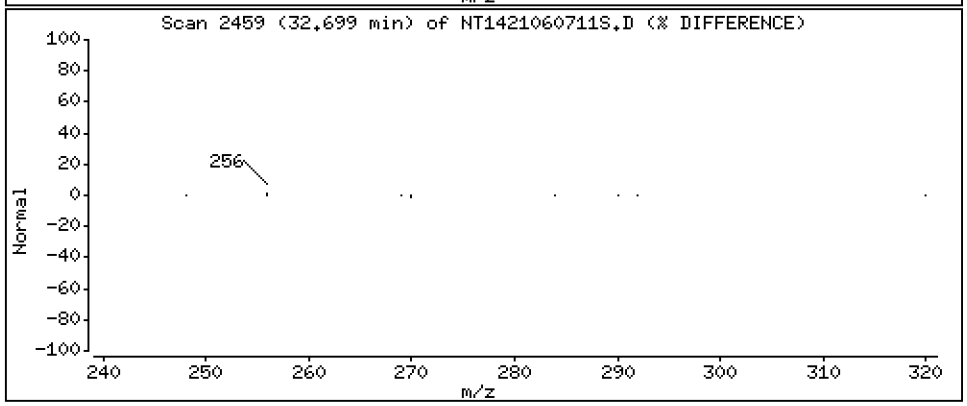
Concentration: 0.05679 ug/mL











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Date : 07-JUN-2021 20:30

Client ID:

Instrument: nt14.i

Sample Info: 21E0106-02

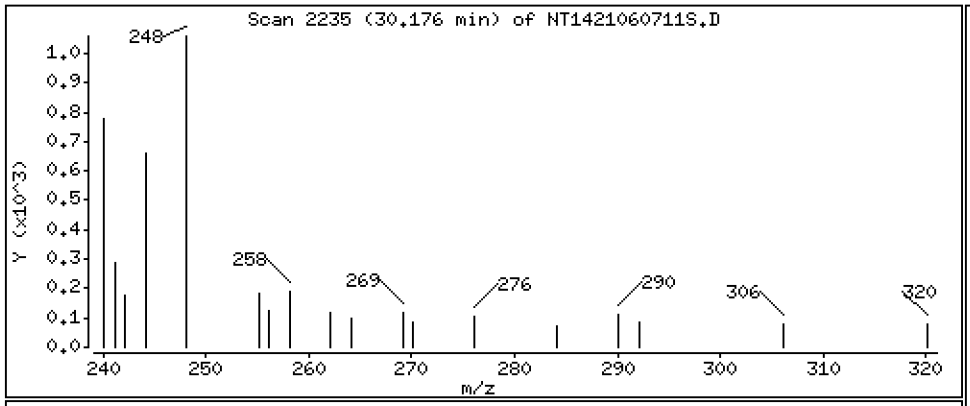
Operator: VTS

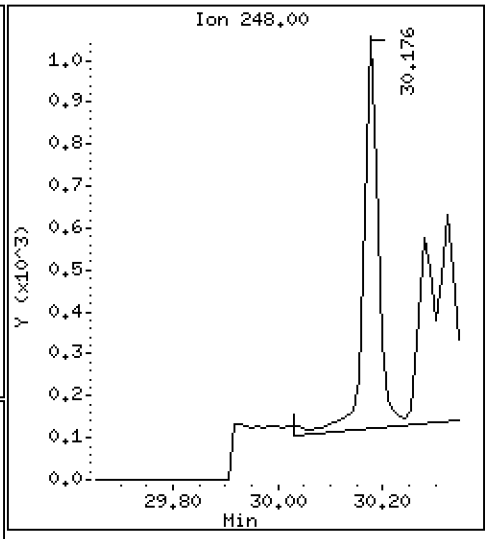
Column phase: Rxi-17Sil MS

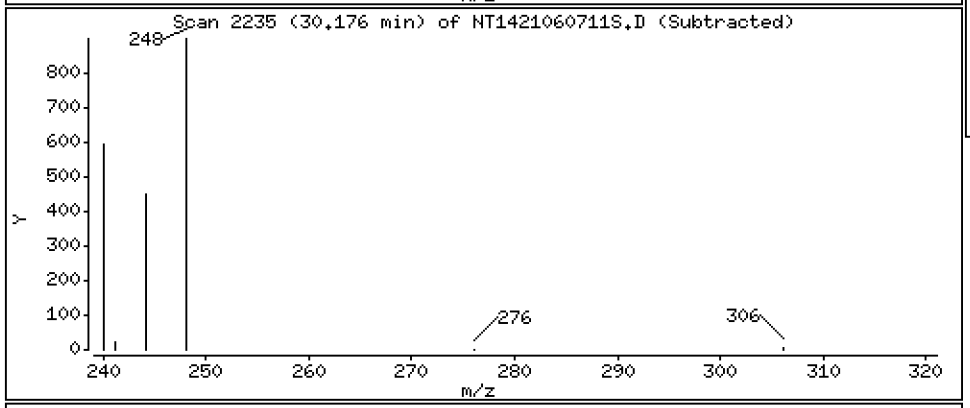
Column diameter: 0.25

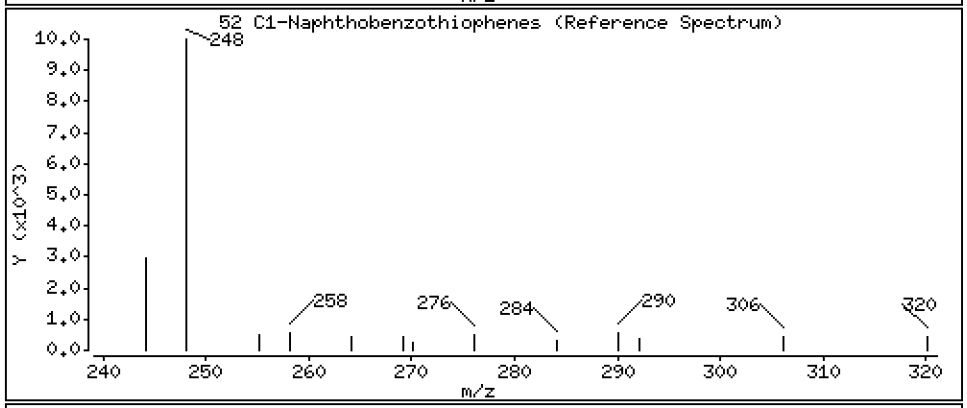
52 C1-Naphthobenzothiophenes

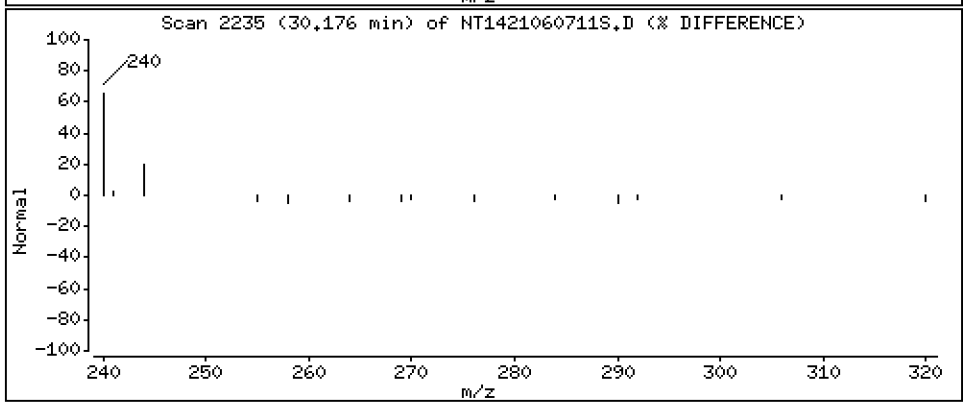
Concentration: 0.04757 ug/mL











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Date : 07-JUN-2021 20:30

Client ID:

Instrument: nt14.i

Sample Info: 21E0106-02

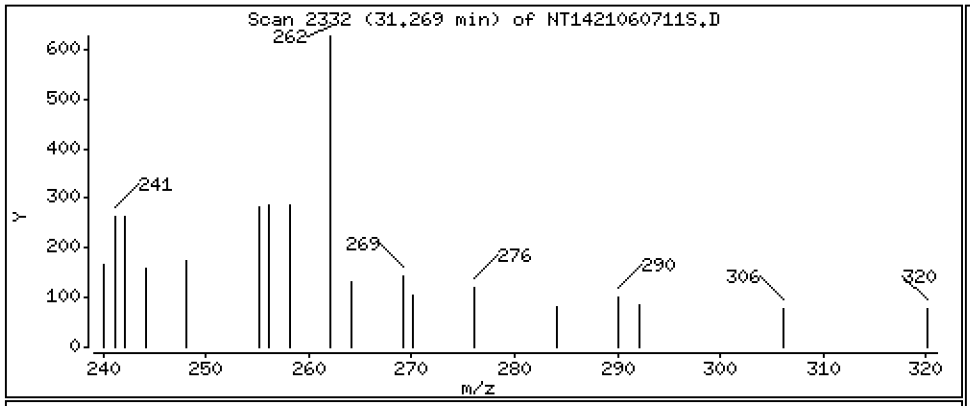
Operator: VTS

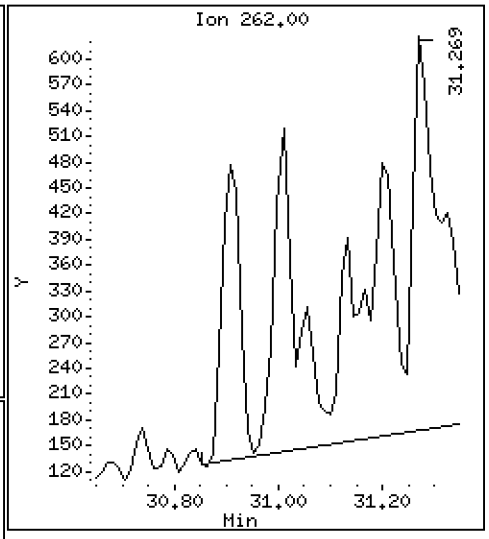
Column phase: Rxi-17Sil MS

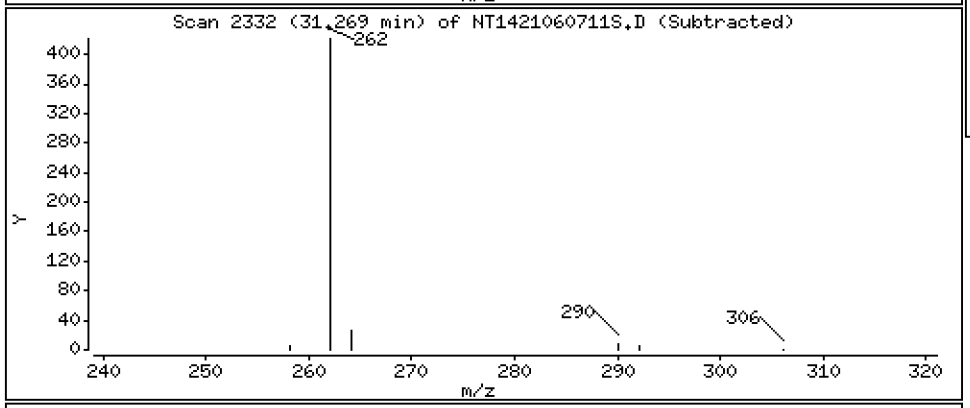
Column diameter: 0.25

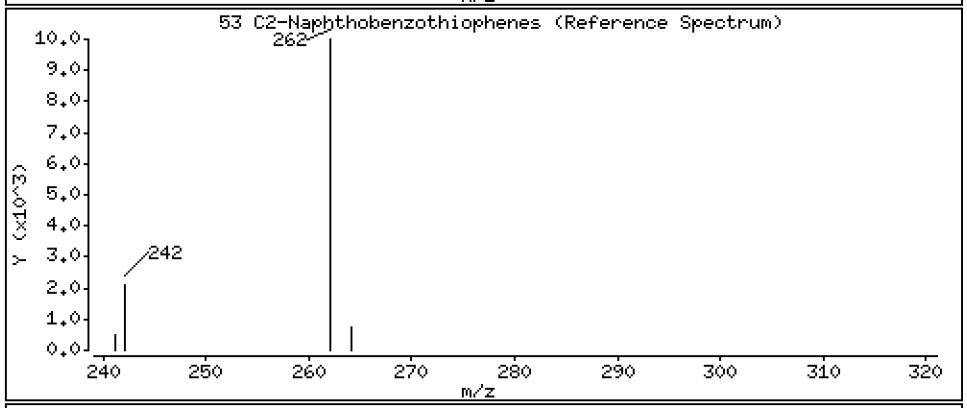
53 C2-Naphthobenzothiophenes

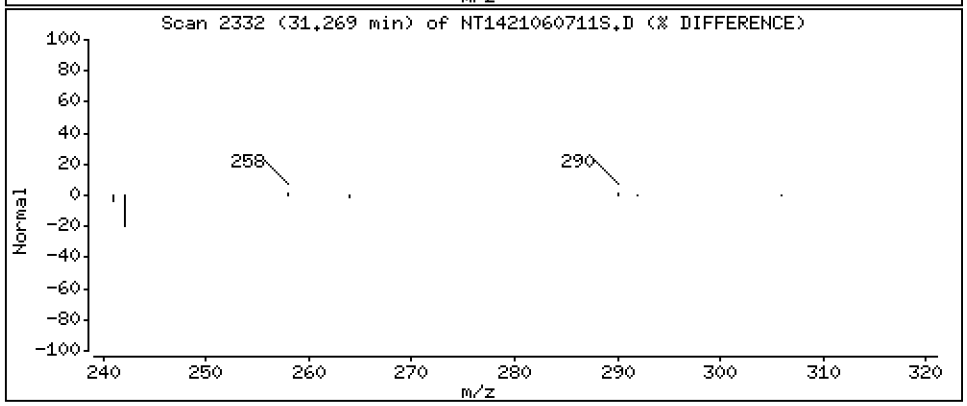
Concentration: 0.03339 ug/mL











Data File: \\target\share\chem3\nt14.i\20210607.b\SIM.b\NT1421060711S.D

Date : 07-JUN-2021 20:30

Client ID:

Instrument: nt14.i

Sample Info: 21E0106-02

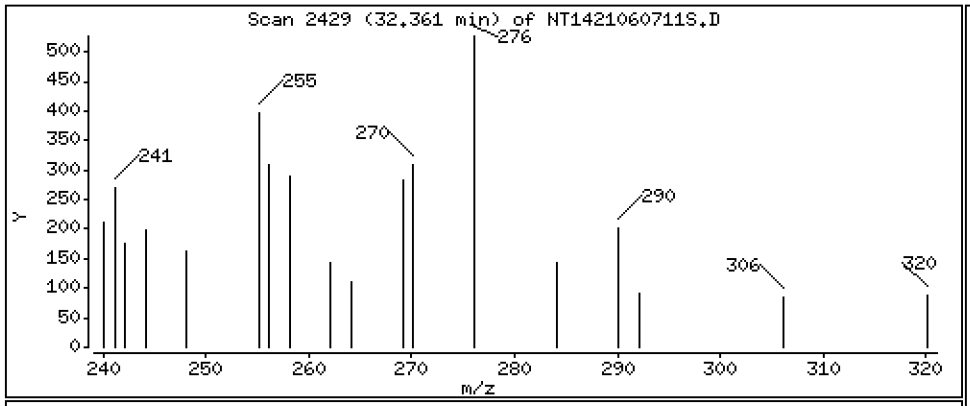
Operator: VTS

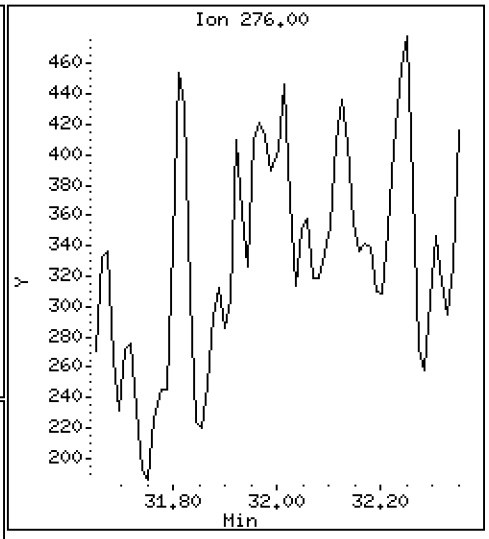
Column phase: Rxi-17Sil MS

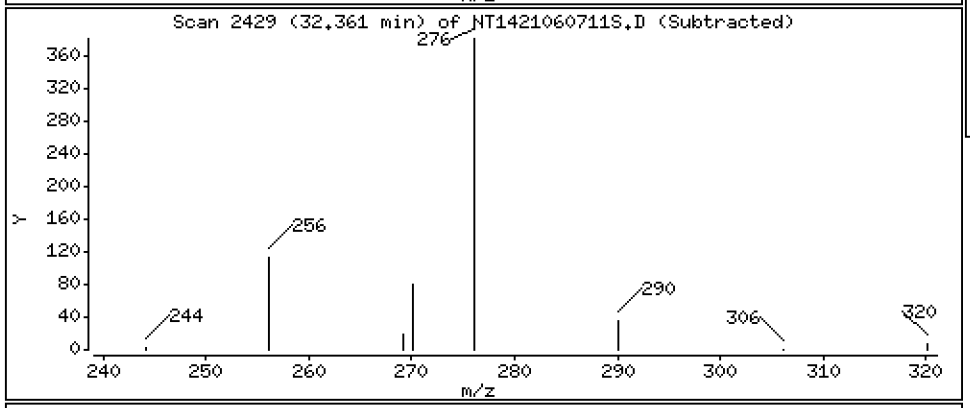
Column diameter: 0.25

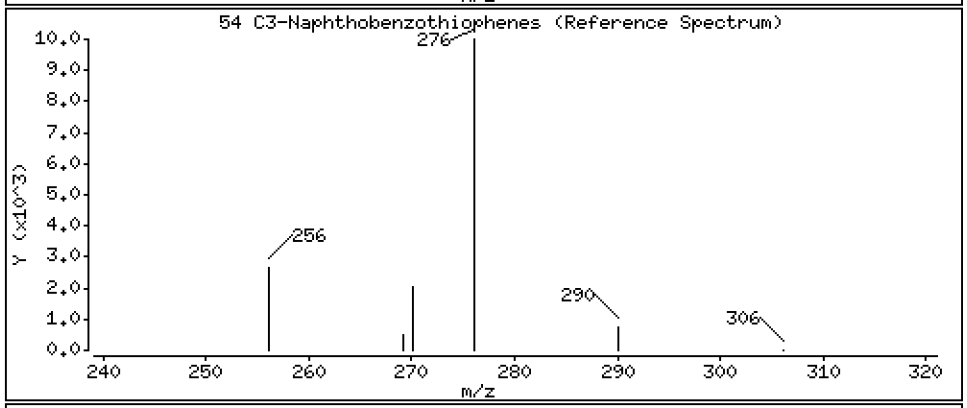
54 C3-Naphthobenzothiophenes

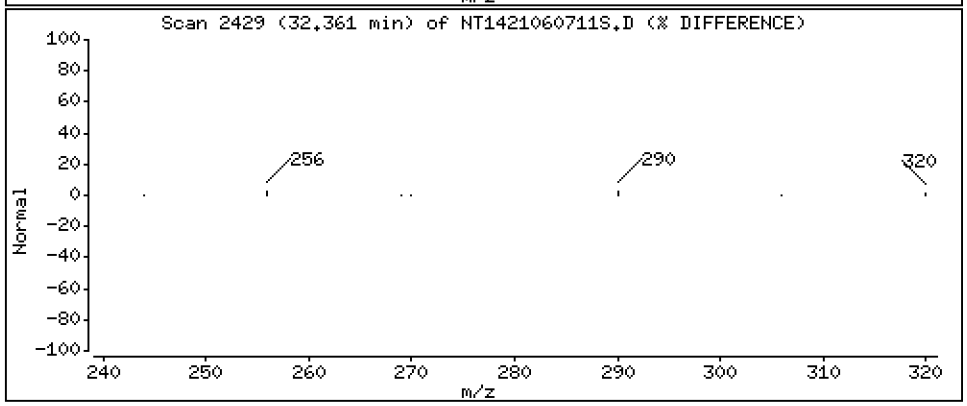
Concentration: 0.04475 ug/mL











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Date : 07-JUN-2021 20:30

Client ID:

Instrument: nt14.i

Sample Info: 21E0106-02

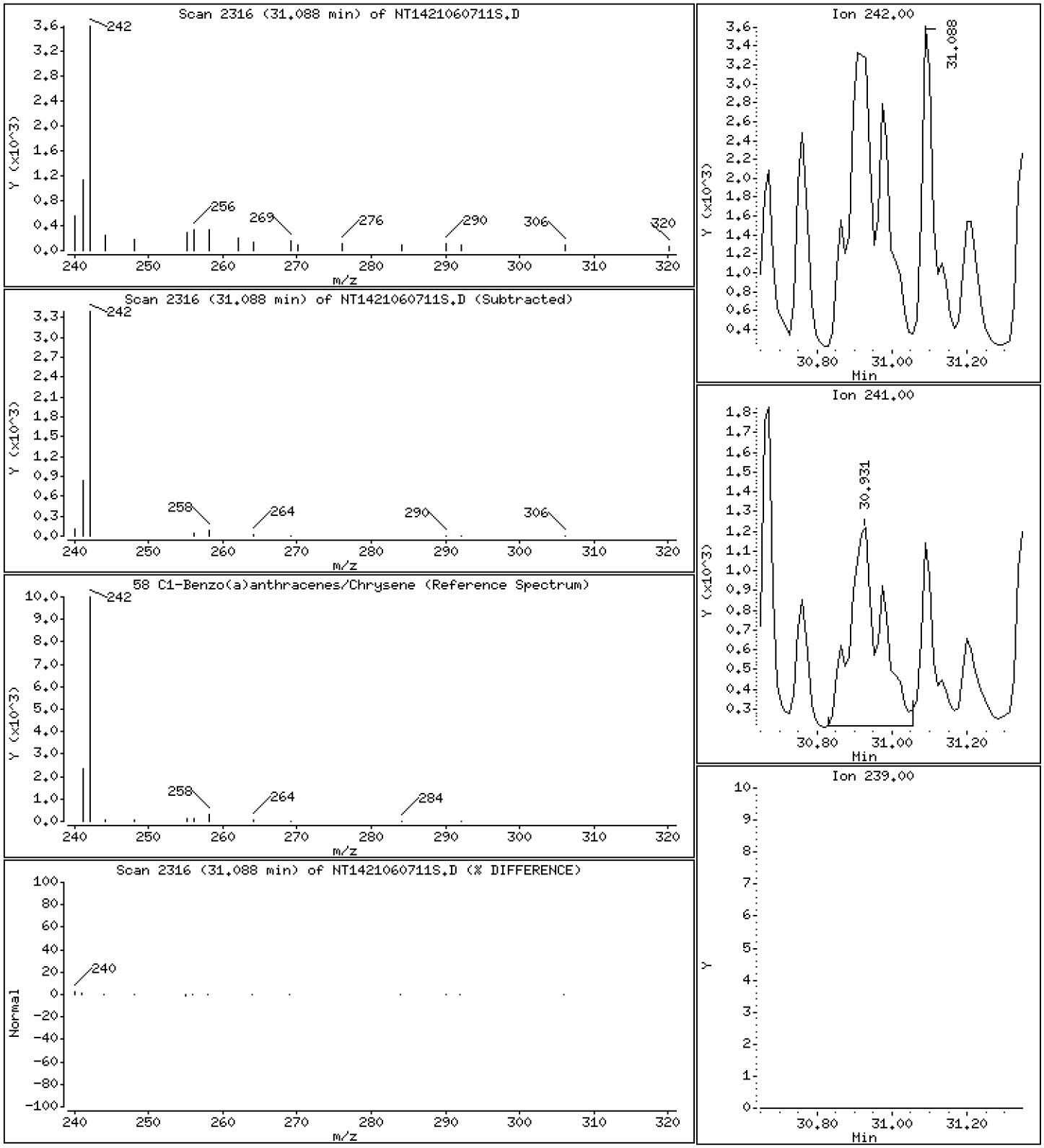
Operator: VTS

Column phase: Rxi-17Sil MS

Column diameter: 0.25

58 C1-Benzo(a)anthracenes/Chrysene

Concentration: 0.3015 ug/mL



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Date : 07-JUN-2021 20:30

Client ID:

Instrument: nt14.i

Sample Info: 21E0106-02

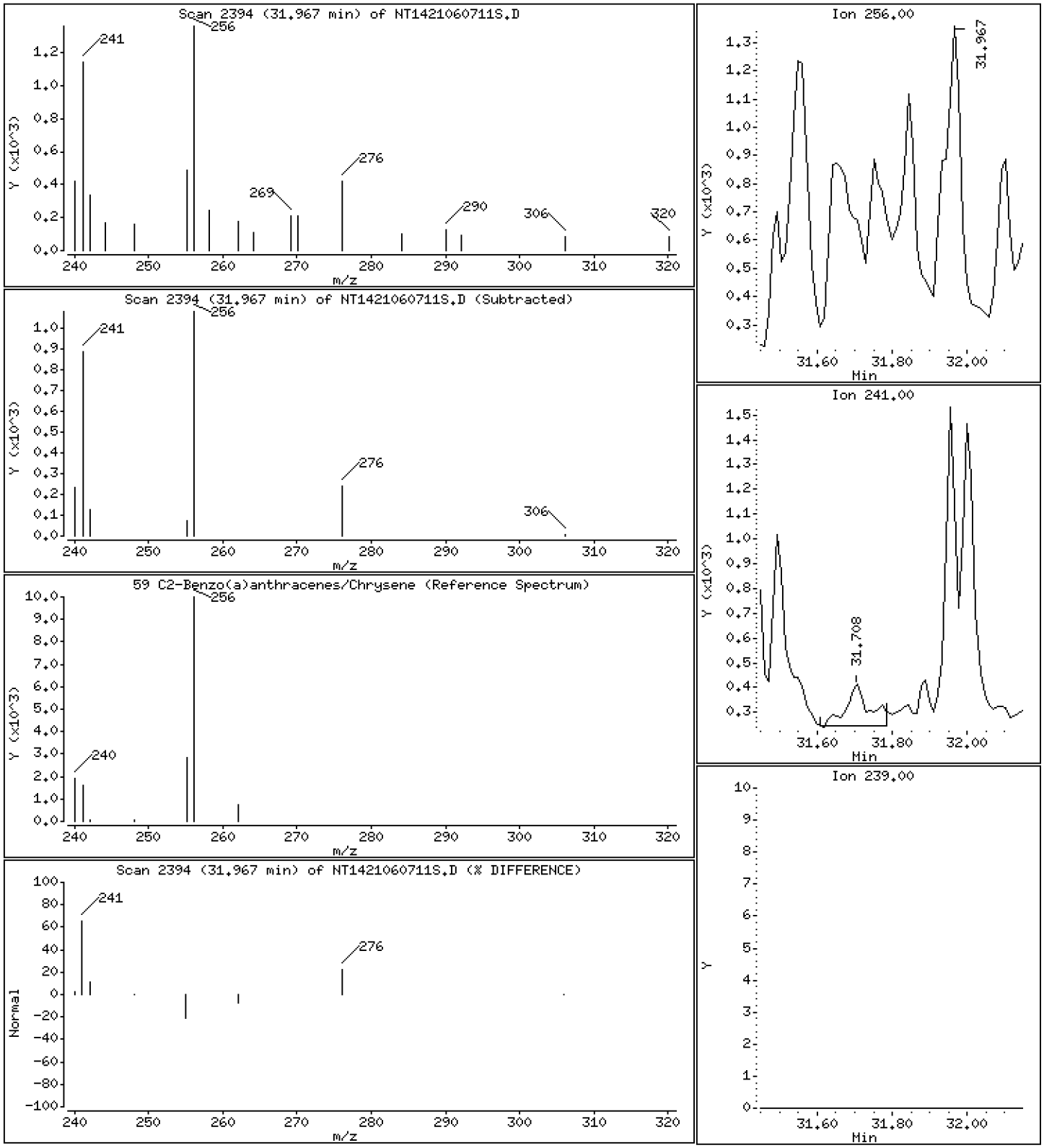
Operator: VTS

Column phase: Rxi-17Sil MS

Column diameter: 0.25

59 C2-Benzo(a)anthracenes/Chrysene

Concentration: 0.1203 ug/mL



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Date : 07-JUN-2021 20:30

Client ID:

Instrument: nt14.i

Sample Info: 21E0106-02

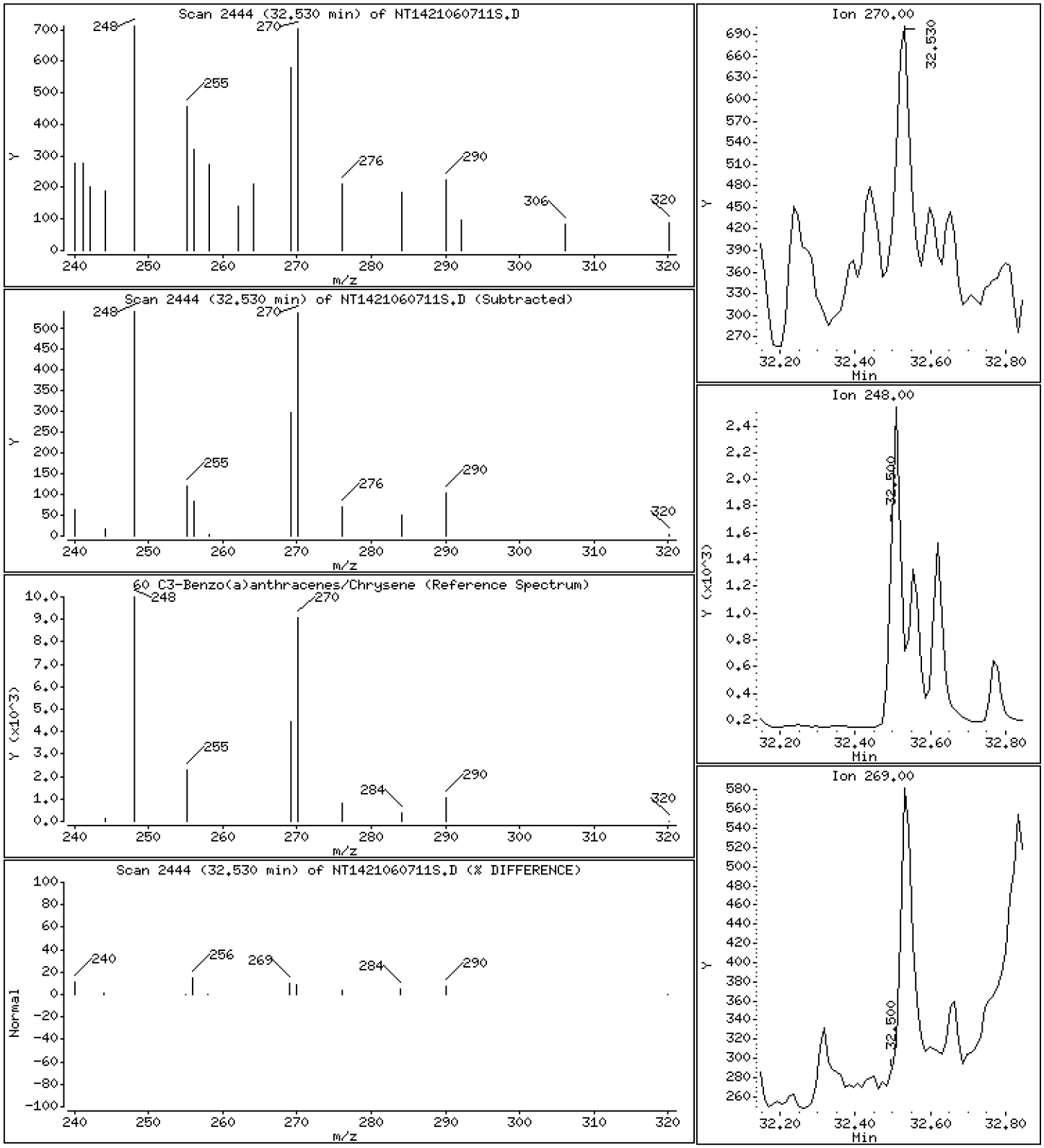
Operator: VTS

Column phase: Rxi-17Sil MS

Column diameter: 0.25

60 C3-Benzo(a)anthracenes/Chrysene

Concentration: 0.07971 ug/mL



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Date : 07-JUN-2021 20:30

Client ID:

Instrument: nt14.i

Sample Info: 21E0106-02

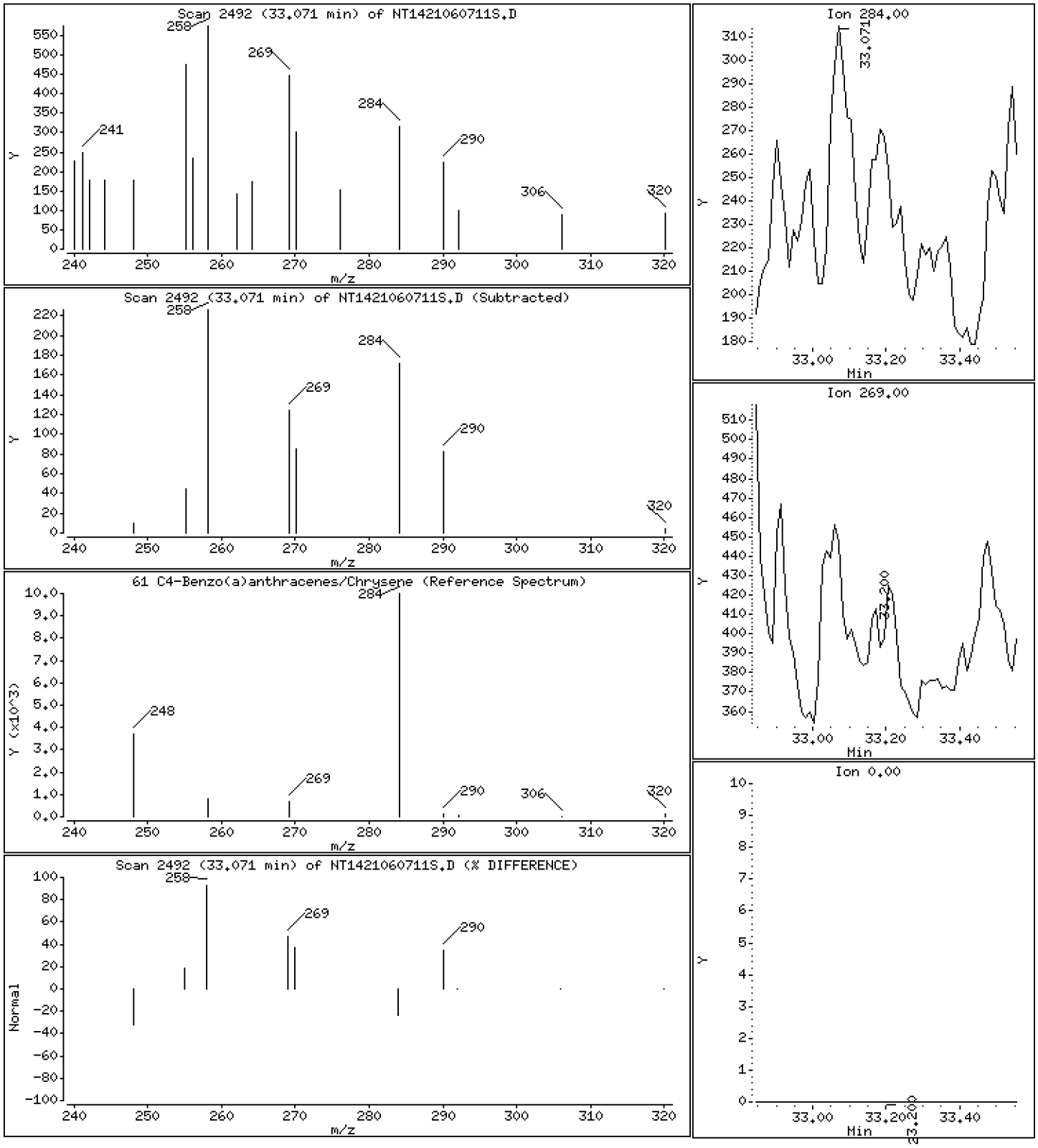
Operator: VTS

Column phase: Rxi-17Sil MS

Column diameter: 0.25

61 C4-Benzo(a)anthracenes/Chrysene

Concentration: 0.02813 ug/mL



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Date : 07-JUN-2021 20:30

Client ID:

Instrument: nt14.i

Sample Info: 21E0106-02

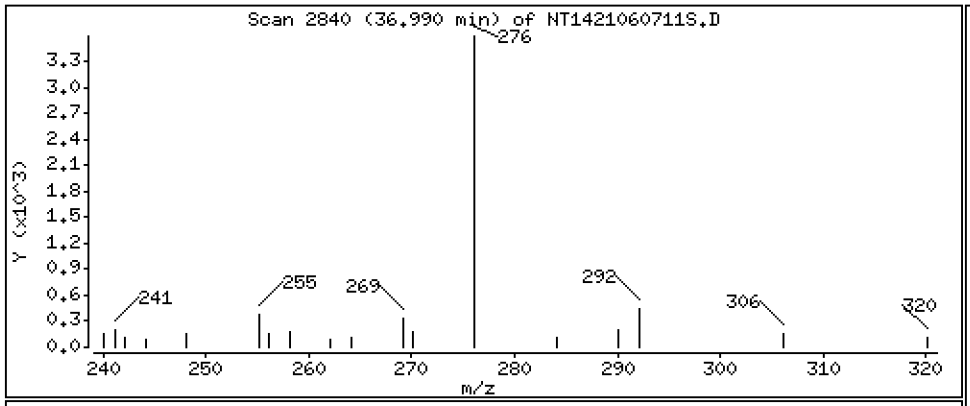
Operator: VTS

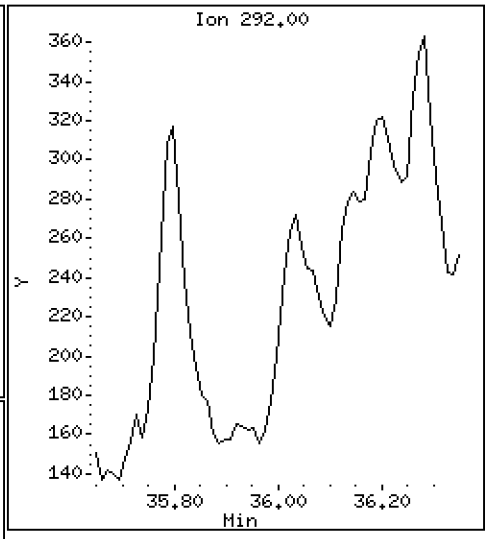
Column phase: Rxi-17Sil MS

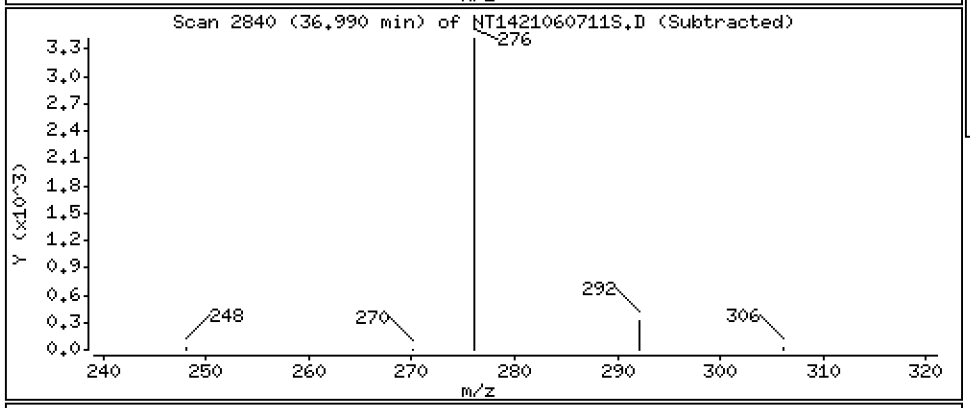
Column diameter: 0.25

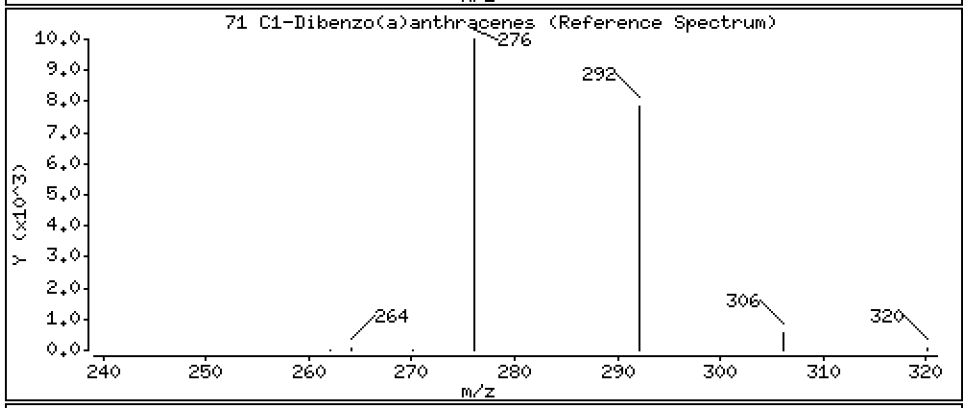
71 C1-Dibenzo(a)anthracenes

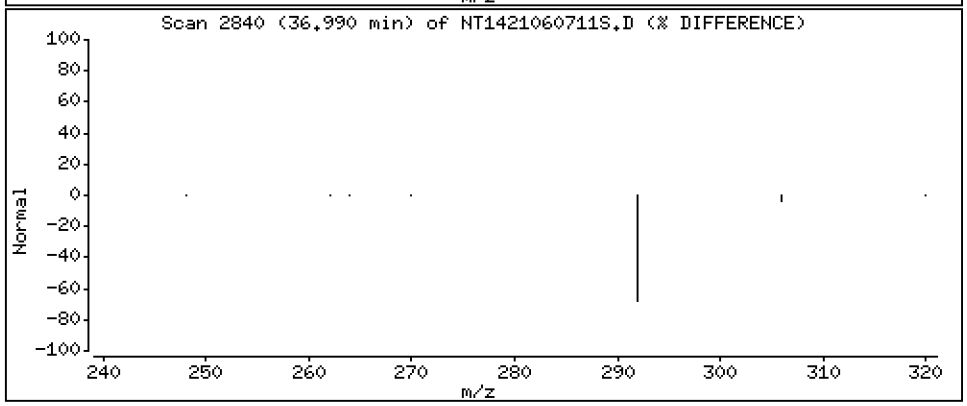
Concentration: 0.06005 ug/mL











ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt14.i\20210607.b\SIM.b\NT1421060711S.D
Lab Smp Id: 21E0106-02
Inj Date : 07-JUN-2021 20:30
Operator : VTS Inst ID: nt14.i
Smp Info : 21E0106-02
Misc Info :
Comment : 1ul Injection
Method : \\target\share\chem3\nt14.i\20210607.b\SIM.b\ALKYLRANGES.m
Meth Date : 15-Jun-2021 10:32 yev Quant Type: ISTD
Cal Date : 29-MAY-2021 18:49 Cal File: NT1421052914.D
Als bottle: 38
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ALKYLRANGES.sub
Target Version: 4.14
Processing Host: ORGDATA102

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/mL)
3 C1-Decalin	152	Compound Not Detected.					
4 C2-Decalin	166	Compound Not Detected.					
5 C3-Decalin	180	Compound Not Detected.					
247 C4-Decalin	194	Compound Not Detected.					
8 C1-Naphthalenes	142	13.785	14.246	(0.729)	3871	0.02153	0.02153(M)
9 C2-Naphthalenes	156	15.906	16.000	(0.842)	8013	0.04456	0.04456(M)
10 C3-Naphthalenes	170	17.763	18.082	(0.940)	8282	0.04605	0.04605(M)
11 C4-Naphthalenes	184	19.464	18.500	(1.030)	4581	0.02547	0.02547(M)
13 C1-Benzothiophenes	148	Compound Not Detected.					
14 C2-Benzothiophenes	162	Compound Not Detected.					
15 C3_Benzothiophenes	176	Compound Not Detected.					
27 C1-Fluorenes	180	20.530	21.000	(1.086)	3702	0.02676	0.02676(M)
* 25 Fluorene-d10	176	18.898	18.896	(1.000)	387046	2.00000	
28 C2-Fluorenes	194	Compound Not Detected.					
29 C3-Fluorenes	208	23.417	23.000	(1.239)	3586	0.02355	0.02355(M)
31 C1-Dibenzothiophenes	198	23.054	23.500	(1.220)	4572	0.02341	0.02341(M)
32 C2-Dibenzothiophenes	212	24.186	24.500	(1.280)	6219	0.03184	0.03184(M)
33 C3-Dibenzothiophenes	226	25.362	25.600	(1.342)	5806	0.02973	0.02973(M)
34 C4-Dibenzothiophenes	240	Compound Not Detected.					
* 250 Anthracene-d10	188	22.350	22.359	(1.000)	412200	2.00000	
38 C1-Phenanthrenes/Anthracenes	192	23.702	23.800	(1.060)	28597	0.14301	0.1430(M)
39 C2-Phenanthrenes/Anthracenes	206	25.472	25.000	(1.140)	22628	0.11316	0.1132(M)
40 C3-Phenanthrenes/Anthracenes	220	26.506	26.800	(1.186)	12794	0.06398	0.06398(M)
41 C4-Phenanthrenes/Anthracenes	234	Compound Not Detected.					
48 C1-Fluoranthenes/Pyrenes	216	27.747	27.900	(1.241)	71683	0.30557	0.3056(M)
49 C2-Fluoranthenes/Pyrenes	230	29.347	29.000	(1.313)	29603	0.12619	0.1262(M)
50 C3-Fluoranthenes/Pyrenes	244	29.917	30.000	(1.339)	14539	0.06198	0.06198(M)
249 C4-Fluoranthenes/Pyrenes	258	32.699	33.183	(1.463)	13323	0.05679	0.05679(M)
52 C1-Naphthobenzothiophenes	248	30.176	30.000	(1.350)	12470	0.04757	0.04757(M)
53 C2-Naphthobenzothiophenes	262	31.268	31.000	(1.399)	8752	0.03339	0.03339(M)
54 C3-Naphthobenzothiophenes	276	32.361	32.000	(1.448)	11732	0.04475	0.04475(M)
248 C4-Naphthobenzothiophenes	290	Compound Not Detected.					
58 C1-Benzo(a)anthracenes/Chrysen	242	31.088	31.000	(0.937)	60399	0.30145	0.3015(M)

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/mL)
59 C2-Benzo(a)anthracenes/Chrysen	256	31.966	31.800	(0.964)	24105	0.12031	0.1203(M)
60 C3-Benzo(a)anthracenes/Chrysen	270	32.530	32.500	(0.981)	15970	0.07971	0.07971(M)
61 C4-Benzo(a)anthracenes/Chrysen	284	33.070	33.200	(0.997)	5636	0.02813	0.02813(M)
* 251 Benzo(e)pyrene-d12	264	33.172	33.181	(1.000)	516591	2.00000	
71 C1-Dibenzo(a)anthracenes	292	36.990	36.000	(1.115)	19874	0.06005	0.06005(M)
72 C2-Dibenzo(a)anthracenes	306	Compound Not Detected.					
73 C3-Dibenzo(a)anthracenes	320	Compound Not Detected.					

QC Flag Legend

M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt14.i
Lab File ID: NT1421060711S.D
Lab Smp Id: 21E0106-02
Analysis Type: SV
Quant Type: ISTD
Operator: VTS
Method File: \\target\share\chem3\nt14.i\20210607.b\SIM.b\ALKYLRANGES.m
Misc Info:

Calibration Date: 07-JUN-2021
Calibration Time: 13:18
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

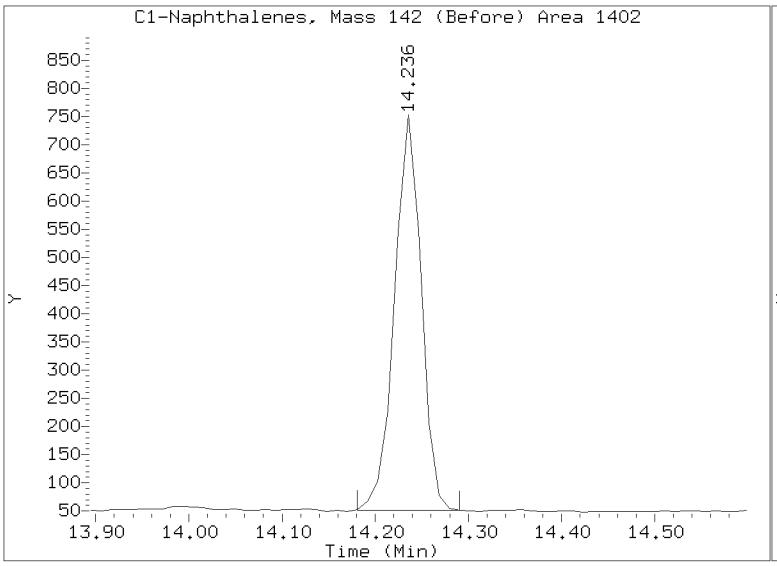
COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
25 Fluorene-d10	311077	155539	622154	387046	24.42
250 Anthracene-d10	331614	165807	663228	412200	24.30
251 Benzo(e)pyrene-d1	416427	208214	832854	516591	24.05

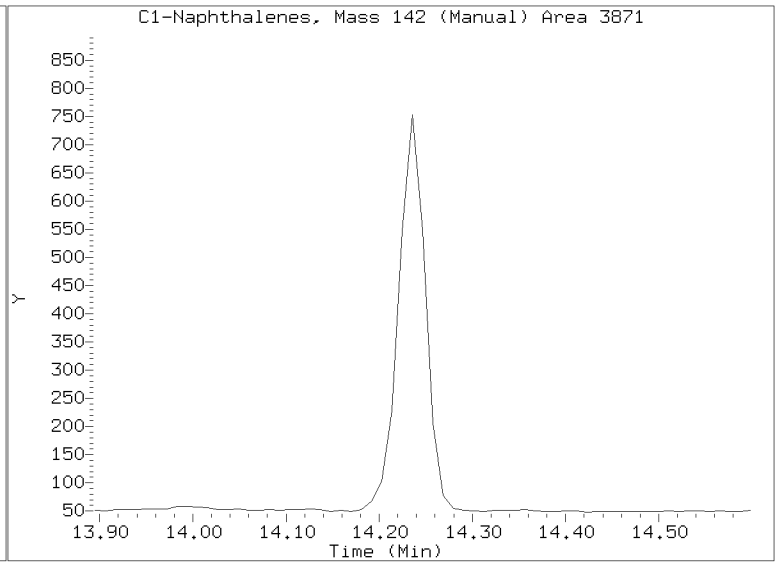
COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
25 Fluorene-d10	18.90	18.40	19.40	18.90	0.01
250 Anthracene-d10	22.36	21.86	22.86	22.35	-0.04
251 Benzo(e)pyrene-d1	33.18	32.68	33.68	33.17	-0.03

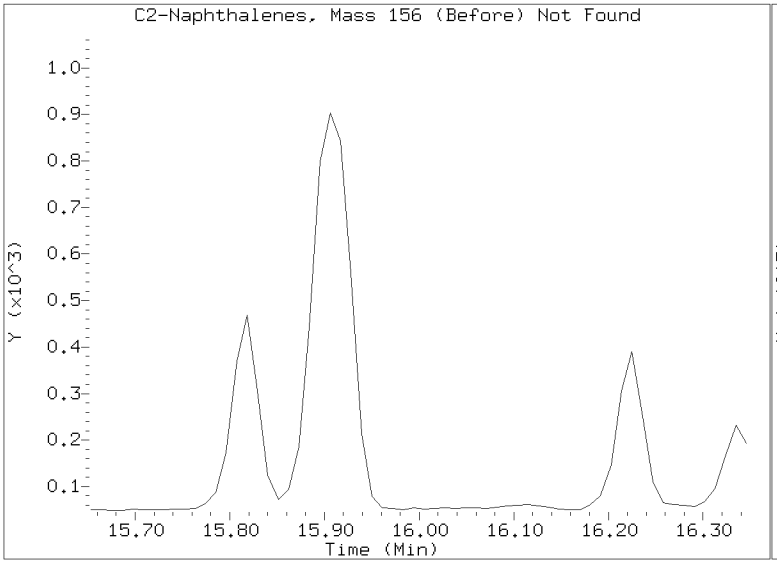
AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

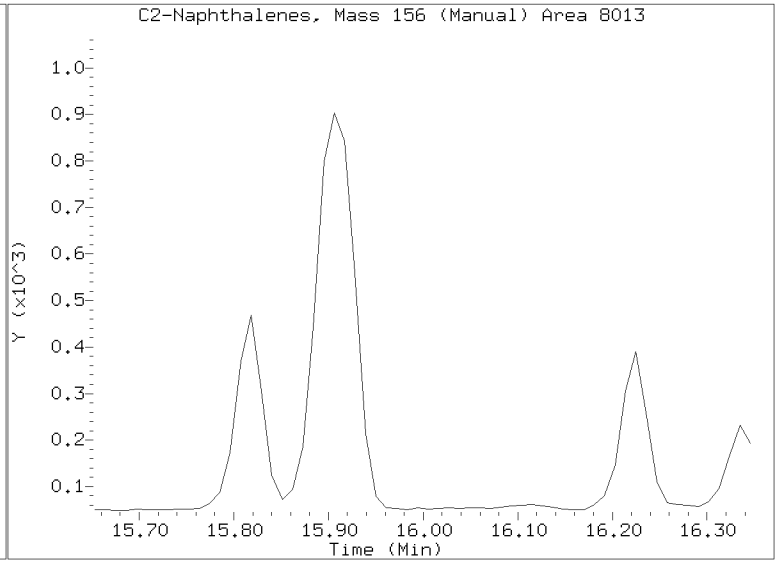
Quant Ion Manual Peak Adjustment Report

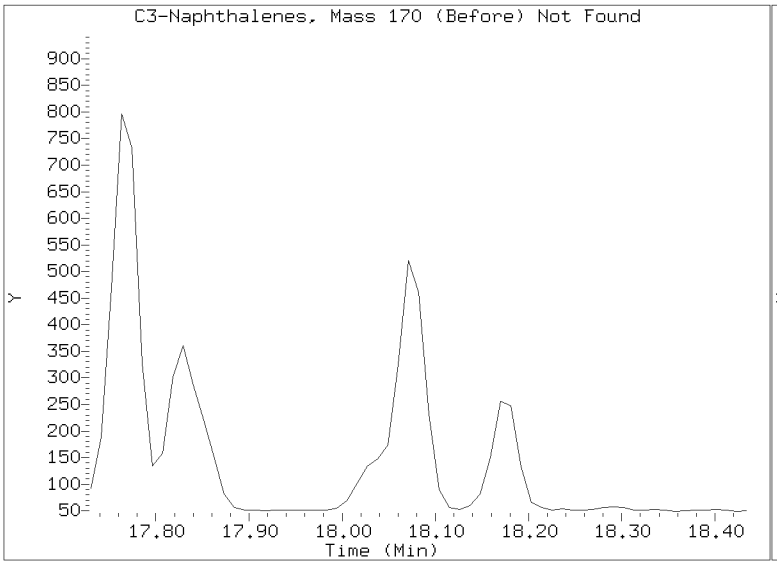
Datafile: //target/share/chem3/nt14.i/20210607.b/SIM.b/NT1421060711S.D
Injection Date: 07-JUN-2021 20:30
Lab ID:21E0106-02 Client ID:
Report Date: 06/15/2021 10:36

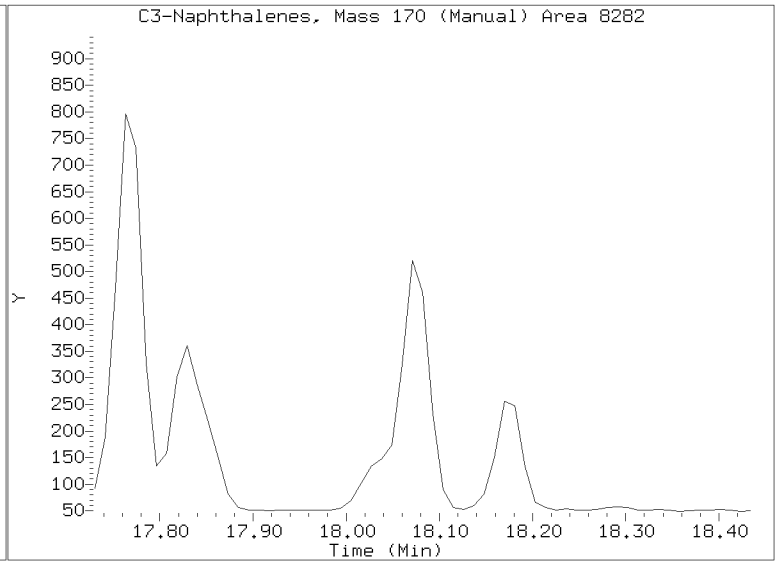






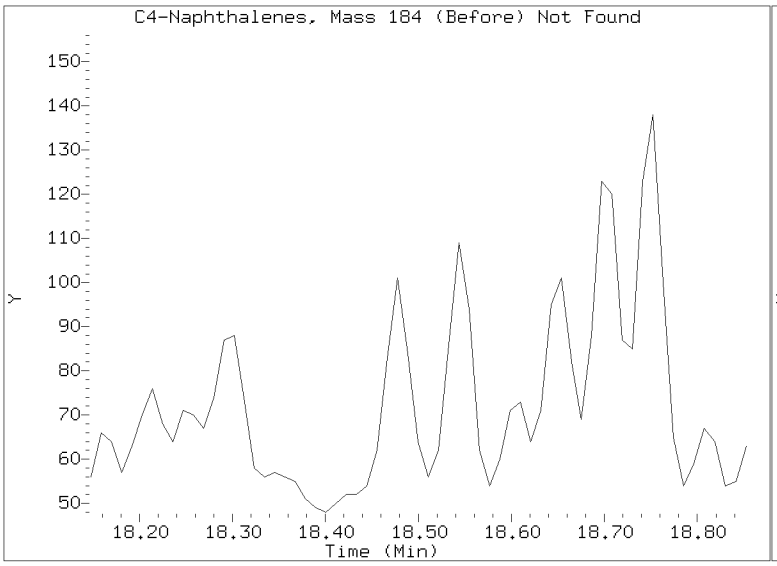


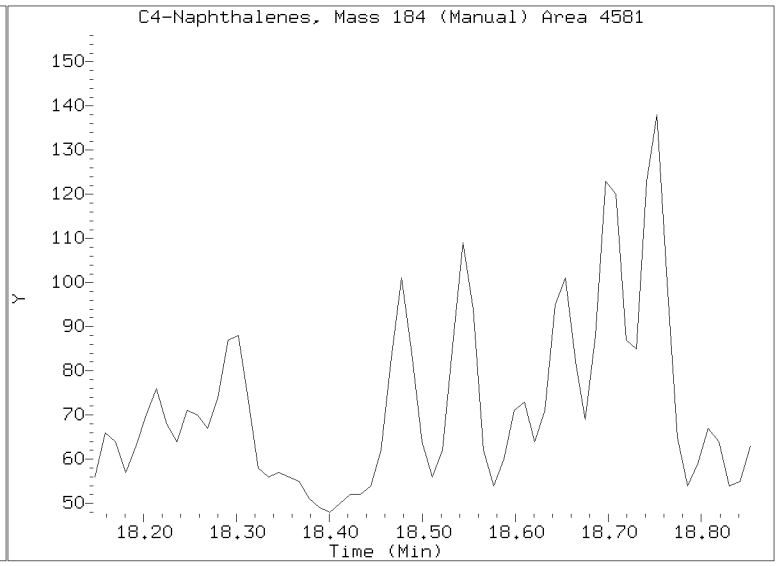


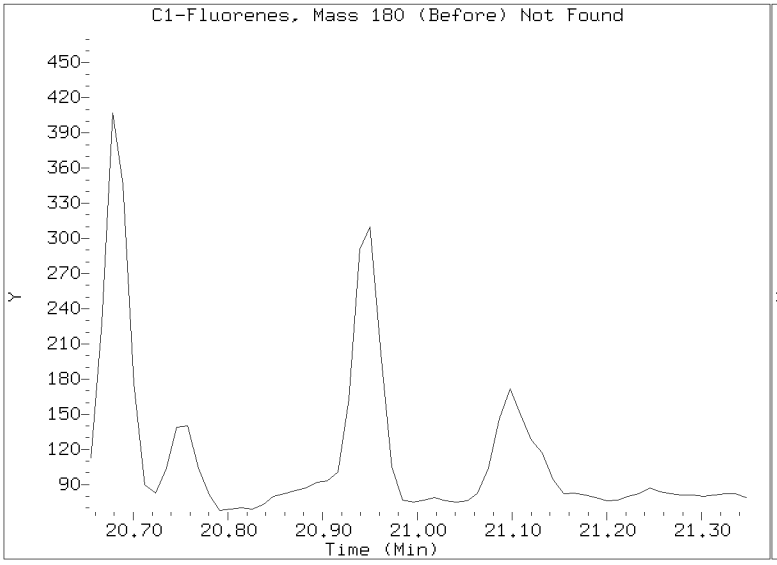


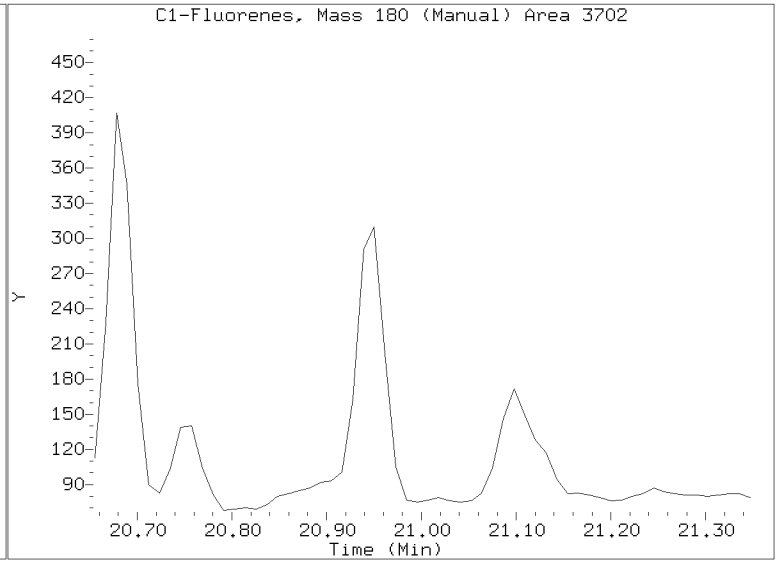
Quant Ion Manual Peak Adjustment Report

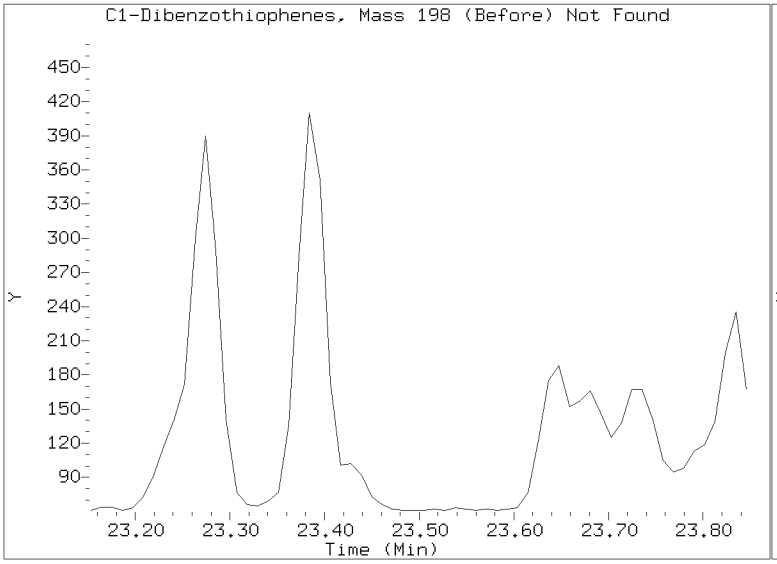
Datafile: //target/share/chem3/nt14.i/20210607.b/SIM.b/NT1421060711S.D
Injection Date: 07-JUN-2021 20:30
Lab ID:21E0106-02 Client ID:
Report Date: 06/15/2021 10:36

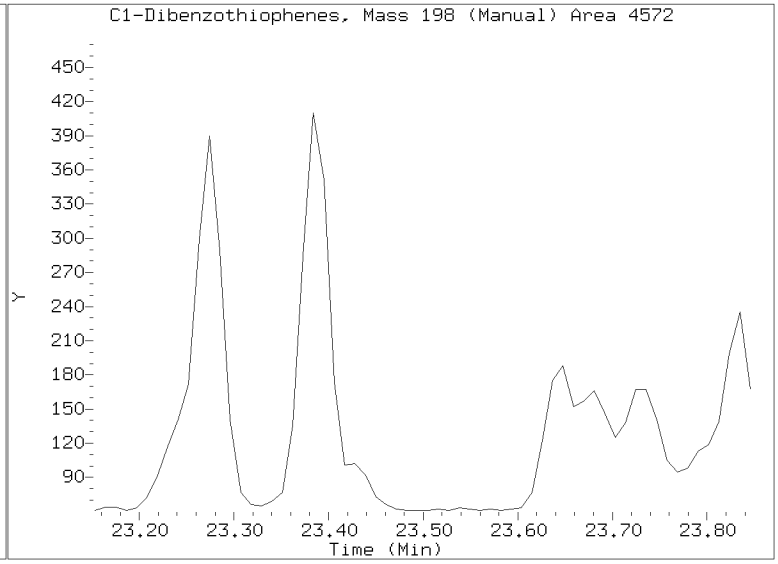






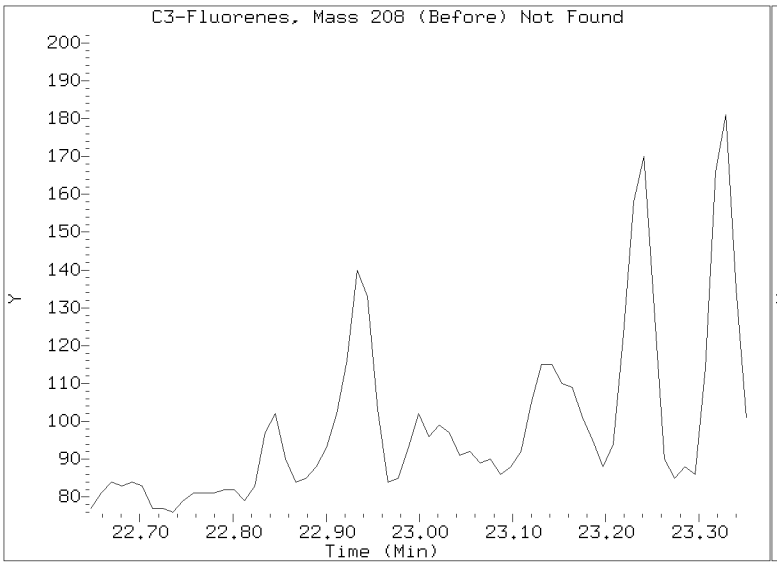


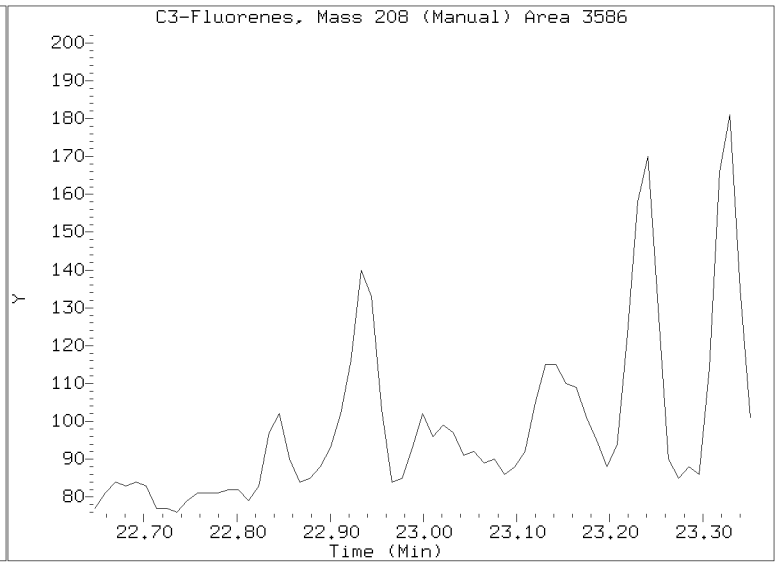


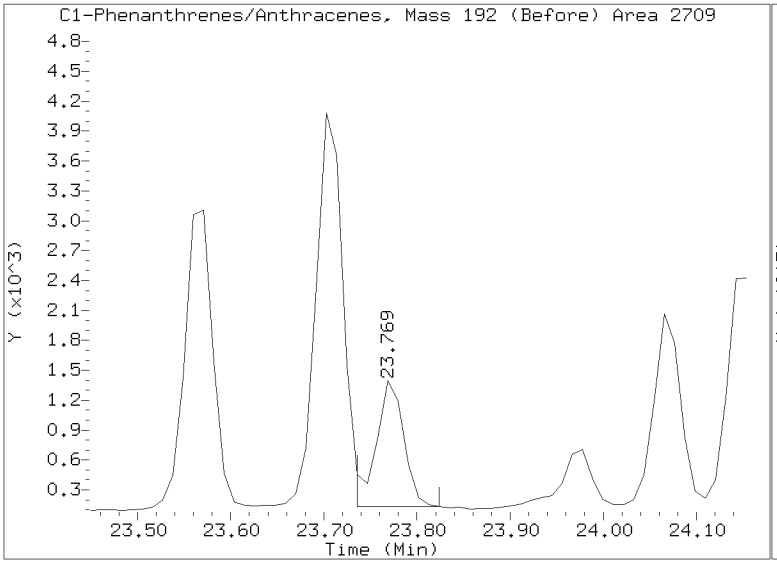


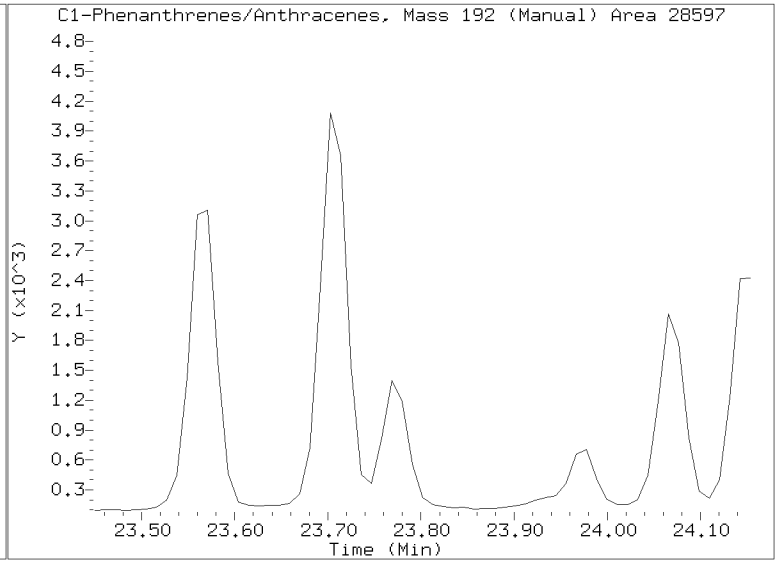
Quant Ion Manual Peak Adjustment Report

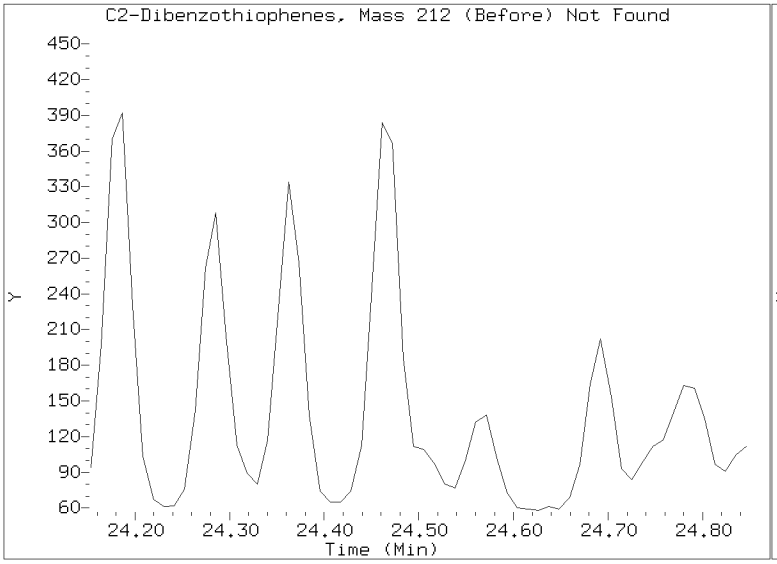
Datafile: //target/share/chem3/nt14.i/20210607.b/SIM.b/NT1421060711S.D
Injection Date: 07-JUN-2021 20:30
Lab ID:21E0106-02 Client ID:
Report Date: 06/15/2021 10:36

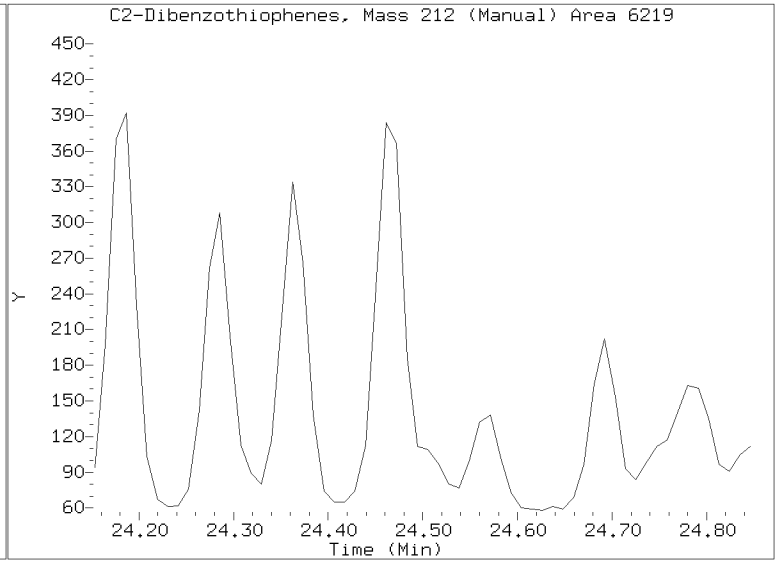












Quant Ion Manual Peak Adjustment Report

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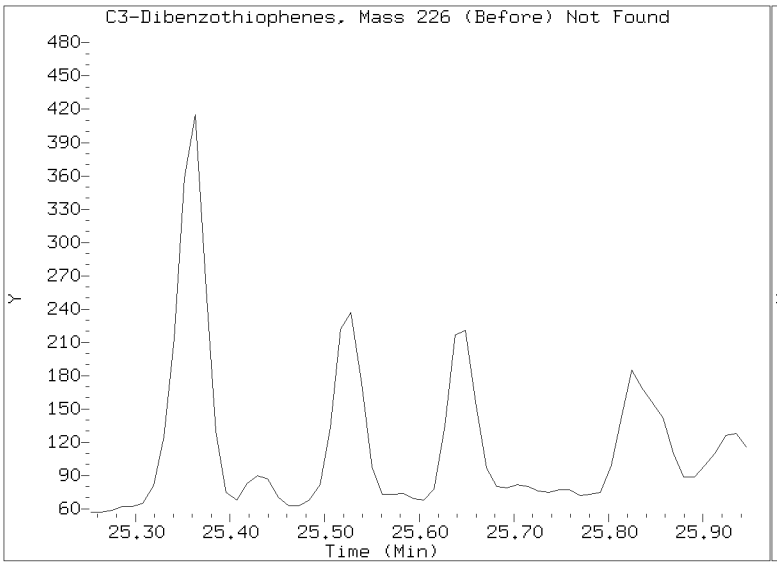

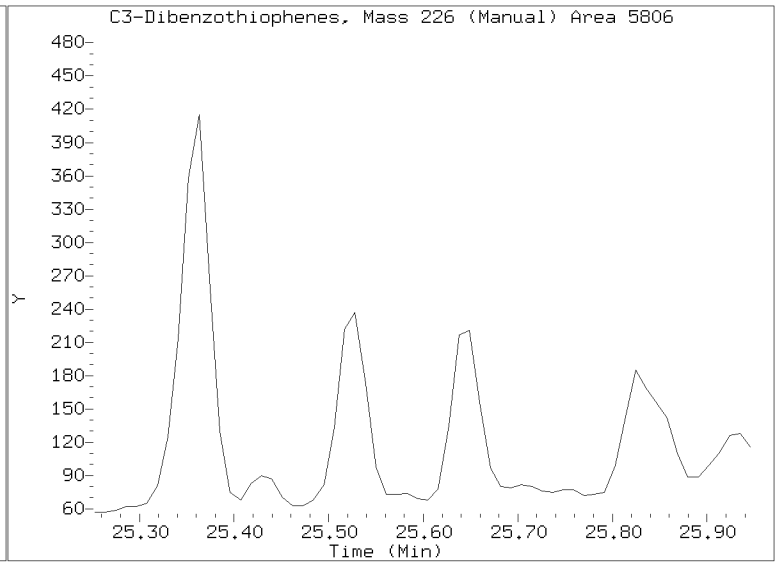

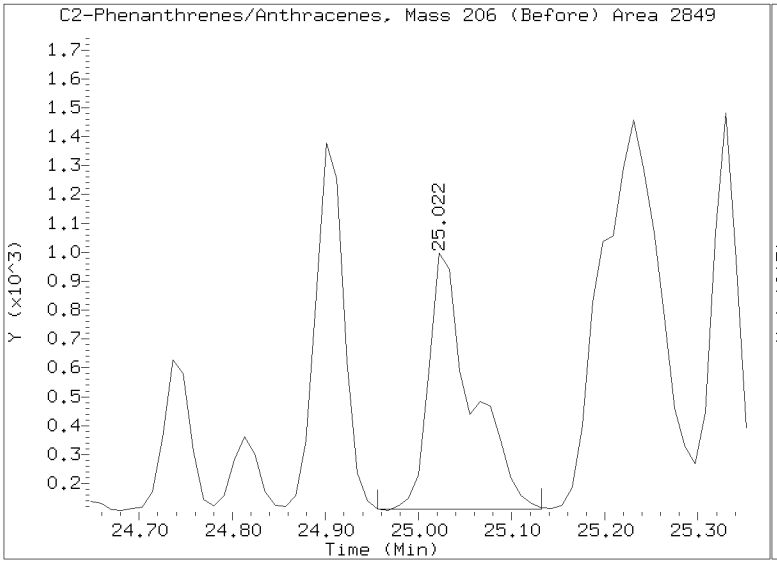

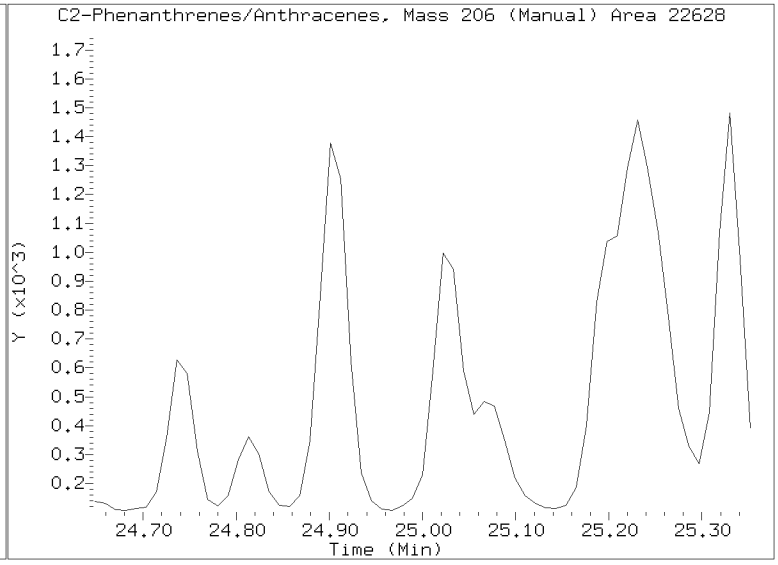

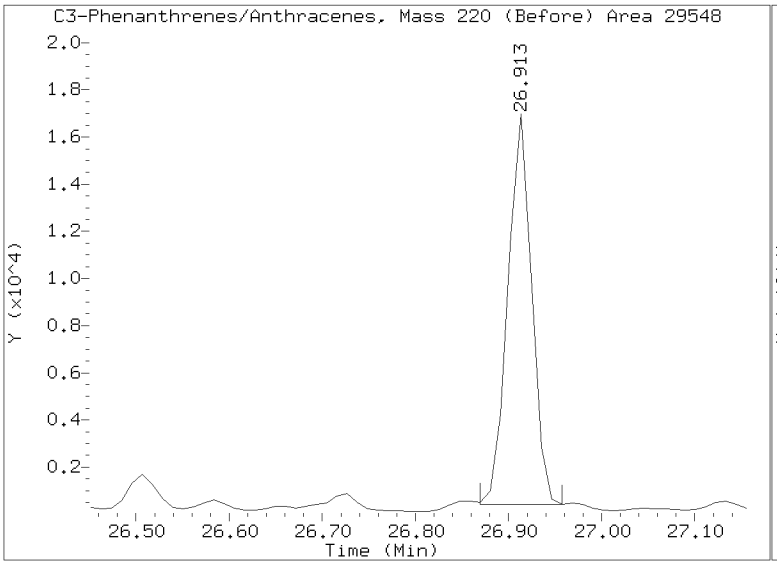

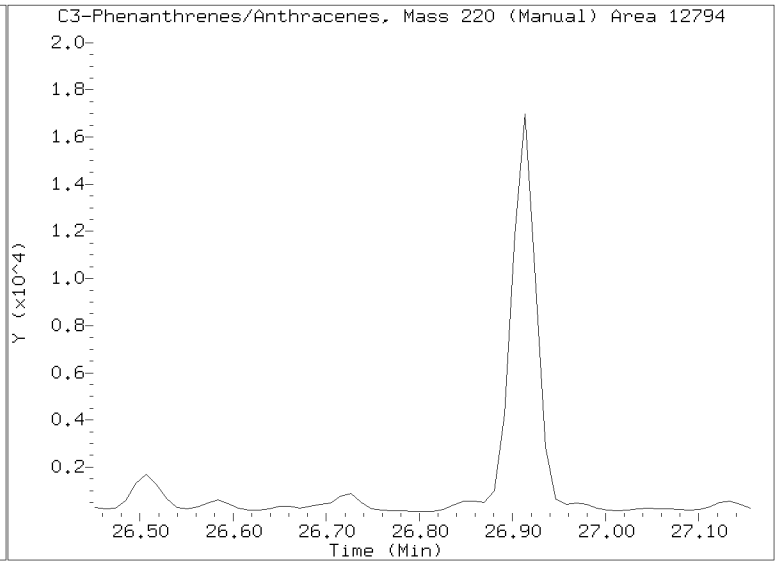

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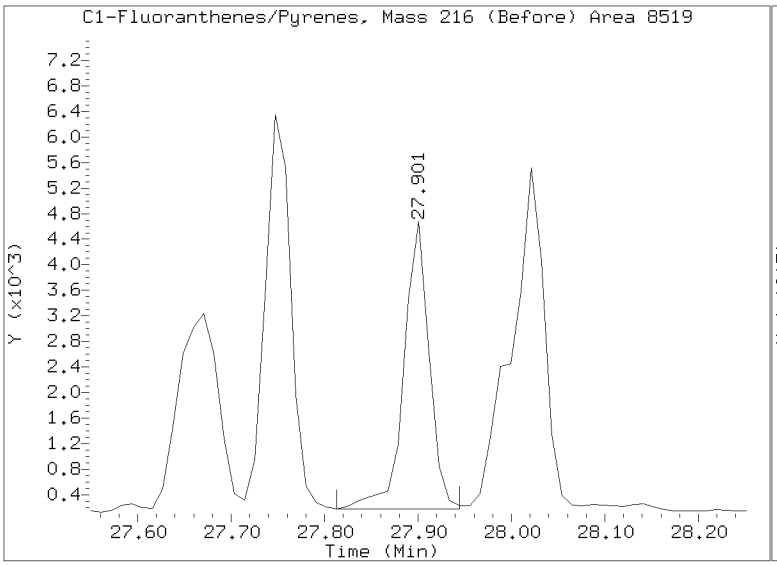

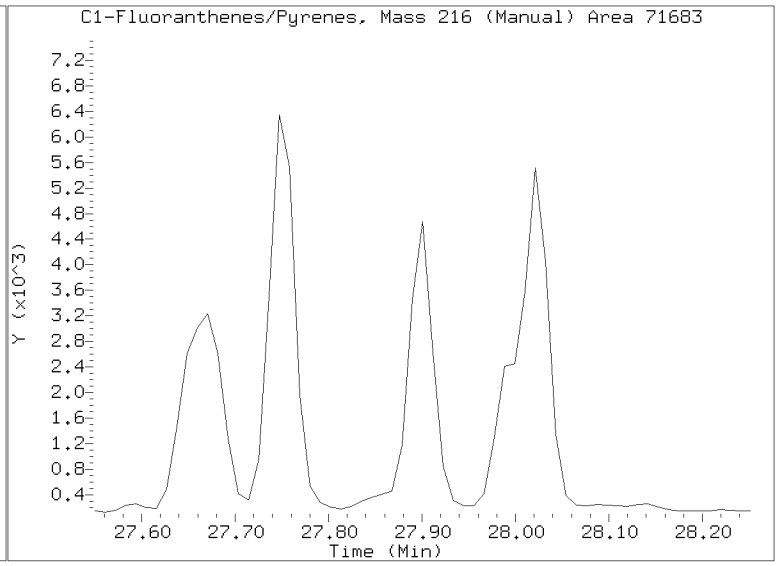

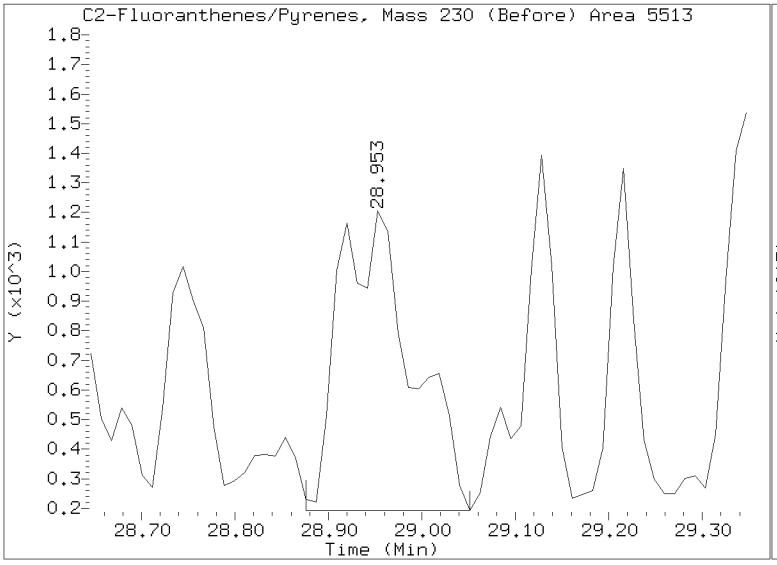

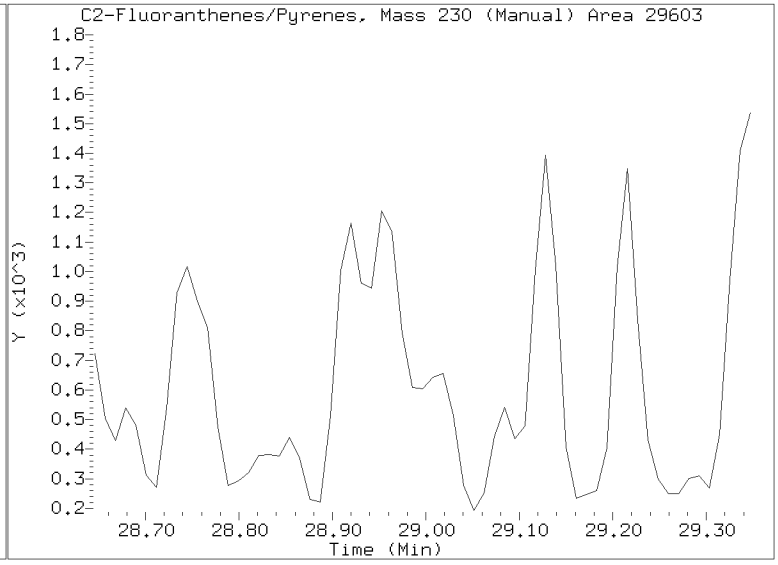

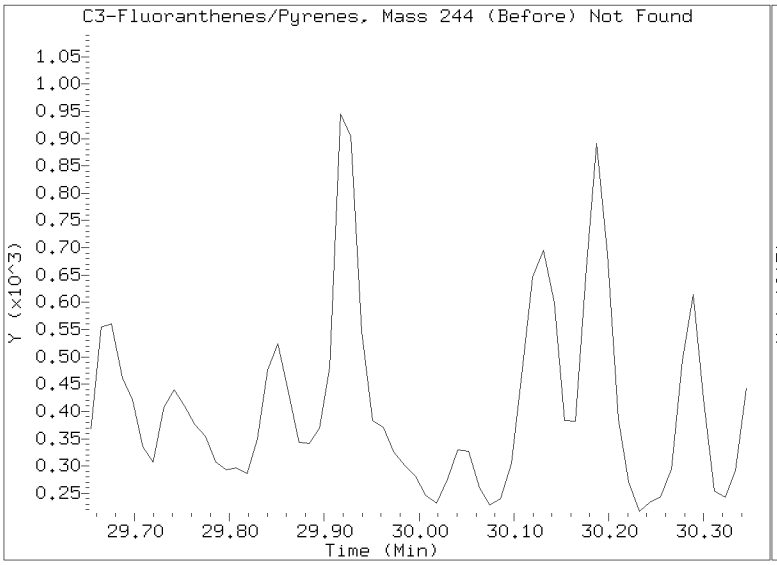

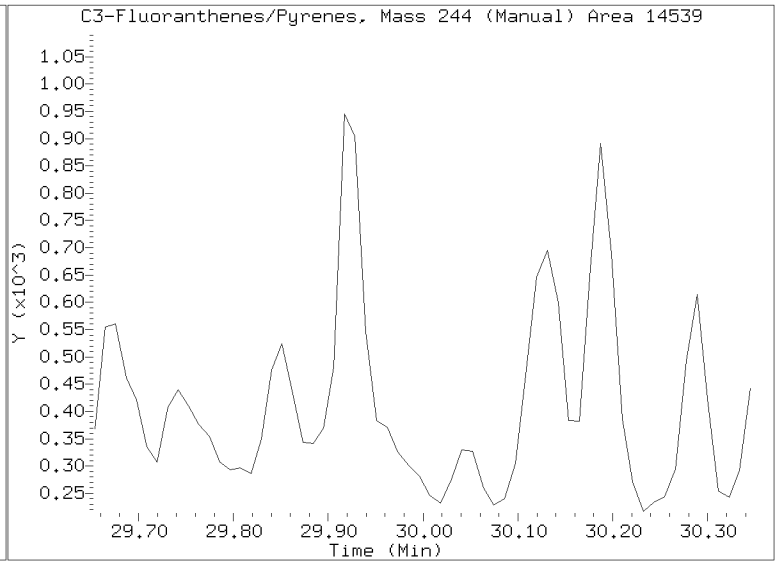

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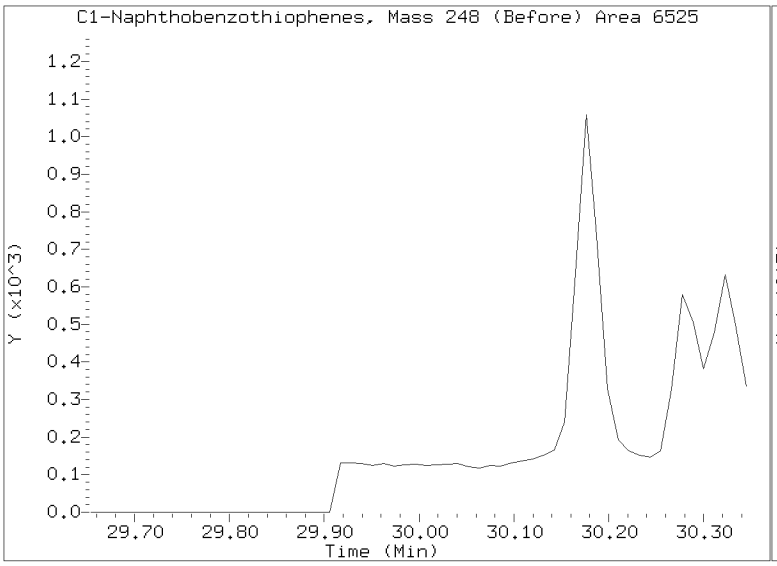

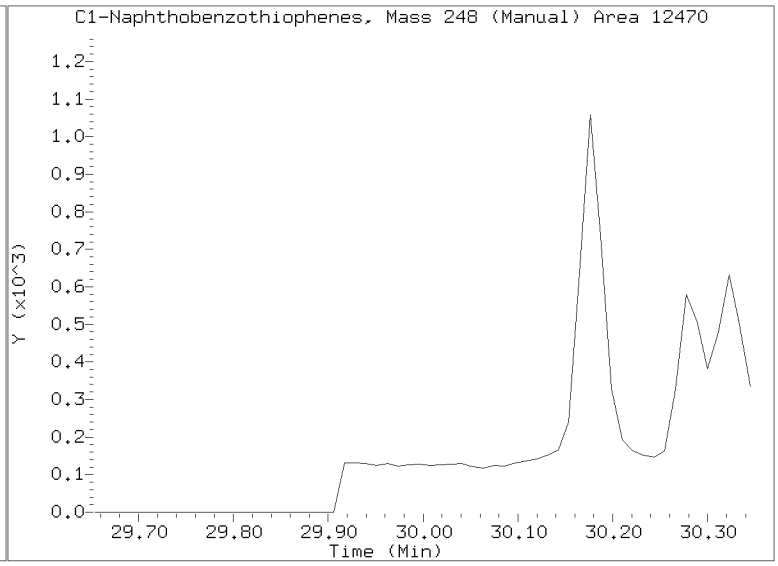

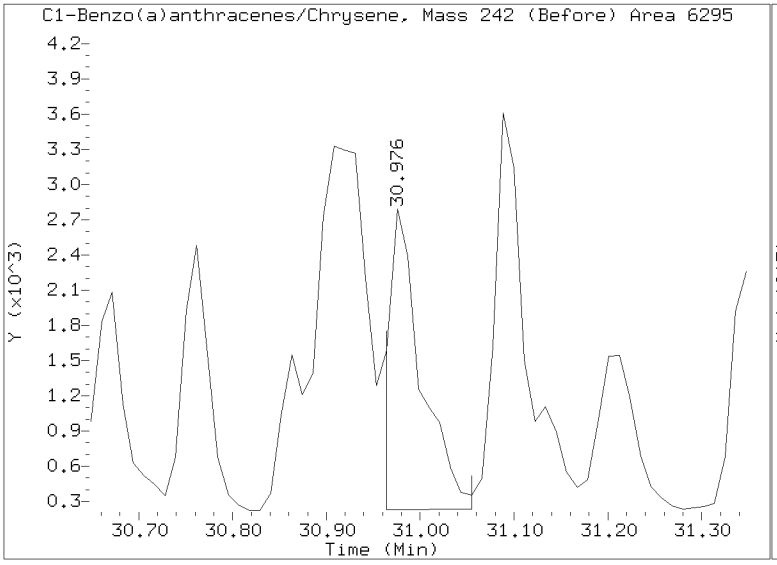

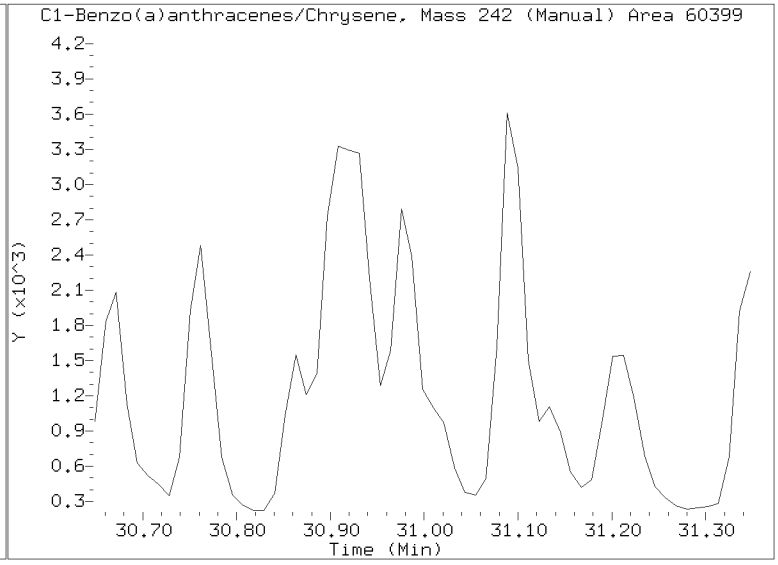

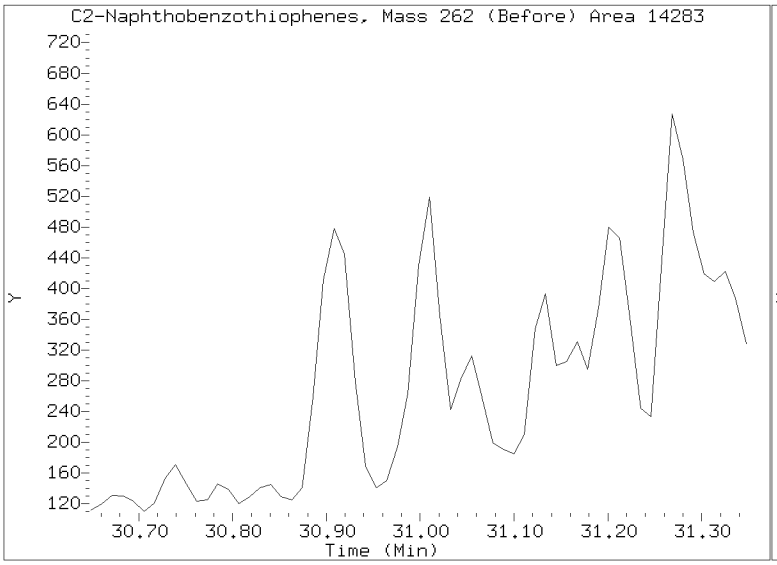

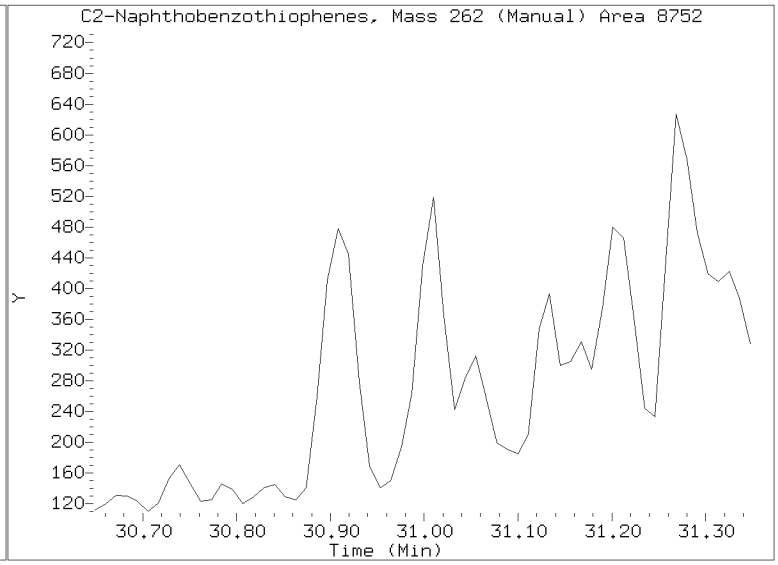

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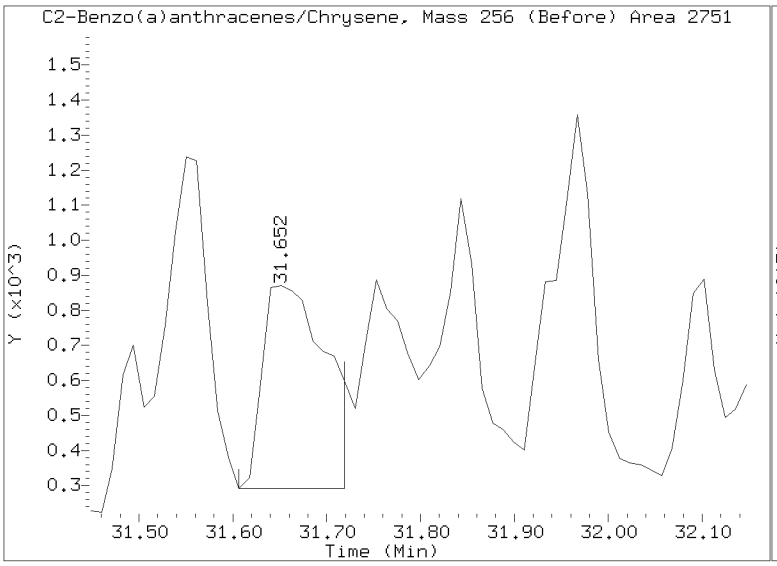

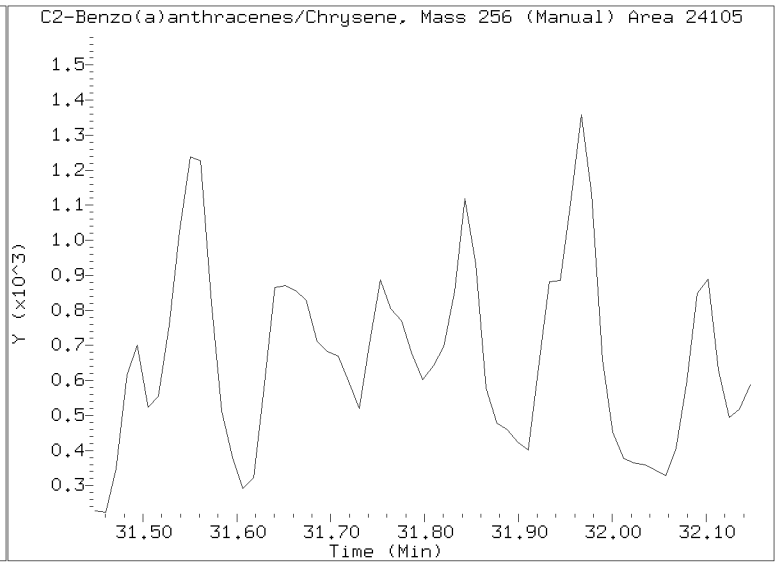

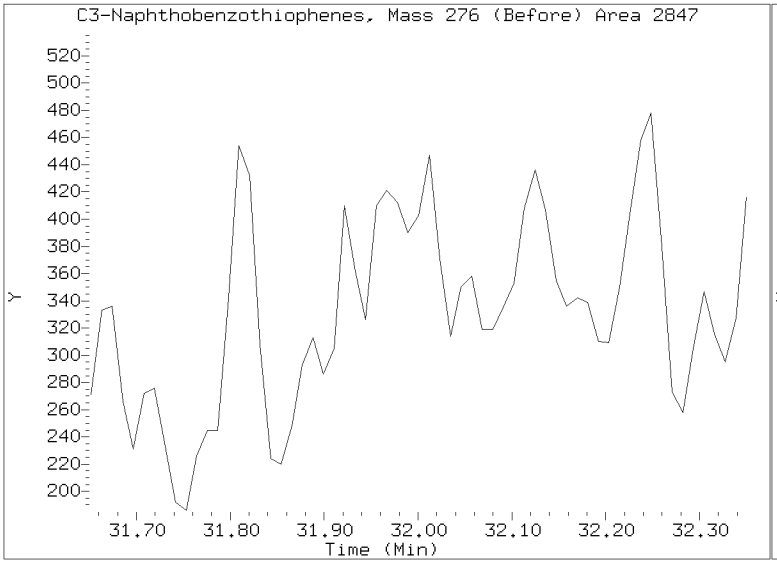

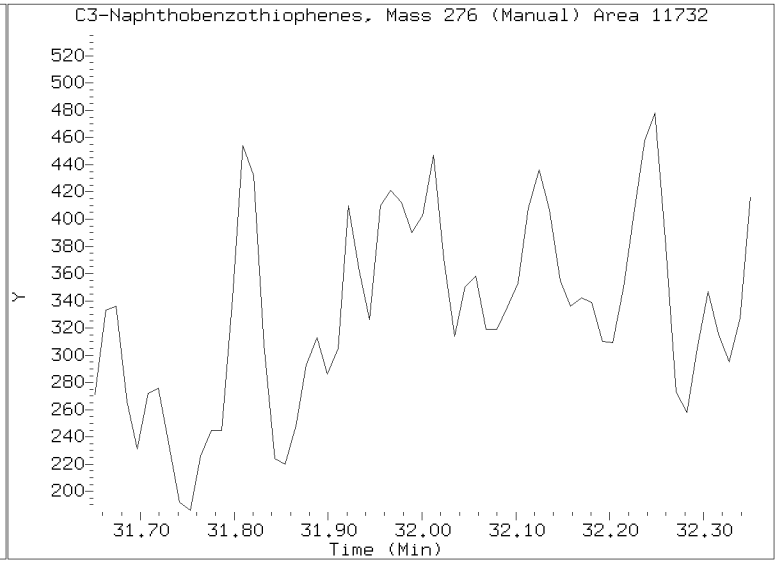

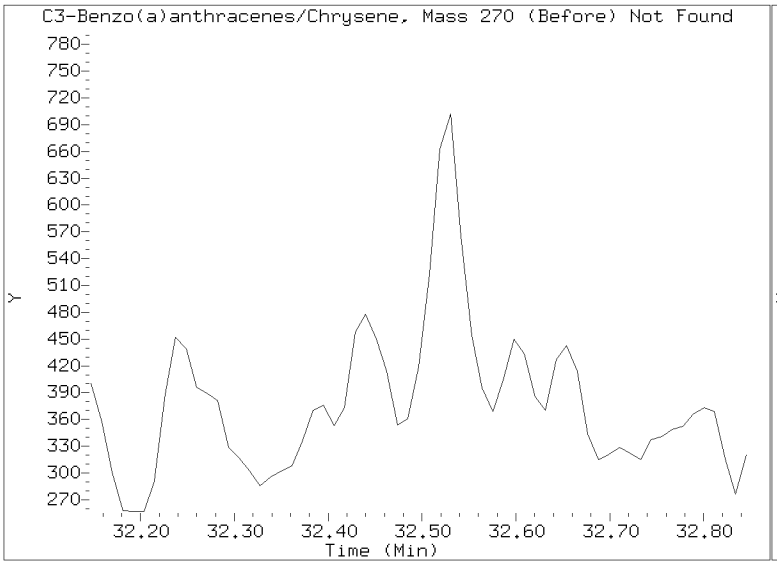

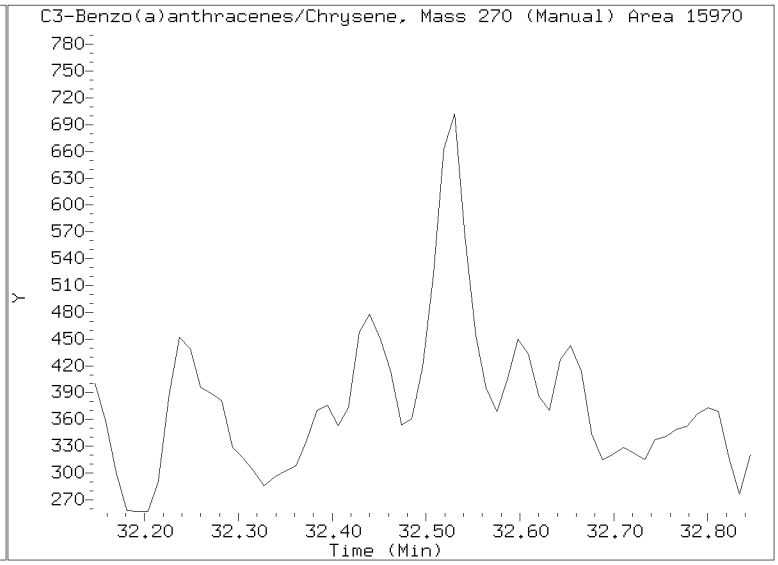

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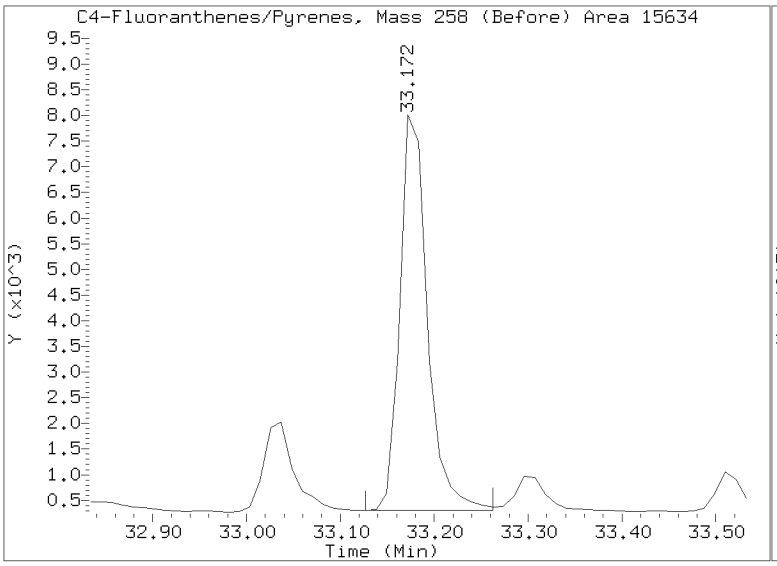

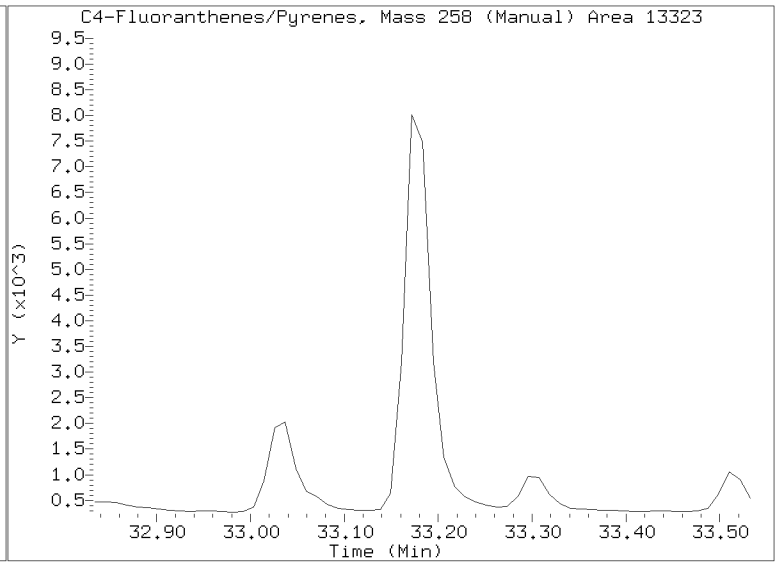

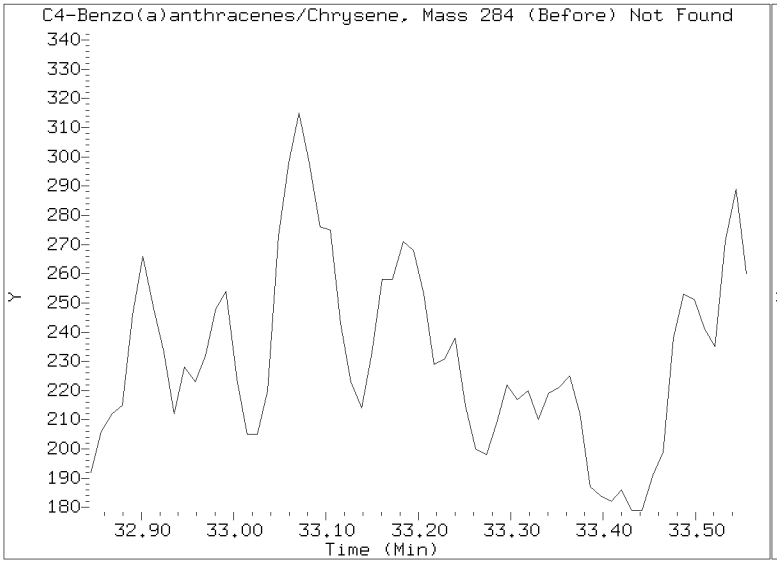

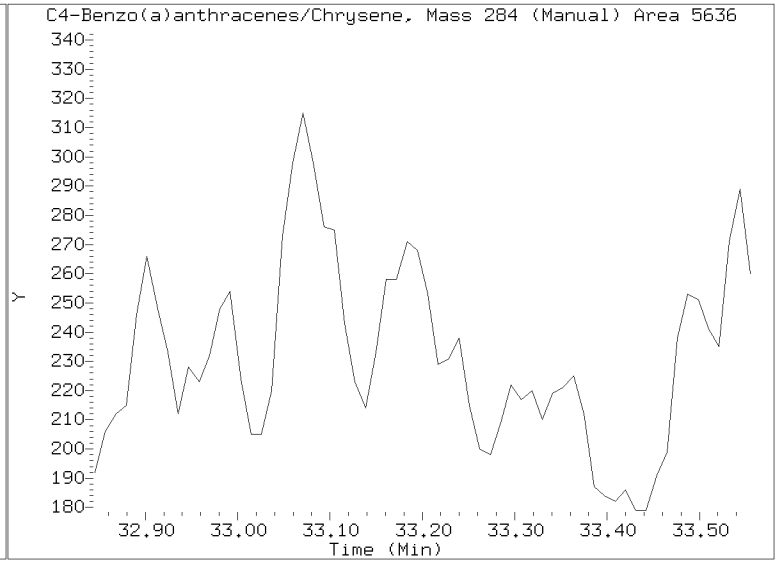

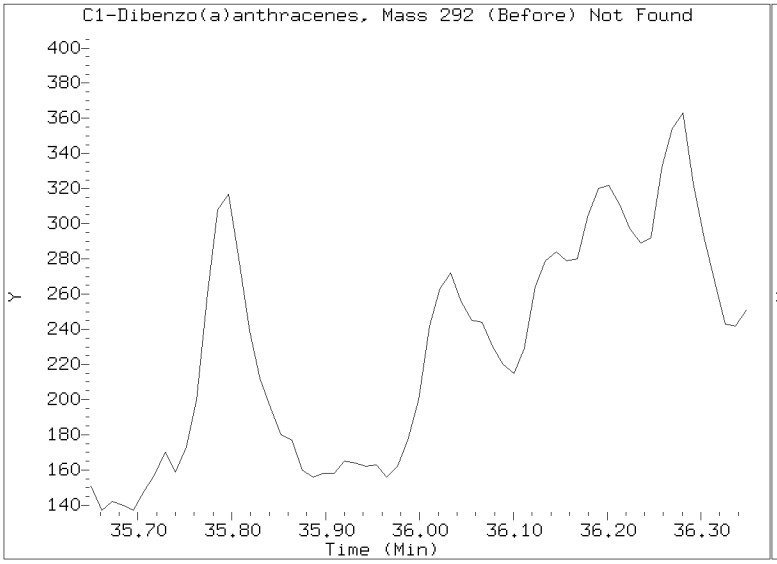

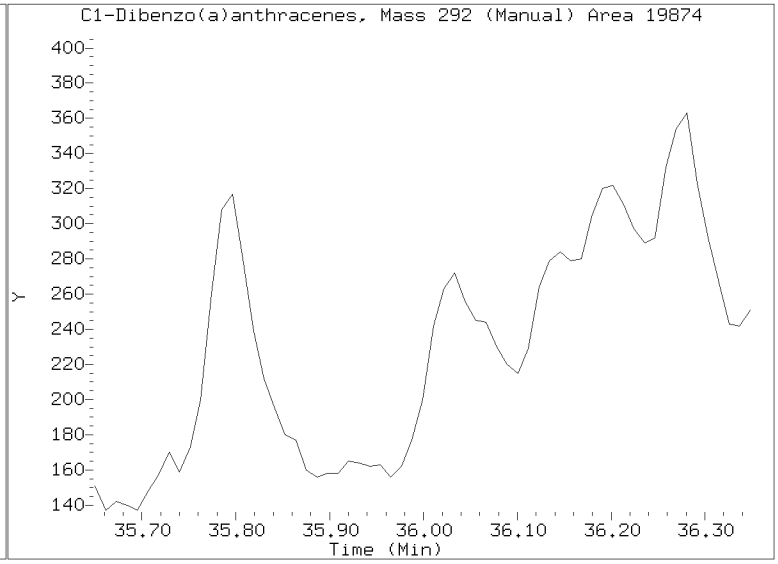

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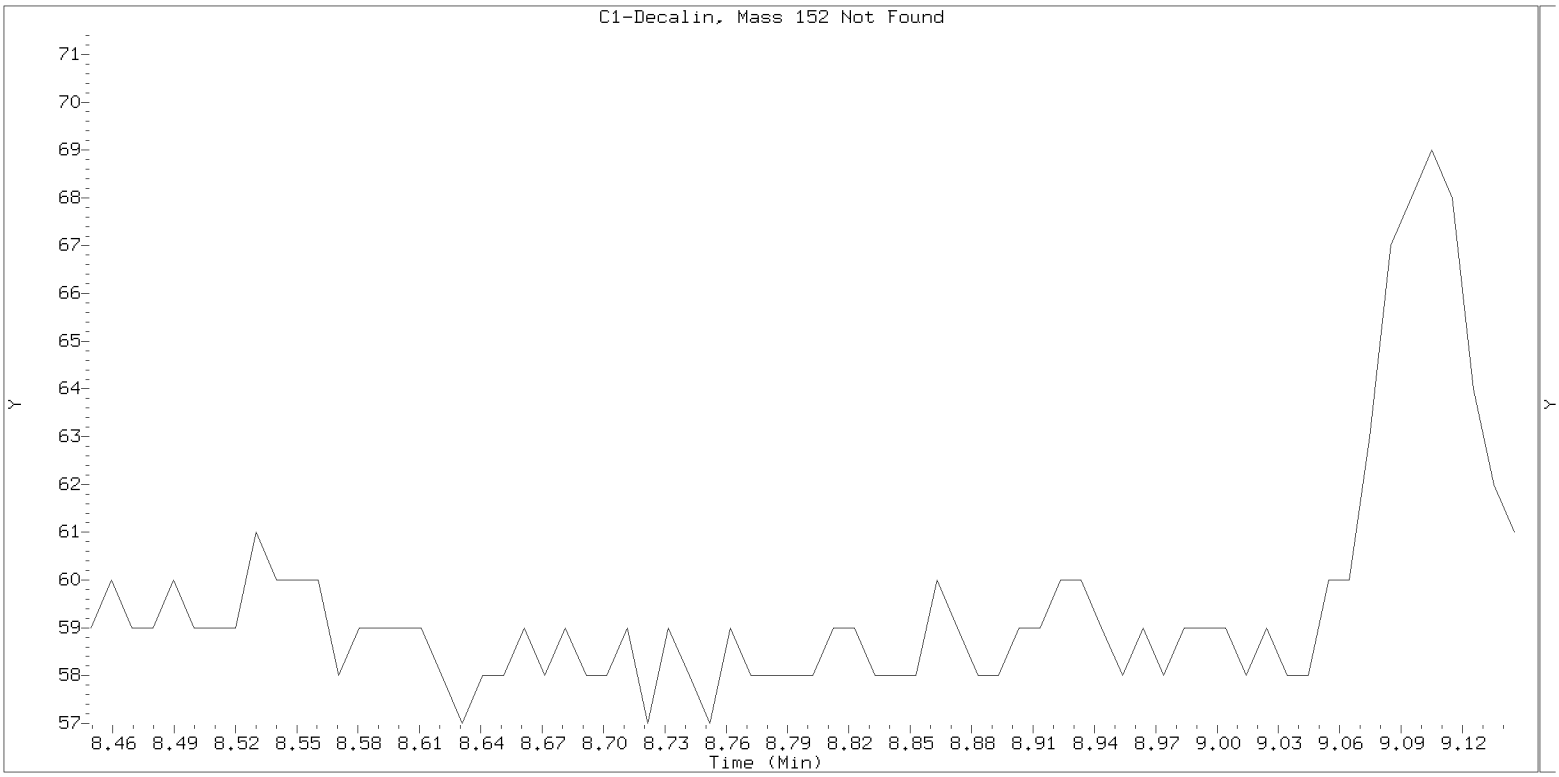

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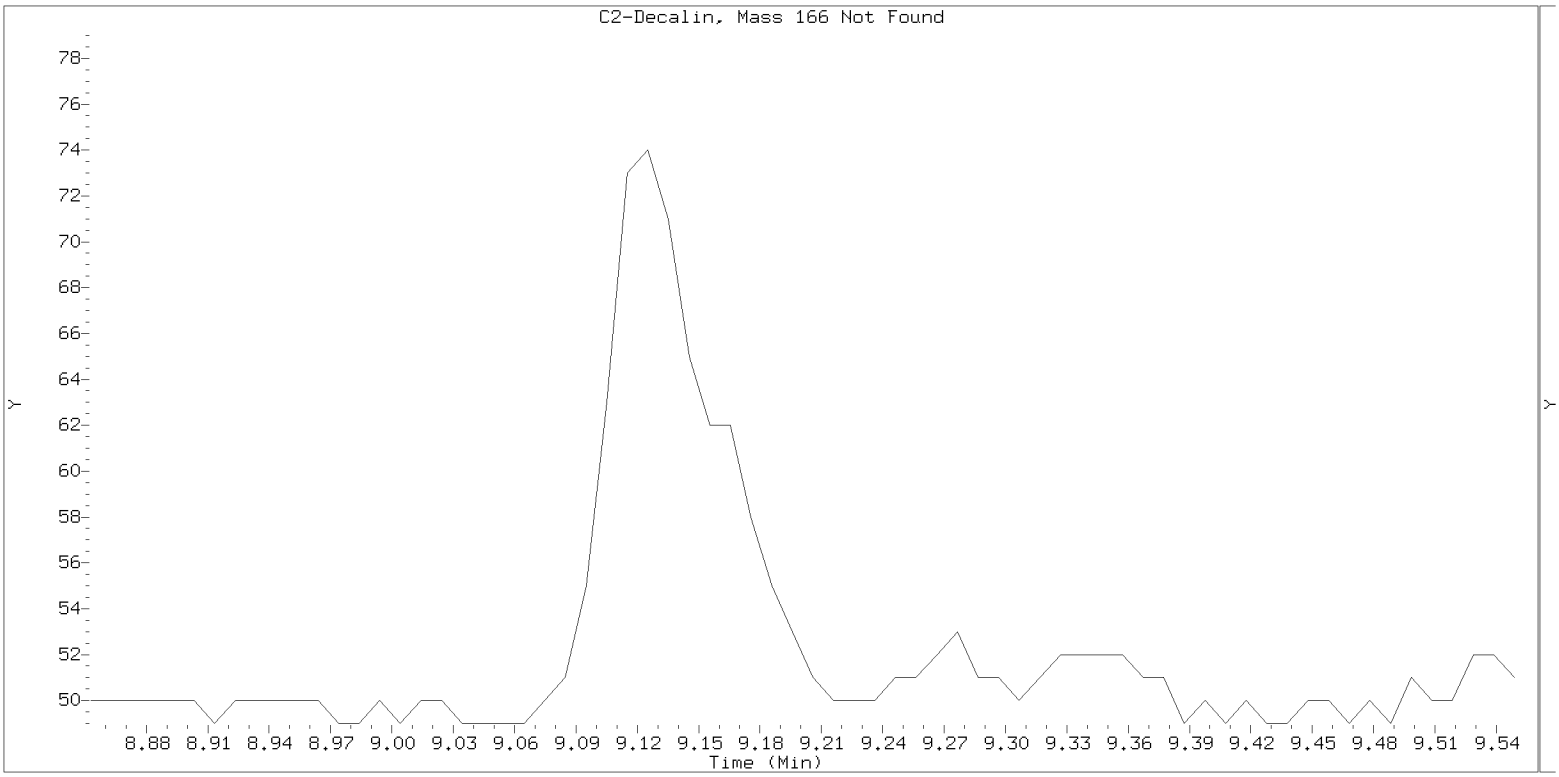

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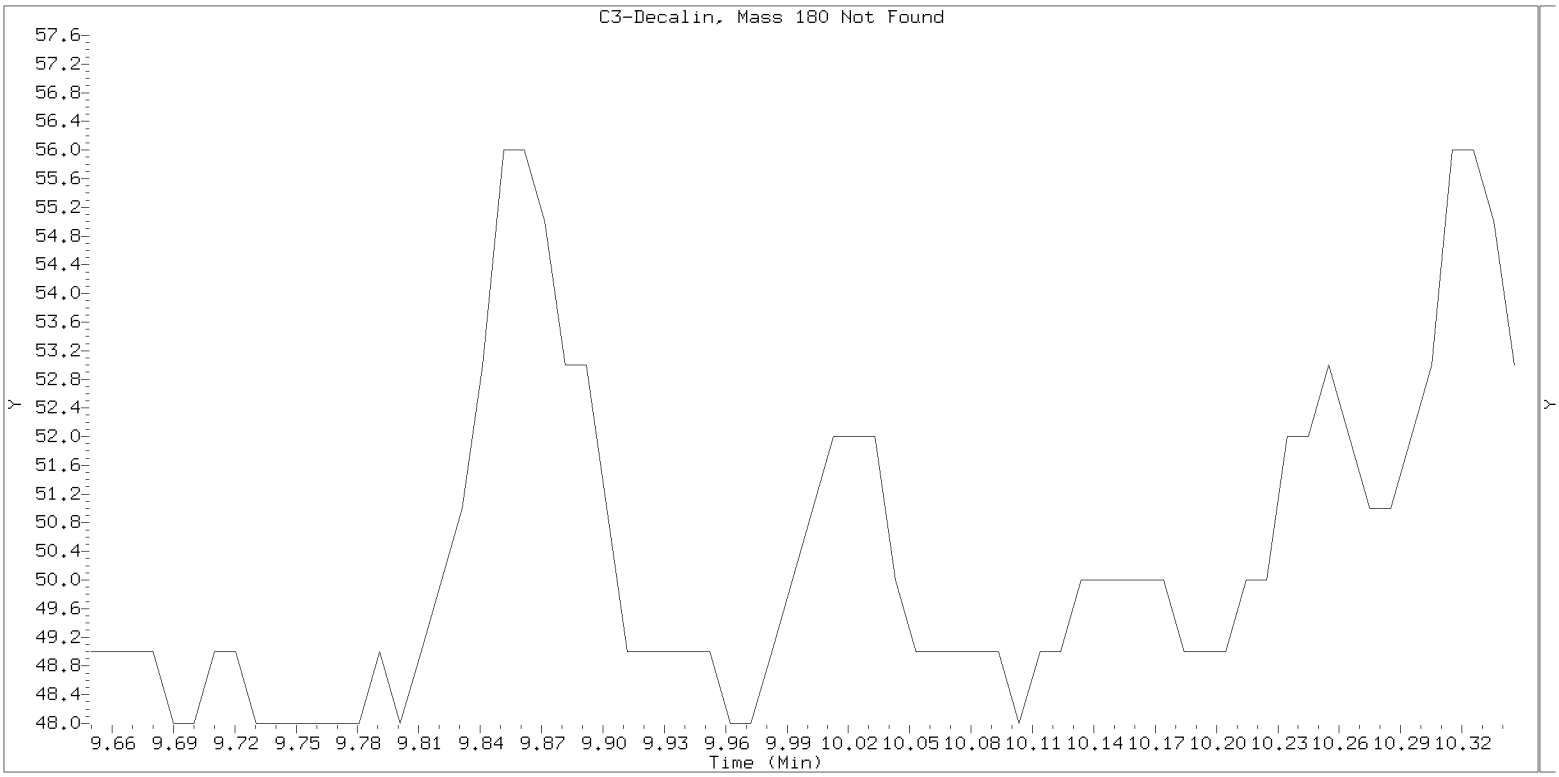

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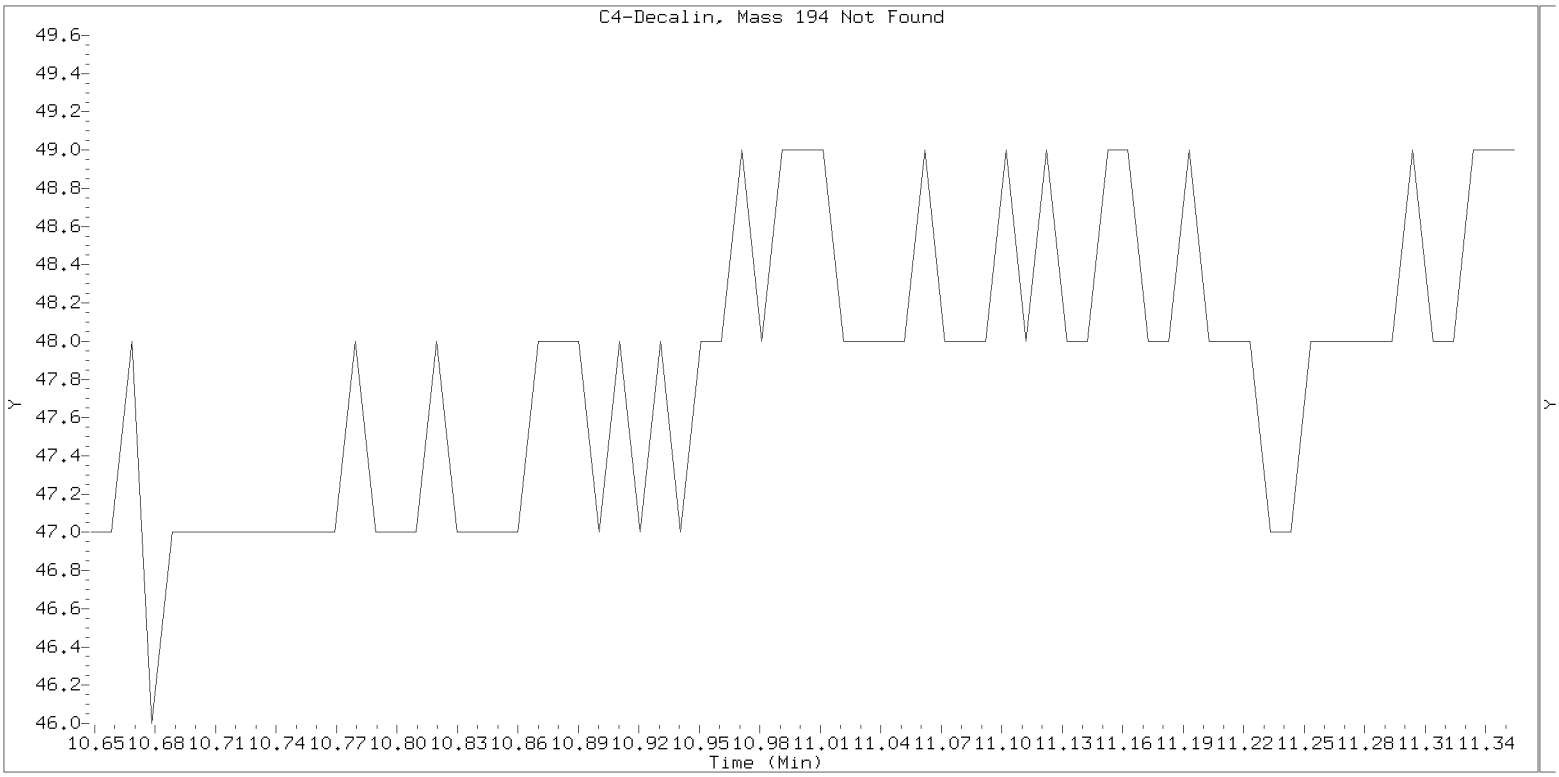

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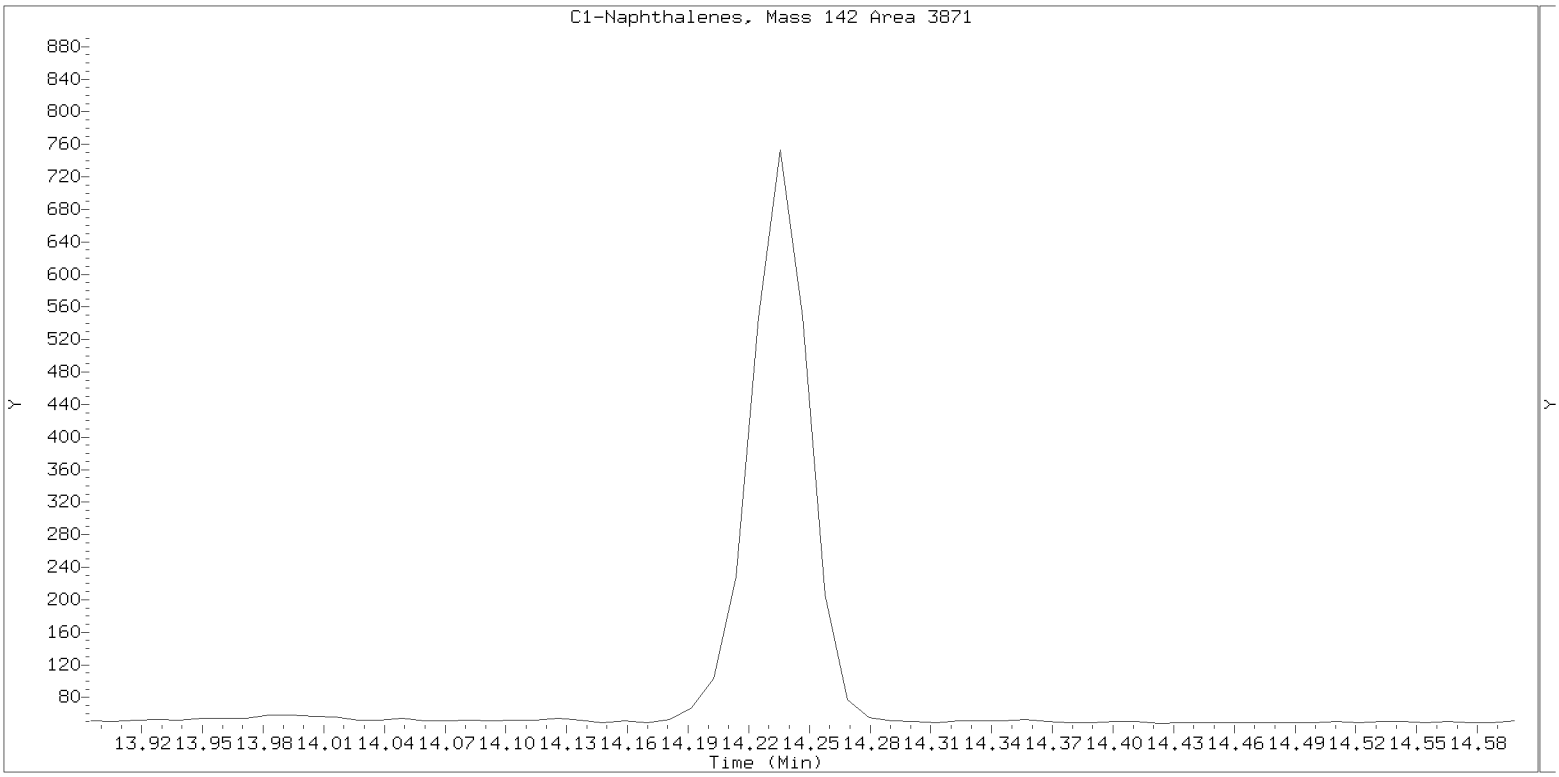

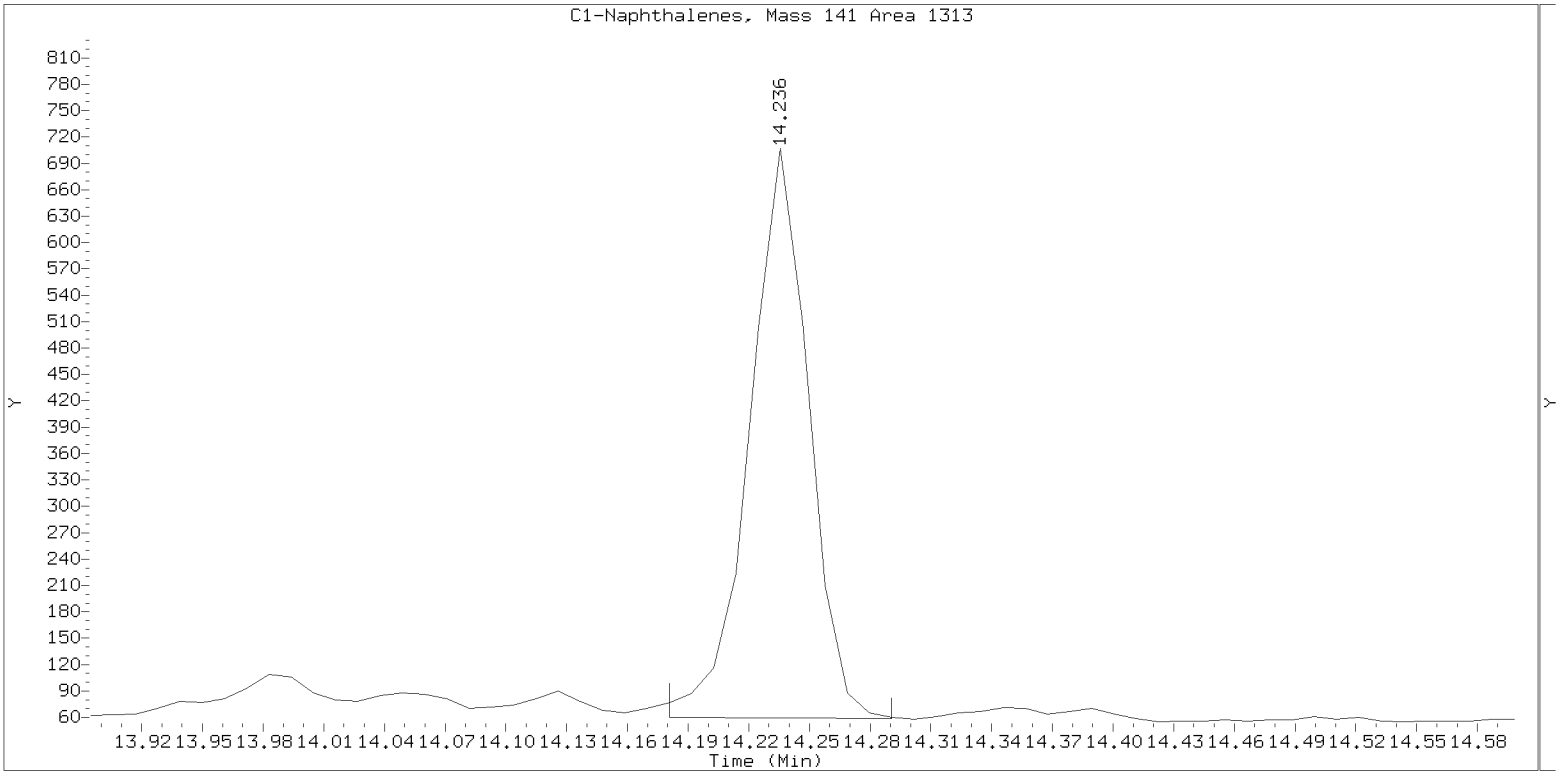

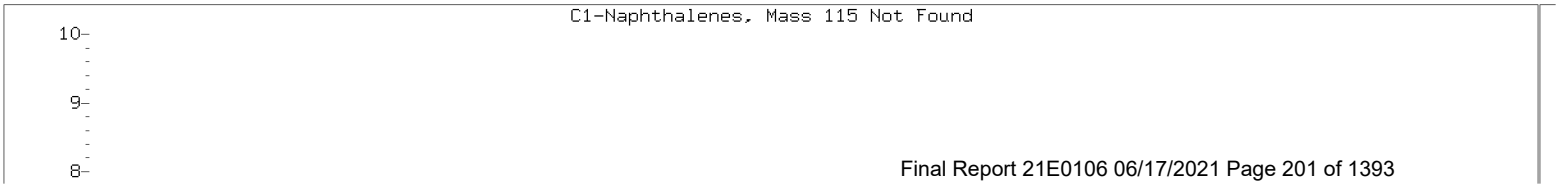

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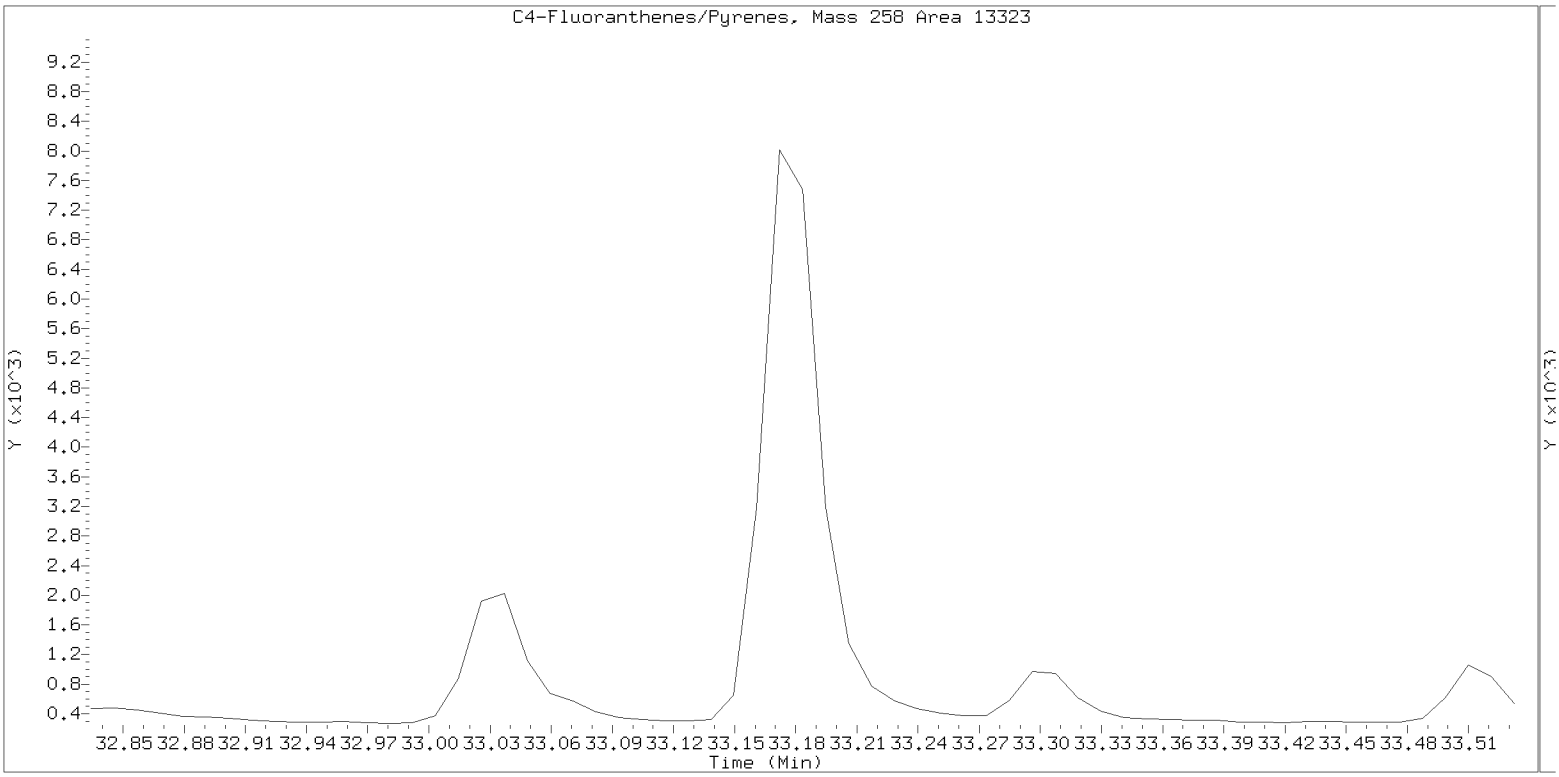

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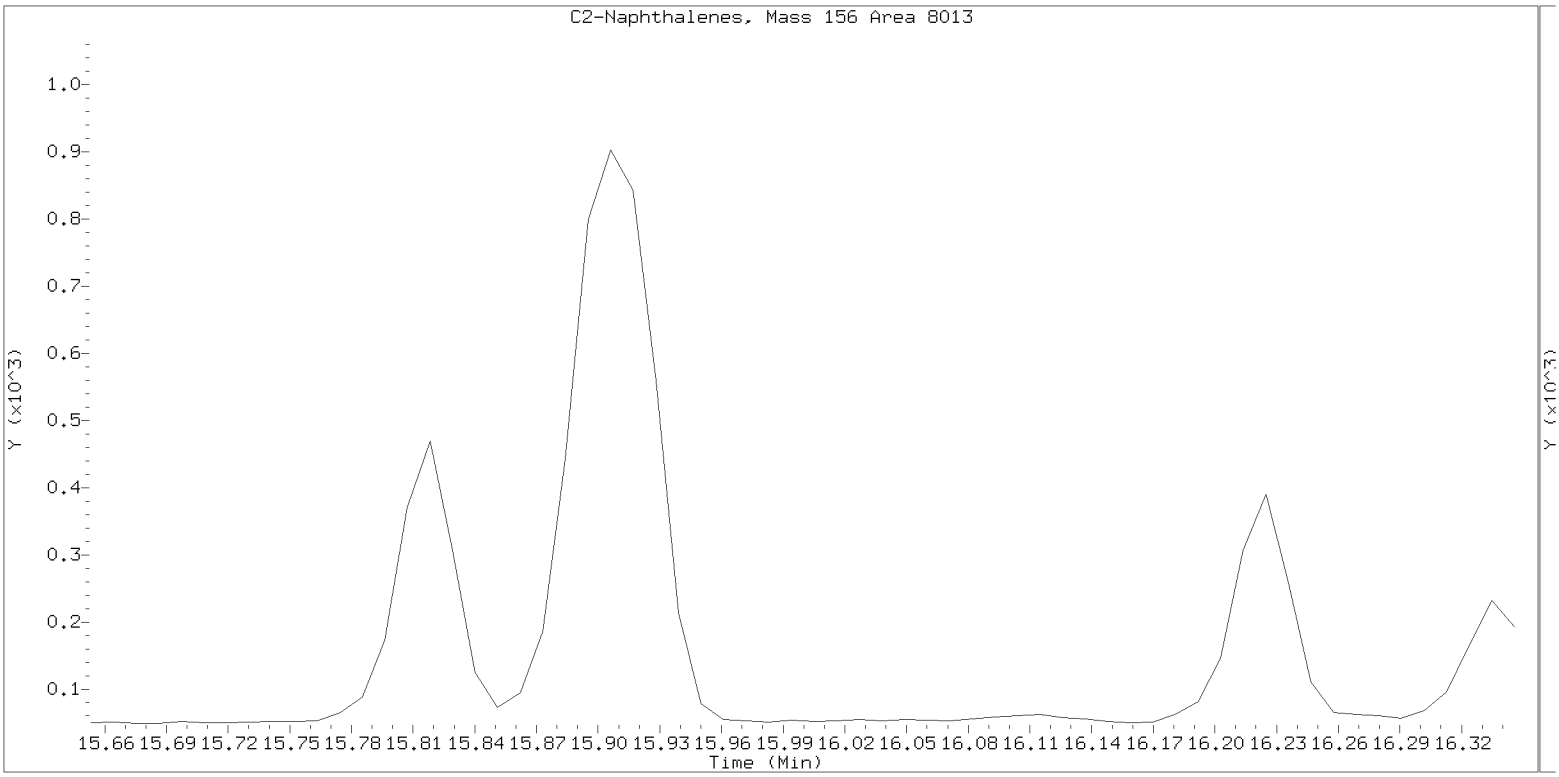

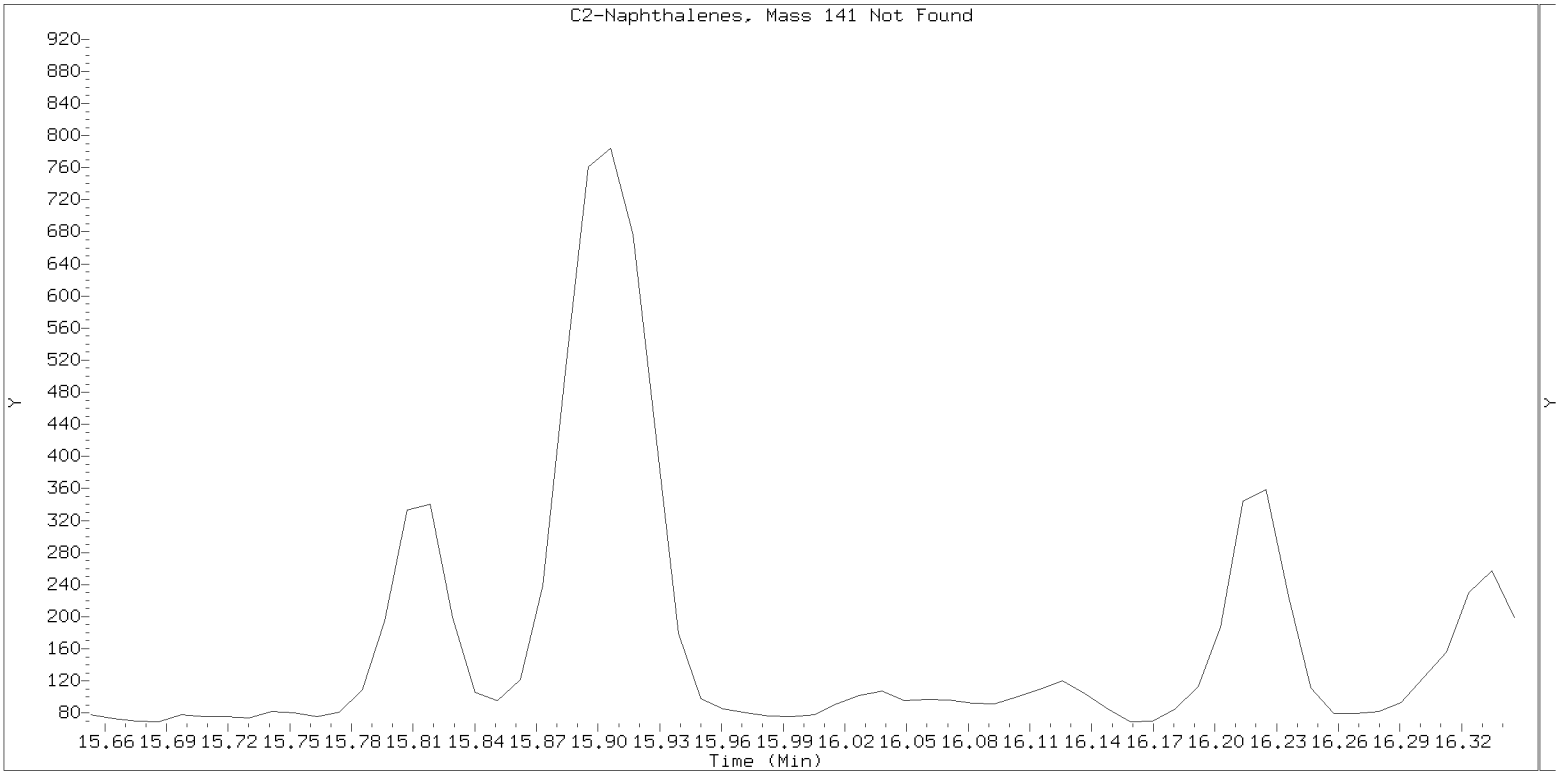

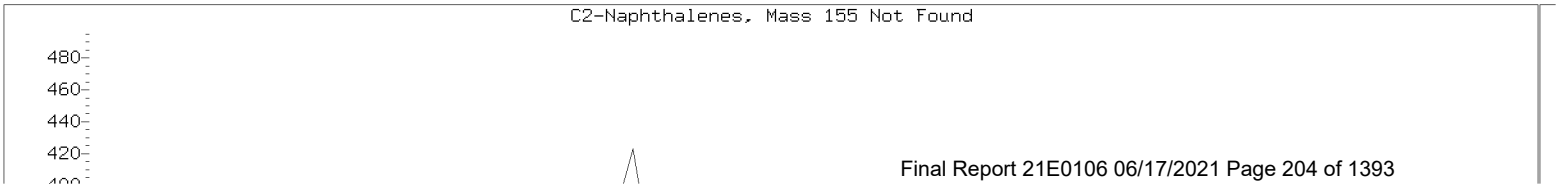

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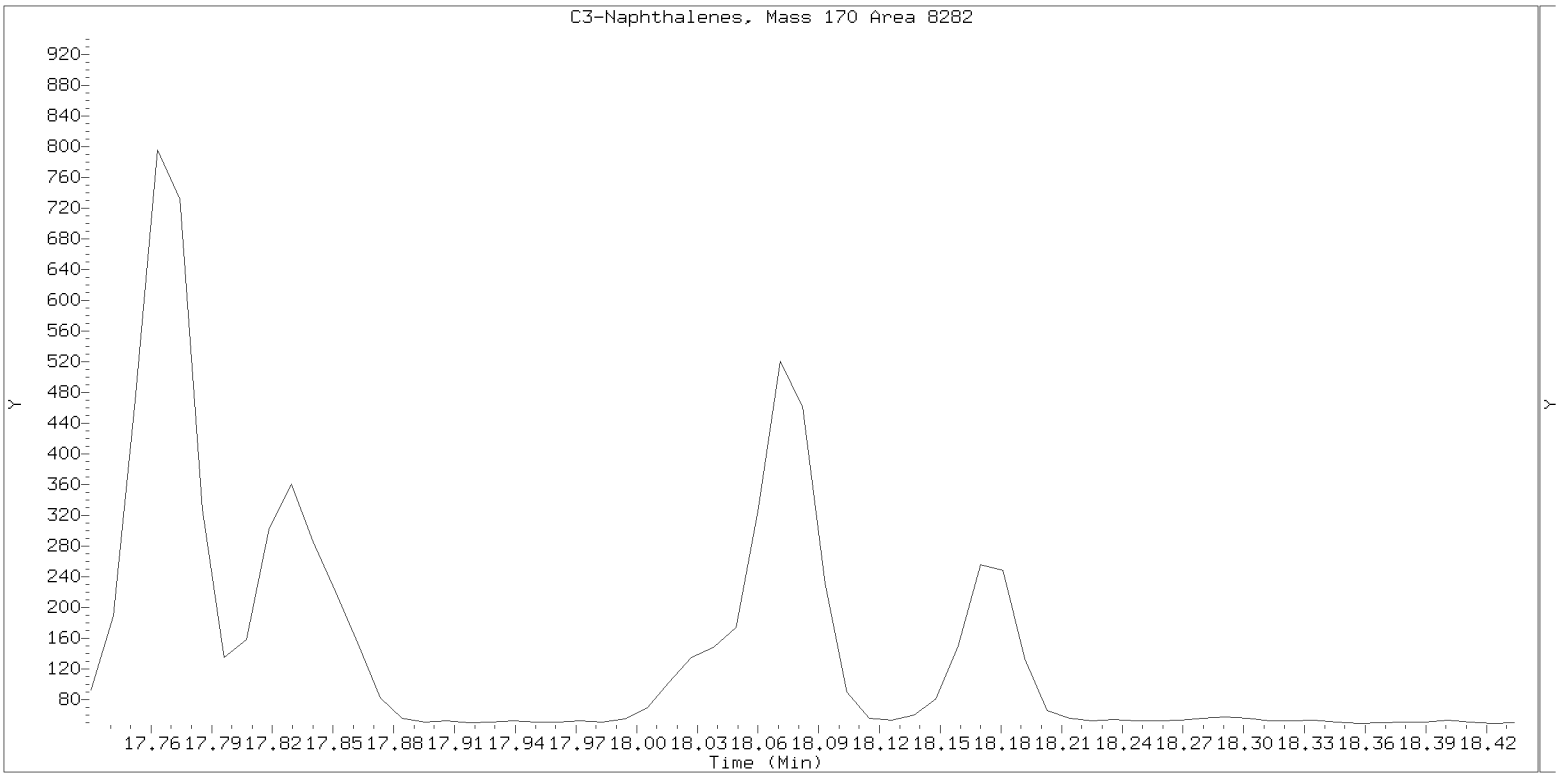

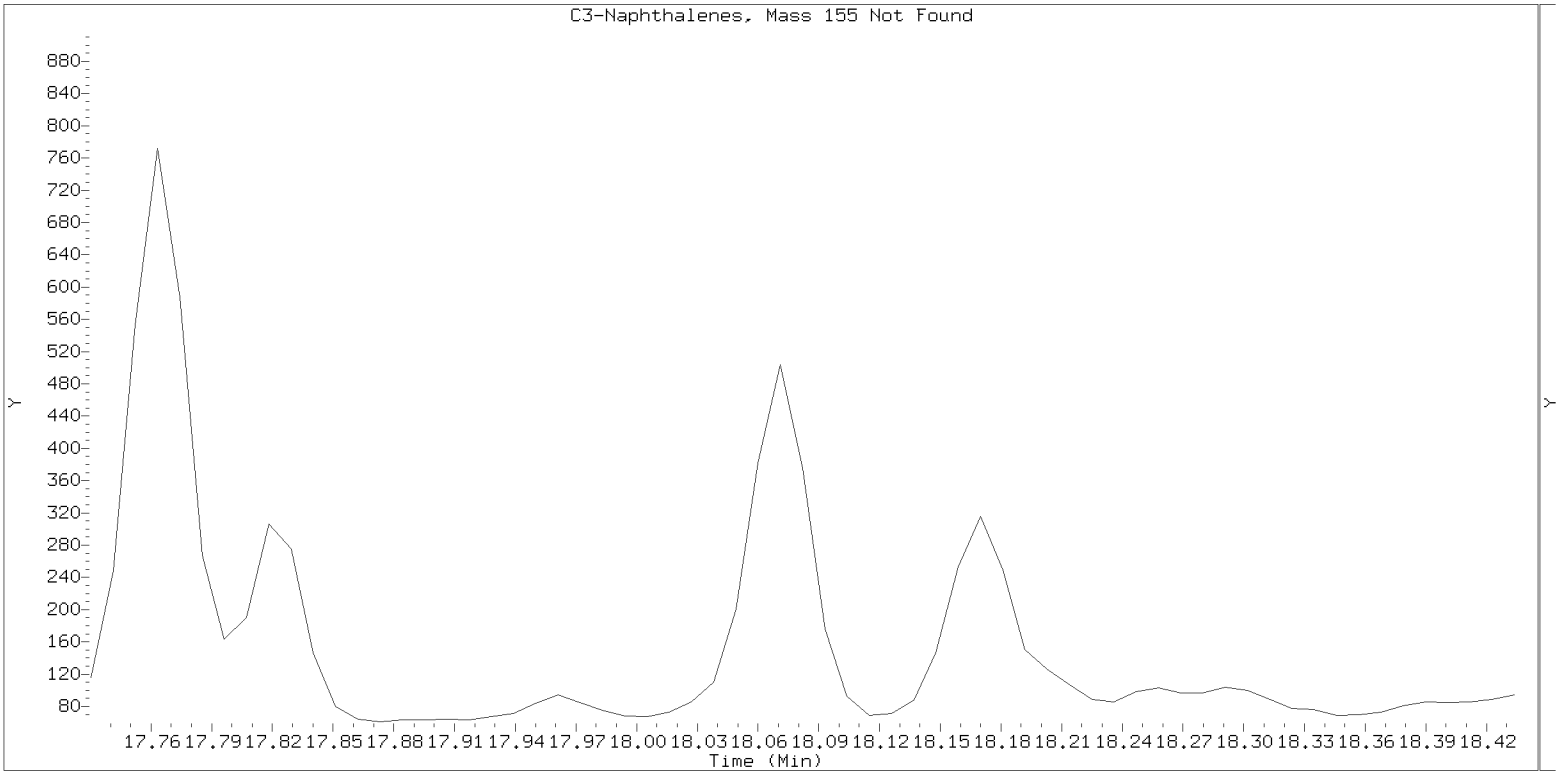

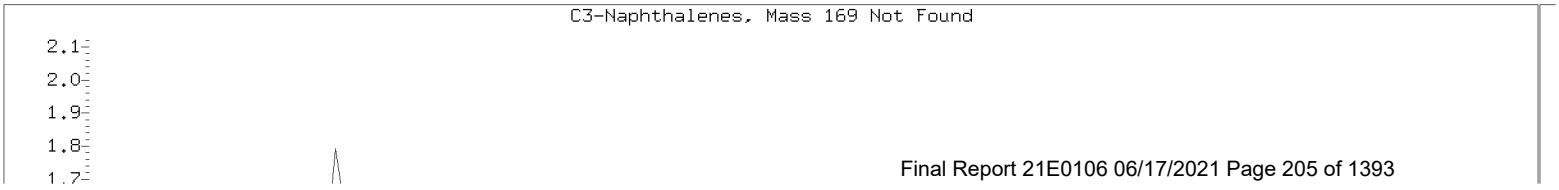

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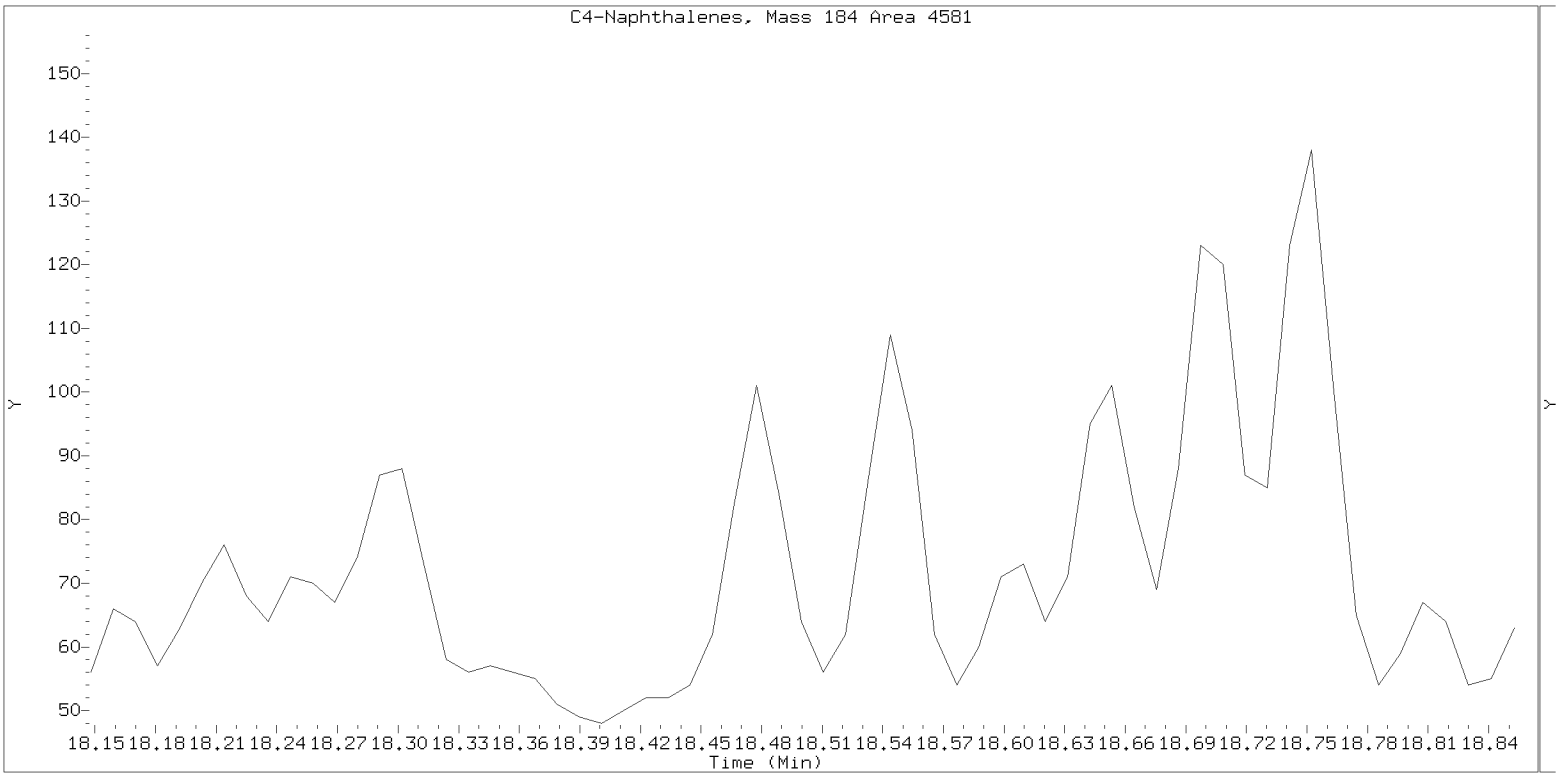

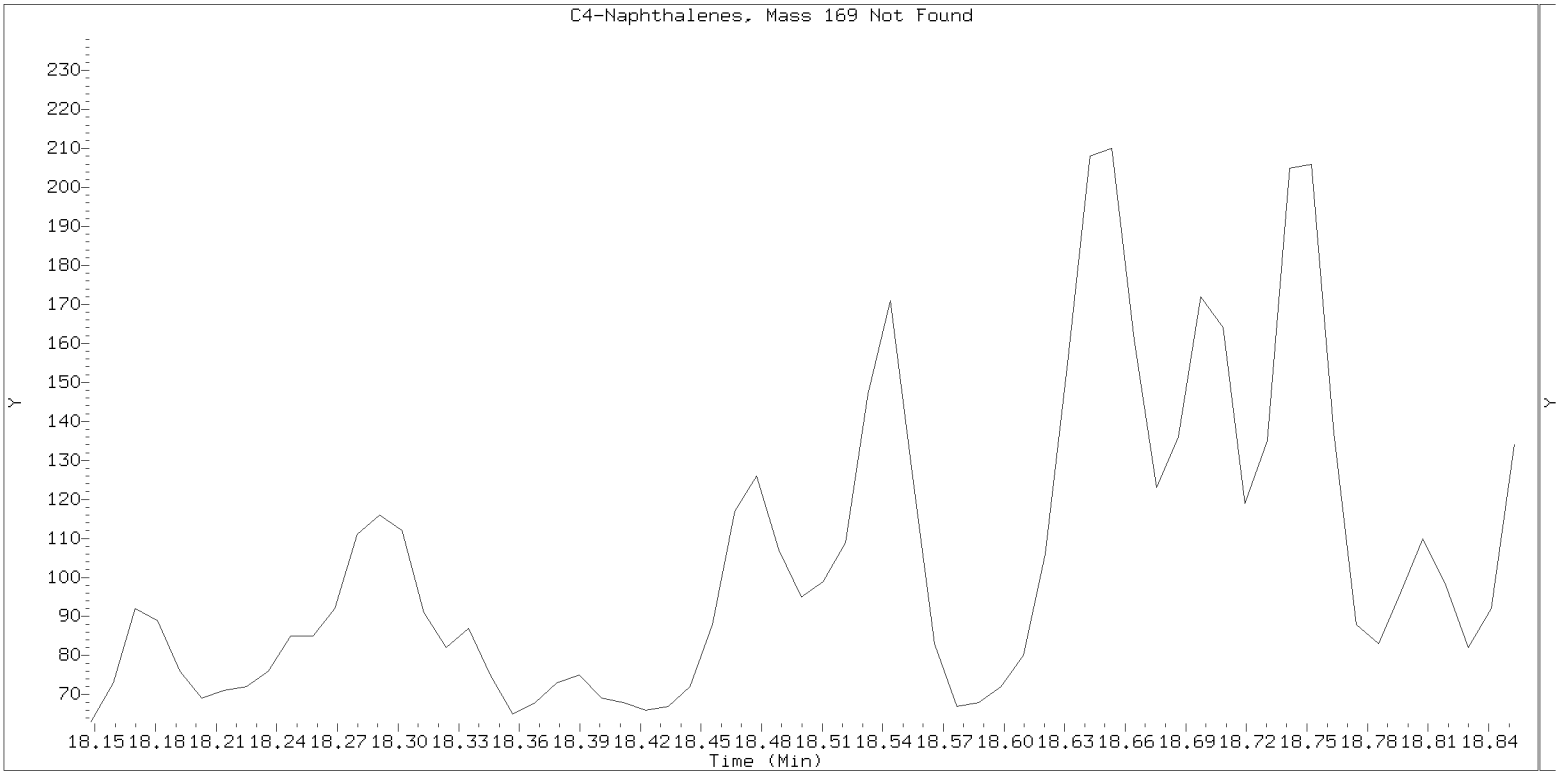

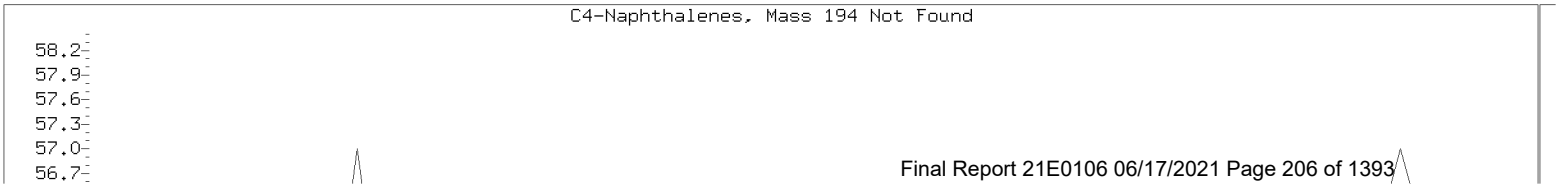

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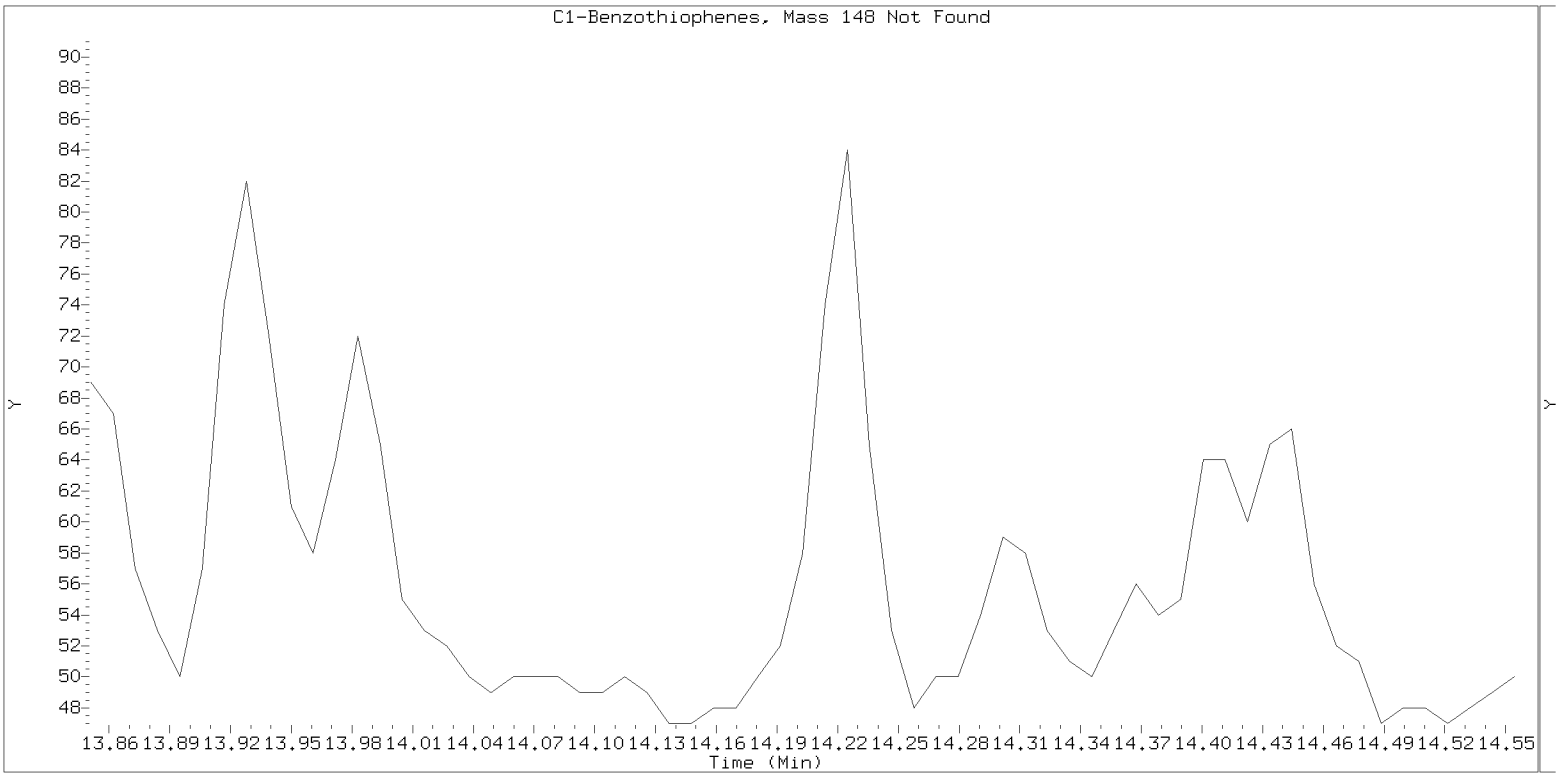

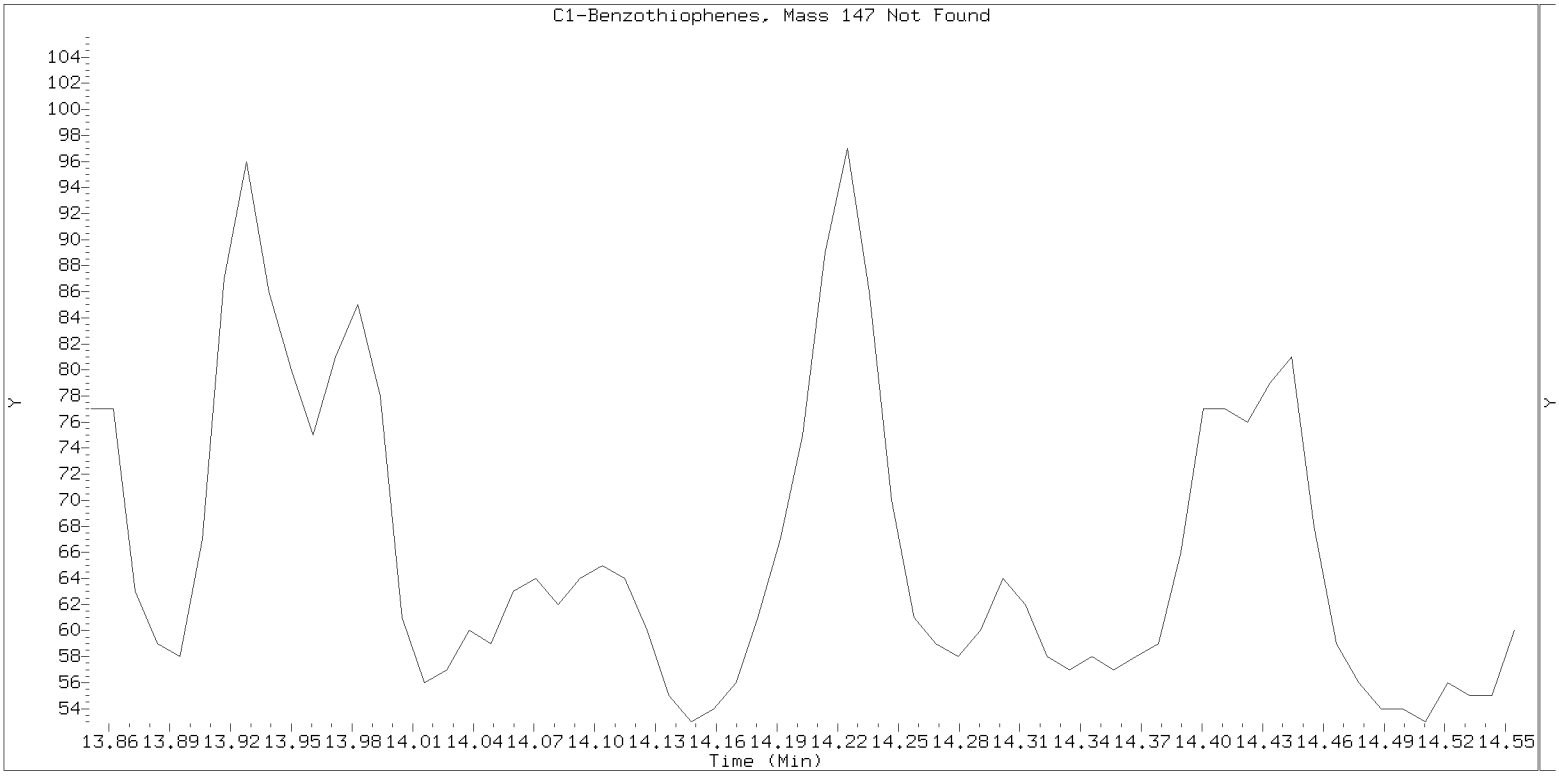

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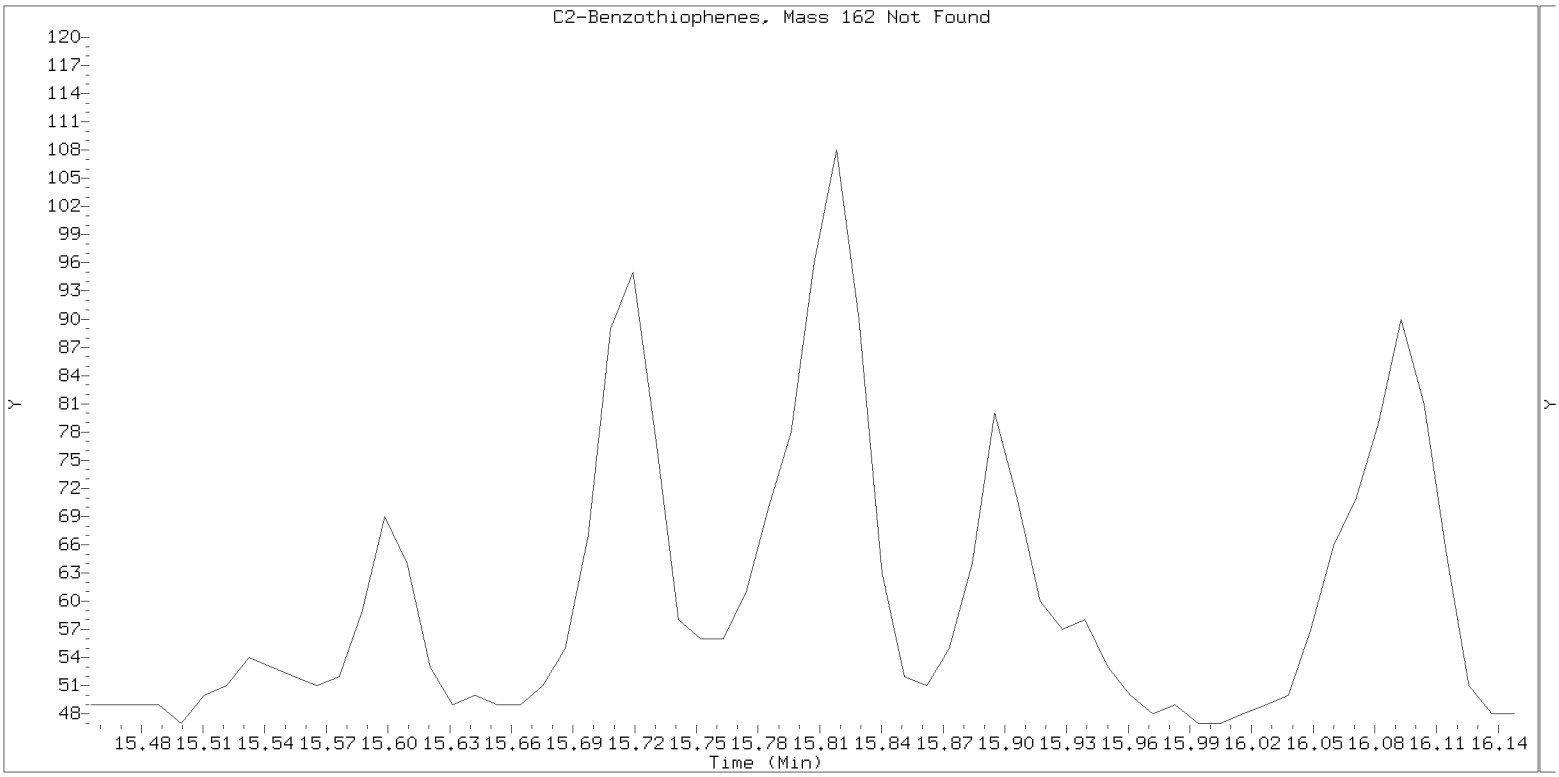

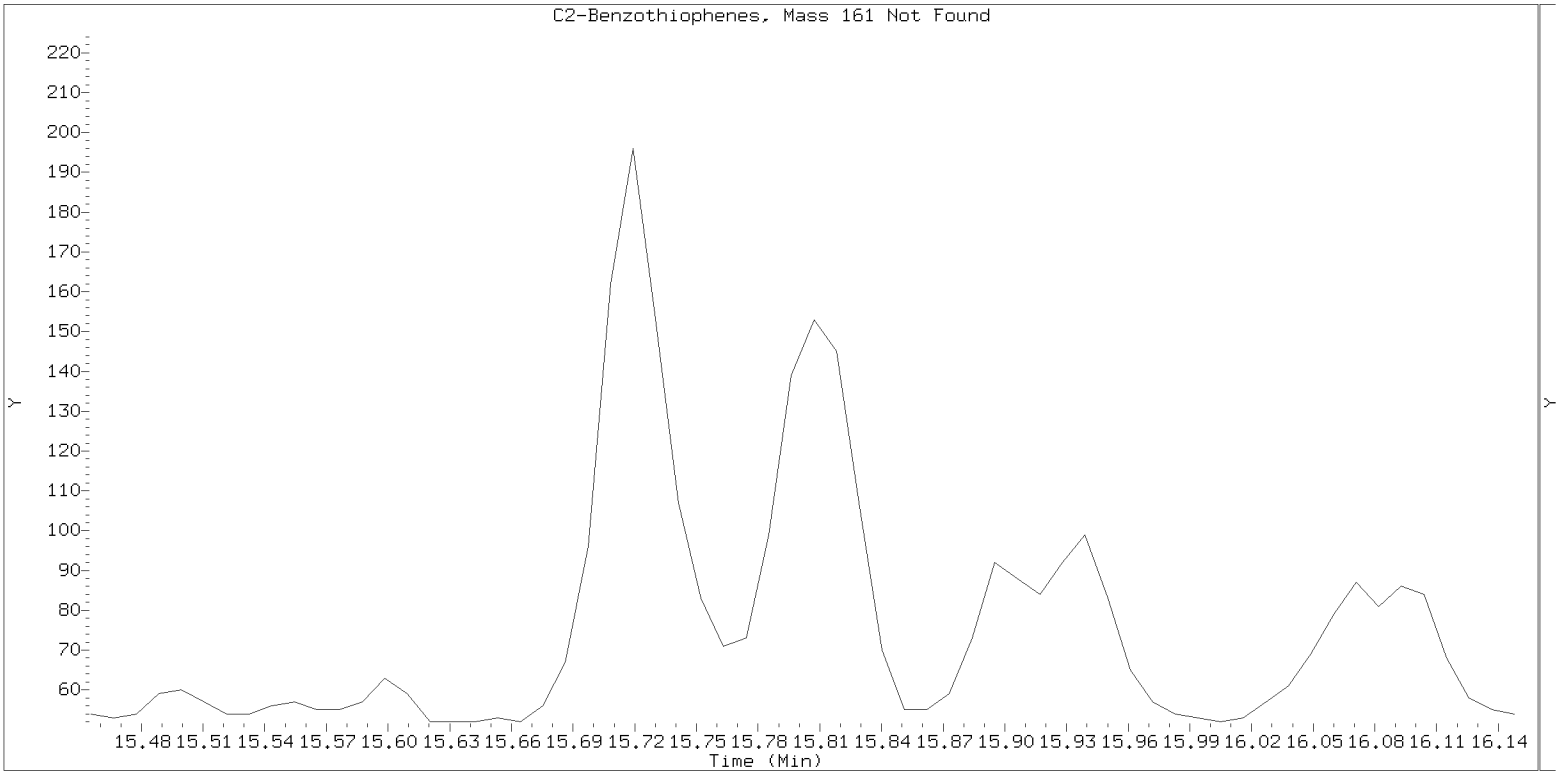

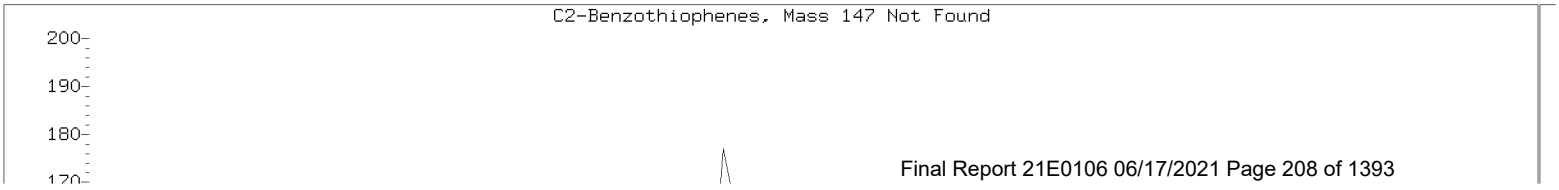

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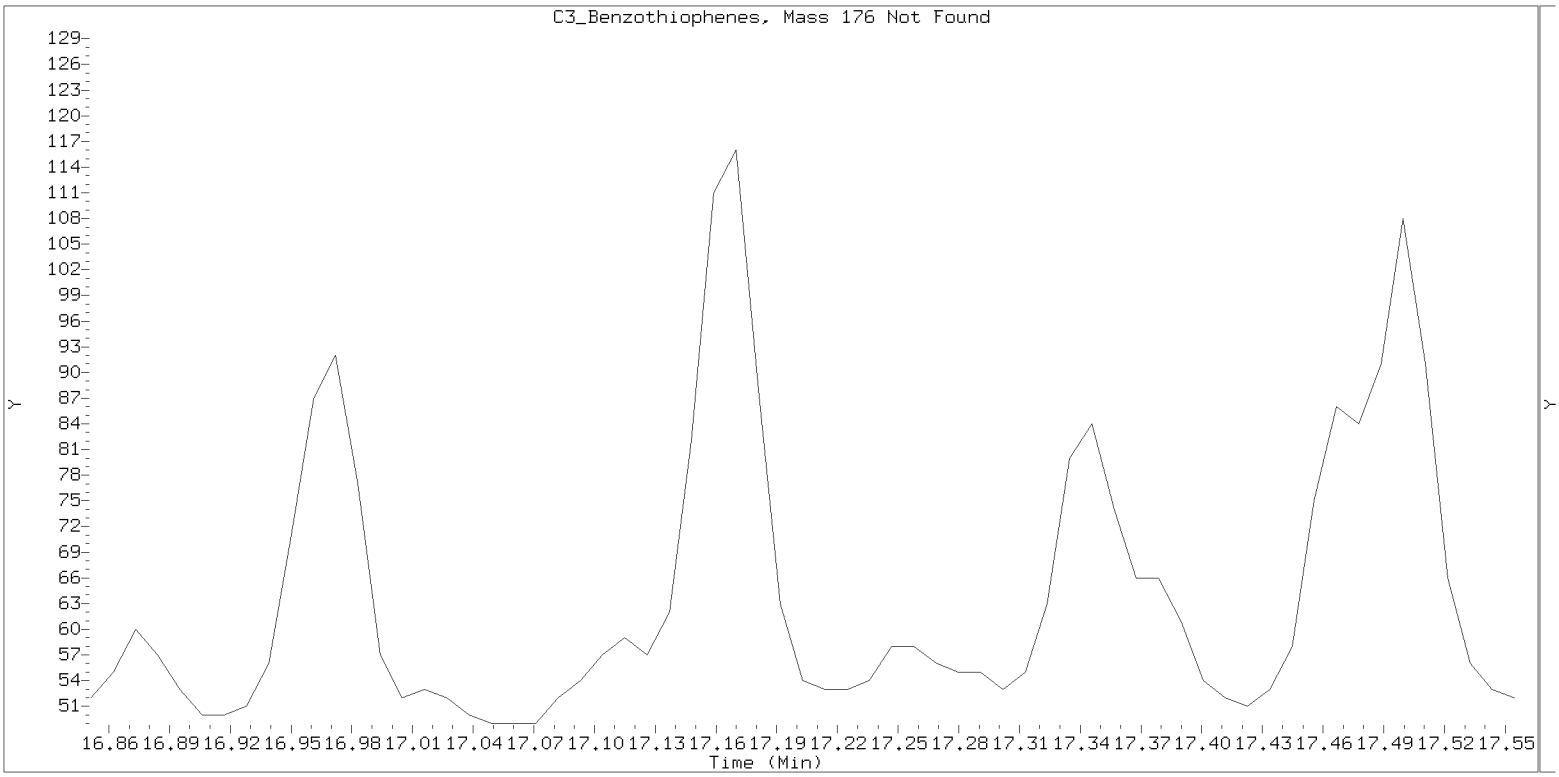

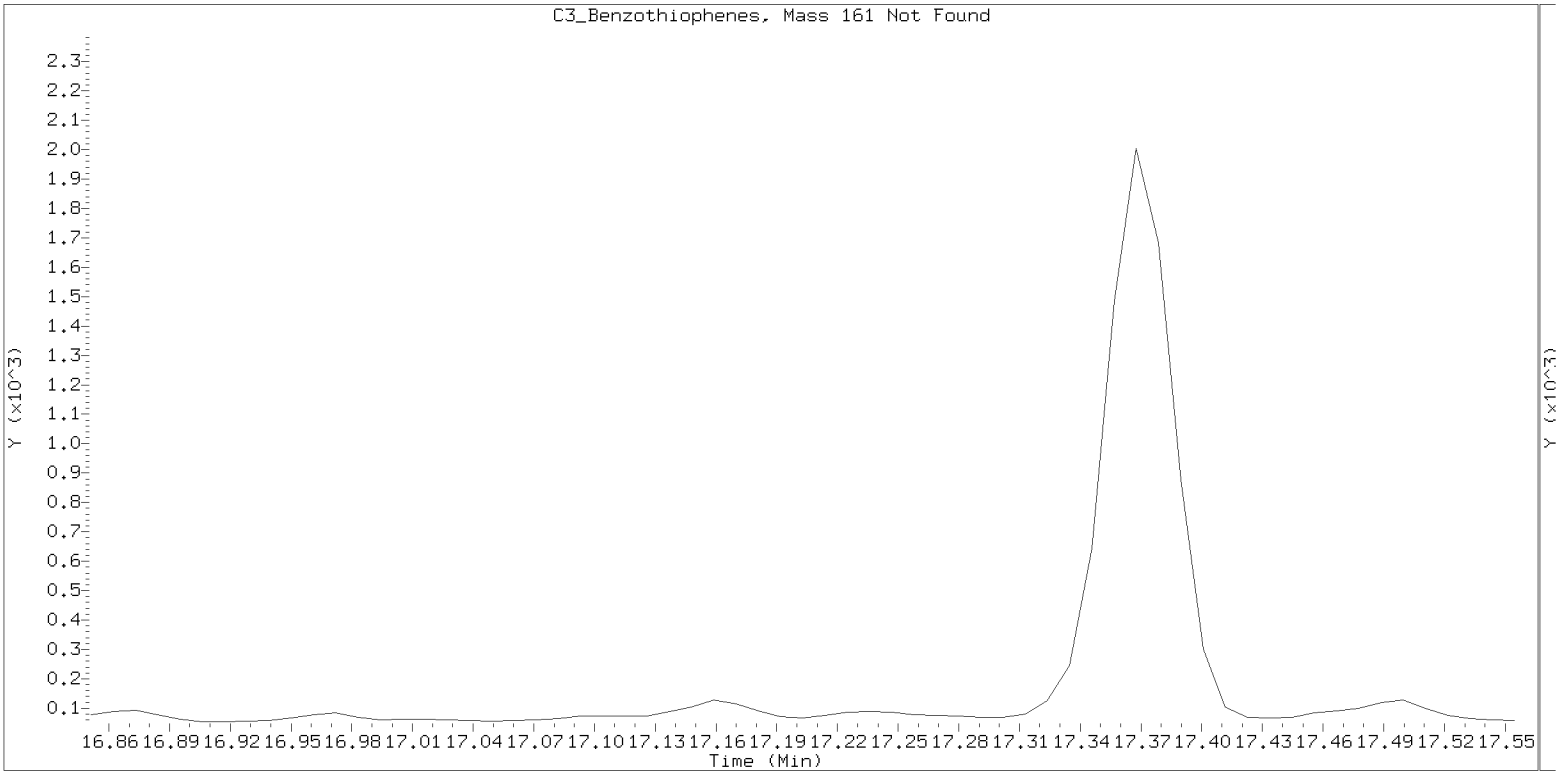

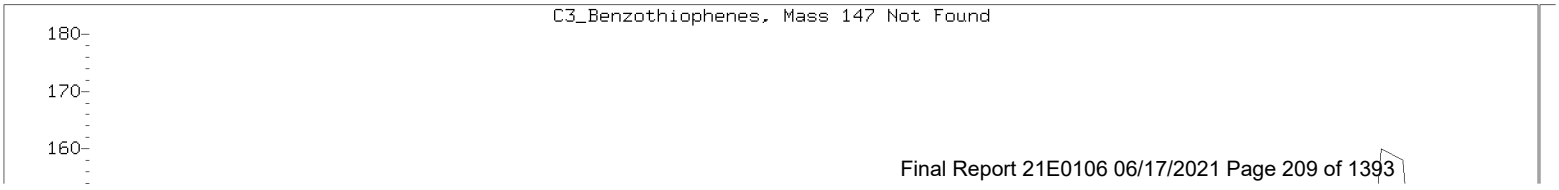

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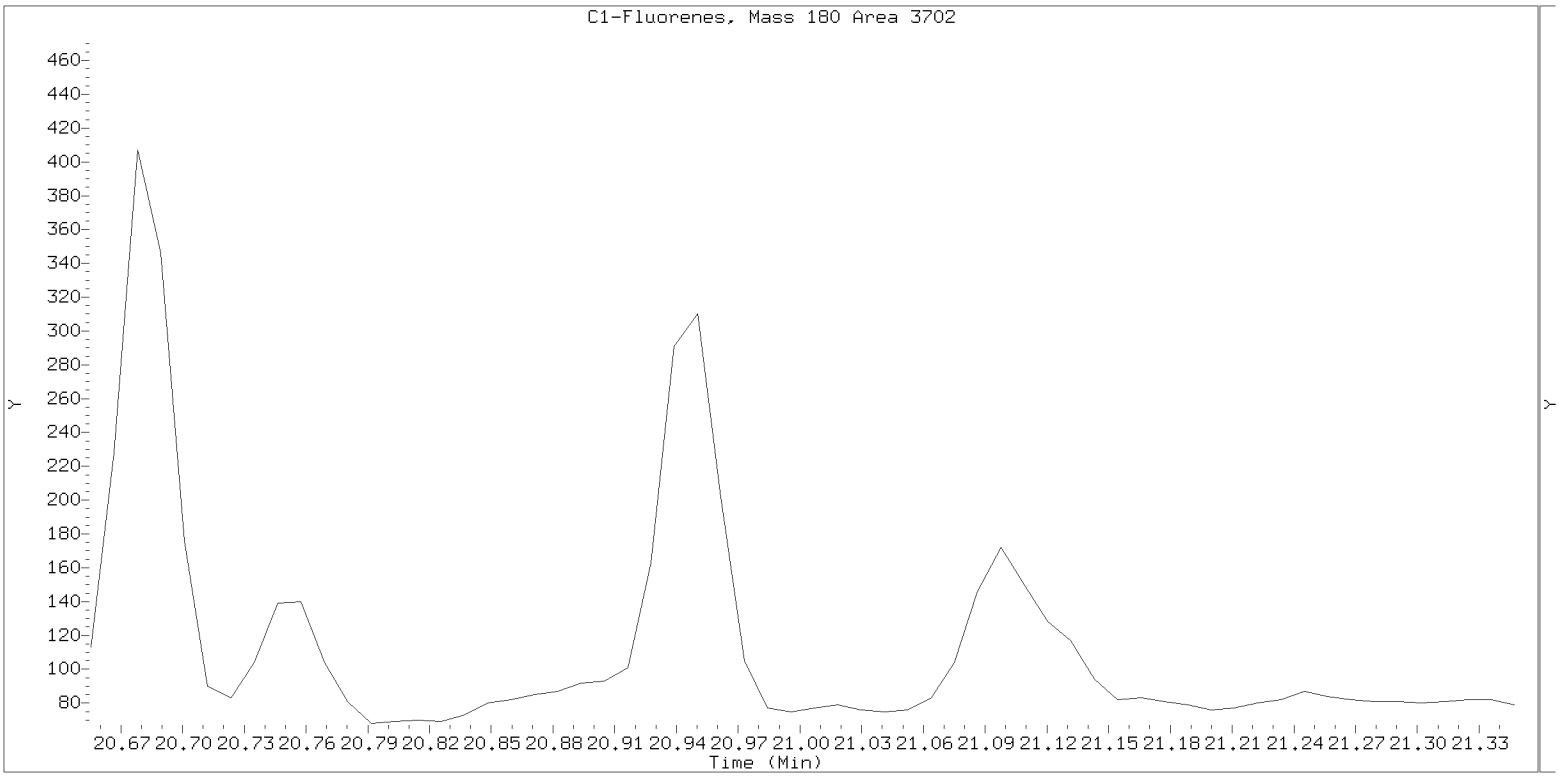

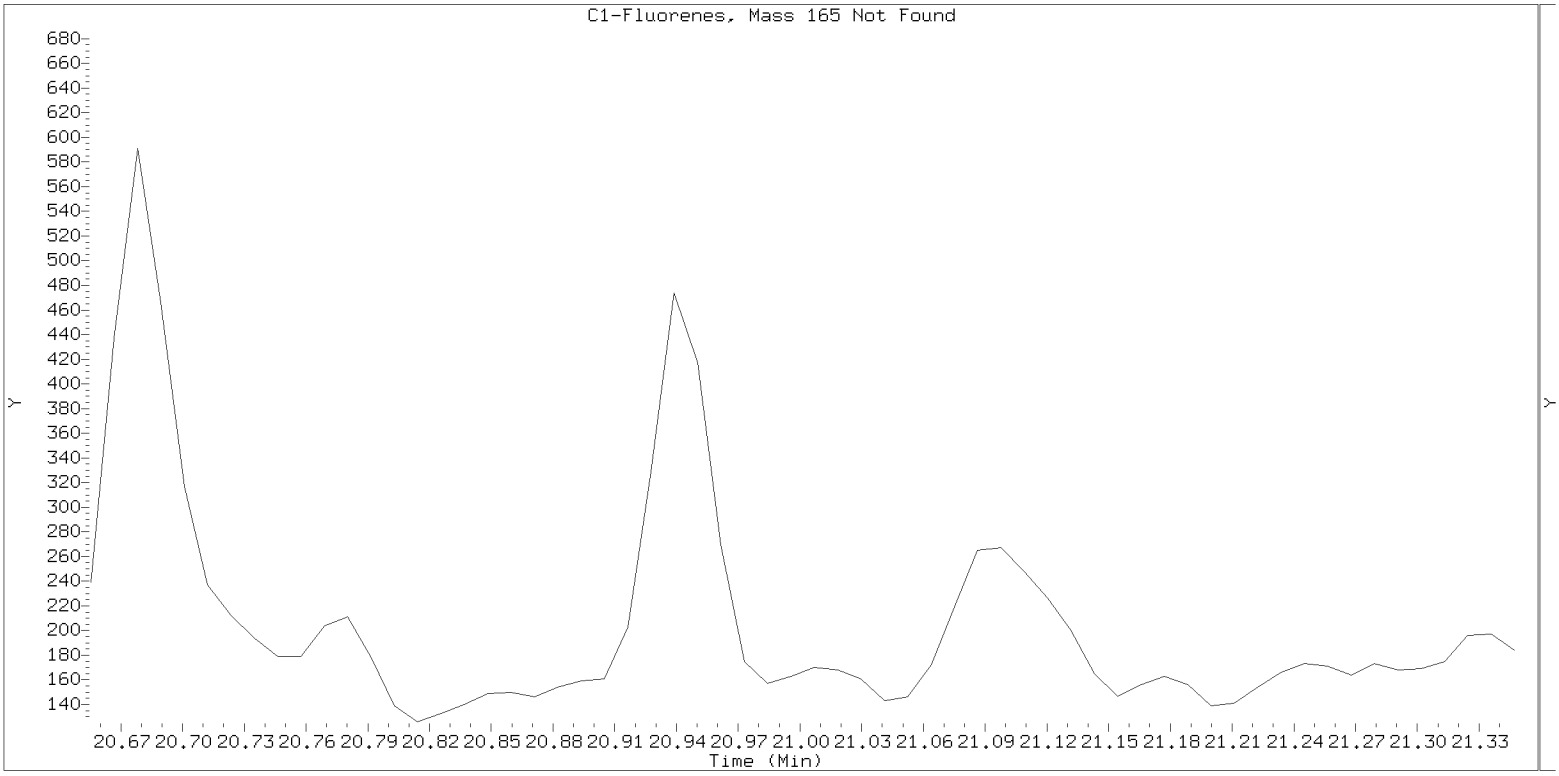

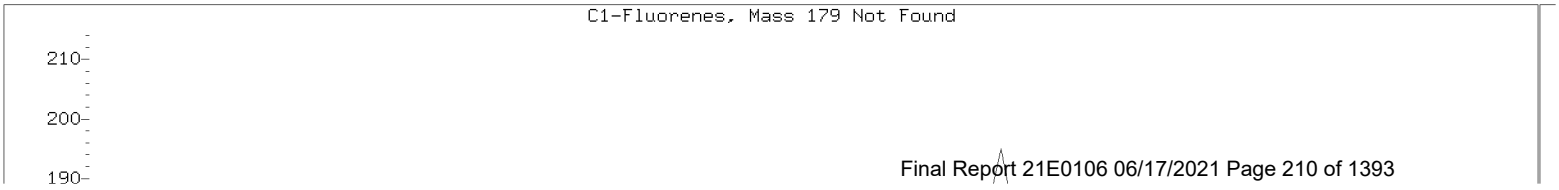

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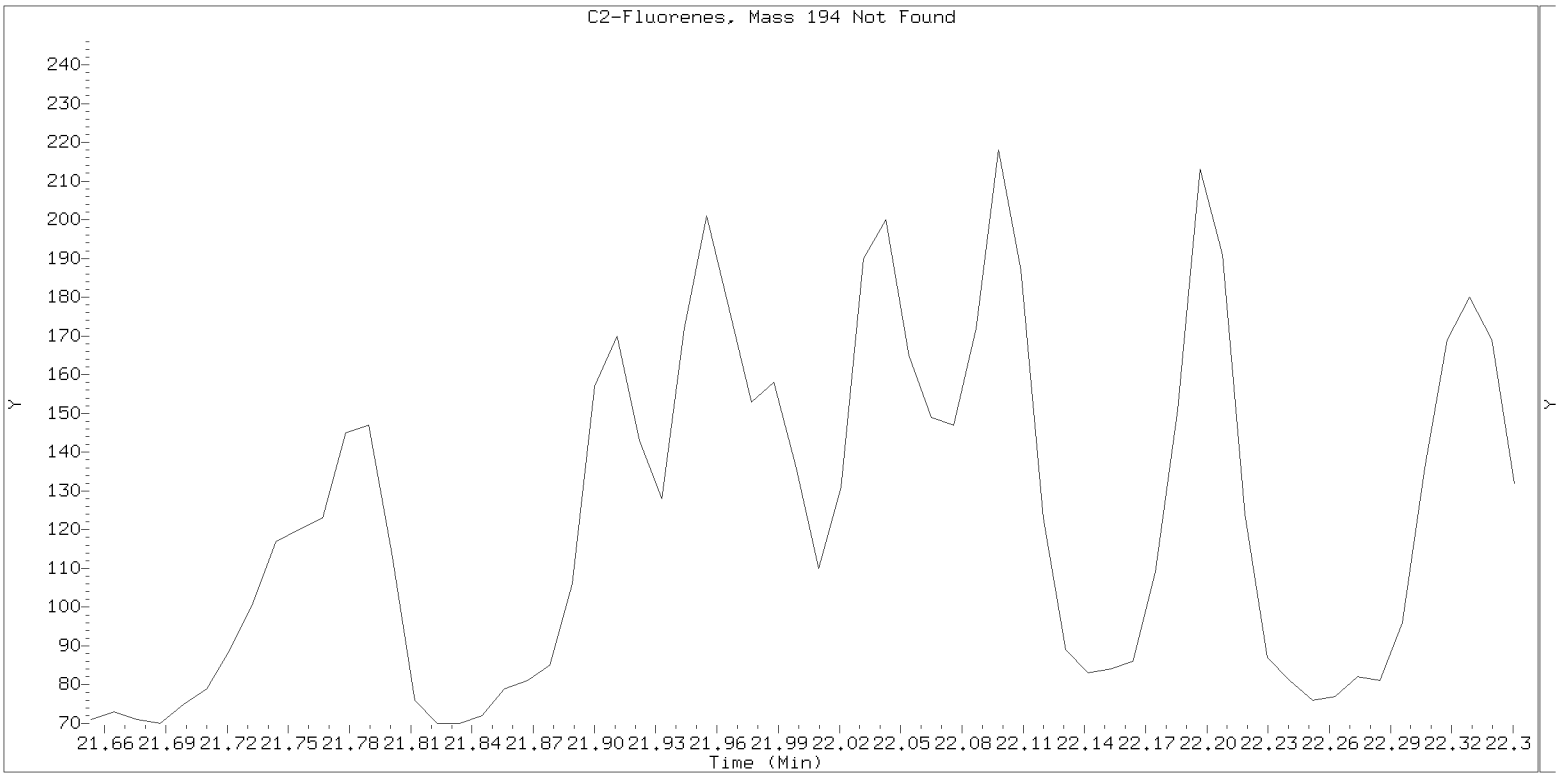

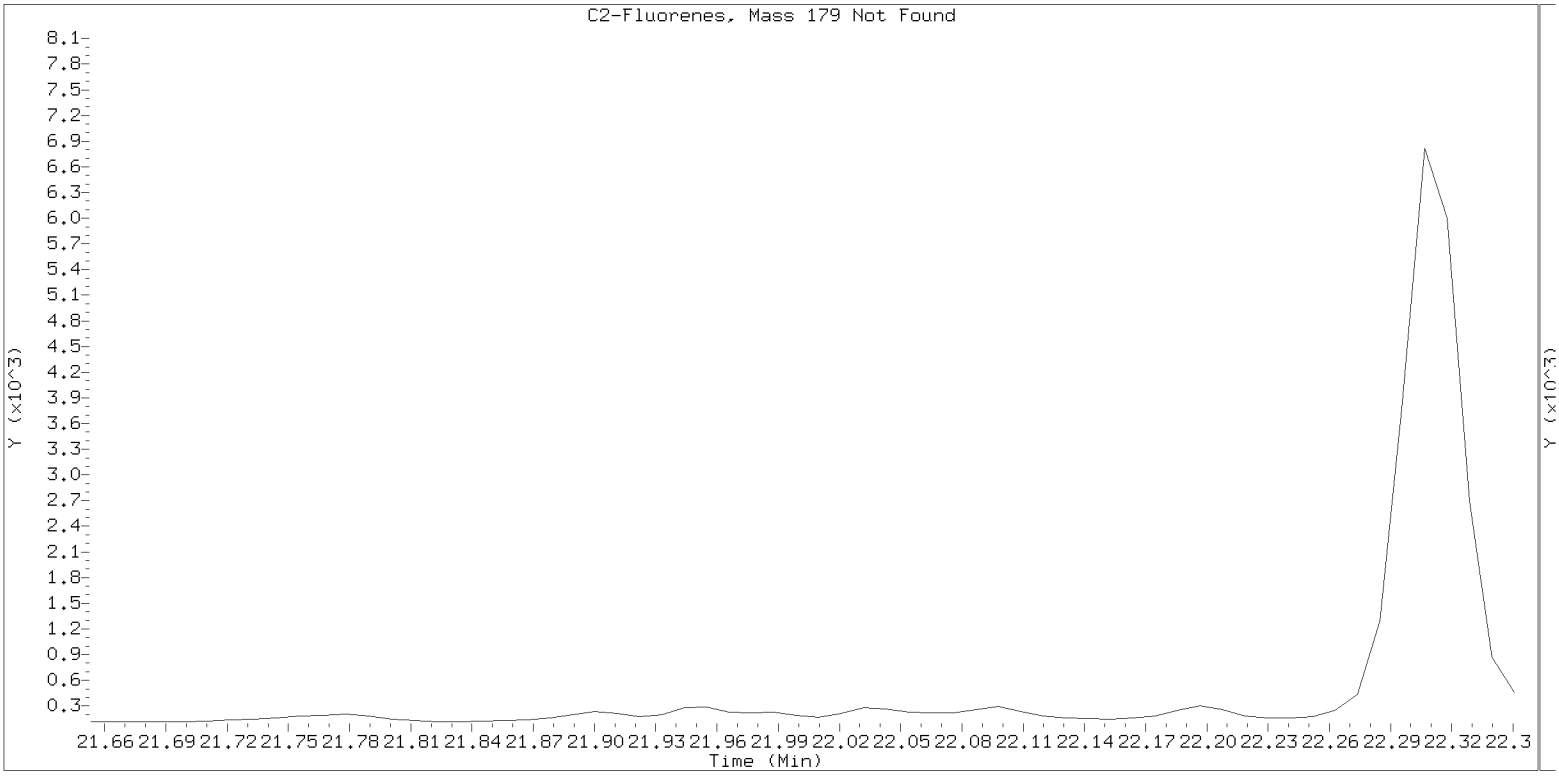

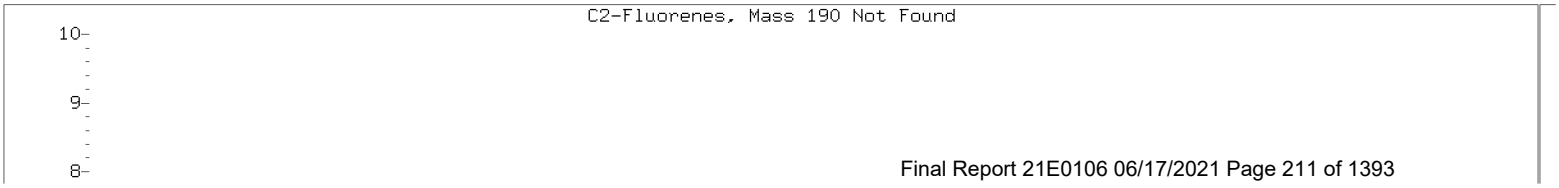

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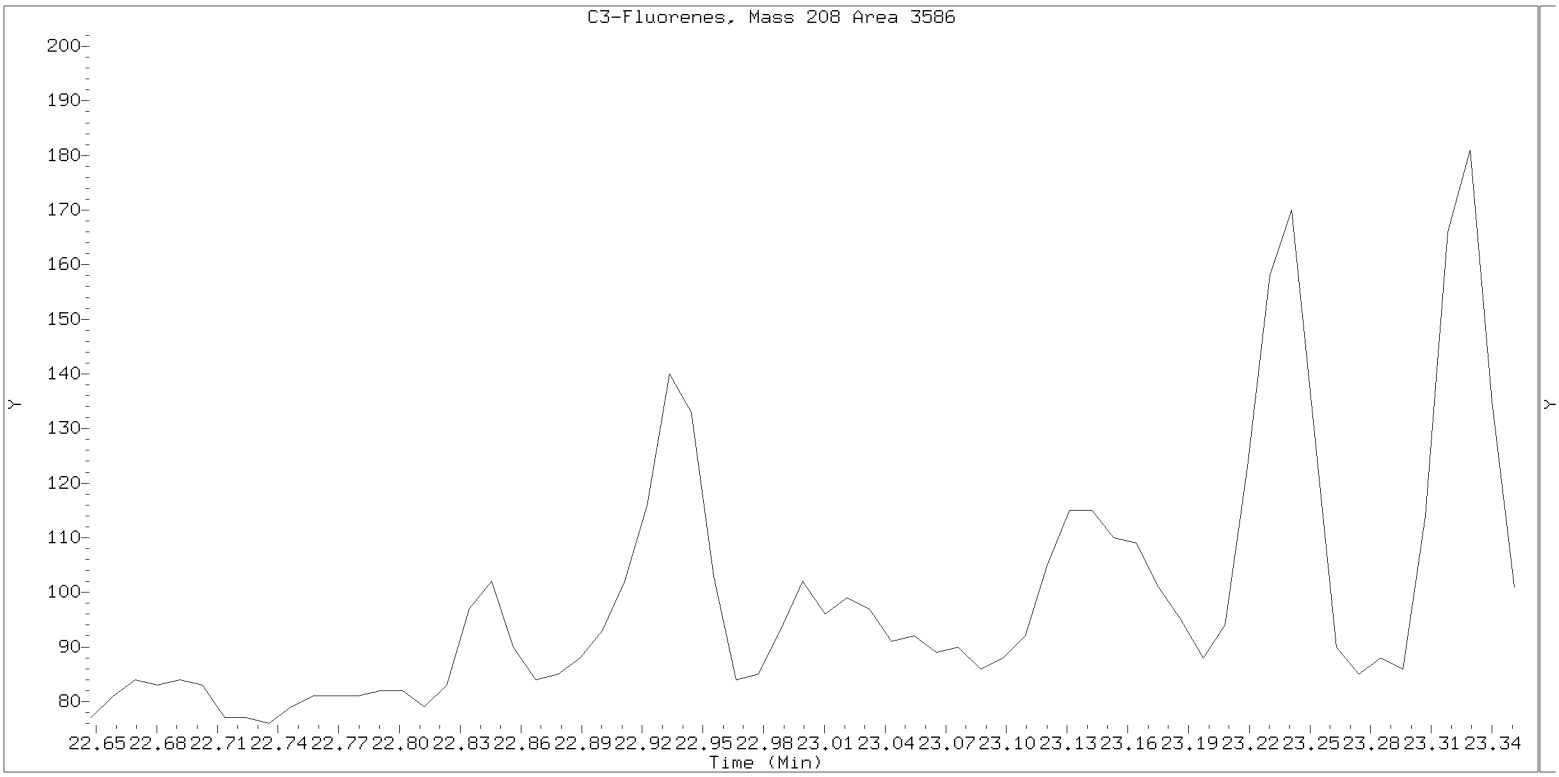

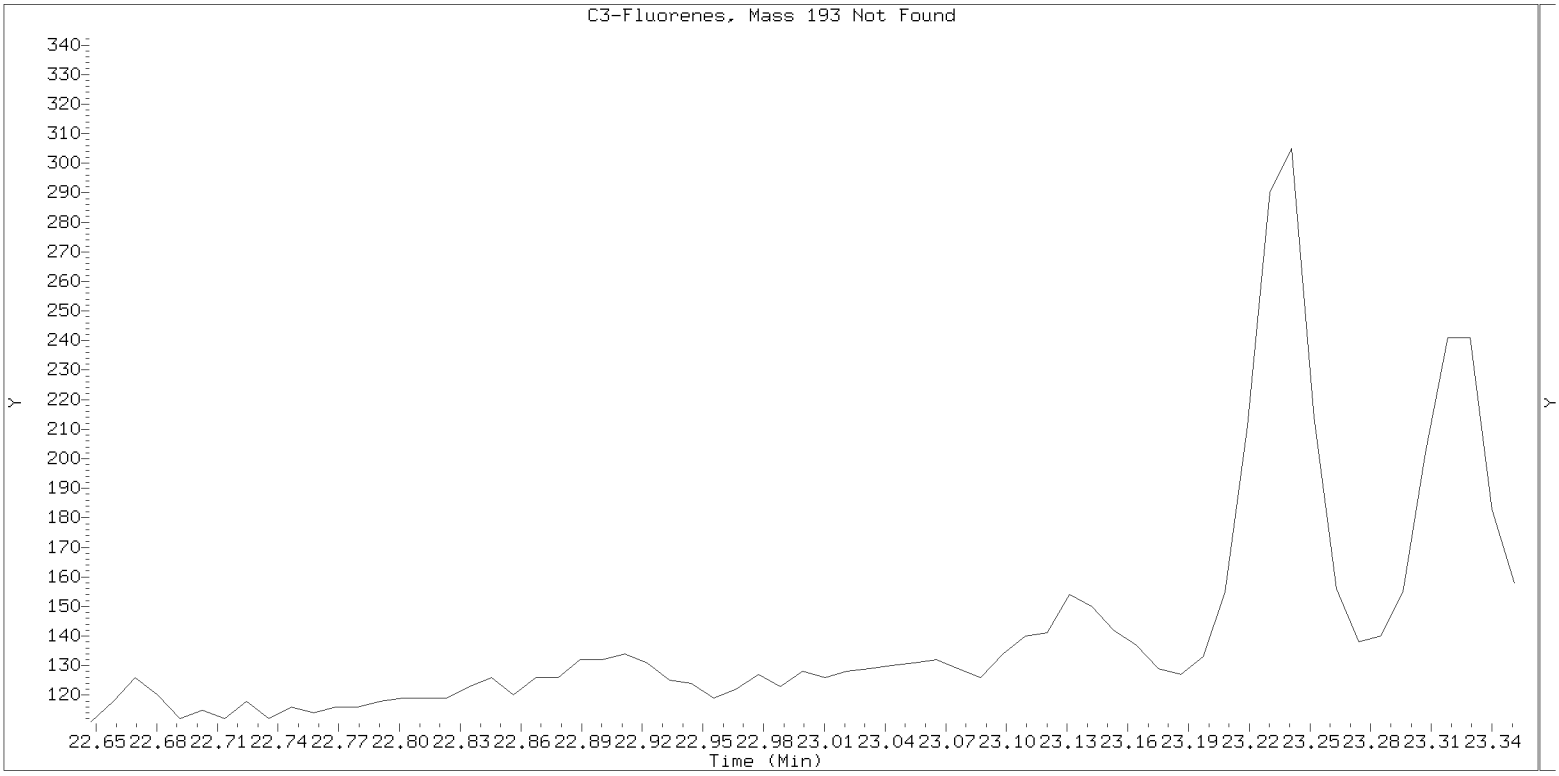

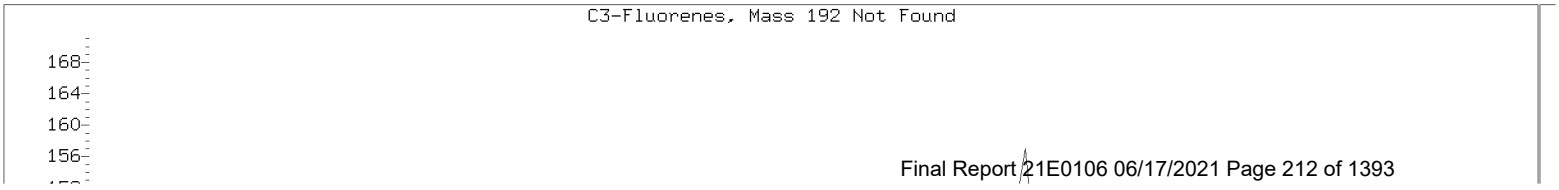

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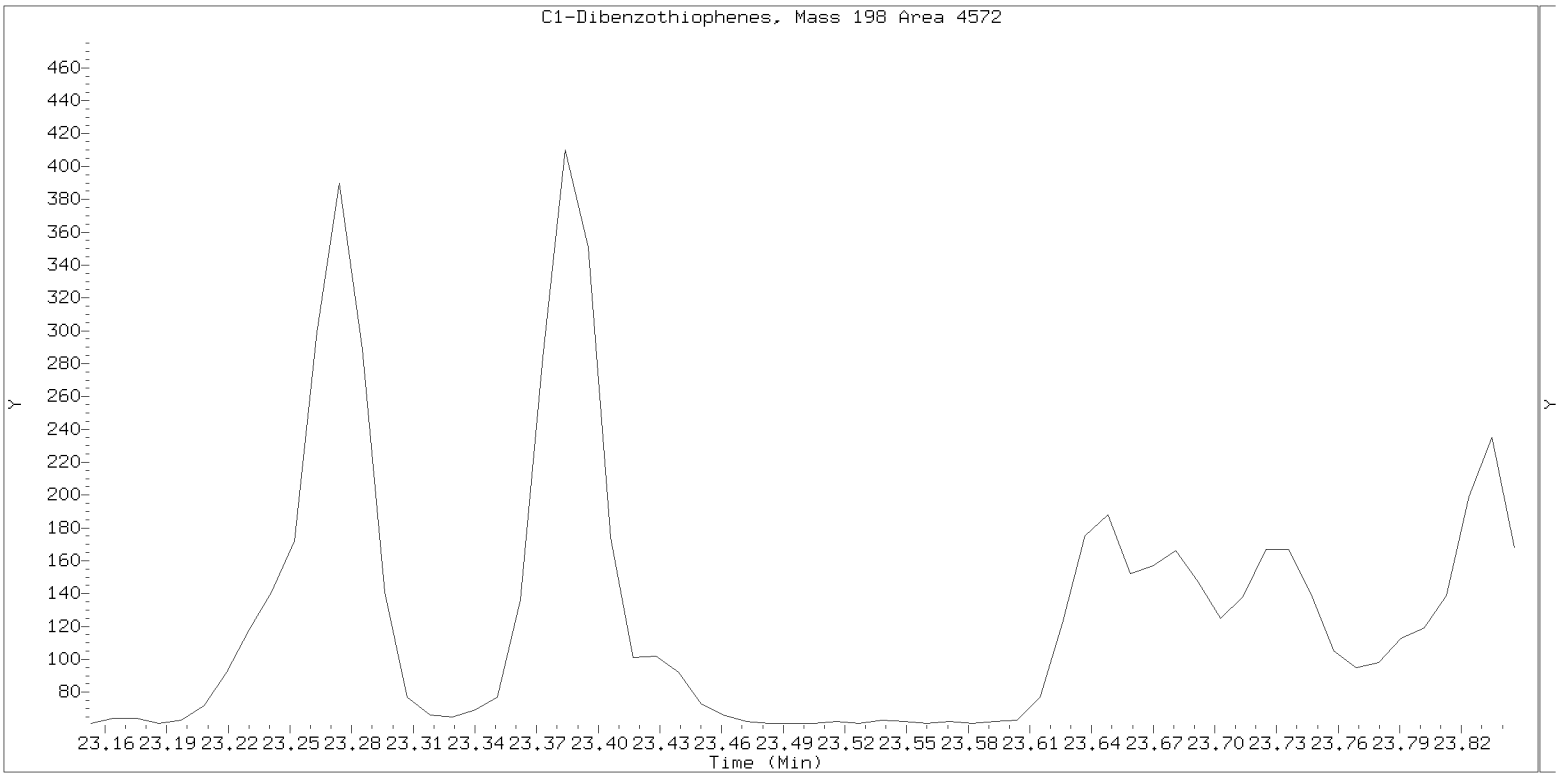

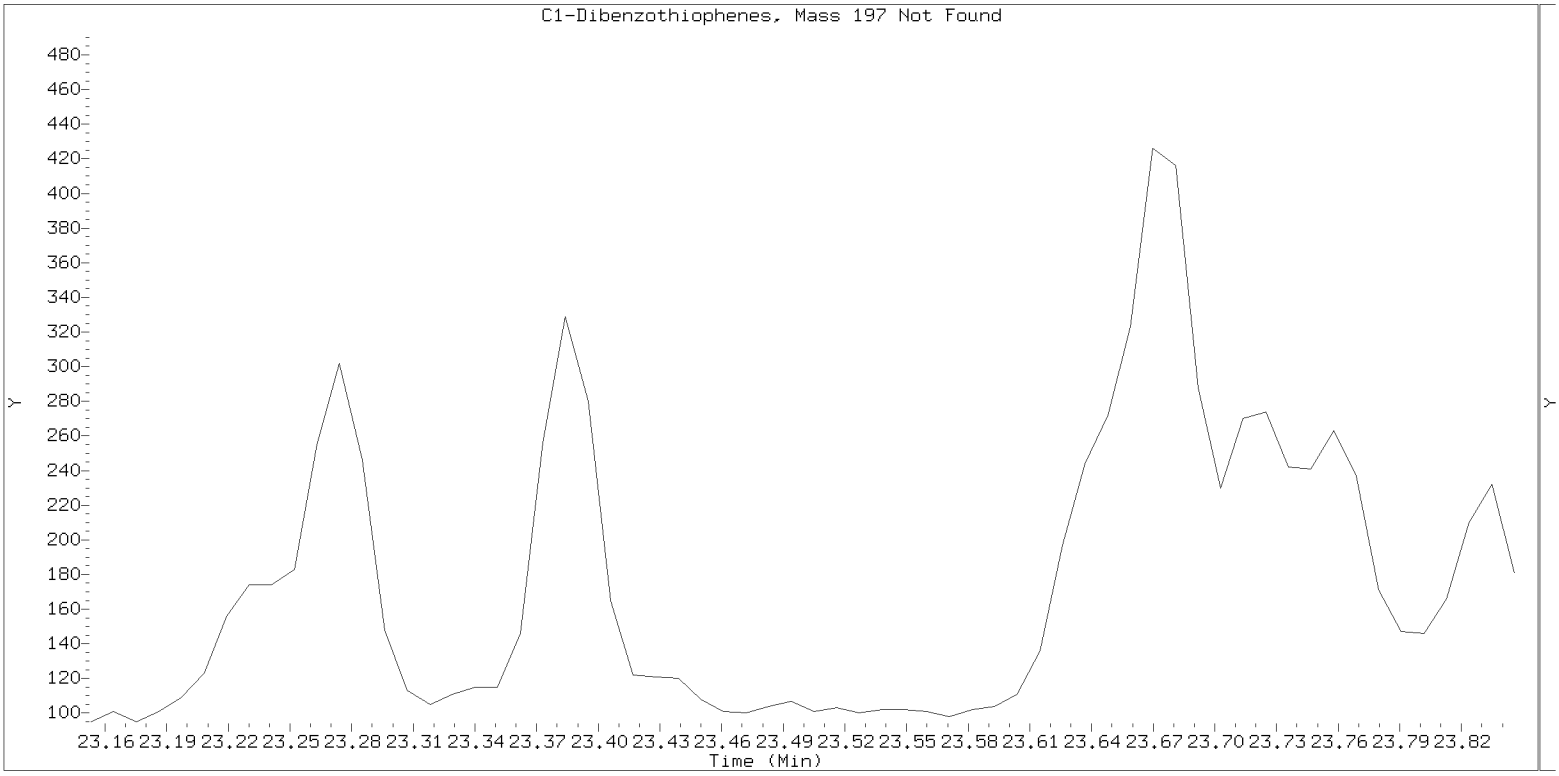

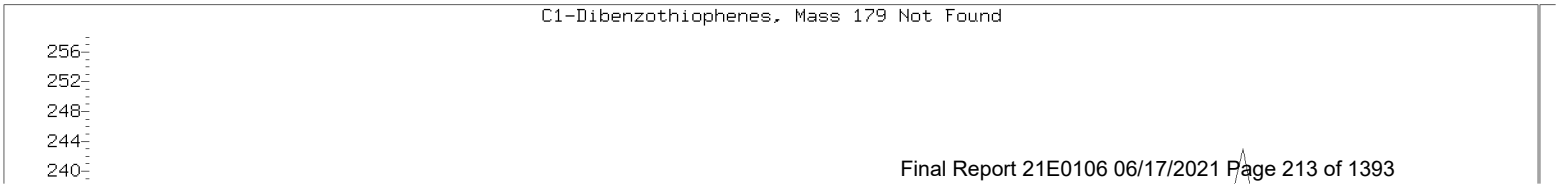

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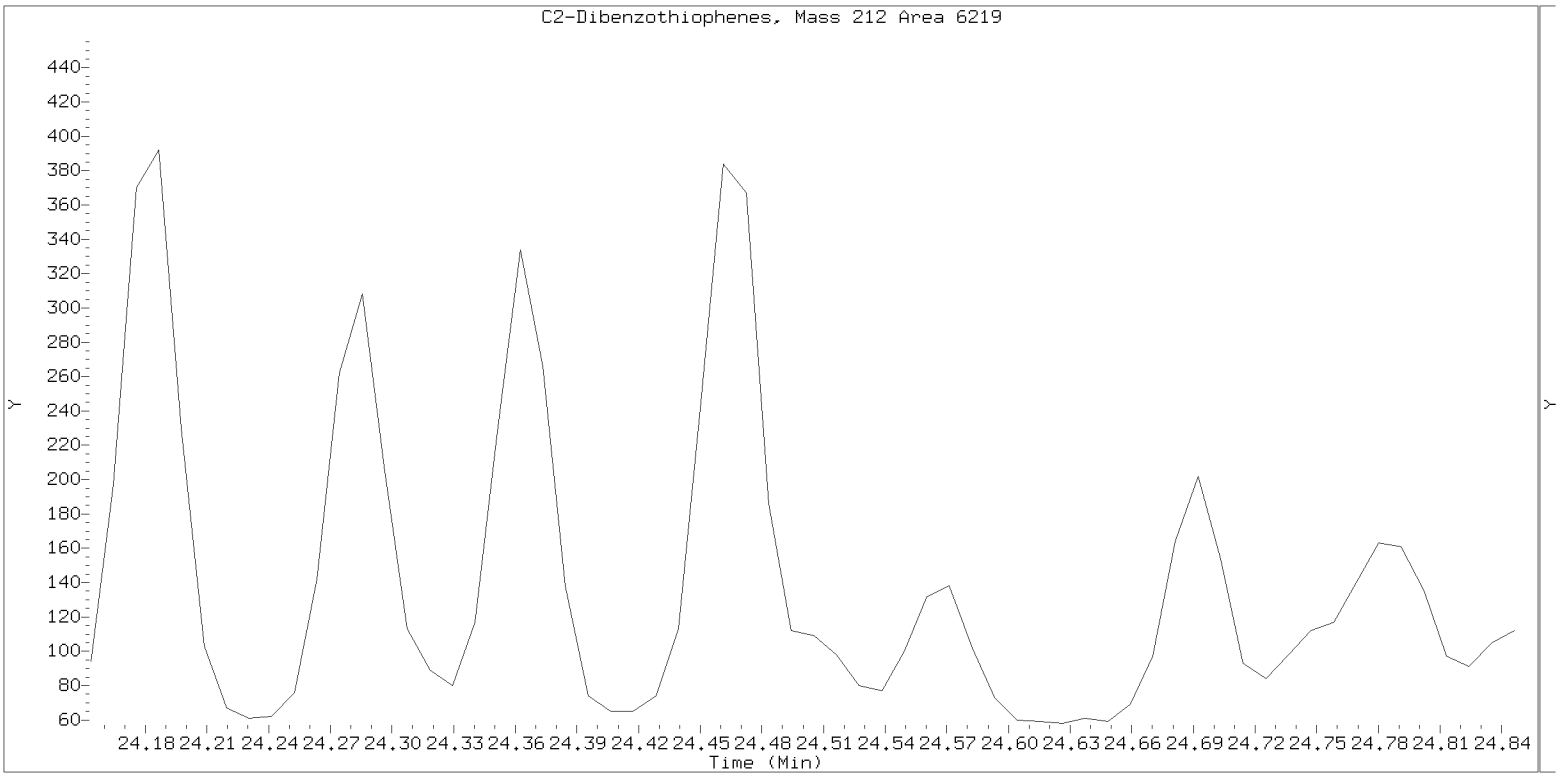

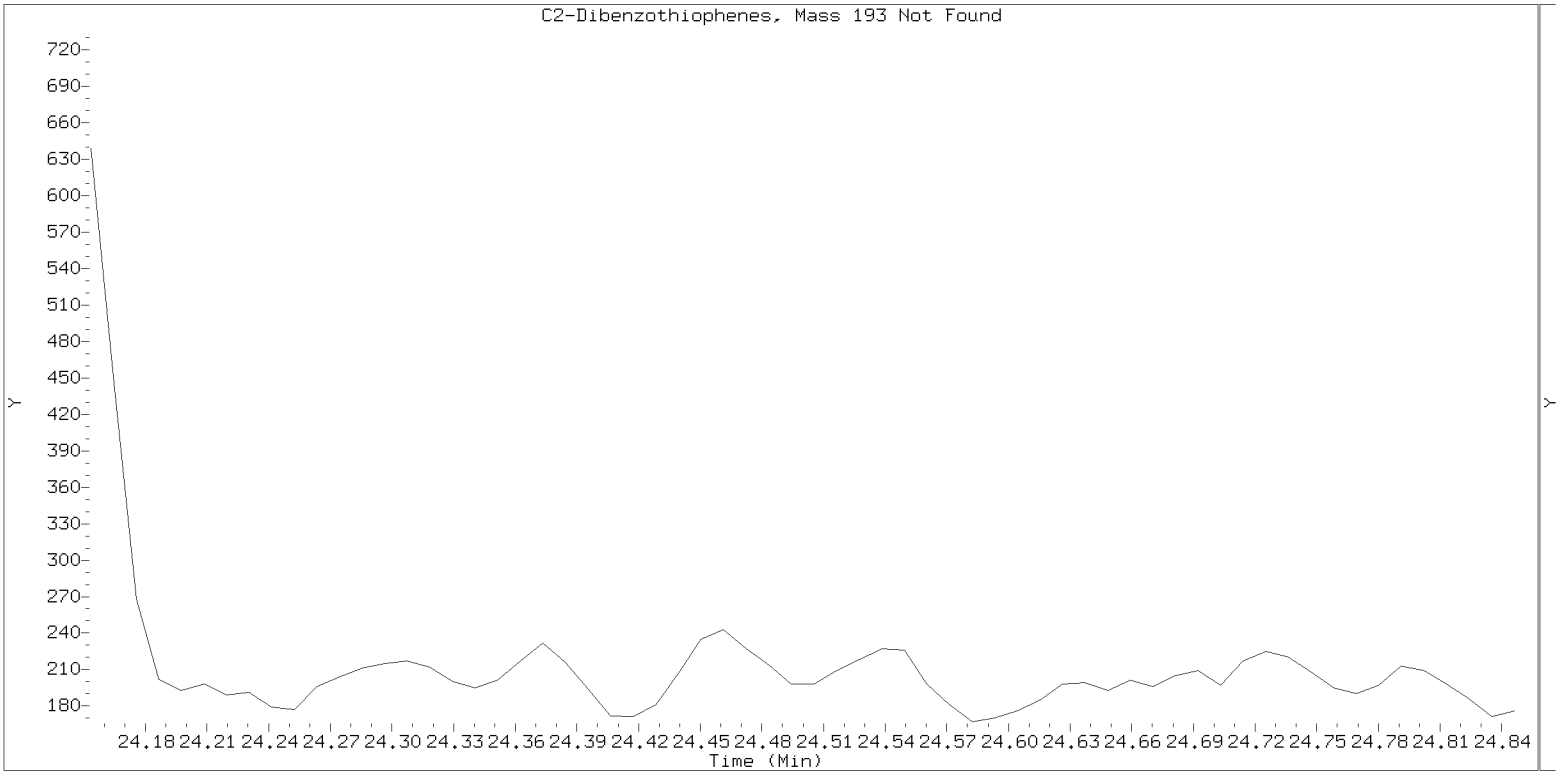

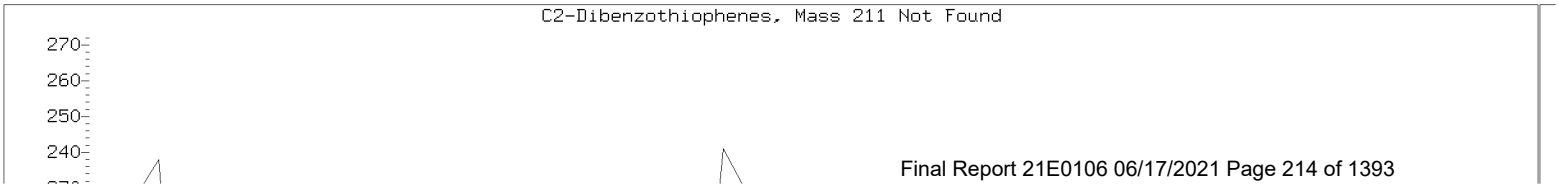

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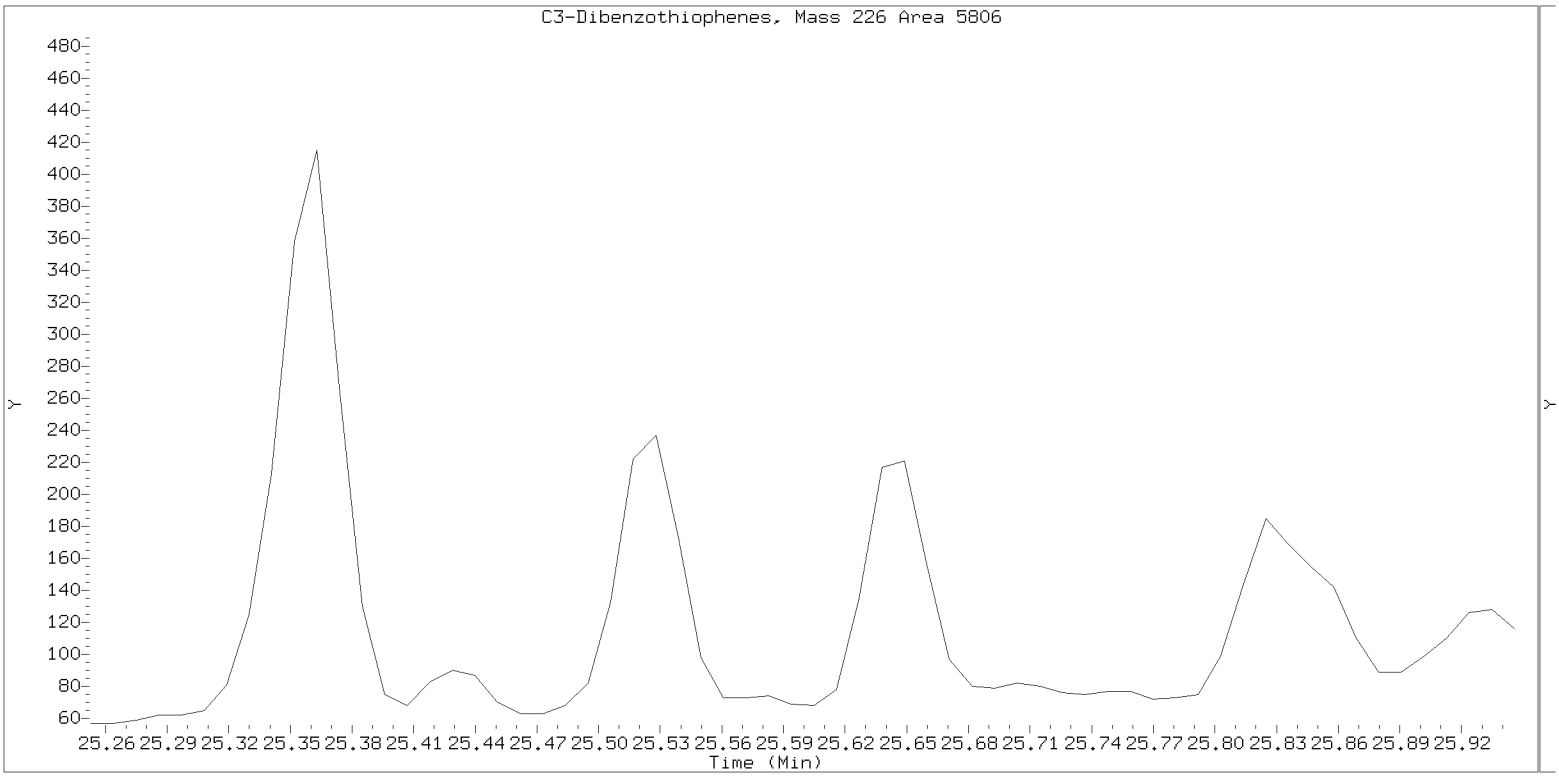

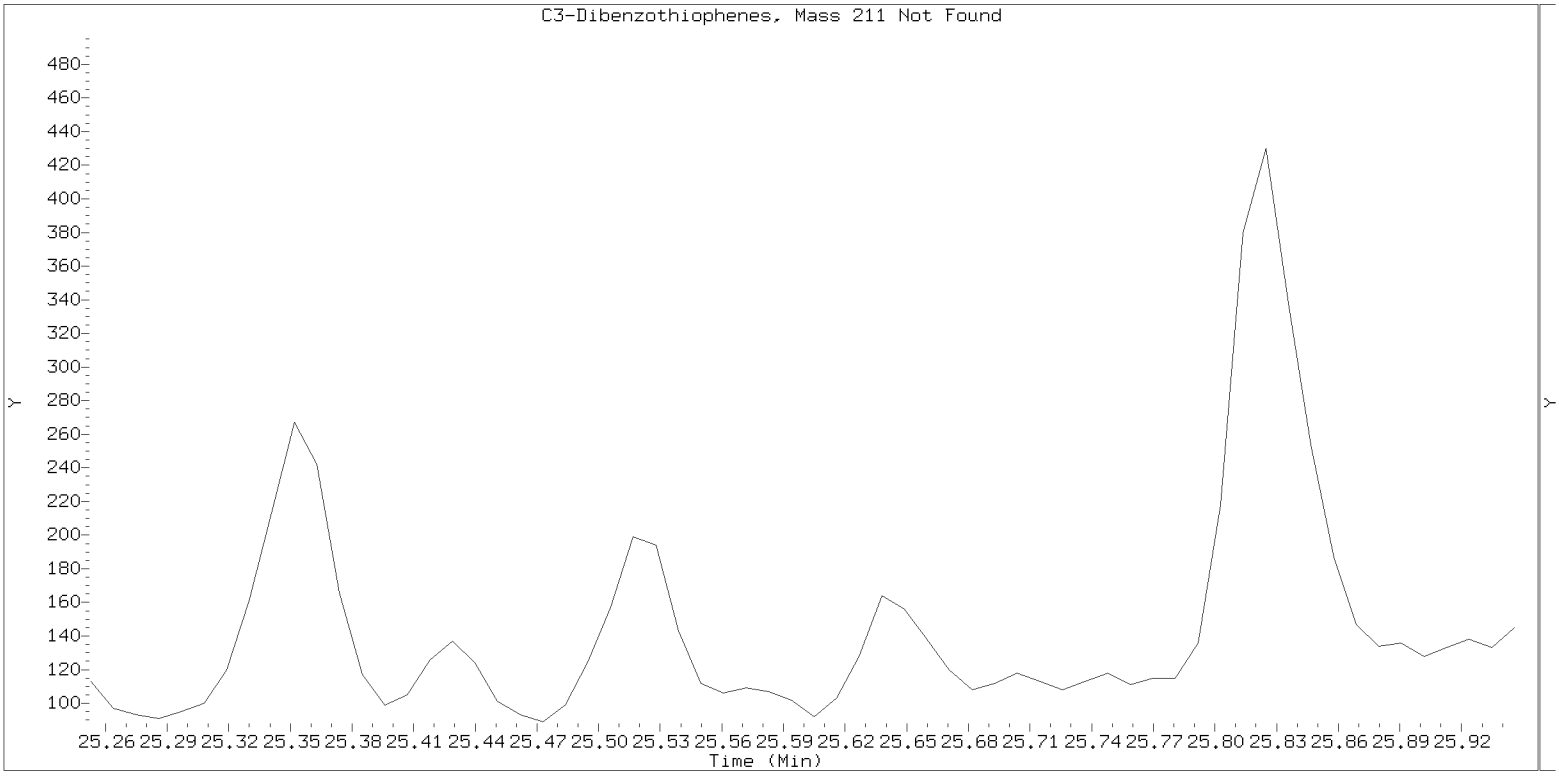

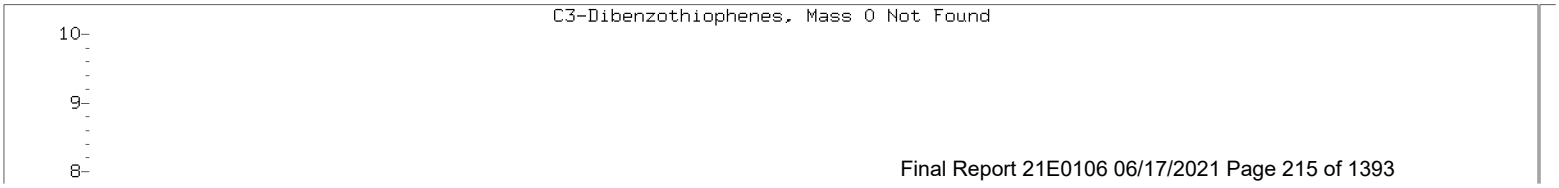

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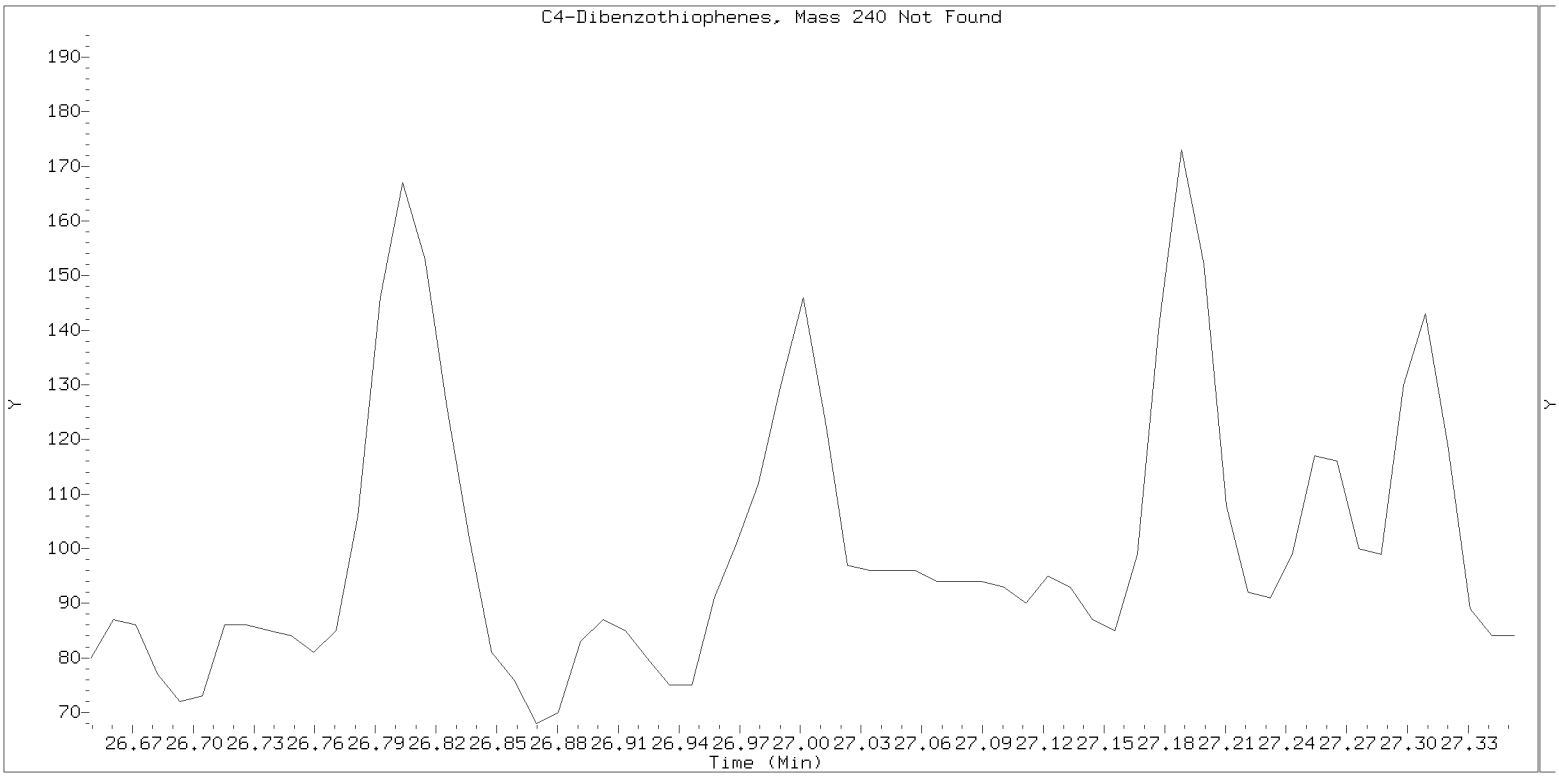

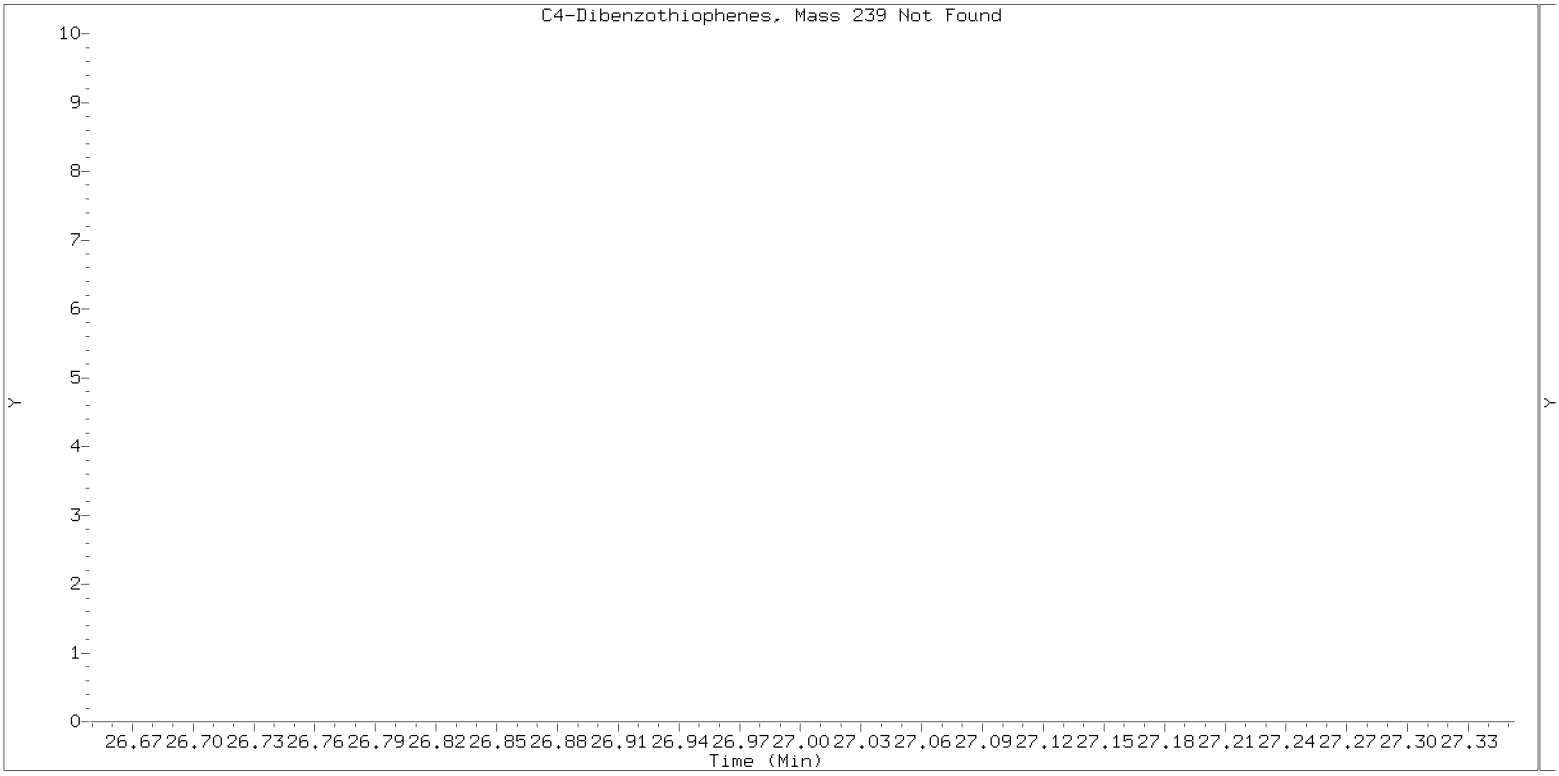

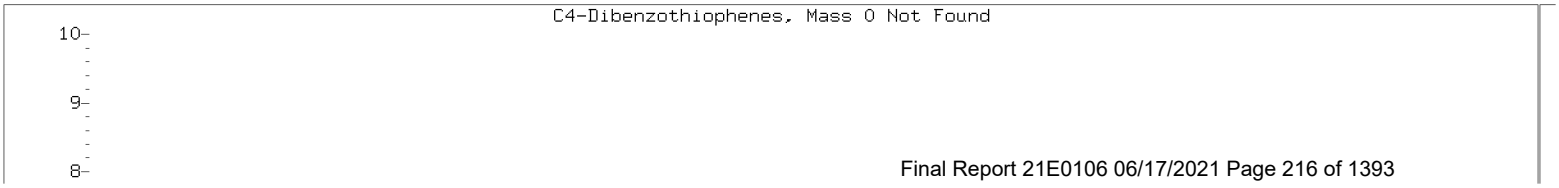

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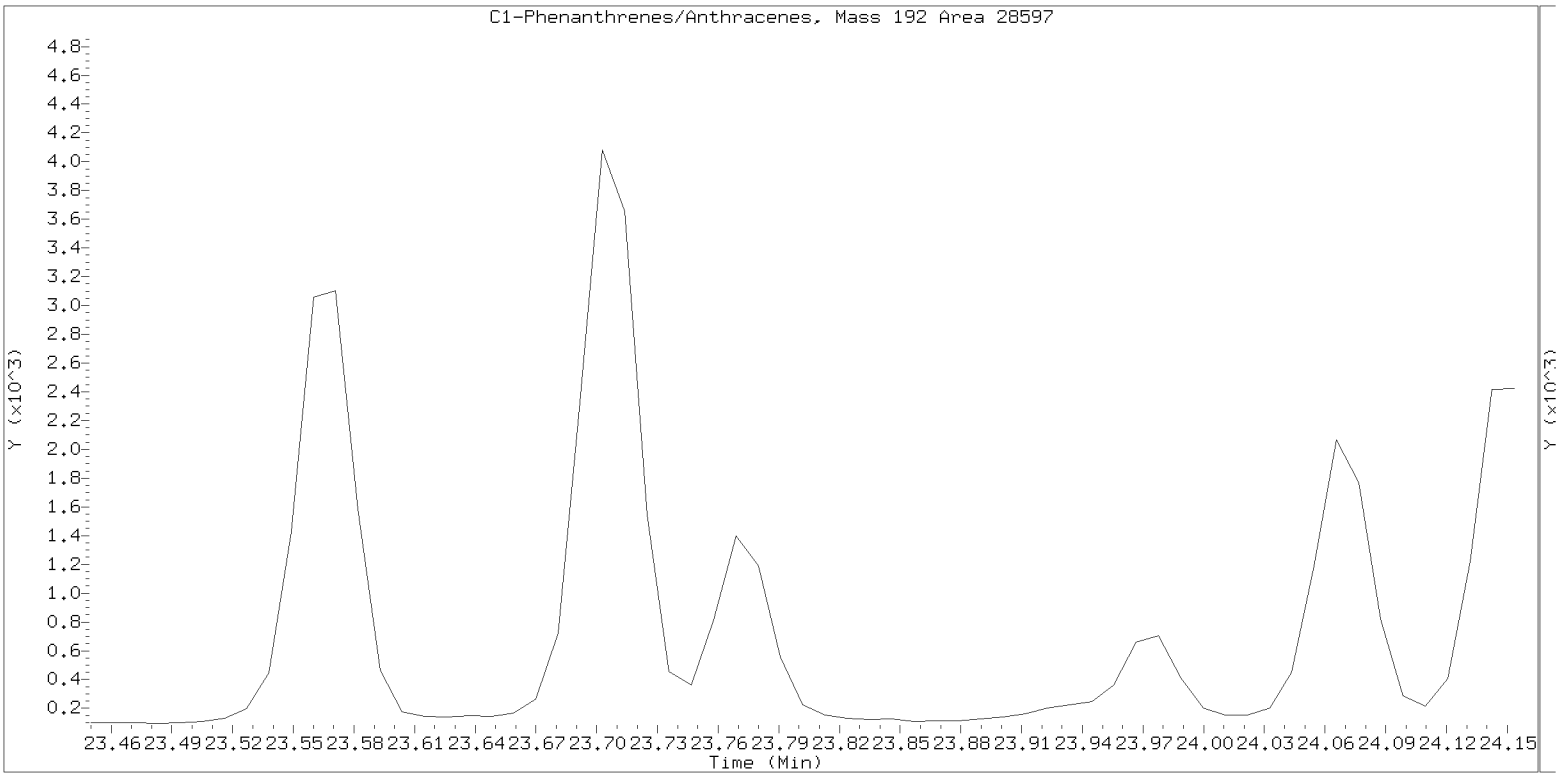

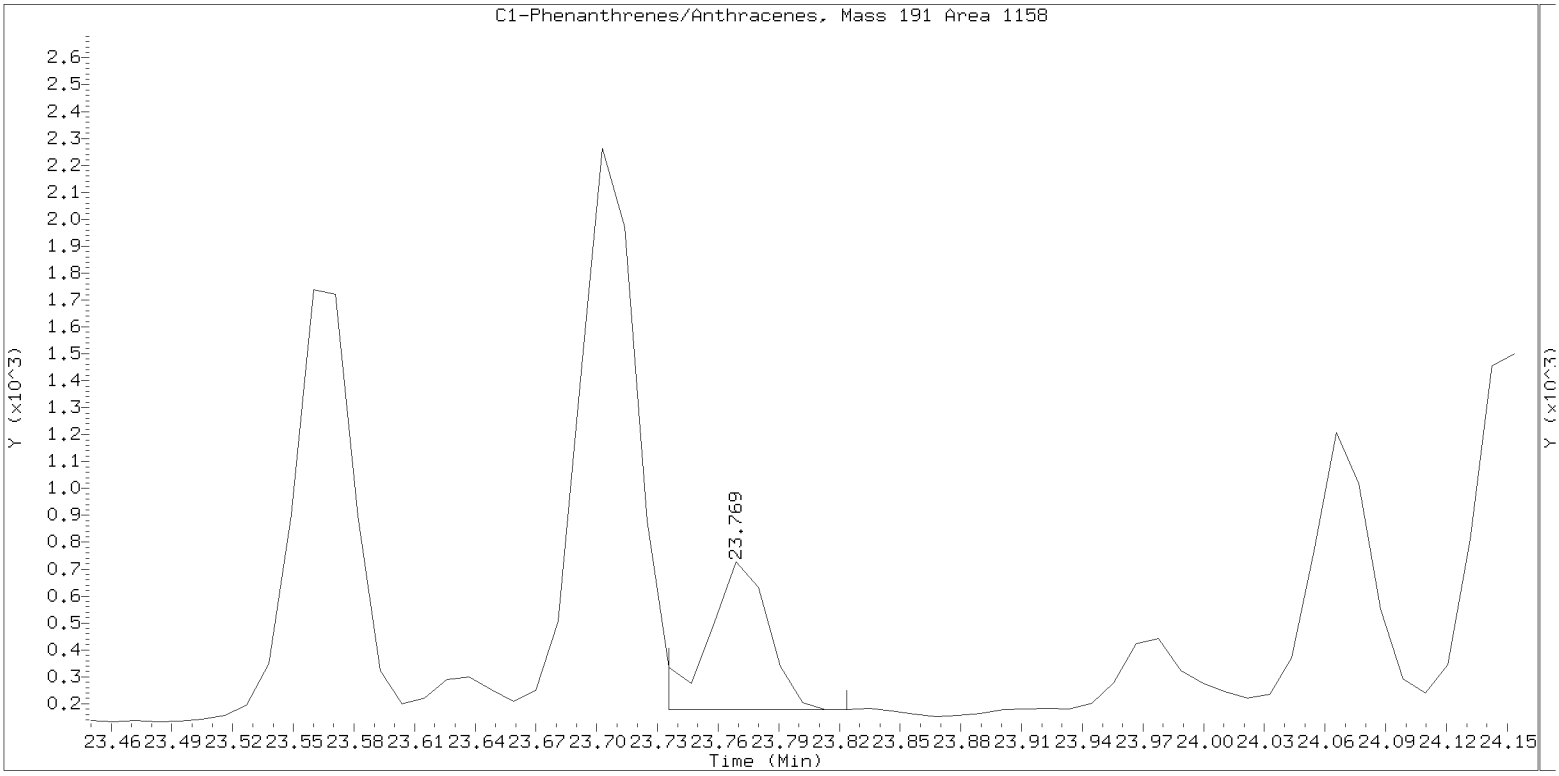

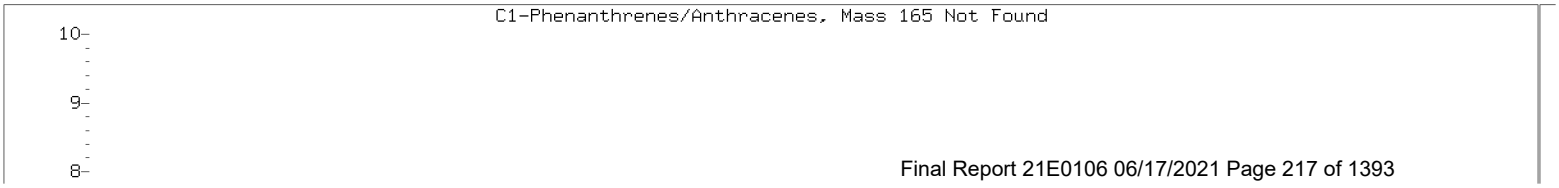

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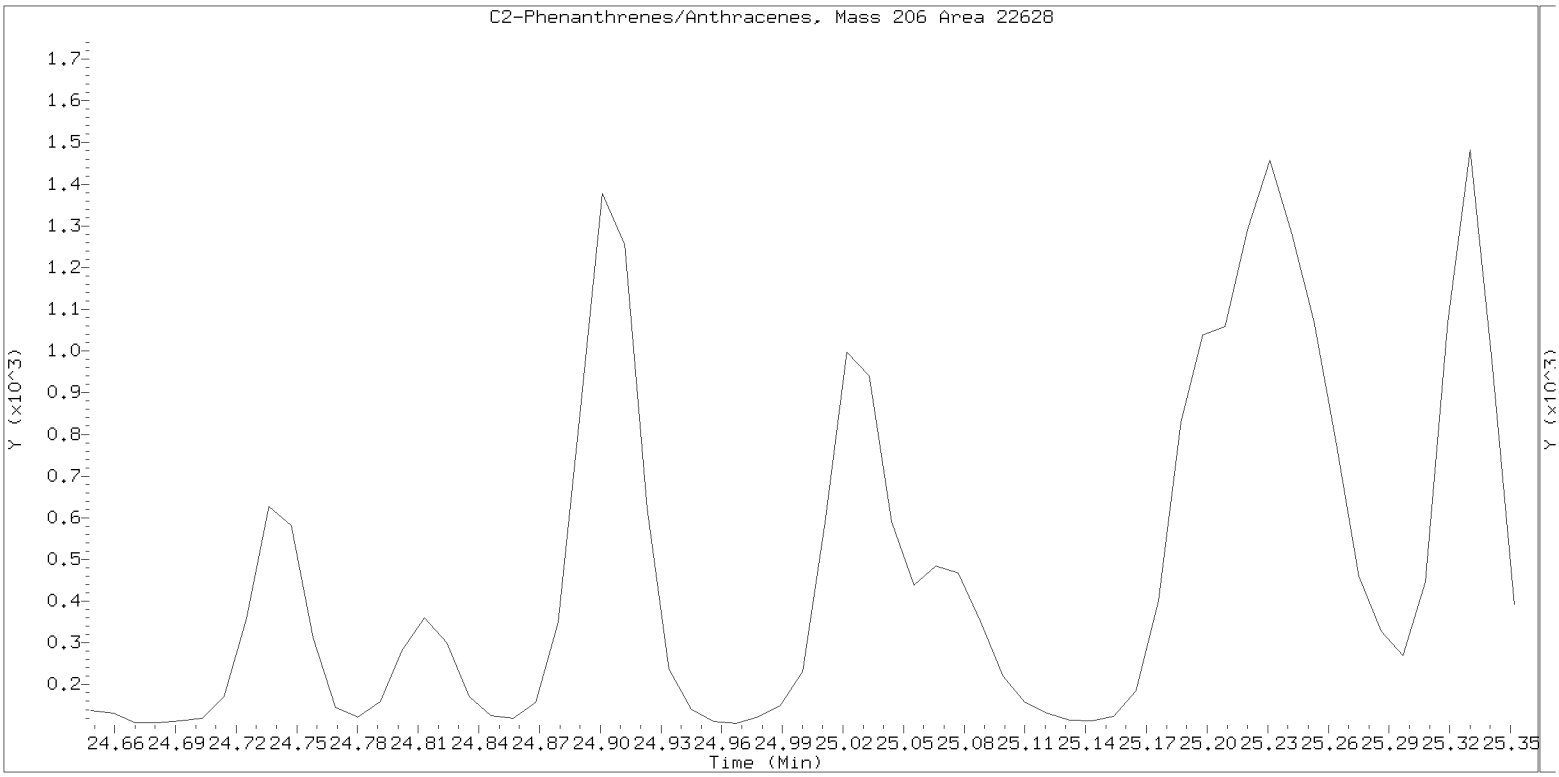

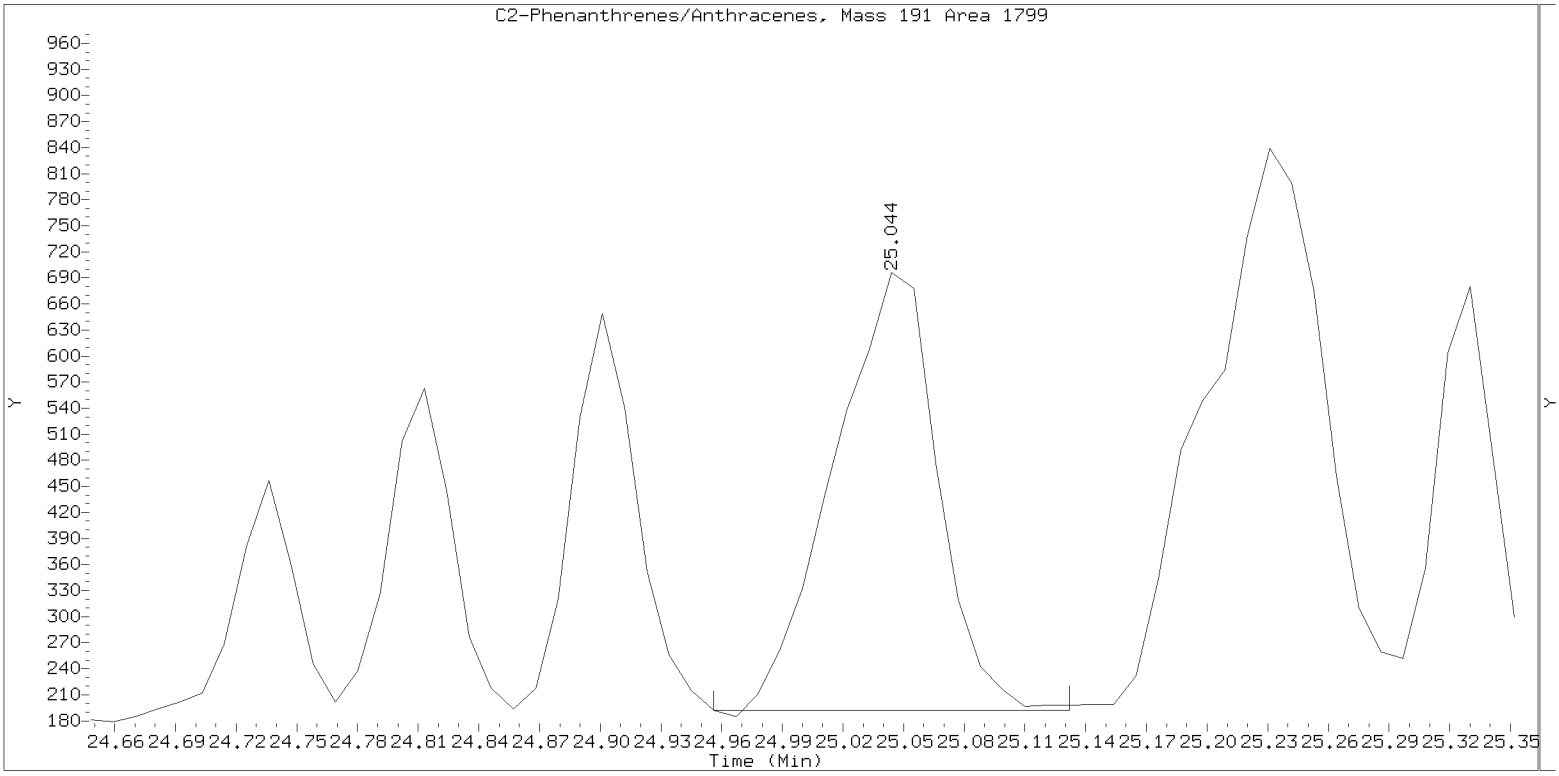

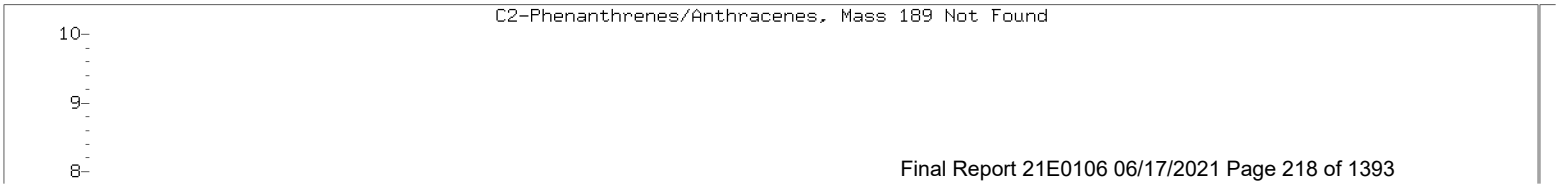

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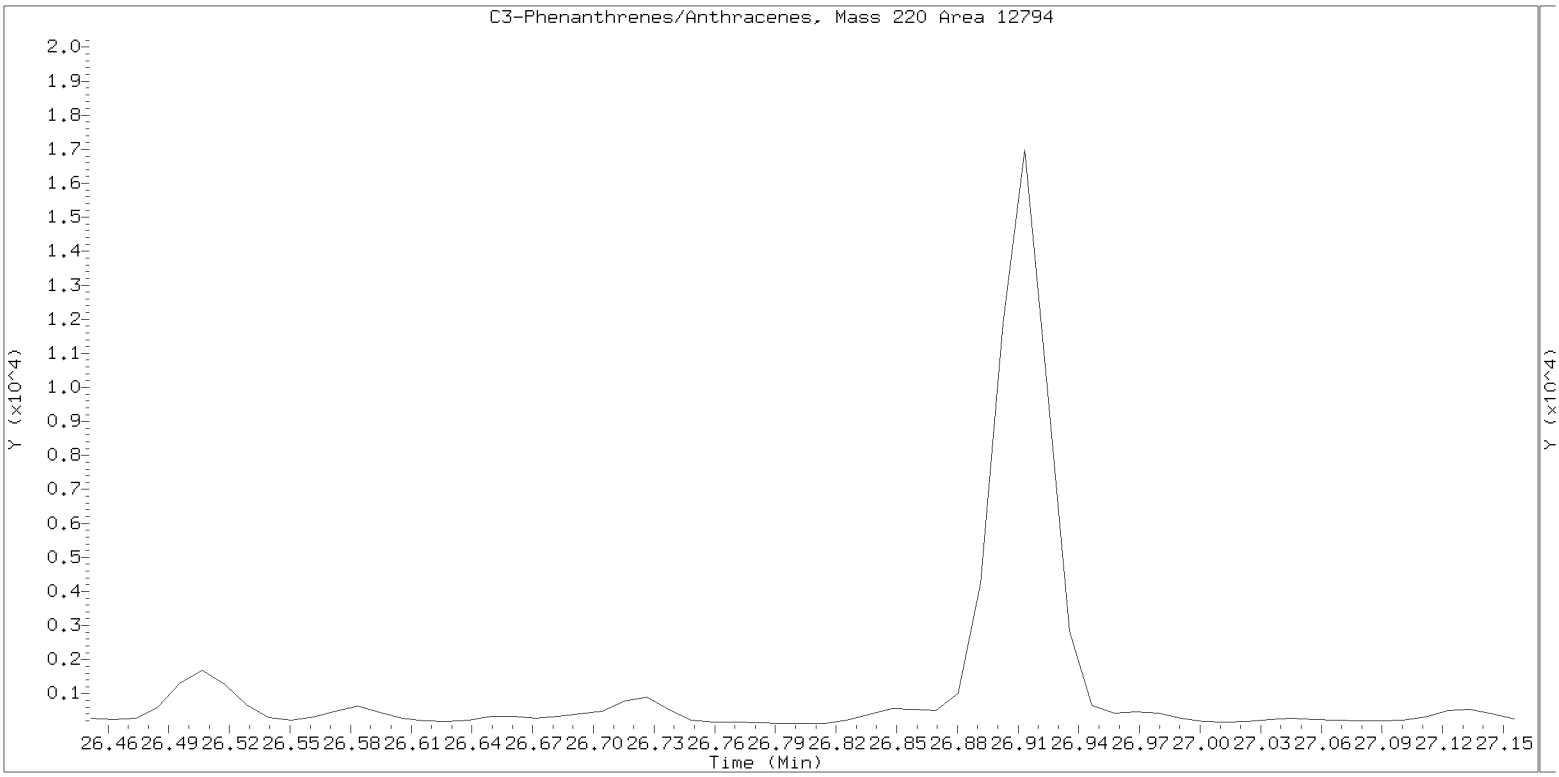

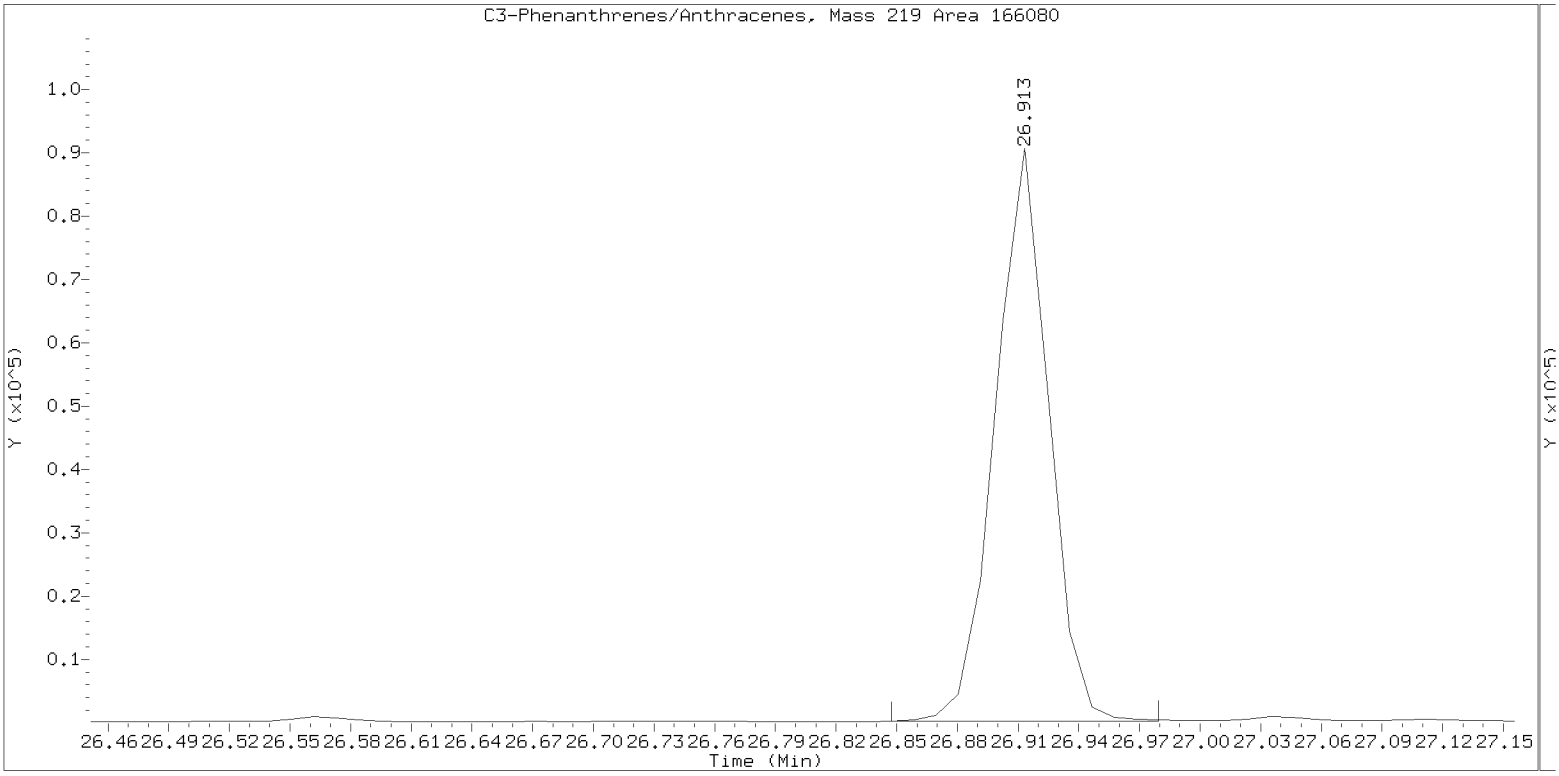

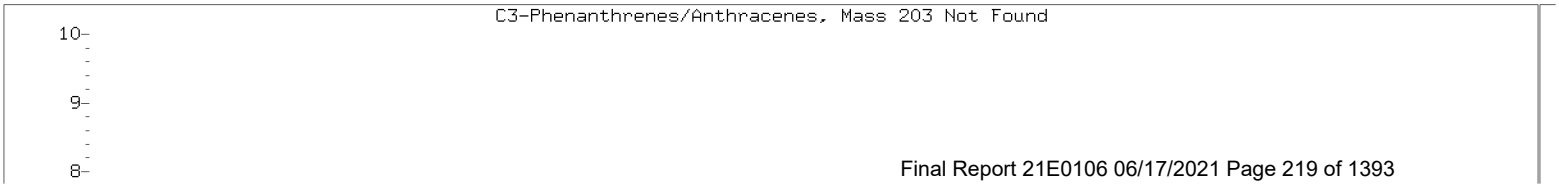

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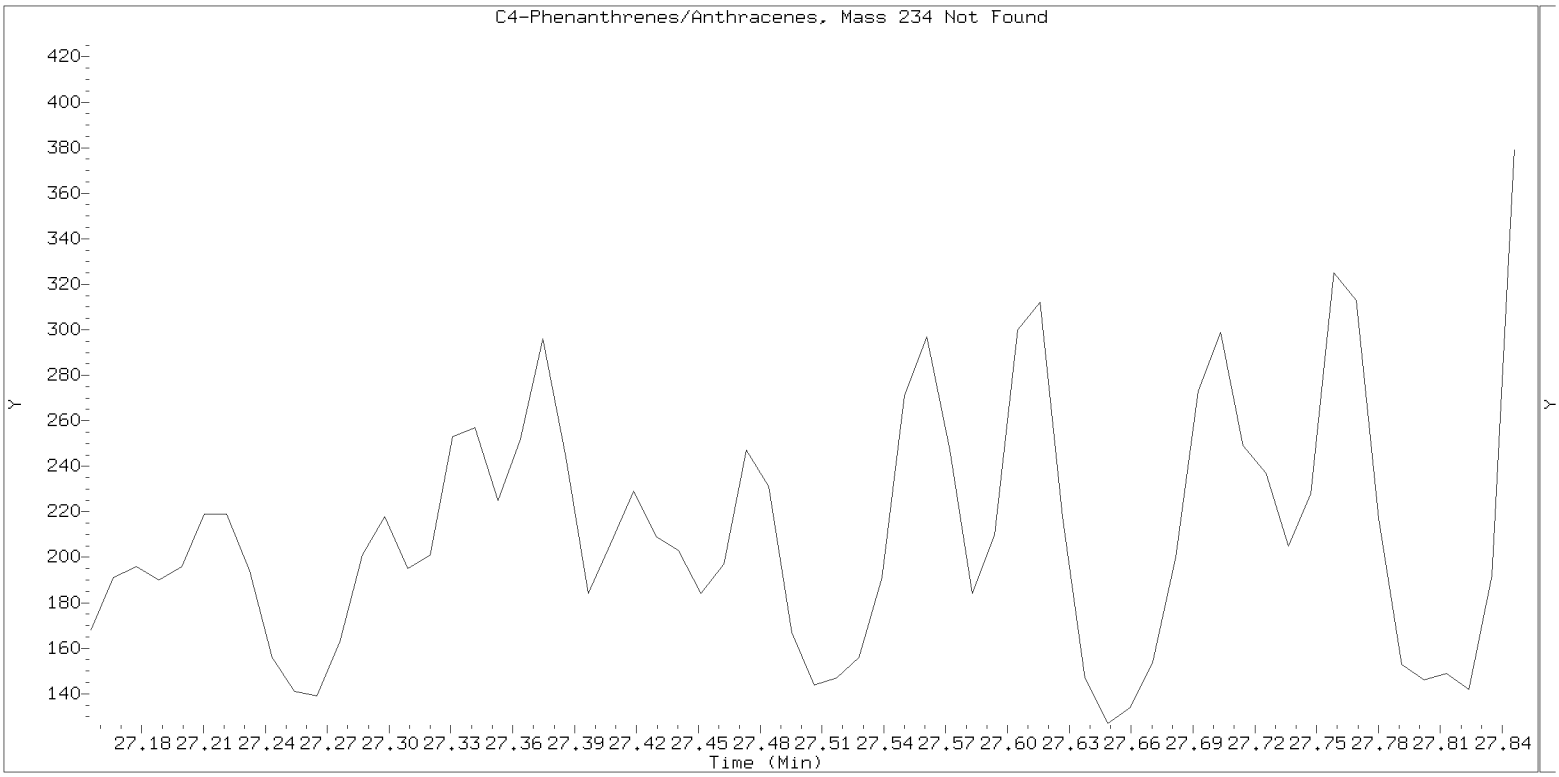

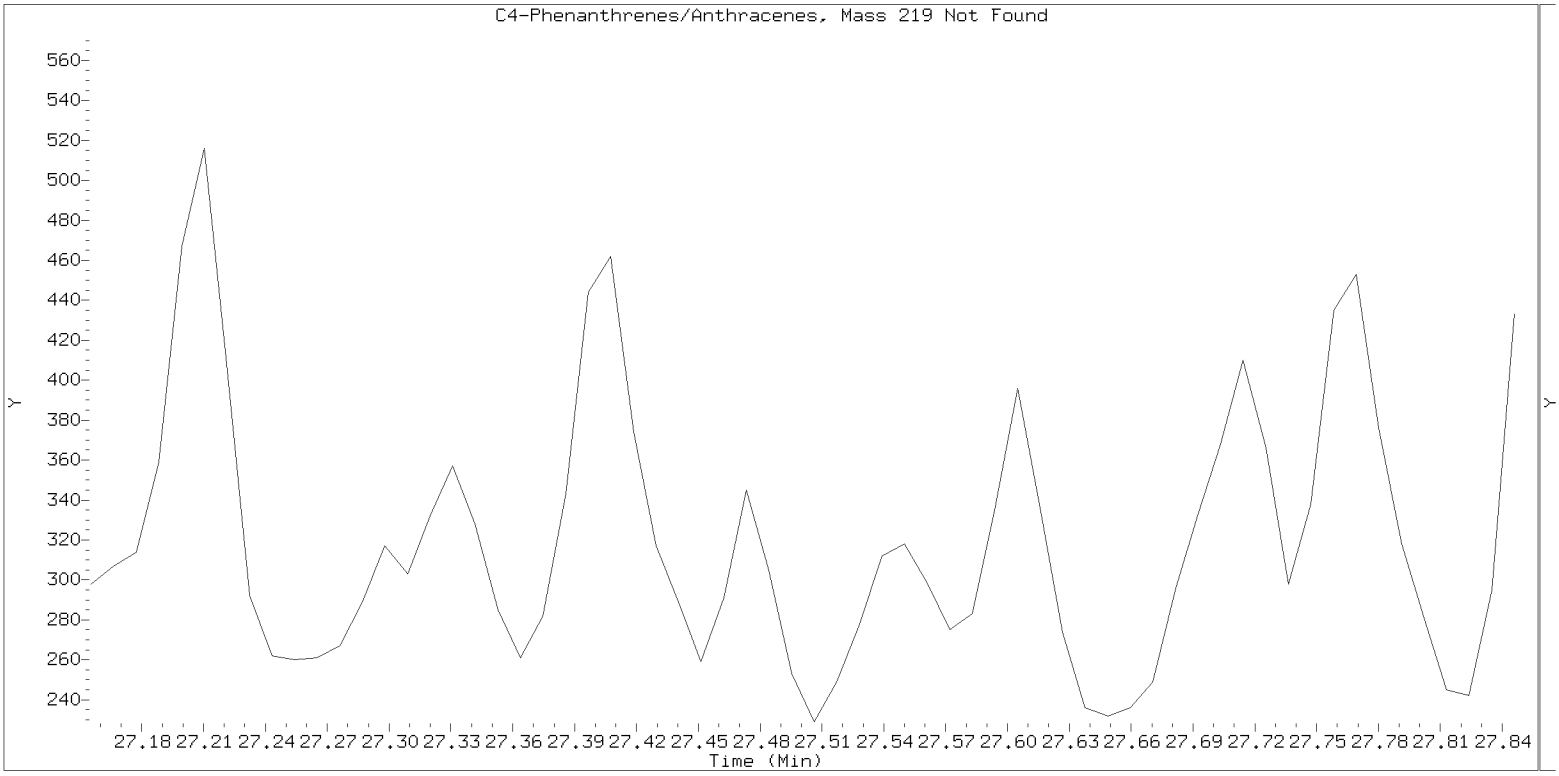

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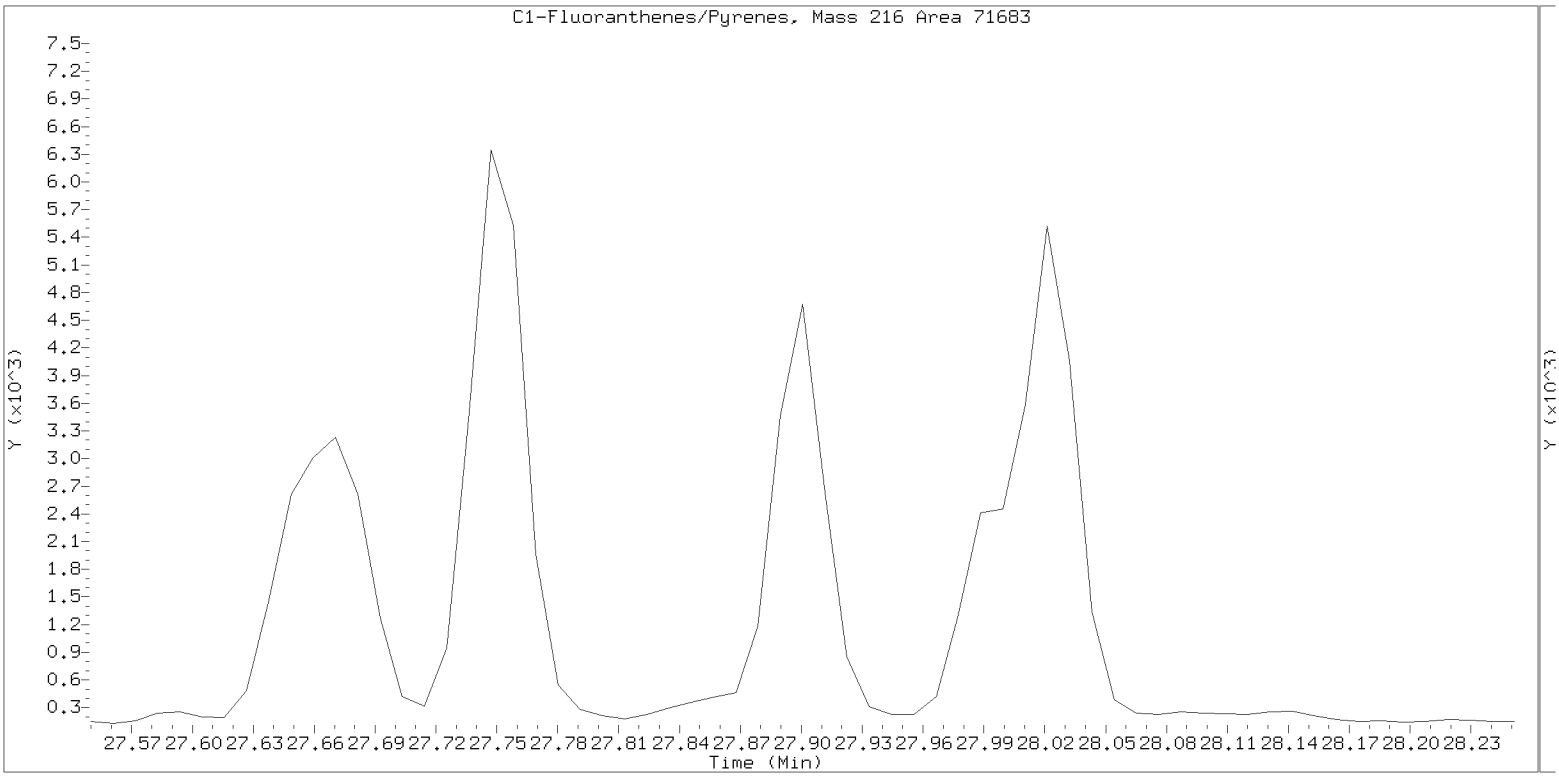

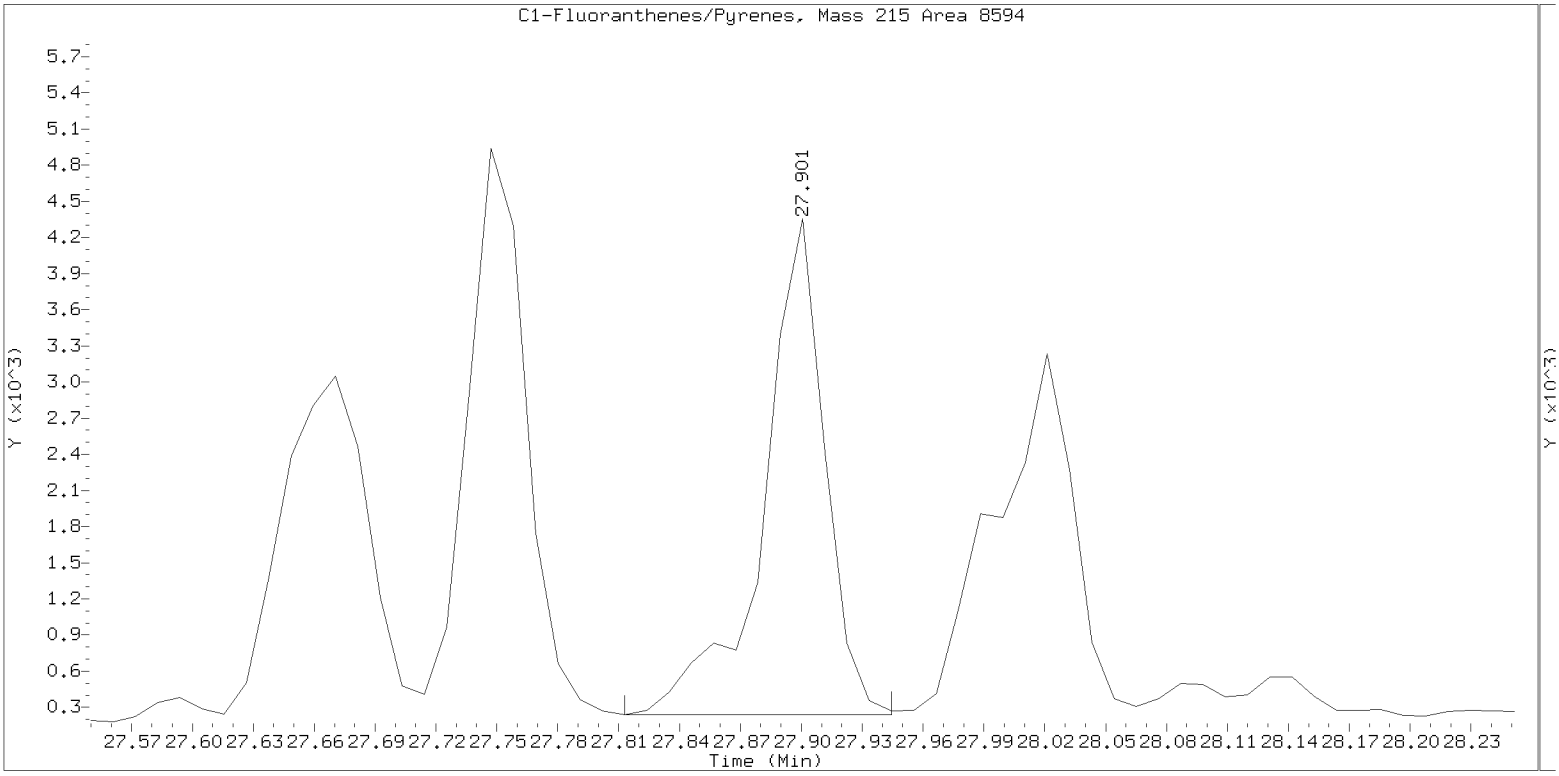

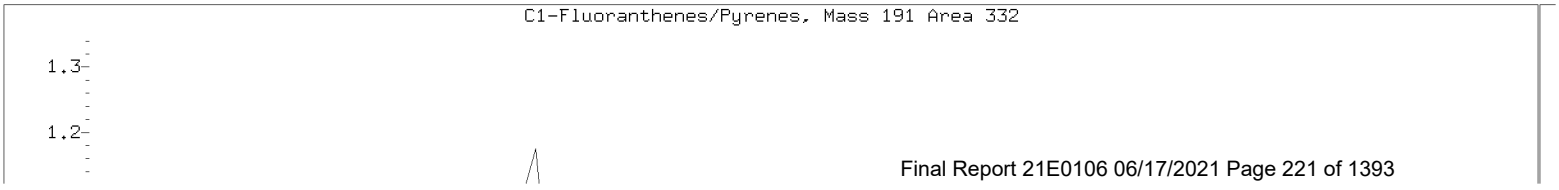

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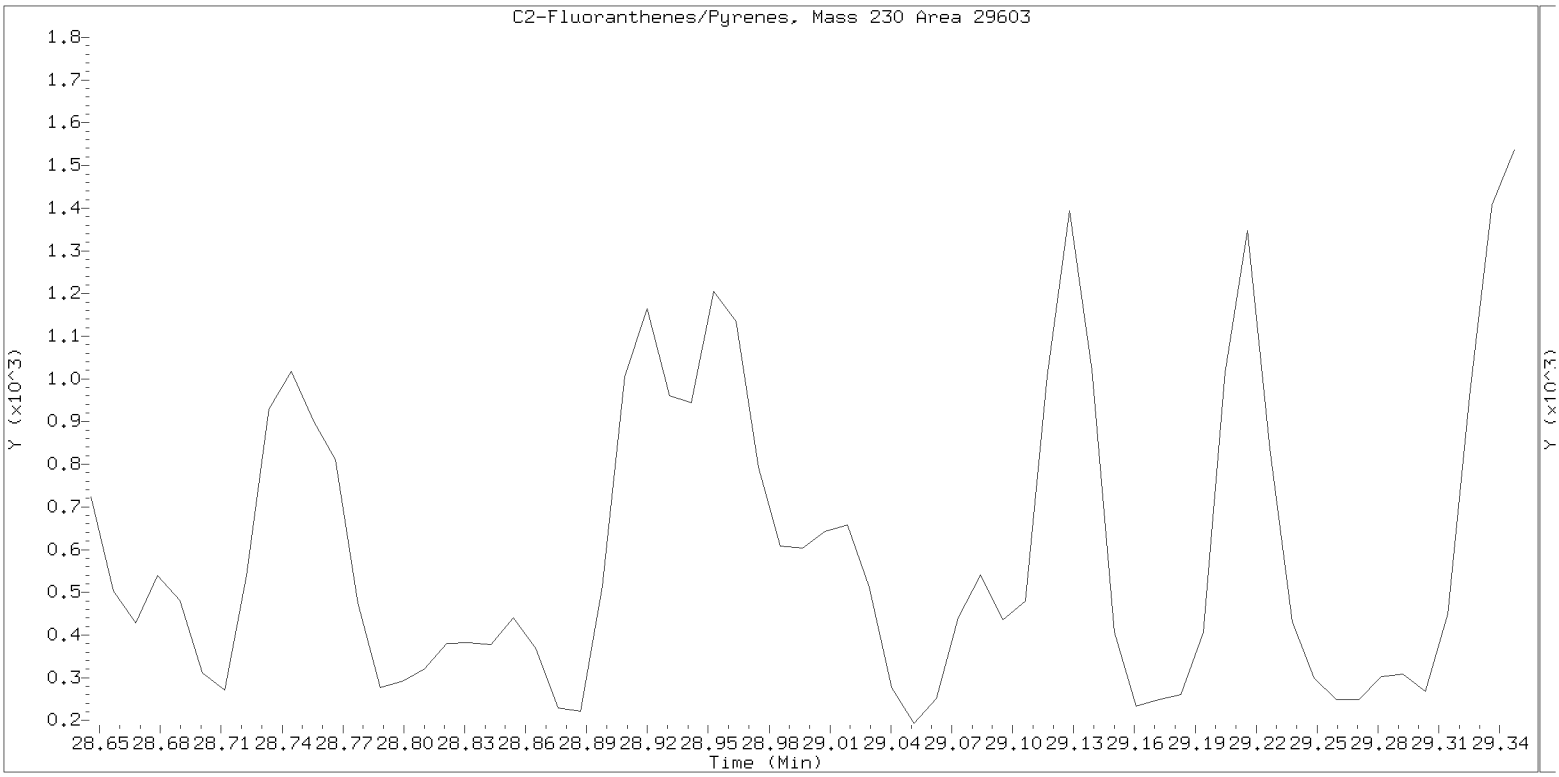

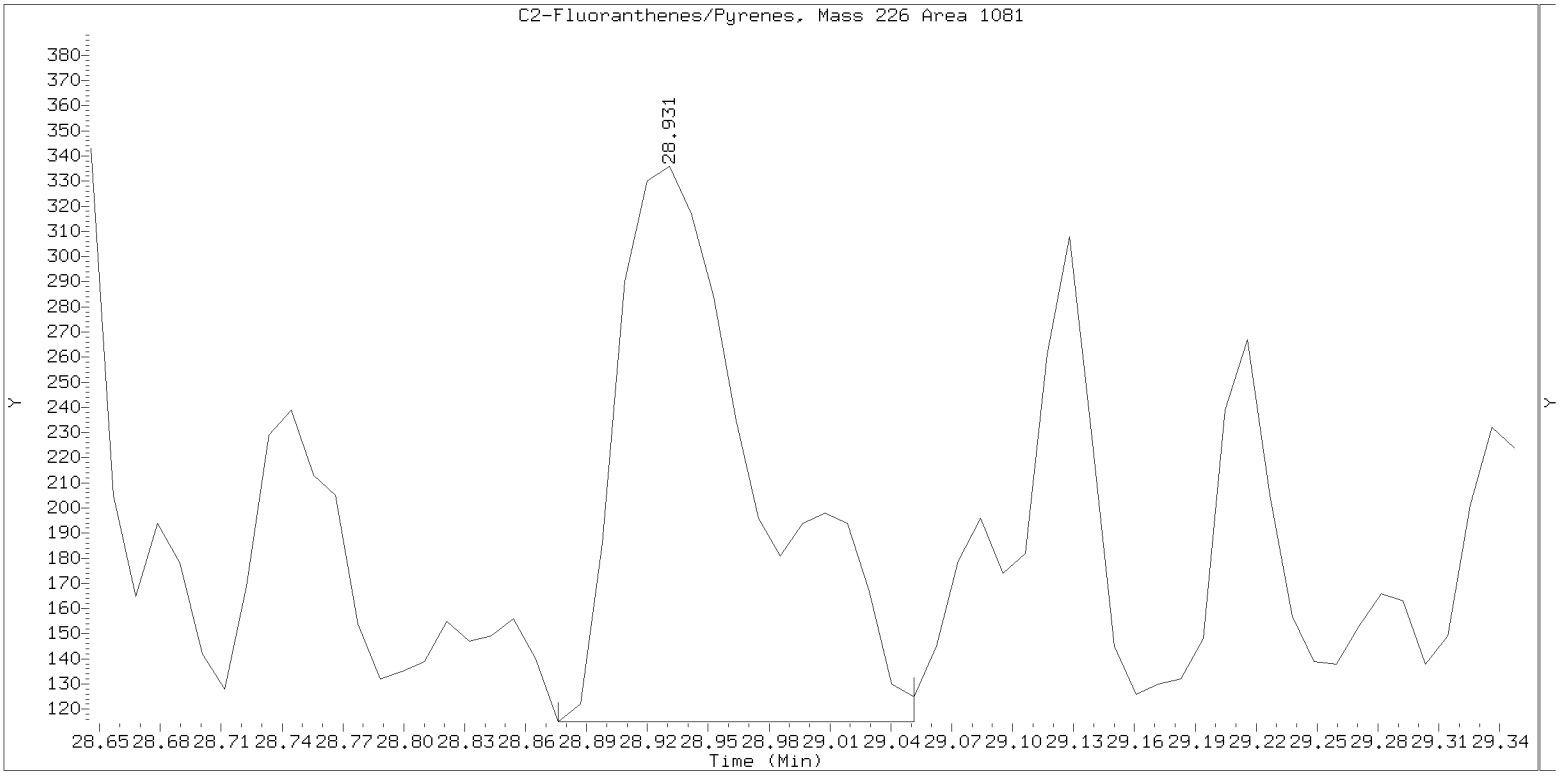

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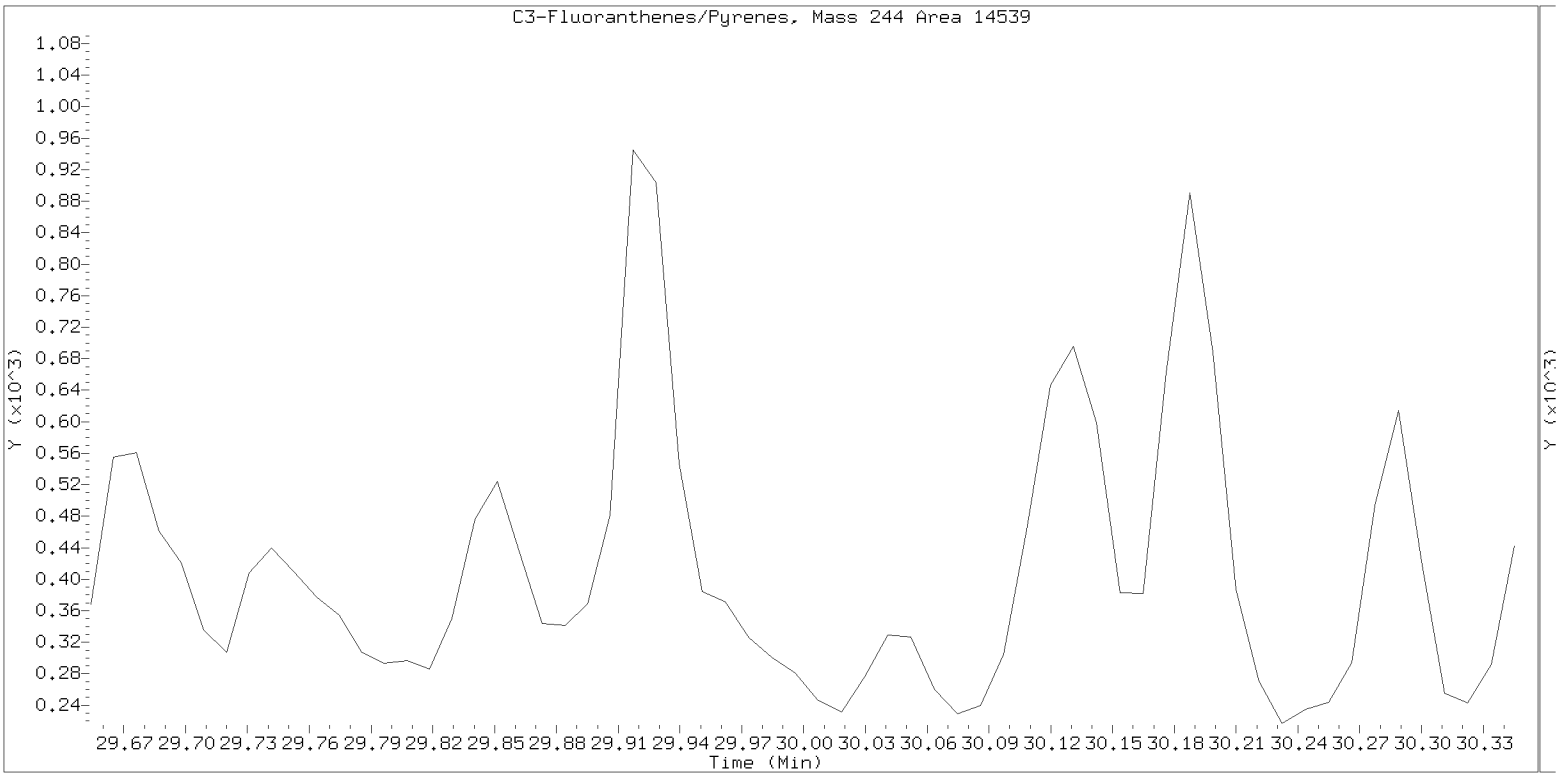

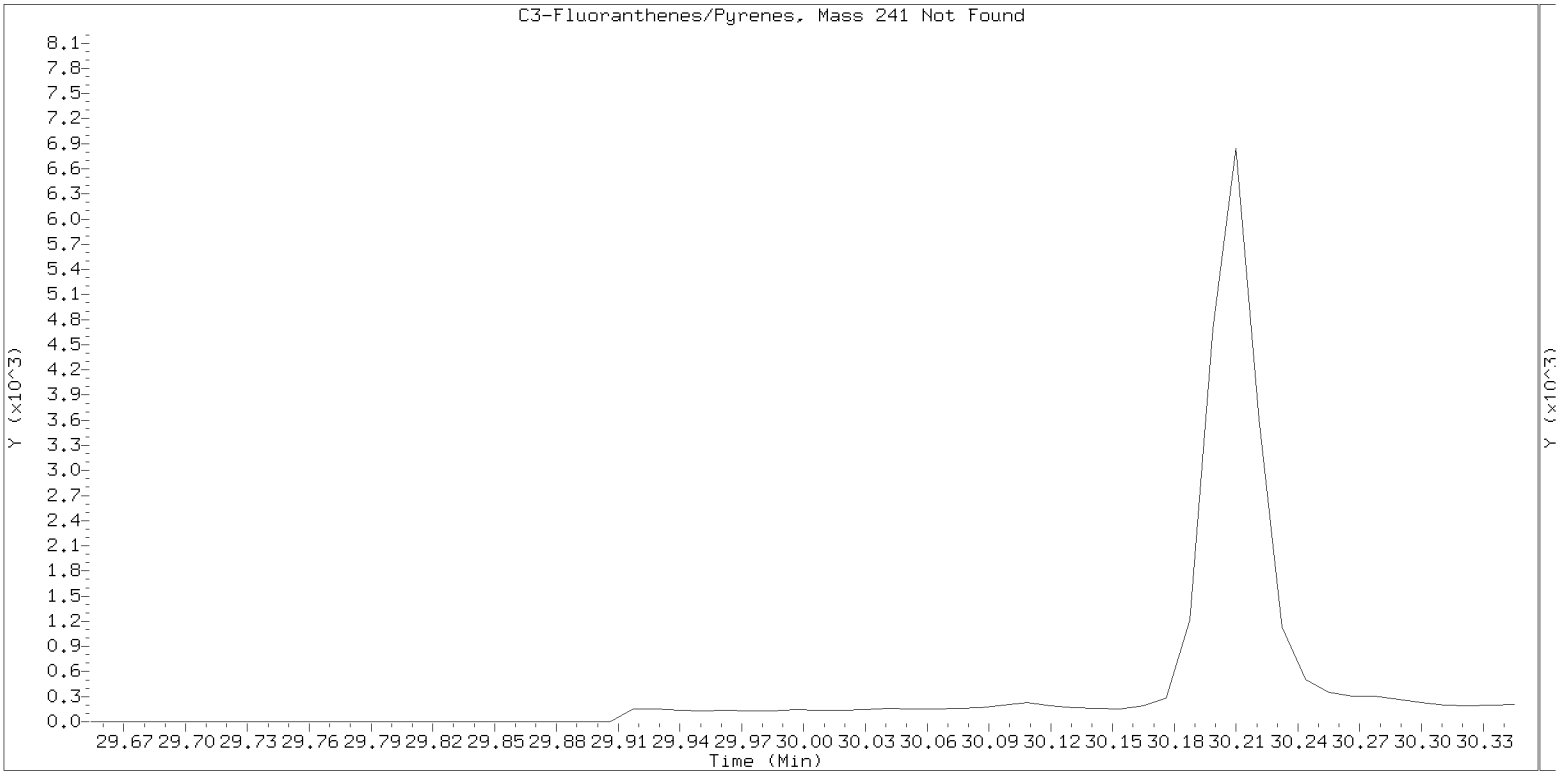

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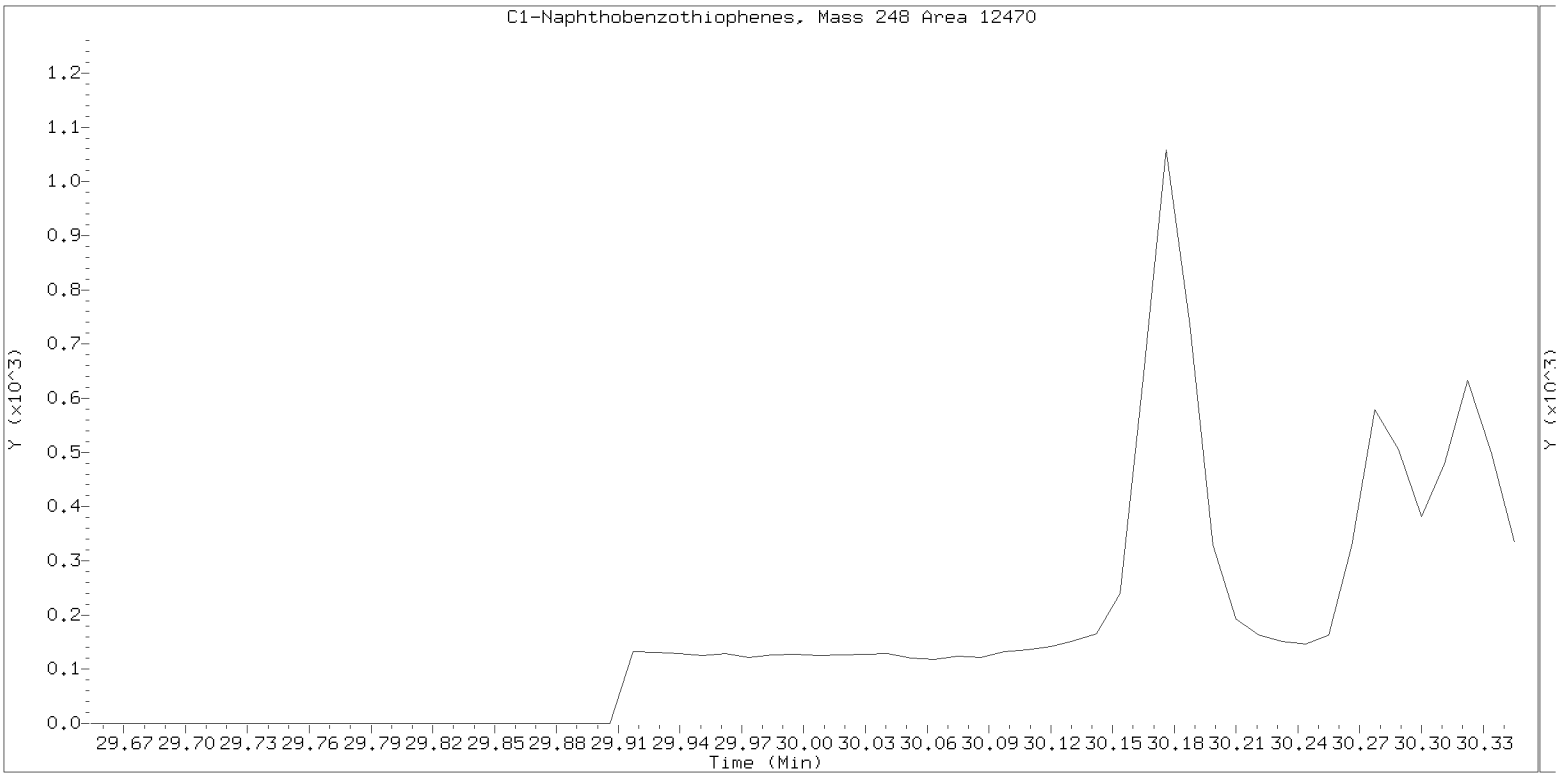

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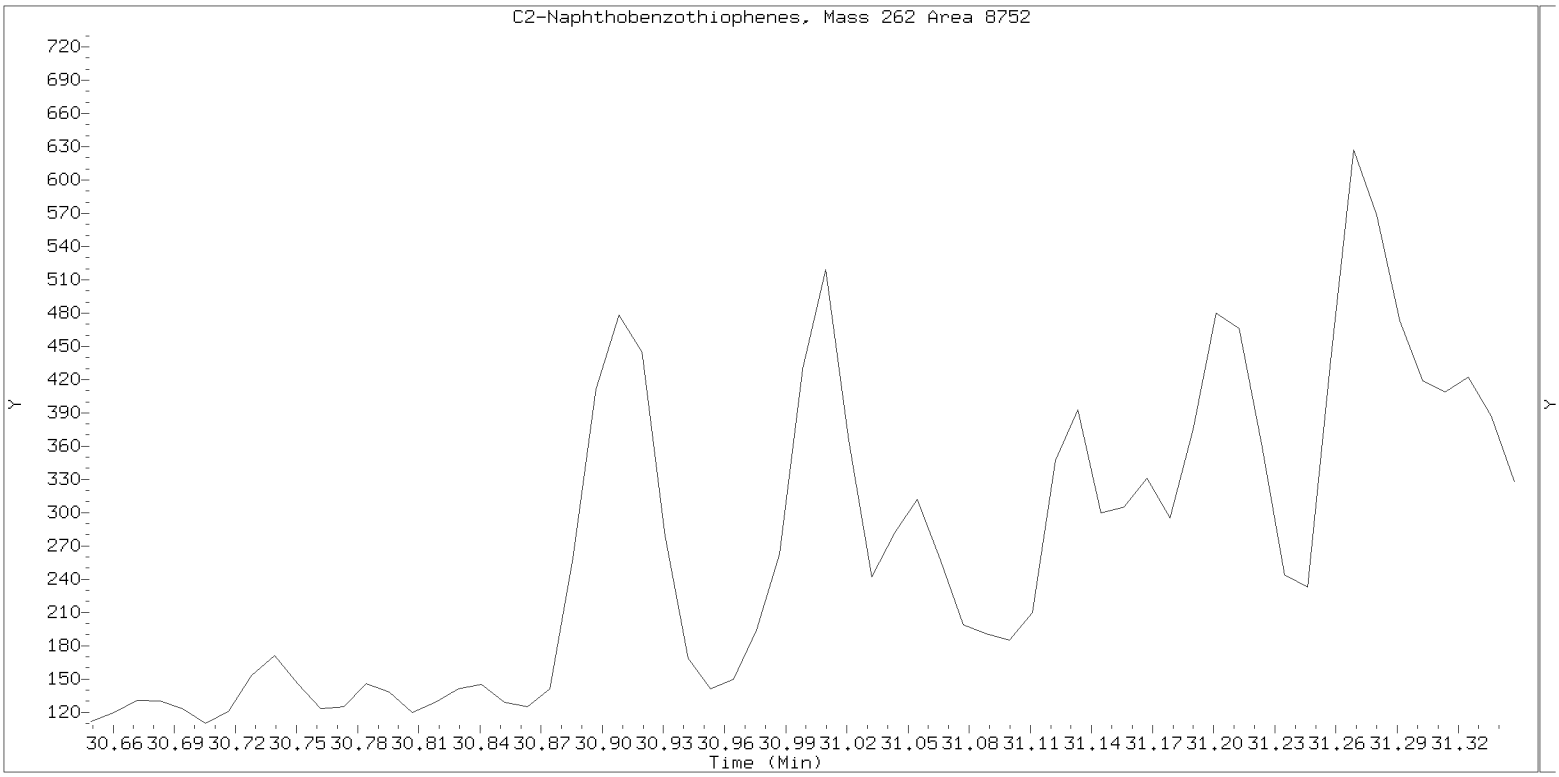

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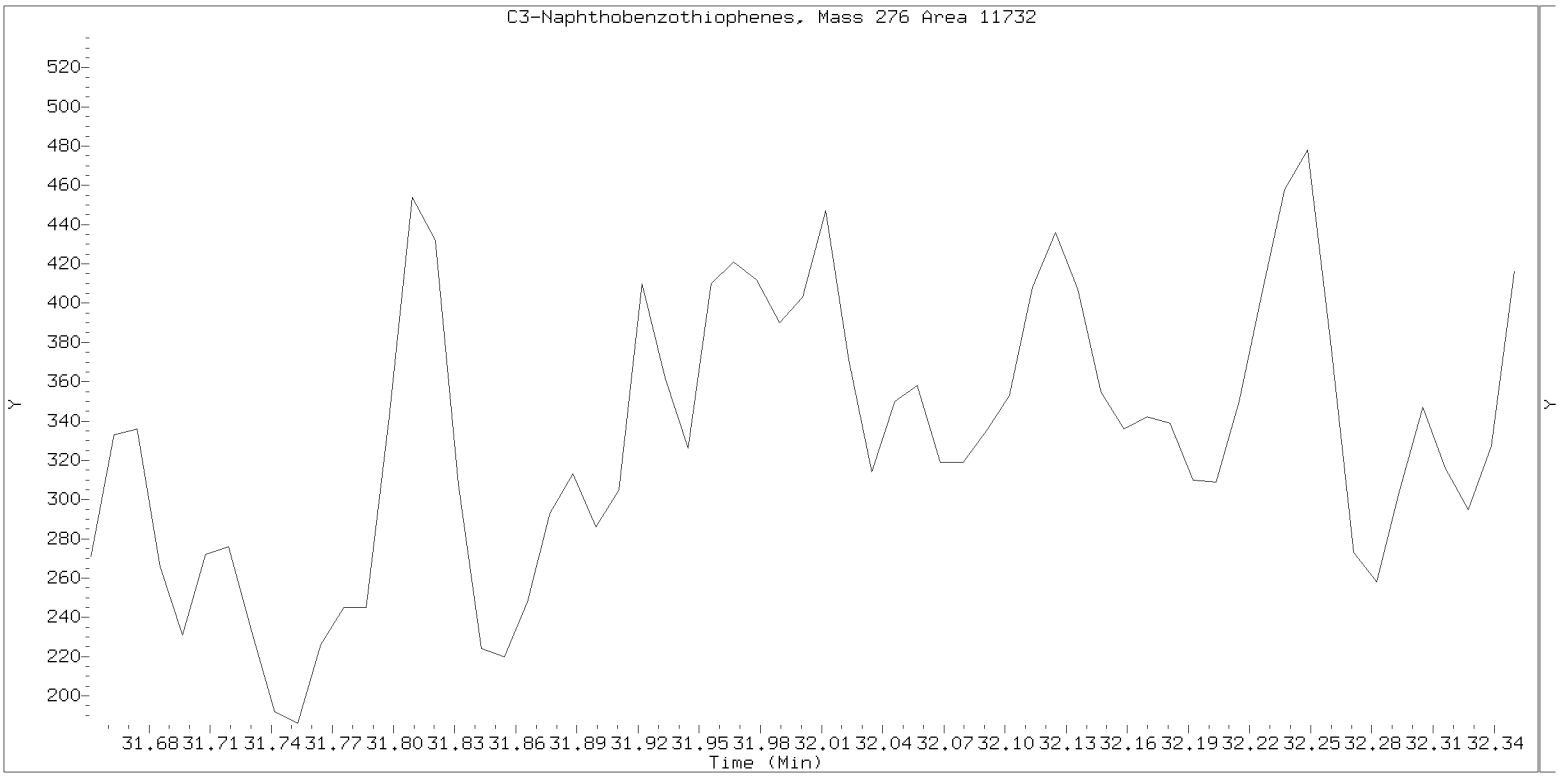

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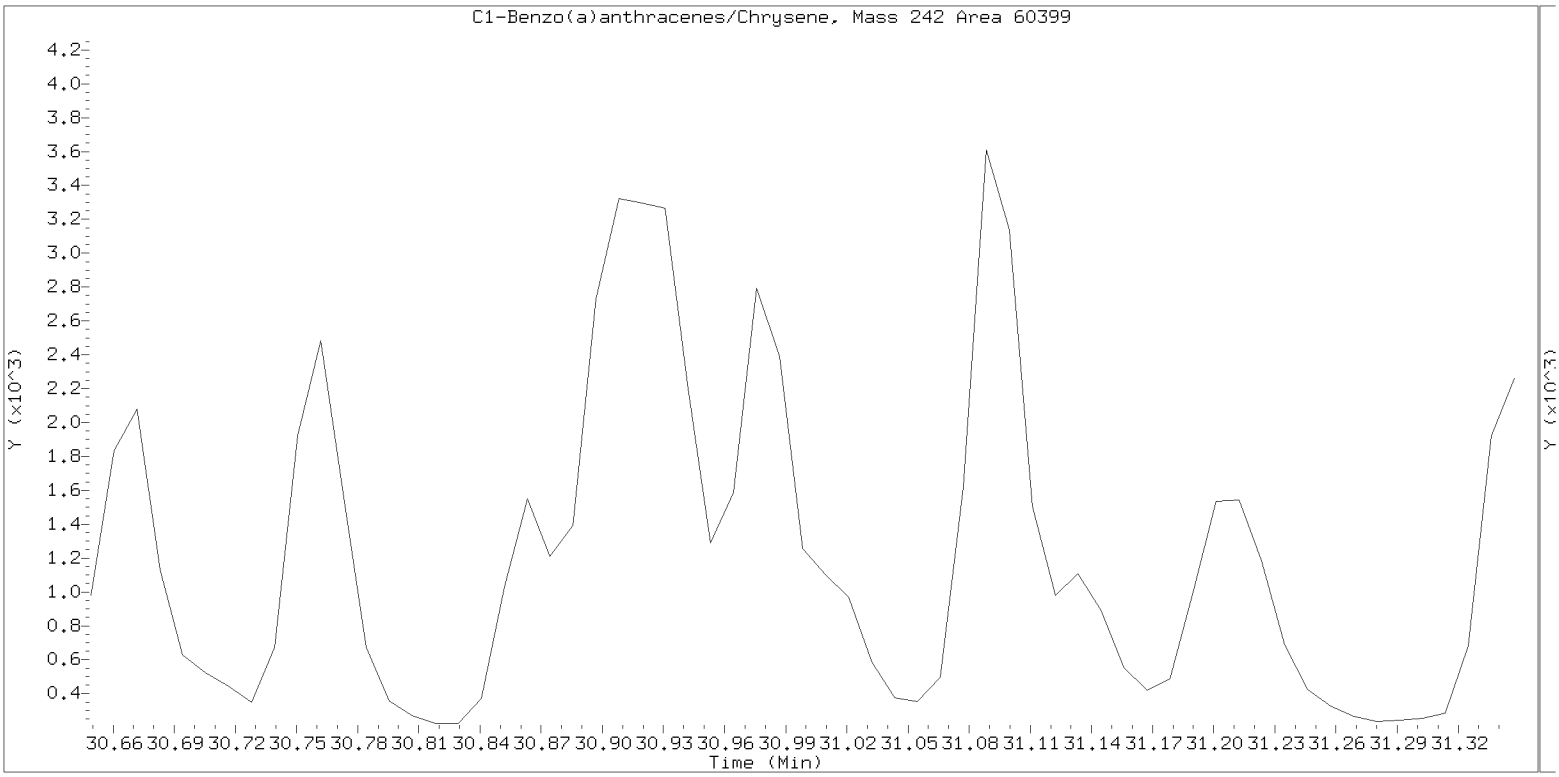

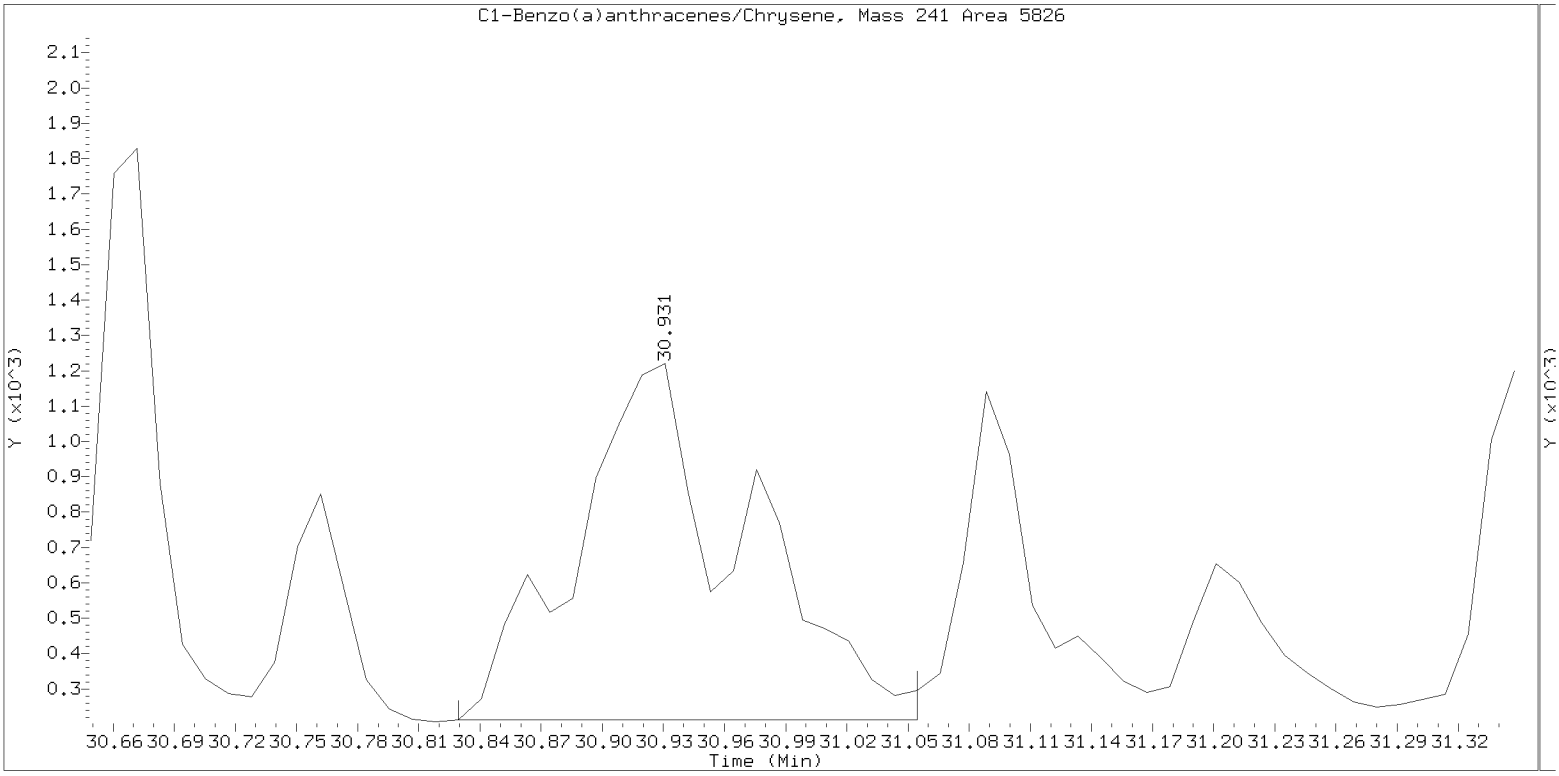

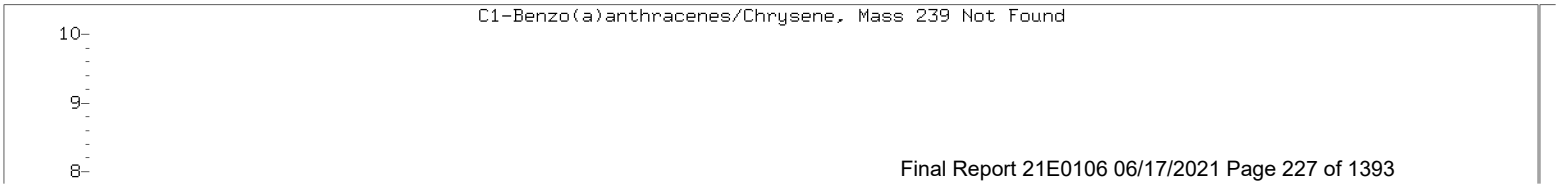

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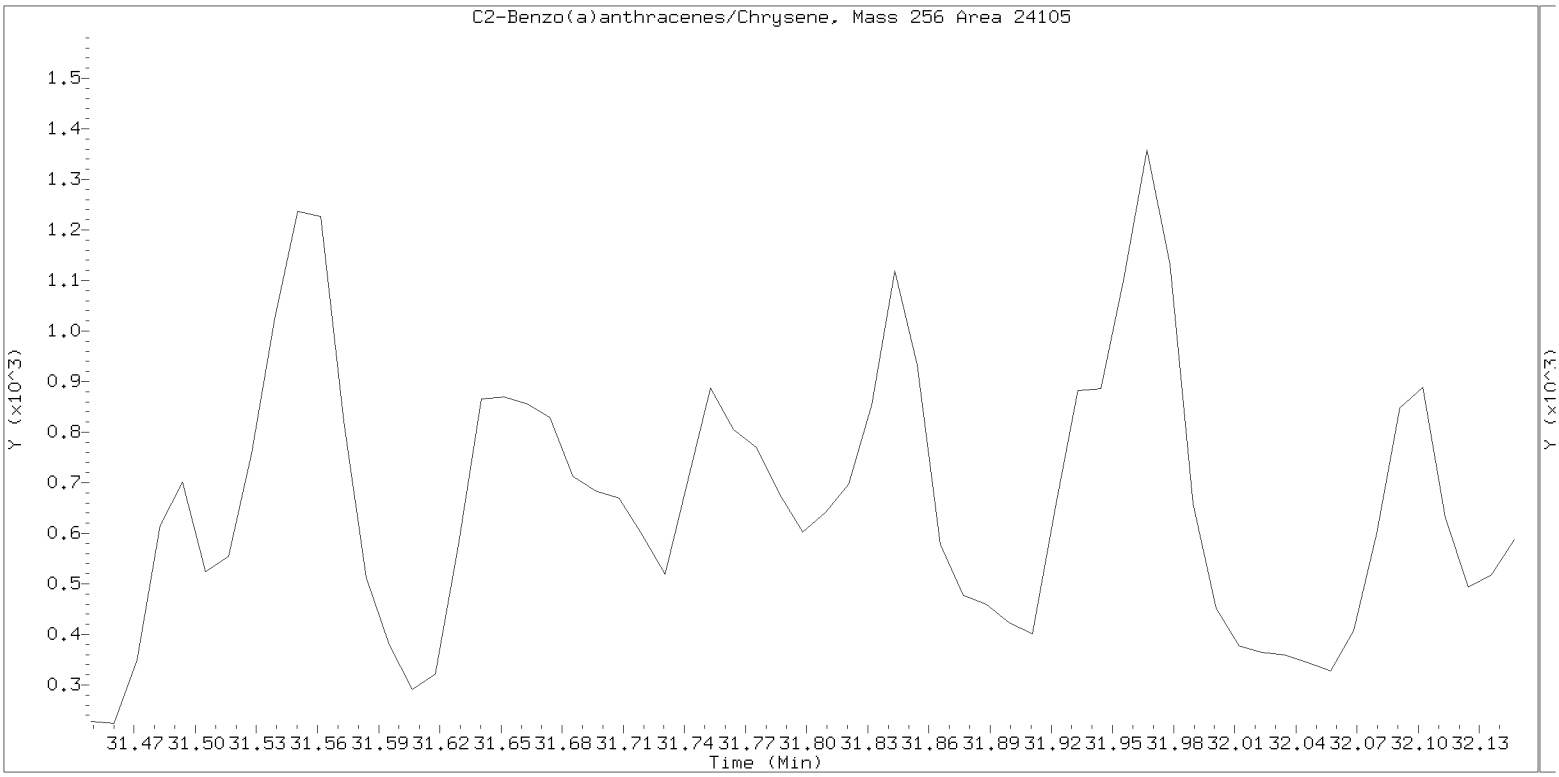

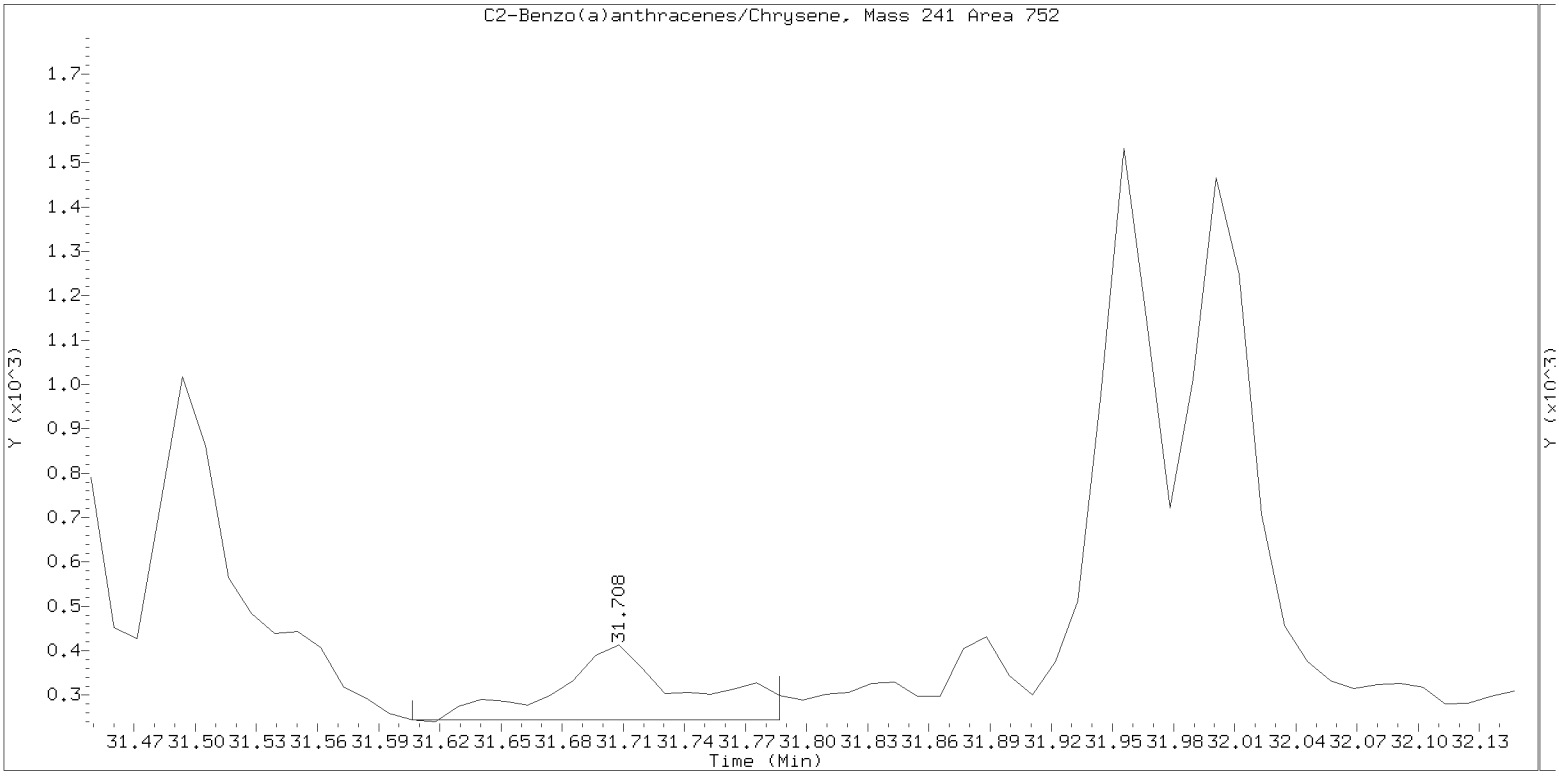

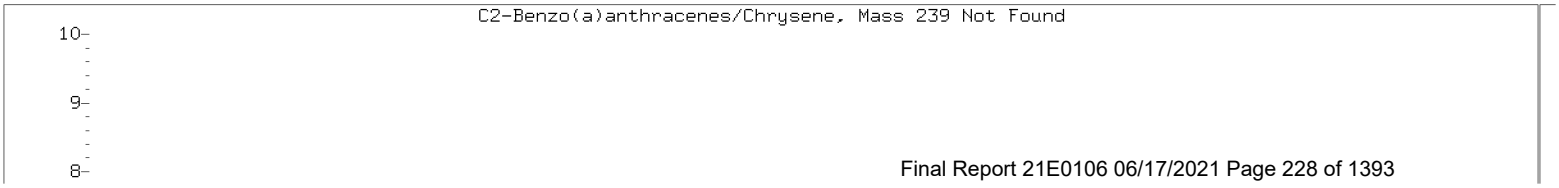

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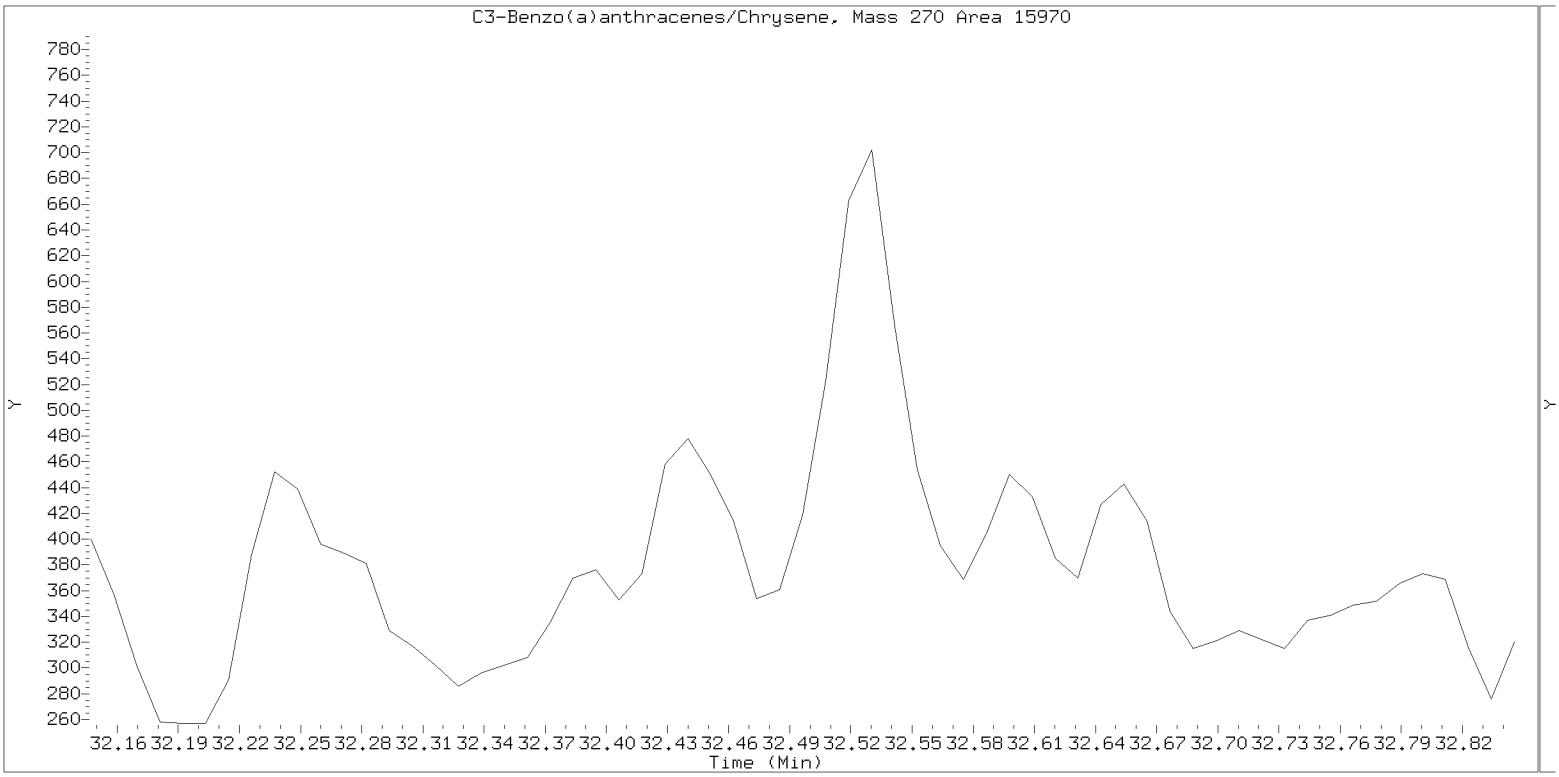
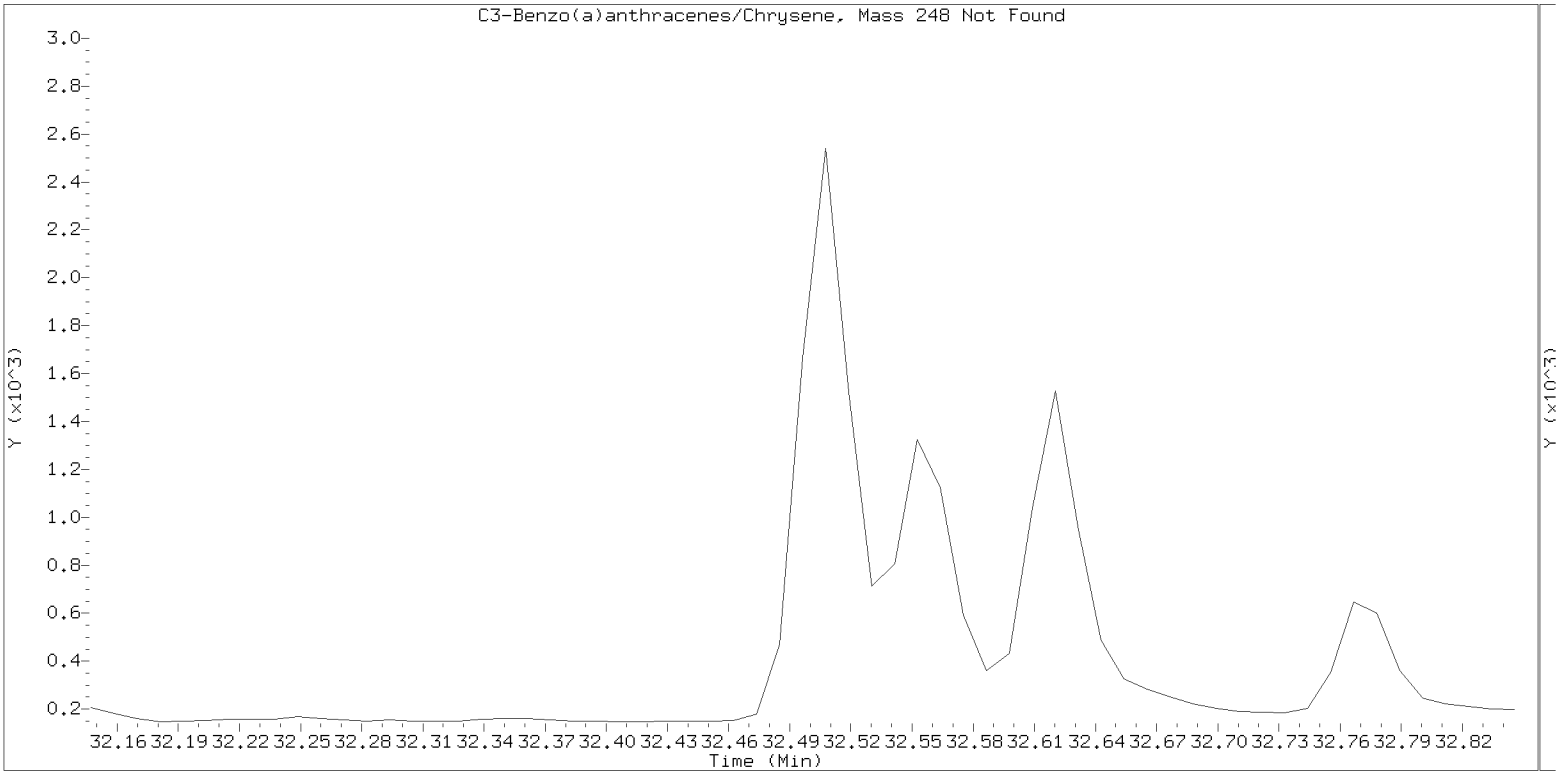
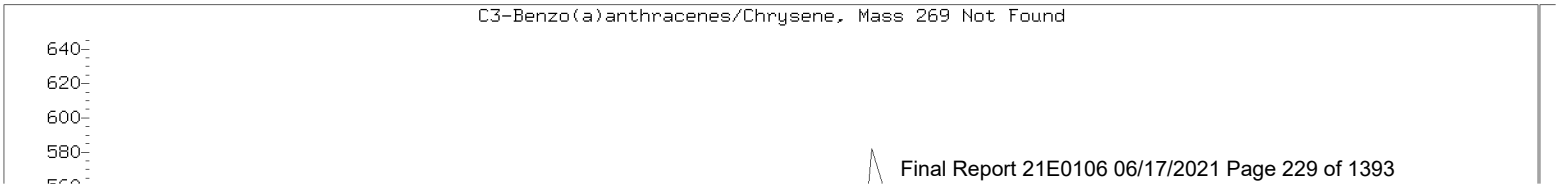
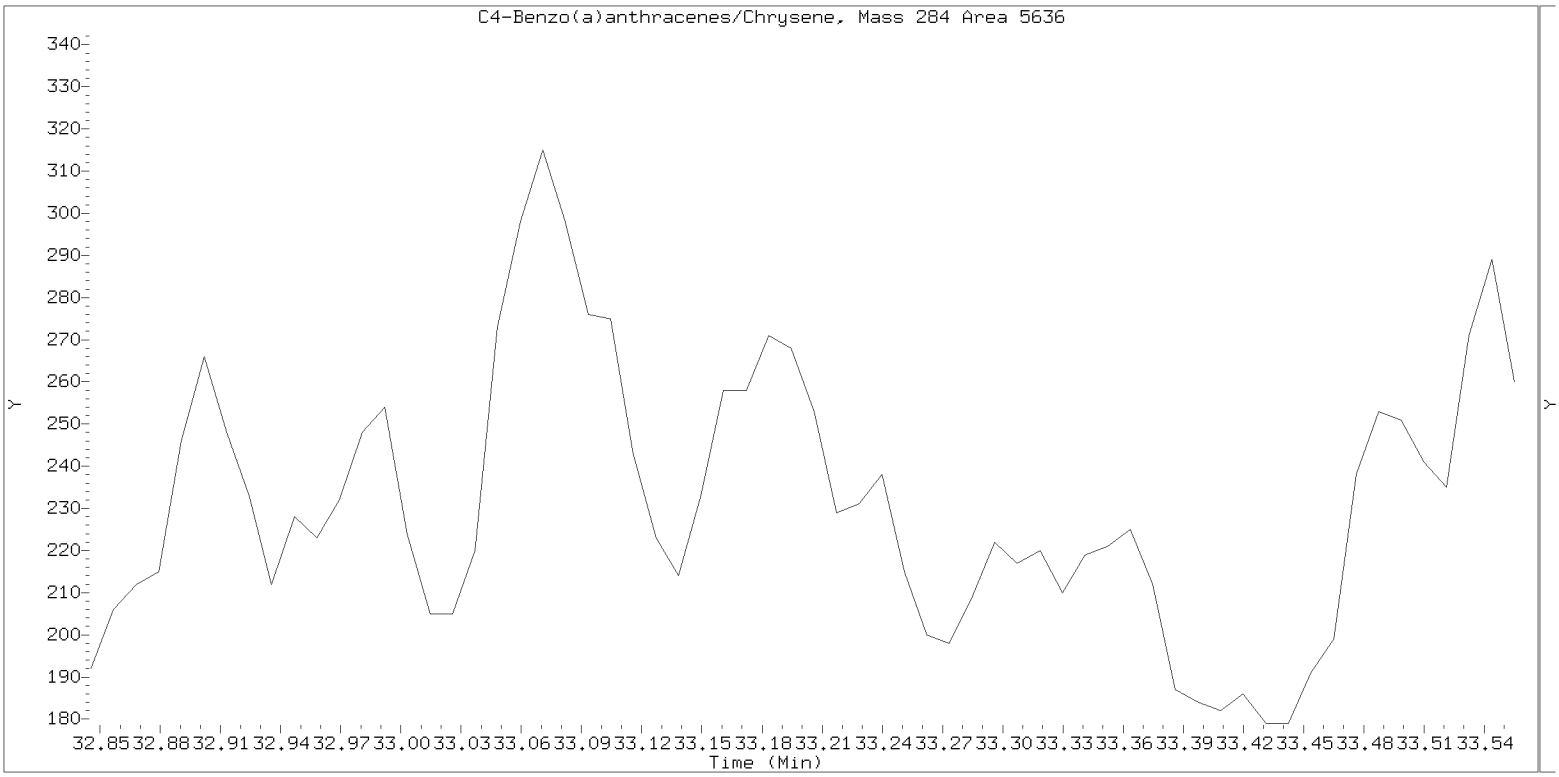


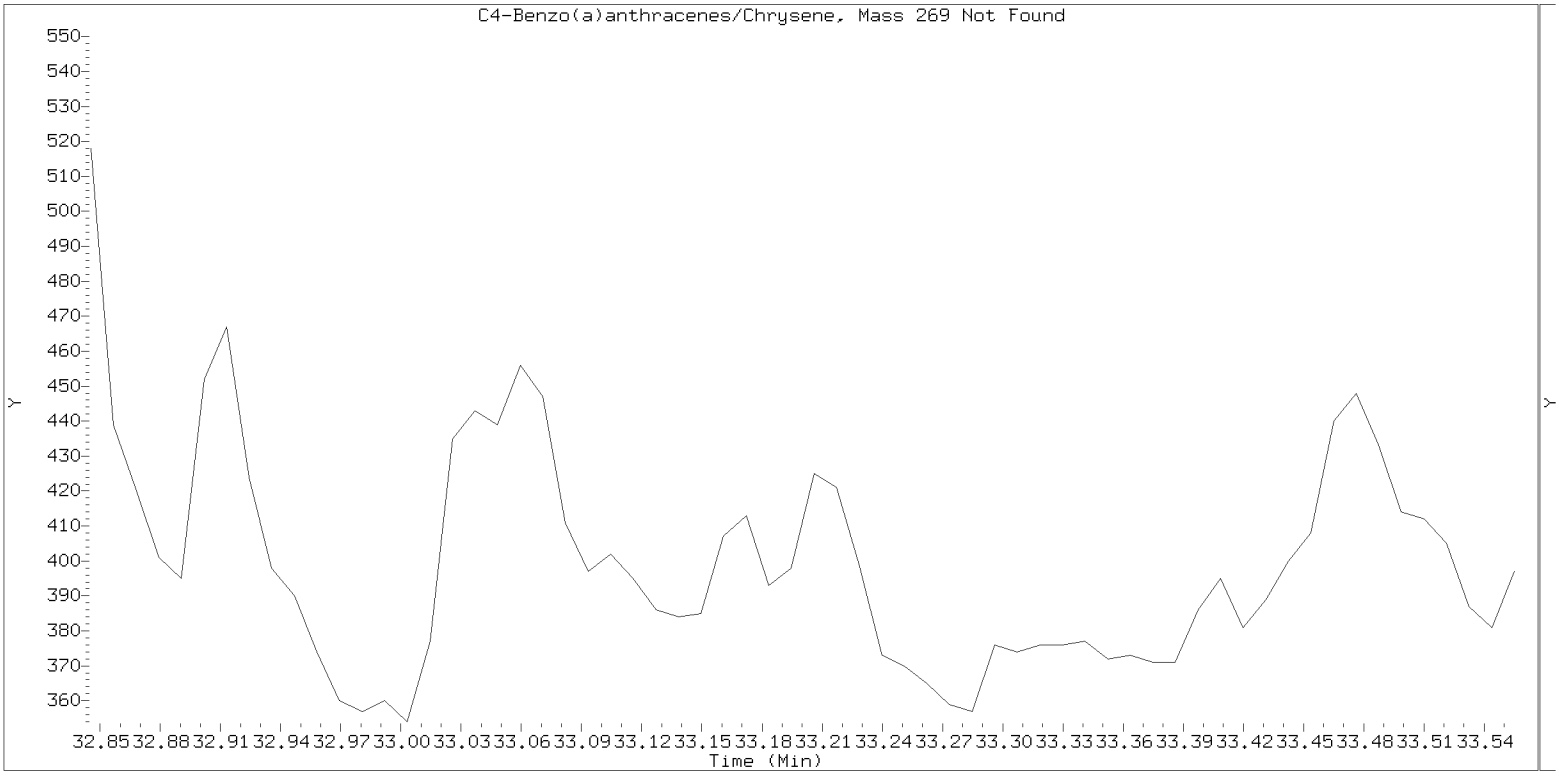


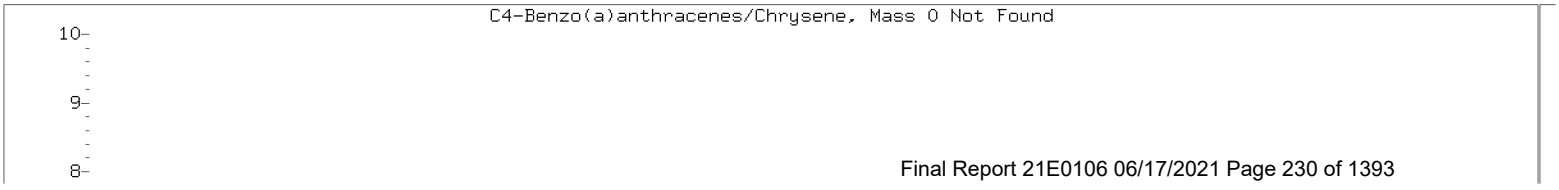


SIM ALKYL PNA RANGE ION WINDOWS - NT1421060711S.D

Lab ID: 21E0106-02
nt14.i, SIM.b\ALKYLRANGES.m, 07-JUN-2021 20:30







SIM ALKYL PNA RANGE ION WINDOWS - NT1421060711S.D

Lab ID: 21E0106-02
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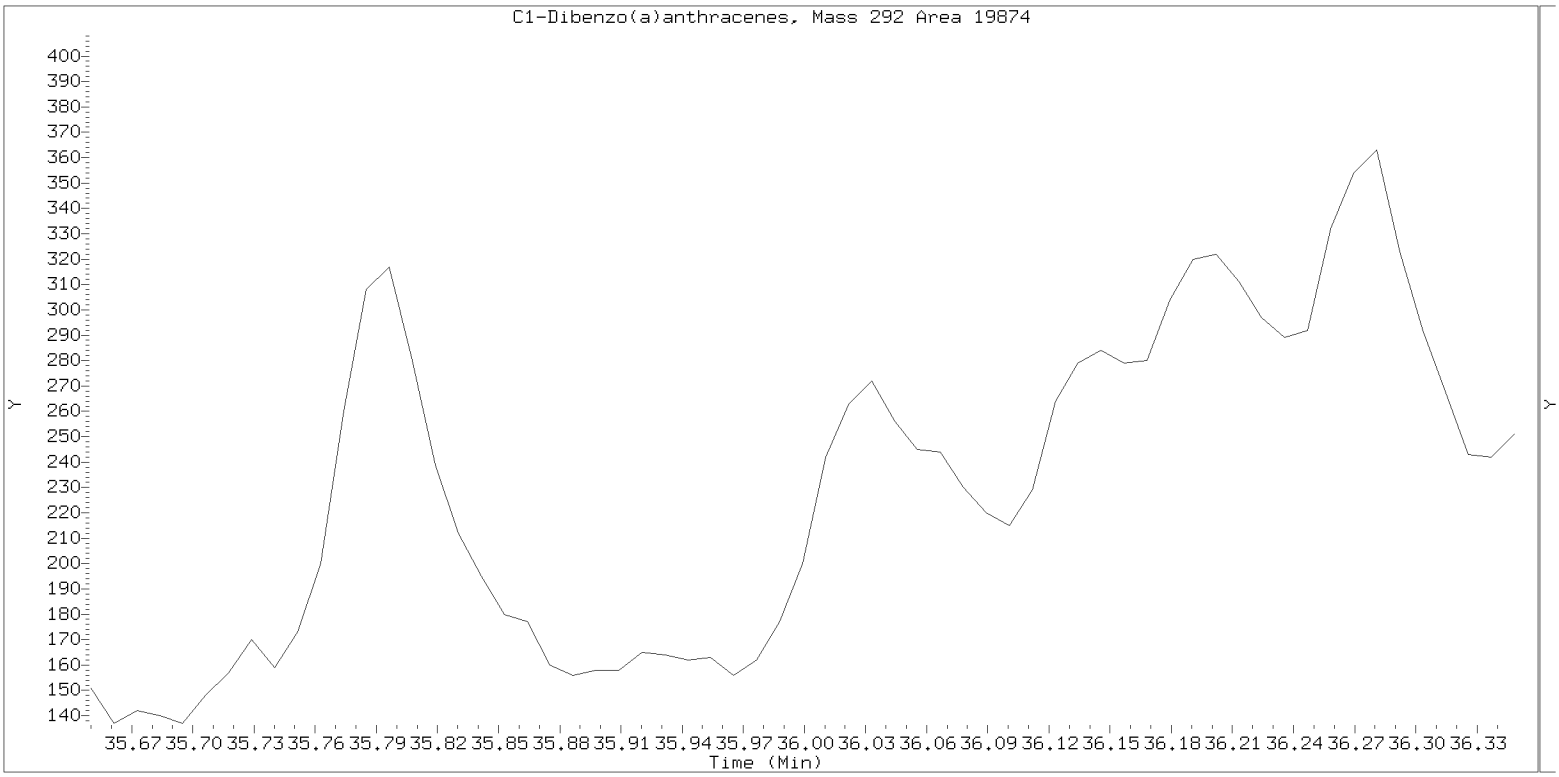

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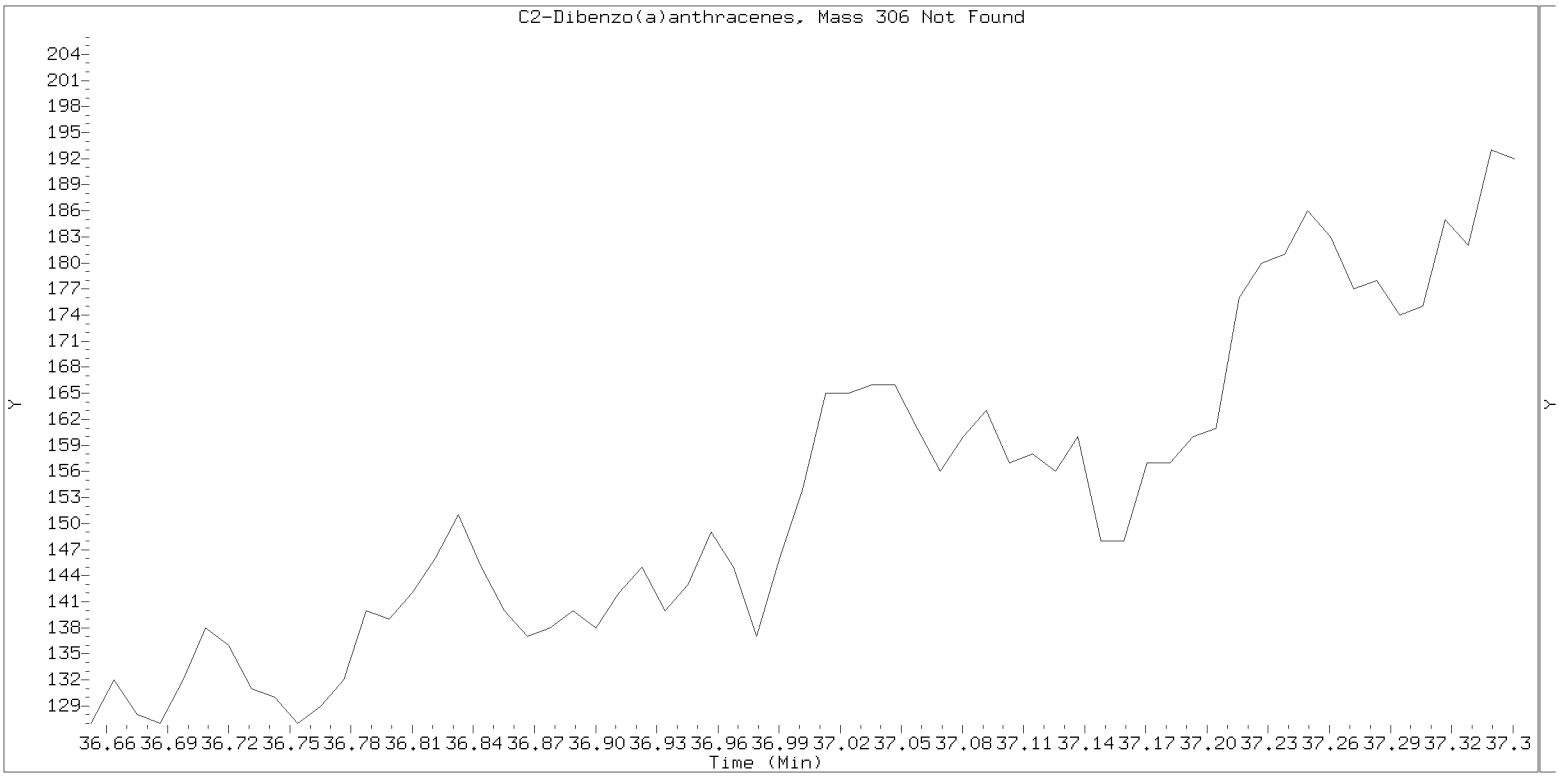

SIM ALKYL PNA RANGE ION WINDOWS - NT1421060711S.D

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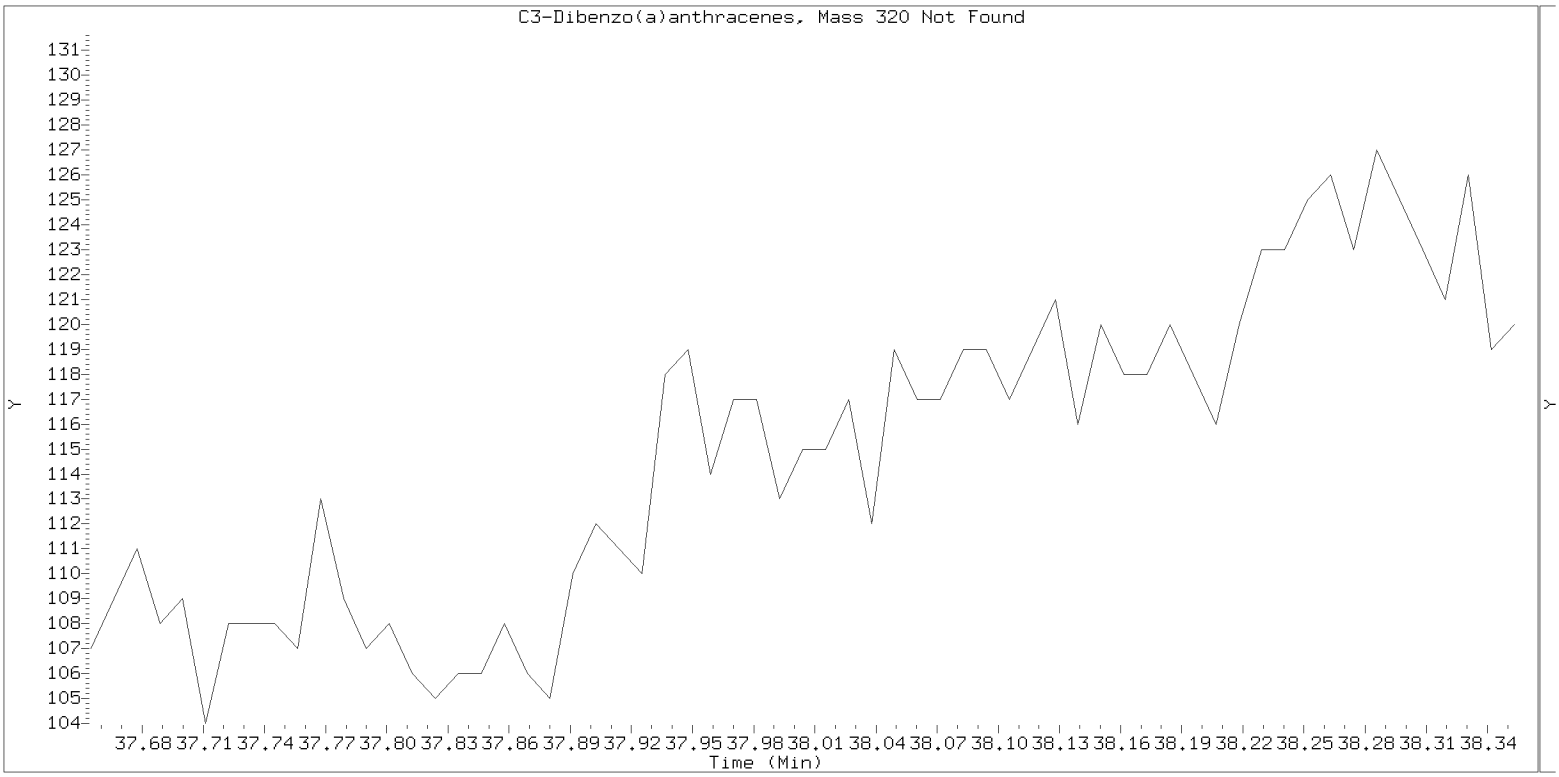


Analytical Resources, Incorporated
Analytical Chemists and Consultants

USMPDI-031SG-210504

Form I
ORGANIC ANALYSIS DATA SHEET
EPA 8270E-SIM
Alkyl PAH Parents

Laboratory:	Analytical Resources, Inc.				
Client:	Anchor QEA, LLC				
Project:	Gasco Siltronic - US Moorings				
Matrix:	Sediment	Laboratory ID:	21E0106-03 A	SDG:	21E0106
Sampled:	05/04/21 00:00	Prepared:	05/17/21 13:40	File ID:	NT1421060714.D
% Solids:	46.39	Preparation:	EPA 3546 (Microwave)	Analyzed:	06/07/21 22:55
Batch:	BJE0383	Sequence:	SJF0173	Initial/Final:	21.54 g Wet / 0.5 mL
Instrument:	NT14	Column:	ZB-5MS	Calibration:	EF00008
Cleanups:	GPC, Silica Gel				

CAS NO.	COMPOUND	DILUTION	CONC: (ug/kg dry)	Q	DL	RL
493-02-7	trans-Decalin	5	25.0	U	0.1	25.0
493-01-6	cis-Decalin	5	25.0	U	2.4	25.0
91-20-3	Naphthalene	5	11.5	J, D	2.2	25.0
90-12-0	1-Methylnaphthalene	5	3.7	J, D	1.9	25.0
91-57-6	2-Methylnaphthalene	5	5.8	J, D	2.2	25.0
92-52-4	Biphenyl	5	25.0	U	1.7	25.0
581-42-0	2,6-Dimethylnaphthalene	5	25.0	U	1.9	25.0
208-96-8	Acenaphthylene	5	6.1	J, D	1.3	25.0
83-32-9	Acenaphthene	5	12.3	J, D	2.3	25.0
132-64-9	Dibenzofuran	5	3.4	J, D	2.1	25.0
2245-38-7	2,3,5-Trimethylnaphthalene	5	25.0	U	2.2	25.0
86-73-7	Fluorene	5	8.9	J, D	2.3	25.0
95-15-8	Benzo(b)thiophene	5	25.0	U	1.8	25.0
85-01-8	Phenanthrene	5	81.0	D	4.7	25.0
120-12-7	Anthracene	5	18.1	J, D	0.2	25.0
86-74-8	Carbazole	5	4.8	J, D	3.6	25.0
832-69-9	1-Methylphenanthrene	5	10.4	J, D	2.5	25.0
206-44-0	Fluoranthene	5	153	D	6.8	25.0
132-65-0	Dibenzothiophene	5	25.0	U	3.3	25.0
129-00-0	Pyrene	5	170	D	5.1	25.0
56-55-3	Benzo(a)anthracene	5	72.5	D	7.1	25.0
218-01-9	Chrysene	5	92.2	D	3.5	25.0
205-99-2	Benzo(b)fluoranthene	5	65.9	D	4.0	25.0
205-82-3	Benzo(j)fluoranthene	5	41.8	D	3.4	25.0
207-08-9	Benzo(k)fluoranthene	5	47.5	D	4.0	25.0
197-97-2	Benzo(e)pyrene	5	70.5	D	3.1	25.0
50-32-8	Benzo(a)pyrene	5	106	D	4.9	25.0
193-39-5	Indeno(1,2,3-cd)pyrene	5	65.8	D	1.9	25.0
53-70-3	Dibenzo(a,h)anthracene	5	16.3	J, D	3.4	25.0
191-24-2	Benzo(g,h,i)perylene	5	91.5	D	2.6	25.0

Analytical Resources, Incorporated
Analytical Chemists and Consultants

USMPDI-031SG-210504

Form I
ORGANIC ANALYSIS DATA SHEET
EPA 8270E-SIM
Alkyl PAH Parents

Laboratory:	Analytical Resources, Inc.				
Client:	Anchor QEA, LLC				
Project:	Gasco Siltronic - US Moorings				
Matrix:	Sediment	Laboratory ID:	21E0106-03 A	SDG:	21E0106
Sampled:	05/04/21 00:00	Prepared:	05/17/21 13:40	File ID:	NT1421060714.D
% Solids:	46.39	Preparation:	EPA 3546 (Microwave)	Analyzed:	06/07/21 22:55
Batch:	BJE0383	Sequence:	SJF0173	Initial/Final:	21.54 g Wet / 0.5 mL
Instrument:	NT14	Column:	ZB-5MS	Calibration:	EF00008
Cleanups:	GPC, Silica Gel				

CAS NO.	COMPOUND	DILUTION	CONC: (ug/kg dry)	Q	DL	RL
1985-5-0	Perylene	5	82.5	D	2.2	25.0
239-35-0	Benzo(b)naphtho(2,1-d)thiophene	5	25.0	U	25.0	25.0

SURROGATES	ADDED: (ug/kg dry)	FOUND: (ug/kg dry)	% REC	QC LIMITS	Q
Naphthalene-d8	150.11	72.1	48.0	30 - 160	
Acenaphthene-d10	150.11	82.7	55.1	30 - 160	
Phenanthrene-d10	150.11	89.5	59.6	30 - 160	
Chrysene-d12	150.11	103	68.8	30 - 160	
Perylene-d12	150.11	103	68.4	30 - 160	

Data File: \\target\share\chem3\nt14.i\20210607.b\NT1421060714.D

Date : 07-JUN-2021 22:55

Client ID:

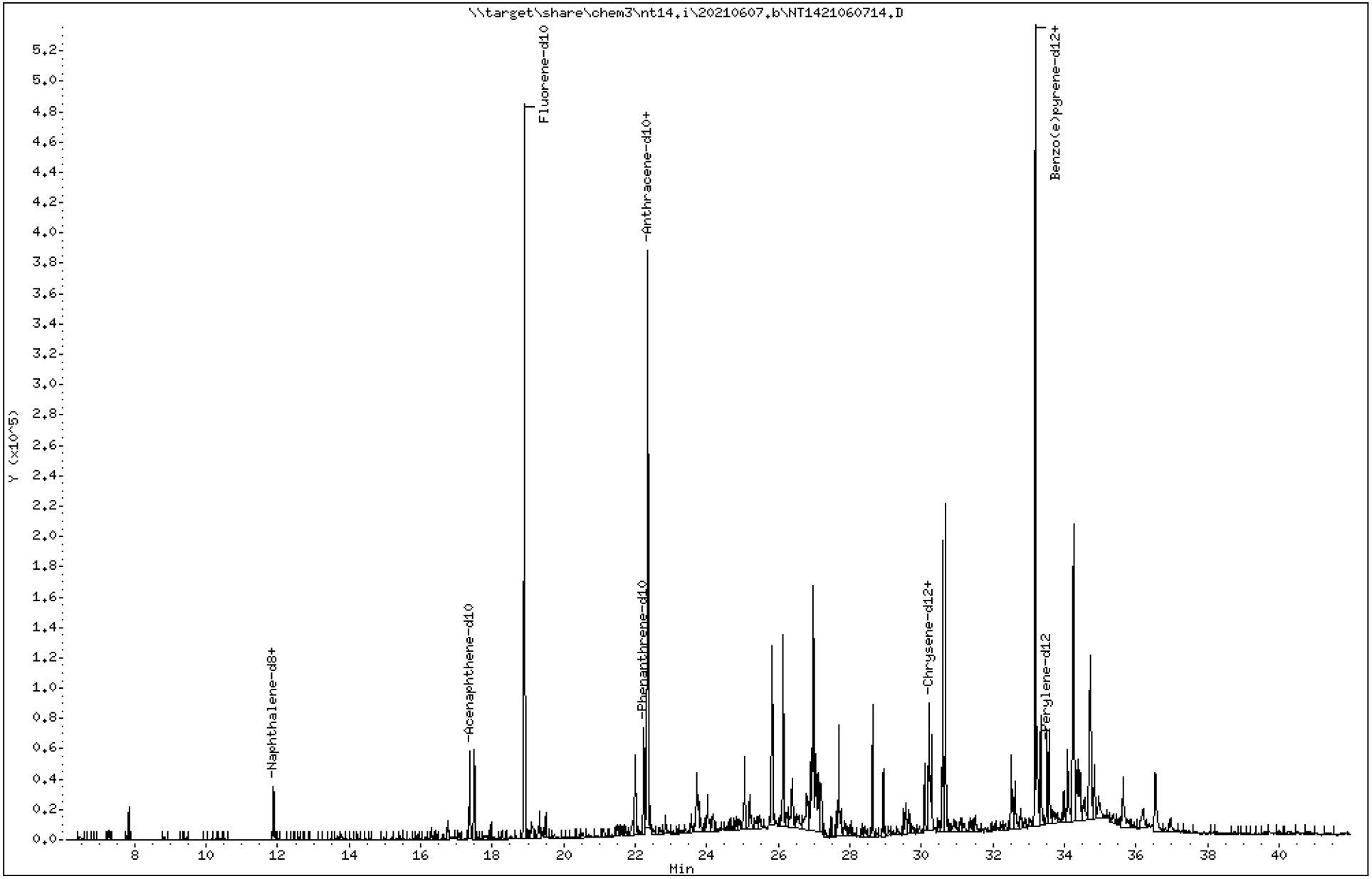
Instrument: nt14.i

Sample Info: 21E0106-03

Operator: VTS

Column phase: Rxi-17Sil MS

Column diameter: 0.25



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Date : 07-JUN-2021 22:55

Client ID:

Instrument: nt14.i

Sample Info: 21E0106-03

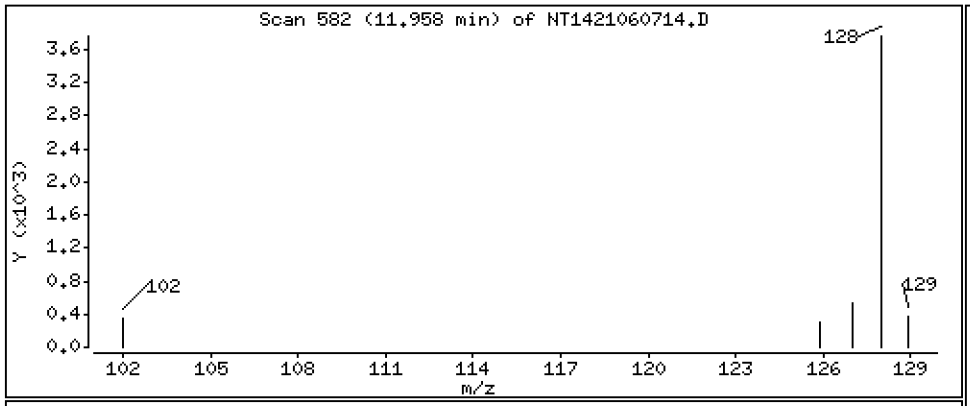
Operator: VTS

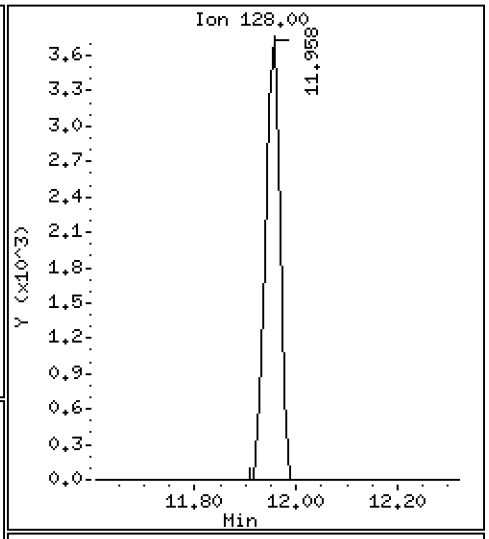
Column phase: Rxi-17Sil MS

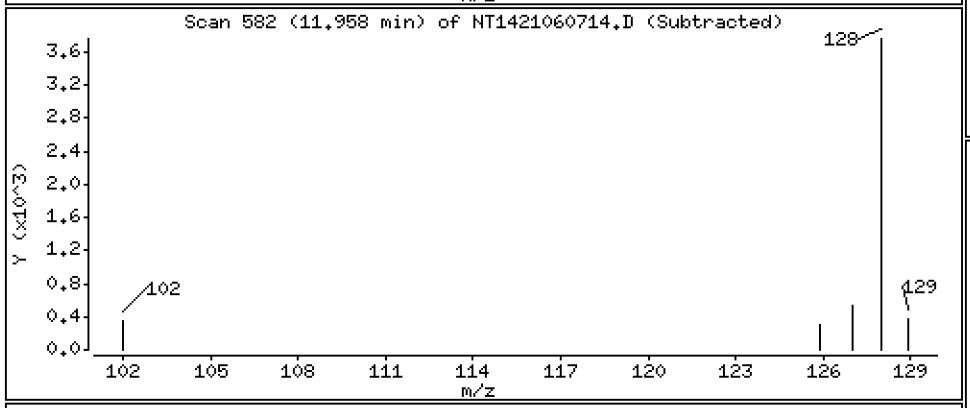
Column diameter: 0.25

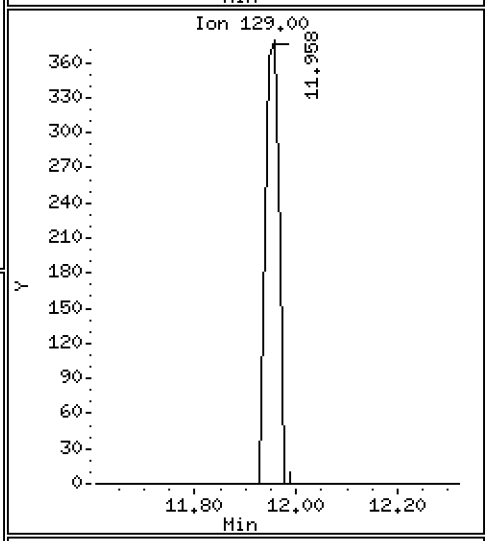
7 Naphthalene

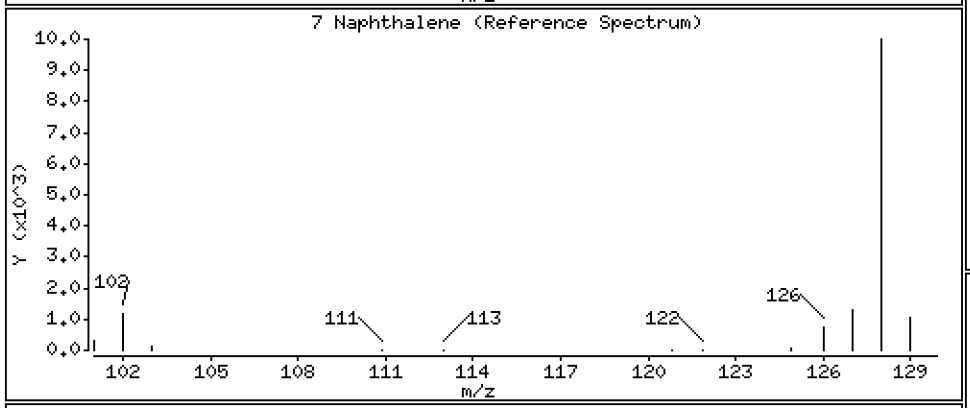
Concentration: 0.2298 ug/mL

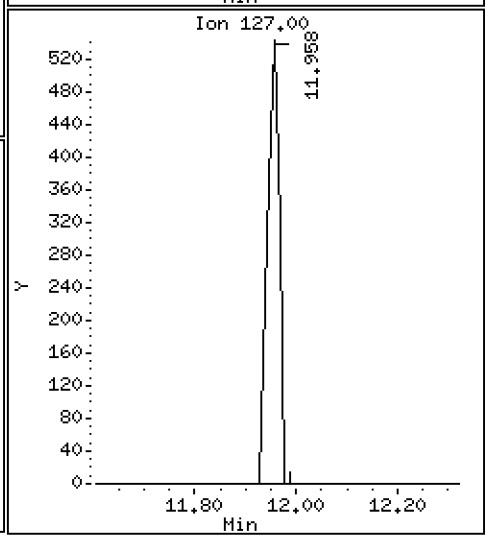


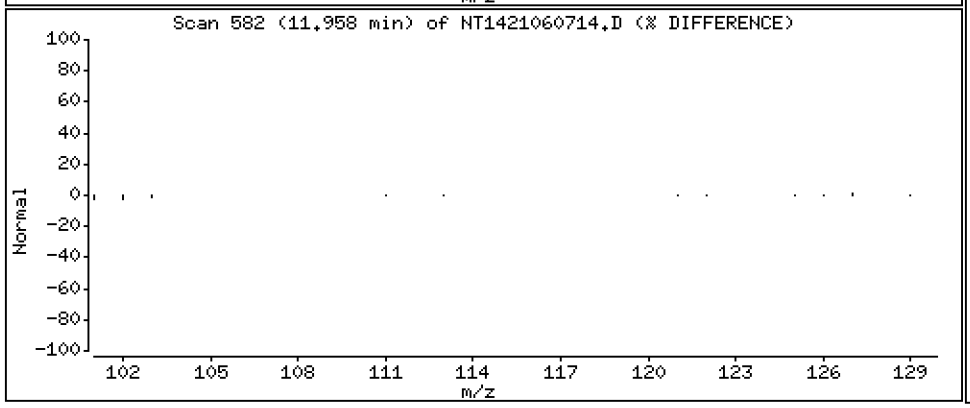












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Date : 07-JUN-2021 22:55

Client ID:

Instrument: nt14.i

Sample Info: 21E0106-03

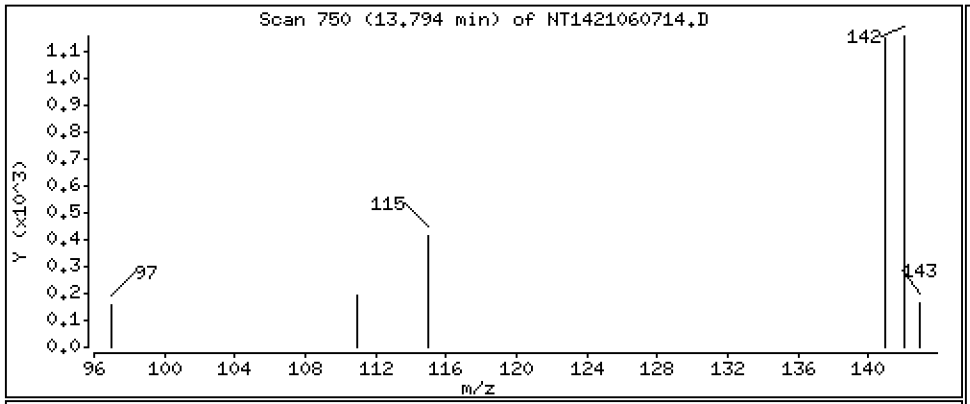
Operator: VTS

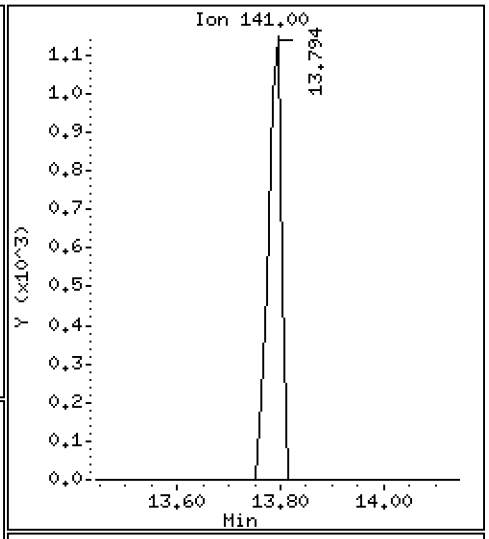
Column phase: Rxi-17Sil MS

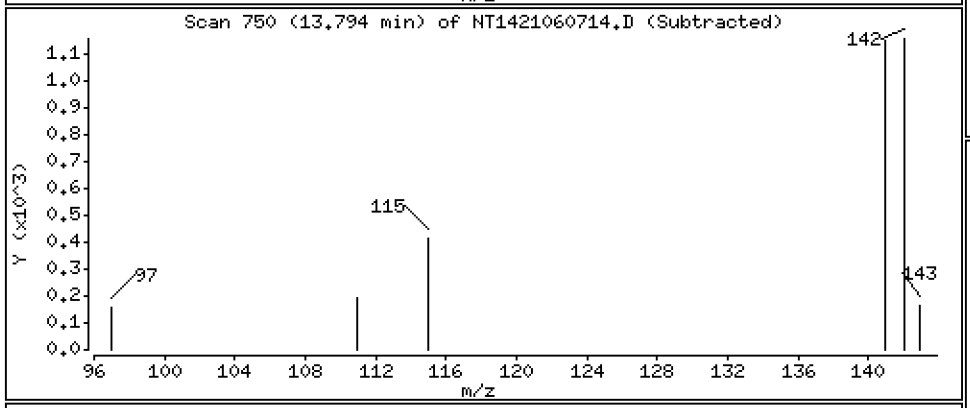
Column diameter: 0.25

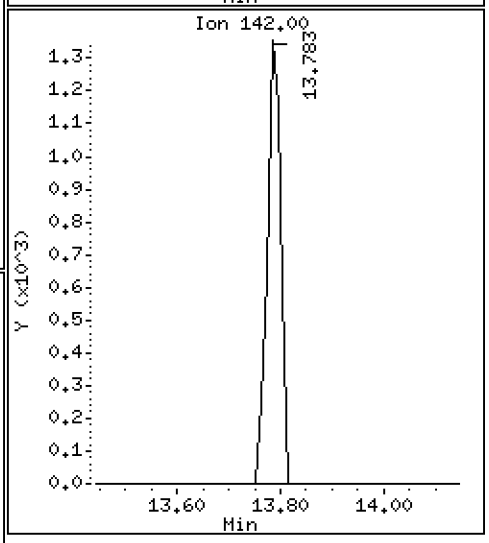
16 2-Methylnaphthalene

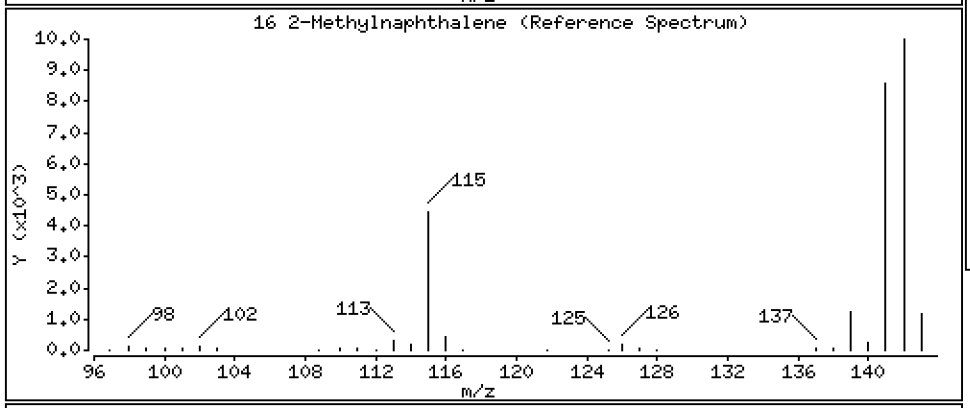
Concentration: 0.1163 ug/mL

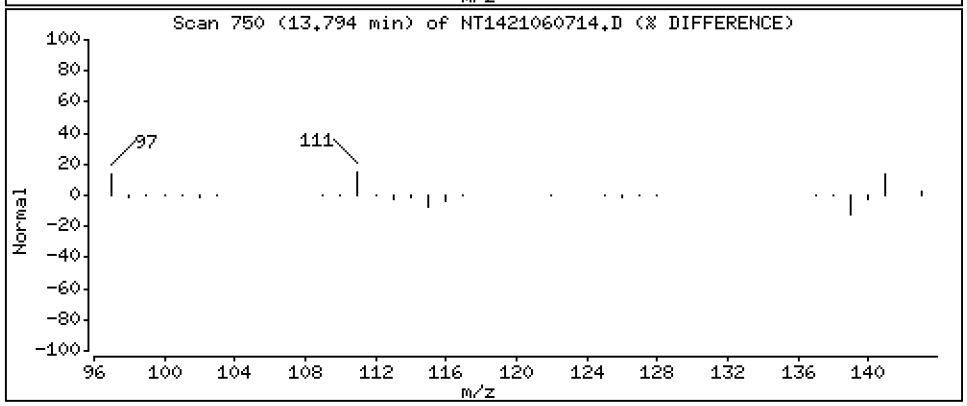












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Date : 07-JUN-2021 22:55

Client ID:

Instrument: nt14.i

Sample Info: 21E0106-03

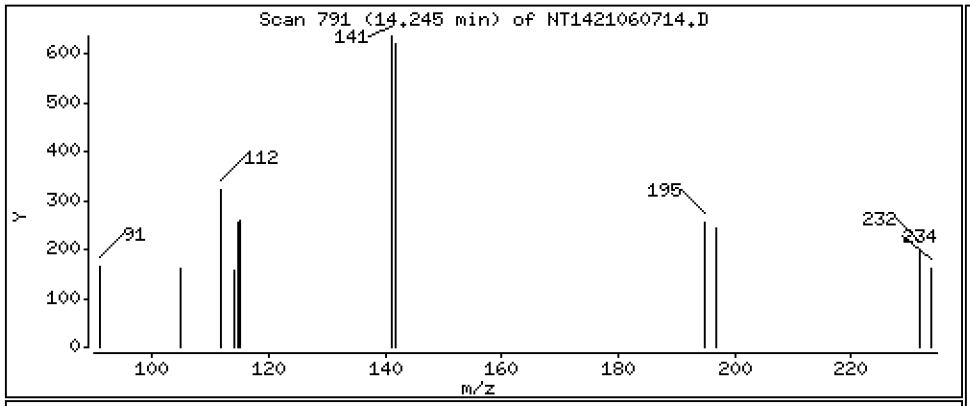
Operator: VTS

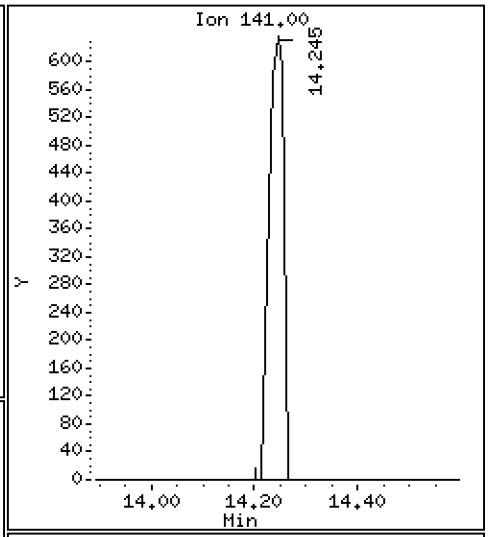
Column phase: Rxi-17Sil MS

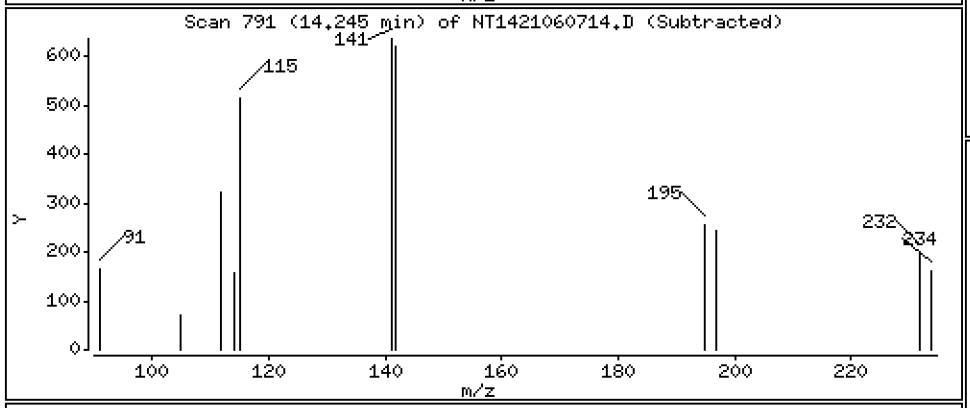
Column diameter: 0.25

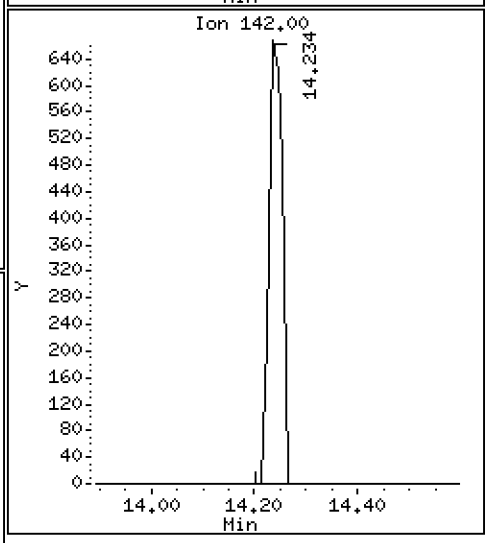
17 1-methylnaphthalene

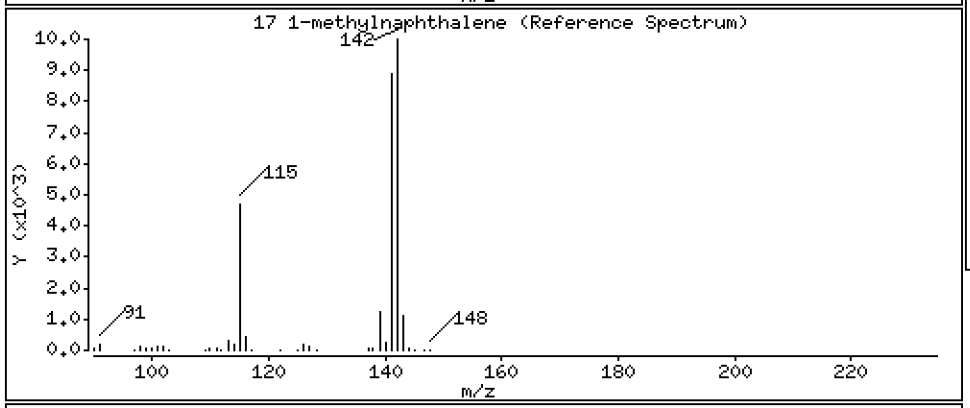
Concentration: 0.07472 ug/mL

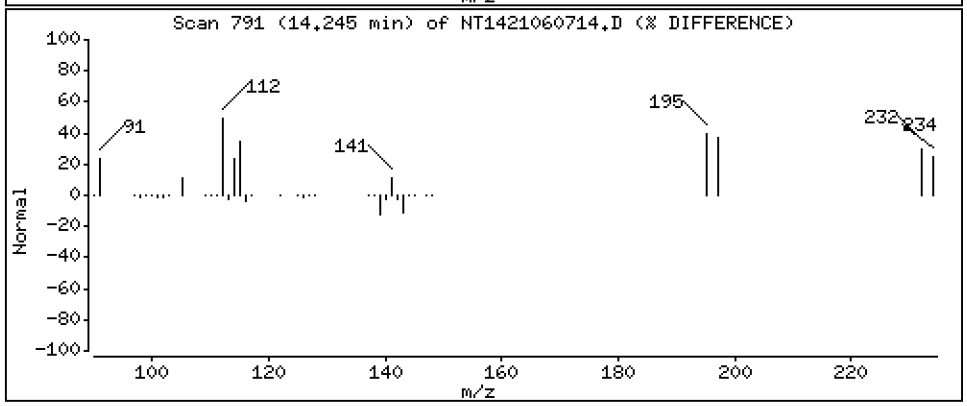












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Date : 07-JUN-2021 22:55

Client ID:

Instrument: nt14.i

Sample Info: 21E0106-03

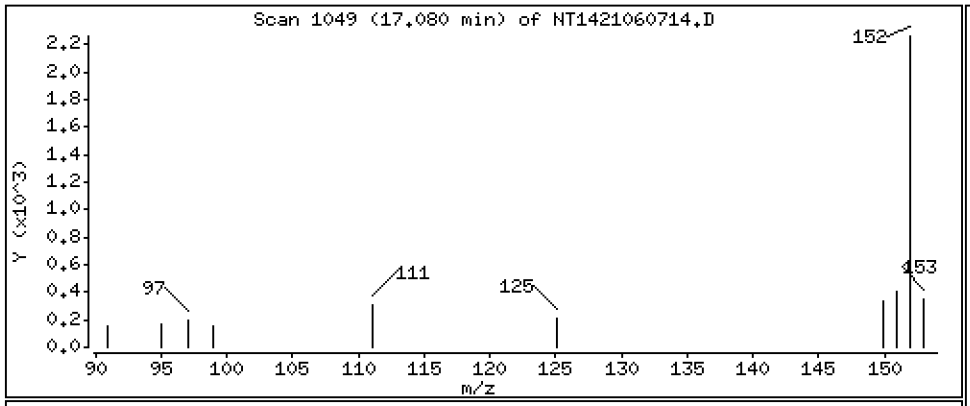
Operator: VTS

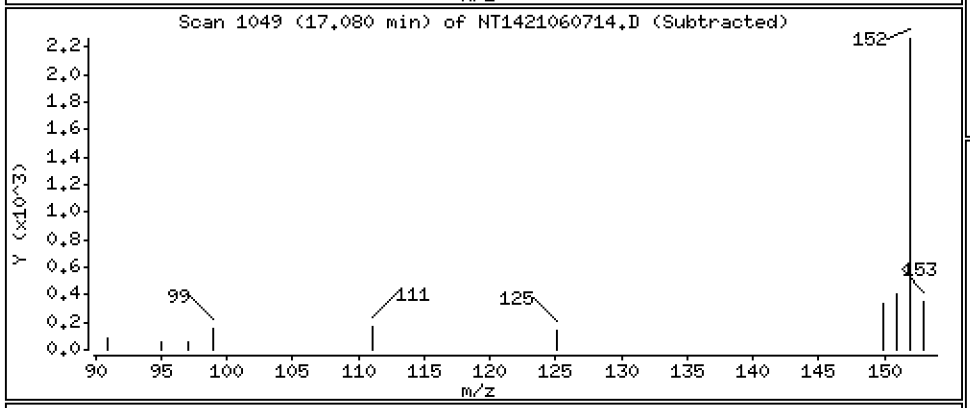
Column phase: Rxi-17Sil MS

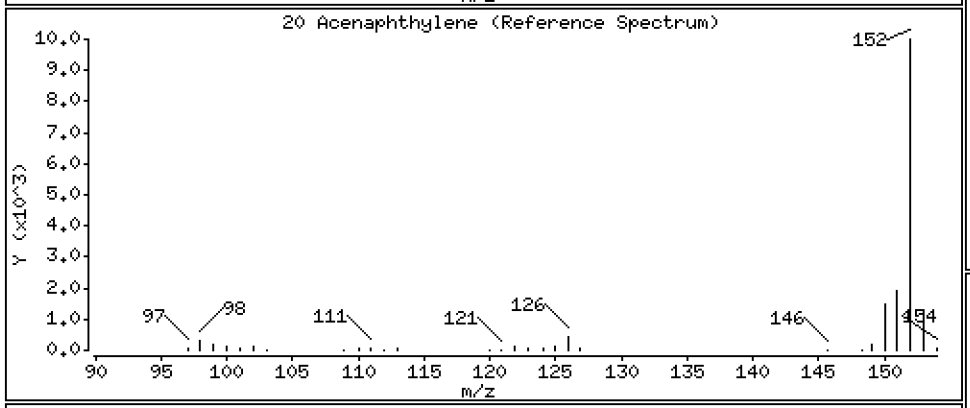
Column diameter: 0.25

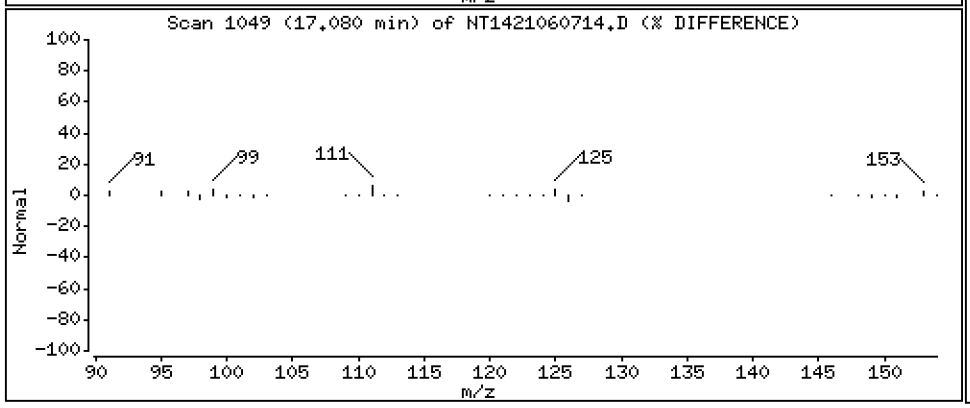
20 Acenaphthylene

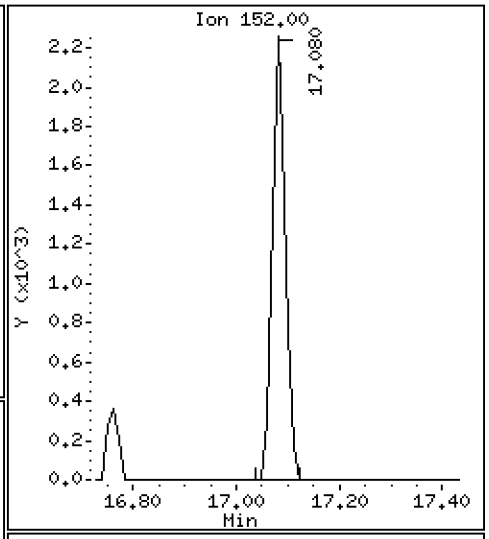
Concentration: 0.1223 ug/mL

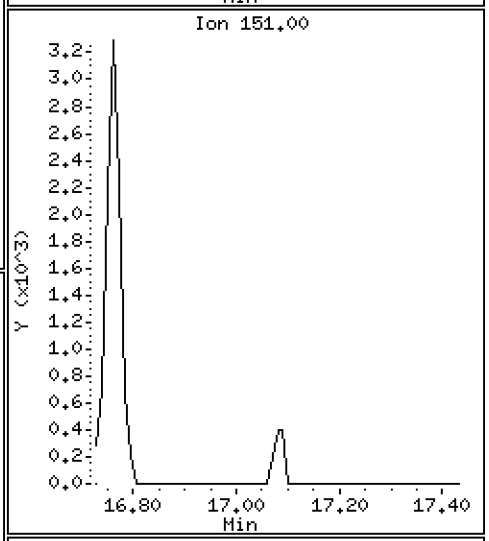


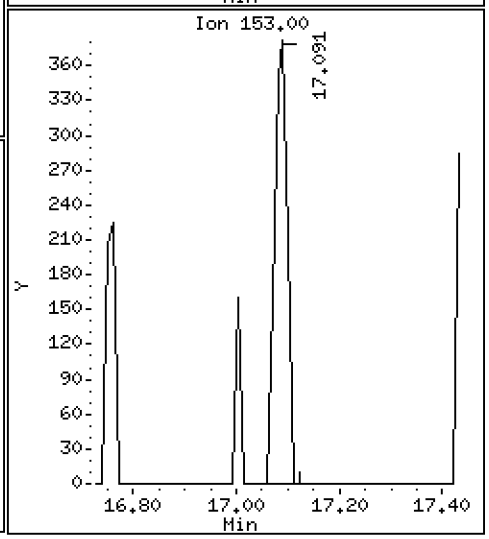












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Date : 07-JUN-2021 22:55

Client ID:

Instrument: nt14.i

Sample Info: 21E0106-03

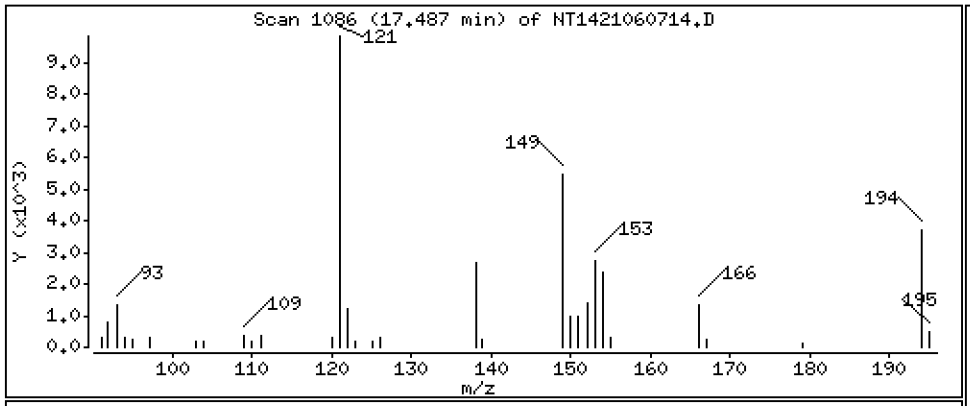
Operator: VTS

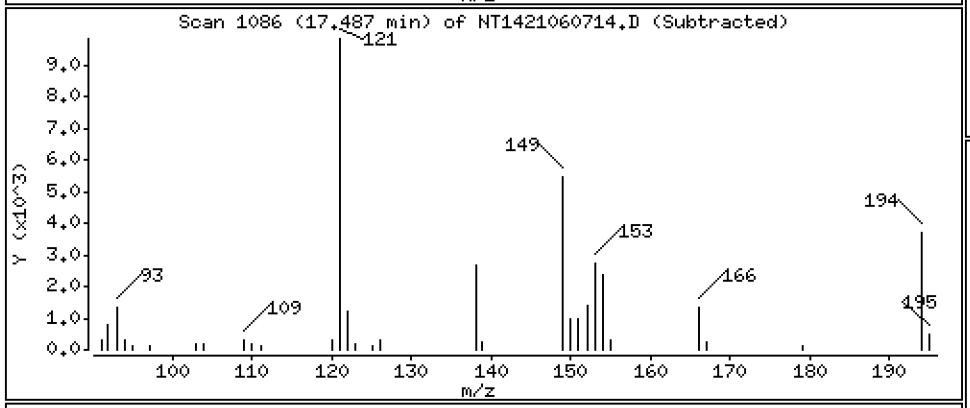
Column phase: Rxi-17Sil MS

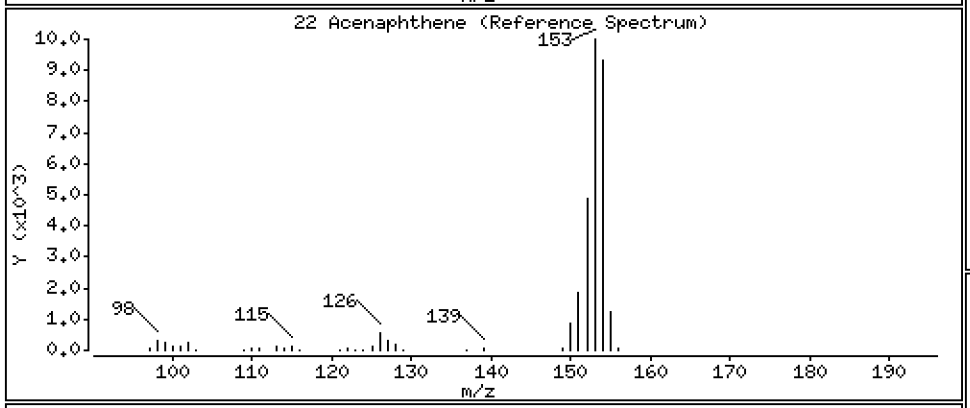
Column diameter: 0.25

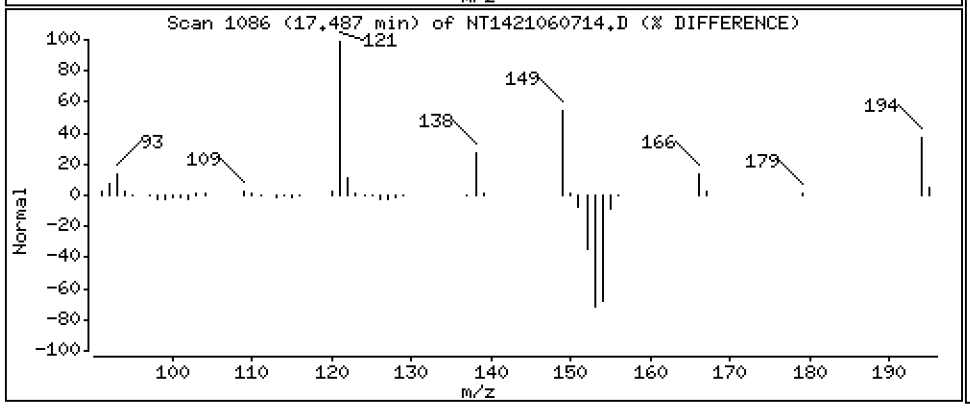
22 Acenaphthene

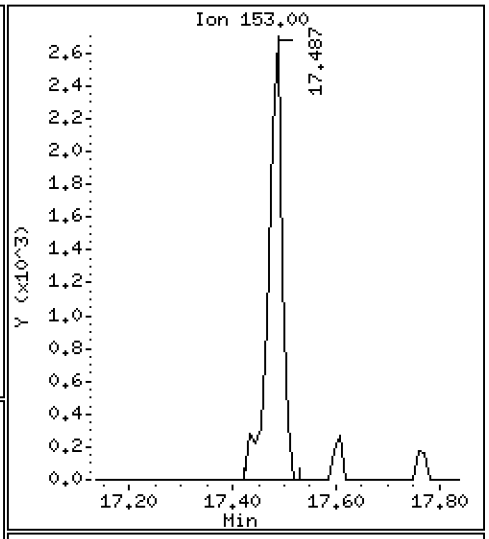
Concentration: 0.2463 ug/mL

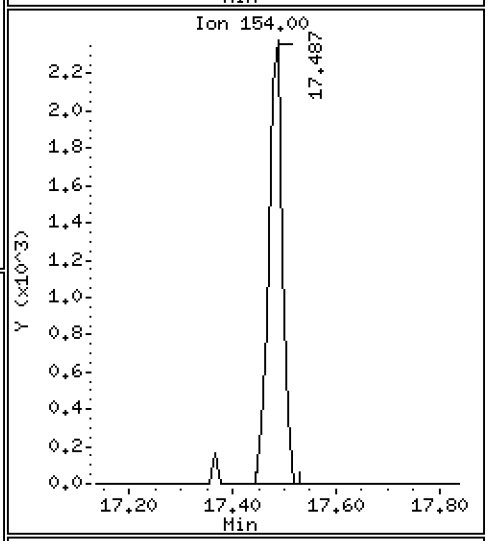


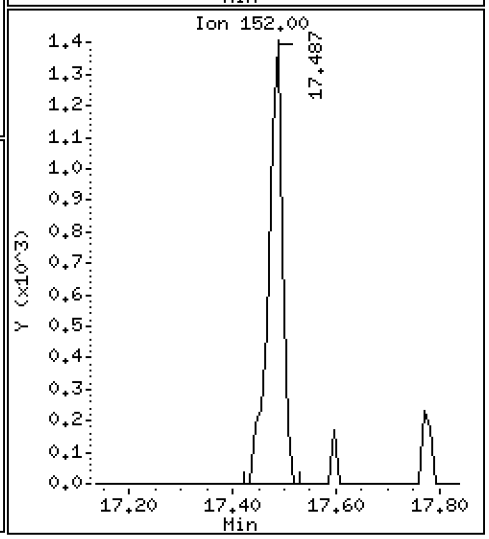












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Date : 07-JUN-2021 22:55

Client ID:

Instrument: nt14.i

Sample Info: 21E0106-03

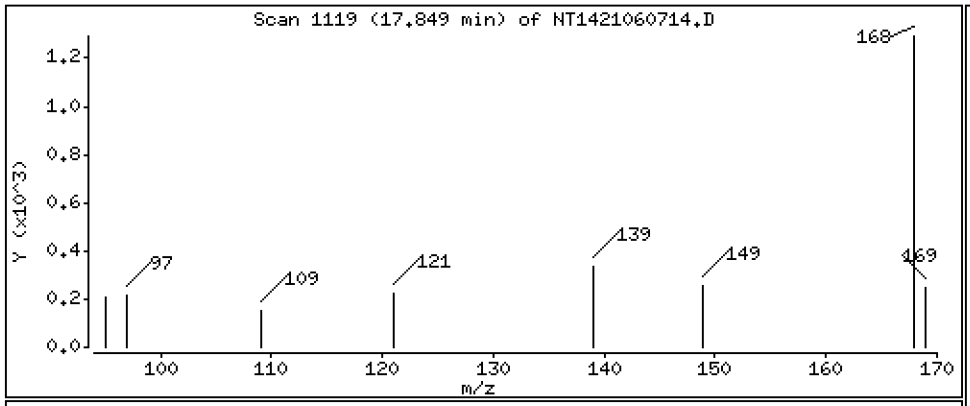
Operator: VTS

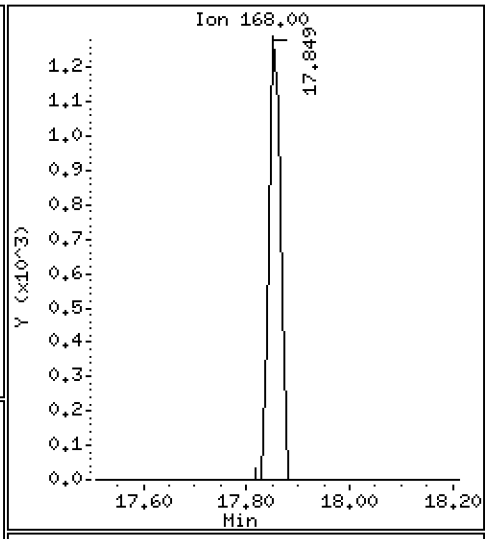
Column phase: Rxi-17Sil MS

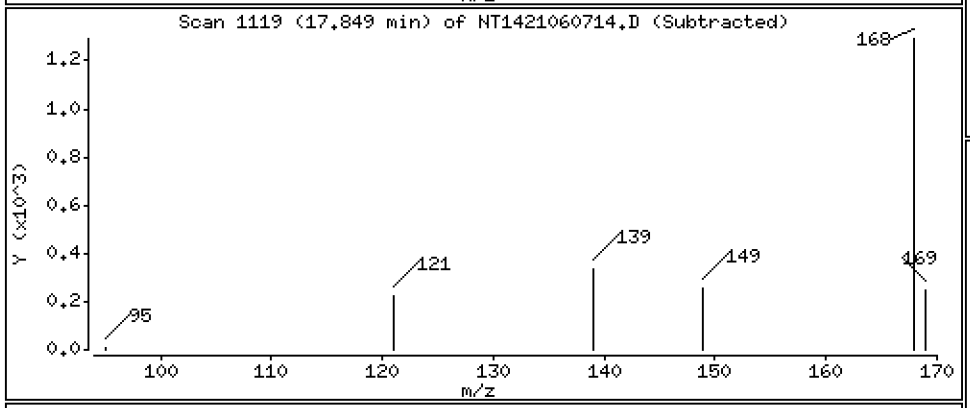
Column diameter: 0.25

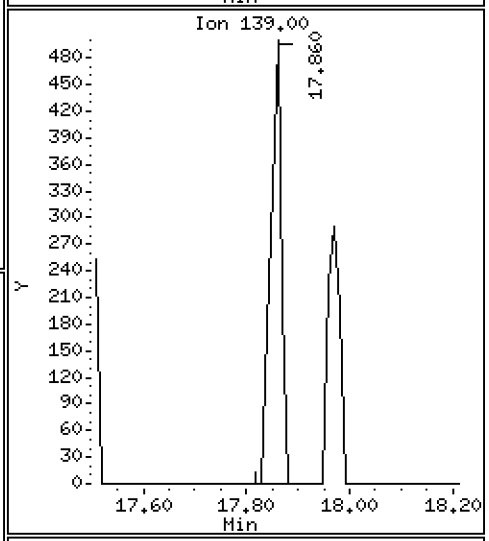
23 Dibenzofuran

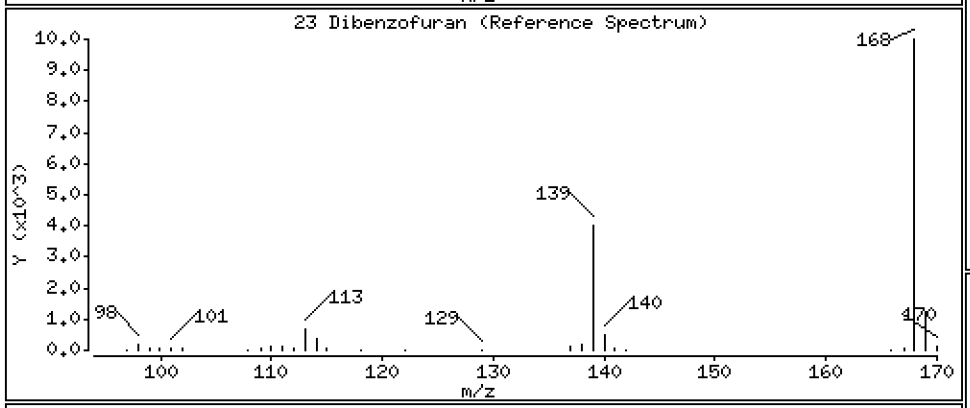
Concentration: 0.06745 ug/mL

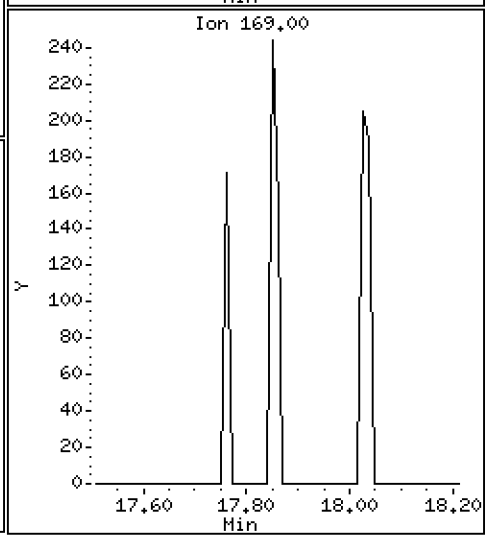


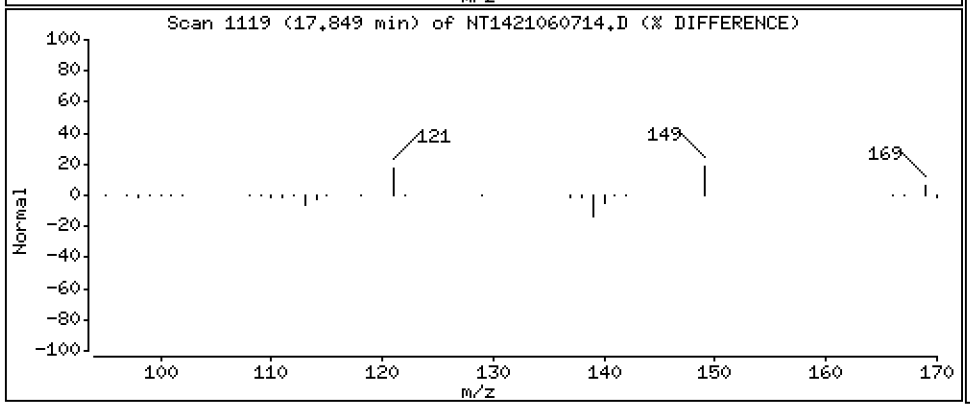












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Date : 07-JUN-2021 22:55

Client ID:

Instrument: nt14.i

Sample Info: 21E0106-03

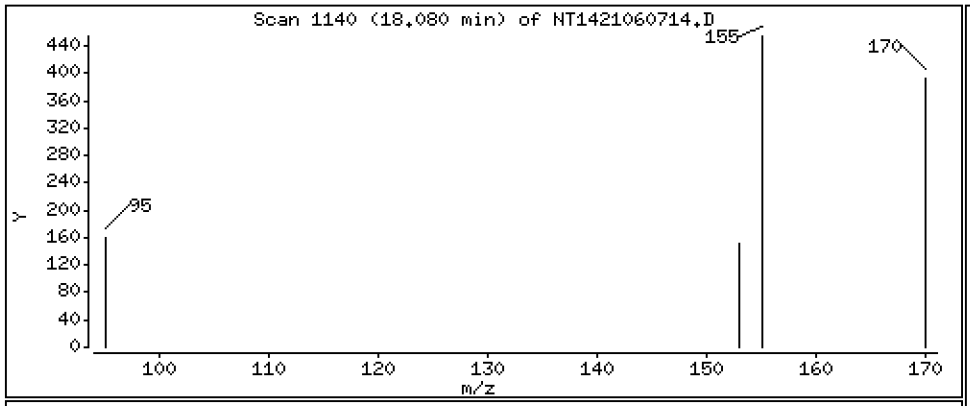
Operator: VTS

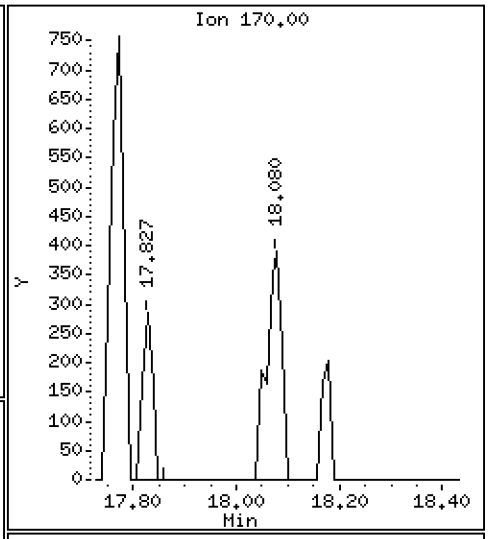
Column phase: Rxi-17Sil MS

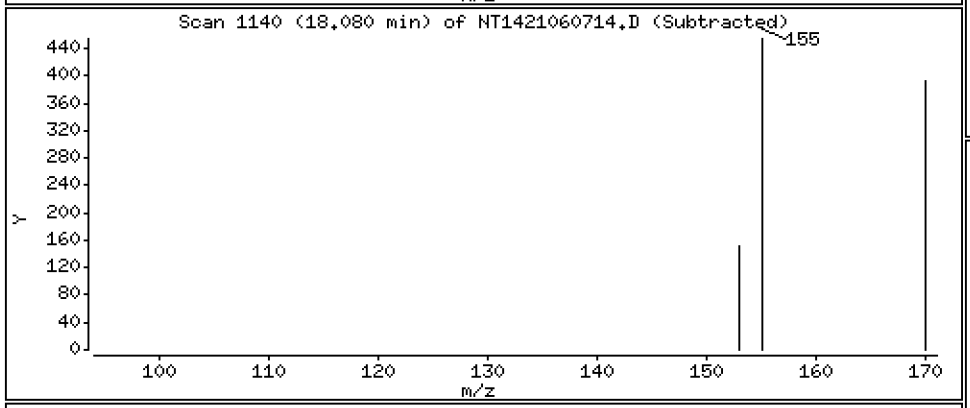
Column diameter: 0.25

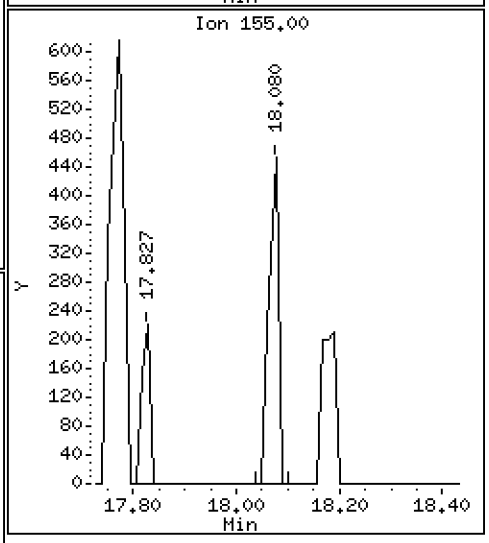
24 1,6,7-Trimethylnaphthalene

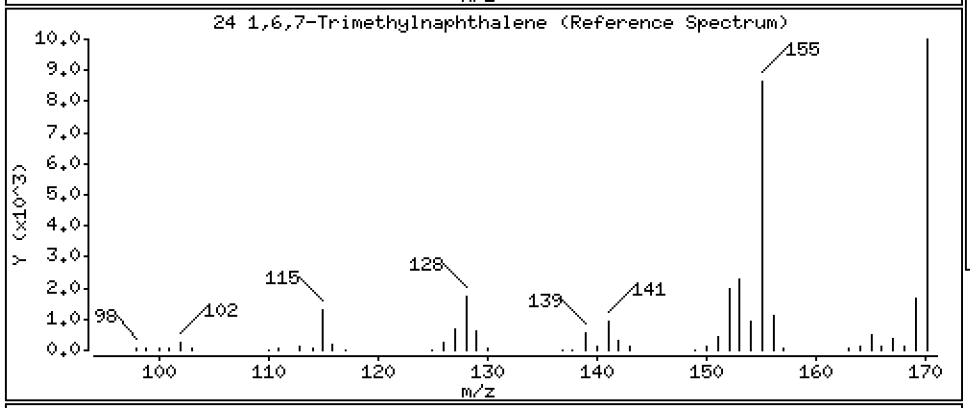
Concentration: 0.04106 ug/mL

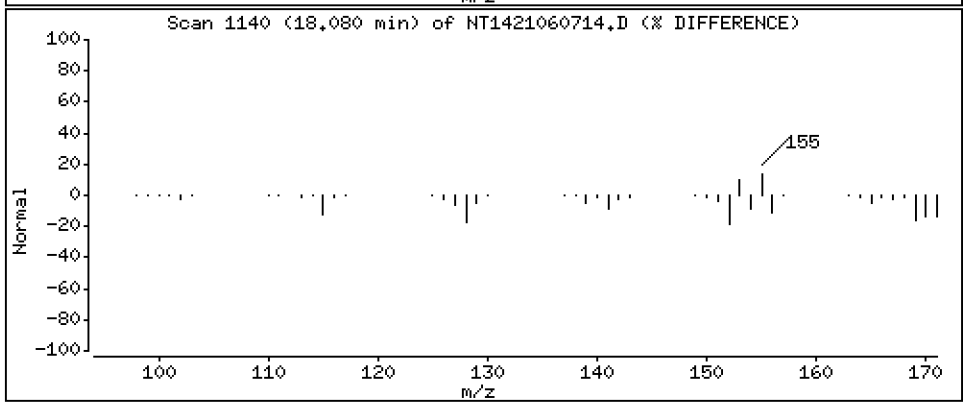












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Date : 07-JUN-2021 22:55

Client ID:

Instrument: nt14.i

Sample Info: 21E0106-03

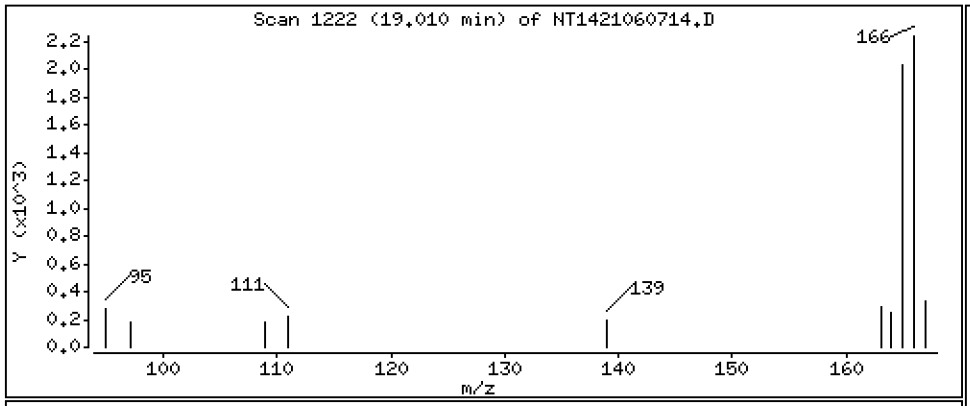
Operator: VTS

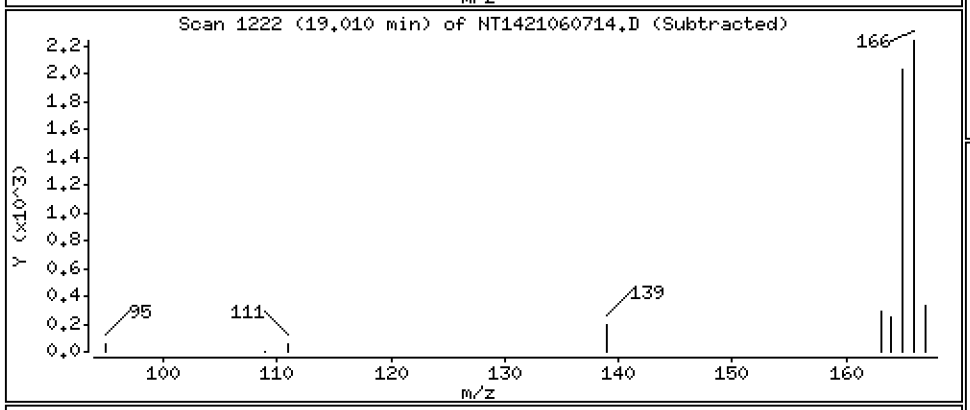
Column phase: Rxi-17Sil MS

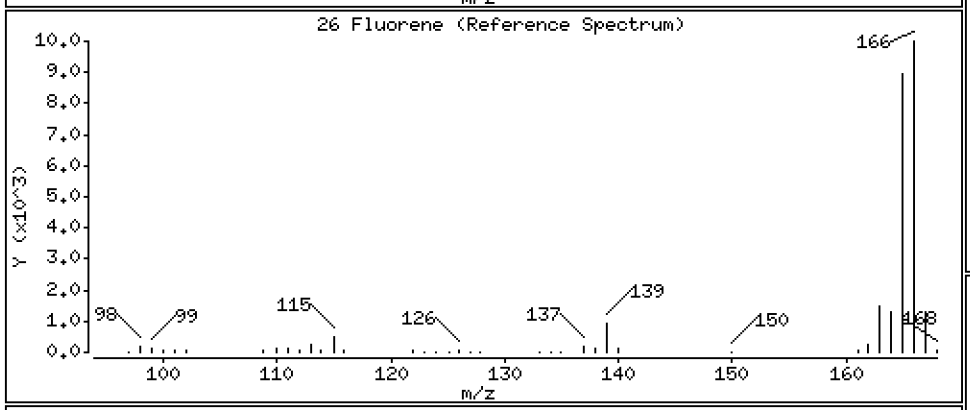
Column diameter: 0.25

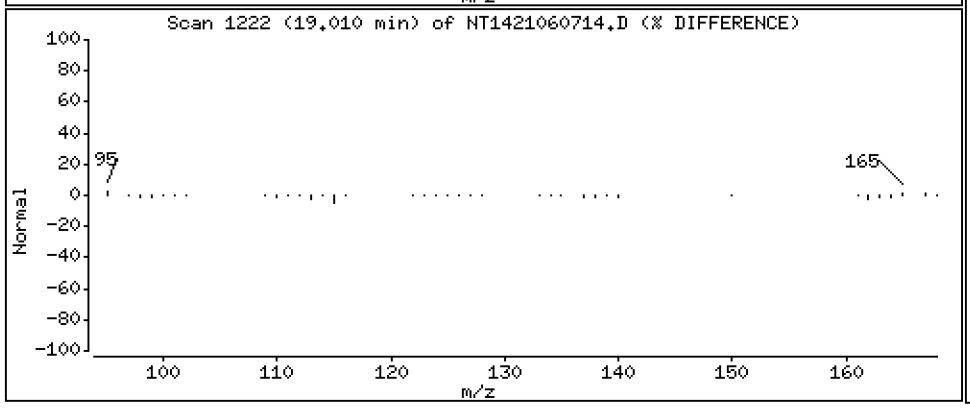
26 Fluorene

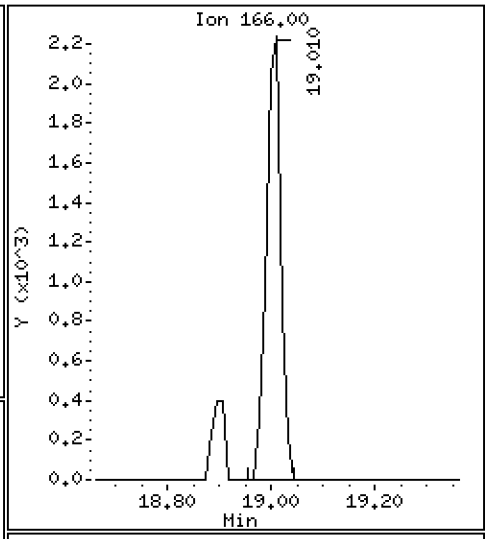
Concentration: 0.1788 ug/mL

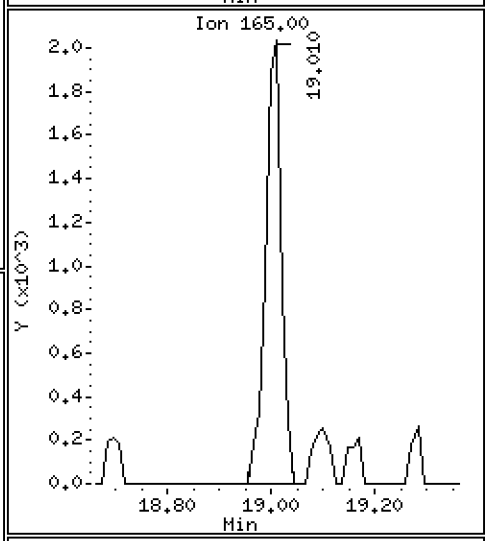


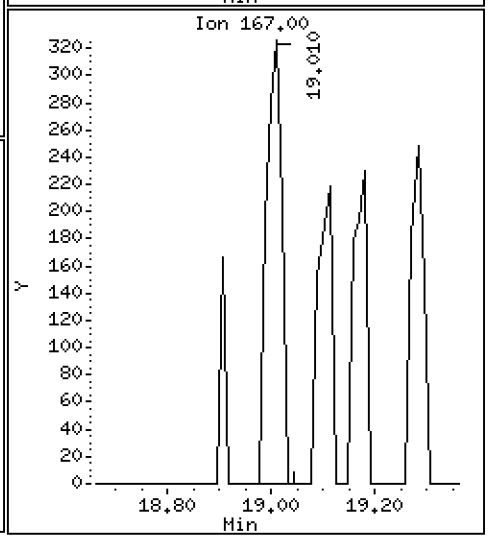












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Date : 07-JUN-2021 22:55

Client ID:

Instrument: nt14.i

Sample Info: 21E0106-03

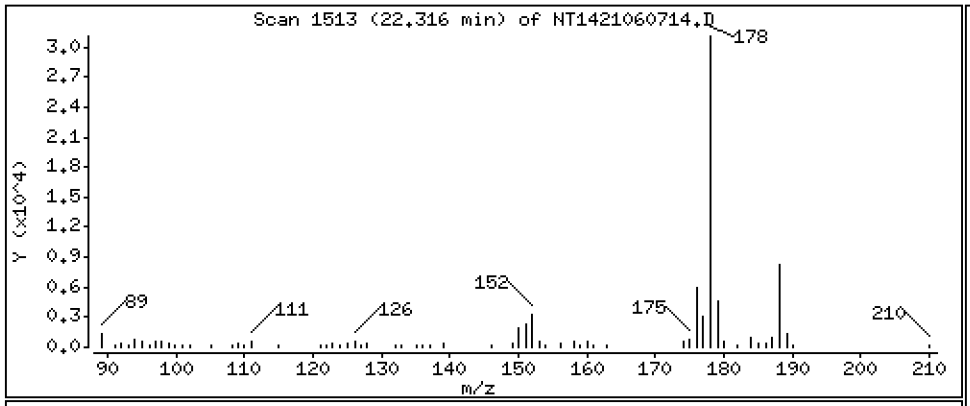
Operator: VTS

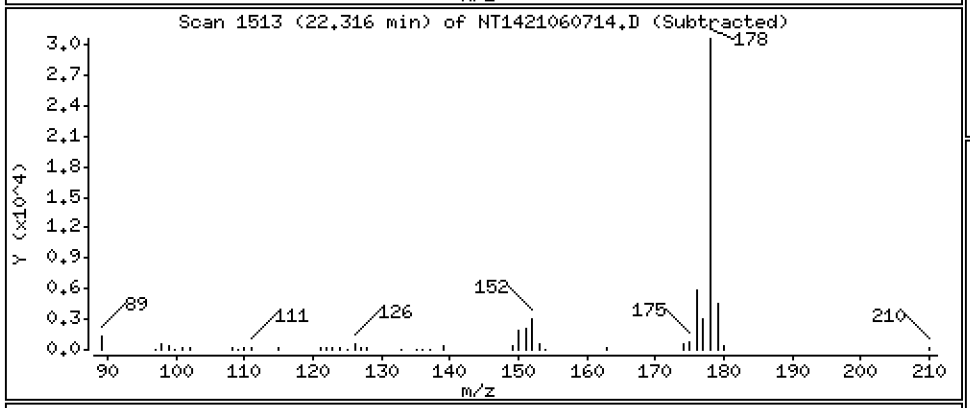
Column phase: Rxi-17Sil MS

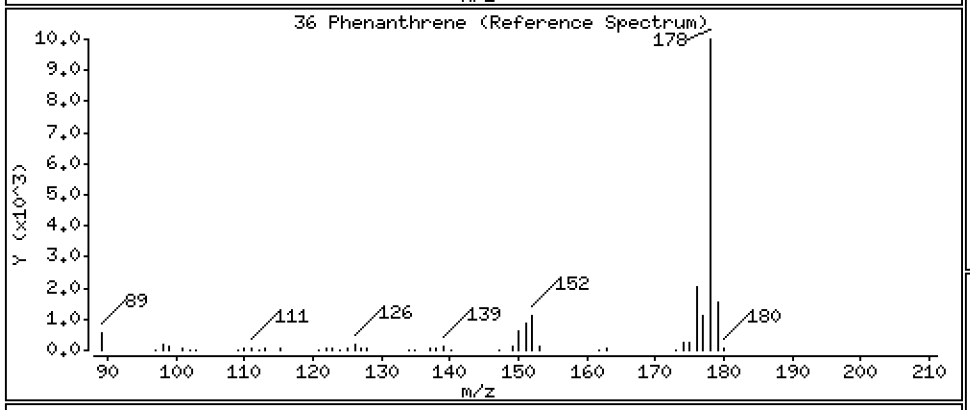
Column diameter: 0.25

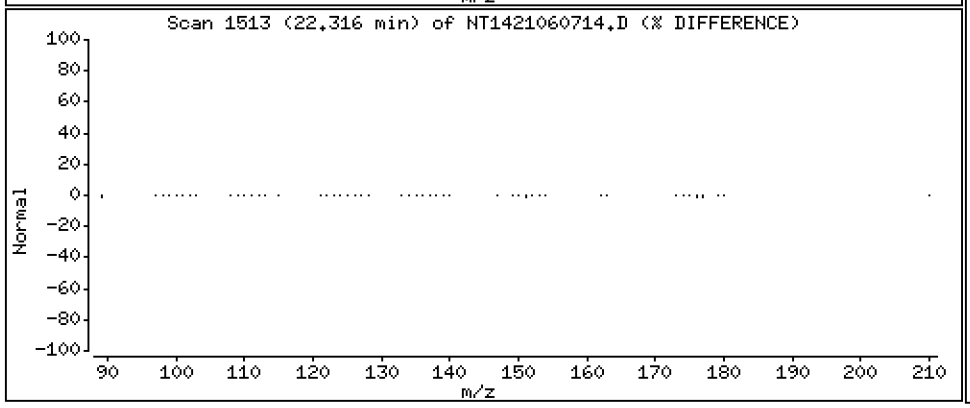
36 Phenanthrene

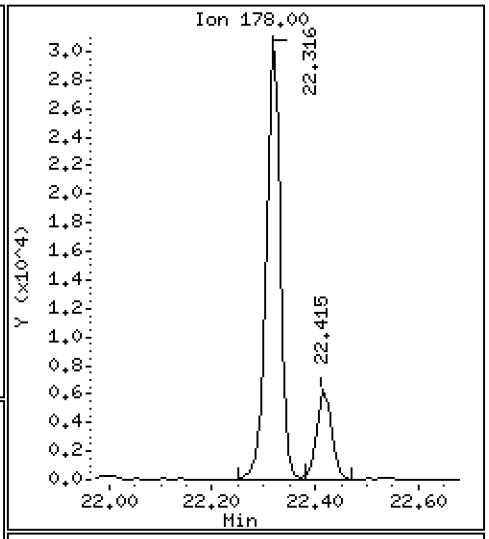
Concentration: 1.619 ug/mL

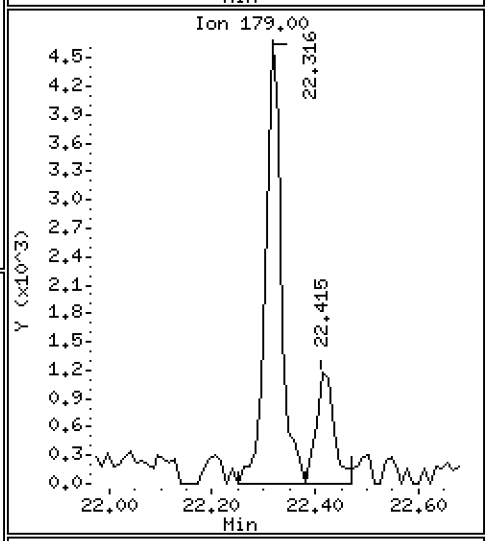


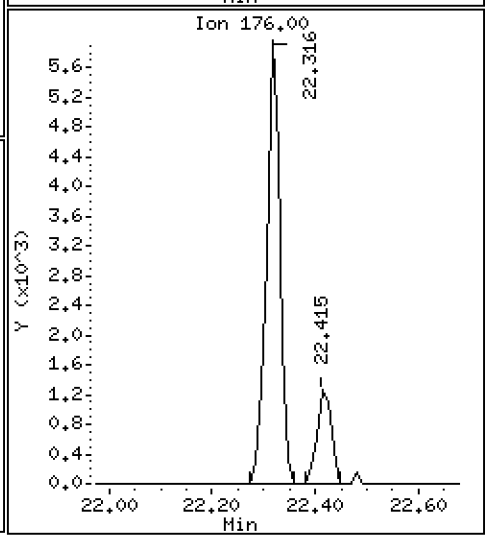












Data File: \\target\share\chem3\nt14.i\20210607.b\NT1421060714.D

Date : 07-JUN-2021 22:55

Client ID:

Instrument: nt14.i

Sample Info: 21E0106-03

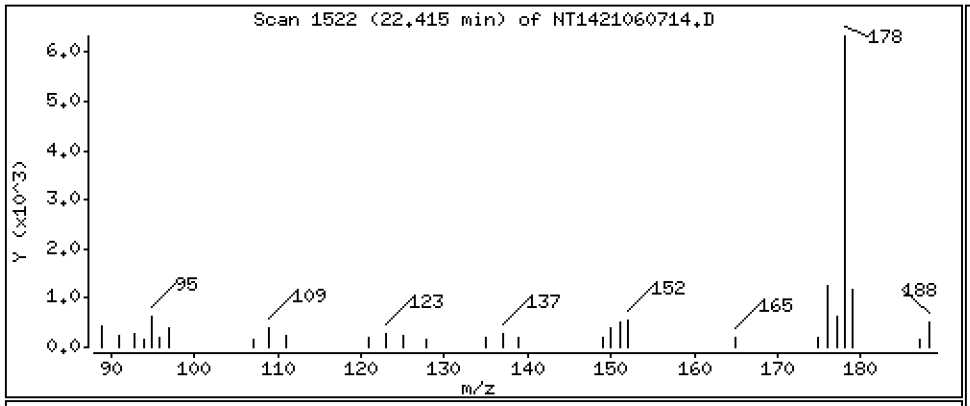
Operator: VTS

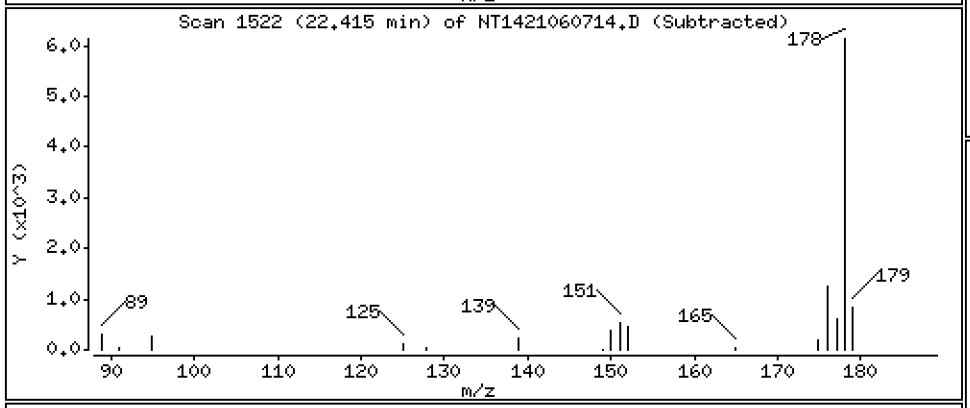
Column phase: Rxi-17Sil MS

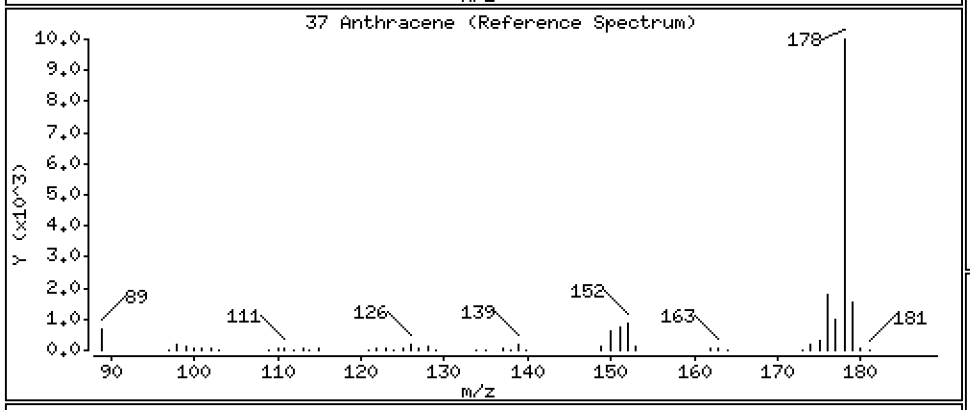
Column diameter: 0.25

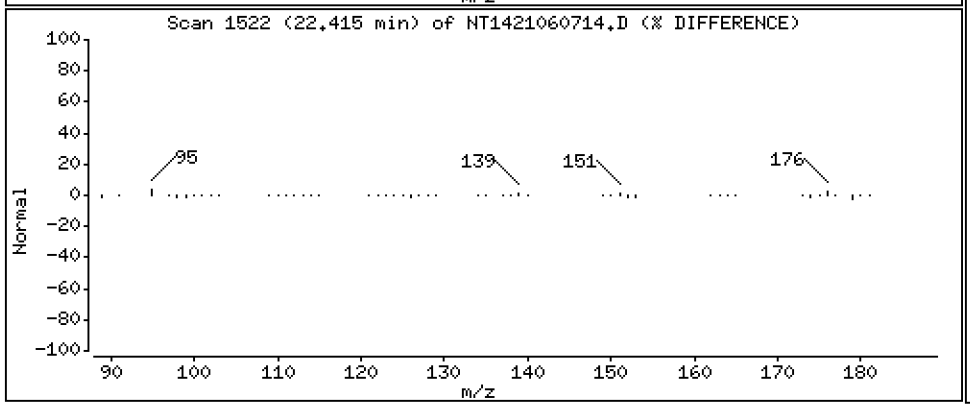
37 Anthracene

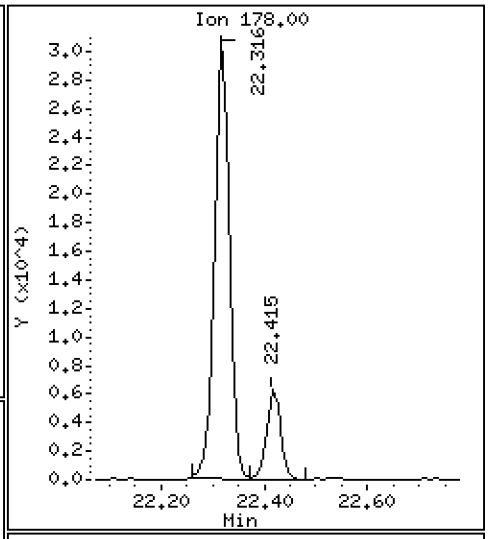
Concentration: 0.3614 ug/mL

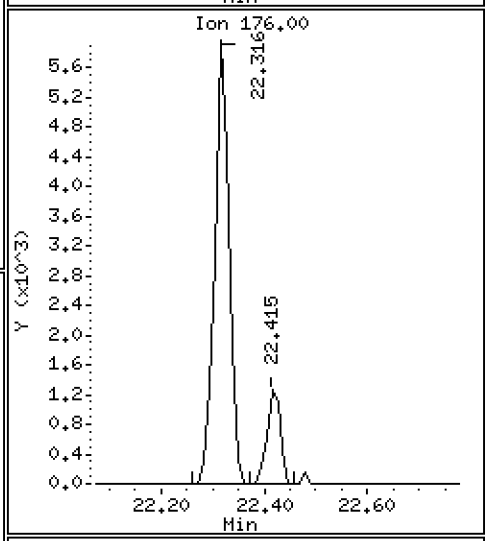


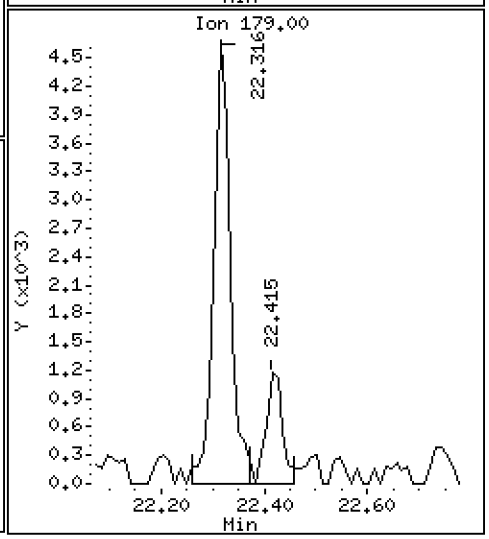












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Date : 07-JUN-2021 22:55

Client ID:

Instrument: nt14.i

Sample Info: 21E0106-03

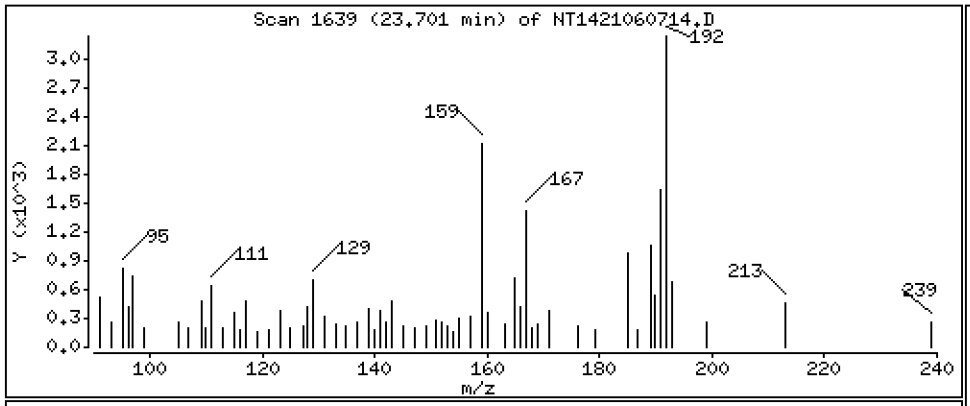
Operator: VTS

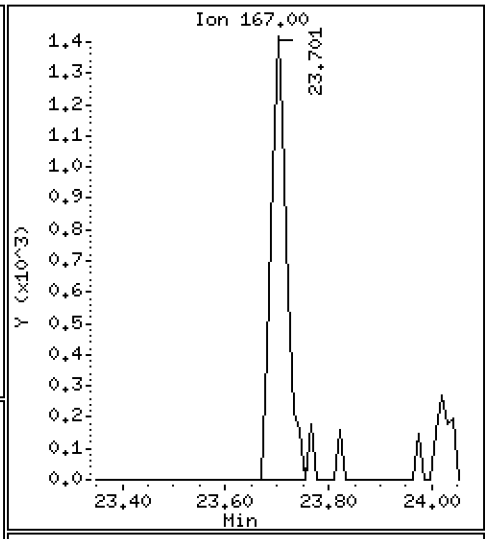
Column phase: Rxi-17Sil MS

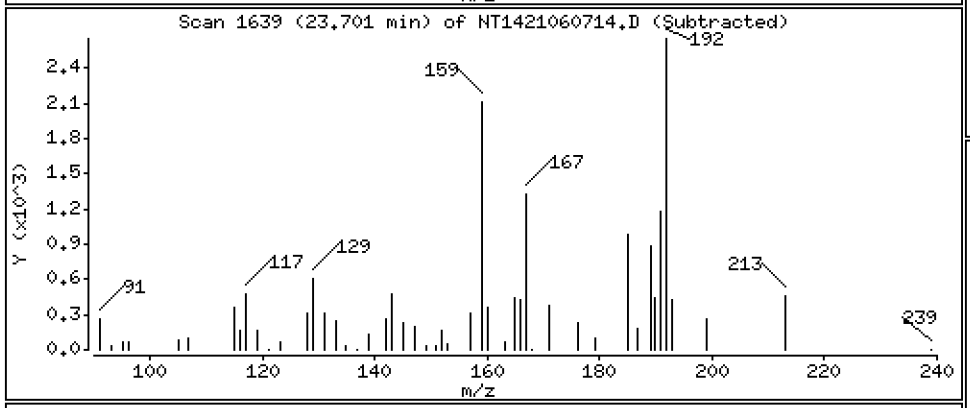
Column diameter: 0.25

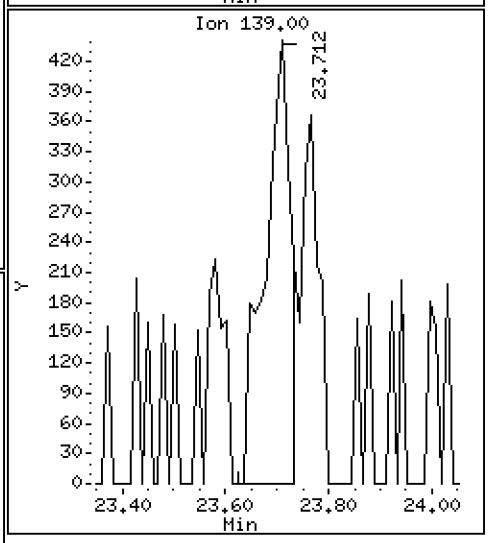
42 Carbazole

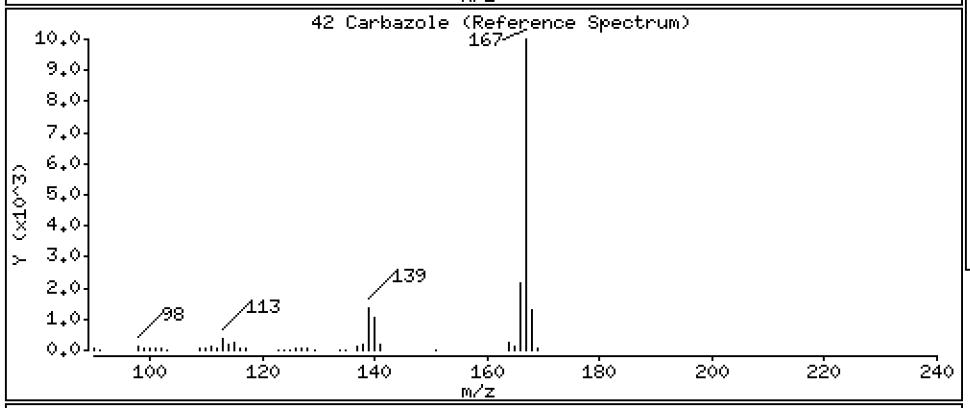
Concentration: 0.09573 ug/mL

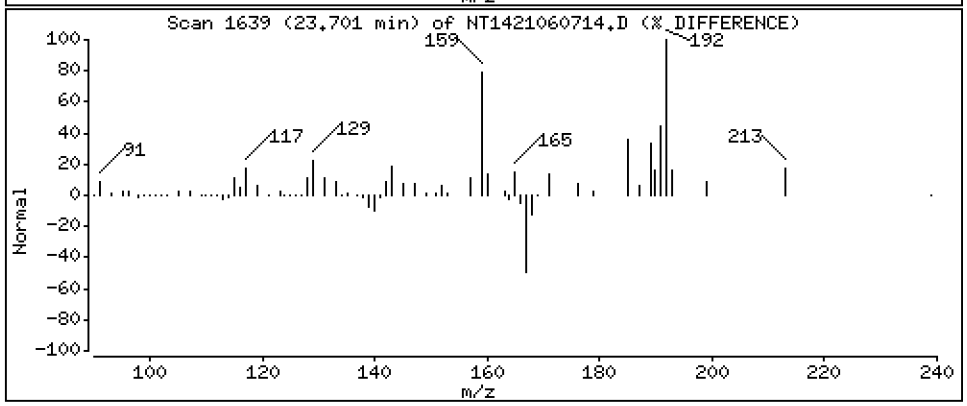












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Date : 07-JUN-2021 22:55

Client ID:

Instrument: nt14.i

Sample Info: 21E0106-03

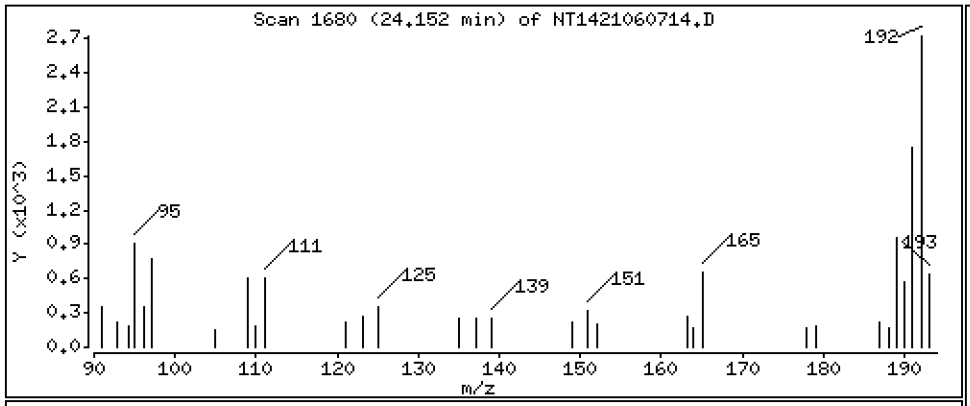
Operator: VTS

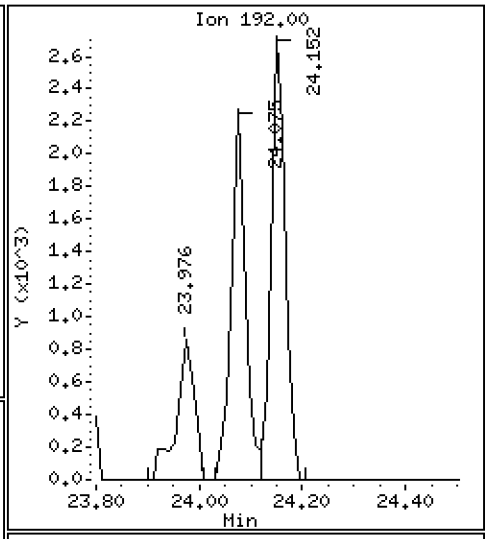
Column phase: Rxi-17Sil MS

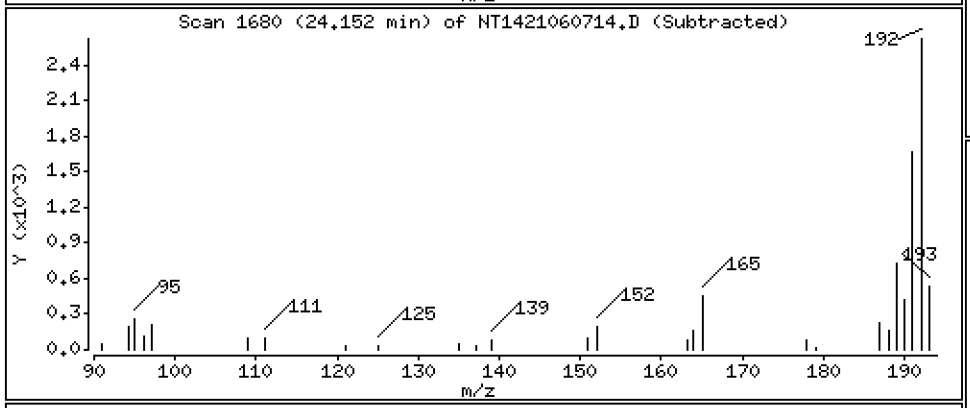
Column diameter: 0.25

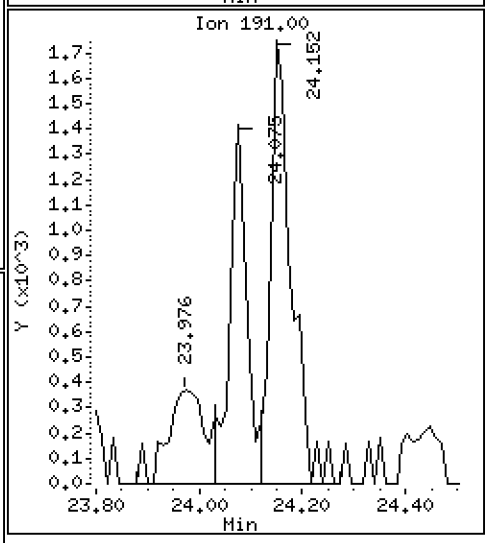
43 1-Methylphenanthrene

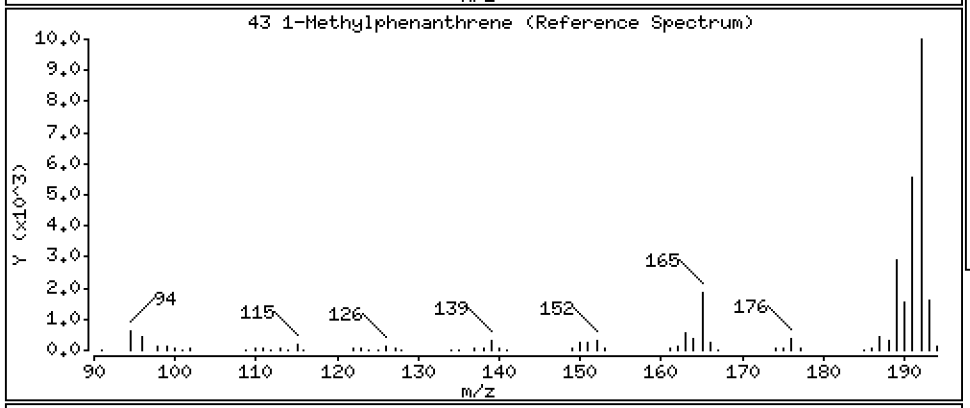
Concentration: 0.2075 ug/mL

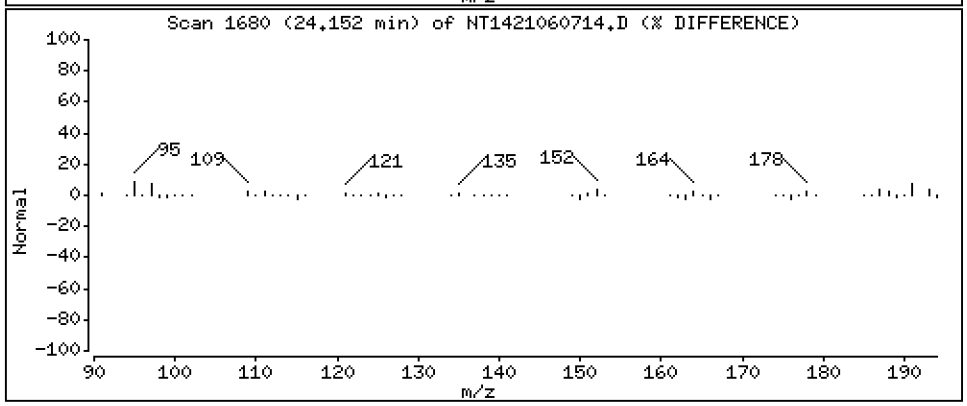












Data File: \\target\share\chem3\nt14.i\20210607.b\NT1421060714.D

Date : 07-JUN-2021 22:55

Client ID:

Instrument: nt14.i

Sample Info: 21E0106-03

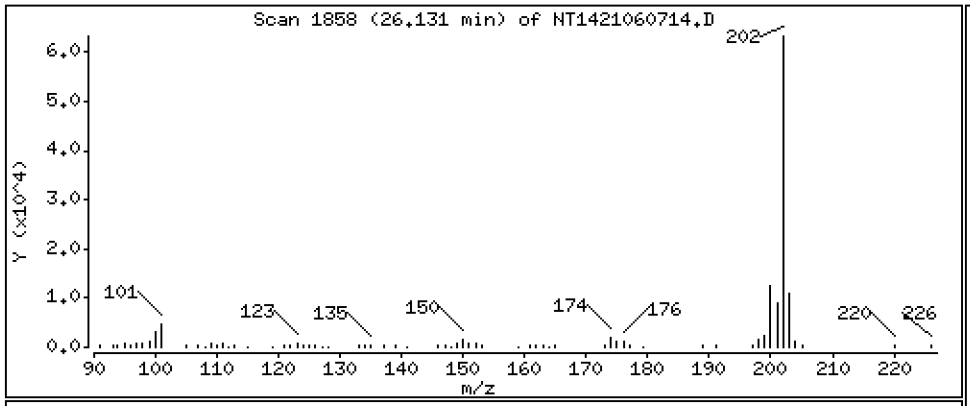
Operator: VTS

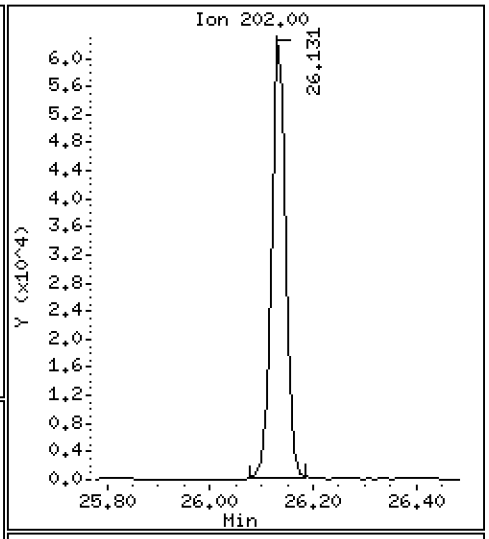
Column phase: Rxi-17Sil MS

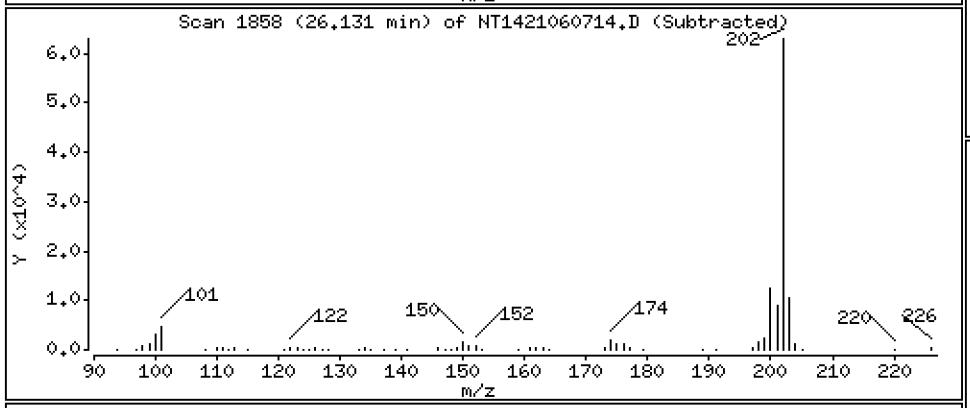
Column diameter: 0.25

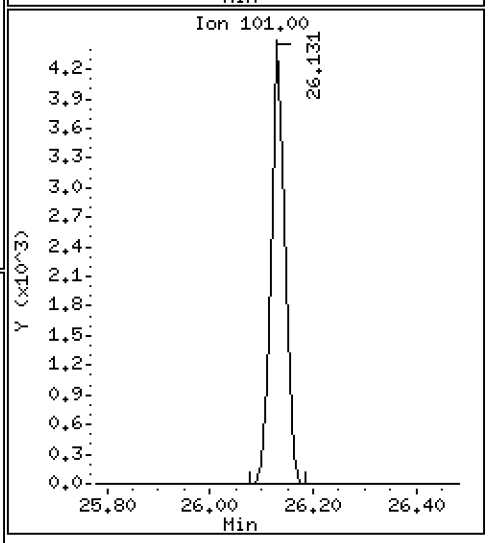
44 Fluoranthene

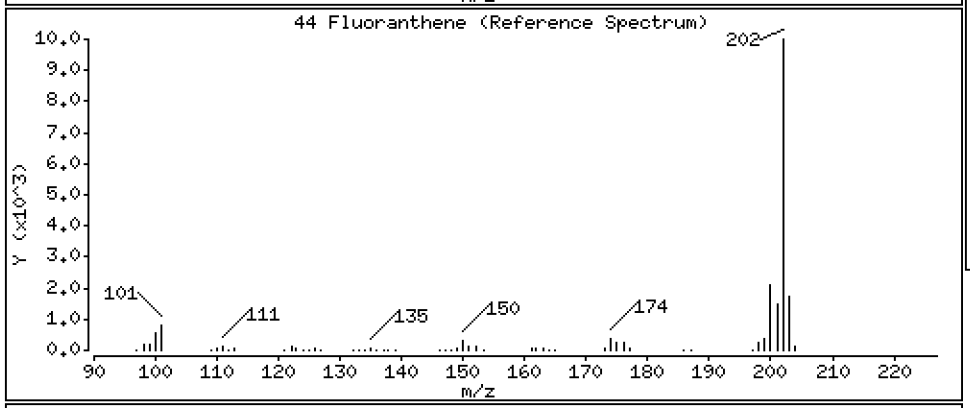
Concentration: 3.048 ug/mL

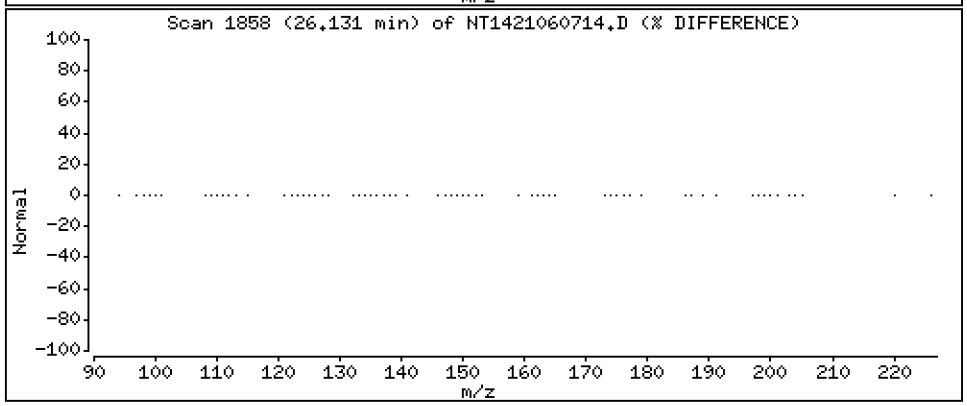












Data File: \\target\share\chem3\nt14.i\20210607.b\NT1421060714.D

Date : 07-JUN-2021 22:55

Client ID:

Instrument: nt14.i

Sample Info: 21E0106-03

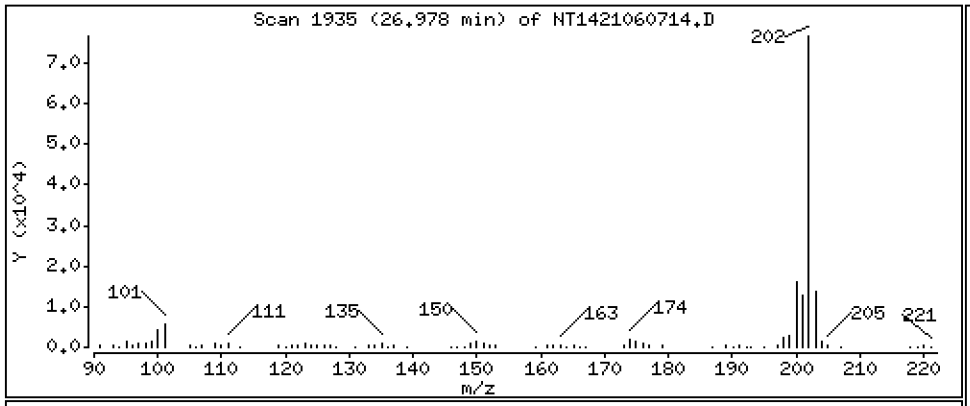
Operator: VTS

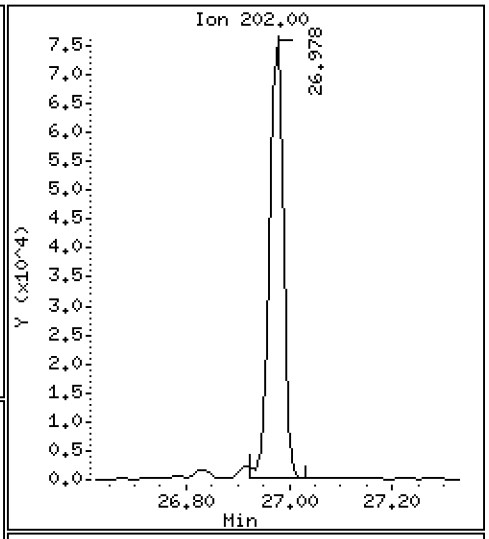
Column phase: Rxi-17Sil MS

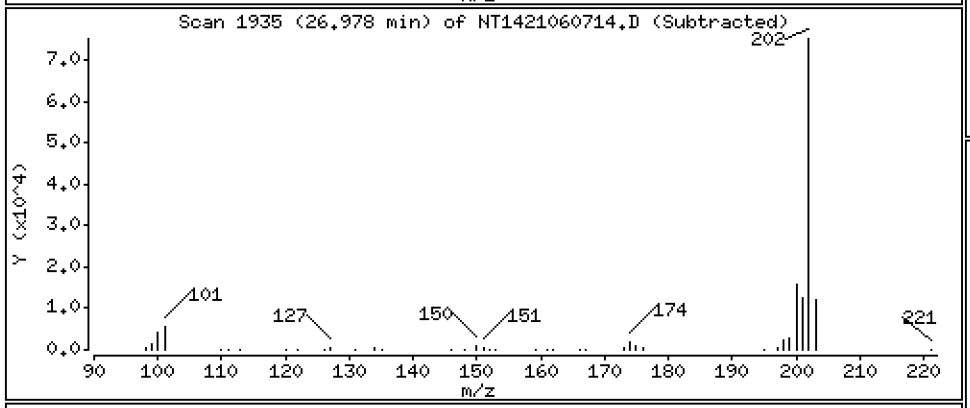
Column diameter: 0.25

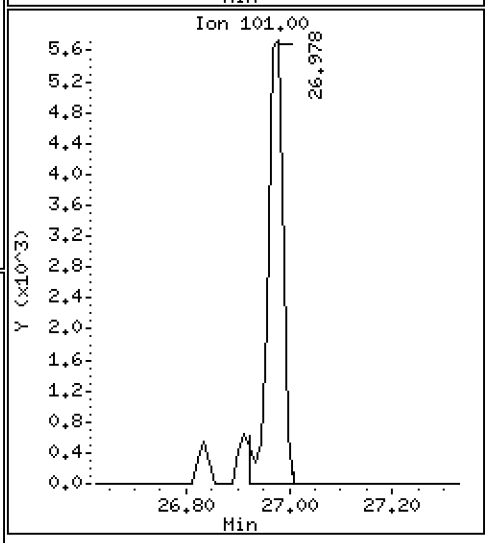
46 Pyrene

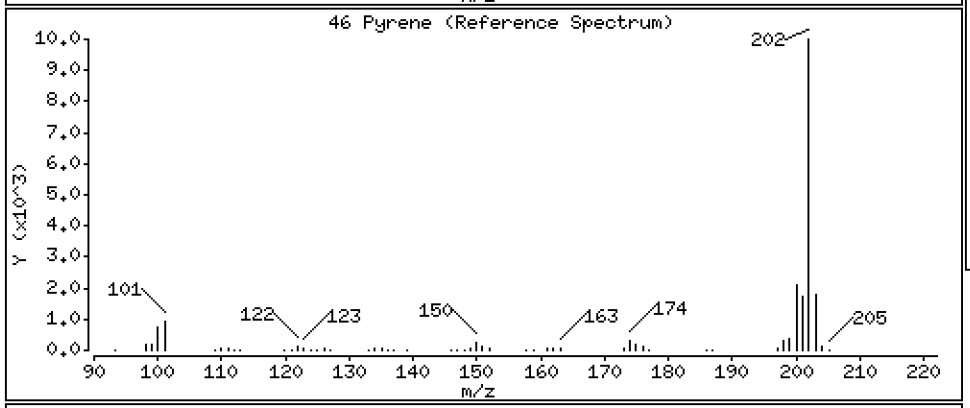
Concentration: 3.402 ug/mL

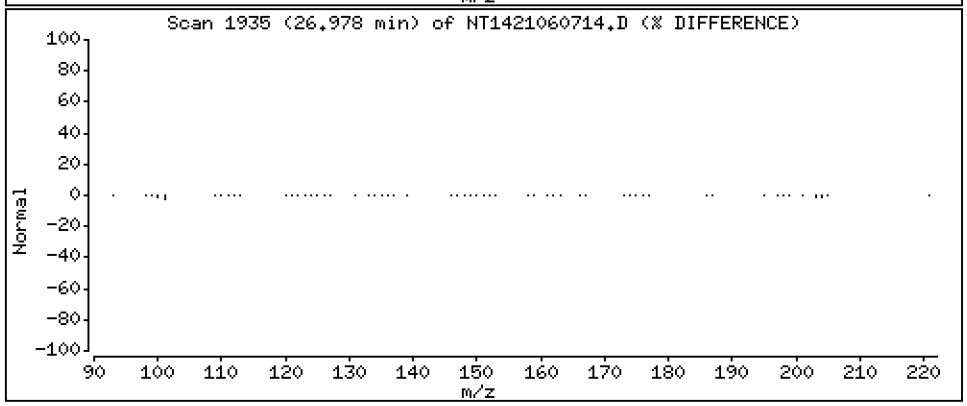












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Date : 07-JUN-2021 22:55

Client ID:

Instrument: nt14.i

Sample Info: 21E0106-03

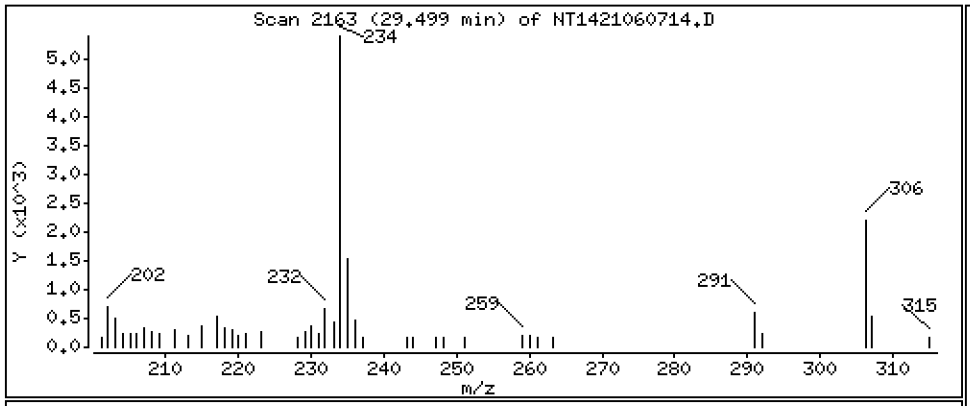
Operator: VTS

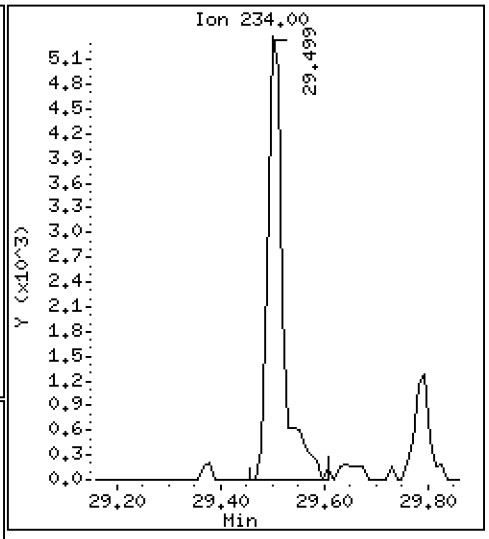
Column phase: Rxi-17Sil MS

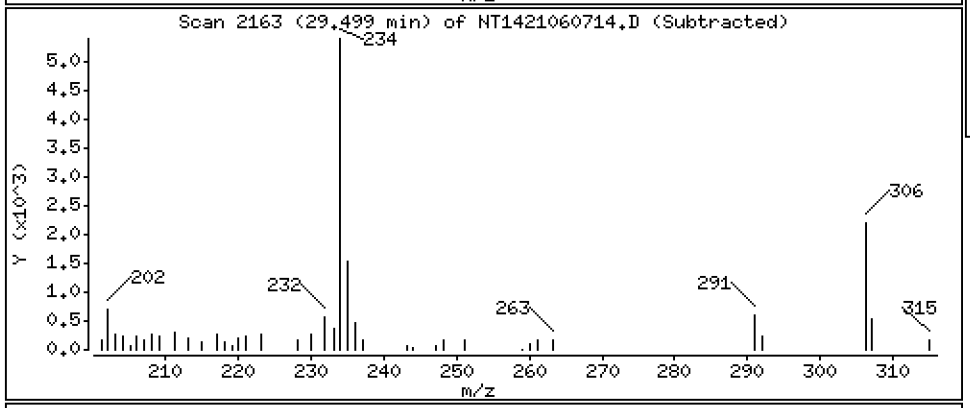
Column diameter: 0.25

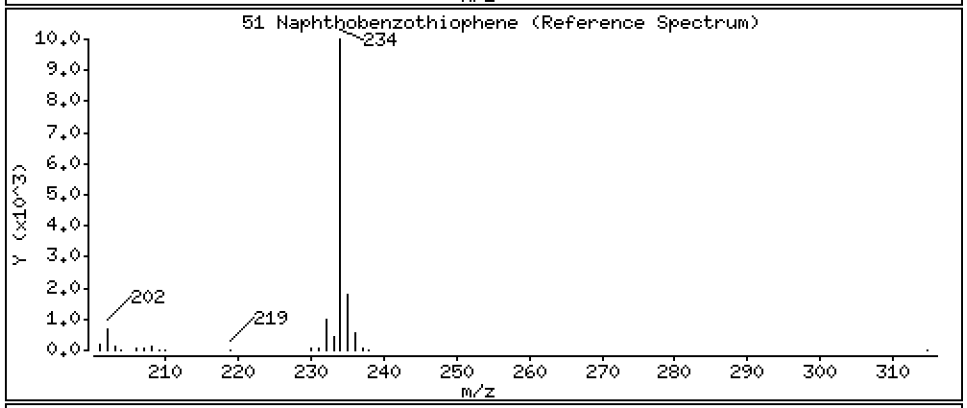
51 Naphthobenzothiophene

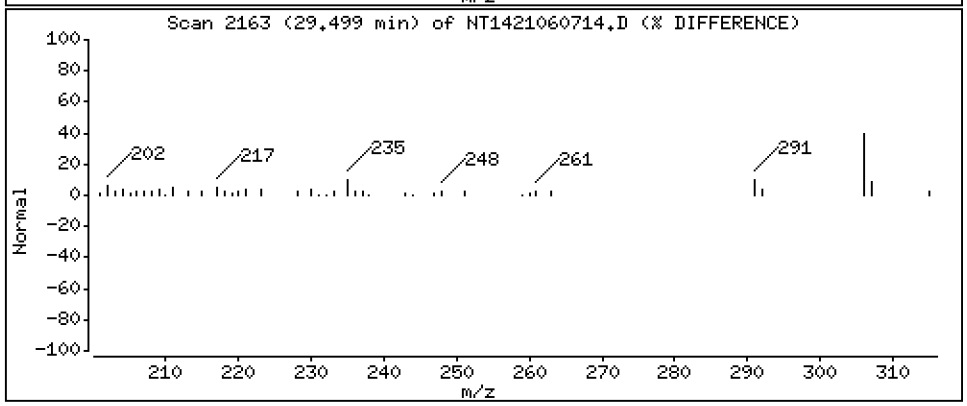
Concentration: 0.2561 ug/mL











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Date : 07-JUN-2021 22:55

Client ID:

Instrument: nt14.i

Sample Info: 21E0106-03

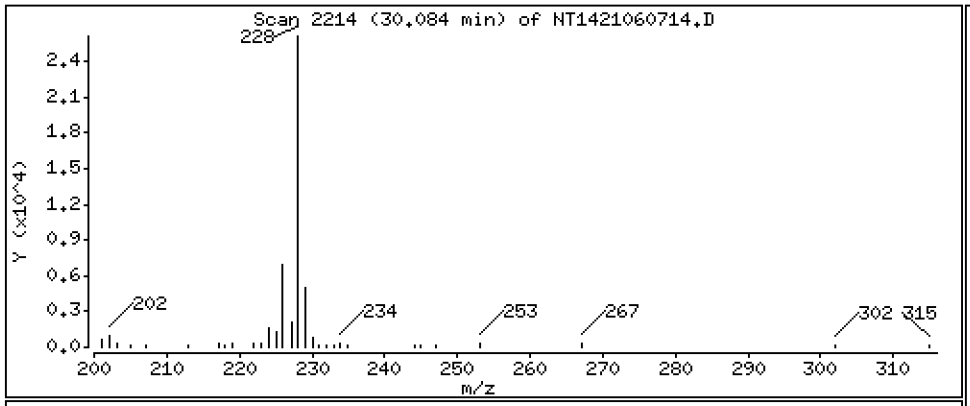
Operator: VTS

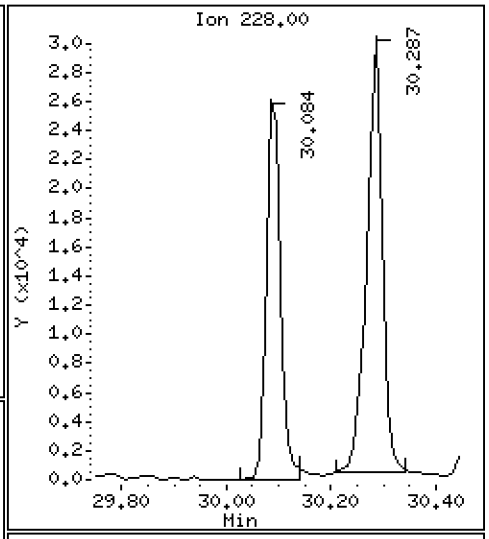
Column phase: Rxi-17Sil MS

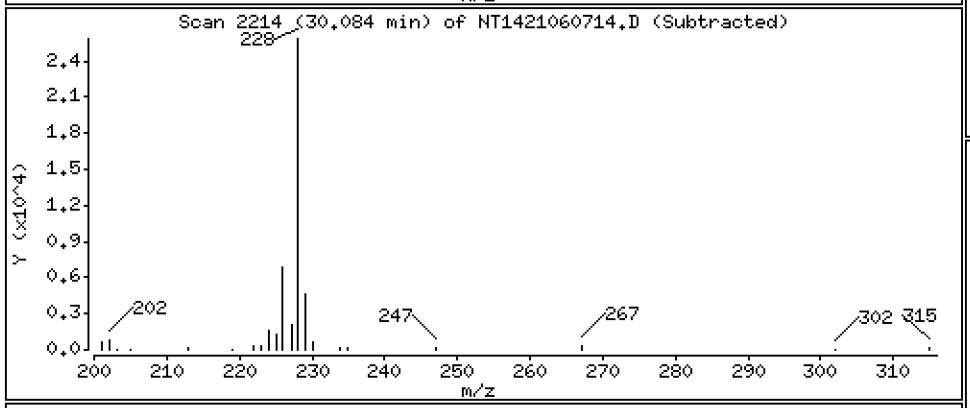
Column diameter: 0.25

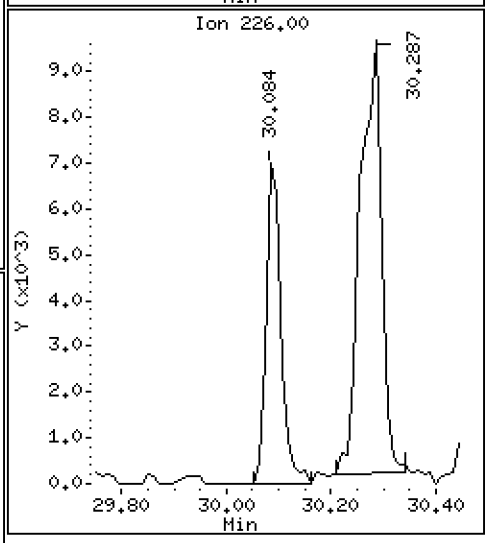
55 Benzo(a)anthracene

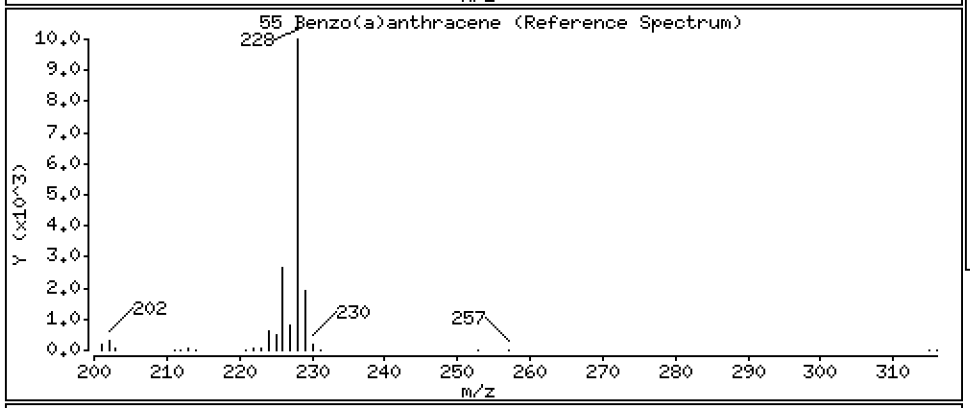
Concentration: 1.449 ug/mL

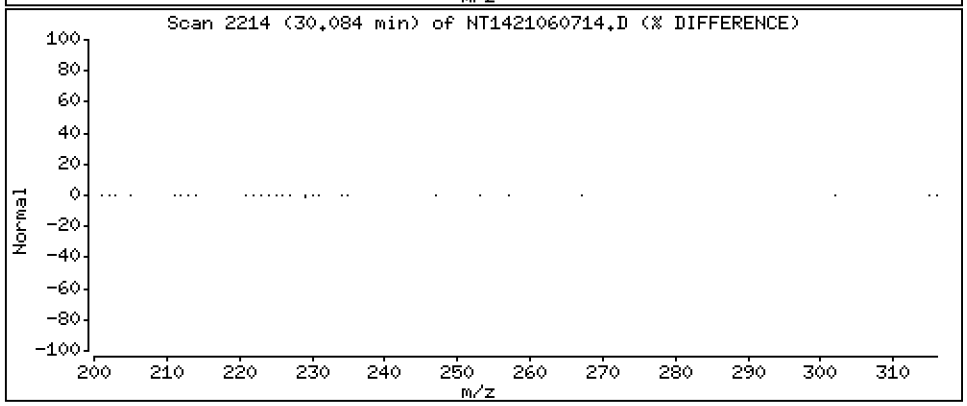












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Date : 07-JUN-2021 22:55

Client ID:

Instrument: nt14.i

Sample Info: 21E0106-03

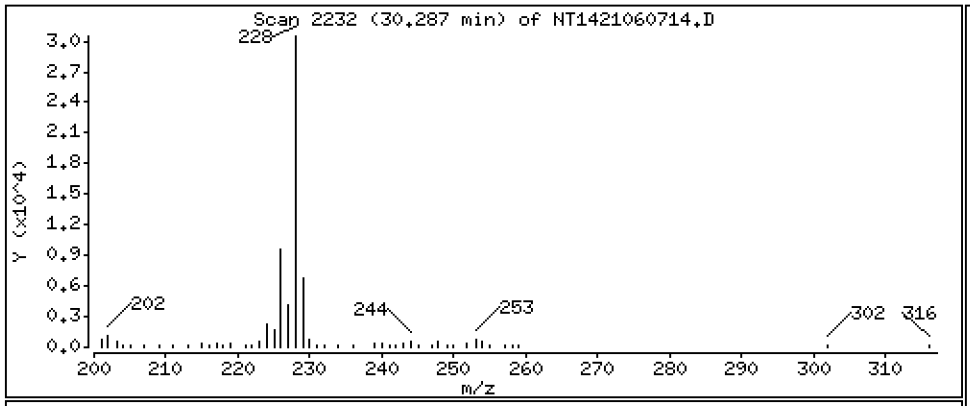
Operator: VTS

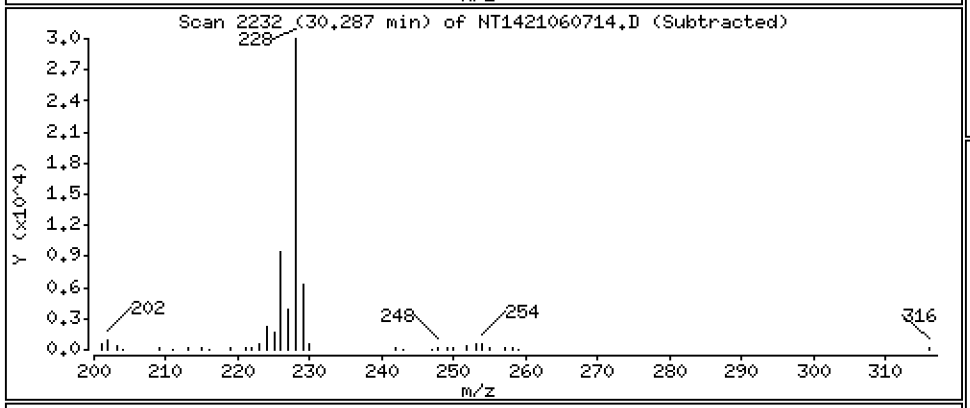
Column phase: Rxi-17Sil MS

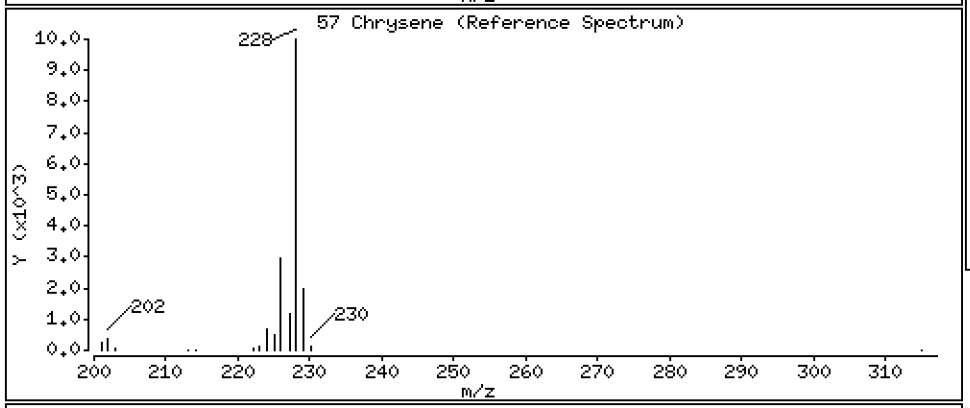
Column diameter: 0.25

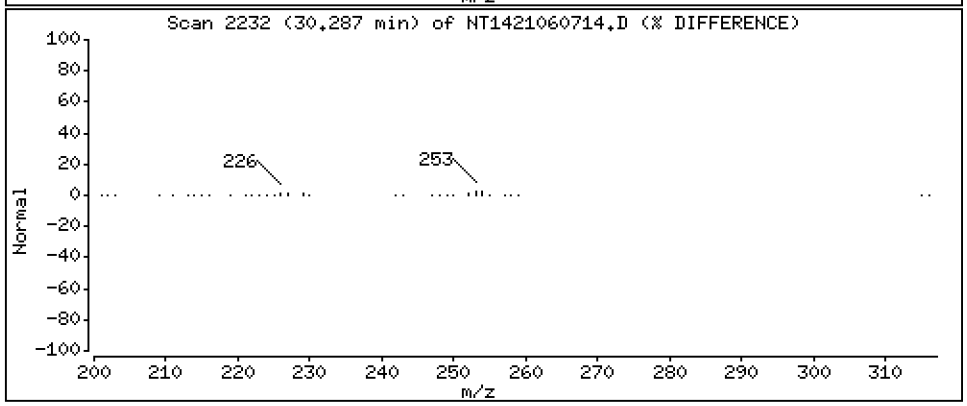
57 Chrysene

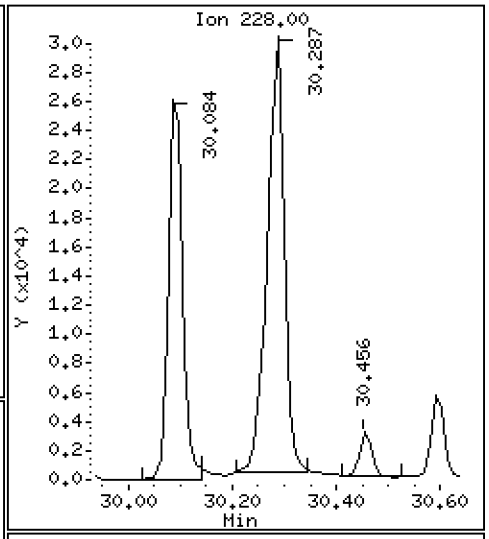
Concentration: 1.844 ug/mL

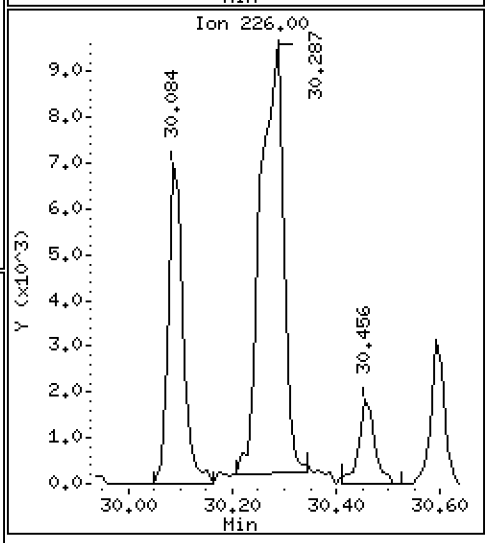












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Date : 07-JUN-2021 22:55

Client ID:

Instrument: nt14.i

Sample Info: 21E0106-03

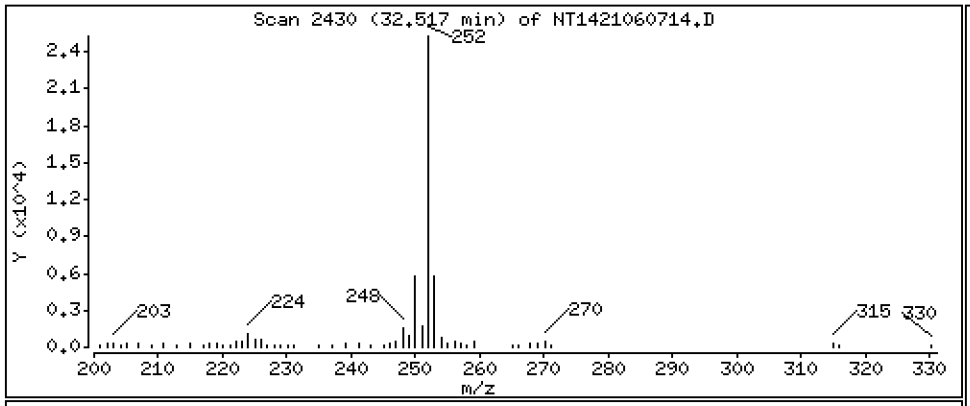
Operator: VTS

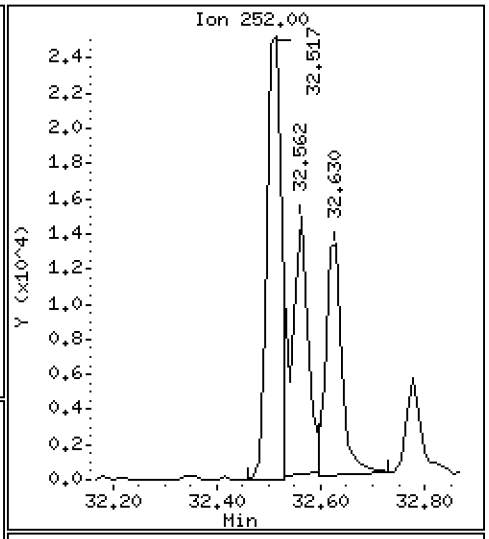
Column phase: Rxi-17Sil MS

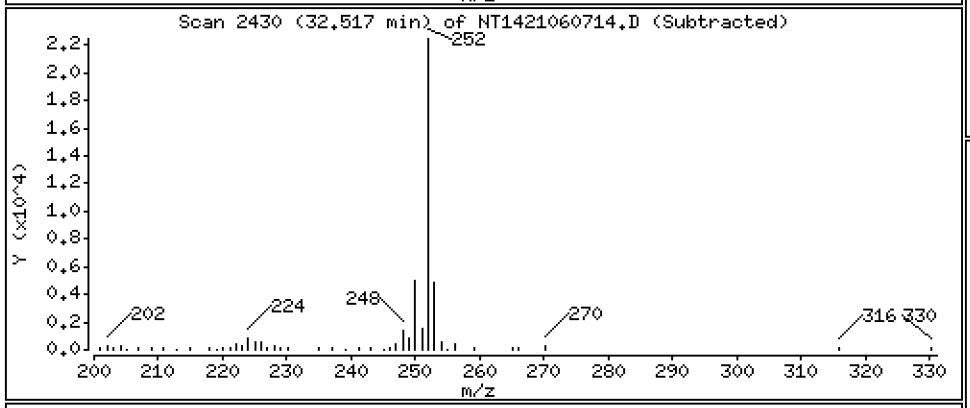
Column diameter: 0.25

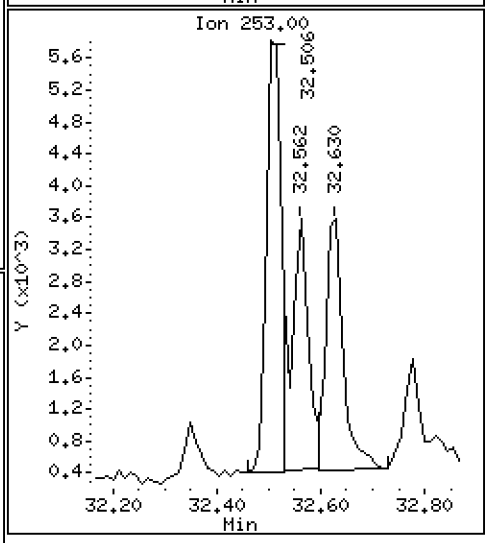
62 Benzo(b)fluoranthene

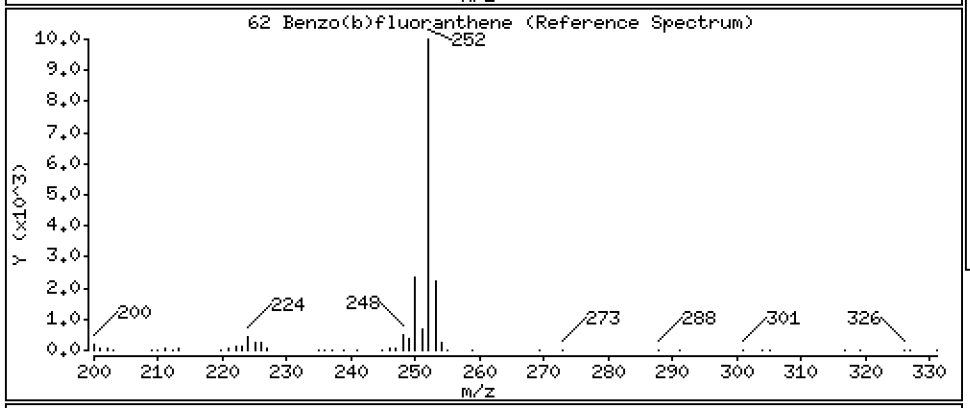
Concentration: 1.316 ug/mL

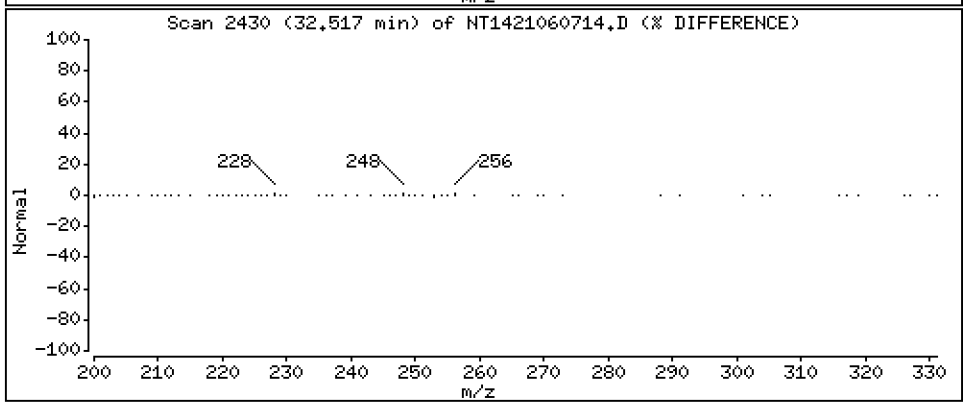












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Date : 07-JUN-2021 22:55

Client ID:

Instrument: nt14.i

Sample Info: 21E0106-03

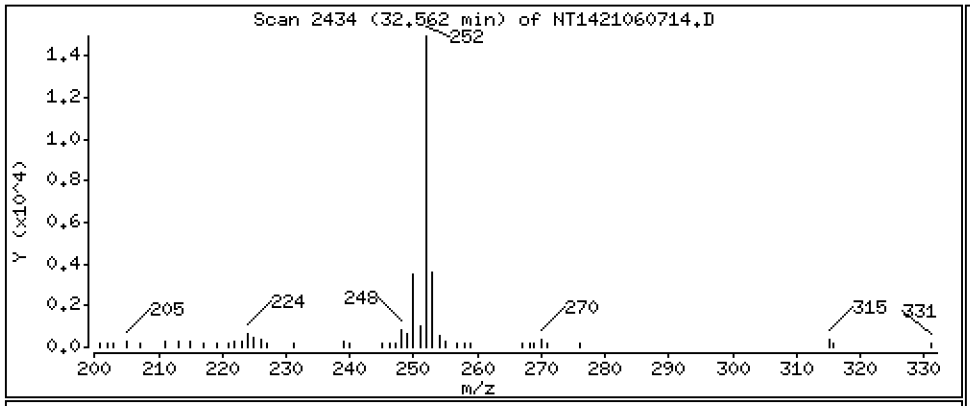
Operator: VTS

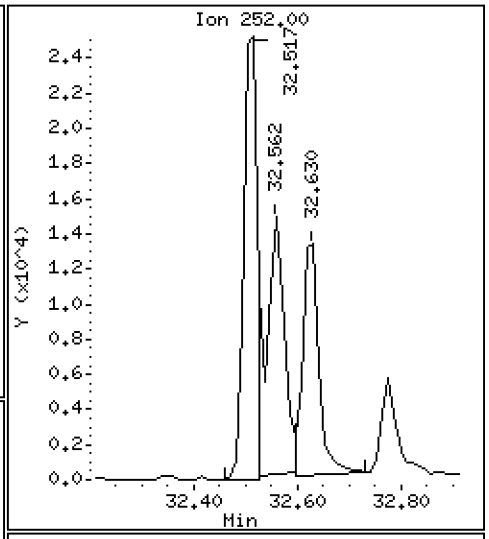
Column phase: Rxi-17Sil MS

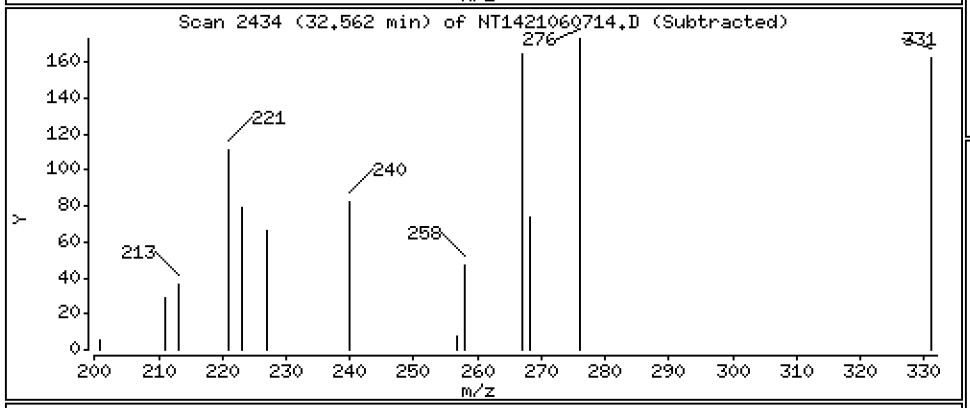
Column diameter: 0.25

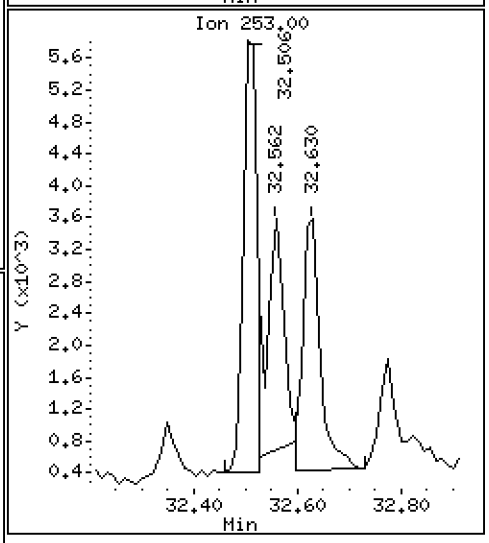
63 Benzo(k)fluoranthene

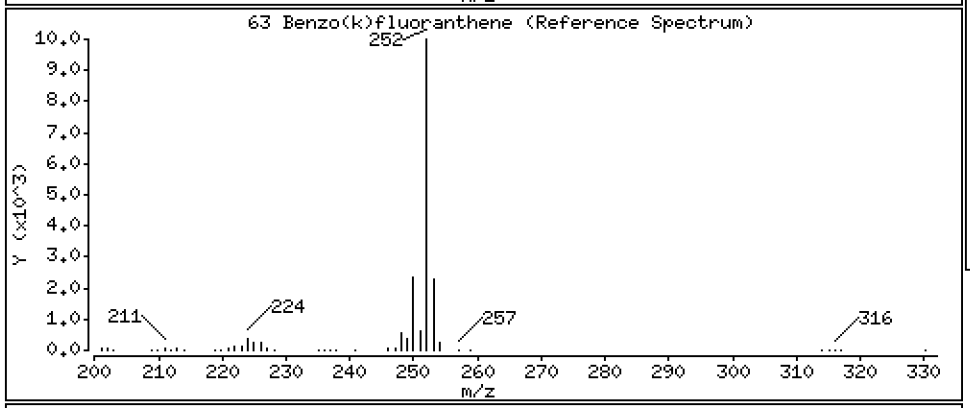
Concentration: 0.9491 ug/mL

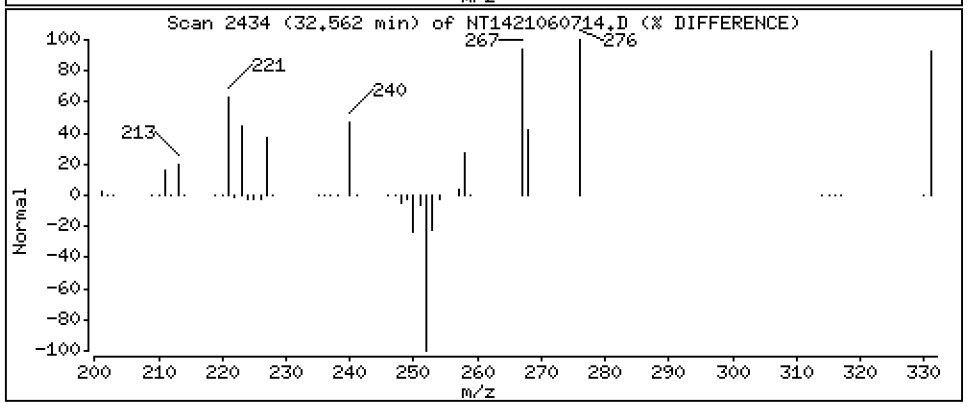












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Date : 07-JUN-2021 22:55

Client ID:

Instrument: nt14.i

Sample Info: 21E0106-03

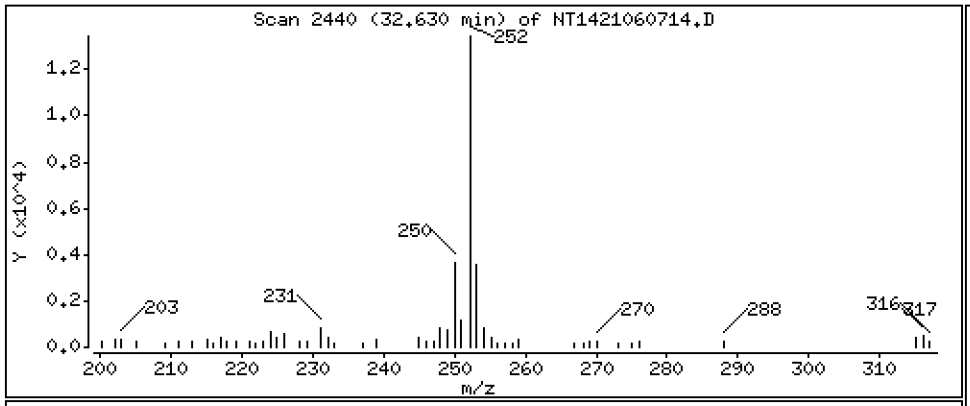
Operator: VTS

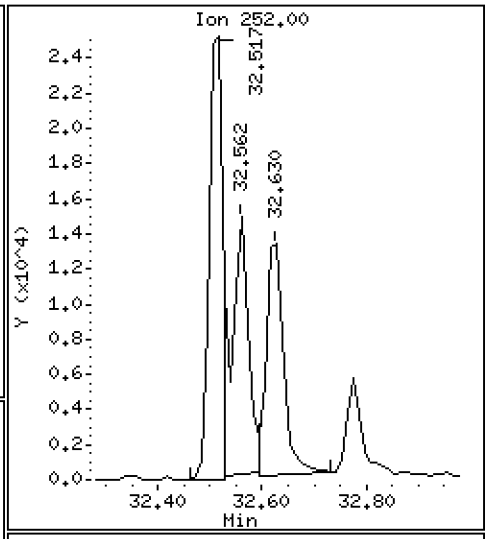
Column phase: Rxi-17Sil MS

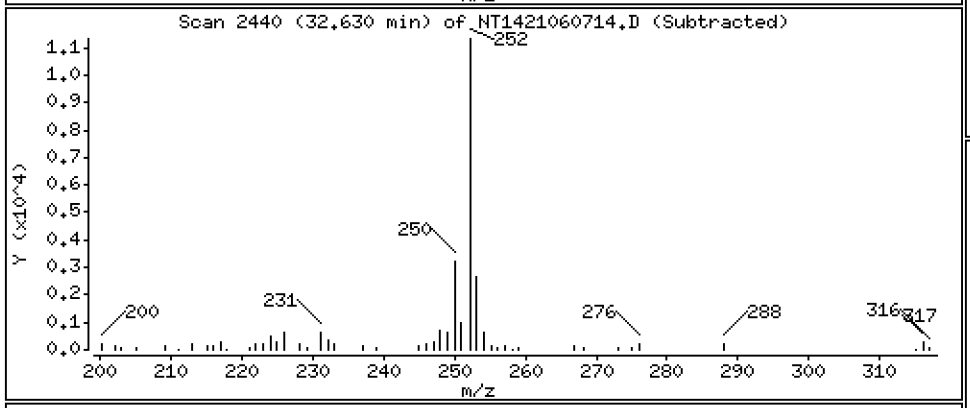
Column diameter: 0.25

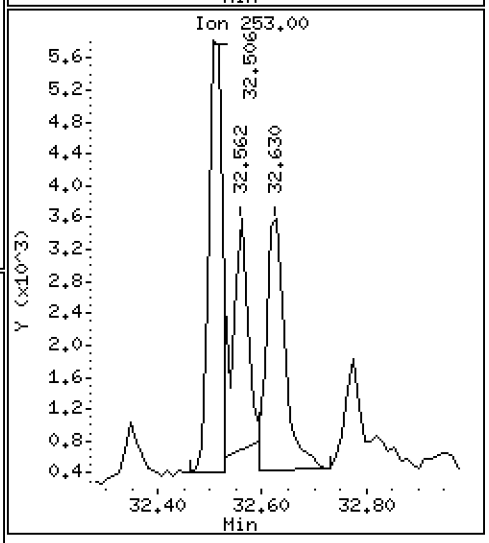
293 Benzo(j)fluoranthene

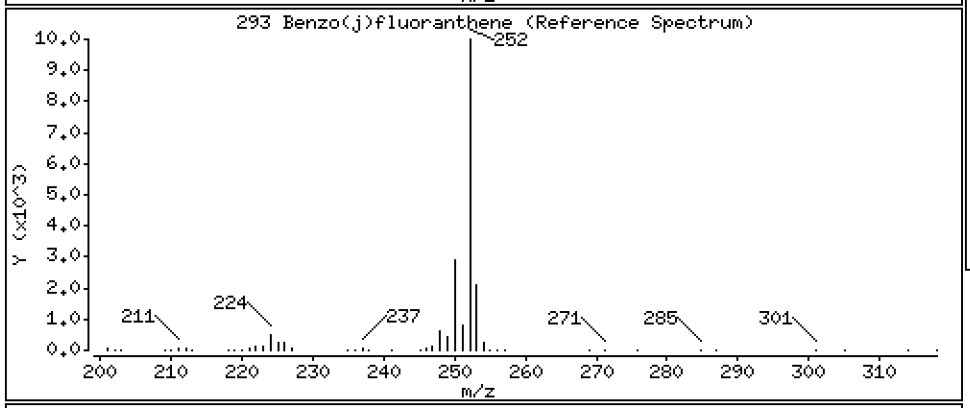
Concentration: 0.8345 ug/mL

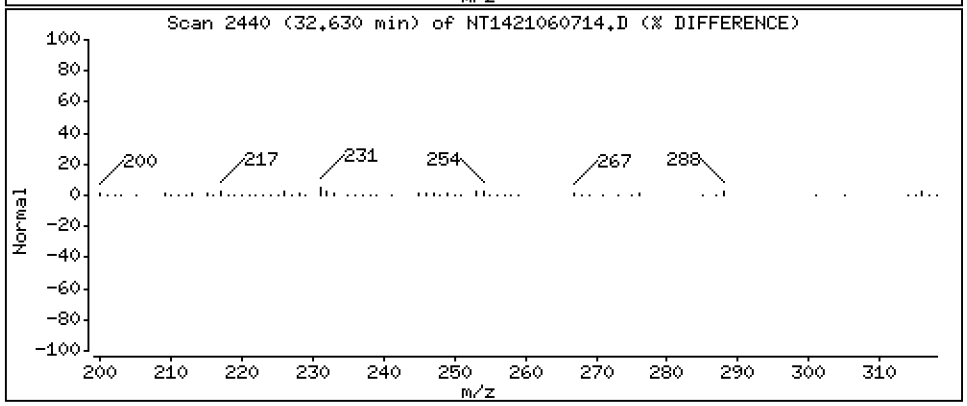












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Date : 07-JUN-2021 22:55

Client ID:

Instrument: nt14.i

Sample Info: 21E0106-03

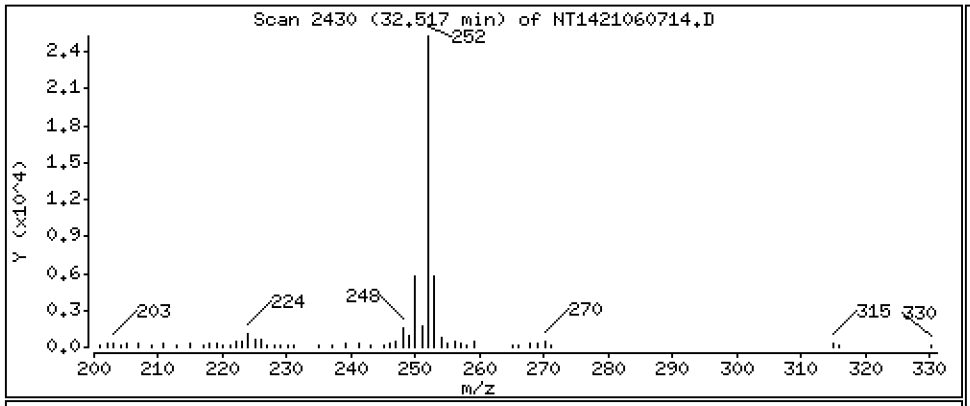
Operator: VTS

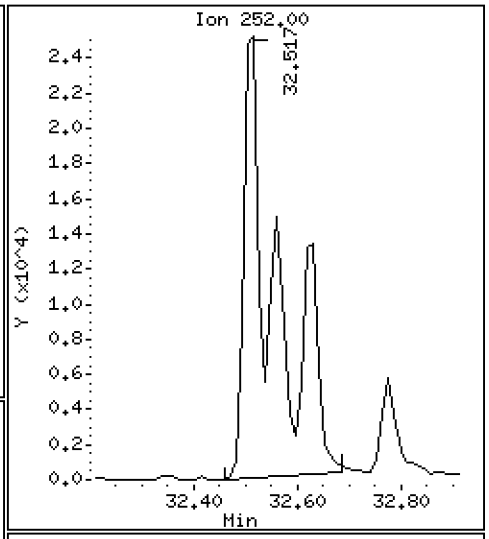
Column phase: Rxi-17Sil MS

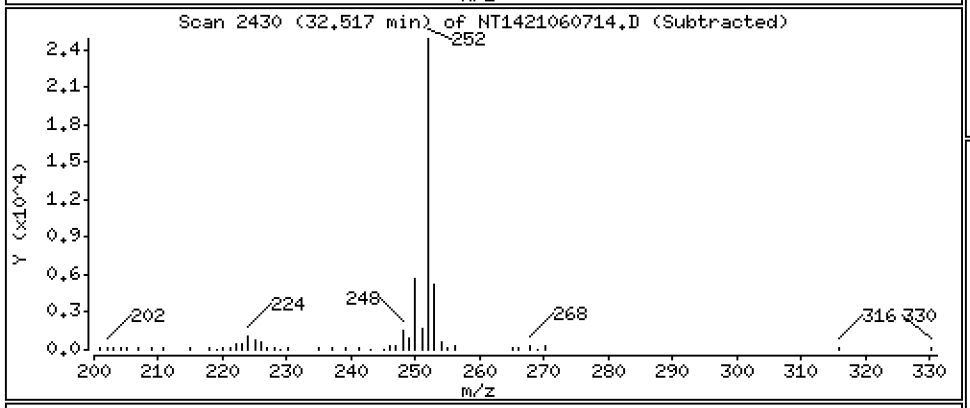
Column diameter: 0.25

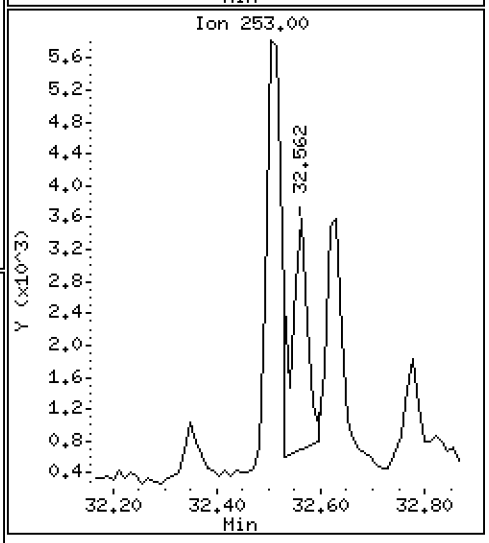
246 Total Benzofluoranthenes

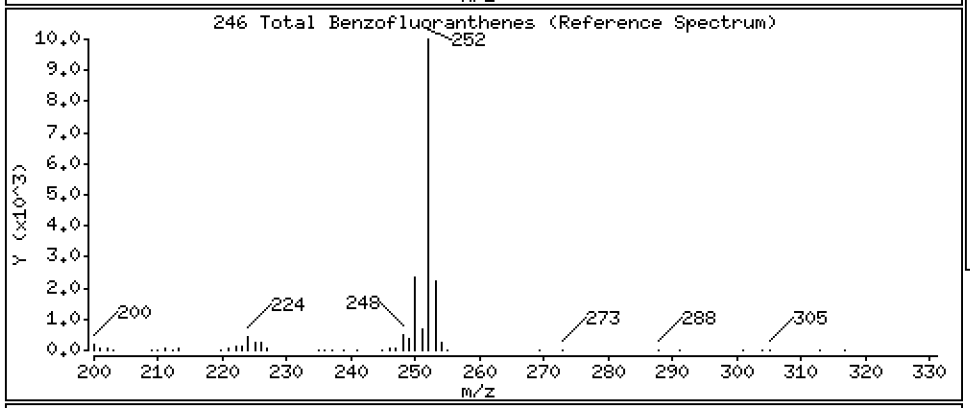
Concentration: 2.978 ug/mL

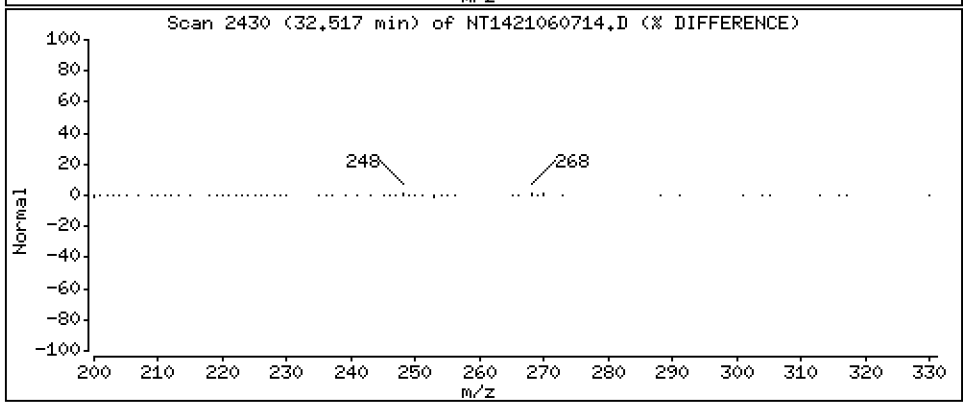












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Date : 07-JUN-2021 22:55

Client ID:

Instrument: nt14.i

Sample Info: 21E0106-03

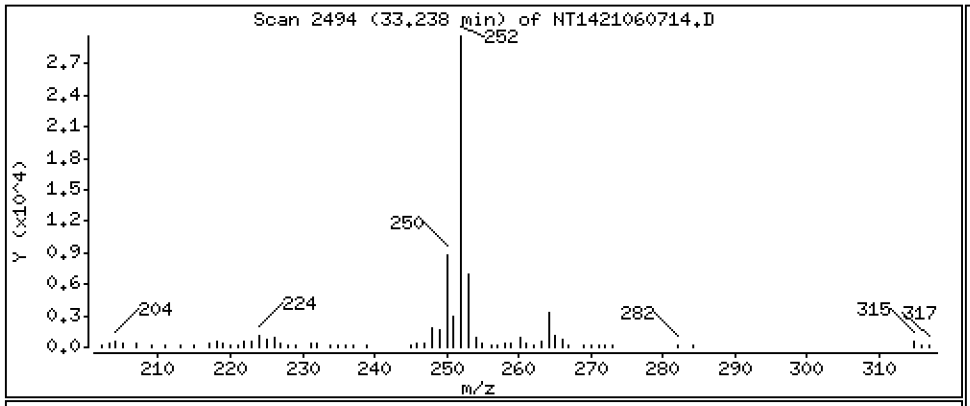
Operator: VTS

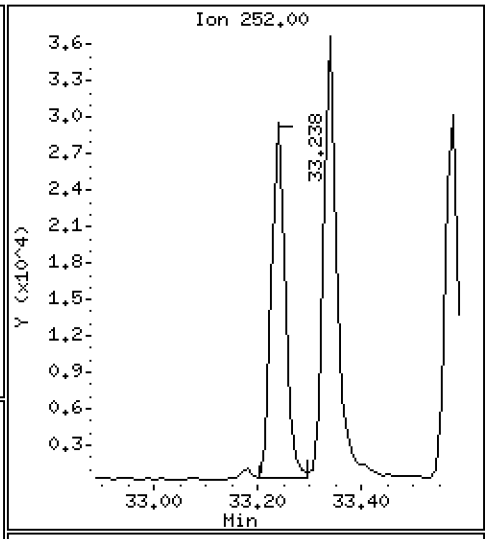
Column phase: Rxi-17Sil MS

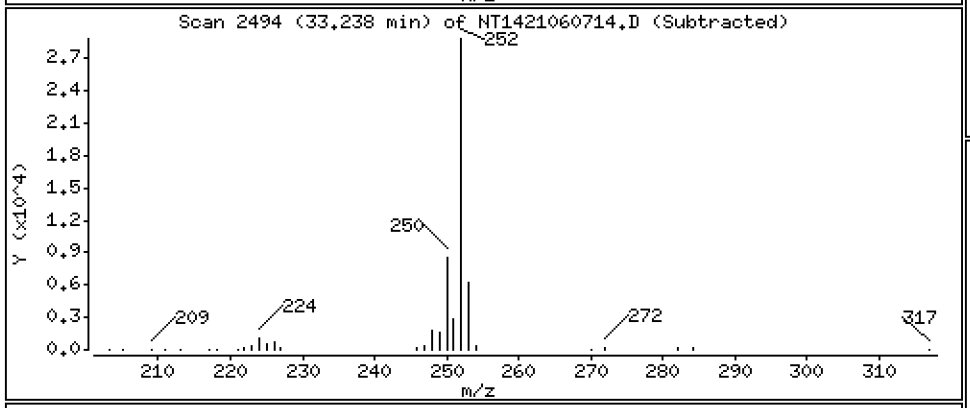
Column diameter: 0.25

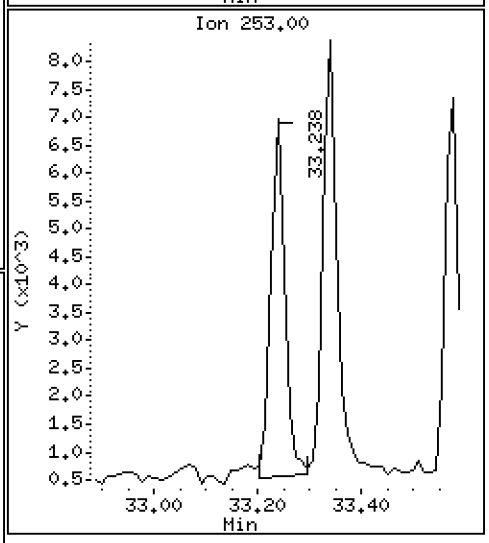
64 Benzo(e)pyrene

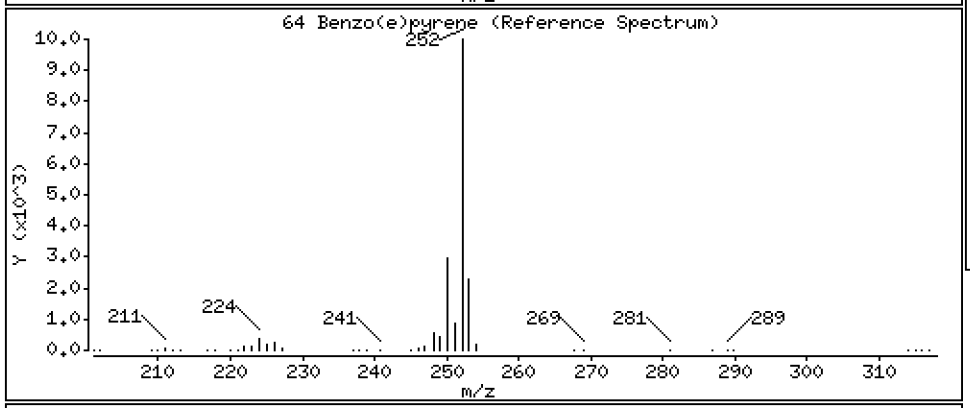
Concentration: 1.408 ug/mL

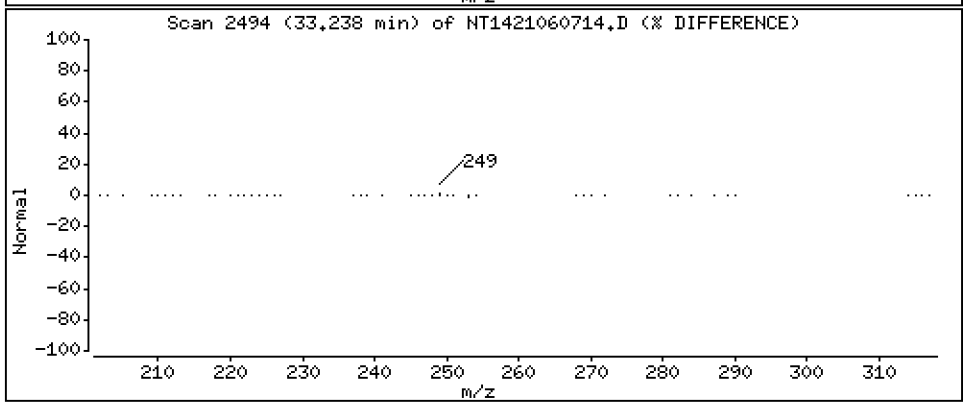












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Date : 07-JUN-2021 22:55

Client ID:

Instrument: nt14.i

Sample Info: 21E0106-03

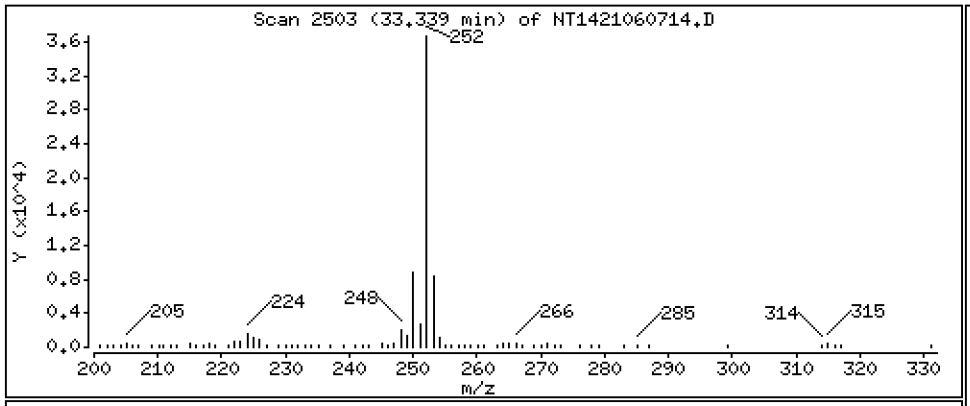
Operator: VTS

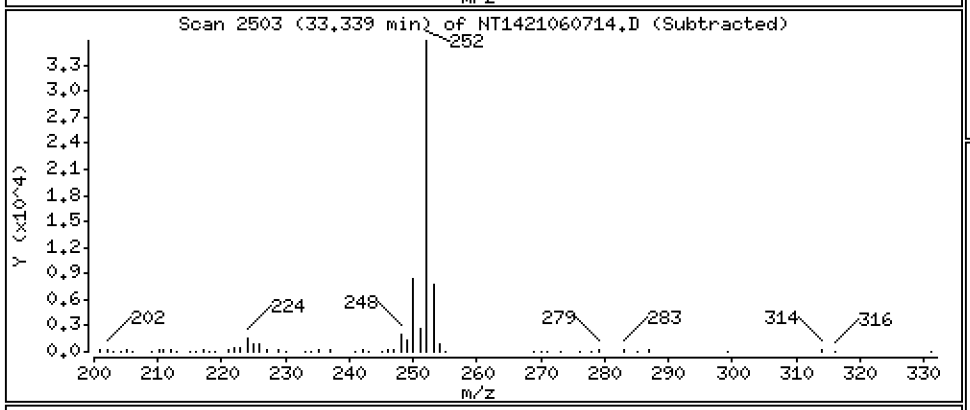
Column phase: Rxi-17Sil MS

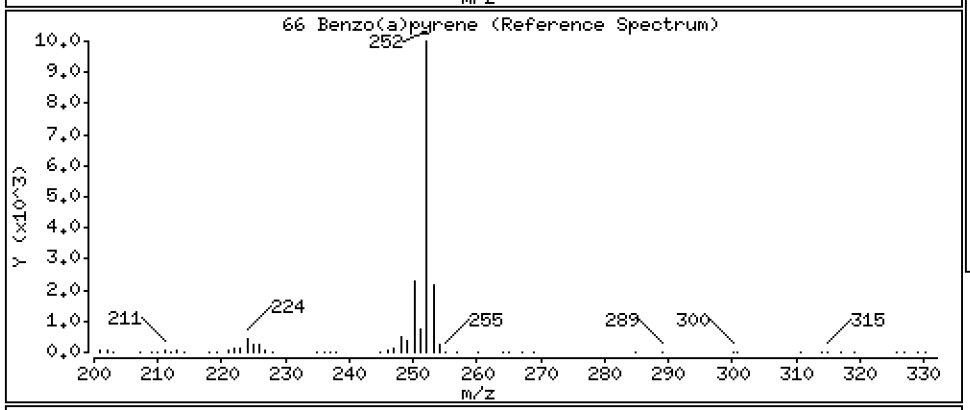
Column diameter: 0.25

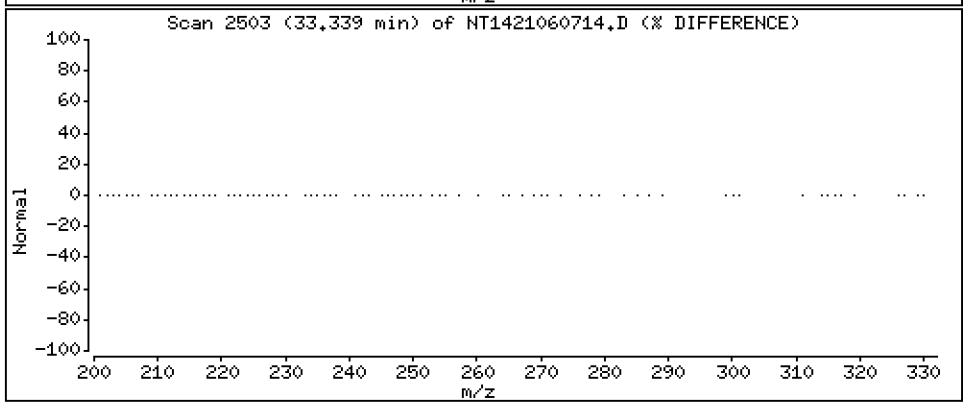
66 Benzo(a)pyrene

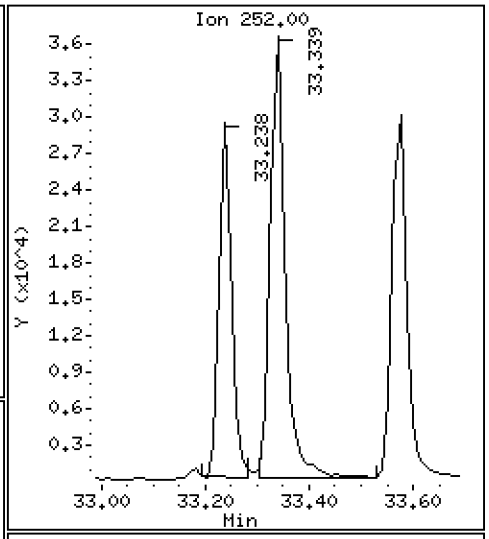
Concentration: 2.117 ug/mL

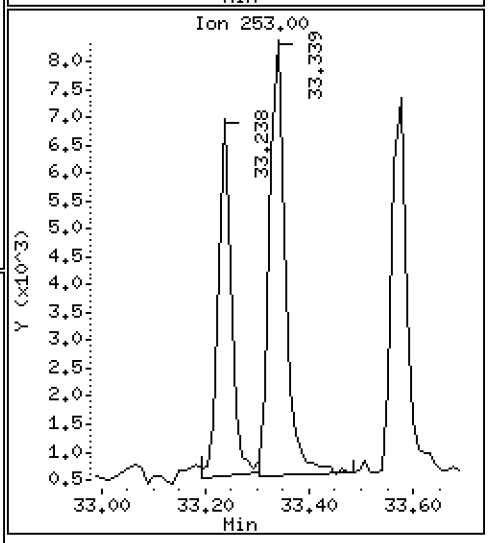












Data File: \\target\share\chem3\nt14.i\20210607.b\NT1421060714.D

Date : 07-JUN-2021 22:55

Client ID:

Instrument: nt14.i

Sample Info: 21E0106-03

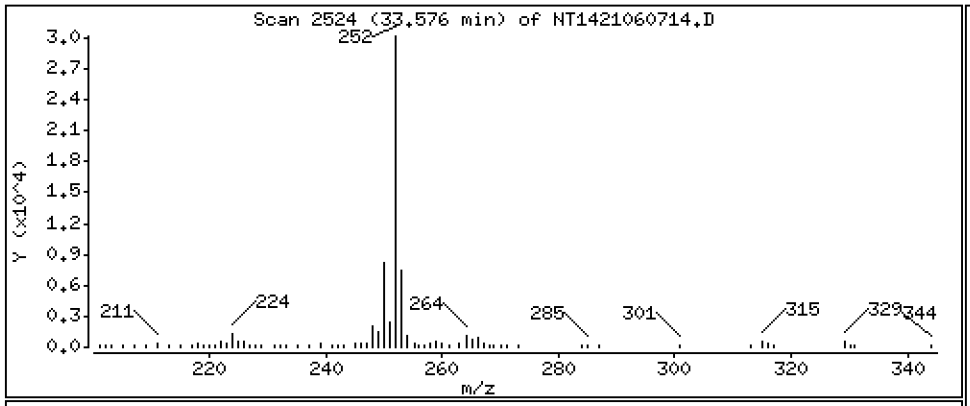
Operator: VTS

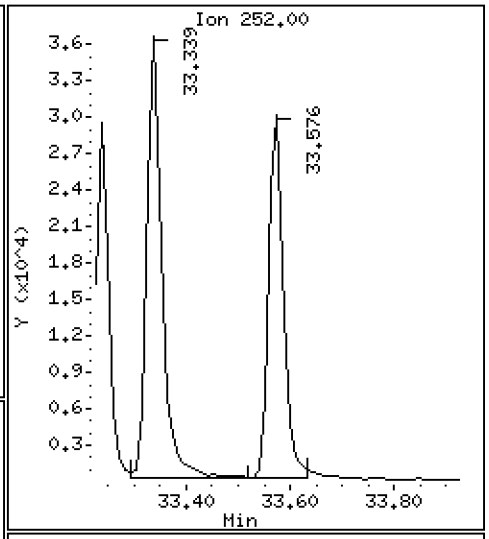
Column phase: Rxi-17Sil MS

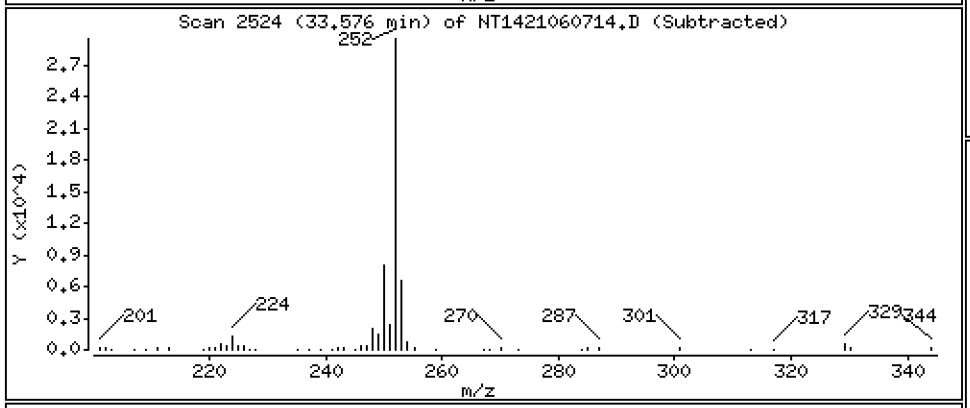
Column diameter: 0.25

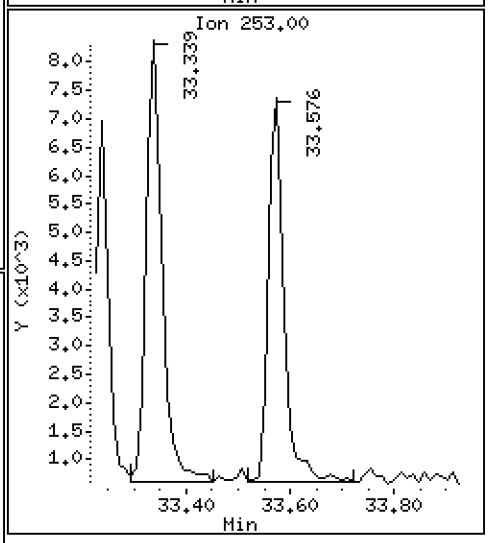
68 Perylene

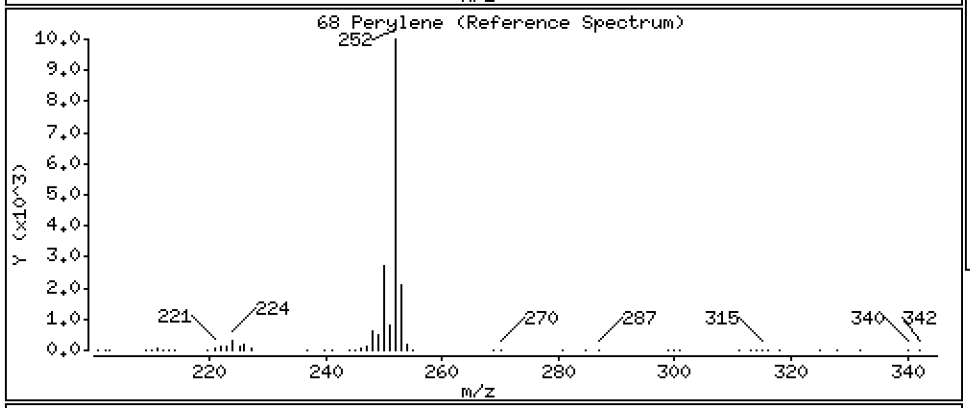
Concentration: 1.649 ug/mL

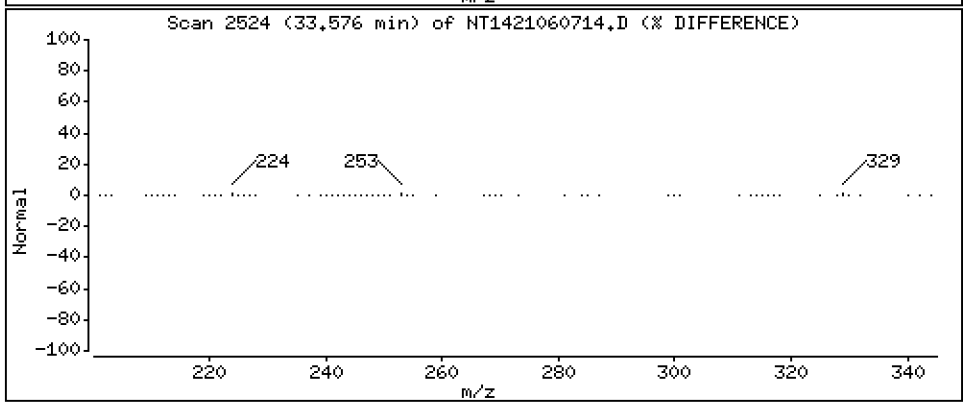












Data File: \\target\share\chem3\nt14.i\20210607.b\NT1421060714.D

Date : 07-JUN-2021 22:55

Client ID:

Instrument: nt14.i

Sample Info: 21E0106-03

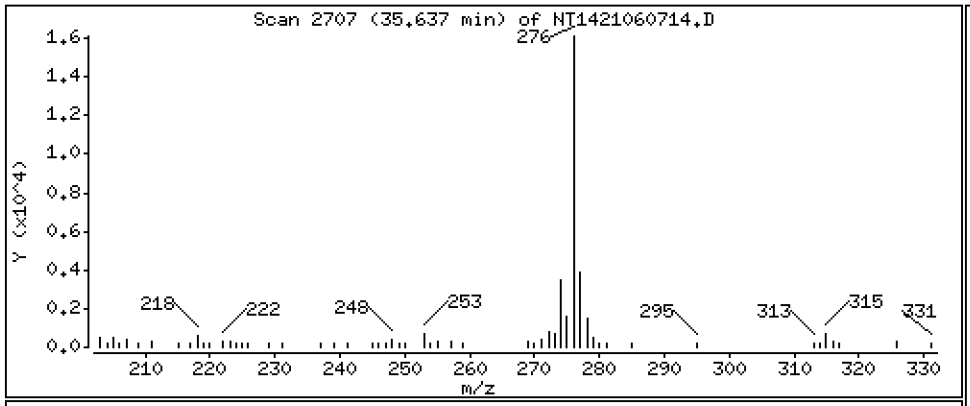
Operator: VTS

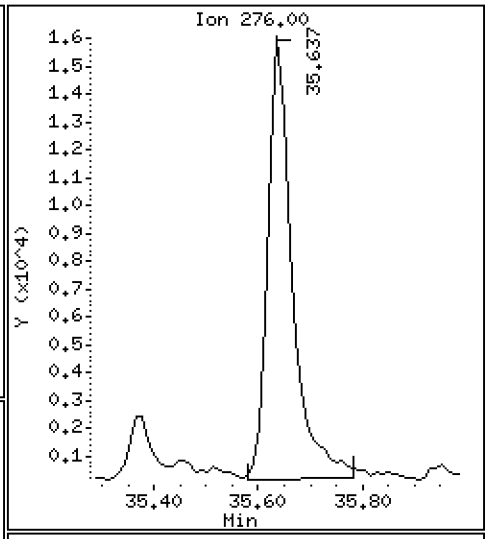
Column phase: Rxi-17Sil MS

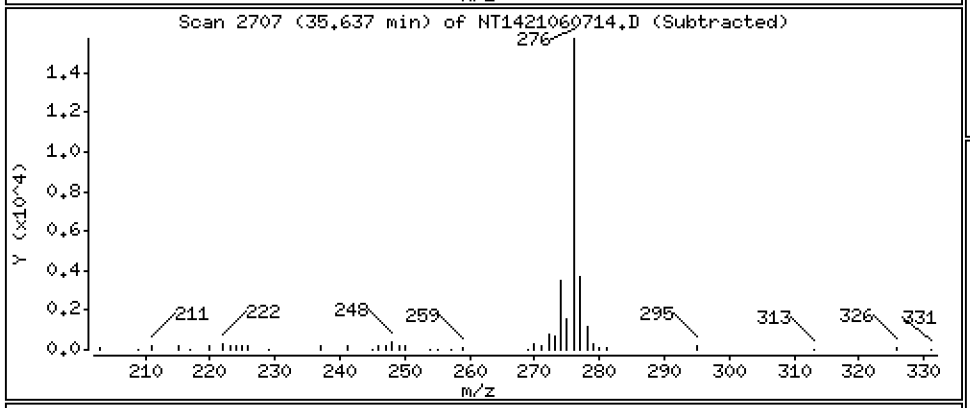
Column diameter: 0.25

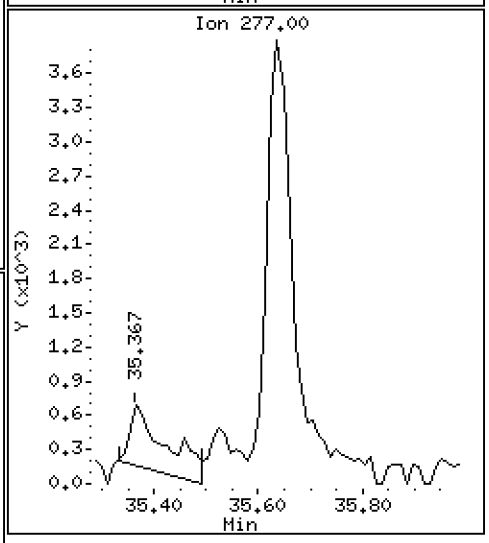
69 Indeno(1,2,3-cd)pyrene

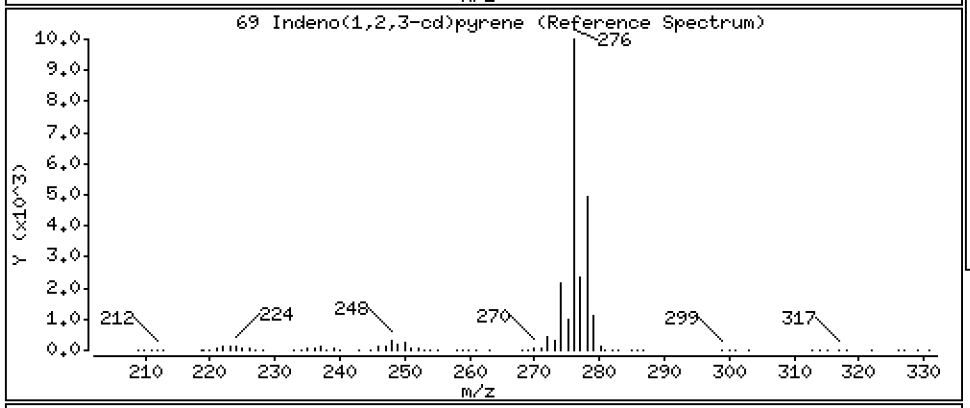
Concentration: 1.315 ug/mL

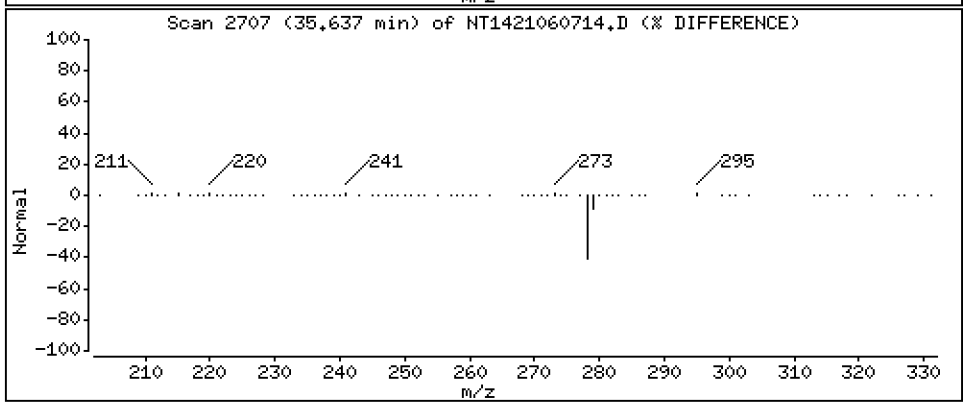












Data File: \\target\share\chem3\nt14.i\20210607.b\NT1421060714.D

Date : 07-JUN-2021 22:55

Client ID:

Instrument: nt14.i

Sample Info: 21E0106-03

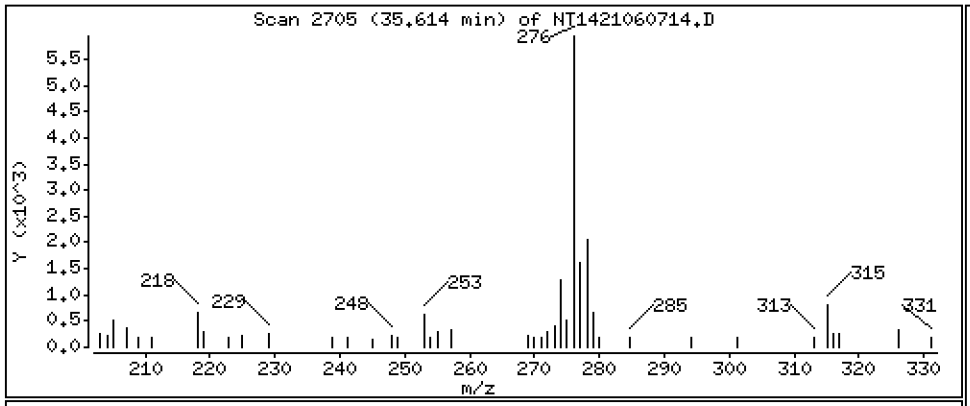
Operator: VTS

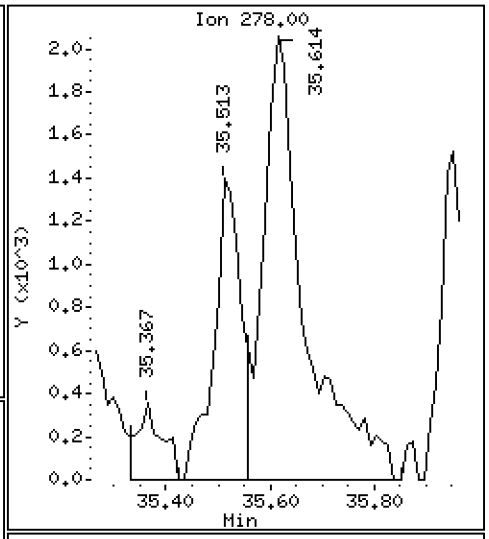
Column phase: Rxi-17Sil MS

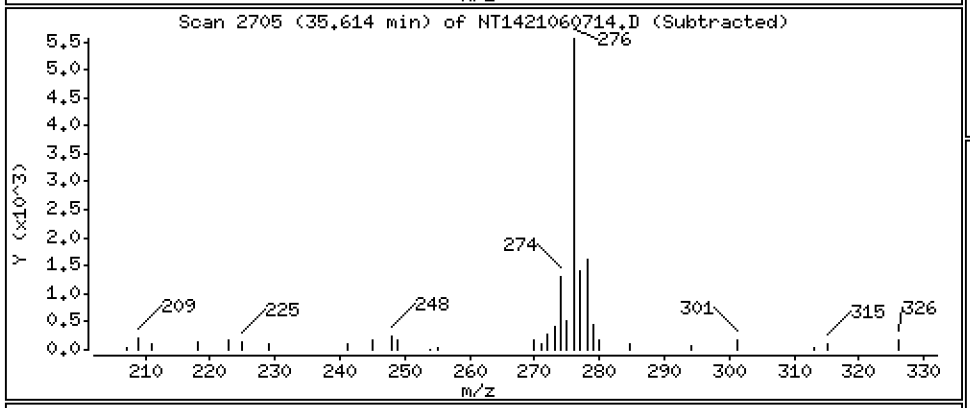
Column diameter: 0.25

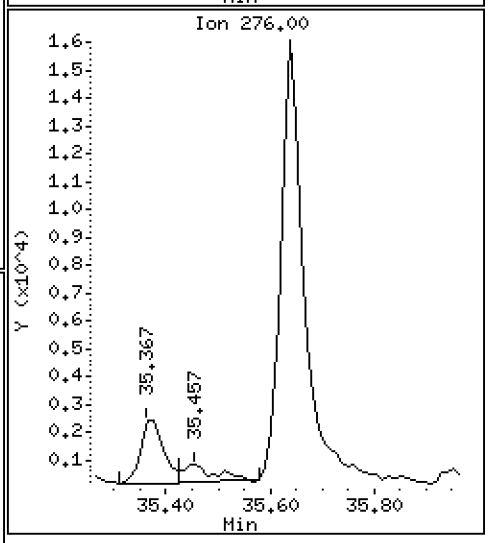
70 Dibenzo(a,h)anthracene

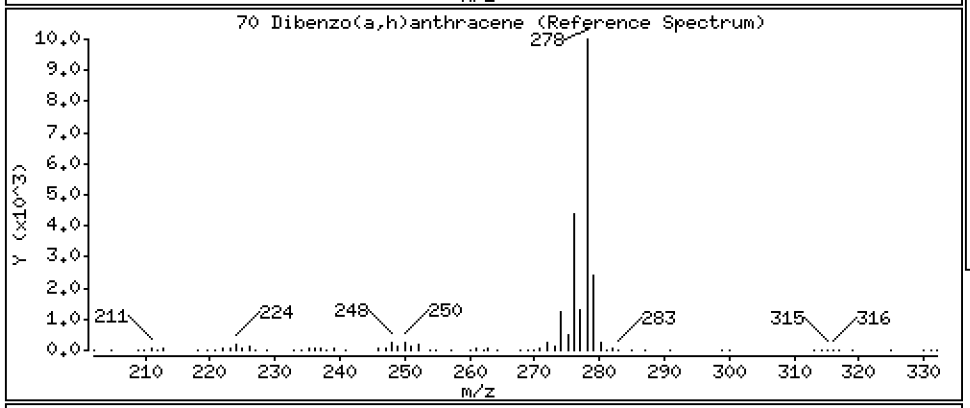
Concentration: 0.3261 ug/mL

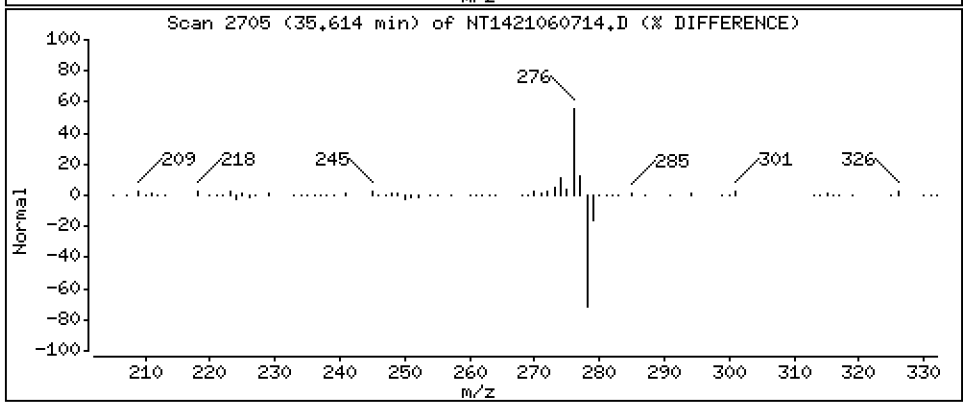












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Date : 07-JUN-2021 22:55

Client ID:

Instrument: nt14.i

Sample Info: 21E0106-03

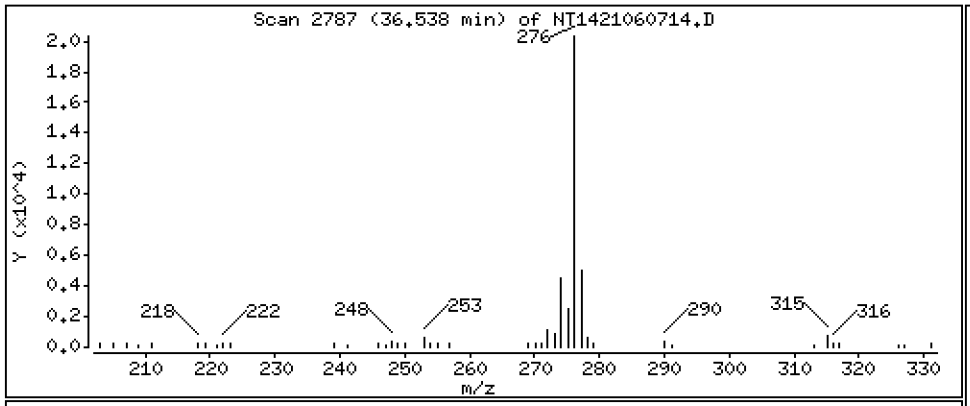
Operator: VTS

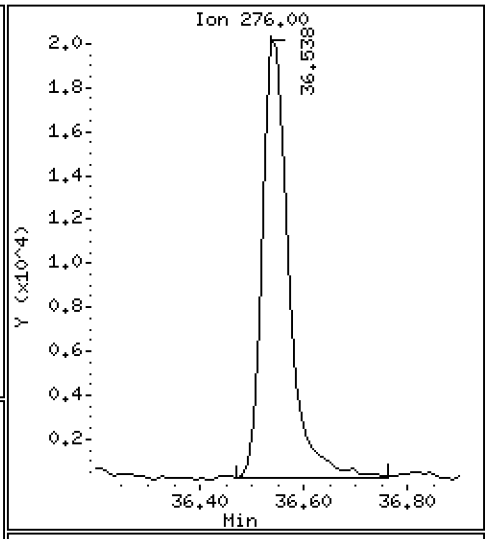
Column phase: Rxi-17Sil MS

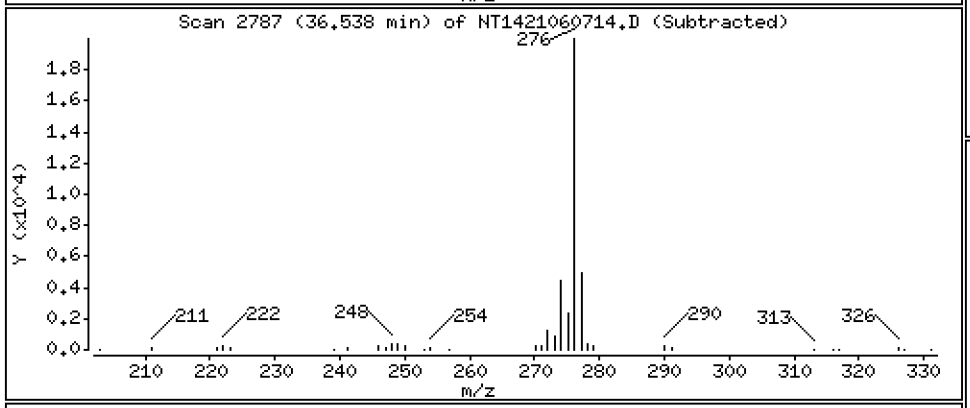
Column diameter: 0.25

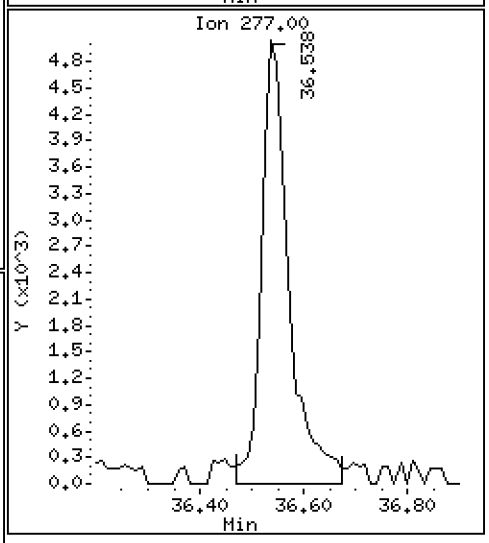
74 Benzo(g,h,i)perylene

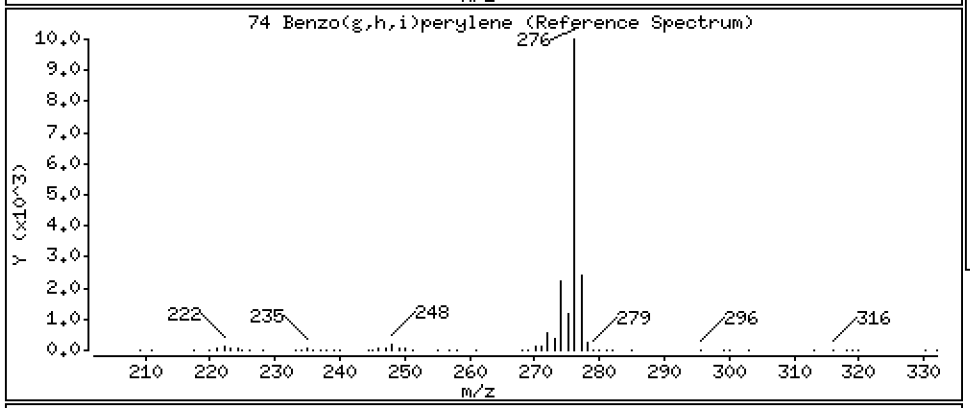
Concentration: 1.829 ug/mL

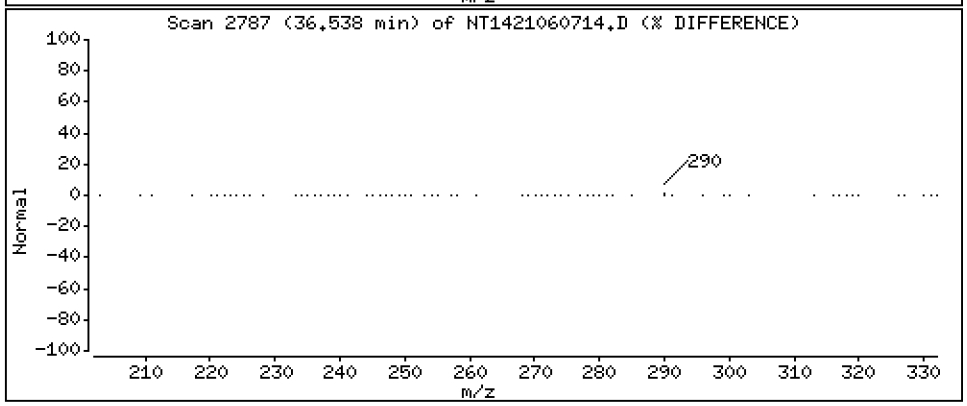












ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt14.i\20210607.b\NT1421060714.D
Lab Smp Id: 21E0106-03
Inj Date : 07-JUN-2021 22:55
Operator : VTS Inst ID: nt14.i
Smp Info : 21E0106-03
Misc Info :
Comment : 1ul Injection
Method : \\target\share\chem3\nt14.i\20210607.b\ALKYLPNA.m
Meth Date : 12-Jun-2021 14:57 yev Quant Type: ISTD
Cal Date : 29-MAY-2021 18:49 Cal File: NT1421052914.D
Als bottle: 41
Dil Factor: 5.00000
Integrator: HP RTE Compound Sublist: TARGETS.sub
Target Version: 4.14
Processing Host: ORGDATA102

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/mL)
1 trans-Decalin	138	Compound Not Detected.					
2 cis-Decalin	138	Compound Not Detected.					
$ 6 Naphthalene-d8	136	11.887	11.887	(0.629)	47032	0.28804	1.440(R)
7 Naphthalene	128	11.957	11.957	(0.633)	7500	0.04596	0.2298
12 Benzo(b)thiophene	134	Compound Not Detected.					
16 2-Methylnaphthalene	141	13.794	13.794	(0.730)	2219	0.02326	0.1163
17 1-methylnaphthalene	141	14.244	14.244	(0.754)	1387	0.01494	0.07472
18 Biphenyl	154	Compound Not Detected.					
19 2,6-Dimethylnaphthalene	156	Compound Not Detected.					
20 Acenaphthylene	152	17.080	17.080	(0.904)	4334	0.02446	0.1223
$ 21 Acenaphthene-d10	164	17.365	17.365	(0.919)	33165	0.33070	1.654(R)
22 Acenaphthene	153	17.486	17.486	(0.925)	5381	0.04926	0.2463
23 Dibenzofuran	168	17.849	17.860	(0.945)	2186	0.01349	0.06745
24 1,6,7-Trimethylnaphthalene	170	18.080	18.080	(0.957)	867	0.00821	0.04106
* 25 Fluorene-d10	176	18.896	18.896	(1.000)	351236	2.00000	
26 Fluorene	166	19.009	19.009	(1.006)	4489	0.03576	0.1788
30 Dibenzothiophene	184	Compound Not Detected.					
$ 35 Phenanthrene-d10	188	22.238	22.238	(0.995)	63249	0.35754	1.788(R)
36 Phenanthrene	178	22.315	22.326	(0.999)	61386	0.32379	1.619
* 250 Anthracene-d10	188	22.348	22.359	(1.000)	367693	2.00000	
37 Anthracene	178	22.414	22.425	(1.003)	12893	0.07228	0.3614
42 Carbazole	167	23.701	23.701	(1.061)	3253	0.01915	0.09573
43 1-Methylphenanthrene	192	24.151	24.151	(1.081)	5653	0.04149	0.2075
44 Fluoranthene	202	26.130	26.130	(1.169)	127561	0.60959	3.048
46 Pyrene	202	26.977	26.977	(1.207)	148081	0.68042	3.402
51 Naphthobenzothiophene	234	29.498	29.509	(1.320)	11978	0.05122	0.2561
55 Benzo(a)anthracene	228	30.084	30.095	(0.907)	50736	0.28978	1.449
$ 56 Chrysene-d12	240	30.219	30.219	(0.911)	58303	0.41261	2.063(R)
57 Chrysene	228	30.286	30.286	(0.913)	63256	0.36870	1.844
62 Benzo(b)fluoranthene	252	32.517	32.517	(0.980)	47805	0.26327	1.316
63 Benzo(k)fluoranthene	252	32.562	32.562	(0.981)	36984	0.18983	0.9491
293 Benzo(j)fluoranthene	252	32.629	32.629	(0.983)	29964	0.16690	0.8345
246 Total Benzofluoranthenes	252	32.517	32.562	(0.980)	105946	0.59569	2.978(M)

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/mL)
* 251 Benzo(e)pyrene-d12	264	33.181	33.181	(1.000)	451419	2.00000	
64 Benzo(e)pyrene	252	33.237	33.237	(1.002)	50132	0.28169	1.408
66 Benzo(a)pyrene	252	33.339	33.339	(1.005)	68549	0.42340	2.117
$ 67 Perylene-d12	264	33.519	33.519	(1.010)	62610	0.41046	2.052(R)
68 Perylene	252	33.575	33.575	(1.012)	55035	0.32970	1.649
69 Indeno(1,2,3-cd)pyrene	276	35.636	35.636	(1.074)	49974	0.26296	1.315(M)
70 Dibenzo(a,h)anthracene	278	35.614	35.614	(1.073)	11494	0.06523	0.3261
74 Benzo(g,h,i)perylene	276	36.538	36.549	(1.101)	68664	0.36573	1.829

QC Flag Legend

R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt14.i
Lab File ID: NT1421060714.D
Lab Smp Id: 21E0106-03
Analysis Type: SV
Quant Type: ISTD
Operator: VTS
Method File: \\target\share\chem3\nt14.i\20210607.b\ALKYLPNA.m
Misc Info:

Calibration Date: 07-JUN-2021
Calibration Time: 13:18
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
25 Fluorene-d10	323874	161937	647748	351236	8.45
250 Anthracene-d10	339912	169956	679824	367693	8.17
251 Benzo(e)pyrene-d1	416427	208214	832854	451419	8.40

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
25 Fluorene-d10	18.90	18.40	19.40	18.90	0.00
250 Anthracene-d10	22.36	21.86	22.86	22.35	-0.05
251 Benzo(e)pyrene-d1	33.18	32.68	33.68	33.18	0.00

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

REVIEW SUMMARY FOR FILE - NT1421060714.D

Lab ID: 21E0106-03
nt14.i, 20210607.b\ALKYLPNA.m, 07-JUN-2021 22:55

RT	CO-ELUTION COMPOUNDS
	NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
NONE			

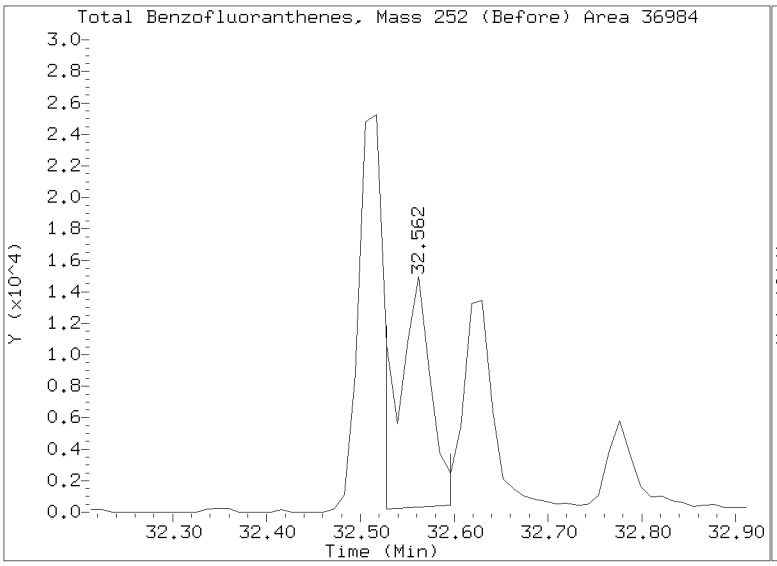
RRT check based on Ccal File: NT1421060702.D

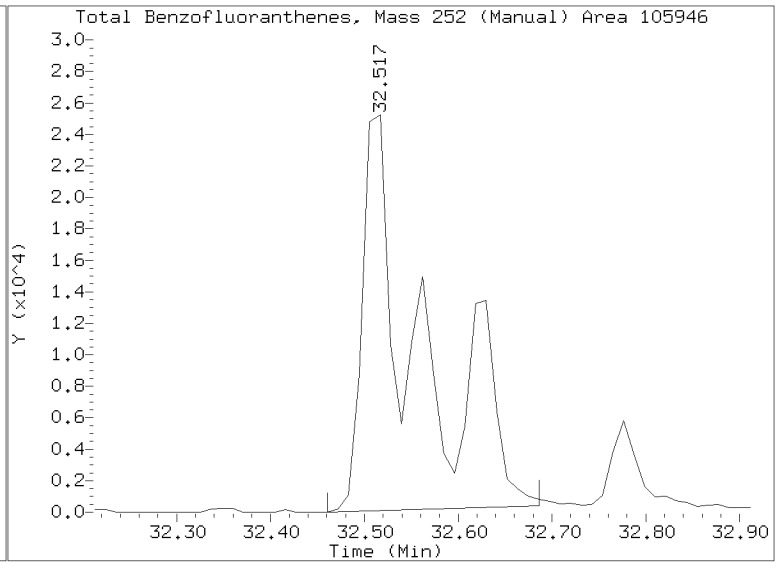
On Column LOD for nt14.i, 20210607.b\ALKYLPNA.m, TARGETS.sub = 0.0000

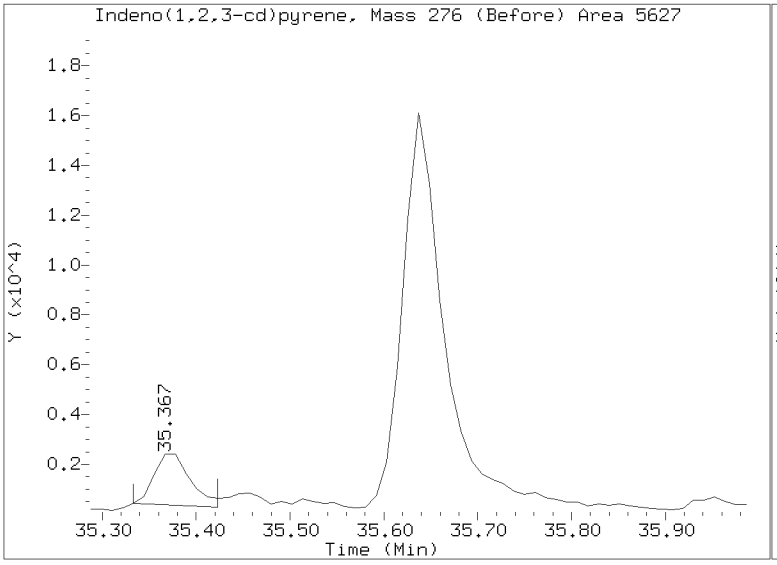
* Only compounds listed in the work order have been verified by the analyst *

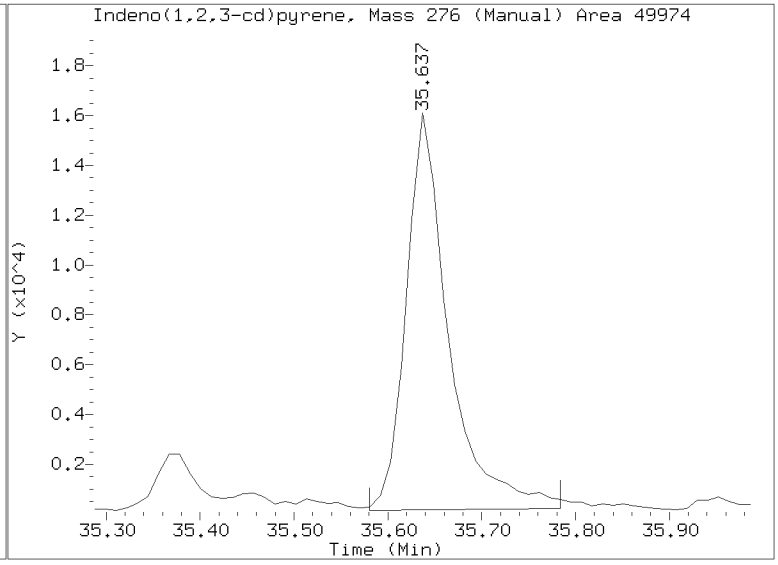
Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt14.i/20210607.b/NT1421060714.D
Injection Date: 07-JUN-2021 22:55
Lab ID:21E0106-03 Client ID:
Report Date: 06/12/2021 15:50









Analytical Resources, Incorporated
Analytical Chemists and Consultants

USMPDI-031SG-210504

Form I
ORGANIC ANALYSIS DATA SHEET
EPA 8270E-SIM
Alkyl PAH Ranges

Laboratory:	Analytical Resources, Inc.				
Client:	Anchor QEA, LLC				
Project:	Gasco Siltronic - US Moorings				
Matrix:	Sediment	Laboratory ID:	21E0106-03 A	SDG:	21E0106
Sampled:	05/04/21 00:00	Prepared:	05/17/21 13:40	File ID:	NT1421060714S.D
% Solids:	46.39	Preparation:	EPA 3546 (Microwave)	Analyzed:	06/07/21 22:55
Batch:	BJE0383	Sequence:	SJF0198	Initial/Final:	21.54 g Wet / 0.5 mL
Instrument:	NT14	Column:	ZB-5MS	Calibration:	EF00019
Cleanups:	GPC, Silica Gel				

CAS NO.	COMPOUND	DILUTION	CONC: (ug/kg dry)	Q	DL	RL
C1DEC	C1-Decalins	1	5.0	U	0.5	5.0
C2DEC	C2-Decalins	1	1.8	J	0.5	5.0
C3DEC	C3-Decalins	1	2.0	J	0.5	5.0
C4DEC	C4-Decalins	1	5.0	U	0.5	5.0
C1NAPH	C1-Naphthalenes	1	1.4	J	0.4	5.0
C2NAPH	C2-Naphthalenes	1	2.0	J	0.4	5.0
C3NAPH	C3-Naphthalenes	1	2.0	J	0.4	5.0
C4NAPH	C4-Naphthalenes	1	1.8	J	0.4	5.0
C1FLR	C1-Fluorenes	1	1.3	J	0.5	5.0
C2FLR	C2-Fluorenes	1	1.5	J	0.5	5.0
C3FLR	C3-Fluorenes	1	1.8	J	0.5	5.0
C1DBTPH	C1-Dibenzothiophenes	1	1.5	J	0.7	5.0
C2DBTPH	C2-Dibenzothiophenes	1	2.0	J	0.7	5.0
C3DBTPH	C3-Dibenzothiophenes	1	2.0	J	0.7	5.0
C4DBTPH	C4-Dibenzothiophenes	1	5.0	U	0.7	5.0
C1PHNANT	C1-Phenanthrenes/Anthracenes	1	8.5		0.9	5.0
C2PHNANT	C2-Phenanthrenes/Anthracenes	1	8.3		0.9	5.0
C3PHNANT	C3-Phenanthrenes/Anthracenes	1	3.9	J	0.9	5.0
C4PHNANT	C4-Phenanthrenes/Anthracenes	1	2.2	J	0.9	5.0
C1FLPYR	C1-Fluoranthenes/Pyrenes	1	14.2		1.0	5.0
C2FLPYR	C2-Fluoranthenes/Pyrenes	1	6.7		1.0	5.0
C3FLPYR	C3-Fluoranthenes/Pyrenes	1	3.8	J	1.0	5.0
C4FLPYR	C4-Fluoranthenes/Pyrenes	1	2.4	J	1.0	5.0
C1BAACYR	C1-Benzo(a)anthracenes/Chrysenes	1	14.8		0.7	5.0
C2BAACYR	C2-Benzo(a)anthracenes/Chrysenes	1	5.8		0.7	5.0
C3BAACYR	C3-Benzo(a)anthracenes/Chrysenes	1	3.7	J	0.7	5.0
C4BAACYR	C4-Benzo(a)anthracenes/Chrysenes	1	1.3	J	0.7	5.0
C1BZTPH	C1-Benzothiophenes	1	5.0	U	0.4	5.0
C2BZTPH	C2-Benzothiophenes	1	5.0	U	0.4	5.0
C3BZTPH	C3-Benzothiophenes	1	5.0	U	0.4	5.0

Analytical Resources, Incorporated
Analytical Chemists and Consultants

USMPDI-031SG-210504

Form I
ORGANIC ANALYSIS DATA SHEET
EPA 8270E-SIM
Alkyl PAH Ranges

Laboratory:	Analytical Resources, Inc.				
Client:	Anchor QEA, LLC				
Project:	Gasco Siltronic - US Moorings				
Matrix:	Sediment	Laboratory ID:	21E0106-03 A	SDG:	21E0106
Sampled:	05/04/21 00:00	Prepared:	05/17/21 13:40	File ID:	NT1421060714S.D
% Solids:	46.39	Preparation:	EPA 3546 (Microwave)	Analyzed:	06/07/21 22:55
Batch:	BJE0383	Sequence:	SJF0198	Initial/Final:	21.54 g Wet / 0.5 mL
Instrument:	NT14	Column:	ZB-5MS	Calibration:	EF00019
Cleanups:	GPC, Silica Gel				

CAS NO.	COMPOUND	DILUTION	CONC: (ug/kg dry)	Q	DL	RL
C1NPBTP	C1-Naphthobenzothiophenes	1	5.0	U	2.5	5.0
C2NPBTP	C2-Naphthobenzothiophenes	1	5.0	U	2.5	5.0
C3NPBTP	C3-Naphthobenzothiophenes	1	5.0	U	2.5	5.0
C4NPBTP	C4-Naphthobenzothiopenes	1	5.0	U	2.5	5.0
C1DBA	C1-Dibenzo(a)anthracenes	1	2.0	J	0.7	5.0
C2DBA	C2-Dibenzo(a)anthracenes	1	5.0	U	0.7	5.0
C3DBA	C3-Dibenzo(a)anthracenes	1	5.0	U	0.7	5.0

Data File: \\target\share\chem3\nt14.i\20210607.b\SIM.b\NT1421060714S.D

Date : 07-JUN-2021 22:55

Client ID:

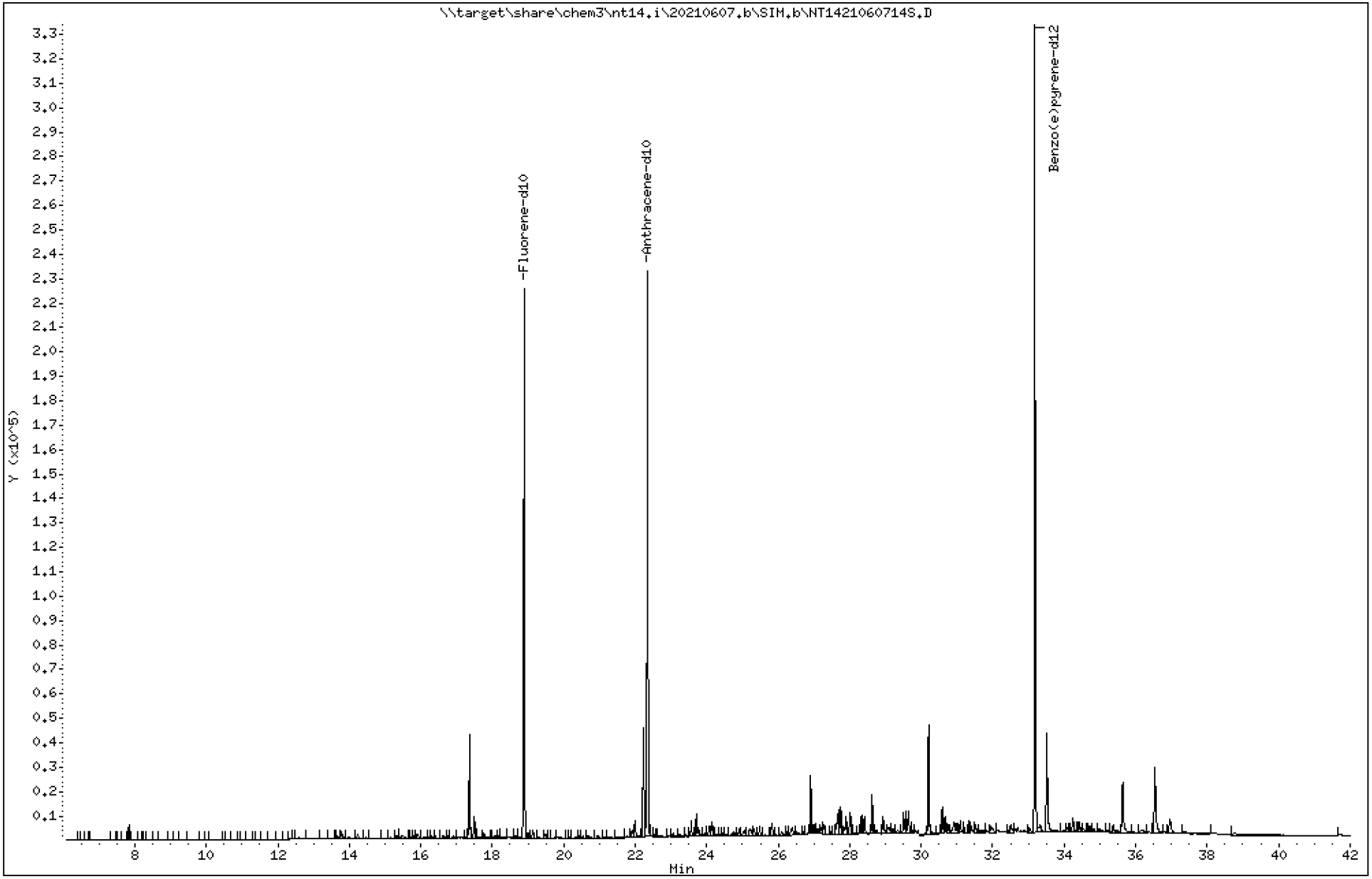
Instrument: nt14.i

Sample Info: 21E0106-03

Operator: VTS

Column phase: Rxi-17Sil MS

Column diameter: 0.25



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Date : 07-JUN-2021 22:55

Client ID:

Instrument: nt14.i

Sample Info: 21E0106-03

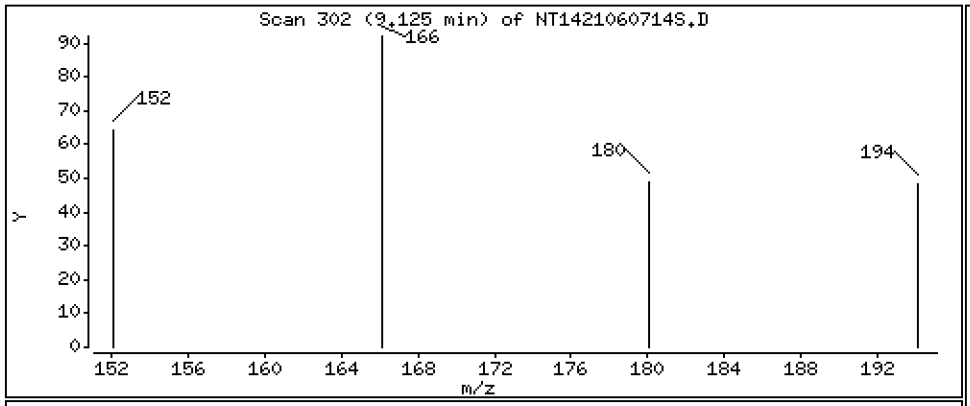
Operator: VTS

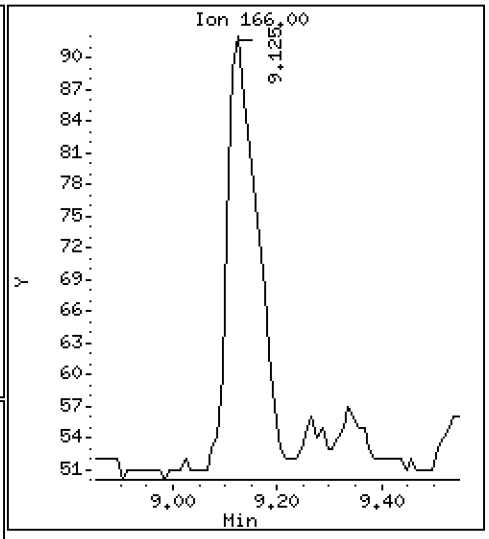
Column phase: Rxi-17Sil MS

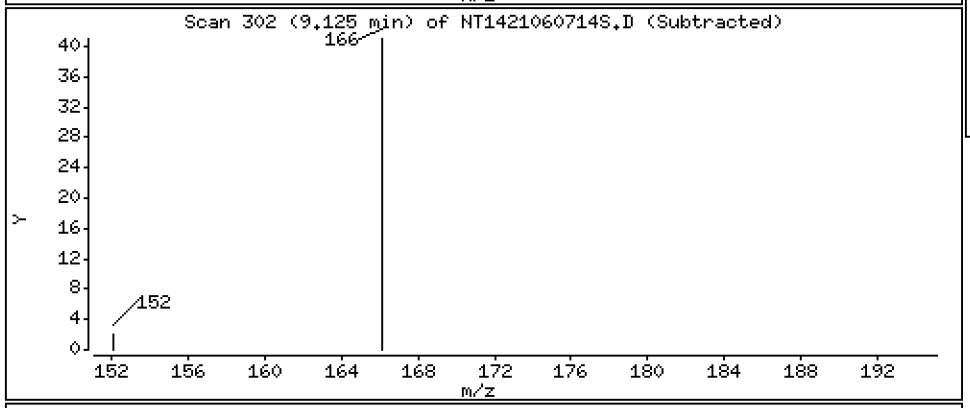
Column diameter: 0.25

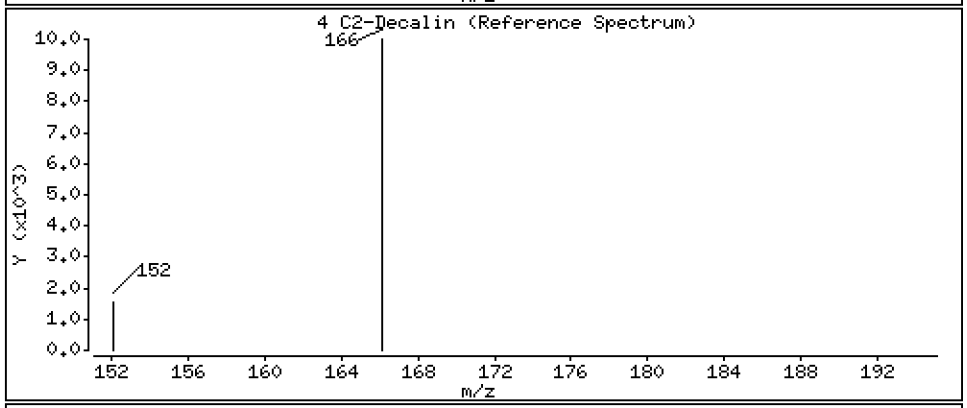
4 C2-Decalin

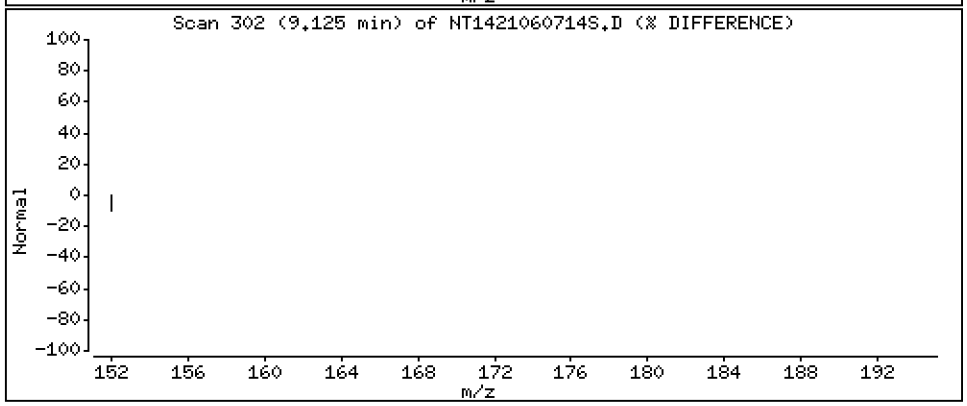
Concentration: 0.03588 ug/mL











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Date : 07-JUN-2021 22:55

Client ID:

Instrument: nt14.i

Sample Info: 21E0106-03

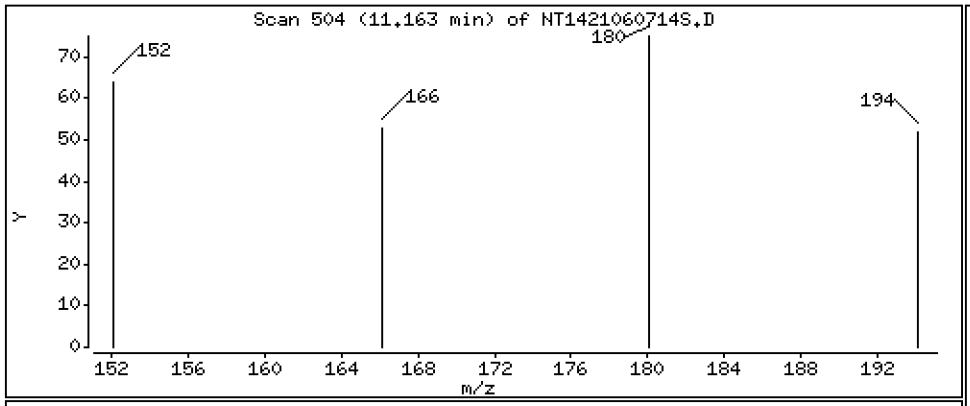
Operator: VTS

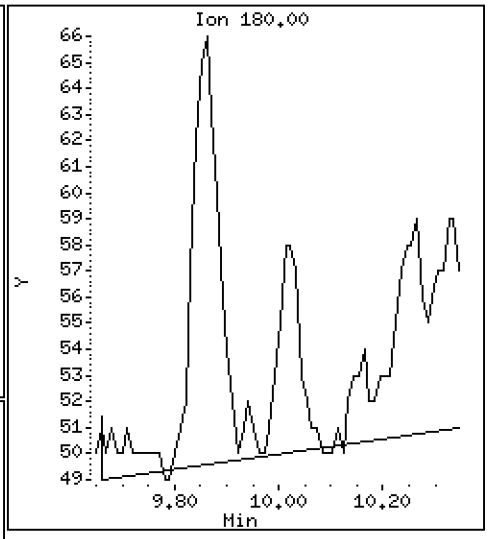
Column phase: Rxi-17Sil MS

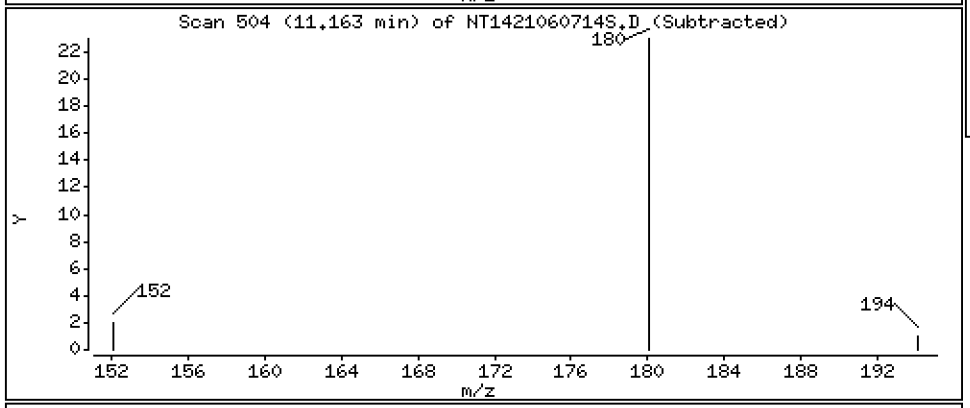
Column diameter: 0.25

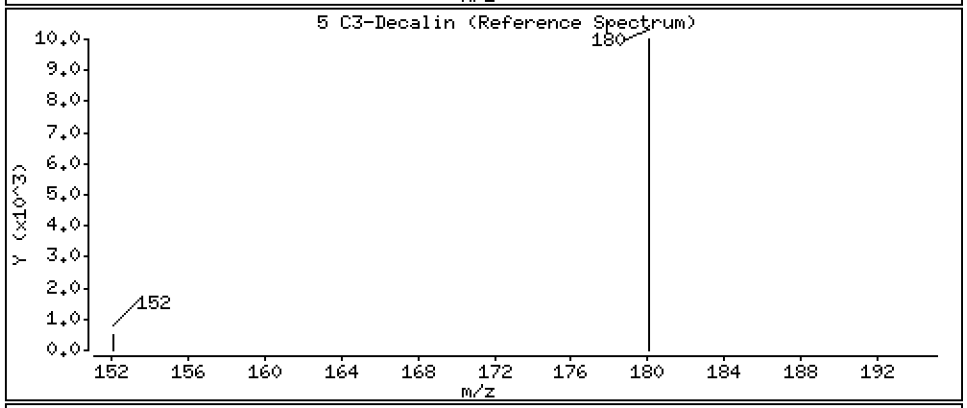
5 C3-Decalin

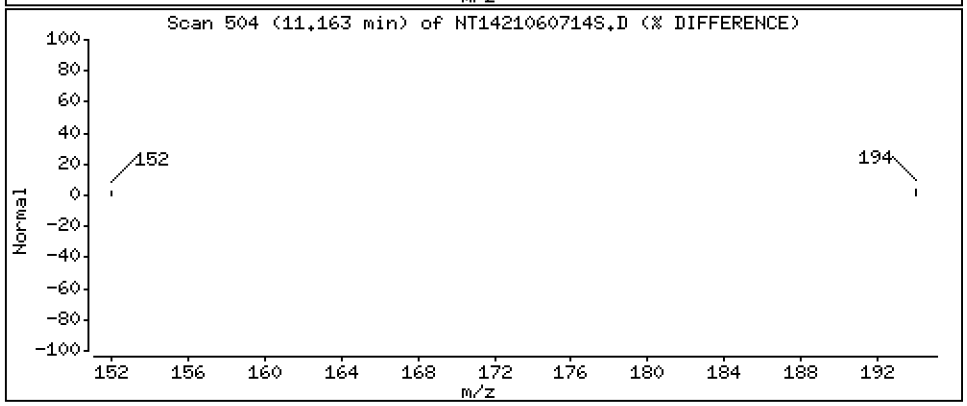
Concentration: 0.04081 ug/mL











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Date : 07-JUN-2021 22:55

Client ID:

Instrument: nt14.i

Sample Info: 21E0106-03

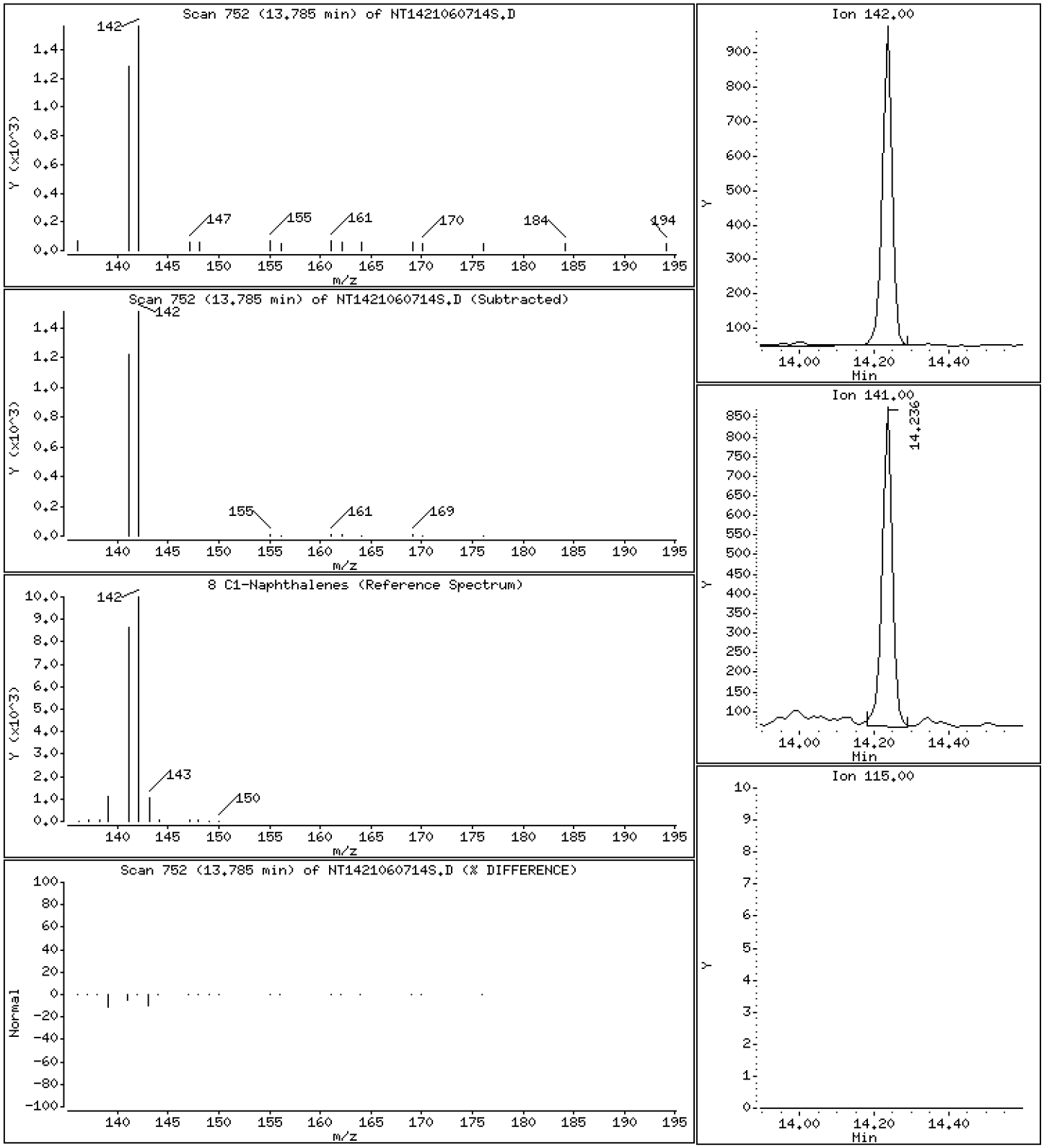
Operator: VTS

Column phase: Rxi-17Sil MS

Column diameter: 0.25

8 C1-Naphthalenes

Concentration: 0.02704 ug/mL



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Date : 07-JUN-2021 22:55

Client ID:

Instrument: nt14.i

Sample Info: 21E0106-03

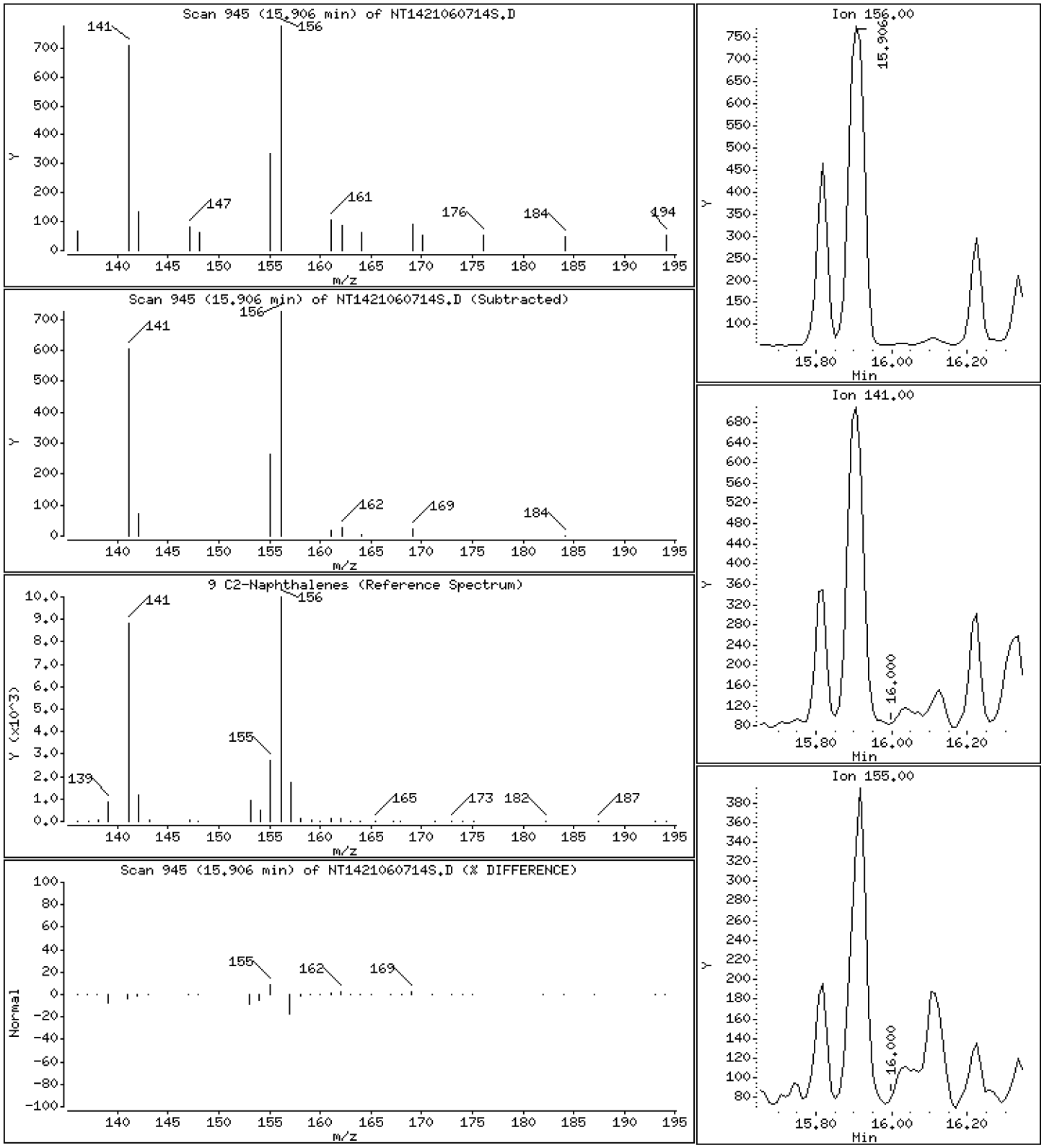
Operator: VTS

Column phase: Rxi-17Sil MS

Column diameter: 0.25

9 C2-Naphthalenes

Concentration: 0.03988 ug/mL



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Date : 07-JUN-2021 22:55

Client ID:

Instrument: nt14.i

Sample Info: 21E0106-03

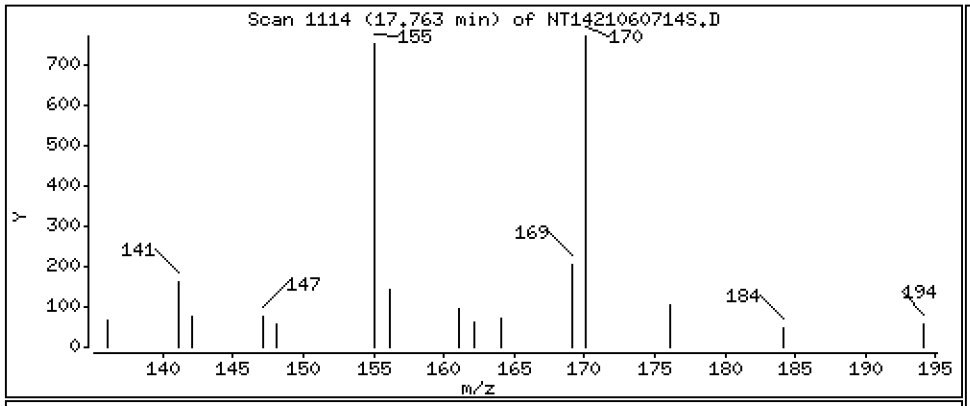
Operator: VTS

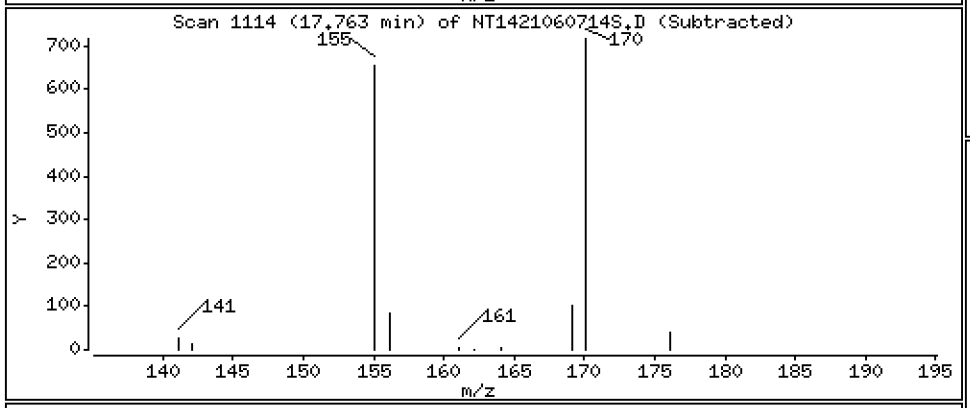
Column phase: Rxi-17Sil MS

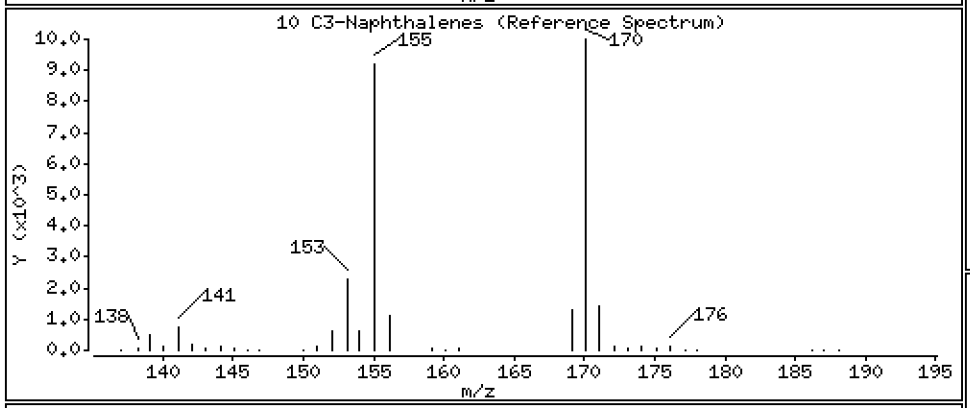
Column diameter: 0.25

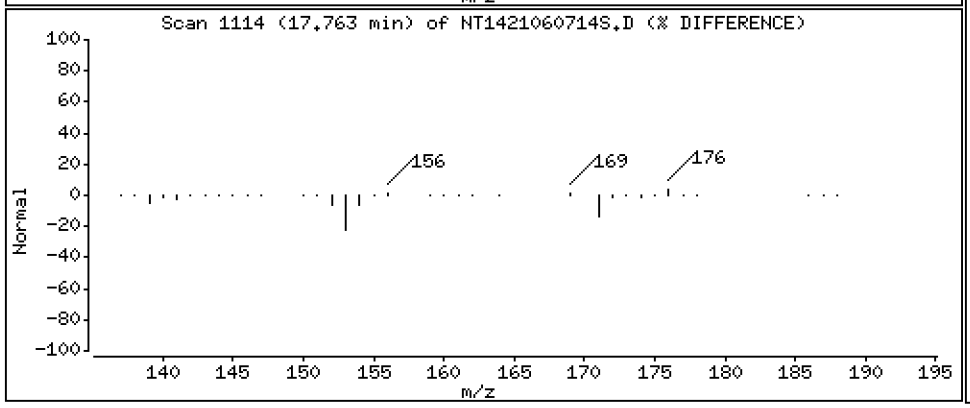
10 C3-Naphthalenes

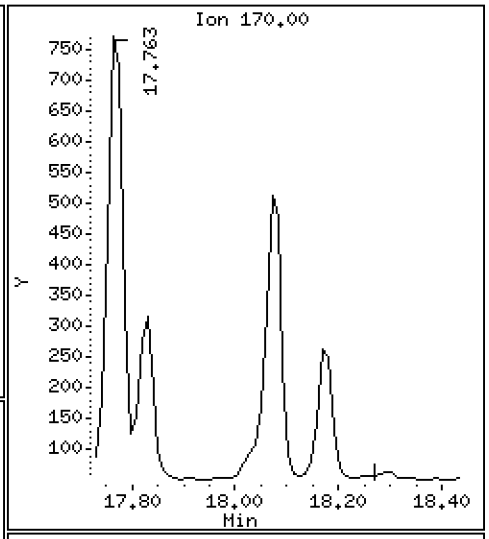
Concentration: 0.04017 ug/mL

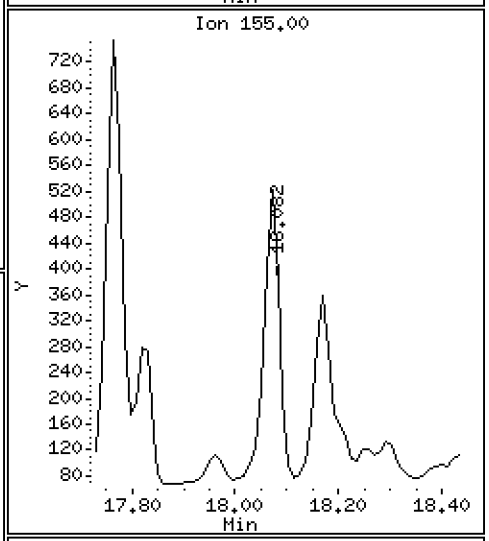


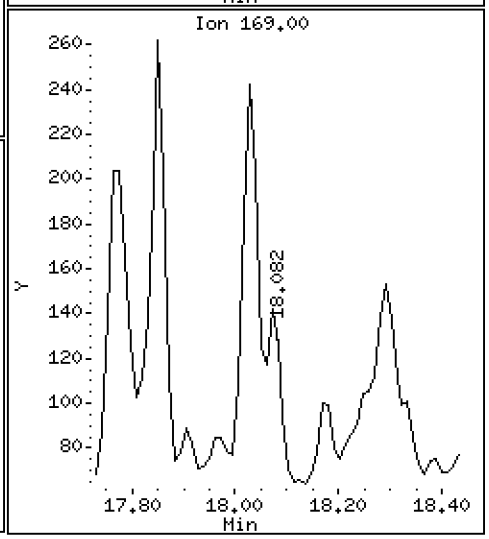












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Date : 07-JUN-2021 22:55

Client ID:

Instrument: nt14.i

Sample Info: 21E0106-03

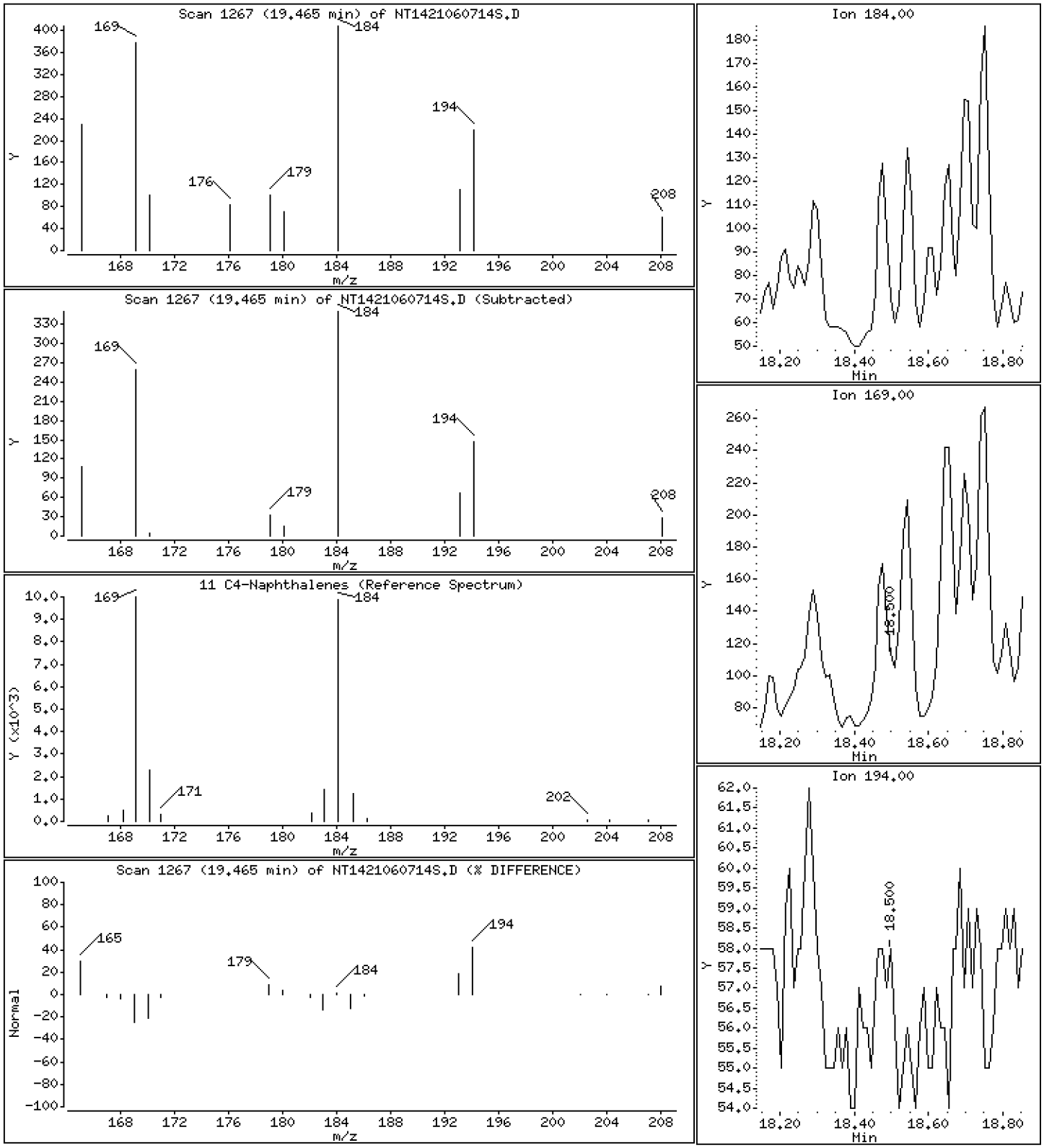
Operator: VTS

Column phase: Rxi-17Sil MS

Column diameter: 0.25

11 C4-Naphthalenes

Concentration: 0.03559 ug/mL



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Date : 07-JUN-2021 22:55

Client ID:

Instrument: nt14.i

Sample Info: 21E0106-03

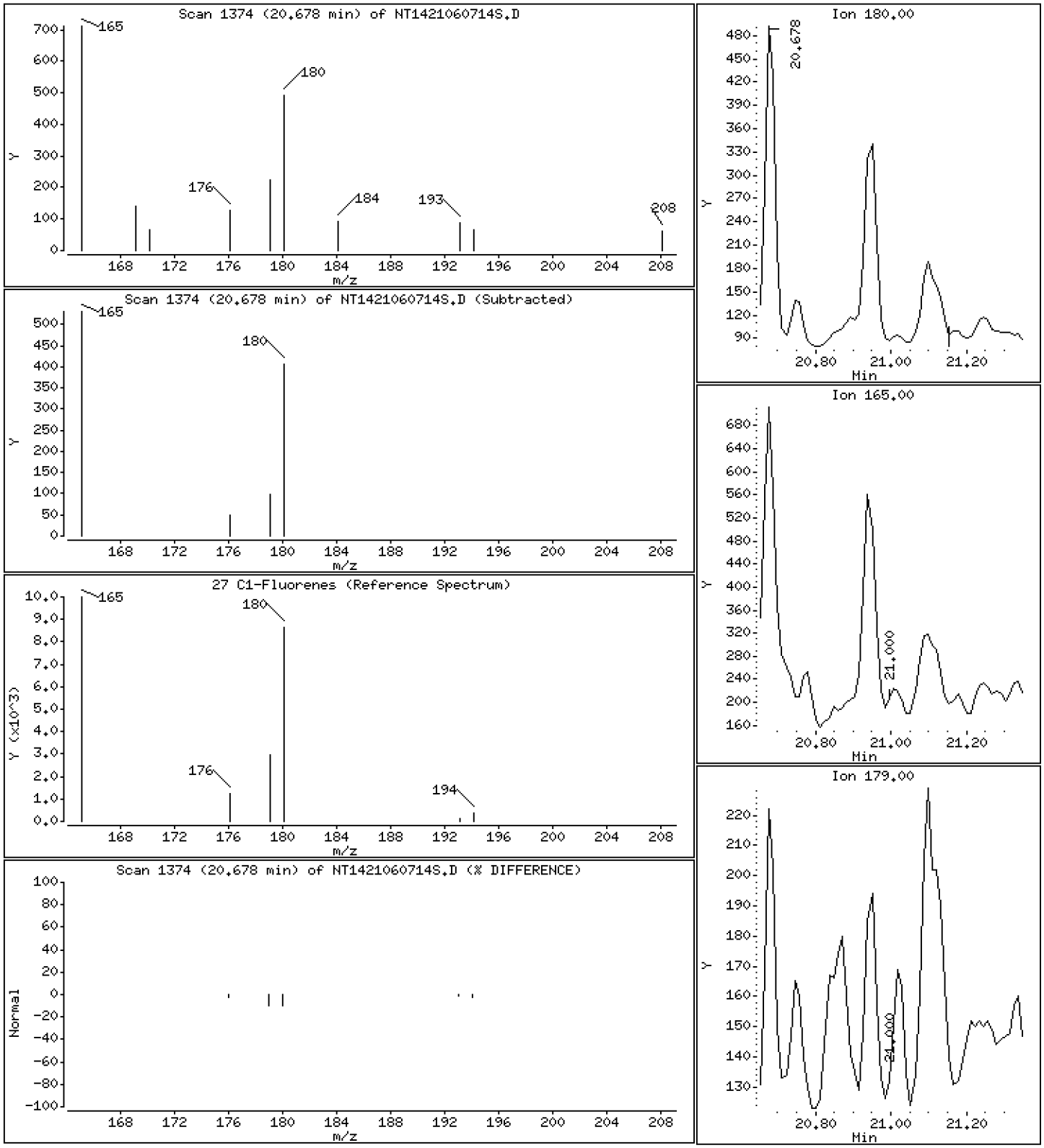
Operator: VTS

Column phase: Rxi-17Sil MS

Column diameter: 0.25

27 C1-Fluorenes

Concentration: 0.02667 ug/mL



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Date : 07-JUN-2021 22:55

Client ID:

Instrument: nt14.i

Sample Info: 21E0106-03

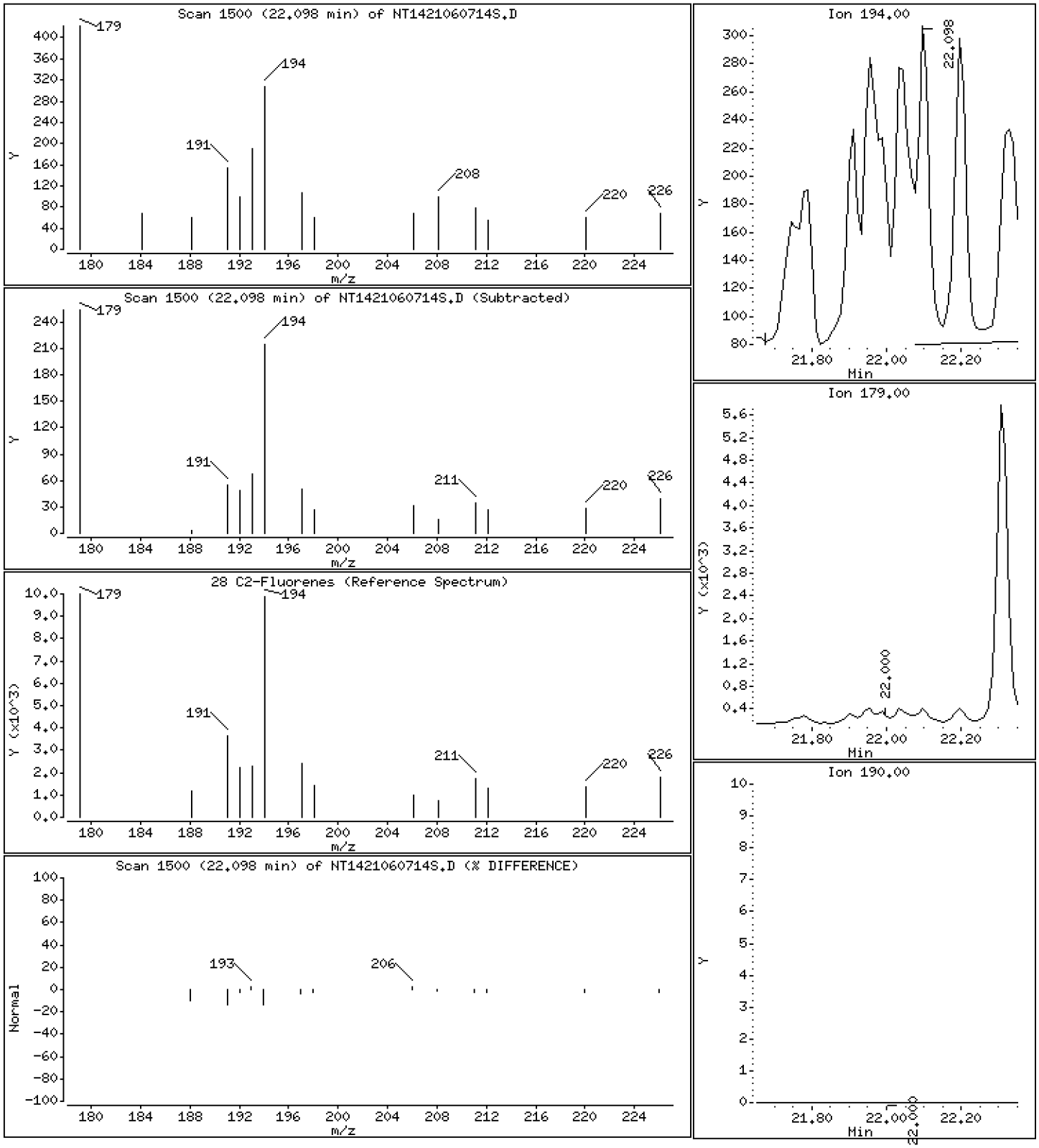
Operator: VTS

Column phase: Rxi-17Sil MS

Column diameter: 0.25

28 C2-Fluorenes

Concentration: 0.02960 ug/mL



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Date : 07-JUN-2021 22:55

Client ID:

Instrument: nt14.i

Sample Info: 21E0106-03

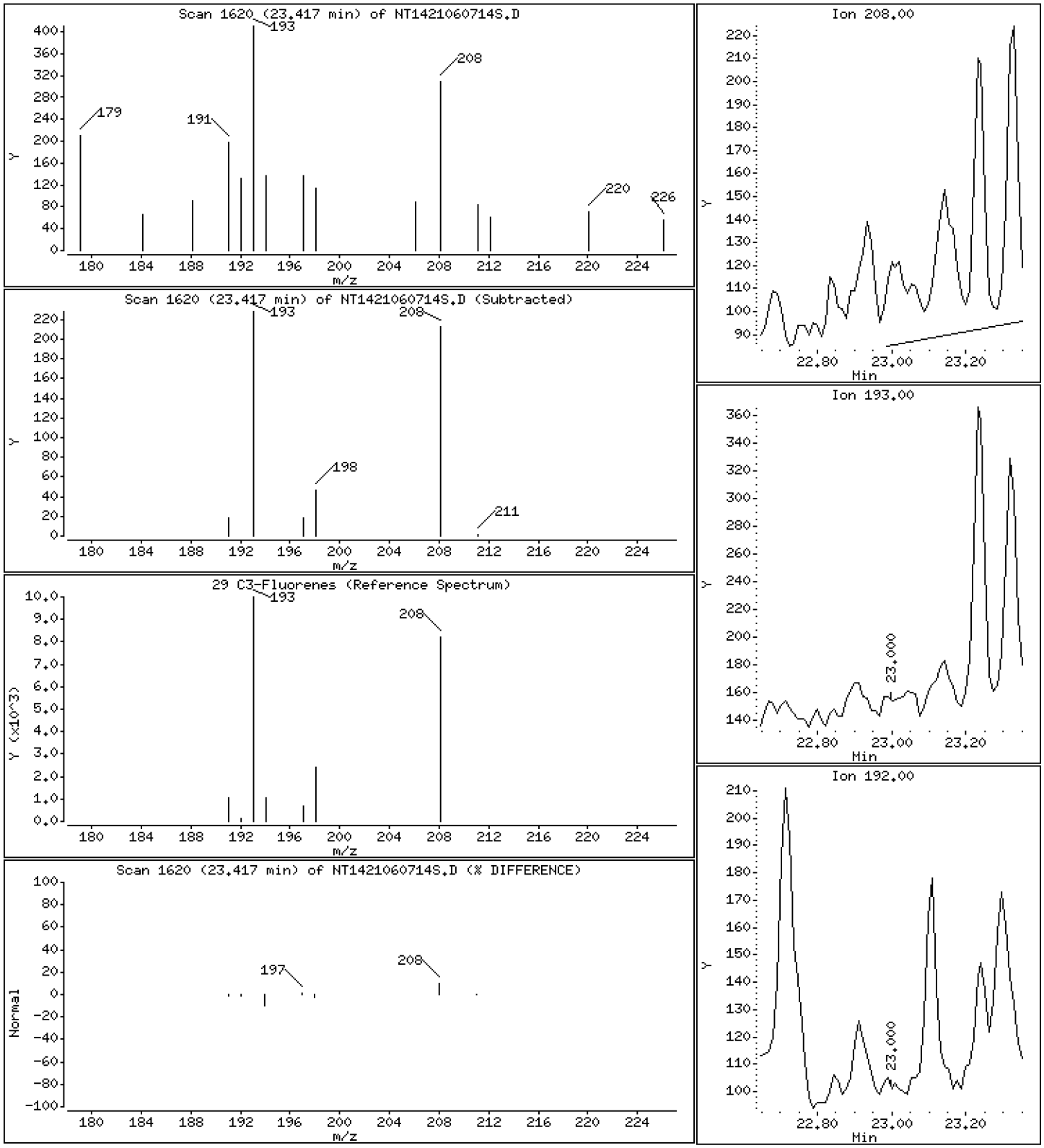
Operator: VTS

Column phase: Rxi-17Sil MS

Column diameter: 0.25

29 C3-Fluorenes

Concentration: 0.03689 ug/mL



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Date : 07-JUN-2021 22:55

Client ID:

Instrument: nt14.i

Sample Info: 21E0106-03

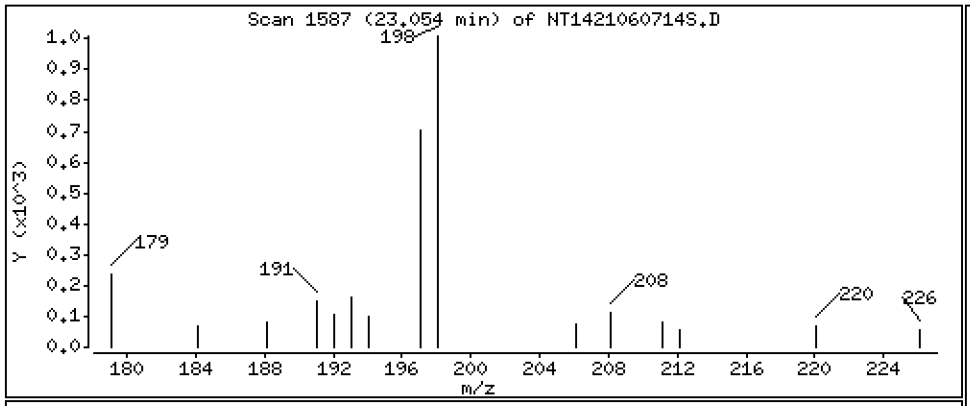
Operator: VTS

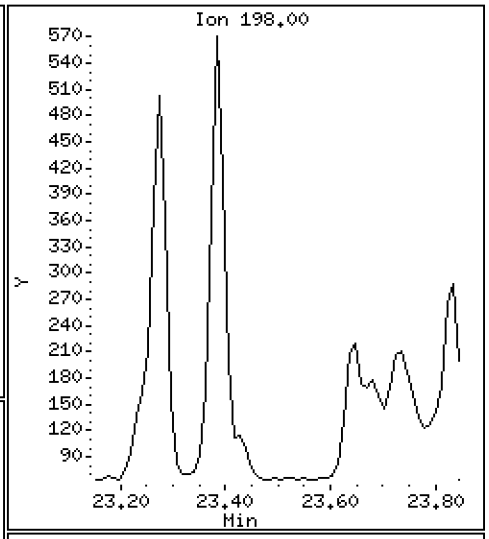
Column phase: Rxi-17Sil MS

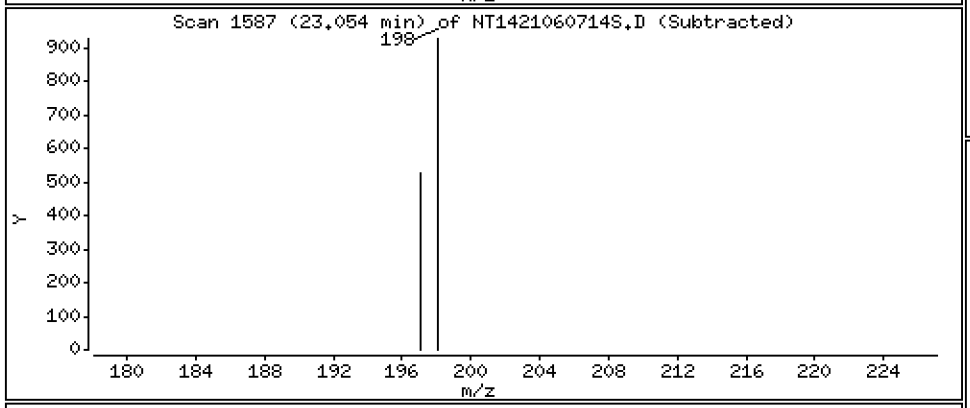
Column diameter: 0.25

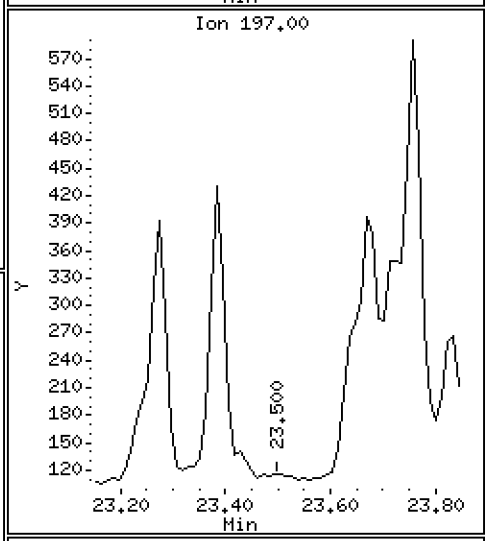
31 C1-Dibenzothiophenes

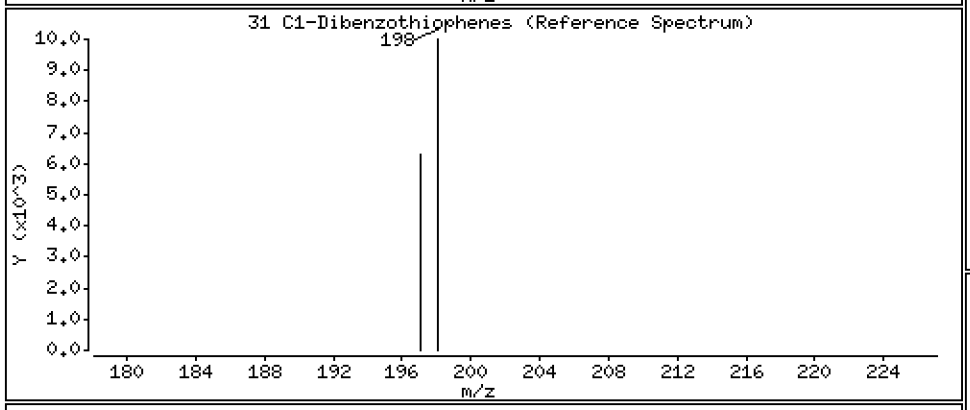
Concentration: 0.02968 ug/mL

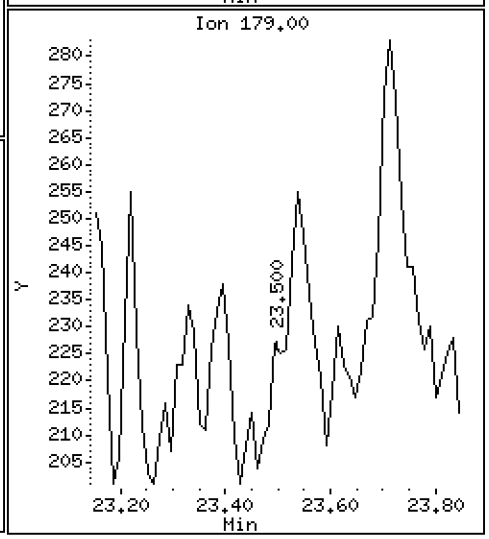


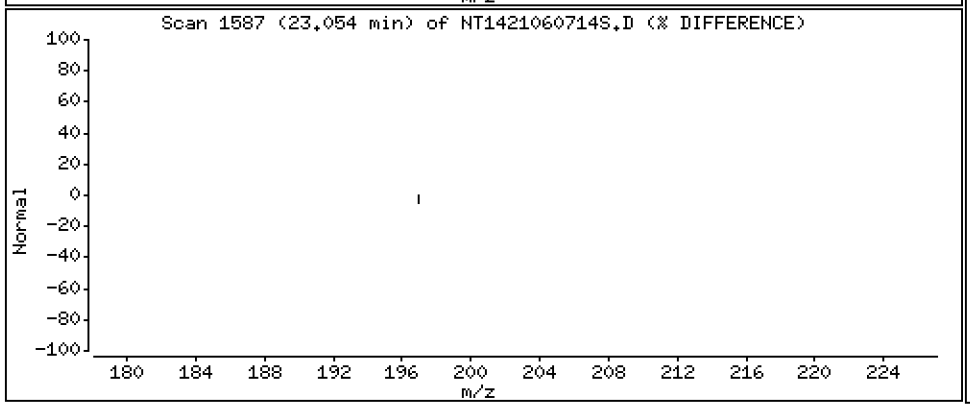












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Date : 07-JUN-2021 22:55

Client ID:

Instrument: nt14.i

Sample Info: 21E0106-03

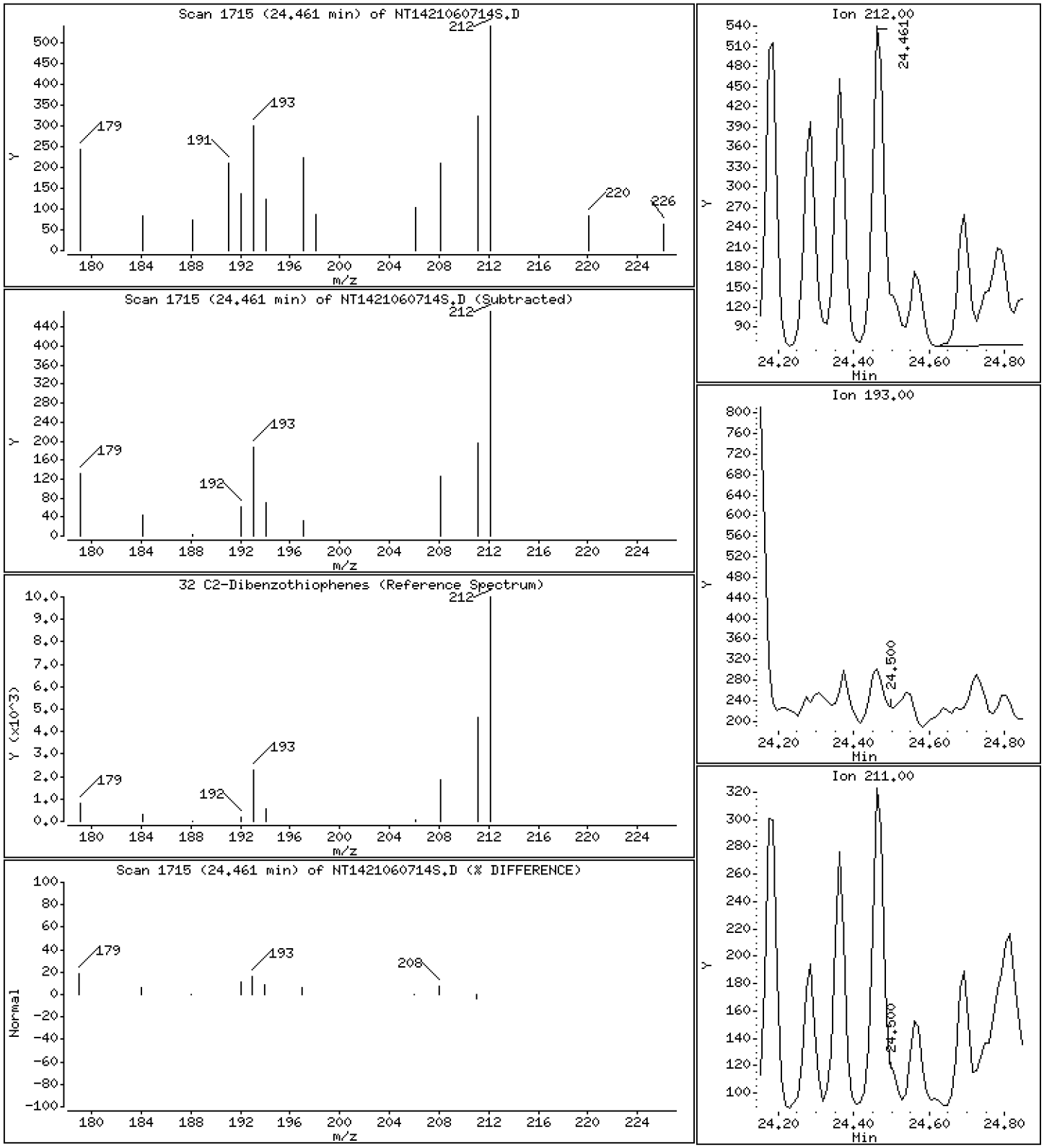
Operator: VTS

Column phase: Rxi-17Sil MS

Column diameter: 0.25

32 C2-Dibenzothiophenes

Concentration: 0.04017 ug/mL



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Date : 07-JUN-2021 22:55

Client ID:

Instrument: nt14.i

Sample Info: 21E0106-03

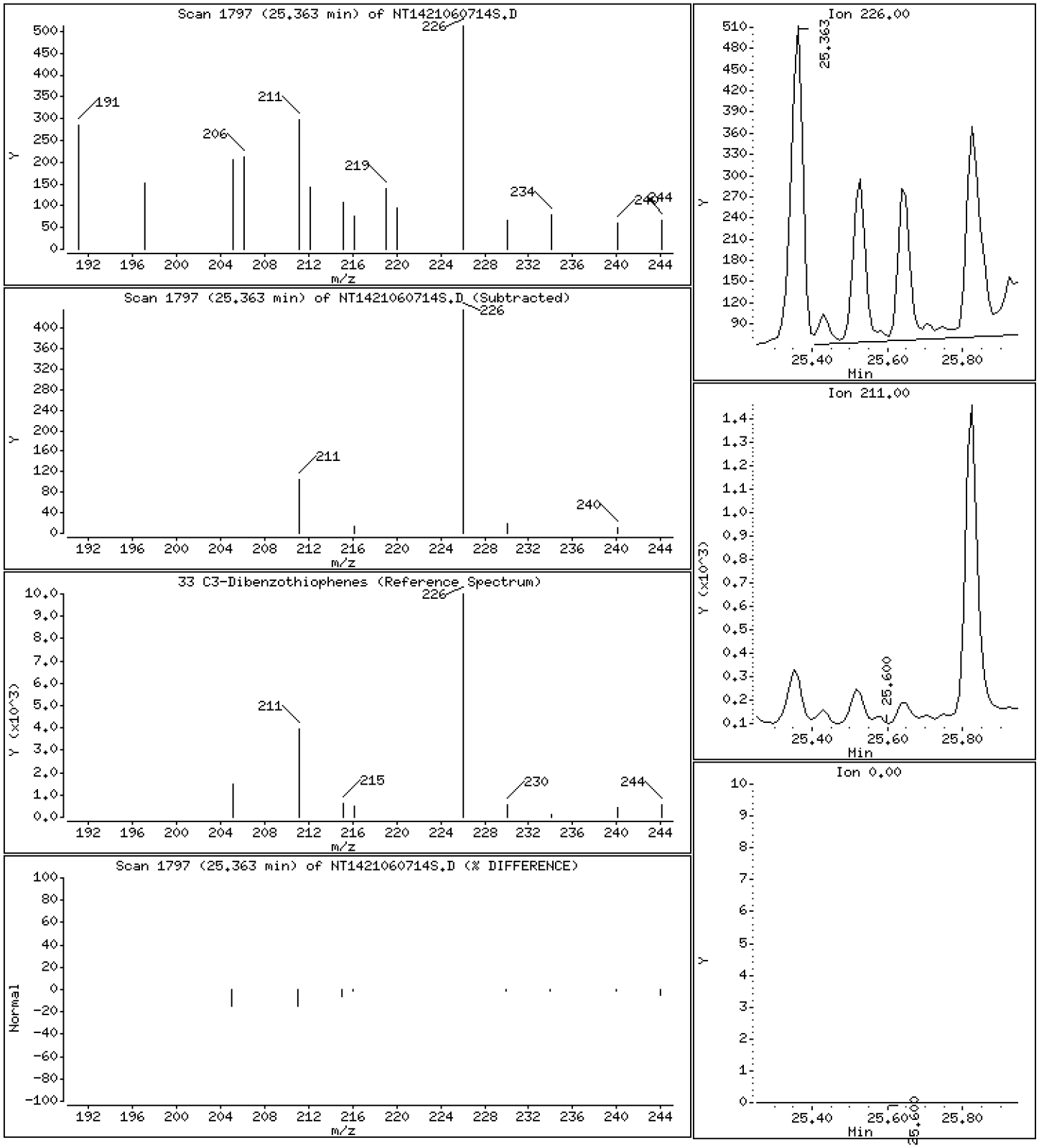
Operator: VTS

Column phase: Rxi-17Sil MS

Column diameter: 0.25

33 C3-Dibenzothiophenes

Concentration: 0.04045 ug/mL



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Date : 07-JUN-2021 22:55

Client ID:

Instrument: nt14.i

Sample Info: 21E0106-03

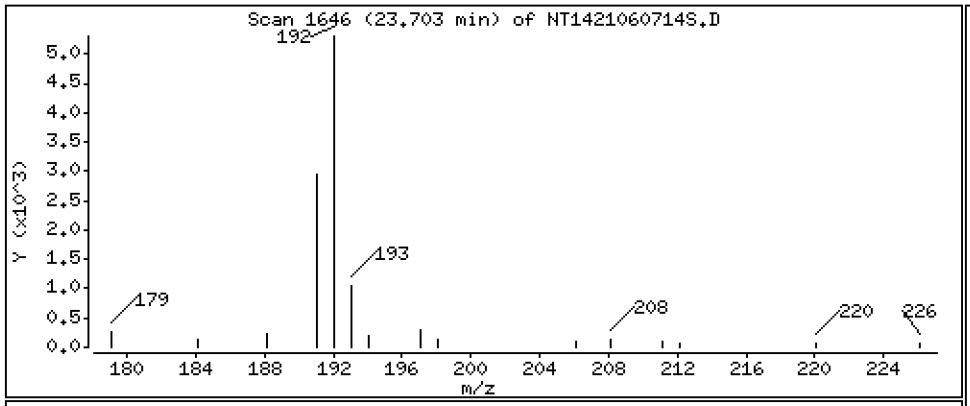
Operator: VTS

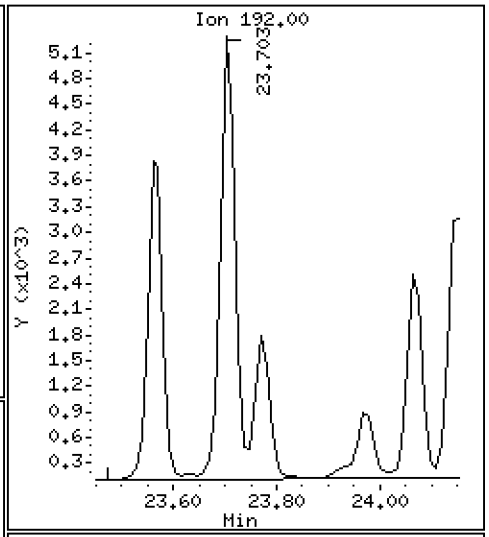
Column phase: Rxi-17Sil MS

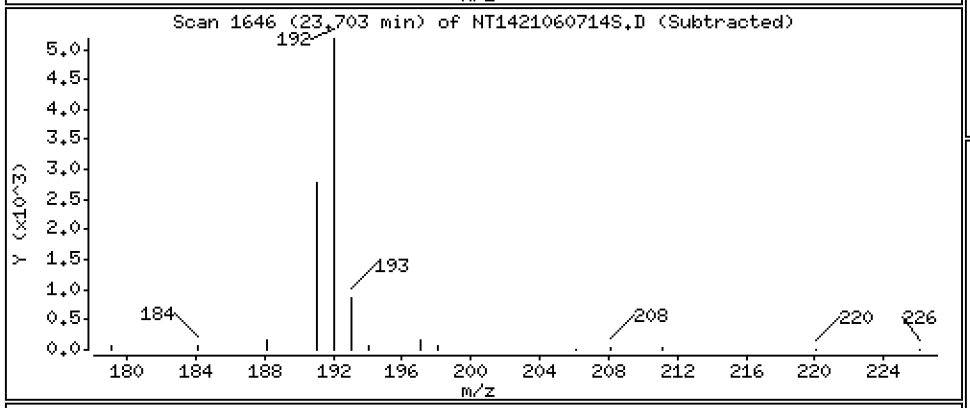
Column diameter: 0.25

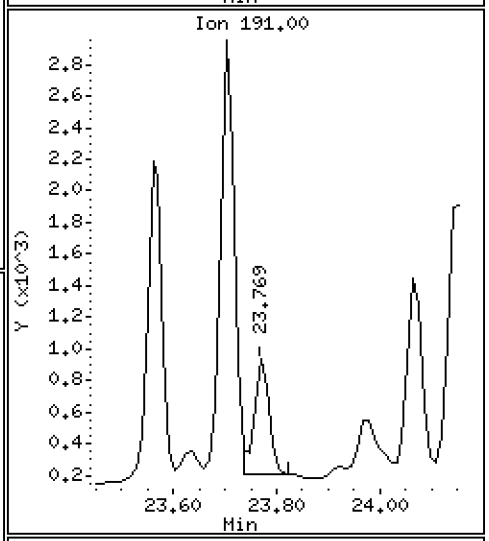
38 C1-Phenanthrenes/Anthracenes

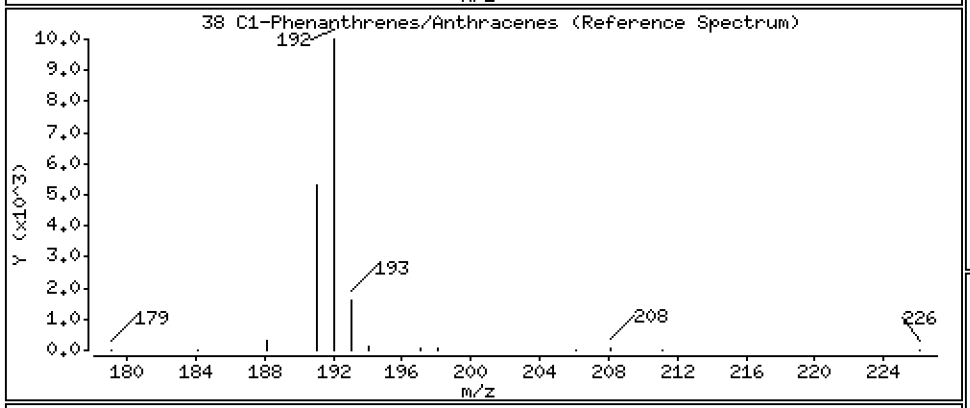
Concentration: 0.1690 ug/mL

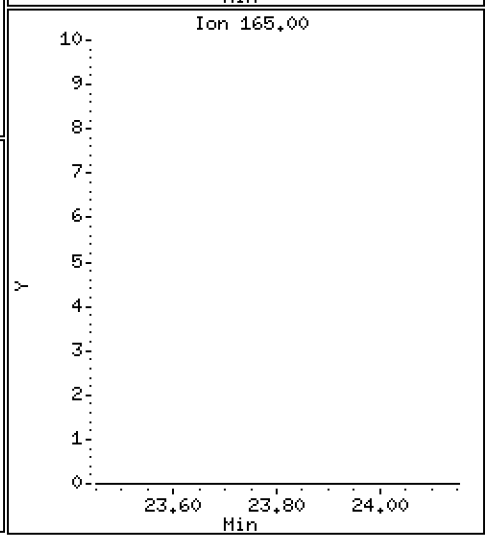


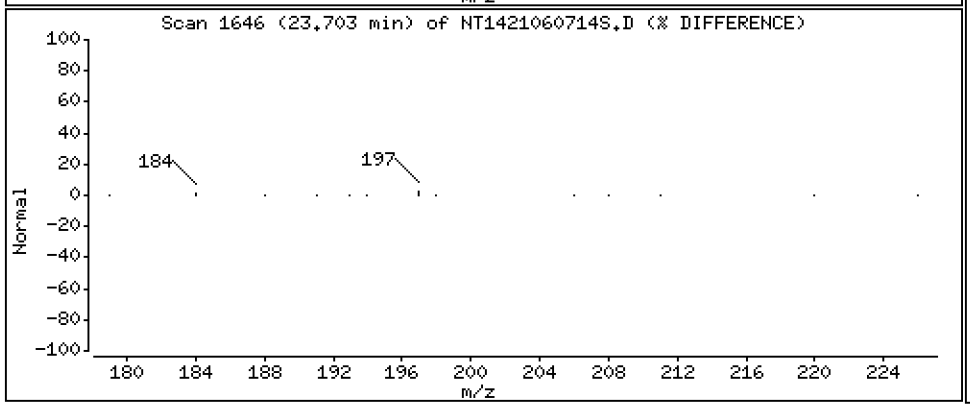












Data File: \\target\share\chem3\nt14.i\20210607.b\SIM.b\NT1421060714S.D

Date : 07-JUN-2021 22:55

Client ID:

Instrument: nt14.i

Sample Info: 21E0106-03

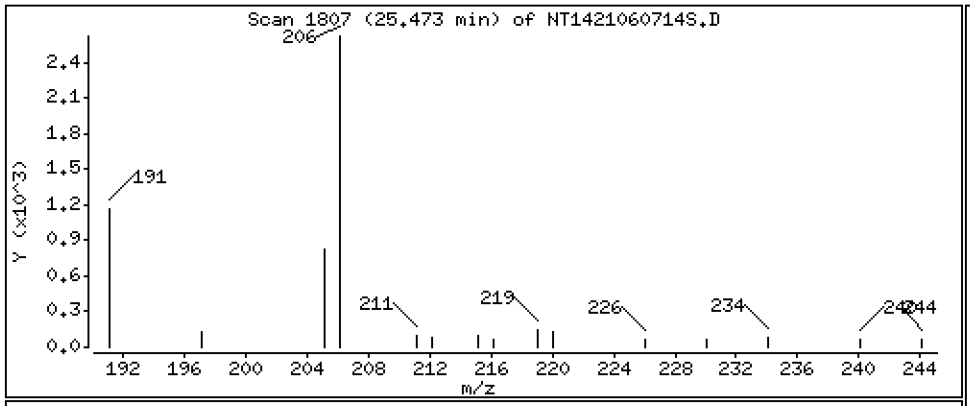
Operator: VTS

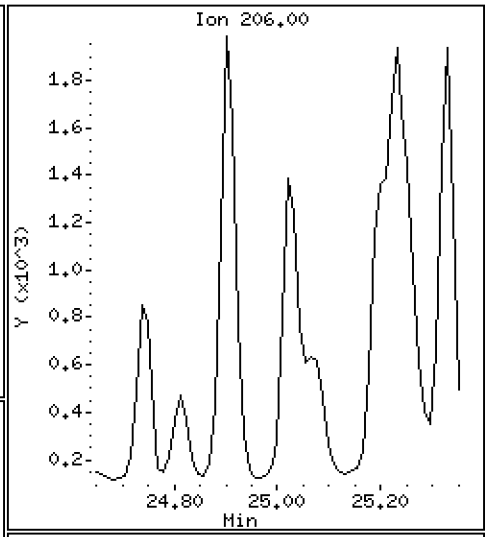
Column phase: Rxi-17Sil MS

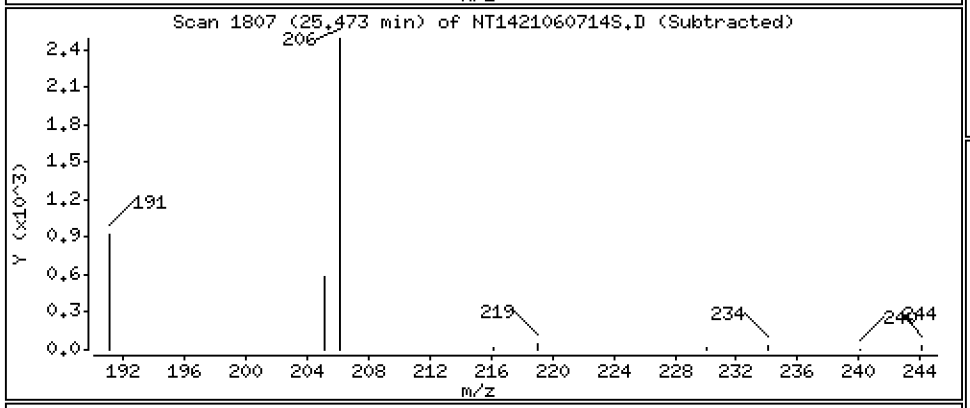
Column diameter: 0.25

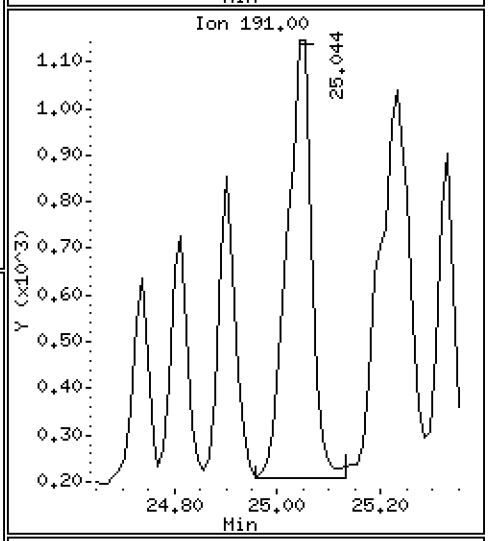
39 C2-Phenanthrenes/Anthracenes

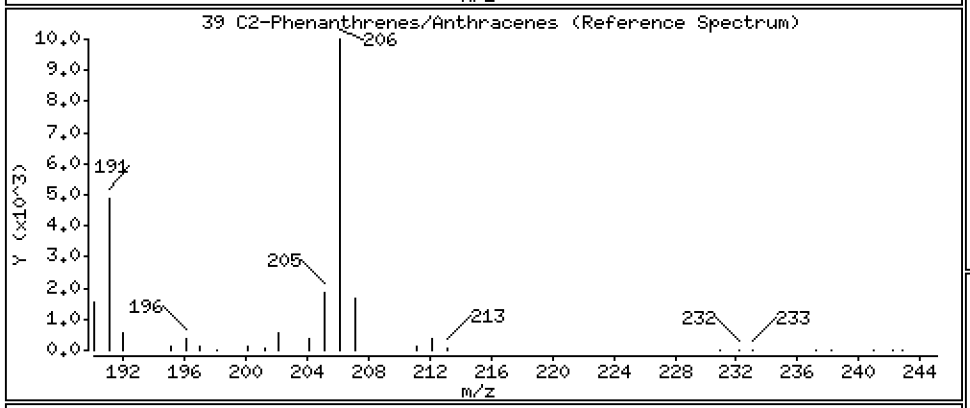
Concentration: 0.1666 ug/mL

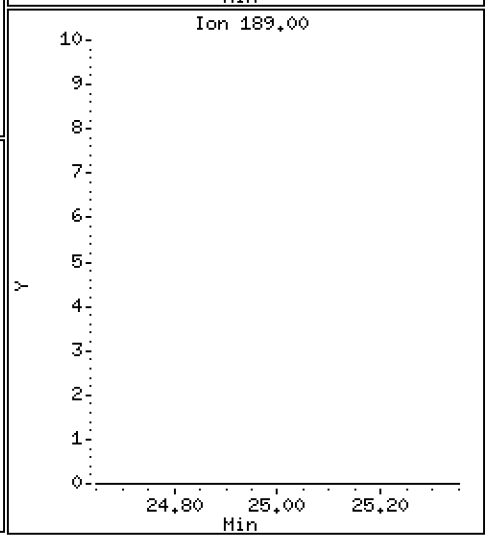


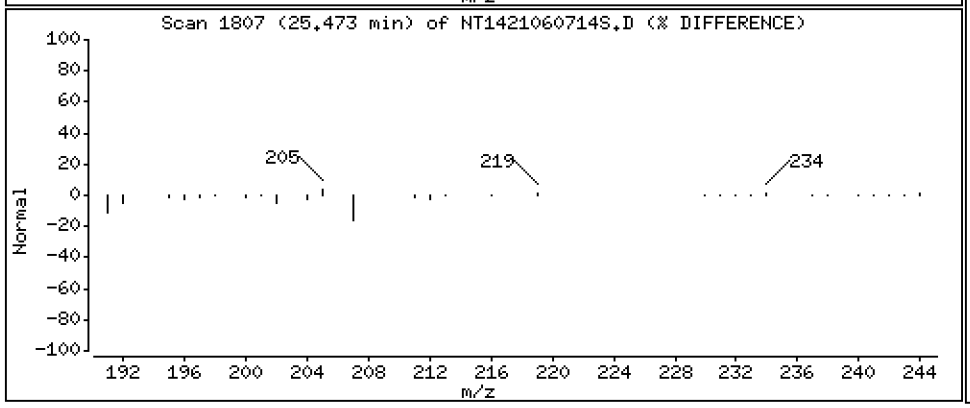












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Date : 07-JUN-2021 22:55

Client ID:

Instrument: nt14.i

Sample Info: 21E0106-03

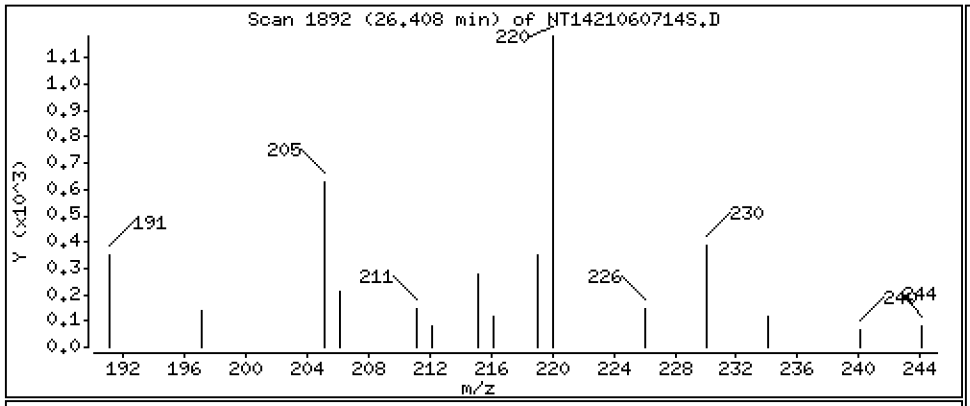
Operator: VTS

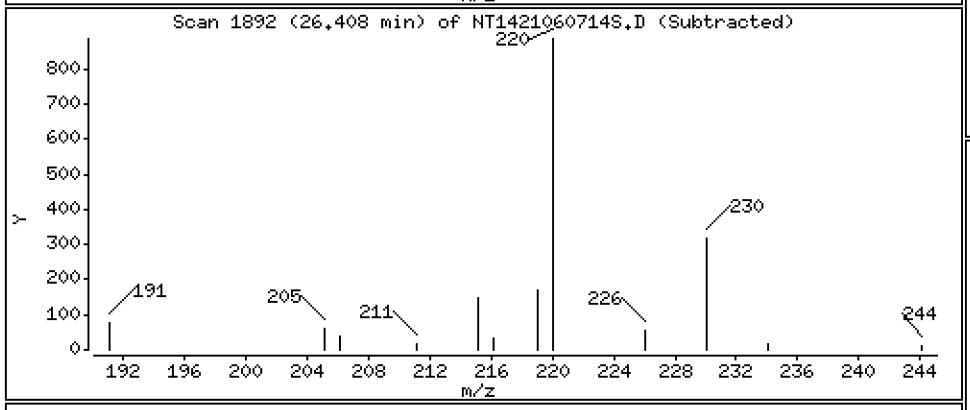
Column phase: Rxi-17Sil MS

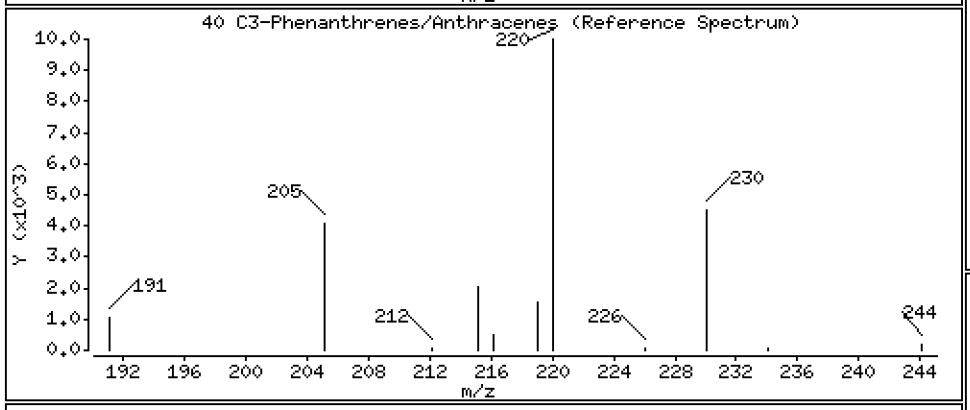
Column diameter: 0.25

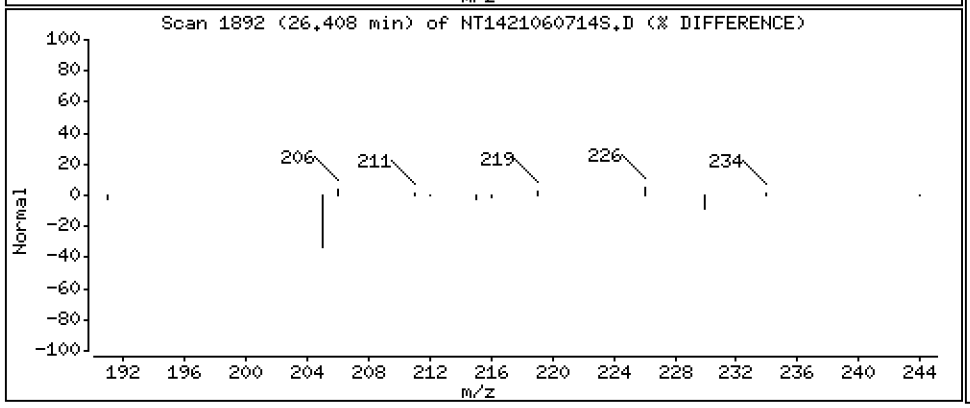
40 C3-Phenanthrenes/Anthracenes

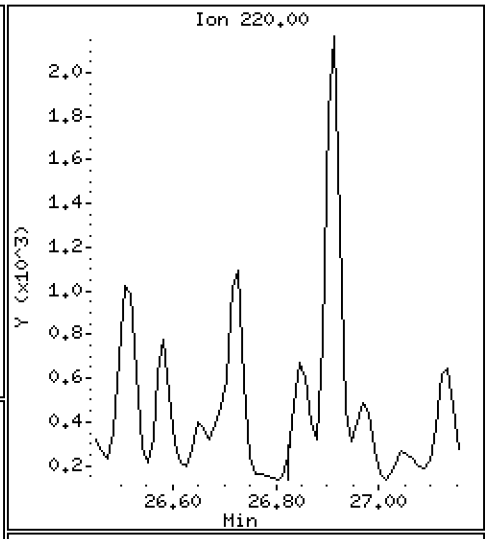
Concentration: 0.07865 ug/mL

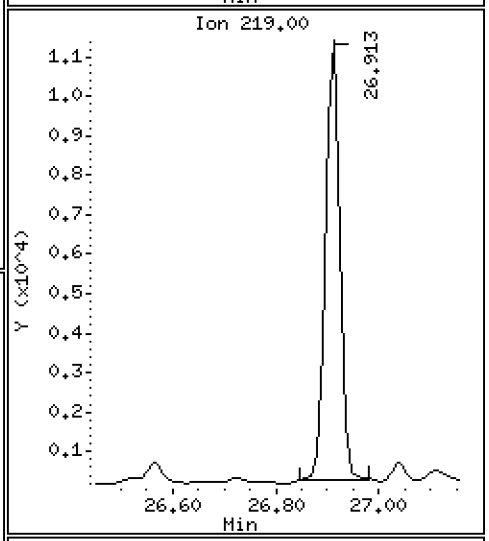


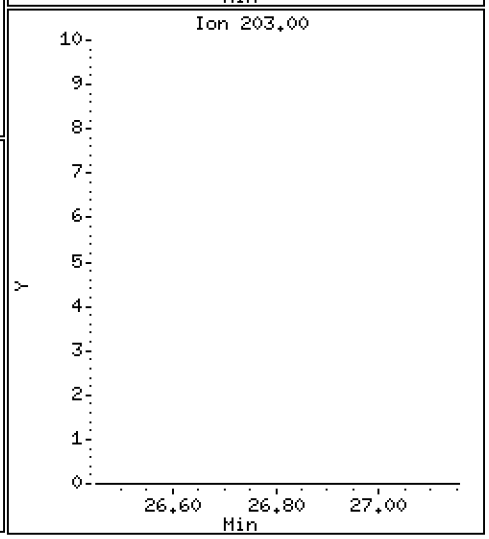












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Date : 07-JUN-2021 22:55

Client ID:

Instrument: nt14.i

Sample Info: 21E0106-03

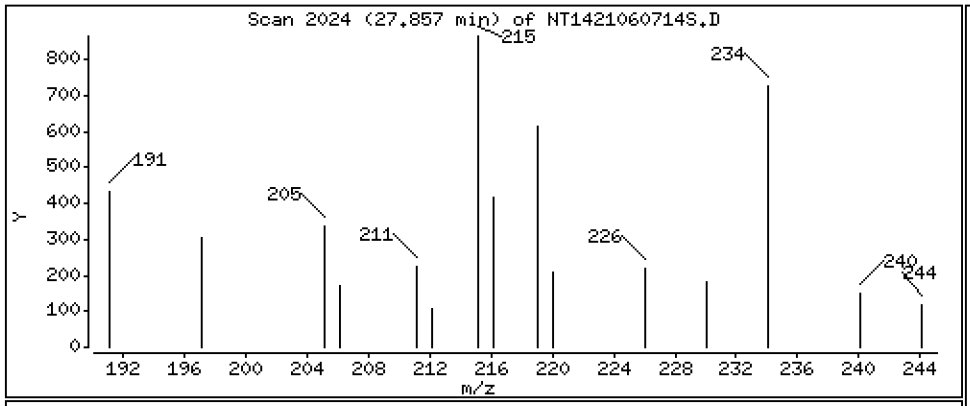
Operator: VTS

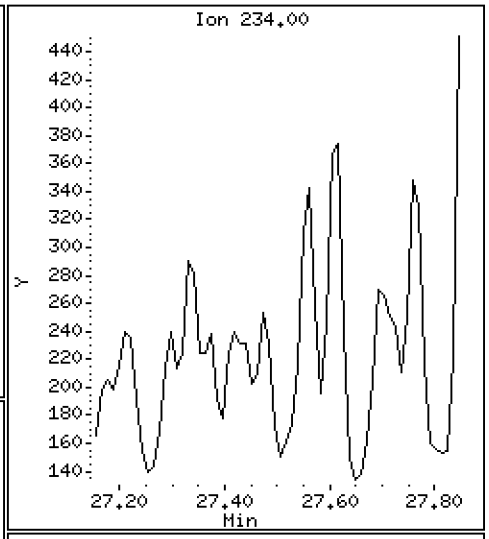
Column phase: Rxi-17Sil MS

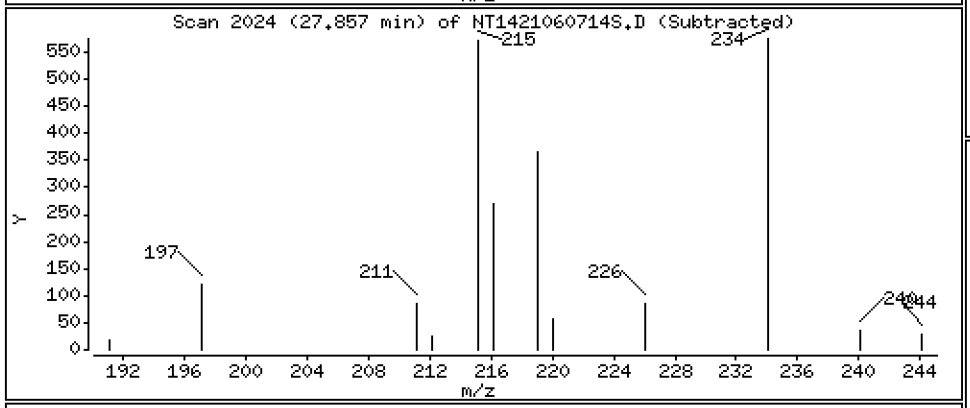
Column diameter: 0.25

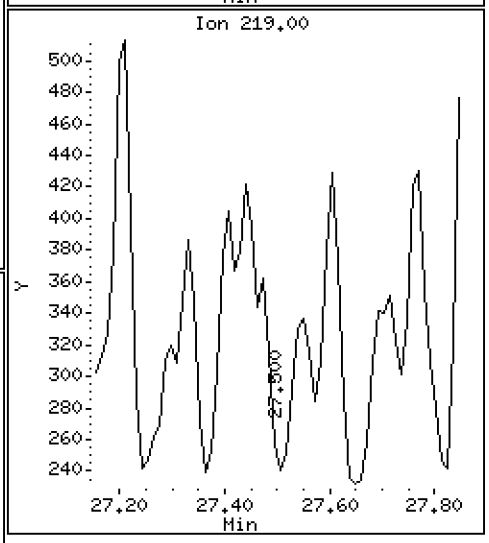
41 C4-Phenanthrenes/Anthracenes

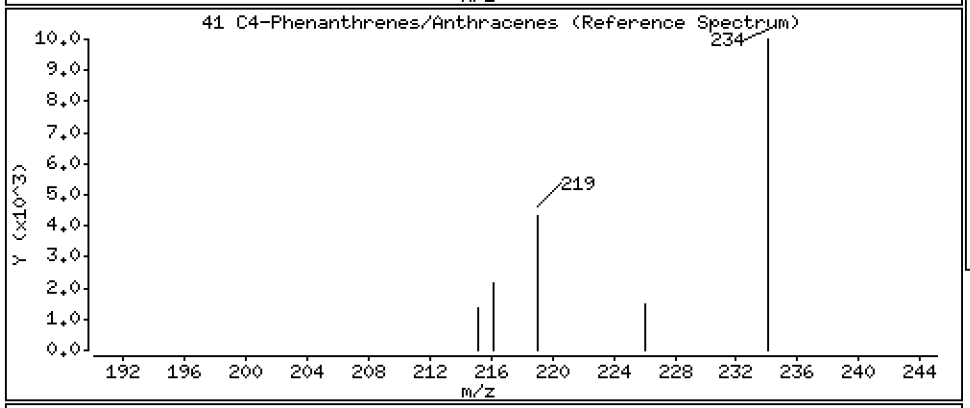
Concentration: 0.04478 ug/mL

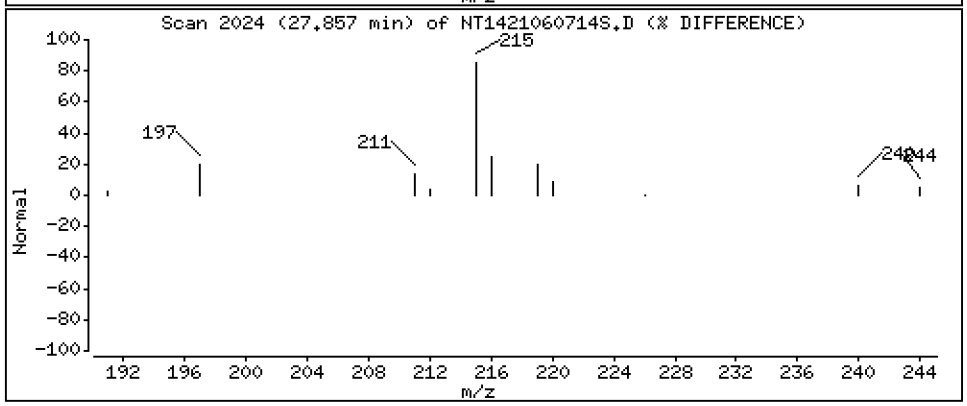












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Date : 07-JUN-2021 22:55

Client ID:

Instrument: nt14.i

Sample Info: 21E0106-03

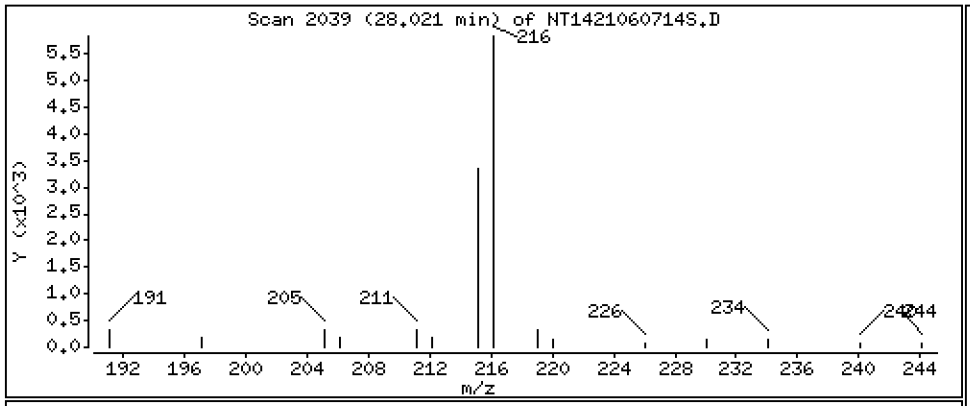
Operator: VTS

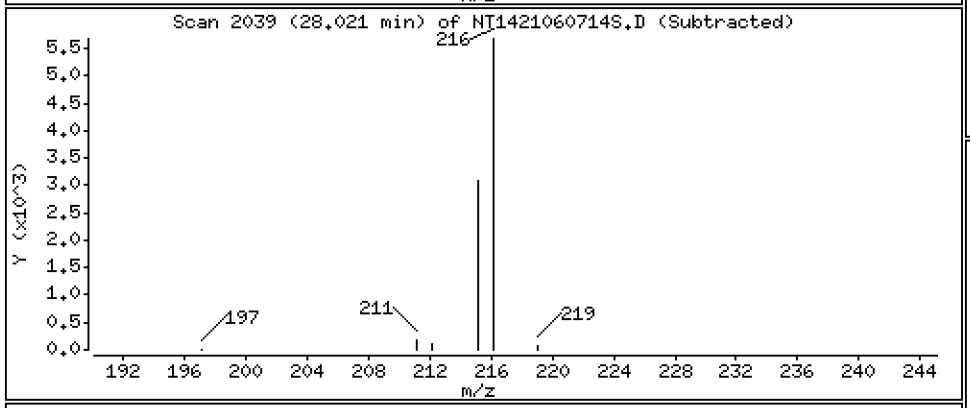
Column phase: Rxi-17Sil MS

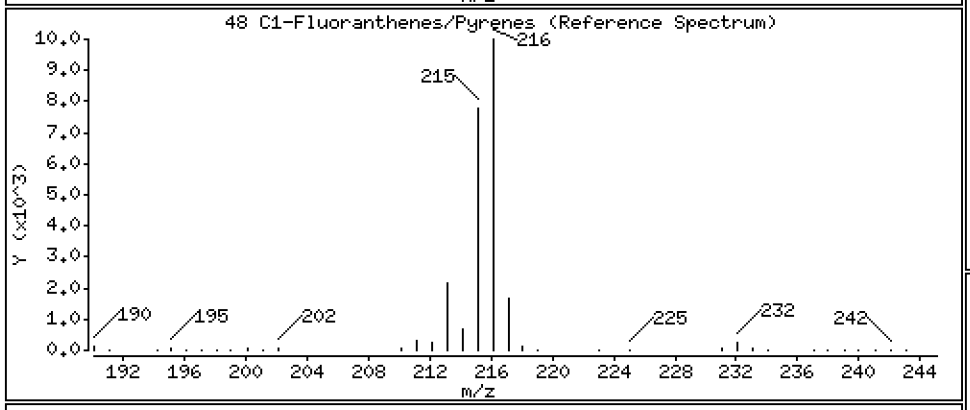
Column diameter: 0.25

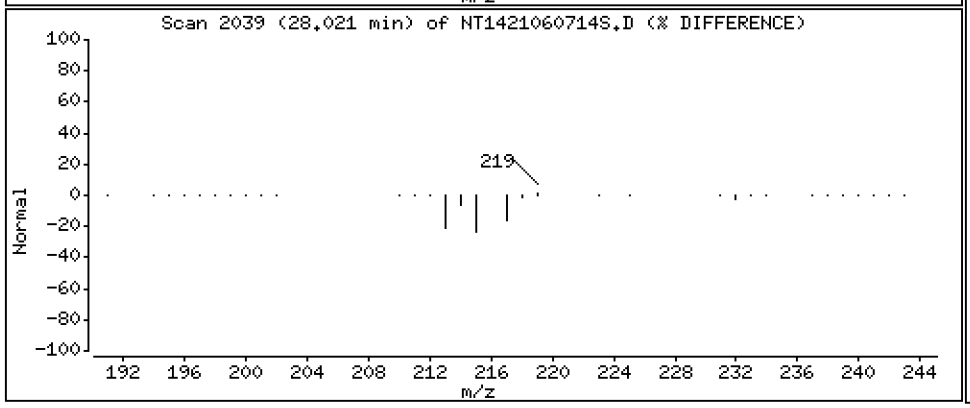
48 C1-Fluoranthenes/Pyrenes

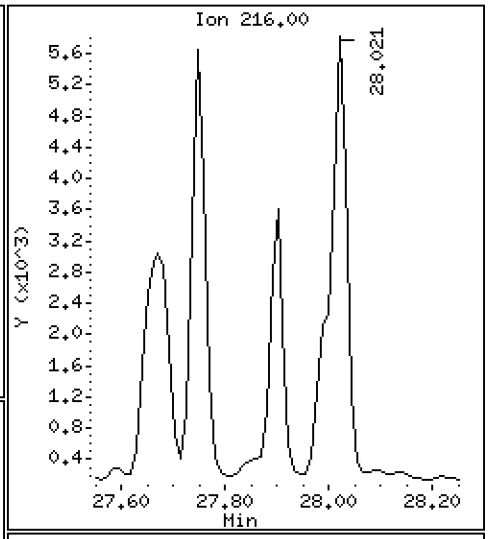
Concentration: 0.2835 ug/mL

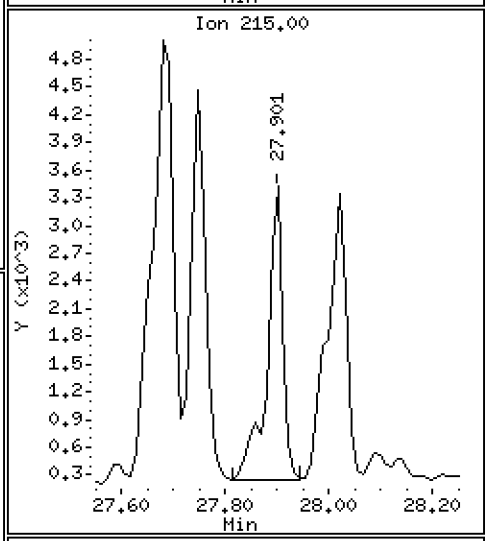


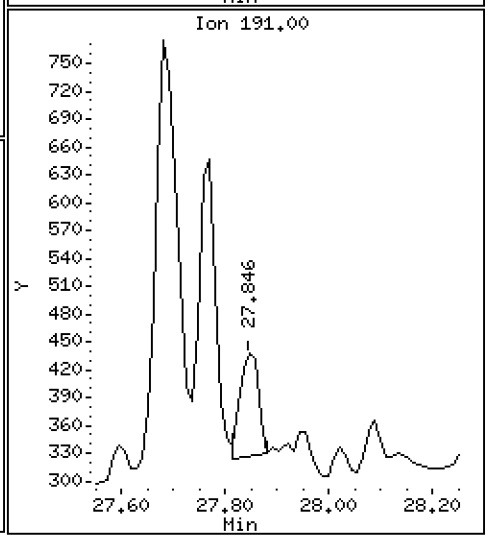












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Date : 07-JUN-2021 22:55

Client ID:

Instrument: nt14.i

Sample Info: 21E0106-03

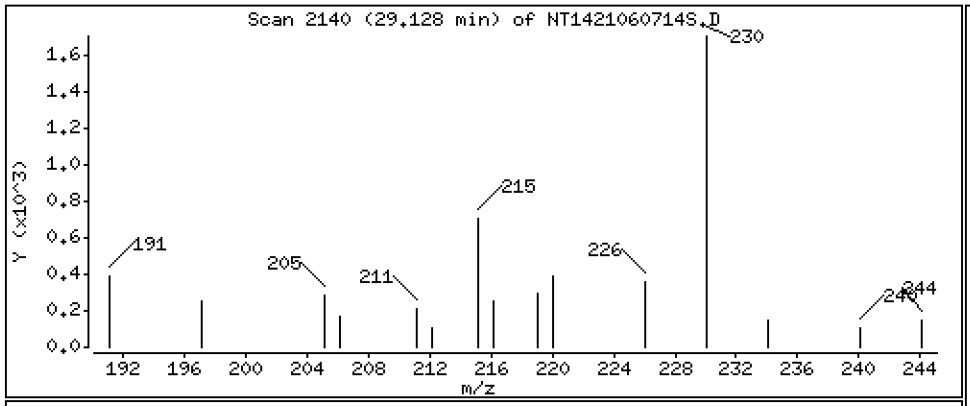
Operator: VTS

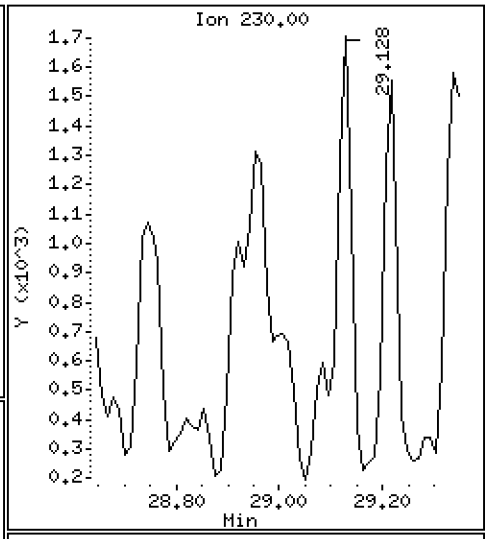
Column phase: Rxi-17Sil MS

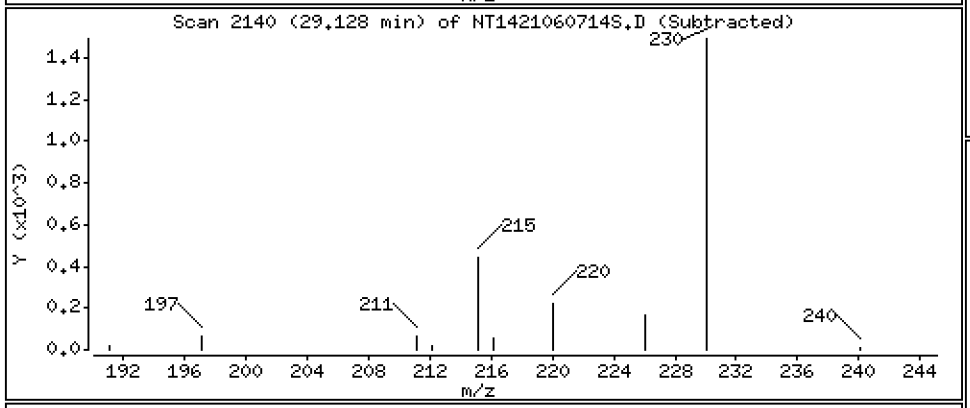
Column diameter: 0.25

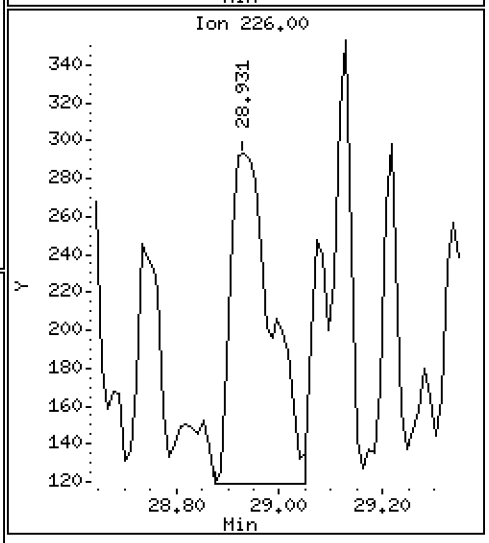
49 C2-Fluoranthenes/Pyrenes

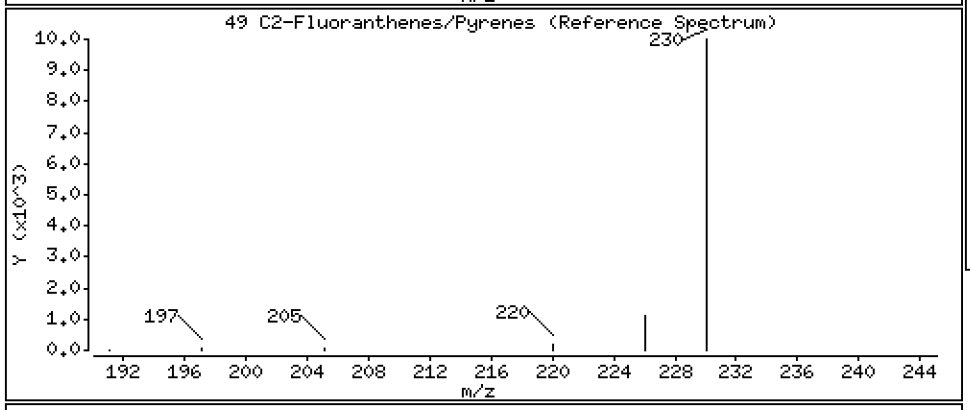
Concentration: 0.1344 ug/mL

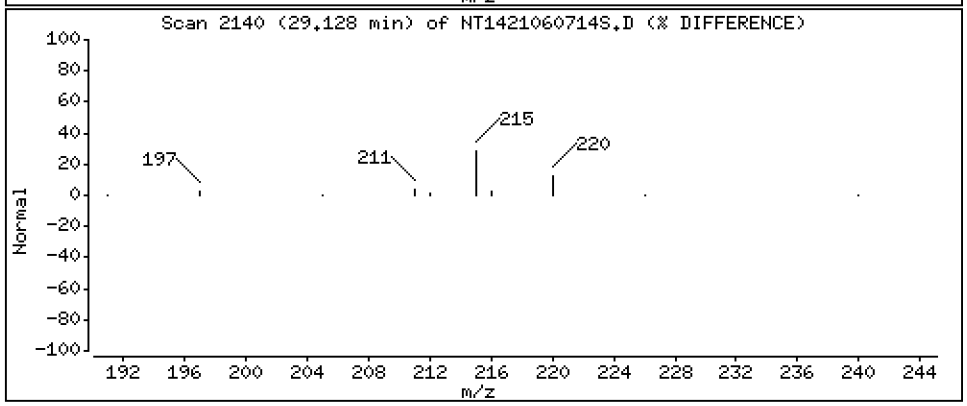












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Date : 07-JUN-2021 22:55

Client ID:

Instrument: nt14.i

Sample Info: 21E0106-03

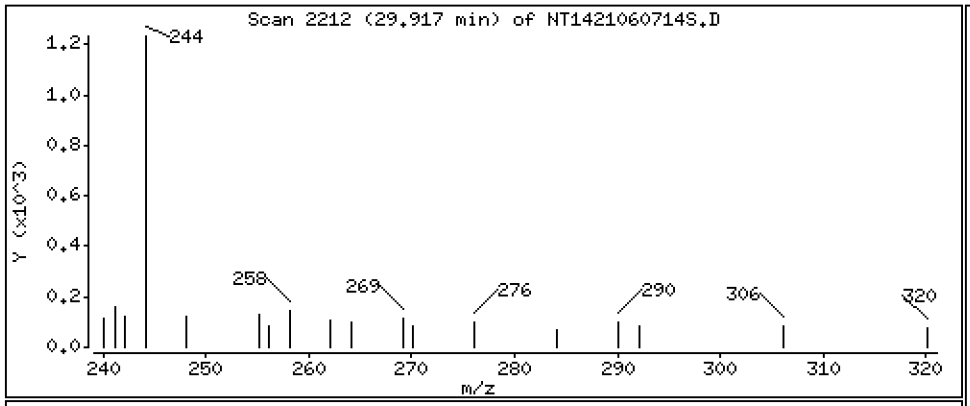
Operator: VTS

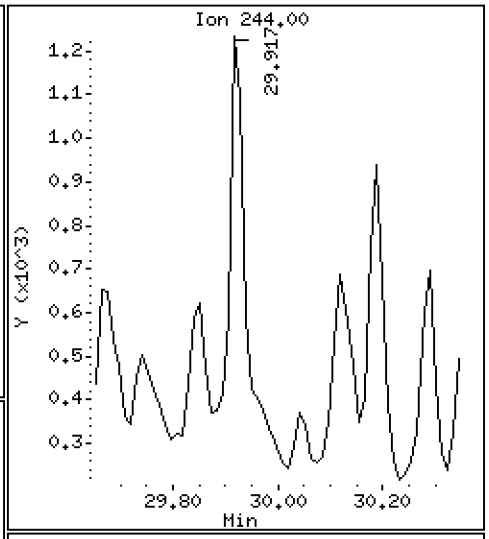
Column phase: Rxi-17Sil MS

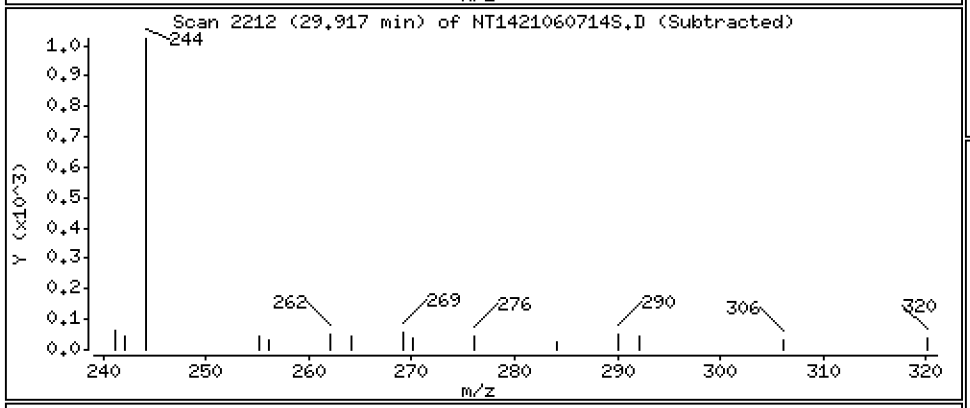
Column diameter: 0.25

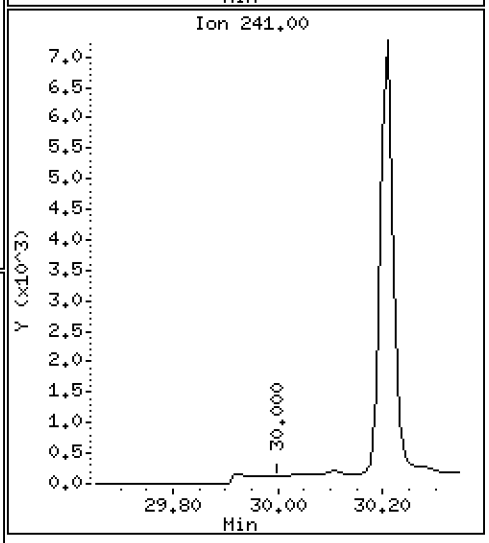
50 C3-Fluoranthenes/Pyrenes

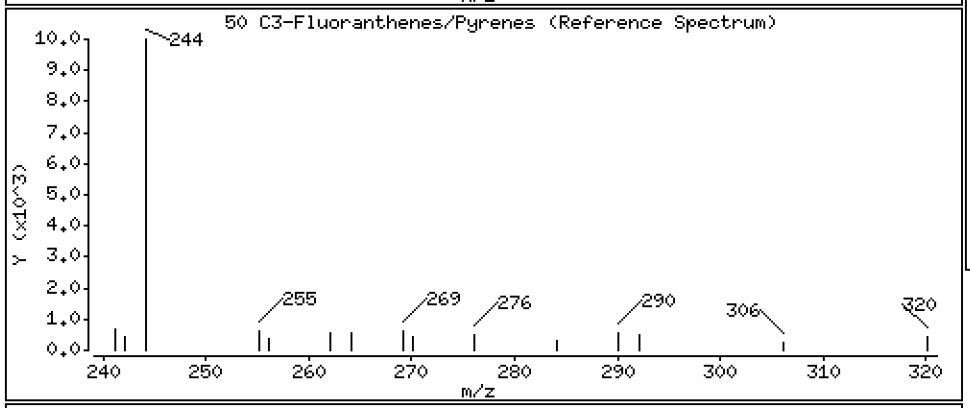
Concentration: 0.07661 ug/mL

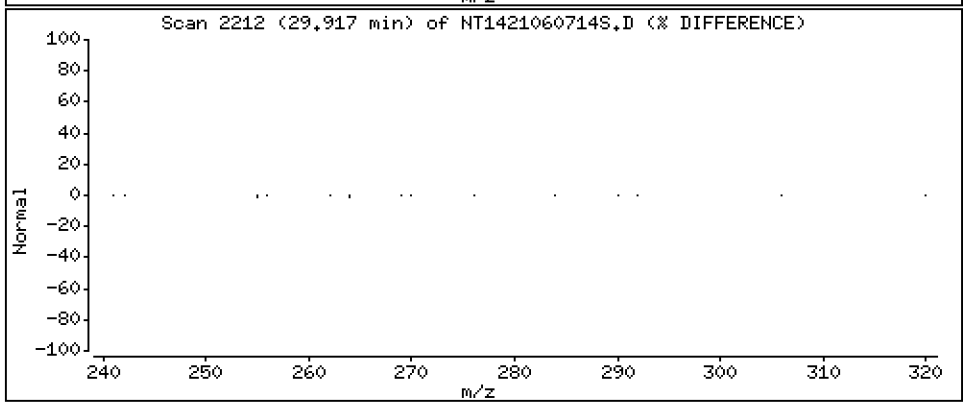












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Date : 07-JUN-2021 22:55

Client ID:

Instrument: nt14.i

Sample Info: 21E0106-03

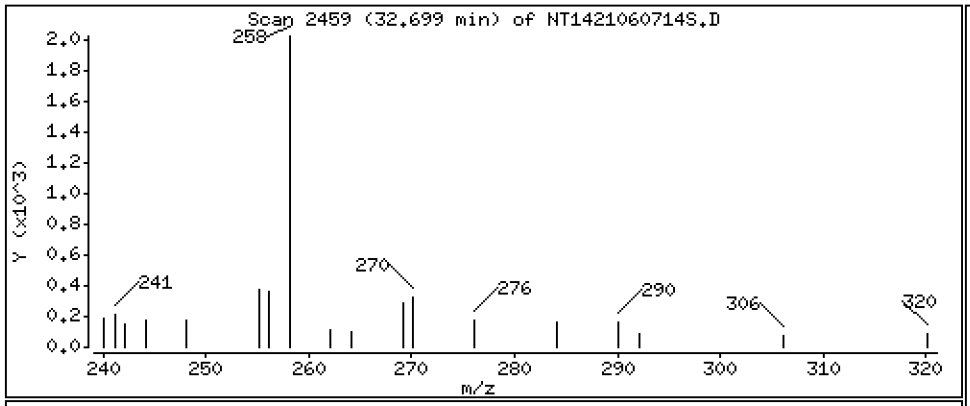
Operator: VTS

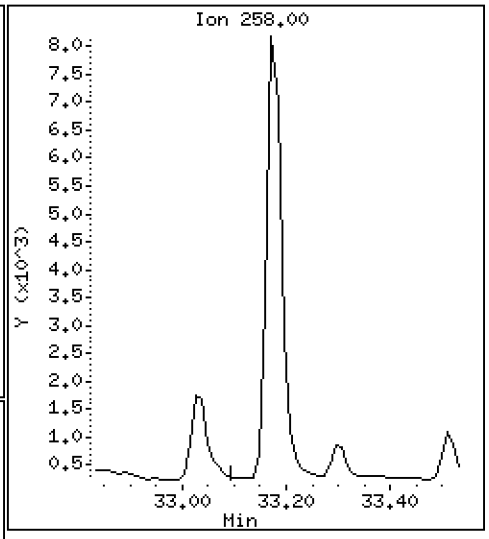
Column phase: Rxi-17Sil MS

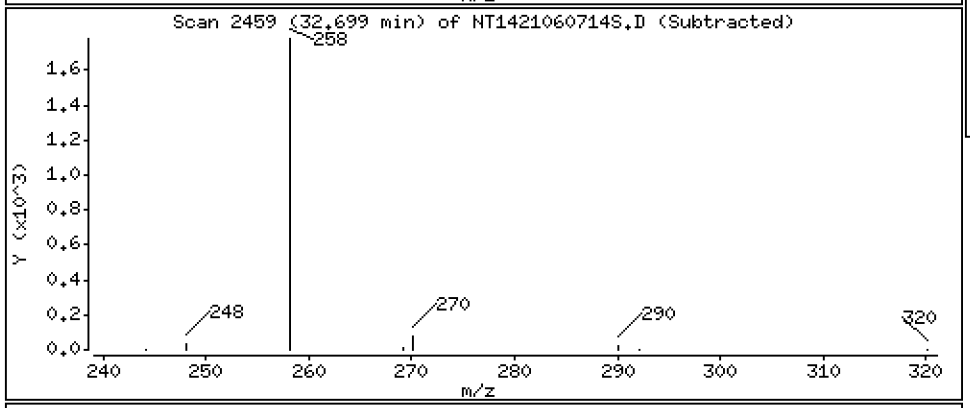
Column diameter: 0.25

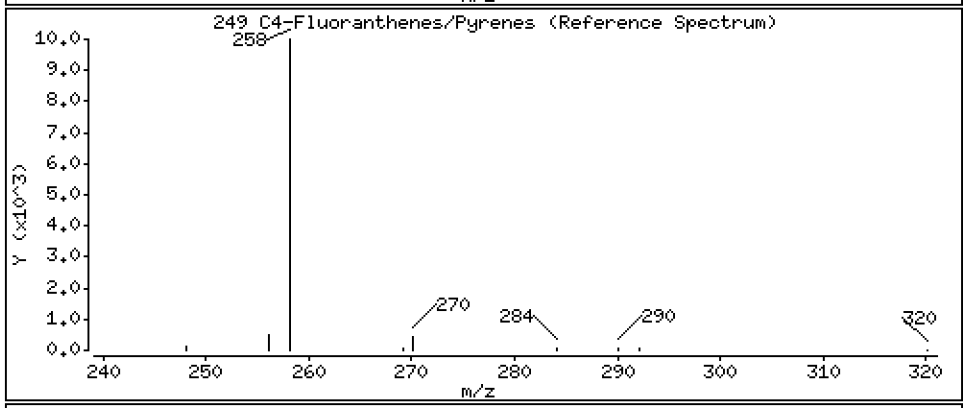
249 C4-Fluoranthenes/Pyrenes

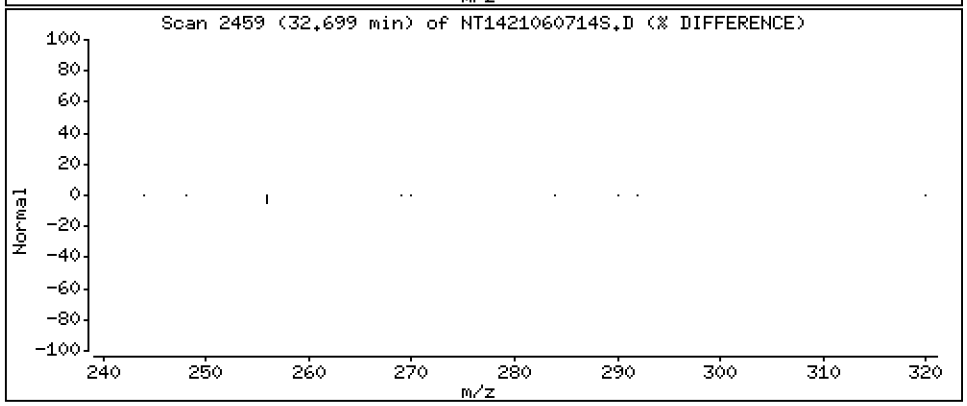
Concentration: 0.04732 ug/mL











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Date : 07-JUN-2021 22:55

Client ID:

Instrument: nt14.i

Sample Info: 21E0106-03

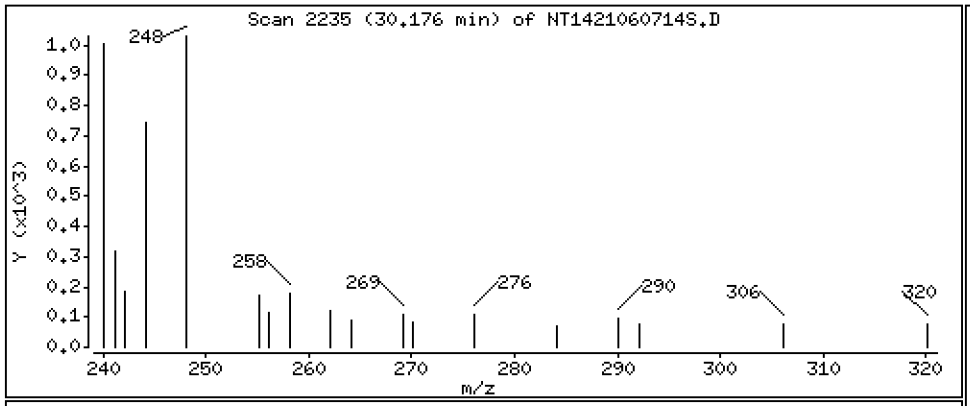
Operator: VTS

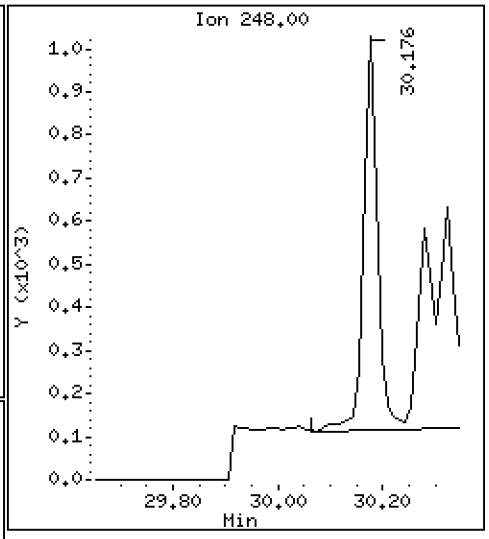
Column phase: Rxi-17Sil MS

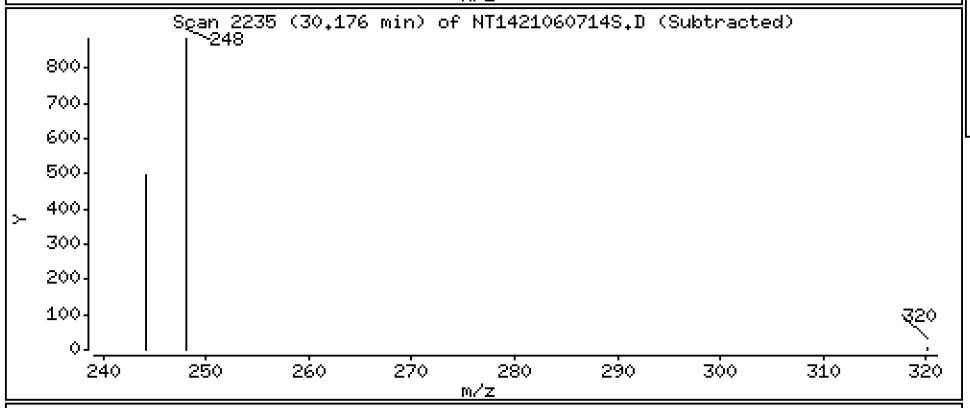
Column diameter: 0.25

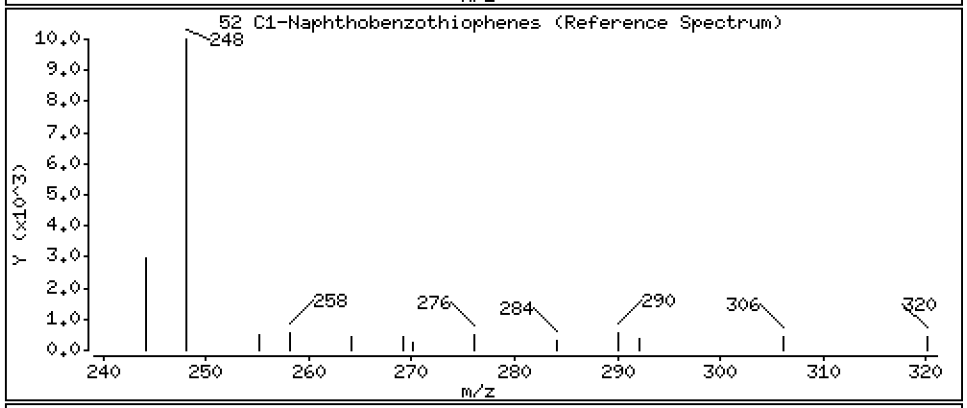
52 C1-Naphthobenzothiophenes

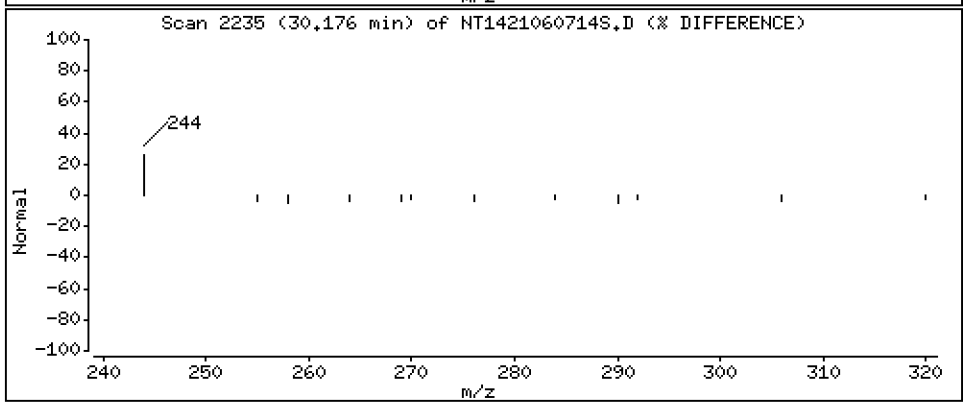
Concentration: 0.04758 ug/mL











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Date : 07-JUN-2021 22:55

Client ID:

Instrument: nt14.i

Sample Info: 21E0106-03

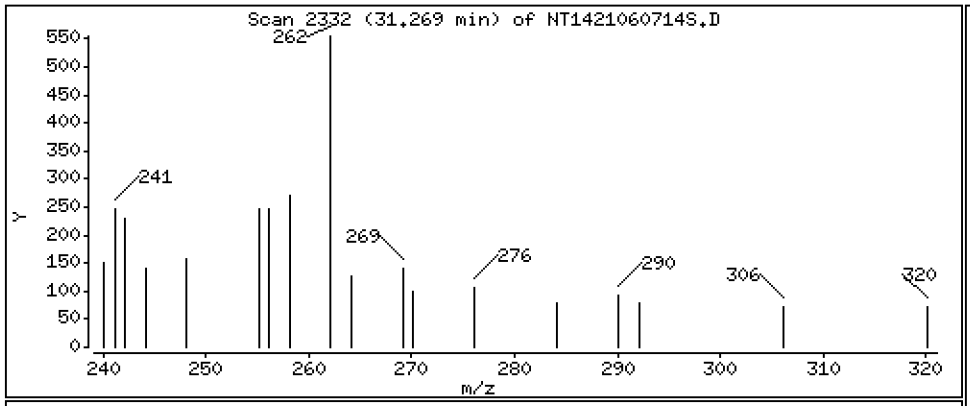
Operator: VTS

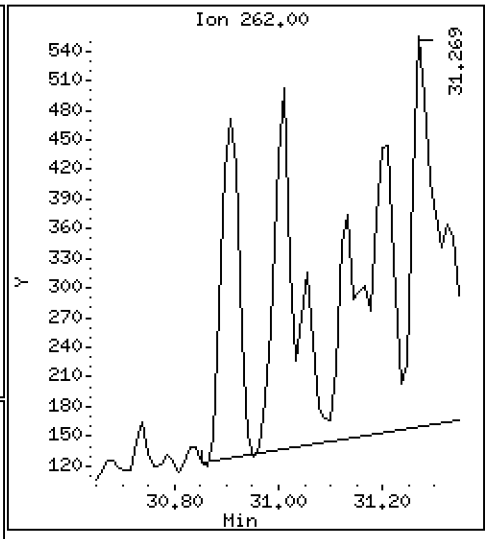
Column phase: Rxi-17Sil MS

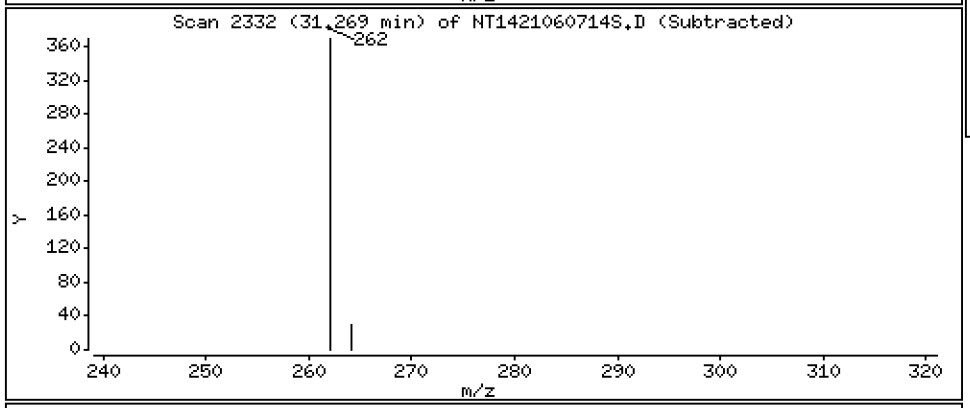
Column diameter: 0.25

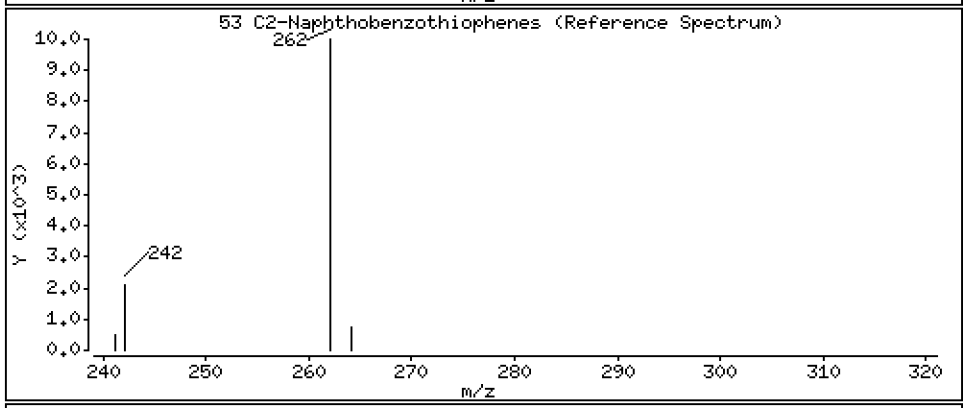
53 C2-Naphthobenzothiophenes

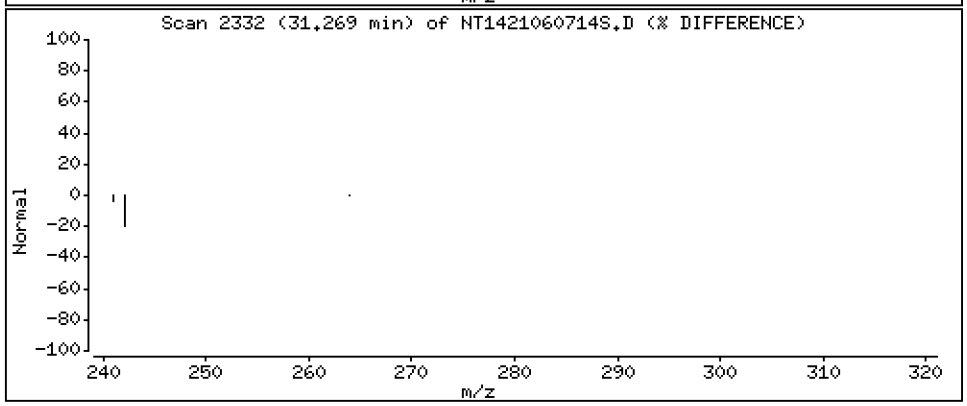
Concentration: 0.02811 ug/mL











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Date : 07-JUN-2021 22:55

Client ID:

Instrument: nt14.i

Sample Info: 21E0106-03

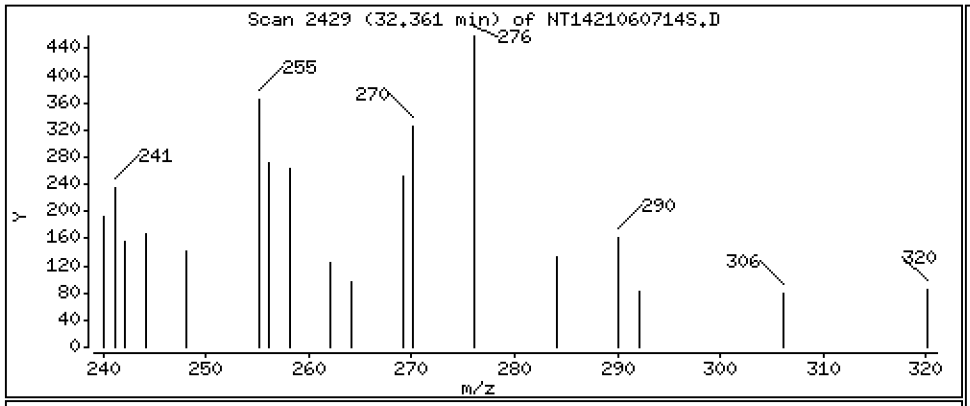
Operator: VTS

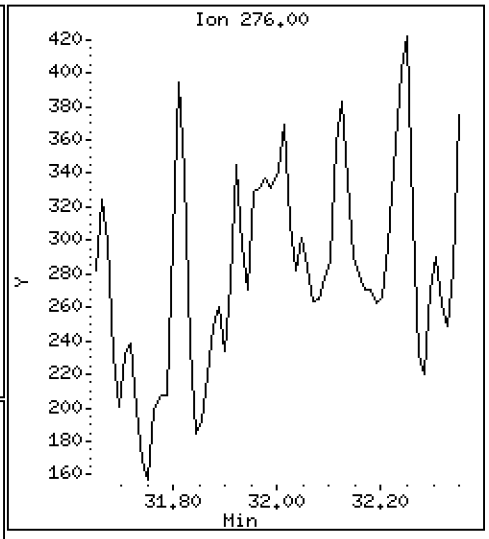
Column phase: Rxi-17Sil MS

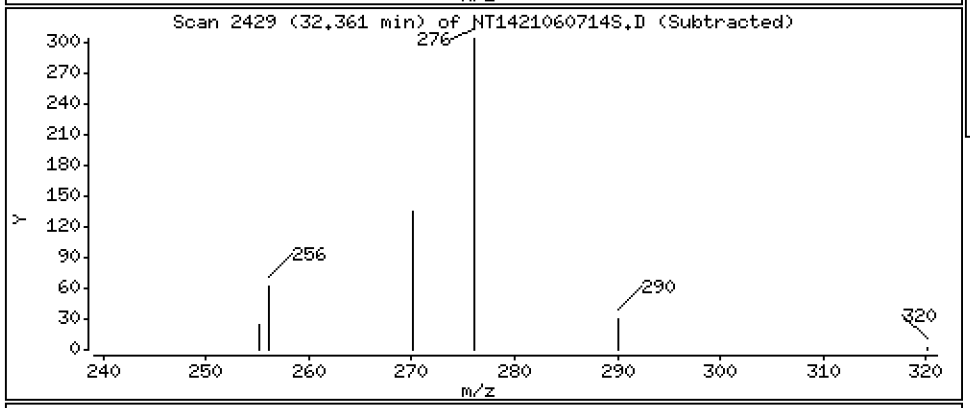
Column diameter: 0.25

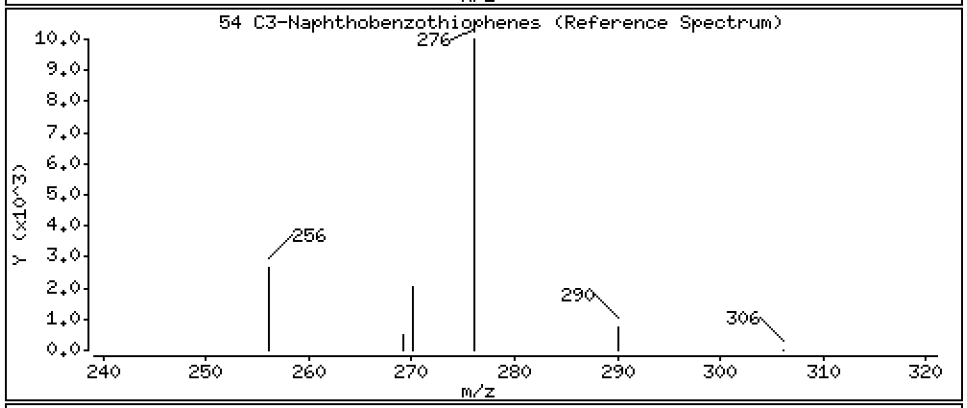
54 C3-Naphthobenzothiophenes

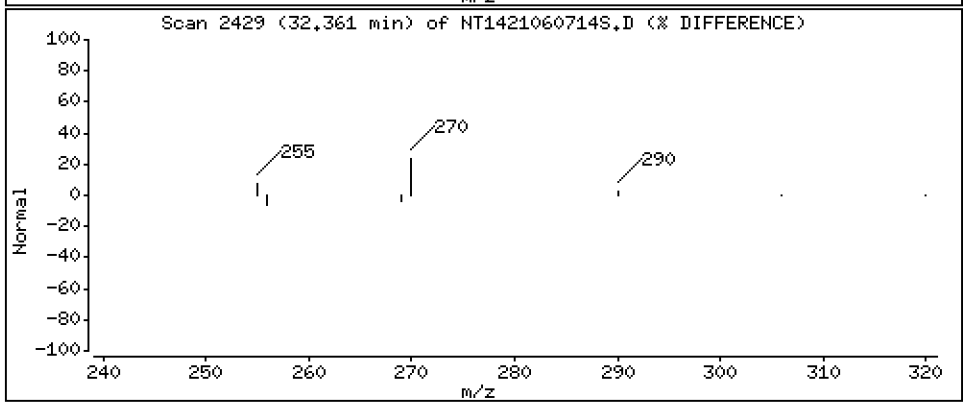
Concentration: 0.03991 ug/mL











Data File: \\target\share\chem3\nt14.i\20210607.b\SIM.b\NT1421060714S.D

Date : 07-JUN-2021 22:55

Client ID:

Instrument: nt14.i

Sample Info: 21E0106-03

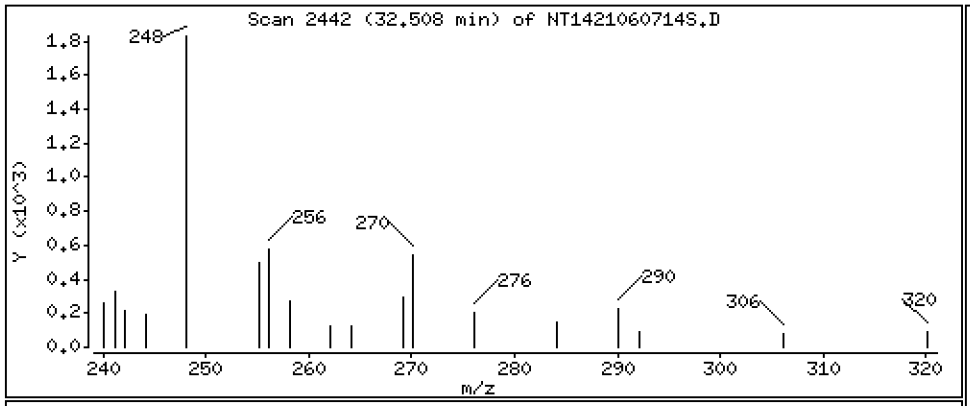
Operator: VTS

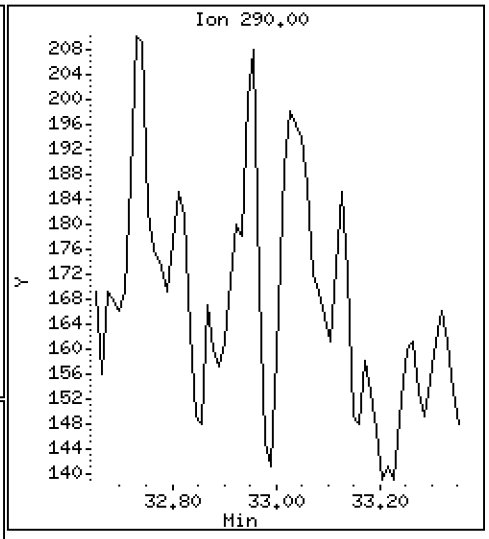
Column phase: Rxi-17Sil MS

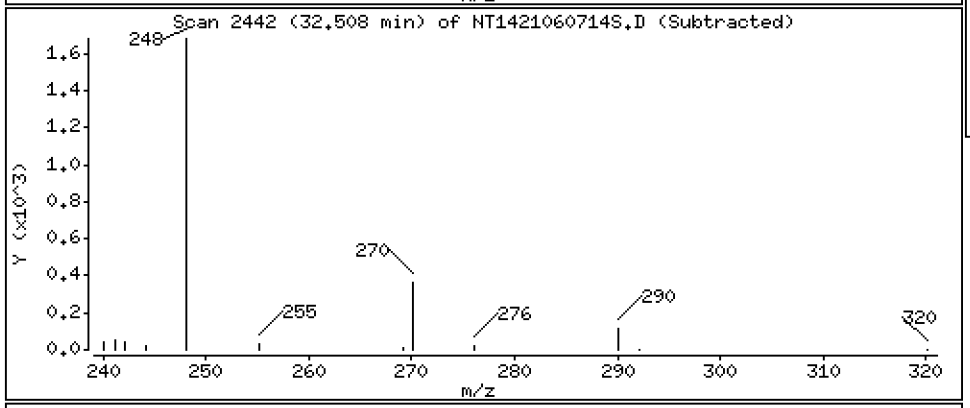
Column diameter: 0.25

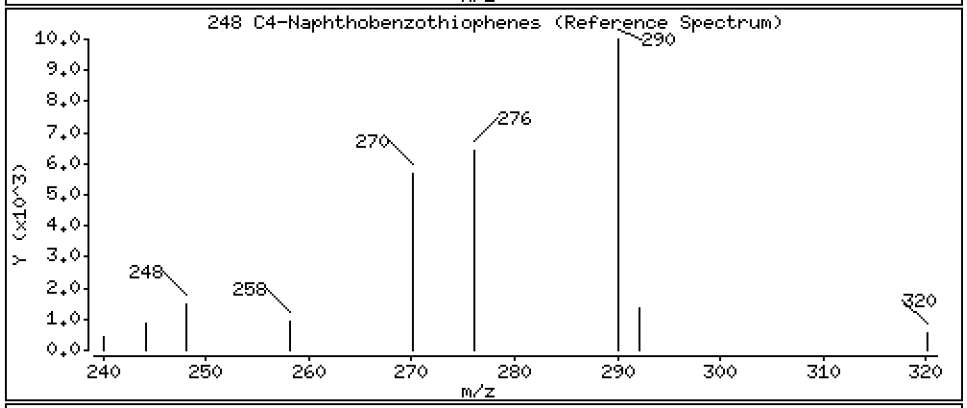
248 C4-Naphthobenzothiophenes

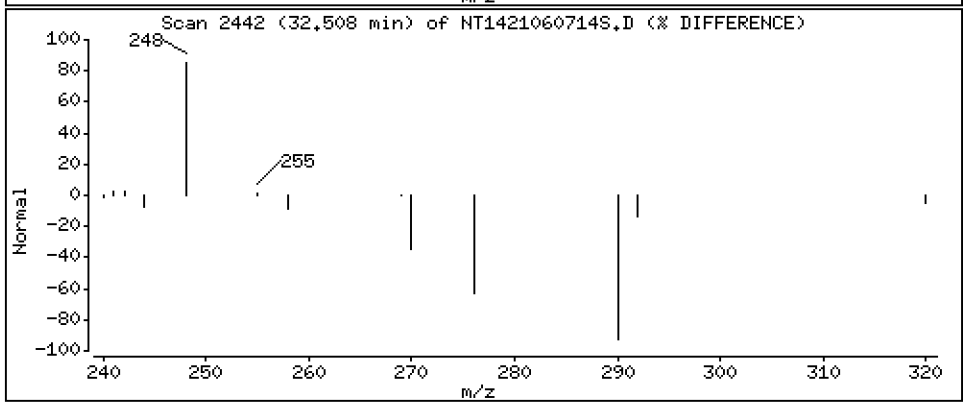
Concentration: 0.01933 ug/mL











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Date : 07-JUN-2021 22:55

Client ID:

Instrument: nt14.i

Sample Info: 21E0106-03

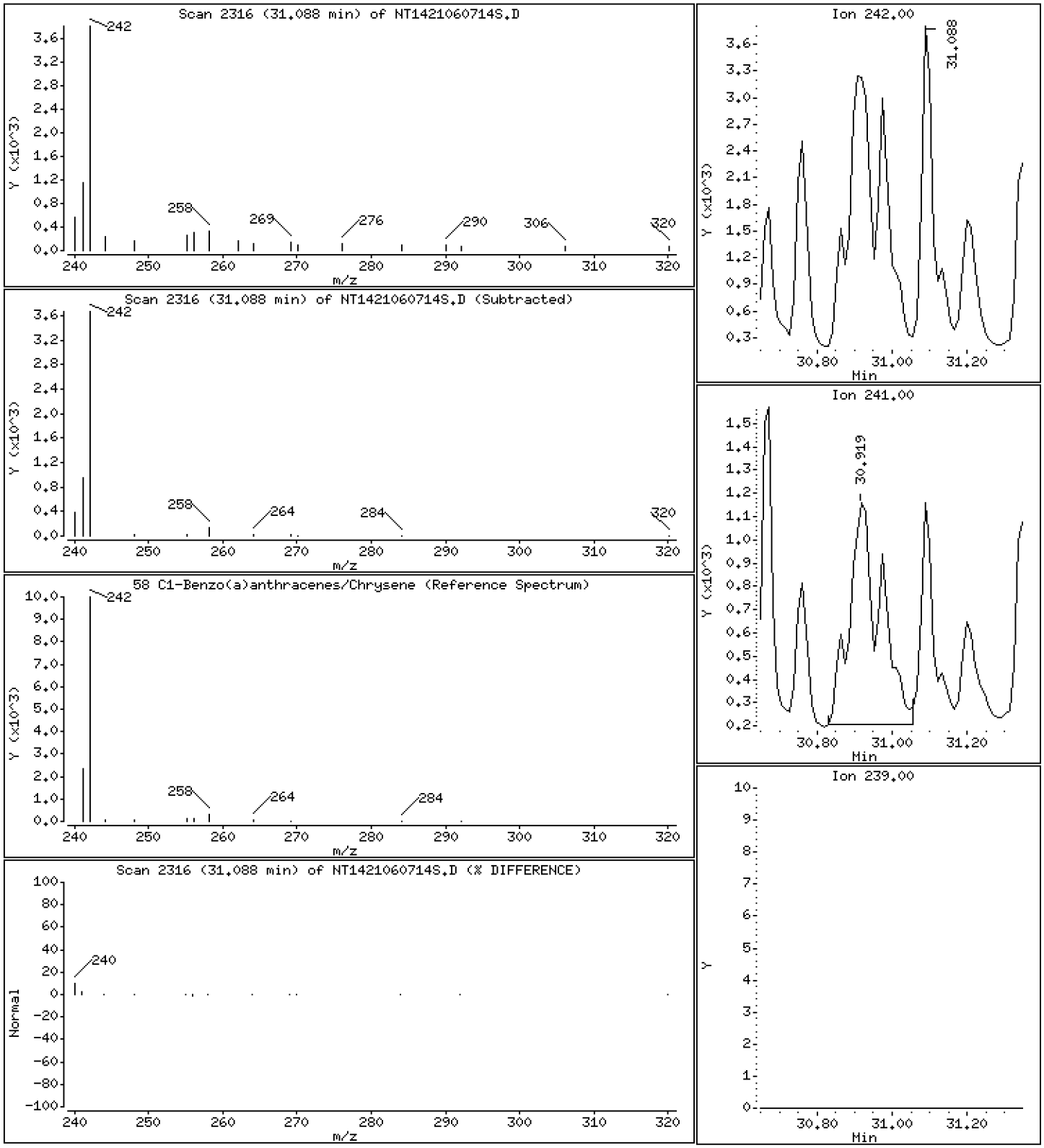
Operator: VTS

Column phase: Rxi-17Sil MS

Column diameter: 0.25

58 C1-Benzo(a)anthracenes/Chrysene

Concentration: 0.2963 ug/mL



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Date : 07-JUN-2021 22:55

Client ID:

Instrument: nt14.i

Sample Info: 21E0106-03

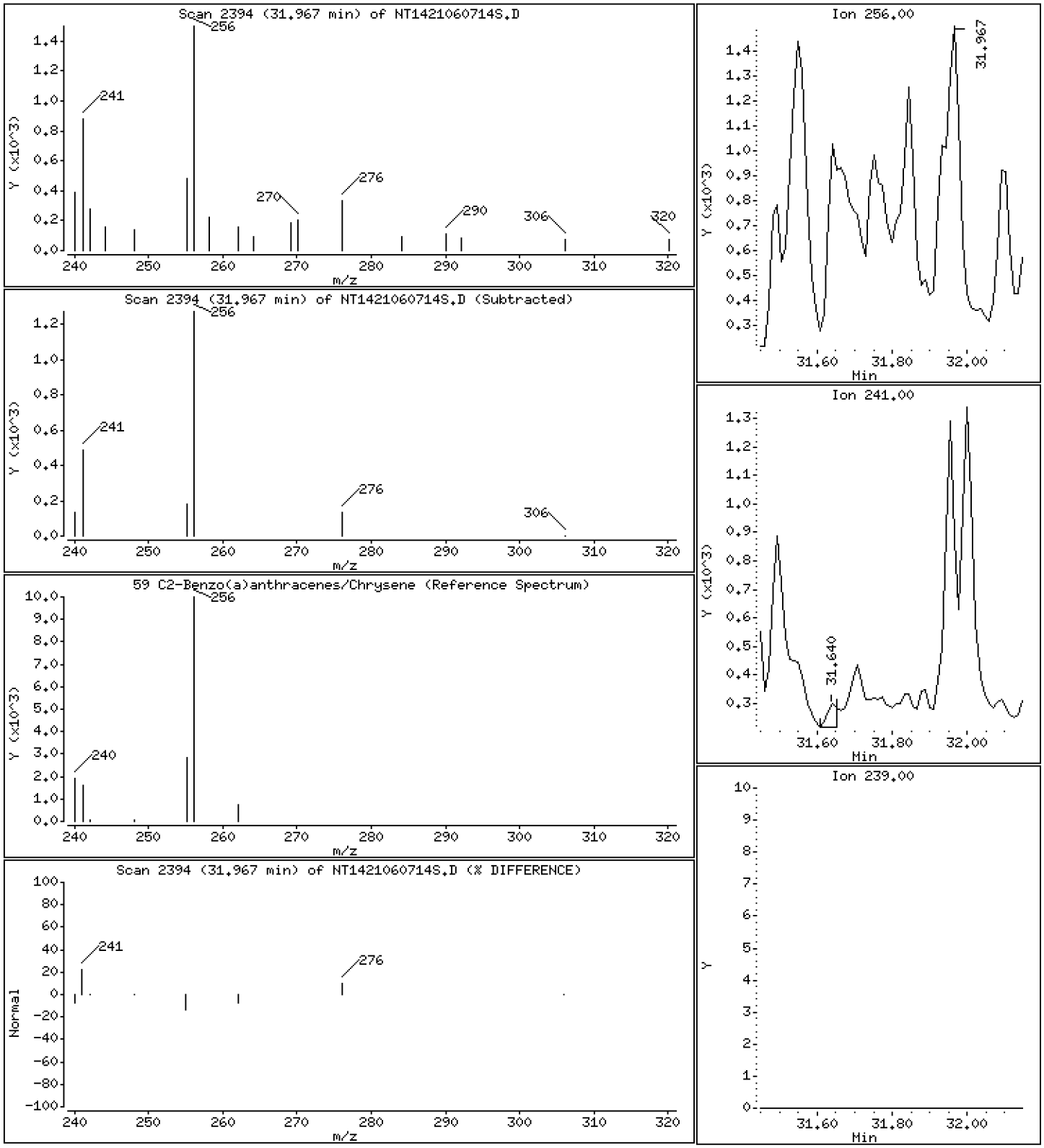
Operator: VTS

Column phase: Rxi-17Sil MS

Column diameter: 0.25

59 C2-Benzo(a)anthracenes/Chrysene

Concentration: 0.1153 ug/mL



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Date : 07-JUN-2021 22:55

Client ID:

Instrument: nt14.i

Sample Info: 21E0106-03

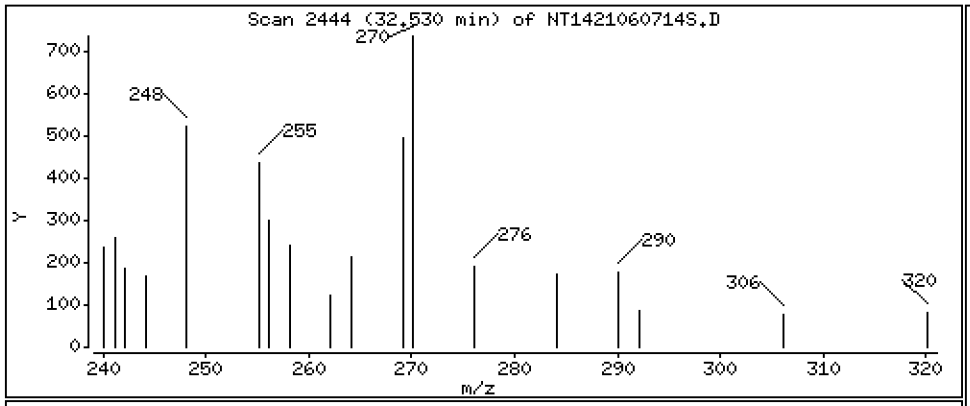
Operator: VTS

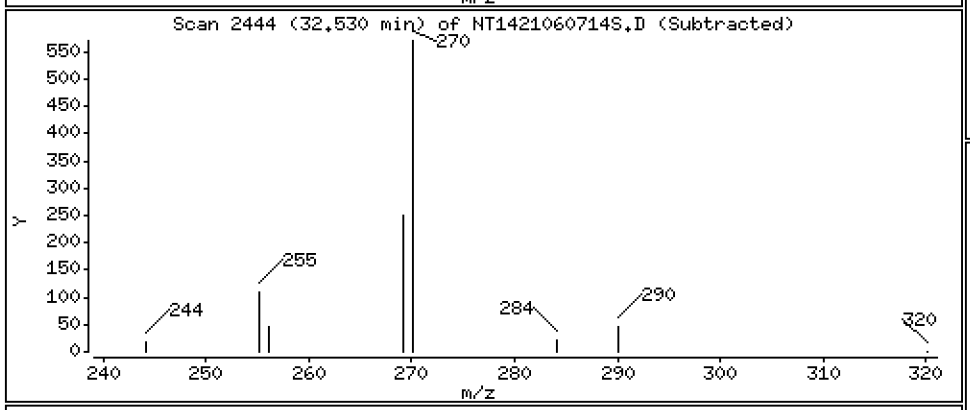
Column phase: Rxi-17Sil MS

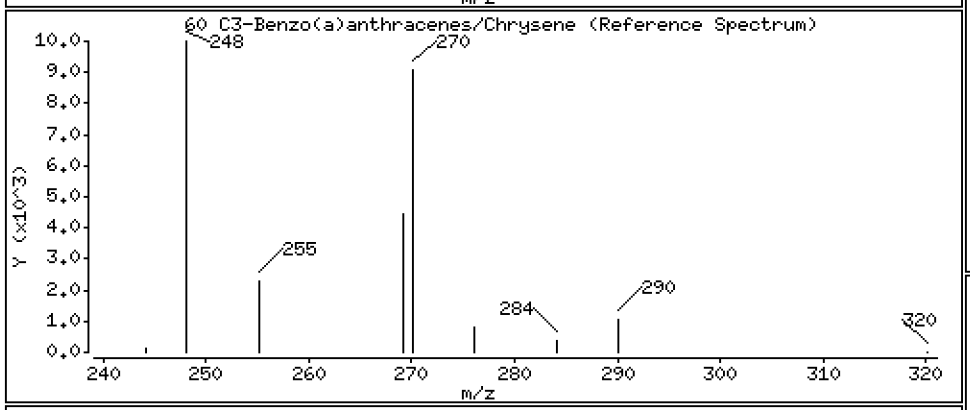
Column diameter: 0.25

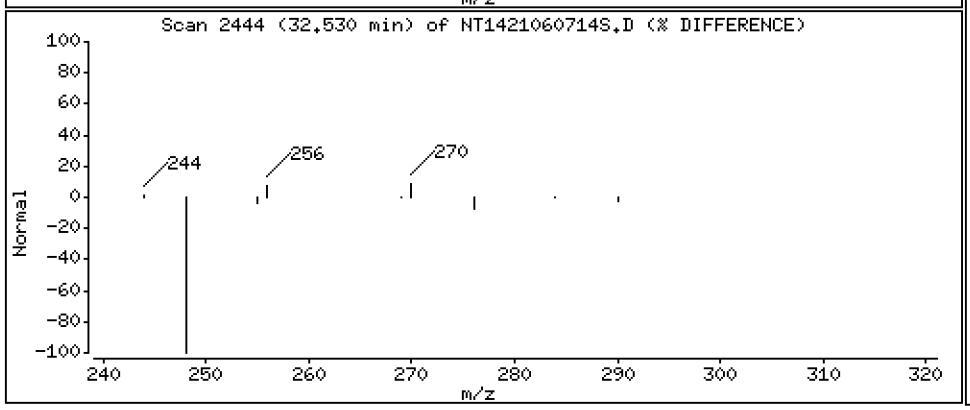
60 C3-Benzo(a)anthracenes/Chrysene

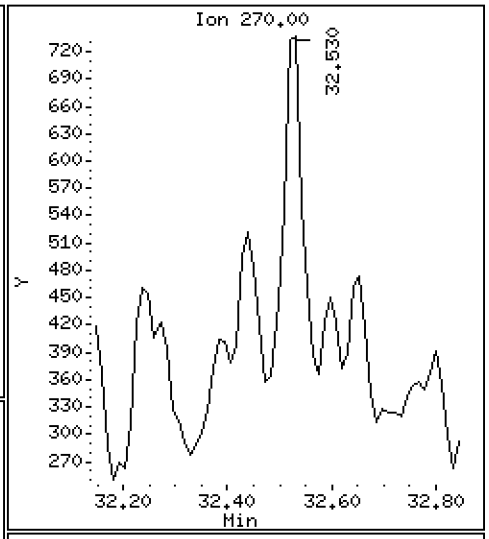
Concentration: 0.07339 ug/mL

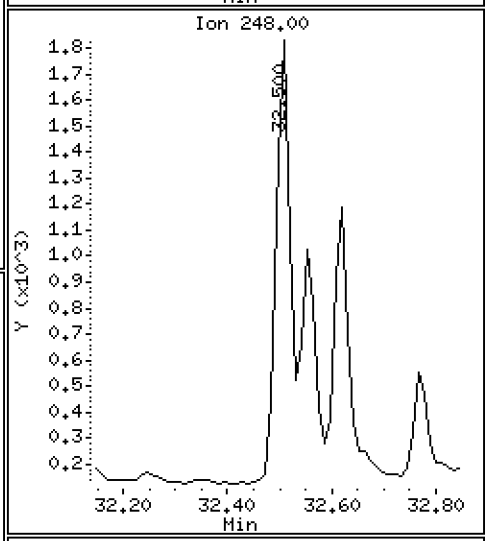


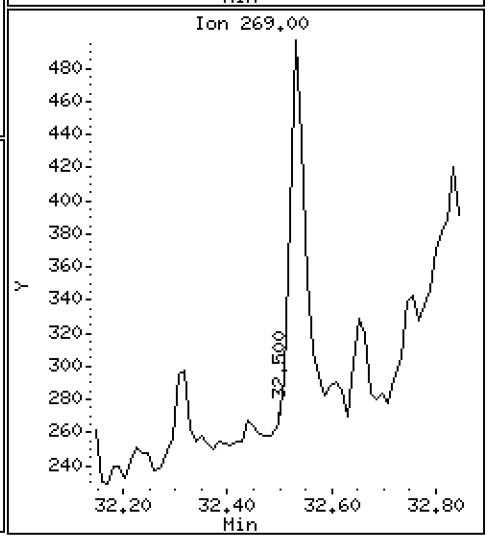












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Date : 07-JUN-2021 22:55

Client ID:

Instrument: nt14.i

Sample Info: 21E0106-03

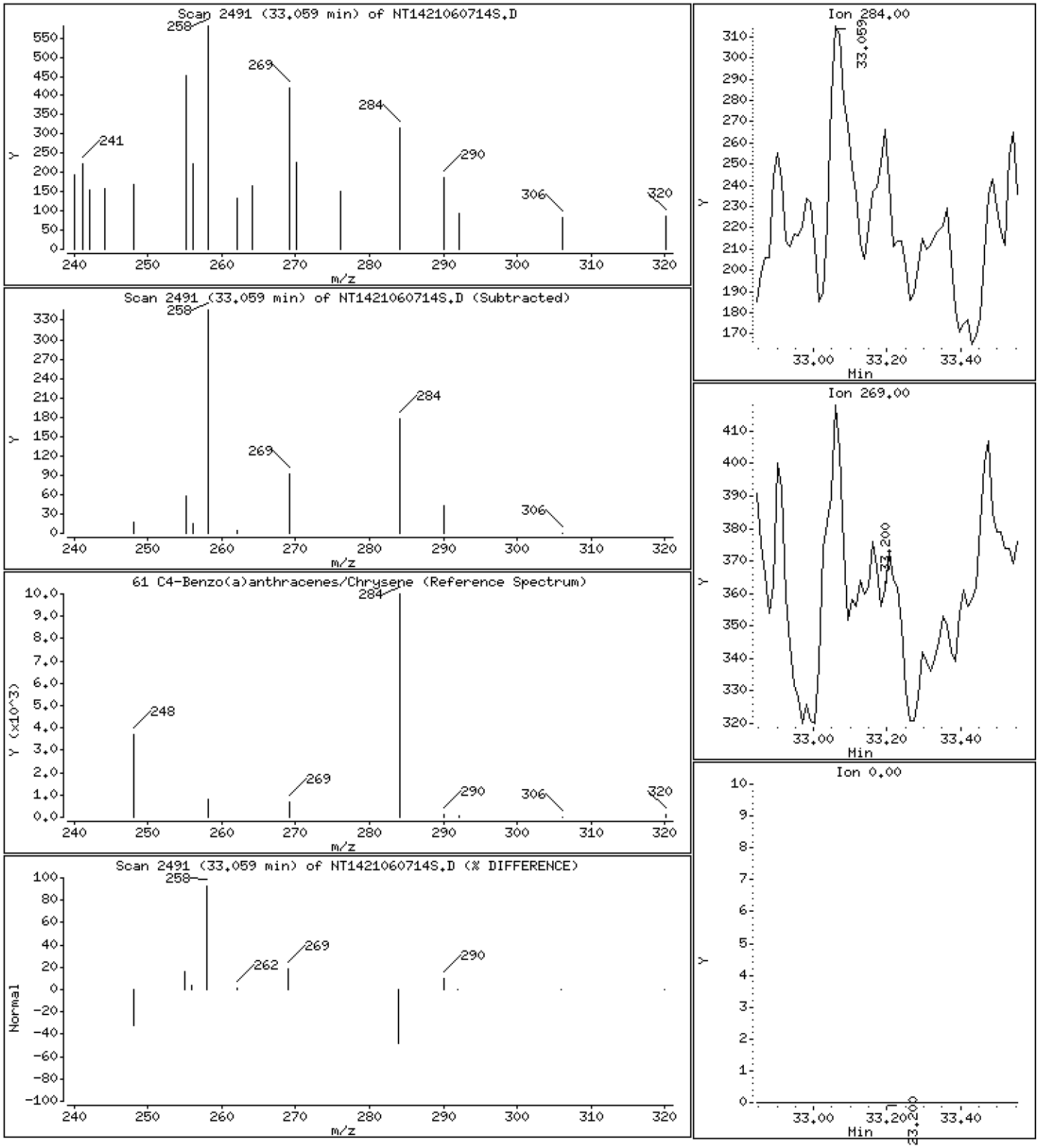
Operator: VTS

Column phase: Rxi-17Sil MS

Column diameter: 0.25

61 C4-Benzo(a)anthracenes/Chrysene

Concentration: 0.02617 ug/mL



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Date : 07-JUN-2021 22:55

Client ID:

Instrument: nt14.i

Sample Info: 21E0106-03

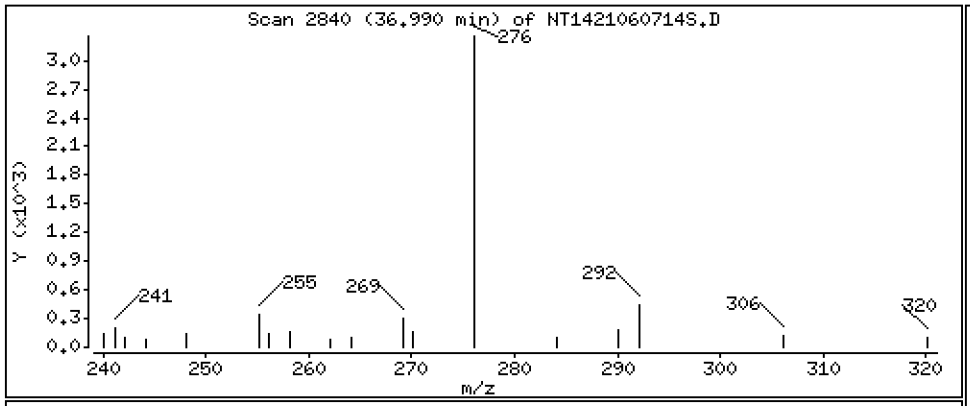
Operator: VTS

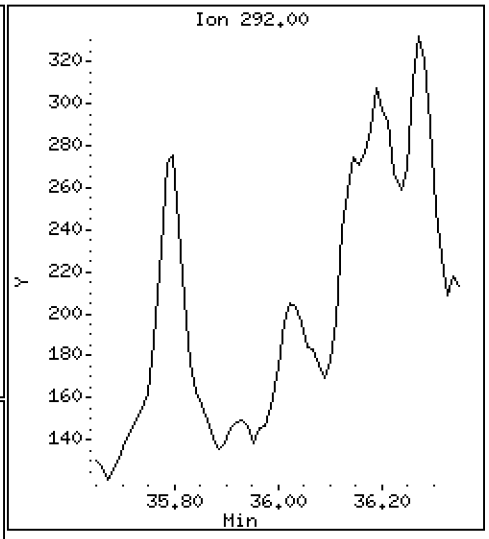
Column phase: Rxi-17Sil MS

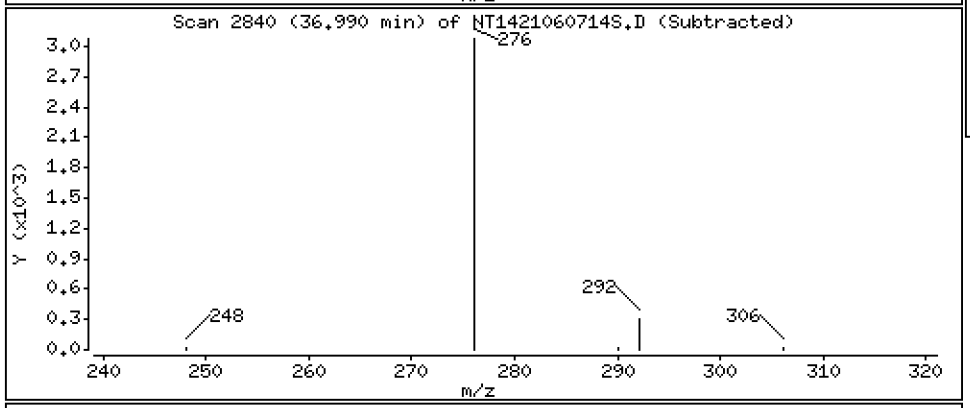
Column diameter: 0.25

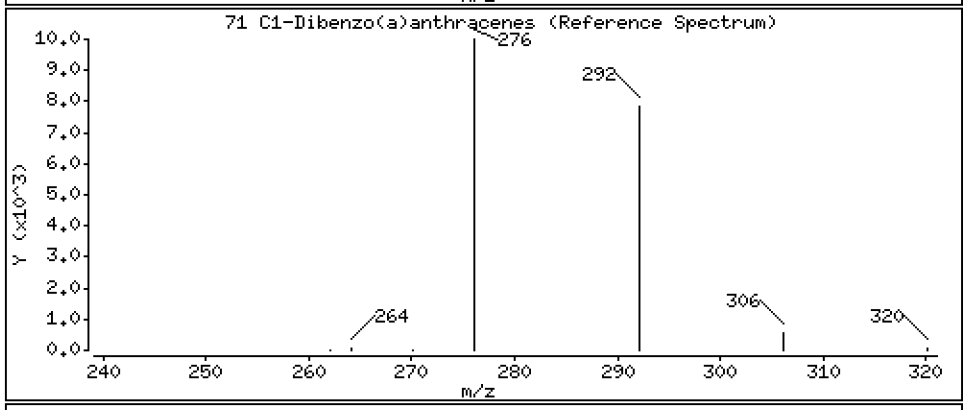
71 C1-Dibenzo(a)anthracenes

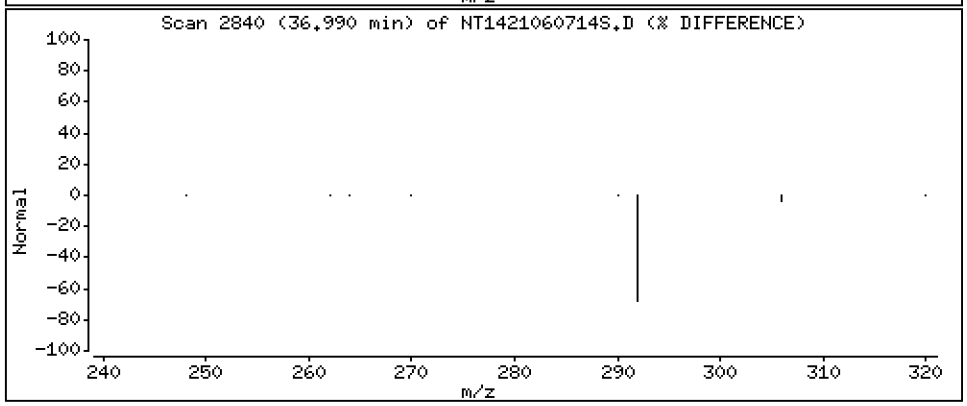
Concentration: 0.04055 ug/mL











ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt14.i\20210607.b\SIM.b\NT1421060714S.D
Lab Smp Id: 21E0106-03
Inj Date : 07-JUN-2021 22:55
Operator : VTS Inst ID: nt14.i
Smp Info : 21E0106-03
Misc Info :
Comment : 1ul Injection
Method : \\target\share\chem3\nt14.i\20210607.b\SIM.b\ALKYLRANGES.m
Meth Date : 15-Jun-2021 10:32 yev Quant Type: ISTD
Cal Date : 29-MAY-2021 18:49 Cal File: NT1421052914.D
Als bottle: 41
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ALKYLRANGES.sub
Target Version: 4.14
Processing Host: ORGDATA102

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/mL)
3 C1-Decalin	152	Compound Not Detected.					
4 C2-Decalin	166	9.125	9.200	(0.483)	728	0.03588	0.03588(M)
5 C3-Decalin	180	11.162	10.000	(0.591)	828	0.04081	0.04081(M)
247 C4-Decalin	194	Compound Not Detected.					
8 C1-Naphthalenes	142	13.785	14.246	(0.729)	5114	0.02704	0.02704(M)
9 C2-Naphthalenes	156	15.906	16.000	(0.842)	7541	0.03988	0.03988(M)
10 C3-Naphthalenes	170	17.763	18.082	(0.940)	7596	0.04017	0.04017(M)
11 C4-Naphthalenes	184	19.464	18.500	(1.030)	6731	0.03559	0.03559(M)
13 C1-Benzothiophenes	148	Compound Not Detected.					
14 C2-Benzothiophenes	162	Compound Not Detected.					
15 C3_Benzothiophenes	176	Compound Not Detected.					
27 C1-Fluorenes	180	20.678	21.000	(1.094)	3880	0.02667	0.02667(M)
* 25 Fluorene-d10	176	18.897	18.896	(1.000)	407021	2.00000	
28 C2-Fluorenes	194	22.097	22.000	(1.169)	4307	0.02960	0.02960(M)
29 C3-Fluorenes	208	23.416	23.000	(1.239)	5908	0.03689	0.03689(M)
31 C1-Dibenzothiophenes	198	23.054	23.500	(1.220)	6096	0.02968	0.02968(M)
32 C2-Dibenzothiophenes	212	24.461	24.500	(1.294)	8250	0.04017	0.04017(M)
33 C3-Dibenzothiophenes	226	25.362	25.600	(1.342)	8308	0.04045	0.04045(M)
34 C4-Dibenzothiophenes	240	Compound Not Detected.					
* 250 Anthracene-d10	188	22.350	22.359	(1.000)	428732	2.00000	
38 C1-Phenanthrenes/Anthracenes	192	23.702	23.800	(1.060)	35154	0.16902	0.1690(M)
39 C2-Phenanthrenes/Anthracenes	206	25.472	25.000	(1.140)	34643	0.16656	0.1666(M)
40 C3-Phenanthrenes/Anthracenes	220	26.407	26.800	(1.182)	16359	0.07865	0.07865(M)
41 C4-Phenanthrenes/Anthracenes	234	27.856	27.500	(1.246)	9313	0.04478	0.04478(M)
48 C1-Fluoranthenes/Pyrenes	216	28.021	27.900	(1.254)	69163	0.28346	0.2835(M)
49 C2-Fluoranthenes/Pyrenes	230	29.127	29.000	(1.303)	32787	0.13438	0.1344(M)
50 C3-Fluoranthenes/Pyrenes	244	29.916	30.000	(1.339)	18692	0.07661	0.07661(M)
249 C4-Fluoranthenes/Pyrenes	258	32.698	33.183	(1.463)	11545	0.04732	0.04732(M)
52 C1-Naphthobenzothiophenes	248	30.176	30.000	(1.350)	12973	0.04758	0.04758(M)
53 C2-Naphthobenzothiophenes	262	31.268	31.000	(1.399)	7664	0.02811	0.02811(M)
54 C3-Naphthobenzothiophenes	276	32.361	32.000	(1.448)	10881	0.03991	0.03991(M)
248 C4-Naphthobenzothiophenes	290	32.507	33.000	(1.454)	5271	0.01933	0.01933(M)
58 C1-Benzo(a)anthracenes/Chrysen	242	31.088	31.000	(0.937)	60678	0.29629	0.2963(M)

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/mL)
59 C2-Benzo(a)anthracenes/Chrysen	256	31.966	31.800	(0.964)	23612	0.11530	0.1153(M)
60 C3-Benzo(a)anthracenes/Chrysen	270	32.530	32.500	(0.981)	15030	0.07339	0.07339(M)
61 C4-Benzo(a)anthracenes/Chrysen	284	33.059	33.200	(0.997)	5360	0.02617	0.02617(M)
* 251 Benzo(e)pyrene-d12	264	33.172	33.181	(1.000)	528014	2.00000	
71 C1-Dibenzo(a)anthracenes	292	36.990	36.000	(1.115)	13717	0.04055	0.04055(M)
72 C2-Dibenzo(a)anthracenes	306	Compound Not Detected.					
73 C3-Dibenzo(a)anthracenes	320	Compound Not Detected.					

QC Flag Legend

M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt14.i
Lab File ID: NT1421060714S.D
Lab Smp Id: 21E0106-03
Analysis Type: SV
Quant Type: ISTD
Operator: VTS
Method File: \\target\share\chem3\nt14.i\20210607.b\SIM.b\ALKYLRANGES.m
Misc Info:

Calibration Date: 07-JUN-2021
Calibration Time: 13:18
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

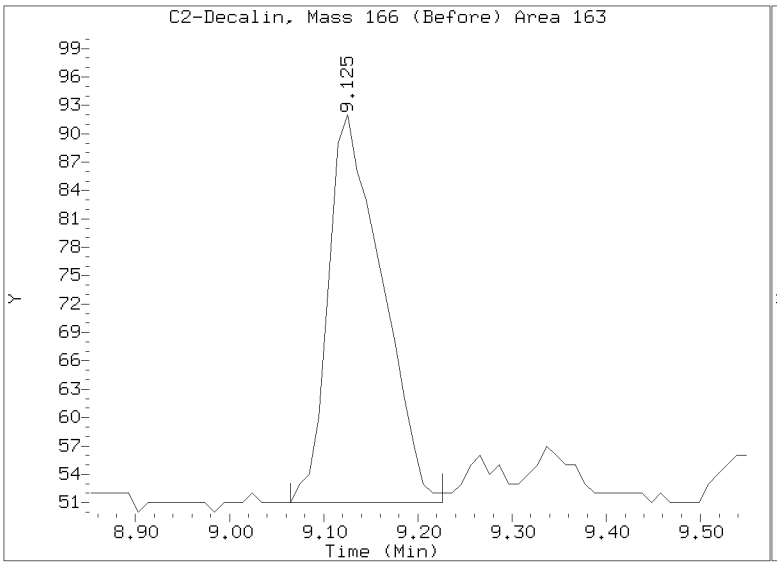
COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
25 Fluorene-d10	311077	155539	622154	407021	30.84
250 Anthracene-d10	331614	165807	663228	428732	29.29
251 Benzo(e)pyrene-d1	416427	208214	832854	528014	26.80

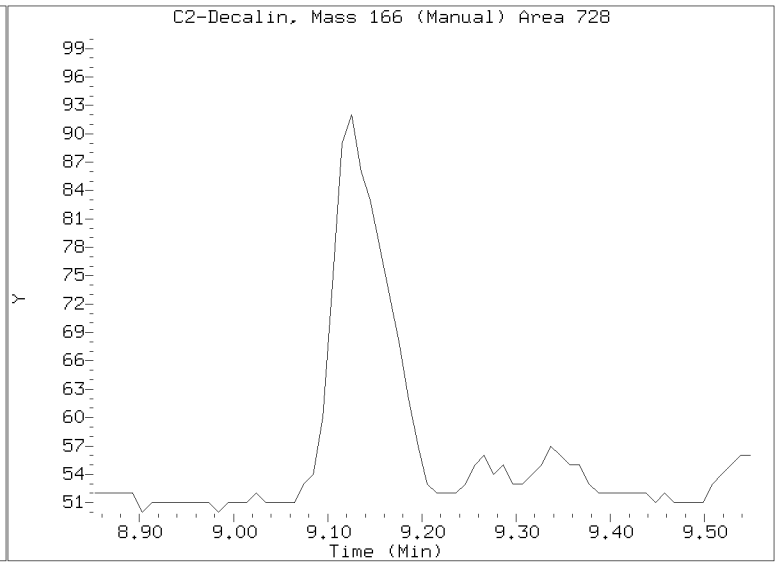
COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
25 Fluorene-d10	18.90	18.40	19.40	18.90	0.01
250 Anthracene-d10	22.36	21.86	22.86	22.35	-0.04
251 Benzo(e)pyrene-d1	33.18	32.68	33.68	33.17	-0.03

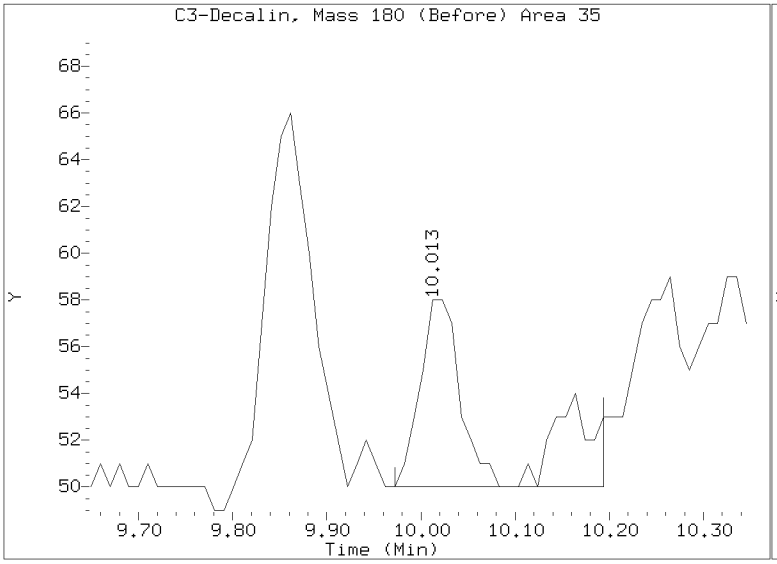
AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

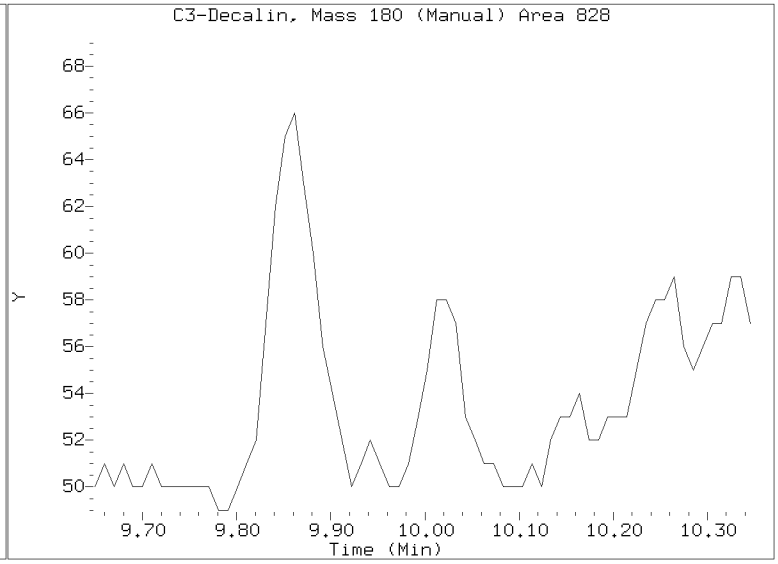
Quant Ion Manual Peak Adjustment Report

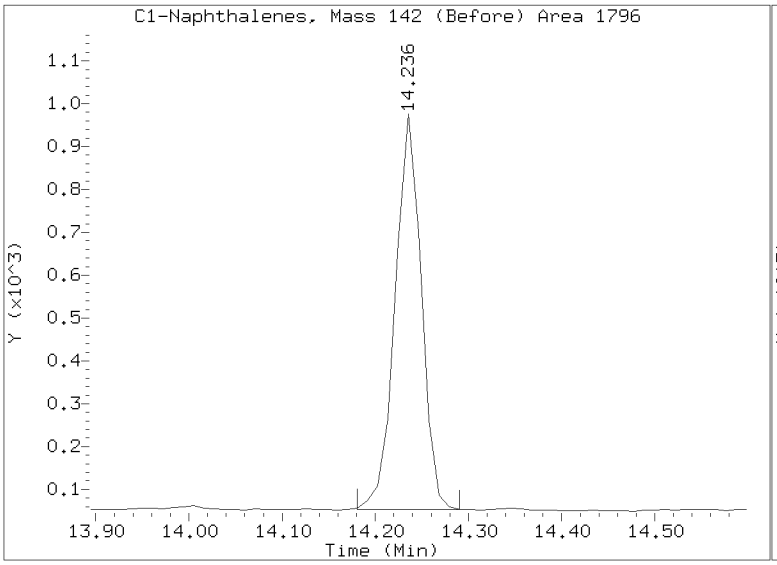
Datafile: //target/share/chem3/nt14.i/20210607.b/SIM.b/NT1421060714S.D
Injection Date: 07-JUN-2021 22:55
Lab ID:21E0106-03 Client ID:
Report Date: 06/15/2021 10:37

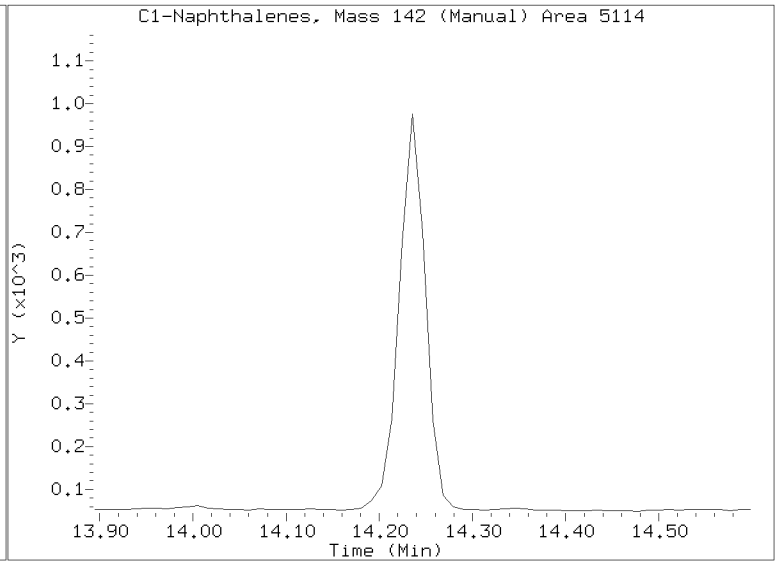






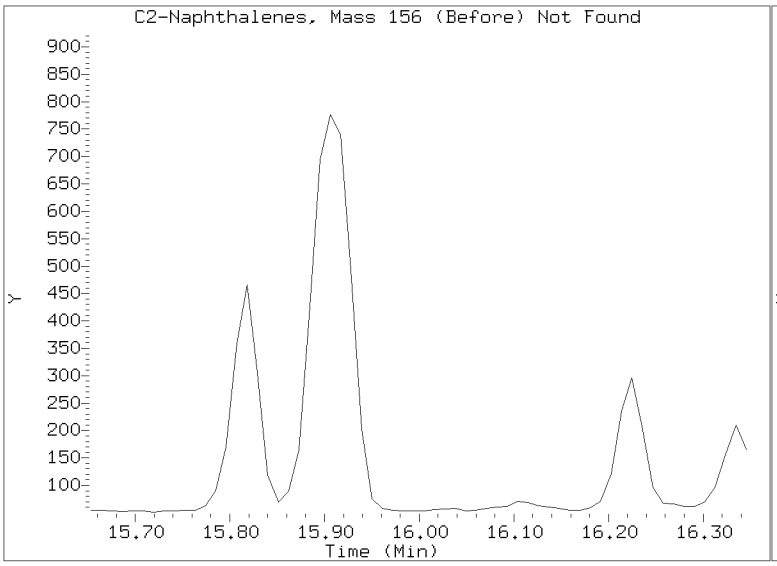


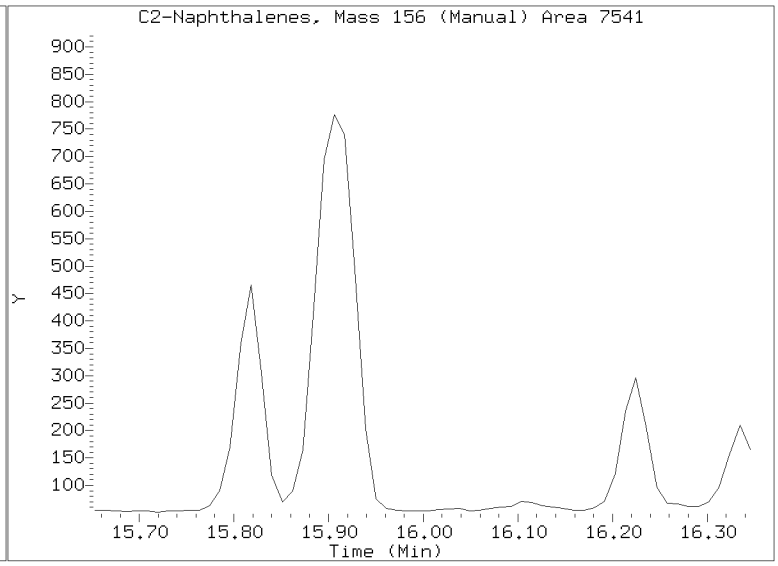


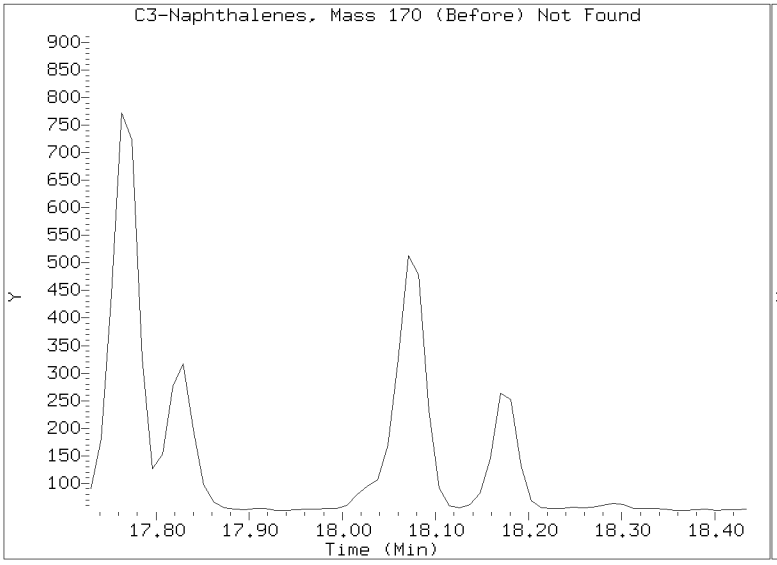


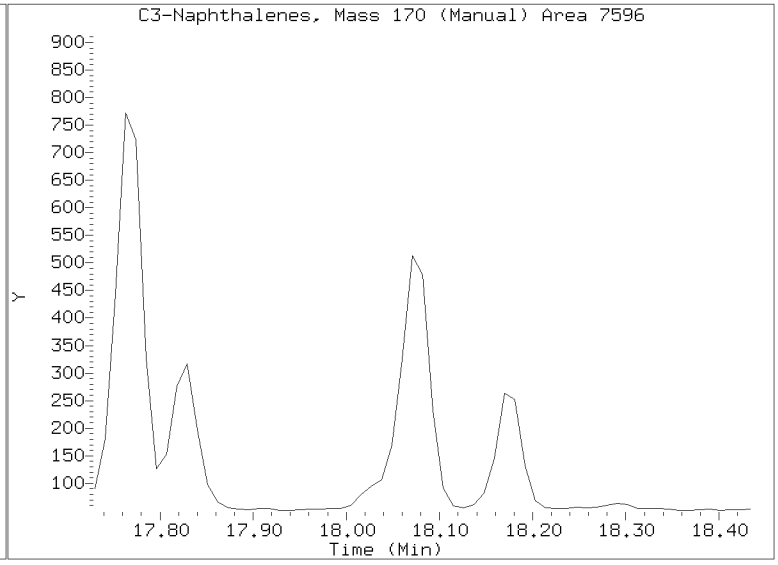
Quant Ion Manual Peak Adjustment Report

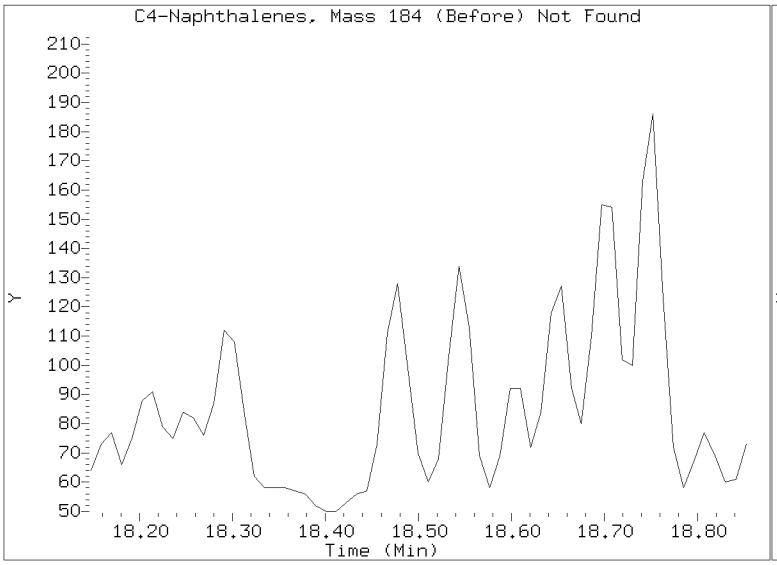
Datafile: //target/share/chem3/nt14.i/20210607.b/SIM.b/NT1421060714S.D
Injection Date: 07-JUN-2021 22:55
Lab ID:21E0106-03 Client ID:
Report Date: 06/15/2021 10:37

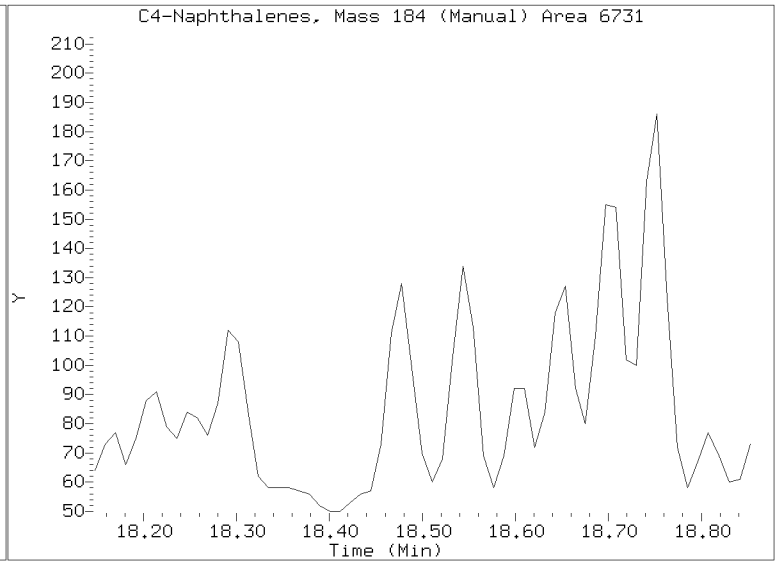












Quant Ion Manual Peak Adjustment Report

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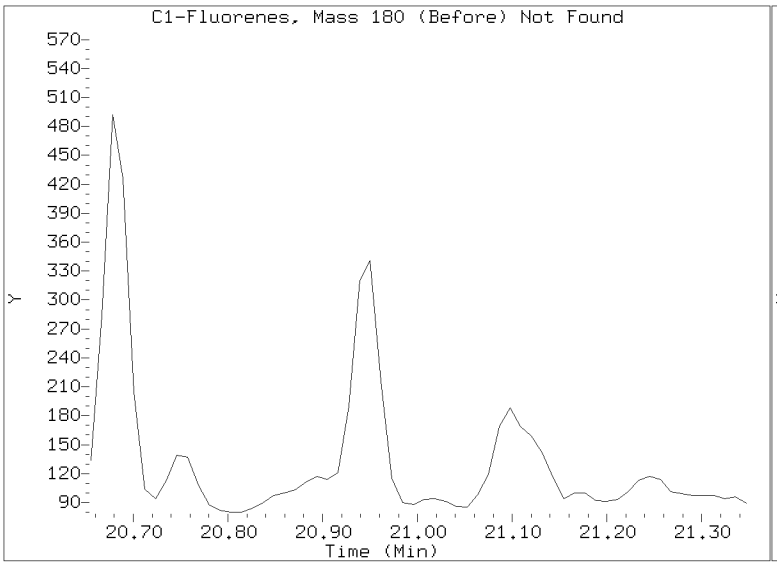

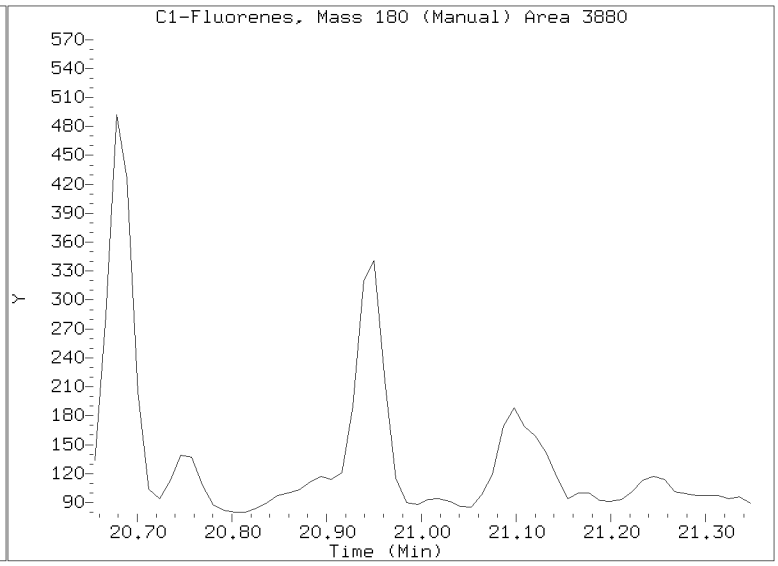

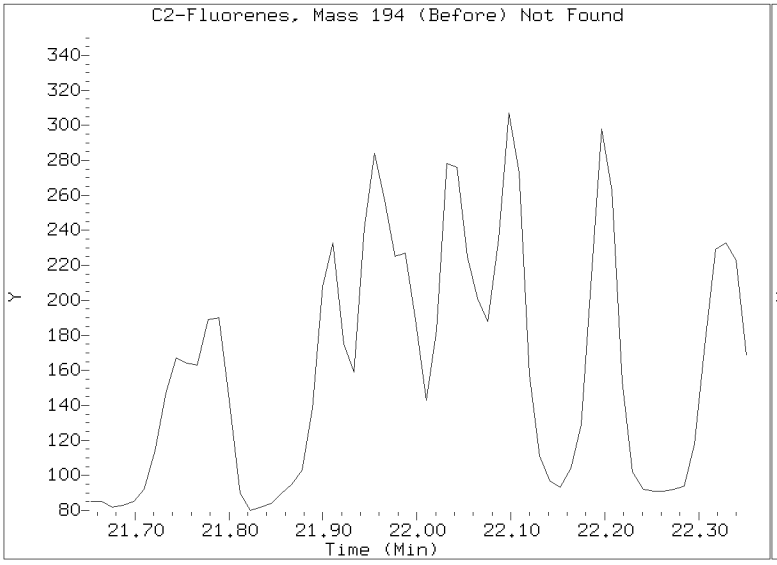

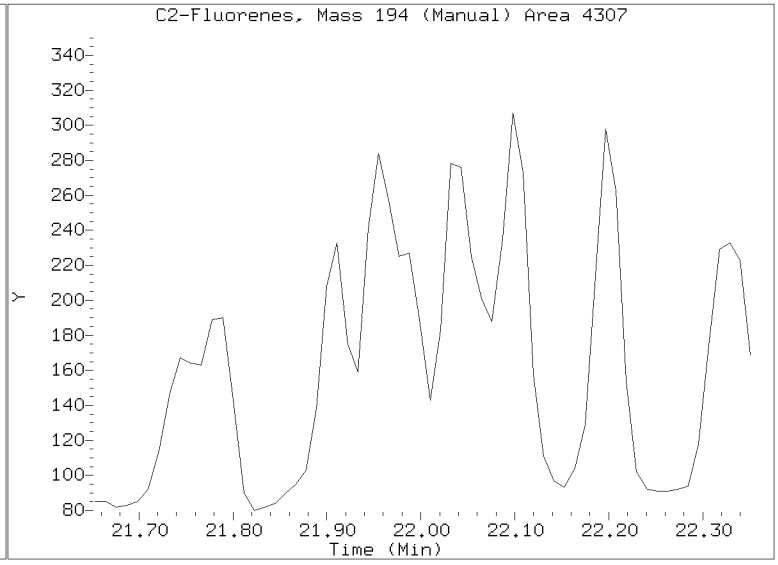

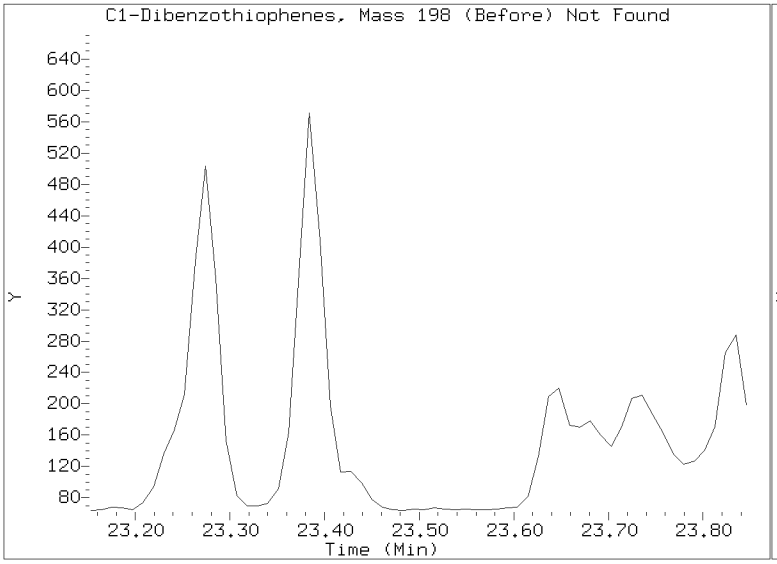

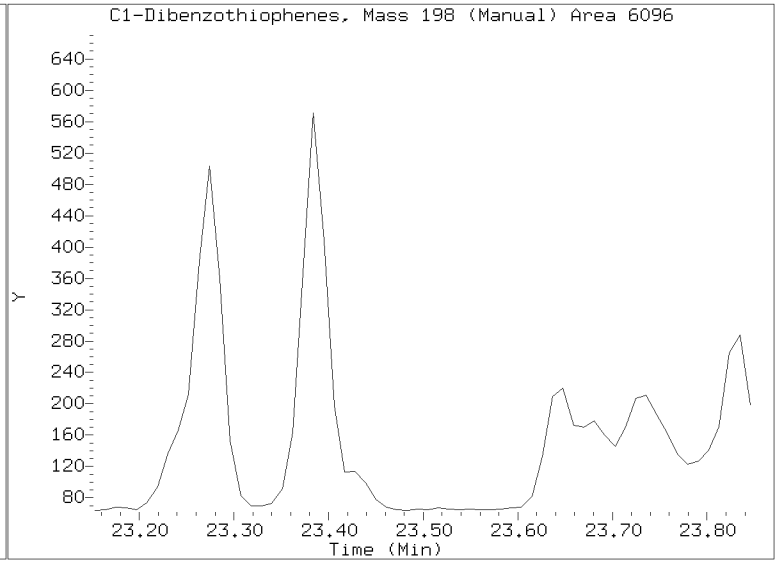

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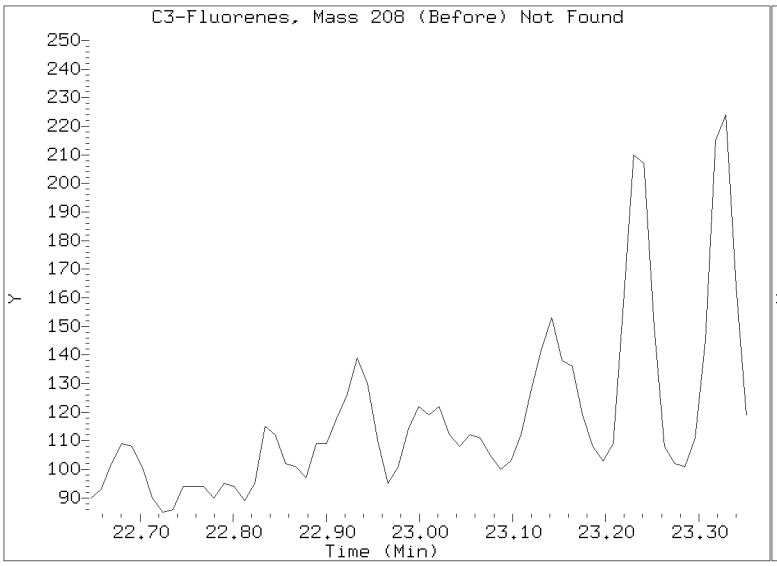

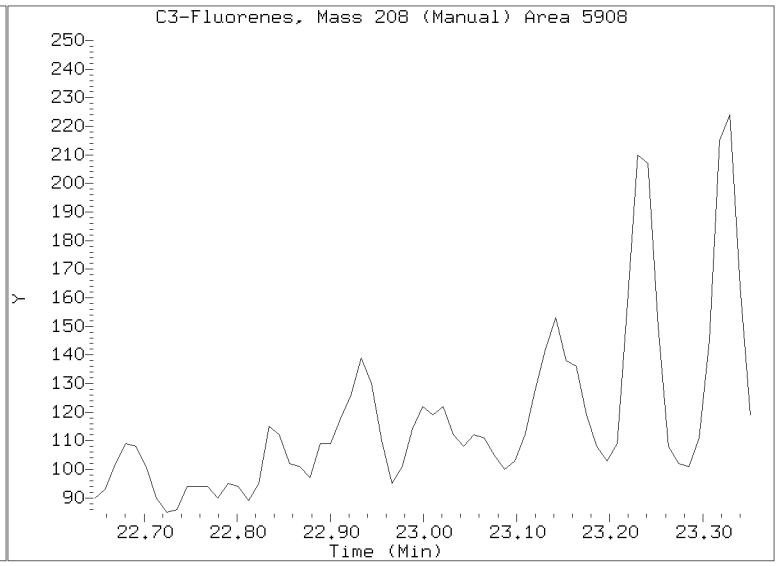

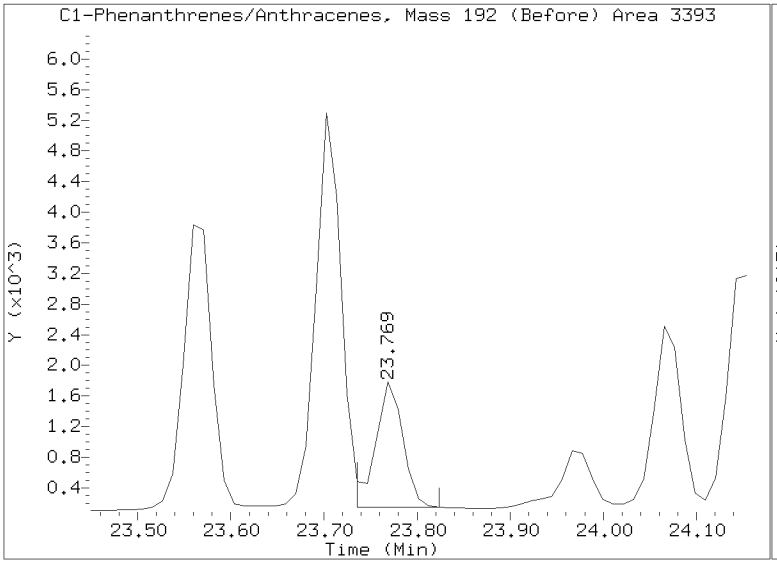

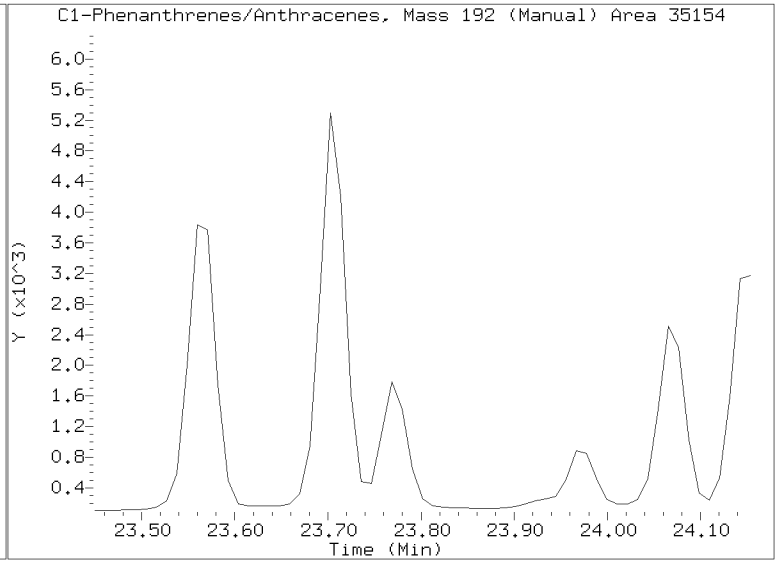

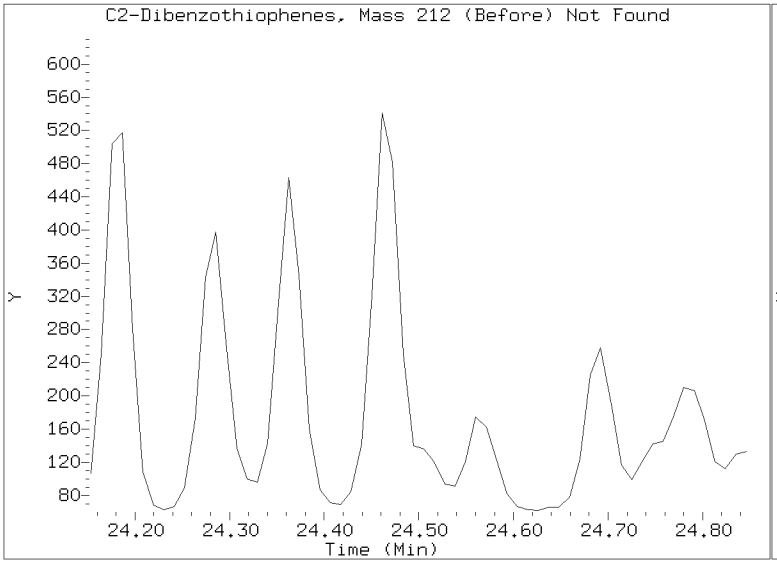

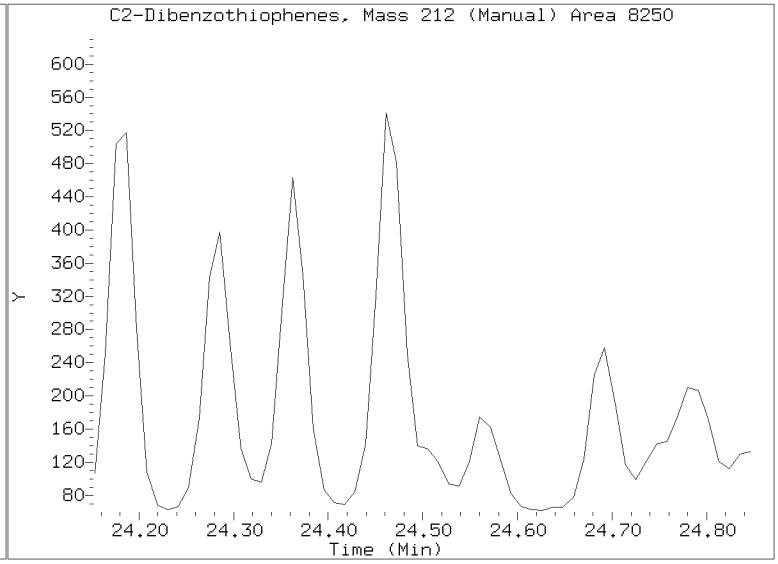

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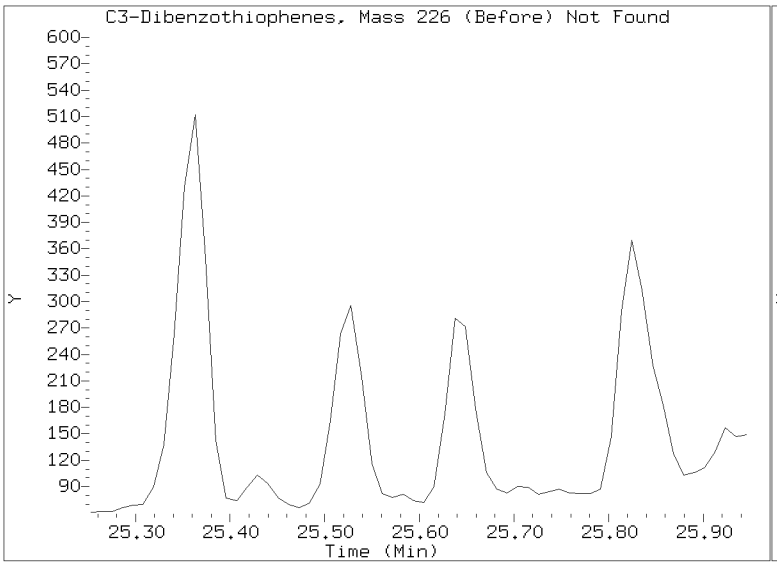

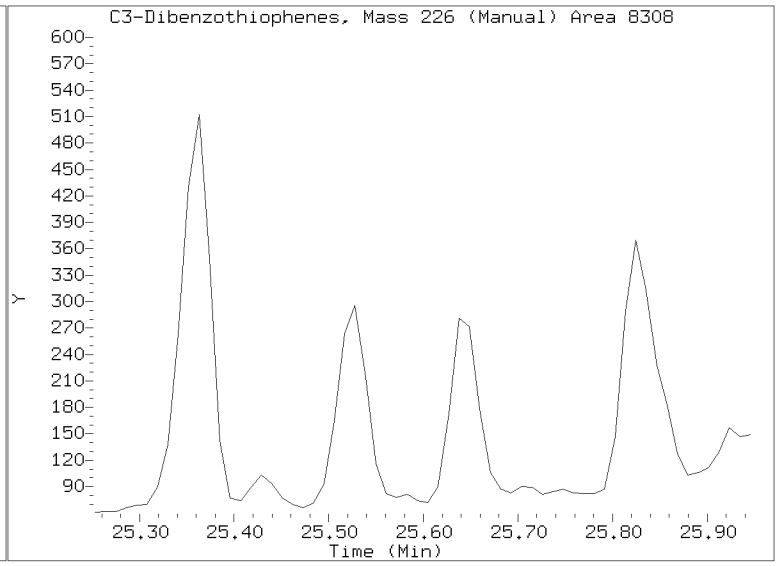

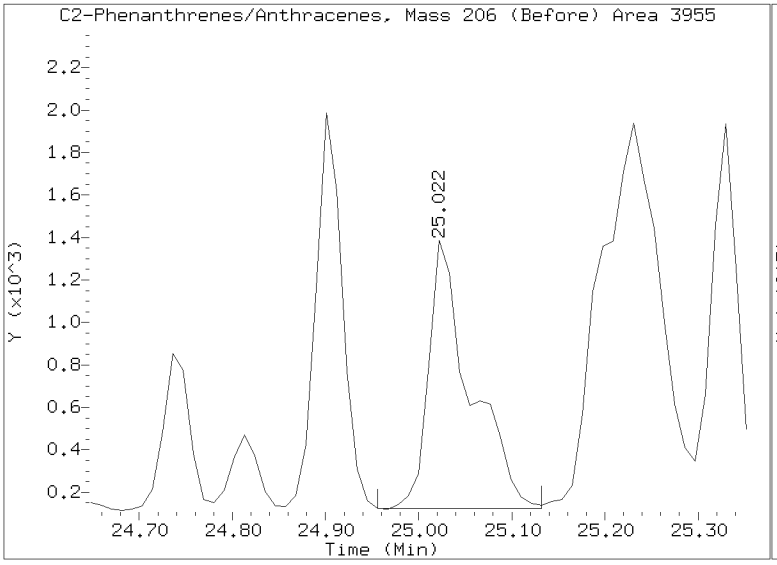

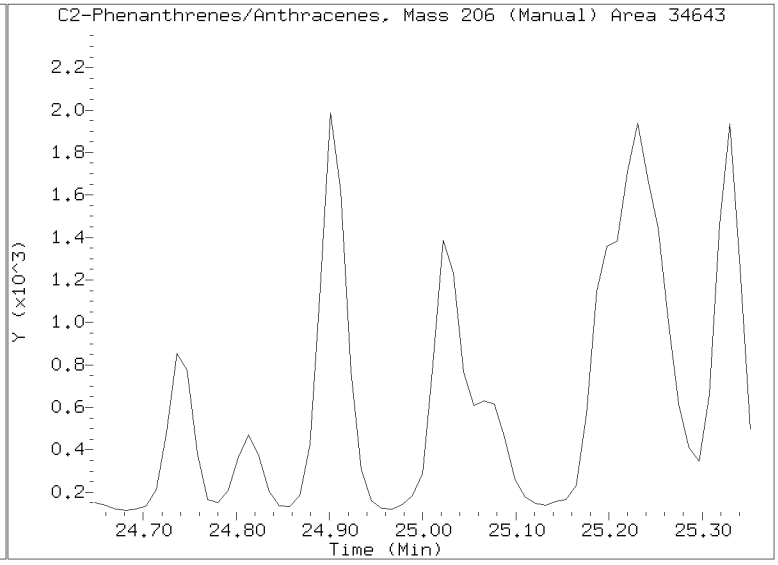

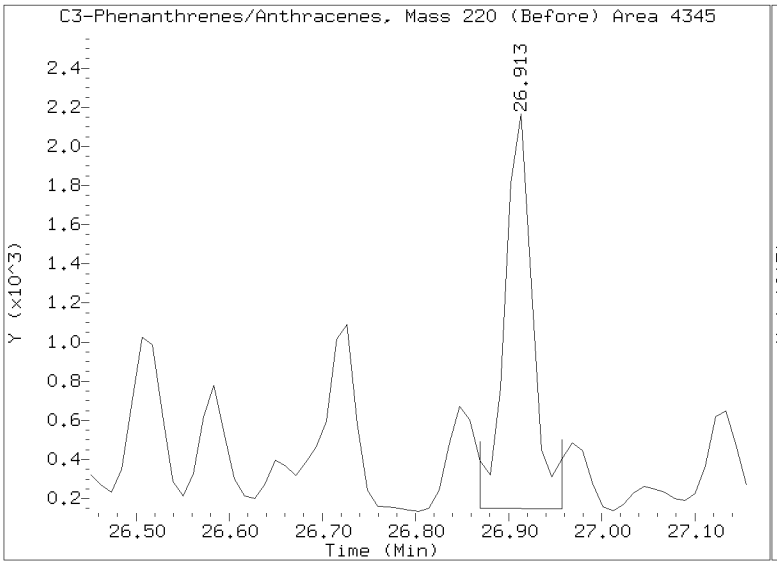

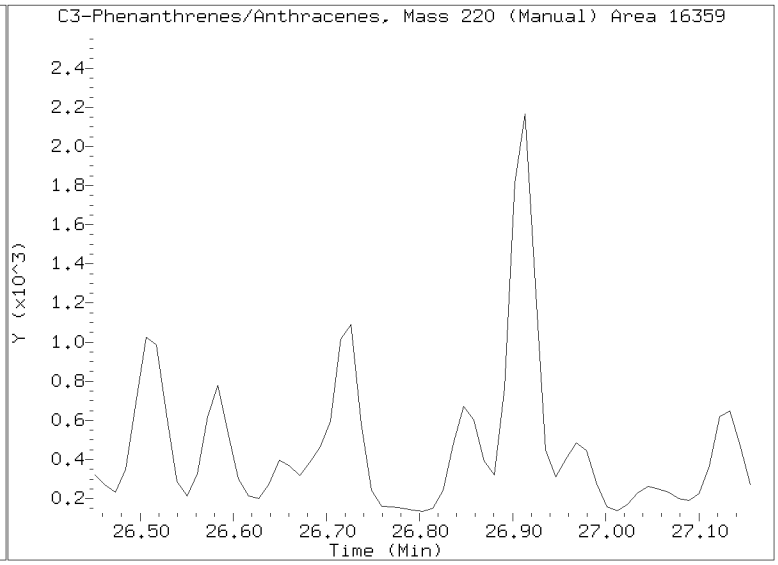

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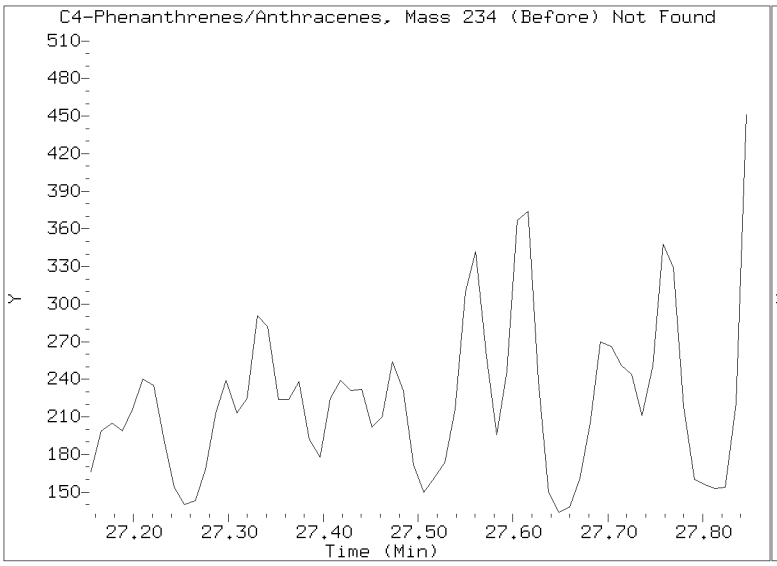

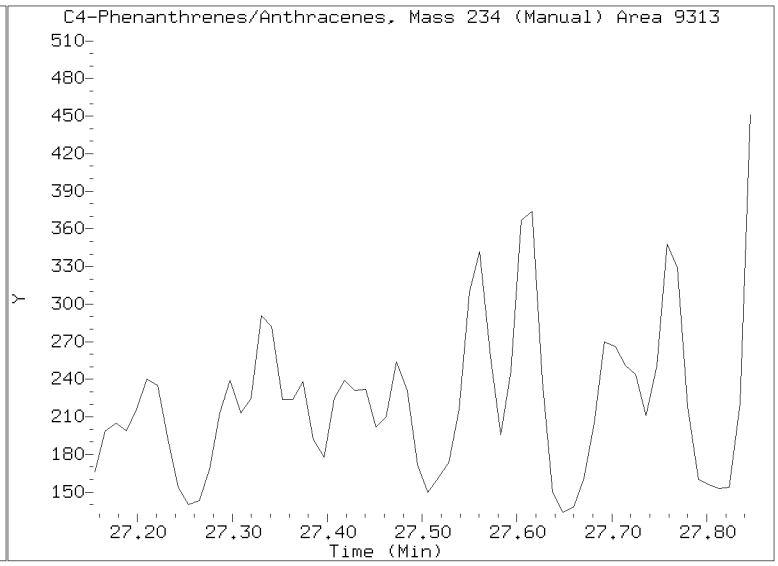

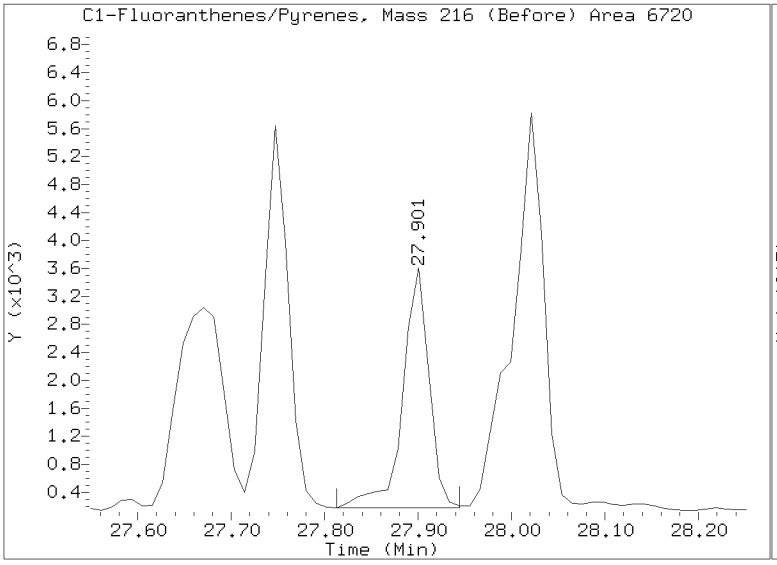

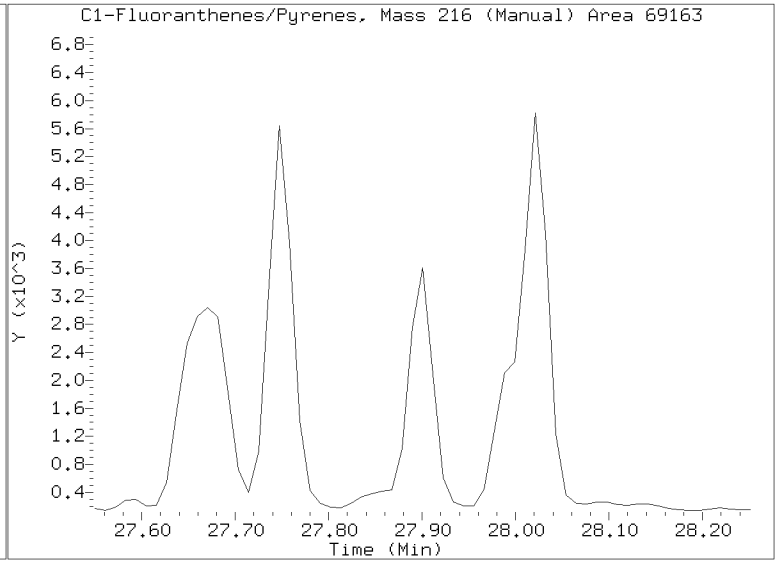

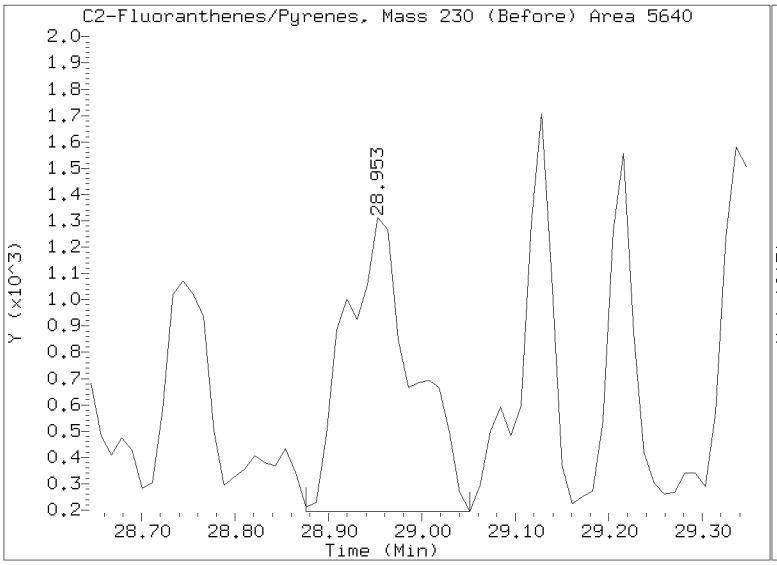

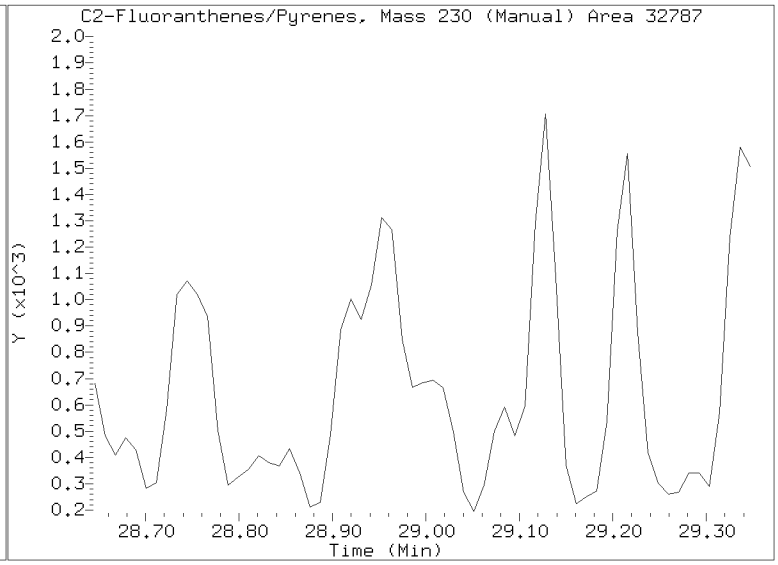

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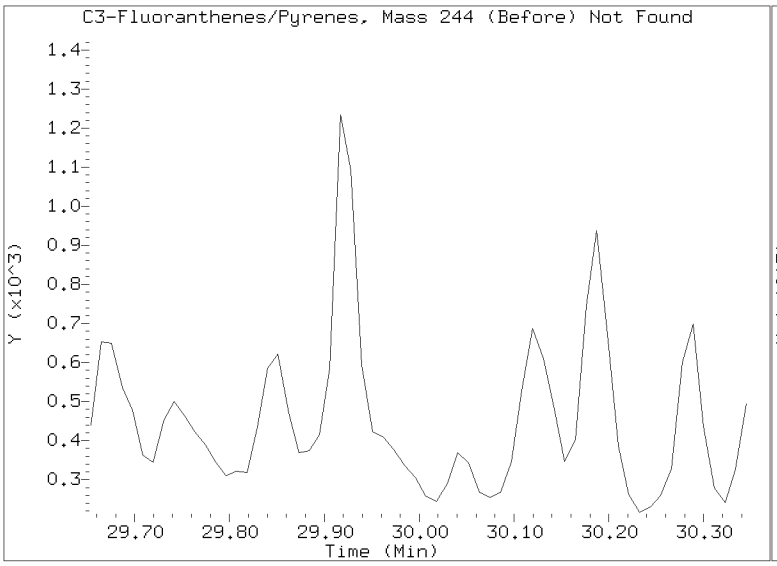

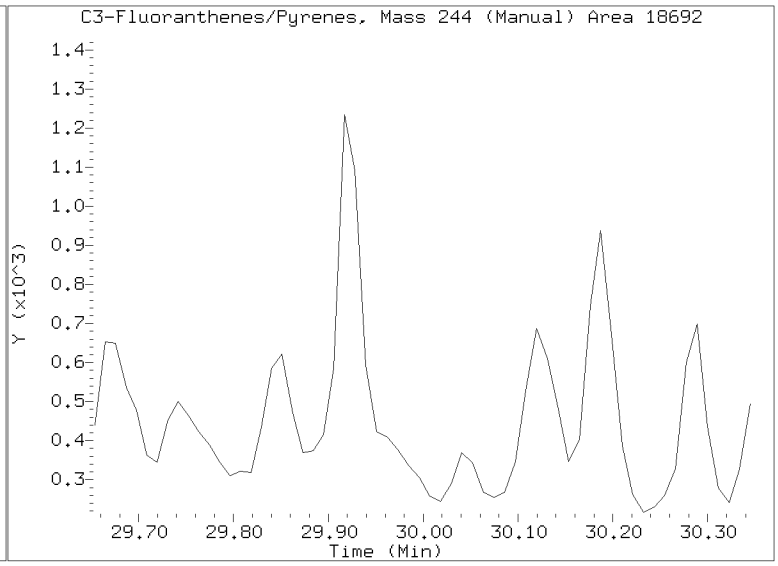

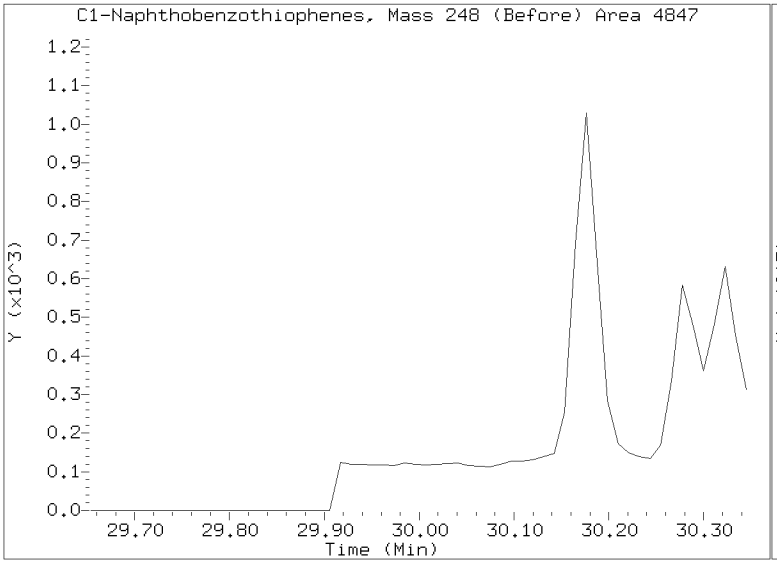

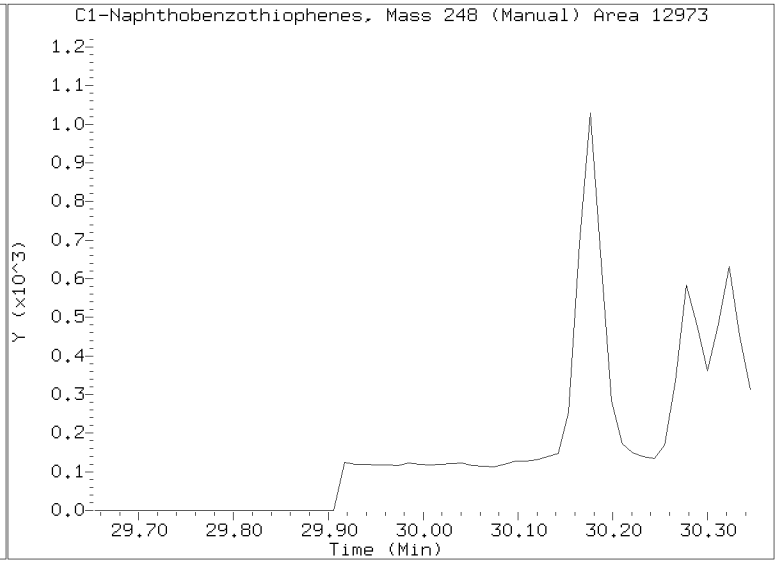

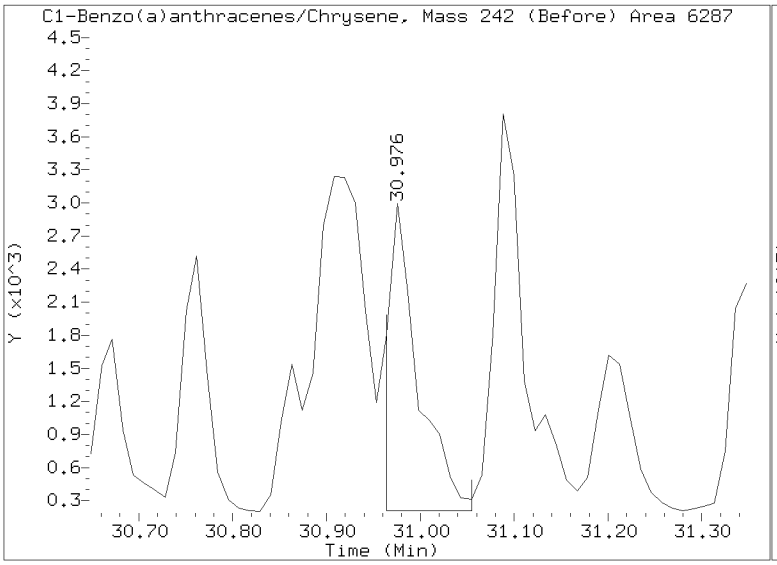

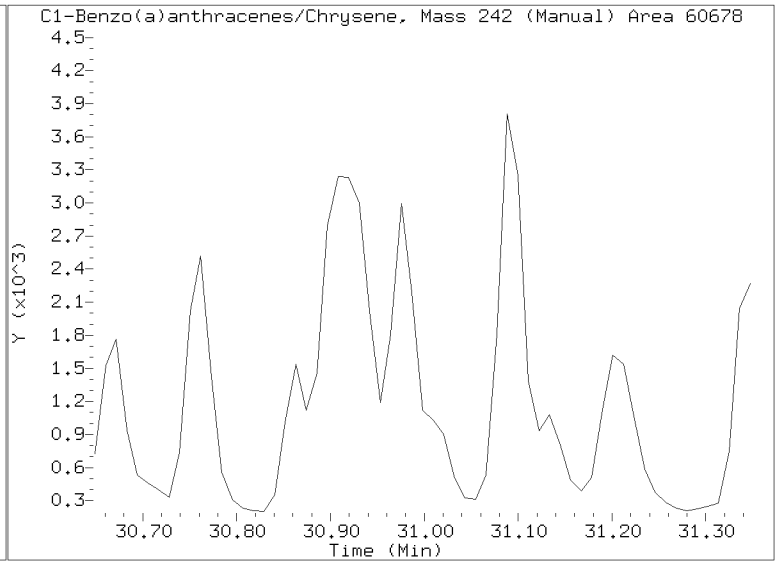

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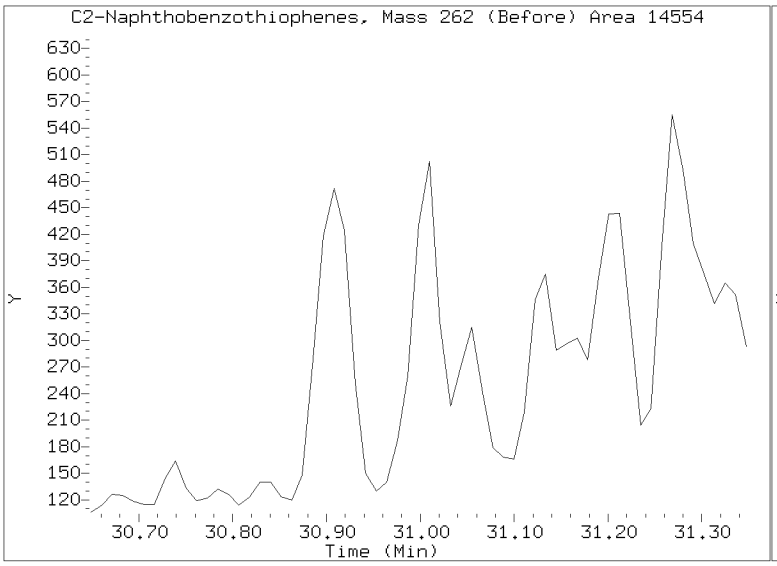

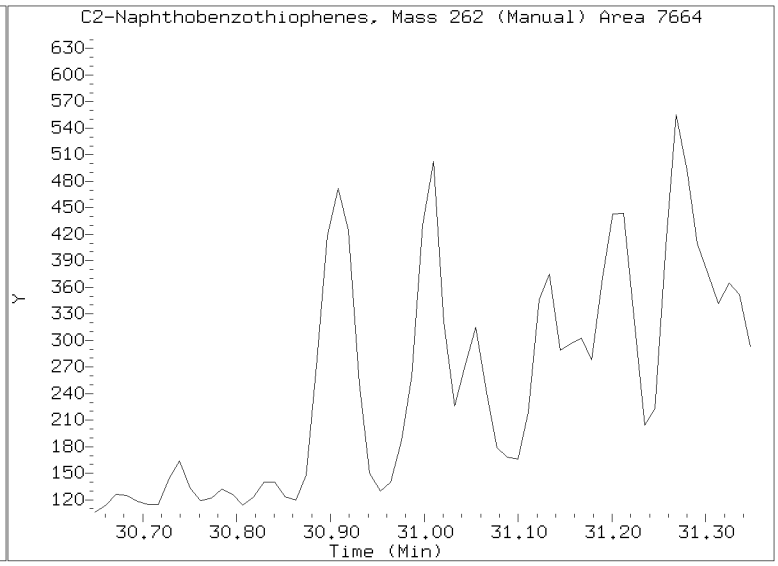

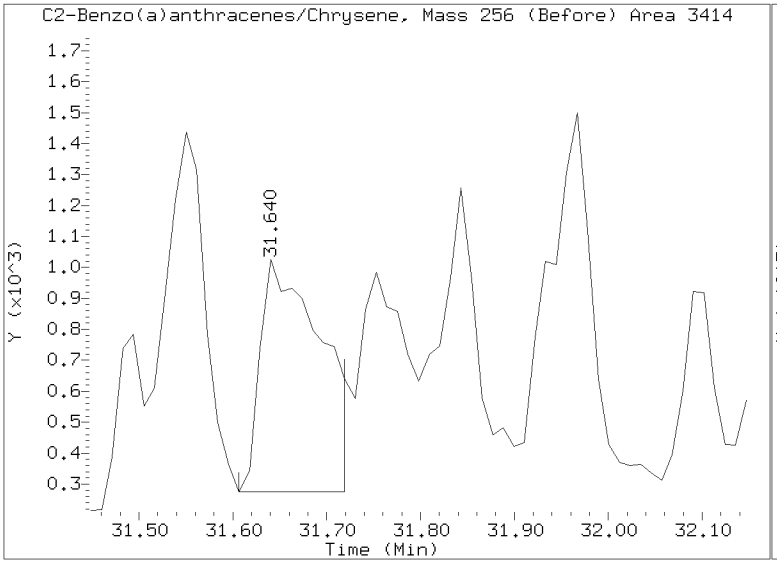

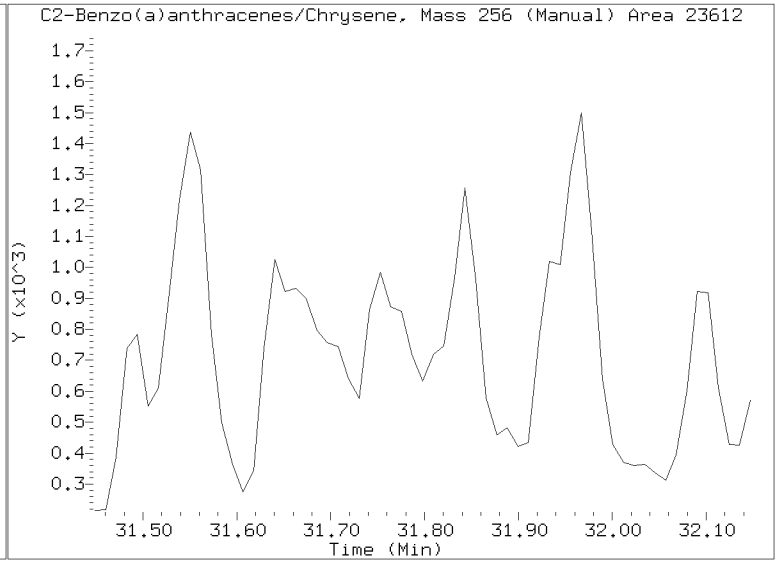

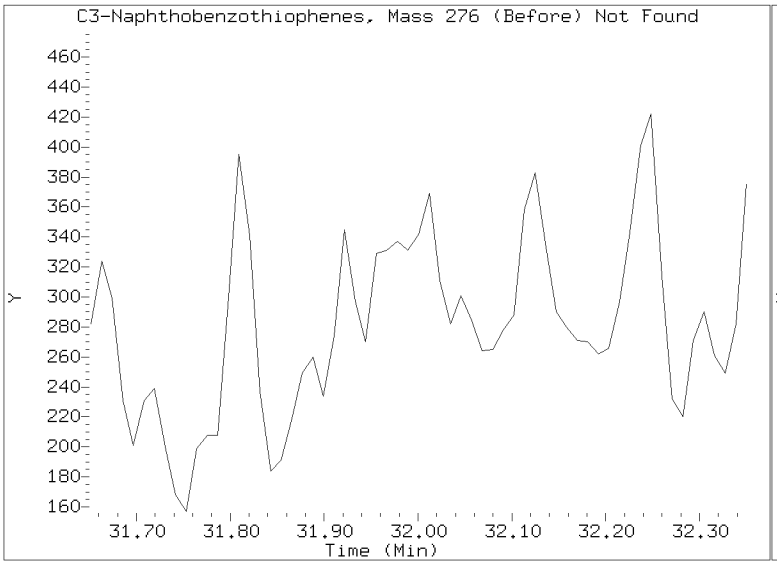

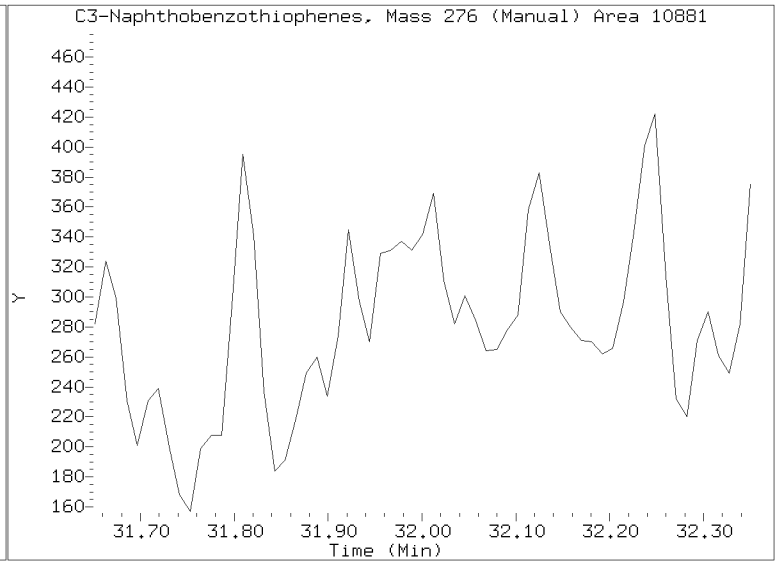

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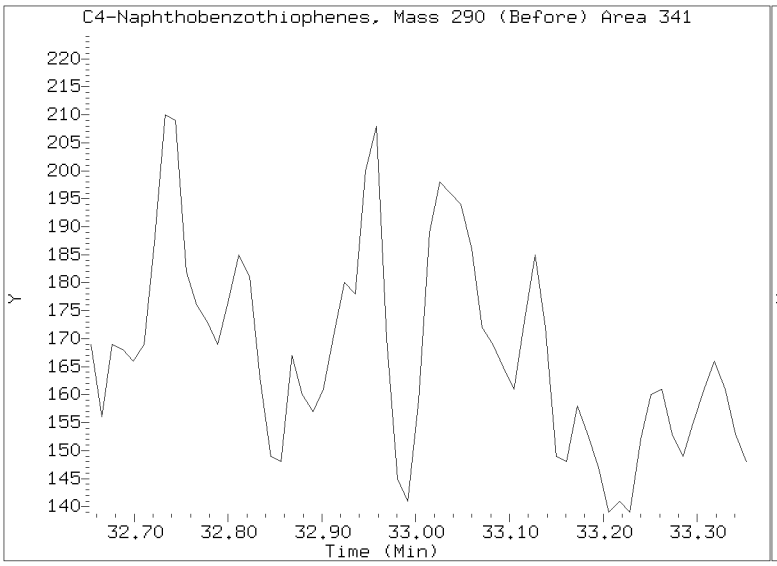

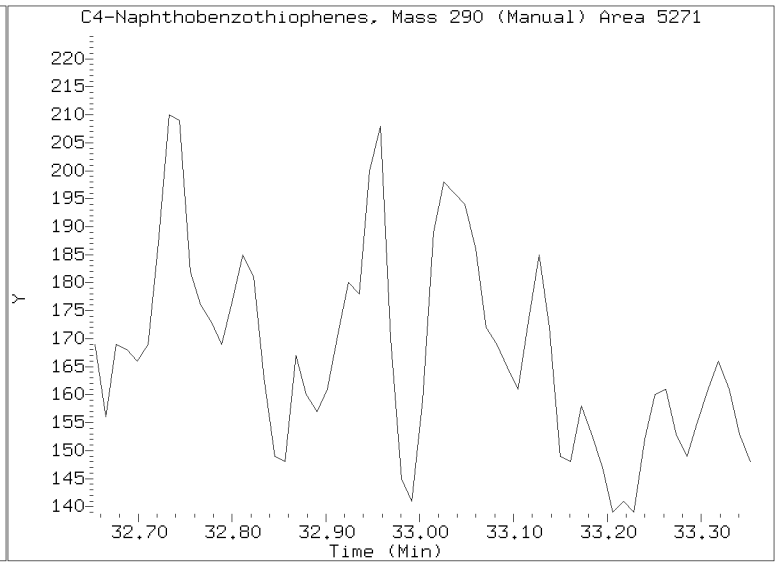

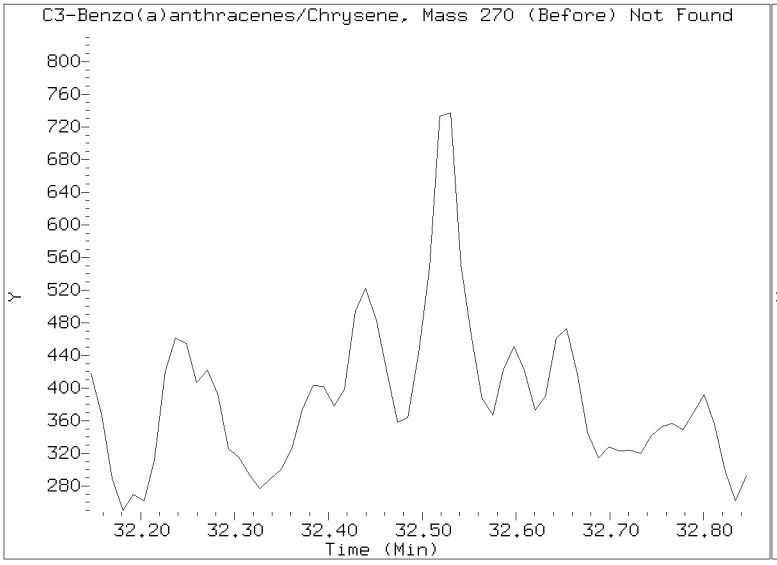

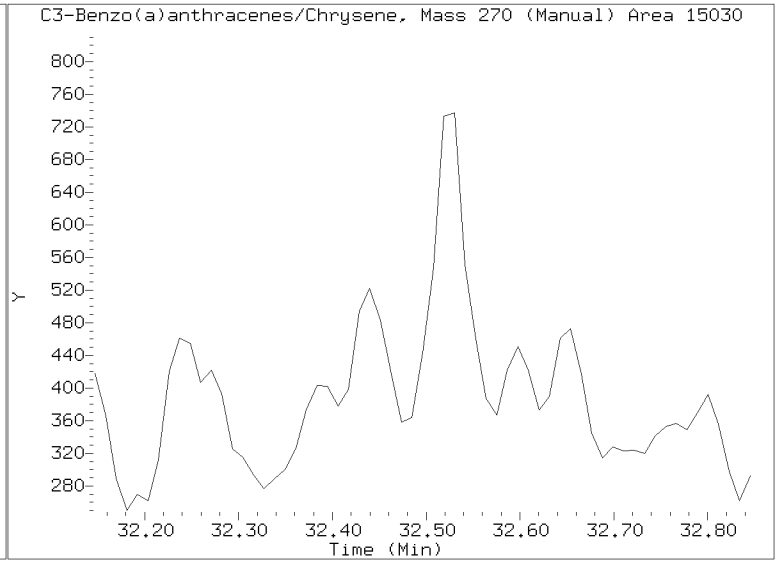

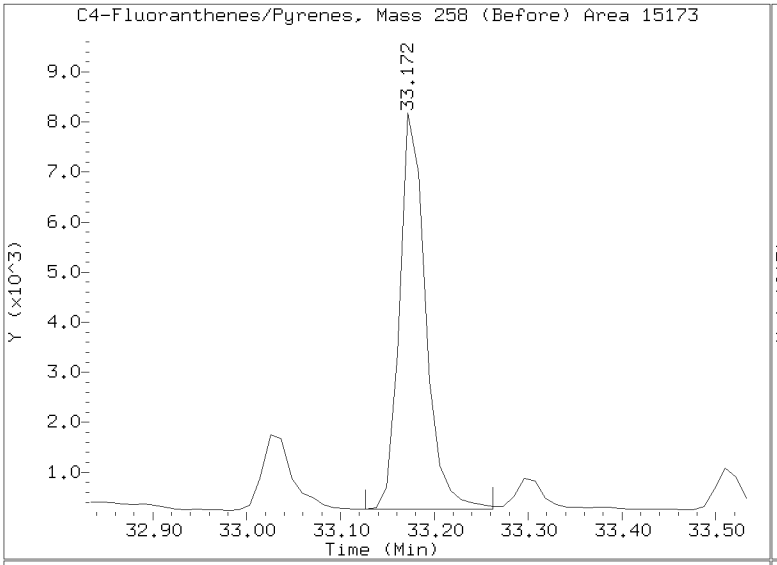

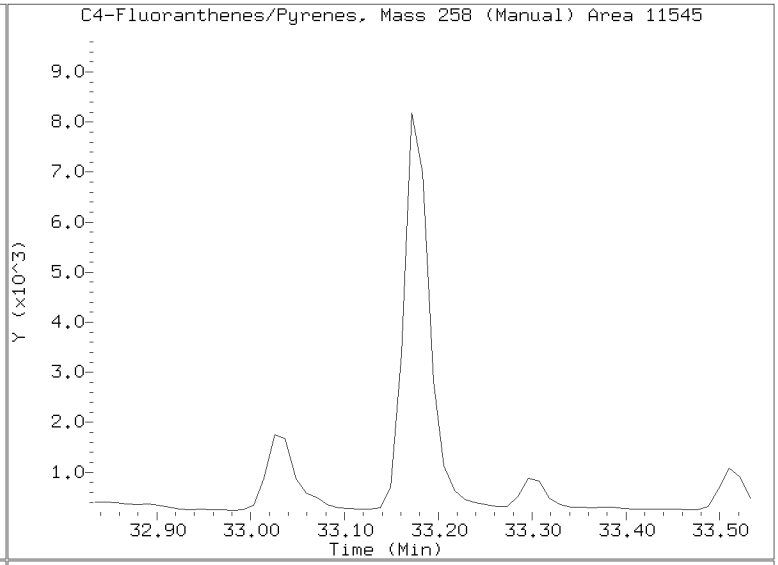

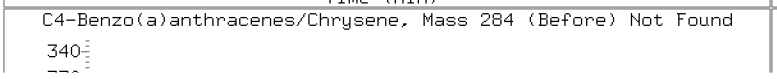

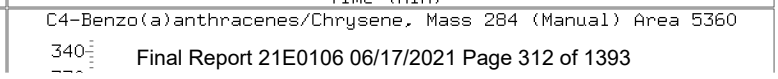

SIM ALKYL PNA RANGE ION WINDOWS - NT1421060714S.D

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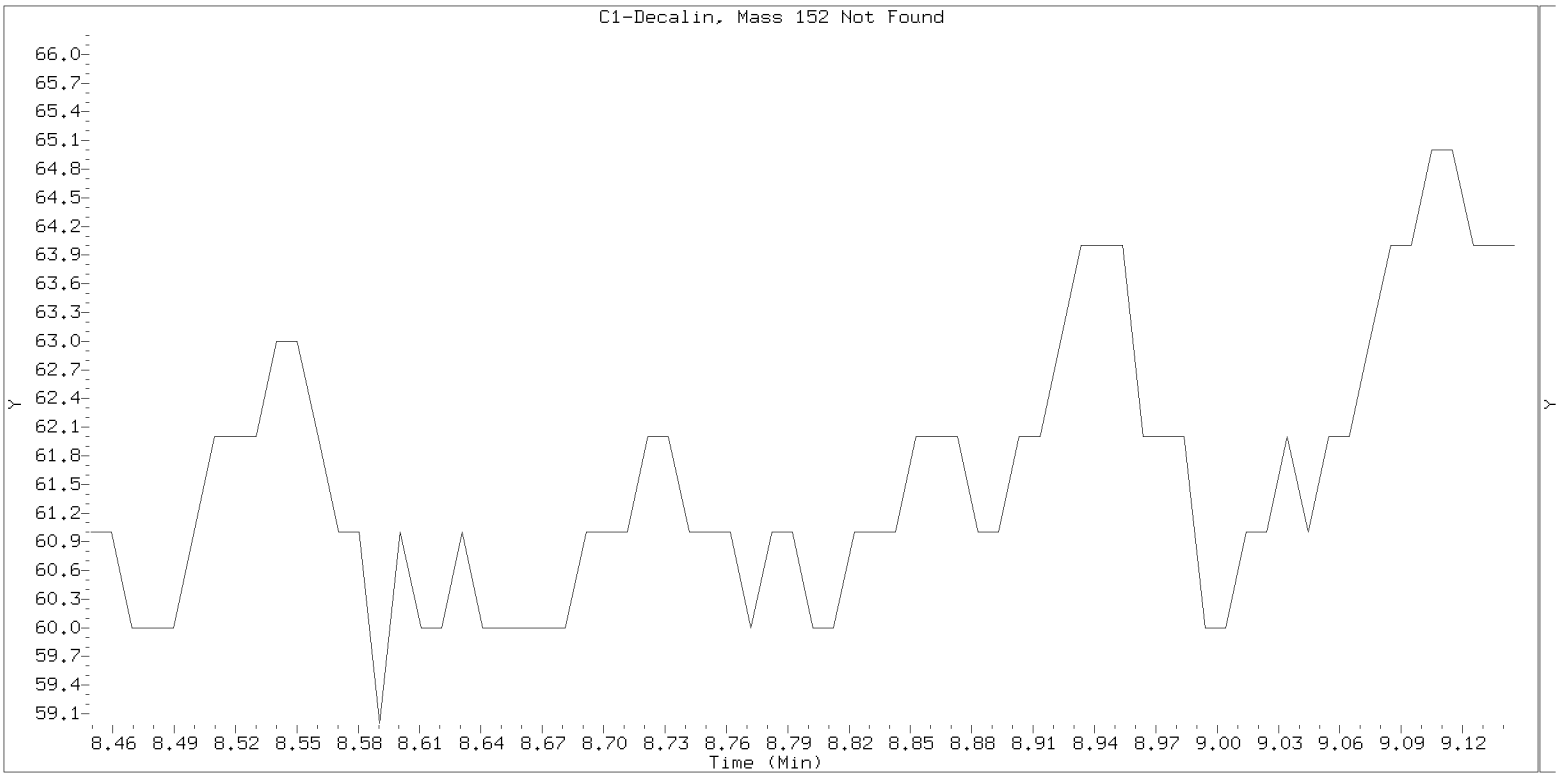

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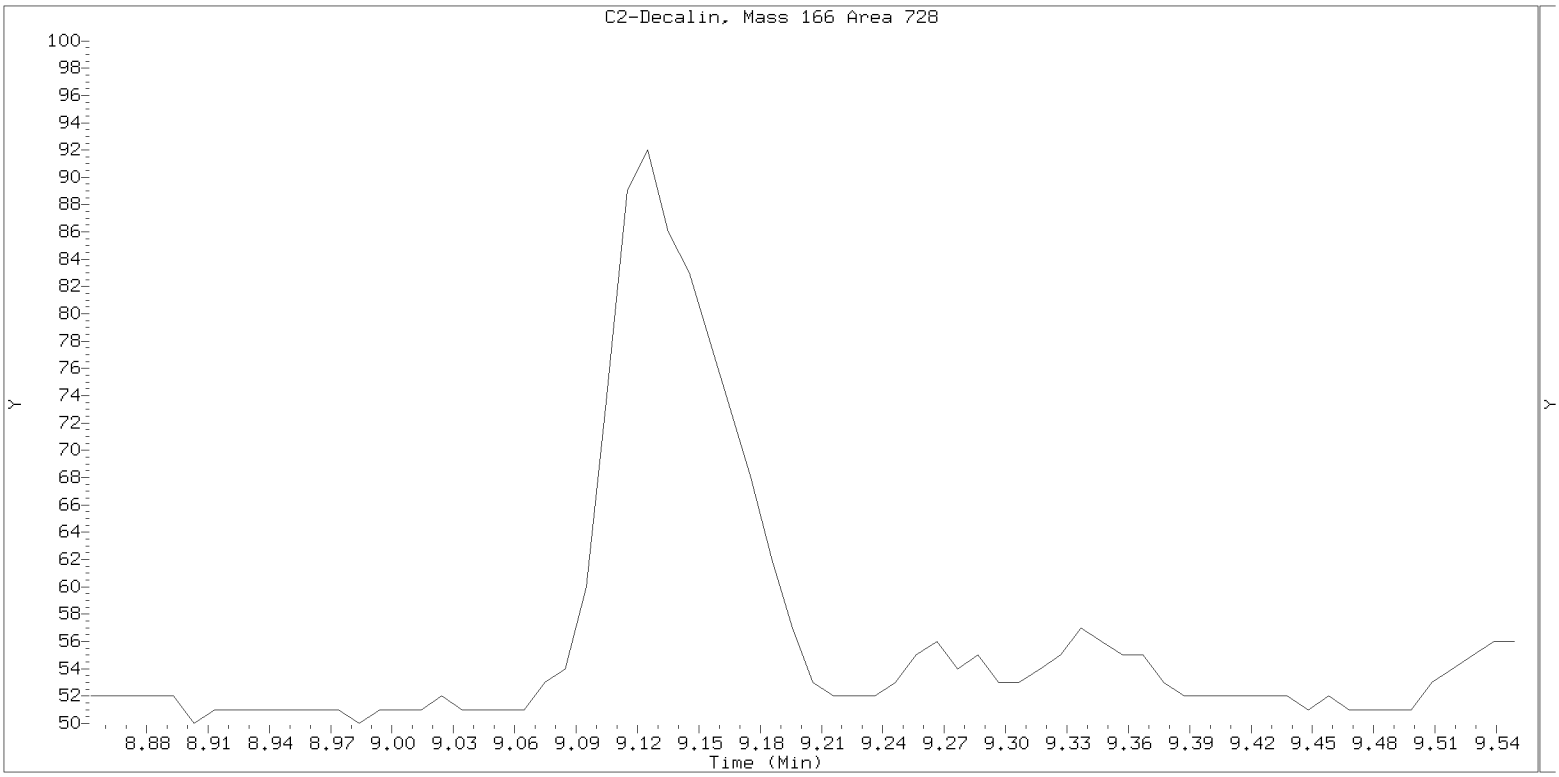

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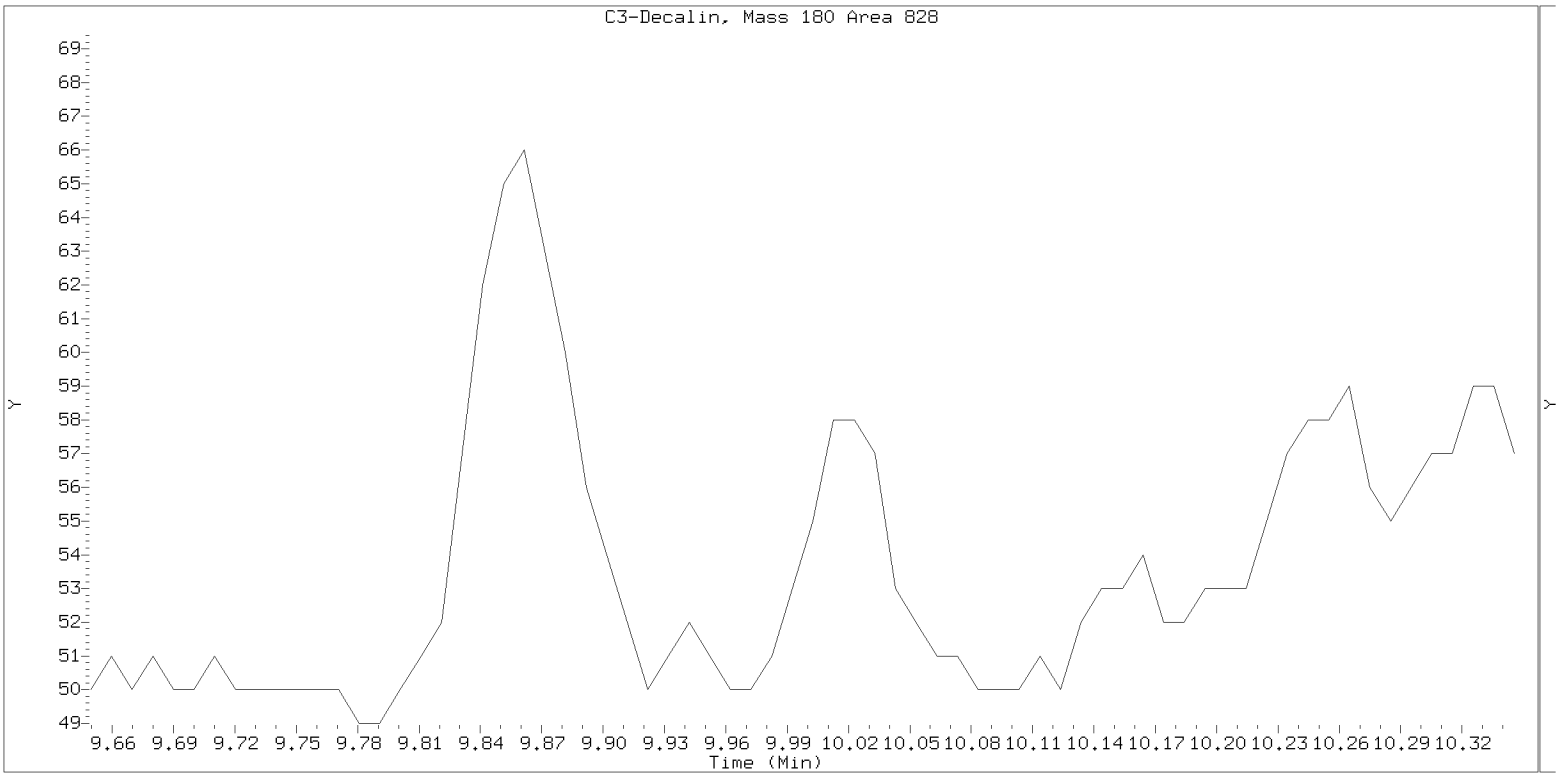

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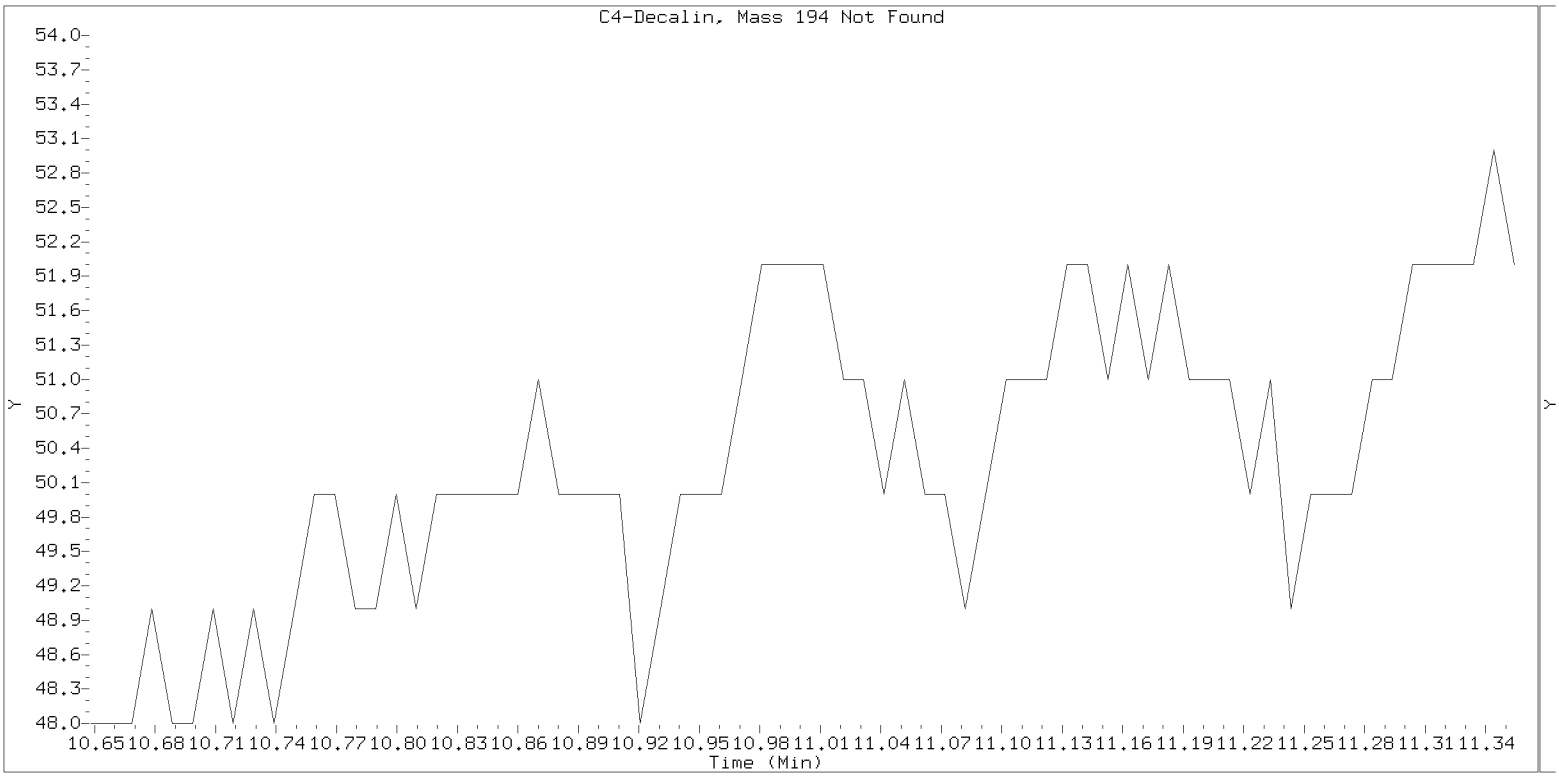

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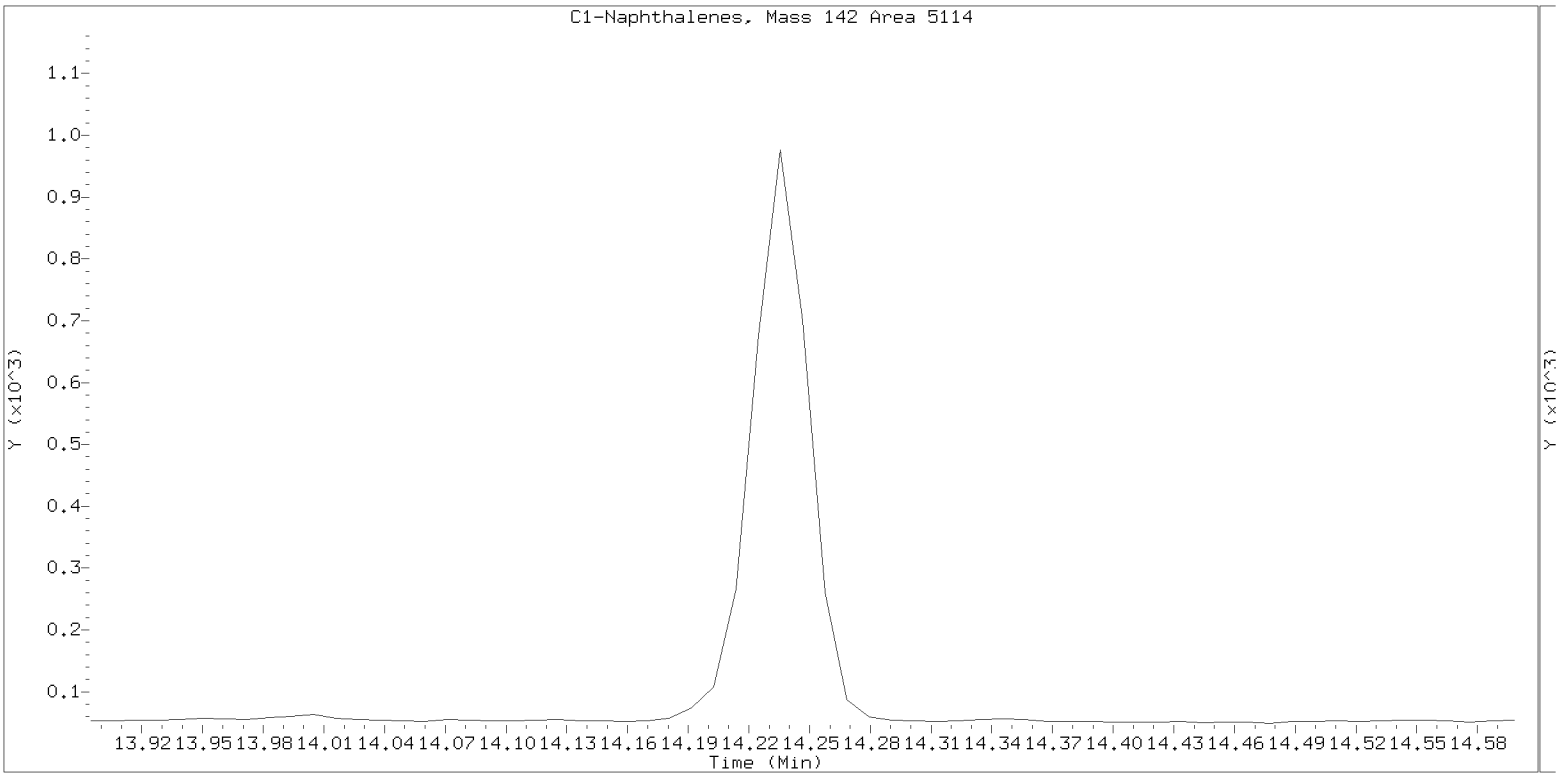

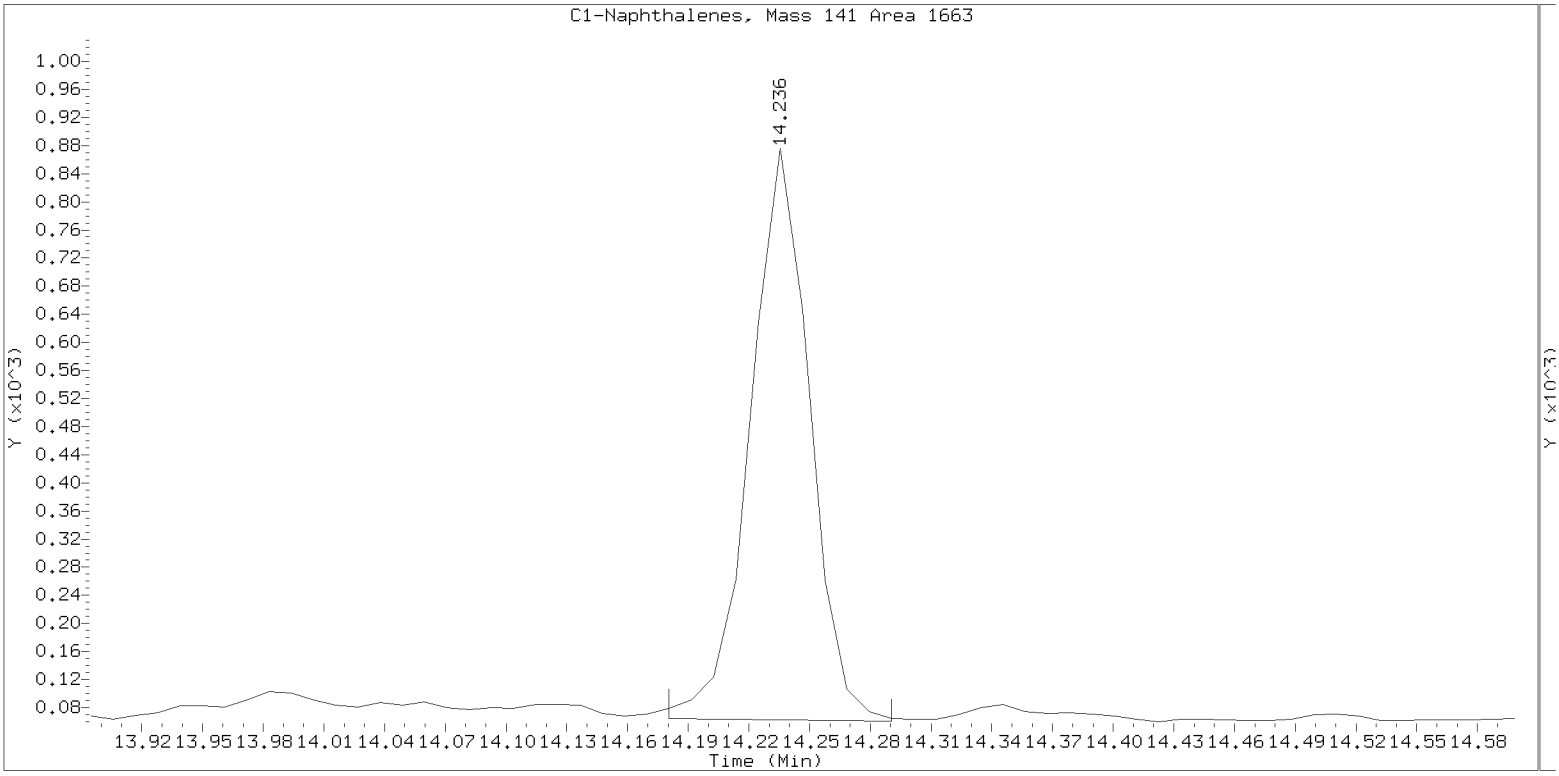

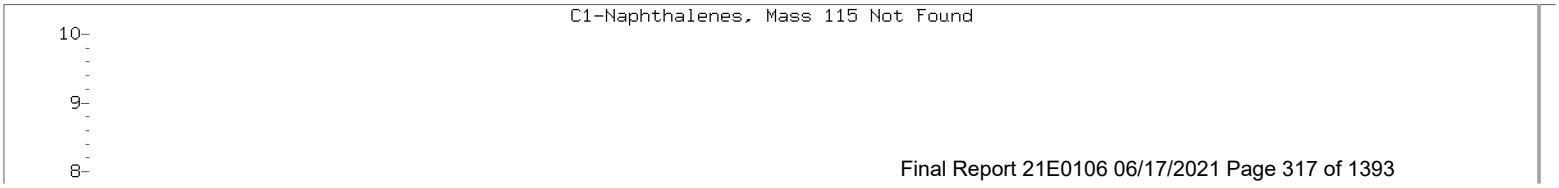

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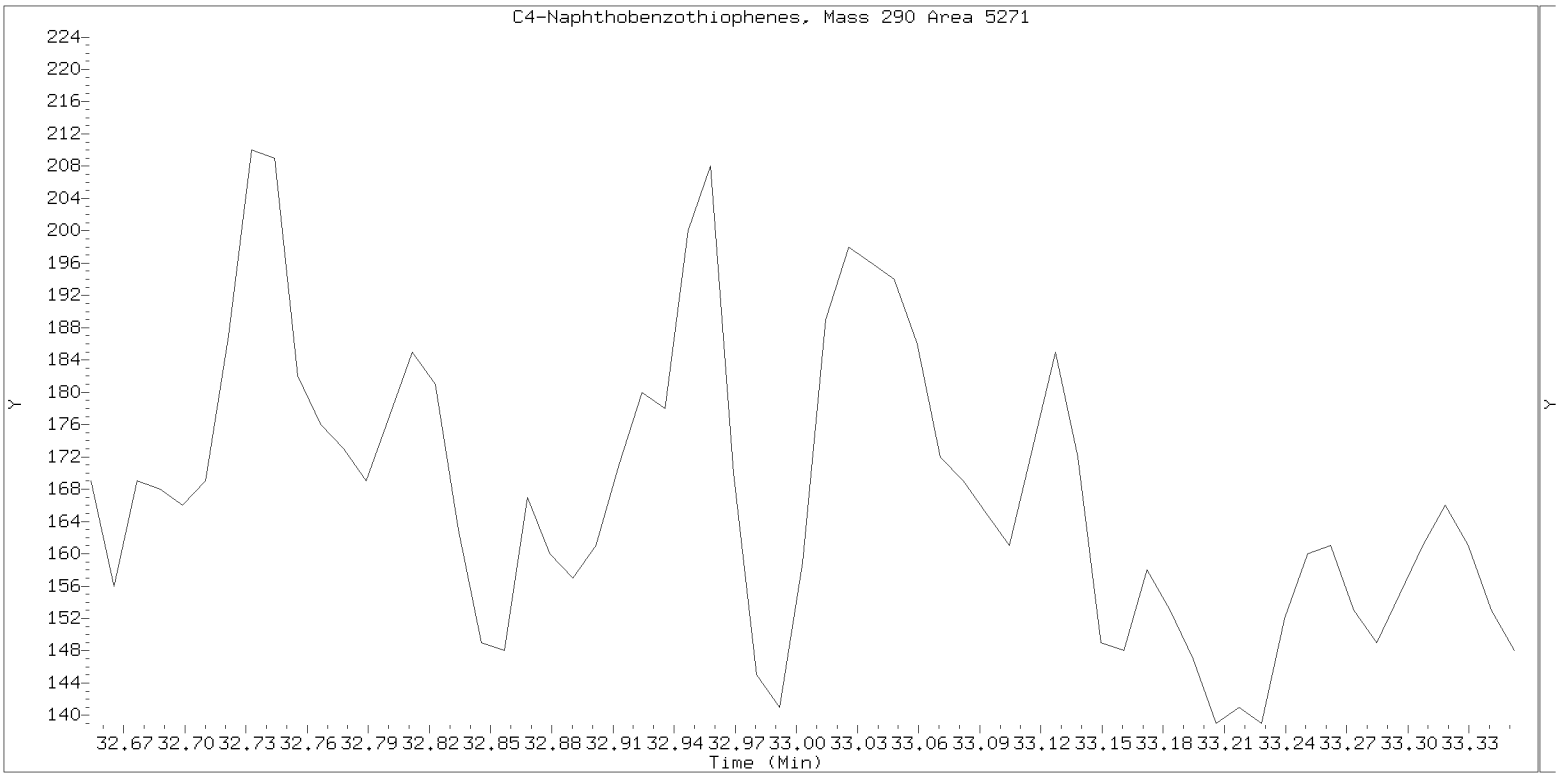

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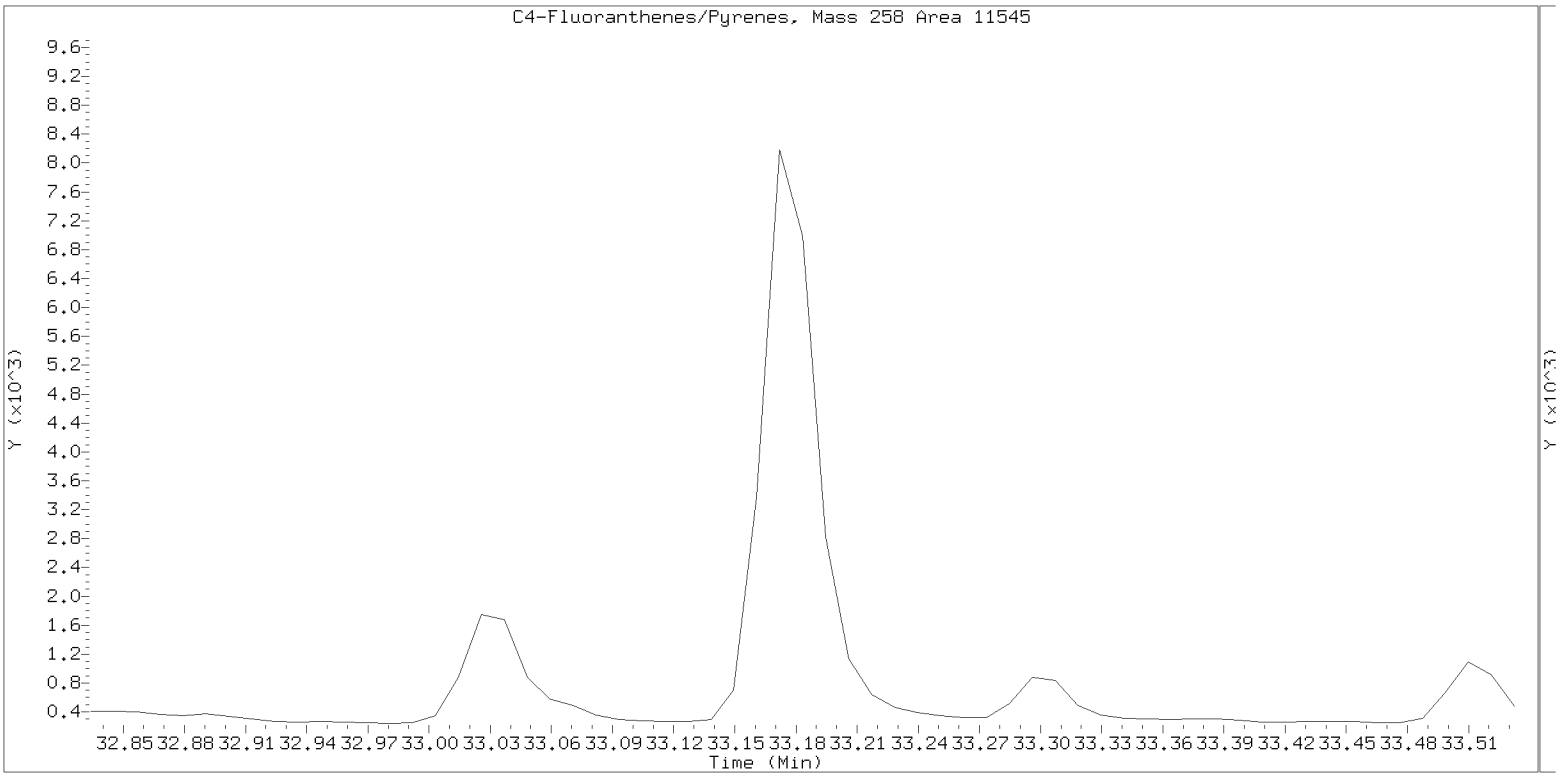

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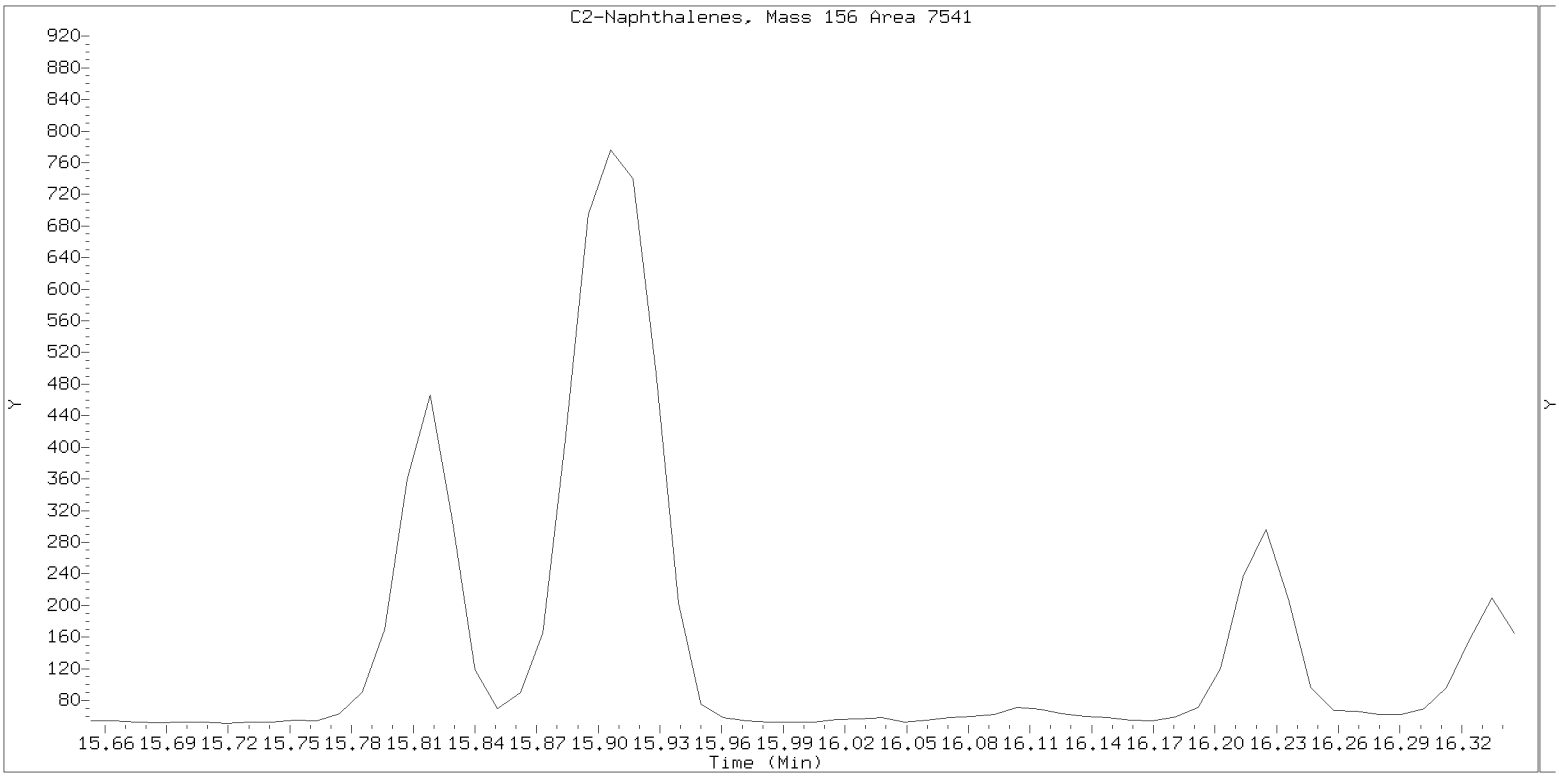

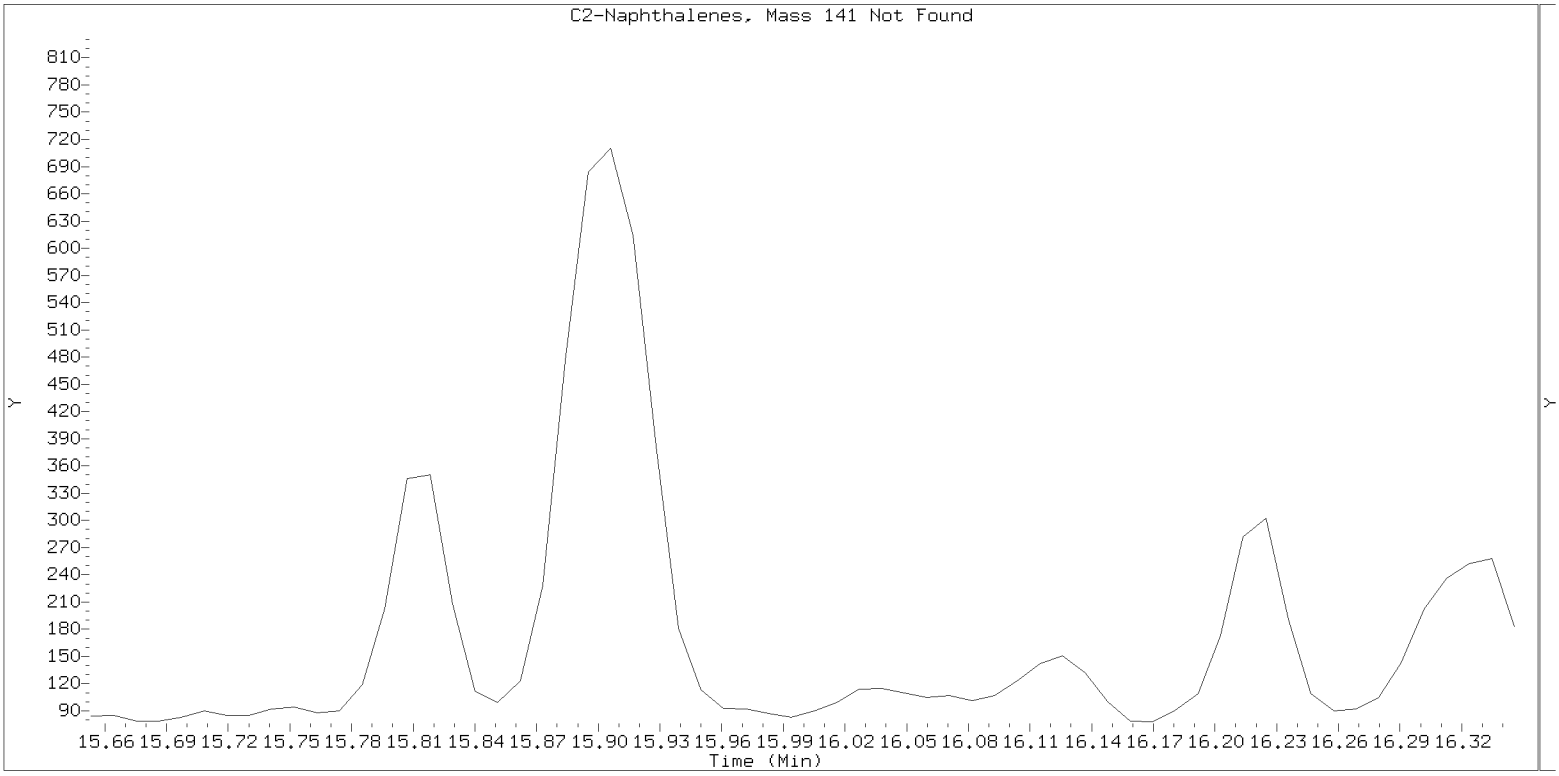

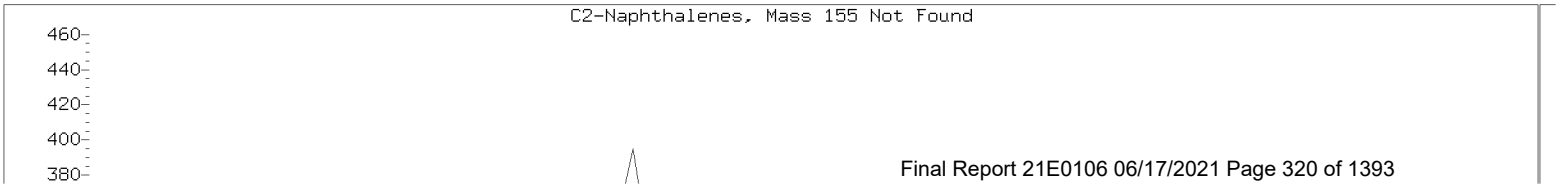

SIM ALKYL PNA RANGE ION WINDOWS - NT1421060714S.D

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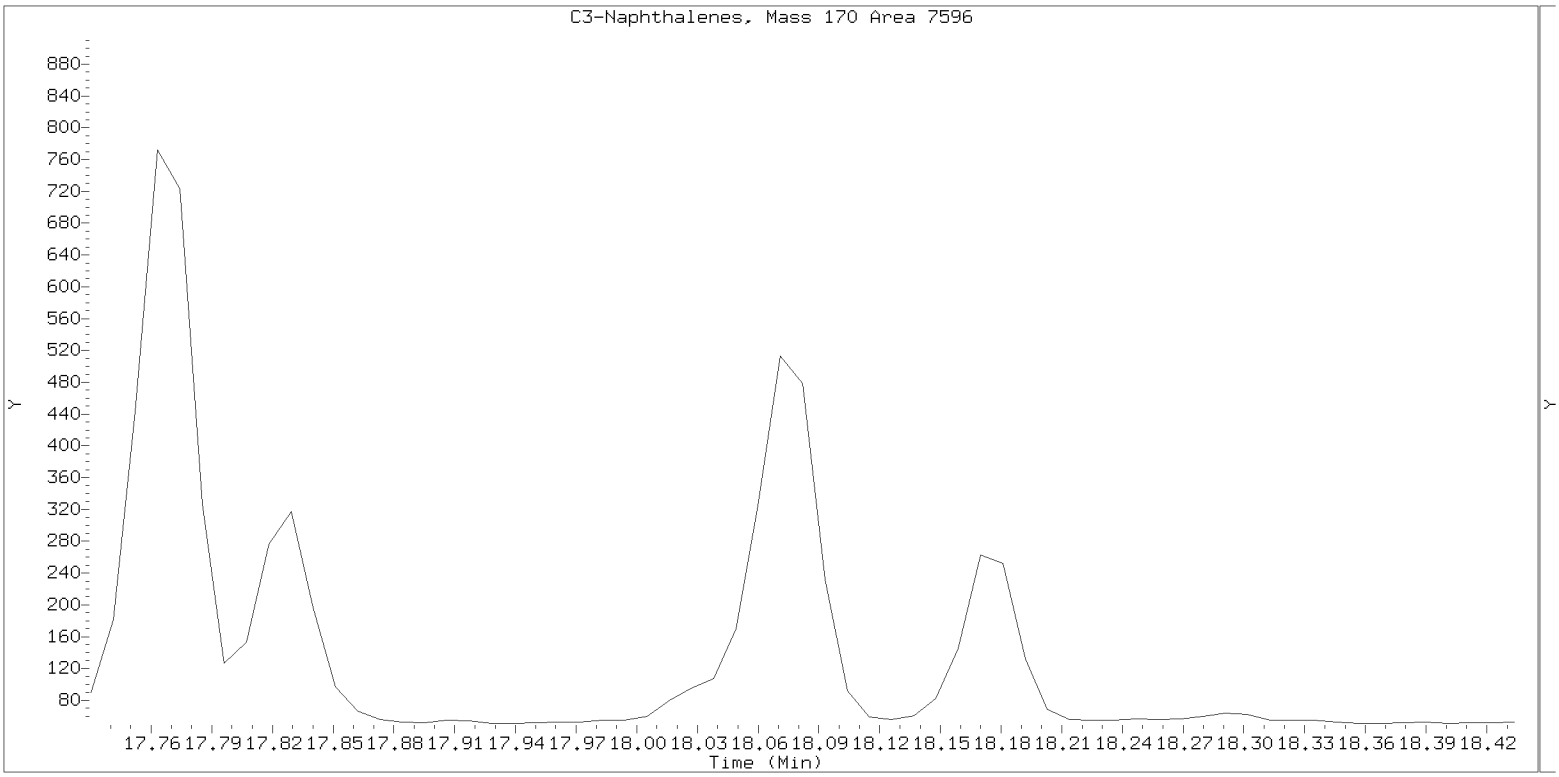

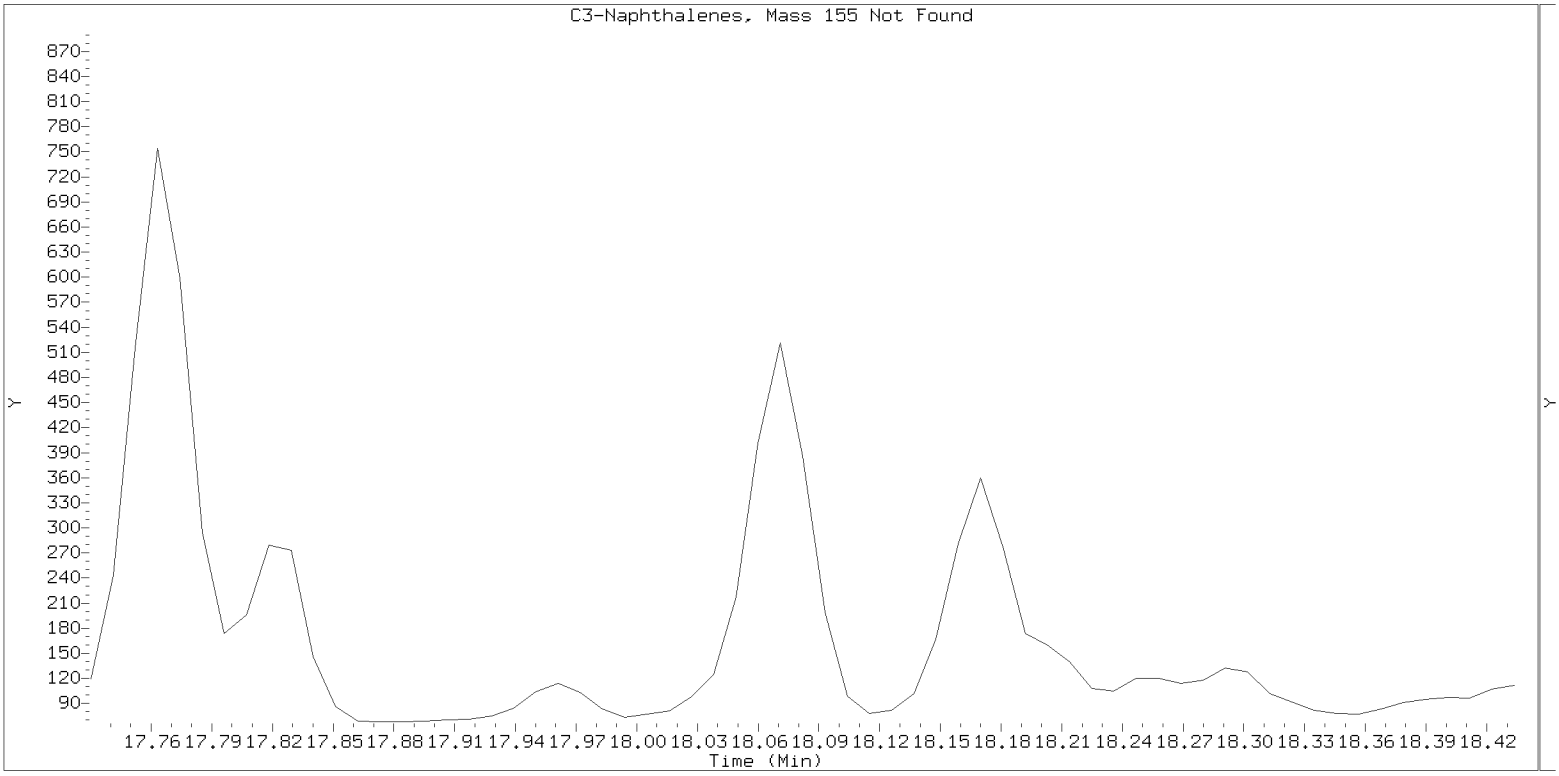

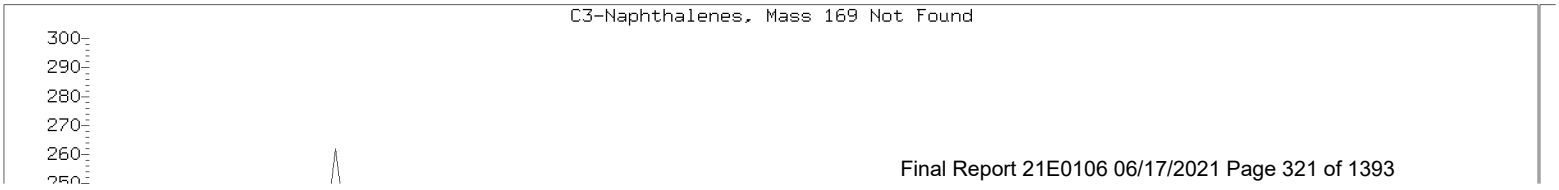

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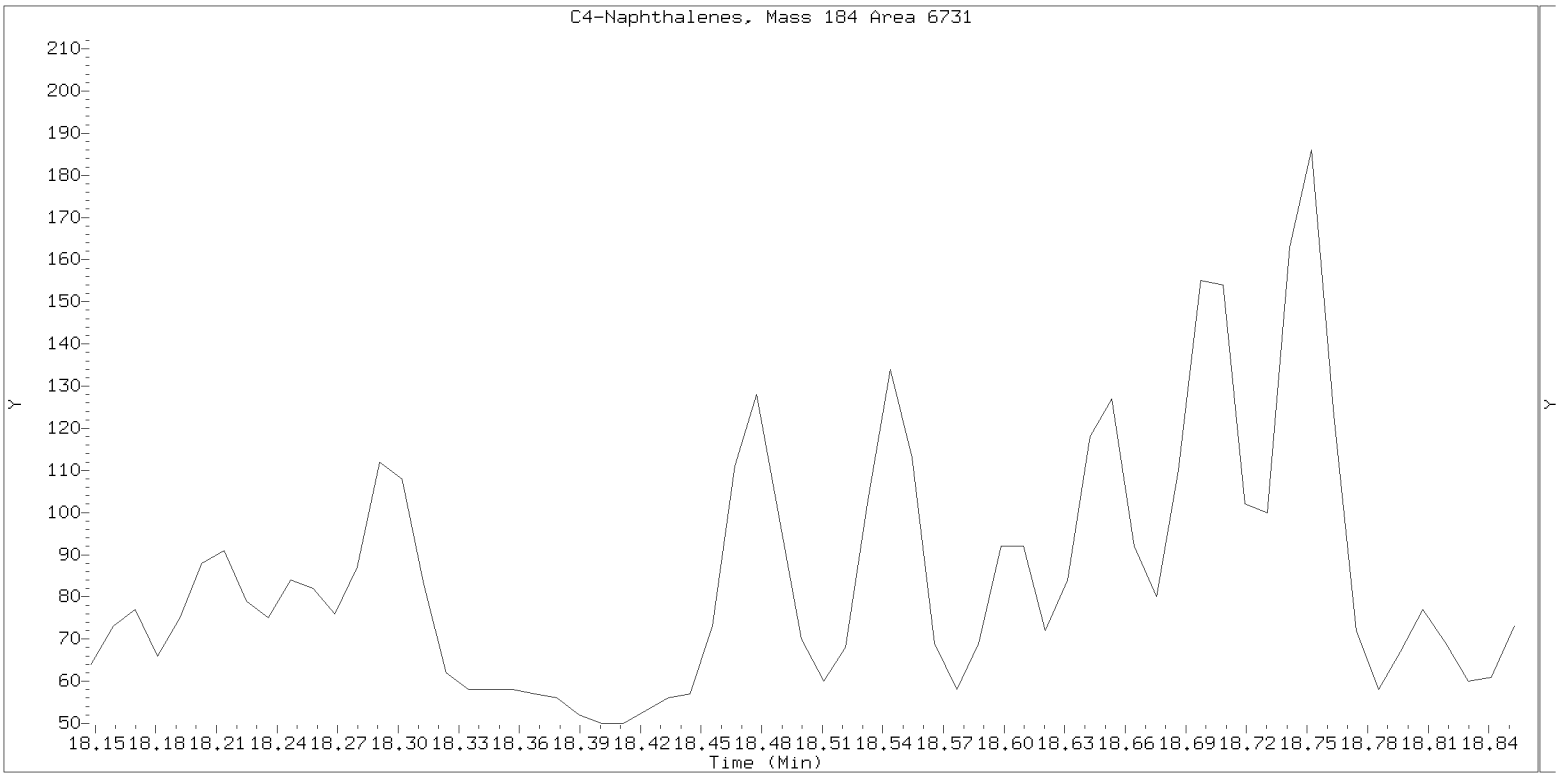

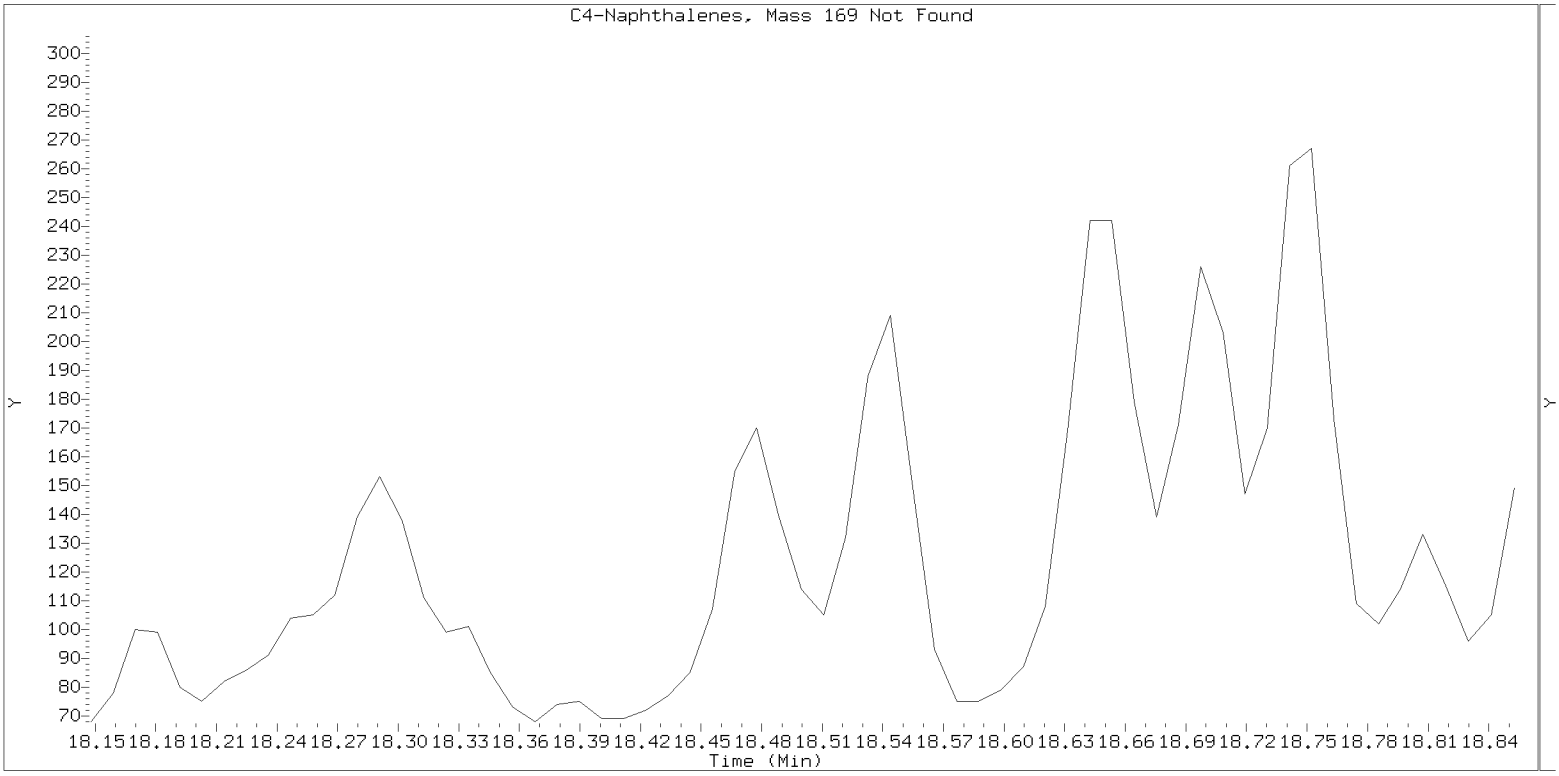

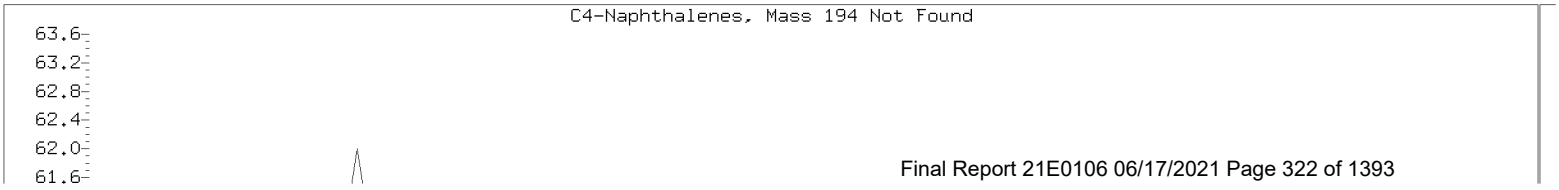

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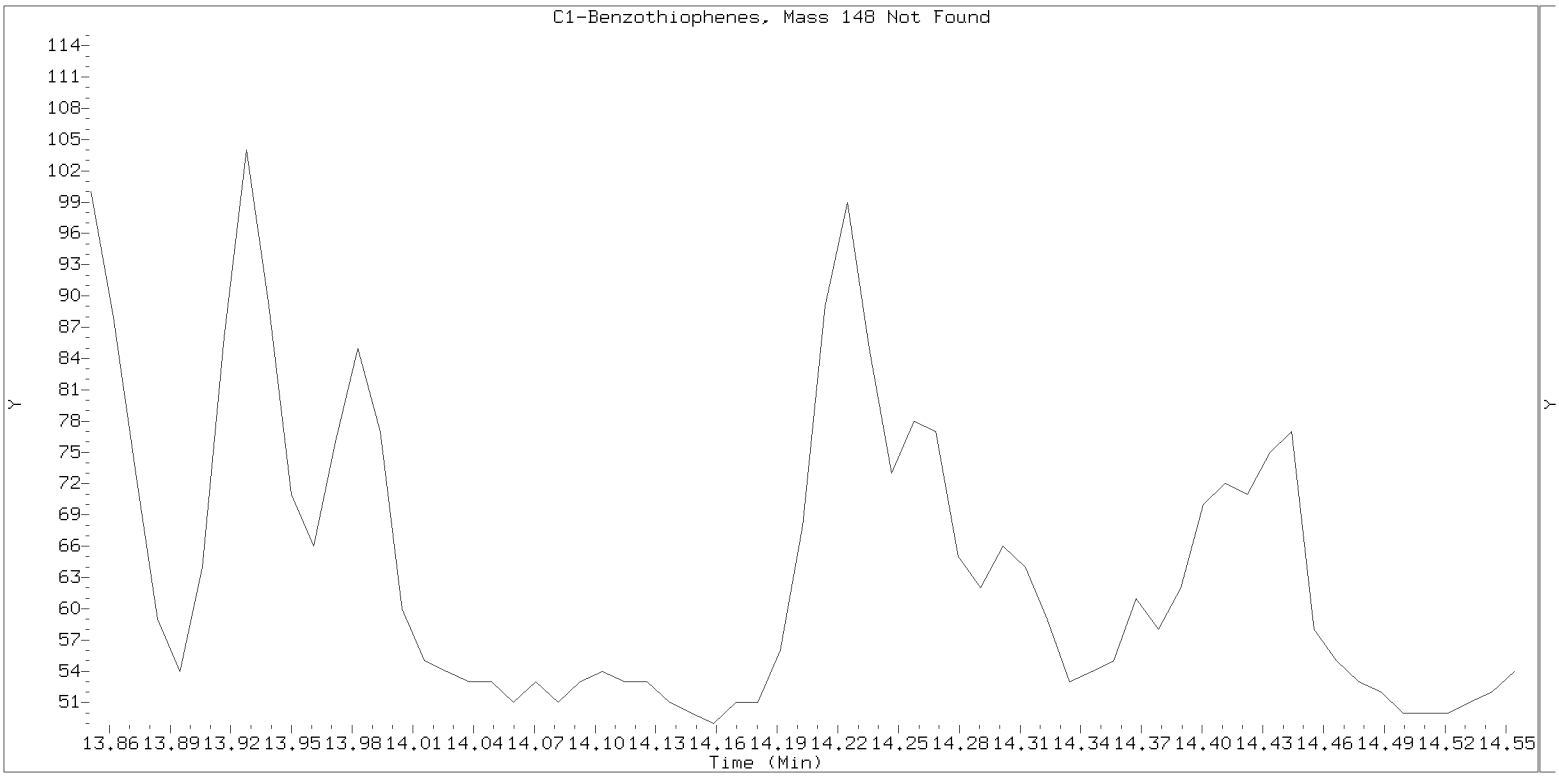

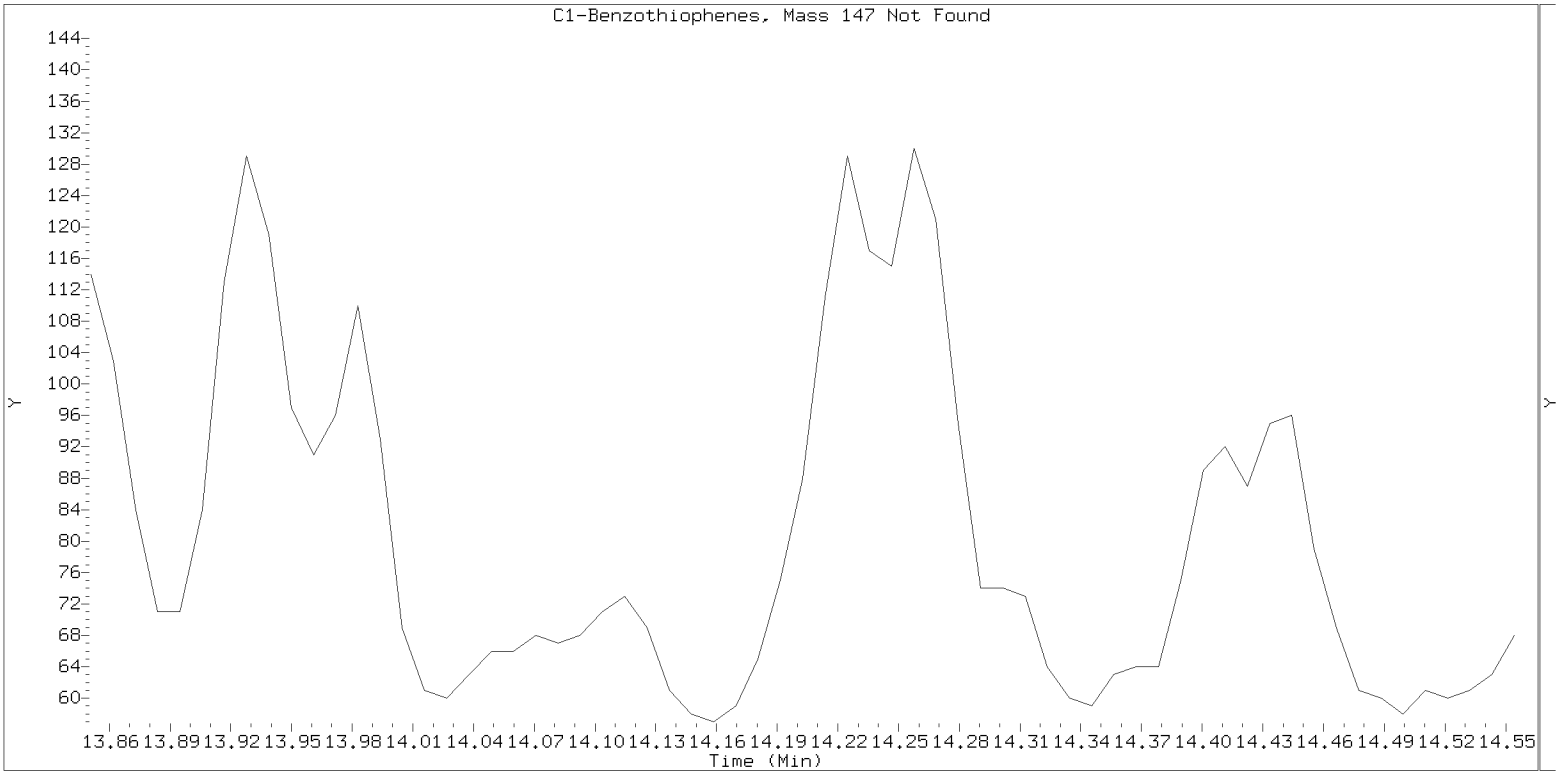

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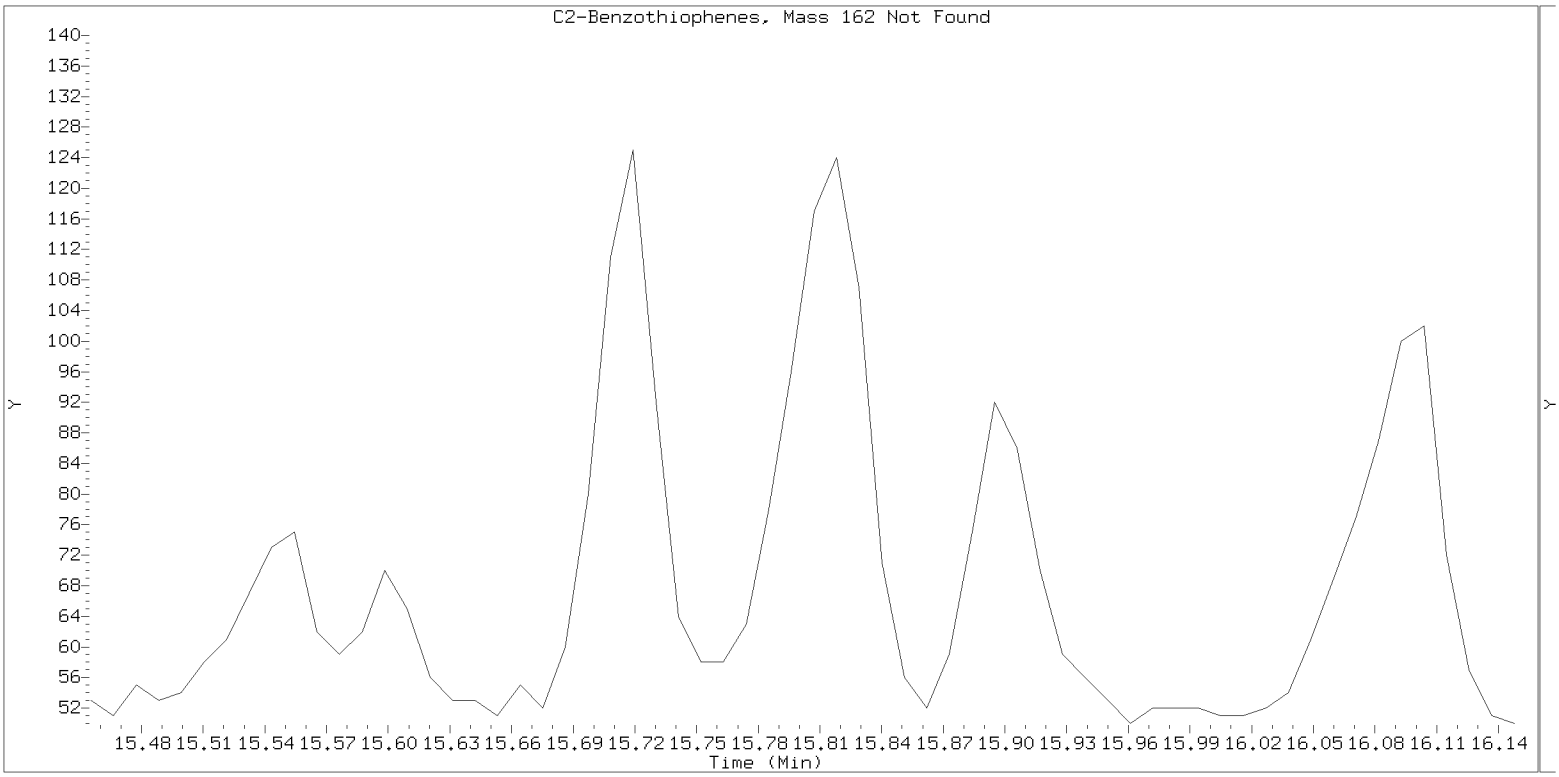

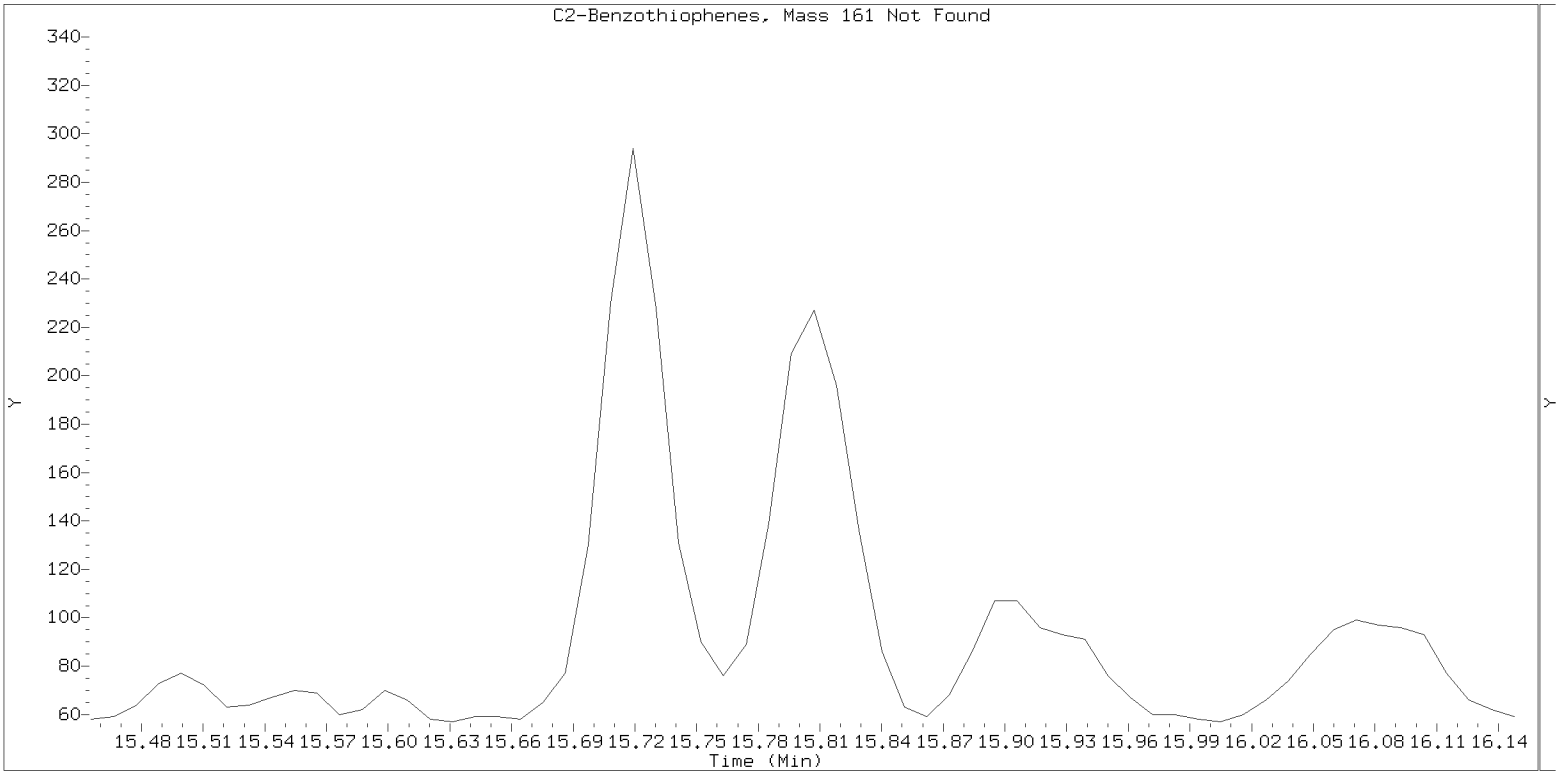

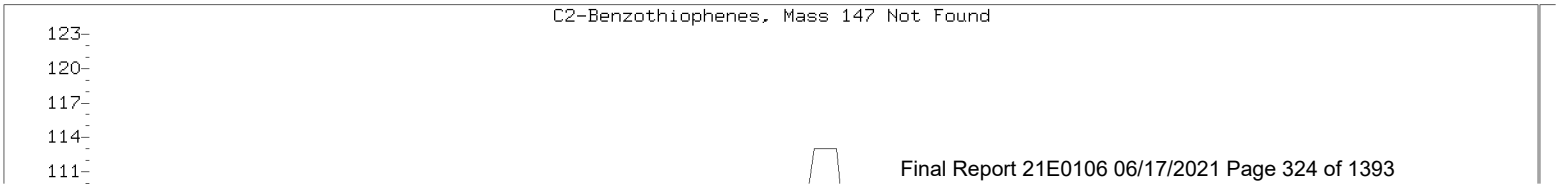

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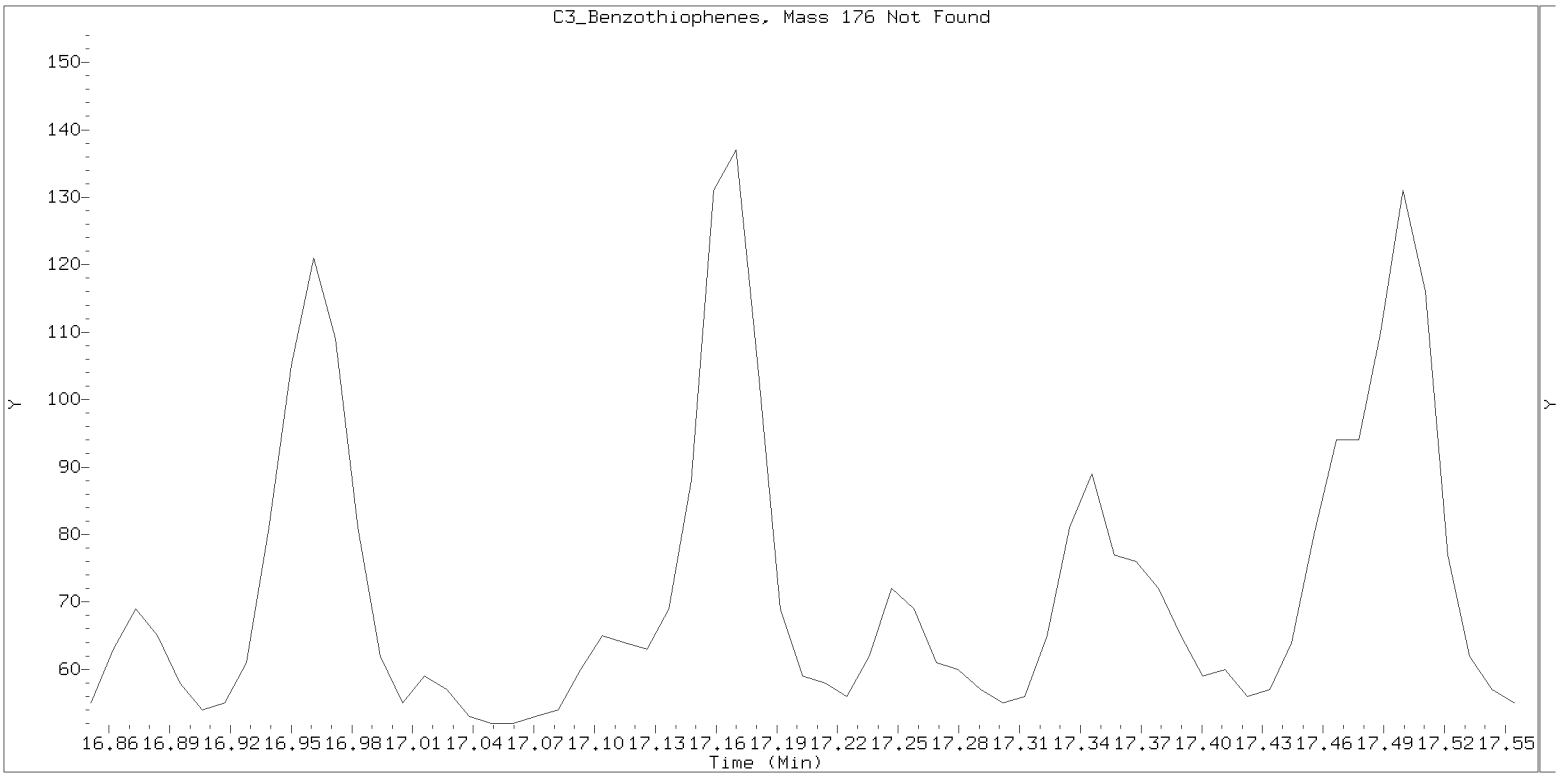

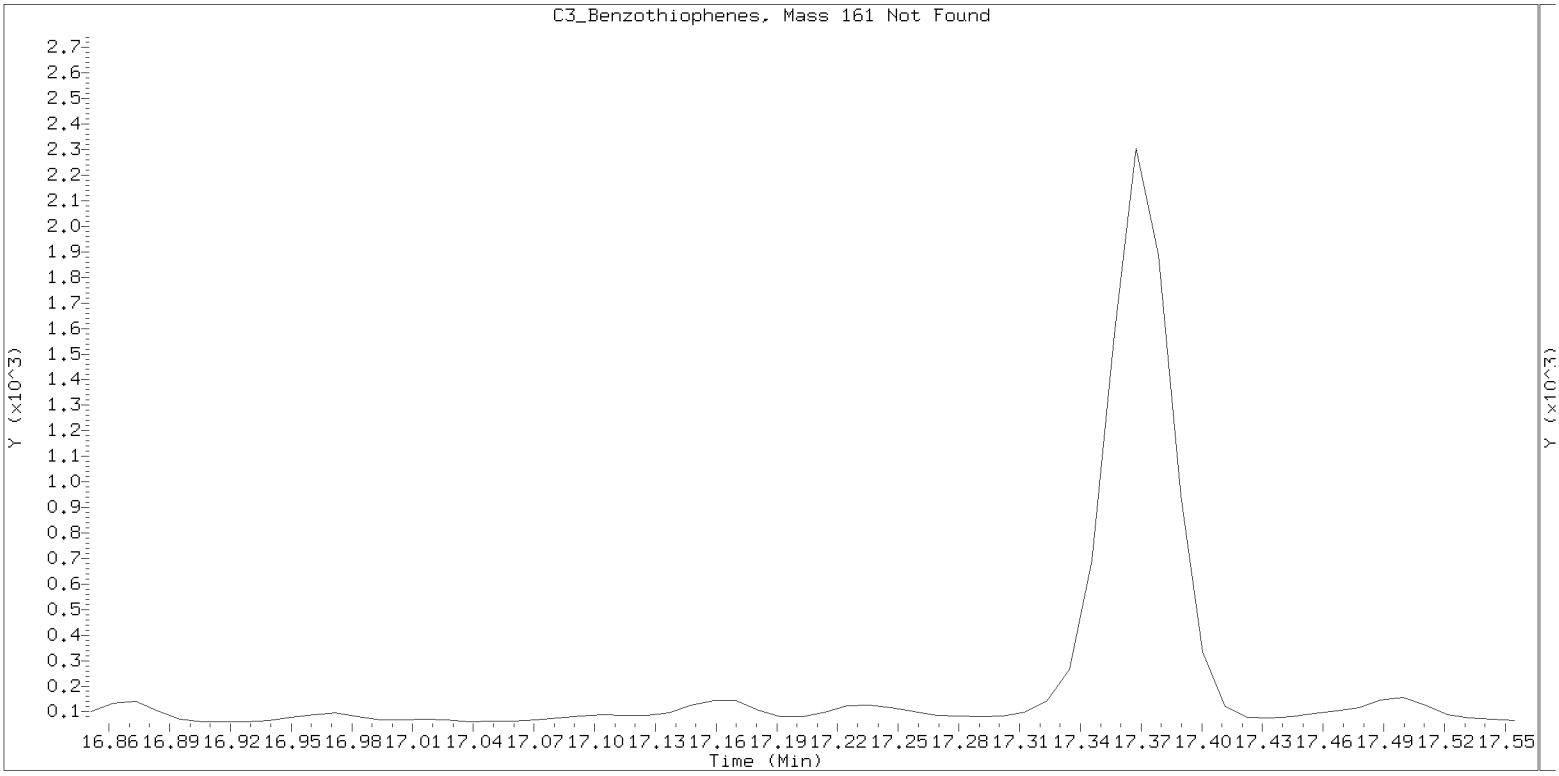

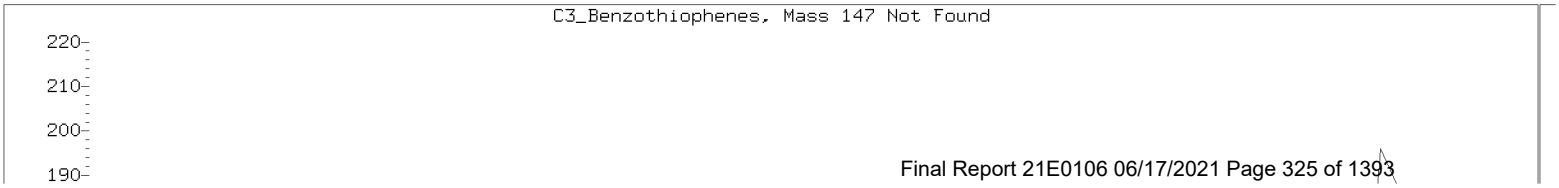

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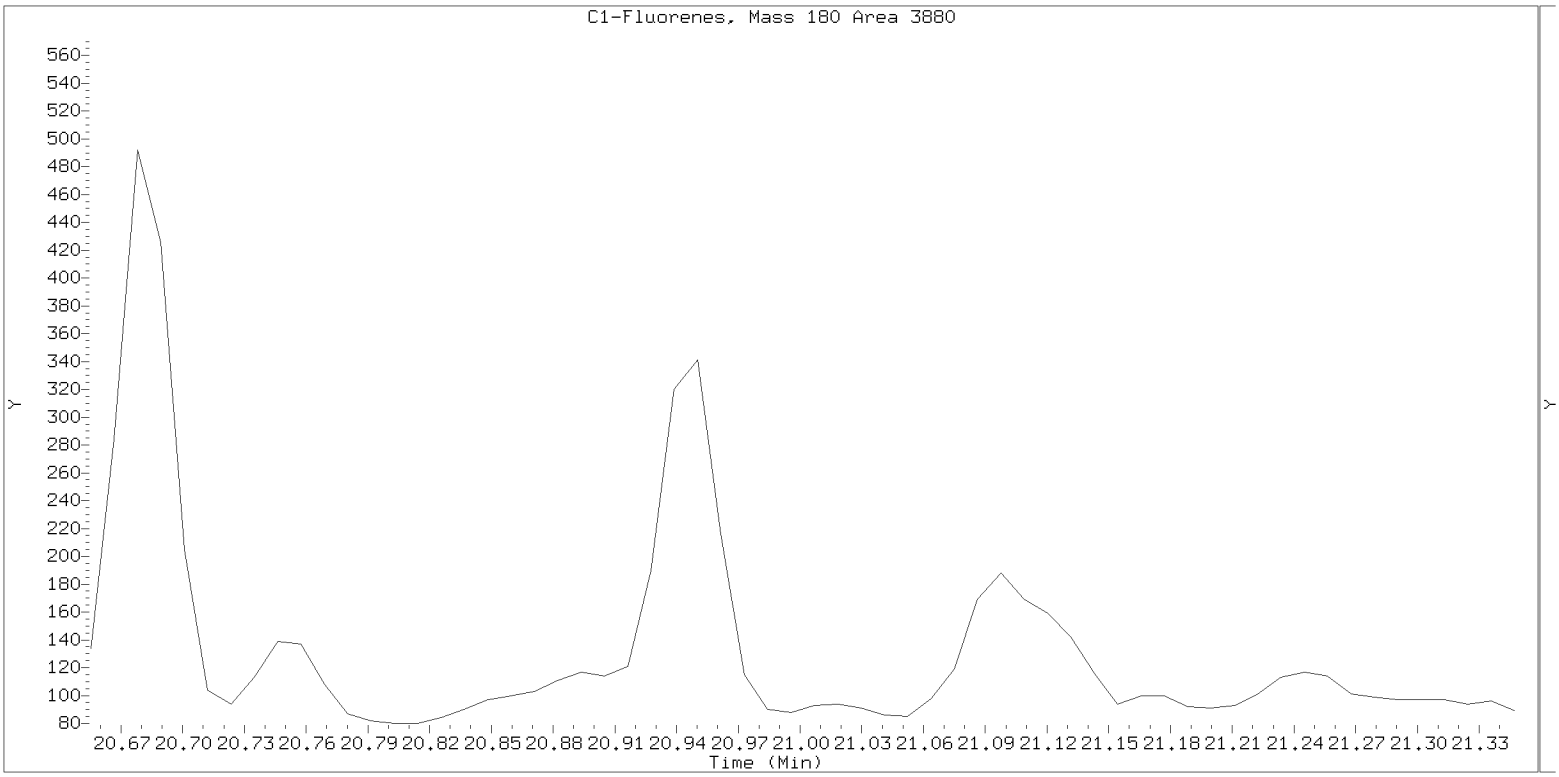

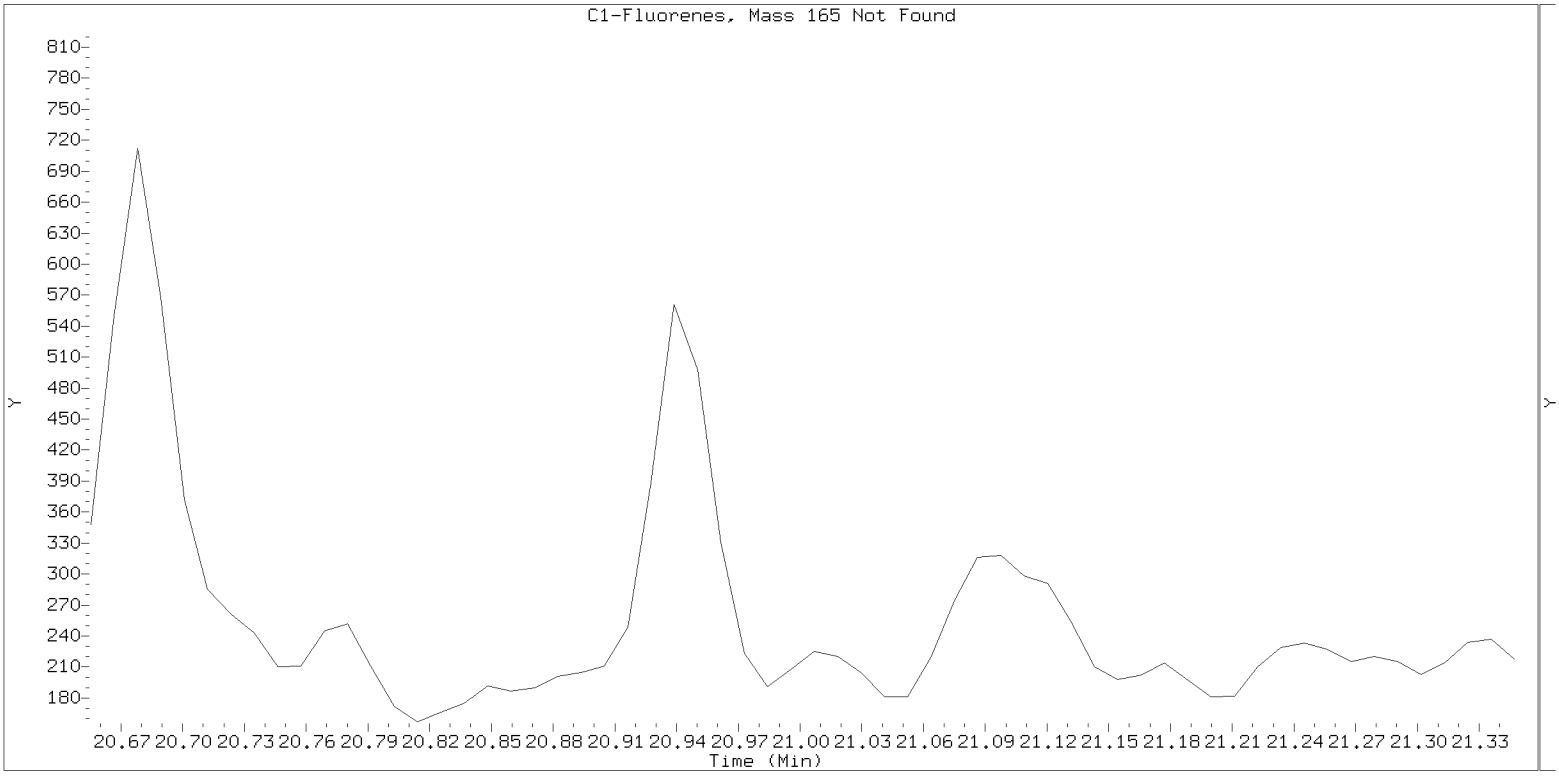

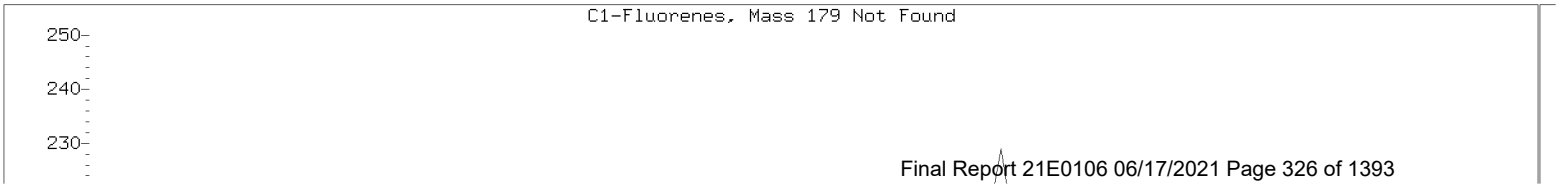

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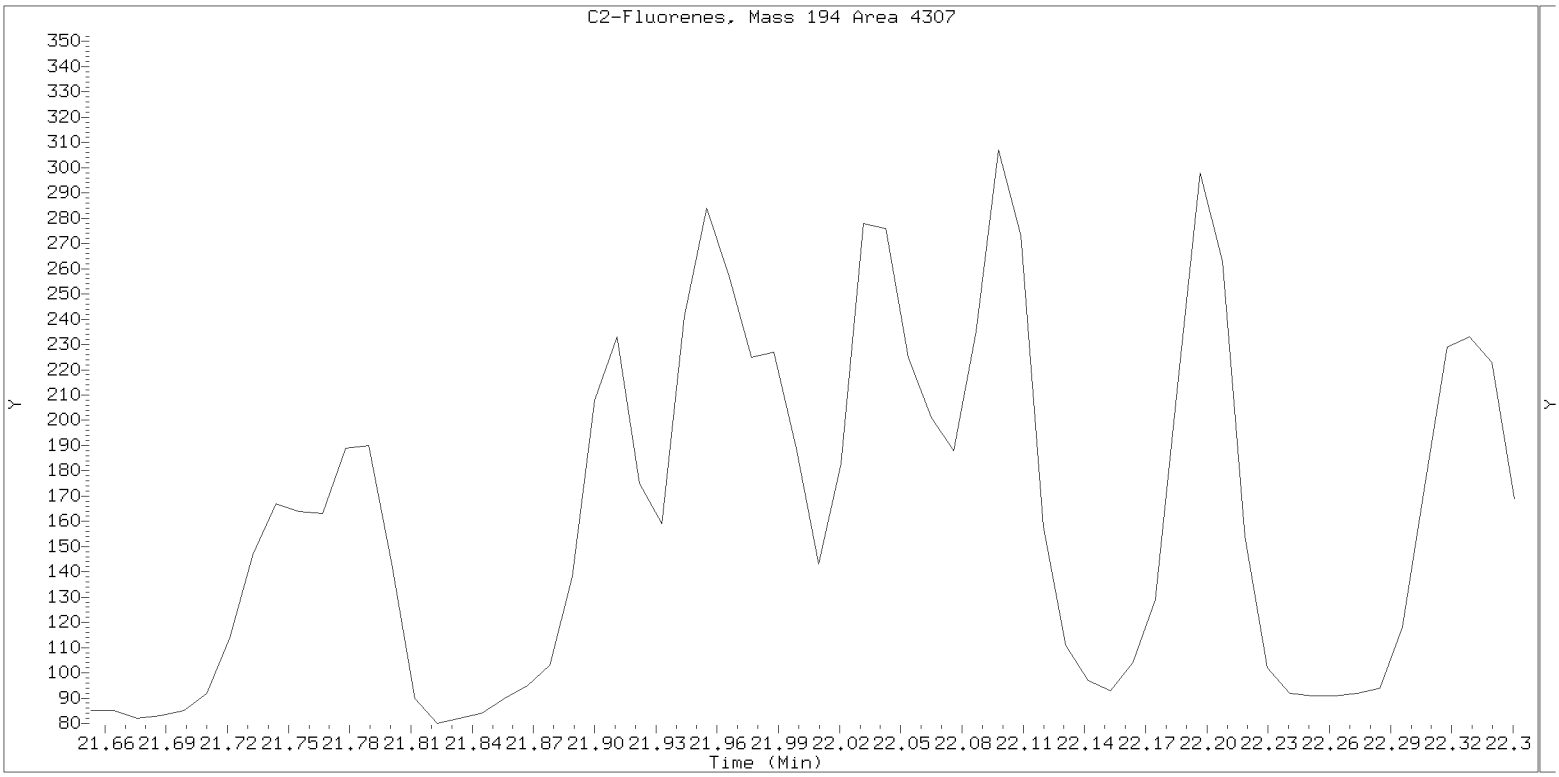

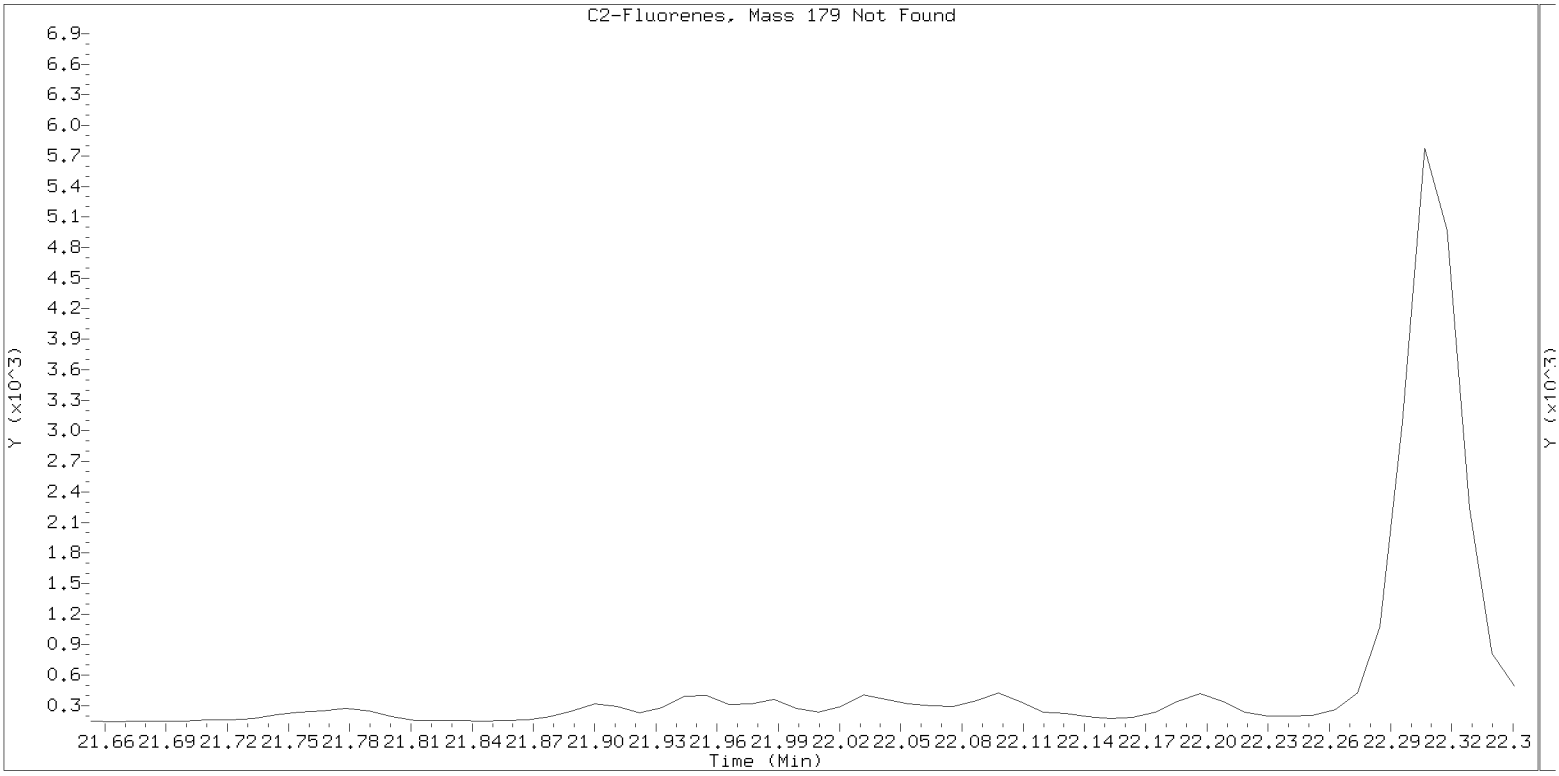

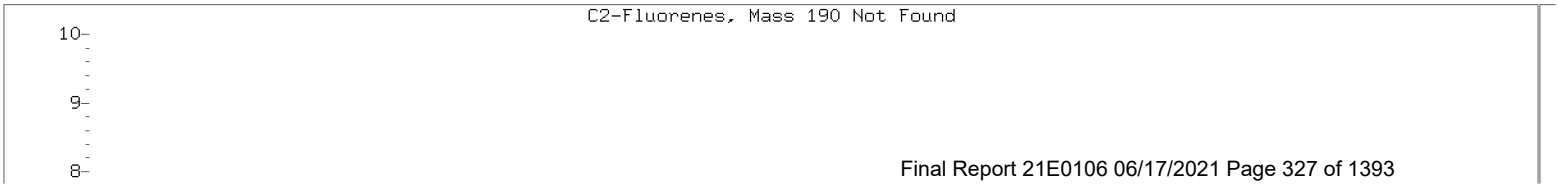

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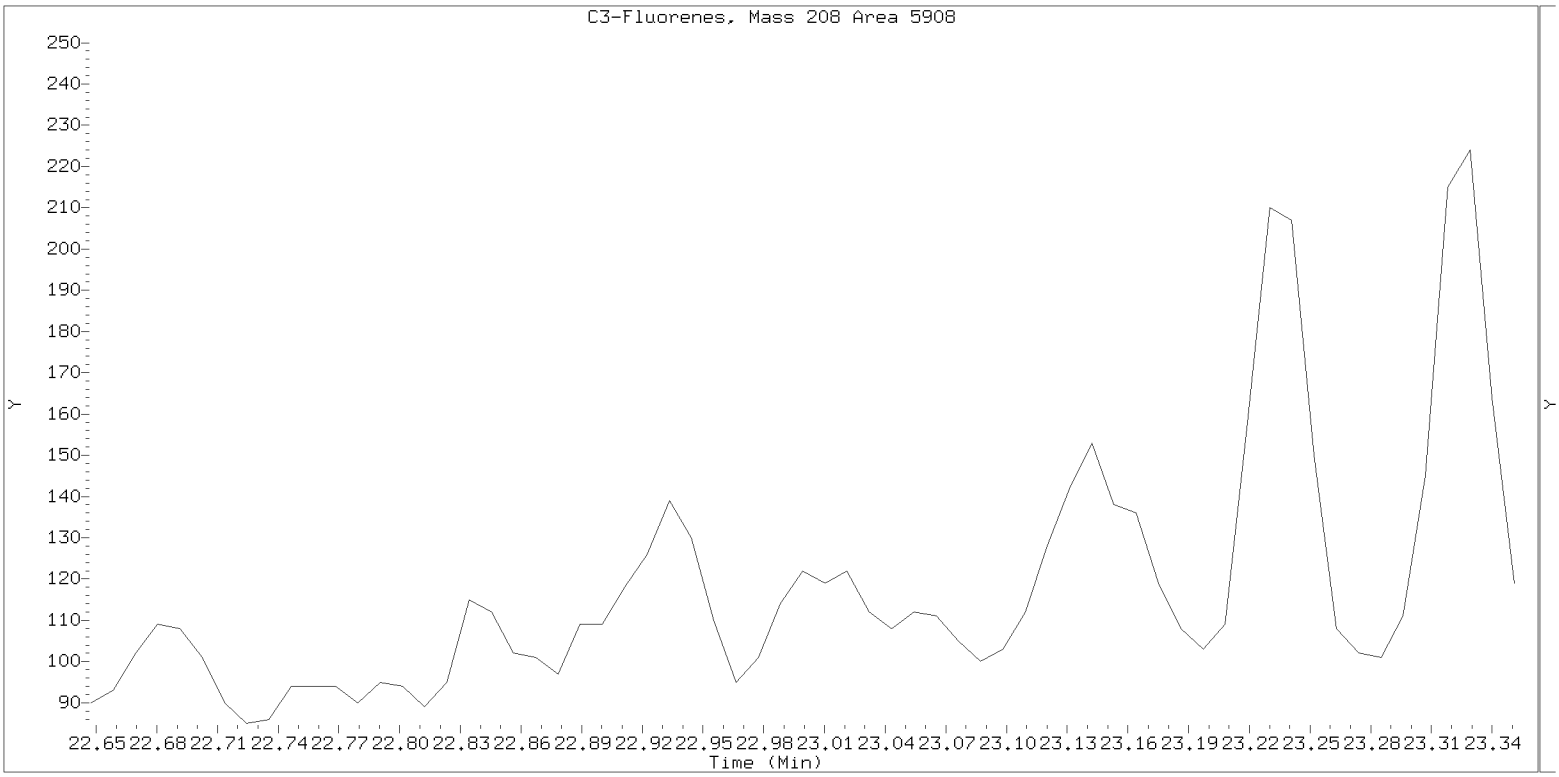

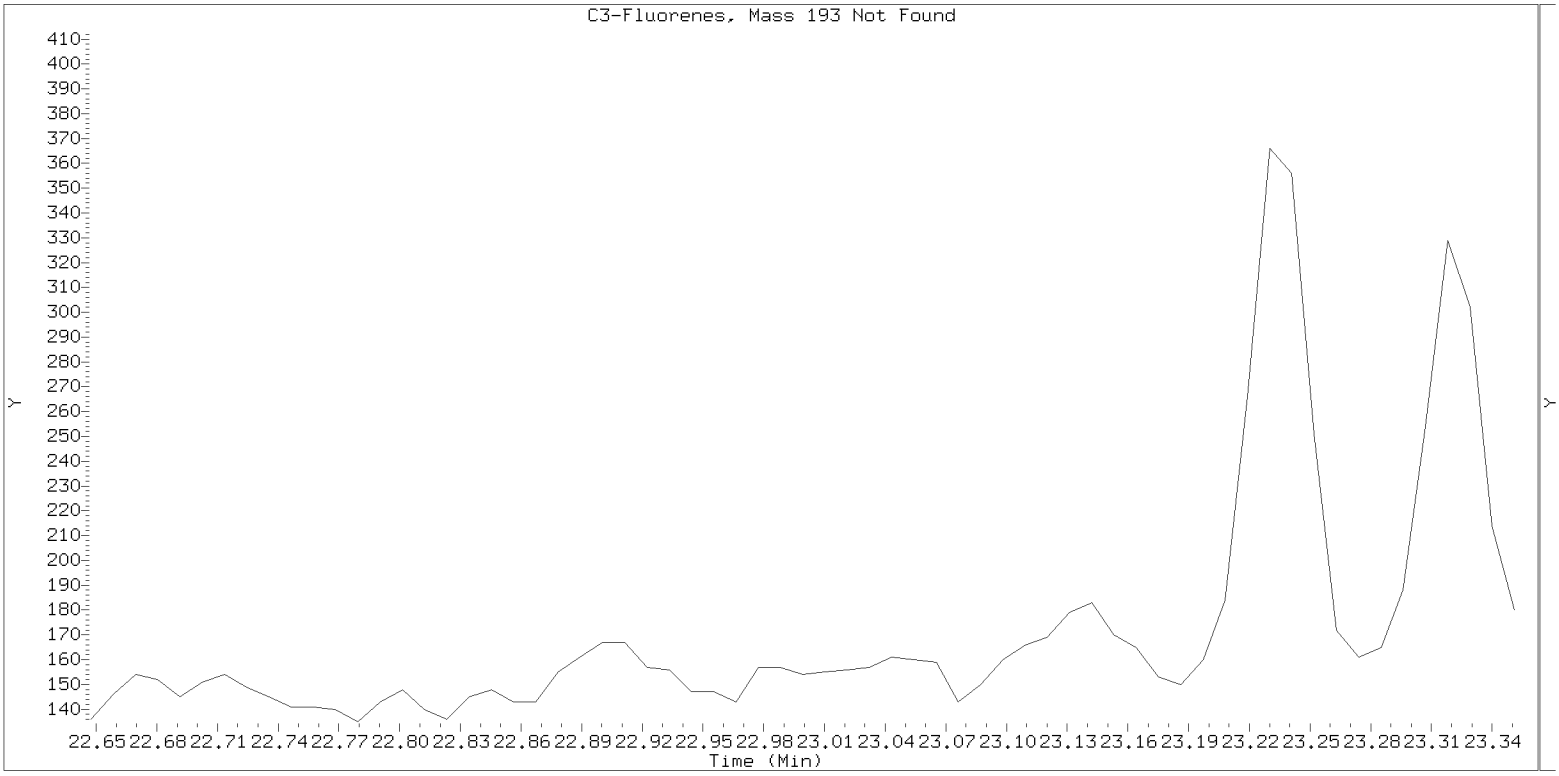

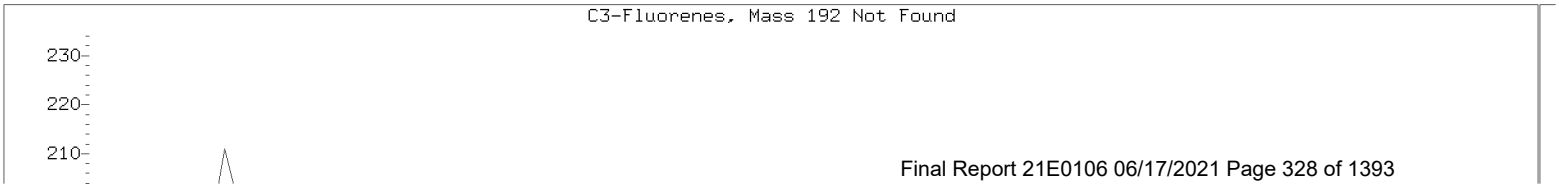

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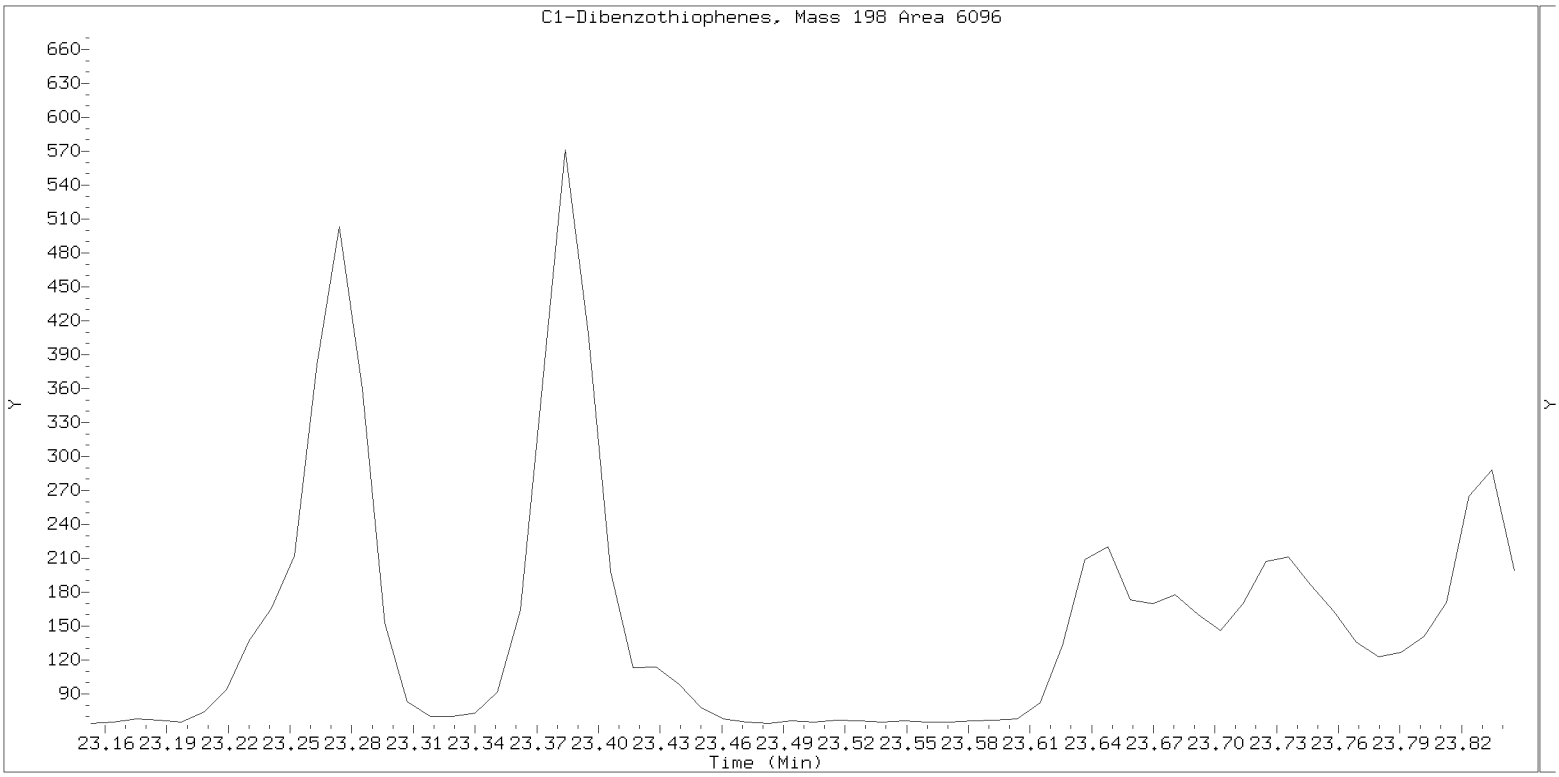

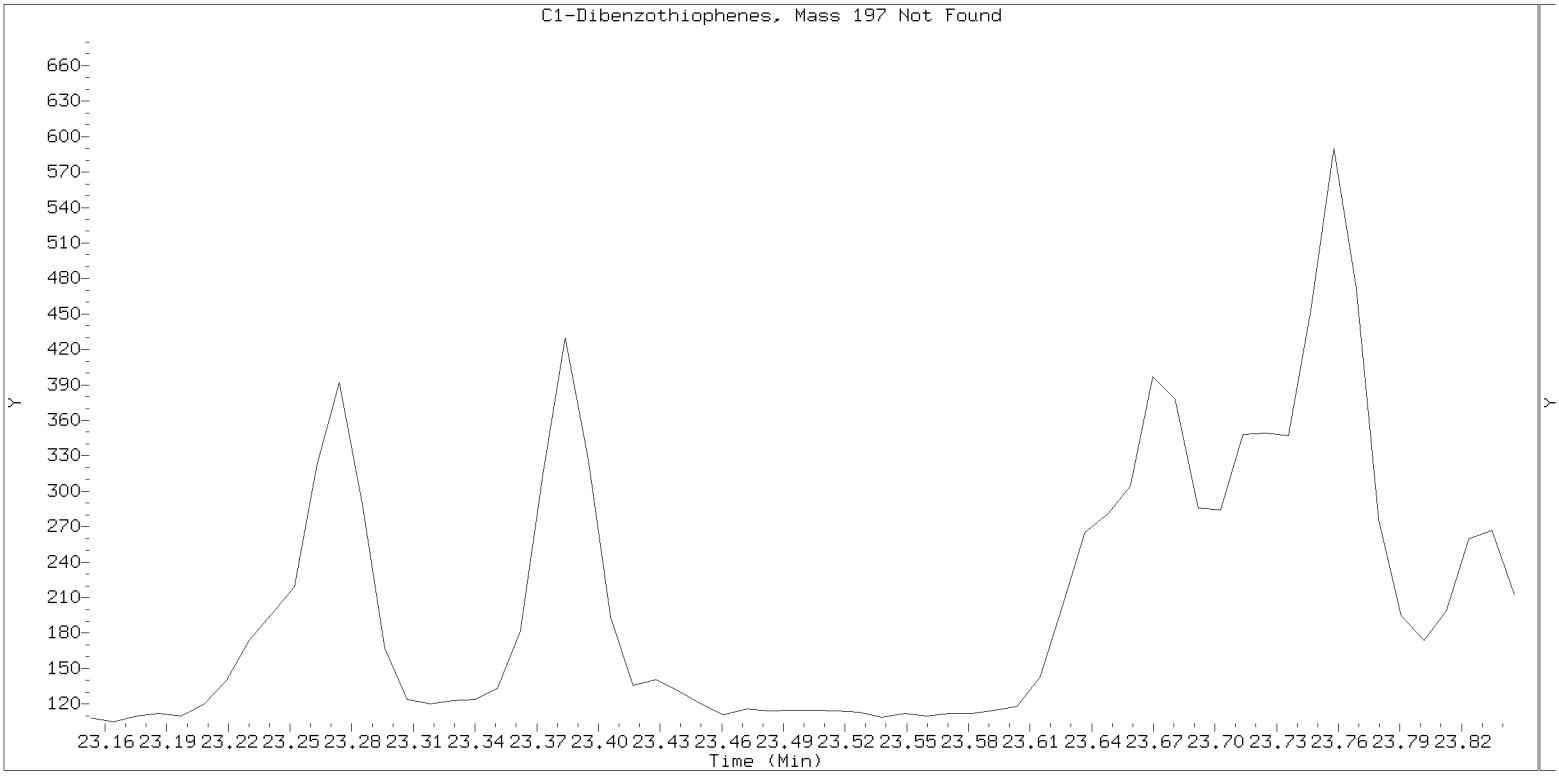

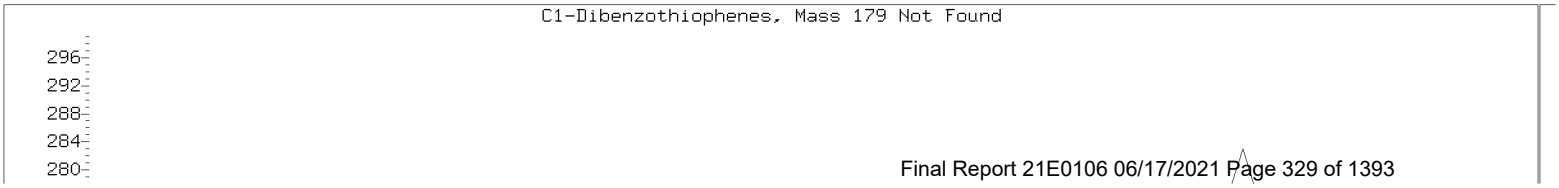

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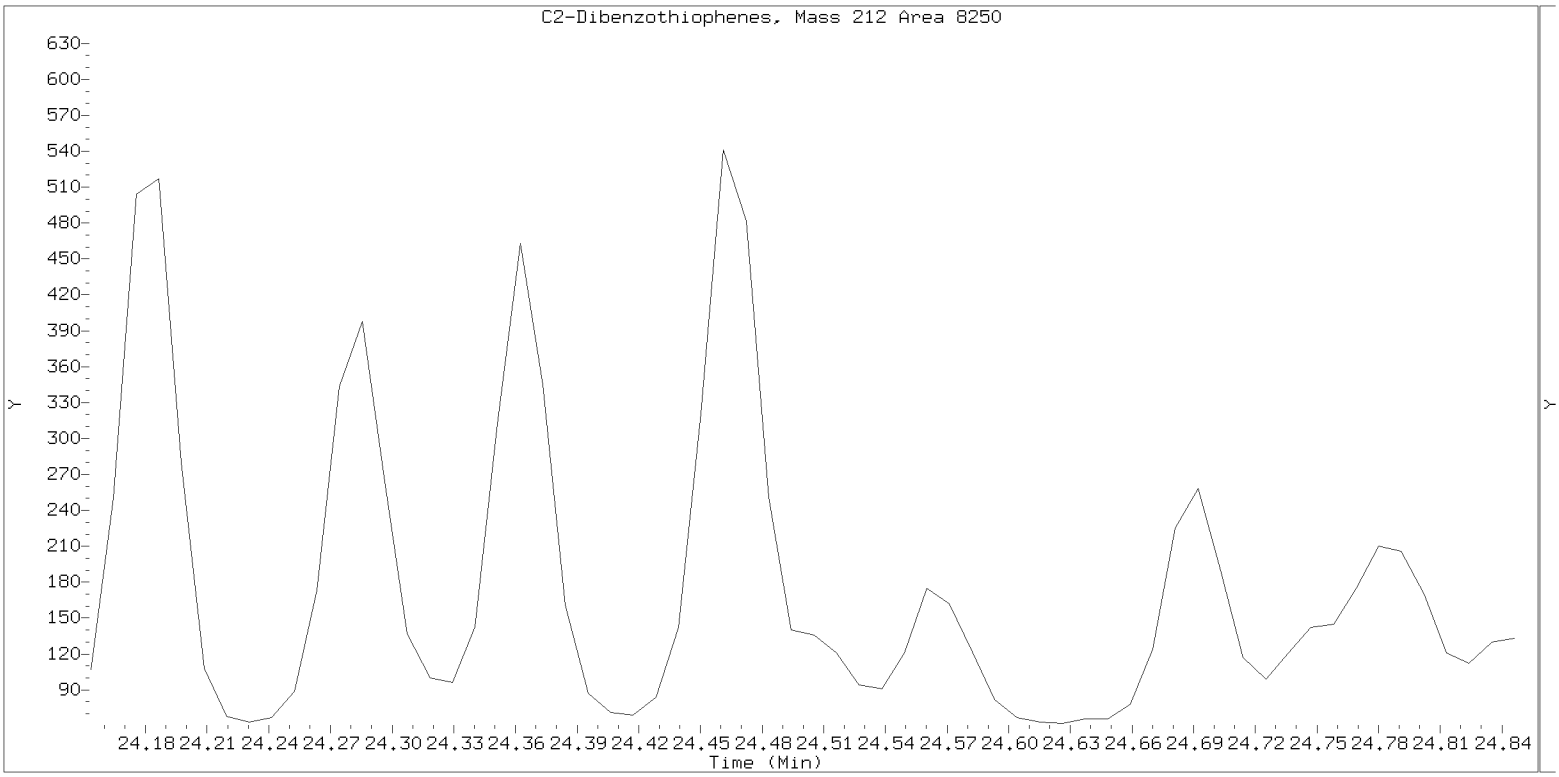

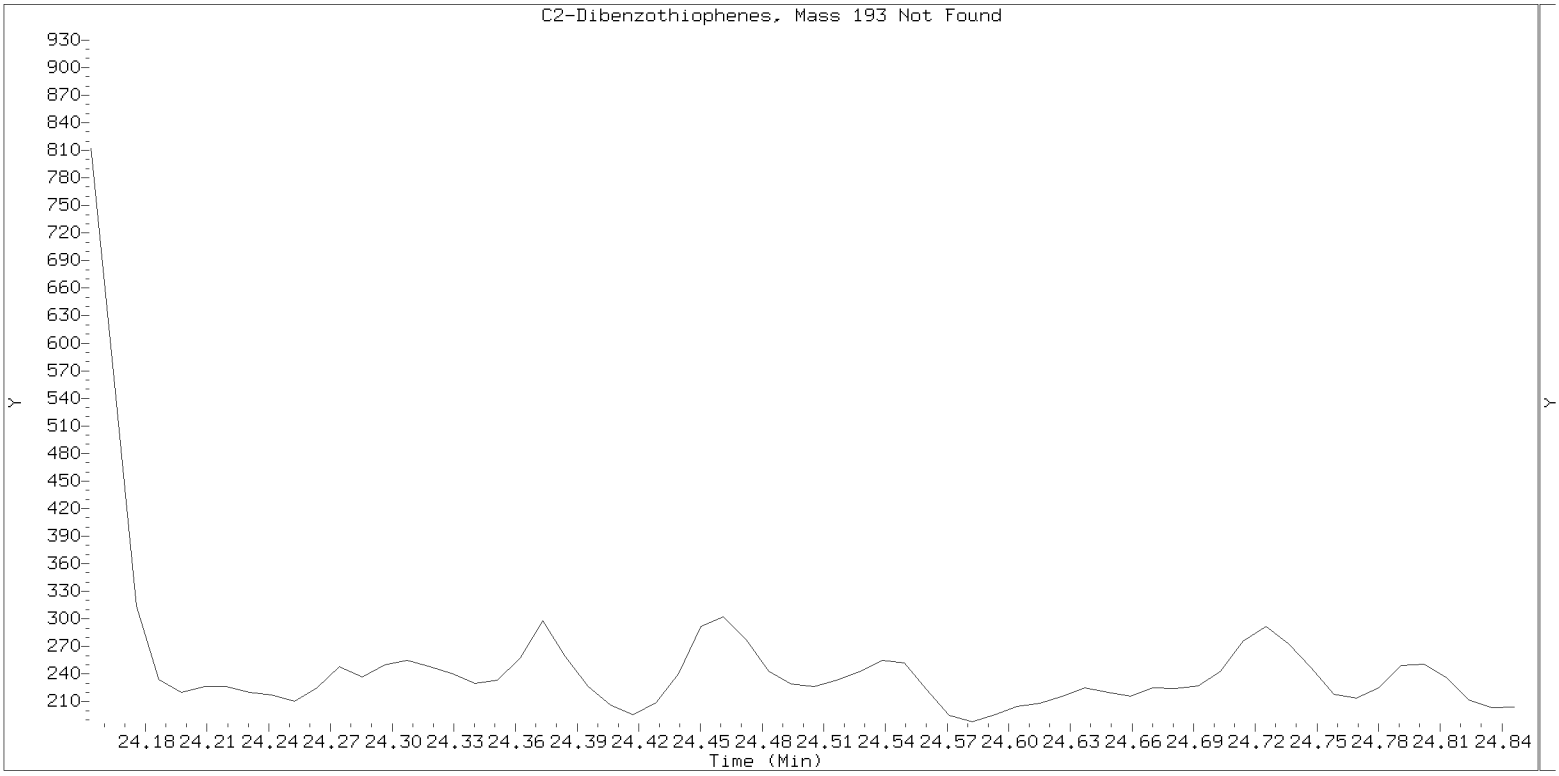

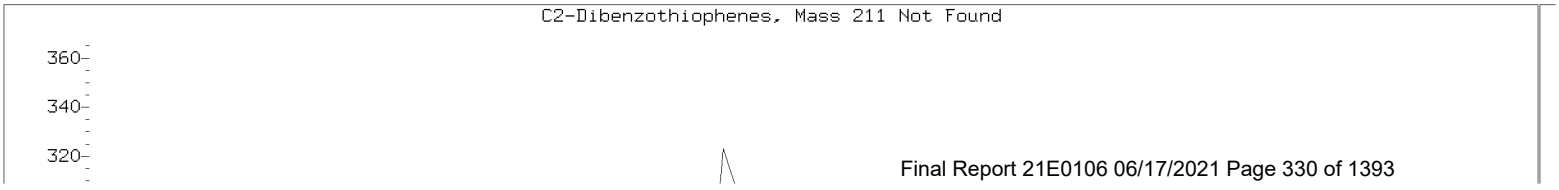

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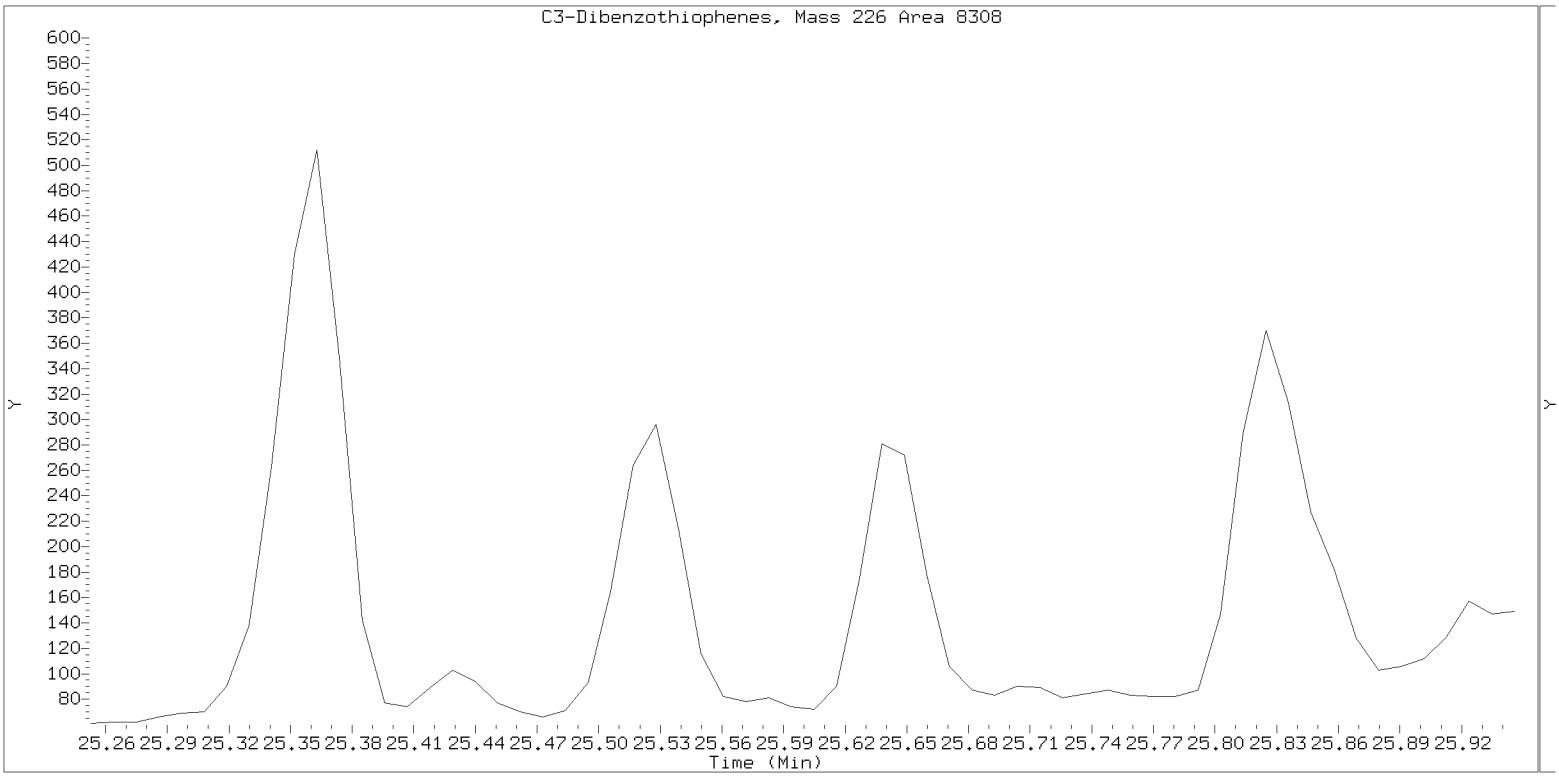

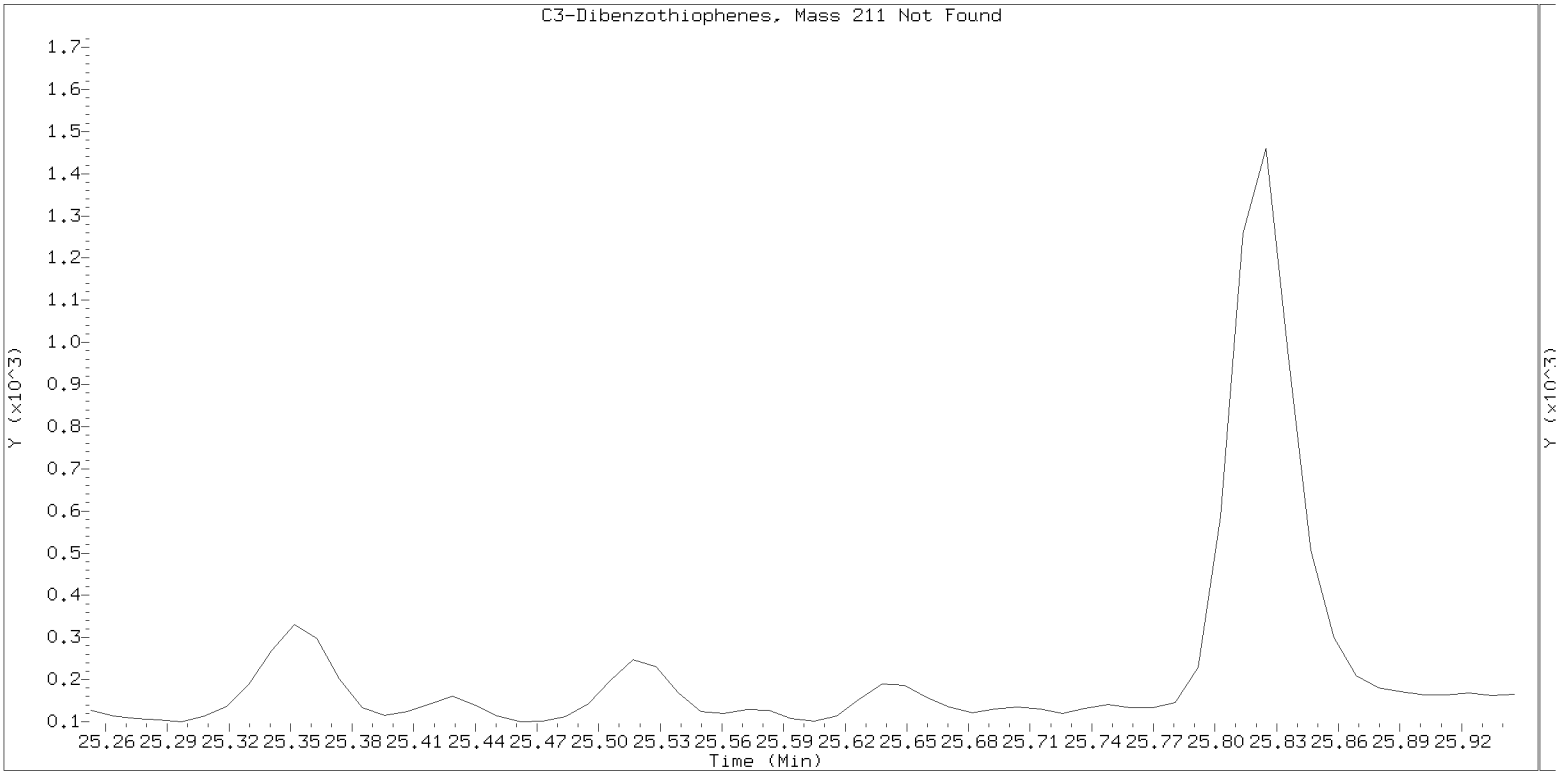

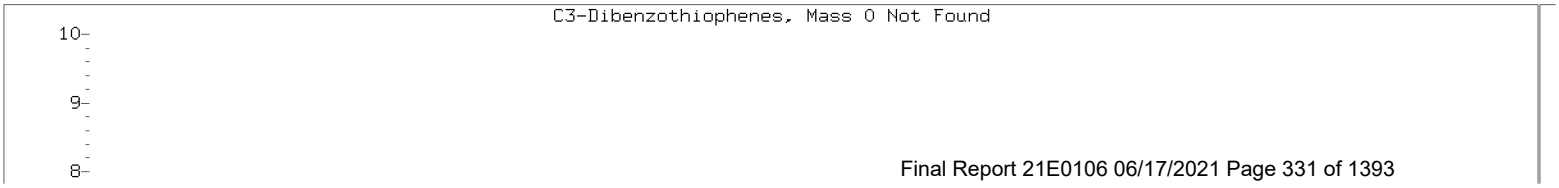

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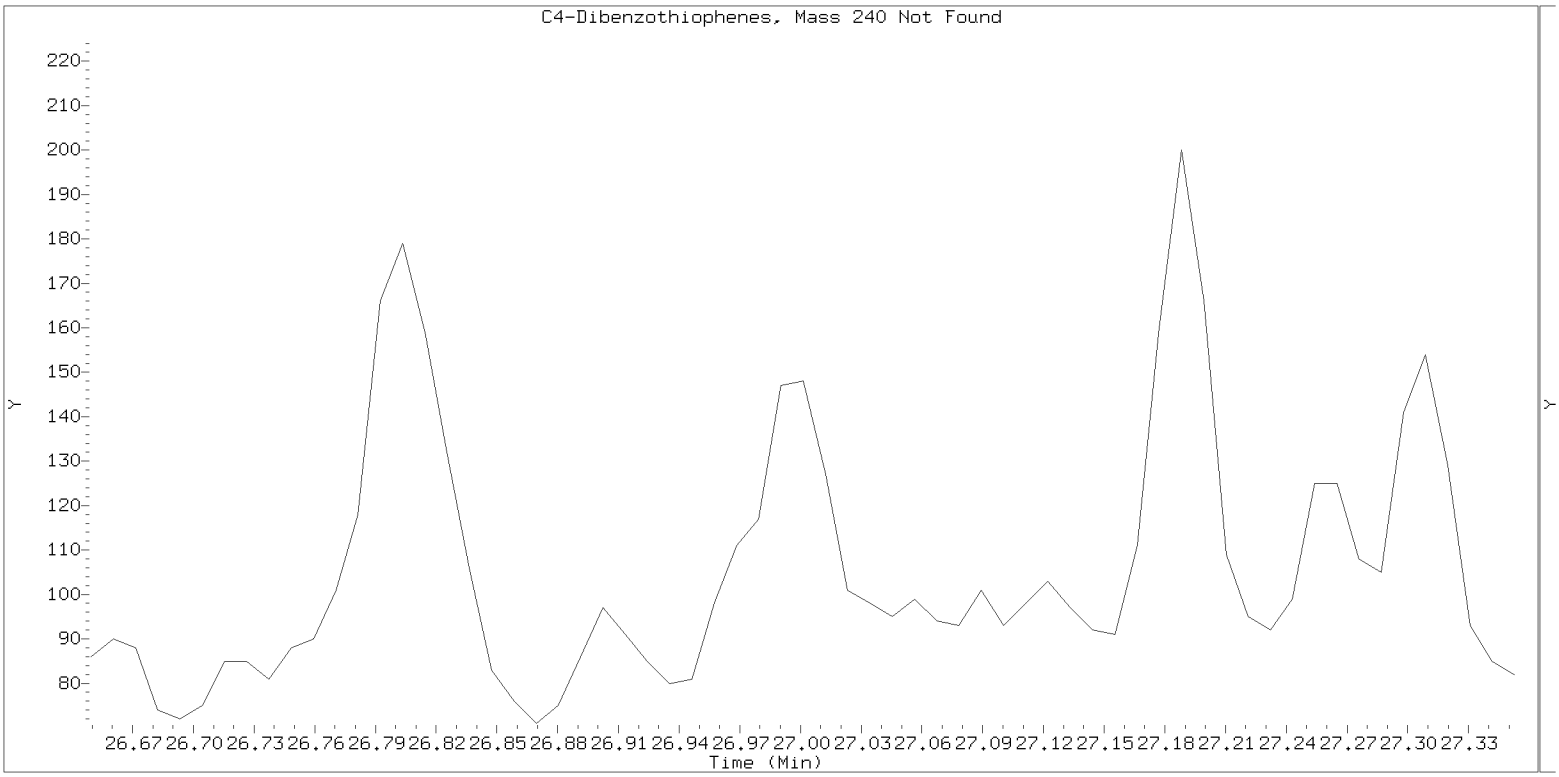

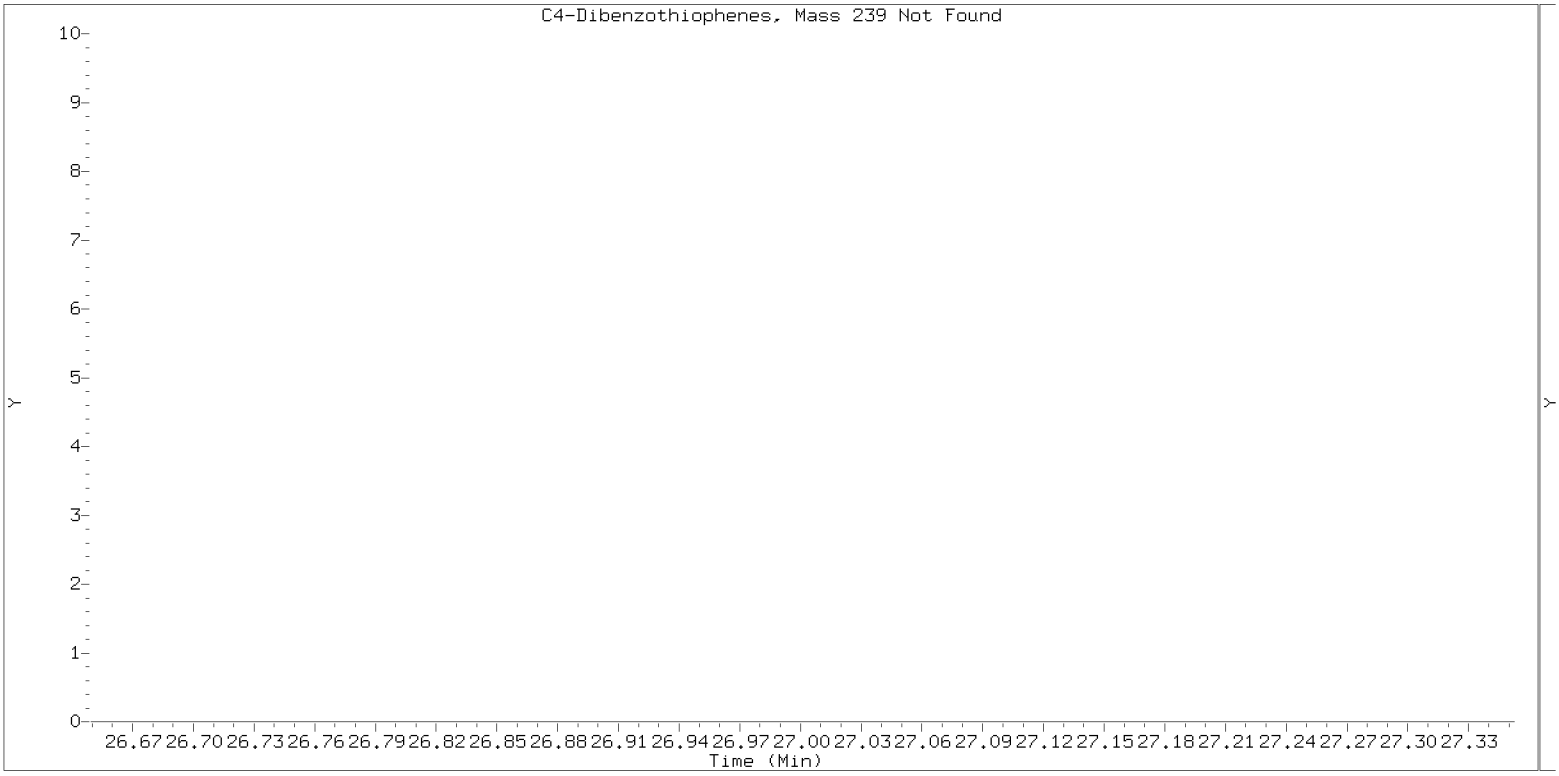

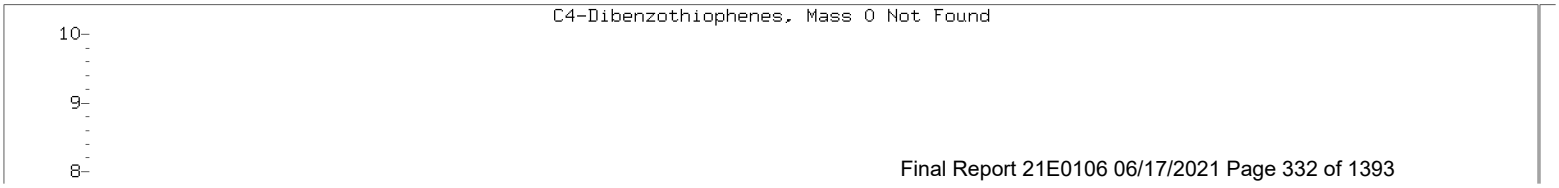

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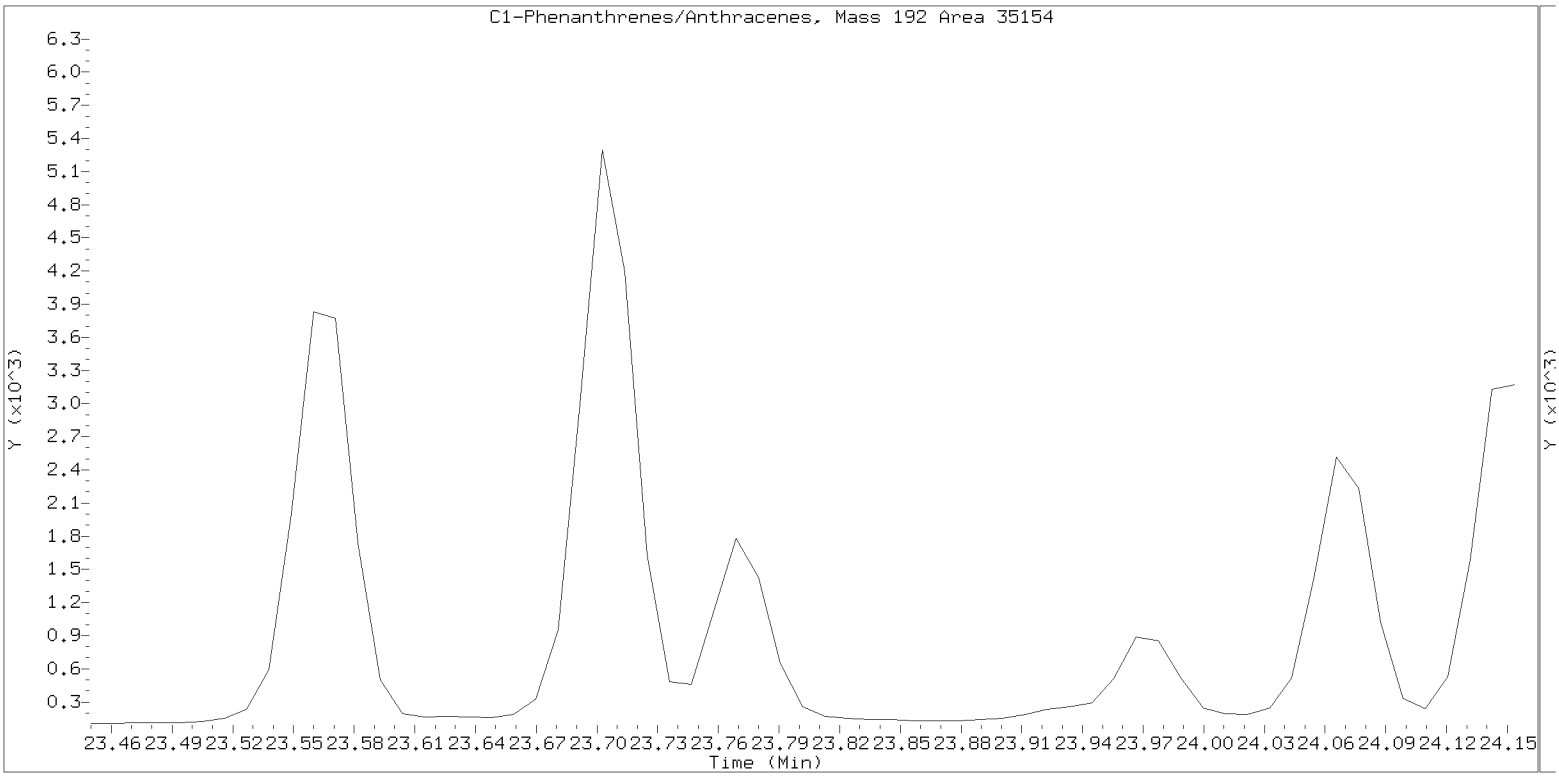

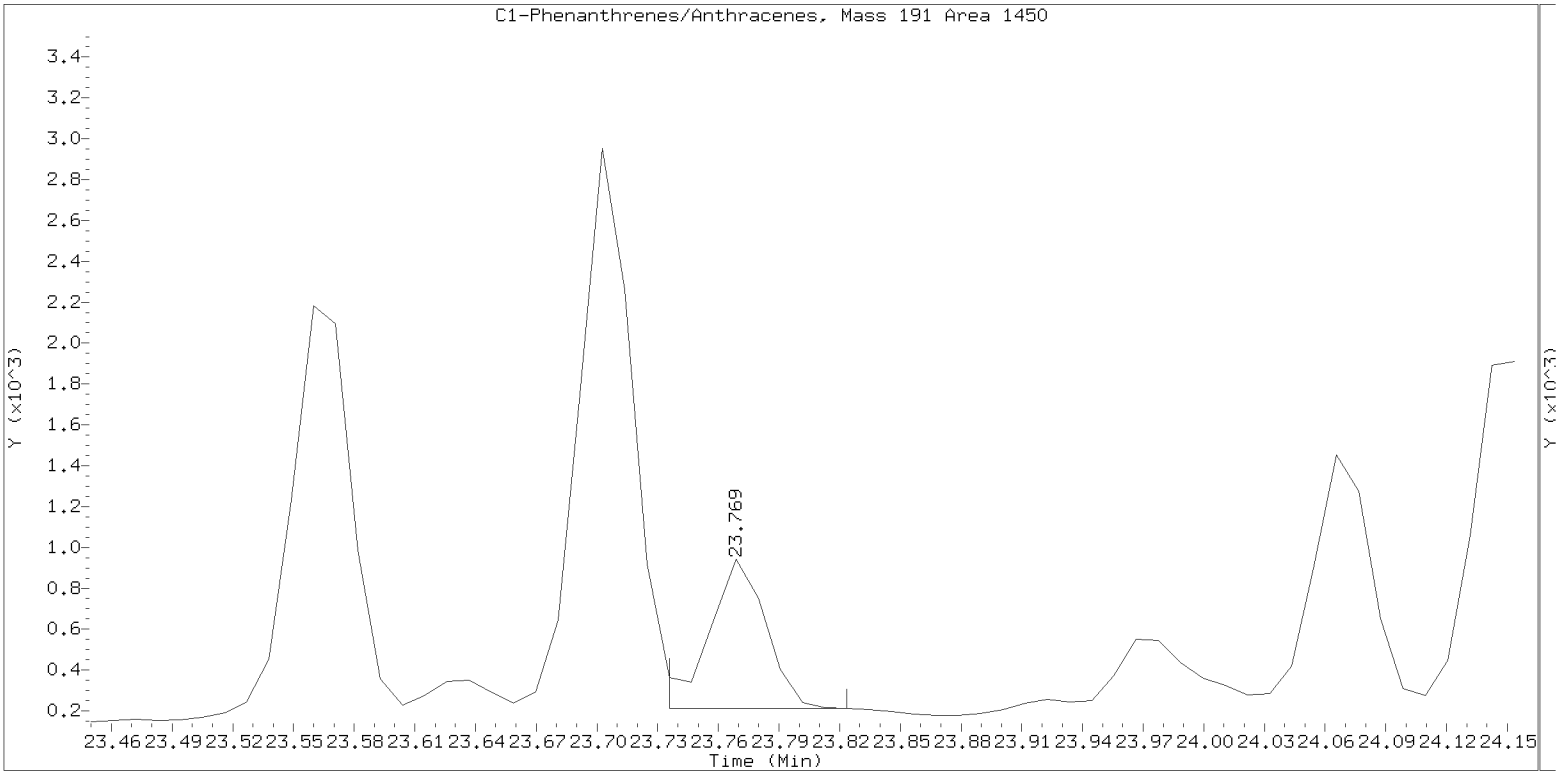

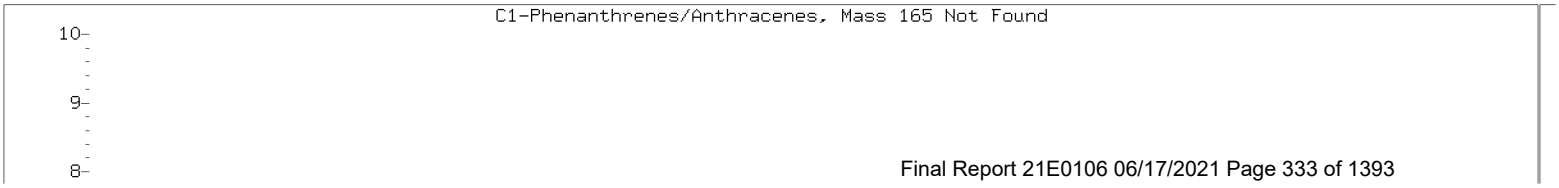

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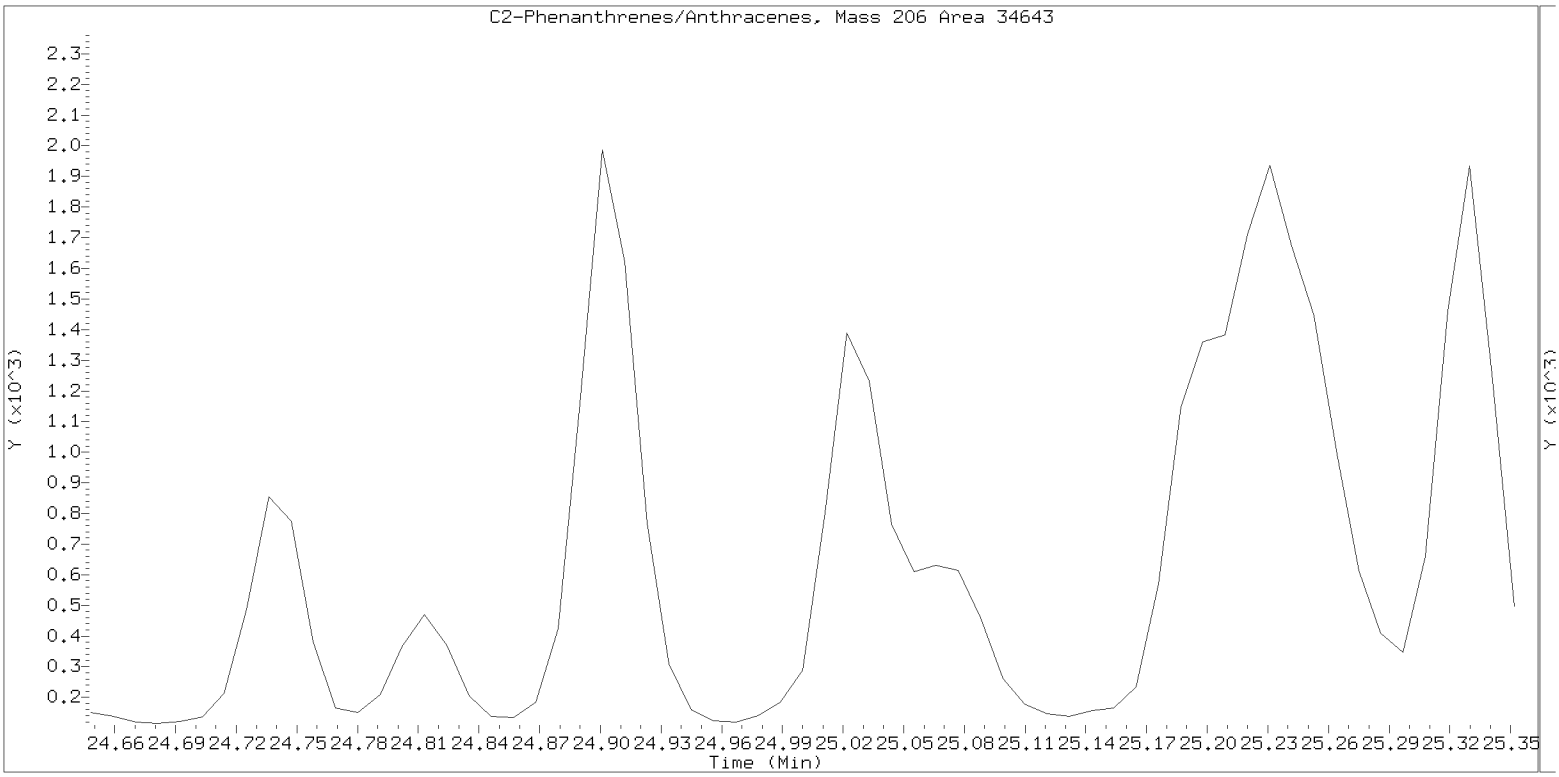

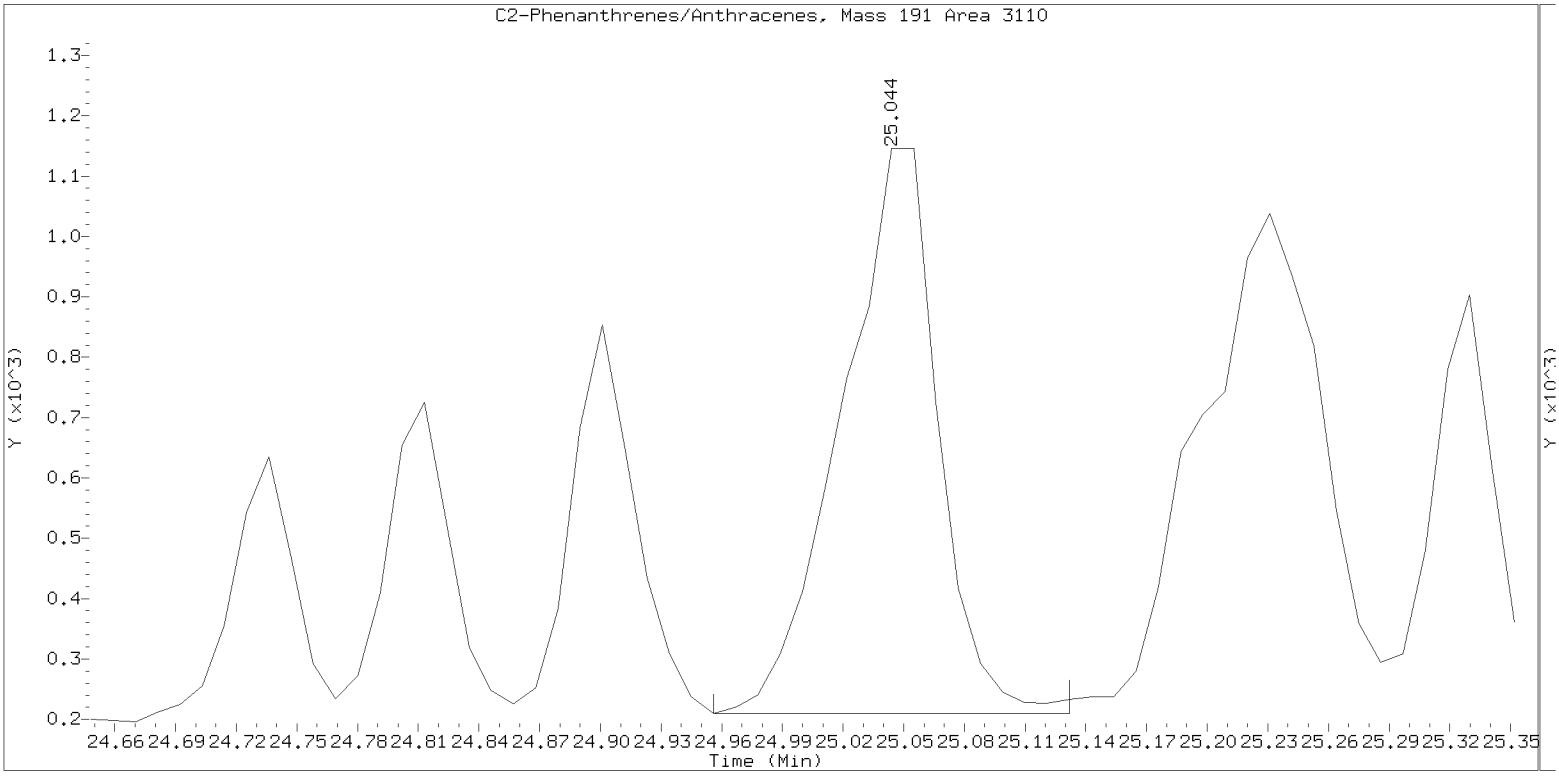

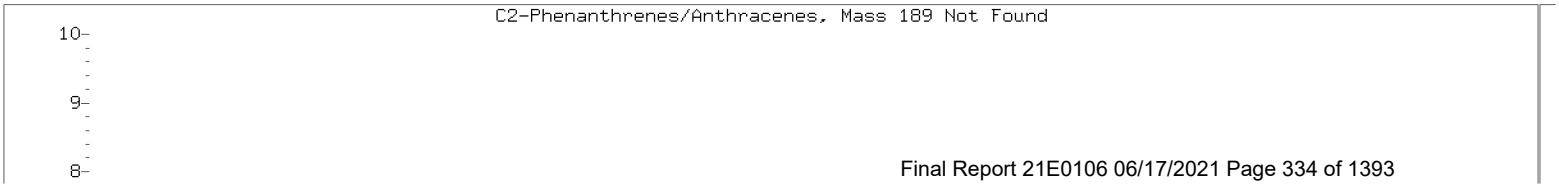

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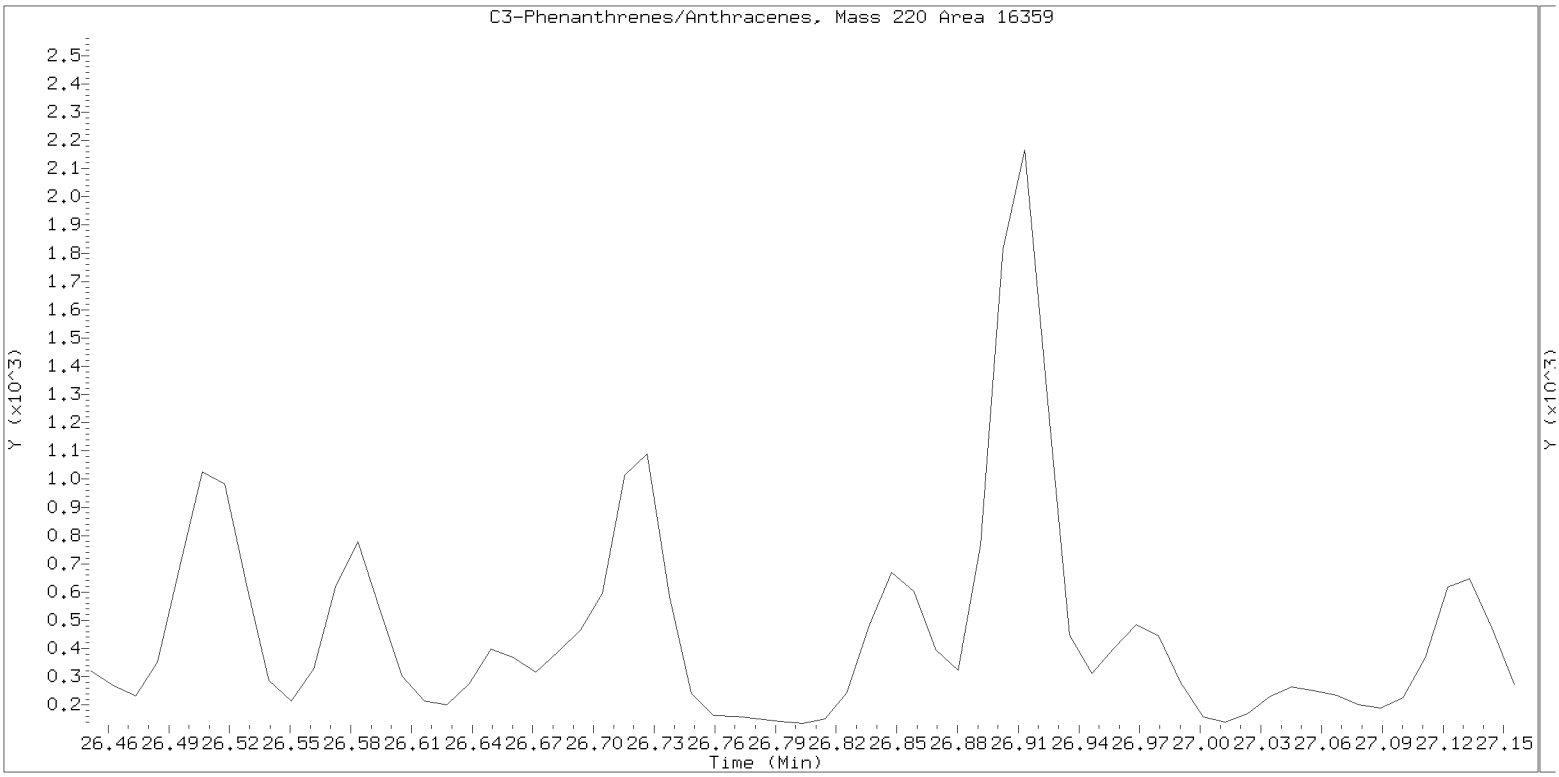

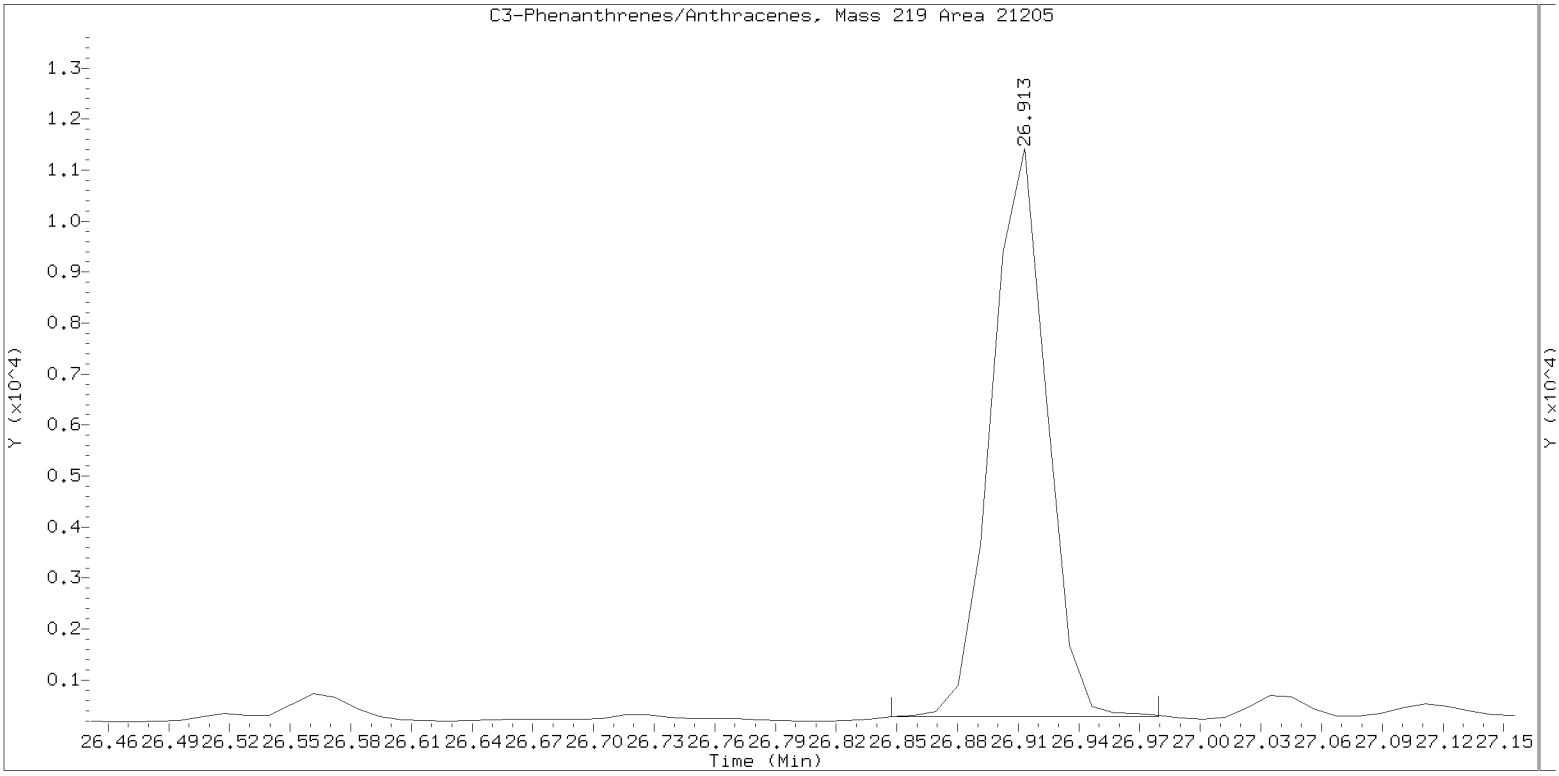

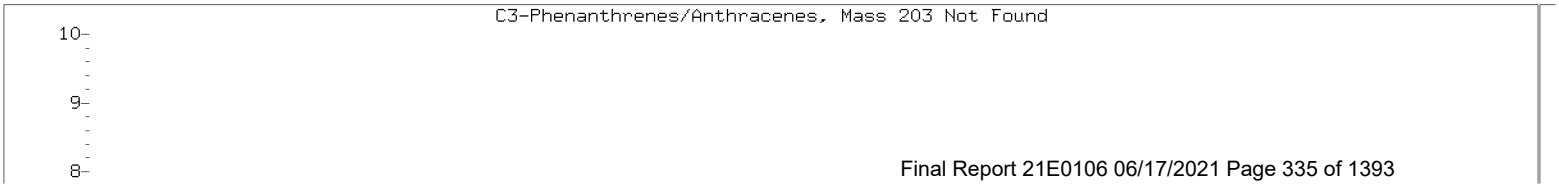

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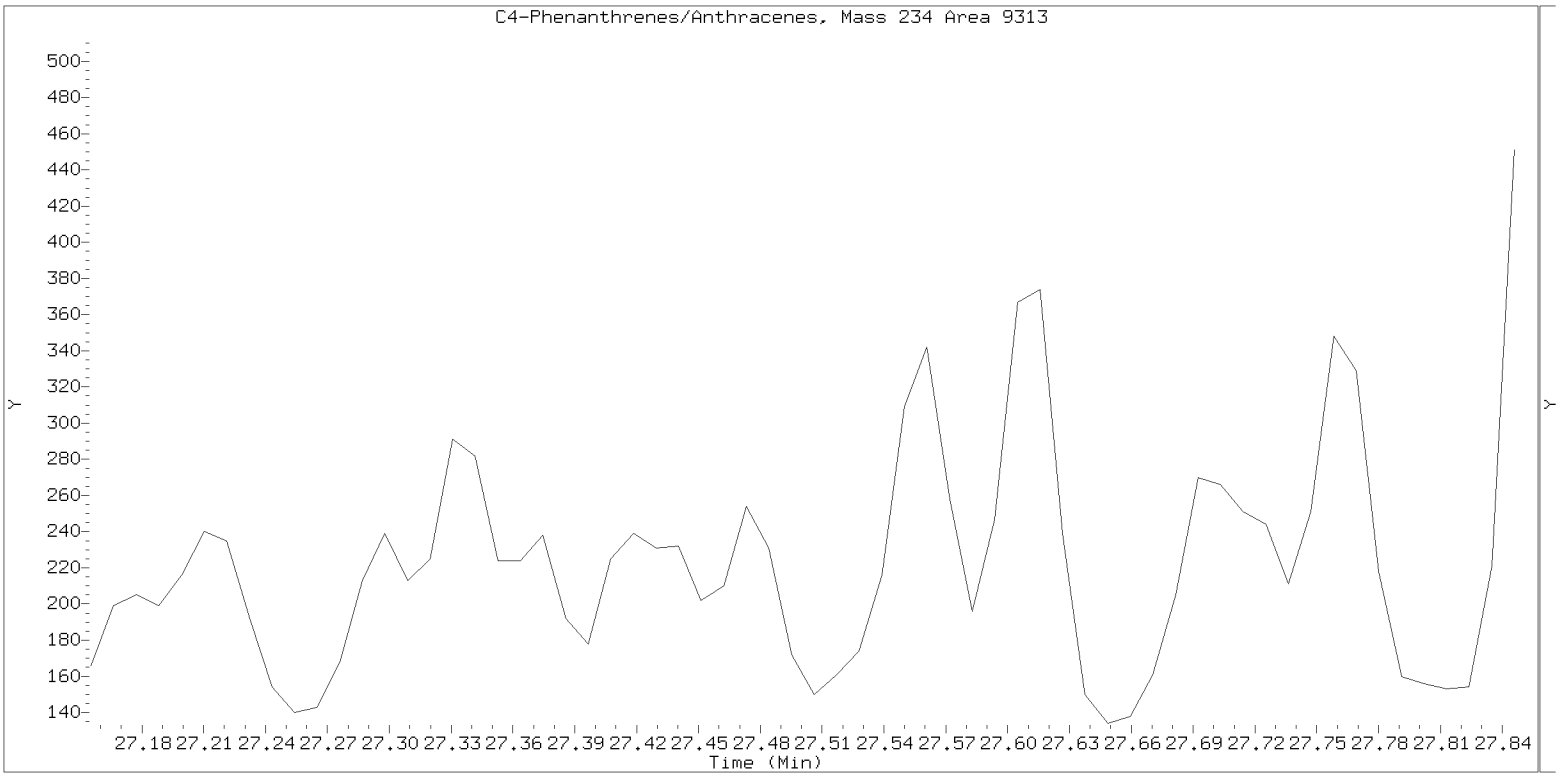

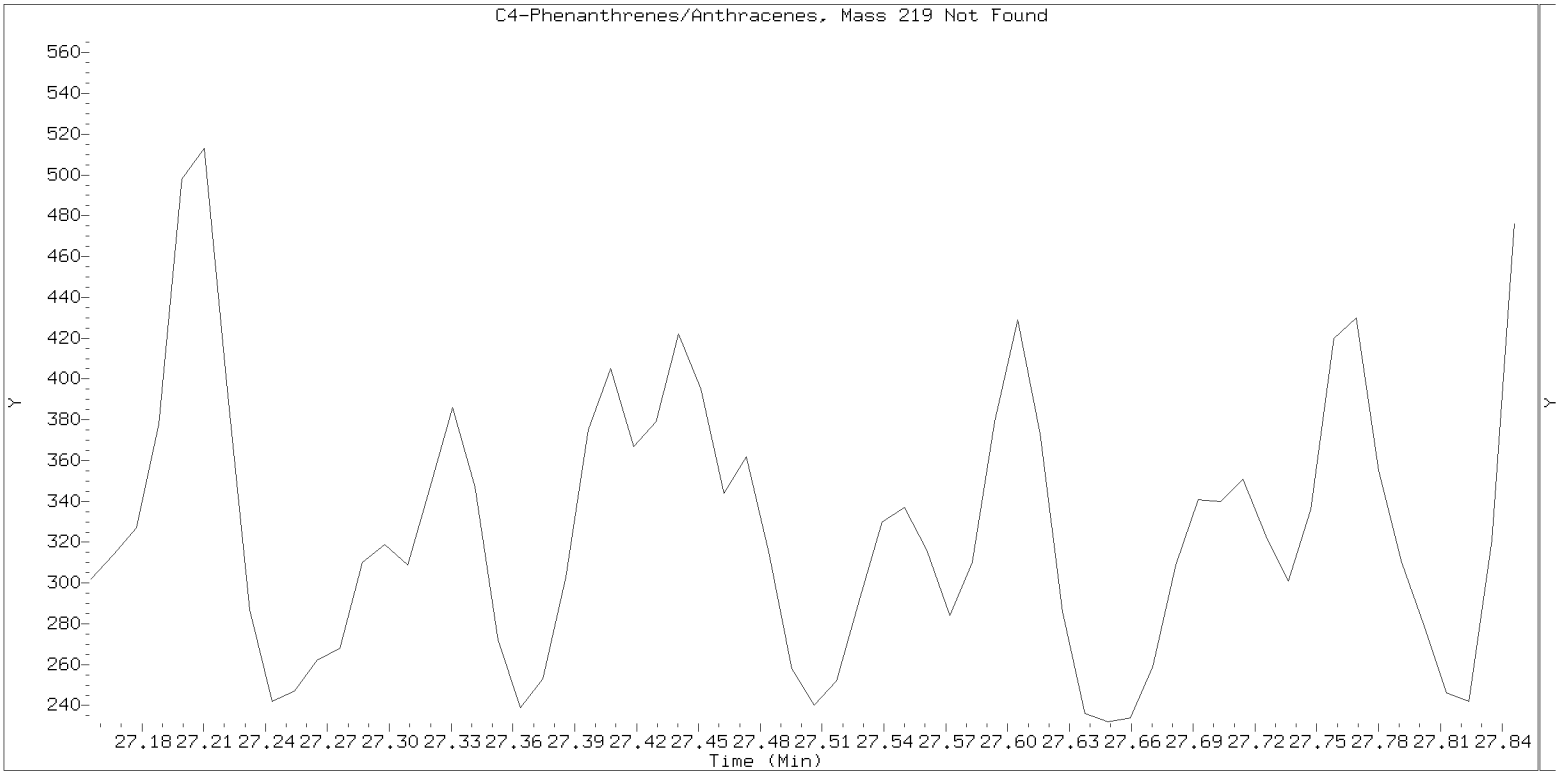

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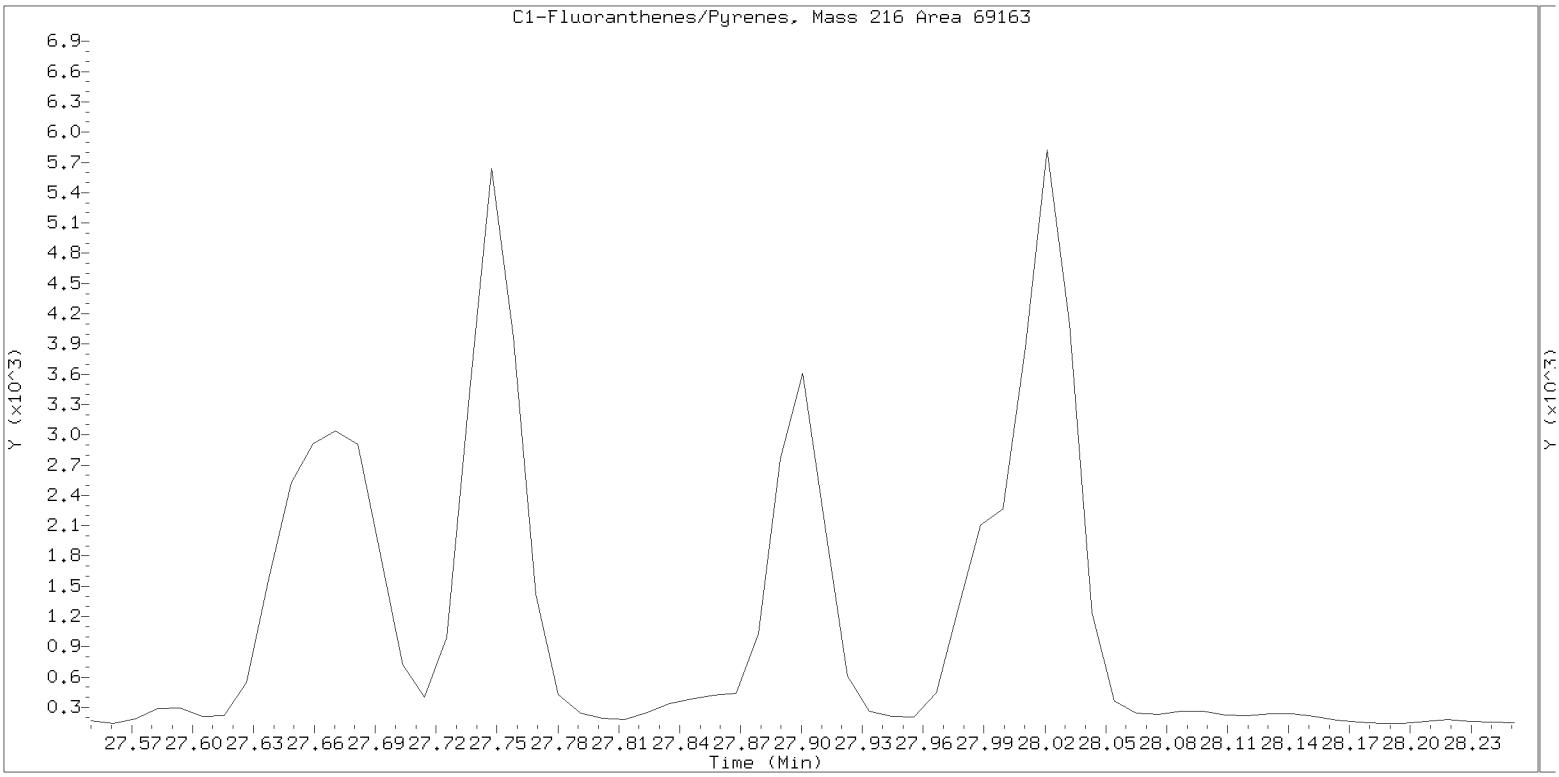

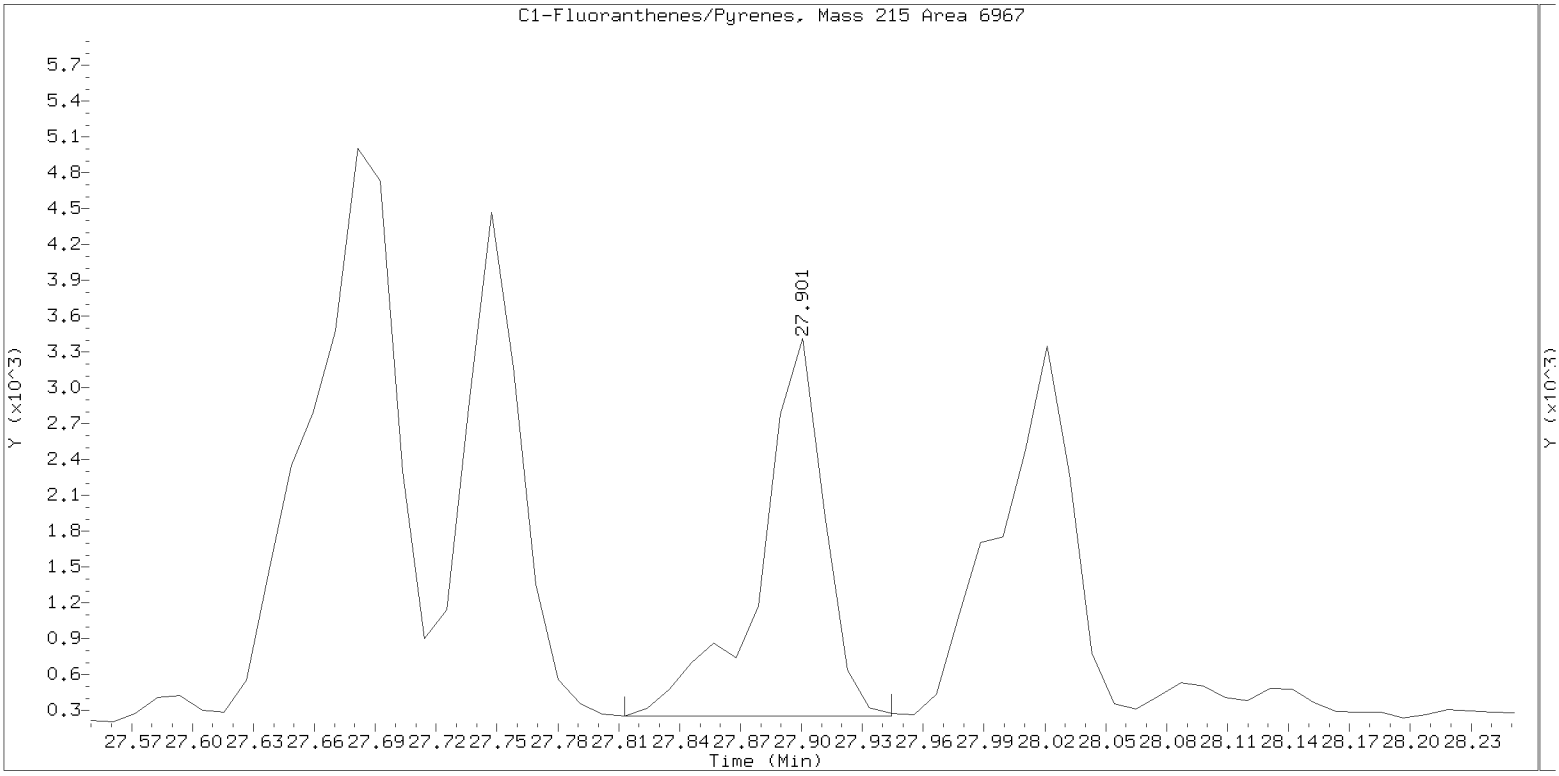

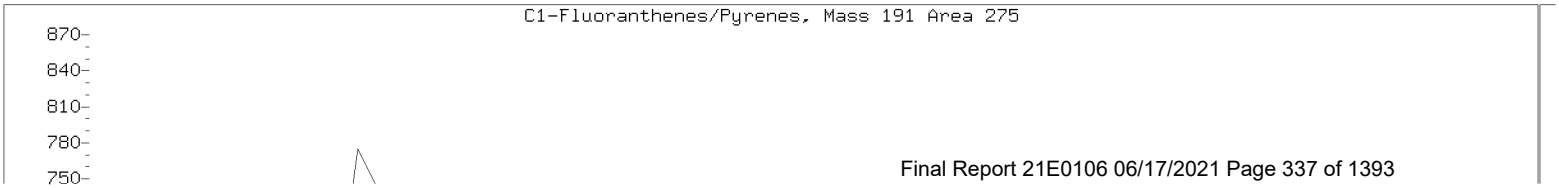

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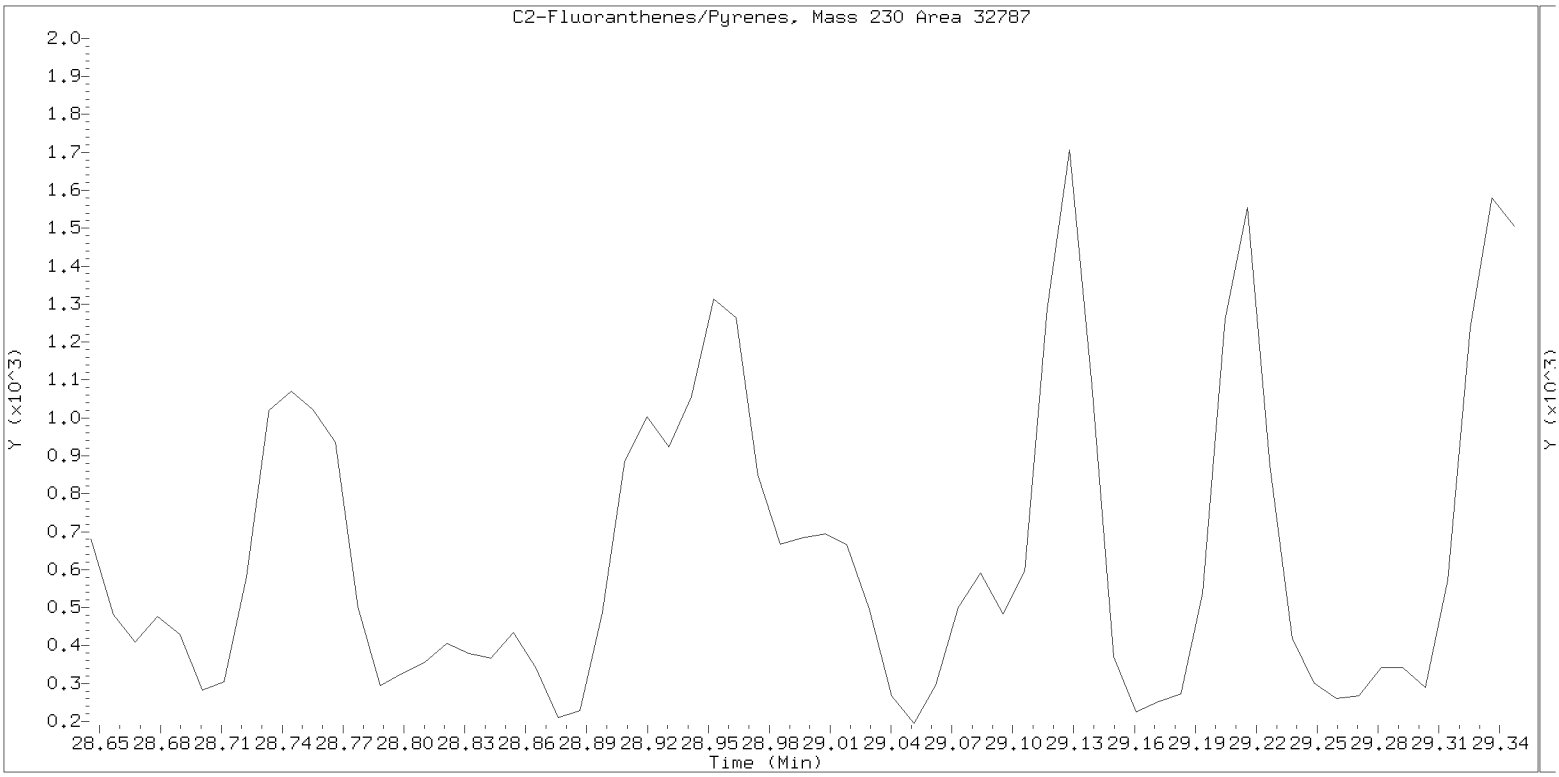

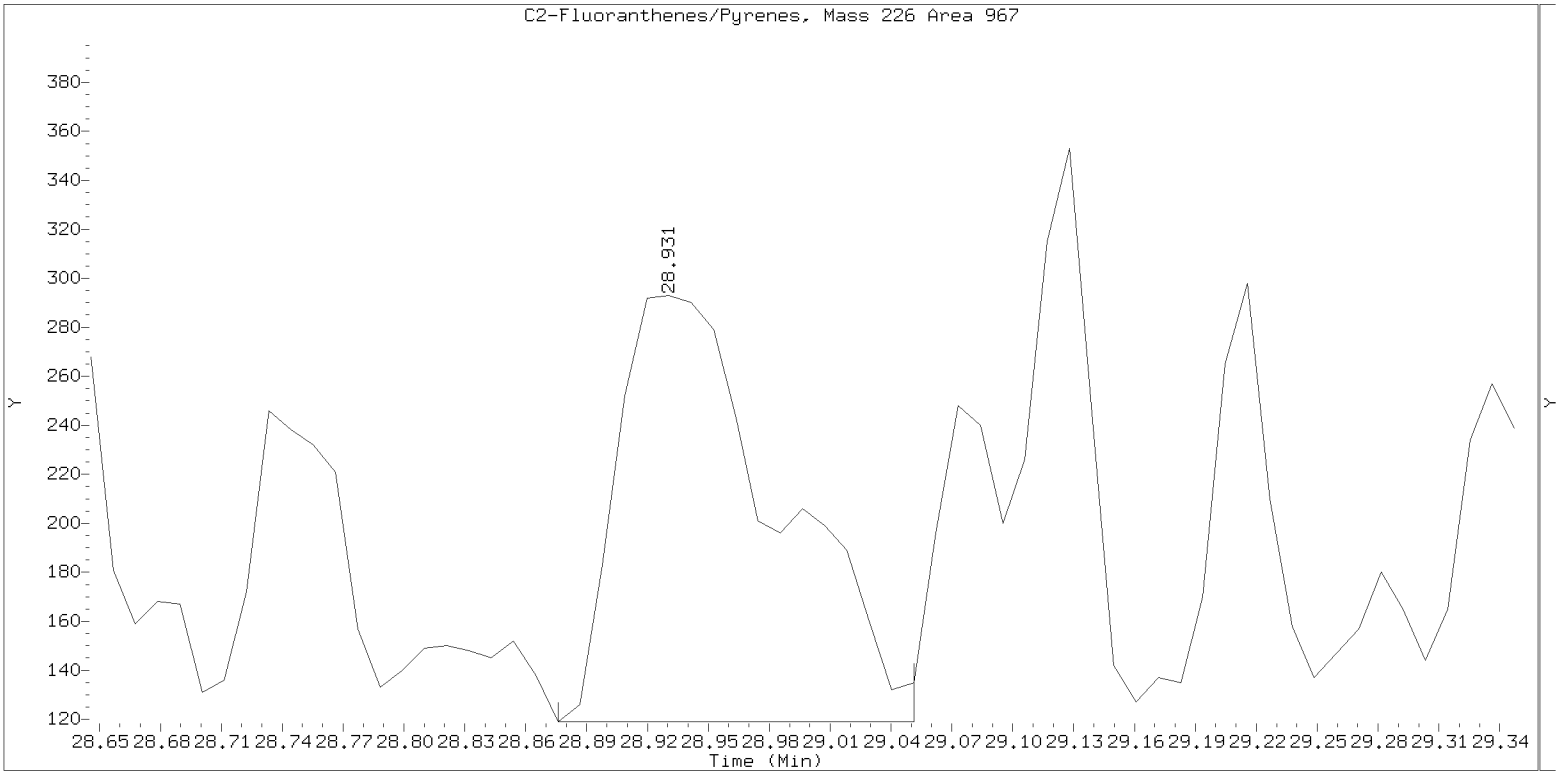

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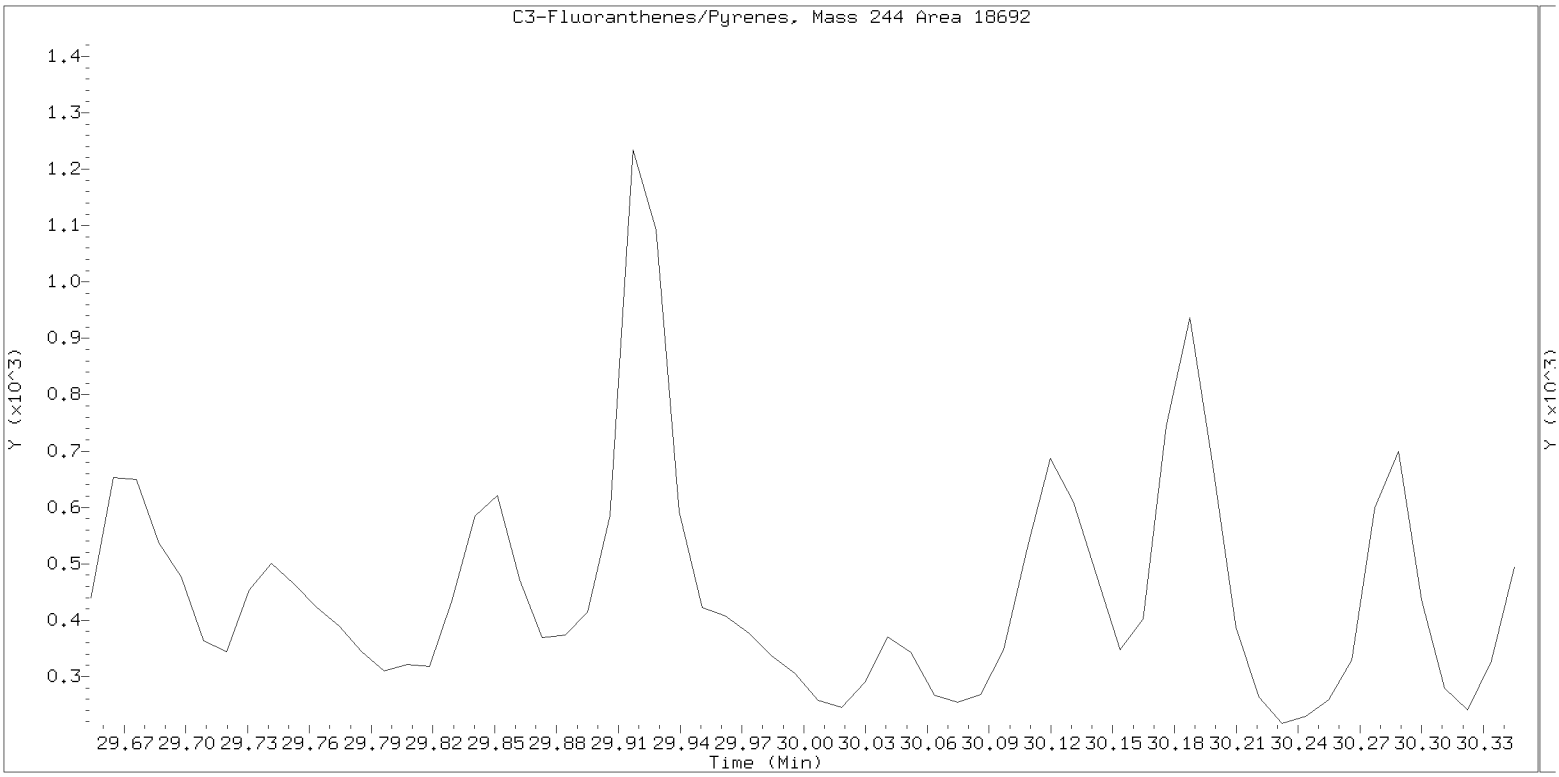

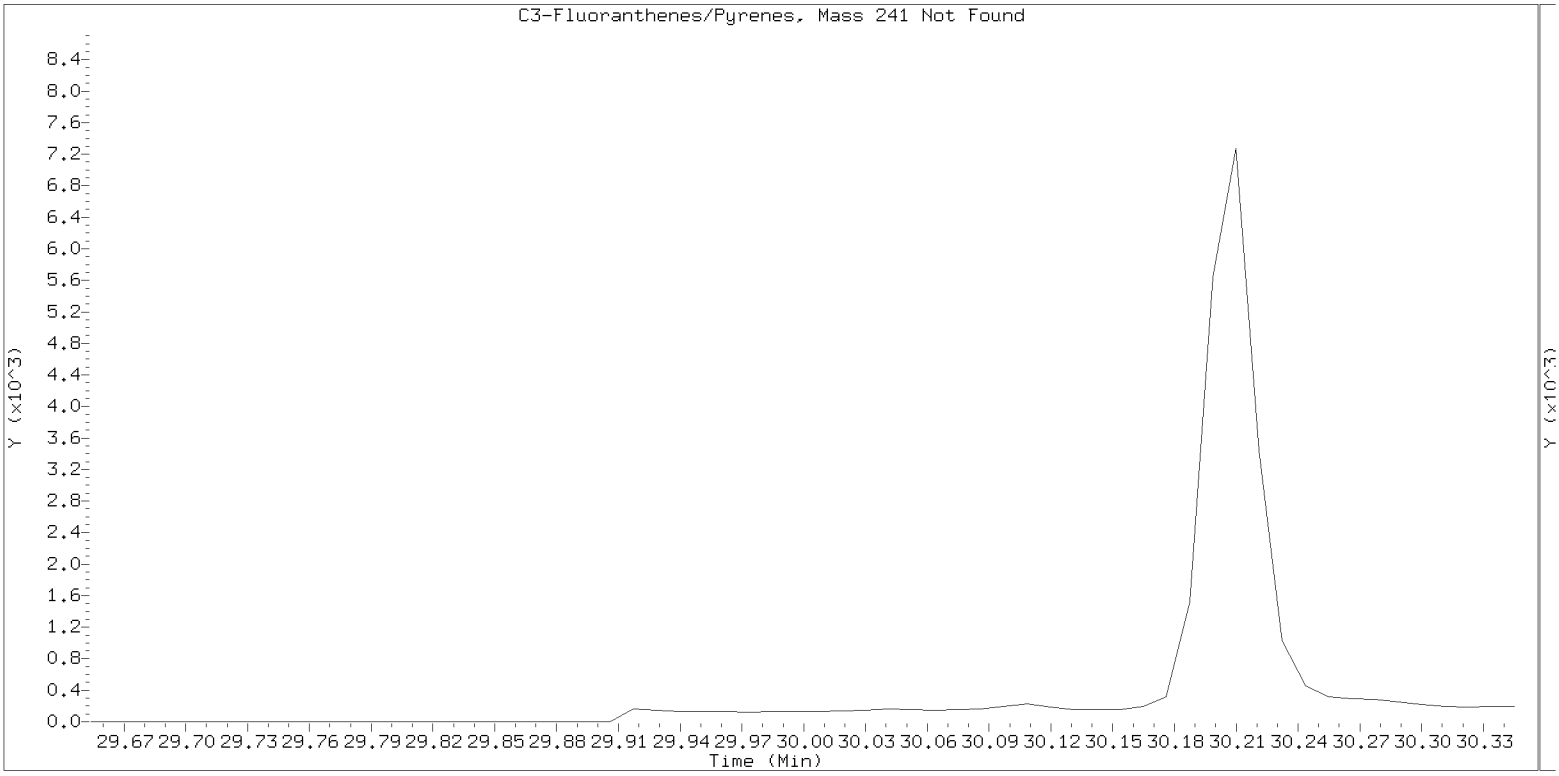

SIM ALKYL PNA RANGE ION WINDOWS - NT1421060714S.D

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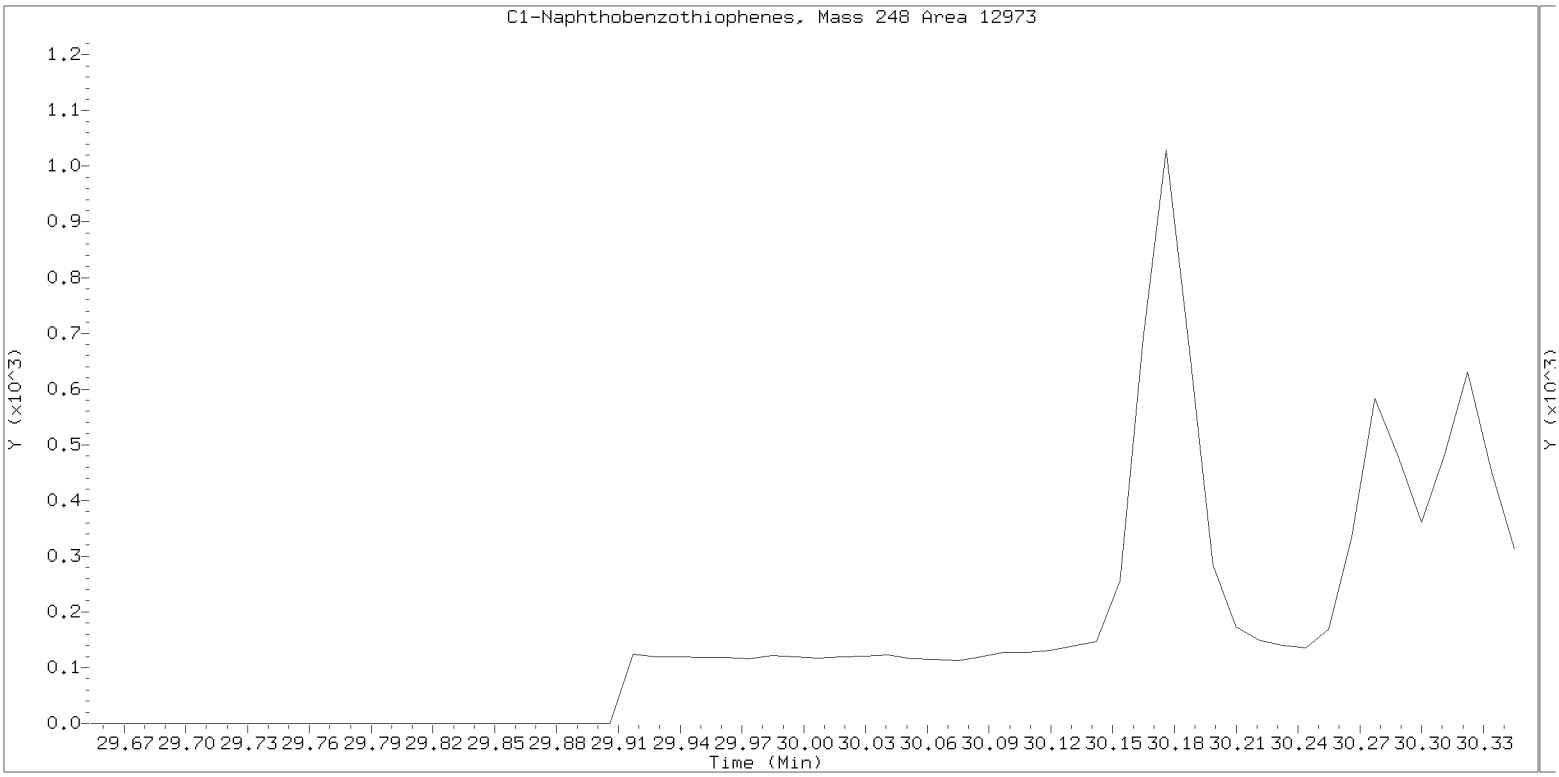

SIM ALKYL PNA RANGE ION WINDOWS - NT1421060714S.D

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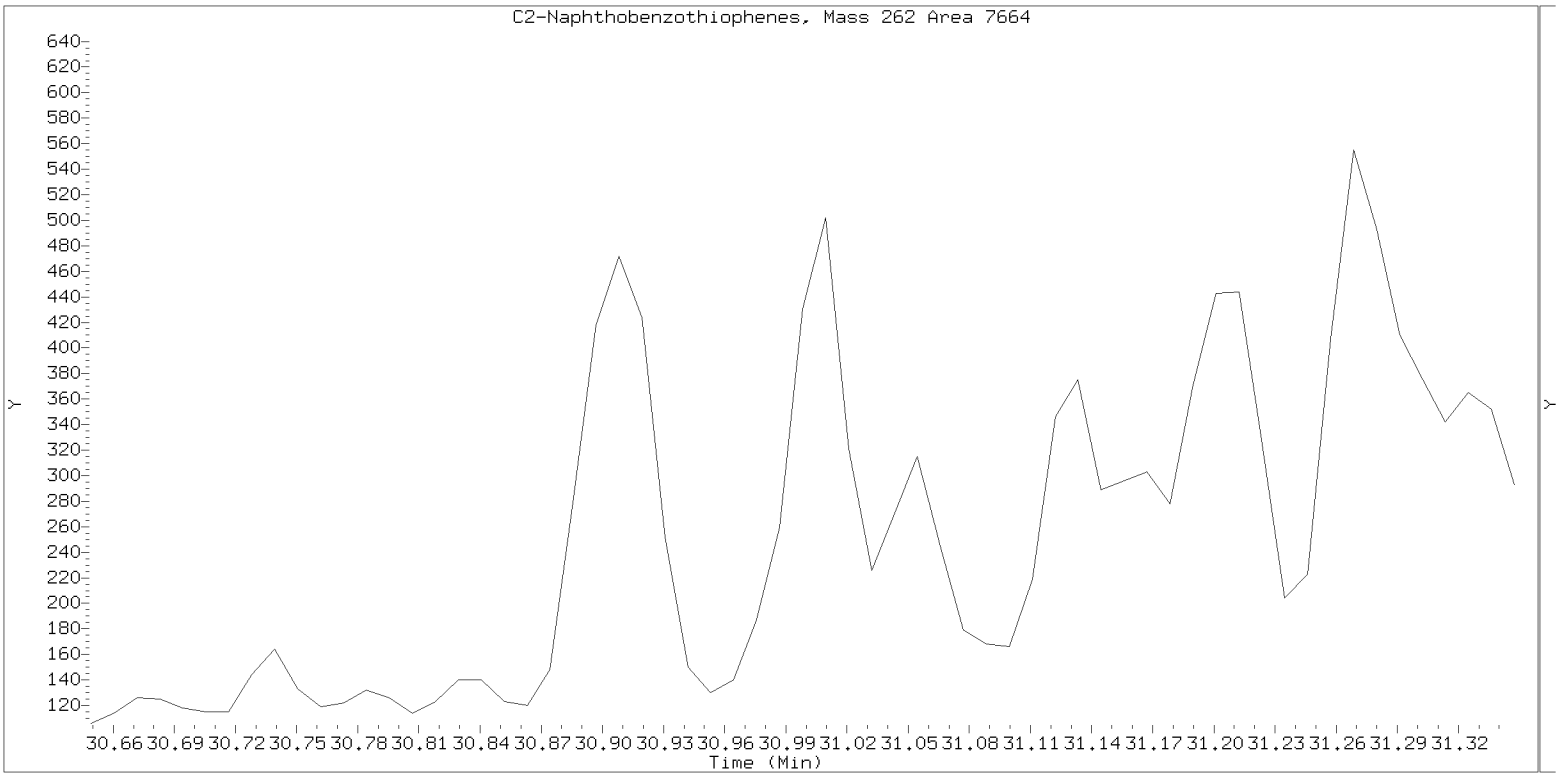

SIM ALKYL PNA RANGE ION WINDOWS - NT1421060714S.D

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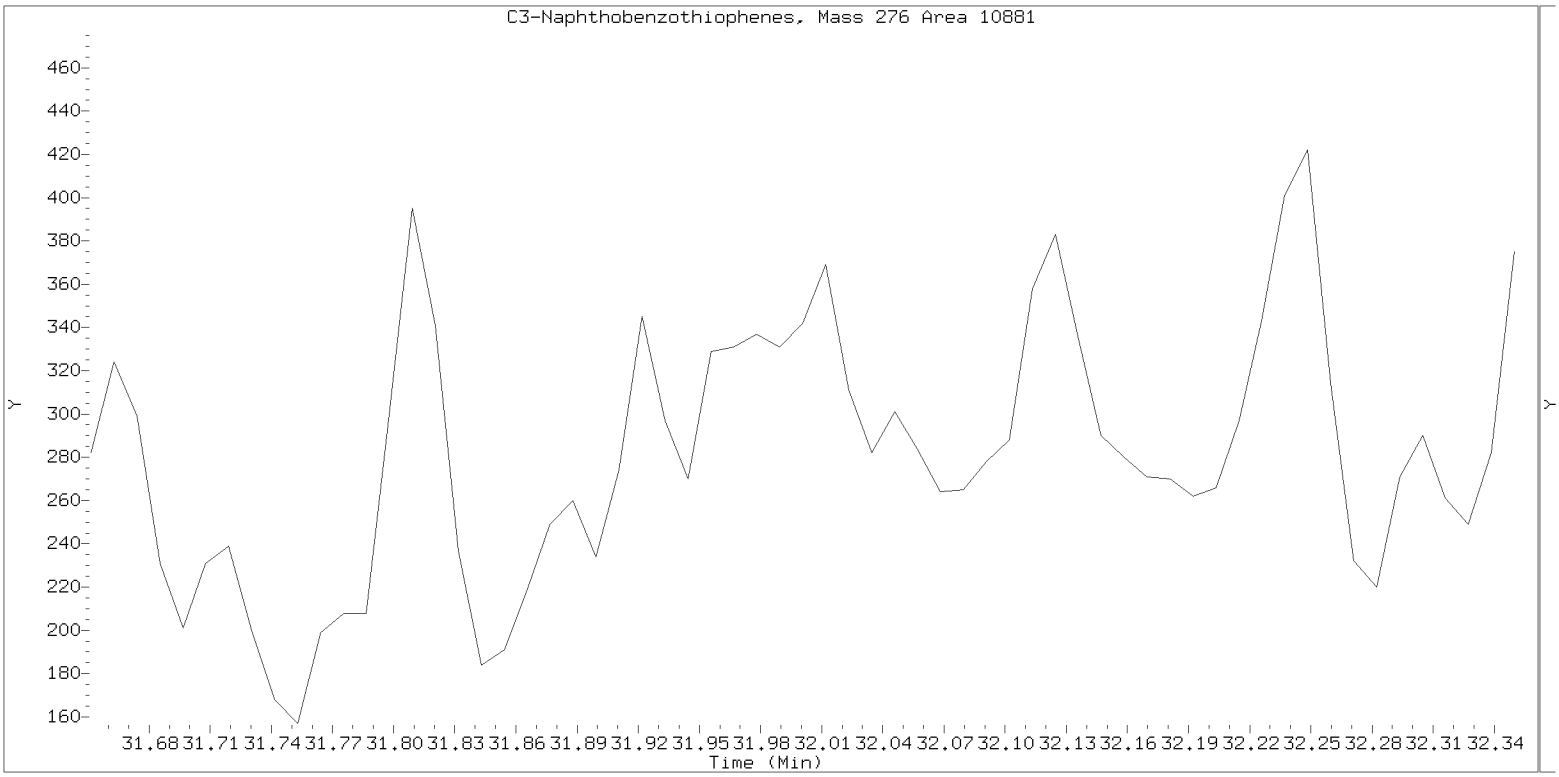

SIM ALKYL PNA RANGE ION WINDOWS - NT1421060714S.D

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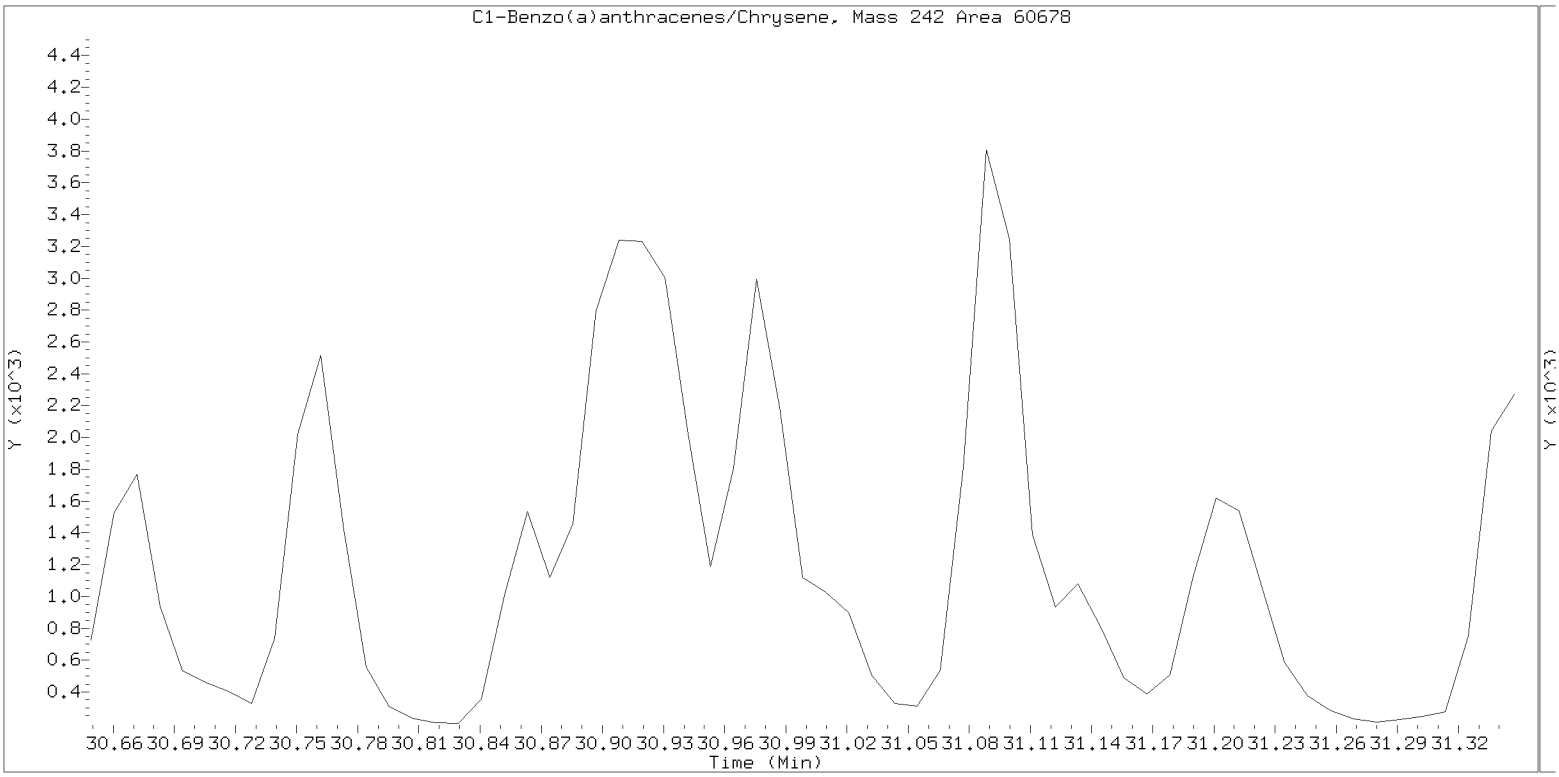

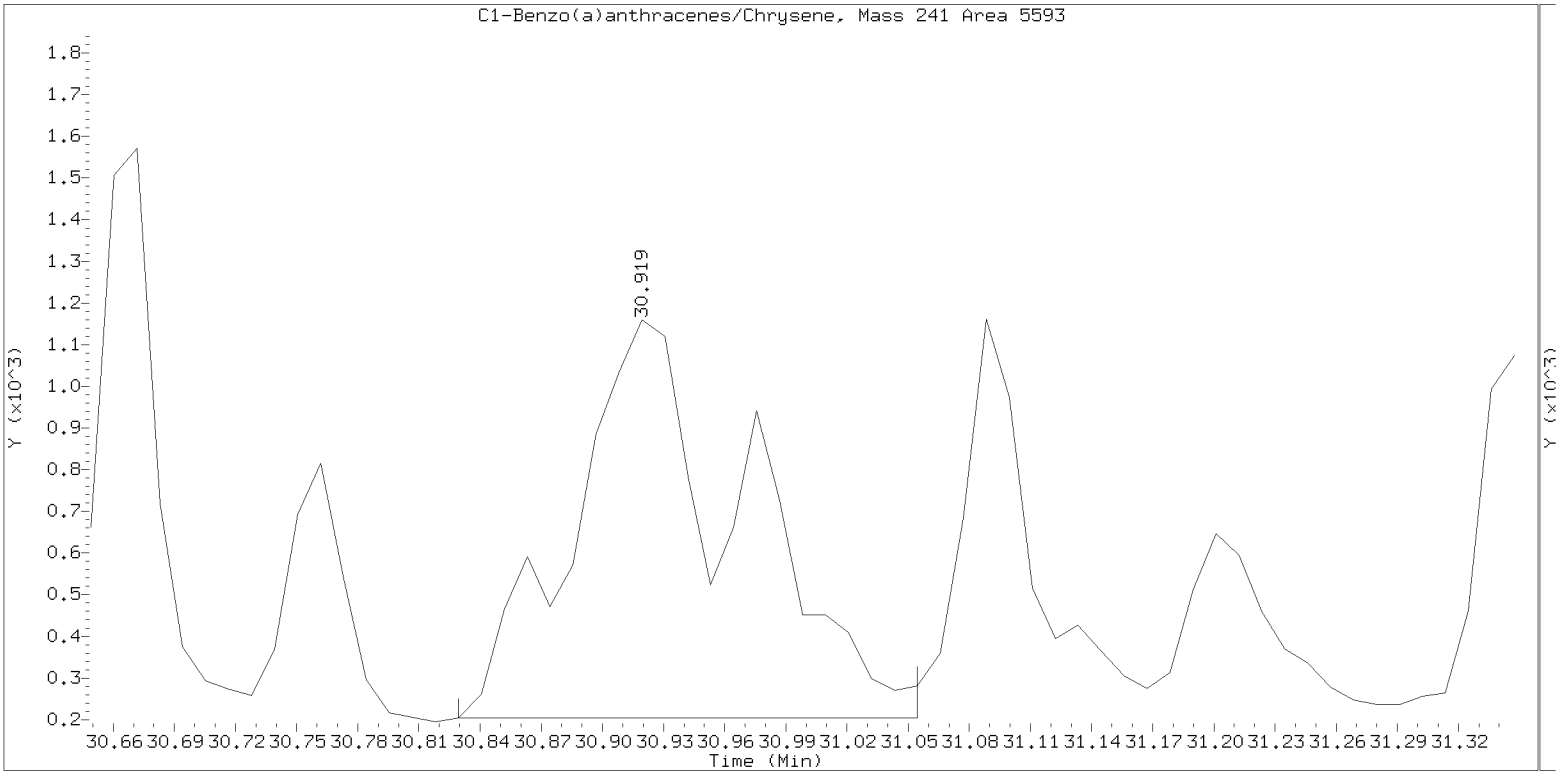

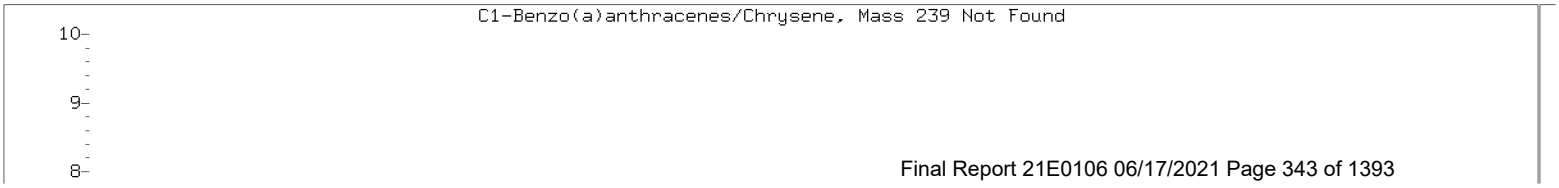

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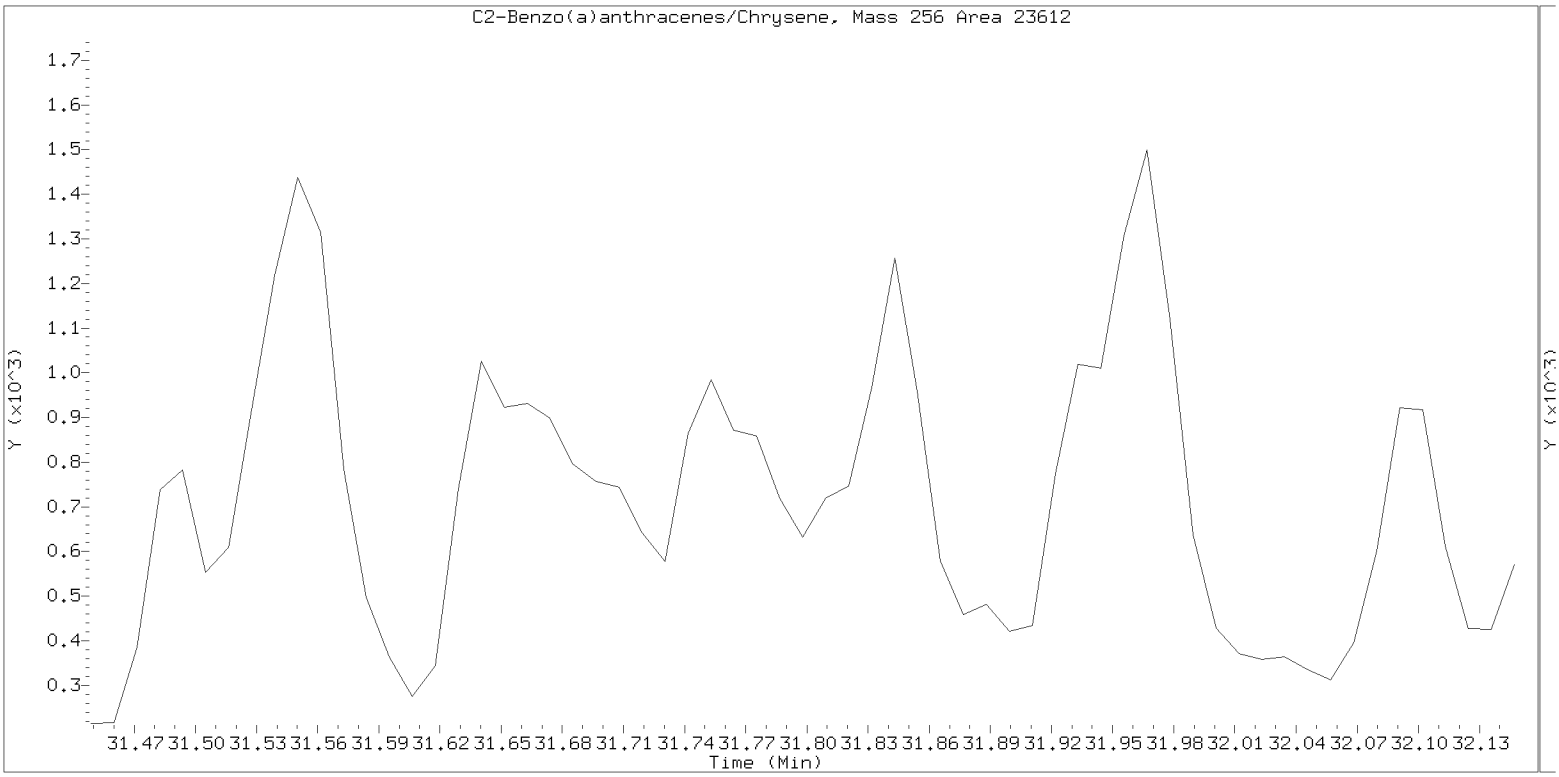

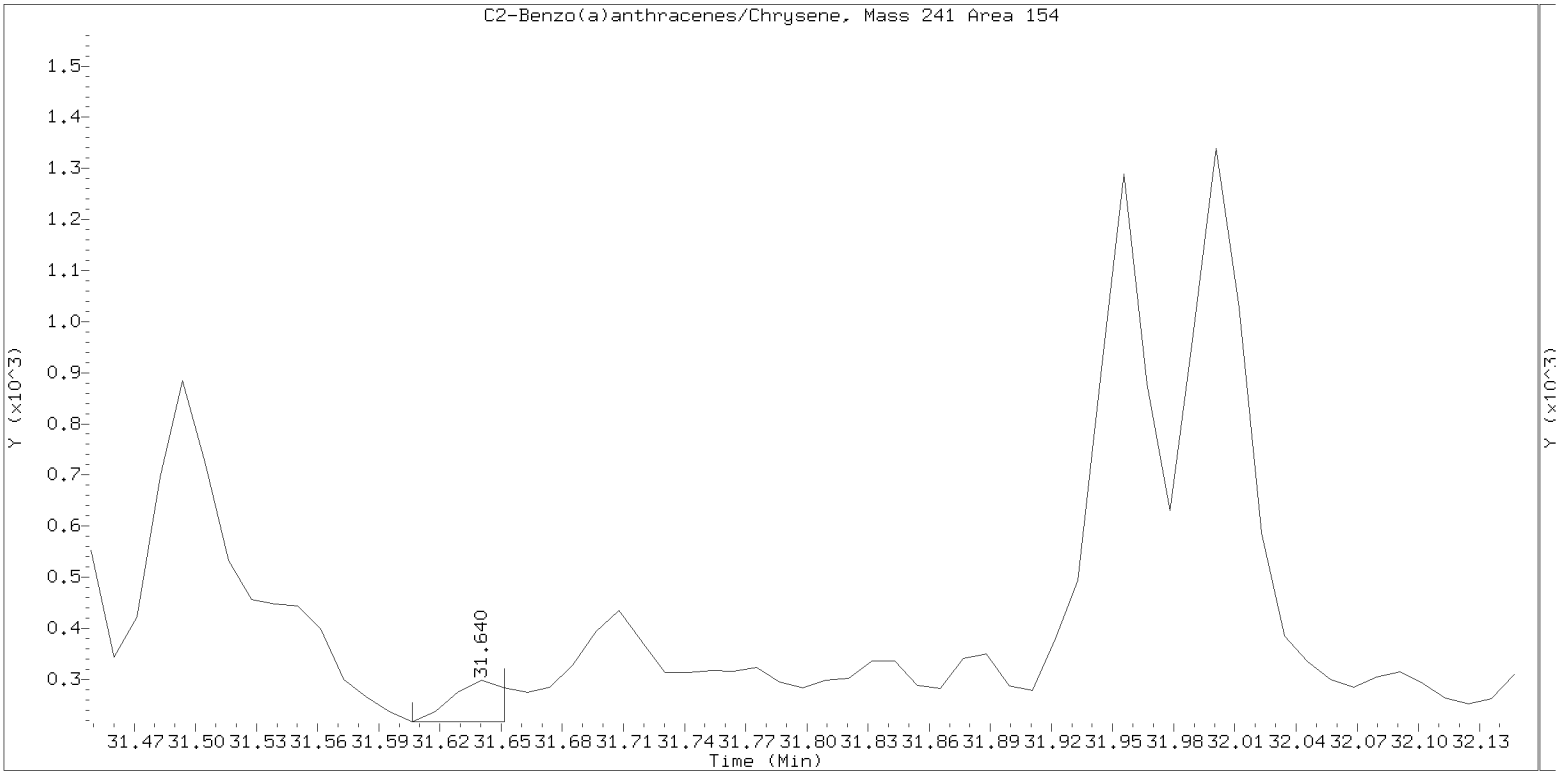

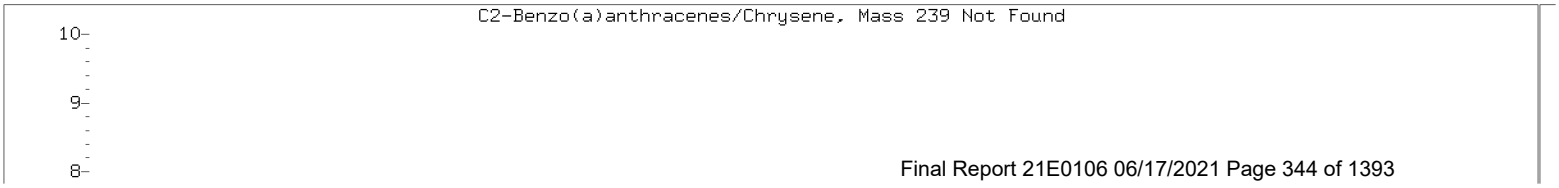

SIM ALKYL PNA RANGE ION WINDOWS - NT1421060714S.D

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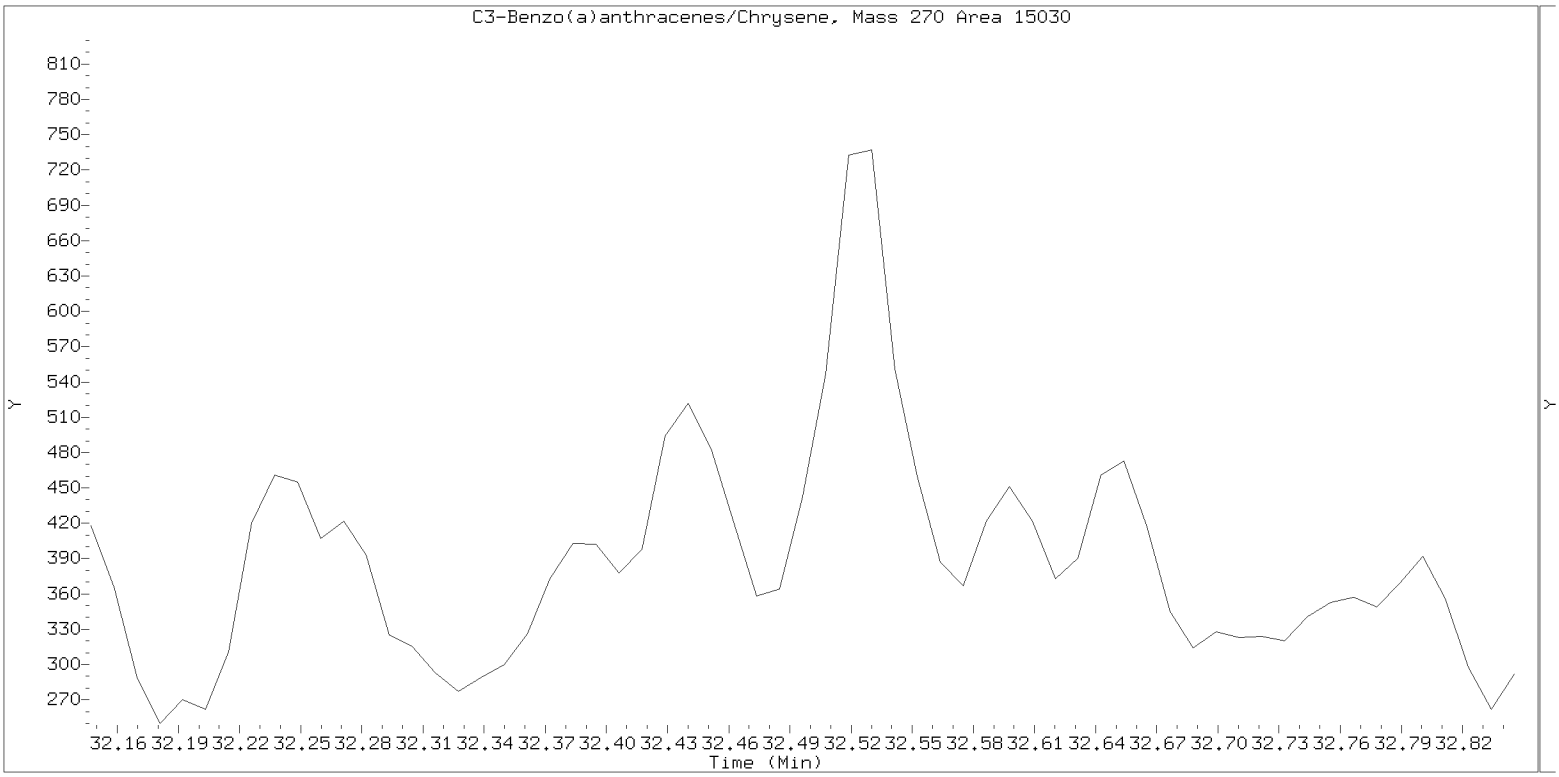

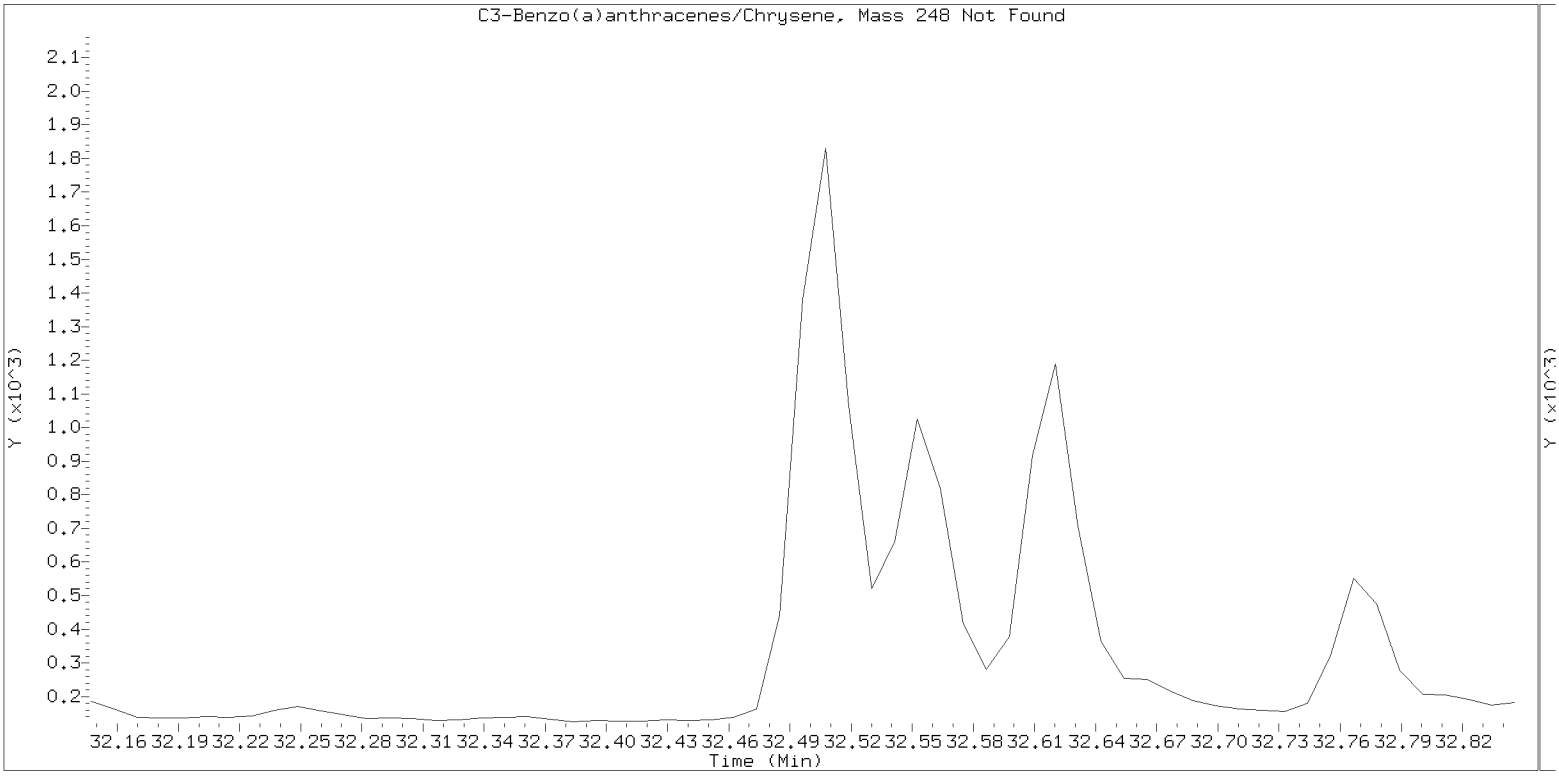

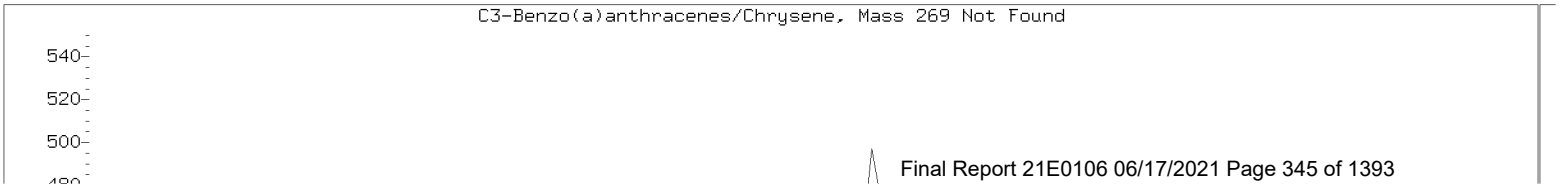

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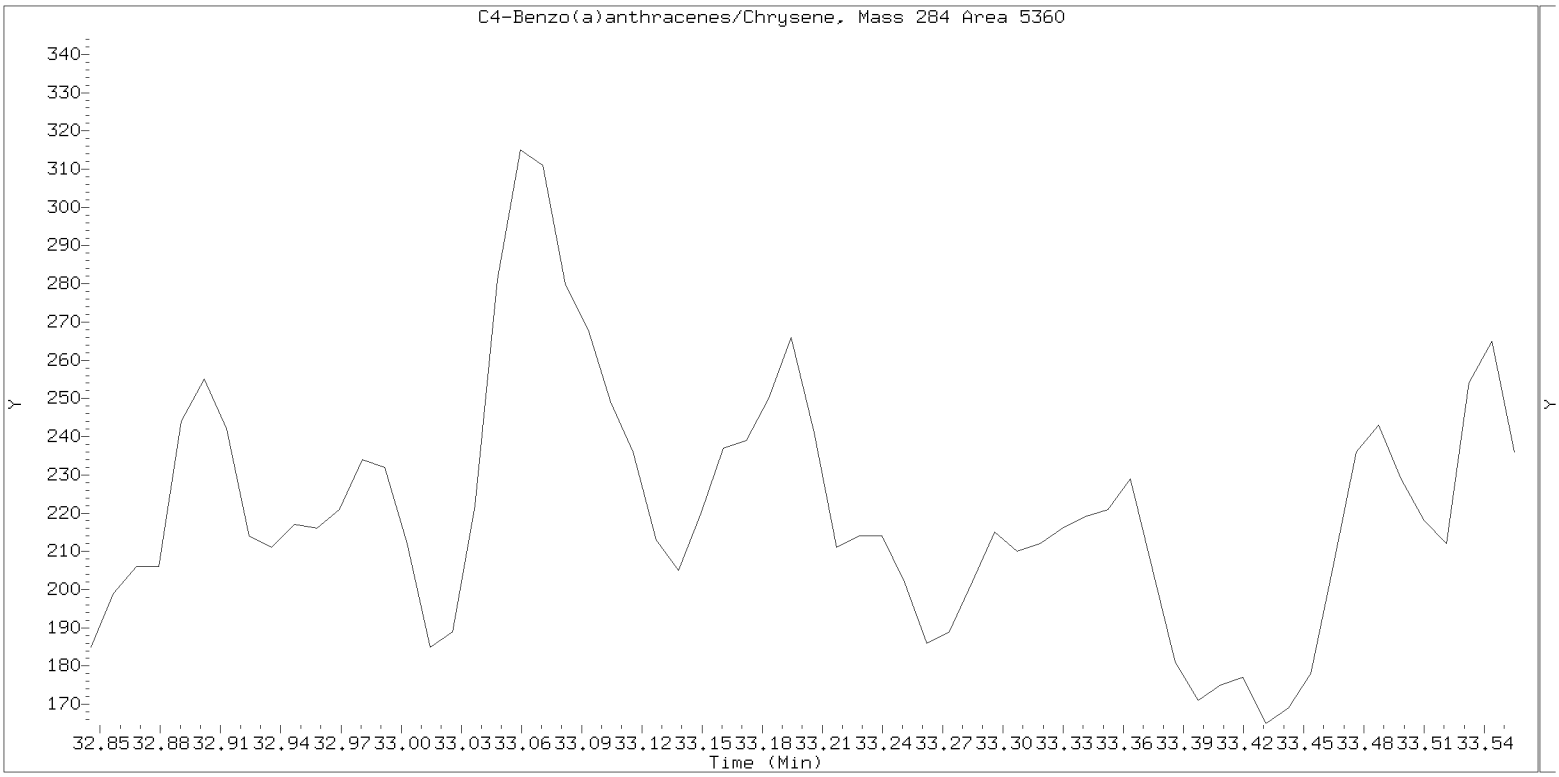

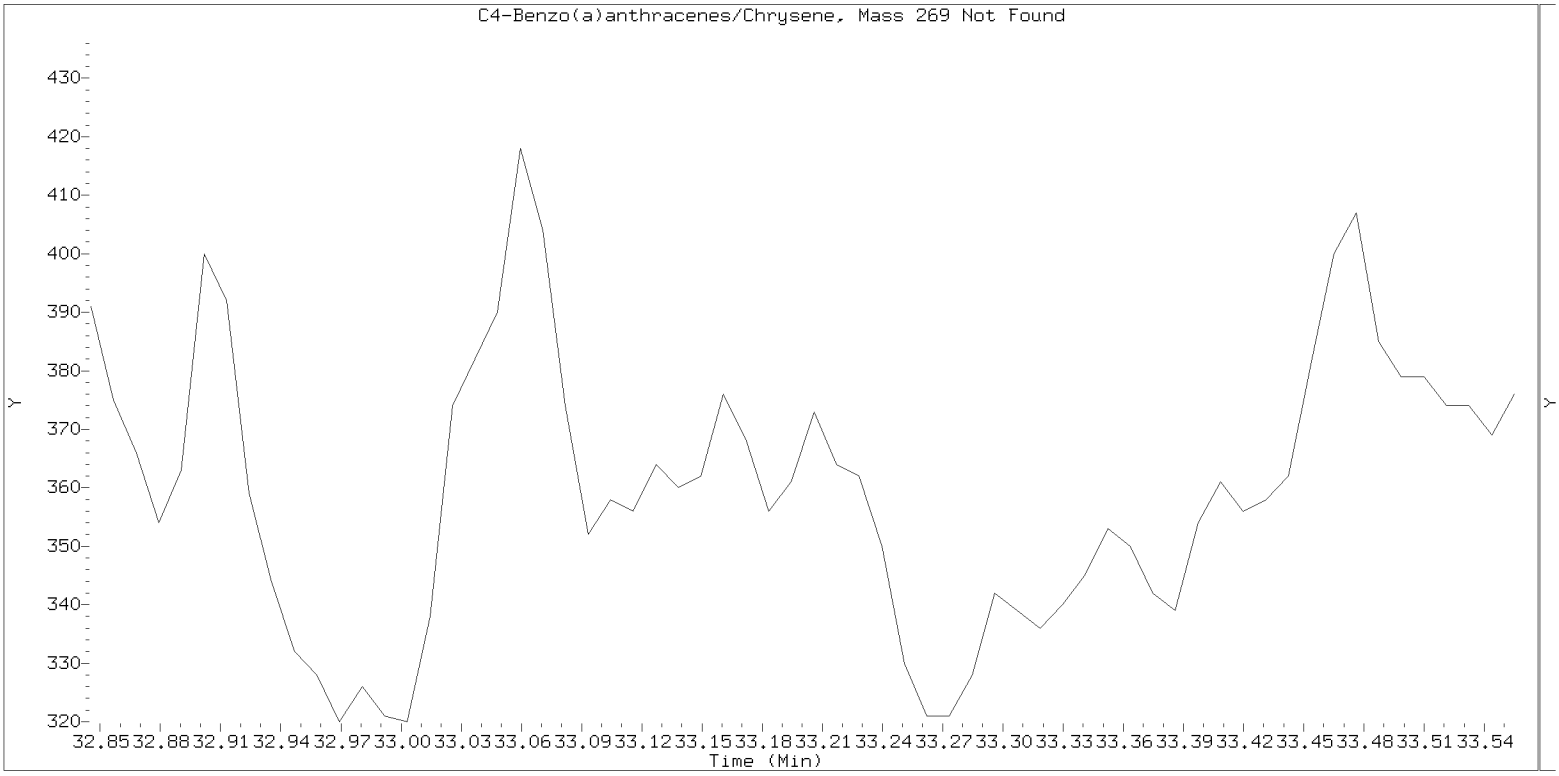

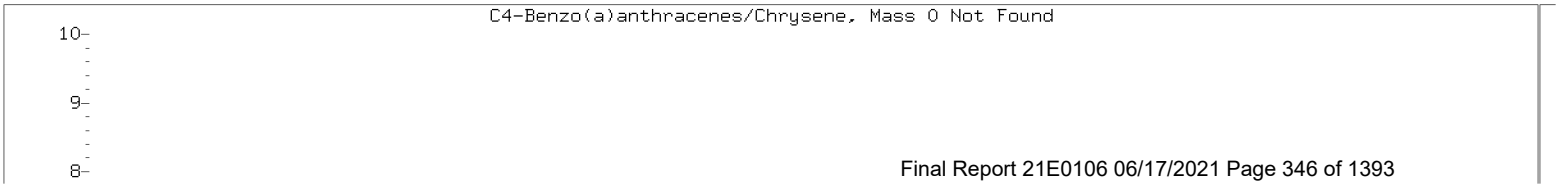

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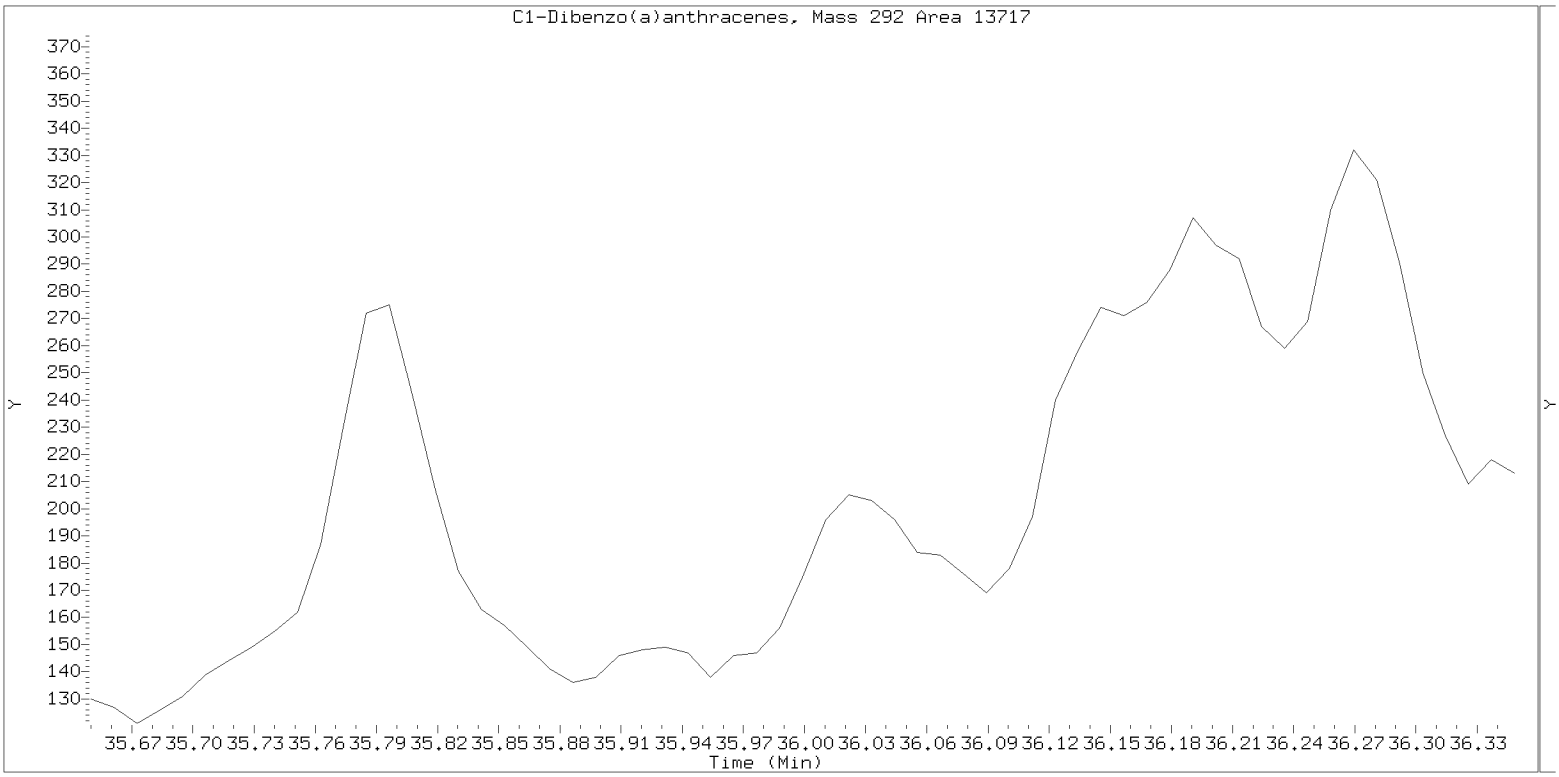

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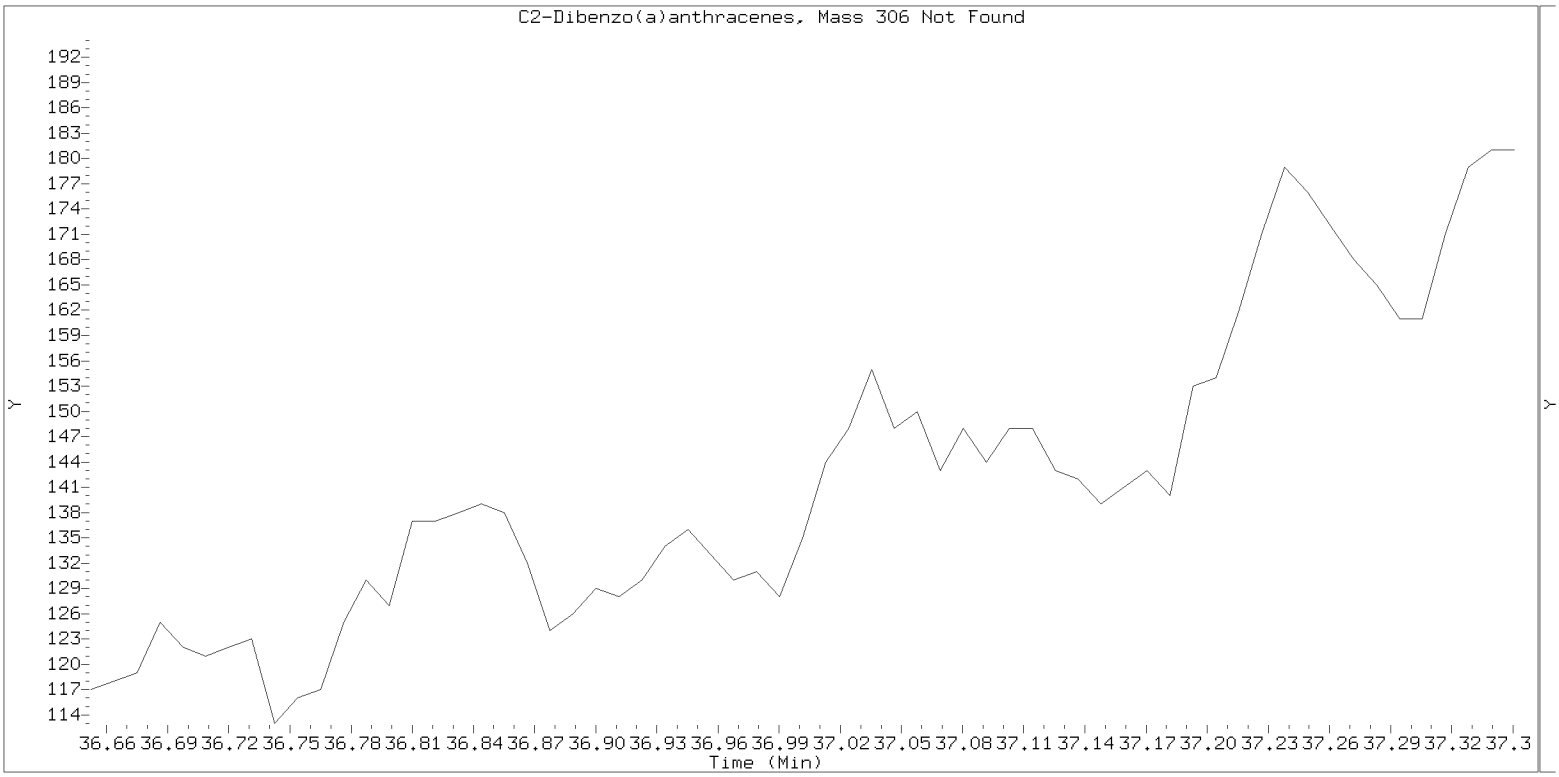

SIM ALKYL PNA RANGE ION WINDOWS - NT1421060714S.D

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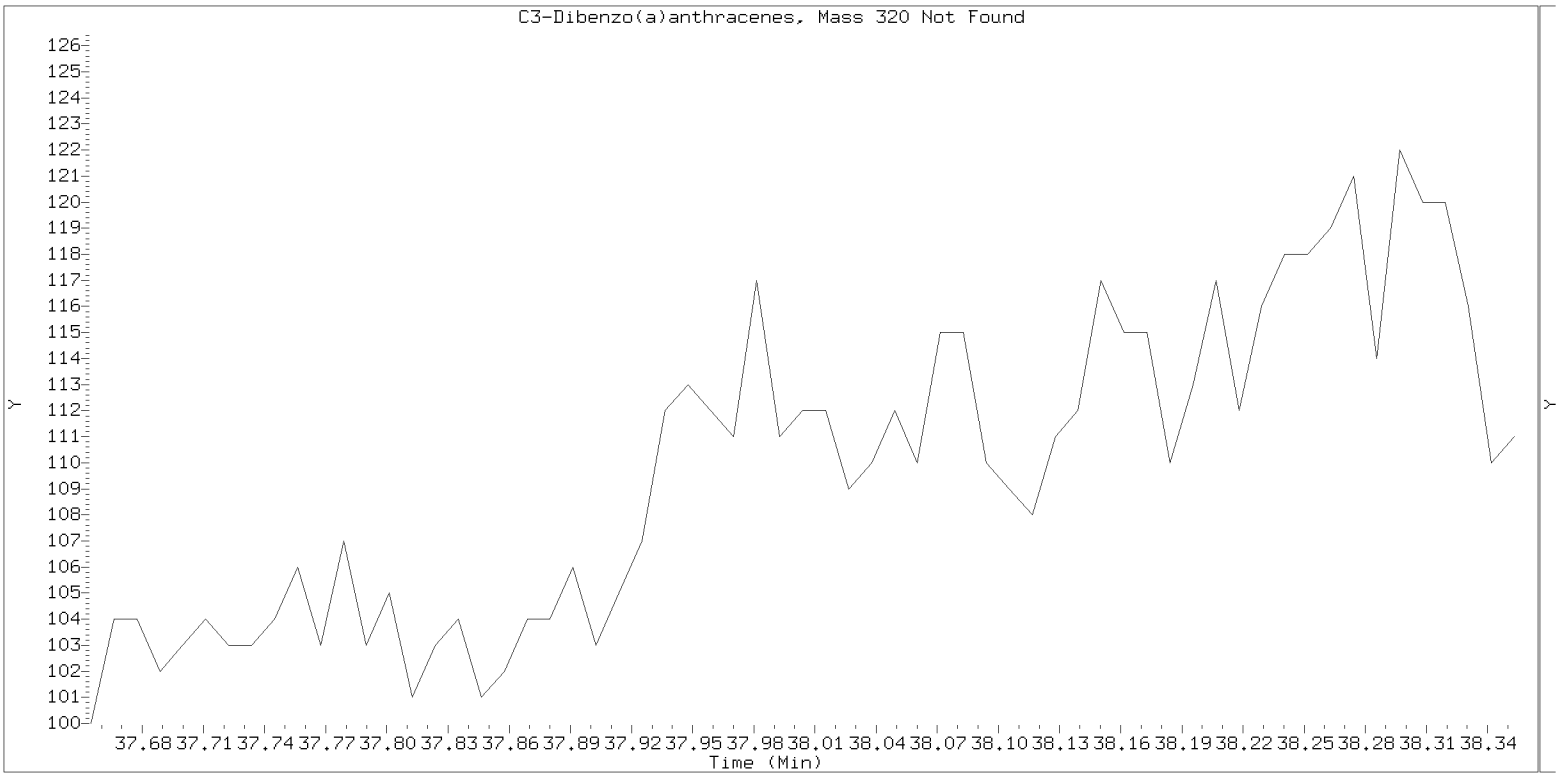


Analytical Resources, Incorporated
Analytical Chemists and Consultants

USMPDI-035SG-210504

Form I
ORGANIC ANALYSIS DATA SHEET
EPA 8270E-SIM
Alkyl PAH Parents

Laboratory:	Analytical Resources, Inc.				
Client:	Anchor QEA, LLC				
Project:	Gasco Siltronic - US Moorings				
Matrix:	Sediment	Laboratory ID:	21E0106-04 A	SDG:	21E0106
Sampled:	05/04/21 00:00	Prepared:	05/17/21 13:40	File ID:	NT1421060715.D
% Solids:	51.35	Preparation:	EPA 3546 (Microwave)	Analyzed:	06/07/21 23:43
Batch:	BJE0383	Sequence:	SJF0173	Initial/Final:	19.48 g Wet / 0.5 mL
Instrument:	NT14	Column:	ZB-5MS	Calibration:	EF00008
Cleanups:	GPC, Silica Gel				

CAS NO.	COMPOUND	DILUTION	CONC: (ug/kg dry)	Q	DL	RL
493-02-7	trans-Decalin	5	25.0	U	0.1	25.0
493-01-6	cis-Decalin	5	25.0	U	2.4	25.0
91-20-3	Naphthalene	5	11.4	J, D	2.2	25.0
90-12-0	1-Methylnaphthalene	5	2.9	J, D	1.9	25.0
91-57-6	2-Methylnaphthalene	5	4.8	J, D	2.2	25.0
92-52-4	Biphenyl	5	25.0	U	1.7	25.0
581-42-0	2,6-Dimethylnaphthalene	5	25.0	U	1.9	25.0
208-96-8	Acenaphthylene	5	5.0	J, D	1.3	25.0
83-32-9	Acenaphthene	5	14.1	J, D	2.3	25.0
132-64-9	Dibenzofuran	5	6.2	J, D	2.1	25.0
2245-38-7	2,3,5-Trimethylnaphthalene	5	25.0	U	2.2	25.0
86-73-7	Fluorene	5	11.3	J, D	2.3	25.0
95-15-8	Benzo(b)thiophene	5	25.0	U	1.8	25.0
85-01-8	Phenanthrene	5	107	D	4.7	25.0
120-12-7	Anthracene	5	25.6	D	0.2	25.0
86-74-8	Carbazole	5	13.8	J, D	3.6	25.0
832-69-9	1-Methylphenanthrene	5	11.6	J, D	2.5	25.0
206-44-0	Fluoranthene	5	240	D	6.8	25.0
132-65-0	Dibenzothiophene	5	25.0	U	3.3	25.0
129-00-0	Pyrene	5	240	D	5.1	25.0
56-55-3	Benzo(a)anthracene	5	125	D	7.1	25.0
218-01-9	Chrysene	5	157	D	3.5	25.0
205-99-2	Benzo(b)fluoranthene	5	149	D	4.0	25.0
205-82-3	Benzo(j)fluoranthene	5	75.0	D	3.4	25.0
207-08-9	Benzo(k)fluoranthene	5	73.2	D	4.0	25.0
197-97-2	Benzo(e)pyrene	5	113	D	3.1	25.0
50-32-8	Benzo(a)pyrene	5	152	D	4.9	25.0
193-39-5	Indeno(1,2,3-cd)pyrene	5	103	D	1.9	25.0
53-70-3	Dibenzo(a,h)anthracene	5	20.6	J, D	3.4	25.0
191-24-2	Benzo(g,h,i)perylene	5	133	D	2.6	25.0

Analytical Resources, Incorporated
Analytical Chemists and Consultants

USMPDI-035SG-210504

Form I
ORGANIC ANALYSIS DATA SHEET
EPA 8270E-SIM
Alkyl PAH Parents

Laboratory:	Analytical Resources, Inc.				
Client:	Anchor QEA, LLC				
Project:	Gasco Siltronic - US Moorings				
Matrix:	Sediment	Laboratory ID:	21E0106-04 A	SDG:	21E0106
Sampled:	05/04/21 00:00	Prepared:	05/17/21 13:40	File ID:	NT1421060715.D
% Solids:	51.35	Preparation:	EPA 3546 (Microwave)	Analyzed:	06/07/21 23:43
Batch:	BJE0383	Sequence:	SJF0173	Initial/Final:	19.48 g Wet / 0.5 mL
Instrument:	NT14	Column:	ZB-5MS	Calibration:	EF00008
Cleanups:	GPC, Silica Gel				

CAS NO.	COMPOUND	DILUTION	CONC: (ug/kg dry)	Q	DL	RL
1985-5-0	Perylene	5	100	D	2.2	25.0
239-35-0	Benzo(b)naphtho(2,1-d)thiophene	5	25.0	U	25.0	25.0

SURROGATES	ADDED: (ug/kg dry)	FOUND: (ug/kg dry)	% REC	QC LIMITS	Q
Naphthalene-d8	149.96	61.5	41.0	30 - 160	
Acenaphthene-d10	149.96	72.9	48.6	30 - 160	
Phenanthrene-d10	149.96	86.2	57.5	30 - 160	
Chrysene-d12	149.96	103	68.5	30 - 160	
Perylene-d12	149.96	99.8	66.5	30 - 160	

Data File: \\target\share\chem3\nt14.i\20210607.b\NT1421060715.D

Date : 07-JUN-2021 23:43

Client ID:

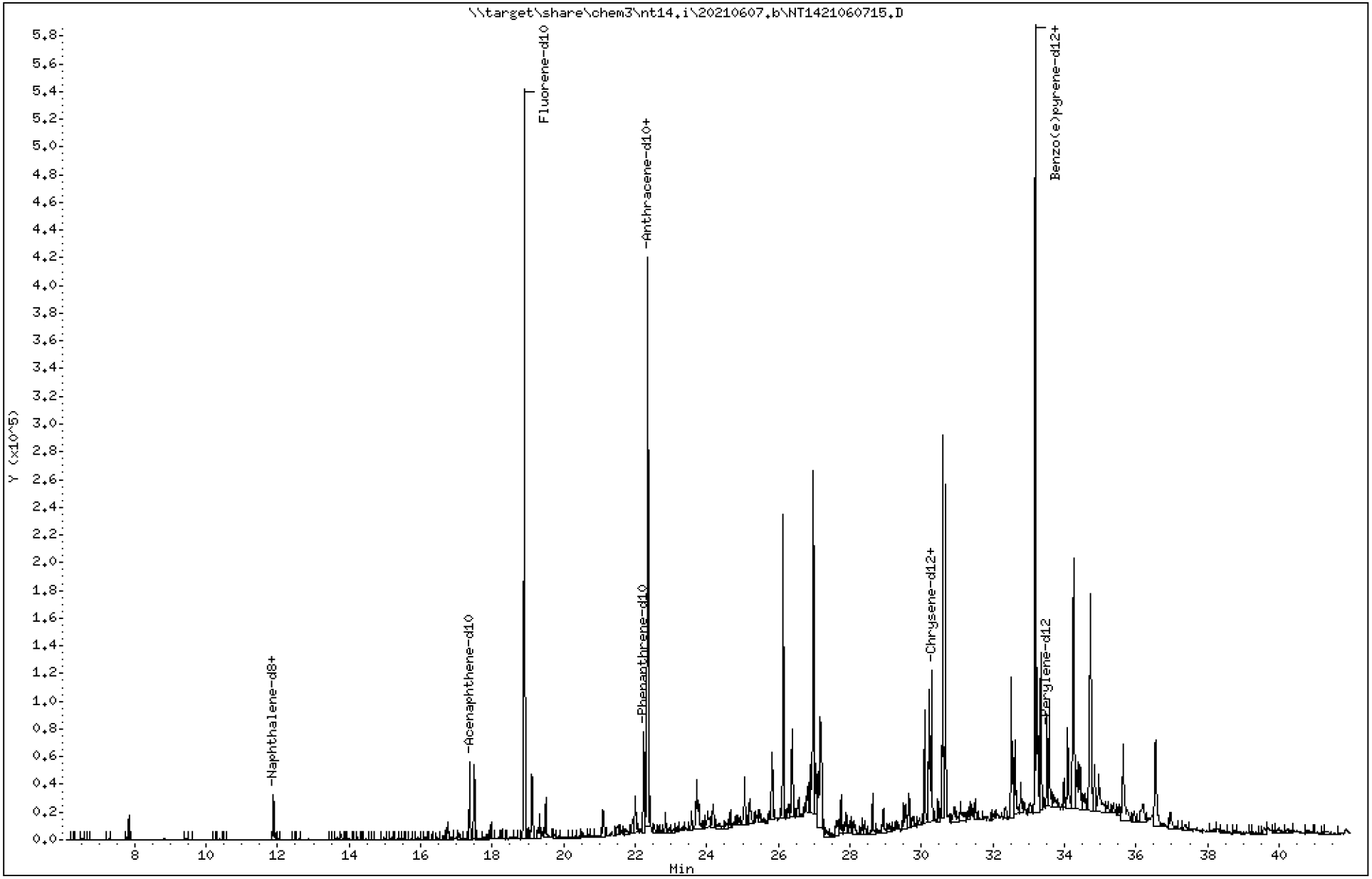
Instrument: nt14.i

Sample Info: 21E0106-04

Operator: VTS

Column phase: Rxi-17Sil MS

Column diameter: 0.25



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Date : 07-JUN-2021 23:43

Client ID:

Instrument: nt14.i

Sample Info: 21E0106-04

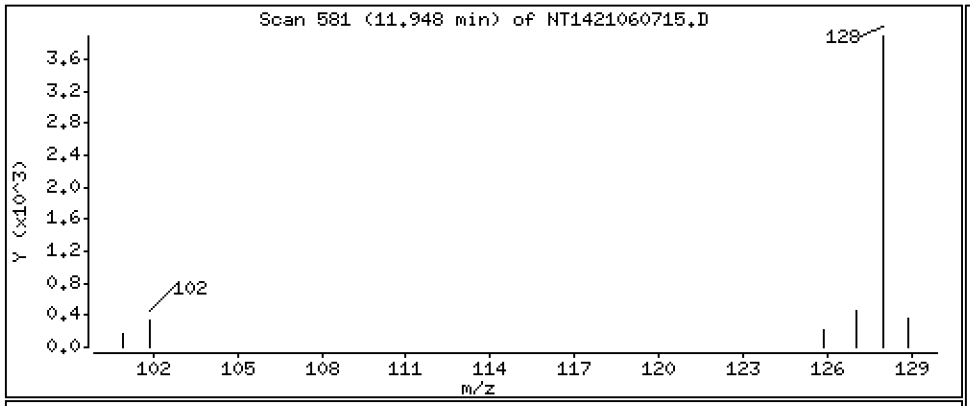
Operator: VTS

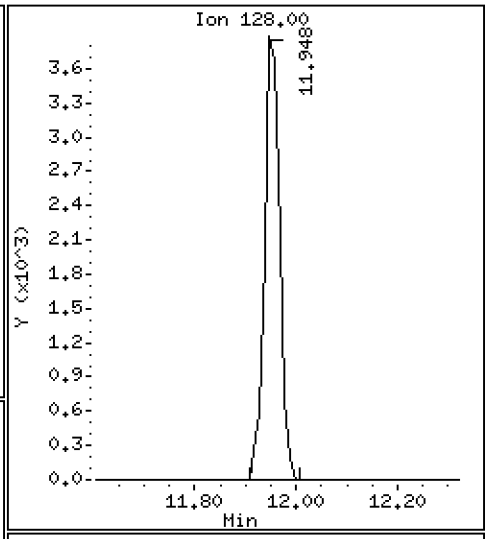
Column phase: Rxi-17Sil MS

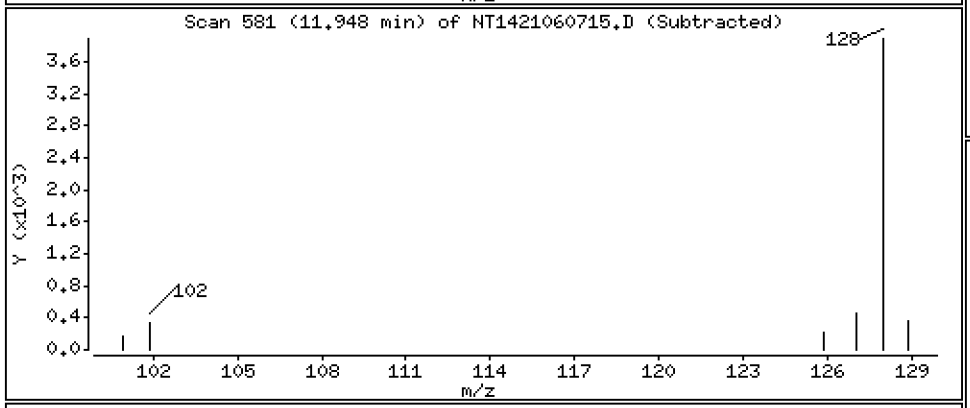
Column diameter: 0.25

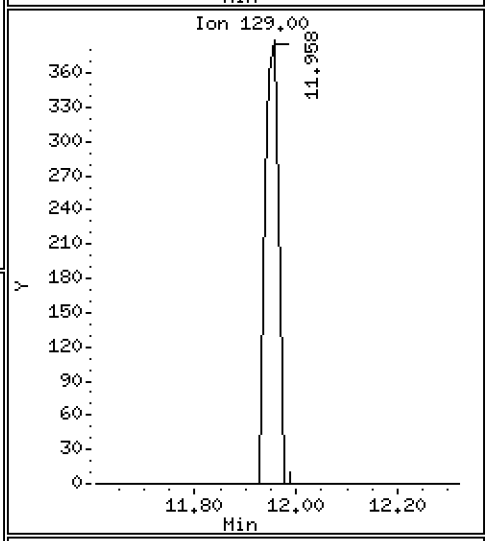
7 Naphthalene

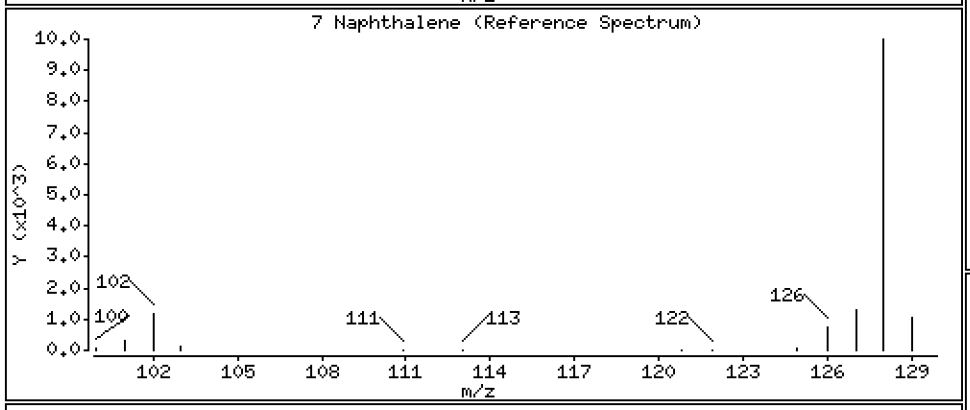
Concentration: 0.2276 ug/mL

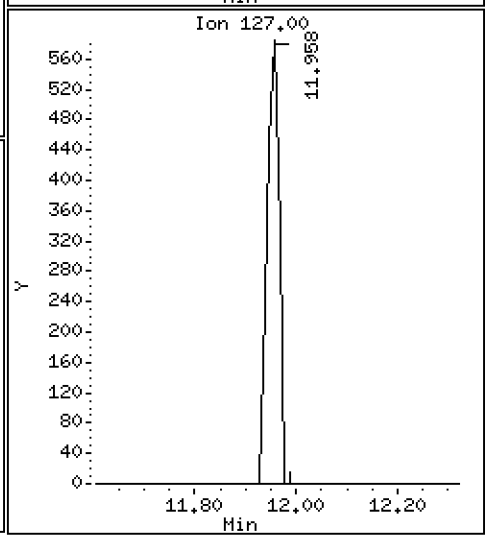


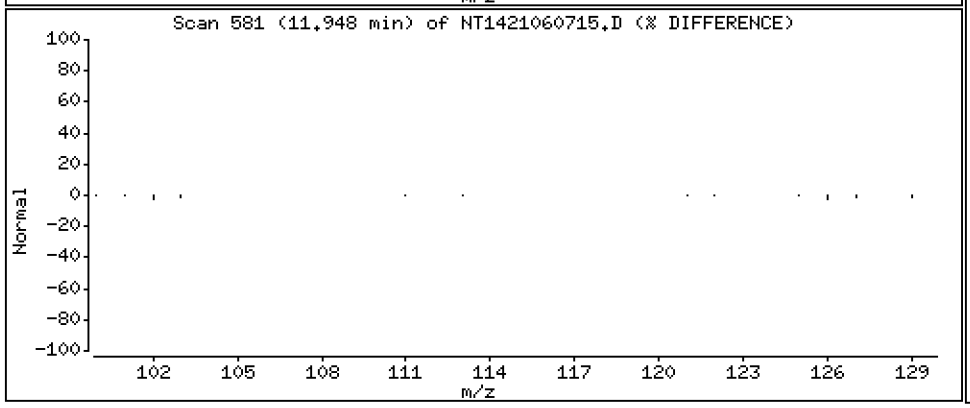












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Date : 07-JUN-2021 23:43

Client ID:

Instrument: nt14.i

Sample Info: 21E0106-04

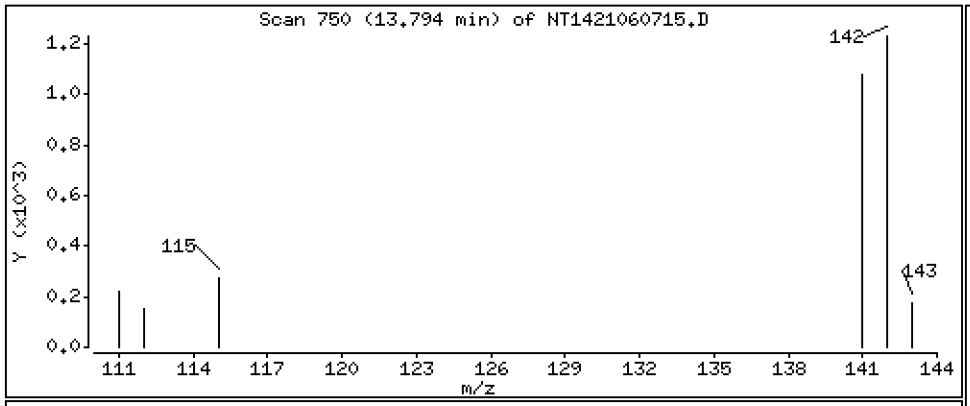
Operator: VTS

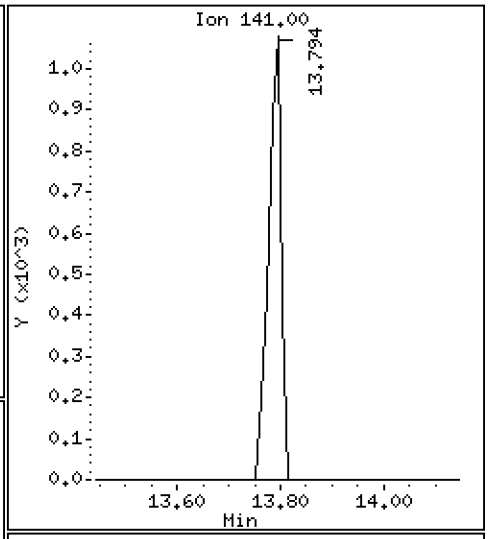
Column phase: Rxi-17Sil MS

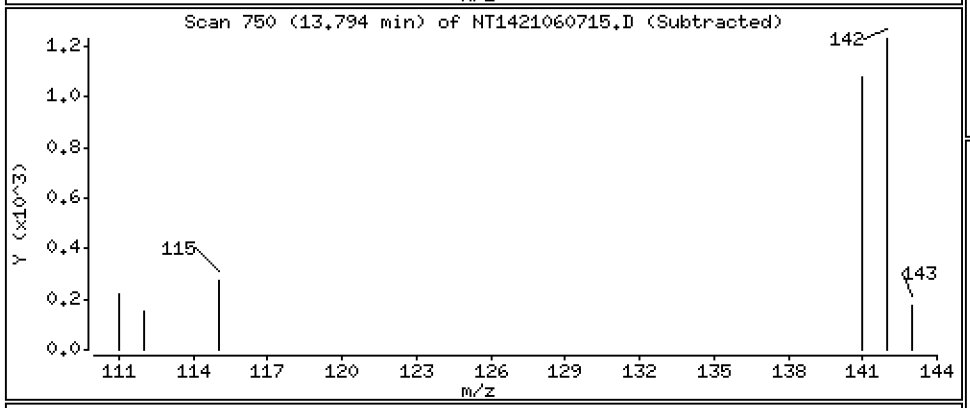
Column diameter: 0.25

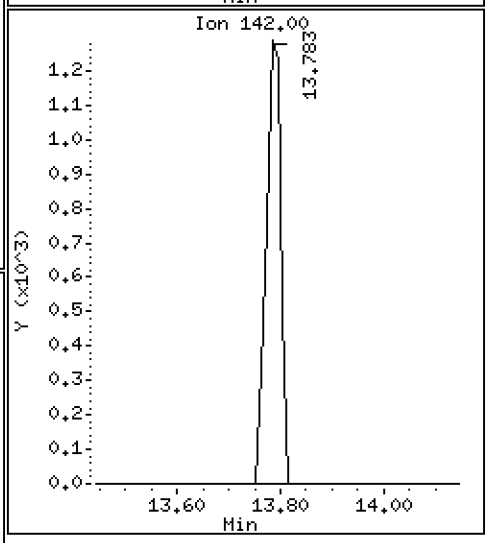
16 2-Methylnaphthalene

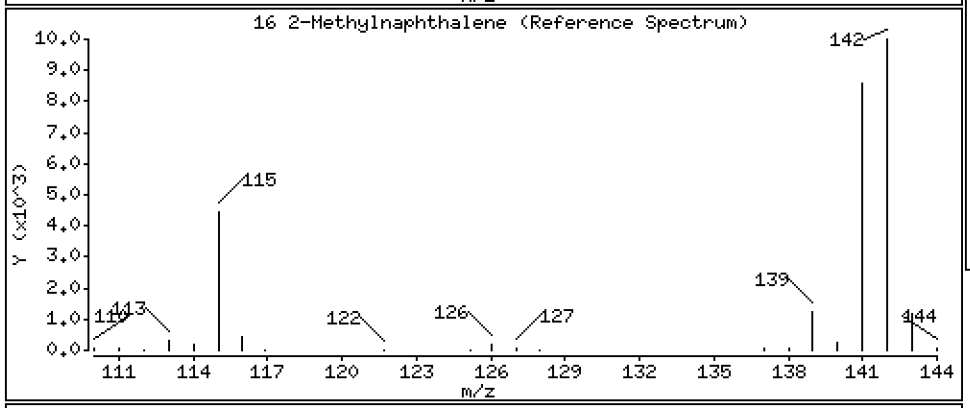
Concentration: 0.09575 ug/mL

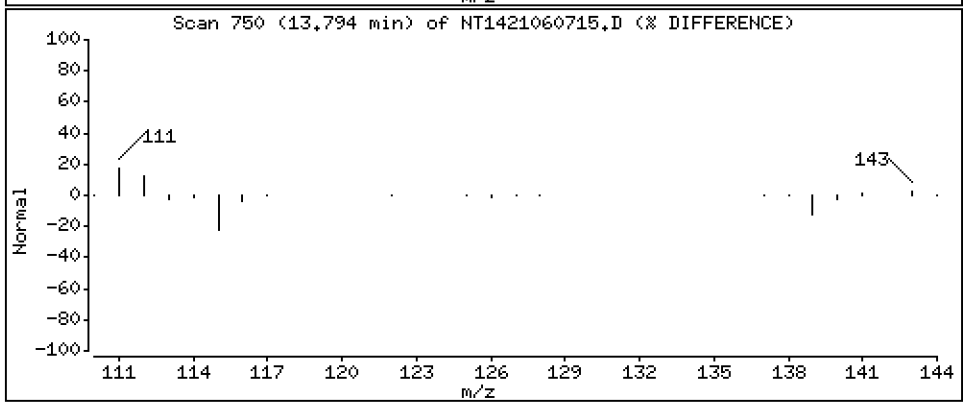












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Date : 07-JUN-2021 23:43

Client ID:

Instrument: nt14.i

Sample Info: 21E0106-04

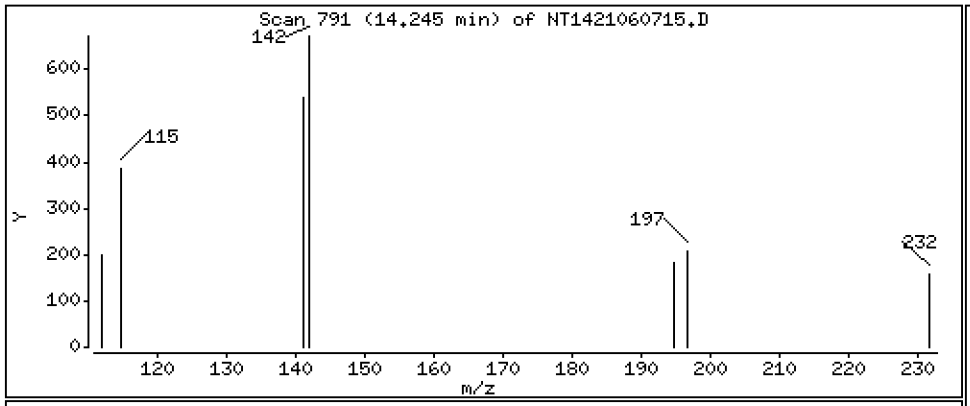
Operator: VTS

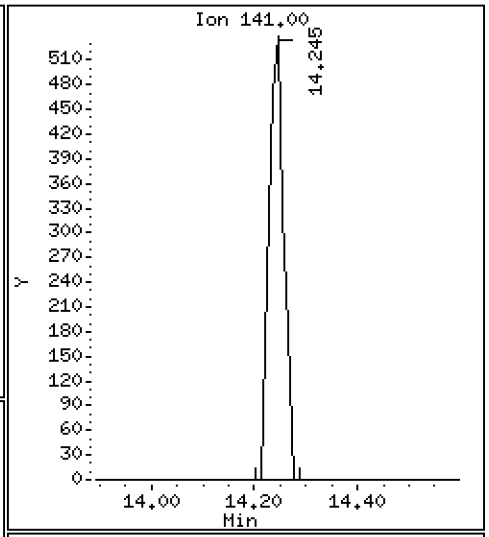
Column phase: Rxi-17Sil MS

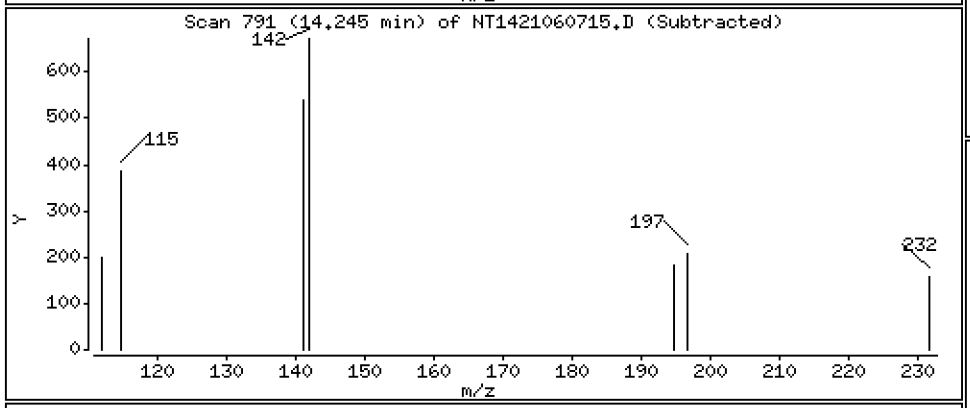
Column diameter: 0.25

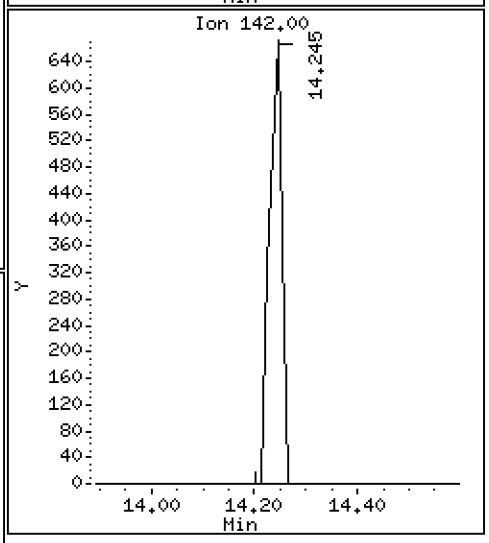
17 1-methylnaphthalene

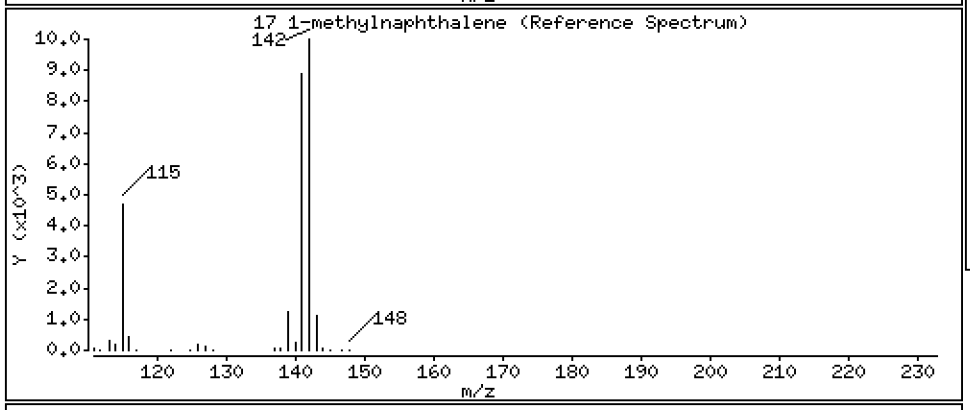
Concentration: 0.05732 ug/mL

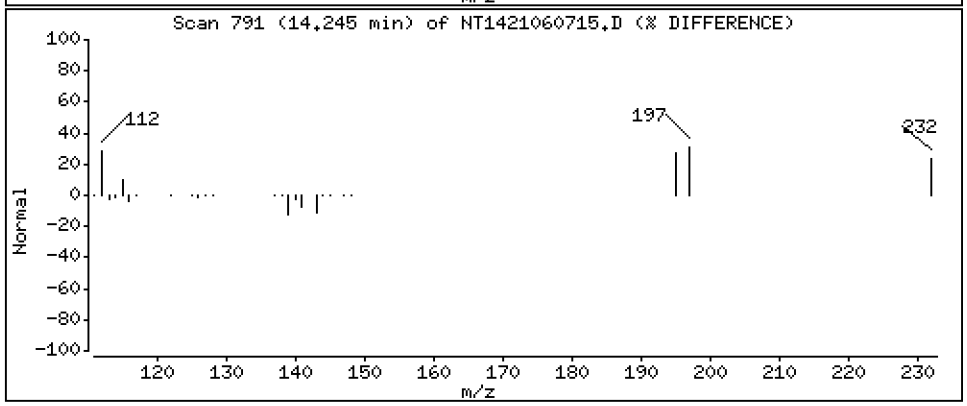












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Date : 07-JUN-2021 23:43

Client ID:

Instrument: nt14.i

Sample Info: 21E0106-04

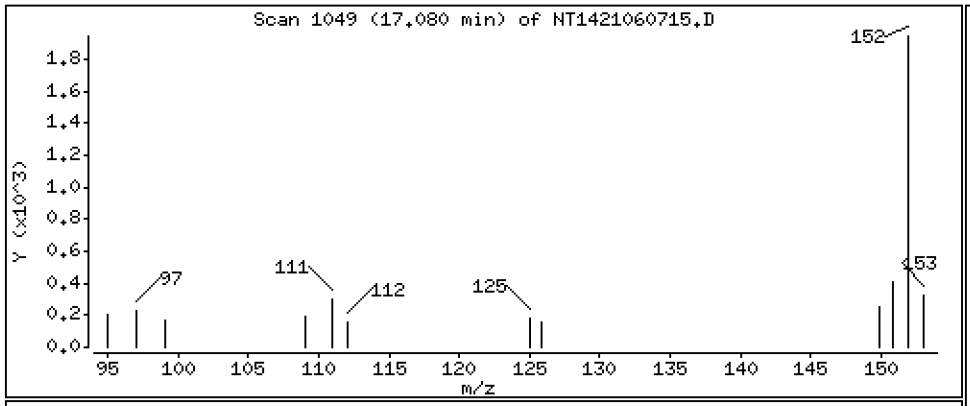
Operator: VTS

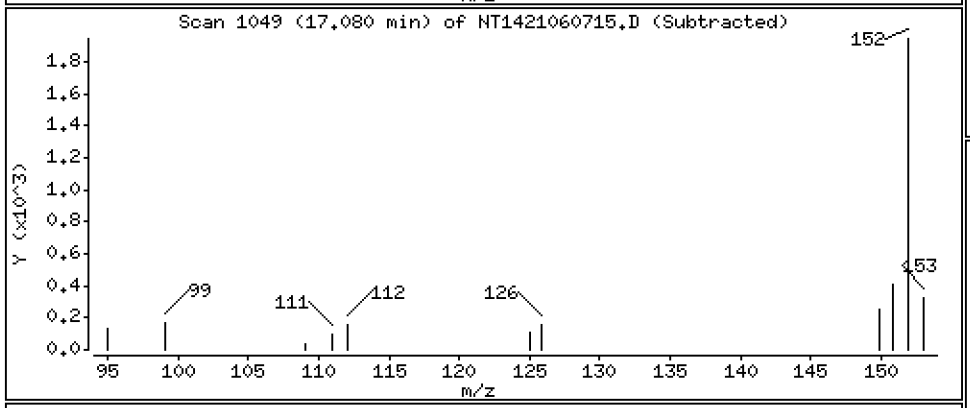
Column phase: Rxi-17Sil MS

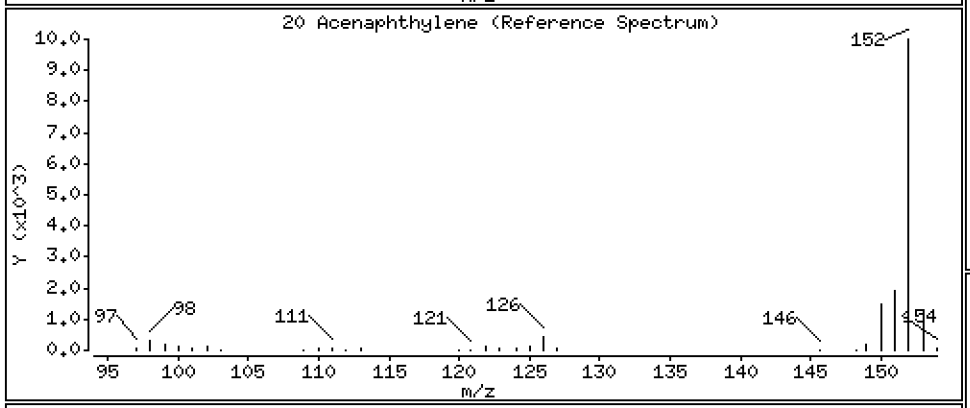
Column diameter: 0.25

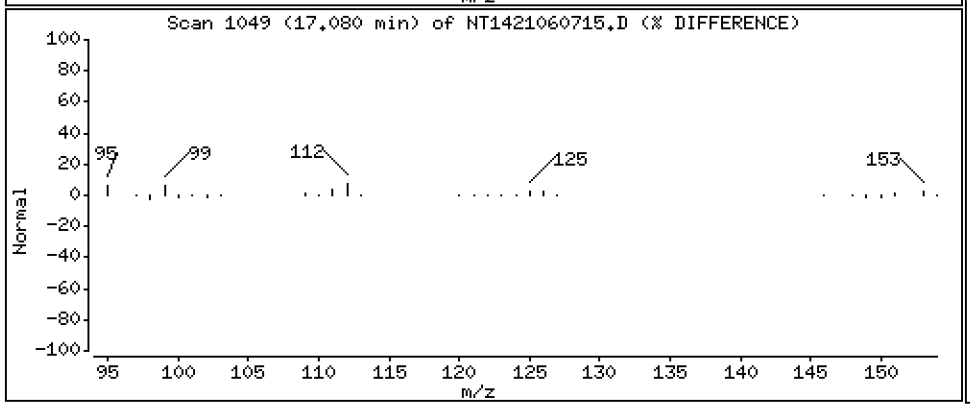
20 Acenaphthylene

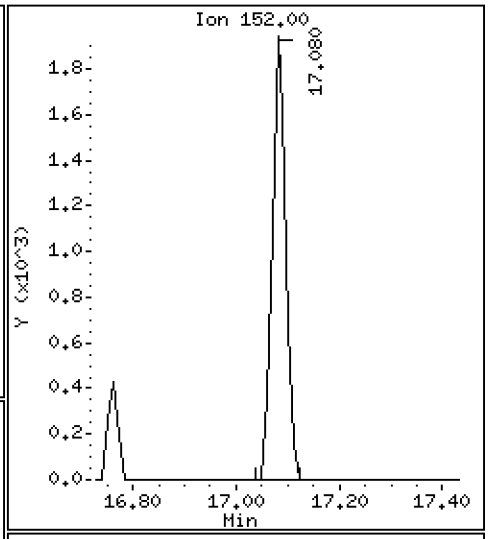
Concentration: 0.09957 ug/mL

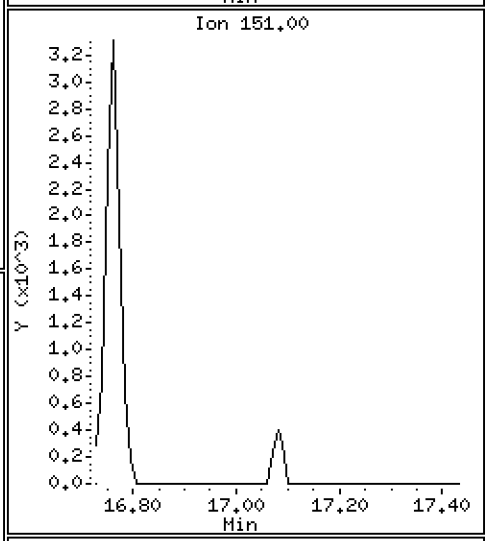


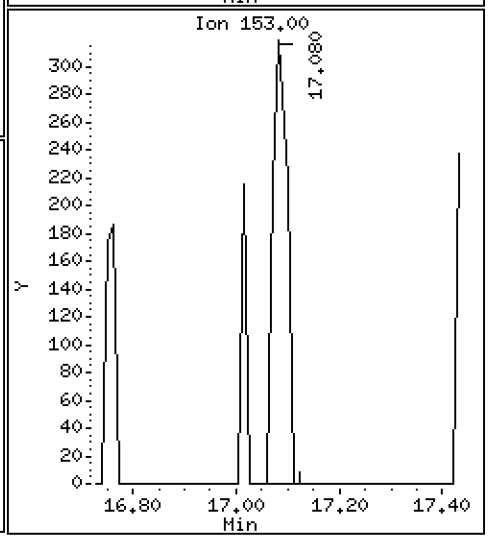












Data File: \\target\share\chem3\nt14.i\20210607.b\NT1421060715.D

Date : 07-JUN-2021 23:43

Client ID:

Instrument: nt14.i

Sample Info: 21E0106-04

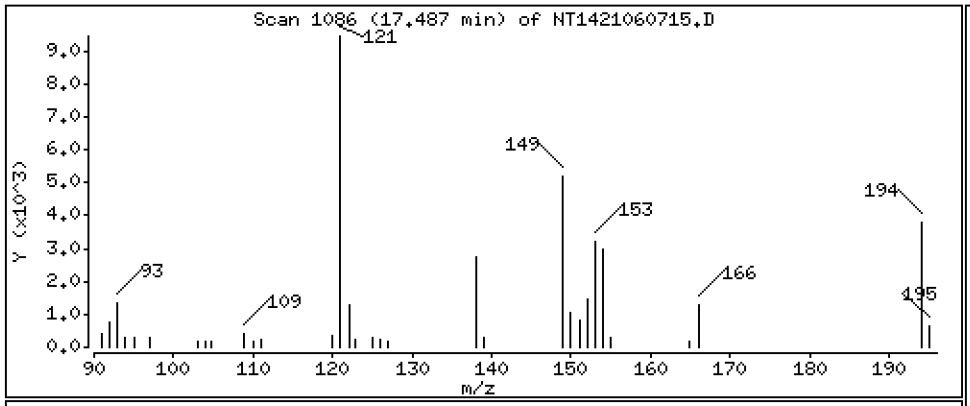
Operator: VTS

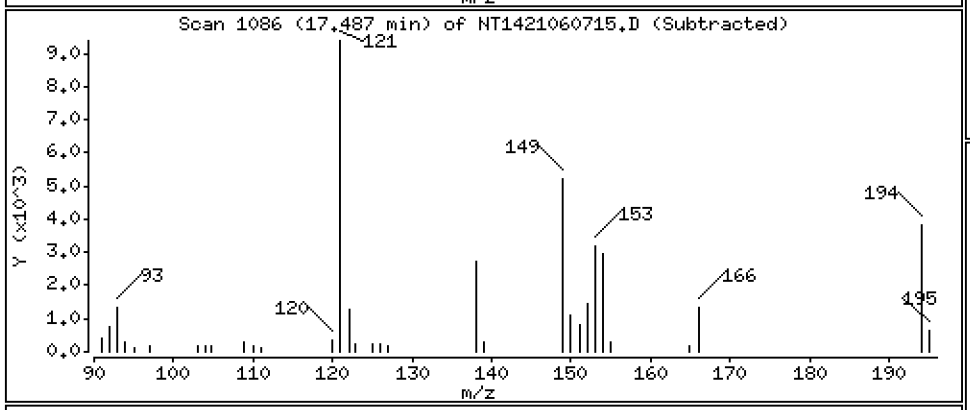
Column phase: Rxi-17Sil MS

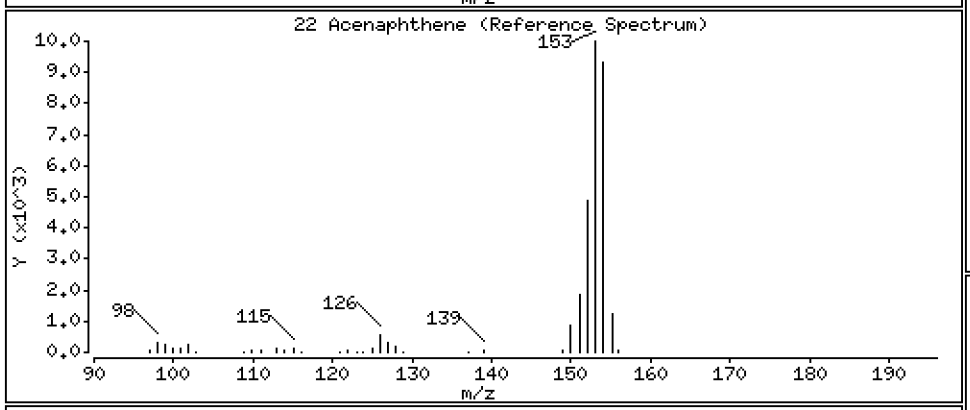
Column diameter: 0.25

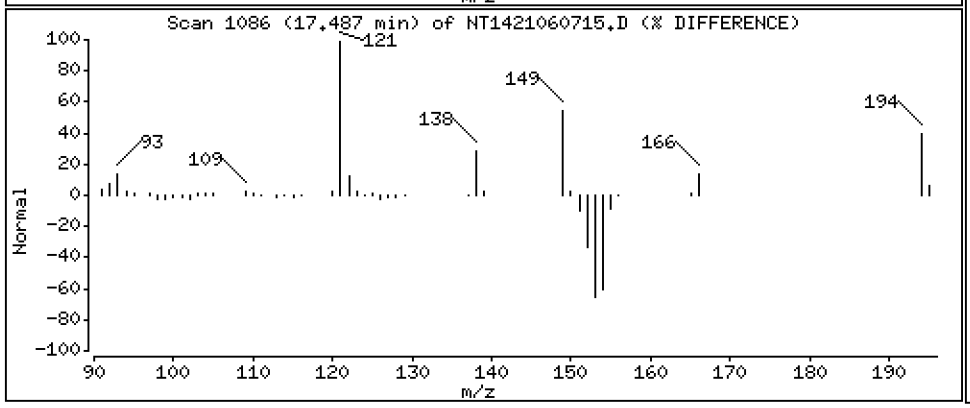
22 Acenaphthene

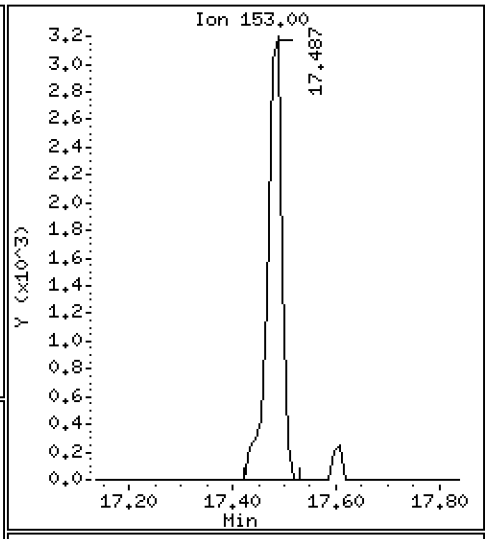
Concentration: 0.2824 ug/mL

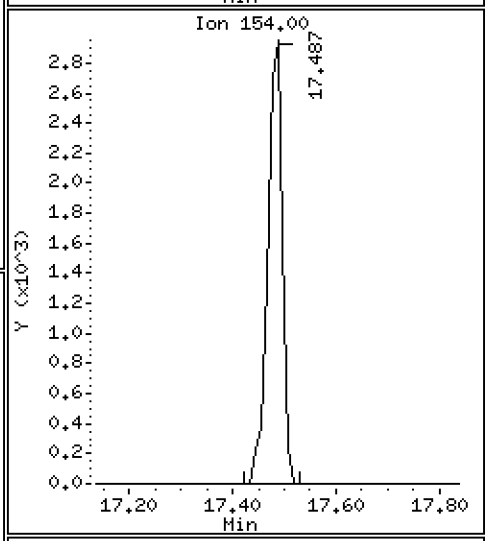


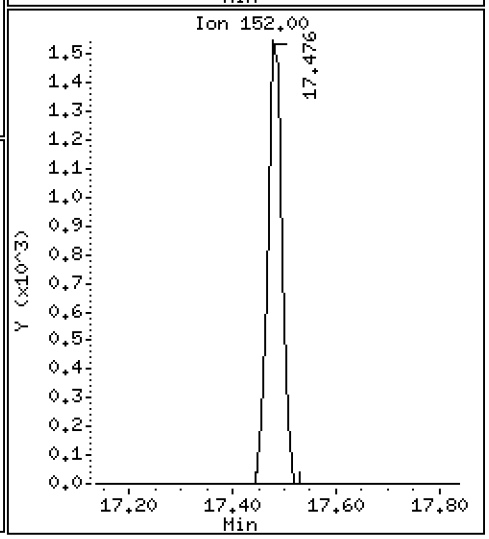












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Date : 07-JUN-2021 23:43

Client ID:

Instrument: nt14.i

Sample Info: 21E0106-04

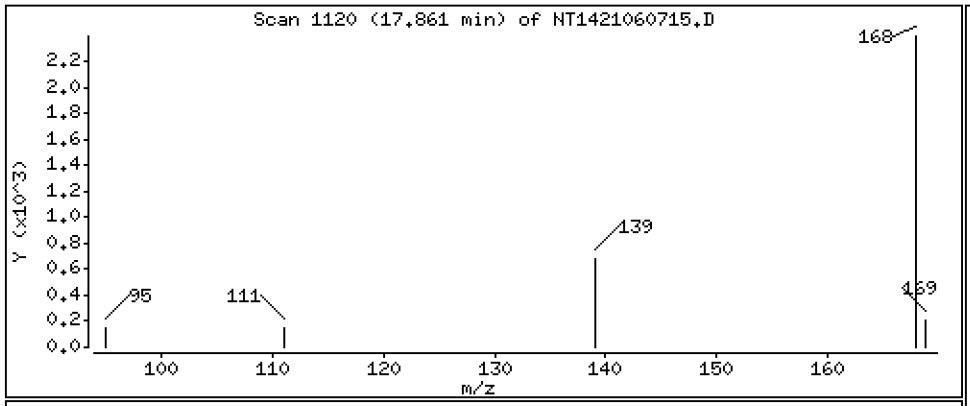
Operator: VTS

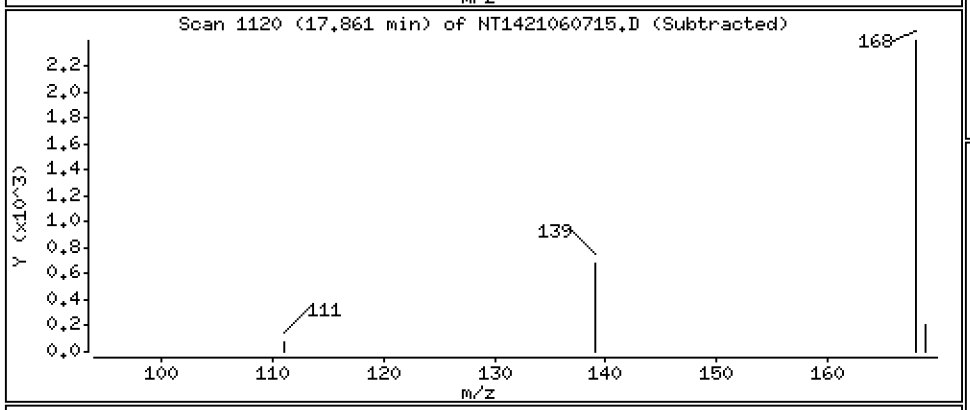
Column phase: Rxi-17Sil MS

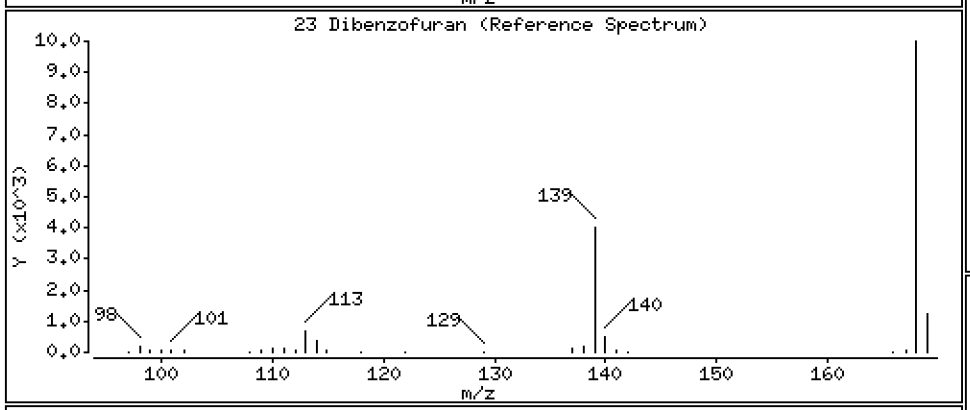
Column diameter: 0.25

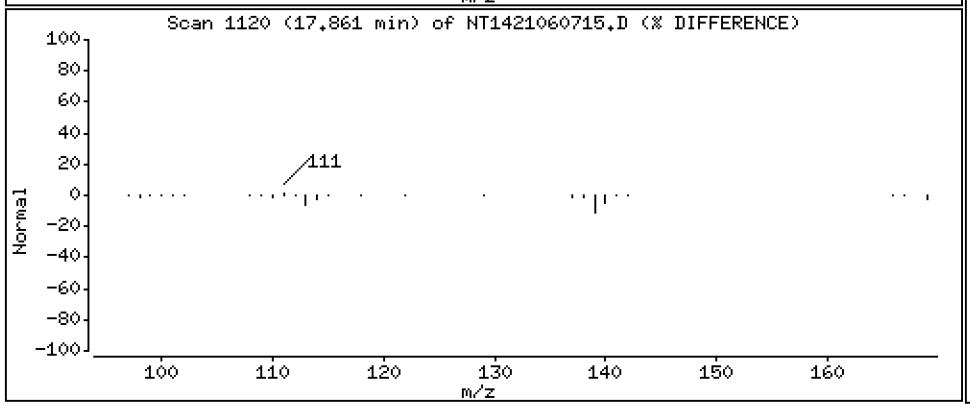
23 Dibenzofuran

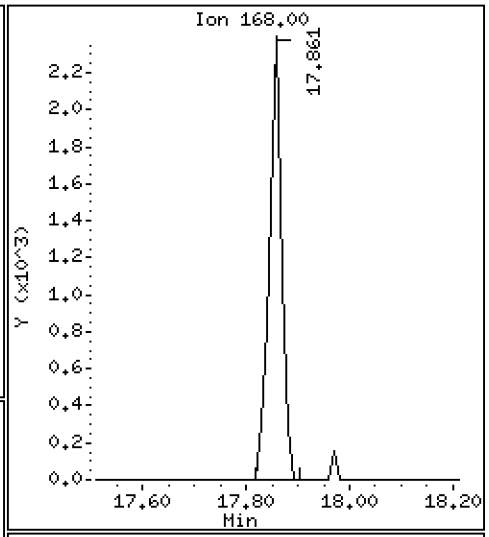
Concentration: 0.1249 ug/mL

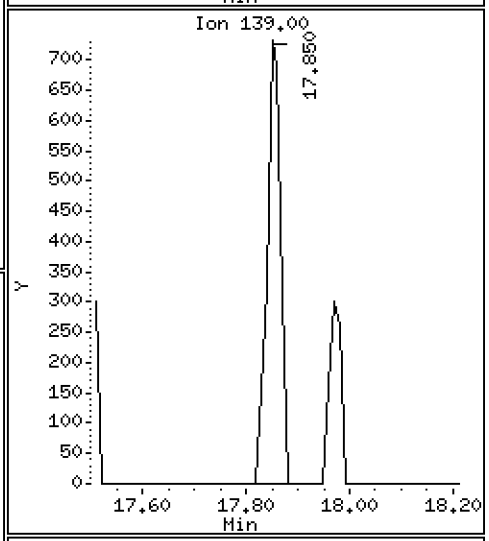


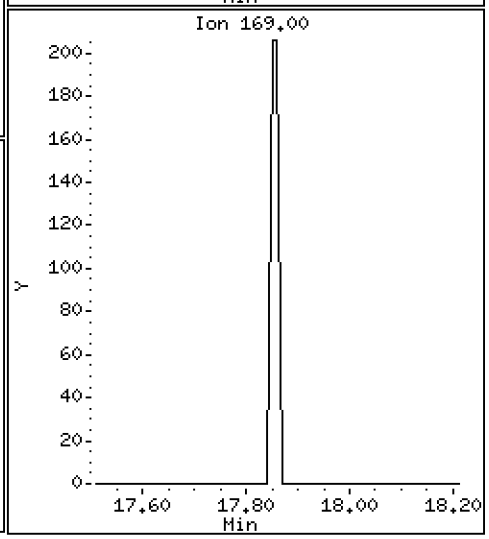












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Date : 07-JUN-2021 23:43

Client ID:

Instrument: nt14.i

Sample Info: 21E0106-04

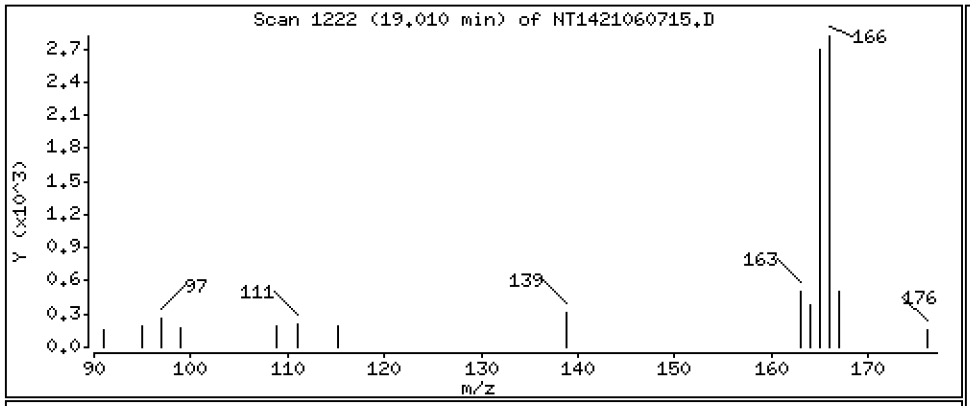
Operator: VTS

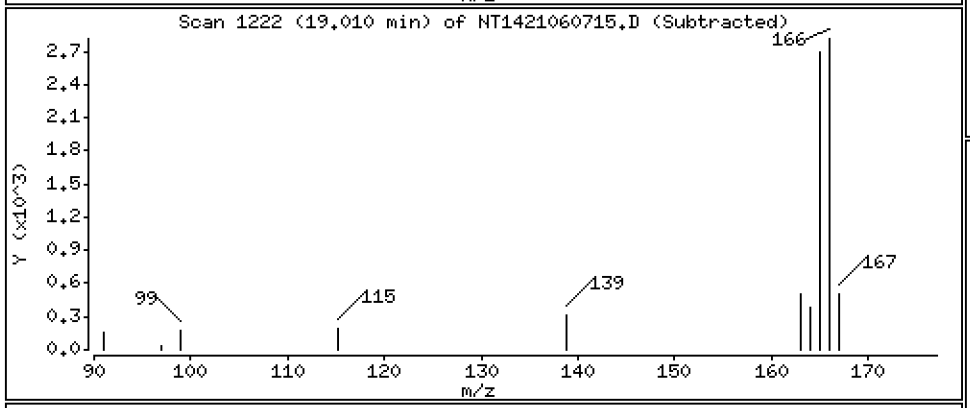
Column phase: Rxi-17Sil MS

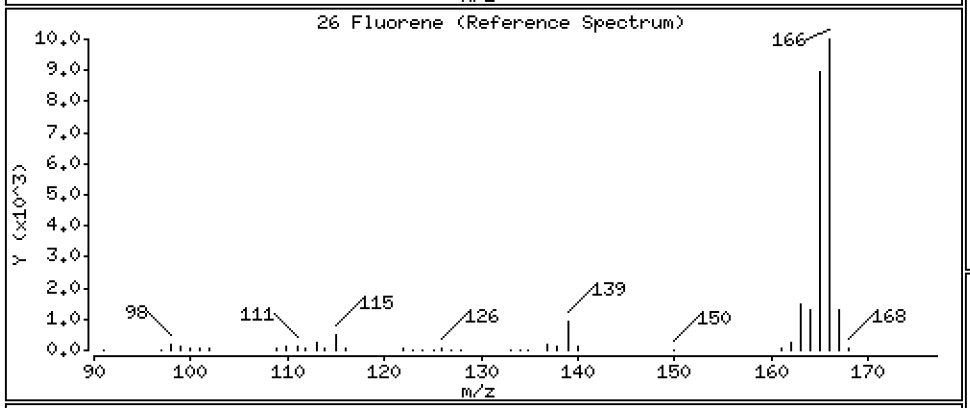
Column diameter: 0.25

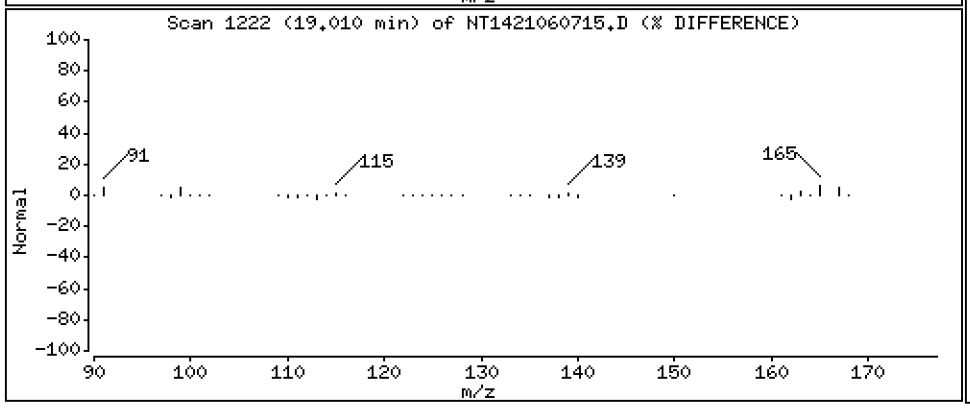
26 Fluorene

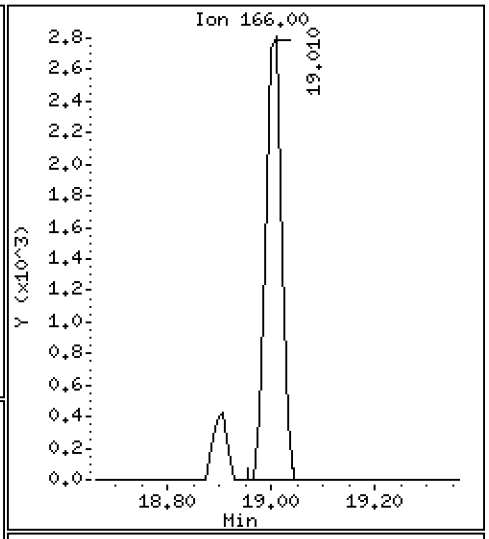
Concentration: 0.2264 ug/mL

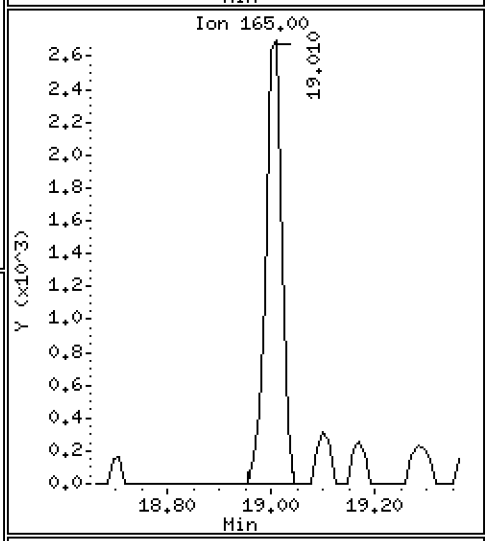


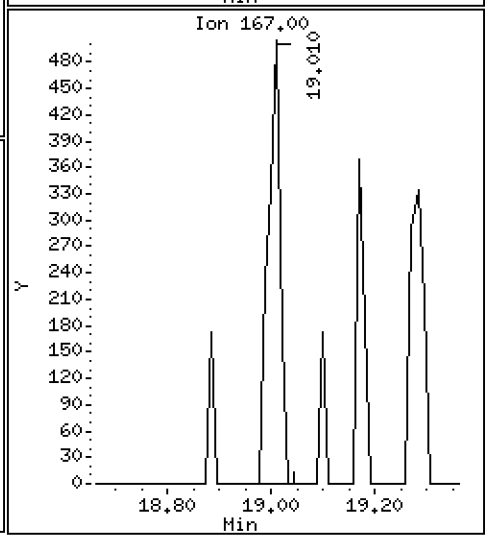












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Date : 07-JUN-2021 23:43

Client ID:

Instrument: nt14.i

Sample Info: 21E0106-04

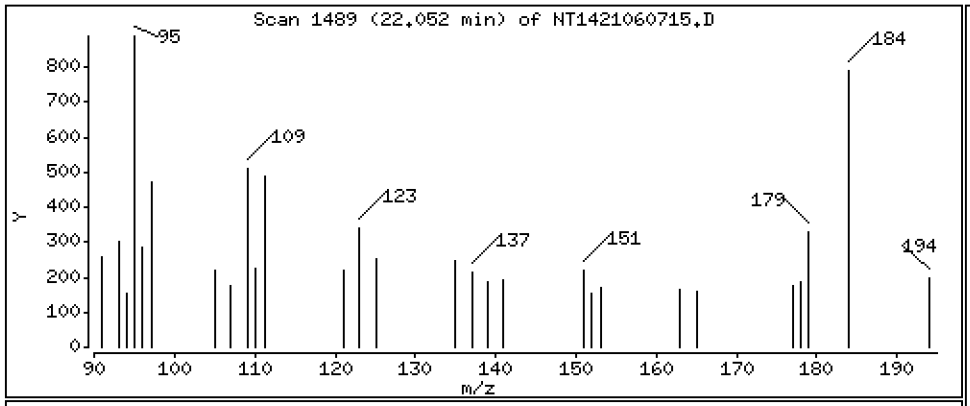
Operator: VTS

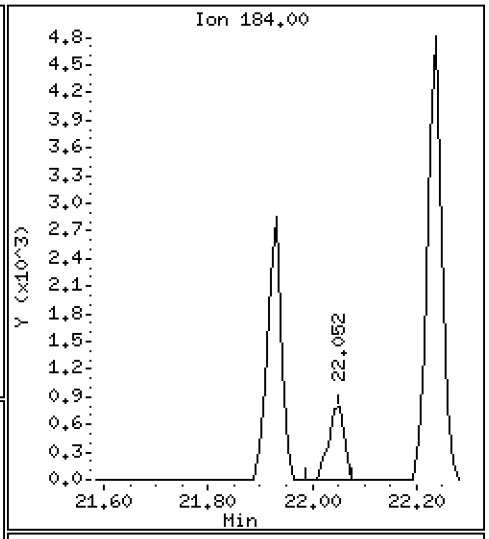
Column phase: Rxi-17Sil MS

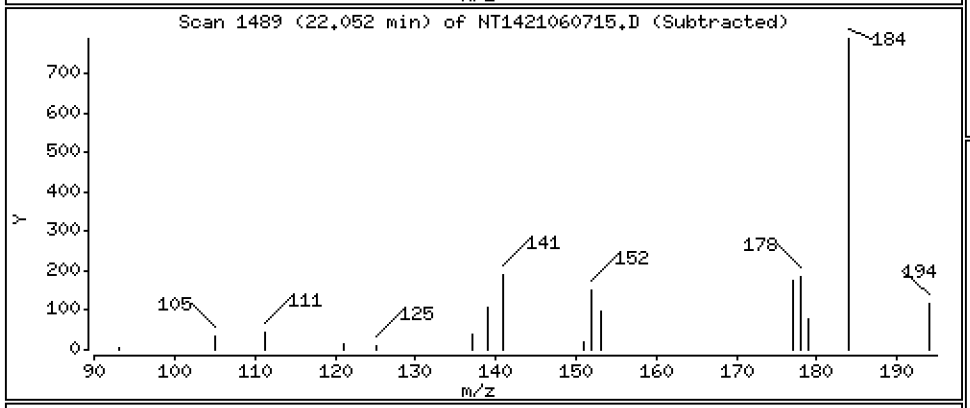
Column diameter: 0.25

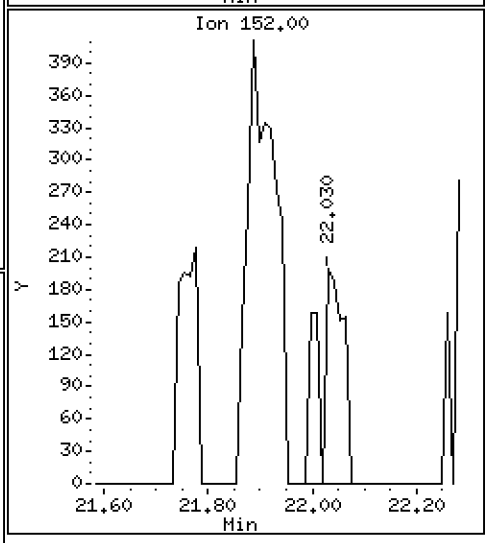
30 Dibenzothiophene

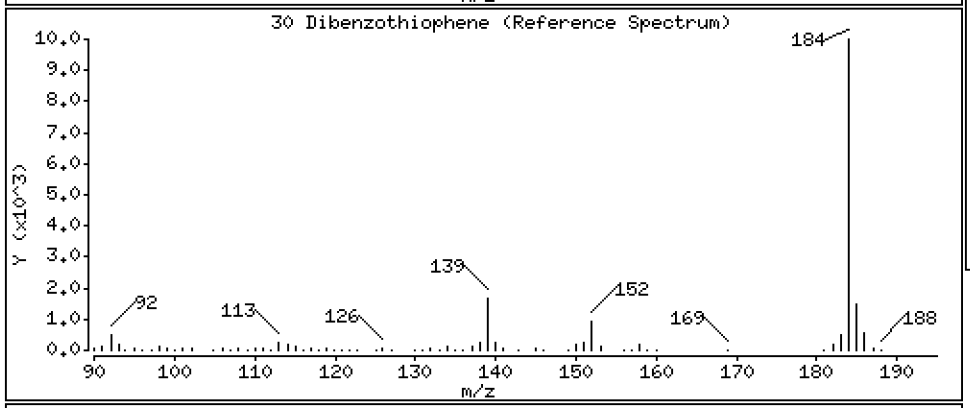
Concentration: 0.04265 ug/mL

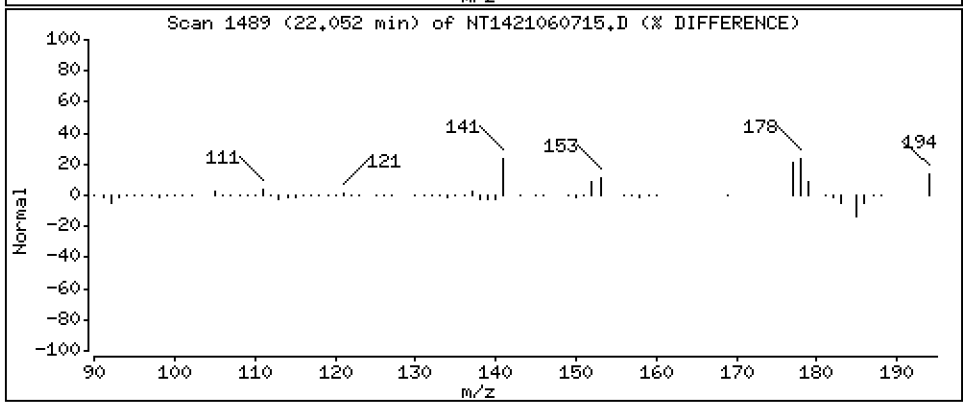












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Client ID:

Instrument: nt14.i

Sample Info: 21E0106-04

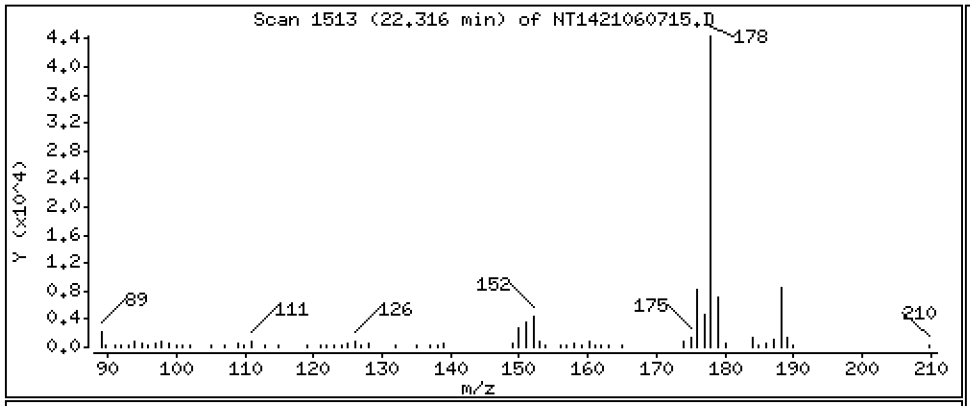
Operator: VTS

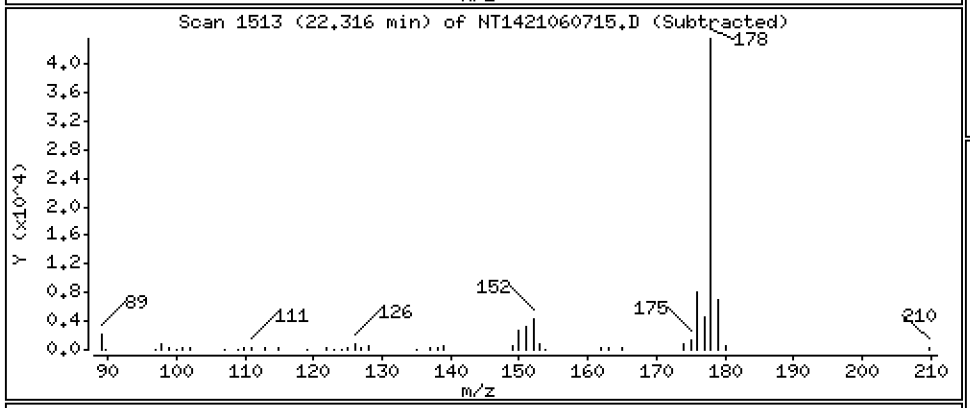
Column phase: Rxi-17Sil MS

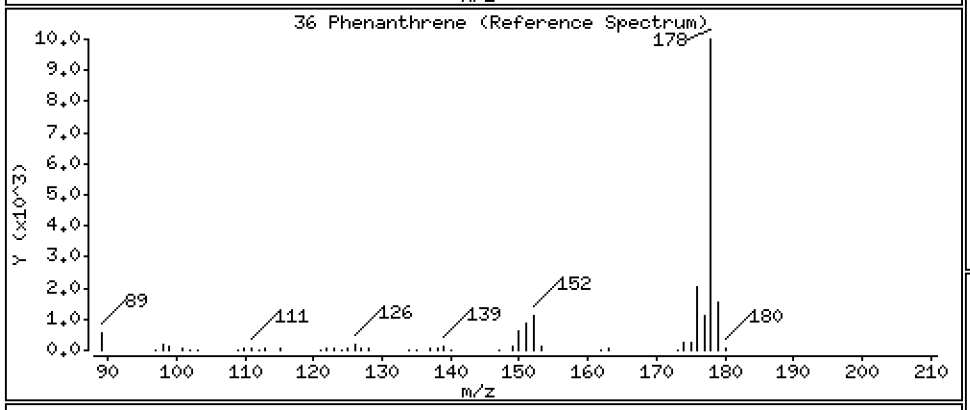
Column diameter: 0.25

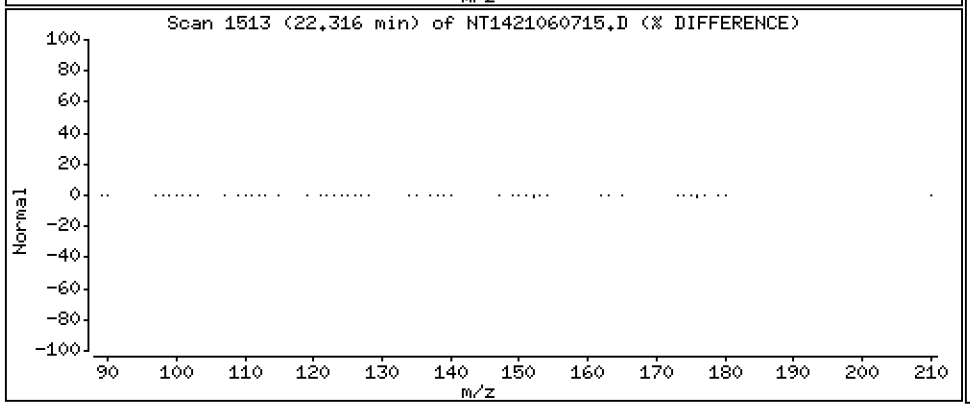
36 Phenanthrene

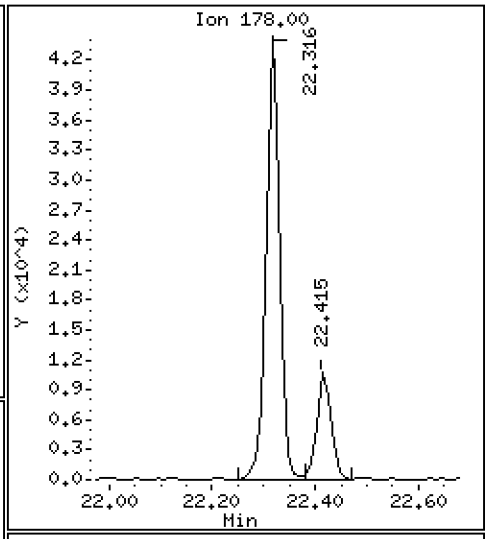
Concentration: 2.137 ug/mL

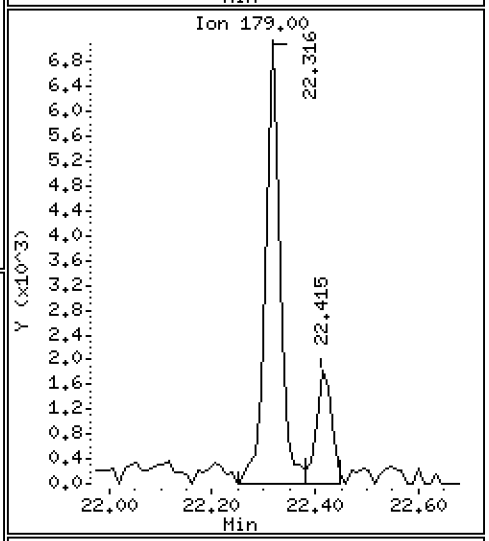


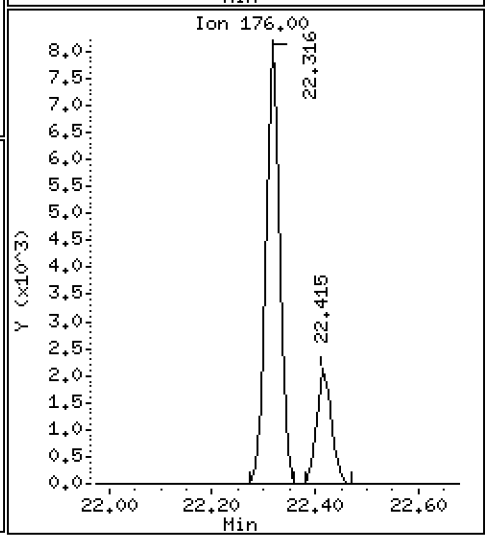












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Client ID:

Instrument: nt14.i

Sample Info: 21E0106-04

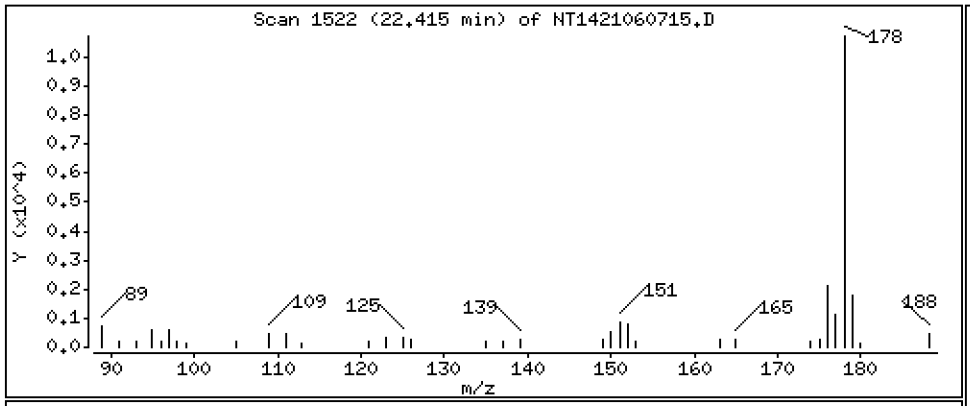
Operator: VTS

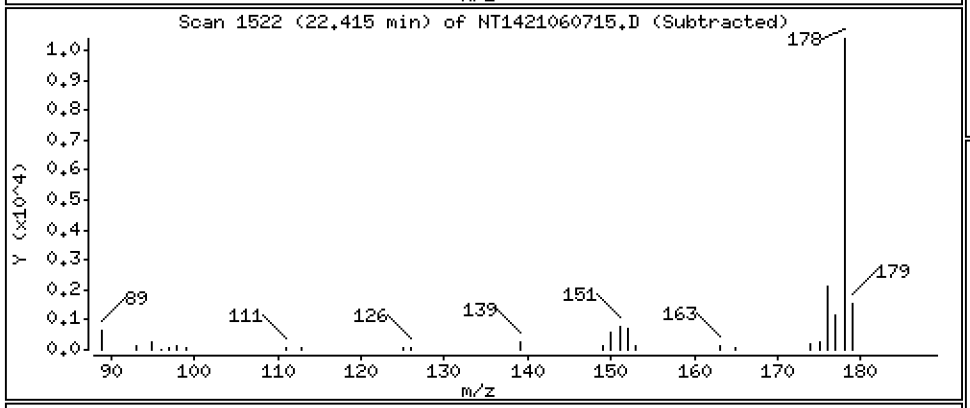
Column phase: Rxi-17Sil MS

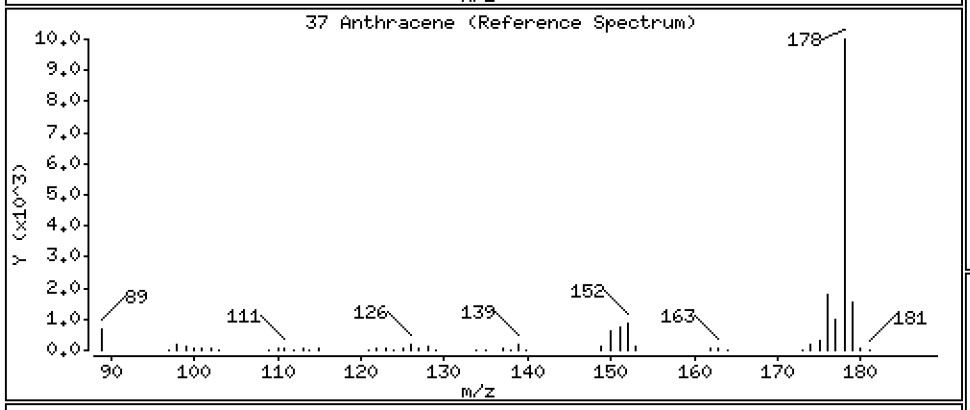
Column diameter: 0.25

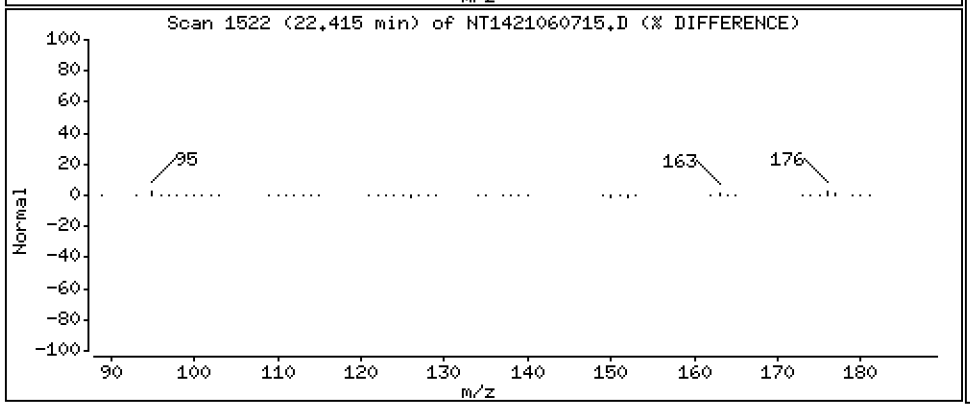
37 Anthracene

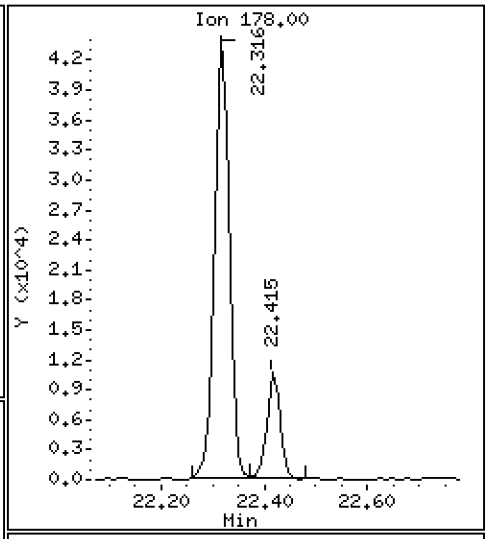
Concentration: 0.5122 ug/mL

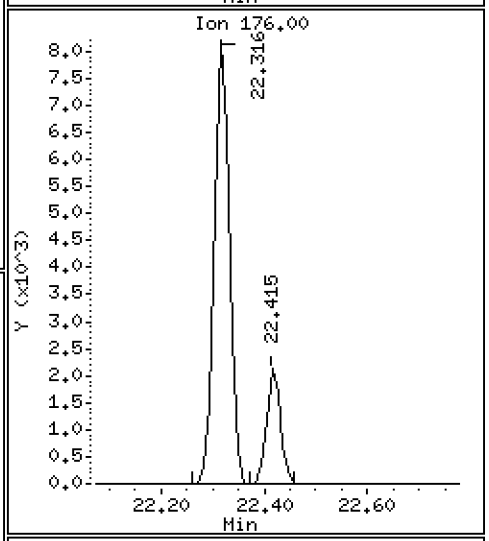


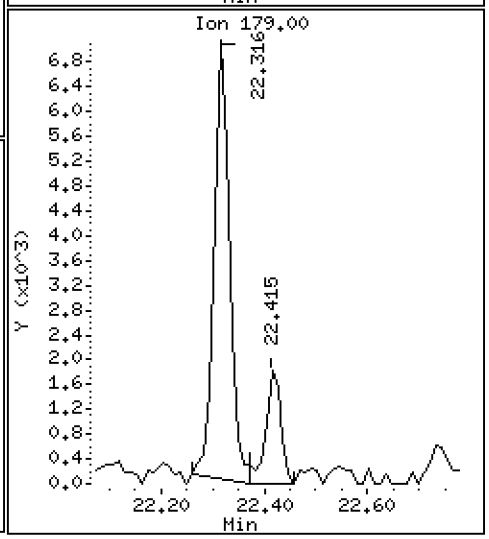












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Date : 07-JUN-2021 23:43

Client ID:

Instrument: nt14.i

Sample Info: 21E0106-04

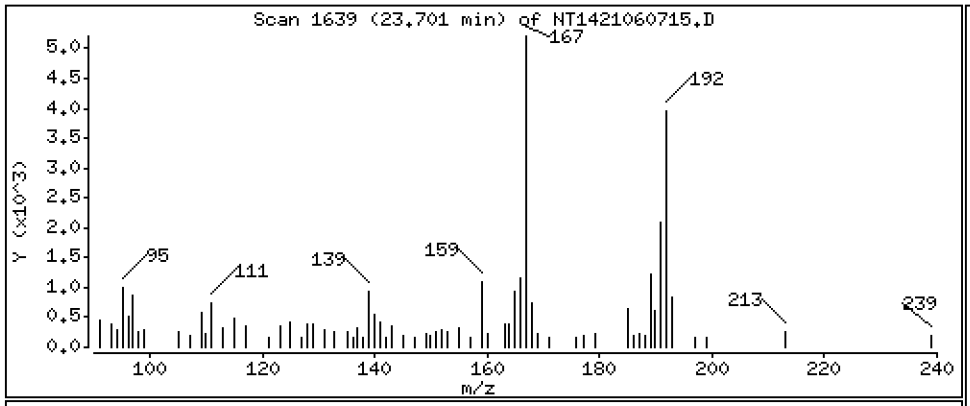
Operator: VTS

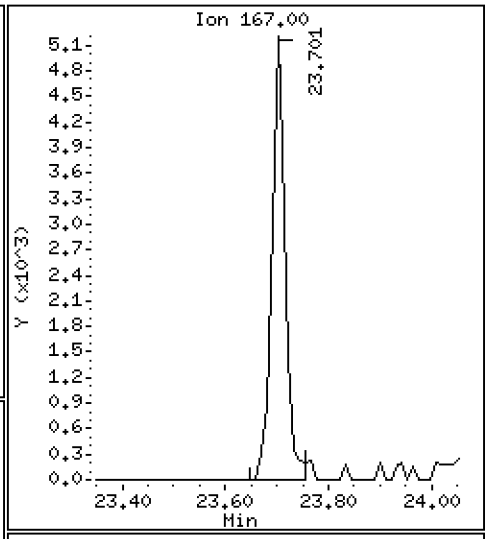
Column phase: Rxi-17Sil MS

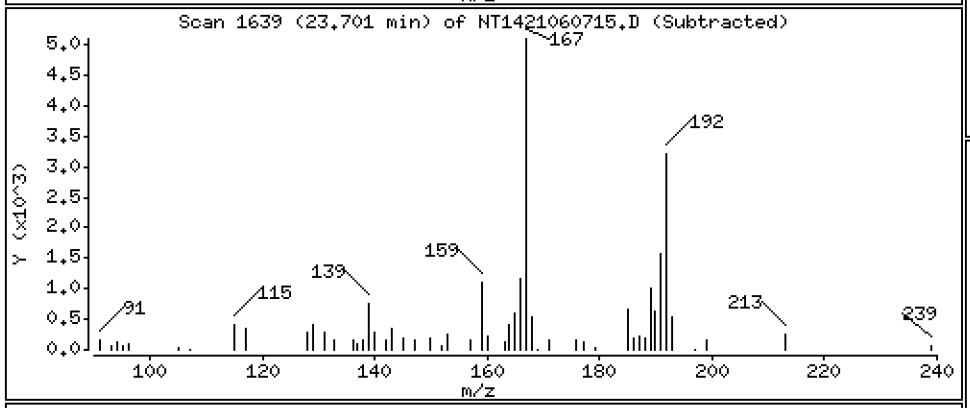
Column diameter: 0.25

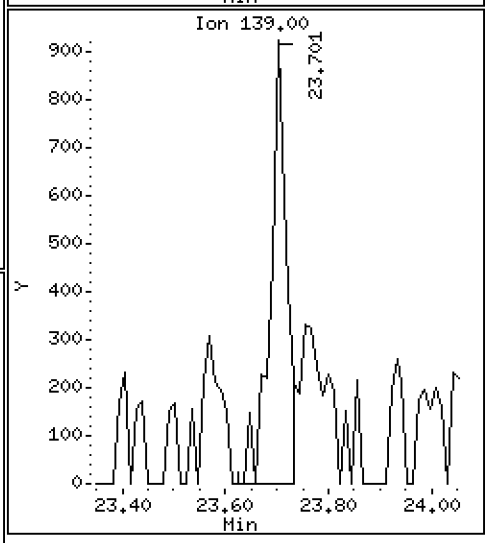
42 Carbazole

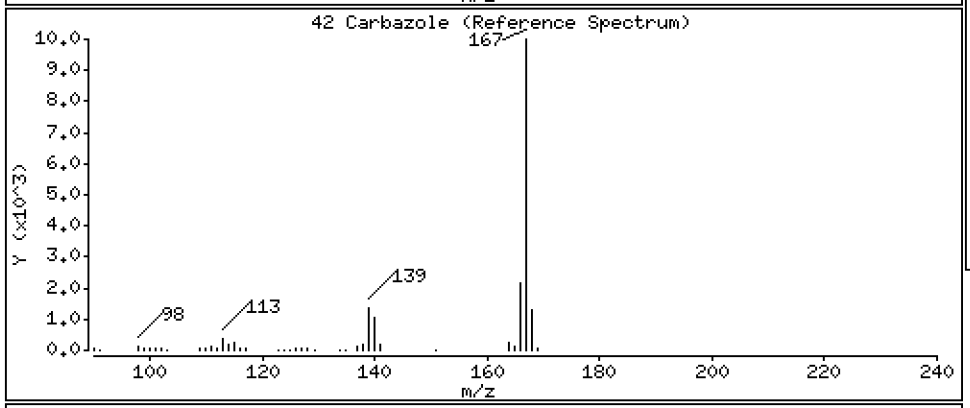
Concentration: 0.2771 ug/mL

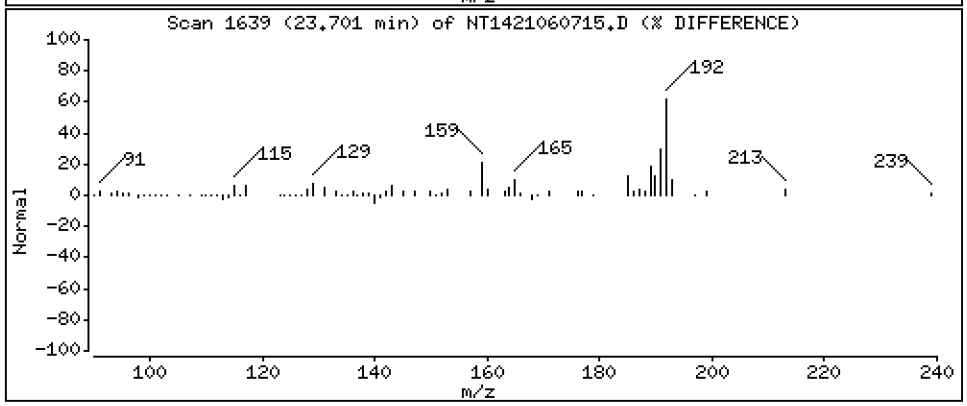












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Date : 07-JUN-2021 23:43

Client ID:

Instrument: nt14.i

Sample Info: 21E0106-04

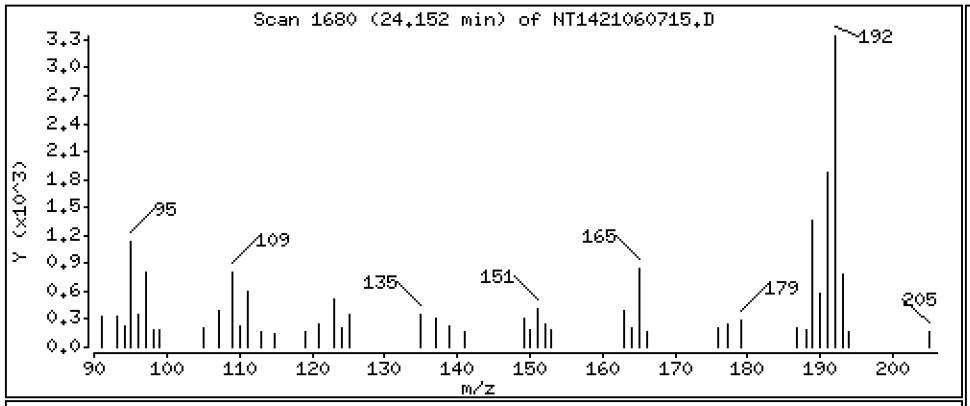
Operator: VTS

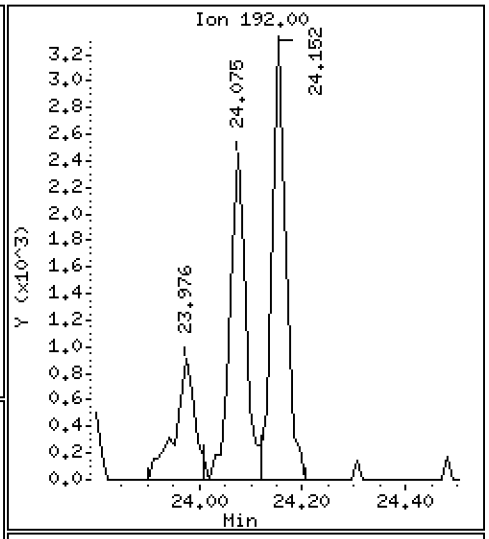
Column phase: Rxi-17Sil MS

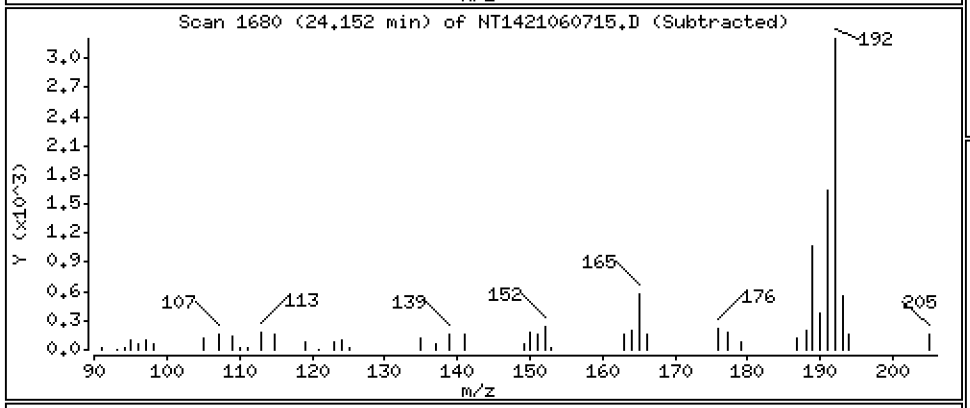
Column diameter: 0.25

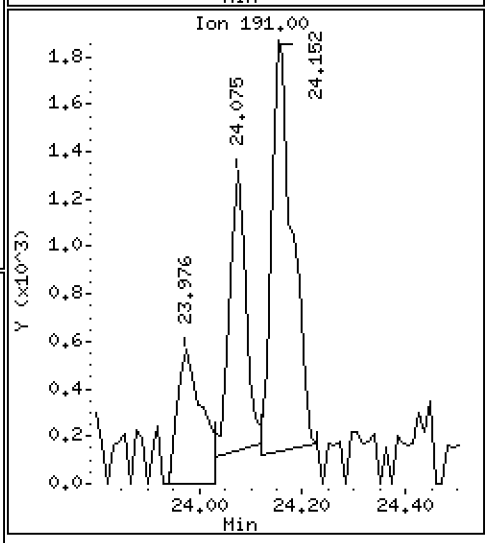
43 1-Methylphenanthrene

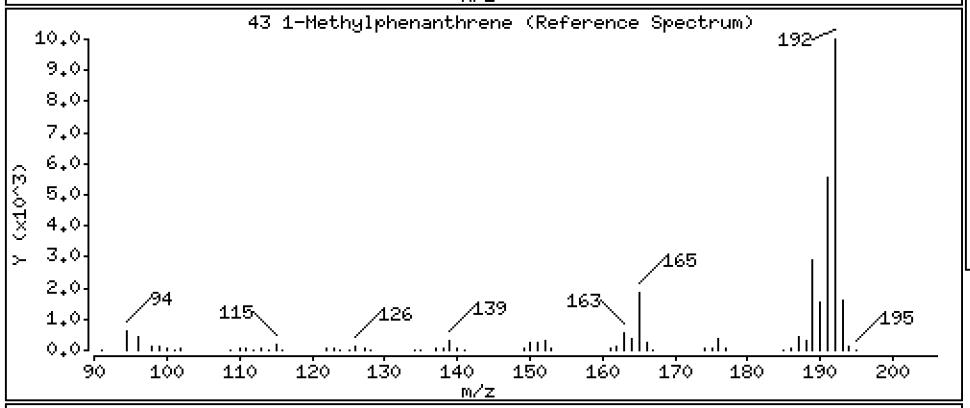
Concentration: 0.2316 ug/mL

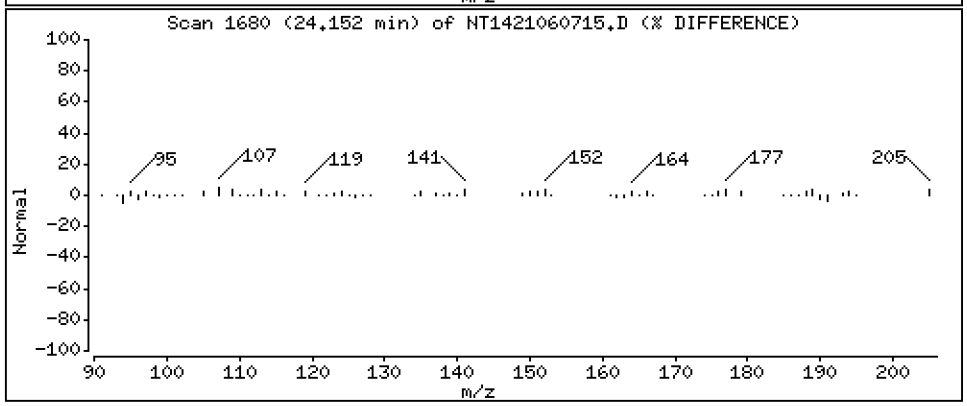












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Date : 07-JUN-2021 23:43

Client ID:

Instrument: nt14.i

Sample Info: 21E0106-04

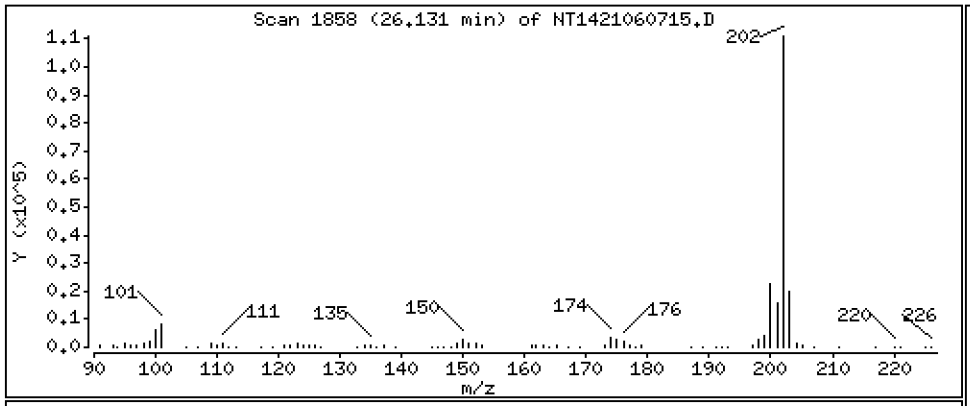
Operator: VTS

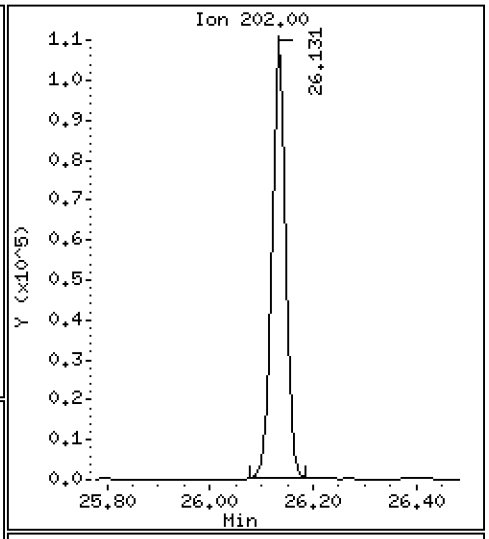
Column phase: Rxi-17Sil MS

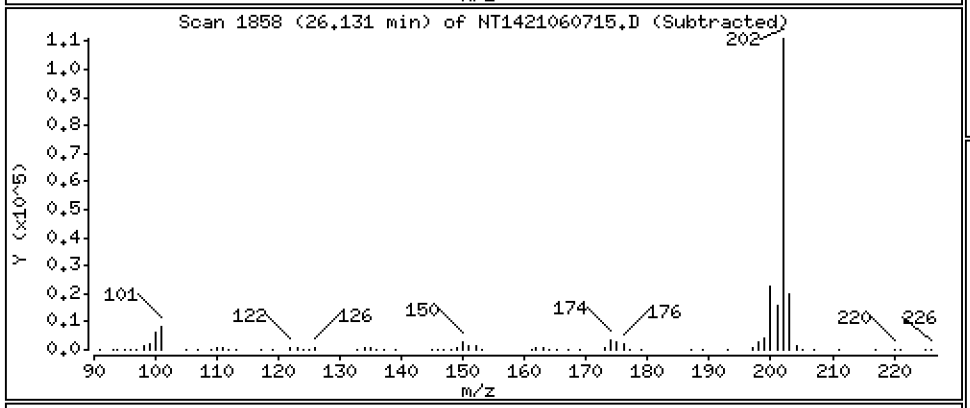
Column diameter: 0.25

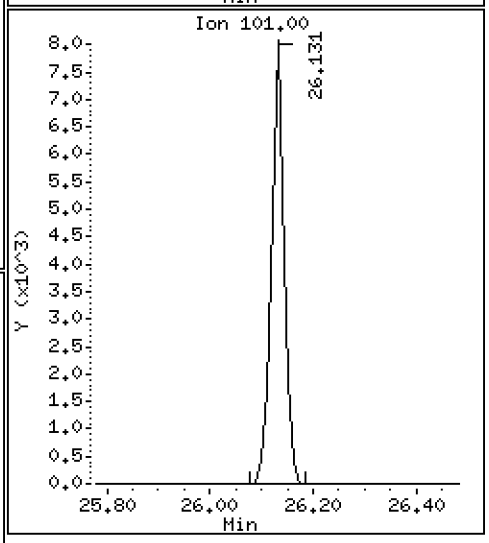
44 Fluoranthene

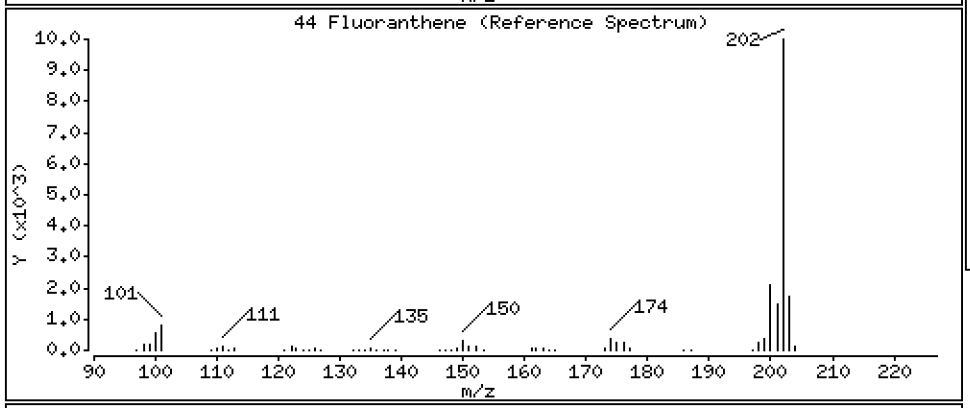
Concentration: 4.792 ug/mL

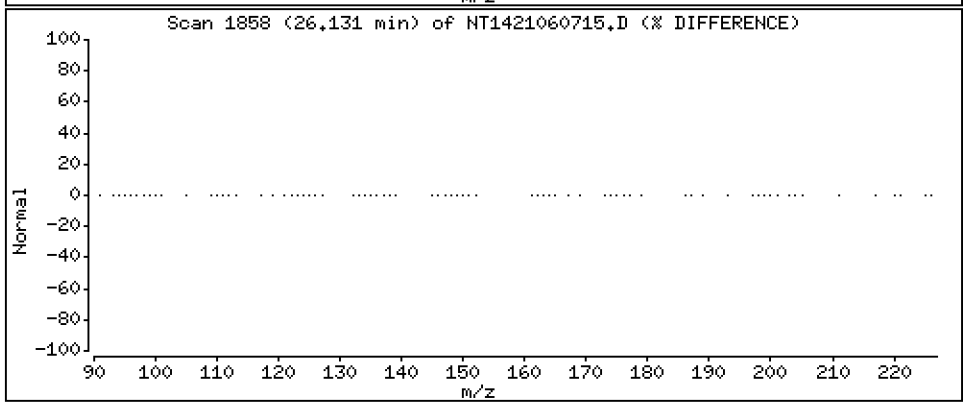












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Date : 07-JUN-2021 23:43

Client ID:

Instrument: nt14.i

Sample Info: 21E0106-04

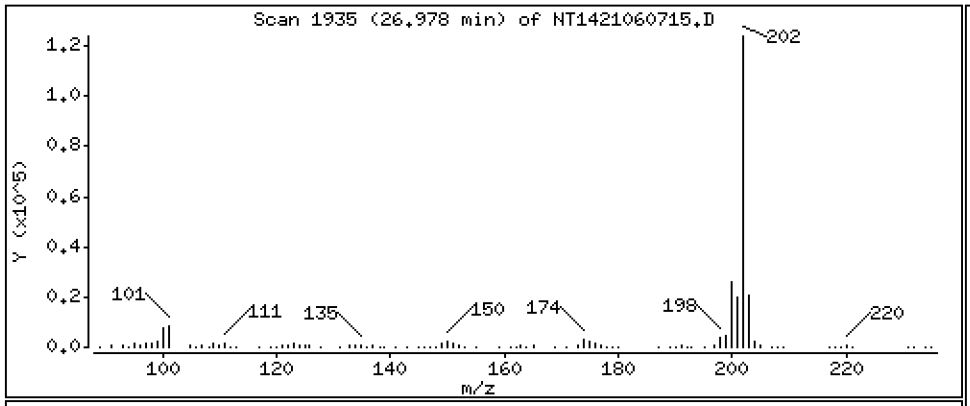
Operator: VTS

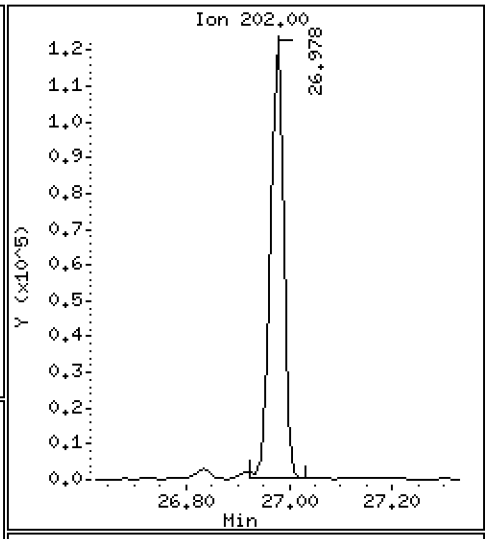
Column phase: Rxi-17Sil MS

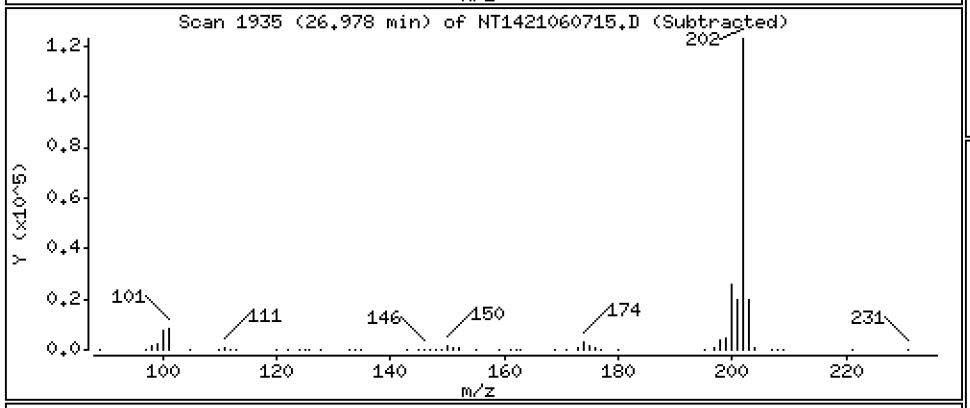
Column diameter: 0.25

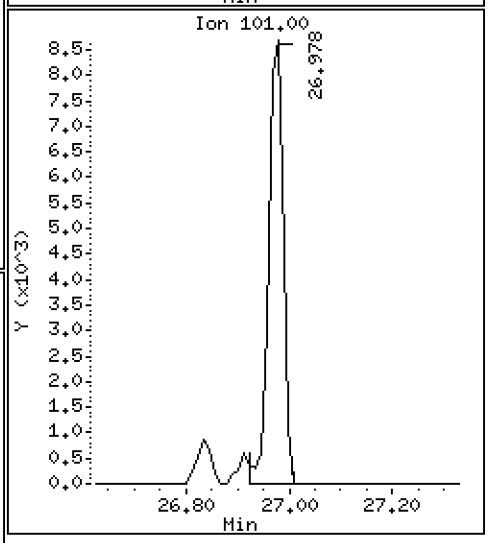
46 Pyrene

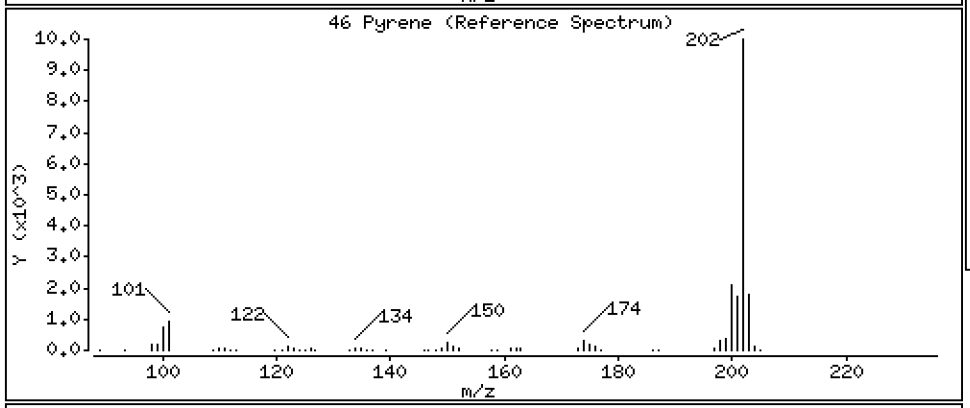
Concentration: 4.797 ug/mL

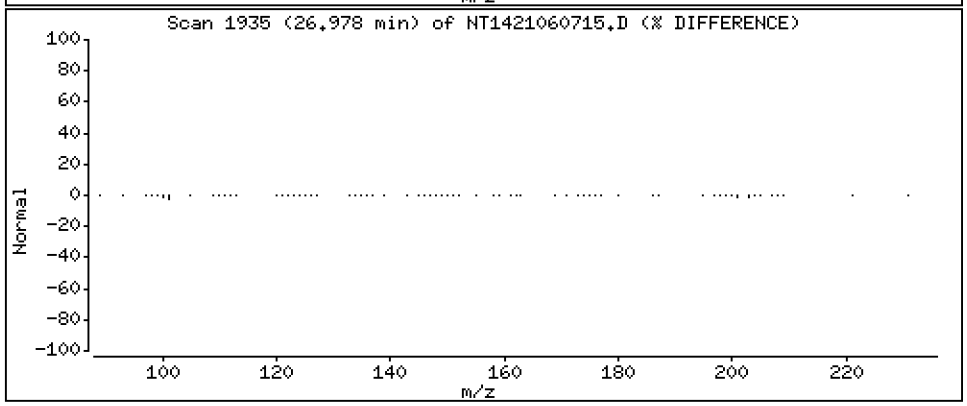












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Date : 07-JUN-2021 23:43

Client ID:

Instrument: nt14.i

Sample Info: 21E0106-04

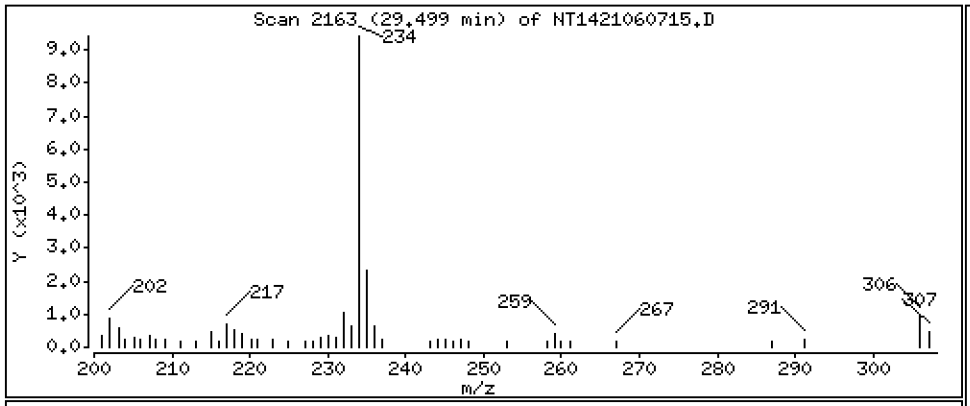
Operator: VTS

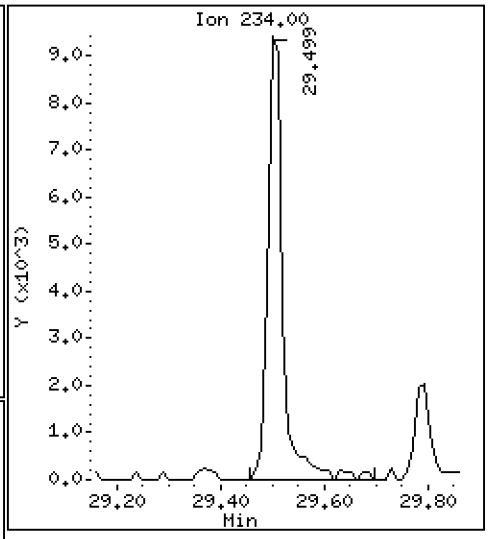
Column phase: Rxi-17Sil MS

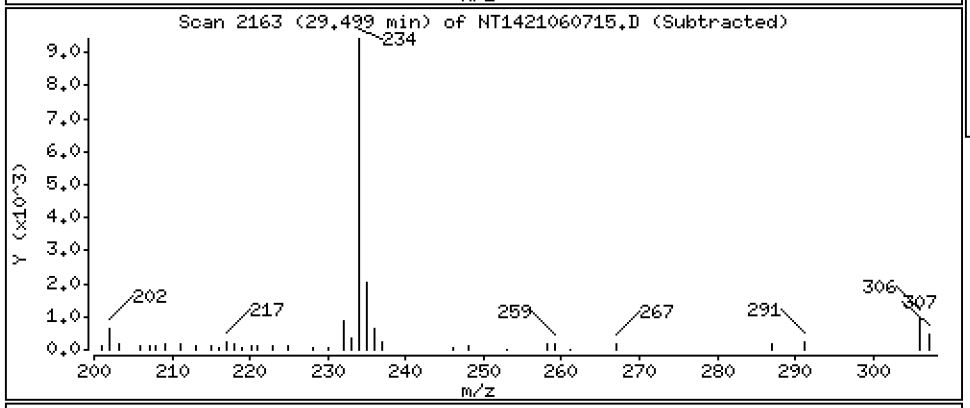
Column diameter: 0.25

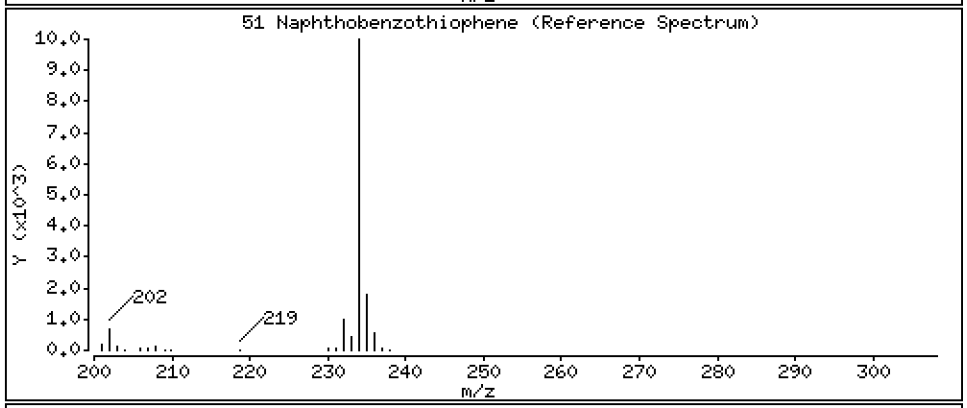
51 Naphthobenzothiophene

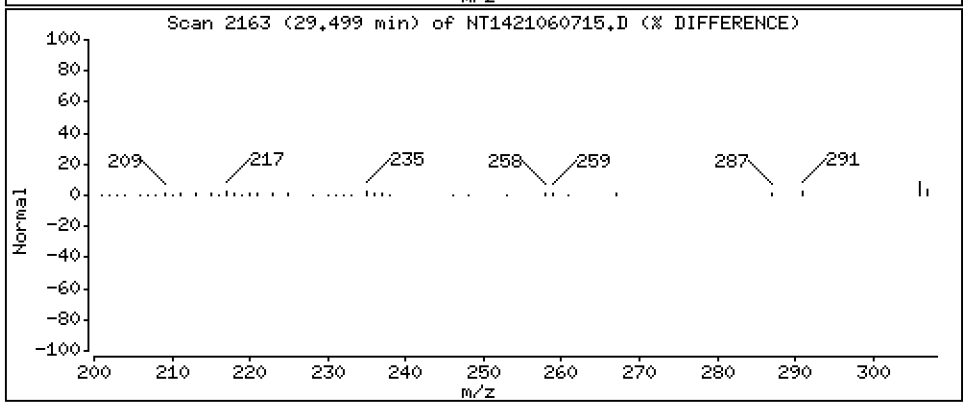
Concentration: 0.4037 ug/mL











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Date : 07-JUN-2021 23:43

Client ID:

Instrument: nt14.i

Sample Info: 21E0106-04

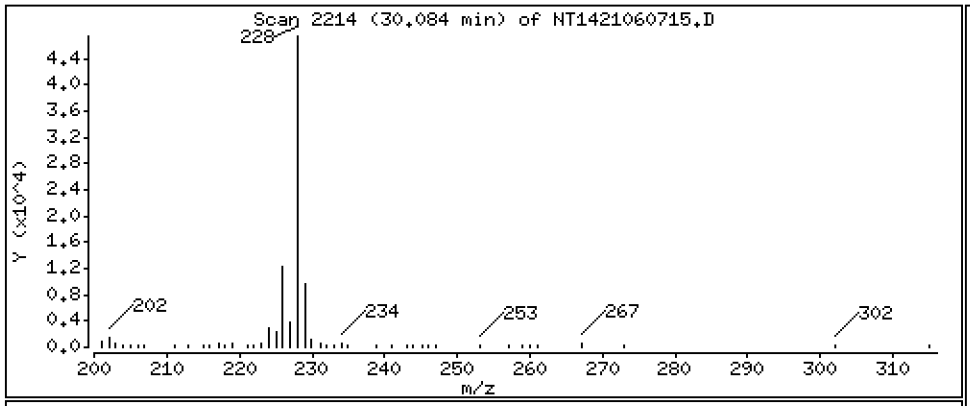
Operator: VTS

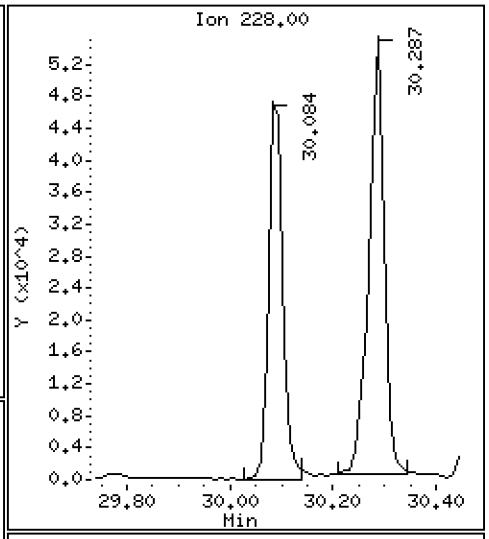
Column phase: Rxi-17Sil MS

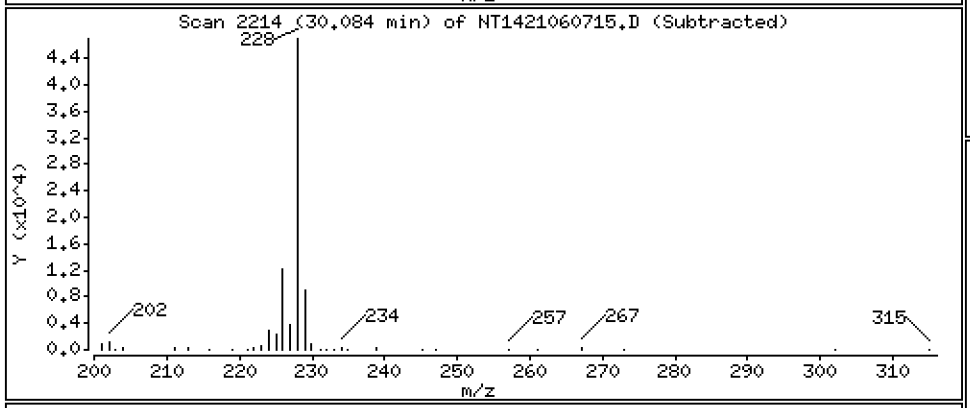
Column diameter: 0.25

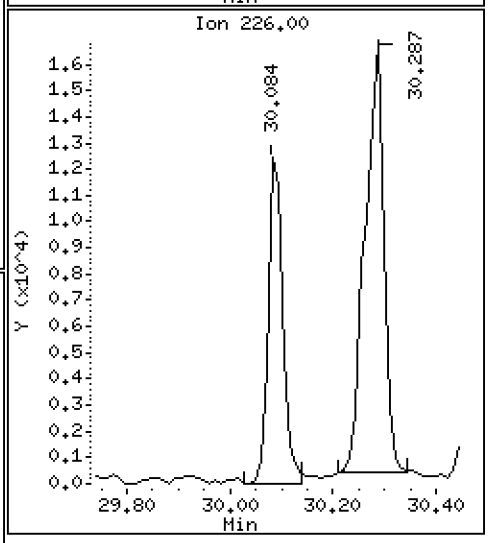
55 Benzo(a)anthracene

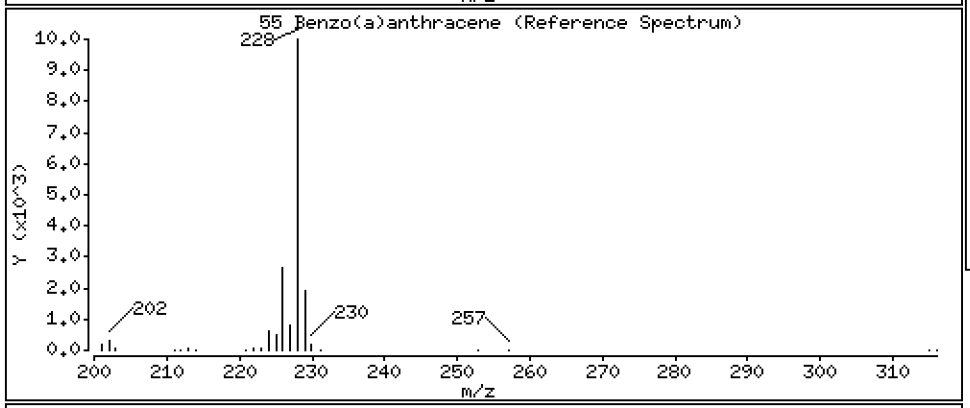
Concentration: 2.509 ug/mL

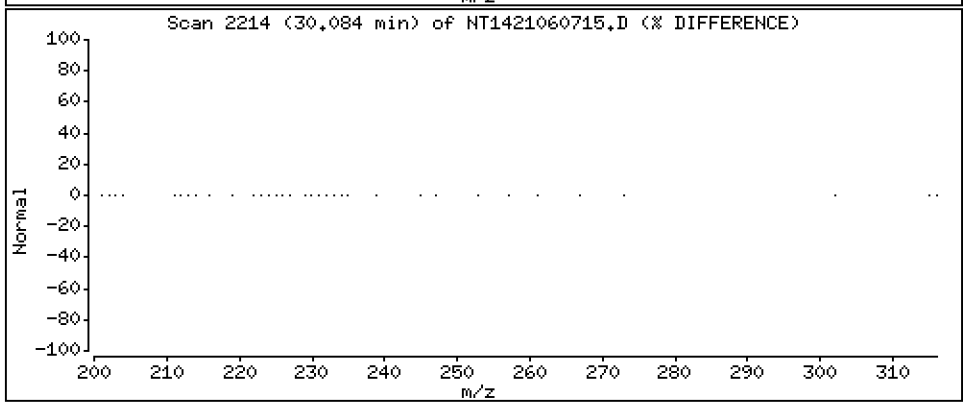












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Date : 07-JUN-2021 23:43

Client ID:

Instrument: nt14.i

Sample Info: 21E0106-04

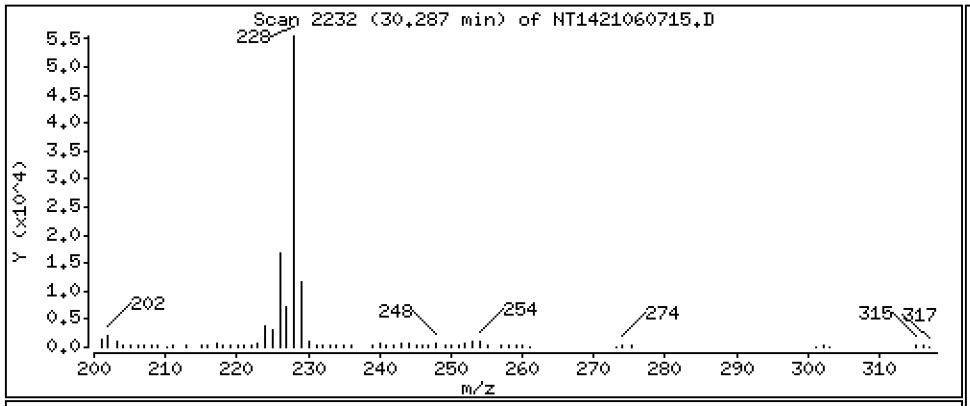
Operator: VTS

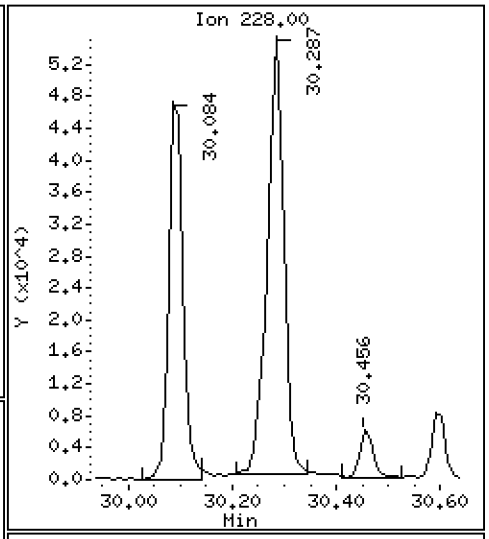
Column phase: Rxi-17Sil MS

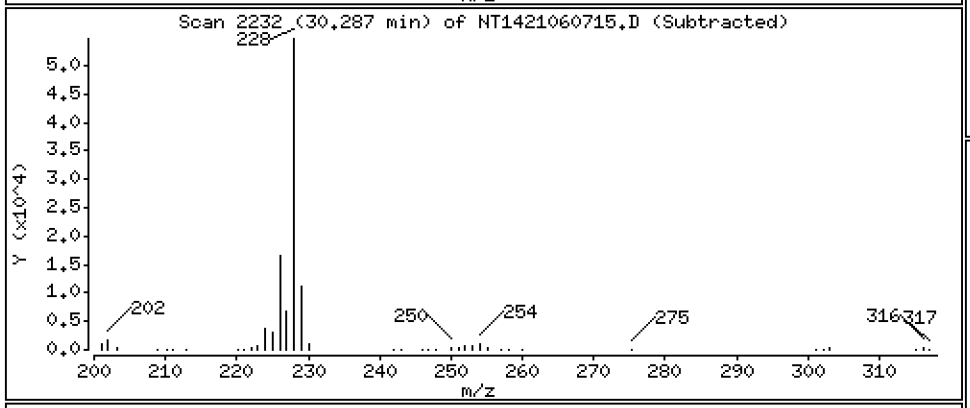
Column diameter: 0.25

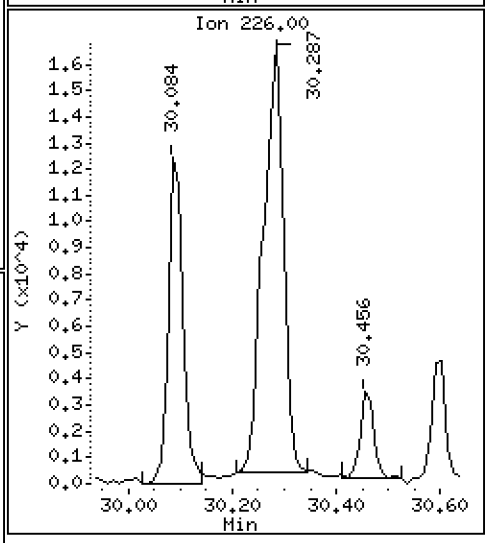
57 Chrysene

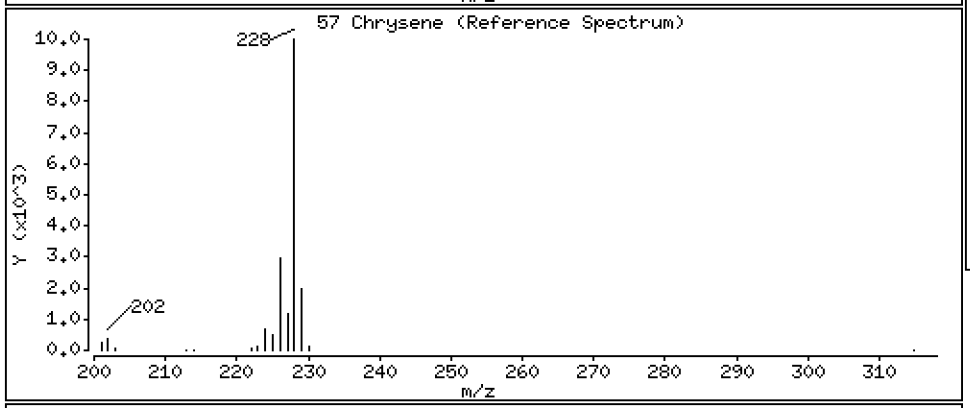
Concentration: 3.142 ug/mL

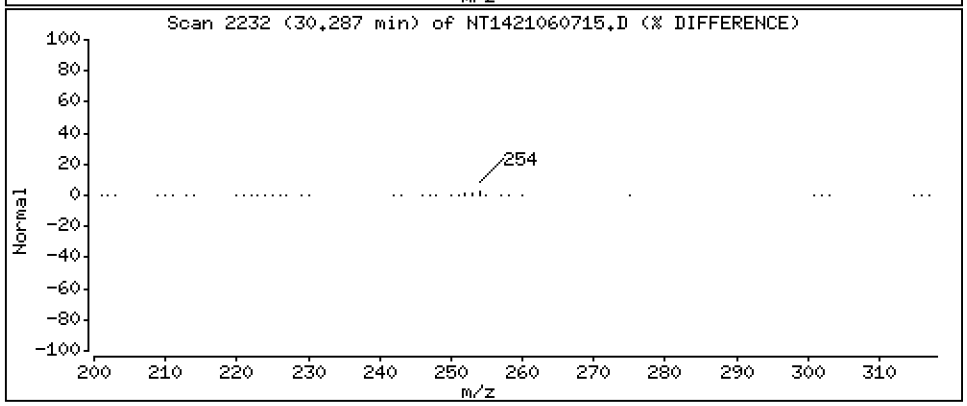












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Date : 07-JUN-2021 23:43

Client ID:

Instrument: nt14.i

Sample Info: 21E0106-04

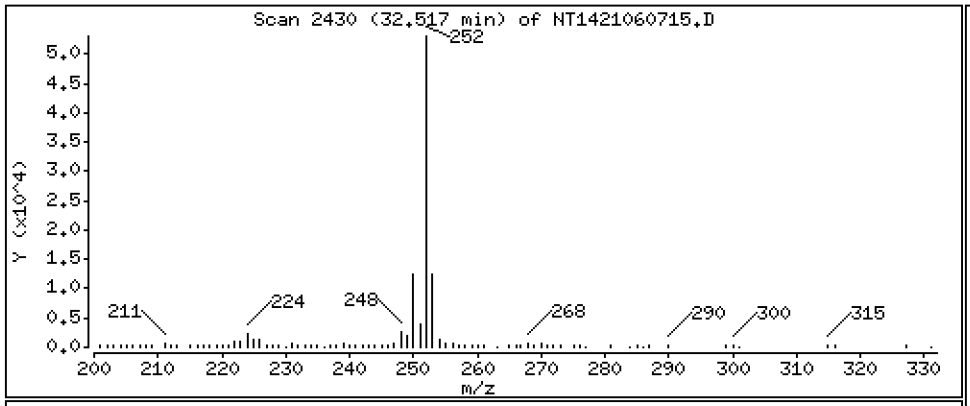
Operator: VTS

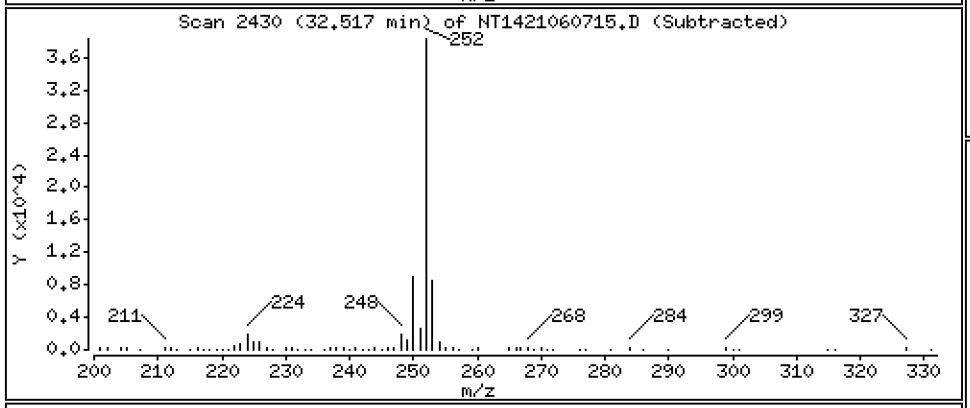
Column phase: Rxi-17Sil MS

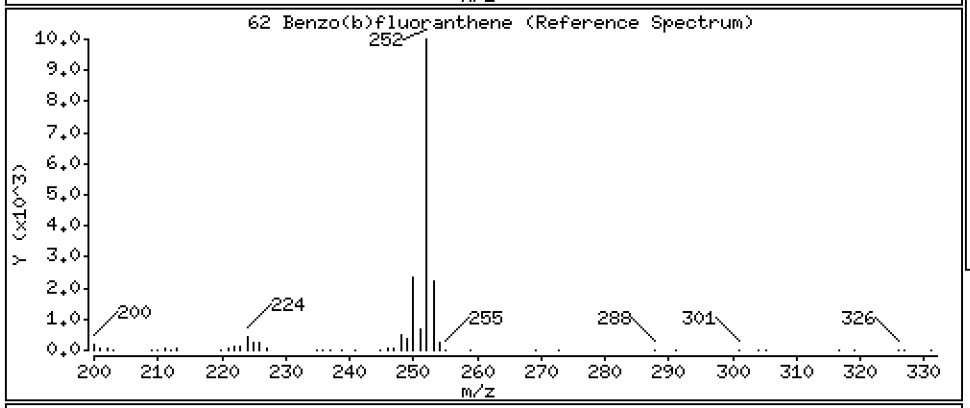
Column diameter: 0.25

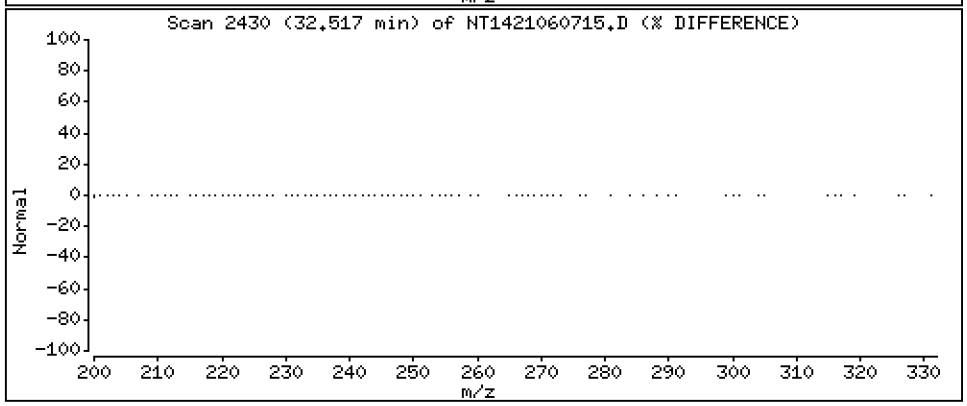
62 Benzo(b)fluoranthene

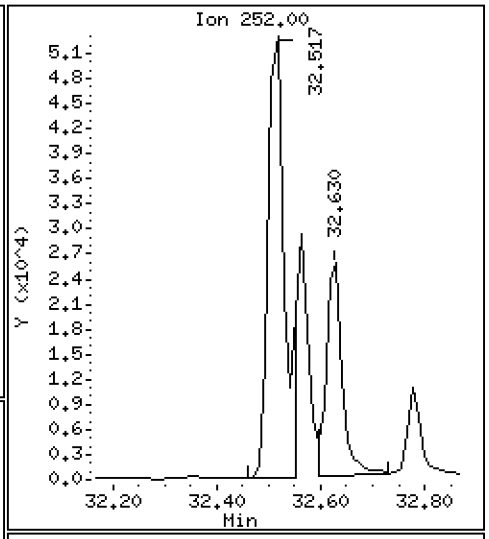
Concentration: 2.981 ug/mL

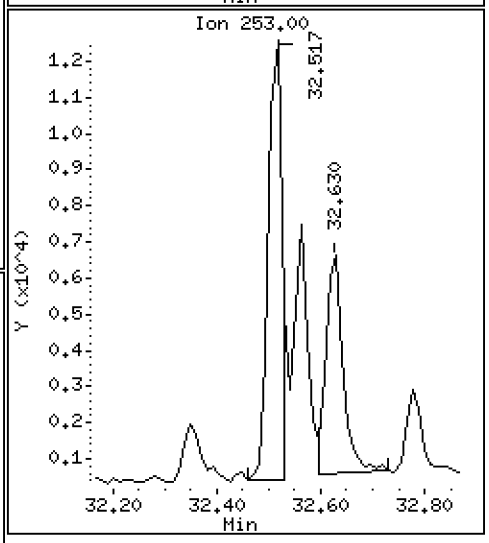












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Client ID:

Instrument: nt14.i

Sample Info: 21E0106-04

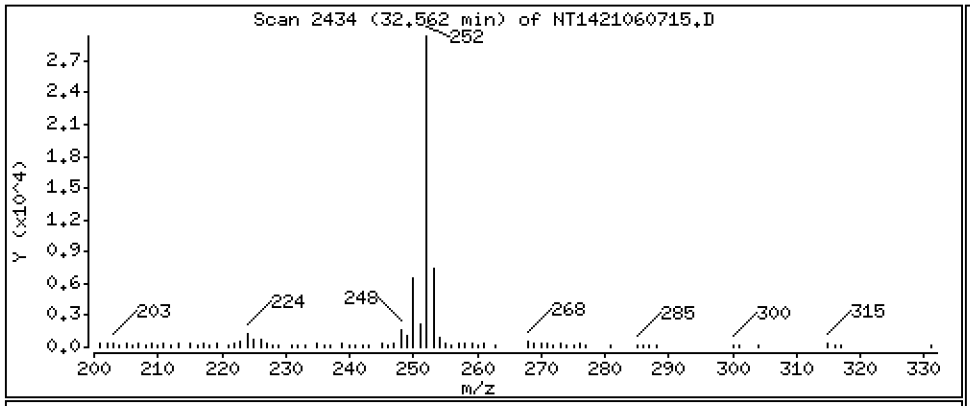
Operator: VTS

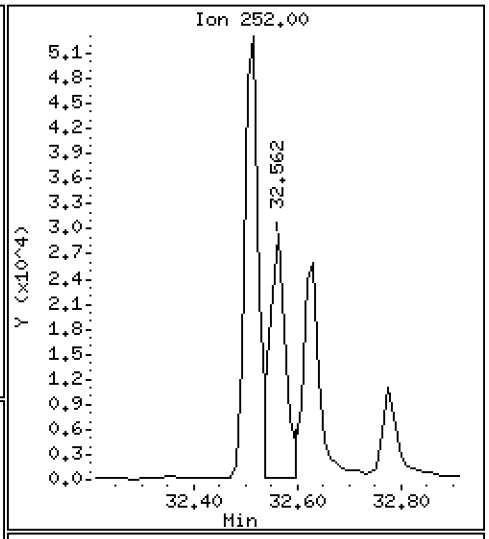
Column phase: Rxi-17Sil MS

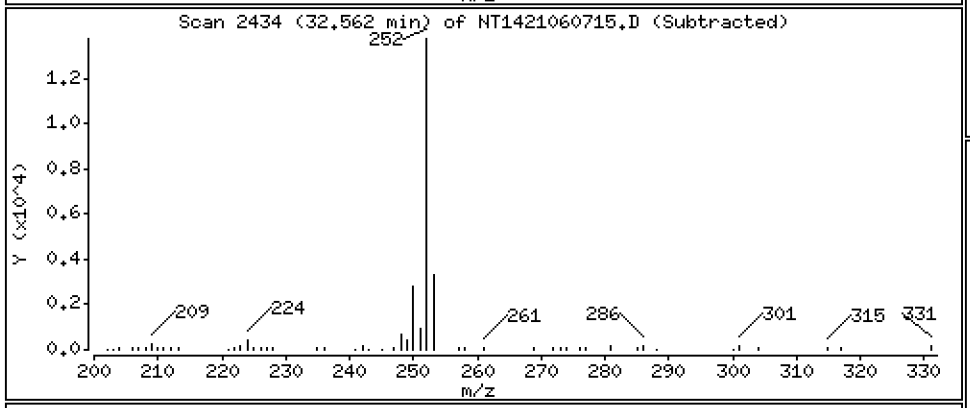
Column diameter: 0.25

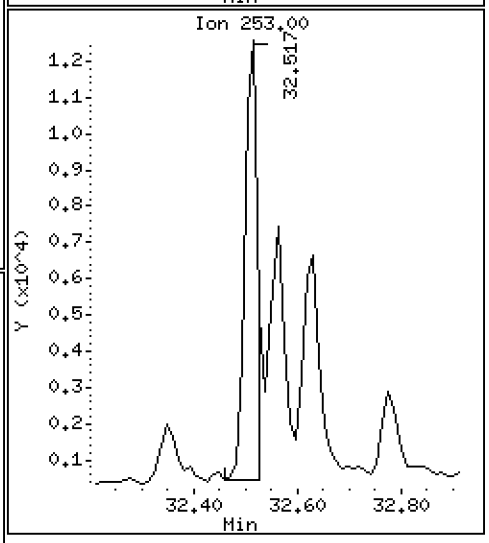
63 Benzo(k)fluoranthene

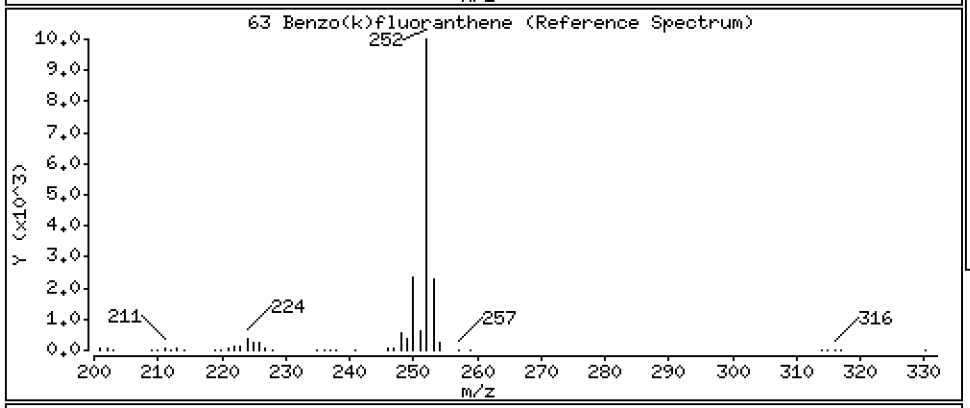
Concentration: 1.465 ug/mL

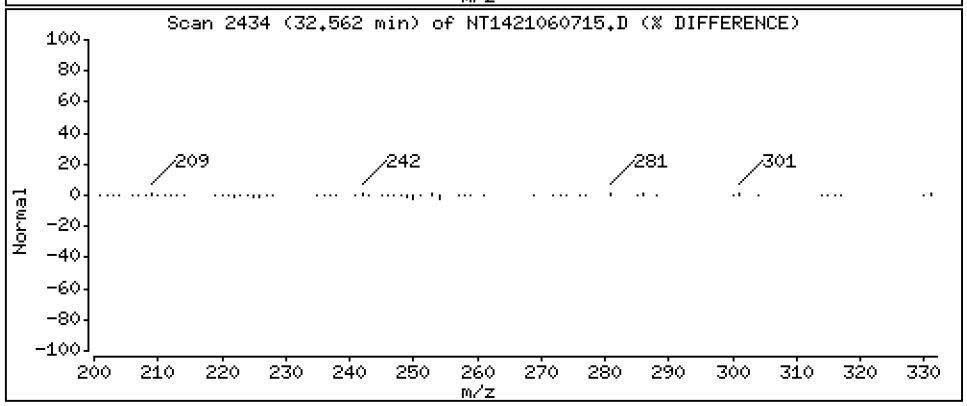












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Date : 07-JUN-2021 23:43

Client ID:

Instrument: nt14.i

Sample Info: 21E0106-04

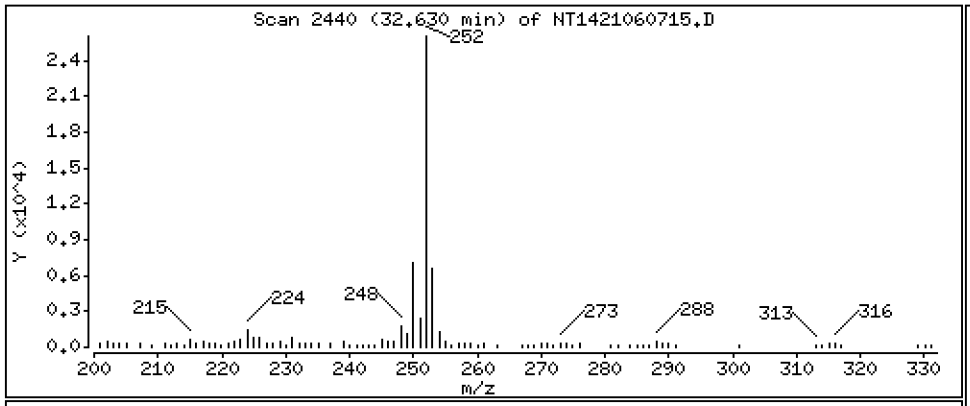
Operator: VTS

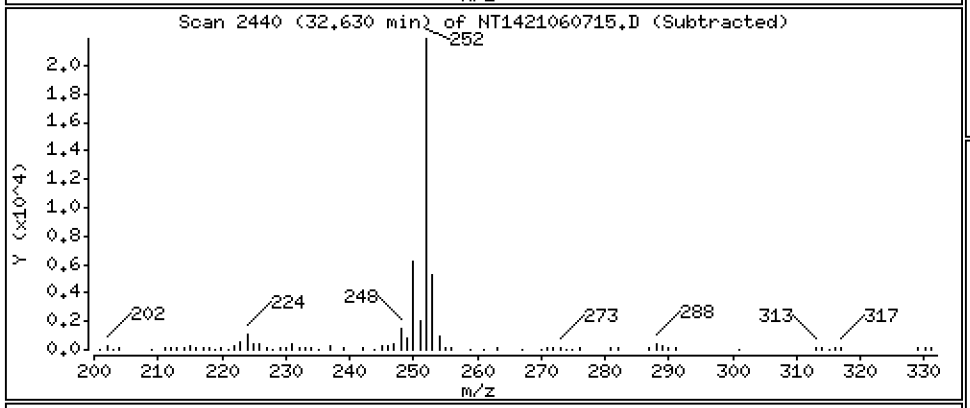
Column phase: Rxi-17Sil MS

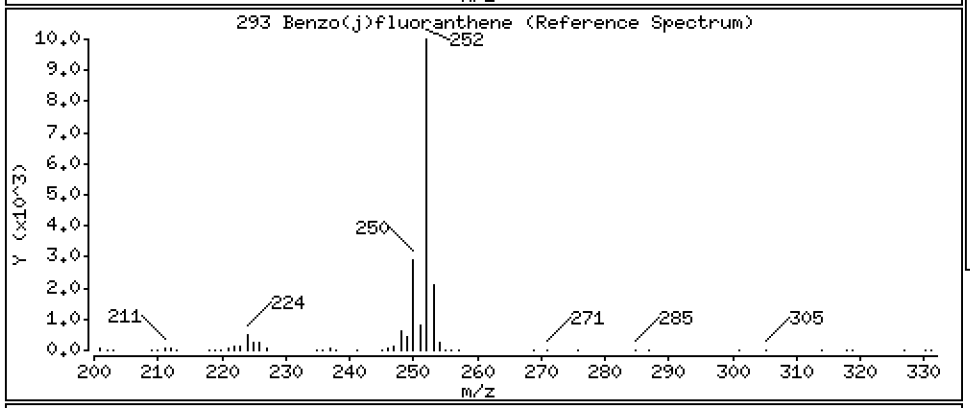
Column diameter: 0.25

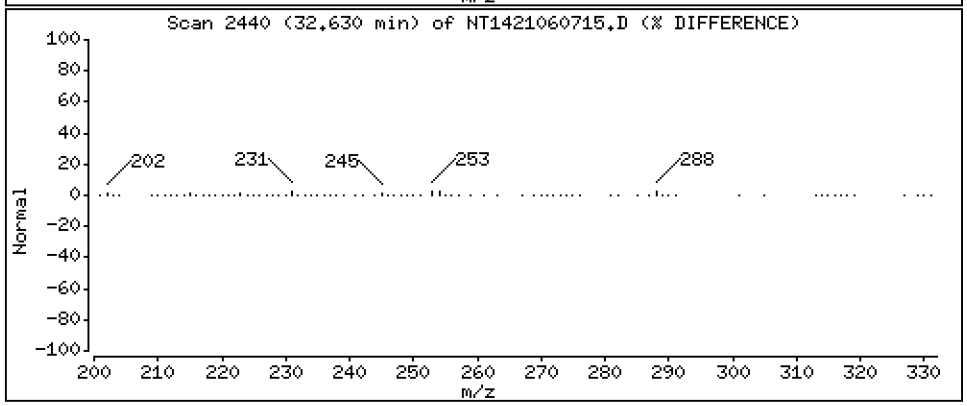
293 Benzo(j)fluoranthene

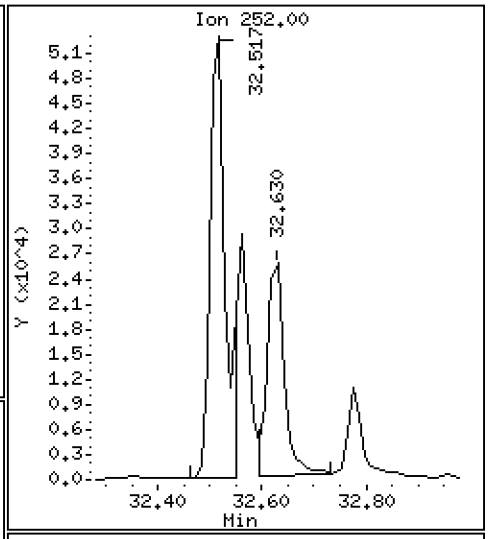
Concentration: 1.500 ug/mL

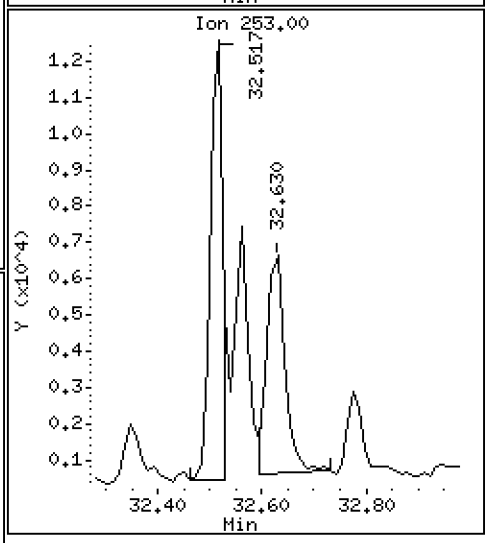












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Date : 07-JUN-2021 23:43

Client ID:

Instrument: nt14.i

Sample Info: 21E0106-04

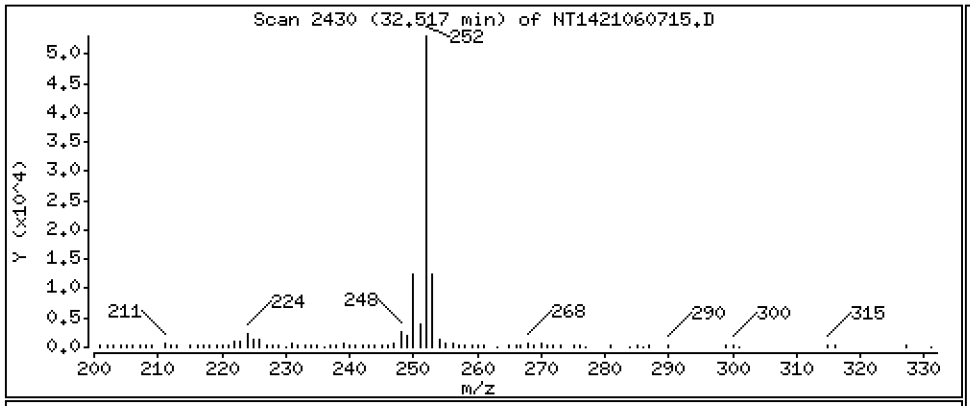
Operator: VTS

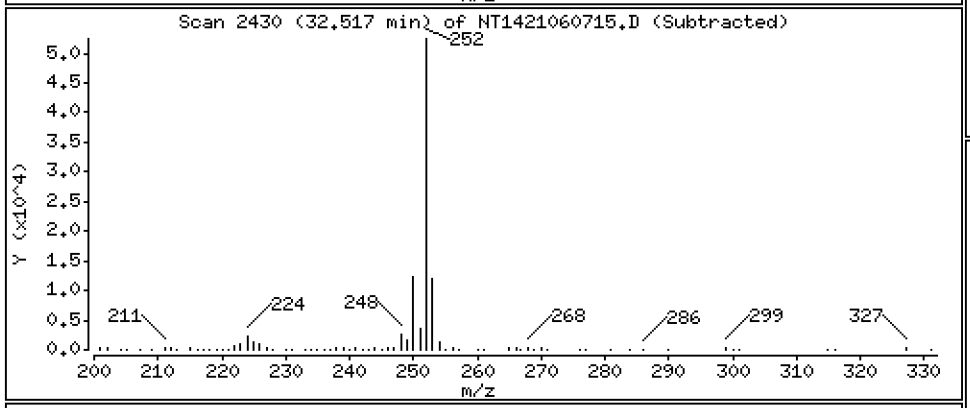
Column phase: Rxi-17Sil MS

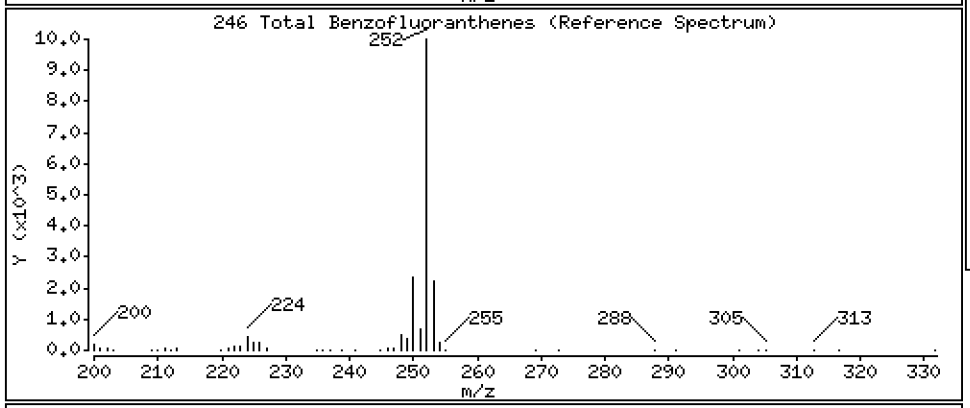
Column diameter: 0.25

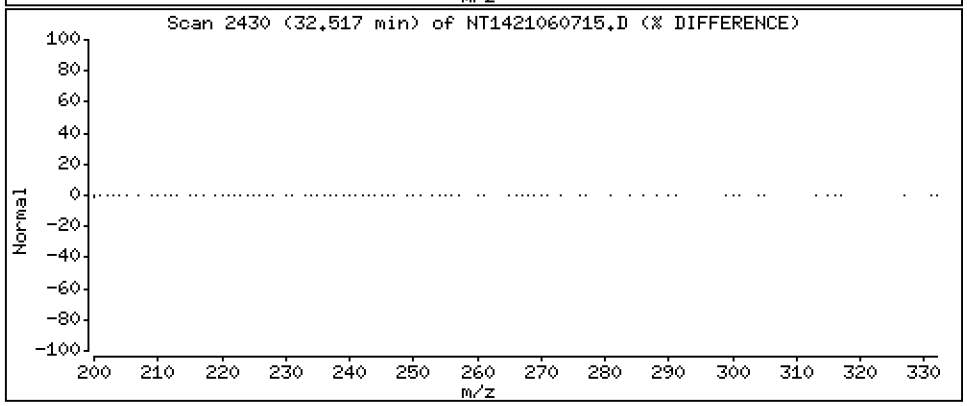
246 Total Benzofluoranthenes

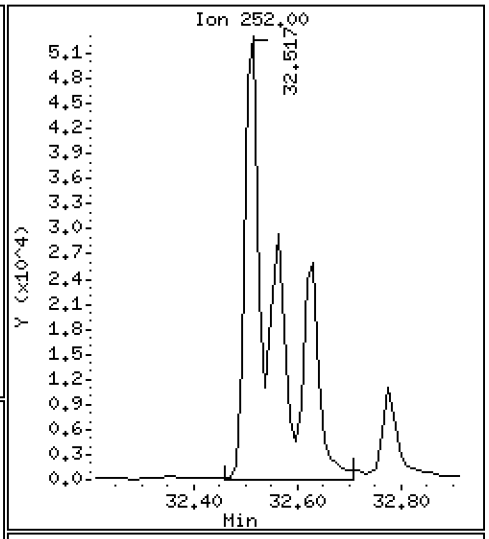
Concentration: 5.690 ug/mL

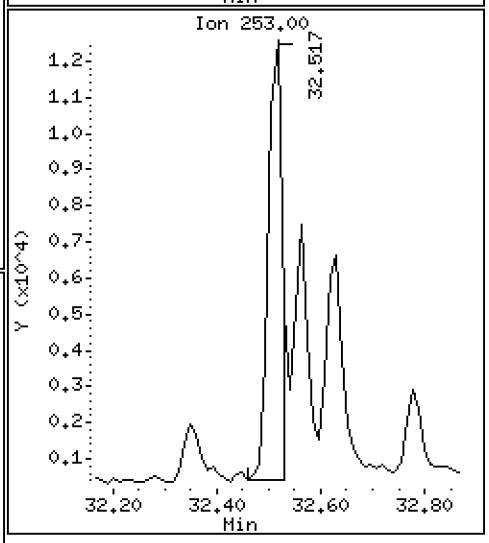












Data File: \\target\share\chem3\nt14.i\20210607.b\NT1421060715.D

Date : 07-JUN-2021 23:43

Client ID:

Instrument: nt14.i

Sample Info: 21E0106-04

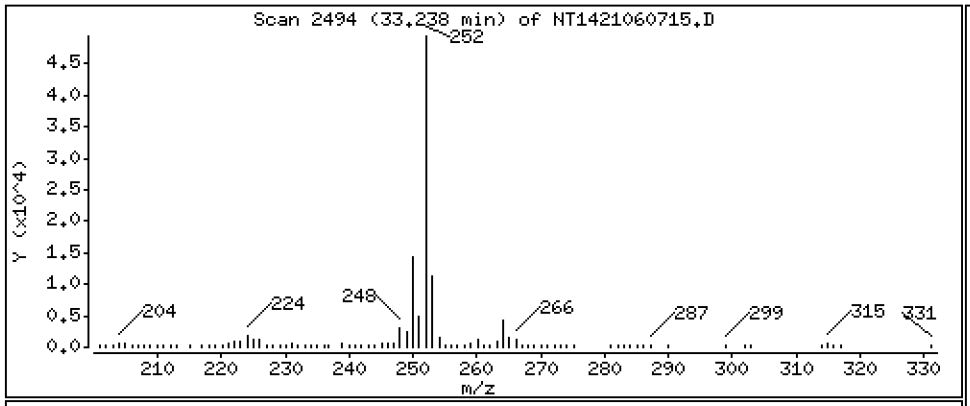
Operator: VTS

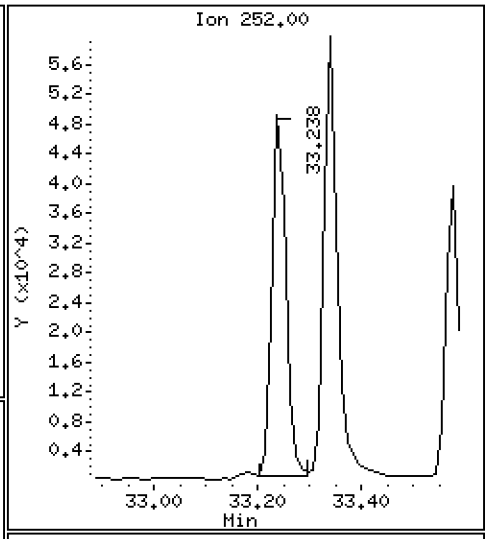
Column phase: Rxi-17Sil MS

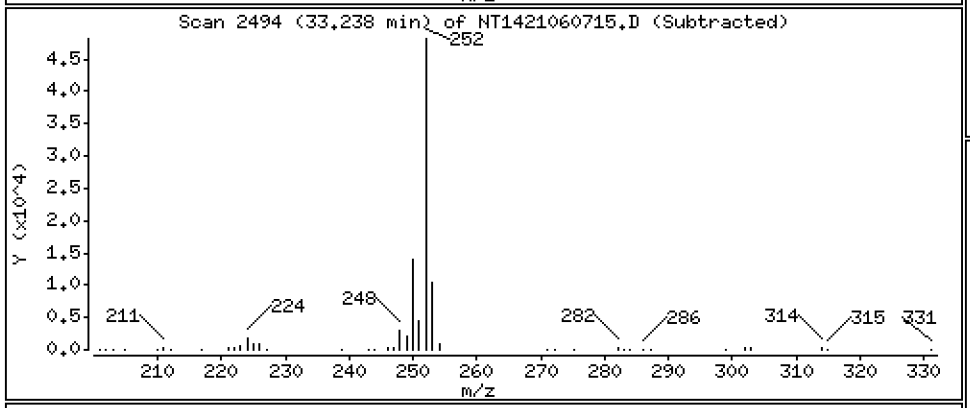
Column diameter: 0.25

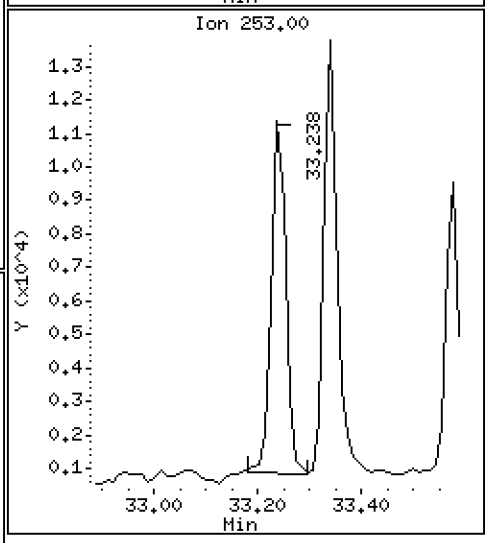
64 Benzo(e)pyrene

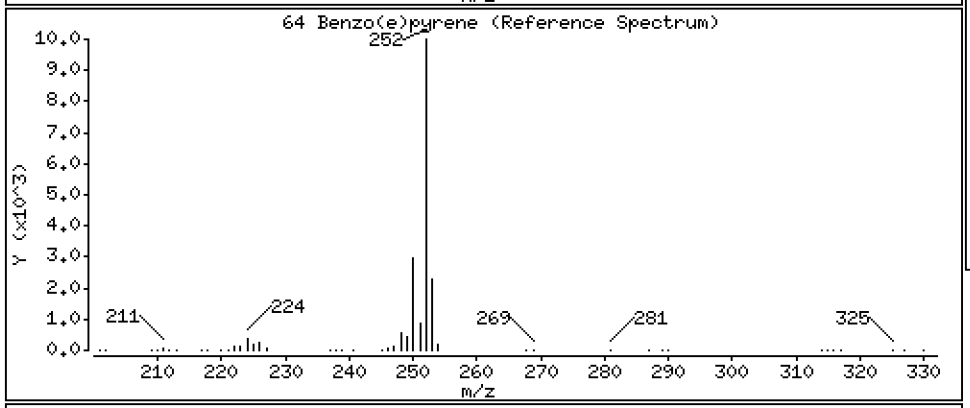
Concentration: 2.251 ug/mL

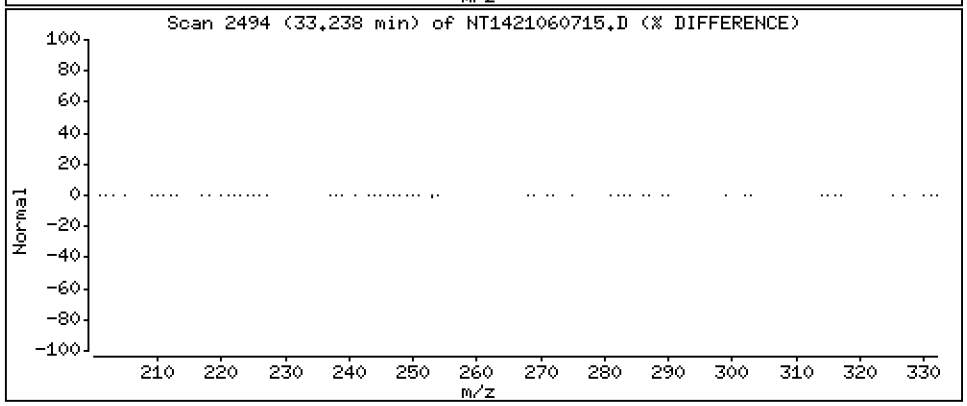












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Date : 07-JUN-2021 23:43

Client ID:

Instrument: nt14.i

Sample Info: 21E0106-04

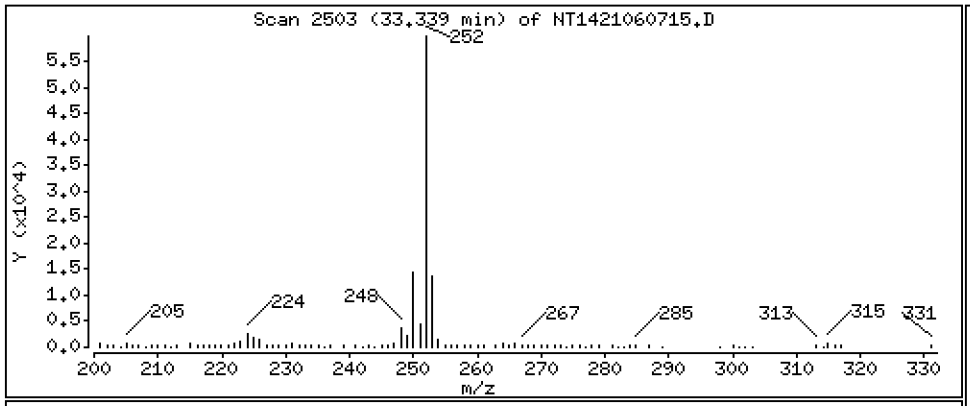
Operator: VTS

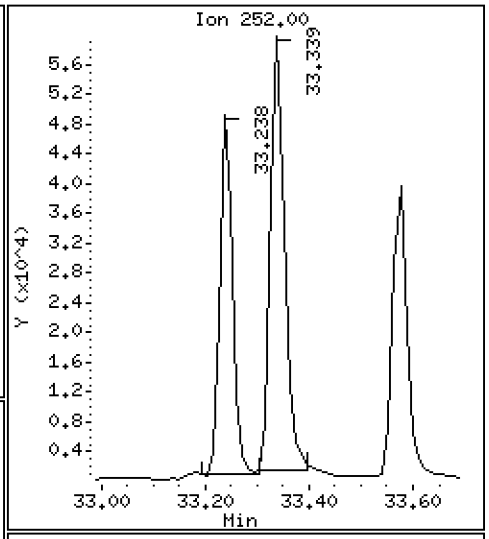
Column phase: Rxi-17Sil MS

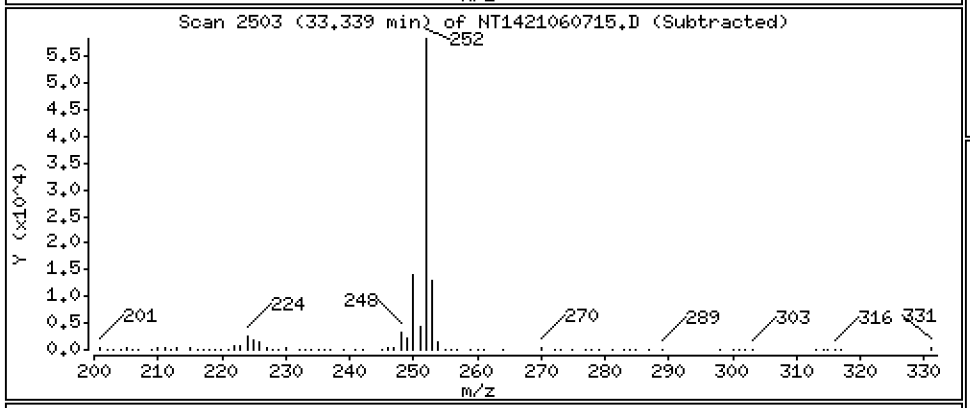
Column diameter: 0.25

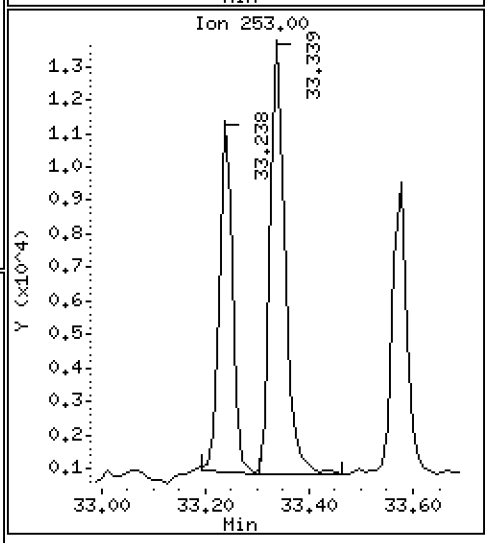
66 Benzo(a)pyrene

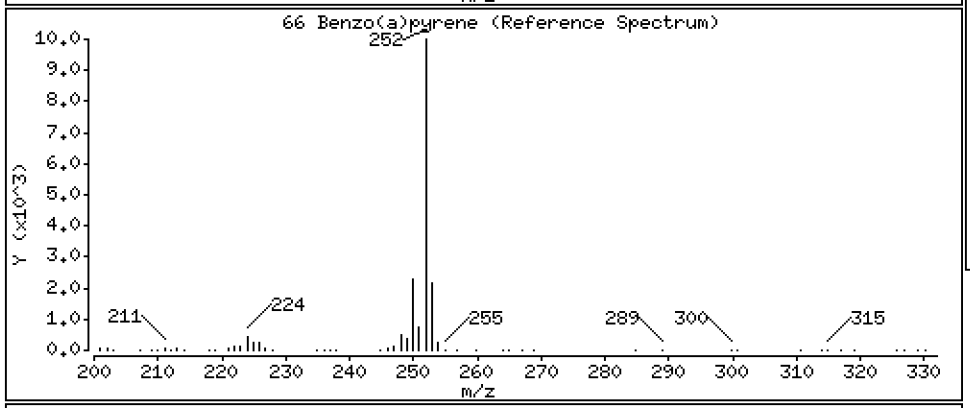
Concentration: 3.037 ug/mL

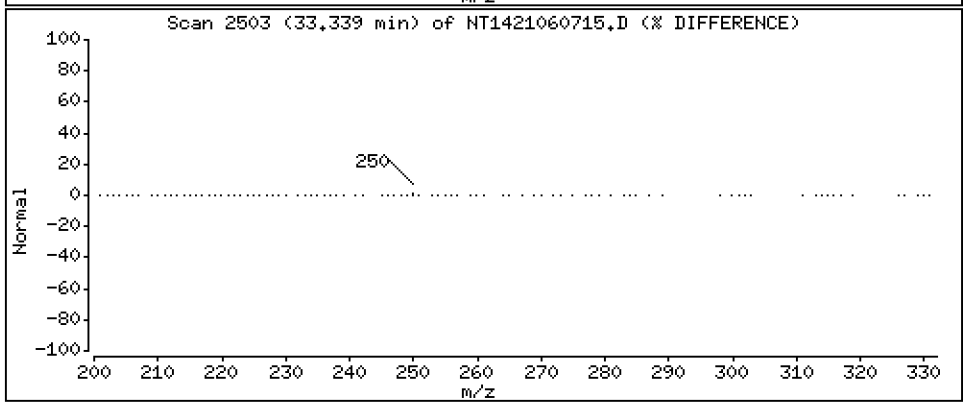












Data File: \\target\share\chem3\nt14.i\20210607.b\NT1421060715.D

Date : 07-JUN-2021 23:43

Client ID:

Instrument: nt14.i

Sample Info: 21E0106-04

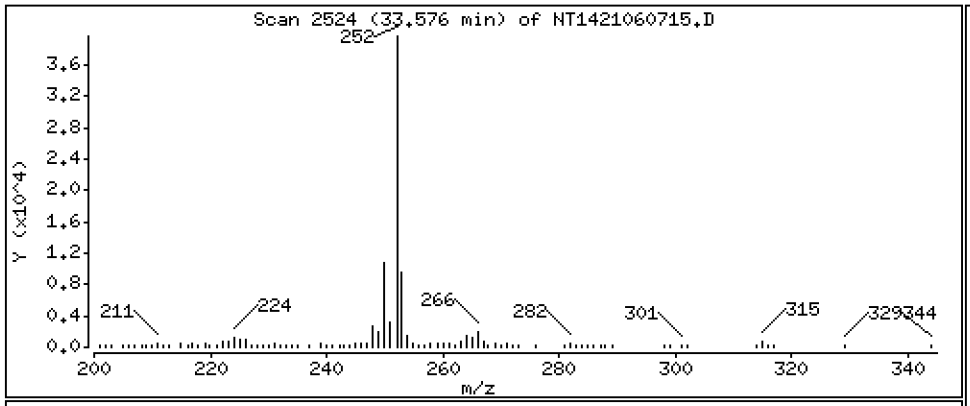
Operator: VTS

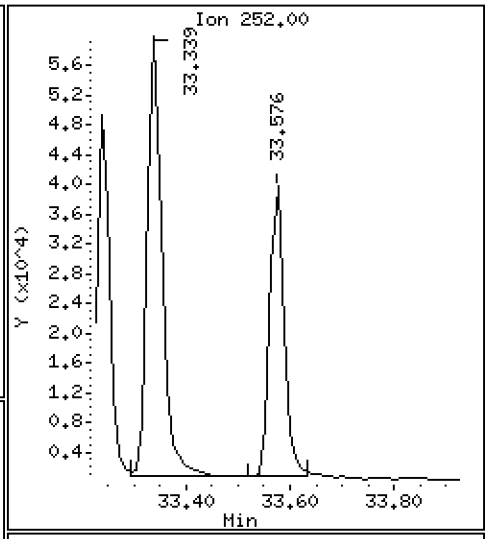
Column phase: Rxi-17Sil MS

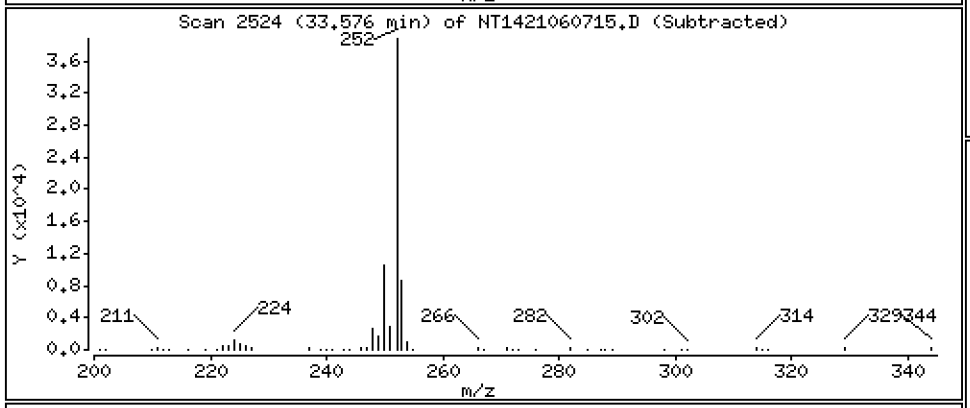
Column diameter: 0.25

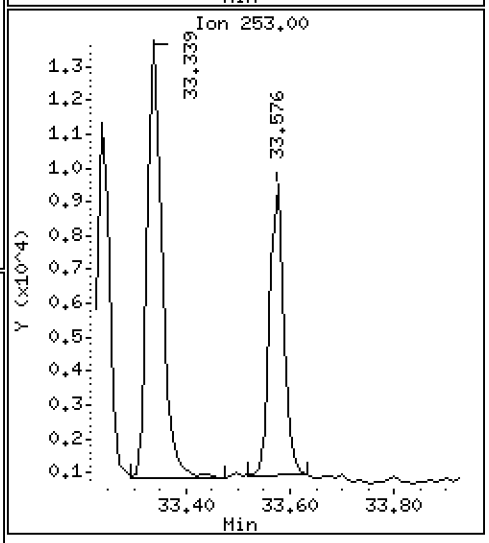
68 Perylene

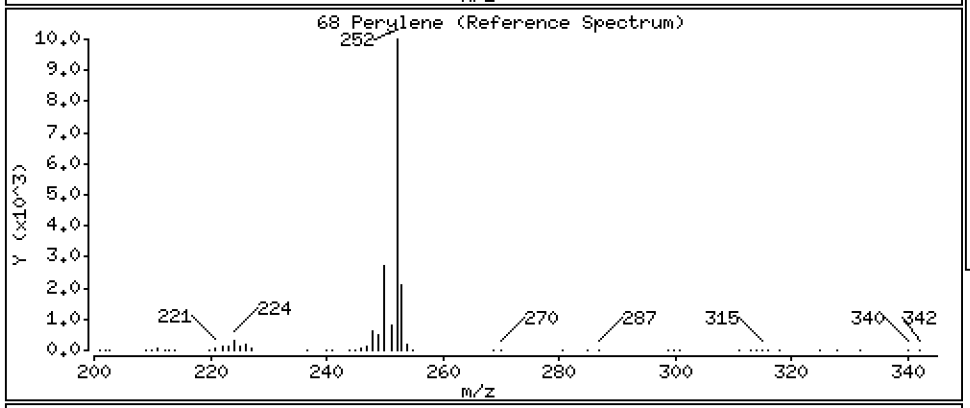
Concentration: 2.005 ug/mL

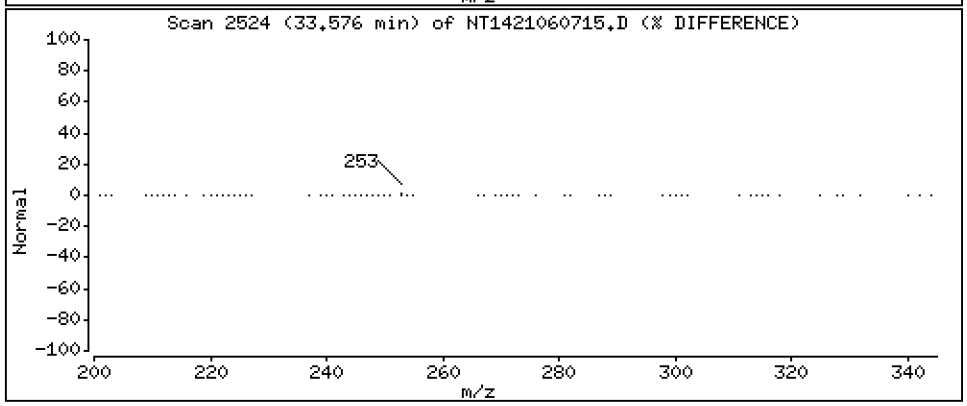












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Date : 07-JUN-2021 23:43

Client ID:

Instrument: nt14.i

Sample Info: 21E0106-04

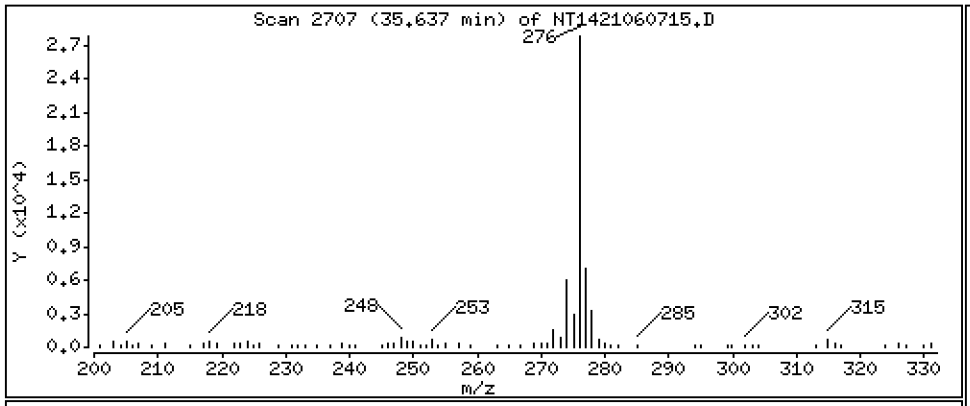
Operator: VTS

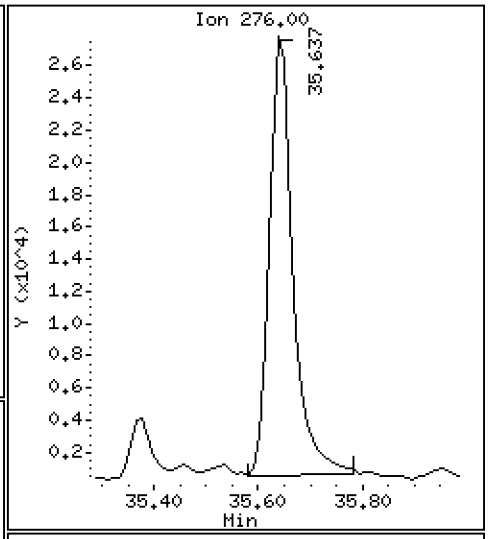
Column phase: Rxi-17Sil MS

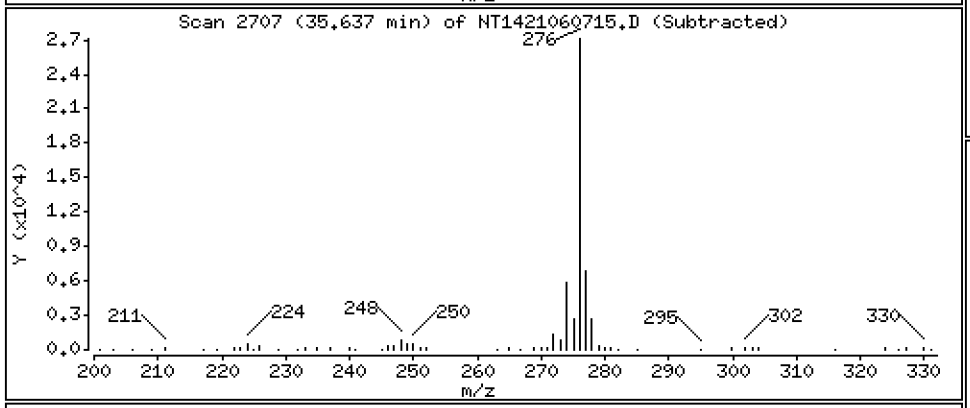
Column diameter: 0.25

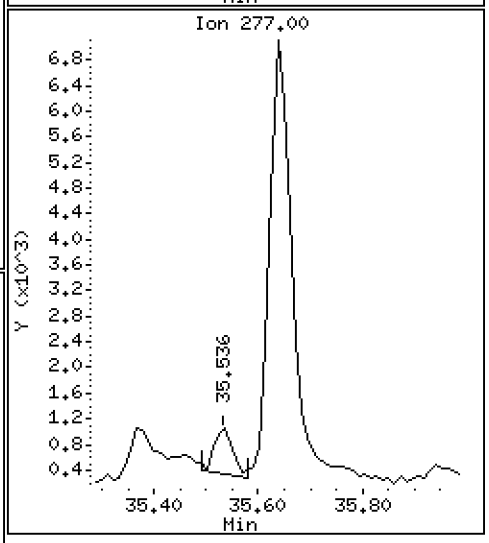
69 Indeno(1,2,3-cd)pyrene

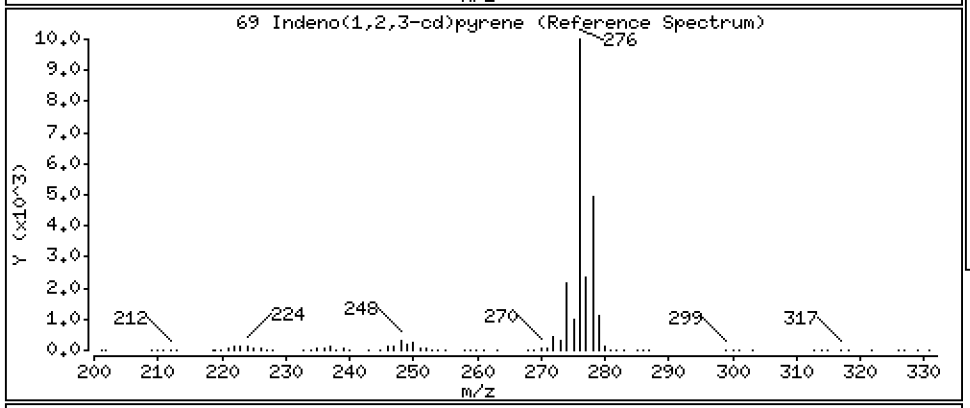
Concentration: 2.061 ug/mL

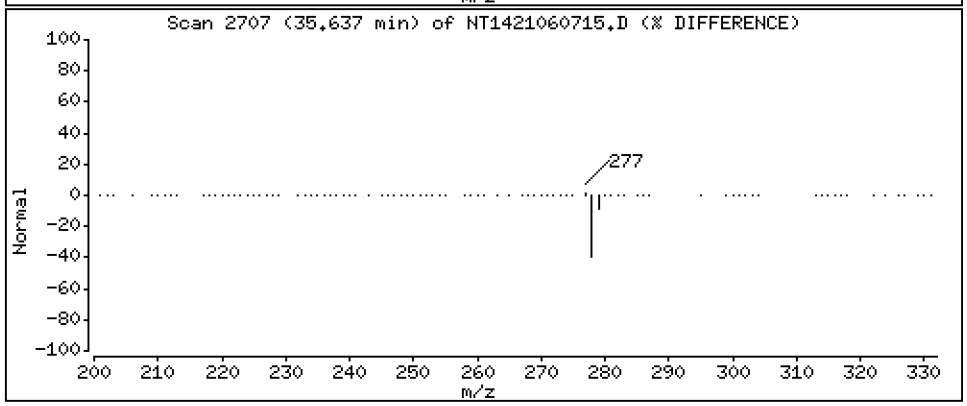












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Date : 07-JUN-2021 23:43

Client ID:

Instrument: nt14.i

Sample Info: 21E0106-04

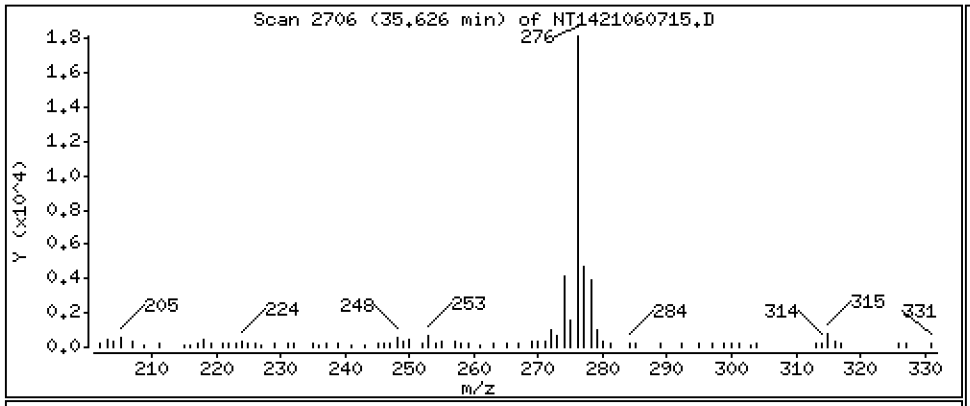
Operator: VTS

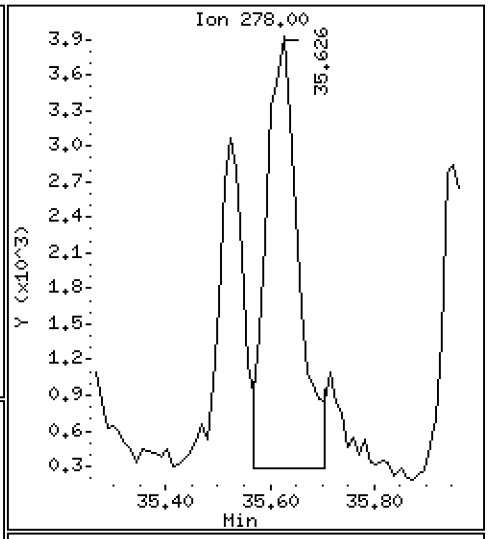
Column phase: Rxi-17Sil MS

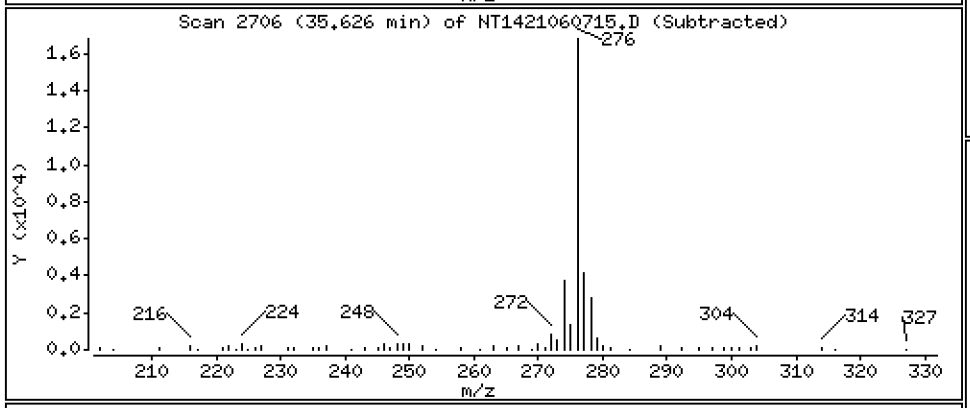
Column diameter: 0.25

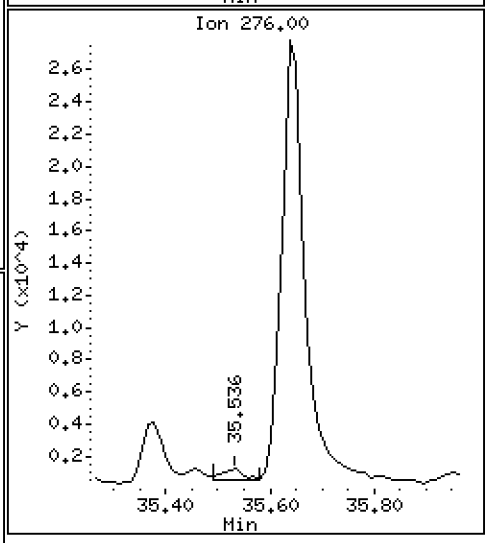
70 Dibenzo(a,h)anthracene

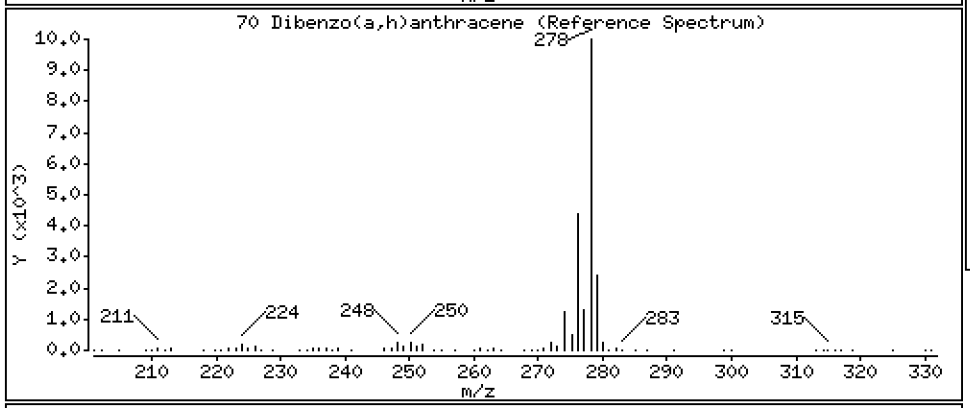
Concentration: 0.4131 ug/mL

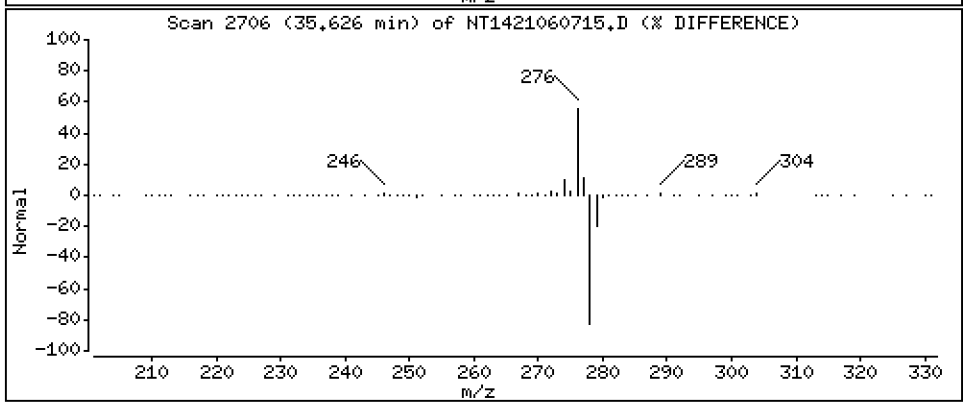












Data File: \\target\share\chem3\nt14.i\20210607.b\NT1421060715.D

Date : 07-JUN-2021 23:43

Client ID:

Instrument: nt14.i

Sample Info: 21E0106-04

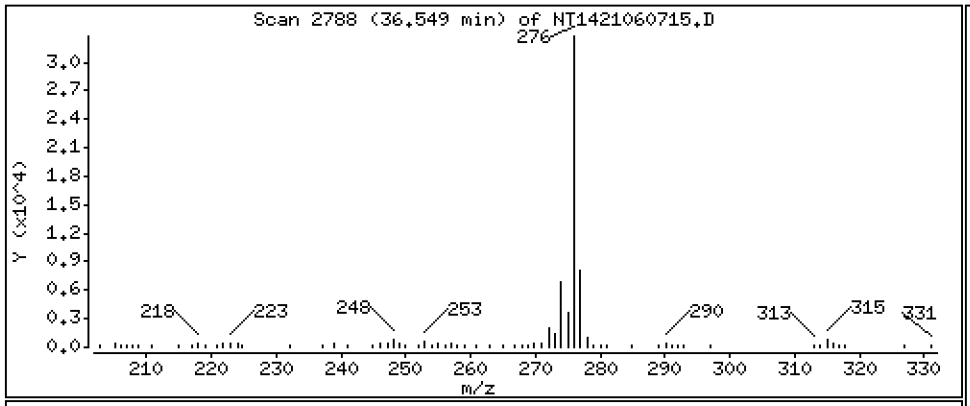
Operator: VTS

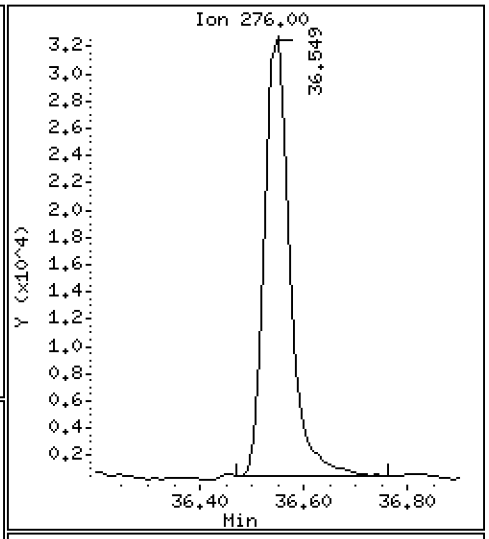
Column phase: Rxi-17Sil MS

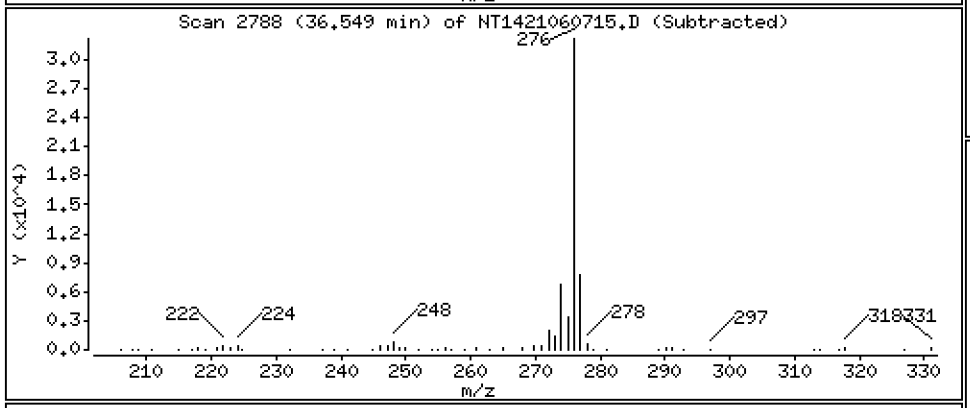
Column diameter: 0.25

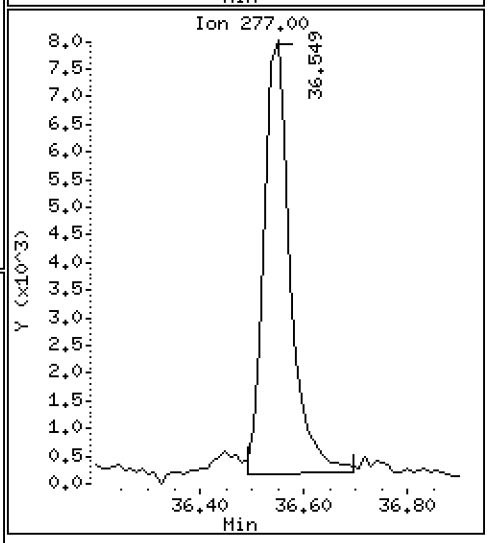
74 Benzo(g,h,i)perylene

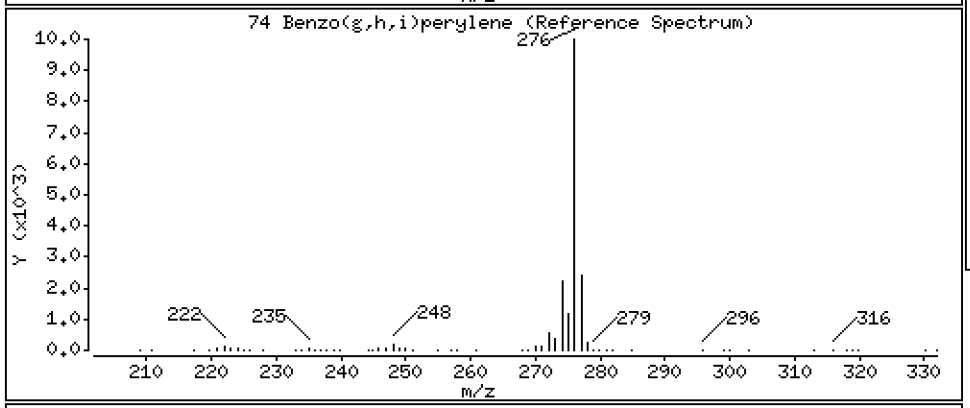
Concentration: 2.671 ug/mL

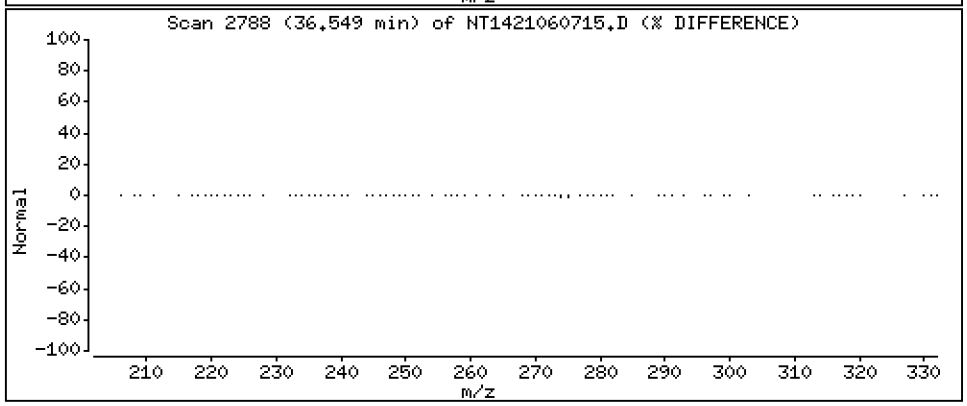












ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt14.i\20210607.b\NT1421060715.D
Lab Smp Id: 21E0106-04
Inj Date : 07-JUN-2021 23:43
Operator : VTS Inst ID: nt14.i
Smp Info : 21E0106-04
Misc Info :
Comment : 1ul Injection
Method : \\target\share\chem3\nt14.i\20210607.b\ALKYLPNA.m
Meth Date : 12-Jun-2021 14:57 yev Quant Type: ISTD
Cal Date : 29-MAY-2021 18:49 Cal File: NT1421052914.D
Als bottle: 42
Dil Factor: 5.00000
Integrator: HP RTE Compound Sublist: TARGETS.sub
Target Version: 4.14
Processing Host: ORGDATA102

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/mL)
1 trans-Decalin	138	Compound Not Detected.					
2 cis-Decalin	138	Compound Not Detected.					
$ 6 Naphthalene-d8	136	11.887	11.887	(0.629)	43769	0.24607	1.230(R)
7 Naphthalene	128	11.947	11.957	(0.632)	8091	0.04551	0.2276
12 Benzo(b)thiophene	134	Compound Not Detected.					
16 2-Methylnaphthalene	141	13.794	13.794	(0.730)	1990	0.01915	0.09575
17 1-methylnaphthalene	141	14.244	14.244	(0.754)	1159	0.01146	0.05732
18 Biphenyl	154	Compound Not Detected.					
19 2,6-Dimethylnaphthalene	156	Compound Not Detected.					
20 Acenaphthylene	152	17.080	17.080	(0.904)	3844	0.01991	0.09957
$ 21 Acenaphthene-d10	164	17.366	17.365	(0.919)	31857	0.29161	1.458(R)
22 Acenaphthene	153	17.486	17.486	(0.925)	6722	0.05649	0.2824
23 Dibenzofuran	168	17.860	17.860	(0.945)	4409	0.02498	0.1249
24 1,6,7-Trimethylnaphthalene	170	Compound Not Detected.					
* 25 Fluorene-d10	176	18.896	18.896	(1.000)	382617	2.00000	
26 Fluorene	166	19.009	19.009	(1.006)	6192	0.04528	0.2264
30 Dibenzothiophene	184	22.052	21.931	(1.167)	1647	0.00853	0.04265
$ 35 Phenanthrene-d10	188	22.239	22.238	(0.995)	66382	0.34495	1.725(R)
36 Phenanthrene	178	22.316	22.326	(0.999)	88136	0.42735	2.137
* 250 Anthracene-d10	188	22.349	22.359	(1.000)	399994	2.00000	
37 Anthracene	178	22.414	22.425	(1.003)	19877	0.10243	0.5122
42 Carbazole	167	23.701	23.701	(1.061)	10237	0.05541	0.2771
43 1-Methylphenanthrene	192	24.151	24.151	(1.081)	6864	0.04631	0.2316
44 Fluoranthene	202	26.131	26.130	(1.169)	218184	0.95847	4.792
46 Pyrene	202	26.977	26.977	(1.207)	227159	0.95948	4.797
51 Naphthobenzothiophene	234	29.498	29.509	(1.320)	20541	0.08075	0.4037
55 Benzo(a)anthracene	228	30.084	30.095	(0.907)	92252	0.50172	2.509
$ 56 Chrysene-d12	240	30.219	30.219	(0.911)	60955	0.41076	2.054(R)
57 Chrysene	228	30.287	30.286	(0.913)	113236	0.62848	3.142
62 Benzo(b)fluoranthene	252	32.517	32.517	(0.980)	113698	0.59623	2.981
63 Benzo(k)fluoranthene	252	32.562	32.562	(0.981)	59953	0.29301	1.465(M)
293 Benzo(j)fluoranthene	252	32.629	32.629	(0.983)	56562	0.30000	1.500
246 Total Benzofluoranthenes	252	32.517	32.562	(0.980)	212565	1.13804	5.690(M)

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/mL)
* 251 Benzo(e)pyrene-d12	264	33.181	33.181	(1.000)	474075	2.00000	
64 Benzo(e)pyrene	252	33.238	33.237	(1.002)	84149	0.45023	2.251
66 Benzo(a)pyrene	252	33.339	33.339	(1.005)	103260	0.60732	3.037
$ 67 Perylene-d12	264	33.519	33.519	(1.010)	63936	0.39912	1.996(R)
68 Perylene	252	33.575	33.575	(1.012)	70300	0.40102	2.005
69 Indeno(1,2,3-cd)pyrene	276	35.637	35.636	(1.074)	82283	0.41228	2.061(M)
70 Dibenzo(a,h)anthracene	278	35.625	35.614	(1.074)	15290	0.08261	0.4131(M)
74 Benzo(g,h,i)perylene	276	36.549	36.549	(1.101)	105311	0.53412	2.671

QC Flag Legend

R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt14.i
Lab File ID: NT1421060715.D
Lab Smp Id: 21E0106-04
Analysis Type: SV
Quant Type: ISTD
Operator: VTS
Method File: \\target\share\chem3\nt14.i\20210607.b\ALKYLPNA.m
Misc Info:

Calibration Date: 07-JUN-2021
Calibration Time: 13:18
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
25 Fluorene-d10	323874	161937	647748	382617	18.14
250 Anthracene-d10	339912	169956	679824	399994	17.68
251 Benzo(e)pyrene-d1	416427	208214	832854	474075	13.84

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
25 Fluorene-d10	18.90	18.40	19.40	18.90	0.00
250 Anthracene-d10	22.36	21.86	22.86	22.35	-0.05
251 Benzo(e)pyrene-d1	33.18	32.68	33.68	33.18	0.00

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

REVIEW SUMMARY FOR FILE - NT1421060715.D

Lab ID: 21E0106-04
nt14.i, 20210607.b\ALKYLPNA.m, 07-JUN-2021 23:43

RT	CO-ELUTION COMPOUNDS
	NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
1.167	1.161	0.0064	Dibenzothiophene

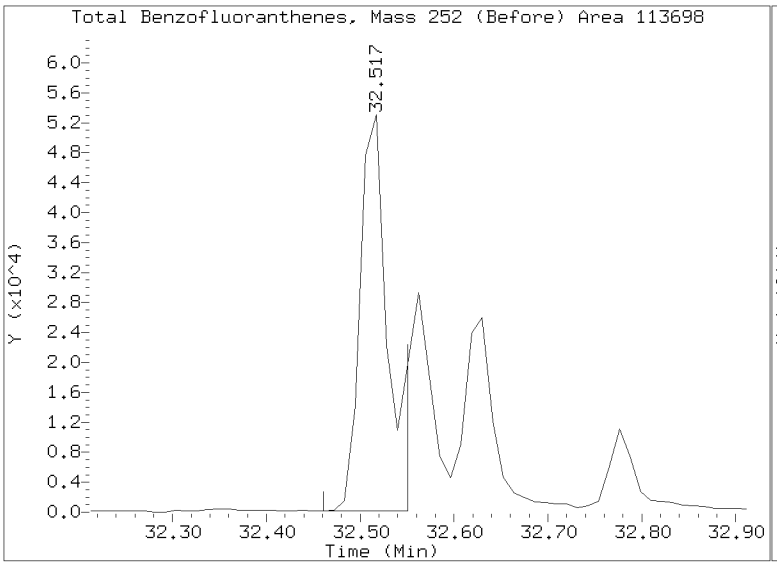
RRT check based on Ccal File: NT1421060702.D

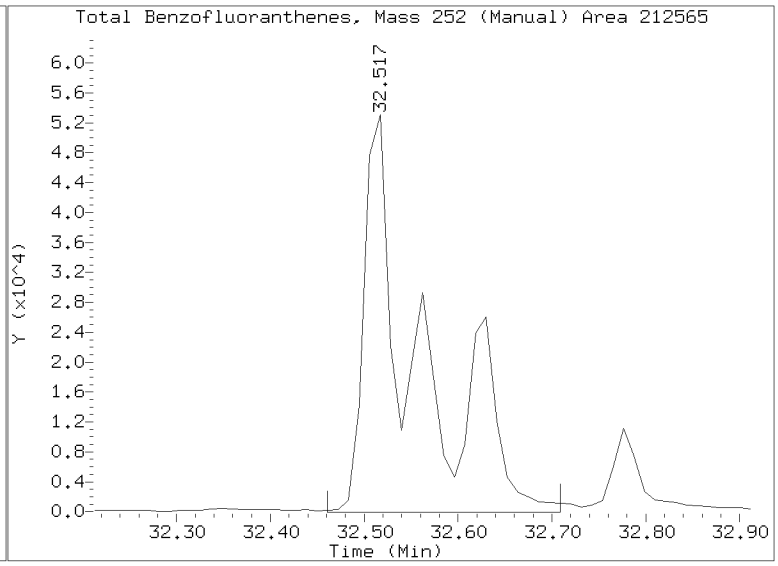
On Column LOD for nt14.i, 20210607.b\ALKYLPNA.m, TARGETS.sub = 0.0000

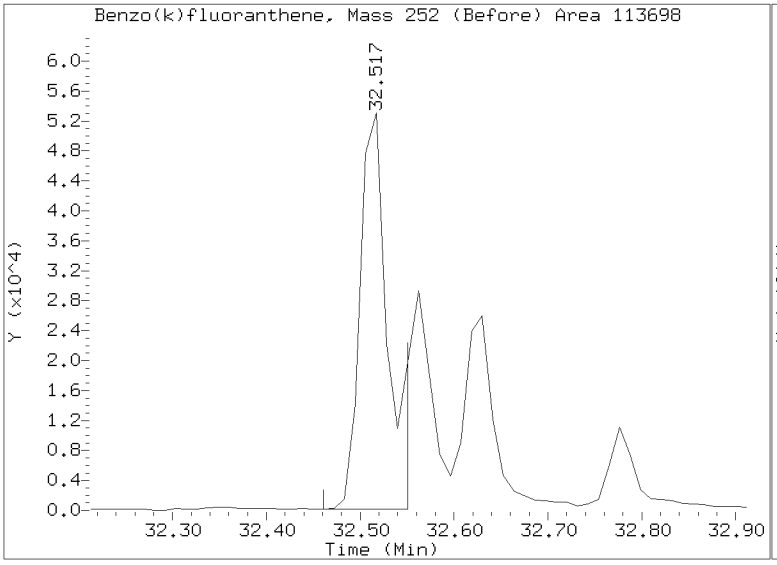
* Only compounds listed in the work order have been verified by the analyst *

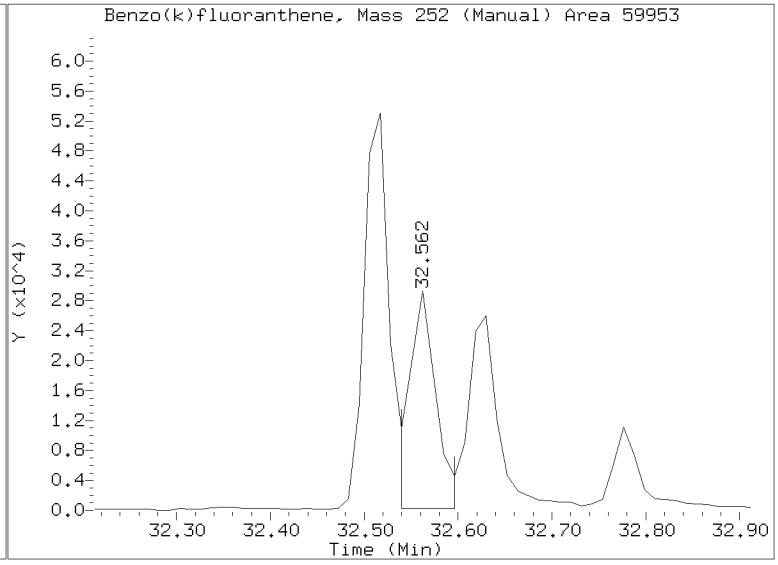
Quant Ion Manual Peak Adjustment Report

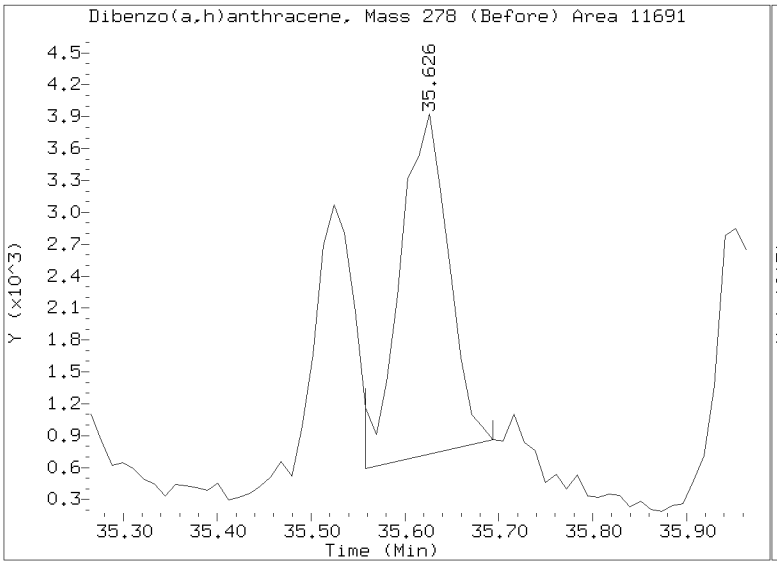
Datafile: //target/share/chem3/nt14.i/20210607.b/NT1421060715.D
Injection Date: 07-JUN-2021 23:43
Lab ID:21E0106-04 Client ID:
Report Date: 06/12/2021 15:50

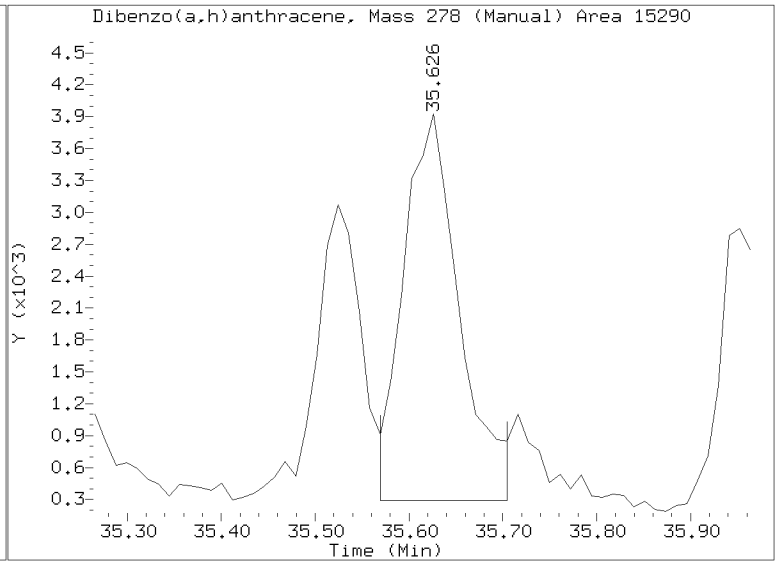






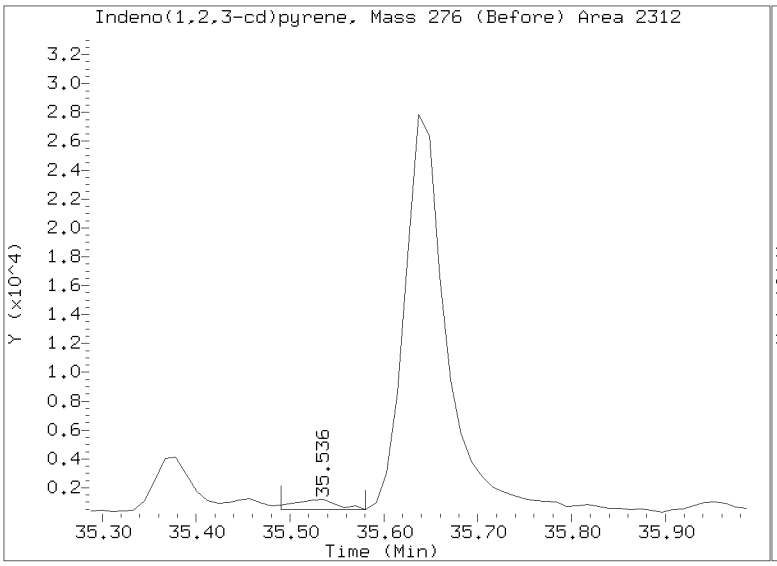


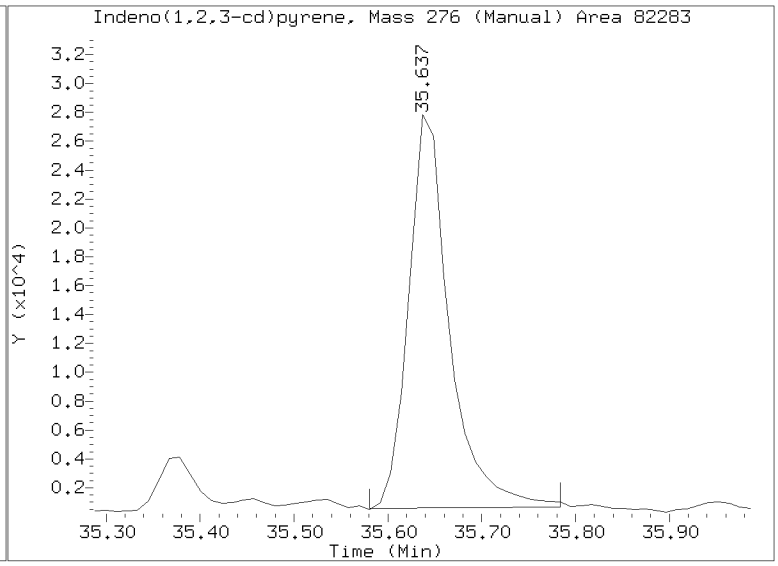




Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt14.i/20210607.b/NT1421060715.D
Injection Date: 07-JUN-2021 23:43
Lab ID:21E0106-04 Client ID:
Report Date: 06/12/2021 15:50





Analytical Resources, Incorporated
Analytical Chemists and Consultants

USMPDI-035SG-210504

Form I
ORGANIC ANALYSIS DATA SHEET
EPA 8270E-SIM
Alkyl PAH Ranges

Laboratory:	Analytical Resources, Inc.				
Client:	Anchor QEA, LLC				
Project:	Gasco Siltronic - US Moorings				
Matrix:	Sediment	Laboratory ID:	21E0106-04 A	SDG:	21E0106
Sampled:	05/04/21 00:00	Prepared:	05/17/21 13:40	File ID:	NT1421060715S.D
% Solids:	51.35	Preparation:	EPA 3546 (Microwave)	Analyzed:	06/07/21 23:43
Batch:	BJE0383	Sequence:	SJF0198	Initial/Final:	19.48 g Wet / 0.5 mL
Instrument:	NT14	Column:	ZB-5MS	Calibration:	EF00019
Cleanups:	GPC, Silica Gel				

CAS NO.	COMPOUND	DILUTION	CONC: (ug/kg dry)	Q	DL	RL
C1DEC	C1-Decalins	1	5.0	U	0.5	5.0
C2DEC	C2-Decalins	1	5.0	U	0.5	5.0
C3DEC	C3-Decalins	1	1.2	J	0.5	5.0
C4DEC	C4-Decalins	1	5.0	U	0.5	5.0
C1NAPH	C1-Naphthalenes	1	1.2	J	0.4	5.0
C2NAPH	C2-Naphthalenes	1	1.5	J	0.4	5.0
C3NAPH	C3-Naphthalenes	1	1.7	J	0.4	5.0
C4NAPH	C4-Naphthalenes	1	1.3	J	0.4	5.0
C1FLR	C1-Fluorenes	1	1.6	J	0.5	5.0
C2FLR	C2-Fluorenes	1	1.3	J	0.5	5.0
C3FLR	C3-Fluorenes	1	1.6	J	0.5	5.0
C1DBTPH	C1-Dibenzothiophenes	1	1.3	J	0.7	5.0
C2DBTPH	C2-Dibenzothiophenes	1	2.0	J	0.7	5.0
C3DBTPH	C3-Dibenzothiophenes	1	1.7	J	0.7	5.0
C4DBTPH	C4-Dibenzothiophenes	1	5.0	U	0.7	5.0
C1PHNANT	C1-Phenanthrenes/Anthracenes	1	8.8		0.9	5.0
C2PHNANT	C2-Phenanthrenes/Anthracenes	1	8.0		0.9	5.0
C3PHNANT	C3-Phenanthrenes/Anthracenes	1	3.6	J	0.9	5.0
C4PHNANT	C4-Phenanthrenes/Anthracenes	1	2.1	J	0.9	5.0
C1FLPYR	C1-Fluoranthenes/Pyrenes	1	20.2		1.0	5.0
C2FLPYR	C2-Fluoranthenes/Pyrenes	1	8.7		1.0	5.0
C3FLPYR	C3-Fluoranthenes/Pyrenes	1	1.8	J	1.0	5.0
C4FLPYR	C4-Fluoranthenes/Pyrenes	1	3.4	J	1.0	5.0
C1BAACYR	C1-Benzo(a)anthracenes/Chrysenes	1	18.4		0.7	5.0
C2BAACYR	C2-Benzo(a)anthracenes/Chrysenes	1	7.7		0.7	5.0
C3BAACYR	C3-Benzo(a)anthracenes/Chrysenes	1	4.5	J	0.7	5.0
C4BAACYR	C4-Benzo(a)anthracenes/Chrysenes	1	1.8	J	0.7	5.0
C1BZTPH	C1-Benzothiophenes	1	5.0	U	0.4	5.0
C2BZTPH	C2-Benzothiophenes	1	5.0	U	0.4	5.0
C3BZTPH	C3-Benzothiophenes	1	5.0	U	0.4	5.0

Analytical Resources, Incorporated
Analytical Chemists and Consultants

USMPDI-035SG-210504

Form I
ORGANIC ANALYSIS DATA SHEET
EPA 8270E-SIM
Alkyl PAH Ranges

Laboratory:	Analytical Resources, Inc.				
Client:	Anchor QEA, LLC				
Project:	Gasco Siltronic - US Moorings				
Matrix:	Sediment	Laboratory ID:	21E0106-04 A	SDG:	21E0106
Sampled:	05/04/21 00:00	Prepared:	05/17/21 13:40	File ID:	NT1421060715S.D
% Solids:	51.35	Preparation:	EPA 3546 (Microwave)	Analyzed:	06/07/21 23:43
Batch:	BJE0383	Sequence:	SJF0198	Initial/Final:	19.48 g Wet / 0.5 mL
Instrument:	NT14	Column:	ZB-5MS	Calibration:	EF00019
Cleanups:	GPC, Silica Gel				

CAS NO.	COMPOUND	DILUTION	CONC: (ug/kg dry)	Q	DL	RL
C1NPBTP	C1-Naphthobenzothiophenes	1	2.9	J	2.5	5.0
C2NPBTP	C2-Naphthobenzothiophenes	1	5.0	U	2.5	5.0
C3NPBTP	C3-Naphthobenzothiophenes	1	2.9	J	2.5	5.0
C4NPBTP	C4-Naphthobenzothiopenes	1	5.0	U	2.5	5.0
C1DBA	C1-Dibenzo(a)anthracenes	1	4.1	J	0.7	5.0
C2DBA	C2-Dibenzo(a)anthracenes	1	1.0	J	0.7	5.0
C3DBA	C3-Dibenzo(a)anthracenes	1	5.0	U	0.7	5.0

Data File: \\target\share\chem3\nt14.i\20210607.b\SIM.b\NT1421060715S.D

Date : 07-JUN-2021 23:43

Client ID:

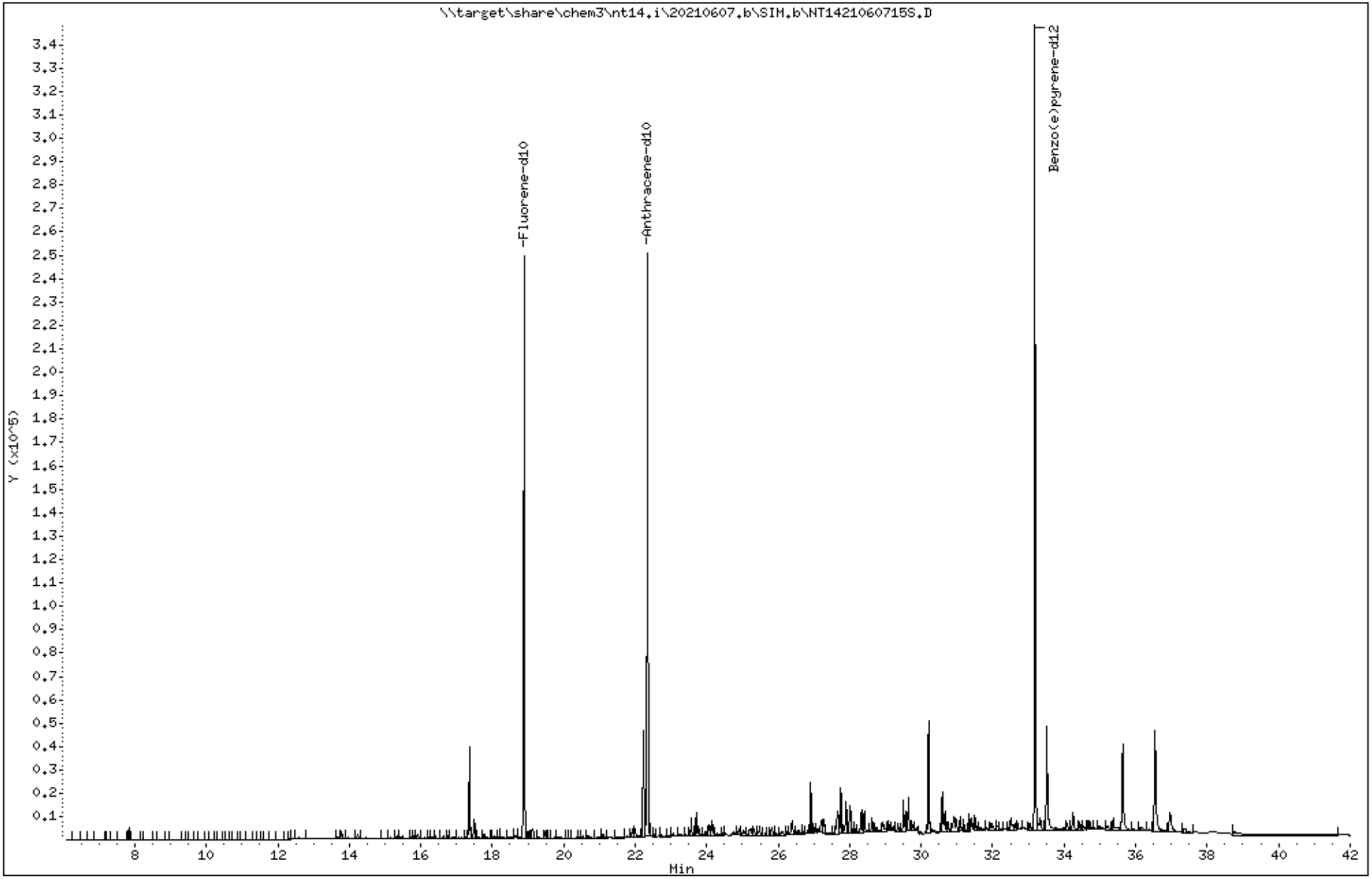
Instrument: nt14.i

Sample Info: 21E0106-04

Operator: VTS

Column phase: Rxi-17Sil MS

Column diameter: 0.25



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Date : 07-JUN-2021 23:43

Client ID:

Instrument: nt14.i

Sample Info: 21E0106-04

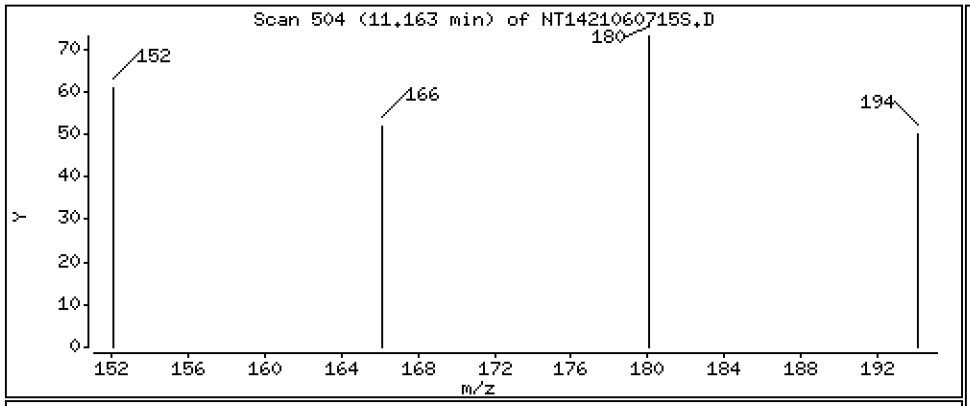
Operator: VTS

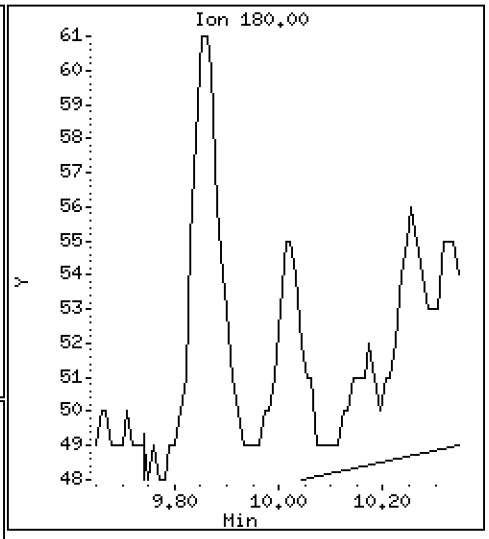
Column phase: Rxi-17Sil MS

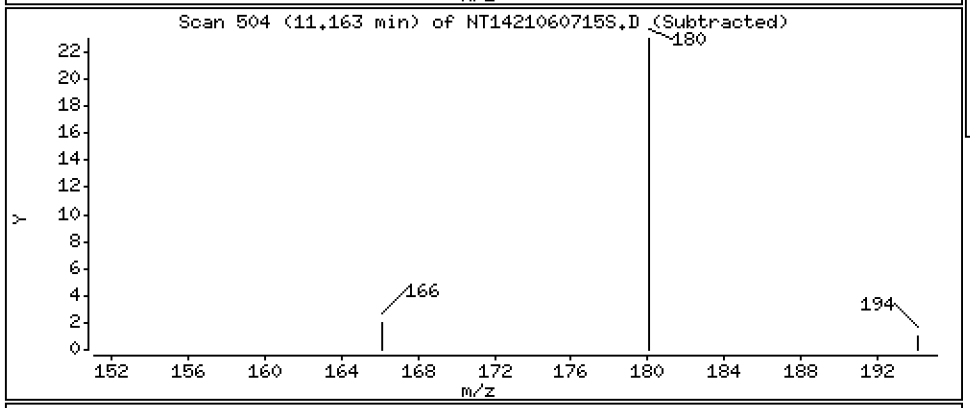
Column diameter: 0.25

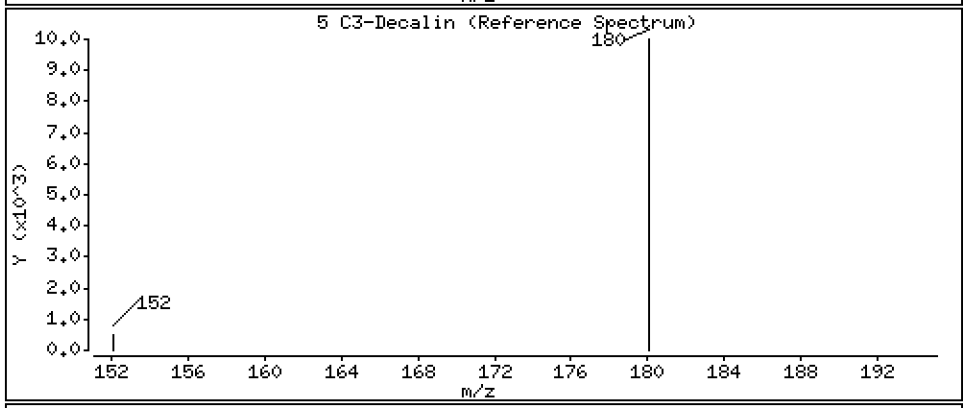
5 C3-Decalin

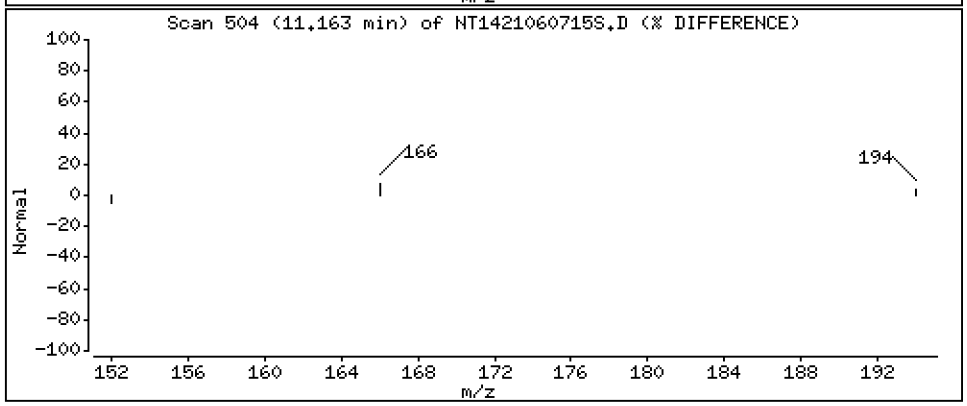
Concentration: 0.02444 ug/mL











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Date : 07-JUN-2021 23:43

Client ID:

Instrument: nt14.i

Sample Info: 21E0106-04

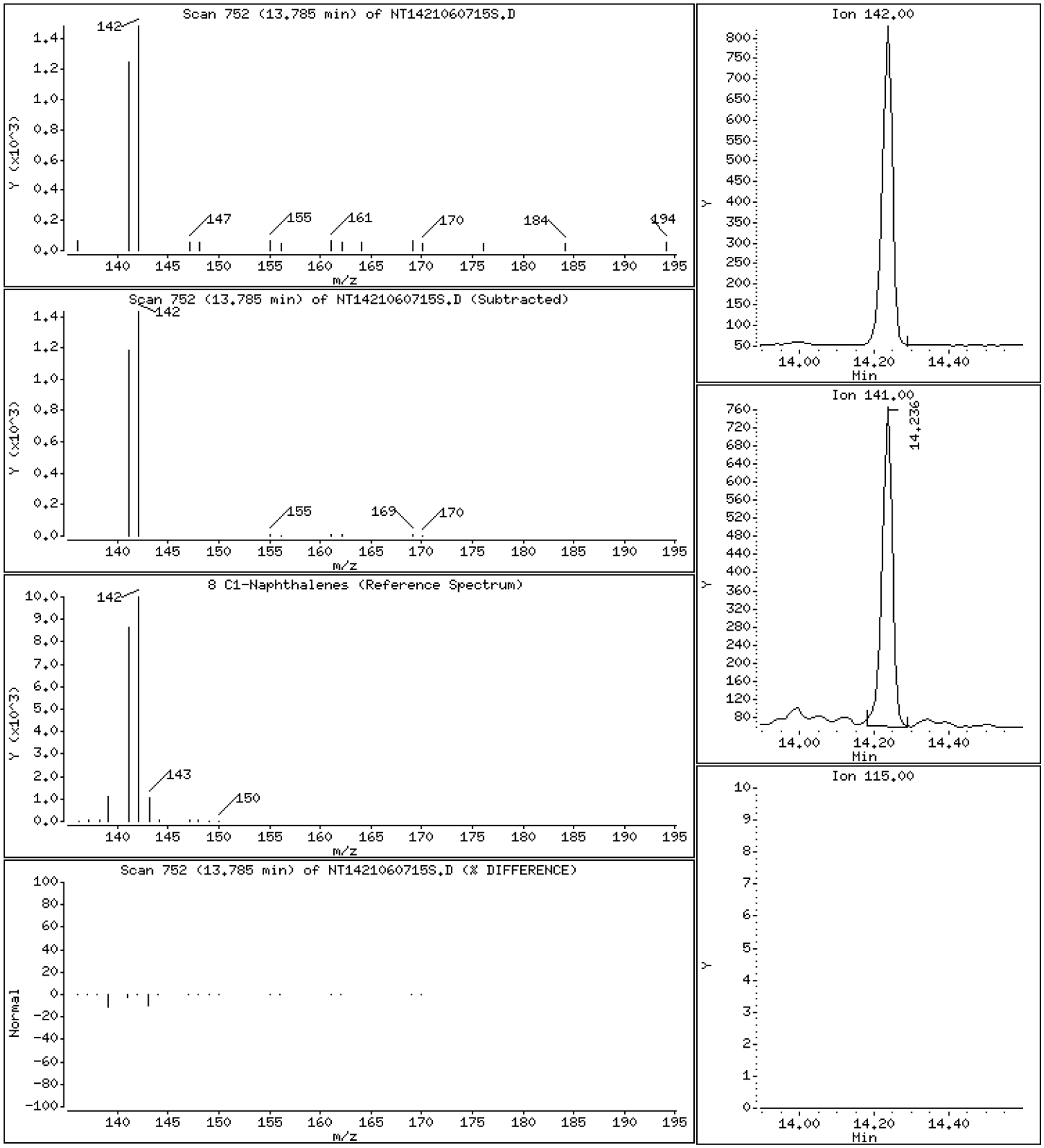
Operator: VTS

Column phase: Rxi-17Sil MS

Column diameter: 0.25

8 C1-Naphthalenes

Concentration: 0.02438 ug/mL



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Date : 07-JUN-2021 23:43

Client ID:

Instrument: nt14.i

Sample Info: 21E0106-04

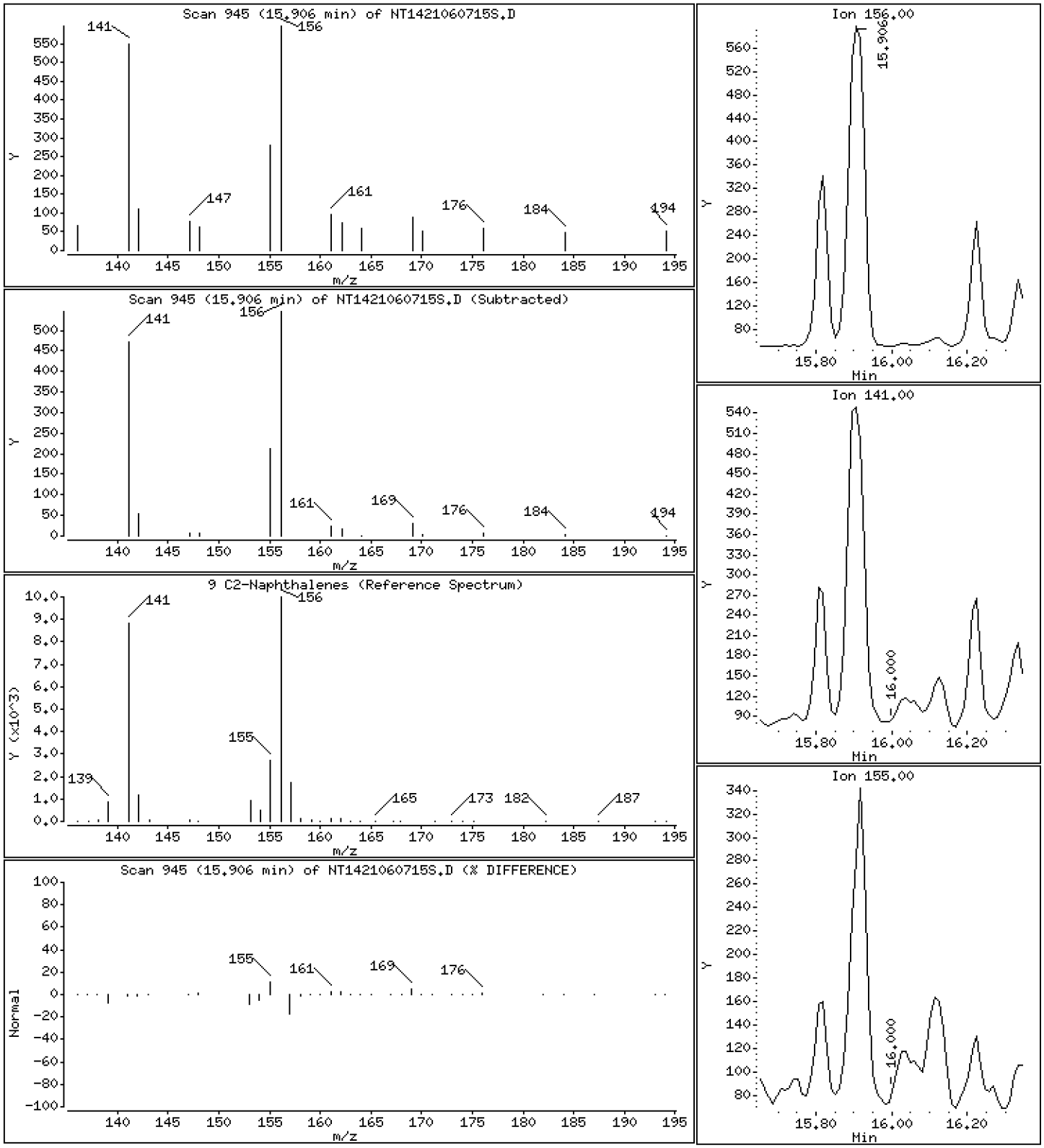
Operator: VTS

Column phase: Rxi-17Sil MS

Column diameter: 0.25

9 C2-Naphthalenes

Concentration: 0.02945 ug/mL



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Date : 07-JUN-2021 23:43

Client ID:

Instrument: nt14.i

Sample Info: 21E0106-04

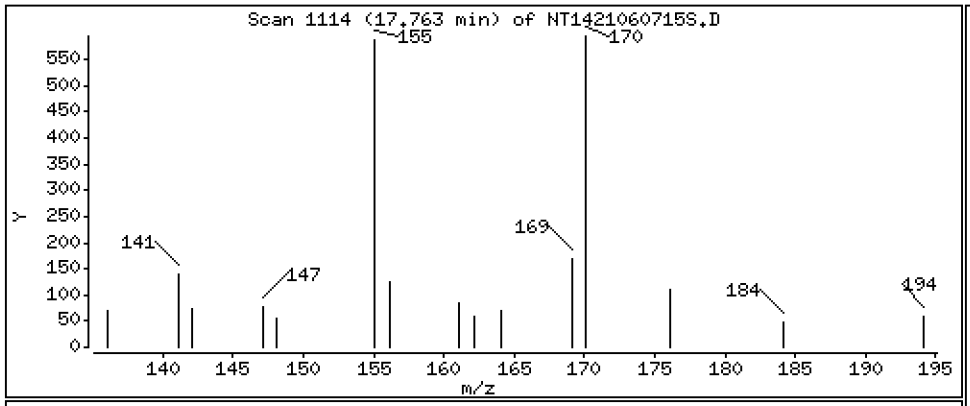
Operator: VTS

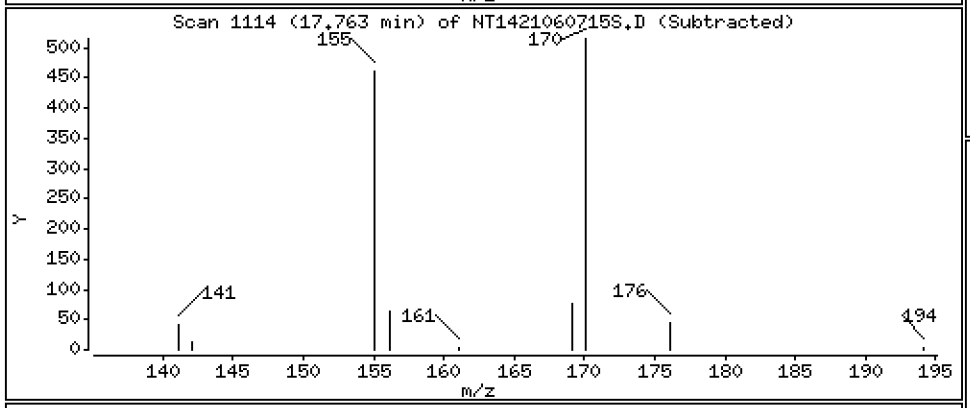
Column phase: Rxi-17Sil MS

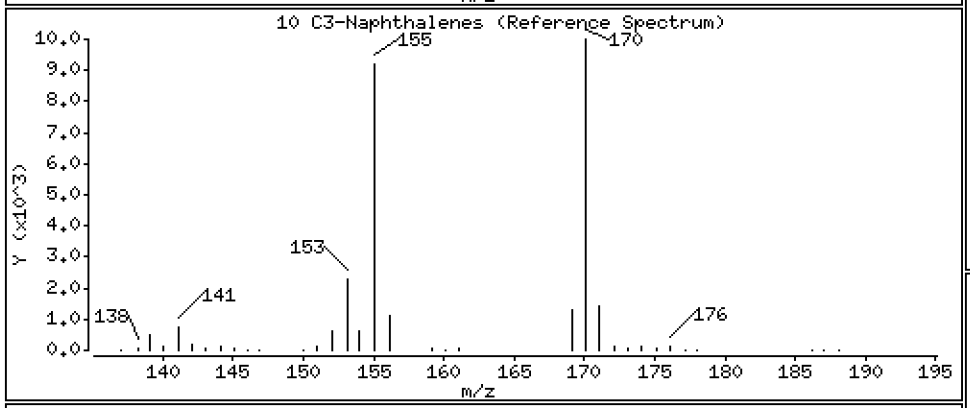
Column diameter: 0.25

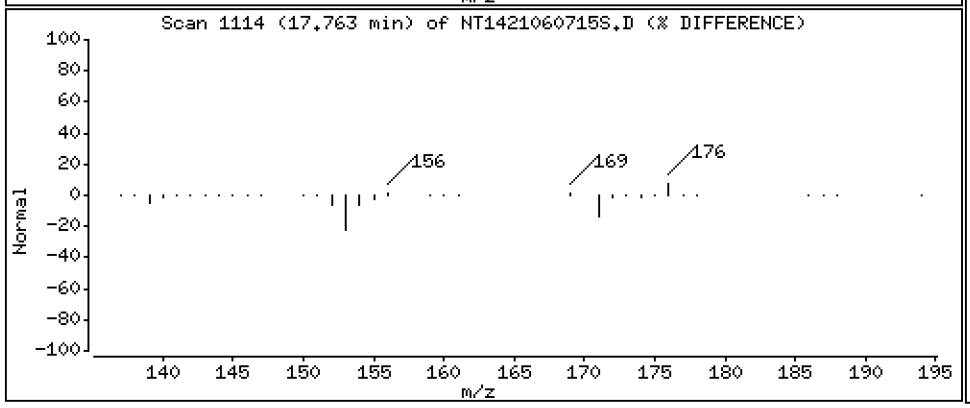
10 C3-Naphthalenes

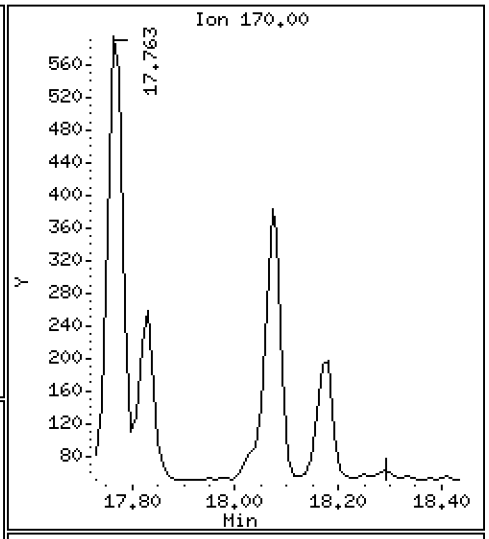
Concentration: 0.03418 ug/mL

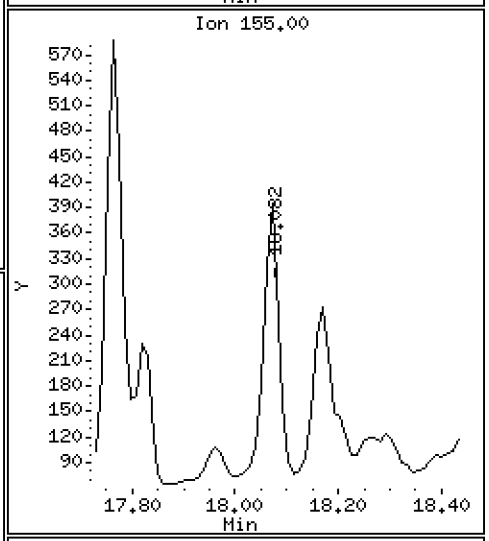


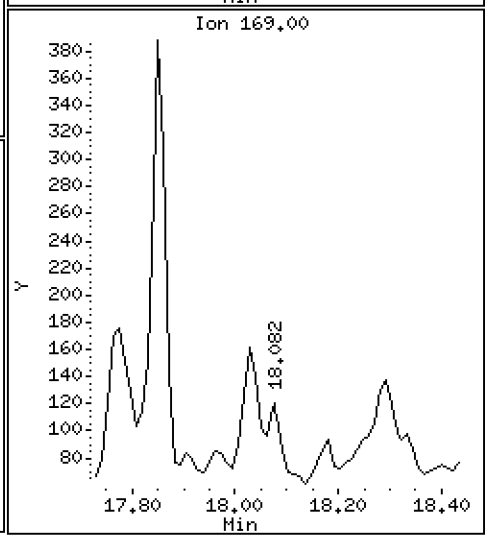












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Date : 07-JUN-2021 23:43

Client ID:

Instrument: nt14.i

Sample Info: 21E0106-04

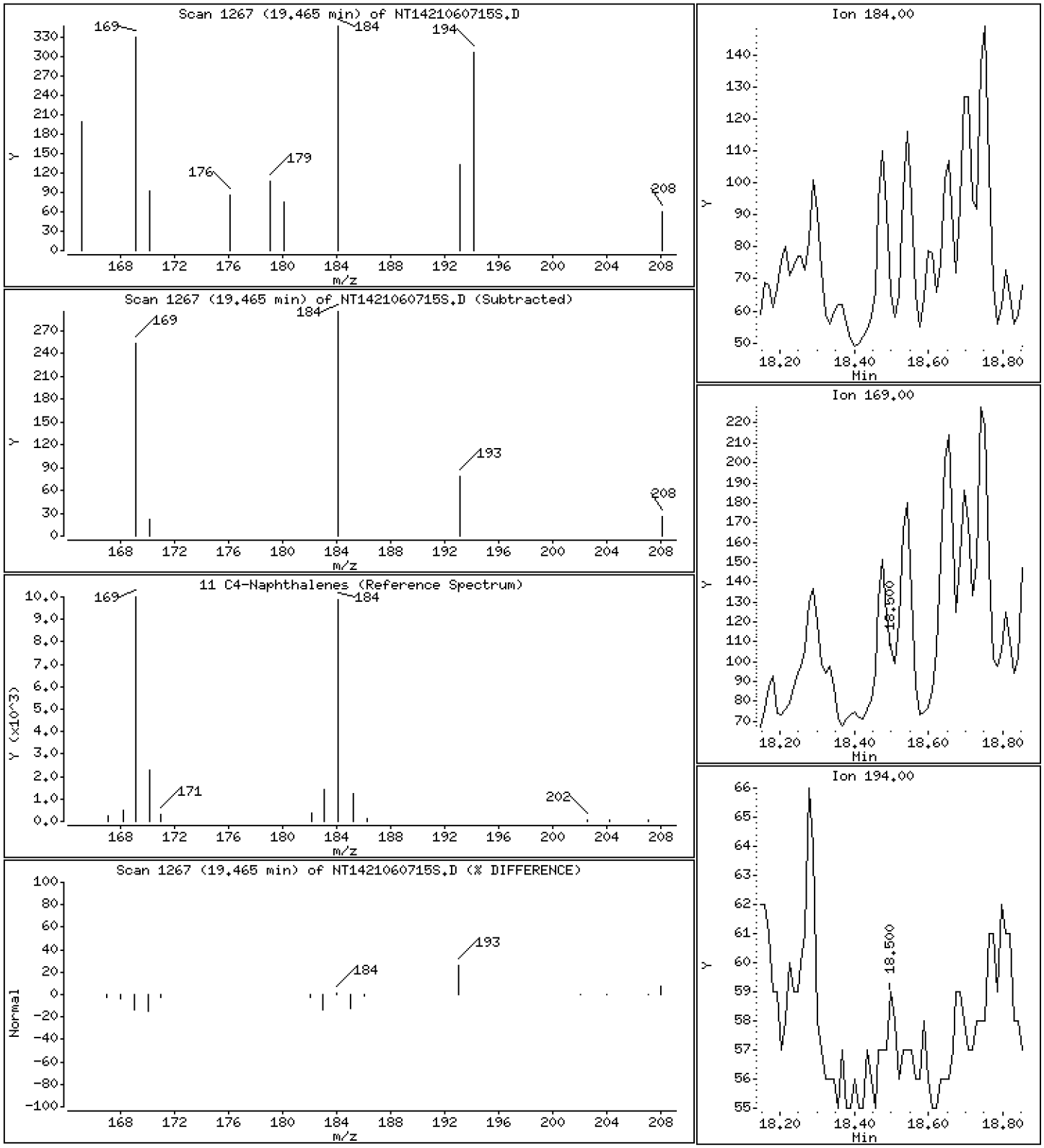
Operator: VTS

Column phase: Rxi-17Sil MS

Column diameter: 0.25

11 C4-Naphthalenes

Concentration: 0.02504 ug/mL



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Date : 07-JUN-2021 23:43

Client ID:

Instrument: nt14.i

Sample Info: 21E0106-04

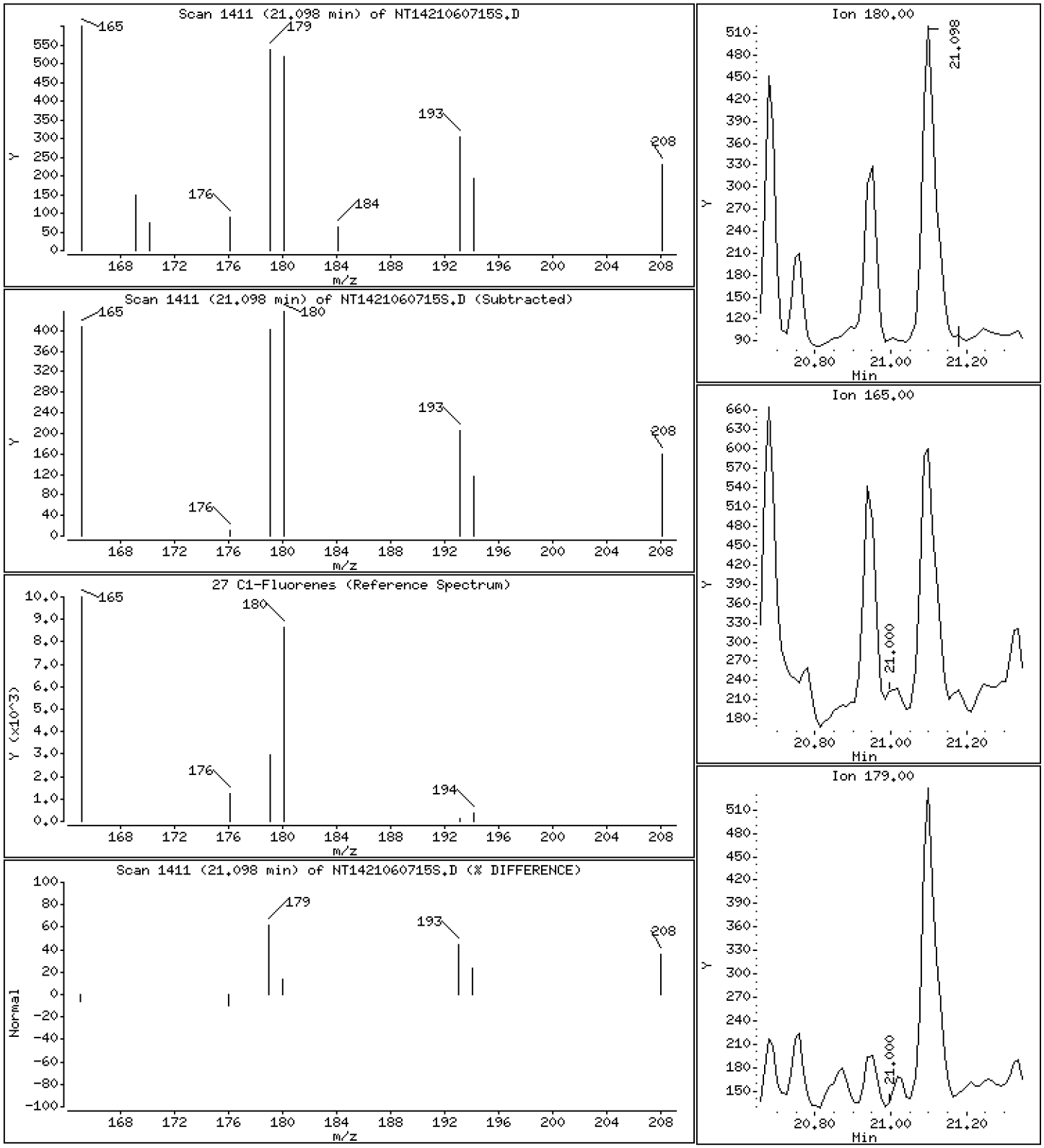
Operator: VTS

Column phase: Rxi-17Sil MS

Column diameter: 0.25

27 C1-Fluorenes

Concentration: 0.03166 ug/mL



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Date : 07-JUN-2021 23:43

Client ID:

Instrument: nt14.i

Sample Info: 21E0106-04

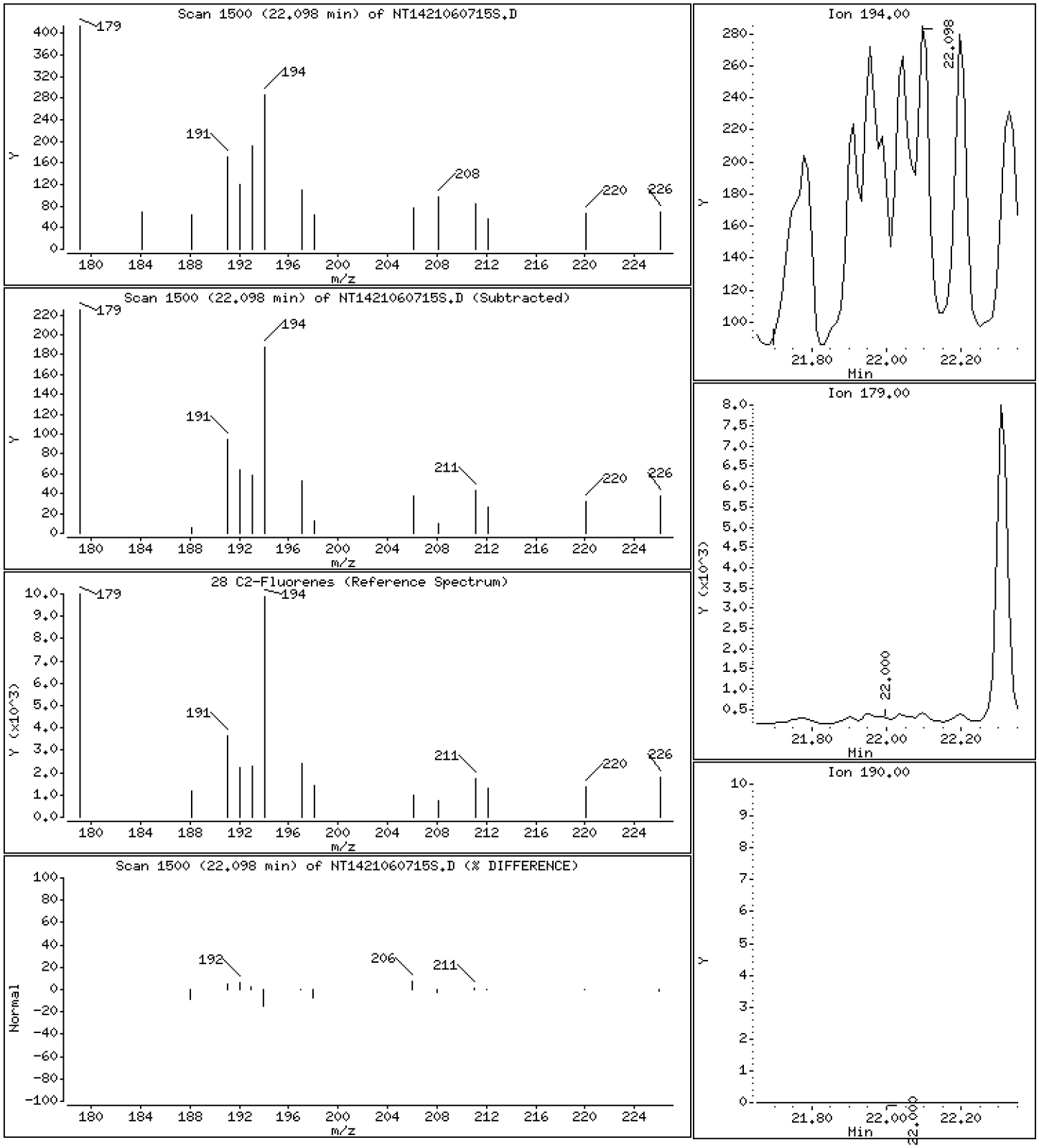
Operator: VTS

Column phase: Rxi-17Sil MS

Column diameter: 0.25

28 C2-Fluorenes

Concentration: 0.02632 ug/mL



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Date : 07-JUN-2021 23:43

Client ID:

Instrument: nt14.i

Sample Info: 21E0106-04

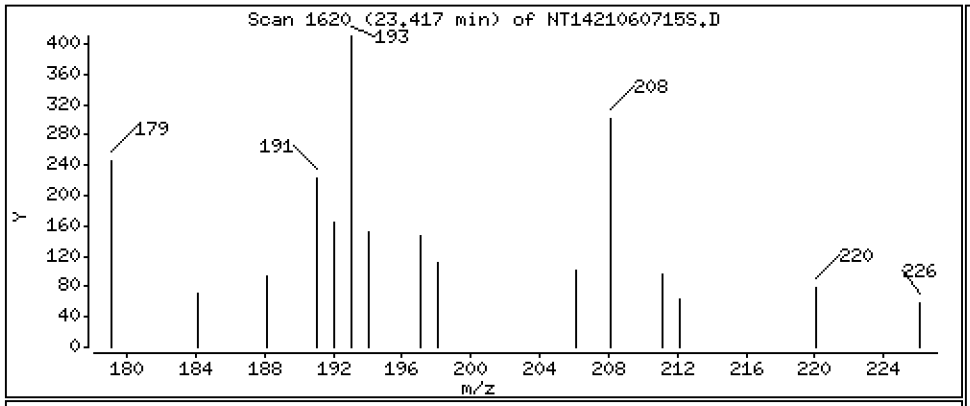
Operator: VTS

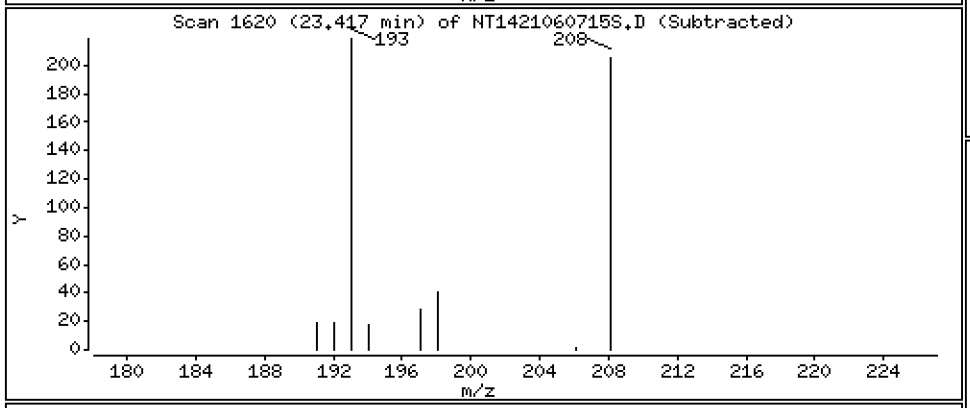
Column phase: Rxi-17Sil MS

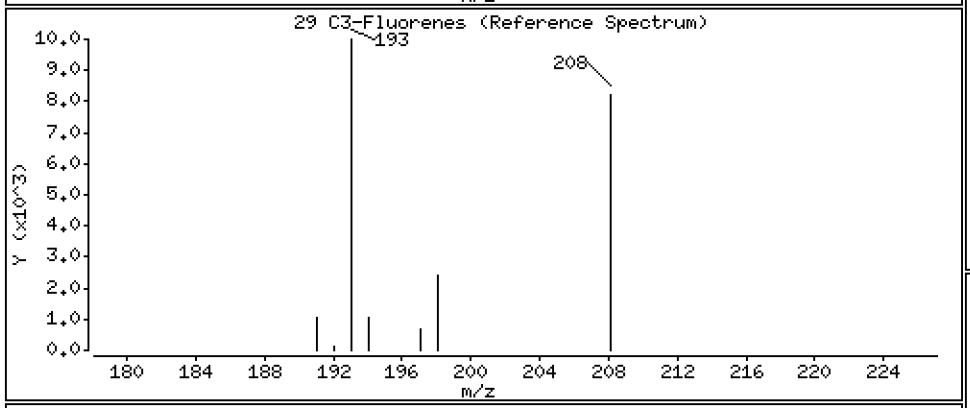
Column diameter: 0.25

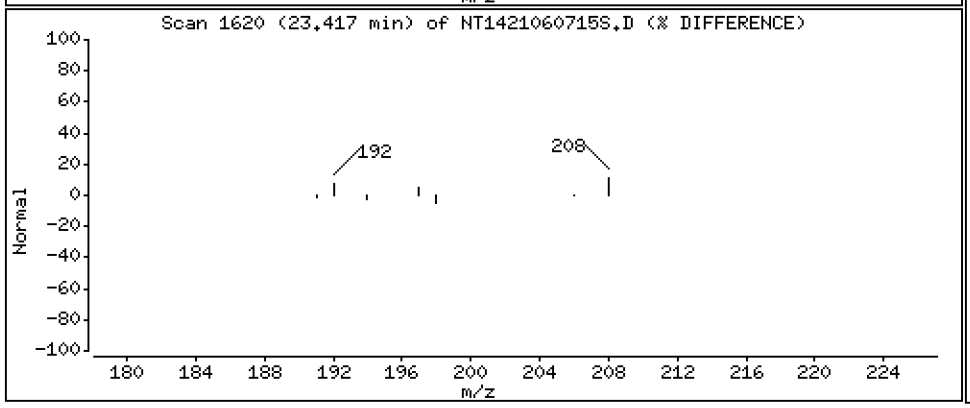
29 C3-Fluorenes

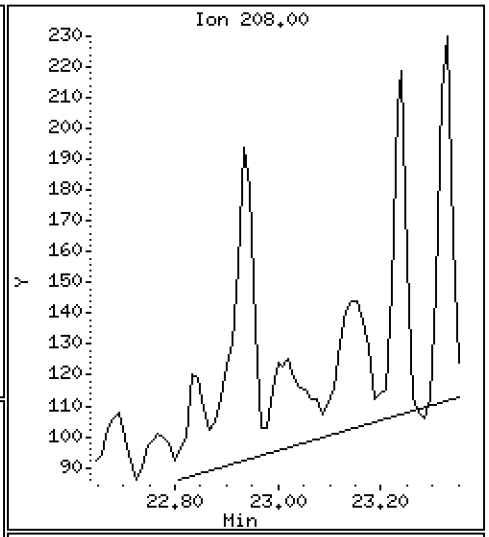
Concentration: 0.03275 ug/mL

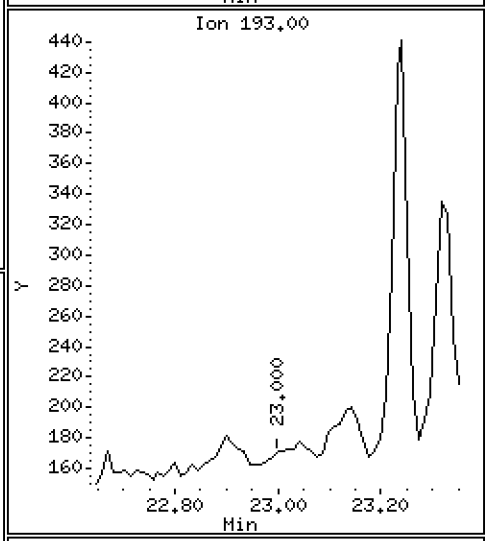


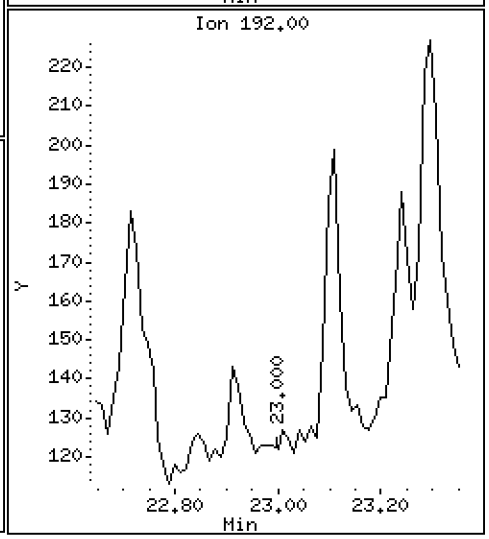












Data File: \\target\share\chem3\nt14.i\20210607.b\SIM.b\NT1421060715S.D

Date : 07-JUN-2021 23:43

Client ID:

Instrument: nt14.i

Sample Info: 21E0106-04

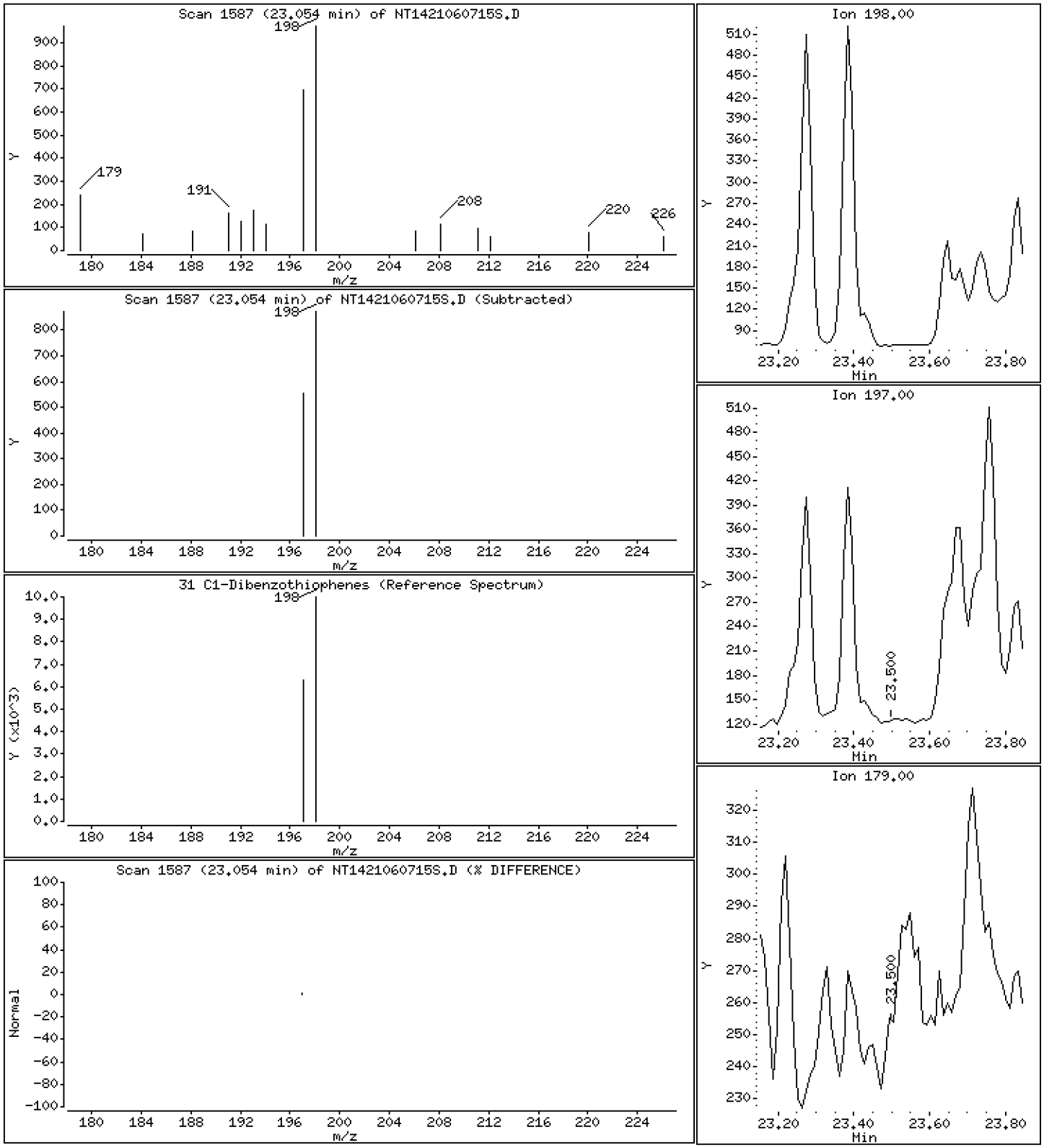
Operator: VTS

Column phase: Rxi-17Sil MS

Column diameter: 0.25

31 C1-Dibenzothiophenes

Concentration: 0.02567 ug/mL



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Date : 07-JUN-2021 23:43

Client ID:

Instrument: nt14.i

Sample Info: 21E0106-04

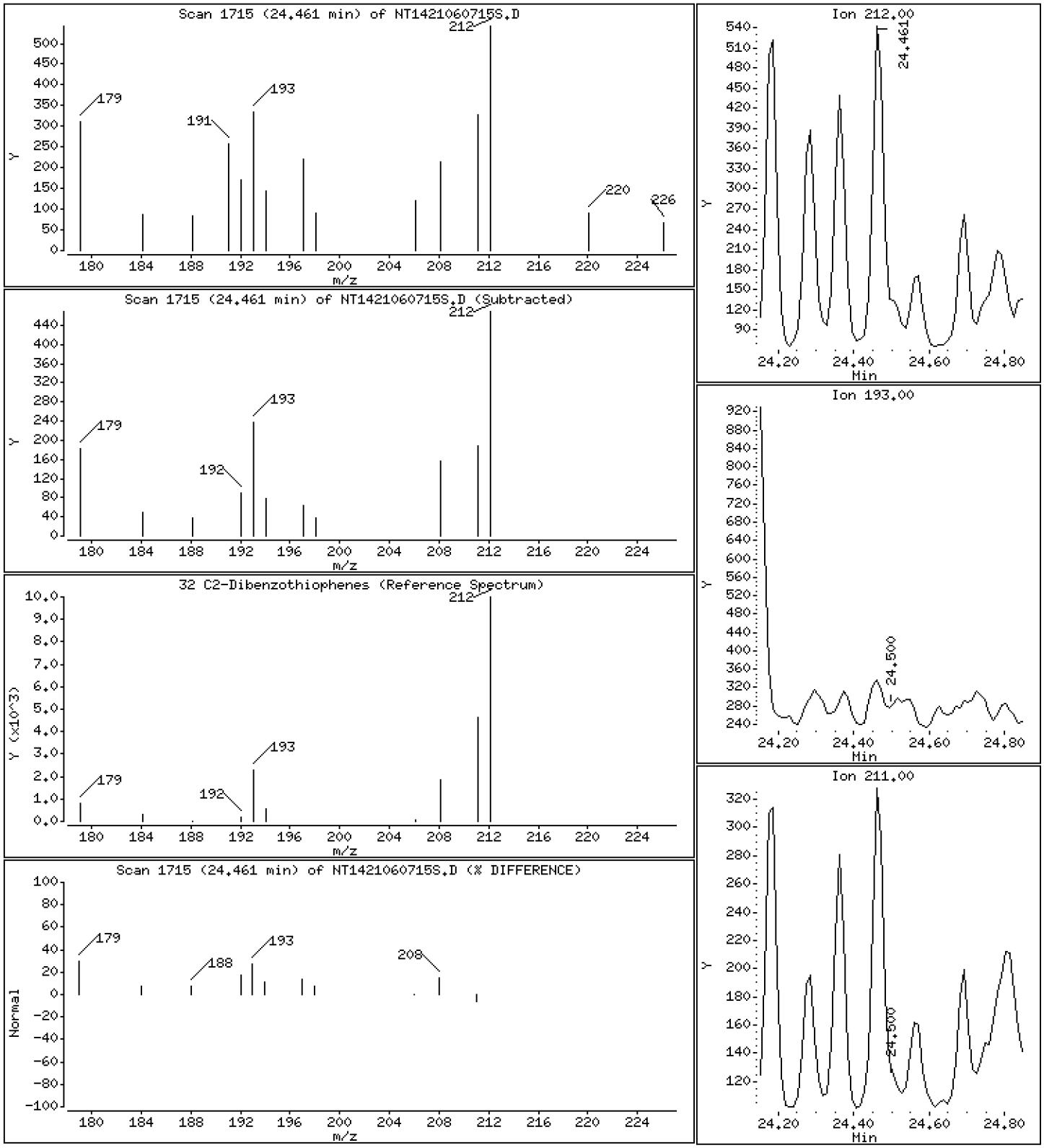
Operator: VTS

Column phase: Rxi-17Sil MS

Column diameter: 0.25

32 C2-Dibenzothiophenes

Concentration: 0.03990 ug/mL



Data File: \\target\share\chem3\nt14.i\20210607.b\SIM.b\NT1421060715S.D

Date : 07-JUN-2021 23:43

Client ID:

Instrument: nt14.i

Sample Info: 21E0106-04

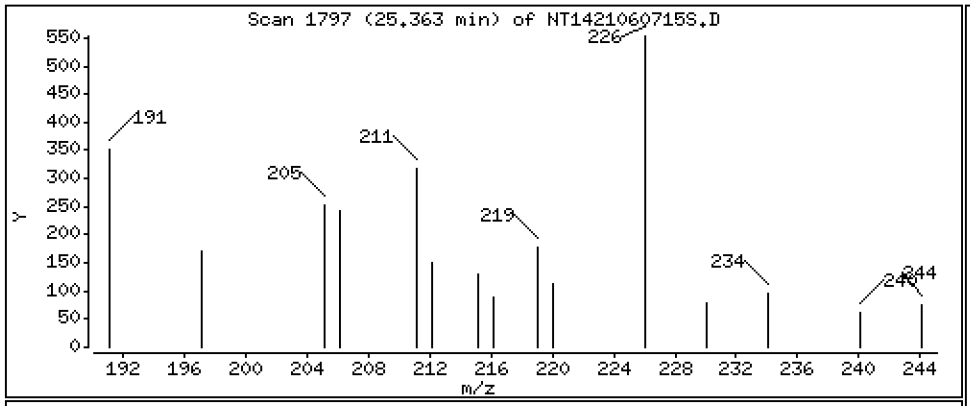
Operator: VTS

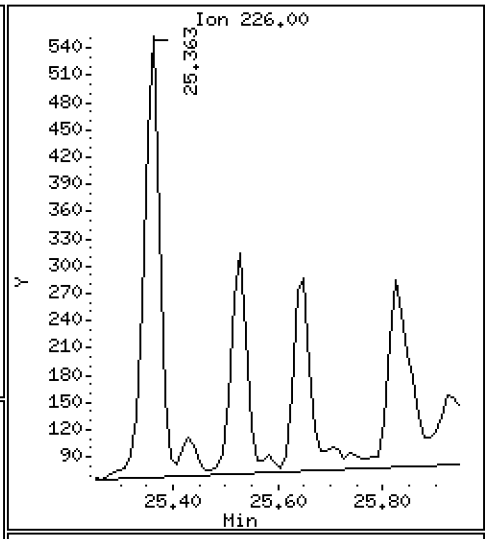
Column phase: Rxi-17Sil MS

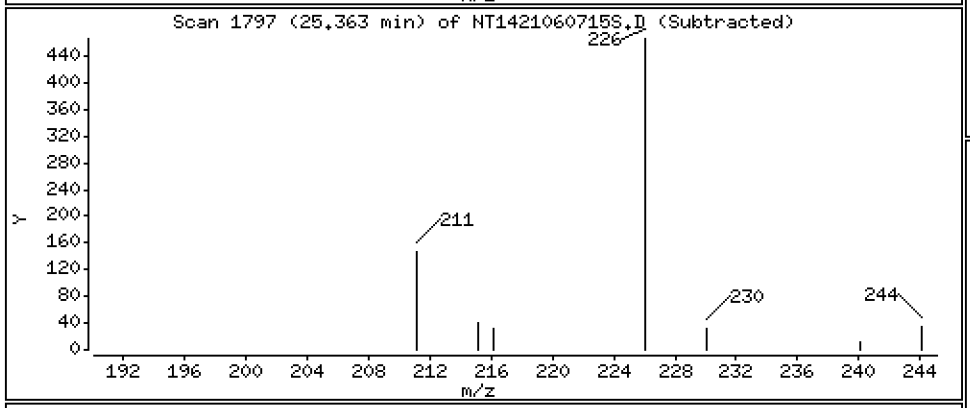
Column diameter: 0.25

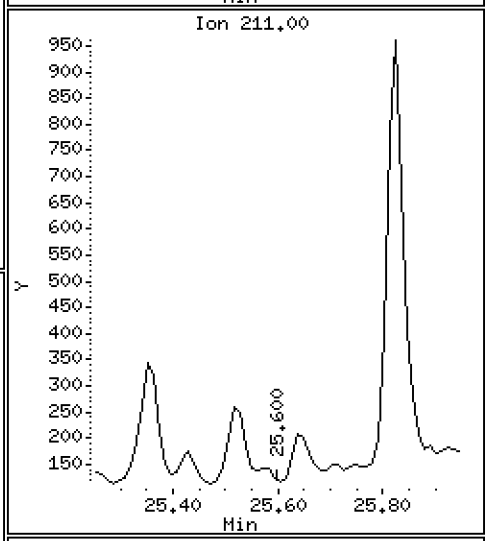
33 C3-Dibenzothiophenes

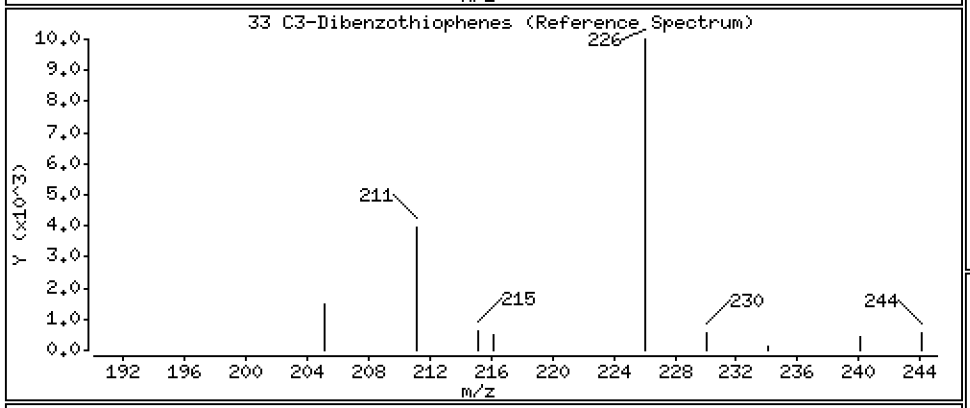
Concentration: 0.03415 ug/mL

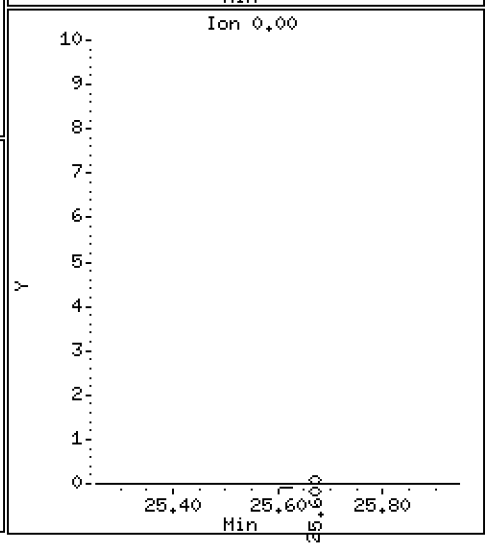


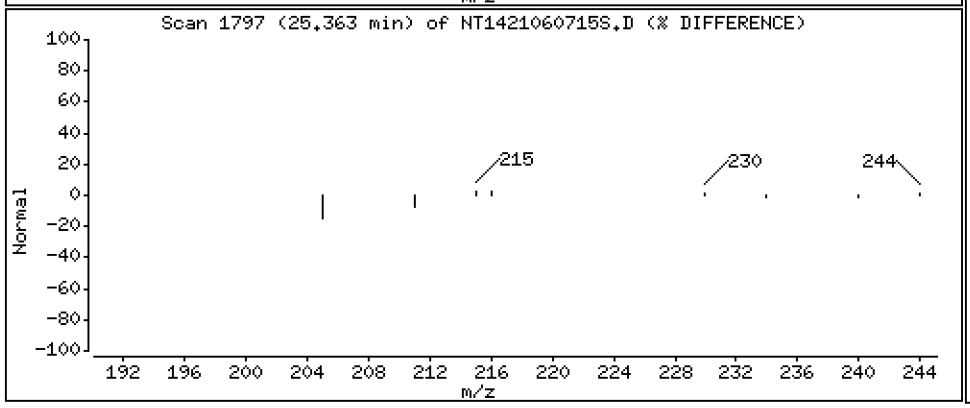












Data File: \\target\share\chem3\nt14.i\20210607.b\SIM.b\NT1421060715S.D

Date : 07-JUN-2021 23:43

Client ID:

Instrument: nt14.i

Sample Info: 21E0106-04

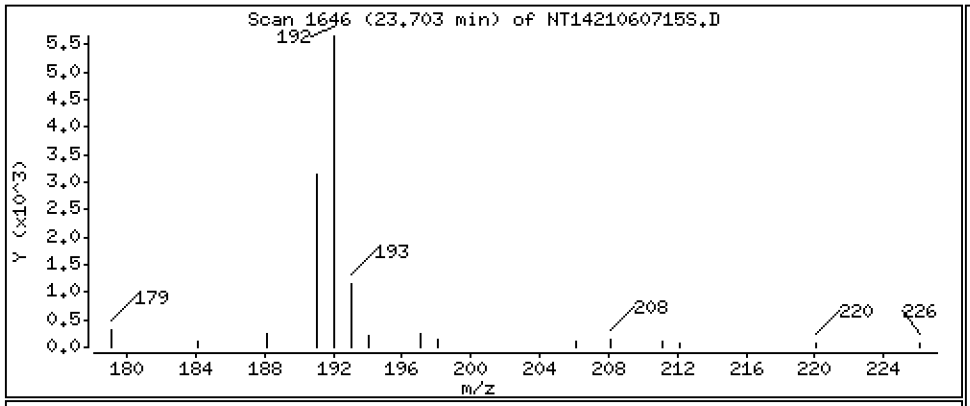
Operator: VTS

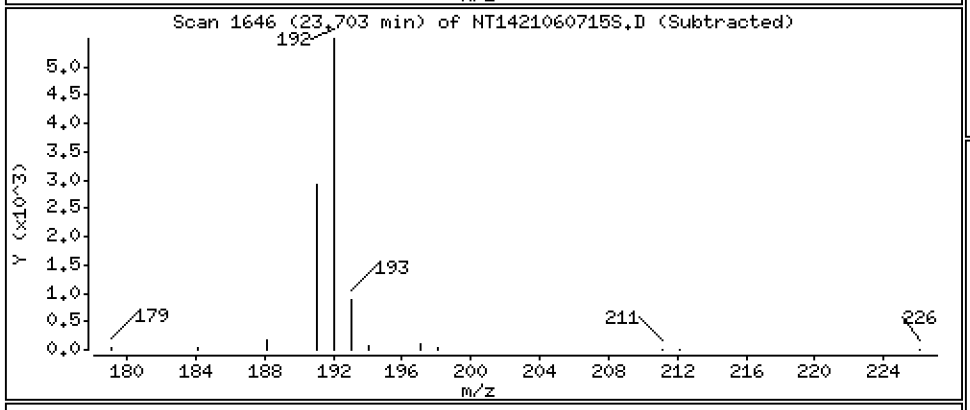
Column phase: Rxi-17Sil MS

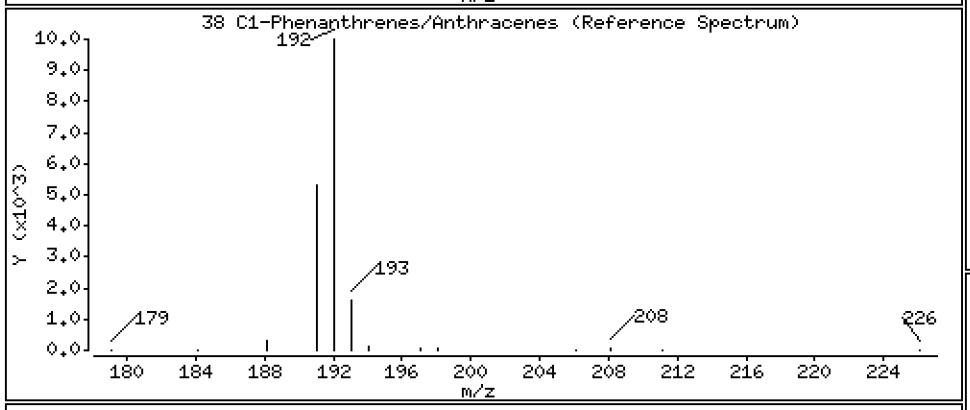
Column diameter: 0.25

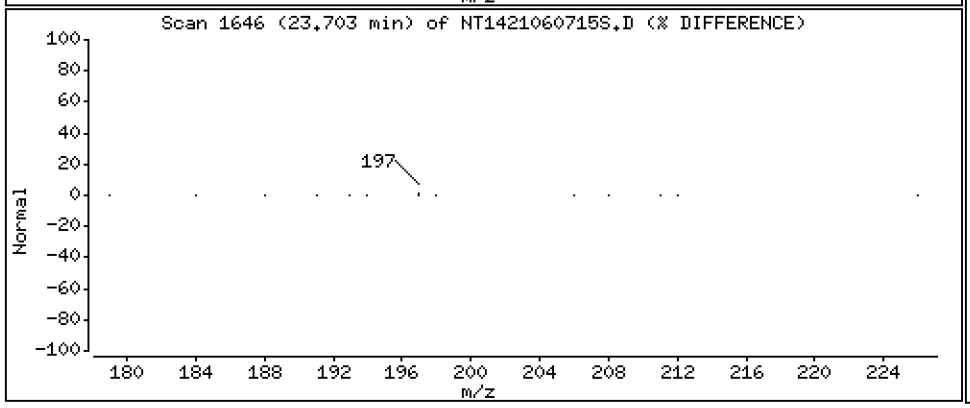
38 C1-Phenanthrenes/Anthracenes

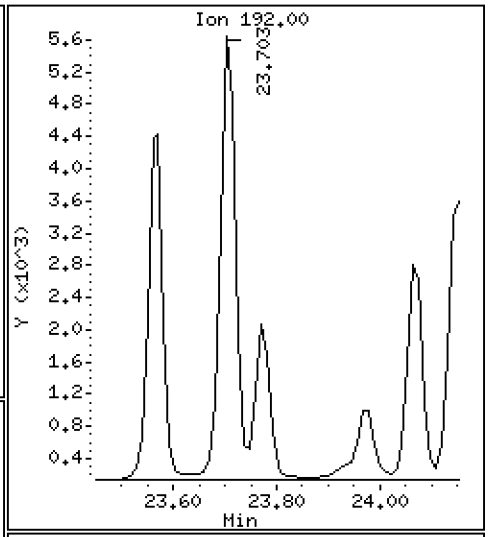
Concentration: 0.1763 ug/mL

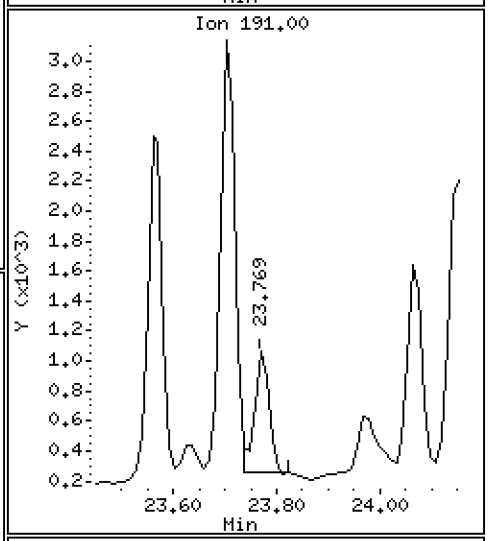


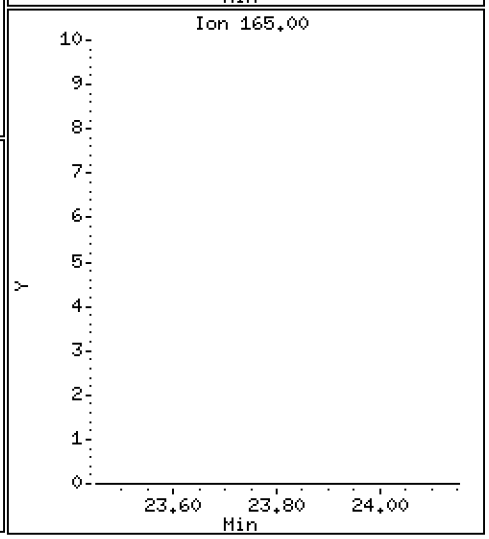












Data File: \\target\share\chem3\nt14.i\20210607.b\SIM.b\NT1421060715S.D

Date : 07-JUN-2021 23:43

Client ID:

Instrument: nt14.i

Sample Info: 21E0106-04

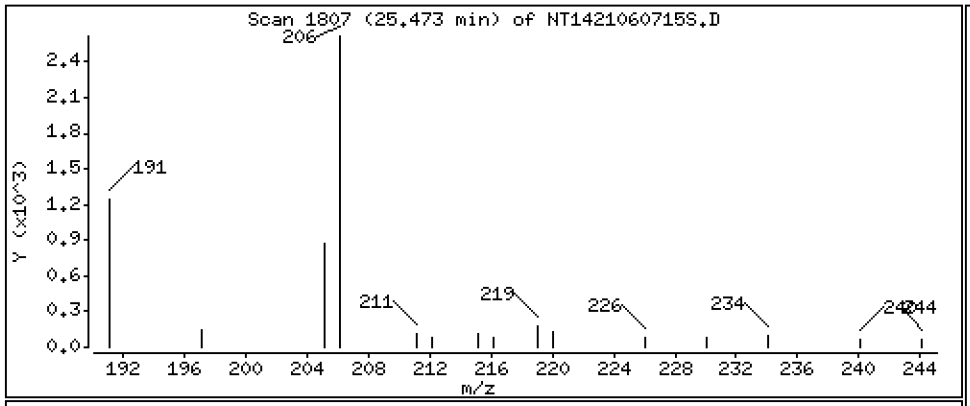
Operator: VTS

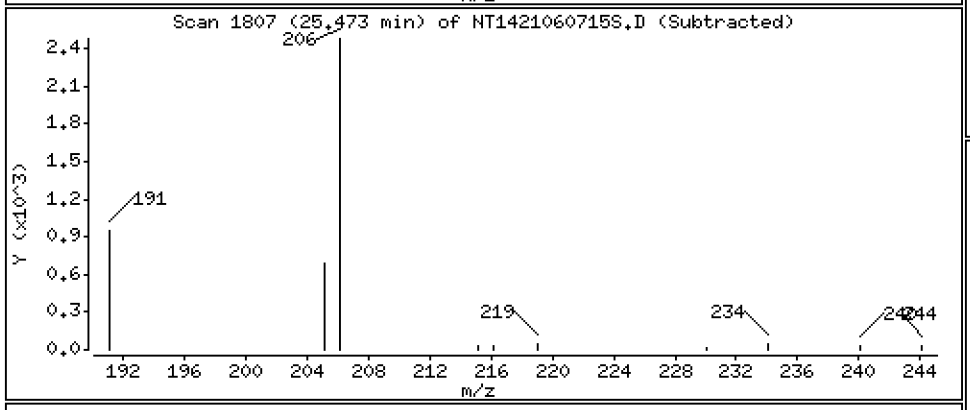
Column phase: Rxi-17Sil MS

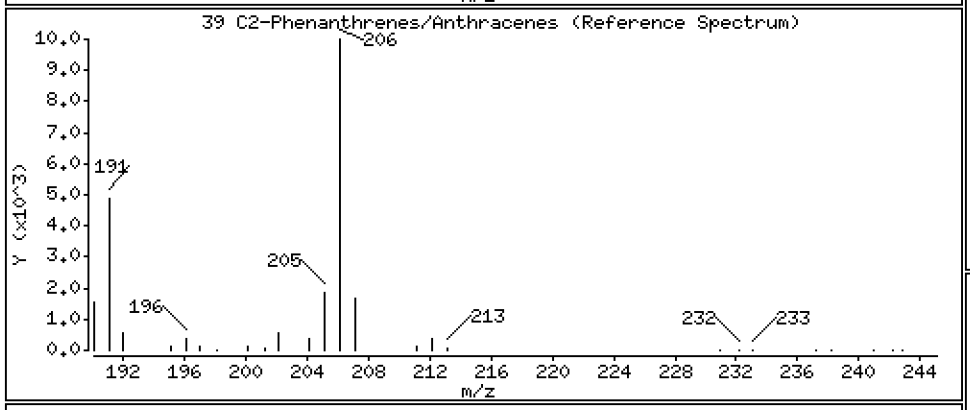
Column diameter: 0.25

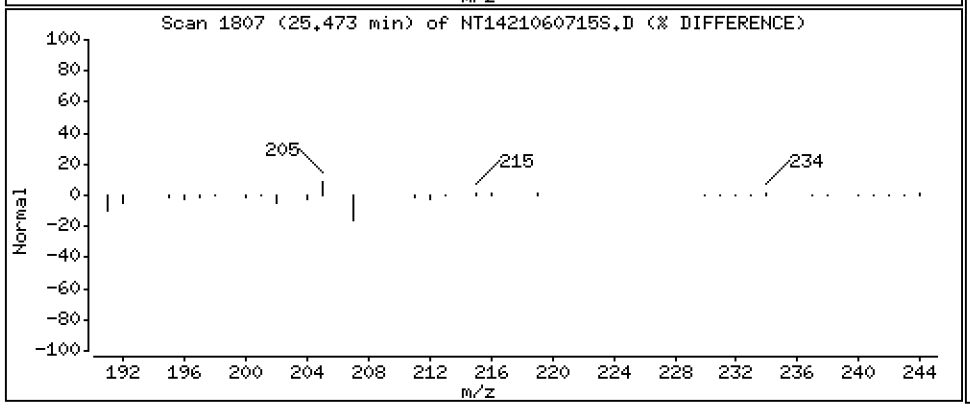
39 C2-Phenanthrenes/Anthracenes

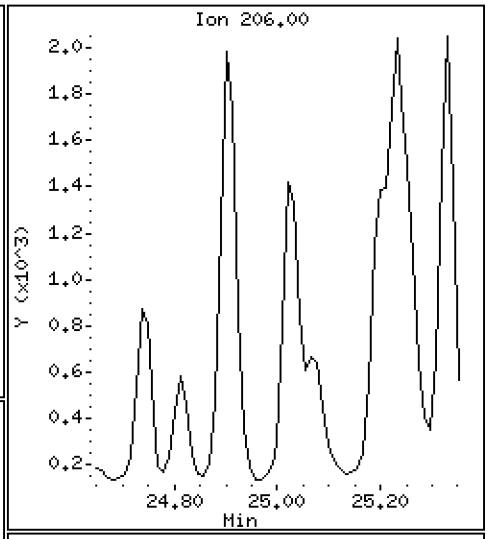
Concentration: 0.1606 ug/mL

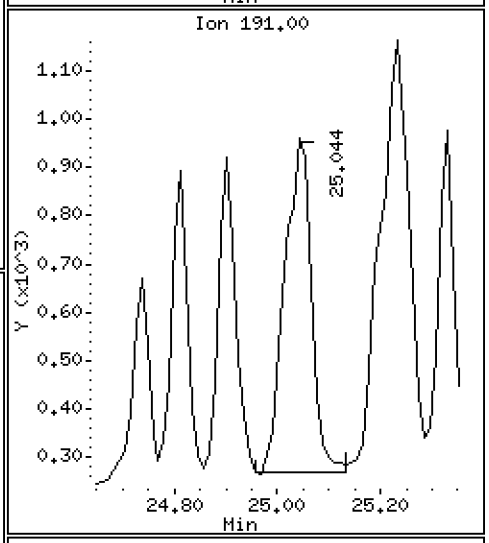


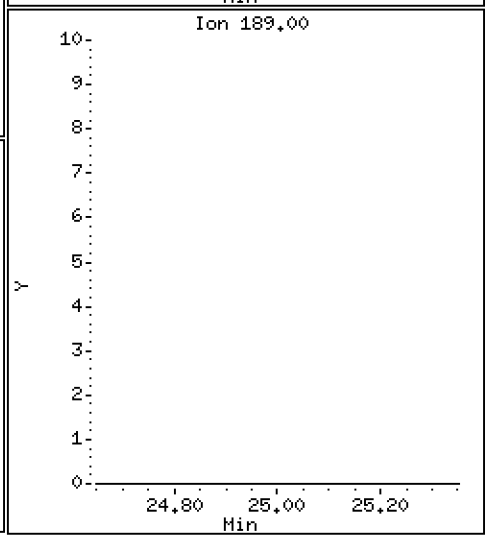












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Date : 07-JUN-2021 23:43

Client ID:

Instrument: nt14.i

Sample Info: 21E0106-04

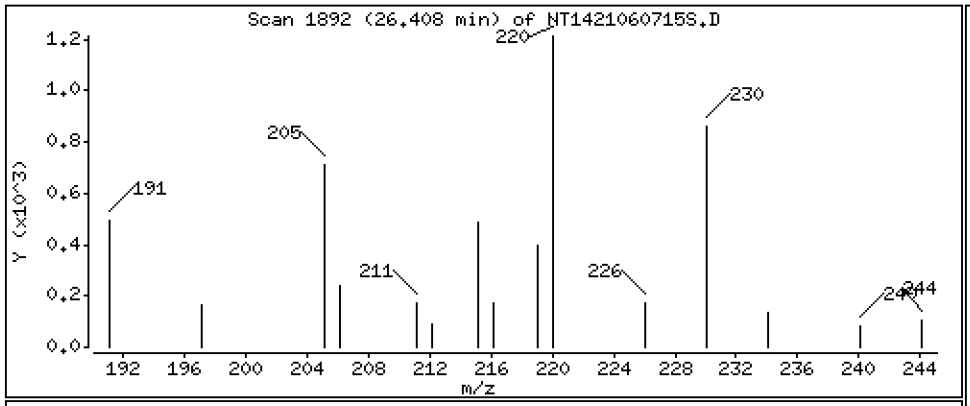
Operator: VTS

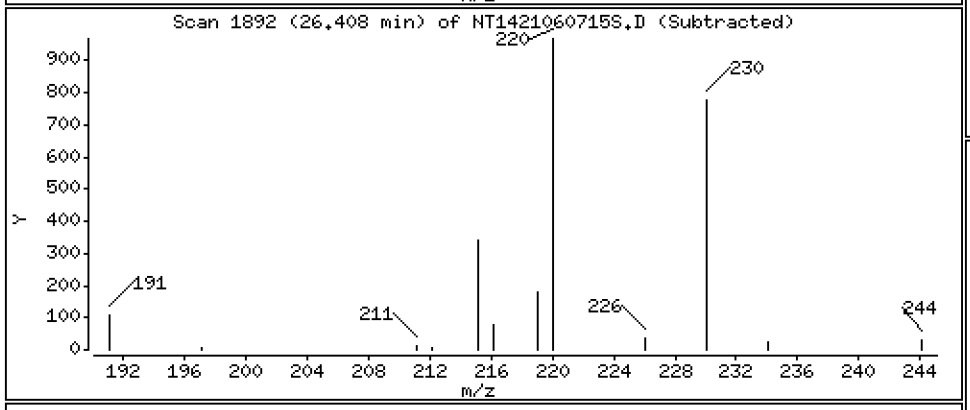
Column phase: Rxi-17Sil MS

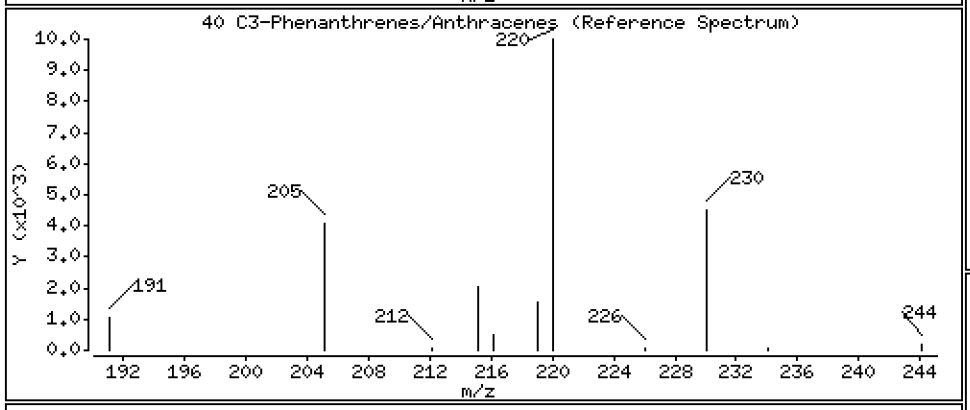
Column diameter: 0.25

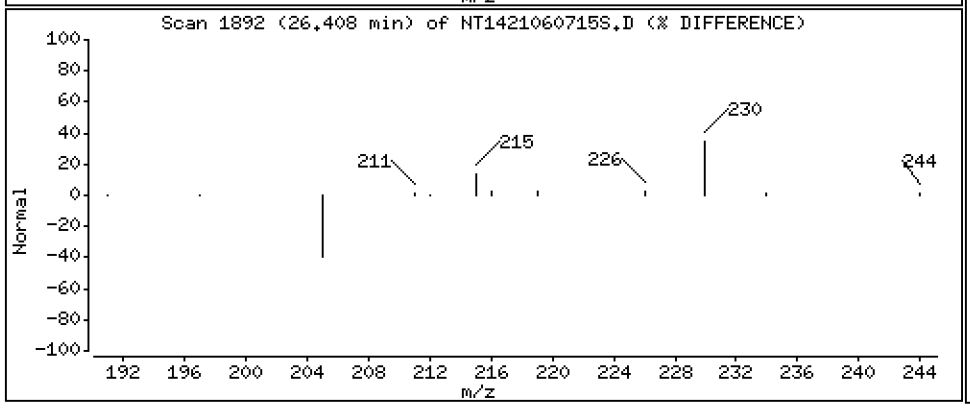
40 C3-Phenanthrenes/Anthracenes

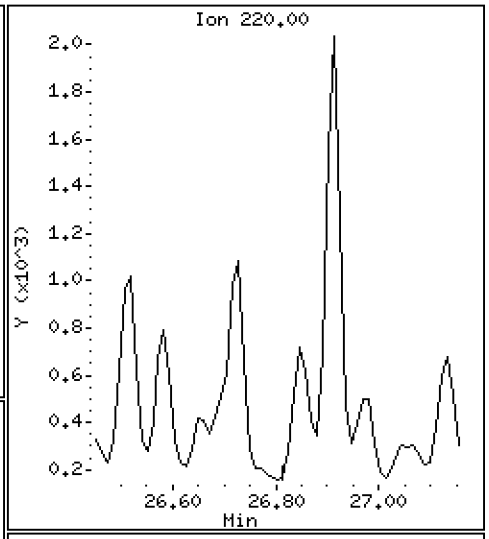
Concentration: 0.07278 ug/mL

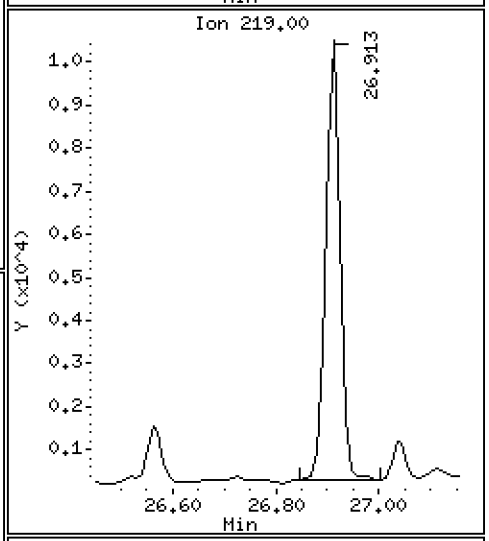


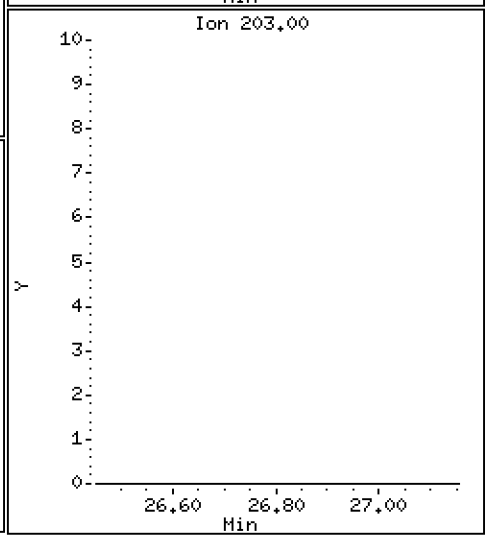












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Date : 07-JUN-2021 23:43

Client ID:

Instrument: nt14.i

Sample Info: 21E0106-04

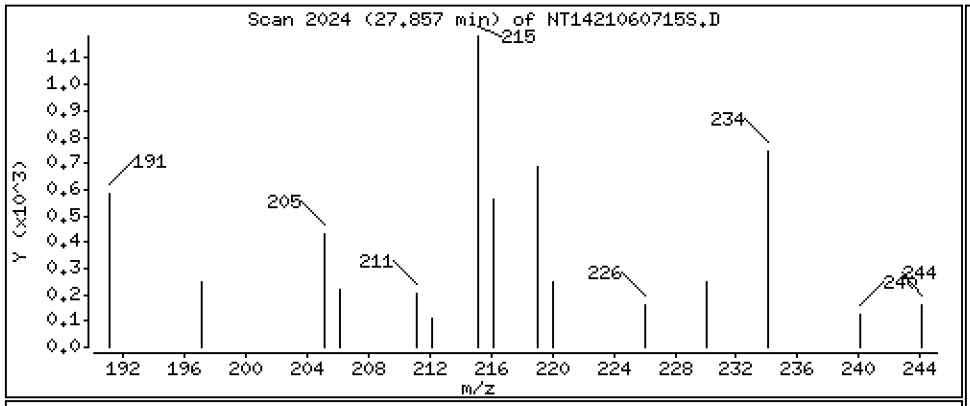
Operator: VTS

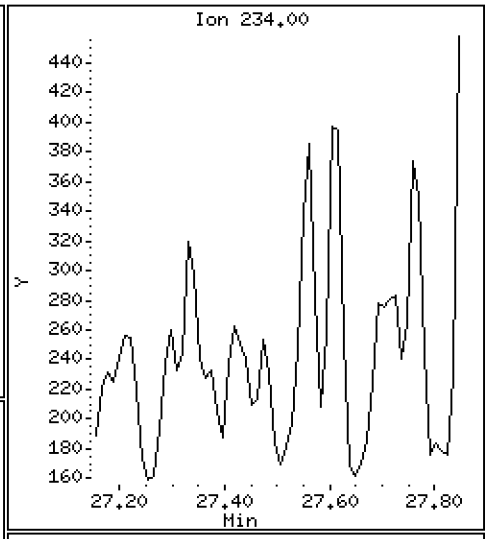
Column phase: Rxi-17Sil MS

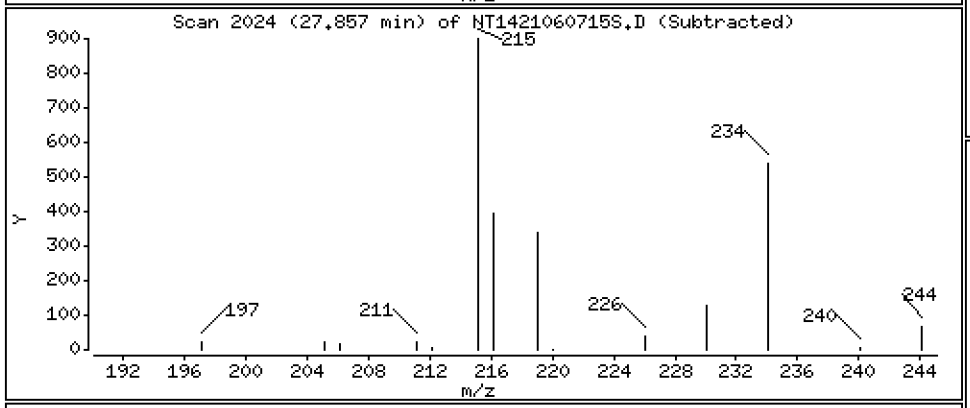
Column diameter: 0.25

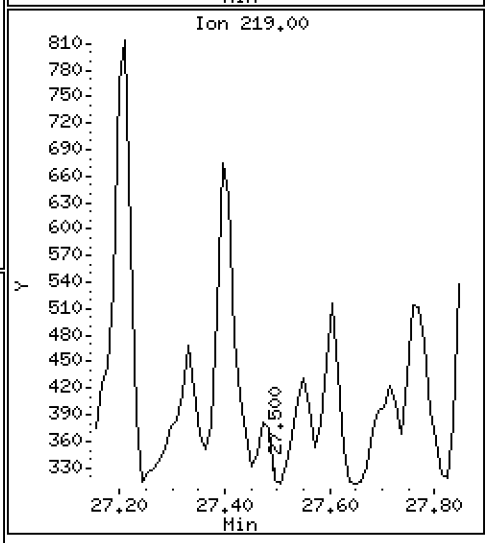
41 C4-Phenanthrenes/Anthracenes

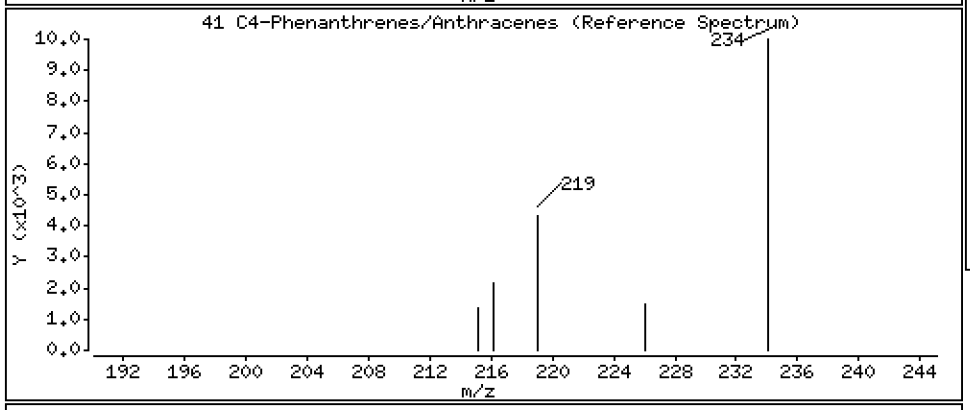
Concentration: 0.04249 ug/mL

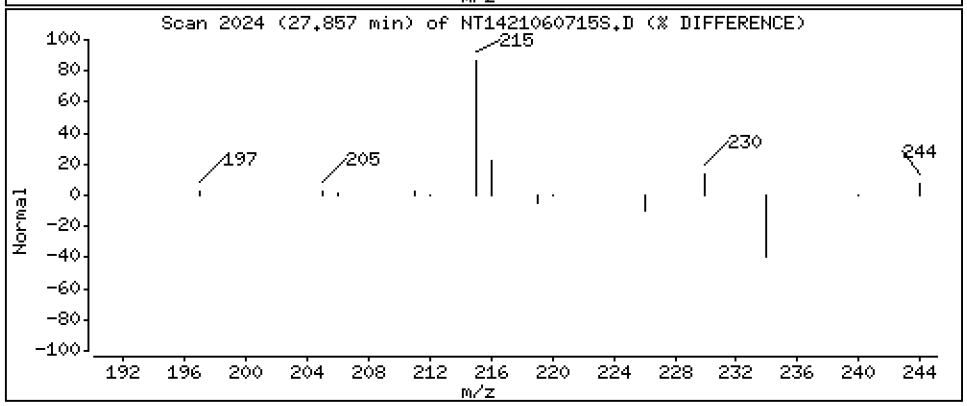












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Date : 07-JUN-2021 23:43

Client ID:

Instrument: nt14.i

Sample Info: 21E0106-04

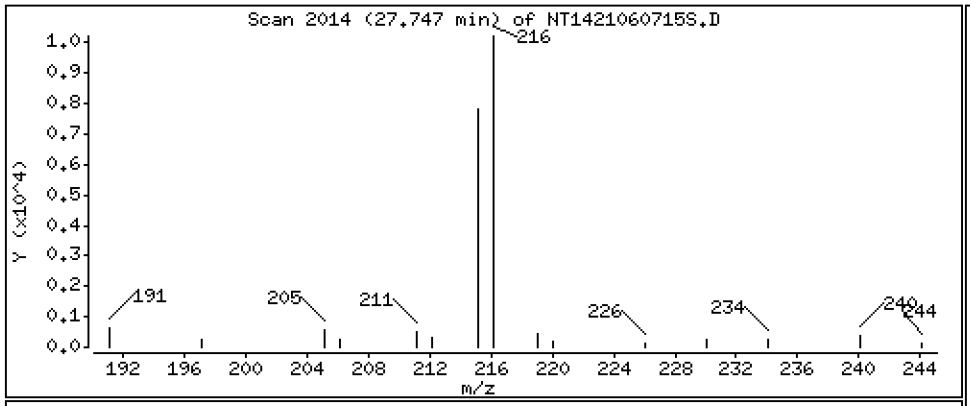
Operator: VTS

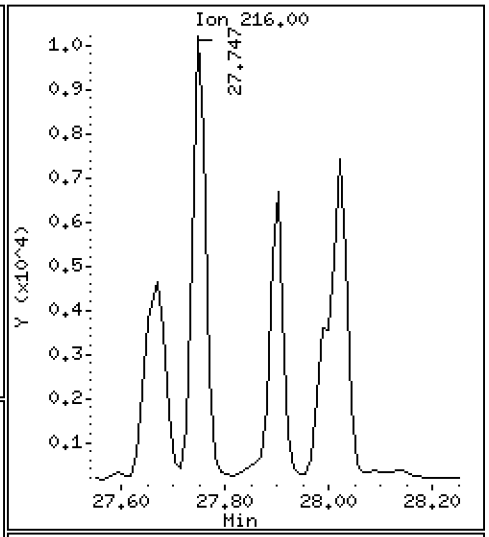
Column phase: Rxi-17Sil MS

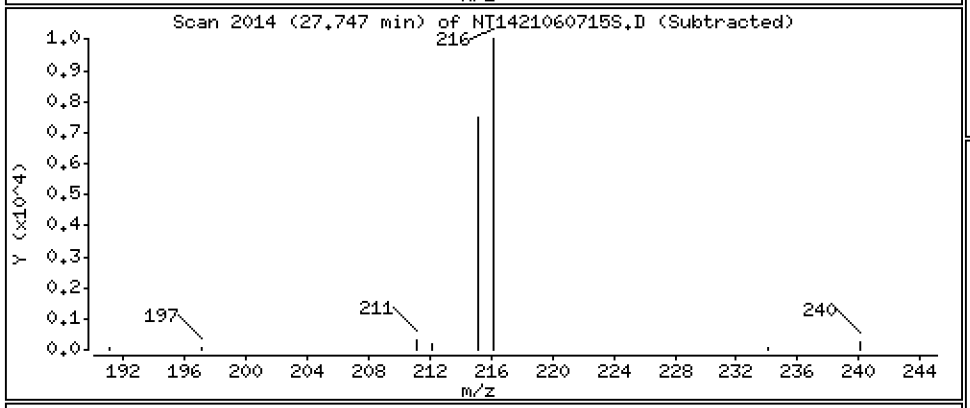
Column diameter: 0.25

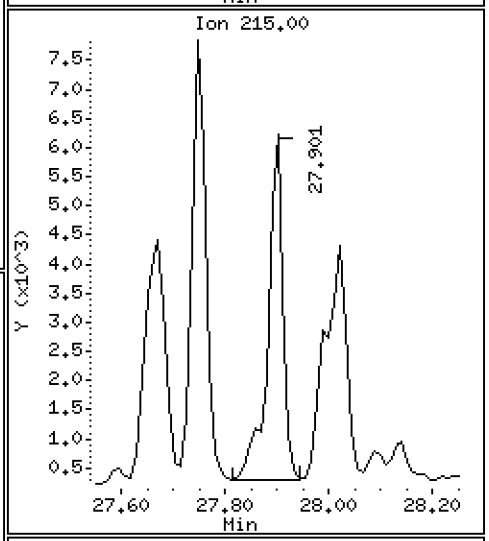
48 C1-Fluoranthenes/Pyrenes

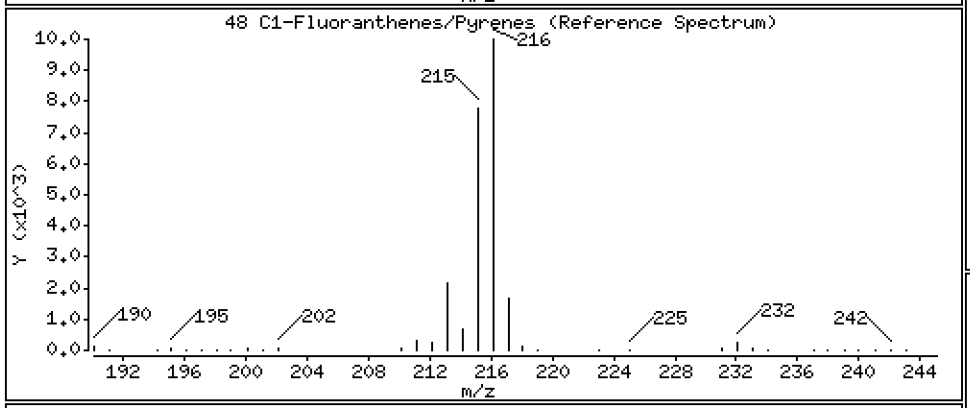
Concentration: 0.4038 ug/mL

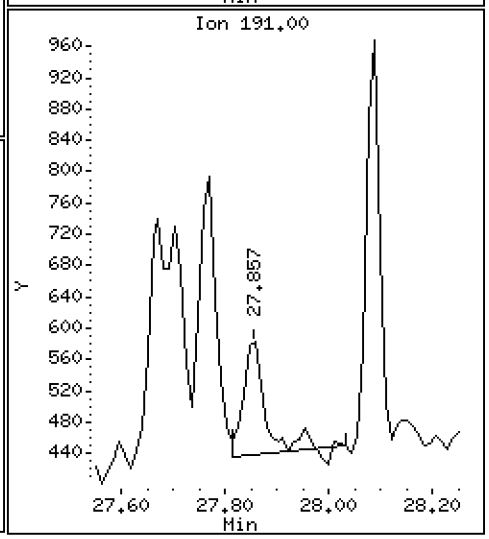


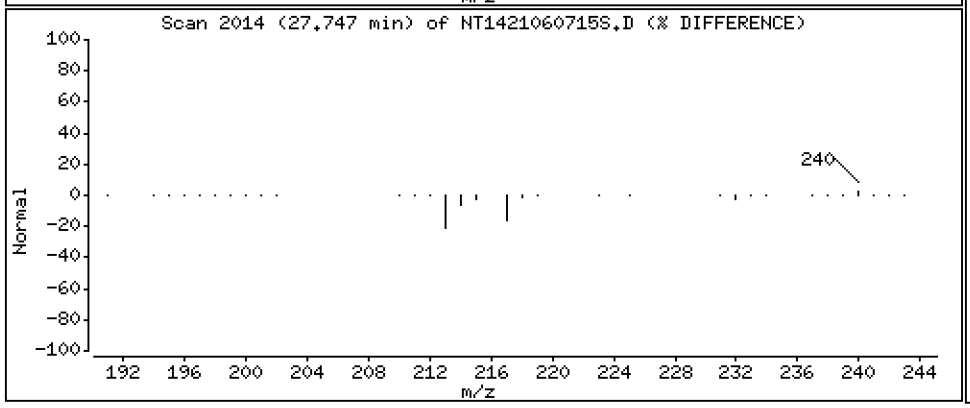












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Date : 07-JUN-2021 23:43

Client ID:

Instrument: nt14.i

Sample Info: 21E0106-04

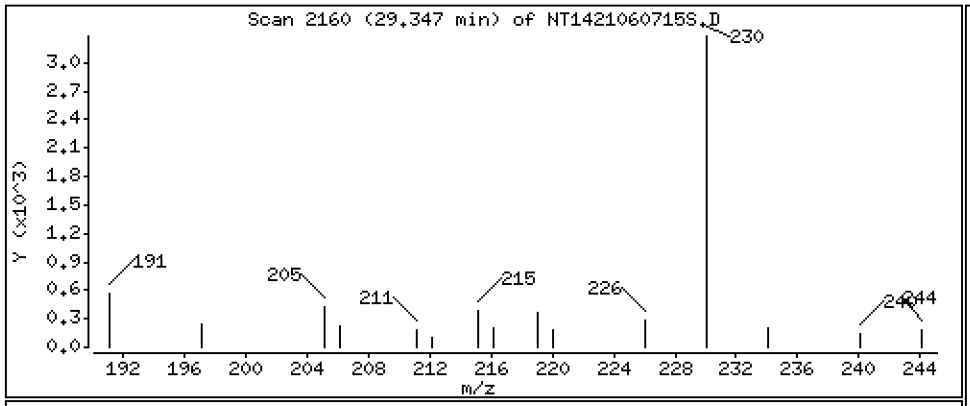
Operator: VTS

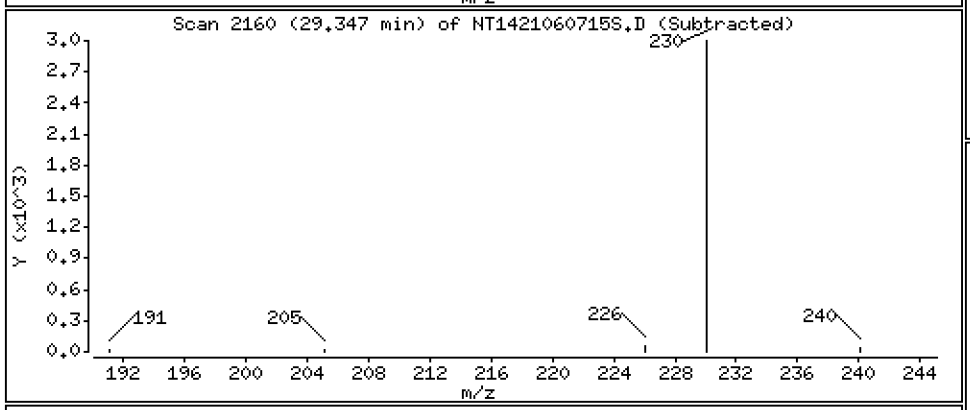
Column phase: Rxi-17Sil MS

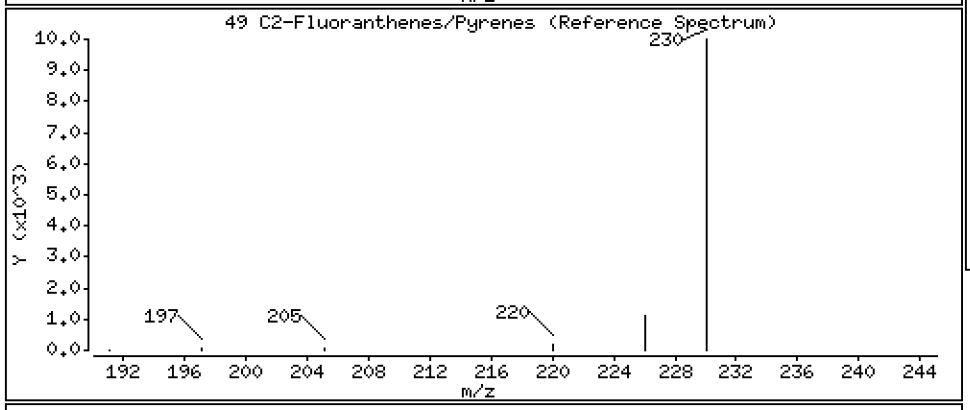
Column diameter: 0.25

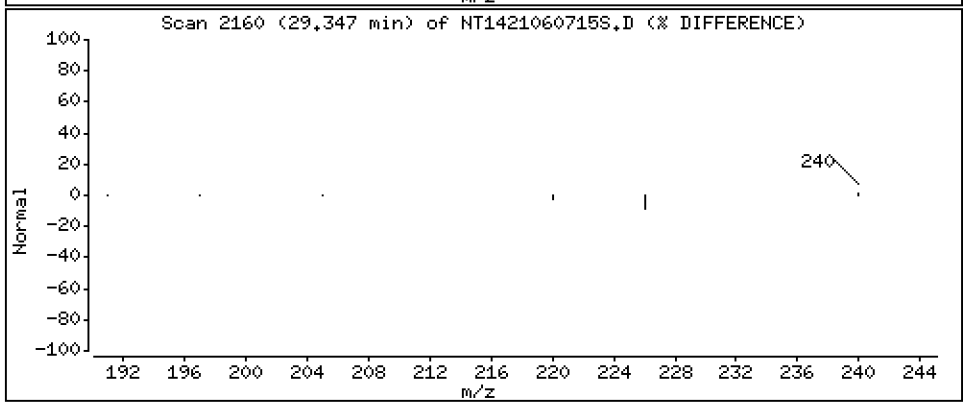
49 C2-Fluoranthenes/Pyrenes

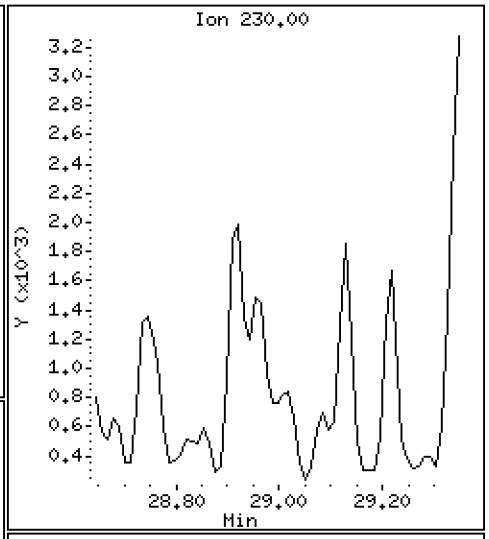
Concentration: 0.1735 ug/mL

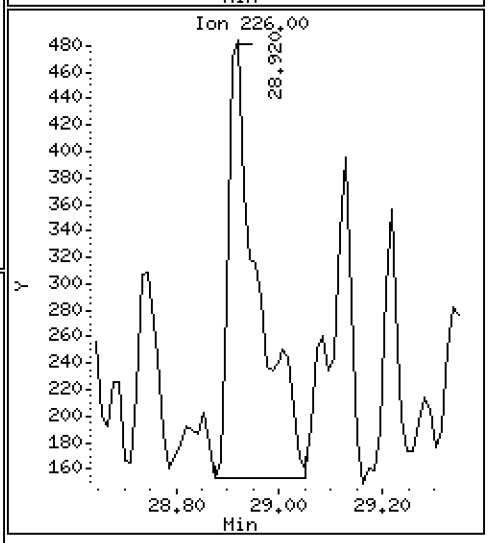












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Date : 07-JUN-2021 23:43

Client ID:

Instrument: nt14.i

Sample Info: 21E0106-04

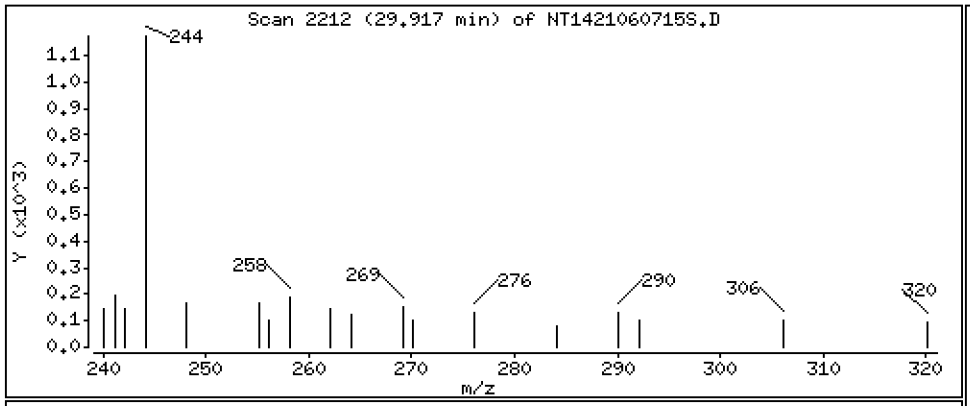
Operator: VTS

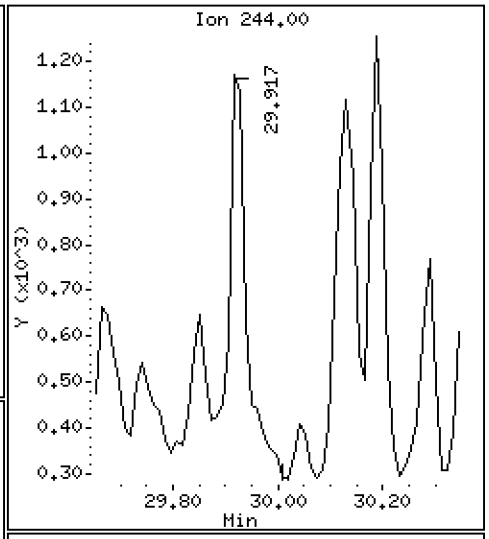
Column phase: Rxi-17Sil MS

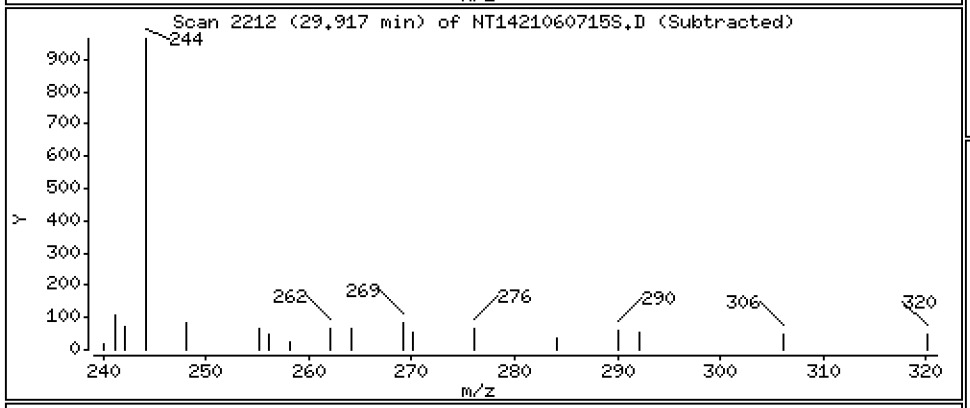
Column diameter: 0.25

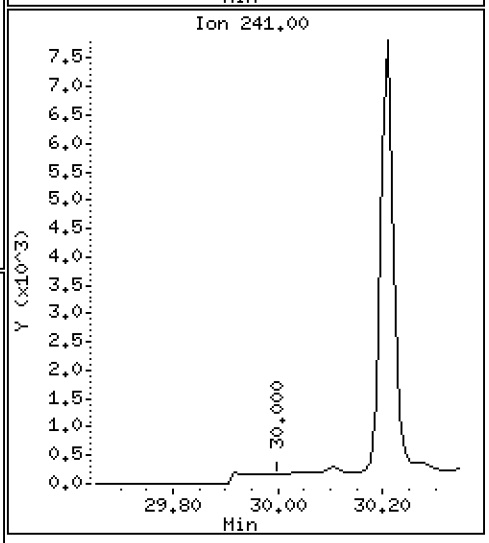
50 C3-Fluoranthenes/Pyrenes

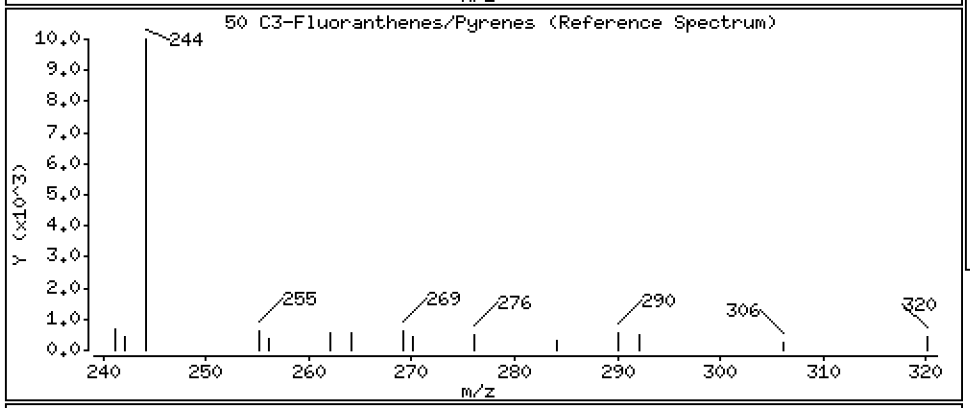
Concentration: 0.03589 ug/mL

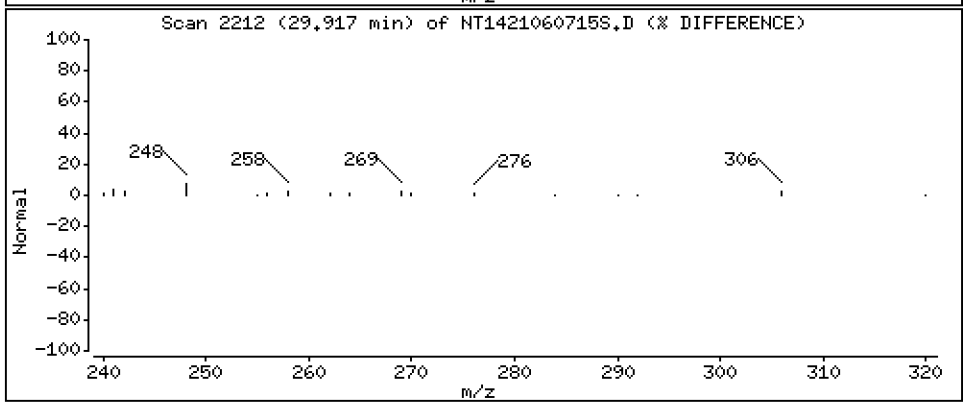












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Date : 07-JUN-2021 23:43

Client ID:

Instrument: nt14.i

Sample Info: 21E0106-04

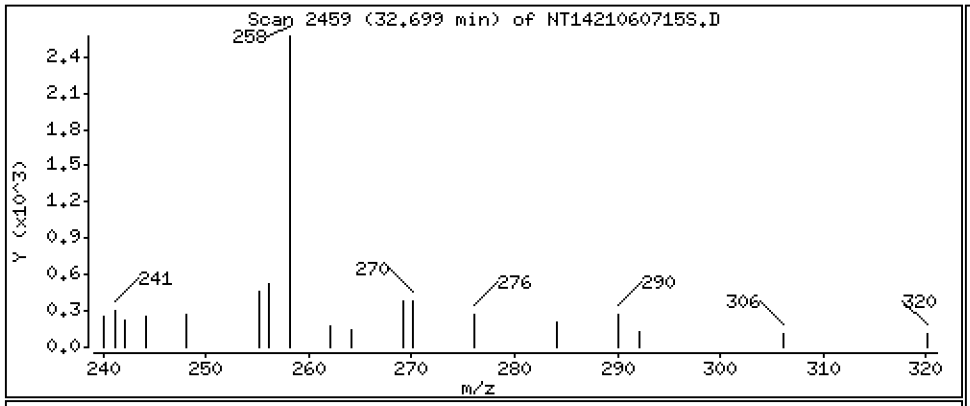
Operator: VTS

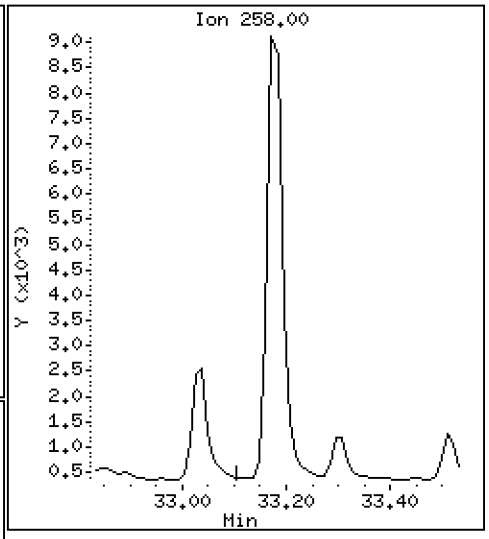
Column phase: Rxi-17Sil MS

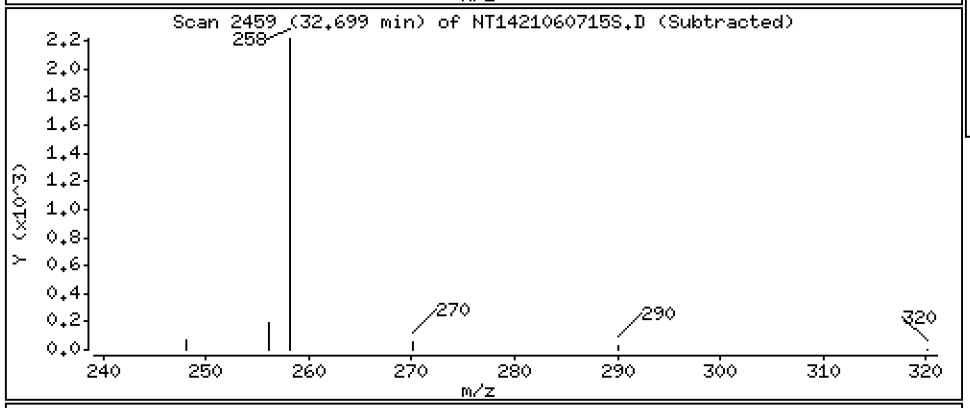
Column diameter: 0.25

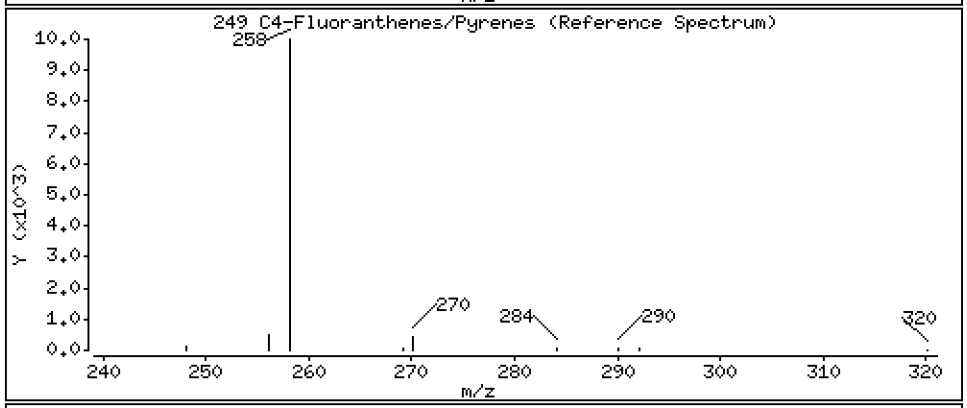
249 C4-Fluoranthenes/Pyrenes

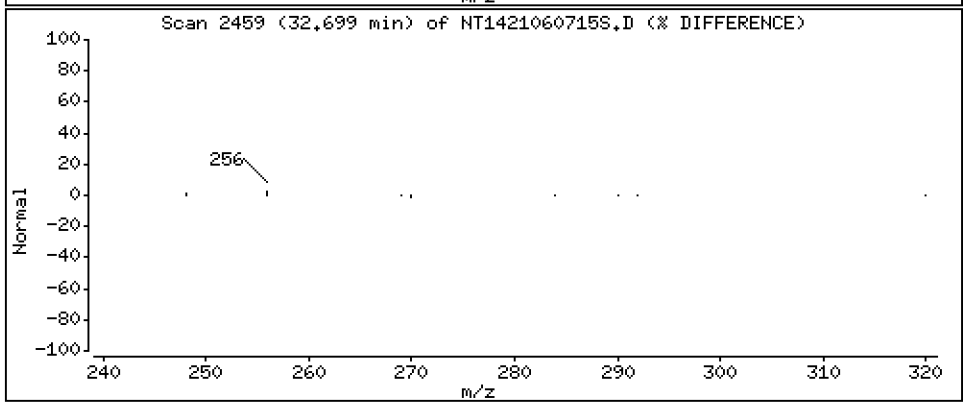
Concentration: 0.06864 ug/mL











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Date : 07-JUN-2021 23:43

Client ID:

Instrument: nt14.i

Sample Info: 21E0106-04

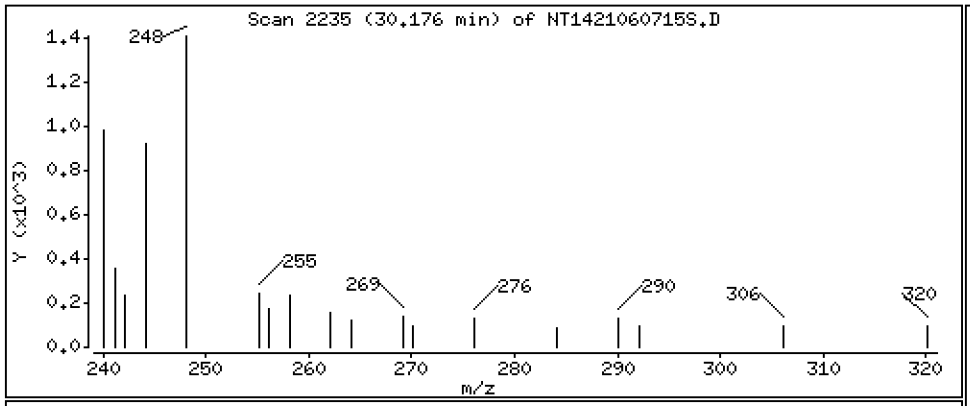
Operator: VTS

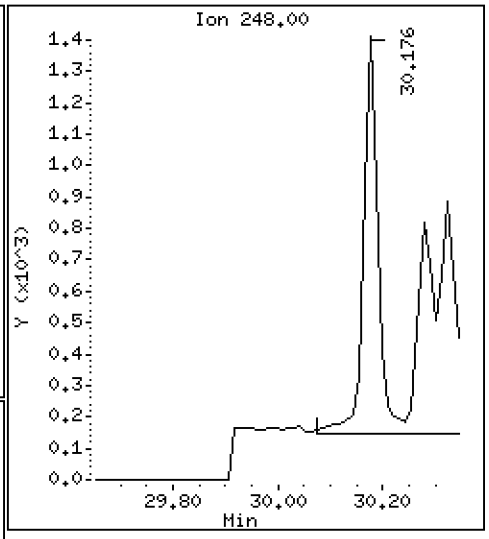
Column phase: Rxi-17Sil MS

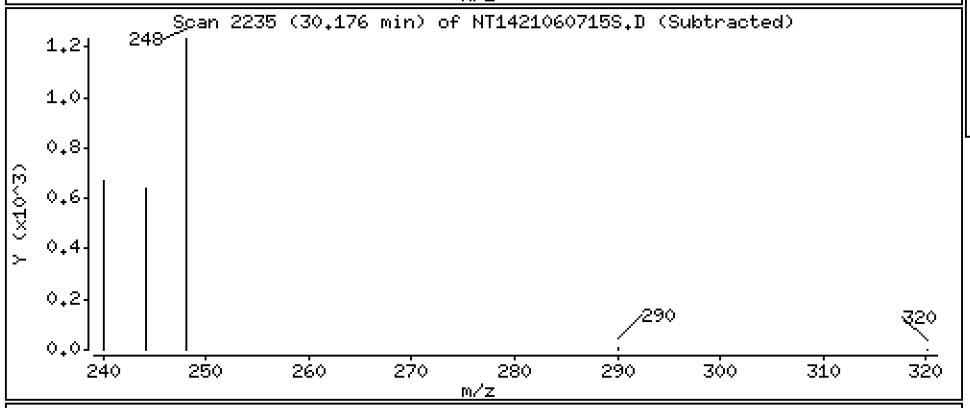
Column diameter: 0.25

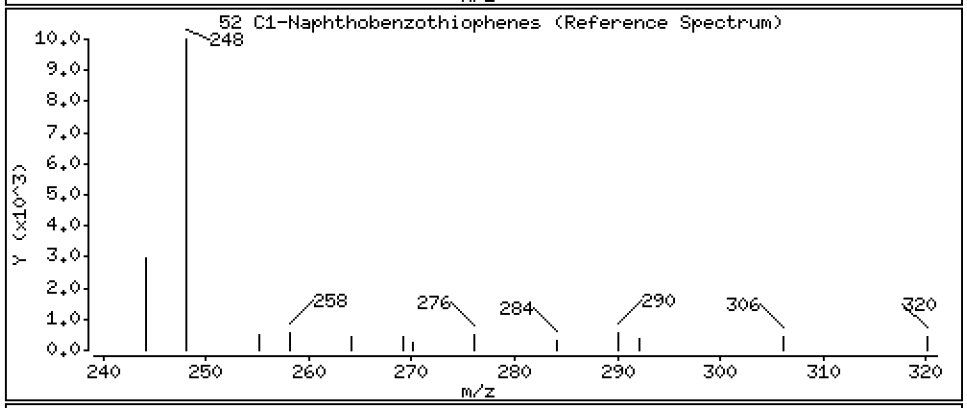
52 C1-Naphthobenzothiophenes

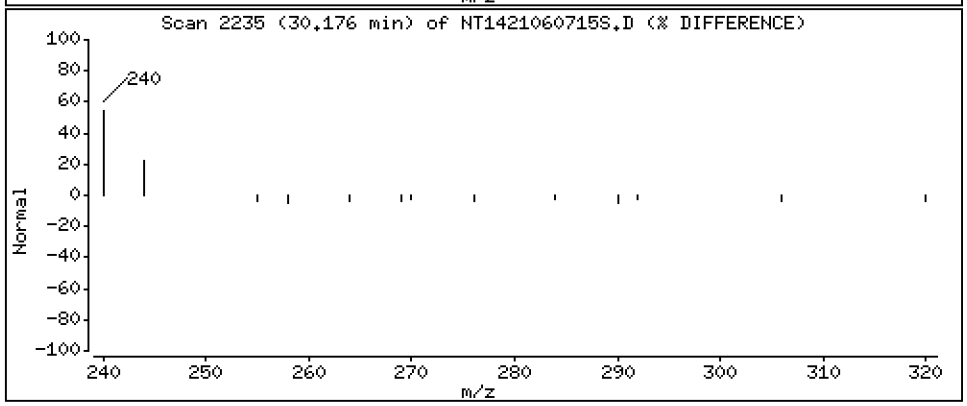
Concentration: 0.05767 ug/mL











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Date : 07-JUN-2021 23:43

Client ID:

Instrument: nt14.i

Sample Info: 21E0106-04

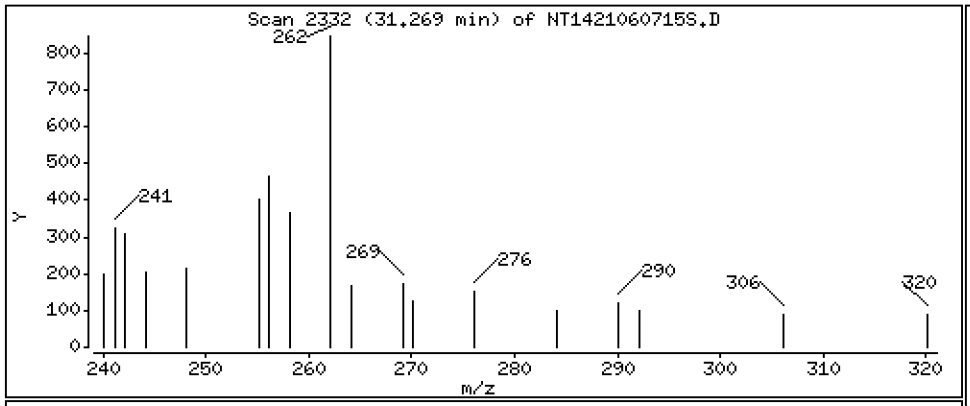
Operator: VTS

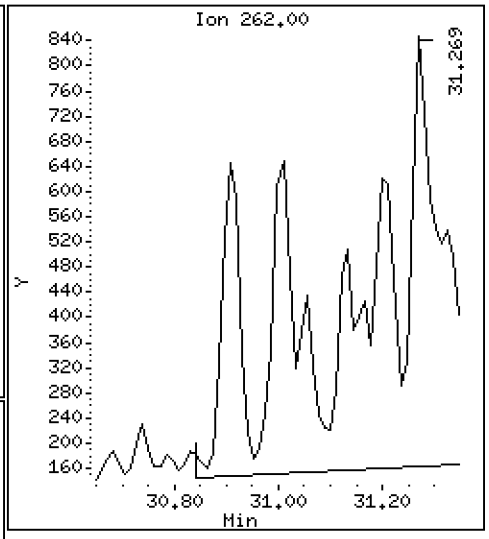
Column phase: Rxi-17Sil MS

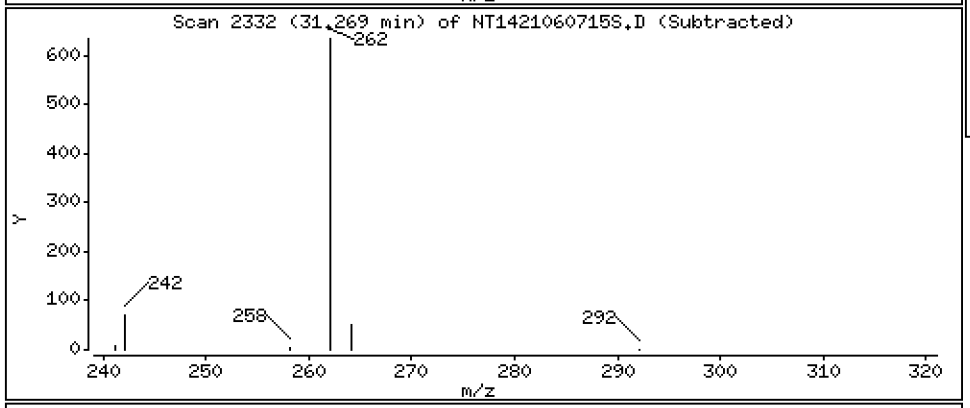
Column diameter: 0.25

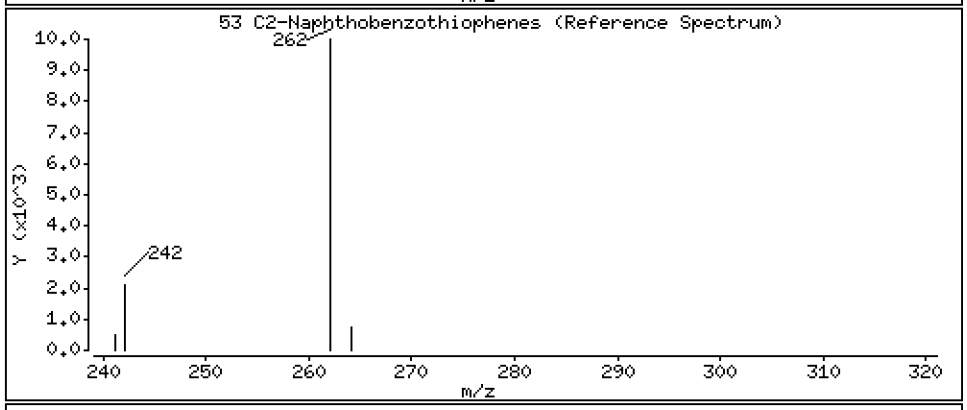
53 C2-Naphthobenzothiophenes

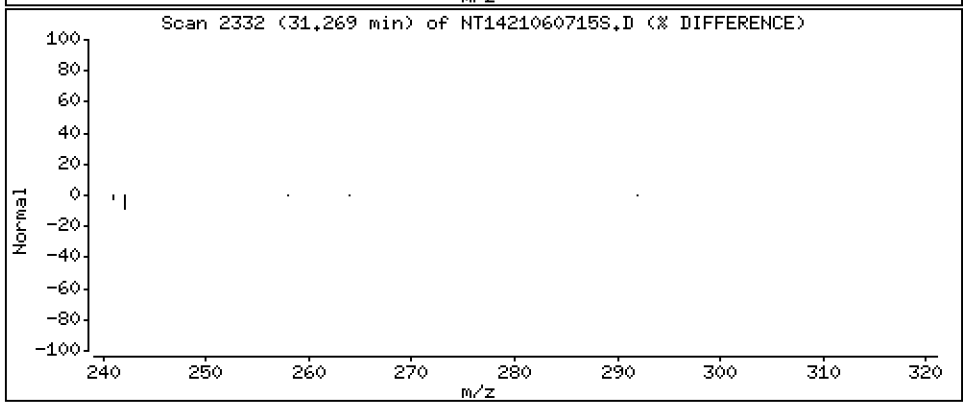
Concentration: 0.04900 ug/mL











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Date : 07-JUN-2021 23:43

Client ID:

Instrument: nt14.i

Sample Info: 21E0106-04

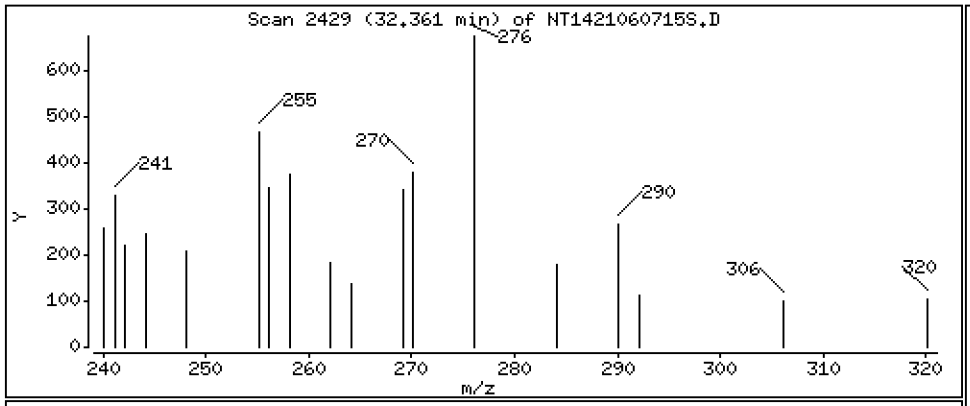
Operator: VTS

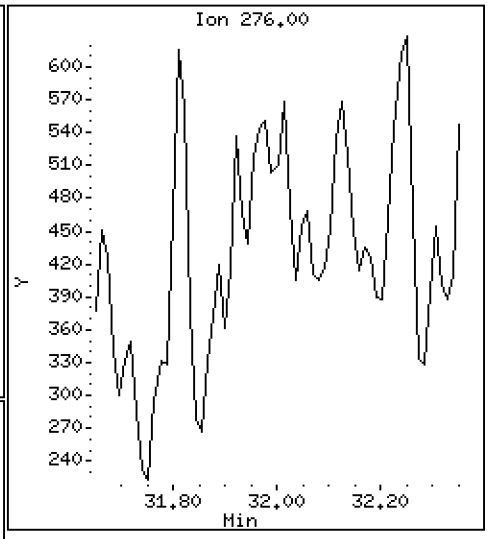
Column phase: Rxi-17Sil MS

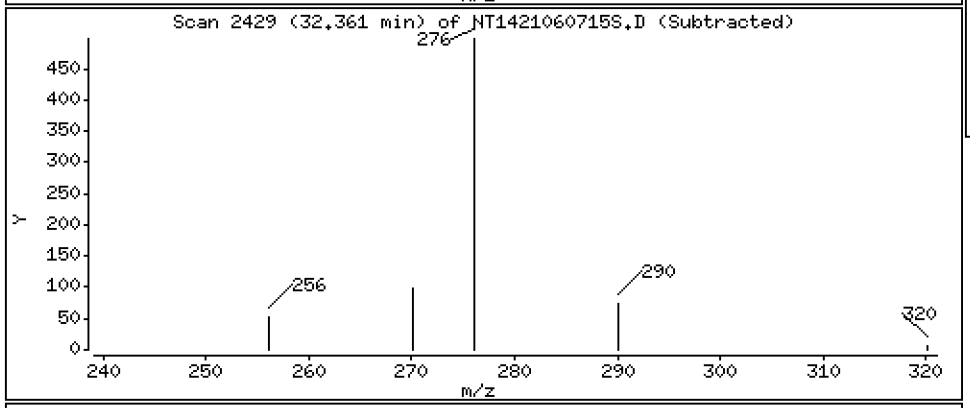
Column diameter: 0.25

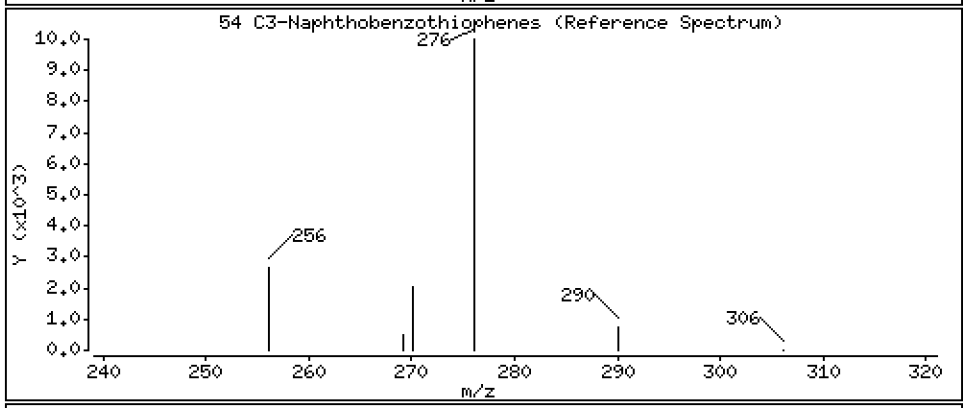
54 C3-Naphthobenzothiophenes

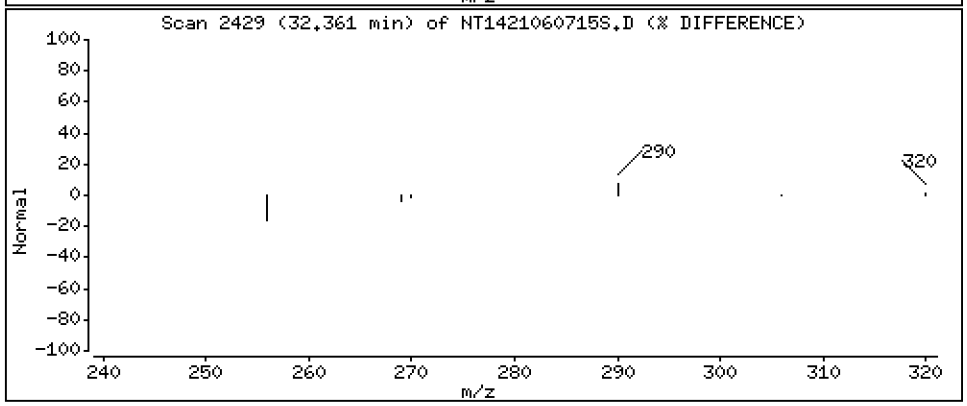
Concentration: 0.05854 ug/mL











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Date : 07-JUN-2021 23:43

Client ID:

Instrument: nt14.i

Sample Info: 21E0106-04

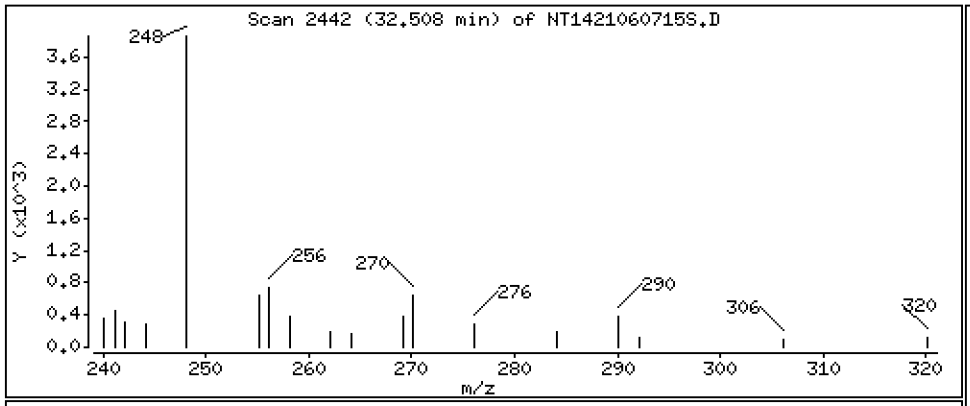
Operator: VTS

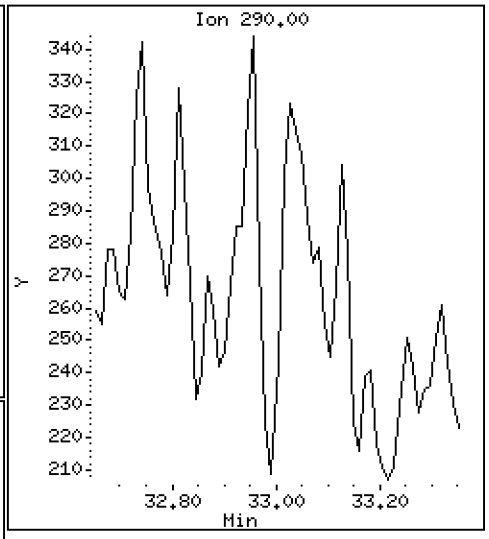
Column phase: Rxi-17Sil MS

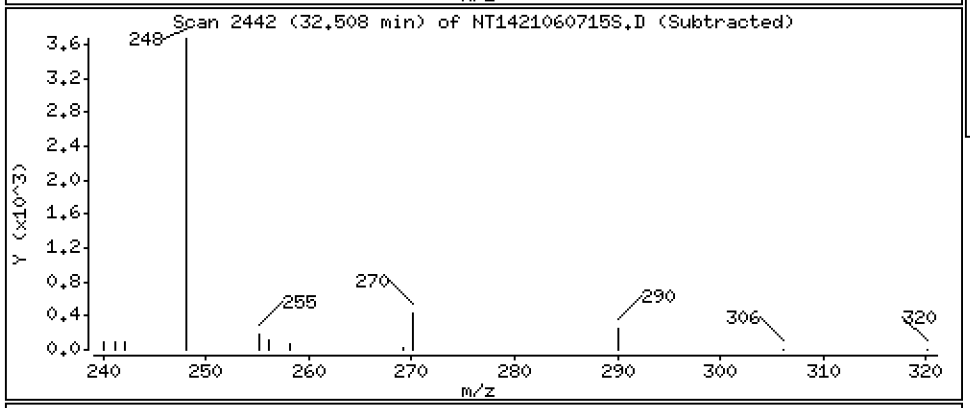
Column diameter: 0.25

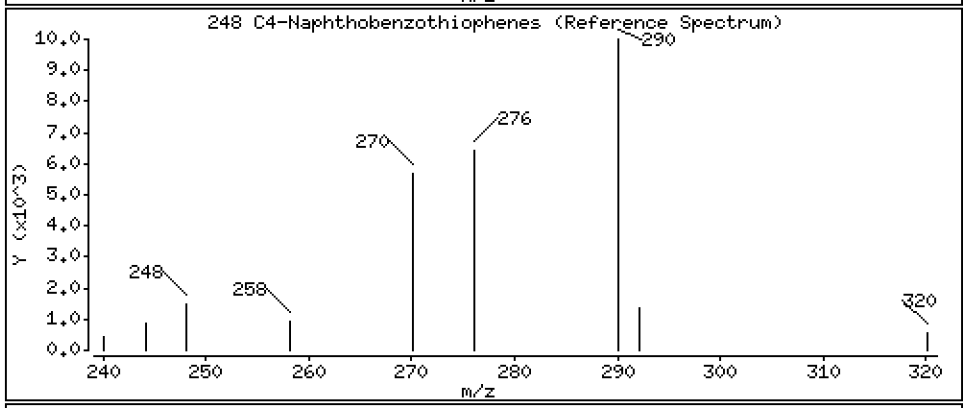
248 C4-Naphthobenzothiophenes

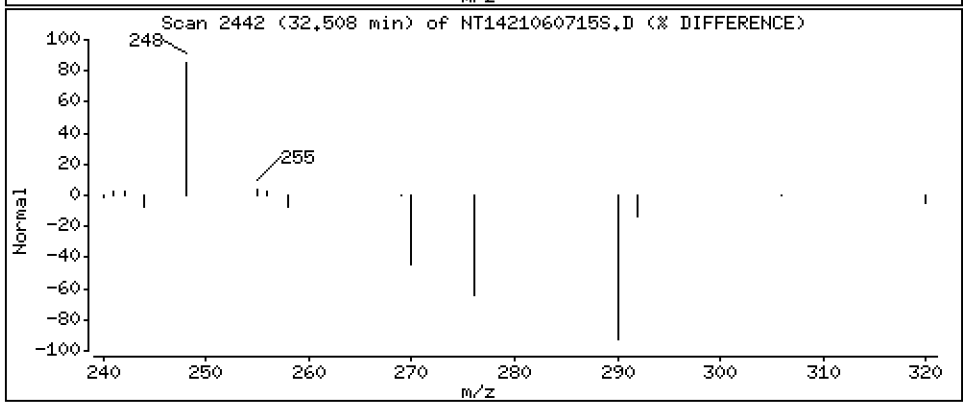
Concentration: 0.04097 ug/mL











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Date : 07-JUN-2021 23:43

Client ID:

Instrument: nt14.i

Sample Info: 21E0106-04

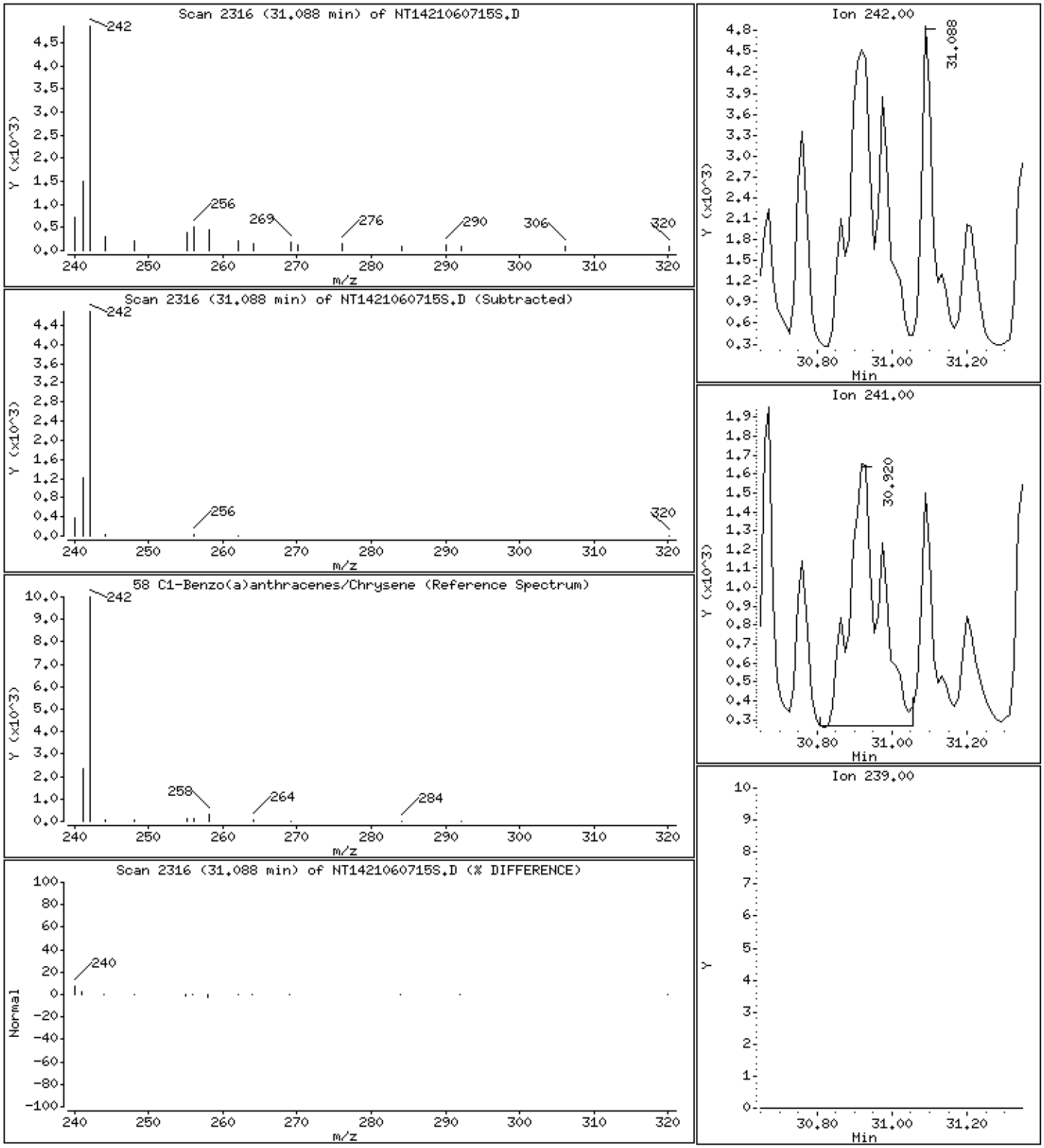
Operator: VTS

Column phase: Rxi-17Sil MS

Column diameter: 0.25

58 C1-Benzo(a)anthracenes/Chrysene

Concentration: 0.3673 ug/mL



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Date : 07-JUN-2021 23:43

Client ID:

Instrument: nt14.i

Sample Info: 21E0106-04

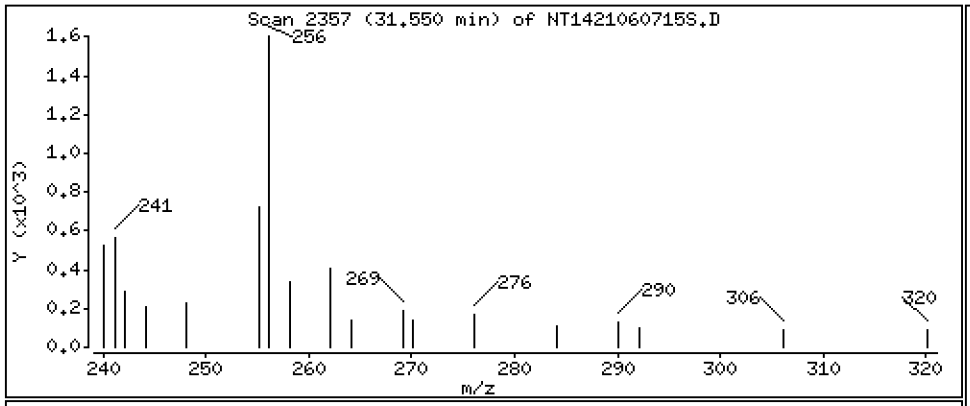
Operator: VTS

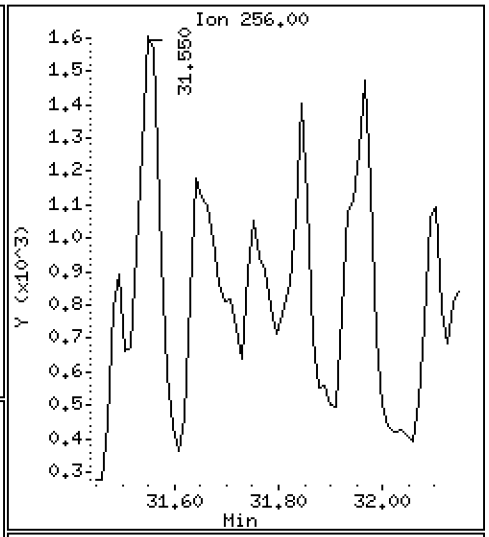
Column phase: Rxi-17Sil MS

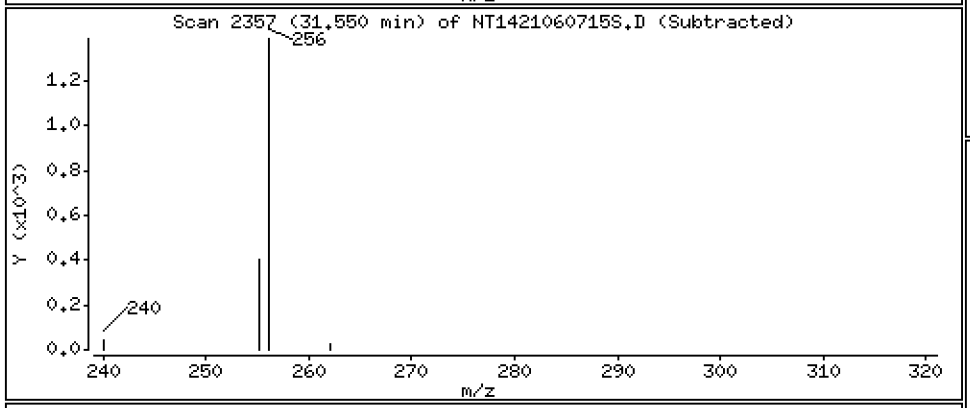
Column diameter: 0.25

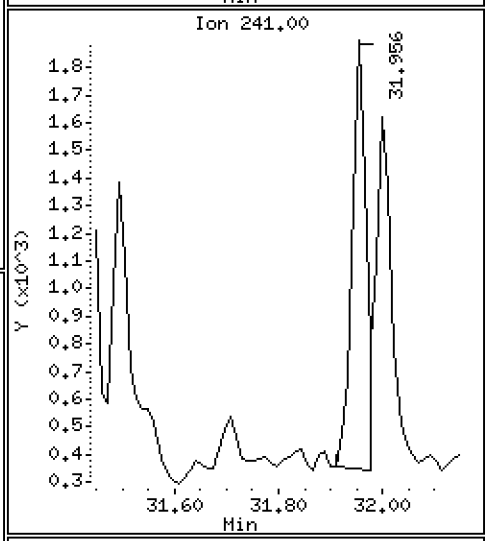
59 C2-Benzo(a)anthracenes/Chrysene

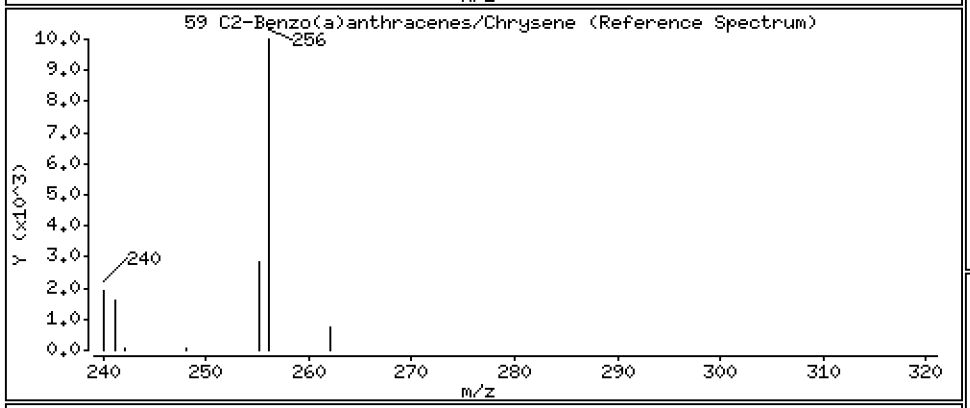
Concentration: 0.1534 ug/mL

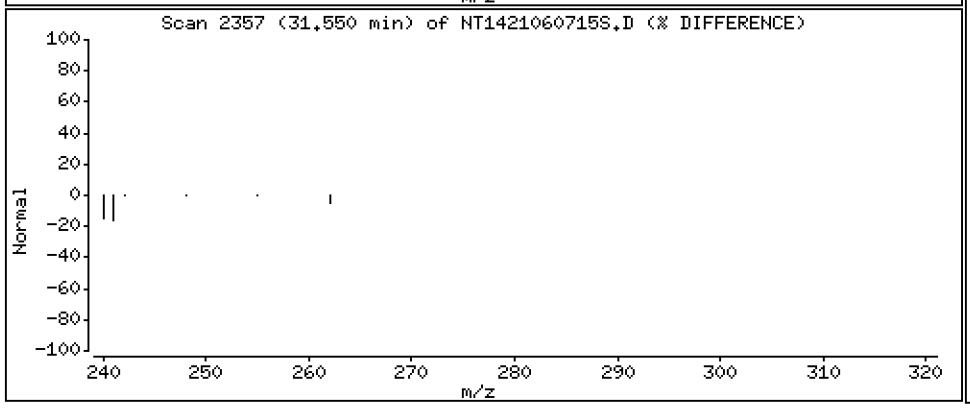


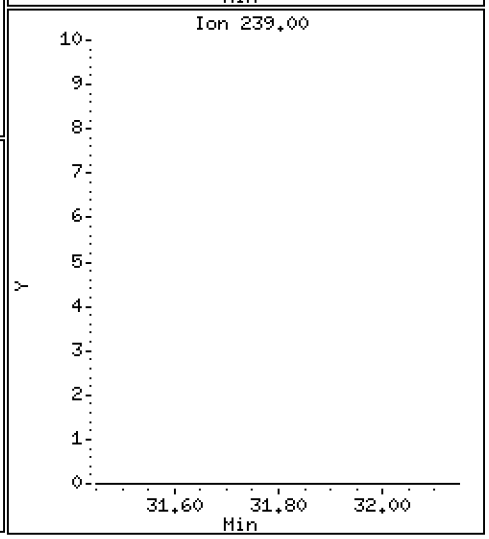












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Date : 07-JUN-2021 23:43

Client ID:

Instrument: nt14.i

Sample Info: 21E0106-04

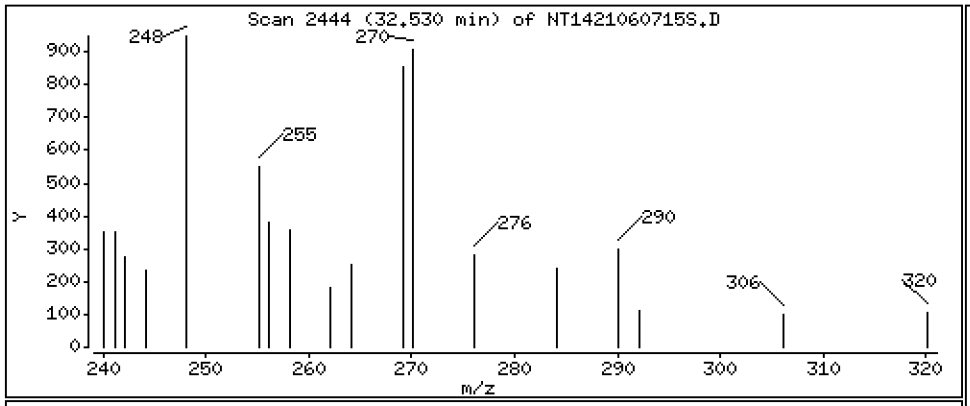
Operator: VTS

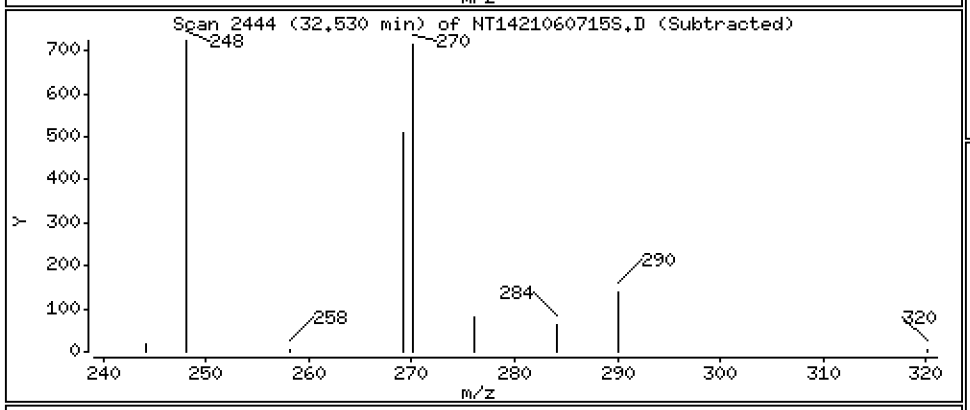
Column phase: Rxi-17Sil MS

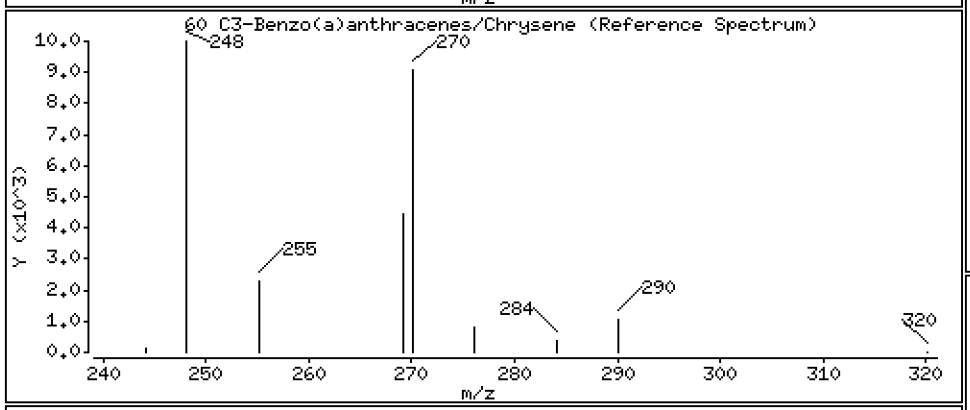
Column diameter: 0.25

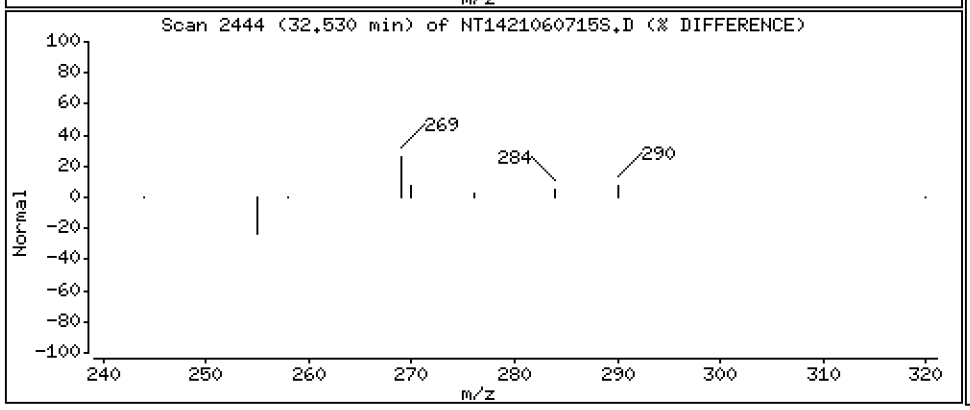
60 C3-Benzo(a)anthracenes/Chrysene

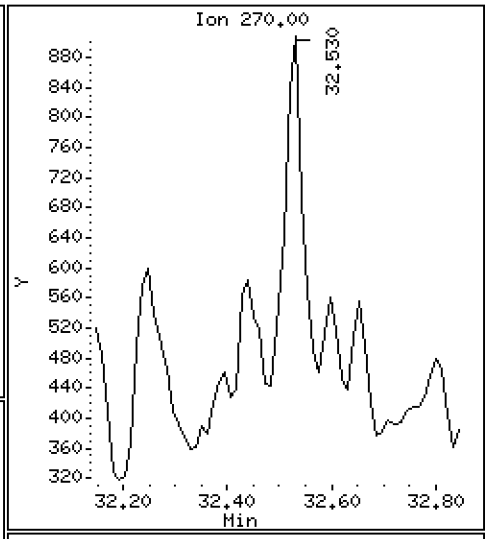
Concentration: 0.09041 ug/mL

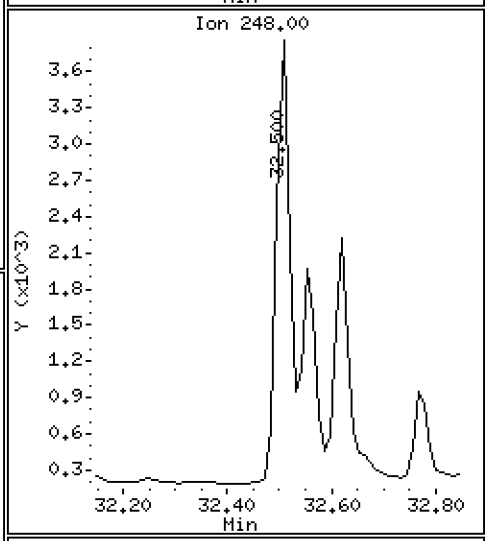


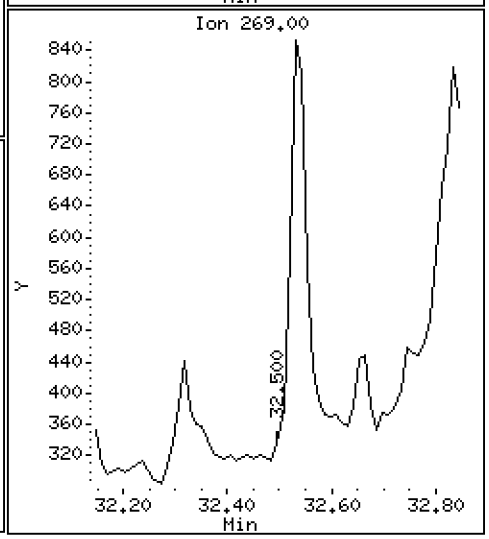












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Date : 07-JUN-2021 23:43

Client ID:

Instrument: nt14.i

Sample Info: 21E0106-04

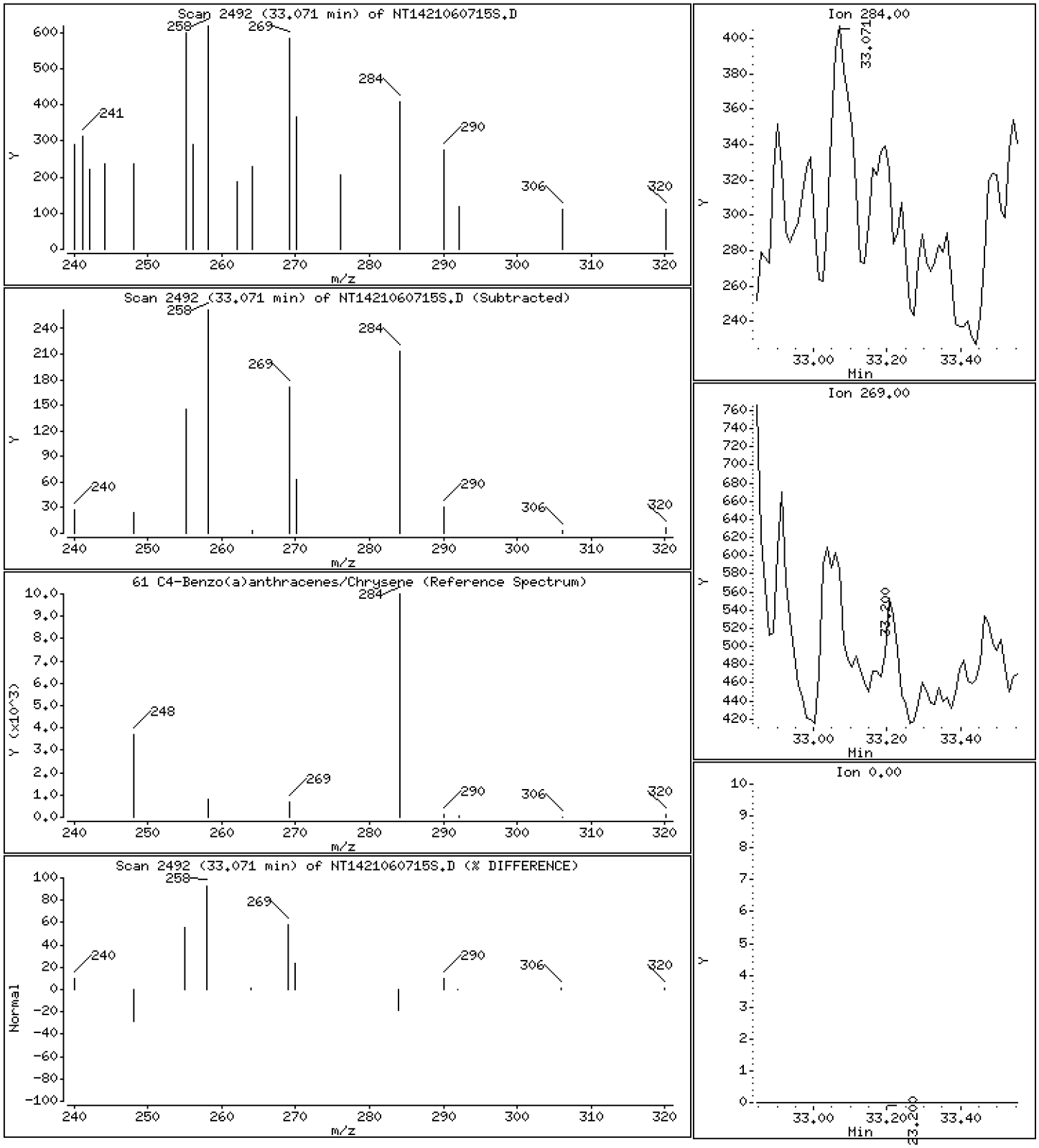
Operator: VTS

Column phase: Rxi-17Sil MS

Column diameter: 0.25

61 C4-Benzo(a)anthracenes/Chrysene

Concentration: 0.03672 ug/mL



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Date : 07-JUN-2021 23:43

Client ID:

Instrument: nt14.i

Sample Info: 21E0106-04

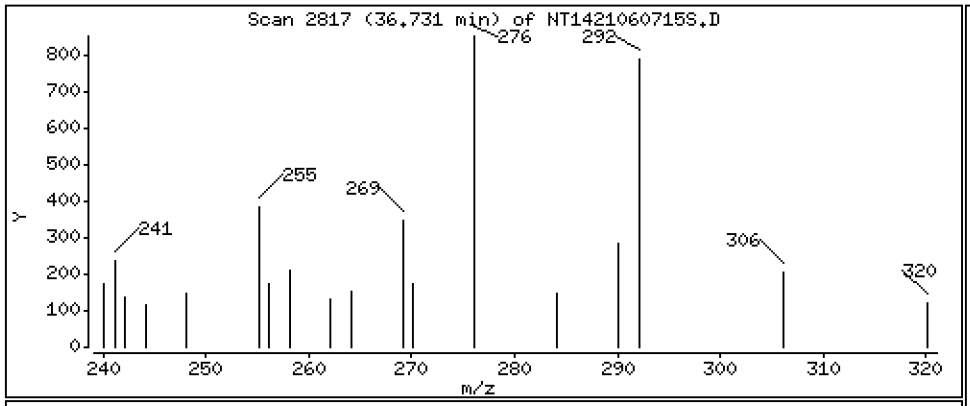
Operator: VTS

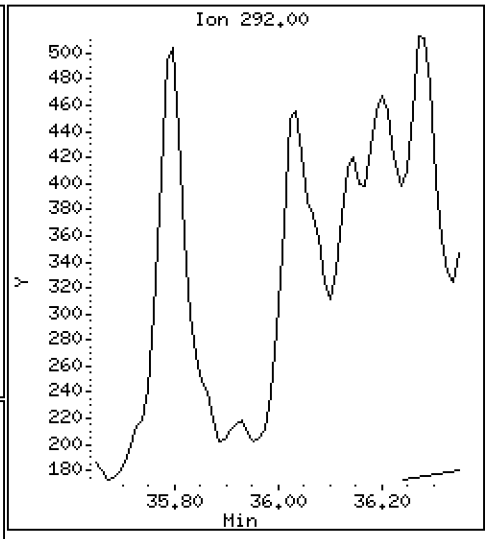
Column phase: Rxi-17Sil MS

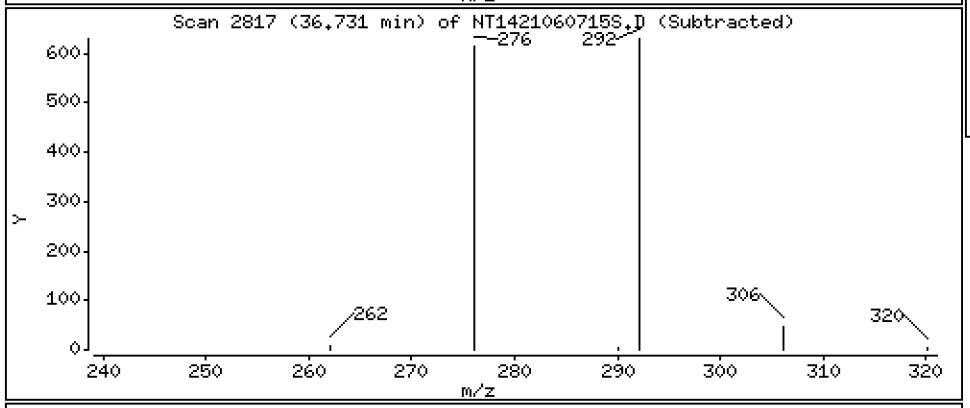
Column diameter: 0.25

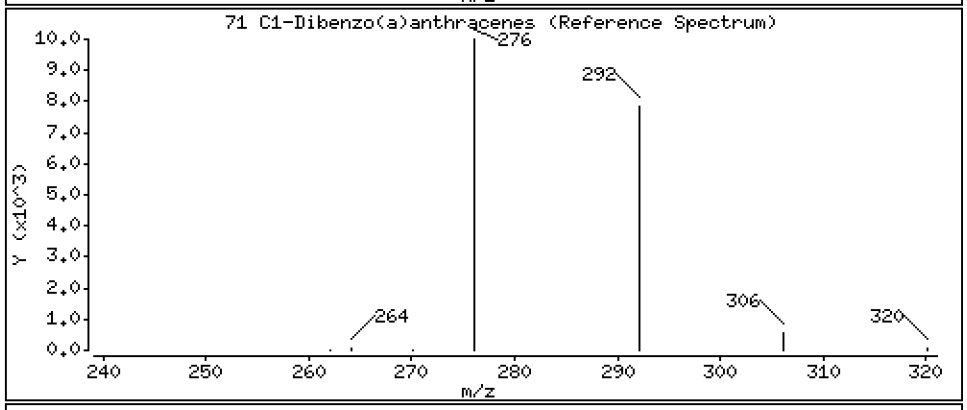
71 C1-Dibenzo(a)anthracenes

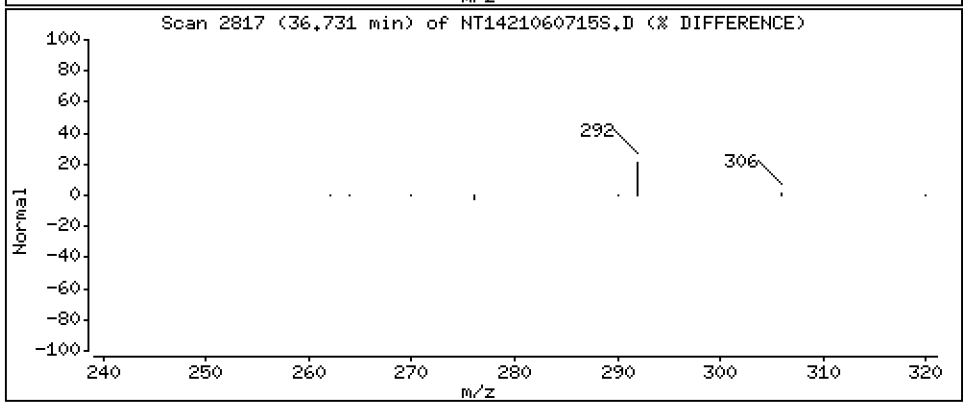
Concentration: 0.08220 ug/mL











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Date : 07-JUN-2021 23:43

Client ID:

Instrument: nt14.i

Sample Info: 21E0106-04

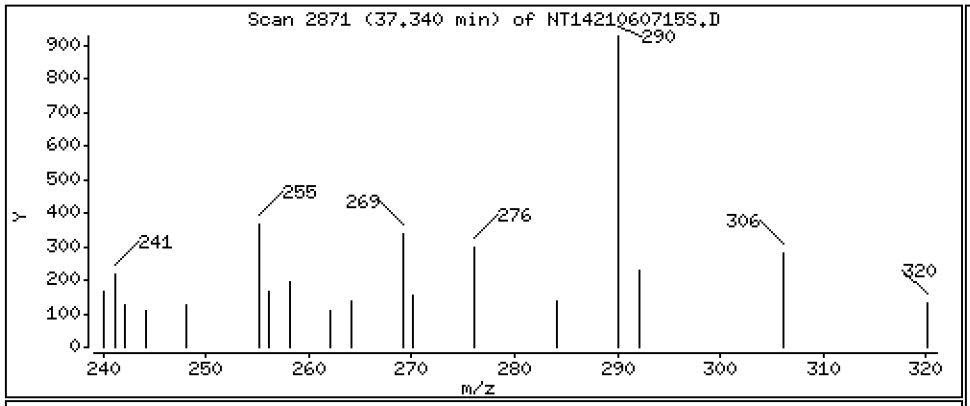
Operator: VTS

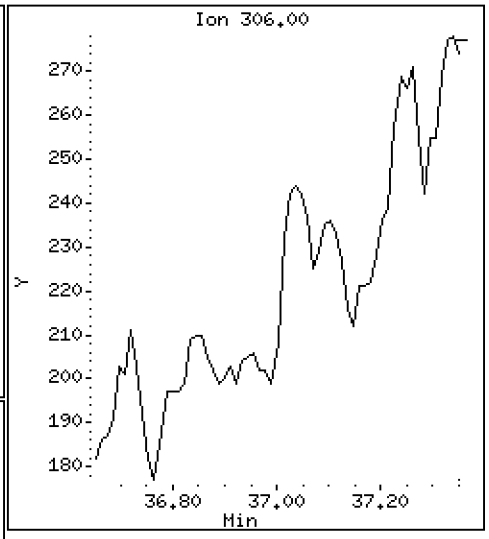
Column phase: Rxi-17Sil MS

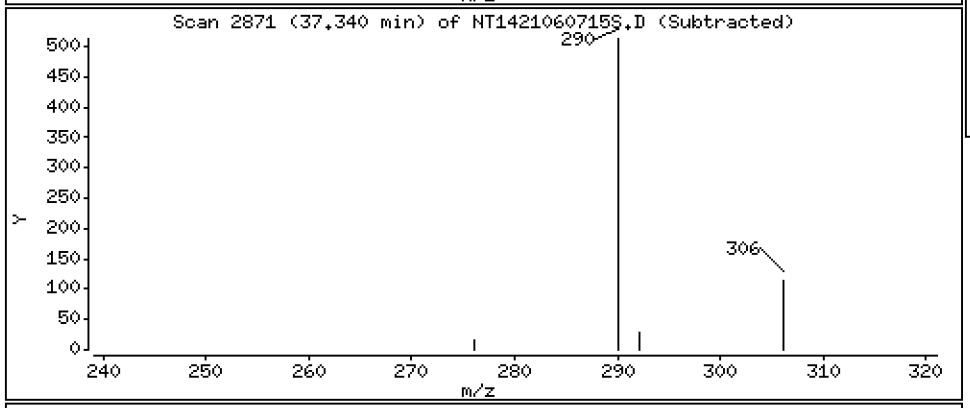
Column diameter: 0.25

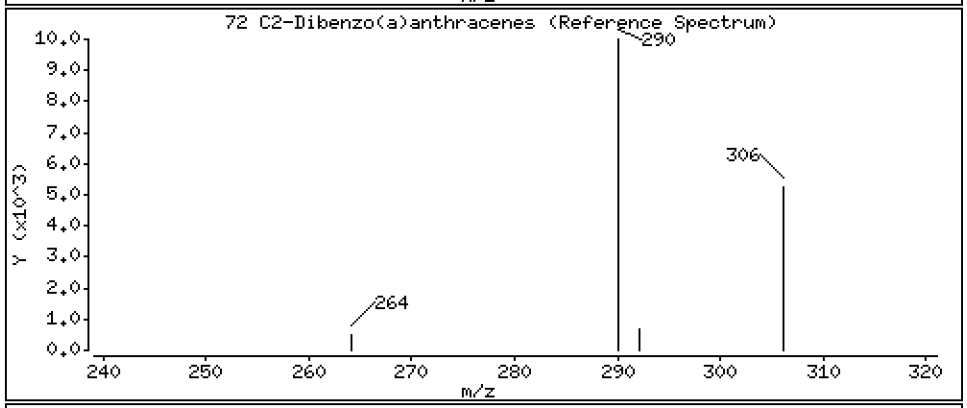
72 C2-Dibenzo(a)anthracenes

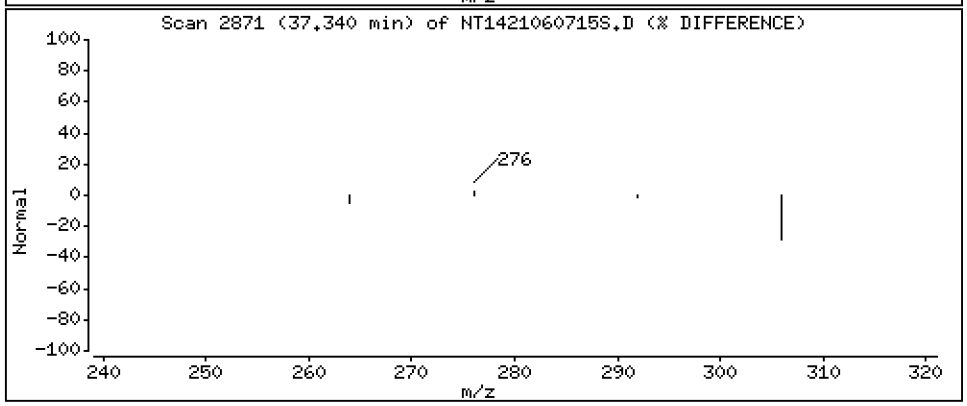
Concentration: 0.01916 ug/mL











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Date : 07-JUN-2021 23:43

Client ID:

Instrument: nt14.i

Sample Info: 21E0106-04

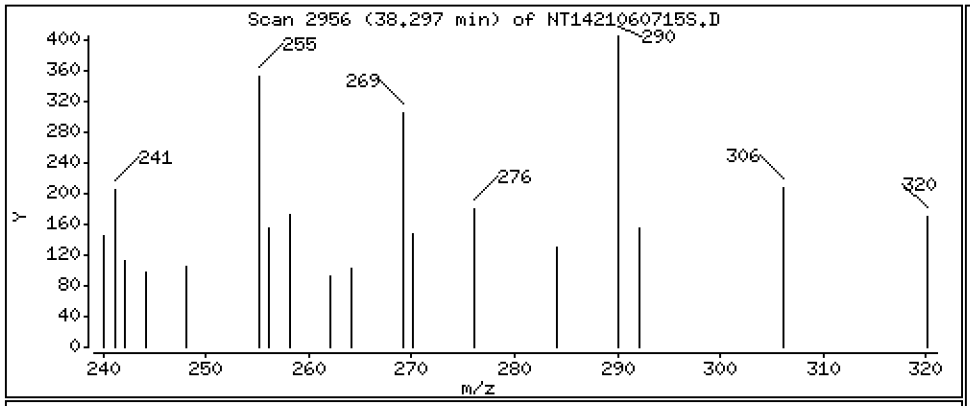
Operator: VTS

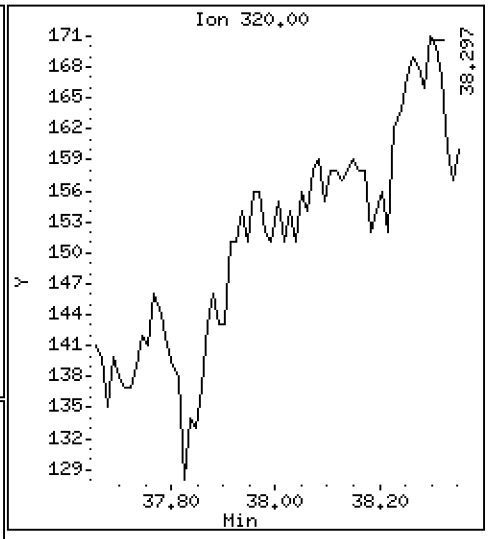
Column phase: Rxi-17Sil MS

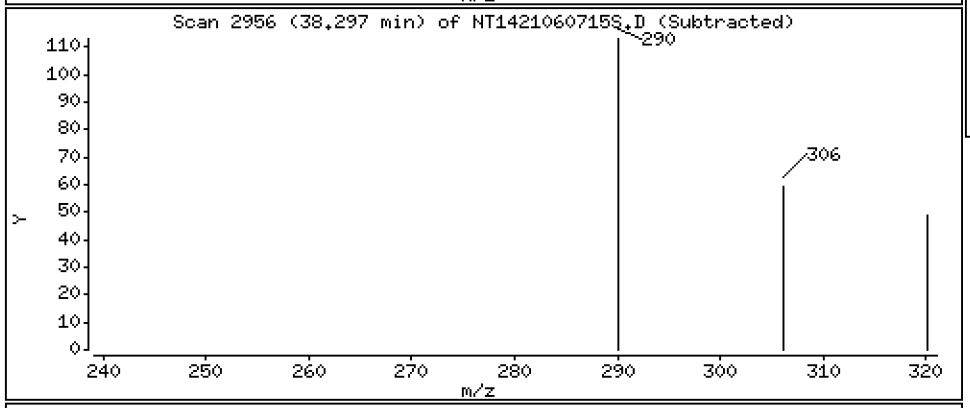
Column diameter: 0.25

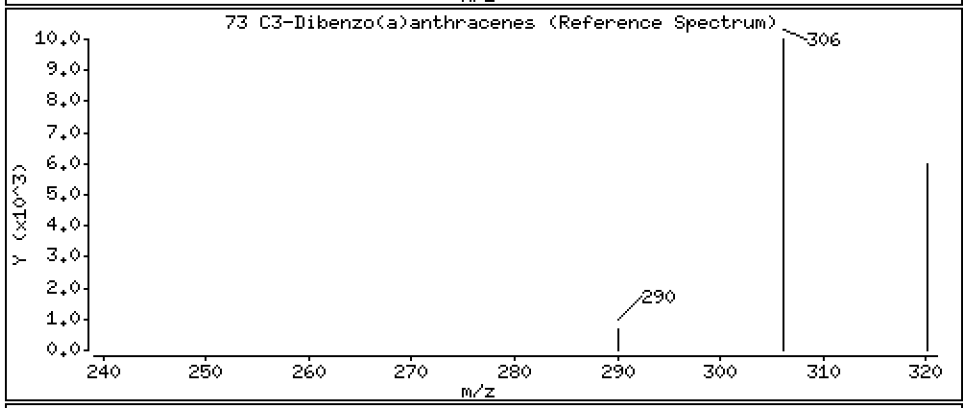
73 C3-Dibenzo(a)anthracenes

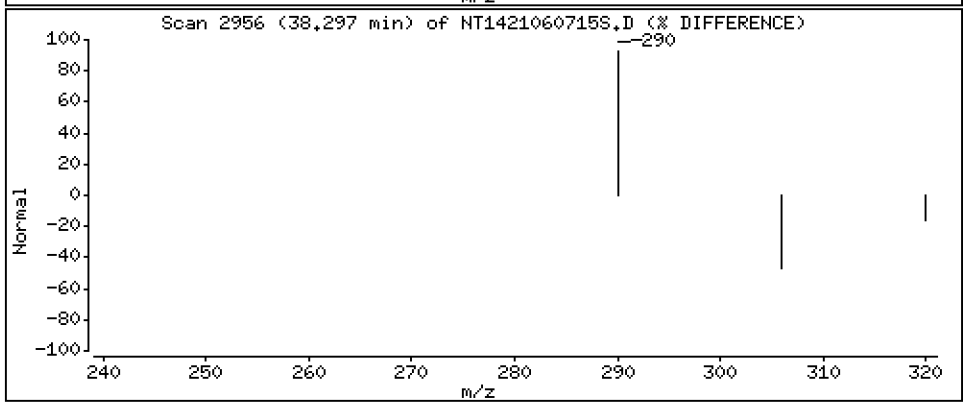
Concentration: 0.01205 ug/mL











ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt14.i\20210607.b\SIM.b\NT1421060715S.D
Lab Smp Id: 21E0106-04
Inj Date : 07-JUN-2021 23:43
Operator : VTS Inst ID: nt14.i
Smp Info : 21E0106-04
Misc Info :
Comment : 1ul Injection
Method : \\target\share\chem3\nt14.i\20210607.b\SIM.b\ALKYLRANGES.m
Meth Date : 15-Jun-2021 10:32 yev Quant Type: ISTD
Cal Date : 29-MAY-2021 18:49 Cal File: NT1421052914.D
Als bottle: 42
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ALKYLRANGES.sub
Target Version: 4.14
Processing Host: ORGDATA102

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/mL)
3 C1-Decalin	152	Compound Not Detected.					
4 C2-Decalin	166	Compound Not Detected.					
5 C3-Decalin	180	11.162	10.000	(0.591)	538	0.02444	0.02444(M)
247 C4-Decalin	194	Compound Not Detected.					
8 C1-Naphthalenes	142	13.785	14.246	(0.729)	5003	0.02438	0.02438(M)
9 C2-Naphthalenes	156	15.906	16.000	(0.842)	6043	0.02945	0.02945(M)
10 C3-Naphthalenes	170	17.763	18.082	(0.940)	7015	0.03418	0.03418(M)
11 C4-Naphthalenes	184	19.465	18.500	(1.030)	5139	0.02504	0.02504(M)
13 C1-Benzothiophenes	148	Compound Not Detected.					
14 C2-Benzothiophenes	162	Compound Not Detected.					
15 C3_Benzothiophenes	176	Compound Not Detected.					
27 C1-Fluorenes	180	21.097	21.000	(1.116)	4998	0.03166	0.03166(M)
* 25 Fluorene-d10	176	18.898	18.896	(1.000)	441674	2.00000	
28 C2-Fluorenes	194	22.097	22.000	(1.169)	4155	0.02632	0.02632(M)
29 C3-Fluorenes	208	23.417	23.000	(1.239)	5691	0.03275	0.03275(M)
31 C1-Dibenzothiophenes	198	23.054	23.500	(1.220)	5722	0.02567	0.02567(M)
32 C2-Dibenzothiophenes	212	24.461	24.500	(1.294)	8894	0.03990	0.03990(M)
33 C3-Dibenzothiophenes	226	25.362	25.600	(1.342)	7611	0.03415	0.03415(M)
34 C4-Dibenzothiophenes	240	Compound Not Detected.					
* 250 Anthracene-d10	188	22.350	22.359	(1.000)	464608	2.00000	
38 C1-Phenanthrenes/Anthracenes	192	23.702	23.800	(1.060)	39737	0.17630	0.1763(M)
39 C2-Phenanthrenes/Anthracenes	206	25.472	25.000	(1.140)	36203	0.16062	0.1606(M)
40 C3-Phenanthrenes/Anthracenes	220	26.407	26.800	(1.182)	16405	0.07278	0.07278(M)
41 C4-Phenanthrenes/Anthracenes	234	27.856	27.500	(1.246)	9576	0.04249	0.04249(M)
48 C1-Fluoranthenes/Pyrenes	216	27.747	27.900	(1.241)	106781	0.40385	0.4038(M)
49 C2-Fluoranthenes/Pyrenes	230	29.347	29.000	(1.313)	45887	0.17354	0.1735(M)
50 C3-Fluoranthenes/Pyrenes	244	29.917	30.000	(1.339)	9490	0.03589	0.03589(M)
249 C4-Fluoranthenes/Pyrenes	258	32.699	33.183	(1.463)	18148	0.06864	0.06864(M)
52 C1-Naphthobenzothiophenes	248	30.176	30.000	(1.350)	17039	0.05767	0.05767(M)
53 C2-Naphthobenzothiophenes	262	31.268	31.000	(1.399)	14477	0.04900	0.04900(M)
54 C3-Naphthobenzothiophenes	276	32.361	32.000	(1.448)	17297	0.05854	0.05854(M)
248 C4-Naphthobenzothiophenes	290	32.507	33.000	(1.454)	12106	0.04097	0.04097(M)
58 C1-Benzo(a)anthracenes/Chrysen	242	31.088	31.000	(0.937)	80775	0.36728	0.3673(M)

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/mL)
59 C2-Benzo(a)anthracenes/Chrysen	256	31.550	31.800	(0.951)	33740	0.15342	0.1534(M)
60 C3-Benzo(a)anthracenes/Chrysen	270	32.530	32.500	(0.981)	19884	0.09041	0.09041(M)
61 C4-Benzo(a)anthracenes/Chrysen	284	33.070	33.200	(0.997)	8075	0.03672	0.03672(M)
* 251 Benzo(e)pyrene-d12	264	33.172	33.181	(1.000)	567033	2.00000	
71 C1-Dibenzo(a)anthracenes	292	36.731	36.000	(1.107)	29863	0.08220	0.08220(M)
72 C2-Dibenzo(a)anthracenes	306	37.339	37.000	(1.126)	6959	0.01916	0.01916(M)
73 C3-Dibenzo(a)anthracenes	320	38.296	38.000	(1.154)	4377	0.01205	0.01205(M)

QC Flag Legend

M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt14.i
Lab File ID: NT1421060715S.D
Lab Smp Id: 21E0106-04
Analysis Type: SV
Quant Type: ISTD
Operator: VTS
Method File: \\target\share\chem3\nt14.i\20210607.b\SIM.b\ALKYLRANGES.m
Misc Info:

Calibration Date: 07-JUN-2021
Calibration Time: 13:18
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

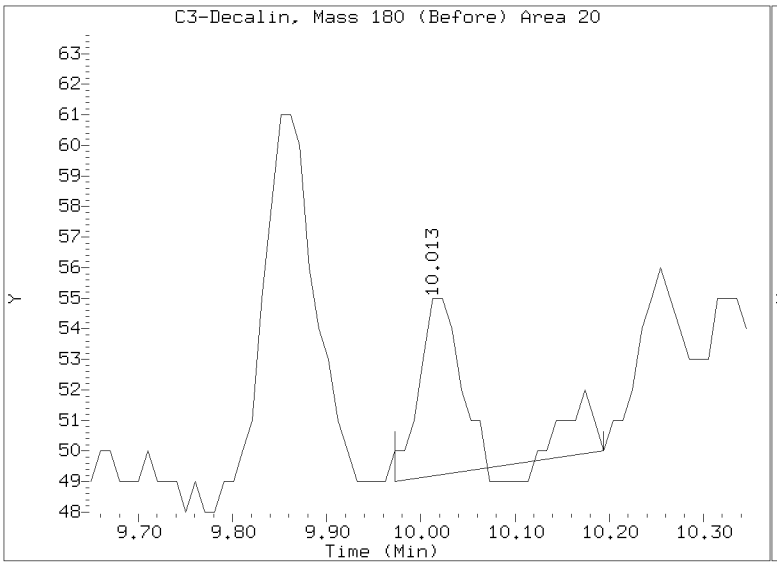
COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
25 Fluorene-d10	311077	155539	622154	441674	41.98
250 Anthracene-d10	331614	165807	663228	464608	40.11
251 Benzo(e)pyrene-d1	416427	208214	832854	567033	36.17

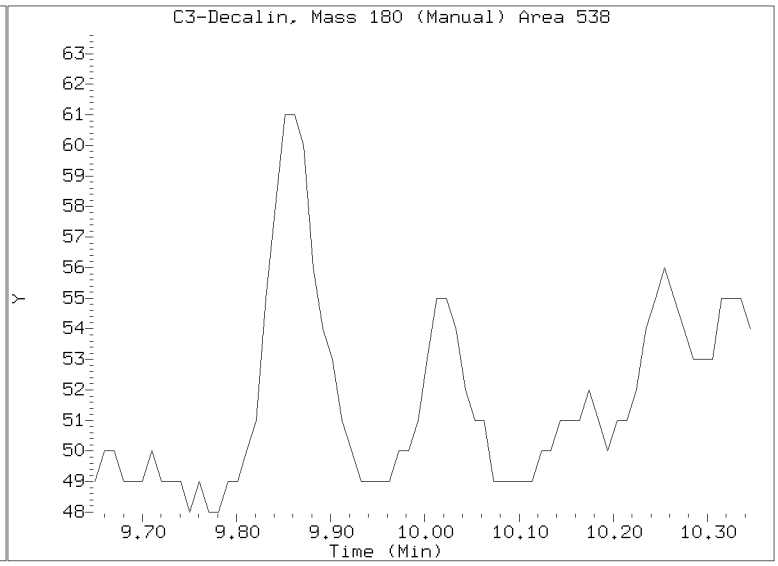
COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
25 Fluorene-d10	18.90	18.40	19.40	18.90	0.01
250 Anthracene-d10	22.36	21.86	22.86	22.35	-0.04
251 Benzo(e)pyrene-d1	33.18	32.68	33.68	33.17	-0.03

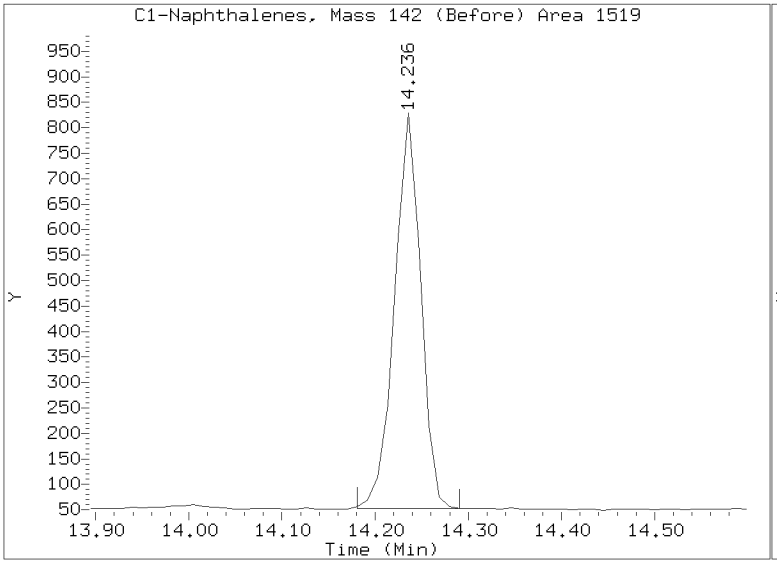
AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

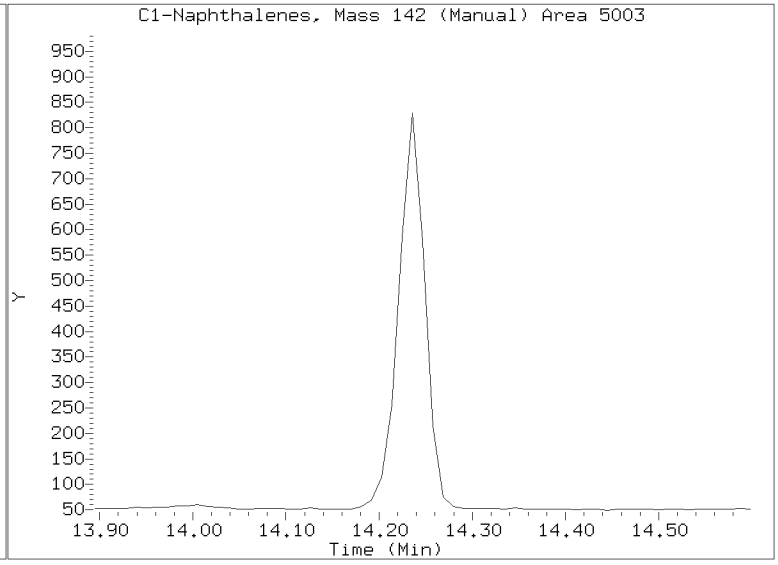
Quant Ion Manual Peak Adjustment Report

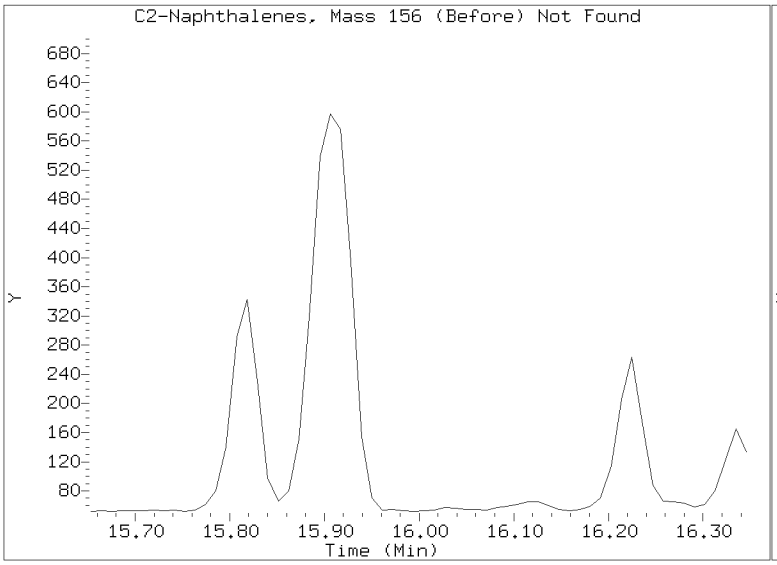
Datafile: //target/share/chem3/nt14.i/20210607.b/SIM.b/NT1421060715S.D
Injection Date: 07-JUN-2021 23:43
Lab ID:21E0106-04 Client ID:
Report Date: 06/15/2021 10:37

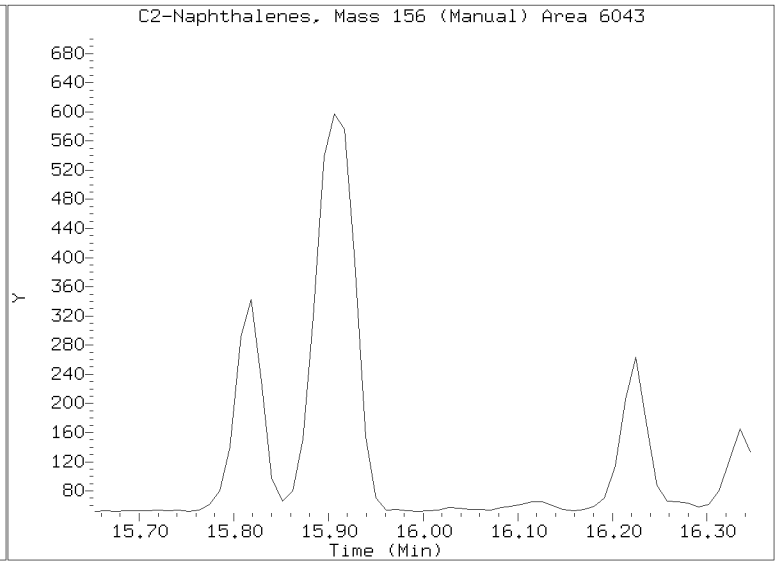












Quant Ion Manual Peak Adjustment Report

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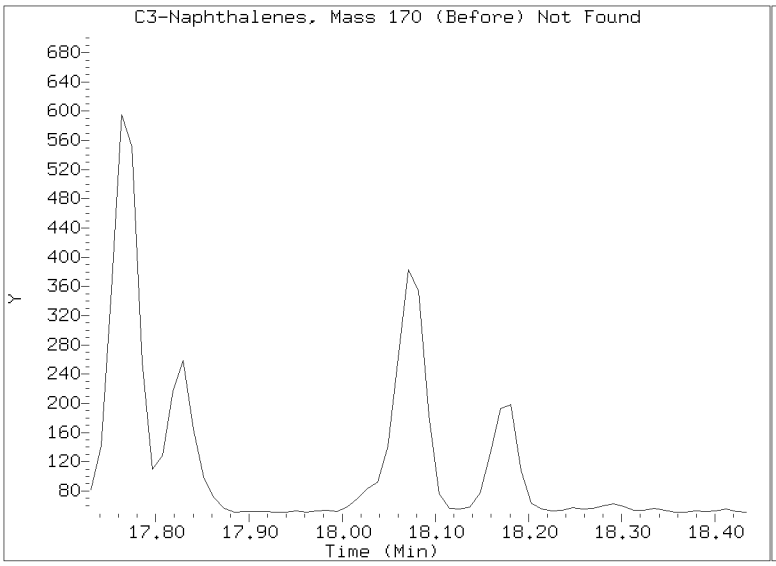
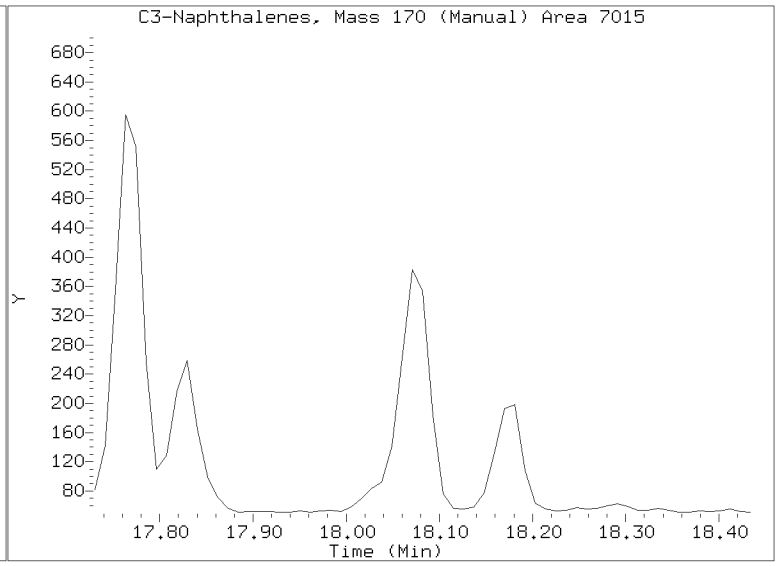
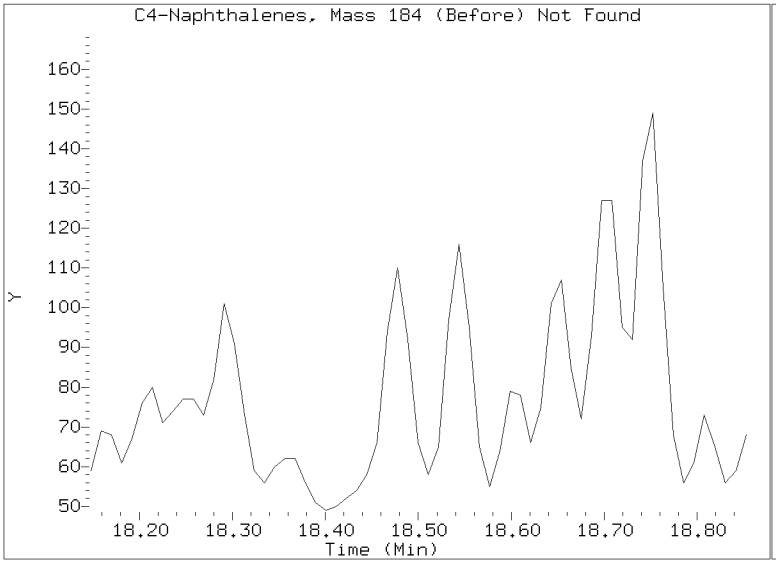
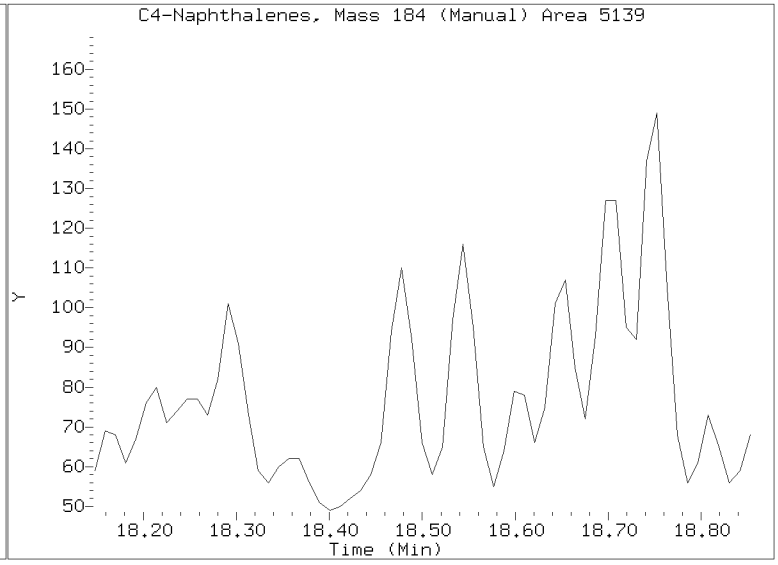
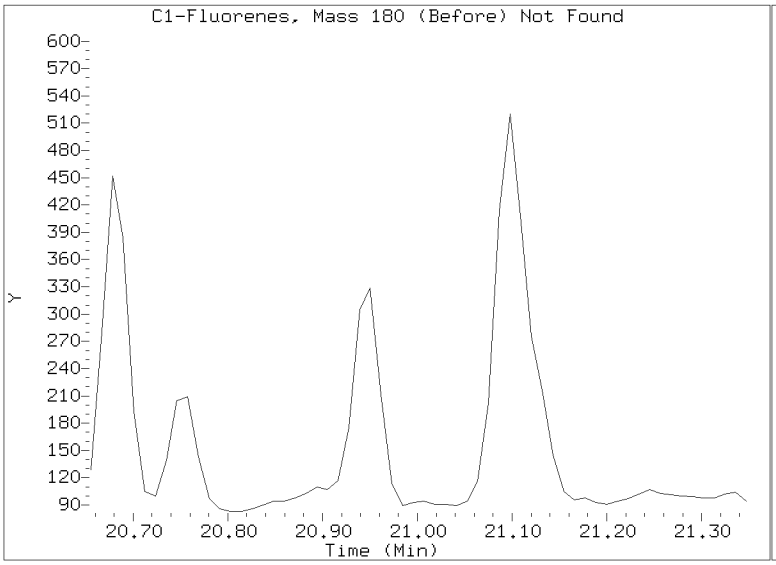
Report Date: 06/15/2021 10:37

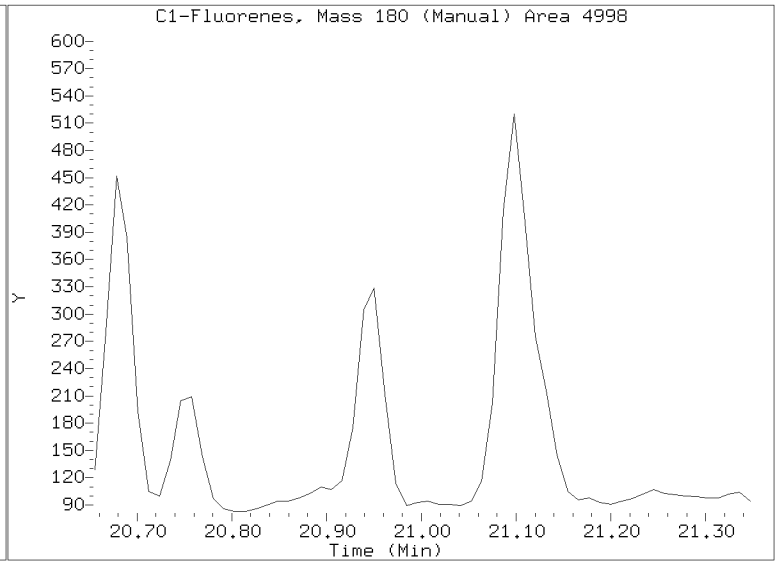












Quant Ion Manual Peak Adjustment Report

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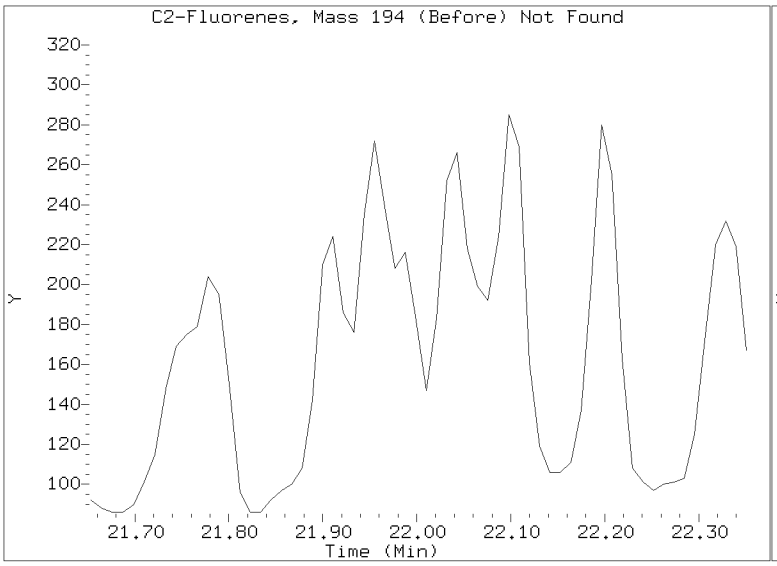

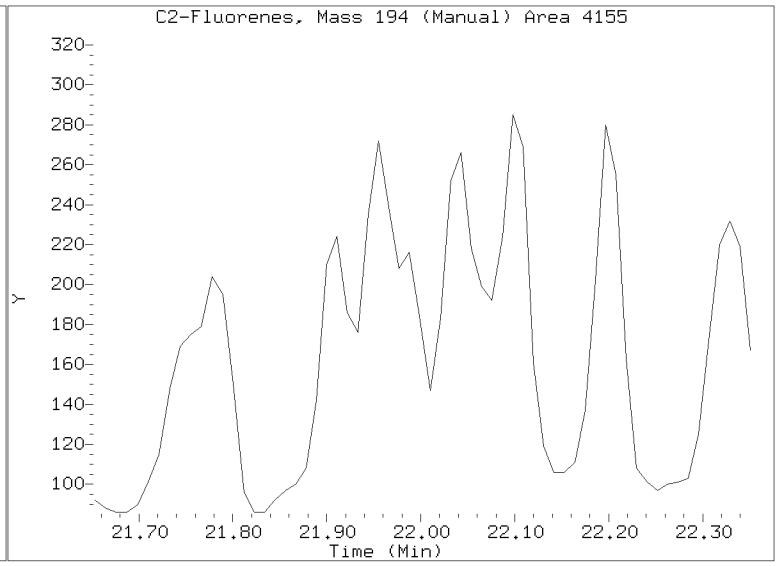

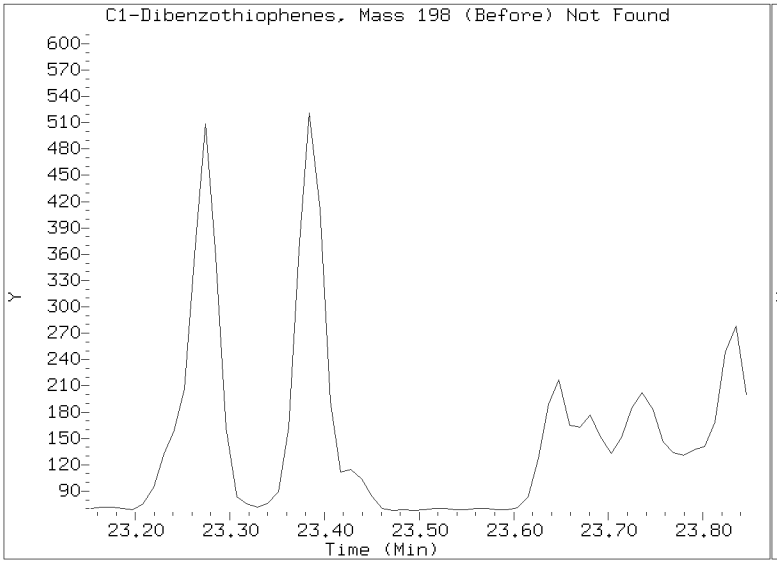

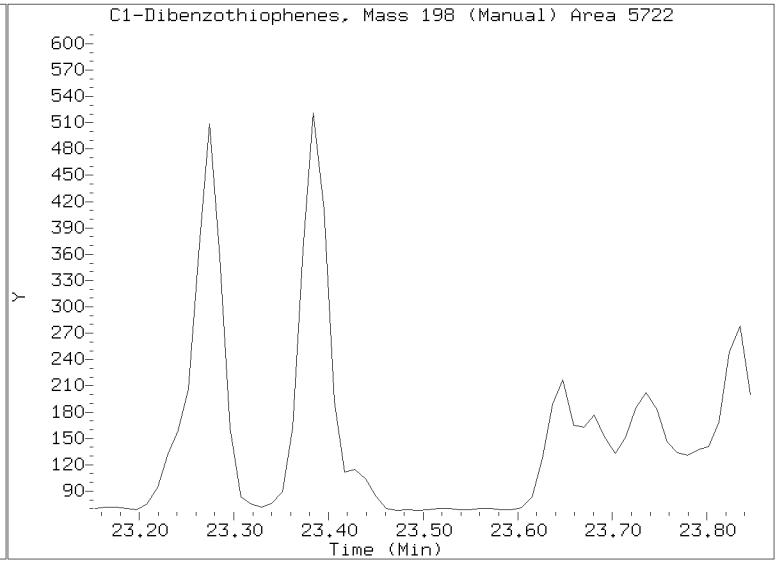

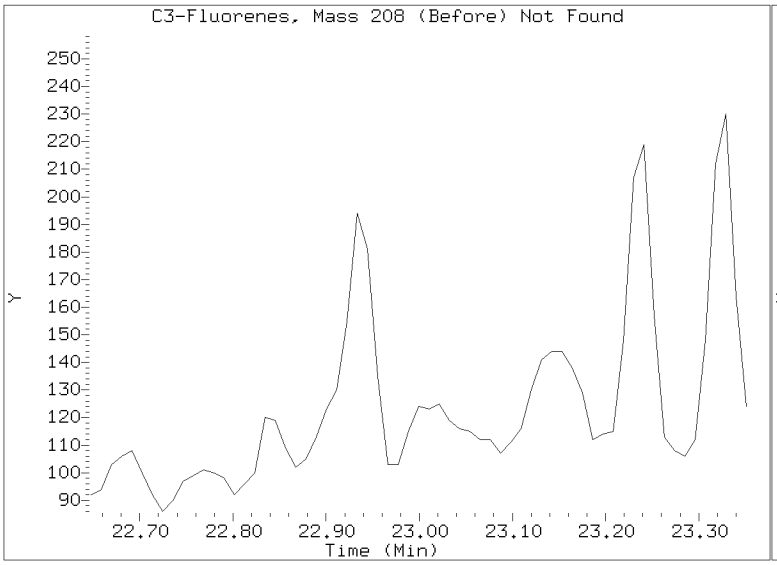

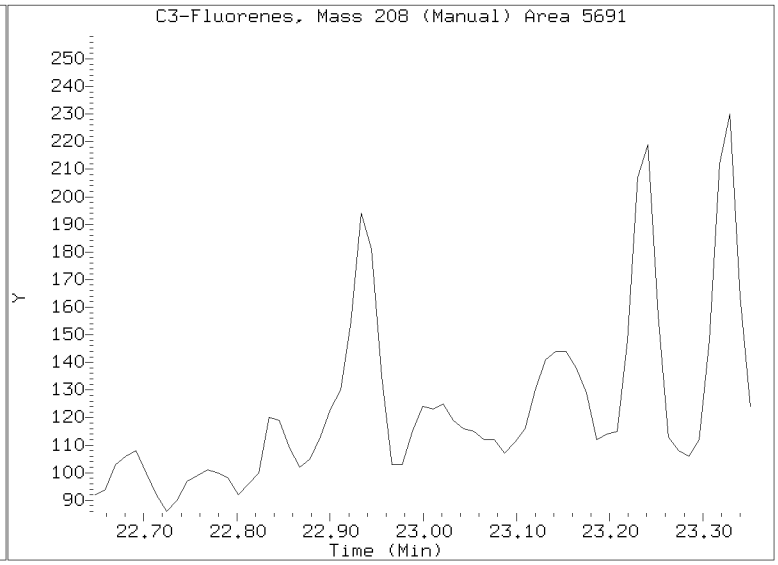

Quant Ion Manual Peak Adjustment Report

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Injection Date: 07-JUN-2021 23:43
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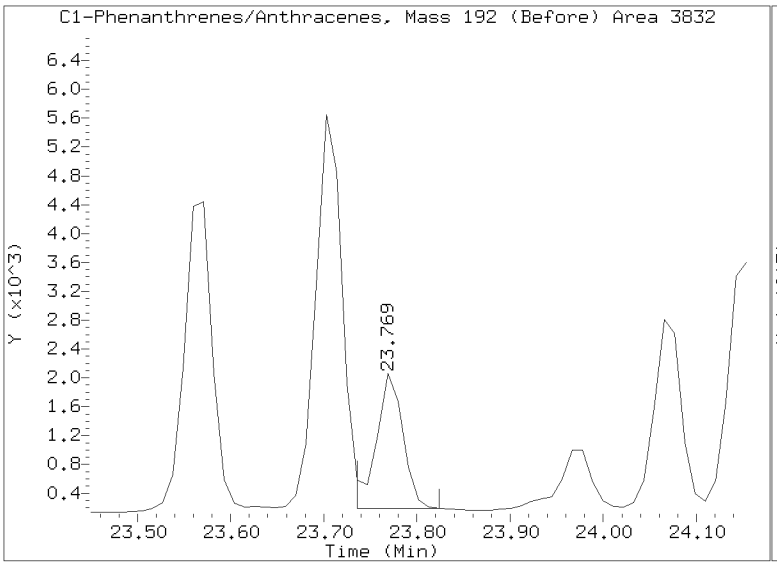

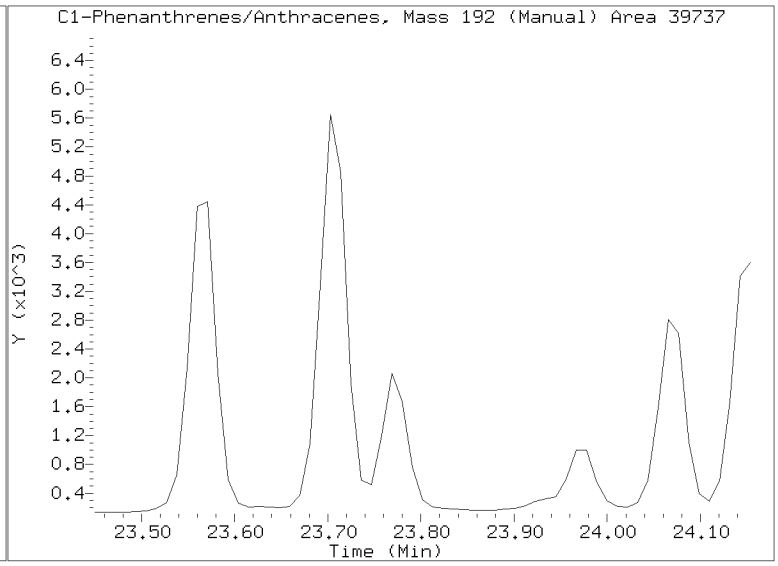

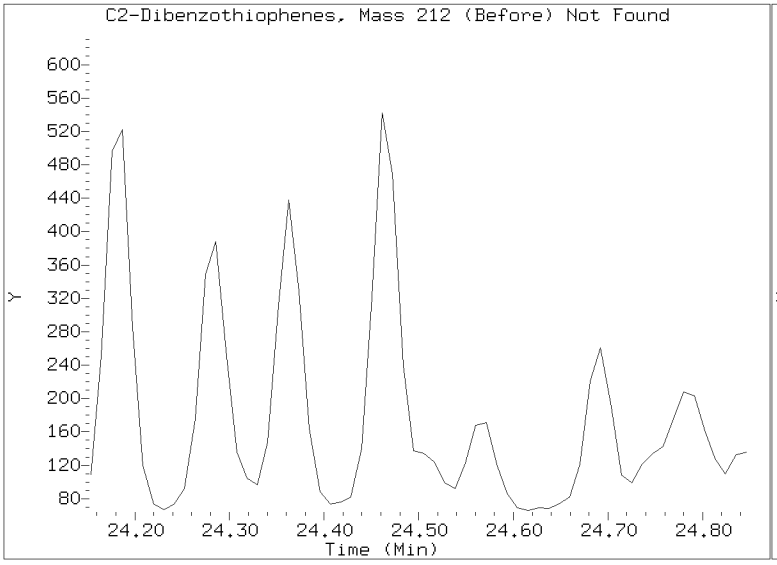

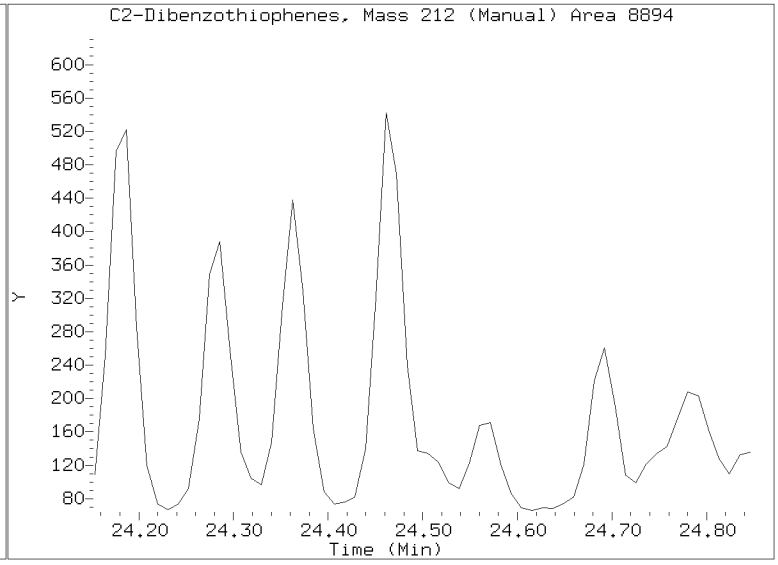

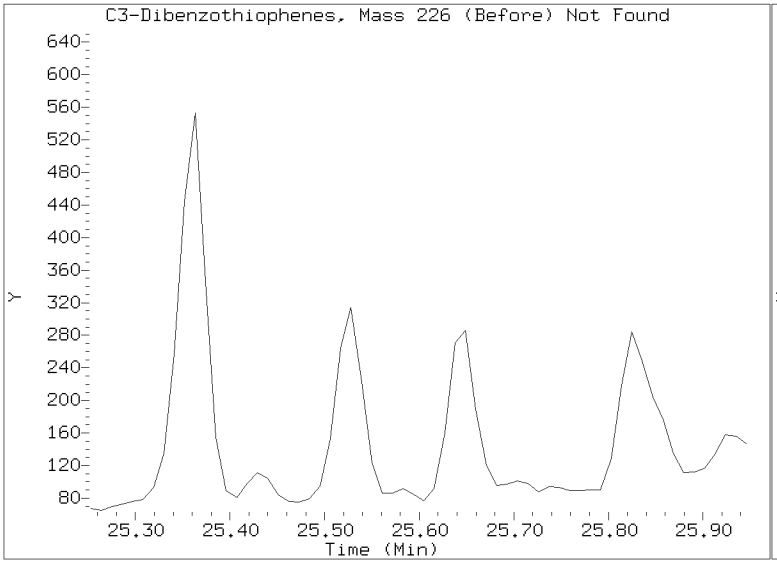

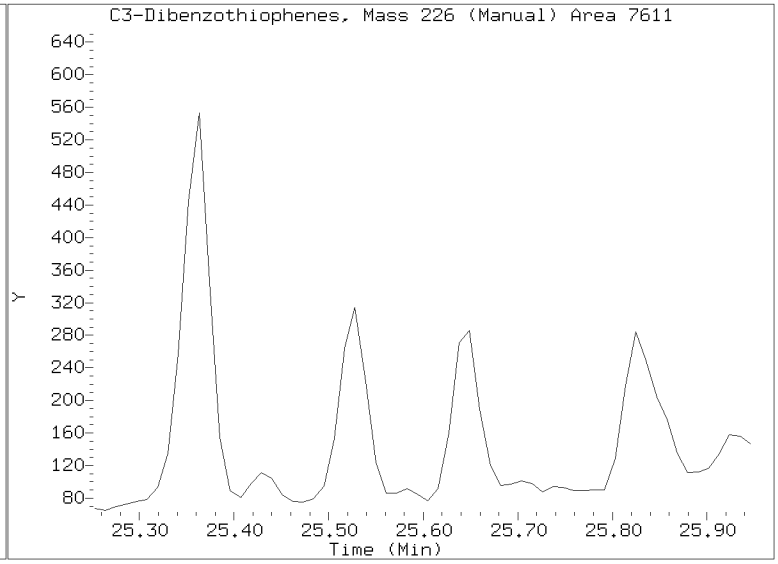

Quant Ion Manual Peak Adjustment Report

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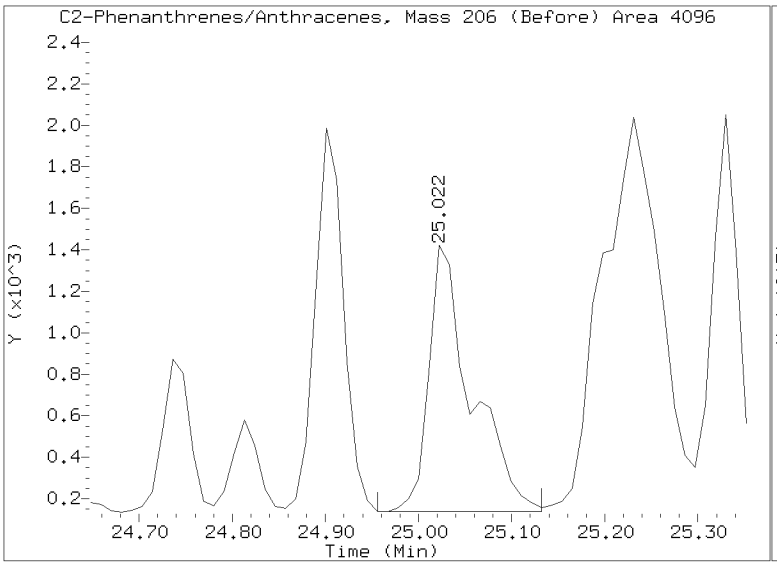

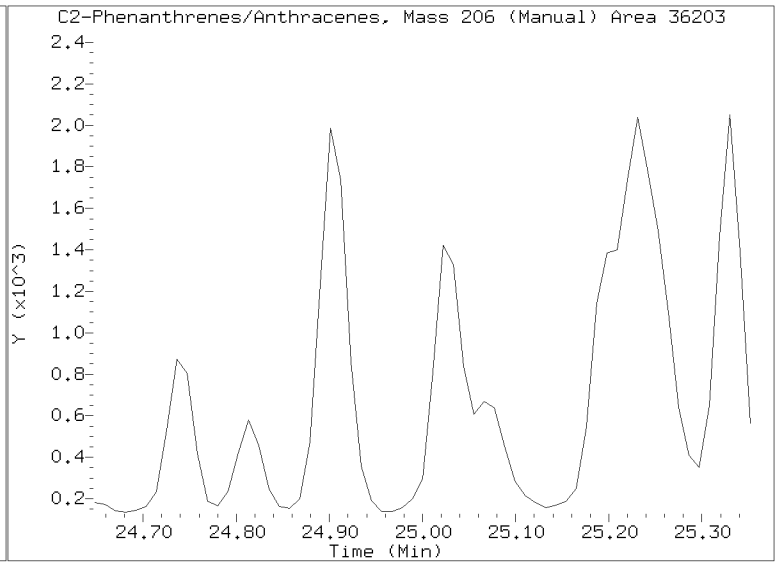

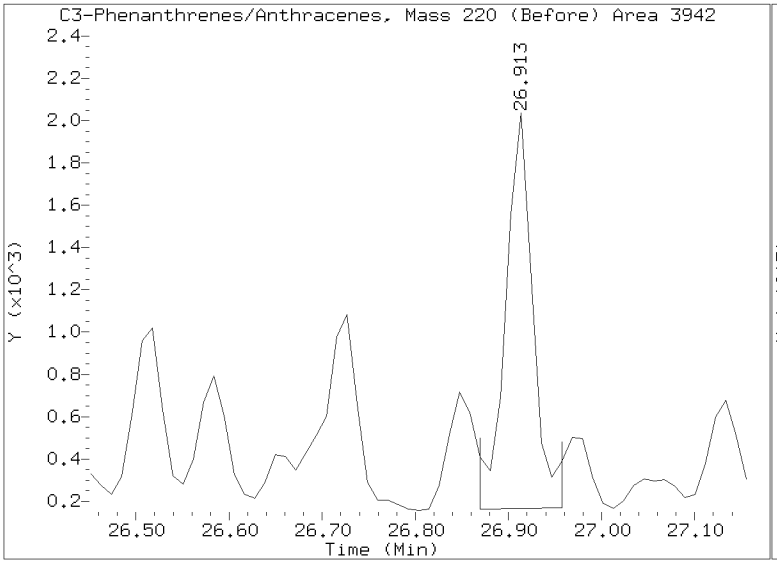

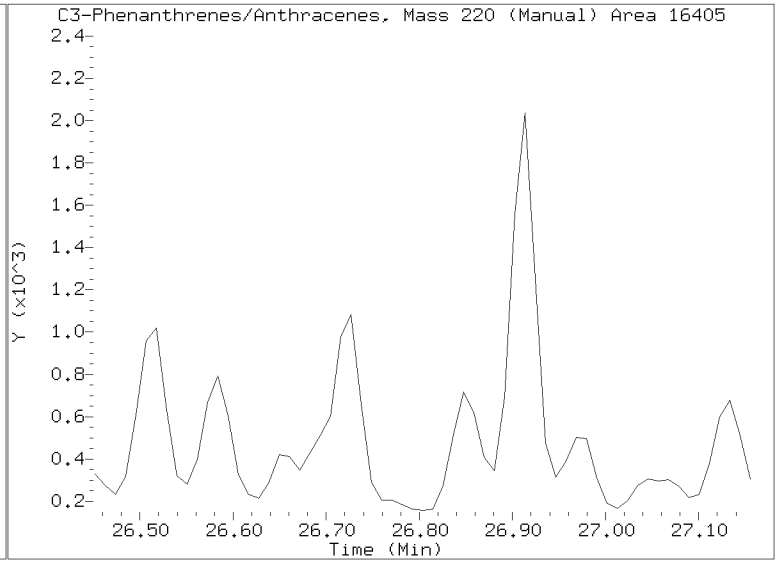

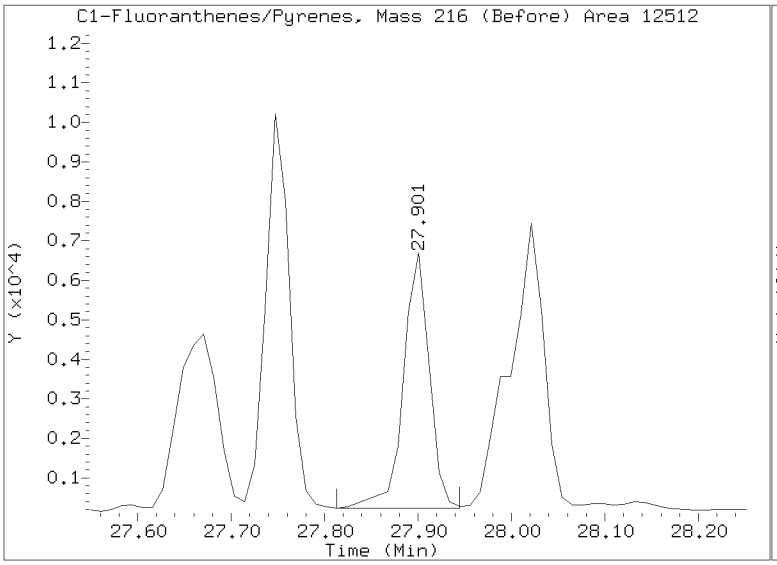

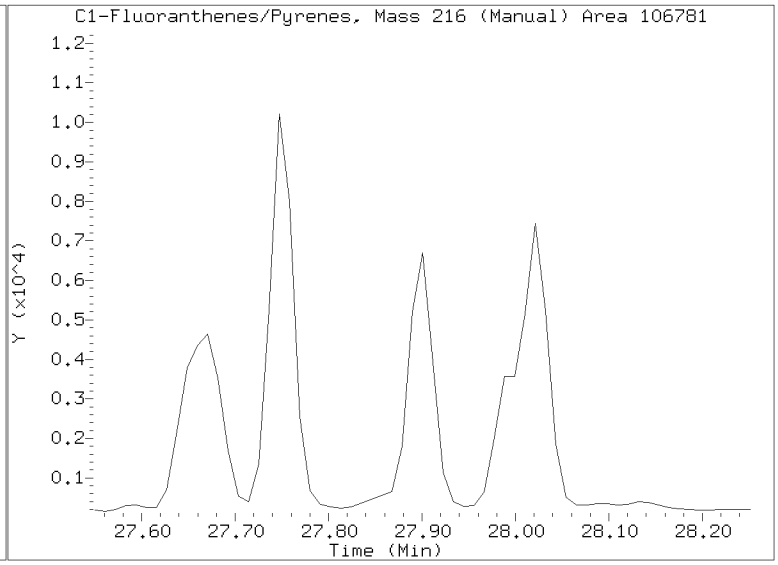

Quant Ion Manual Peak Adjustment Report

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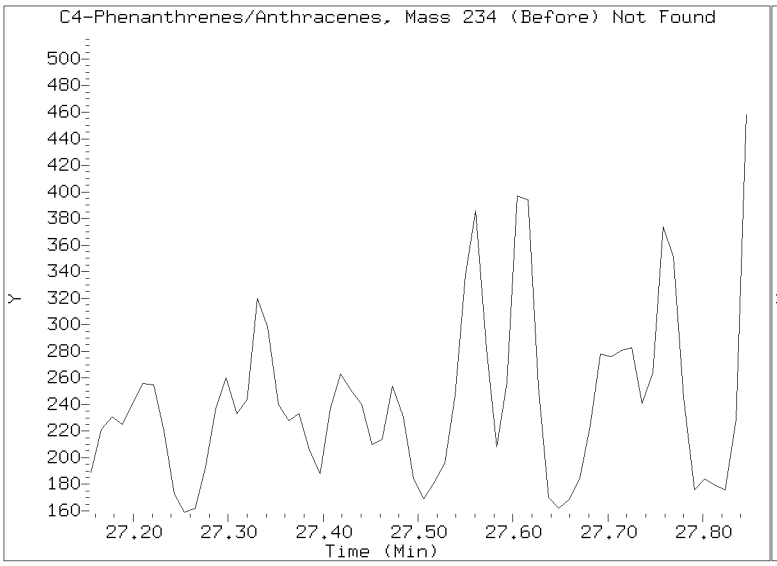
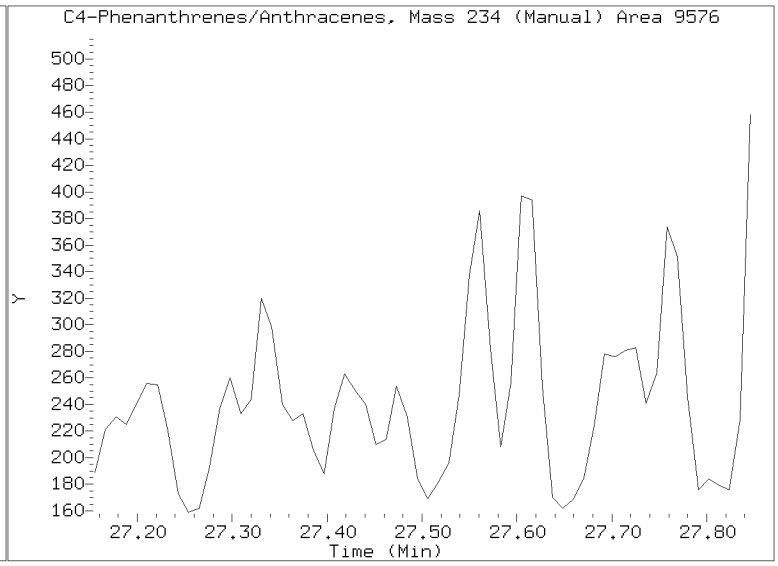
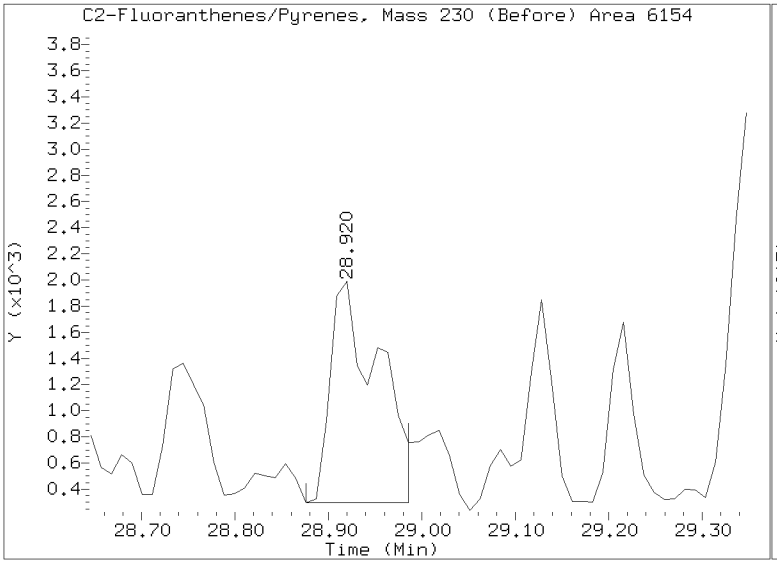
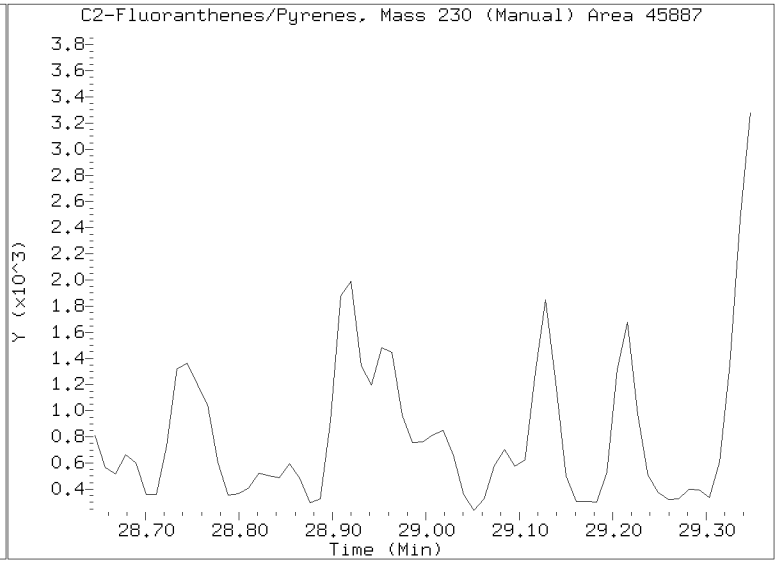
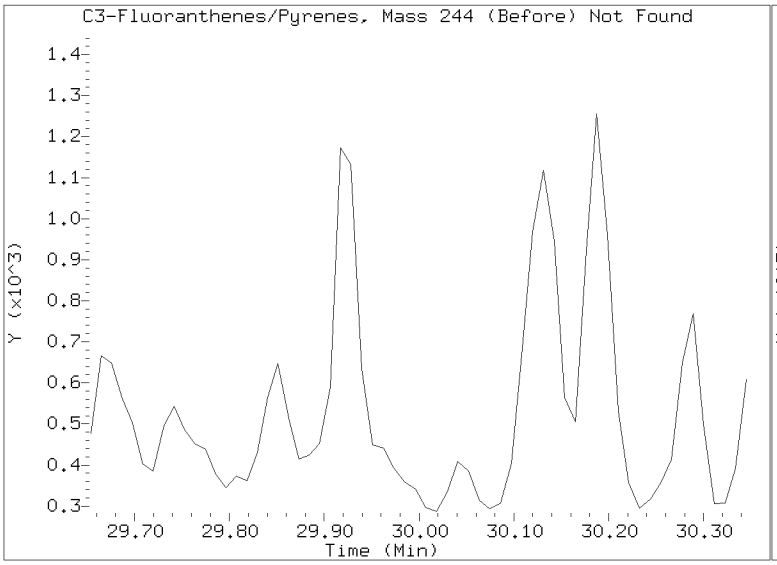
Injection Date: 07-JUN-2021 23:43
Lab ID:21E0106-04 Client ID:
Report Date: 06/15/2021 10:37

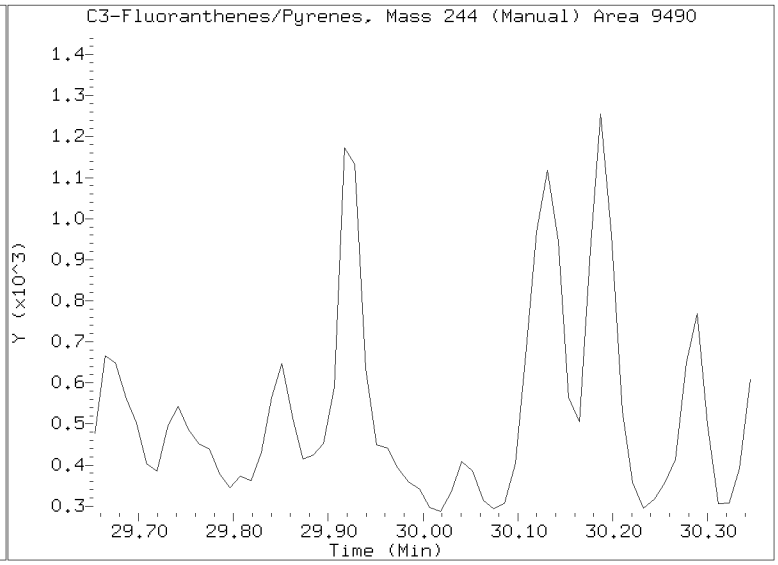












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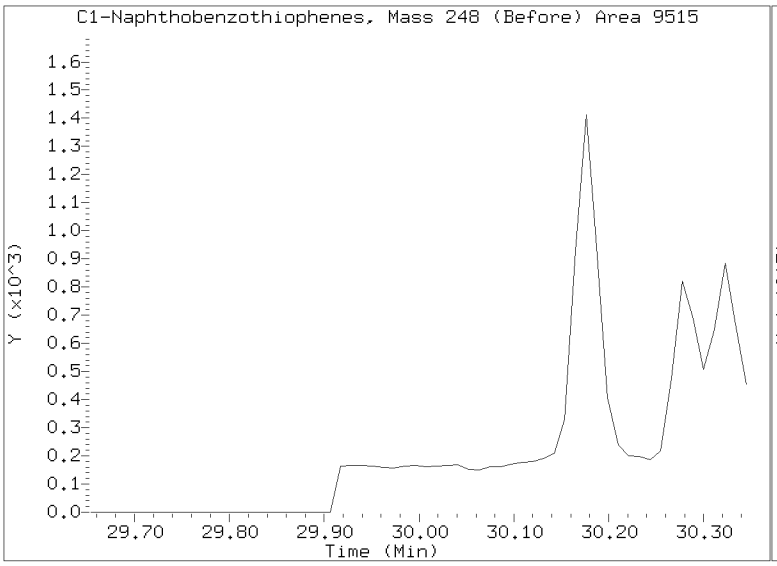

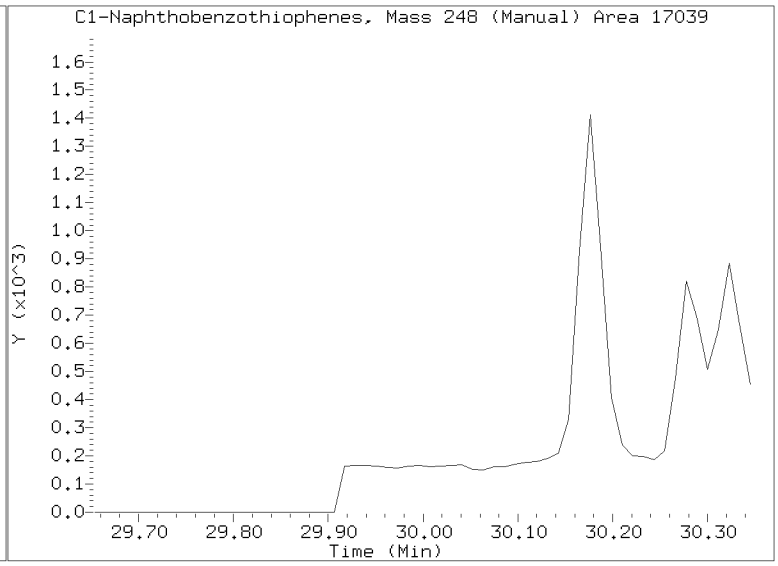

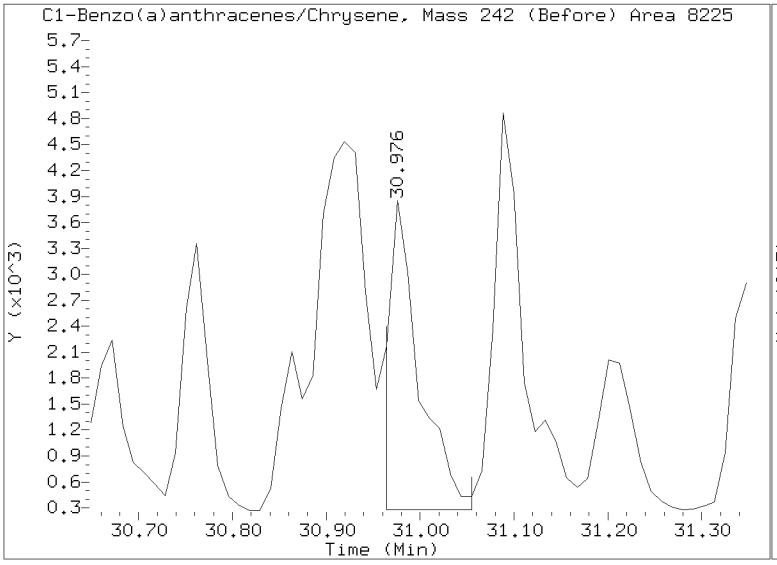

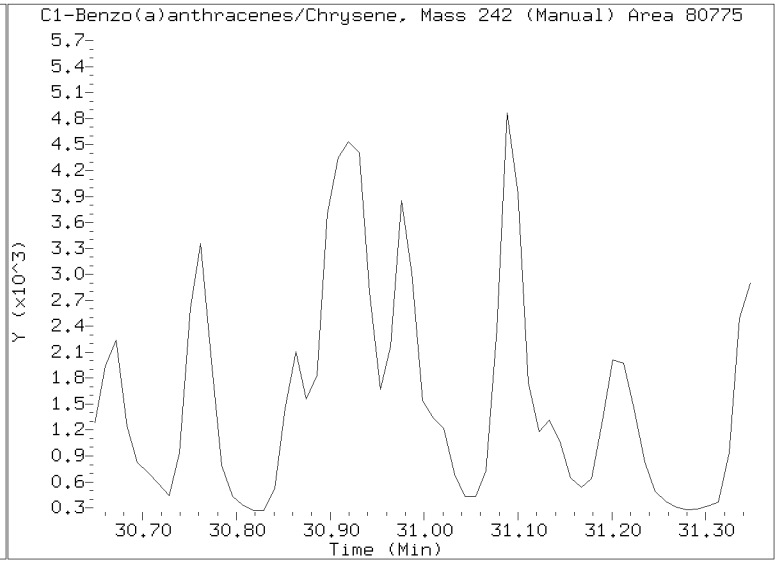

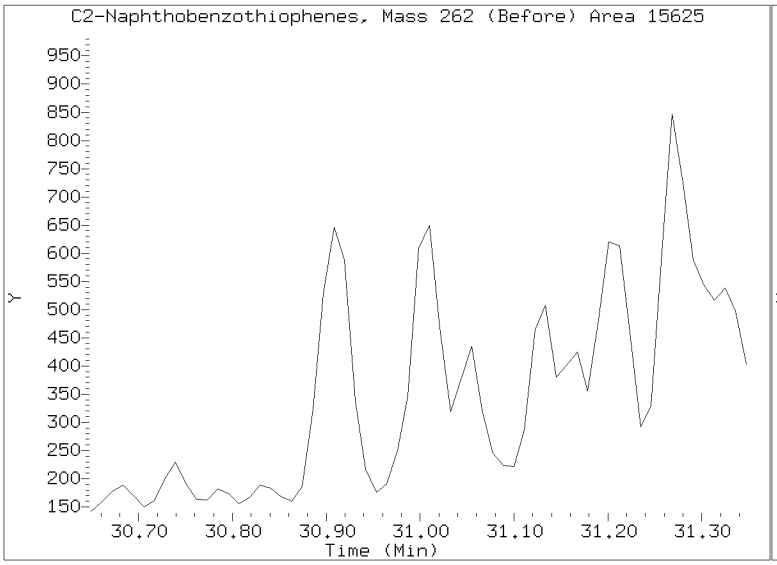

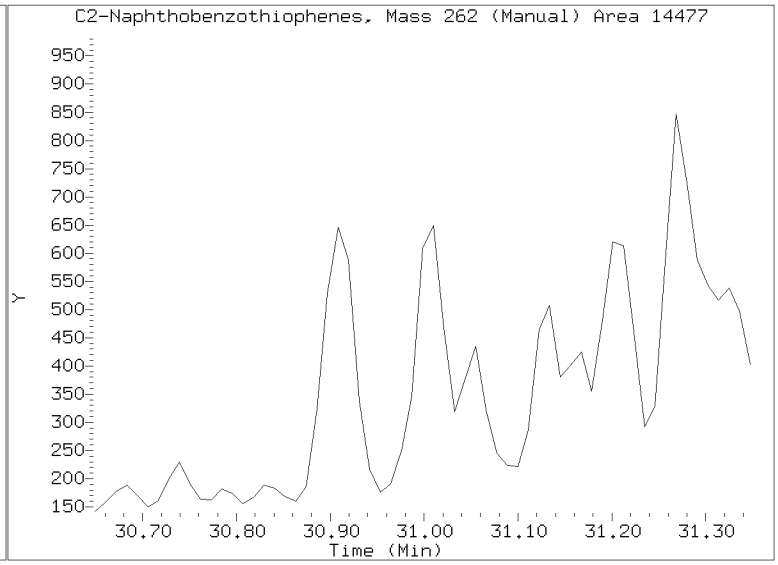

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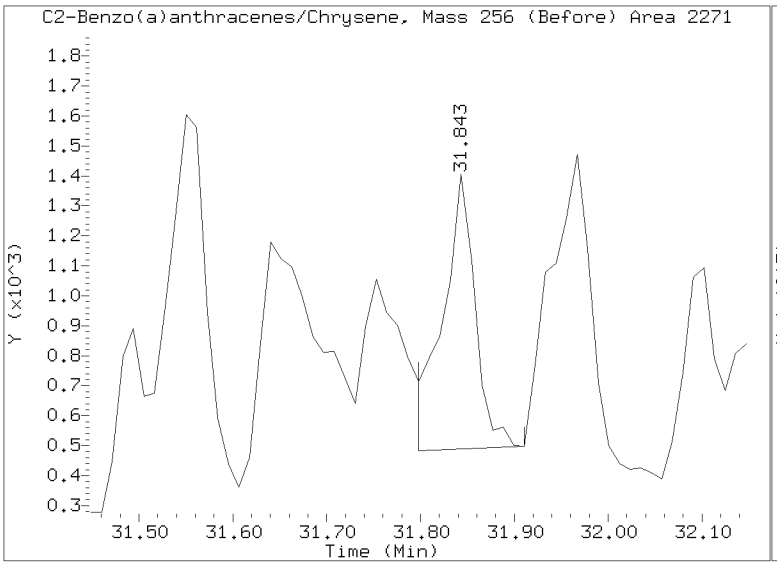

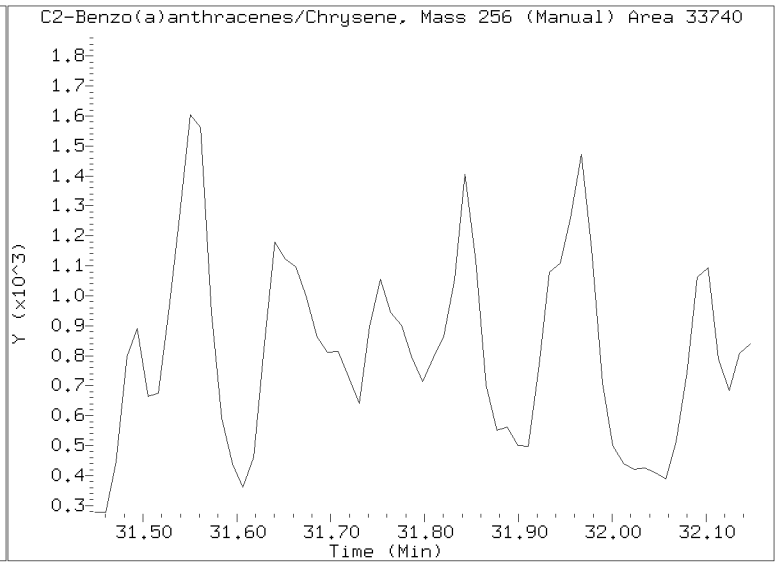

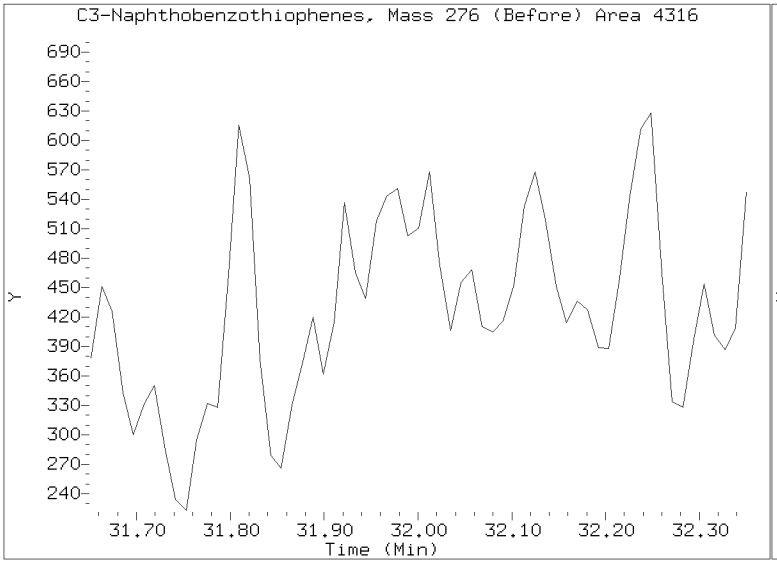

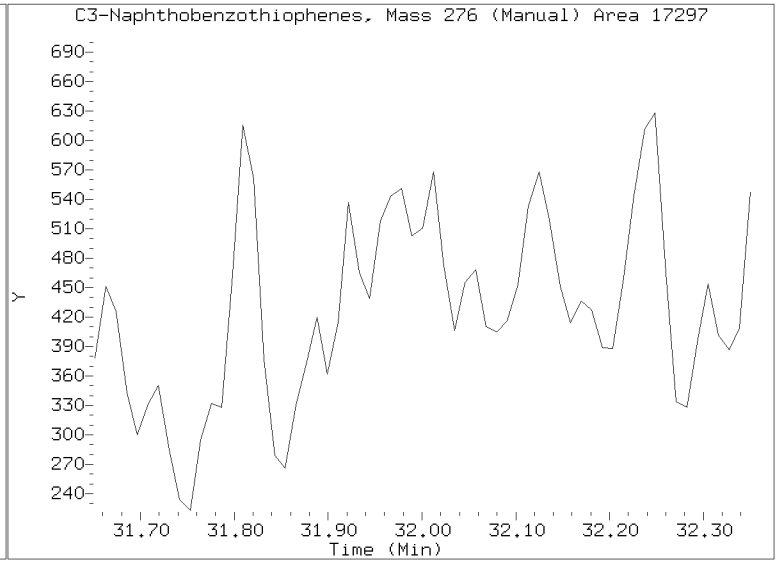

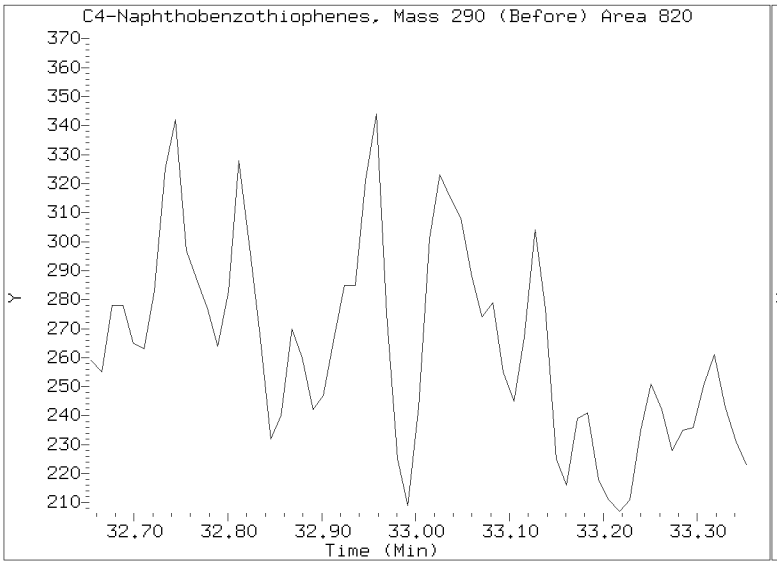

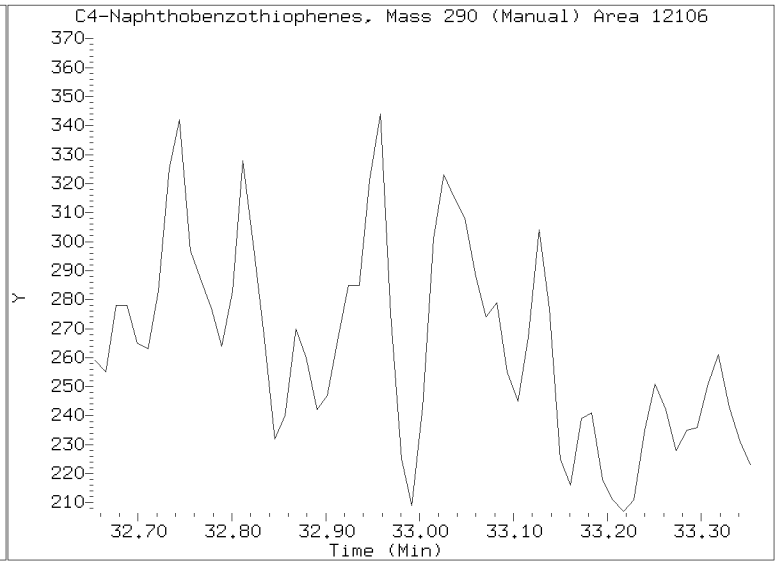

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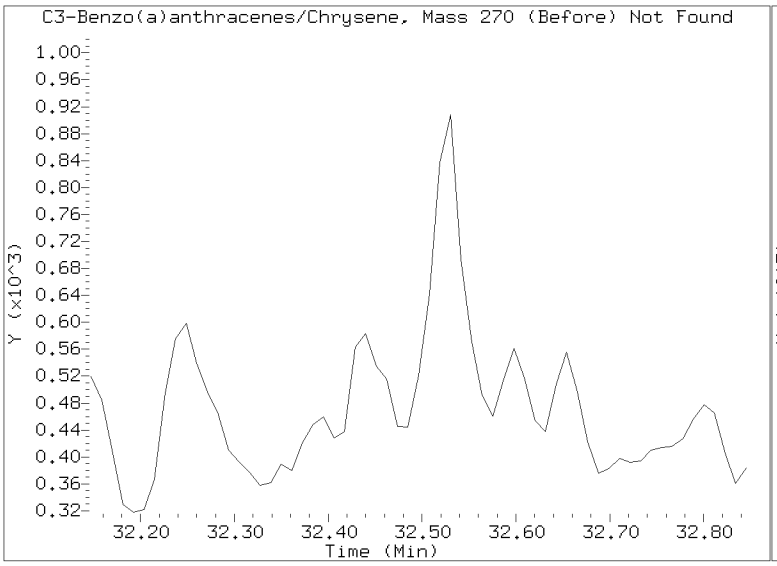

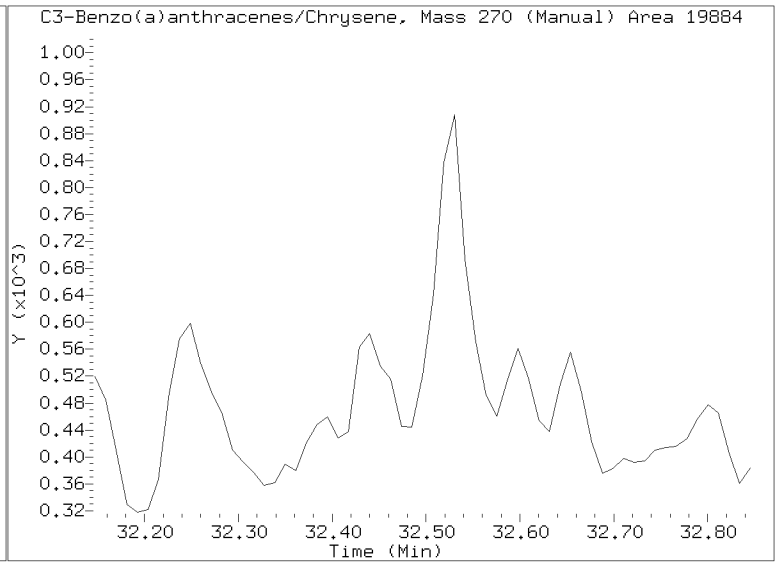

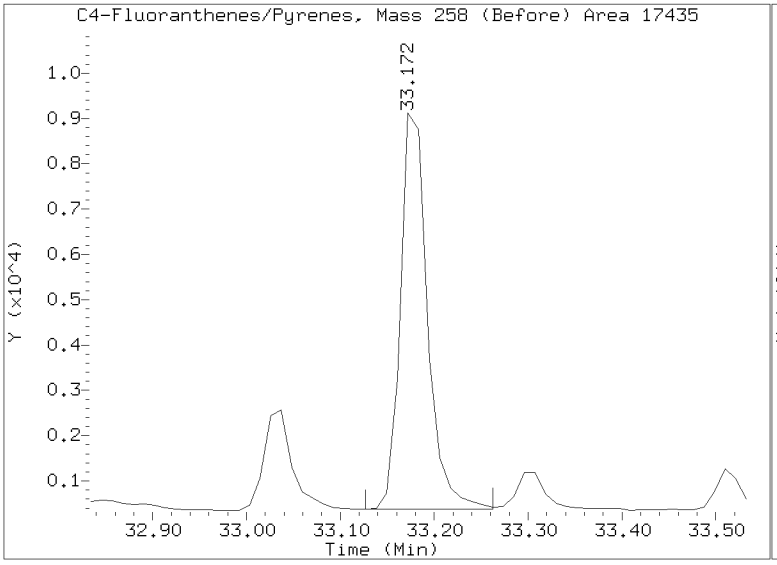

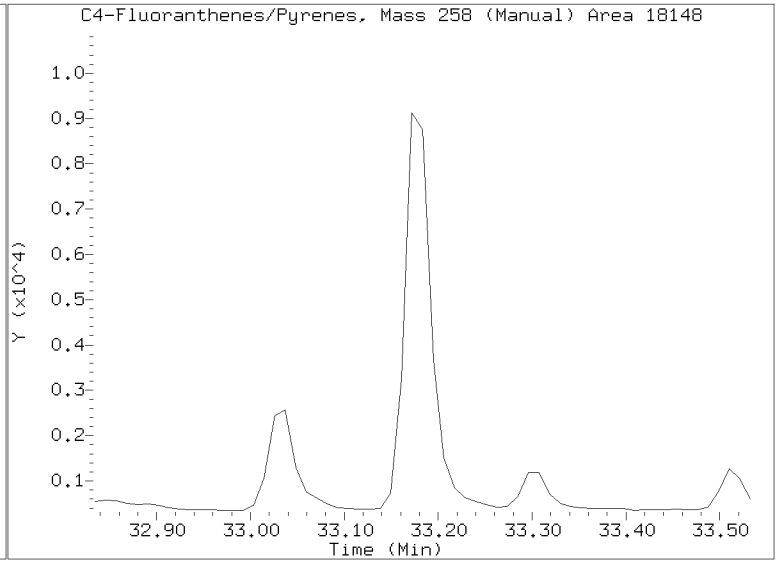

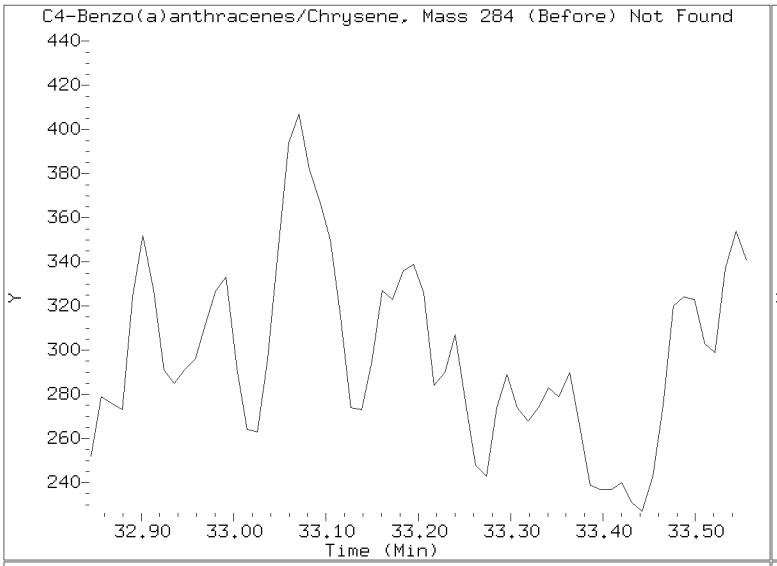

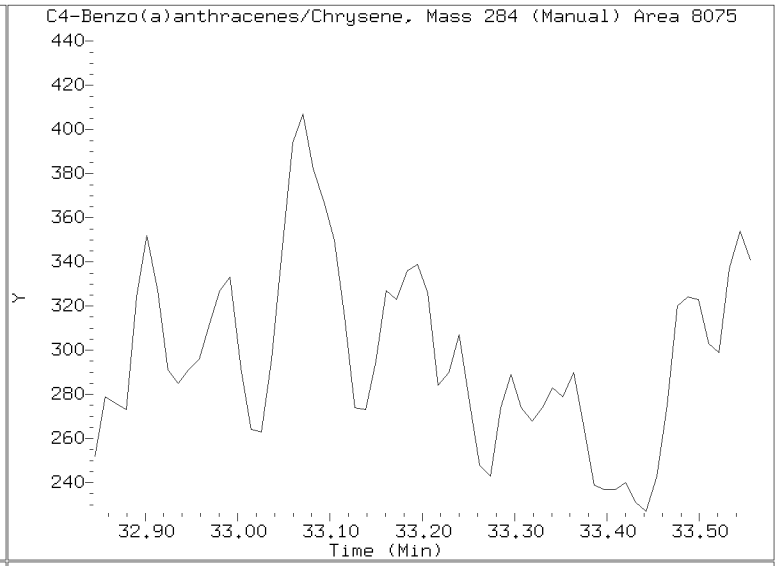

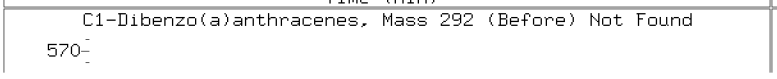

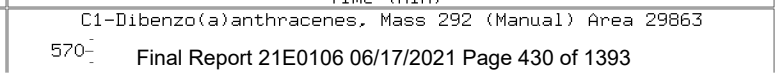

SIM ALKYL PNA RANGE ION WINDOWS - NT1421060715S.D

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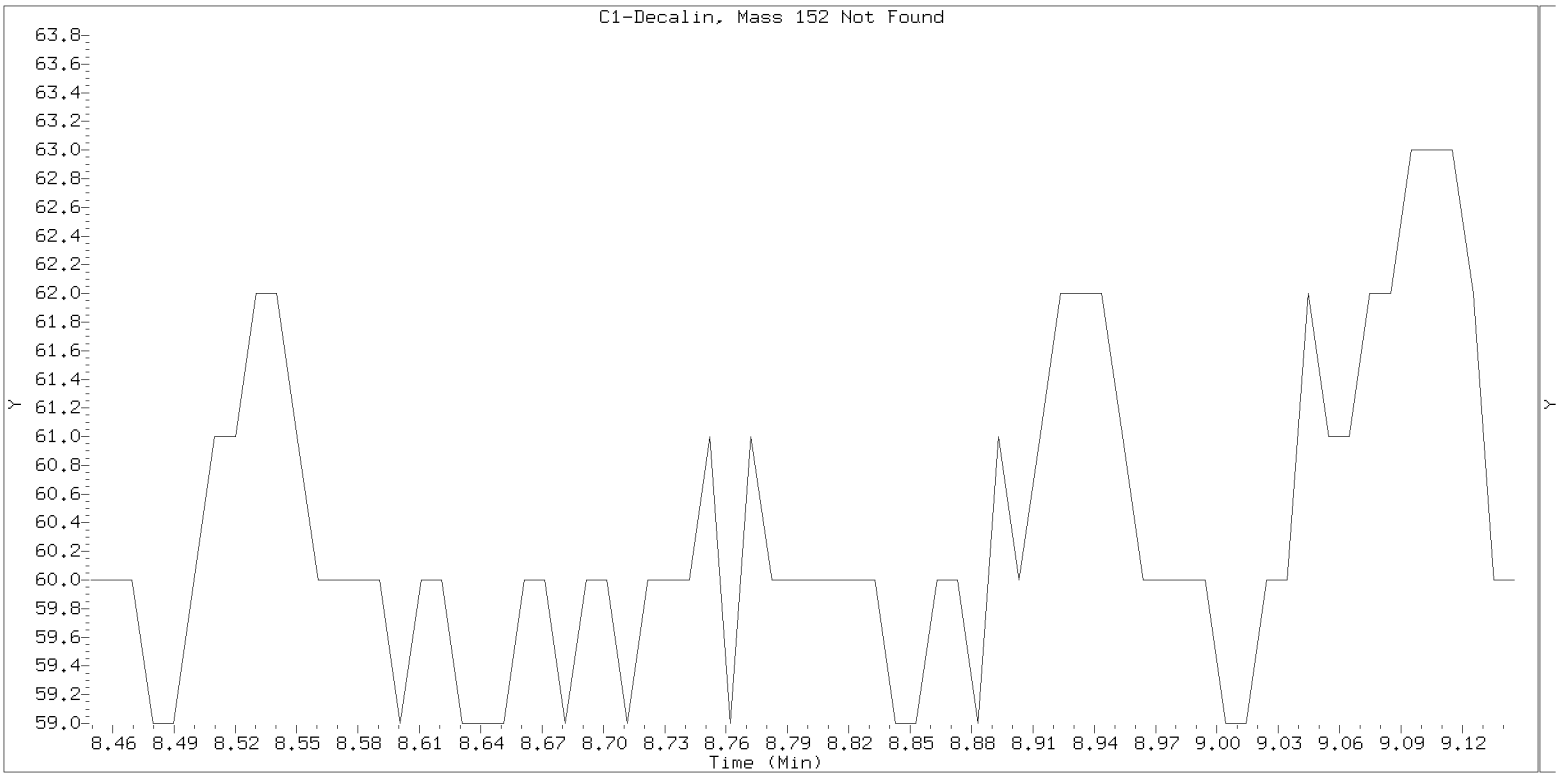

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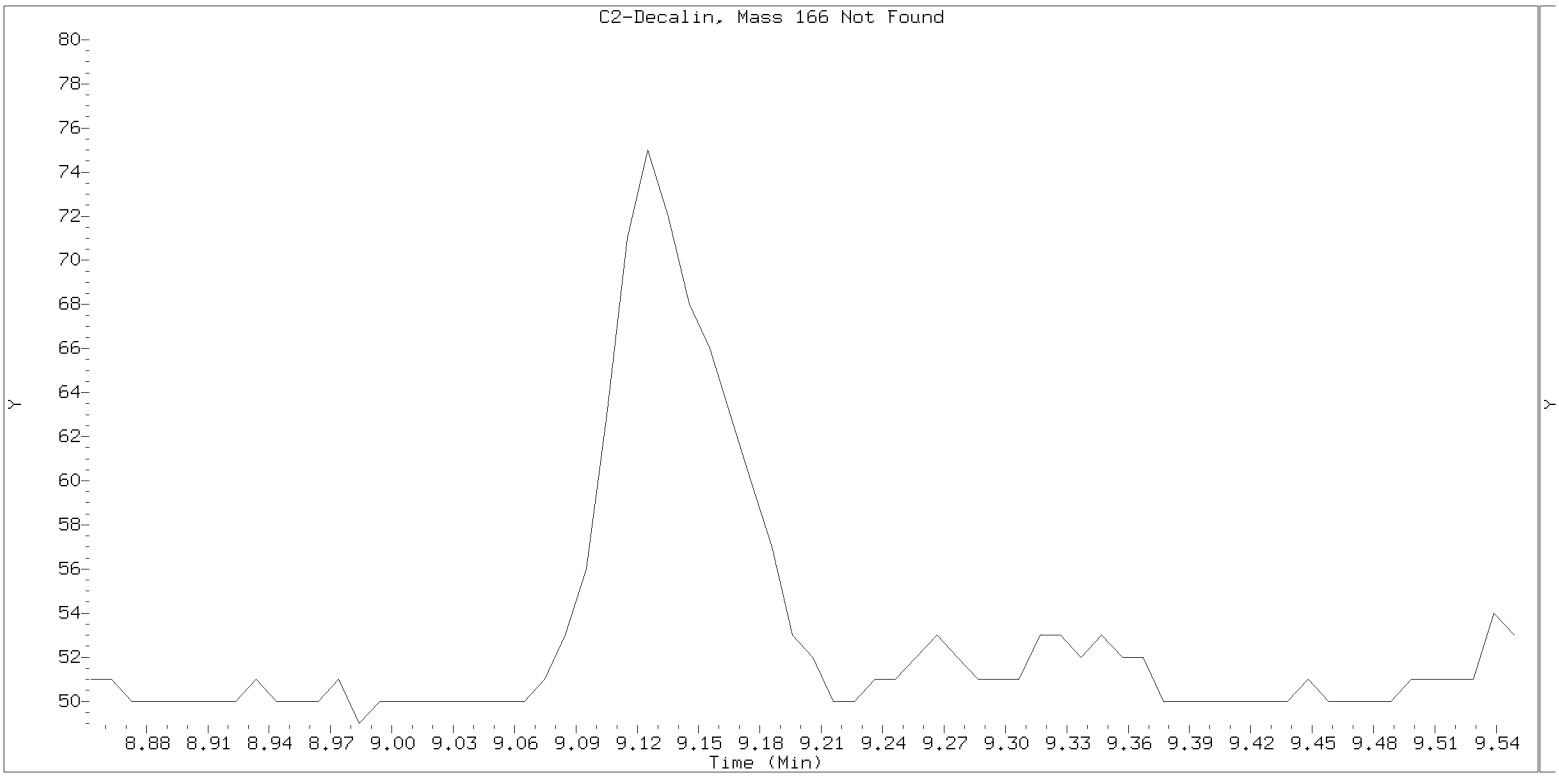

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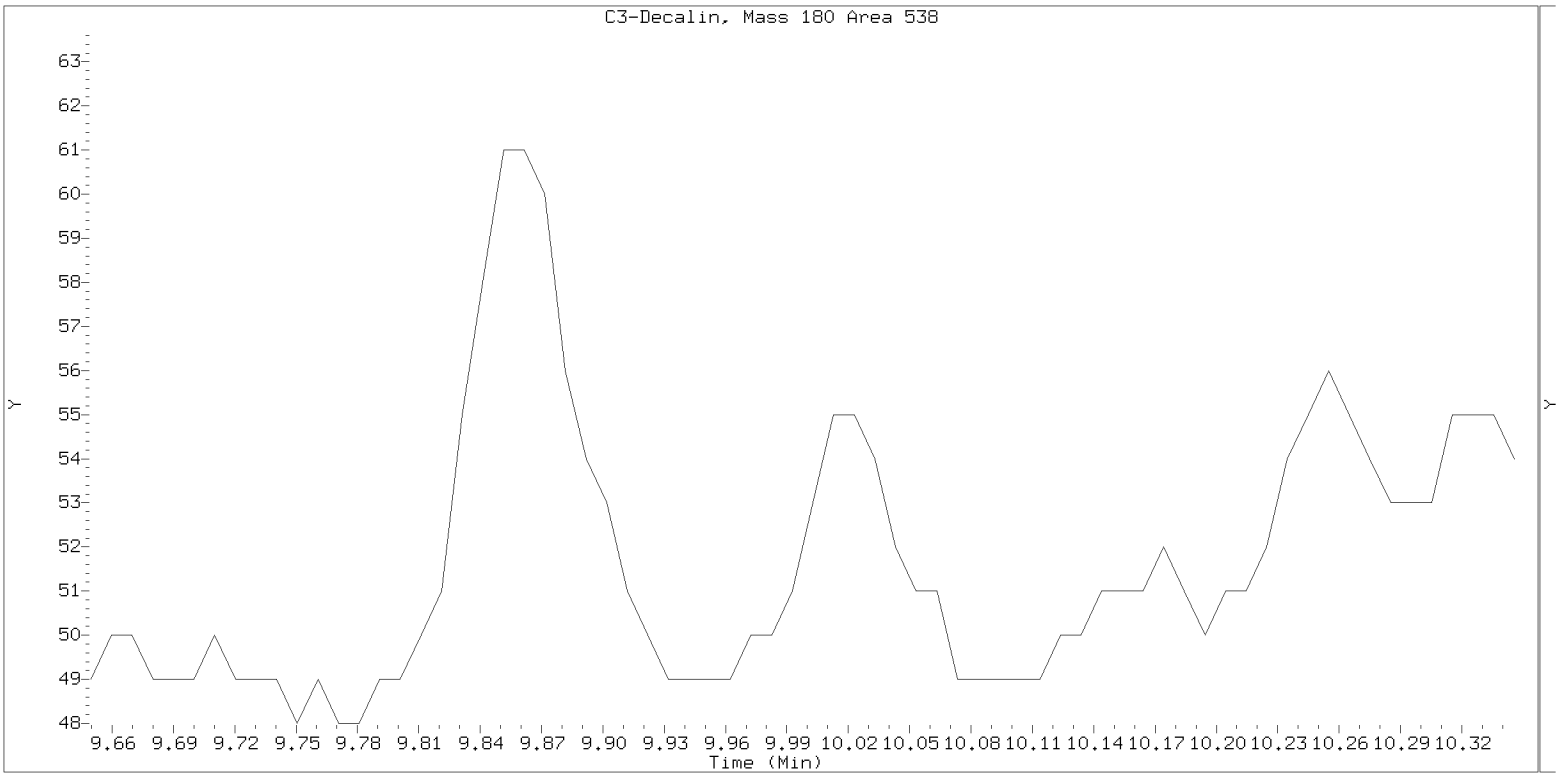

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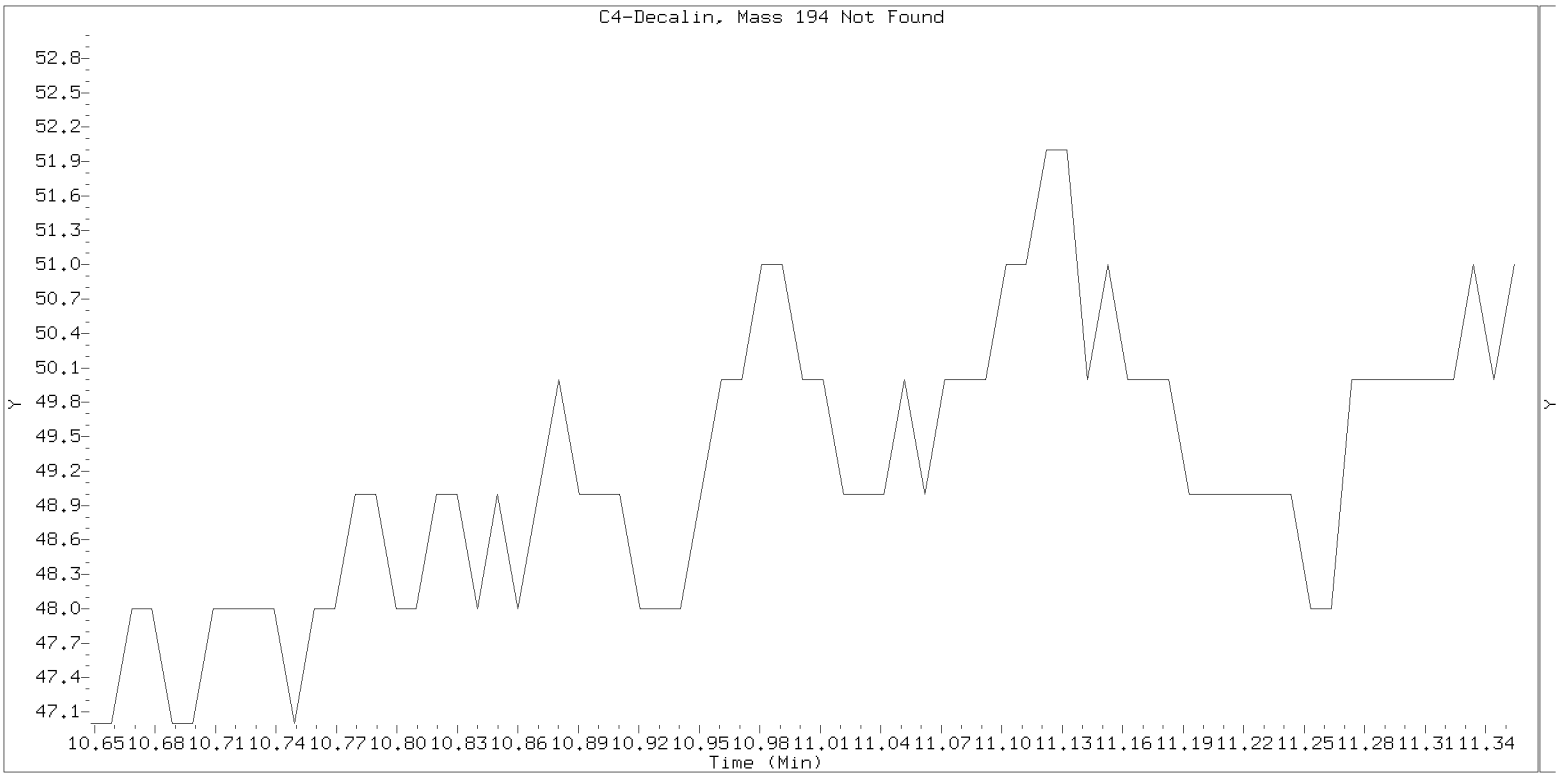

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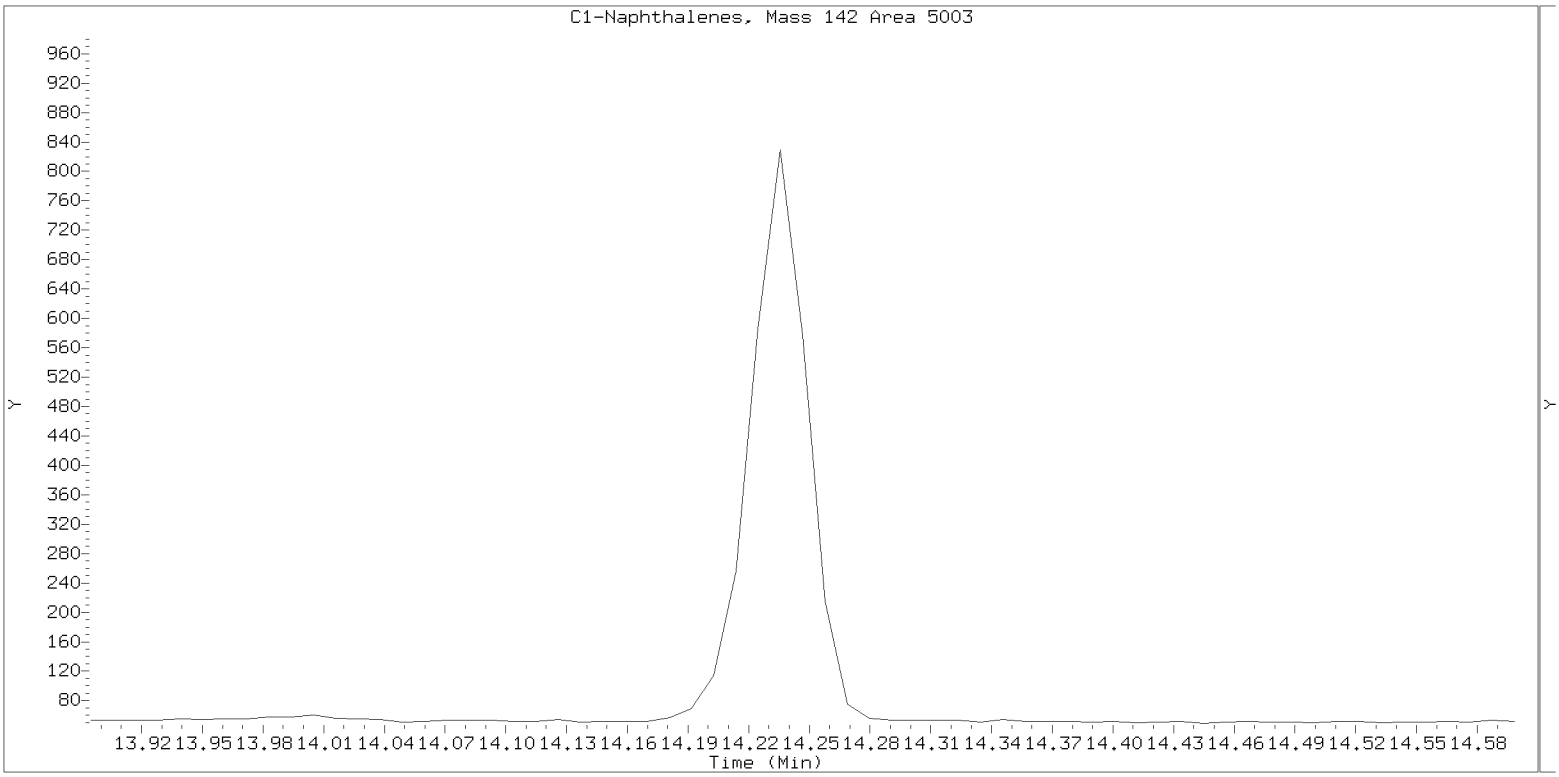

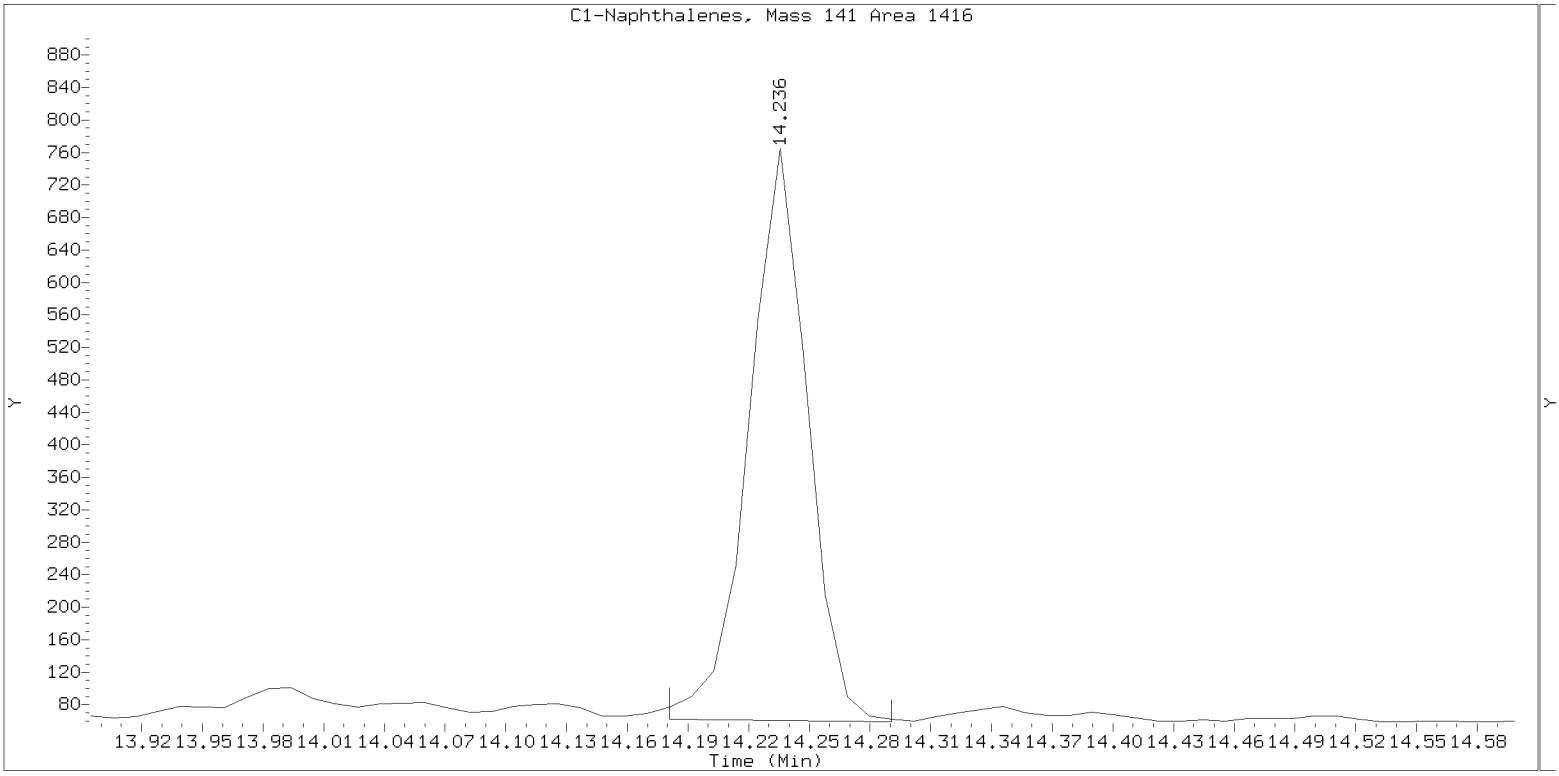

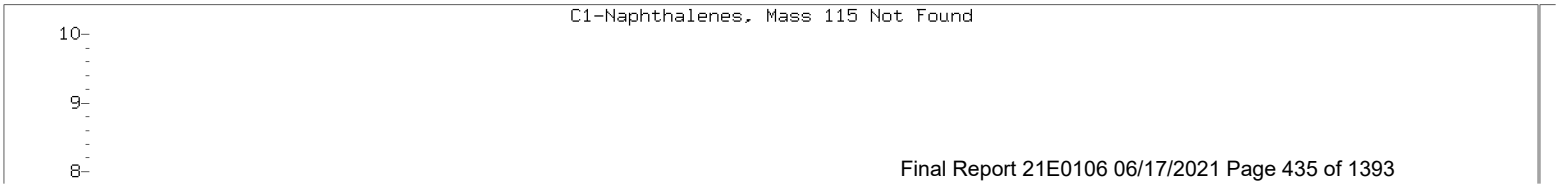

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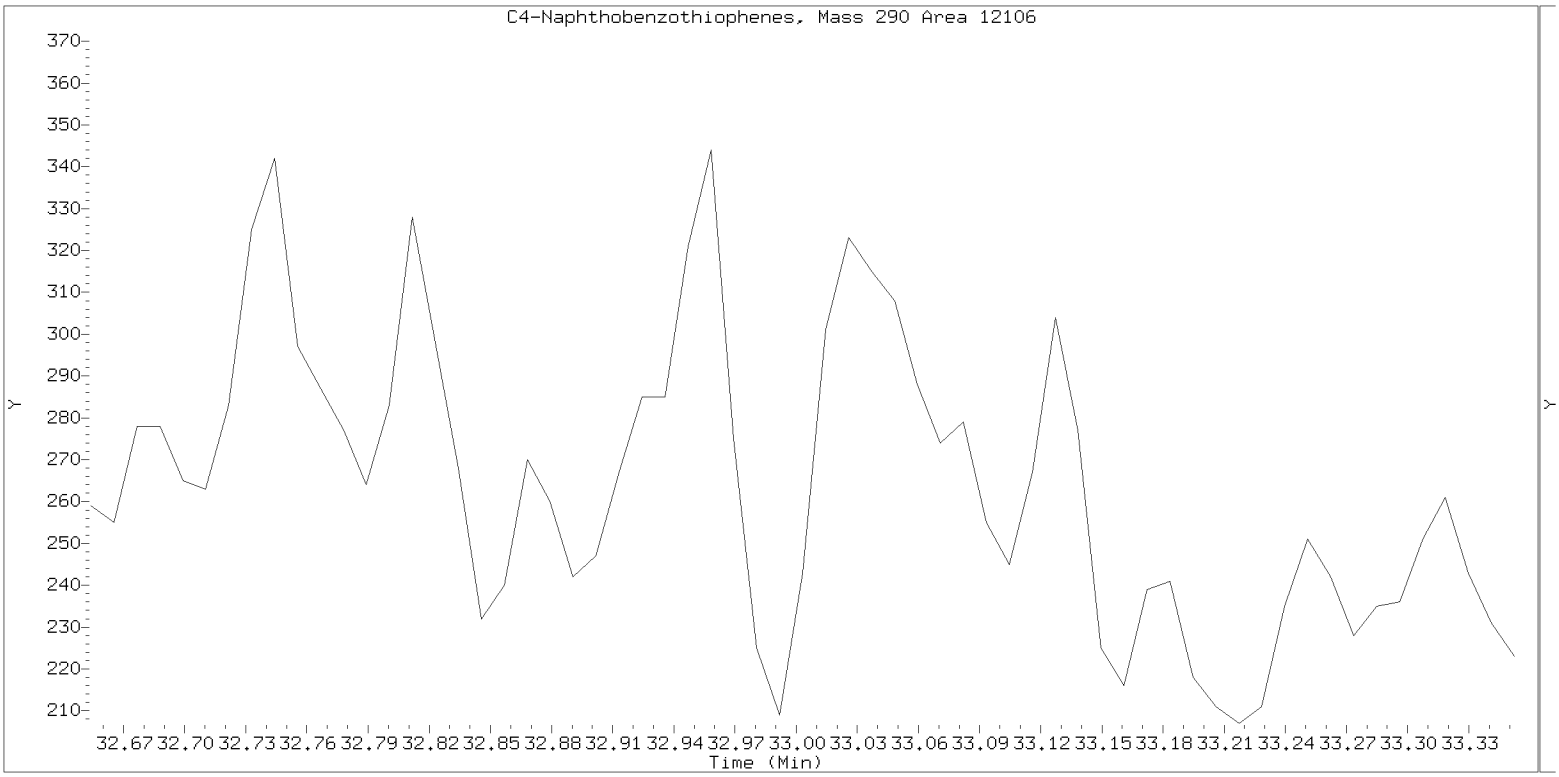

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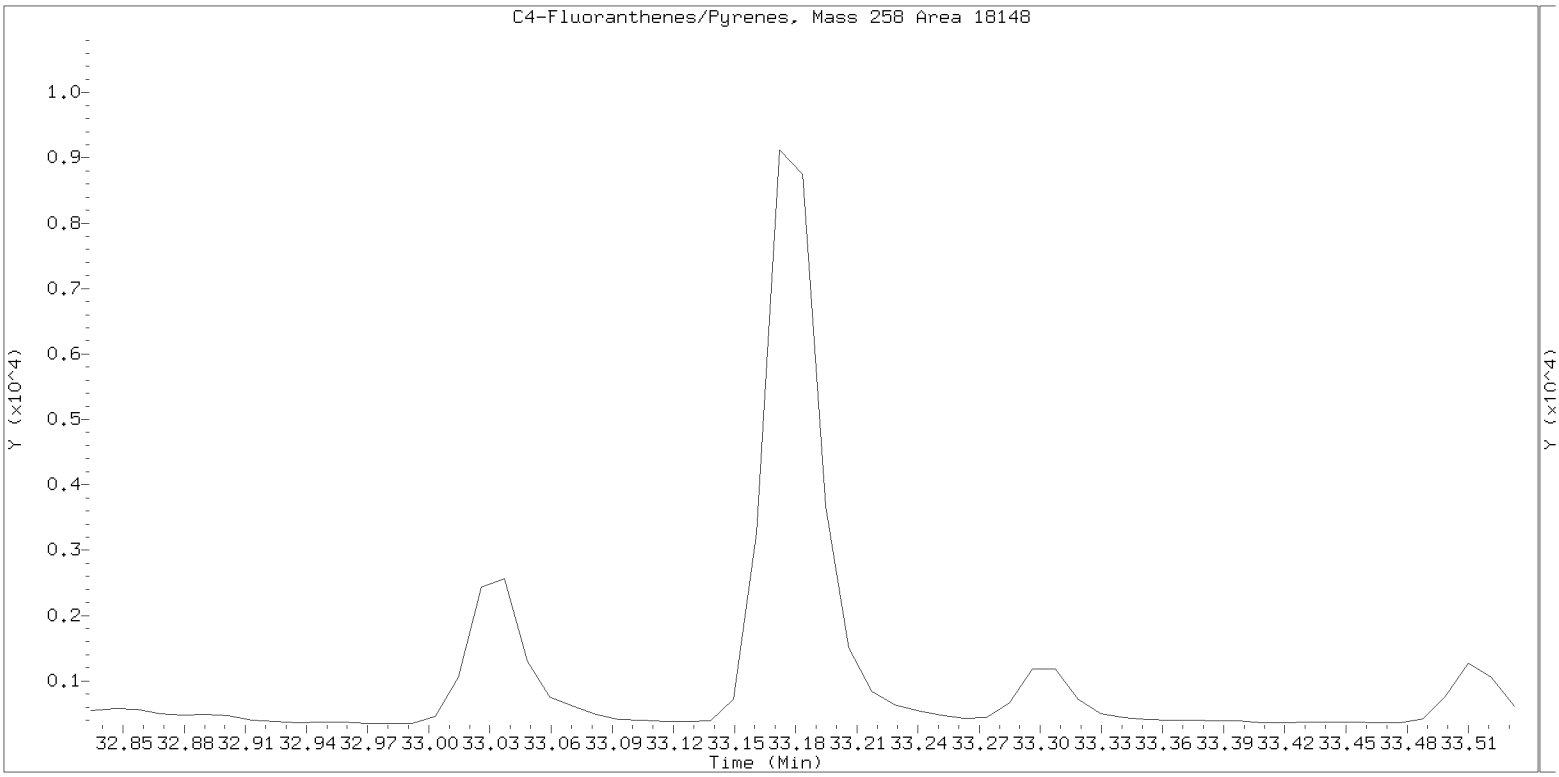

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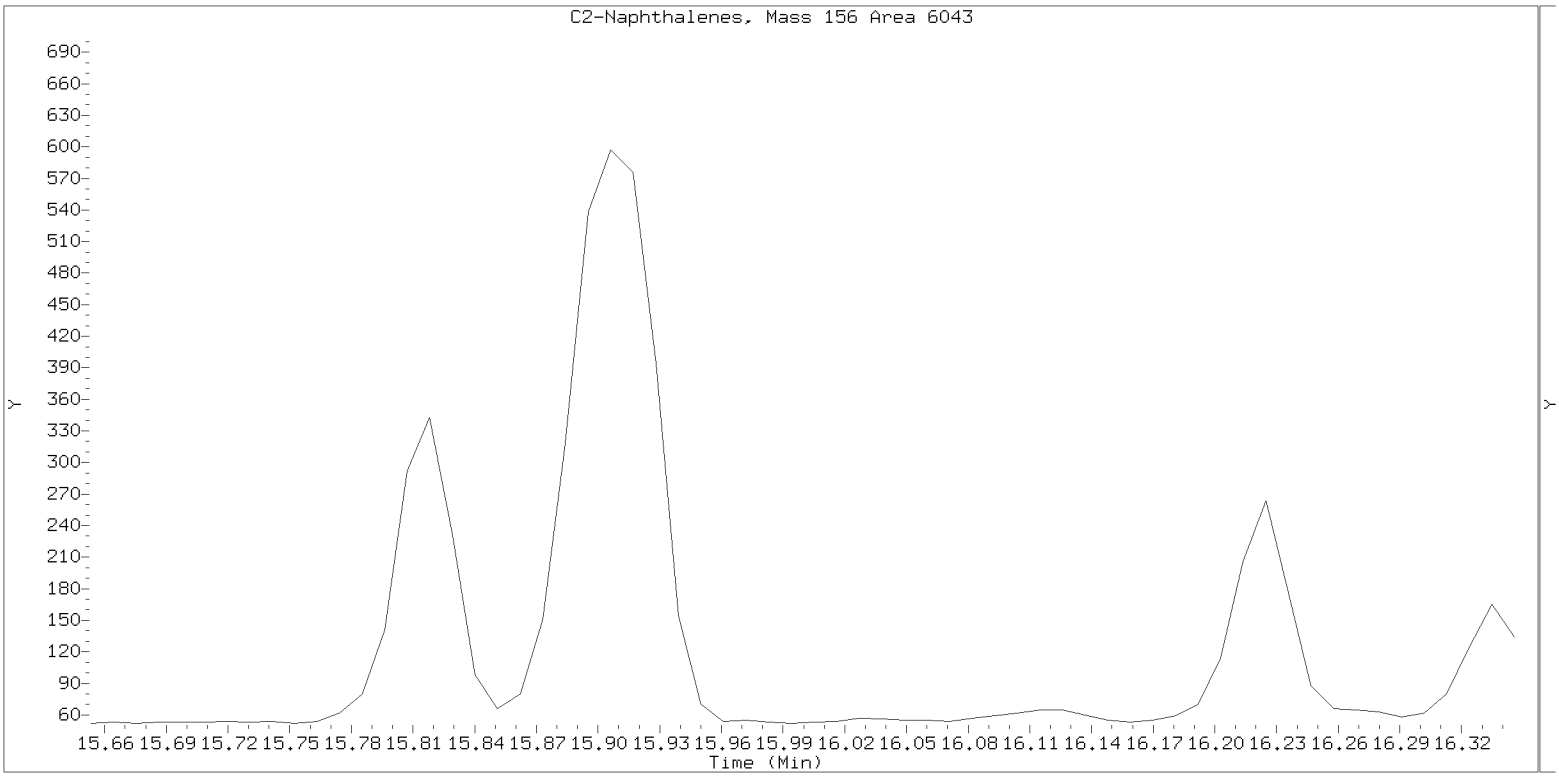

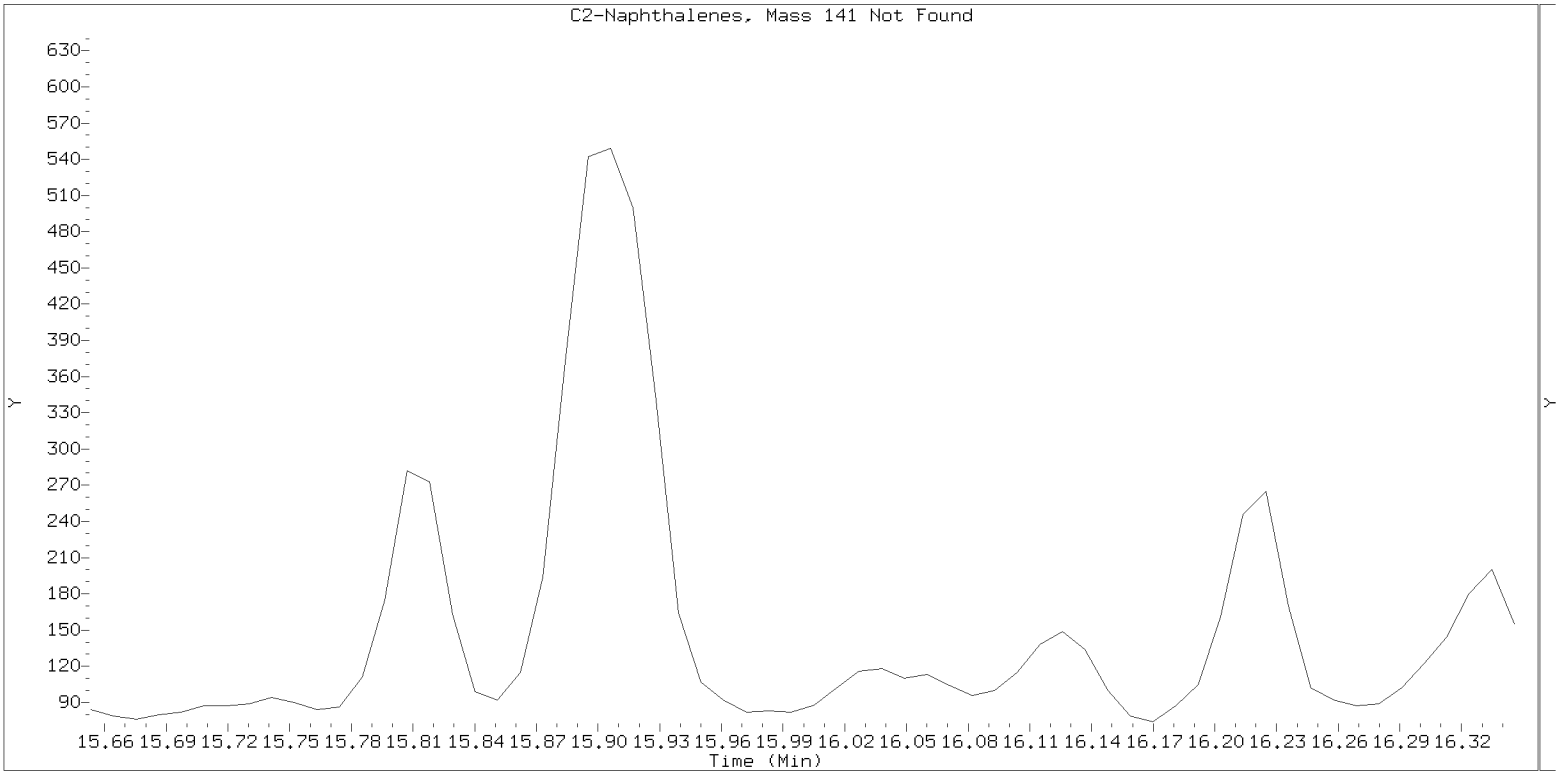

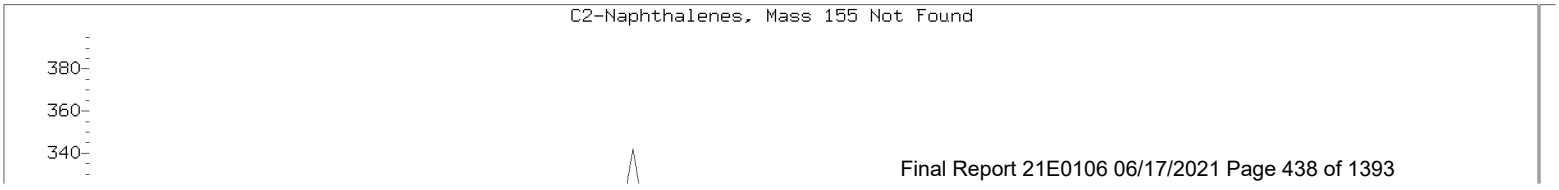

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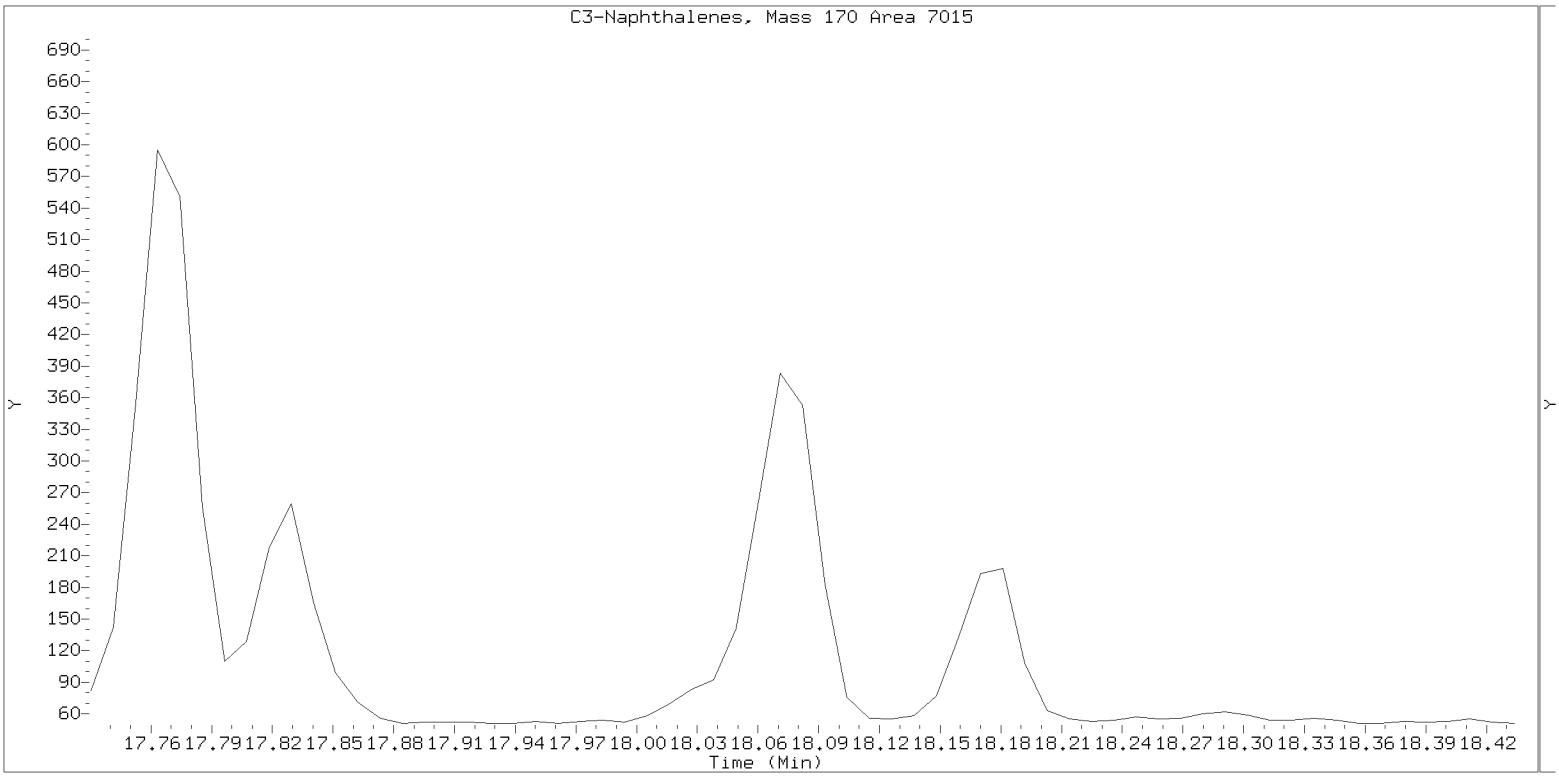

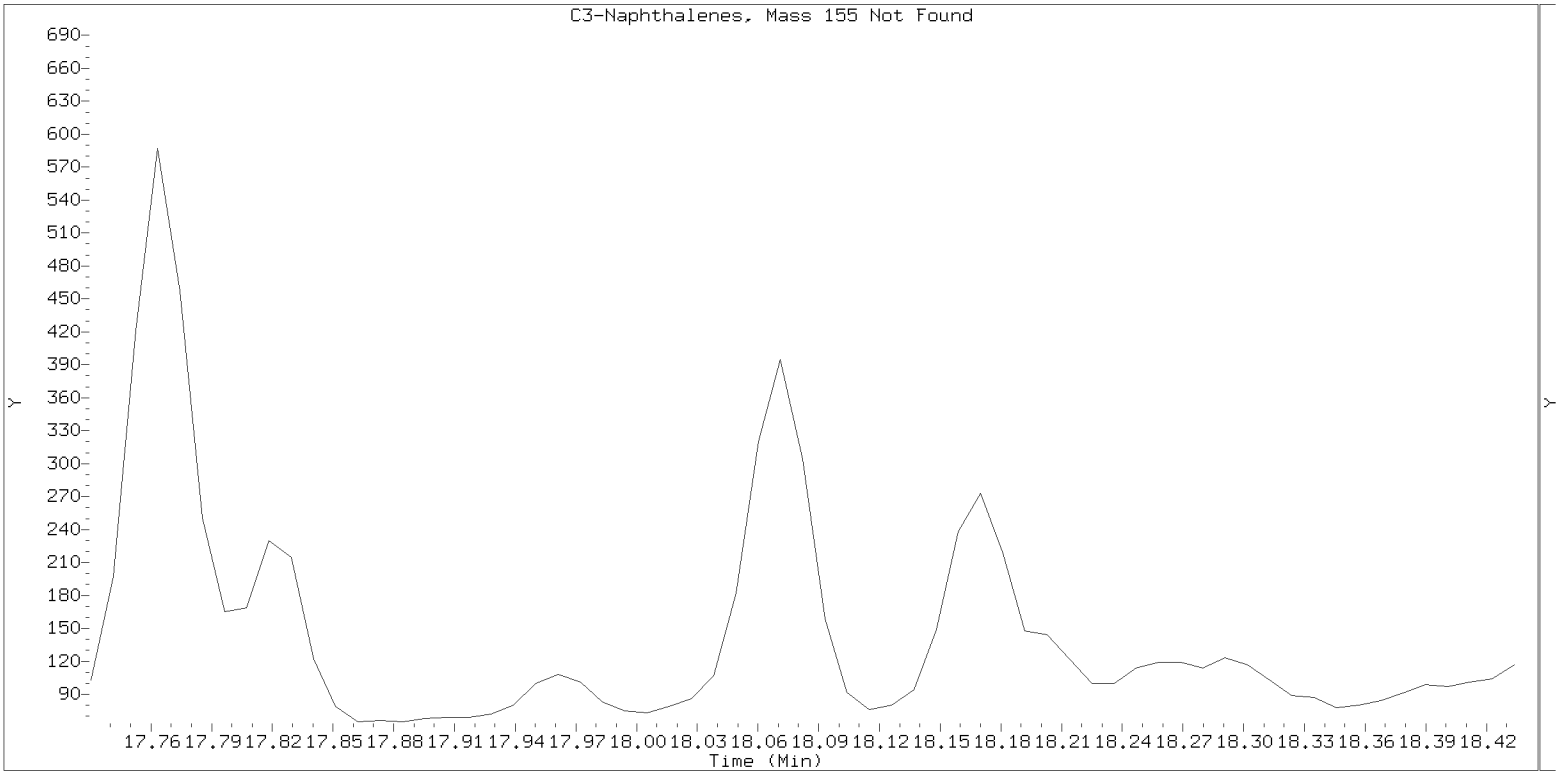

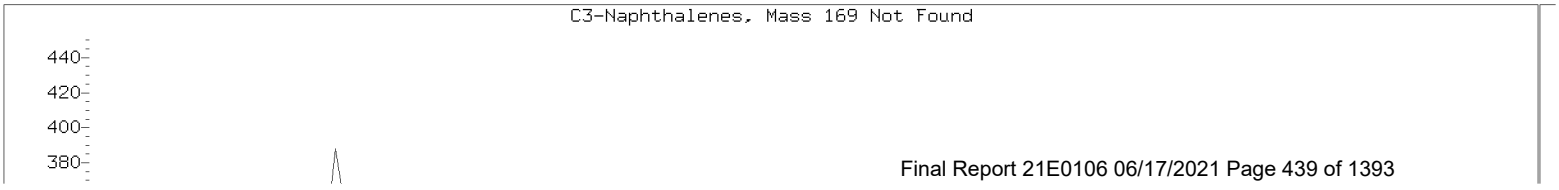

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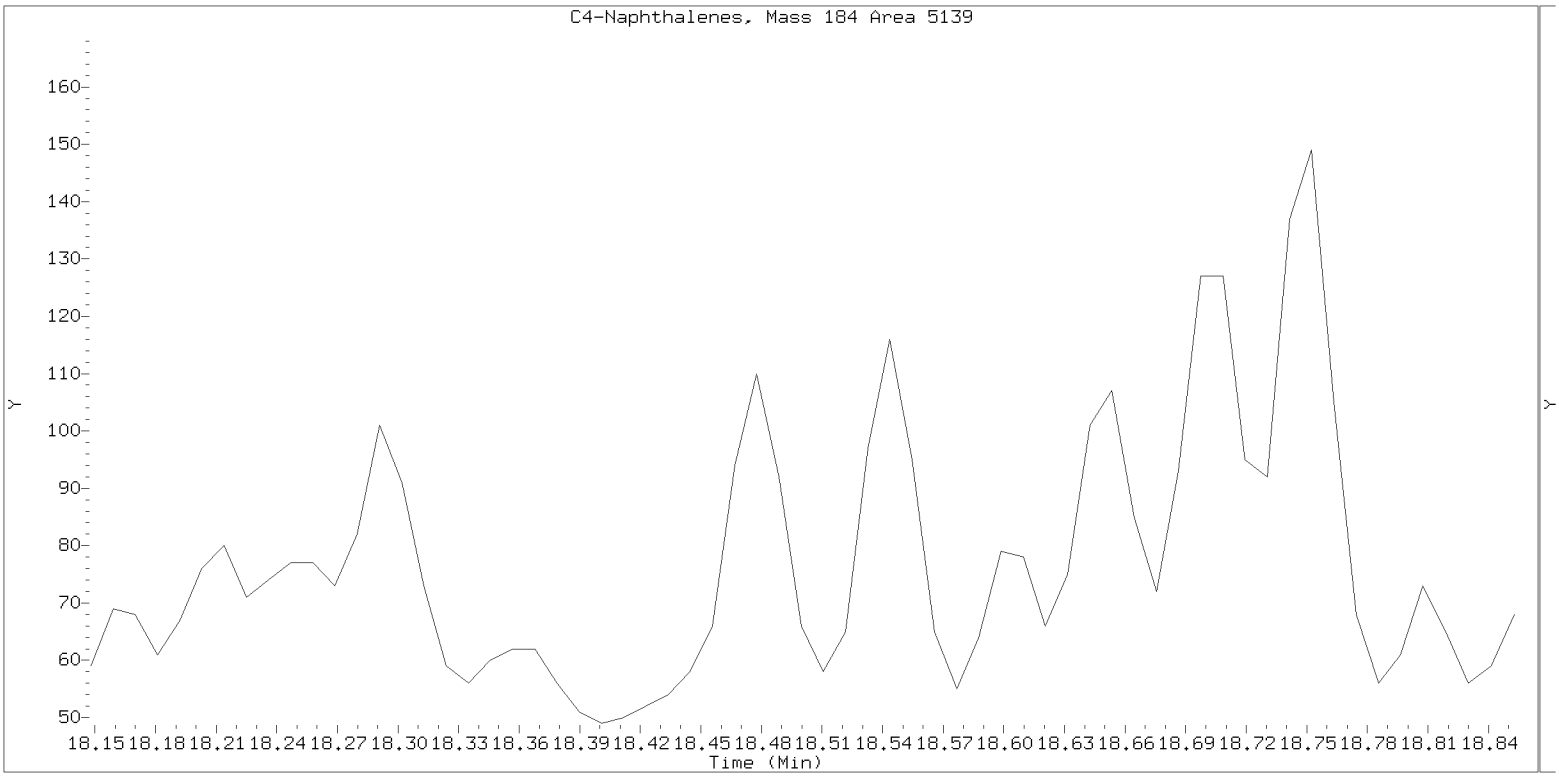

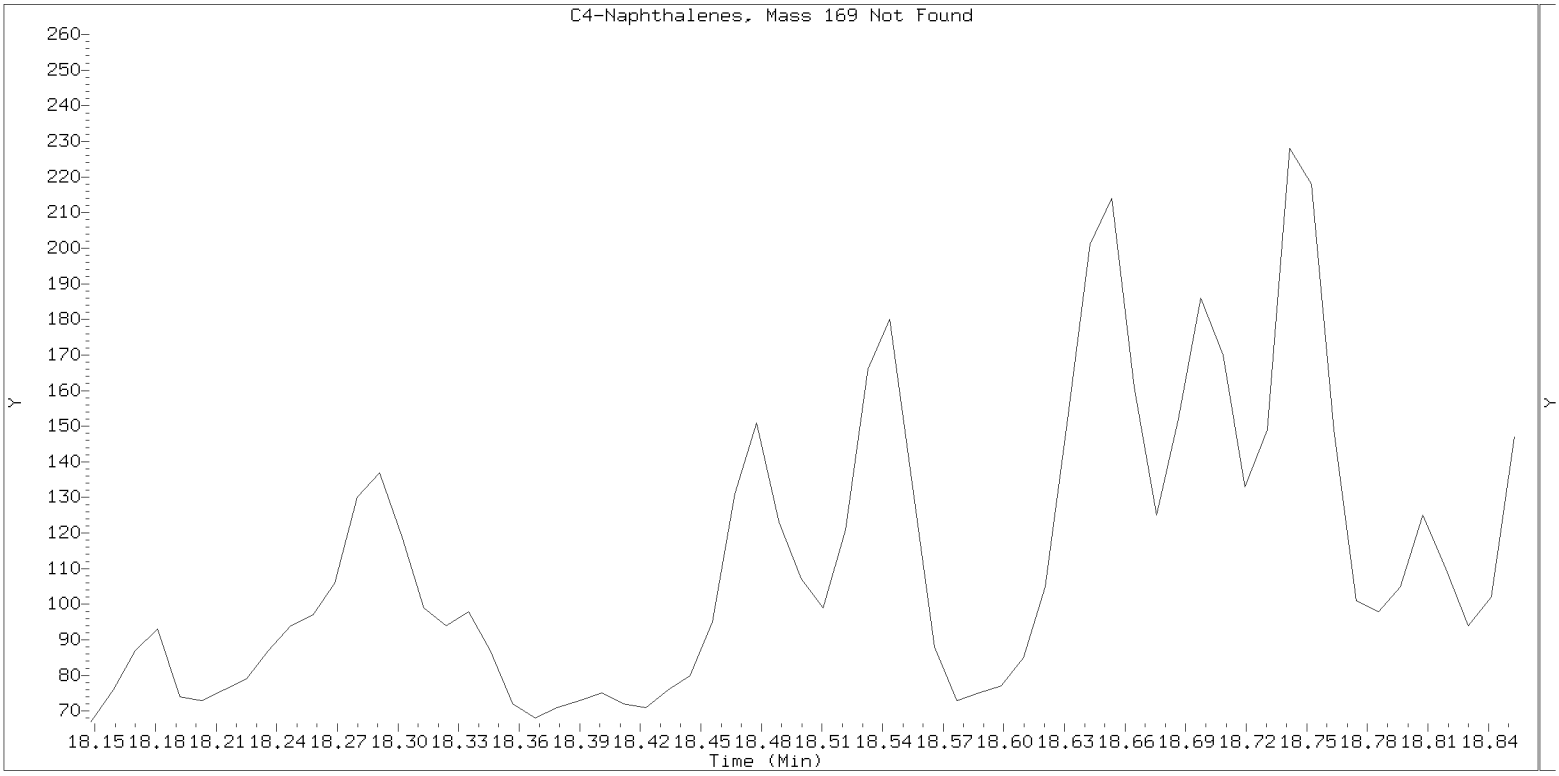

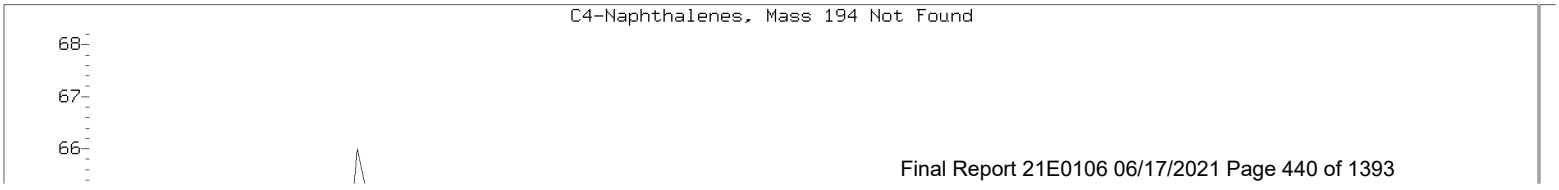

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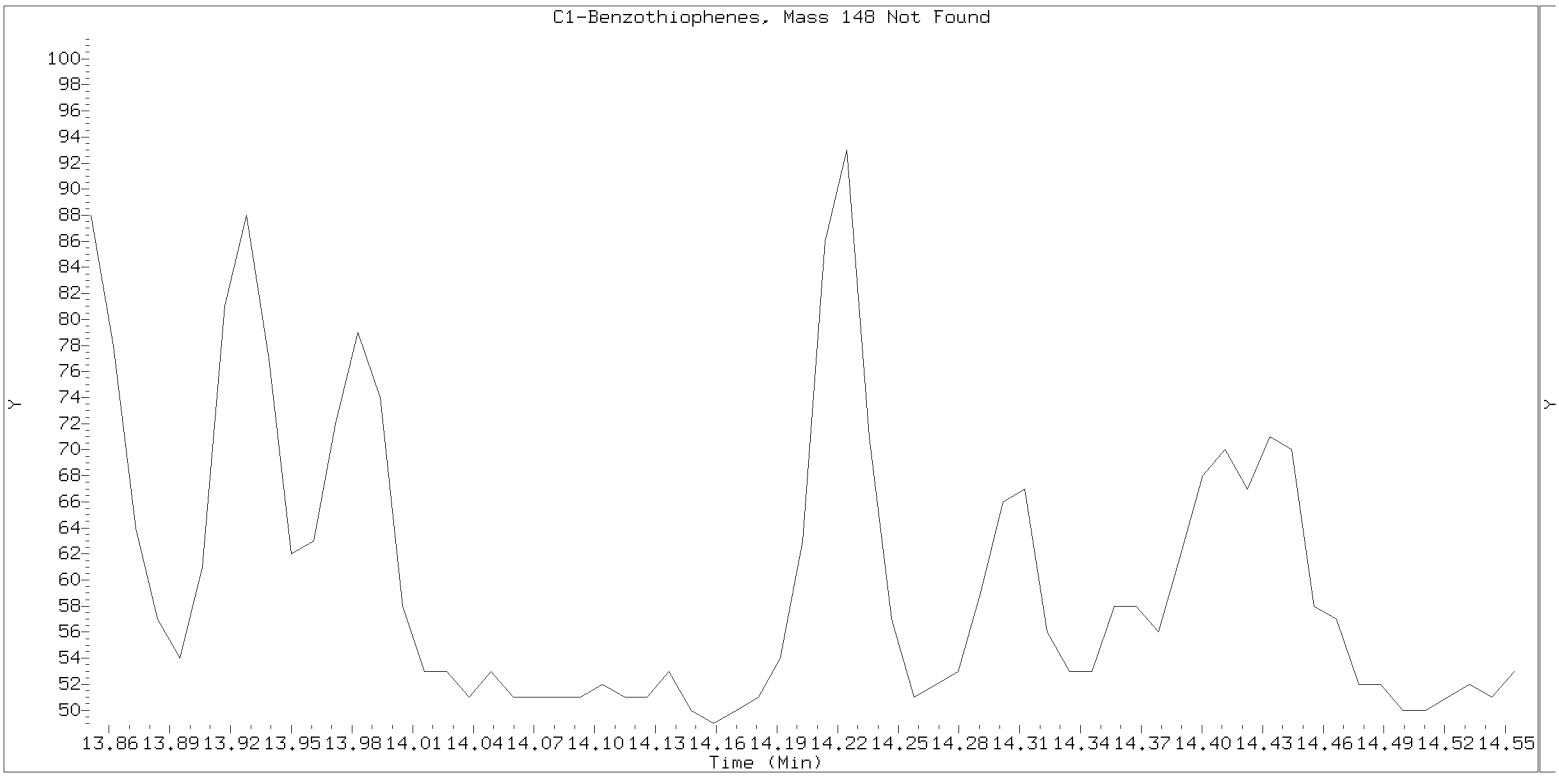

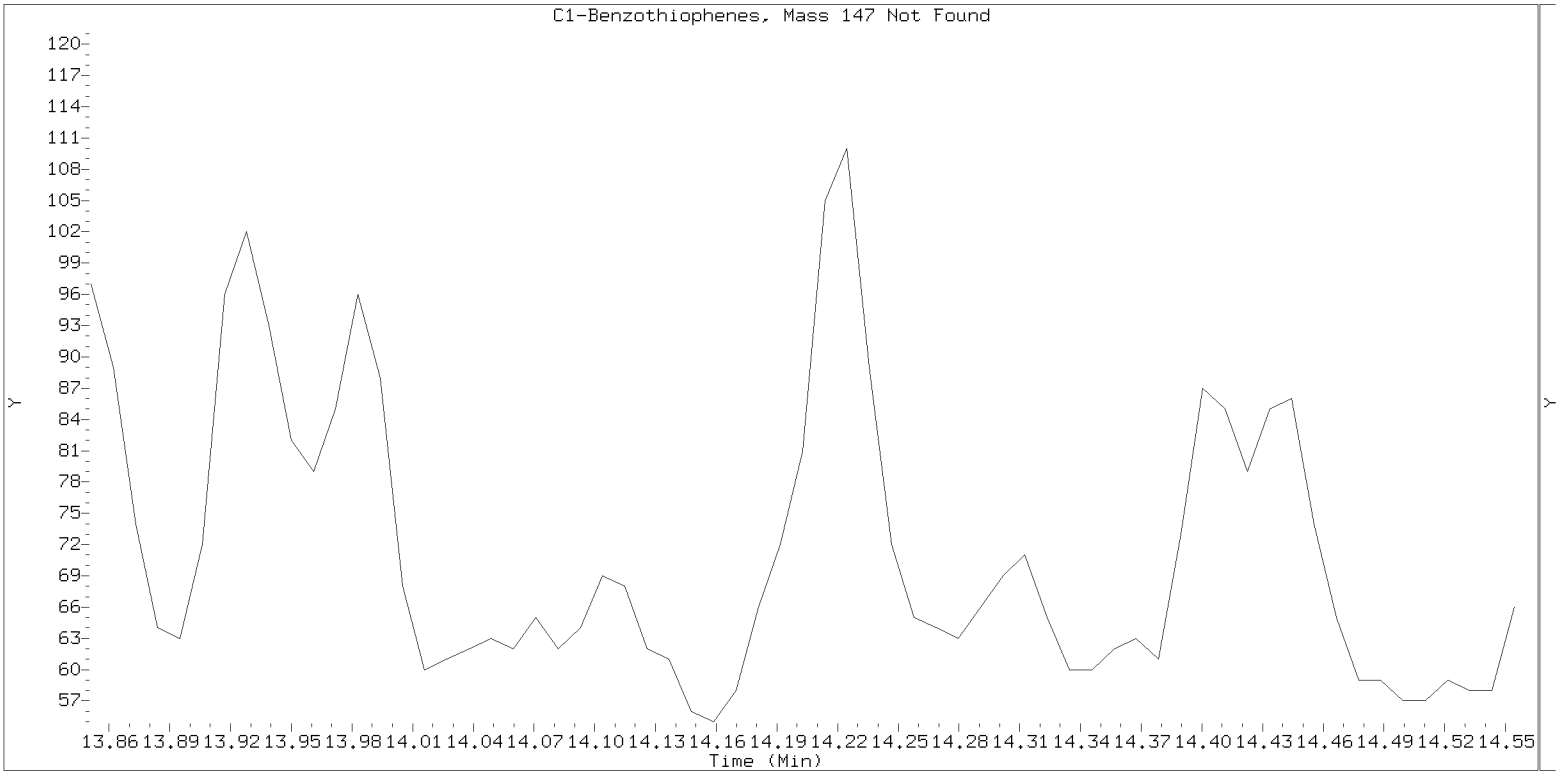

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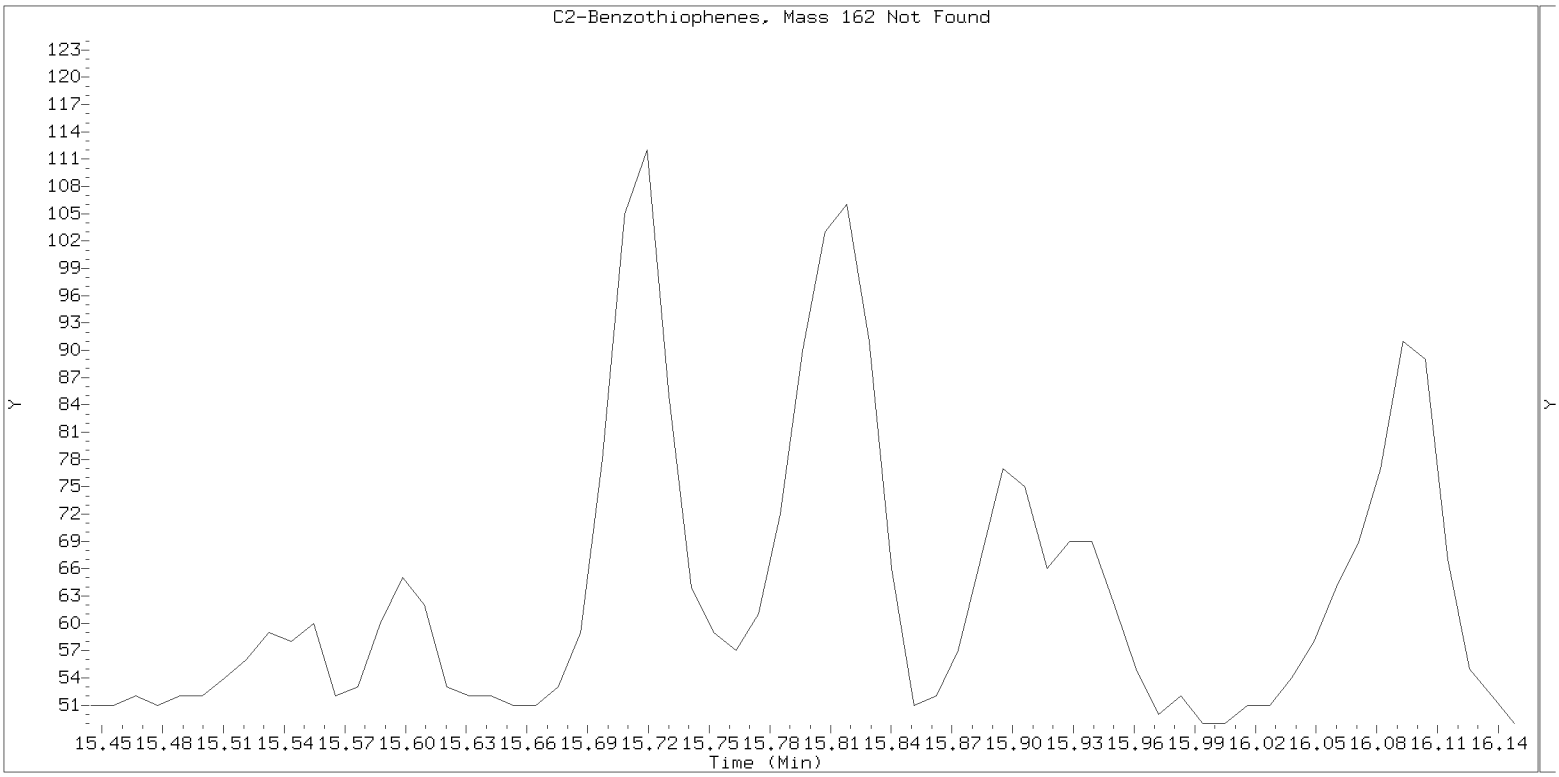

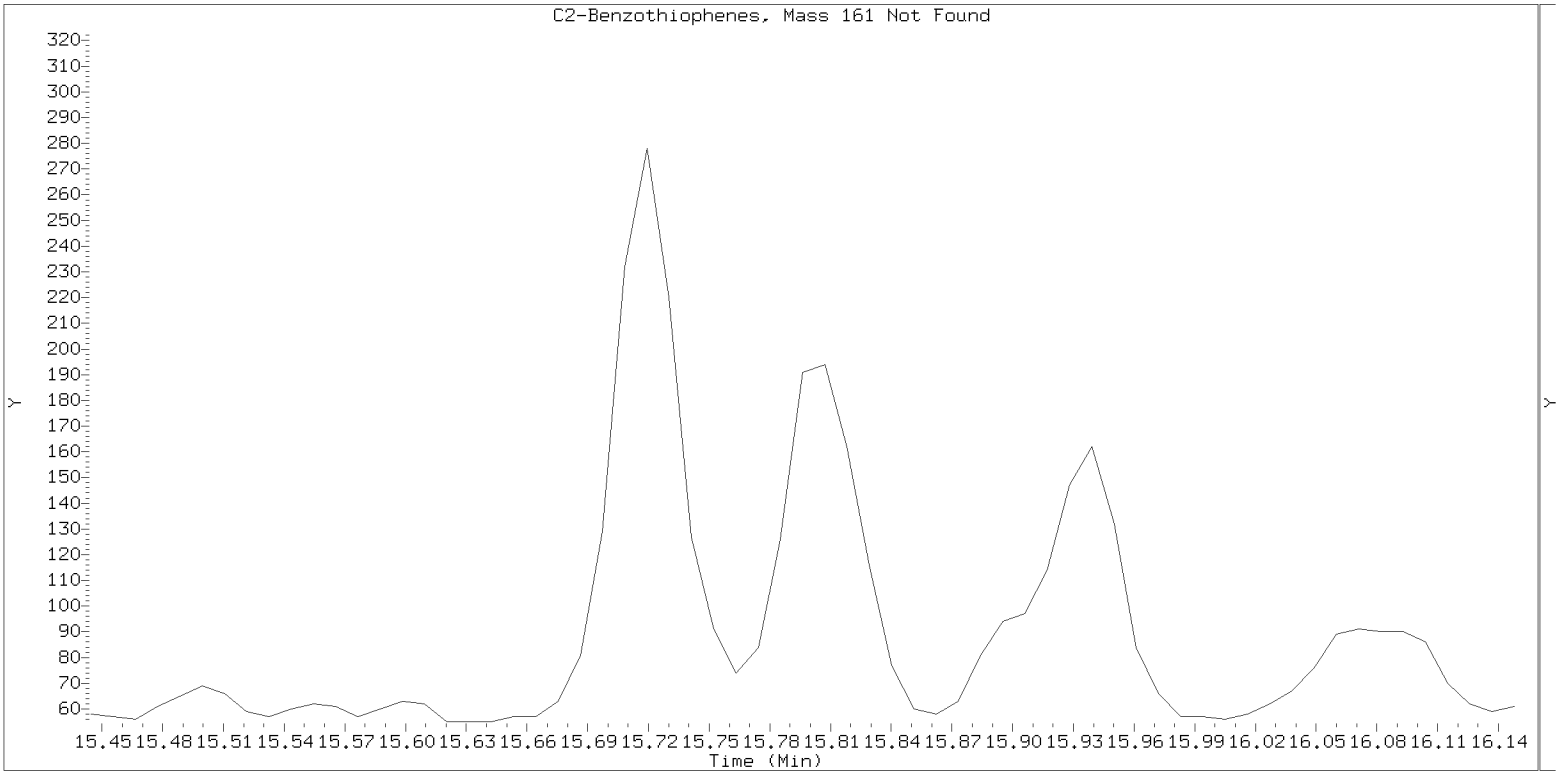

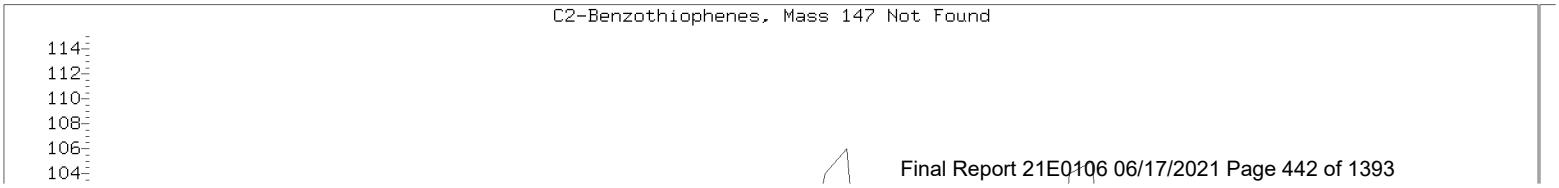

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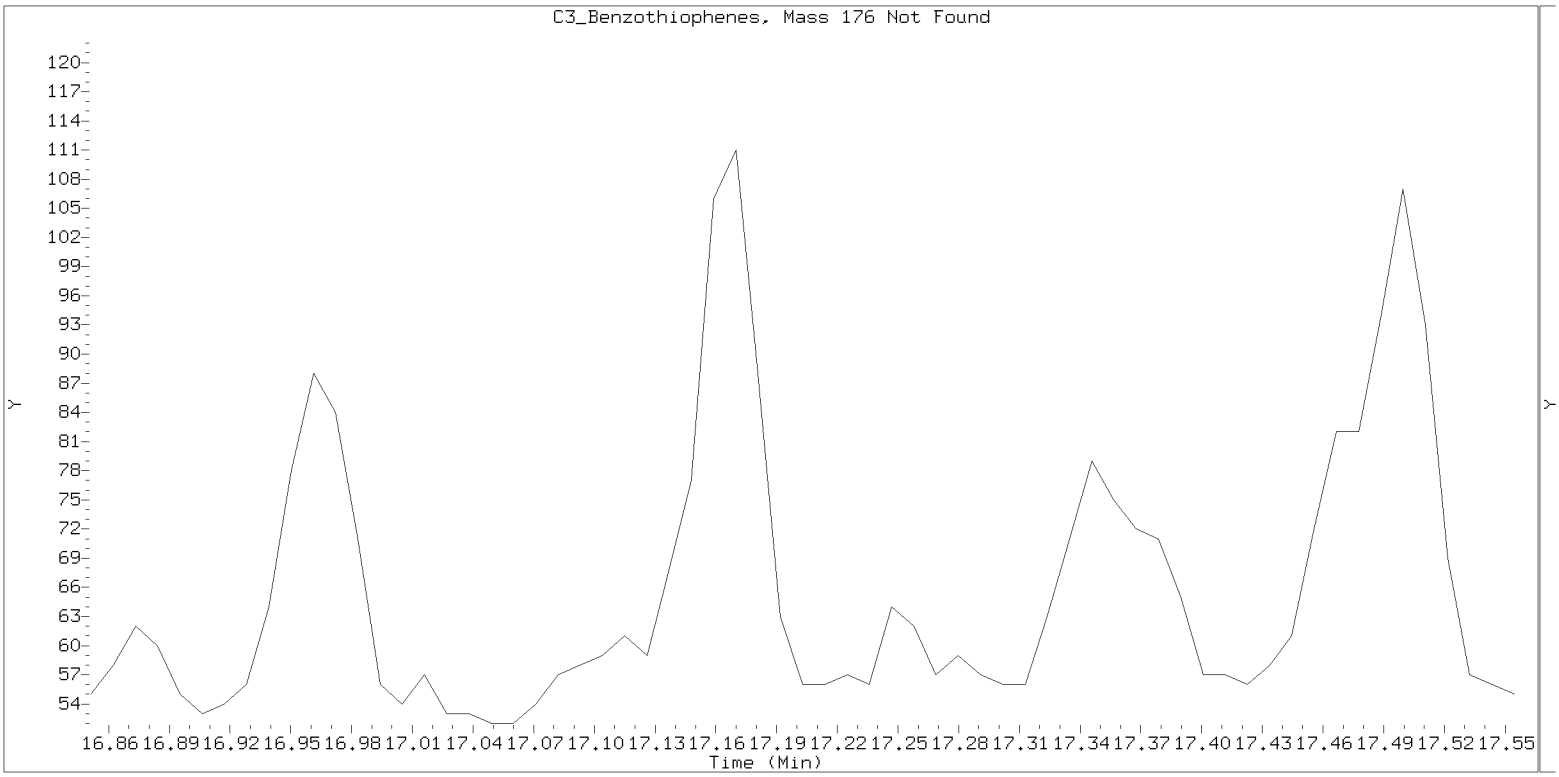

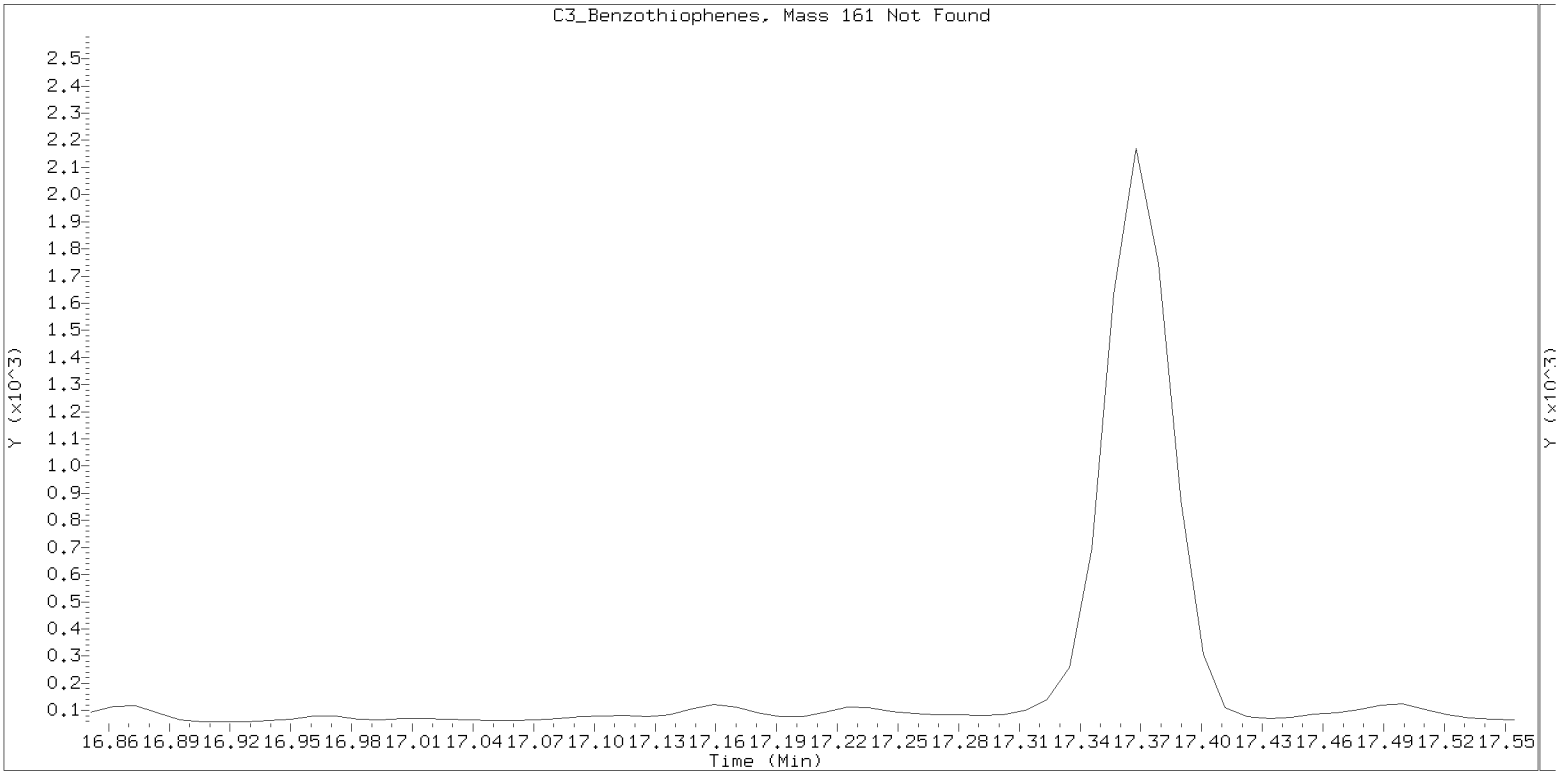

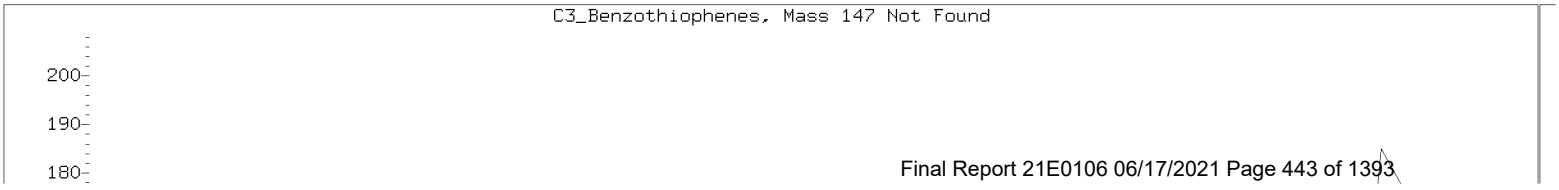

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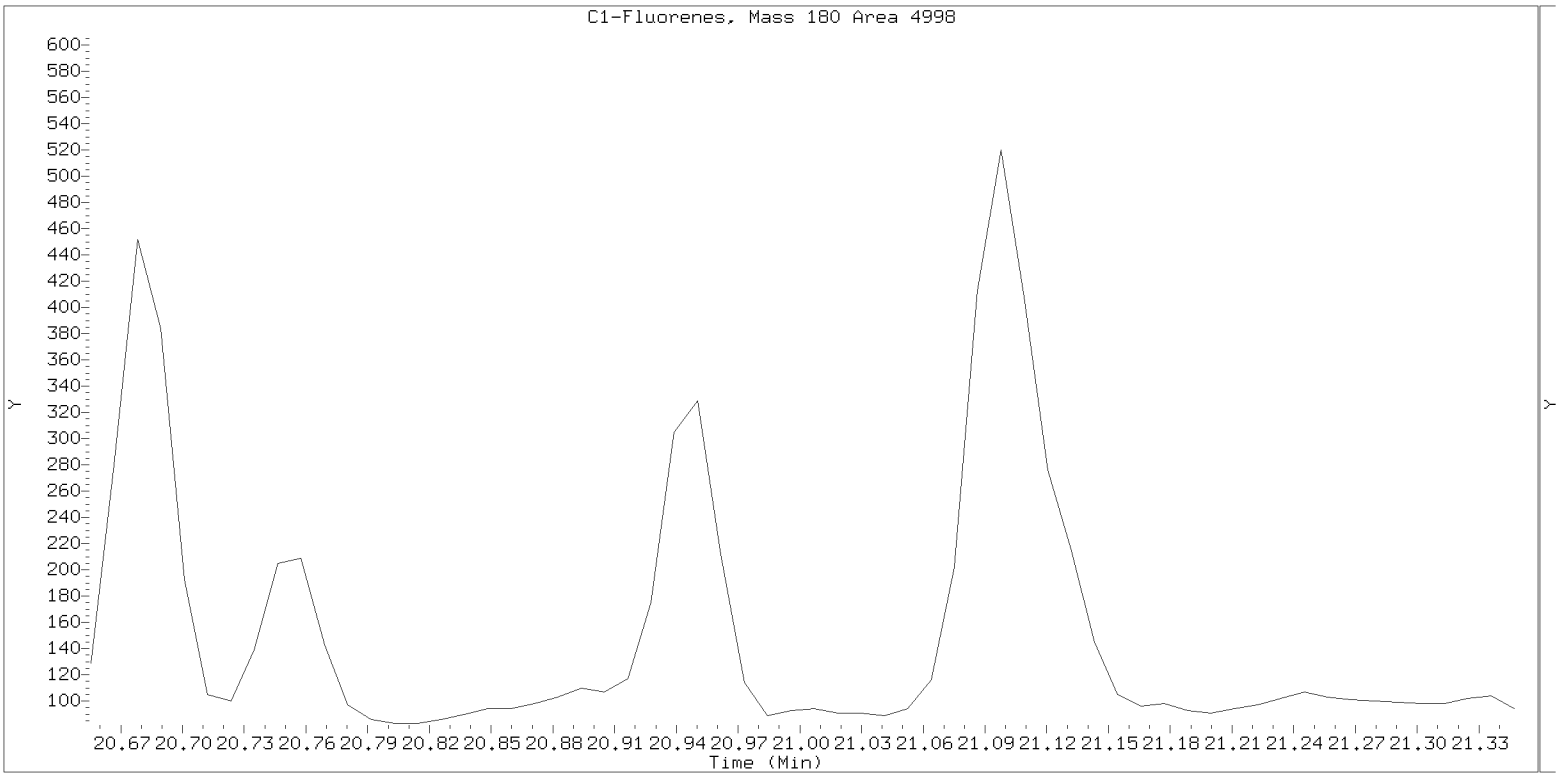

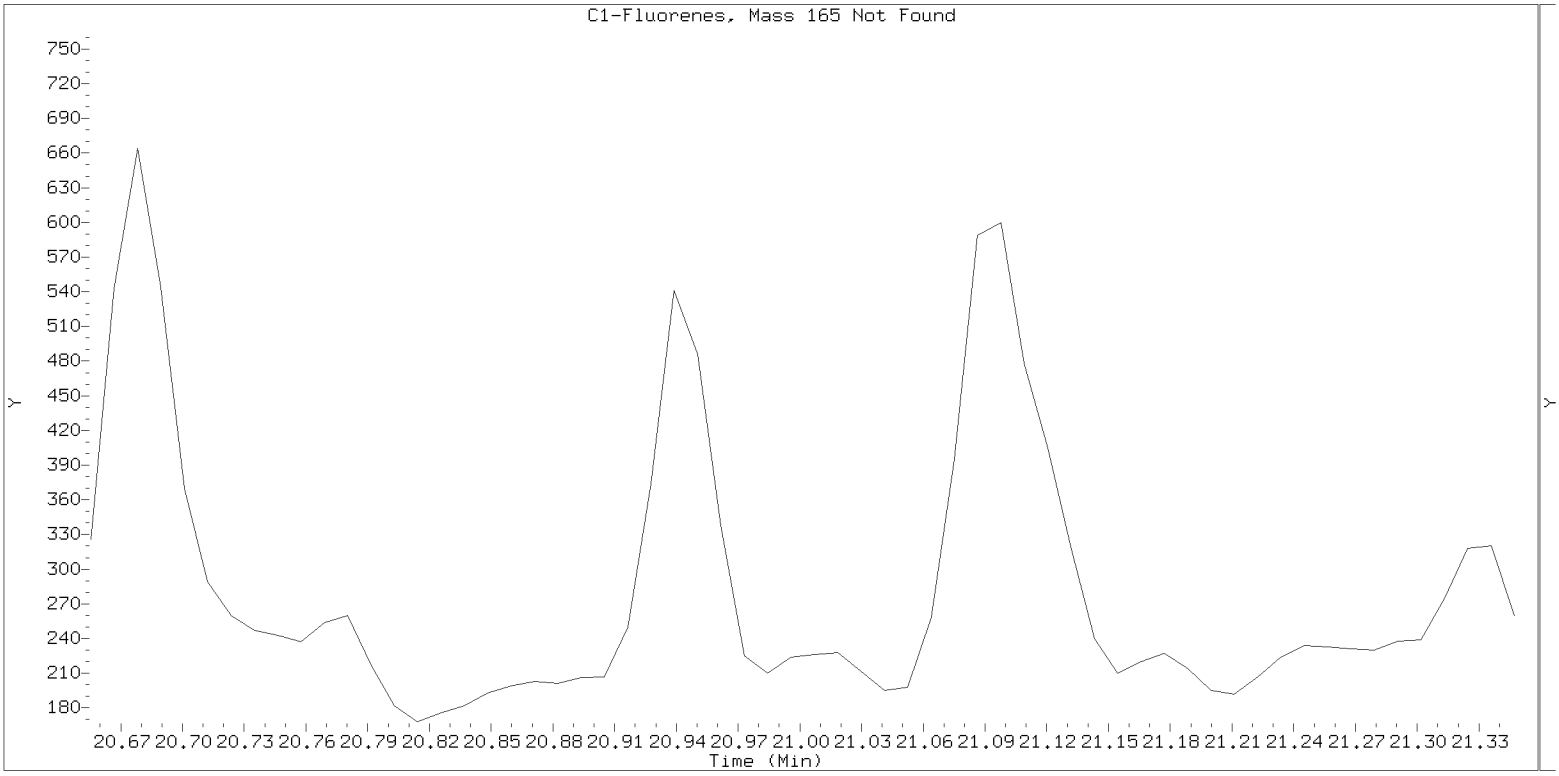

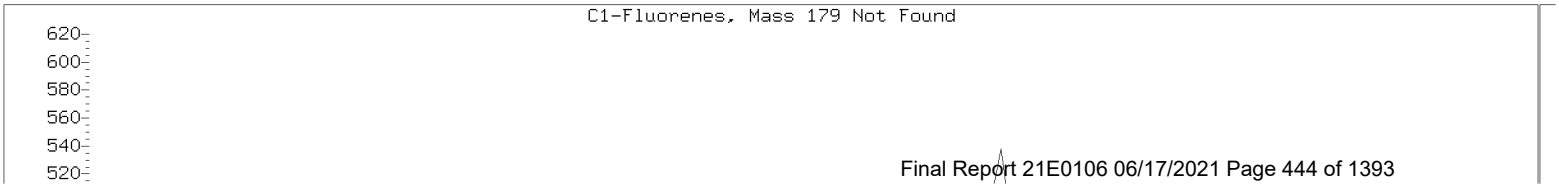

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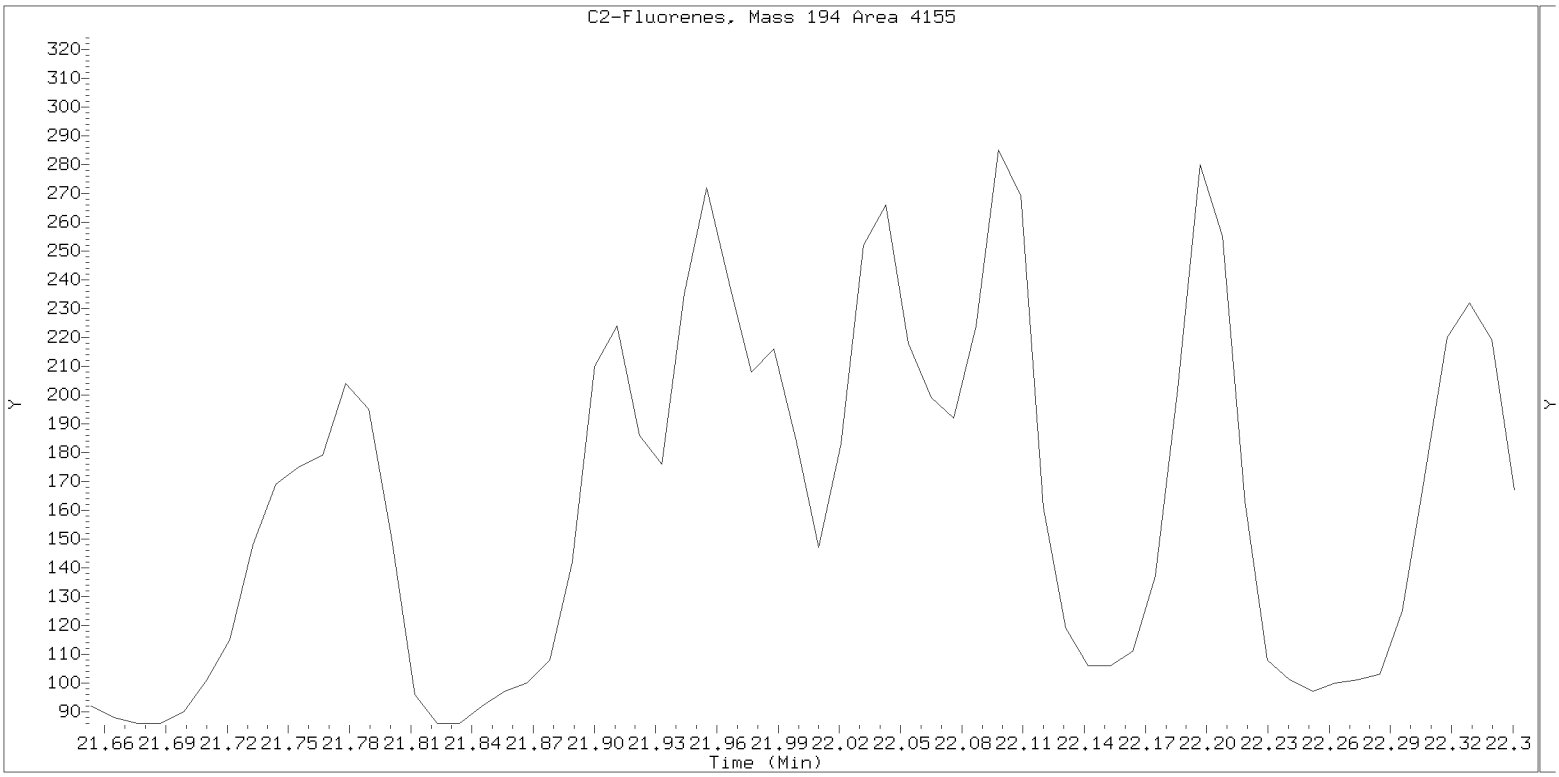

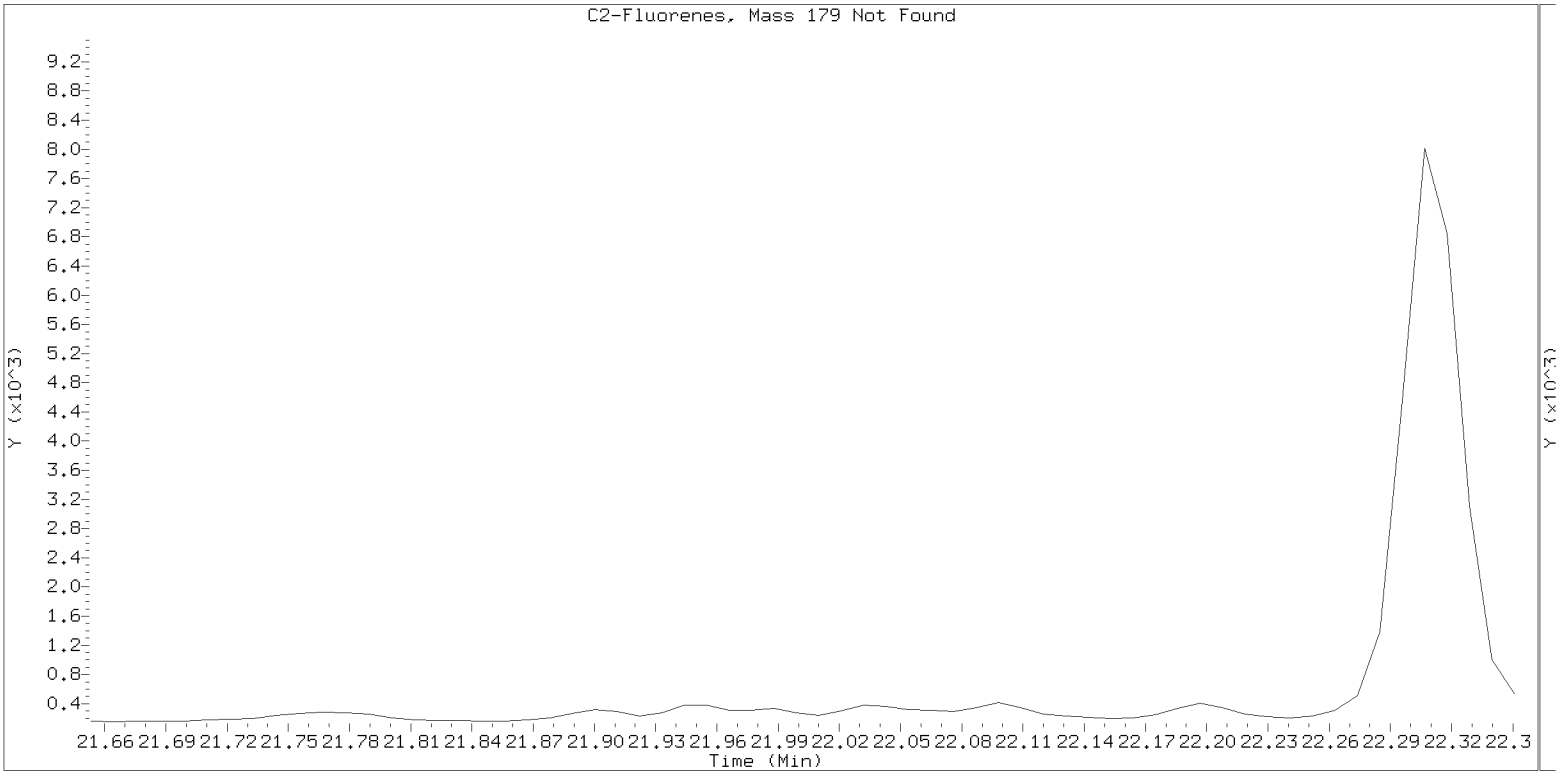

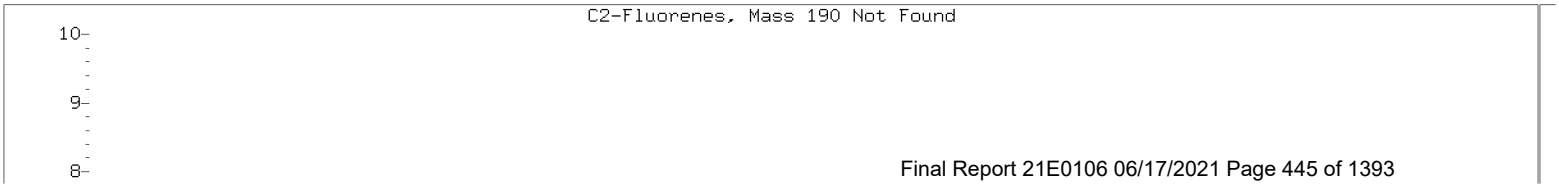

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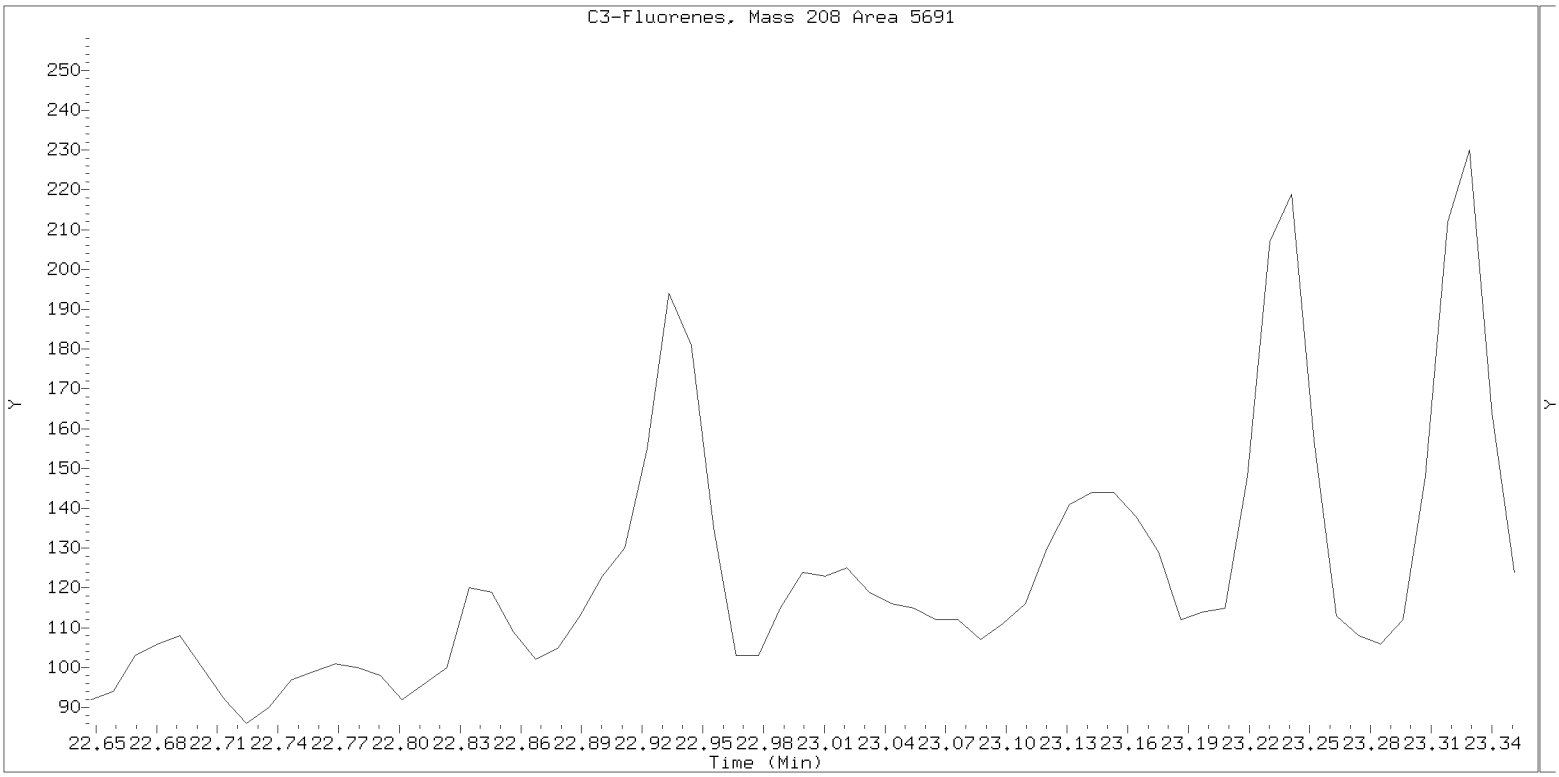

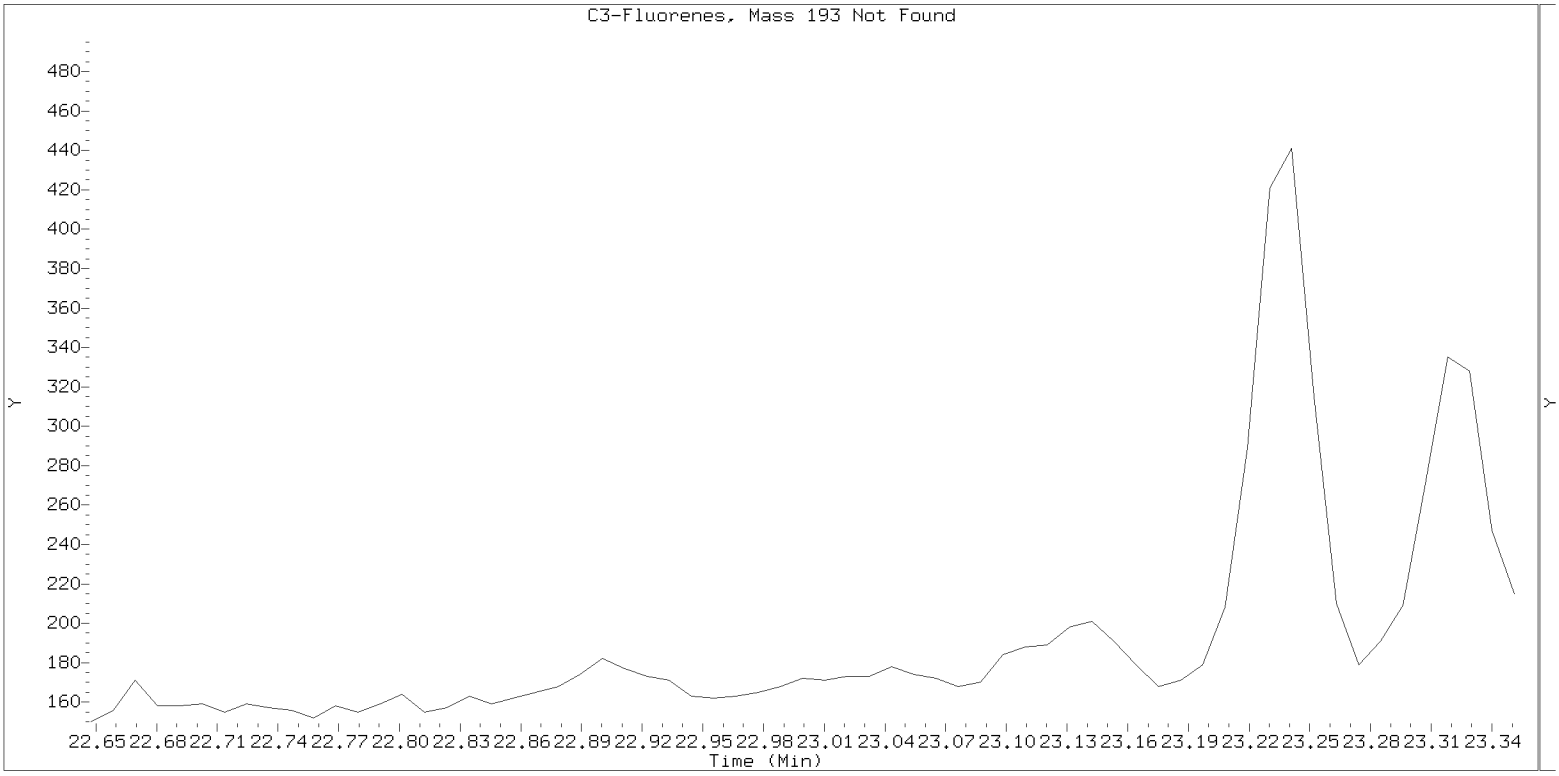

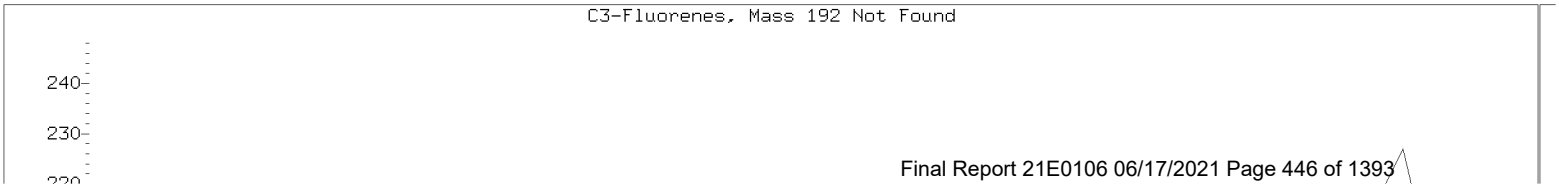

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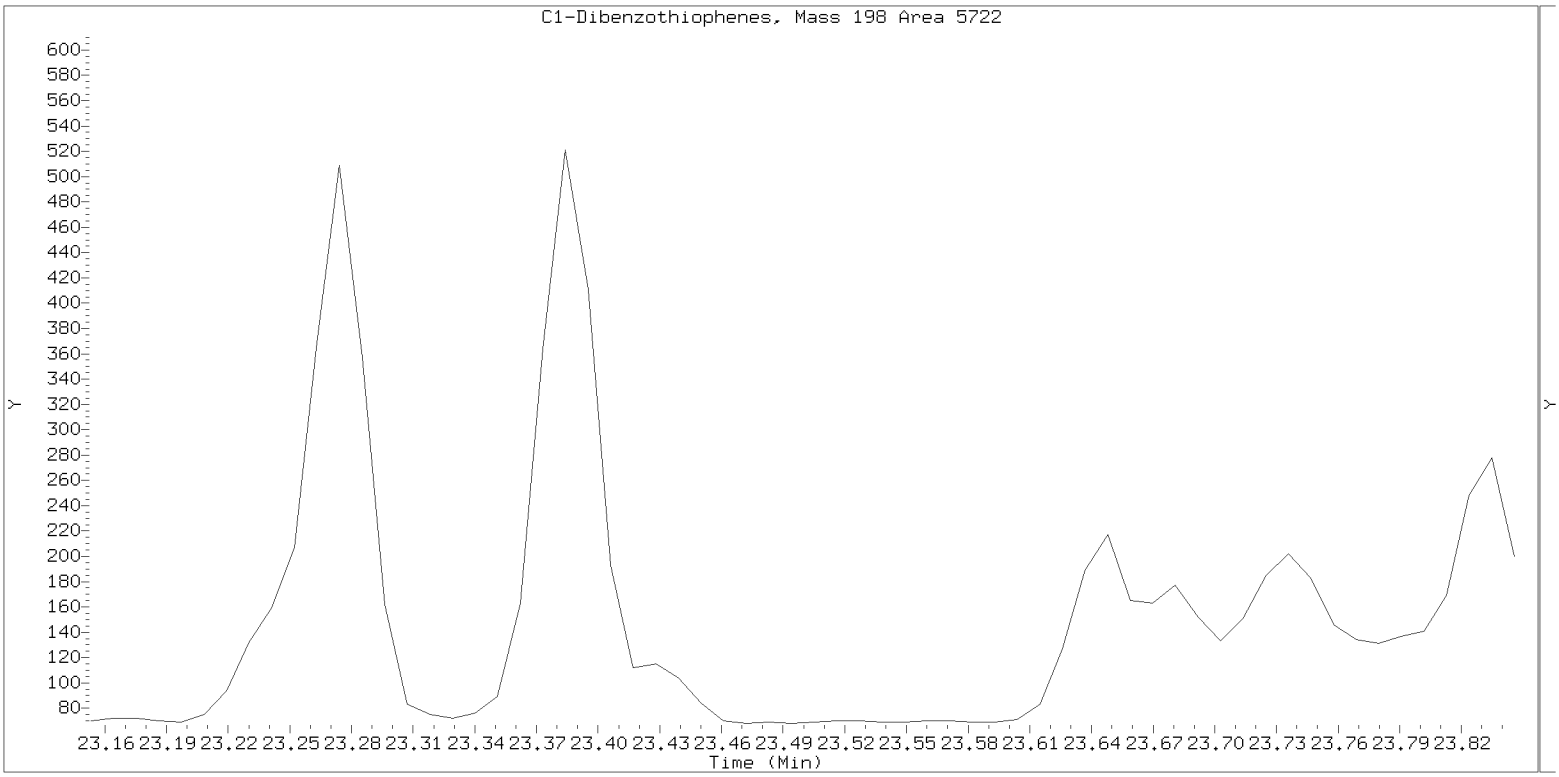

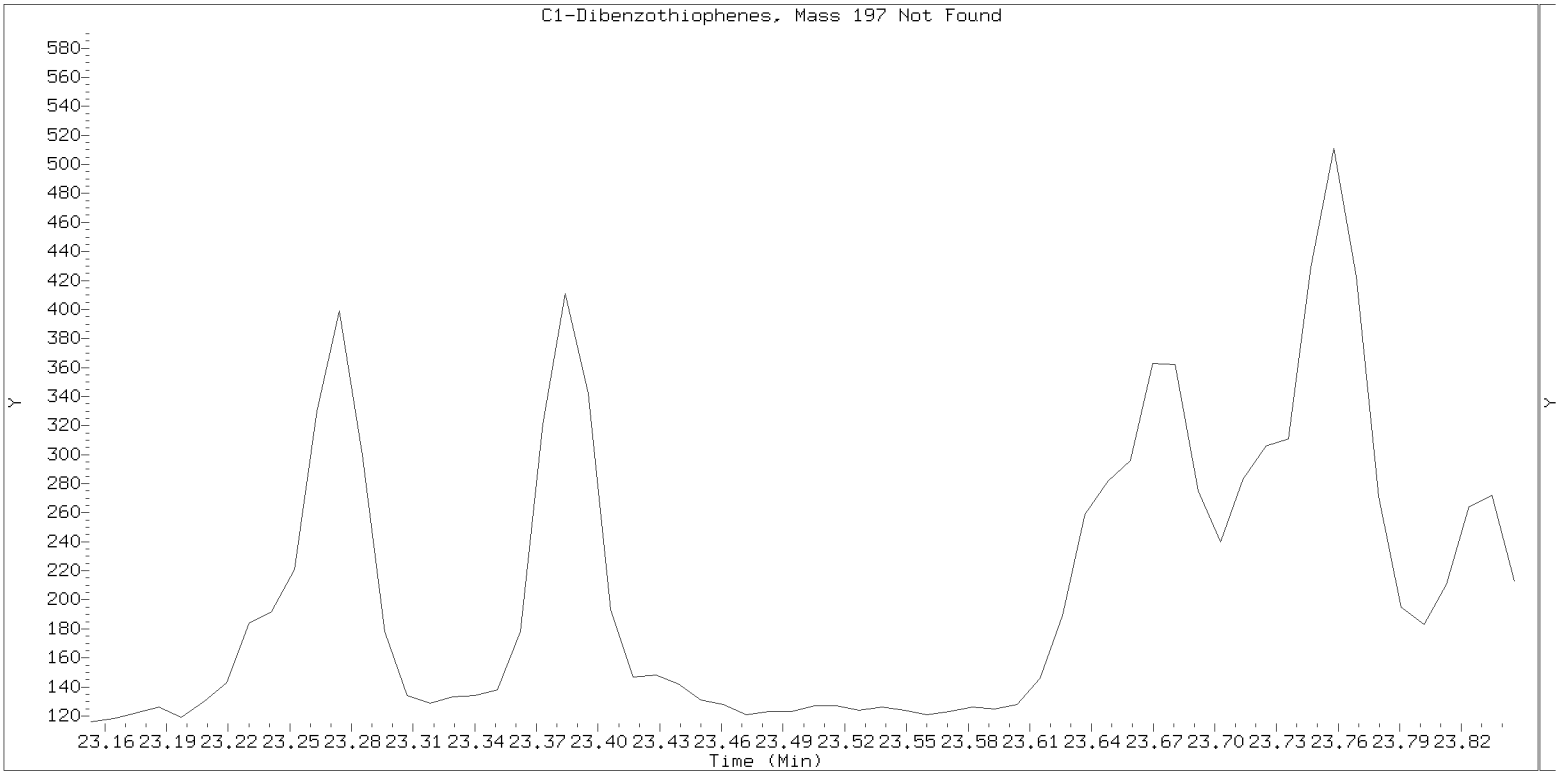

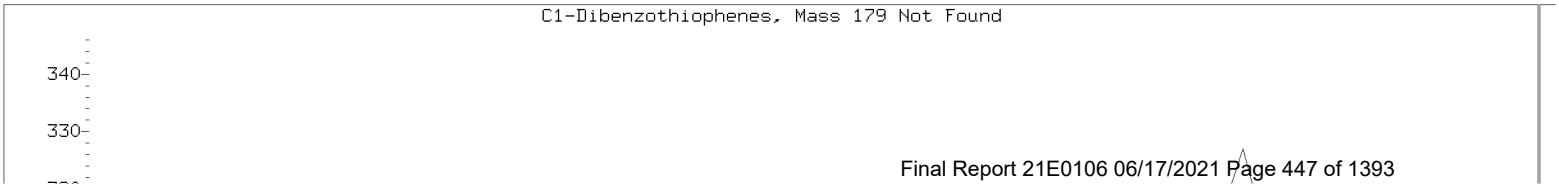

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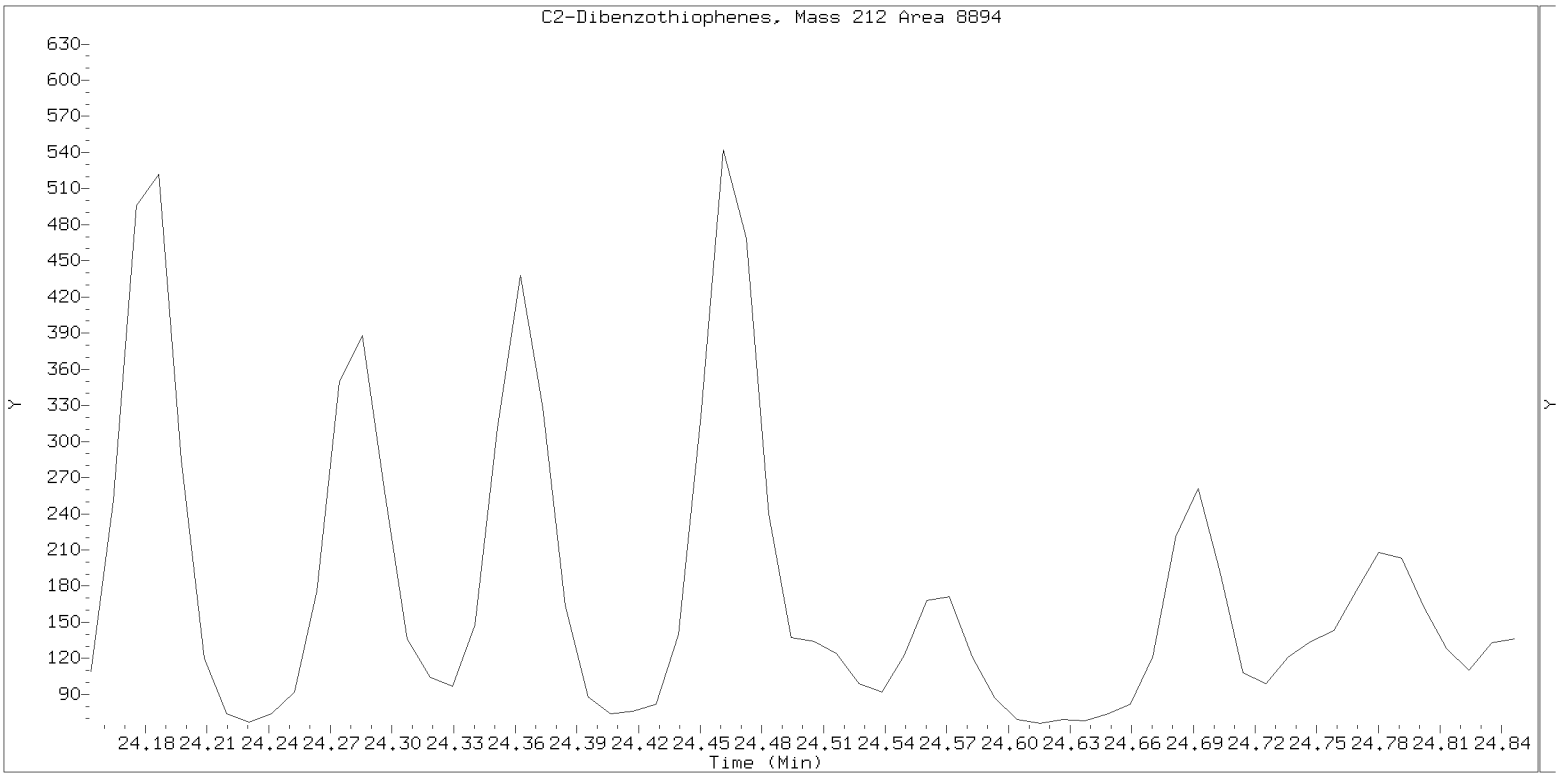

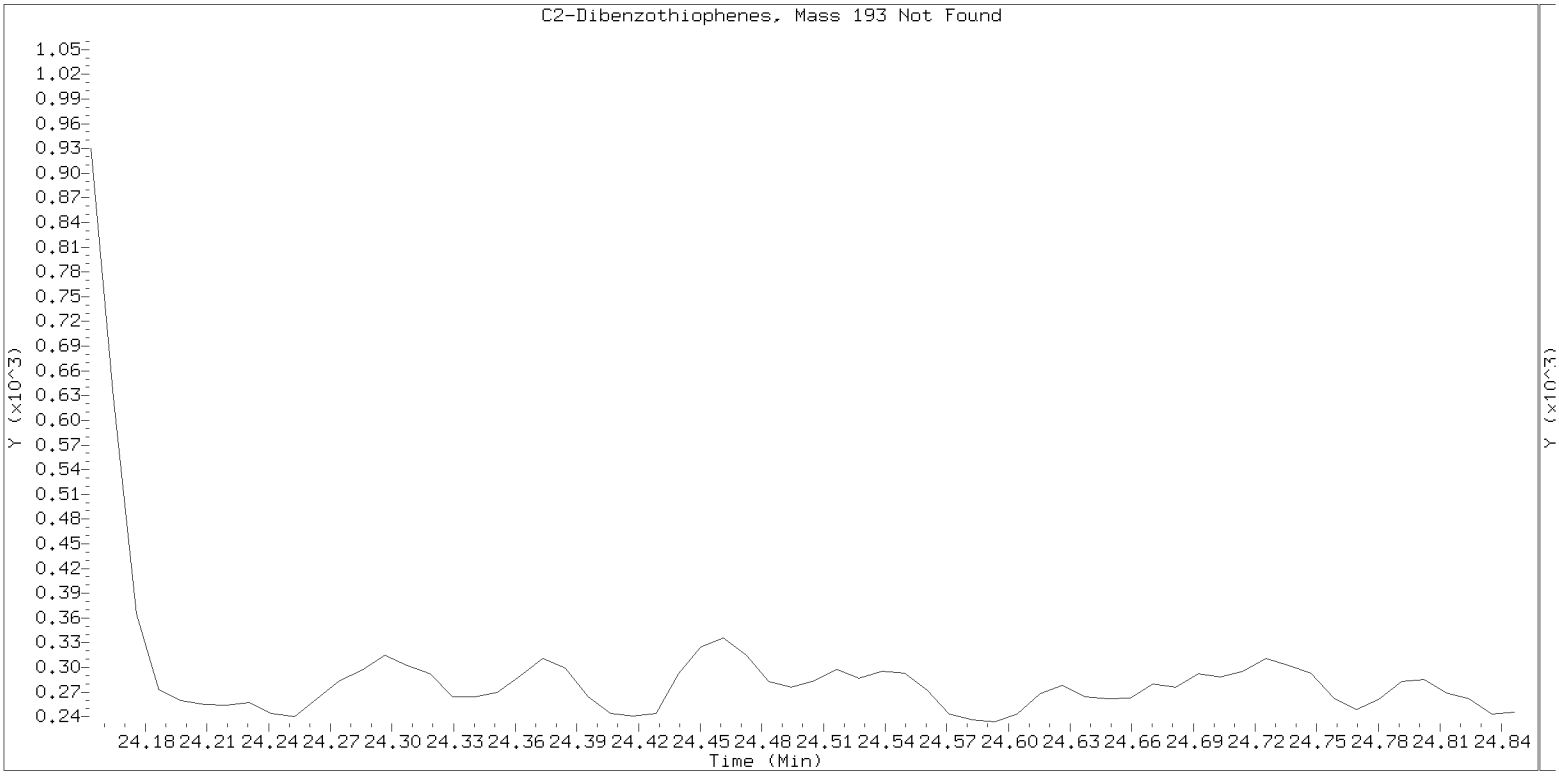

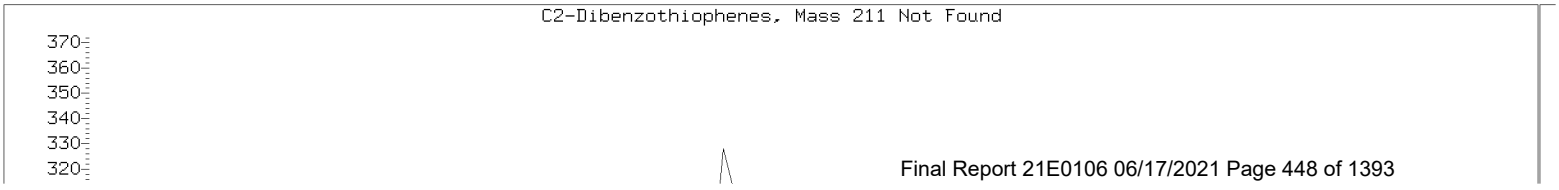

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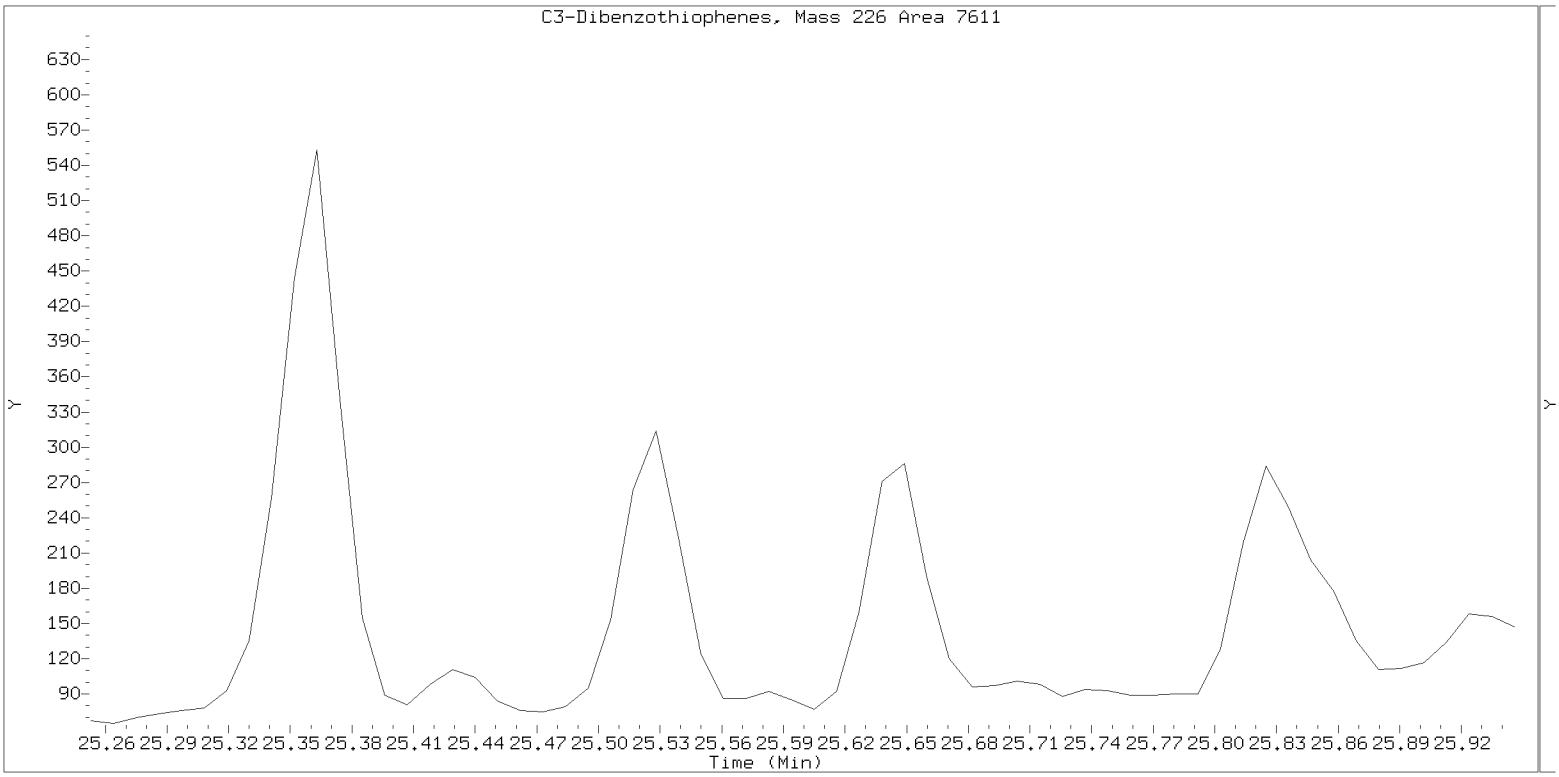

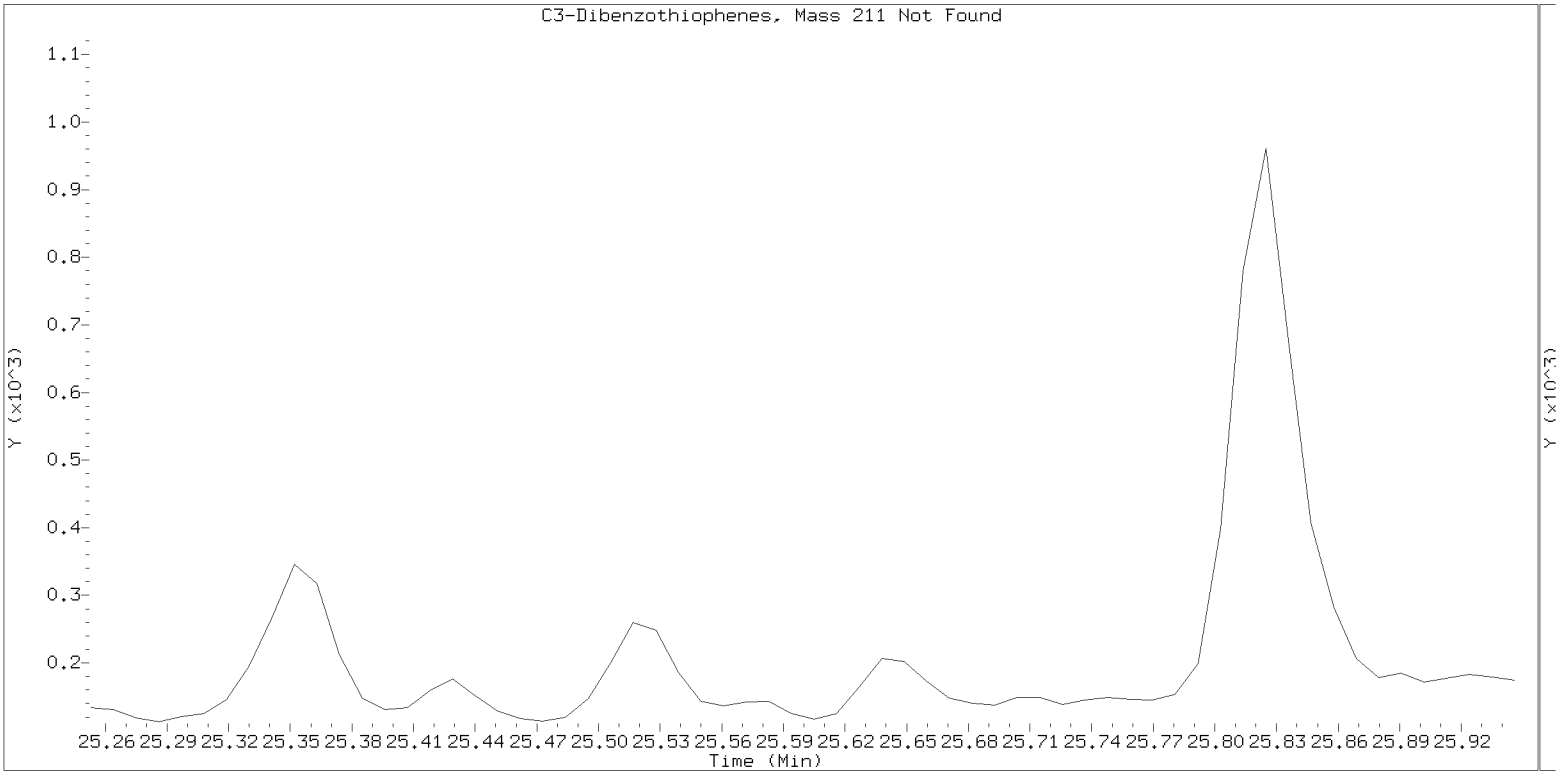

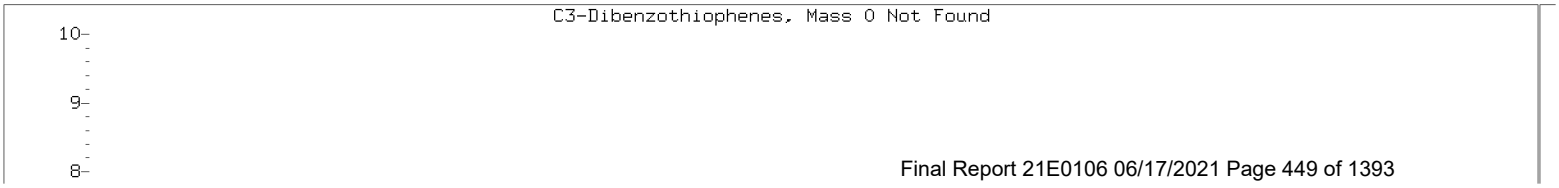

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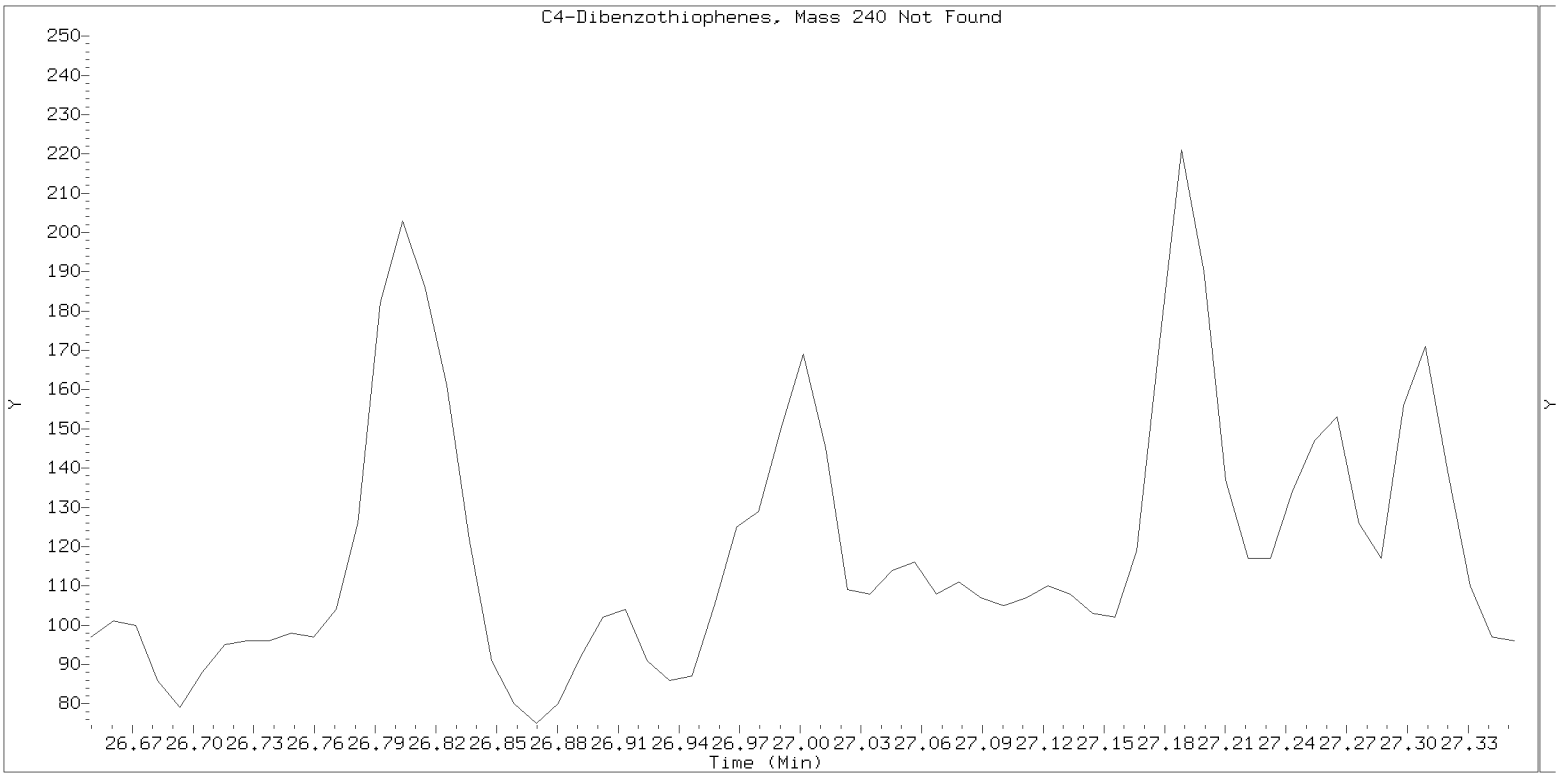

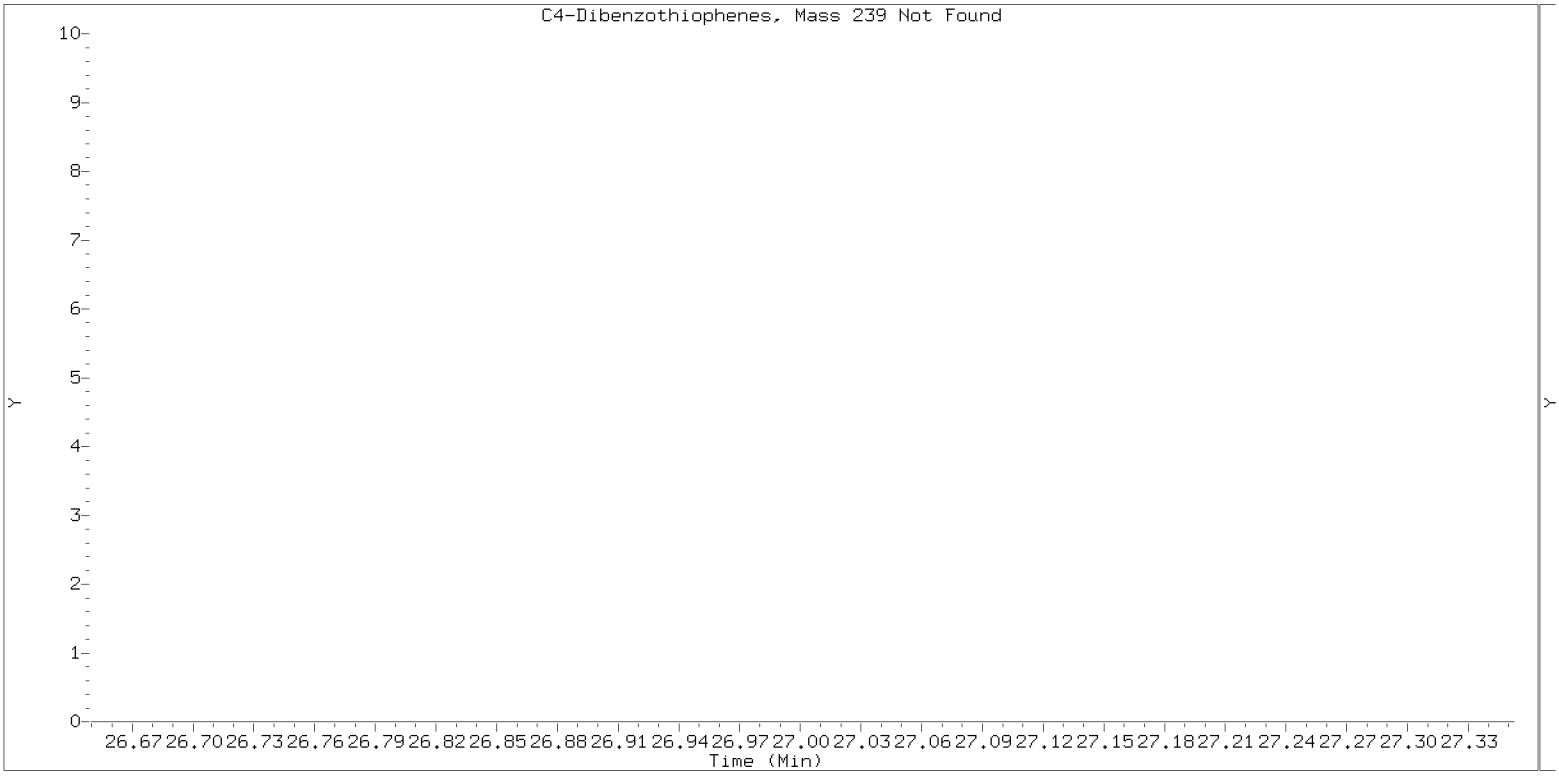

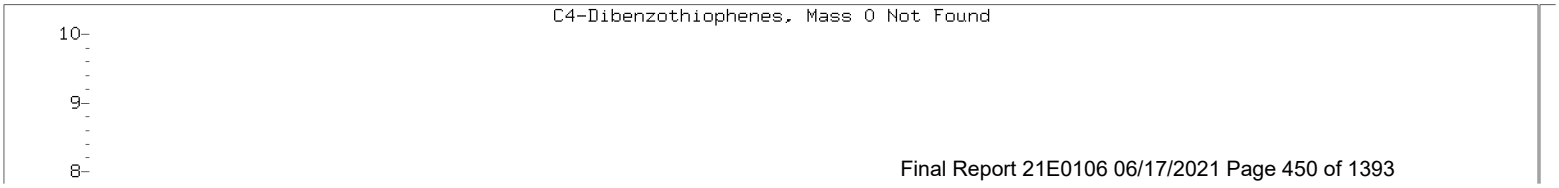

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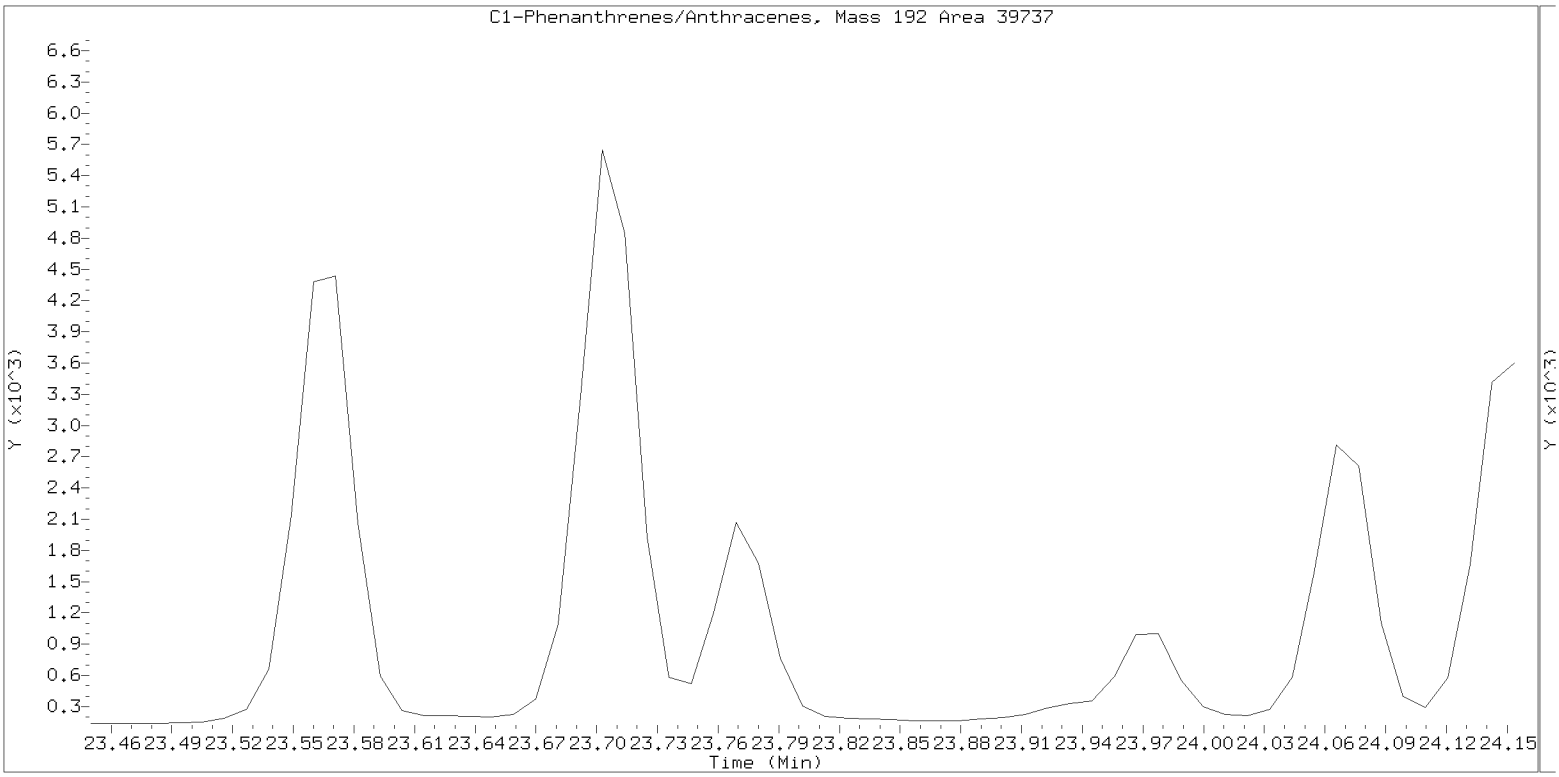

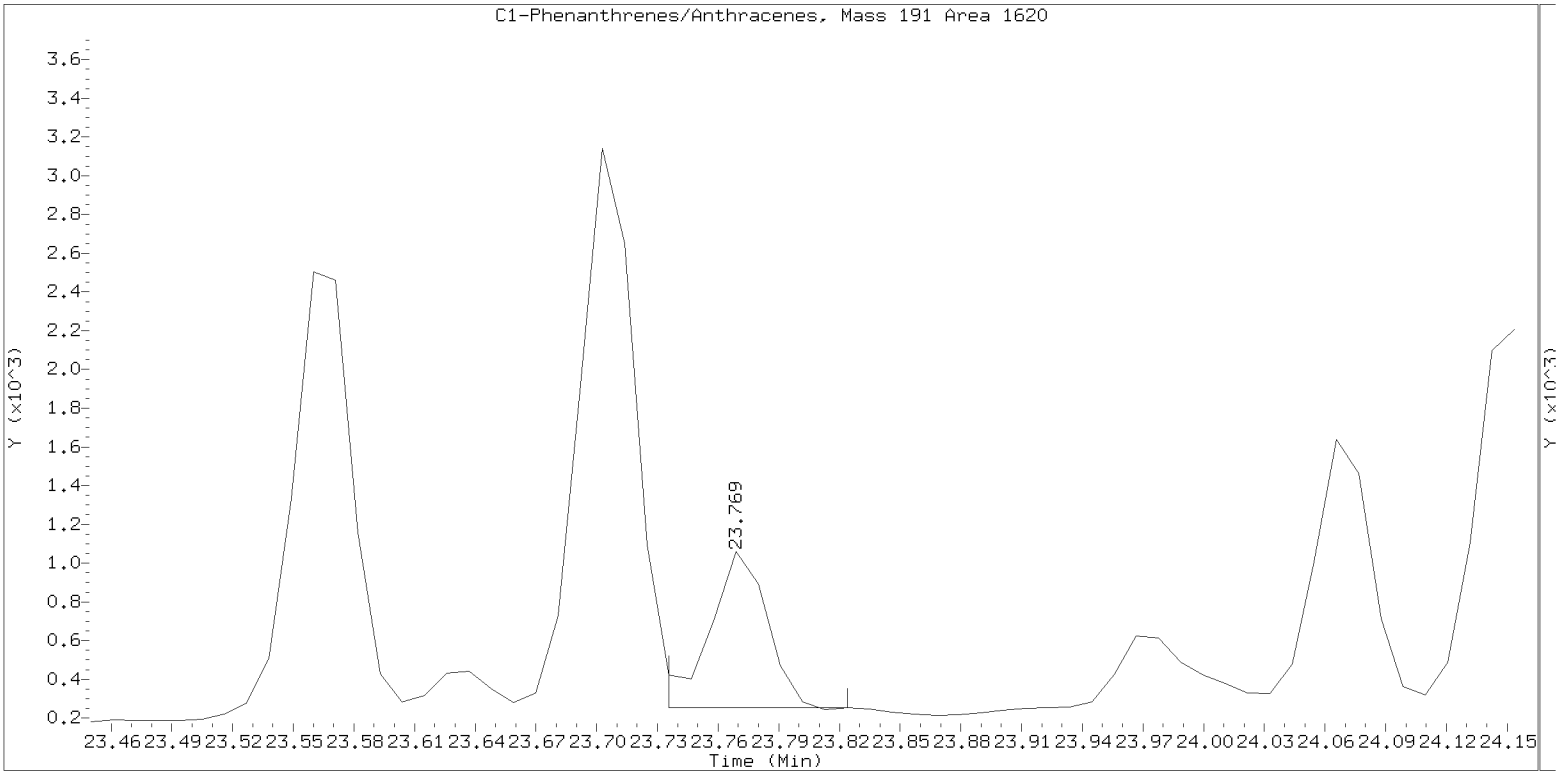

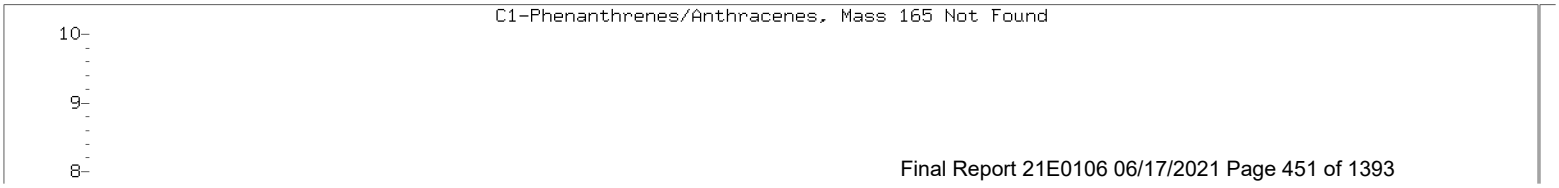

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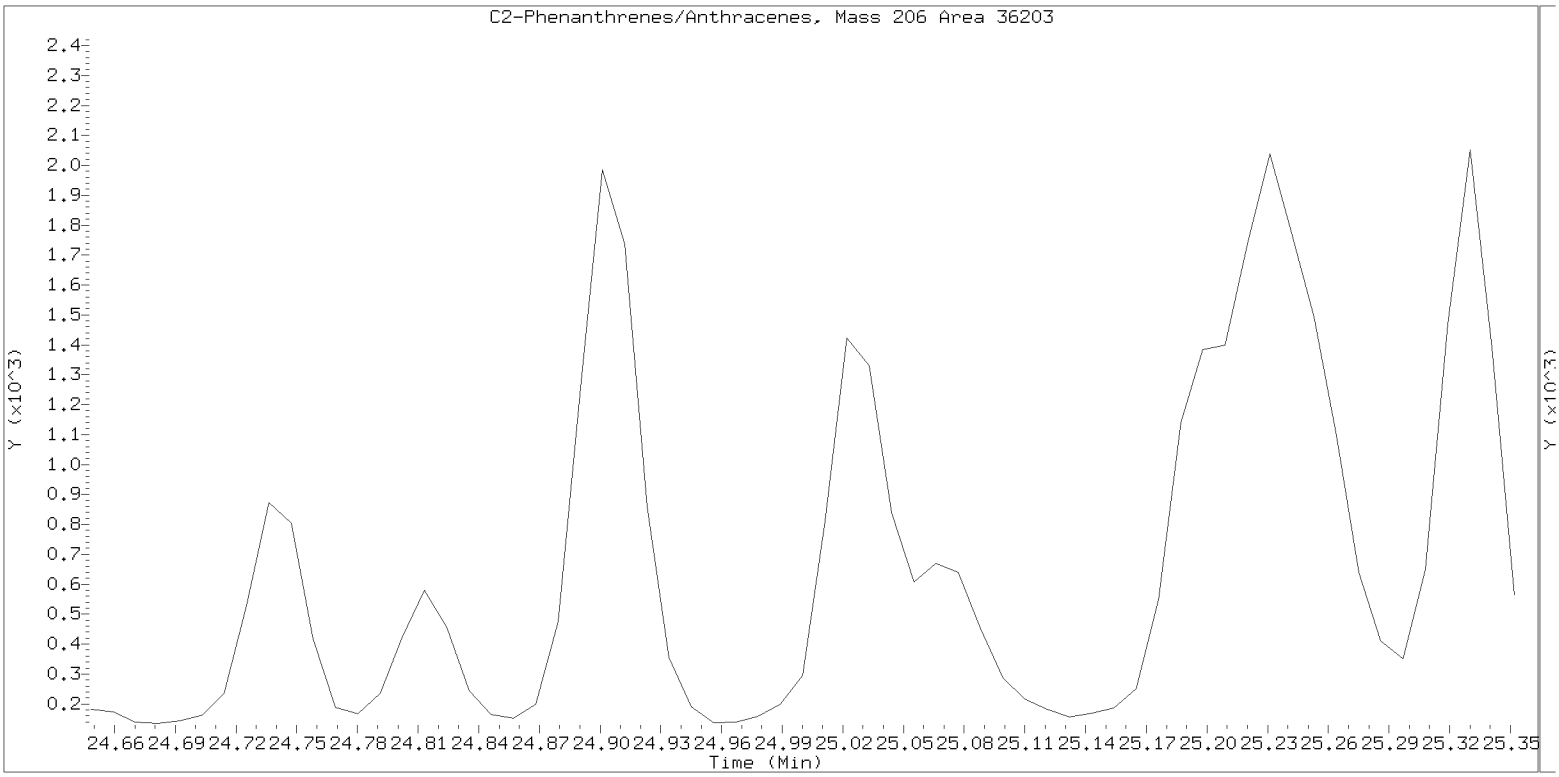

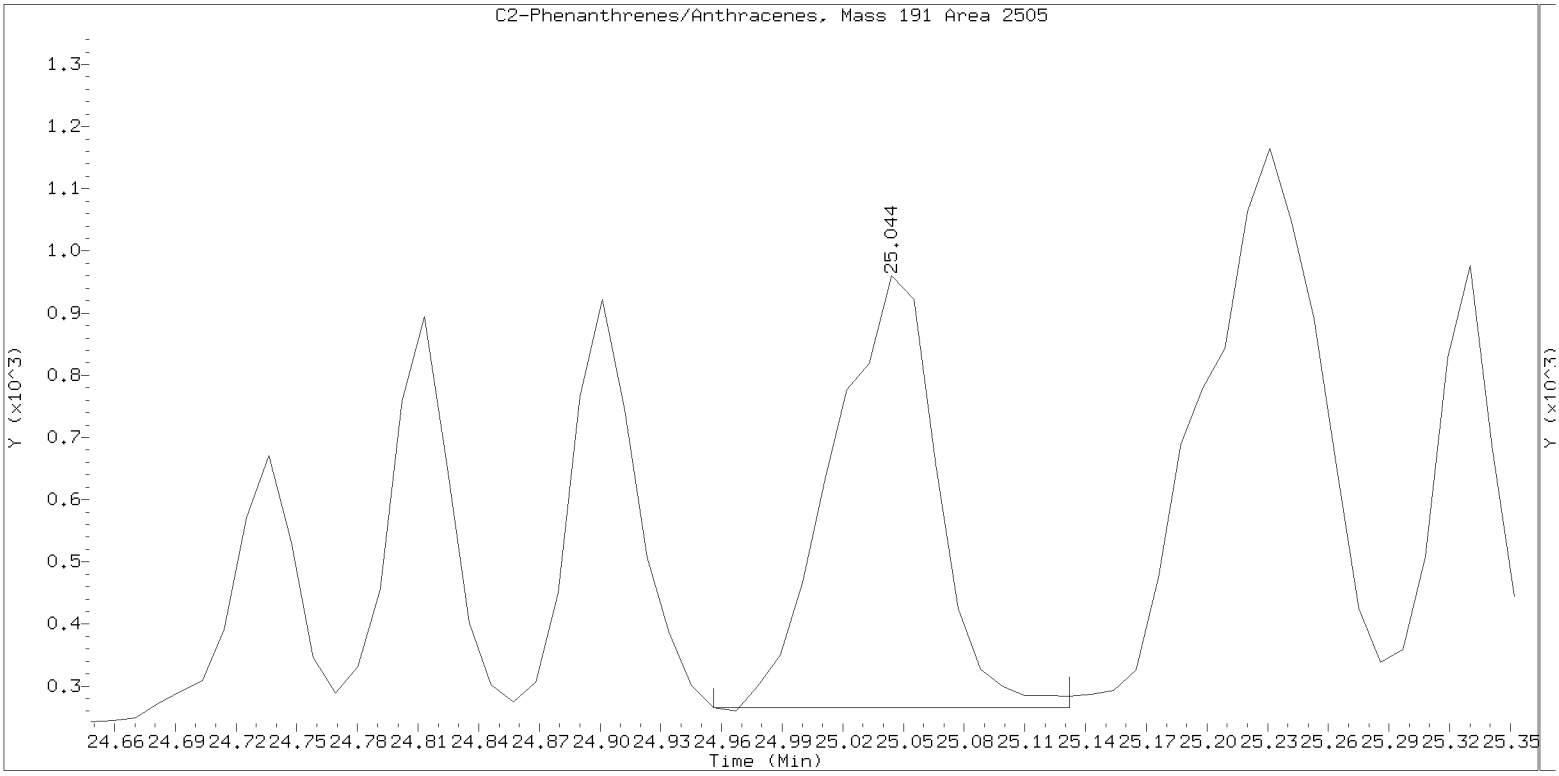

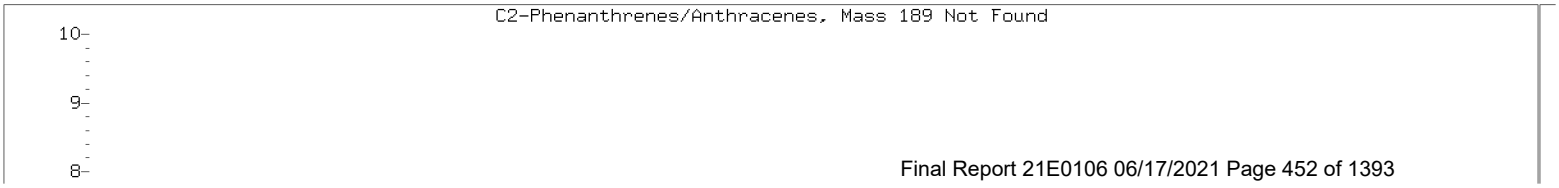

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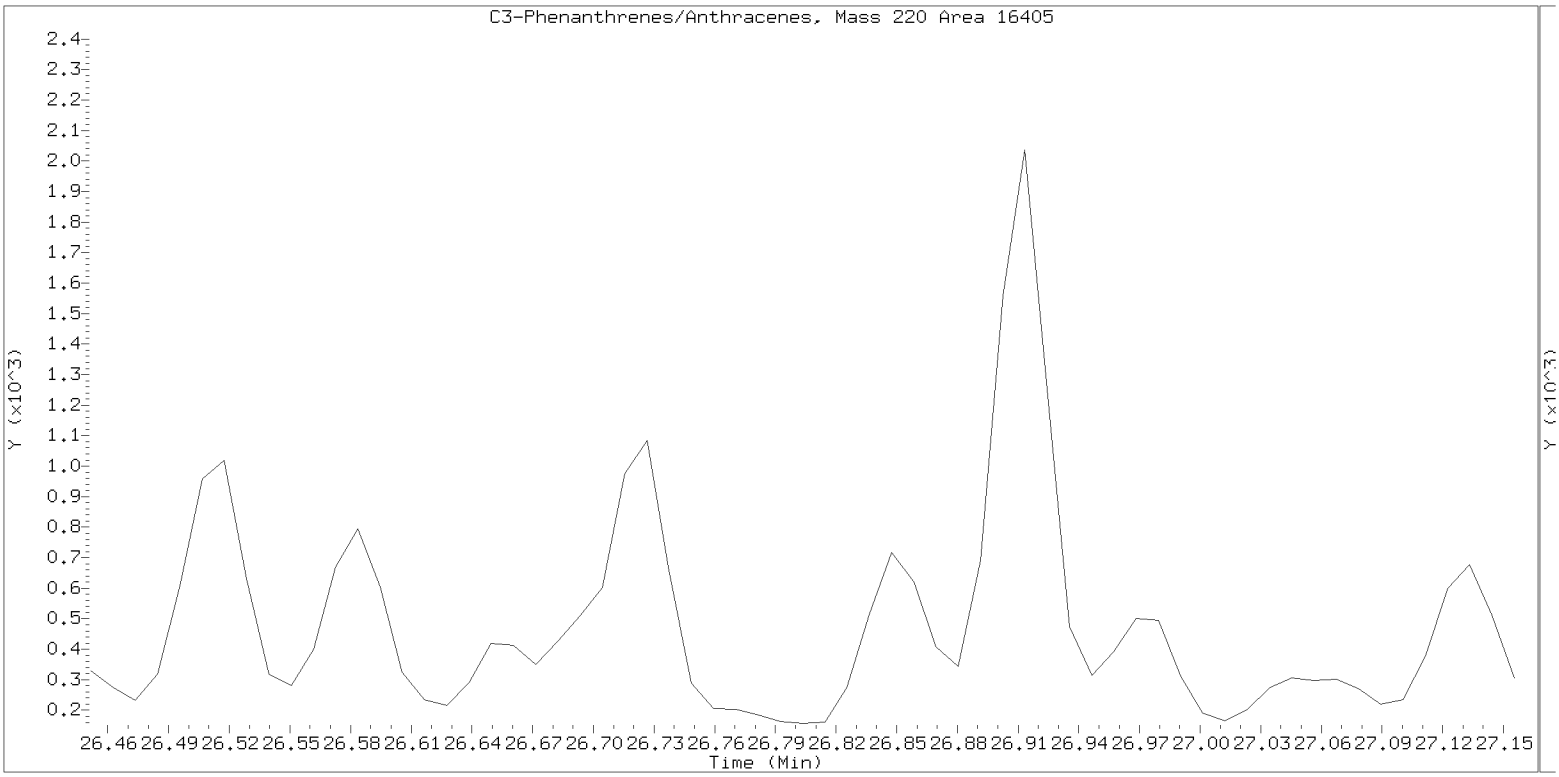

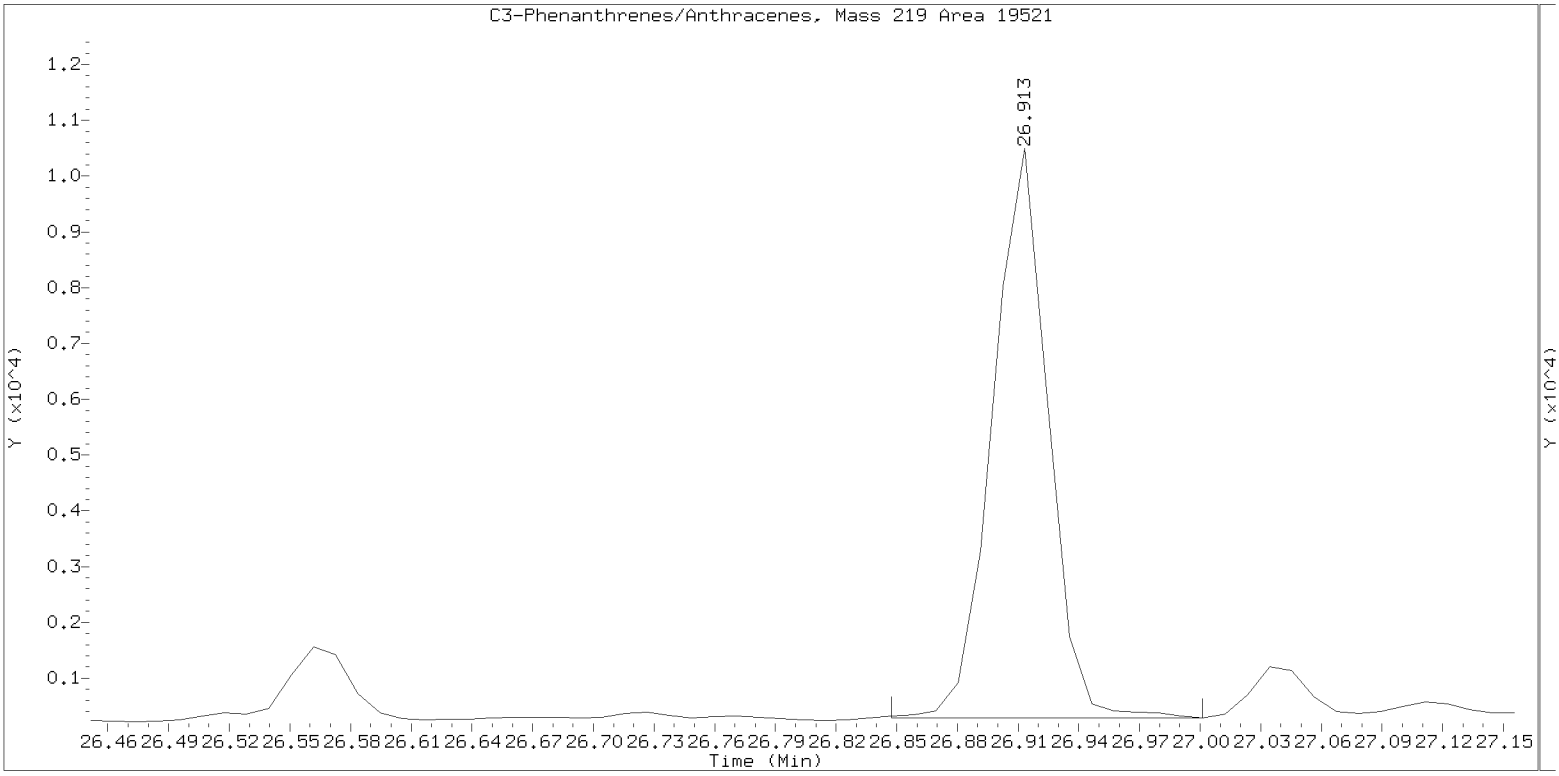

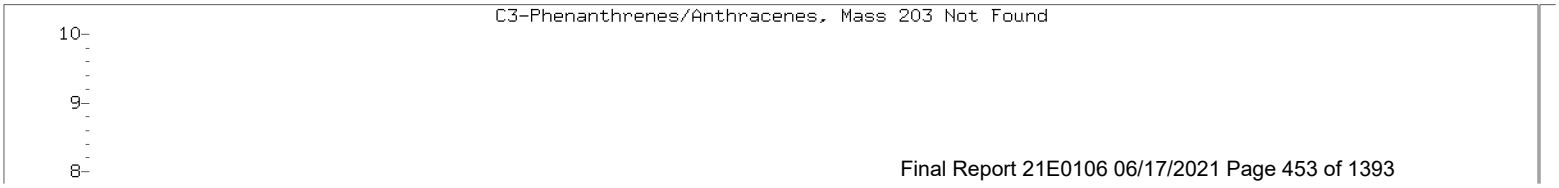

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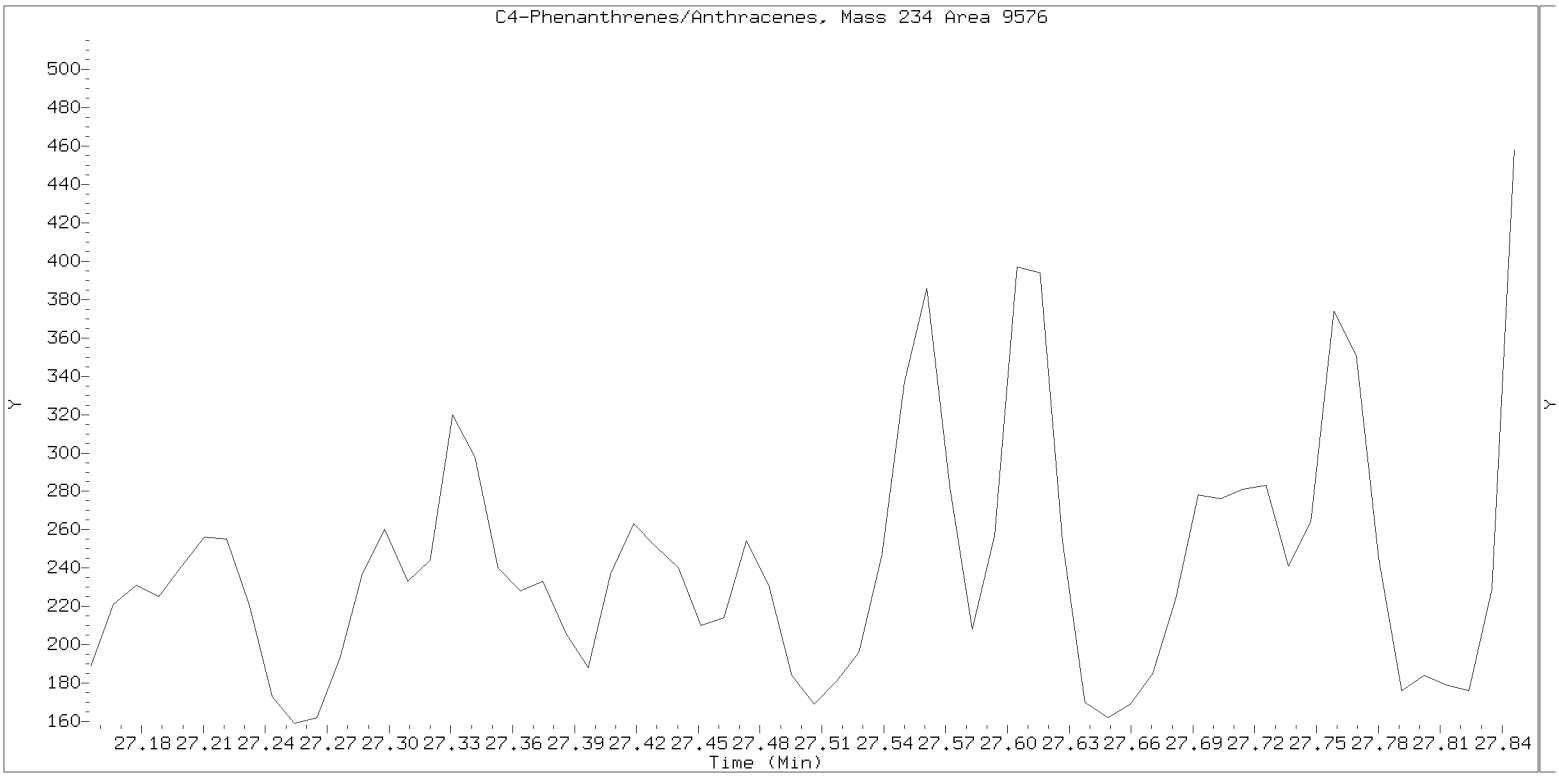

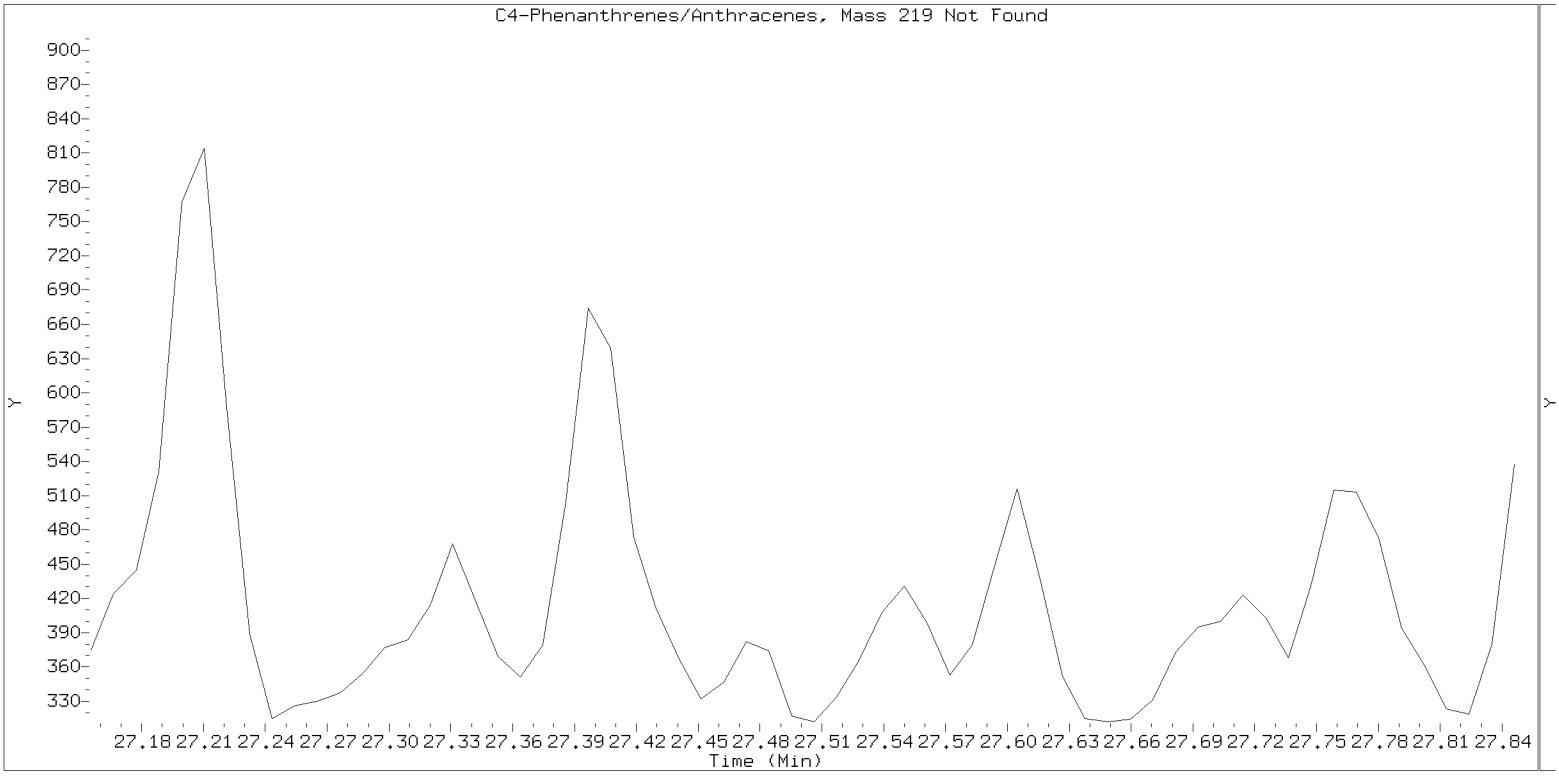

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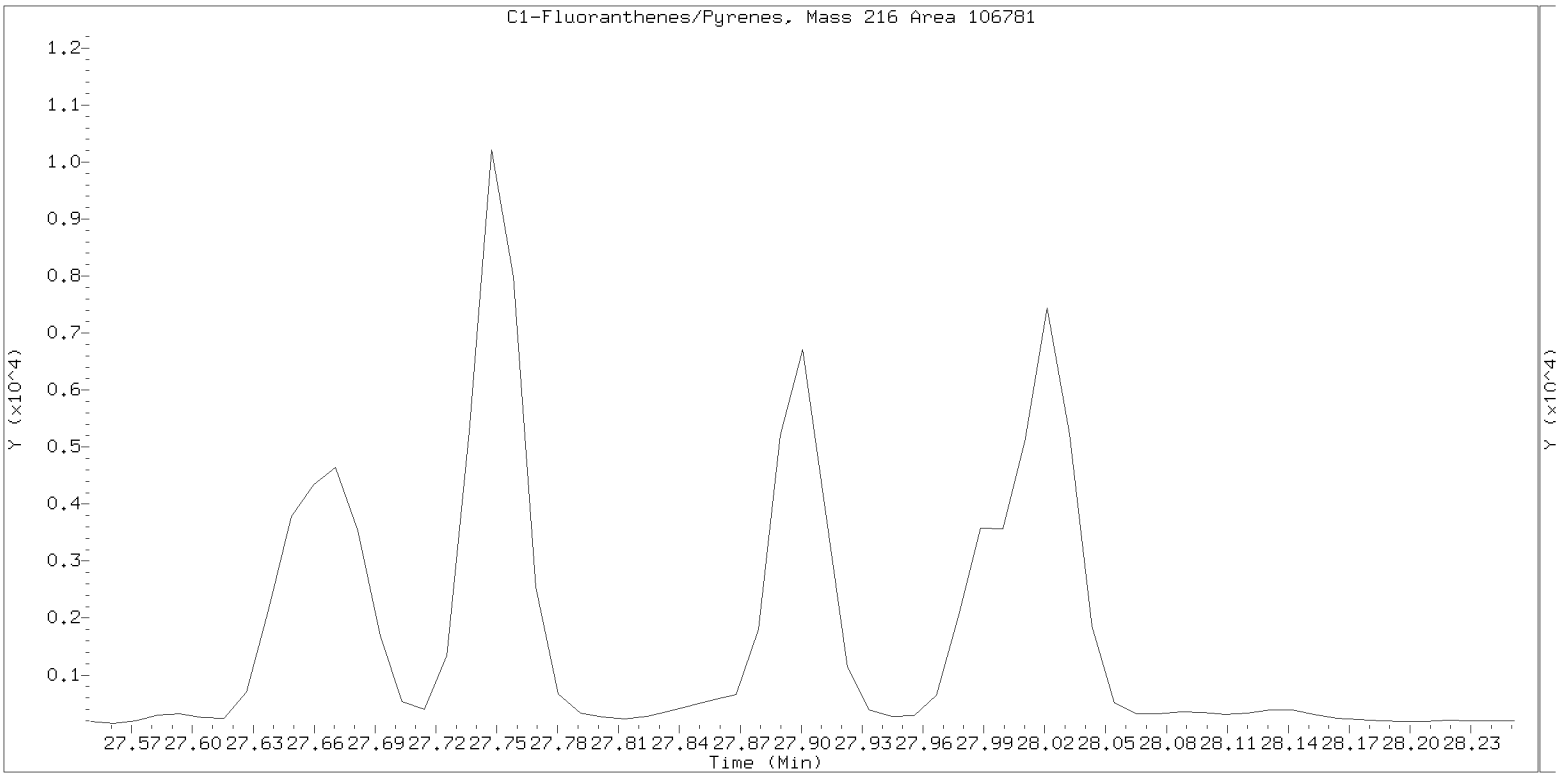

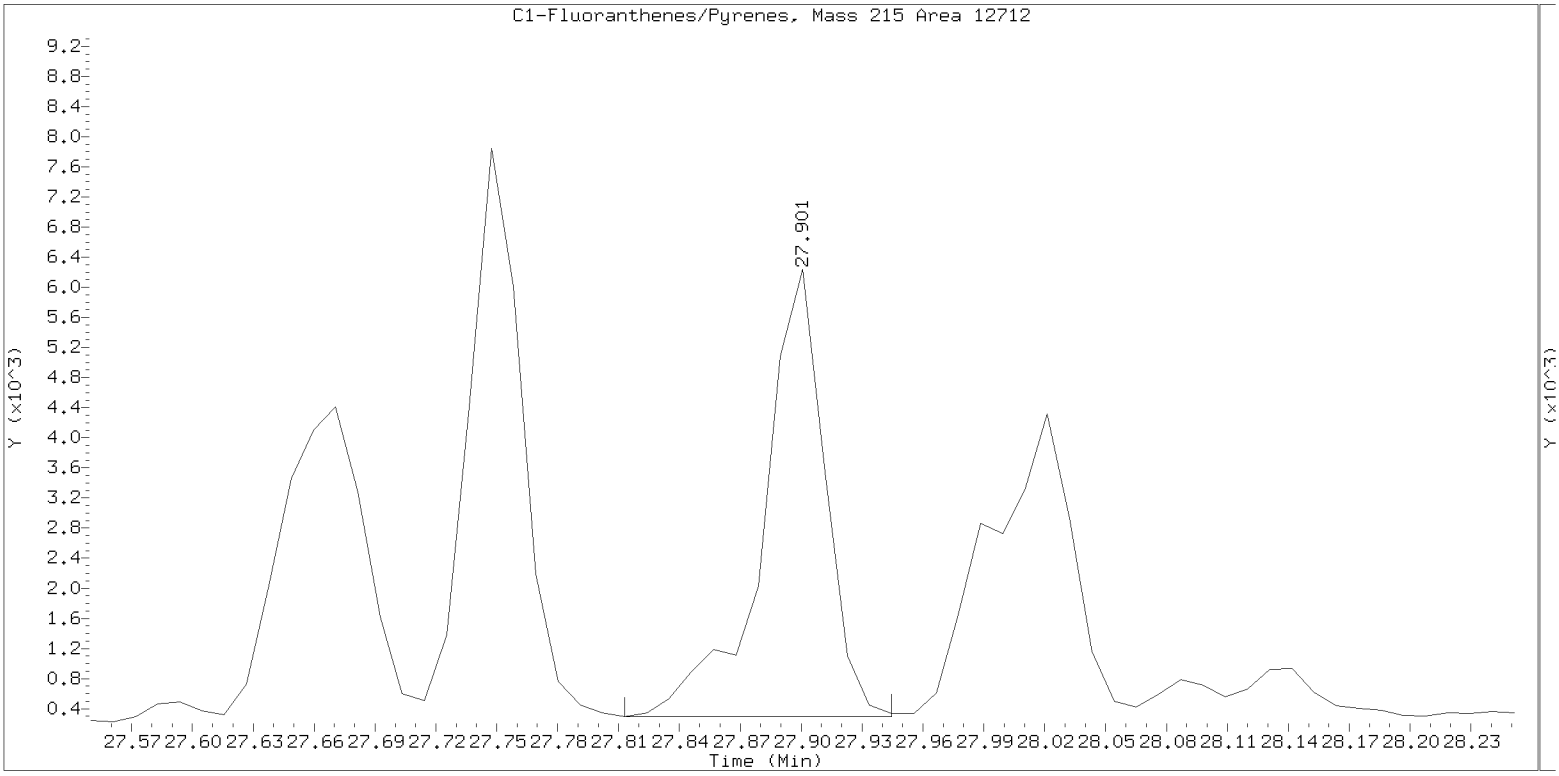

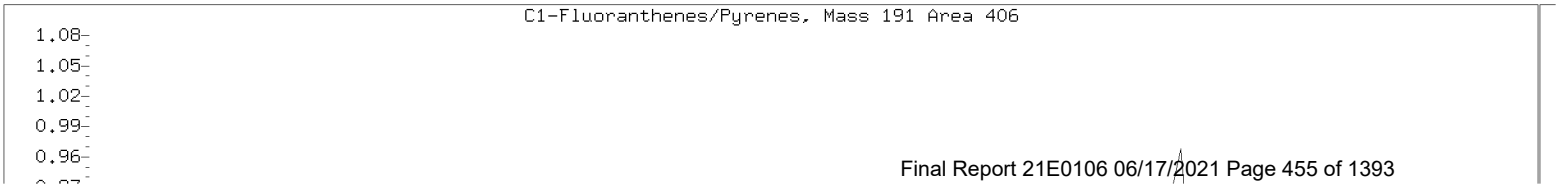

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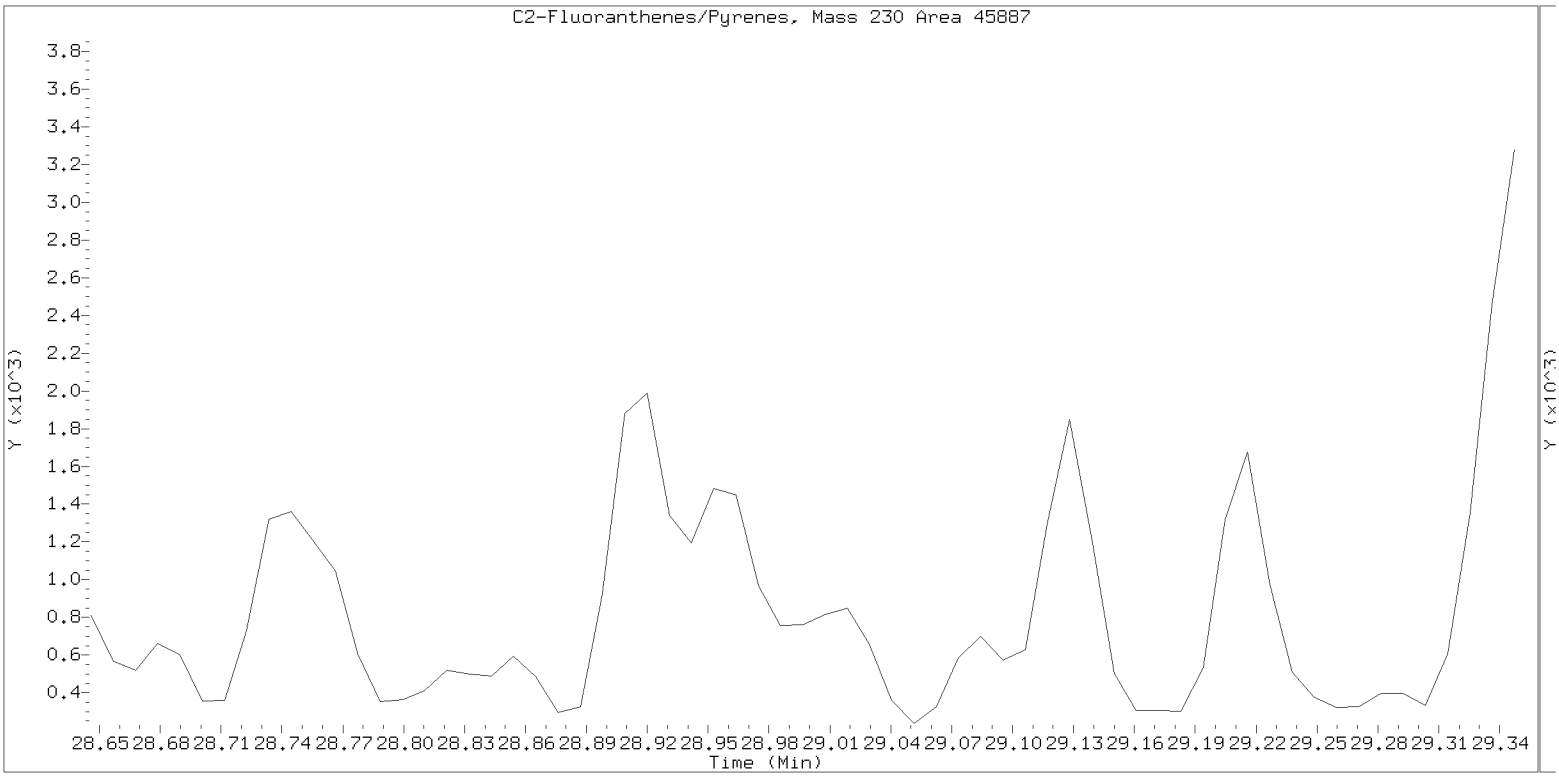

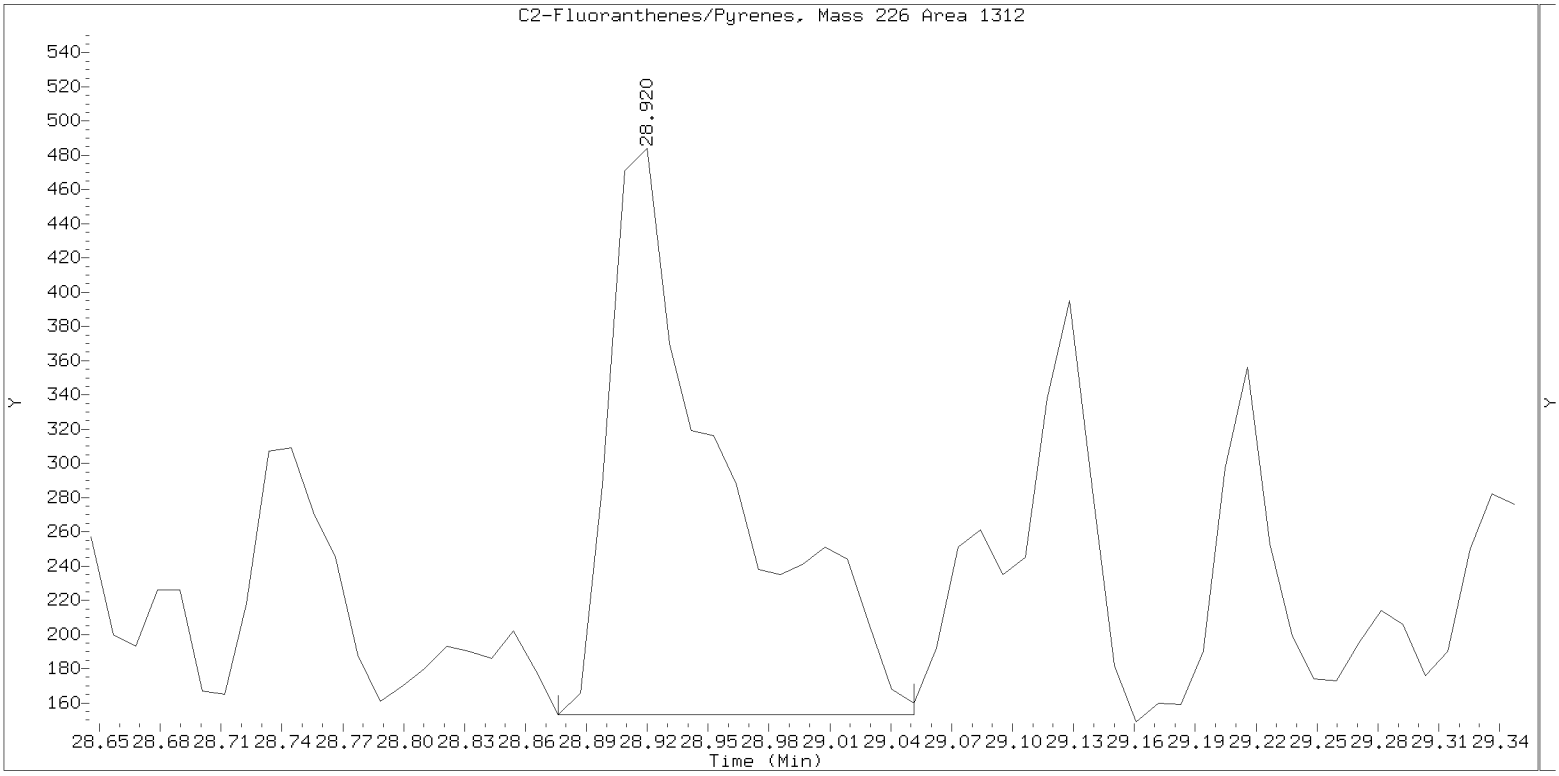

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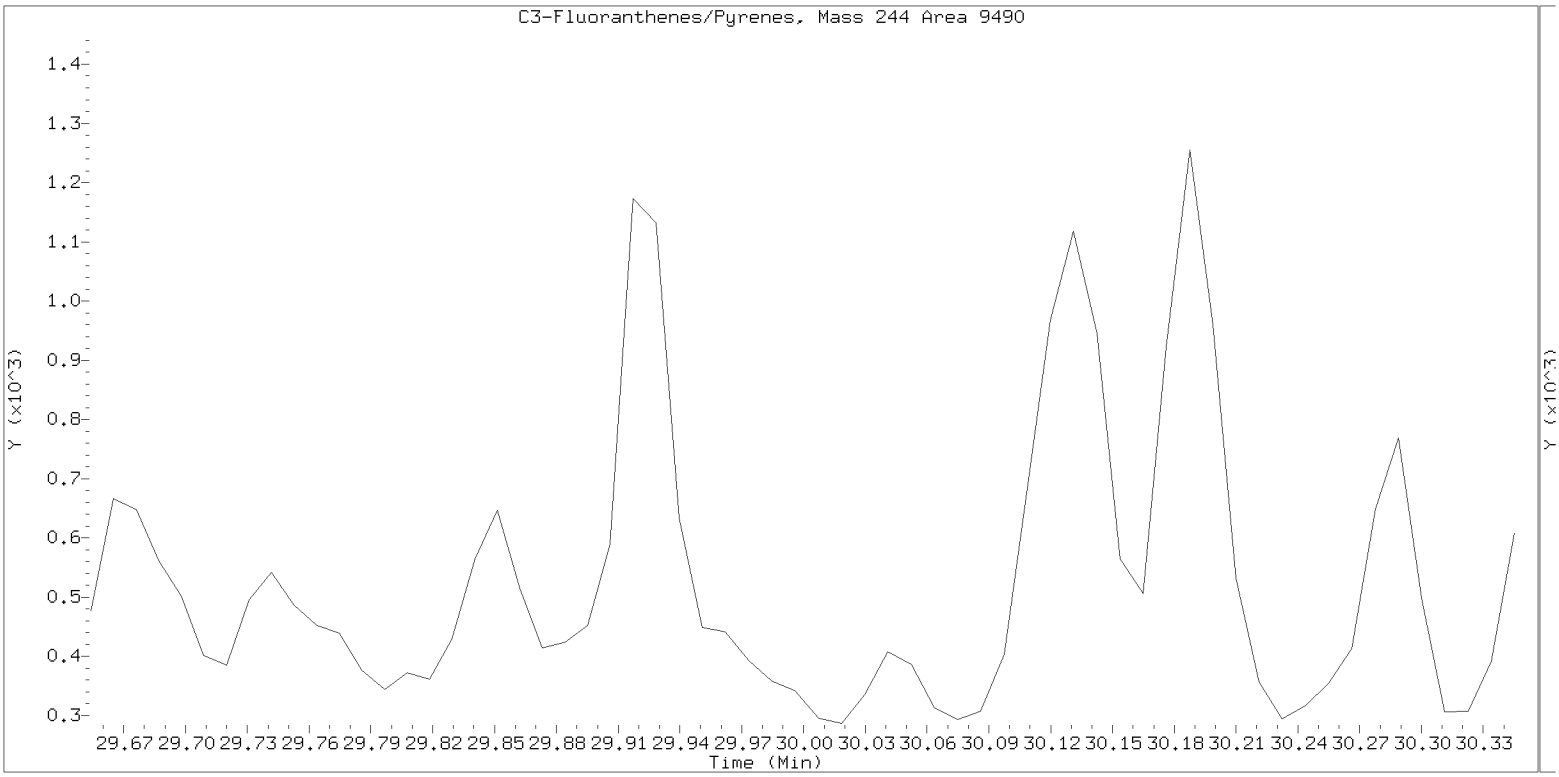

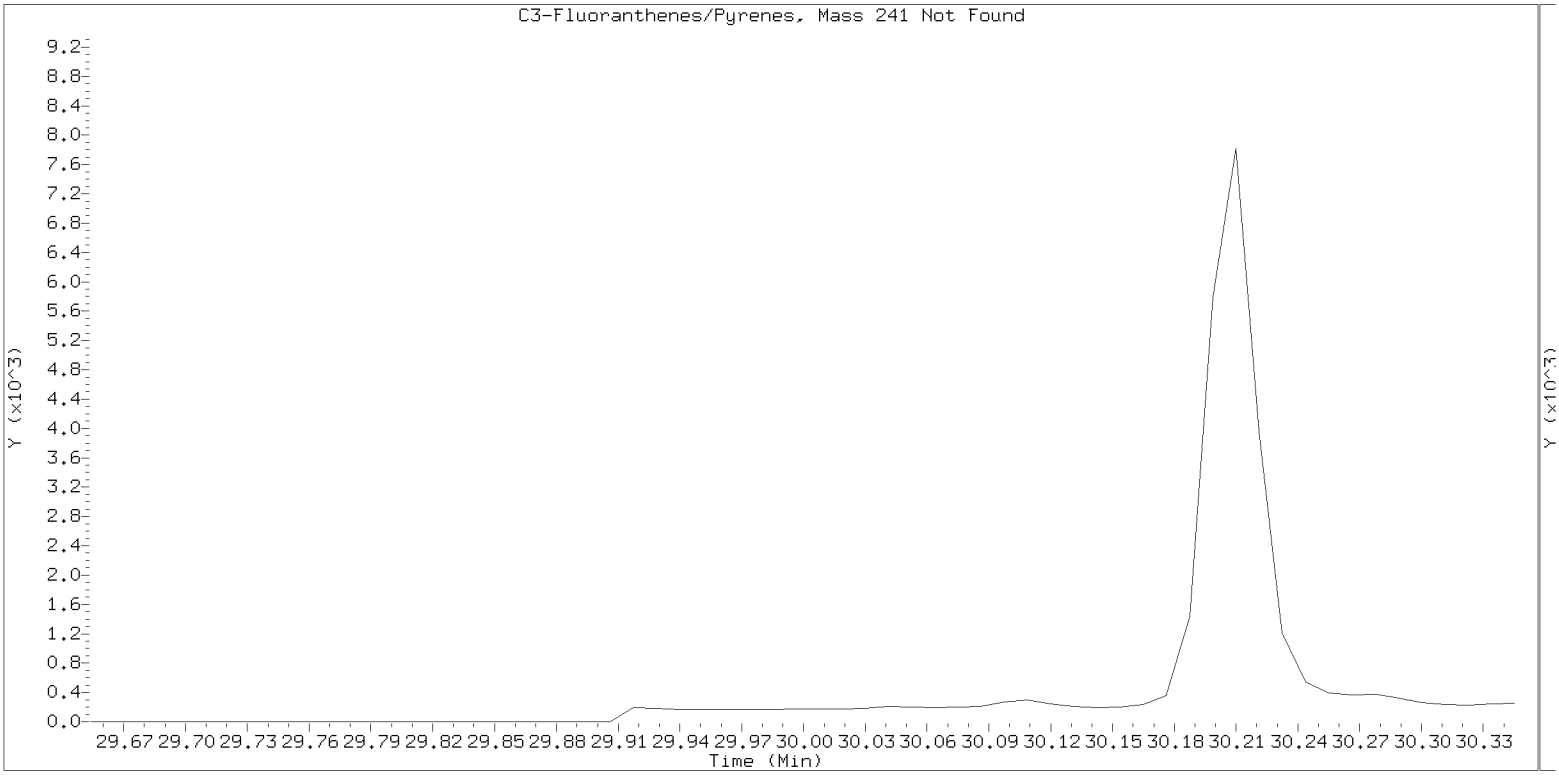

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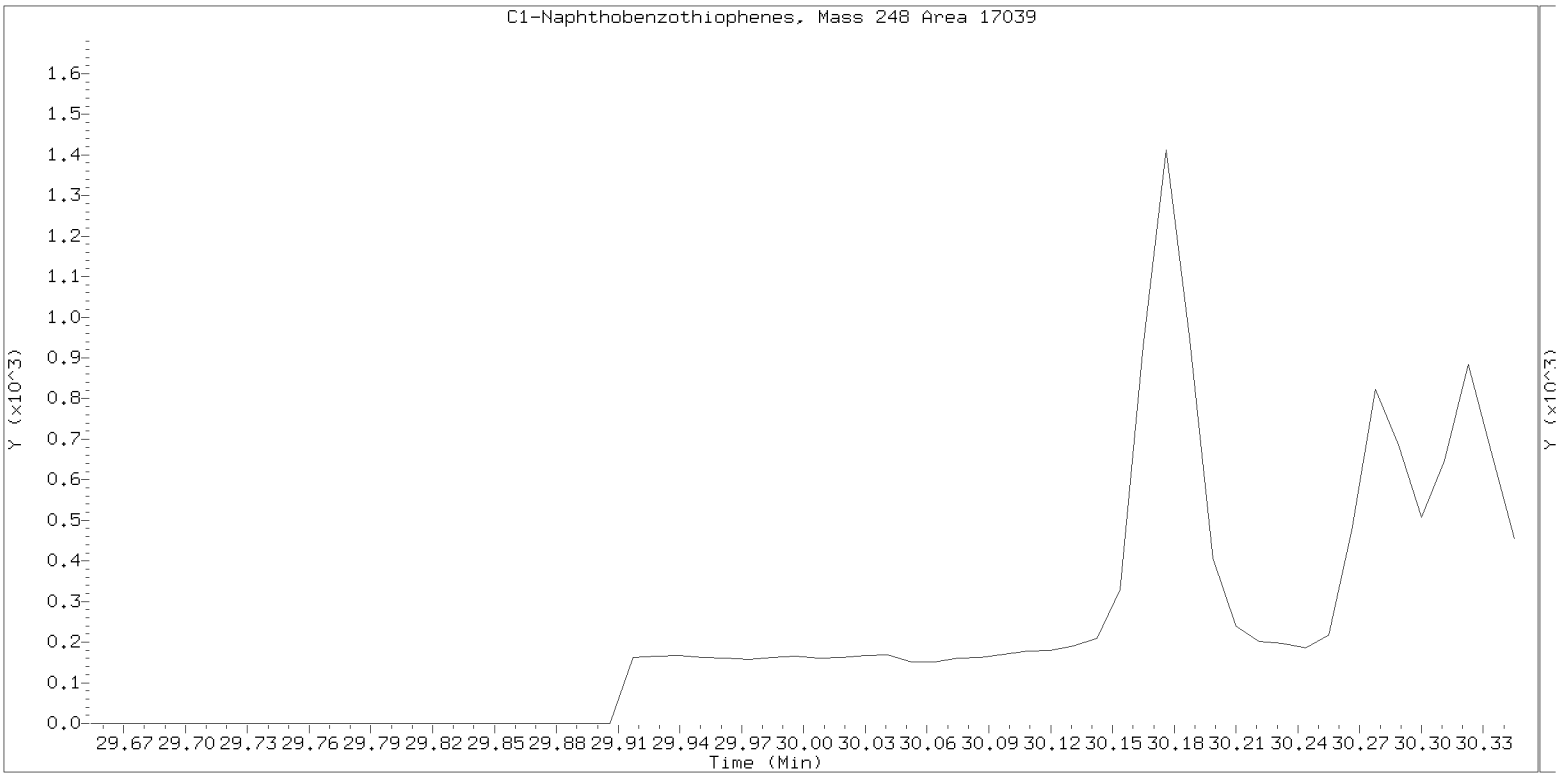

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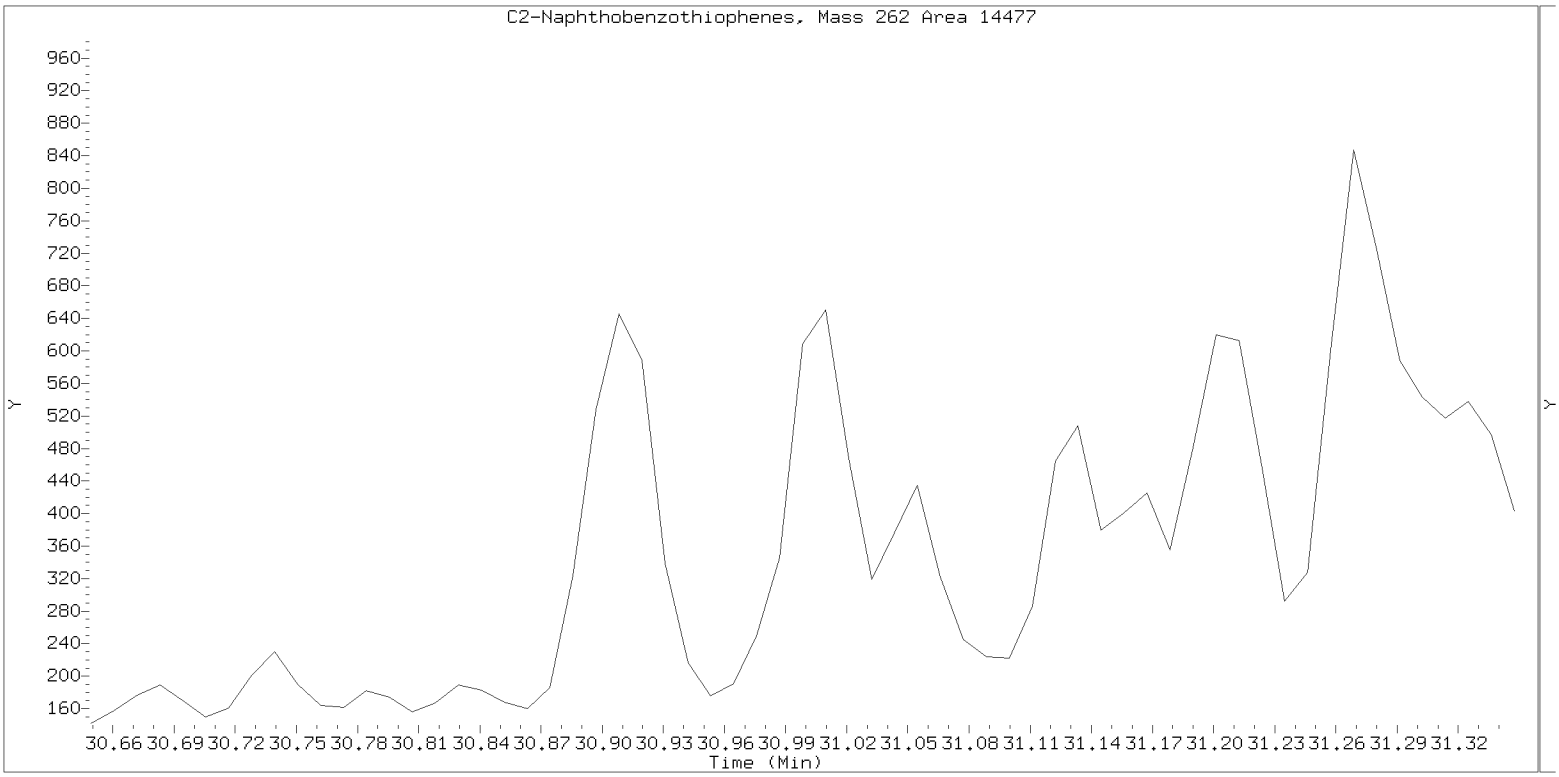

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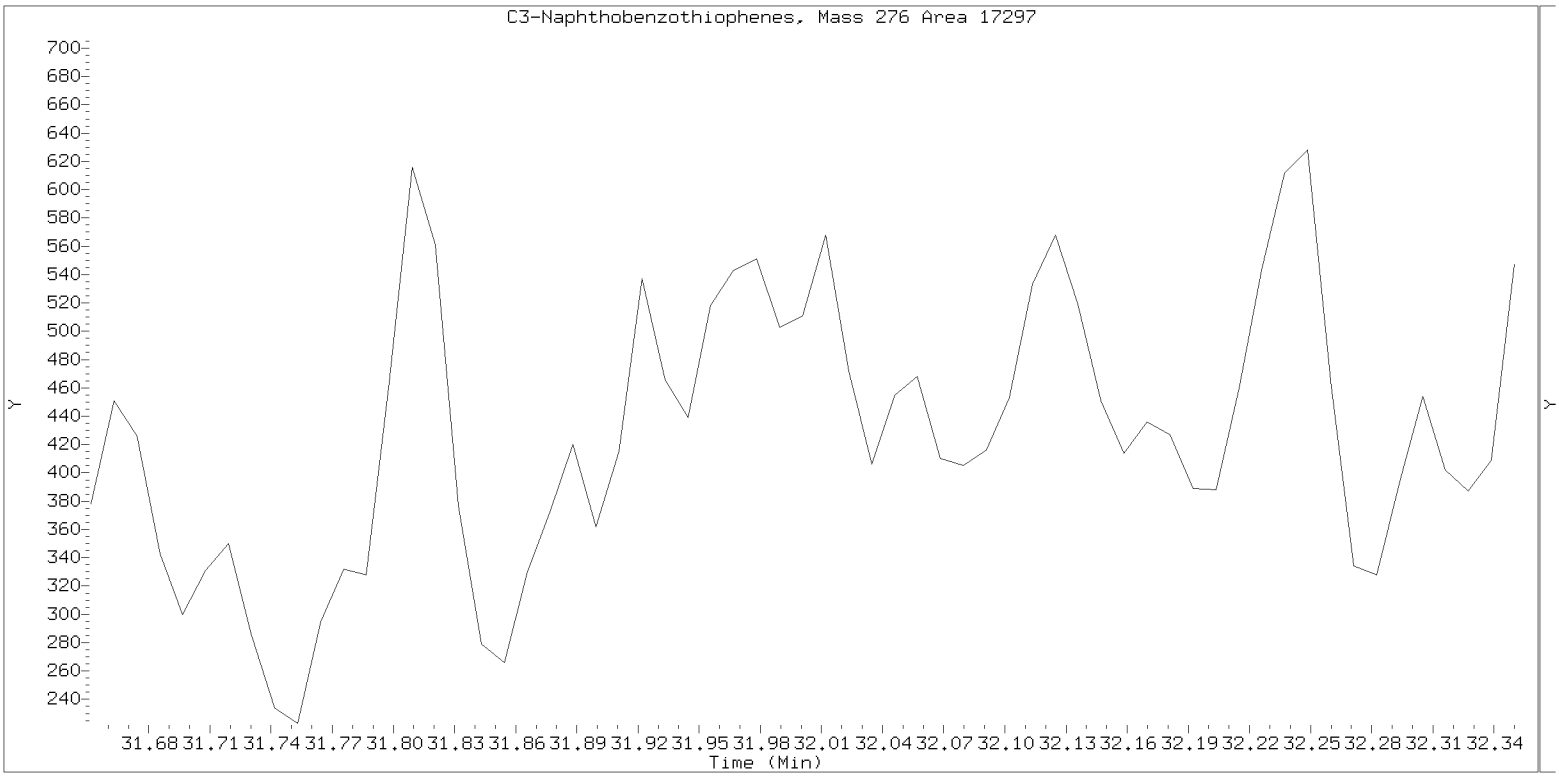

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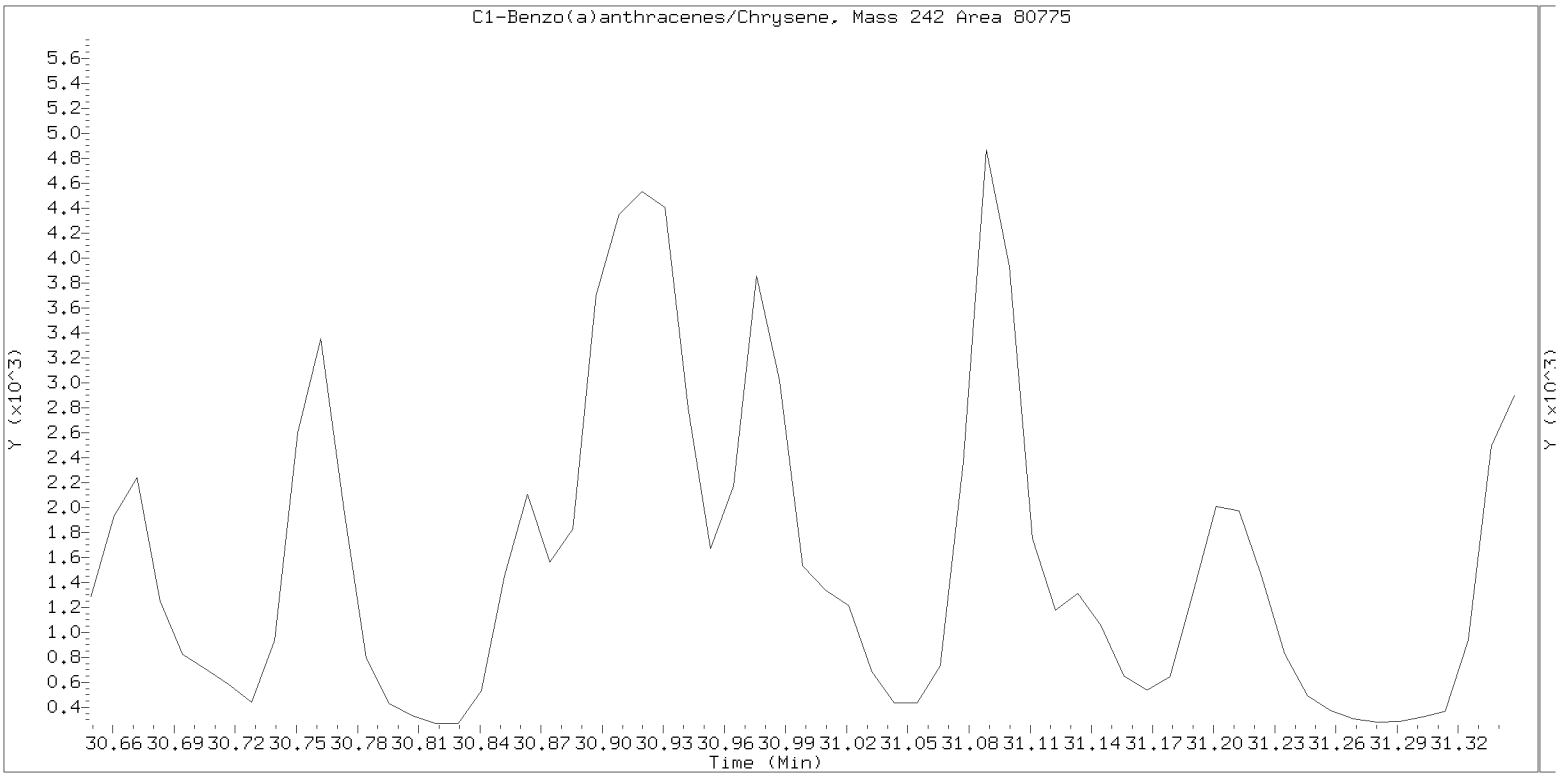

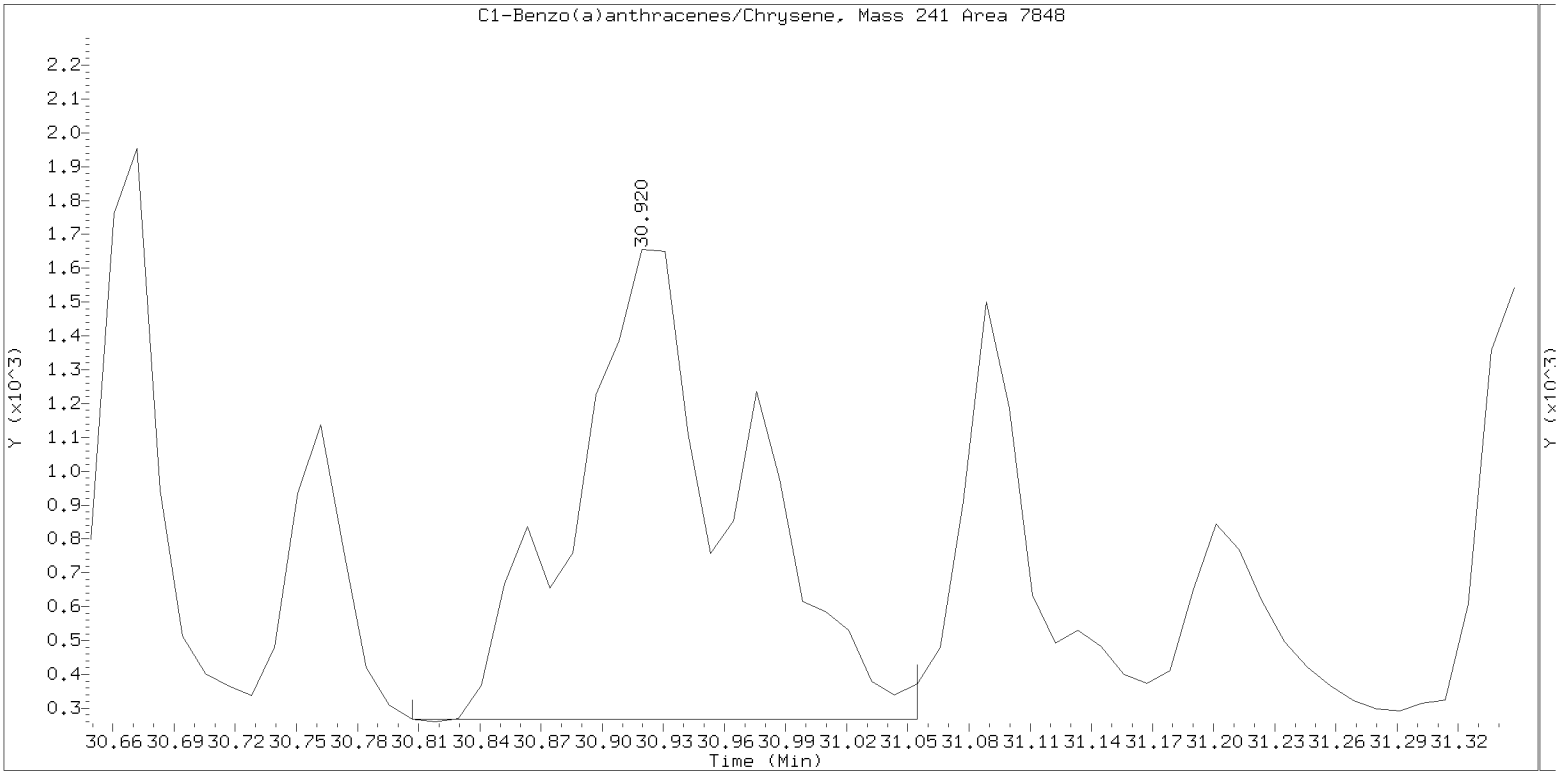

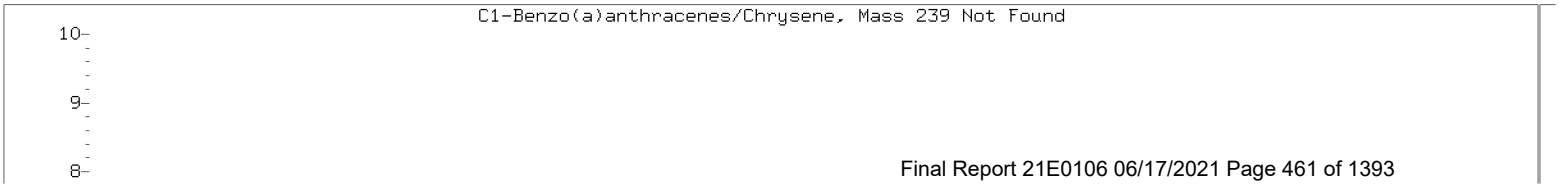

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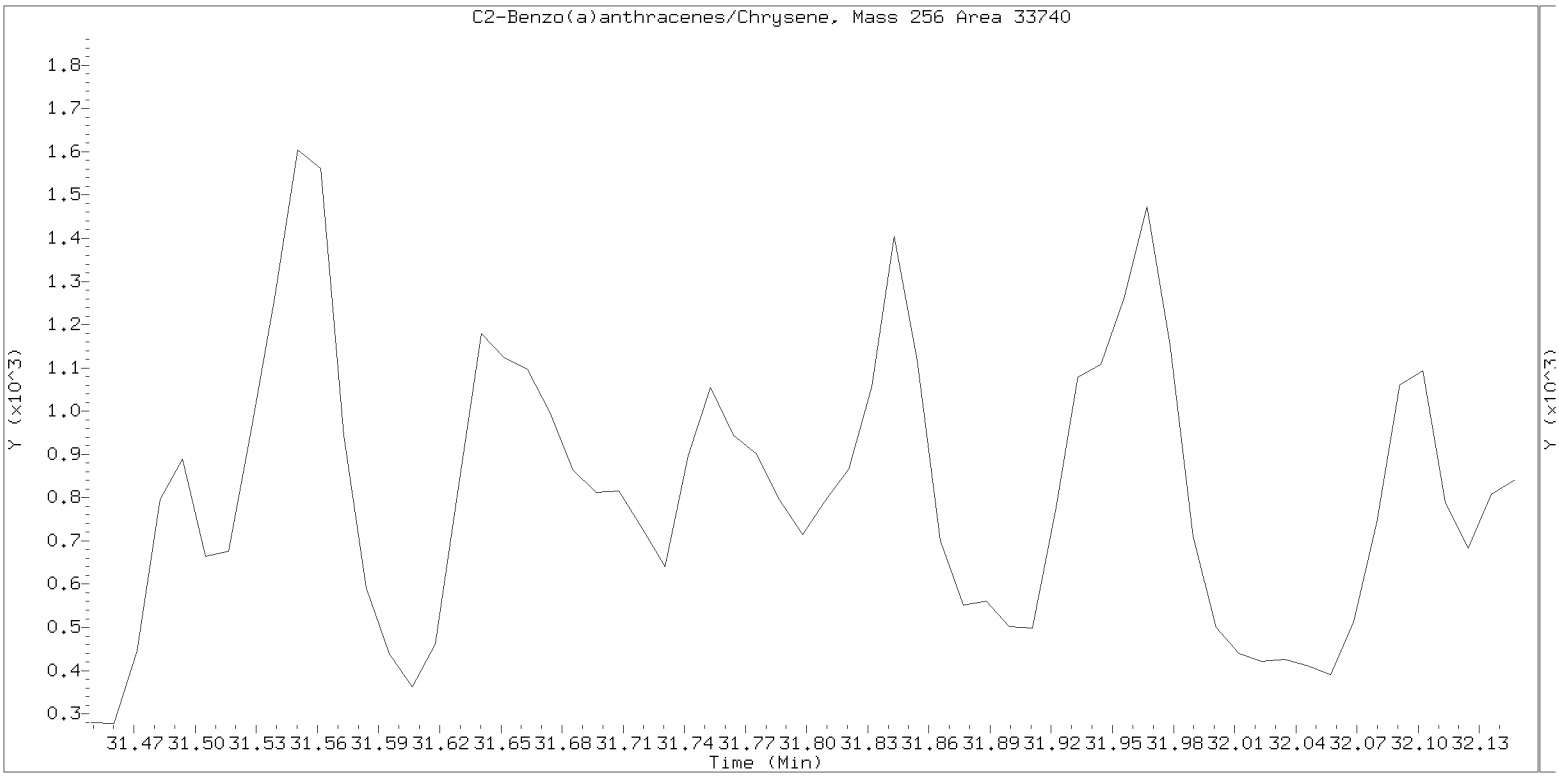

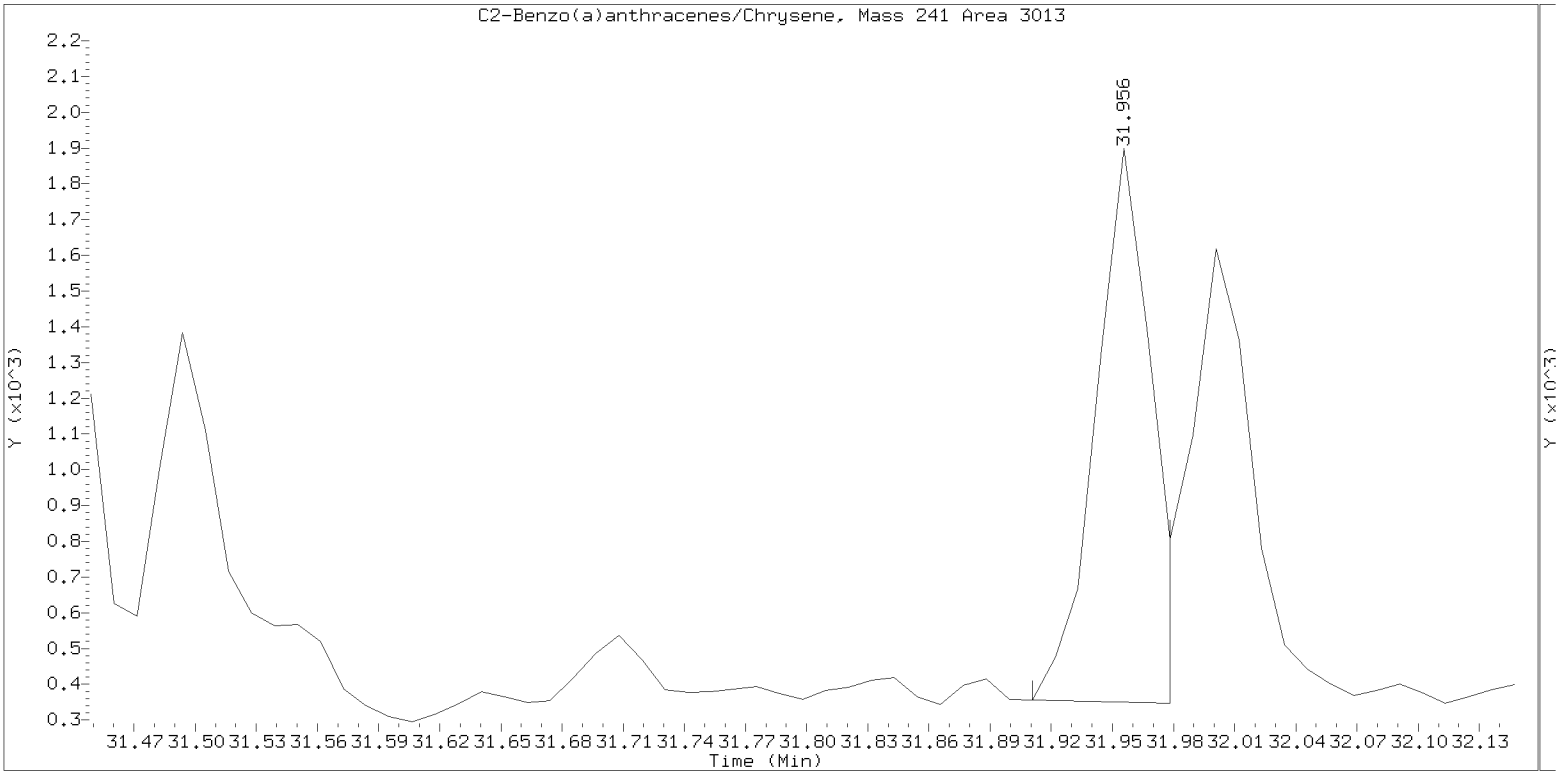

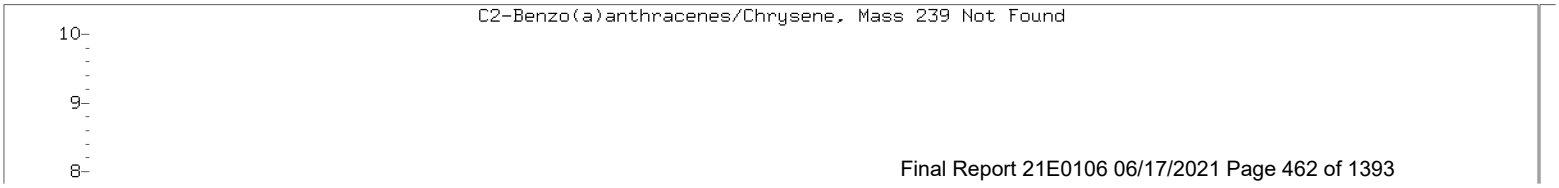

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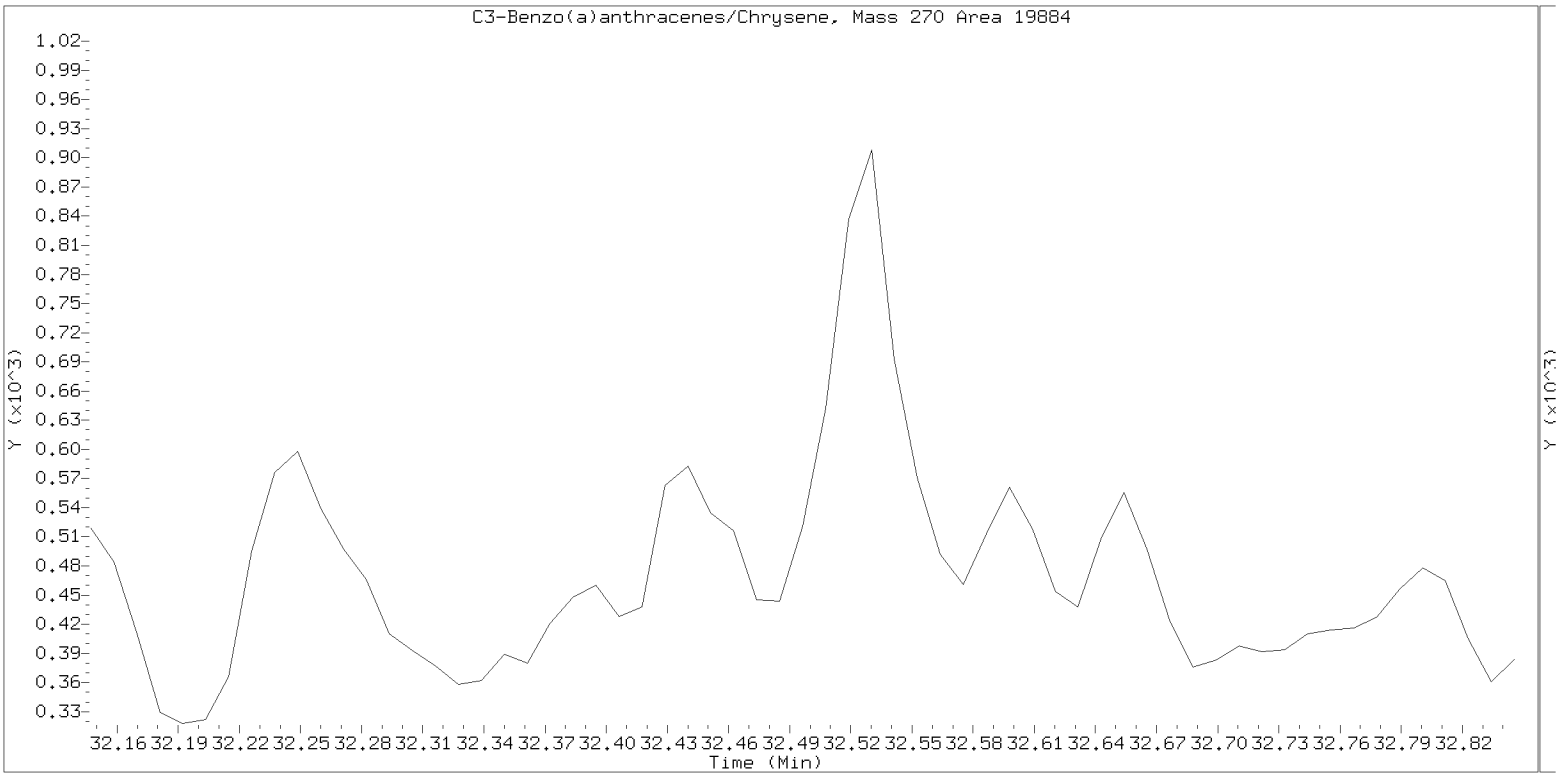

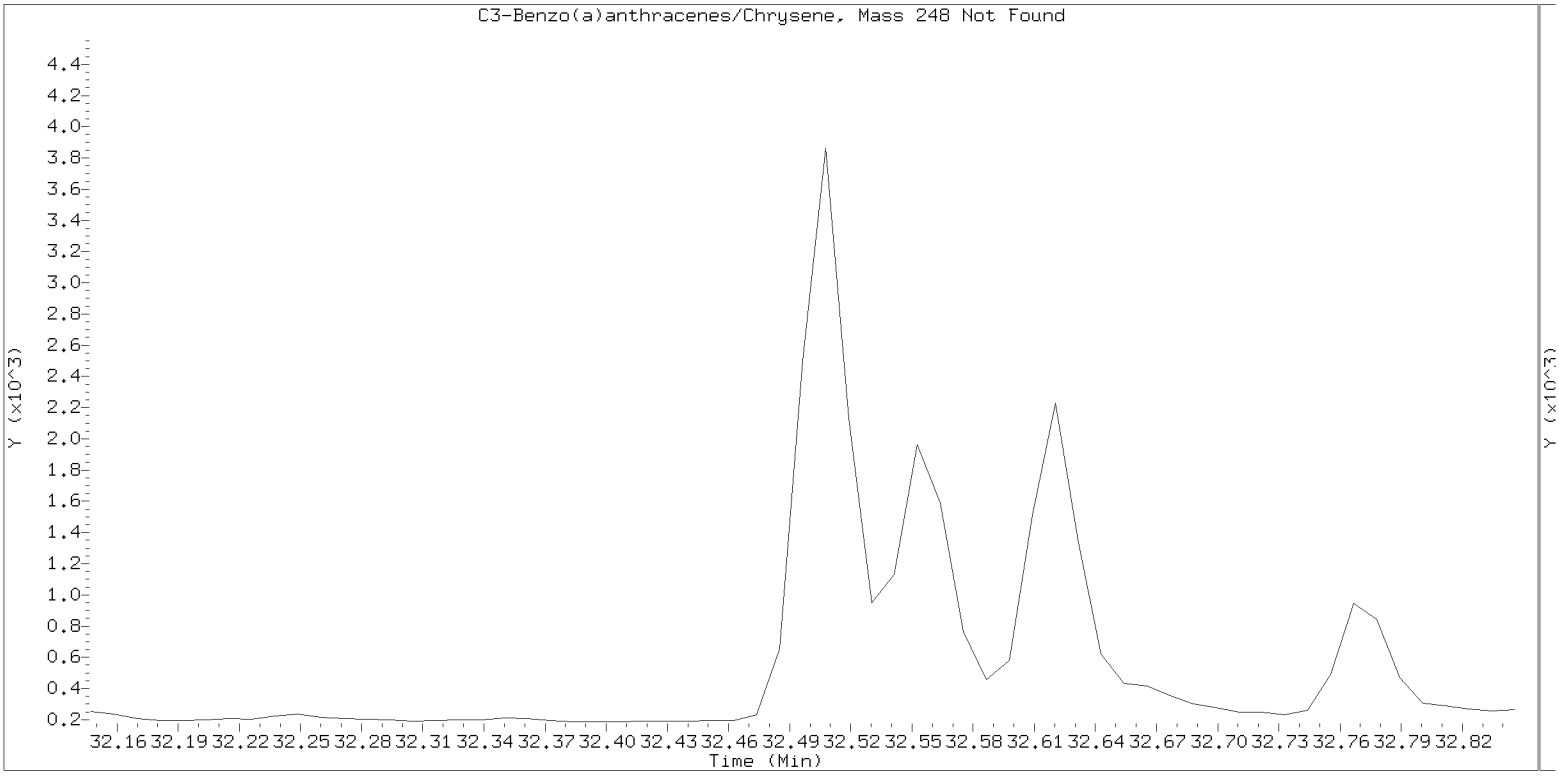

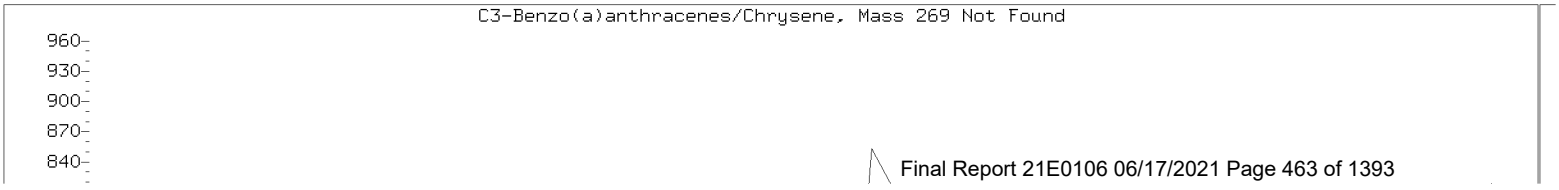

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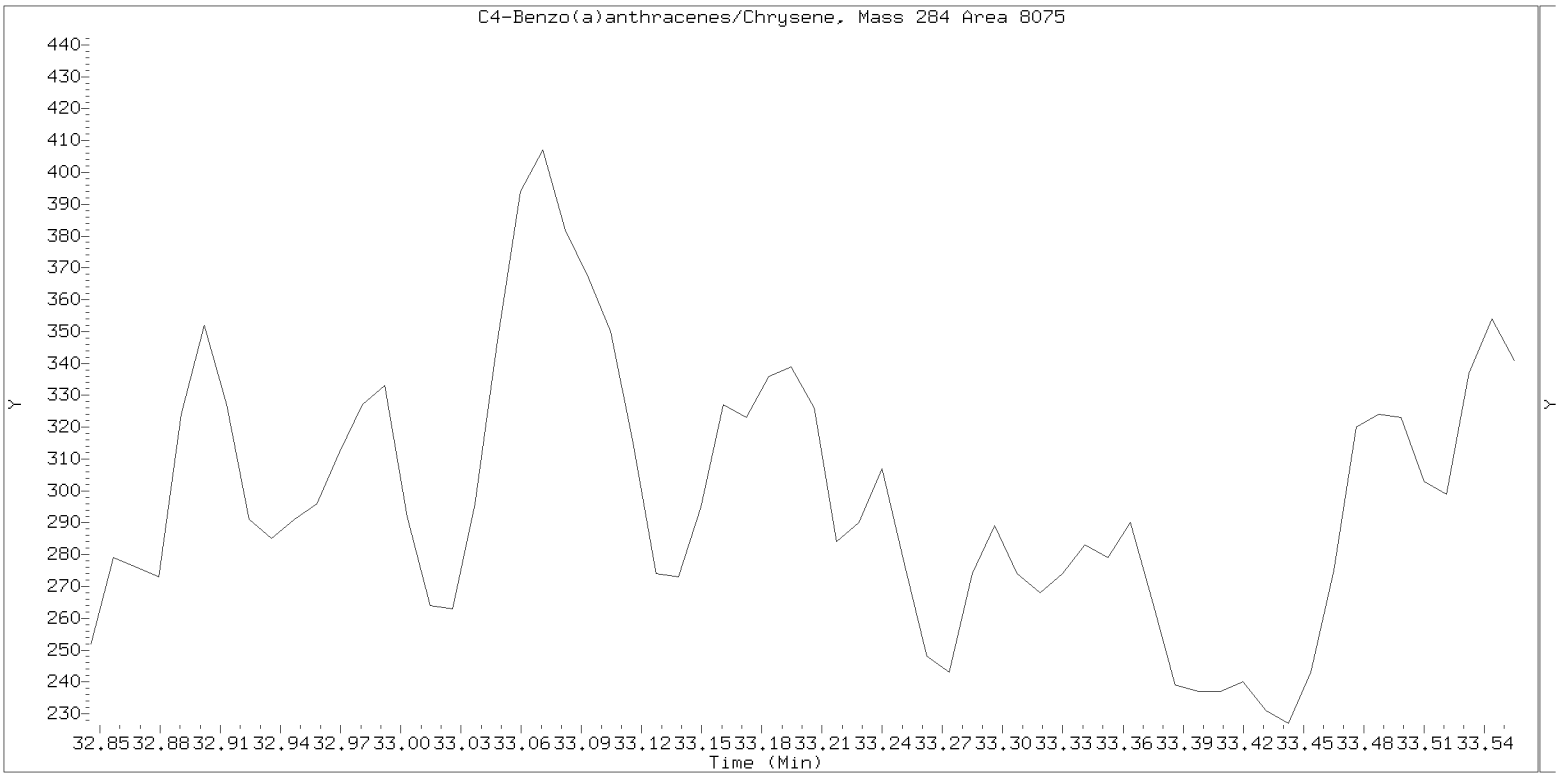

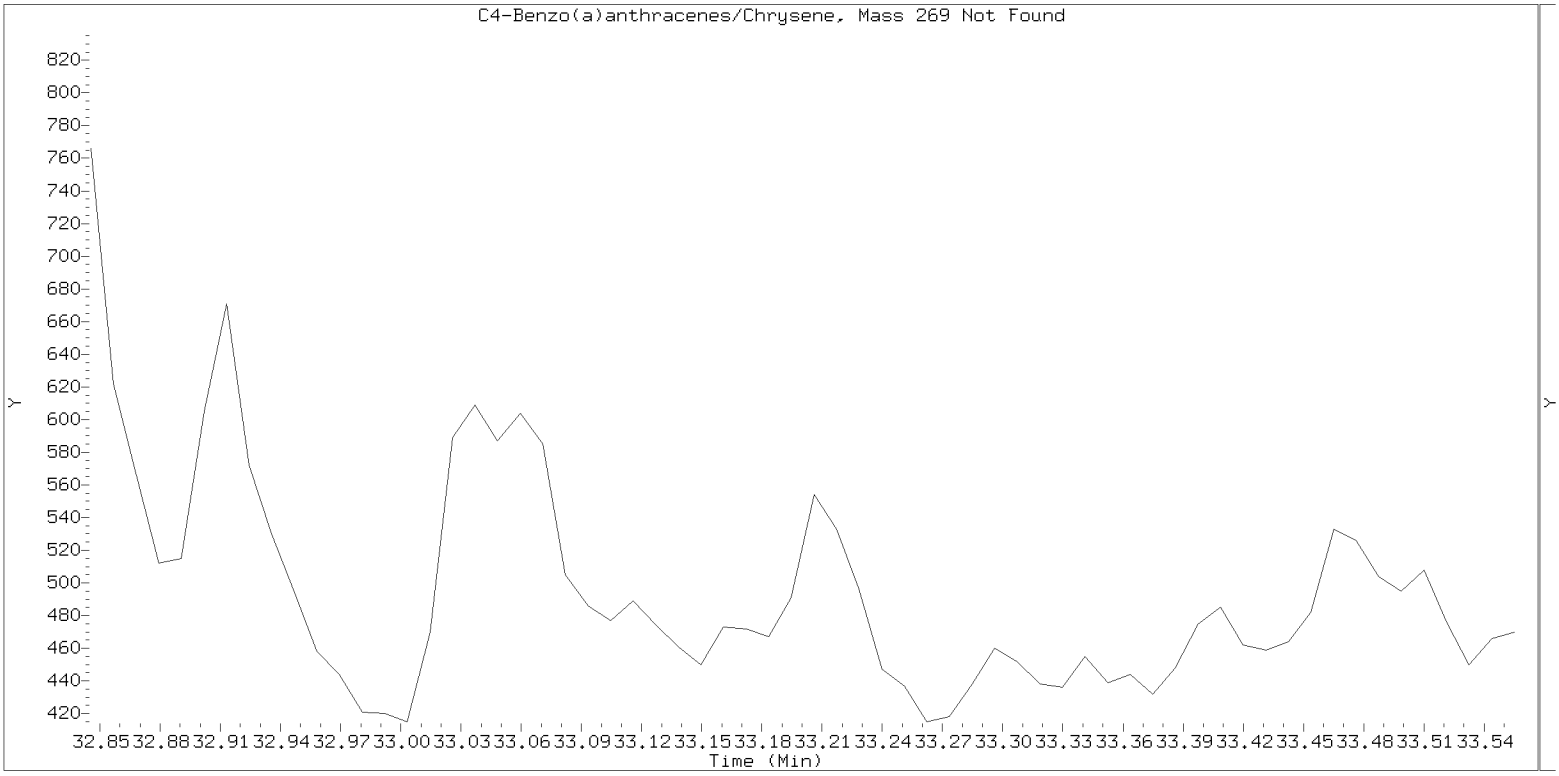

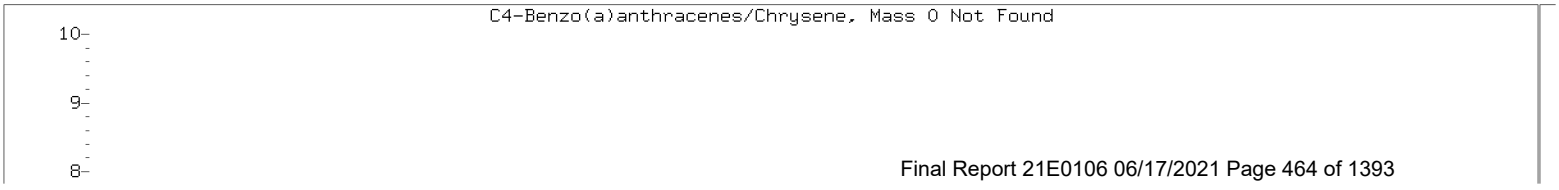

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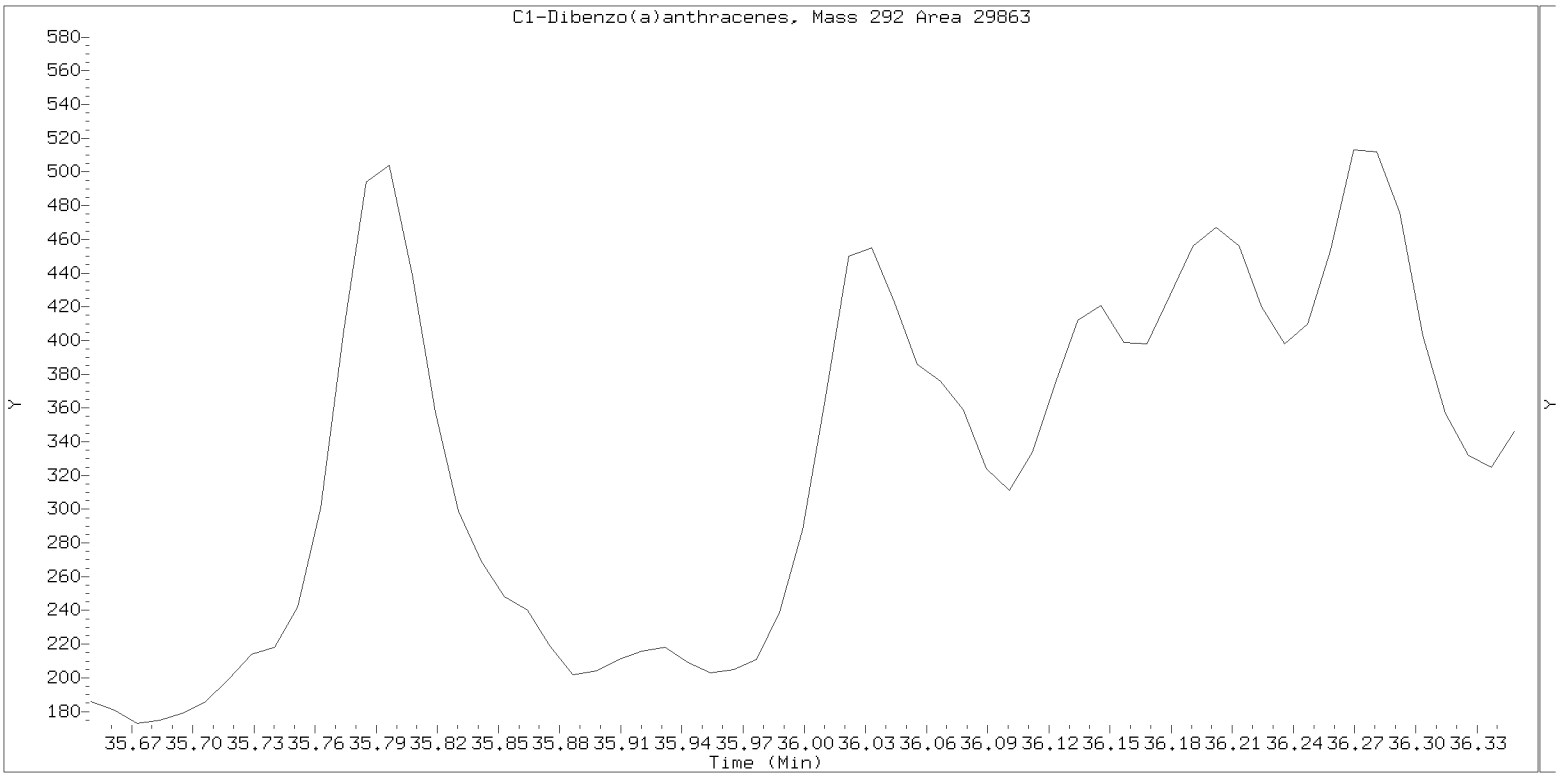

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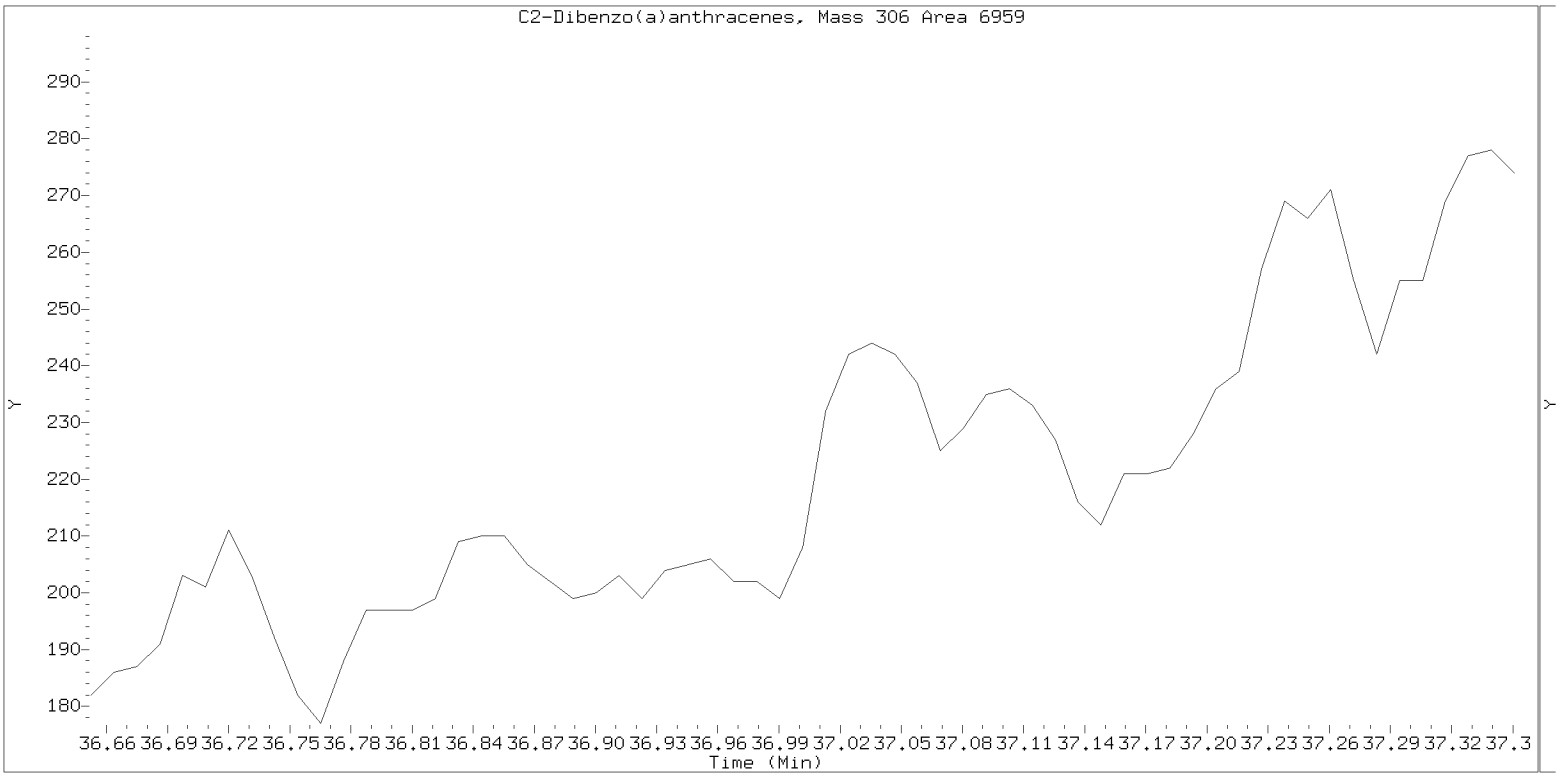

SIM ALKYL PNA RANGE ION WINDOWS - NT1421060715S.D

Lab ID: 21E0106-04
nt14.i, SIM.b\ALKYLRANGES.m, 07-JUN-2021 23:43

Analytical Resources, Incorporated
Analytical Chemists and Consultants

PREPARATION BATCH SUMMARY

EPA 8270E-SIM

Laboratory:	Analytical Resources, Inc.	SDG:	21E0106
Client:	Anchor QEA, LLC	Project:	Gasco Siltronic - US Moorings
Batch:	BJE0383 Batch Matrix: Solid	Preparation:	EPA 3546 (Microwave)

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
USMPDI-028SG-210504	21E0106-01	NT1421060710S.D	05/17/21 13:40	
USMPDI-028SG-210504	21E0106-01	NT1421060710.D	05/17/21 13:40	
USMPDI-030SG-210504	21E0106-02	NT1421060711S.D	05/17/21 13:40	
USMPDI-030SG-210504	21E0106-02	NT1421060711.D	05/17/21 13:40	
USMPDI-031SG-210504	21E0106-03	NT1421060714S.D	05/17/21 13:40	
USMPDI-031SG-210504	21E0106-03	NT1421060714.D	05/17/21 13:40	
USMPDI-035SG-210504	21E0106-04	NT1421060715S.D	05/17/21 13:40	
USMPDI-035SG-210504	21E0106-04	NT1421060715.D	05/17/21 13:40	
Blank	BJE0383-BLK1	NT1421060418.D	05/17/21 13:40	
Blank	BJE0383-BLK2	NT1421060418S.D	05/17/21 13:40	
LCS	BJE0383-BS1	NT1421060419.D	05/17/21 13:40	
USMPDI-030SG-210504	BJE0383-MS1	NT1421060712.D	05/17/21 13:40	
USMPDI-030SG-210504	BJE0383-MSD1	NT1421060713.D	05/17/21 13:40	

Analytical Resources, Incorporated
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ORGANICS PREPARATION BENCH SHEET

Batch: BJE0383

Prepared using: EPA 3546 (Microwave)

8270E-SIM Alkyl PAH (Parents) Dual Scan in Solid (Version:)

Matrix: Solid **Date Prepared:** 05/17/21 **Balance ID:** B146462614 **Set Up By:** CTD 5/17/21

Analysis: 8270E-SIM Alkyl PAH (Parents) Dual Scan

Lab Number & Container	% Solids	Initial (g) Target Dry: 10 (Wet) Actual	(REQ/Opt) GPC C/U (1:1) 1 2 3	(REQ/Opt) Sulfur C/U (1:1) Y/N (Transfer Rinse)	(REQ) Silica Gel C/U (1:1)	Final Effective Vol (mL)	Vol (mL) to Lab	Extraction Comments
21E0103-01 A	52.5	(19.05) 19.07	(1:1) Y / N	(1:1) Y / N	(1:1)	0.5	0.5	
21E0103-08 A	57.5	(17.40) 17.47	(1:1) Y / N	(1:1) Y / N	(1:1)	~~0.5~~ 5	~~0.5~~ 1	
21E0103-10 A	55.7	(17.97) 17.98	(1:1) Y / N	(1:1) Y / N	(1:1)	0.5	0.5	
21E0103-16 A	55.1	(18.16) 18.18	(1:1) Y / N	(1:1) Y / N	(1:1)	0.5	0.5	
21E0103-17 A	53.2	(18.79) 18.79	(1:1) Y / N	(1:1) Y / N	(1:1)	0.5	0.5	
21E0103-23 A	54.6	(18.32) 18.35	(1:1) Y / N	(1:1) Y / N	(1:1)	~~0.5~~ 5	~~0.5~~ 1	
21E0105-01 A	55.8	(17.91) 17.91	(1:1) Y / N	(1:1) Y / N	(1:1)	0.5	0.5	
21E0105-07 A	56.7	(17.65) 17.65	(1:1) Y / N	(1:1) Y / N	(1:1)	~~0.5~~ 5	~~0.5~~ 1	
21E0106-01 A	47.2	(21.20) 21.22	(1:1) Y / N	(1:1) Y / N	(1:1)	0.5	0.5	
21E0106-02 A	58.8	(17.01) 17.01	(1:1) Y / N	(1:1) Y / N	(1:1)	0.5	0.5	
21E0106-03 A	46.4	(21.56) 21.54	(1:1) Y / N	(1:1) Y / N	(1:1)	0.5	0.5	
21E0106-04 A	51.4	(19.47) 19.48	(1:1) Y / N	(1:1) Y / N	(1:1)	0.5	0.5	

Batch QC

Lab Number	% Solids	Initial (g) Target Dry: 10 (Wet) Actual	(REQ/Opt) GPC C/U (1:1) 1 2 3	(REQ/Opt) Sulfur C/U (1:1) Y/N (Transfer Rinse)	(REQ) Silica Gel C/U (1:1)	Final Effective Vol (mL)	Vol (mL) to Lab	Extraction Comments
BJE0383-BLK1	100.0	(10.00) 10.00	(1:1) Y / N	(1:1) Y / N	(1:1)	0.5	0.5	
BJE0383-BS1	100.0	(10.00) 10.00	(1:1) Y / N	(1:1) Y / N	(1:1)	0.5	0.5	
BJE0383-MS1	58.8	()(17.01) 17.01	(1:1) Y / N	(1:1) Y / N	(1:1)	0.5	0.5	Use 21E0106-02
BJE0383-MSD1	58.8	()(17.01) 17.01	(1:1) Y / N	(1:1) Y / N	(1:1)	0.5	0.5	Use 21E0106-02

05/17/21 — Client ID verified By — Date

BT 05/25/21 — Preparation Reviewed By — Date

05/17/21 13:40 — Extraction Date and Time

Printed: 5/17/2021 7:59:33AM

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Analytical Resources, Incorporated
Analytical Chemists and Consultants

ORGANICS PREPARATION BENCH SHEET

Batch: BJE0383

Prepared using: EPA 3546 (Microwave)

8270E-SIM Alkyl PAH (Parents) Dual Scan in Solid (Version:)

Prep Steps

Step	Analyst/Date
Microwave 1 (2) 3	CT 05/17/21
Pre-GPC KD 100°C (No Exchange) 1 2 3 4 (5) 6	AR 05/18/21
Pre GPC TurboVap 1 2 3 (4)	SH 05/19/21
Post-GPC KD 80°C Hexane Exchange 2 x 20 mL 100°C (0) (1) (2) 3 4 (5) 6	NLB 5/21/21
Pre-Cleanup TurboVap 1 2 3 (4)	BT 05/25/21
Post-Cleanup TurboVap 1 2 (3) 4	BT 05/25/21
Vialing	BT 05/25/21

Reagents Used

Station/Reagent	Standard ID
Microwave Analyst: CT Date: 05/17/21	
1:1 Methylene Chloride/Acetone	J04785
Methylene Chloride	J04394
Anhydrous Sodium Sulfate	J05045
Pre-Deactivated Glass Wool	J04483
Pre GPC KD Analyst: AR Date: 05/18/21	
Methylene Chloride	J04394
Hexane	J06252
GPC Filter Prep Analyst: SH Date: 05/19/21	
Methylene Chloride	J05192
GPC Analyst: SH Date: 05/19/21	
Methylene Chloride	J05192
GPC Calibration File	C5A0220-GPC1
Post GPC KD Analyst: NLB Date: 5/21/21	
Hexane	J0003533
Methylene Chloride	J0005192
Vialing Analyst: BT Date: 05/25/21	
Silica Gel (SPE) darts	J003772
Methylene Chloride	J0024317
Hexane	J003533
Tetrabutylammonium hydrogensulfate (TBAS)	———
Sodium Sulfite	———

Surrogates & Spike Standards Used

Type	Vial ID / Standard ID	Vol uL	Analyst	Witness
Surr 15µg/mL	T I010873 (V) Exp: ~~11/24/2021~~	100µL	CT	
Spike 15/75µg/mL	15 I010207 (V) Exp: ~~10/03/2021~~	100µL	CT	
Spike 15µg/mL	42 I010896 (V) Exp: ~~09/01/2021~~	100µL	CT	

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

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

Analytical Resources, Incorporated
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ORGANICS PREPARATION BENCH SHEET

Batch: BJE0383

Prepared using: EPA 3546 (Microwave)

8270E-SIM Alkyl PAH (Parents) Dual Scan in Solid (Version:)

Prep Instructions	
SPECIAL INSTRUCTIONS: 1. Weigh into beakers dry with Sodium Sulfate. 2. Transfer to microwave vessel. 3. Add DCM ONLY to the vessels (until solvent is 3 inches above soil layer after homogenization). 4. Add surr/spike. 5. Microwave on appropriate power setting determined by # of samples. 6. After microwave-re-homogenize while hot then let cool 10-15 min in Refridgerator 05. Re-homogenize while cool. 7. Decant DCM into Erlenmeyer flask with a funnel containing pre-deactivated glasswool. 8. Rinse with DCM 9. Microwave a 2nd time using 1:1 DCM/ACE. 10. Let cool and decant the solvent then empty the soil into the funnel and rinse with DCM. 11. If GPC is Req add 10mL Hexane and KD to 5mL at 100°C (NO EXCHANGE) 12. If GPC is NOT Req = KD to 5mL at 100°C. Exchange to Hexane (2X with 10mL) to 5mL at 100°C. 13. TurboVap. 14. Sulfur clean = Hexane transfer rinse. 15. Silica Clean-up REQ. 16. TurboVap 17. Vial in DCM. A. Need Total Solids Y [N] B. Archive/Freeze [Y] N	

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Batch: BJE0383
Batch Comment: **NONE**
Project: Gasco Siltronic - US Moorings
Project Comments: <G> MS/MSD per 20 samples, please batch with other work orders, SM2540 Needed </G>
Work Order:21E0103
Work Order Comments: <G> MS/MSD per 20 samples, please batch with other work orders, SM2540 Needed </G>
Sample: 21E0103-01
Sample Comments: **NONE**
Sample: 21E0103-08
Sample Comments: **NONE**
Sample: 21E0103-10
Sample Comments: **NONE**
Sample: 21E0103-16
Sample Comments: **NONE**
Sample: 21E0103-17
Sample Comments: **NONE**
Sample: 21E0103-23
Sample Comments: **NONE**
Work Order:21E0105
Work Order Comments: <G> MS/MSD per 20 samples, please batch with other work orders, SM2540 Needed </G>
Sample: 21E0105-01
Sample Comments: **NONE**
Sample: 21E0105-07
Sample Comments: **NONE**
Work Order:21E0106
Work Order Comments: <G> MS/MSD per 20 samples, please batch with other work orders, SM2540 Needed </G>
Sample: 21E0106-01
Sample Comments: **NONE**
Sample: 21E0106-02
Sample Comments: **NONE**
Sample: 21E0106-03
Sample Comments: **NONE**
Sample: 21E0106-04
Sample Comments: **NONE**

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Organic Extractions Laboratory Analyst Notes

Extraction Parameter: SIM ALKL Extraction Batch BJE0383

Total Solids Batch: BJE0230 Work Order(s): 21E0103 1-20

Screens: Soil/Sediment/Solid/Other: SH 05/11/21	Analyst/Date
☒ No Anomalies (standard soil/wet sediment/sand/gravel)= ~~04~~ 05, 09, 12, 14, 13, 16, 20	SH 05/11/21
☒ Standing Water Decanted (Not shared)= 03 01, 02, 03, 04, 06, 07, 08, 11, 10, 15, 17, 18, 19	SH 05/11/21
☐ Standing Water Homogenized (Shared samples)=	
☐ Clay/Clumps (Difficult to homogenize)=	
☐ Rocks (%+size)?	
☐ Organics (Leaves/sticks/grass)=	
☐ Oily, obvious fuel/sulfur odors=	
☐ Received in 32oz jar(s)=Homogenized in Pyrex dish=	
☐ Previously Frozen =	
☐ Other (Details)=	
Aqueous:	
☐ No Anomalies	
☐ Turbid/Color=	
☐ Particulates(%)=(Note: >5%=Notify Supervisor/Lead)	
☐ Emulsions (%)=	
☐ Oily, obvious fuel/sulfur odors=	
☐ Other (Details)=	
☐ Received in 1.0L Bottle(s)=No Bottle Rinse=	
☐ Other Notes/Comments= (Note problems, concerns, corrective actions).	
☒ Share Samples Y / (N)	SH 05/11/21
☒ Multiple Jars Y / (N)	SH 05/11/21
☐ Sample Pre-Screens indicate analyte activity=	
☐ Sample weights/volumes reduced based on Pre-Screen=	

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Revision 15
07/01/19

Analytical Resources, Incorporated
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Organic Extractions Laboratory Analyst Notes

Extraction Parameter: SIM ALKYL Extraction Batch BJE0583

Total Solids Batch: BJE0251 Work Order(s): 21E0103 21-23

Screens: Soil/Sediment/Solid/Other:	Analyst/Date
☐ No Anomalies (standard soil/wet sediment/sand/gravel)=	
☐ Standing Water Decanted (Not shared)=	
☑ Standing Water Homogenized (Shared samples)= 22	AR 05/11/21
☑ Clay/Clumps (Difficult to homogenize)= 21, 23	AR 05/11/21
☐ Rocks (%+size)?	
☐ Organics (Leaves/sticks/grass)=	
☐ Oily, obvious fuel/sulfur odors=	
☐ Received in 32oz jar(s)=Homogenized in Pyrex dish=	
☐ Previously Frozen =	
☐ Other (Details)=	
Aqueous:	
☐ No Anomalies	
☐ Turbid/Color=	
☐ Particulates(%)=(Note: >5%=Notify Supervisor/Lead)	
☐ Emulsions (%)=	
☐ Oily, obvious fuel/sulfur odors=	
☐ Other (Details)=	
☐ Received in 1.0L Bottle(s)=No Bottle Rinse=	
☐ Other Notes/Comments= (Note problems, concerns, corrective actions).	
☒ Share Samples Y / (N)	
☒ Multiple Jars Y / (N)	AR 05/11/21
☐ Sample Pre-Screens indicate analyte activity=	AR 05/11/21
☐ Sample weights/volumes reduced based on Pre-Screen=	

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Revision 15
07/01/19

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Organic Extractions Laboratory Analyst Notes

Extraction Parameter: SIM ALKYL Extraction Batch BJE0383

Total Solids Batch: BJE0232 Work Order(s): 21E0105

Screens: Soil/Sediment/Solid/Other:	Analyst/Date
☐ No Anomalies (standard soil/wet sediment/sand/gravel)=	
☑ Standing Water Decanted (Not shared)= 01	AR 05/11/21
☐ Standing Water Homogenized (Shared samples)=	
☐ Clay/Clumps (Difficult to homogenize)=	
☐ Rocks (%+size)?	
☐ Organics (Leaves/sticks/grass)=	
☑ Oily, obvious fuel/sulfur odors= 02, 03, 04, 05, 06, 07	05/11/21 AR
☐ Received in 32oz jar(s)=Homogenized in Pyrex dish=	
☐ Previously Frozen =	
☐ Other (Details)=	
Aqueous:	
☐ No Anomalies	
☐ Turbid/Color=	
☐ Particulates(%)=(Note: >5%=Notify Supervisor/Lead)	
☐ Emulsions (%)=	
☐ Oily, obvious fuel/sulfur odors=	
☐ Other (Details)=	
☐ Received in 1.0L Bottle(s)=No Bottle Rinse=	
☐ Other Notes/Comments= (Note problems, concerns, corrective actions).	
☒ Share Samples Y/(N)	AR 05/11/21
☒ Multiple Jars (Y)/N 21E0145 07, X2	AR 05/11/21
☐ Sample Pre-Screens indicate analyte activity=	
☐ Sample weights/volumes reduced based on Pre-Screen=	

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Revision 15
07/01/19

Analytical Resources, Incorporated
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Organic Extractions Laboratory Analyst Notes

Extraction Parameter: SIM ALKYL Extraction Batch BJE0383

Total Solids Batch: BJE0233 Work Order(s): 21E0106

Screens: Soil/Sediment/Solid/Other:	Analyst/Date
☐ No Anomalies (standard soil/wet sediment/sand/gravel)=	
☑ Standing Water Decanted (Not shared)= Ø1, Ø2, Ø3, Ø4	AR Ø5/11/21
☑ Standing Water Homogenized (Shared samples)= ~~0~~	
☑ Clay/Clumps (Difficult to homogenize)= Ø1	AR Ø5/11/21
☐ Rocks (%+size)?	
☐ Organics (Leaves/sticks/grass)=	
☐ Oily, obvious fuel/sulfur odors=	
☐ Received in 32oz jar(s)=Homogenized in Pyrex dish=	
☐ Previously Frozen =	
☐ Other (Details)=	
Aqueous:	
☐ No Anomalies	
☐ Turbid/Color=	
☐ Particulates(%)=(Note: >5%=Notify Supervisor/Lead)	
☐ Emulsions (%)=	
☐ Oily, obvious fuel/sulfur odors=	
☐ Other (Details)=	
☐ Received in 1.0L Bottle(s)=No Bottle Rinse=	
☐ Other Notes/Comments= (Note problems, concerns, corrective actions).	
☑ Share Samples Y/N	AR Ø5/11/21
☑ Multiple Jars Y/N	AR Ø5/11/21
☐ Sample Pre-Screens indicate analyte activity=	
☐ Sample weights/volumes reduced based on Pre-Screen=	

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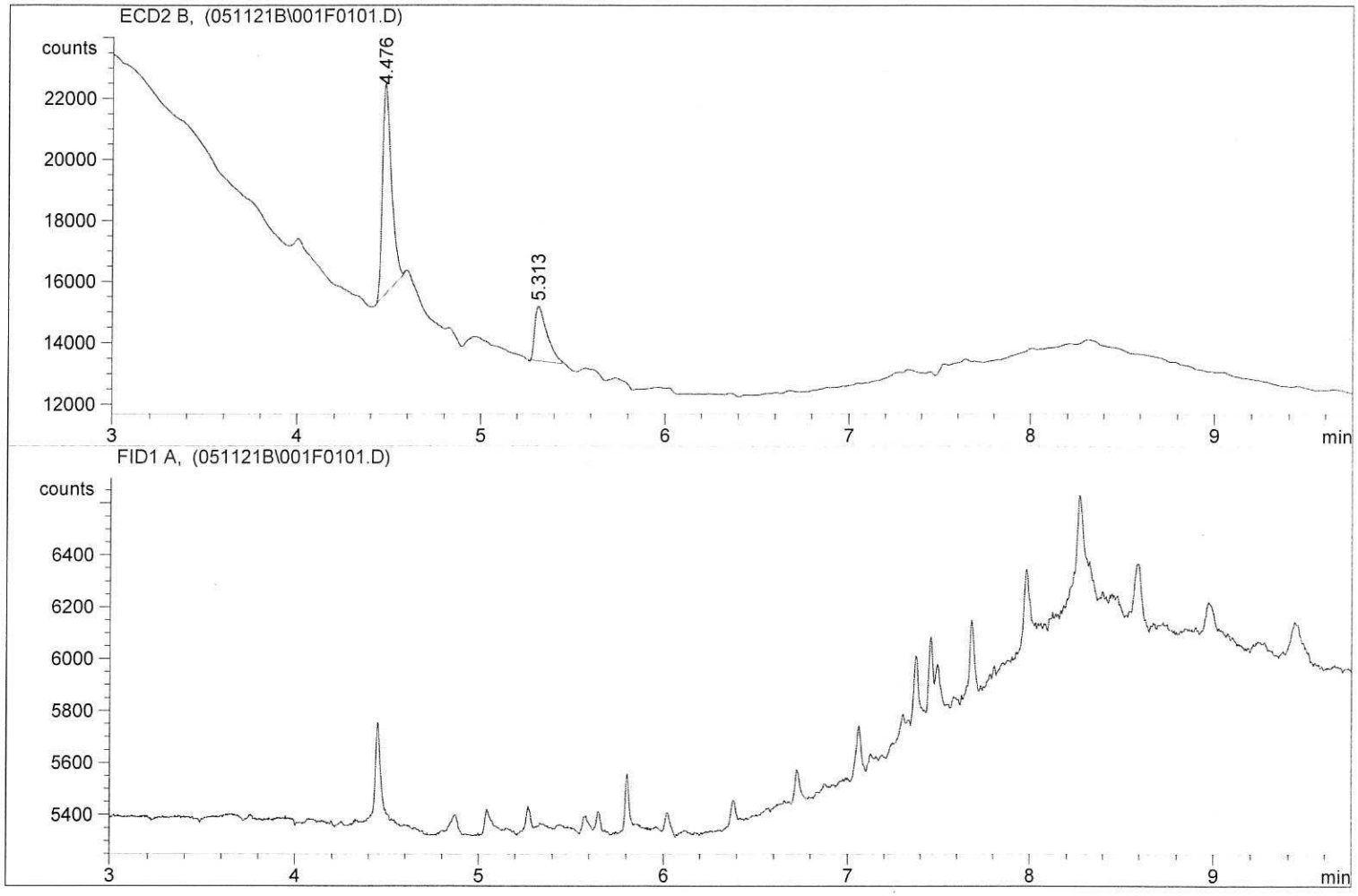
Revision 15
07/01/19

Injection Date	: 5/11/2021 7:56:18 PM	Seq. Line :	1
Sample Name	: DCM RINSE	Location :	Vial 1
Acq. Operator	: SH	Inj :	1
		Inj Volume :	1 µl
Sequence File	: C:\HPCHEM\1\SEQUENCE\051121B.S		
Method	: C:\HPCHEM\1\METHODS\SCREEN.M		
Last changed	: 5/8/2021 12:43:03 PM by TW		
SCREEN METHOD			



*** End of Report ***

Data File C:\HPCHEM\1\DATA\051121B\002F0201.D

Sample Name: PNA STD 1-PPM

==========

Injection Date : 5/11/2021 8:09:39 PM

Sample Name : PNA STD 1-PPM

Acq. Operator : SH

Seq. Line : 2

Location : Vial 2

Inj : 1

Inj Volume : 1 µl

Sequence File : C:\HPCHEM\1\SEQUENCE\051121B.S

Method : C:\HPCHEM\1\METHODS\SCREEN.M

Last changed : 5/8/2021 12:43:03 PM by TW

SCREEN METHOD

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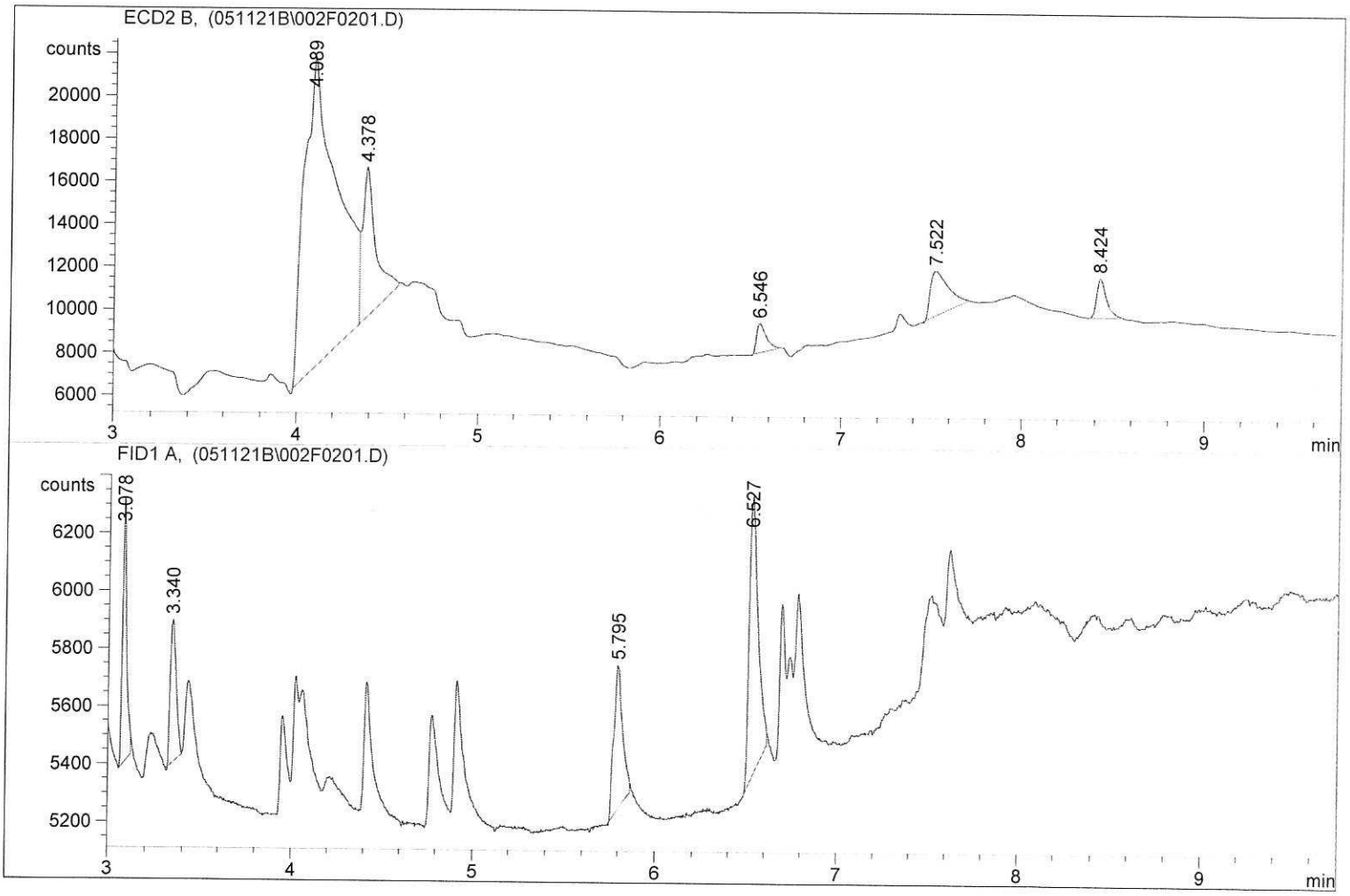
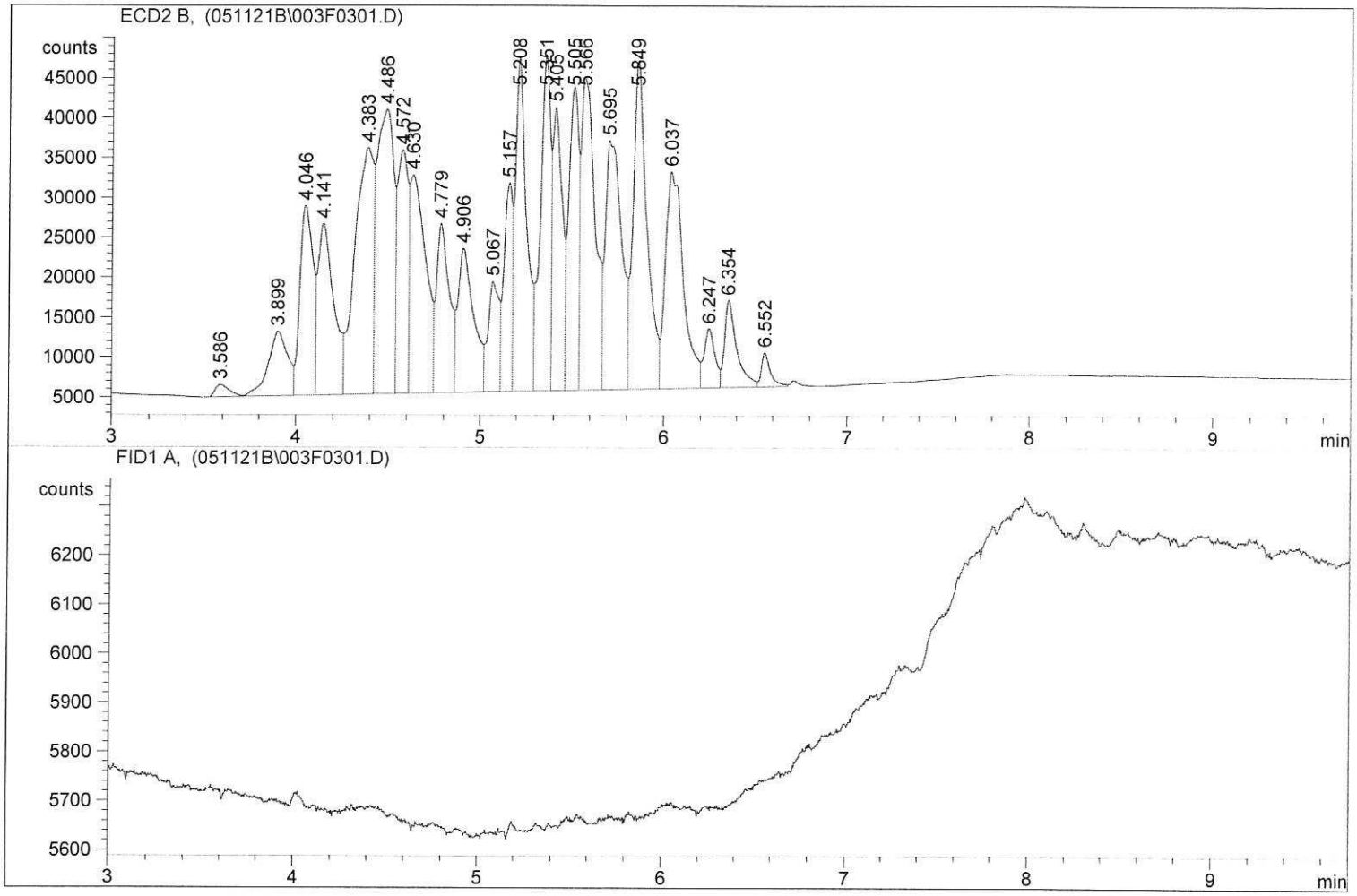


*** End of Report ***

Instrument 1 5/11/2021 8:19:27 PM SH

Injection Date	: 5/11/2021 8:23:32 PM	Seq. Line :	3
Sample Name	: AR1660 1PPM	Location :	Vial 3
Acq. Operator	: SH	Inj :	1
		Inj Volume :	1 µl
Sequence File	: C:\HPCHEM\1\SEQUENCE\051121B.S		
Method	: C:\HPCHEM\1\METHODS\SCREEN.M		
Last changed	: 5/8/2021 12:43:03 PM by TW		
SCREEN METHOD			

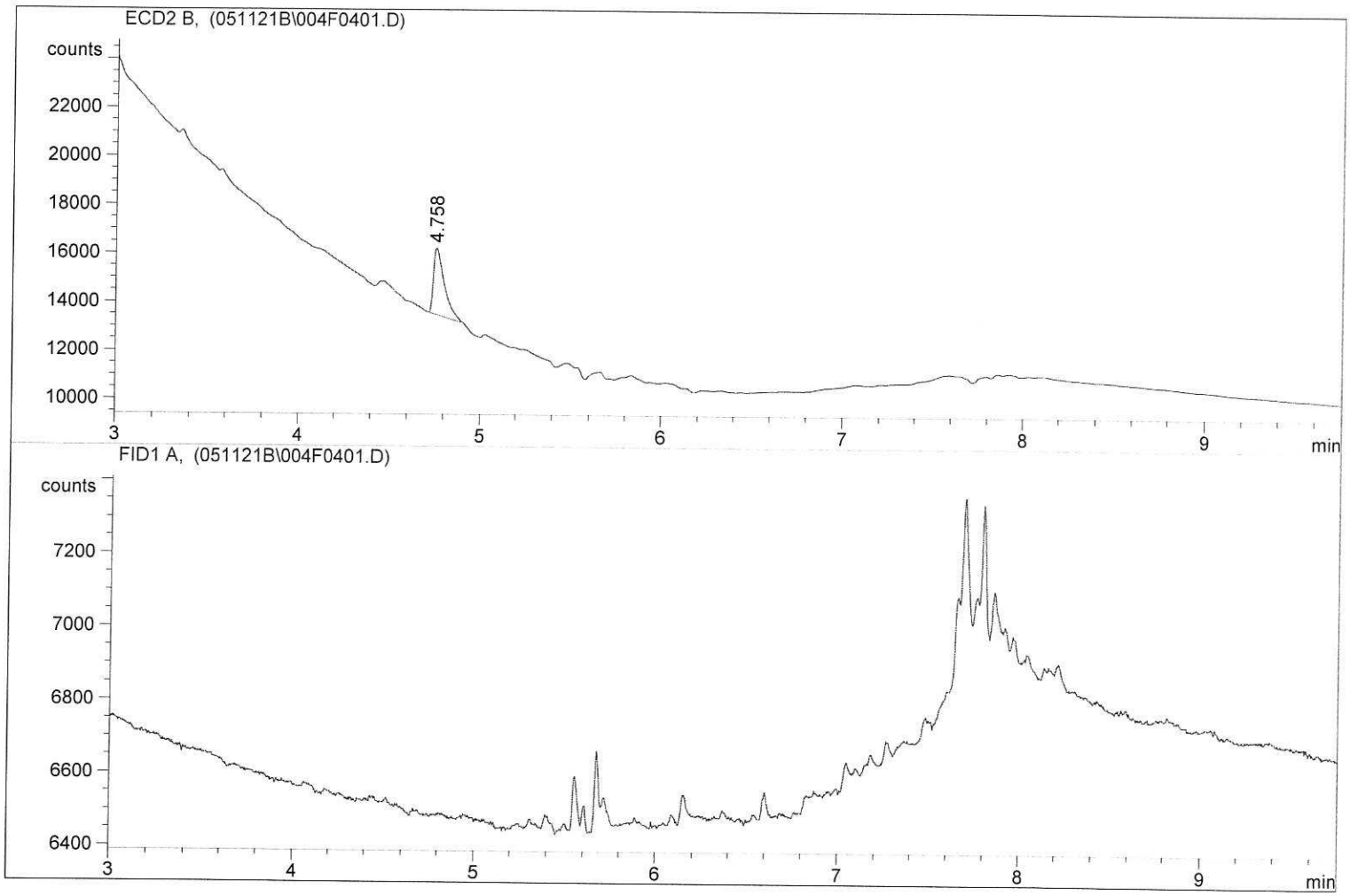


*** End of Report ***

Data File C:\HPCHEM\1\DATA\051121B\004F0401.D

Sample Name: 21E0103-01

Injection Date	: 5/11/2021 8:37:13 PM	Seq. Line :	4
Sample Name	: 21E0103-01	Location :	Vial 4
Acq. Operator	: SH	Inj :	1
		Inj Volume :	1 µl
Sequence File	: C:\HPCHEM\1\SEQUENCE\051121B.S		
Method	: C:\HPCHEM\1\METHODS\SCREEN.M		
Last changed	: 5/8/2021 12:43:03 PM by TW		
SCREEN METHOD			



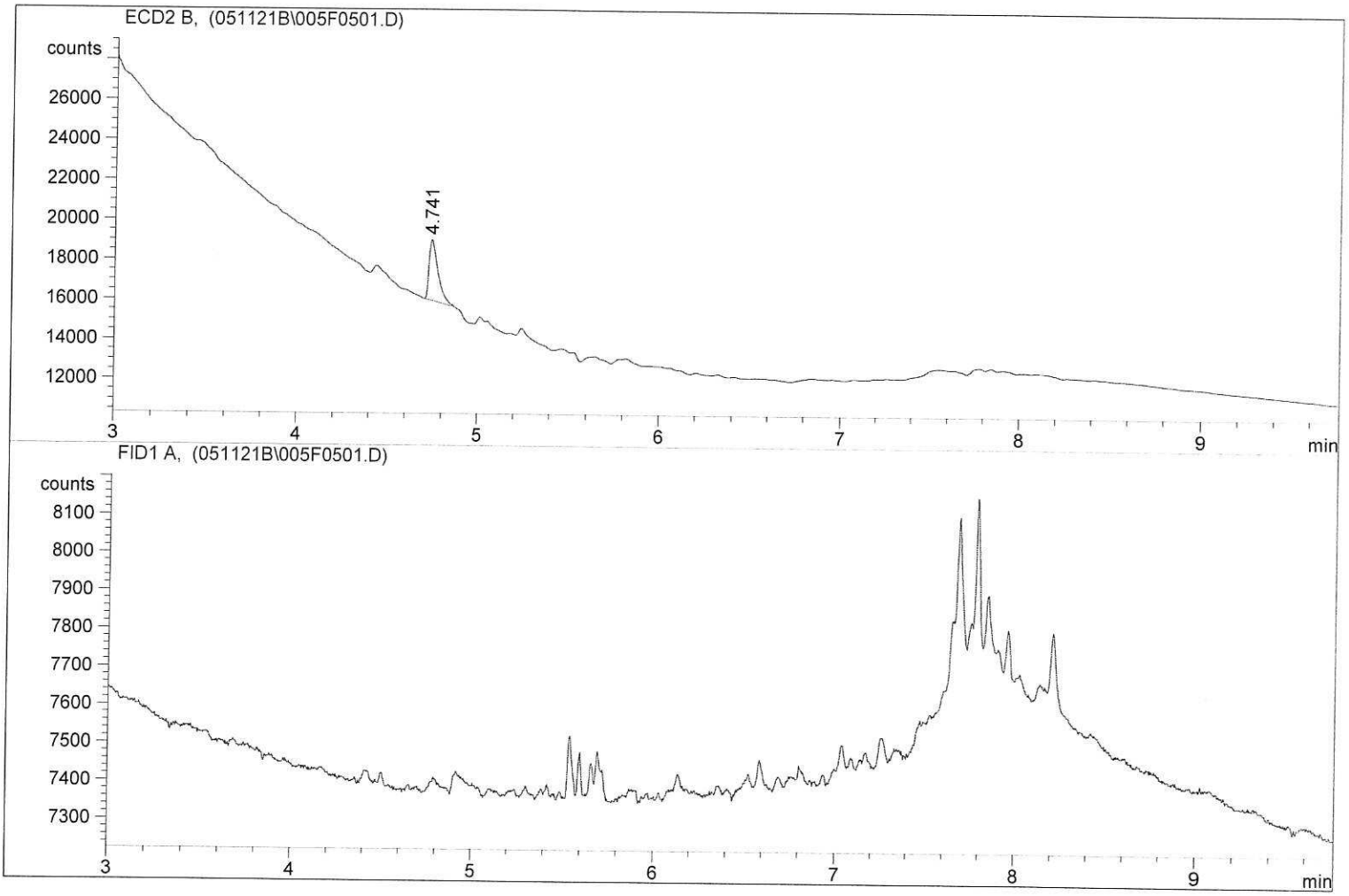
*** End of Report ***

Instrument 1 5/11/2021 8:47:04 PM SH

Data File C:\HPCHEM\1\DATA\051121B\005F0501.D

Sample Name: 21E0103-02

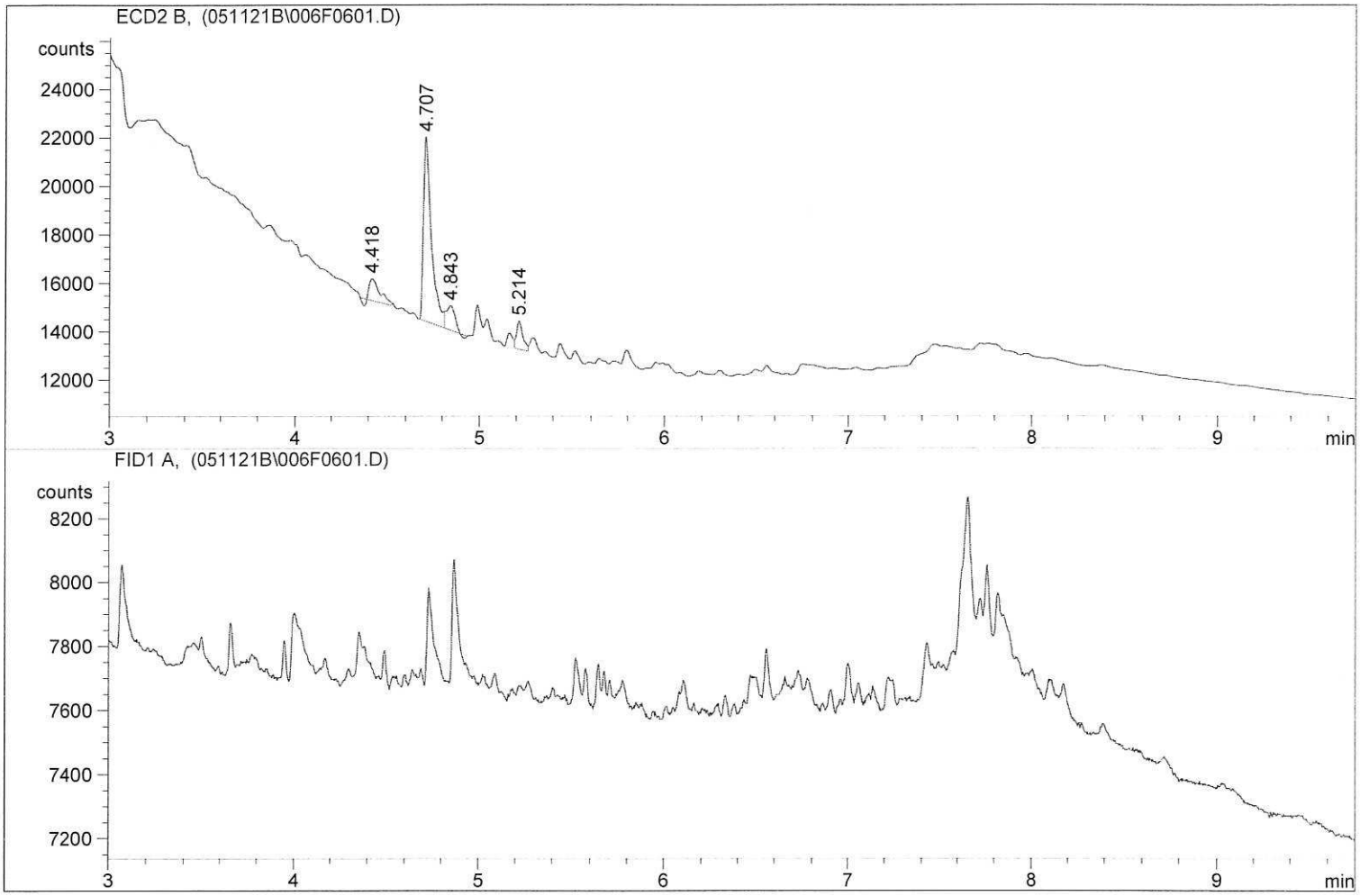
Injection Date	: 5/11/2021 8:51:14 PM	Seq. Line :	5
Sample Name	: 21E0103-02	Location :	Vial 5
Acq. Operator	: SH	Inj :	1
		Inj Volume :	1 µl
Sequence File	: C:\HPCHEM\1\SEQUENCE\051121B.S		
Method	: C:\HPCHEM\1\METHODS\SCREEN.M		
Last changed	: 5/8/2021 12:43:03 PM by TW		
SCREEN METHOD			



*** End of Report ***

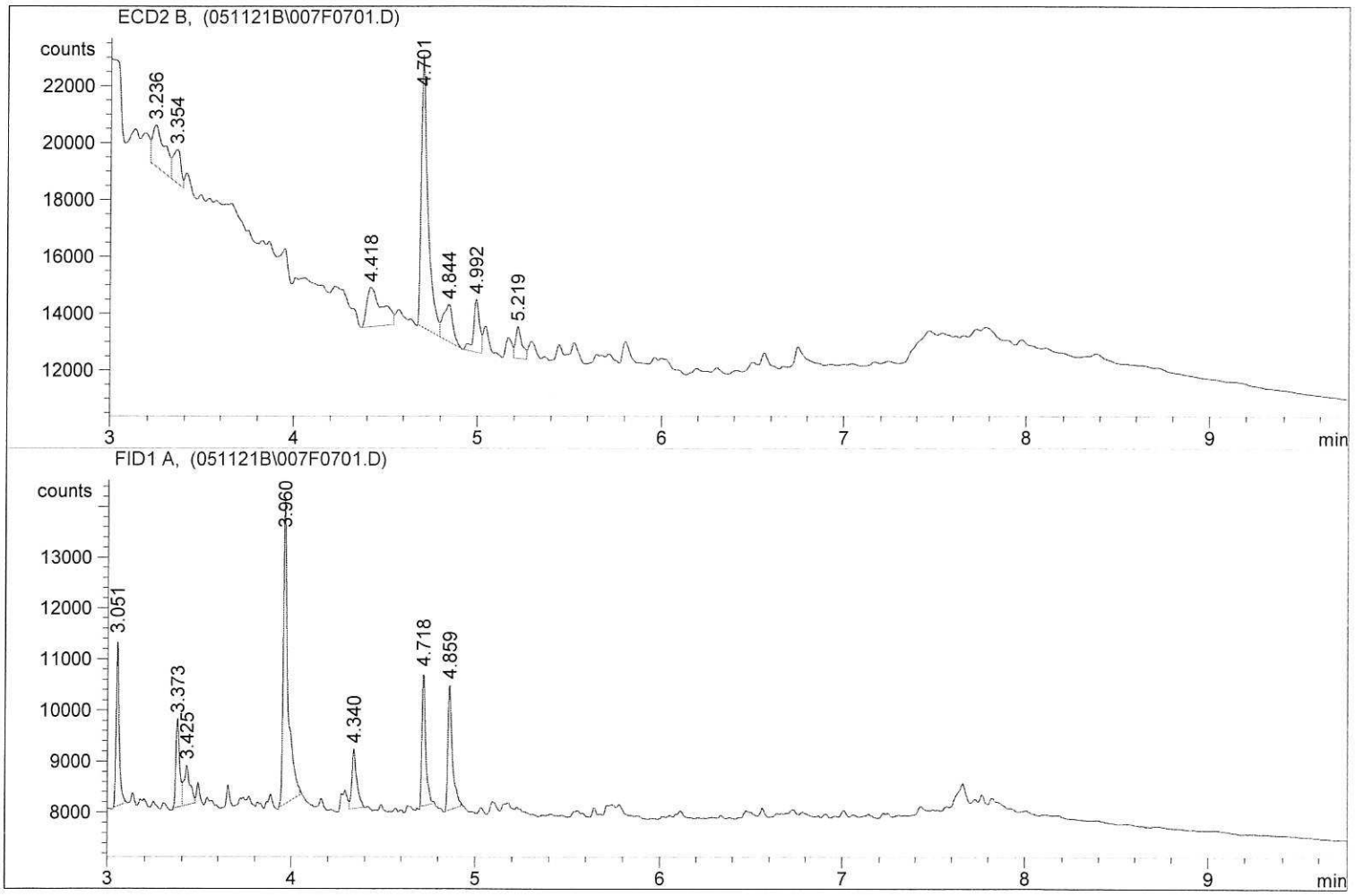
Instrument 1 5/11/2021 9:01:04 PM SH

Injection Date	: 5/11/2021 9:04:53 PM	Seq. Line :	6
Sample Name	: 21E0103-03	Location :	Vial 6
Acq. Operator	: SH	Inj :	1
		Inj Volume :	1 µl
Sequence File	: C:\HPCHEM\1\SEQUENCE\051121B.S		
Method	: C:\HPCHEM\1\METHODS\SCREEN.M		
Last changed	: 5/8/2021 12:43:03 PM by TW		
SCREEN METHOD			



*** End of Report ***

Injection Date	: 5/11/2021 9:18:55 PM	Seq. Line :	7
Sample Name	: 21E0103-04	Location :	Vial 7
Acq. Operator	: SH	Inj :	1
		Inj Volume :	1 µl
Sequence File	: C:\HPCHEM\1\SEQUENCE\051121B.S		
Method	: C:\HPCHEM\1\METHODS\SCREEN.M		
Last changed	: 5/8/2021 12:43:03 PM by TW		
SCREEN METHOD			

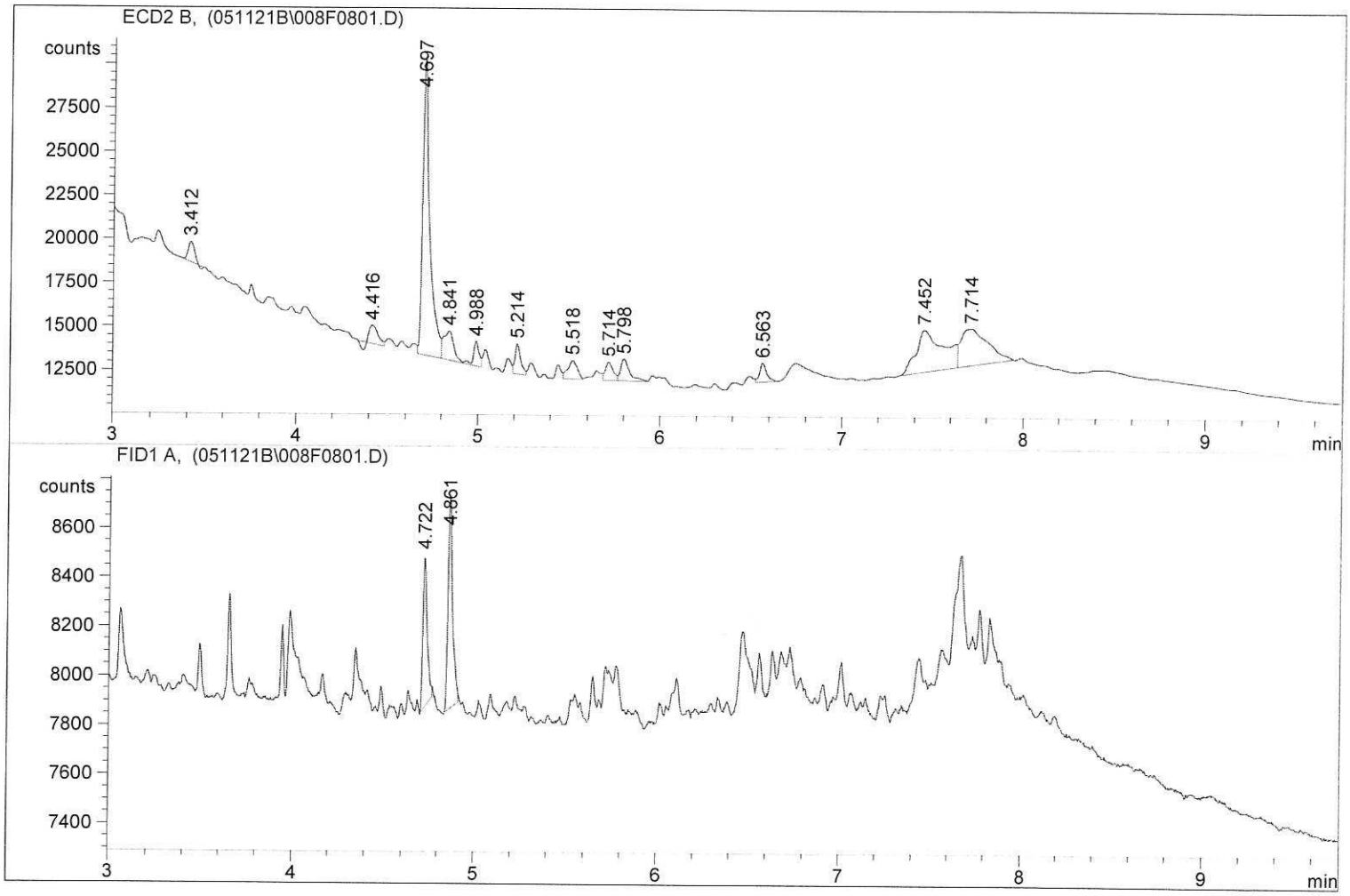


*** End of Report ***

Data File C:\HPCHEM\1\DATA\051121B\008F0801.D

Sample Name: 21E0103-05

Injection Date	: 5/11/2021 9:32:40 PM	Seq. Line :	8
Sample Name	: 21E0103-05	Location :	Vial 8
Acq. Operator	: SH	Inj :	1
		Inj Volume :	1 µl
Sequence File	: C:\HPCHEM\1\SEQUENCE\051121B.S		
Method	: C:\HPCHEM\1\METHODS\SCREEN.M		
Last changed	: 5/8/2021 12:43:03 PM by TW		
SCREEN METHOD			

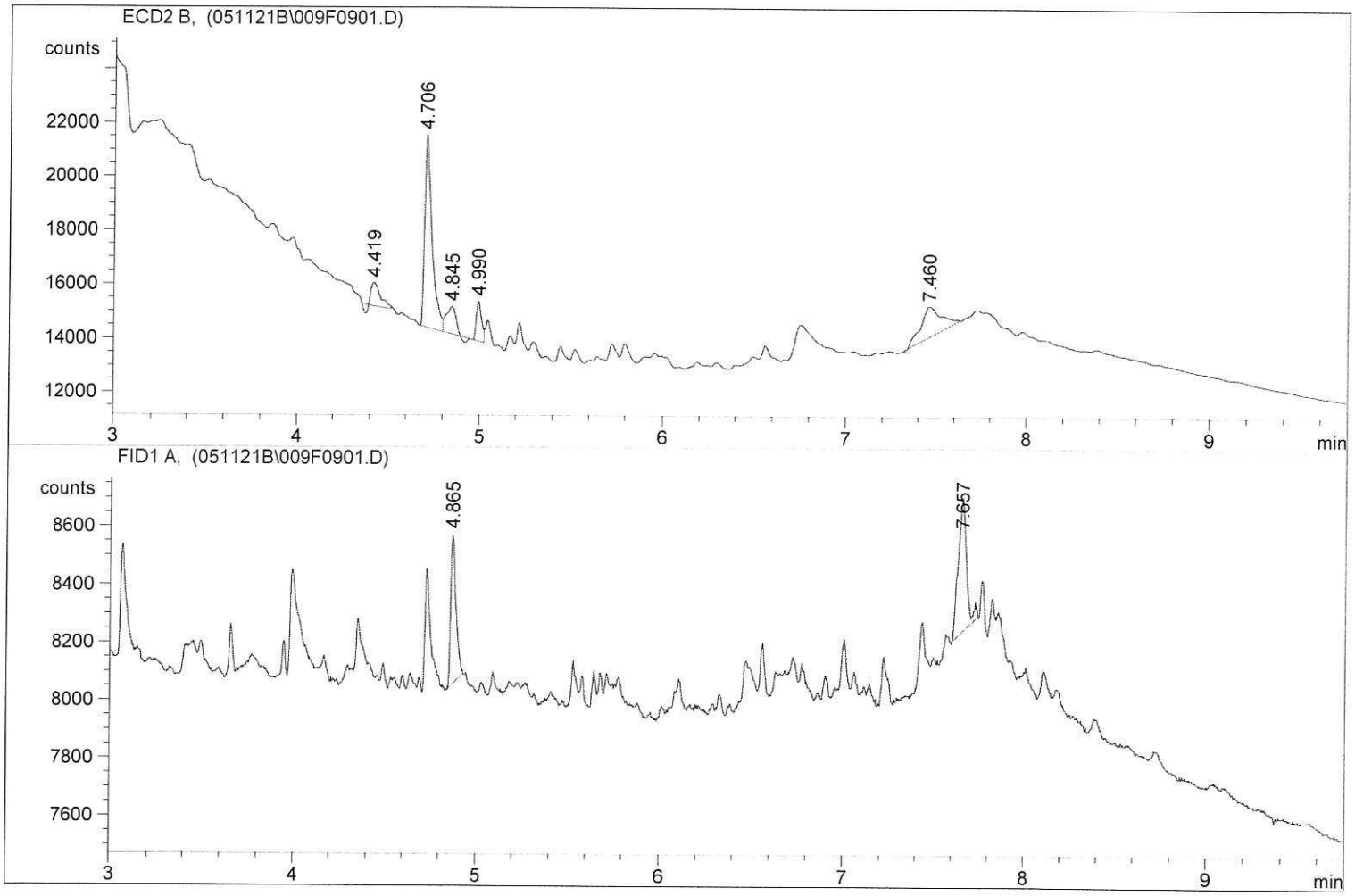


*** End of Report ***

Data File C:\HPCHEM\1\DATA\051121B\009F0901.D

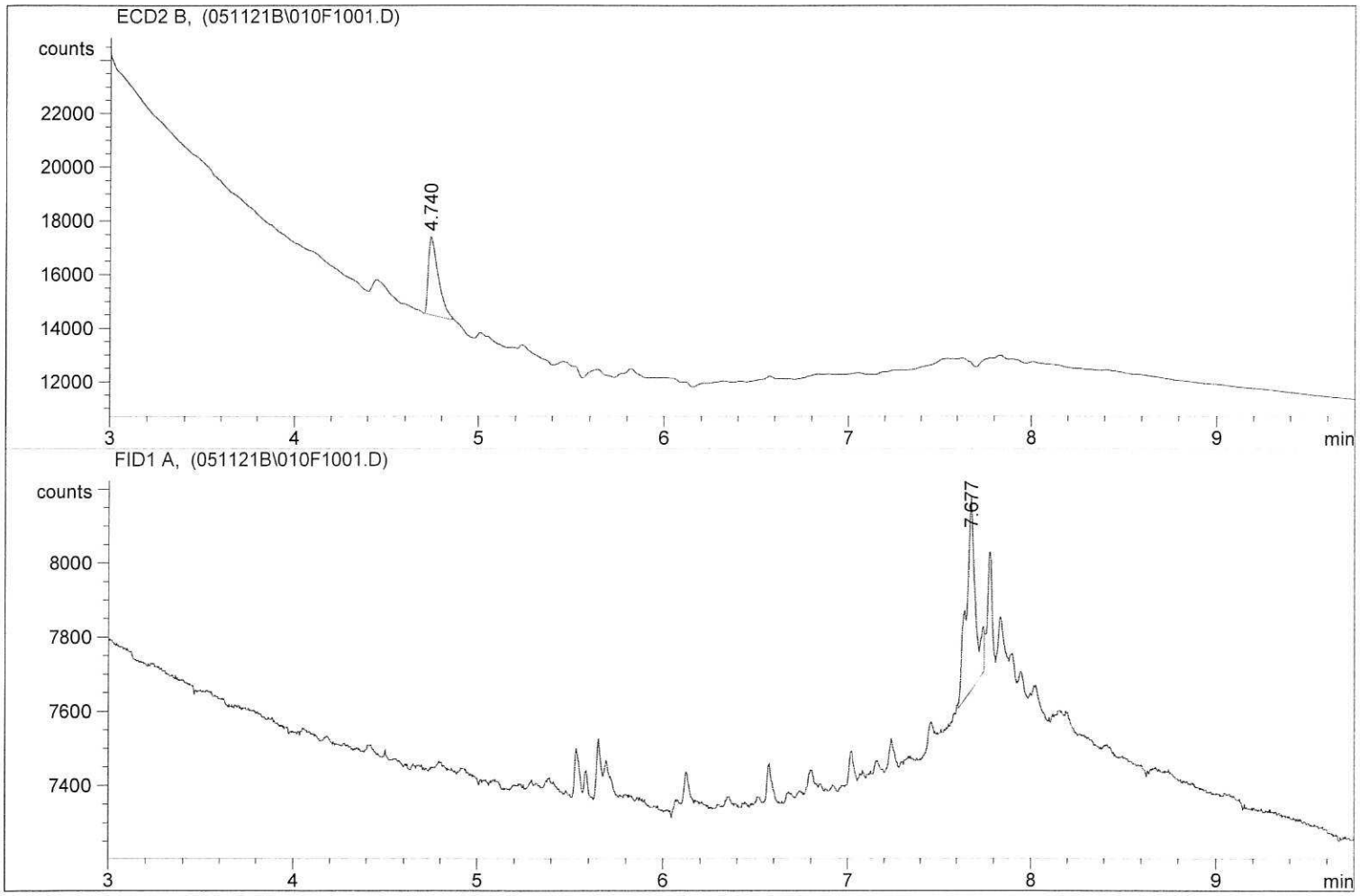
Sample Name: 21E0103-06

Injection Date	: 5/11/2021 9:46:41 PM	Seq. Line :	9
Sample Name	: 21E0103-06	Location :	Vial 9
Acq. Operator	: SH	Inj :	1
		Inj Volume :	1 µl
Sequence File	: C:\HPCHEM\1\SEQUENCE\051121B.S		
Method	: C:\HPCHEM\1\METHODS\SCREEN.M		
Last changed	: 5/8/2021 12:43:03 PM by TW		
SCREEN METHOD			



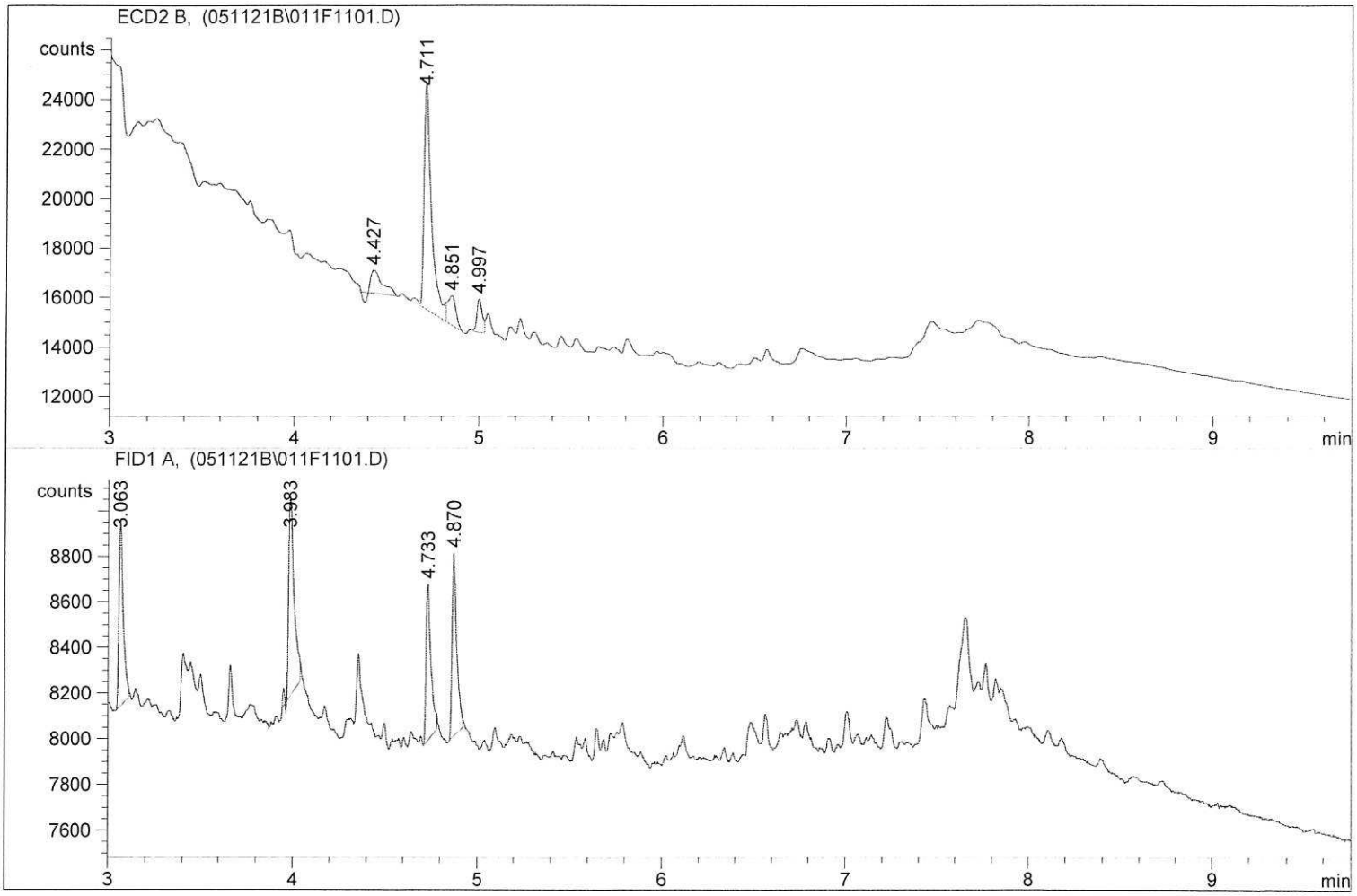
*** End of Report ***

Injection Date	: 5/11/2021 10:00:20 PM	Seq. Line :	10
Sample Name	: 21E0103-07	Location :	Vial 10
Acq. Operator	: SH	Inj :	1
		Inj Volume :	1 µl
Sequence File	: C:\HPCHEM\1\SEQUENCE\051121B.S		
Method	: C:\HPCHEM\1\METHODS\SCREEN.M		
Last changed	: 5/8/2021 12:43:03 PM by TW		
SCREEN METHOD			



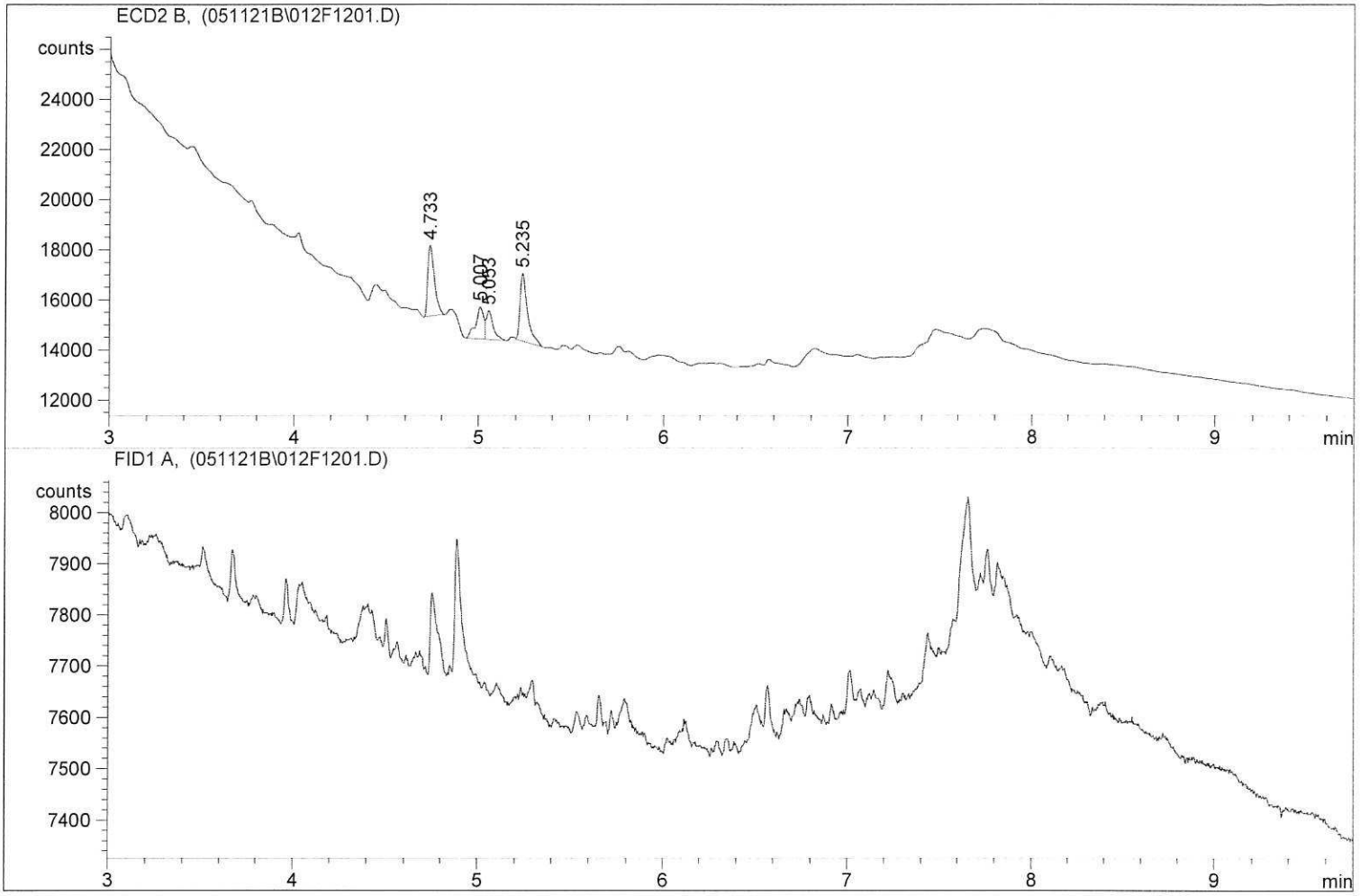
*** End of Report ***

Injection Date	: 5/11/2021 10:14:24 PM	Seq. Line :	11
Sample Name	: 21E0103-08	Location :	Vial 11
Acq. Operator	: SH	Inj :	1
		Inj Volume :	1 µl
Sequence File	: C:\HPCHEM\1\SEQUENCE\051121B.S		
Method	: C:\HPCHEM\1\METHODS\SCREEN.M		
Last changed	: 5/8/2021 12:43:03 PM by TW		
SCREEN METHOD			



*** End of Report ***

Injection Date	: 5/11/2021 10:28:02 PM	Seq. Line :	12
Sample Name	: 21E0103-09	Location :	Vial 12
Acq. Operator	: SH	Inj :	1
		Inj Volume :	1 µl
Sequence File	: C:\HPCHEM\1\SEQUENCE\051121B.S		
Method	: C:\HPCHEM\1\METHODS\SCREEN.M		
Last changed	: 5/8/2021 12:43:03 PM by TW		
SCREEN METHOD			



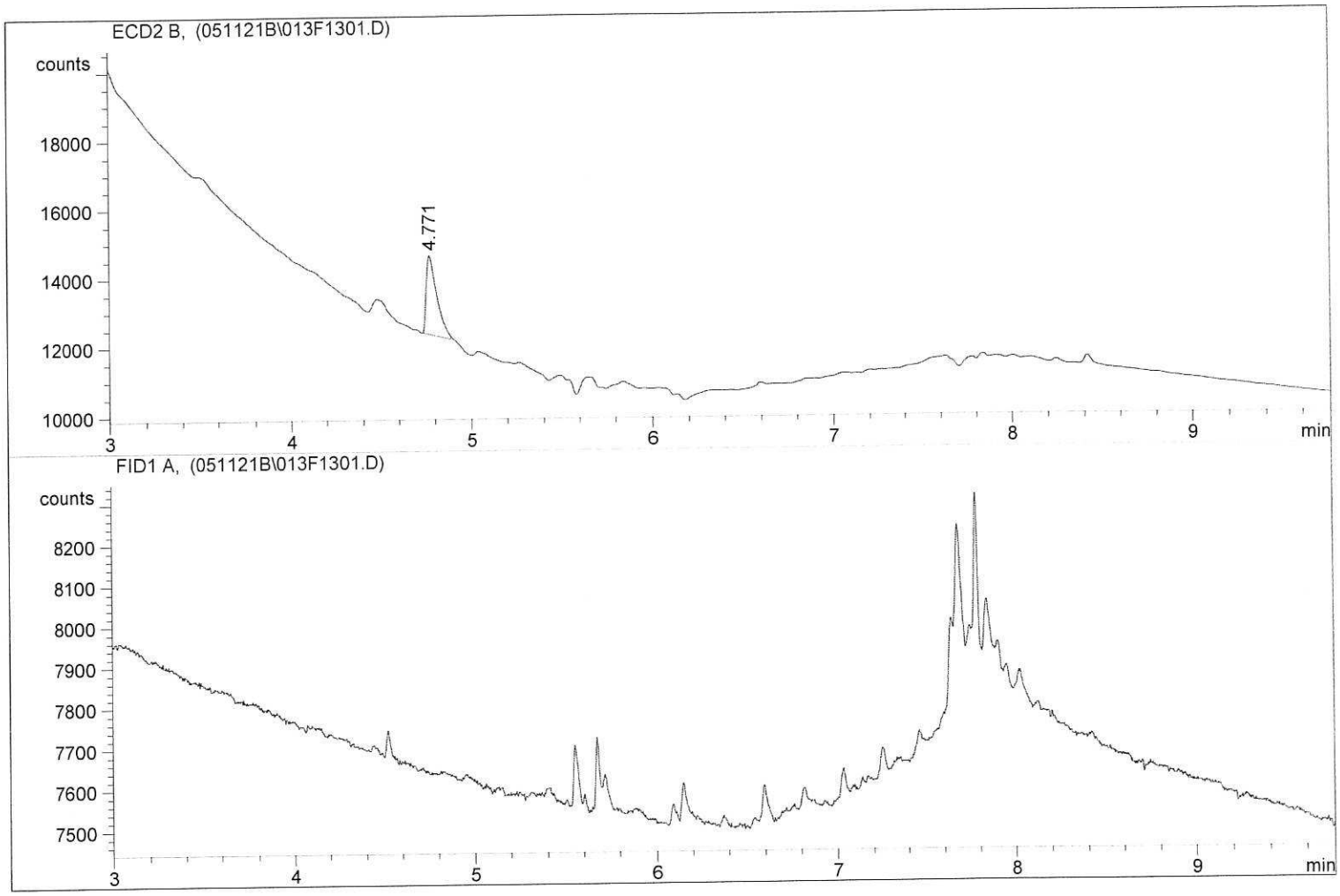
*** End of Report ***

Data File C:\HPCHEM\1\DATA\051121B\013F1301.D

Sample Name: 21E0103-10

Injection Date	: 5/11/2021 10:42:06 PM	Seq. Line :	13
Sample Name	: 21E0103-10	Location :	Vial 13
Acq. Operator	: SH	Inj :	1
		Inj Volume :	1 µl

Sequence File : C:\HPCHEM\1\SEQUENCE\051121B.S
Method : C:\HPCHEM\1\METHODS\SCREEN.M
Last changed : 5/8/2021 12:43:03 PM by TW
SCREEN METHOD



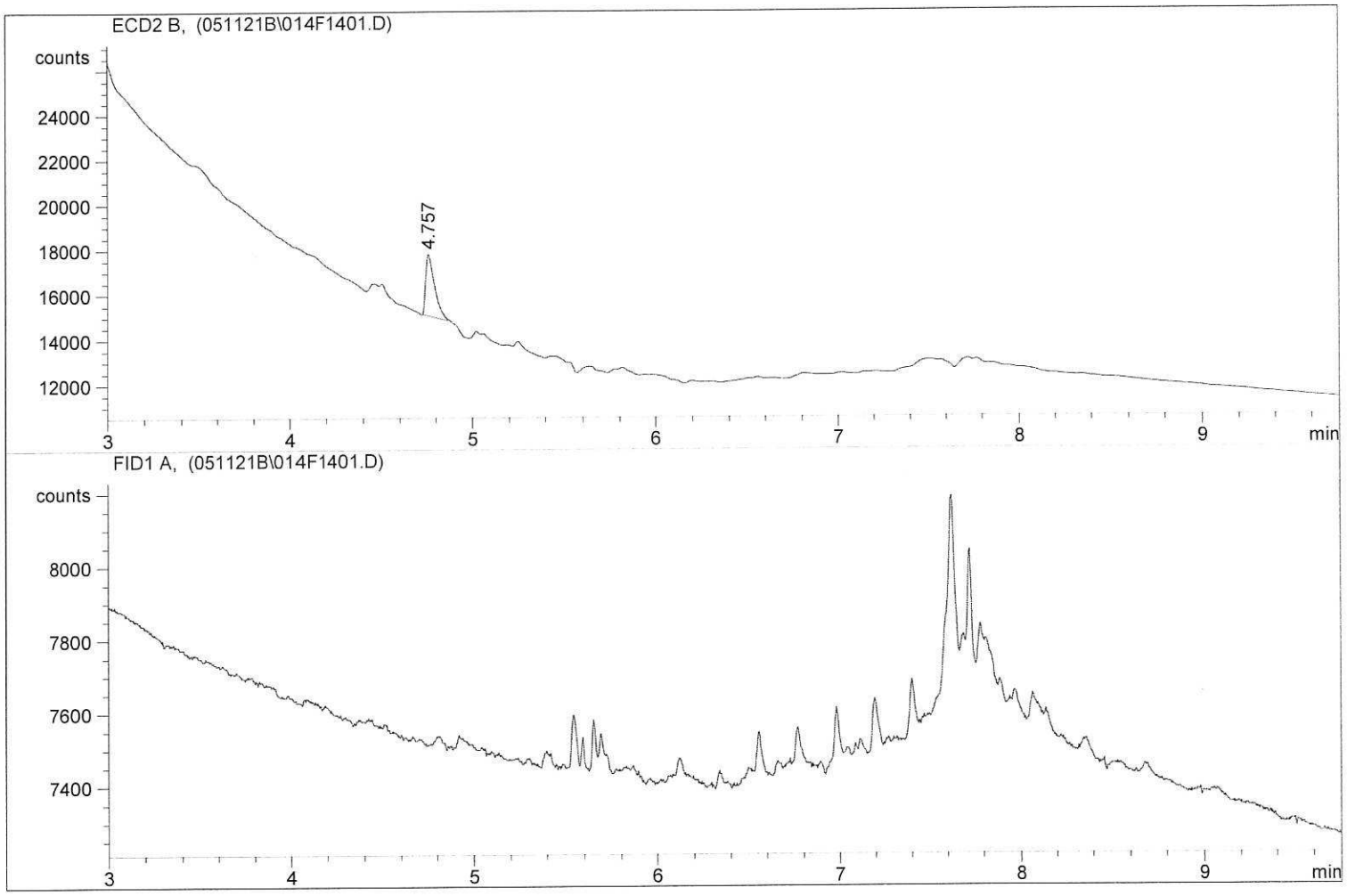
*** End of Report ***

Data File C:\HPCHEM\1\DATA\051121B\014F1401.D

Sample Name: 21E0103-11

Injection Date	: 5/11/2021 10:55:46 PM	Seq. Line :	14
Sample Name	: 21E0103-11	Location :	Vial 14
Acq. Operator	: SH	Inj :	1
		Inj Volume :	1 µl

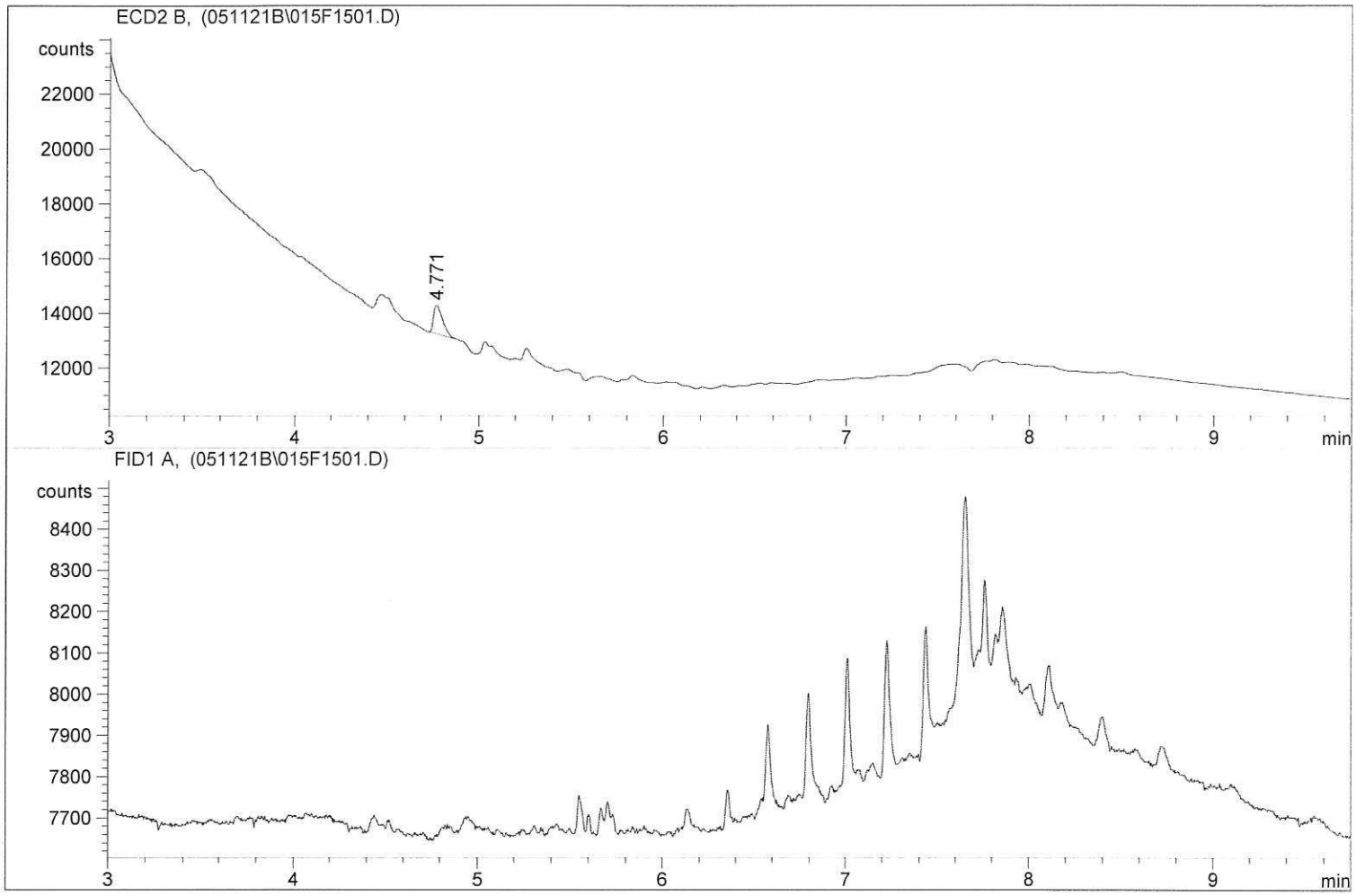
Sequence File : C:\HPCHEM\1\SEQUENCE\051121B.S
Method : C:\HPCHEM\1\METHODS\SCREEN.M
Last changed : 5/8/2021 12:43:03 PM by TW
SCREEN METHOD



*** End of Report ***

Data File C:\HPCHEM\1\DATA\051121B\015F1501.D Sample Name: 21E0103-12

Injection Date	: 5/11/2021 11:09:43 PM	Seq. Line :	15
Sample Name	: 21E0103-12	Location :	Vial 15
Acq. Operator	: SH	Inj :	1
		Inj Volume :	1 µl
Sequence File	: C:\HPCHEM\1\SEQUENCE\051121B.S		
Method	: C:\HPCHEM\1\METHODS\SCREEN.M		
Last changed	: 5/8/2021 12:43:03 PM by TW		
SCREEN METHOD			

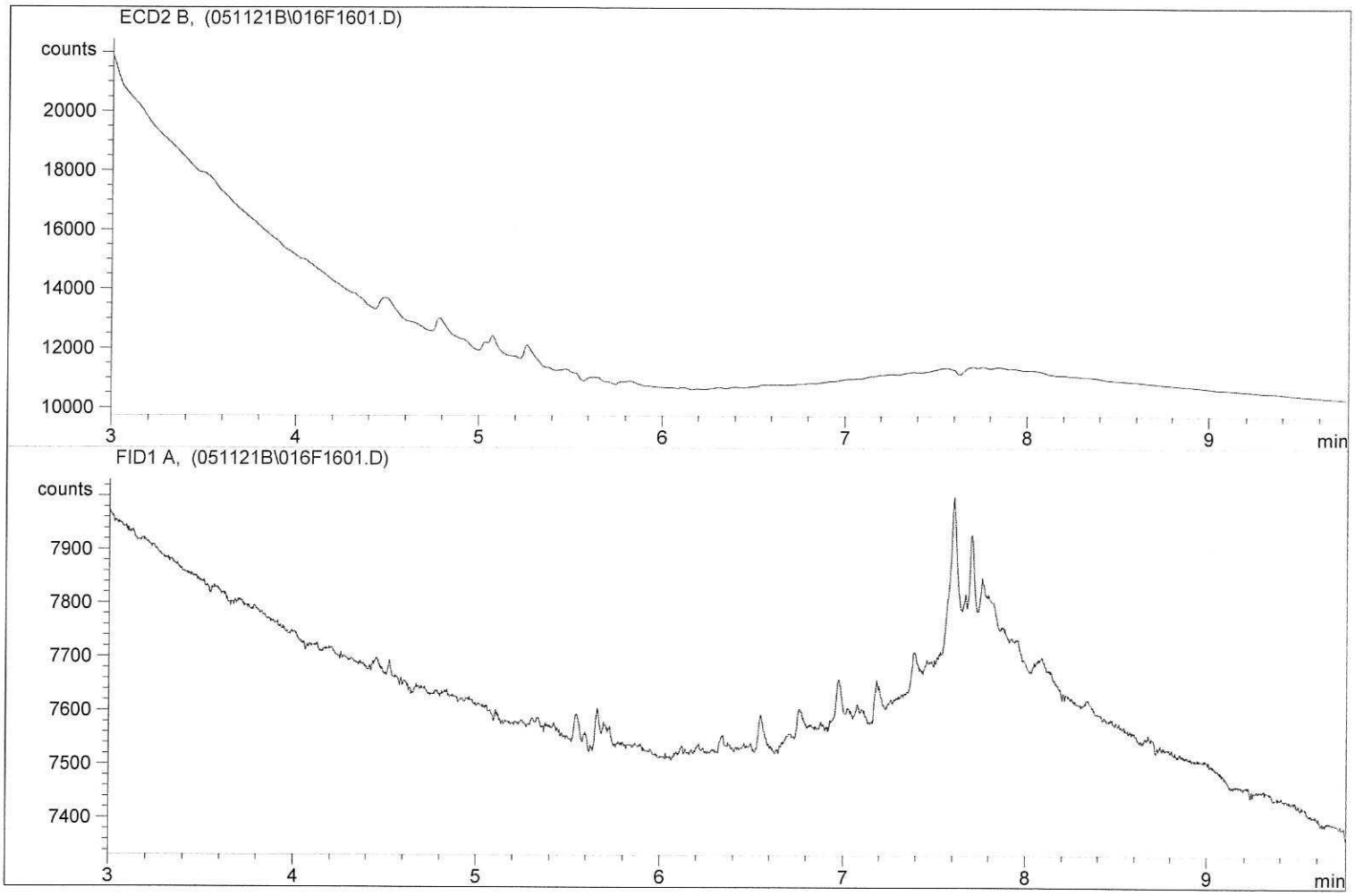


*** End of Report ***

Data File C:\HPCHEM\1\DATA\051121B\016F1601.D

Sample Name: 21E0103-13

Injection Date	: 5/11/2021 11:23:25 PM	Seq. Line :	16
Sample Name	: 21E0103-13	Location :	Vial 16
Acq. Operator	: SH	Inj :	1
		Inj Volume :	1 µl
Sequence File	: C:\HPCHEM\1\SEQUENCE\051121B.S		
Method	: C:\HPCHEM\1\METHODS\SCREEN.M		
Last changed	: 5/8/2021 12:43:03 PM by TW		
SCREEN METHOD			



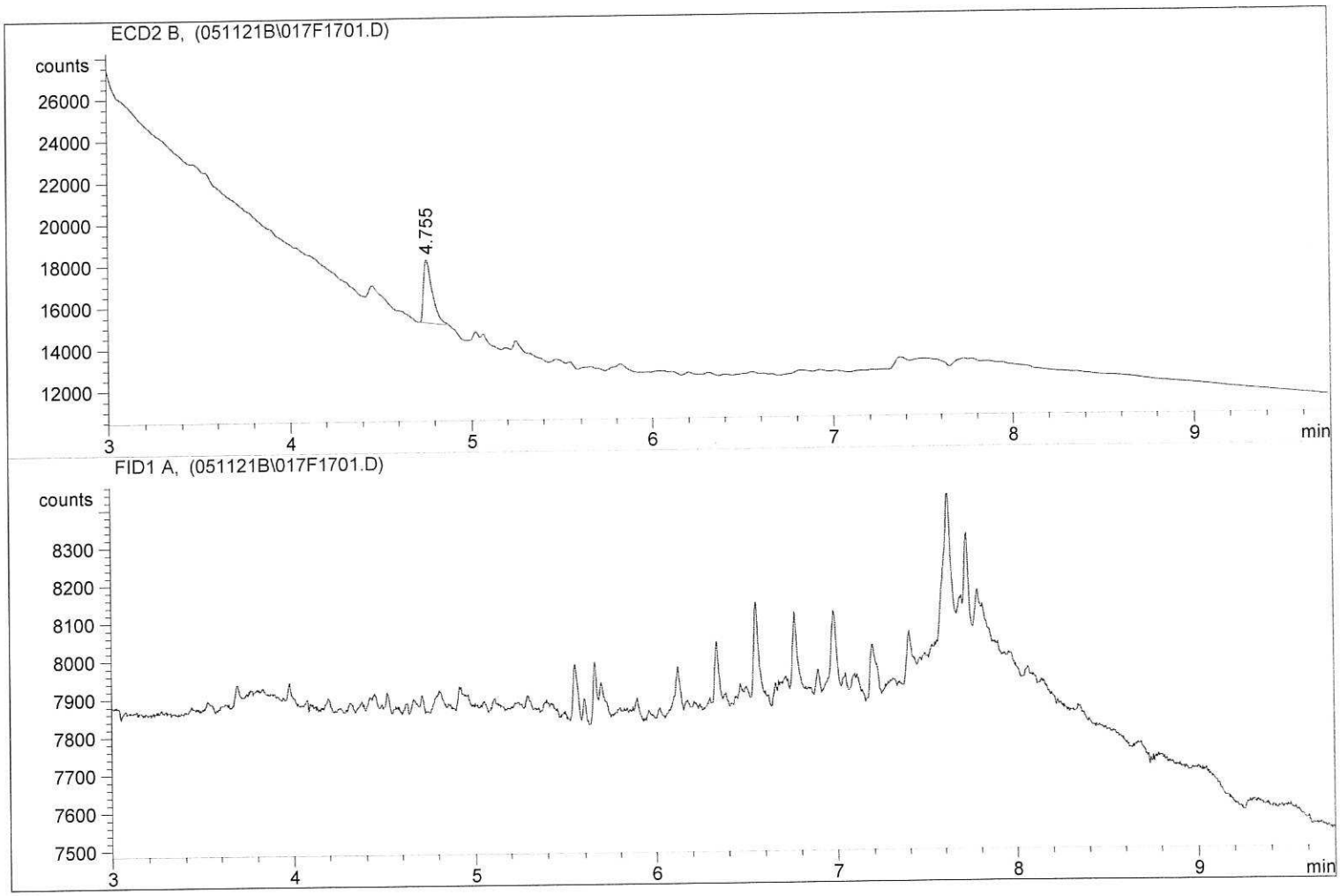
*** End of Report ***

Data File C:\HPCHEM\1\DATA\051121B\017F1701.D

Sample Name: 21E0103-14

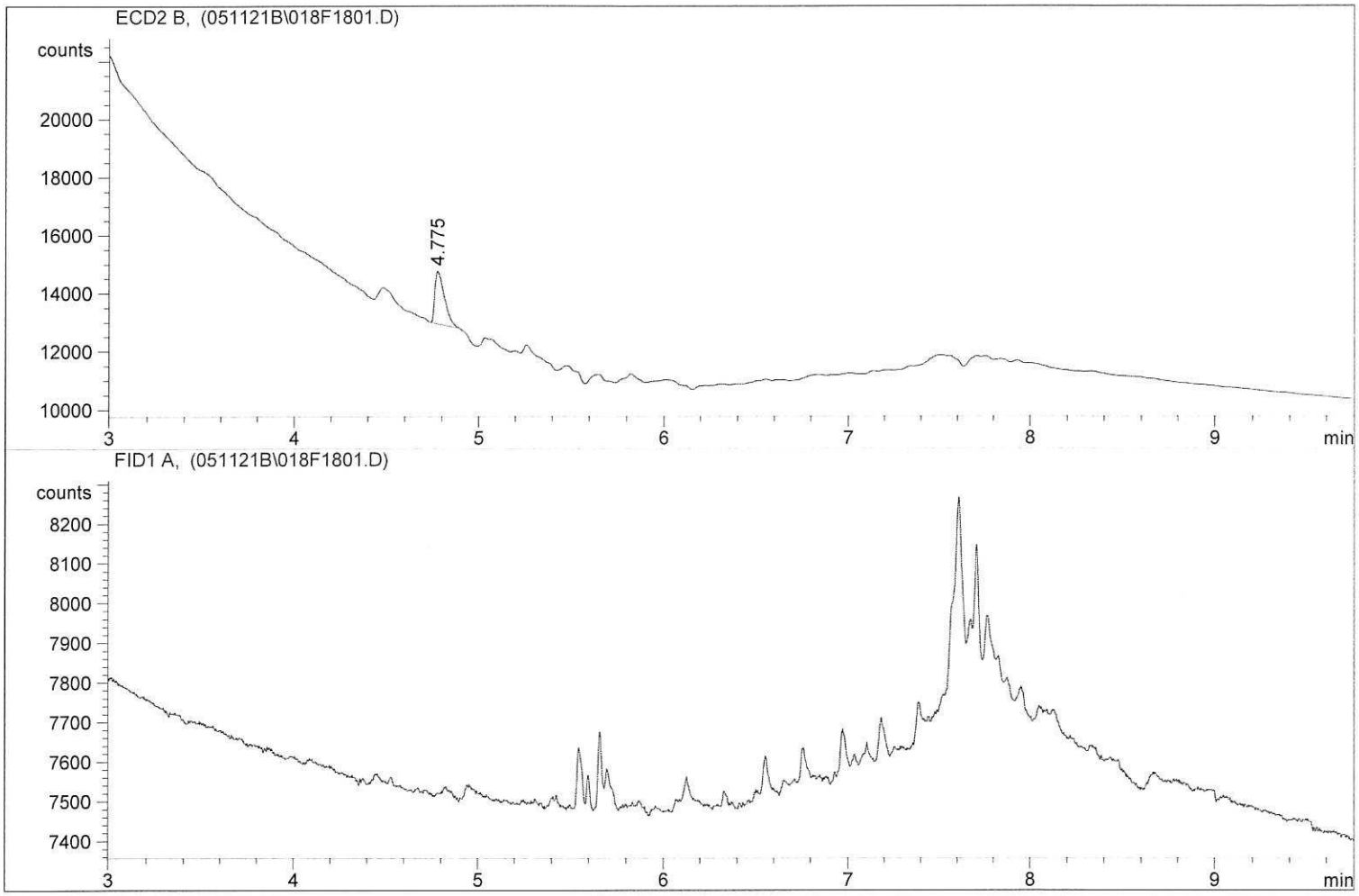
Injection Date	: 5/11/2021 11:37:19 PM	Seq. Line :	17
Sample Name	: 21E0103-14	Location :	Vial 17
Acq. Operator	: SH	Inj :	1
		Inj Volume :	1 µl

Sequence File : C:\HPCHEM\1\SEQUENCE\051121B.S
Method : C:\HPCHEM\1\METHODS\SCREEN.M
Last changed : 5/8/2021 12:43:03 PM by TW
SCREEN METHOD



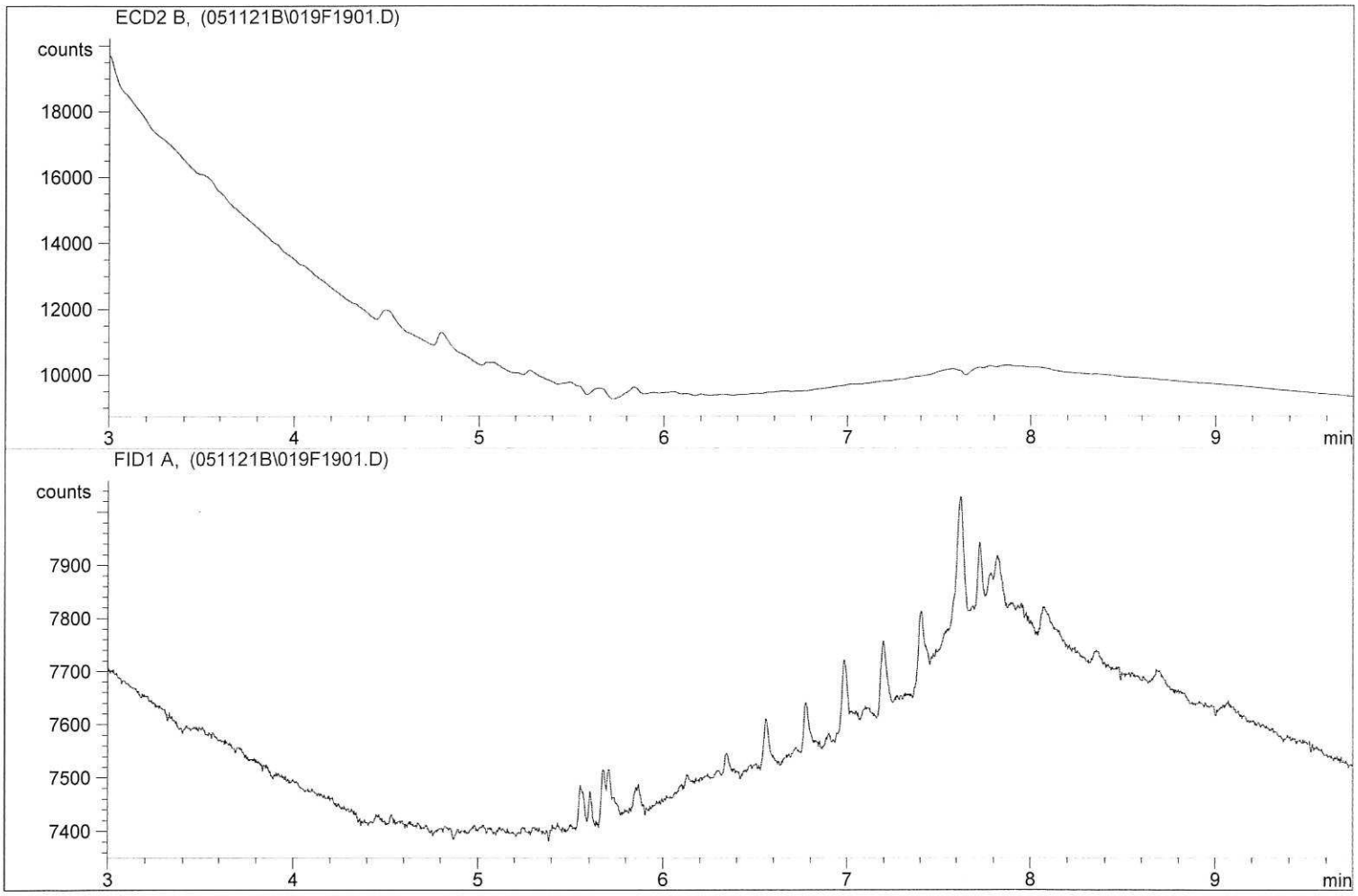
*** End of Report ***

Injection Date	: 5/11/2021 11:51:04 PM	Seq. Line :	18
Sample Name	: 21E0103-15	Location :	Vial 18
Acq. Operator	: SH	Inj :	1
		Inj Volume :	1 µl
Sequence File	: C:\HPCHEM\1\SEQUENCE\051121B.S		
Method	: C:\HPCHEM\1\METHODS\SCREEN.M		
Last changed	: 5/8/2021 12:43:03 PM by TW		
SCREEN METHOD			



*** End of Report ***

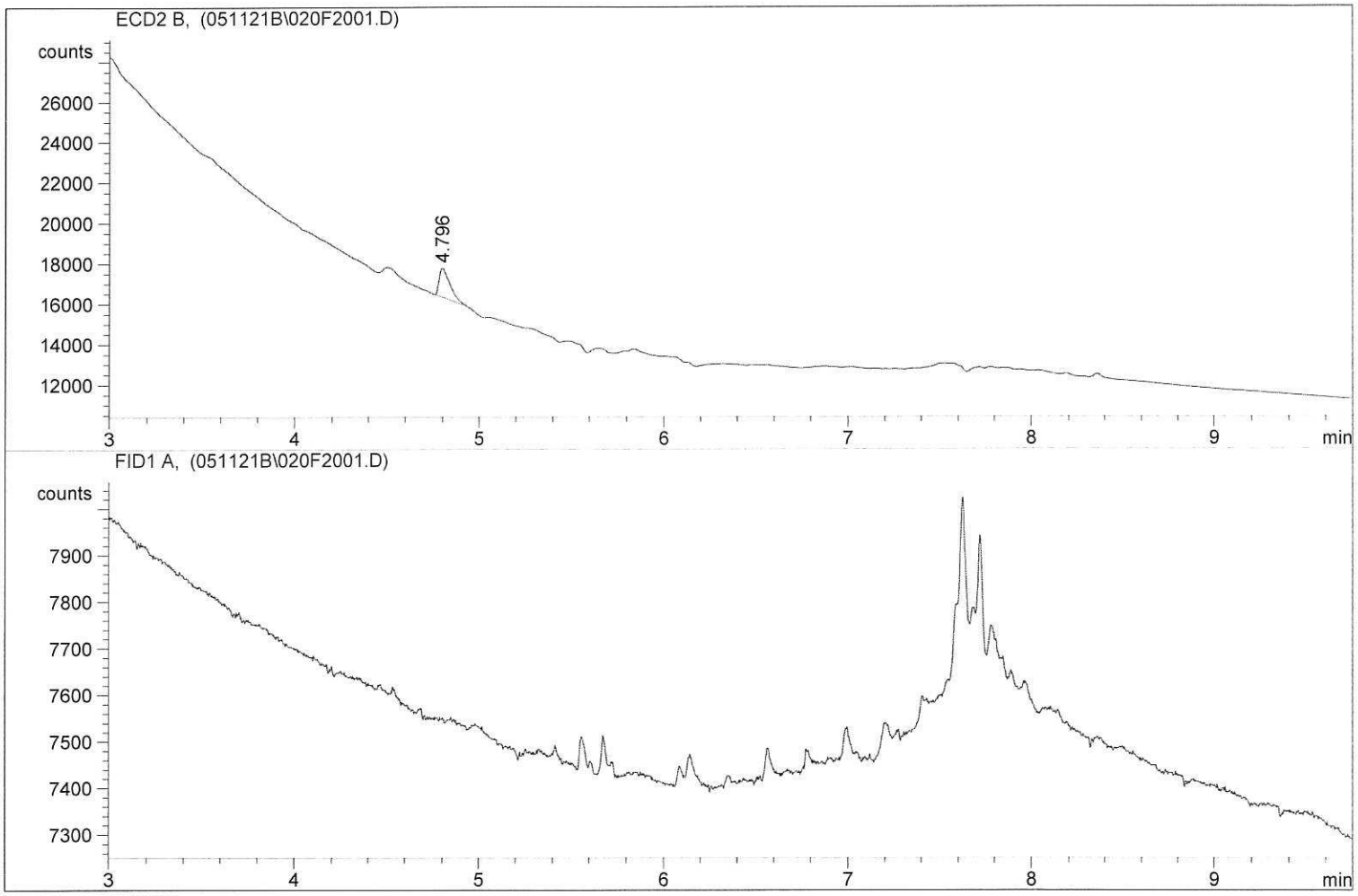
Injection Date	: 5/12/2021 12:04:59 AM	Seq. Line :	19
Sample Name	: 21E0103-16	Location :	Vial 19
Acq. Operator	: SH	Inj :	1
		Inj Volume :	1 µl
Sequence File	: C:\HPCHEM\1\SEQUENCE\051121B.S		
Method	: C:\HPCHEM\1\METHODS\SCREEN.M		
Last changed	: 5/8/2021 12:43:03 PM by TW		
SCREEN METHOD			



*** End of Report ***

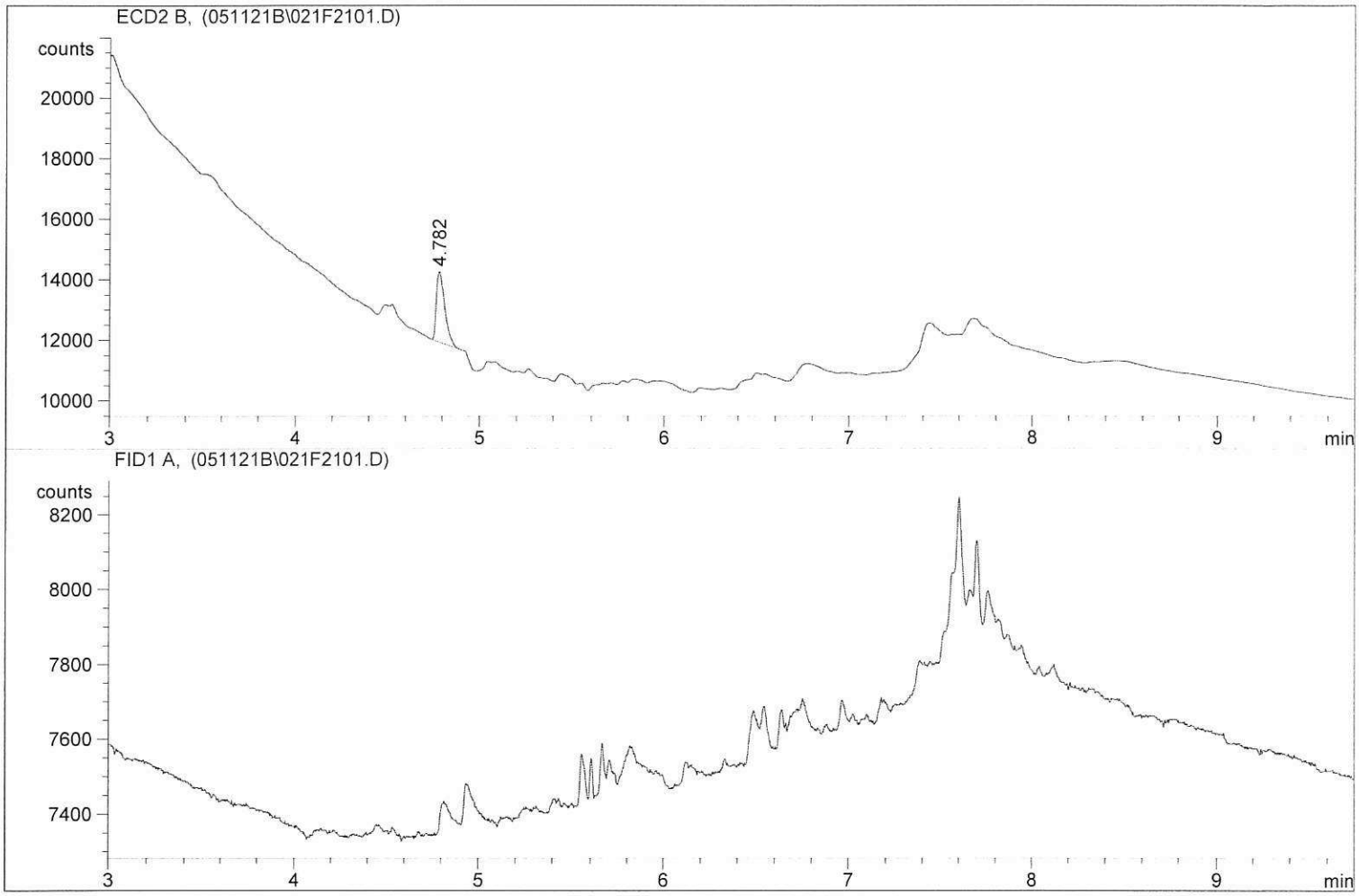
Data File C:\HPCHEM\1\DATA\051121B\020F2001.D Sample Name: 21E0103-17

Injection Date	: 5/12/2021 12:18:37 AM	Seq. Line :	20
Sample Name	: 21E0103-17	Location :	Vial 20
Acq. Operator	: SH	Inj :	1
		Inj Volume :	1 µl
Sequence File	: C:\HPCHEM\1\SEQUENCE\051121B.S		
Method	: C:\HPCHEM\1\METHODS\SCREEN.M		
Last changed	: 5/8/2021 12:43:03 PM by TW		
SCREEN METHOD			



*** End of Report ***

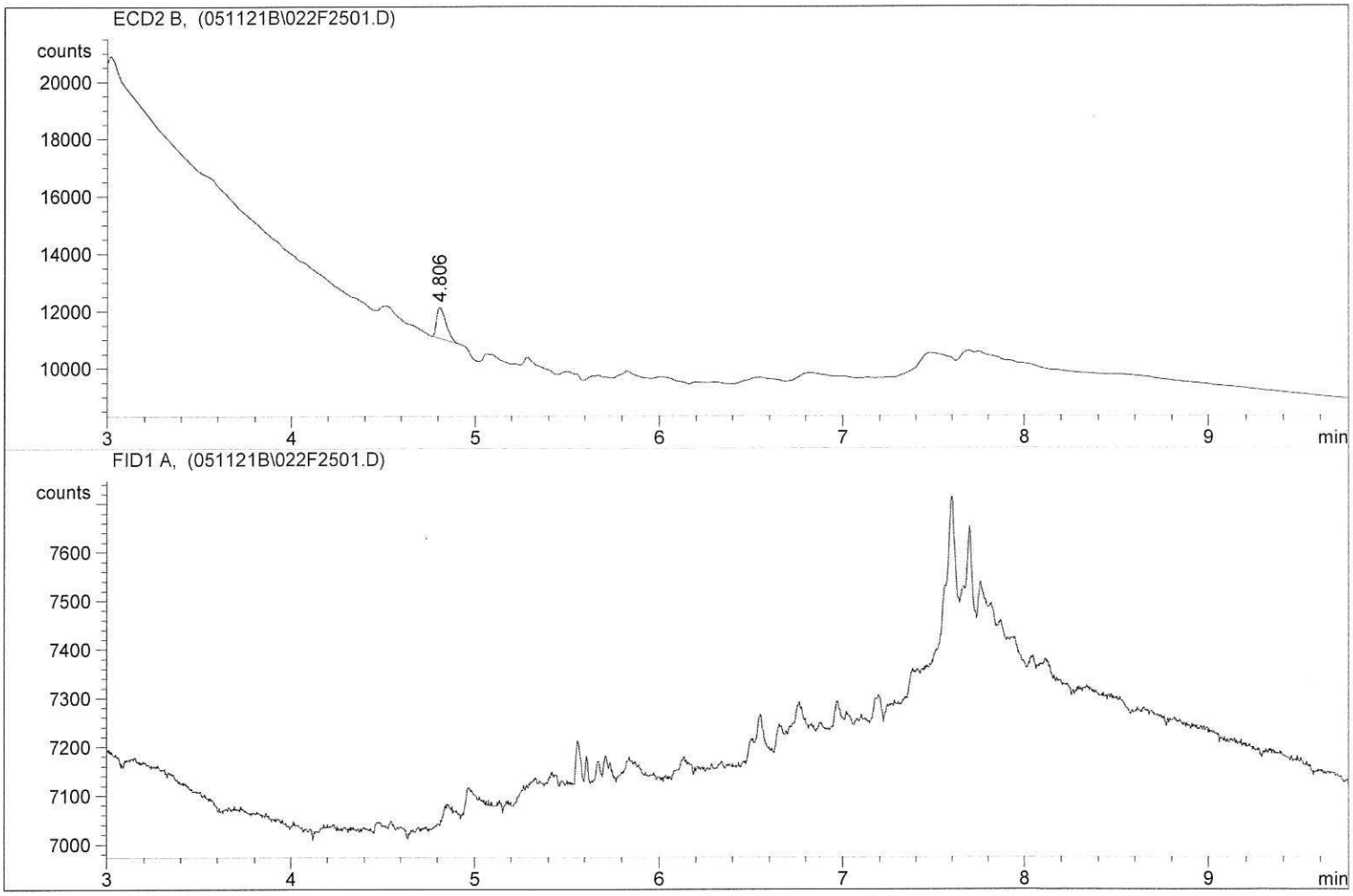
Injection Date	: 5/12/2021 12:32:39 AM	Seq. Line :	21
Sample Name	: 21E0103-18	Location :	Vial 21
Acq. Operator	: SH	Inj :	1
		Inj Volume :	1 µl
Sequence File	: C:\HPCHEM\1\SEQUENCE\051121B.S		
Method	: C:\HPCHEM\1\METHODS\SCREEN.M		
Last changed	: 5/8/2021 12:43:03 PM by TW		
SCREEN METHOD			



*** End of Report ***

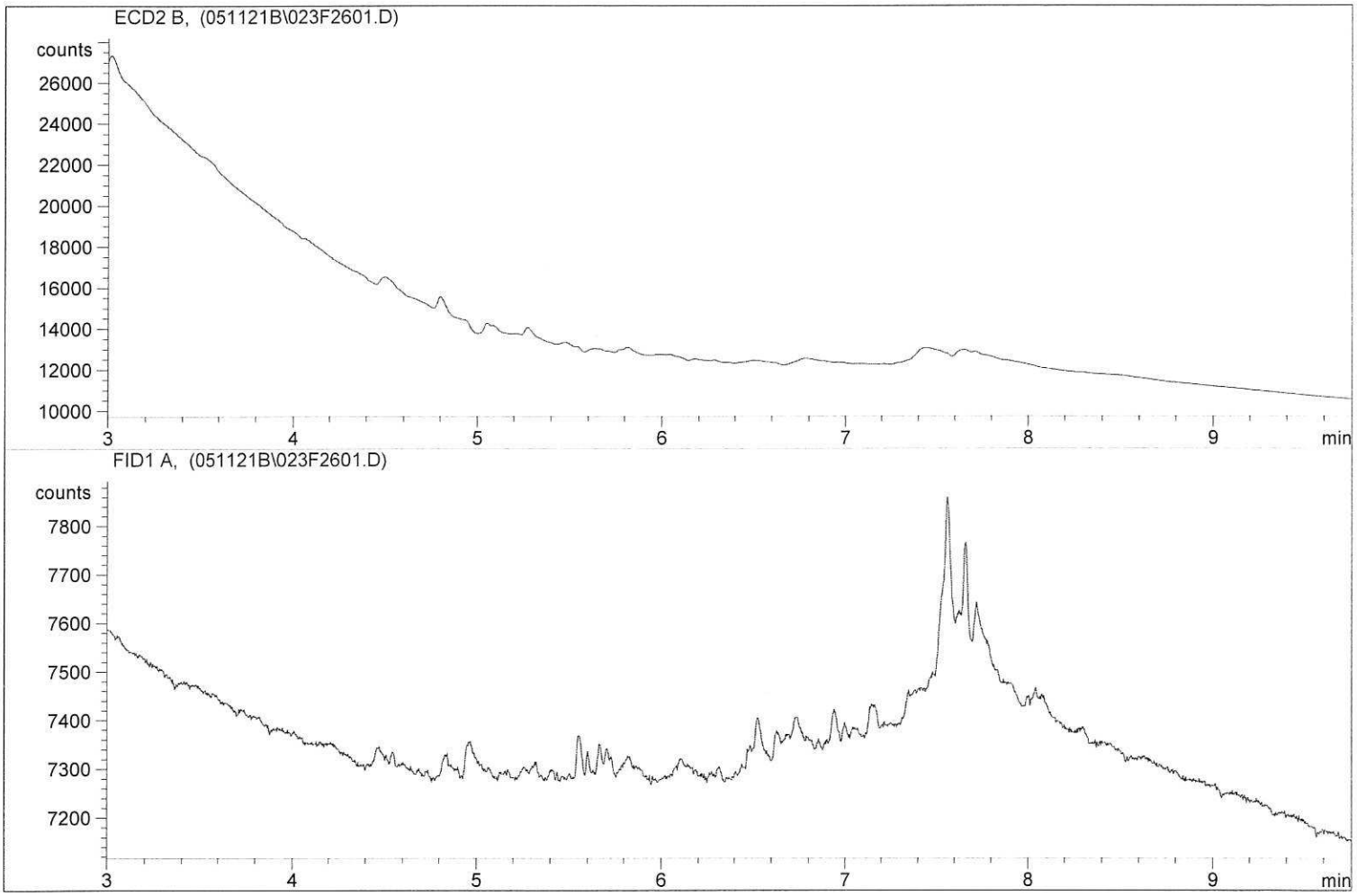
Data File C:\HPCHEM\1\DATA\051121B\022F2501.D Sample Name: 21E0103-19

Injection Date	: 5/12/2021 1:27:56 AM	Seq. Line :	25
Sample Name	: 21E0103-19	Location :	Vial 22
Acq. Operator	: SH	Inj :	1
		Inj Volume :	1 µl
Sequence File	: C:\HPCHEM\1\SEQUENCE\051121B.S		
Method	: C:\HPCHEM\1\METHODS\SCREEN.M		
Last changed	: 5/8/2021 12:43:03 PM by TW		
SCREEN METHOD			



*** End of Report ***

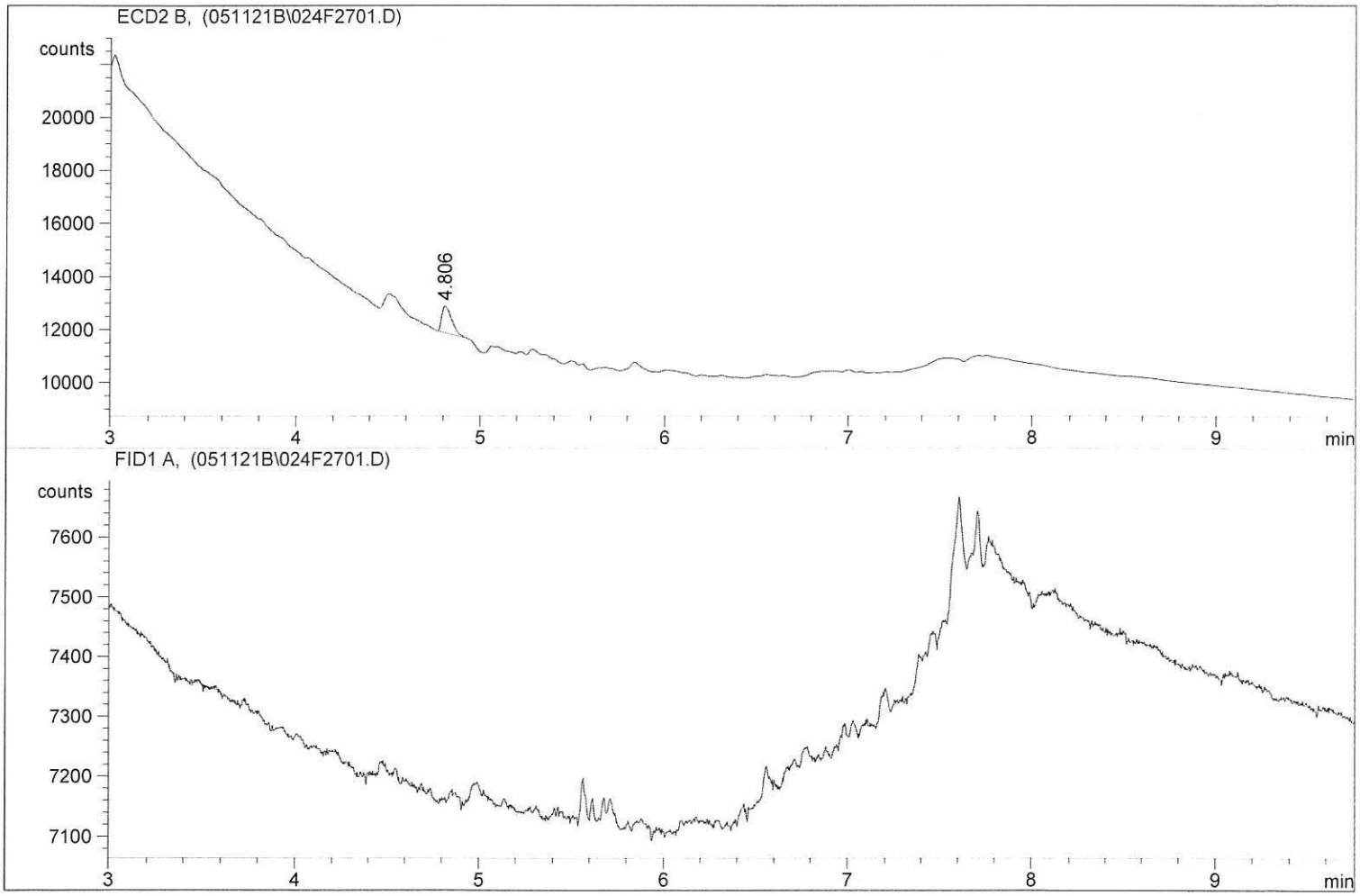
Injection Date	: 5/12/2021 1:41:33 AM	Seq. Line :	26
Sample Name	: 21E0103-20	Location :	Vial 23
Acq. Operator	: SH	Inj :	1
		Inj Volume :	1 µl
Sequence File	: C:\HPCHEM\1\SEQUENCE\051121B.S		
Method	: C:\HPCHEM\1\METHODS\SCREEN.M		
Last changed	: 5/8/2021 12:43:03 PM by TW		
SCREEN METHOD			



*** End of Report ***

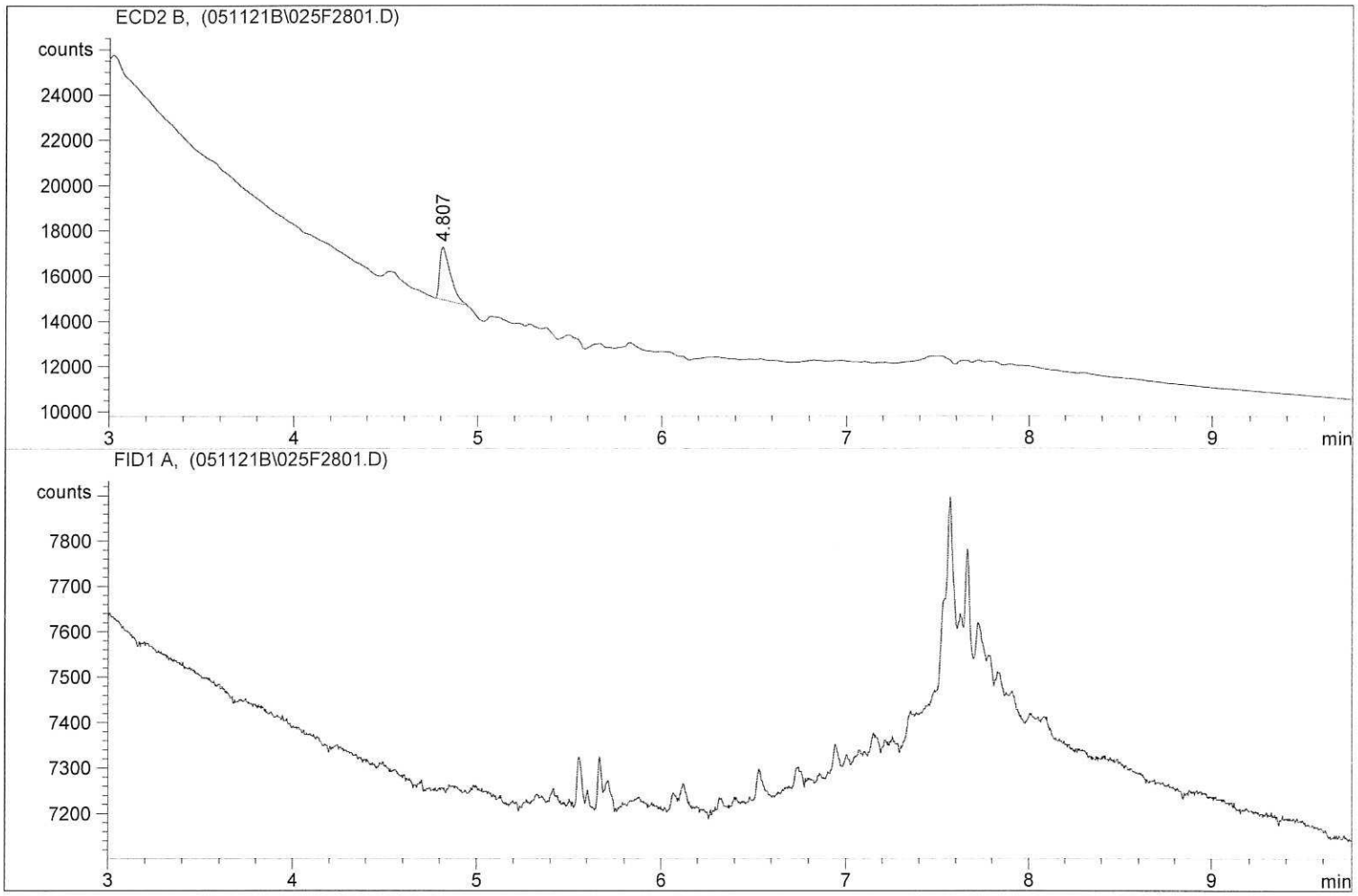
Data File C:\HPCHEM\1\DATA\051121B\024F2701.D Sample Name: 21E0103-21

Injection Date	: 5/12/2021 1:55:30 AM	Seq. Line :	27
Sample Name	: 21E0103-21	Location :	Vial 24
Acq. Operator	: SH	Inj :	1
		Inj Volume :	1 µl
Sequence File	: C:\HPCHEM\1\SEQUENCE\051121B.S		
Method	: C:\HPCHEM\1\METHODS\SCREEN.M		
Last changed	: 5/8/2021 12:43:03 PM by TW		
SCREEN METHOD			



*** End of Report ***

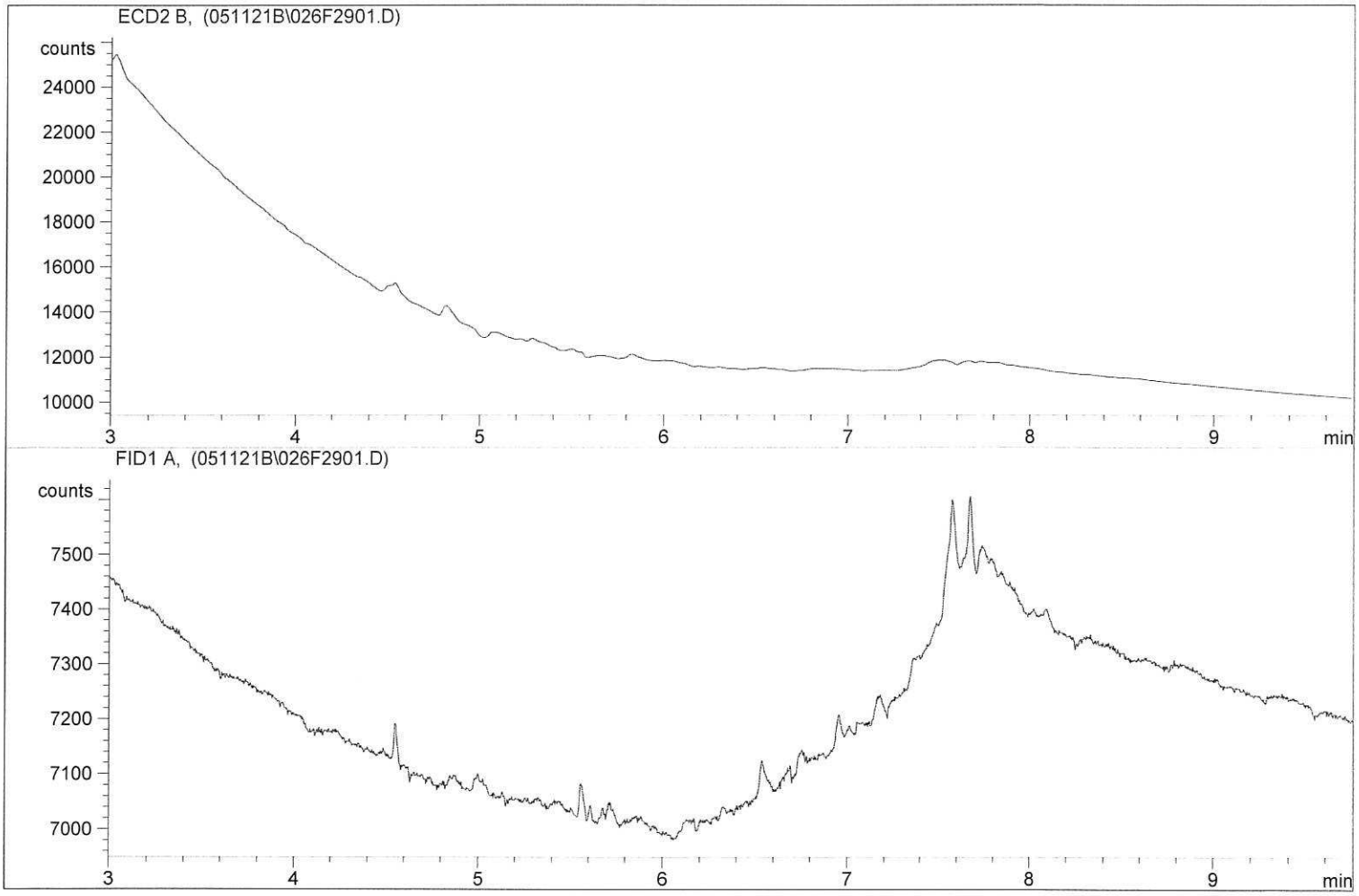
Injection Date	: 5/12/2021 2:09:11 AM	Seq. Line :	28
Sample Name	: 21E0103-22	Location :	Vial 25
Acq. Operator	: SH	Inj :	1
		Inj Volume :	1 µl
Sequence File	: C:\HPCHEM\1\SEQUENCE\051121B.S		
Method	: C:\HPCHEM\1\METHODS\SCREEN.M		
Last changed	: 5/8/2021 12:43:03 PM by TW		
SCREEN METHOD			



*** End of Report ***

Data File C:\HPCHEM\1\DATA\051121B\026F2901.D Sample Name: 21E0103-23

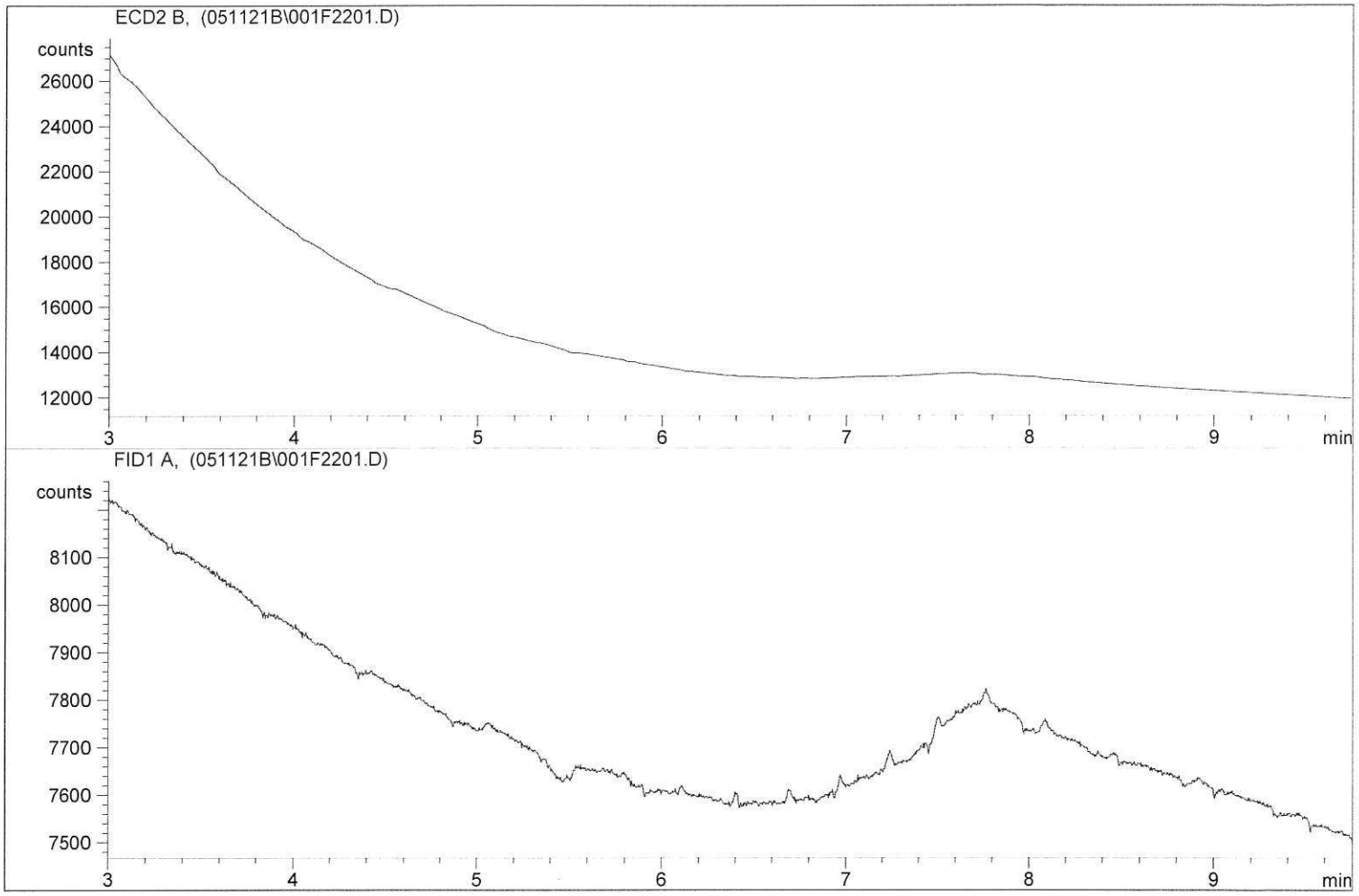
Injection Date	: 5/12/2021 2:23:12 AM	Seq. Line :	29
Sample Name	: 21E0103-23	Location :	Vial 26
Acq. Operator	: SH	Inj :	1
		Inj Volume :	1 µl
Sequence File	: C:\HPCHEM\1\SEQUENCE\051121B.S		
Method	: C:\HPCHEM\1\METHODS\SCREEN.M		
Last changed	: 5/8/2021 12:43:03 PM by TW		
SCREEN METHOD			



*** End of Report ***

Data File C:\HPCHEM\1\DATA\051121B\001F2201.D Sample Name: DCM RINSE

Injection Date	: 5/12/2021 12:46:21 AM	Seq. Line :	22
Sample Name	: DCM RINSE	Location :	Vial 1
Acq. Operator	: SH	Inj :	1
		Inj Volume :	1 µl
Sequence File	: C:\HPCHEM\1\SEQUENCE\051121B.S		
Method	: C:\HPCHEM\1\METHODS\SCREEN.M		
Last changed	: 5/8/2021 12:43:03 PM by TW		
SCREEN METHOD			



*** End of Report ***

Data File C:\HPCHEM\1\DATA\051121B\002F2301.D Sample Name: PNA STD 1-PPM

==========

Injection Date : 5/12/2021 1:00:17 AM Seq. Line : 23
Sample Name : PNA STD 1-PPM Location : Vial 2
Acq. Operator : SH Inj : 1
Inj Volume : 1 µl

Sequence File : C:\HPCHEM\1\SEQUENCE\051121B.S
Method : C:\HPCHEM\1\METHODS\SCREEN.M
Last changed : 5/8/2021 12:43:03 PM by TW
SCREEN METHOD

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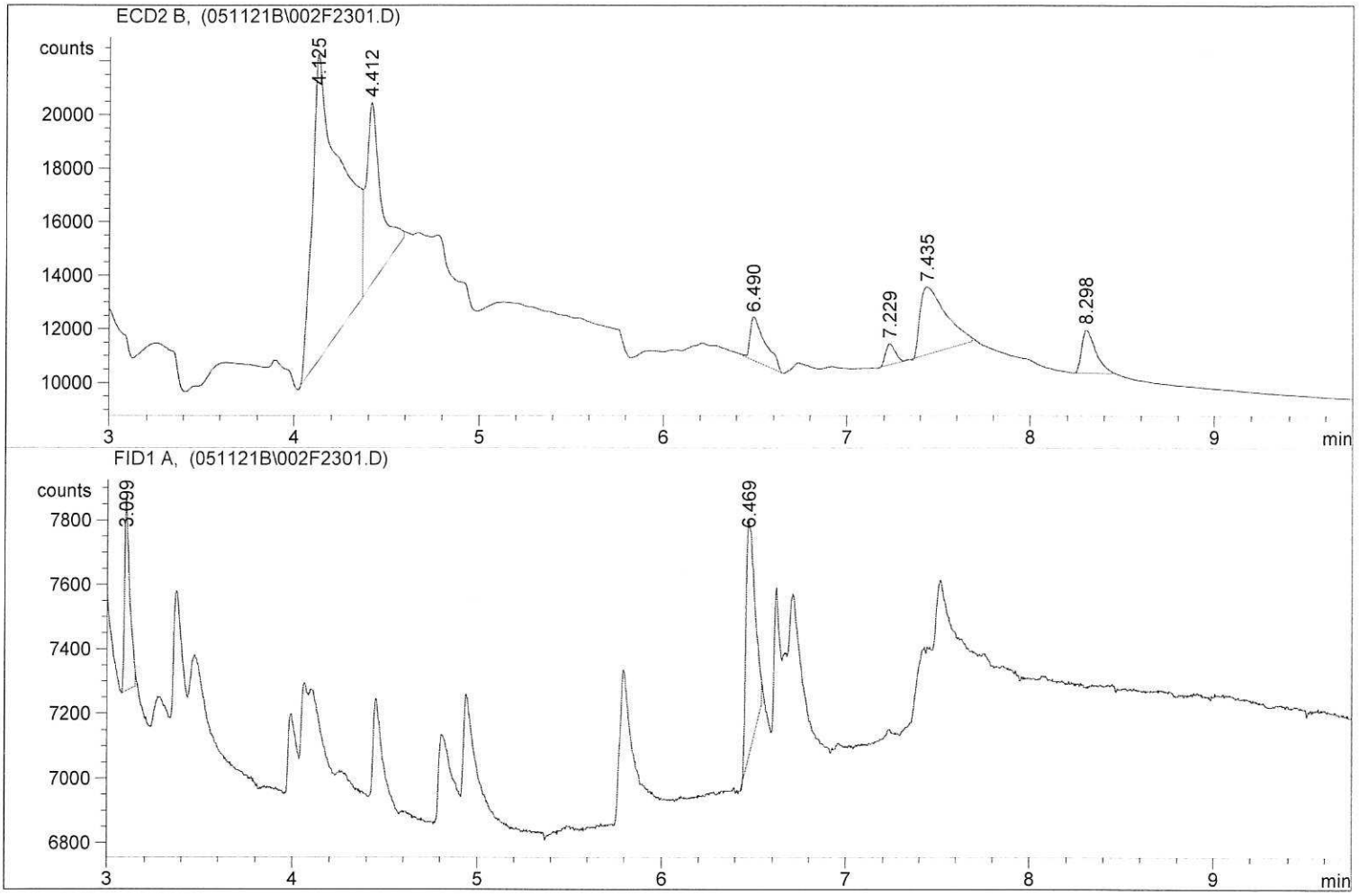
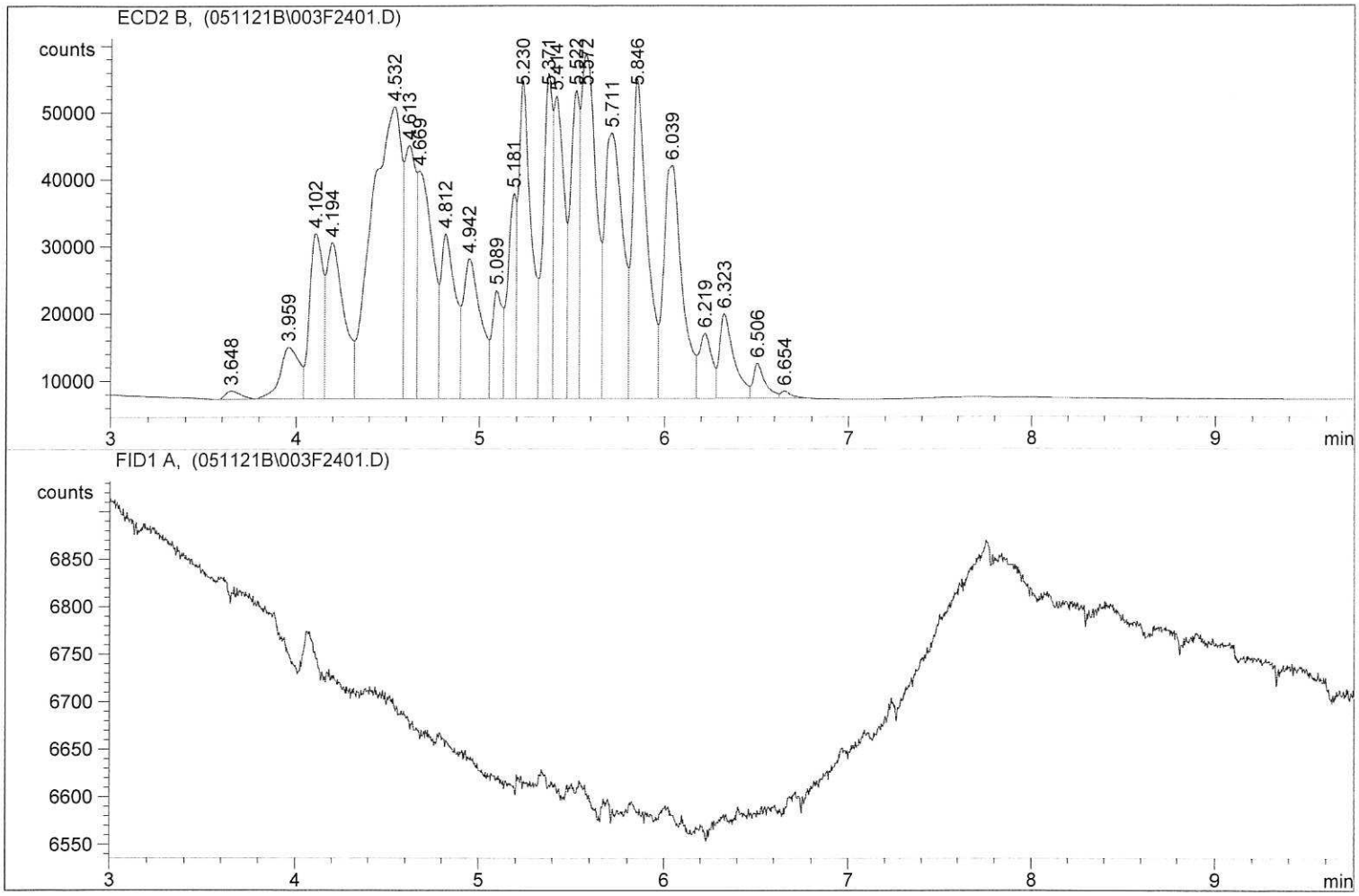


*** End of Report ***

Data File C:\HPCHEM\1\DATA\051121B\003F2401.D Sample Name: AR1660 1PPM

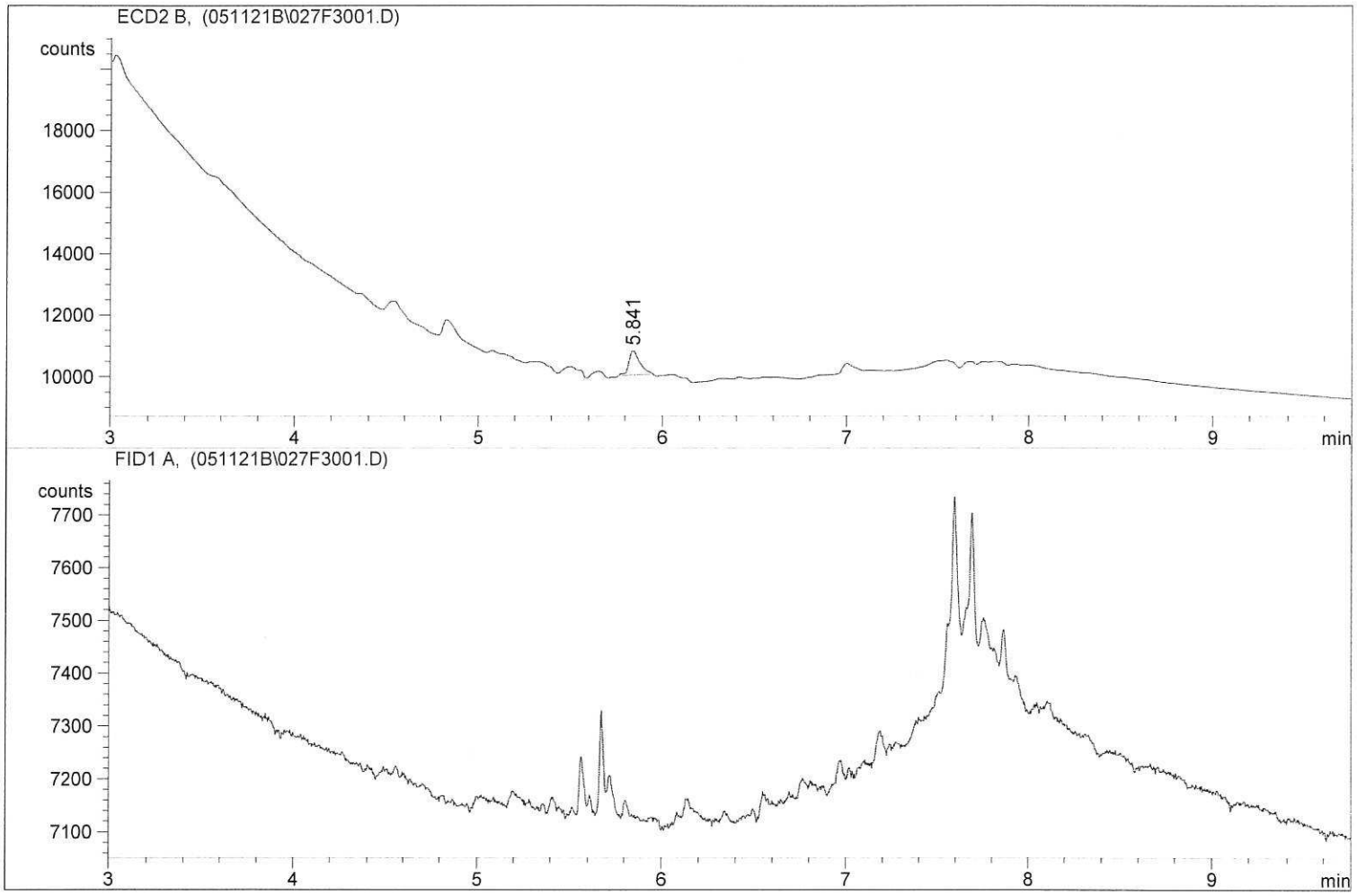
Injection Date	: 5/12/2021 1:13:56 AM	Seq. Line :	24
Sample Name	: AR1660 1PPM	Location :	Vial 3
Acq. Operator	: SH	Inj :	1
		Inj Volume :	1 µl
Sequence File	: C:\HPCHEM\1\SEQUENCE\051121B.S		
Method	: C:\HPCHEM\1\METHODS\SCREEN.M		
Last changed	: 5/8/2021 12:43:03 PM by TW		
SCREEN METHOD			



*** End of Report ***

Data File C:\HPCHEM\1\DATA\051121B\027F3001.D Sample Name: 21E0105-01

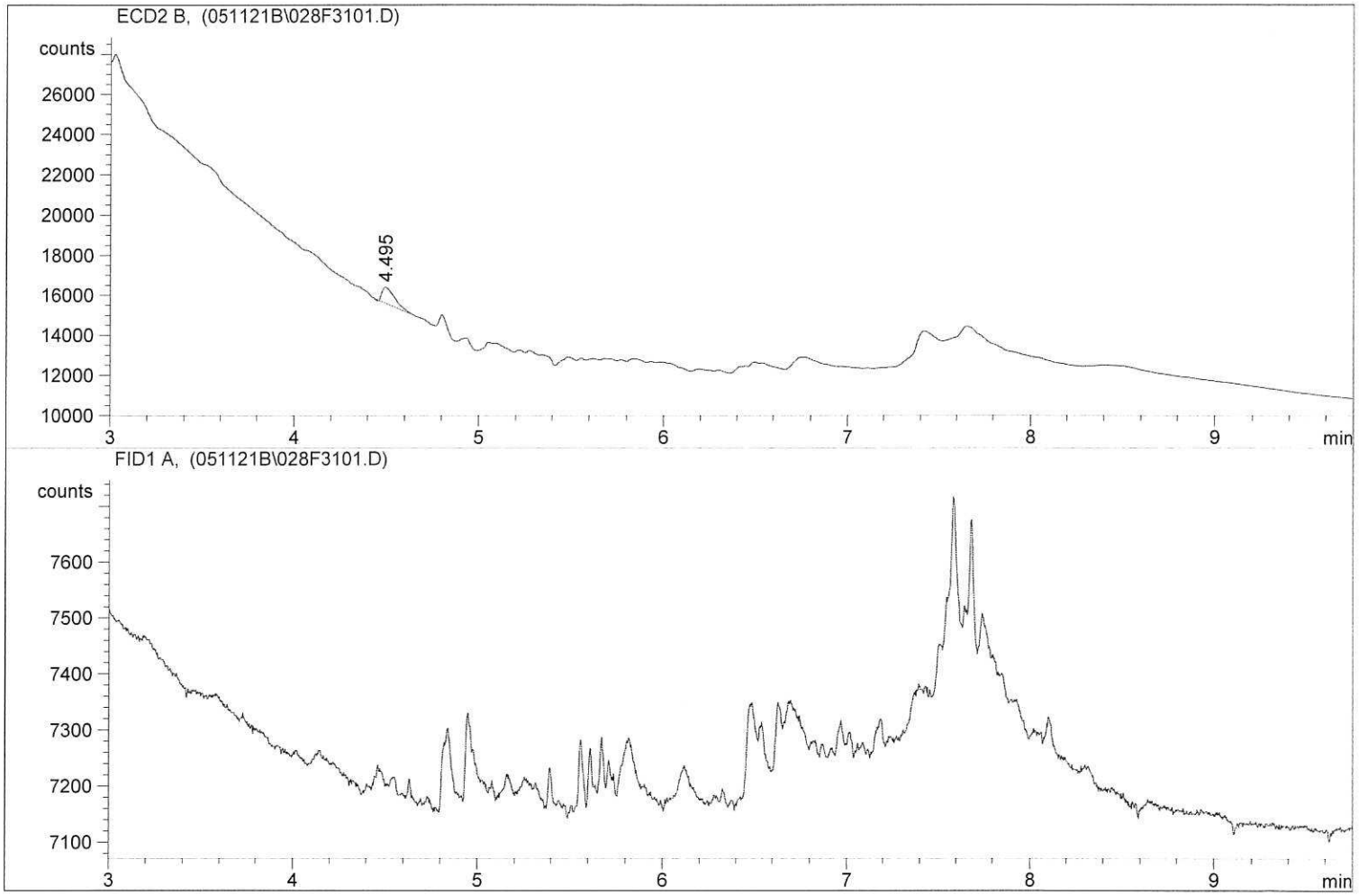
Injection Date	: 5/12/2021 2:36:49 AM	Seq. Line :	30
Sample Name	: 21E0105-01	Location :	Vial 27
Acq. Operator	: SH	Inj :	1
		Inj Volume :	1 µl
Sequence File	: C:\HPCHEM\1\SEQUENCE\051121B.S		
Method	: C:\HPCHEM\1\METHODS\SCREEN.M		
Last changed	: 5/8/2021 12:43:03 PM by TW		
SCREEN METHOD			



*** End of Report ***

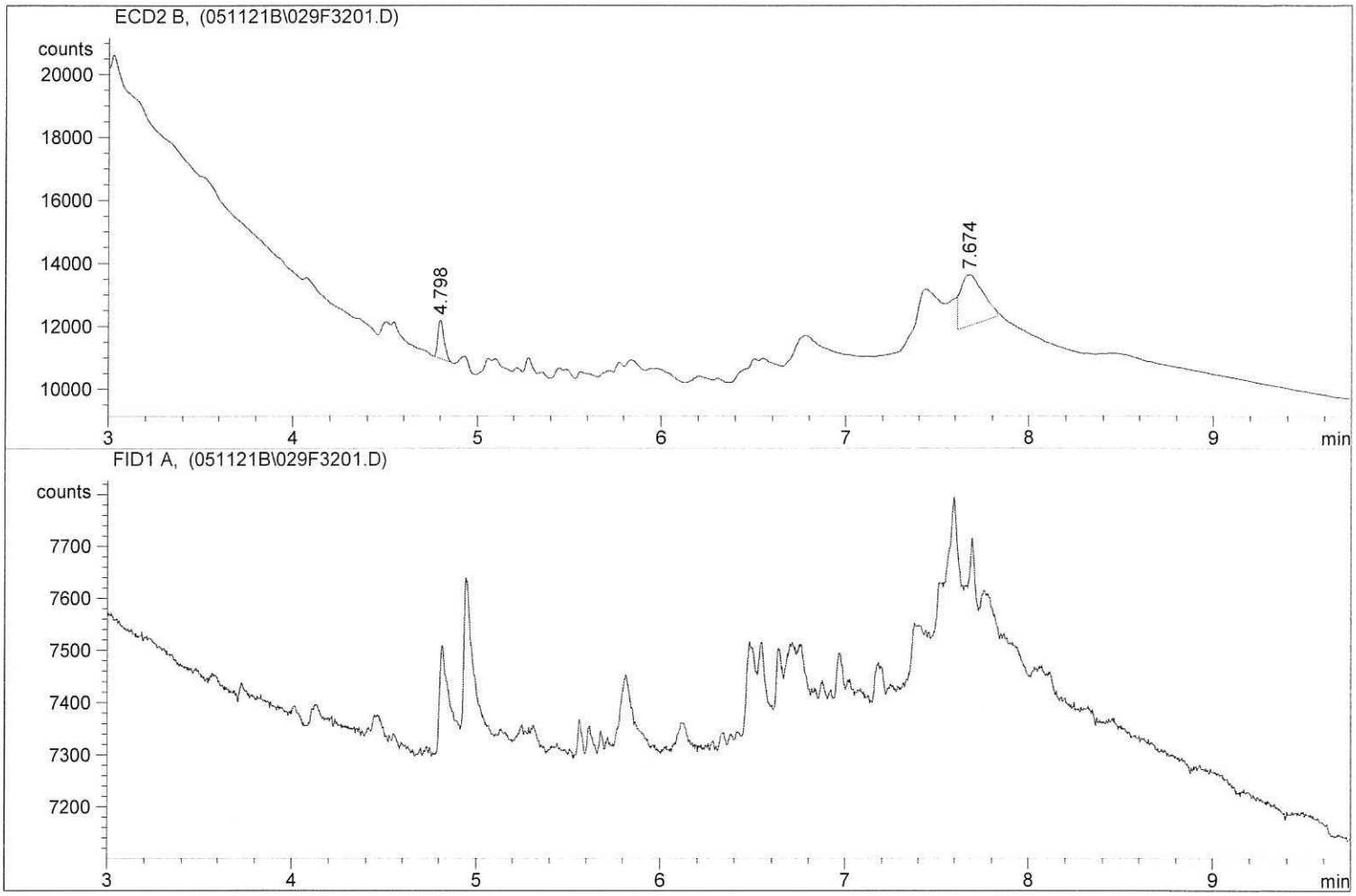
Data File C:\HPCHEM\1\DATA\051121B\028F3101.D Sample Name: 21E0105-02

Injection Date	: 5/12/2021 2:50:46 AM	Seq. Line :	31
Sample Name	: 21E0105-02	Location :	Vial 28
Acq. Operator	: SH	Inj :	1
		Inj Volume :	1 µl
Sequence File	: C:\HPCHEM\1\SEQUENCE\051121B.S		
Method	: C:\HPCHEM\1\METHODS\SCREEN.M		
Last changed	: 5/8/2021 12:43:03 PM by TW		
SCREEN METHOD			



*** End of Report ***

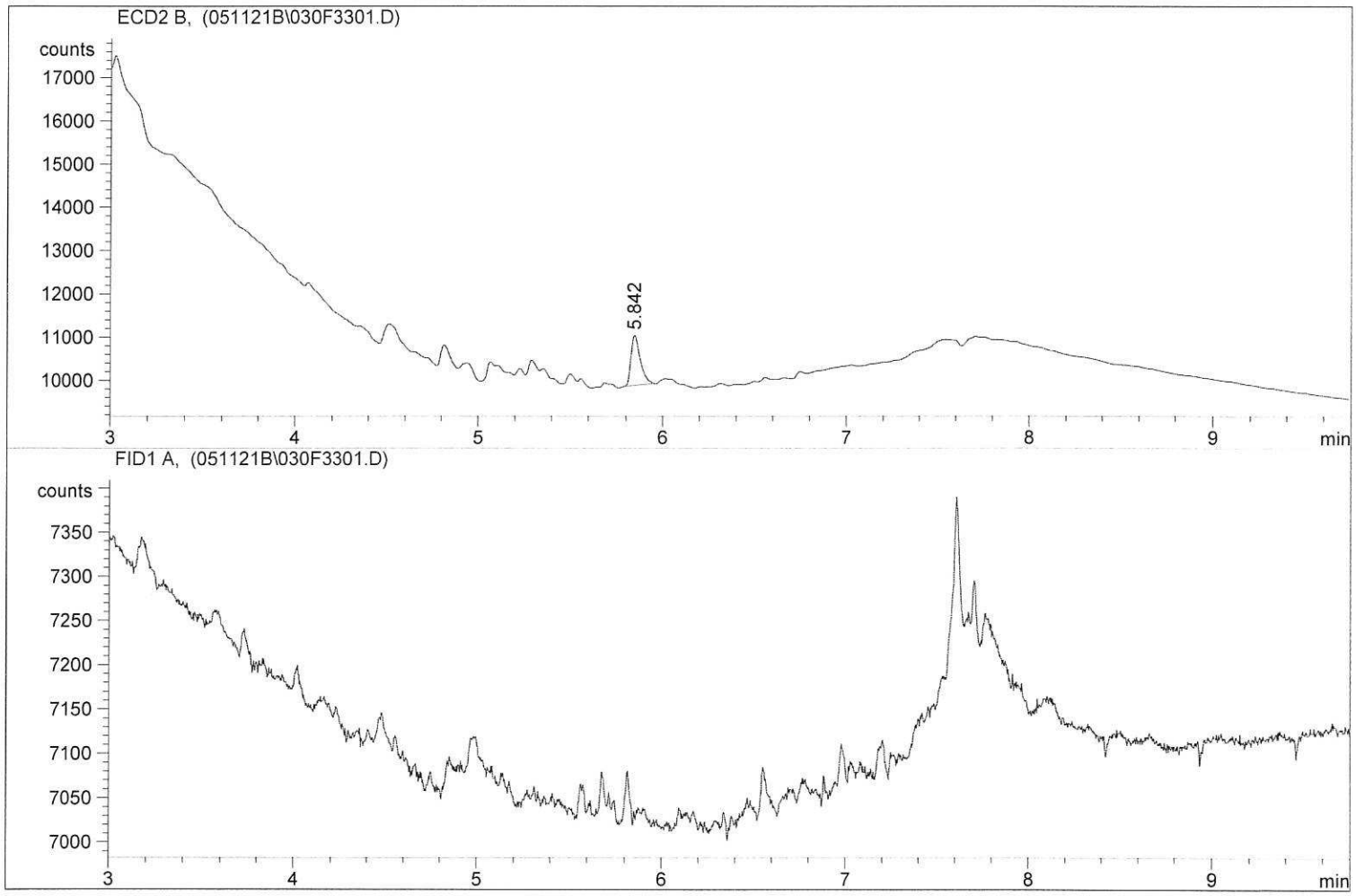
Injection Date	: 5/12/2021 3:04:22 AM	Seq. Line :	32
Sample Name	: 21E0105-03	Location :	Vial 29
Acq. Operator	: SH	Inj :	1
		Inj Volume :	1 µl
Sequence File	: C:\HPCHEM\1\SEQUENCE\051121B.S		
Method	: C:\HPCHEM\1\METHODS\SCREEN.M		
Last changed	: 5/8/2021 12:43:03 PM by TW		
SCREEN METHOD			



*** End of Report ***

Data File C:\HPCHEM\1\DATA\051121B\030F3301.D Sample Name: 21E0105-04

Injection Date	: 5/12/2021 3:18:15 AM	Seq. Line :	33
Sample Name	: 21E0105-04	Location :	Vial 30
Acq. Operator	: SH	Inj :	1
		Inj Volume :	1 µl
Sequence File	: C:\HPCHEM\1\SEQUENCE\051121B.S		
Method	: C:\HPCHEM\1\METHODS\SCREEN.M		
Last changed	: 5/8/2021 12:43:03 PM by TW		
SCREEN METHOD			

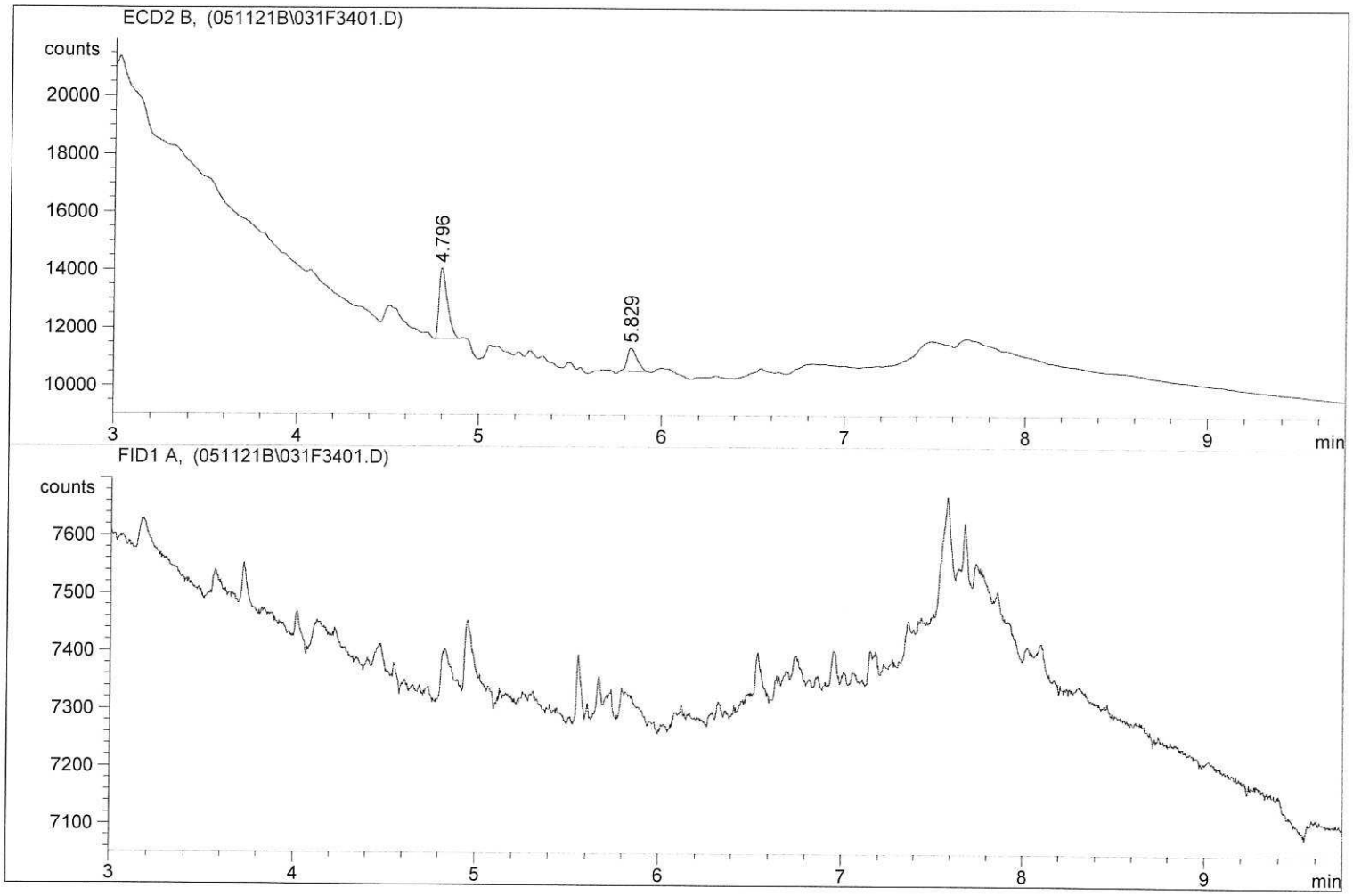


*** End of Report ***

Data File C:\HPCHEM\1\DATA\051121B\031F3401.D

Sample Name: 21E0105-05

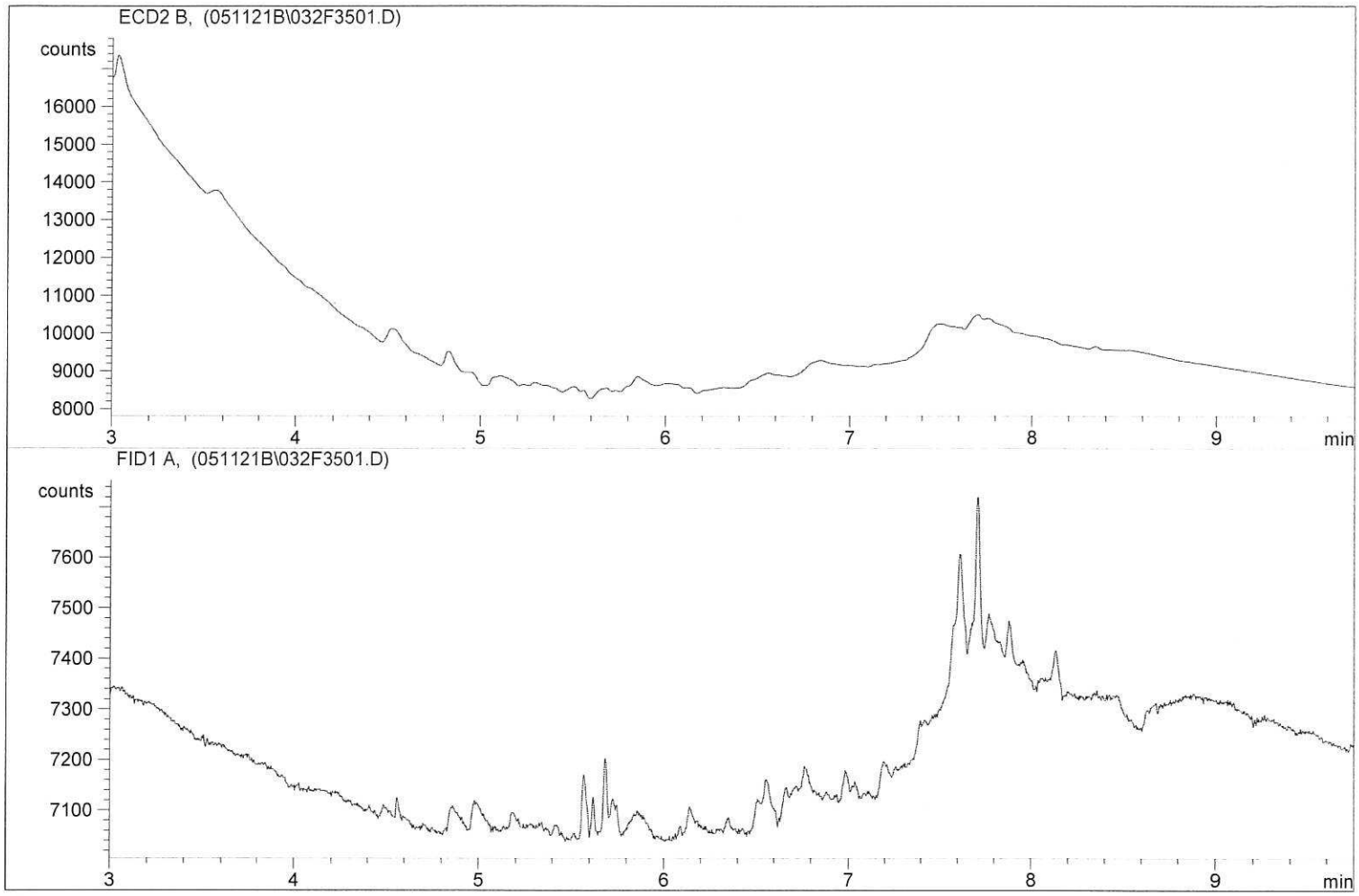
Injection Date	: 5/12/2021 3:31:58 AM	Seq. Line :	34
Sample Name	: 21E0105-05	Location :	Vial 31
Acq. Operator	: SH	Inj :	1
		Inj Volume :	1 µl
Sequence File	: C:\HPCHEM\1\SEQUENCE\051121B.S		
Method	: C:\HPCHEM\1\METHODS\SCREEN.M		
Last changed	: 5/8/2021 12:43:03 PM by TW		
SCREEN METHOD			



*** End of Report ***

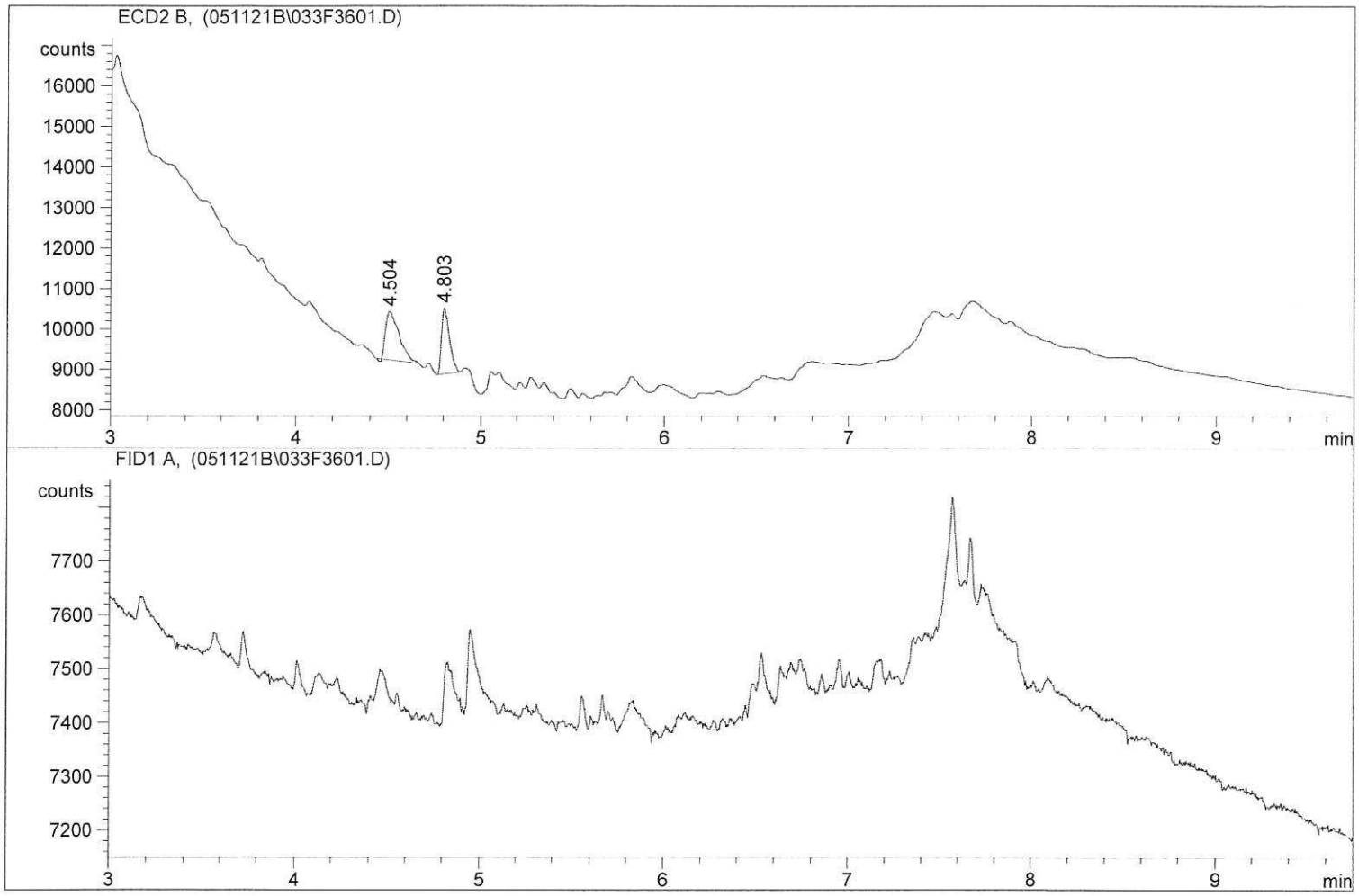
Data File C:\HPCHEM\1\DATA\051121B\032F3501.D Sample Name: 21E0105-06

Injection Date	: 5/12/2021 3:45:53 AM	Seq. Line :	35
Sample Name	: 21E0105-06	Location :	Vial 32
Acq. Operator	: SH	Inj :	1
		Inj Volume :	1 µl
Sequence File	: C:\HPCHEM\1\SEQUENCE\051121B.S		
Method	: C:\HPCHEM\1\METHODS\SCREEN.M		
Last changed	: 5/8/2021 12:43:03 PM by TW		
SCREEN METHOD			



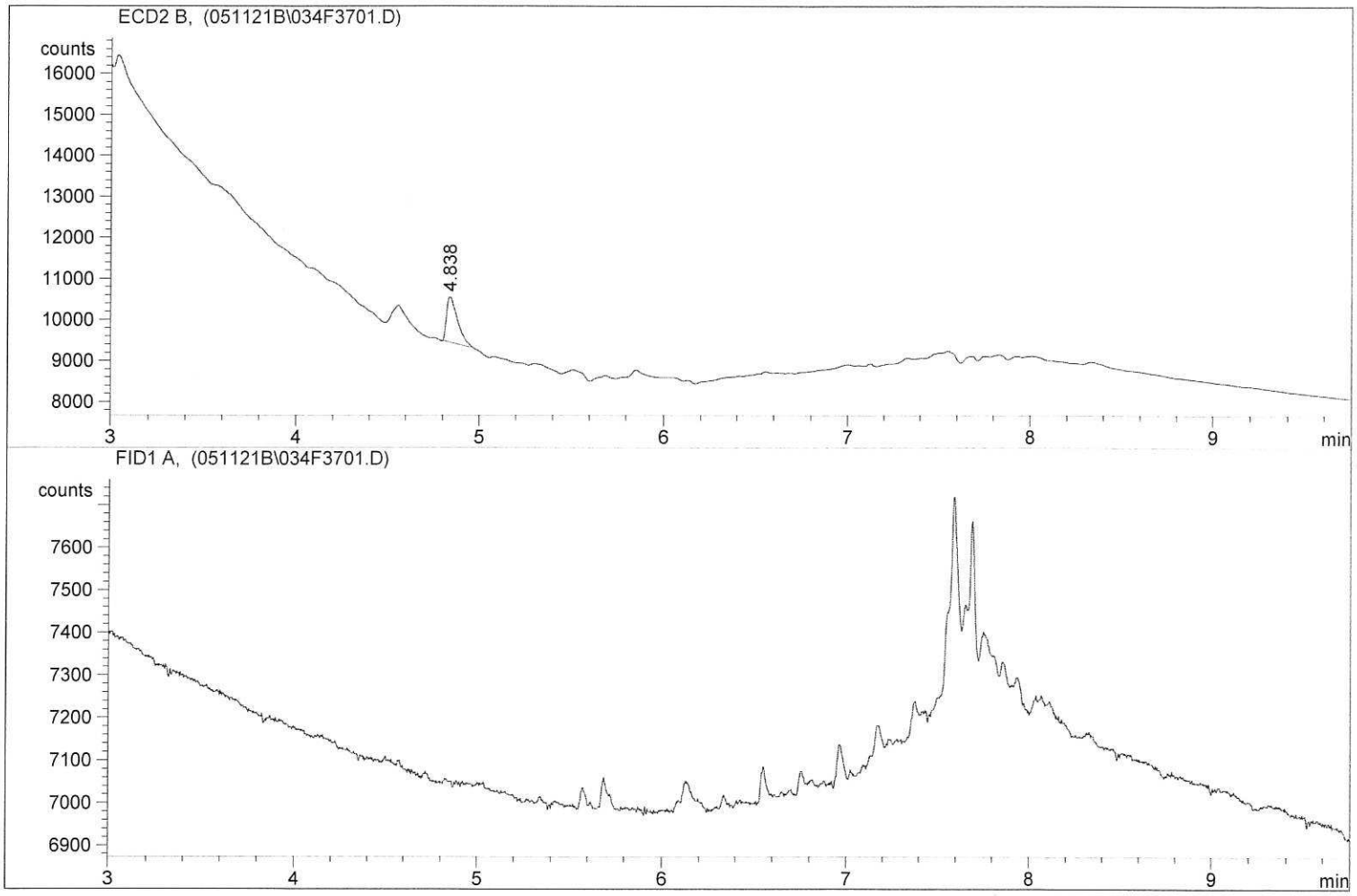
*** End of Report ***

Injection Date	: 5/12/2021 3:59:32 AM	Seq. Line :	36
Sample Name	: 21E0105-07	Location :	Vial 33
Acq. Operator	: SH	Inj :	1
		Inj Volume :	1 µl
Sequence File	: C:\HPCHEM\1\SEQUENCE\051121B.S		
Method	: C:\HPCHEM\1\METHODS\SCREEN.M		
Last changed	: 5/8/2021 12:43:03 PM by TW		
SCREEN METHOD			



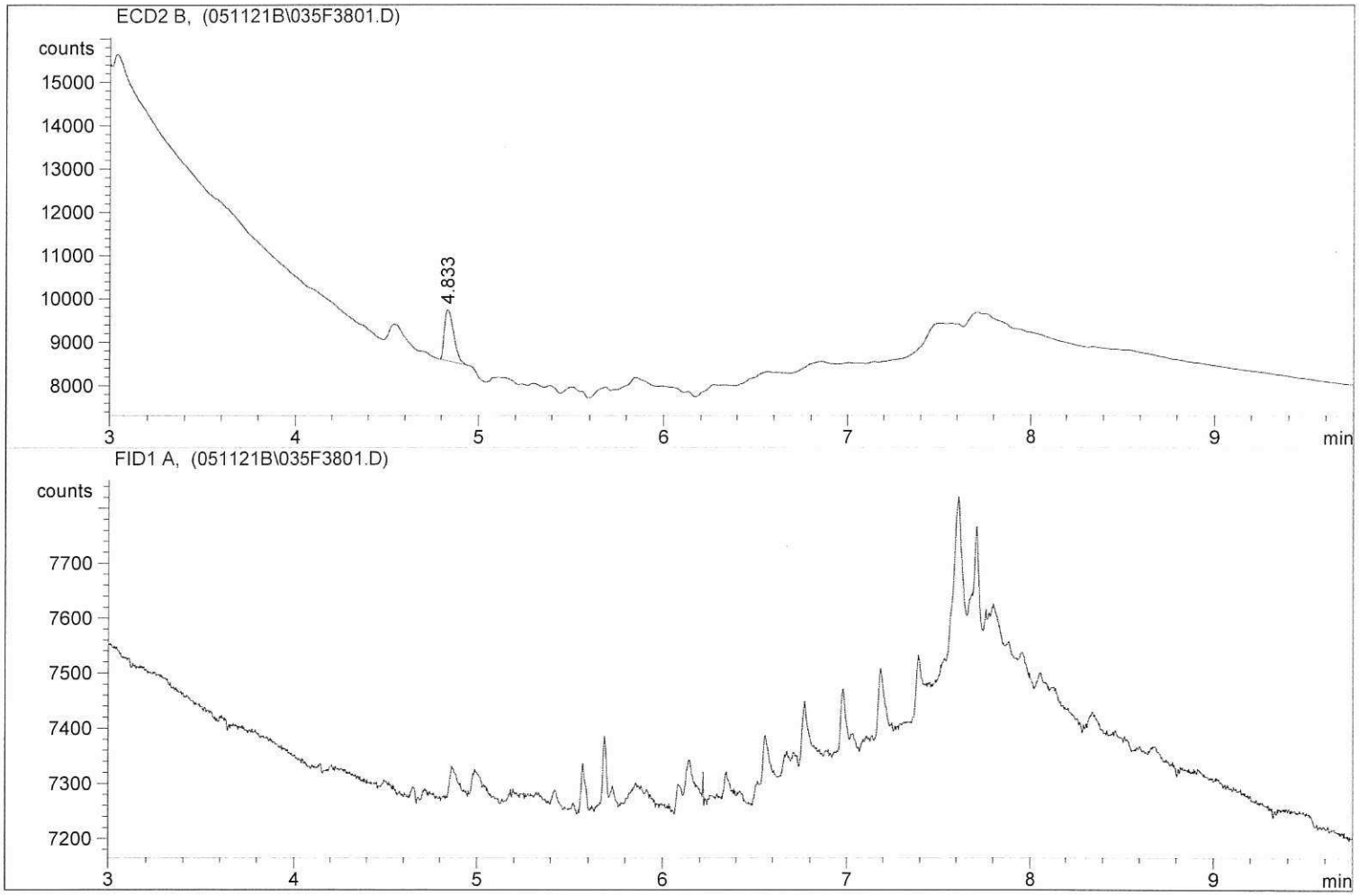
*** End of Report ***

Injection Date	: 5/12/2021 4:13:32 AM	Seq. Line :	37
Sample Name	: 21E0106-01	Location :	Vial 34
Acq. Operator	: SH	Inj :	1
		Inj Volume :	1 µl
Sequence File	: C:\HPCHEM\1\SEQUENCE\051121B.S		
Method	: C:\HPCHEM\1\METHODS\SCREEN.M		
Last changed	: 5/8/2021 12:43:03 PM by TW		
SCREEN METHOD			



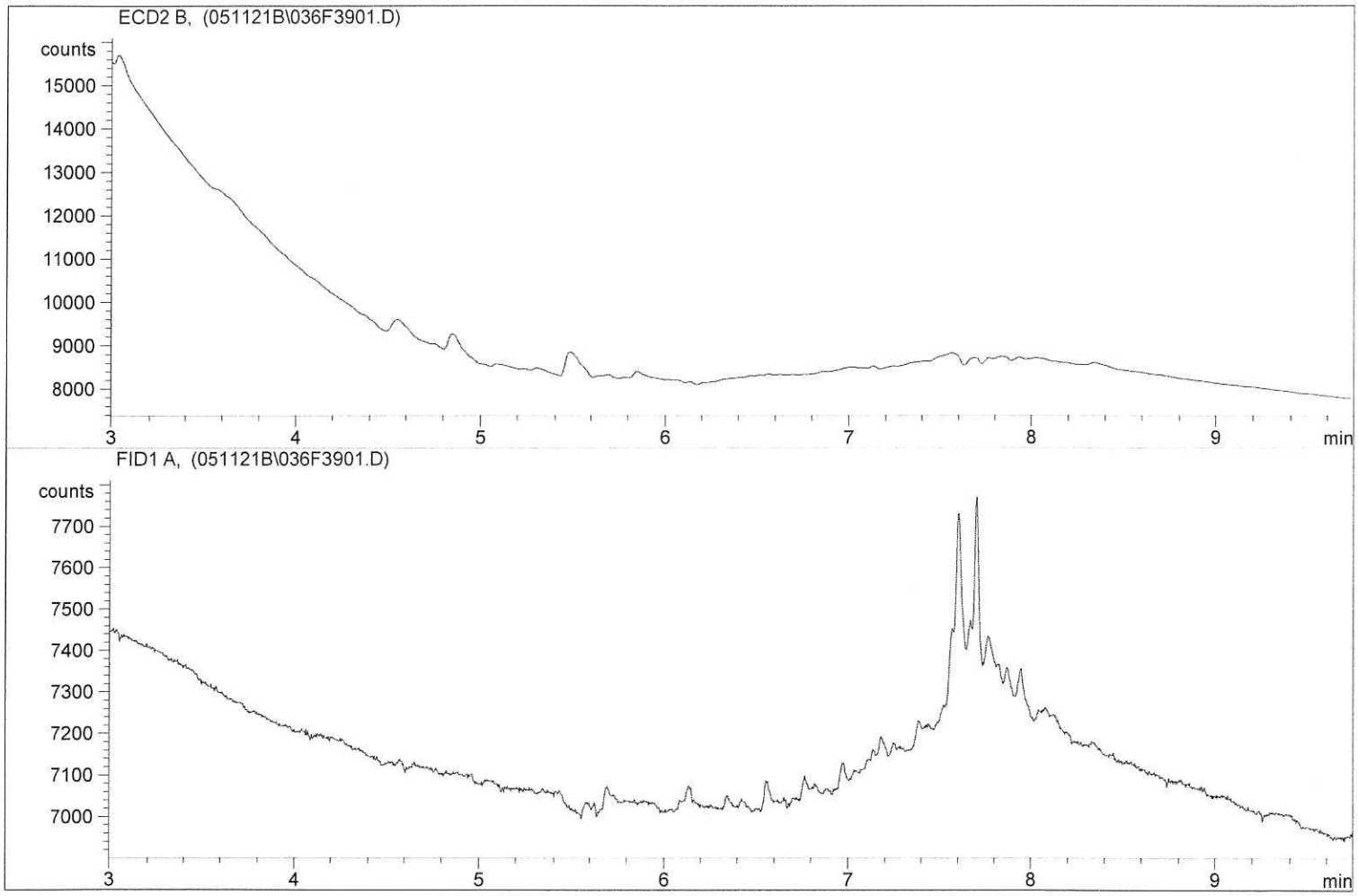
*** End of Report ***

Injection Date	: 5/12/2021 4:27:08 AM	Seq. Line :	38
Sample Name	: 21E0106-02	Location :	Vial 35
Acq. Operator	: SH	Inj :	1
		Inj Volume :	1 µl
Sequence File	: C:\HPCHEM\1\SEQUENCE\051121B.S		
Method	: C:\HPCHEM\1\METHODS\SCREEN.M		
Last changed	: 5/8/2021 12:43:03 PM by TW		
SCREEN METHOD			



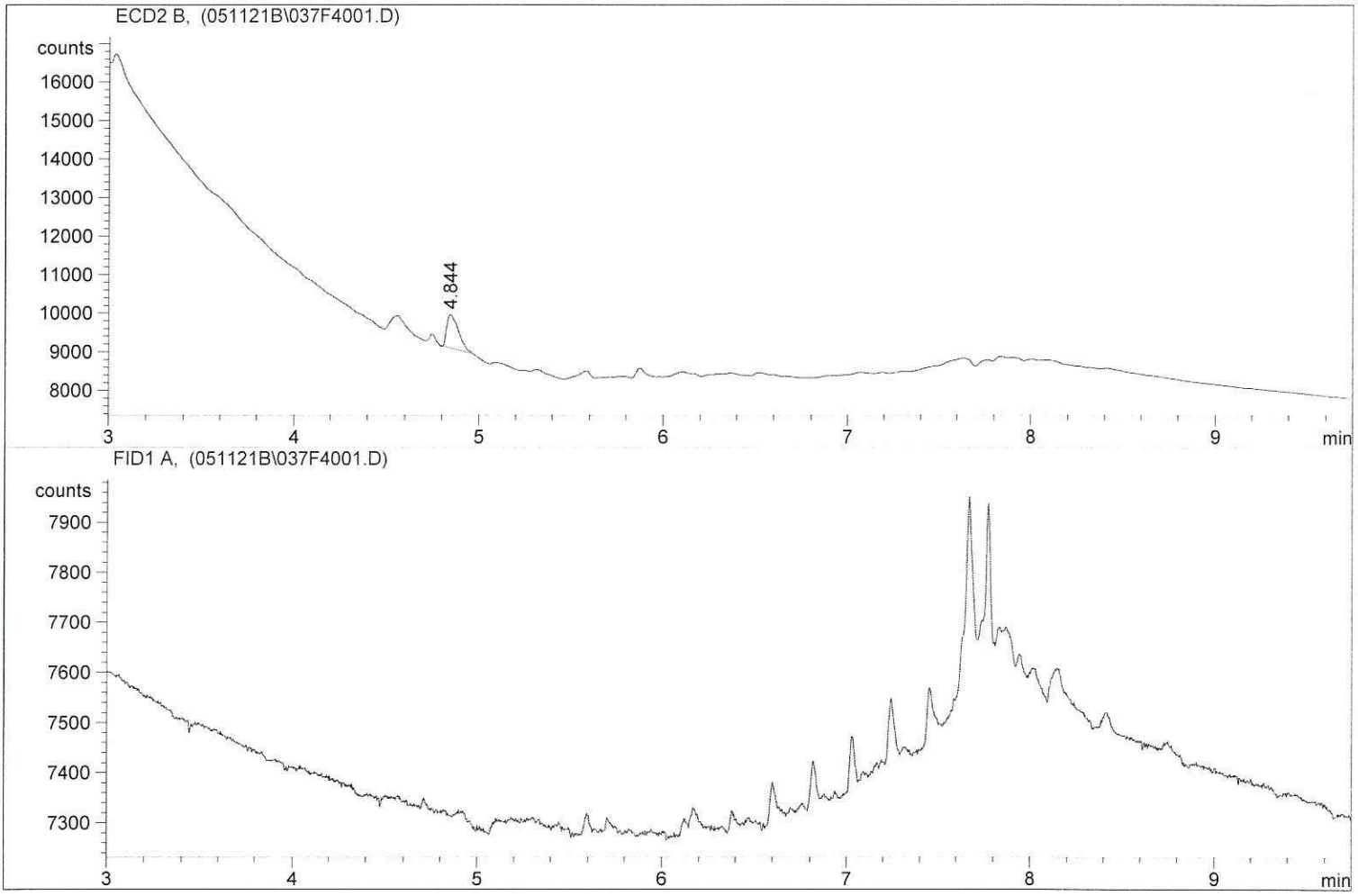
*** End of Report ***

Injection Date	: 5/12/2021 4:41:11 AM	Seq. Line :	39
Sample Name	: 21E0106-03	Location :	Vial 36
Acq. Operator	: SH	Inj :	1
		Inj Volume :	1 µl
Sequence File	: C:\HPCHEM\1\SEQUENCE\051121B.S		
Method	: C:\HPCHEM\1\METHODS\SCREEN.M		
Last changed	: 5/8/2021 12:43:03 PM by TW		
SCREEN METHOD			



*** End of Report ***

Injection Date	: 5/12/2021 4:54:41 AM	Seq. Line :	40
Sample Name	: 21E0106-04	Location :	Vial 37
Acq. Operator	: SH	Inj :	1
		Inj Volume :	1 µl
Sequence File	: C:\HPCHEM\1\SEQUENCE\051121B.S		
Method	: C:\HPCHEM\1\METHODS\SCREEN.M		
Last changed	: 5/8/2021 12:43:03 PM by TW		
SCREEN METHOD			



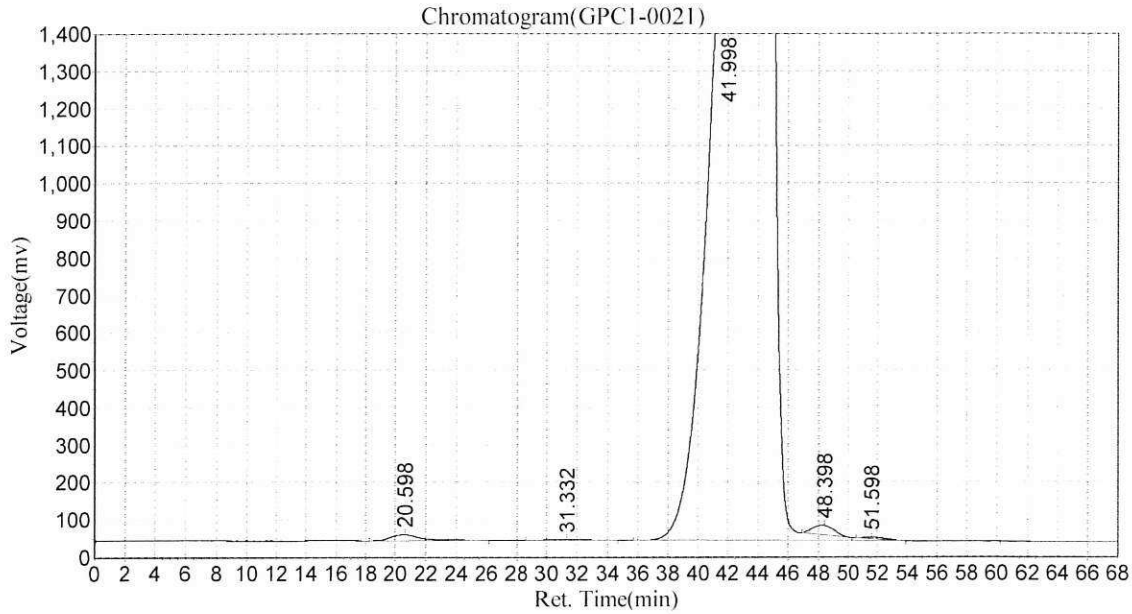
*** End of Report ***

Blk

BJE0383 21E0103/105/106 ALKYL PAH

Date:2021-05-19,9:52:35 PM
Data File:c:\n2000\data\gpc1\051721B\GPC1-0021
Method File:C:\N2000\GPC1_InHouse.mtd

Analyst£ºSH
Date/Time2021-05-19,9:52:35 PM



Results

Peak No.	Peak ID	Ret Time	Height	Area	Conc
1		20.598	16604.766	2305433.250	1.4623
2		31.332	3039.530	618718.750	0.3924
3		41.998	1382758.000	151759616.000	96.2585
4		48.398	26083.520	2535349.500	1.6081
5		51.598	4348.160	439304.000	0.2786
Total			1432833.975	157658421.500	100.000

Ingredient Table

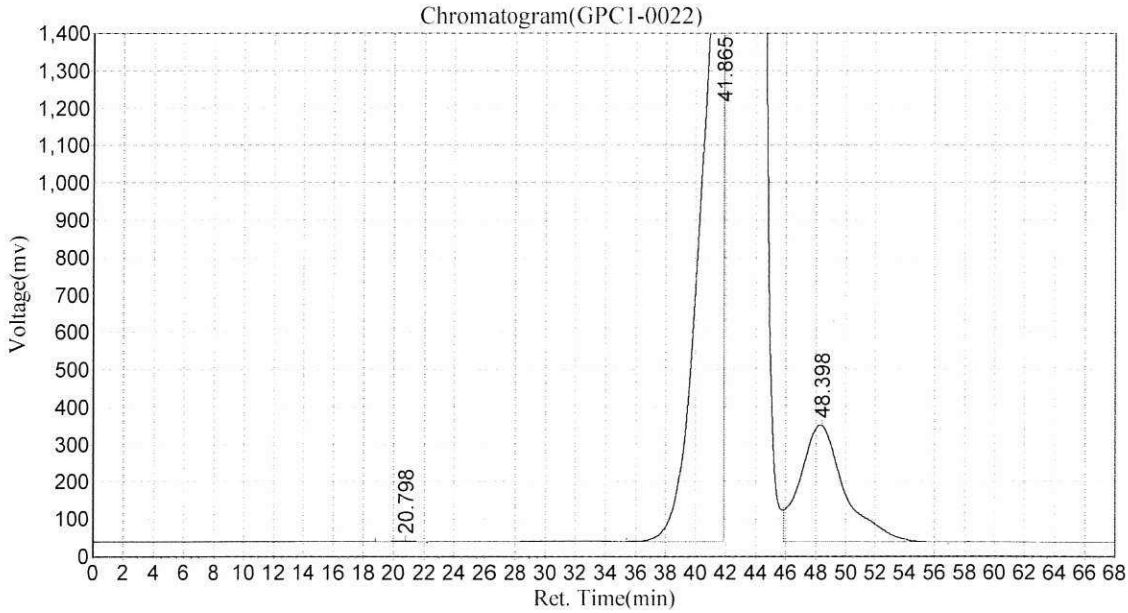
No	Peak ID	Ret Time	Peak Width	Factor1	Factor2	ISTD Wt.
1	Collect BAN	28.000	0.010	0.00E+000	0.00E+000	0.0000
2	Collect Pest	33.000	0.010	0.00E+000	0.00E+000	0.0000
3	Dump Pest	56.000	0.010	0.00E+000	0.00E+000	0.0000
4	Dump BAN	60.000	0.010	0.00E+000	0.00E+000	0.0000

1351

BJE0383 21E0103/105/106 ALKYL PAH

Date:2021-05-19,11:02:28 PM
Data File:c:\n2000\data\gpc1\051721B\GPC1-0022
Method File:C:\N2000\GPC1_InHouse.mtd

Analyst£°SH
Date/Time2021-05-19,11:02:29 PM



Results

Peak No.	Peak ID	Ret Time	Height	Area	Conc
1		20.798	1544.165	177403.000	0.0776
2		41.865	1385961.500	164263360.000	71.8165
3		48.398	313105.063	64285592.000	28.1059
Total			1700610.728	228726355.000	100.000

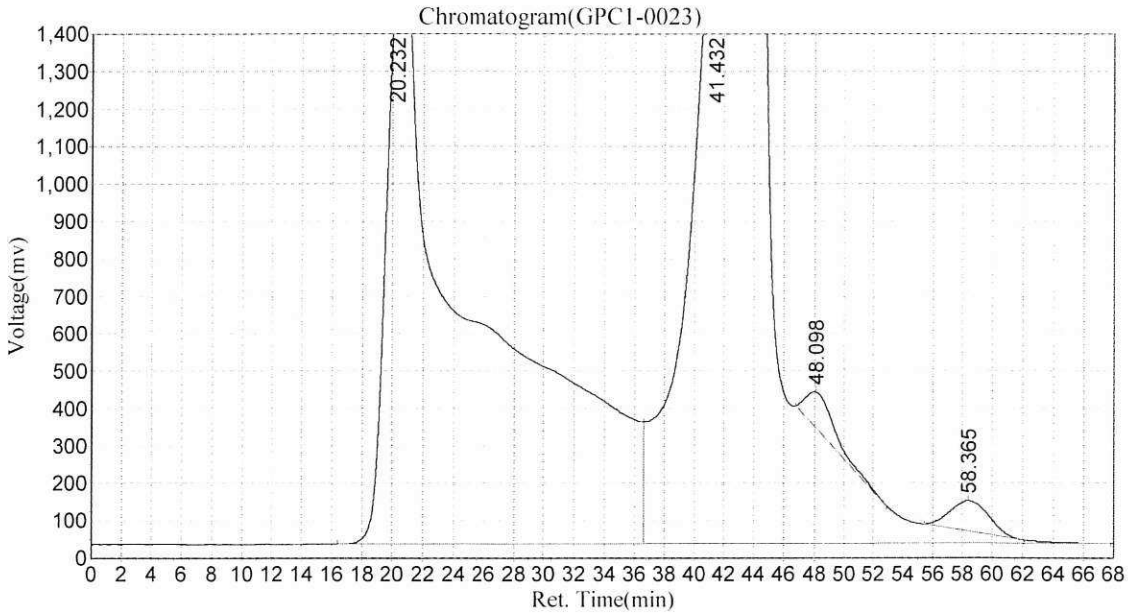
Ingredient Table

No	Peak ID	Ret Time	Peak Width	Factor1	Factor2	ISTD Wt.
1	Collect BAN	28.000	0.010	0.00E+000	0.00E+000	0.0000
2	Collect Pest	33.000	0.010	0.00E+000	0.00E+000	0.0000
3	Dump Pest	56.000	0.010	0.00E+000	0.00E+000	0.0000
4	Dump BAN	60.000	0.010	0.00E+000	0.00E+000	0.0000

BJE0383 21E0103/105/106 ALKYL PAH

Date:2021-05-20,12:12:10 AM
Data File:c:\n2000\data\gpc1\051721B\GPC1-0023
Method File:C:\N2000\GPC1_InHouse.mtd

Analyst£ºSH
Date/Time2021-05-20,12:12:11 AM



Results

Peak No.	Peak ID	Ret Time	Height	Area	Conc
1		20.232	1388173.875	642915456.000	65.7186
2		41.432	1387514.750	308208960.000	31.5050
3		48.098	94982.914	12564165.000	1.2843
4		58.365	80407.961	14597446.000	1.4921
Total			2951079.500	978286027.000	100.000

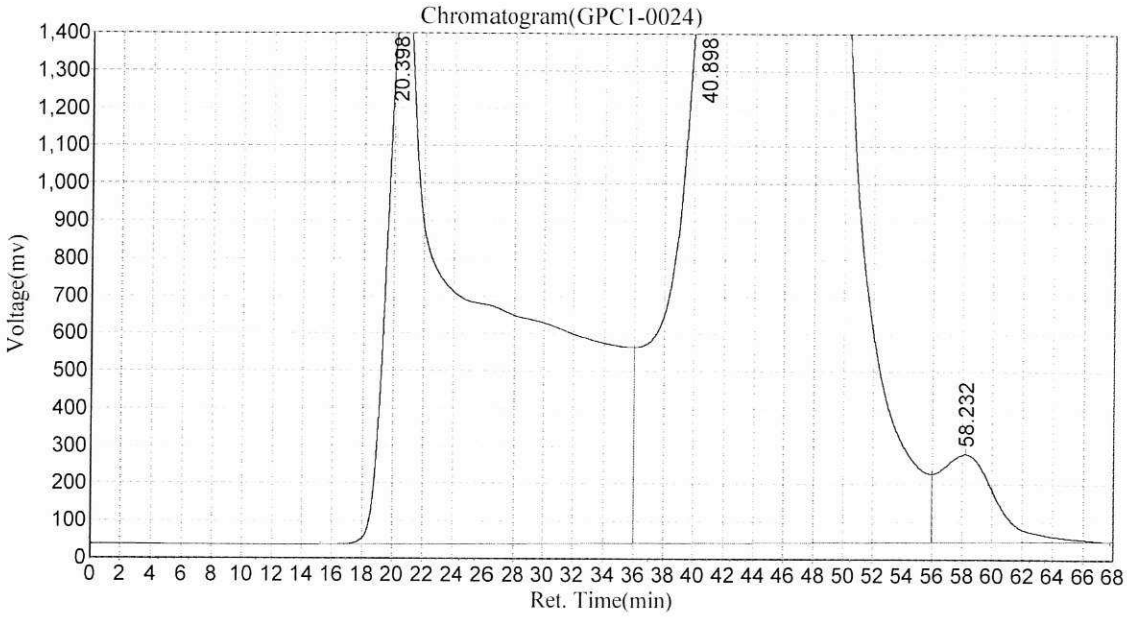
Ingredient Table

No	Peak ID	Ret Time	Peak Width	Factor1	Factor2	ISTD Wt.
1	Collect BAN	28.000	0.010	0.00E+000	0.00E+000	0.0000
2	Collect Pest	33.000	0.010	0.00E+000	0.00E+000	0.0000
3	Dump Pest	56.000	0.010	0.00E+000	0.00E+000	0.0000
4	Dump BAN	60.000	0.010	0.00E+000	0.00E+000	0.0000

BJE0383 21E0103/105/106 ALKYL PAH

Date:2021-05-20,1:21:54 AM
Data File:c:\n2000\data\gpc1\051721B\GPC1-0024
Method File:C:\N2000\GPC1_InHouse.mtd

Analyst£ºSH
Date/Time2021-05-20,1:21:54 AM



Results

Peak No.	Peak ID	Ret Time	Height	Area	Conc
1		20.398	1388183.125	714373632.000	36.3502
2		40.898	1383472.625	1188021888.000	60.4513
3		58.232	237109.875	62858580.000	3.1985
Total			3008765.625	1965254100.000	100.000

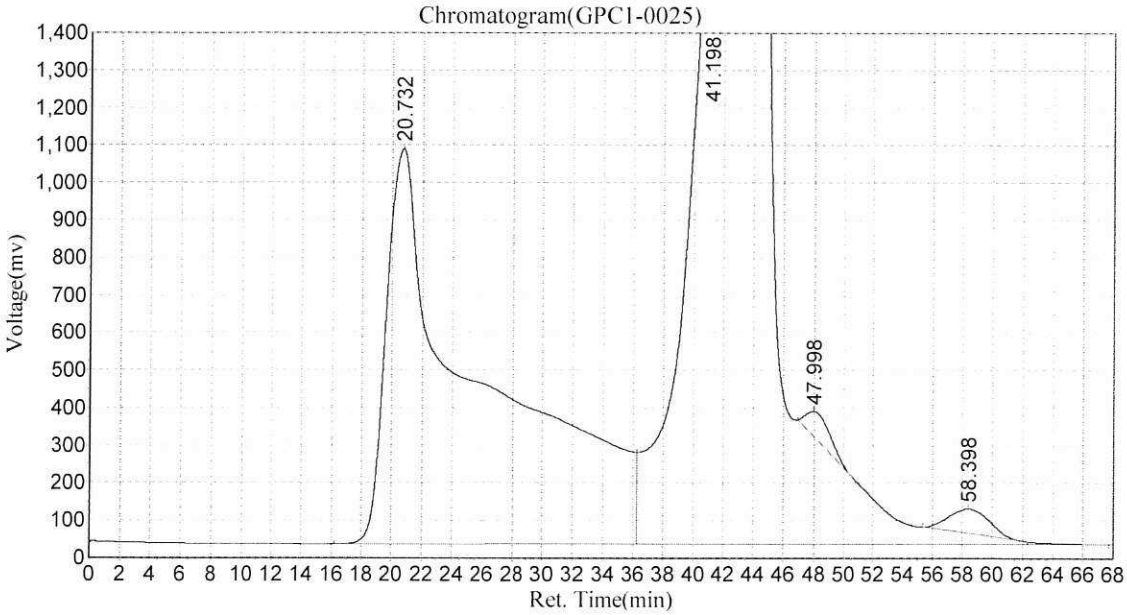
Ingredient Table

No	Peak ID	Ret Time	Peak Width	Factor1	Factor2	ISTD Wt.
1	Collect BAN	28.000	0.010	0.00E+000	0.00E+000	0.0000
2	Collect Pest	33.000	0.010	0.00E+000	0.00E+000	0.0000
3	Dump Pest	56.000	0.010	0.00E+000	0.00E+000	0.0000
4	Dump BAN	60.000	0.010	0.00E+000	0.00E+000	0.0000

BJE0383 21E0103/105/106 ALKYL PAH

Date:2021-05-20,2:31:36 AM
Data File:c:\n2000\data\gpc1\051721B\GPC1-0025
Method File:C:\N2000\GPC1_InHouse.mtd

Analyst£ºSH
Date/Time2021-05-20,2:31:36 AM



Results

Peak No.	Peak ID	Ret Time	Height	Area	Conc
1		20.732	1053081.500	462092096.000	60.7085
2		41.198	1388283.250	278847360.000	36.6343
3		47.998	66832.070	7914934.500	1.0398
4		58.398	64907.461	12310666.000	1.6173
Total			2573104.281	761165056.500	100.000

Ingredient Table

No	Peak ID	Ret Time	Peak Width	Factor1	Factor2	ISTD Wt.
1	Collect BAN	28.000	0.010	0.00E+000	0.00E+000	0.0000
2	Collect Pest	33.000	0.010	0.00E+000	0.00E+000	0.0000
3	Dump Pest	56.000	0.010	0.00E+000	0.00E+000	0.0000
4	Dump BAN	60.000	0.010	0.00E+000	0.00E+000	0.0000

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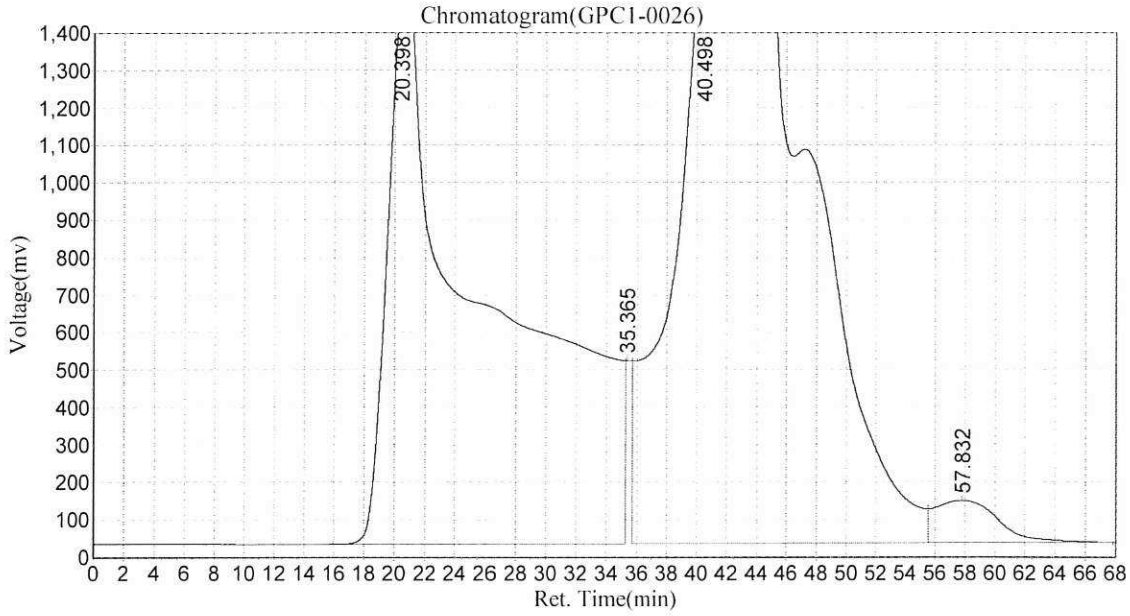
BJE0383 21E0103/105/106 ALKYL PAH

Date:2021-05-20,3:41:19 AM
Data File:c:\n2000\data\gpc1\051721B\GPC1-0026
Method File:C:\N2000\GPC1_InHouse.mtd

Analyst£ºSH
Date/Time2021-05-20,3:41:19 AM



Results

Peak No.	Peak ID	Ret Time	Height	Area	Conc
1		20.398	1390083.125	684784320.000	40.2281
2		35.365	488215.063	12659734.000	0.7437
3		40.498	1388409.625	971920576.000	57.0962
4		57.832	112450.563	32887670.000	1.9320
Total			3379158.375	1702252300.000	100.000

Ingredient Table

No	Peak ID	Ret Time	Peak Width	Factor1	Factor2	ISTD Wt.
1	Collect BAN	28.000	0.010	0.00E+000	0.00E+000	0.0000
2	Collect Pest	33.000	0.010	0.00E+000	0.00E+000	0.0000
3	Dump Pest	56.000	0.010	0.00E+000	0.00E+000	0.0000
4	Dump BAN	60.000	0.010	0.00E+000	0.00E+000	0.0000

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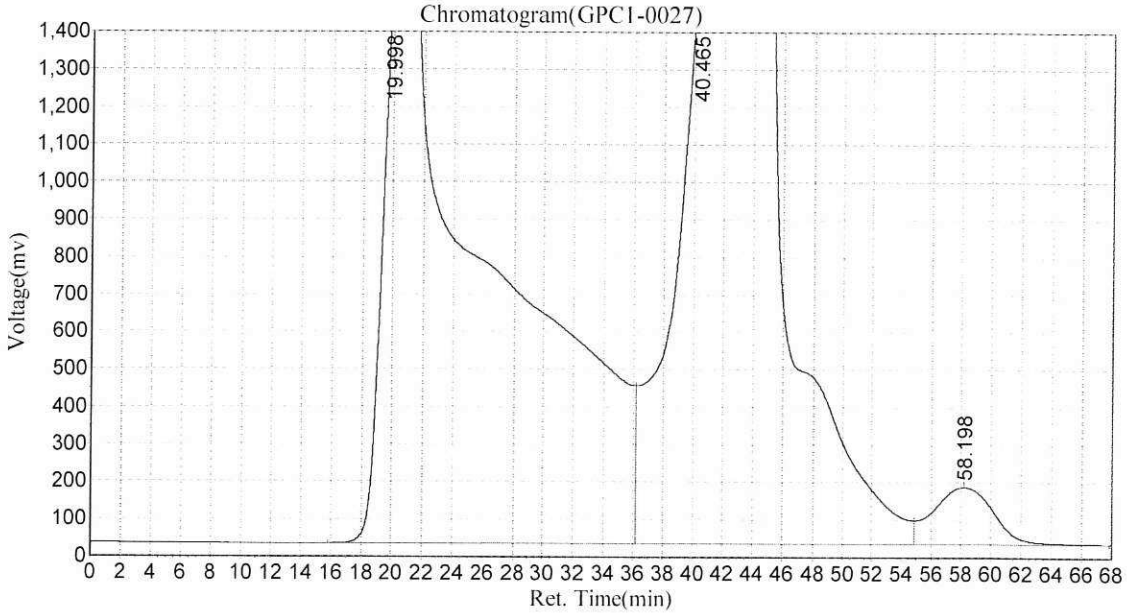
BJE0383 21E0103/105/106 ALKYL PAH

Date:2021-05-20,4:51:01 AM
Data File:c:\n2000\data\gpc1\051721B\GPC1-0027
Method File:C:\N2000\GPC1_InHouse.mtd

Analyst£ºSH
Date/Time2021-05-20,4:51:01 AM



Results

Peak No.	Peak ID	Ret Time	Height	Area	Conc
1		19.998	1390509.875	795454528.000	49.3734
2		40.465	1389885.250	773120128.000	47.9871
3		58.198	152818.016	42523876.000	2.6394
Total			2933213.141	1611098532.000	100.000

Ingredient Table

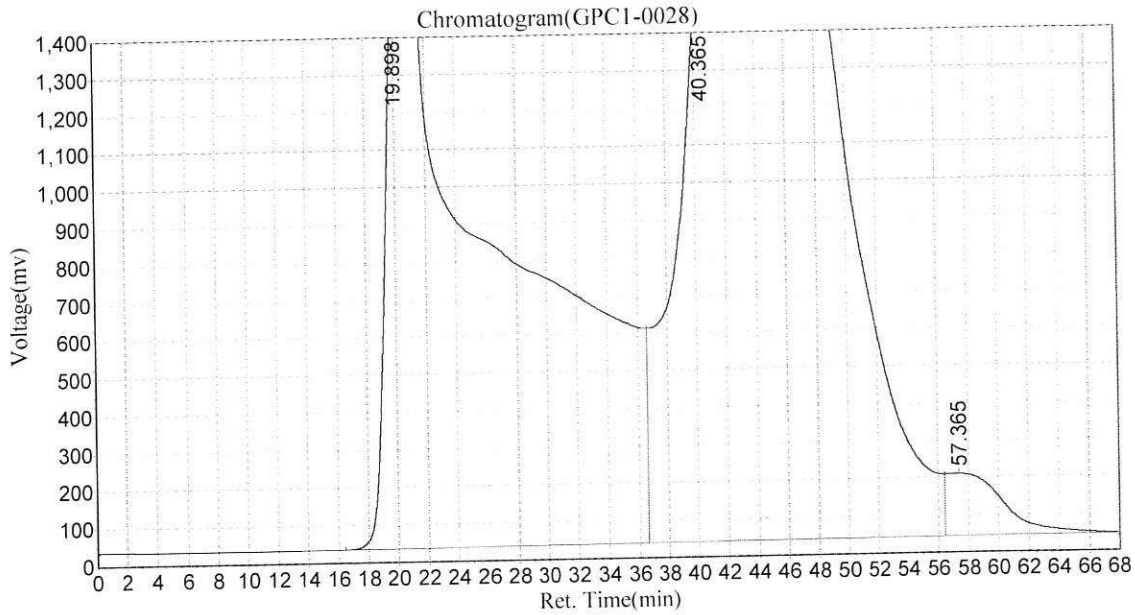
No	Peak ID	Ret Time	Peak Width	Factor1	Factor2	ISTD Wt.
1	Collect BAN	28.000	0.010	0.00E+000	0.00E+000	0.0000
2	Collect Pest	33.000	0.010	0.00E+000	0.00E+000	0.0000
3	Dump Pest	56.000	0.010	0.00E+000	0.00E+000	0.0000
4	Dump BAN	60.000	0.010	0.00E+000	0.00E+000	0.0000

GPC #1

BJE0383 21E0103/105/106 ALKYL PAH

Date:2021-05-20,6:00:44 AM
Data File:c:\n2000\data\gpc1\051721B\GPC1-0028
Method File:C:\N2000\GPC1_InHouse.mtd

Analyst£°SH
Date/Time2021-05-20,6:00:44 AM



Results

Peak No.	Peak ID	Ret Time	Height	Area	Conc
1		19.898	1390412.375	889297216.000	42.7423
2		40.365	1385817.500	1147901824.000	55.1716
3		57.365	166876.828	43404512.000	2.0861
Total			2943106.703	2080603552.000	100.000

Ingredient Table

No	Peak ID	Ret Time	Peak Width	Factor1	Factor2	ISTD Wt.
1	Collect BAN	28.000	0.010	0.00E+000	0.00E+000	0.0000
2	Collect Pest	33.000	0.010	0.00E+000	0.00E+000	0.0000
3	Dump Pest	56.000	0.010	0.00E+000	0.00E+000	0.0000
4	Dump BAN	60.000	0.010	0.00E+000	0.00E+000	0.0000

2021-05-20

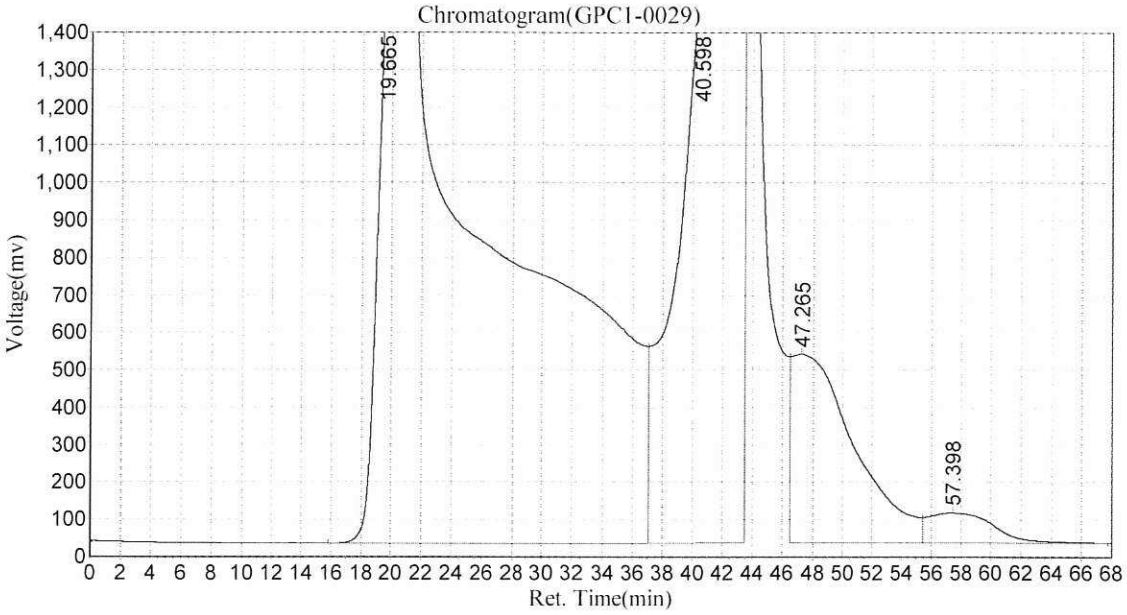
Analytical Resources, Inc.

BJE0383 21E0103/105/106 ALKYL PAH

001

Date:2021-05-20,7:10:25 AM
Data File:c:\n2000\data\gpc1\051721B\GPC1-0029
Method File:C:\N2000\GPC1_InHouse.mtd

Analyst£ºSH
Date/Time2021-05-20,7:10:26 AM



Results

Peak No.	Peak ID	Ret Time	Height	Area	Conc
1		19.665	1389526.625	923337408.000	61.0977
2		40.598	1388606.125	416607008.000	27.5671
3		47.265	505651.938	146640784.000	9.7033
4		57.398	80183.336	24661562.000	1.6319
Total			3363968.023	1511246762.000	100.000

Ingredient Table

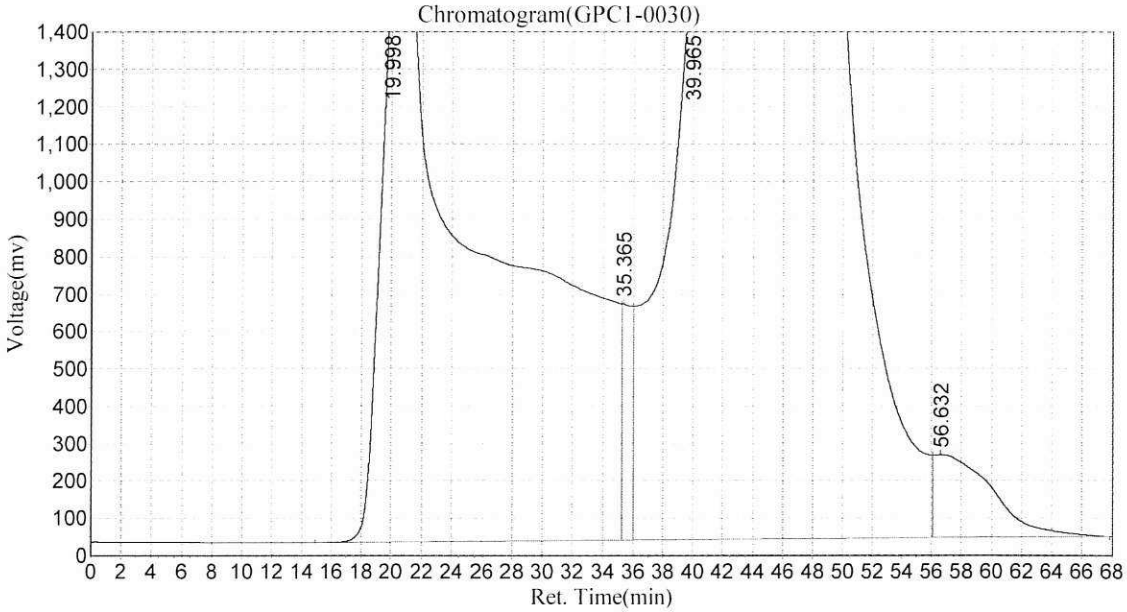
No	Peak ID	Ret Time	Peak Width	Factor1	Factor2	ISTD Wt.
1	Collect BAN	28.000	0.010	0.00E+000	0.00E+000	0.0000
2	Collect Pest	33.000	0.010	0.00E+000	0.00E+000	0.0000
3	Dump Pest	56.000	0.010	0.00E+000	0.00E+000	0.0000
4	Dump BAN	60.000	0.010	0.00E+000	0.00E+000	0.0000

BJE0383 21E0103/105/106 ALKYL PAH

-07

Date:2021-05-20,8:20:09 AM
Data File:c:\n2000\data\gpc1\051721B\GPC1-0030
Method File:C:\N2000\GPC1_InHouse.mtd

Analyst£ºSH
Date/Time2021-05-20,8:20:09 AM



Results

Peak No.	Peak ID	Ret Time	Height	Area	Conc
1		19.998	1389293.125	837371712.000	38.6394
2		35.365	633846.813	28953546.000	1.3360
3		39.965	1383393.625	1240866432.000	57.2581
4		56.632	222907.219	59952416.000	2.7664
Total			3629440.781	2167144106.000	100.000

Ingredient Table

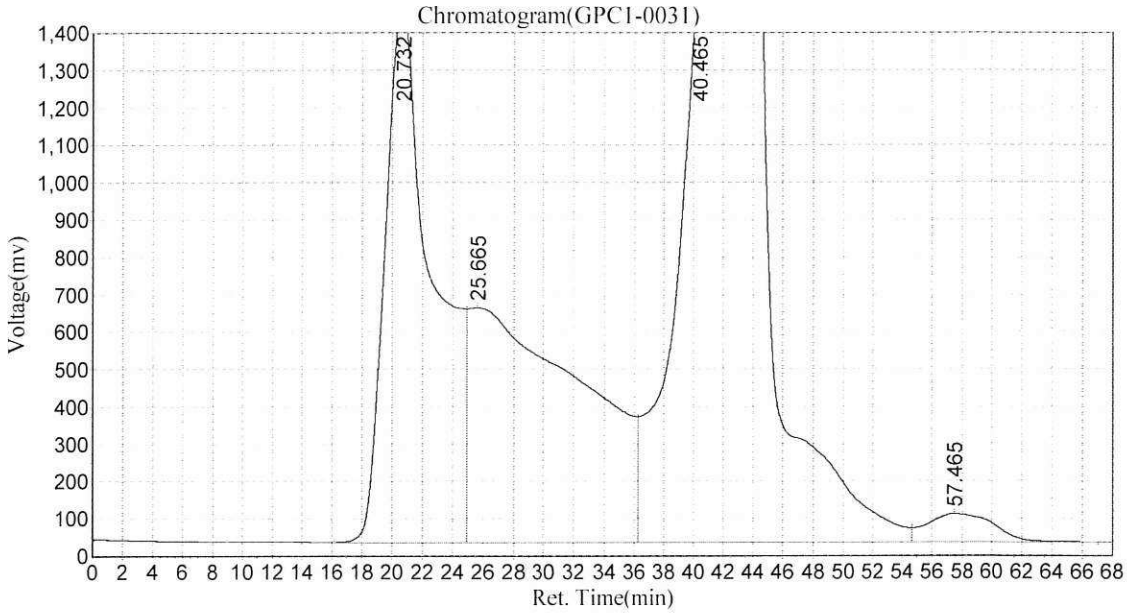
No	Peak ID	Ret Time	Peak Width	Factor1	Factor2	ISTD Wt.
1	Collect BAN	28.000	0.010	0.00E+000	0.00E+000	0.0000
2	Collect Pest	33.000	0.010	0.00E+000	0.00E+000	0.0000
3	Dump Pest	56.000	0.010	0.00E+000	0.00E+000	0.0000
4	Dump BAN	60.000	0.010	0.00E+000	0.00E+000	0.0000

BJE0383 21E0103/105/106 ALKYL PAH

-001

Date:2021-05-20,9:29:50 AM
Data File:c:\n2000\data\gpc1\051721B\GPC1-0031
Method File:C:\N2000\GPC1_InHouse.mtd

Analyst£°SH
Date/Time2021-05-20,9:29:50 AM



Results

Peak No.	Peak ID	Ret Time	Height	Area	Conc
1		20.732	1389004.000	322604960.000	24.3223
2		25.665	628431.375	328140768.000	24.7397
3		40.465	1389109.625	652377088.000	49.1850
4		57.465	75154.602	23250980.000	1.7530
Total			3481699.602	1326373796.000	100.000

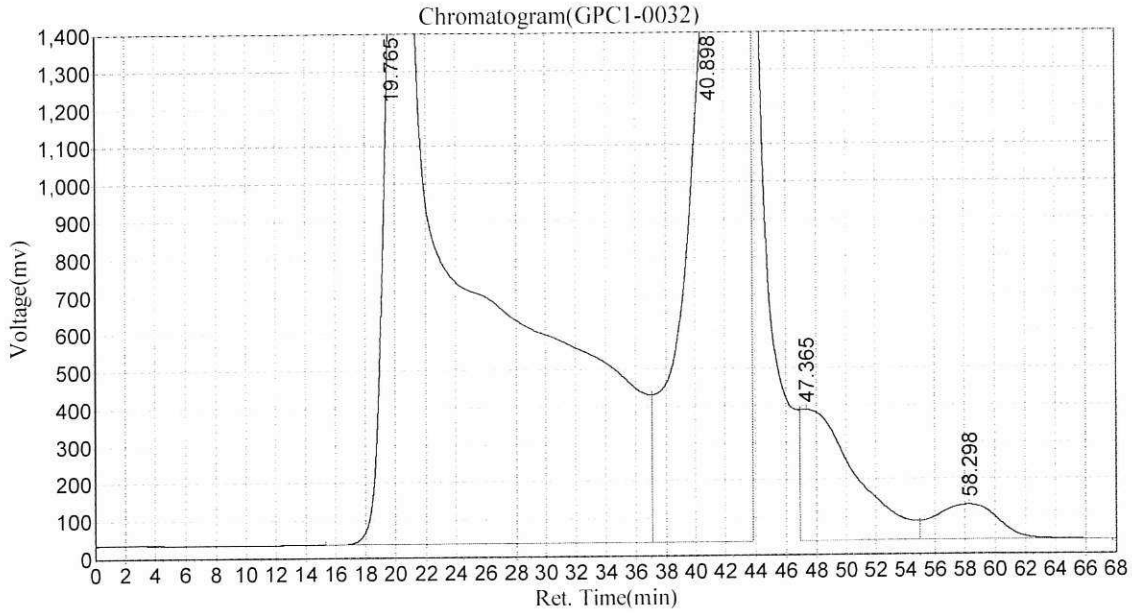
Ingredient Table

No	Peak ID	Ret Time	Peak Width	Factor1	Factor2	ISTD Wt.
1	Collect BAN	28.000	0.010	0.00E+000	0.00E+000	0.0000
2	Collect Pest	33.000	0.010	0.00E+000	0.00E+000	0.0000
3	Dump Pest	56.000	0.010	0.00E+000	0.00E+000	0.0000
4	Dump BAN	60.000	0.010	0.00E+000	0.00E+000	0.0000

BJE0383 21E0103/105/106 ALKYL PAH

Date:2021-05-20,10:39:33 AM
Data File:c:\n2000\data\gpc1\051721B\GPC1-0032
Method File:C:\N2000\GPC1_InHouse.mtd

Analyst£ºSH
Date/Time2021-05-20,10:39:34 AM



Results

Peak No.	Peak ID	Ret Time	Height	Area	Conc
1		19.765	1390092.625	761393344.000	58.7470
2		40.898	1389108.750	417052992.000	32.1786
3		47.365	352556.719	89945696.000	6.9400
4		58.298	93786.711	27663224.000	2.1344
Total			3225544.805	1296055256.000	100.000

Ingredient Table

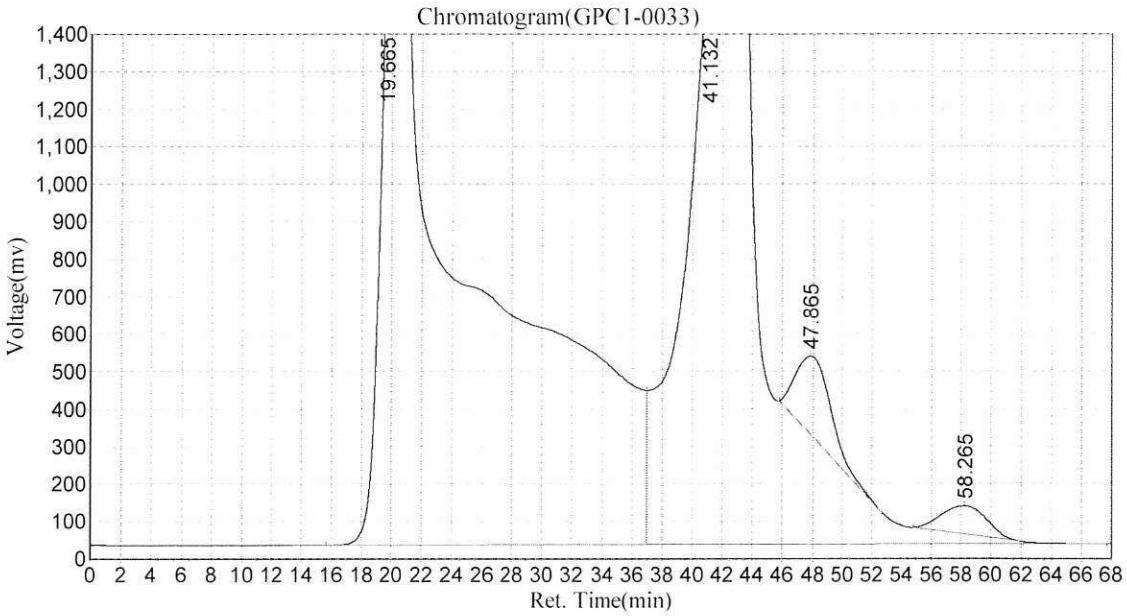
No	Peak ID	Ret Time	Peak Width	Factor1	Factor2	ISTD Wt.
1	Collect BAN	28.000	0.010	0.00E+000	0.00E+000	0.0000
2	Collect Pest	33.000	0.010	0.00E+000	0.00E+000	0.0000
3	Dump Pest	56.000	0.010	0.00E+000	0.00E+000	0.0000
4	Dump BAN	60.000	0.010	0.00E+000	0.00E+000	0.0000

MSI

BJE0383 21E0103/105/106 ALKYL PAH

Date:2021-05-20,11:49:15 AM
Data File:c:\n2000\data\gpc1\051721B\GPC1-0033
Method File:C:\N2000\GPC1_InHouse.mtd

Analyst£ºSH
Date/Time2021-05-20,11:49:16 AM



Results

Peak No.	Peak ID	Ret Time	Height	Area	Conc
1		19.665	1388986.625	773861376.000	61.9241
2		41.132	1387730.500	425593056.000	34.0558
3		47.865	207992.766	34248016.000	2.7405
4		58.265	75781.398	15990290.000	1.2795
Total			3060491.289	1249692738.000	100.000

Ingredient Table

No	Peak ID	Ret Time	Peak Width	Factor1	Factor2	ISTD Wt.
1	Collect BAN	28.000	0.010	0.00E+000	0.00E+000	0.0000
2	Collect Pest	33.000	0.010	0.00E+000	0.00E+000	0.0000
3	Dump Pest	56.000	0.010	0.00E+000	0.00E+000	0.0000
4	Dump BAN	60.000	0.010	0.00E+000	0.00E+000	0.0000

MSD1

BJE0383 21E0103/105/106 ALKYL PAH

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Analyst£ºSH
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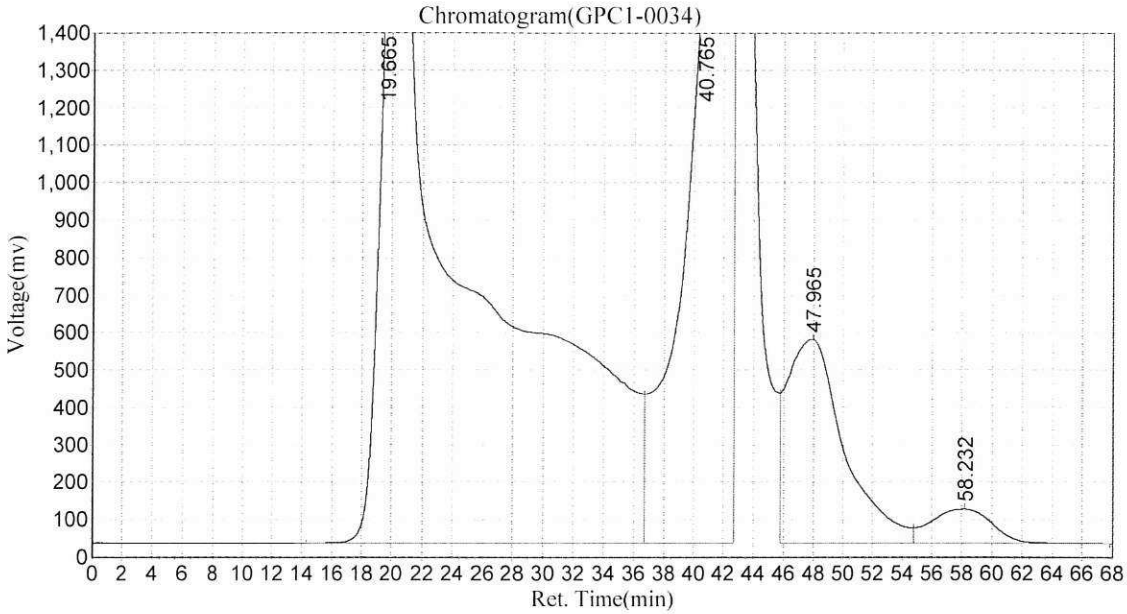

Results

Peak No.	Peak ID	Ret Time	Height	Area	Conc
1		19.665	1387527.125	757007936.000	59.7652
2		40.765	1388070.250	336246304.000	26.5464
3		47.965	546103.625	147407536.000	11.6377
4		58.232	91566.883	25975098.000	2.0507
Total			3413267.883	1266636874.000	100.000

Ingredient Table

No	Peak ID	Ret Time	Peak Width	Factor1	Factor2	ISTD Wt.
1	Collect BAN	28.000	0.010	0.00E+000	0.00E+000	0.0000
2	Collect Pest	33.000	0.010	0.00E+000	0.00E+000	0.0000
3	Dump Pest	56.000	0.010	0.00E+000	0.00E+000	0.0000
4	Dump BAN	60.000	0.010	0.00E+000	0.00E+000	0.0000

-03

BJE0383 21E0103/105/106 ALKYL PAH

Date:2021-05-20,2:08:40 PM
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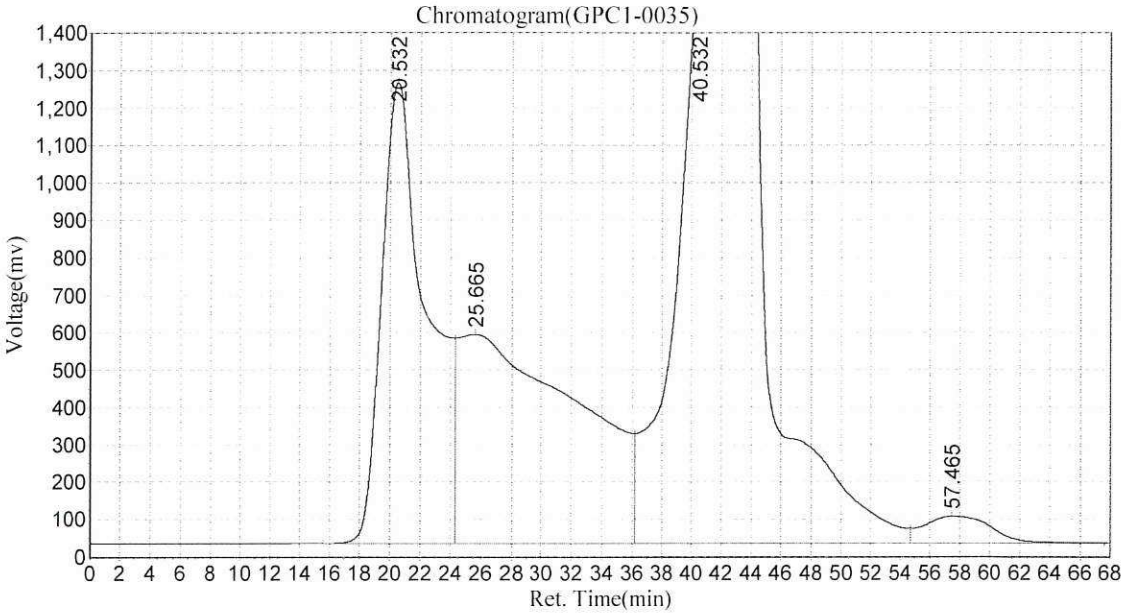
Method File:C:\N2000\GPC1_InHouse.mtd

Analyst£ºSH
Date/Time2021-05-20,2:08:41 PM



Results

Peak No.	Peak ID	Ret Time	Height	Area	Conc
1		20.532	1230968.875	258492688.000	21.3086
2		25.665	559634.688	306351872.000	25.2538
3		40.532	1389093.375	626397696.000	51.6365
4		57.465	71069.422	21849070.000	1.8011
Total			3250766.359	1213091326.000	100.000

Ingredient Table

No	Peak ID	Ret Time	Peak Width	Factor1	Factor2	ISTD Wt.
1	Collect BAN	28.000	0.010	0.00E+000	0.00E+000	0.0000
2	Collect Pest	33.000	0.010	0.00E+000	0.00E+000	0.0000
3	Dump Pest	56.000	0.010	0.00E+000	0.00E+000	0.0000
4	Dump BAN	60.000	0.010	0.00E+000	0.00E+000	0.0000

BJE0383 21E0103/105/106 ALKYL PAH

Date:2021-05-20,3:18:24 PM
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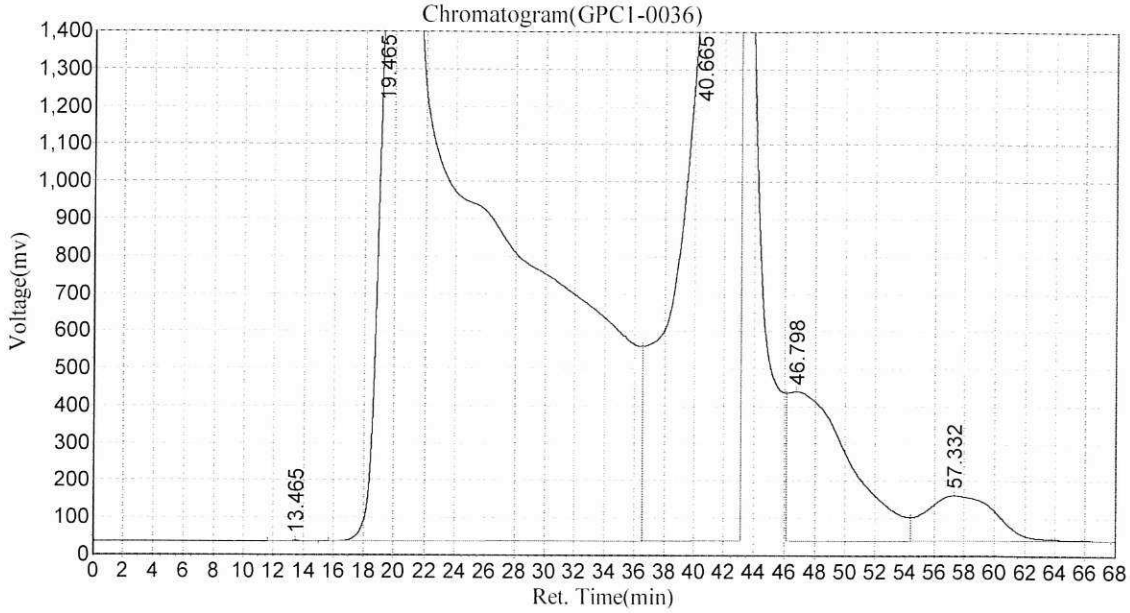
Method File:C:\N2000\GPC1_InHouse.mtd

Analyst£°SH
Date/Time2021-05-20,3:18:24 PM



Results

Peak No.	Peak ID	Ret Time	Height	Area	Conc
1		13.465	1465.909	118012.797	0.0079
2		19.465	1389268.250	933762112.000	62.5901
3		40.665	1386867.750	403847296.000	27.0699
4		46.798	400262.313	114825032.000	7.6967
5		57.332	120706.609	39314908.000	2.6353
Total			3298570.831	1491867360.797	100.000

Ingredient Table

No	Peak ID	Ret Time	Peak Width	Factor1	Factor2	ISTD Wt.
1	Collect BAN	28.000	0.010	0.00E+000	0.00E+000	0.0000
2	Collect Pest	33.000	0.010	0.00E+000	0.00E+000	0.0000
3	Dump Pest	56.000	0.010	0.00E+000	0.00E+000	0.0000
4	Dump BAN	60.000	0.010	0.00E+000	0.00E+000	0.0000

Analytical Resources, Incorporated
Analytical Chemists and Consultants

CLEANUP BATCH SUMMARY

Laboratory:	Analytical Resources, Inc.	SDG:	21E0106
Client:	Anchor QEA, LLC	Project:	Gasco Siltronic - US Moorings
Cleanup Batch:	CJE0207	Cleanup Type:	Silica Gel
Cleanup Method:	EPA 3630C Silica Gel Cleanup	Analysis:	EPA 8270E-SIM

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
Blank	BJE0383-BLK1	NT1421060418.D	05/25/2021	
USMPDI-028SG-210504	21E0106-01	NT1421060710S.D	05/25/2021	
USMPDI-030SG-210504	21E0106-02	NT1421060711.D	05/25/2021	
USMPDI-030SG-210504	21E0106-02	NT1421060711S.D	05/25/2021	
USMPDI-031SG-210504	21E0106-03	NT1421060714.D	05/25/2021	
Matrix Spike Dup	BJE0383-MSD1	NT1421060713.D	05/25/2021	
Matrix Spike	BJE0383-MS1	NT1421060712.D	05/25/2021	
Blank	BJE0383-BLK2	NT1421060418S.D	05/25/2021	
USMPDI-031SG-210504	21E0106-03	NT1421060714S.D	05/25/2021	
USMPDI-035SG-210504	21E0106-04	NT1421060715.D	05/25/2021	
USMPDI-035SG-210504	21E0106-04	NT1421060715S.D	05/25/2021	
USMPDI-028SG-210504	21E0106-01	NT1421060710.D	05/25/2021	
LCS	BJE0383-BS1	NT1421060419.D	05/25/2021	

Analytical Resources, Incorporated
Analytical Chemists and Consultants

CLEANUP BENCH SHEET

CJE0207

Matrix: Solid **Cleanup using: Organics - EPA 3630C Silica Gel Cleanup** **Printed: 5/25/2021 5:39:52PM**

Lab Number	Sample Container	Sample Name	Extract Container	Initial (mL)	Final (mL)	Analysis	Clean Up Date	Cleaned By	Cleanup Comments
21E0106-04	A	USMPDI-035SG-210504	A 03	0.5	0.5	270E-SIM Alkyl PAH (Range) Dual Sca	5/25/2021	BT	
21E0106-04	A	USMPDI-035SG-210504	A 02	0.5	0.5	70E-SIM Alkyl PAH (Parents) Dual Sc	5/25/2021	BT	
21E0106-02	A	USMPDI-030SG-210504	A 02	0.5	0.5	70E-SIM Alkyl PAH (Parents) Dual Sc	5/25/2021	BT	
21E0106-02	A	USMPDI-030SG-210504	A 03	0.5	0.5	270E-SIM Alkyl PAH (Range) Dual Sca	5/25/2021	BT	
21E0106-03	A	USMPDI-031SG-210504	A 02	0.5	0.5	70E-SIM Alkyl PAH (Parents) Dual Sc	5/25/2021	BT	
21E0106-03	A	USMPDI-031SG-210504	A 03	0.5	0.5	270E-SIM Alkyl PAH (Range) Dual Sca	5/25/2021	BT	
21E0106-01	A	USMPDI-028SG-210504	A 02	0.5	0.5	70E-SIM Alkyl PAH (Parents) Dual Sc	5/25/2021	BT	
21E0106-01	A	USMPDI-028SG-210504	A 03	0.5	0.5	270E-SIM Alkyl PAH (Range) Dual Sca	5/25/2021	BT	
21E0105-01	A	USMPDI-030SC-A-00-01-21 0503	A 03	0.5	0.5	70E-SIM Alkyl PAH (Parents) Dual Sc	5/25/2021	BT	
21E0105-01	A	USMPDI-030SC-A-00-01-21 0503	A 04	0.5	0.5	270E-SIM Alkyl PAH (Range) Dual Sca	5/25/2021	BT	
21E0105-07	A	USMPDI-030SC-B-02-05-21 0503	A 03	5	5	70E-SIM Alkyl PAH (Parents) Dual Sc	5/25/2021	BT	
21E0105-07	A	USMPDI-030SC-B-02-05-21 0503	A 04	5	5	270E-SIM Alkyl PAH (Range) Dual Sca	5/25/2021	BT	
21E0103-23	A	USMPDI-035SC-B-02-05-21 0504	A 03	5	5	70E-SIM Alkyl PAH (Parents) Dual Sc	5/25/2021	BT	
21E0103-23	A	USMPDI-035SC-B-02-05-21 0504	A 04	5	5	270E-SIM Alkyl PAH (Range) Dual Sca	5/25/2021	BT	
21E0103-01	A	USMPDI-028SC-A-00-01-21 0504	A 03	0.5	0.5	70E-SIM Alkyl PAH (Parents) Dual Sc	5/25/2021	BT	
21E0103-01	A	USMPDI-028SC-A-00-01-21 0504	A 04	0.5	0.5	270E-SIM Alkyl PAH (Range) Dual Sca	5/25/2021	BT	
21E0103-16	A	USMPDI-031SC-B-02-05-21 0504	A 03	0.5	0.5	70E-SIM Alkyl PAH (Parents) Dual Sc	5/25/2021	BT	
21E0103-16	A	USMPDI-031SC-B-02-05-21 0504	A 04	0.5	0.5	270E-SIM Alkyl PAH (Range) Dual Sca	5/25/2021	BT	
21E0103-17	A	USMPDI-035SC-A-00-01-21 0504	A 03	0.5	0.5	70E-SIM Alkyl PAH (Parents) Dual Sc	5/25/2021	BT	
21E0103-08	A	USMPDI-028SC-B-02-05-21 0504	A 03	5	5	70E-SIM Alkyl PAH (Parents) Dual Sc	5/25/2021	BT	
21E0103-08	A	USMPDI-028SC-B-02-05-21 0504	A 04	5	5	270E-SIM Alkyl PAH (Range) Dual Sca	5/25/2021	BT	
21E0103-10	A	USMPDI-031SC-A-00-01-21 0504	A 03	0.5	0.5	70E-SIM Alkyl PAH (Parents) Dual Sc	5/25/2021	BT	

Analytical Resources, Incorporated
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CLEANUP BENCH SHEET

CJE0207

Matrix: Solid **Cleanup using: Organics - EPA 3630C Silica Gel Cleanup** **Printed: 5/25/2021 5:39:52PM**

Lab Number	Sample Container	Sample Name	Extract Container	Initial (mL)	Final (mL)	Analysis	Clean Up Date	Cleaned By	Cleanup Comments
21E0103-10	A	USMPDI-031SC-A-00-01-21 0504	A 04	0.5	0.5	270E-SIM Alkyl PAH (Range) Dual Sca	5/25/2021	BT	
21E0103-17	A	USMPDI-035SC-A-00-01-21 0504	A 04	0.5	0.5	270E-SIM Alkyl PAH (Range) Dual Sca	5/25/2021	BT	
BJE0383-MSD2	-	Matrix Spike Dup	-	0.5	0.5	-	5/25/2021	BT	
BJE0383-MSD1	-	Matrix Spike Dup	-	0.5	0.5	-	5/25/2021	BT	
BJE0383-BS1	-	LCS	-	0.5	0.5	-	5/25/2021	BT	
BJE0383-BS2	-	LCS	-	0.5	0.5	-	5/25/2021	BT	
BJE0383-MS1	-	Matrix Spike	-	0.5	0.5	-	5/25/2021	BT	
BJE0383-MS2	-	Matrix Spike	-	0.5	0.5	-	5/25/2021	BT	
BJE0383-BLK1	-	Blank	-	0.5	0.5	-	5/25/2021	BT	
BJE0383-BLK2	-	Blank	-	0.5	0.5	-	5/25/2021	BT	

Analytical Resources, Incorporated
Analytical Chemists and Consultants

CLEANUP BATCH SUMMARY

Laboratory:	Analytical Resources, Inc.	SDG:	21E0106
Client:	Anchor QEA, LLC	Project:	Gasco Siltronic - US Moorings
Cleanup Batch:	CJE0208	Cleanup Type:	GPC
Cleanup Method:	EPA 3640A GPC Cleanup 1:1	Analysis:	EPA 8270E-SIM

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
USMPDI-030SG-210504	21E0106-02	NT1421060711S.D	05/25/2021	
Matrix Spike	BJE0383-MS1	NT1421060712.D	05/25/2021	
LCS	BJE0383-BS1	NT1421060419.D	05/25/2021	
Blank	BJE0383-BLK2	NT1421060418S.D	05/25/2021	
Blank	BJE0383-BLK1	NT1421060418.D	05/25/2021	
USMPDI-035SG-210504	21E0106-04	NT1421060715S.D	05/25/2021	
USMPDI-035SG-210504	21E0106-04	NT1421060715.D	05/25/2021	
Matrix Spike Dup	BJE0383-MSD1	NT1421060713.D	05/25/2021	
USMPDI-031SG-210504	21E0106-03	NT1421060714.D	05/25/2021	
USMPDI-030SG-210504	21E0106-02	NT1421060711.D	05/25/2021	
USMPDI-028SG-210504	21E0106-01	NT1421060710.D	05/25/2021	
USMPDI-028SG-210504	21E0106-01	NT1421060710S.D	05/25/2021	
USMPDI-031SG-210504	21E0106-03	NT1421060714S.D	05/25/2021	

Analytical Resources, Incorporated
Analytical Chemists and Consultants

CLEANUP BENCH SHEET

CJE0208

Matrix: Solid **Cleanup using: Organics - EPA 3640A GPC Cleanup 1:1** **Printed: 5/25/2021 5:40:25PM**

Lab Number	Sample Container	Sample Name	Extract Container	Initial (uL)	Final (uL)	Analysis	Clean Up Date	Cleaned By	Cleanup Comments
21E0106-04	A	USMPDI-035SG-210504	A 03	0.5	0.5	270E-SIM Alkyl PAH (Range) Dual Sca	5/25/2021	BT	
21E0106-04	A	USMPDI-035SG-210504	A 02	0.5	0.5	70E-SIM Alkyl PAH (Parents) Dual Sc	5/25/2021	BT	
21E0106-02	A	USMPDI-030SG-210504	A 02	0.5	0.5	70E-SIM Alkyl PAH (Parents) Dual Sc	5/25/2021	BT	
21E0106-02	A	USMPDI-030SG-210504	A 03	0.5	0.5	270E-SIM Alkyl PAH (Range) Dual Sca	5/25/2021	BT	
21E0106-03	A	USMPDI-031SG-210504	A 02	0.5	0.5	70E-SIM Alkyl PAH (Parents) Dual Sc	5/25/2021	BT	
21E0106-03	A	USMPDI-031SG-210504	A 03	0.5	0.5	270E-SIM Alkyl PAH (Range) Dual Sca	5/25/2021	BT	
21E0106-01	A	USMPDI-028SG-210504	A 02	0.5	0.5	70E-SIM Alkyl PAH (Parents) Dual Sc	5/25/2021	BT	
21E0106-01	A	USMPDI-028SG-210504	A 03	0.5	0.5	270E-SIM Alkyl PAH (Range) Dual Sca	5/25/2021	BT	
21E0105-01	A	USMPDI-030SC-A-00-01-21 0503	A 03	0.5	0.5	70E-SIM Alkyl PAH (Parents) Dual Sc	5/25/2021	BT	
21E0105-01	A	USMPDI-030SC-A-00-01-21 0503	A 04	0.5	0.5	270E-SIM Alkyl PAH (Range) Dual Sca	5/25/2021	BT	
21E0105-07	A	USMPDI-030SC-B-02-05-21 0503	A 03	5	5	70E-SIM Alkyl PAH (Parents) Dual Sc	5/25/2021	BT	
21E0105-07	A	USMPDI-030SC-B-02-05-21 0503	A 04	5	5	270E-SIM Alkyl PAH (Range) Dual Sca	5/25/2021	BT	
21E0103-23	A	USMPDI-035SC-B-02-05-21 0504	A 03	5	5	70E-SIM Alkyl PAH (Parents) Dual Sc	5/25/2021	BT	
21E0103-23	A	USMPDI-035SC-B-02-05-21 0504	A 04	5	5	270E-SIM Alkyl PAH (Range) Dual Sca	5/25/2021	BT	
21E0103-01	A	USMPDI-028SC-A-00-01-21 0504	A 03	0.5	0.5	70E-SIM Alkyl PAH (Parents) Dual Sc	5/25/2021	BT	
21E0103-01	A	USMPDI-028SC-A-00-01-21 0504	A 04	0.5	0.5	270E-SIM Alkyl PAH (Range) Dual Sca	5/25/2021	BT	
21E0103-16	A	USMPDI-031SC-B-02-05-21 0504	A 03	0.5	0.5	70E-SIM Alkyl PAH (Parents) Dual Sc	5/25/2021	BT	
21E0103-16	A	USMPDI-031SC-B-02-05-21 0504	A 04	0.5	0.5	270E-SIM Alkyl PAH (Range) Dual Sca	5/25/2021	BT	
21E0103-17	A	USMPDI-035SC-A-00-01-21 0504	A 03	0.5	0.5	70E-SIM Alkyl PAH (Parents) Dual Sc	5/25/2021	BT	
21E0103-08	A	USMPDI-028SC-B-02-05-21 0504	A 03	5	5	70E-SIM Alkyl PAH (Parents) Dual Sc	5/25/2021	BT	
21E0103-08	A	USMPDI-028SC-B-02-05-21 0504	A 04	5	5	270E-SIM Alkyl PAH (Range) Dual Sca	5/25/2021	BT	
21E0103-10	A	USMPDI-031SC-A-00-01-21 0504	A 03	0.5	0.5	70E-SIM Alkyl PAH (Parents) Dual Sc	5/25/2021	BT	

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CLEANUP BENCH SHEET

CJE0208

Matrix: Solid **Cleanup using: Organics - EPA 3640A GPC Cleanup 1:1** **Printed: 5/25/2021 5:40:25PM**

Lab Number	Sample Container	Sample Name	Extract Container	Initial (uL)	Final (uL)	Analysis	Clean Up Date	Cleaned By	Cleanup Comments
21E0103-10	A	USMPDI-031SC-A-00-01-21 0504	A 04	0.5	0.5	270E-SIM Alkyl PAH (Range) Dual Sca	5/25/2021	BT	
21E0103-17	A	USMPDI-035SC-A-00-01-21 0504	A 04	0.5	0.5	270E-SIM Alkyl PAH (Range) Dual Sca	5/25/2021	BT	
BJE0383-MSD2	-	Matrix Spike Dup	-	0.5	0.5	-	5/25/2021	BT	
BJE0383-MSD1	-	Matrix Spike Dup	-	0.5	0.5	-	5/25/2021	BT	
BJE0383-BS1	-	LCS	-	0.5	0.5	-	5/25/2021	BT	
BJE0383-BS2	-	LCS	-	0.5	0.5	-	5/25/2021	BT	
BJE0383-MS1	-	Matrix Spike	-	0.5	0.5	-	5/25/2021	BT	
BJE0383-MS2	-	Matrix Spike	-	0.5	0.5	-	5/25/2021	BT	
BJE0383-BLK1	-	Blank	-	0.5	0.5	-	5/25/2021	BT	
BJE0383-BLK2	-	Blank	-	0.5	0.5	-	5/25/2021	BT	

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Form I
METHOD BLANK DATA SHEET
EPA 8270E-SIM

Blank

Laboratory:	Analytical Resources, Inc.			SDG:	21E0106
Client:	Anchor QEA, LLC			Project:	Gasco Siltronic - US Moorings
Matrix:	Solid	Laboratory ID:	BJE0383-BLK1	File ID:	NT1421060418.D
Sampled:	N/A	Prepared:	05/17/21 13:40	Analyzed:	06/05/21 01:55
Solids:		Preparation:	EPA 3546 (Microwave)	Initial/Final:	10 g / 0.5 mL
Batch:	BJE0383	Sequence:	SJF0131	Calibration:	EF00008
Instrument:	NT14	Column:	ZB-5MS	Cleanups:	GPC, Silica Gel

CAS NO.	COMPOUND	DILUTION	CONC: (ug/kg wet)	Q	DL	RL
493-02-7	trans-Decalin	1	5.0	U	0.03	5.0
493-01-6	cis-Decalin	1	5.0	U	0.5	5.0
91-20-3	Naphthalene	1	5.0	U	0.4	5.0
90-12-0	1-Methylnaphthalene	1	5.0	U	0.4	5.0
91-57-6	2-Methylnaphthalene	1	5.0	U	0.4	5.0
92-52-4	Biphenyl	1	5.0	U	0.3	5.0
581-42-0	2,6-Dimethylnaphthalene	1	5.0	U	0.4	5.0
208-96-8	Acenaphthylene	1	5.0	U	0.3	5.0
83-32-9	Acenaphthene	1	5.0	U	0.5	5.0
132-64-9	Dibenzofuran	1	5.0	U	0.4	5.0
2245-38-7	2,3,5-Trimethylnaphthalene	1	5.0	U	0.4	5.0
86-73-7	Fluorene	1	5.0	U	0.5	5.0
95-15-8	Benzo(b)thiophene	1	5.0	U	0.4	5.0
85-01-8	Phenanthrene	1	5.0	U	0.9	5.0
120-12-7	Anthracene	1	5.0	U	0.05	5.0
86-74-8	Carbazole	1	5.0	U	0.7	5.0
832-69-9	1-Methylphenanthrene	1	5.0	U	0.5	5.0
206-44-0	Fluoranthene	1	5.0	U	1.4	5.0
132-65-0	Dibenzothiophene	1	5.0	U	0.7	5.0
129-00-0	Pyrene	1	5.0	U	1.0	5.0
56-55-3	Benzo(a)anthracene	1	5.0	U	1.4	5.0
218-01-9	Chrysene	1	5.0	U	0.7	5.0
205-99-2	Benzo(b)fluoranthene	1	5.0	U	0.8	5.0
205-82-3	Benzo(j)fluoranthene	1	5.0	U	0.7	5.0
207-08-9	Benzo(k)fluoranthene	1	5.0	U	0.8	5.0
197-97-2	Benzo(e)pyrene	1	5.0	U	0.6	5.0
50-32-8	Benzo(a)pyrene	1	5.0	U	1.0	5.0
193-39-5	Indeno(1,2,3-cd)pyrene	1	5.0	U	0.4	5.0
53-70-3	Dibenzo(a,h)anthracene	1	5.0	U	0.7	5.0
191-24-2	Benzo(g,h,i)perylene	1	5.0	U	0.5	5.0
1985-5-0	Perylene	1	5.0	U	0.4	5.0
239-35-0	Benzo(b)naphtho(2,1-d)thiophene	1	5.0	U	5.0	5.0

SURROGATES	ADDED: (ug/kg wet)	FOUND: (ug/kg wet)	% REC	QC LIMITS	Q
Naphthalene-d8	150.00	58.7	39.1	30 - 160	
Acenaphthene-d10	150.00	62.4	41.6	30 - 160	

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Form I
METHOD BLANK DATA SHEET
EPA 8270E-SIM

Blank

Laboratory:	Analytical Resources, Inc.			SDG:	21E0106
Client:	Anchor QEA, LLC			Project:	Gasco Siltronic - US Moorings
Matrix:	Solid	Laboratory ID:	BJE0383-BLK1	File ID:	NT1421060418.D
Sampled:	N/A	Prepared:	05/17/21 13:40	Analyzed:	06/05/21 01:55
Solids:		Preparation:	EPA 3546 (Microwave)	Initial/Final:	10 g / 0.5 mL
Batch:	BJE0383	Sequence:	SJF0131	Calibration:	EF00008
Instrument:	NT14	Column:	ZB-5MS	Cleanups:	GPC, Silica Gel

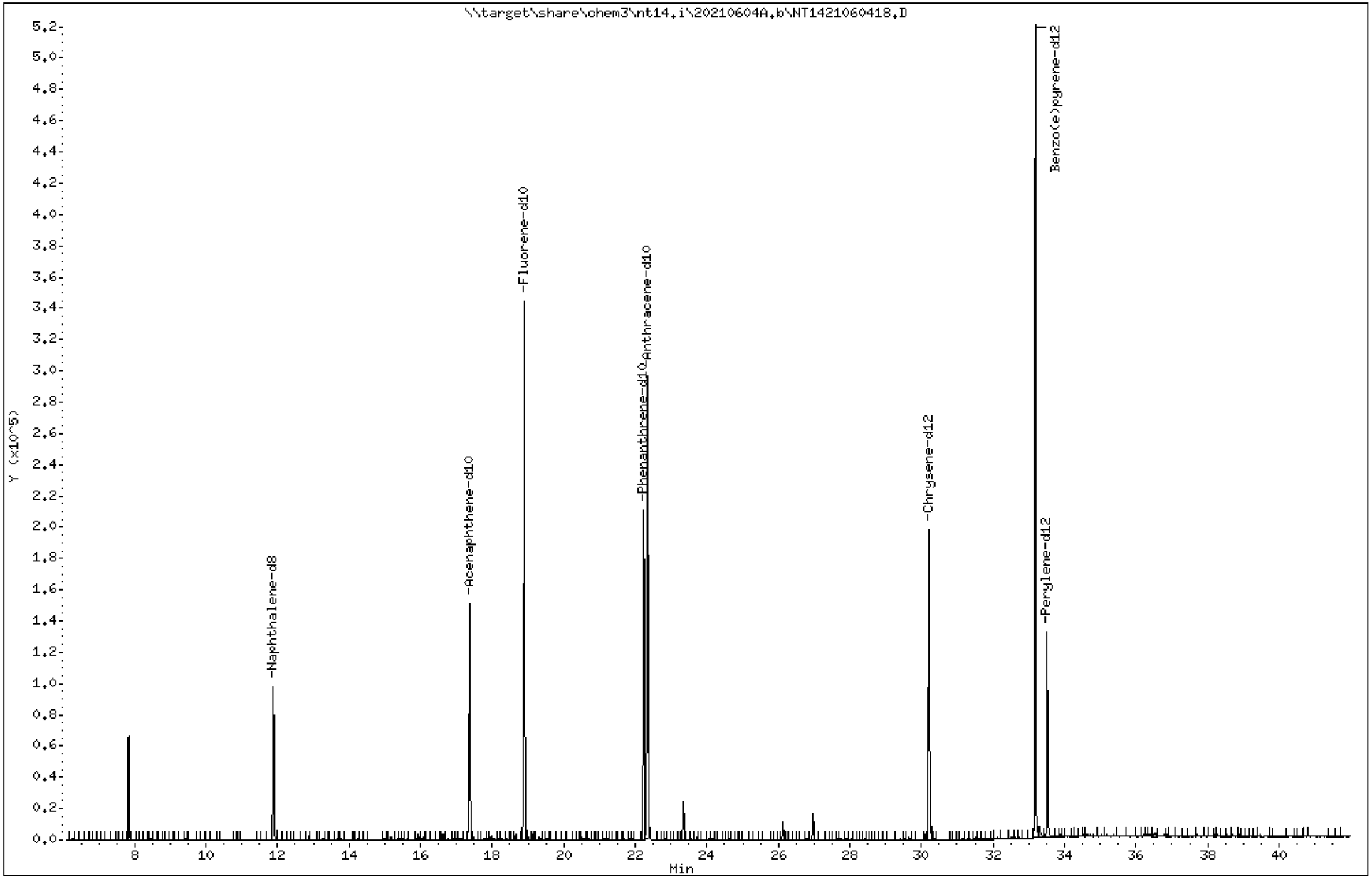
SURROGATES	ADDED: (ug/kg wet)	FOUND: (ug/kg wet)	% REC	QC LIMITS	Q
Phenanthrene-d10	150.00	75.8	50.6	30 - 160	
Chrysene-d12	150.00	60.2	40.1	30 - 160	
Perylene-d12	150.00	40.4	27.0	30 - 160	*

Data File: \\target\share\chem3\nt14.i\20210604A.b\NT1421060418.D
Date : 05-JUN-2021 01:55
Client ID:
Sample Info: BJE0383-BLK1

Instrument: nt14.i

Operator: VTS

Column phase: Rxi-17Sil MS
Column diameter: 0.25



ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt14.i\20210604A.b\NT1421060418.D
Lab Smp Id: BJE0383-BLK1
Inj Date : 05-JUN-2021 01:55
Operator : VTS Inst ID: nt14.i
Smp Info : BJE0383-BLK1
Misc Info :
Comment : 1ul Injection
Method : \\target\share\chem3\nt14.i\20210604.b\ALKYLPNA.m
Meth Date : 03-Jun-2021 08:55 yev Quant Type: ISTD
Cal Date : 29-MAY-2021 18:49 Cal File: NT1421052914.D
Als bottle: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: TARGETS.sub
Target Version: 4.14
Processing Host: ORGDATA102

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/mL)
	1 trans-Decalin	138	Compound Not Detected.					
	2 cis-Decalin	138	Compound Not Detected.					
$	6 Naphthalene-d8	136	11.887	11.897	(0.629)	153554	1.17333	1.173(R)
	7 Naphthalene	128	Compound Not Detected.					
	12 Benzo(b)thiophene	134	Compound Not Detected.					
	16 2-Methylnaphthalene	141	Compound Not Detected.					
	17 1-methylnaphthalene	141	Compound Not Detected.					
	18 Biphenyl	154	Compound Not Detected.					
	19 2,6-Dimethylnaphthalene	156	Compound Not Detected.					
	20 Acenaphthylene	152	Compound Not Detected.					
$	21 Acenaphthene-d10	164	17.366	17.376	(0.919)	100303	1.24788	1.248(R)
	22 Acenaphthene	153	Compound Not Detected.					
	23 Dibenzofuran	168	Compound Not Detected.					
	24 1,6,7-Trimethylnaphthalene	170	Compound Not Detected.					
*	25 Fluorene-d10	176	18.896	18.907	(1.000)	281511	2.00000	
	26 Fluorene	166	Compound Not Detected.					
	30 Dibenzothiophene	184	Compound Not Detected.					
$	35 Phenanthrene-d10	188	22.239	22.239	(0.995)	217553	1.51682	1.517(R)
	36 Phenanthrene	178	Compound Not Detected.					
*	250 Anthracene-d10	188	22.349	22.359	(1.000)	298120	2.00000	
	37 Anthracene	178	Compound Not Detected.					
	42 Carbazole	167	Compound Not Detected.					
	43 1-Methylphenanthrene	192	Compound Not Detected.					
	44 Fluoranthene	202	Compound Not Detected.					
	46 Pyrene	202	Compound Not Detected.					
	51 Naphthobenzothiophene	234	Compound Not Detected.					
	55 Benzo(a)anthracene	228	Compound Not Detected.					
$	56 Chrysene-d12	240	30.219	30.219	(0.911)	171570	1.20424	1.204(R)
	57 Chrysene	228	Compound Not Detected.					
	62 Benzo(b)fluoranthene	252	Compound Not Detected.					
	63 Benzo(k)fluoranthene	252	Compound Not Detected.					
	293 Benzo(j)fluoranthene	252	Compound Not Detected.					
	246 Total Benzofluoranthenes	252	Compound Not Detected.					

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/mL)
* 251 Benzo(e)pyrene-d12	264	33.181	33.181	(1.000)	455154	2.00000	
64 Benzo(e)pyrene	252	Compound Not Detected.					
66 Benzo(a)pyrene	252	Compound Not Detected.					
$ 67 Perylene-d12	264	33.519	33.519	(1.010)	124414	0.80894	0.8089(R)
68 Perylene	252	Compound Not Detected.					
69 Indeno(1,2,3-cd)pyrene	276	Compound Not Detected.					
70 Dibenzo(a,h)anthracene	278	Compound Not Detected.					
74 Benzo(g,h,i)perylene	276	Compound Not Detected.					

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt14.i
Lab File ID: NT1421060418.D
Lab Smp Id: BJE0383-BLK1
Analysis Type: SV
Quant Type: ISTD
Operator: VTS
Method File: \\target\share\chem3\nt14.i\20210604.b\ALKYLPNA.m
Misc Info:

Calibration Date: 01-JUN-2021
Calibration Time: 15:22
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
25 Fluorene-d10	228656	114328	457312	281511	23.12
250 Anthracene-d10	234827	117414	469654	298120	26.95
251 Benzo(e)pyrene-d1	331649	165825	663298	455154	37.24

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
25 Fluorene-d10	18.91	18.41	19.41	18.90	-0.06
250 Anthracene-d10	22.36	21.86	22.86	22.35	-0.05
251 Benzo(e)pyrene-d1	33.18	32.68	33.68	33.18	0.00

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

REVIEW SUMMARY FOR FILE - NT1421060418.D

Lab ID: BJE0383-BLK1
nt14.i, 20210604.b\ALKYLPNA.m, 05-JUN-2021 01:55

RT	CO-ELUTION COMPOUNDS
	NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
NONE			

RRT check based on Ccal File: NT1421060102.D

On Column LOD for nt14.i, 20210604.b\ALKYLPNA.m, TARGETS.sub = 0.0000

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

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Form I
METHOD BLANK DATA SHEET
EPA 8270E-SIM

Blank

Laboratory:	Analytical Resources, Inc.			SDG:	21E0106
Client:	Anchor QEA, LLC			Project:	Gasco Siltronic - US Moorings
Matrix:	Solid	Laboratory ID:	BJE0383-BLK2	File ID:	NT1421060418S.D
Sampled:	N/A	Prepared:	05/17/21 13:40	Analyzed:	06/05/21 01:55
Solids:		Preparation:	EPA 3546 (Microwave)	Initial/Final:	10 g / 0.5 mL
Batch:	BJE0383	Sequence:	SJF0189	Calibration:	EF00019
Instrument:	NT14	Column:	ZB-5MS	Cleanups:	GPC, Silica Gel

CAS NO.	COMPOUND	DILUTION	CONC: (ug/kg wet)	Q	DL	RL
C1DEC	C1-Decalins	1	5.0	U	0.5	5.0
C2DEC	C2-Decalins	1	5.0	U	0.5	5.0
C3DEC	C3-Decalins	1	5.0	U	0.5	5.0
C4DEC	C4-Decalins	1	5.0	U	0.5	5.0
C1NAPH	C1-Naphthalenes	1	5.0	U	0.4	5.0
C2NAPH	C2-Naphthalenes	1	5.0	U	0.4	5.0
C3NAPH	C3-Naphthalenes	1	5.0	U	0.4	5.0
C4NAPH	C4-Naphthalenes	1	5.0	U	0.4	5.0
C1FLR	C1-Fluorenes	1	5.0	U	0.5	5.0
C2FLR	C2-Fluorenes	1	5.0	U	0.5	5.0
C3FLR	C3-Fluorenes	1	5.0	U	0.5	5.0
C1DBTPH	C1-Dibenzothiophenes	1	5.0	U	0.7	5.0
C2DBTPH	C2-Dibenzothiophenes	1	5.0	U	0.7	5.0
C3DBTPH	C3-Dibenzothiophenes	1	5.0	U	0.7	5.0
C4DBTPH	C4-Dibenzothiophenes	1	5.0	U	0.7	5.0
C1PHNANT	C1-Phenanthrenes/Anthracenes	1	5.0	U	0.9	5.0
C2PHNANT	C2-Phenanthrenes/Anthracenes	1	5.0	U	0.9	5.0
C3PHNANT	C3-Phenanthrenes/Anthracenes	1	5.0	U	0.9	5.0
C4PHNANT	C4-Phenanthrenes/Anthracenes	1	5.0	U	0.9	5.0
C1FLPYR	C1-Fluoranthenes/Pyrenes	1	5.0	U	1.0	5.0
C2FLPYR	C2-Fluoranthenes/Pyrenes	1	5.0	U	1.0	5.0
C3FLPYR	C3-Fluoranthenes/Pyrenes	1	5.0	U	1.0	5.0
C4FLPYR	C4-Fluoranthenes/Pyrenes	1	5.0	U	1.0	5.0
C1BAACYR	C1-Benzo(a)anthracenes/Chrysenes	1	5.0	U	0.7	5.0
C2BAACYR	C2-Benzo(a)anthracenes/Chrysenes	1	5.0	U	0.7	5.0
C3BAACYR	C3-Benzo(a)anthracenes/Chrysenes	1	5.0	U	0.7	5.0
C4BAACYR	C4-Benzo(a)anthracenes/Chrysenes	1	5.0	U	0.7	5.0
C1BZTPH	C1-Benzothiophenes	1	5.0	U	0.4	5.0
C2BZTPH	C2-Benzothiophenes	1	5.0	U	0.4	5.0
C3BZTPH	C3-Benzothiophenes	1	5.0	U	0.4	5.0
C1NPBTP	C1-Naphthobenzothiophenes	1	5.0	U	2.5	5.0
C2NPBTP	C2-Naphthobenzothiophenes	1	5.0	U	2.5	5.0
C3NPBTP	C3-Naphthobenzothiophenes	1	5.0	U	2.5	5.0
C4NPBTP	C4-Naphthobenzothiopenes	1	5.0	U	2.5	5.0
C1DBA	C1-Dibenzo(a)anthracenes	1	5.0	U	0.7	5.0
C2DBA	C2-Dibenzo(a)anthracenes	1	5.0	U	0.7	5.0

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Form I
METHOD BLANK DATA SHEET
EPA 8270E-SIM

Blank

Laboratory:	Analytical Resources, Inc.			SDG:	21E0106
Client:	Anchor QEA, LLC			Project:	Gasco Siltronic - US Moorings
Matrix:	Solid	Laboratory ID:	BJE0383-BLK2	File ID:	NT1421060418S.D
Sampled:	N/A	Prepared:	05/17/21 13:40	Analyzed:	06/05/21 01:55
Solids:		Preparation:	EPA 3546 (Microwave)	Initial/Final:	10 g / 0.5 mL
Batch:	BJE0383	Sequence:	SJF0189	Calibration:	EF00019
Instrument:	NT14	Column:	ZB-5MS	Cleanups:	GPC, Silica Gel

CAS NO.	COMPOUND	DILUTION	CONC: (ug/kg wet)	Q	DL	RL
C3DBA	C3-Dibenzo(a)anthracenes	1	5.0	U	0.7	5.0

Data File: \\target\share\chem3\nt14.i\20210604.b\SIM.b\NT1421060418S.D

Date : 05-JUN-2021 01:55

Client ID:

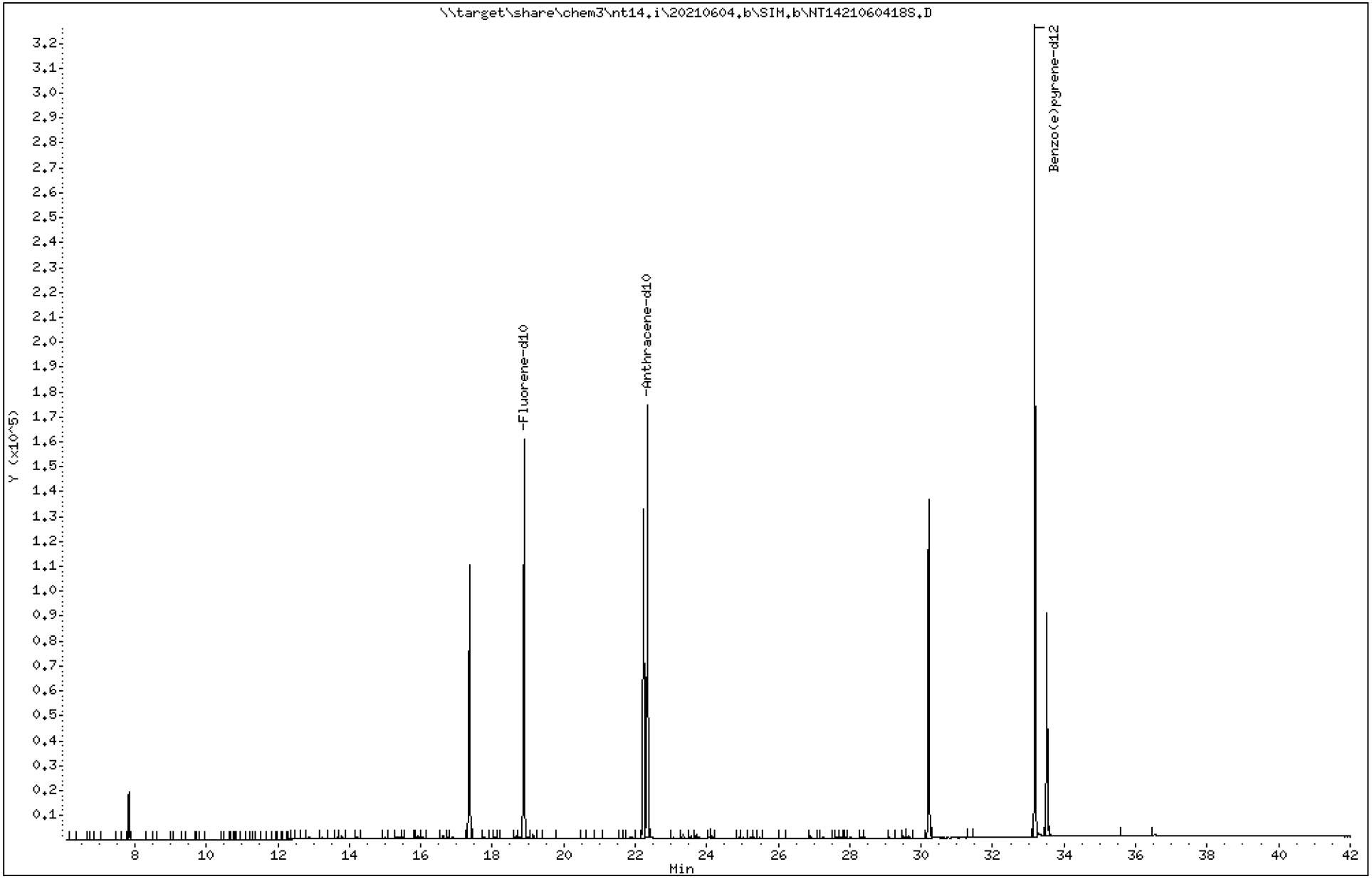
Instrument: nt14.i

Sample Info: BJE0383-BLK2

Operator: VTS

Column phase: Rxi-17Sil MS

Column diameter: 0.25



Data File: \\target\share\chem3\nt14.i\20210604.b\SIM.b\NT1421060418S.D

Date : 05-JUN-2021 01:55

Client ID:

Instrument: nt14.i

Sample Info: BJE0383-BLK2

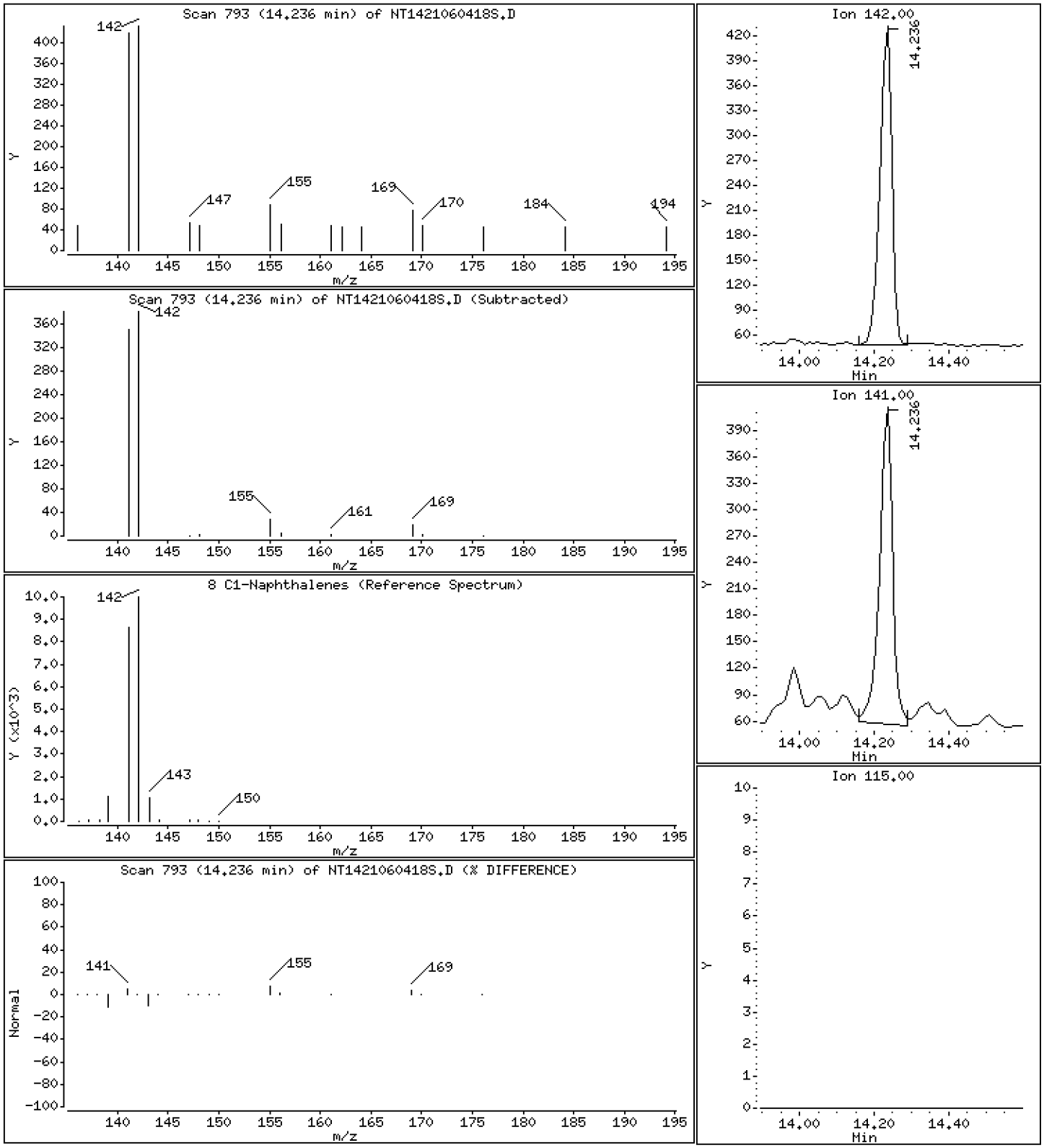
Operator: VTS

Column phase: Rxi-17Sil MS

Column diameter: 0.25

8 C1-Naphthalenes

Concentration: 0.005916 ug/mL



ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt14.i\20210604.b\SIM.b\NT1421060418S.D
Lab Smp Id: BJE0383-BLK2
Inj Date : 05-JUN-2021 01:55
Operator : VTS Inst ID: nt14.i
Smp Info : BJE0383-BLK2
Misc Info :
Comment : 1ul Injection
Method : \\target\share\chem3\nt14.i\20210604.b\SIM.b\ALKYLRANGES.m
Meth Date : 14-Jun-2021 17:25 yev Quant Type: ISTD
Cal Date : 29-MAY-2021 18:49 Cal File: NT1421052914.D
Als bottle: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ALKYLRANGES.sub
Target Version: 4.14
Processing Host: ORGDATA102

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/mL)
3	C1-Decalin	152	Compound Not Detected.					
4	C2-Decalin	166	Compound Not Detected.					
5	C3-Decalin	180	Compound Not Detected.					
247	C4-Decalin	194	Compound Not Detected.					
8	C1-Naphthalenes	142	14.235	14.246	(0.753)	876	0.00592	0.005916
9	C2-Naphthalenes	156	Compound Not Detected.					
10	C3-Naphthalenes	170	Compound Not Detected.					
11	C4-Naphthalenes	184	Compound Not Detected.					
13	C1-Benzothiophenes	148	Compound Not Detected.					
14	C2-Benzothiophenes	162	Compound Not Detected.					
15	C3_Benzothiophenes	176	Compound Not Detected.					
27	C1-Fluorenes	180	Compound Not Detected.					
* 25	Fluorene-d10	176	18.898	18.897	(1.000)	318684	2.00000	
28	C2-Fluorenes	194	Compound Not Detected.					
29	C3-Fluorenes	208	Compound Not Detected.					
31	C1-Dibenzothiophenes	198	Compound Not Detected.					
32	C2-Dibenzothiophenes	212	Compound Not Detected.					
33	C3-Dibenzothiophenes	226	Compound Not Detected.					
34	C4-Dibenzothiophenes	240	Compound Not Detected.					
* 250	Anthracene-d10	188	22.339	22.350	(1.000)	338914	2.00000	
38	C1-Phenanthrenes/Anthracenes	192	Compound Not Detected.					
39	C2-Phenanthrenes/Anthracenes	206	Compound Not Detected.					
40	C3-Phenanthrenes/Anthracenes	220	Compound Not Detected.					
41	C4-Phenanthrenes/Anthracenes	234	Compound Not Detected.					
48	C1-Fluoranthenes/Pyrenes	216	Compound Not Detected.					
49	C2-Fluoranthenes/Pyrenes	230	Compound Not Detected.					
50	C3-Fluoranthenes/Pyrenes	244	Compound Not Detected.					
249	C4-Fluoranthenes/Pyrenes	258	Compound Not Detected.					
52	C1-Naphthobenzothiophenes	248	Compound Not Detected.					
53	C2-Naphthobenzothiophenes	262	Compound Not Detected.					
54	C3-Naphthobenzothiophenes	276	Compound Not Detected.					
248	C4-Naphthobenzothiophenes	290	Compound Not Detected.					
58	C1-Benzo(a)anthracenes/Chrysen	242	Compound Not Detected.					

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/mL)
59 C2-Benzo(a)anthracenes/Chrysen	256	Compound Not Detected.					
60 C3-Benzo(a)anthracenes/Chrysen	270	Compound Not Detected.					
61 C4-Benzo(a)anthracenes/Chrysen	284	Compound Not Detected.					
* 251 Benzo(e)pyrene-d12	264	33.172	33.171	(1.000)	524180	2.00000	
71 C1-Dibenzo(a)anthracenes	292	Compound Not Detected.					
72 C2-Dibenzo(a)anthracenes	306	Compound Not Detected.					
73 C3-Dibenzo(a)anthracenes	320	Compound Not Detected.					

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt14.i
Lab File ID: NT1421060418S.D
Lab Smp Id: BJE0383-BLK2
Analysis Type: SV
Quant Type: ISTD
Operator: VTS
Method File: \\target\share\chem3\nt14.i\20210604.b\SIM.b\ALKYLRANGES.m
Misc Info:

Calibration Date: 05-JUN-2021
Calibration Time: 00:19
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

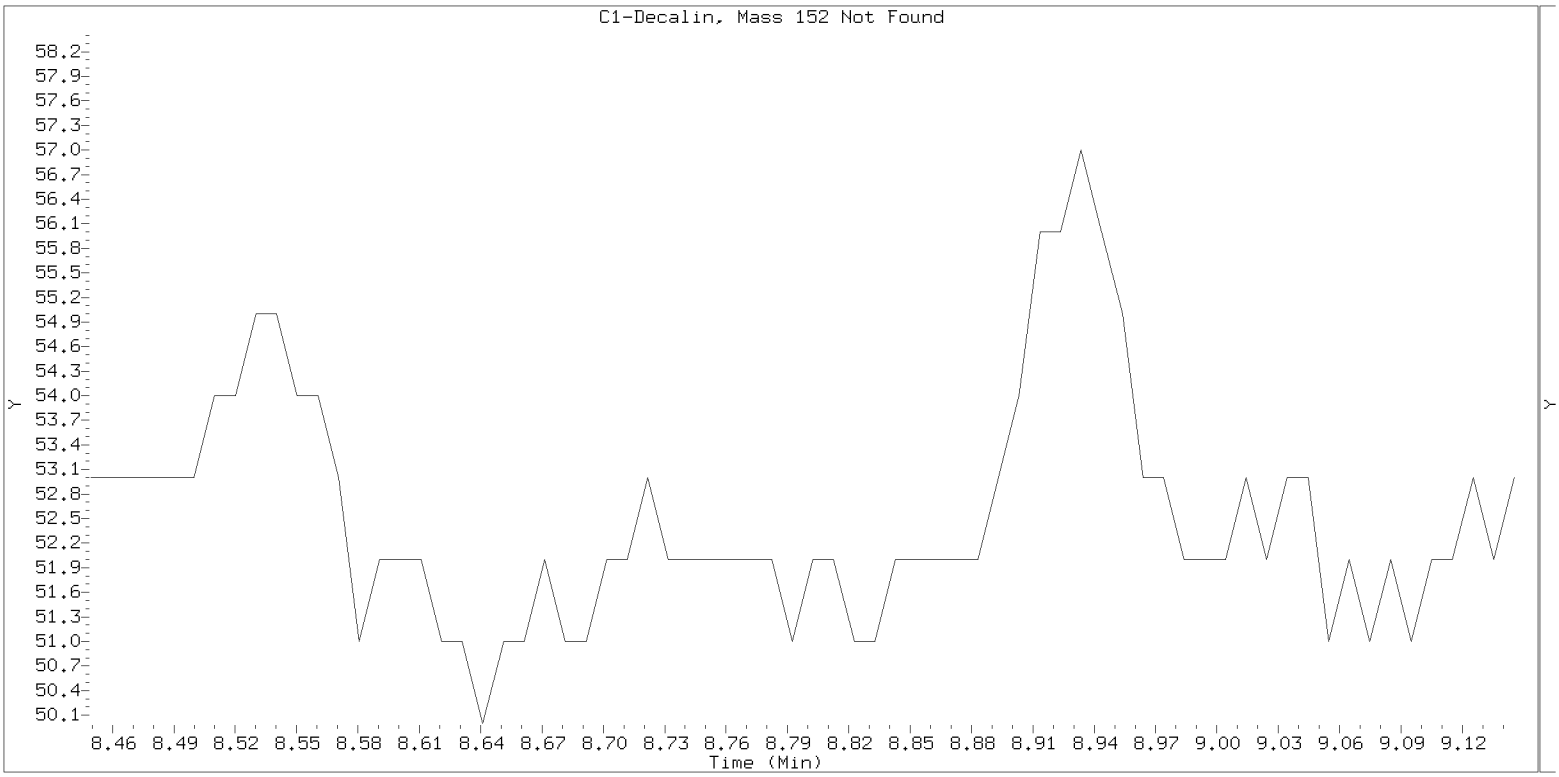
COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
25 Fluorene-d10	308296	154148	616592	318684	3.37
250 Anthracene-d10	328447	164224	656894	338914	3.19
251 Benzo(e)pyrene-d1	473911	236956	947822	524180	10.61

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
25 Fluorene-d10	18.90	18.40	19.40	18.90	0.00
250 Anthracene-d10	22.35	21.85	22.85	22.34	-0.05
251 Benzo(e)pyrene-d1	33.17	32.67	33.67	33.17	0.00

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

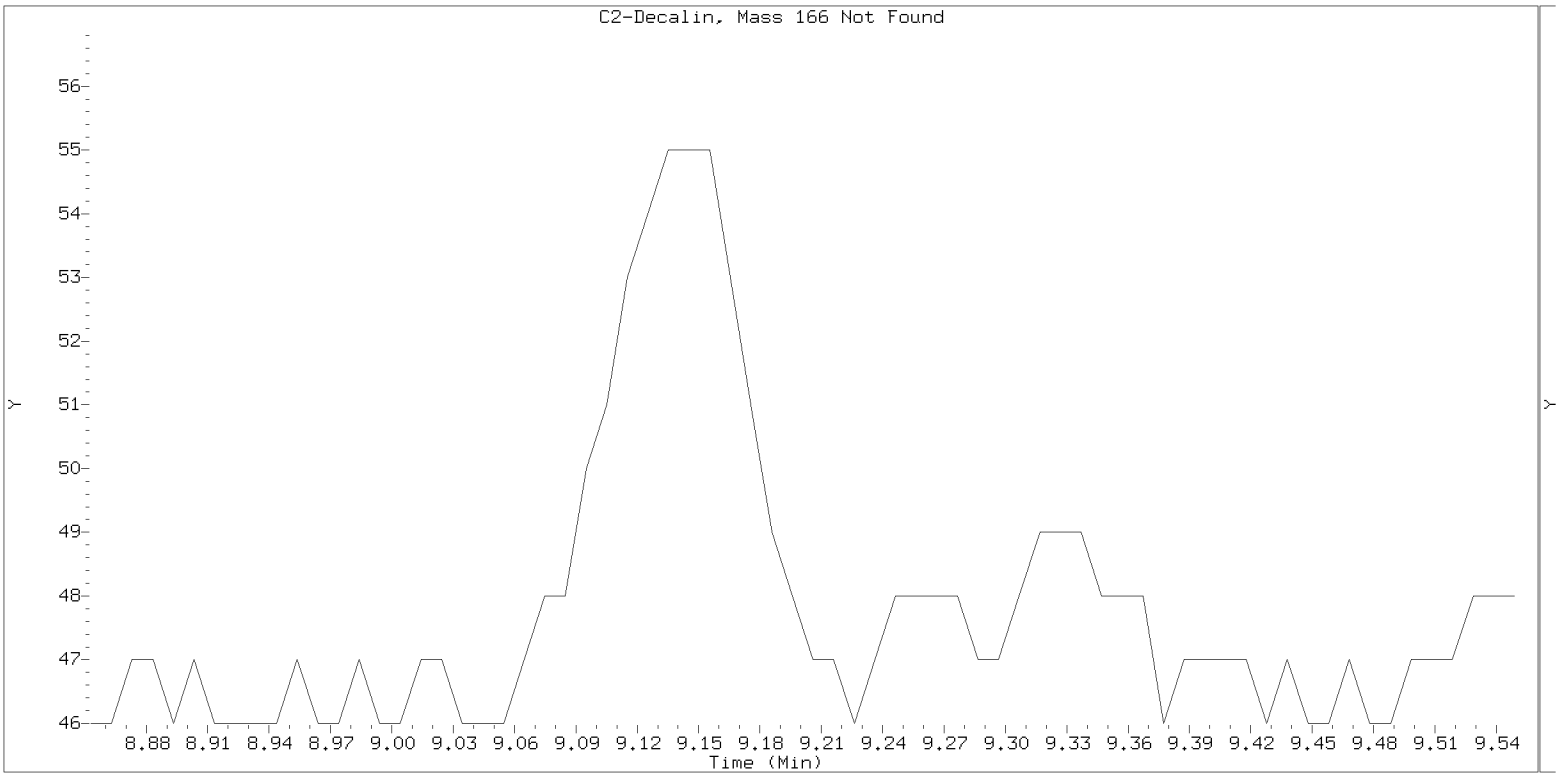
SIM ALKYL PNA RANGE ION WINDOWS - NT1421060418S.D

Lab ID: BJE0383-BLK2
nt14.i, SIM.b\ALKYLRANGES.m, 05-JUN-2021 01:55



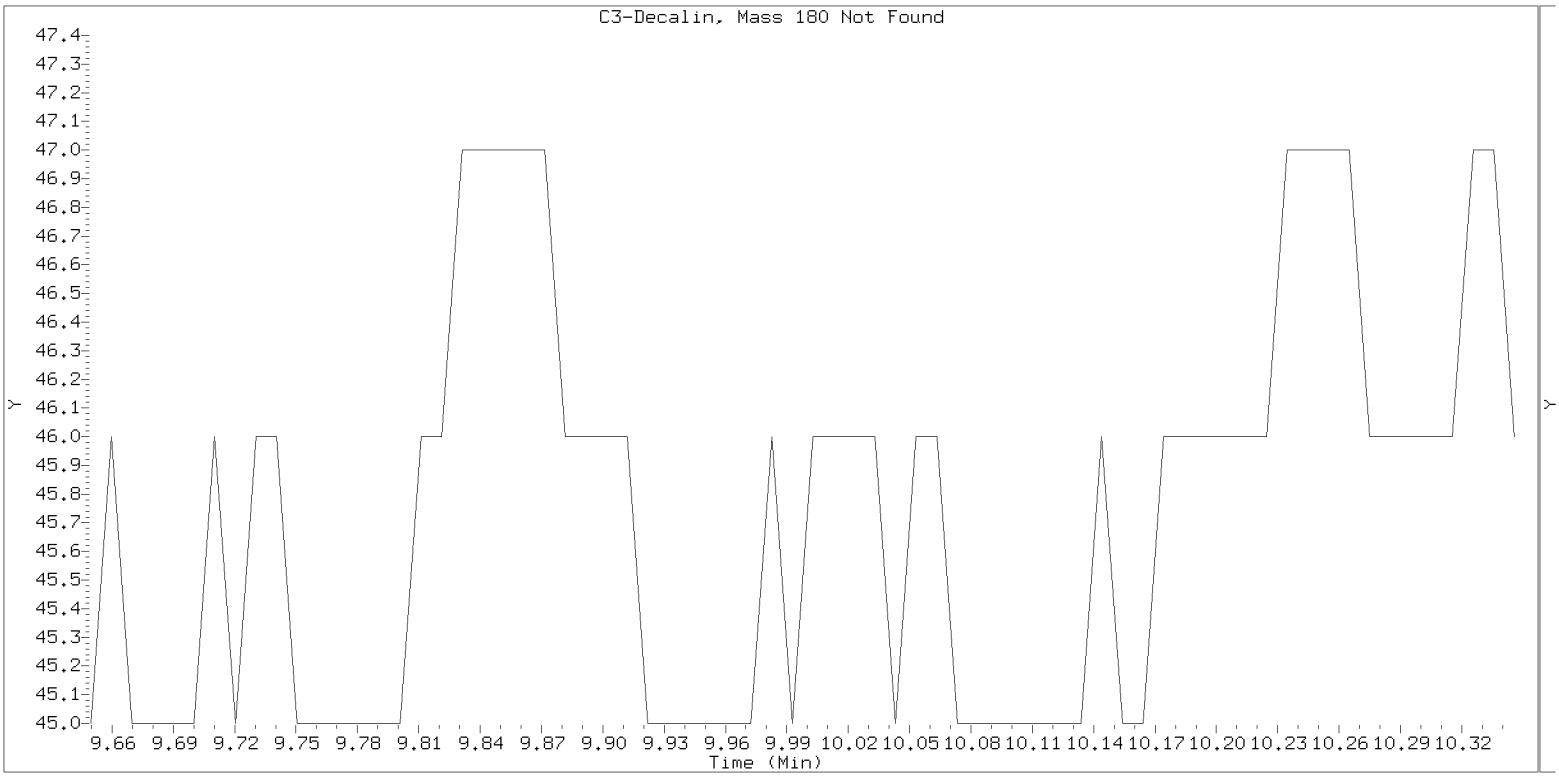
SIM ALKYL PNA RANGE ION WINDOWS - NT1421060418S.D

Lab ID: BJE0383-BLK2
nt14.i, SIM.b\ALKYLRANGES.m, 05-JUN-2021 01:55



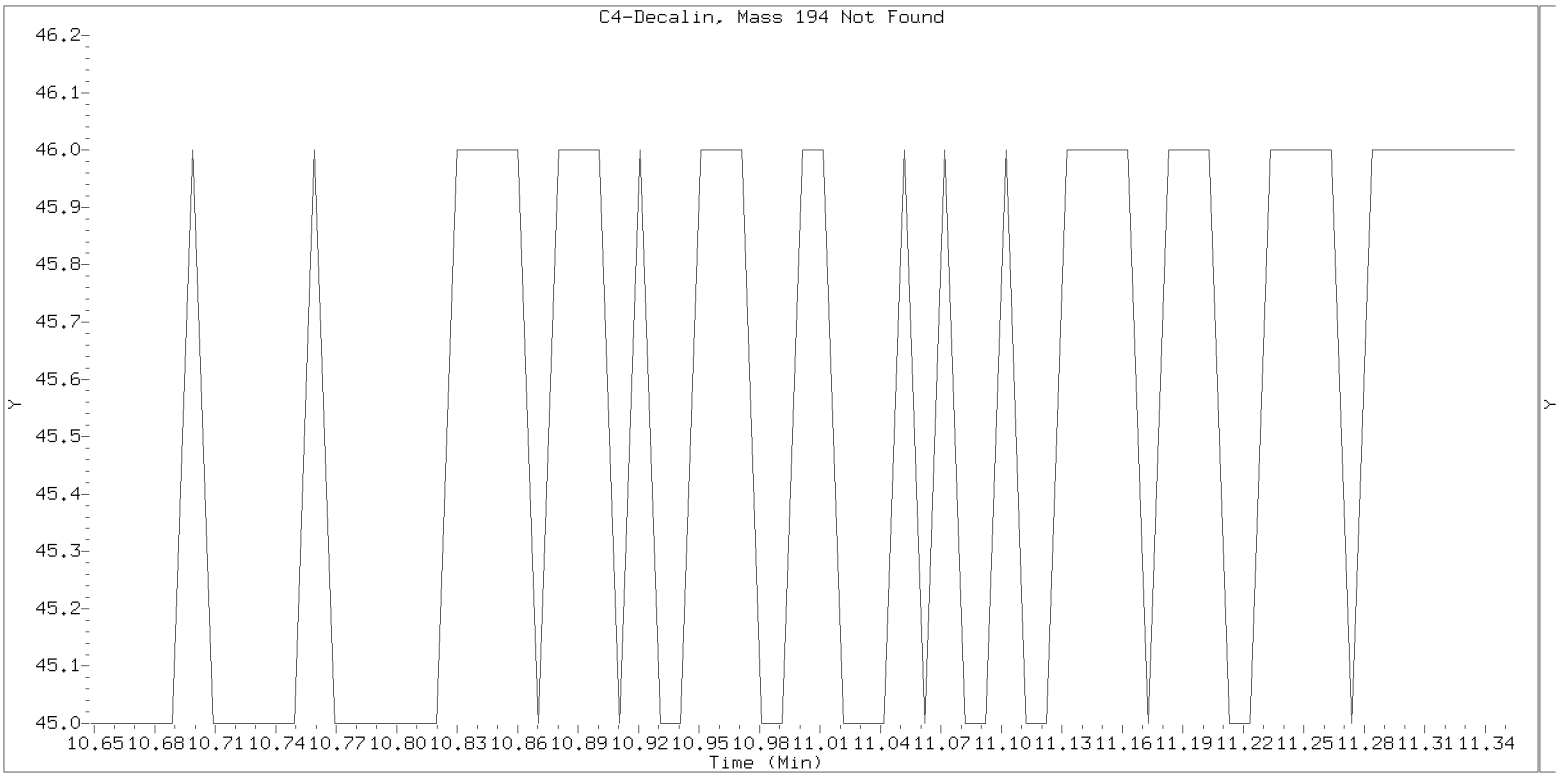
SIM ALKYL PNA RANGE ION WINDOWS - NT1421060418S.D

Lab ID: BJE0383-BLK2
nt14.i, SIM.b\ALKYLRANGES.m, 05-JUN-2021 01:55



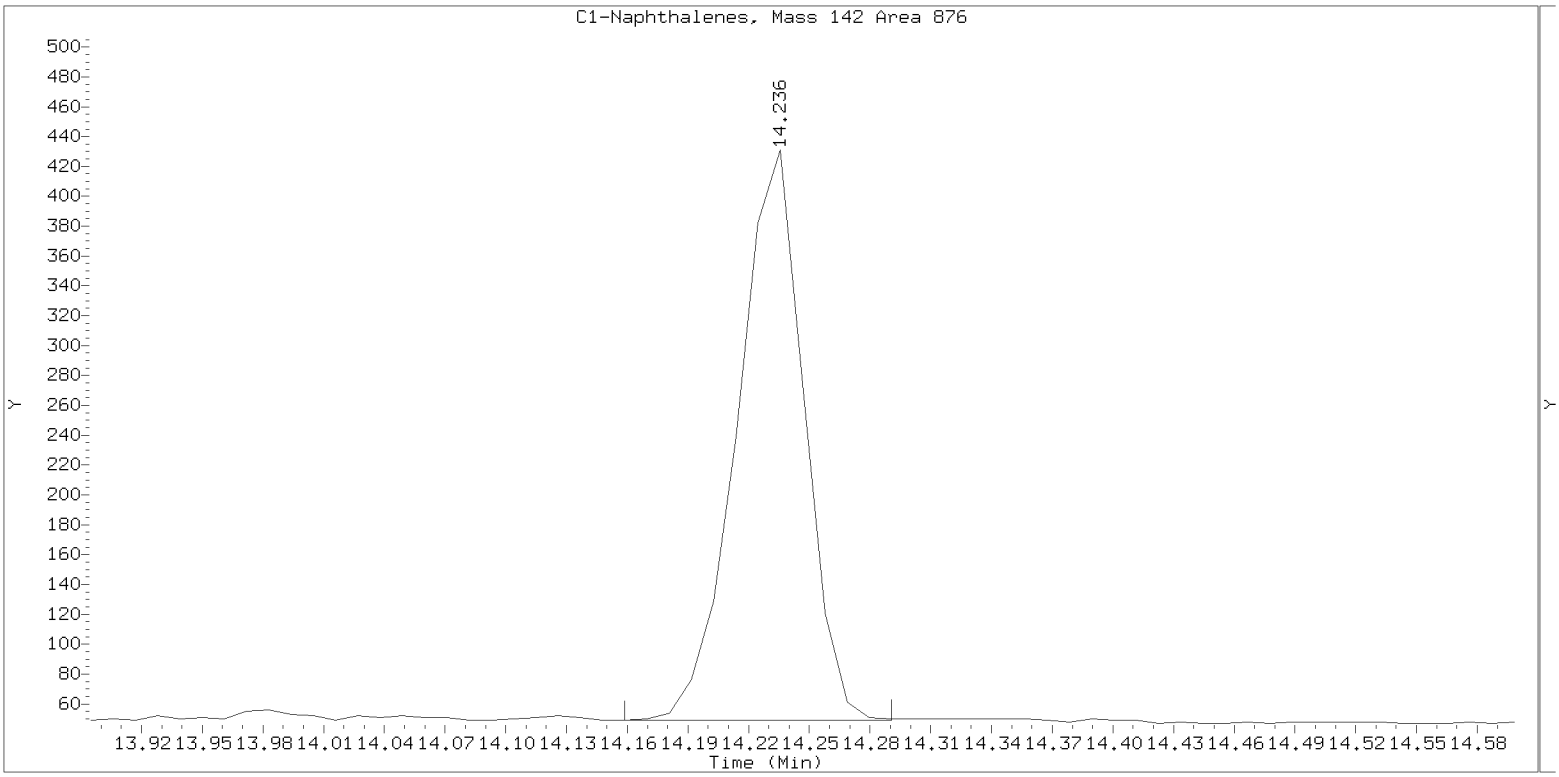
SIM ALKYL PNA RANGE ION WINDOWS - NT1421060418S.D

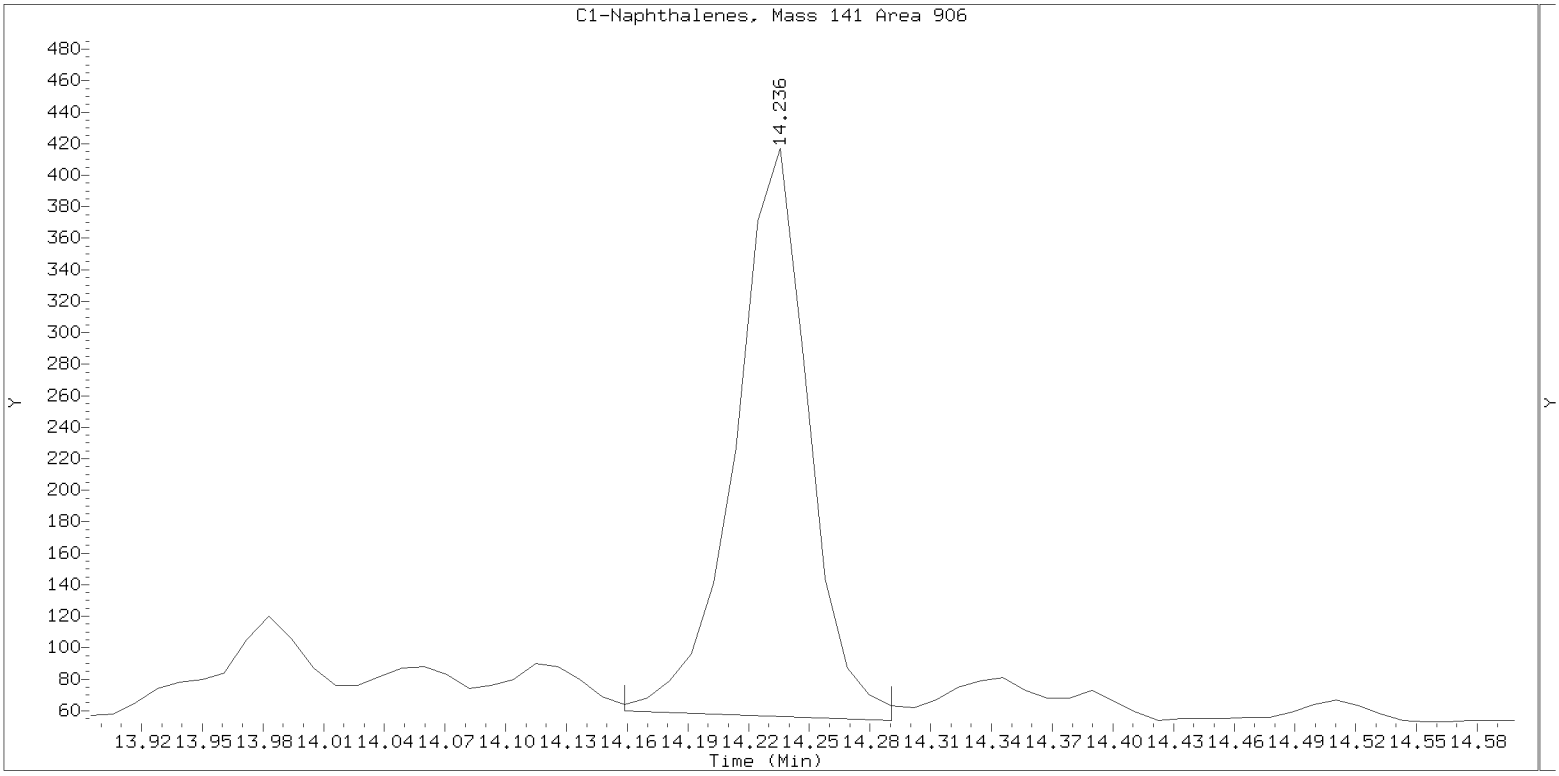
Lab ID: BJE0383-BLK2
nt14.i, SIM.b\ALKYLRANGES.m, 05-JUN-2021 01:55

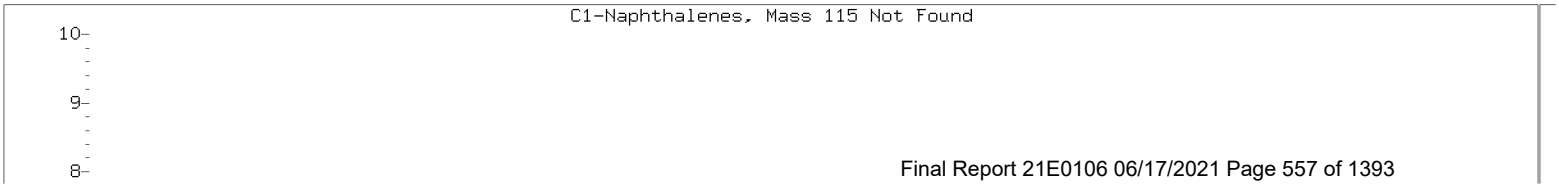


SIM ALKYL PNA RANGE ION WINDOWS - NT1421060418S.D

Lab ID: BJE0383-BLK2
nt14.i, SIM.b\ALKYLRANGES.m, 05-JUN-2021 01:55







SIM ALKYL PNA RANGE ION WINDOWS - NT1421060418S.D

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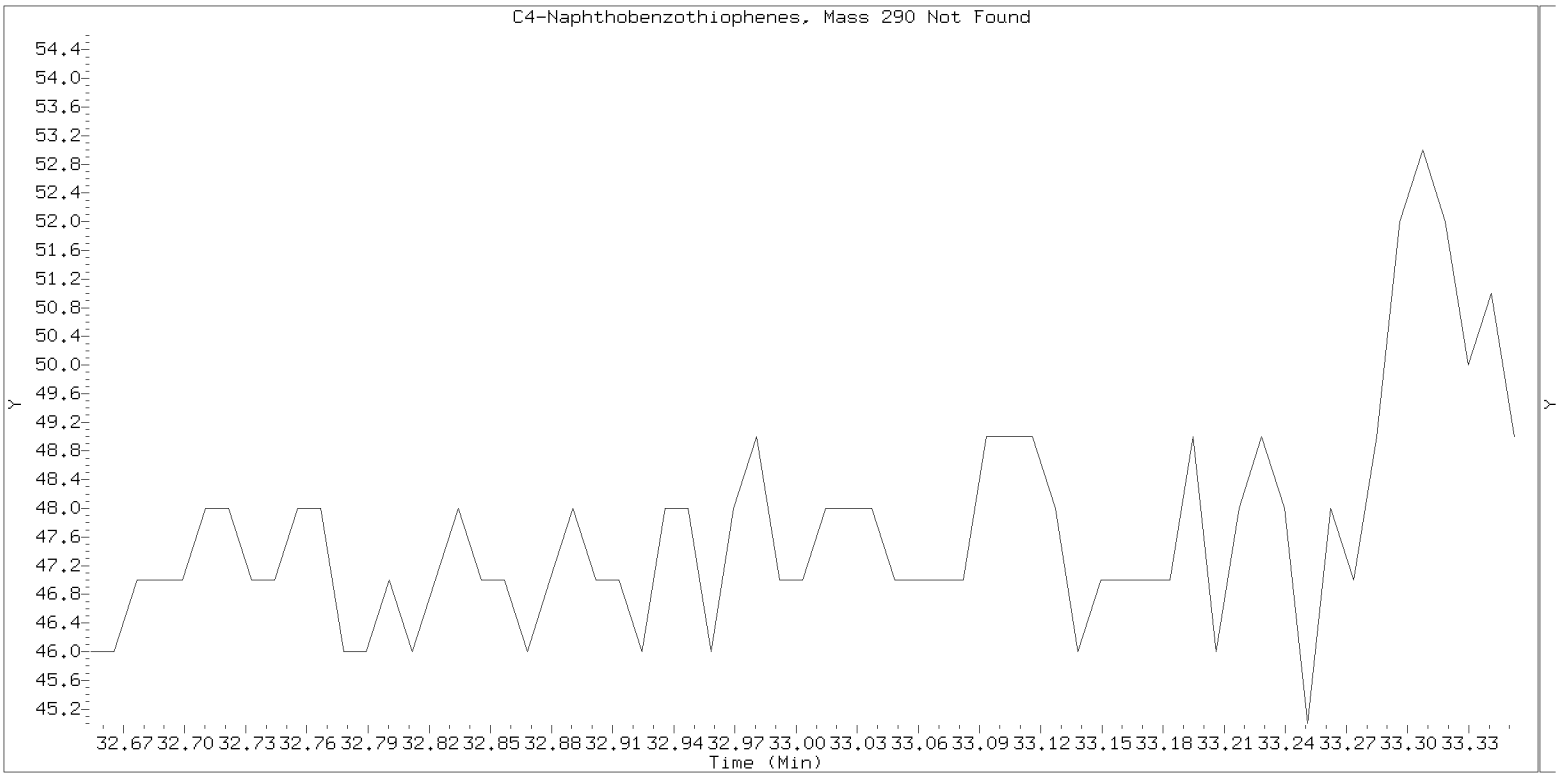

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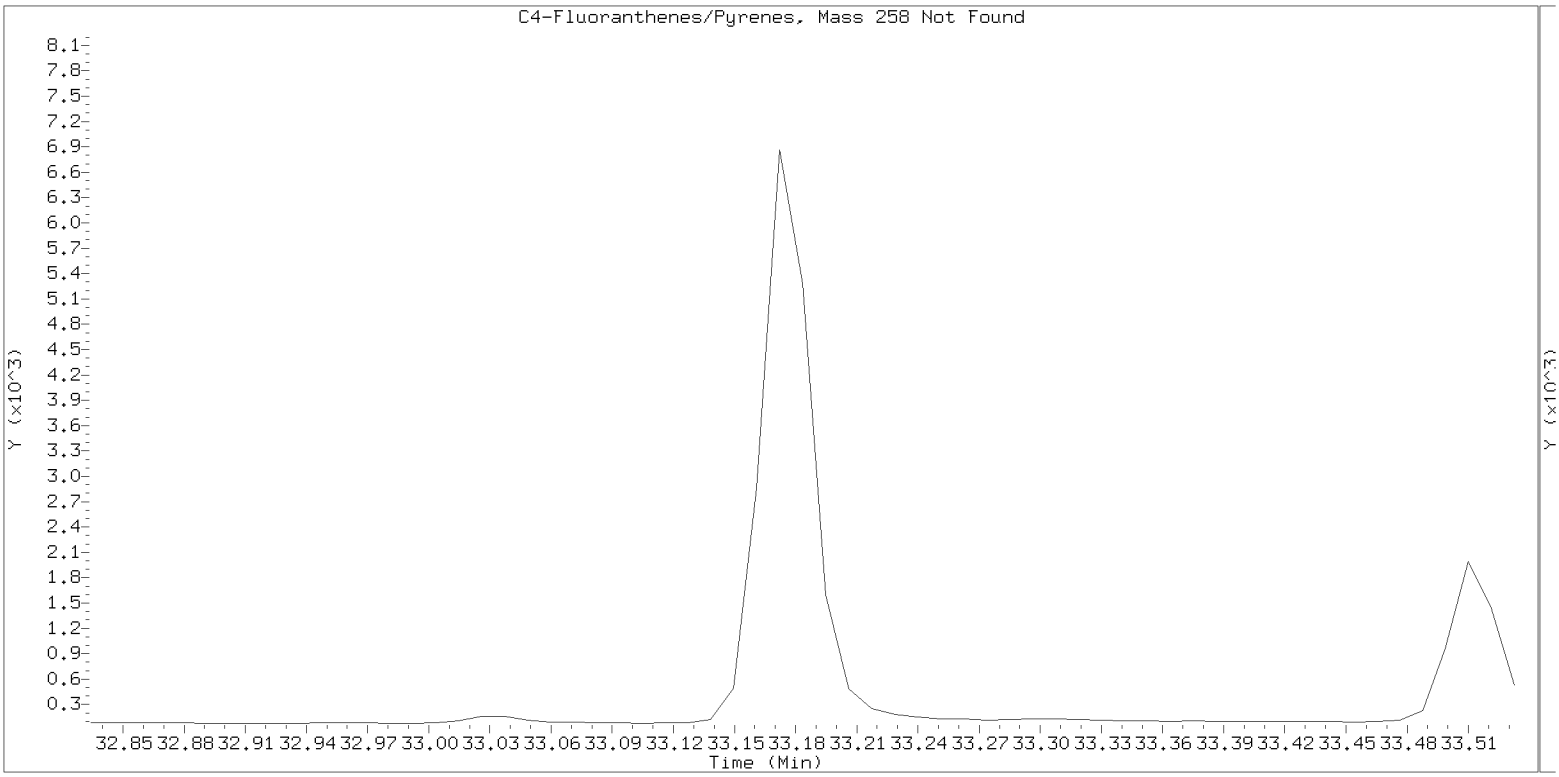

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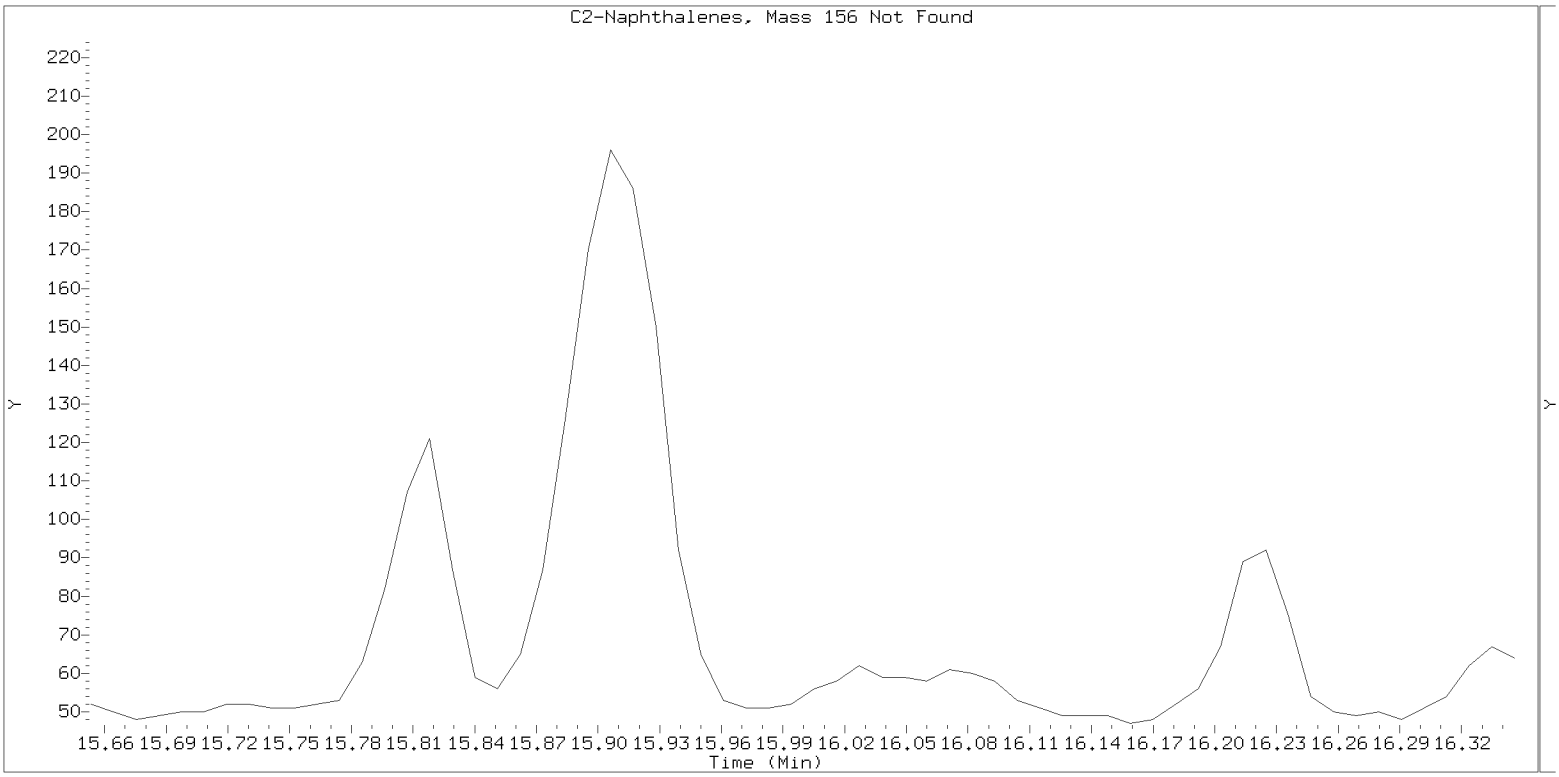

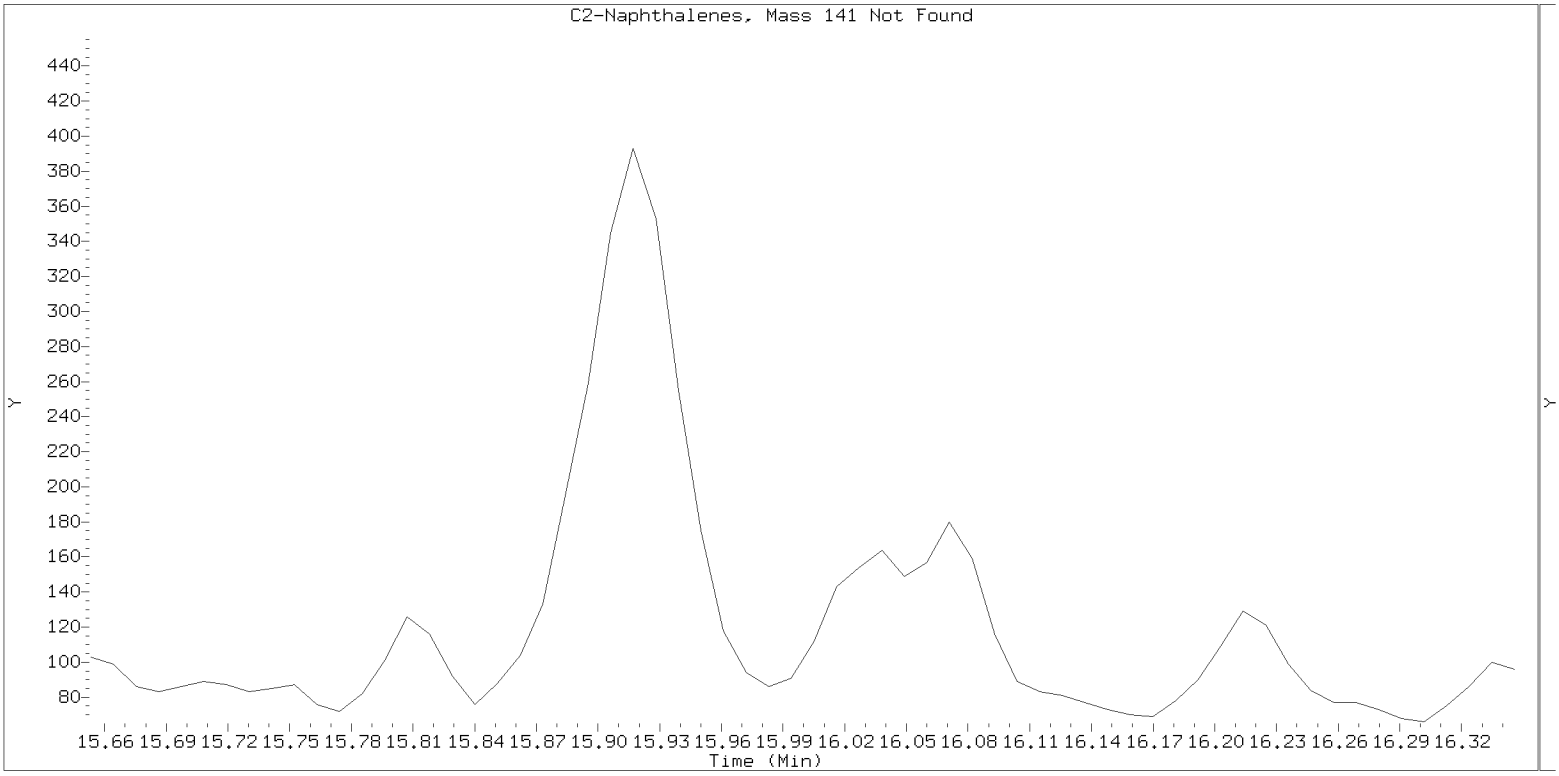

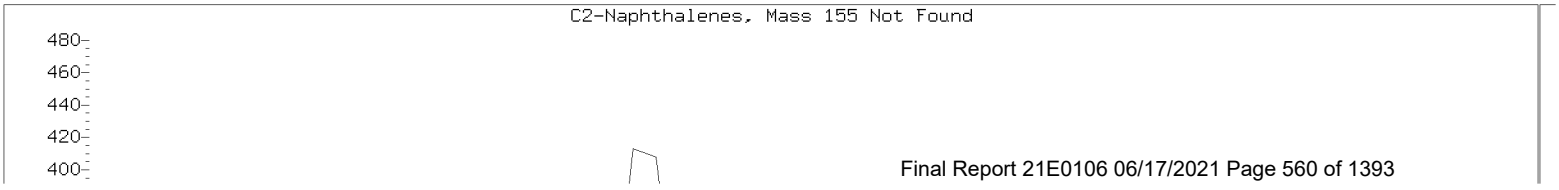

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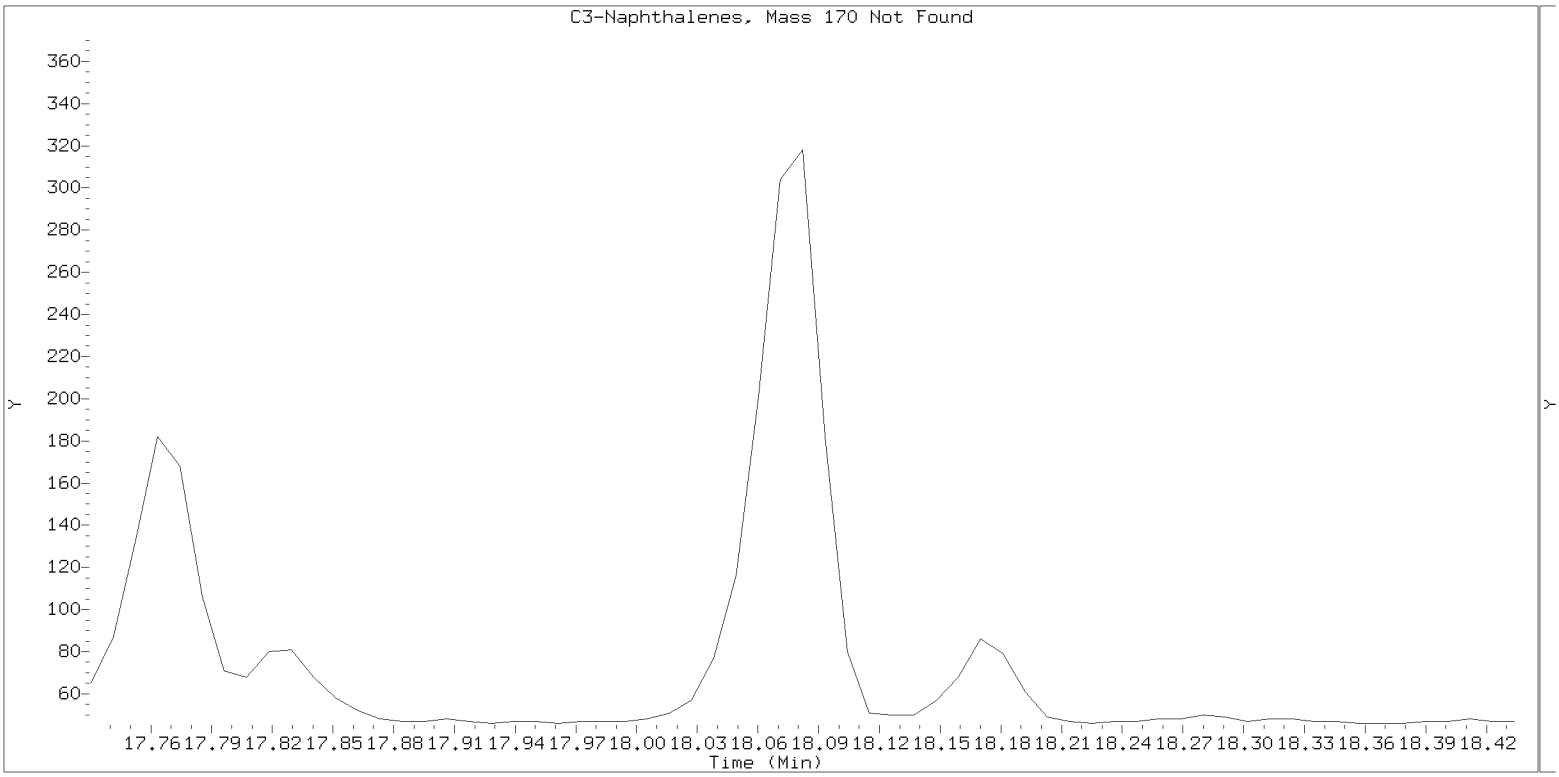

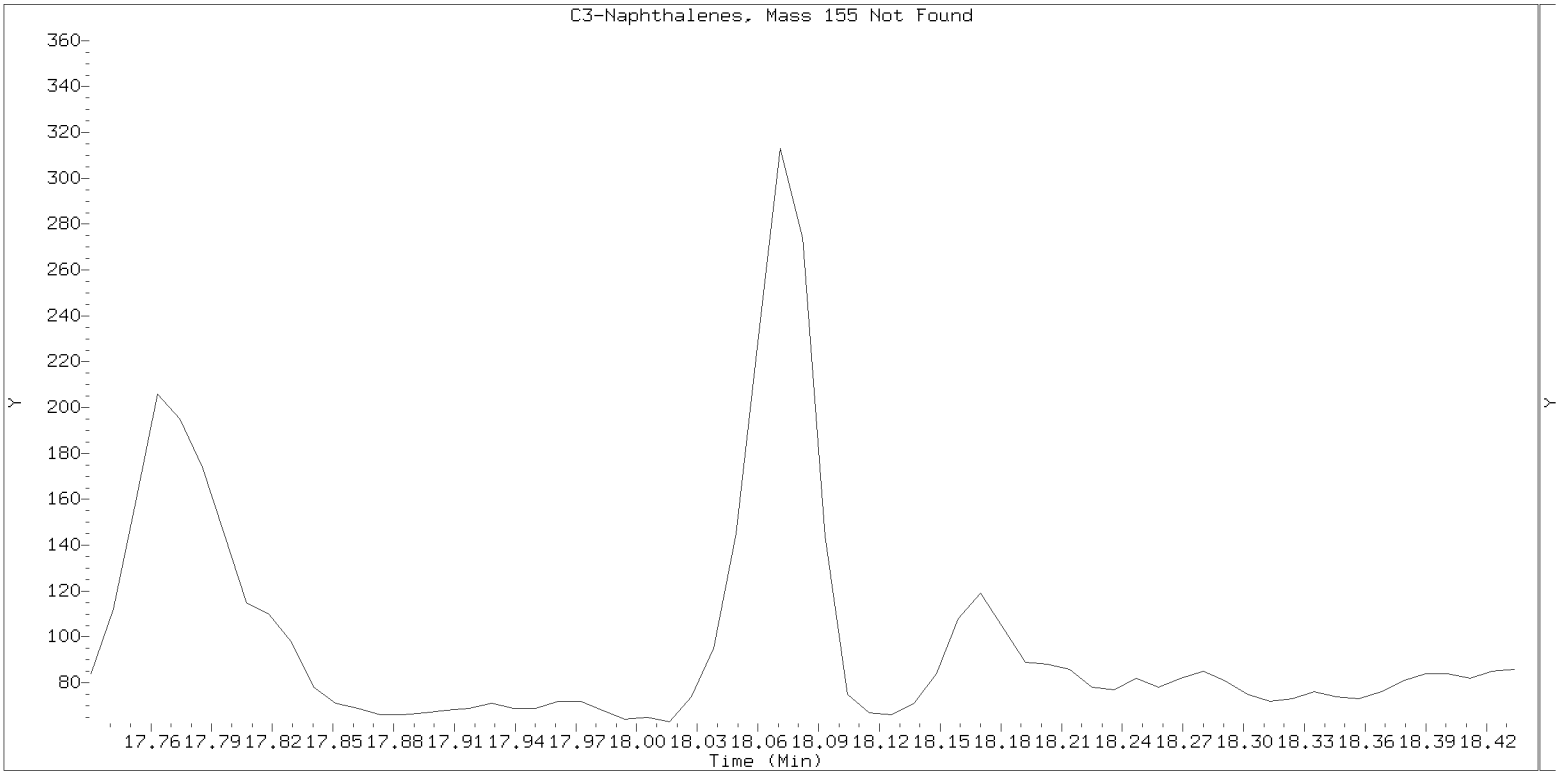

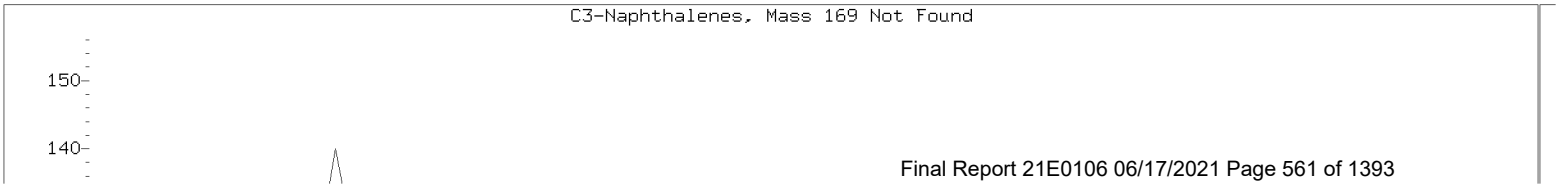

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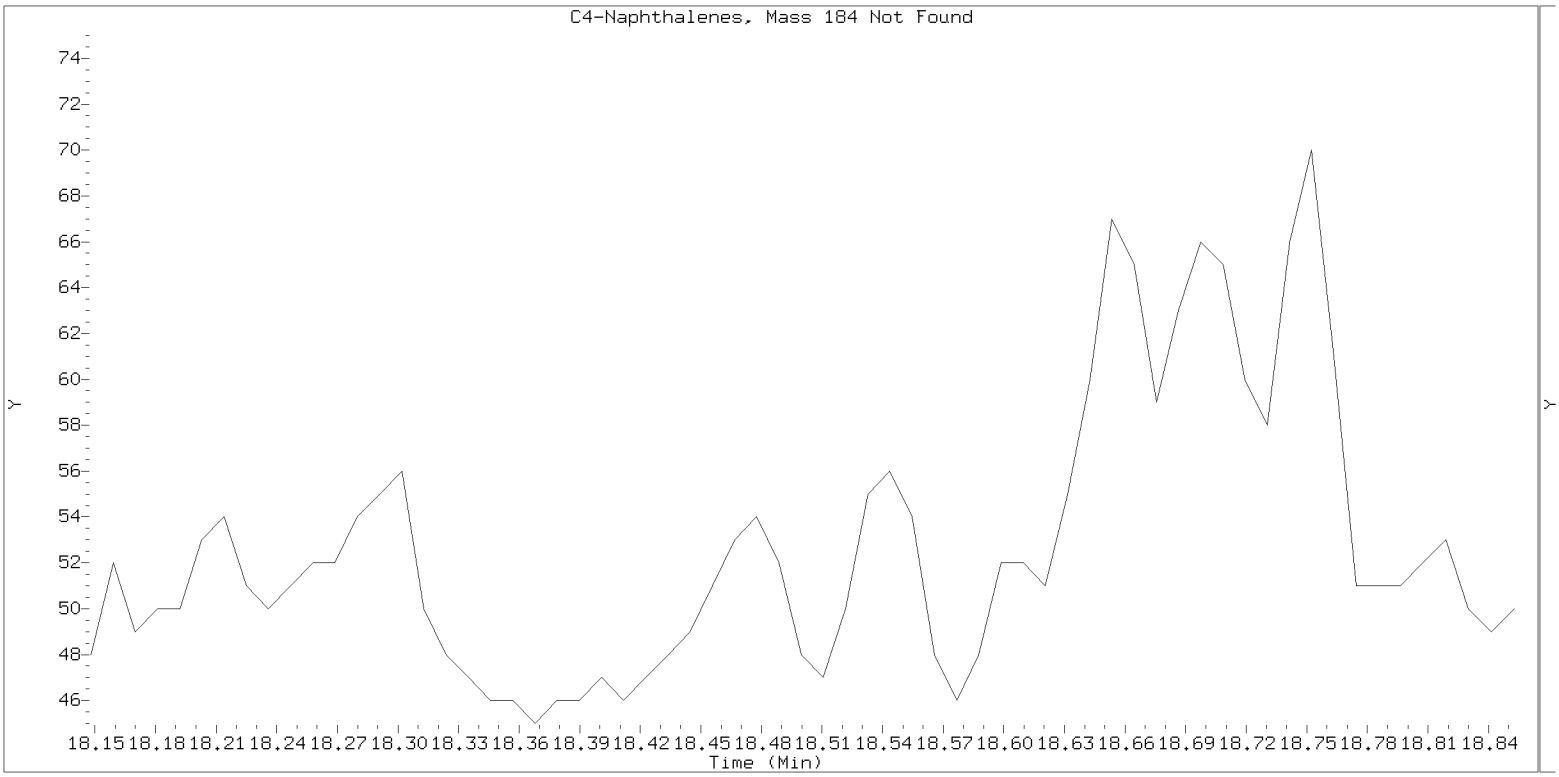

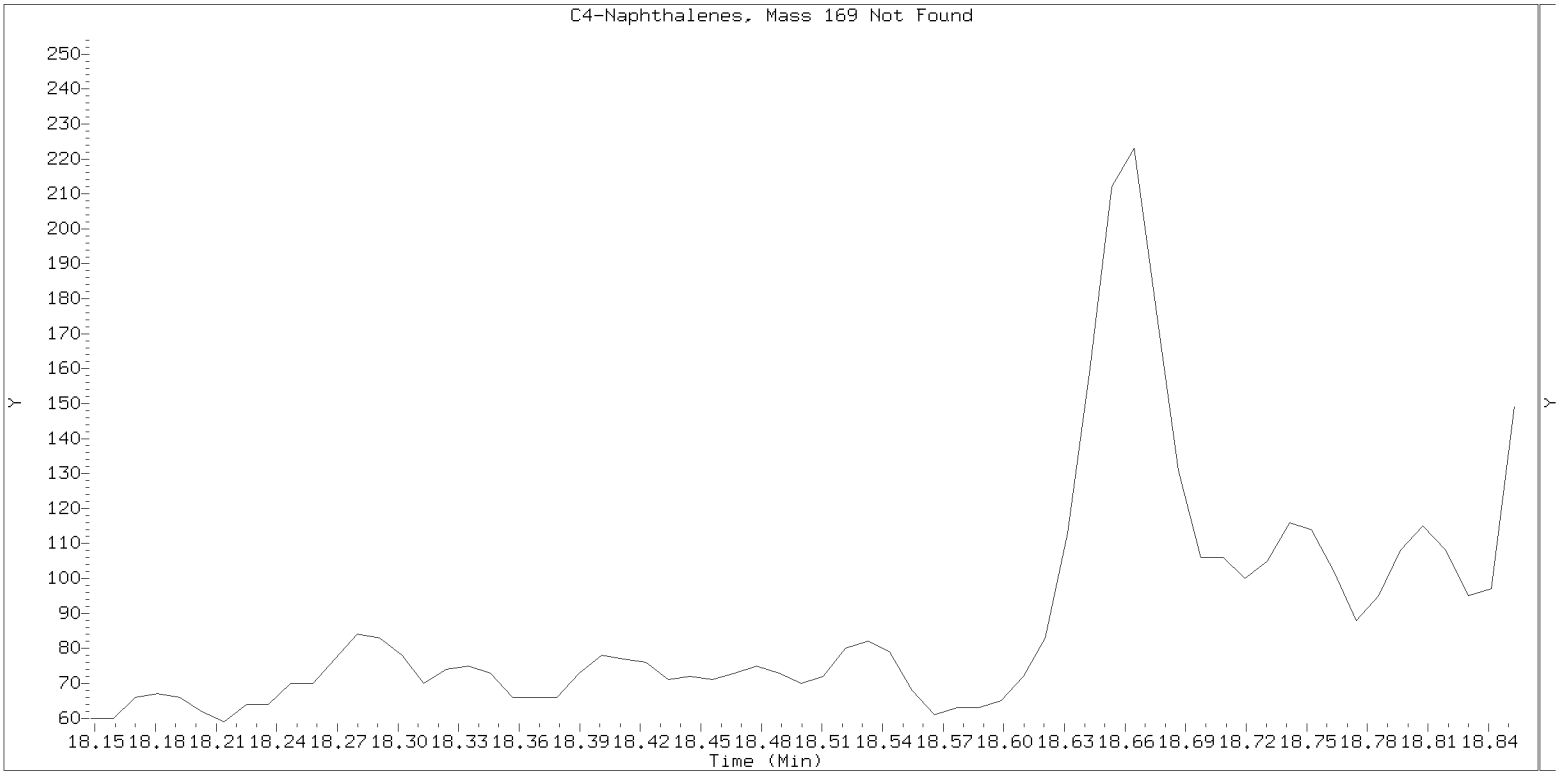

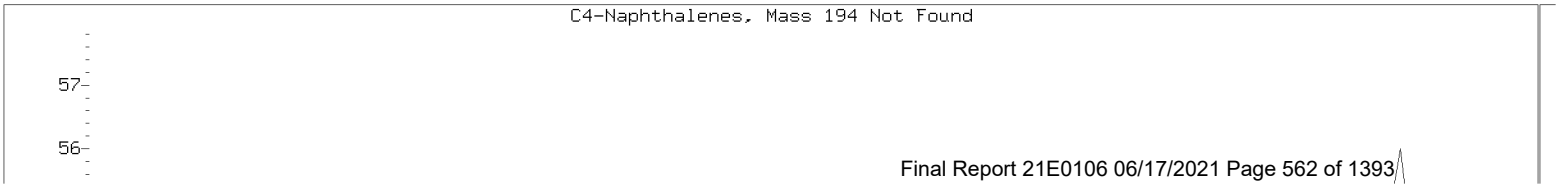

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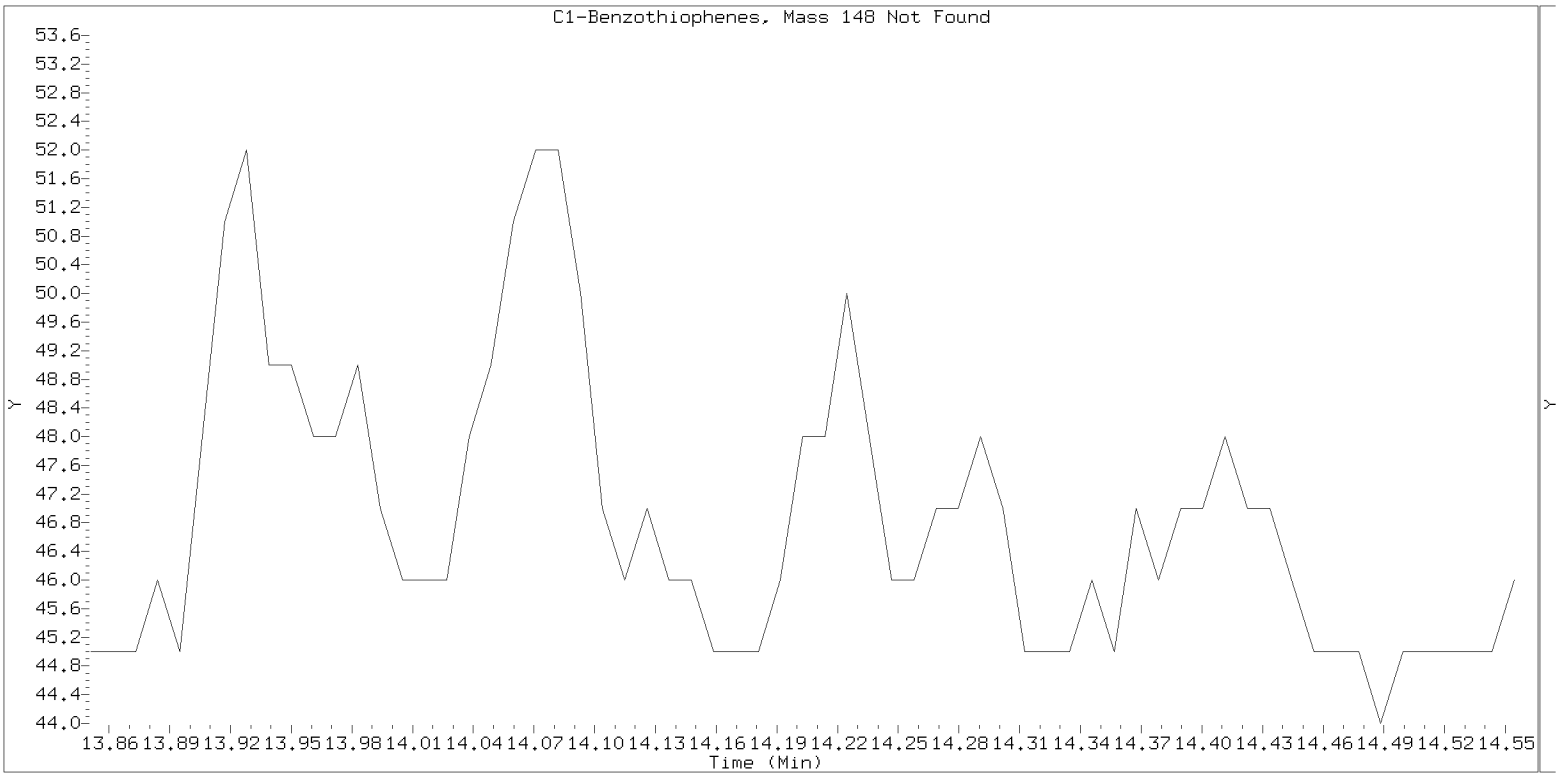

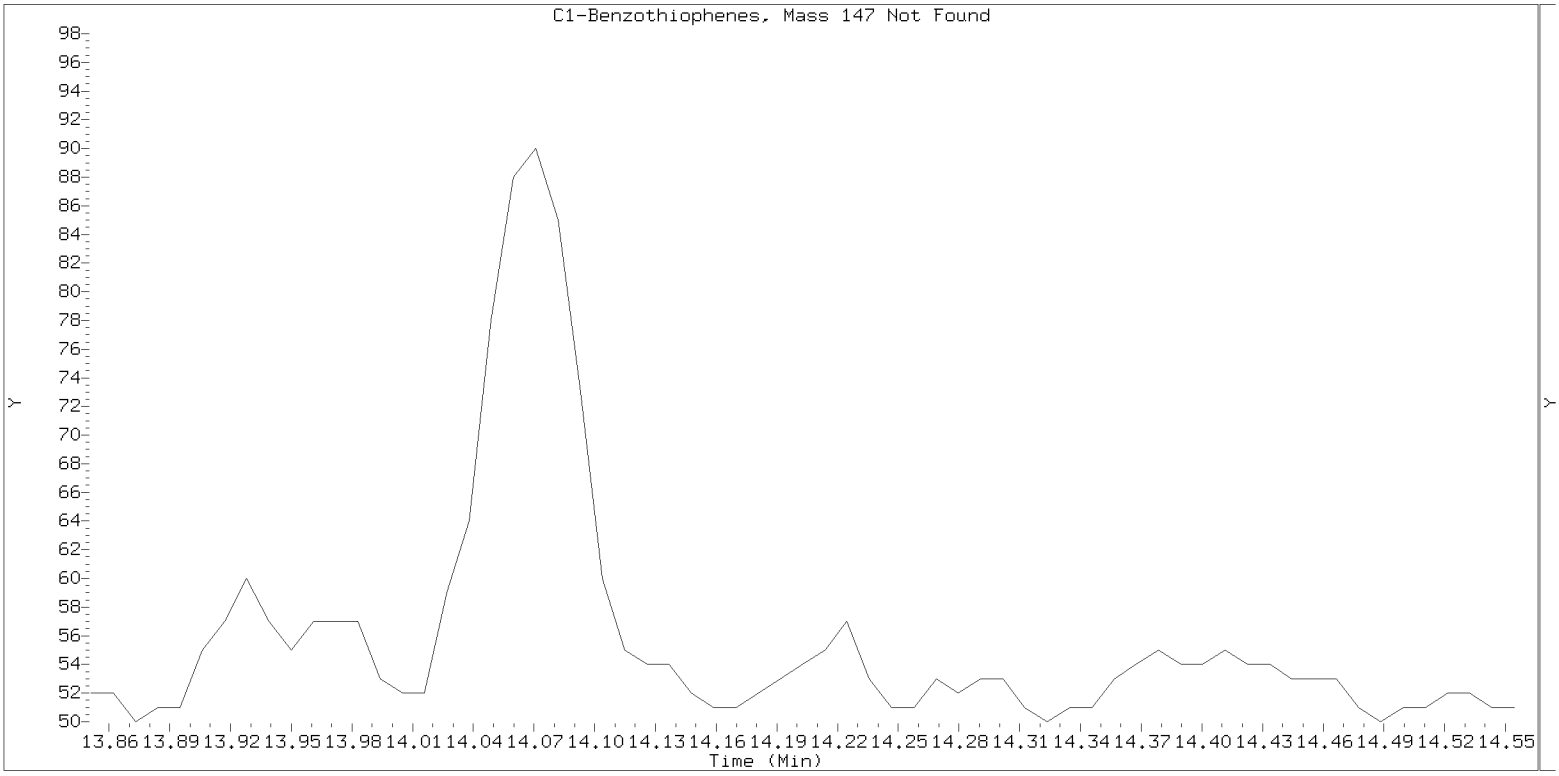

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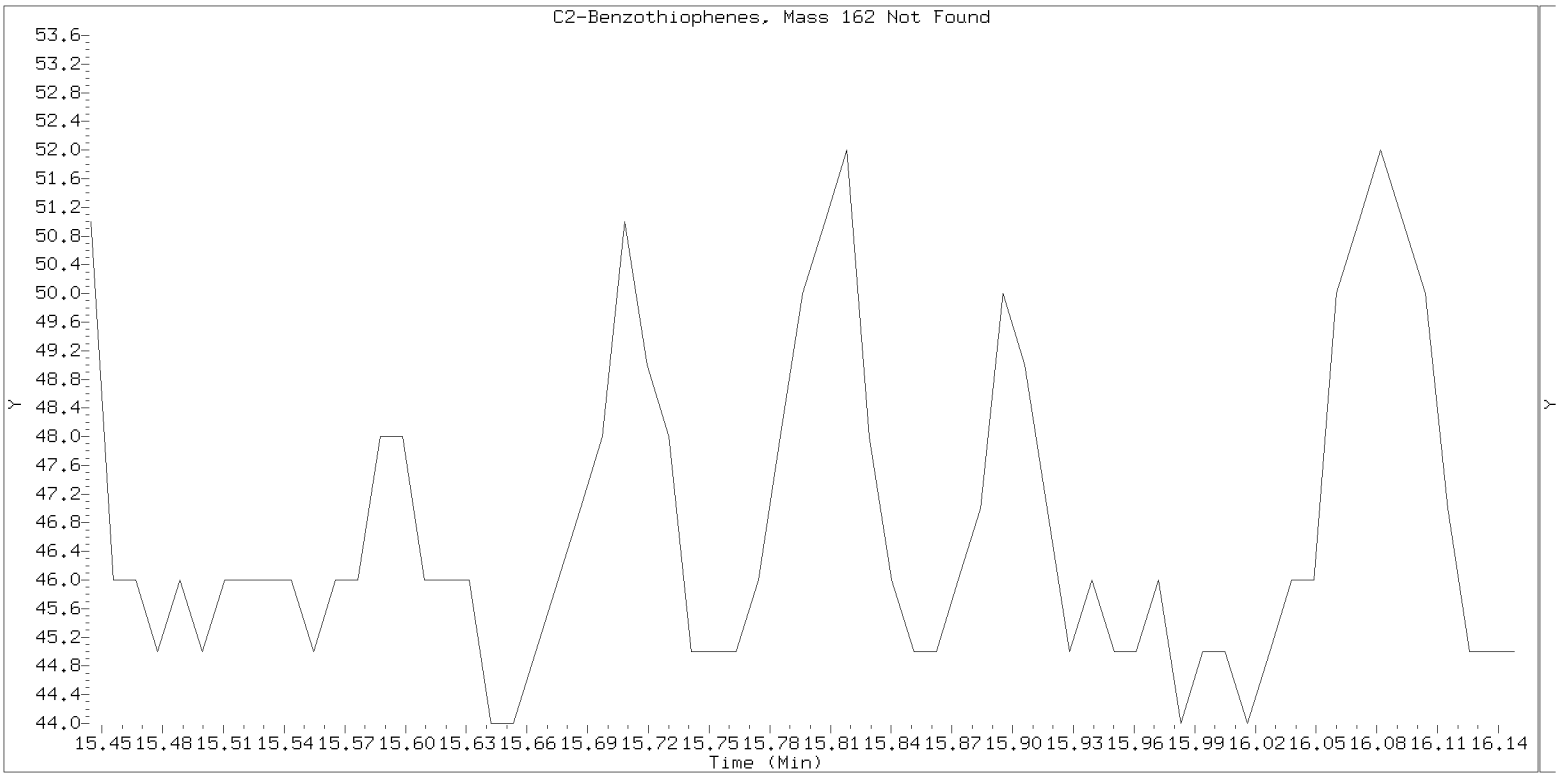

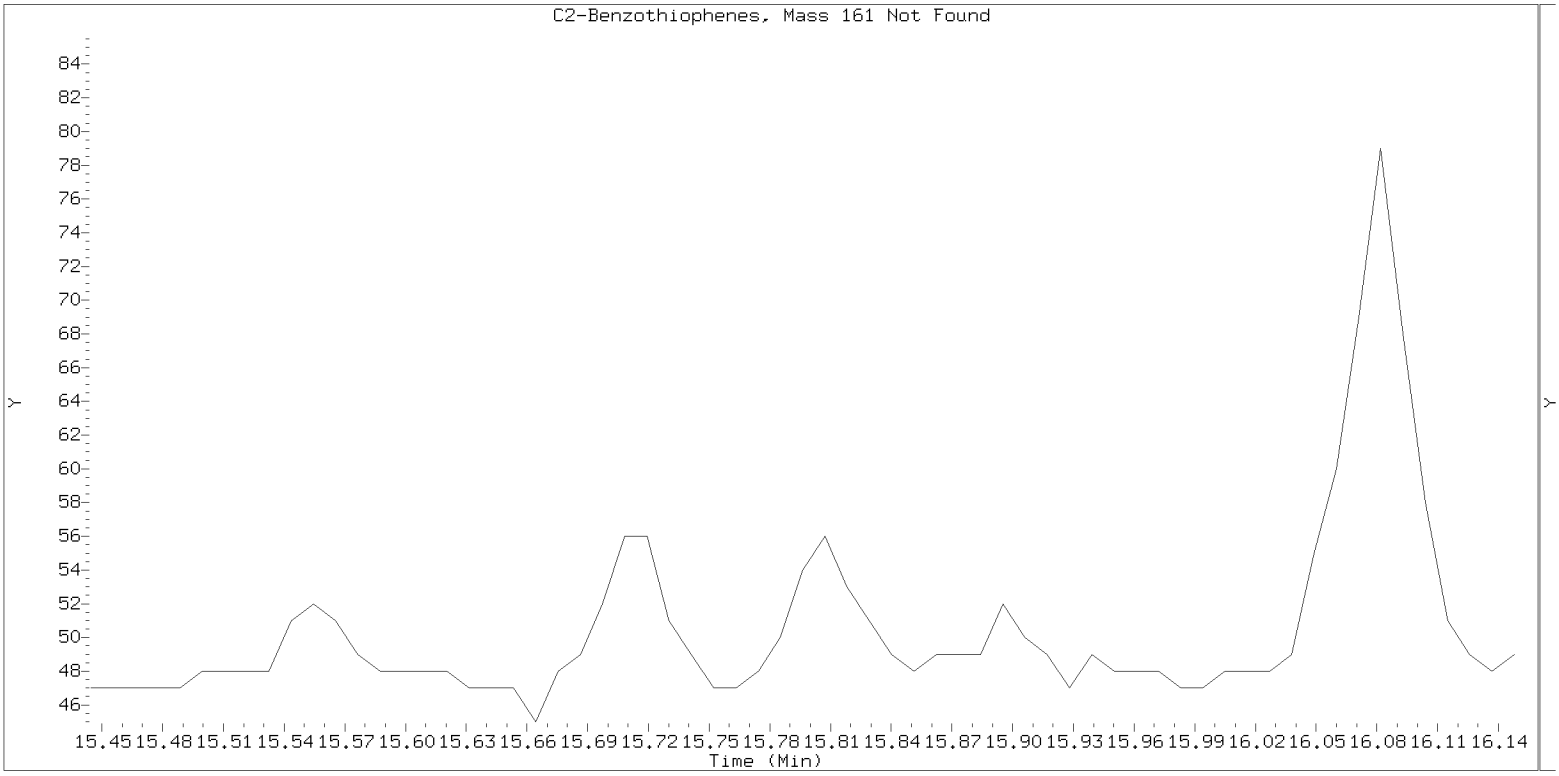

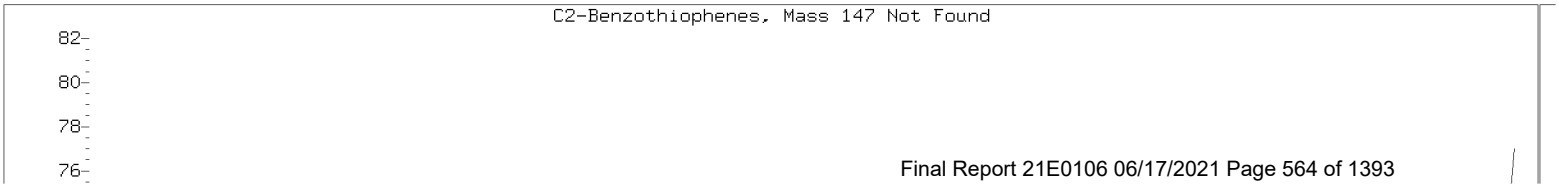

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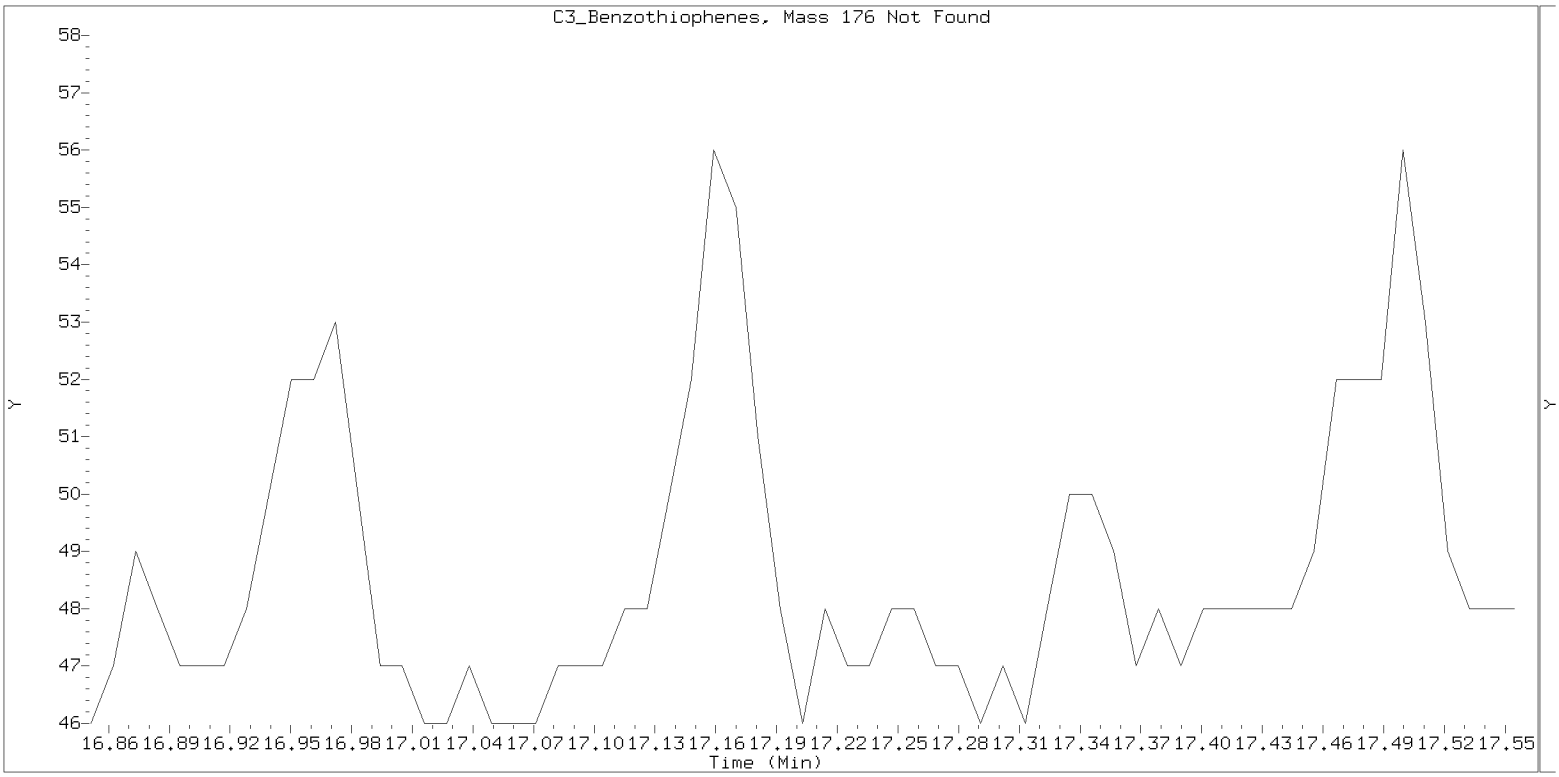

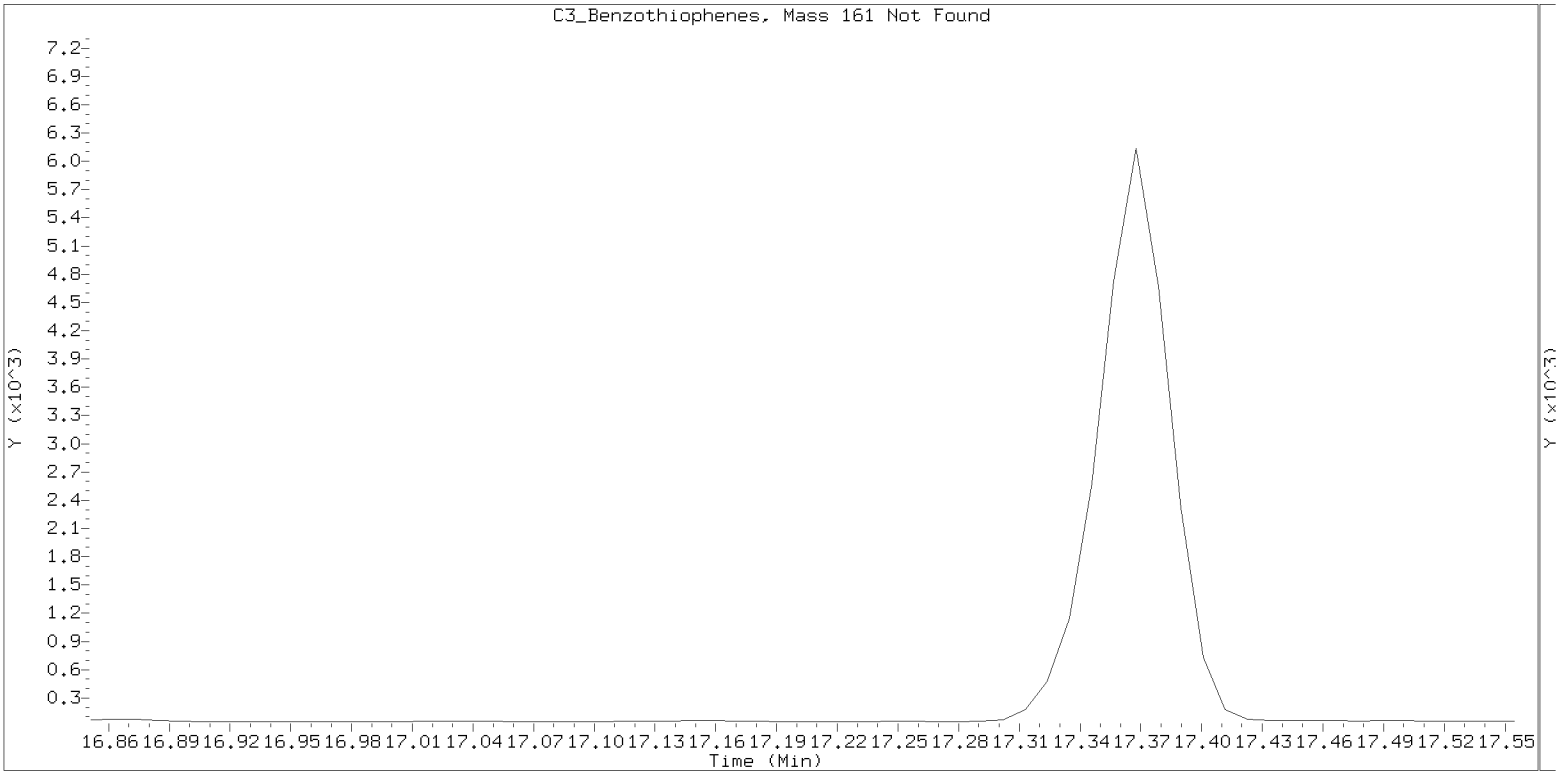

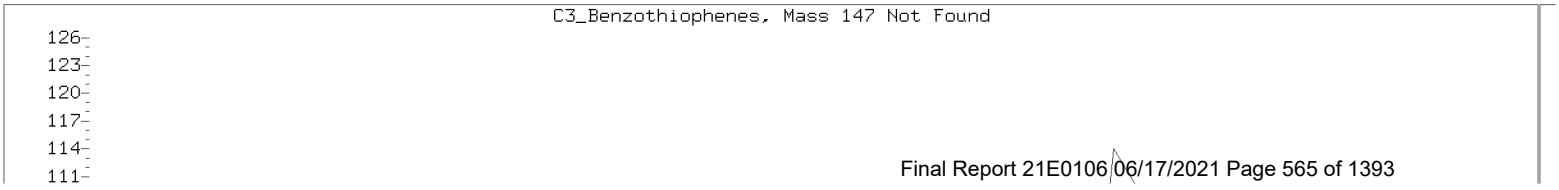

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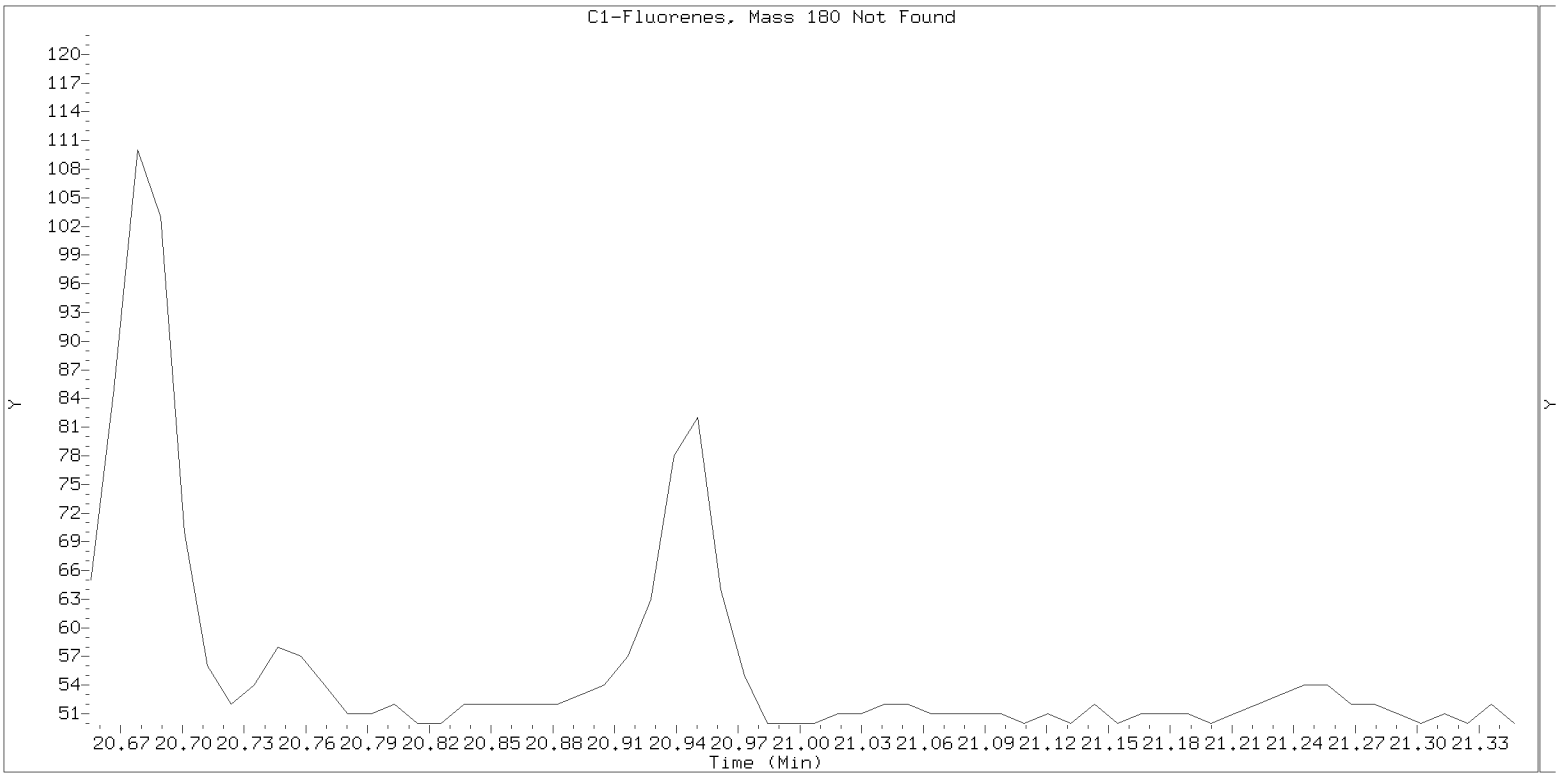

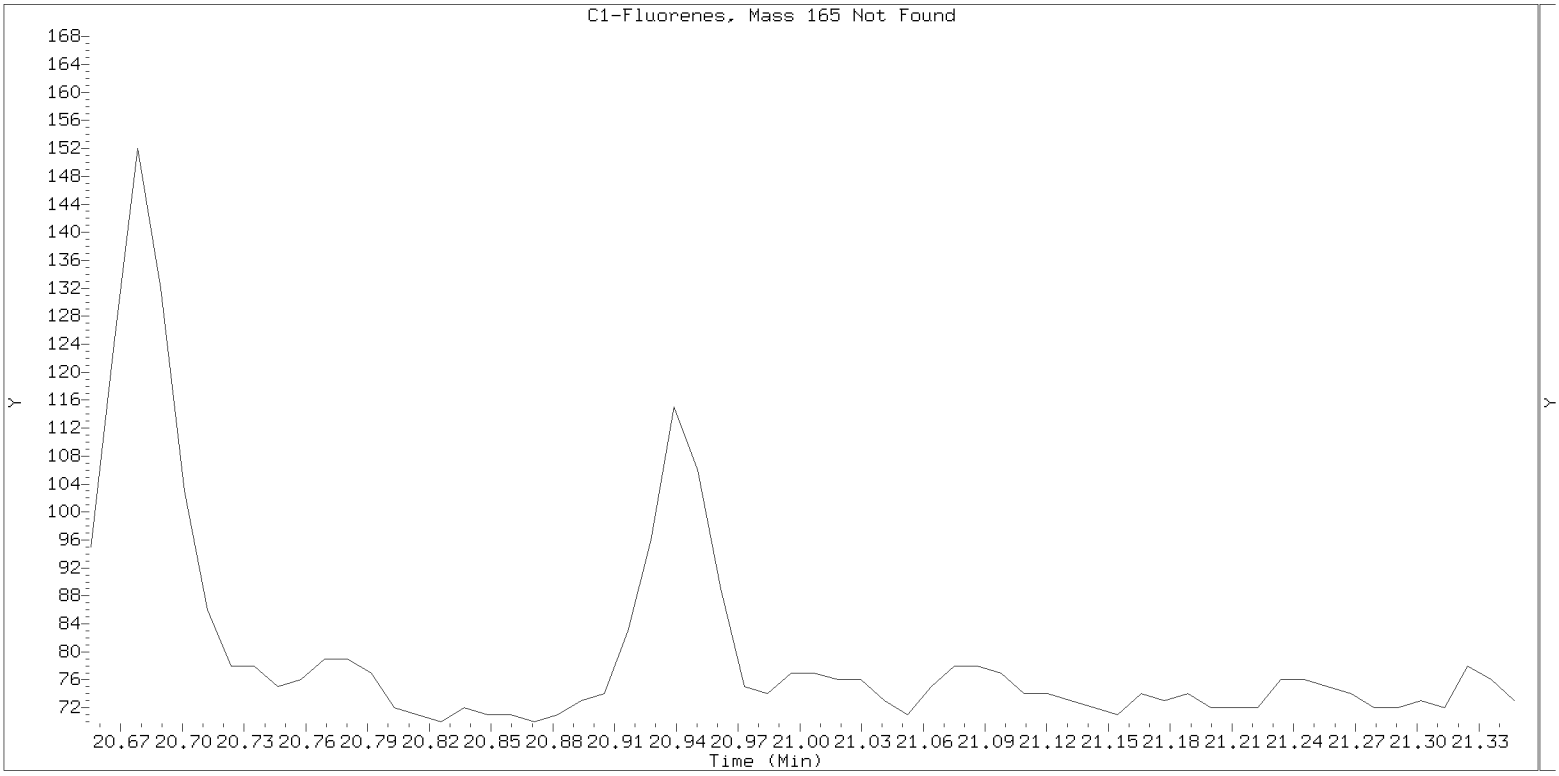

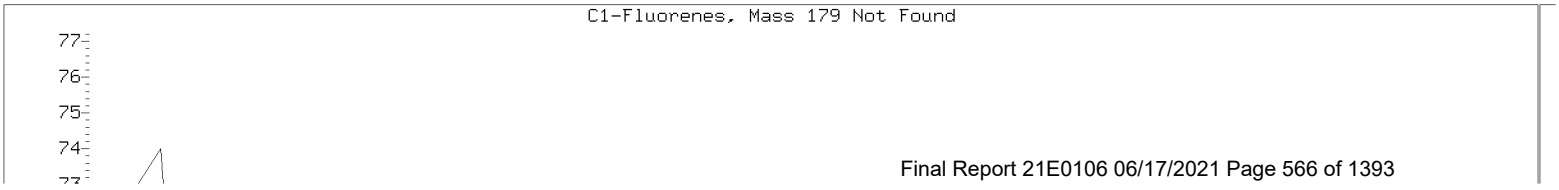

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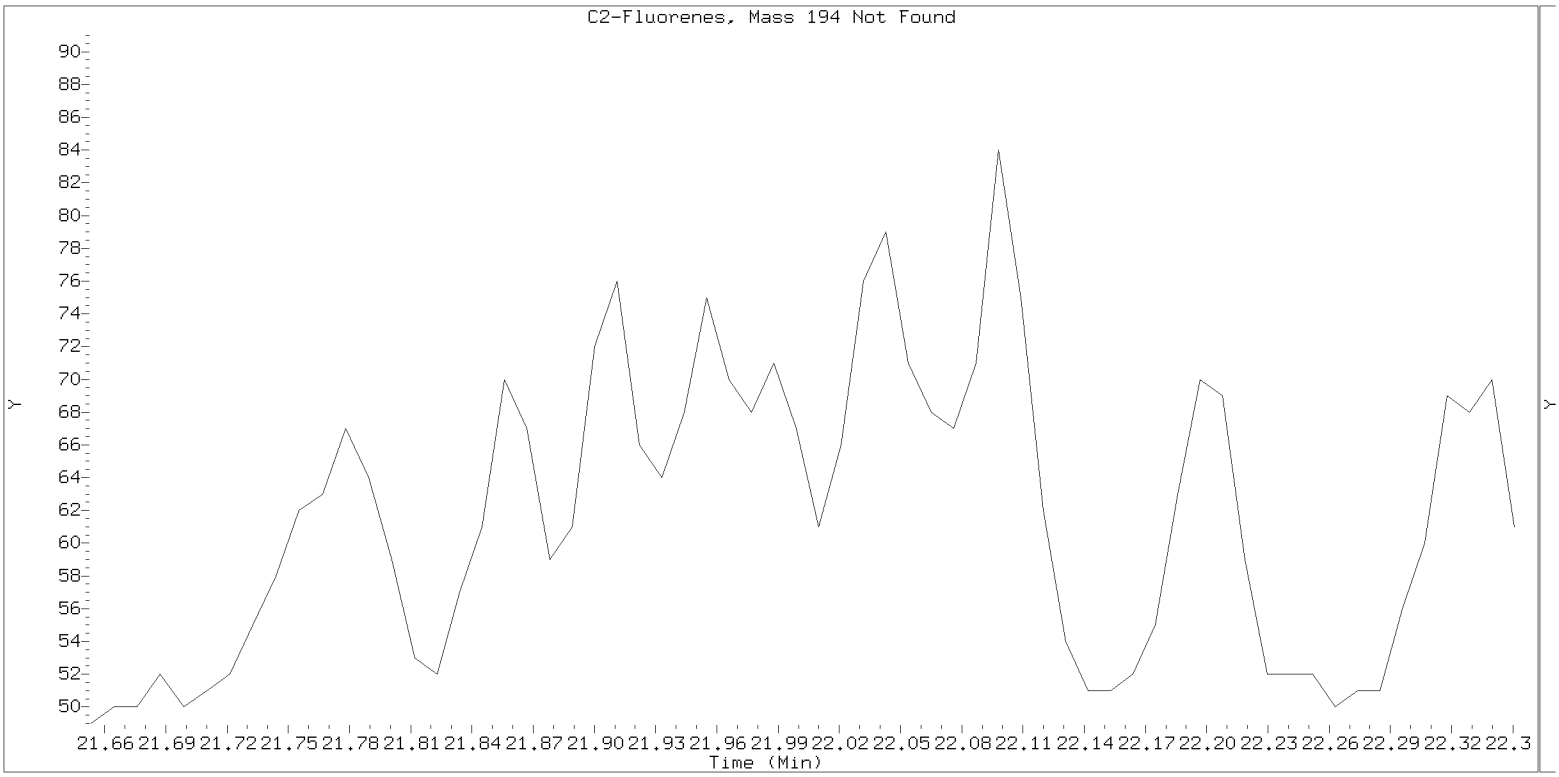

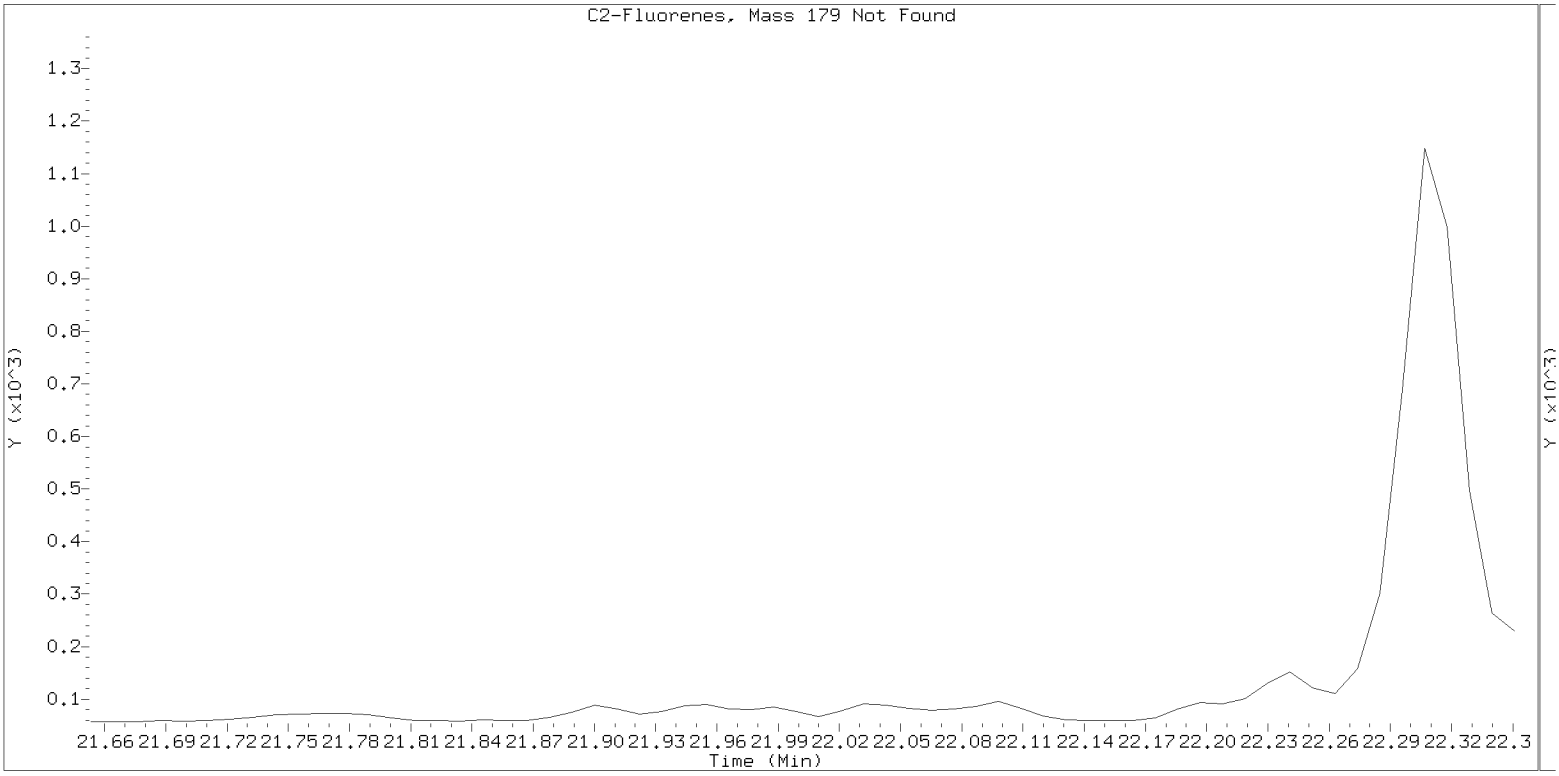

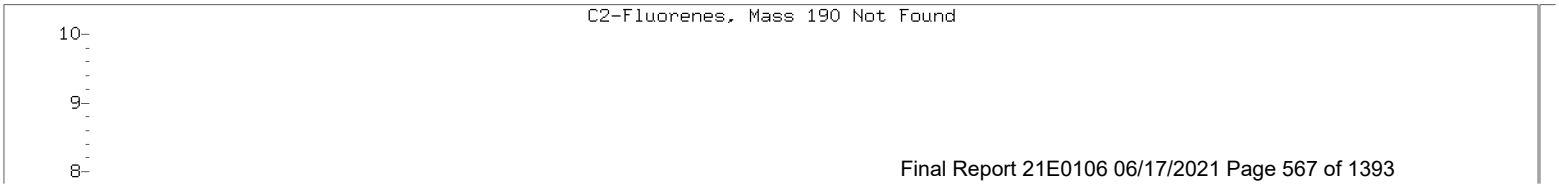

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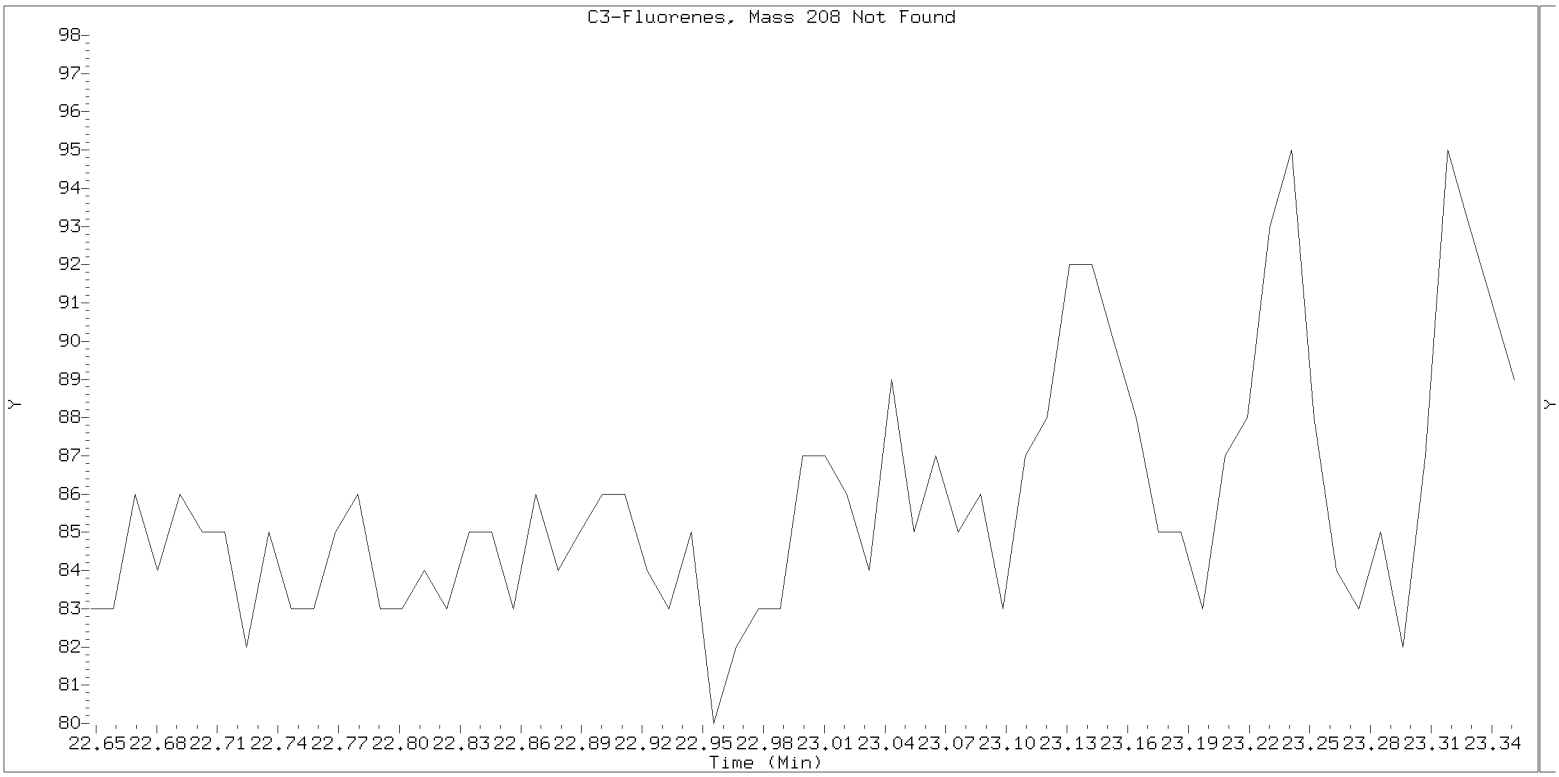

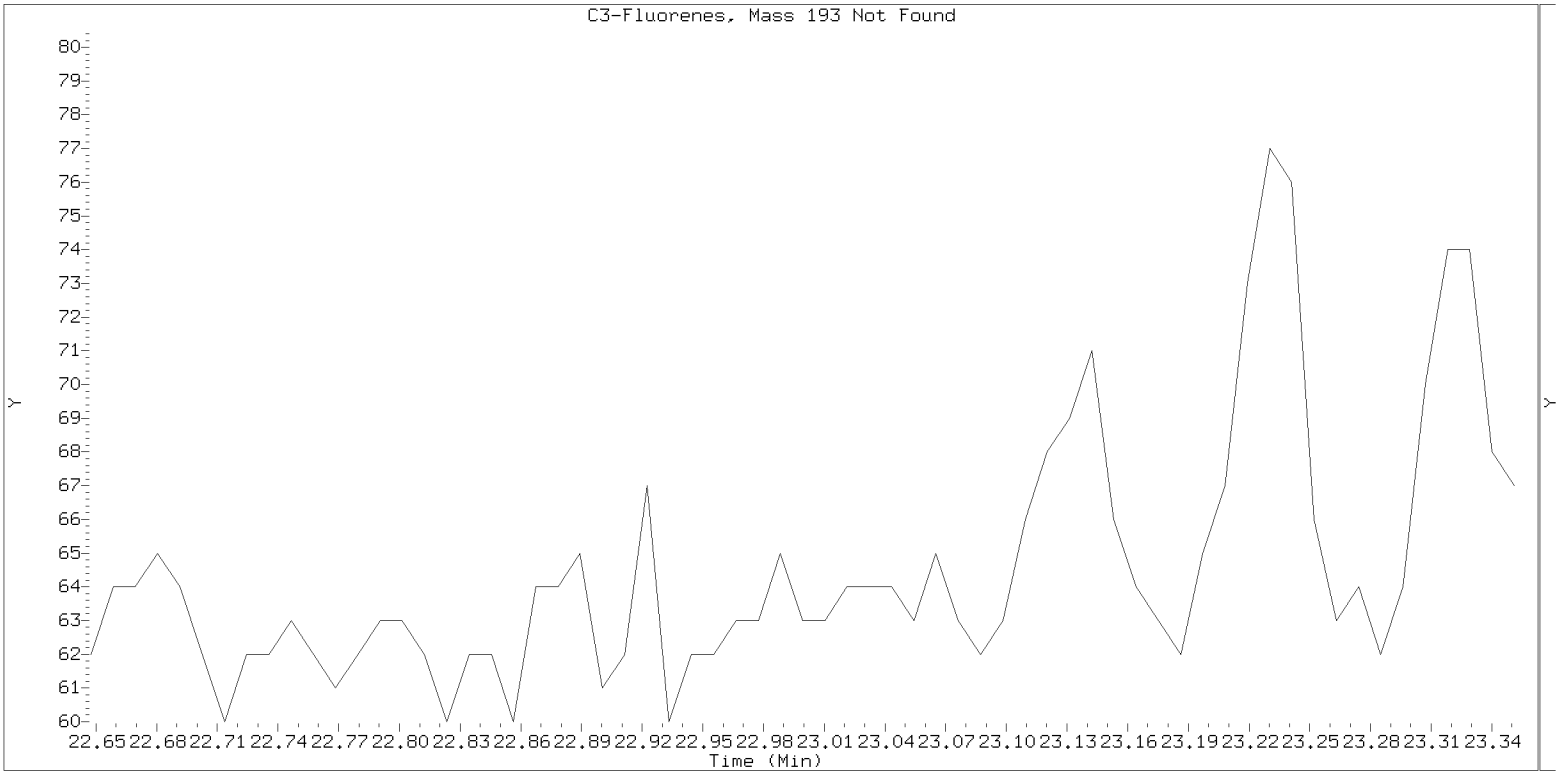

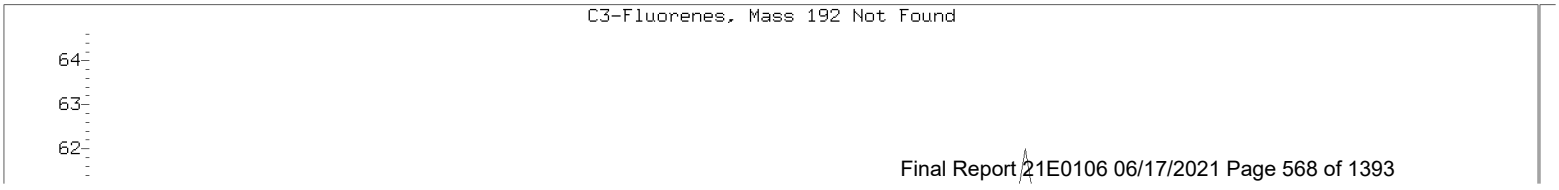

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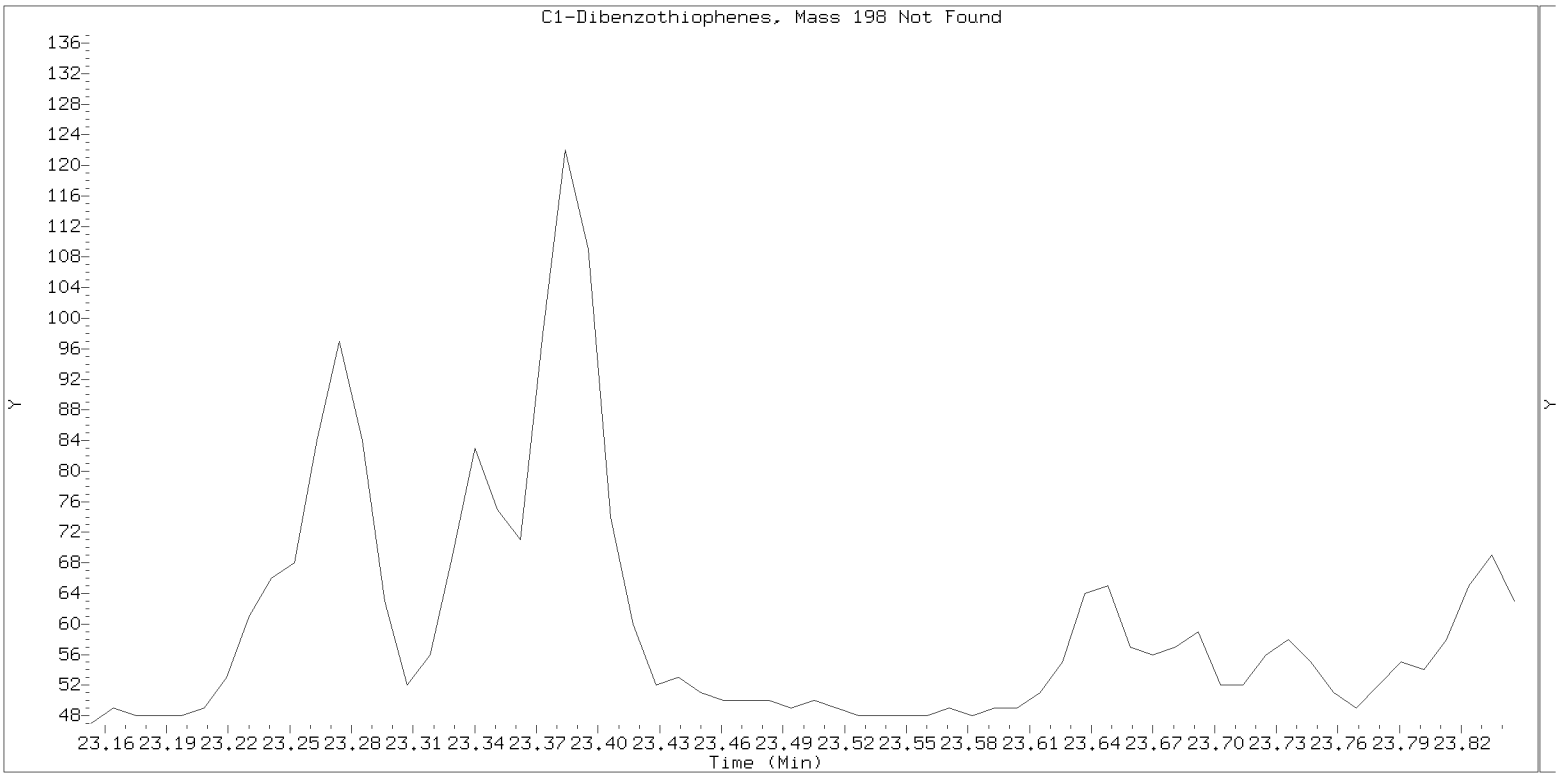

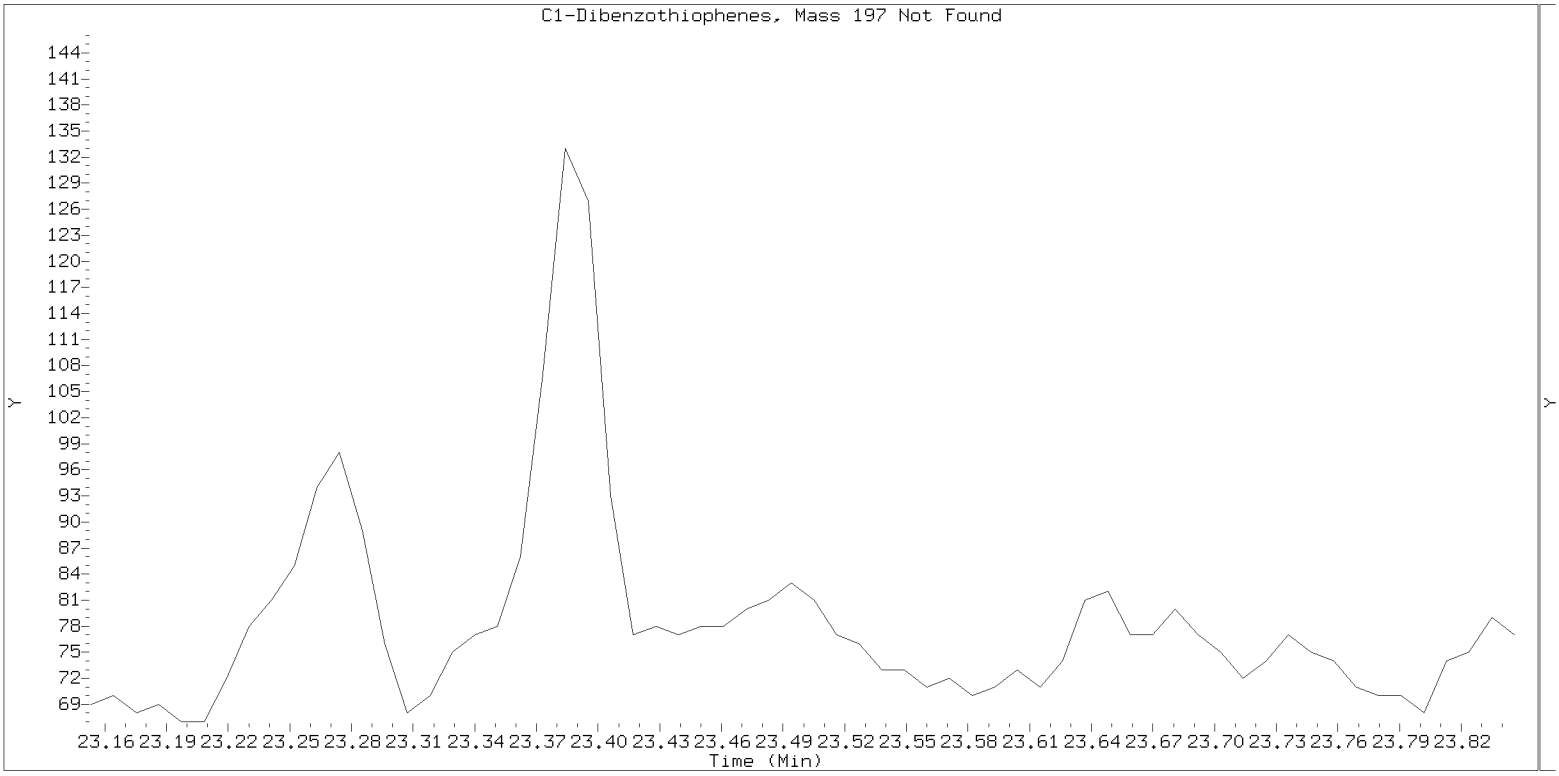

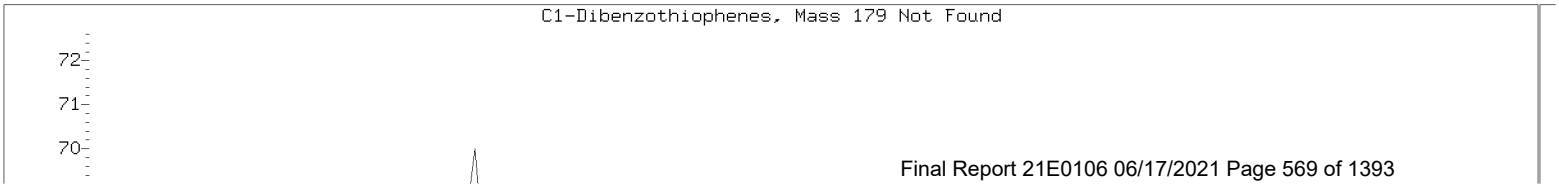

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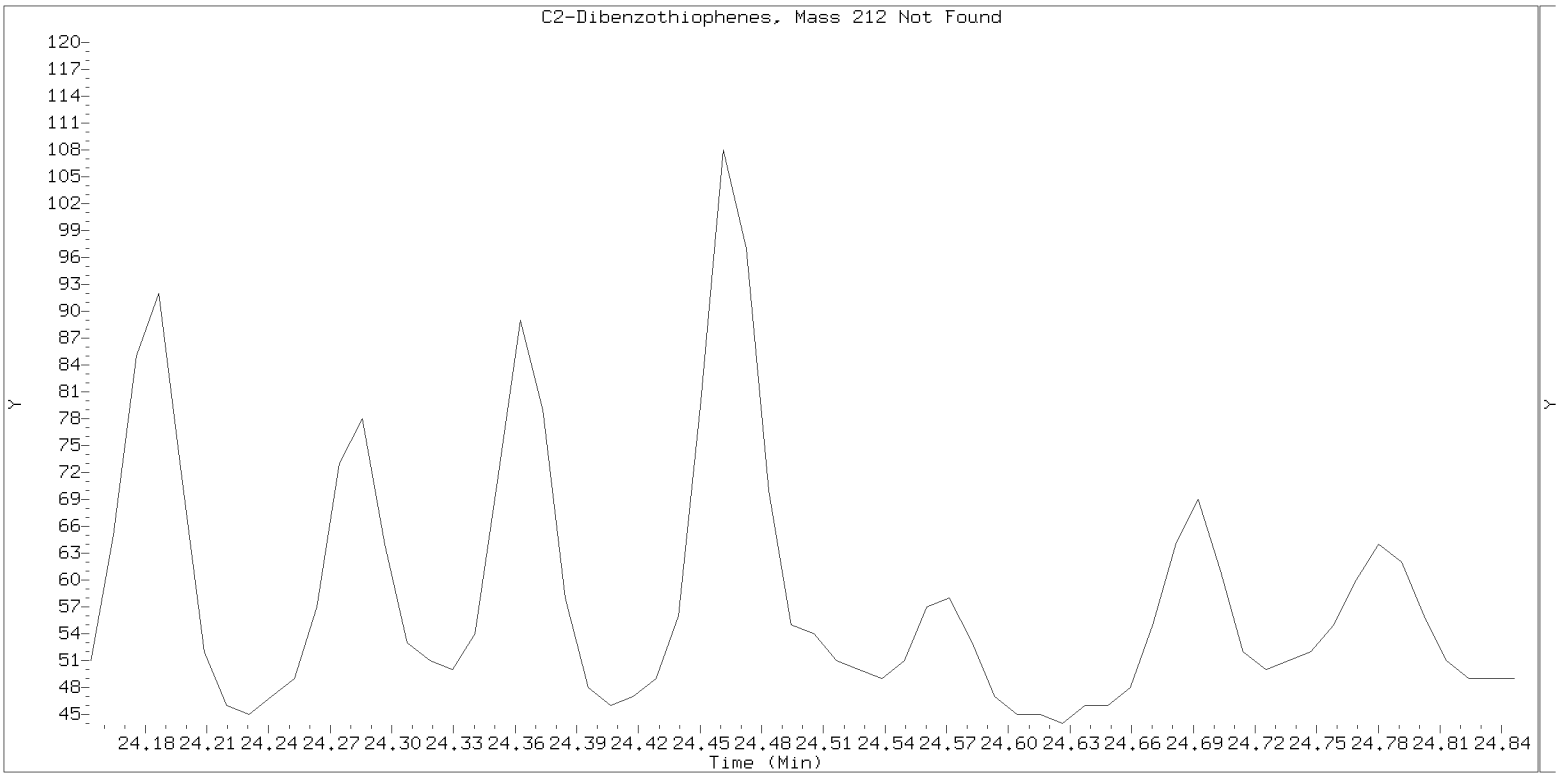

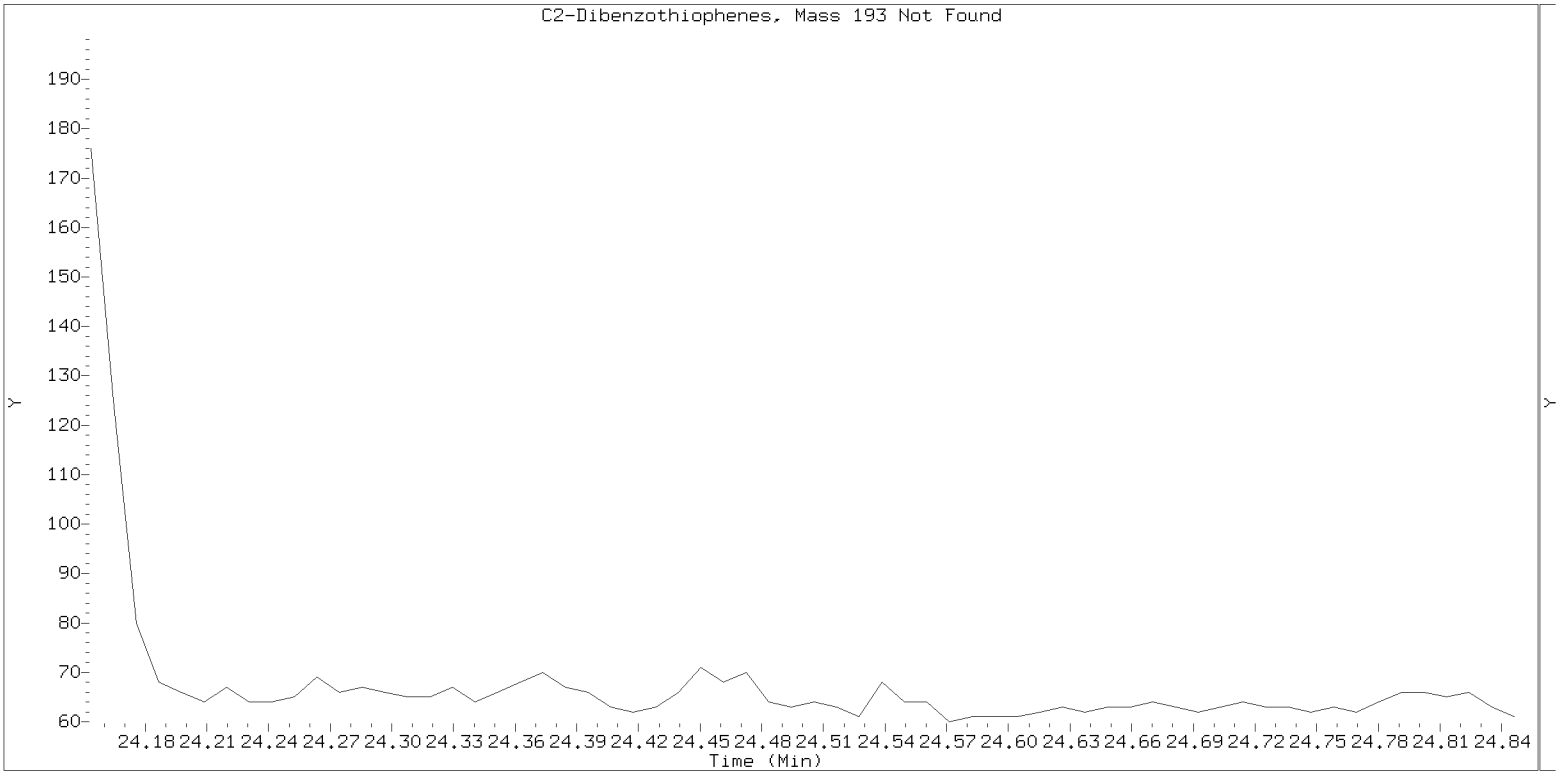

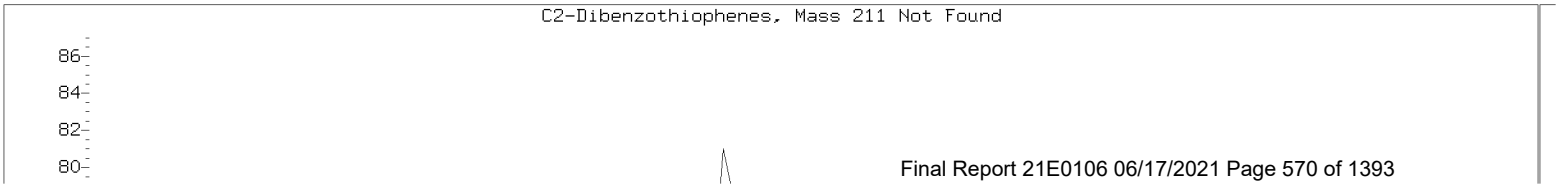

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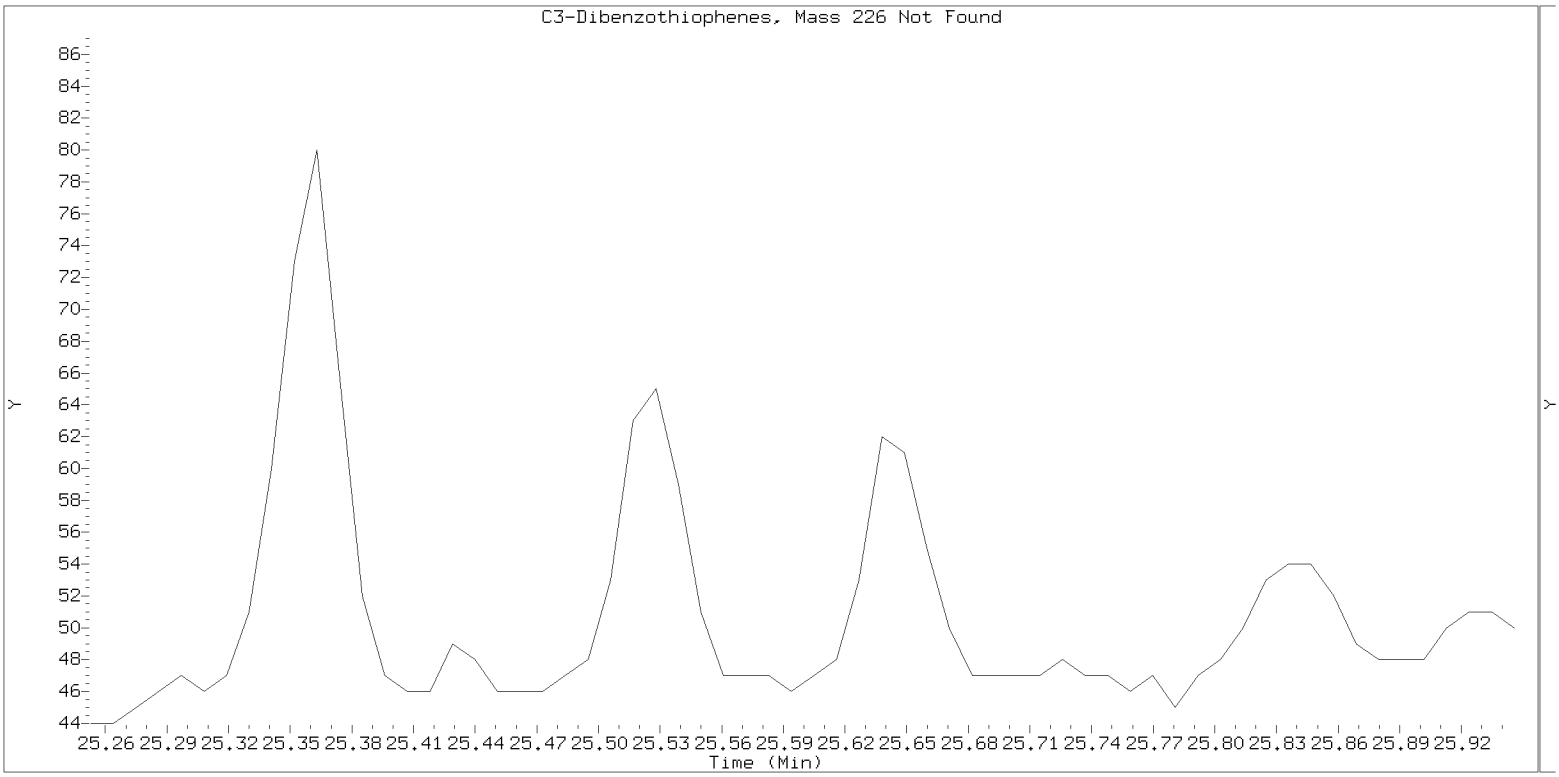

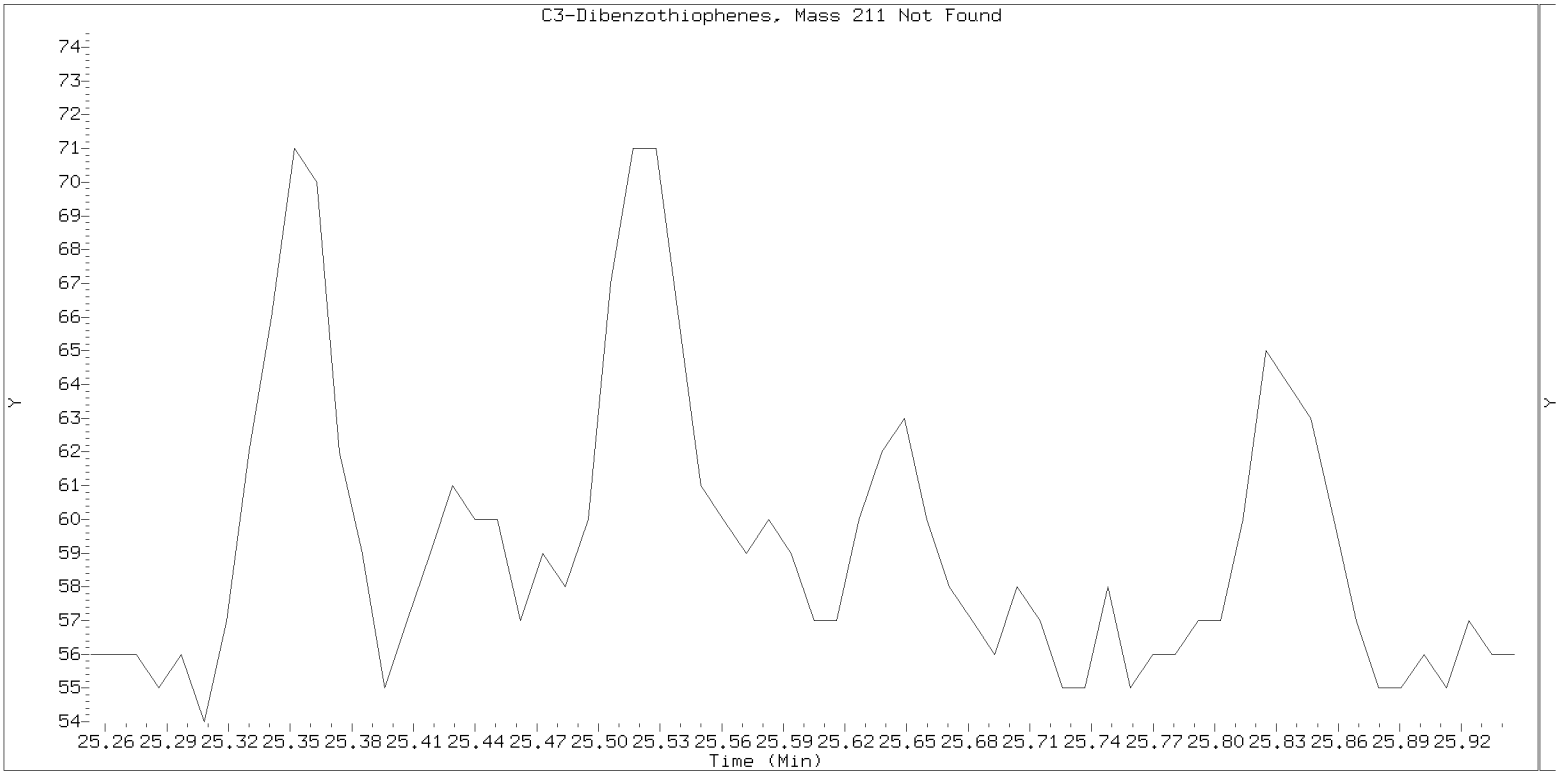

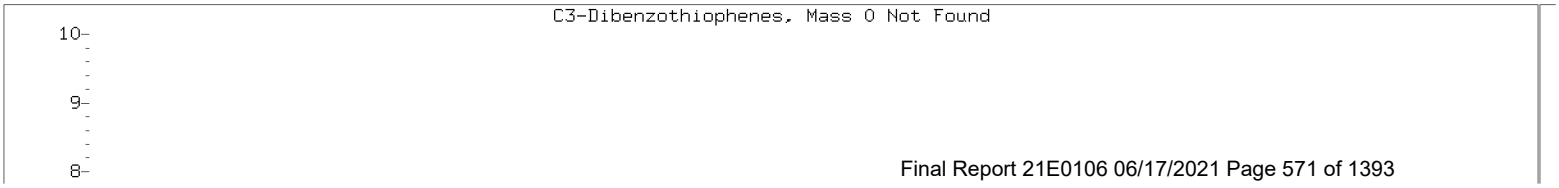

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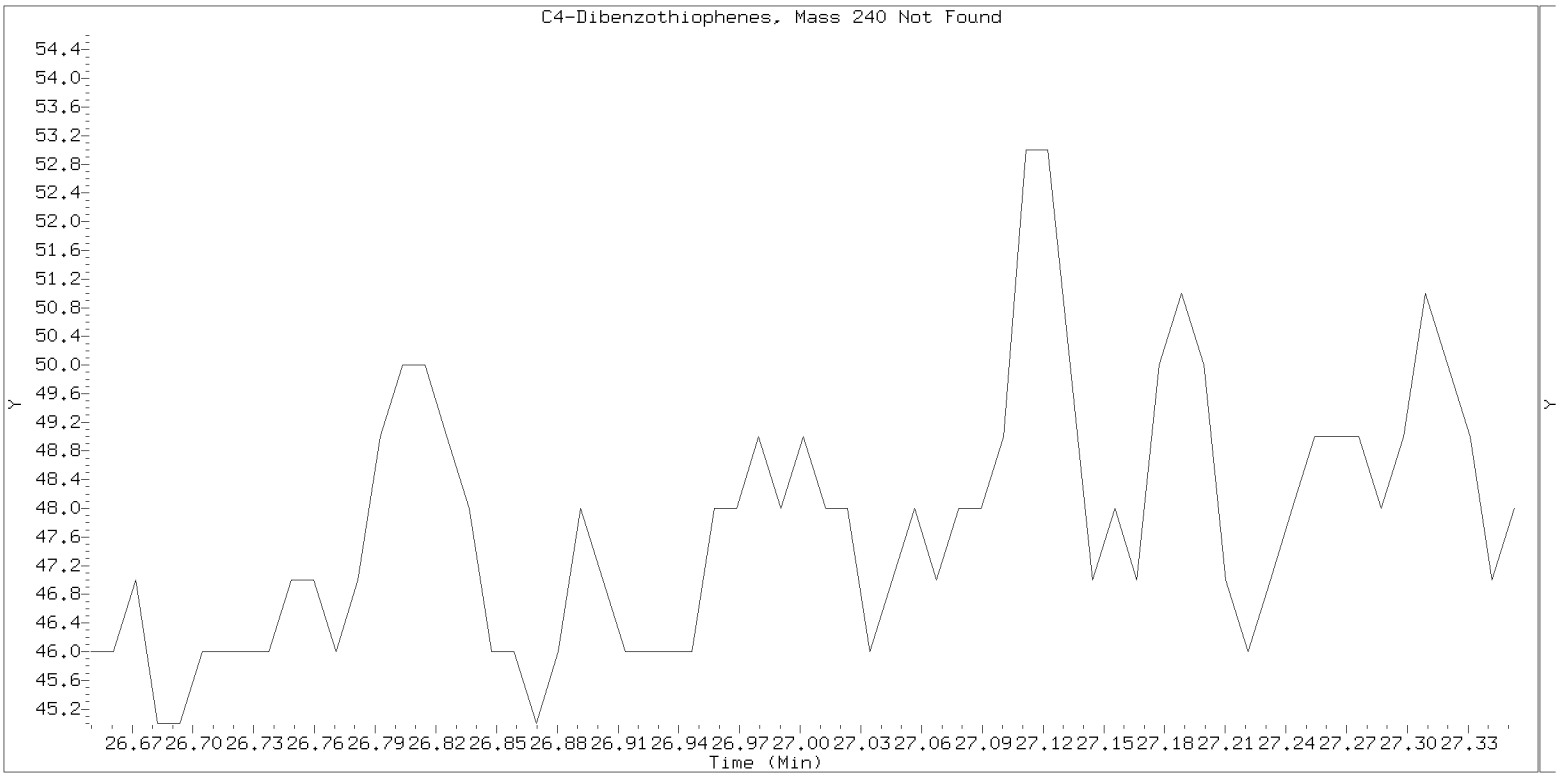

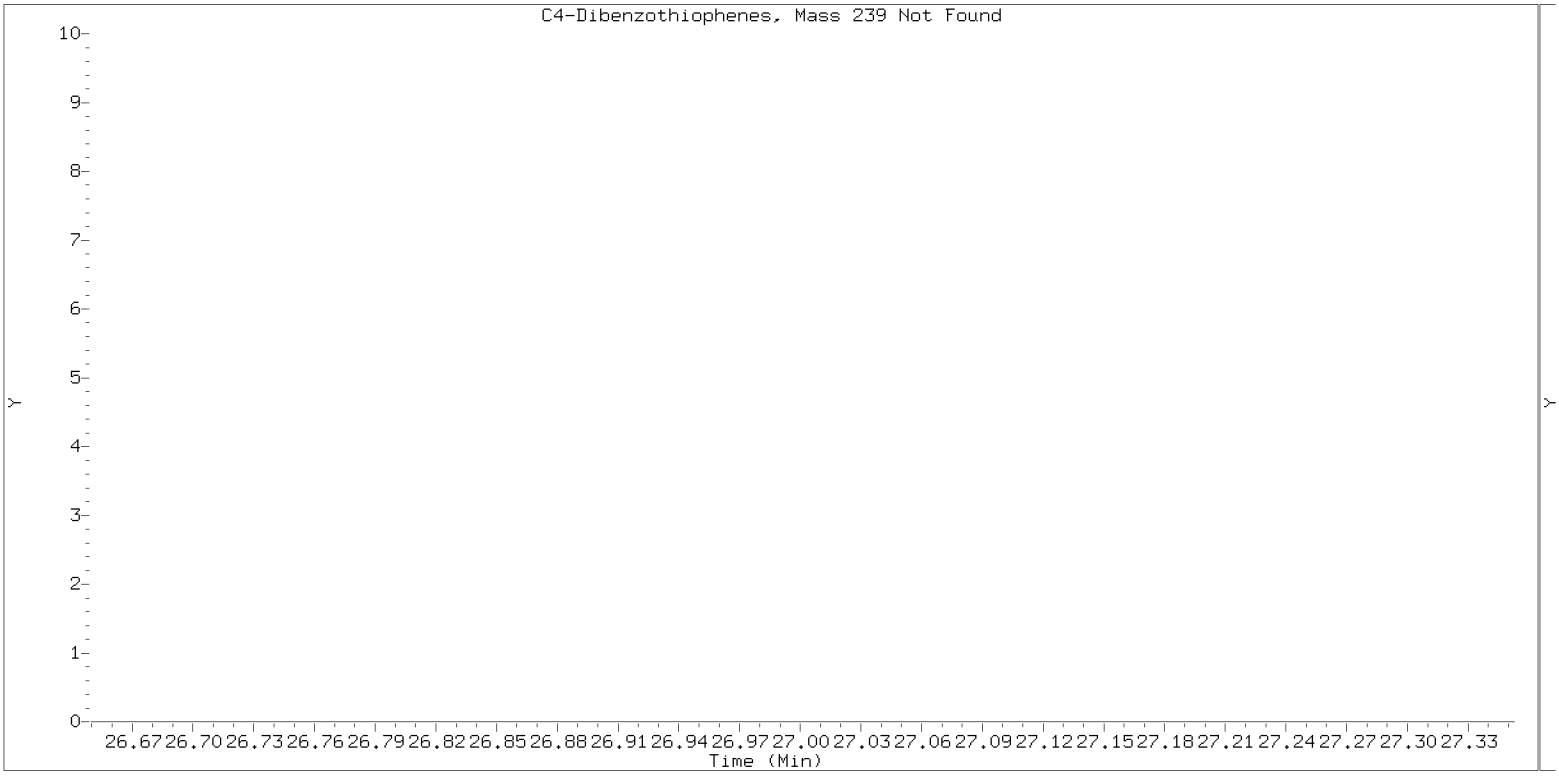

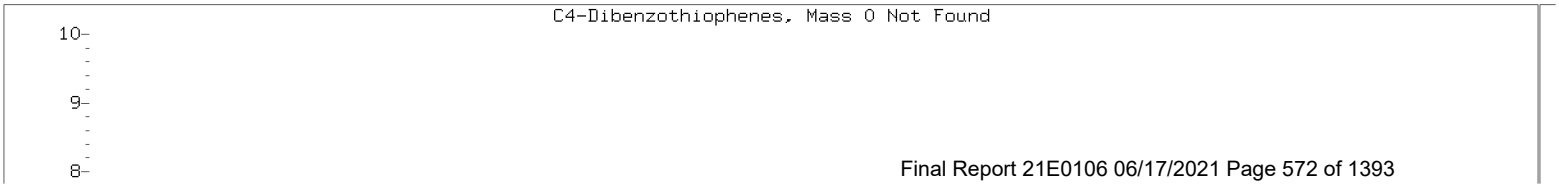

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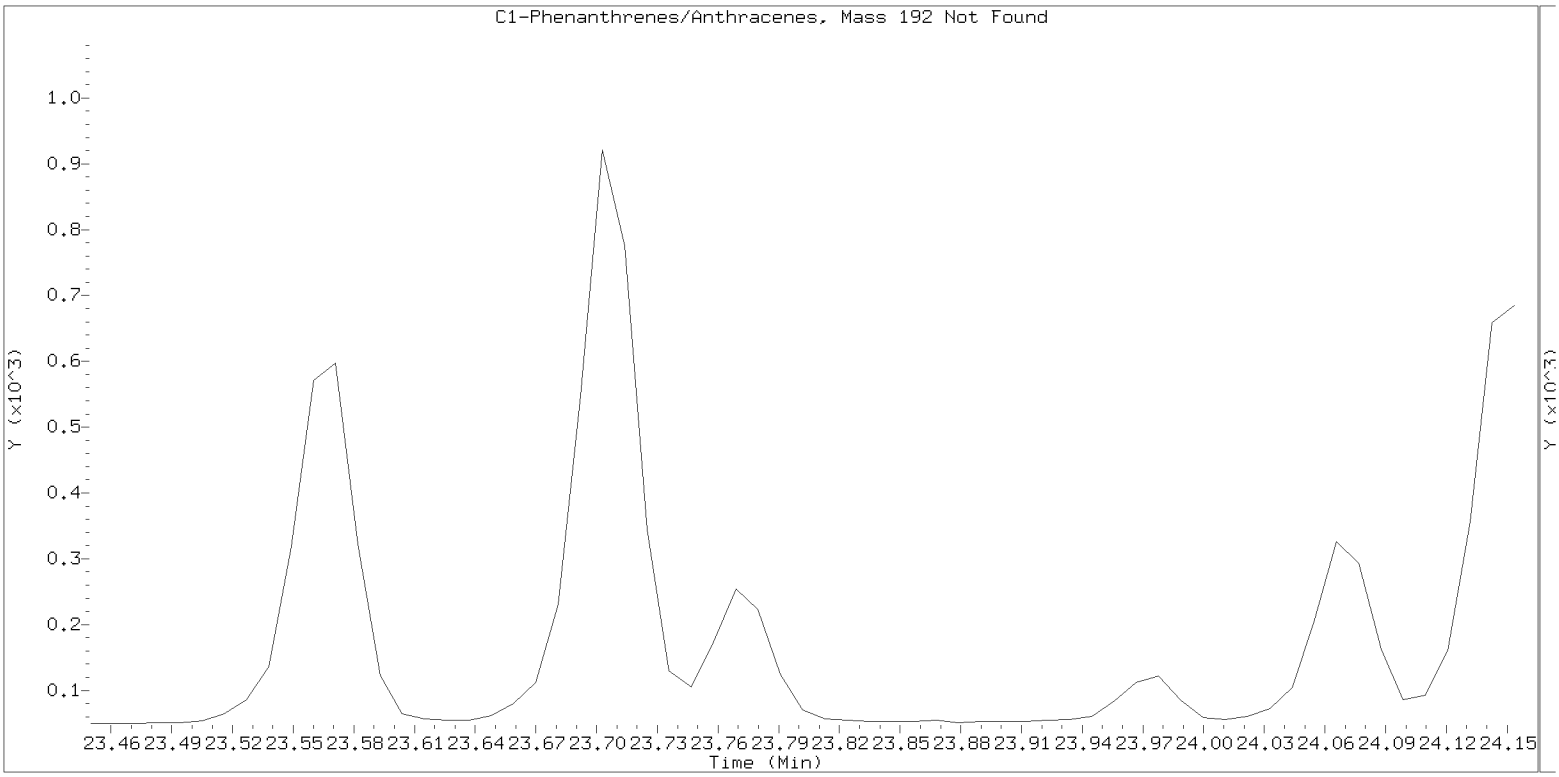

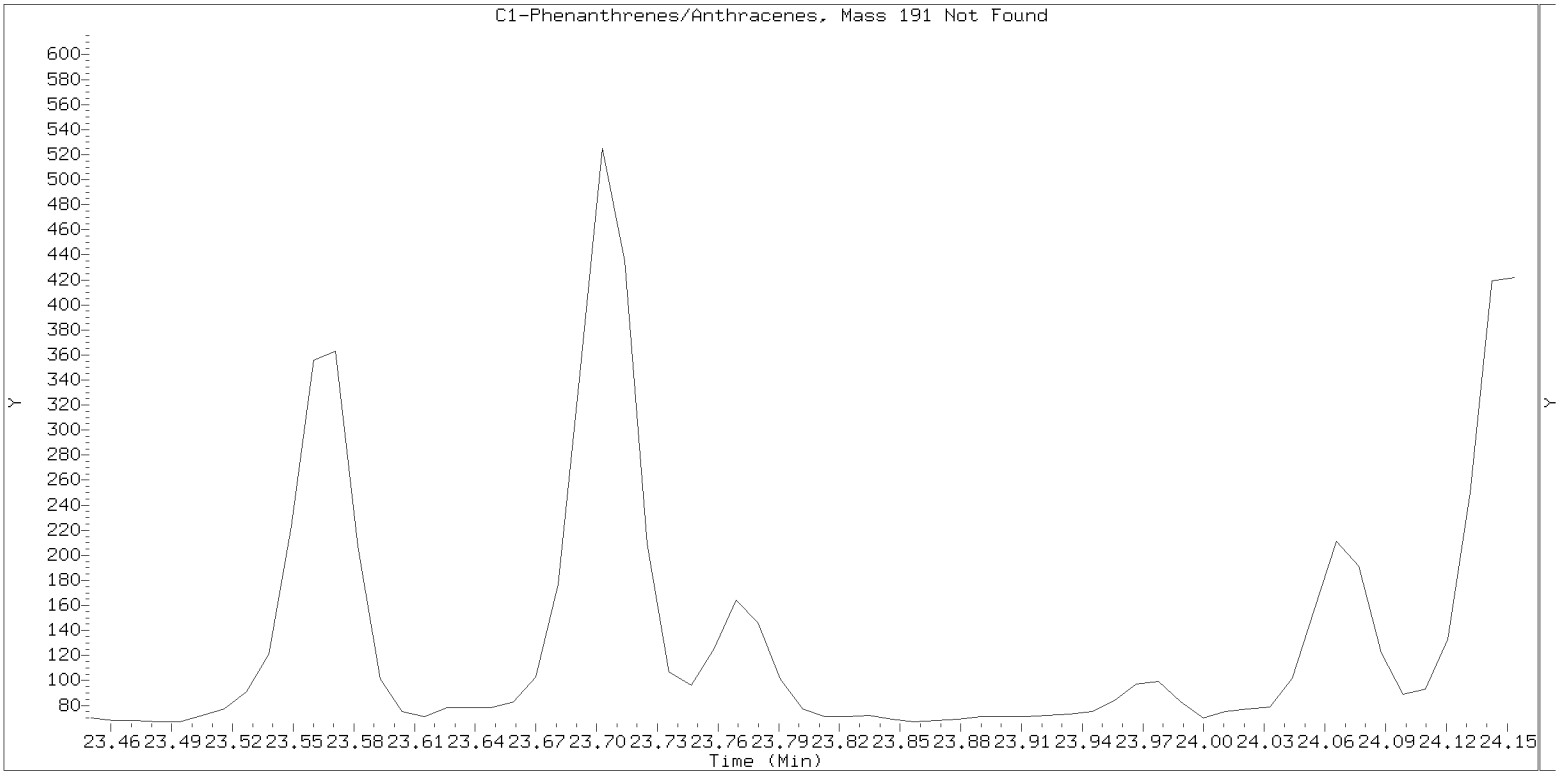

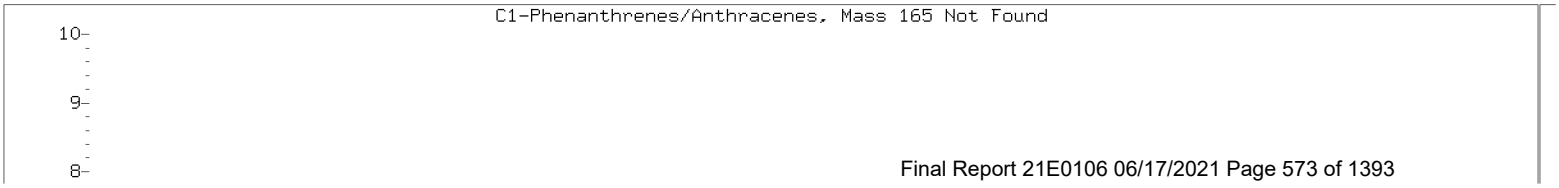

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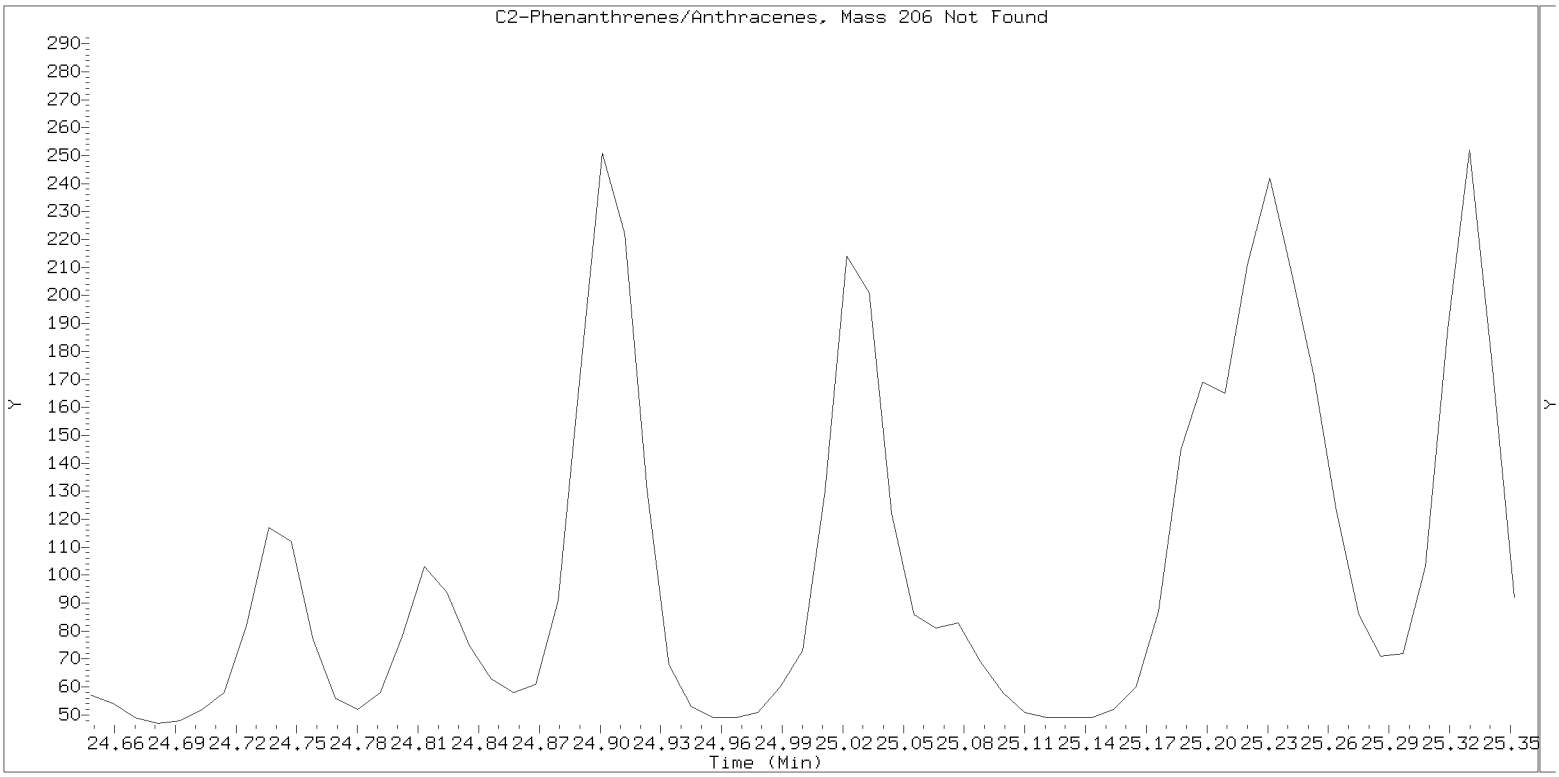

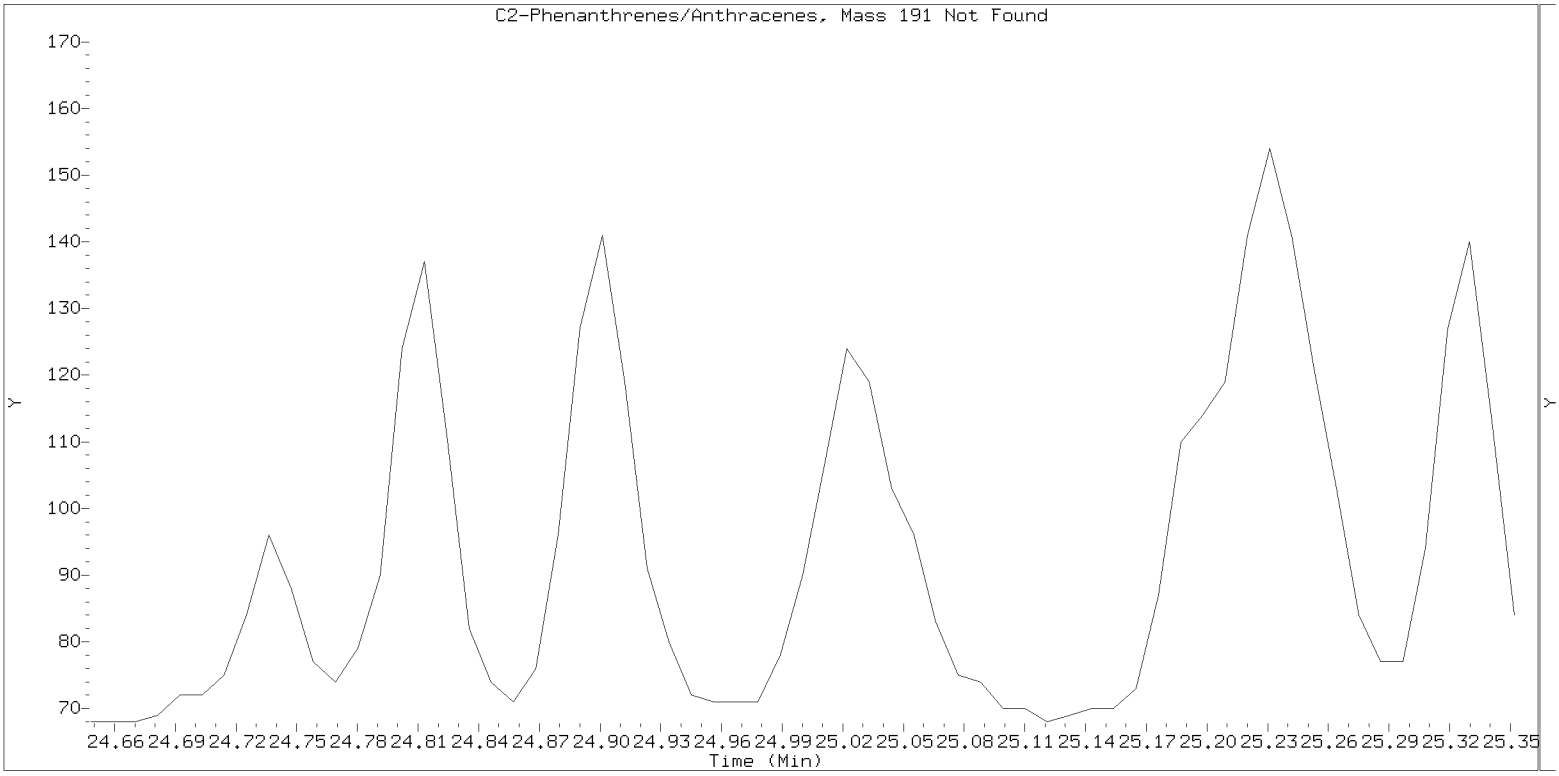

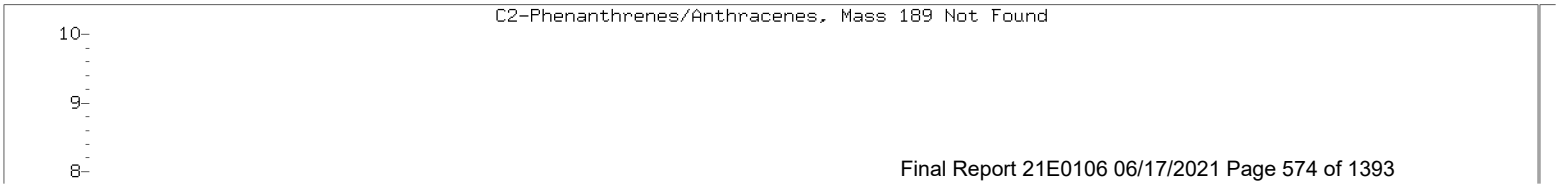

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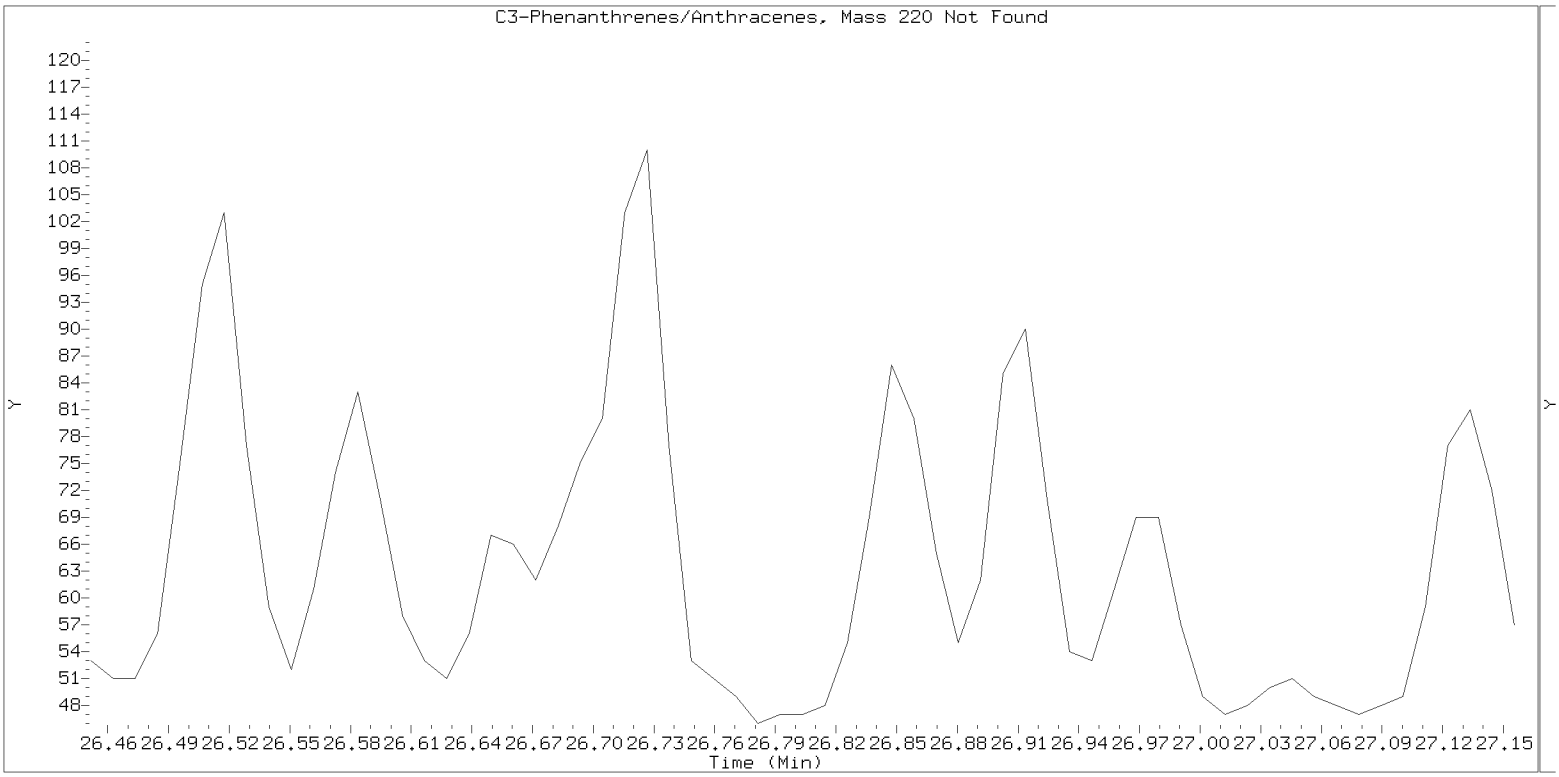

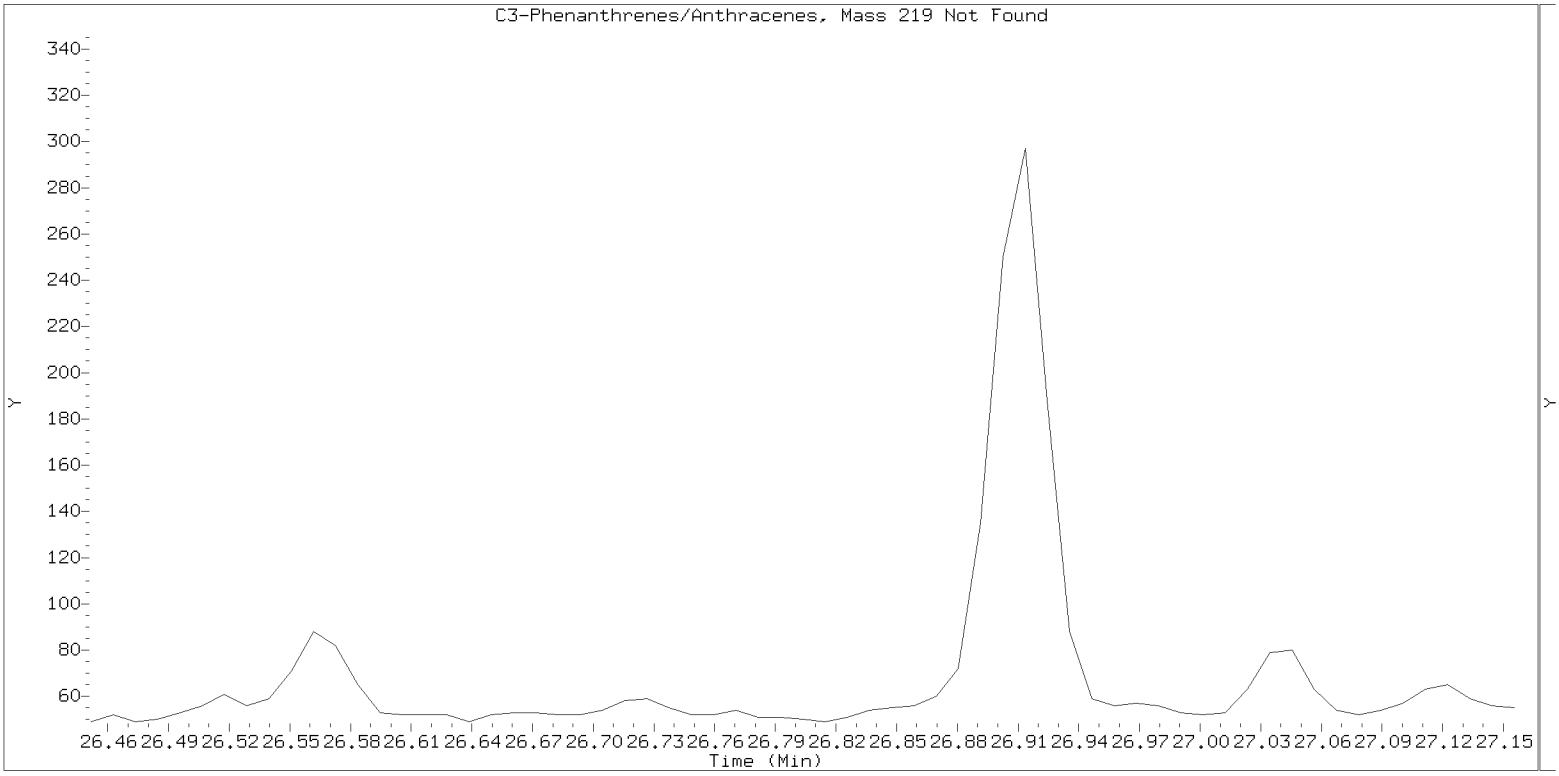

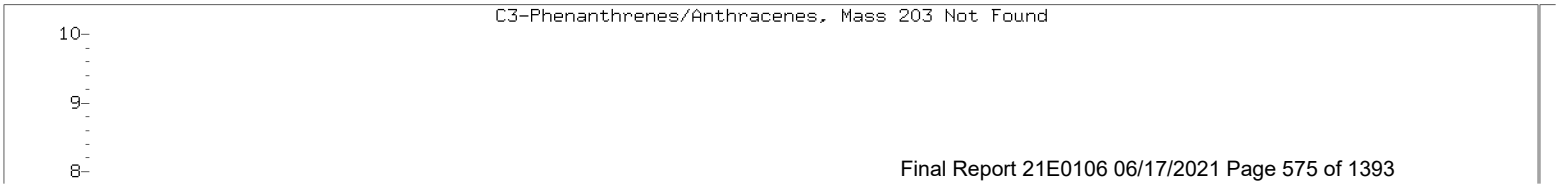

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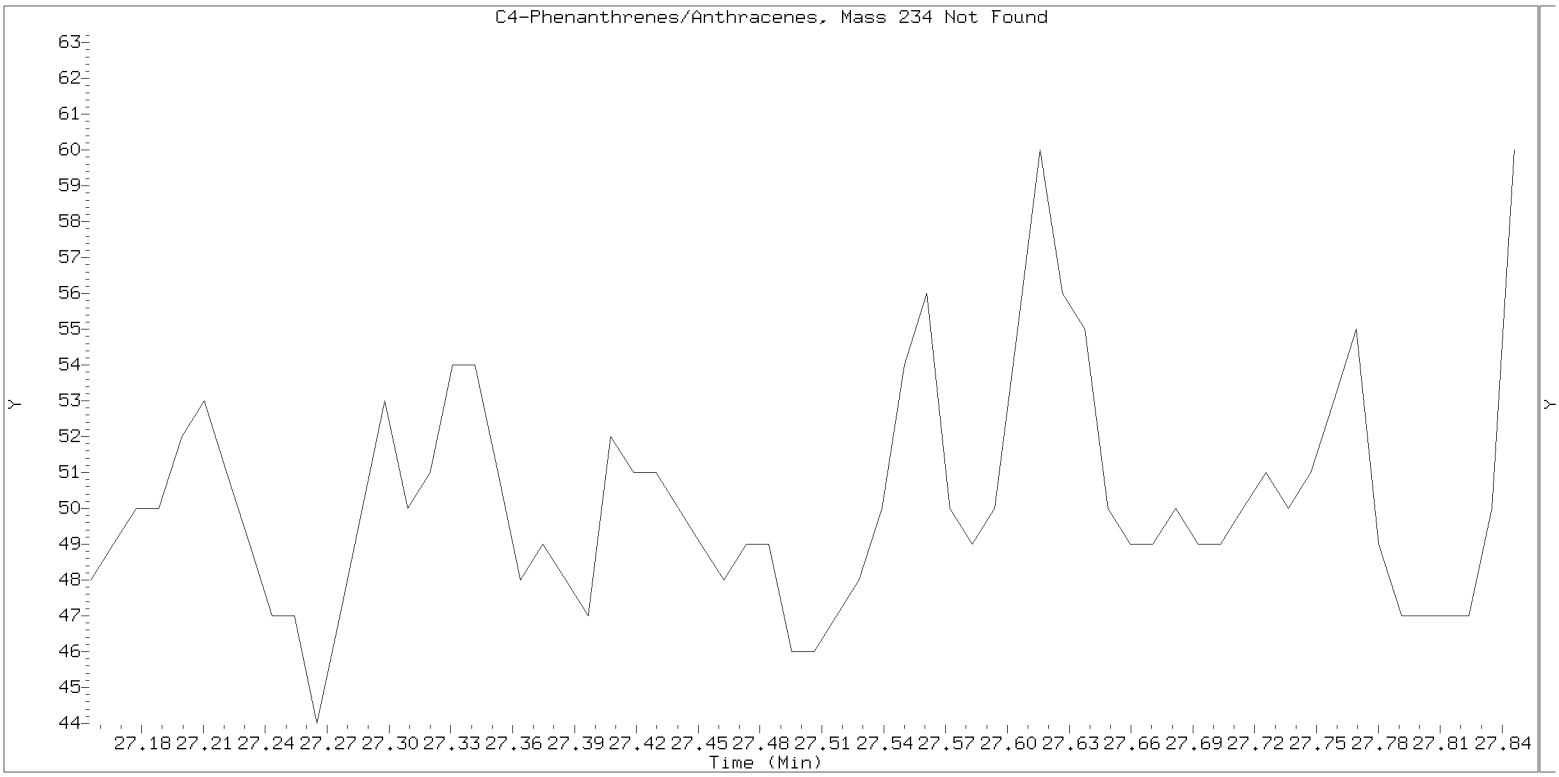
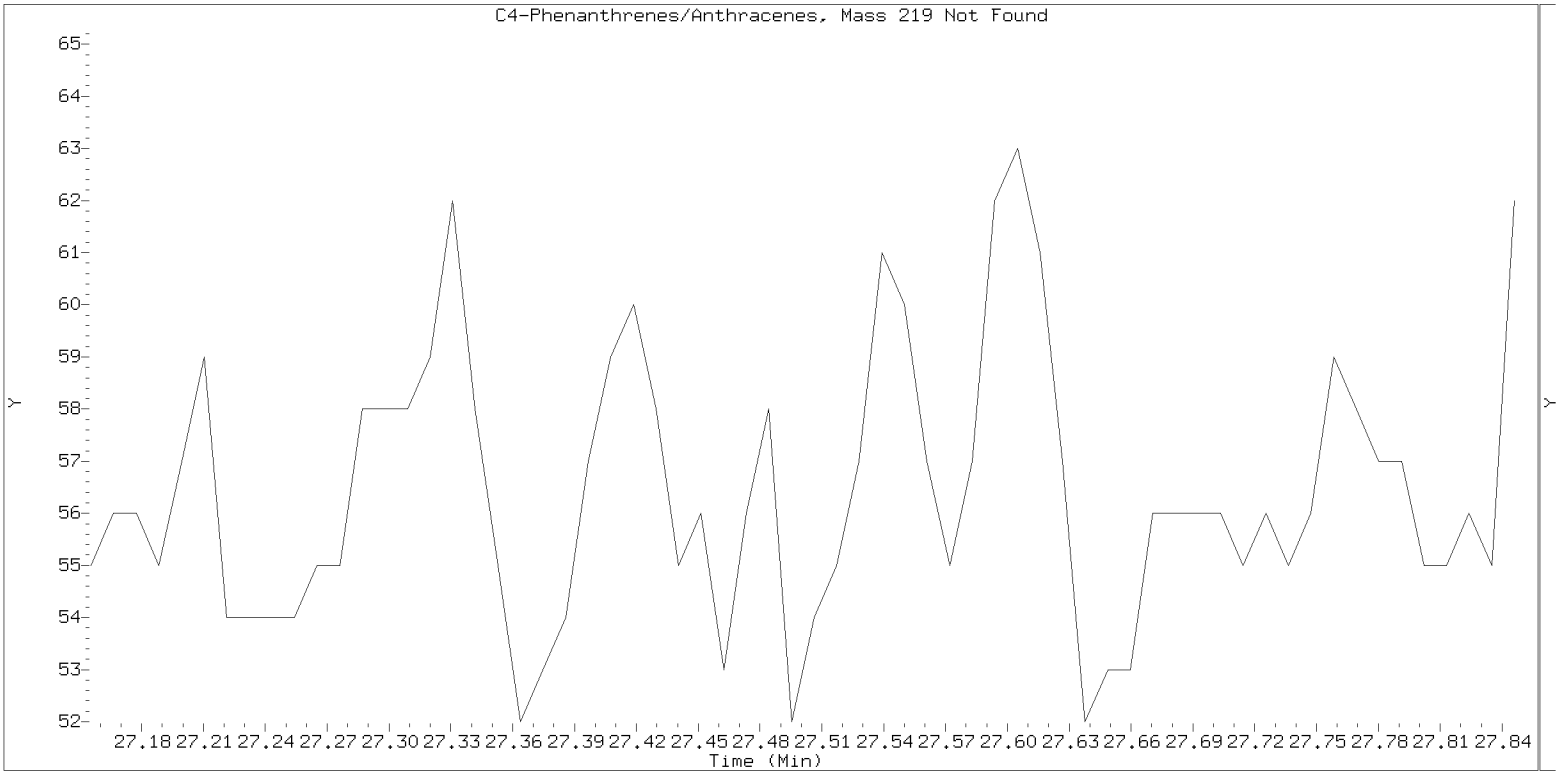
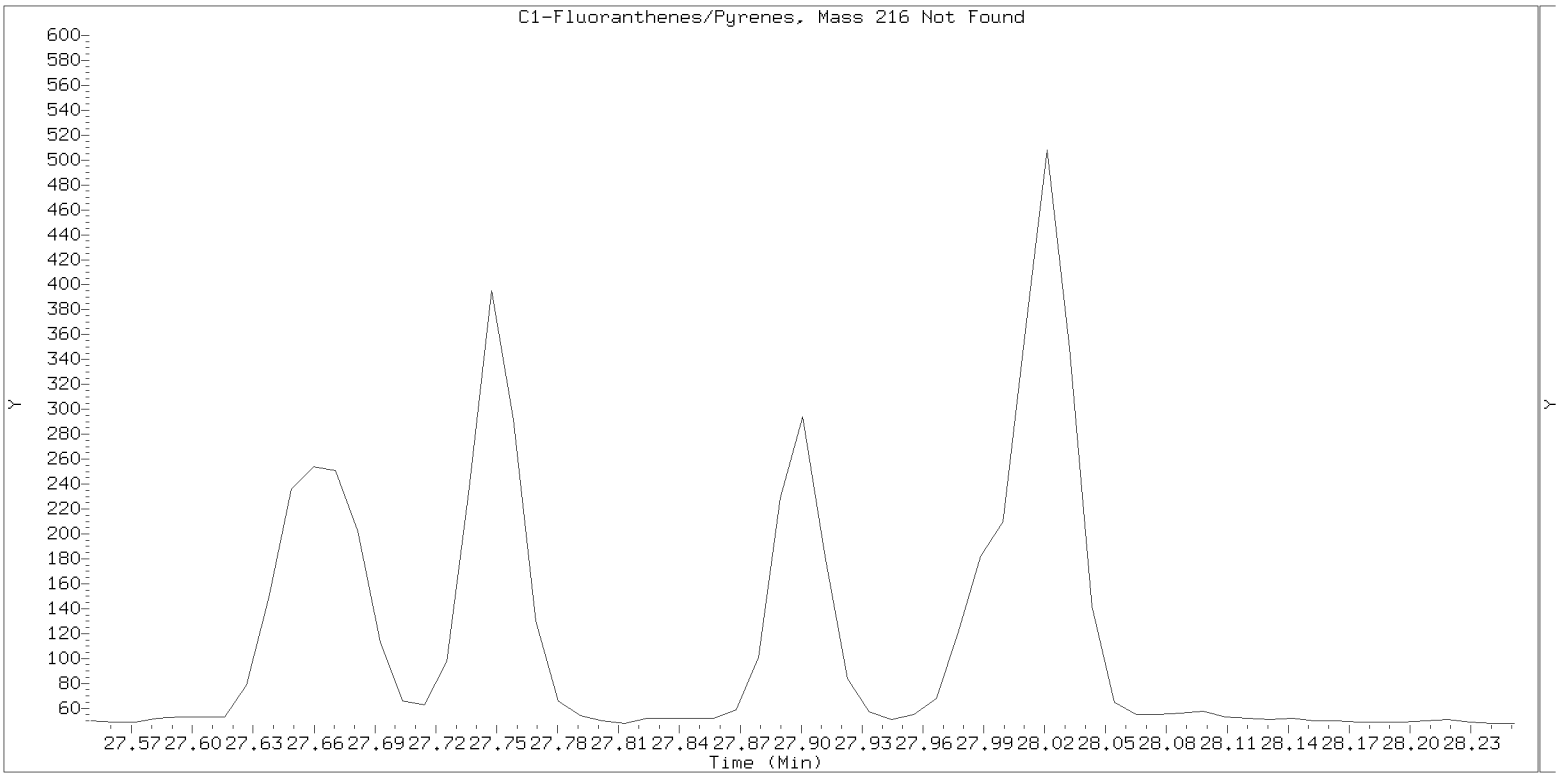
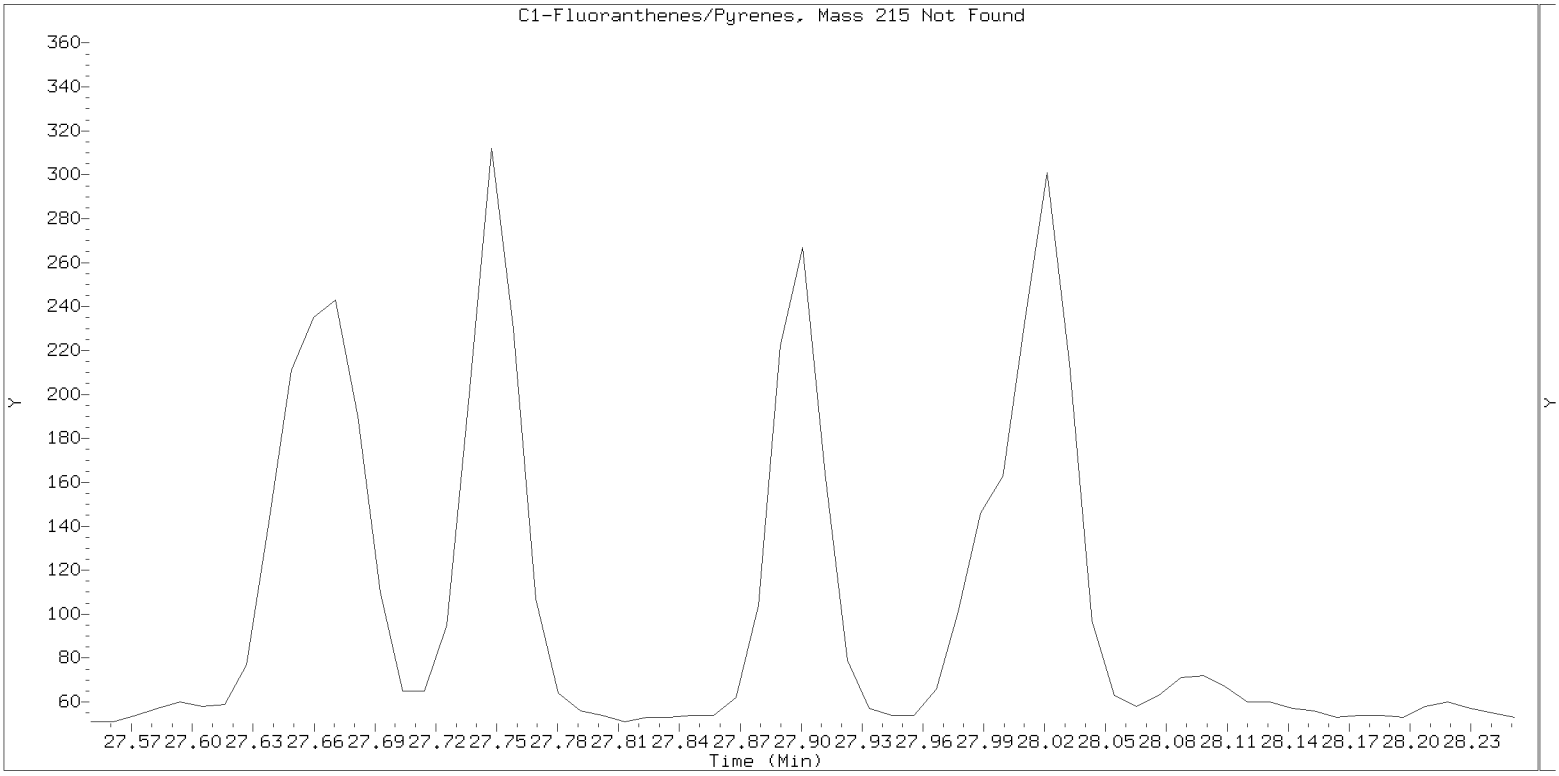


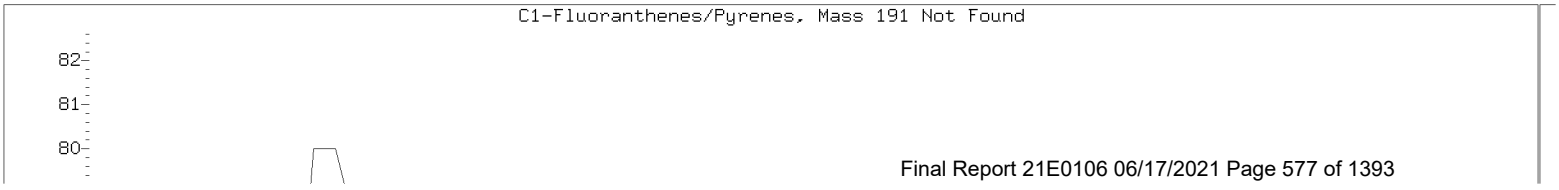


SIM ALKYL PNA RANGE ION WINDOWS - NT1421060418S.D

Lab ID: BJE0383-BLK2
nt14.i, SIM.b\ALKYLRANGES.m, 05-JUN-2021 01:55







SIM ALKYL PNA RANGE ION WINDOWS - NT1421060418S.D

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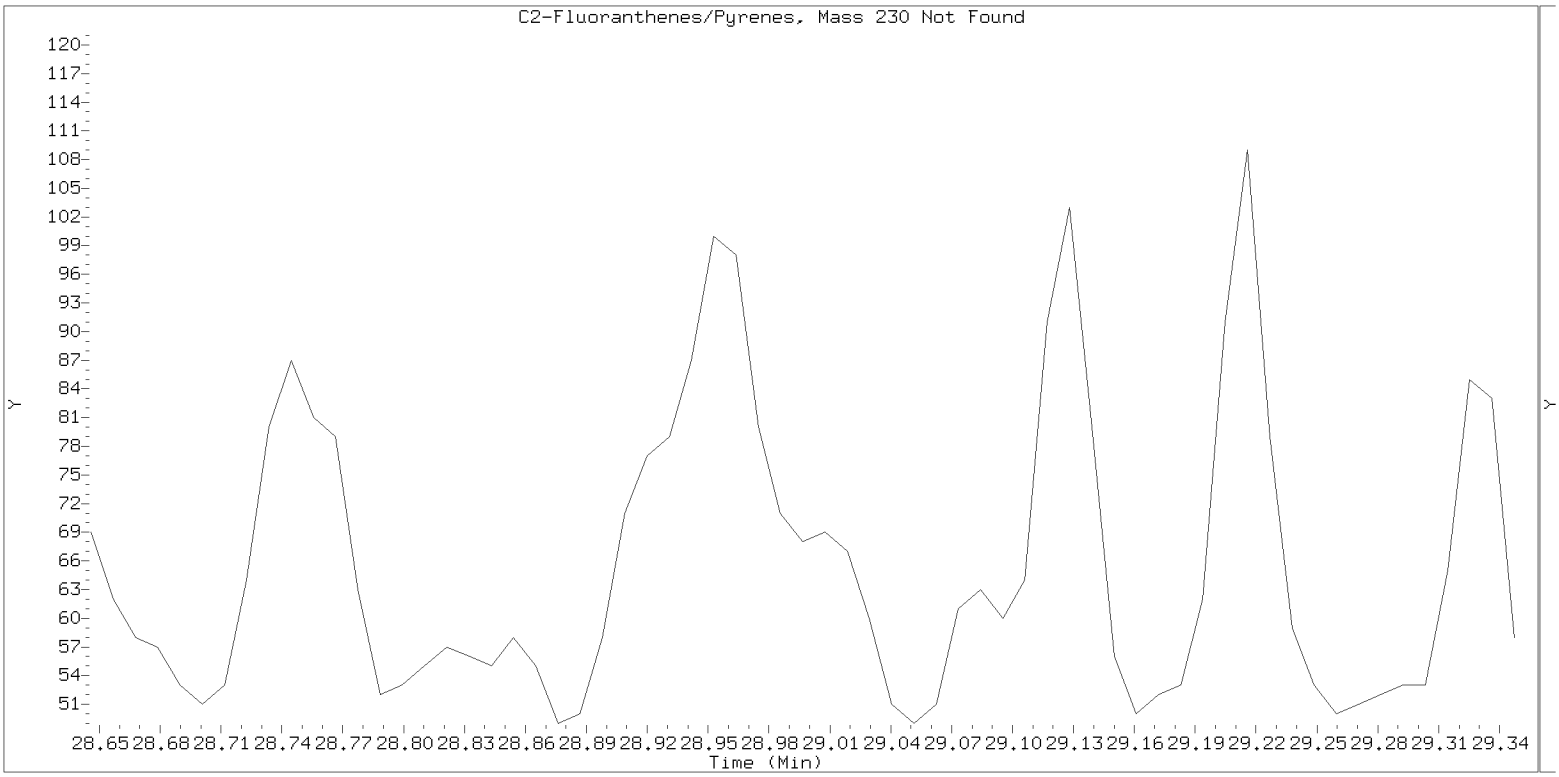

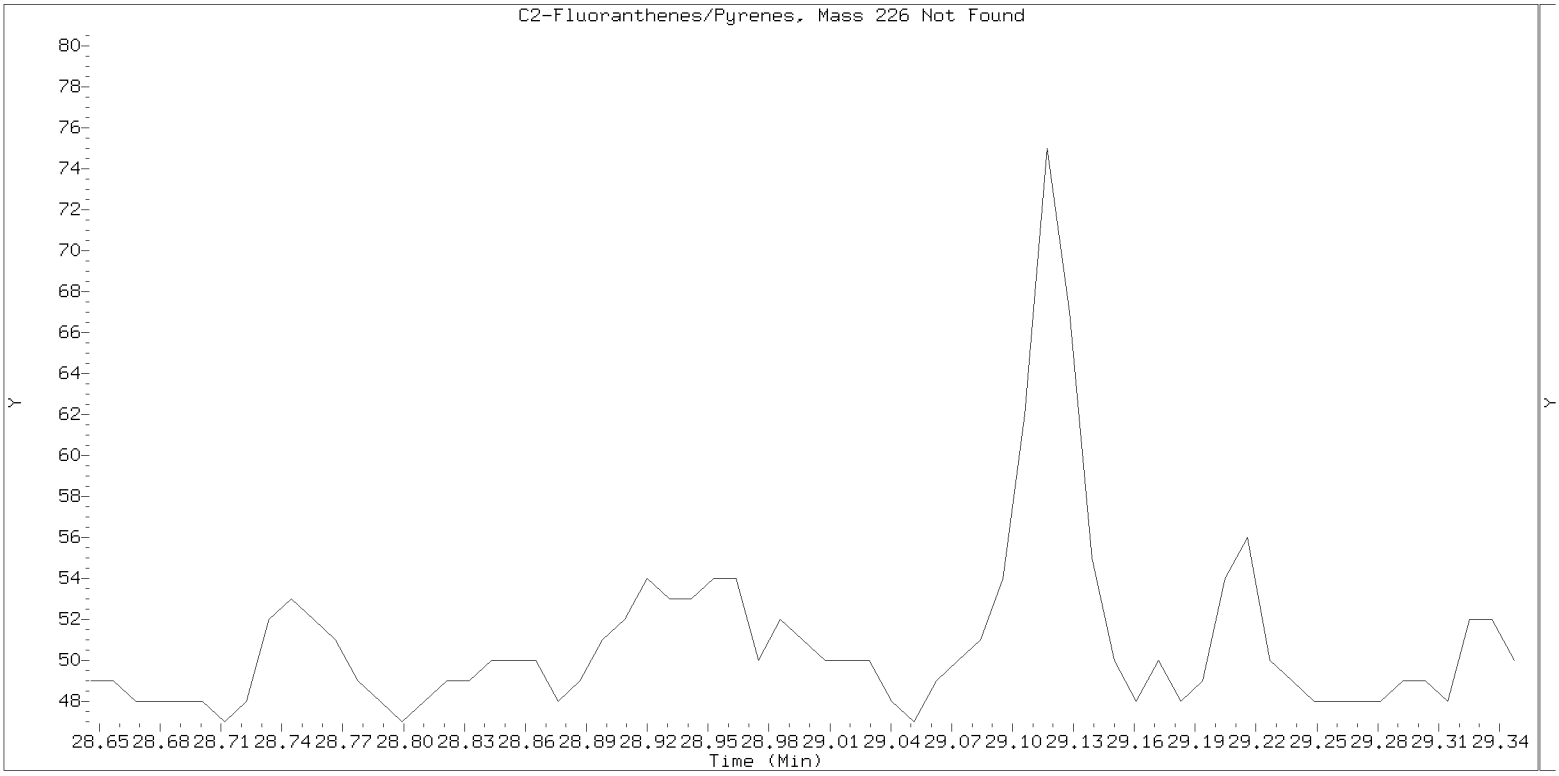

SIM ALKYL PNA RANGE ION WINDOWS - NT1421060418S.D

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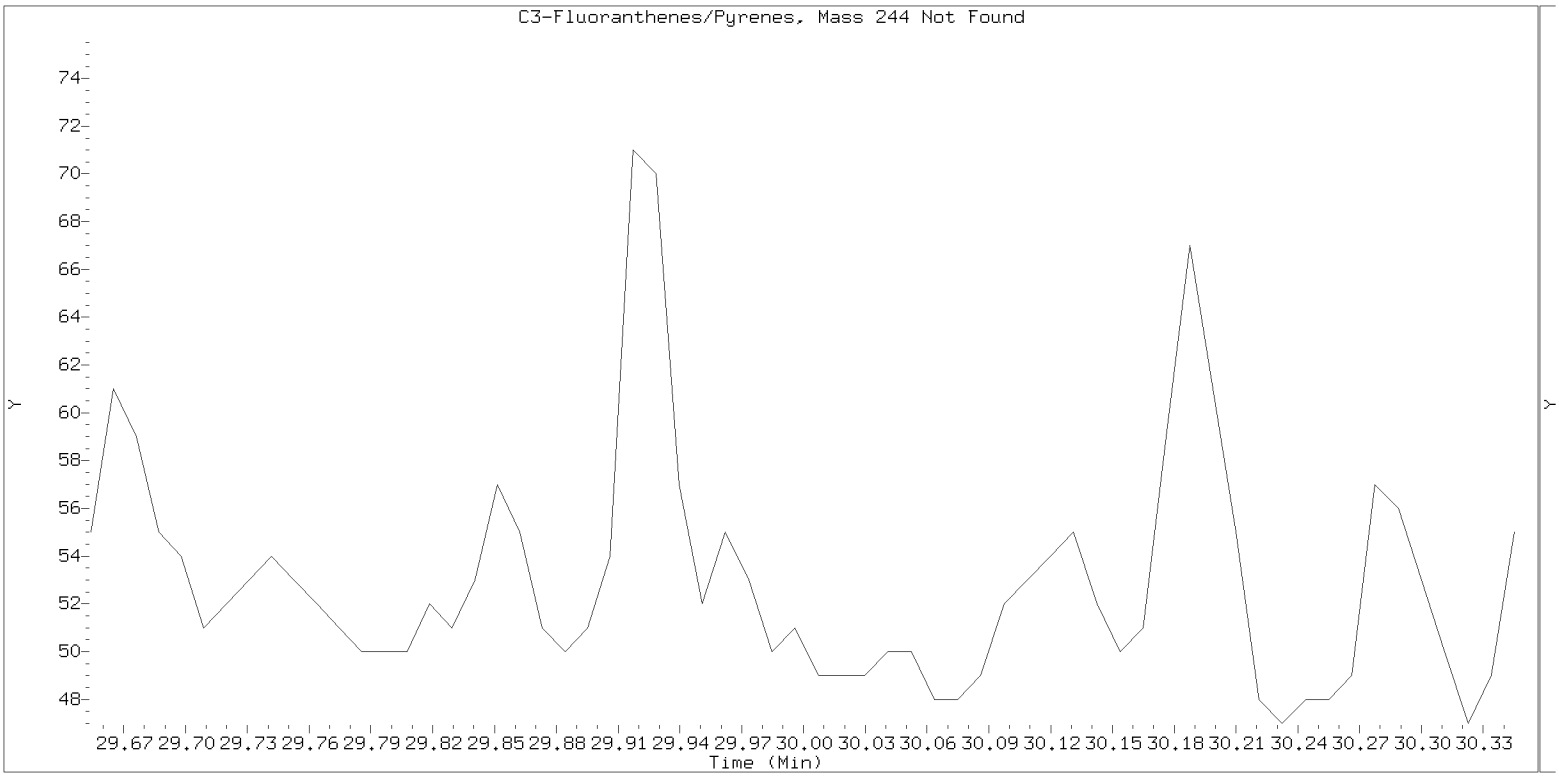

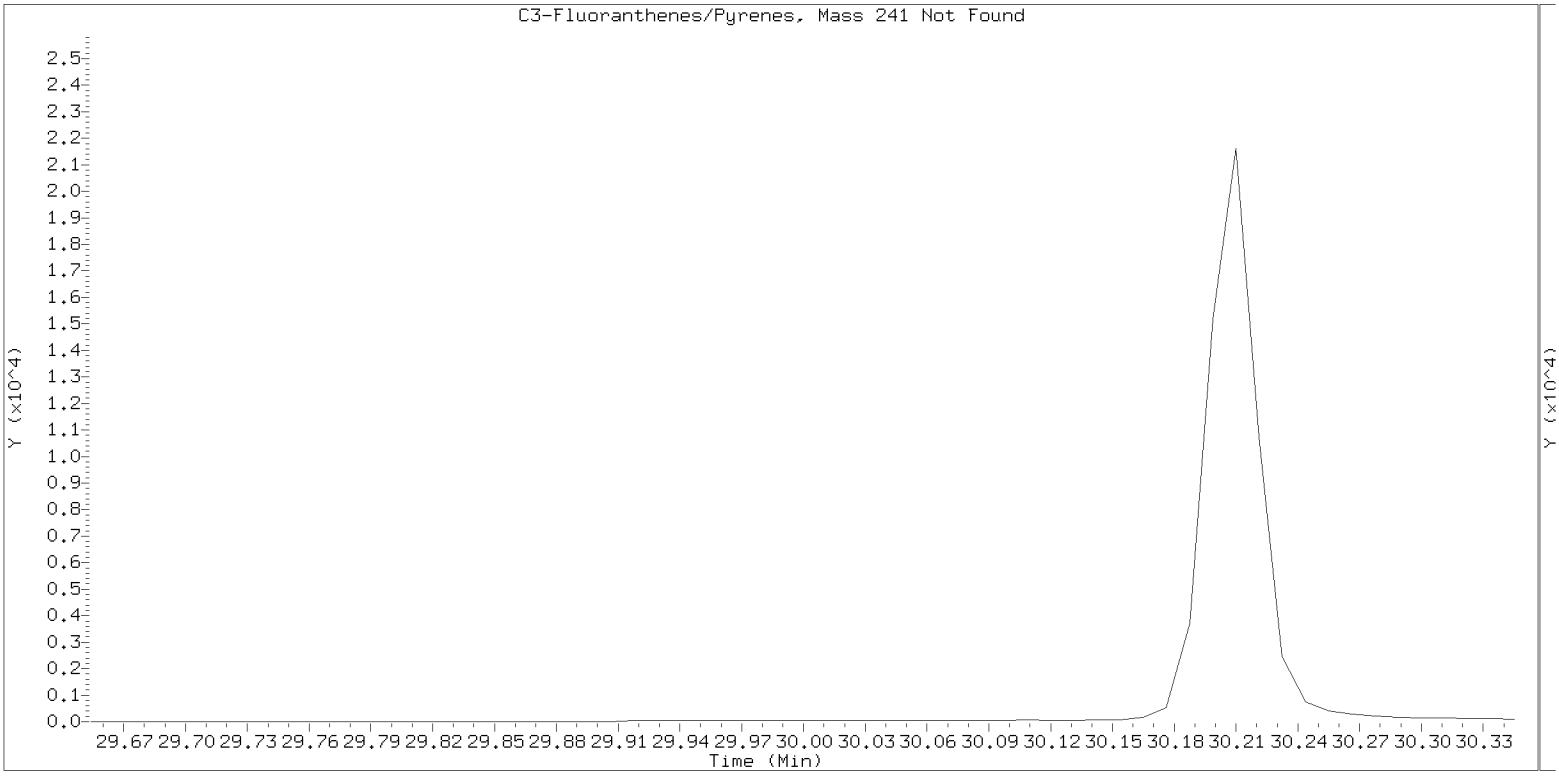

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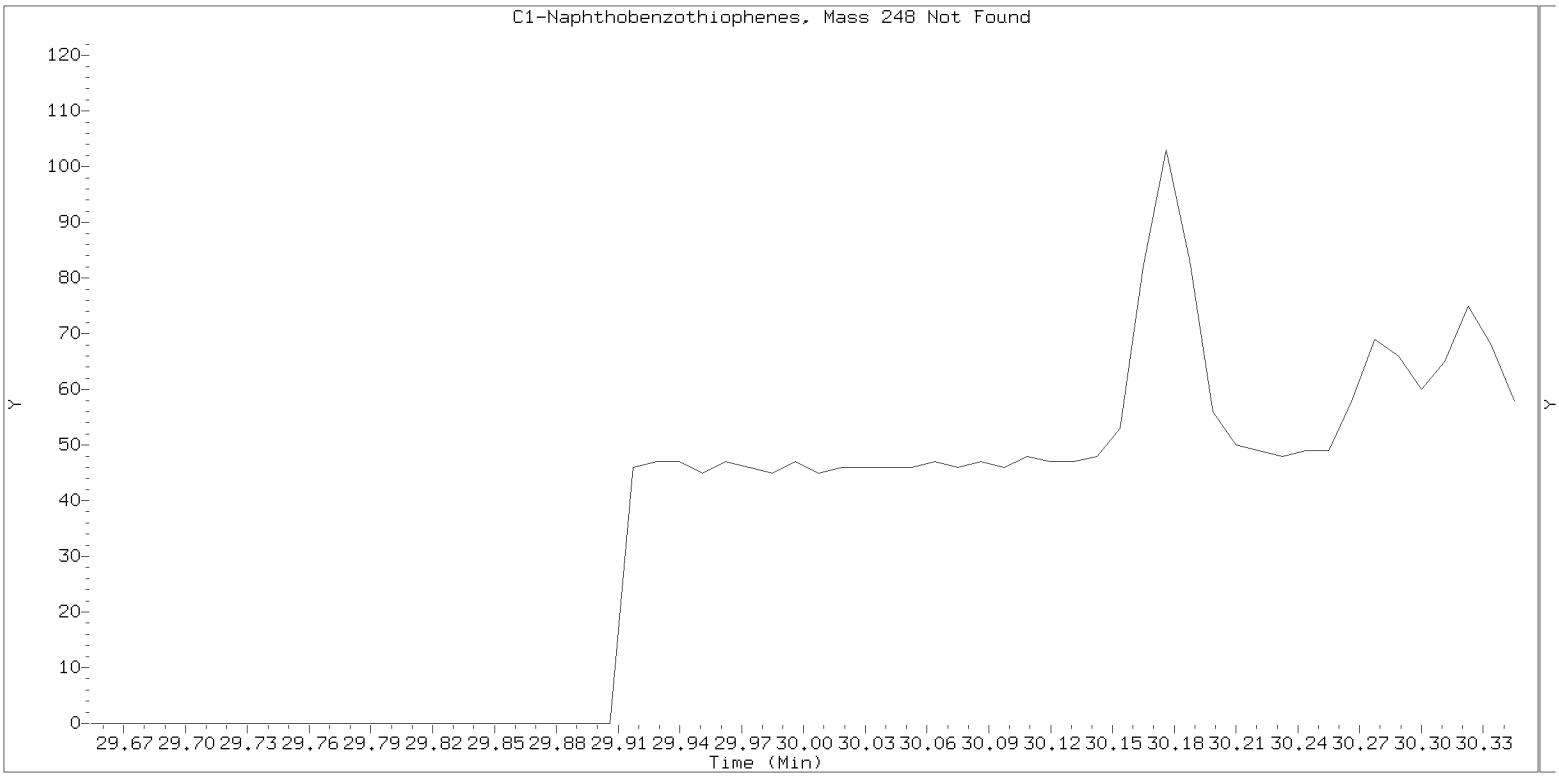

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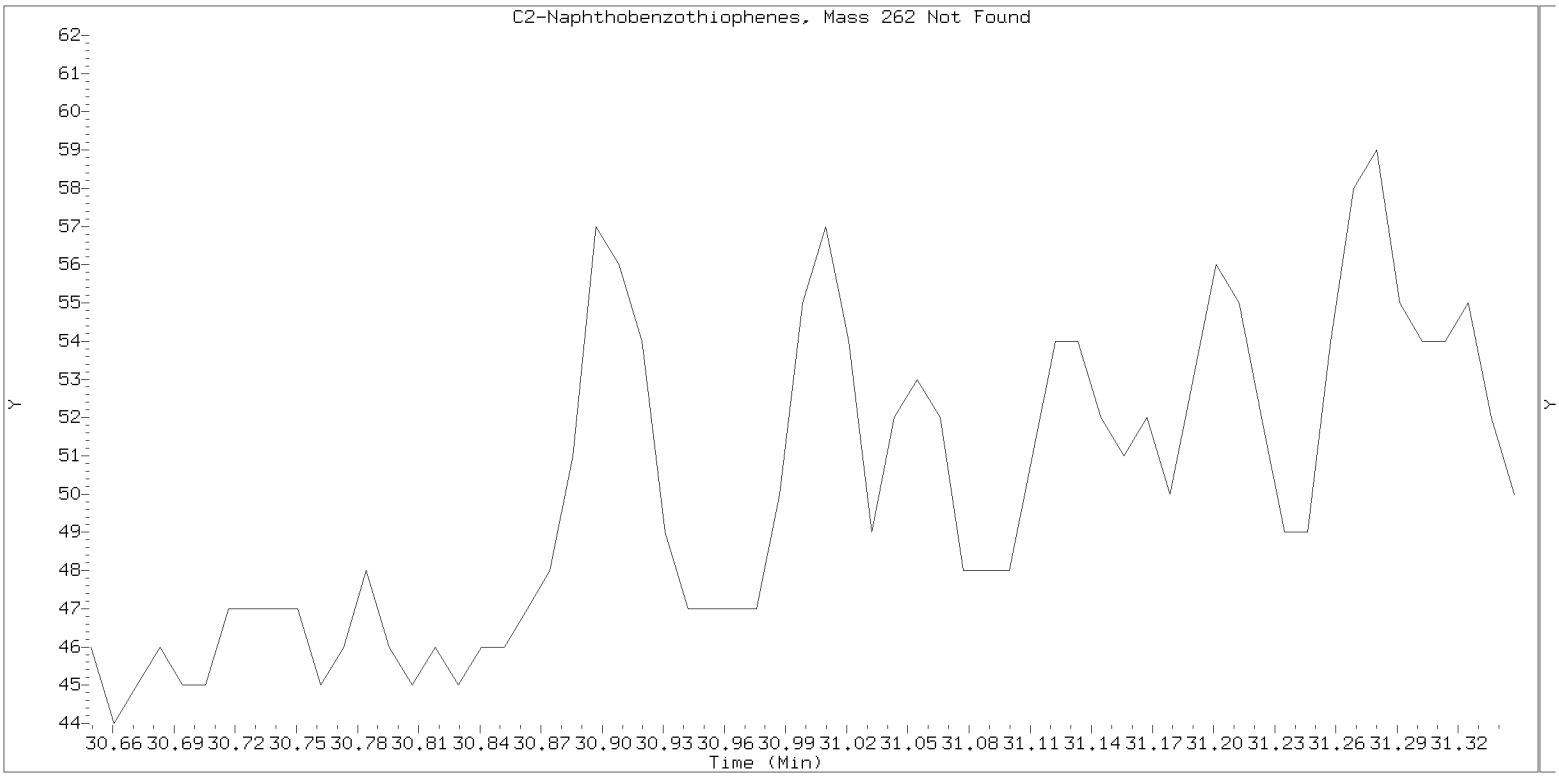

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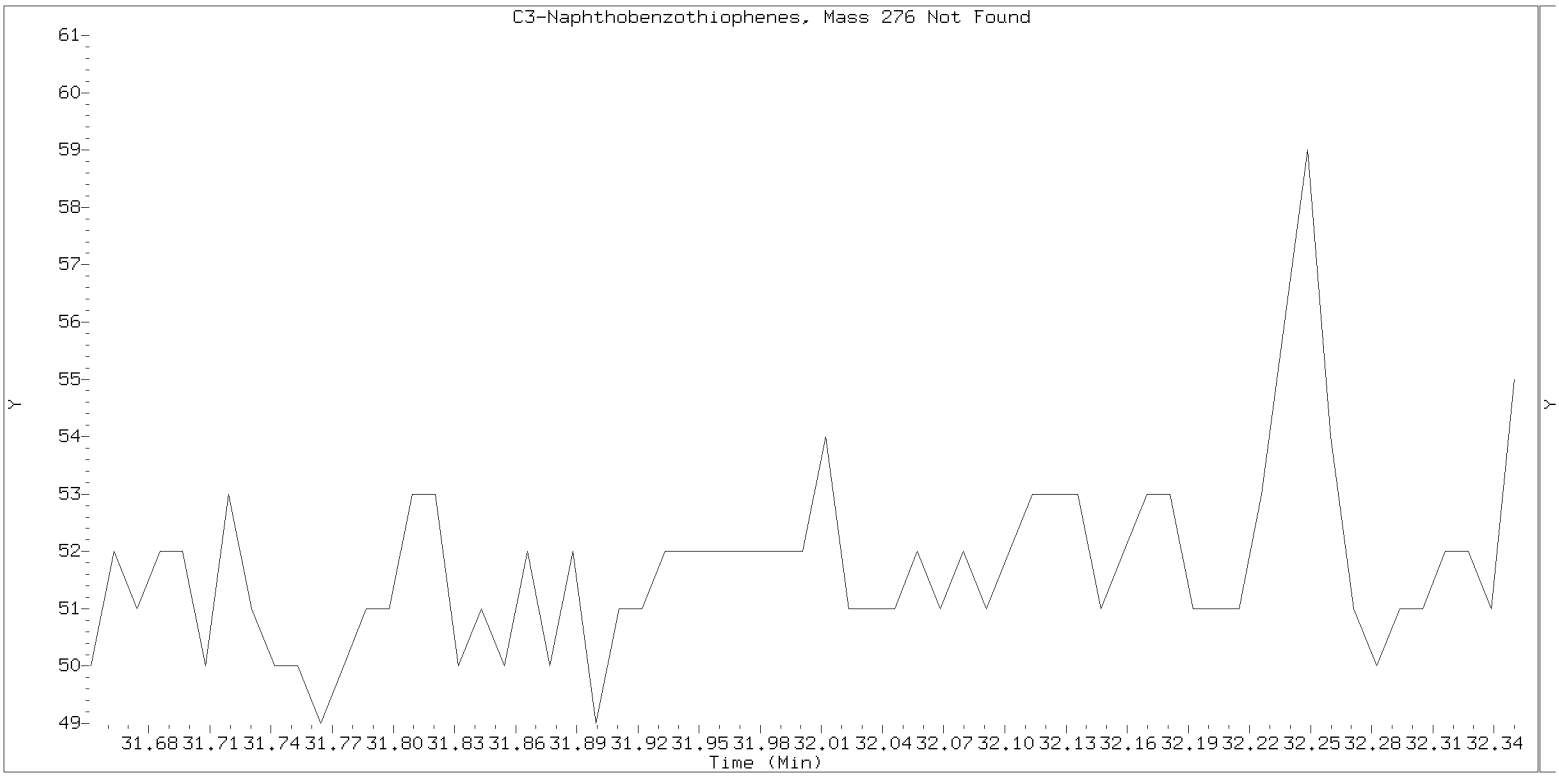

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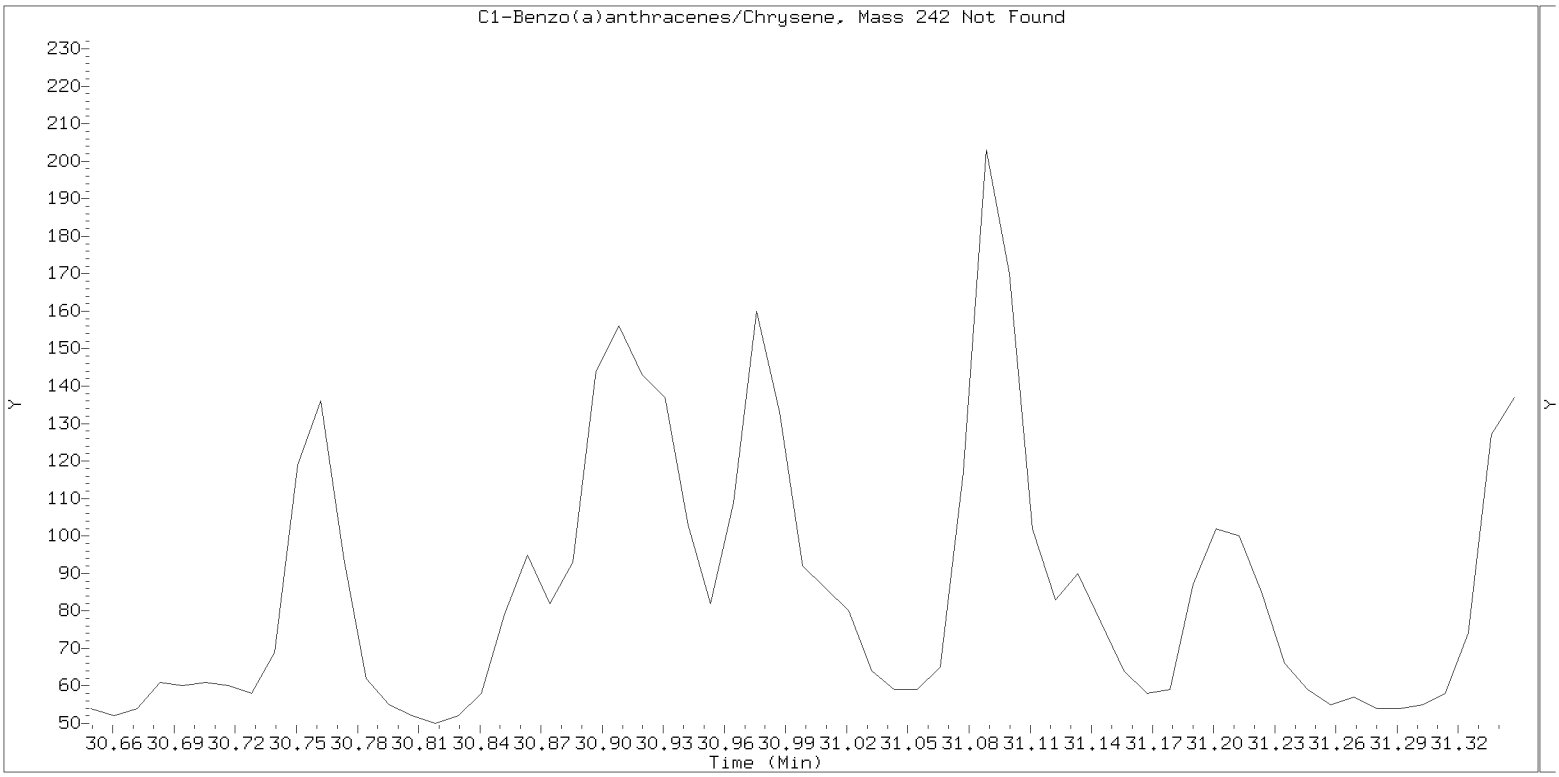

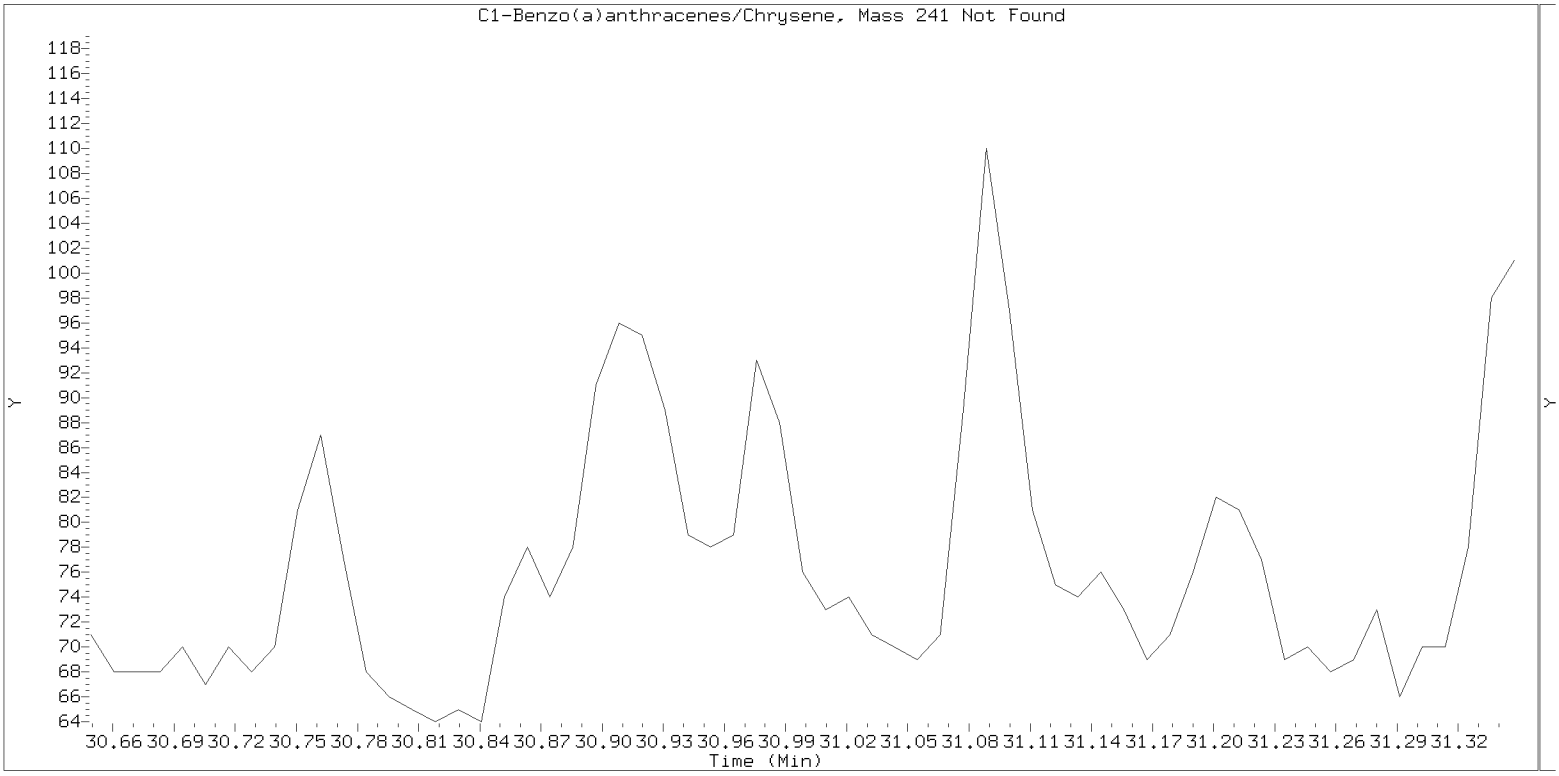

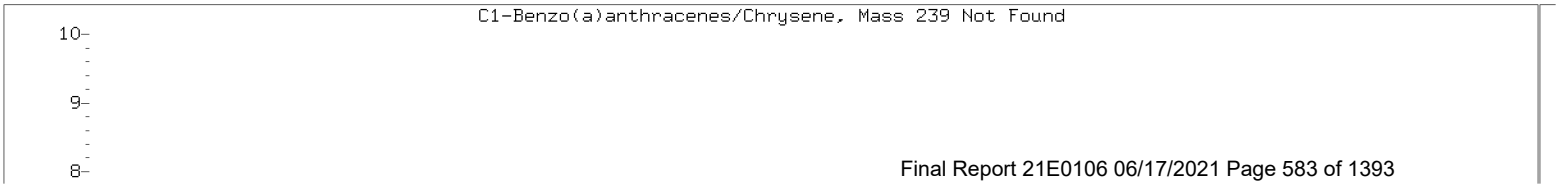

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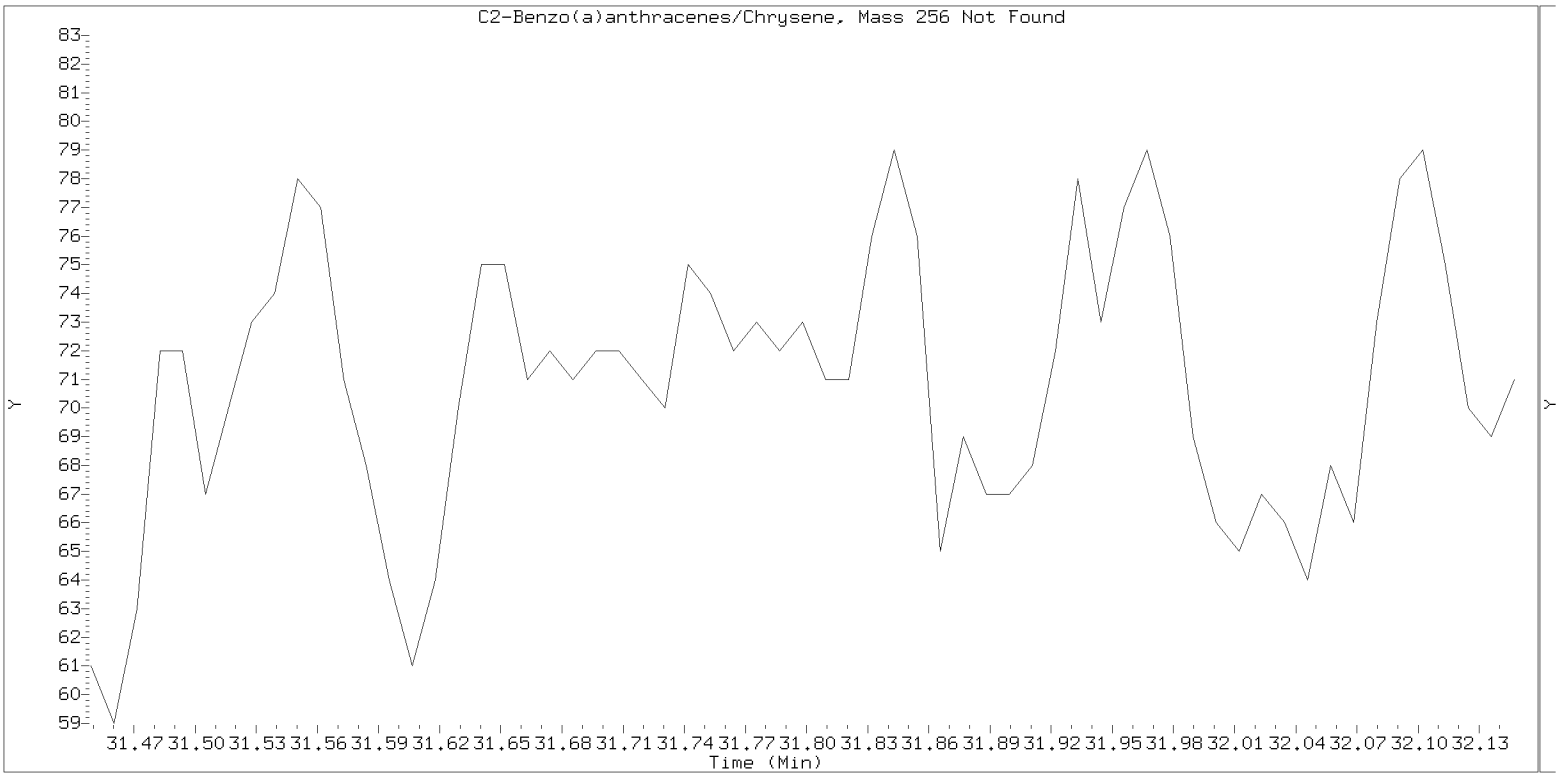

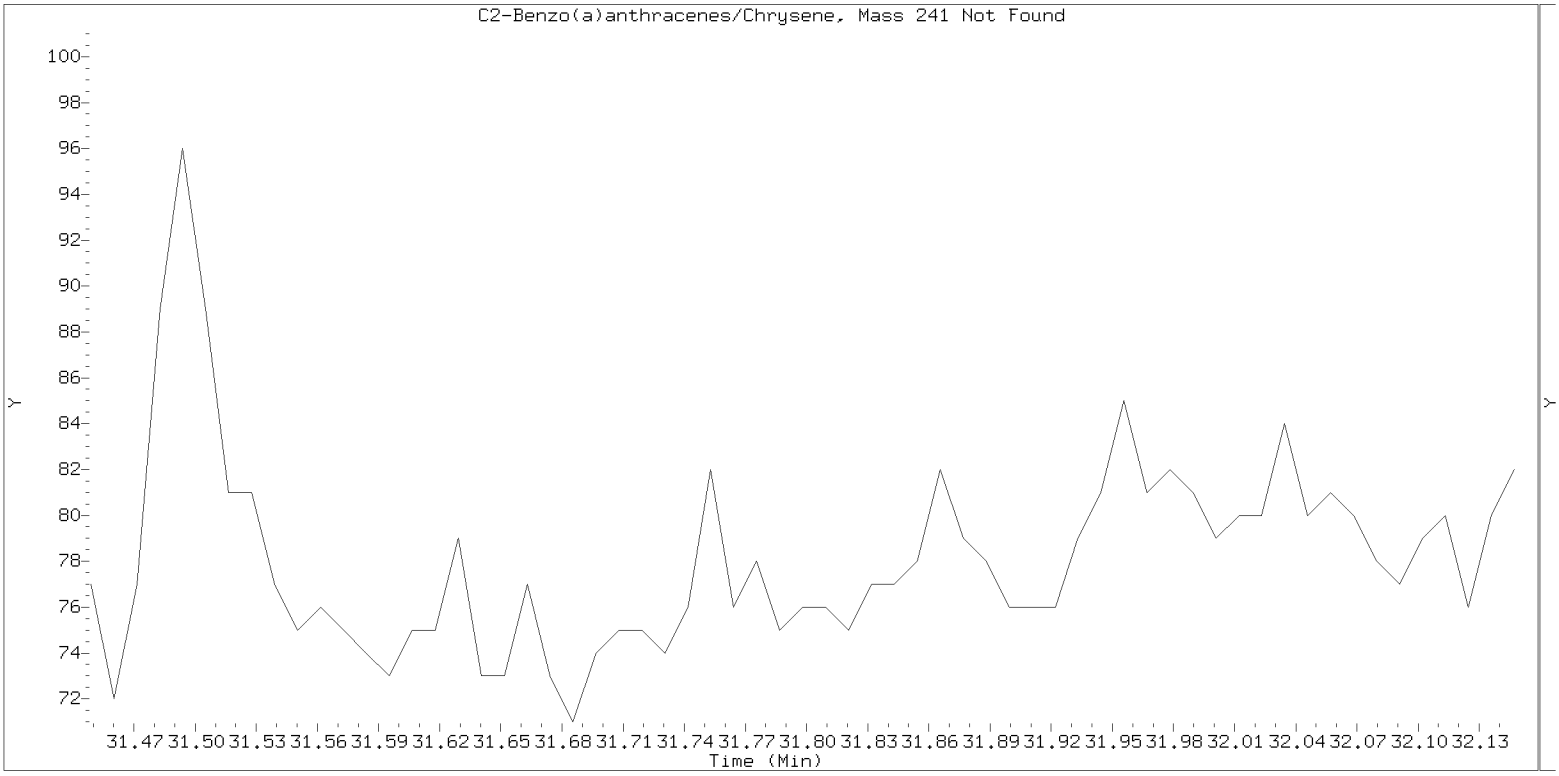

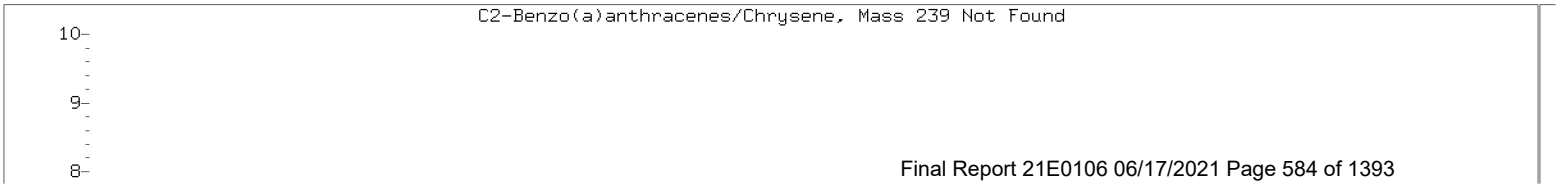

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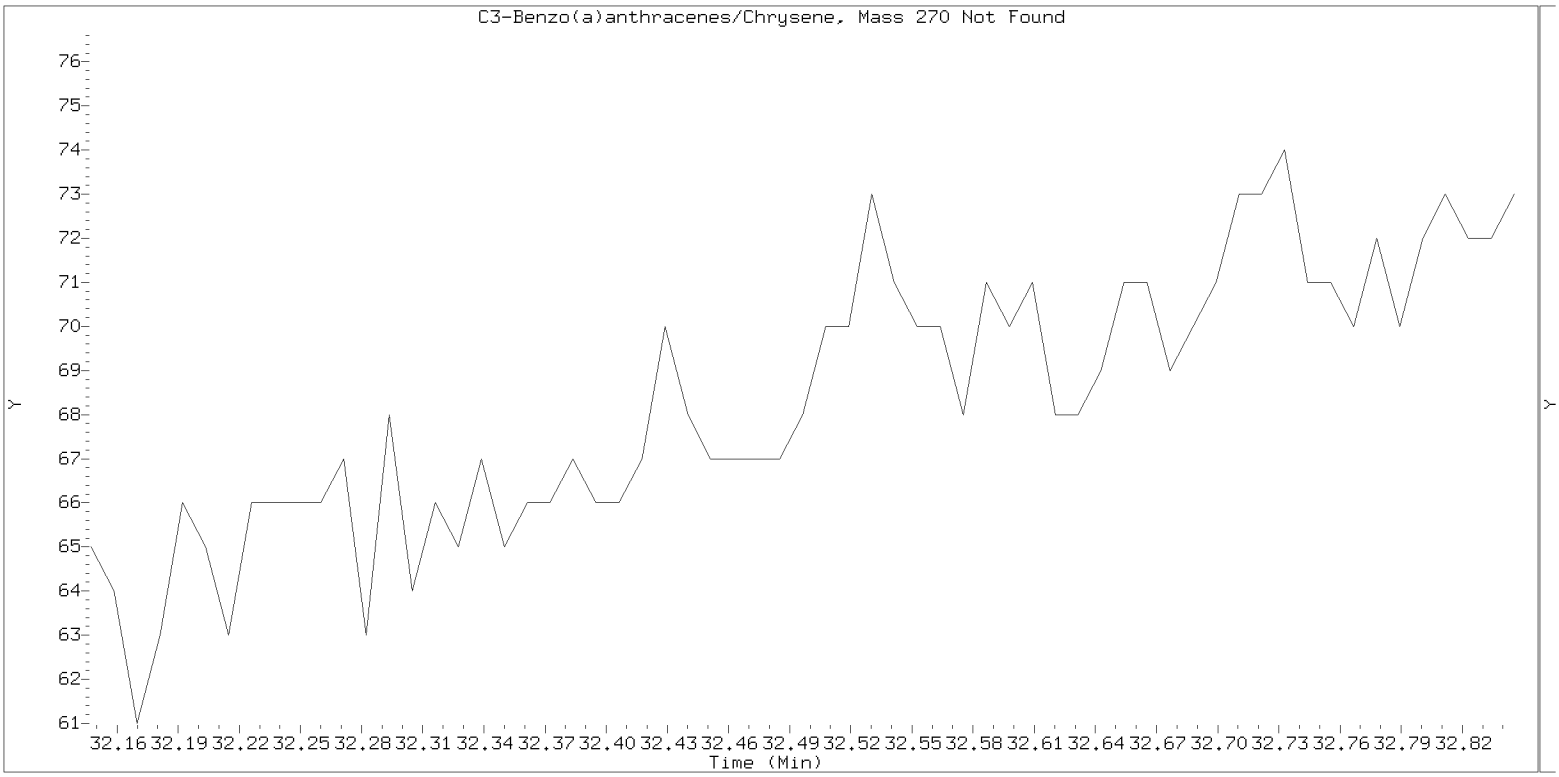

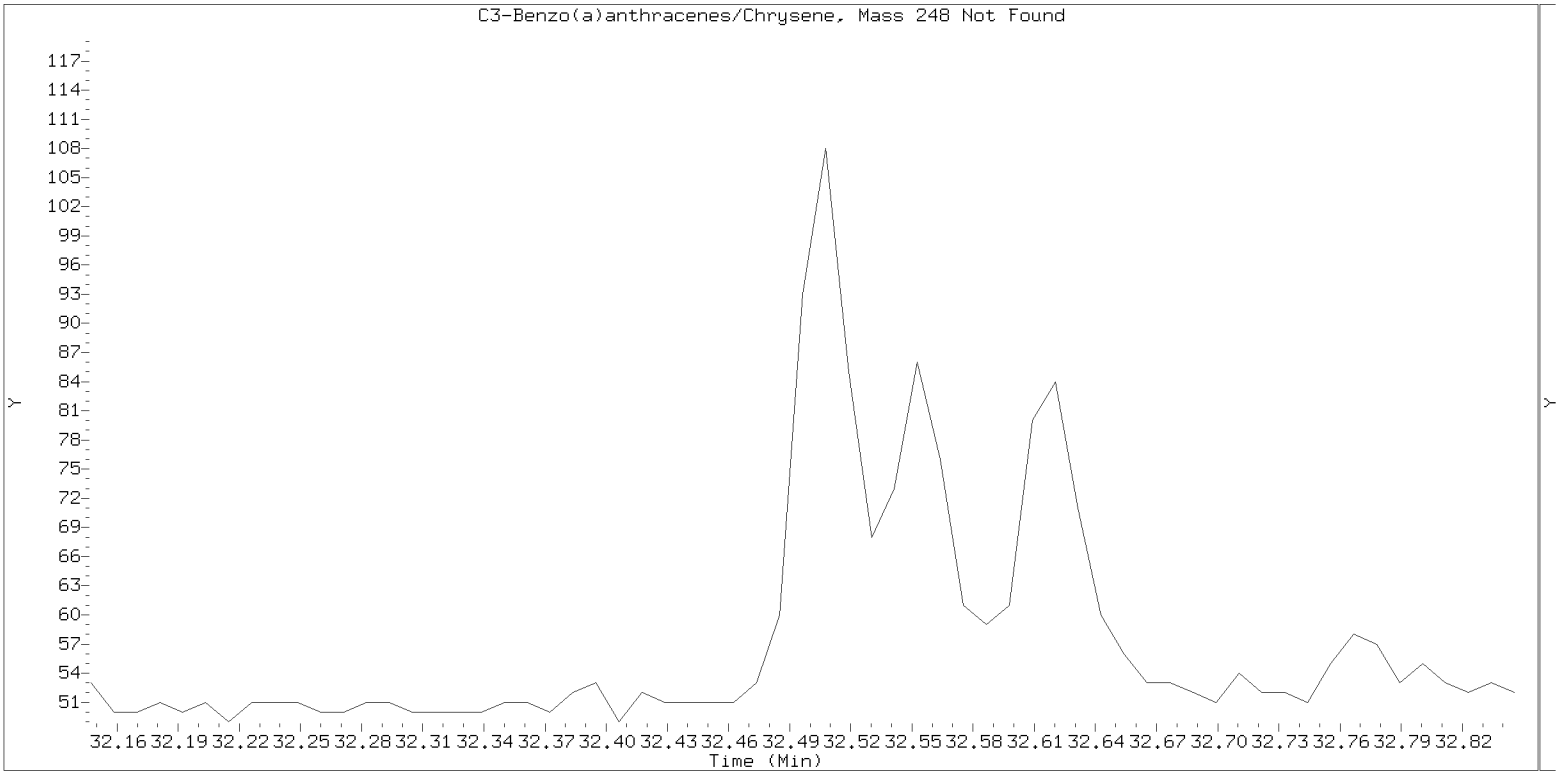

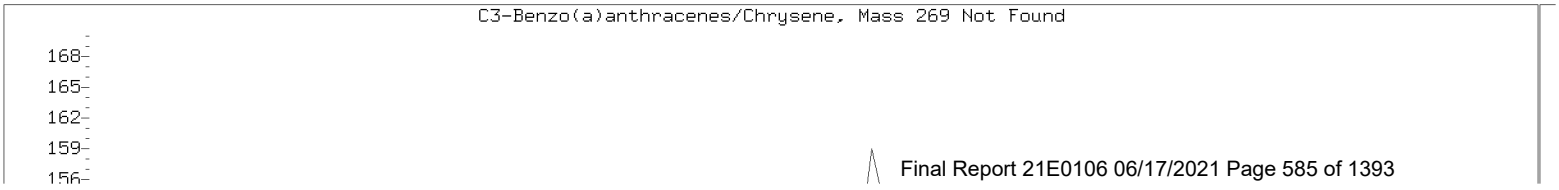

SIM ALKYL PNA RANGE ION WINDOWS - NT1421060418S.D

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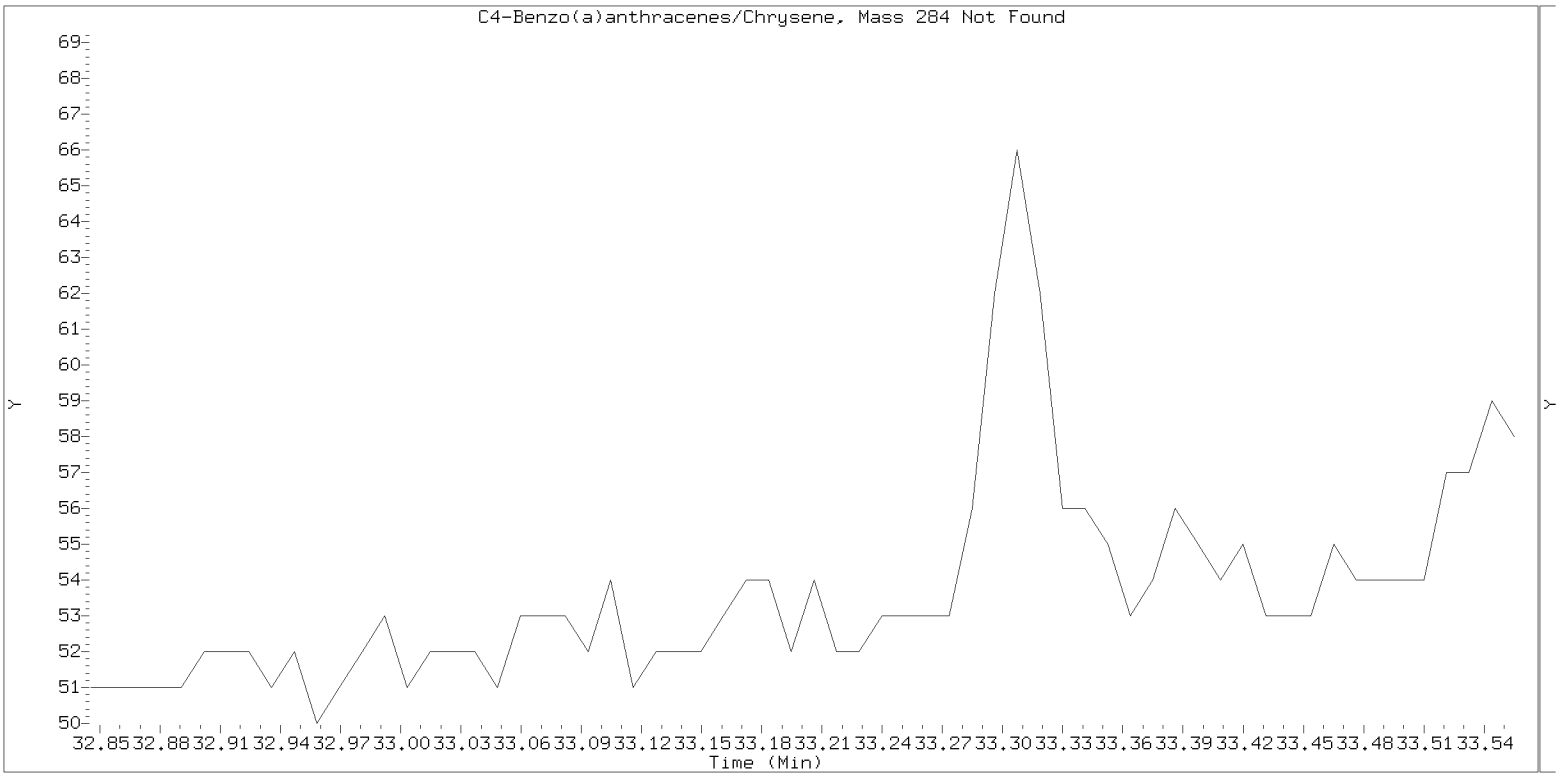

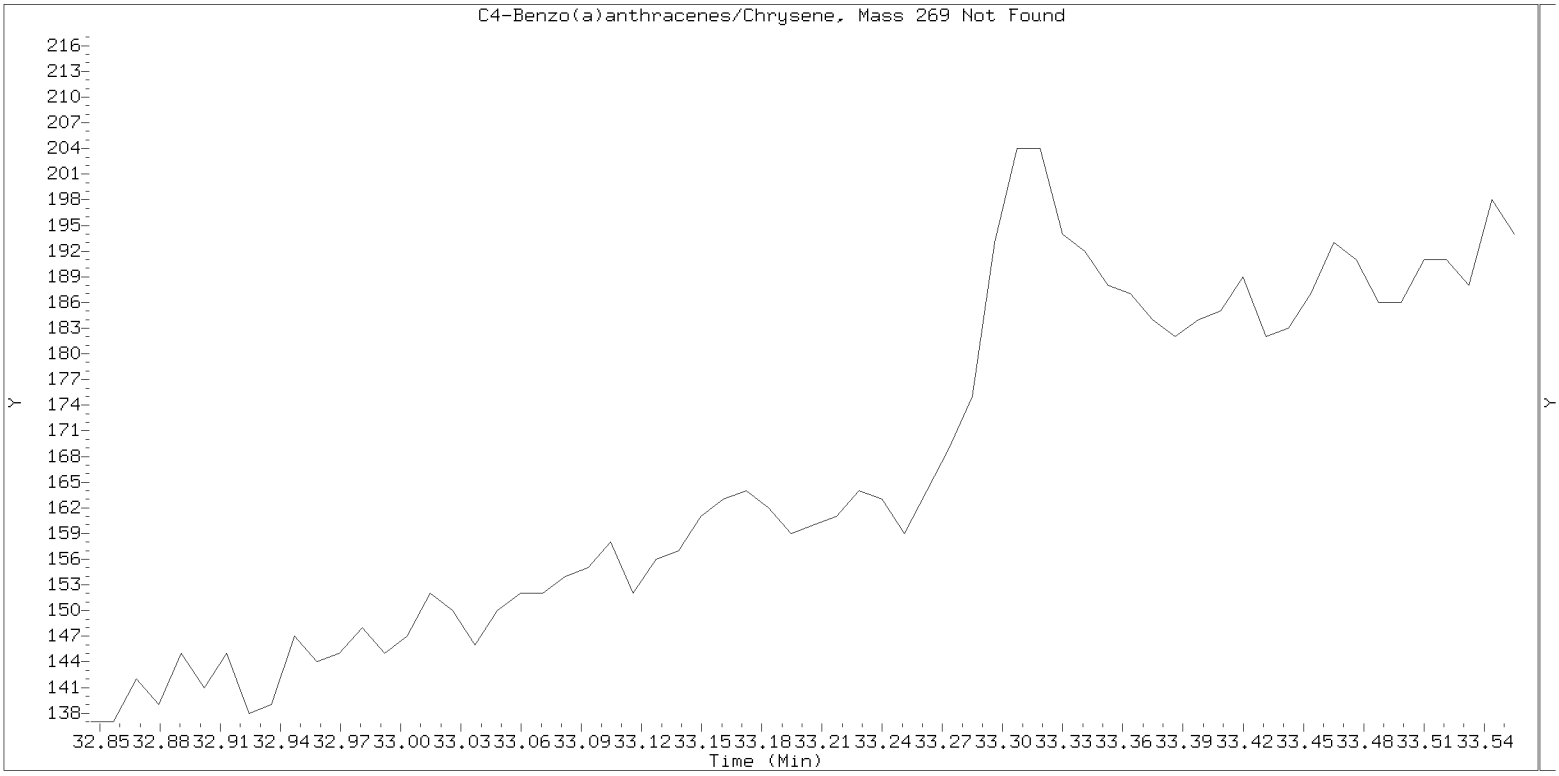

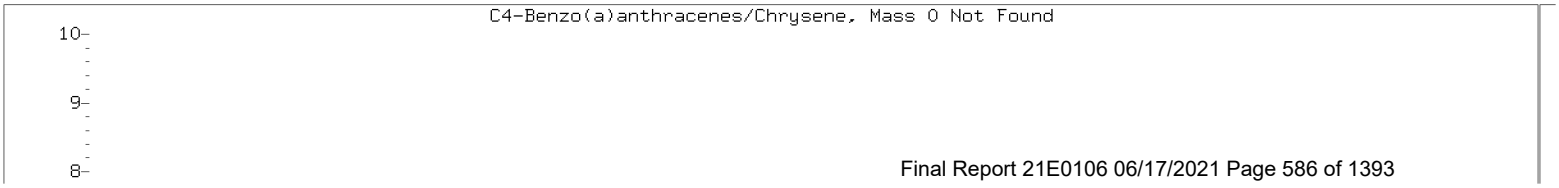

SIM ALKYL PNA RANGE ION WINDOWS - NT1421060418S.D

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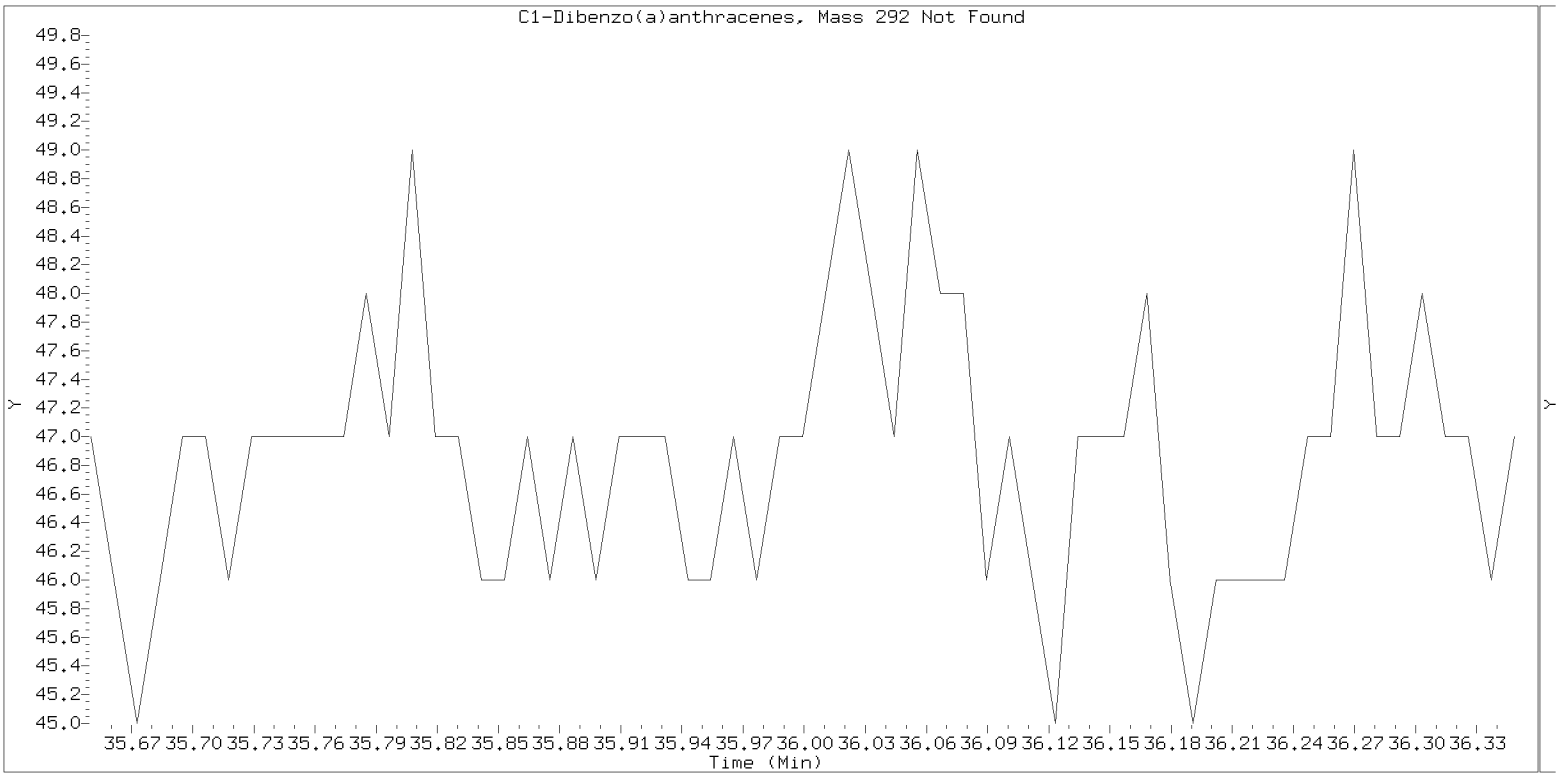

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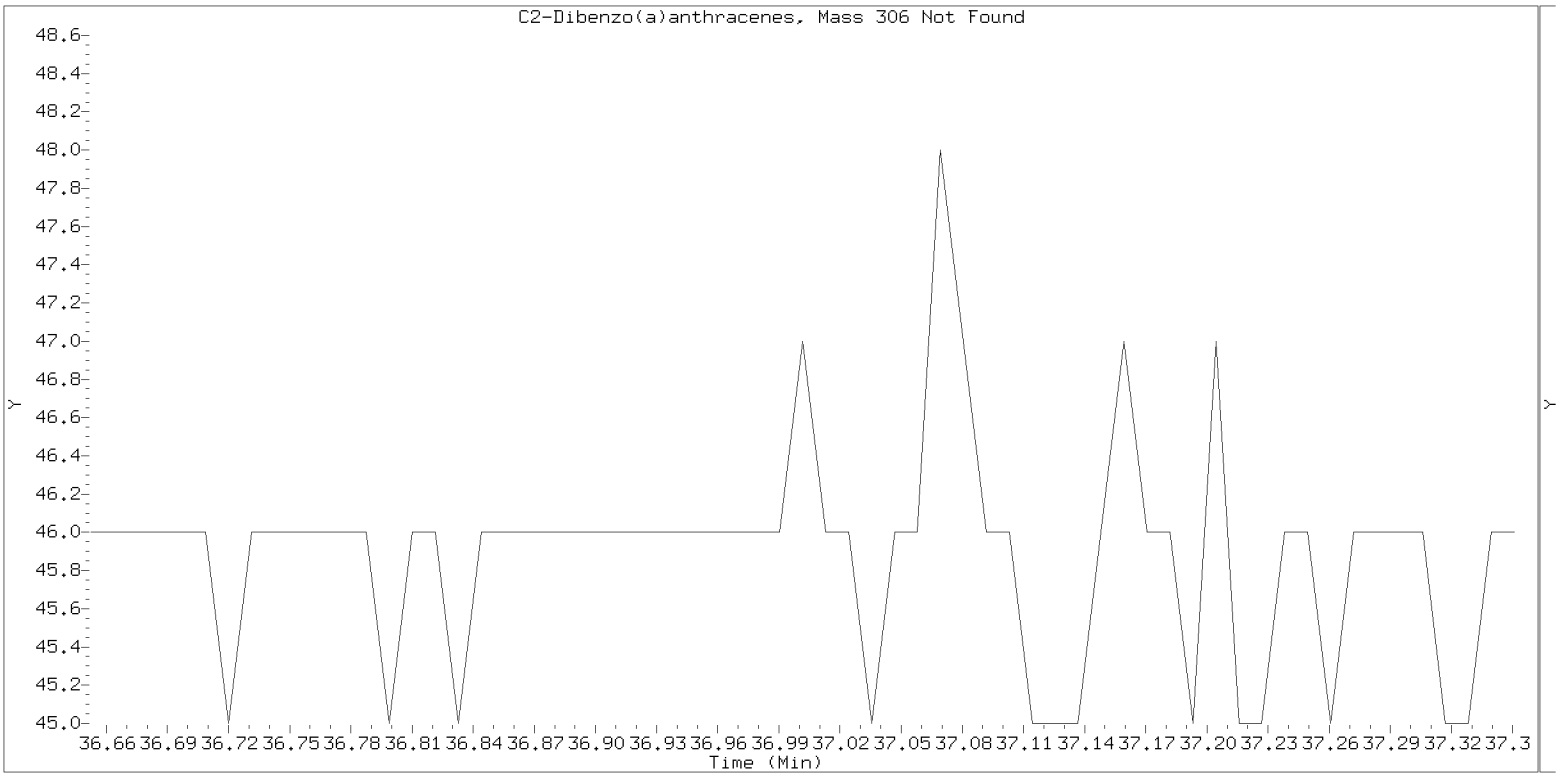

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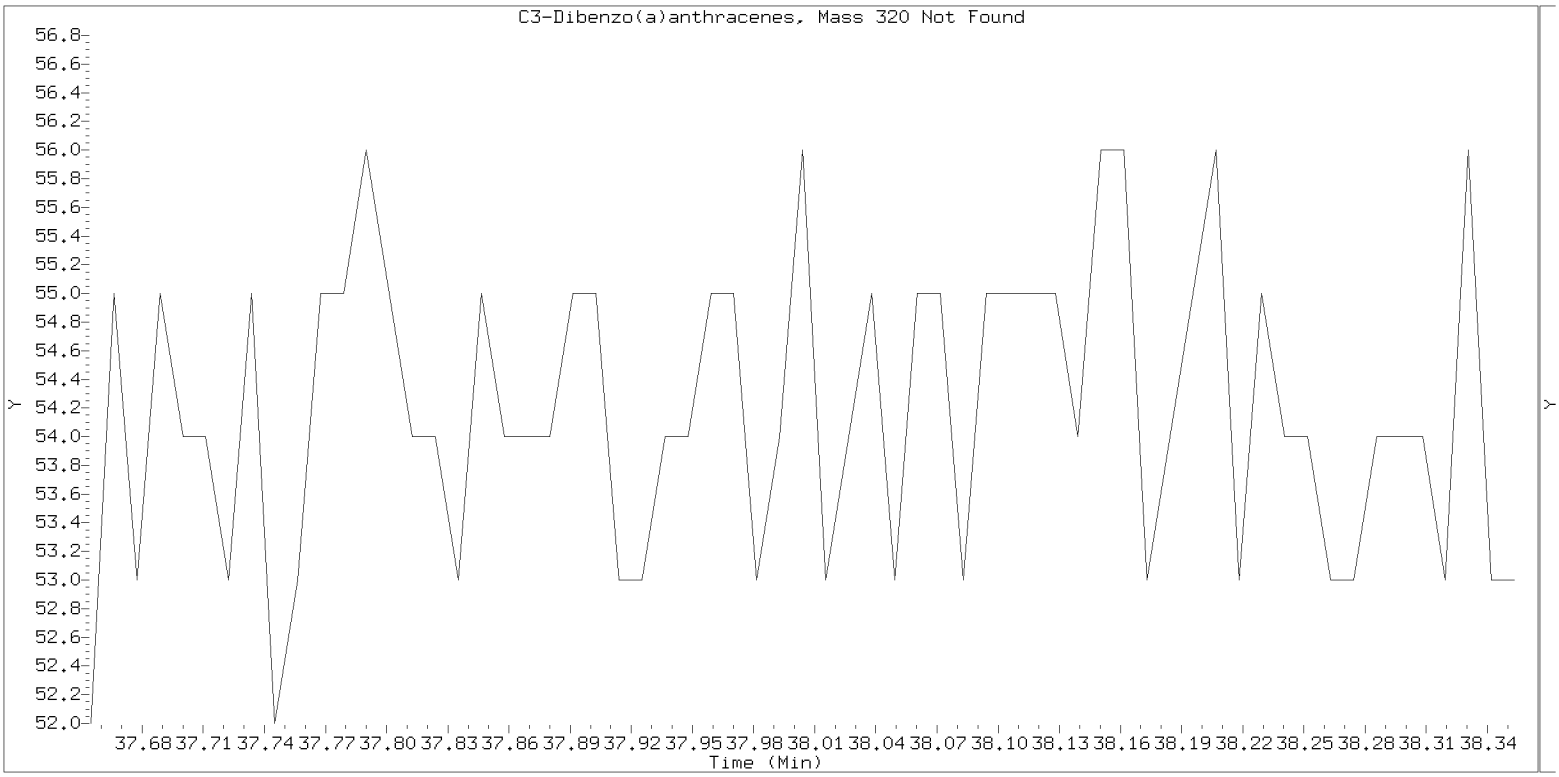


Analytical Resources, Incorporated
Analytical Chemists and Consultants

LCS / LCS DUPLICATE RECOVERY
EPA 8270E-SIM

Laboratory:	Analytical Resources, Inc.	SDG:	21E0106
Client:	Anchor QEA, LLC	Project:	Gasco Siltronic - US Moorings
Matrix:	Solid	Analyzed:	06/05/21 02:43
Batch:	BJE0383	Laboratory ID:	BJE0383-BS1
Preparation:	EPA 3546 (Microwave)	Sequence Name:	LCS
Initial/Final:	10 g / 0.5 mL		

COMPOUND	SPIKE ADDED (ug/kg wet)	LCS CONCENTRATION (ug/kg wet)	Q	LCS % REC. #		QC LIMITS REC.
trans-Decalin	150	46.3		30.8		30 - 160
cis-Decalin	150	46.1		30.7		30 - 160
Naphthalene	150	51.8	*	34.5	*	37 - 120
1-Methylnaphthalene	150	54.1		36.1		30 - 160
2-Methylnaphthalene	150	53.0	*	35.3	*	37 - 120
Biphenyl	150	55.2		36.8		30 - 160
2,6-Dimethylnaphthalene	150	56.4		37.6		30 - 160
Acenaphthylene	150	54.0		36.0		35 - 120
Acenaphthene	150	61.7		41.1		39 - 120
Dibenzofuran	150	61.0		40.6		39 - 120
2,3,5-Trimethylnaphthalene	150	63.7		42.5		30 - 160
Fluorene	150	65.0		43.3		42 - 120
Benzo(b)thiophene	150	49.9		33.3		30 - 160
Phenanthrene	150	79.0		52.6		47 - 120
Anthracene	150	75.9		50.6		41 - 120
1-Methylphenanthrene	150	89.6		59.8		30 - 160
Fluoranthene	150	101		67.5		52 - 120
Dibenzothiophene	150	76.1		50.8		30 - 160
Pyrene	150	106		71.0		47 - 120
Benzo(a)anthracene	150	95.9		63.9		47 - 120
Chrysene	150	97.6		65.1		51 - 120
Benzo(b)fluoranthene	150	65.3		43.5		35 - 127
Benzo(j)fluoranthene	150	66.4		44.3		40 - 120
Benzo(k)fluoranthene	150	82.4		54.9		37 - 129
Benzo(e)pyrene	150	84.6		56.4		30 - 160
Benzo(a)pyrene	150	83.9		55.9		44 - 120
Indeno(1,2,3-cd)pyrene	150	46.6	*	31.0	*	41 - 120
Dibenzo(a,h)anthracene	150	12.0	*	7.99	*	42 - 120
Benzo(g,h,i)perylene	150	76.6		51.1		37 - 120
Perylene	150	75.9		50.6		30 - 160
Benzo(b)naphtho(2,1-d)thiophene	150	89.2		59.5		30 - 160

* Indicates values outside of QC limits

Data File: \\target\share\chem3\nt14.i\20210604A.b\NT1421060419.D

Date : 05-JUN-2021 02:43

Client ID:

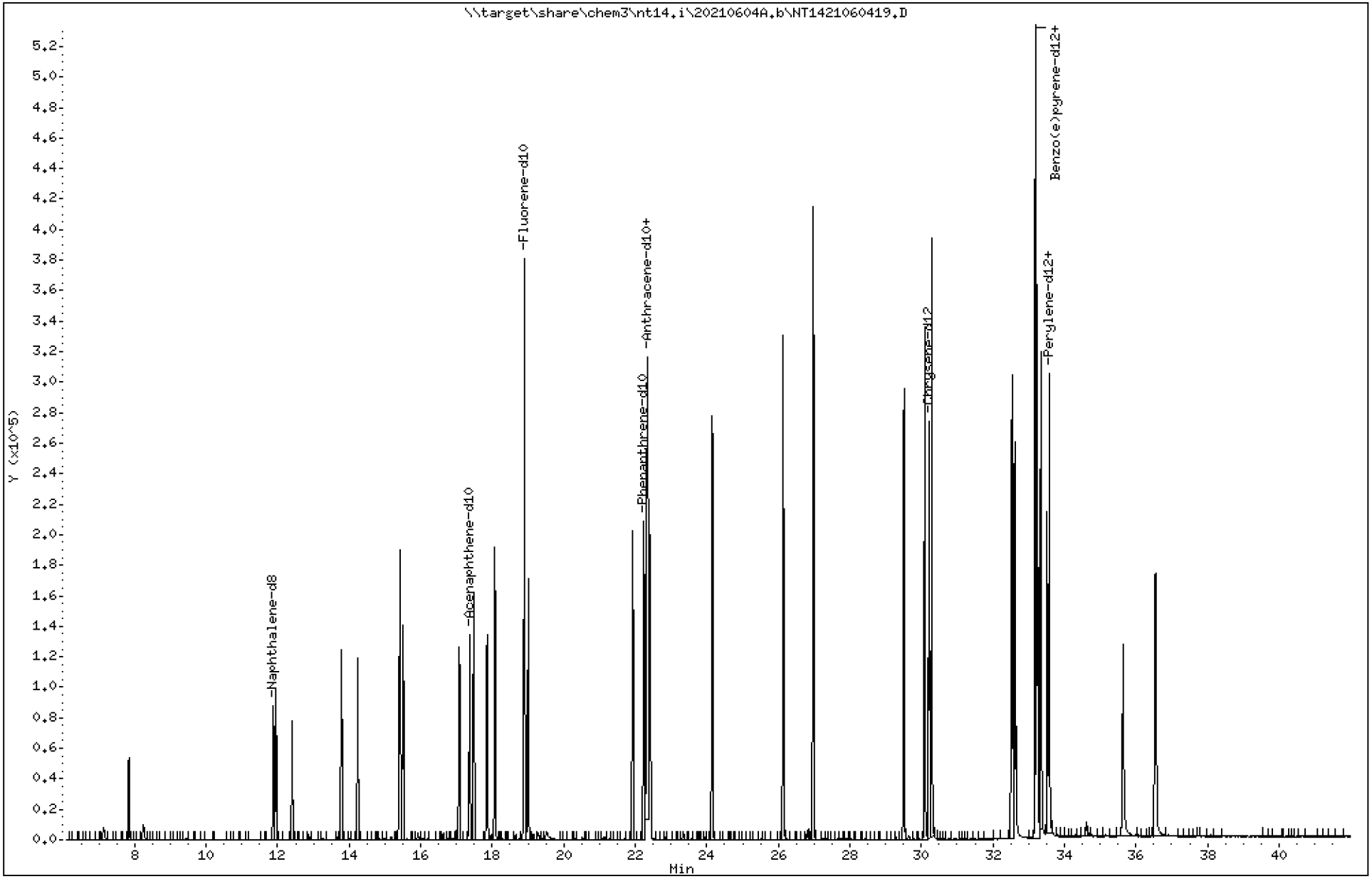
Instrument: nt14.i

Sample Info: BJE0383-BS1

Operator: VTS

Column phase: Rxi-17Sil MS

Column diameter: 0.25



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Date : 05-JUN-2021 02:43

Client ID:

Instrument: nt14.i

Sample Info: BJE0383-BS1

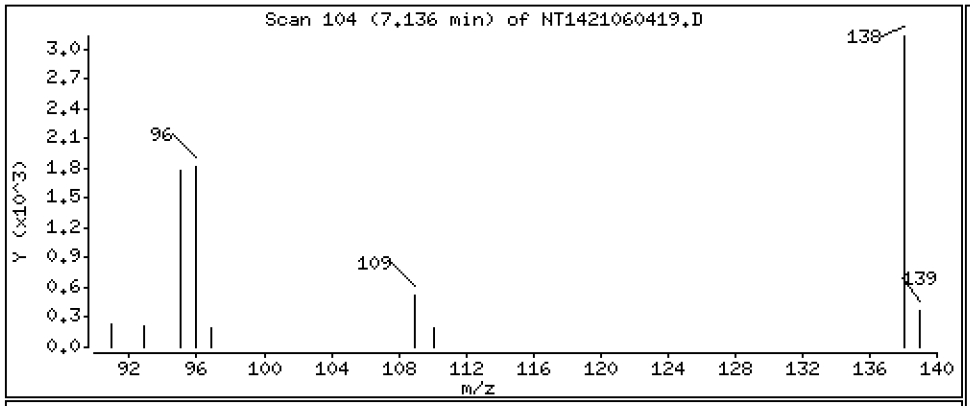
Operator: VTS

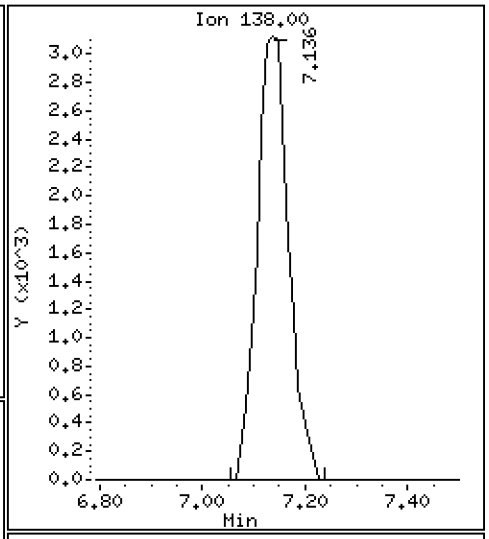
Column phase: Rxi-17Sil MS

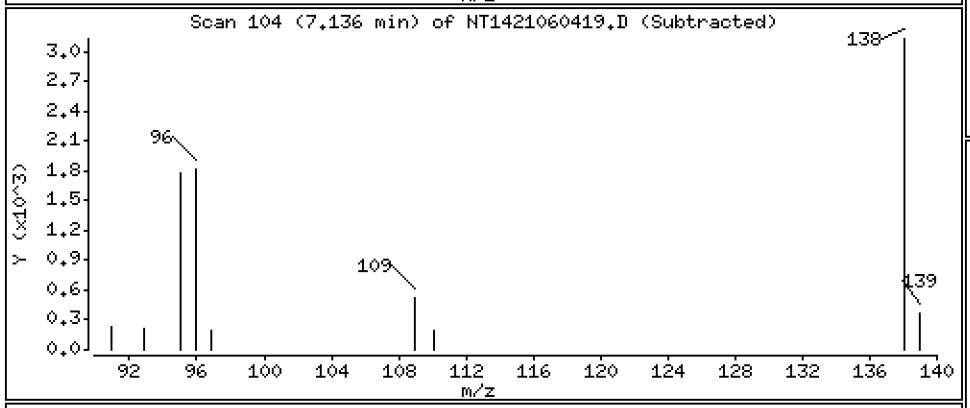
Column diameter: 0.25

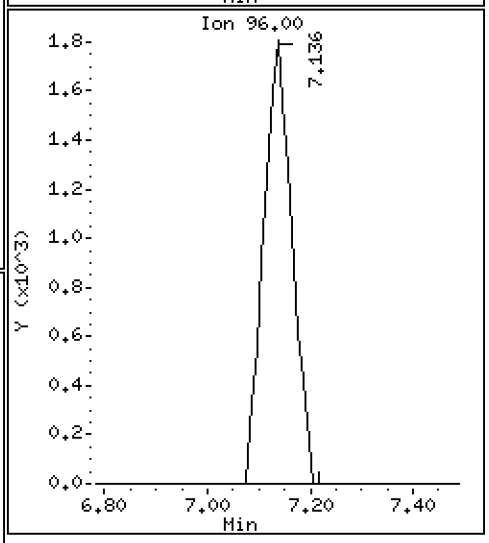
1 trans-Decalin

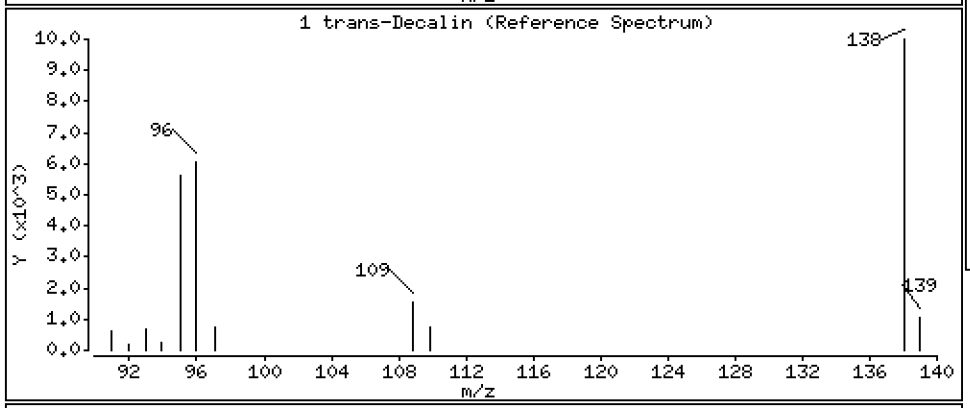
Concentration: 0.9254 ug/mL

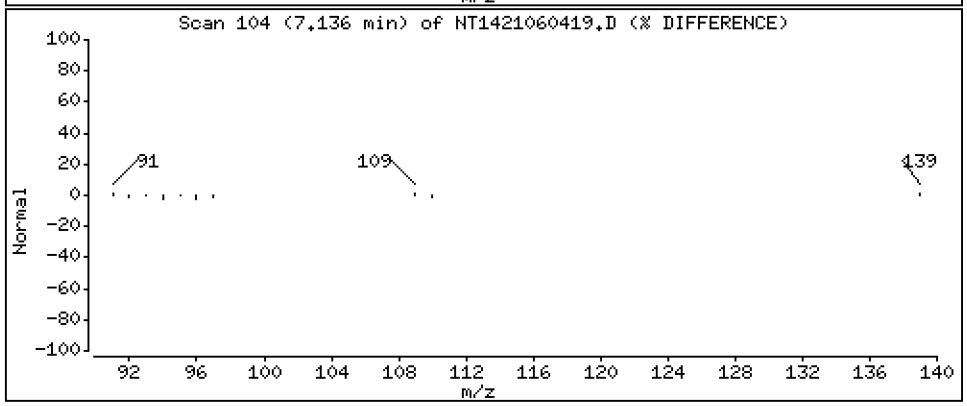












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Date : 05-JUN-2021 02:43

Client ID:

Instrument: nt14.i

Sample Info: BJE0383-BS1

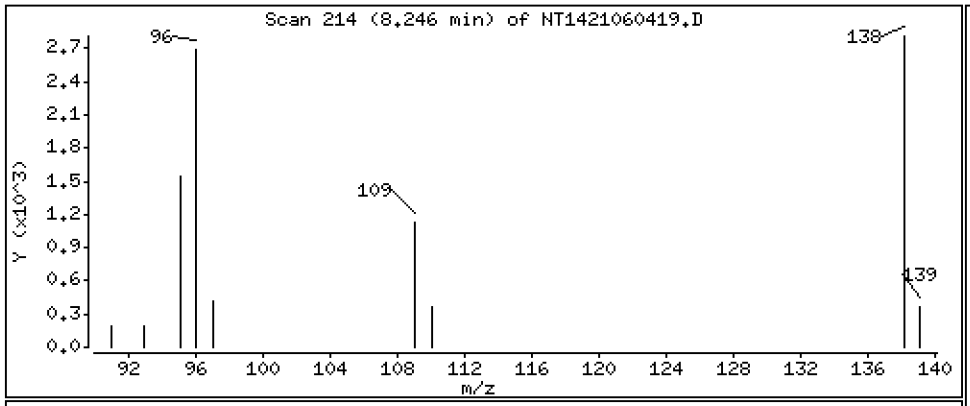
Operator: VTS

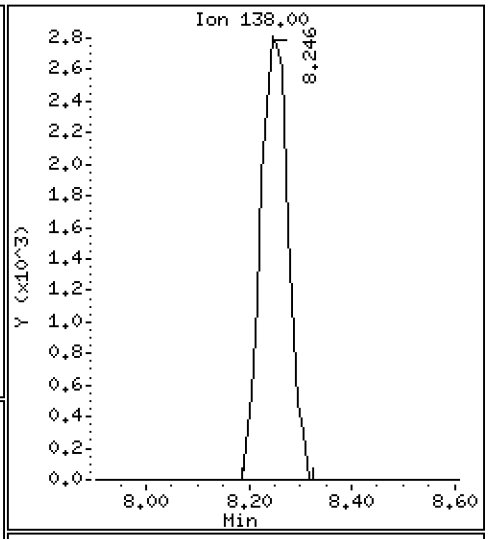
Column phase: Rxi-17Sil MS

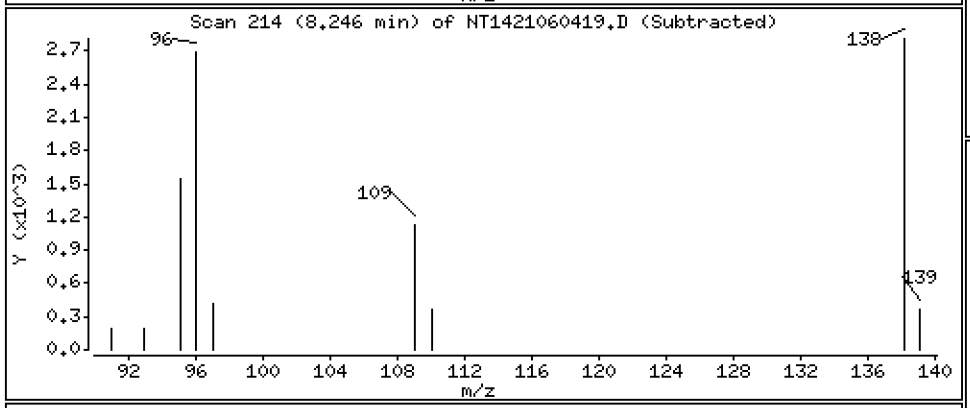
Column diameter: 0.25

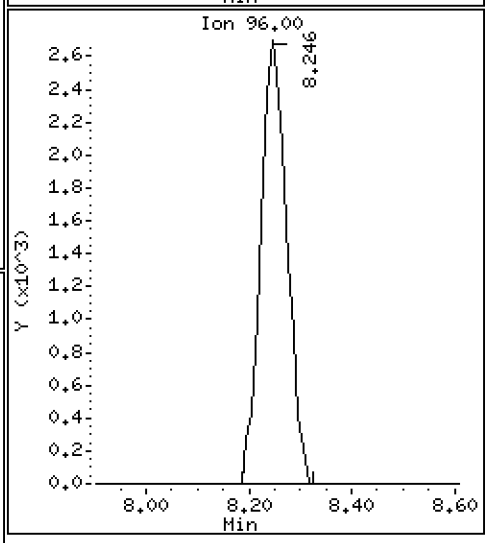
2 cis-Decalin

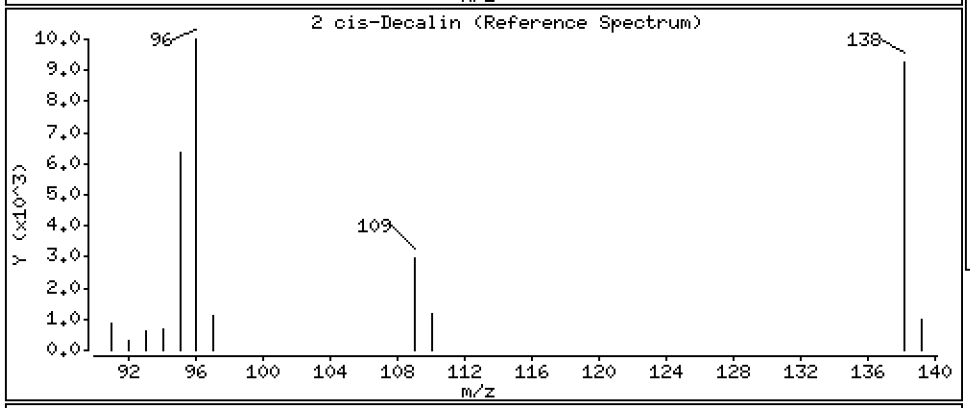
Concentration: 0.9219 ug/mL

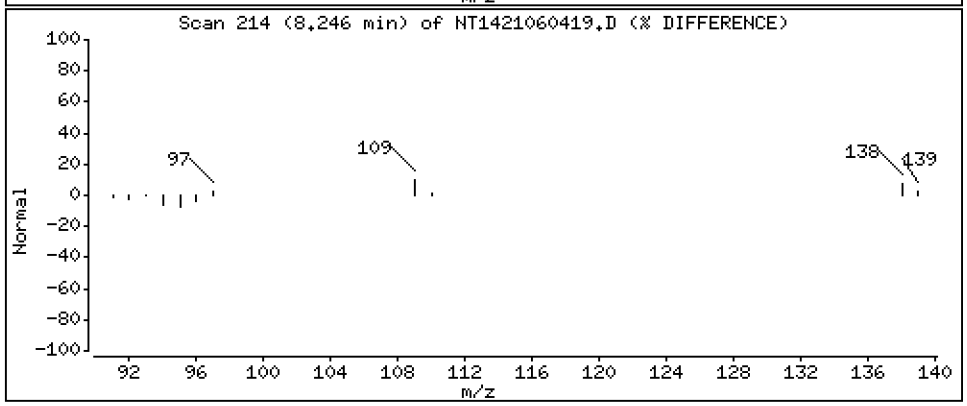












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Date : 05-JUN-2021 02:43

Client ID:

Instrument: nt14.i

Sample Info: BJE0383-BS1

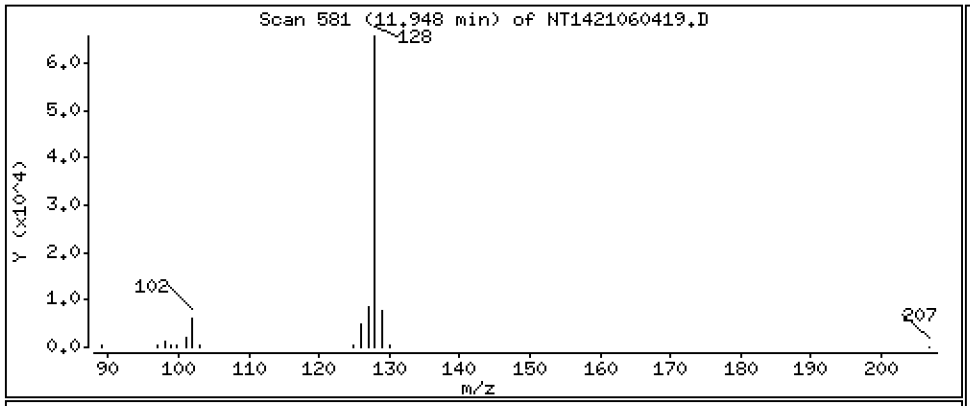
Operator: VTS

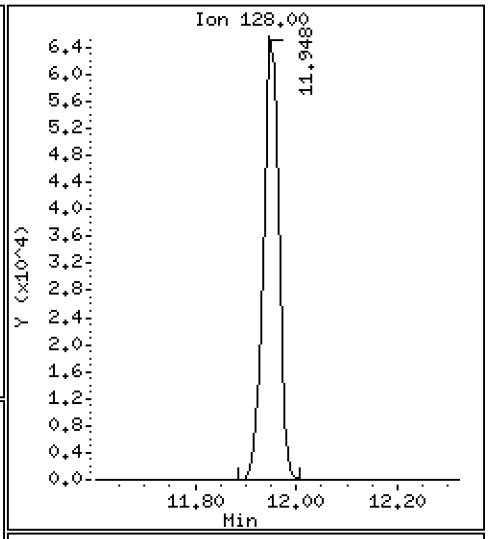
Column phase: Rxi-17Sil MS

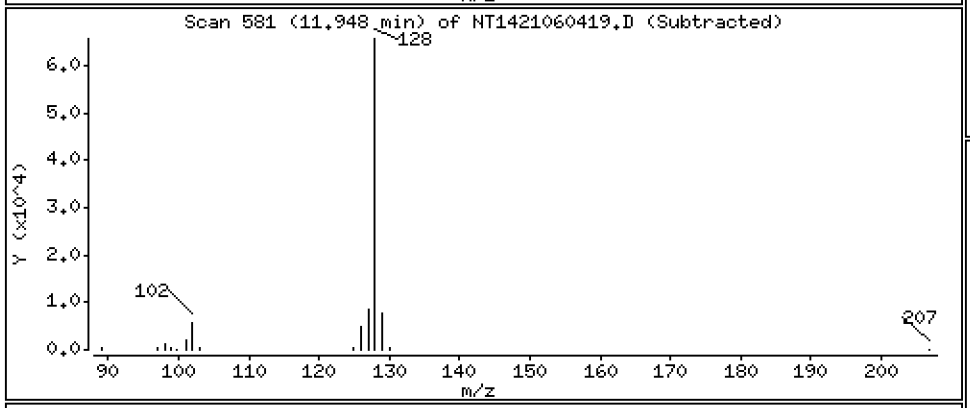
Column diameter: 0.25

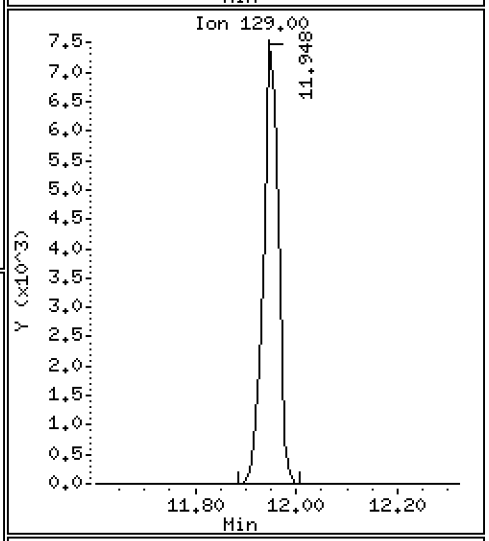
7 Naphthalene

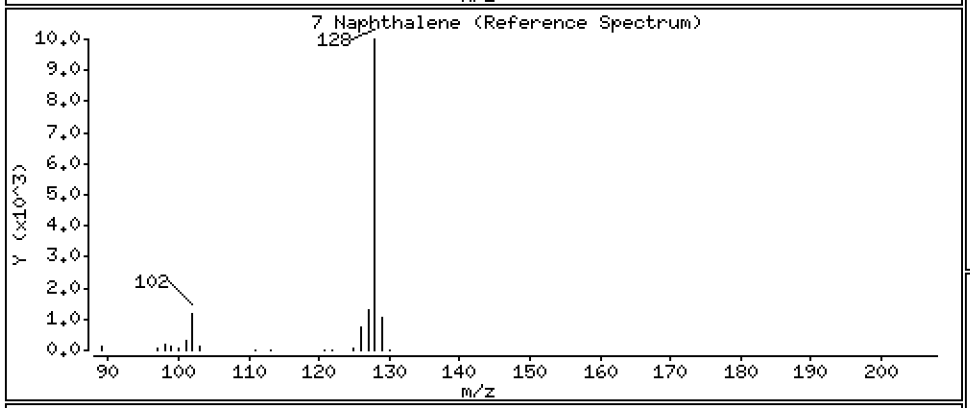
Concentration: 1.036 ug/mL

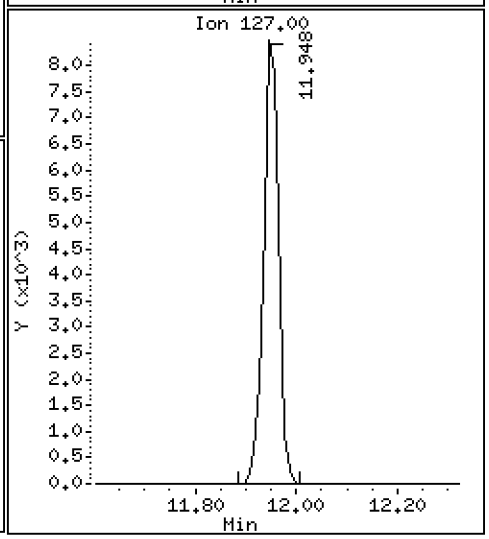


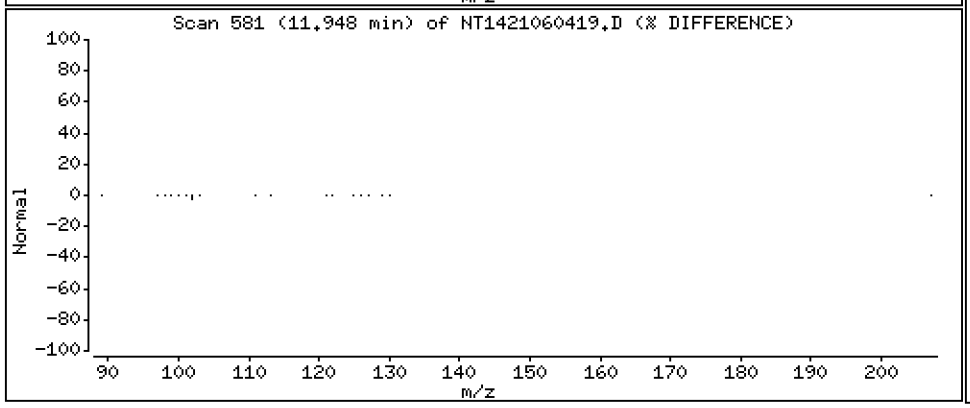












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Date : 05-JUN-2021 02:43

Client ID:

Instrument: nt14.i

Sample Info: BJE0383-BS1

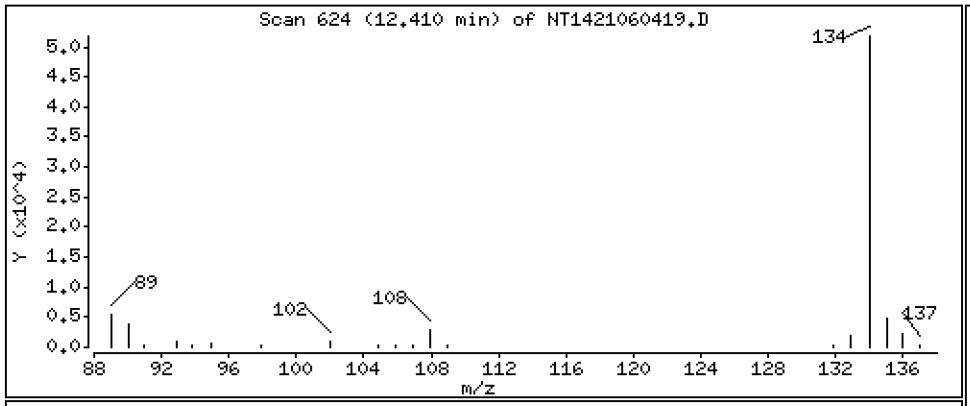
Operator: VTS

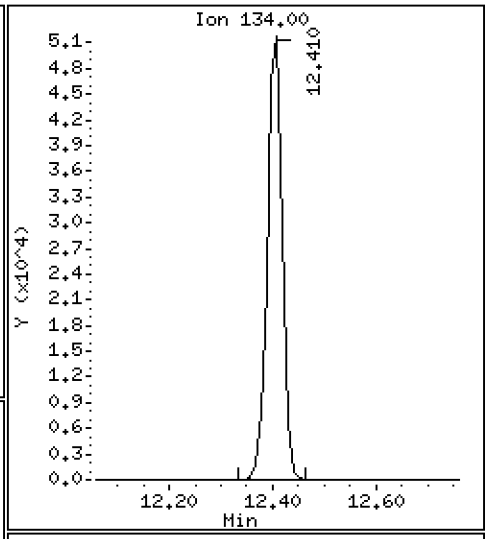
Column phase: Rxi-17Sil MS

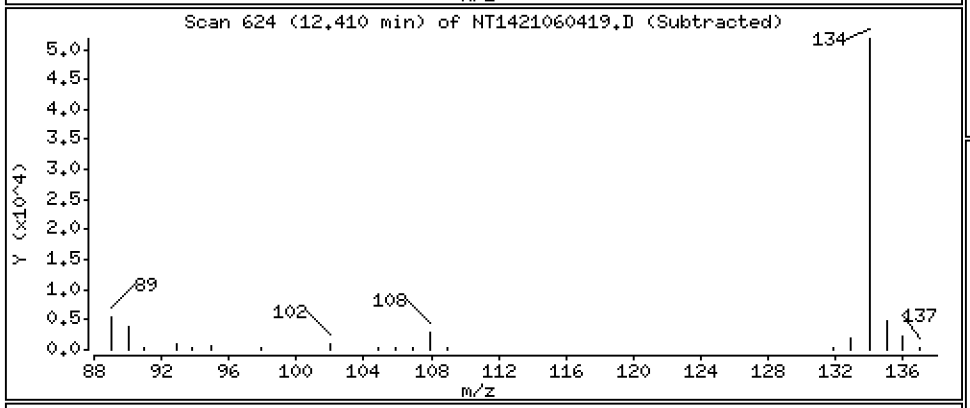
Column diameter: 0.25

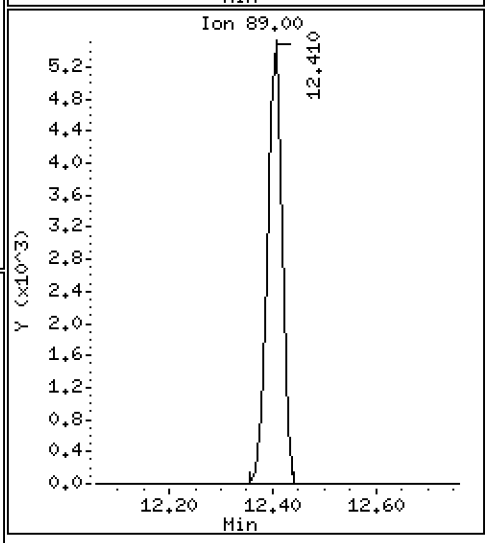
12 Benzo(b)thiophene

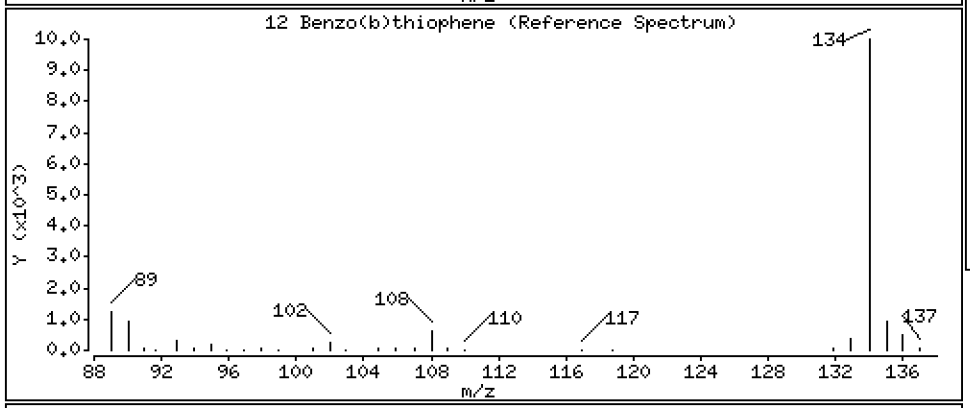
Concentration: 0.9989 ug/mL

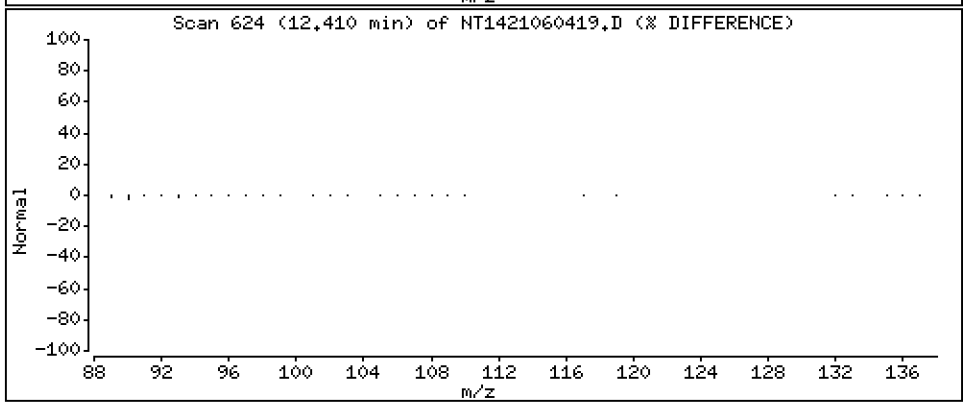












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Date : 05-JUN-2021 02:43

Client ID:

Instrument: nt14.i

Sample Info: BJE0383-BS1

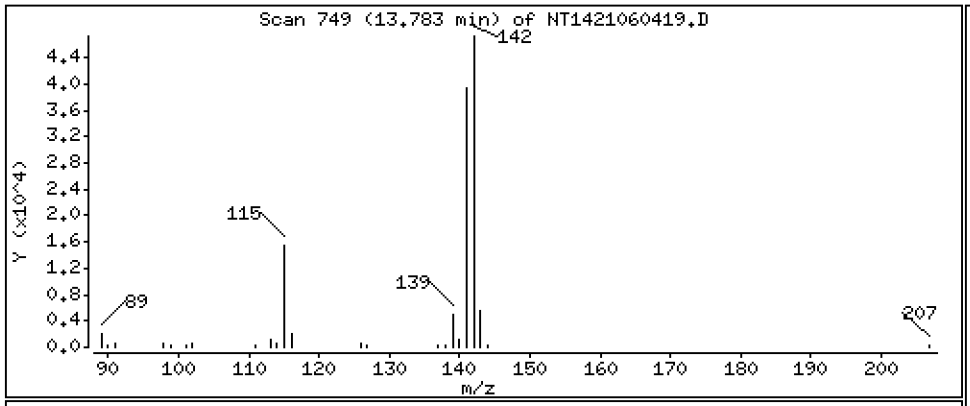
Operator: VTS

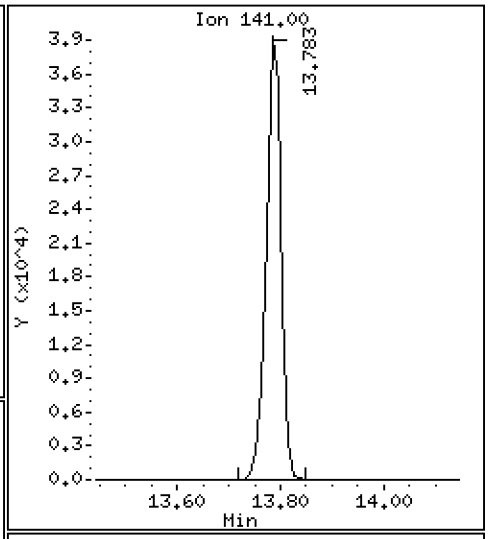
Column phase: Rxi-17Sil MS

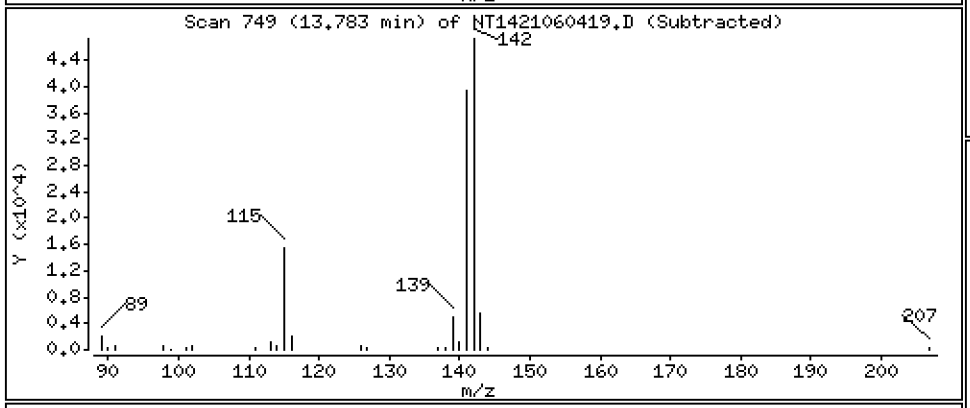
Column diameter: 0.25

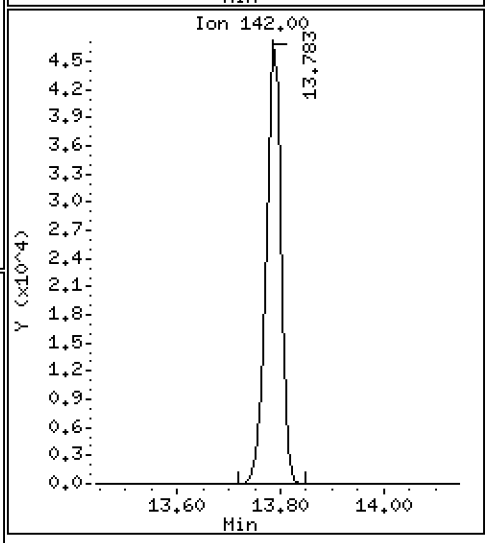
16 2-Methylnaphthalene

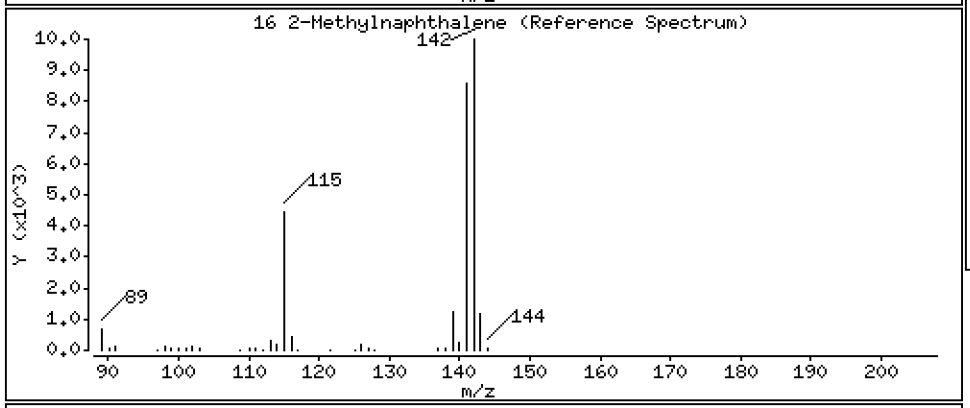
Concentration: 1.060 ug/mL

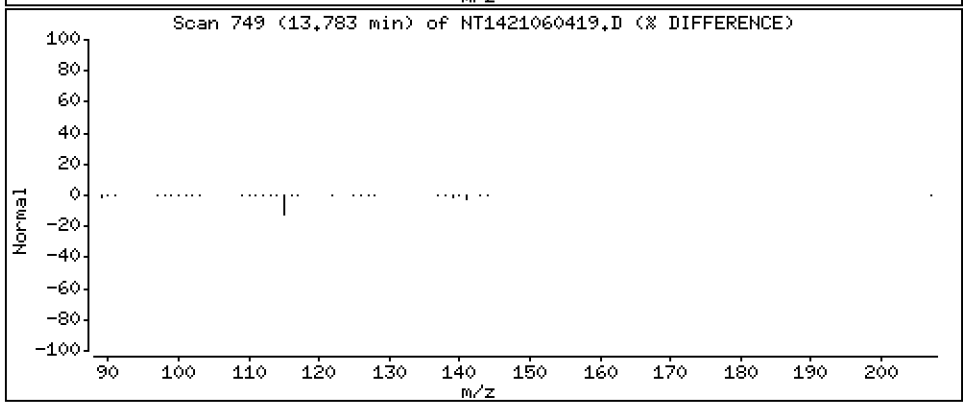












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Date : 05-JUN-2021 02:43

Client ID:

Instrument: nt14.i

Sample Info: BJE0383-BS1

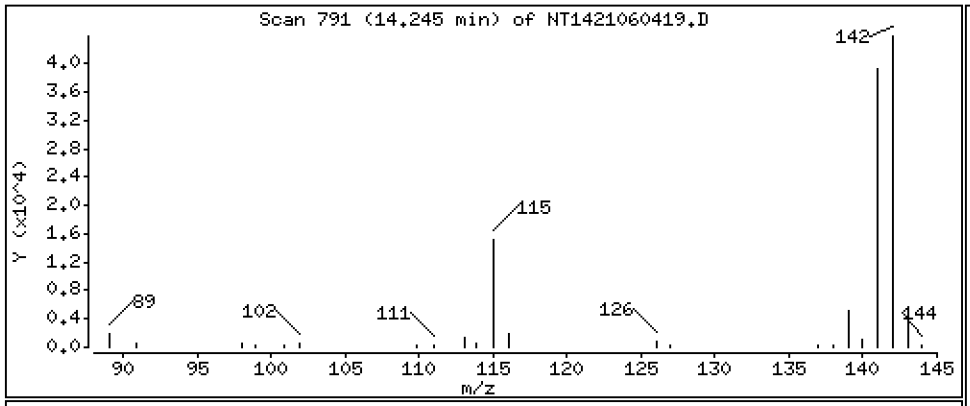
Operator: VTS

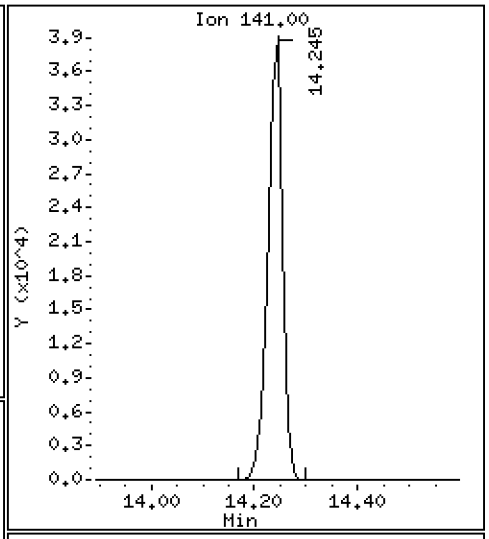
Column phase: Rxi-17Sil MS

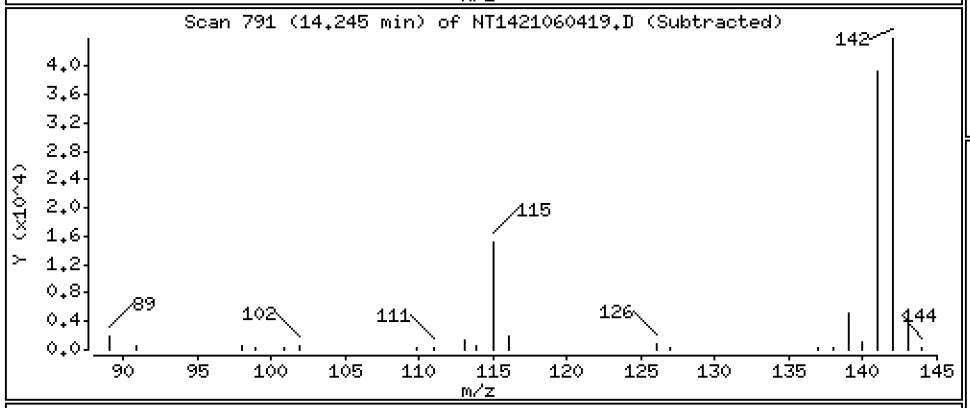
Column diameter: 0.25

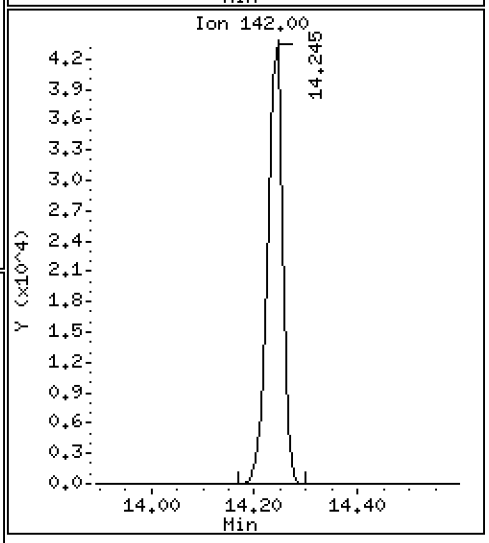
17 1-methylnaphthalene

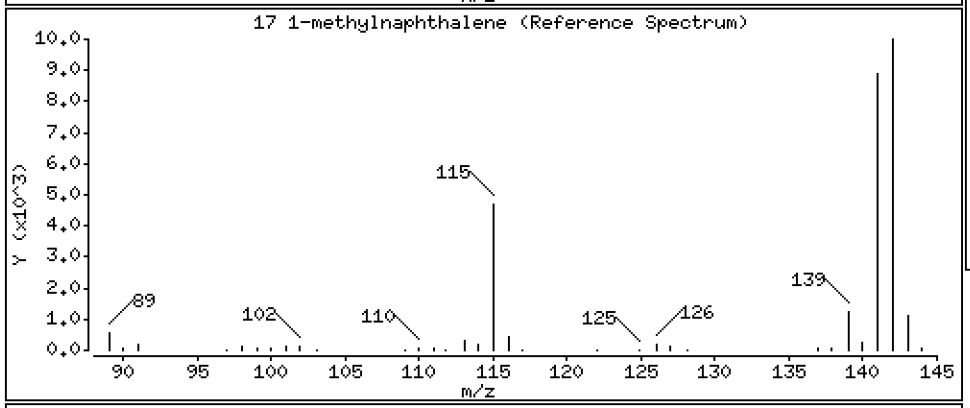
Concentration: 1.083 ug/mL

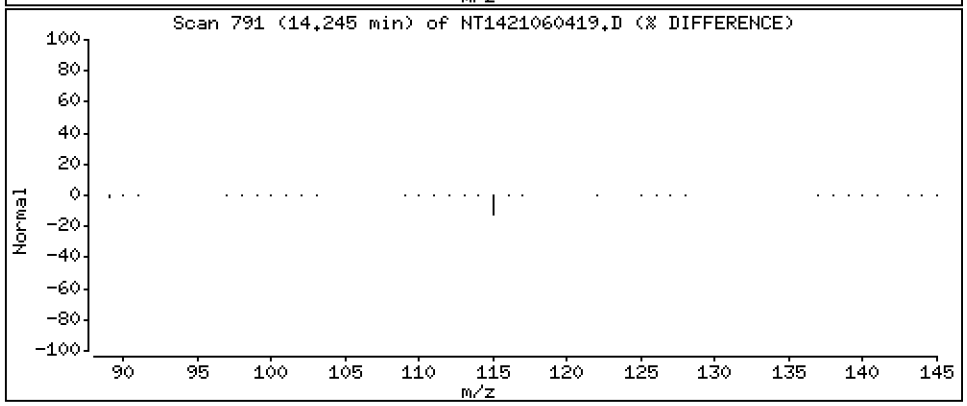












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Date : 05-JUN-2021 02:43

Client ID:

Instrument: nt14.i

Sample Info: BJE0383-BS1

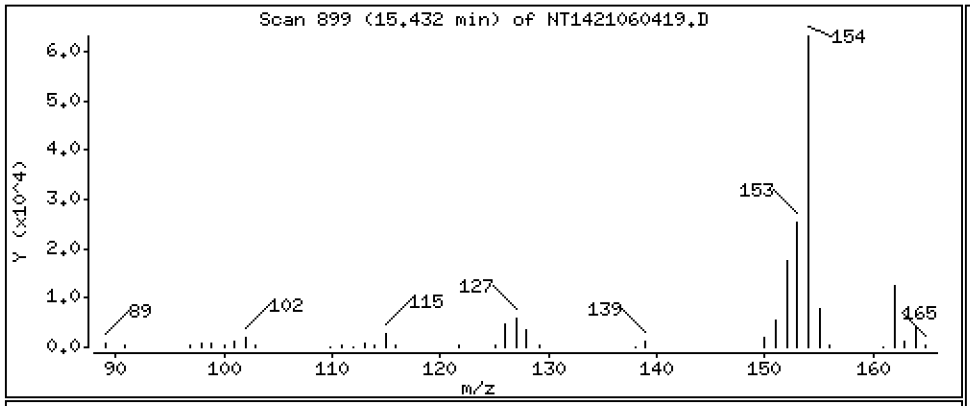
Operator: VTS

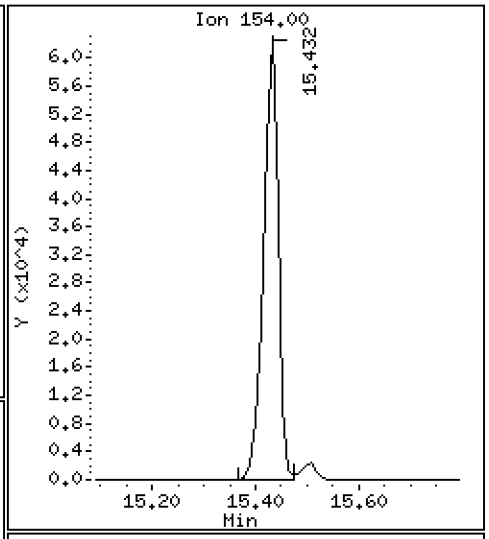
Column phase: Rxi-17Sil MS

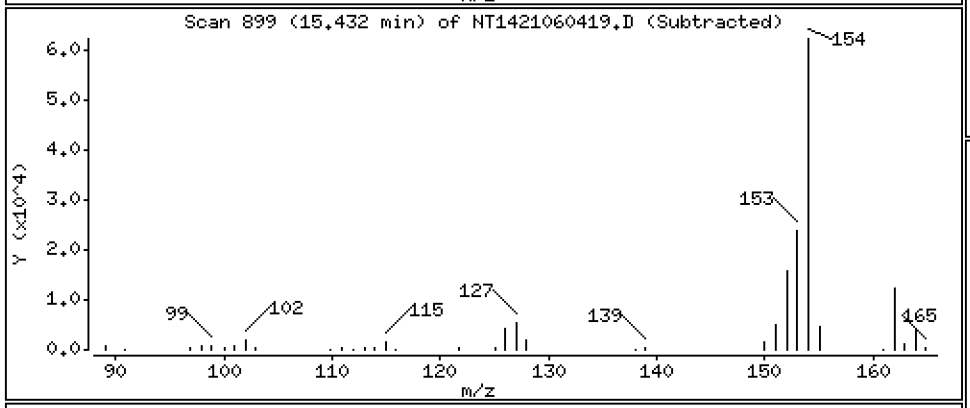
Column diameter: 0.25

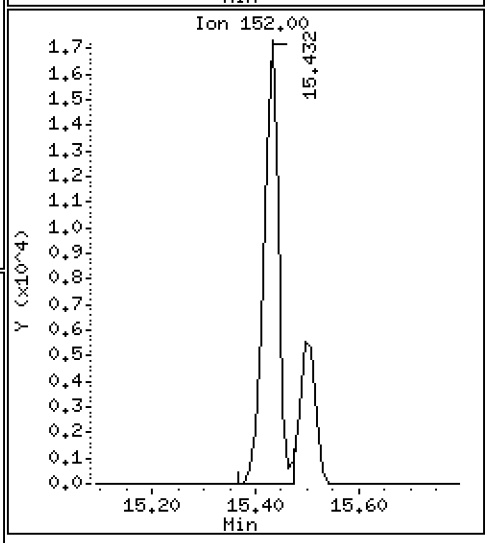
18 Biphenyl

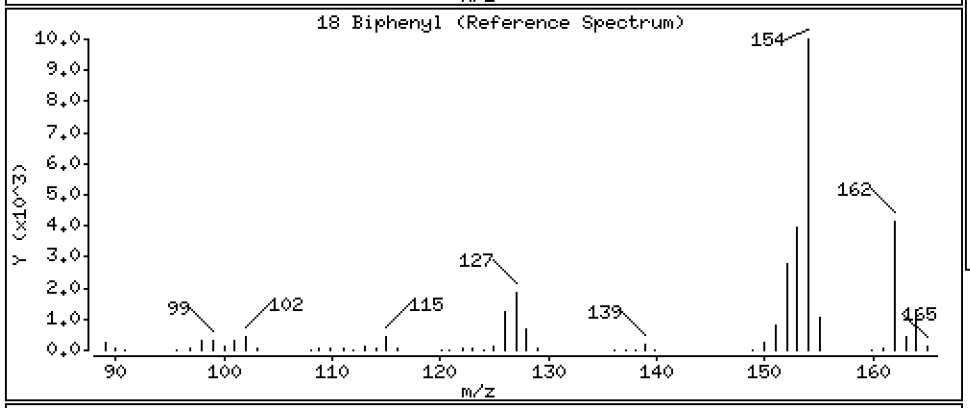
Concentration: 1.105 ug/mL

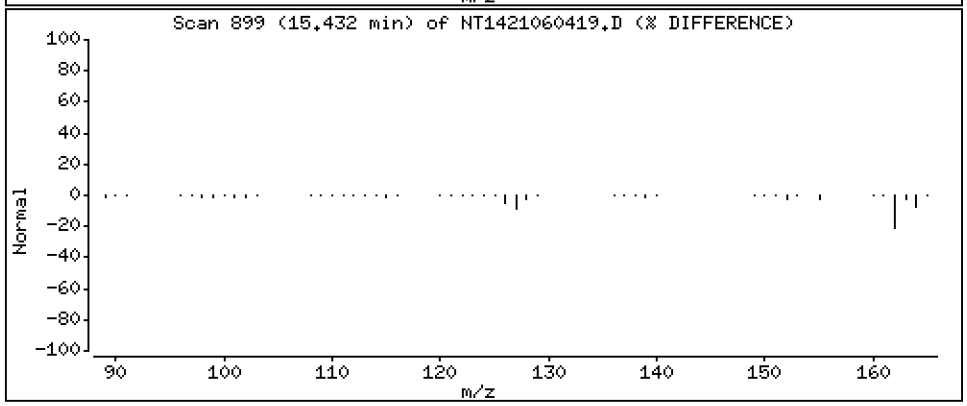












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Date : 05-JUN-2021 02:43

Client ID:

Instrument: nt14.i

Sample Info: BJE0383-BS1

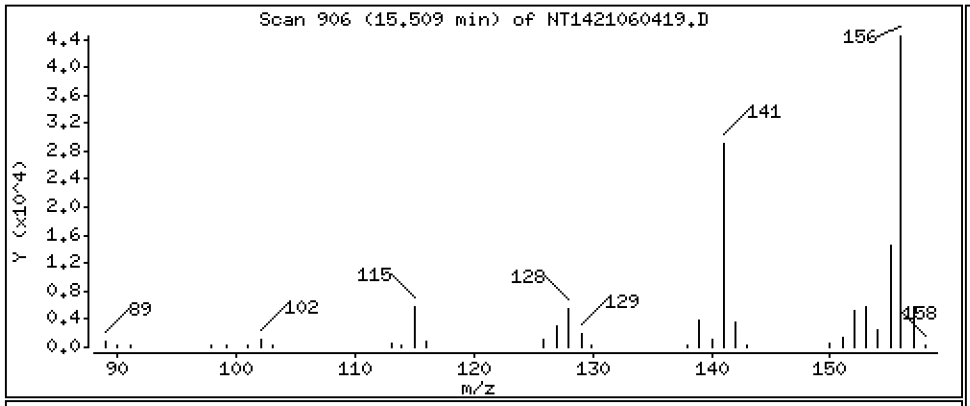
Operator: VTS

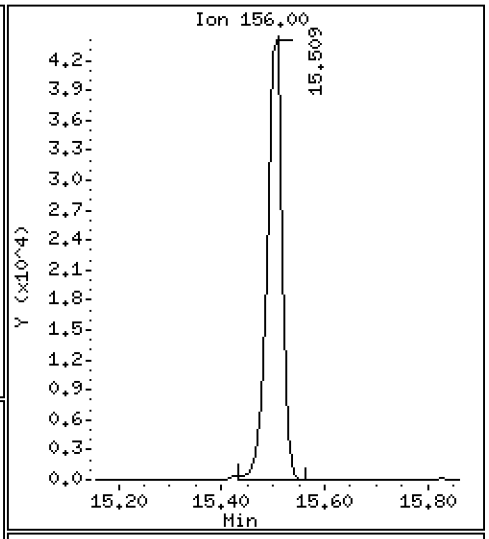
Column phase: Rxi-17Sil MS

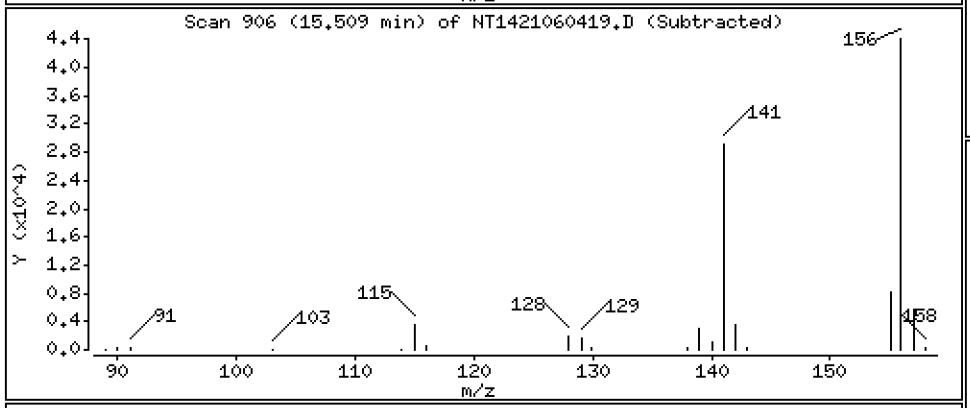
Column diameter: 0.25

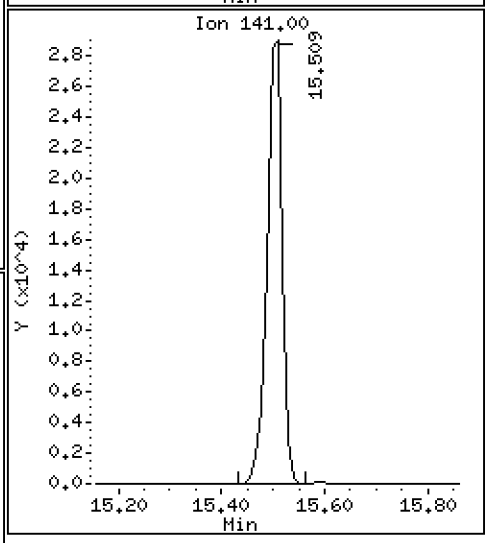
19 2,6-Dimethylnaphthalene

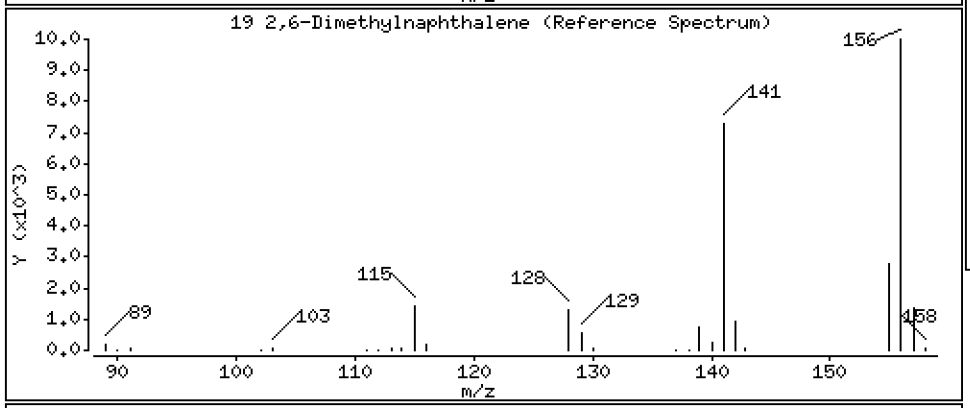
Concentration: 1.128 ug/mL

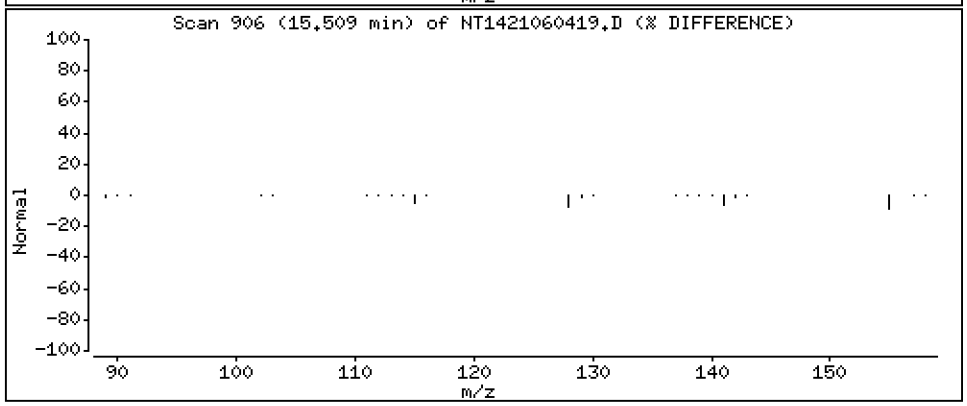












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Date : 05-JUN-2021 02:43

Client ID:

Instrument: nt14.i

Sample Info: BJE0383-BS1

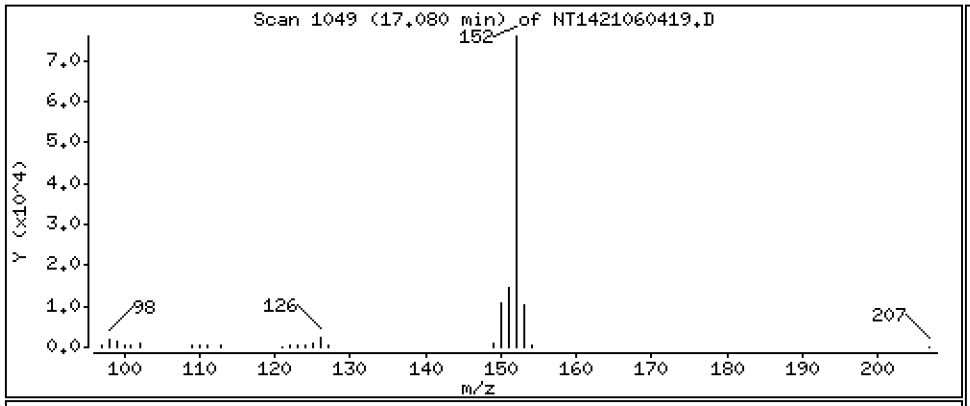
Operator: VTS

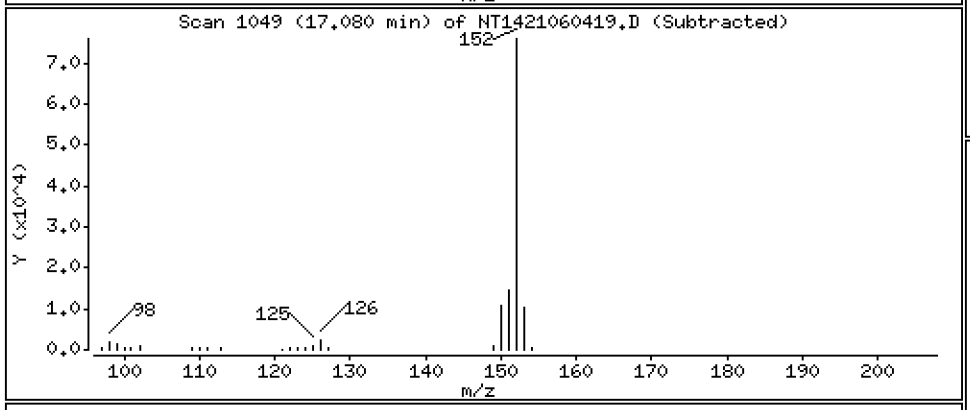
Column phase: Rxi-17Sil MS

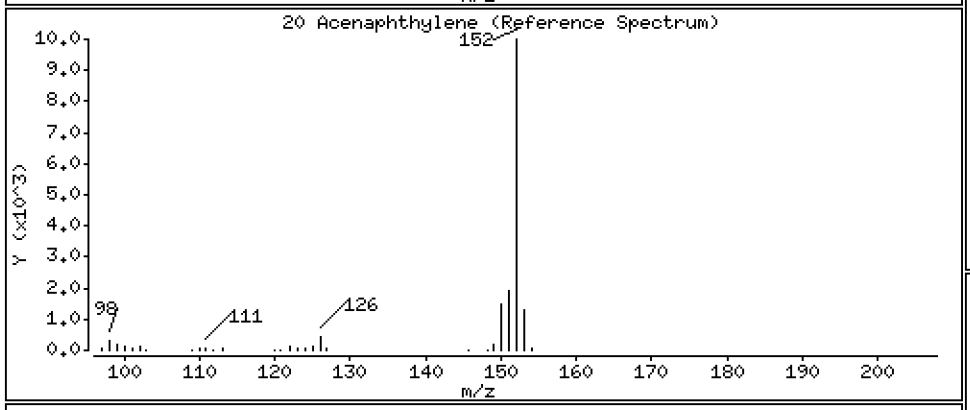
Column diameter: 0.25

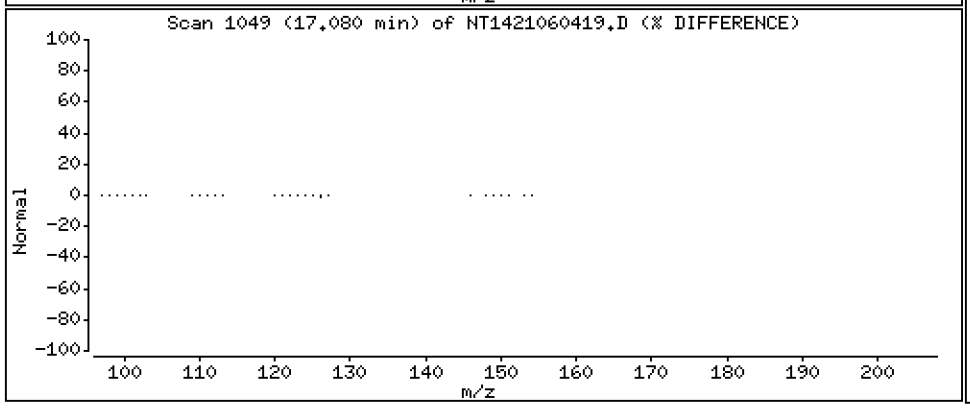
20 Acenaphthylene

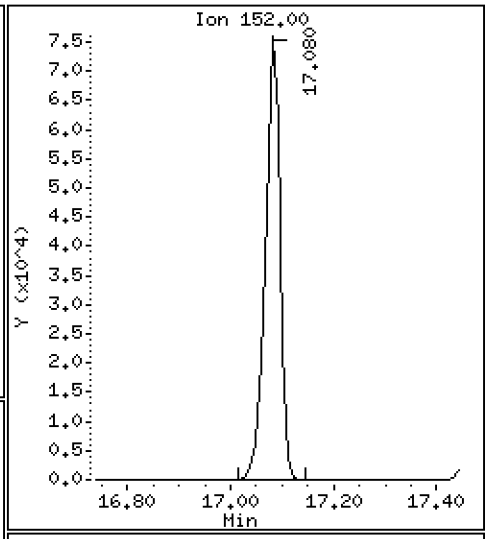
Concentration: 1.080 ug/mL

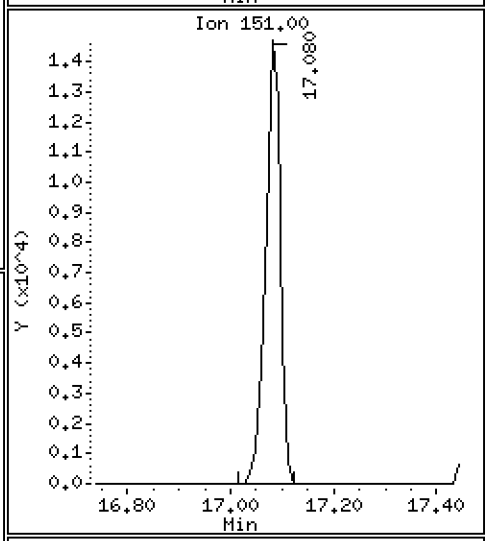


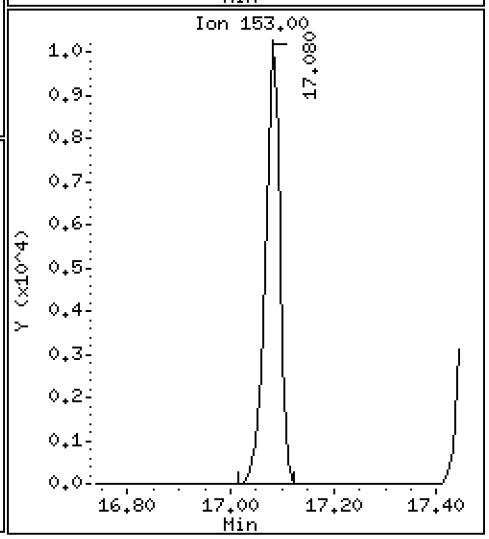












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Date : 05-JUN-2021 02:43

Client ID:

Instrument: nt14.i

Sample Info: BJE0383-BS1

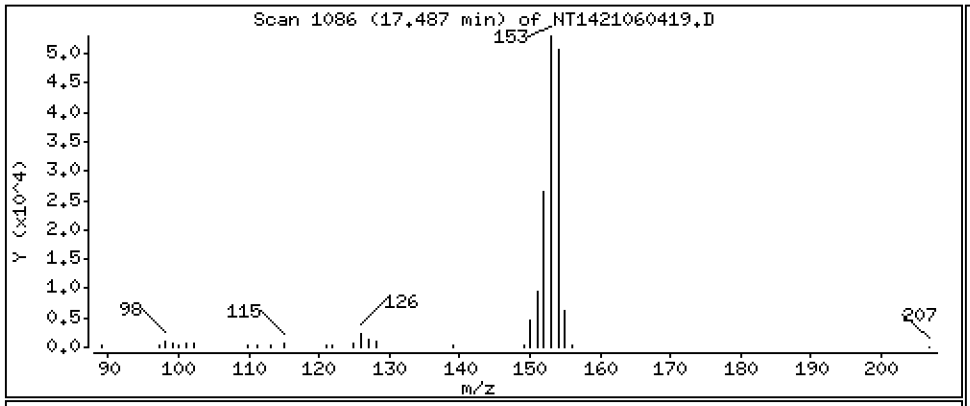
Operator: VTS

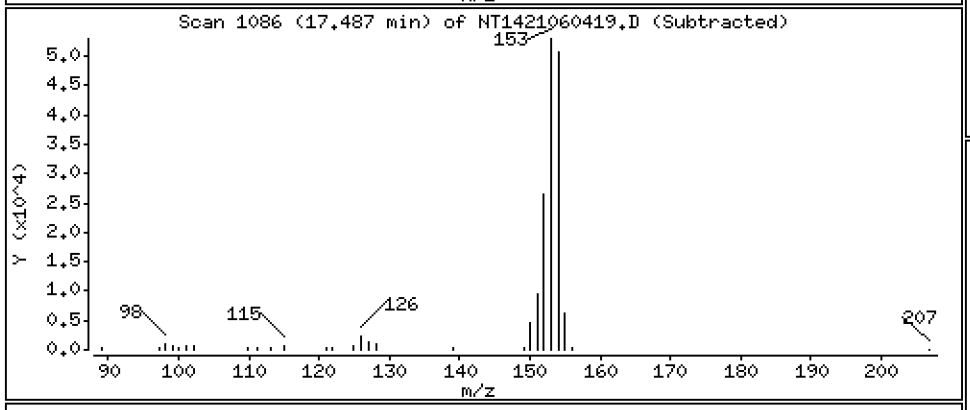
Column phase: Rxi-17Sil MS

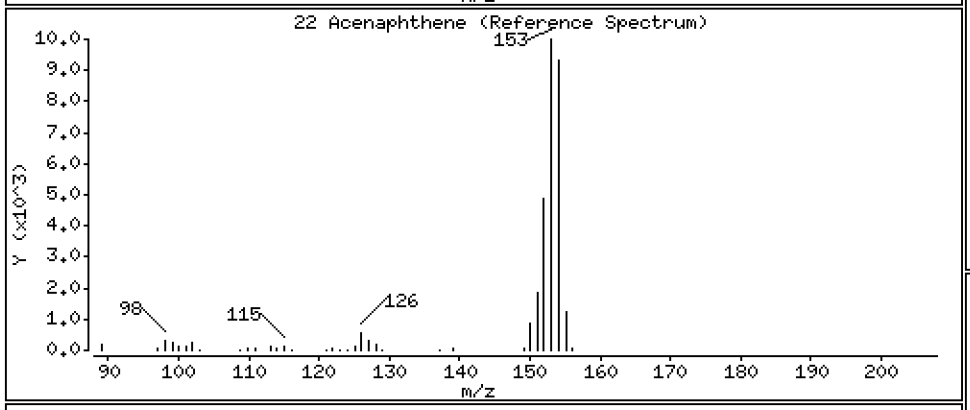
Column diameter: 0.25

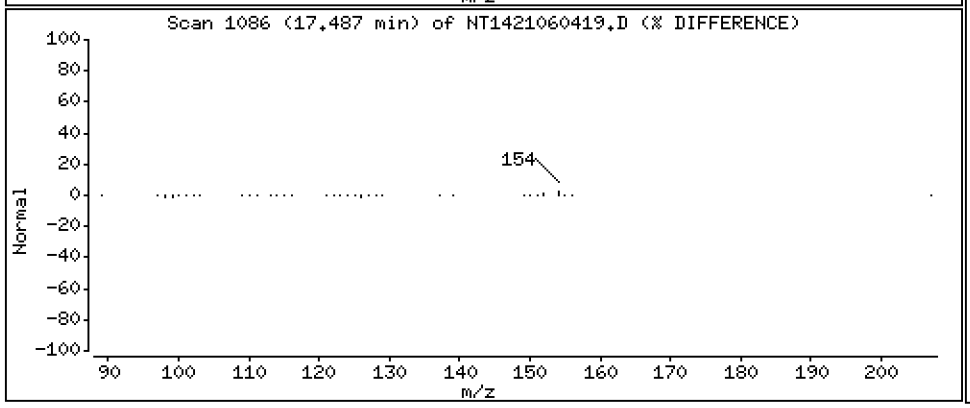
22 Acenaphthene

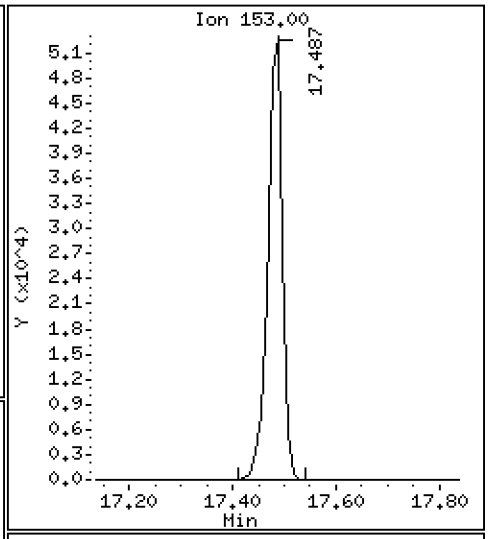
Concentration: 1.233 ug/mL

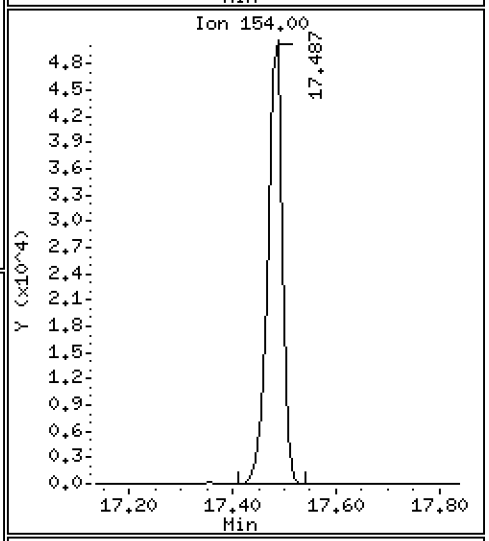


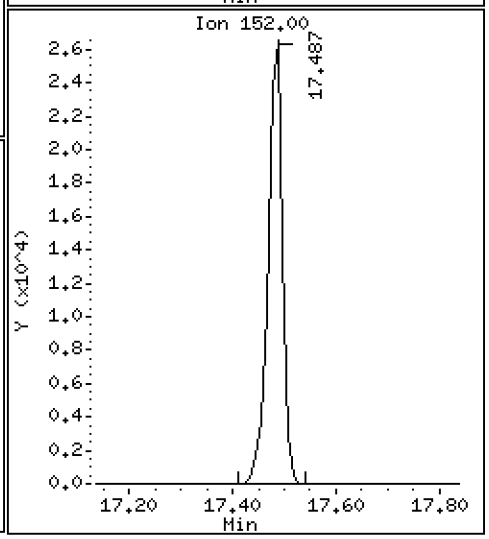












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Date : 05-JUN-2021 02:43

Client ID:

Instrument: nt14.i

Sample Info: BJE0383-BS1

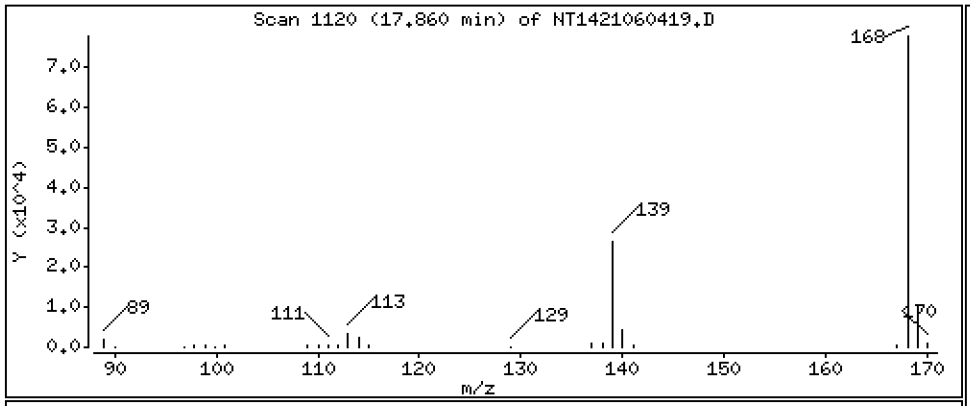
Operator: VTS

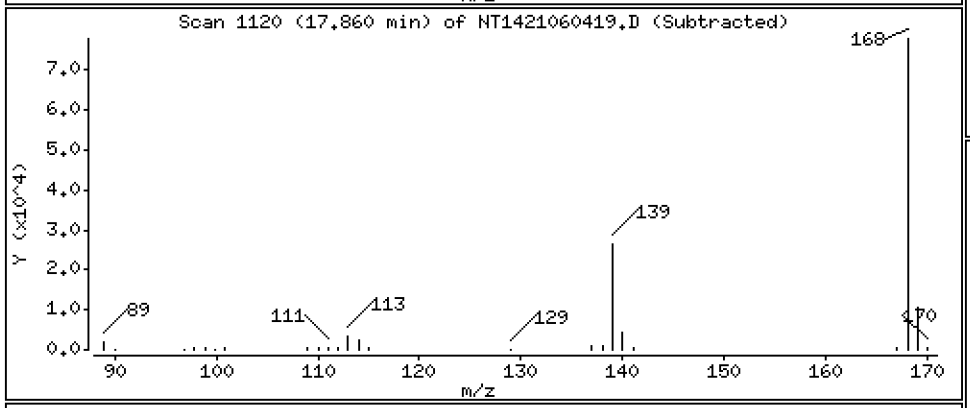
Column phase: Rxi-17Sil MS

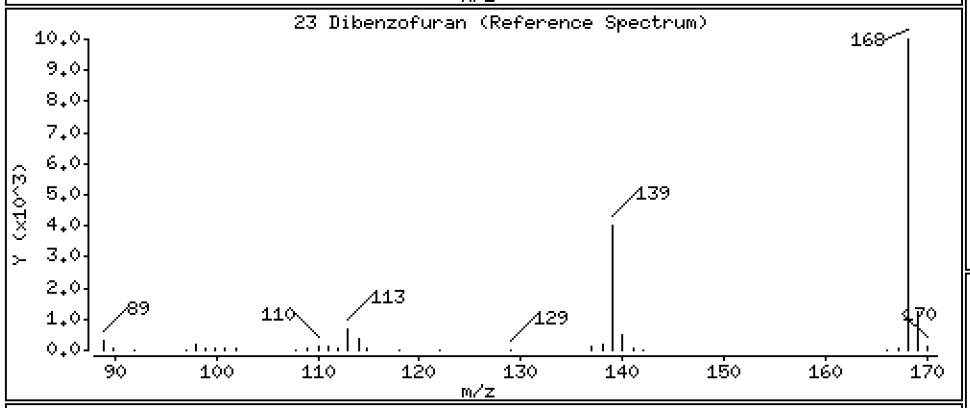
Column diameter: 0.25

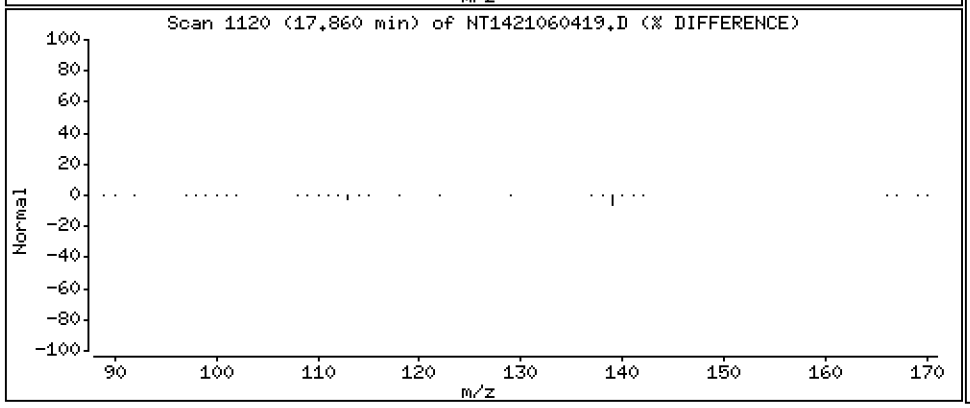
23 Dibenzofuran

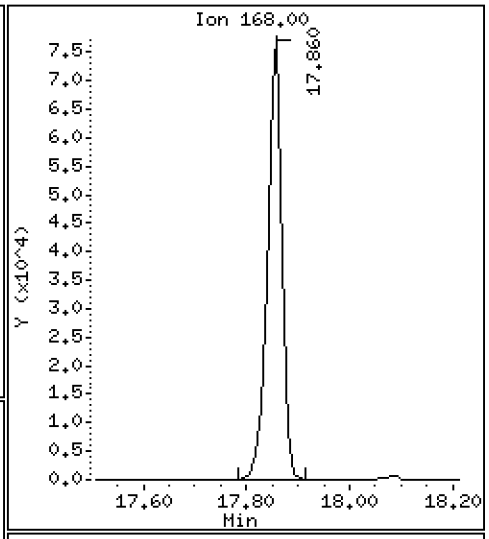
Concentration: 1.219 ug/mL

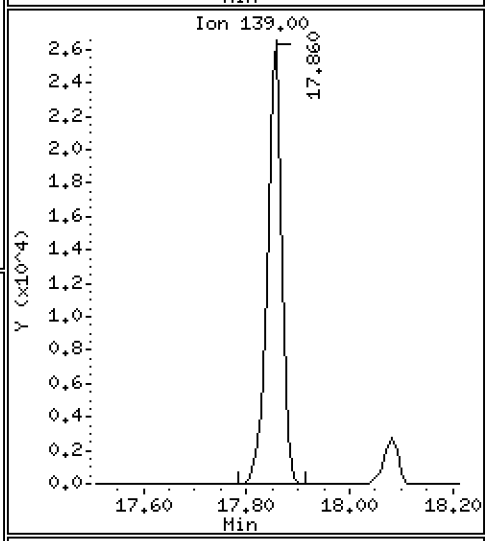


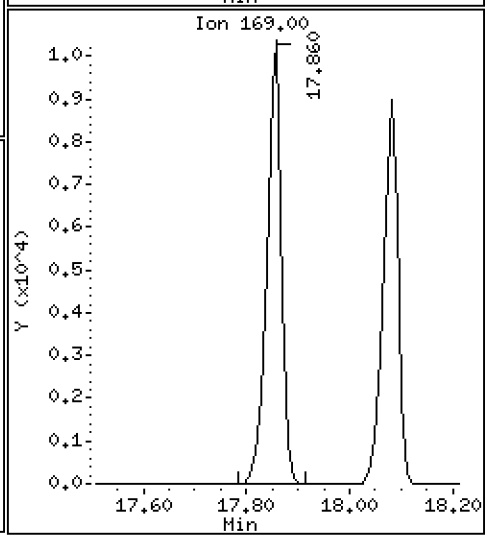












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Date : 05-JUN-2021 02:43

Client ID:

Instrument: nt14.i

Sample Info: BJE0383-BS1

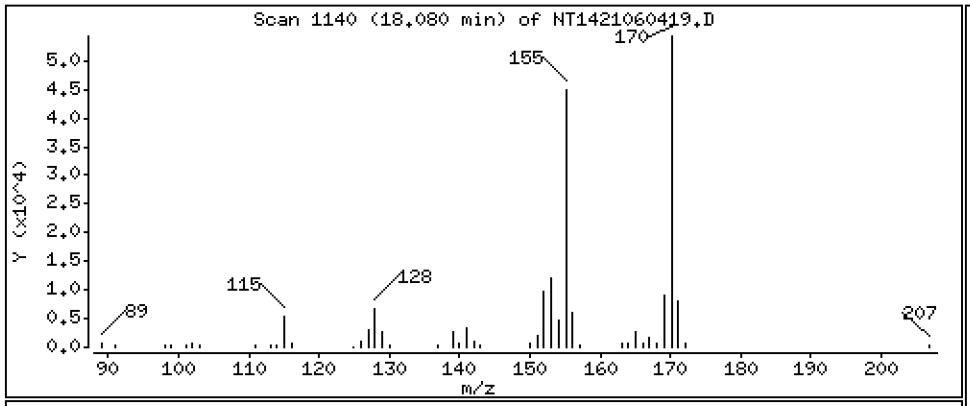
Operator: VTS

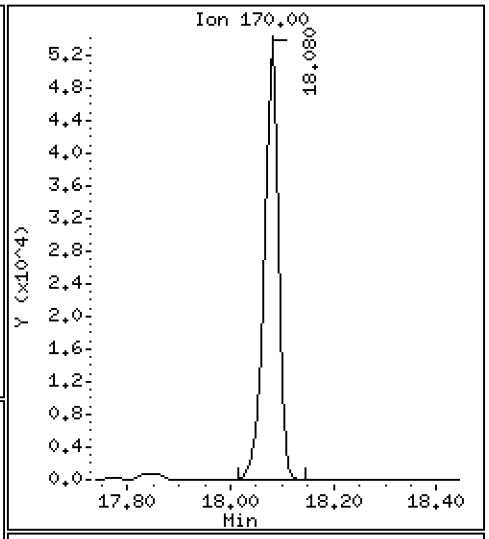
Column phase: Rxi-17Sil MS

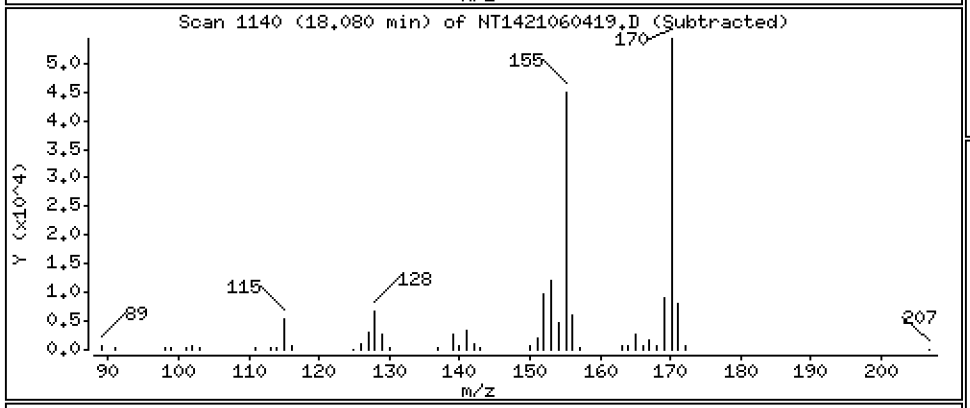
Column diameter: 0.25

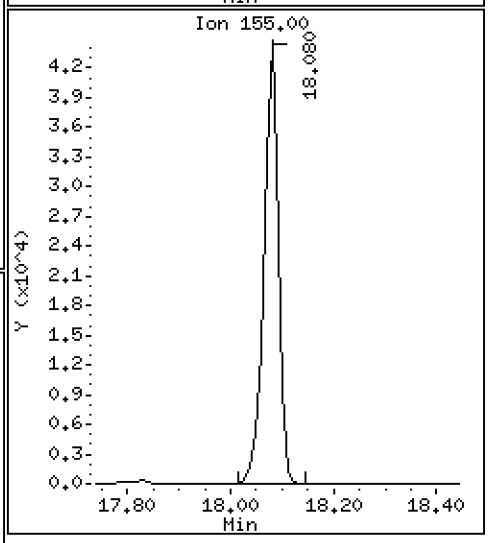
24 1,6,7-Trimethylnaphthalene

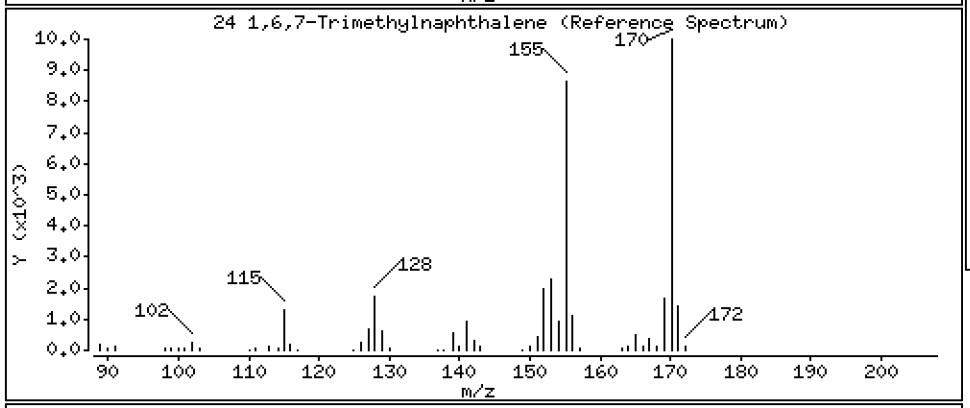
Concentration: 1.275 ug/mL

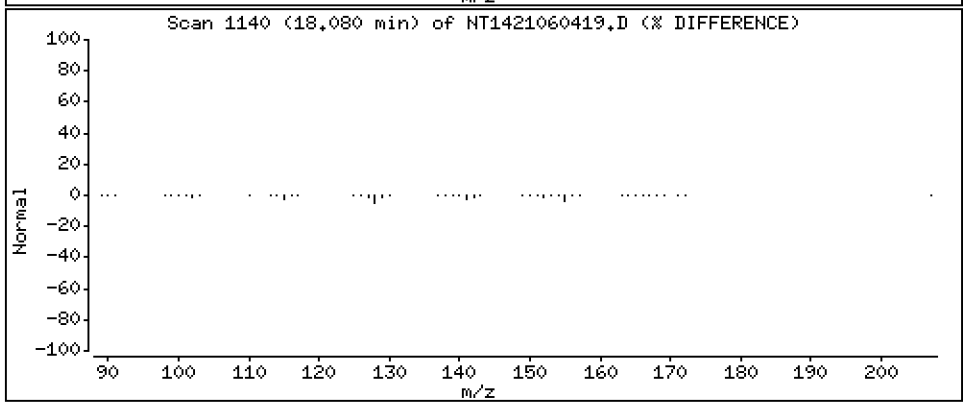












Data File: \\target\share\chem3\nt14.i\20210604A.b\NT1421060419.D

Date : 05-JUN-2021 02:43

Client ID:

Instrument: nt14.i

Sample Info: BJE0383-BS1

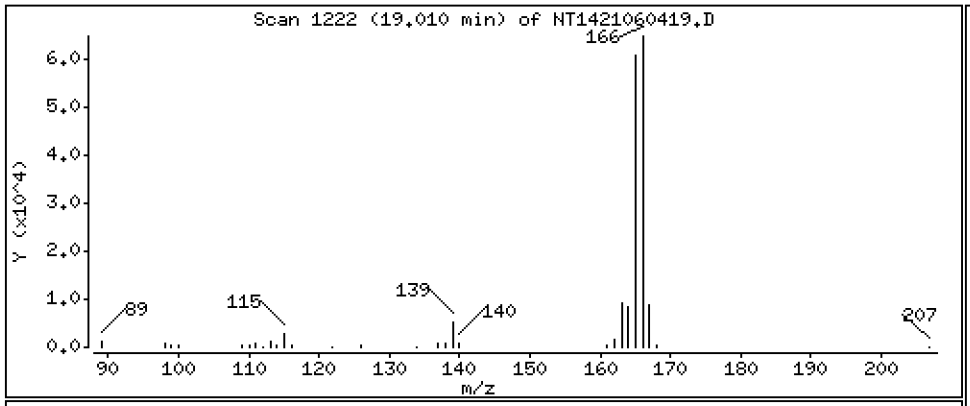
Operator: VTS

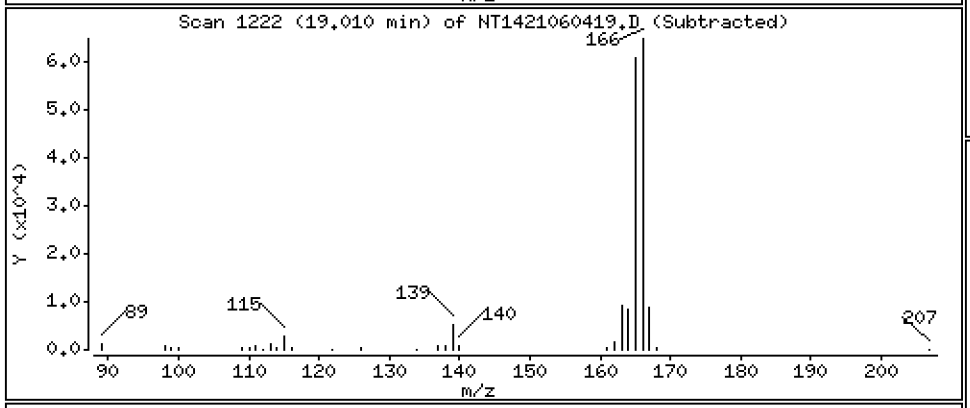
Column phase: Rxi-17Sil MS

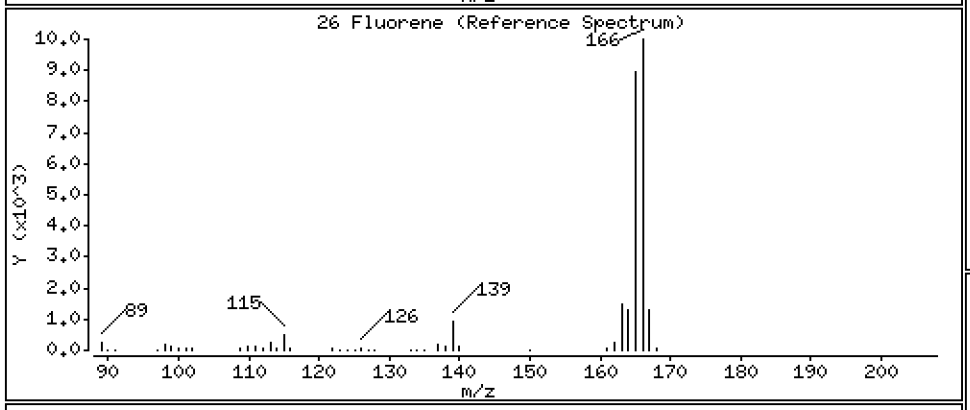
Column diameter: 0.25

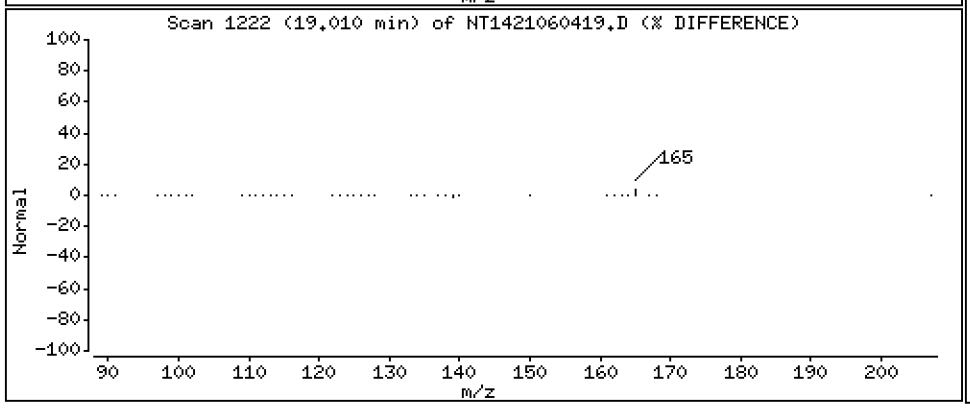
26 Fluorene

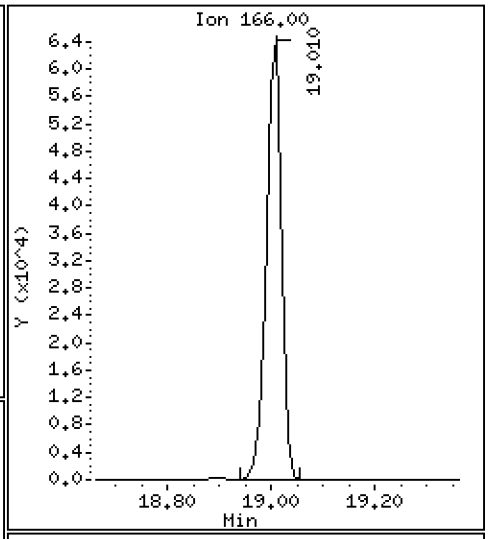
Concentration: 1.300 ug/mL

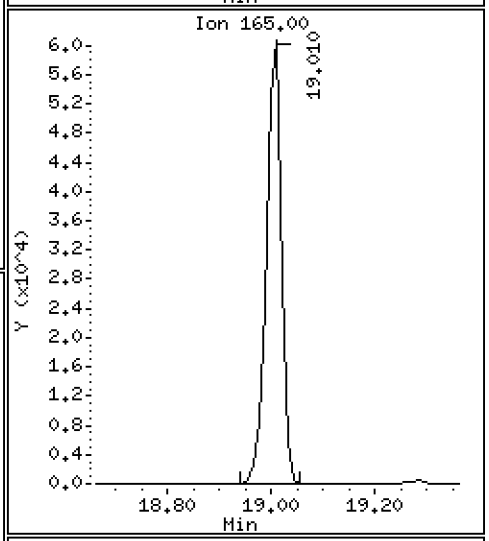


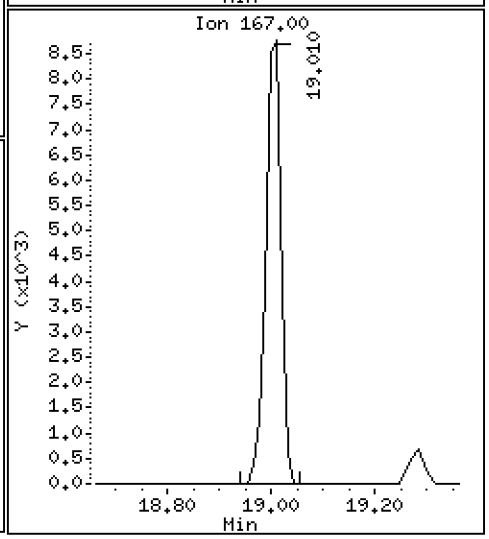












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Date : 05-JUN-2021 02:43

Client ID:

Instrument: nt14.i

Sample Info: BJE0383-BS1

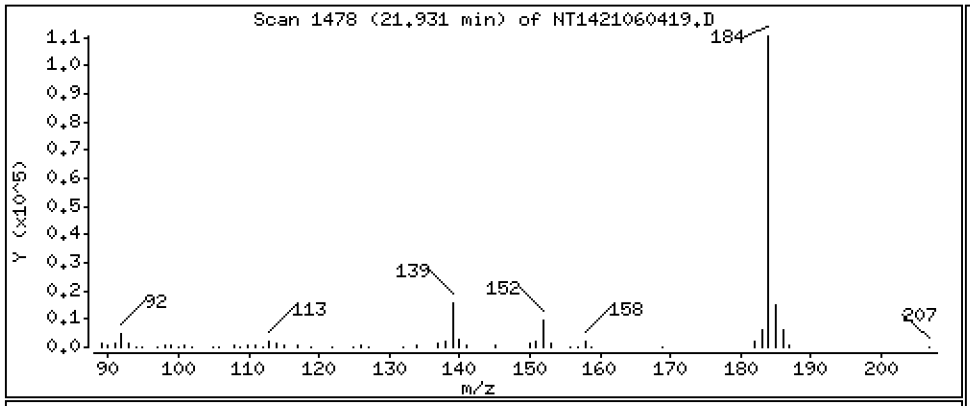
Operator: VTS

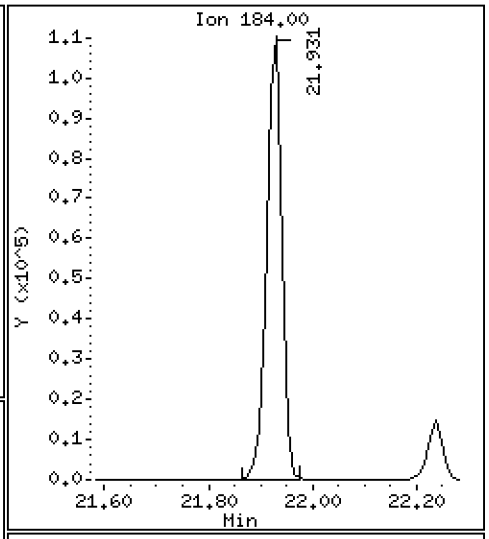
Column phase: Rxi-17Sil MS

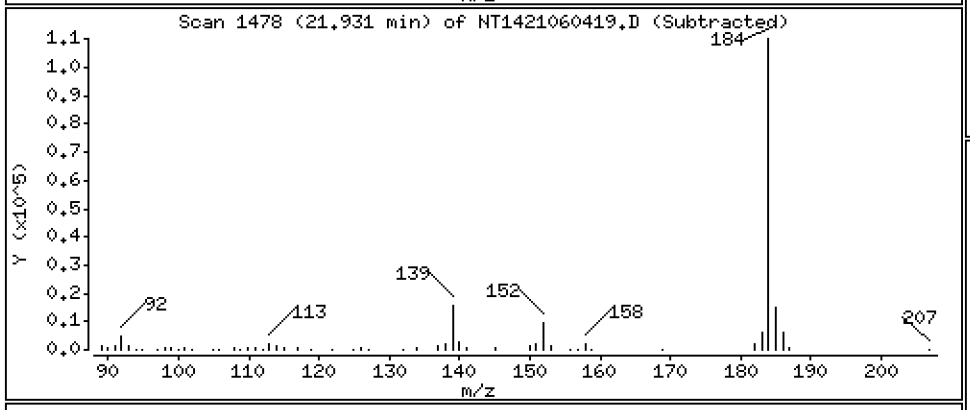
Column diameter: 0.25

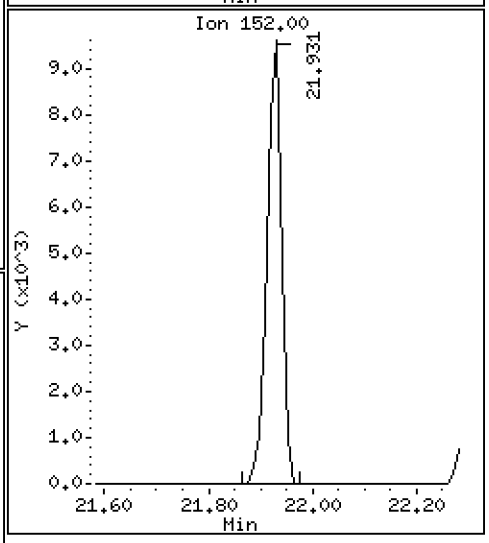
30 Dibenzothiophene

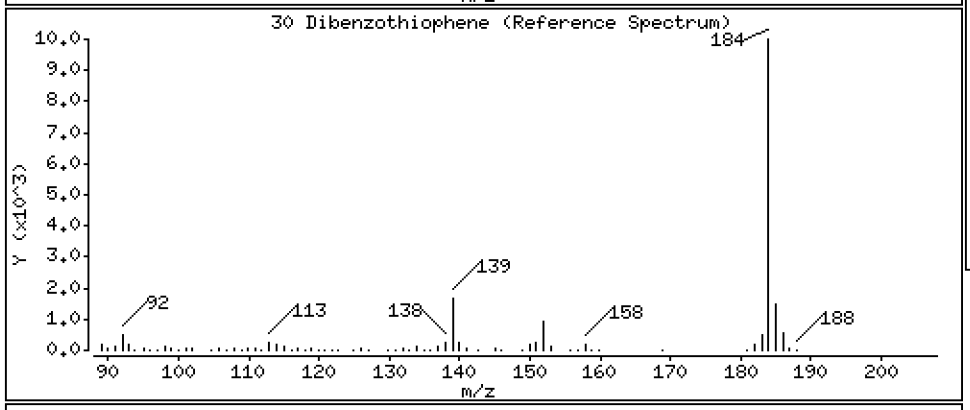
Concentration: 1.523 ug/mL

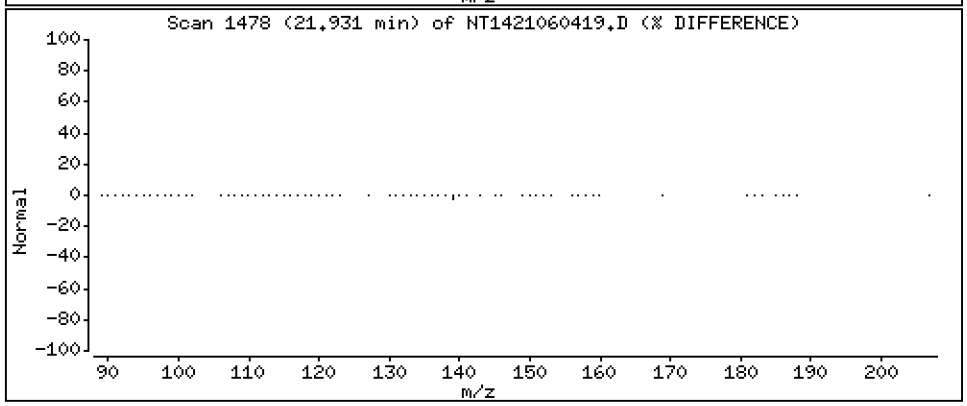












Data File: \\target\share\chem3\nt14.i\20210604A.b\NT1421060419.D

Date : 05-JUN-2021 02:43

Client ID:

Instrument: nt14.i

Sample Info: BJE0383-BS1

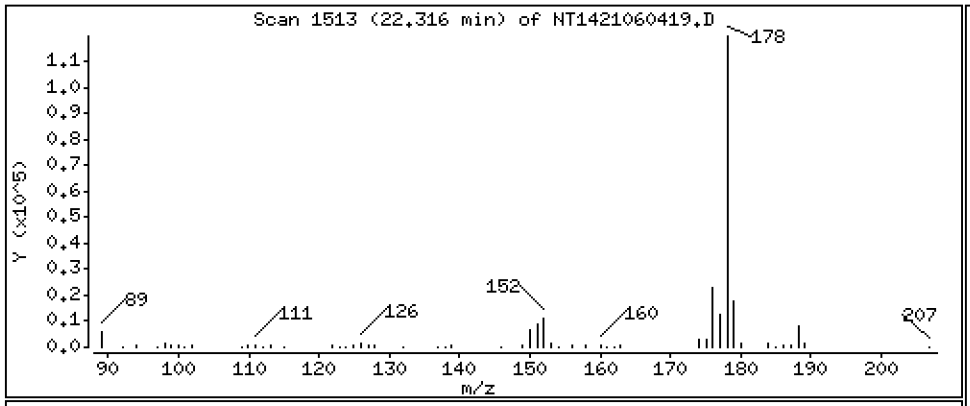
Operator: VTS

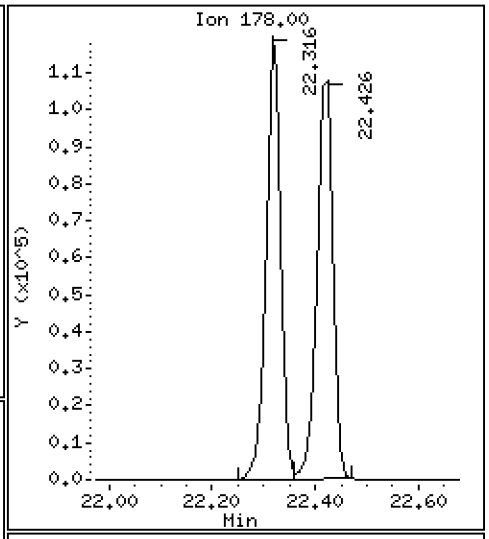
Column phase: Rxi-17Sil MS

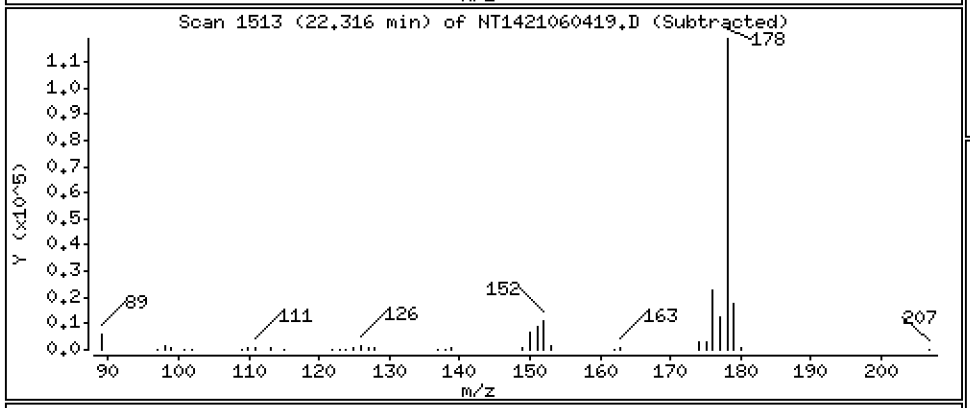
Column diameter: 0.25

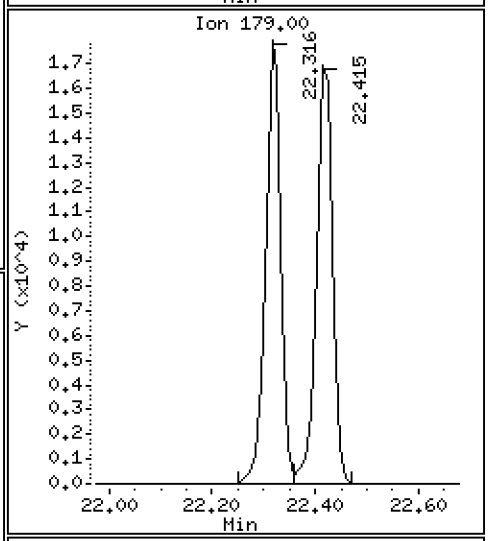
36 Phenanthrene

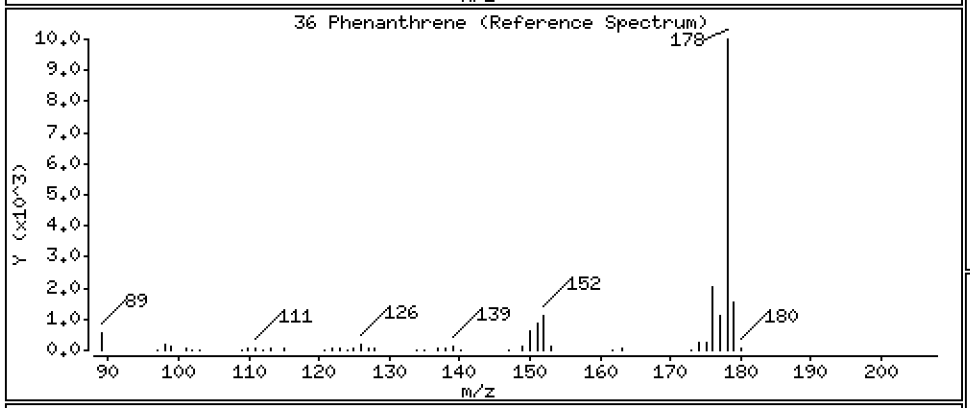
Concentration: 1.579 ug/mL

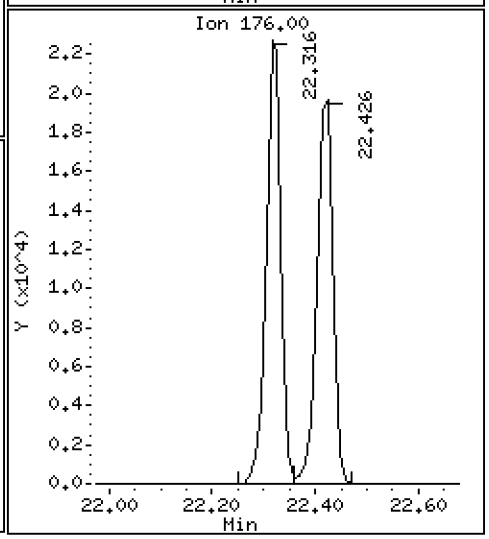


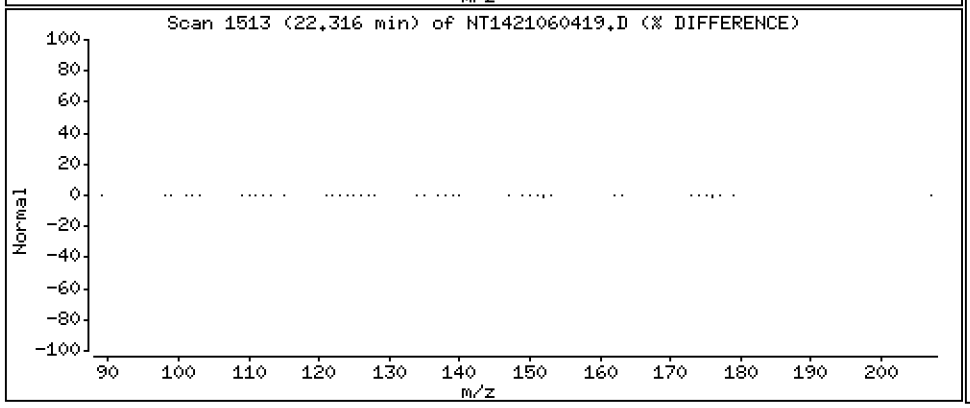












Data File: \\target\share\chem3\nt14.i\20210604A.b\NT1421060419.D

Date : 05-JUN-2021 02:43

Client ID:

Instrument: nt14.i

Sample Info: BJE0383-BS1

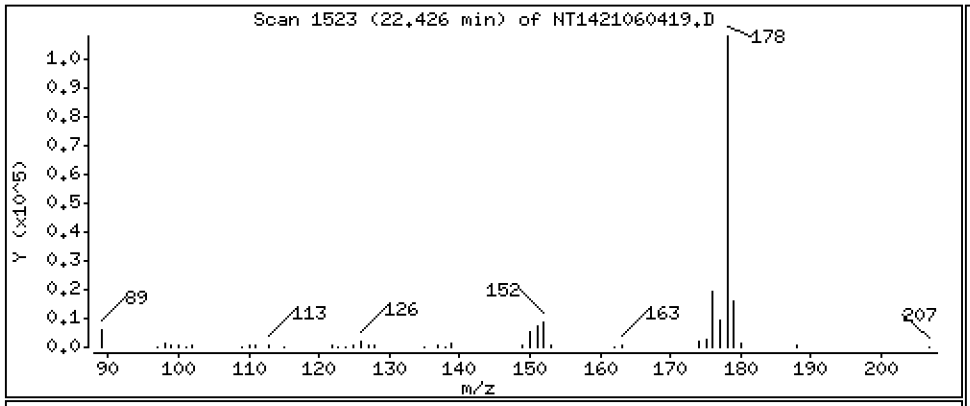
Operator: VTS

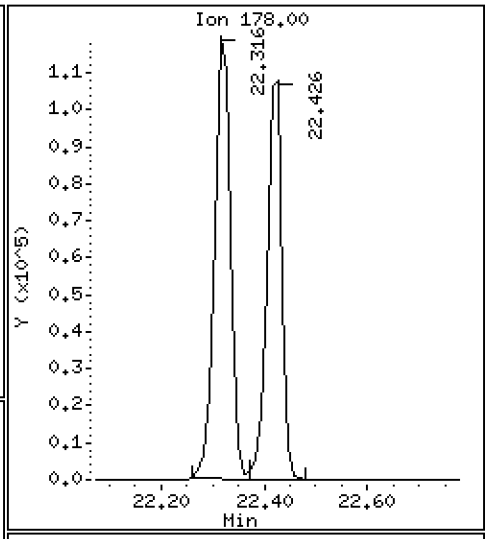
Column phase: Rxi-17Sil MS

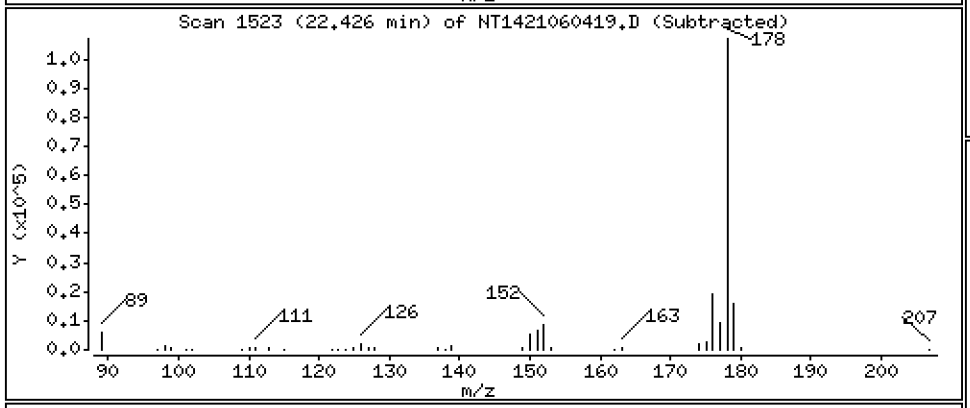
Column diameter: 0.25

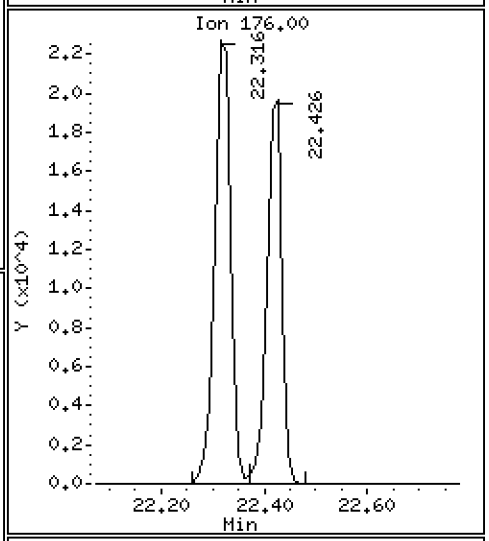
37 Anthracene

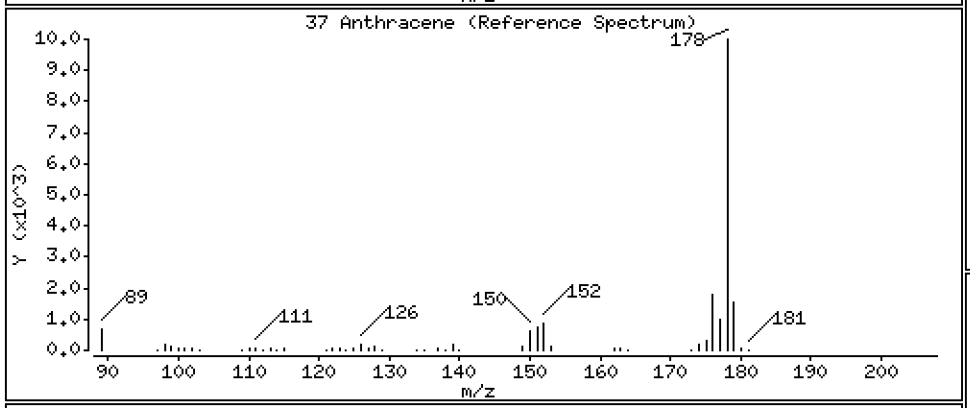
Concentration: 1.518 ug/mL

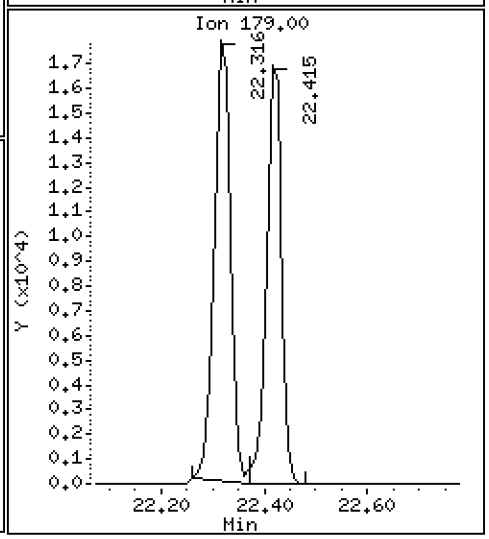


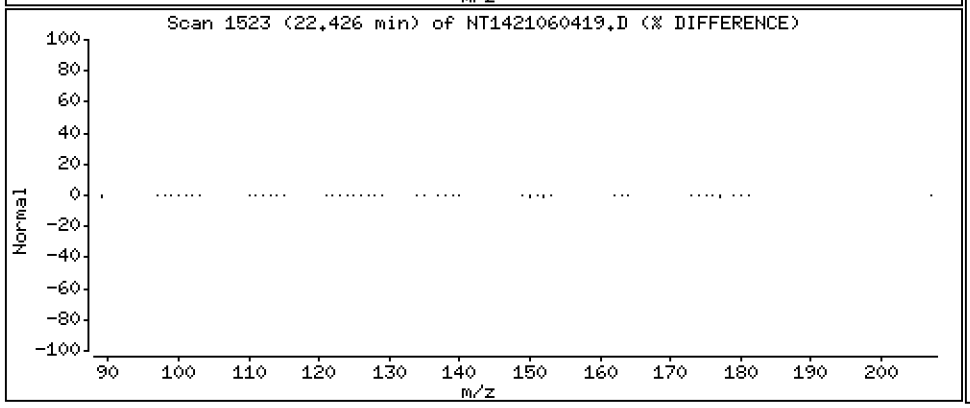












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Date : 05-JUN-2021 02:43

Client ID:

Instrument: nt14.i

Sample Info: BJE0383-BS1

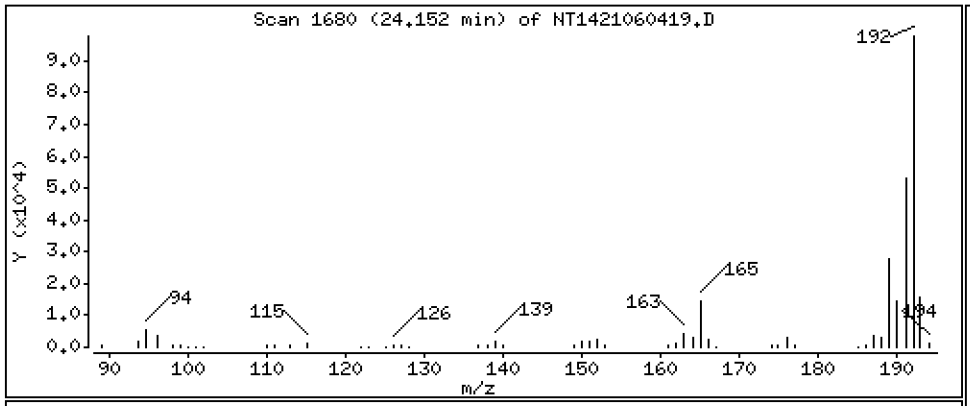
Operator: VTS

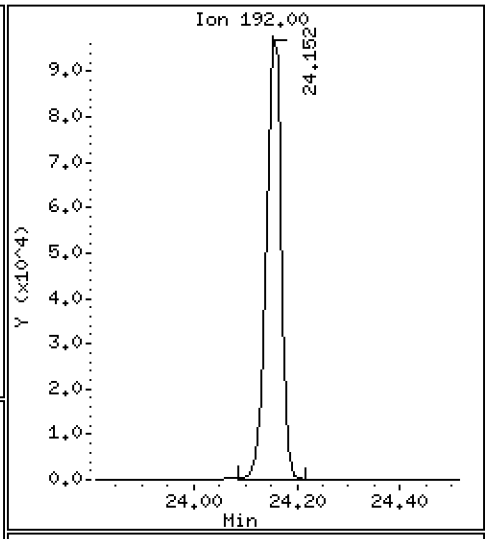
Column phase: Rxi-17Sil MS

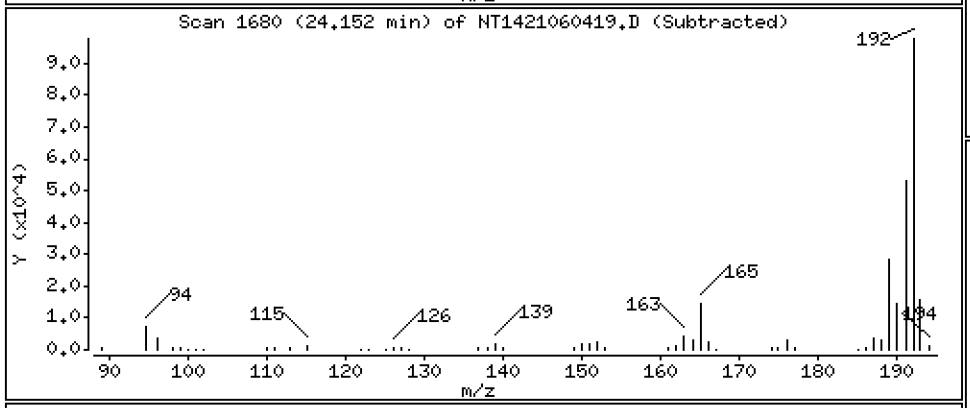
Column diameter: 0.25

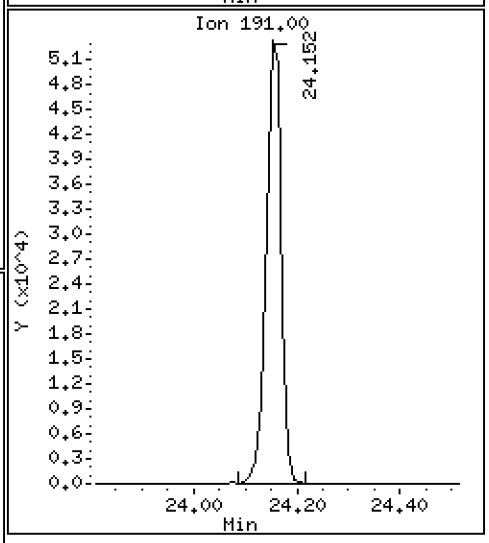
43 1-Methylphenanthrene

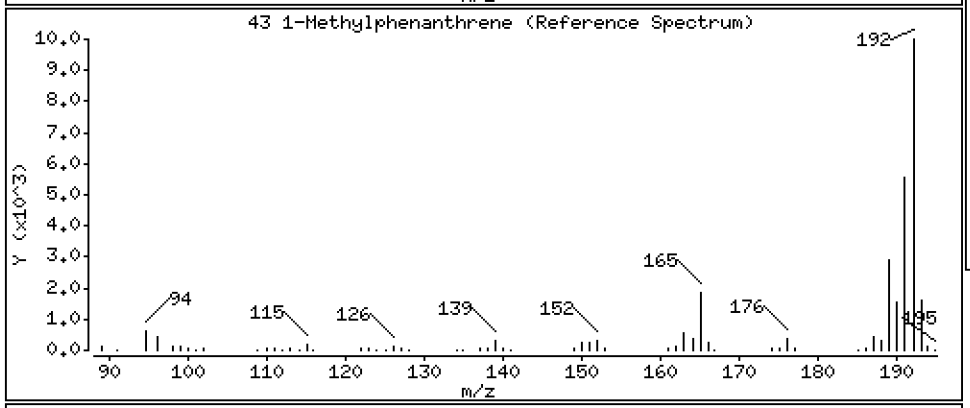
Concentration: 1.793 ug/mL

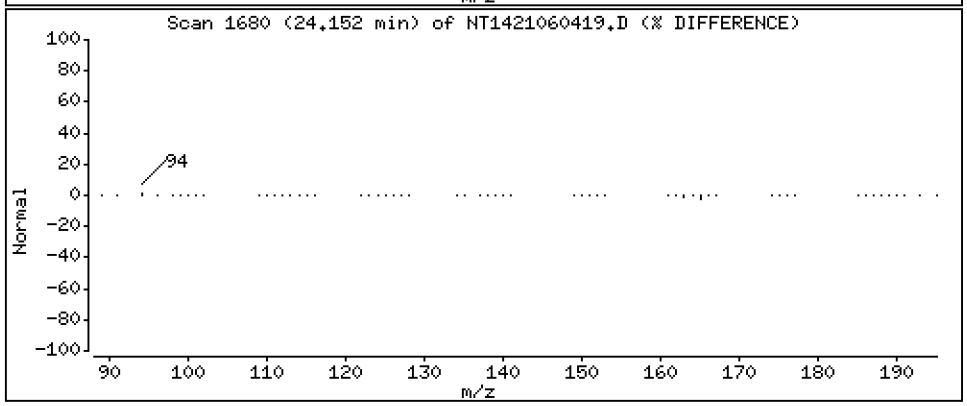












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Date : 05-JUN-2021 02:43

Client ID:

Instrument: nt14.i

Sample Info: BJE0383-BS1

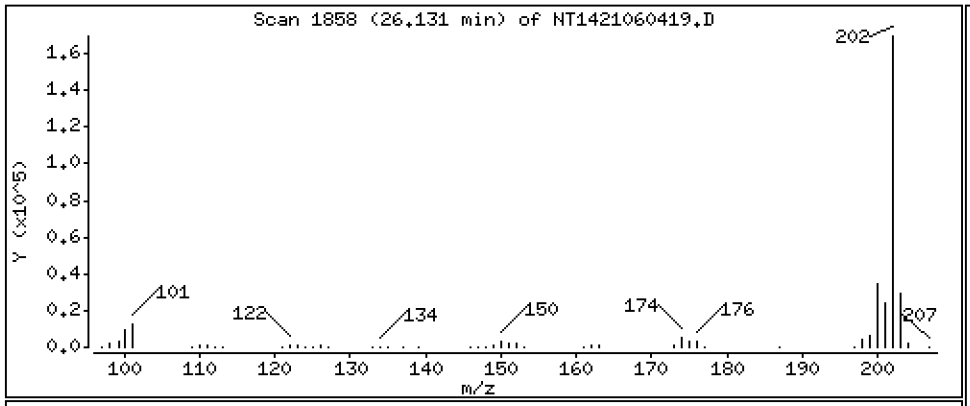
Operator: VTS

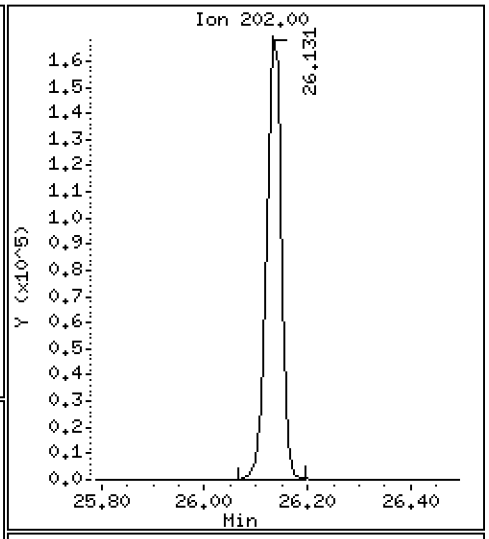
Column phase: Rxi-17Sil MS

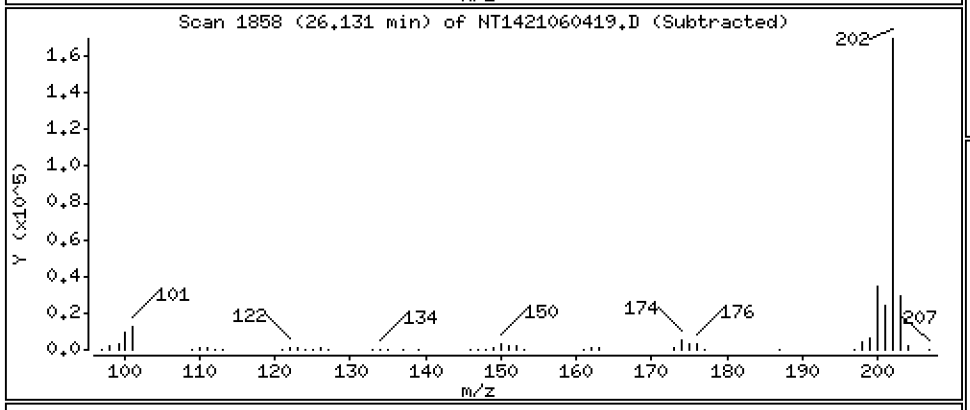
Column diameter: 0.25

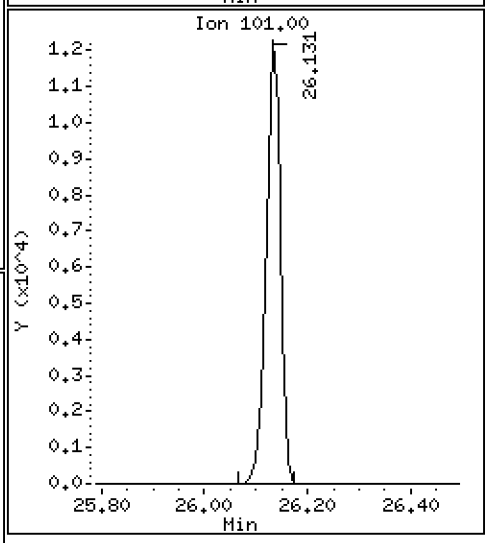
44 Fluoranthene

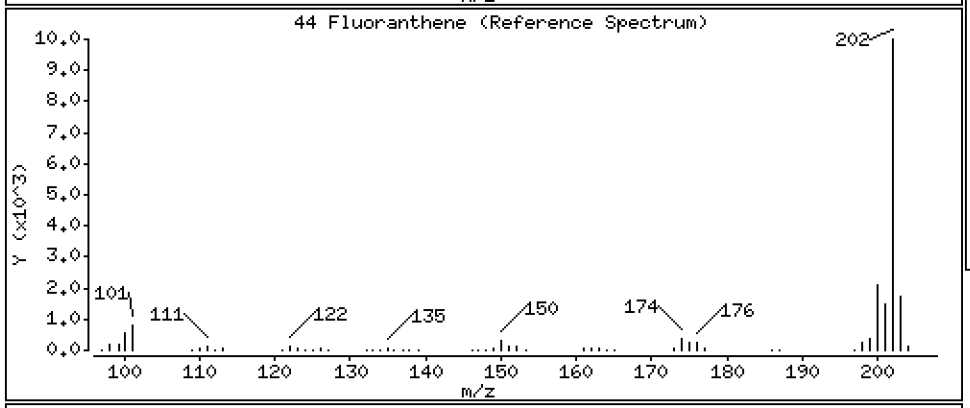
Concentration: 2.025 ug/mL

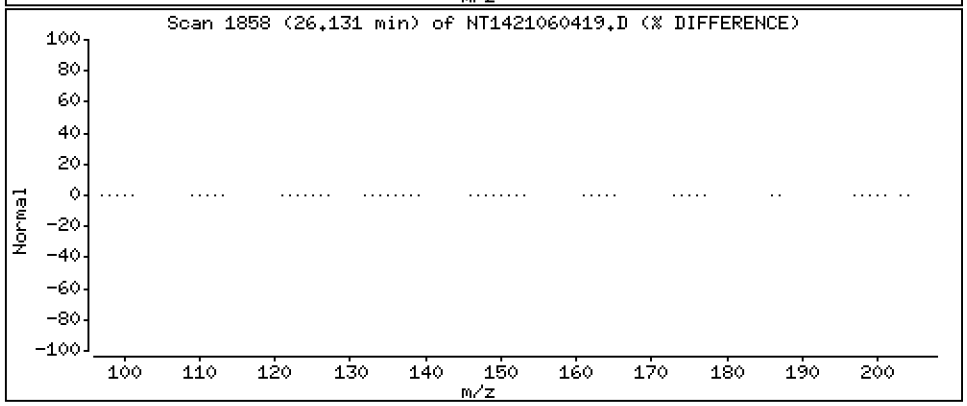












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Date : 05-JUN-2021 02:43

Client ID:

Instrument: nt14.i

Sample Info: BJE0383-BS1

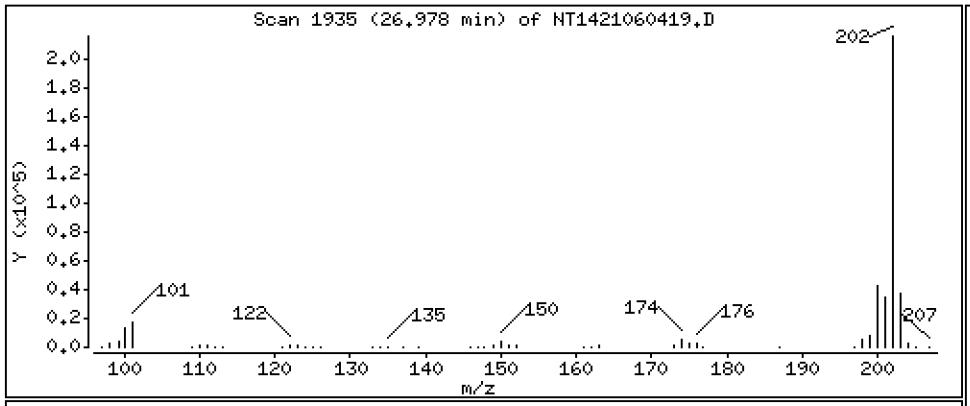
Operator: VTS

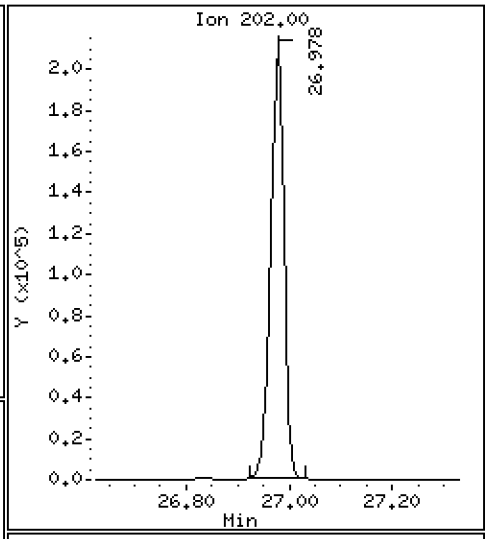
Column phase: Rxi-17Sil MS

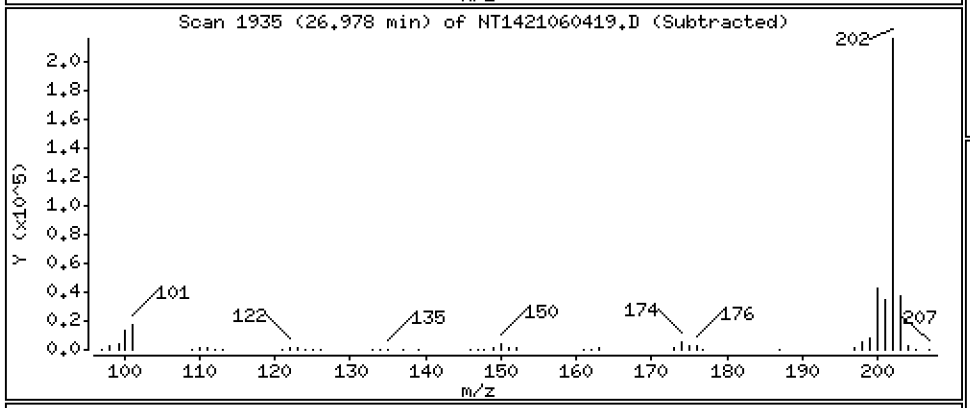
Column diameter: 0.25

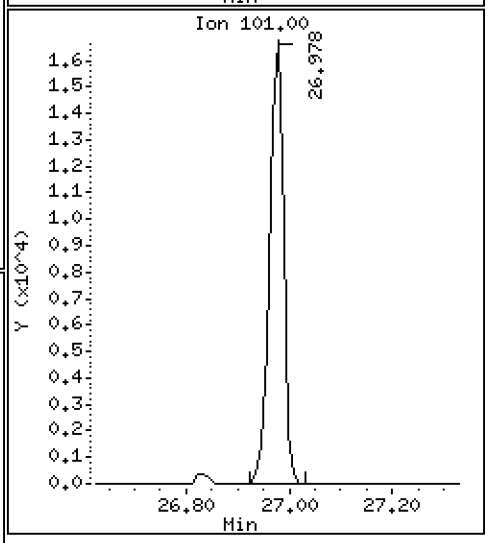
46 Pyrene

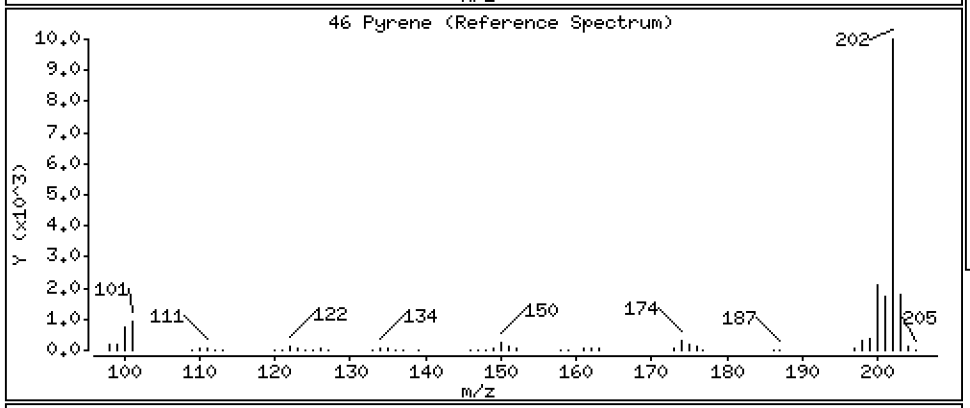
Concentration: 2.129 ug/mL

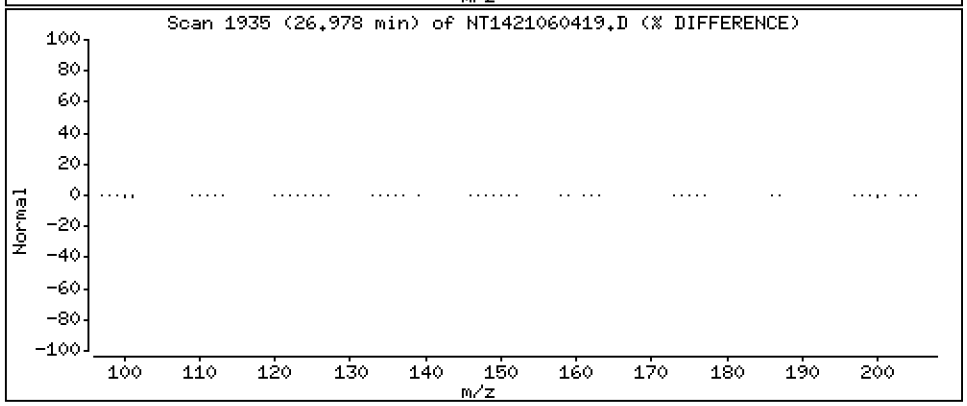












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Date : 05-JUN-2021 02:43

Client ID:

Instrument: nt14.i

Sample Info: BJE0383-BS1

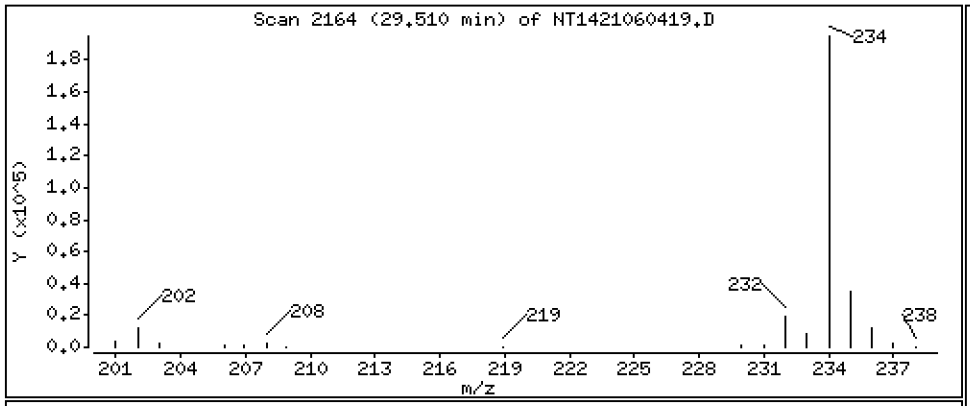
Operator: VTS

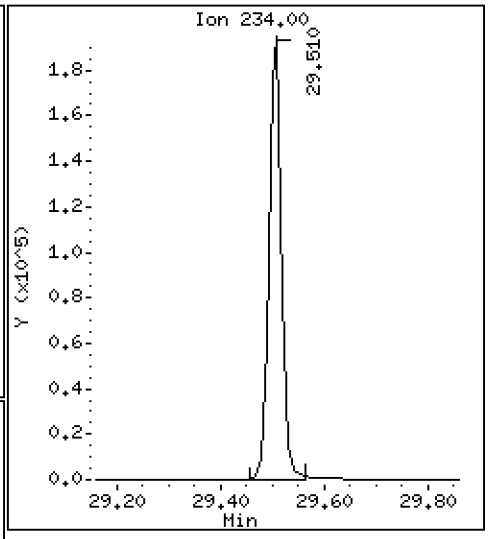
Column phase: Rxi-17Sil MS

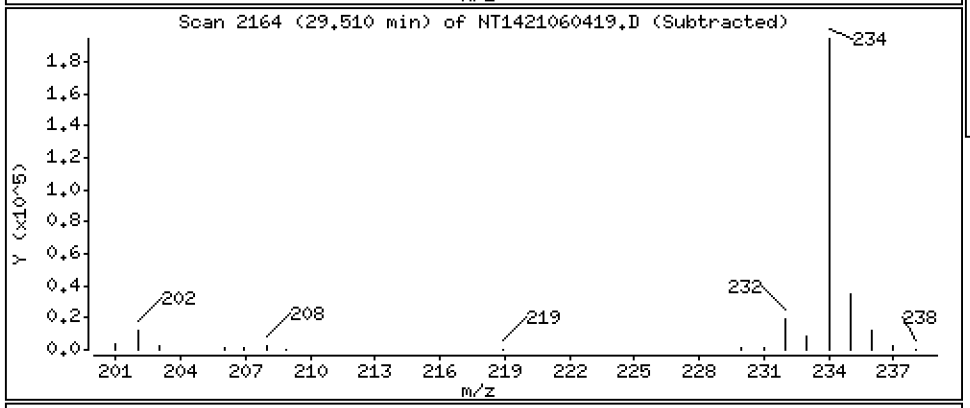
Column diameter: 0.25

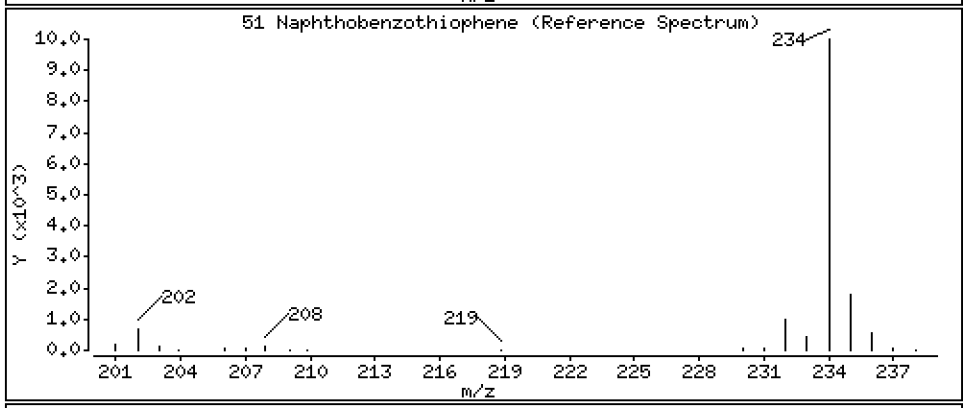
51 Naphthobenzothiophene

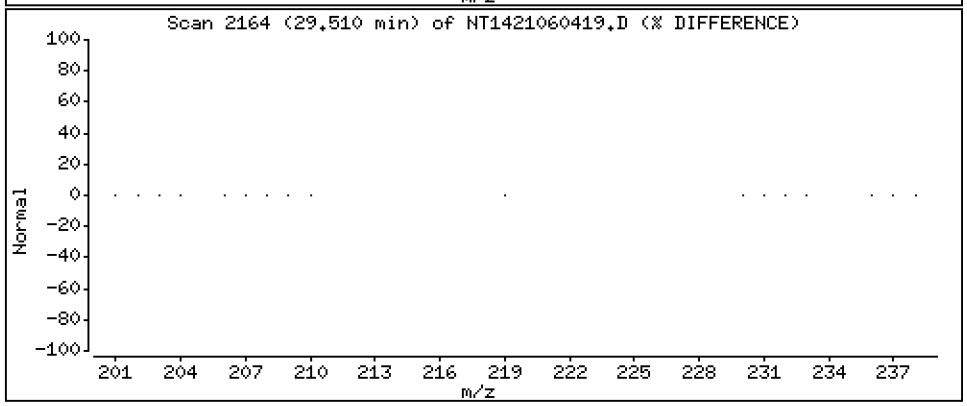
Concentration: 1.784 ug/mL











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Date : 05-JUN-2021 02:43

Client ID:

Instrument: nt14.i

Sample Info: BJE0383-BS1

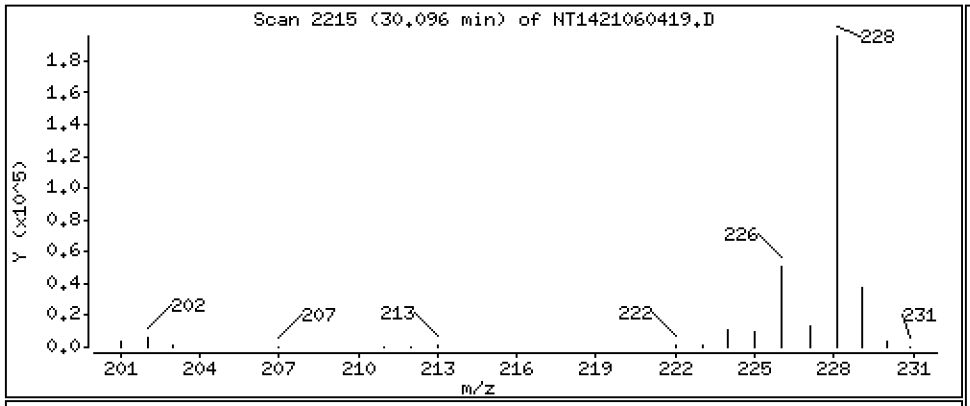
Operator: VTS

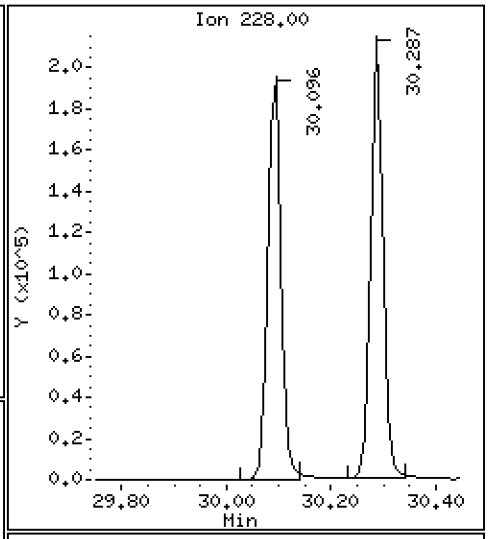
Column phase: Rxi-17Sil MS

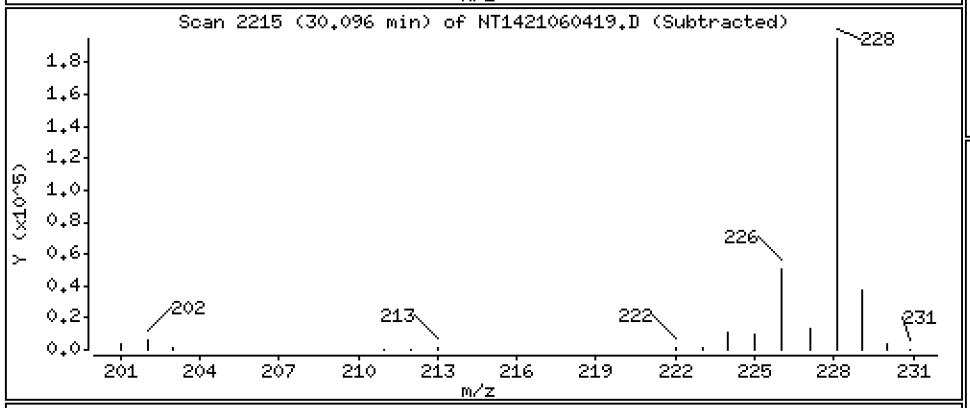
Column diameter: 0.25

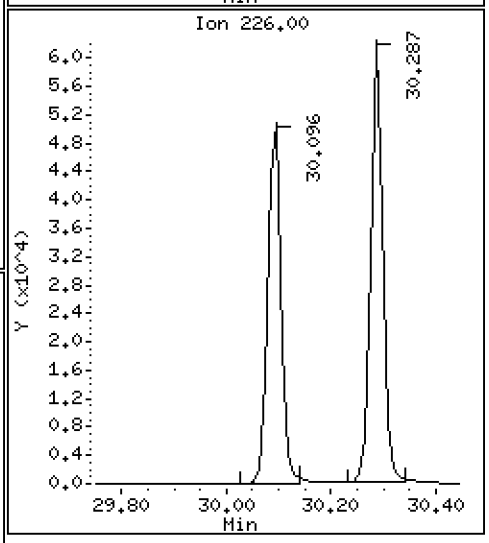
55 Benzo(a)anthracene

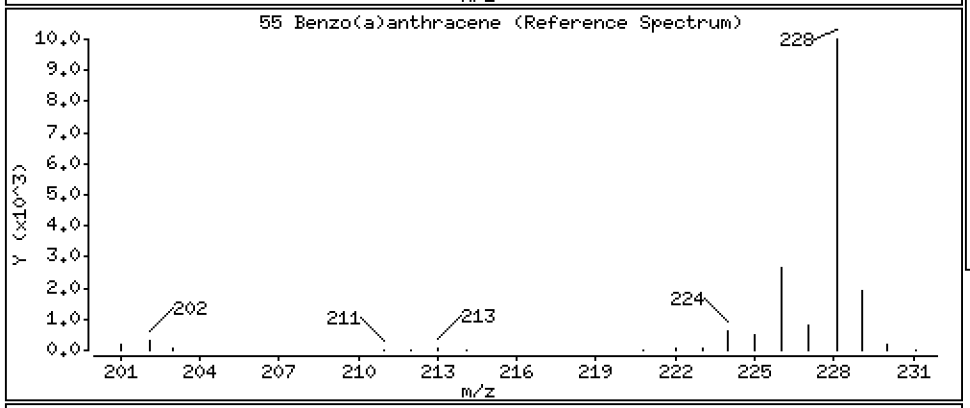
Concentration: 1.918 ug/mL

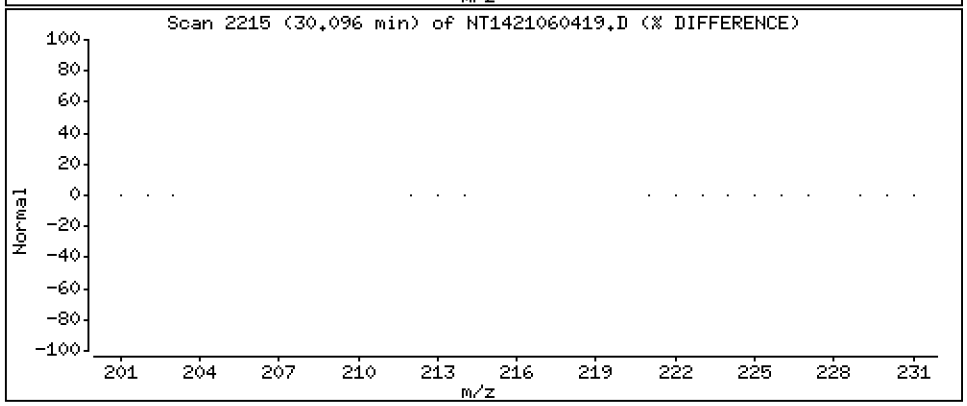












Data File: \\target\share\chem3\nt14.i\20210604A.b\NT1421060419.D

Date : 05-JUN-2021 02:43

Client ID:

Instrument: nt14.i

Sample Info: BJE0383-BS1

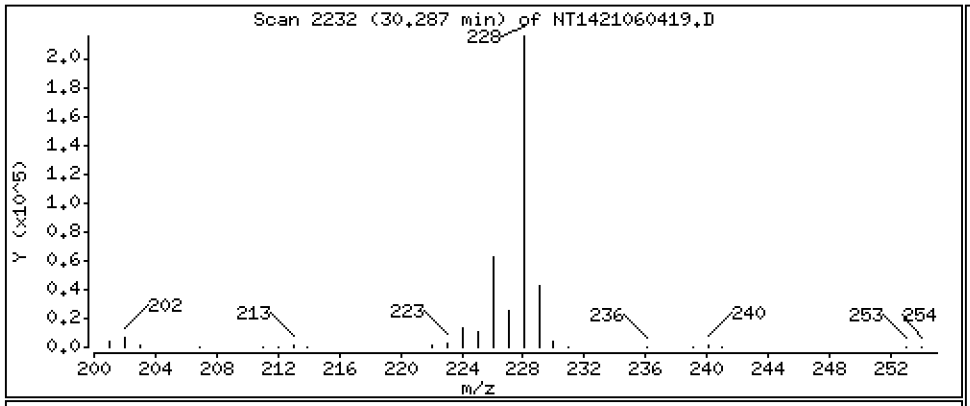
Operator: VTS

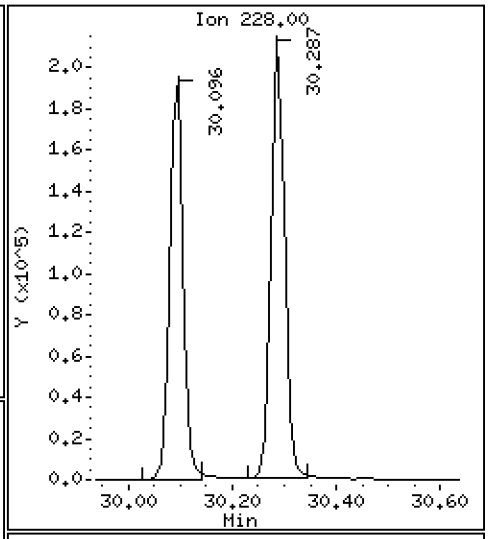
Column phase: Rxi-17Sil MS

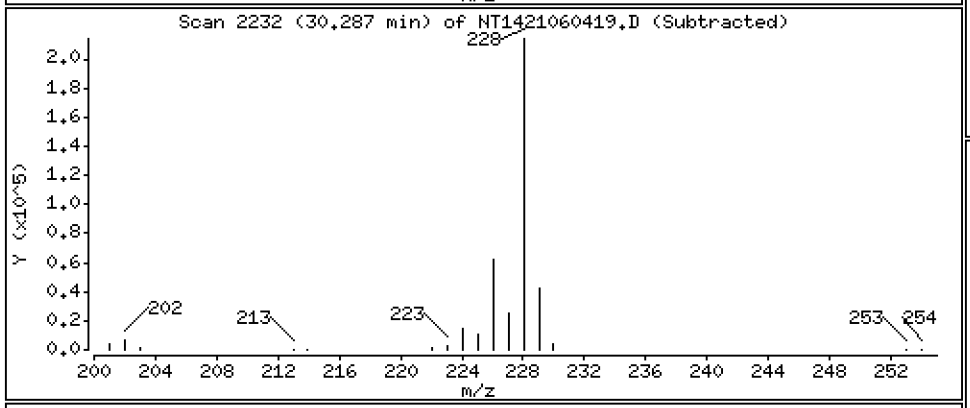
Column diameter: 0.25

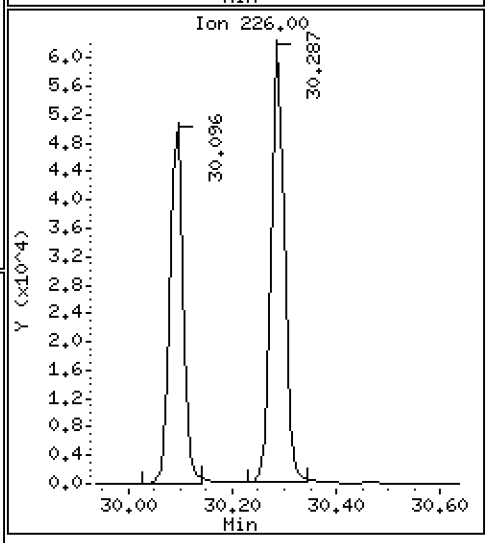
57 Chrysene

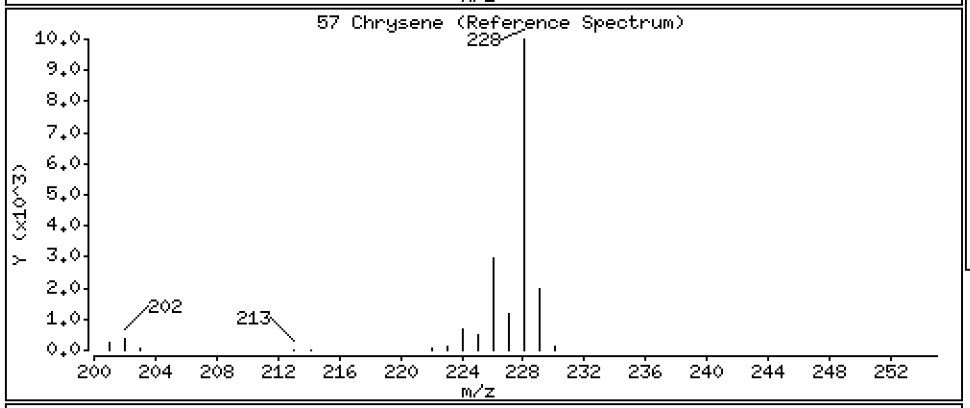
Concentration: 1.952 ug/mL

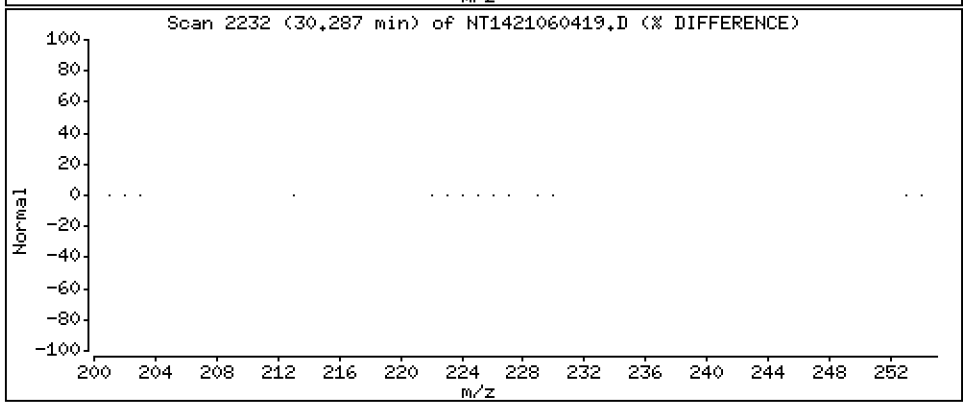












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Date : 05-JUN-2021 02:43

Client ID:

Instrument: nt14.i

Sample Info: BJE0383-BS1

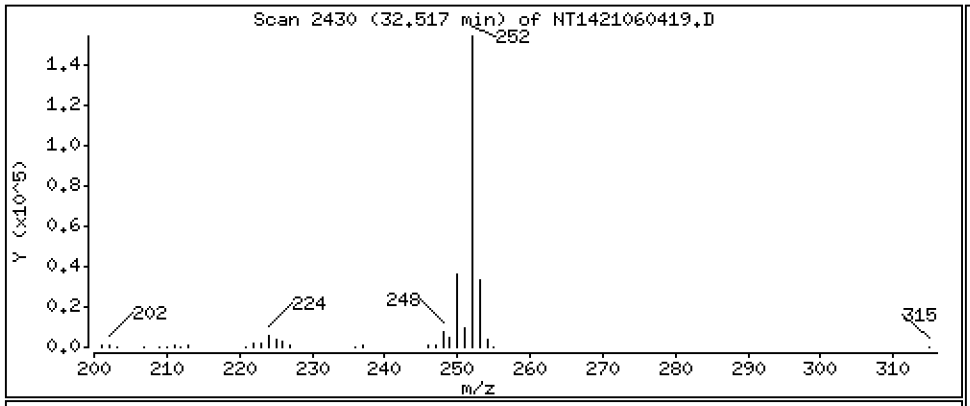
Operator: VTS

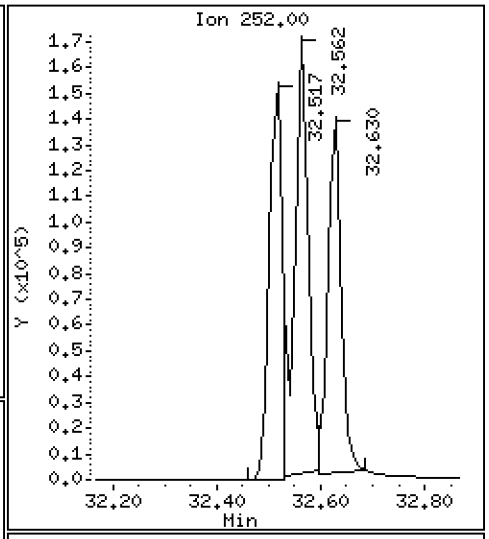
Column phase: Rxi-17Sil MS

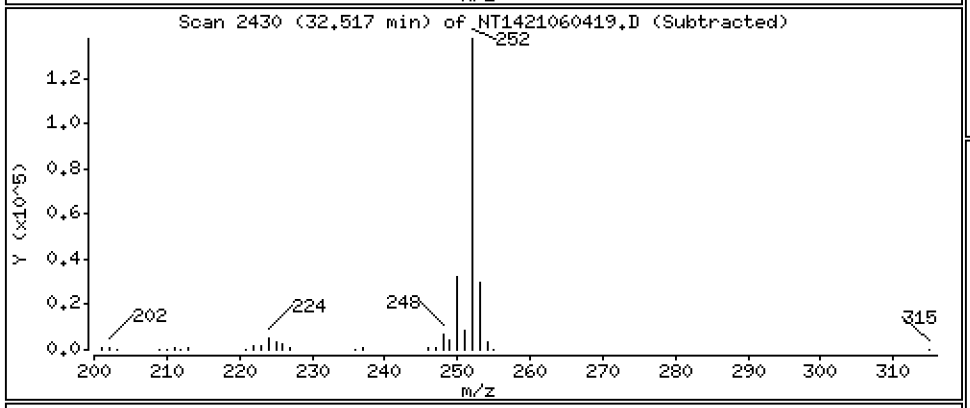
Column diameter: 0.25

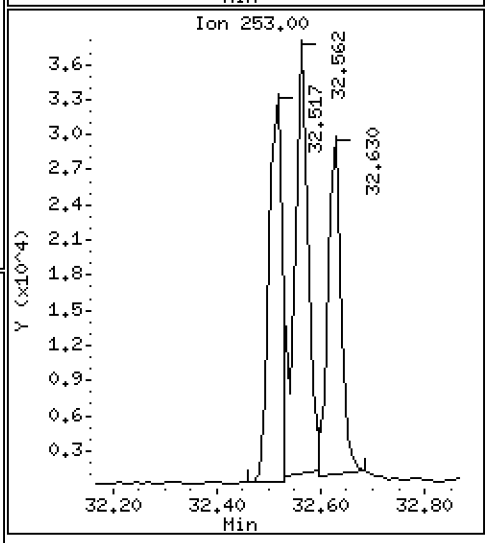
62 Benzo(b)fluoranthene

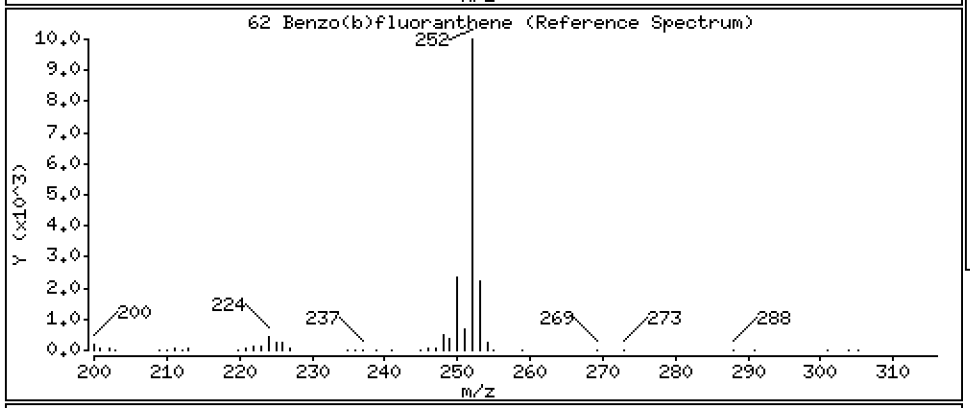
Concentration: 1.305 ug/mL

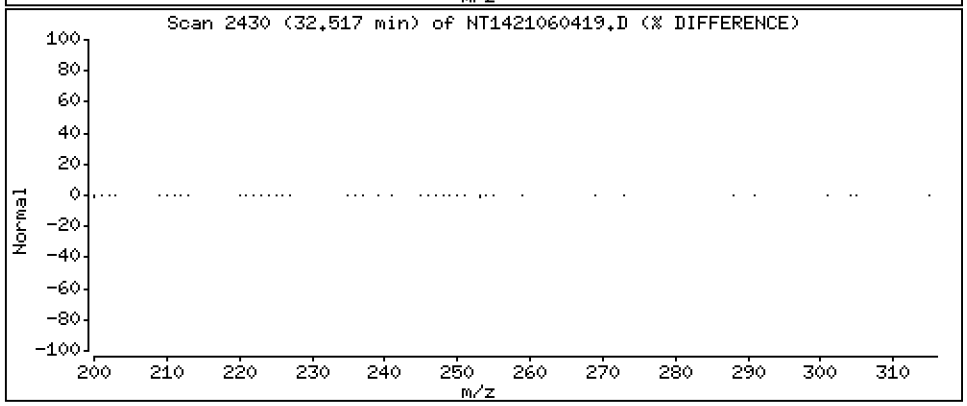












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Date : 05-JUN-2021 02:43

Client ID:

Instrument: nt14.i

Sample Info: BJE0383-BS1

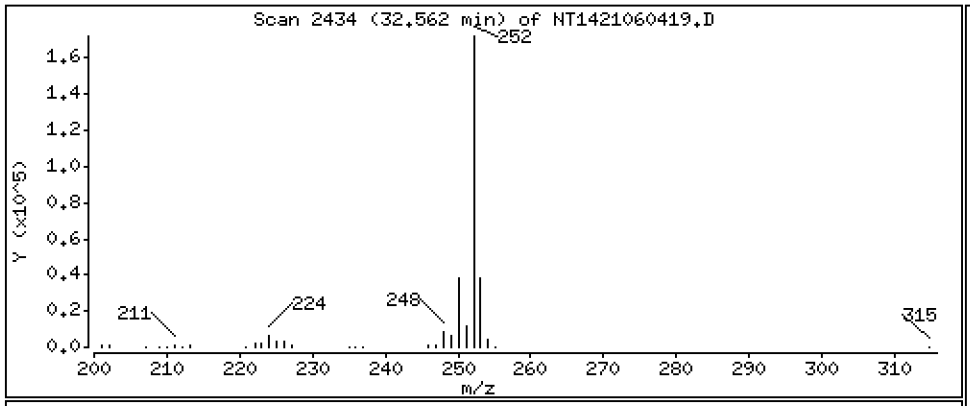
Operator: VTS

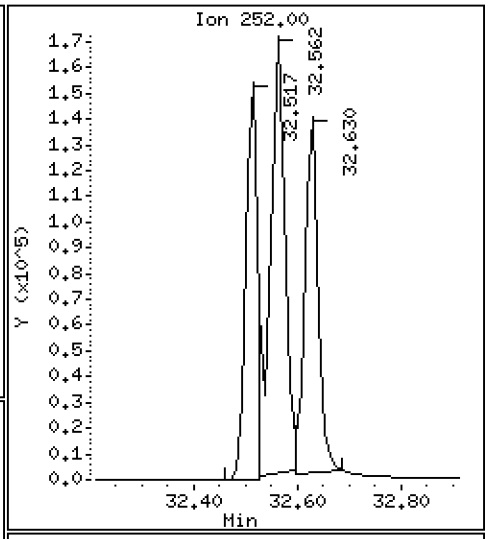
Column phase: Rxi-17Sil MS

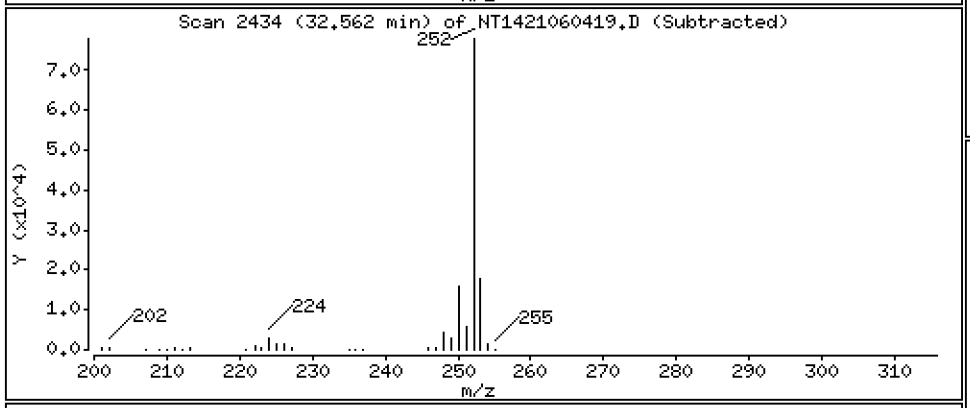
Column diameter: 0.25

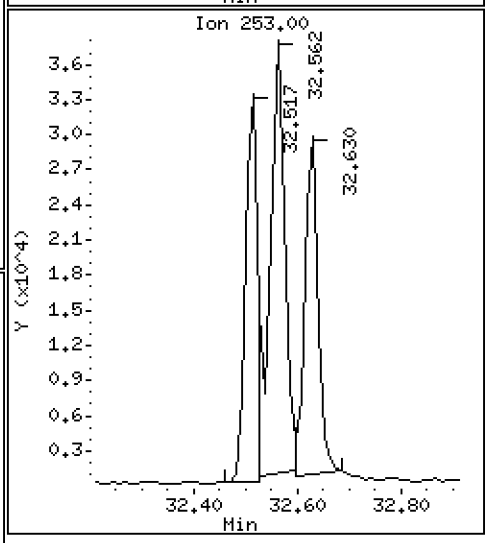
63 Benzo(k)fluoranthene

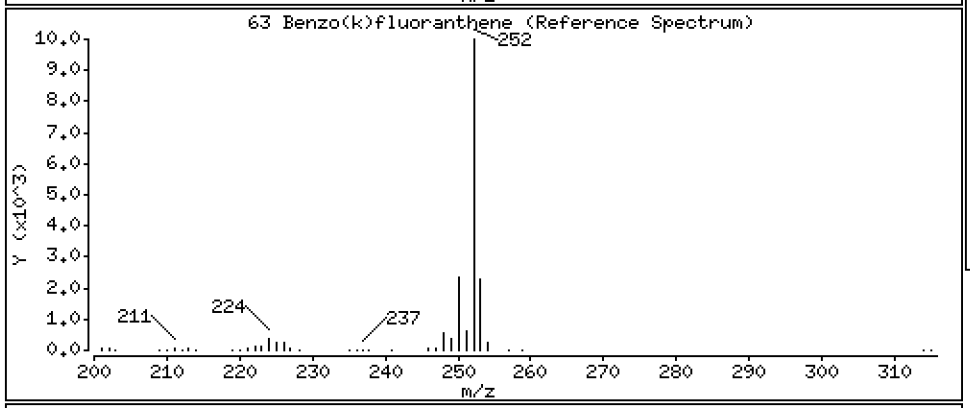
Concentration: 1.648 ug/mL

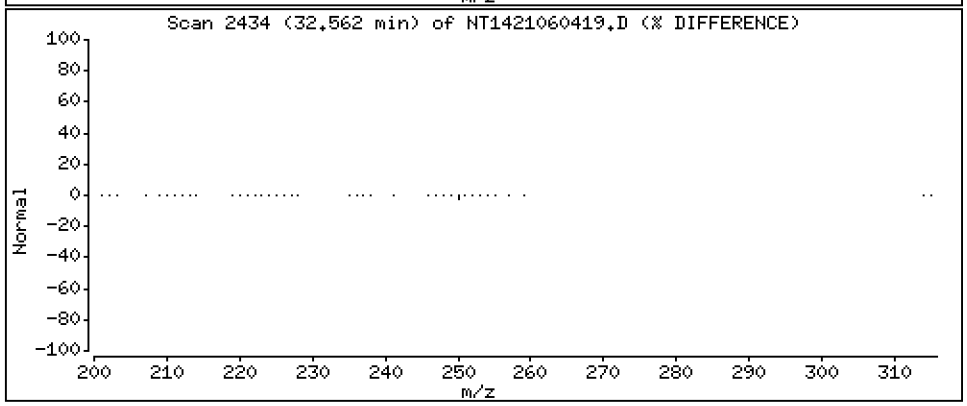












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Date : 05-JUN-2021 02:43

Client ID:

Instrument: nt14.i

Sample Info: BJE0383-BS1

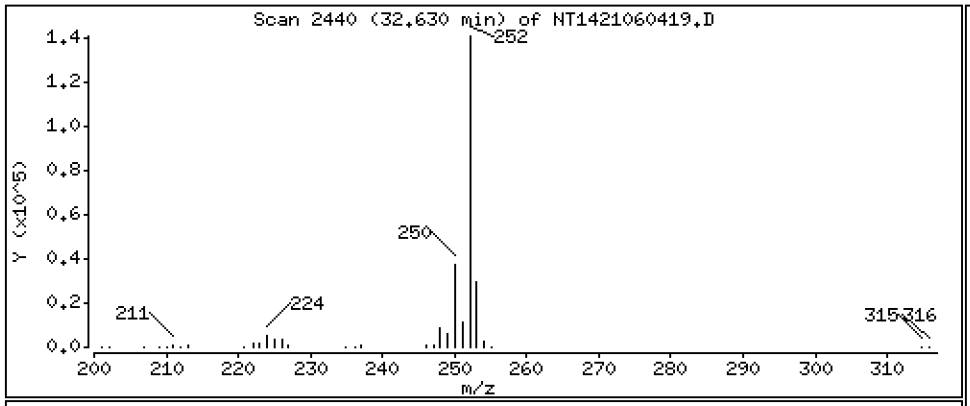
Operator: VTS

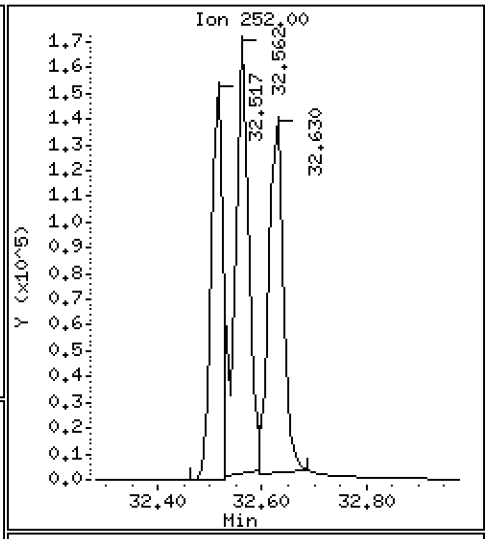
Column phase: Rxi-17Sil MS

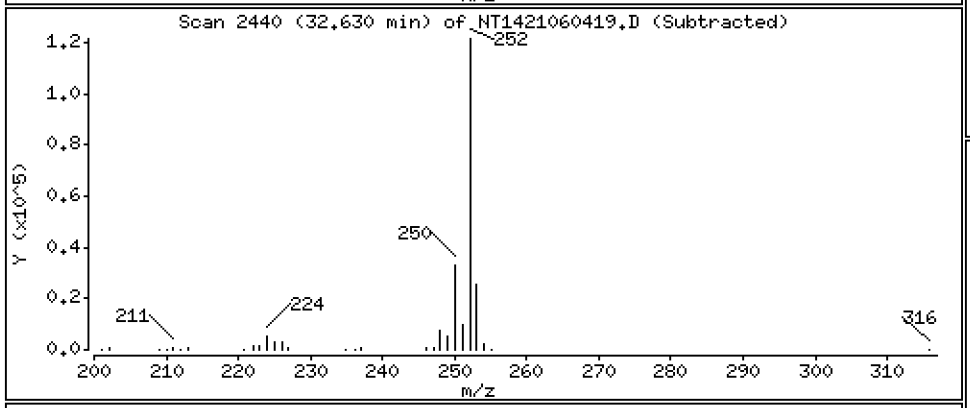
Column diameter: 0.25

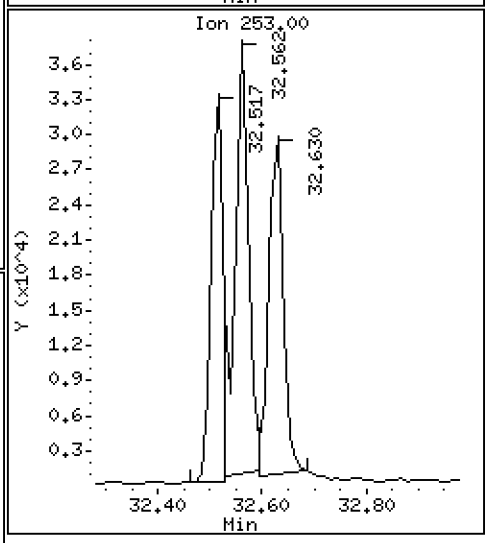
293 Benzo(j)fluoranthene

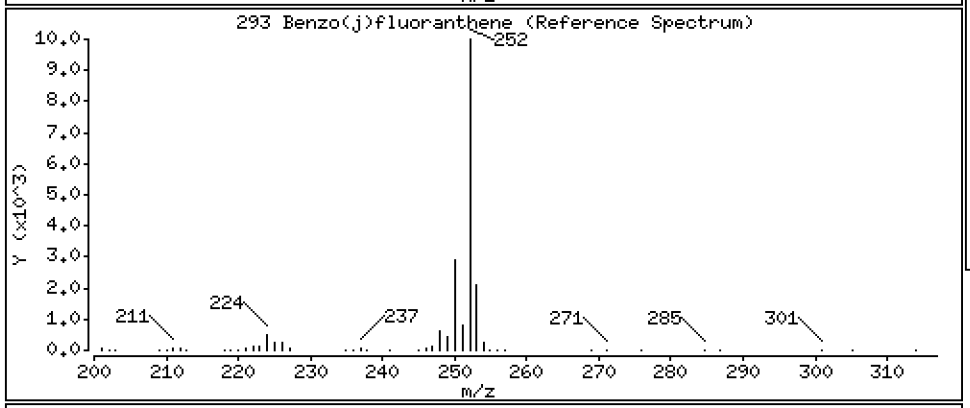
Concentration: 1.328 ug/mL

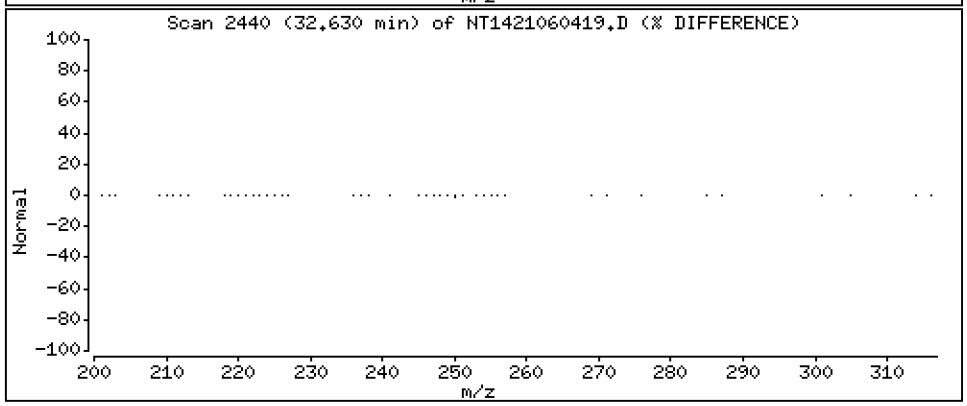












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Date : 05-JUN-2021 02:43

Client ID:

Instrument: nt14.i

Sample Info: BJE0383-BS1

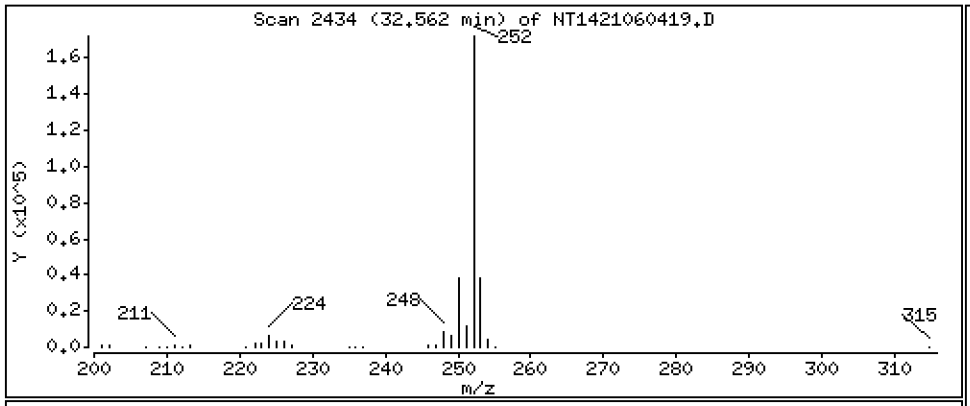
Operator: VTS

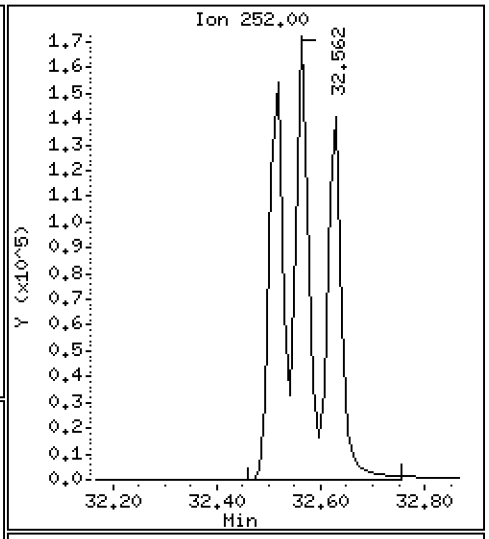
Column phase: Rxi-17Sil MS

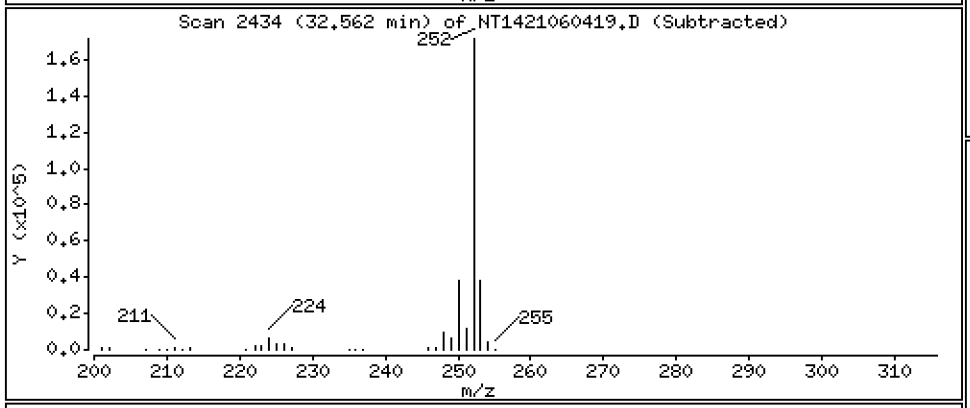
Column diameter: 0.25

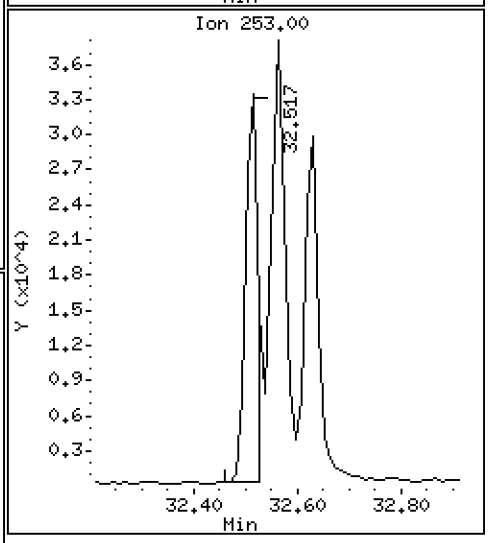
246 Total Benzofluoranthenes

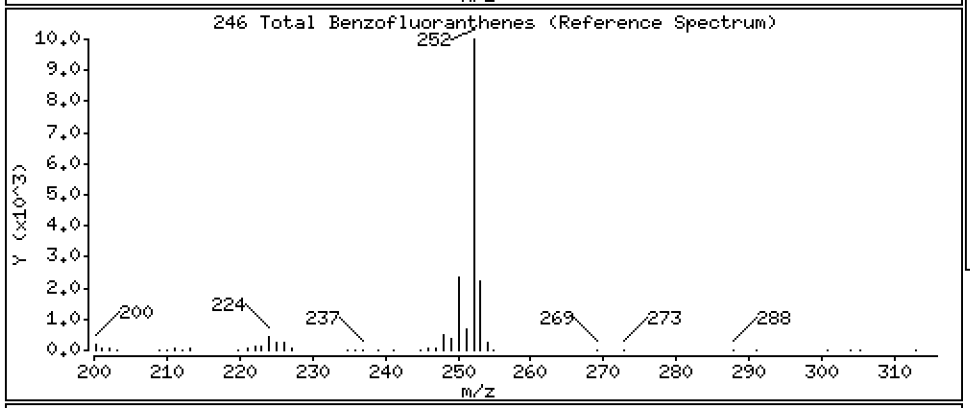
Concentration: 4.376 ug/mL

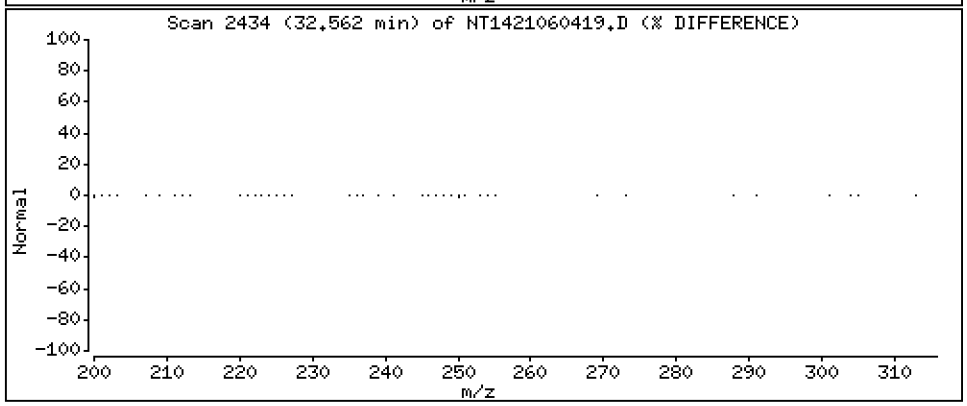












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Date : 05-JUN-2021 02:43

Client ID:

Instrument: nt14.i

Sample Info: BJE0383-BS1

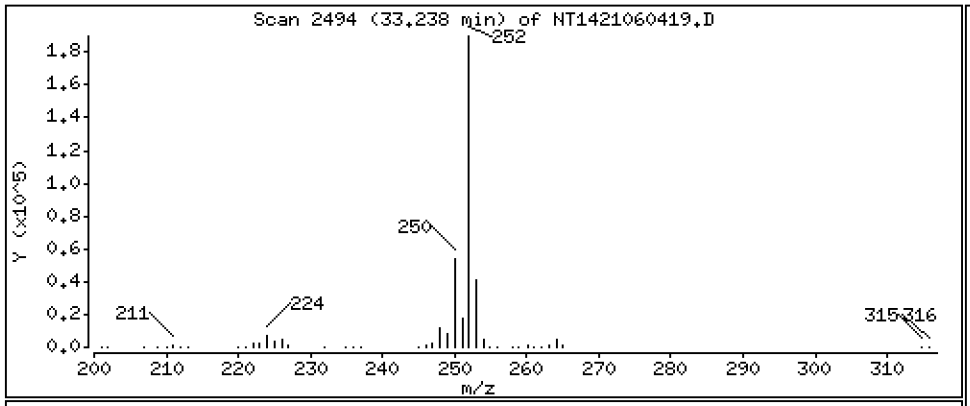
Operator: VTS

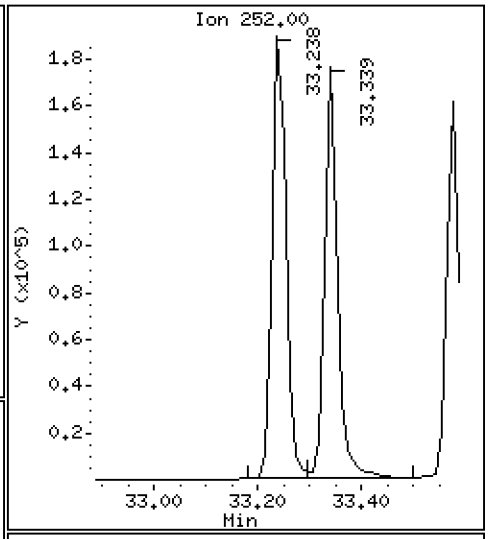
Column phase: Rxi-17Sil MS

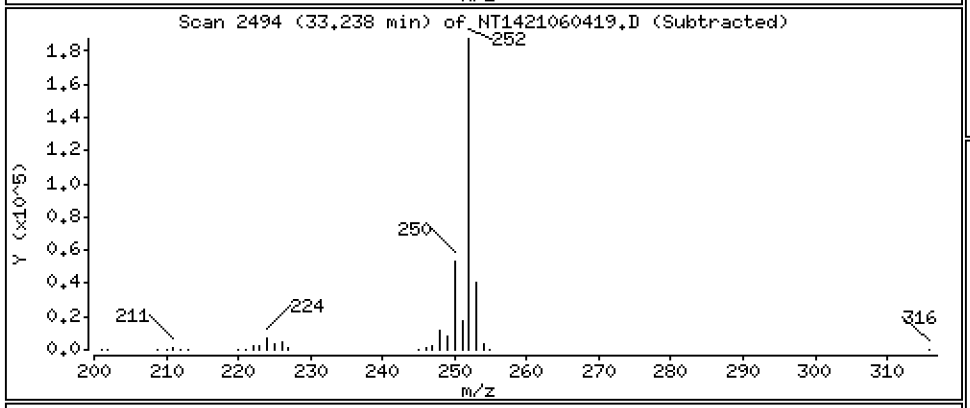
Column diameter: 0.25

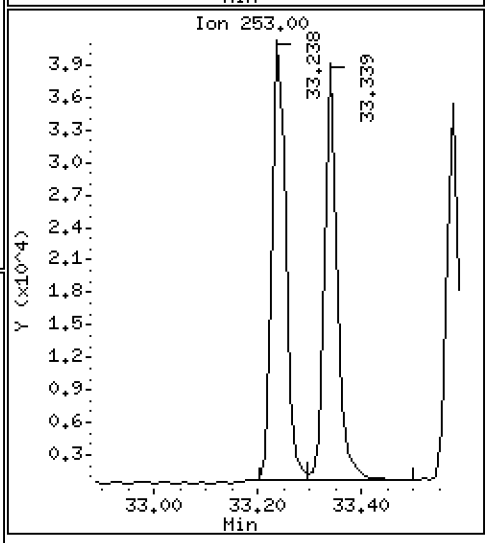
64 Benzo(e)pyrene

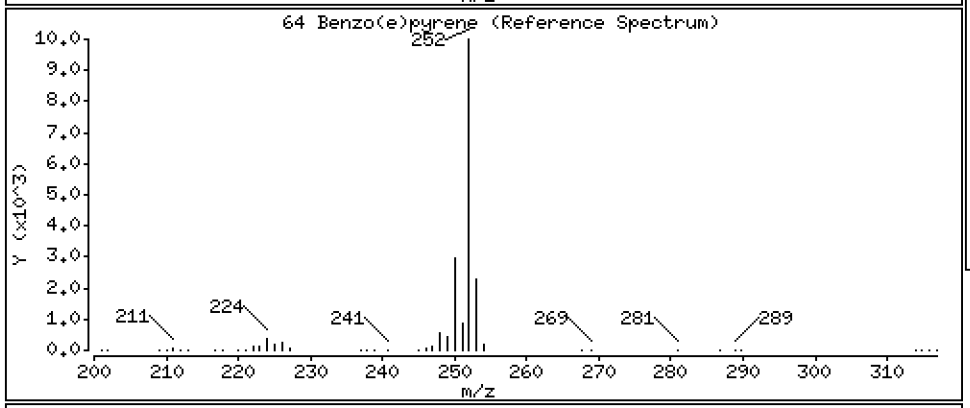
Concentration: 1.693 ug/mL

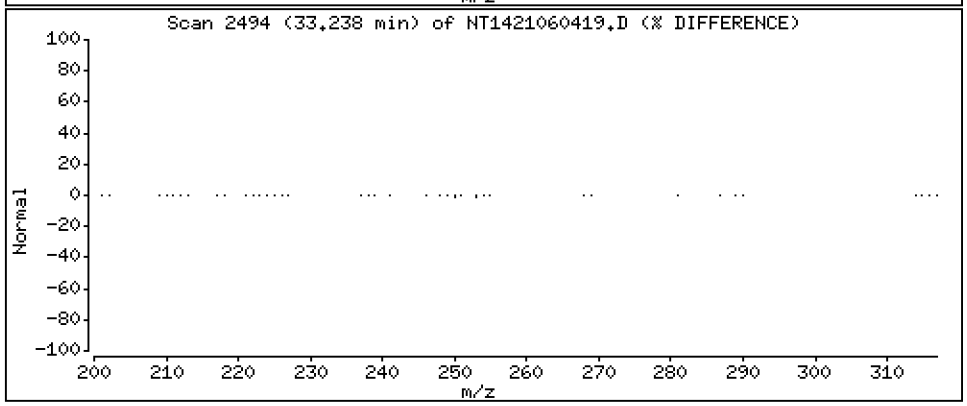












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Date : 05-JUN-2021 02:43

Client ID:

Instrument: nt14.i

Sample Info: BJE0383-BS1

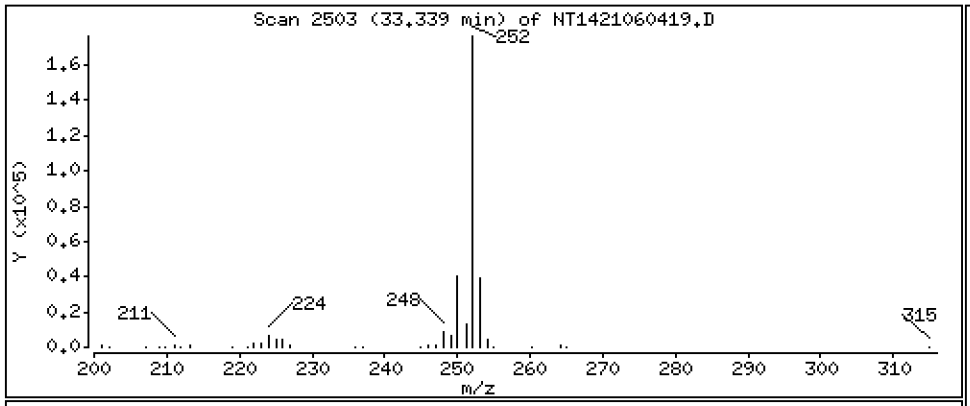
Operator: VTS

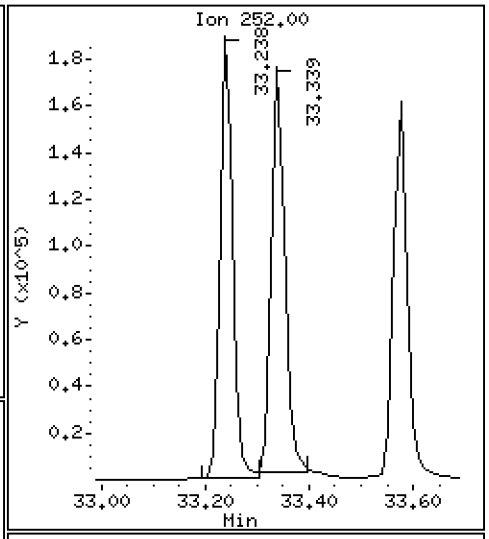
Column phase: Rxi-17Sil MS

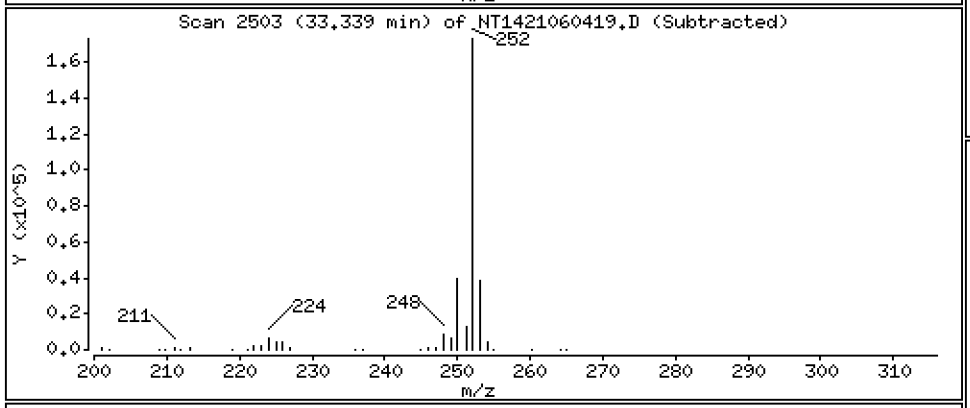
Column diameter: 0.25

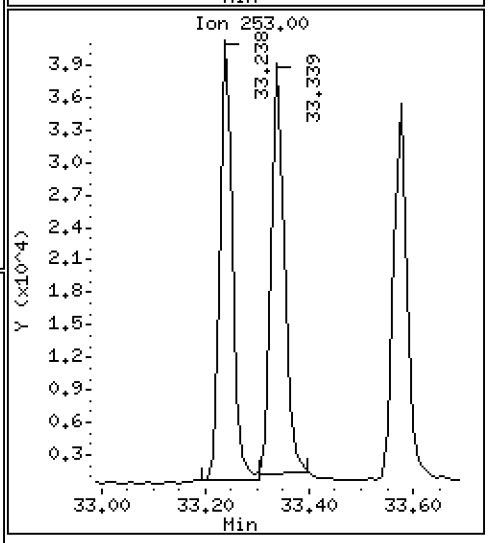
66 Benzo(a)pyrene

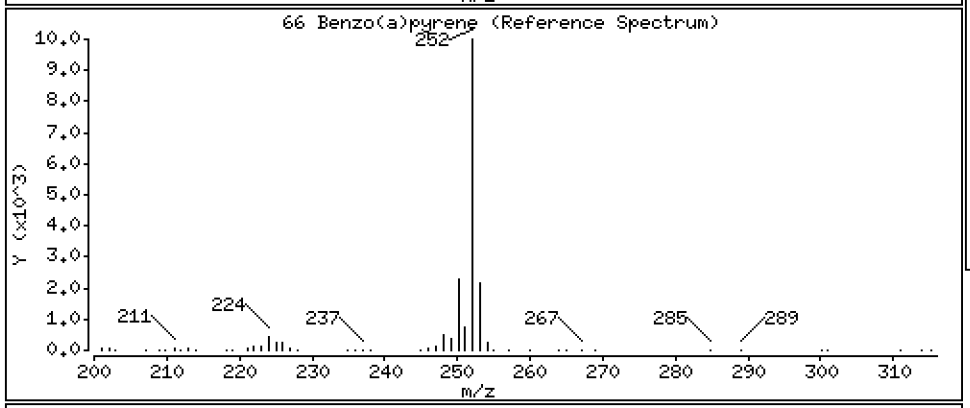
Concentration: 1.678 ug/mL

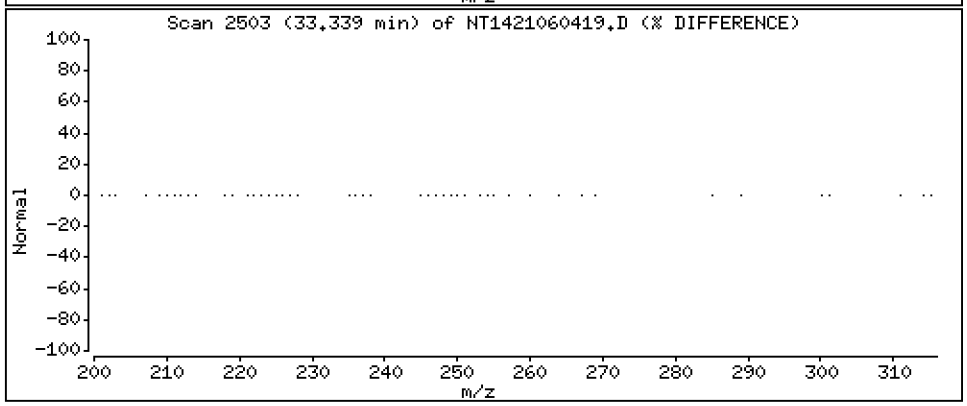












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Date : 05-JUN-2021 02:43

Client ID:

Instrument: nt14.i

Sample Info: BJE0383-BS1

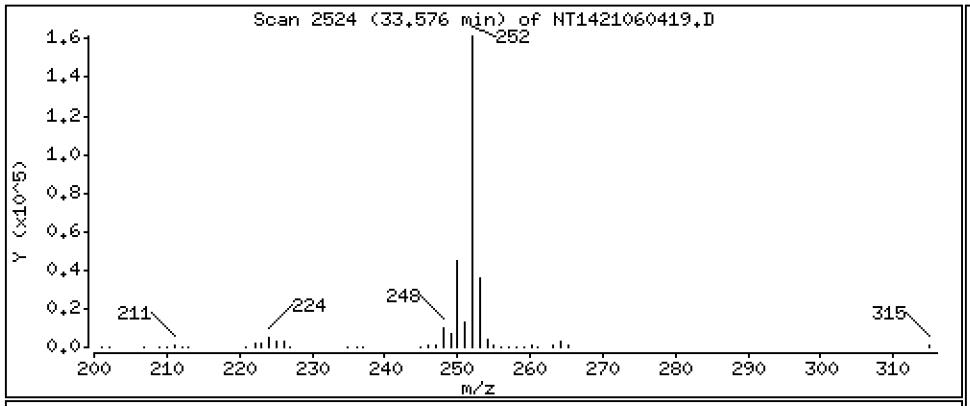
Operator: VTS

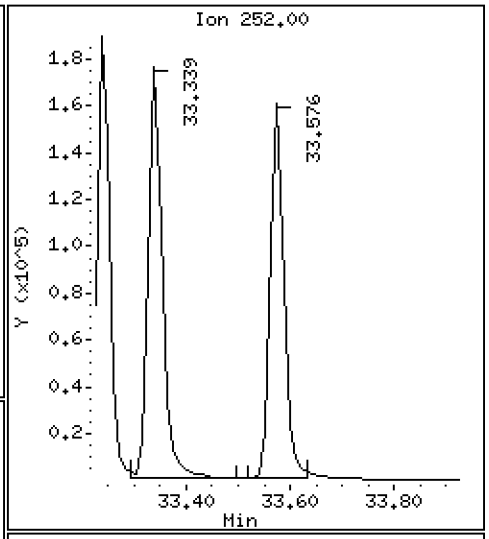
Column phase: Rxi-17Sil MS

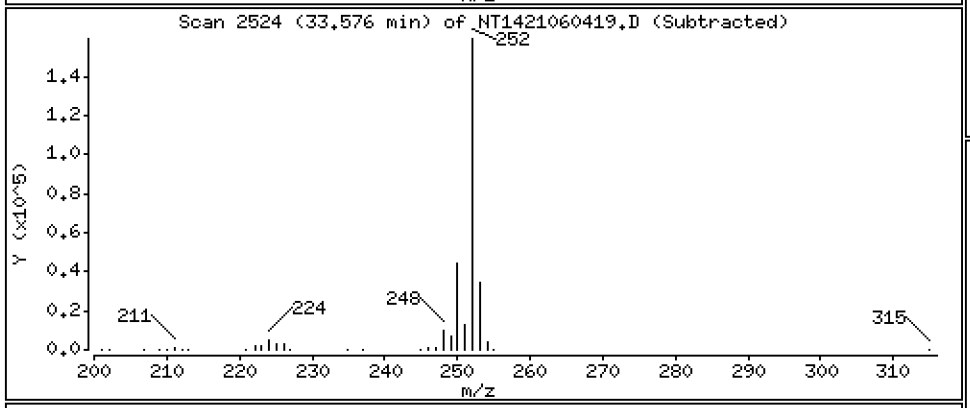
Column diameter: 0.25

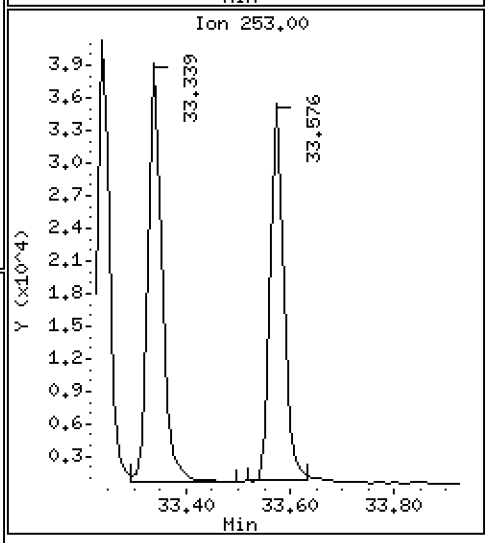
68 Perylene

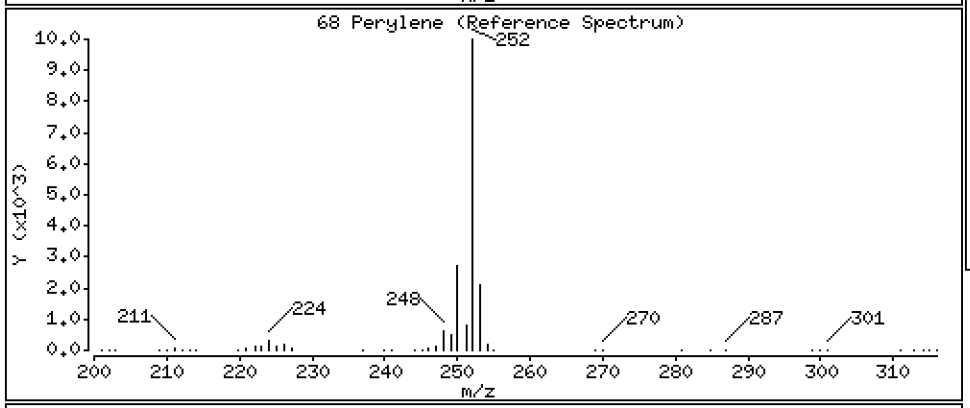
Concentration: 1.519 ug/mL

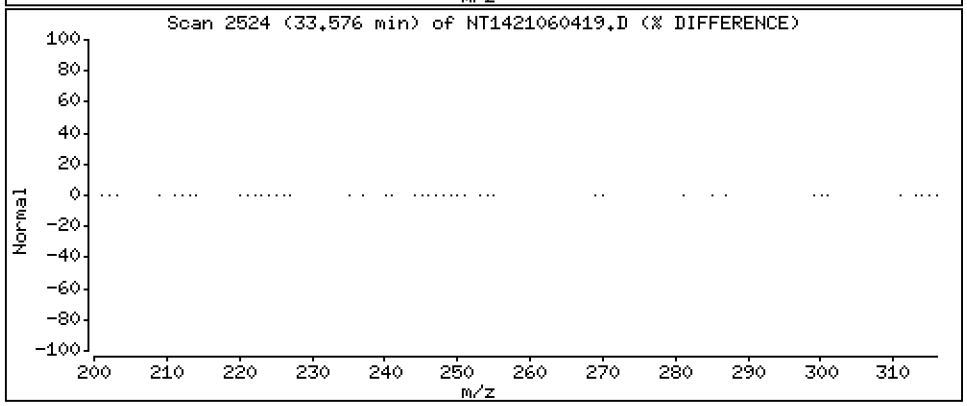












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Date : 05-JUN-2021 02:43

Client ID:

Instrument: nt14.i

Sample Info: BJE0383-BS1

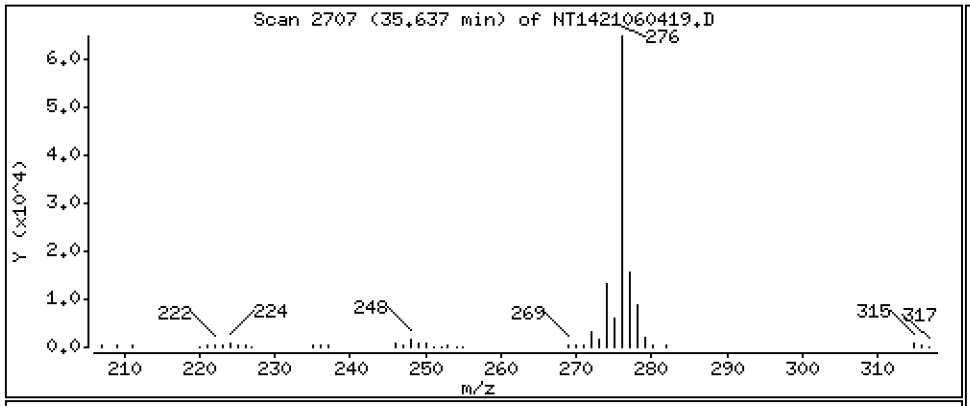
Operator: VTS

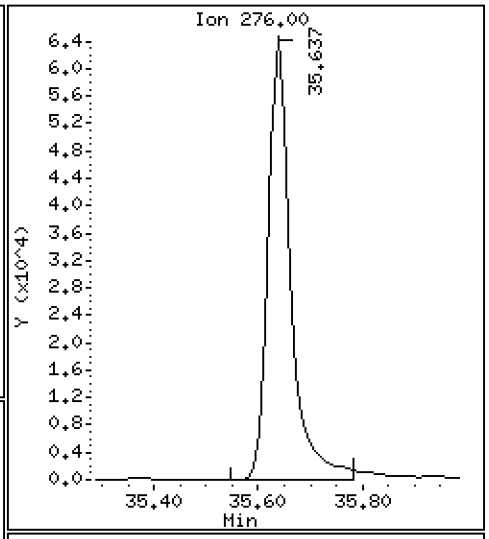
Column phase: Rxi-17Sil MS

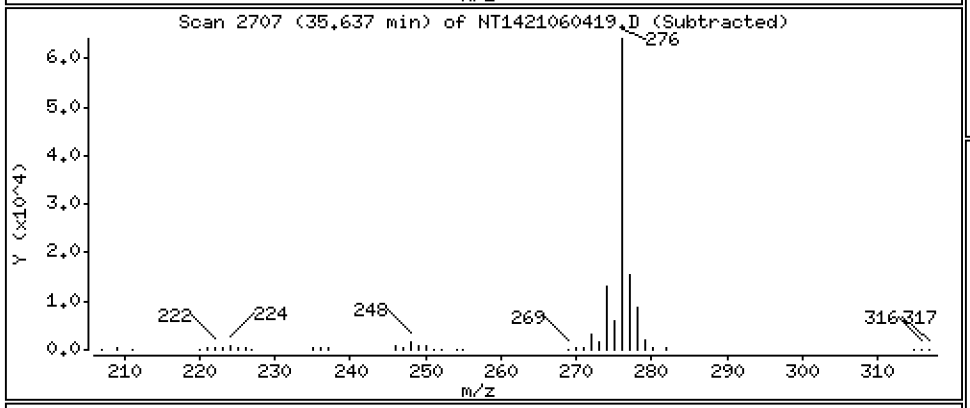
Column diameter: 0.25

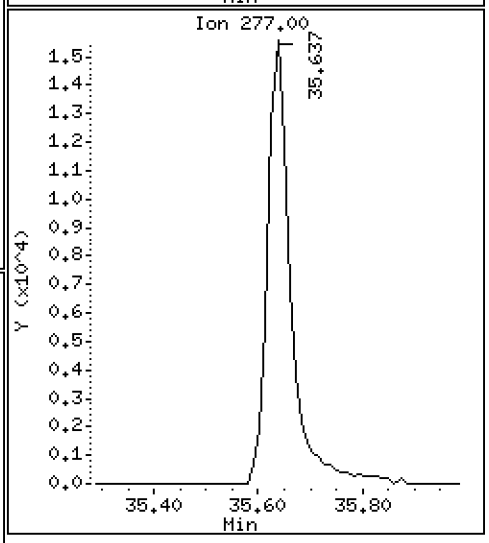
69 Indeno(1,2,3-cd)pyrene

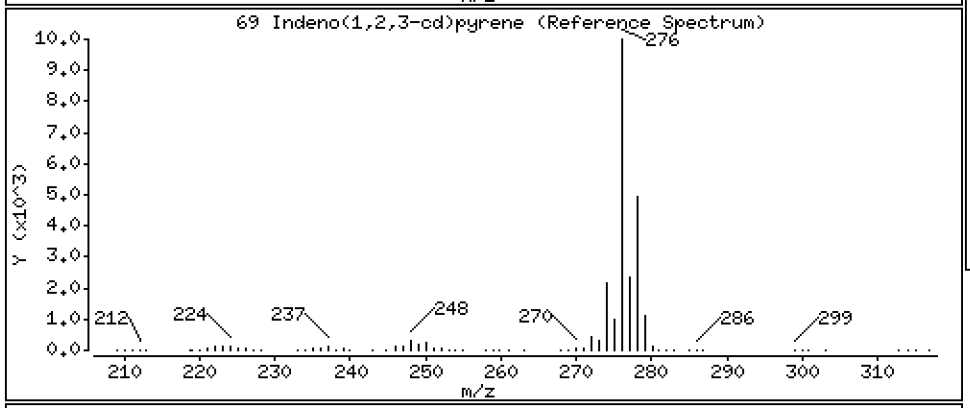
Concentration: 0.9314 ug/mL

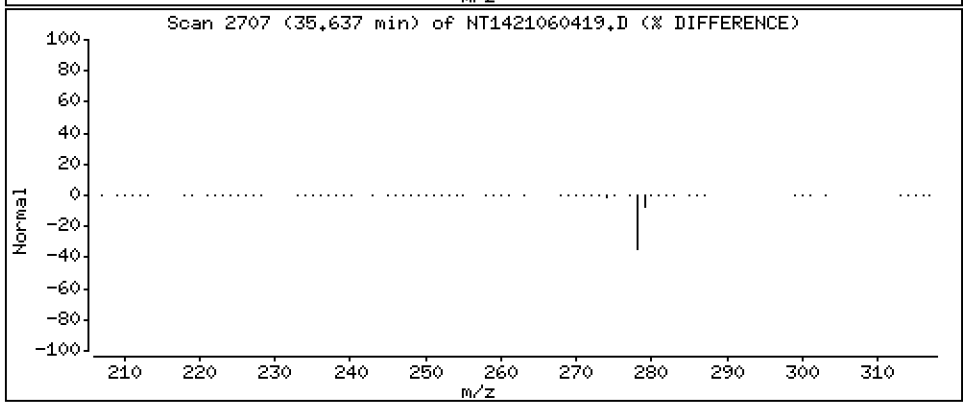












Data File: \\target\share\chem3\nt14.i\20210604A.b\NT1421060419.D

Date : 05-JUN-2021 02:43

Client ID:

Instrument: nt14.i

Sample Info: BJE0383-BS1

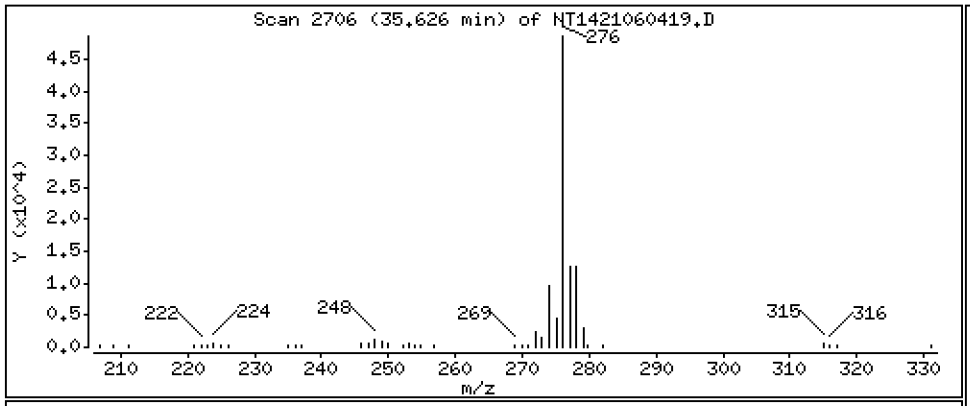
Operator: VTS

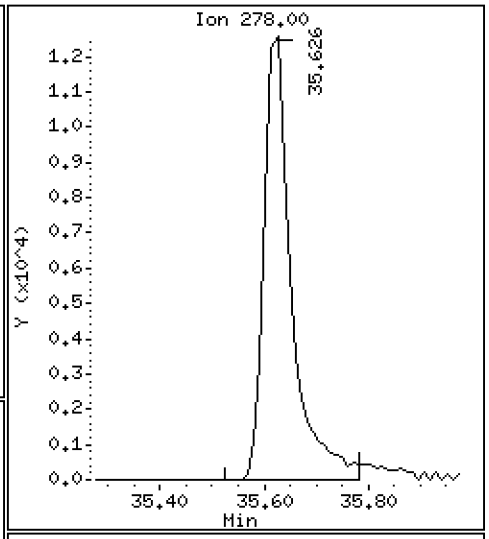
Column phase: Rxi-17Sil MS

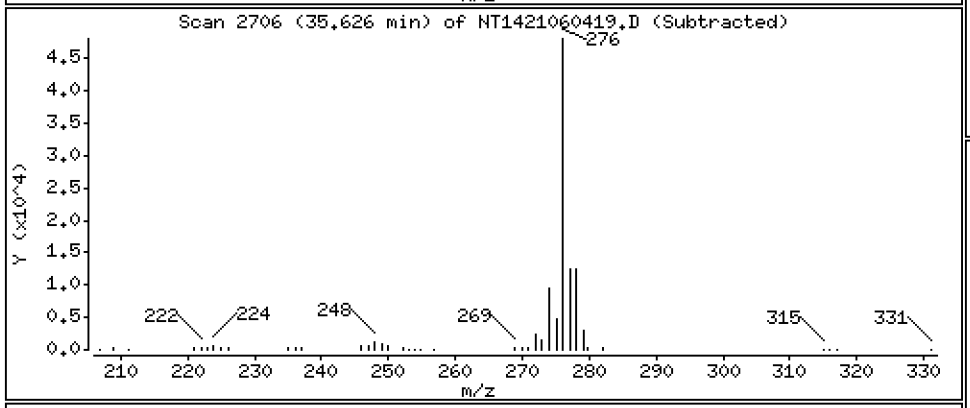
Column diameter: 0.25

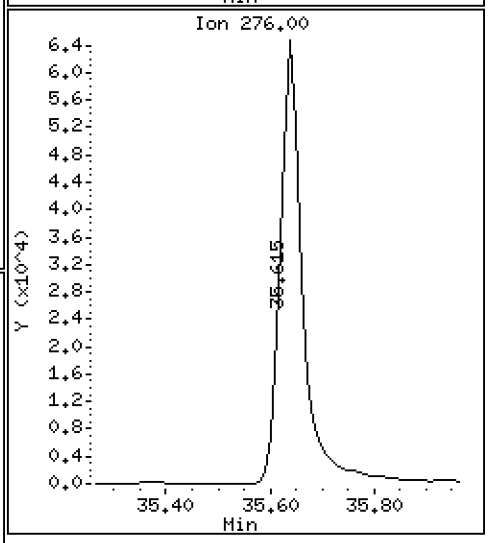
70 Dibenzo(a,h)anthracene

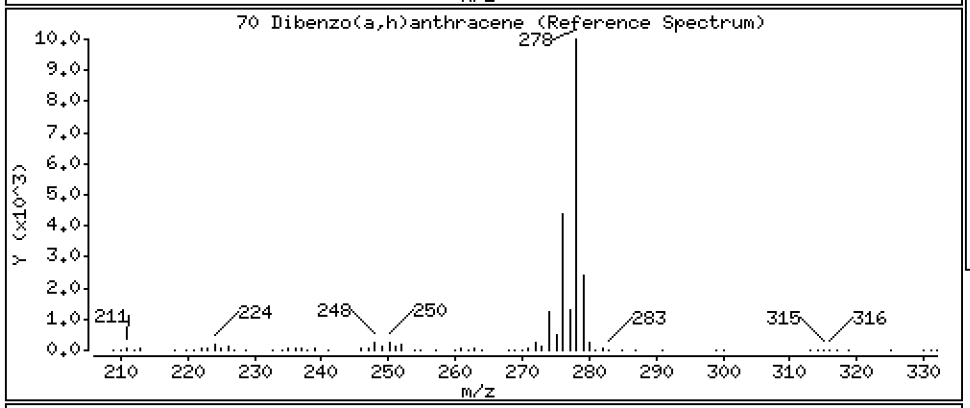
Concentration: 0.2398 ug/mL

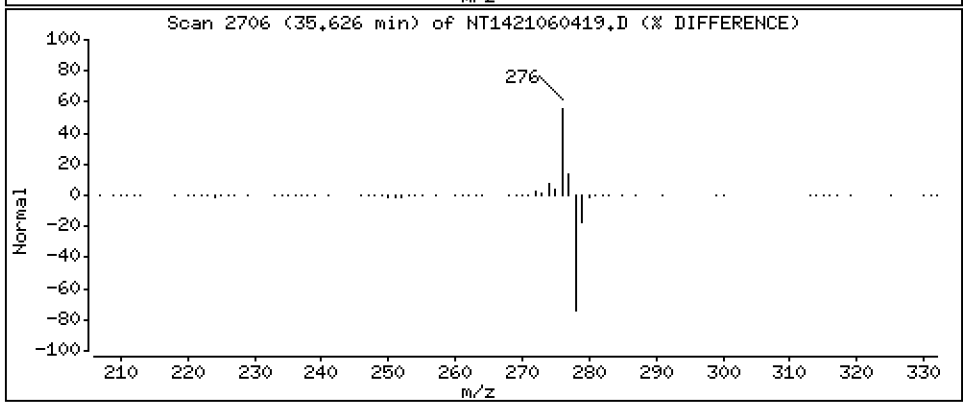












Data File: \\target\share\chem3\nt14.i\20210604A.b\NT1421060419.D

Date : 05-JUN-2021 02:43

Client ID:

Instrument: nt14.i

Sample Info: BJE0383-BS1

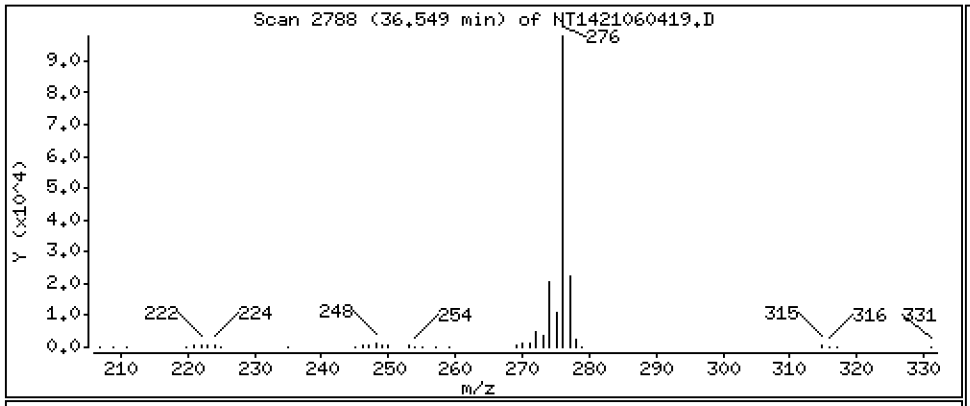
Operator: VTS

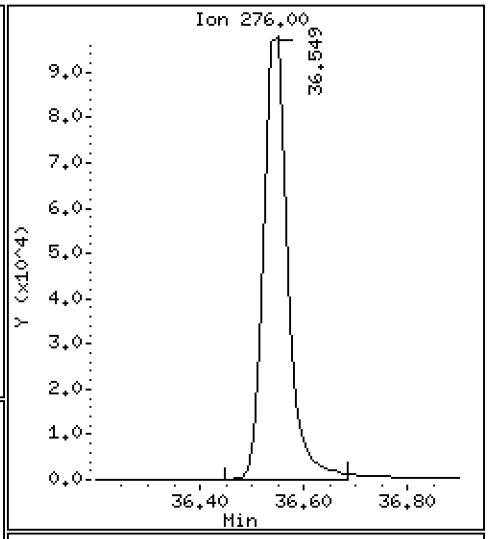
Column phase: Rxi-17Sil MS

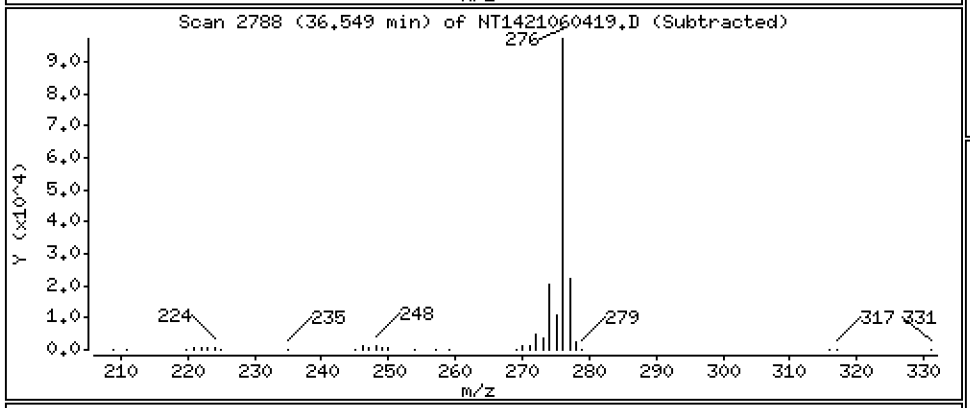
Column diameter: 0.25

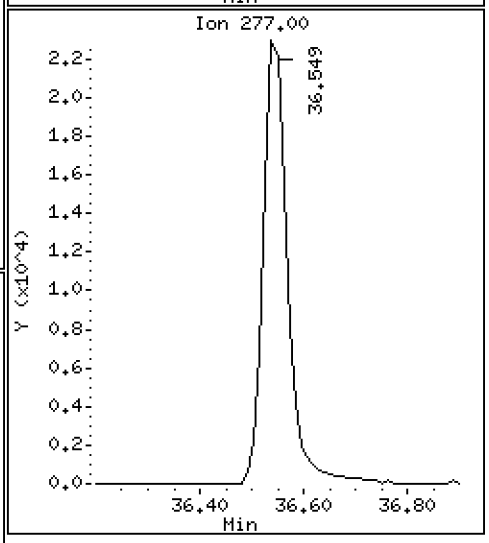
74 Benzo(g,h,i)perylene

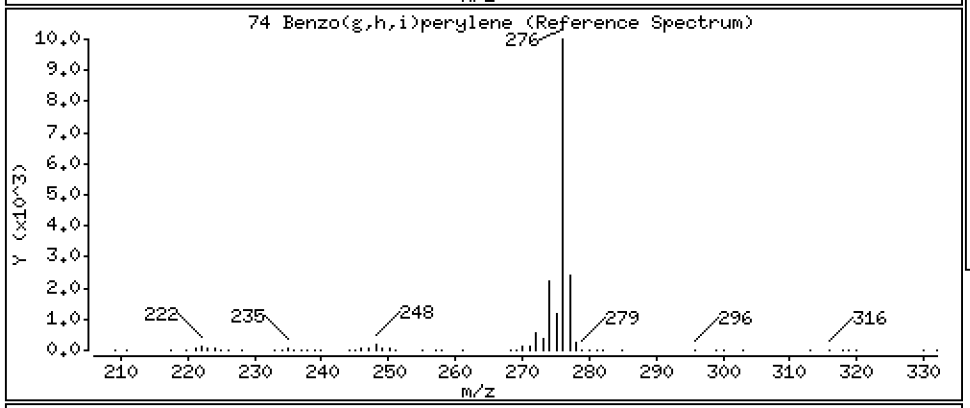
Concentration: 1.533 ug/mL

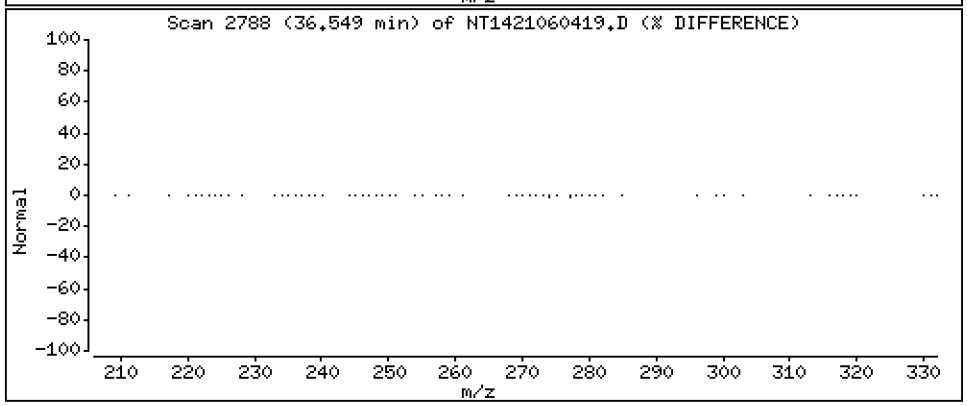












ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt14.i\20210604A.b\NT1421060419.D
Lab Smp Id: BJE0383-BS1
Inj Date : 05-JUN-2021 02:43
Operator : VTS Inst ID: nt14.i
Smp Info : BJE0383-BS1
Misc Info :
Comment : 1ul Injection
Method : \\target\share\chem3\nt14.i\20210604.b\ALKYLPNA.m
Meth Date : 03-Jun-2021 08:55 yev Quant Type: ISTD
Cal Date : 29-MAY-2021 18:49 Cal File: NT1421052914.D
Als bottle: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: TARGETS.sub
Target Version: 4.14
Processing Host: ORGDATA102

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/mL)
1 trans-Decalin	138	7.136	7.146	(0.378)	13365	0.92542	0.9254
2 cis-Decalin	138	8.245	8.256	(0.436)	10686	0.92193	0.9219
$ 6 Naphthalene-d8	136	11.887	11.897	(0.629)	125029	0.92868	0.9287(R)
7 Naphthalene	128	11.947	11.957	(0.632)	139379	1.03586	1.036
12 Benzo(b)thiophene	134	12.409	12.409	(0.657)	110491	0.99889	0.9989
16 2-Methylnaphthalene	141	13.783	13.794	(0.729)	83341	1.05956	1.060
17 1-methylnaphthalene	141	14.244	14.244	(0.754)	82851	1.08271	1.083
18 Biphenyl	154	15.431	15.442	(0.817)	128420	1.10493	1.105
19 2,6-Dimethylnaphthalene	156	15.508	15.508	(0.821)	96375	1.12759	1.128
20 Acenaphthylene	152	17.080	17.091	(0.904)	157743	1.07964	1.080
$ 21 Acenaphthene-d10	164	17.365	17.376	(0.919)	84054	1.01653	1.017(R)
22 Acenaphthene	153	17.486	17.486	(0.925)	111068	1.23314	1.233
23 Dibenzofuran	168	17.860	17.860	(0.945)	162908	1.21935	1.219
24 1,6,7-Trimethylnaphthalene	170	18.080	18.091	(0.957)	110966	1.27482	1.275
* 25 Fluorene-d10	176	18.896	18.907	(1.000)	289598	2.00000	
26 Fluorene	166	19.009	19.009	(1.006)	134586	1.30017	1.300
30 Dibenzothiophene	184	21.931	21.931	(1.161)	222528	1.52270	1.523
$ 35 Phenanthrene-d10	188	22.238	22.239	(0.995)	196057	1.30103	1.301(R)
36 Phenanthrene	178	22.315	22.326	(0.999)	255054	1.57929	1.579
* 250 Anthracene-d10	188	22.348	22.359	(1.000)	313224	2.00000	
37 Anthracene	178	22.425	22.425	(1.003)	230645	1.51789	1.518
42 Carbazole	167	Compound Not Detected.					
43 1-Methylphenanthrene	192	24.151	24.162	(1.081)	208094	1.79298	1.793
44 Fluoranthene	202	26.130	26.141	(1.169)	360994	2.02513	2.025
46 Pyrene	202	26.977	26.977	(1.207)	394710	2.12904	2.129
51 Naphthobenzothiophene	234	29.509	29.509	(1.320)	355360	1.78394	1.784
55 Benzo(a)anthracene	228	30.095	30.095	(0.907)	356633	1.91768	1.918
$ 56 Chrysene-d12	240	30.219	30.219	(0.911)	228280	1.52096	1.521(R)
57 Chrysene	228	30.286	30.287	(0.913)	355727	1.95206	1.952
62 Benzo(b)fluoranthene	252	32.517	32.517	(0.980)	251768	1.30536	1.305
63 Benzo(k)fluoranthene	252	32.562	32.562	(0.981)	341109	1.64830	1.648
293 Benzo(j)fluoranthene	252	32.629	32.629	(0.983)	253278	1.32821	1.328
246 Total Benzofluoranthenes	252	32.562	32.517	(0.981)	826701	4.37605	4.376(M)

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/mL)
* 251 Benzo(e)pyrene-d12	264	33.181	33.181	(1.000)	479490	2.00000	
64 Benzo(e)pyrene	252	33.237	33.237	(1.002)	320030	1.69295	1.693
66 Benzo(a)pyrene	252	33.339	33.339	(1.005)	288511	1.67769	1.678
$ 67 Perylene-d12	264	33.519	33.519	(1.010)	193736	1.19573	1.196(R)
68 Perylene	252	33.575	33.575	(1.012)	269270	1.51870	1.519
69 Indeno(1,2,3-cd)pyrene	276	35.636	35.637	(1.074)	188004	0.93137	0.9314(M)
70 Dibenzo(a,h)anthracene	278	35.625	35.625	(1.074)	44935	0.23981	0.2398(M)
74 Benzo(g,h,i)perylene	276	36.549	36.549	(1.101)	305622	1.53255	1.533(M)

QC Flag Legend

R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt14.i
Lab File ID: NT1421060419.D
Lab Smp Id: BJE0383-BS1
Analysis Type: SV
Quant Type: ISTD
Operator: VTS
Method File: \\target\share\chem3\nt14.i\20210604.b\ALKYLPNA.m
Misc Info:

Calibration Date: 01-JUN-2021
Calibration Time: 15:22
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
25 Fluorene-d10	228656	114328	457312	289598	26.65
250 Anthracene-d10	234827	117414	469654	313224	33.39
251 Benzo(e)pyrene-d1	331649	165825	663298	479490	44.58

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
25 Fluorene-d10	18.91	18.41	19.41	18.90	-0.06
250 Anthracene-d10	22.36	21.86	22.86	22.35	-0.05
251 Benzo(e)pyrene-d1	33.18	32.68	33.68	33.18	-0.00

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

REVIEW SUMMARY FOR FILE - NT1421060419.D

Lab ID: BJE0383-BS1
nt14.i, 20210604.b\ALKYLPNA.m, 05-JUN-2021 02:43

RT	CO-ELUTION COMPOUNDS
	NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
NONE			

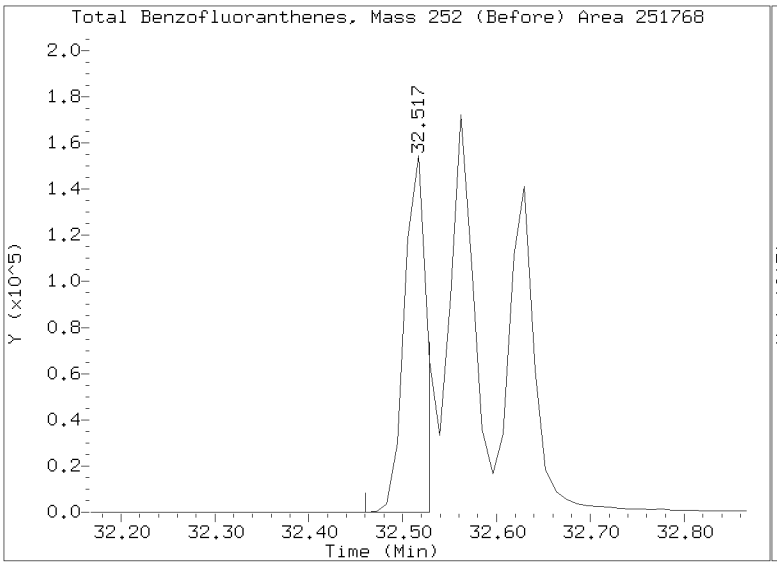
RRT check based on Ccal File: NT1421060102.D

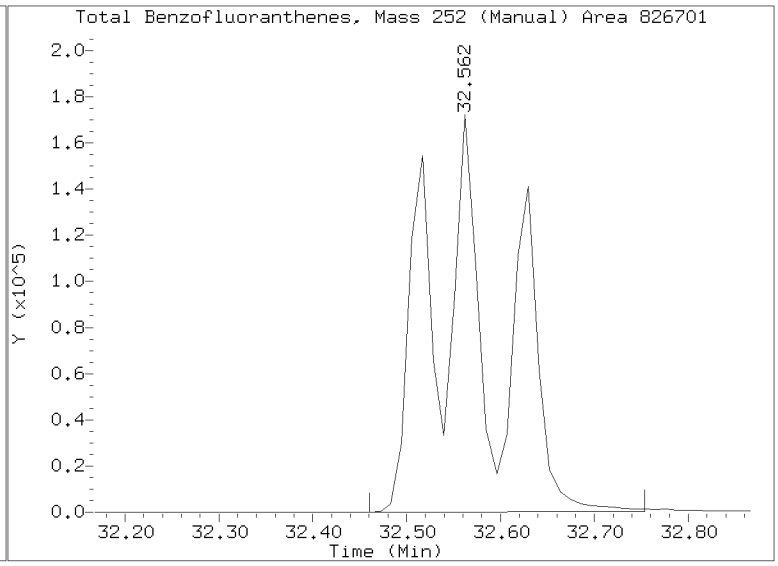
On Column LOD for nt14.i, 20210604.b\ALKYLPNA.m, TARGETS.sub = 0.0000

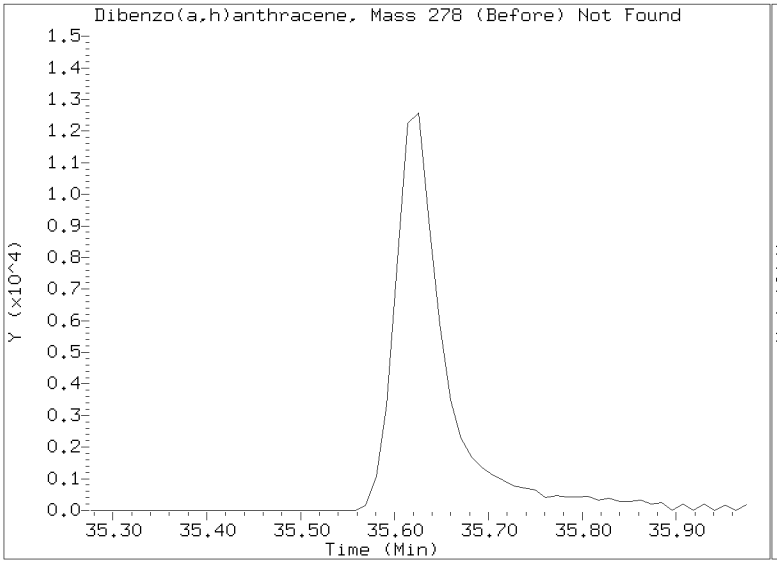
* Only compounds listed in the work order have been verified by the analyst *

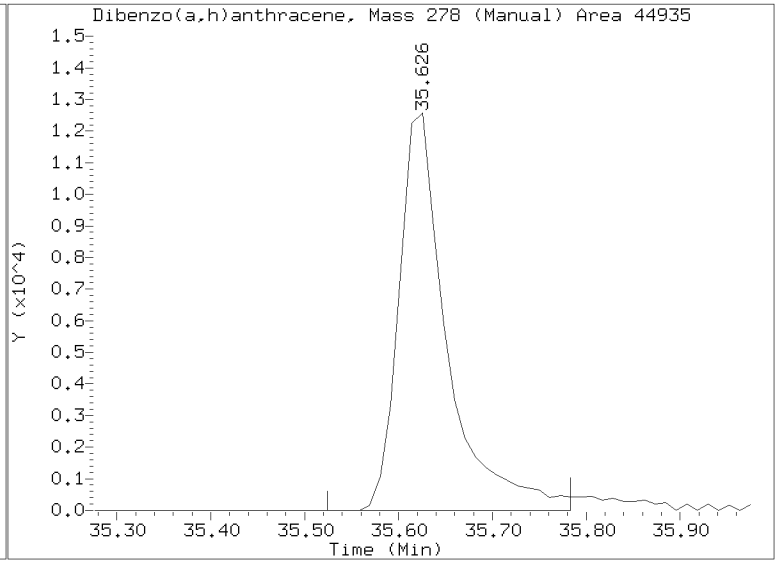
Quant Ion Manual Peak Adjustment Report

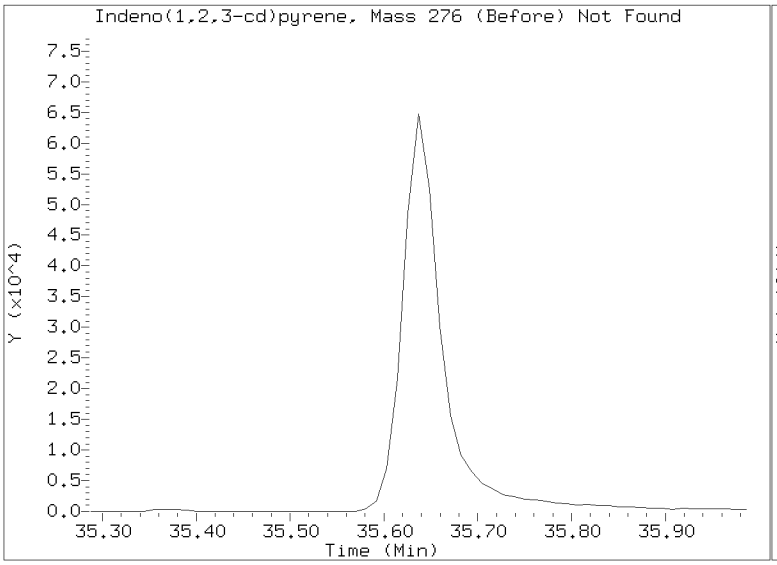
Datafile: //target/share/chem3/nt14.i/20210604A.b/NT1421060419.D
Injection Date: 05-JUN-2021 02:43
Lab ID:BJE0383-BS1 Client ID:
Report Date: 06/10/2021 15:49

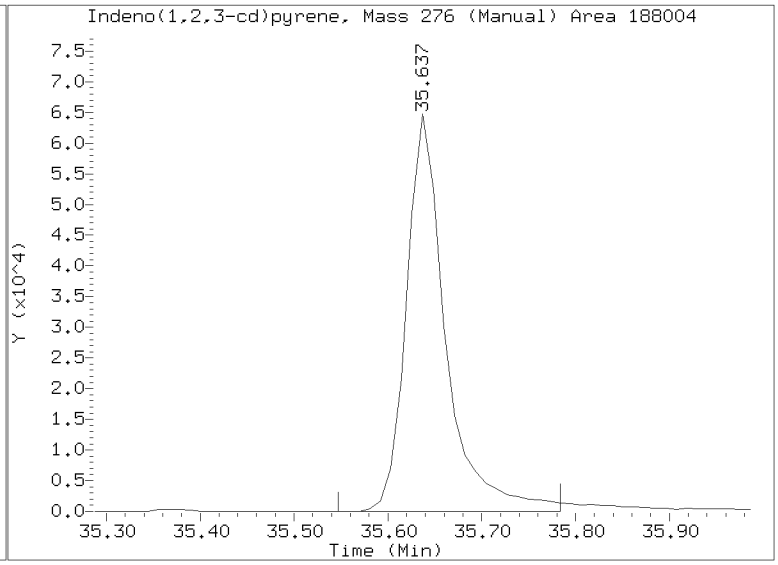






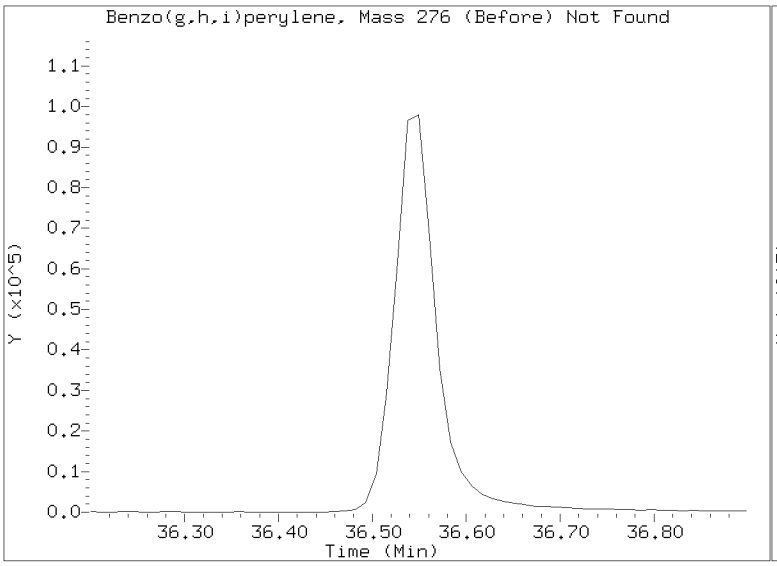


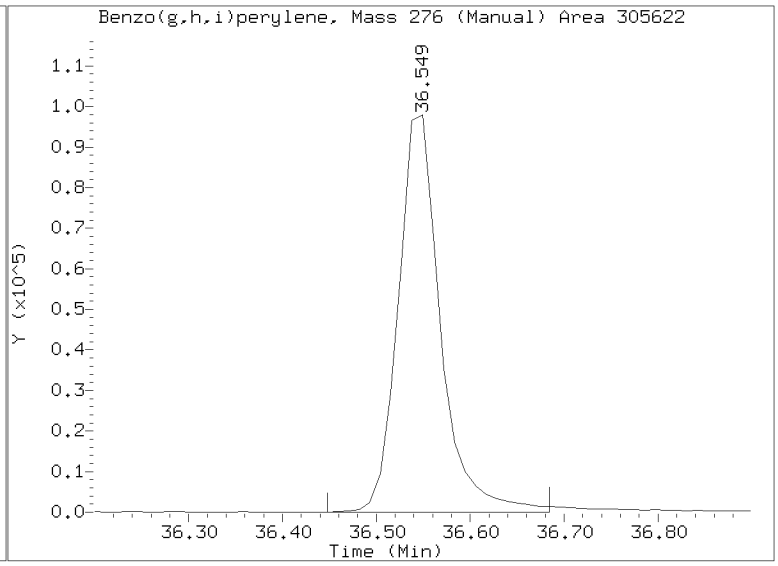




Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt14.i/20210604A.b/NT1421060419.D
Injection Date: 05-JUN-2021 02:43
Lab ID:BJE0383-BS1 Client ID:
Report Date: 06/10/2021 15:49





Analytical Resources, Incorporated
Analytical Chemists and Consultants

USMPDI-030SG-210504

MS / MS DUPLICATE RECOVERY
EPA 8270E-SIM

Laboratory:	Analytical Resources, Inc.	SDG:	21E0106
Client:	Anchor QEA, LLC	Project:	Gasco Siltronic - US Moorings
Matrix:	Solid	Analyzed:	06/07/21 21:18
Batch:	BJE0383	Laboratory ID:	BJE0383-MS1
Preparation:	EPA 3546 (Microwave)	Sequence Name:	Matrix Spike
Initial/Final:	17.01 g / 0.5 mL	Source Sample:	USMPDI-030SG-210504

COMPOUND	SPIKE ADDED (ug/kg dry)	SAMPLE CONCENTRATION (ug/kg dry)	Q	MS CONCENTRATION (ug/kg dry)	Q	MS % REC. #	QC LIMITS REC.
trans-Decalin	150	ND	U	74.7	D	49.8	30 - 160
cis-Decalin	150	ND	U	83.0	D	55.3	30 - 160
Naphthalene	150	8.6	J, D	92.0	D	55.6	37 - 120
1-Methylnaphthalene	150	3.3	J, D	90.0	D	57.7	30 - 160
2-Methylnaphthalene	150	4.3	J, D	91.0	D	57.8	37 - 120
Biphenyl	150	ND	U	93.4	D	62.2	30 - 160
2,6-Dimethylnaphthalene	150	ND	U	94.5	D	63.0	30 - 160
Acenaphthylene	150	6.6	J, D	95.1	D	59.0	35 - 120
Acenaphthene	150	48.3	D	107	D	39.0	39 - 120
Dibenzofuran	150	35.5	D	99.0	D	42.3	39 - 120
2,3,5-Trimethylnaphthalene	150	ND	U	98.5	D	65.7	30 - 160
Fluorene	150	44.7	D	106	*, D	40.8 *	42 - 120
Benzo(b)thiophene	150	ND	U	81.0	D	54.0	30 - 160
Phenanthrene	150	105	D	161	*, D	37.7 *	47 - 120
Anthracene	150	20.5	J, D	112	D	61.3	41 - 120
Carbazole	150	9.8	J, D	101	D	60.9	30 - 160
1-Methylphenanthrene	150	8.5	J, D	115	D	70.9	30 - 160
Fluoranthene	150	189	D	256	*, D	44.4 *	52 - 120
Dibenzothiophene	150	ND	U	106	D	70.4	30 - 160
Pyrene	150	199	D	262	*, D	42.2 *	47 - 120
Benzo(a)anthracene	150	96.5	D	195	D	65.7	47 - 120
Chrysene	150	121	D	233	D	74.8	51 - 120
Benzo(b)fluoranthene	150	96.4	D	177	D	53.8	35 - 127
Benzo(j)fluoranthene	150	58.1	D	156	D	65.0	40 - 120
Benzo(k)fluoranthene	150	58.5	D	175	D	77.7	37 - 129
Benzo(e)pyrene	150	92.0	D	178	D	57.6	30 - 160
Benzo(a)pyrene	150	135	D	220	D	56.6	44 - 120
Indeno(1,2,3-cd)pyrene	150	86.0	D	158	D	47.9	41 - 120
Dibenzo(a,h)anthracene	150	19.3	J, D	100	D	54.1	42 - 120
Benzo(g,h,i)perylene	150	110	D	195	D	56.4	37 - 120

* Values outside of QC limits

Analytical Resources, Incorporated
Analytical Chemists and Consultants

USMPDI-030SG-210504

MS / MS DUPLICATE RECOVERY
EPA 8270E-SIM

Laboratory:	Analytical Resources, Inc.	SDG:	21E0106
Client:	Anchor QEA, LLC	Project:	Gasco Siltronic - US Moorings
Matrix:	Solid	Analyzed:	06/07/21 21:18
Batch:	BJE0383	Laboratory ID:	BJE0383-MS1
Preparation:	EPA 3546 (Microwave)	Sequence Name:	Matrix Spike
Initial/Final:	17.01 g / 0.5 mL	Source Sample:	USMPDI-030SG-210504

COMPOUND	SPIKE ADDED (ug/kg dry)	SAMPLE CONCENTRATION (ug/kg dry)	Q	MS CONCENTRATION (ug/kg dry)	Q	MS % REC. #	QC LIMITS REC.
Perylene	150	97.8	D	197	D	66.0	30 - 160
Benzo(b)naphtho(2,1-d)thiophene	150	ND	U	94.3	D	62.9	30 - 160

* Values outside of QC limits

Analytical Resources, Incorporated
Analytical Chemists and Consultants

USMPDI-030SG-210504

MS / MS DUPLICATE RECOVERY
EPA 8270E-SIM

Laboratory:	Analytical Resources, Inc.	SDG:	21E0106
Client:	Anchor QEA, LLC	Project:	Gasco Siltronic - US Moorings
Matrix:	Solid	Analyzed:	06/07/21 22:07
Batch:	BJE0383	Laboratory ID:	BJE0383-MSD1
Preparation:	EPA 3546 (Microwave)	Sequence Name:	Matrix Spike Dup
Initial/Final:	17.01 g / 0.5 mL	Source Sample:	USMPDI-030SG-210504

COMPOUND	SPIKE ADDED (ug/kg dry)	MSD CONCENTRATION (ug/kg dry)	Q	MSD % REC. #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
trans-Decalin	150	74.8	D	49.9	0.151	30	30 - 160
cis-Decalin	150	84.7	D	56.5	2.07	30	30 - 160
Naphthalene	150	89.4	D	53.9	2.95	30	37 - 120
1-Methylnaphthalene	150	91.2	D	58.6	1.34	30	30 - 160
2-Methylnaphthalene	150	98.7	D	62.9	8.11	30	37 - 120
Biphenyl	150	99.6	D	66.4	6.46	30	30 - 160
2,6-Dimethylnaphthalene	150	103	D	68.7	8.65	30	30 - 160
Acenaphthylene	150	98.7	D	61.4	3.70	30	35 - 120
Acenaphthene	150	113	D	43.3	5.89	30	39 - 120
Dibenzofuran	150	106	D	47.2	7.14	30	39 - 120
2,3,5-Trimethylnaphthalene	150	106	D	70.9	7.65	30	30 - 160
Fluorene	150	121	D	51.0	13.5	30	42 - 120
Benzo(b)thiophene	150	83.0	D	55.3	2.41	30	30 - 160
Phenanthrene	150	177	D	48.4	9.51	30	47 - 120
Anthracene	150	239	*, D	146 *	72.0 *	30	41 - 120
Carbazole	150	135	D	83.2	28.4	30	30 - 160
1-Methylphenanthrene	150	118	D	73.3	3.05	30	30 - 160
Fluoranthene	150	242	*, D	35.7 *	5.26	30	52 - 120
Dibenzothiophene	150	115	D	77.0	8.99	30	30 - 160
Pyrene	150	250	*, D	33.9 *	4.81	30	47 - 120
Benzo(a)anthracene	150	196	D	66.6	0.672	30	47 - 120
Chrysene	150	211	D	60.1	9.91	30	51 - 120
Benzo(b)fluoranthene	150	173	D	51.3	2.18	30	35 - 127
Benzo(j)fluoranthene	150	158	D	66.3	1.27	30	40 - 120
Benzo(k)fluoranthene	150	178	D	79.6	1.61	30	37 - 129
Benzo(e)pyrene	150	176	D	56.1	1.31	30	30 - 160
Benzo(a)pyrene	150	212	D	51.1	3.84	30	44 - 120
Indeno(1,2,3-cd)pyrene	150	169	D	55.3	6.81	30	41 - 120
Dibenzo(a,h)anthracene	150	95.0	D	50.5	5.49	30	42 - 120
Benzo(g,h,i)perylene	150	193	D	55.6	0.652	30	37 - 120
Perylene	150	190	D	61.4	3.62	30	30 - 160

* Values outside of QC limits

Analytical Resources, Incorporated
Analytical Chemists and Consultants

USMPDI-030SG-210504

MS / MS DUPLICATE RECOVERY
EPA 8270E-SIM

Laboratory:	Analytical Resources, Inc.	SDG:	21E0106
Client:	Anchor QEA, LLC	Project:	Gasco Siltronic - US Moorings
Matrix:	Solid	Analyzed:	06/07/21 22:07
Batch:	BJE0383	Laboratory ID:	BJE0383-MSD1
Preparation:	EPA 3546 (Microwave)	Sequence Name:	Matrix Spike Dup
Initial/Final:	17.01 g / 0.5 mL	Source Sample:	USMPDI-030SG-210504

COMPOUND	SPIKE ADDED (ug/kg dry)	MSD CONCENTRATION (ug/kg dry)	Q	MSD % REC. #	% RPD #	QC LIMITS	
						RPD	REC.
Benzo(b)naphtho(2,1-d)thiophene	150	93.8	D	62.5	0.603	30	30 - 160

* Values outside of QC limits

Data File: \\target\share\chem3\nt14.i\20210607.b\NT1421060712.D

Date : 07-JUN-2021 21:18

Client ID:

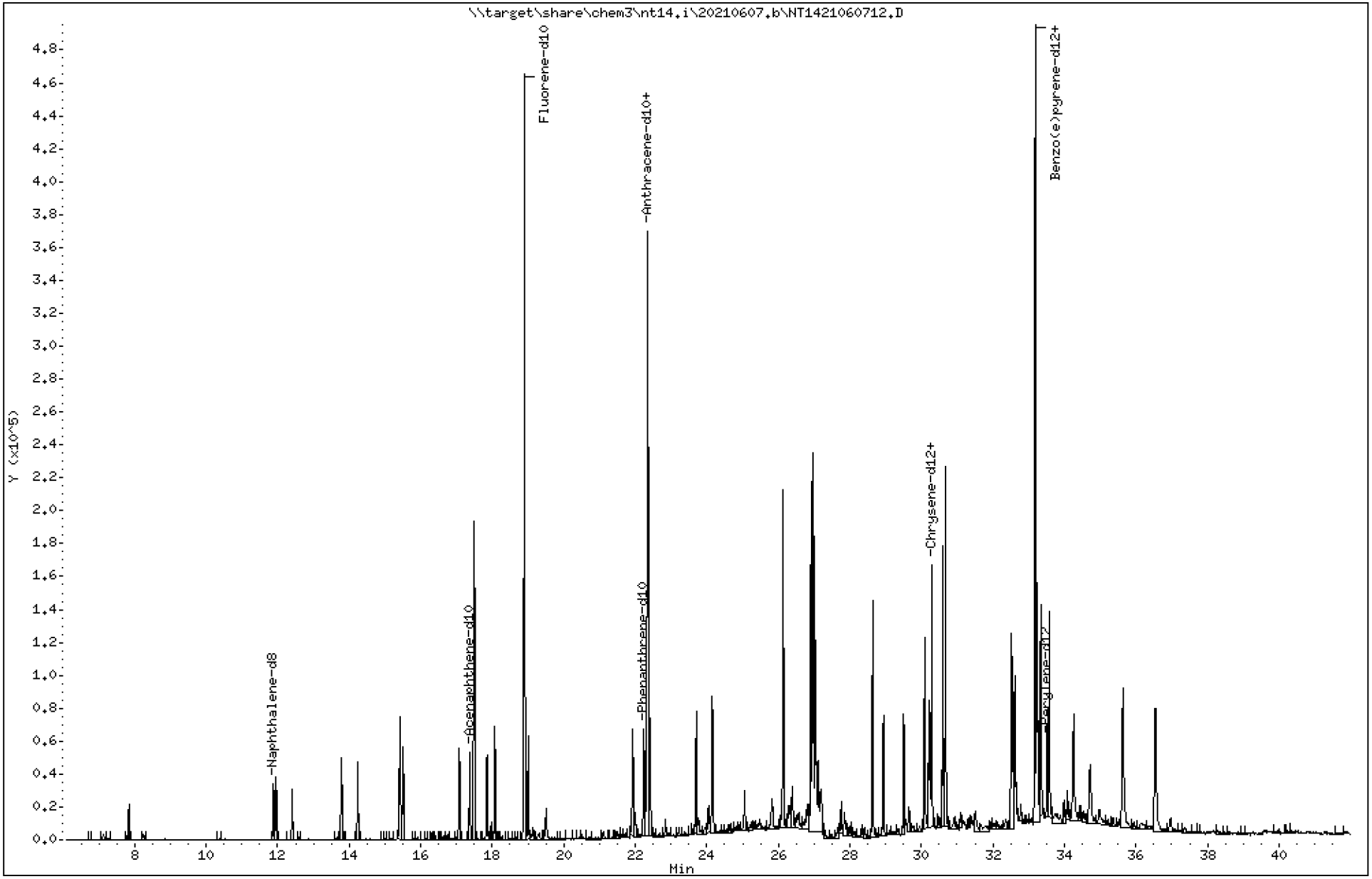
Instrument: nt14.i

Sample Info: BJE0383-MS1

Operator: VTS

Column phase: Rxi-17Sil MS

Column diameter: 0.25



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Date : 07-JUN-2021 21:18

Client ID:

Instrument: nt14.i

Sample Info: BJE0383-MS1

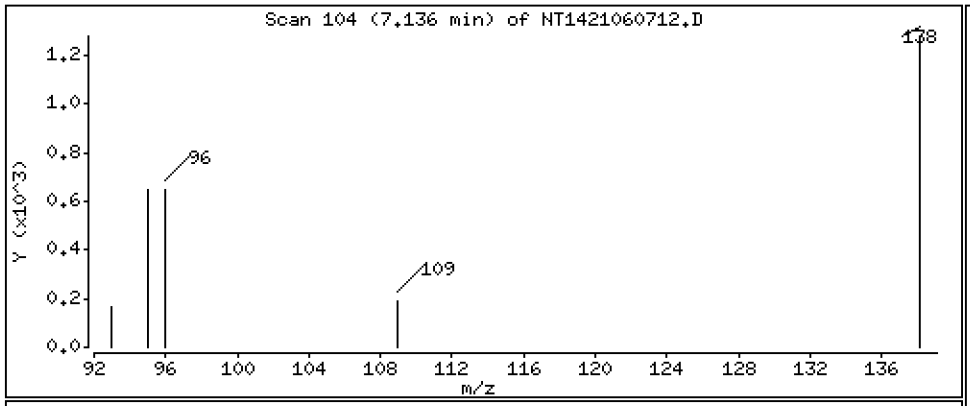
Operator: VTS

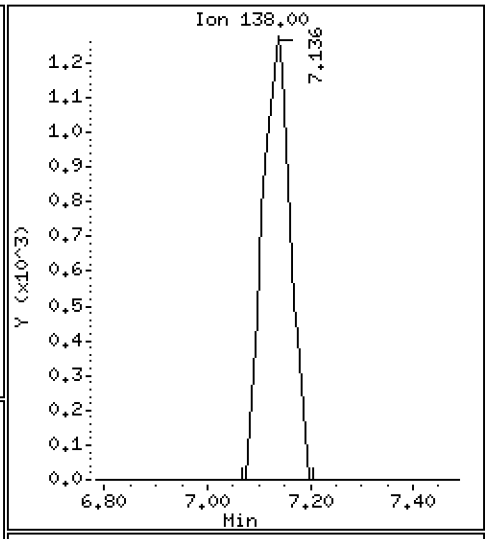
Column phase: Rxi-17Sil MS

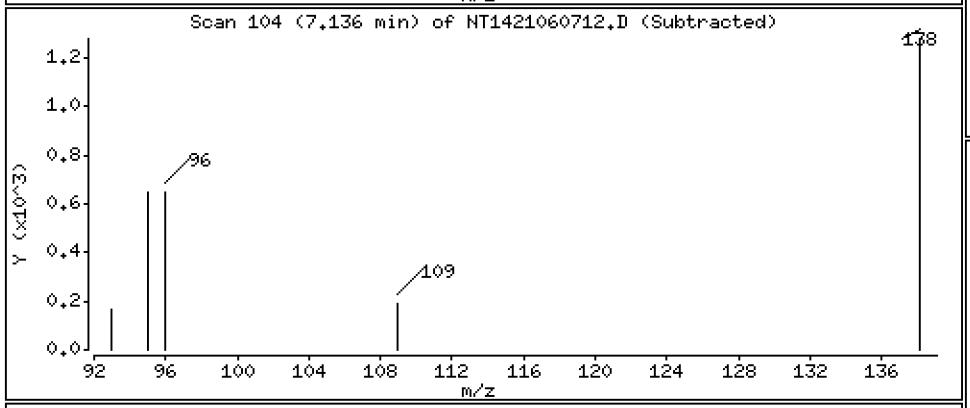
Column diameter: 0.25

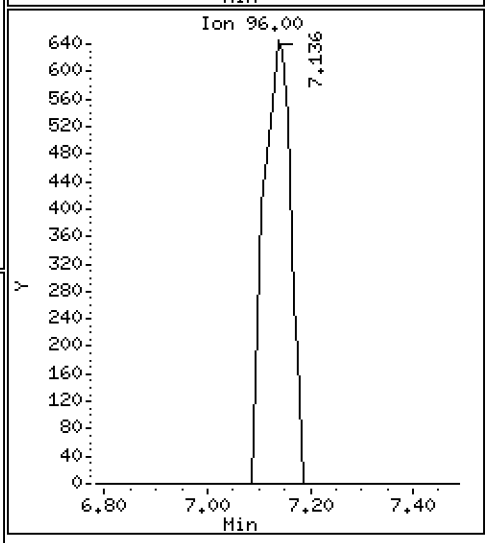
1 trans-Decalin

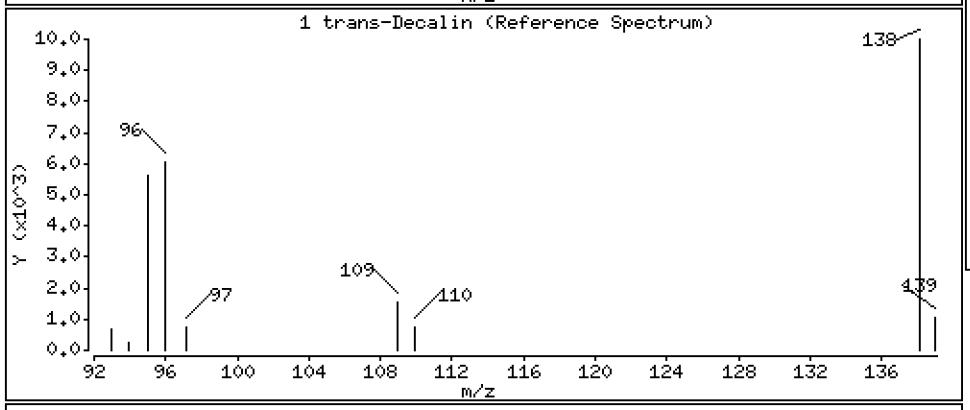
Concentration: 1.493 ug/mL

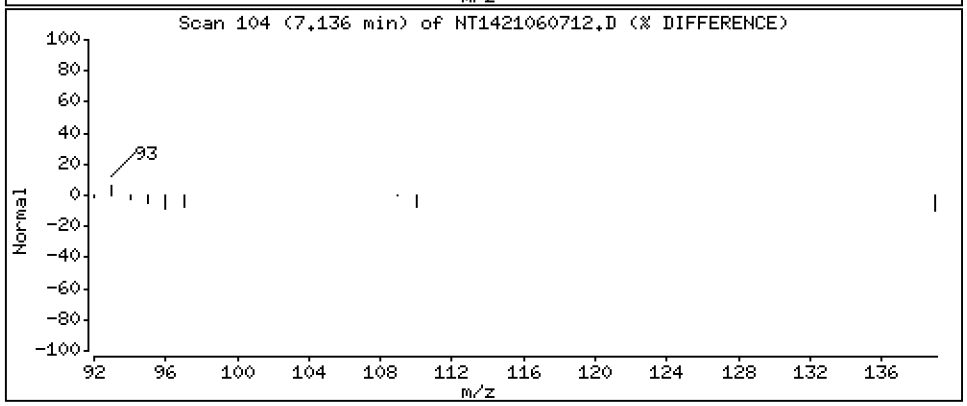












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Date : 07-JUN-2021 21:18

Client ID:

Instrument: nt14.i

Sample Info: BJE0383-MS1

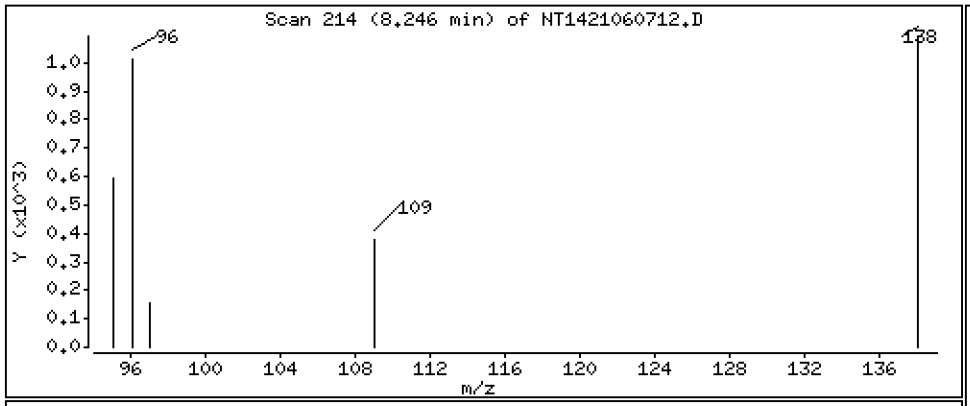
Operator: VTS

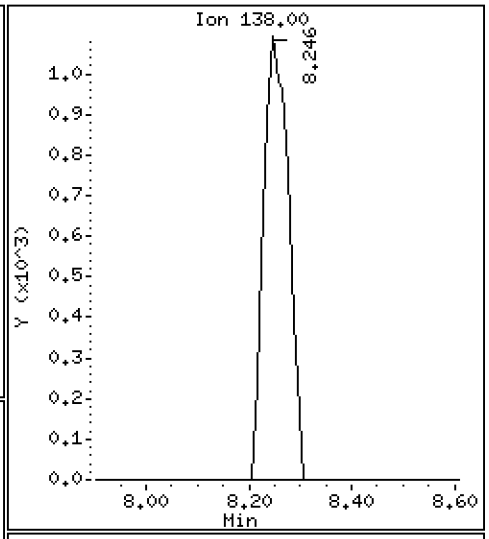
Column phase: Rxi-17Sil MS

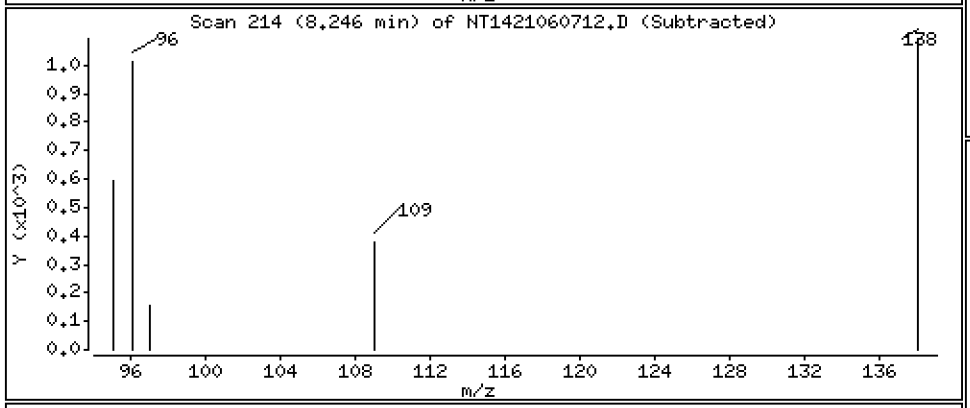
Column diameter: 0.25

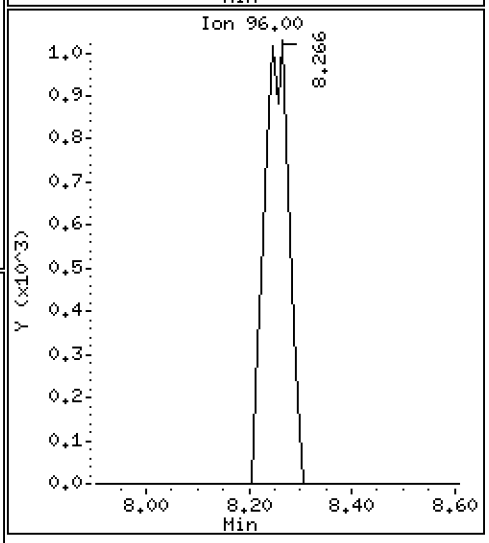
2 cis-Decalin

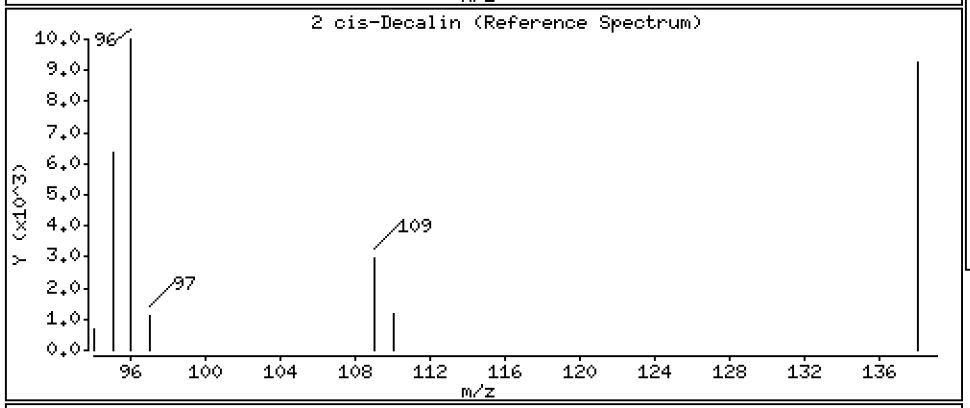
Concentration: 1.660 ug/mL

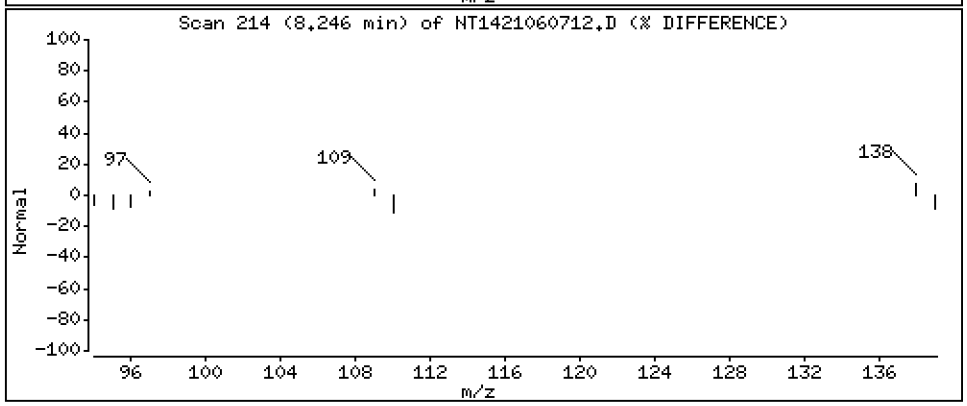












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Date : 07-JUN-2021 21:18

Client ID:

Instrument: nt14.i

Sample Info: BJE0383-MS1

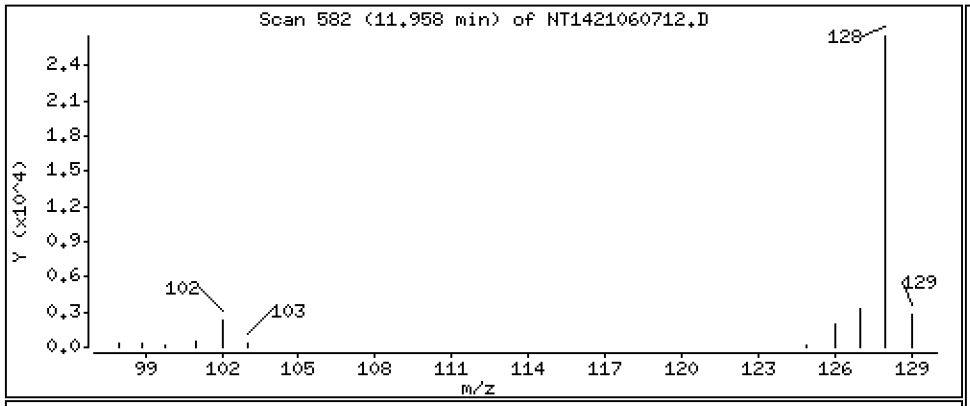
Operator: VTS

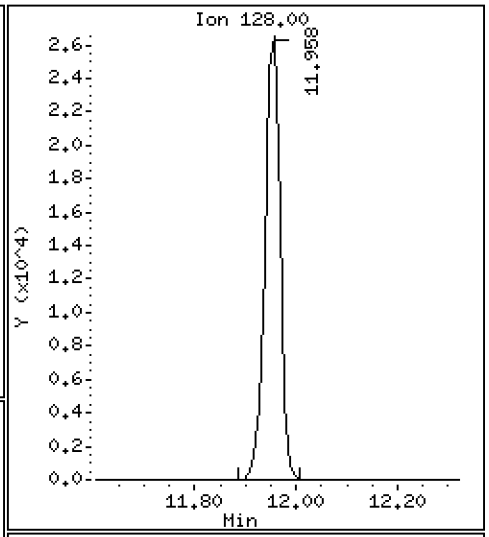
Column phase: Rxi-17Sil MS

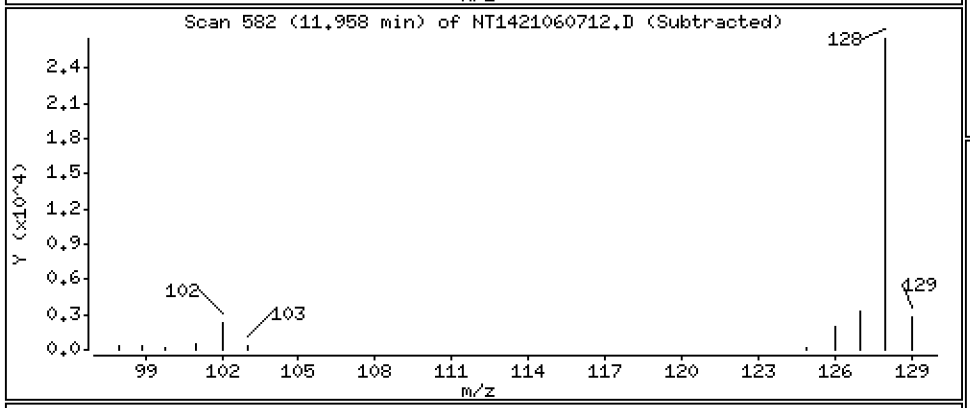
Column diameter: 0.25

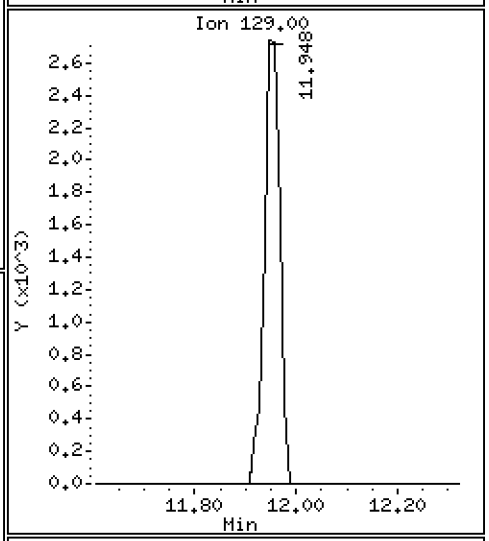
7 Naphthalene

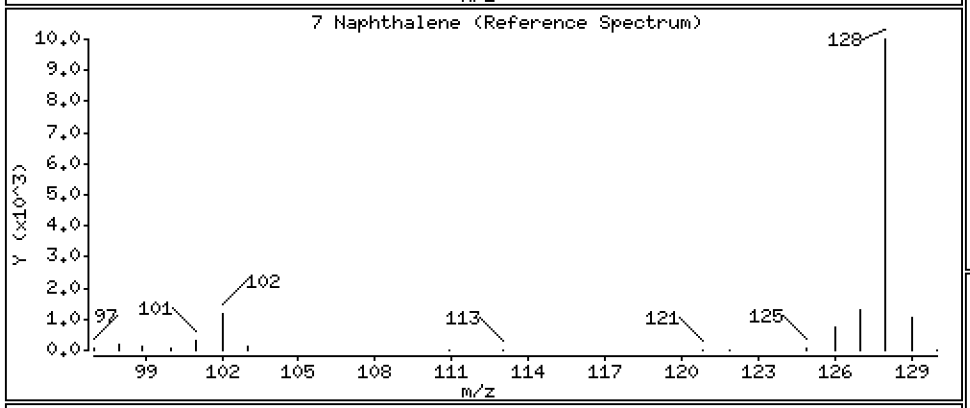
Concentration: 1.841 ug/mL

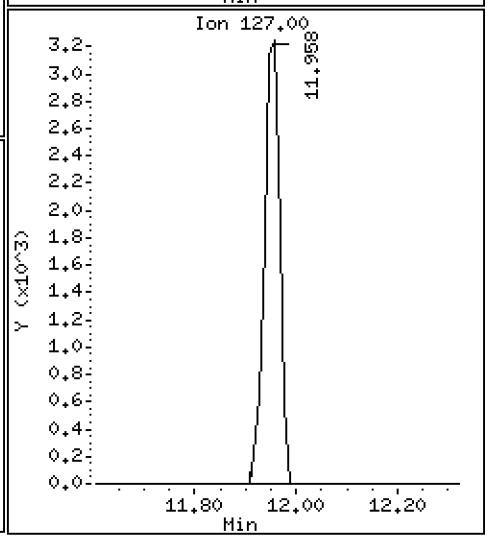


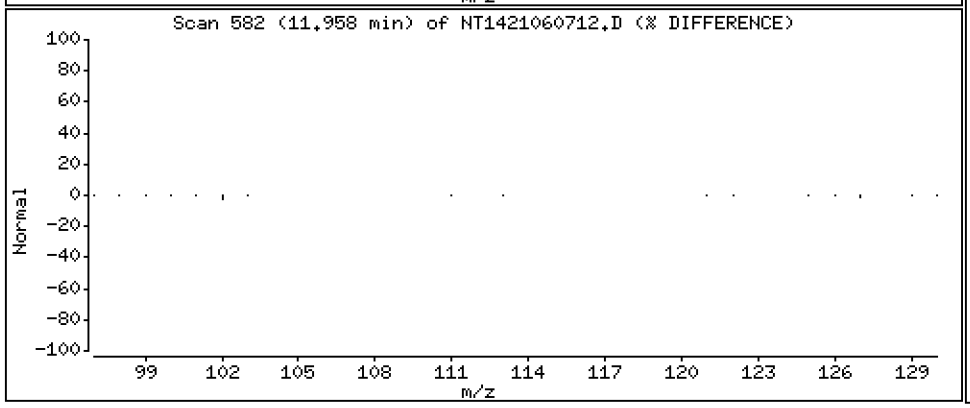












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Date : 07-JUN-2021 21:18

Client ID:

Instrument: nt14.i

Sample Info: BJE0383-MS1

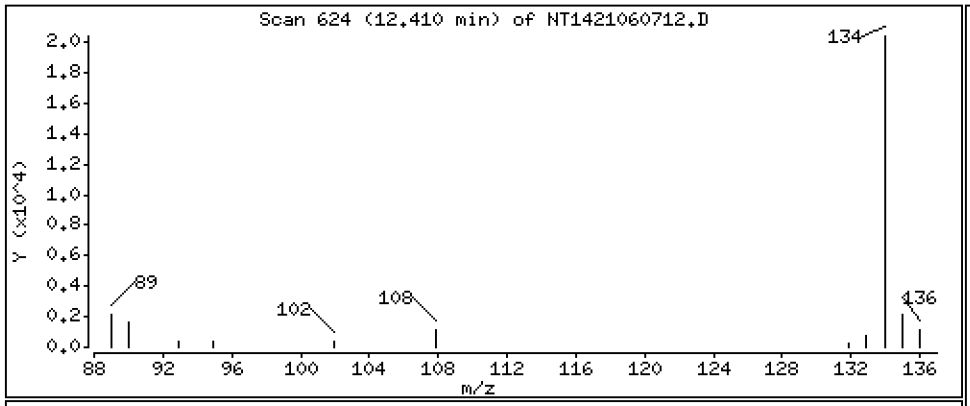
Operator: VTS

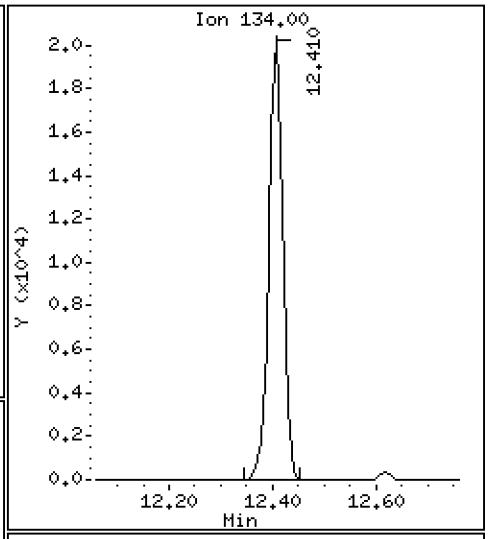
Column phase: Rxi-17Sil MS

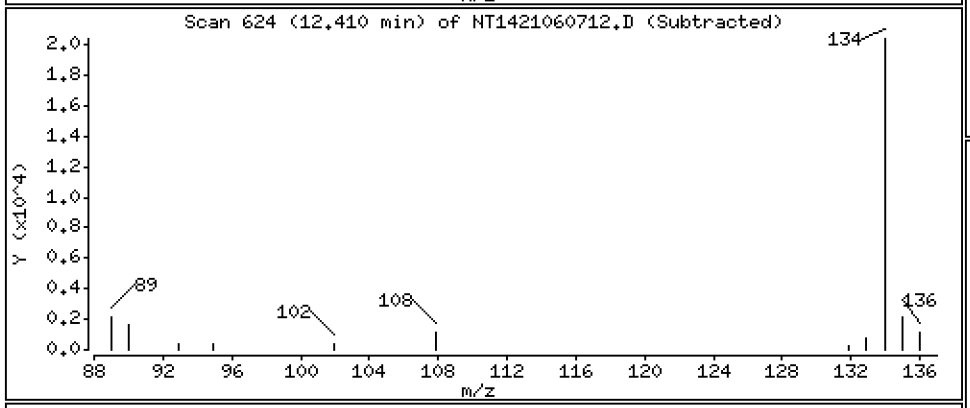
Column diameter: 0.25

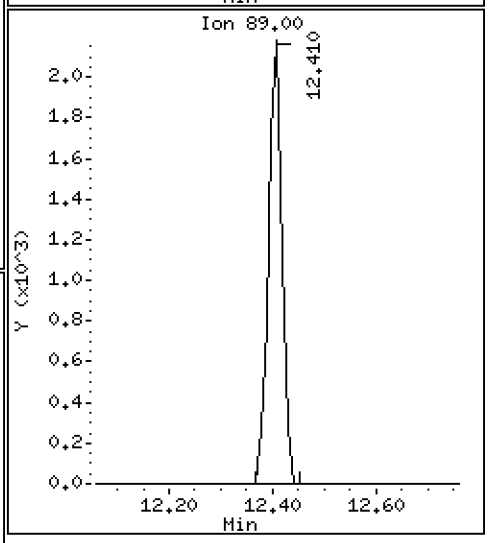
12 Benzo(b)thiophene

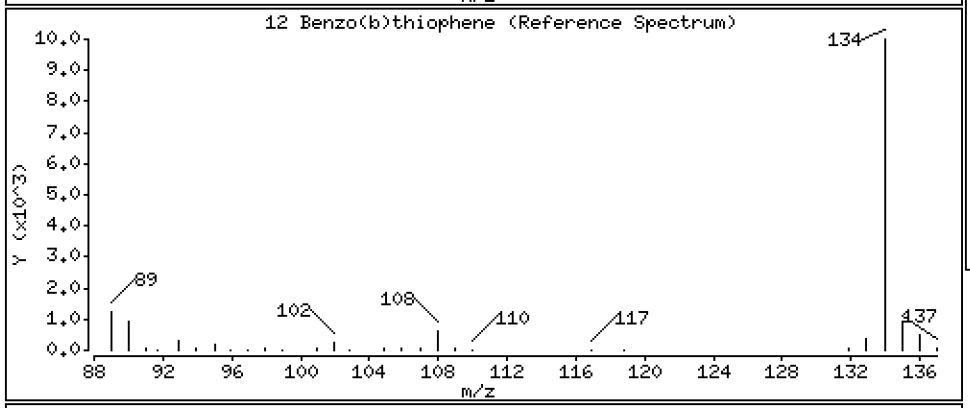
Concentration: 1.620 ug/mL

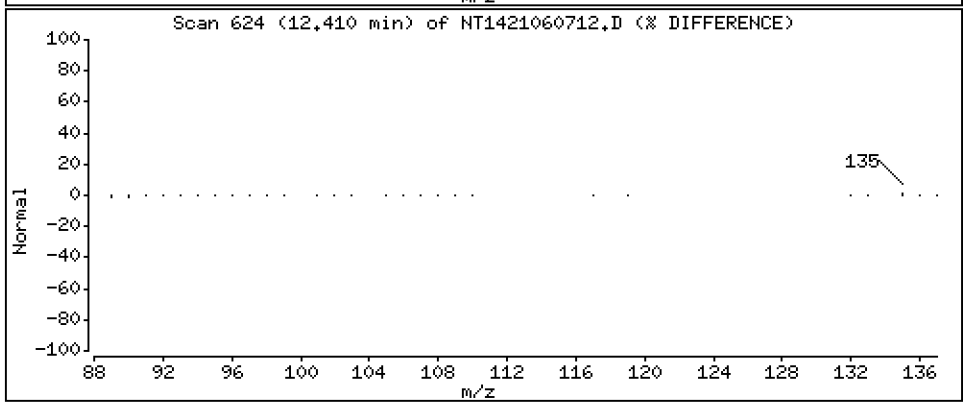












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Date : 07-JUN-2021 21:18

Client ID:

Instrument: nt14.i

Sample Info: BJE0383-MS1

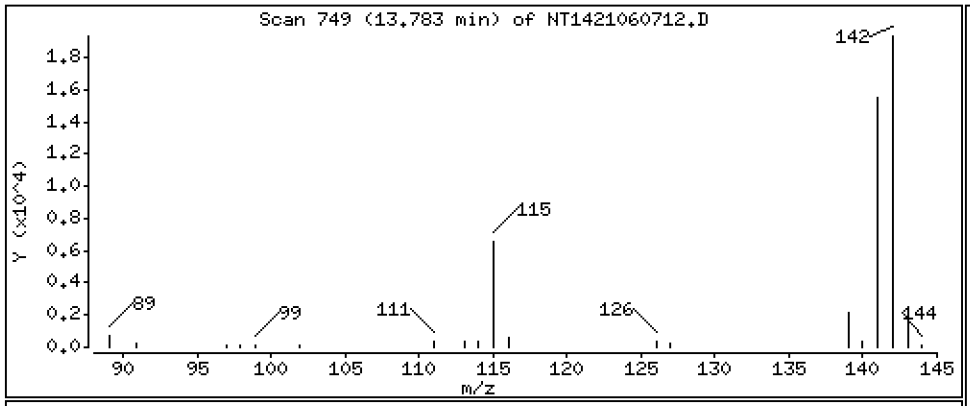
Operator: VTS

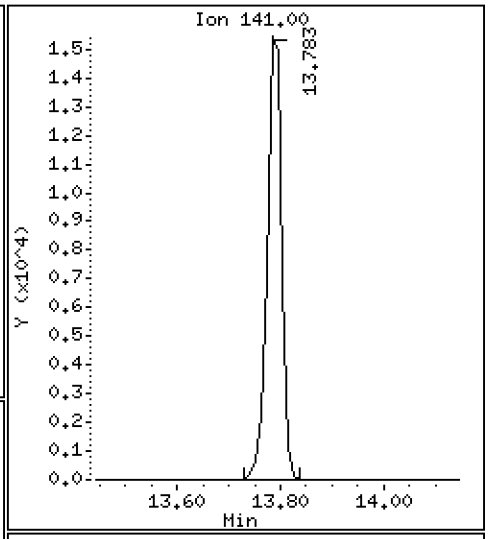
Column phase: Rxi-17Sil MS

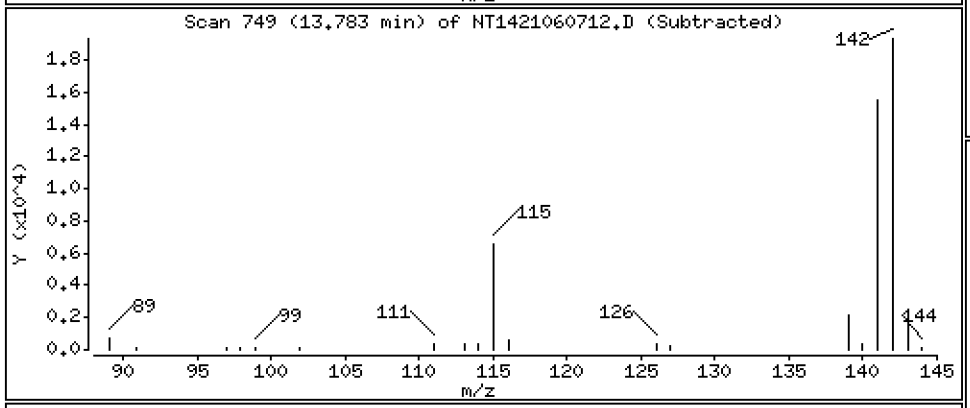
Column diameter: 0.25

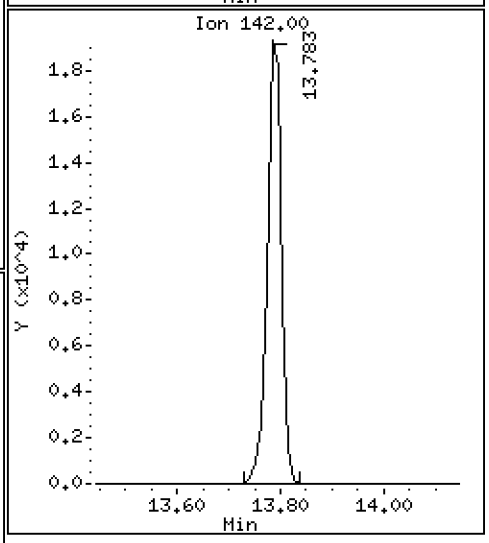
16 2-Methylnaphthalene

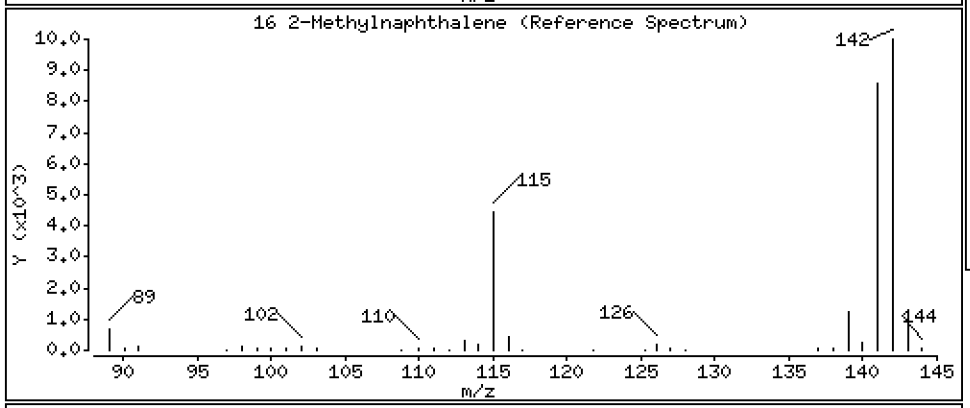
Concentration: 1.819 ug/mL

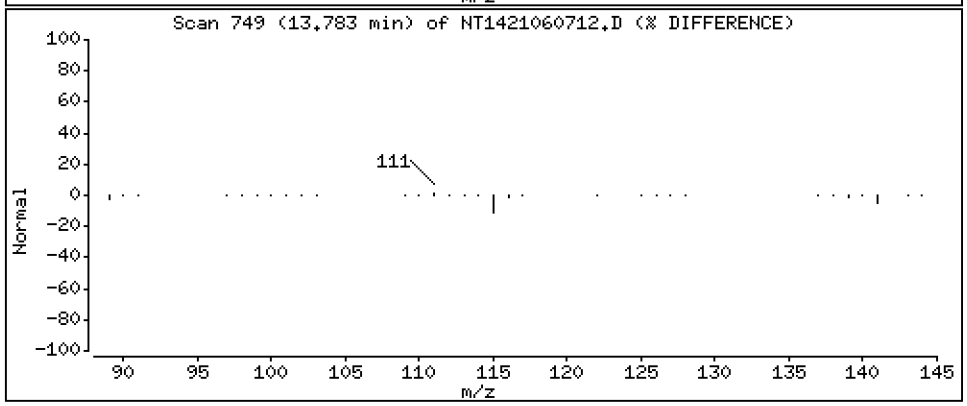












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Date : 07-JUN-2021 21:18

Client ID:

Instrument: nt14.i

Sample Info: BJE0383-MS1

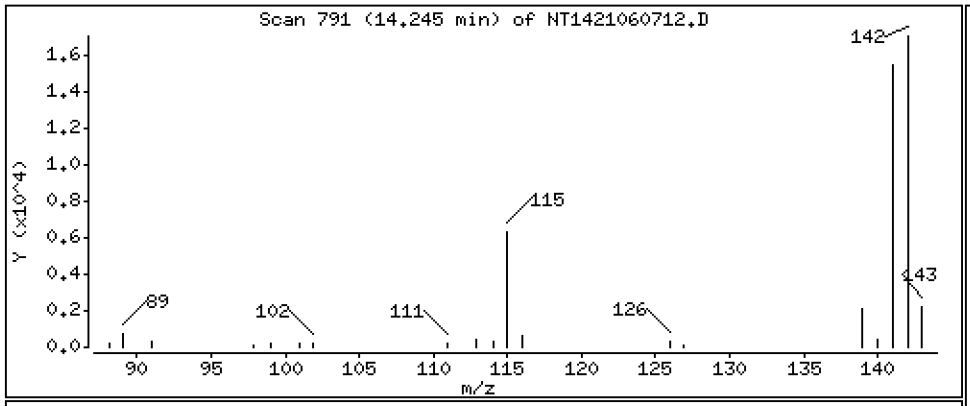
Operator: VTS

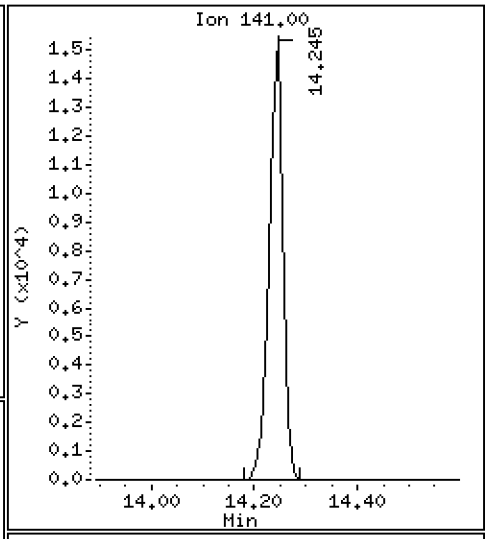
Column phase: Rxi-17Sil MS

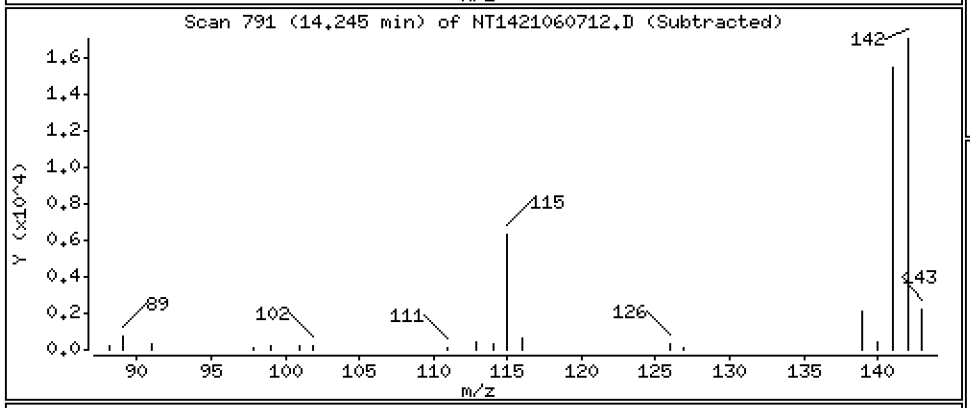
Column diameter: 0.25

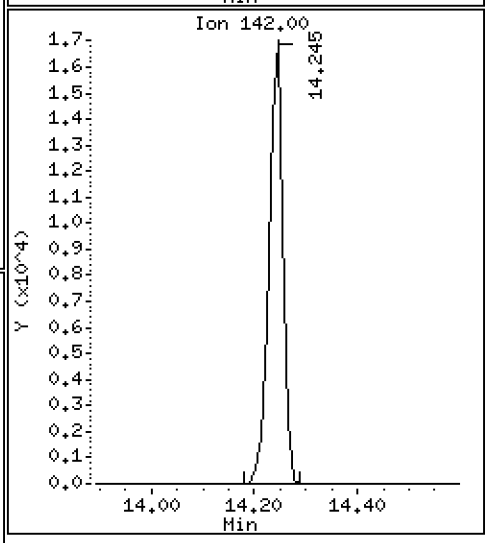
17 1-methylnaphthalene

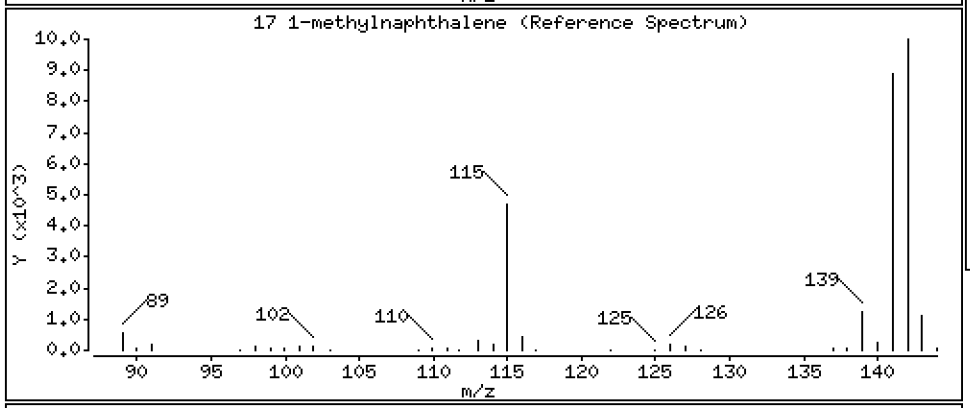
Concentration: 1.799 ug/mL

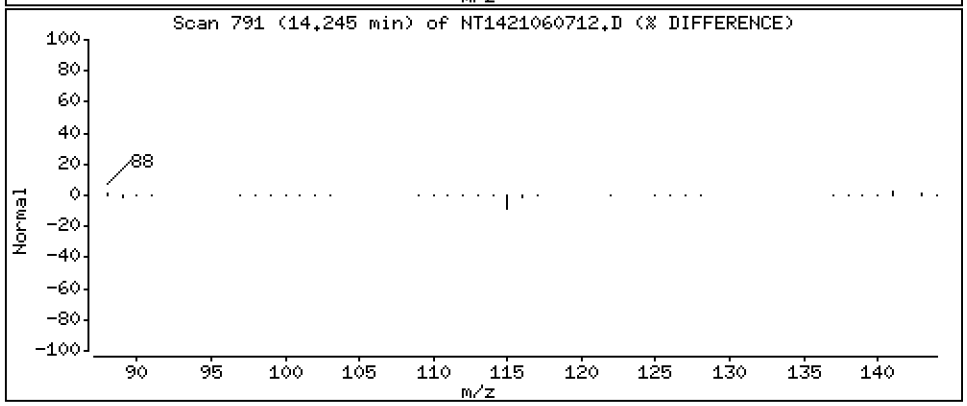












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Date : 07-JUN-2021 21:18

Client ID:

Instrument: nt14.i

Sample Info: BJE0383-MS1

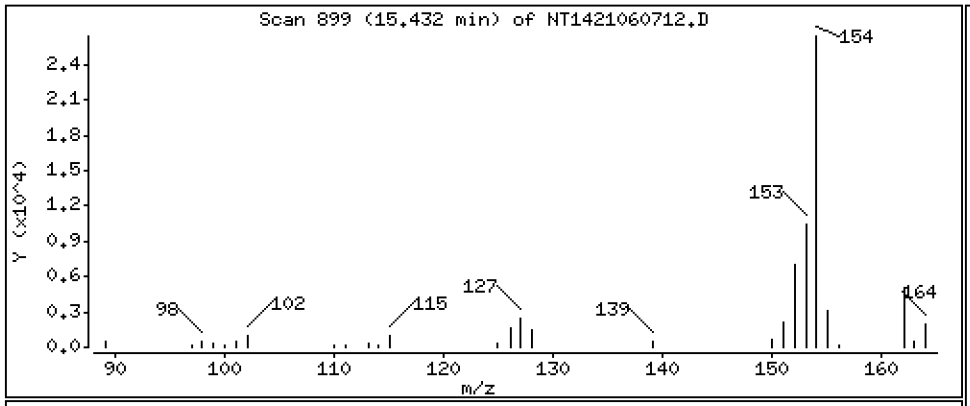
Operator: VTS

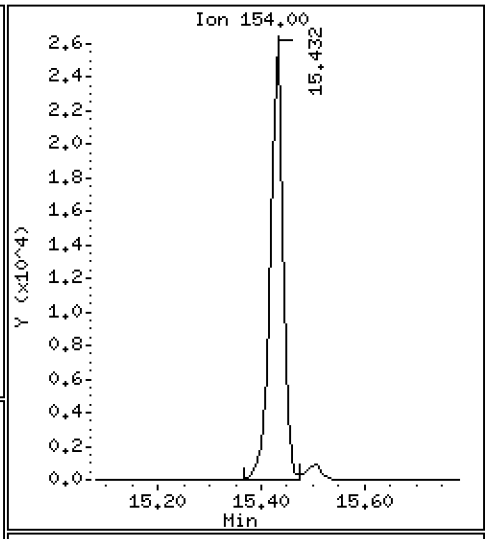
Column phase: Rxi-17Sil MS

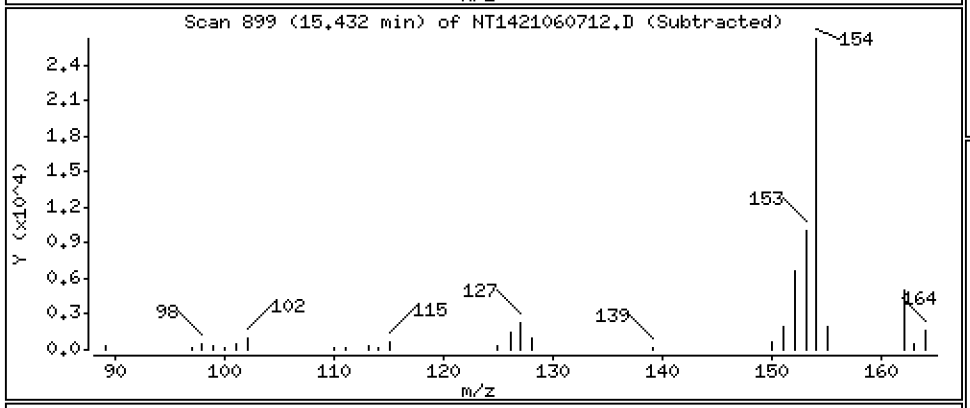
Column diameter: 0.25

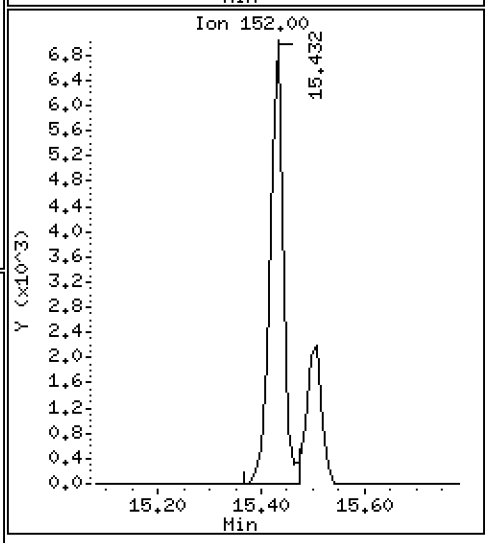
18 Biphenyl

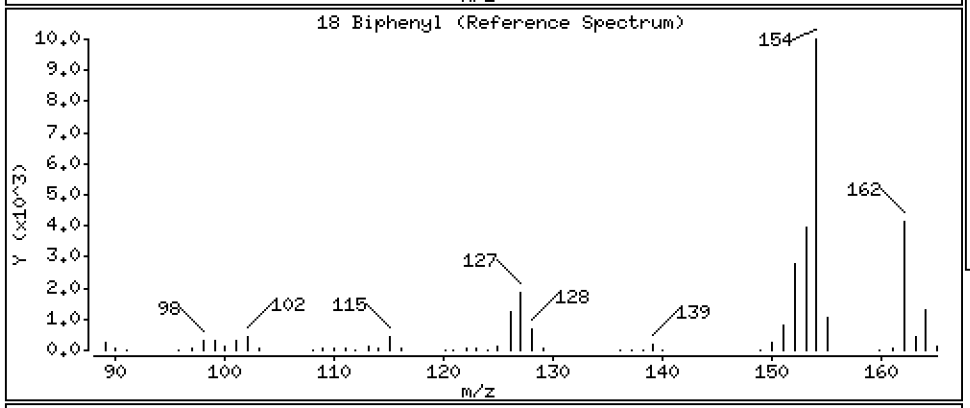
Concentration: 1.867 ug/mL

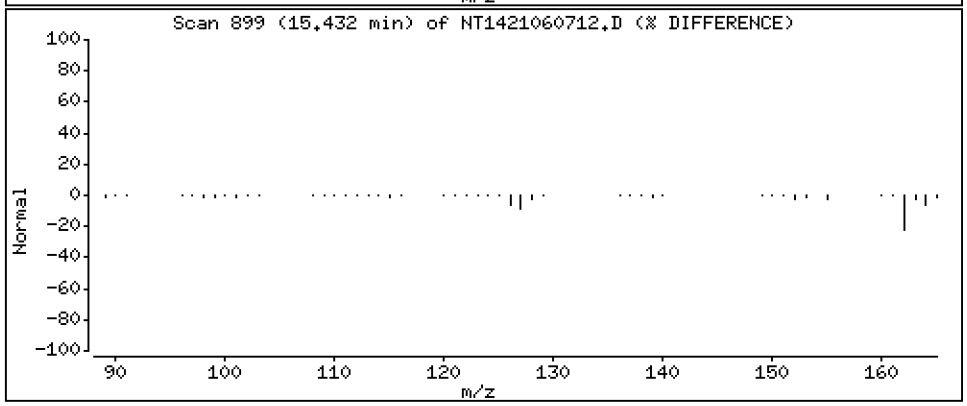












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Date : 07-JUN-2021 21:18

Client ID:

Instrument: nt14.i

Sample Info: BJE0383-MS1

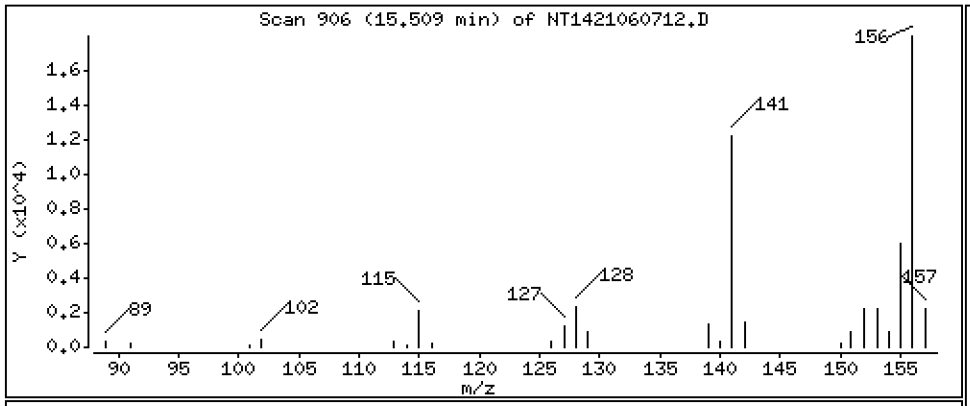
Operator: VTS

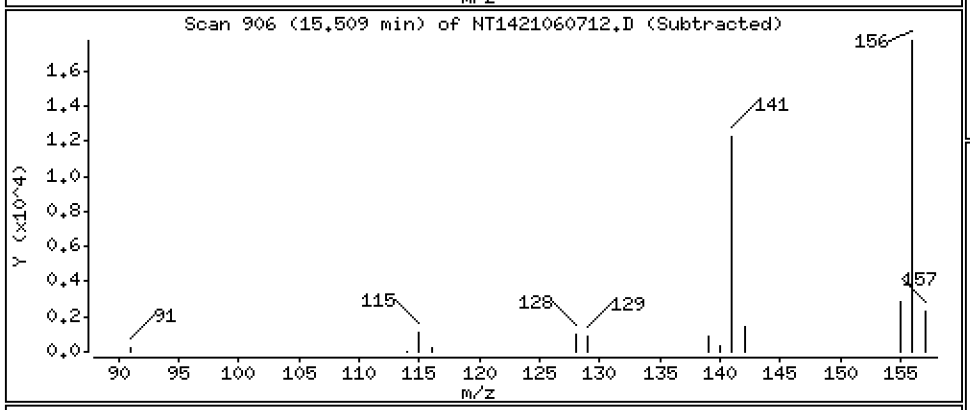
Column phase: Rxi-17Sil MS

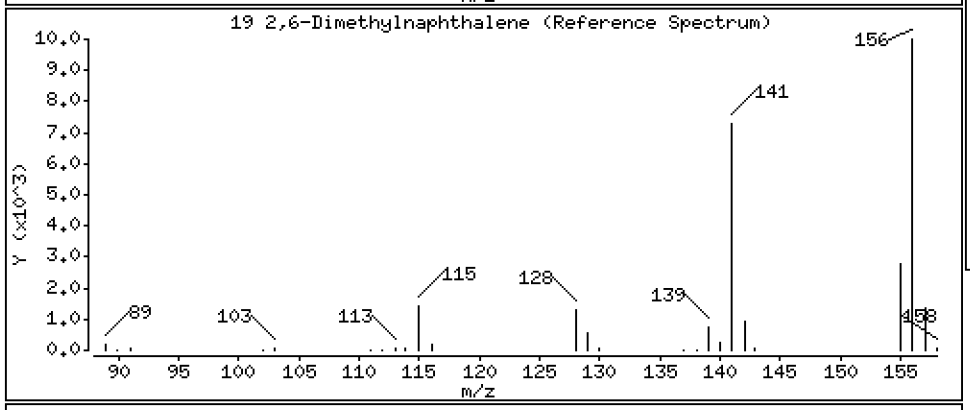
Column diameter: 0.25

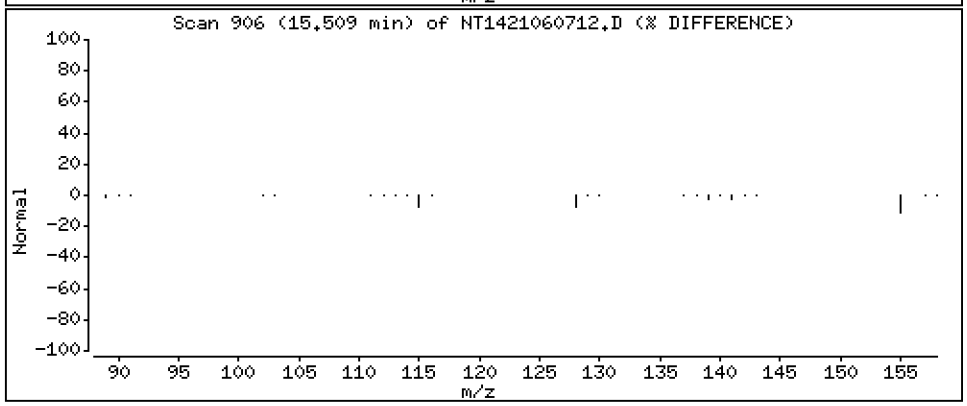
19 2,6-Dimethylnaphthalene

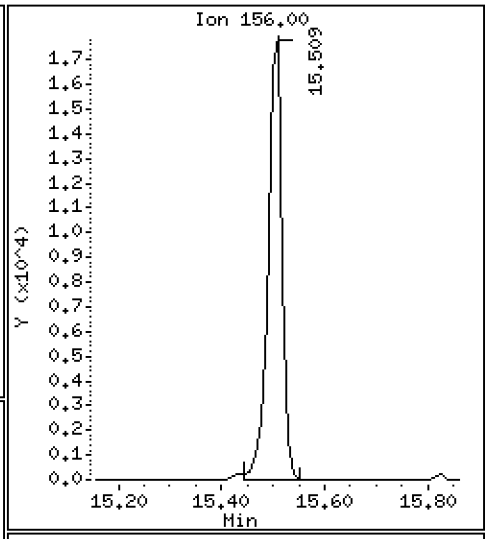
Concentration: 1.890 ug/mL

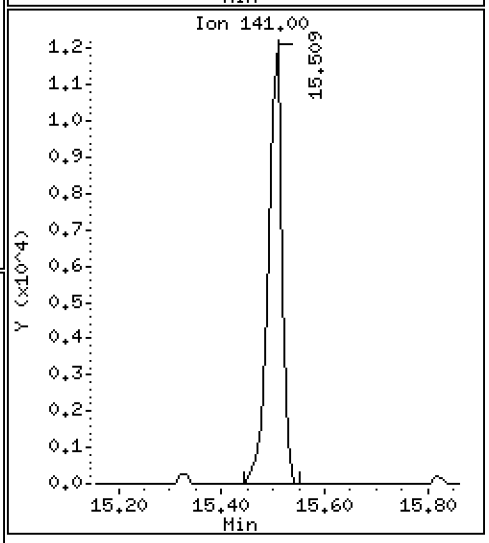












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Date : 07-JUN-2021 21:18

Client ID:

Instrument: nt14.i

Sample Info: BJE0383-MS1

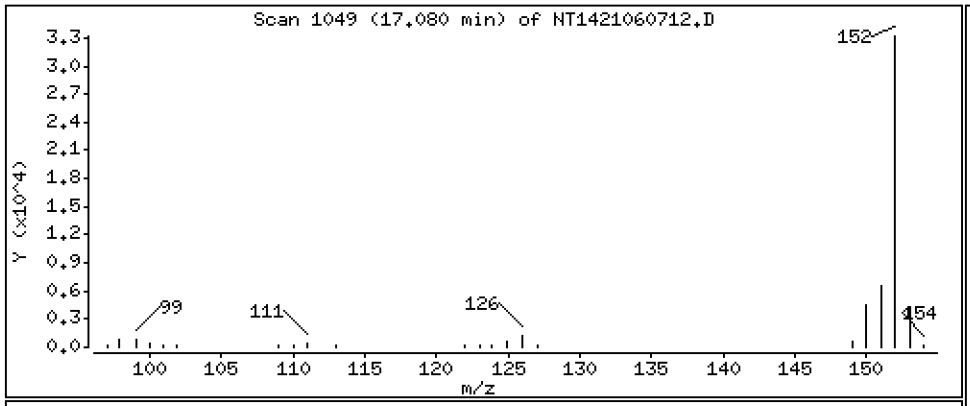
Operator: VTS

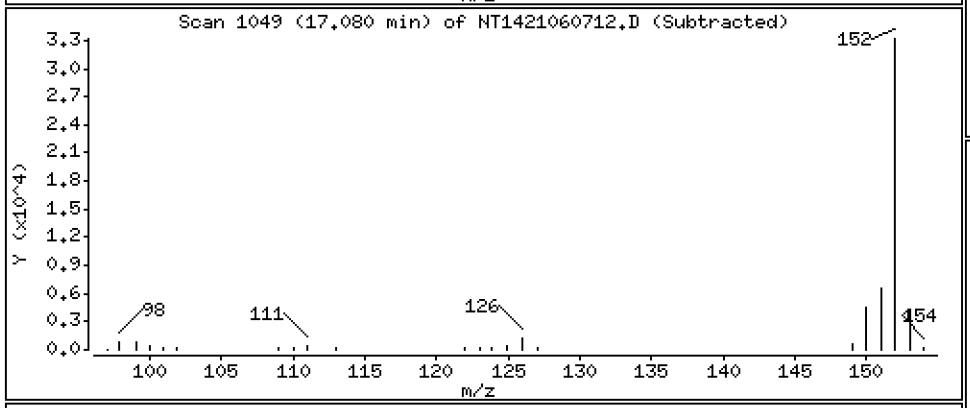
Column phase: Rxi-17Sil MS

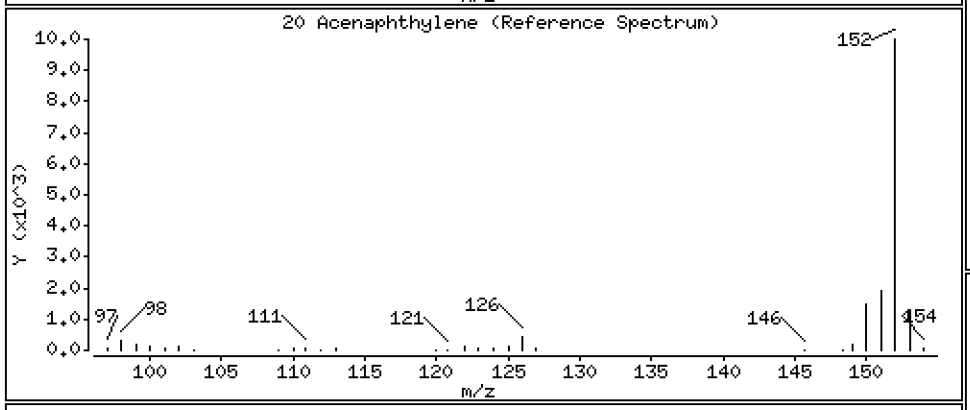
Column diameter: 0.25

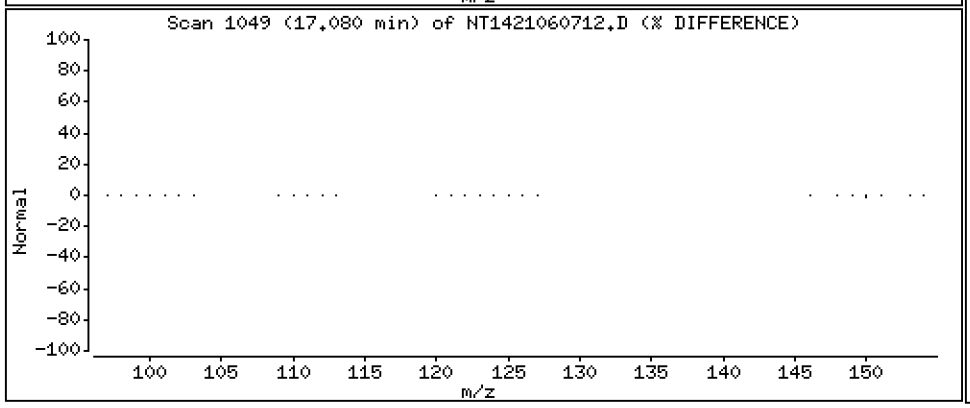
20 Acenaphthylene

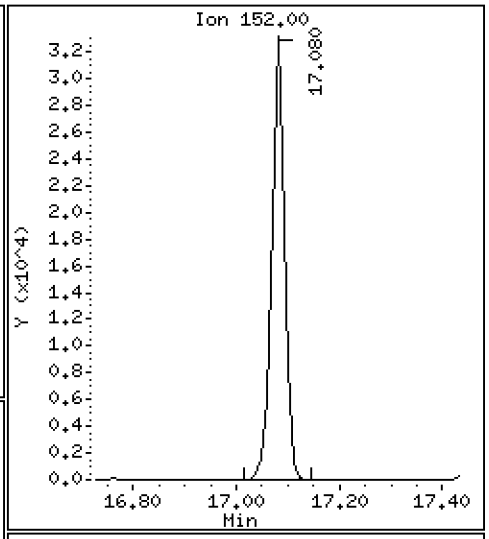
Concentration: 1.902 ug/mL

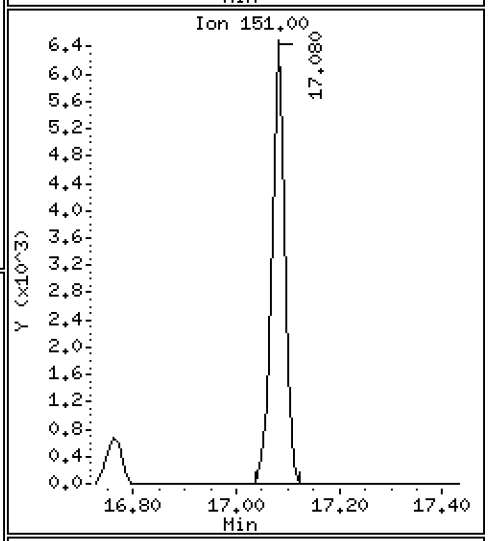


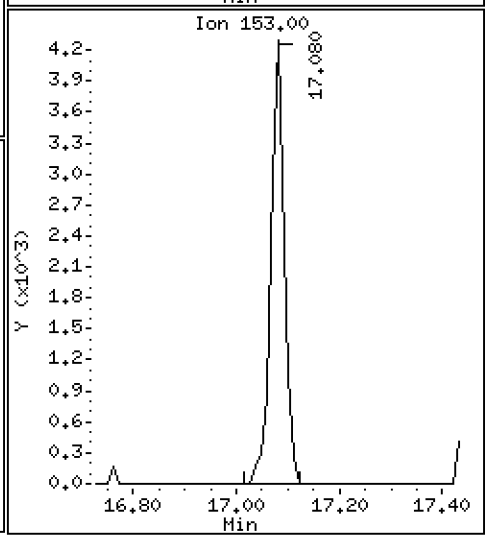












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Date : 07-JUN-2021 21:18

Client ID:

Instrument: nt14.i

Sample Info: BJE0383-MS1

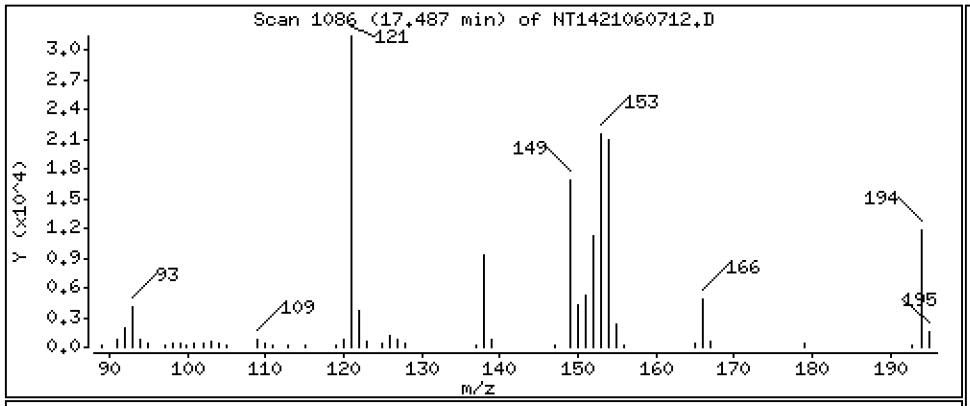
Operator: VTS

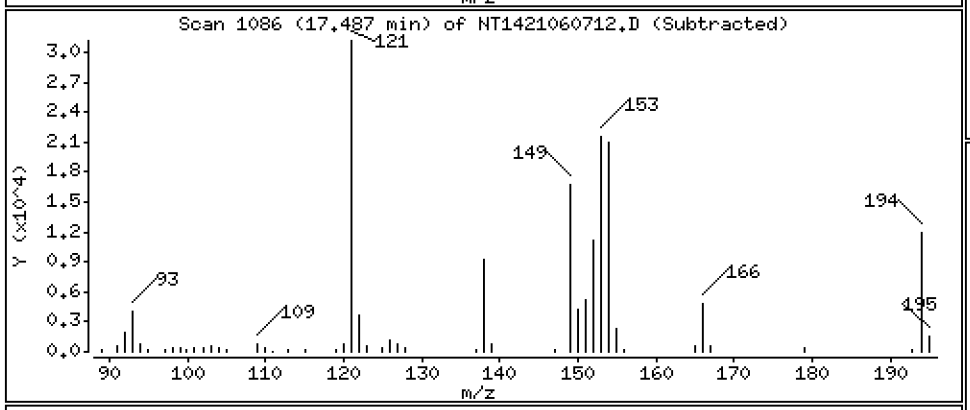
Column phase: Rxi-17Sil MS

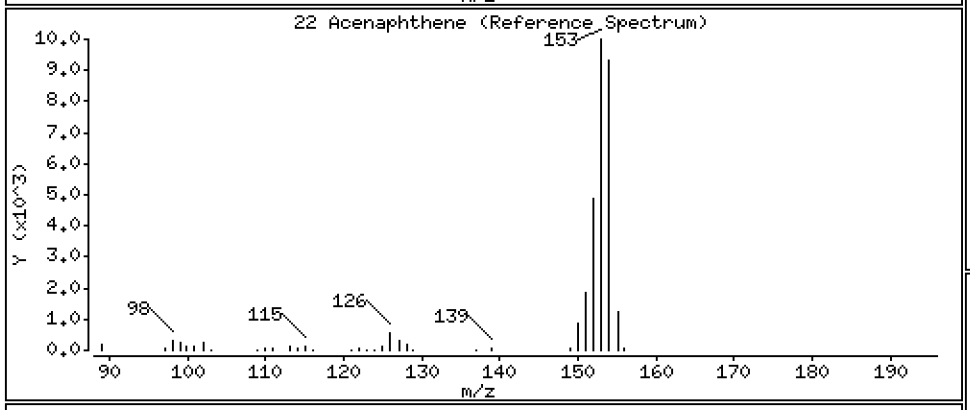
Column diameter: 0.25

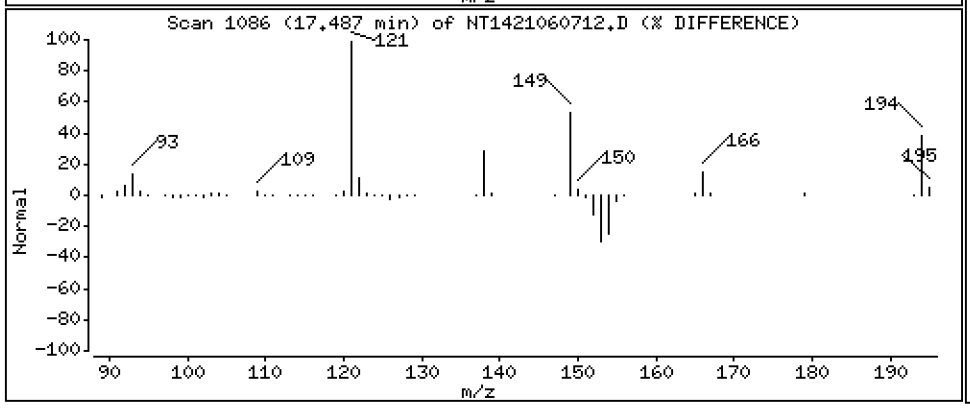
22 Acenaphthene

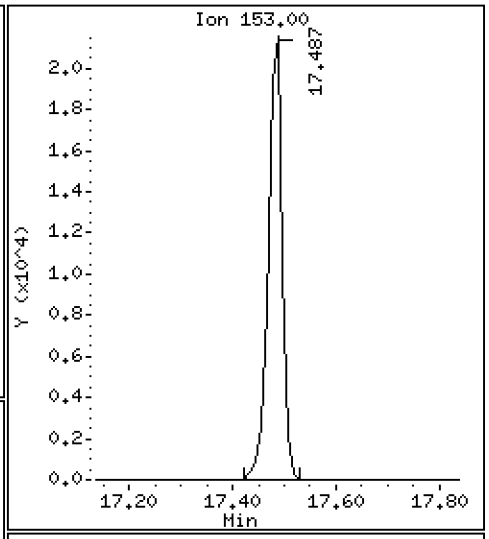
Concentration: 2.134 ug/mL

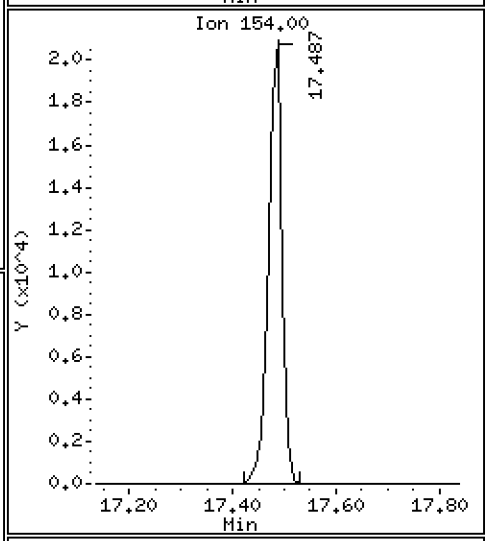


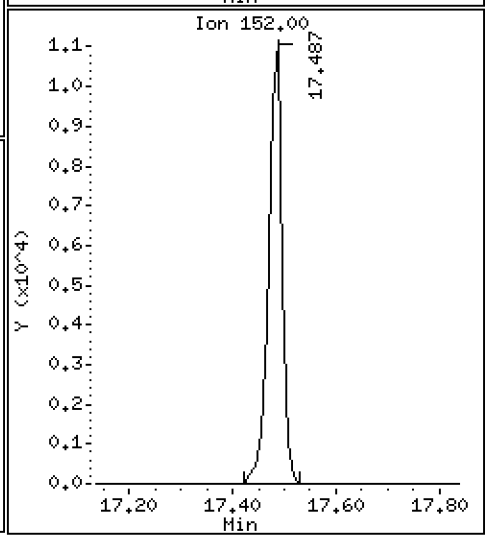












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Date : 07-JUN-2021 21:18

Client ID:

Instrument: nt14.i

Sample Info: BJE0383-MS1

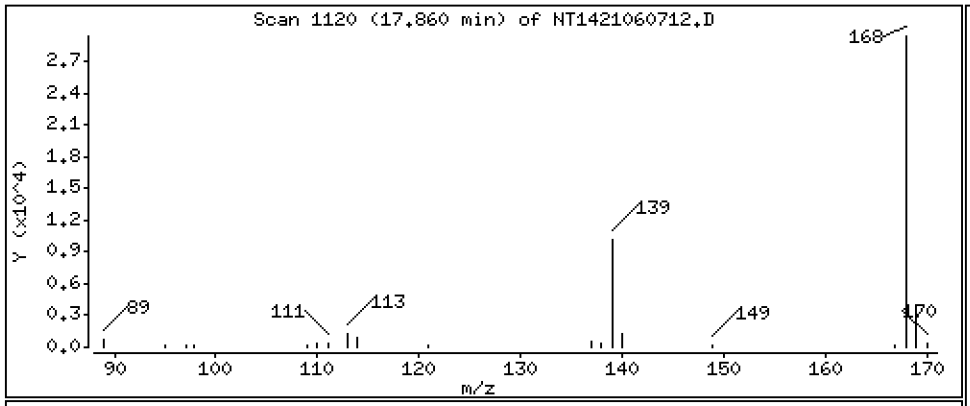
Operator: VTS

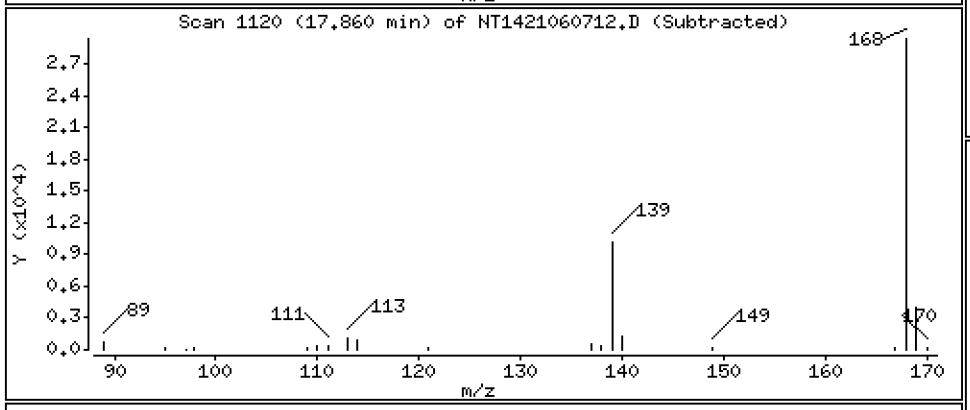
Column phase: Rxi-17Sil MS

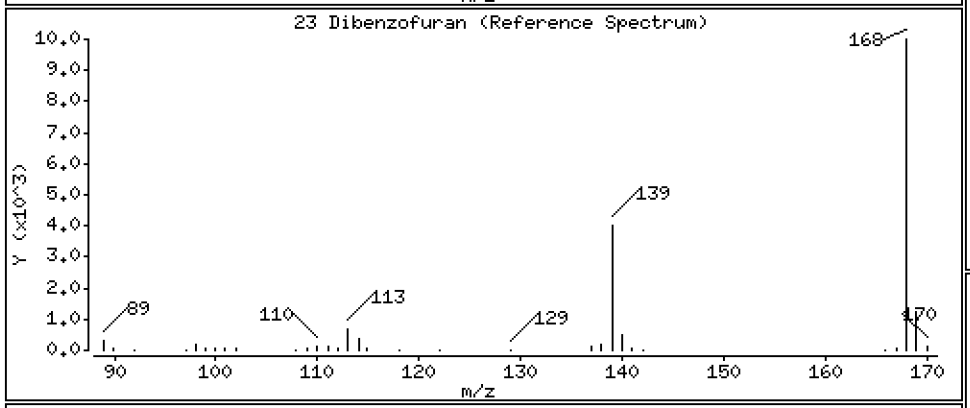
Column diameter: 0.25

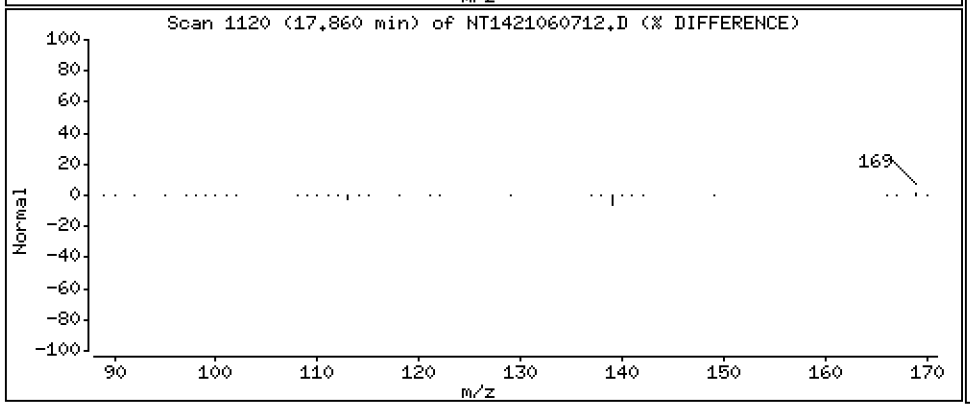
23 Dibenzofuran

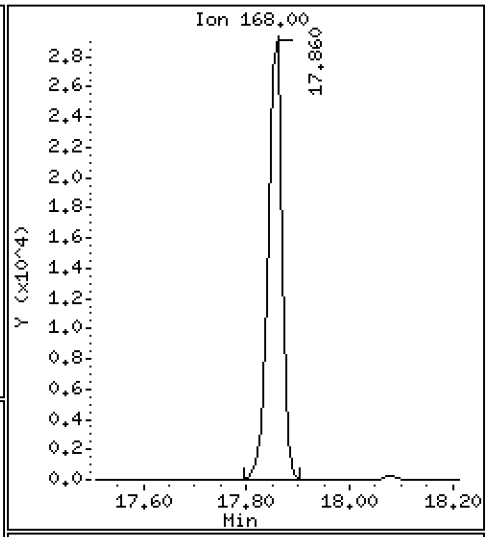
Concentration: 1.980 ug/mL

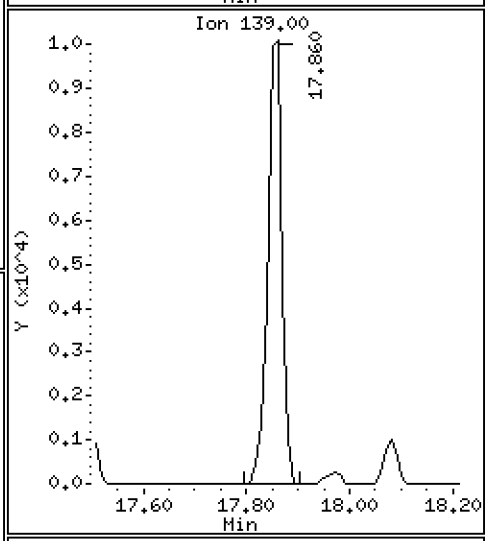


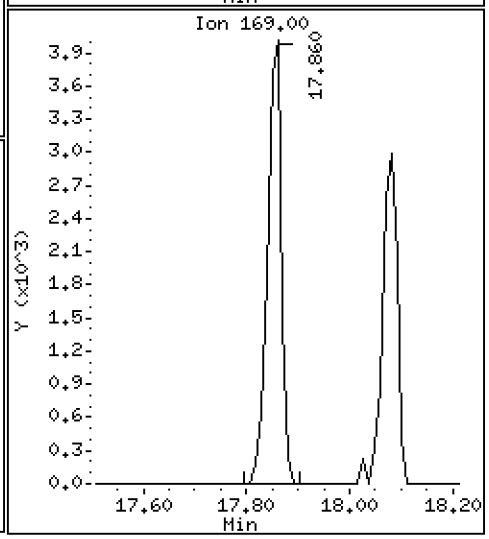












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Date : 07-JUN-2021 21:18

Client ID:

Instrument: nt14.i

Sample Info: BJE0383-MS1

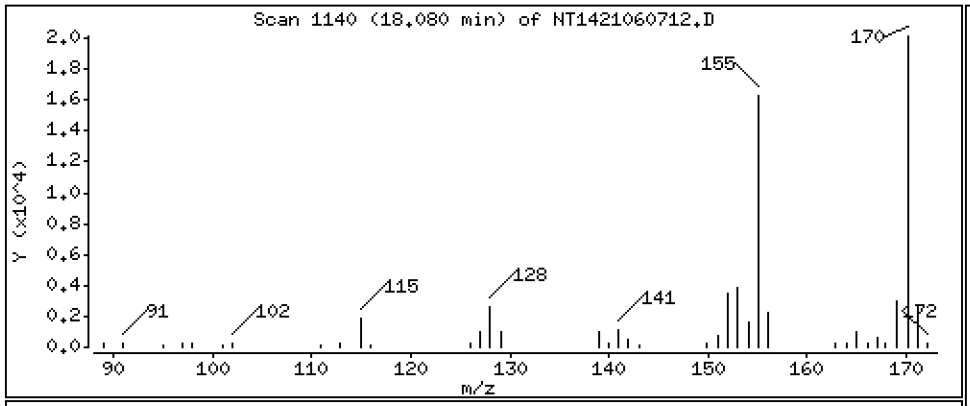
Operator: VTS

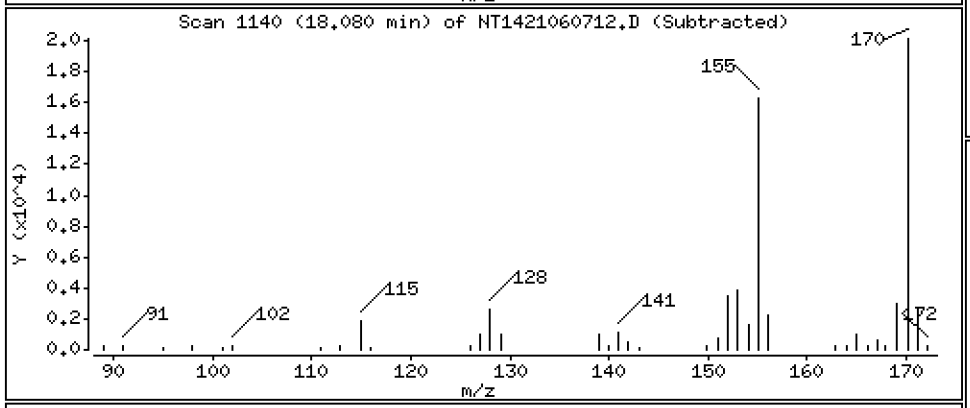
Column phase: Rxi-17Sil MS

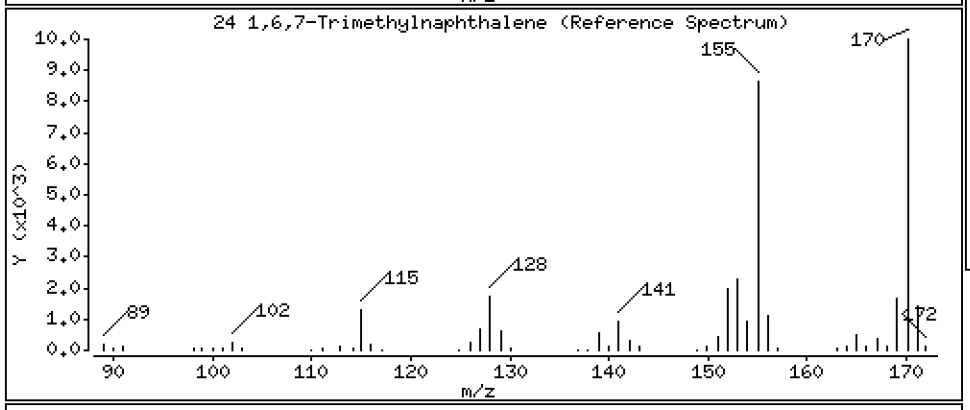
Column diameter: 0.25

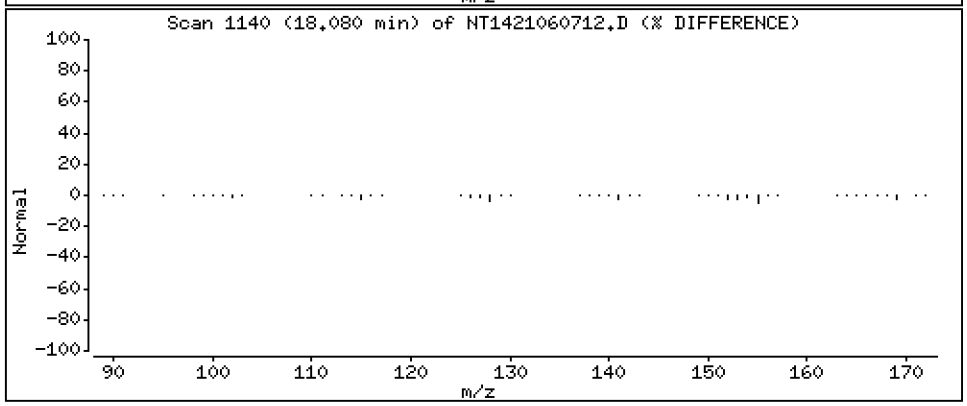
24 1,6,7-Trimethylnaphthalene

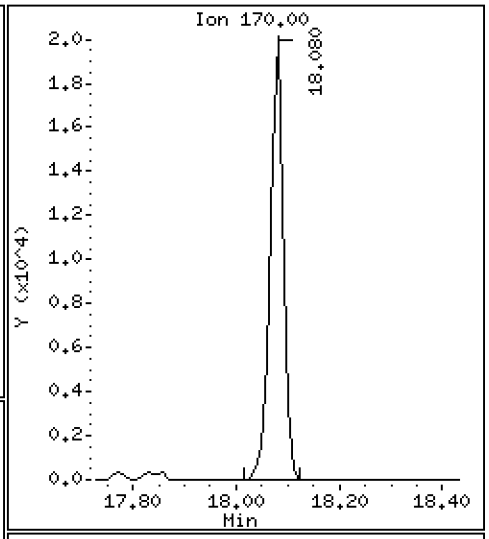
Concentration: 1.970 ug/mL

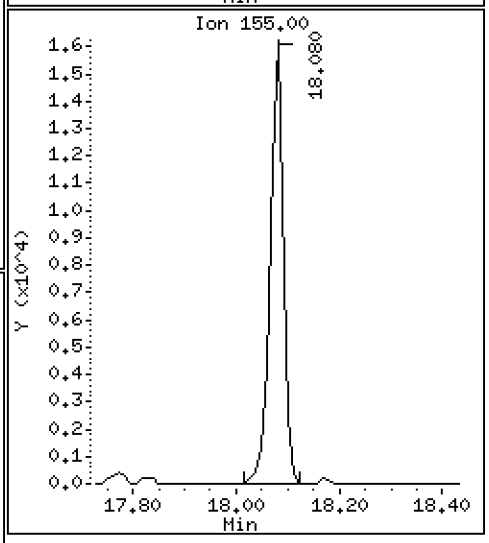












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Date : 07-JUN-2021 21:18

Client ID:

Instrument: nt14.i

Sample Info: BJE0383-MS1

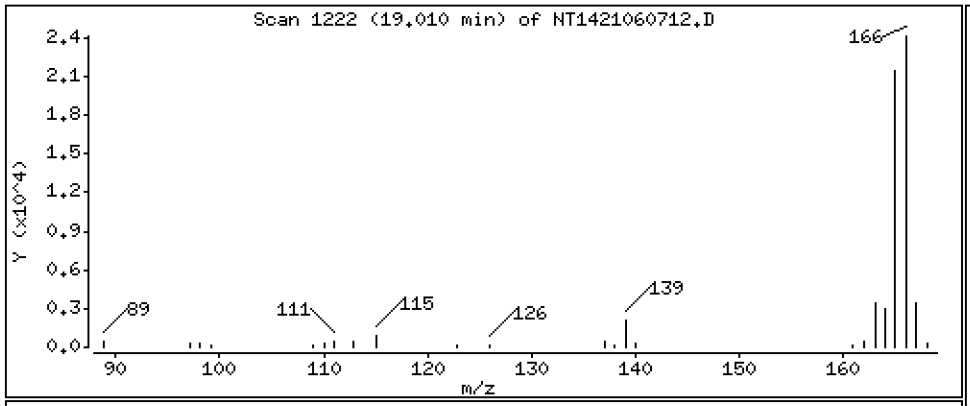
Operator: VTS

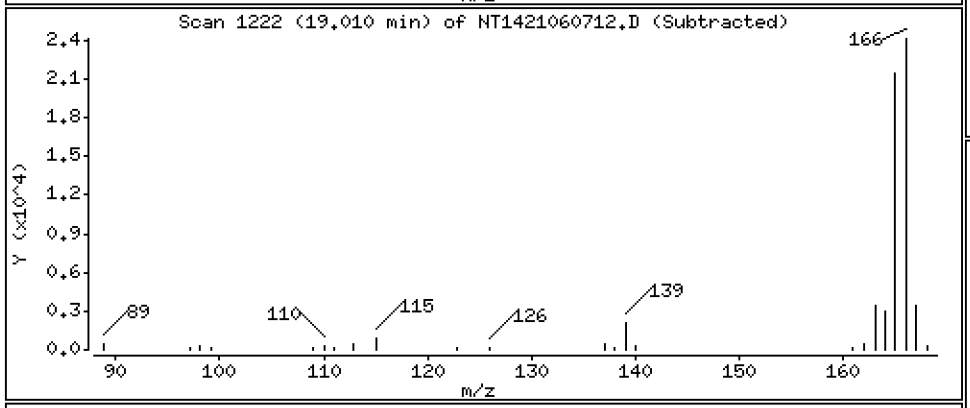
Column phase: Rxi-17Sil MS

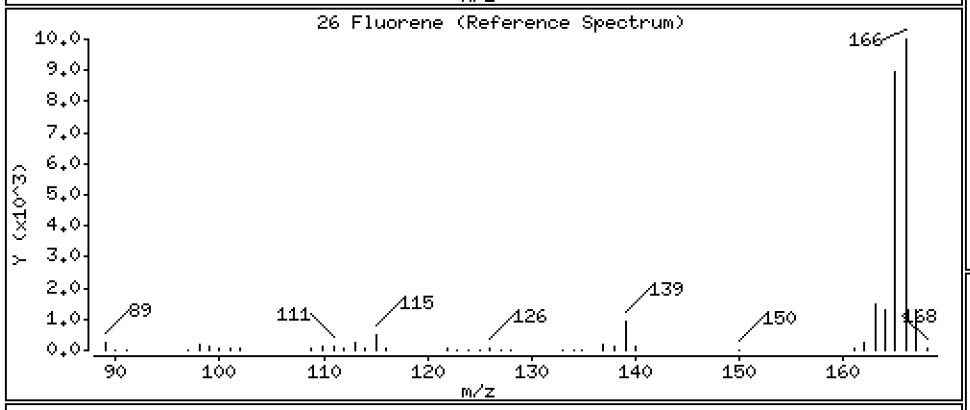
Column diameter: 0.25

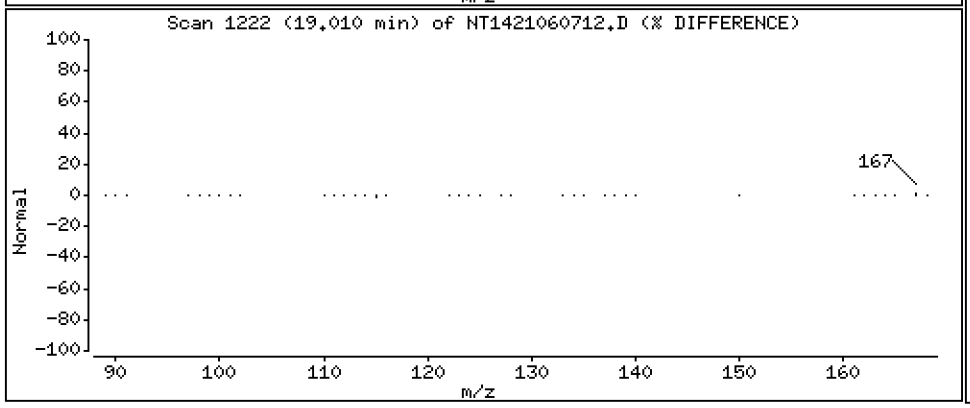
26 Fluorene

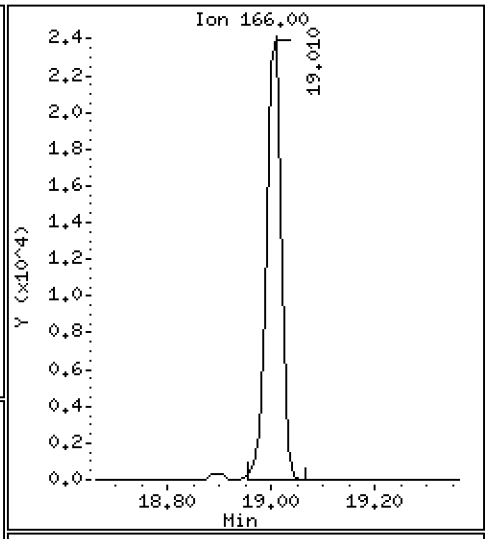
Concentration: 2.119 ug/mL

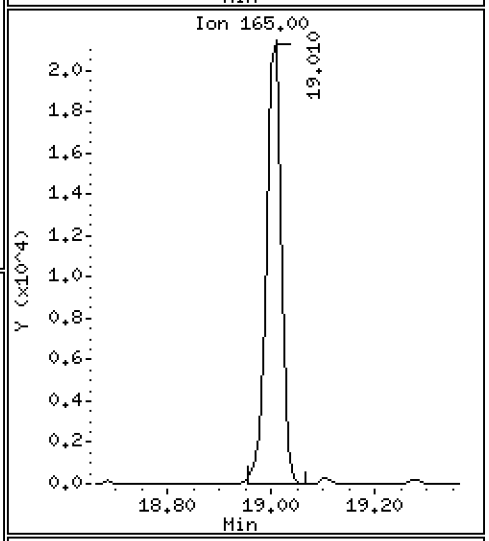


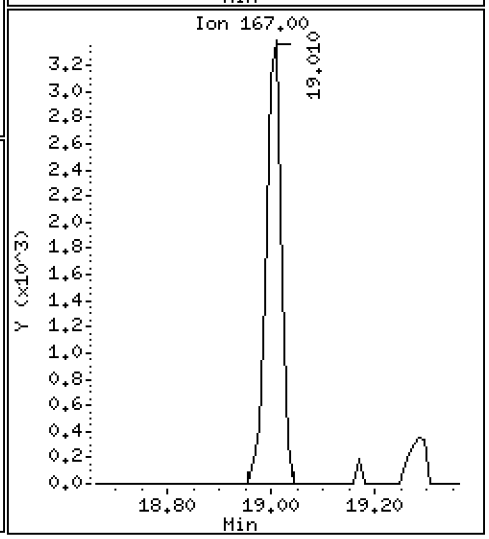












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Date : 07-JUN-2021 21:18

Client ID:

Instrument: nt14.i

Sample Info: BJE0383-MS1

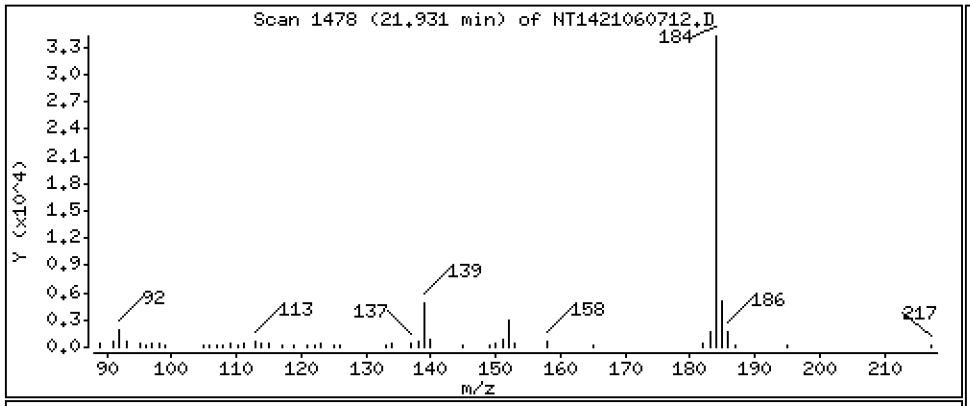
Operator: VTS

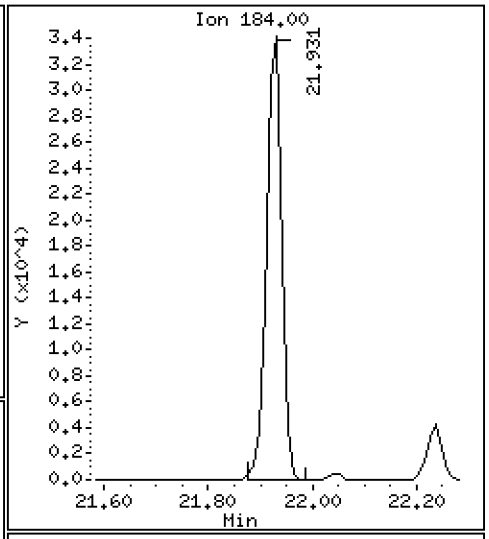
Column phase: Rxi-17Sil MS

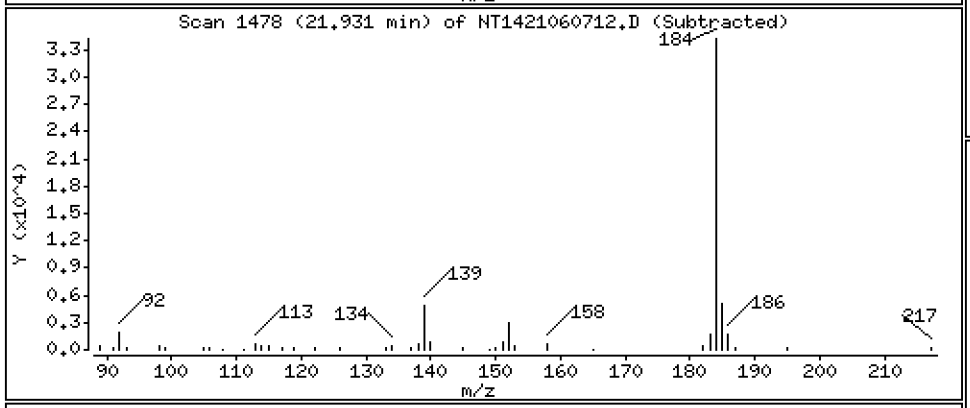
Column diameter: 0.25

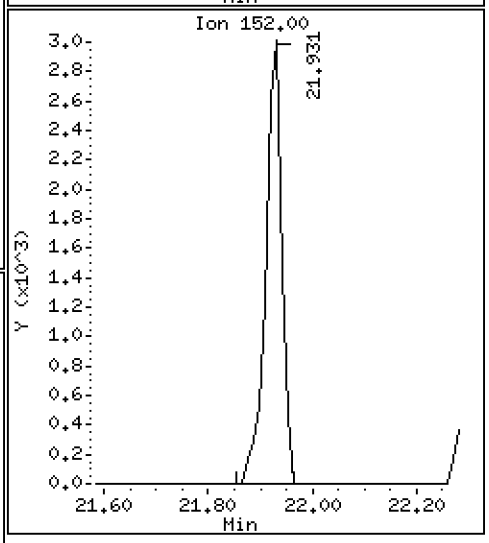
30 Dibenzothiophene

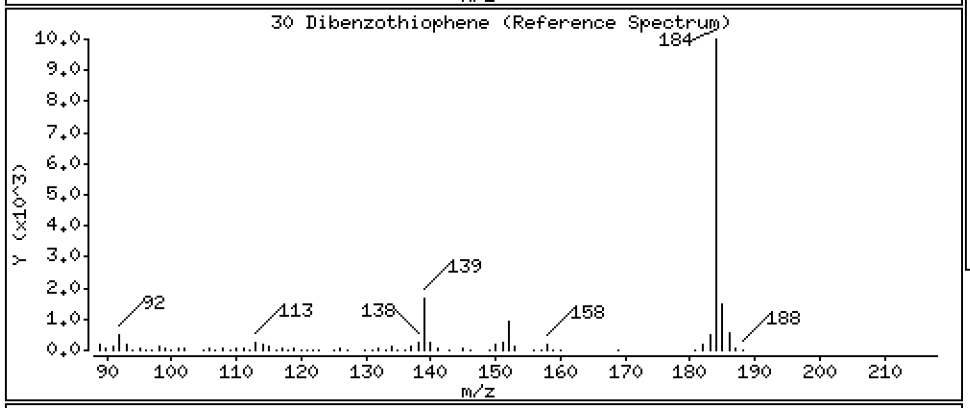
Concentration: 2.111 ug/mL

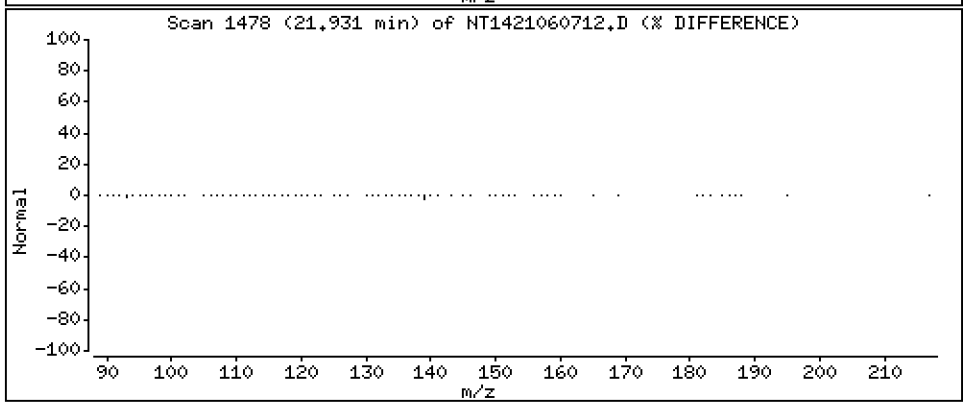












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Date : 07-JUN-2021 21:18

Client ID:

Instrument: nt14.i

Sample Info: BJE0383-MS1

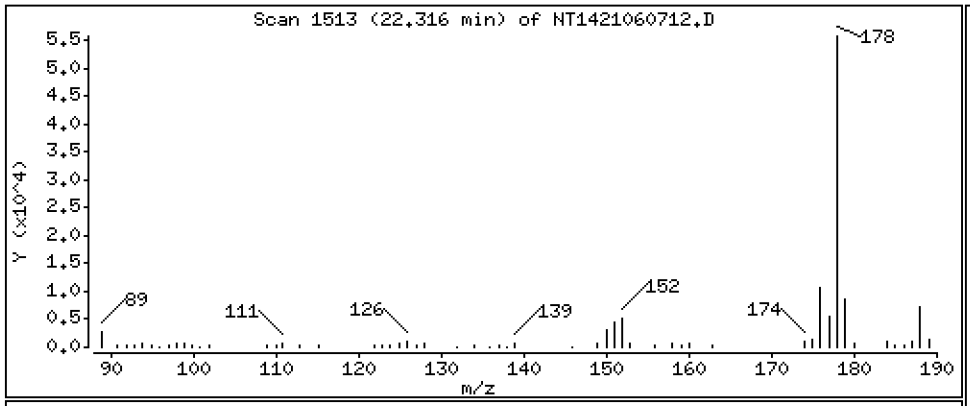
Operator: VTS

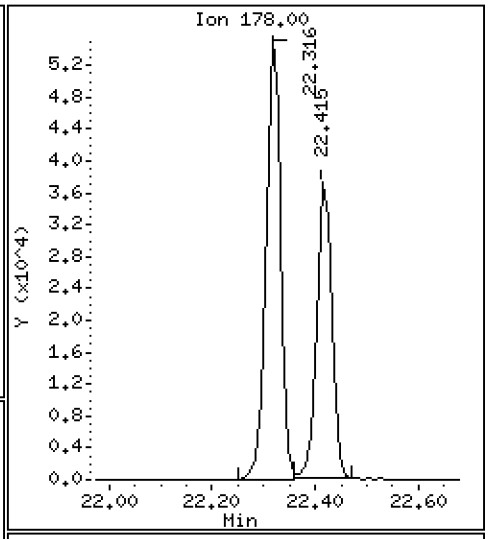
Column phase: Rxi-17Sil MS

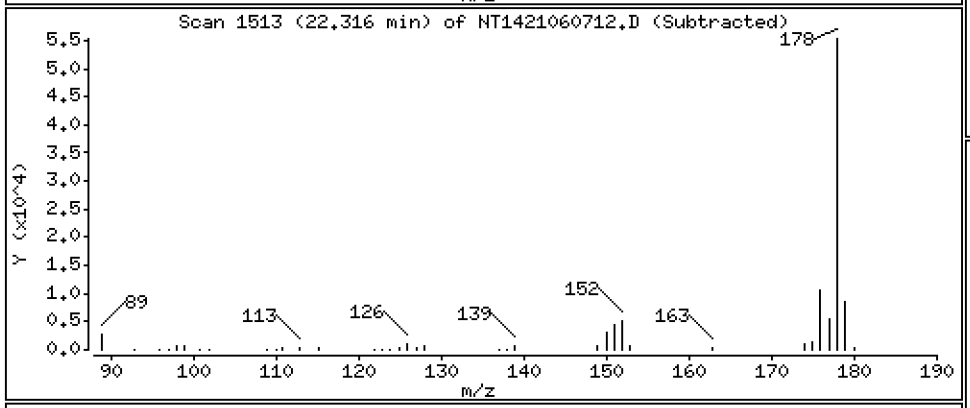
Column diameter: 0.25

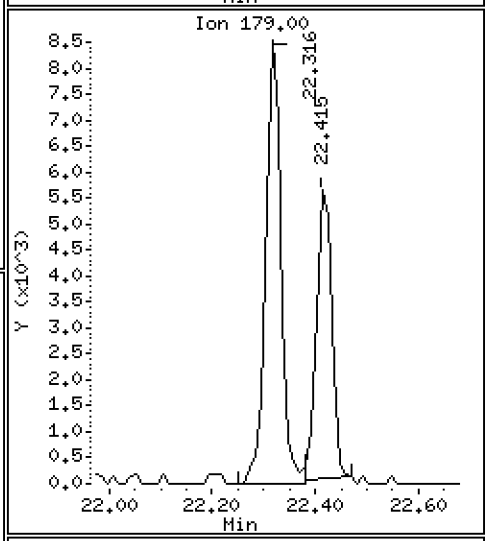
36 Phenanthrene

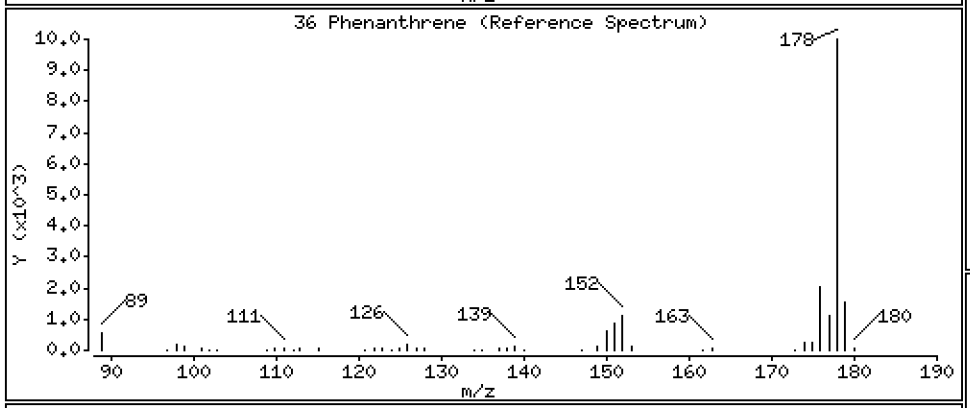
Concentration: 3.224 ug/mL

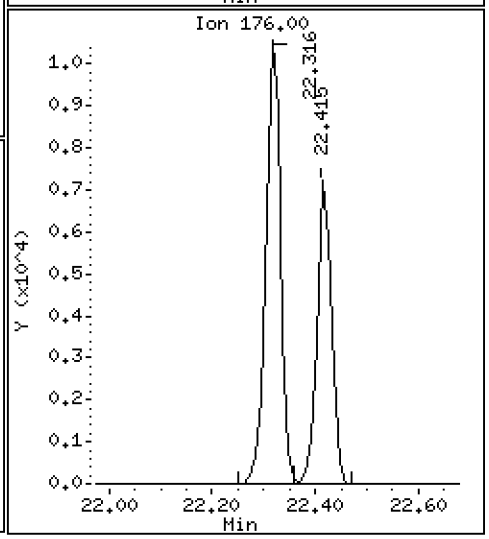


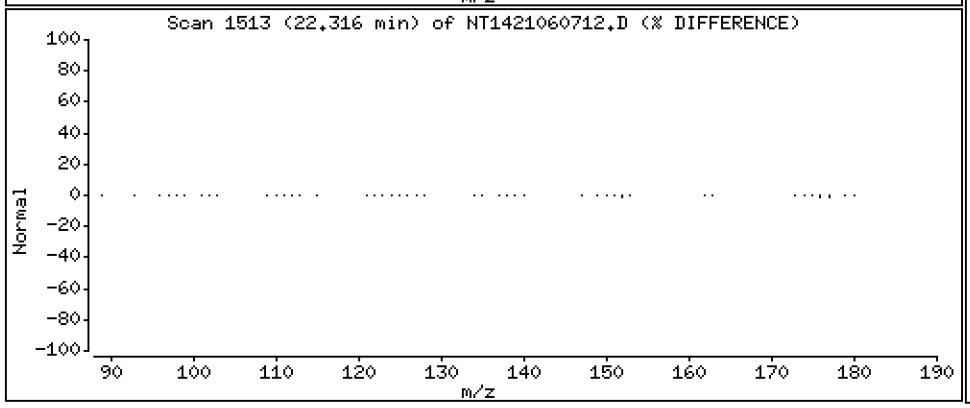












Data File: \\target\share\chem3\nt14.i\20210607.b\NT1421060712.D

Date : 07-JUN-2021 21:18

Client ID:

Instrument: nt14.i

Sample Info: BJE0383-MS1

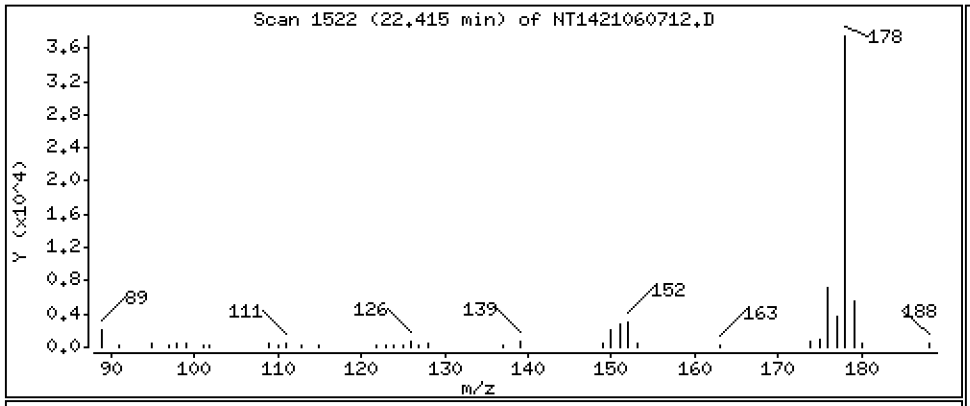
Operator: VTS

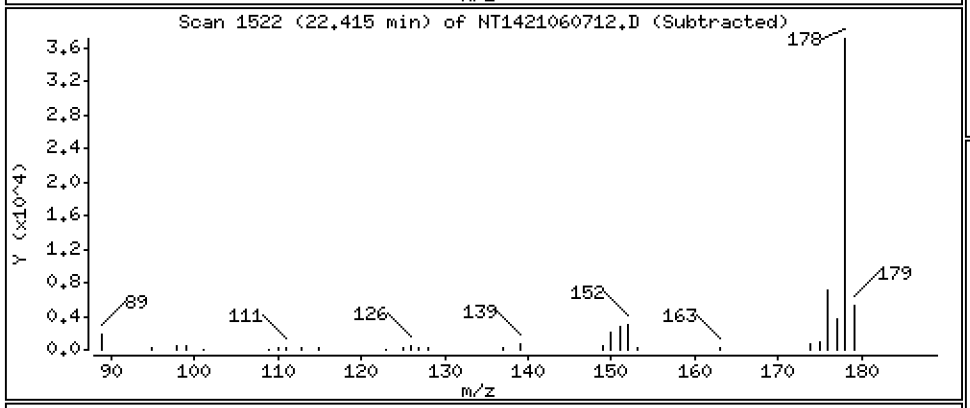
Column phase: Rxi-17Sil MS

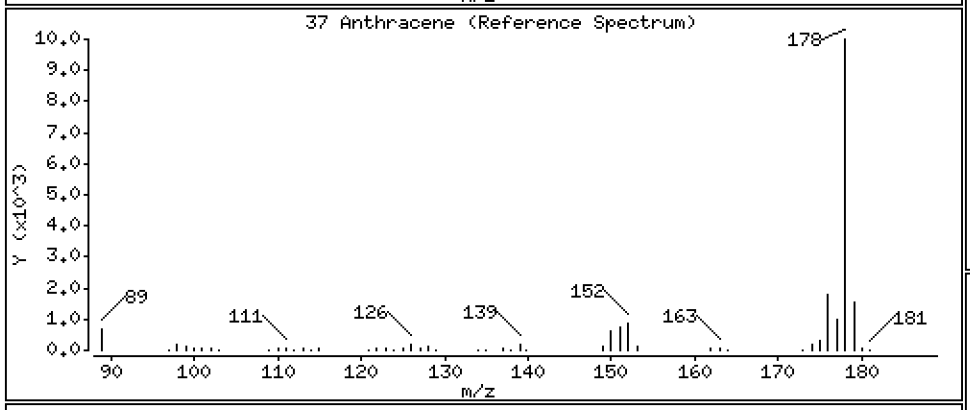
Column diameter: 0.25

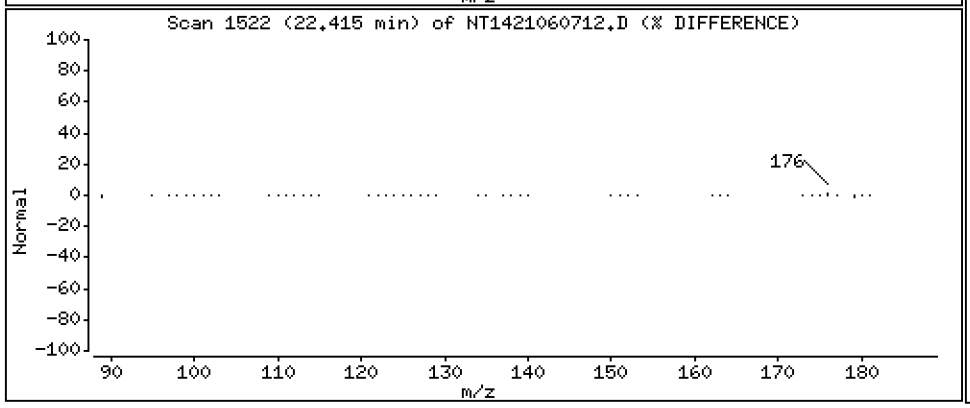
37 Anthracene

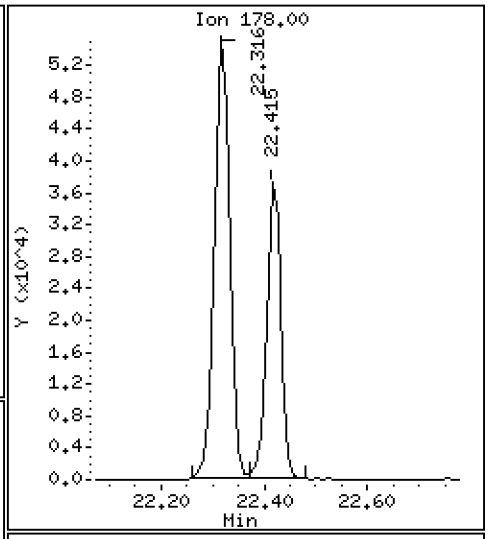
Concentration: 2.248 ug/mL

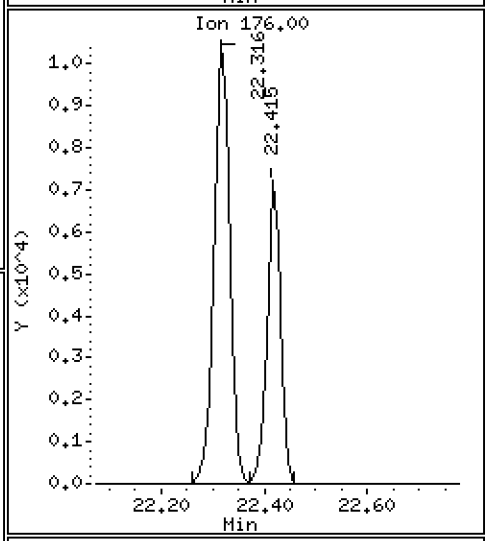


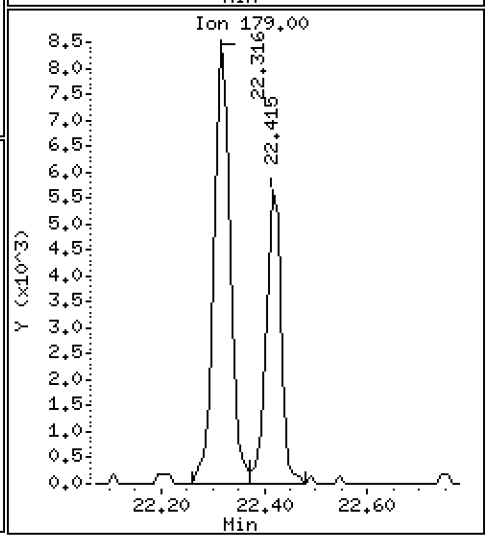












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Date : 07-JUN-2021 21:18

Client ID:

Instrument: nt14.i

Sample Info: BJE0383-MS1

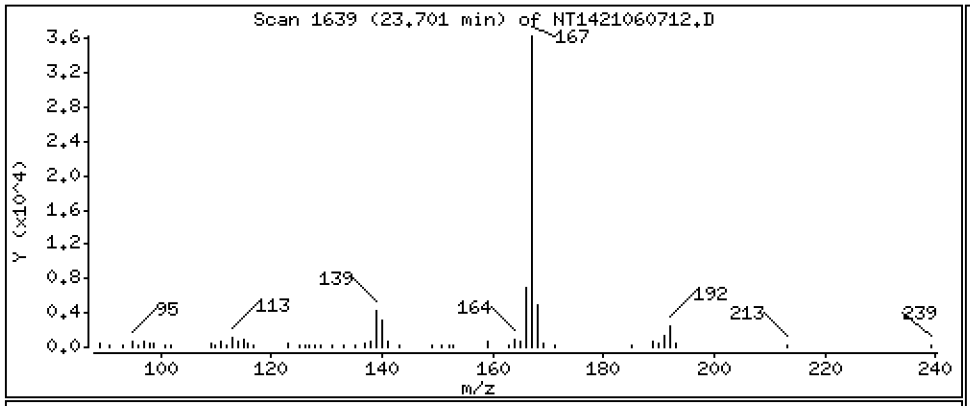
Operator: VTS

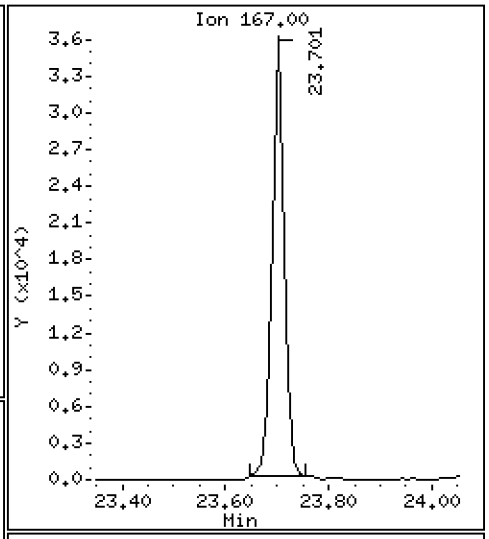
Column phase: Rxi-17Sil MS

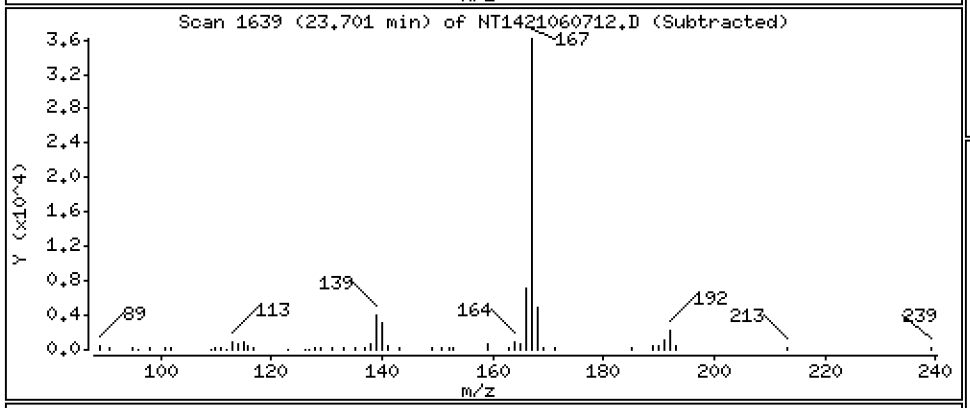
Column diameter: 0.25

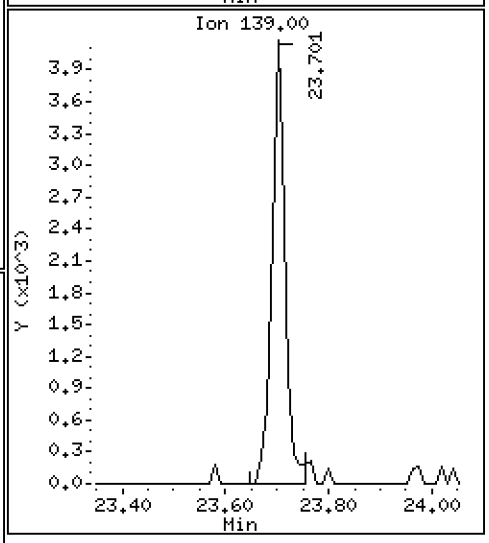
42 Carbazole

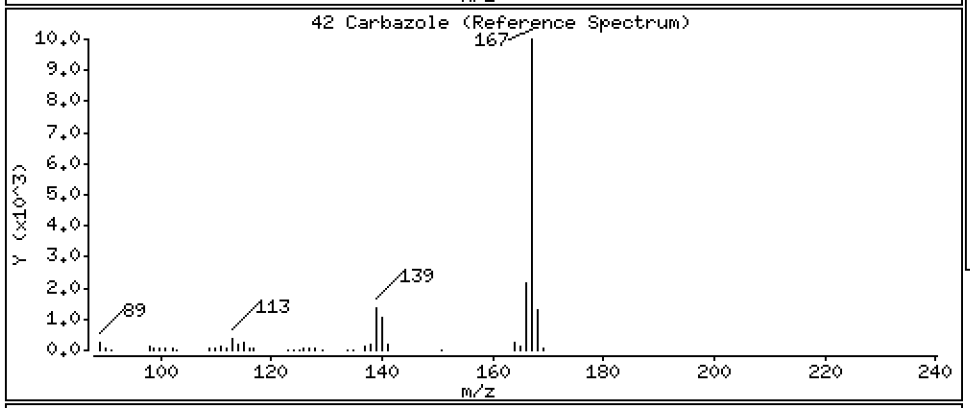
Concentration: 2.023 ug/mL

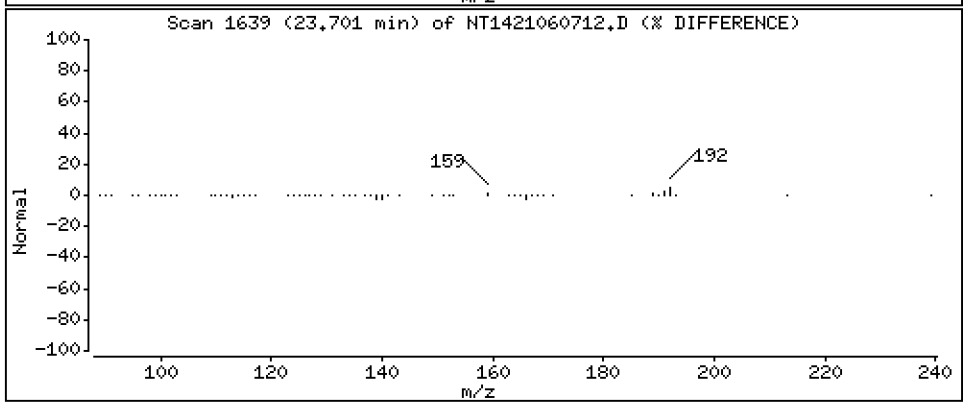












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Date : 07-JUN-2021 21:18

Client ID:

Instrument: nt14.i

Sample Info: BJE0383-MS1

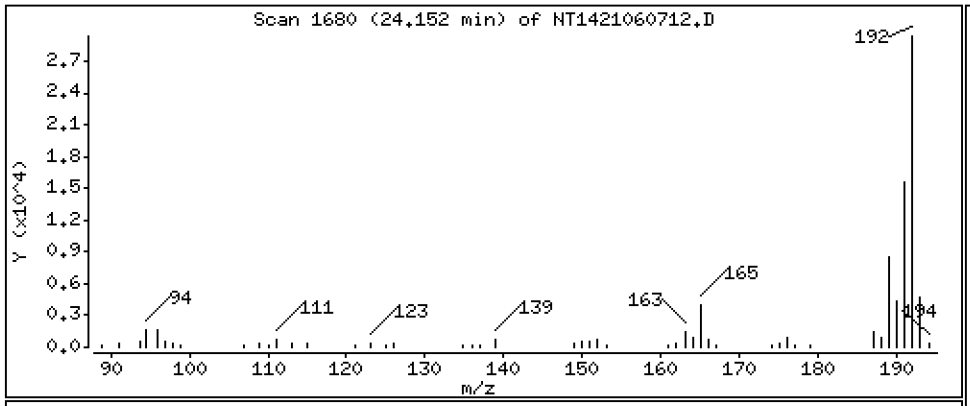
Operator: VTS

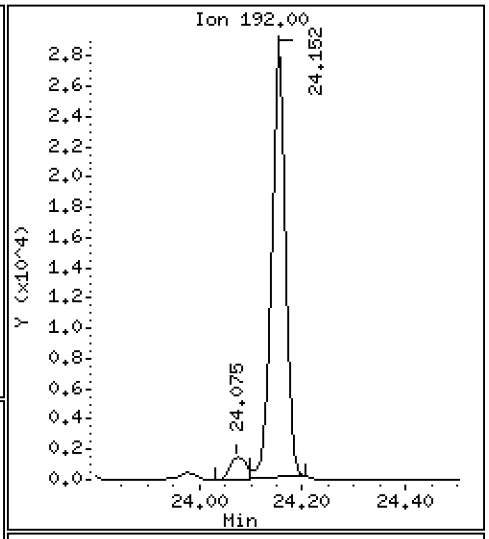
Column phase: Rxi-17Sil MS

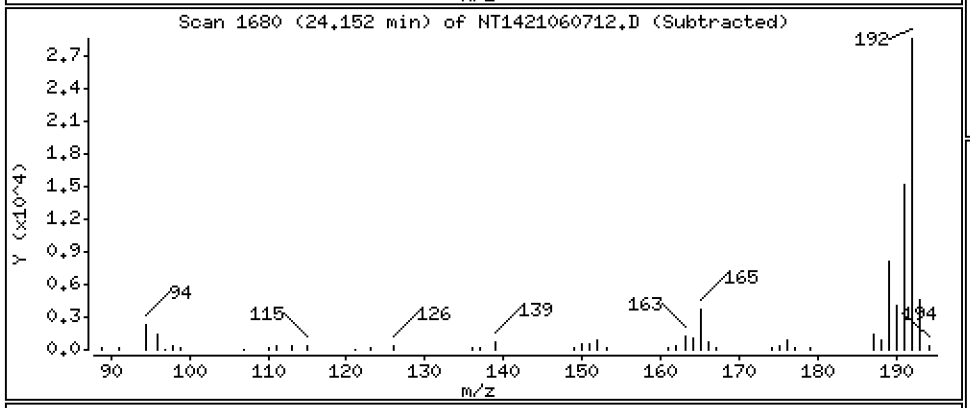
Column diameter: 0.25

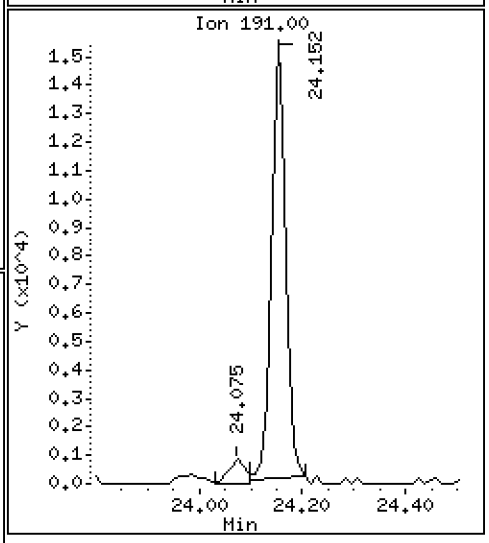
43 1-Methylphenanthrene

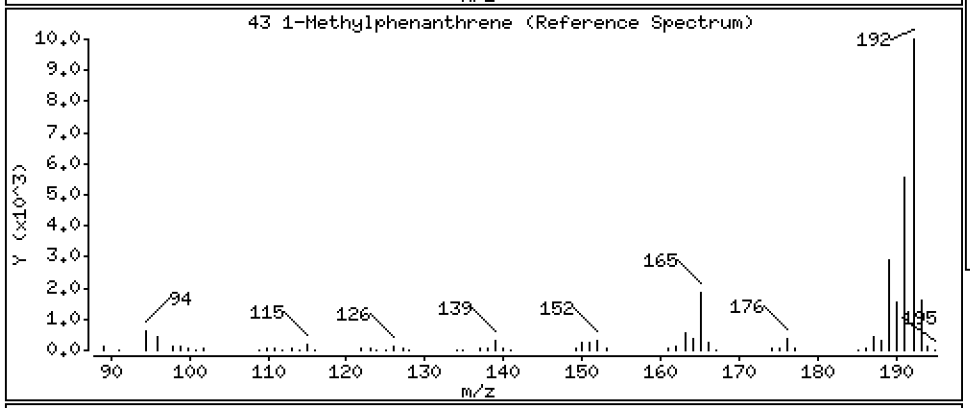
Concentration: 2.298 ug/mL

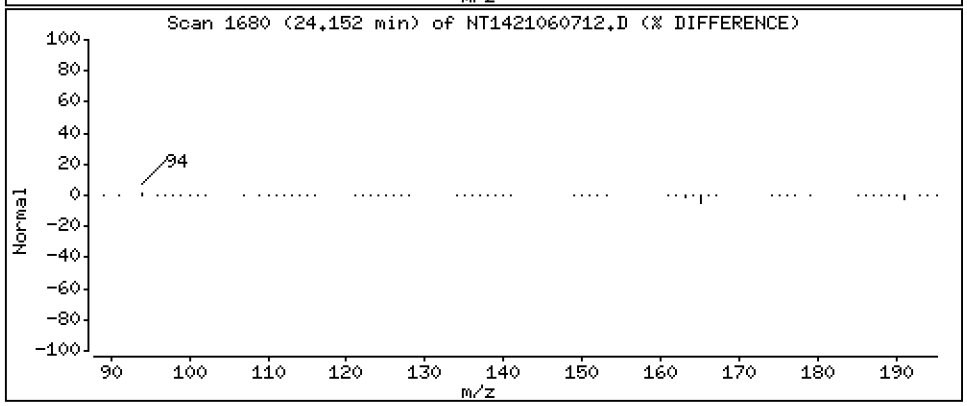












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Date : 07-JUN-2021 21:18

Client ID:

Instrument: nt14.i

Sample Info: BJE0383-MS1

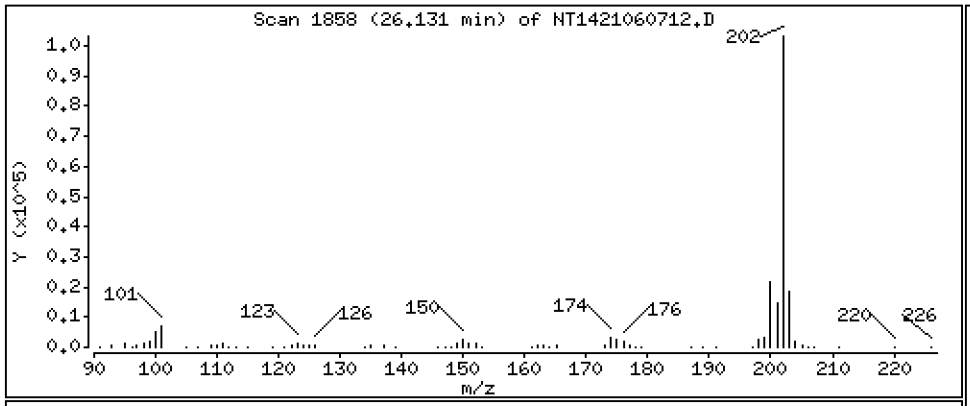
Operator: VTS

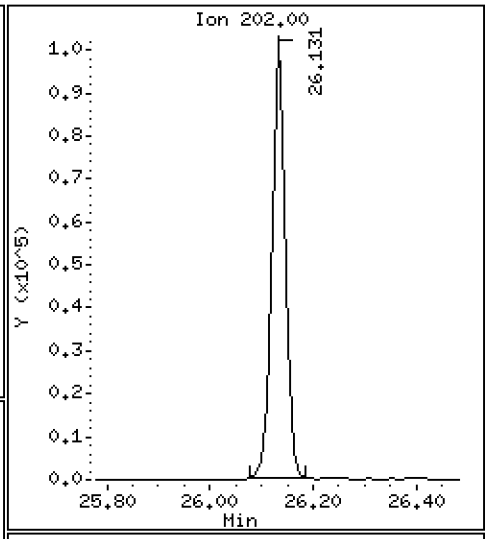
Column phase: Rxi-17Sil MS

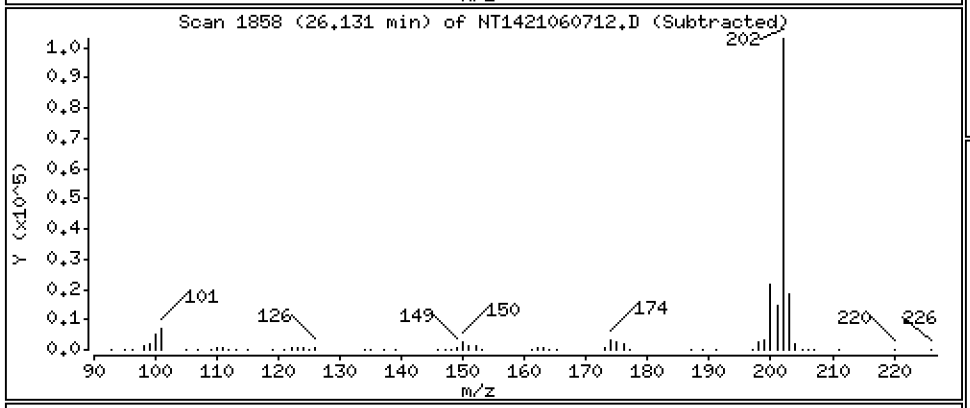
Column diameter: 0.25

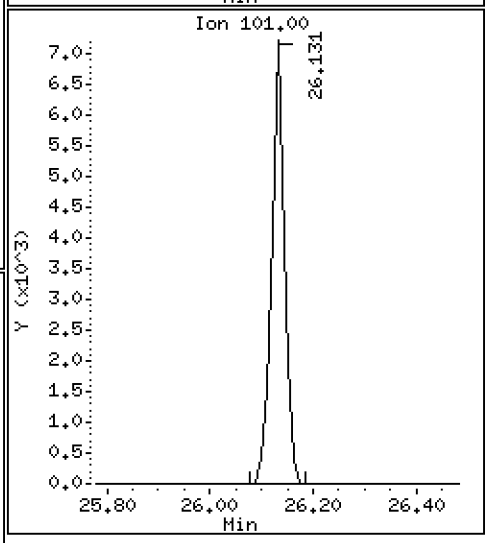
44 Fluoranthene

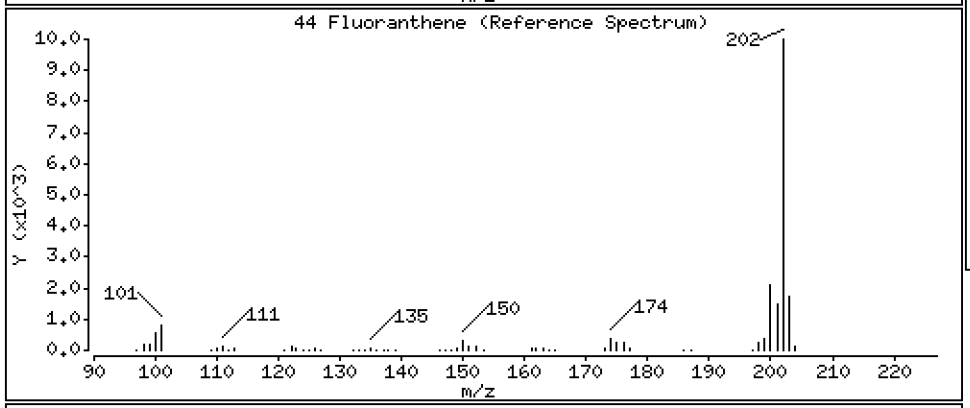
Concentration: 5.110 ug/mL

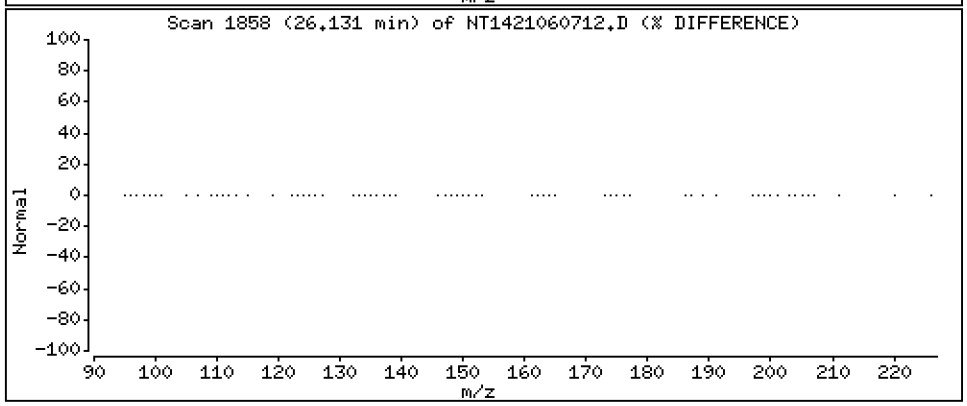












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Date : 07-JUN-2021 21:18

Client ID:

Instrument: nt14.i

Sample Info: BJE0383-MS1

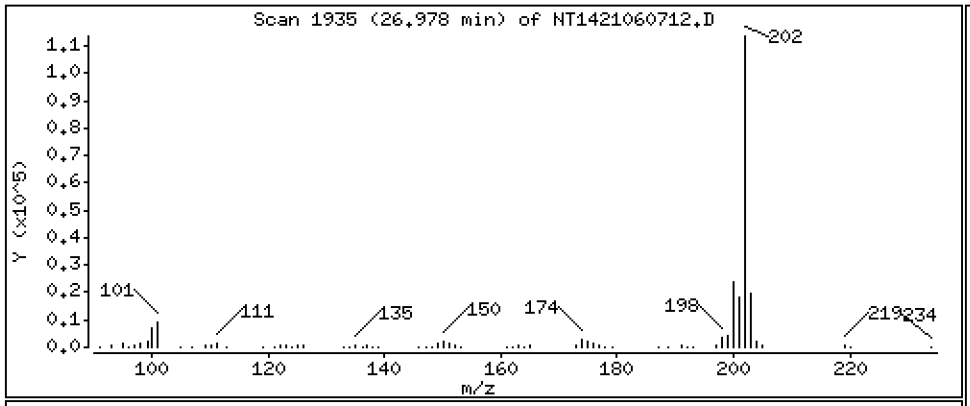
Operator: VTS

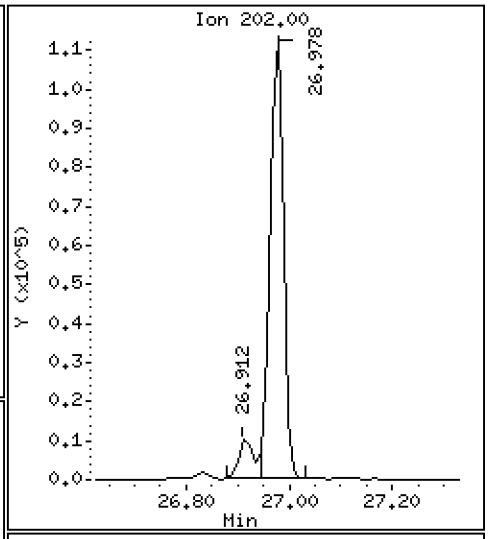
Column phase: Rxi-17Sil MS

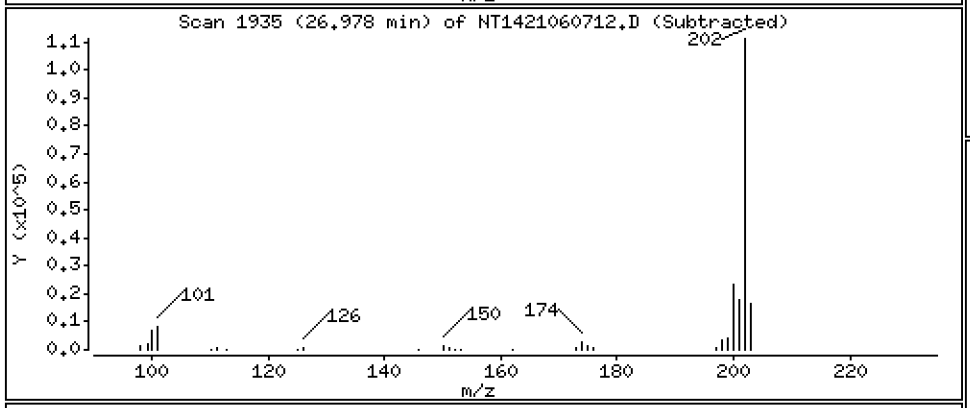
Column diameter: 0.25

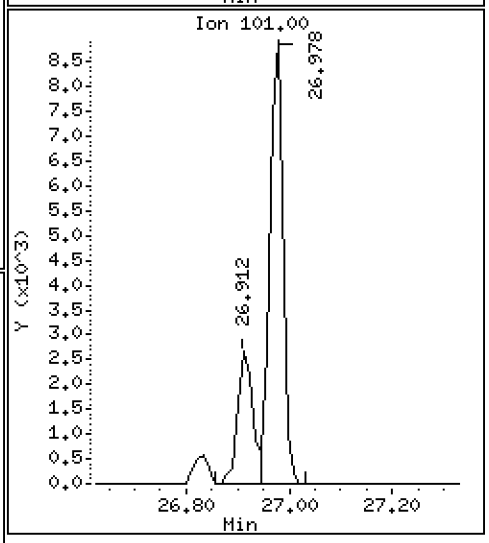
46 Pyrene

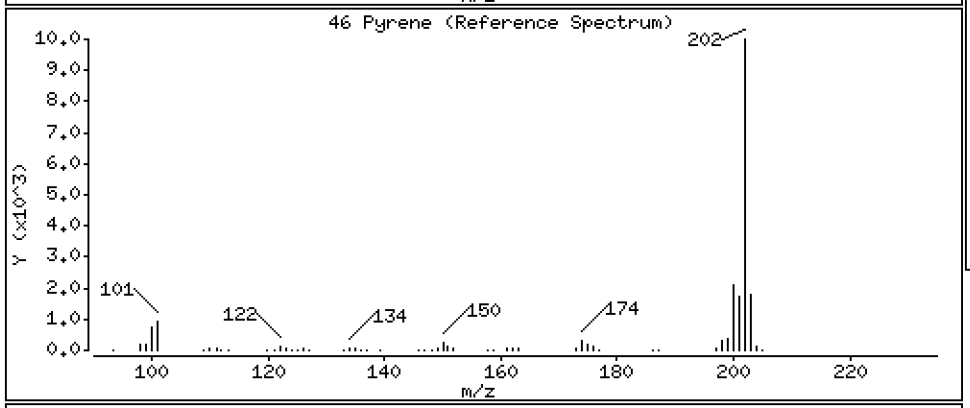
Concentration: 5.247 ug/mL

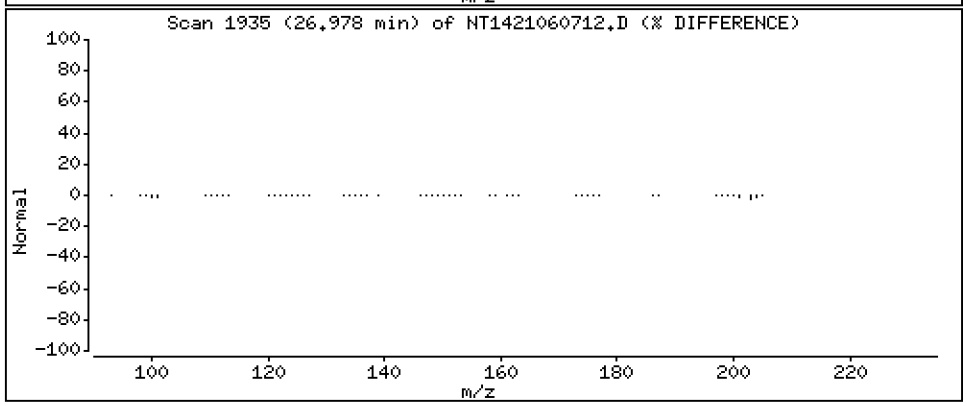












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Date : 07-JUN-2021 21:18

Client ID:

Instrument: nt14.i

Sample Info: BJE0383-MS1

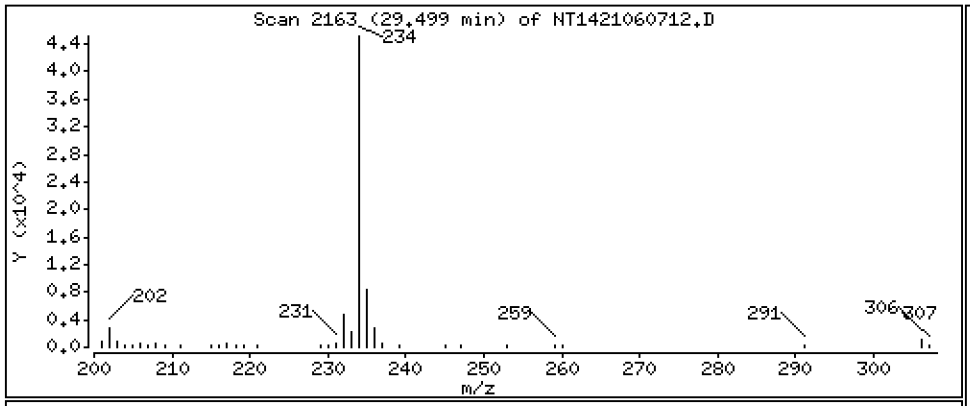
Operator: VTS

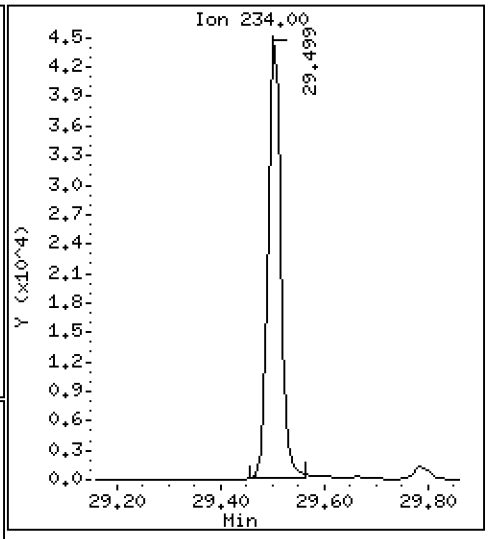
Column phase: Rxi-17Sil MS

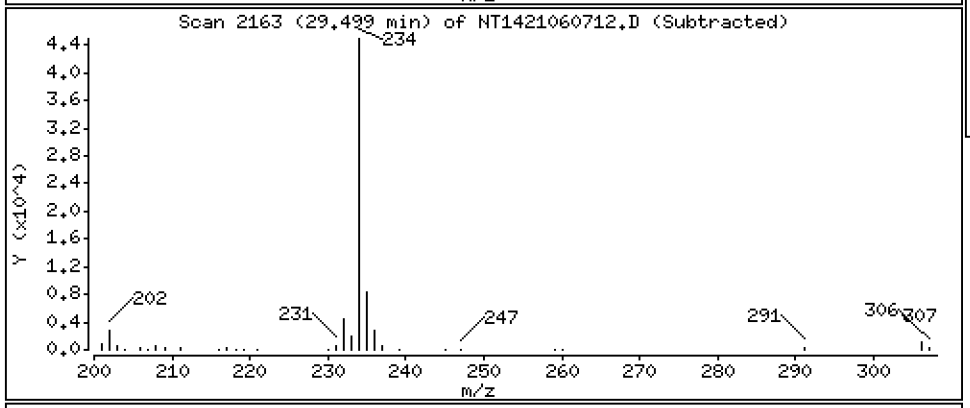
Column diameter: 0.25

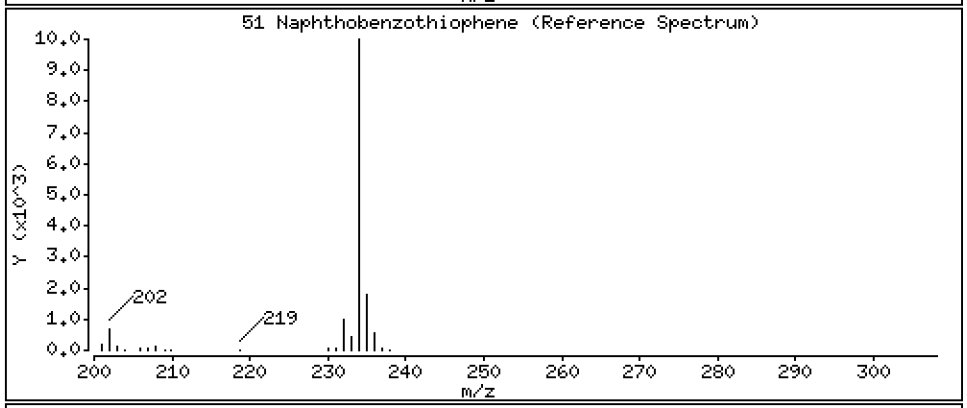
51 Naphthobenzothiophene

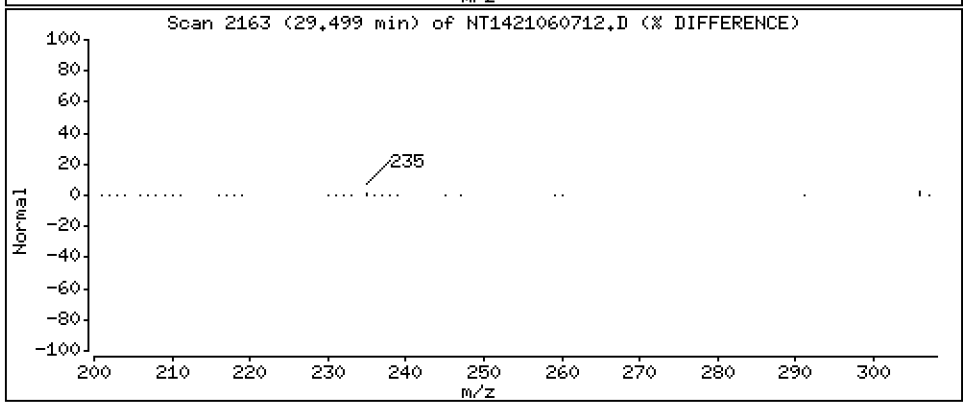
Concentration: 1.886 ug/mL











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Date : 07-JUN-2021 21:18

Client ID:

Instrument: nt14.i

Sample Info: BJE0383-MS1

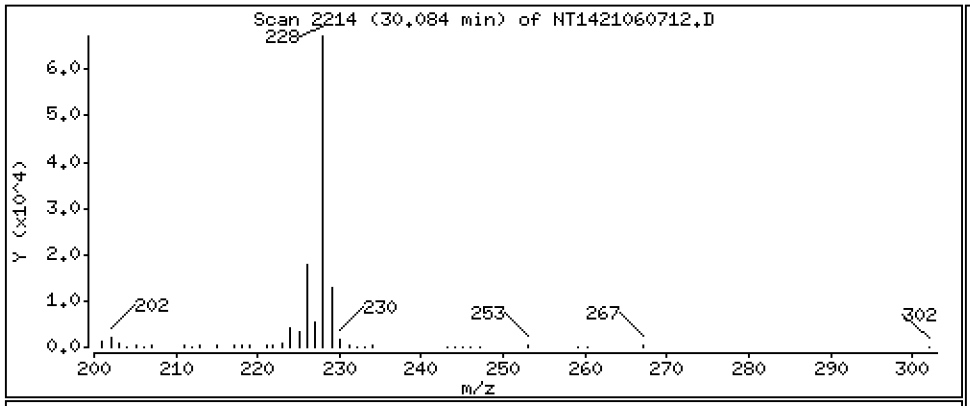
Operator: VTS

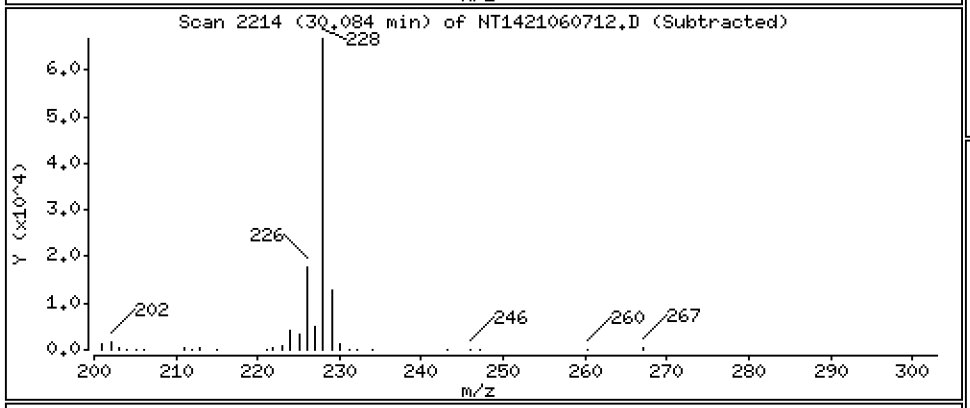
Column phase: Rxi-17Sil MS

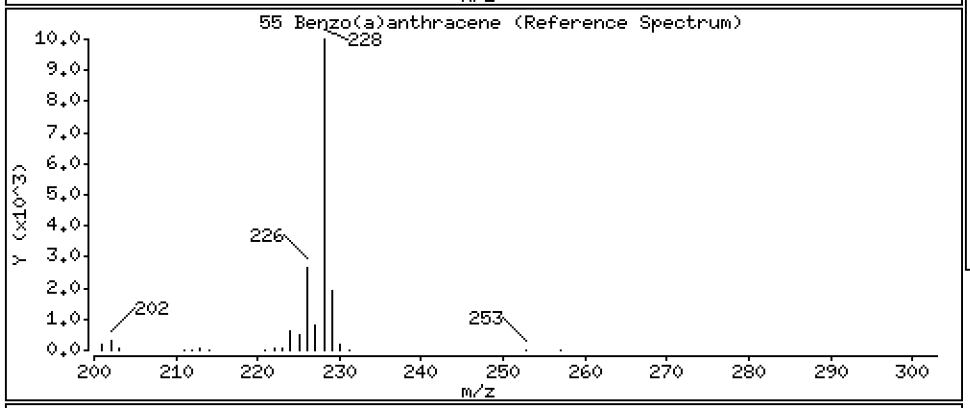
Column diameter: 0.25

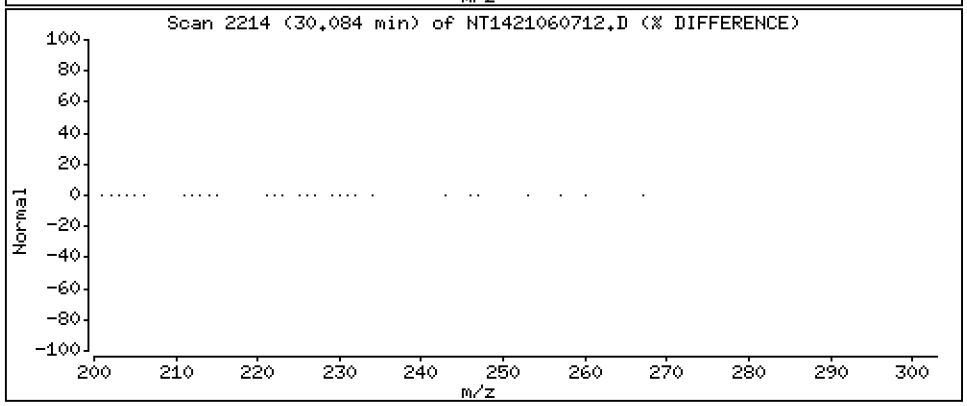
55 Benzo(a)anthracene

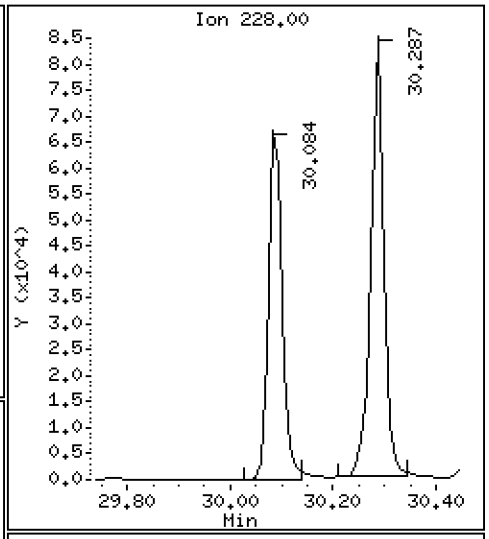
Concentration: 3.901 ug/mL

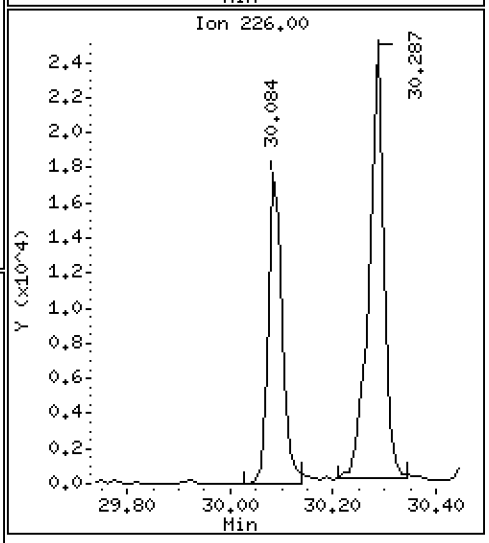












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Date : 07-JUN-2021 21:18

Client ID:

Instrument: nt14.i

Sample Info: BJE0383-MS1

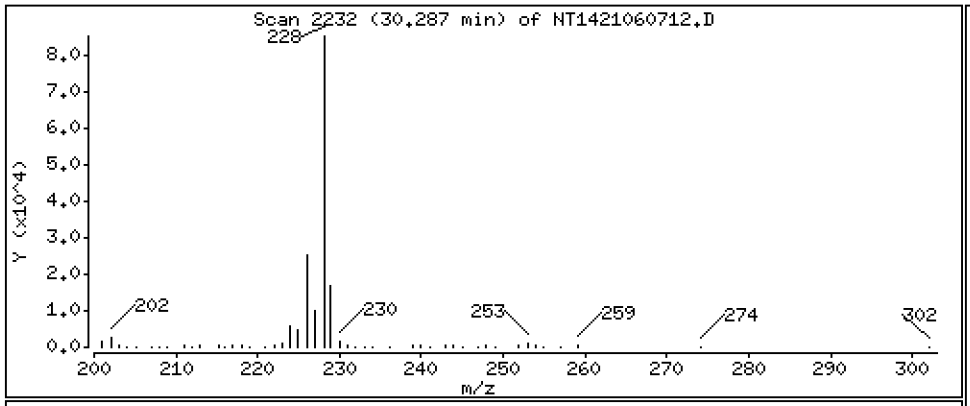
Operator: VTS

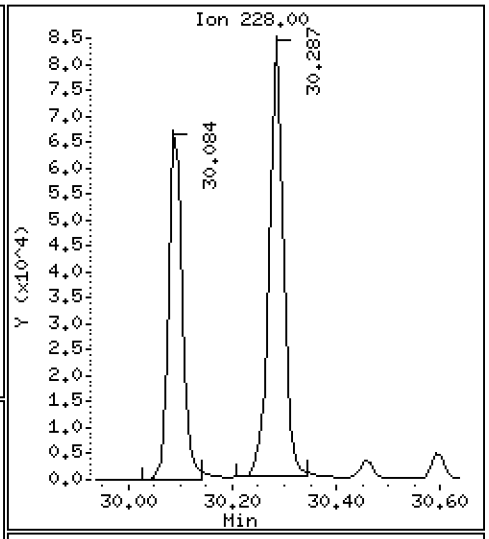
Column phase: Rxi-17Sil MS

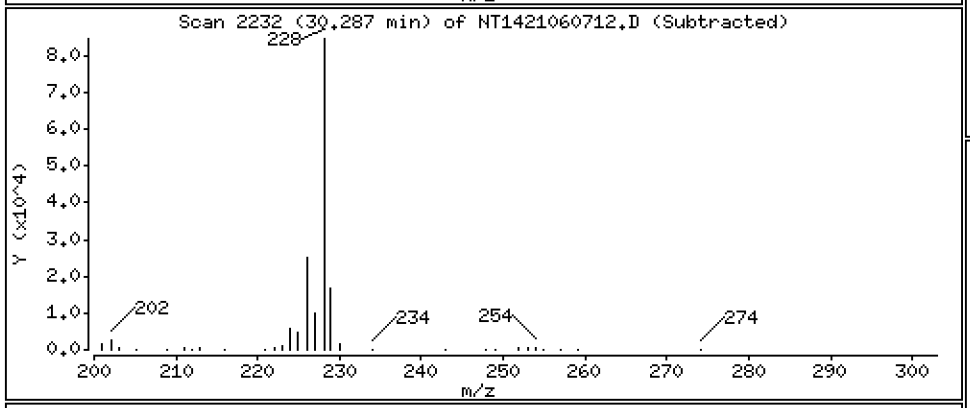
Column diameter: 0.25

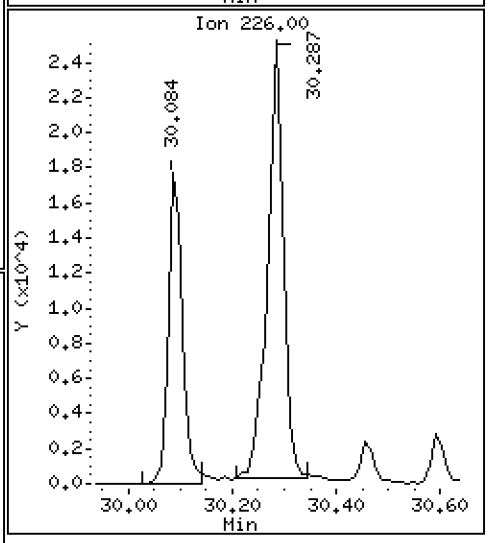
57 Chrysene

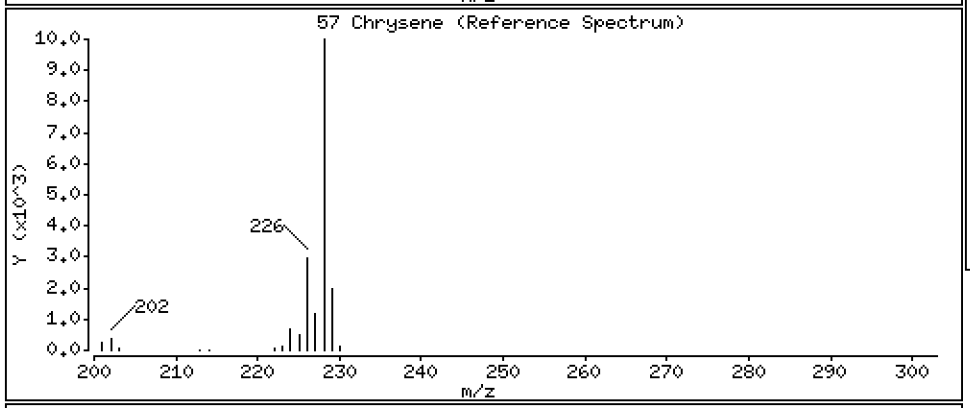
Concentration: 4.665 ug/mL

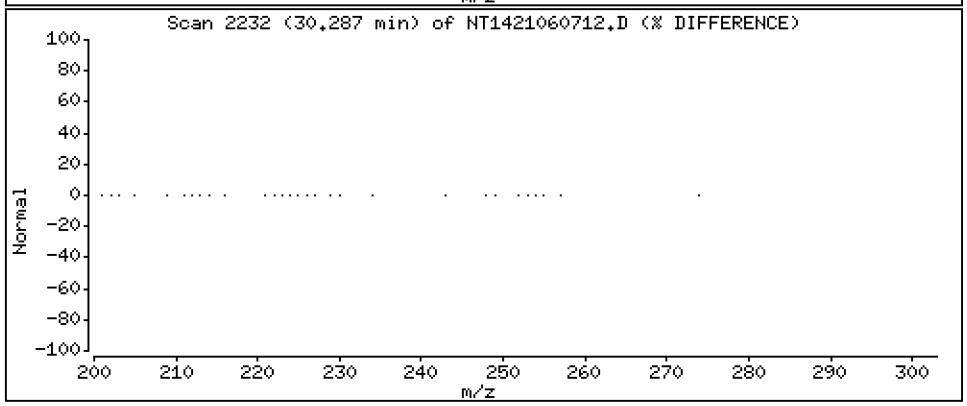












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Date : 07-JUN-2021 21:18

Client ID:

Instrument: nt14.i

Sample Info: BJE0383-MS1

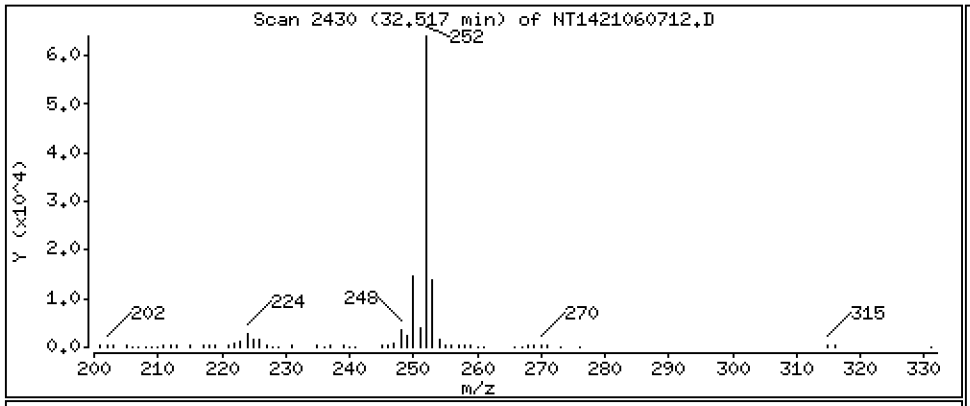
Operator: VTS

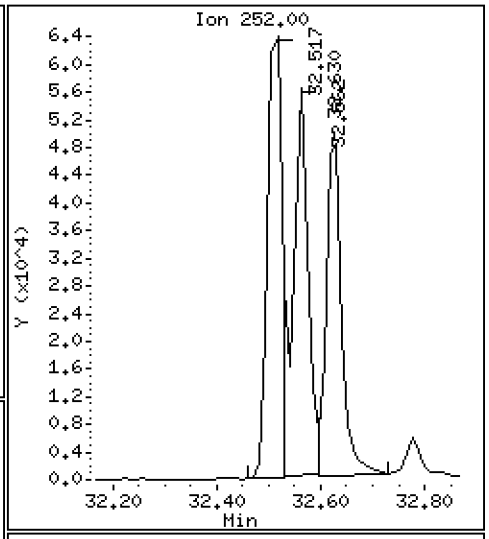
Column phase: Rxi-17Sil MS

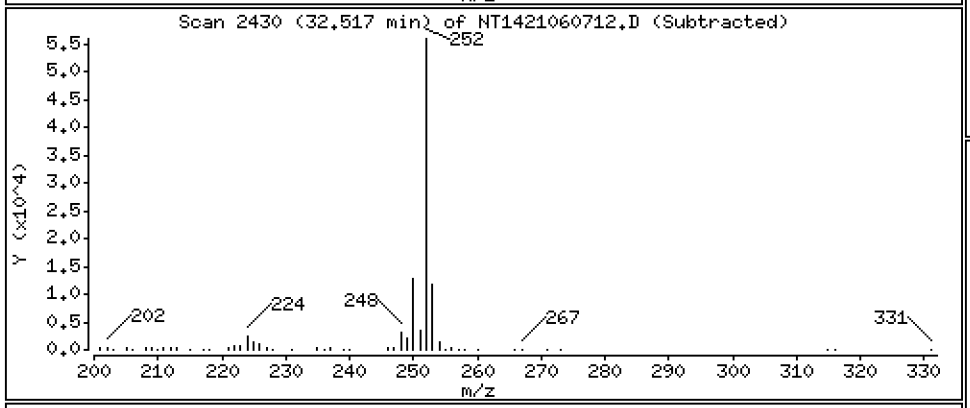
Column diameter: 0.25

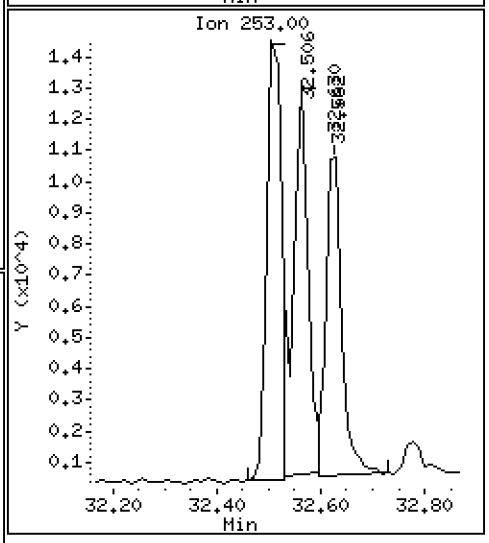
62 Benzo(b)fluoranthene

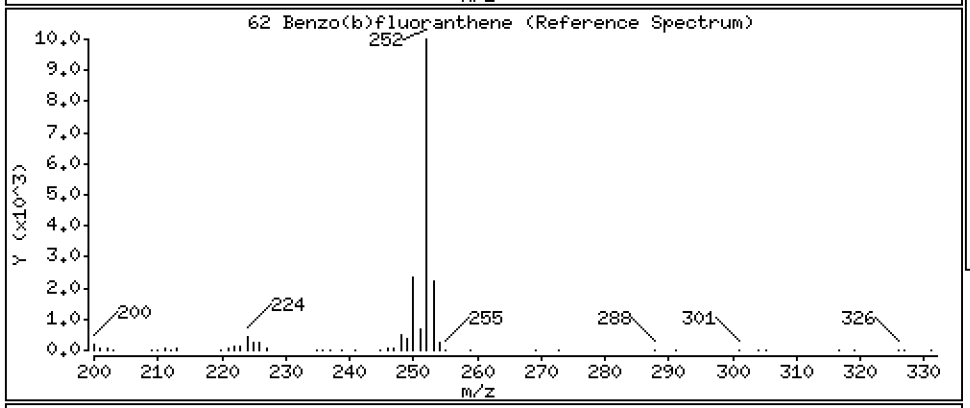
Concentration: 3.542 ug/mL

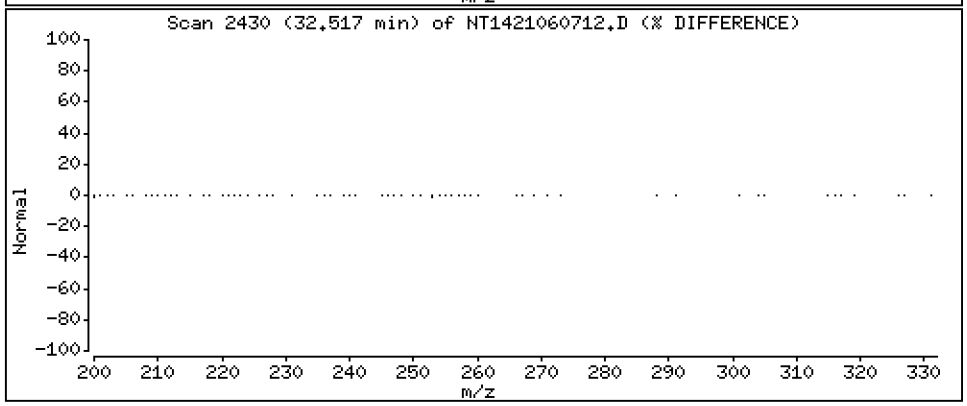












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Date : 07-JUN-2021 21:18

Client ID:

Instrument: nt14.i

Sample Info: BJE0383-MS1

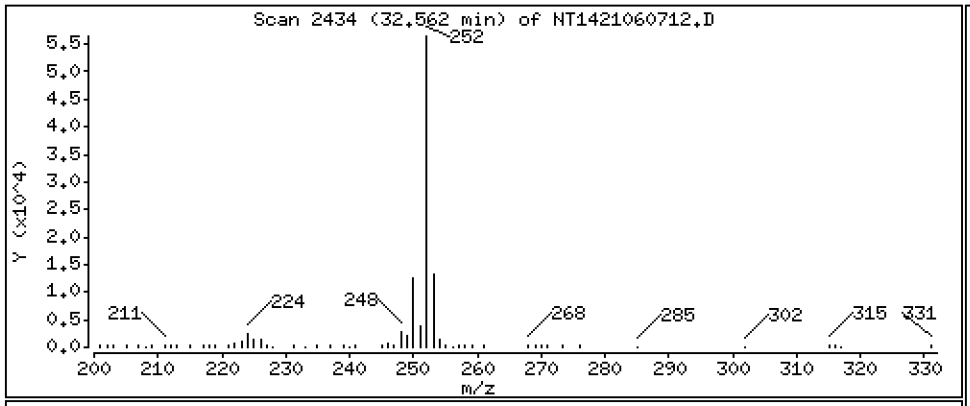
Operator: VTS

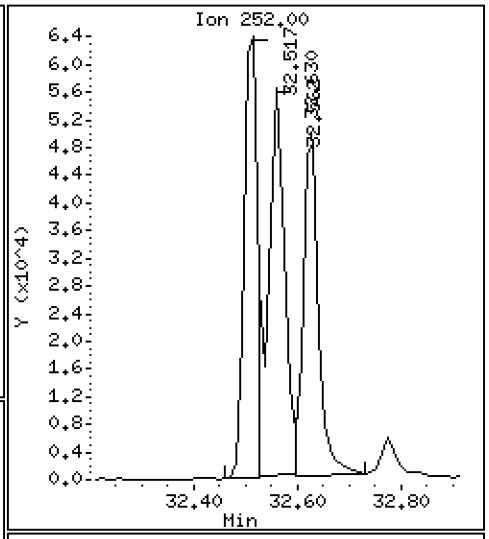
Column phase: Rxi-17Sil MS

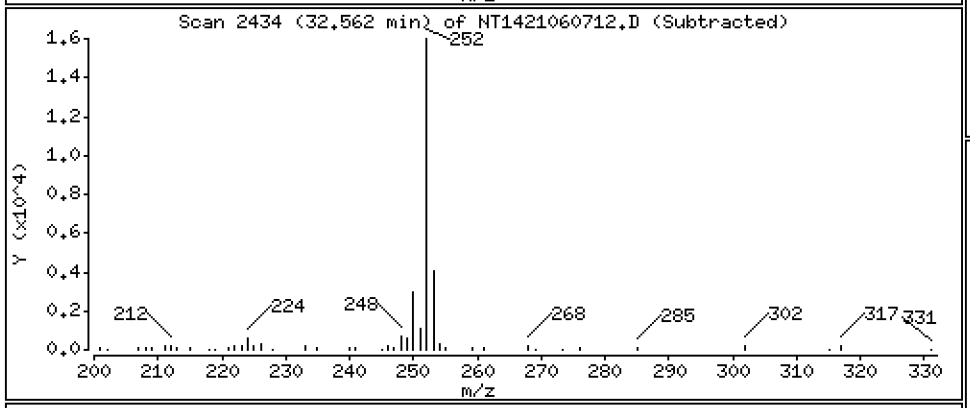
Column diameter: 0.25

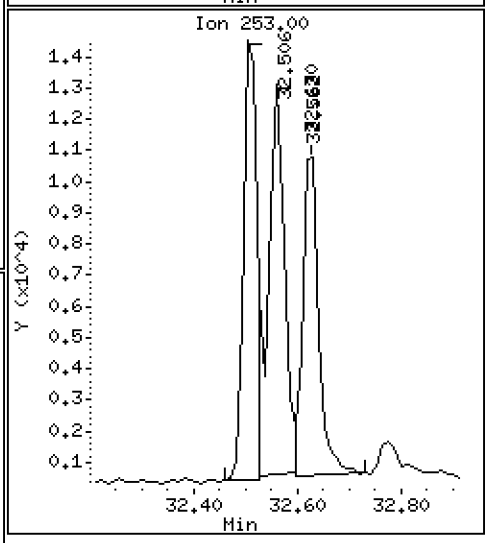
63 Benzo(k)fluoranthene

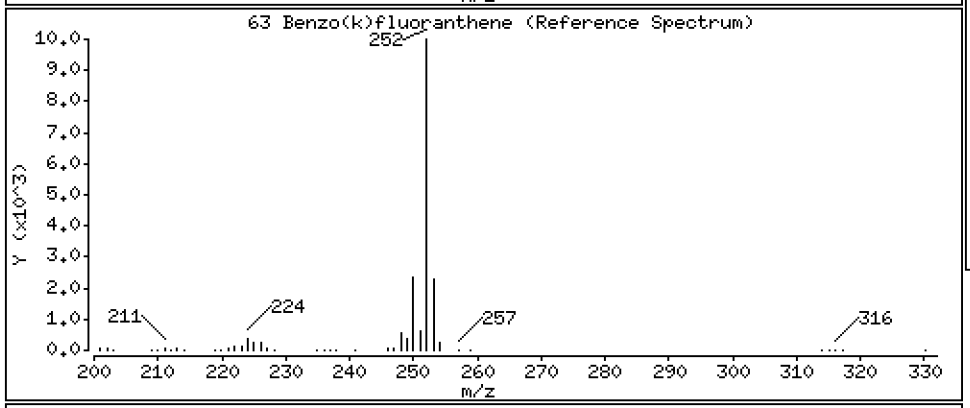
Concentration: 3.500 ug/mL

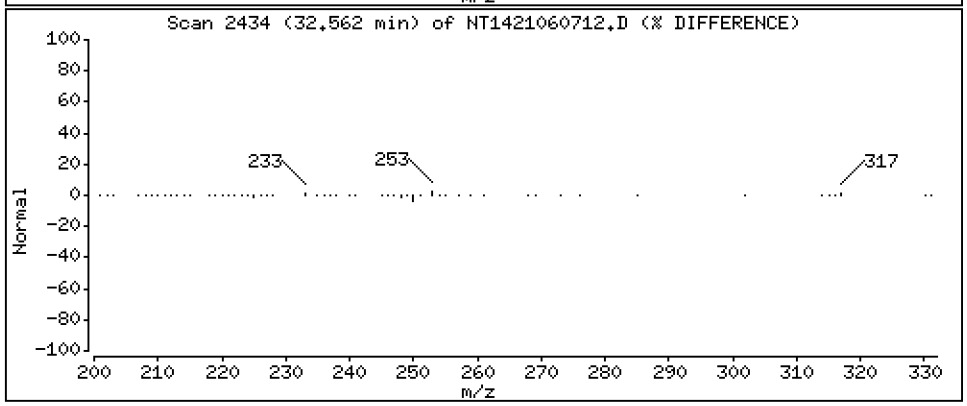












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Date : 07-JUN-2021 21:18

Client ID:

Instrument: nt14.i

Sample Info: BJE0383-MS1

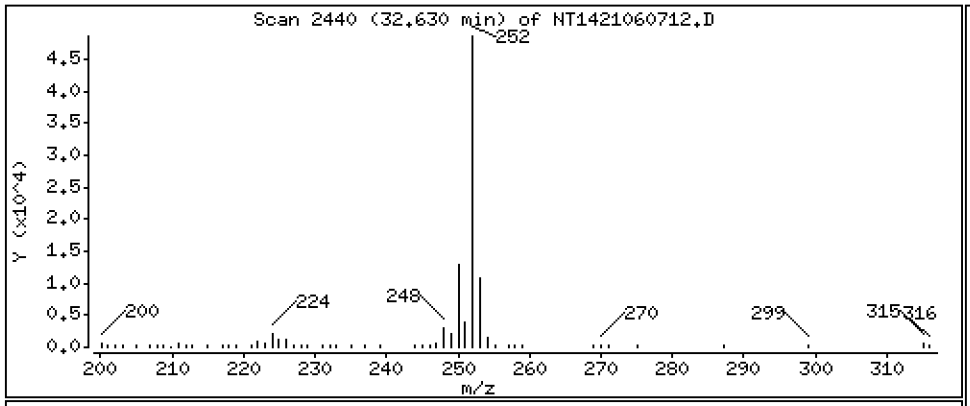
Operator: VTS

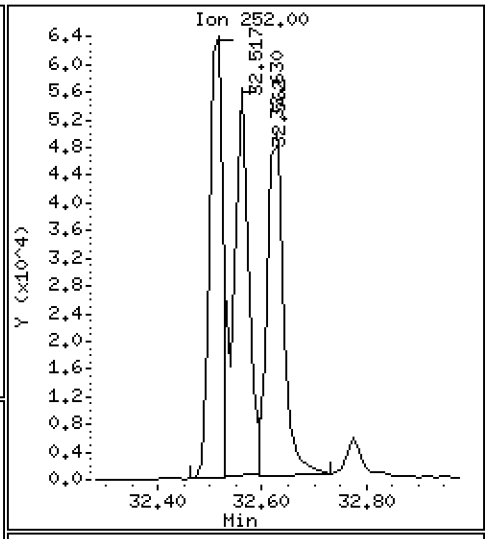
Column phase: Rxi-17Sil MS

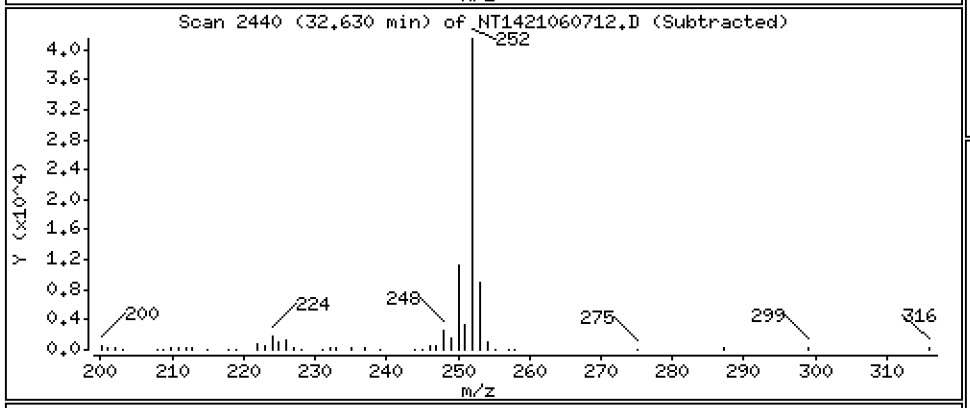
Column diameter: 0.25

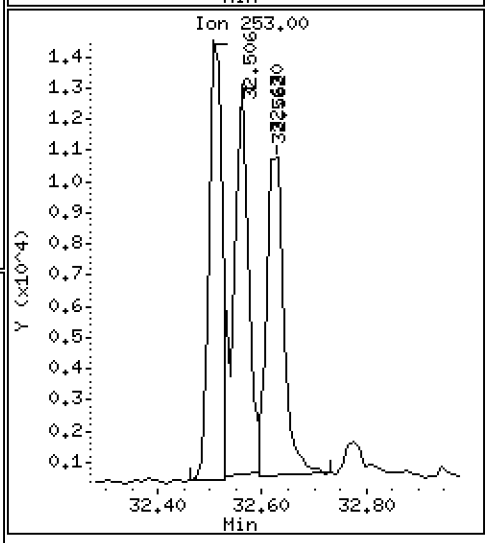
293 Benzo(j)fluoranthene

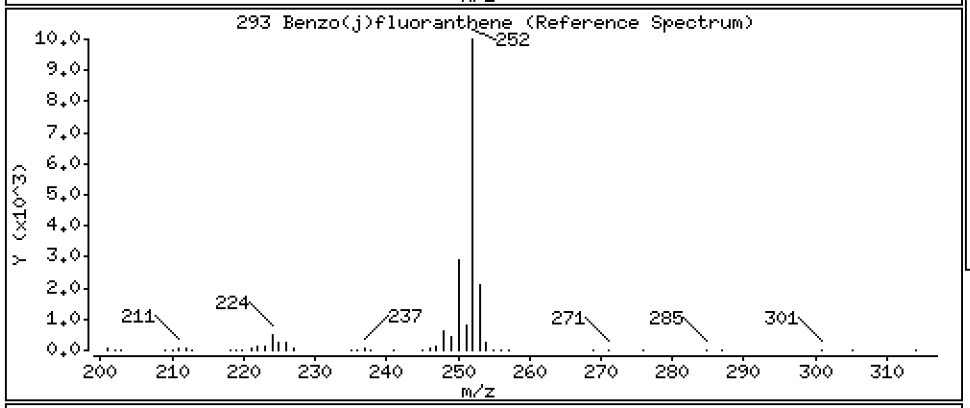
Concentration: 3.112 ug/mL

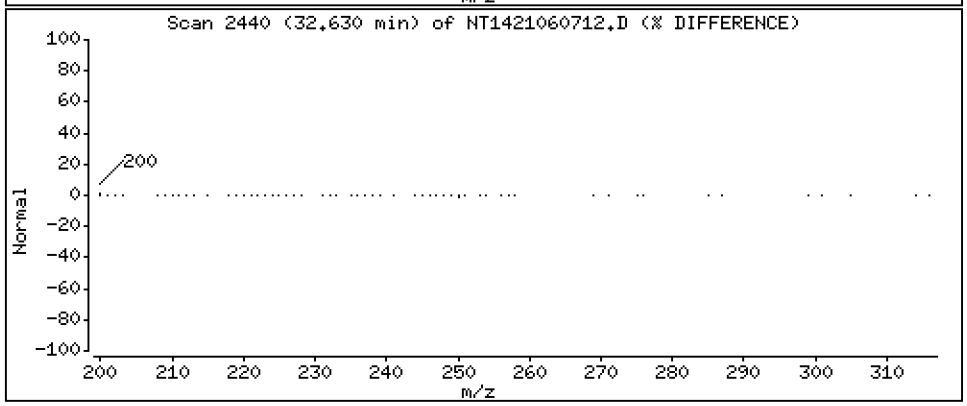












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Date : 07-JUN-2021 21:18

Client ID:

Instrument: nt14.i

Sample Info: BJE0383-MS1

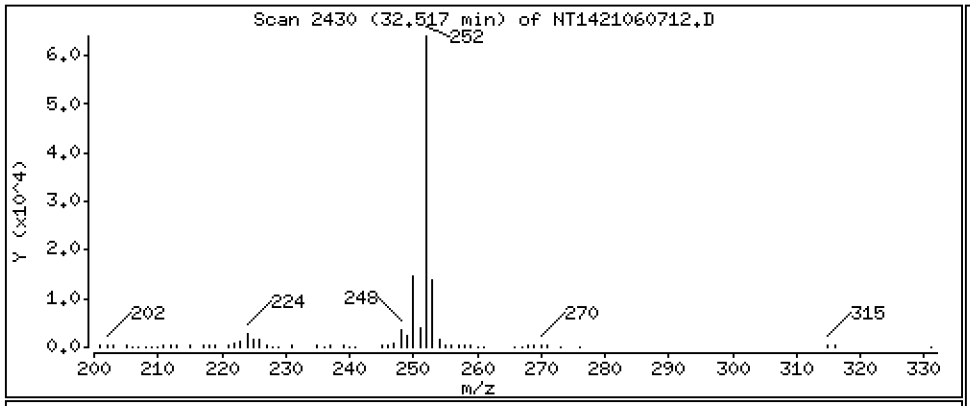
Operator: VTS

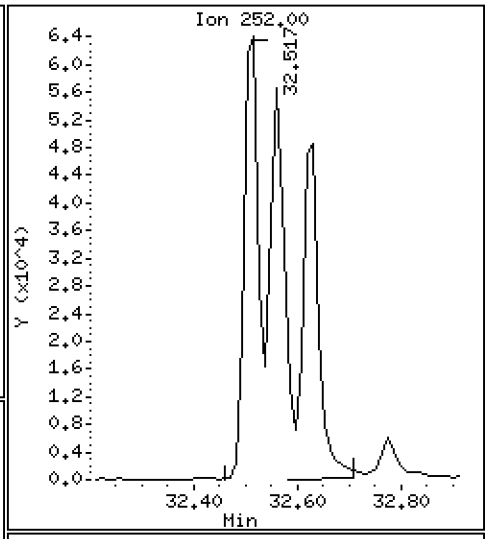
Column phase: Rxi-17Sil MS

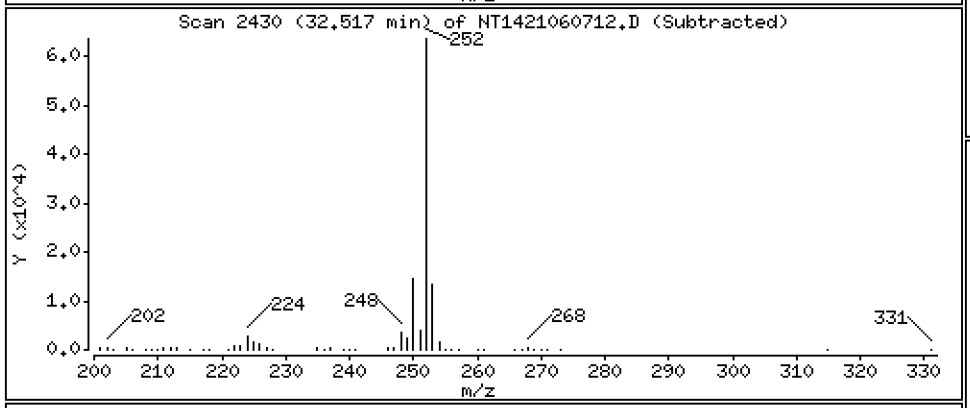
Column diameter: 0.25

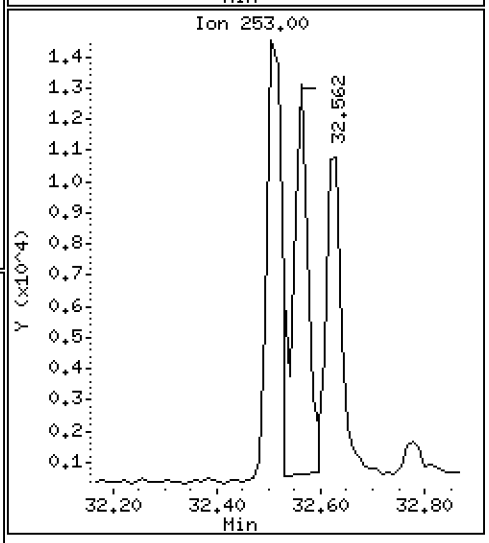
246 Total Benzofluoranthenes

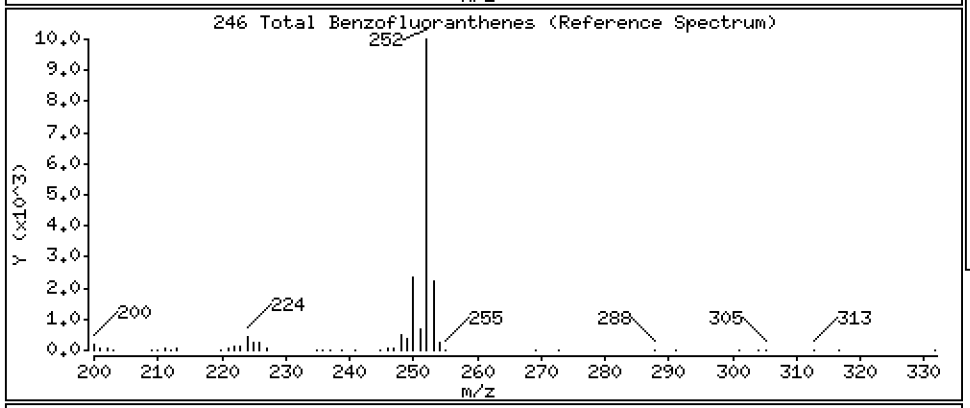
Concentration: 10.16 ug/mL

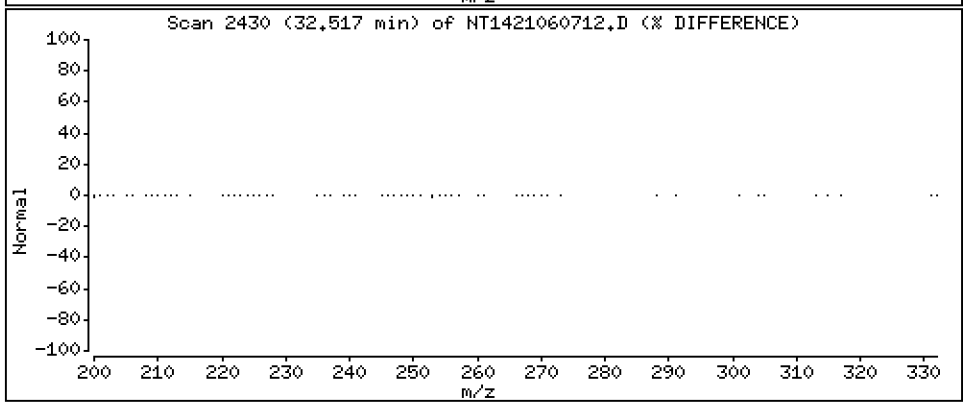












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Date : 07-JUN-2021 21:18

Client ID:

Instrument: nt14.i

Sample Info: BJE0383-MS1

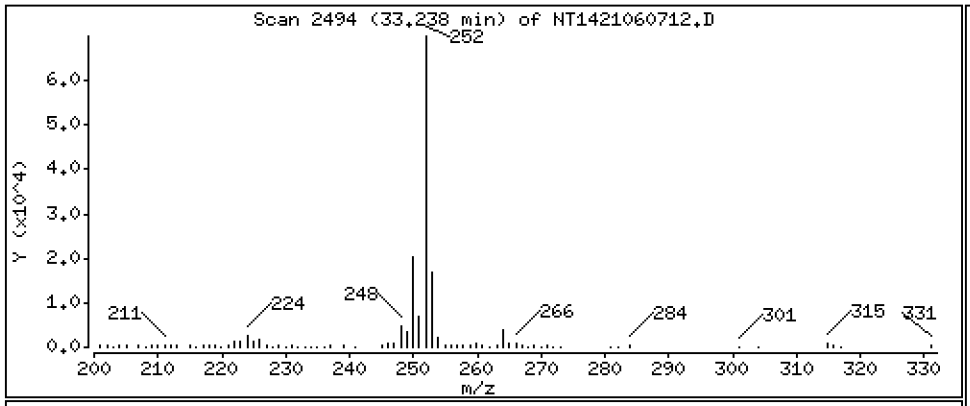
Operator: VTS

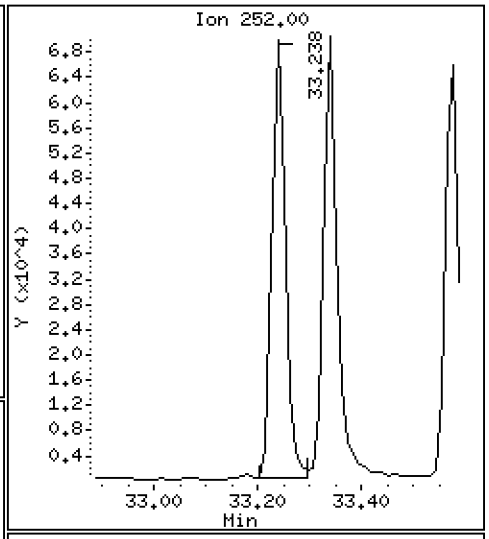
Column phase: Rxi-17Sil MS

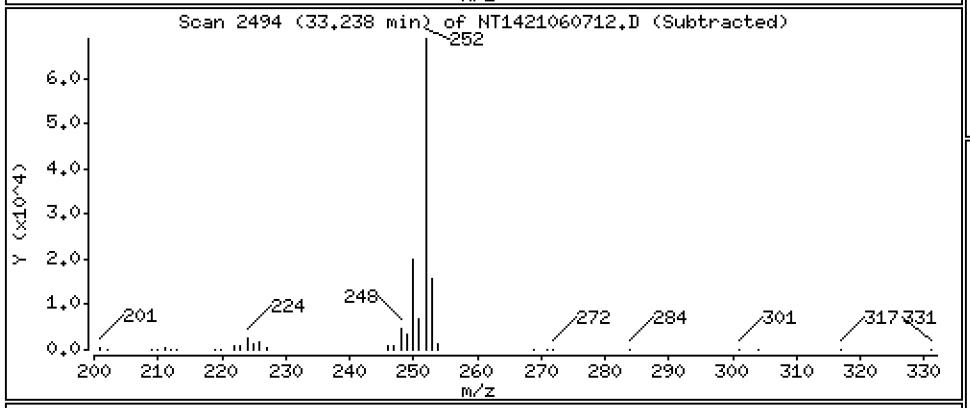
Column diameter: 0.25

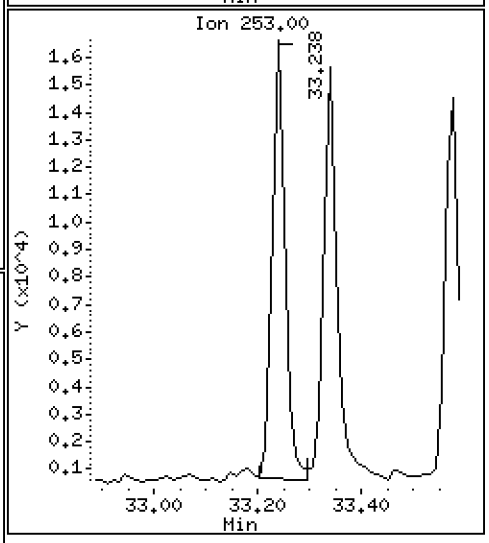
64 Benzo(e)pyrene

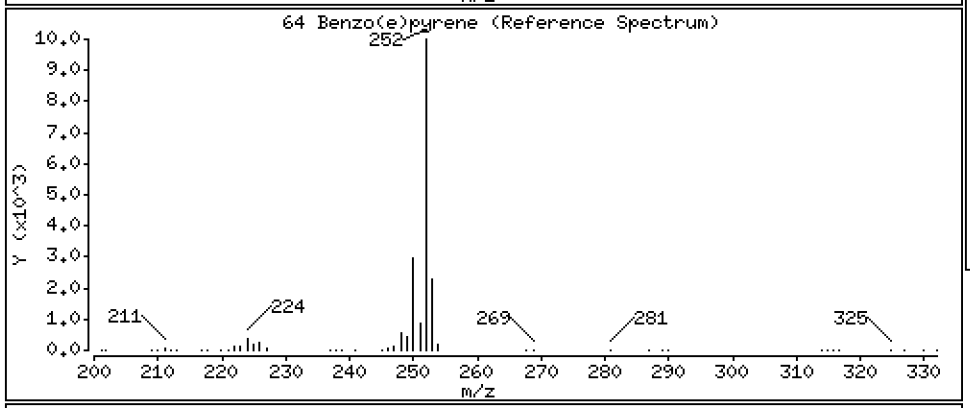
Concentration: 3.569 ug/mL

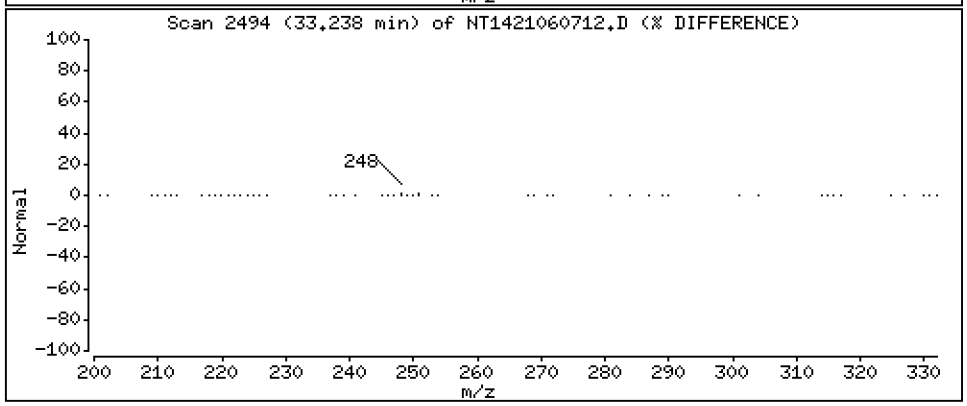












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Date : 07-JUN-2021 21:18

Client ID:

Instrument: nt14.i

Sample Info: BJE0383-MS1

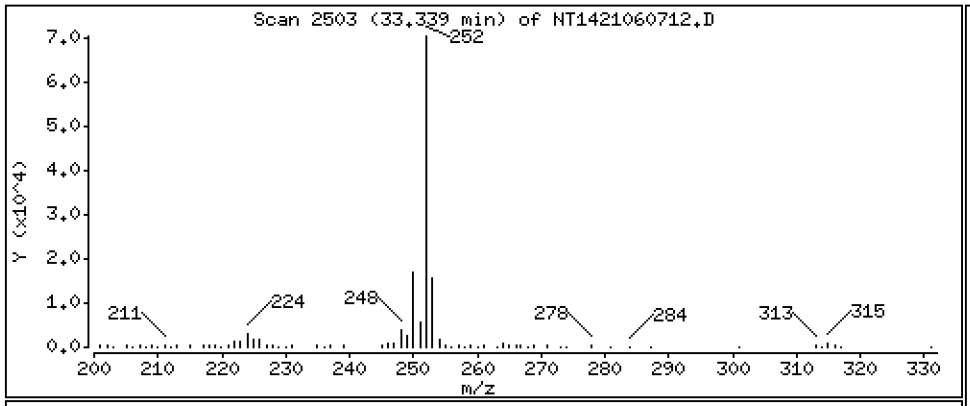
Operator: VTS

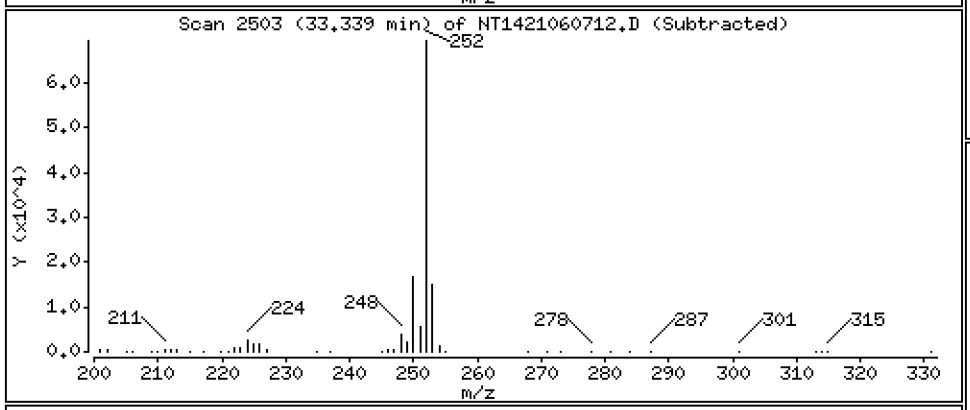
Column phase: Rxi-17Sil MS

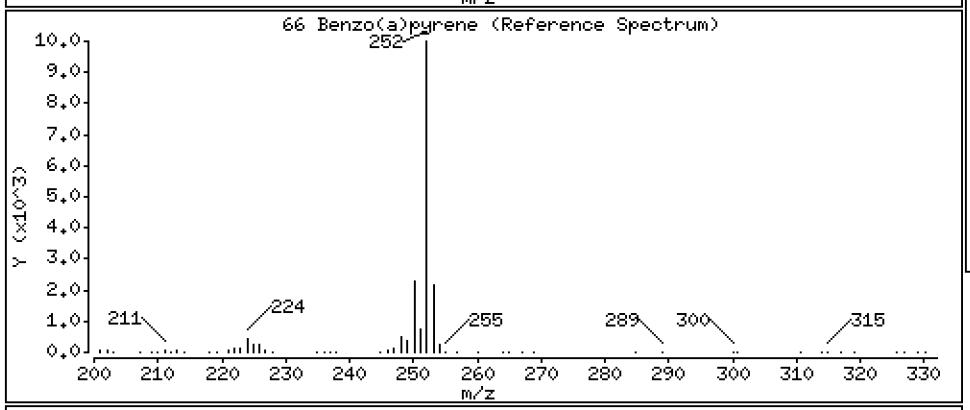
Column diameter: 0.25

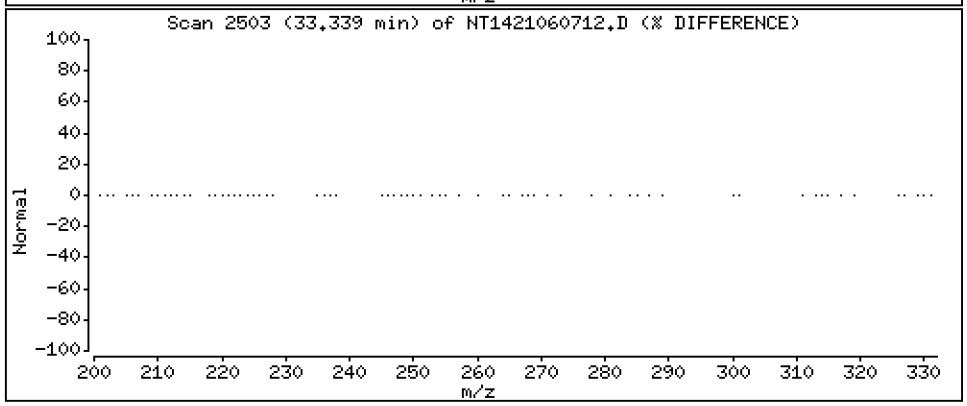
66 Benzo(a)pyrene

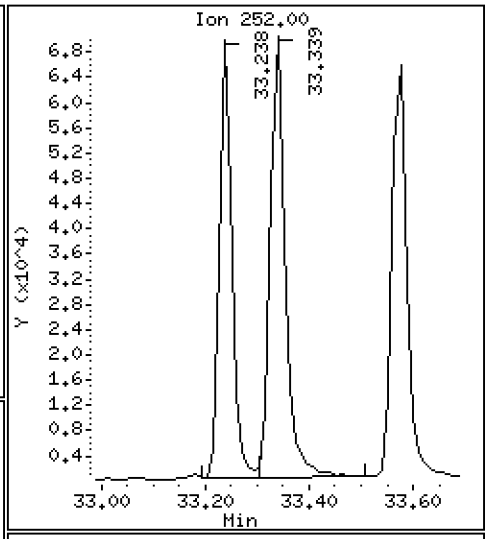
Concentration: 4.396 ug/mL

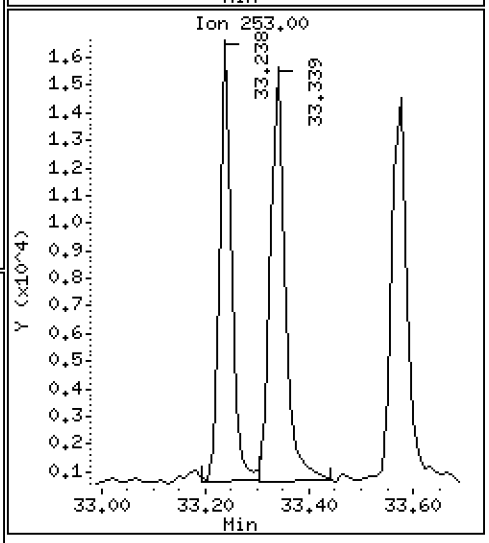












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Date : 07-JUN-2021 21:18

Client ID:

Instrument: nt14.i

Sample Info: BJE0383-MS1

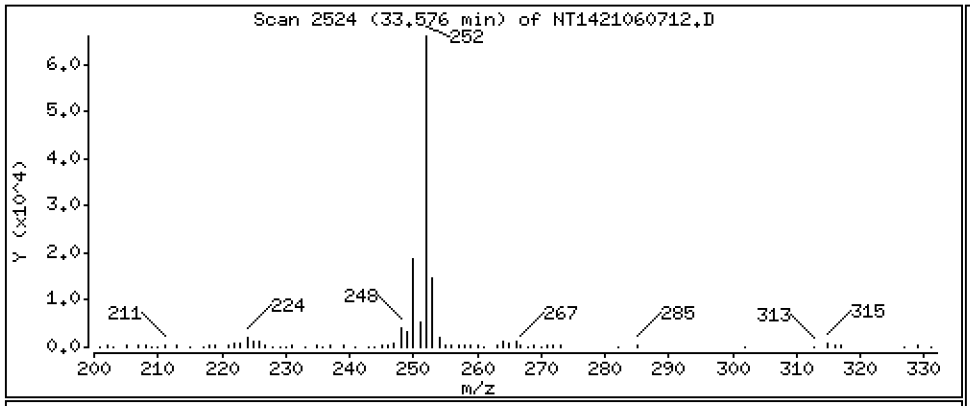
Operator: VTS

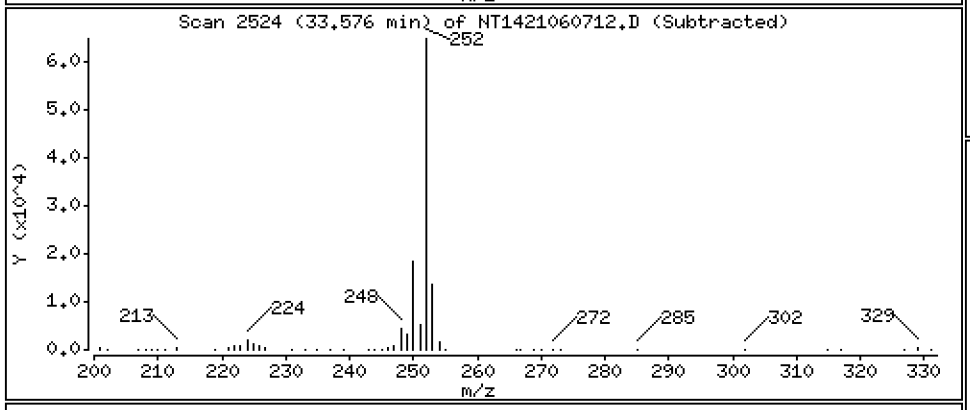
Column phase: Rxi-17Sil MS

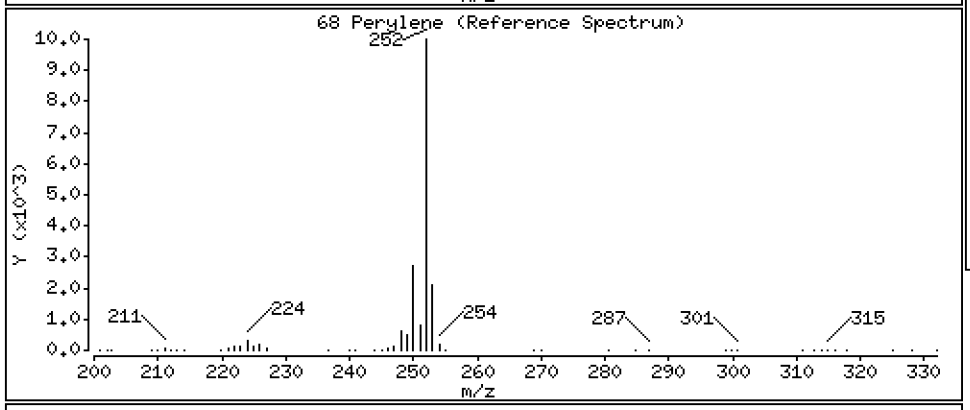
Column diameter: 0.25

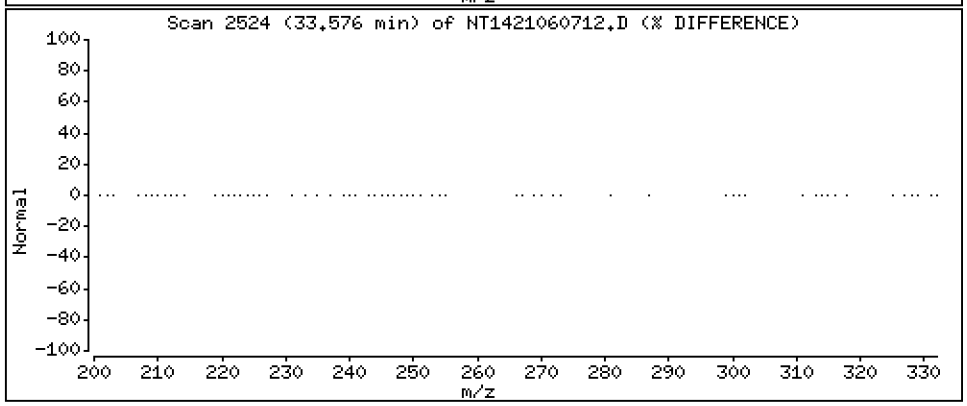
68 Perylene

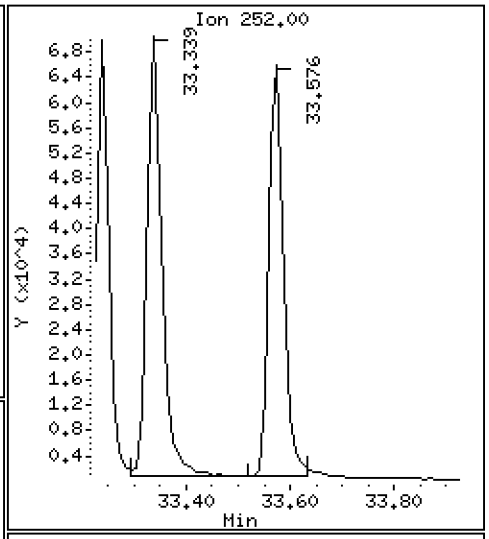
Concentration: 3.938 ug/mL

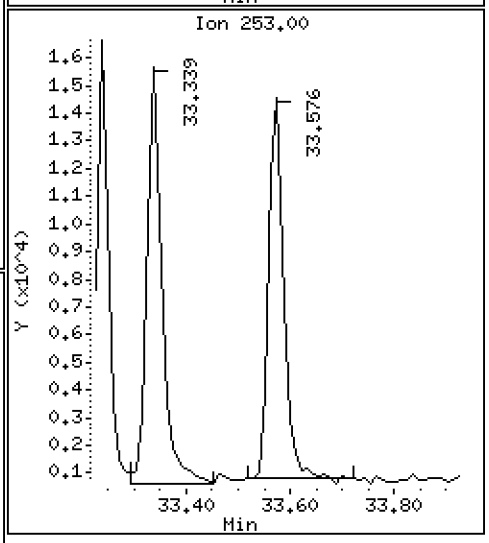












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Date : 07-JUN-2021 21:18

Client ID:

Instrument: nt14.i

Sample Info: BJE0383-MS1

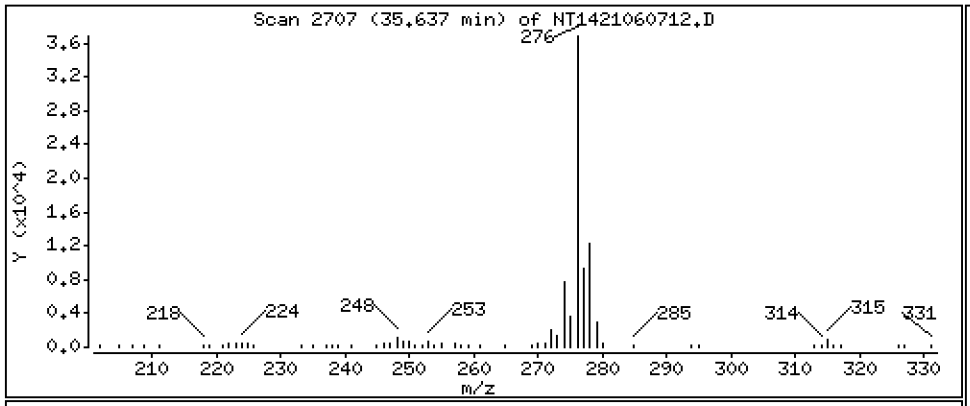
Operator: VTS

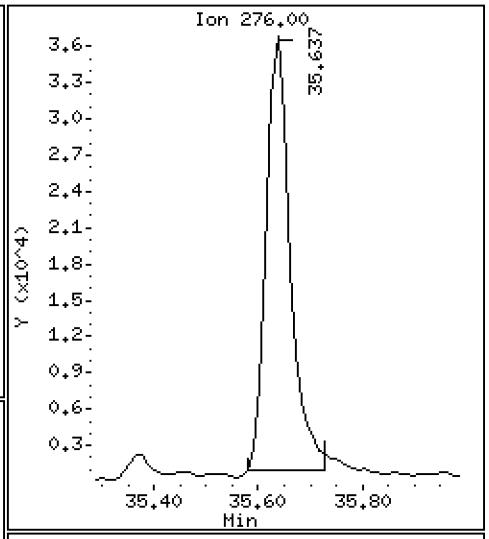
Column phase: Rxi-17Sil MS

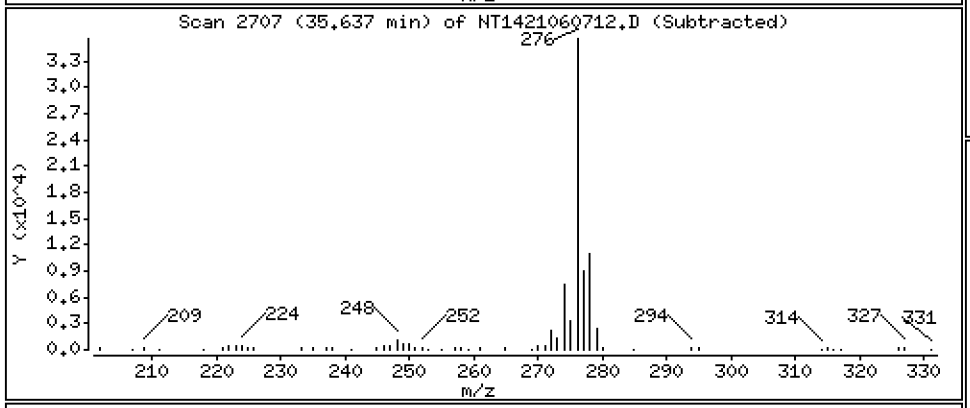
Column diameter: 0.25

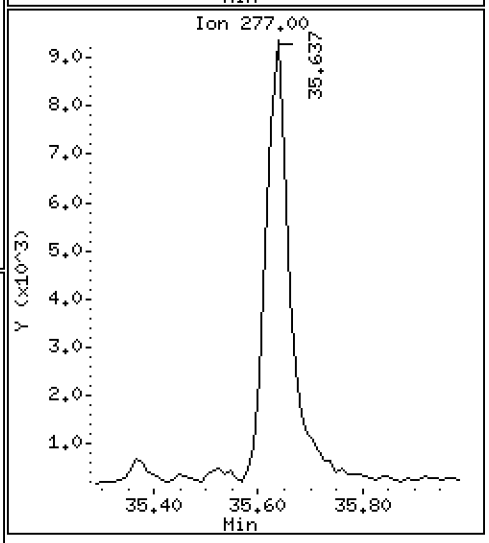
69 Indeno(1,2,3-cd)pyrene

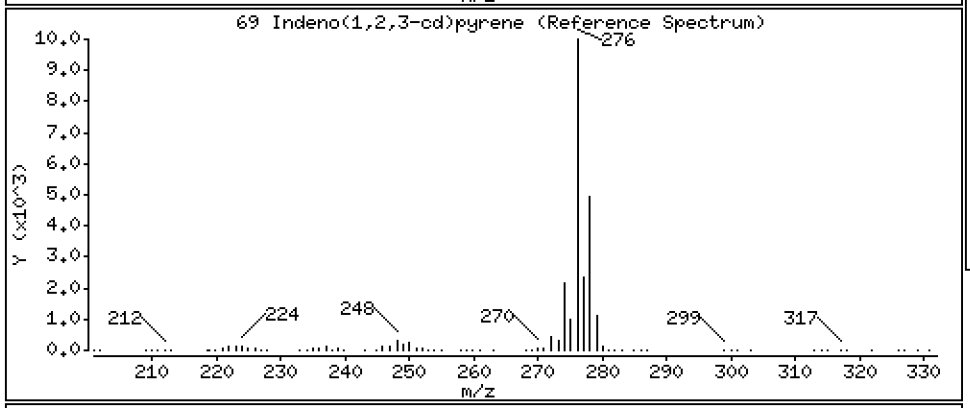
Concentration: 3.158 ug/mL

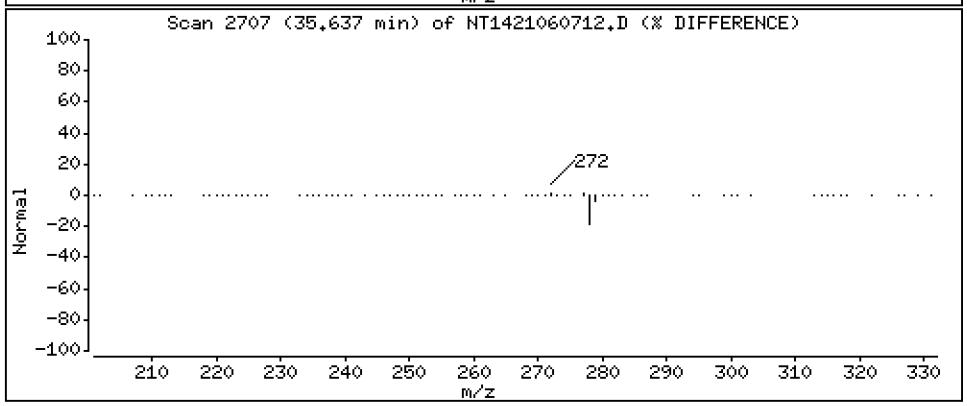












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Date : 07-JUN-2021 21:18

Client ID:

Instrument: nt14.i

Sample Info: BJE0383-MS1

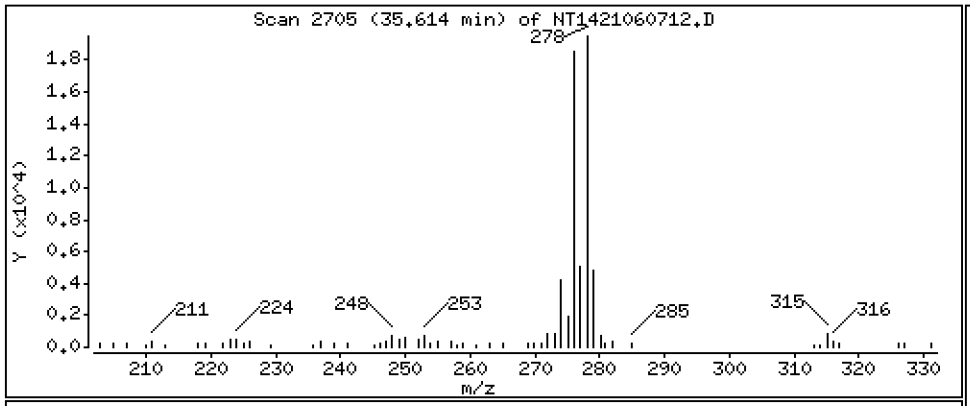
Operator: VTS

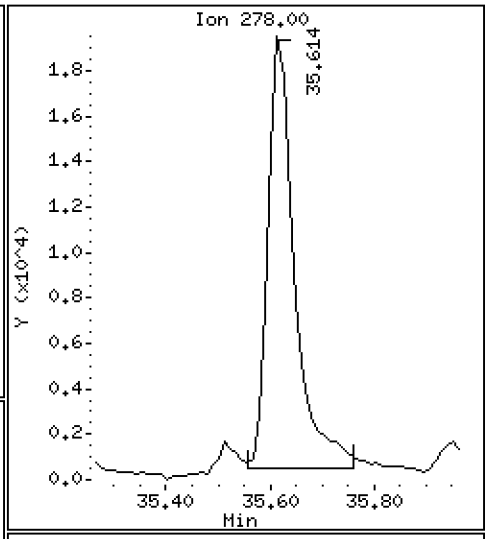
Column phase: Rxi-17Sil MS

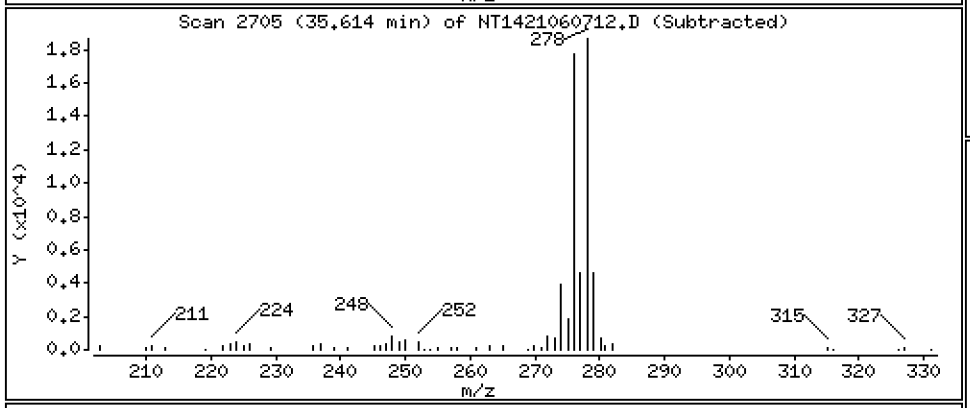
Column diameter: 0.25

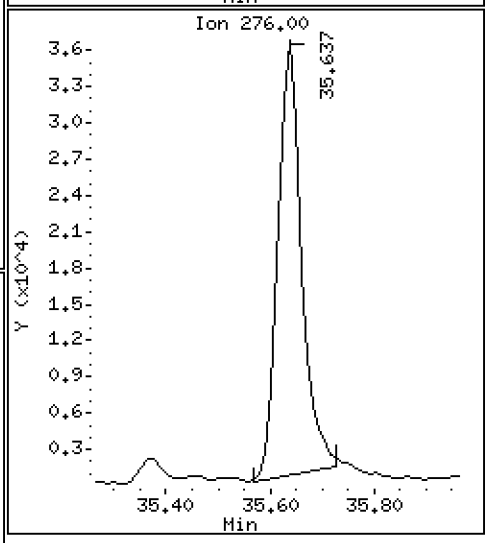
70 Dibenzo(a,h)anthracene

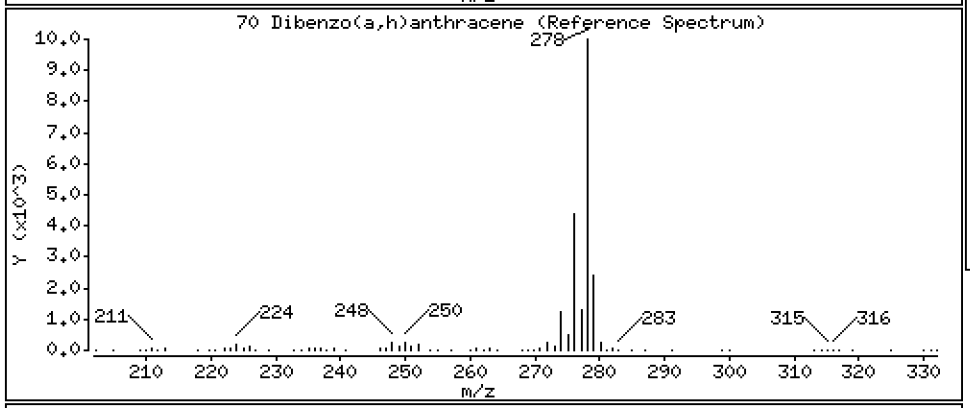
Concentration: 2.008 ug/mL

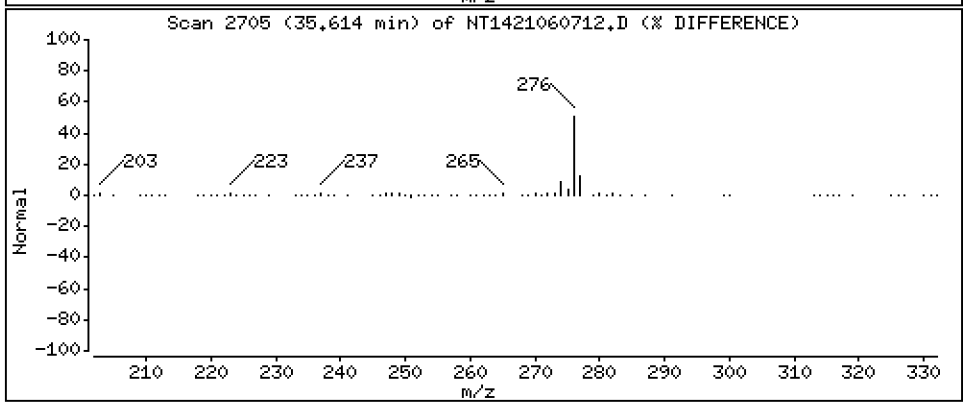












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Date : 07-JUN-2021 21:18

Client ID:

Instrument: nt14.i

Sample Info: BJE0383-MS1

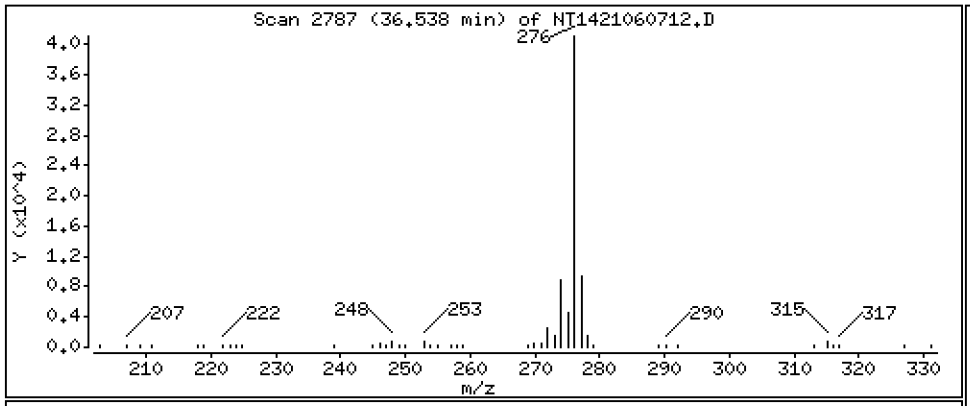
Operator: VTS

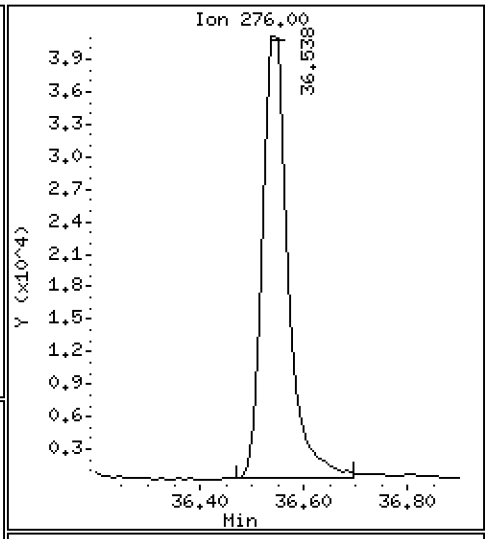
Column phase: Rxi-17Sil MS

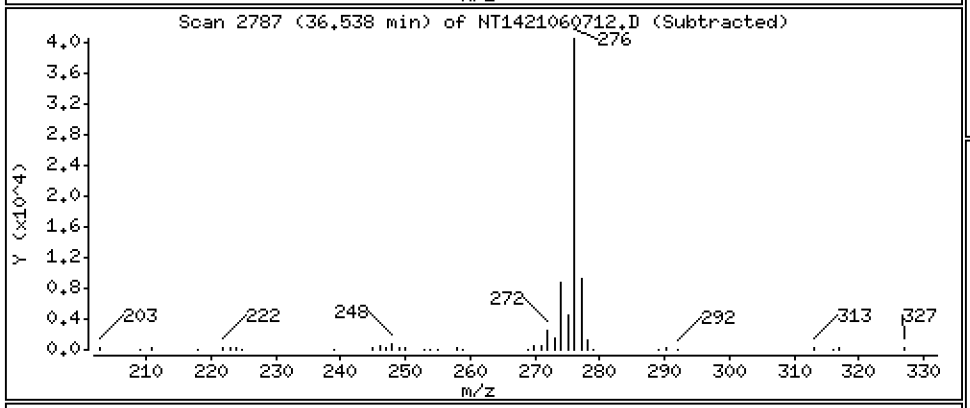
Column diameter: 0.25

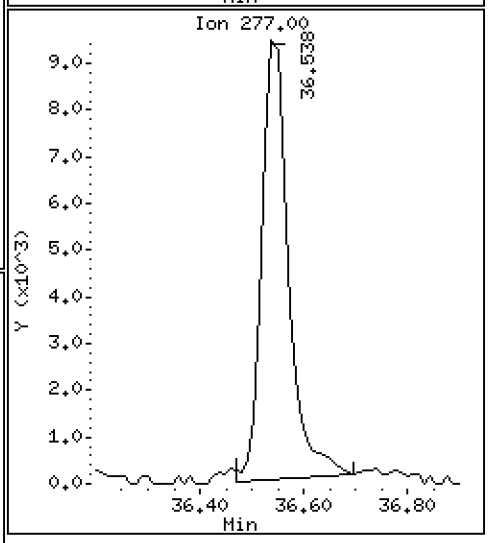
74 Benzo(g,h,i)perylene

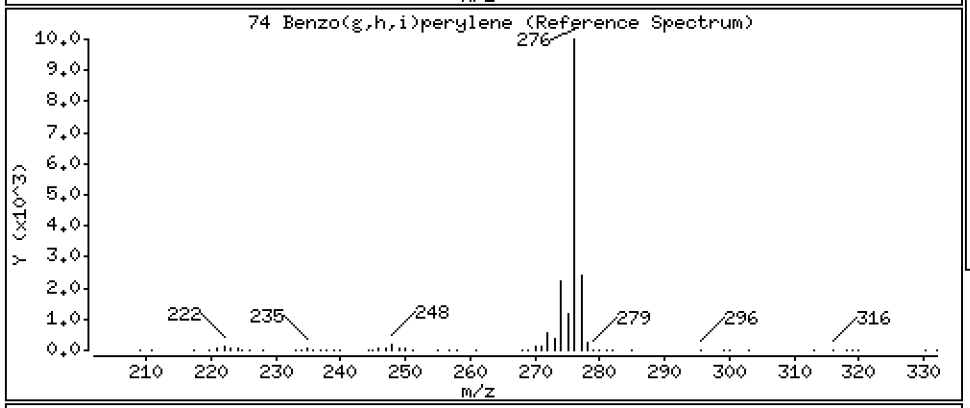
Concentration: 3.892 ug/mL

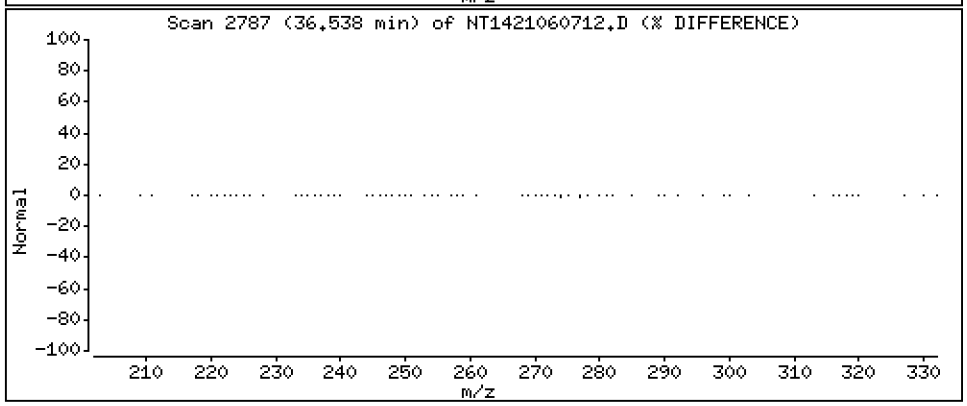












ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt14.i\20210607.b\NT1421060712.D
Lab Smp Id: BJE0383-MS1
Inj Date : 07-JUN-2021 21:18
Operator : VTS Inst ID: nt14.i
Smp Info : BJE0383-MS1
Misc Info :
Comment : 1ul Injection
Method : \\target\share\chem3\nt14.i\20210607.b\ALKYLPNA.m
Meth Date : 12-Jun-2021 14:57 yev Quant Type: ISTD
Cal Date : 29-MAY-2021 18:49 Cal File: NT1421052914.D
Als bottle: 39
Dil Factor: 5.00000
Integrator: HP RTE Compound Sublist: TARGETS.sub
Target Version: 4.14
Processing Host: ORGDATA102

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/mL)
1 trans-Decalin	138	7.136	7.136	(0.378)	4848	0.29865	1.493
2 cis-Decalin	138	8.245	8.255	(0.436)	3698	0.33205	1.660
$ 6 Naphthalene-d8	136	11.887	11.887	(0.629)	46290	0.30589	1.529(R)
7 Naphthalene	128	11.957	11.957	(0.633)	55675	0.36812	1.841
12 Benzo(b)thiophene	134	12.409	12.409	(0.657)	40291	0.32406	1.620
16 2-Methylnaphthalene	141	13.783	13.794	(0.729)	32168	0.36385	1.819
17 1-methylnaphthalene	141	14.244	14.244	(0.754)	30950	0.35983	1.799
18 Biphenyl	154	15.431	15.431	(0.817)	48792	0.37349	1.867
19 2,6-Dimethylnaphthalene	156	15.508	15.508	(0.821)	36320	0.37806	1.890
20 Acenaphthylene	152	17.080	17.080	(0.904)	62487	0.38049	1.902
$ 21 Acenaphthene-d10	164	17.365	17.365	(0.919)	31628	0.34030	1.701(R)
22 Acenaphthene	153	17.486	17.486	(0.925)	43219	0.42690	2.134
23 Dibenzofuran	168	17.860	17.860	(0.945)	59465	0.39598	1.980
24 1,6,7-Trimethylnaphthalene	170	18.080	18.080	(0.957)	38546	0.39397	1.970
* 25 Fluorene-d10	176	18.896	18.896	(1.000)	325513	2.00000	
26 Fluorene	166	19.009	19.009	(1.006)	49304	0.42375	2.119
30 Dibenzothiophene	184	21.931	21.931	(1.161)	69342	0.42214	2.111
$ 35 Phenanthrene-d10	188	22.239	22.238	(0.995)	59617	0.36140	1.807(R)
36 Phenanthrene	178	22.315	22.326	(0.999)	114007	0.64487	3.224
* 250 Anthracene-d10	188	22.348	22.359	(1.000)	342885	2.00000	
37 Anthracene	178	22.414	22.425	(1.003)	74797	0.44966	2.248
42 Carbazole	167	23.701	23.701	(1.061)	63816	0.40460	2.023
43 1-Methylphenanthrene	192	24.151	24.151	(1.081)	58405	0.45970	2.298
44 Fluoranthene	202	26.130	26.130	(1.169)	199446	1.02208	5.110
46 Pyrene	202	26.977	26.977	(1.207)	212976	1.04941	5.247
51 Naphthobenzothiophene	234	29.498	29.509	(1.320)	82272	0.37729	1.886
55 Benzo(a)anthracene	228	30.084	30.095	(0.907)	126265	0.78027	3.901
$ 56 Chrysene-d12	240	30.219	30.219	(0.911)	54841	0.41992	2.100(R)
57 Chrysene	228	30.287	30.286	(0.913)	147943	0.93299	4.665
62 Benzo(b)fluoranthene	252	32.517	32.517	(0.980)	118900	0.70846	3.542
63 Benzo(k)fluoranthene	252	32.562	32.562	(0.981)	126043	0.69995	3.500
293 Benzo(j)fluoranthene	252	32.629	32.629	(0.983)	103271	0.62238	3.112
246 Total Benzofluoranthenes	252	32.517	32.562	(0.980)	333906	2.03126	10.16(M)

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/mL)
* 251 Benzo(e)pyrene-d12	264	33.181	33.181	(1.000)	417227	2.00000	
64 Benzo(e)pyrene	252	33.237	33.237	(1.002)	117424	0.71387	3.569
66 Benzo(a)pyrene	252	33.339	33.339	(1.005)	131565	0.87922	4.396
$ 67 Perylene-d12	264	33.519	33.519	(1.010)	57658	0.40897	2.045(R)
68 Perylene	252	33.575	33.575	(1.012)	121508	0.78758	3.938
69 Indeno(1,2,3-cd)pyrene	276	35.637	35.636	(1.074)	110947	0.63165	3.158(M)
70 Dibenzo(a,h)anthracene	278	35.614	35.614	(1.073)	65538	0.40157	2.008(M)
74 Benzo(g,h,i)perylene	276	36.538	36.549	(1.101)	135070	0.77839	3.892

QC Flag Legend

R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt14.i
Lab File ID: NT1421060712.D
Lab Smp Id: BJE0383-MS1
Analysis Type: SV
Quant Type: ISTD
Operator: VTS
Method File: \\target\share\chem3\nt14.i\20210607.b\ALKYLPNA.m
Misc Info:

Calibration Date: 07-JUN-2021
Calibration Time: 13:18
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
25 Fluorene-d10	323874	161937	647748	325513	0.51
250 Anthracene-d10	339912	169956	679824	342885	0.87
251 Benzo(e)pyrene-d1	416427	208214	832854	417227	0.19

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
25 Fluorene-d10	18.90	18.40	19.40	18.90	0.00
250 Anthracene-d10	22.36	21.86	22.86	22.35	-0.05
251 Benzo(e)pyrene-d1	33.18	32.68	33.68	33.18	0.00

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

REVIEW SUMMARY FOR FILE - NT1421060712.D

Lab ID: BJE0383-MS1
nt14.i, 20210607.b\ALKYLPNA.m, 07-JUN-2021 21:18

RT	CO-ELUTION COMPOUNDS
	NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
NONE			

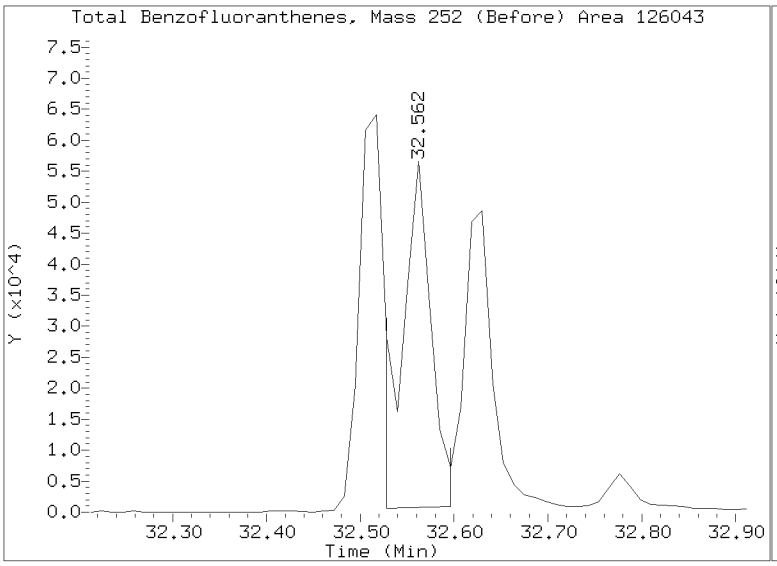
RRT check based on Ccal File: NT1421060702.D

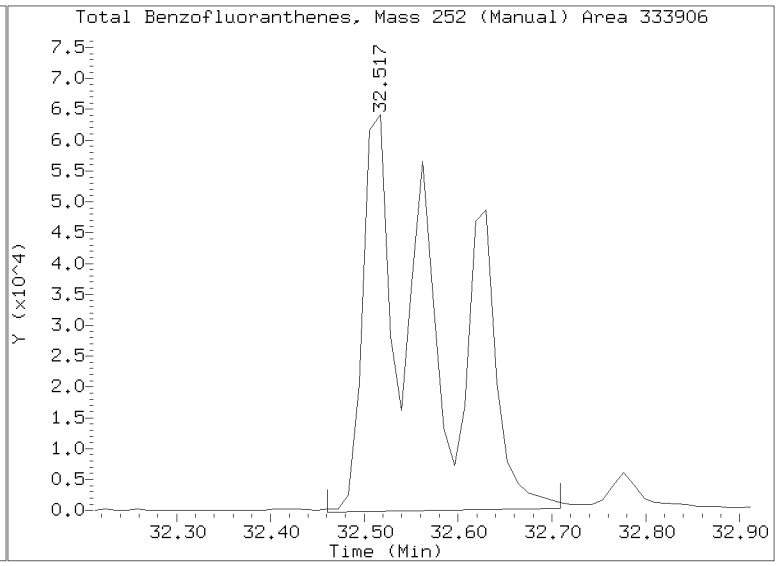
On Column LOD for nt14.i, 20210607.b\ALKYLPNA.m, TARGETS.sub = 0.0000

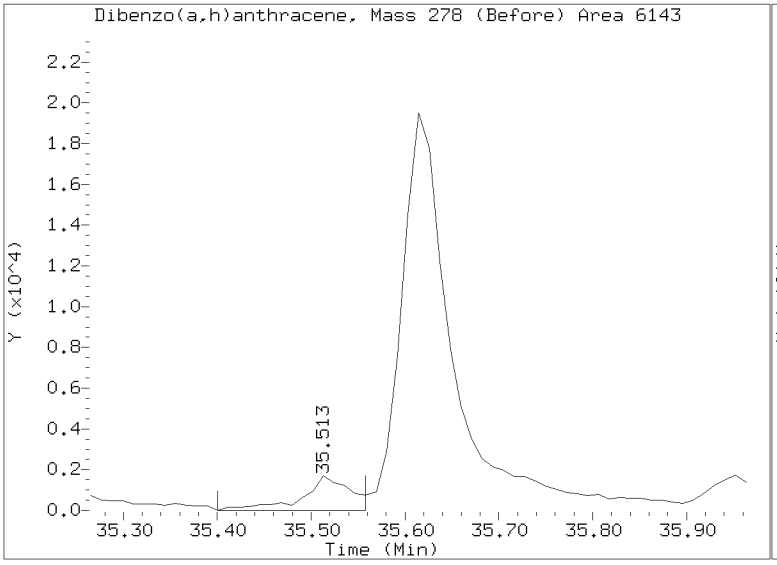
* Only compounds listed in the work order have been verified by the analyst *

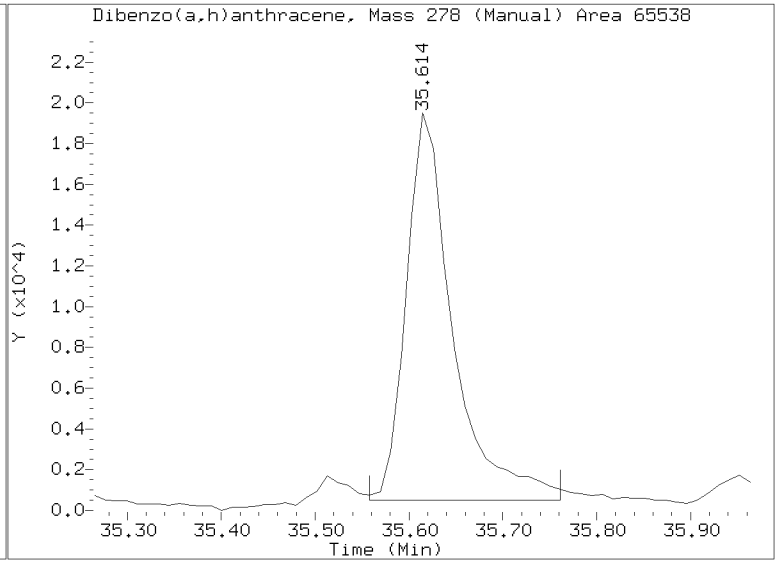
Quant Ion Manual Peak Adjustment Report

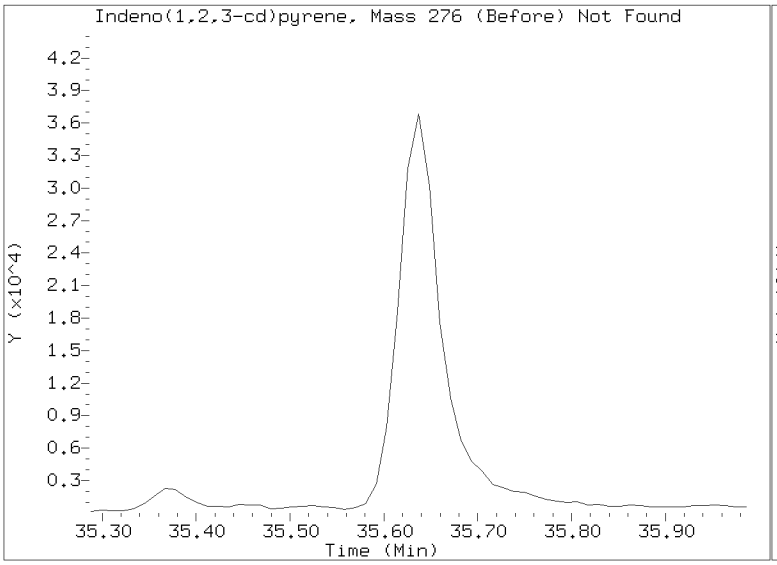
Datafile: //target/share/chem3/nt14.i/20210607.b/NT1421060712.D
Injection Date: 07-JUN-2021 21:18
Lab ID:BJE0383-MS1 Client ID:
Report Date: 06/12/2021 15:50

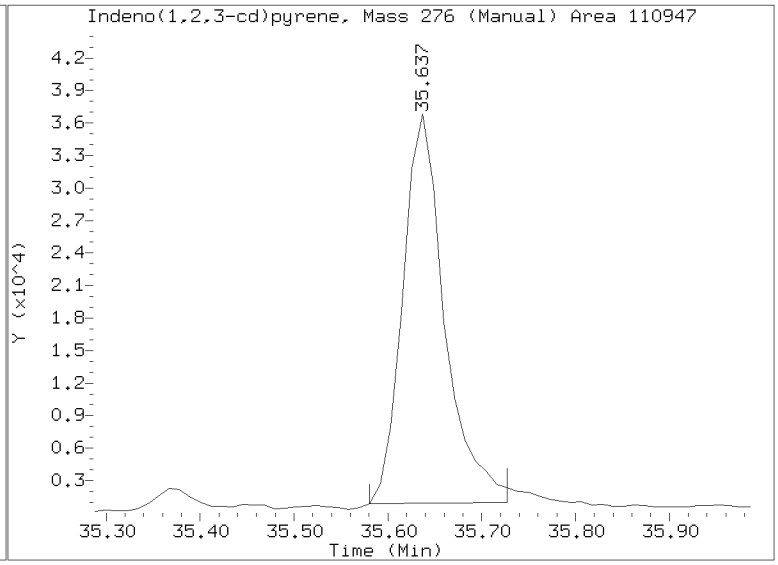












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Date : 07-JUN-2021 22:07

Client ID:

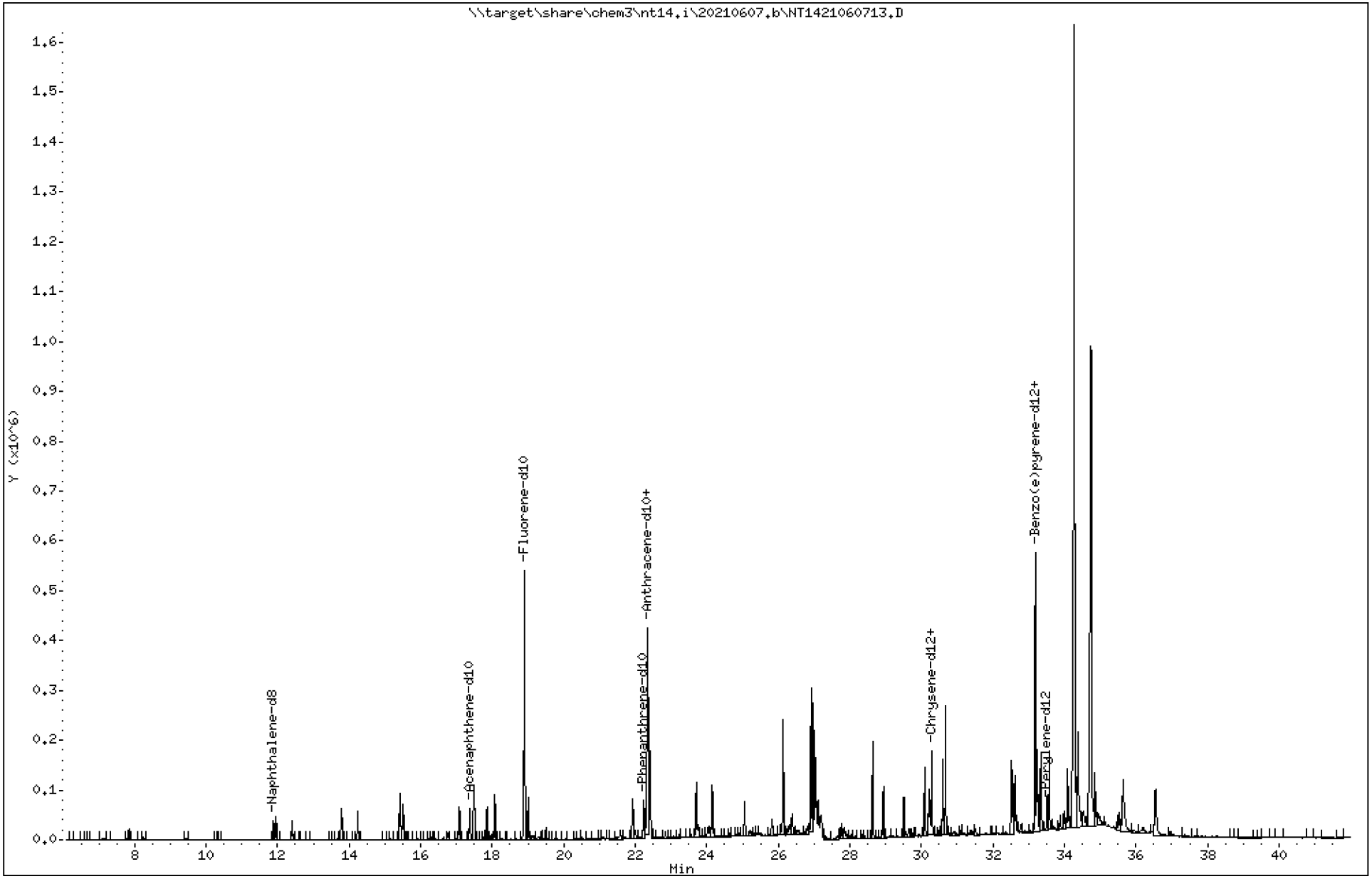
Instrument: nt14.i

Sample Info: BJE0383-MSD1

Operator: VTS

Column phase: Rxi-17Sil MS

Column diameter: 0.25



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Date : 07-JUN-2021 22:07

Client ID:

Instrument: nt14.i

Sample Info: BJE0383-MSD1

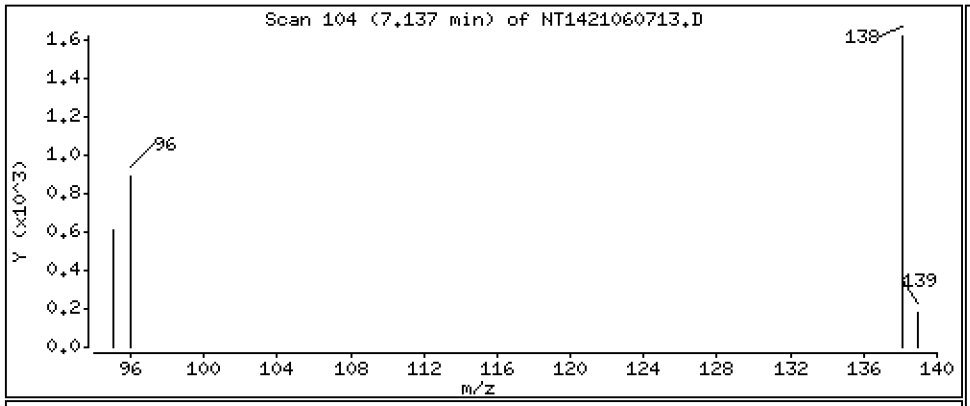
Operator: VTS

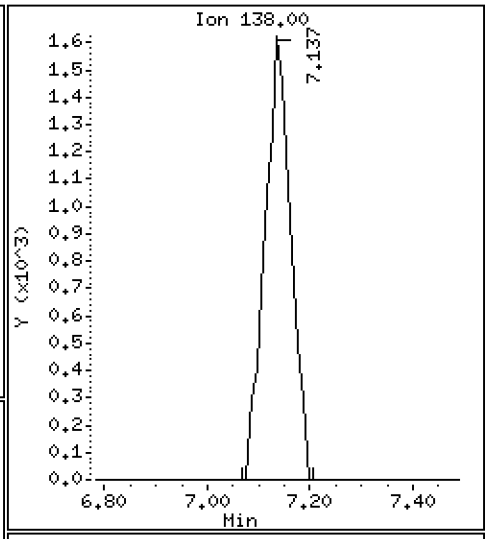
Column phase: Rxi-17Sil MS

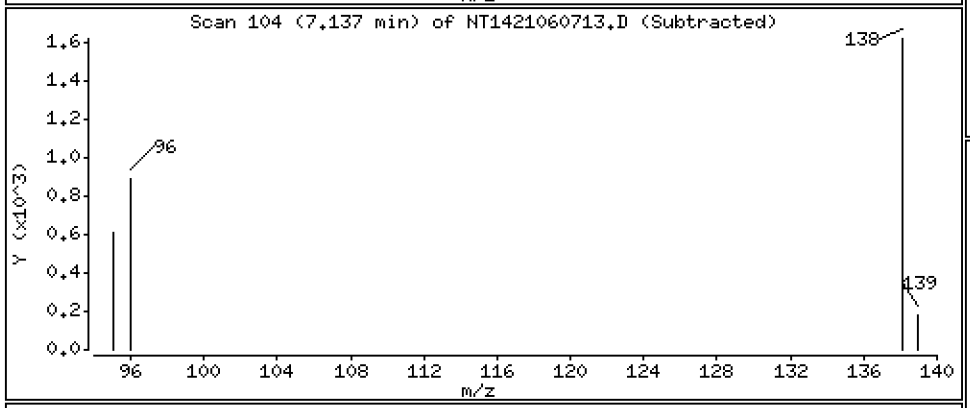
Column diameter: 0.25

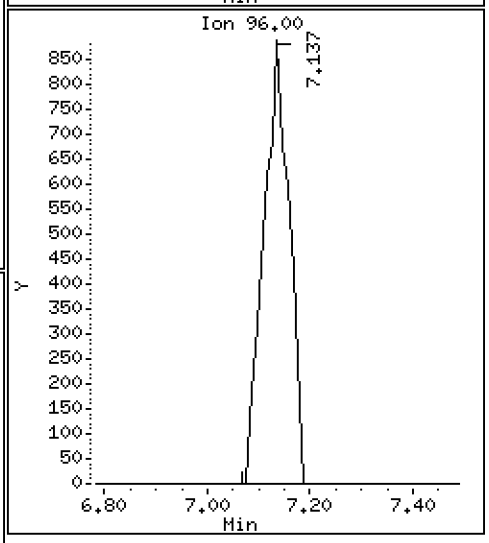
1 trans-Decalin

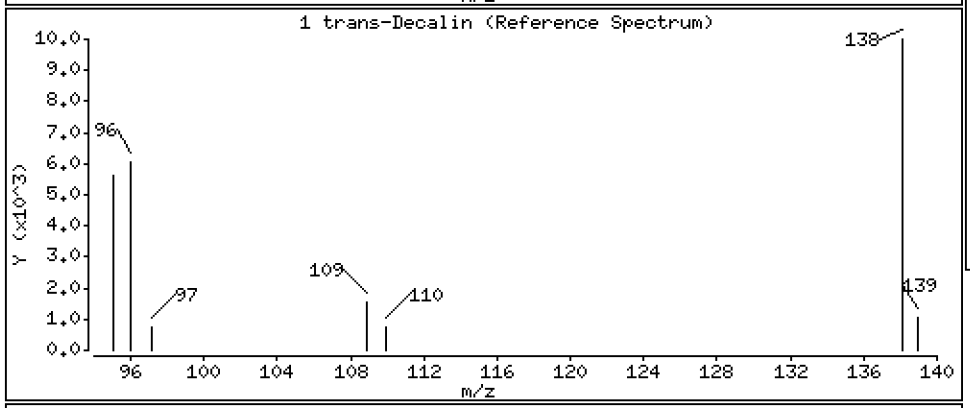
Concentration: 1.496 ug/mL

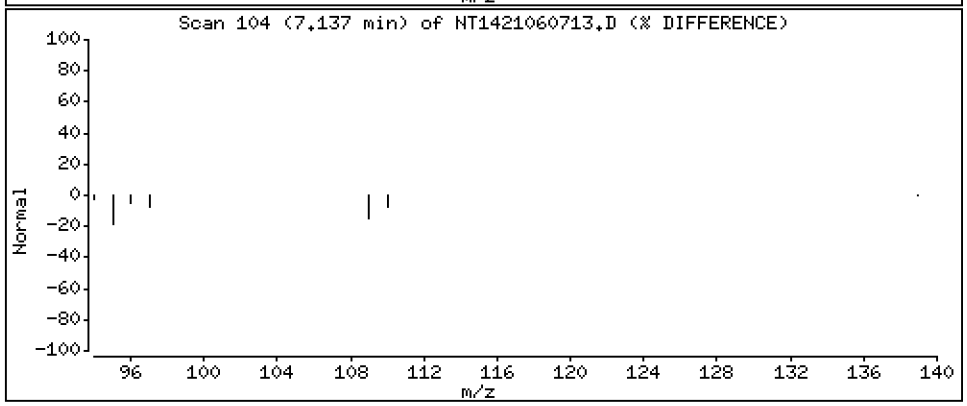












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Date : 07-JUN-2021 22:07

Client ID:

Instrument: nt14.i

Sample Info: BJE0383-MSD1

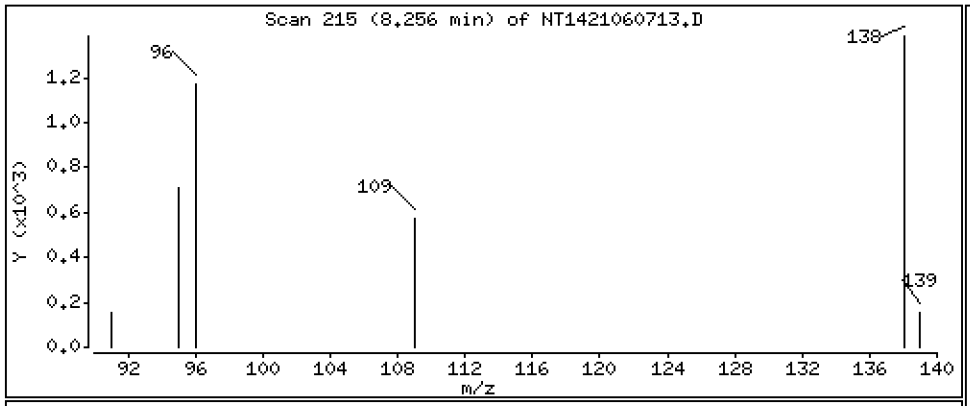
Operator: VTS

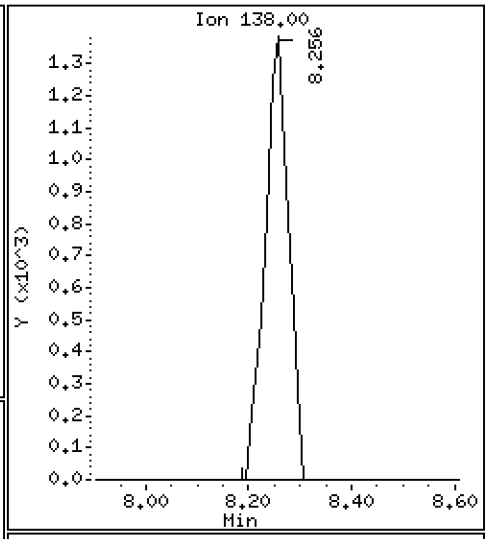
Column phase: Rxi-17Sil MS

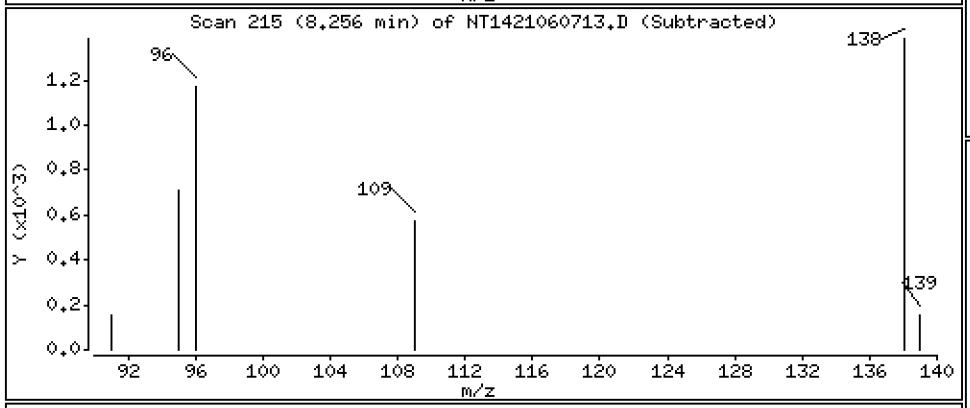
Column diameter: 0.25

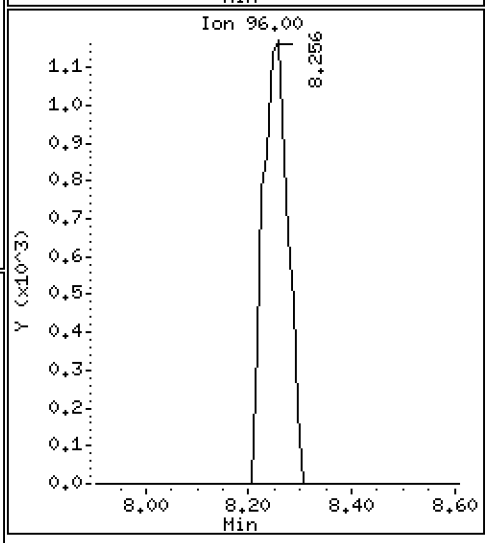
2 cis-Decalin

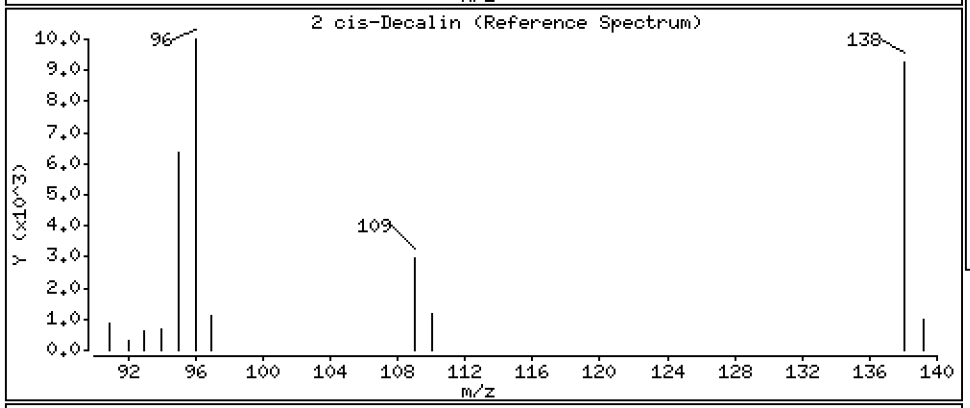
Concentration: 1.695 ug/mL

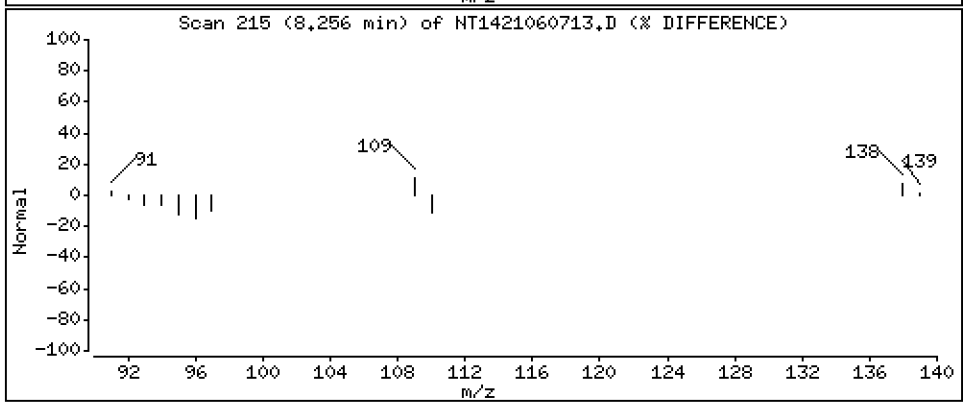












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Date : 07-JUN-2021 22:07

Client ID:

Instrument: nt14.i

Sample Info: BJE0383-MSD1

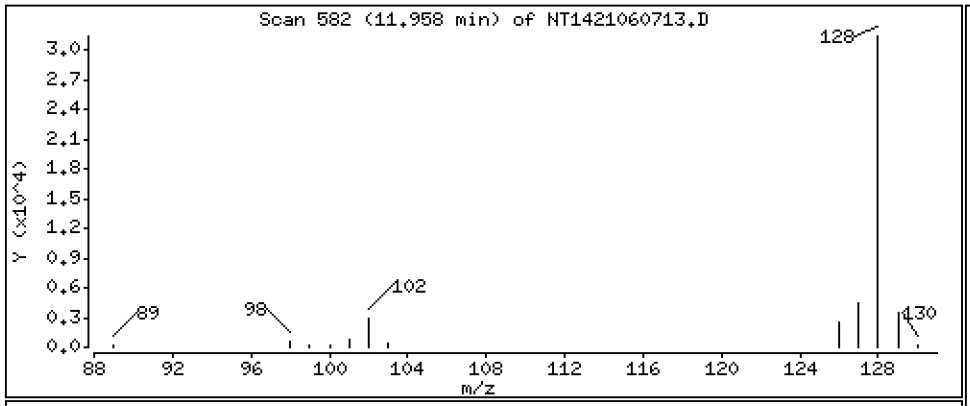
Operator: VTS

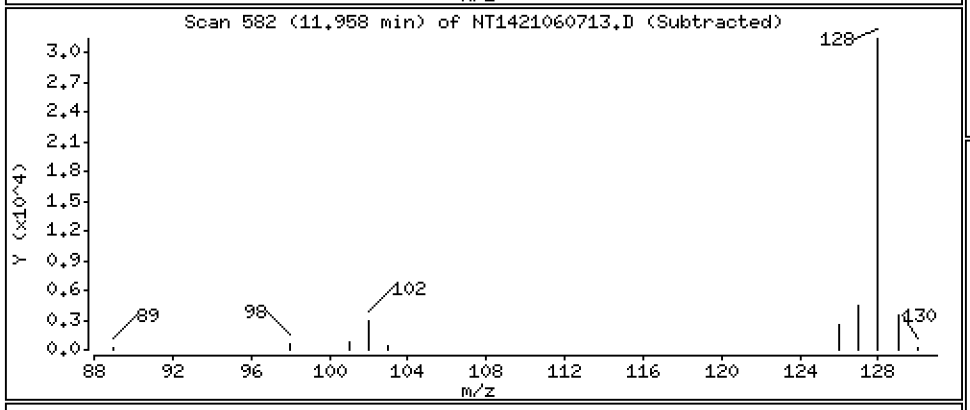
Column phase: Rxi-17Sil MS

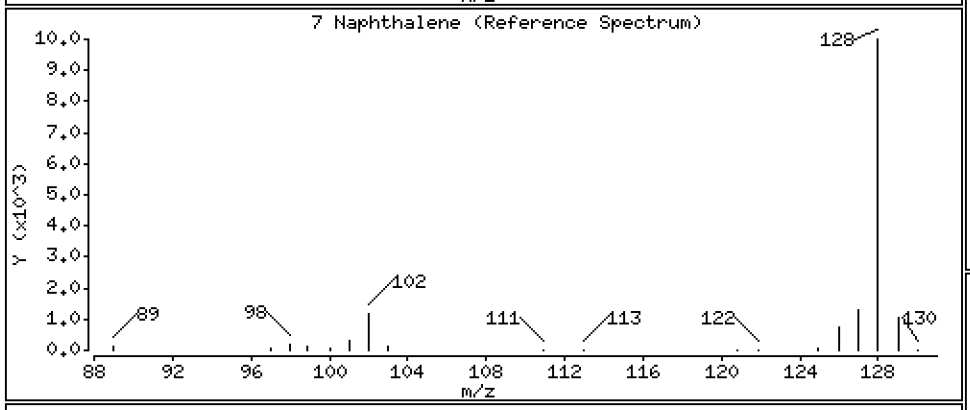
Column diameter: 0.25

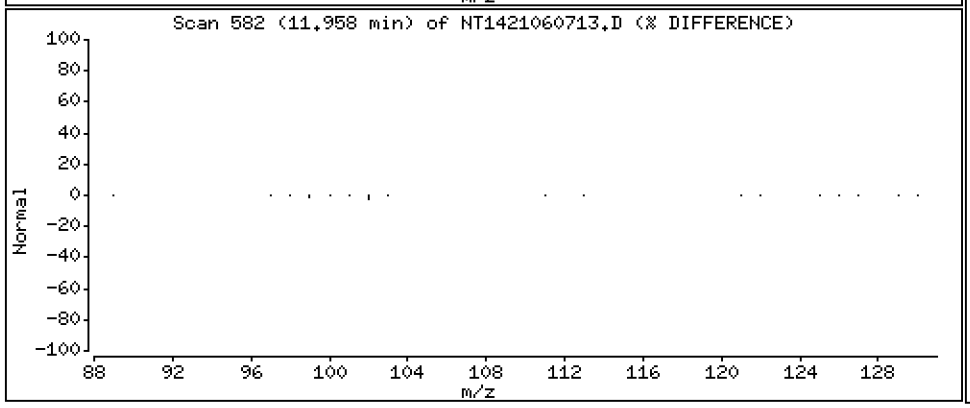
7 Naphthalene

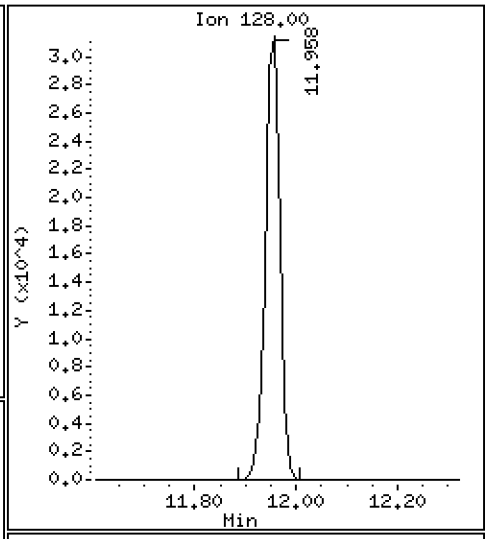
Concentration: 1.787 ug/mL

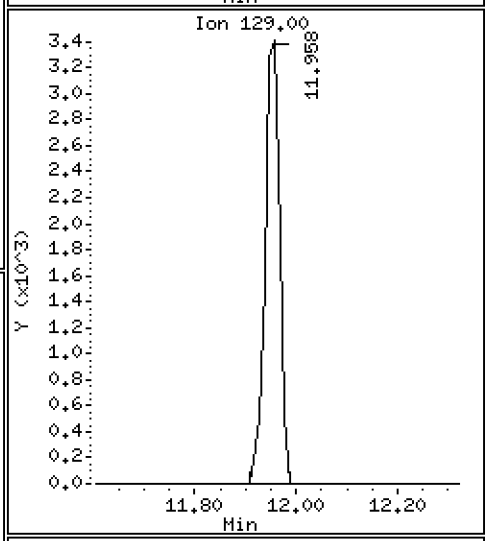


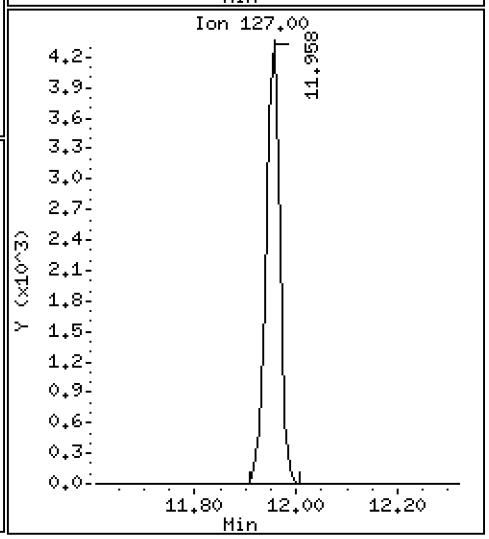












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Date : 07-JUN-2021 22:07

Client ID:

Instrument: nt14.i

Sample Info: BJE0383-MSD1

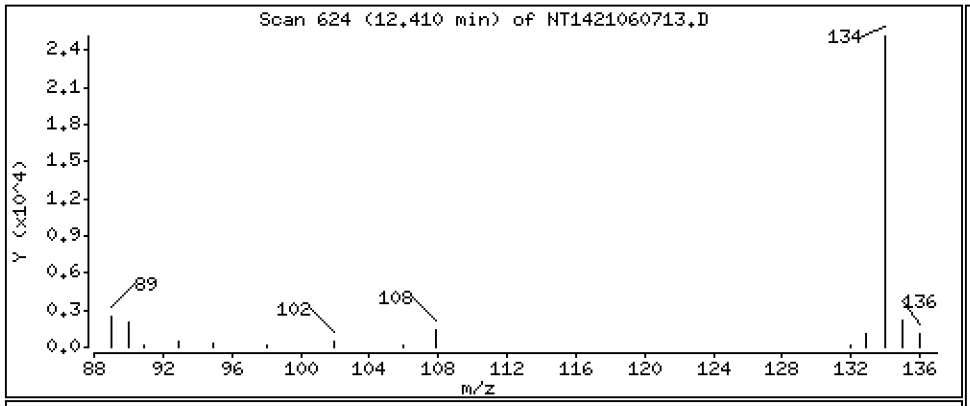
Operator: VTS

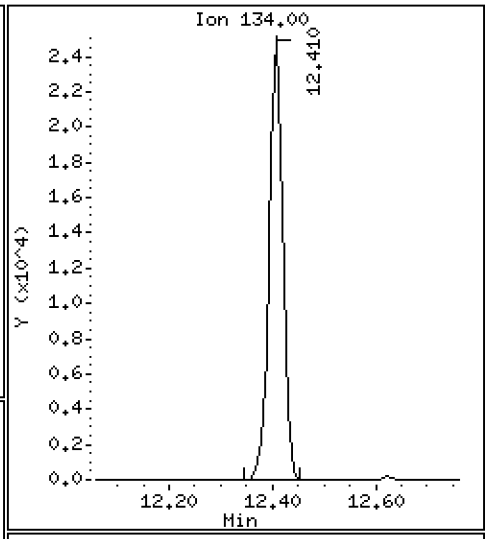
Column phase: Rxi-17Sil MS

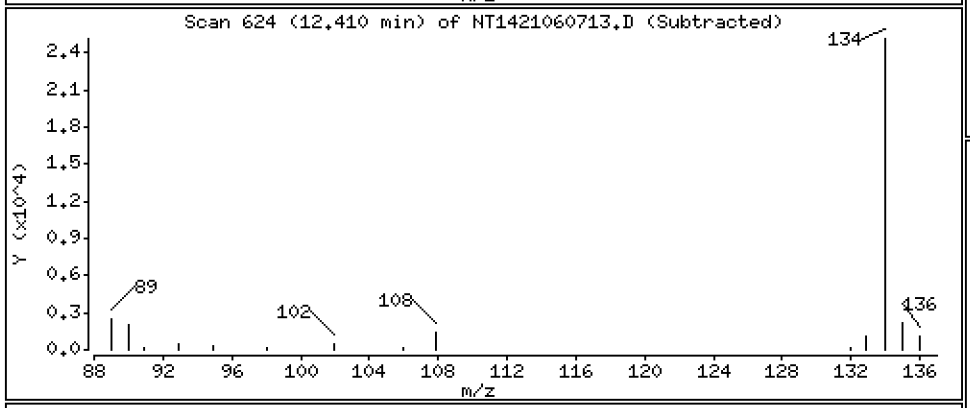
Column diameter: 0.25

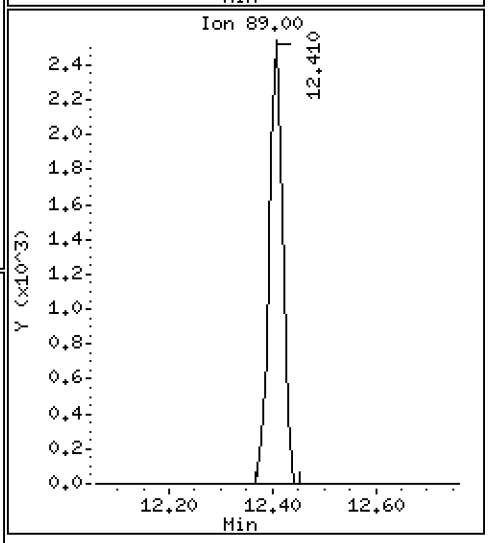
12 Benzo(b)thiophene

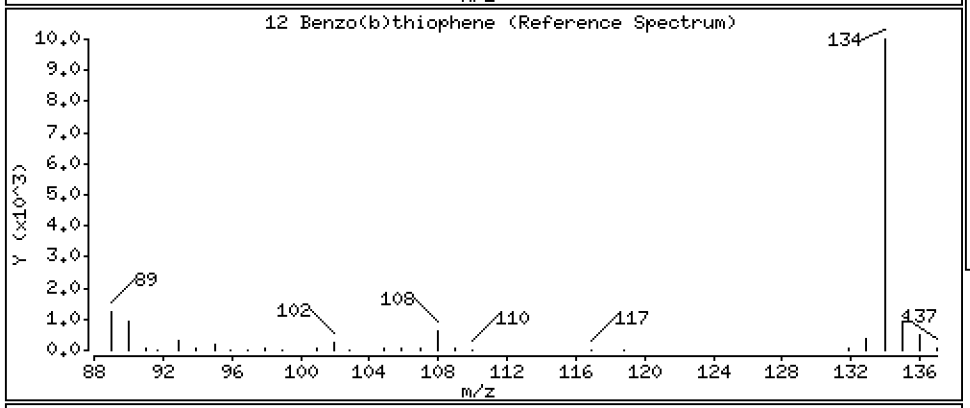
Concentration: 1.660 ug/mL

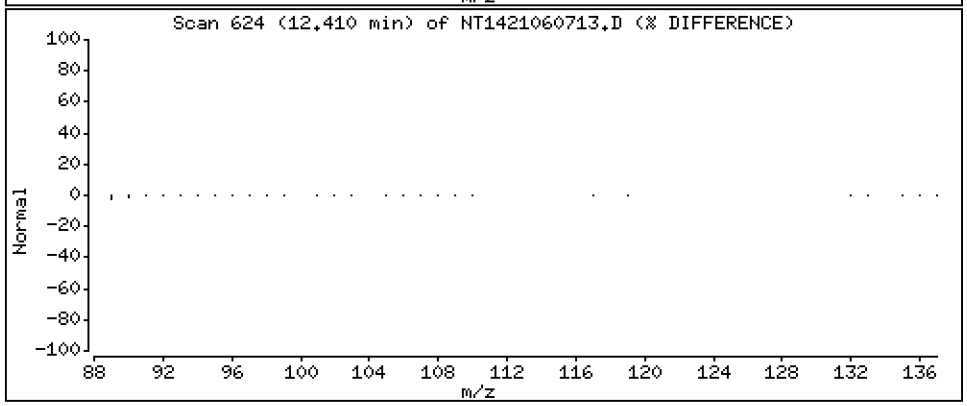












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Date : 07-JUN-2021 22:07

Client ID:

Instrument: nt14.i

Sample Info: BJE0383-MSD1

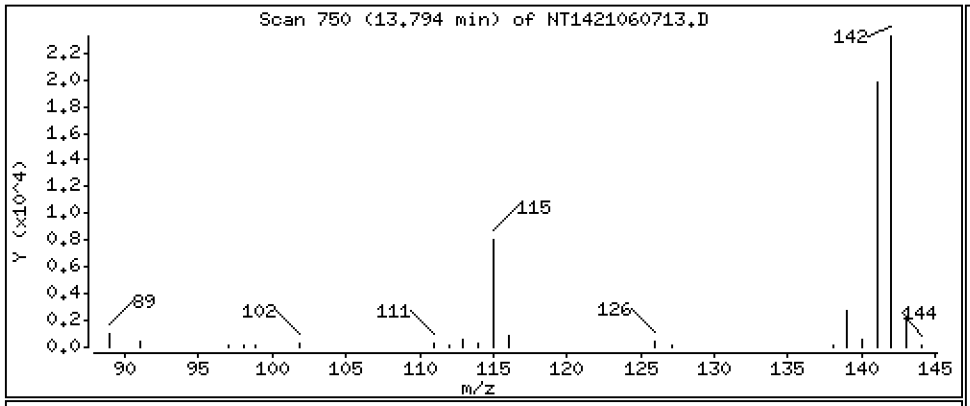
Operator: VTS

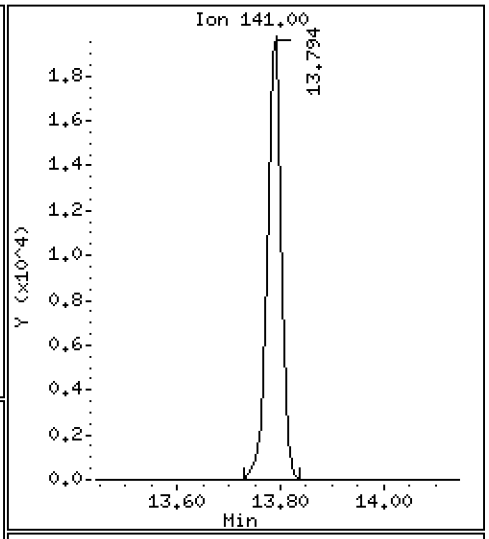
Column phase: Rxi-17Sil MS

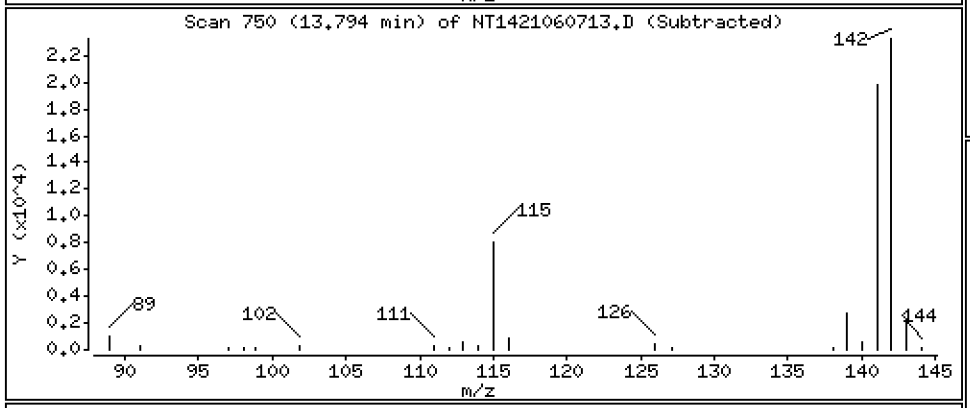
Column diameter: 0.25

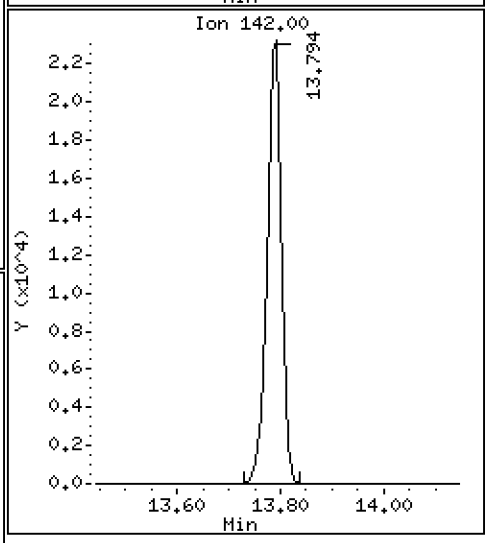
16 2-Methylnaphthalene

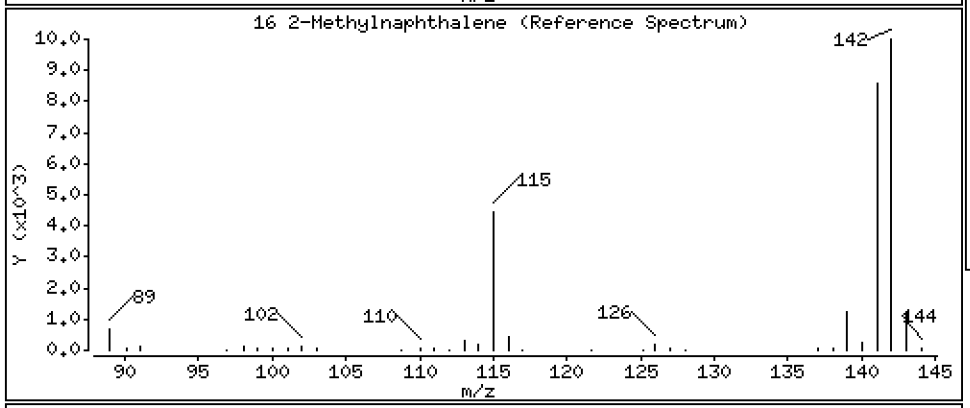
Concentration: 1.973 ug/mL

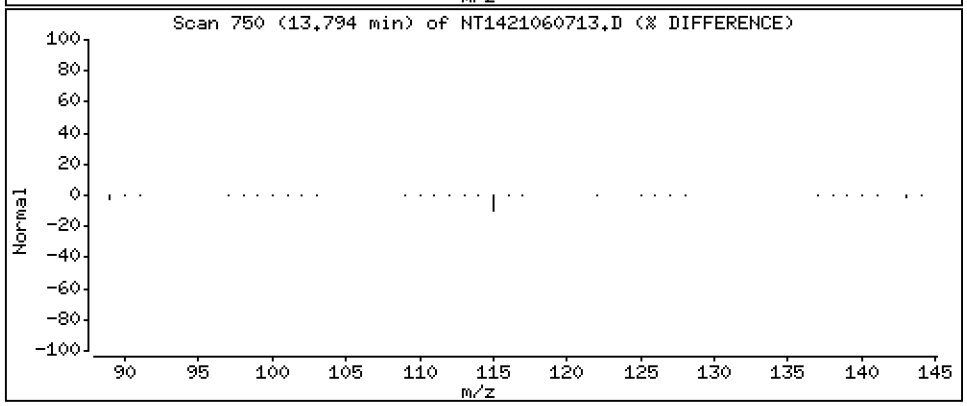












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Date : 07-JUN-2021 22:07

Client ID:

Instrument: nt14.i

Sample Info: BJE0383-MSD1

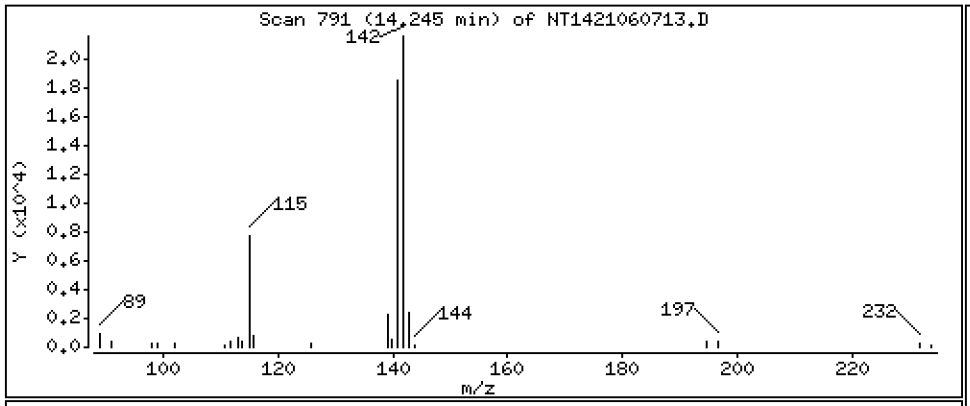
Operator: VTS

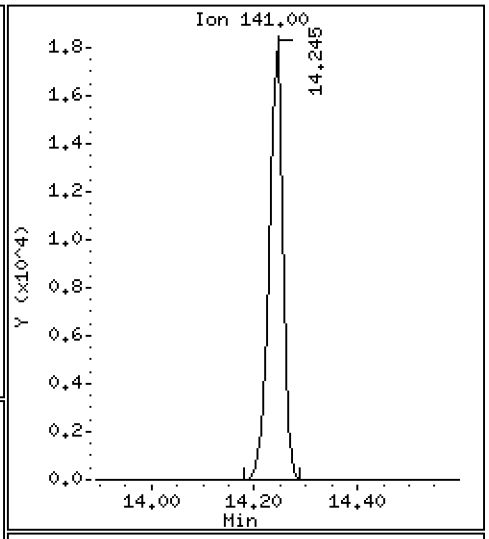
Column phase: Rxi-17Sil MS

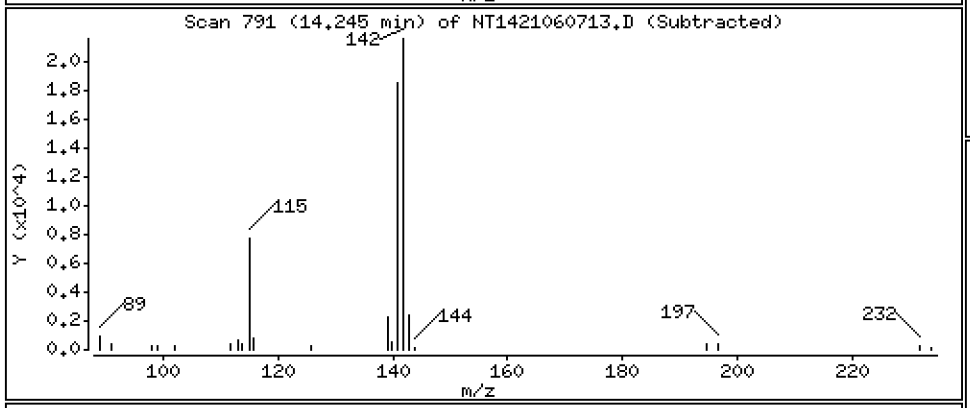
Column diameter: 0.25

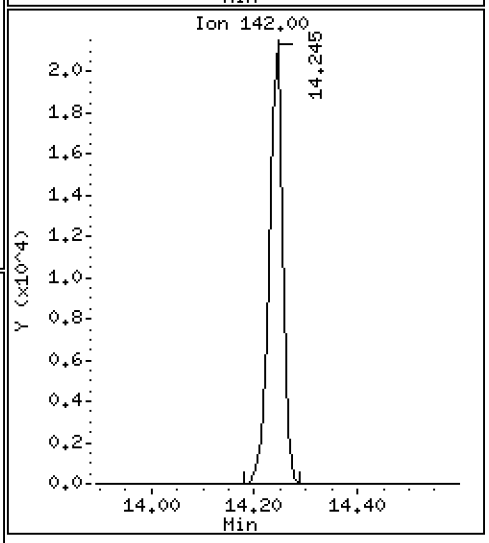
17 1-methylnaphthalene

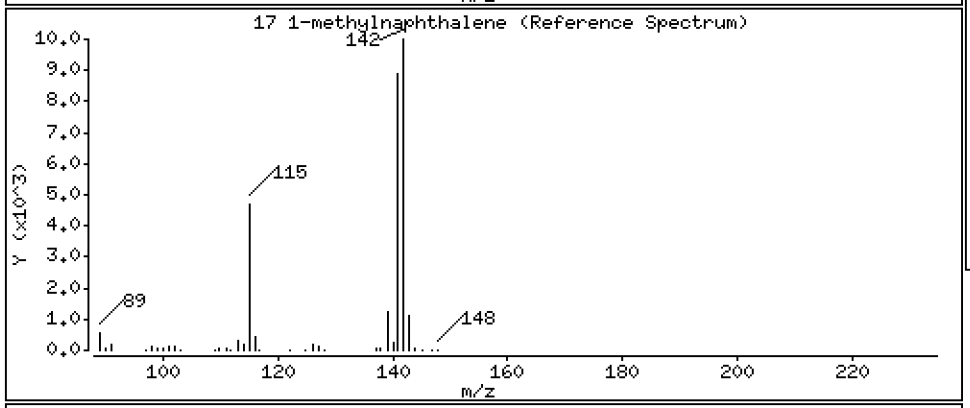
Concentration: 1.823 ug/mL

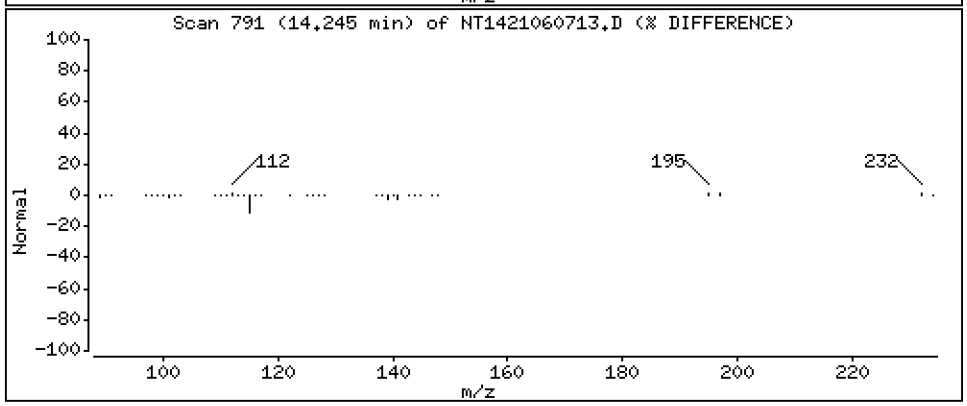












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Date : 07-JUN-2021 22:07

Client ID:

Instrument: nt14.i

Sample Info: BJE0383-MSD1

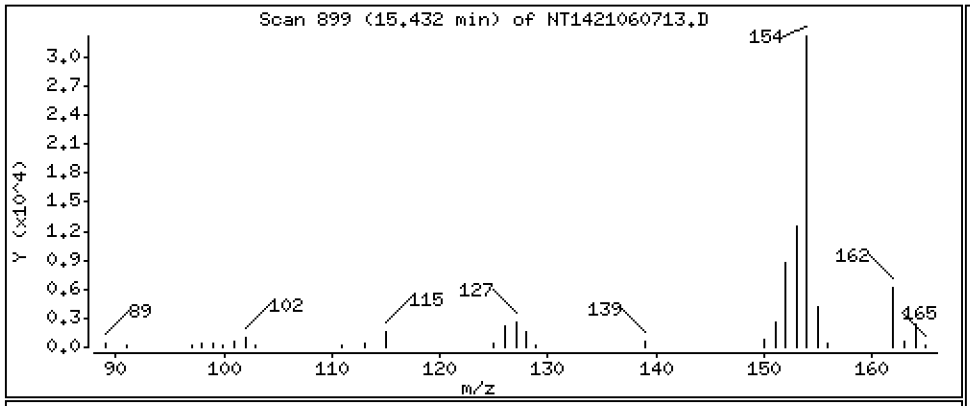
Operator: VTS

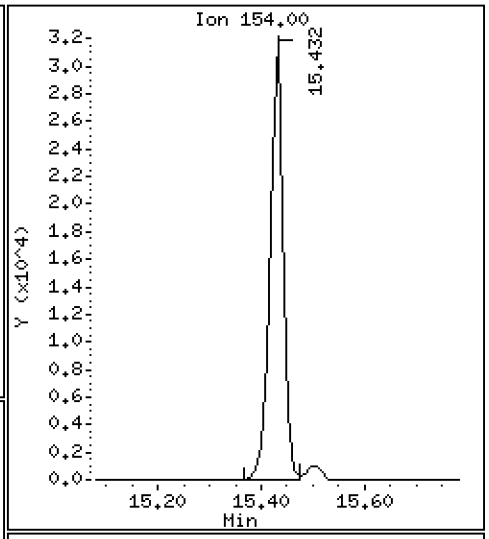
Column phase: Rxi-17Sil MS

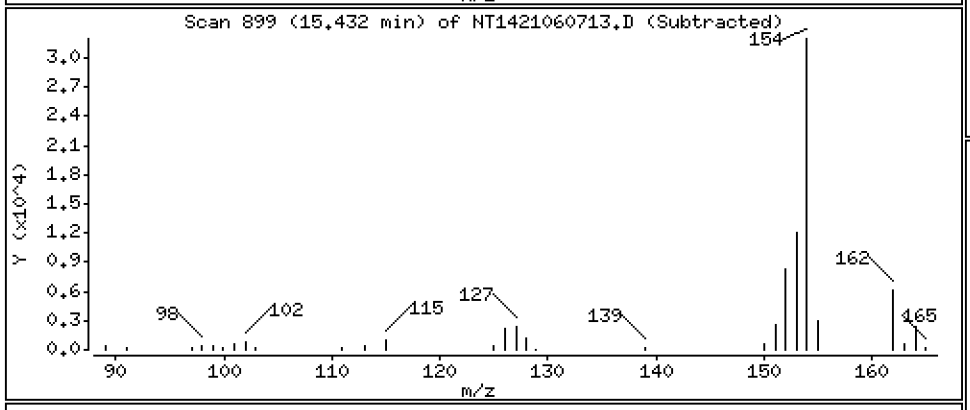
Column diameter: 0.25

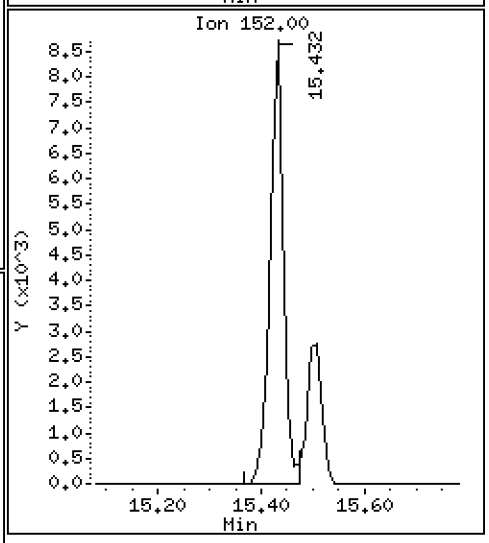
18 Biphenyl

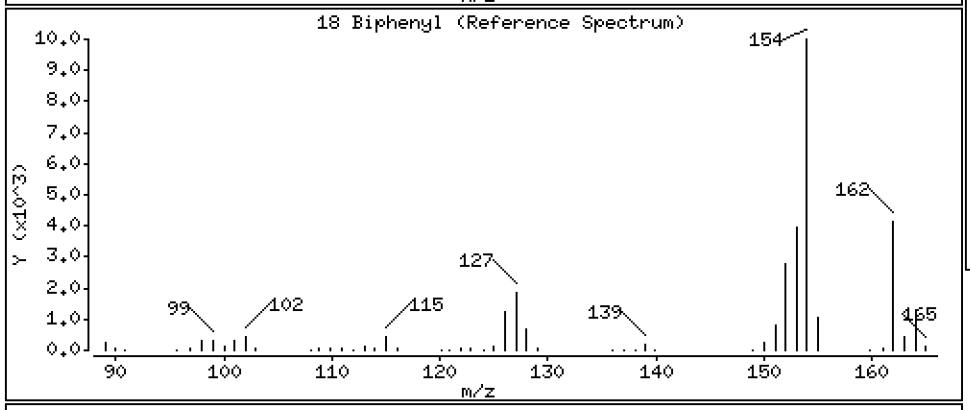
Concentration: 1.992 ug/mL

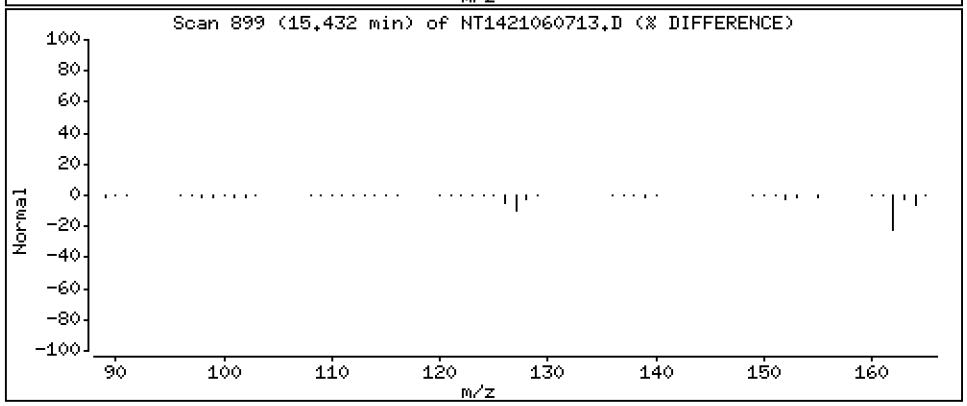












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Date : 07-JUN-2021 22:07

Client ID:

Instrument: nt14.i

Sample Info: BJE0383-MSD1

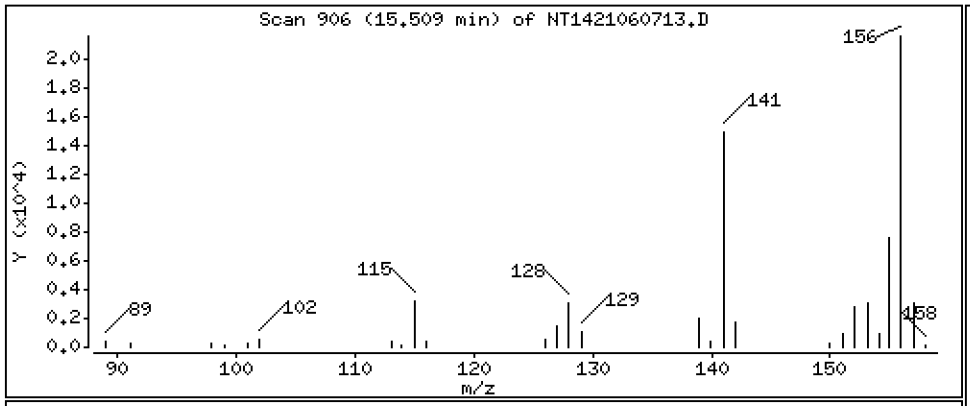
Operator: VTS

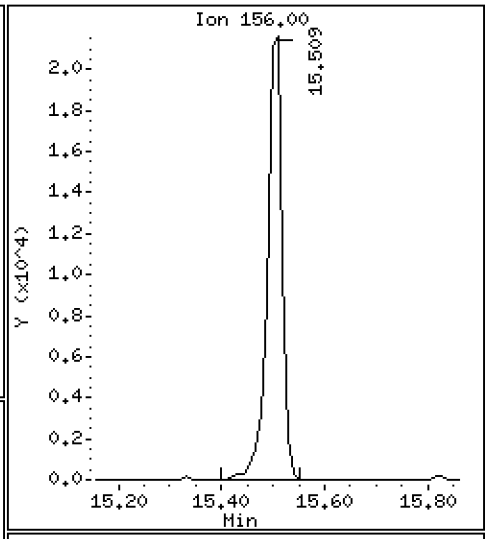
Column phase: Rxi-17Sil MS

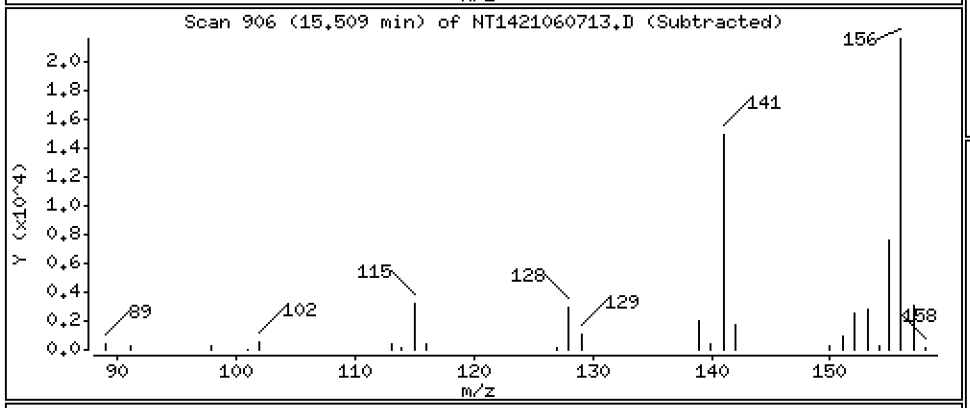
Column diameter: 0.25

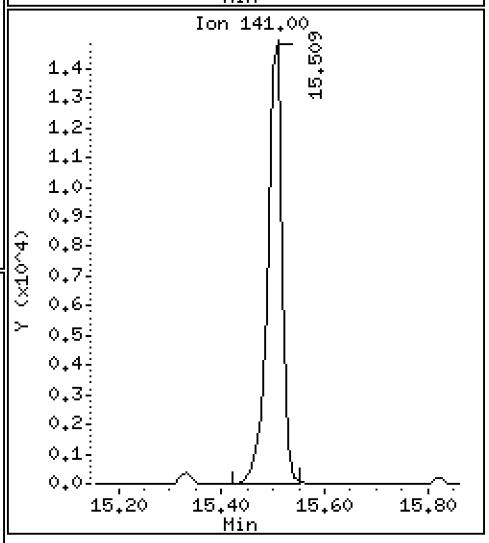
19 2,6-Dimethylnaphthalene

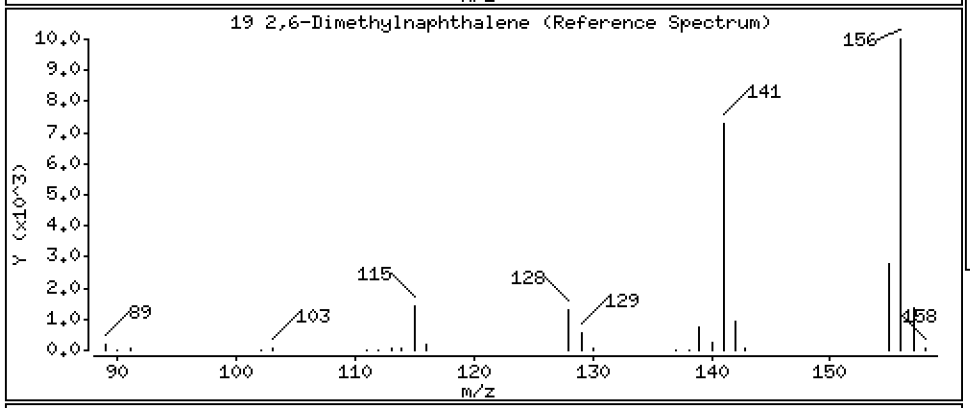
Concentration: 2.061 ug/mL

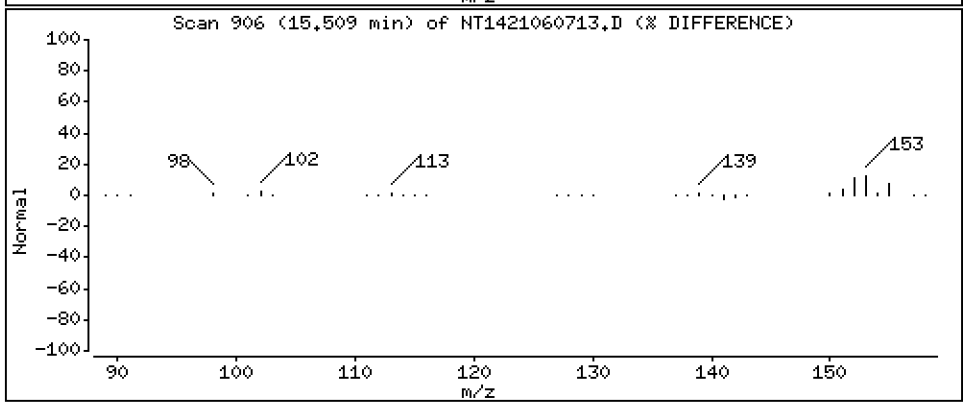












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Date : 07-JUN-2021 22:07

Client ID:

Instrument: nt14.i

Sample Info: BJE0383-MSD1

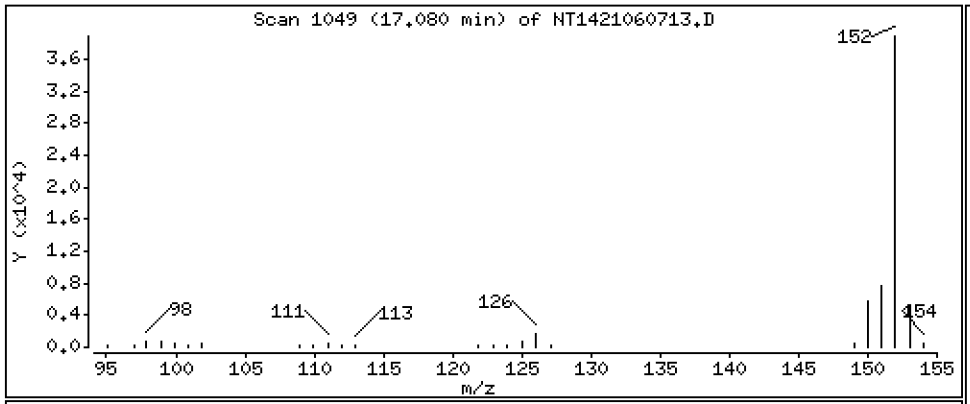
Operator: VTS

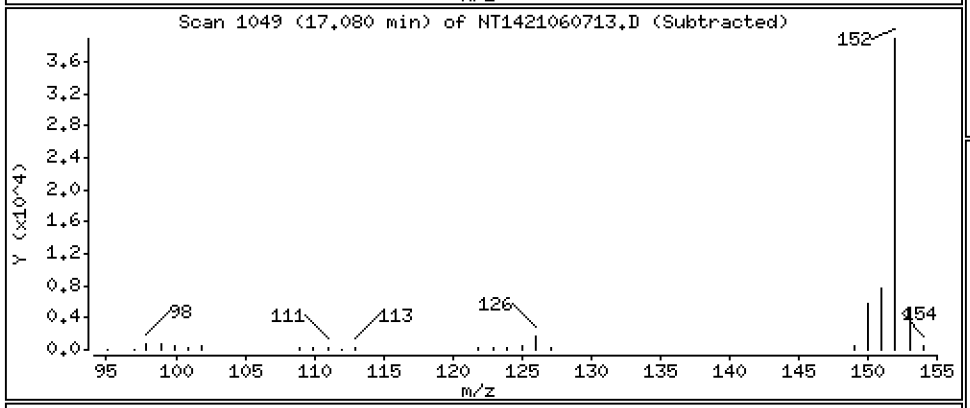
Column phase: Rxi-17Sil MS

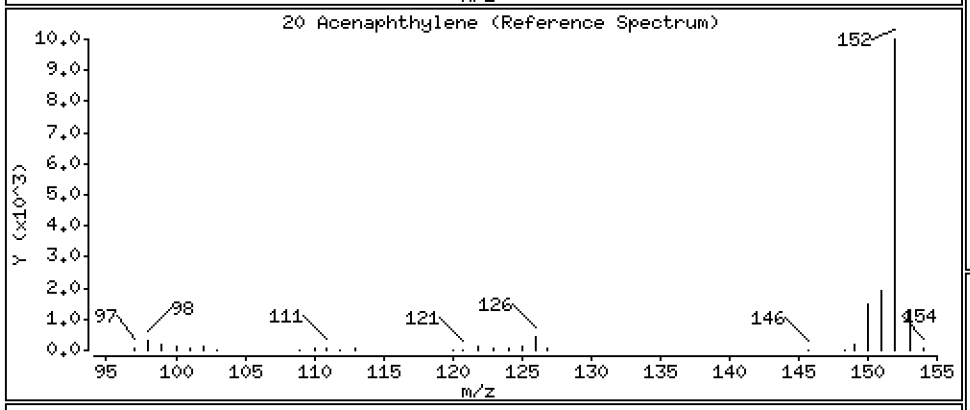
Column diameter: 0.25

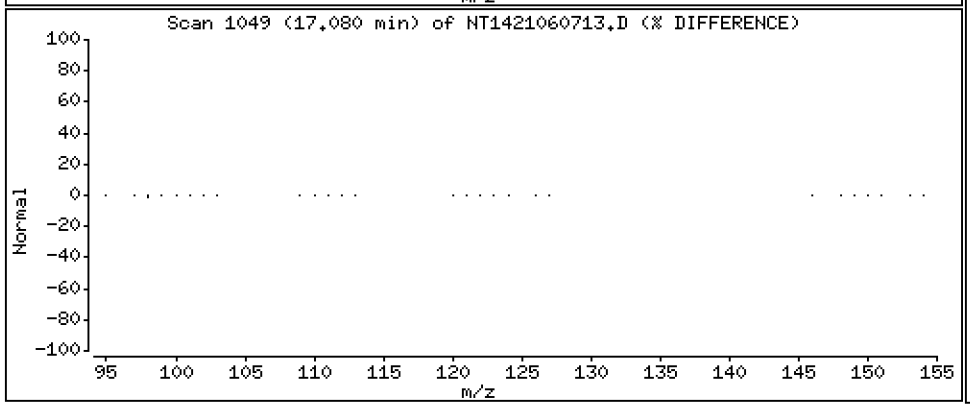
20 Acenaphthylene

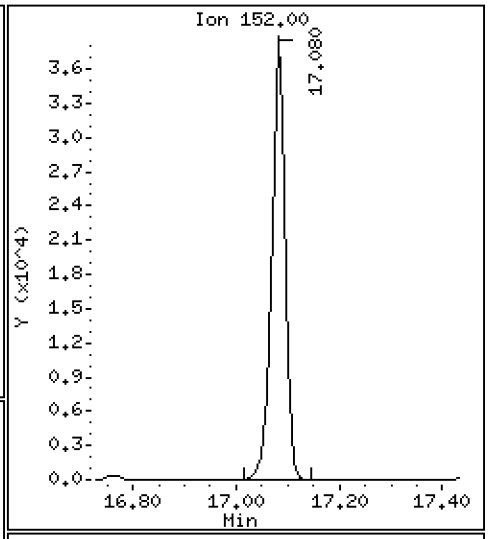
Concentration: 1.974 ug/mL

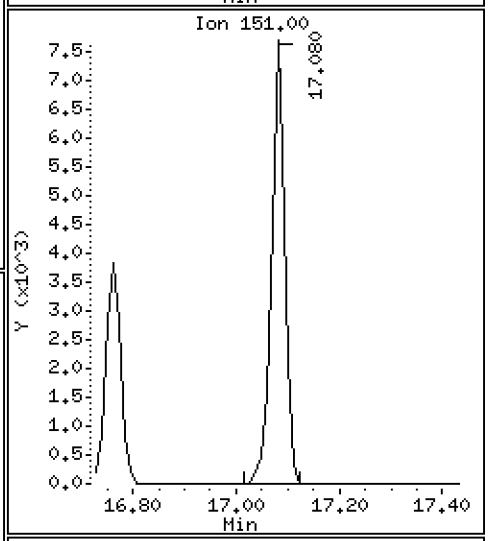


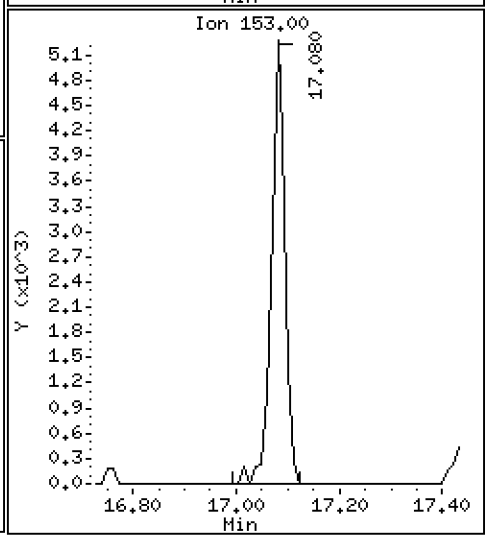












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Date : 07-JUN-2021 22:07

Client ID:

Instrument: nt14.i

Sample Info: BJE0383-MSD1

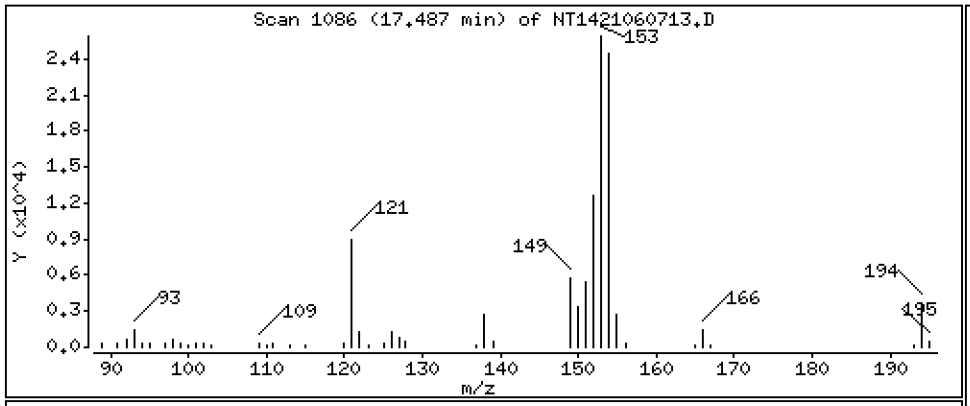
Operator: VTS

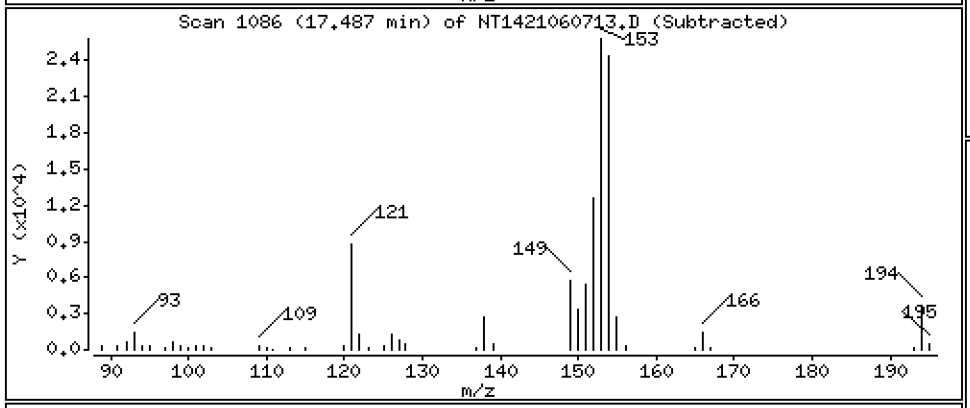
Column phase: Rxi-17Sil MS

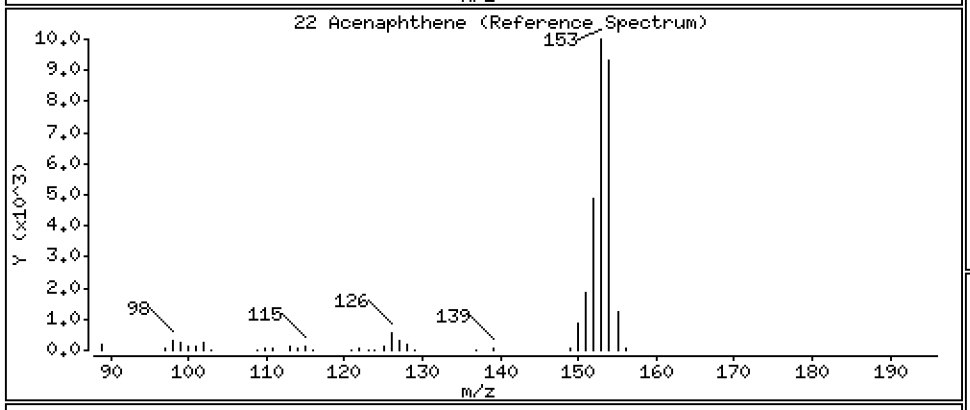
Column diameter: 0.25

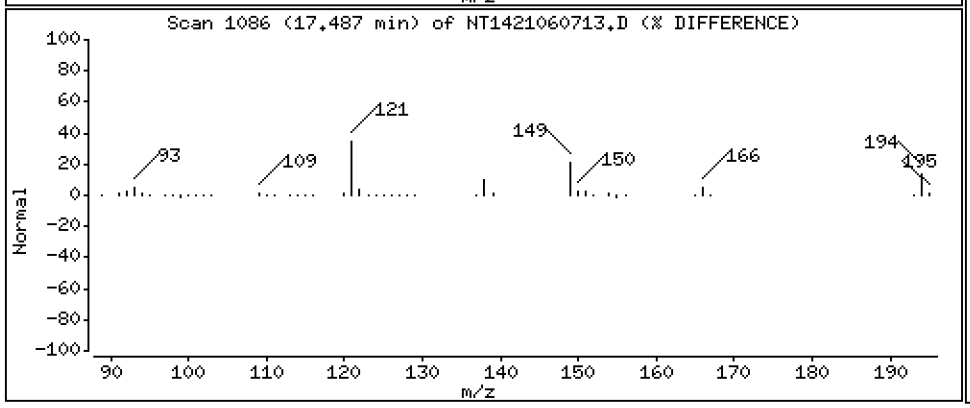
22 Acenaphthene

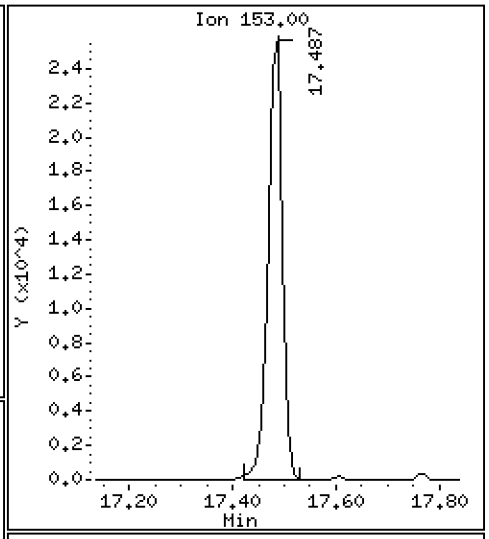
Concentration: 2.264 ug/mL

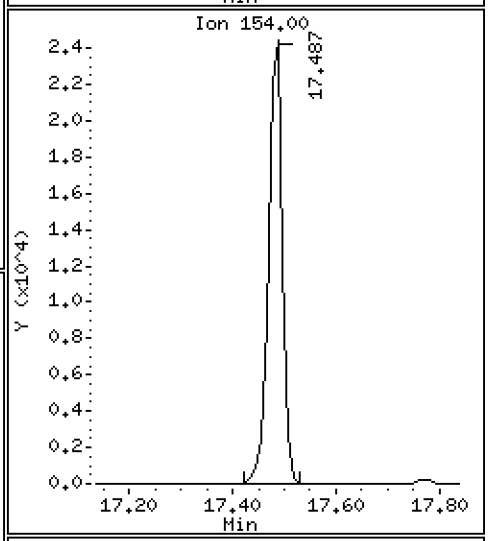


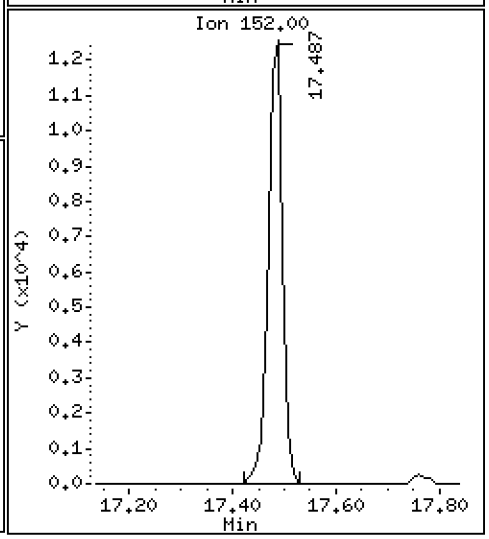












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Date : 07-JUN-2021 22:07

Client ID:

Instrument: nt14.i

Sample Info: BJE0383-MSD1

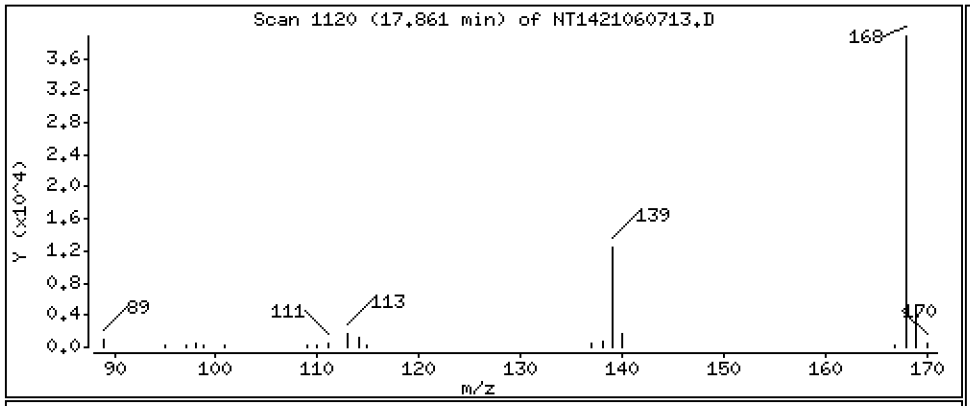
Operator: VTS

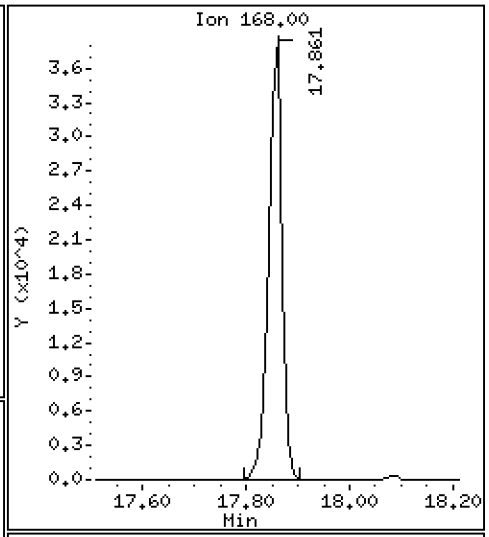
Column phase: Rxi-17Sil MS

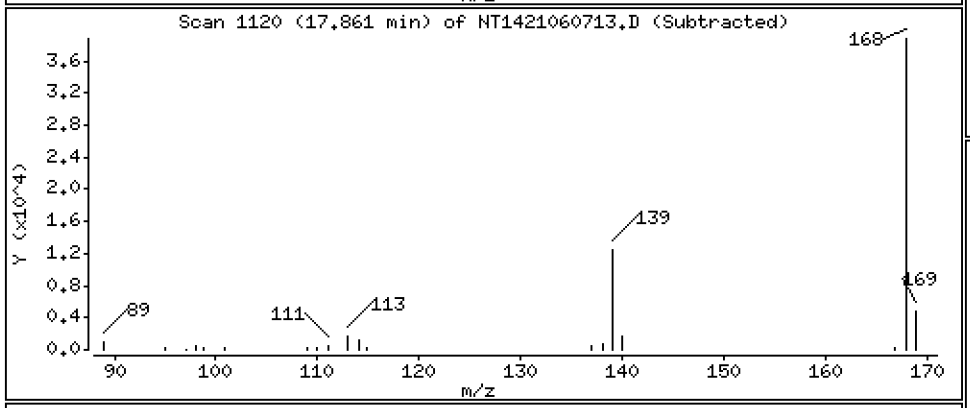
Column diameter: 0.25

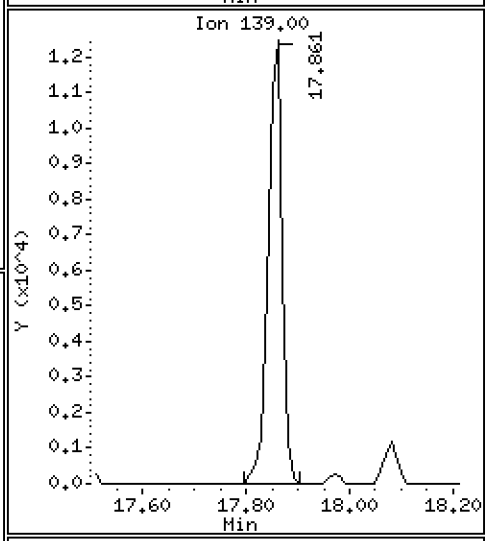
23 Dibenzofuran

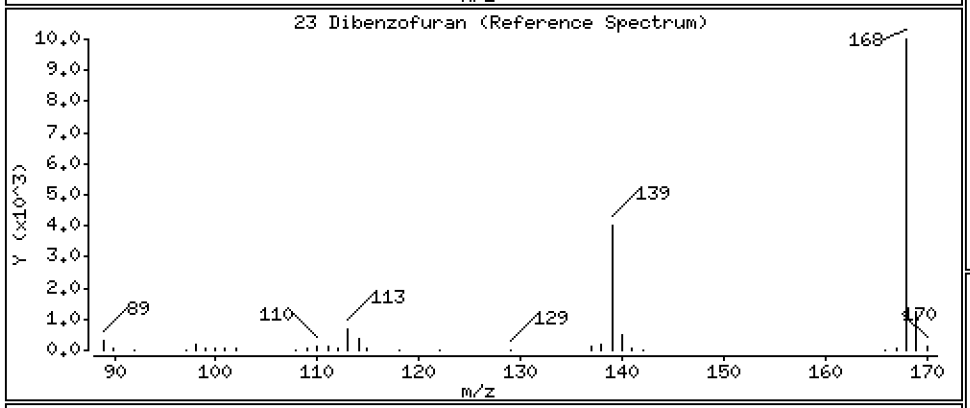
Concentration: 2.126 ug/mL

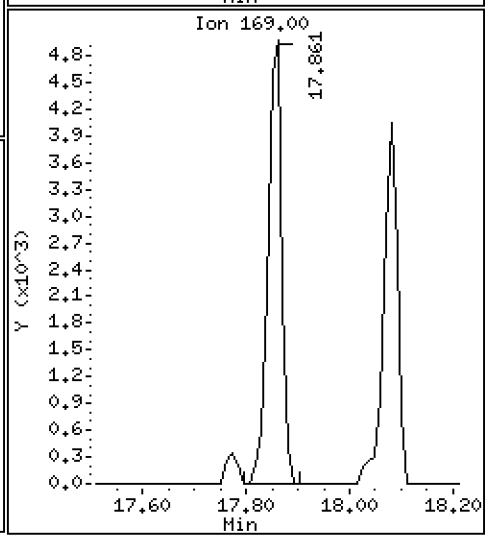


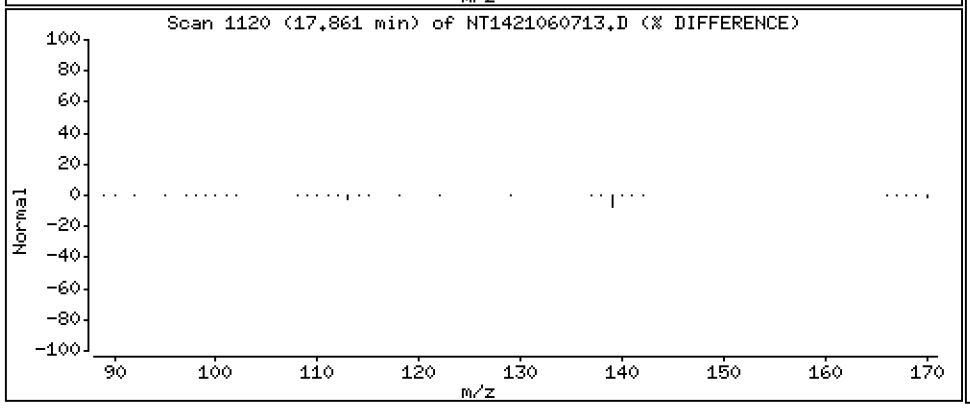












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Client ID:

Instrument: nt14.i

Sample Info: BJE0383-MSD1

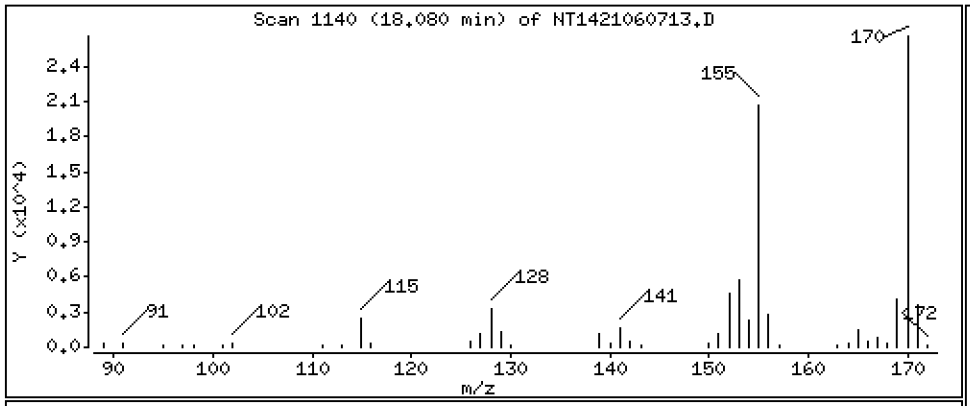
Operator: VTS

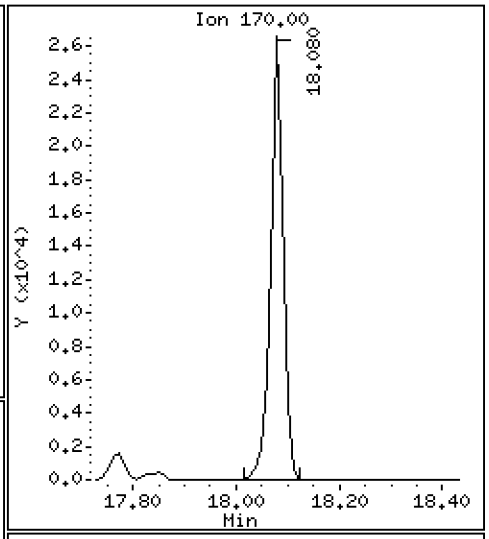
Column phase: Rxi-17Sil MS

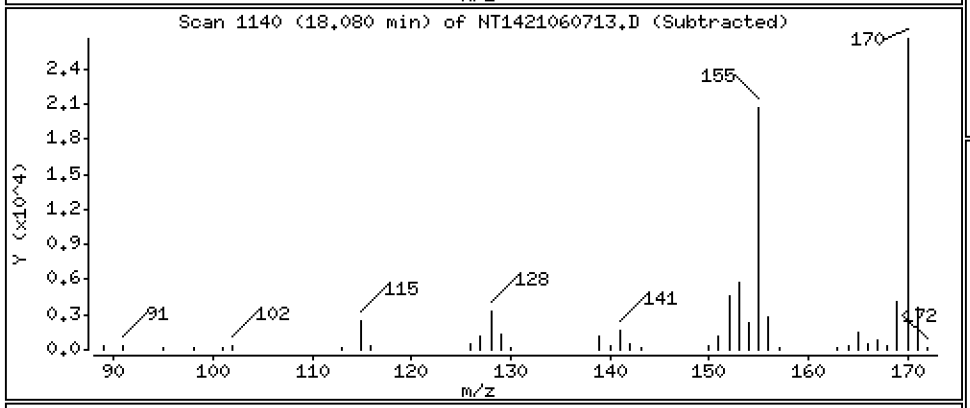
Column diameter: 0.25

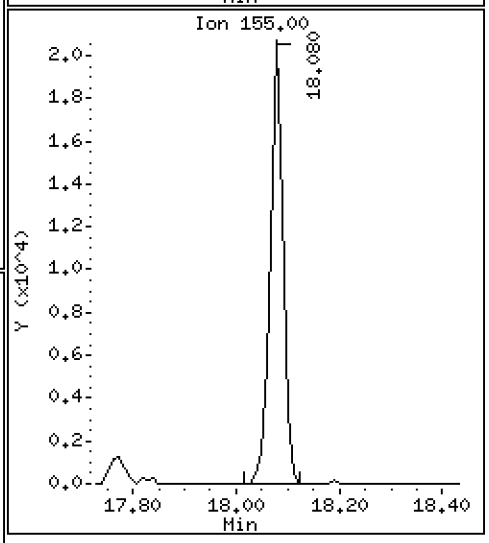
24 1,6,7-Trimethylnaphthalene

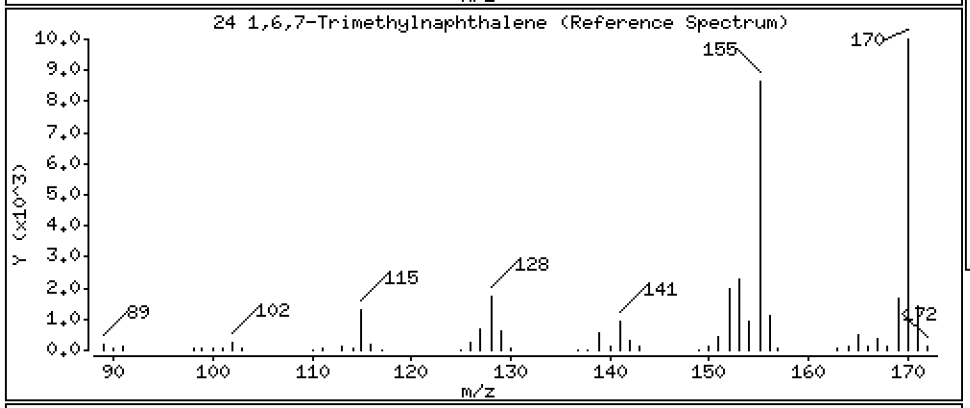
Concentration: 2.127 ug/mL

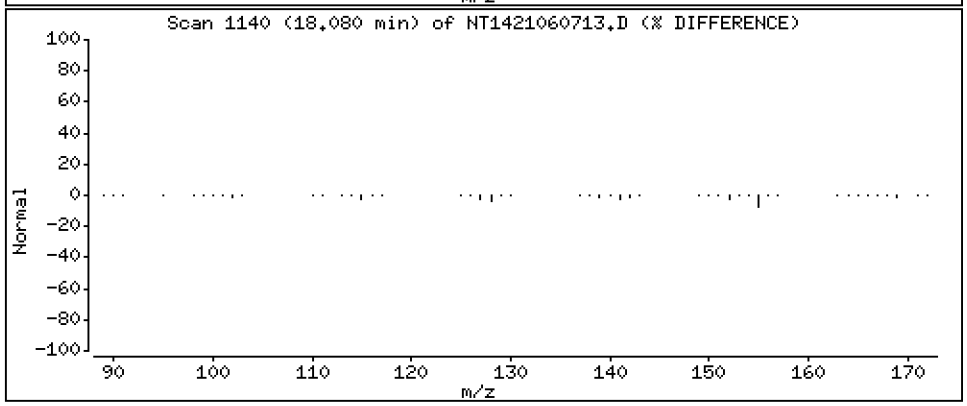












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Date : 07-JUN-2021 22:07

Client ID:

Instrument: nt14.i

Sample Info: BJE0383-MSD1

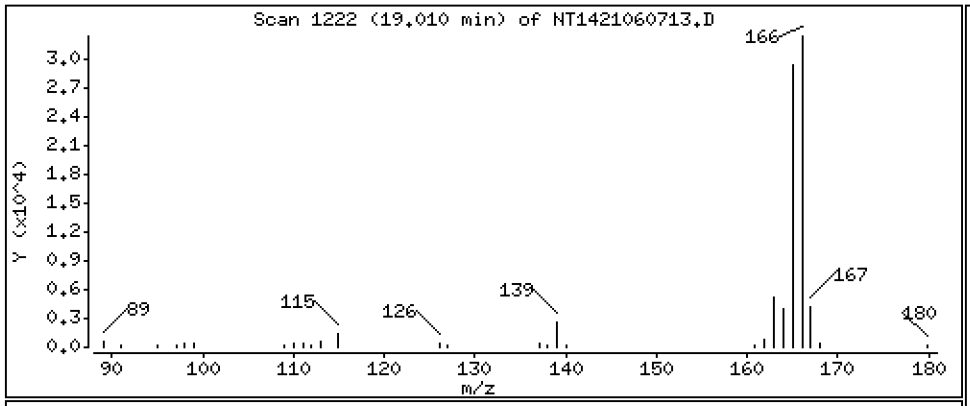
Operator: VTS

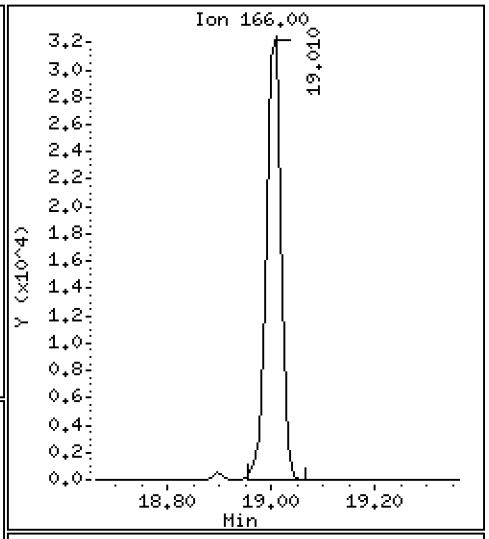
Column phase: Rxi-17Sil MS

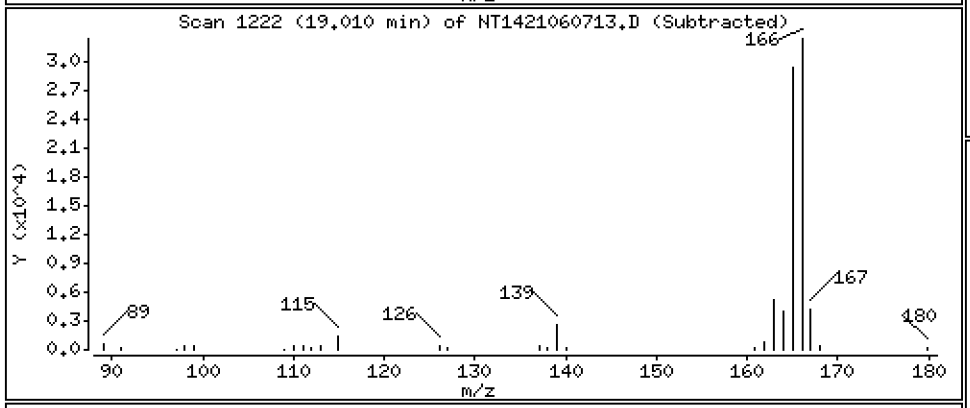
Column diameter: 0.25

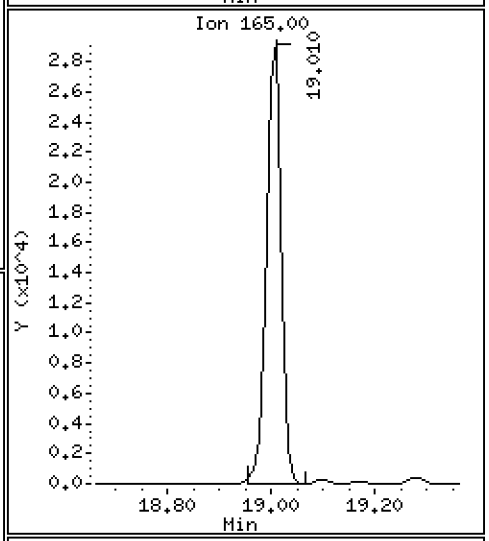
26 Fluorene

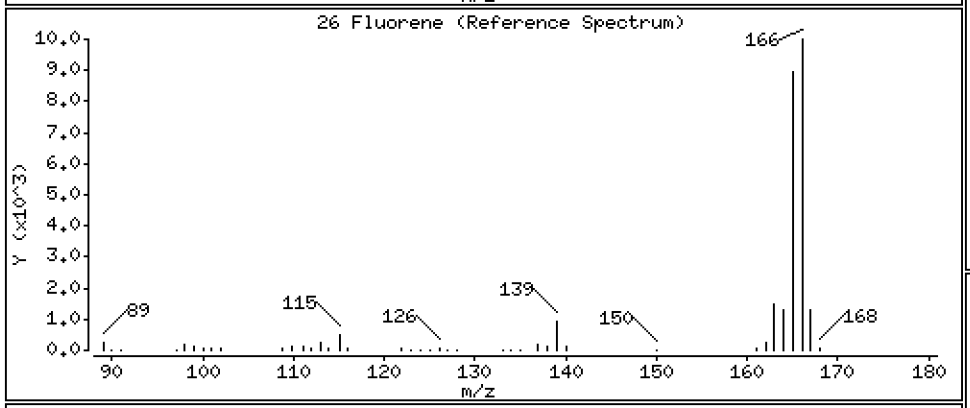
Concentration: 2.426 ug/mL

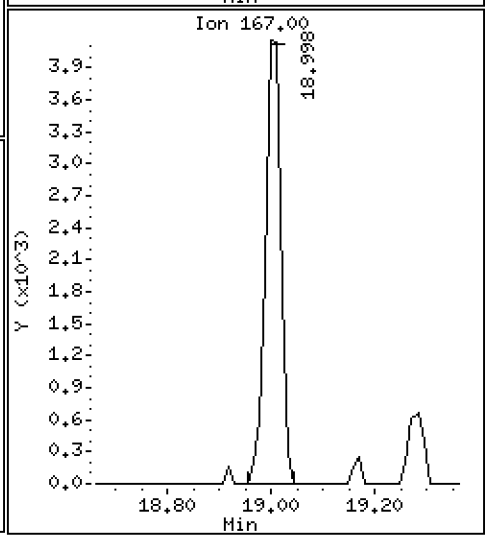


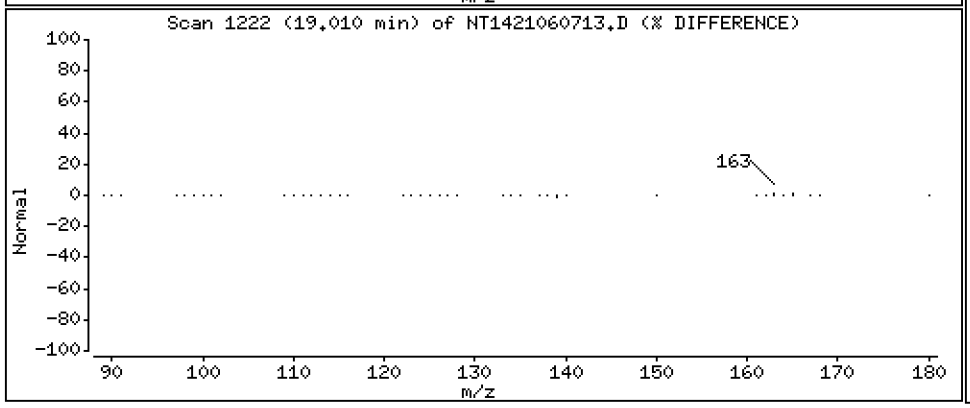












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Date : 07-JUN-2021 22:07

Client ID:

Instrument: nt14.i

Sample Info: BJE0383-MSD1

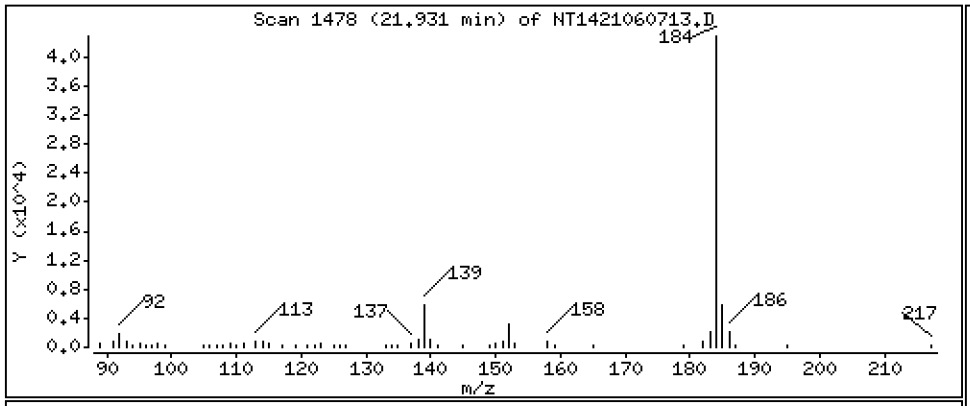
Operator: VTS

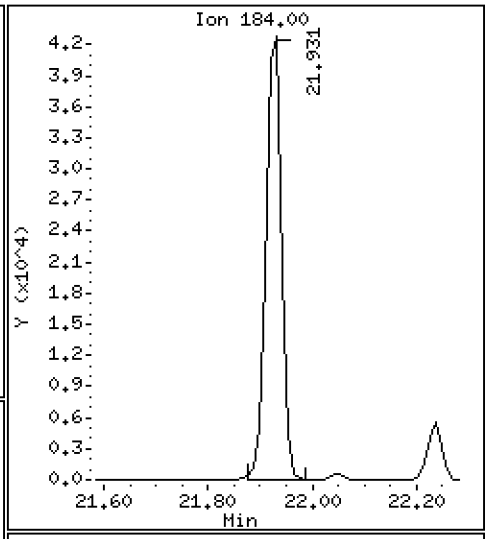
Column phase: Rxi-17Sil MS

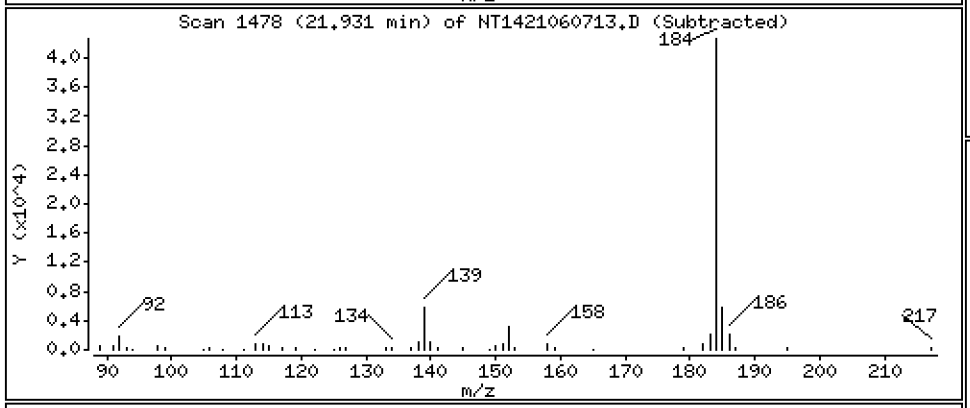
Column diameter: 0.25

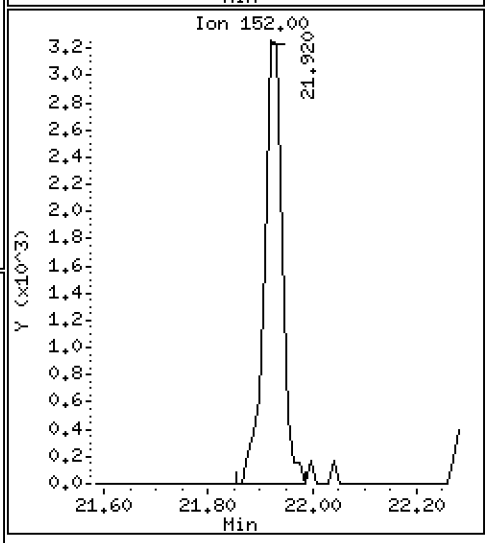
30 Dibenzothiophene

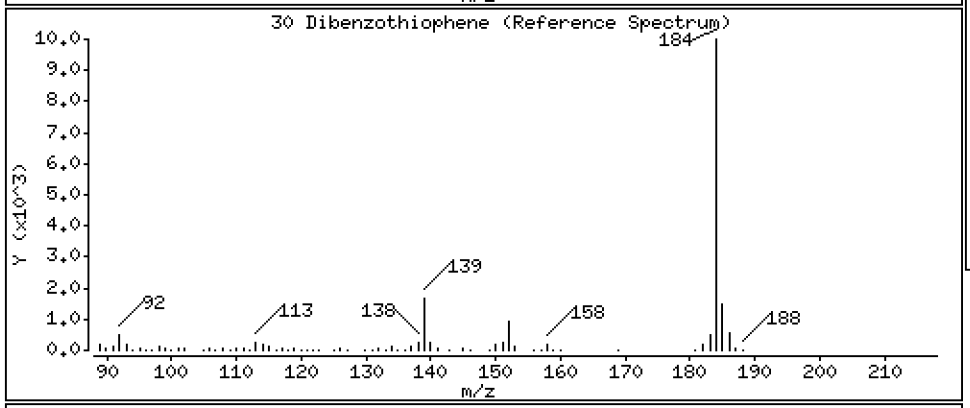
Concentration: 2.309 ug/mL

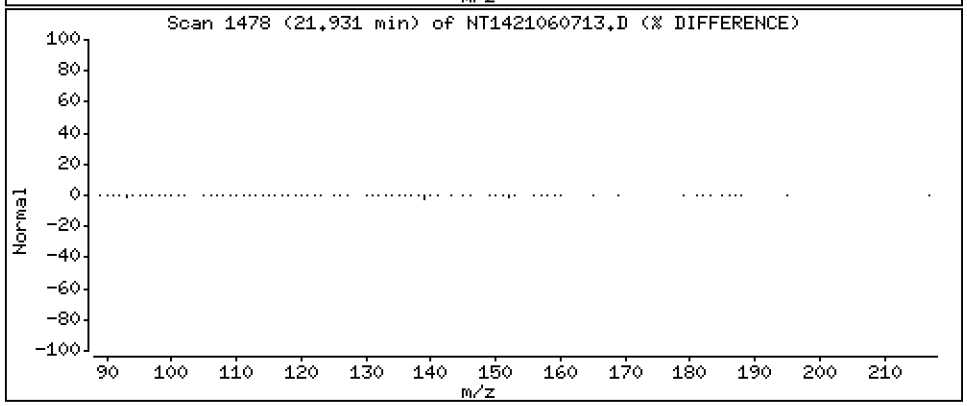












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Date : 07-JUN-2021 22:07

Client ID:

Instrument: nt14.i

Sample Info: BJE0383-MSD1

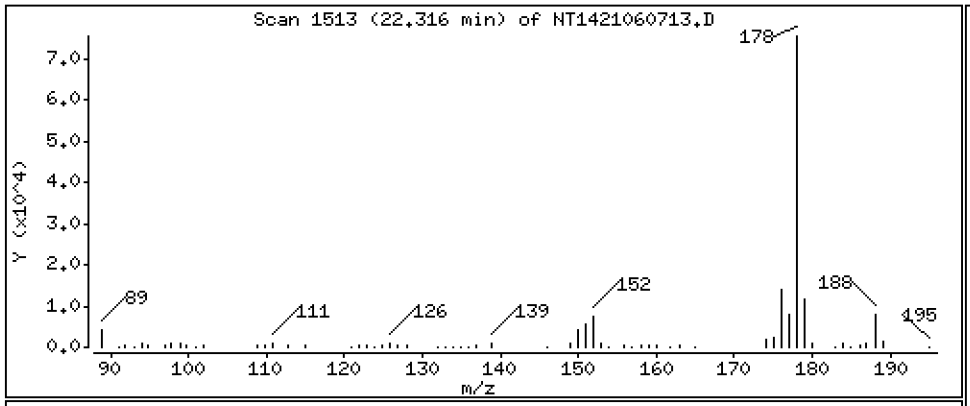
Operator: VTS

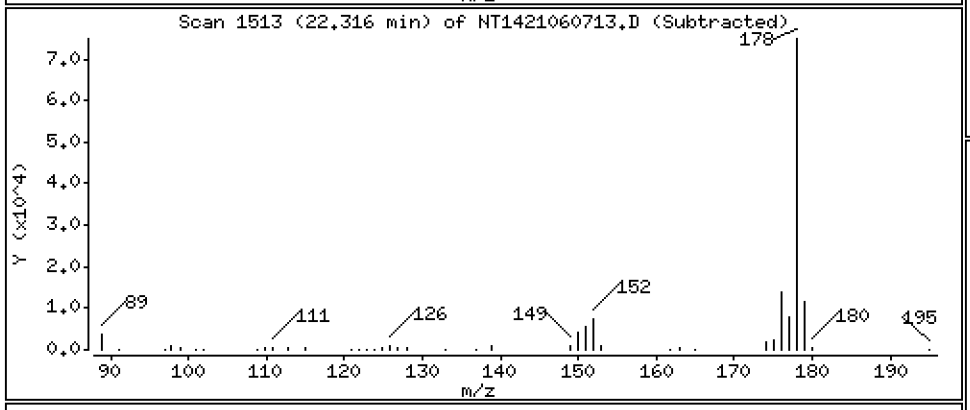
Column phase: Rxi-17Sil MS

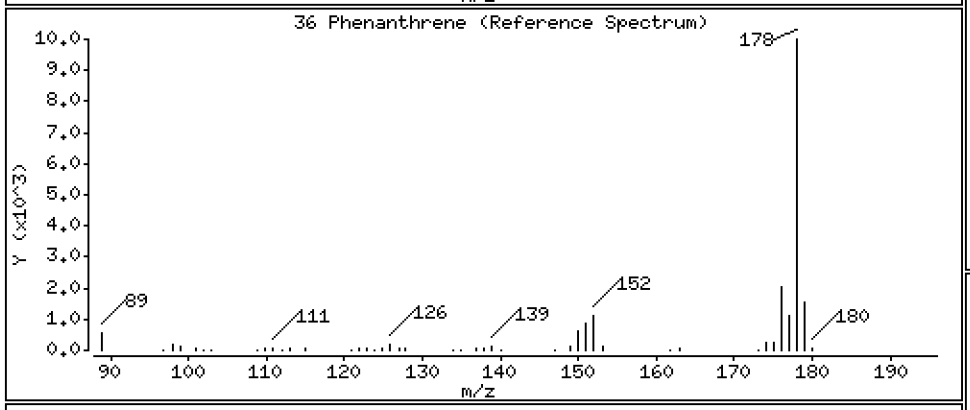
Column diameter: 0.25

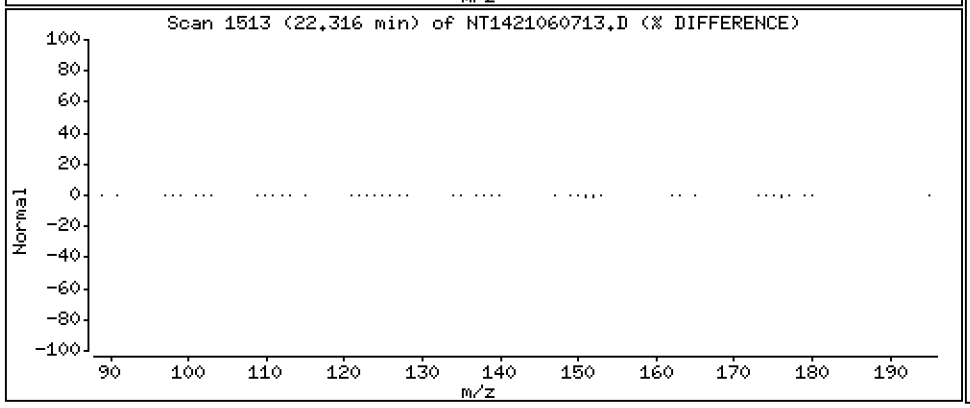
36 Phenanthrene

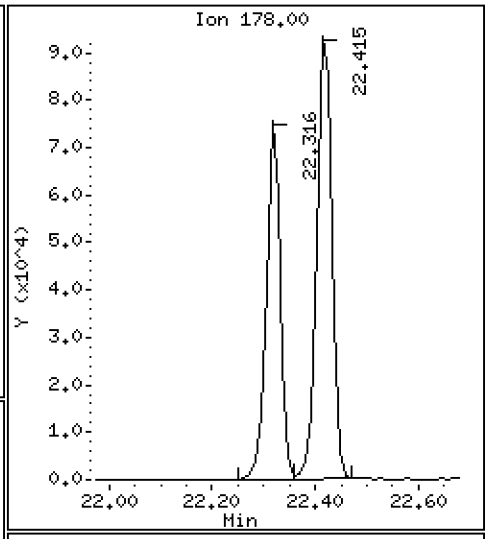
Concentration: 3.546 ug/mL

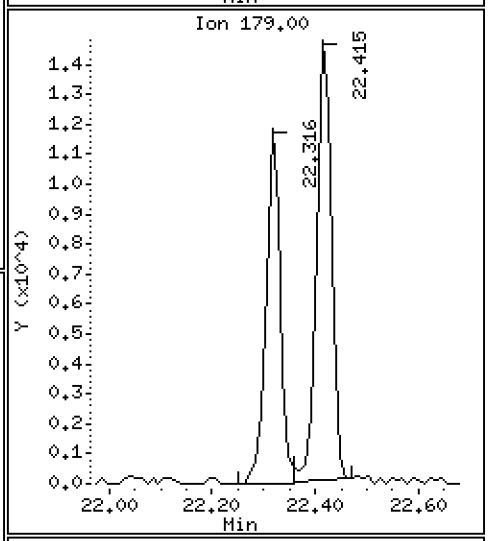


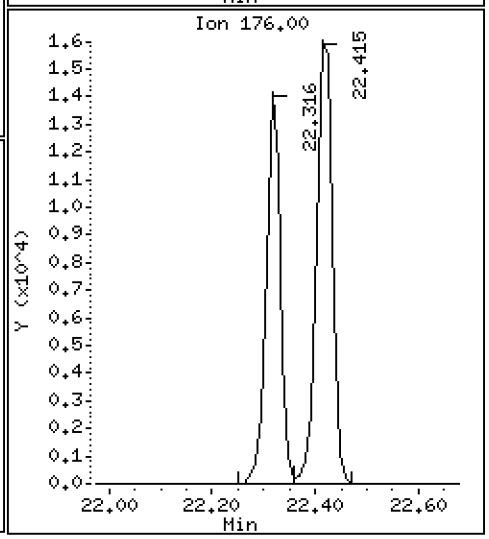












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Date : 07-JUN-2021 22:07

Client ID:

Instrument: nt14.i

Sample Info: BJE0383-MSD1

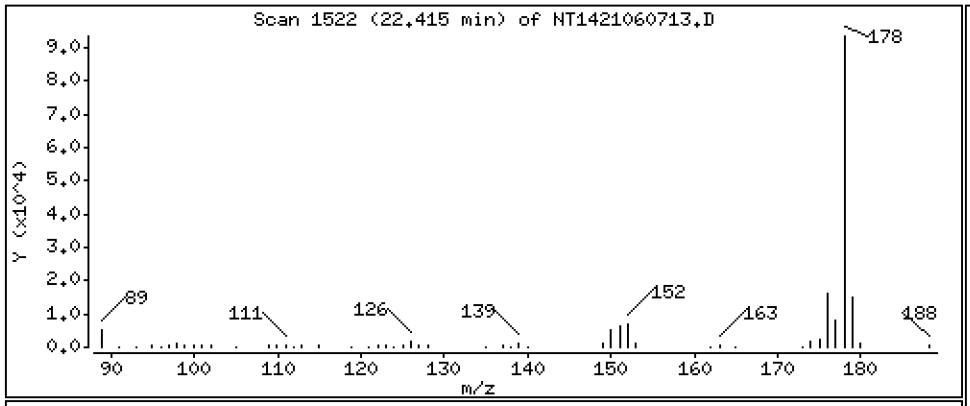
Operator: VTS

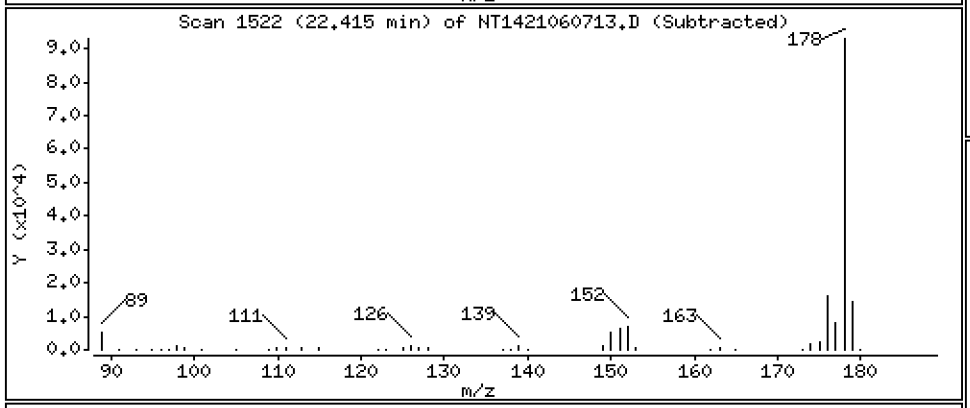
Column phase: Rxi-17Sil MS

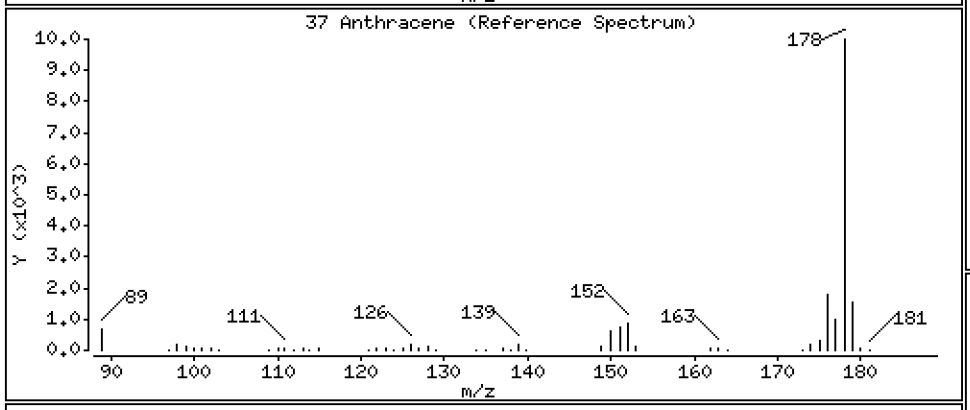
Column diameter: 0.25

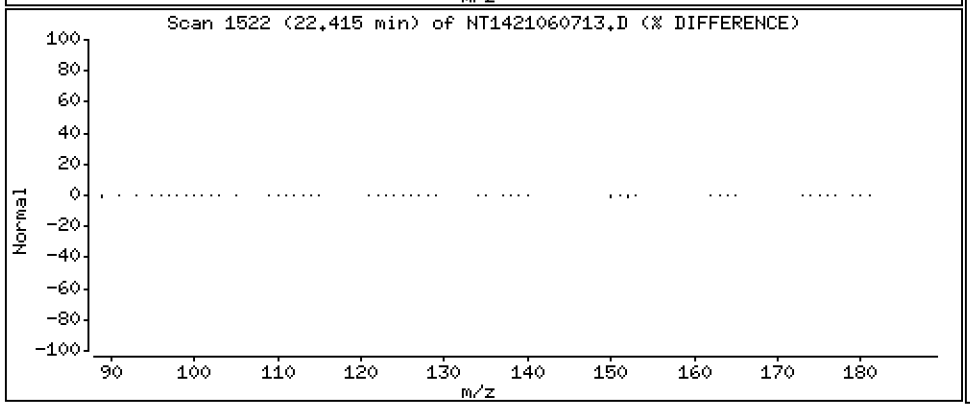
37 Anthracene

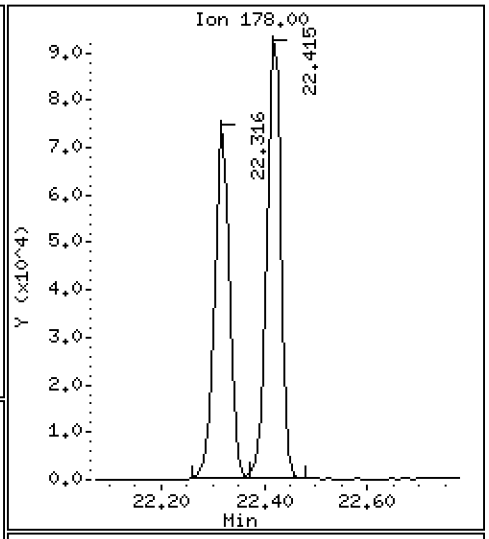
Concentration: 4.777 ug/mL

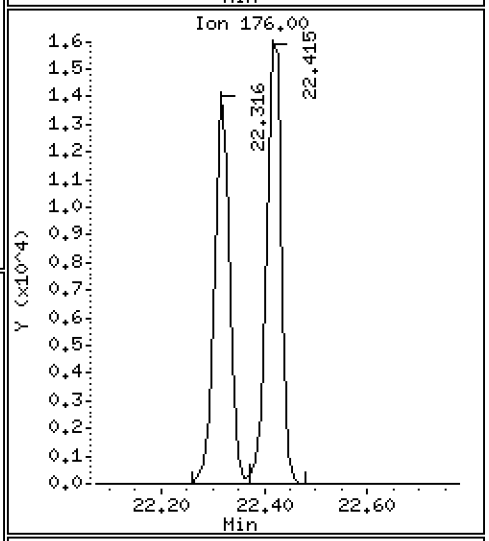


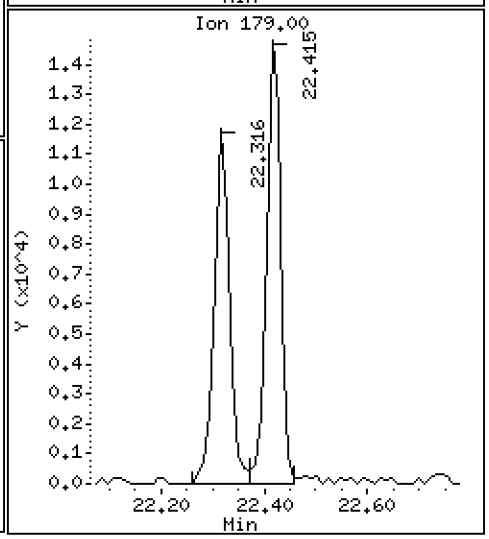












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Date : 07-JUN-2021 22:07

Client ID:

Instrument: nt14.i

Sample Info: BJE0383-MSD1

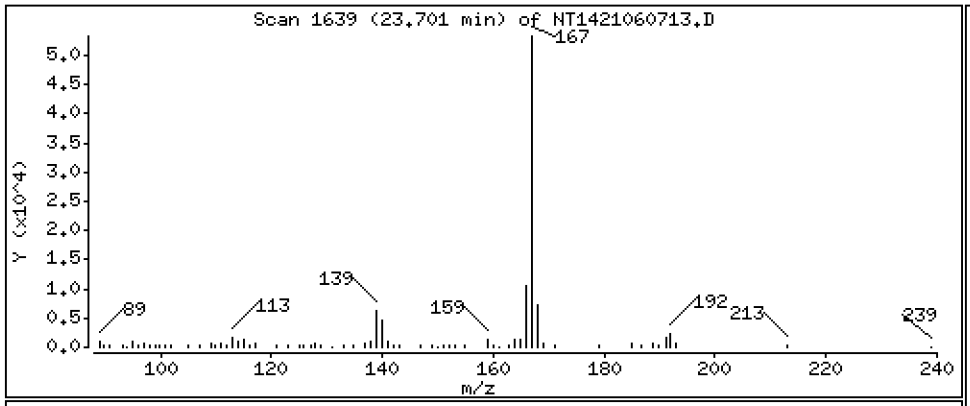
Operator: VTS

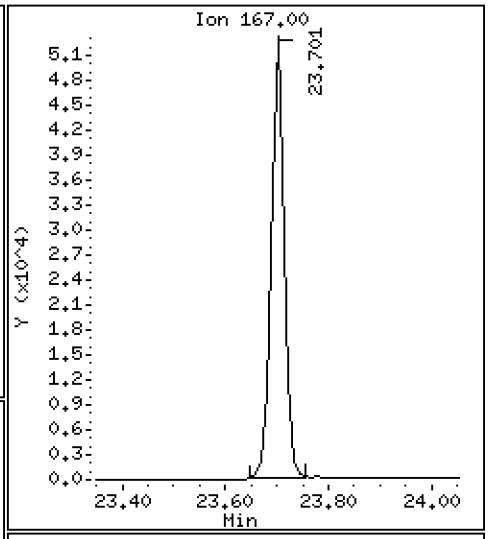
Column phase: Rxi-17Sil MS

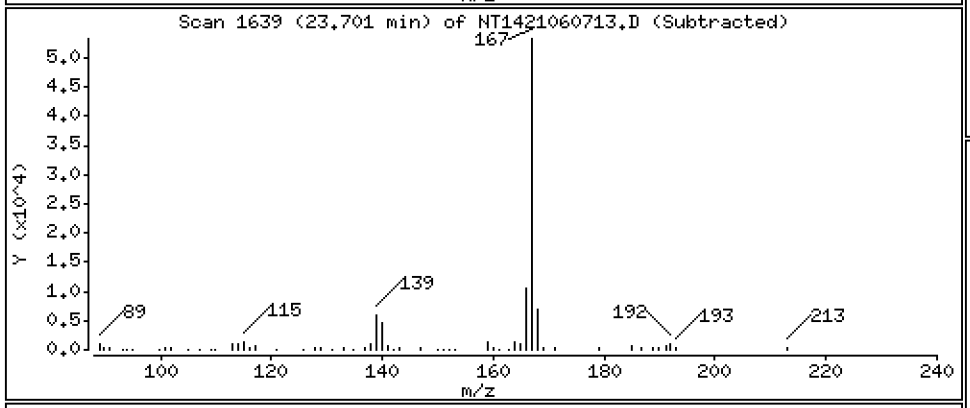
Column diameter: 0.25

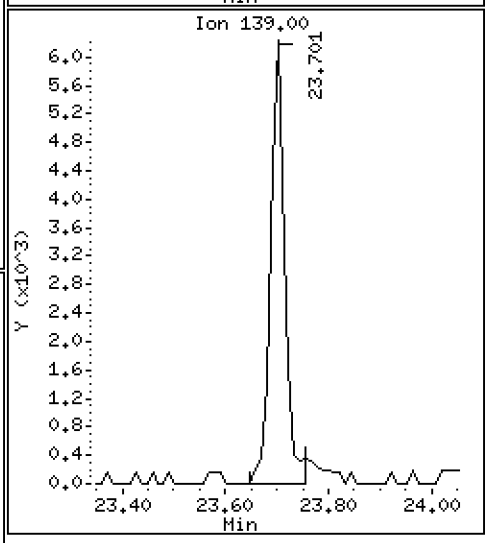
42 Carbazole

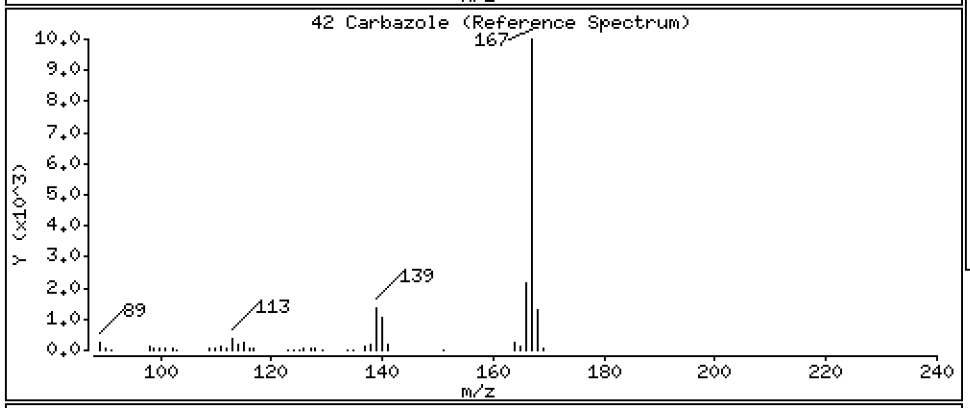
Concentration: 2.693 ug/mL

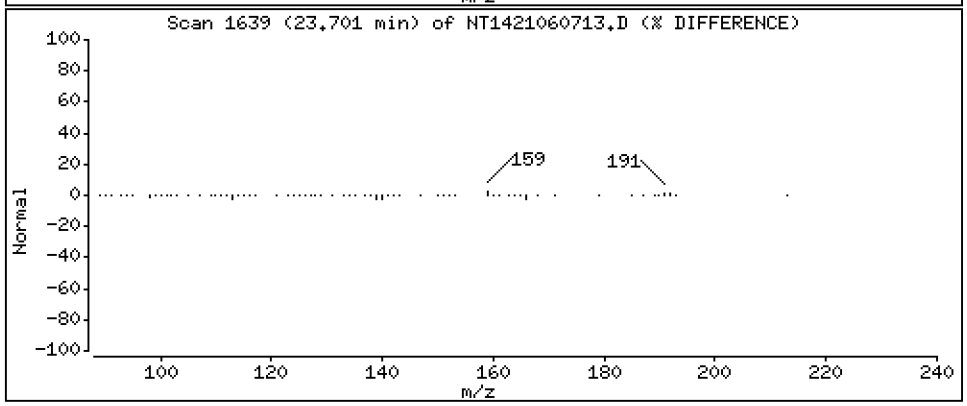












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Date : 07-JUN-2021 22:07

Client ID:

Instrument: nt14.i

Sample Info: BJE0383-MSD1

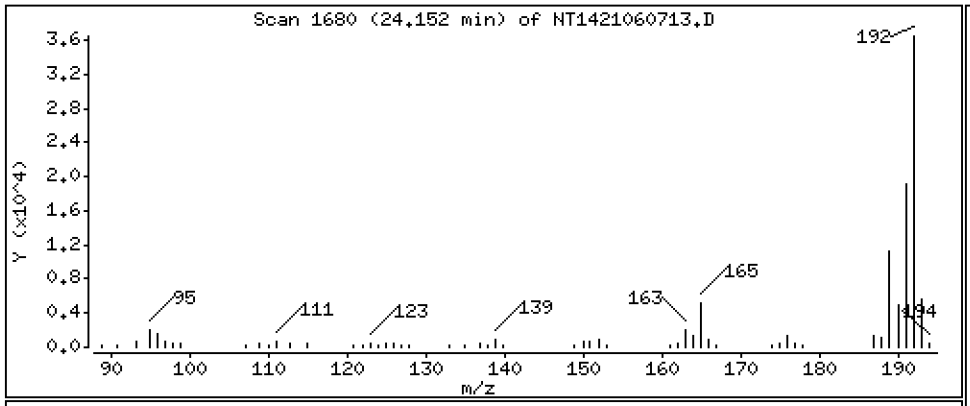
Operator: VTS

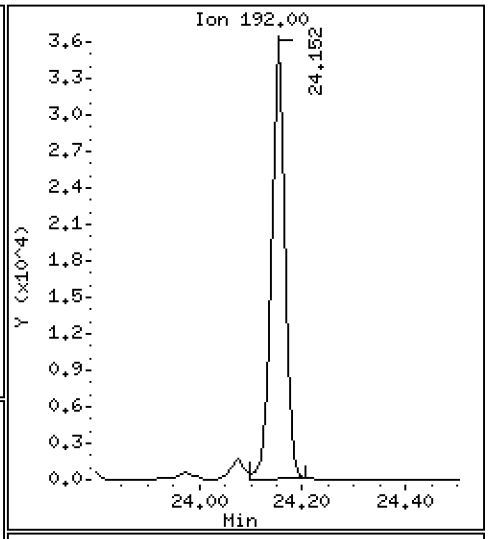
Column phase: Rxi-17Sil MS

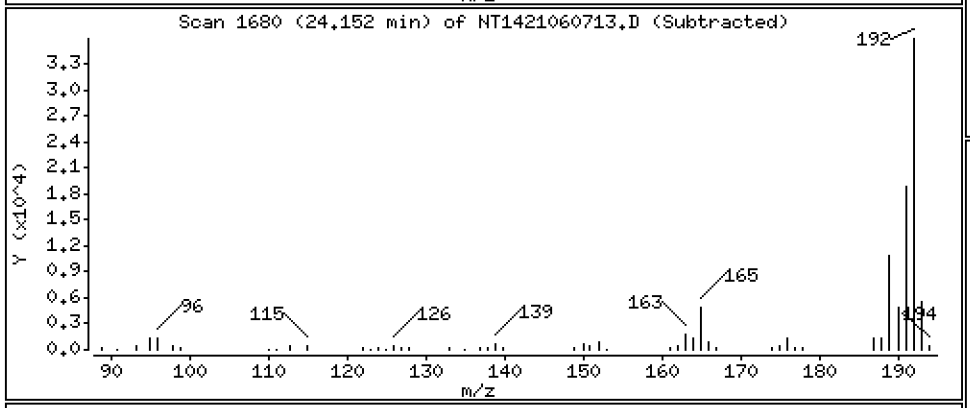
Column diameter: 0.25

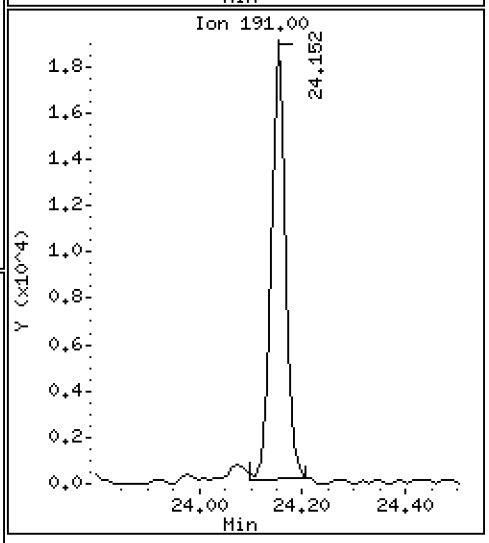
43 1-Methylphenanthrene

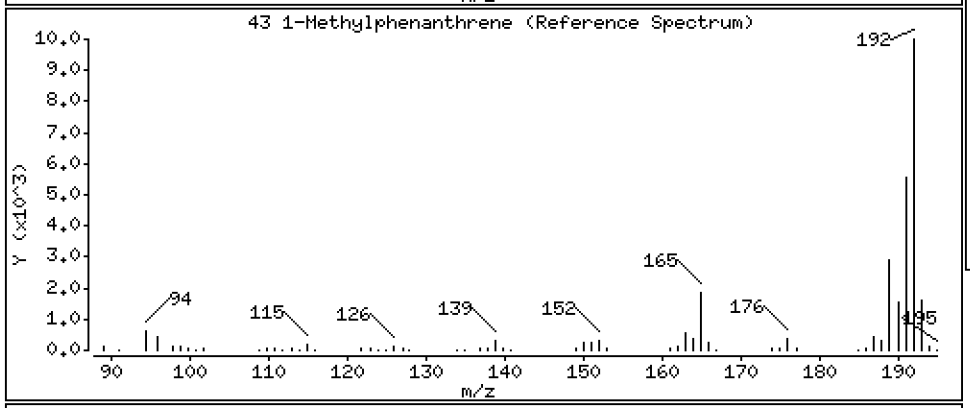
Concentration: 2.370 ug/mL

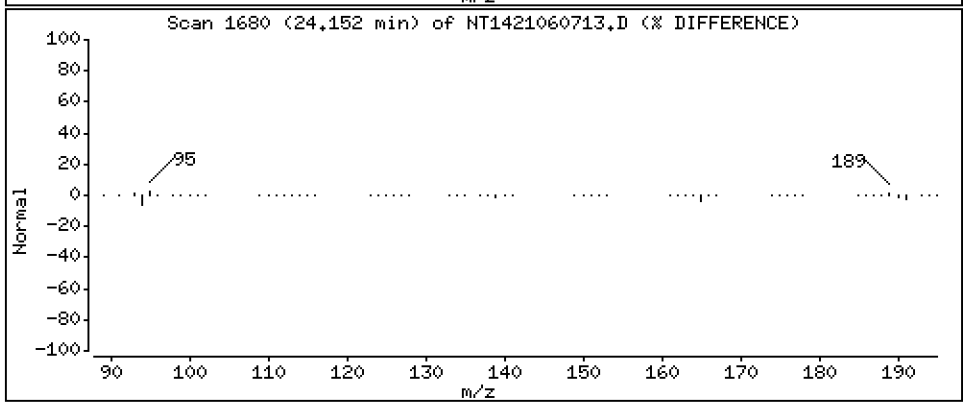












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Date : 07-JUN-2021 22:07

Client ID:

Instrument: nt14.i

Sample Info: BJE0383-MSD1

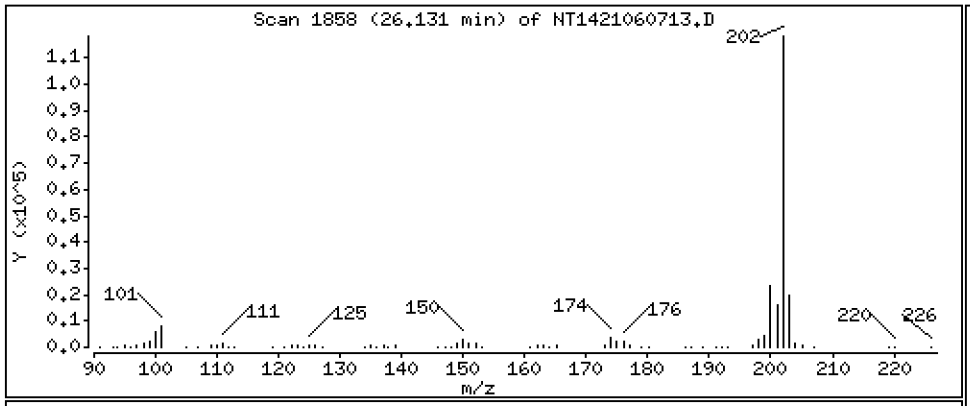
Operator: VTS

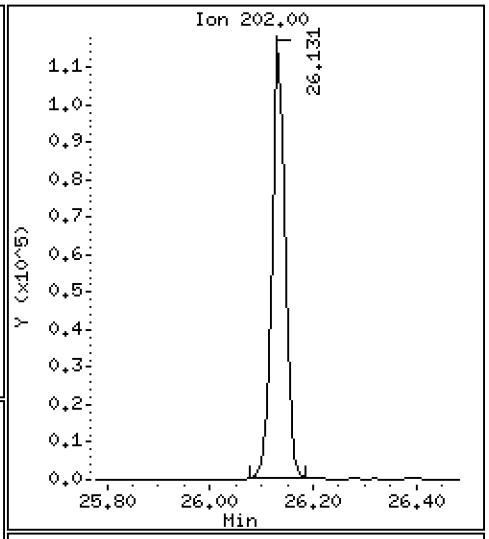
Column phase: Rxi-17Sil MS

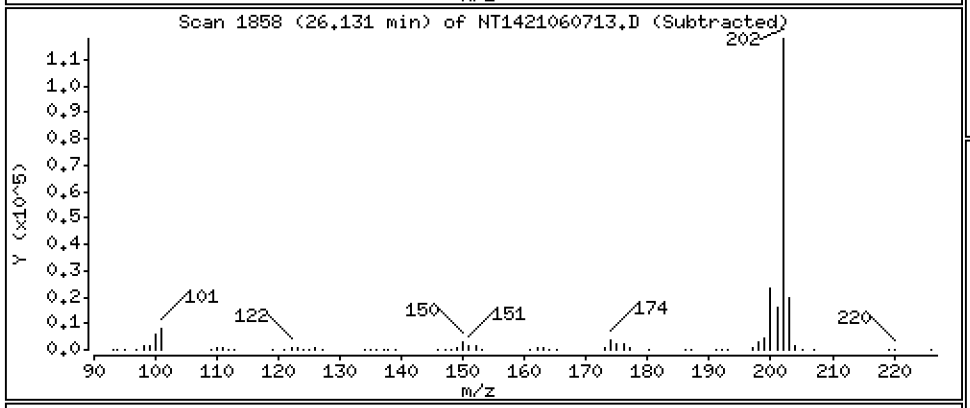
Column diameter: 0.25

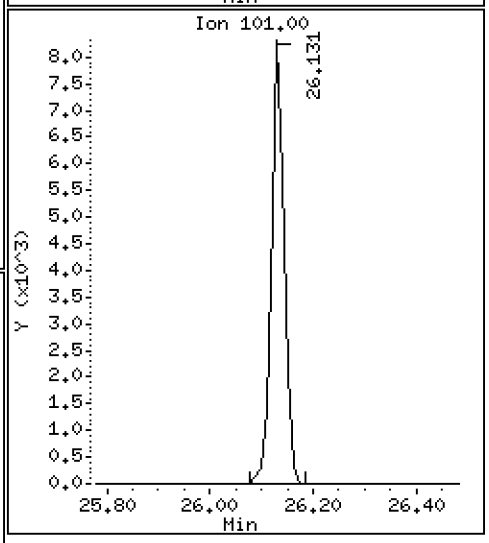
44 Fluoranthene

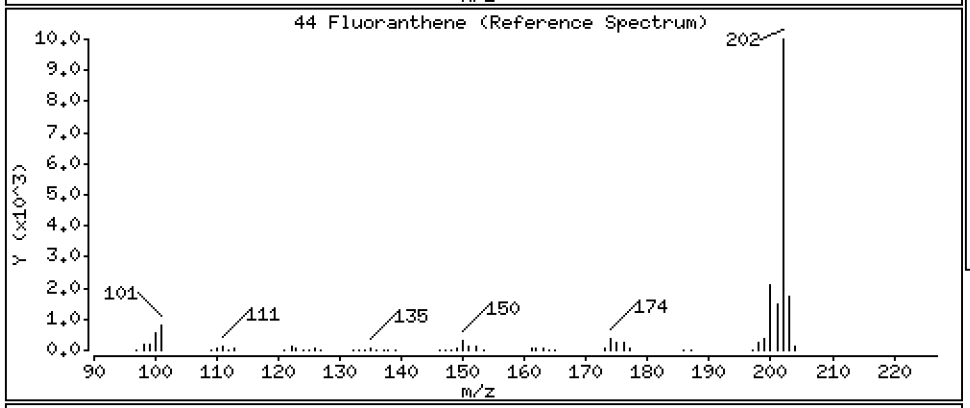
Concentration: 4.848 ug/mL

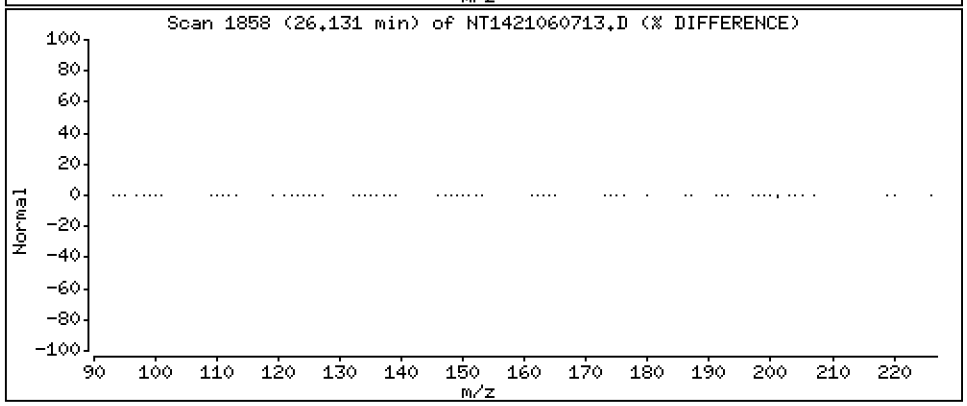












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Date : 07-JUN-2021 22:07

Client ID:

Instrument: nt14.i

Sample Info: BJE0383-MSD1

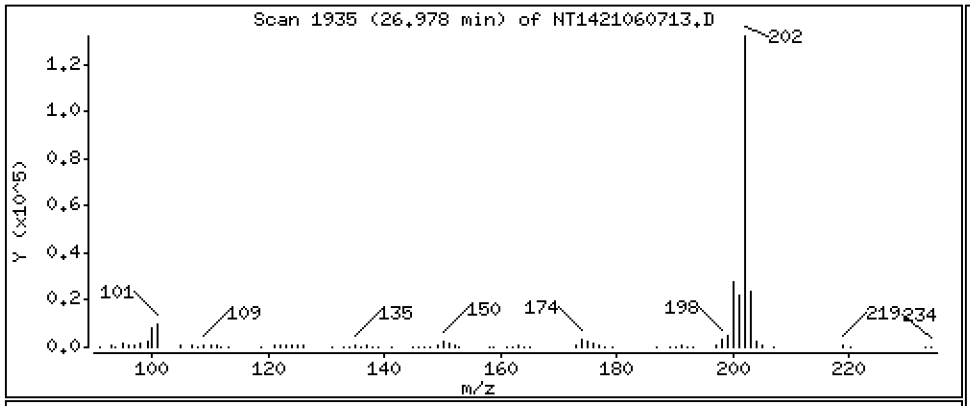
Operator: VTS

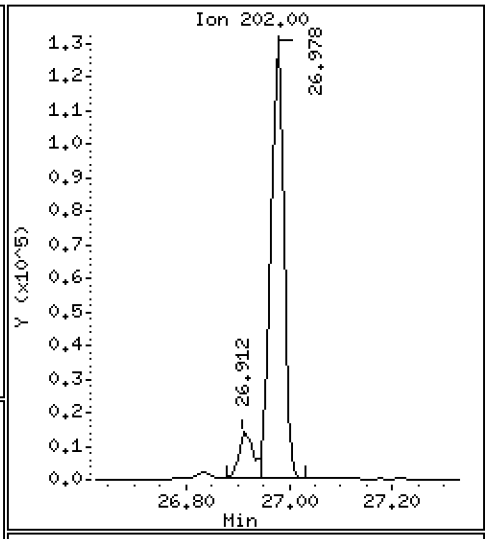
Column phase: Rxi-17Sil MS

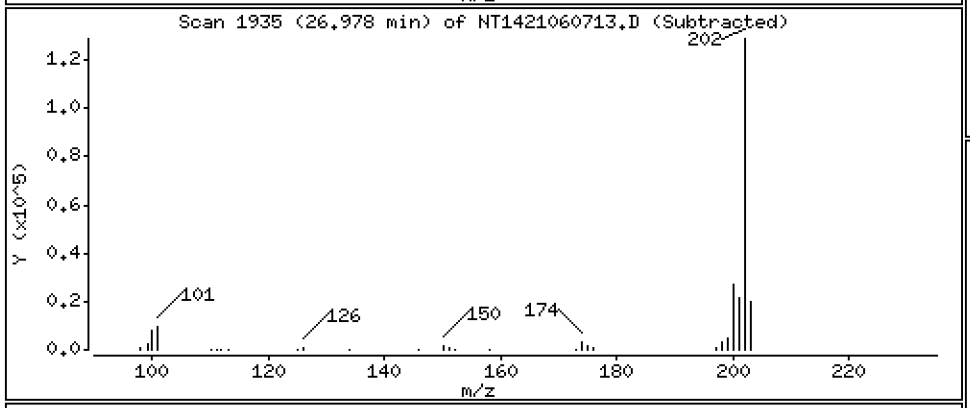
Column diameter: 0.25

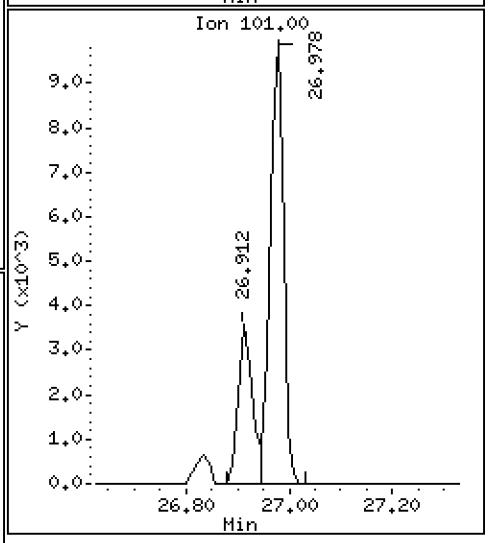
46 Pyrene

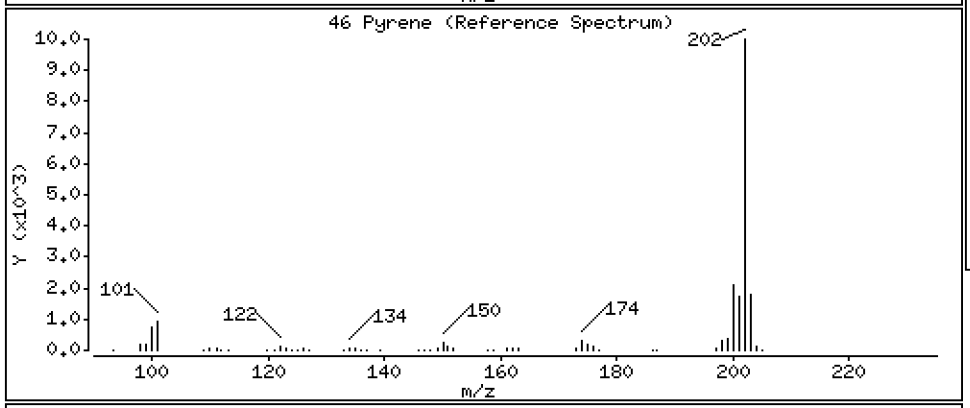
Concentration: 5.001 ug/mL

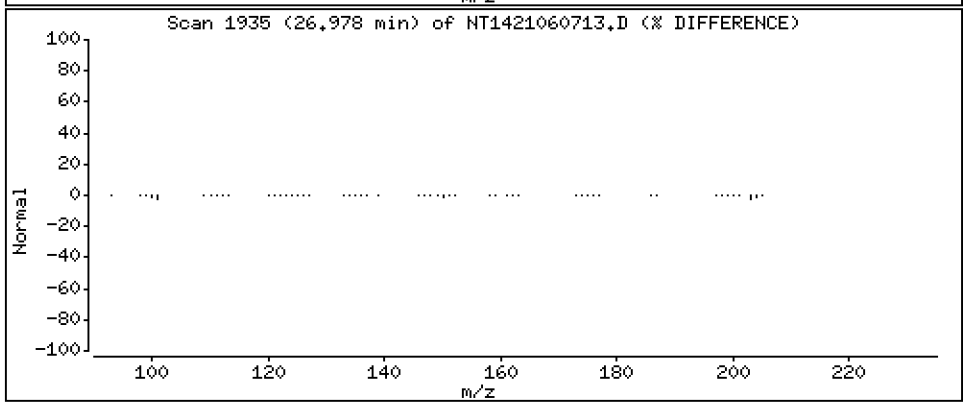












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Date : 07-JUN-2021 22:07

Client ID:

Instrument: nt14.i

Sample Info: BJE0383-MSD1

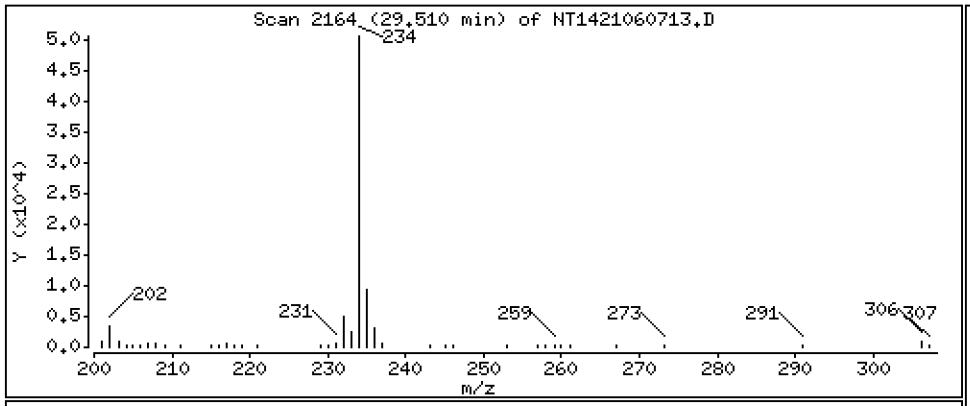
Operator: VTS

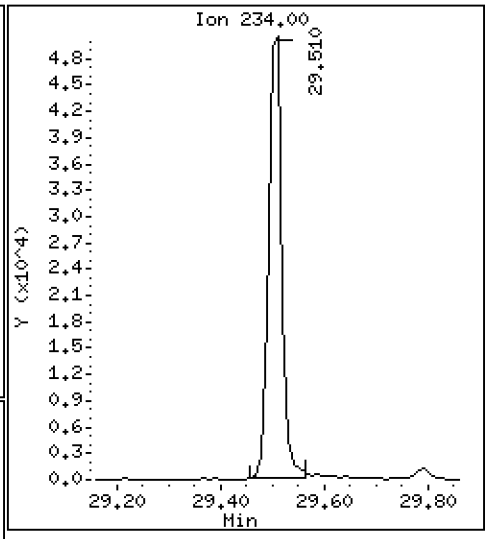
Column phase: Rxi-17Sil MS

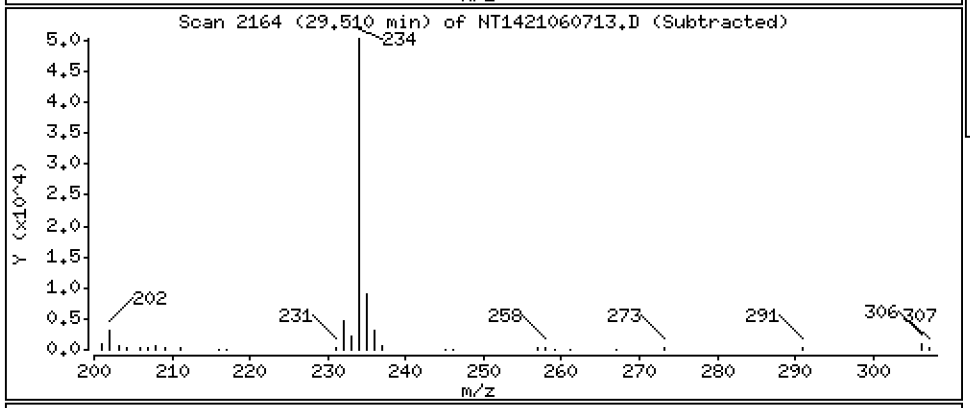
Column diameter: 0.25

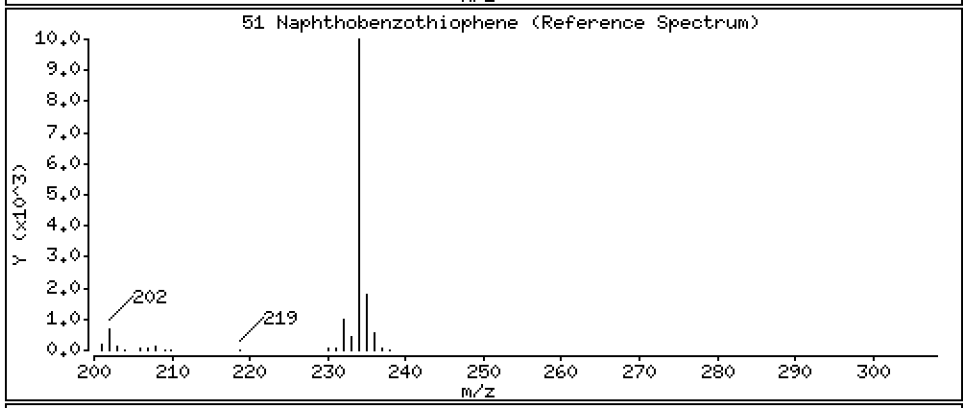
51 Naphthobenzothiophene

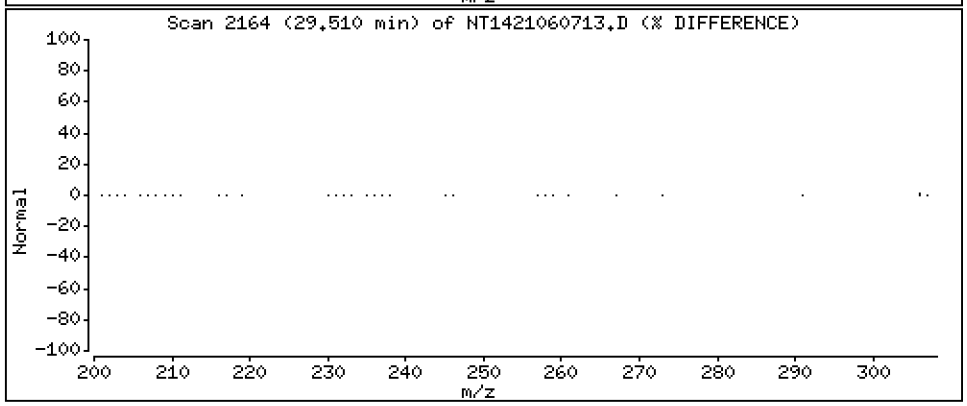
Concentration: 1.875 ug/mL











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Date : 07-JUN-2021 22:07

Client ID:

Instrument: nt14.i

Sample Info: BJE0383-MSD1

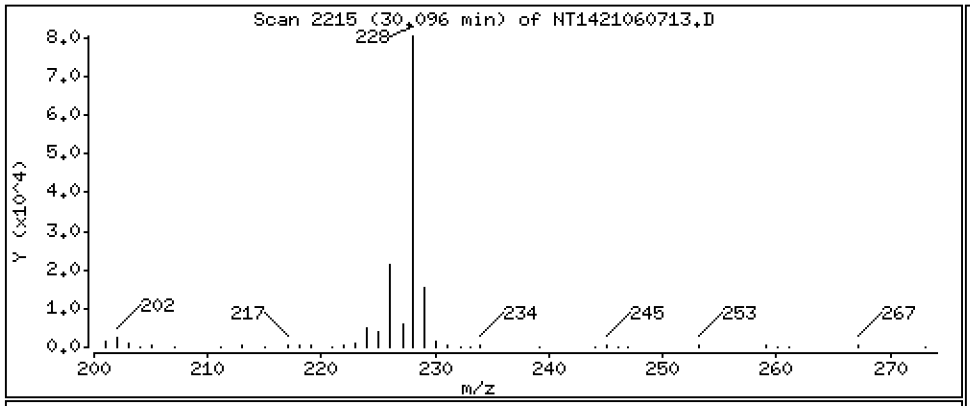
Operator: VTS

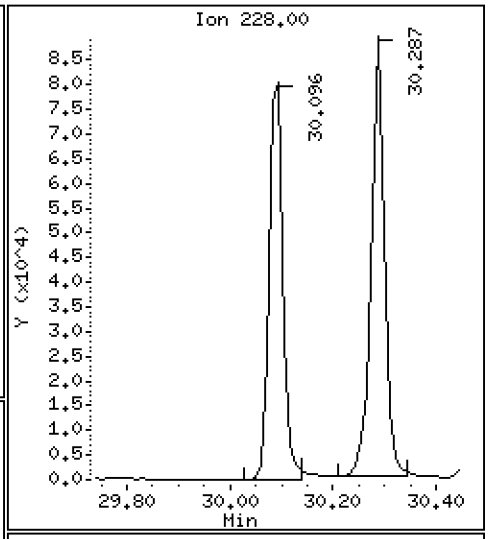
Column phase: Rxi-17Sil MS

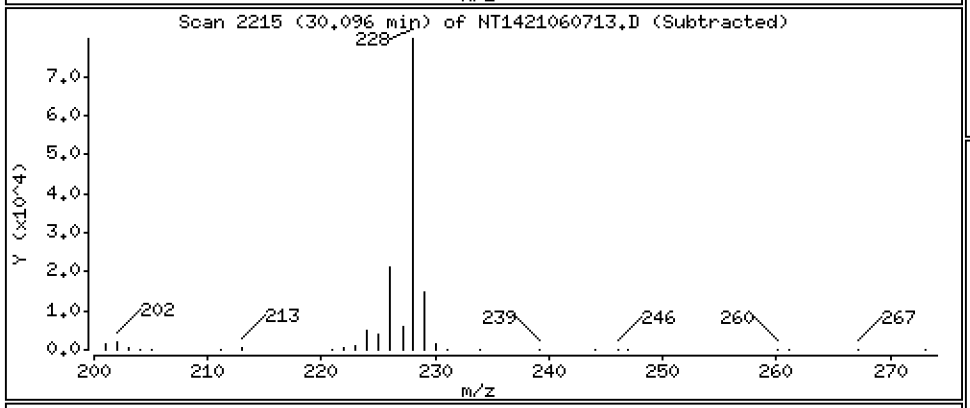
Column diameter: 0.25

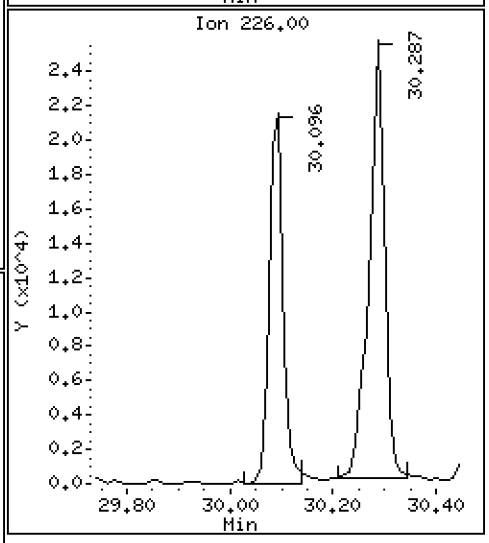
55 Benzo(a)anthracene

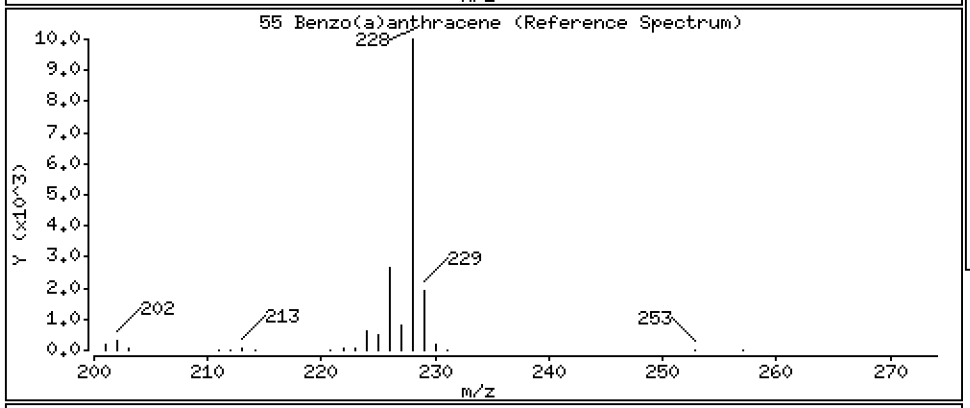
Concentration: 3.928 ug/mL

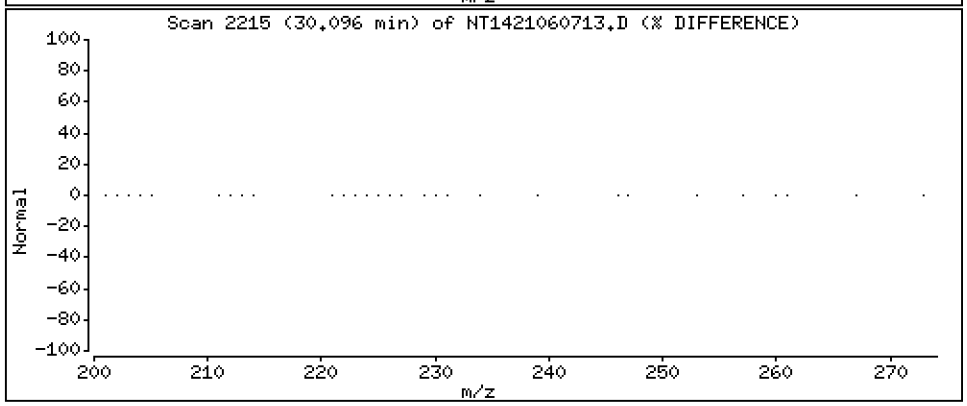












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Date : 07-JUN-2021 22:07

Client ID:

Instrument: nt14.i

Sample Info: BJE0383-MSD1

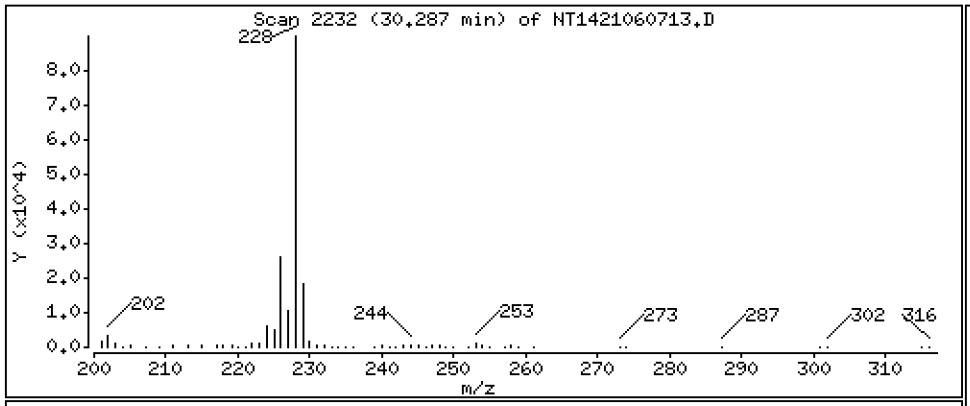
Operator: VTS

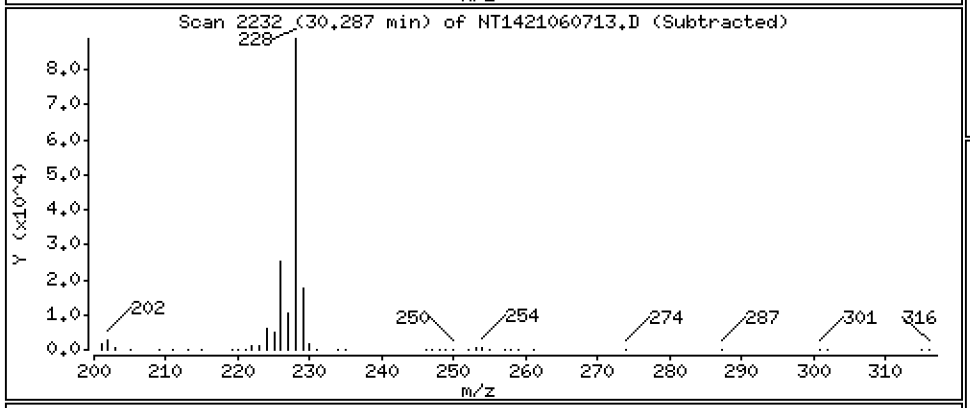
Column phase: Rxi-17Sil MS

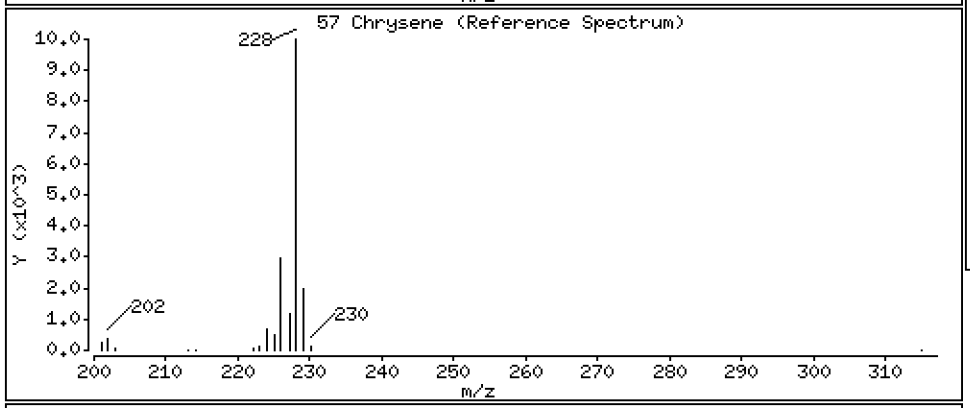
Column diameter: 0.25

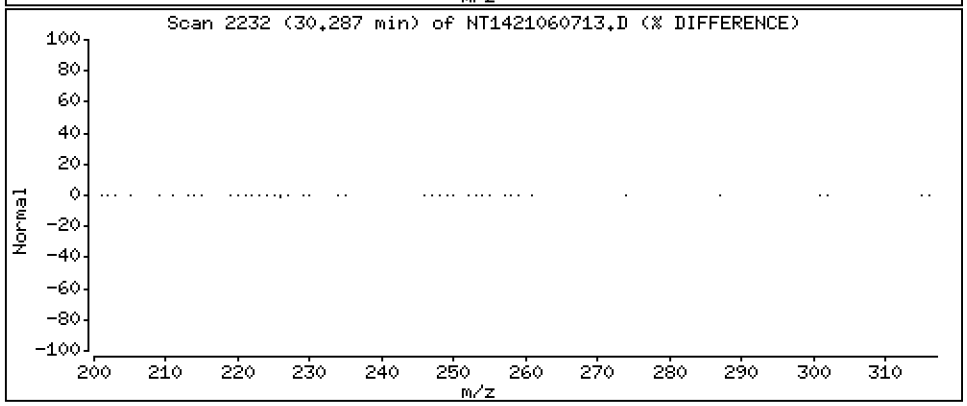
57 Chrysene

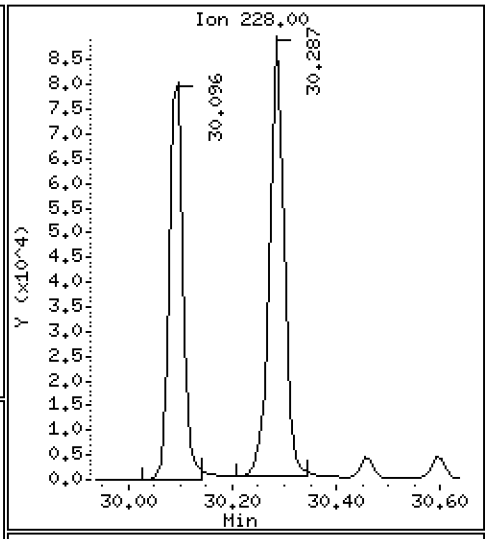
Concentration: 4.224 ug/mL

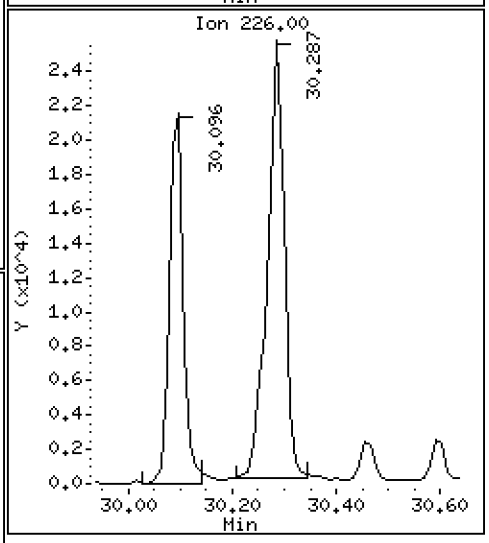












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Date : 07-JUN-2021 22:07

Client ID:

Instrument: nt14.i

Sample Info: BJE0383-MSD1

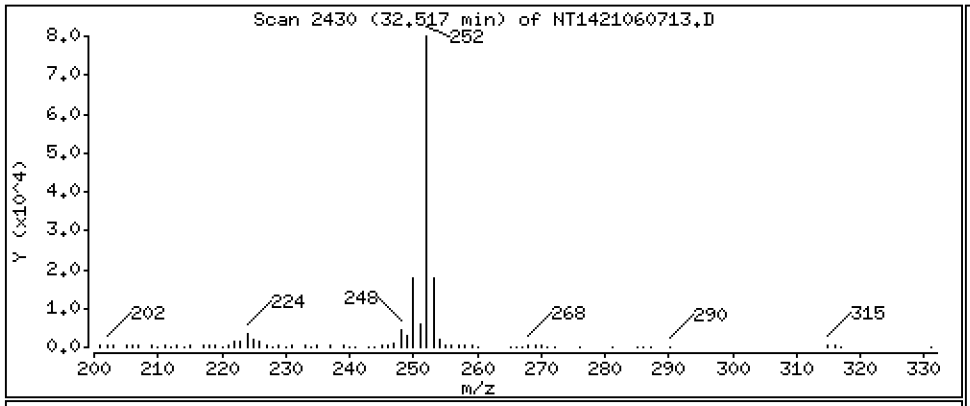
Operator: VTS

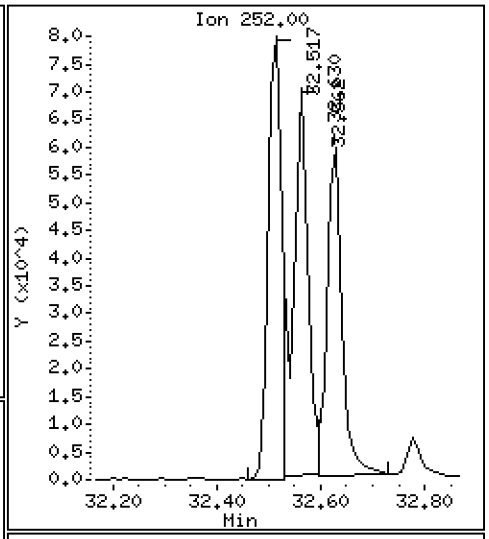
Column phase: Rxi-17Sil MS

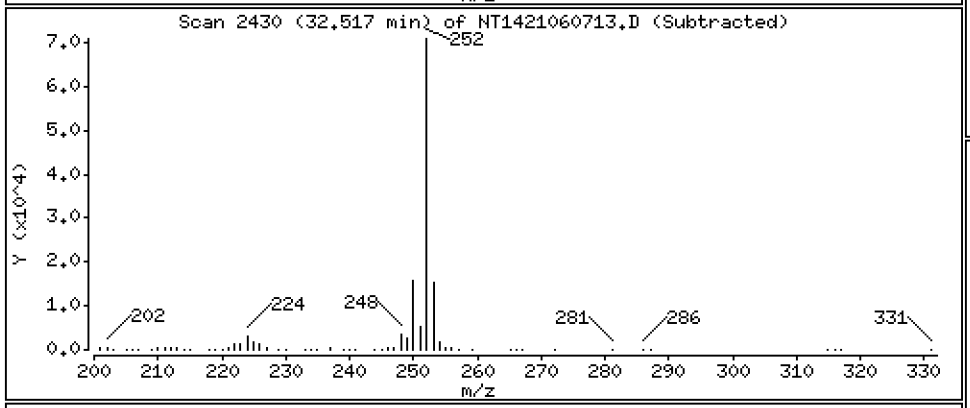
Column diameter: 0.25

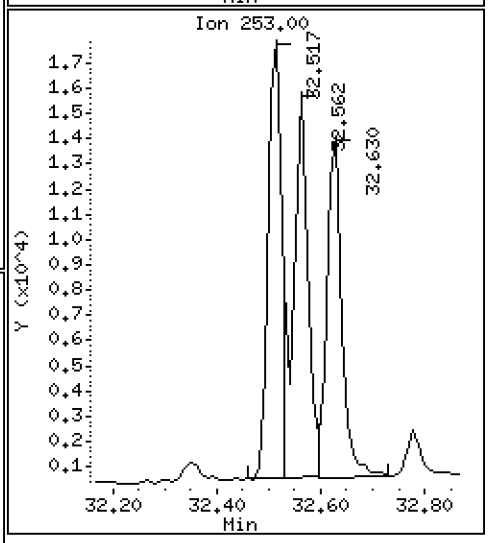
62 Benzo(b)fluoranthene

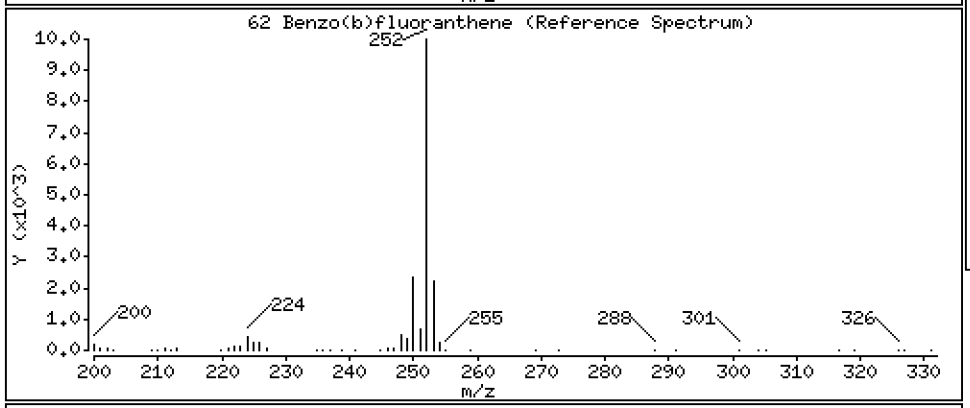
Concentration: 3.466 ug/mL

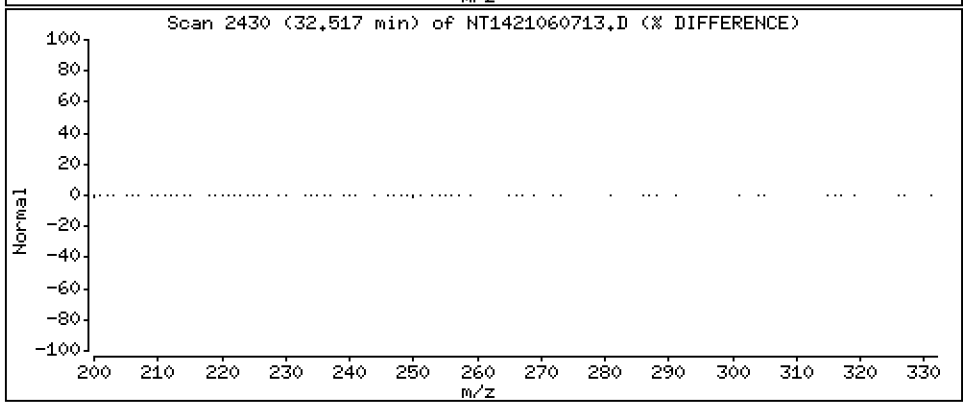












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Date : 07-JUN-2021 22:07

Client ID:

Instrument: nt14.i

Sample Info: BJE0383-MSD1

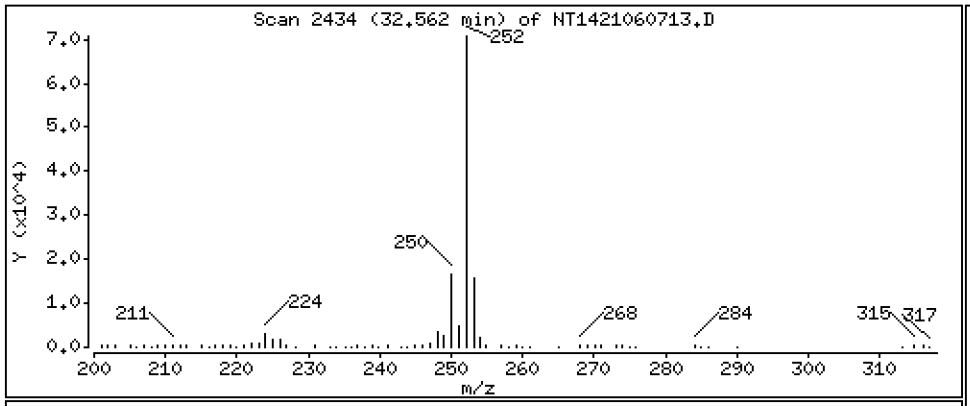
Operator: VTS

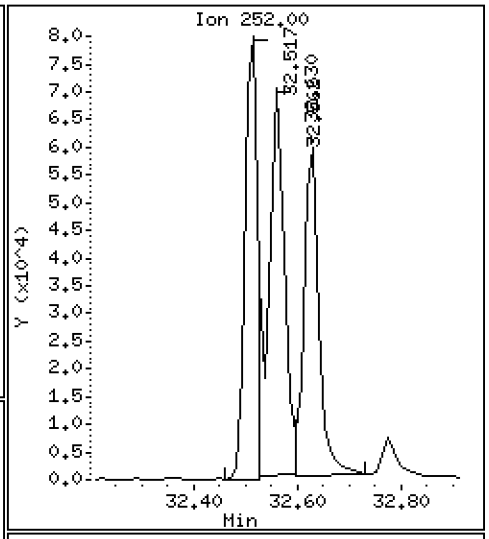
Column phase: Rxi-17Sil MS

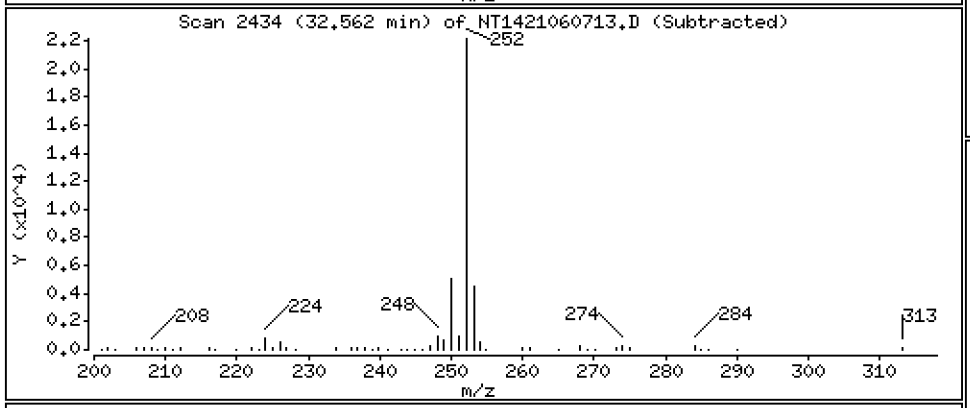
Column diameter: 0.25

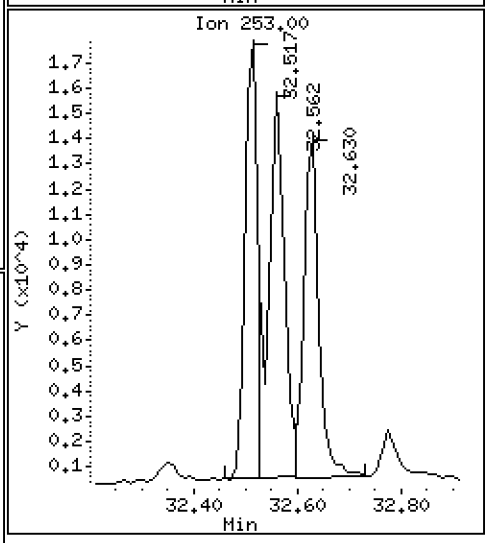
63 Benzo(k)fluoranthene

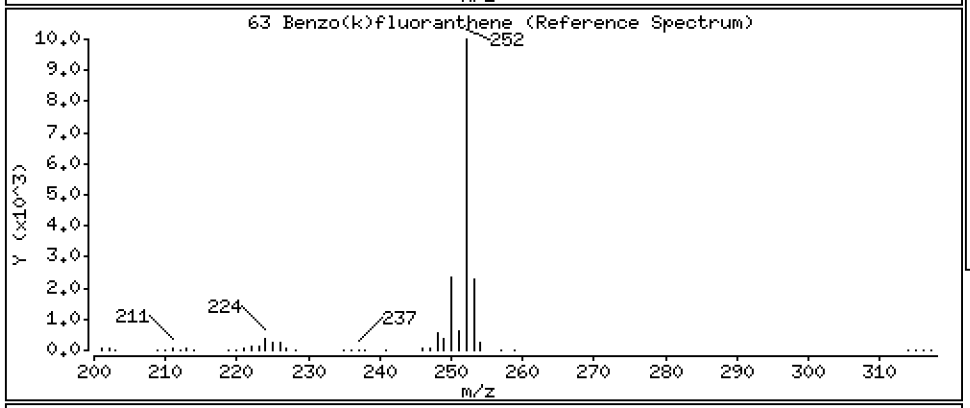
Concentration: 3.557 ug/mL

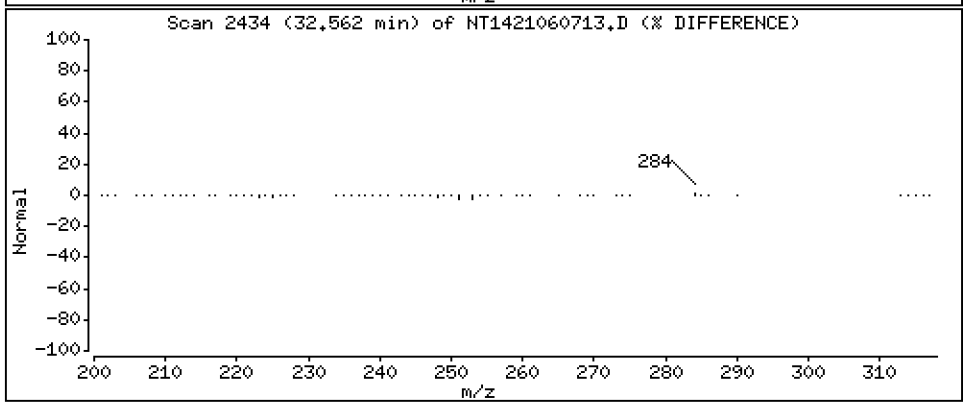












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Date : 07-JUN-2021 22:07

Client ID:

Instrument: nt14.i

Sample Info: BJE0383-MSD1

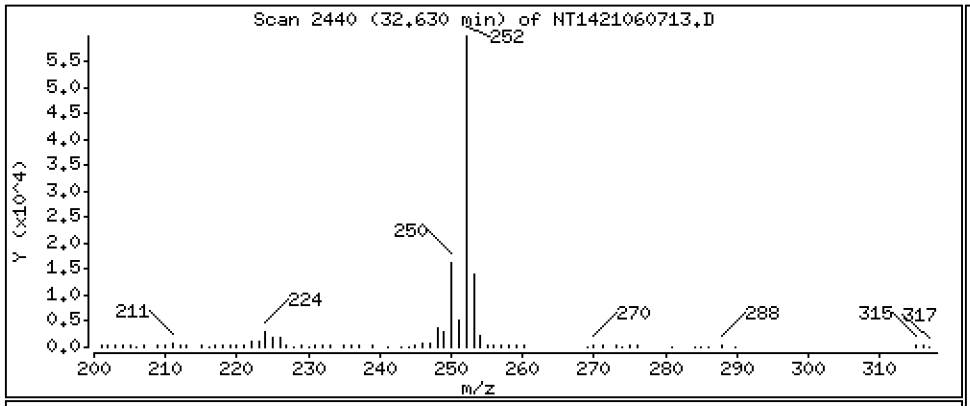
Operator: VTS

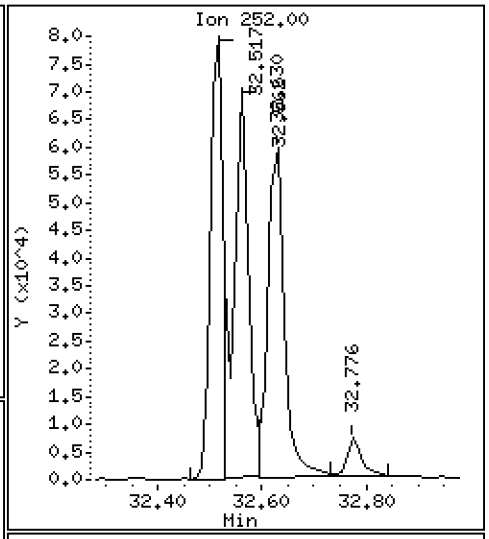
Column phase: Rxi-17Sil MS

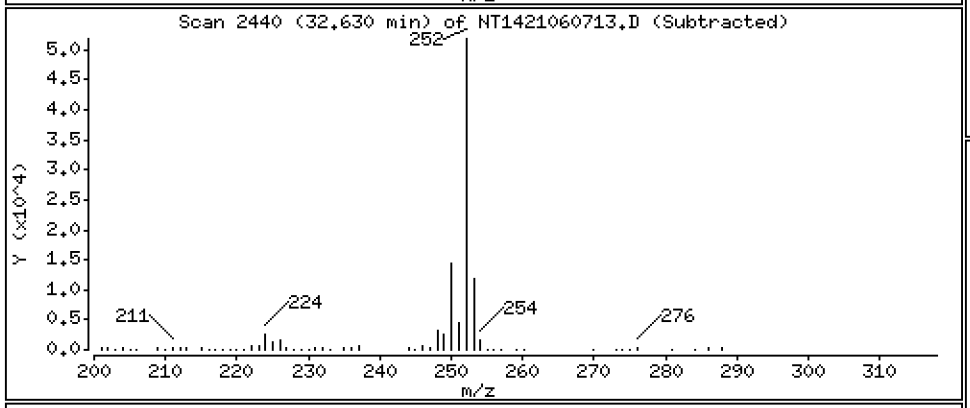
Column diameter: 0.25

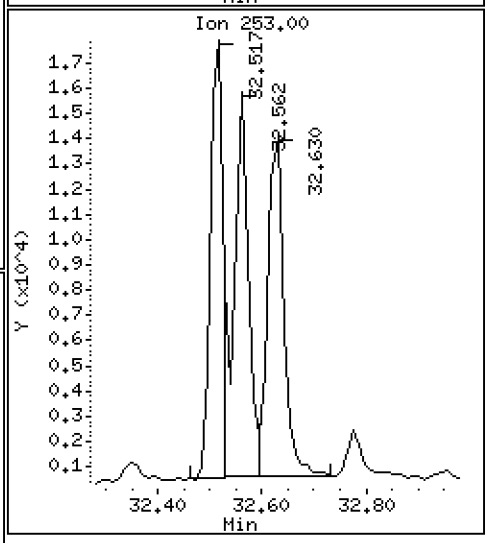
293 Benzo(j)fluoranthene

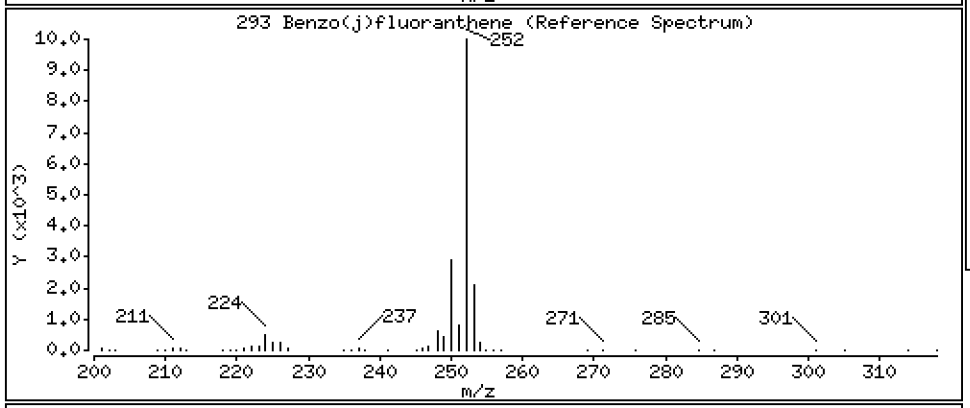
Concentration: 3.152 ug/mL

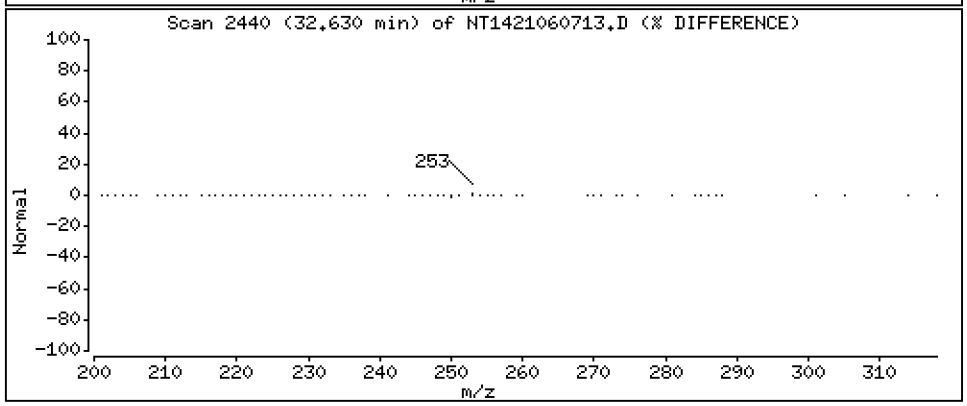












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Date : 07-JUN-2021 22:07

Client ID:

Instrument: nt14.i

Sample Info: BJE0383-MSD1

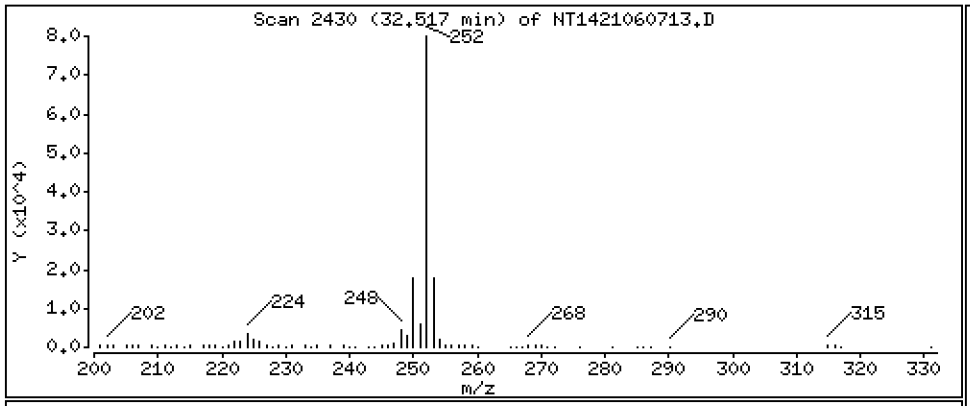
Operator: VTS

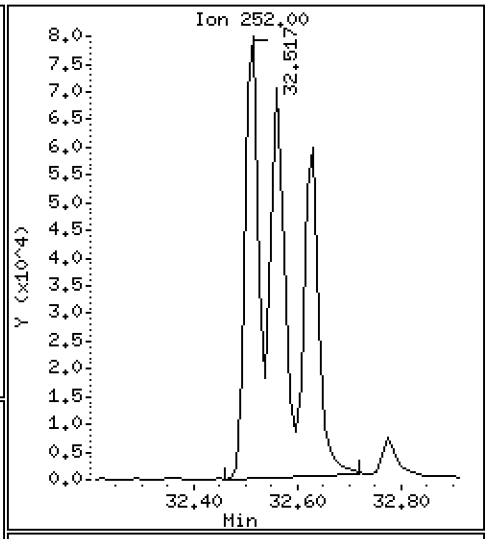
Column phase: Rxi-17Sil MS

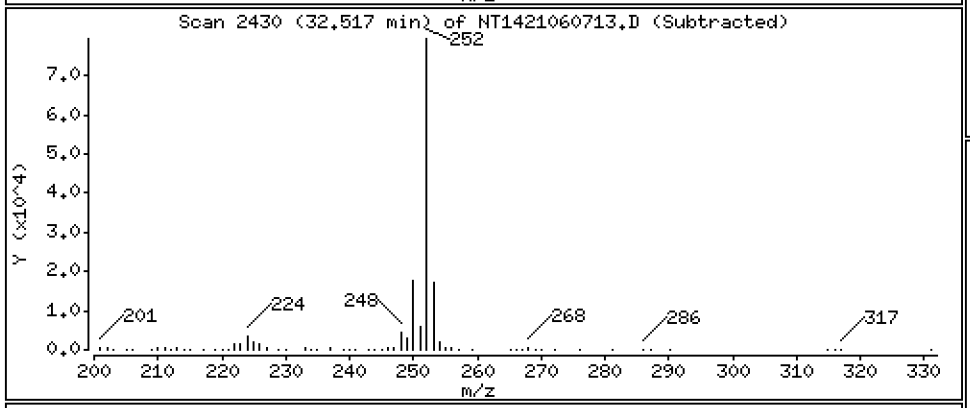
Column diameter: 0.25

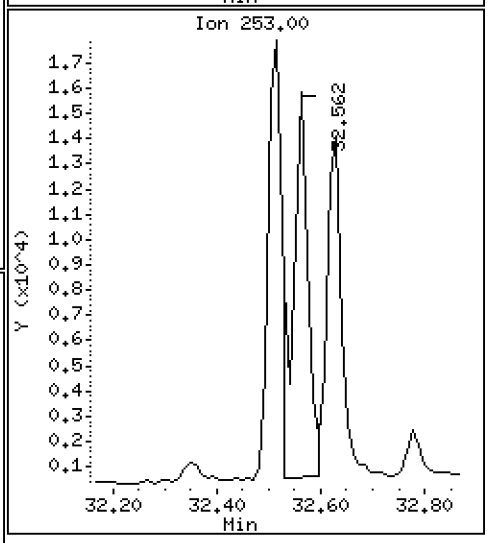
246 Total Benzofluoranthenes

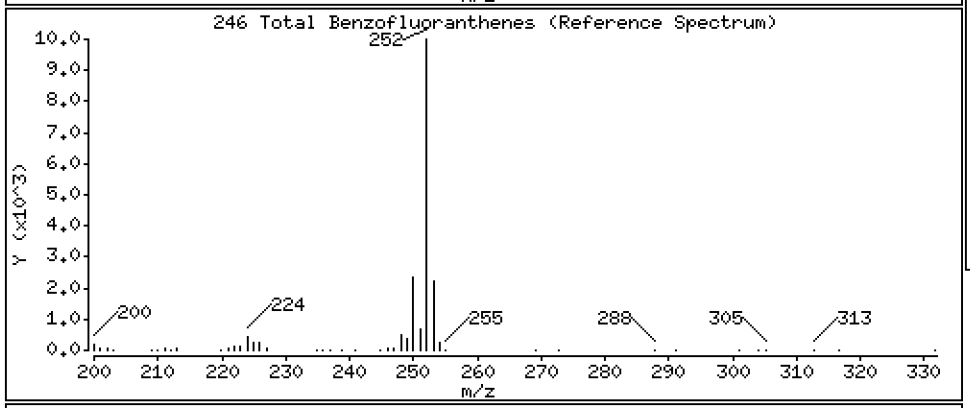
Concentration: 9.896 ug/mL

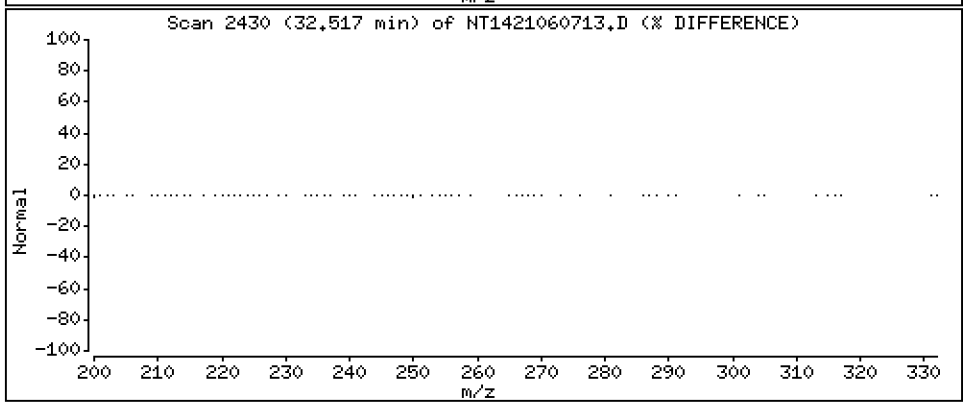












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Date : 07-JUN-2021 22:07

Client ID:

Instrument: nt14.i

Sample Info: BJE0383-MSD1

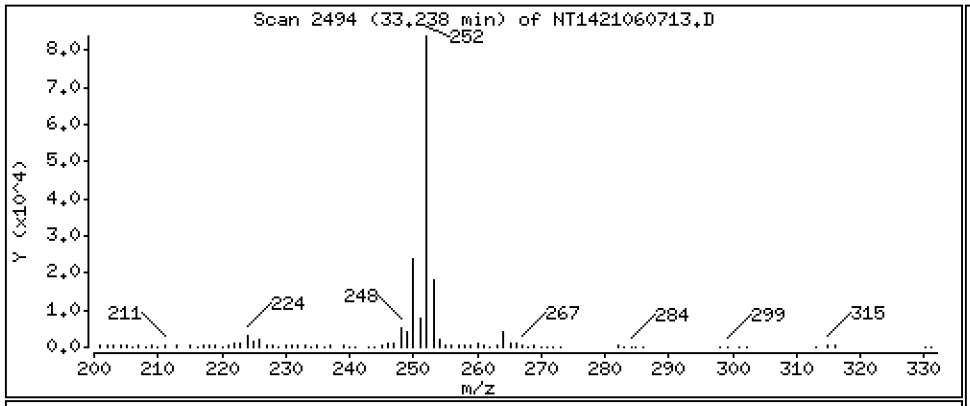
Operator: VTS

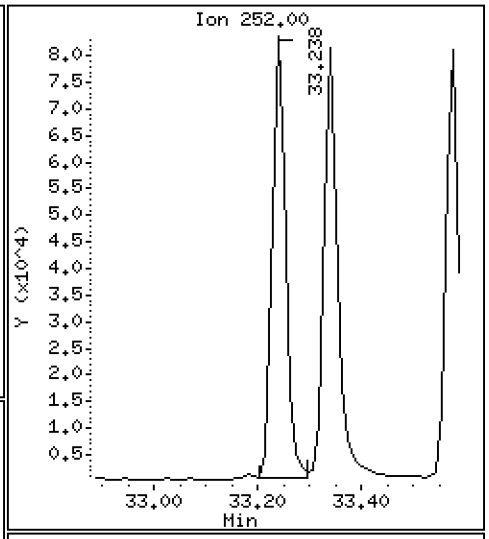
Column phase: Rxi-17Sil MS

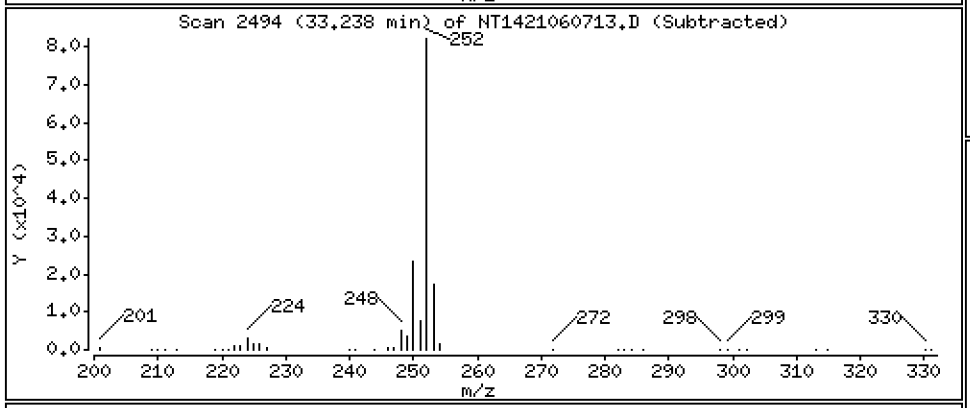
Column diameter: 0.25

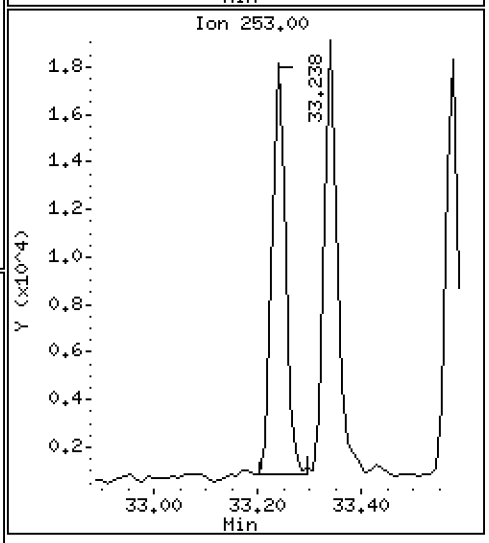
64 Benzo(e)pyrene

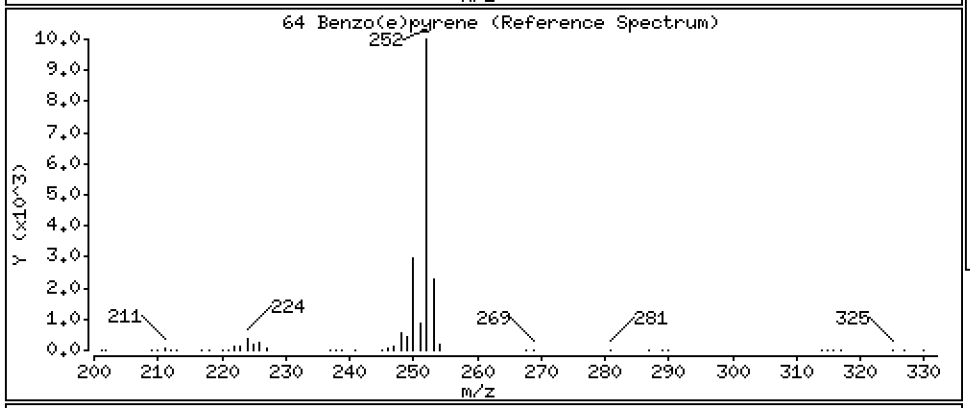
Concentration: 3.523 ug/mL

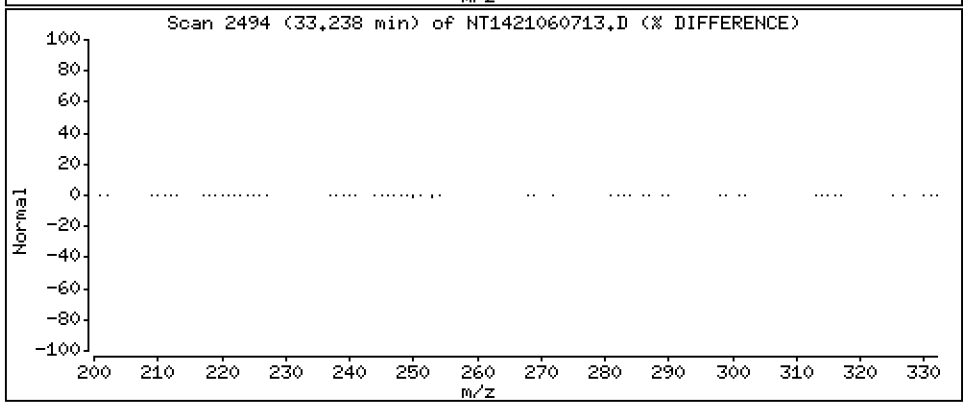












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Date : 07-JUN-2021 22:07

Client ID:

Instrument: nt14.i

Sample Info: BJE0383-MSD1

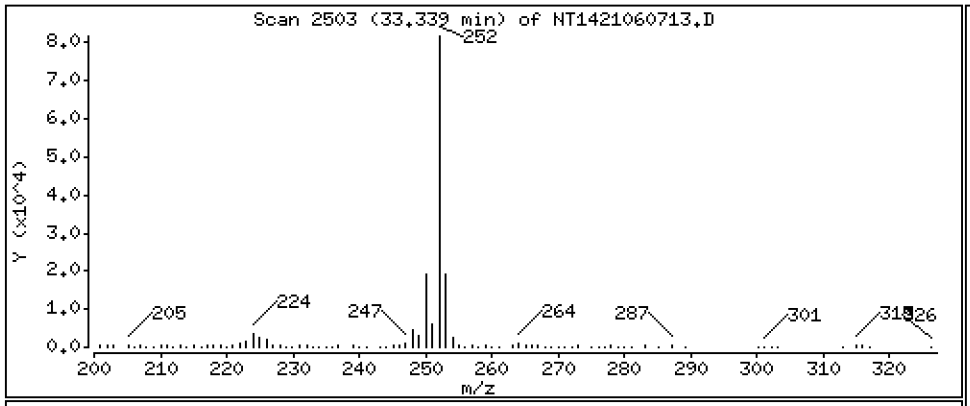
Operator: VTS

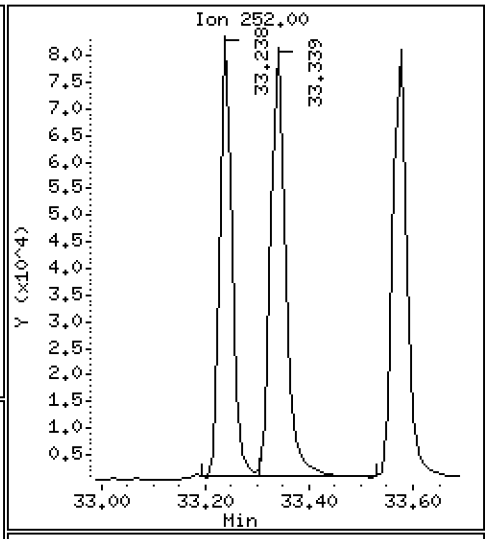
Column phase: Rxi-17Sil MS

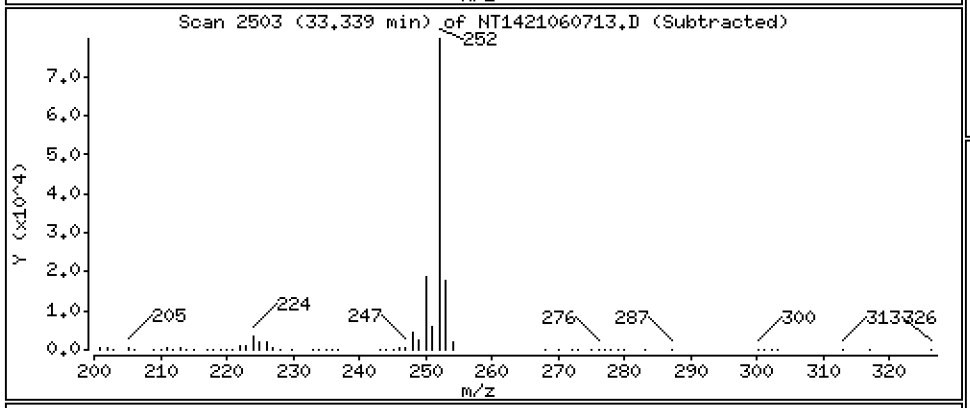
Column diameter: 0.25

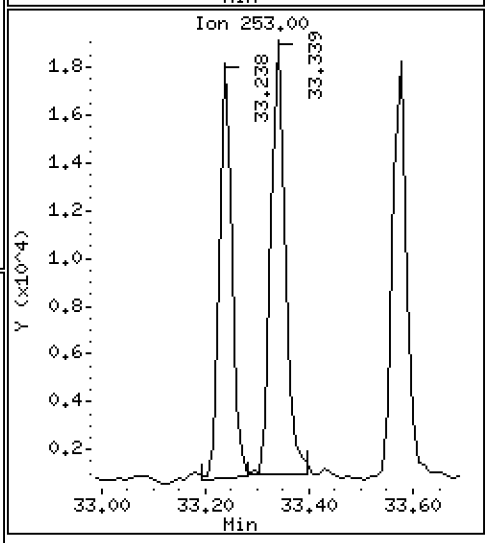
66 Benzo(a)pyrene

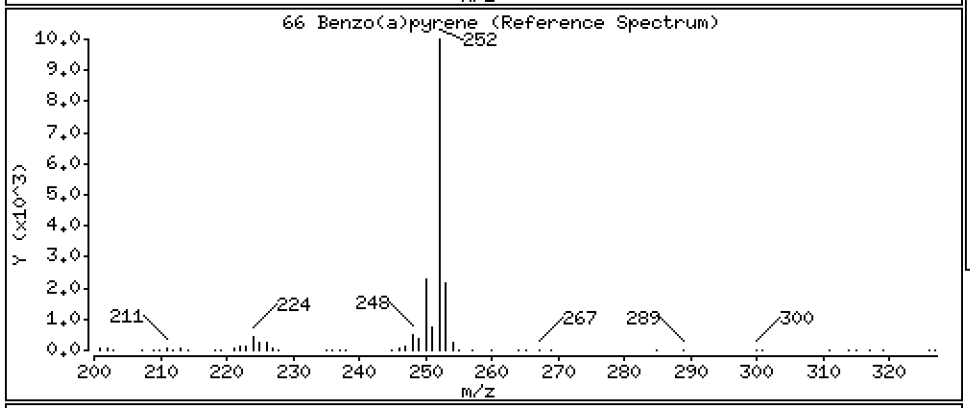
Concentration: 4.230 ug/mL

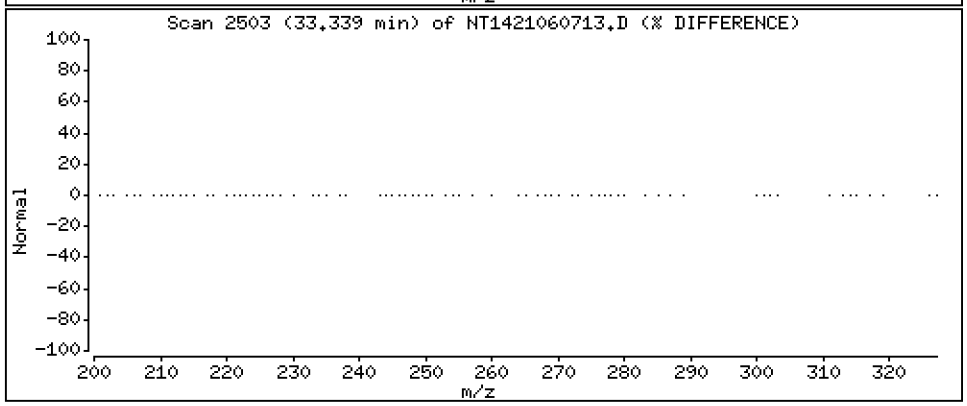












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Date : 07-JUN-2021 22:07

Client ID:

Instrument: nt14.i

Sample Info: BJE0383-MSD1

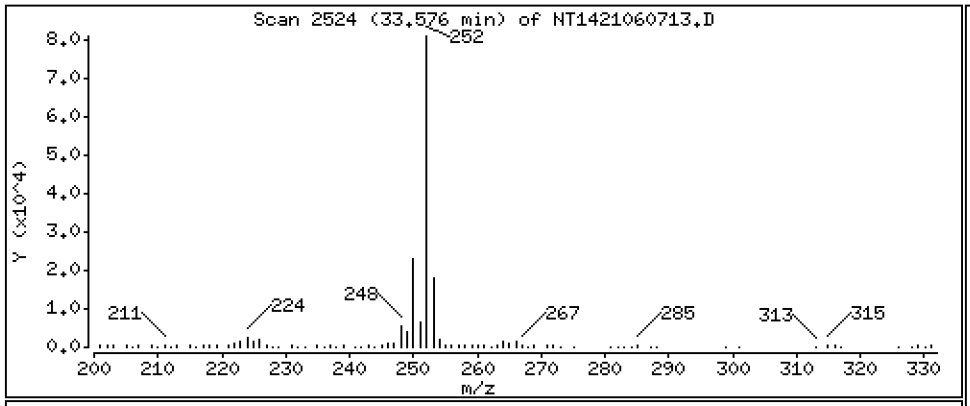
Operator: VTS

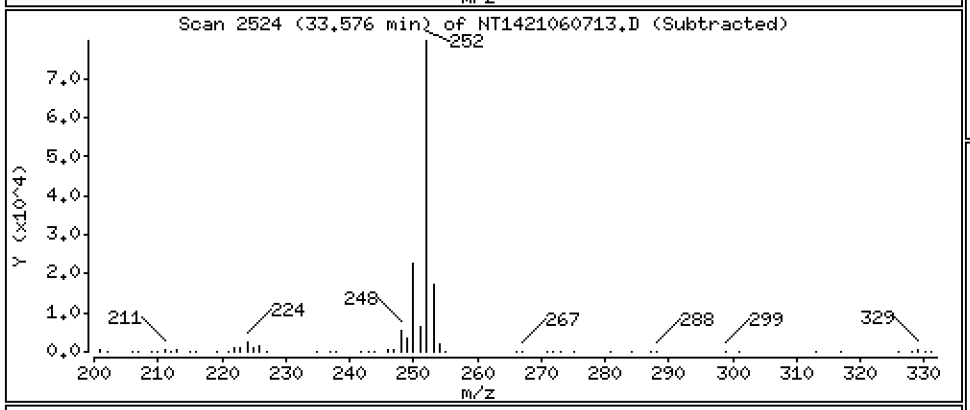
Column phase: Rxi-17Sil MS

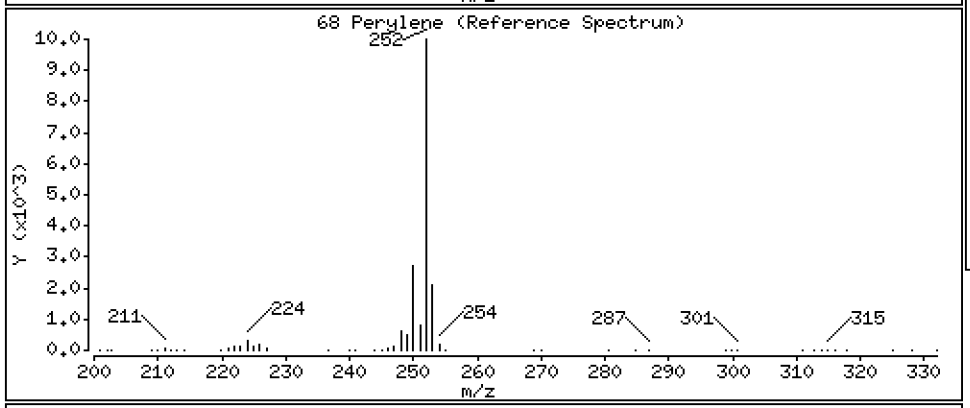
Column diameter: 0.25

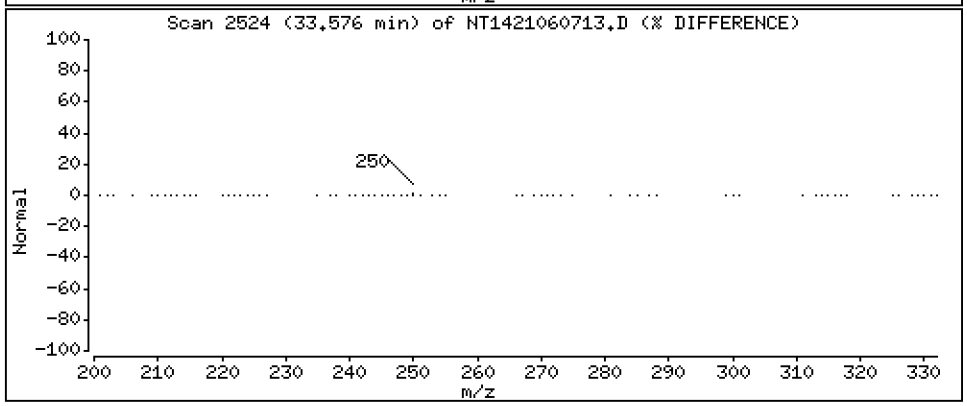
68 Perylene

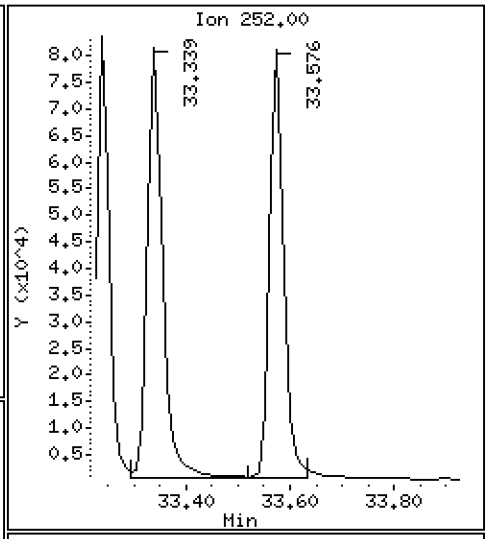
Concentration: 3.798 ug/mL

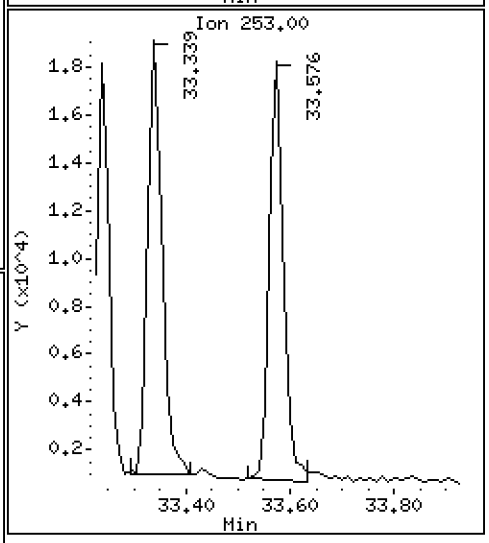












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Date : 07-JUN-2021 22:07

Client ID:

Instrument: nt14.i

Sample Info: BJE0383-MSD1

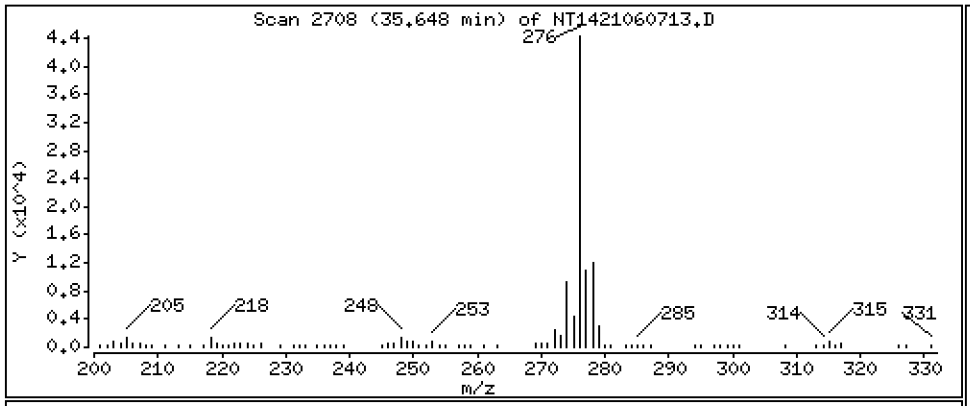
Operator: VTS

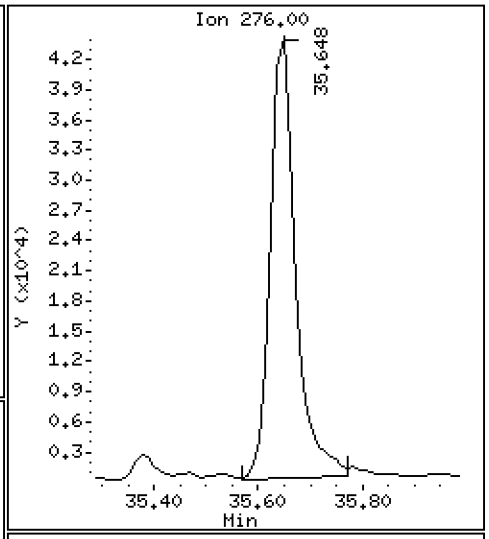
Column phase: Rxi-17Sil MS

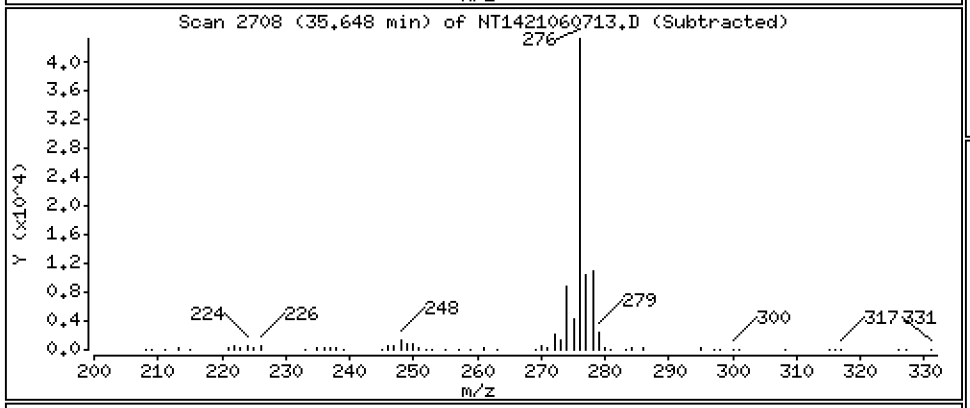
Column diameter: 0.25

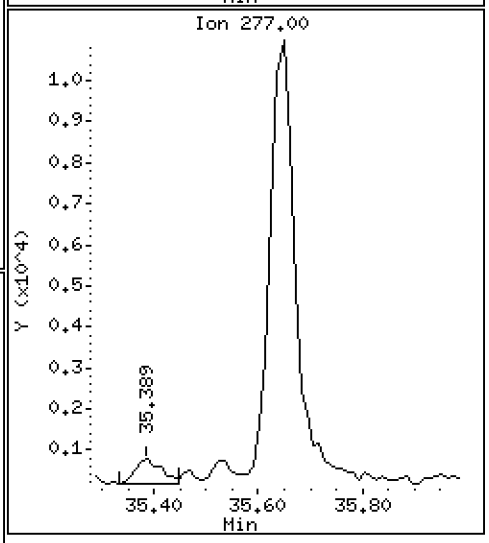
69 Indeno(1,2,3-cd)pyrene

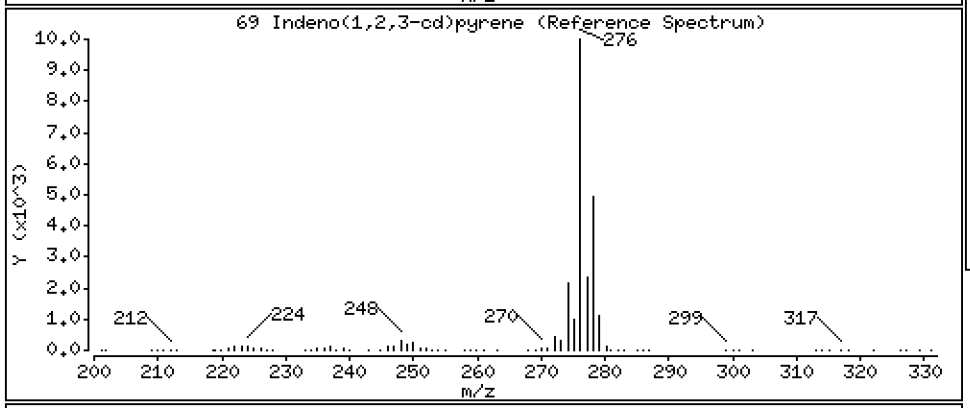
Concentration: 3.381 ug/mL

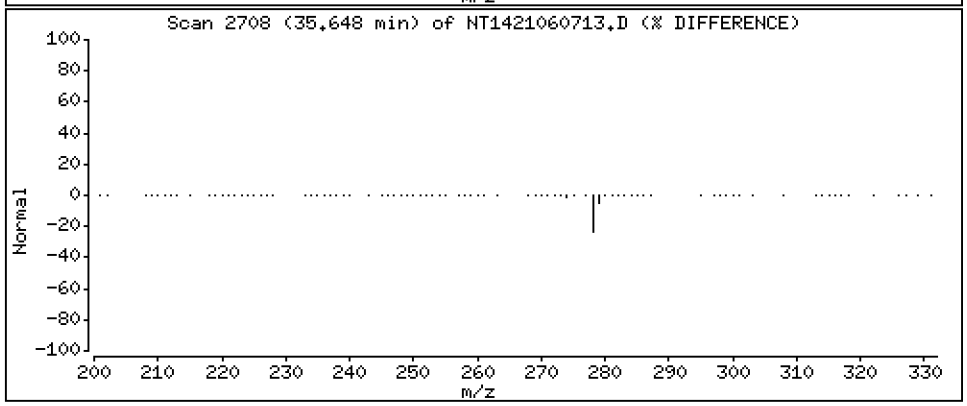












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Date : 07-JUN-2021 22:07

Client ID:

Instrument: nt14.i

Sample Info: BJE0383-MSD1

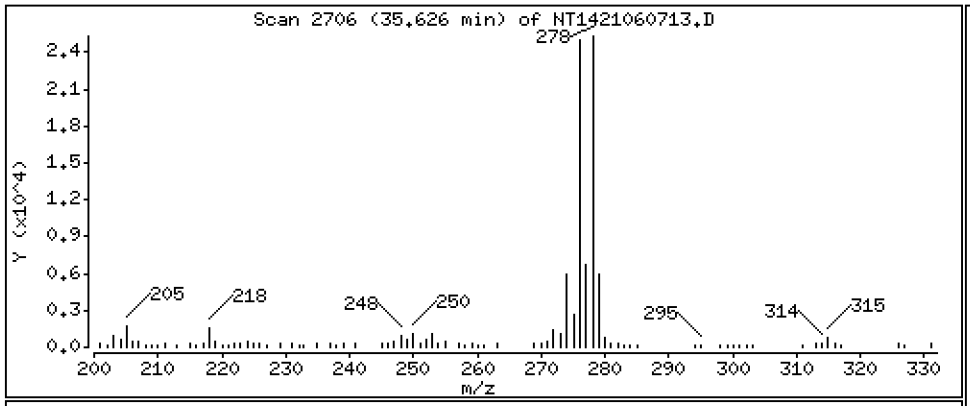
Operator: VTS

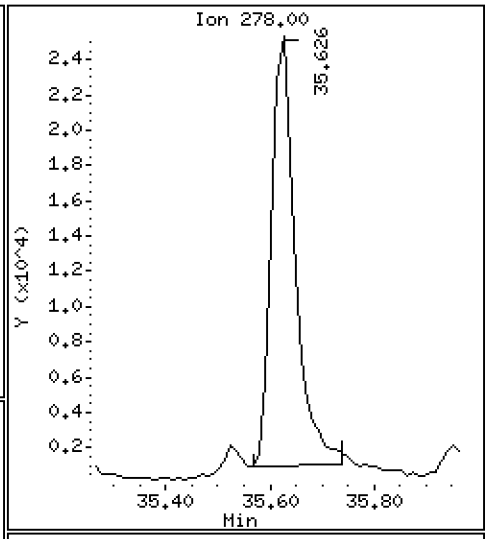
Column phase: Rxi-17Sil MS

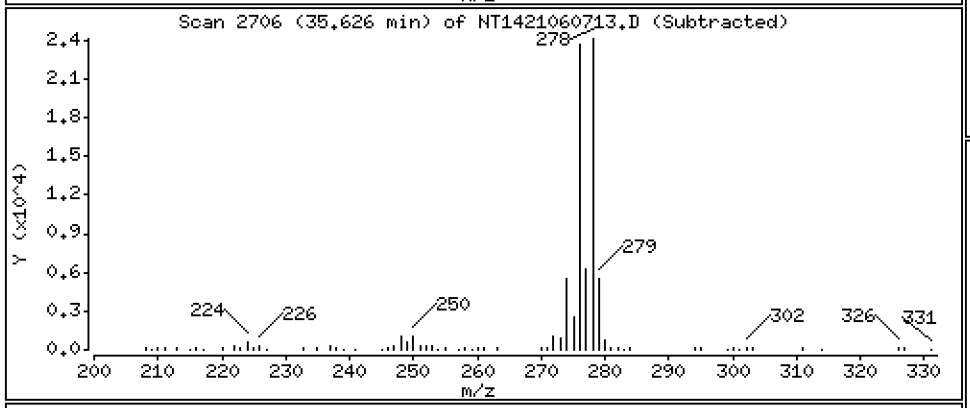
Column diameter: 0.25

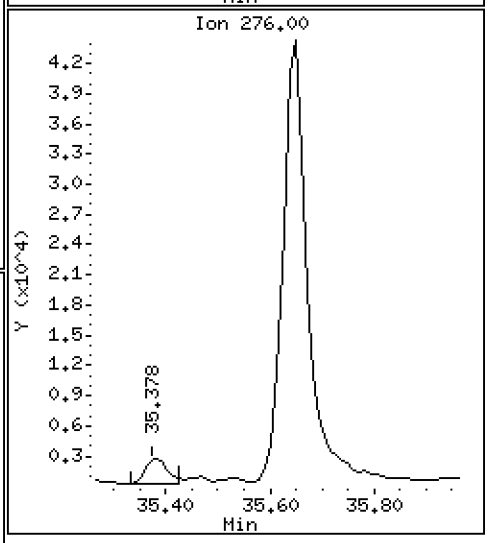
70 Dibenzo(a,h)anthracene

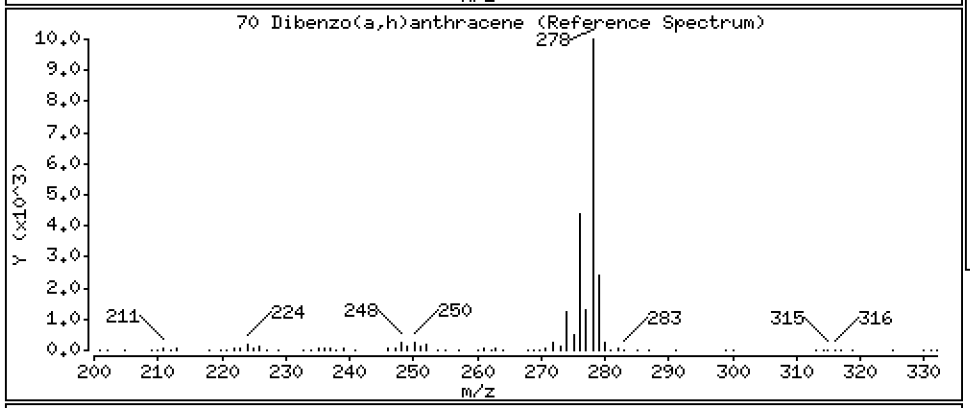
Concentration: 1.901 ug/mL

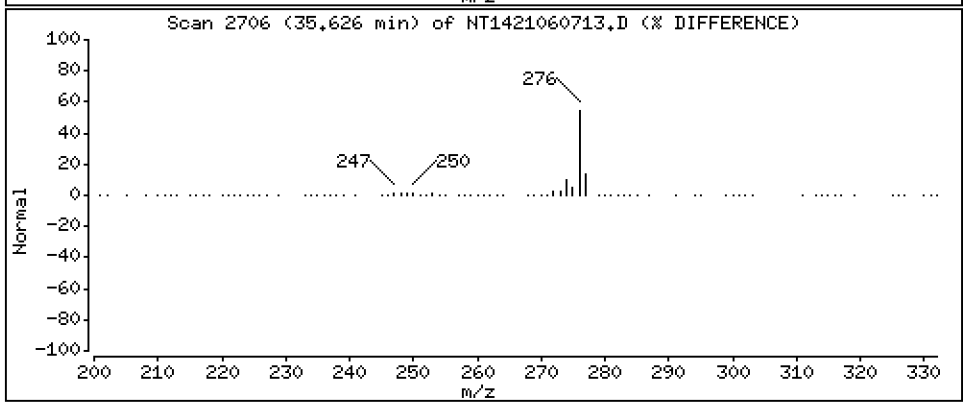












Data File: \\target\share\chem3\nt14.i\20210607.b\NT1421060713.D

Date : 07-JUN-2021 22:07

Client ID:

Instrument: nt14.i

Sample Info: BJE0383-MSD1

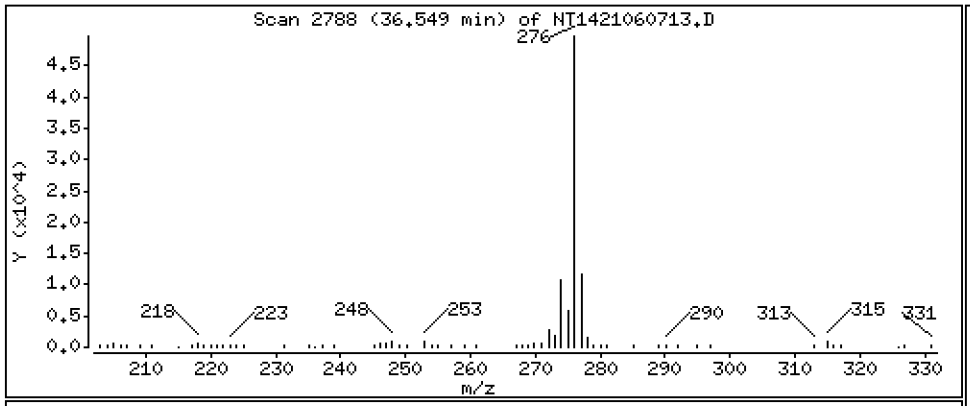
Operator: VTS

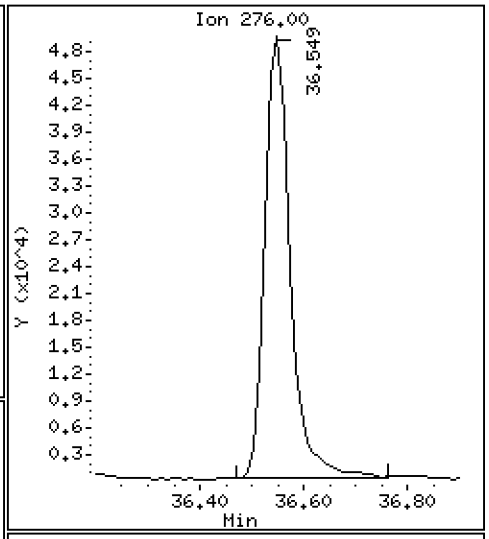
Column phase: Rxi-17Sil MS

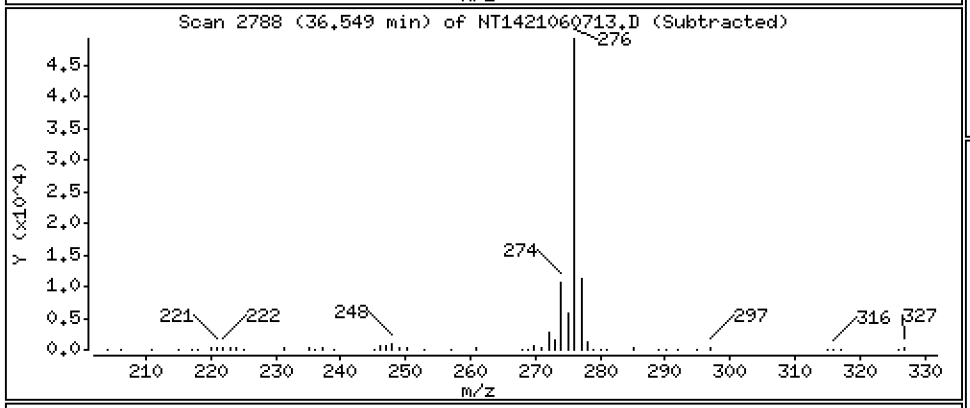
Column diameter: 0.25

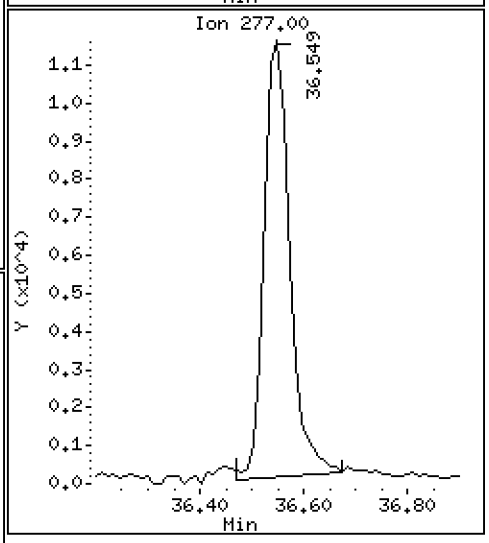
74 Benzo(g,h,i)perylene

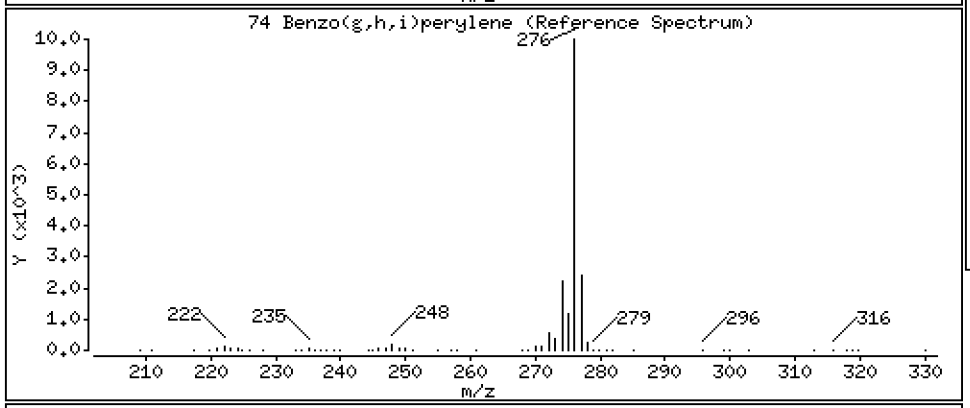
Concentration: 3.867 ug/mL

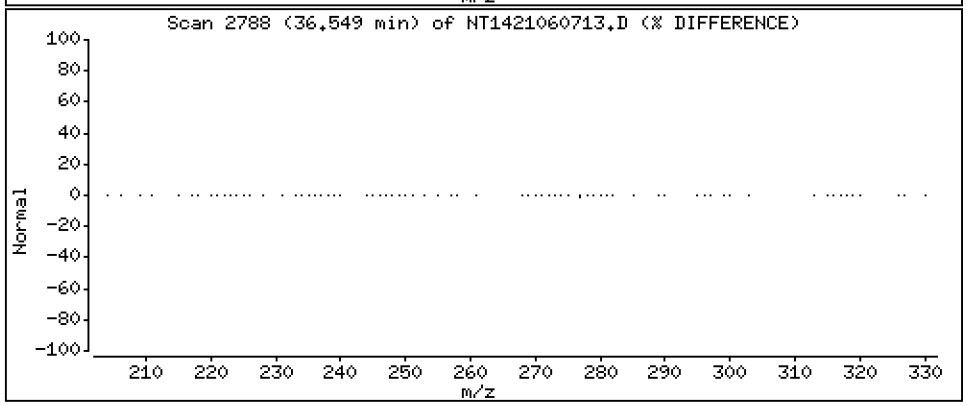












ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt14.i\20210607.b\NT1421060713.D
Lab Smp Id: BJE0383-MSD1
Inj Date : 07-JUN-2021 22:07
Operator : VTS Inst ID: nt14.i
Smp Info : BJE0383-MSD1
Misc Info :
Comment : 1ul Injection
Method : \\target\share\chem3\nt14.i\20210607.b\ALKYLPNA.m
Meth Date : 12-Jun-2021 14:57 yev Quant Type: ISTD
Cal Date : 29-MAY-2021 18:49 Cal File: NT1421052914.D
Als bottle: 40
Dil Factor: 5.00000
Integrator: HP RTE Compound Sublist: TARGETS.sub
Target Version: 4.14
Processing Host: ORGDATA102

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/mL)
	1 trans-Decalin	138	7.136	7.136	(0.378)	5679	0.29910	1.496
	2 cis-Decalin	138	8.256	8.255	(0.437)	4441	0.33898	1.695
$	6 Naphthalene-d8	136	11.887	11.887	(0.629)	52845	0.29857	1.493(R)
	7 Naphthalene	128	11.957	11.957	(0.633)	63225	0.35742	1.787
	12 Benzo(b)thiophene	134	12.409	12.409	(0.657)	48274	0.33196	1.660
	16 2-Methylnaphthalene	141	13.794	13.794	(0.730)	40807	0.39462	1.973
	17 1-methylnaphthalene	141	14.244	14.244	(0.754)	36688	0.36468	1.823
	18 Biphenyl	154	15.431	15.431	(0.817)	60880	0.39843	1.992
	19 2,6-Dimethylnaphthalene	156	15.508	15.508	(0.821)	46321	0.41223	2.061
	20 Acenaphthylene	152	17.080	17.080	(0.904)	75838	0.39482	1.974
$	21 Acenaphthene-d10	164	17.366	17.365	(0.919)	37681	0.34663	1.733(R)
	22 Acenaphthene	153	17.486	17.486	(0.925)	53617	0.45280	2.264
	23 Dibenzofuran	168	17.860	17.860	(0.945)	74698	0.42528	2.126
	24 1,6,7-Trimethylnaphthalene	170	18.080	18.080	(0.957)	48671	0.42531	2.127
*	25 Fluorene-d10	176	18.896	18.896	(1.000)	380730	2.00000	
	26 Fluorene	166	19.009	19.009	(1.006)	66027	0.48518	2.426
	30 Dibenzothiophene	184	21.931	21.931	(1.161)	88742	0.46189	2.309
$	35 Phenanthrene-d10	188	22.239	22.238	(0.995)	70055	0.35985	1.799(R)
	36 Phenanthrene	178	22.316	22.326	(0.999)	147983	0.70928	3.546
*	250 Anthracene-d10	188	22.349	22.359	(1.000)	404652	2.00000	
	37 Anthracene	178	22.414	22.425	(1.003)	187550	0.95540	4.777
	42 Carbazole	167	23.701	23.701	(1.061)	100095	0.53857	2.693
	43 1-Methylphenanthrene	192	24.151	24.151	(1.081)	71061	0.47394	2.370
	44 Fluoranthene	202	26.131	26.130	(1.169)	223299	0.96965	4.848
	46 Pyrene	202	26.977	26.977	(1.207)	239545	1.00015	5.001
	51 Naphthobenzothiophene	234	29.509	29.509	(1.320)	96510	0.37502	1.875
	55 Benzo(a)anthracene	228	30.095	30.095	(0.907)	152826	0.78553	3.928
$	56 Chrysene-d12	240	30.219	30.219	(0.911)	62996	0.40121	2.006(R)
	57 Chrysene	228	30.287	30.286	(0.913)	161068	0.84489	4.224
	62 Benzo(b)fluoranthene	252	32.517	32.517	(0.980)	139864	0.69318	3.466
	63 Benzo(k)fluoranthene	252	32.562	32.562	(0.981)	154000	0.71134	3.557
	293 Benzo(j)fluoranthene	252	32.629	32.629	(0.983)	125741	0.63032	3.152
	246 Total Benzofluoranthenes	252	32.517	32.562	(0.980)	391134	1.97913	9.896(M)

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/mL)
* 251 Benzo(e)pyrene-d12	264	33.181	33.181	(1.000)	501609	2.00000	
64 Benzo(e)pyrene	252	33.238	33.237	(1.002)	139337	0.70458	3.523
66 Benzo(a)pyrene	252	33.339	33.339	(1.005)	152210	0.84607	4.230
$ 67 Perylene-d12	264	33.519	33.519	(1.010)	67396	0.39762	1.988(R)
68 Perylene	252	33.575	33.575	(1.012)	140895	0.75961	3.798
69 Indeno(1,2,3-cd)pyrene	276	35.648	35.636	(1.074)	142788	0.67618	3.381(M)
70 Dibenzo(a,h)anthracene	278	35.625	35.614	(1.074)	74575	0.38012	1.901(M)
74 Benzo(g,h,i)perylene	276	36.549	36.549	(1.101)	161331	0.77333	3.867

QC Flag Legend

R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt14.i
Lab File ID: NT1421060713.D
Lab Smp Id: BJE0383-MSD1
Analysis Type: SV
Quant Type: ISTD
Operator: VTS
Method File: \\target\share\chem3\nt14.i\20210607.b\ALKYLPNA.m
Misc Info:

Calibration Date: 07-JUN-2021
Calibration Time: 13:18
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
25 Fluorene-d10	323874	161937	647748	380730	17.55
250 Anthracene-d10	339912	169956	679824	404652	19.05
251 Benzo(e)pyrene-d1	416427	208214	832854	501609	20.46

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
25 Fluorene-d10	18.90	18.40	19.40	18.90	0.00
250 Anthracene-d10	22.36	21.86	22.86	22.35	-0.05
251 Benzo(e)pyrene-d1	33.18	32.68	33.68	33.18	0.00

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

REVIEW SUMMARY FOR FILE - NT1421060713.D

Lab ID: BJE0383-MSD1
nt14.i, 20210607.b\ALKYLPNA.m, 07-JUN-2021 22:07

RT	CO-ELUTION COMPOUNDS
	NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
NONE			

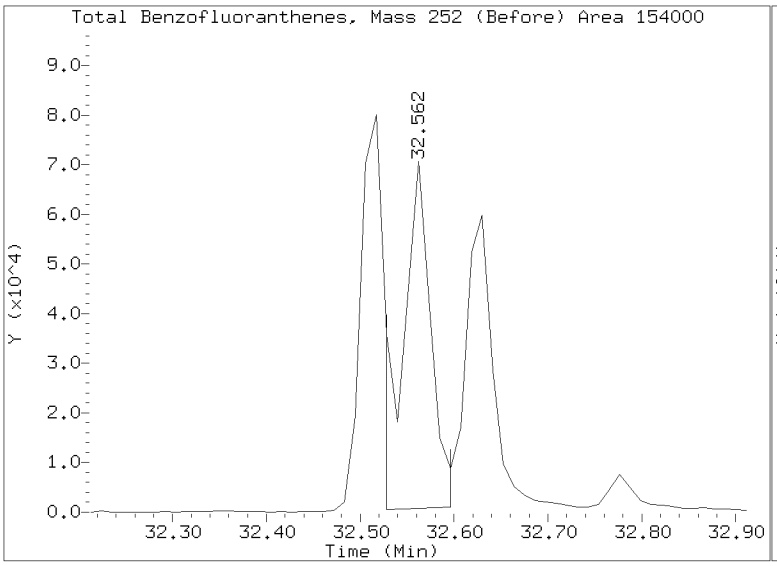
RRT check based on Ccal File: NT1421060702.D

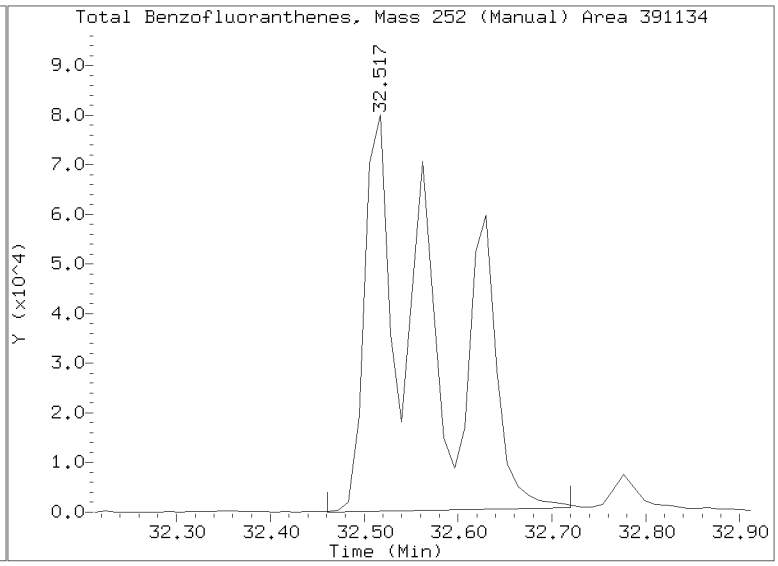
On Column LOD for nt14.i, 20210607.b\ALKYLPNA.m, TARGETS.sub = 0.0000

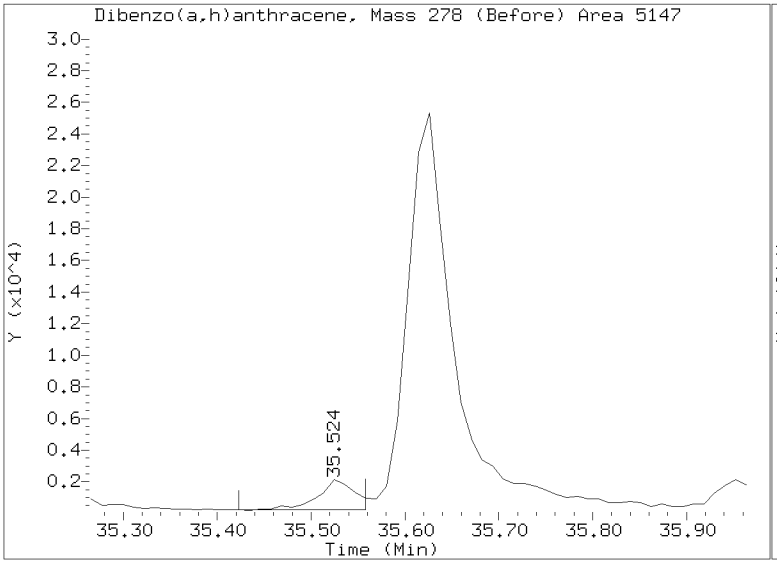
* Only compounds listed in the work order have been verified by the analyst *

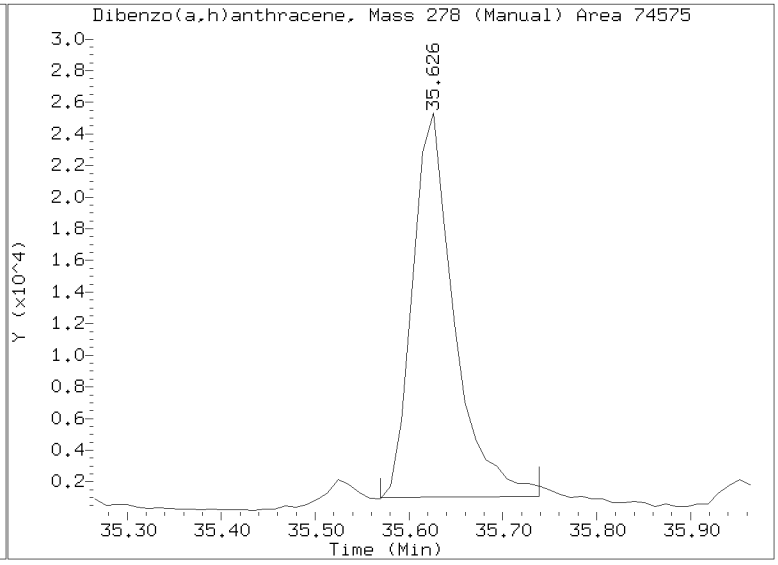
Quant Ion Manual Peak Adjustment Report

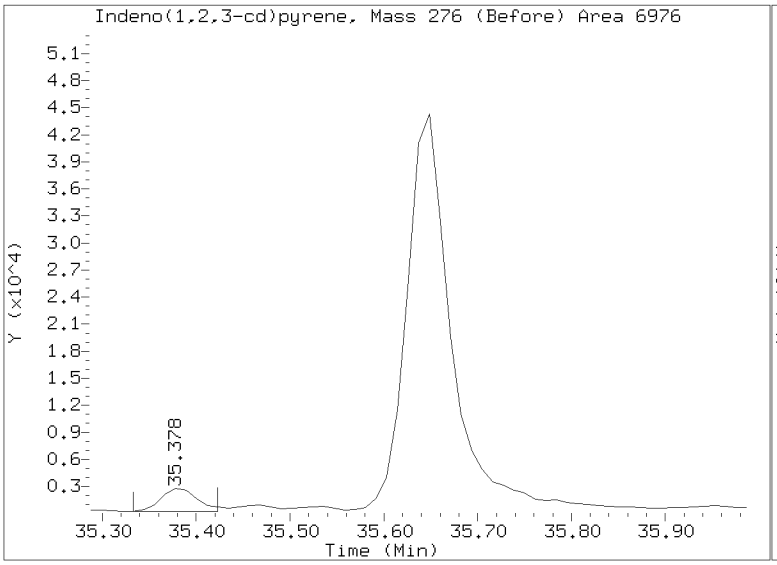
Datafile: //target/share/chem3/nt14.i/20210607.b/NT1421060713.D
Injection Date: 07-JUN-2021 22:07
Lab ID:BJE0383-MSD1 Client ID:
Report Date: 06/12/2021 15:50

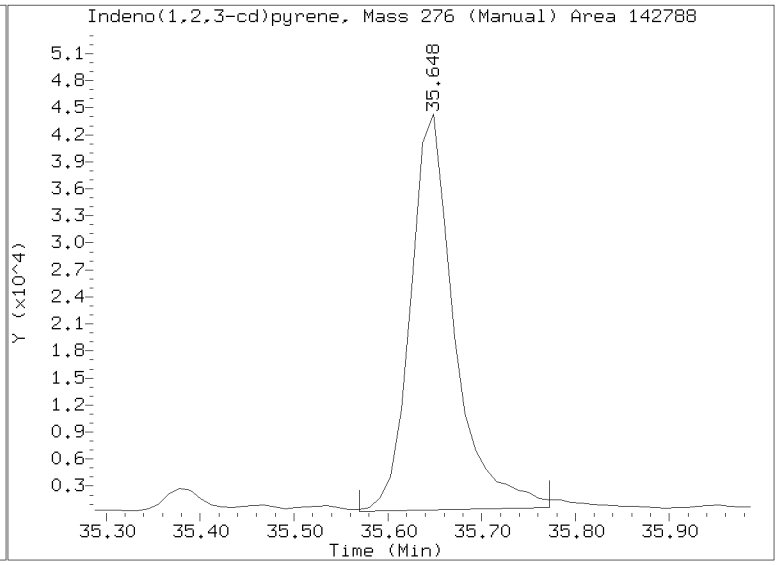












Analytical Resources, Incorporated
Analytical Chemists and Consultants

MASS SPECTROMETER
INSTRUMENT PERFORMANCE CHECK
EPA 8270E-SIM

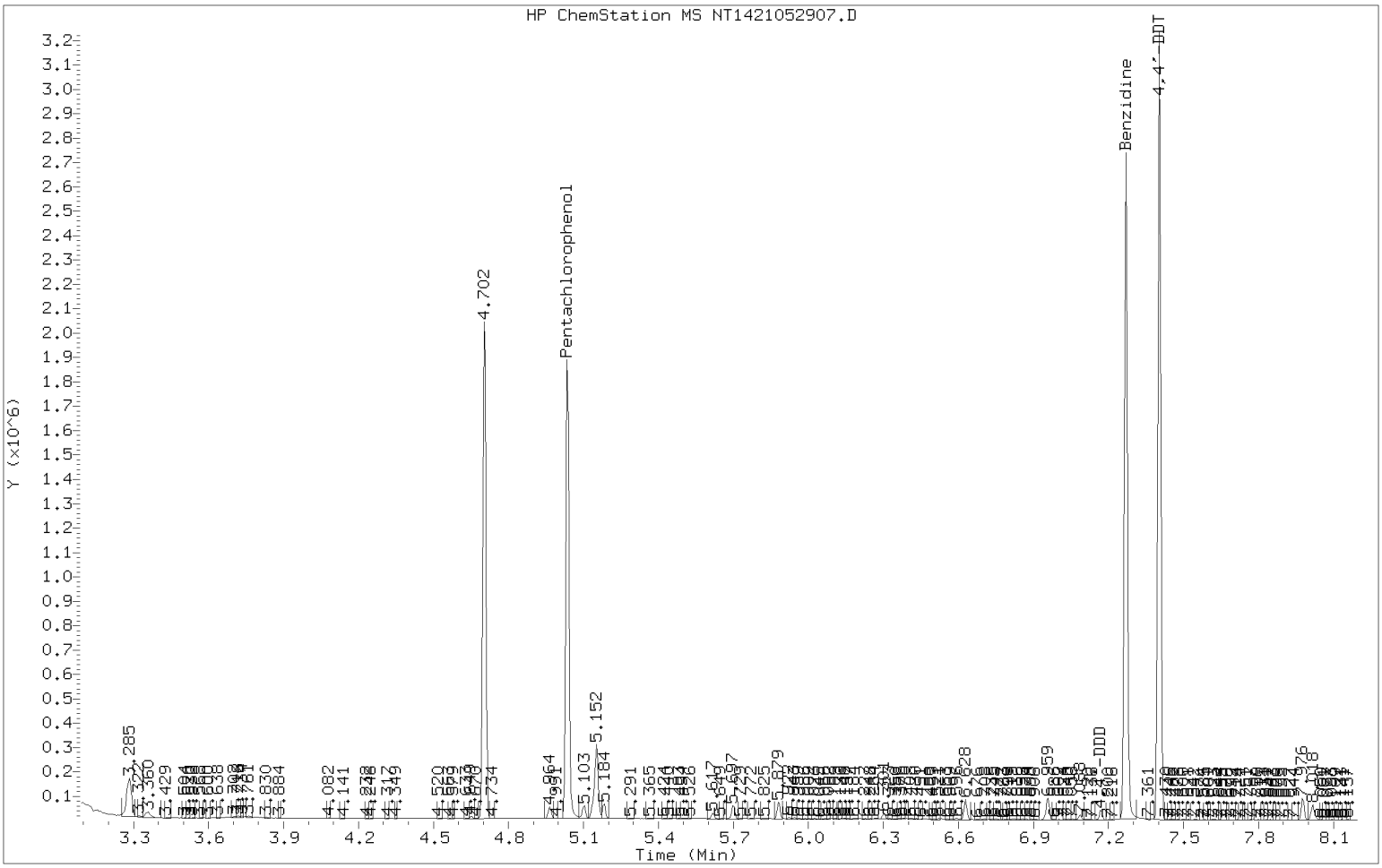
Laboratory:	Analytical Resources, Inc.	SDG:	21E0106
Client:	Anchor QEA, LLC	Project:	Gasco Siltronic - US Moorings
Lab File ID:	NT1421052907.D	Injection Date:	05/29/21
Instrument ID:	NT14	Injection Time:	13:39
Sequence:	SJF0025	Lab Sample ID:	SJF0025-TUN1

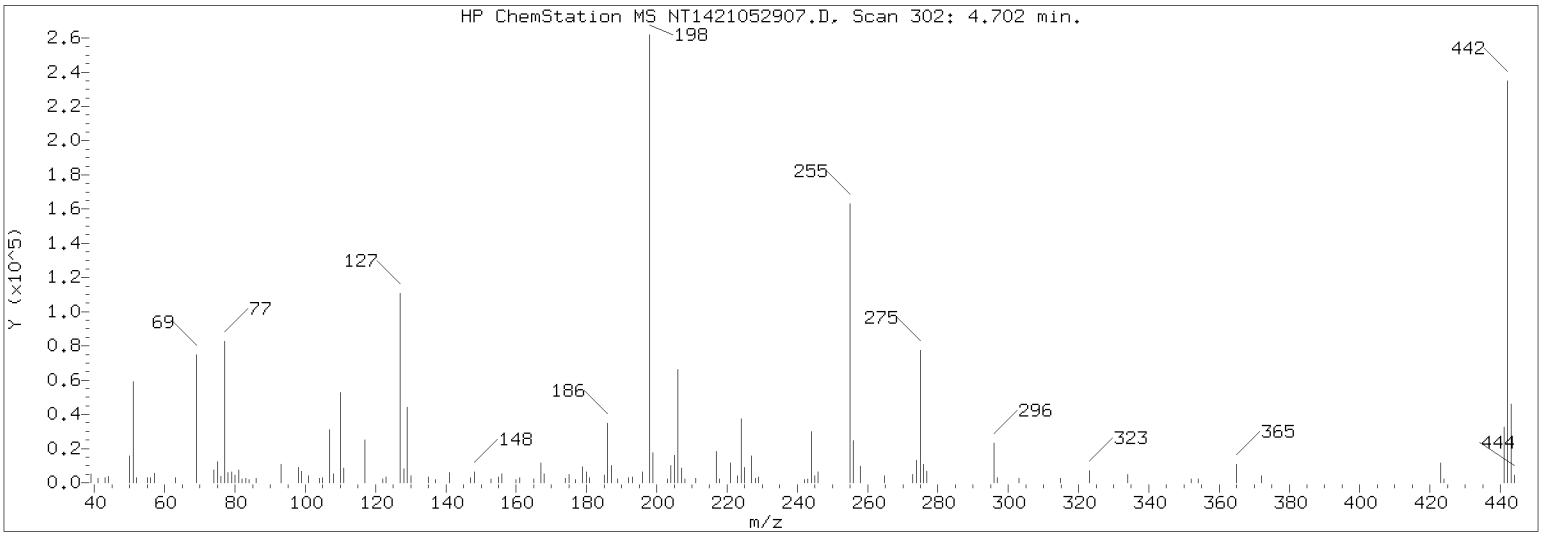
m/z	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
68	Less than 2% of 69	0	PASS
69	Less than 100% of 198	28.4	PASS
70	Less than 2% of 69	0	PASS
197	Less than 2% of 198	0	PASS
198	Base peak, 100% relative abundance	100	PASS
199	5 - 9% of 198	6.76	PASS
365	1 - 100% of 198	4.64	PASS
441	Less than 150% of 443	72.5	PASS
442	1 - 200% of 198	108	PASS
443	15 - 24% of 442	19.5	PASS
4,4'-DDD	Less than 20% of 4,4'-DDT		
4,4'-DDE	Less than 20% of 4,4'-DDT		
4,4'-DDT	Base peak, 100% relative abundance		

Client Sample ID	Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed
MS Tune	SJF0025-TUN1	NT1421052907.D	05/29/2021	13:39
Cal Standard	SJF0025-CAL5	NT1421052908.D	05/29/2021	14:01
Cal Standard	SJF0025-CAL7	NT1421052909.D	05/29/2021	14:49
Cal Standard	SJF0025-CAL1	NT1421052910.D	05/29/2021	15:37
Cal Standard	SJF0025-CAL6	NT1421052911.D	05/29/2021	16:25
Cal Standard	SJF0025-CAL3	NT1421052912.D	05/29/2021	17:13
Cal Standard	SJF0025-CAL4	NT1421052913.D	05/29/2021	18:01
Cal Standard	SJF0025-CAL2	NT1421052914.D	05/29/2021	18:49
Secondary Cal Check	SJF0025-SCV1	NT1421052915.D	05/29/2021	19:38
Initial Cal Blank	SJF0025-ICB1	NT1421052916.D	05/29/2021	20:26

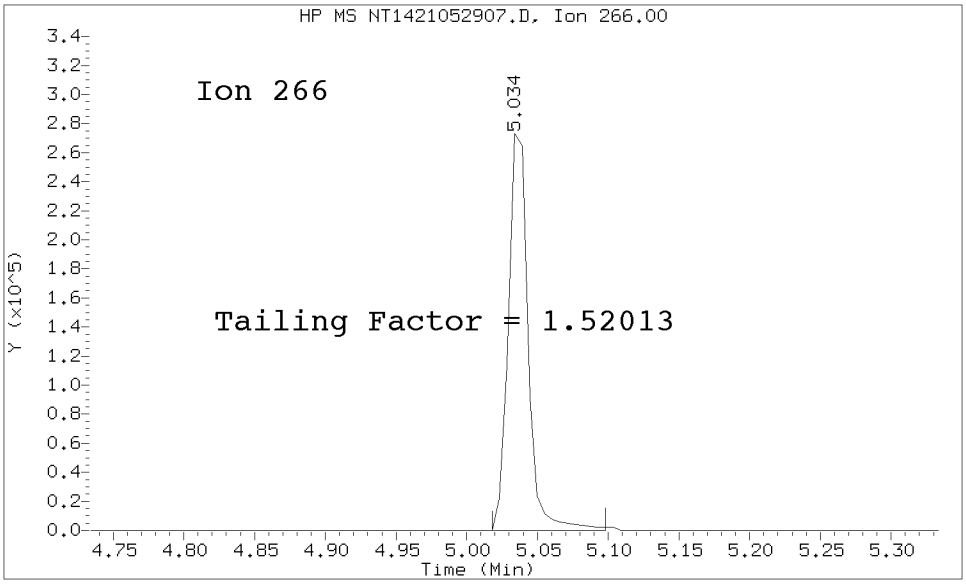
DFTPP TAILING FACTOR AND BREAKDOWN GRAPHIC REPORT

Datafile Analyzed: /20210529.b/NT1421052907.D/NT1421052907.D
Method Used: \20210529.b\DFTPP8270E.m Inst: nt14
Injection Date: 29-MAY-2021 13:39 Operator: VTS
Sample Info: SJF0025-TUN1 SJF0025-TUN1
Report Date: 06/02/2021 18:45



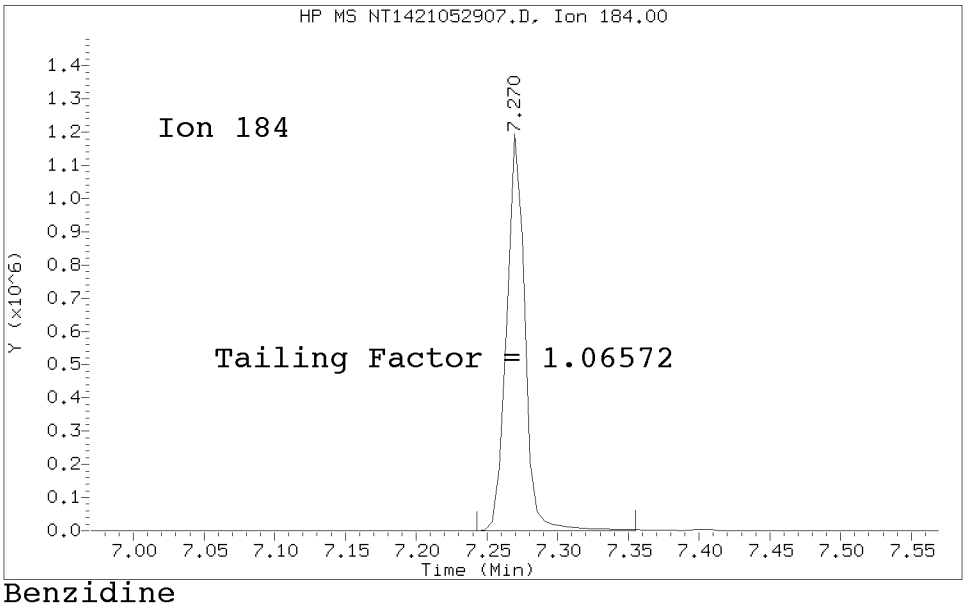


Datafile Analyzed: /20210529.b/NT1421052907.D/NT1421052907.D
Method Used: \20210529.b\DFTPP8270E.m\sw846ddt.m Inst: nt14
Injection Date: 29-MAY-2021 13:39 Operator: JZ
Sample Info: SJF0025-TUN1
Report Date: 06/02/2021 18:45



Pentachlorophenol
==========
Exp. RT = 5.039
Found RT = 5.034

Tail Factor = 1.520 Maximum Allowed = 2.0



Benzidine
==========
Exp. RT = 7.275
Found RT = 7.270

Tail Factor = 1.066 Maximum Allowed = 2.0

8270 TAILING FACTOR/BREAKDOWN SUMMARY RESULTS

TAILING ANALYSIS SUMMARY

Compound	Tail Factor	Max Allowed	Test
Pentachlorophenol	1.5201288	2.000	PASS
Benzidine	1.0657216	2.000	PASS

DDT DEGRADATION BREAKDOWN ANALYSIS SUMMARY

Compound	Response	%Breakdown	Max Allowed	Test
4,4-DDT	563112			N/A
4,4-DDE	0	0.0	20.0	PASS
4,4-DDD	13152	2.3	20.0	PASS
4,4-DDD + DDE	13152	2.3	20.0	PASS

Tuning Sample, nt14.i/20210529.b/NT1421052907.D, *** PASSED ***

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
68	Less than 2.00% of mass 69	0.00 (0.00)
69	Mass 69 relative abundance	28.36
70	Less than 2.00% of mass 69	0.00 (0.00)
197	Less than 2.00% of mass 198	0.00
199	5.00 - 9.00% of mass 198	6.76
365	1.00 - 100.00% of mass 198	4.64
441	Less than 150.00% of mass 443	15.22 (72.50)
442	Less than 200.00% of mass 198	107.89
443	15.00 - 24.00% of mass 442	20.99 (19.45)

Data File: NT1421052907.D
Spectrum: Avg. Scans 301-303 (4.70), Background Scan 296
Location of Maximum: 442.00
Number of points: 119

m/z	Y	m/z	Y	m/z	Y	m/z	Y
39.00	4088	107.00	23768	185.00	3550	246.00	4921
41.00	189	108.00	3673	186.00	27048	255.00	130472
43.00	300	110.00	40024	187.00	7921	256.00	19464
44.00	492	111.00	6643	189.00	687	258.00	7944
50.00	11960	117.00	19360	192.00	1775	265.00	2660
51.00	44032	122.00	778	193.00	2104	273.00	4235
52.00	1691	123.00	2759	196.00	5145	274.00	10626
55.00	546	127.00	84112	198.00	202048	275.00	62040
56.00	1678	128.00	6409	199.00	13660	276.00	8597
57.00	4602	129.00	34144	203.00	687	277.00	5339
63.00	984	130.00	3082	204.00	7568	296.00	19536
69.00	57304	135.00	2780	205.00	12402	297.00	2089
74.00	5859	137.00	682	206.00	51632	303.00	1778
75.00	9203	141.00	4684	207.00	6963	315.00	1895
76.00	2985	147.00	1837	208.00	1422	323.00	6224
77.00	62216	148.00	4980	211.00	1691	334.00	3421
78.00	4462	153.00	743	217.00	14131	352.00	1509
79.00	4915	155.00	2043	218.00	755	354.00	1684
80.00	3483	156.00	3962	221.00	9451	365.00	9372
81.00	5765	160.00	679	222.00	674	372.00	2913
82.00	702	161.00	1805	223.00	2579	403.00	888
83.00	2221	165.00	1447	224.00	30408	421.00	826
84.00	685	167.00	8876	225.00	7402	422.00	716
86.00	1590	168.00	4117	227.00	12661	423.00	10882
93.00	8295	174.00	1590	228.00	1506	424.00	1838
98.00	7051	175.00	3747	229.00	2182	441.00	30744
99.00	5151	177.00	674	242.00	673	442.00	217984
101.00	3014	179.00	7206	243.00	724	443.00	42408
104.00	846	180.00	5041	244.00	24280	444.00	3461
105.00	1678	181.00	1922	245.00	3292		

Analytical Resources, Incorporated
Analytical Chemists and Consultants

INITIAL CALIBRATION DATA
EPA 8270E-SIM

Laboratory:	Analytical Resources, Inc.	SDG:	21E0106
Client:	Anchor QEA, LLC	Project:	Gasco Siltronic - US Moorings
Calibration:	EF00008	Instrument:	NT14
Calibration Date:	06/02/2021	Column (1):	ZB-5MS

Compound	Level 01		Level 02		Level 03		Level 04		Level 05		Level 06	
		RRF		RRF		RRF		RRF		RRF		RRF
trans-Decalin	0.1	7.534294E-02	0.25	9.778924E-02	0.5	0.1036148	1	0.106297	2.5	0.1043755	5	0.1088011
cis-Decalin	0.1	3.670278E-02	0.25	6.178443E-02	0.5	7.815701E-02	1	7.951199E-02	2.5	7.976022E-02	5	8.013539E-02
Naphthalene	0.1	0.9765522	0.25	0.9067926	0.5	0.9255268	1	0.9807403	2.5	0.9081428	5	0.9387818
1-Methylnaphthalene	0.1	0.5476356	0.25	0.5119529	0.5	0.5386273	1	0.5544323	2.5	0.5378297	5	0.5270036
2-Methylnaphthalene	0.1	0.5620584	0.25	0.5307568	0.5	0.5500292	1	0.5770137	2.5	0.5423394	5	0.5394794
Biphenyl	0.1	0.866121	0.25	0.8037175	0.5	0.8227613	1	0.8448413	2.5	0.7883871	5	0.7812212
2,6-Dimethylnaphthalene	0.1	0.6124305	0.25	0.5967873	0.5	0.5947874	1	0.6231305	2.5	0.5840555	5	0.5886414
Acenaphthylene	0.1	1.054263	0.25	0.940891	0.5	0.9872286	1	1.046211	2.5	1.034134	5	1.029675
Acenaphthene	0.1	0.6504249	0.25	0.6015099	0.5	0.6334943	1	0.653886	2.5	0.6294135	5	0.6141236
Dibenzofuran	0.1	0.975153	0.25	0.889895	0.5	0.9282871	1	0.9845446	2.5	0.9332497	5	0.9063837
2,3,5-Trimethylnaphthalene	0.1	0.6459043	0.25	0.5533302	0.5	0.5973141	1	0.6237959	2.5	0.6172789	5	0.6061235
Fluorene	0.1	0.7472944	0.25	0.6937966	0.5	0.7166835	1	0.7379897	2.5	0.7367587	5	0.7082099
Benzo(b)thiophene	0.1	0.8336159	0.25	0.7500785	0.5	0.7434577	1	0.7839956	2.5	0.7434204	5	0.7716431
Phenanthrene	0.1	1.131429	0.25	1.01129	0.5	1.038436	1	1.079004	2.5	1.018391	5	1.010104
Anthracene	0.1	0.985716	0.25	0.9554749	0.5	0.9711693	1	1.020905	2.5	0.9795335	5	0.9705072
Carbazole	0.1	0.8763289	0.25	0.7815781	0.5	0.8387547	1	0.8873516	2.5	0.8878368	5	0.8835912
1-Methylphenanthrene	0.1	0.7837705	0.25	0.6578359	0.5	0.7154462	1	0.7764907	2.5	0.7574097	5	0.7751158
Fluoranthene	0.1	1.130505	0.25	1.037637	0.5	1.099469	1	1.177821	2.5	1.185089	5	1.182504
Dibenzothiophene	0.1	1.085584	0.25	0.9323989	0.5	1.00258	1	1.048352	2.5	1.044824	5	1.006764
Pyrene	0.1	1.168781	0.25	1.045878	0.5	1.136973	1	1.211834	2.5	1.251549	5	1.269524
Benzo(a)anthracene	0.1	0.8140912	0.25	0.6707719	0.5	0.7671555	1	0.8017325	2.5	0.8336517	5	0.8031392
Chrysene	0.1	0.8072931	0.25	0.7219358	0.5	0.7864226	1	0.7987609	2.5	0.7686271	5	0.7471807
Benzo(b)fluoranthene	0.1	0.854727	0.25	0.6576491	0.5	0.7544163	1	0.7852628	2.5	0.8363295	5	0.8506428
Benzo(j)fluoranthene	0.1	0.8267708	0.25	0.8195274	0.5	0.8279569	1	0.8858766	2.5	0.7258668	5	0.750776
Benzo(k)fluoranthene	0.1	0.8280693	0.25	0.8500869	0.5	0.8291479	1	0.9014526	2.5	0.8952783	5	0.8256551
Benzo(e)pyrene	0.1	0.8546506	0.25	0.734757	0.5	0.7544314	1	0.8085466	2.5	0.7983839	5	0.7929136
Benzo(a)pyrene	0.1	0.7645949	0.25	0.6490514	0.5	0.6677295	1	0.7345777	2.5	0.73648	5	0.7414213
Indeno(1,2,3-cd)pyrene	0.1	0.7359512	0.25	0.6503788	0.5	0.8202078	1	0.8621191	2.5	0.9480635	5	0.9414672

Analytical Resources, Incorporated
Analytical Chemists and Consultants

INITIAL CALIBRATION DATA
EPA 8270E-SIM

Laboratory:	Analytical Resources, Inc.	SDG:	21E0106
Client:	Anchor QEA, LLC	Project:	Gasco Siltronic - US Moorings
Calibration:	EF00008	Instrument:	NT14
Calibration Date:	06/02/2021	Column (1):	ZB-5MS

Compound	Level 01		Level 02		Level 03		Level 04		Level 05		Level 06	
		RRF		RRF		RRF		RRF		RRF		RRF
Dibenzo(a,h)anthracene	0.1	0.6053361	0.25	0.546784	0.5	0.6899063	1	0.7163892	2.5	0.807435	5	0.8071966
Benzo(g,h,i)perylene	0.1	0.817452	0.25	0.7204878	0.5	0.7919253	1	0.8547246	2.5	0.904796	5	0.8734312
Perylene	0.1	0.8097373	0.25	0.6287488	0.5	0.7253348	1	0.7554018	2.5	0.7706186	5	0.7575012
Benzo(b)naphtho(2,1-d)thiophene	0.1	1.308542	0.25	1.104565	0.5	1.228033	1	1.317391	2.5	1.33585	5	1.333795
Naphthalene-d8	0.1	0.9407105	0.25	0.9066626	0.5	0.9293912	1	0.9809289	2.5	0.9150152	5	0.9527602
Acenaphthene-d10	0.1	0.6039275	0.25	0.5495174	0.5	0.5733426	1	0.5959018	2.5	0.5788585	5	0.5673766
Phenanthrene-d10	0.1	1.02317	0.25	0.9375358	0.5	0.9619614	1	1.004585	2.5	0.9435863	5	0.9744183
Chrysene-d12	0.1	0.6443679	0.25	0.5849457	0.5	0.6476483	1	0.6545664	2.5	0.6599023	5	0.6235904
Perylene-d12	0.1	0.7316738	0.25	0.6009344	0.5	0.6527742	1	0.693495	2.5	0.7048907	5	0.6796008

Analytical Resources, Incorporated
Analytical Chemists and Consultants

INITIAL CALIBRATION DATA
EPA 8270E-SIM

Laboratory:	Analytical Resources, Inc.	SDG:	21E0106
Client:	Anchor QEA, LLC	Project:	Gasco Siltronic - US Moorings
Calibration:	EF00008	Instrument:	NT14
Calibration Date:	06/02/2021	Column (1):	ZB-5MS

Compound	Level 07		Level 08		Level 09		Level 10		Level 11		Level 12	
		RRF		RRF		RRF		RRF		RRF		RRF
trans-Decalin	10	0.1019532										
cis-Decalin	10	0.0740341										
Naphthalene	10	0.8681585										
1-Methylnaphthalene	10	0.4818078										
2-Methylnaphthalene	10	0.5007918										
Biphenyl	10	0.7115786										
2,6-Dimethylnaphthalene	10	0.5320324										
Acenaphthylene	10	0.9708179										
Acenaphthene	10	0.5713637										
Dibenzofuran	10	0.841194										
2,3,5-Trimethylnaphthalene	10	0.5642276										
Fluorene	10	0.6634272										
Benzo(b)thiophene	10	0.721182										
Phenanthrene	10	0.9297658										
Anthracene	10	0.908387										
Carbazole	10	0.8348721										
1-Methylphenanthrene	10	0.7214288										
Fluoranthene	10	1.154423										
Dibenzothiophene	10	0.9443673										
Pyrene	10	1.201874										
Benzo(a)anthracene	10	0.7393942										
Chrysene	10	0.6905319										
Benzo(b)fluoranthene	10	0.8924207										
Benzo(j)fluoranthene	10	0.7309814										
Benzo(k)fluoranthene	10	0.9126467										
Benzo(e)pyrene	10	0.7757705										
Benzo(a)pyrene	10	0.7272336										
Indeno(1,2,3-cd)pyrene	10	0.9356019										

Analytical Resources, Incorporated
Analytical Chemists and Consultants

INITIAL CALIBRATION DATA
EPA 8270E-SIM

Laboratory:	Analytical Resources, Inc.	SDG:	21E0106
Client:	Anchor QEA, LLC	Project:	Gasco Siltronic - US Moorings
Calibration:	EF00008	Instrument:	NT14
Calibration Date:	06/02/2021	Column (1):	ZB-5MS

Compound	Level 07		Level 08		Level 09		Level 10		Level 11		Level 12	
		RRF		RRF		RRF		RRF		RRF		RRF
Dibenzo(a,h)anthracene	10	0.8344713										
Benzo(g,h,i)perylene	10	0.8598027										
Perylene	10	0.7295014										
Benzo(b)naphtho(2,1-d)thiophene	10	1.275329										
Naphthalene-d8	10	0.8829448										
Acenaphthene-d10	10	0.5284258										
Phenanthrene-d10	10	0.8902021										
Chrysene-d12	10	0.5672435										
Perylene-d12	10	0.6673176										

Analytical Resources, Incorporated
Analytical Chemists and Consultants

INITIAL CALIBRATION DATA
EPA 8270E-SIM

Laboratory:	Analytical Resources, Inc.	SDG:	21E0106
Client:	Anchor QEA, LLC	Project:	Gasco Siltronic - US Moorings
Calibration:	EF00008	Instrument:	NT14
Calibration Date:	06/02/2021	Column (1):	ZB-5MS

COMPOUND	Mean RRF	RRF RSD	Linear COD	Quad COD	Limit Type & Limit	Q
trans-Decalin	9.973911E-02	11.3			RSD (15)	
cis-Decalin	7.001228E-02	22.9		0.9997	QCOD (0.99)	
Naphthalene	0.9292421	4.3			RSD (15)	
1-Methylnaphthalene	0.5284699	4.7			RSD (15)	
2-Methylnaphthalene	0.5432098	4.5			RSD (15)	
Biphenyl	0.8026611	6.3			RSD (15)	
2,6-Dimethylnaphthalene	0.5902664	4.9			RSD (15)	
Acenaphthylene	1.009032	4.3			RSD (15)	
Acenaphthene	0.6220308	4.7			RSD (15)	
Dibenzofuran	0.9226724	5.4			RSD (15)	
2,3,5-Trimethylnaphthalene	0.6011392	5.5			RSD (15)	
Fluorene	0.71488	4.1			RSD (15)	
Benzo(b)thiophene	0.7639133	4.8			RSD (15)	
Phenanthrene	1.031203	6.1			RSD (15)	
Anthracene	0.9702418	3.5			RSD (15)	
Carbazole	0.8557591	4.6			RSD (15)	
1-Methylphenanthrene	0.7410711	6.2			RSD (15)	
Fluoranthene	1.138207	4.8			RSD (15)	
Dibenzothiophene	1.009267	5.5			RSD (15)	
Pyrene	1.183773	6.4			RSD (15)	
Benzo(a)anthracene	0.7757052	7.2			RSD (15)	
Chrysene	0.7601074	5.6			RSD (15)	
Benzo(b)fluoranthene	0.8044926	9.9			RSD (15)	
Benzo(j)fluoranthene	0.7953937	7.6			RSD (15)	
Benzo(k)fluoranthene	0.863191	4.5			RSD (15)	
Benzo(e)pyrene	0.7884934	4.9			RSD (15)	
Benzo(a)pyrene	0.7172983	5.9			RSD (15)	
Indeno(1,2,3-cd)pyrene	0.8419699	13.6			RSD (15)	
Dibenzo(a,h)anthracene	0.7153598	15.3		0.9998	QCOD (0.99)	
Benzo(g,h,i)perylene	0.8318028	7.4			RSD (15)	
Perylene	0.7395491	7.6			RSD (15)	

Analytical Resources, Incorporated
Analytical Chemists and Consultants

INITIAL CALIBRATION DATA
EPA 8270E-SIM

Laboratory:	Analytical Resources, Inc.	SDG:	21E0106
Client:	Anchor QEA, LLC	Project:	Gasco Siltronic - US Moorings
Calibration:	EF00008	Instrument:	NT14
Calibration Date:	06/02/2021	Column (1):	ZB-5MS

COMPOUND	Mean RRF	RRF RSD	Linear COD	Quad COD	Limit Type & Limit	Q
Benzo(b)naphtho(2,1-d)thiophene	1.271929	6.5			RSD (15)	
Naphthalene-d8	0.9297733	3.5			RSD (15)	
Acenaphthene-d10	0.5710501	4.6			RSD (15)	
Phenanthrene-d10	0.9622084	4.6			RSD (15)	
Chrysene-d12	0.6260378	5.8			RSD (15)	
Perylene-d12	0.6758124	6.2			RSD (15)	

Analytical Resources, Incorporated
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Printed: 6/2/2021 6:40:59PM

ANALYSIS SEQUENCE

SJF0025

Instrument: NT14 Element Column ID: i008815
Calibration ID: UNASSIGNED Tune File: 200228u
EM Voltage: 1906

Lab Number	Sample Name	Analysis	Container	Order	STD ID	ISTD ID	Comments
SJF0025-TUN1	MS Tune	QC		1	I007631		
SJF0025-CAL1	PAH 0.1	QC		2	J004706	J004384	
SJF0025-CAL2	PAH 0.25	QC		3	J004705	J004384	
SJF0025-CAL3	PAH 0.5	QC		4	J004704	J004384	
SJF0025-CAL4	PAH 1.0	QC		5	J004703	J004384	
SJF0025-CAL5	PAH 2.5	QC		6	J004700	J004384	
SJF0025-CAL6	PAH 5.0	QC		7	J004702	J004384	
SJF0025-CAL7	PAH 10.0	QC		8	J004701	J004384	
SJF0025-SCV1	Secondary Cal Check	QC		9	J004707	J004384	

INTERNAL STANDARD SUMMARY FOR DATABATCH - \\target\share\chem3\nt14.i\20210529.b

	Time	Filename	LabID	ClientId	DF						
1	1339	NT1421052907.D	SJF0025-TUN1		1	|NO ISTDS FOUND||					
2	1401	NT1421052908.D	SJF0025-CAL5		1	|18.91	159478||	22.36	170161||	33.18	236612|
3	1449	NT1421052909.D	SJF0025-CAL7		1	|18.91	163422||	22.36	166127||	33.18	247029|
4	1537	NT1421052910.D	SJF0025-CAL1		1	|18.91	185817||	22.36	194904||	33.18	261838|
5	1625	NT1421052911.D	SJF0025-CAL6		1	|18.91	174899||	22.36	178057||	33.18	261344|
6	1713	NT1421052912.D	SJF0025-CAL3		1	|18.91	188390||	22.36	196353||	33.18	265323|
7	1801	NT1421052913.D	SJF0025-CAL4		1	|18.91	180325||	22.36	185169||	33.18	261813|
8	1849	NT1421052914.D	SJF0025-CAL2		1	|18.91	184642||	22.36	192206||	33.18	265187|
9	1938	NT1421052915.D	SJF0025-SCV1		1	|18.91	166522||	22.36	168360||	33.18	235397|
10	2026	NT1421052916.D	SJF0025-ICB1		1	|18.91	183758||	22.36	189746||	33.18	265253|

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem3\nt14.i\20210529.b

ARI Job No.: SJF0 Method: DFTPP8270E.m Instrument: nt14.i Date: 29-MAY-2021

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
1339	NT1421052907.D	SJF0025-TUN1		1	NO MANUAL INTEGRATION
1401	NT1421052908.D	SJF0025-CAL5		1	Benzo(b)fluoranthene, Indeno(1,2,3-cd)pyrene, Dibenzo(a,h)anthracene, Benzo(g,h,i)perylene, Perylene, Total Benzofluoranthen
1449	NT1421052909.D	SJF0025-CAL7		1	Benzo(g,h,i)perylene, Perylene, Total Benzofluoranthenes,
1537	NT1421052910.D	SJF0025-CAL1		1	Benzo(b)fluoranthene, Dibenzo(a,h)anthracene, Perylene, Total Benzofluoranthenes,
1625	NT1421052911.D	SJF0025-CAL6		1	Phenanthrene, Benzo(b)fluoranthene, Indeno(1,2,3-cd)pyrene, Dibenzo(a,h)anthracene, Benzo(g,h,i)perylene, Perylene, Total Benzofluoranthenes, Benzo(j)fluoranthene,
1713	NT1421052912.D	SJF0025-CAL3		1	Benzo(b)fluoranthene, Benzo(k)fluoranthene, Dibenzo(a,h)anthracene, Benzo(g,h,i)perylene, Perylene, cis-Decalin, Total Benzofluoranthenes, Benzo(j)fluoranthene,
1801	NT1421052913.D	SJF0025-CAL4		1	Phenanthrene, Benzo(b)fluoranthene, Benzo(k)fluoranthene, Indeno(1,2,3-cd)pyrene, Dibenzo(a,h)anthracene, Benzo(g,h,i)peryle Perylene, Total Benzofluoranthenes, Benzo(j)fluoranthene,
1849	NT1421052914.D	SJF0025-CAL2		1	Benzo(b)fluoranthene, Benzo(a)pyrene, Indeno(1,2,3-cd)pyrene, Perylene, Total Benzofluoranthenes,
1938	NT1421052915.D	SJF0025-SCV1		1	Indeno(1,2,3-cd)pyrene, Dibenzo(a,h)anthracene, Benzo(g,h,i)perylene, Perylene, Total Benzofluoranthenes,
2026	NT1421052916.D	SJF0025-ICB1		1	NO MANUAL INTEGRATION

Security Status Report

Date: 02-Jun-2021 19:12

NT1421052907.D	Data Locked	yev, 02-
NT1421052908.D	Data Locked	yev, 02-
NT1421052909.D	Data Locked	yev, 02-
NT1421052910.D	Data Locked	yev, 02-
NT1421052911.D	Data Locked	yev, 02-
NT1421052912.D	Data Locked	yev, 02-
NT1421052913.D	Data Locked	yev, 02-
NT1421052914.D	Data Locked	yev, 02-
NT1421052915.D	Data Locked	yev, 02-
NT1421052916.D	Data Locked	yev, 02-

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem3\nt14.i\20210529.b\ALKYLPNA.m
Batch File: \\target\share\chem3\nt14.i\20210529.b
Inst ID: nt14.i

ID:	RT01	RT02	RT03	RT04	RT05	RT06	RT07
FILENAME:	NT1421052908	NT1421052909	NT1421052910	NT1421052911	NT1421052912	NT1421052913	NT1421052914
INJ.DATE:	29-MAY-2021	29-MAY-2021	29-MAY-2021	29-MAY-2021	29-MAY-2021	29-MAY-2021	29-MAY-2021
INJ.TIME:	14:01	14:49	15:37	16:25	17:13	18:01	18:49

Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
1 trans-Decalin	7.147	7.146	7.157	7.146	7.136	7.136	7.157	7.147	4.147-10.147	7.147	0.008
2 cis-Decalin	8.256	8.256	8.256	8.266	8.266	8.266	8.246	8.256	5.256-11.256	8.259	0.008
3 C1-Decalin	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.800	5.800-11.800	+++++	+++++
4 C2-Decalin	+++++	+++++	+++++	+++++	+++++	+++++	+++++	9.200	6.200-12.200	+++++	+++++
5 C3-Decalin	+++++	+++++	+++++	+++++	+++++	+++++	+++++	10.000	7.000-13.000	+++++	+++++
247 C4-Decalin	+++++	+++++	+++++	+++++	+++++	+++++	+++++	10.100	7.100-13.100	+++++	+++++
$ 6 Naphthalene-d8	11.897	11.897	11.897	11.897	11.897	11.897	11.897	11.897	8.897-14.897	11.897	0.000
7 Naphthalene	11.958	11.968	11.958	11.958	11.958	11.958	11.958	11.958	8.958-14.958	11.959	0.004
8 C1-Naphthalenes	+++++	+++++	+++++	+++++	+++++	+++++	+++++	14.000	11.000-17.000	+++++	+++++
9 C2-Naphthalenes	+++++	+++++	+++++	+++++	+++++	+++++	+++++	16.000	13.000-19.000	+++++	+++++
10 C3-Naphthalenes	+++++	+++++	+++++	+++++	+++++	+++++	+++++	18.000	15.000-21.000	+++++	+++++
11 C4-Naphthalenes	+++++	+++++	+++++	+++++	+++++	+++++	+++++	18.500	15.500-21.500	+++++	+++++
12 Benzo(b)thiophene	12.410	12.421	12.410	12.410	12.410	12.410	12.410	12.410	9.410-15.410	12.411	0.004
13 C1-Benzothiophenes	+++++	+++++	+++++	+++++	+++++	+++++	+++++	14.200	11.200-17.200	+++++	+++++
14 C2-Benzothiophenes	+++++	+++++	+++++	+++++	+++++	+++++	+++++	15.800	12.800-18.800	+++++	+++++
15 C3_Benzothiophenes	+++++	+++++	+++++	+++++	+++++	+++++	+++++	17.200	14.200-20.200	+++++	+++++
16 2-Methylnaphthalene	13.794	13.794	13.794	13.794	13.794	13.794	13.794	13.794	10.794-16.794	13.794	0.000

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

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem3\nt14.i\20210529.b\ALKYLPNA.m
Batch File: \\target\share\chem3\nt14.i\20210529.b
Inst ID: nt14.i

Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
17 1-methylnaphthalene	14.245	14.256	14.245	14.245	14.245	14.245	14.245	14.245	11.245-17.245	14.246	0.004
18 Biphenyl	15.432	15.443	15.432	15.443	15.432	15.432	15.432	15.432	12.432-18.432	15.435	0.005
19 2,6-Dimethylnaphthalen	15.509	15.520	15.509	15.509	15.509	15.509	15.509	15.509	12.509-18.509	15.510	0.004
20 Acenaphthylene	17.091	17.091	17.080	17.091	17.091	17.091	17.091	17.091	14.091-20.091	17.090	0.004
$ 21 Acenaphthene-d10	17.377	17.377	17.377	17.377	17.366	17.377	17.377	17.377	14.377-20.377	17.375	0.004
22 Acenaphthene	17.487	17.498	17.487	17.487	17.487	17.487	17.487	17.487	14.487-20.487	17.488	0.004
23 Dibenzofuran	17.861	17.860	17.861	17.860	17.861	17.860	17.861	17.861	14.861-20.861	17.861	0.000
24 1,6,7-Trimethylnaphtha	18.091	18.091	18.080	18.091	18.080	18.080	18.080	18.091	15.091-21.091	18.085	0.006
* 25 Fluorene-d10	18.908	18.908	18.908	18.908	18.908	18.908	18.908	18.908	15.908-21.908	18.908	0.000
26 Fluorene	19.010	19.010	19.010	19.010	19.010	19.010	19.010	19.010	16.010-22.010	19.010	0.000
27 C1-Fluorenes	+++++	+++++	+++++	+++++	+++++	+++++	+++++	21.000	18.000-24.000	+++++	+++++
28 C2-Fluorenes	+++++	+++++	+++++	+++++	+++++	+++++	+++++	21.200	18.200-24.200	+++++	+++++
29 C3-Fluorenes	+++++	+++++	+++++	+++++	+++++	+++++	+++++	23.000	20.000-26.000	+++++	+++++
30 Dibenzothiophene	21.931	21.931	21.931	21.931	21.931	21.931	21.931	21.931	18.931-24.931	21.931	0.000
31 C1-Dibenzothiophenes	+++++	+++++	+++++	+++++	+++++	+++++	+++++	23.500	20.500-26.500	+++++	+++++
32 C2-Dibenzothiophenes	+++++	+++++	+++++	+++++	+++++	+++++	+++++	24.500	21.500-27.500	+++++	+++++
33 C3-Dibenzothiophenes	+++++	+++++	+++++	+++++	+++++	+++++	+++++	25.600	22.600-28.600	+++++	+++++
34 C4-Dibenzothiophenes	+++++	+++++	+++++	+++++	+++++	+++++	+++++	27.000	24.000-30.000	+++++	+++++
$ 35 Phenanthrene-d10	22.239	22.250	22.239	22.239	22.239	22.239	22.239	22.239	19.239-25.239	22.241	0.004
* 250 Anthracene-d10	22.360	22.360	22.360	22.360	22.360	22.360	22.360	22.360	19.360-25.360	22.360	0.000
36 Phenanthrene	22.327	22.327	22.316	22.327	22.316	22.327	22.327	22.327	19.327-25.327	22.324	0.005
37 Anthracene	22.426	22.426	22.426	22.426	22.426	22.426	22.426	22.426	19.426-25.426	22.426	0.000

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem3\nt14.i\20210529.b\ALKYLPNA.m
Batch File: \\target\share\chem3\nt14.i\20210529.b
Inst ID: nt14.i

	Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
	38 C1-Phenanthrenes/Anthr	+++++	+++++	+++++	+++++	+++++	+++++	+++++	23.800	20.800-26.800	+++++	+++++
	39 C2-Phenanthrenes/Anthr	+++++	+++++	+++++	+++++	+++++	+++++	+++++	25.000	22.000-28.000	+++++	+++++
	40 C3-Phenanthrenes/Anthr	+++++	+++++	+++++	+++++	+++++	+++++	+++++	27.000	24.000-30.000	+++++	+++++
	41 C4-Phenanthrenes/Anthr	+++++	+++++	+++++	+++++	+++++	+++++	+++++	28.000	25.000-31.000	+++++	+++++
	42 Carbazole	23.712	23.712	23.701	23.712	23.701	23.701	23.701	23.712	20.712-26.712	23.706	0.006
	43 1-Methylphenanthrene	24.163	24.163	24.163	24.163	24.163	24.163	24.152	24.163	21.163-27.163	24.161	0.004
	44 Fluoranthene	26.142	26.142	26.131	26.142	26.131	26.131	26.131	26.142	23.142-29.142	26.136	0.006
	45 Pyrene-d10	+++++	+++++	+++++	+++++	+++++	+++++	+++++	18.628	15.628-21.628	+++++	+++++
	46 Pyrene	26.978	26.978	26.978	26.978	26.978	26.978	26.978	26.978	23.978-29.978	26.978	0.000
	47 Retene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	17.769	14.769-20.769	+++++	+++++
	48 C1-Fluoranthenes/Pyren	+++++	+++++	+++++	+++++	+++++	+++++	+++++	27.900	24.900-30.900	+++++	+++++
	49 C2-Fluoranthenes/Pyren	+++++	+++++	+++++	+++++	+++++	+++++	+++++	29.000	26.000-32.000	+++++	+++++
	50 C3-Fluoranthenes/Pyren	+++++	+++++	+++++	+++++	+++++	+++++	+++++	30.000	27.000-33.000	+++++	+++++
	249 C4-Fluoranthenes/Pyren	+++++	+++++	+++++	+++++	+++++	+++++	+++++	33.000	30.000-36.000	+++++	+++++
	51 Naphthobenzothiophene	29.510	29.510	29.499	29.510	29.510	29.510	29.510	29.510	26.510-32.510	29.508	0.004
	52 C1-Naphthobenzothiophe	+++++	+++++	+++++	+++++	+++++	+++++	+++++	32.500	29.500-35.500	+++++	+++++
	53 C2-Naphthobenzothiophe	+++++	+++++	+++++	+++++	+++++	+++++	+++++	33.500	30.500-36.500	+++++	+++++
	54 C3-Naphthobenzothiophe	+++++	+++++	+++++	+++++	+++++	+++++	+++++	35.000	32.000-38.000	+++++	+++++
	248 C4-Naphthobenzothiophe	+++++	+++++	+++++	+++++	+++++	+++++	+++++	36.000	33.000-39.000	+++++	+++++
	55 Benzo(a)anthracene	30.096	30.095	30.096	30.095	30.096	30.096	30.096	30.096	27.096-33.096	30.096	0.000
$	56 Chrysene-d12	30.220	30.219	30.220	30.219	30.219	30.219	30.220	30.220	27.220-33.220	30.219	0.000
	57 Chrysene	30.287	30.298	30.287	30.287	30.287	30.287	30.287	30.287	27.287-33.287	30.289	0.004
	58 C1-Benzo(a)anthracenes	+++++	+++++	+++++	+++++	+++++	+++++	+++++	31.000	28.000-34.000	+++++	+++++
	59 C2-Benzo(a)anthracenes	+++++	+++++	+++++	+++++	+++++	+++++	+++++	31.800	28.800-34.800	+++++	+++++

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem3\nt14.i\20210529.b\ALKYLPNA.m
Batch File: \\target\share\chem3\nt14.i\20210529.b
Inst ID: nt14.i

Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
60 C3-Benzo(a)anthracenes	+++++	+++++	+++++	+++++	+++++	+++++	+++++	33.000	30.000-36.000	+++++	+++++
61 C4-Benzo(a)anthracenes	+++++	+++++	+++++	+++++	+++++	+++++	+++++	33.200	30.200-36.200	+++++	+++++
62 Benzo(b)fluoranthene	32.517	32.517	32.517	32.517	32.517	32.517	32.517	32.517	29.517-35.517	32.517	0.000
293 Benzo(j)fluoranthene	32.630	32.630	32.619	32.630	32.630	32.630	32.630	32.630	29.630-35.630	32.628	0.004
63 Benzo(k)fluoranthene	32.562	32.573	32.562	32.562	32.562	32.562	32.562	32.562	29.562-35.562	32.564	0.004
* 251 Benzo(e)pyrene-d12	33.182	33.182	33.182	33.182	33.182	33.182	33.182	33.182	30.182-36.182	33.182	0.000
64 Benzo(e)pyrene	33.238	33.249	33.238	33.249	33.238	33.238	33.238	33.238	30.238-36.238	33.241	0.005
246 Total Benzofluoranthen	32.562	32.573	32.562	32.517	32.562	32.562	32.562	32.562	29.562-35.562	32.557	0.018
65 Benzo(a)pyrene-d12	+++++	+++++	+++++	+++++	+++++	+++++	+++++	25.348	22.348-28.348	+++++	+++++
66 Benzo(a)pyrene	33.339	33.350	33.339	33.339	33.339	33.339	33.339	33.339	30.339-36.339	33.341	0.004
$ 67 Perylene-d12	33.520	33.519	33.520	33.519	33.520	33.520	33.520	33.520	30.520-36.520	33.520	0.000
68 Perylene	33.576	33.587	33.576	33.576	33.576	33.576	33.576	33.576	30.576-36.576	33.577	0.004
69 Indeno(1,2,3-cd)pyrene	35.637	35.659	35.637	35.648	35.637	35.637	35.637	35.637	32.637-38.637	35.642	0.009
70 Dibenzo(a,h)anthracene	35.626	35.637	35.615	35.626	35.626	35.614	35.615	35.626	32.626-38.626	35.623	0.008
71 C1-Dibenzo(a)anthracen	+++++	+++++	+++++	+++++	+++++	+++++	+++++	36.000	33.000-39.000	+++++	+++++
72 C2-Dibenzo(a)anthracen	+++++	+++++	+++++	+++++	+++++	+++++	+++++	37.000	34.000-40.000	+++++	+++++
73 C3-Dibenzo(a)anthracen	+++++	+++++	+++++	+++++	+++++	+++++	+++++	38.000	35.000-41.000	+++++	+++++
74 Benzo(g,h,i)perylene	36.549	36.561	36.538	36.561	36.549	36.549	36.549	36.549	33.549-39.549	36.551	0.008
253 n-Octane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.322	2.322-8.322	+++++	+++++
254 n-Nonane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.986	3.986-9.986	+++++	+++++
262 n-Decane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.446	5.446-11.446	+++++	+++++
255 n-Undecane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	9.869	6.869-12.869	+++++	+++++
256 n-Dodecane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	11.131	8.131-14.131	+++++	+++++

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem3\nt14.i\20210529.b\ALKYLPNA.m
Batch File: \\target\share\chem3\nt14.i\20210529.b
Inst ID: nt14.i

Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
257 n-Tridecane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	12.527	9.527-15.527	+++++	+++++
258 n-Tetradecane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	13.495	10.495-16.495	+++++	+++++
259 n-Pentadecane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	14.559	11.559-17.559	+++++	+++++
263 n-Hexadecane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	15.570	12.570-18.570	+++++	+++++
264 n-Heptadecane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	16.533	13.533-19.533	+++++	+++++
265 n-Octadecane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	17.453	14.453-20.453	+++++	+++++
266 Pristane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	16.608	13.608-19.608	+++++	+++++
288 n-Nonadecane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	18.282	15.282-21.282	+++++	+++++
289 Phytane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	17.517	14.517-20.517	+++++	+++++
267 n-Eicosane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	19.090	16.090-22.090	+++++	+++++
268 n-Heneicosane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	19.962	16.962-22.962	+++++	+++++
270 n-Docosane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	20.529	17.529-23.529	+++++	+++++
271 n-Tricosane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	21.133	18.133-24.133	+++++	+++++
272 n-Tetracosane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	21.839	18.839-24.839	+++++	+++++
273 n-Pentacosane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	22.245	19.245-25.245	+++++	+++++
274 n-Hexacosane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	23.251	20.251-26.251	+++++	+++++
275 n-Heptacosane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	23.764	20.764-26.764	+++++	+++++
276 n-Octacosane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	24.128	21.128-27.128	+++++	+++++
291 n-Nonacosane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	24.626	21.626-27.626	+++++	+++++
278 n-Triacontain	+++++	+++++	+++++	+++++	+++++	+++++	+++++	25.075	22.075-28.075	+++++	+++++
279 n-Hentriacontane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	25.519	22.519-28.519	+++++	+++++
280 n-Dotriacontane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	25.952	22.952-28.952	+++++	+++++
281 n-Tritriacontane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	26.364	23.364-29.364	+++++	+++++
282 n-Tetratriacontane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	26.829	23.829-29.829	+++++	+++++

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem3\nt14.i\20210529.b\ALKYLPNA.m
Batch File: \\target\share\chem3\nt14.i\20210529.b
Inst ID: nt14.i

Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
283 n-Pentatriacontane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	27.370	24.370-30.370	+++++	+++++
284 n-Hexatriacontane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	27.936	24.936-30.936	+++++	+++++
285 n-Heptatriacontane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	28.578	25.578-31.578	+++++	+++++
286 n-Octatriacontane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	29.295	26.295-32.295	+++++	+++++
292 n-Nonatriacontane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	30.135	27.135-33.135	+++++	+++++
287 n-Tetracontane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	31.103	28.103-34.103	+++++	+++++

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 29-MAY-2021 14:01
End Cal Date : 29-MAY-2021 18:49
Quant Method : ISTD
Target Version : 4.14
Integrator : HP RTE
Method file : \\target\share\chem3\nt14.i\20210529.b\ALKYLPNA.m
Last Edit : 02-Jun-2021 19:04 yev

Calibration File Names:
Level 1: \\target\share\chem3\nt14.i\20210529.b\NT1421052910.D
Level 2: \\target\share\chem3\nt14.i\20210529.b\NT1421052914.D
Level 3: \\target\share\chem3\nt14.i\20210529.b\NT1421052912.D
Level 4: \\target\share\chem3\nt14.i\20210529.b\NT1421052913.D
Level 5: \\target\share\chem3\nt14.i\20210529.b\NT1421052908.D
Level 6: \\target\share\chem3\nt14.i\20210529.b\NT1421052911.D
Level 7: \\target\share\chem3\nt14.i\20210529.b\NT1421052909.D

Compound	0.1000000 Level 1	0.2500000 Level 2	0.5000000 Level 3	1.0000 Level 4	2.5000 Level 5	5.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2	
	10.0000 Level 7											
1 trans-Decalin	0.07534	0.09779	0.10361	0.10630	0.10438	0.10880						
	0.10195						AVRG		0.09974		11.32497	
2 cis-Decalin	341	1426	3681	7169	15900	35039						
	60494						QUAD	0.000e+000	11.75388	4.66632	0.99984	<-
3 C1-Decalin	#####	#####	#####	#####	#####	#####						
	#####						AVRG		0.000e+000		0.000e+000	<-
4 C2-Decalin	#####	#####	#####	#####	#####	#####						
	#####						AVRG		0.000e+000		0.000e+000	<-

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 29-MAY-2021 14:01
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Quant Method : ISTD
Target Version : 4.14
Integrator : HP RTE
Method file : \\target\share\chem3\nt14.i\20210529.b\ALKYLPNA.m
Last Edit : 02-Jun-2021 19:04 yev

Compound	0.1000000 Level 1 / 10.0000 Level 7	0.2500000 Level 2	0.5000000 Level 3	1.0000 Level 4	2.5000 Level 5	5.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2	
5 C3-Decalin	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++						AVRG		0.000e+000		0.000e+000	<-
247 C4-Decalin	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++						AVRG		0.000e+000		0.000e+000	<-
7 Naphthalene	0.97655	0.90679	0.92553	0.98074	0.90814	0.93878						
	0.86816						AVRG		0.92924		4.32147	
8 C1-Naphthalenes	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++						AVRG		0.000e+000		0.000e+000	<-
9 C2-Naphthalenes	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++						AVRG		0.000e+000		0.000e+000	<-
10 C3-Naphthalenes	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++						AVRG		0.000e+000		0.000e+000	<-
11 C4-Naphthalenes	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++						AVRG		0.000e+000		0.000e+000	<-

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 29-MAY-2021 14:01
End Cal Date : 29-MAY-2021 18:49
Quant Method : ISTD
Target Version : 4.14
Integrator : HP RTE
Method file : \\target\share\chem3\nt14.i\20210529.b\ALKYLPNA.m
Last Edit : 02-Jun-2021 19:04 yev

Compound	0.1000000 Level 1	0.2500000 Level 2	0.5000000 Level 3	1.0000 Level 4	2.5000 Level 5	5.0000 Level 6	10.0000 Level 7	Curve	Coefficients b	m1	m2	%RSD or R^2
12 Benzo(b)thiophene	0.83362	0.75008	0.74346	0.78400	0.74342	0.77164	0.72118	AVRG		0.76391		4.83263
13 C1-Benzothiophenes	*****	*****	*****	*****	*****	*****	*****	AVRG		0.000e+000		0.000e+000 <-
14 C2-Benzothiophenes	*****	*****	*****	*****	*****	*****	*****	AVRG		0.000e+000		0.000e+000 <-
15 C3_Benzothiophenes	*****	*****	*****	*****	*****	*****	*****	AVRG		0.000e+000		0.000e+000 <-
16 2-Methylnaphthalene	0.56206	0.53076	0.55003	0.57701	0.54234	0.53948	0.50079	AVRG		0.54321		4.45479
17 1-methylnaphthalene	0.54764	0.51195	0.53863	0.55443	0.53783	0.52700	0.48181	AVRG		0.52847		4.68912
18 Biphenyl	0.86612	0.80372	0.82276	0.84484	0.78839	0.78122	0.71158	AVRG		0.80266		6.26466

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 29-MAY-2021 14:01
End Cal Date : 29-MAY-2021 18:49
Quant Method : ISTD
Target Version : 4.14
Integrator : HP RTE
Method file : \\target\share\chem3\nt14.i\20210529.b\ALKYLPNA.m
Last Edit : 02-Jun-2021 19:04 yev

Compound	0.1000000 Level 1	0.2500000 Level 2	0.5000000 Level 3	1.0000 Level 4	2.5000 Level 5	5.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	10.0000 Level 7										
19 2,6-Dimethylnaphthalene	0.61243	0.59679	0.59479	0.62313	0.58406	0.58864					
	0.53203						AVRG		0.59027		4.92309
20 Acenaphthylene	1.05426	0.94089	0.98723	1.04621	1.03413	1.02968					
	0.97082						AVRG		1.00903		4.25561
22 Acenaphthene	0.65042	0.60151	0.63349	0.65389	0.62941	0.61412					
	0.57136						AVRG		0.62203		4.66754
23 Dibenzofuran	0.97515	0.88990	0.92829	0.98454	0.93325	0.90638					
	0.84119						AVRG		0.92267		5.36534
24 1,6,7-Trimethylnaphthalene	0.64590	0.55333	0.59731	0.62380	0.61728	0.60612					
	0.56423						AVRG		0.60114		5.46067
26 Fluorene	0.74729	0.69380	0.71668	0.73799	0.73676	0.70821					
	0.66343						AVRG		0.71488		4.11928
27 C1-Fluorenes	*****	*****	*****	*****	*****	*****					
	*****						AVRG		0.000e+000		0.000e+000 <-

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 29-MAY-2021 14:01
End Cal Date : 29-MAY-2021 18:49
Quant Method : ISTD
Target Version : 4.14
Integrator : HP RTE
Method file : \\target\share\chem3\nt14.i\20210529.b\ALKYLPNA.m
Last Edit : 02-Jun-2021 19:04 yev

Compound	0.1000000 Level 1 / 10.0000 Level 7	0.2500000 Level 2	0.5000000 Level 3	1.0000 Level 4	2.5000 Level 5	5.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2	
28 C2-Fluorenes	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++						AVRG		0.000e+000		0.000e+000	<-
29 C3-Fluorenes	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++						AVRG		0.000e+000		0.000e+000	<-
30 Dibenzothiophene	1.08558	0.93240	1.00258	1.04835	1.04482	1.00676						
	0.94437						AVRG		1.00927		5.54443	
31 C1-Dibenzothiophenes	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++						AVRG		0.000e+000		0.000e+000	<-
32 C2-Dibenzothiophenes	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++						AVRG		0.000e+000		0.000e+000	<-
33 C3-Dibenzothiophenes	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++						AVRG		0.000e+000		0.000e+000	<-
34 C4-Dibenzothiophenes	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++						AVRG		0.000e+000		0.000e+000	<-

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Compound	0.1000000 Level 1 / 10.0000 Level 7	0.2500000 Level 2	0.5000000 Level 3	1.0000 Level 4	2.5000 Level 5	5.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
36 Phenanthrene	1.13143	1.01129	1.03844	1.07900	1.01839	1.01010					
	0.92977						AVRG		1.03120		6.09188
37 Anthracene	0.98572	0.95547	0.97117	1.02091	0.97953	0.97051					
	0.90839						AVRG		0.97024		3.50468
38 C1-Phenanthrenes/Anthracenes	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++						AVRG		0.000e+000		0.000e+000 <-
39 C2-Phenanthrenes/Anthracenes	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++						AVRG		0.000e+000		0.000e+000 <-
40 C3-Phenanthrenes/Anthracenes	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++						AVRG		0.000e+000		0.000e+000 <-
41 C4-Phenanthrenes/Anthracenes	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++						AVRG		0.000e+000		0.000e+000 <-
42 Carbazole	0.87633	0.78158	0.83875	0.88735	0.88784	0.88359					
	0.83487						AVRG		0.85576		4.63830

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Compound	0.1000000 Level 1	0.2500000 Level 2	0.5000000 Level 3	1.0000 Level 4	2.5000 Level 5	5.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	10.0000 Level 7										
43 1-Methylphenanthrene	0.78377	0.65784	0.71545	0.77649	0.75741	0.77512					
	0.72143						AVRG		0.74107		6.15281
44 Fluoranthene	1.13051	1.03764	1.09947	1.17782	1.18509	1.18250					
	1.15442						AVRG		1.13821		4.76741
45 Pyrene-d10	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++						AVRG		0.000e+000		0.000e+000 <-
46 Pyrene	1.16878	1.04588	1.13697	1.21183	1.25155	1.26952					
	1.20187						AVRG		1.18377		6.40493
47 Retene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++						AVRG		0.000e+000		0.000e+000 <-
48 C1-Fluoranthenes/Pyrenes	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++						AVRG		0.000e+000		0.000e+000 <-
49 C2-Fluoranthenes/Pyrenes	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++						AVRG		0.000e+000		0.000e+000 <-

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Compound	0.1000000 Level 1 / 10.0000 Level 7	0.2500000 Level 2	0.5000000 Level 3	1.0000 Level 4	2.5000 Level 5	5.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2	
50 C3-Fluoranthenes/Pyrenes	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++						AVRG		0.000e+000		0.000e+000	<-
249 C4-Fluoranthenes/Pyrenes	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++						AVRG		0.000e+000		0.000e+000	<-
51 Naphthobenzothiophene	1.30854	1.10456	1.22803	1.31739	1.33585	1.33380						
	1.27533						AVRG		1.27193		6.52045	
52 C1-Naphthobenzothiophenes	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++						AVRG		0.000e+000		0.000e+000	<-
53 C2-Naphthobenzothiophenes	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++						AVRG		0.000e+000		0.000e+000	<-
54 C3-Naphthobenzothiophenes	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++						AVRG		0.000e+000		0.000e+000	<-
248 C4-Naphthobenzothiophenes	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++						AVRG		0.000e+000		0.000e+000	<-

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Compound	0.1000000 Level 1	0.2500000 Level 2	0.5000000 Level 3	1.0000 Level 4	2.5000 Level 5	5.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	10.0000 Level 7										
55 Benzo(a)anthracene	0.81409	0.67077	0.76716	0.80173	0.83365	0.80314					
	0.73939						AVRG		0.77571		7.19000
57 Chrysene	0.80729	0.72194	0.78642	0.79876	0.76863	0.74718					
	0.69053						AVRG		0.76011		5.62041
58 C1-Benzo(a)anthracenes/Chryse	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++						AVRG		0.000e+000		0.000e+000 <-
59 C2-Benzo(a)anthracenes/Chryse	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++						AVRG		0.000e+000		0.000e+000 <-
60 C3-Benzo(a)anthracenes/Chryse	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++						AVRG		0.000e+000		0.000e+000 <-
61 C4-Benzo(a)anthracenes/Chryse	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++						AVRG		0.000e+000		0.000e+000 <-
62 Benzo(b)fluoranthene	0.85473	0.65765	0.75442	0.78526	0.83633	0.85064					
	0.89242						AVRG		0.80449		9.87121

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Compound	0.1000000 Level 1	0.2500000 Level 2	0.5000000 Level 3	1.0000 Level 4	2.5000 Level 5	5.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2	
	10.0000 Level 7											
293 Benzo(j)fluoranthene	0.82677	0.81953	0.82796	0.88588	0.72587	0.75078						
	0.73098						AVRG		0.79539		7.57621	
63 Benzo(k)fluoranthene	0.82807	0.85009	0.82915	0.90145	0.89528	0.82566						
	0.91265						AVRG		0.86319		4.46497	
64 Benzo(e)pyrene	0.85465	0.73476	0.75443	0.80855	0.79838	0.79291						
	0.77577						AVRG		0.78849		4.94071	
246 Total Benzofluoranthenes	0.81134	0.69711	0.76511	0.80975	0.80206	0.82536						
	0.80515						AVRG		0.78798		5.60191	
65 Benzo(a)pyrene-d12	#####	#####	#####	#####	#####	#####						
	#####						AVRG		0.000e+000		0.000e+000	<-
66 Benzo(a)pyrene	0.76459	0.64905	0.66773	0.73458	0.73648	0.74142						
	0.72723						AVRG		0.71730		5.88698	
68 Perylene	0.80974	0.62875	0.72533	0.75540	0.77062	0.75750						
	0.72950						AVRG		0.73955		7.61812	

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Compound	0.1000000 Level 1	0.2500000 Level 2	0.5000000 Level 3	1.0000 Level 4	2.5000 Level 5	5.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	10.0000 Level 7										
69 Indeno(1,2,3-cd)pyrene	0.73595	0.65038	0.82021	0.86212	0.94806	0.94147					
	0.93560						AVRG		0.84197		13.60664
70 Dibenzo(a,h)anthracene	7925	18125	45762	93780	238811	527390					
	1030693						QUAD	0.000e+000	1.28137	-0.02001	0.99987
71 C1-Dibenzo(a)anthracenes	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++						AVRG		0.000e+000		0.000e+000 <-
72 C2-Dibenzo(a)anthracenes	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++						AVRG		0.000e+000		0.000e+000 <-
73 C3-Dibenzo(a)anthracenes	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++						AVRG		0.000e+000		0.000e+000 <-
74 Benzo(g,h,i)perylene	0.81745	0.72049	0.79193	0.85472	0.90480	0.87343					
	0.85980						AVRG		0.83180		7.37140
253 n-Octane	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++						AVRG		0.000e+000		0.000e+000 <-

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Compound	0.1000000 Level 1	0.2500000 Level 2	0.5000000 Level 3	1.0000 Level 4	2.5000 Level 5	5.0000 Level 6	10.0000 Level 7	Curve	Coefficients b	m1	m2	%RSD or R^2	
254 n-Nonane	#####	#####	#####	#####	#####	#####	#####						
								AVRG		0.000e+000		0.000e+000	<-
262 n-Decane	#####	#####	#####	#####	#####	#####	#####						
								AVRG		0.000e+000		0.000e+000	<-
255 n-Undecane	#####	#####	#####	#####	#####	#####	#####						
								AVRG		0.000e+000		0.000e+000	<-
256 n-Dodecane	#####	#####	#####	#####	#####	#####	#####						
								AVRG		0.000e+000		0.000e+000	<-
257 n-Tridecane	#####	#####	#####	#####	#####	#####	#####						
								AVRG		0.000e+000		0.000e+000	<-
258 n-Tetradecane	#####	#####	#####	#####	#####	#####	#####						
								AVRG		0.000e+000		0.000e+000	<-
259 n-Pentadecane	#####	#####	#####	#####	#####	#####	#####						
								AVRG		0.000e+000		0.000e+000	<-

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Compound	0.1000000 Level 1	0.2500000 Level 2	0.5000000 Level 3	1.0000 Level 4	2.5000 Level 5	5.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2	
	10.0000 Level 7											
263 n-Hexadecane	#####	#####	#####	#####	#####	#####						
	#####						AVRG		0.000e+000		0.000e+000	<-
264 n-Heptadecane	#####	#####	#####	#####	#####	#####						
	#####						AVRG		0.000e+000		0.000e+000	<-
265 n-Octadecane	#####	#####	#####	#####	#####	#####						
	#####						AVRG		0.000e+000		0.000e+000	<-
266 Pristane	#####	#####	#####	#####	#####	#####						
	#####						AVRG		0.000e+000		0.000e+000	<-
288 n-Nonadecane	#####	#####	#####	#####	#####	#####						
	#####						AVRG		0.000e+000		0.000e+000	<-
289 Phytane	#####	#####	#####	#####	#####	#####						
	#####						AVRG		0.000e+000		0.000e+000	<-
267 n-Eicosane	#####	#####	#####	#####	#####	#####						
	#####						AVRG		0.000e+000		0.000e+000	<-

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Compound	0.1000000 Level 1	0.2500000 Level 2	0.5000000 Level 3	1.0000 Level 4	2.5000 Level 5	5.0000 Level 6	10.0000 Level 7	Curve	Coefficients b	m1	m2	%RSD or R^2	
268 n-Heneicosane	#####	#####	#####	#####	#####	#####	#####						
								AVRG		0.000e+000		0.000e+000	<-
270 n-Docosane	#####	#####	#####	#####	#####	#####	#####						
								AVRG		0.000e+000		0.000e+000	<-
271 n-Tricosane	#####	#####	#####	#####	#####	#####	#####						
								AVRG		0.000e+000		0.000e+000	<-
272 n-Tetracosane	#####	#####	#####	#####	#####	#####	#####						
								AVRG		0.000e+000		0.000e+000	<-
273 n-Pentacosane	#####	#####	#####	#####	#####	#####	#####						
								AVRG		0.000e+000		0.000e+000	<-
274 n-Hexacosane	#####	#####	#####	#####	#####	#####	#####						
								AVRG		0.000e+000		0.000e+000	<-
275 n-Heptacosane	#####	#####	#####	#####	#####	#####	#####						
								AVRG		0.000e+000		0.000e+000	<-

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Compound	0.1000000 Level 1 / 10.0000 Level 7	0.2500000 Level 2	0.5000000 Level 3	1.0000 Level 4	2.5000 Level 5	5.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2	
276 n-Octacosane	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+000		0.000e+000	<-
291 n-Nonacosane	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+000		0.000e+000	<-
278 n-Triacontain	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+000		0.000e+000	<-
279 n-Hentriacontane	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+000		0.000e+000	<-
280 n-Dotriacontane	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+000		0.000e+000	<-
281 n-Tritriacontane	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+000		0.000e+000	<-
282 n-Tetratriacontane	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+000		0.000e+000	<-

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Compound	0.1000000 Level 1 / 10.0000 Level 7	0.2500000 Level 2	0.5000000 Level 3	1.0000 Level 4	2.5000 Level 5	5.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2	
283 n-Pentatriacontane	+++++ / +++++	+++++	+++++	+++++	+++++	+++++						
							AVRG		0.000e+000		0.000e+000	<-
284 n-Hexatriacontane	+++++ / +++++	+++++	+++++	+++++	+++++	+++++						
							AVRG		0.000e+000		0.000e+000	<-
285 n-Heptatriacontane	+++++ / +++++	+++++	+++++	+++++	+++++	+++++						
							AVRG		0.000e+000		0.000e+000	<-
286 n-Octatriacontane	+++++ / +++++	+++++	+++++	+++++	+++++	+++++						
							AVRG		0.000e+000		0.000e+000	<-
292 n-Nonatriacontane	+++++ / +++++	+++++	+++++	+++++	+++++	+++++						
							AVRG		0.000e+000		0.000e+000	<-
287 n-Tetracontane	+++++ / +++++	+++++	+++++	+++++	+++++	+++++						
							AVRG		0.000e+000		0.000e+000	<-
$ 6 Naphthalene-d8	0.94071 / 0.88294	0.90666	0.92939	0.98093	0.91502	0.95276						
							AVRG		0.92977		3.46010	

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Compound	0.1000000 Level 1	0.2500000 Level 2	0.5000000 Level 3	1.0000 Level 4	2.5000 Level 5	5.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	10.0000 Level 7										
$ 21 Acenaphthene-d10	0.60393	0.54952	0.57334	0.59590	0.57886	0.56738					
	0.52843						AVRG		0.57105		4.55455
$ 35 Phenanthrene-d10	1.02317	0.93754	0.96196	1.00459	0.94359	0.97442					
	0.89020						AVRG		0.96221		4.60922
$ 56 Chrysene-d12	0.64437	0.58495	0.64765	0.65457	0.65990	0.62359					
	0.56724						AVRG		0.62604		5.80162
$ 67 Perylene-d12	0.73167	0.60093	0.65277	0.69349	0.70489	0.67960					
	0.66732						AVRG		0.67581		6.19083

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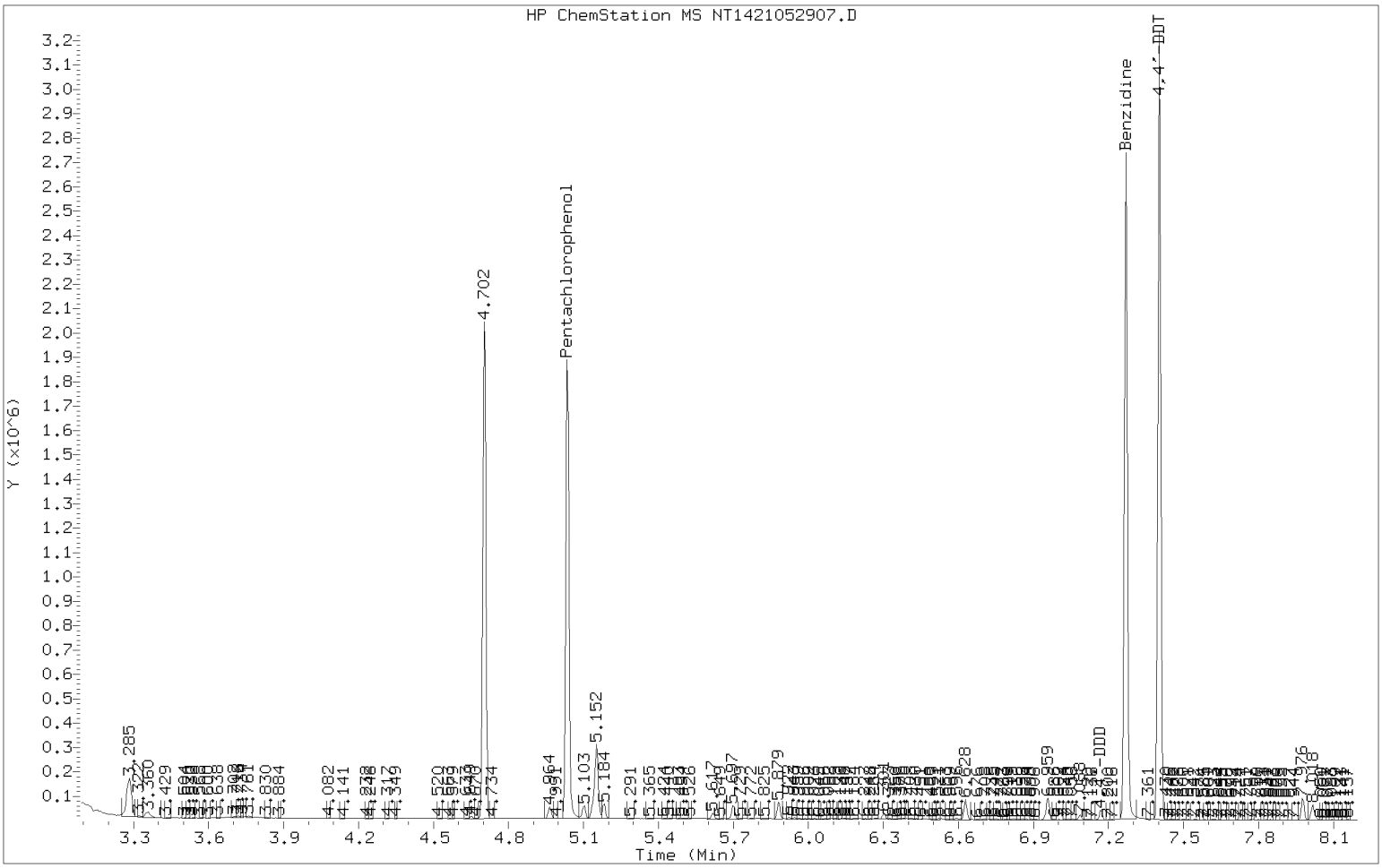
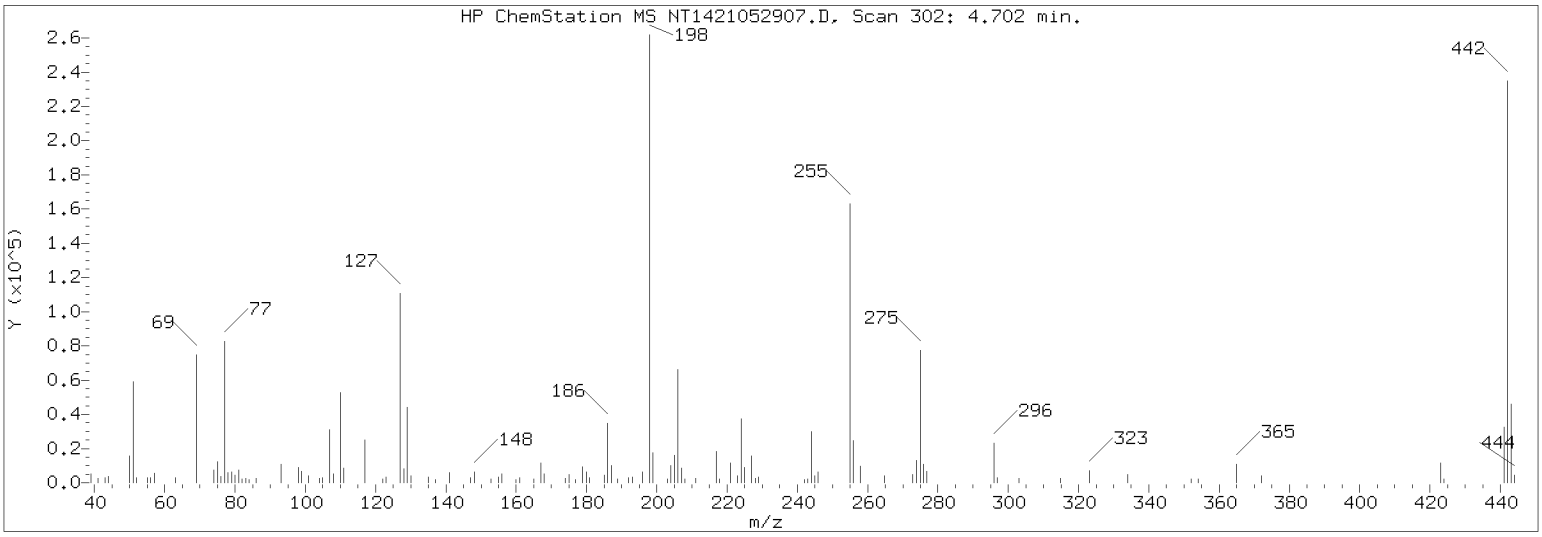
Curve	Formula	Units
Averaged	Amt = Rsp/m1	Response
Quad	Amt = b + m1*Rsp + m2*Rsp^2	Response

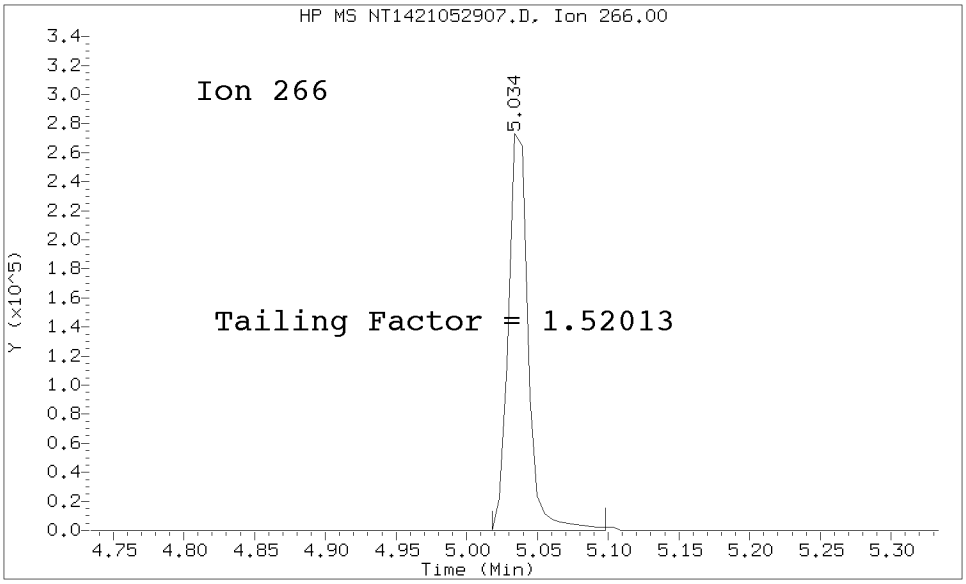
DFTPP TAILING FACTOR AND BREAKDOWN GRAPHIC REPORT

Datafile Analyzed: /20210529.b/NT1421052907.D/NT1421052907.D
Method Used: \20210529.b\DFTPP8270E.m Inst: nt14
Injection Date: 29-MAY-2021 13:39 Operator: VTS
Sample Info: SJF0025-TUN1 SJF0025-TUN1
Report Date: 06/02/2021 18:45



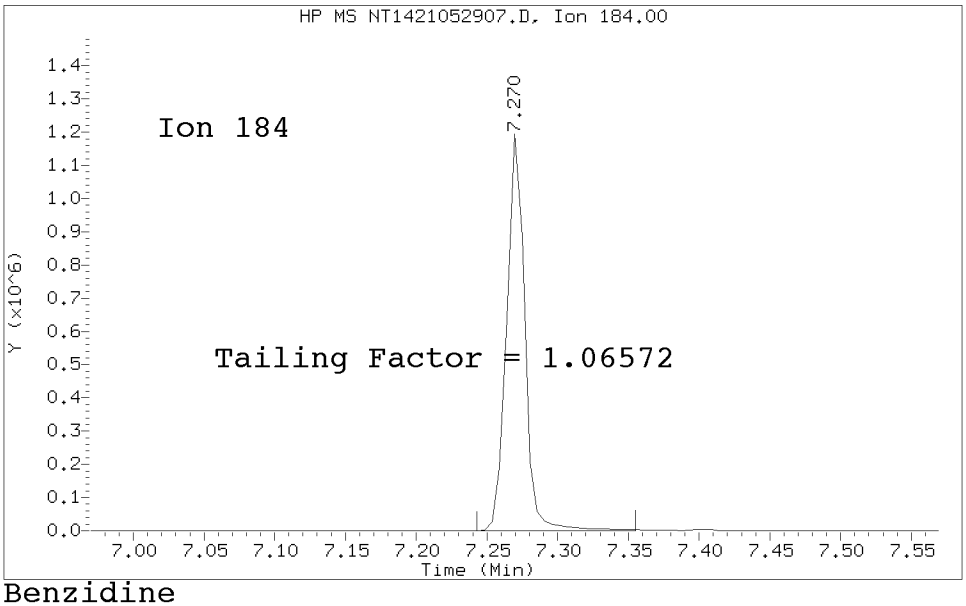


Datafile Analyzed: /20210529.b/NT1421052907.D/NT1421052907.D
Method Used: \20210529.b\DFTPP8270E.m\sw846ddt.m Inst: nt14
Injection Date: 29-MAY-2021 13:39 Operator: JZ
Sample Info: SJF0025-TUN1
Report Date: 06/02/2021 18:45



Pentachlorophenol
==========
Exp. RT = 5.039
Found RT = 5.034

Tail Factor = 1.520 Maximum Allowed = 2.0



Benzidine
==========
Exp. RT = 7.275
Found RT = 7.270

Tail Factor = 1.066 Maximum Allowed = 2.0

8270 TAILING FACTOR/BREAKDOWN SUMMARY RESULTS

TAILING ANALYSIS SUMMARY

Compound	Tail Factor	Max Allowed	Test
Pentachlorophenol	1.5201288	2.000	PASS
Benzidine	1.0657216	2.000	PASS

DDT DEGRADATION BREAKDOWN ANALYSIS SUMMARY

Compound	Response	%Breakdown	Max Allowed	Test
4,4-DDT	563112			N/A
4,4-DDE	0	0.0	20.0	PASS
4,4-DDD	13152	2.3	20.0	PASS
4,4-DDD + DDE	13152	2.3	20.0	PASS

Tuning Sample, nt14.i/20210529.b/NT1421052907.D, *** PASSED ***

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
68	Less than 2.00% of mass 69	0.00 (0.00)
69	Mass 69 relative abundance	28.36
70	Less than 2.00% of mass 69	0.00 (0.00)
197	Less than 2.00% of mass 198	0.00
199	5.00 - 9.00% of mass 198	6.76
365	1.00 - 100.00% of mass 198	4.64
441	Less than 150.00% of mass 443	15.22 (72.50)
442	Less than 200.00% of mass 198	107.89
443	15.00 - 24.00% of mass 442	20.99 (19.45)

Data File: NT1421052907.D
Spectrum: Avg. Scans 301-303 (4.70), Background Scan 296
Location of Maximum: 442.00
Number of points: 119

m/z	Y	m/z	Y	m/z	Y	m/z	Y
39.00	4088	107.00	23768	185.00	3550	246.00	4921
41.00	189	108.00	3673	186.00	27048	255.00	130472
43.00	300	110.00	40024	187.00	7921	256.00	19464
44.00	492	111.00	6643	189.00	687	258.00	7944
50.00	11960	117.00	19360	192.00	1775	265.00	2660
51.00	44032	122.00	778	193.00	2104	273.00	4235
52.00	1691	123.00	2759	196.00	5145	274.00	10626
55.00	546	127.00	84112	198.00	202048	275.00	62040
56.00	1678	128.00	6409	199.00	13660	276.00	8597
57.00	4602	129.00	34144	203.00	687	277.00	5339
63.00	984	130.00	3082	204.00	7568	296.00	19536
69.00	57304	135.00	2780	205.00	12402	297.00	2089
74.00	5859	137.00	682	206.00	51632	303.00	1778
75.00	9203	141.00	4684	207.00	6963	315.00	1895
76.00	2985	147.00	1837	208.00	1422	323.00	6224
77.00	62216	148.00	4980	211.00	1691	334.00	3421
78.00	4462	153.00	743	217.00	14131	352.00	1509
79.00	4915	155.00	2043	218.00	755	354.00	1684
80.00	3483	156.00	3962	221.00	9451	365.00	9372
81.00	5765	160.00	679	222.00	674	372.00	2913
82.00	702	161.00	1805	223.00	2579	403.00	888
83.00	2221	165.00	1447	224.00	30408	421.00	826
84.00	685	167.00	8876	225.00	7402	422.00	716
86.00	1590	168.00	4117	227.00	12661	423.00	10882
93.00	8295	174.00	1590	228.00	1506	424.00	1838
98.00	7051	175.00	3747	229.00	2182	441.00	30744
99.00	5151	177.00	674	242.00	673	442.00	217984
101.00	3014	179.00	7206	243.00	724	443.00	42408
104.00	846	180.00	5041	244.00	24280	444.00	3461
105.00	1678	181.00	1922	245.00	3292		

Data File: \\target\share\chem3\nt14.i\20210529.b\NT1421052908.D

Date : 29-MAY-2021 14:01

Client ID:

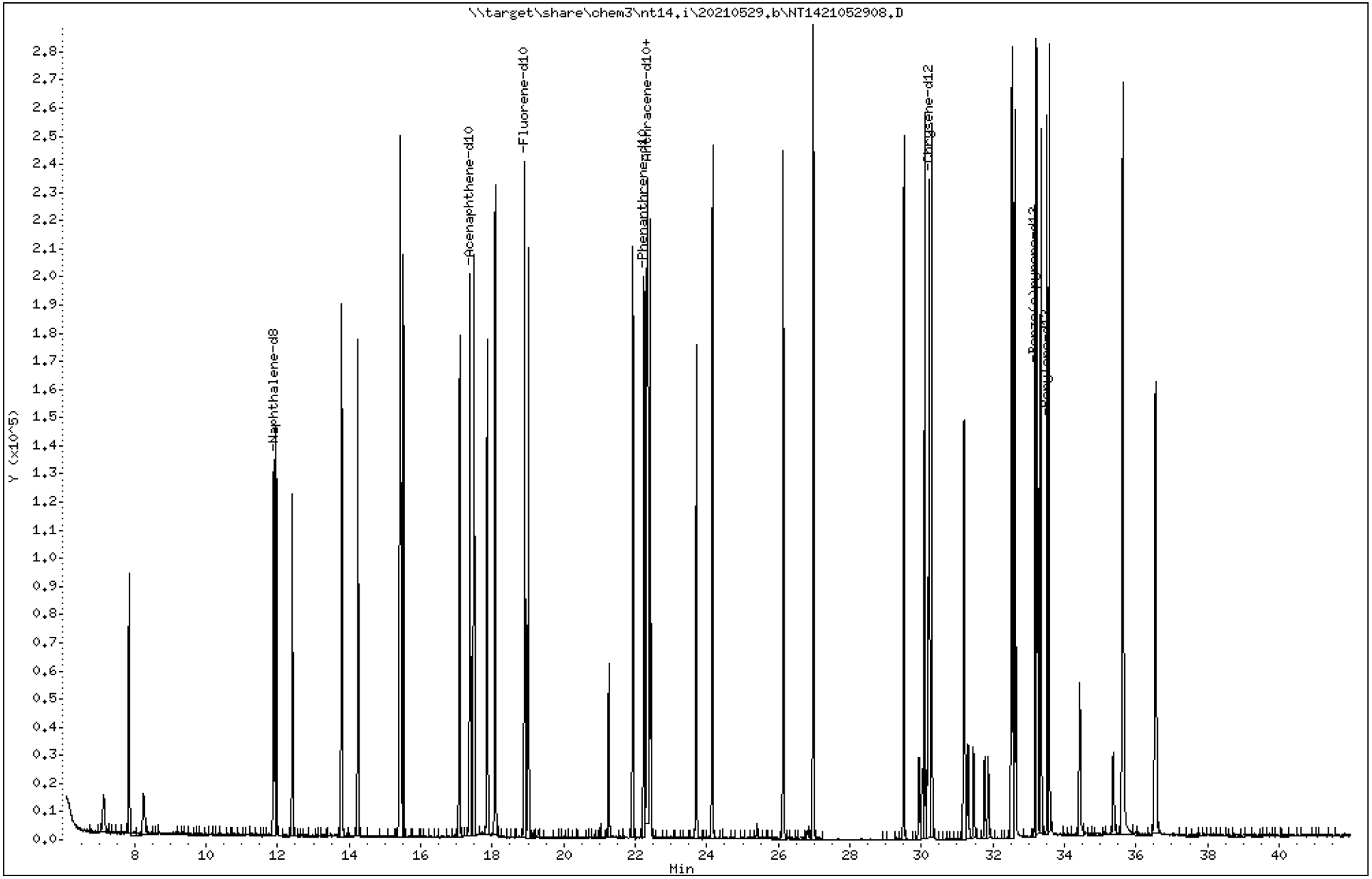
Instrument: nt14.i

Sample Info: SJF0025-CAL5

Operator: VTS

Column phase: Rxi-17Sil MS

Column diameter: 0.25



ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt14.i\20210529.b\NT1421052908.D
Lab Smp Id: SJF0025-CAL5
Inj Date : 29-MAY-2021 14:01
Operator : VTS Inst ID: nt14.i
Smp Info : SJF0025-CAL5
Misc Info :
Comment : 1ul Injection
Method : \\target\share\chem3\nt14.i\20210529.b\ALKYLPNA.m
Meth Date : 02-Jun-2021 19:03 yev Quant Type: ISTD
Cal Date : 29-MAY-2021 14:01 Cal File: NT1421052908.D
Als bottle: 2 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: TARGETS.sub
Target Version: 4.14
Processing Host: ORGDATA102

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
	1 trans-Decalin	138	7.146	7.146	(0.378)	20807	2.50000	2.616
	2 cis-Decalin	138	8.256	8.256	(0.437)	15900	2.50000	2.436
$	6 Naphthalene-d8	136	11.897	11.897	(0.629)	182406	2.50000	2.460
	7 Naphthalene	128	11.957	11.957	(0.632)	181036	2.50000	2.443
	12 Benzo(b)thiophene	134	12.409	12.409	(0.656)	148199	2.50000	2.433
	16 2-Methylnaphthalene	141	13.794	13.794	(0.730)	108114	2.50000	2.496
	17 1-methylnaphthalene	141	14.245	14.245	(0.753)	107215	2.50000	2.544
	18 Biphenyl	154	15.431	15.431	(0.816)	157163	2.50000	2.456
	19 2,6-Dimethylnaphthalene	156	15.508	15.508	(0.820)	116430	2.50000	2.474
	20 Acenaphthylene	152	17.091	17.091	(0.904)	206152	2.50000	2.562
$	21 Acenaphthene-d10	164	17.377	17.377	(0.919)	115394	2.50000	2.534
	22 Acenaphthene	153	17.486	17.486	(0.925)	125472	2.50000	2.530
	23 Dibenzofuran	168	17.860	17.860	(0.945)	186041	2.50000	2.529
	24 1,6,7-Trimethylnaphthalene	170	18.091	18.091	(0.957)	123053	2.50000	2.567
*	25 Fluorene-d10	176	18.907	18.907	(1.000)	159478	2.00000	
	26 Fluorene	166	19.009	19.009	(1.005)	146871	2.50000	2.577
	30 Dibenzothiophene	184	21.931	21.931	(1.160)	208283	2.50000	2.588
$	35 Phenanthrene-d10	188	22.239	22.239	(0.995)	200702	2.50000	2.452
	36 Phenanthrene	178	22.327	22.327	(0.999)	216613	2.50000	2.469
*	250 Anthracene-d10	188	22.360	22.360	(1.000)	170161	2.00000	
	37 Anthracene	178	22.426	22.426	(1.003)	208348	2.50000	2.524
	42 Carbazole	167	23.712	23.712	(1.060)	188844	2.50000	2.594
	43 1-Methylphenanthrene	192	24.162	24.162	(1.081)	161102	2.50000	2.555
	44 Fluoranthene	202	26.142	26.142	(1.169)	252070	2.50000	2.603
	46 Pyrene	202	26.977	26.977	(1.207)	266206	2.50000	2.643
	51 Naphthobenzothiophene	234	29.509	29.509	(1.320)	284137	2.50000	2.626
	55 Benzo(a)anthracene	228	30.095	30.095	(0.907)	246565	2.50000	2.687
$	56 Chrysene-d12	240	30.219	30.219	(0.911)	195176	2.50000	2.635
	57 Chrysene	228	30.287	30.287	(0.913)	227333	2.50000	2.528
	62 Benzo(b)fluoranthene	252	32.517	32.517	(0.980)	247357	2.50000	2.599(M)
	63 Benzo(k)fluoranthene	252	32.562	32.562	(0.981)	264792	2.50000	2.593
	293 Benzo(j)fluoranthene	252	32.629	32.629	(0.983)	214686	2.50000	2.281
	246 Total Benzofluoranthenes	252	32.562	32.562	(0.981)	711668	7.50000	7.634(M)

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
* 251 Benzo(e)pyrene-d12	264	33.181	33.181	(1.000)	236612	2.00000	
64 Benzo(e)pyrene	252	33.238	33.238	(1.002)	236134	2.50000	2.531
66 Benzo(a)pyrene	252	33.339	33.339	(1.005)	217825	2.50000	2.567
$ 67 Perylene-d12	264	33.519	33.519	(1.010)	208482	2.50000	2.608
68 Perylene	252	33.575	33.575	(1.012)	227922	2.50000	2.605(M)
69 Indeno(1,2,3-cd)pyrene	276	35.637	35.637	(1.074)	280404	2.50000	2.815(M)
70 Dibenzo(a,h)anthracene	278	35.625	35.625	(1.074)	238811	2.50000	2.546(M)
74 Benzo(g,h,i)perylene	276	36.549	36.549	(1.101)	267607	2.50000	2.719(M)

QC Flag Legend

M - Compound response manually integrated.

Data File: \\target\share\chem3\nt14.i\20210529.b\NT1421052908.D Page 1
Report Date: 02-Jun-2021 19:03

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt14.i
Lab File ID: NT1421052908.D
Lab Smp Id: SJF0025-CAL5
Analysis Type: SV
Quant Type: ISTD
Operator: VTS
Method File: \\target\share\chem3\nt14.i\20210529.b\ALKYLPNA.m
Misc Info:

Calibration Date: 29-MAY-2021
Calibration Time: 14:01
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
25 Fluorene-d10	159478	79739	318956	159478	0.00
250 Anthracene-d10	170161	85081	340322	170161	0.00
251 Benzo(e)pyrene-d1	236612	118306	473224	236612	0.00

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
25 Fluorene-d10	18.91	18.41	19.41	18.91	0.00
250 Anthracene-d10	22.36	21.86	22.86	22.36	0.00
251 Benzo(e)pyrene-d1	33.18	32.68	33.68	33.18	0.00

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

REVIEW SUMMARY FOR FILE - NT1421052908.D

Lab ID: SJF0025-CAL5
nt14.i, 20210529.b\ALKYLPNA.m, 29-MAY-2021 14:01

RT	CO-ELUTION COMPOUNDS
	NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
NONE			

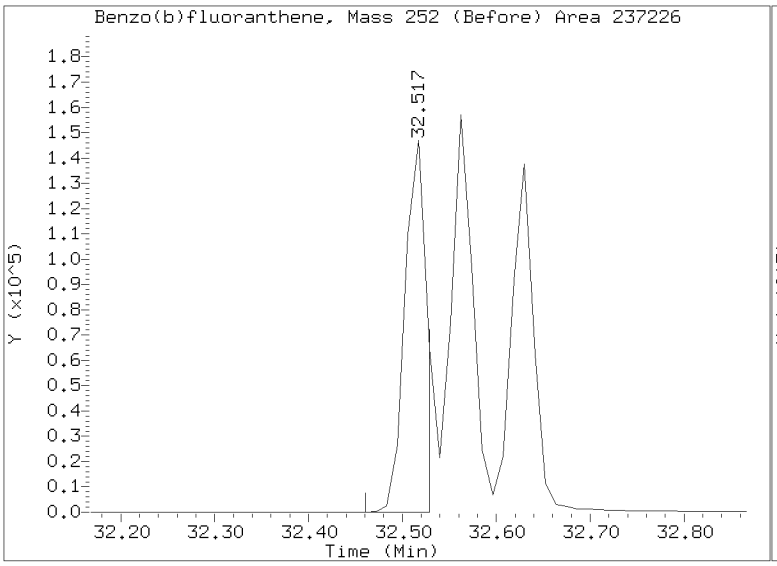
RRT check based on Ccal File: NT1421052908.D

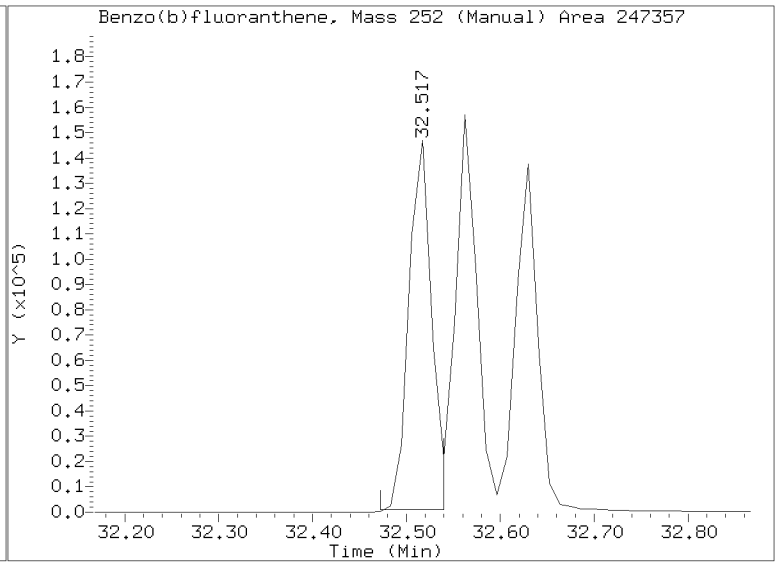
On Column LOD for nt14.i, 20210529.b\ALKYLPNA.m, TARGETS.sub = 0.0000

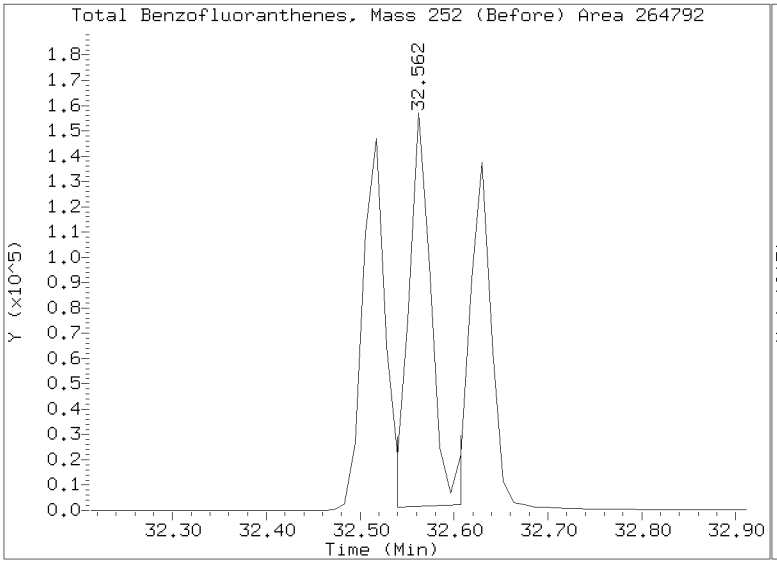
* Only compounds listed in the work order have been verified by the analyst *

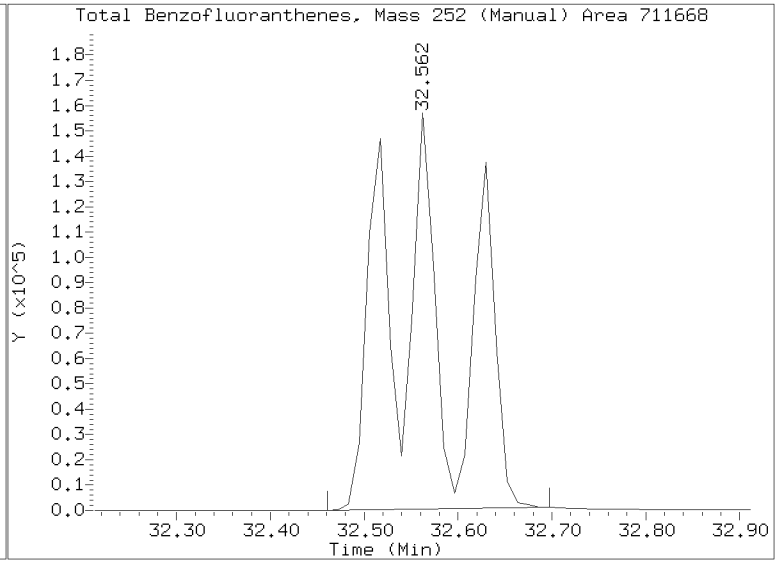
Quant Ion Manual Peak Adjustment Report

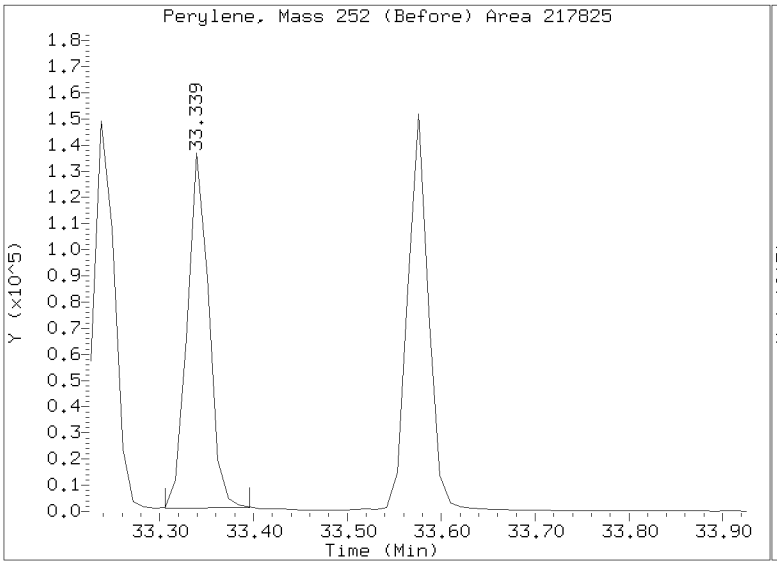
Datafile: //target/share/chem3/nt14.i/20210529.b/NT1421052908.D
Injection Date: 29-MAY-2021 14:01
Lab ID:SJF0025-CAL5 Client ID:
Report Date: 06/02/2021 19:03

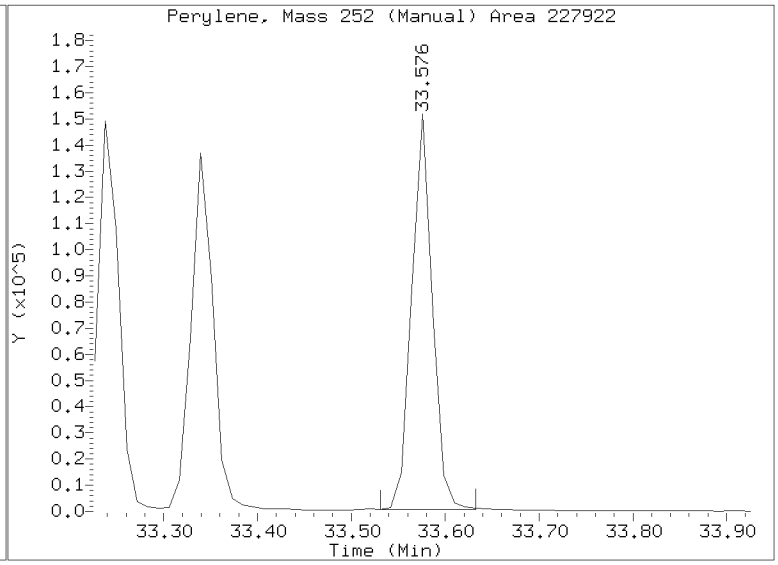






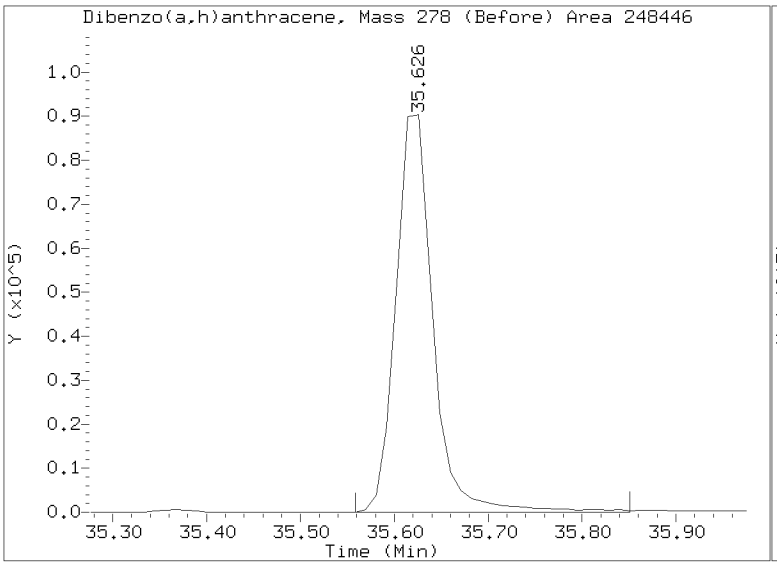


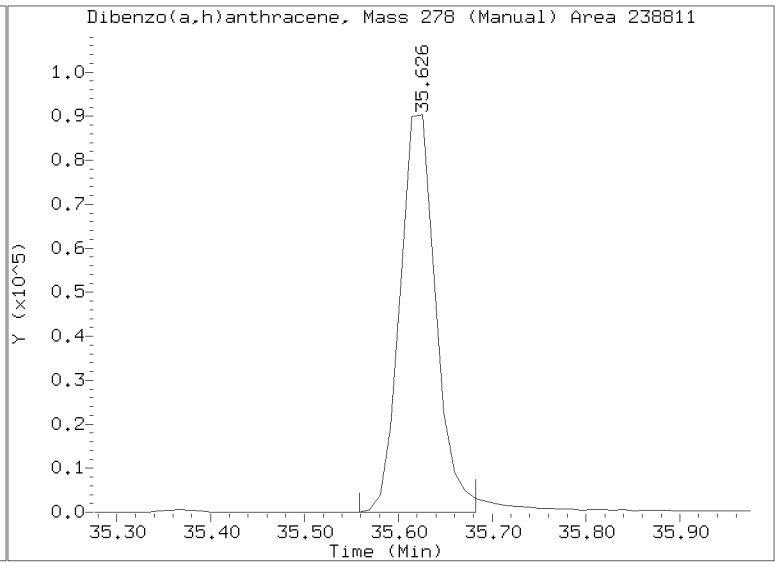


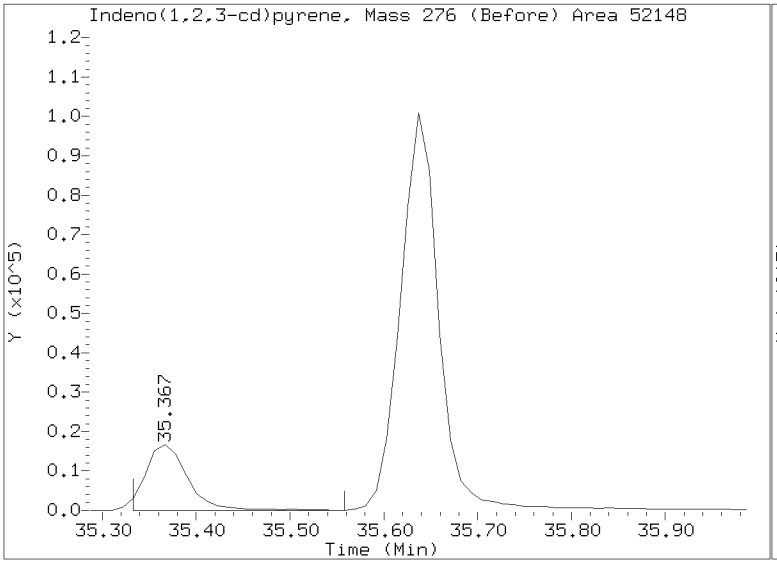


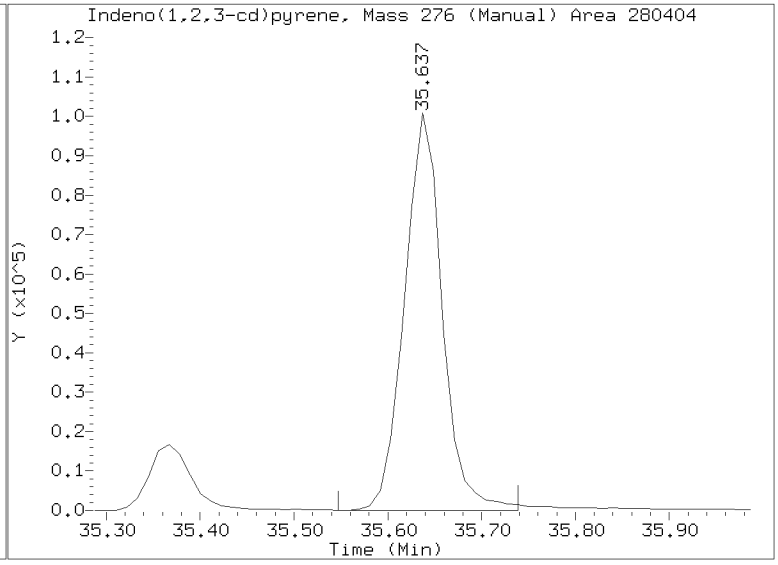
Quant Ion Manual Peak Adjustment Report

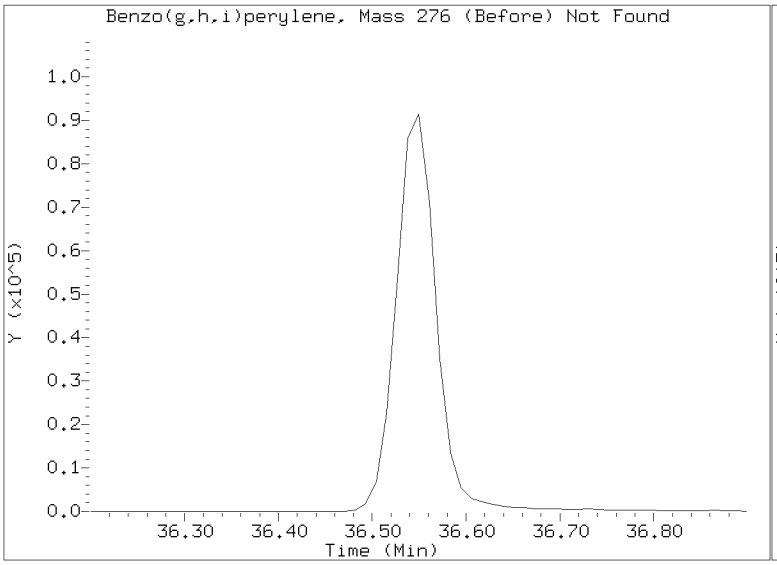
Datafile: //target/share/chem3/nt14.i/20210529.b/NT1421052908.D
Injection Date: 29-MAY-2021 14:01
Lab ID:SJF0025-CAL5 Client ID:
Report Date: 06/02/2021 19:03

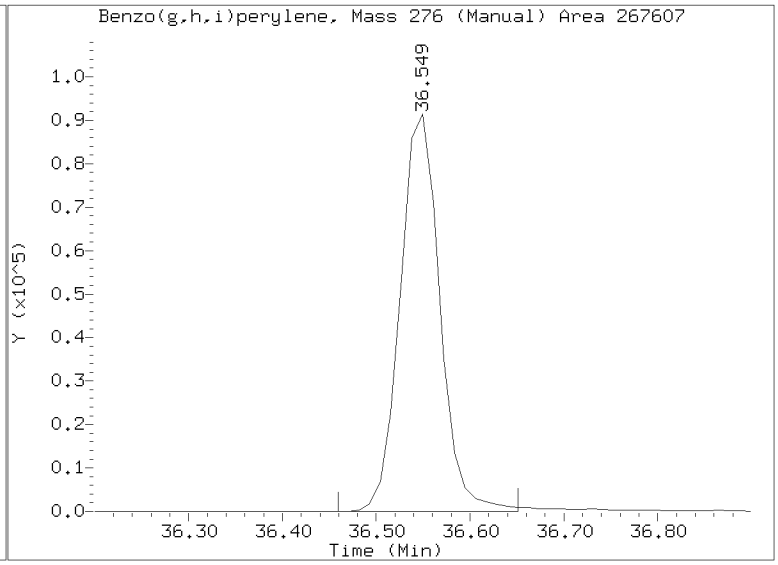












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Date : 29-MAY-2021 14:49

Client ID:

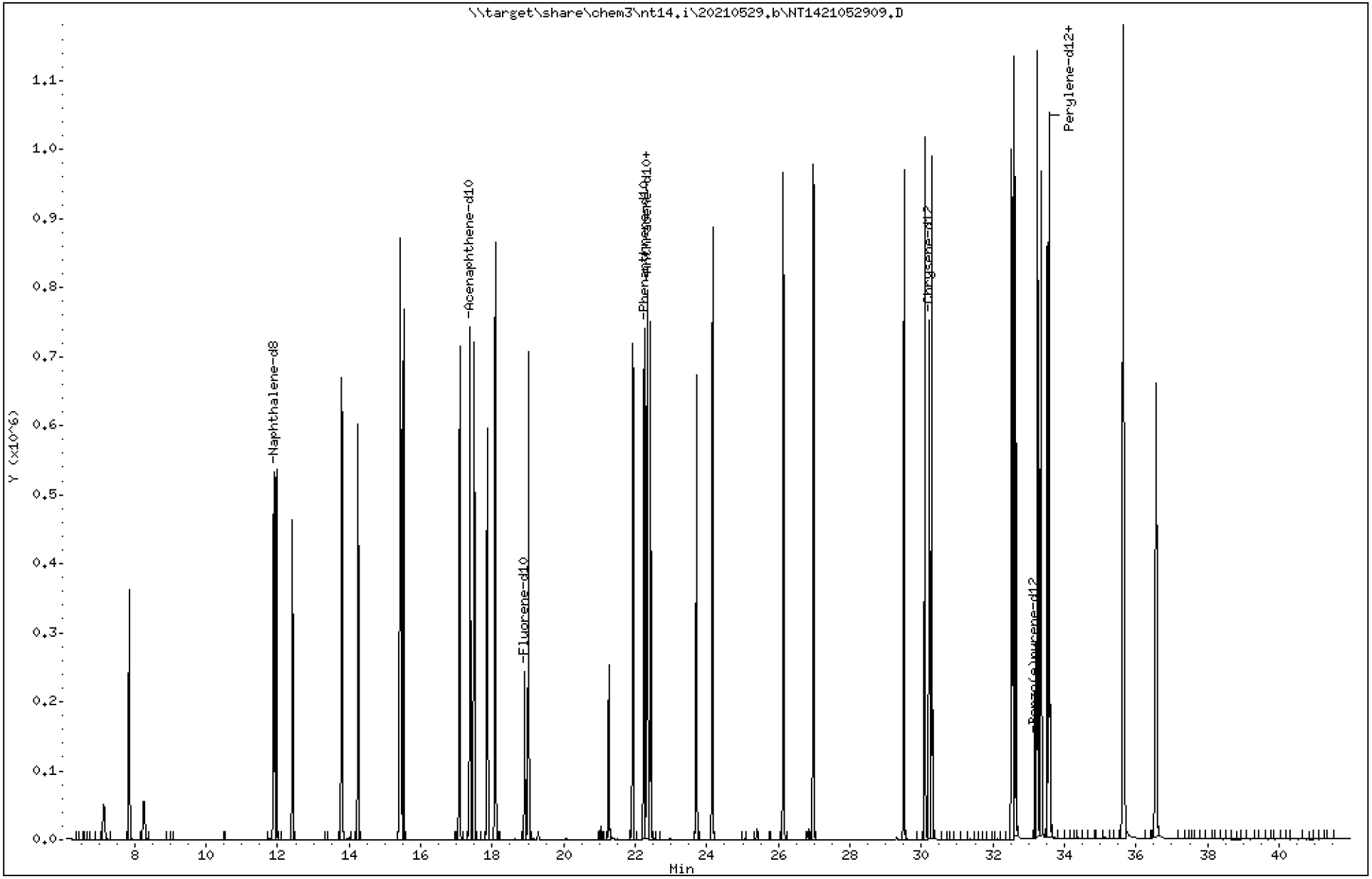
Instrument: nt14.i

Sample Info: SJF0025-CAL7

Operator: VTS

Column phase: Rxi-17Sil MS

Column diameter: 0.25



ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt14.i\20210529.b\NT1421052909.D
Lab Smp Id: SJF0025-CAL7
Inj Date : 29-MAY-2021 14:49
Operator : VTS Inst ID: nt14.i
Smp Info : SJF0025-CAL7
Misc Info :
Comment : 1ul Injection
Method : \\target\share\chem3\nt14.i\20210529.b\ALKYLPNA.m
Meth Date : 02-Jun-2021 19:03 yev Quant Type: ISTD
Cal Date : 29-MAY-2021 14:49 Cal File: NT1421052909.D
Als bottle: 3 Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: TARGETS.sub
Target Version: 4.14
Processing Host: ORGDATA102

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
	1 trans-Decalin	138	7.146	7.146	(0.378)	83307	10.0000	10.22
	2 cis-Decalin	138	8.255	8.255	(0.437)	60494	10.0000	9.981
$	6 Naphthalene-d8	136	11.897	11.897	(0.629)	721463	10.0000	9.496
	7 Naphthalene	128	11.967	11.967	(0.633)	709381	10.0000	9.343
	12 Benzo(b)thiophene	134	12.420	12.420	(0.657)	589285	10.0000	9.441
	16 2-Methylnaphthalene	141	13.794	13.794	(0.730)	409202	10.0000	9.219
	17 1-methylnaphthalene	141	14.255	14.255	(0.754)	393690	10.0000	9.117
	18 Biphenyl	154	15.442	15.442	(0.817)	581438	10.0000	8.865
	19 2,6-Dimethylnaphthalene	156	15.519	15.519	(0.821)	434729	10.0000	9.013
	20 Acenaphthylene	152	17.091	17.091	(0.904)	793265	10.0000	9.621
$	21 Acenaphthene-d10	164	17.376	17.376	(0.919)	431782	10.0000	9.254
	22 Acenaphthene	153	17.497	17.497	(0.925)	466867	10.0000	9.185
	23 Dibenzofuran	168	17.860	17.860	(0.945)	687348	10.0000	9.117
	24 1,6,7-Trimethylnaphthalene	170	18.091	18.091	(0.957)	461036	10.0000	9.386
*	25 Fluorene-d10	176	18.907	18.907	(1.000)	163422	2.00000	
	26 Fluorene	166	19.009	19.009	(1.005)	542093	10.0000	9.280
	30 Dibenzothiophene	184	21.931	21.931	(1.160)	771652	10.0000	9.357
$	35 Phenanthrene-d10	188	22.249	22.249	(0.995)	739433	10.0000	9.252
	36 Phenanthrene	178	22.326	22.326	(0.999)	772296	10.0000	9.016
*	250 Anthracene-d10	188	22.359	22.359	(1.000)	166127	2.00000	
	37 Anthracene	178	22.425	22.425	(1.003)	754538	10.0000	9.362
	42 Carbazole	167	23.711	23.711	(1.060)	693474	10.0000	9.756
	43 1-Methylphenanthrene	192	24.162	24.162	(1.081)	599244	10.0000	9.735
	44 Fluoranthene	202	26.141	26.141	(1.169)	958904	10.0000	10.14
	46 Pyrene	202	26.977	26.977	(1.207)	998319	10.0000	10.15
	51 Naphthobenzothiophene	234	29.509	29.509	(1.320)	1059333	10.0000	10.03
	55 Benzo(a)anthracene	228	30.095	30.095	(0.907)	913259	10.0000	9.532
$	56 Chrysene-d12	240	30.219	30.219	(0.911)	700628	10.0000	9.061
	57 Chrysene	228	30.298	30.298	(0.913)	852907	10.0000	9.085
	62 Benzo(b)fluoranthene	252	32.517	32.517	(0.980)	1102269	10.0000	11.09
	63 Benzo(k)fluoranthene	252	32.573	32.573	(0.982)	1127251	10.0000	10.57
	293 Benzo(j)fluoranthene	252	32.629	32.629	(0.983)	902868	10.0000	9.190
	246 Total Benzofluoranthenes	252	32.573	32.573	(0.982)	2983438	30.0000	30.65(M)

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
* 251 Benzo(e)pyrene-d12	264	33.181	33.181	(1.000)	247029	2.00000	
64 Benzo(e)pyrene	252	33.249	33.249	(1.002)	958189	10.0000	9.839
66 Benzo(a)pyrene	252	33.350	33.350	(1.005)	898239	10.0000	10.14
$ 67 Perylene-d12	264	33.519	33.519	(1.010)	824234	10.0000	9.874
68 Perylene	252	33.587	33.587	(1.012)	901040	10.0000	9.864(M)
69 Indeno(1,2,3-cd)pyrene	276	35.659	35.659	(1.075)	1155604	10.0000	11.11
70 Dibenzo(a,h)anthracene	278	35.636	35.636	(1.074)	1030693	10.0000	9.996
74 Benzo(g,h,i)perylene	276	36.560	36.560	(1.102)	1061981	10.0000	10.34(M)

QC Flag Legend

M - Compound response manually integrated.

Data File: \\target\share\chem3\nt14.i\20210529.b\NT1421052909.D Page 1
Report Date: 02-Jun-2021 19:03

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt14.i
Lab File ID: NT1421052909.D
Lab Smp Id: SJF0025-CAL7
Analysis Type: SV
Quant Type: ISTD
Operator: VTS
Method File: \\target\share\chem3\nt14.i\20210529.b\ALKYLPNA.m
Misc Info:

Calibration Date: 29-MAY-2021
Calibration Time: 14:01
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
25 Fluorene-d10	159478	79739	318956	163422	2.47
250 Anthracene-d10	170161	85081	340322	166127	-2.37
251 Benzo(e)pyrene-d1	236612	118306	473224	247029	4.40

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
25 Fluorene-d10	18.91	18.41	19.41	18.91	-0.00
250 Anthracene-d10	22.36	21.86	22.86	22.36	-0.00
251 Benzo(e)pyrene-d1	33.18	32.68	33.68	33.18	-0.00

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

REVIEW SUMMARY FOR FILE - NT1421052909.D

Lab ID: SJF0025-CAL7
nt14.i, 20210529.b\ALKYLPNA.m, 29-MAY-2021 14:49

RT	CO-ELUTION COMPOUNDS
	NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
NONE			

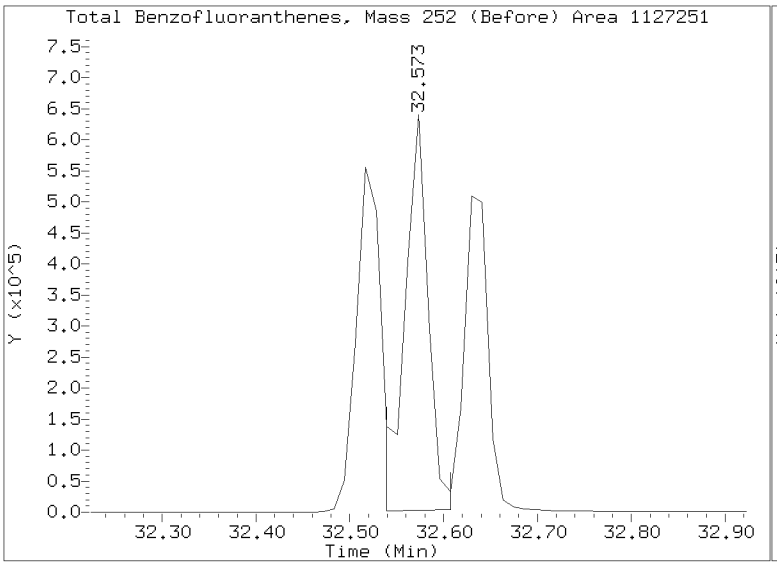
RRT check based on Ccal File: NT1421052909.D

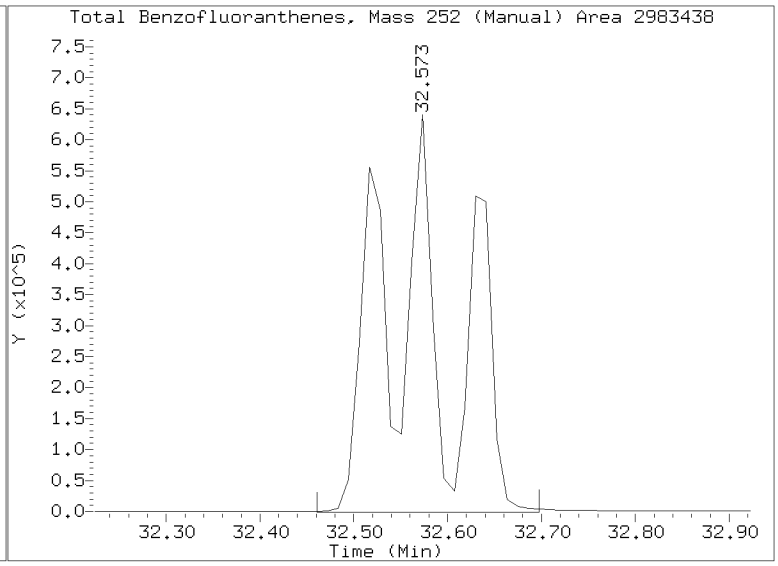
On Column LOD for nt14.i, 20210529.b\ALKYLPNA.m, TARGETS.sub = 0.0000

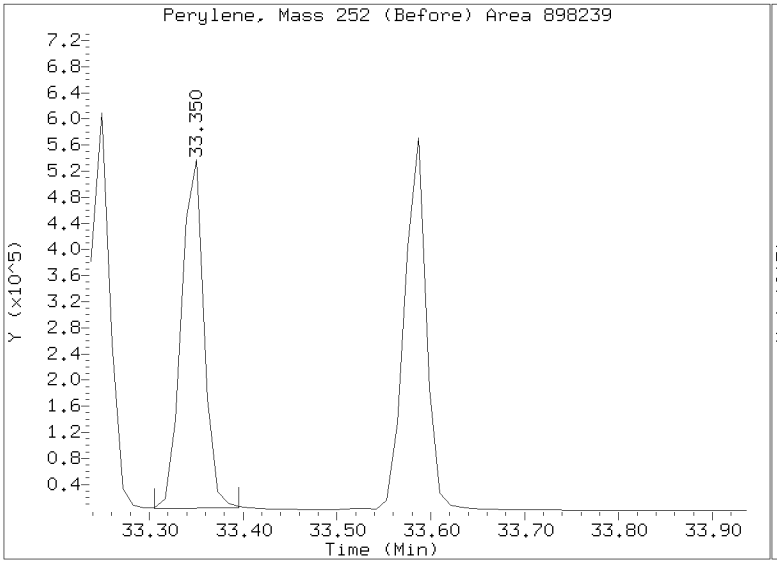
* Only compounds listed in the work order have been verified by the analyst *

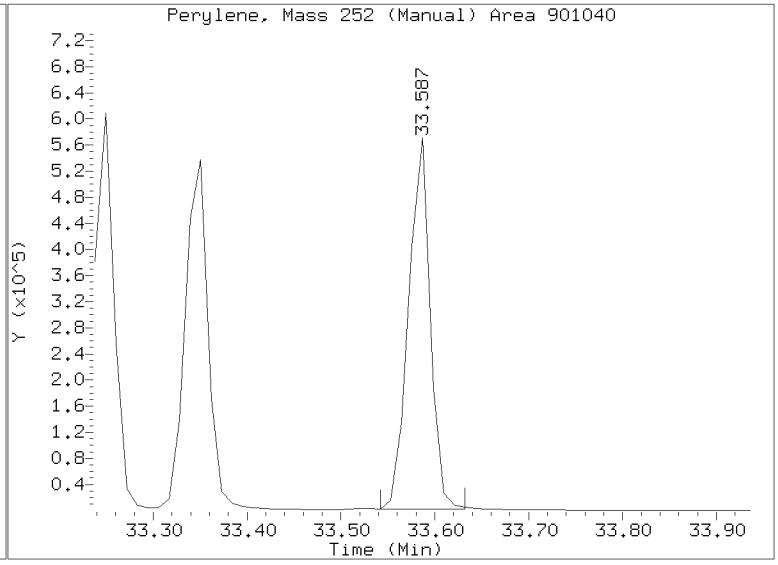
Quant Ion Manual Peak Adjustment Report

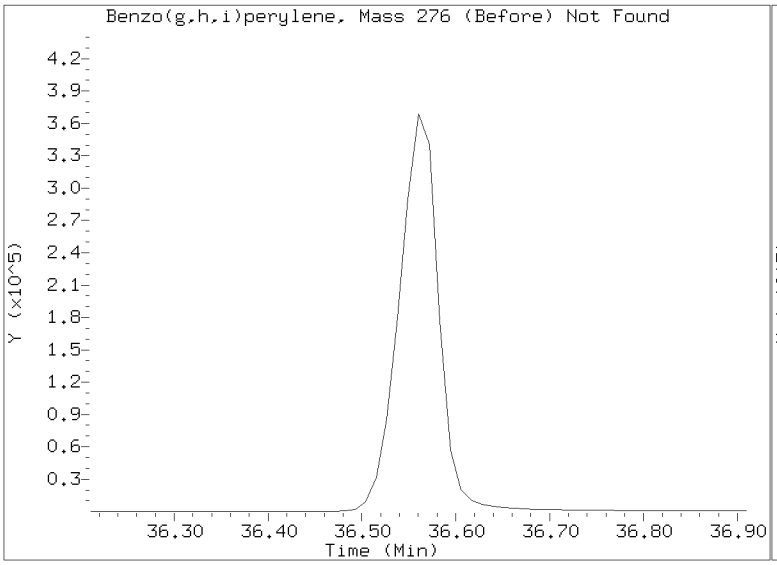
Datafile: //target/share/chem3/nt14.i/20210529.b/NT1421052909.D
Injection Date: 29-MAY-2021 14:49
Lab ID:SJF0025-CAL7 Client ID:
Report Date: 06/02/2021 19:03

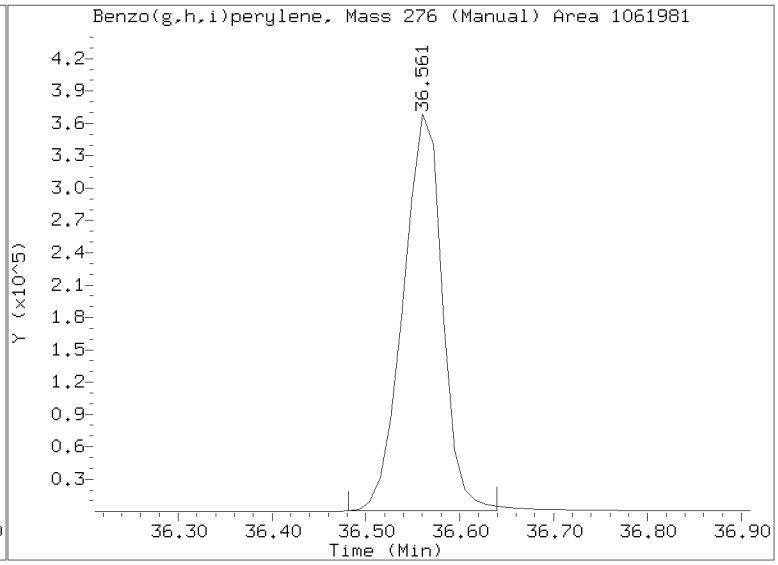












Data File: \\target\share\chem3\nt14.i\20210529.b\NT1421052910.D

Date : 29-MAY-2021 15:37

Client ID:

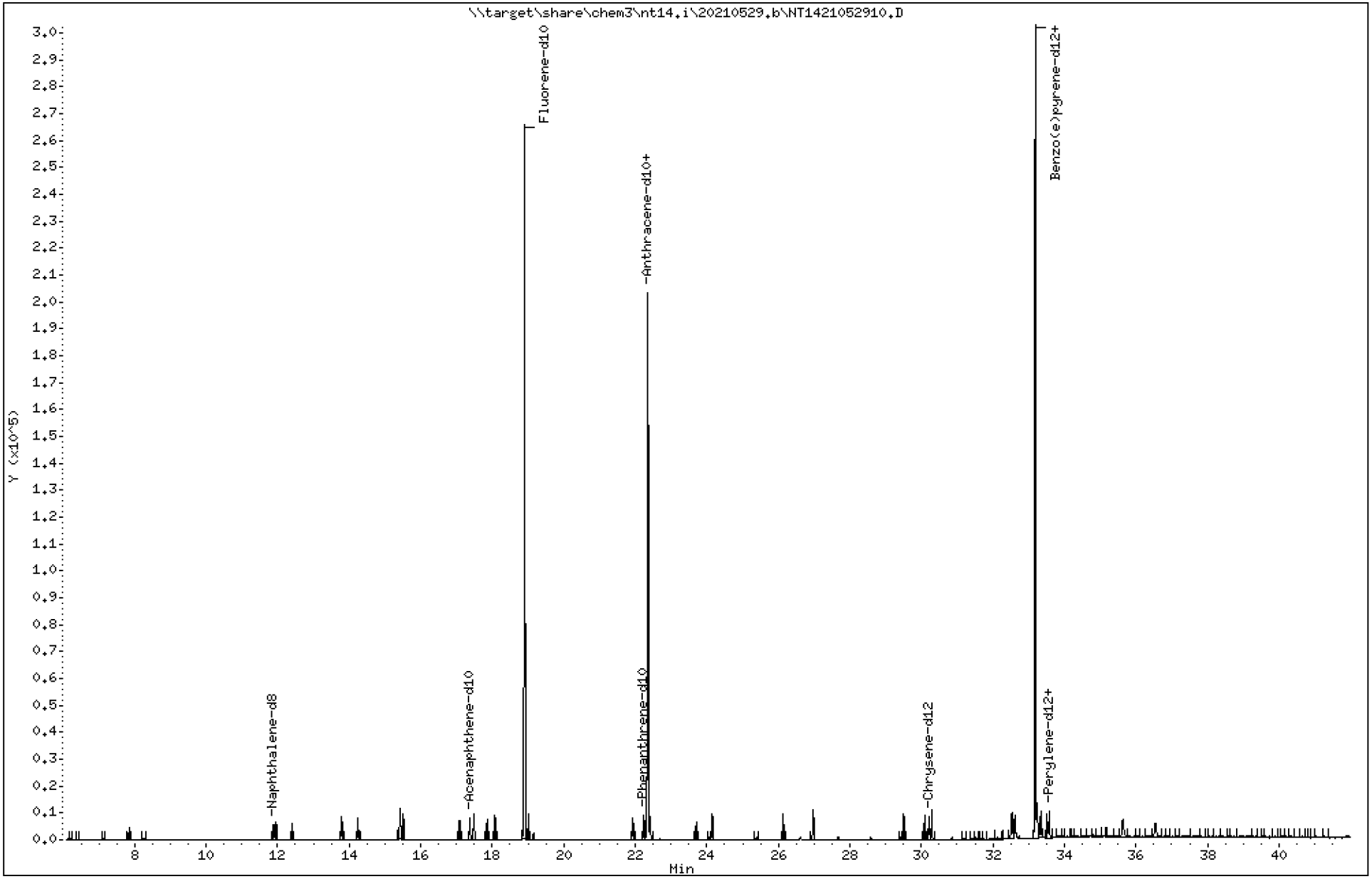
Instrument: nt14.i

Sample Info: SJF0025-CAL1

Operator: VTS

Column phase: Rxi-17Sil MS

Column diameter: 0.25



ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt14.i\20210529.b\NT1421052910.D
Lab Smp Id: SJF0025-CAL1
Inj Date : 29-MAY-2021 15:37
Operator : VTS Inst ID: nt14.i
Smp Info : SJF0025-CAL1
Misc Info :
Comment : 1ul Injection
Method : \\target\share\chem3\nt14.i\20210529.b\ALKYLPNA.m
Meth Date : 02-Jun-2021 19:03 yev Quant Type: ISTD
Cal Date : 29-MAY-2021 15:37 Cal File: NT1421052910.D
Als bottle: 4 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: TARGETS.sub
Target Version: 4.14
Processing Host: ORGDATA102

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
1 trans-Decalin	138	7.156	7.156	(0.379)	700	0.10000	0.07554
2 cis-Decalin	138	8.256	8.256	(0.437)	341	0.10000	0.04317
$ 6 Naphthalene-d8	136	11.897	11.897	(0.629)	8740	0.10000	0.1012
7 Naphthalene	128	11.957	11.957	(0.632)	9073	0.10000	0.1051
12 Benzo(b)thiophene	134	12.409	12.409	(0.656)	7745	0.10000	0.1091
16 2-Methylnaphthalene	141	13.794	13.794	(0.730)	5222	0.10000	0.1035
17 1-methylnaphthalene	141	14.245	14.245	(0.753)	5088	0.10000	0.1036
18 Biphenyl	154	15.431	15.431	(0.816)	8047	0.10000	0.1079
19 2,6-Dimethylnaphthalene	156	15.508	15.508	(0.820)	5690	0.10000	0.1038
20 Acenaphthylene	152	17.080	17.080	(0.903)	9795	0.10000	0.1045
$ 21 Acenaphthene-d10	164	17.377	17.377	(0.919)	5611	0.10000	0.1058
22 Acenaphthene	153	17.486	17.486	(0.925)	6043	0.10000	0.1046
23 Dibenzofuran	168	17.860	17.860	(0.945)	9060	0.10000	0.1057
24 1,6,7-Trimethylnaphthalene	170	18.080	18.080	(0.956)	6001	0.10000	0.1074
* 25 Fluorene-d10	176	18.907	18.907	(1.000)	185817	2.00000	
26 Fluorene	166	19.009	19.009	(1.005)	6943	0.10000	0.1045
30 Dibenzothiophene	184	21.931	21.931	(1.160)	10086	0.10000	0.1076
$ 35 Phenanthrene-d10	188	22.239	22.239	(0.995)	9971	0.10000	0.1063
36 Phenanthrene	178	22.316	22.316	(0.998)	11026	0.10000	0.1097
* 250 Anthracene-d10	188	22.360	22.360	(1.000)	194904	2.00000	
37 Anthracene	178	22.426	22.426	(1.003)	9606	0.10000	0.1016
42 Carbazole	167	23.701	23.701	(1.060)	8540	0.10000	0.1024
43 1-Methylphenanthrene	192	24.162	24.162	(1.081)	7638	0.10000	0.1058
44 Fluoranthene	202	26.131	26.131	(1.169)	11017	0.10000	0.09932
46 Pyrene	202	26.977	26.977	(1.207)	11390	0.10000	0.09873
51 Naphthobenzothiophene	234	29.499	29.499	(1.319)	12752	0.10000	0.1029
55 Benzo(a)anthracene	228	30.095	30.095	(0.907)	10658	0.10000	0.1049
$ 56 Chrysene-d12	240	30.219	30.219	(0.911)	8436	0.10000	0.1029
57 Chrysene	228	30.287	30.287	(0.913)	10569	0.10000	0.1062
62 Benzo(b)fluoranthene	252	32.517	32.517	(0.980)	11190	0.10000	0.1062(M)
63 Benzo(k)fluoranthene	252	32.562	32.562	(0.981)	10841	0.10000	0.09593
293 Benzo(j)fluoranthene	252	32.618	32.618	(0.983)	10824	0.10000	0.1039
246 Total Benzofluoranthenes	252	32.562	32.562	(0.981)	31866	0.30000	0.3089(M)

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
* 251 Benzo(e)pyrene-d12	264	33.181	33.181	(1.000)	261838	2.00000	
64 Benzo(e)pyrene	252	33.238	33.238	(1.002)	11189	0.10000	0.1084
66 Benzo(a)pyrene	252	33.339	33.339	(1.005)	10010	0.10000	0.1066
$ 67 Perylene-d12	264	33.519	33.519	(1.010)	9579	0.10000	0.1083
68 Perylene	252	33.576	33.576	(1.012)	10601	0.10000	0.1095(M)
69 Indeno(1,2,3-cd)pyrene	276	35.637	35.637	(1.074)	9635	0.10000	0.08741
70 Dibenzo(a,h)anthracene	278	35.614	35.614	(1.073)	7925	0.10000	0.07753(M)
74 Benzo(g,h,i)perylene	276	36.538	36.538	(1.101)	10702	0.10000	0.09827

QC Flag Legend

M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt14.i
Lab File ID: NT1421052910.D
Lab Smp Id: SJF0025-CAL1
Analysis Type: SV
Quant Type: ISTD
Operator: VTS
Method File: \\target\share\chem3\nt14.i\20210529.b\ALKYLPNA.m
Misc Info:

Calibration Date: 29-MAY-2021
Calibration Time: 14:01
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
25 Fluorene-d10	159478	79739	318956	185817	16.52
250 Anthracene-d10	170161	85081	340322	194904	14.54
251 Benzo(e)pyrene-d1	236612	118306	473224	261838	10.66

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
25 Fluorene-d10	18.91	18.41	19.41	18.91	0.00
250 Anthracene-d10	22.36	21.86	22.86	22.36	0.00
251 Benzo(e)pyrene-d1	33.18	32.68	33.68	33.18	0.00

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

REVIEW SUMMARY FOR FILE - NT1421052910.D

Lab ID: SJF0025-CAL1
nt14.i, 20210529.b\ALKYLPNA.m, 29-MAY-2021 15:37

RT	CO-ELUTION COMPOUNDS
	NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
NONE			

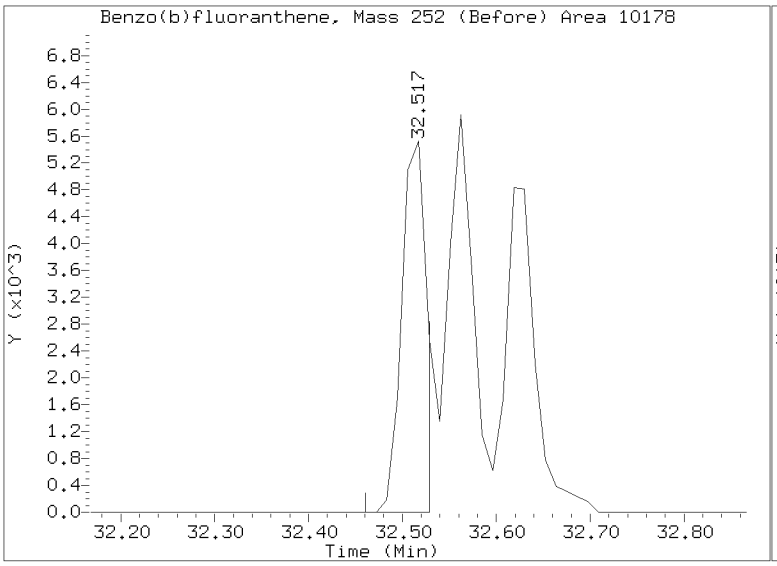
RRT check based on Ccal File: NT1421052910.D

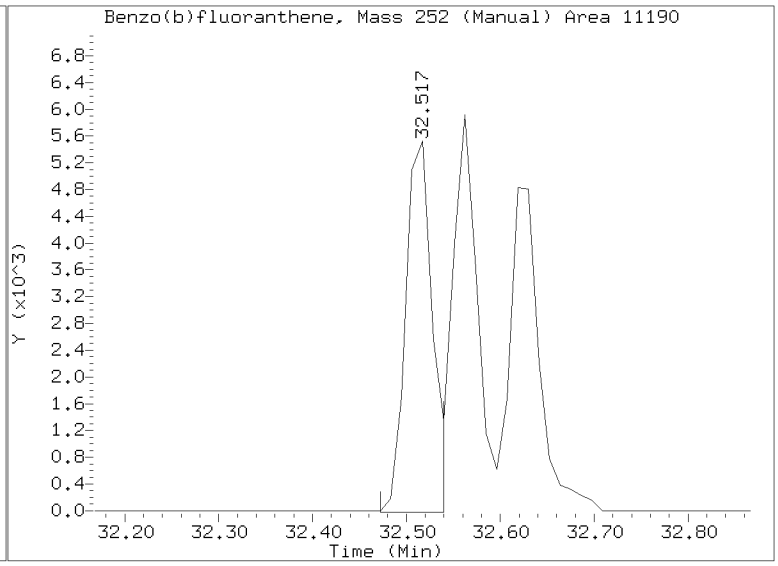
On Column LOD for nt14.i, 20210529.b\ALKYLPNA.m, TARGETS.sub = 0.0000

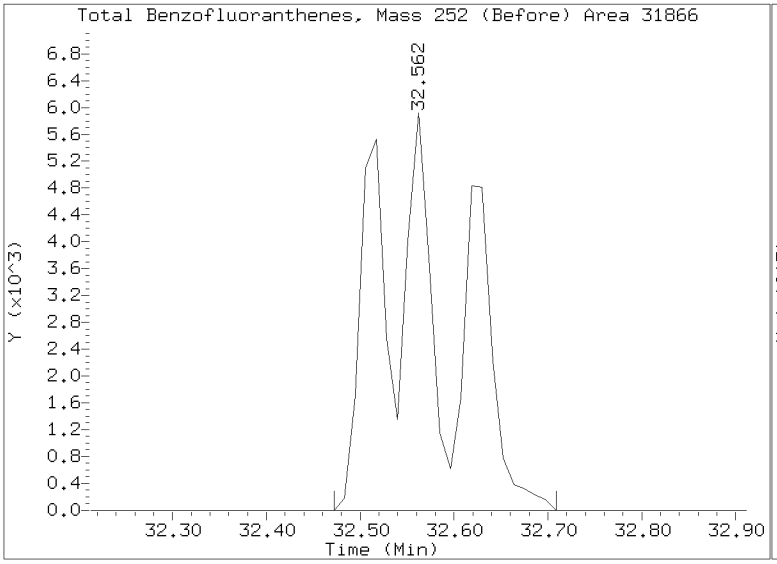
* Only compounds listed in the work order have been verified by the analyst *

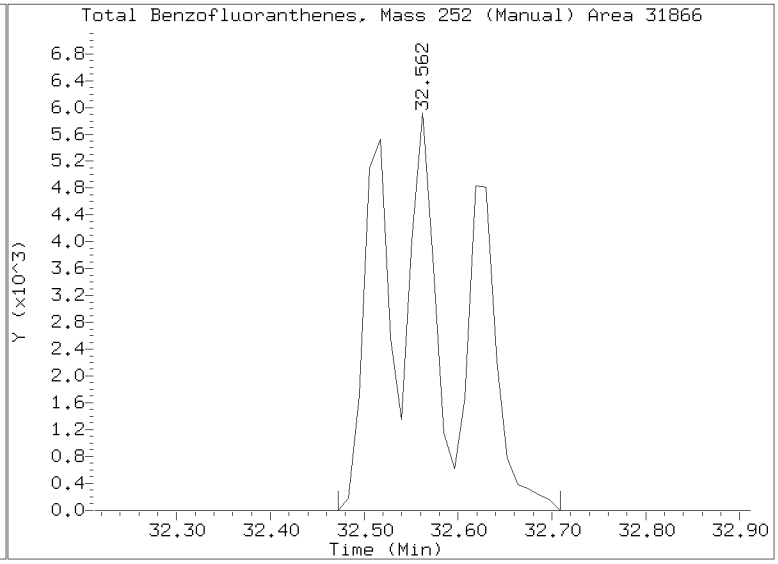
Quant Ion Manual Peak Adjustment Report

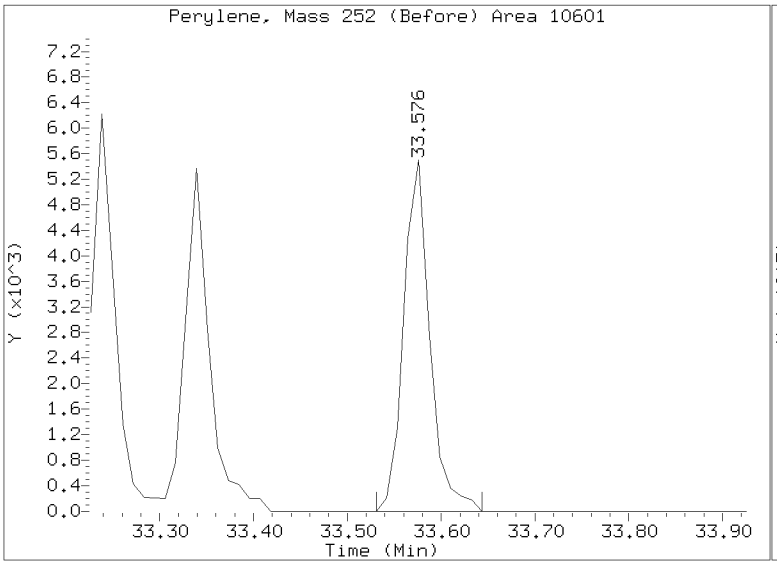
Datafile: //target/share/chem3/nt14.i/20210529.b/NT1421052910.D
Injection Date: 29-MAY-2021 15:37
Lab ID:SJF0025-CAL1 Client ID:
Report Date: 06/02/2021 19:03

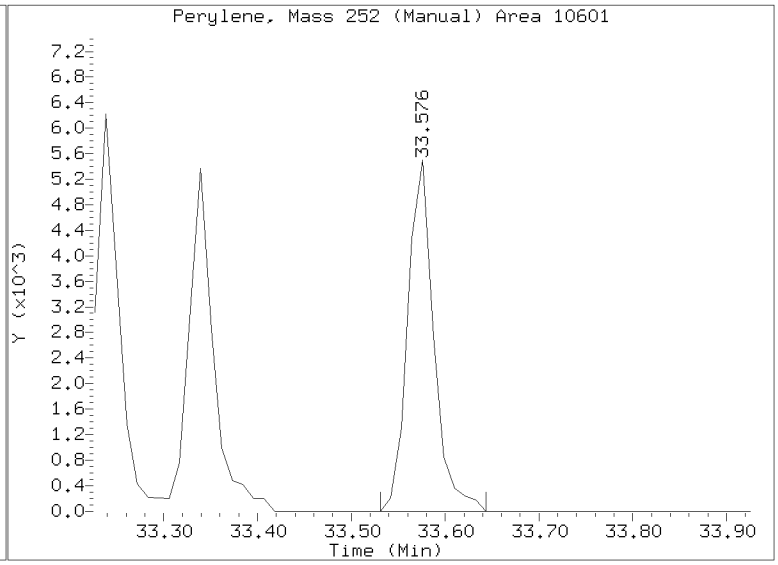






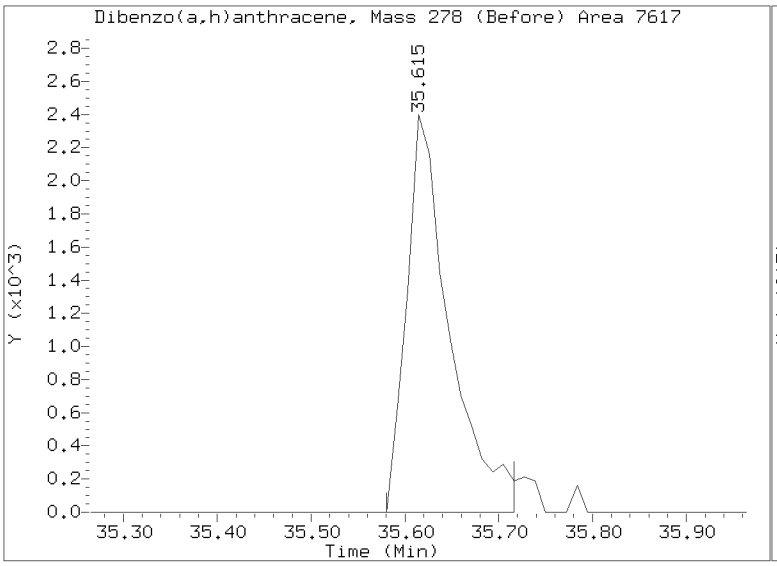


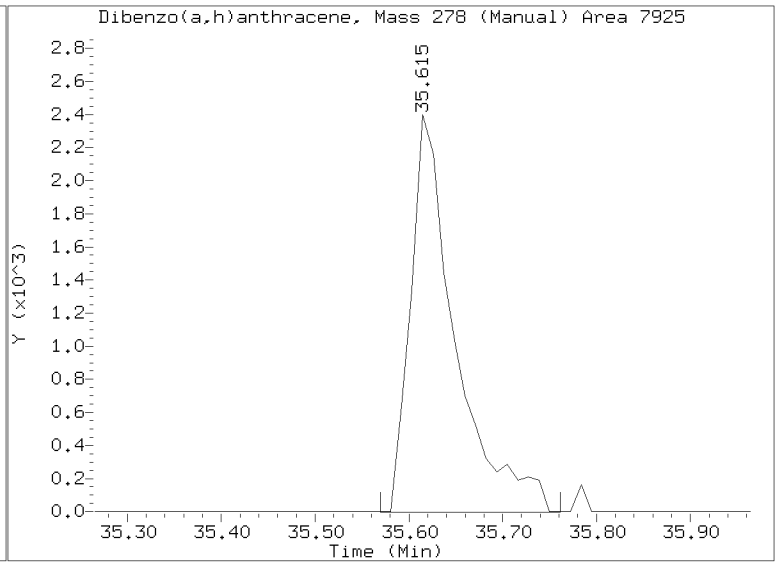




Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt14.i/20210529.b/NT1421052910.D
Injection Date: 29-MAY-2021 15:37
Lab ID:SJF0025-CAL1 Client ID:
Report Date: 06/02/2021 19:03





Data File: \\target\share\chem3\nt14.i\20210529.b\NT1421052911.D

Date : 29-MAY-2021 16:25

Client ID:

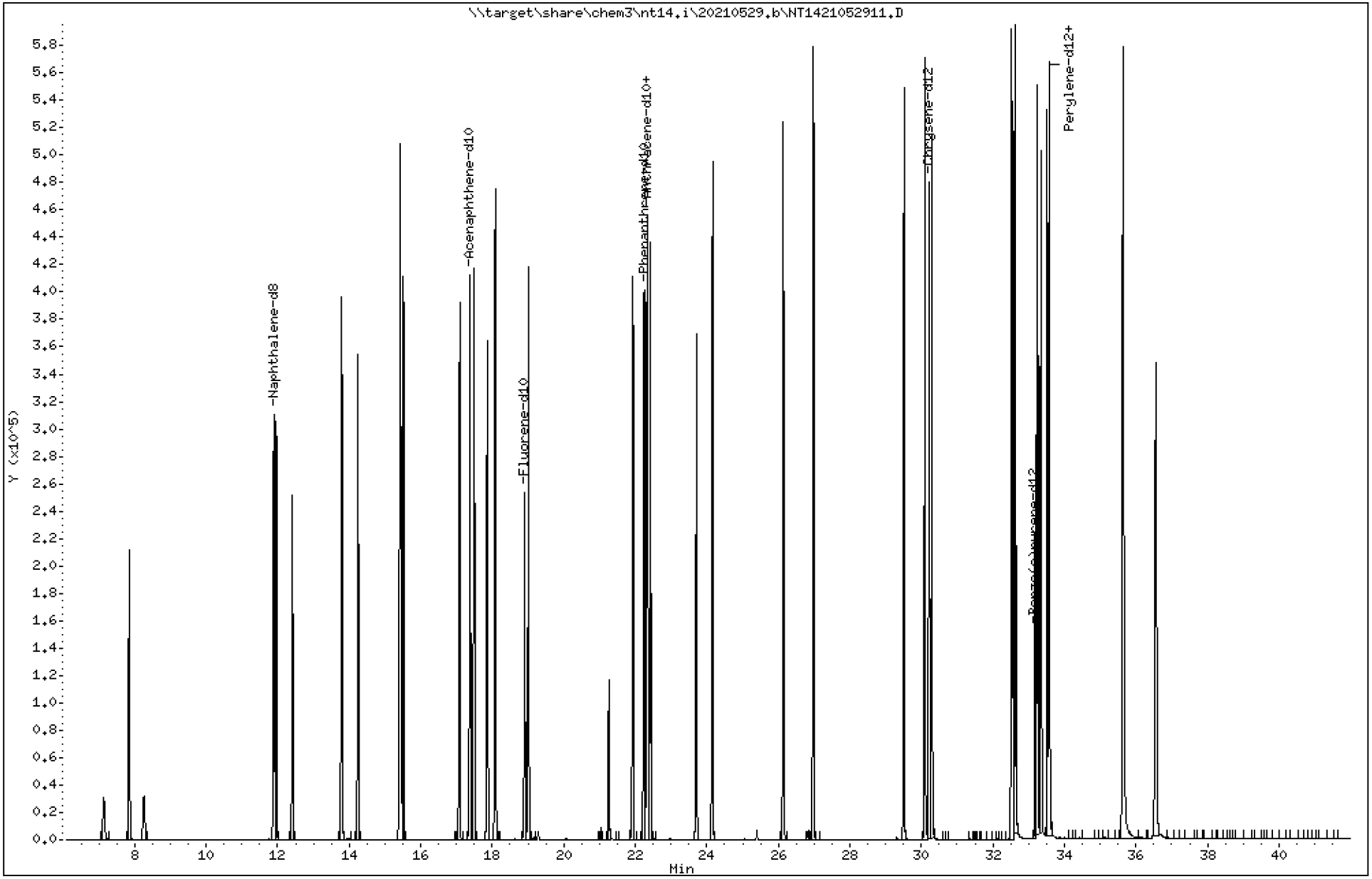
Instrument: nt14.i

Sample Info: SJF0025-CAL6

Operator: VTS

Column phase: Rxi-17Sil MS

Column diameter: 0.25



ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt14.i\20210529.b\NT1421052911.D
Lab Smp Id: SJF0025-CAL6
Inj Date : 29-MAY-2021 16:25
Operator : VTS Inst ID: nt14.i
Smp Info : SJF0025-CAL6
Misc Info :
Comment : 1ul Injection
Method : \\target\share\chem3\nt14.i\20210529.b\ALKYLPNA.m
Meth Date : 02-Jun-2021 19:03 yev Quant Type: ISTD
Cal Date : 29-MAY-2021 16:25 Cal File: NT1421052911.D
Als bottle: 5 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: TARGETS.sub
Target Version: 4.14
Processing Host: ORGDATA102

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
	1 trans-Decalin	138	7.146	7.146	(0.378)	47573	5.00000	5.454
	2 cis-Decalin	138	8.266	8.266	(0.437)	35039	5.00000	5.084
$	6 Naphthalene-d8	136	11.897	11.897	(0.629)	416592	5.00000	5.124
	7 Naphthalene	128	11.957	11.957	(0.632)	410480	5.00000	5.051
	12 Benzo(b)thiophene	134	12.409	12.409	(0.656)	337399	5.00000	5.051
	16 2-Methylnaphthalene	141	13.794	13.794	(0.730)	235886	5.00000	4.966
	17 1-methylnaphthalene	141	14.244	14.244	(0.753)	230431	5.00000	4.986
	18 Biphenyl	154	15.442	15.442	(0.817)	341587	5.00000	4.866
	19 2,6-Dimethylnaphthalene	156	15.508	15.508	(0.820)	257382	5.00000	4.986
	20 Acenaphthylene	152	17.091	17.091	(0.904)	450223	5.00000	5.102
$	21 Acenaphthene-d10	164	17.376	17.376	(0.919)	248084	5.00000	4.968
	22 Acenaphthene	153	17.486	17.486	(0.925)	268524	5.00000	4.936
	23 Dibenzofuran	168	17.860	17.860	(0.945)	396314	5.00000	4.912
	24 1,6,7-Trimethylnaphthalene	170	18.091	18.091	(0.957)	265026	5.00000	5.041
*	25 Fluorene-d10	176	18.907	18.907	(1.000)	174899	2.00000	
	26 Fluorene	166	19.009	19.009	(1.005)	309663	5.00000	4.953
	30 Dibenzothiophene	184	21.931	21.931	(1.160)	440205	5.00000	4.988
$	35 Phenanthrene-d10	188	22.238	22.238	(0.995)	433755	5.00000	5.063
	36 Phenanthrene	178	22.326	22.326	(0.999)	449640	5.00000	4.898(M)
*	250 Anthracene-d10	188	22.359	22.359	(1.000)	178057	2.00000	
	37 Anthracene	178	22.425	22.425	(1.003)	432014	5.00000	5.001
	42 Carbazole	167	23.711	23.711	(1.060)	393324	5.00000	5.163
	43 1-Methylphenanthrene	192	24.162	24.162	(1.081)	345037	5.00000	5.230
	44 Fluoranthene	202	26.141	26.141	(1.169)	526383	5.00000	5.195
	46 Pyrene	202	26.977	26.977	(1.207)	565119	5.00000	5.362
	51 Naphthobenzothiophene	234	29.509	29.509	(1.320)	593729	5.00000	5.243
	55 Benzo(a)anthracene	228	30.095	30.095	(0.907)	524739	5.00000	5.177
$	56 Chrysene-d12	240	30.219	30.219	(0.911)	407429	5.00000	4.980
	57 Chrysene	228	30.286	30.286	(0.913)	488178	5.00000	4.915
	62 Benzo(b)fluoranthene	252	32.517	32.517	(0.980)	555776	5.00000	5.287(M)
	63 Benzo(k)fluoranthene	252	32.562	32.562	(0.981)	539450	5.00000	4.783
	293 Benzo(j)fluoranthene	252	32.629	32.629	(0.983)	490527	5.00000	4.720(M)
	246 Total Benzofluoranthenes	252	32.517	32.517	(0.980)	1617767	15.0000	15.71(M)

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
* 251 Benzo(e)pyrene-d12	264	33.181	33.181	(1.000)	261344	2.00000	
64 Benzo(e)pyrene	252	33.249	33.249	(1.002)	518058	5.00000	5.028
66 Benzo(a)pyrene	252	33.339	33.339	(1.005)	484415	5.00000	5.168
$ 67 Perylene-d12	264	33.519	33.519	(1.010)	444024	5.00000	5.028
68 Perylene	252	33.575	33.575	(1.012)	494921	5.00000	5.121(M)
69 Indeno(1,2,3-cd)pyrene	276	35.648	35.648	(1.074)	615117	5.00000	5.591(M)
70 Dibenzo(a,h)anthracene	278	35.625	35.625	(1.074)	527390	5.00000	5.009(M)
74 Benzo(g,h,i)perylene	276	36.560	36.560	(1.102)	570665	5.00000	5.250(M)

QC Flag Legend

M - Compound response manually integrated.

Data File: \\target\share\chem3\nt14.i\20210529.b\NT1421052911.D Page 1
Report Date: 02-Jun-2021 19:03

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt14.i
Lab File ID: NT1421052911.D
Lab Smp Id: SJF0025-CAL6
Analysis Type: SV
Quant Type: ISTD
Operator: VTS
Method File: \\target\share\chem3\nt14.i\20210529.b\ALKYLPNA.m
Misc Info:

Calibration Date: 29-MAY-2021
Calibration Time: 14:01
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
25 Fluorene-d10	159478	79739	318956	174899	9.67
250 Anthracene-d10	170161	85081	340322	178057	4.64
251 Benzo(e)pyrene-d1	236612	118306	473224	261344	10.45

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
25 Fluorene-d10	18.91	18.41	19.41	18.91	-0.00
250 Anthracene-d10	22.36	21.86	22.86	22.36	-0.00
251 Benzo(e)pyrene-d1	33.18	32.68	33.68	33.18	-0.00

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

REVIEW SUMMARY FOR FILE - NT1421052911.D

Lab ID: SJF0025-CAL6
nt14.i, 20210529.b\ALKYLPNA.m, 29-MAY-2021 16:25

RT	CO-ELUTION COMPOUNDS
	NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
NONE			

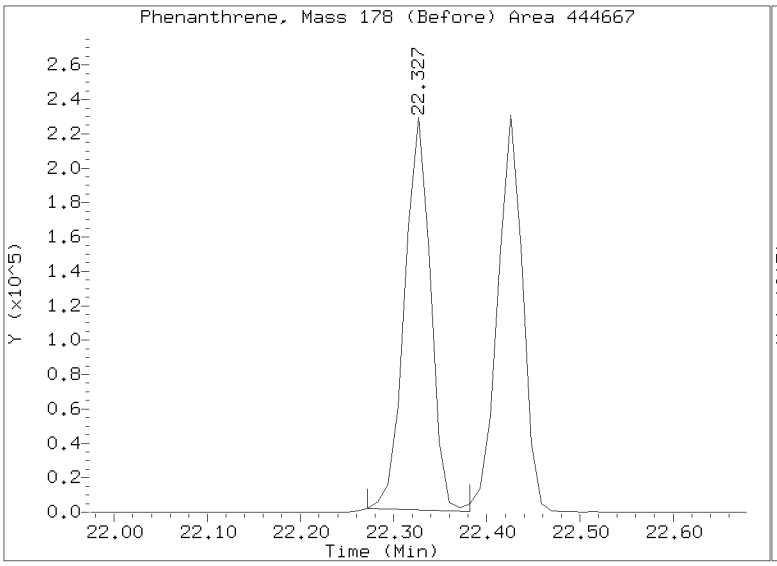
RRT check based on Ccal File: NT1421052911.D

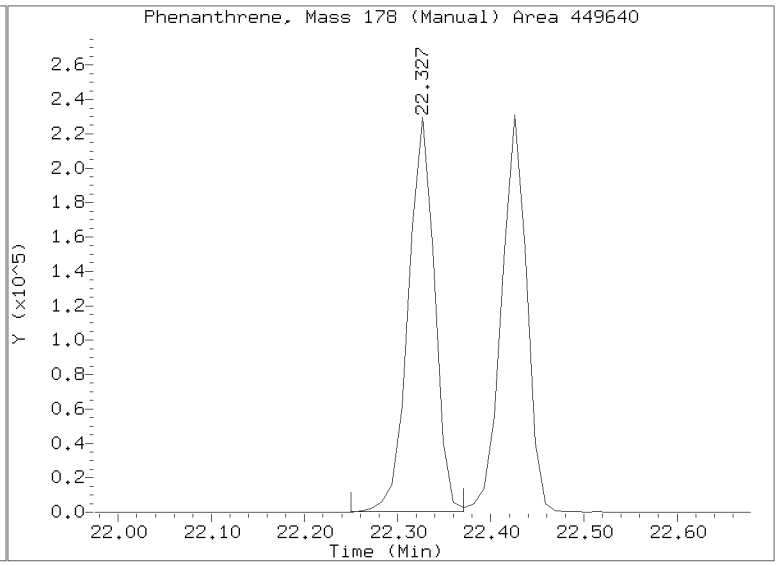
On Column LOD for nt14.i, 20210529.b\ALKYLPNA.m, TARGETS.sub = 0.0000

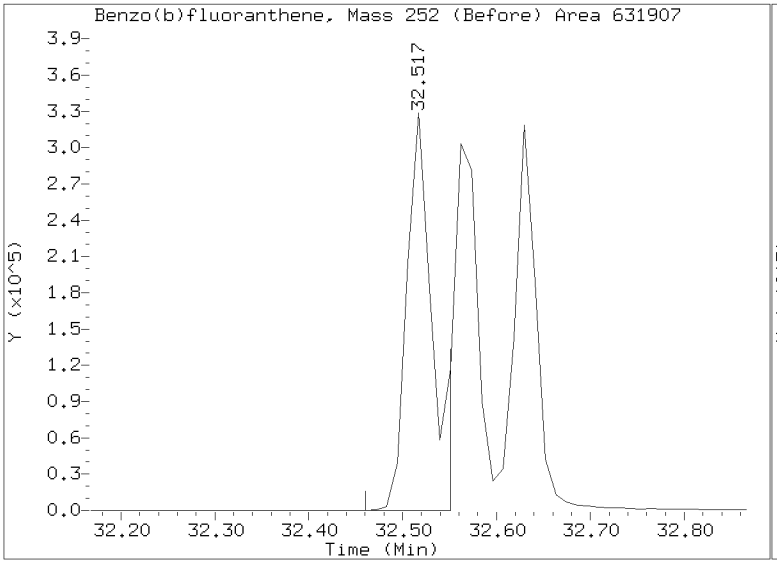
* Only compounds listed in the work order have been verified by the analyst *

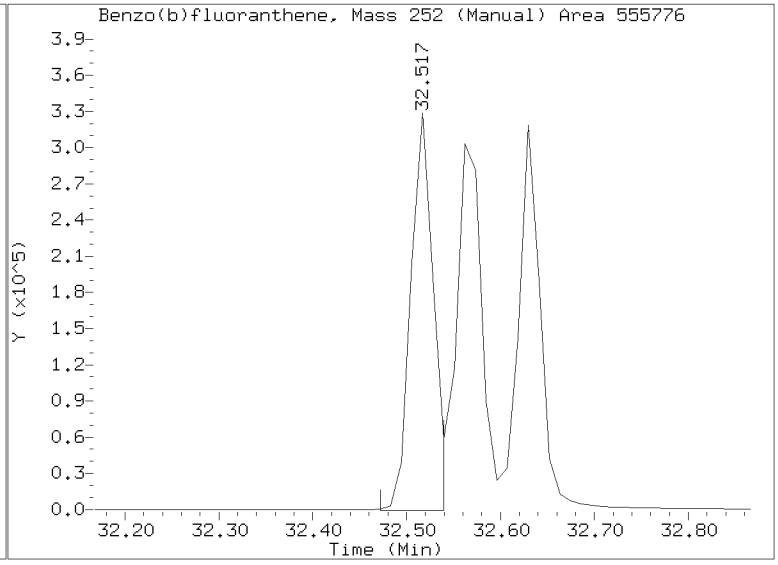
Quant Ion Manual Peak Adjustment Report

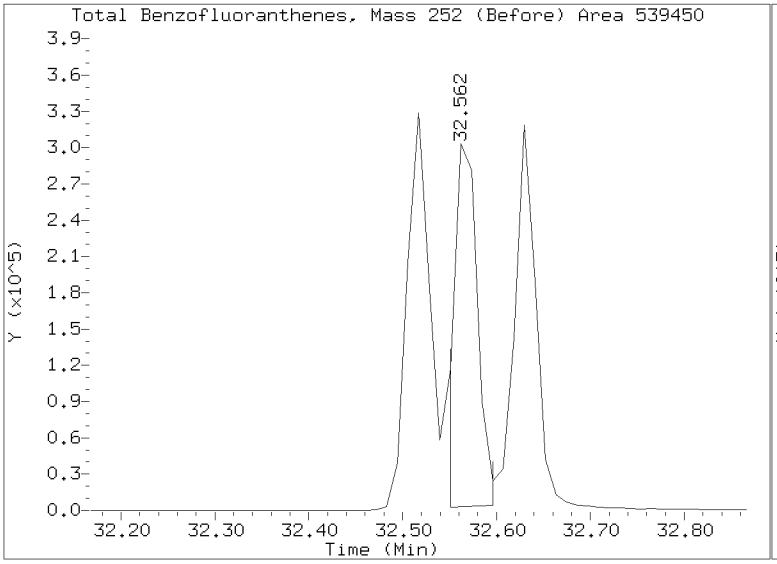
Datafile: //target/share/chem3/nt14.i/20210529.b/NT1421052911.D
Injection Date: 29-MAY-2021 16:25
Lab ID:SJF0025-CAL6 Client ID:
Report Date: 06/02/2021 19:03

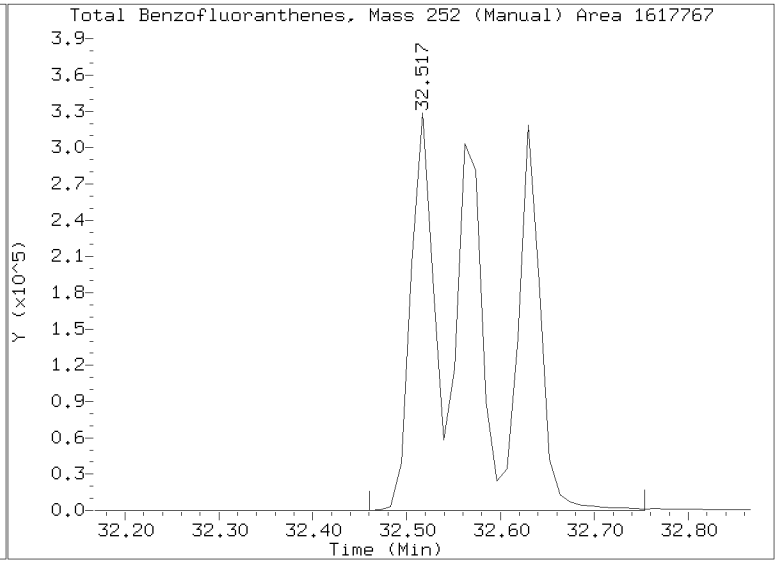






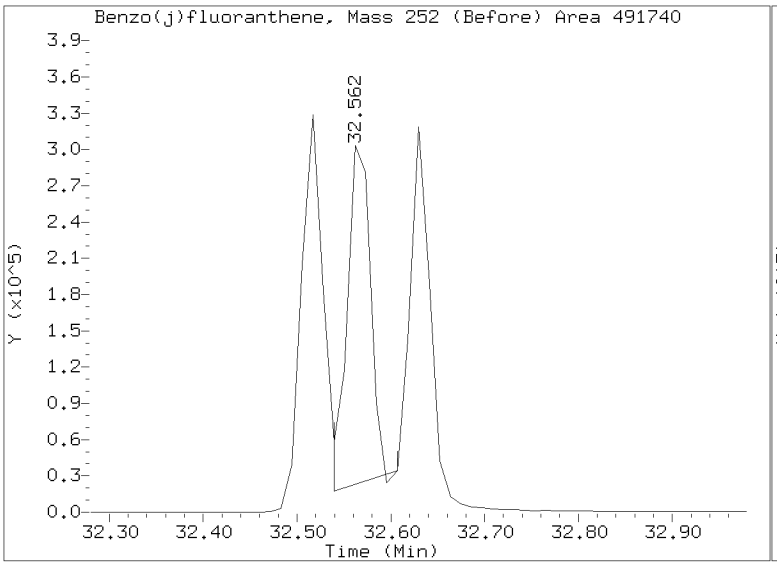


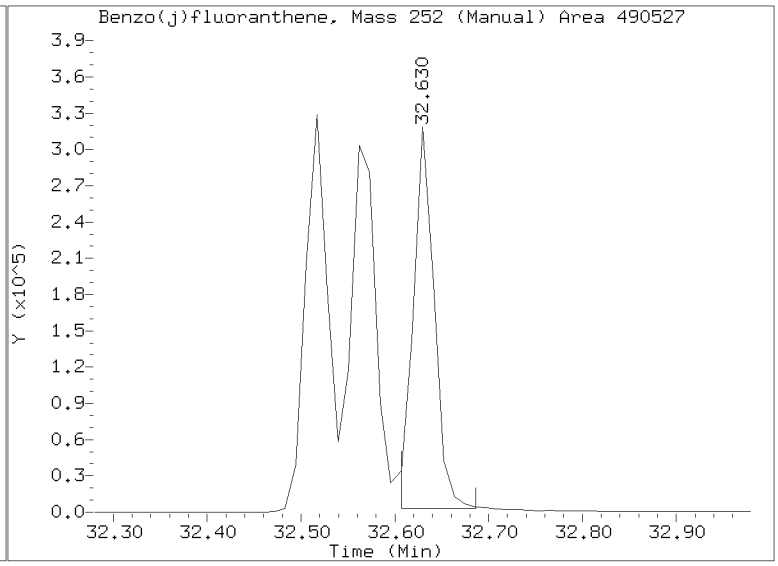


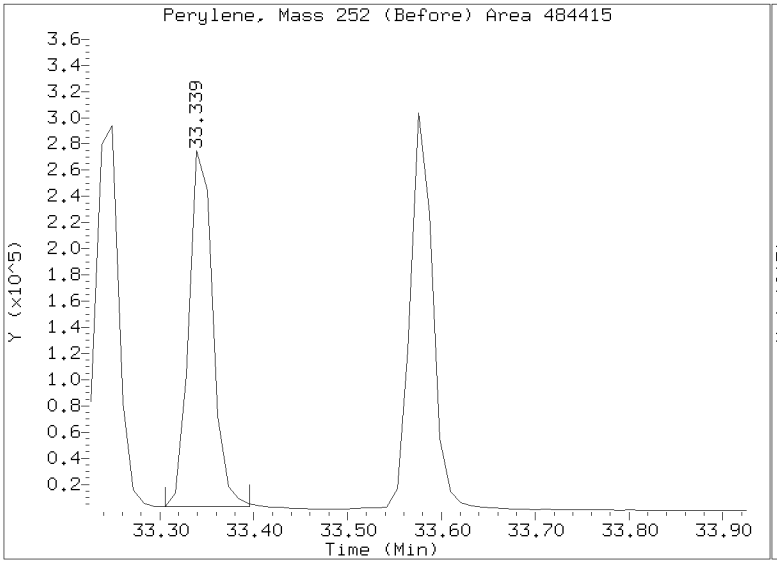


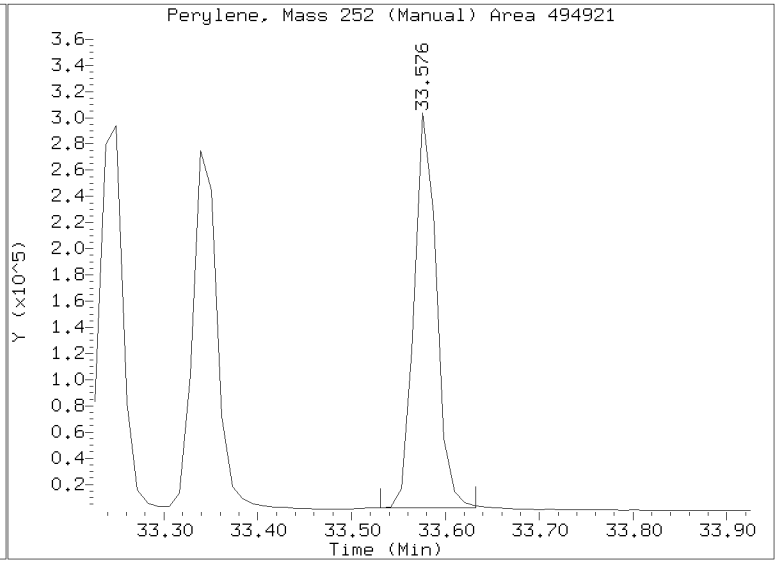
Quant Ion Manual Peak Adjustment Report

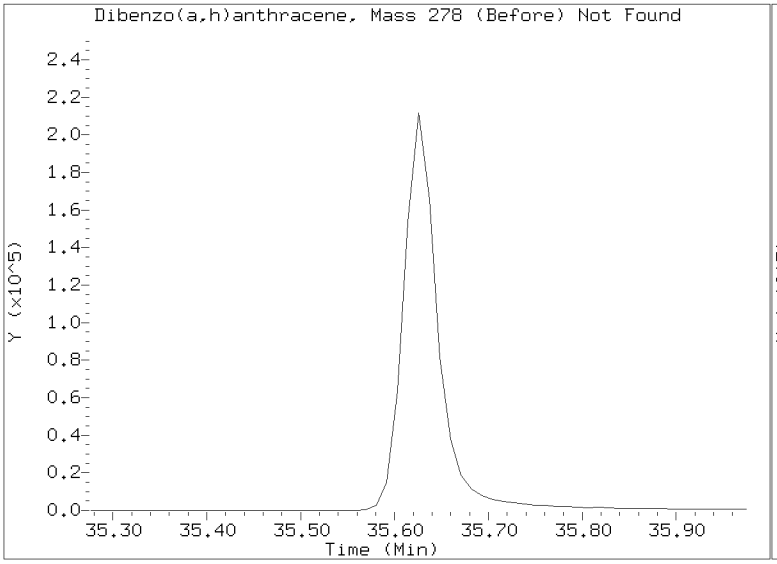
Datafile: //target/share/chem3/nt14.i/20210529.b/NT1421052911.D
Injection Date: 29-MAY-2021 16:25
Lab ID:SJF0025-CAL6 Client ID:
Report Date: 06/02/2021 19:03

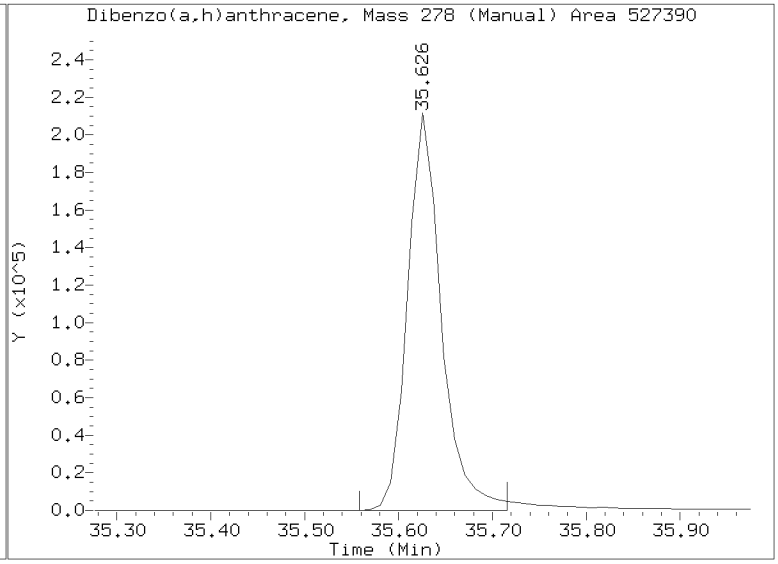






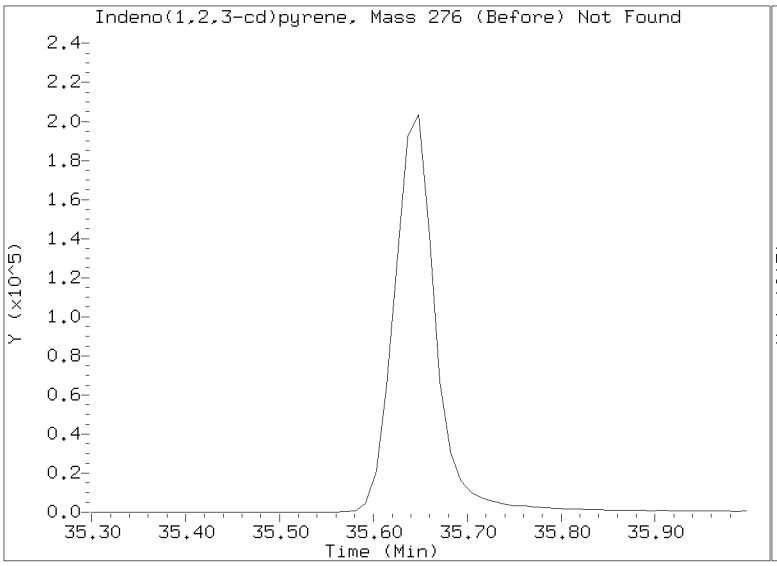


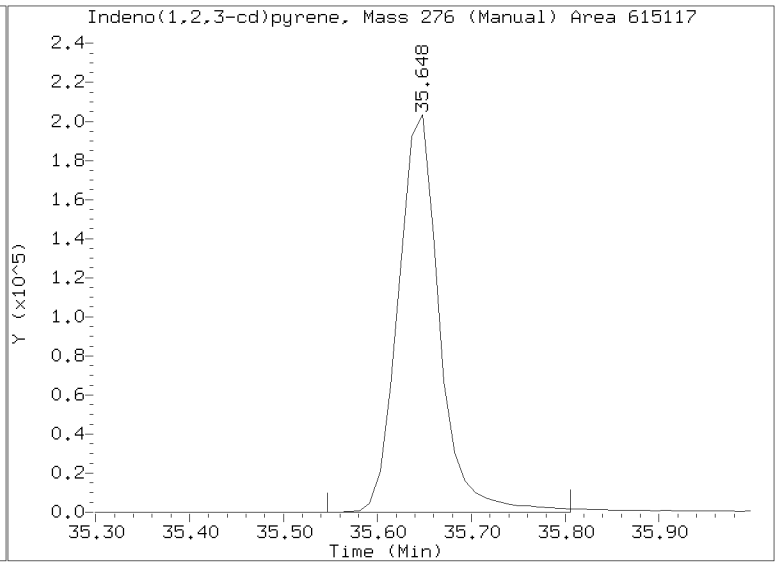


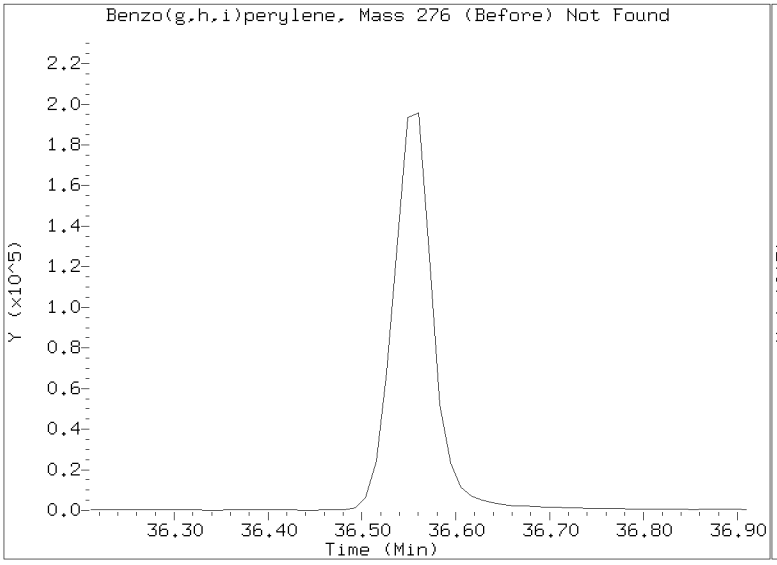


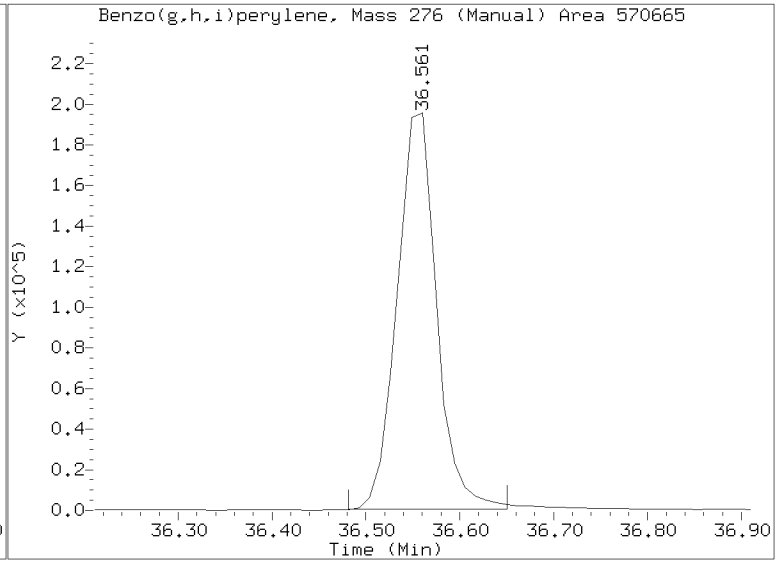
Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt14.i/20210529.b/NT1421052911.D
Injection Date: 29-MAY-2021 16:25
Lab ID:SJF0025-CAL6 Client ID:
Report Date: 06/02/2021 19:03









Data File: \\target\share\chem3\nt14.i\20210529.b\NT1421052912.D

Date : 29-MAY-2021 17:13

Client ID:

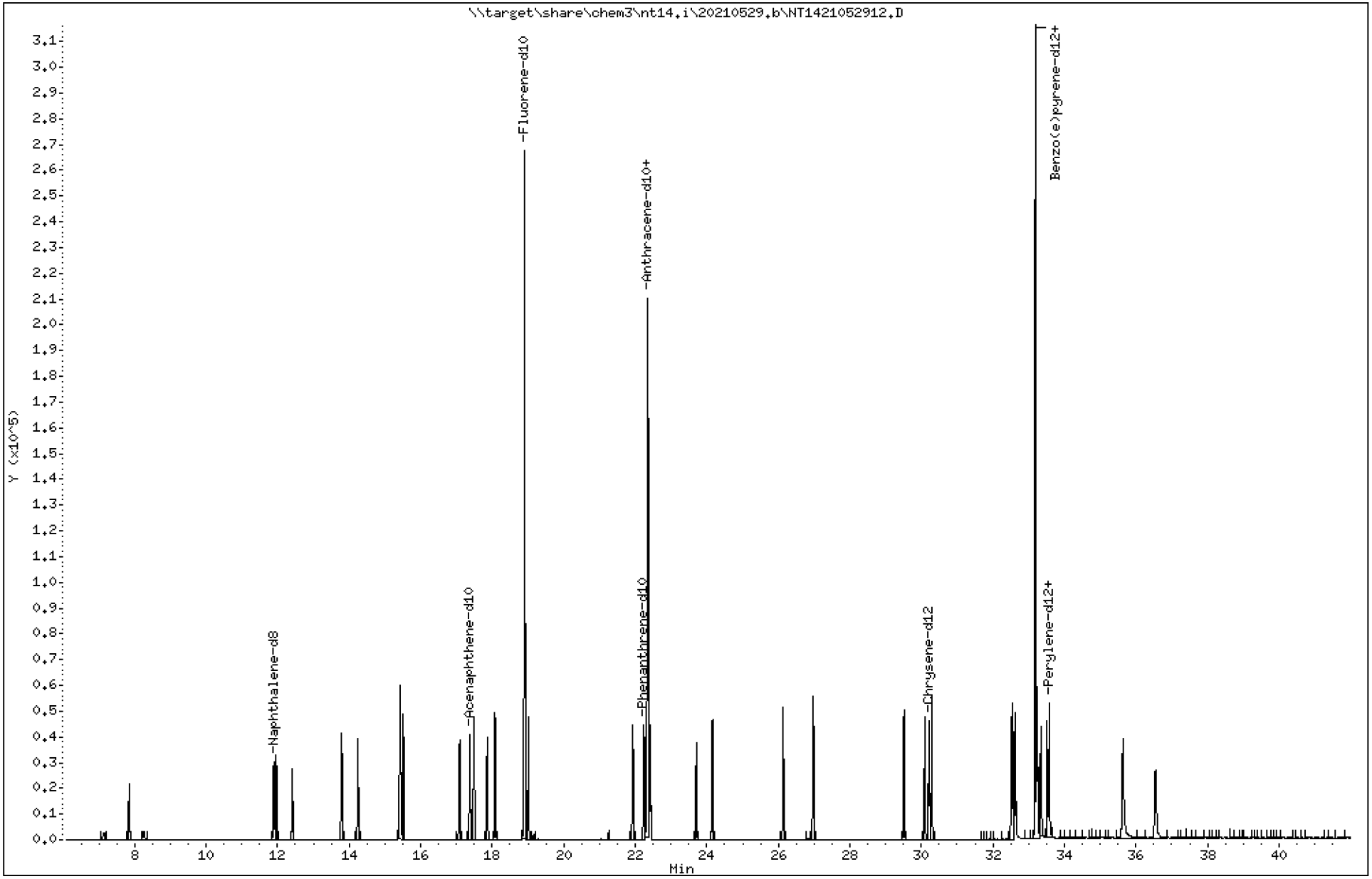
Instrument: nt14.i

Sample Info: SJF0025-CAL3

Operator: VTS

Column phase: Rxi-17Sil MS

Column diameter: 0.25



ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt14.i\20210529.b\NT1421052912.D
Lab Smp Id: SJF0025-CAL3
Inj Date : 29-MAY-2021 17:13
Operator : VTS Inst ID: nt14.i
Smp Info : SJF0025-CAL3
Misc Info :
Comment : 1ul Injection
Method : \\target\share\chem3\nt14.i\20210529.b\ALKYLPNA.m
Meth Date : 02-Jun-2021 19:03 yev Quant Type: ISTD
Cal Date : 29-MAY-2021 17:13 Cal File: NT1421052912.D
Als bottle: 6 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: TARGETS.sub
Target Version: 4.14
Processing Host: ORGDATA102

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
	1 trans-Decalin	138	7.136	7.136	(0.377)	4880	0.50000	0.5194
	2 cis-Decalin	138	8.266	8.266	(0.437)	3681	0.50000	0.4629(M)
$	6 Naphthalene-d8	136	11.897	11.897	(0.629)	43772	0.50000	0.4998
	7 Naphthalene	128	11.957	11.957	(0.632)	43590	0.50000	0.4980
	12 Benzo(b)thiophene	134	12.409	12.409	(0.656)	35015	0.50000	0.4866
	16 2-Methylnaphthalene	141	13.794	13.794	(0.730)	25905	0.50000	0.5063
	17 1-methylnaphthalene	141	14.244	14.244	(0.753)	25368	0.50000	0.5096
	18 Biphenyl	154	15.431	15.431	(0.816)	38750	0.50000	0.5125
	19 2,6-Dimethylnaphthalene	156	15.508	15.508	(0.820)	28013	0.50000	0.5038
	20 Acenaphthylene	152	17.091	17.091	(0.904)	46496	0.50000	0.4892
$	21 Acenaphthene-d10	164	17.366	17.366	(0.918)	27003	0.50000	0.5020
	22 Acenaphthene	153	17.486	17.486	(0.925)	29836	0.50000	0.5092
	23 Dibenzofuran	168	17.860	17.860	(0.945)	43720	0.50000	0.5030
	24 1,6,7-Trimethylnaphthalene	170	18.080	18.080	(0.956)	28132	0.50000	0.4968
*	25 Fluorene-d10	176	18.907	18.907	(1.000)	188390	2.00000	
	26 Fluorene	166	19.009	19.009	(1.005)	33754	0.50000	0.5013
	30 Dibenzothiophene	184	21.931	21.931	(1.160)	47219	0.50000	0.4967
$	35 Phenanthrene-d10	188	22.239	22.239	(0.995)	47221	0.50000	0.4999
	36 Phenanthrene	178	22.316	22.316	(0.998)	50975	0.50000	0.5035
*	250 Anthracene-d10	188	22.359	22.359	(1.000)	196353	2.00000	
	37 Anthracene	178	22.425	22.425	(1.003)	47673	0.50000	0.5005
	42 Carbazole	167	23.701	23.701	(1.060)	41173	0.50000	0.4901
	43 1-Methylphenanthrene	192	24.162	24.162	(1.081)	35120	0.50000	0.4827
	44 Fluoranthene	202	26.130	26.130	(1.169)	53971	0.50000	0.4830
	46 Pyrene	202	26.977	26.977	(1.207)	55812	0.50000	0.4802
	51 Naphthobenzothiophene	234	29.509	29.509	(1.320)	60282	0.50000	0.4827
	55 Benzo(a)anthracene	228	30.095	30.095	(0.907)	50886	0.50000	0.4945
$	56 Chrysene-d12	240	30.219	30.219	(0.911)	42959	0.50000	0.5173
	57 Chrysene	228	30.287	30.287	(0.913)	52164	0.50000	0.5173
	62 Benzo(b)fluoranthene	252	32.517	32.517	(0.980)	50041	0.50000	0.4689(M)
	63 Benzo(k)fluoranthene	252	32.562	32.562	(0.981)	54998	0.50000	0.4803(M)
	293 Benzo(j)fluoranthene	252	32.629	32.629	(0.983)	54919	0.50000	0.5205(M)
	246 Total Benzofluoranthenes	252	32.562	32.562	(0.981)	152250	1.50000	1.456(M)

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
* 251 Benzo(e)pyrene-d12	264	33.181	33.181	(1.000)	265323	2.00000	
64 Benzo(e)pyrene	252	33.238	33.238	(1.002)	50042	0.50000	0.4784
66 Benzo(a)pyrene	252	33.339	33.339	(1.005)	44291	0.50000	0.4654
$ 67 Perylene-d12	264	33.519	33.519	(1.010)	43299	0.50000	0.4830
68 Perylene	252	33.575	33.575	(1.012)	48112	0.50000	0.4904(M)
69 Indeno(1,2,3-cd)pyrene	276	35.637	35.637	(1.074)	54405	0.50000	0.4871
70 Dibenzo(a,h)anthracene	278	35.625	35.625	(1.074)	45762	0.50000	0.4408(M)
74 Benzo(g,h,i)perylene	276	36.549	36.549	(1.101)	52529	0.50000	0.4760(M)

QC Flag Legend

M - Compound response manually integrated.

Data File: \\target\share\chem3\nt14.i\20210529.b\NT1421052912.D Page 1
Report Date: 02-Jun-2021 19:03

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt14.i
Lab File ID: NT1421052912.D
Lab Smp Id: SJF0025-CAL3
Analysis Type: SV
Quant Type: ISTD
Operator: VTS
Method File: \\target\share\chem3\nt14.i\20210529.b\ALKYLPNA.m
Misc Info:

Calibration Date: 29-MAY-2021
Calibration Time: 14:01
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
25 Fluorene-d10	159478	79739	318956	188390	18.13
250 Anthracene-d10	170161	85081	340322	196353	15.39
251 Benzo(e)pyrene-d1	236612	118306	473224	265323	12.13

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
25 Fluorene-d10	18.91	18.41	19.41	18.91	-0.00
250 Anthracene-d10	22.36	21.86	22.86	22.36	-0.00
251 Benzo(e)pyrene-d1	33.18	32.68	33.68	33.18	-0.00

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

REVIEW SUMMARY FOR FILE - NT1421052912.D

Lab ID: SJF0025-CAL3
nt14.i, 20210529.b\ALKYLPNA.m, 29-MAY-2021 17:13

RT	CO-ELUTION COMPOUNDS
	NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
NONE			

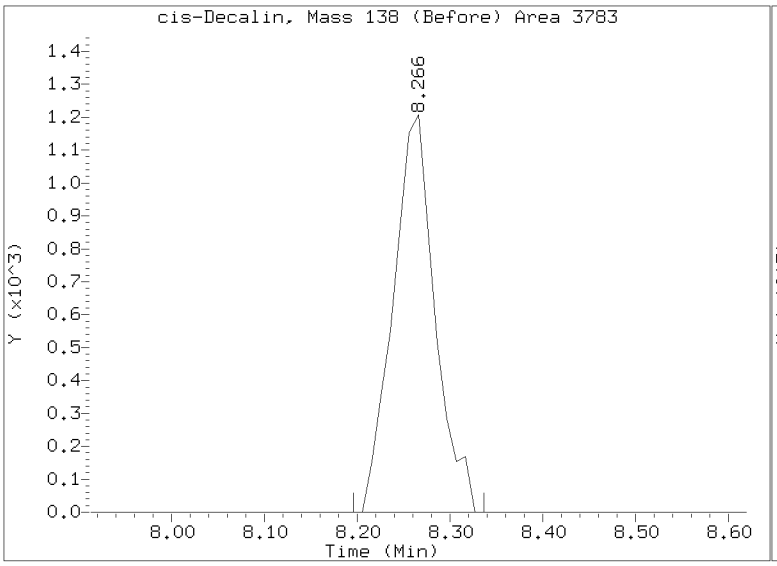
RRT check based on Ccal File: NT1421052912.D

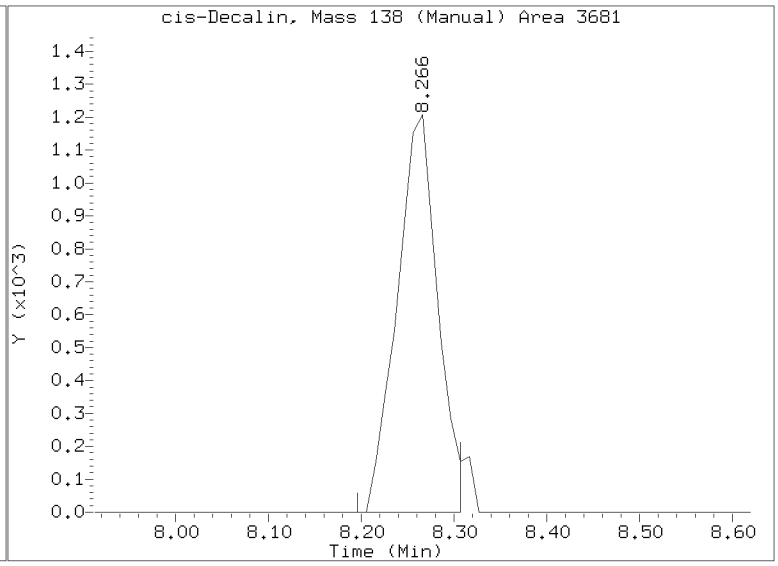
On Column LOD for nt14.i, 20210529.b\ALKYLPNA.m, TARGETS.sub = 0.0000

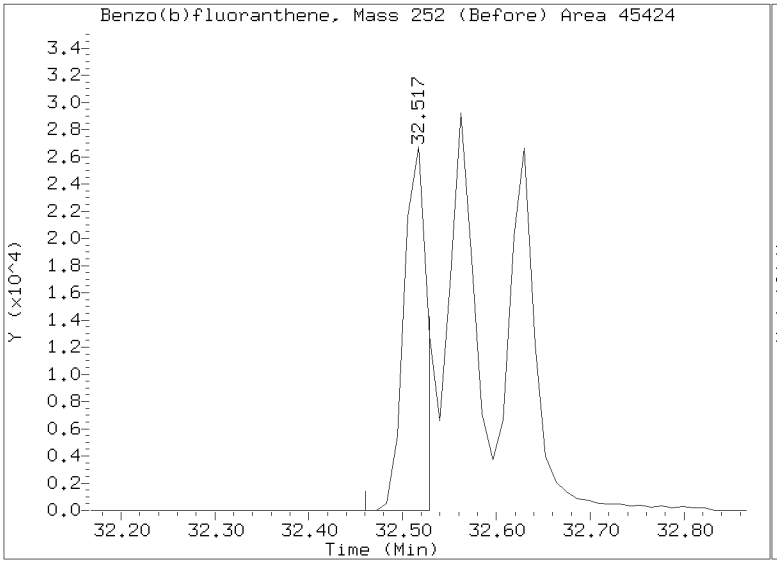
* Only compounds listed in the work order have been verified by the analyst *

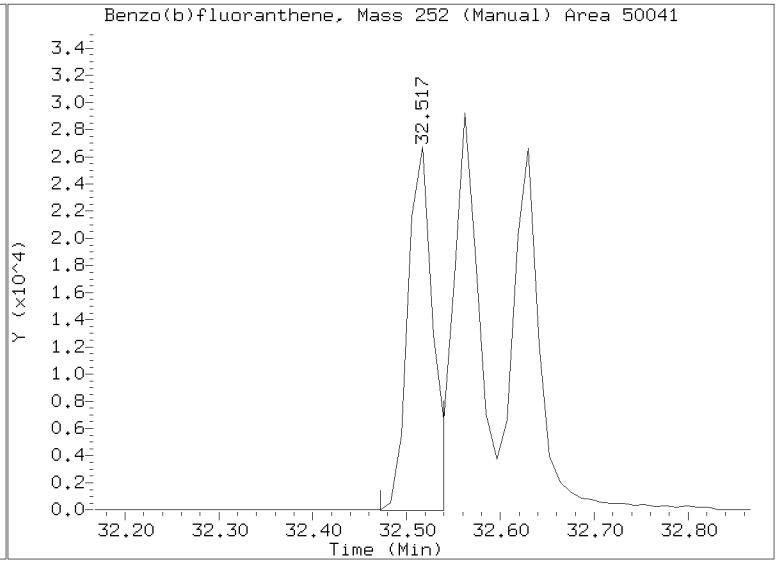
Quant Ion Manual Peak Adjustment Report

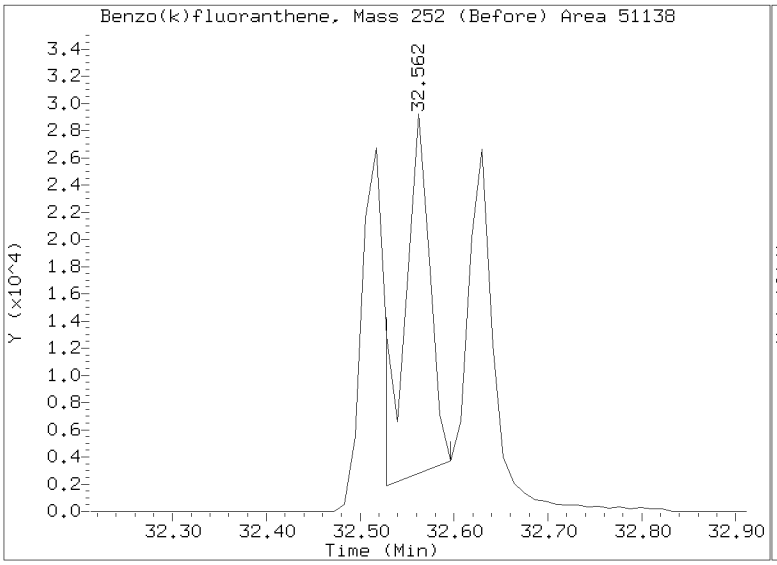
Datafile: //target/share/chem3/nt14.i/20210529.b/NT1421052912.D
Injection Date: 29-MAY-2021 17:13
Lab ID:SJF0025-CAL3 Client ID:
Report Date: 06/02/2021 19:03

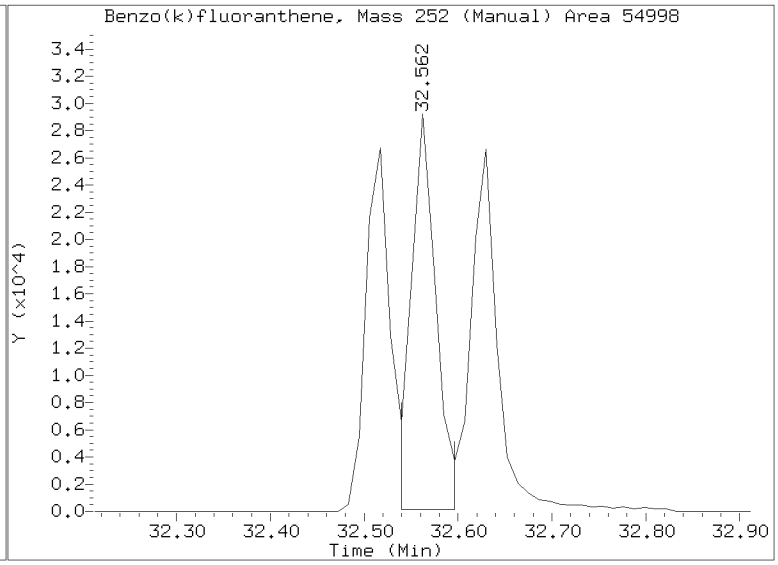






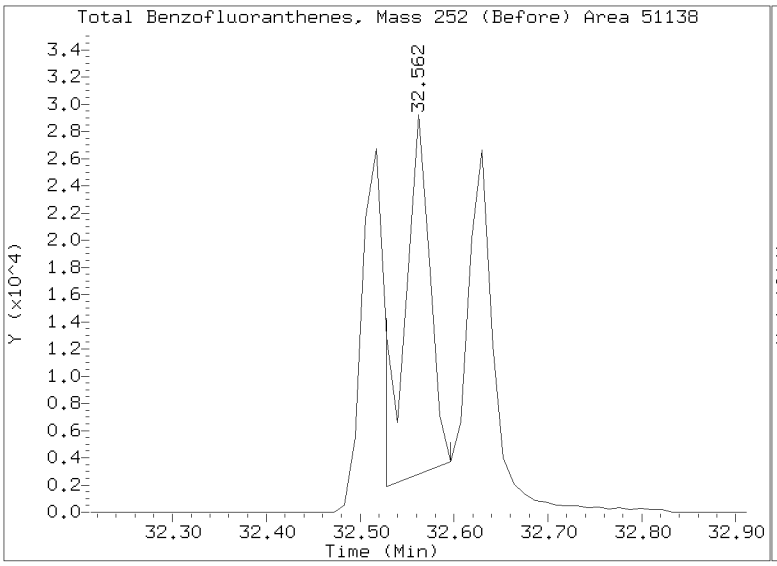


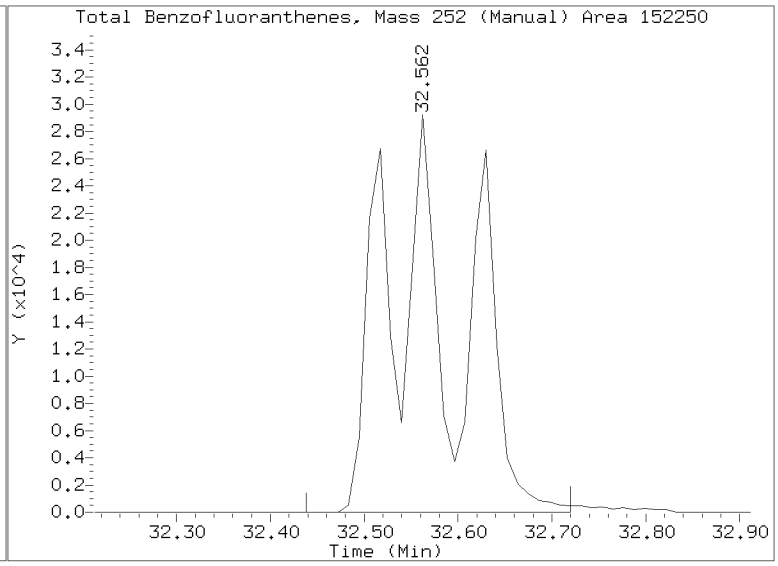


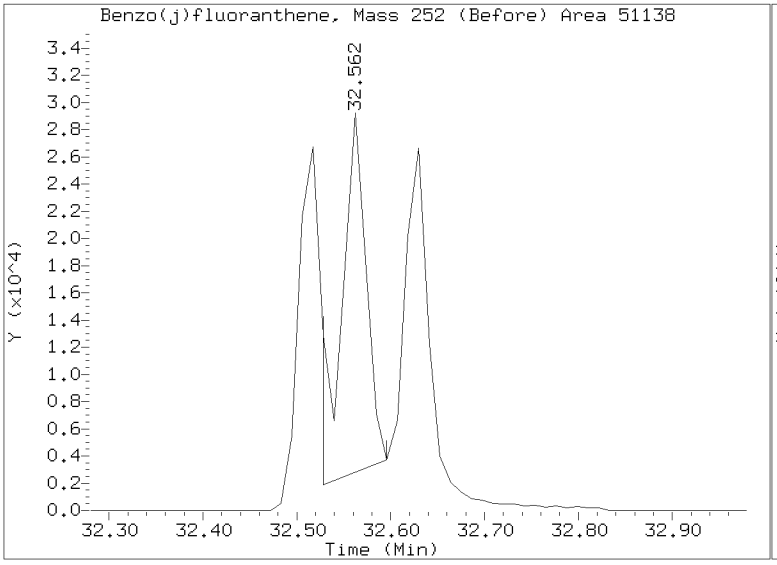


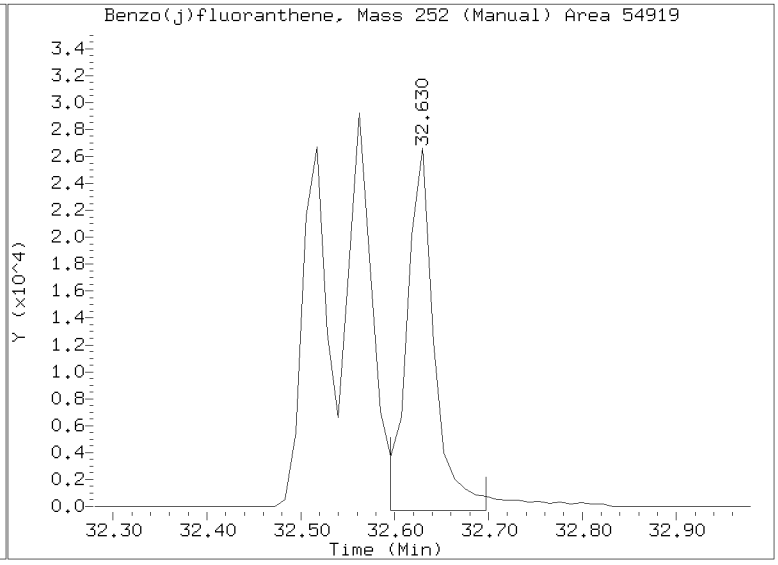
Quant Ion Manual Peak Adjustment Report

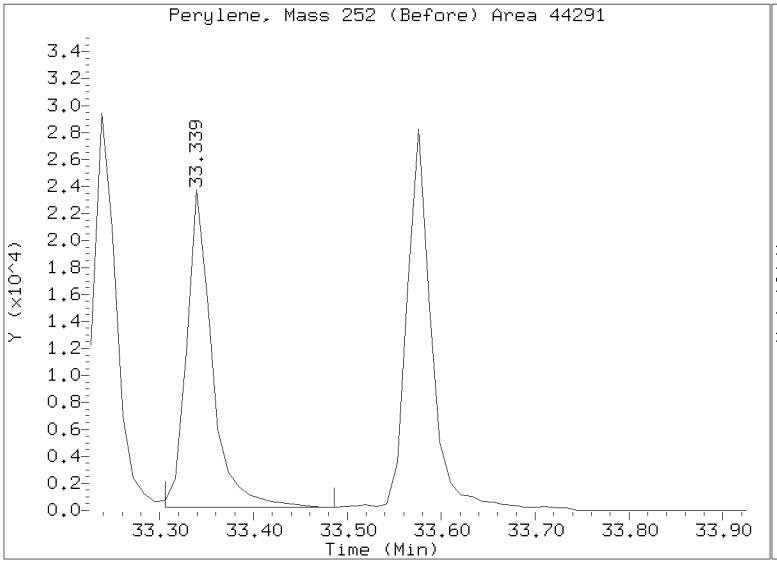
Datafile: //target/share/chem3/nt14.i/20210529.b/NT1421052912.D
Injection Date: 29-MAY-2021 17:13
Lab ID:SJF0025-CAL3 Client ID:
Report Date: 06/02/2021 19:03

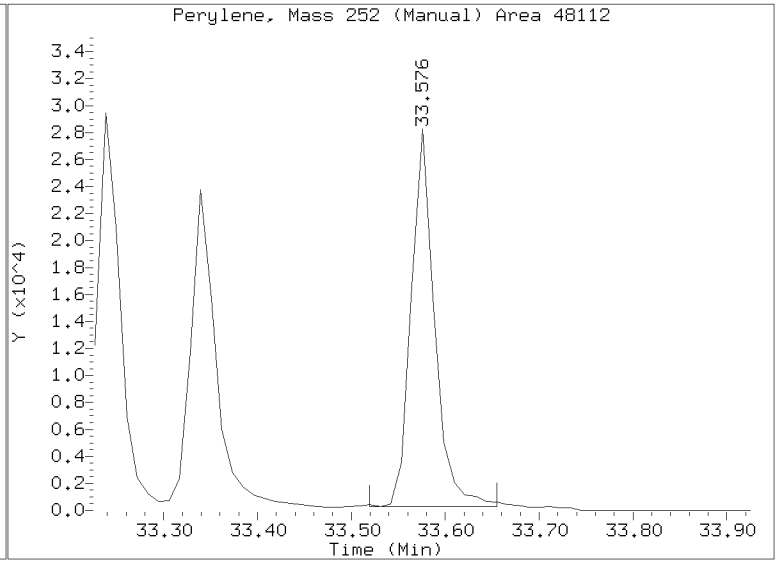






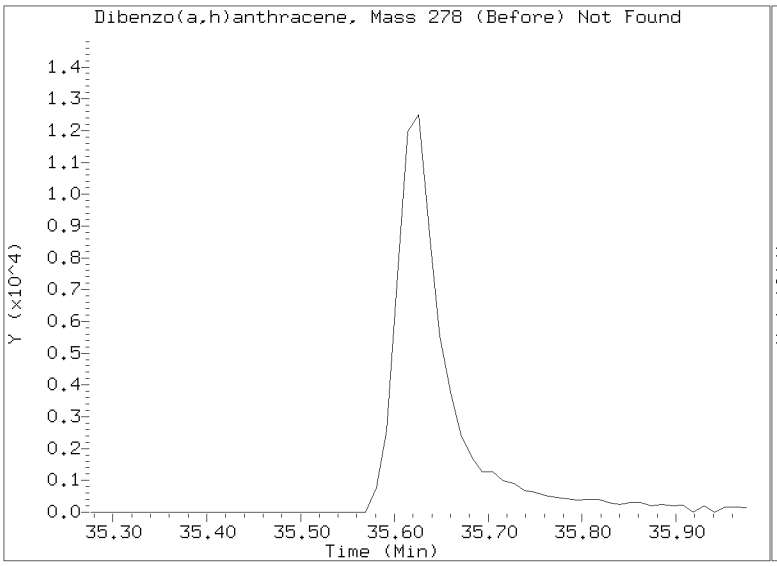


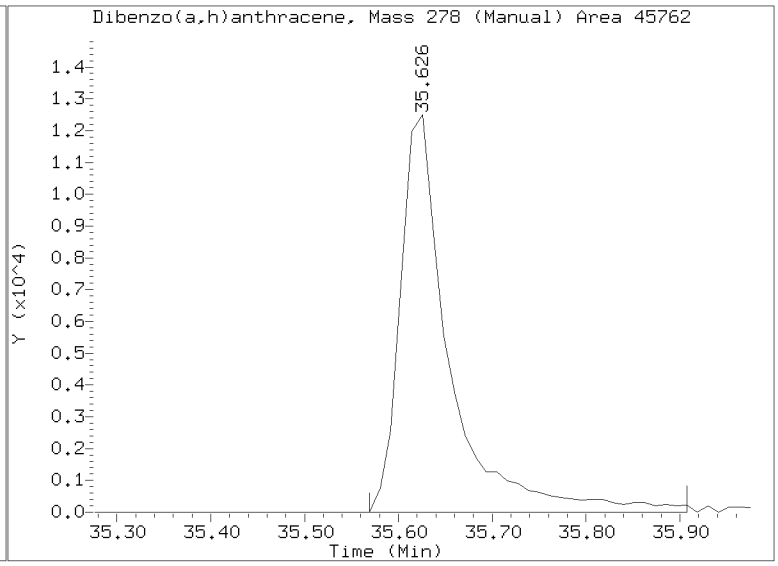


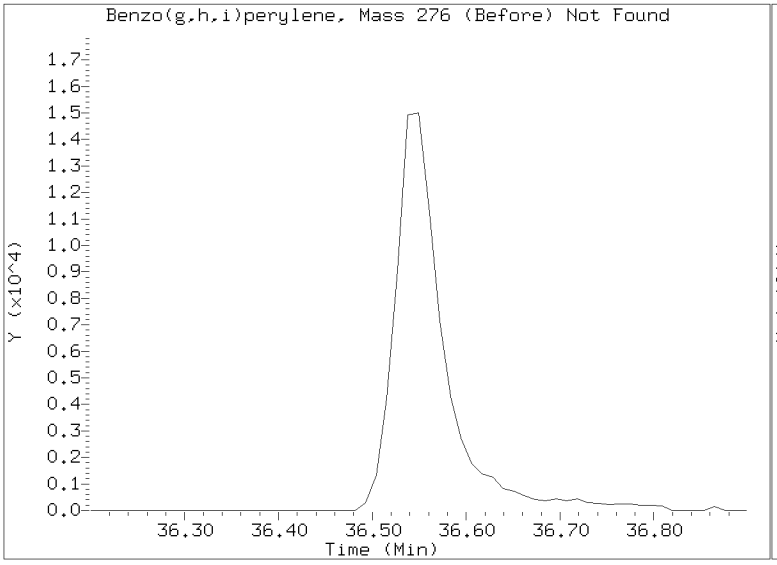


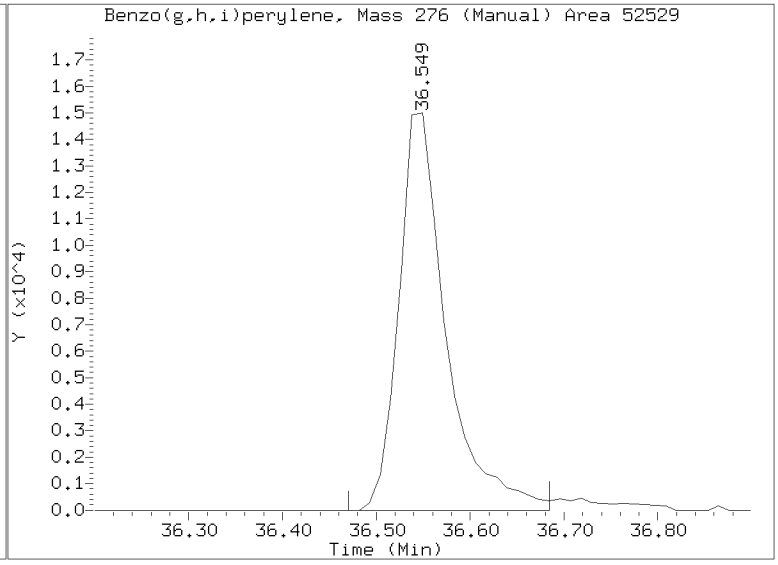
Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt14.i/20210529.b/NT1421052912.D
Injection Date: 29-MAY-2021 17:13
Lab ID:SJF0025-CAL3 Client ID:
Report Date: 06/02/2021 19:03









Data File: \\target\share\chem3\nt14.i\20210529.b\NT1421052913.D

Date : 29-MAY-2021 18:01

Client ID:

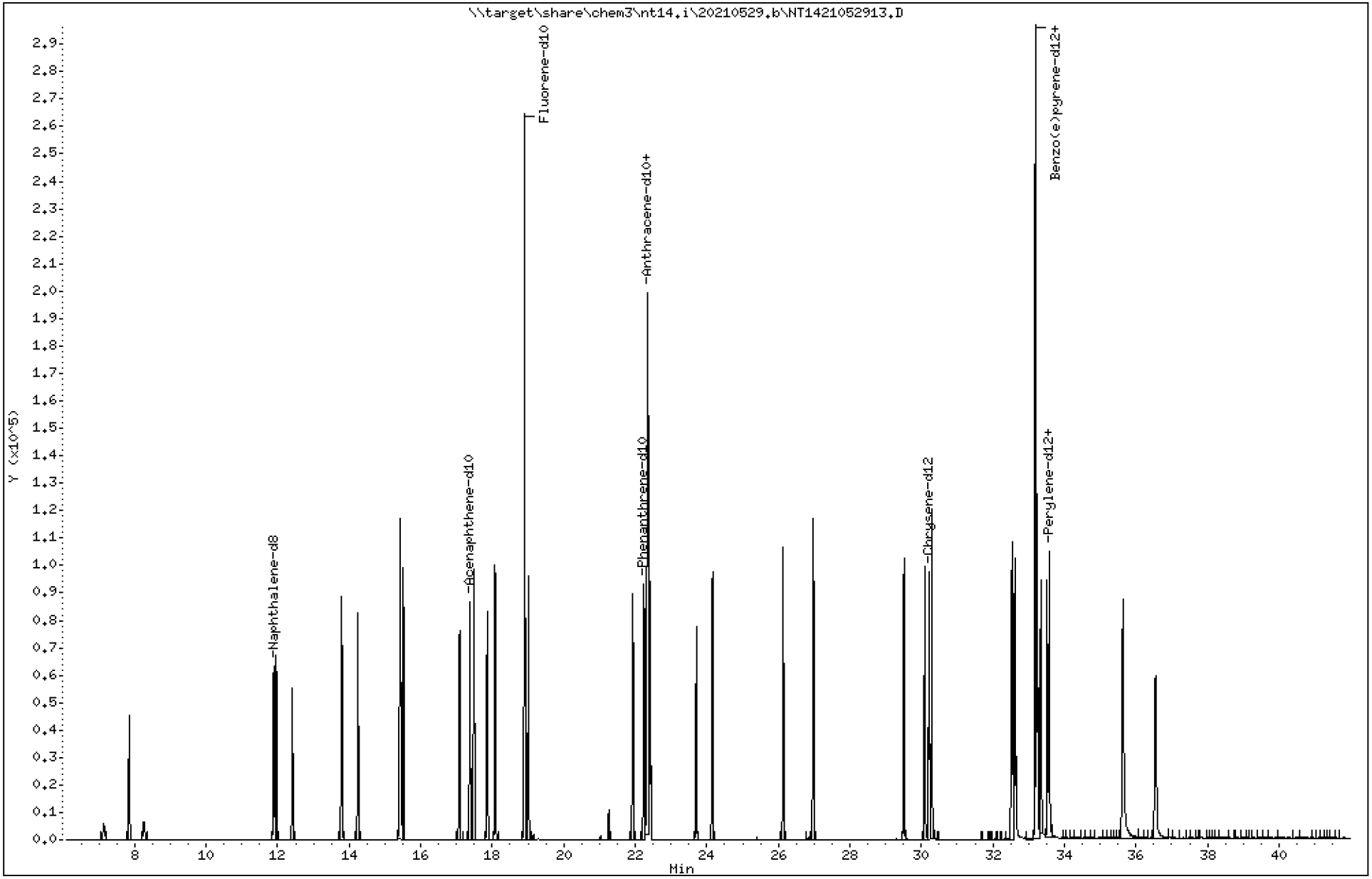
Instrument: nt14.i

Sample Info: SJF0025-CAL4

Operator: VTS

Column phase: Rxi-17Sil MS

Column diameter: 0.25



ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt14.i\20210529.b\NT1421052913.D
Lab Smp Id: SJF0025-CAL4
Inj Date : 29-MAY-2021 18:01
Operator : VTS Inst ID: nt14.i
Smp Info : SJF0025-CAL4
Misc Info :
Comment : 1ul Injection
Method : \\target\share\chem3\nt14.i\20210529.b\ALKYLPNA.m
Meth Date : 02-Jun-2021 19:03 yev Quant Type: ISTD
Cal Date : 29-MAY-2021 18:01 Cal File: NT1421052913.D
Als bottle: 7 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: TARGETS.sub
Target Version: 4.14
Processing Host: ORGDATA102

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
1 trans-Decalin	138	7.136	7.136	(0.377)	9584	1.00000	1.066
2 cis-Decalin	138	8.266	8.266	(0.437)	7169	1.00000	0.9493
$ 6 Naphthalene-d8	136	11.897	11.897	(0.629)	88443	1.00000	1.055
7 Naphthalene	128	11.957	11.957	(0.632)	88426	1.00000	1.055
12 Benzo(b)thiophene	134	12.409	12.409	(0.656)	70687	1.00000	1.026
16 2-Methylnaphthalene	141	13.794	13.794	(0.730)	52025	1.00000	1.062
17 1-methylnaphthalene	141	14.244	14.244	(0.753)	49989	1.00000	1.049
18 Biphenyl	154	15.431	15.431	(0.816)	76173	1.00000	1.053
19 2,6-Dimethylnaphthalene	156	15.508	15.508	(0.820)	56183	1.00000	1.056
20 Acenaphthylene	152	17.091	17.091	(0.904)	94329	1.00000	1.037
$ 21 Acenaphthene-d10	164	17.376	17.376	(0.919)	53728	1.00000	1.044
22 Acenaphthene	153	17.486	17.486	(0.925)	58956	1.00000	1.051
23 Dibenzofuran	168	17.860	17.860	(0.945)	88769	1.00000	1.067
24 1,6,7-Trimethylnaphthalene	170	18.080	18.080	(0.956)	56243	1.00000	1.038
* 25 Fluorene-d10	176	18.907	18.907	(1.000)	180325	2.00000	
26 Fluorene	166	19.009	19.009	(1.005)	66539	1.00000	1.032
30 Dibenzothiophene	184	21.931	21.931	(1.160)	94522	1.00000	1.039
$ 35 Phenanthrene-d10	188	22.238	22.238	(0.995)	93009	1.00000	1.044
36 Phenanthrene	178	22.326	22.326	(0.999)	99899	1.00000	1.046(M)
* 250 Anthracene-d10	188	22.359	22.359	(1.000)	185169	2.00000	
37 Anthracene	178	22.425	22.425	(1.003)	94520	1.00000	1.052
42 Carbazole	167	23.701	23.701	(1.060)	82155	1.00000	1.037
43 1-Methylphenanthrene	192	24.162	24.162	(1.081)	71891	1.00000	1.048
44 Fluoranthene	202	26.130	26.130	(1.169)	109048	1.00000	1.035
46 Pyrene	202	26.977	26.977	(1.207)	112197	1.00000	1.024
51 Naphthobenzothiophene	234	29.509	29.509	(1.320)	121970	1.00000	1.036
55 Benzo(a)anthracene	228	30.095	30.095	(0.907)	104952	1.00000	1.034
$ 56 Chrysene-d12	240	30.219	30.219	(0.911)	85687	1.00000	1.046
57 Chrysene	228	30.286	30.286	(0.913)	104563	1.00000	1.051
62 Benzo(b)fluoranthene	252	32.517	32.517	(0.980)	102796	1.00000	0.9761(M)
63 Benzo(k)fluoranthene	252	32.562	32.562	(0.981)	118006	1.00000	1.044(M)
293 Benzo(j)fluoranthene	252	32.629	32.629	(0.983)	115967	1.00000	1.114(M)
246 Total Benzofluoranthenes	252	32.562	32.562	(0.981)	318006	3.00000	3.083(M)

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
* 251 Benzo(e)pyrene-d12	264	33.181	33.181	(1.000)	261813	2.00000	
64 Benzo(e)pyrene	252	33.237	33.237	(1.002)	105844	1.00000	1.025
66 Benzo(a)pyrene	252	33.339	33.339	(1.005)	96161	1.00000	1.024
$ 67 Perylene-d12	264	33.519	33.519	(1.010)	90783	1.00000	1.026
68 Perylene	252	33.575	33.575	(1.012)	98887	1.00000	1.021(M)
69 Indeno(1,2,3-cd)pyrene	276	35.636	35.636	(1.074)	112857	1.00000	1.024(M)
70 Dibenzo(a,h)anthracene	278	35.614	35.614	(1.073)	93780	1.00000	0.9128(M)
74 Benzo(g,h,i)perylene	276	36.549	36.549	(1.101)	111889	1.00000	1.028(M)

QC Flag Legend

M - Compound response manually integrated.

Data File: \\target\share\chem3\nt14.i\20210529.b\NT1421052913.D Page 1
Report Date: 02-Jun-2021 19:03

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt14.i
Lab File ID: NT1421052913.D
Lab Smp Id: SJF0025-CAL4
Analysis Type: SV
Quant Type: ISTD
Operator: VTS
Method File: \\target\share\chem3\nt14.i\20210529.b\ALKYLPNA.m
Misc Info:

Calibration Date: 29-MAY-2021
Calibration Time: 14:01
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
25 Fluorene-d10	159478	79739	318956	180325	13.07
250 Anthracene-d10	170161	85081	340322	185169	8.82
251 Benzo(e)pyrene-d1	236612	118306	473224	261813	10.65

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
25 Fluorene-d10	18.91	18.41	19.41	18.91	-0.00
250 Anthracene-d10	22.36	21.86	22.86	22.36	-0.00
251 Benzo(e)pyrene-d1	33.18	32.68	33.68	33.18	-0.00

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

REVIEW SUMMARY FOR FILE - NT1421052913.D

Lab ID: SJF0025-CAL4
nt14.i, 20210529.b\ALKYLPNA.m, 29-MAY-2021 18:01

RT	CO-ELUTION COMPOUNDS
	NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
NONE			

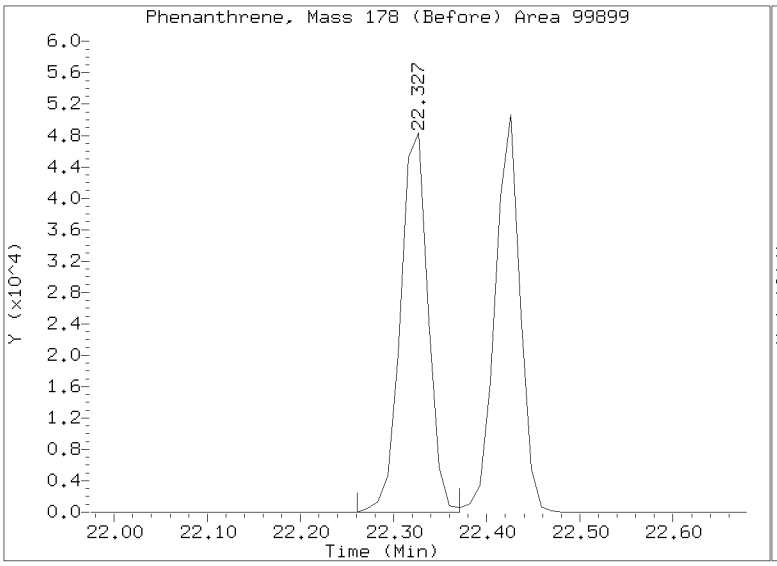
RRT check based on Ccal File: NT1421052913.D

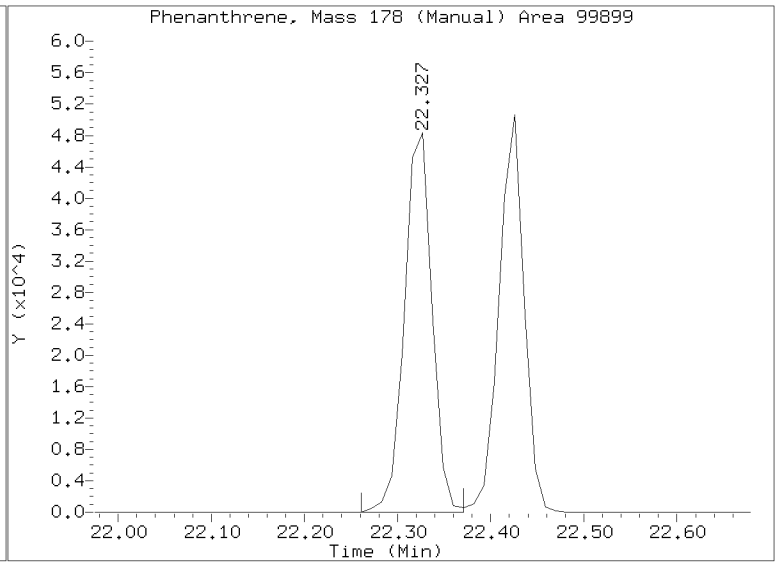
On Column LOD for nt14.i, 20210529.b\ALKYLPNA.m, TARGETS.sub = 0.0000

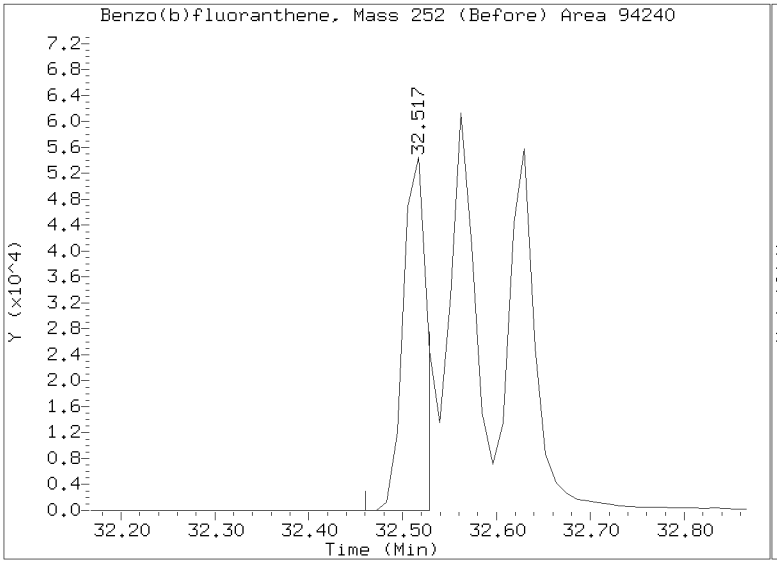
* Only compounds listed in the work order have been verified by the analyst *

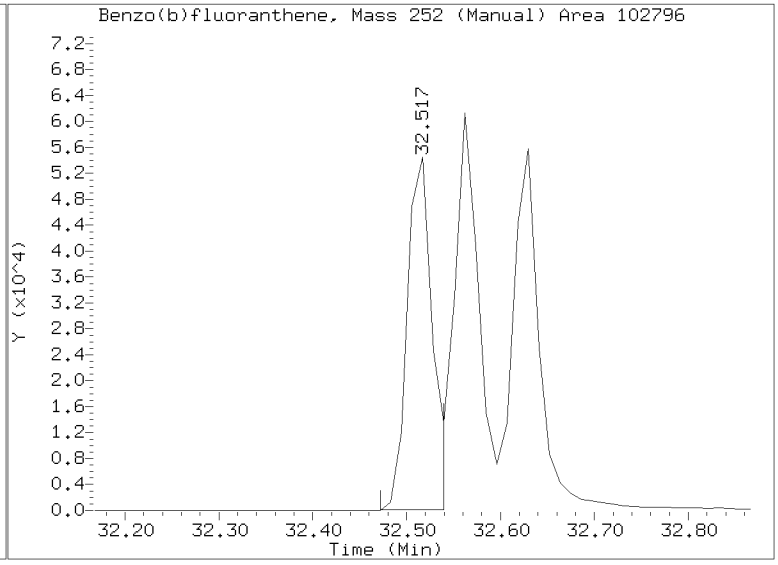
Quant Ion Manual Peak Adjustment Report

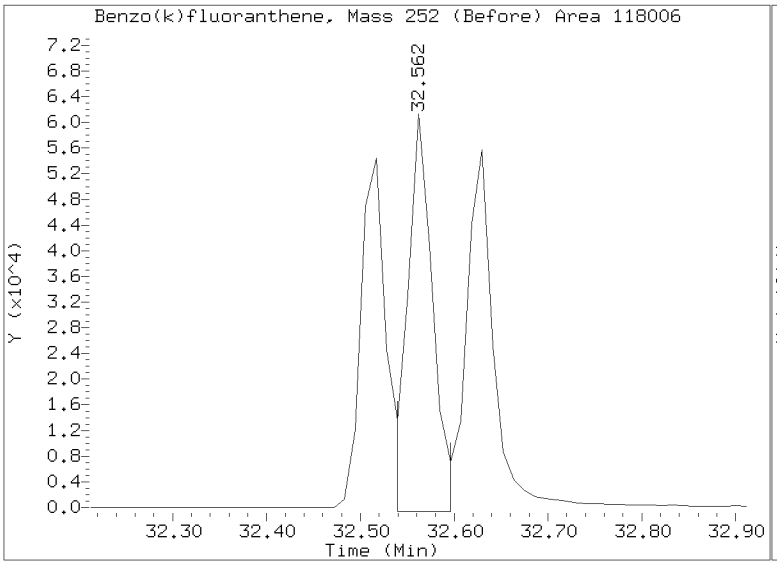
Datafile: //target/share/chem3/nt14.i/20210529.b/NT1421052913.D
Injection Date: 29-MAY-2021 18:01
Lab ID:SJF0025-CAL4 Client ID:
Report Date: 06/02/2021 19:03

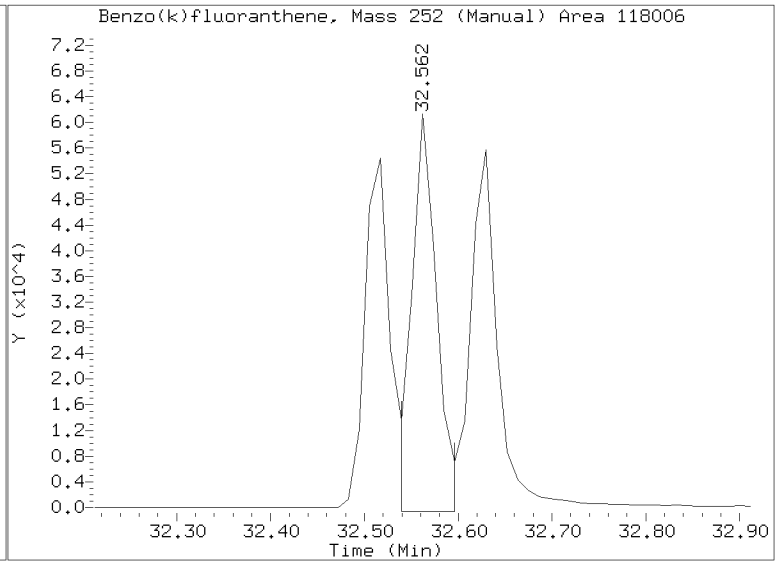












Quant Ion Manual Peak Adjustment Report

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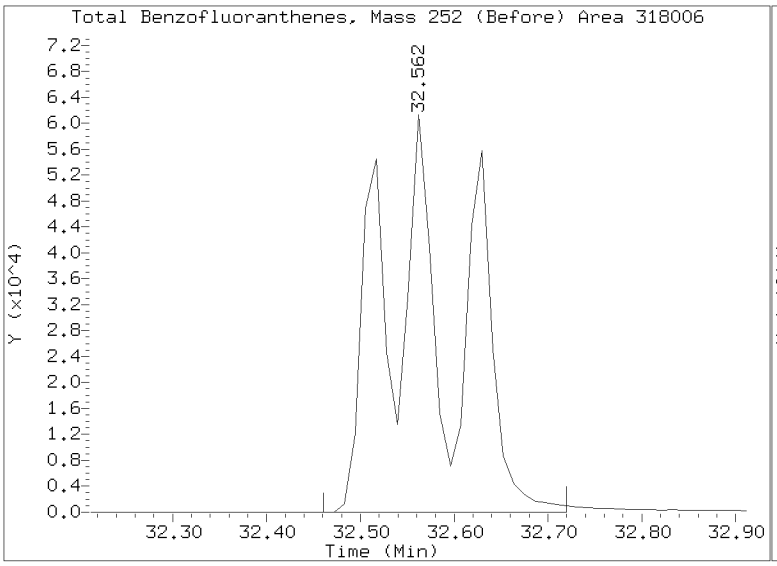
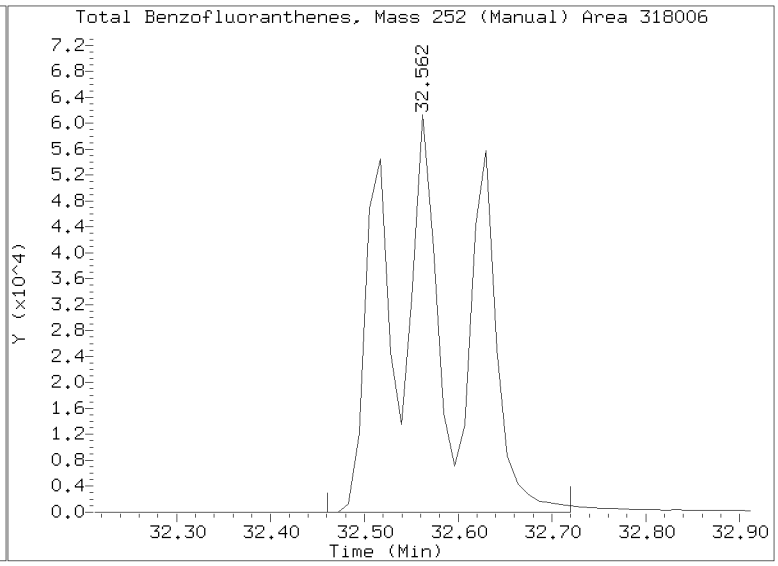
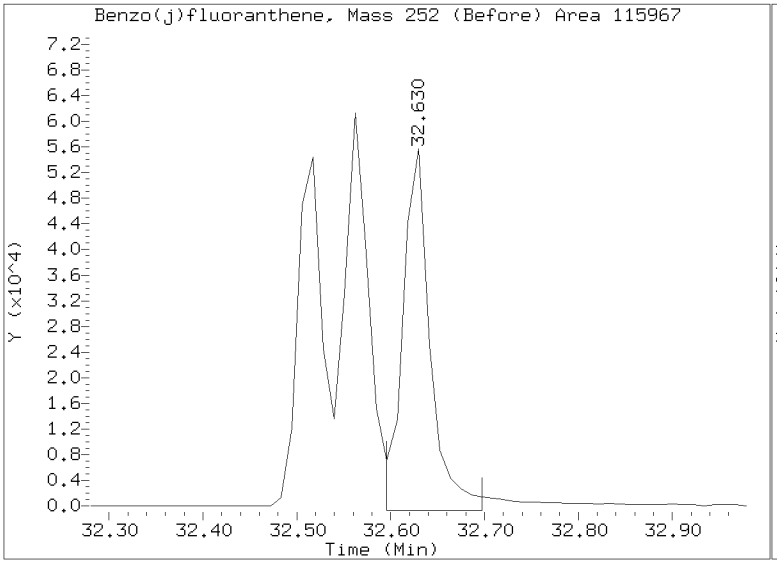
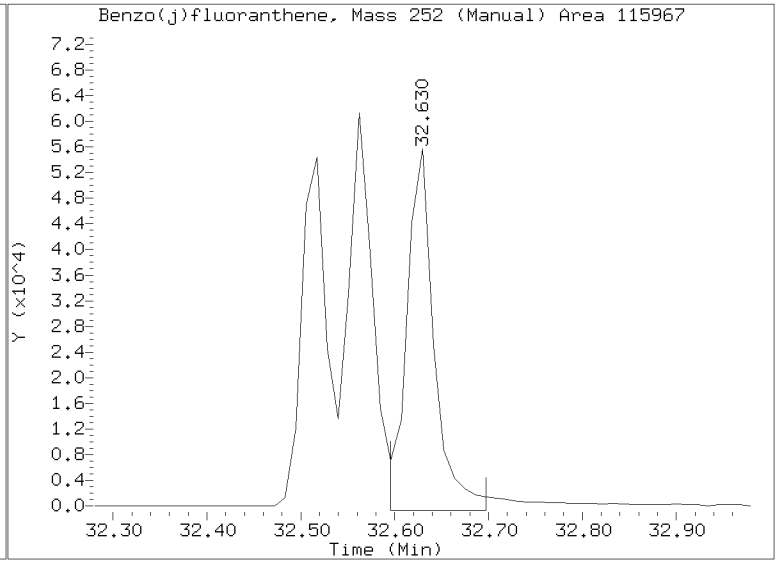
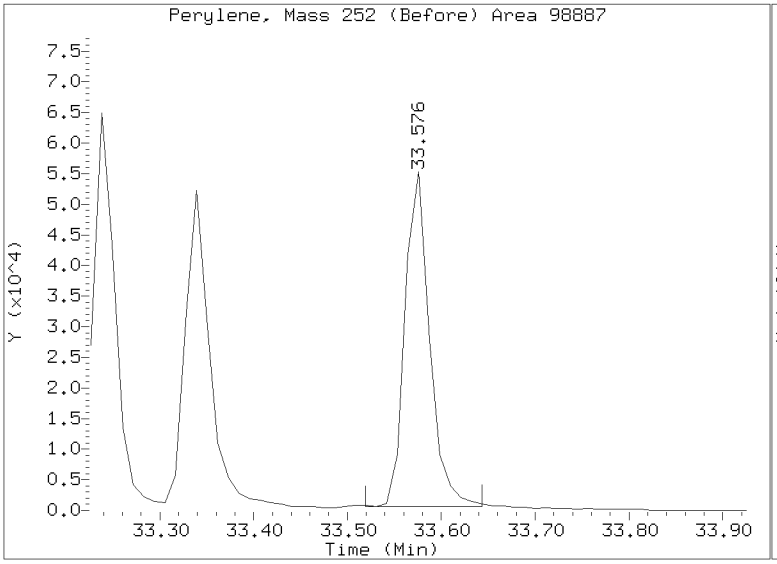
Injection Date: 29-MAY-2021 18:01
Lab ID:SJF0025-CAL4 Client ID:
Report Date: 06/02/2021 19:03

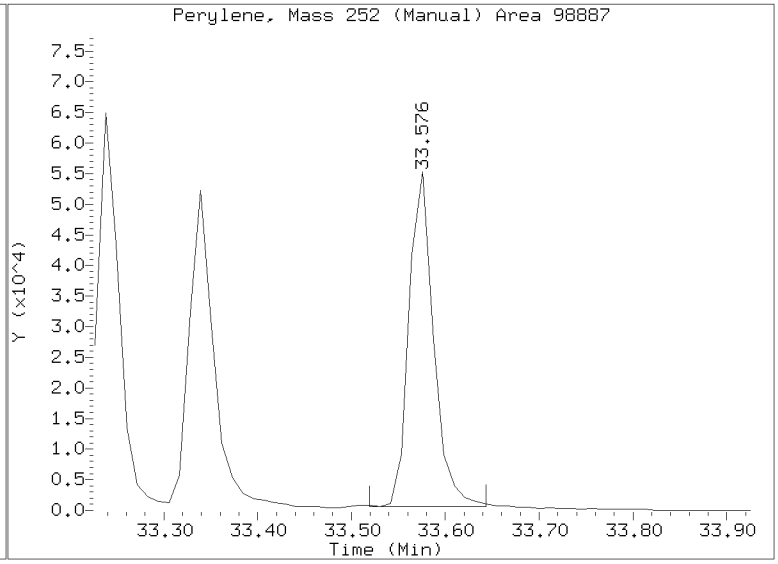






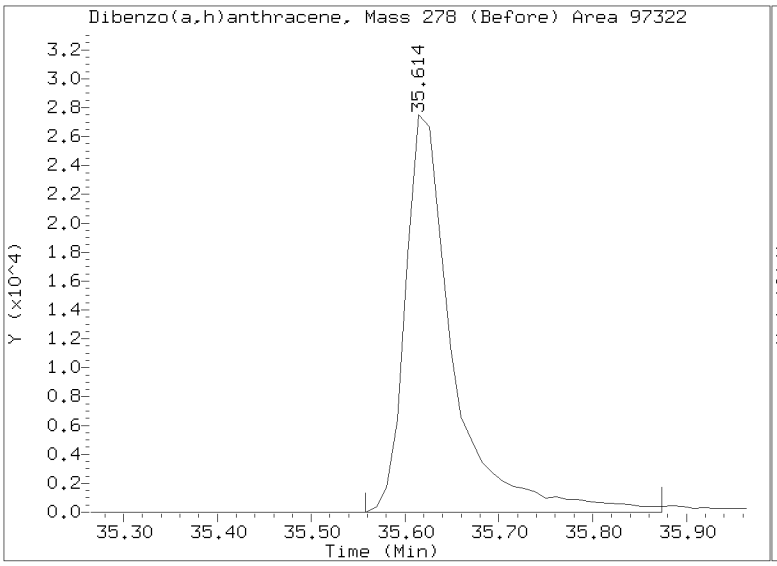


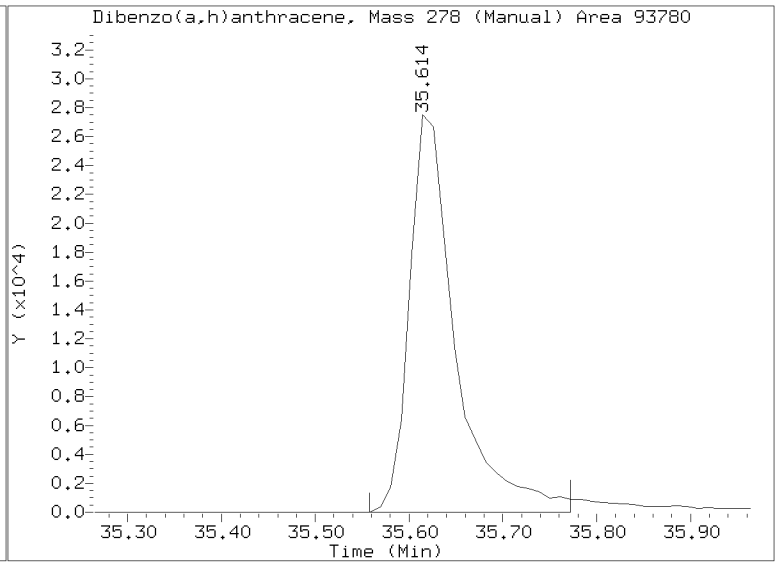


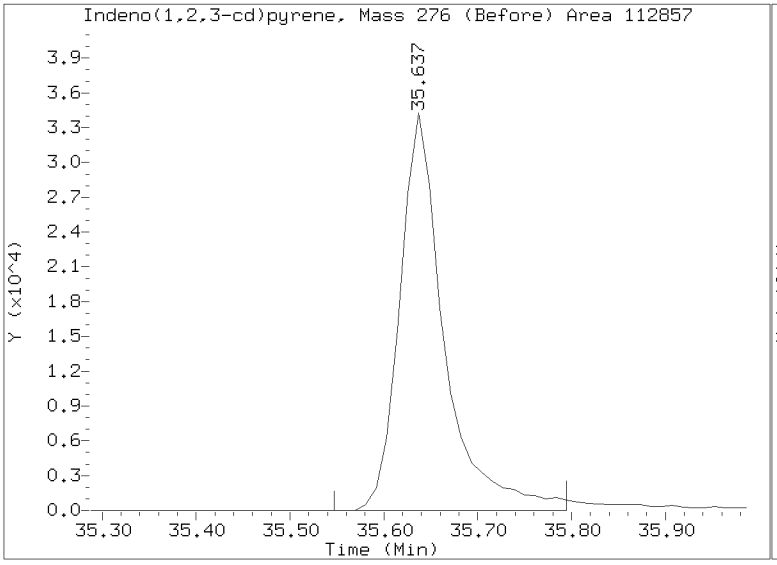


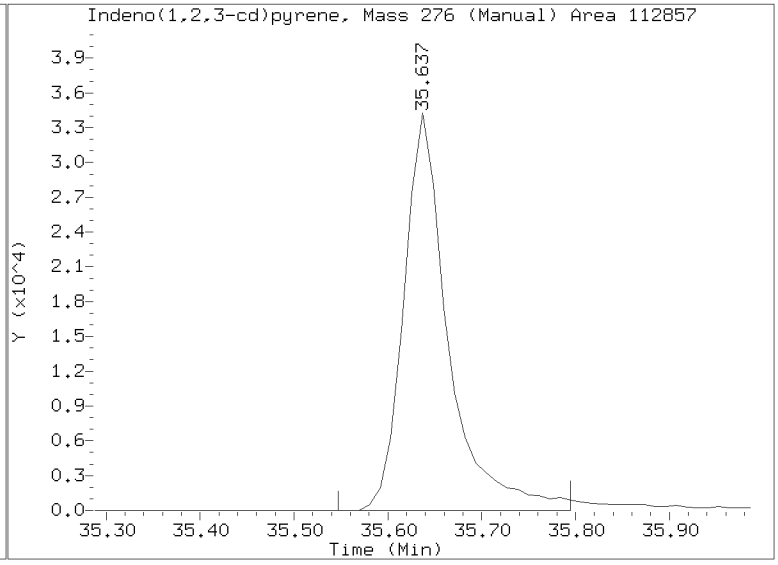
Quant Ion Manual Peak Adjustment Report

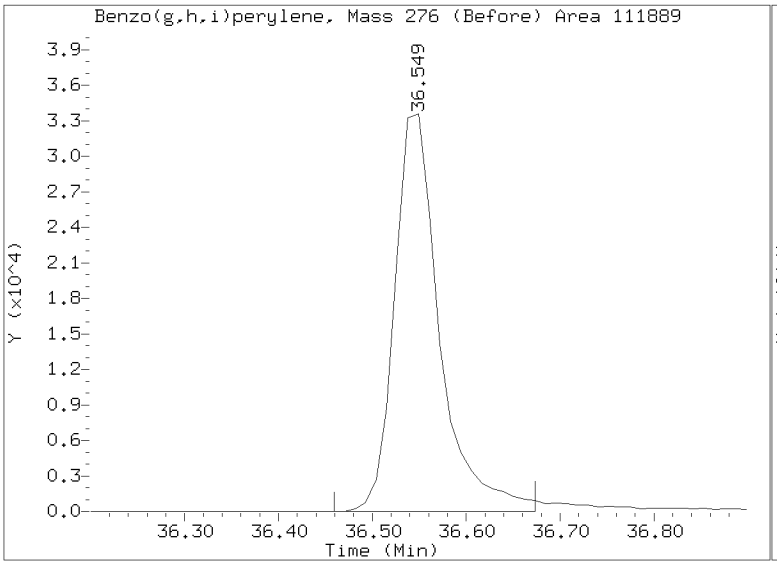
Datafile: //target/share/chem3/nt14.i/20210529.b/NT1421052913.D
Injection Date: 29-MAY-2021 18:01
Lab ID:SJF0025-CAL4 Client ID:
Report Date: 06/02/2021 19:03

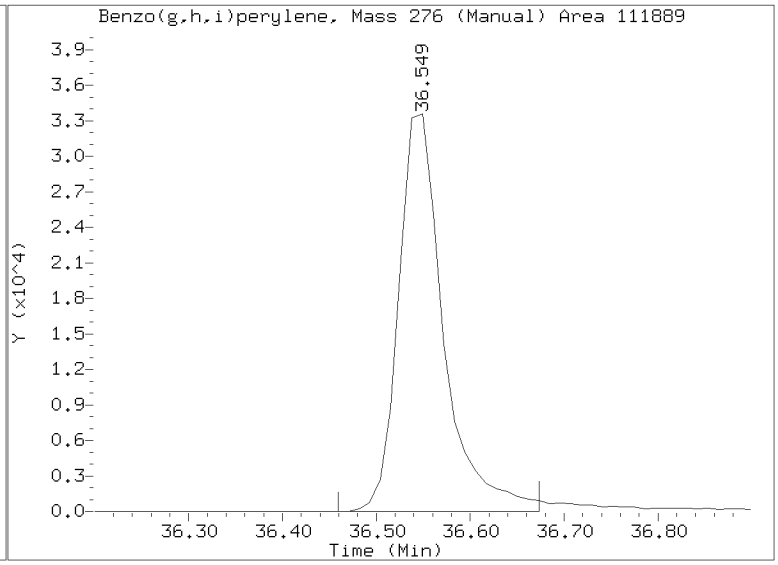










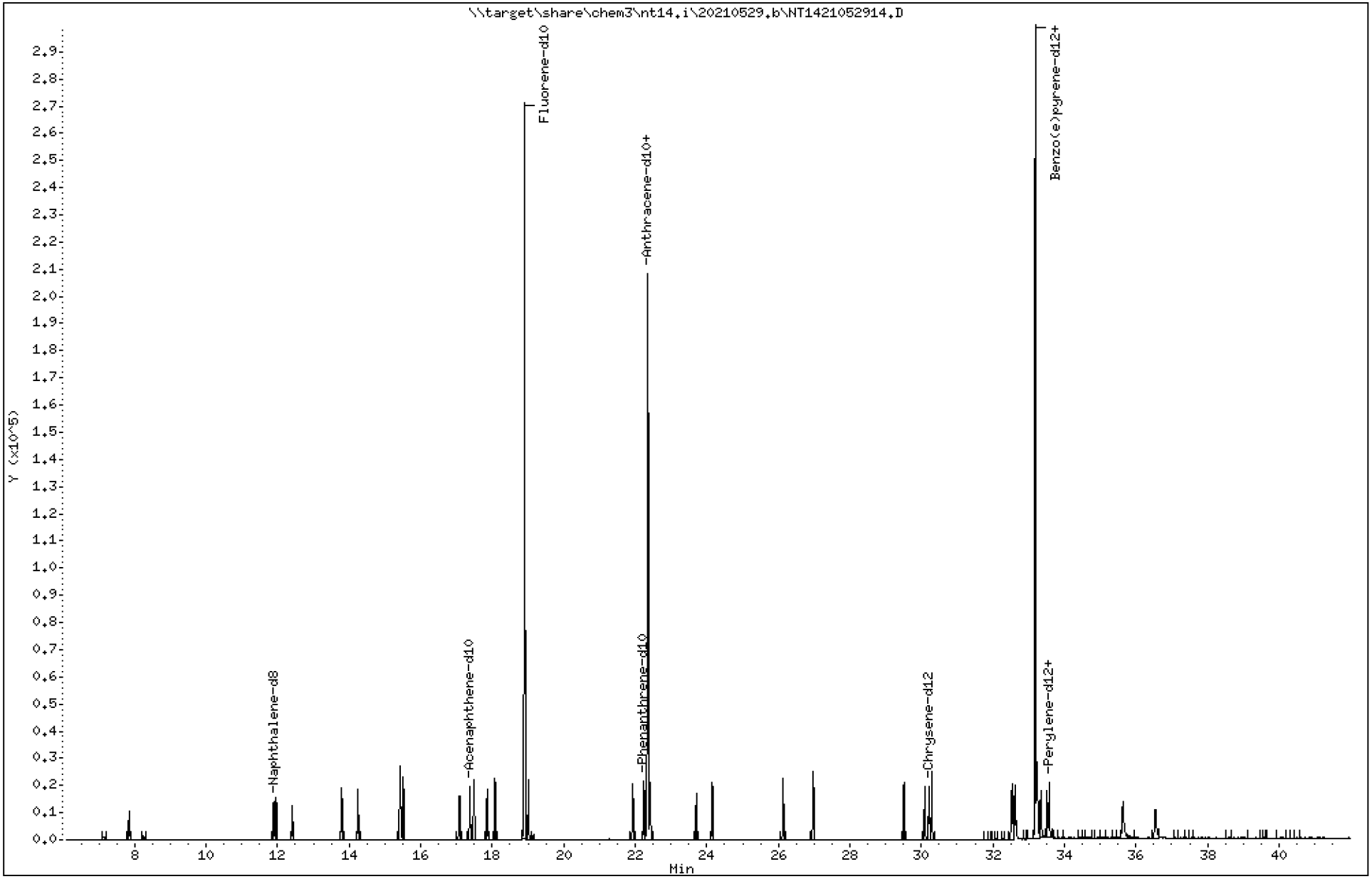


Data File: \\target\share\chem3\nt14.i\20210529.b\NT1421052914.D
Date : 29-MAY-2021 18:49
Client ID:
Sample Info: SJF0025-CAL2

Instrument: nt14.i

Operator: VTS

Column phase: Rxi-17Sil MS
Column diameter: 0.25



ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt14.i\20210529.b\NT1421052914.D
Lab Smp Id: SJF0025-CAL2
Inj Date : 29-MAY-2021 18:49
Operator : VTS Inst ID: nt14.i
Smp Info : SJF0025-CAL2
Misc Info :
Comment : 1ul Injection
Method : \\target\share\chem3\nt14.i\20210529.b\ALKYLPNA.m
Meth Date : 02-Jun-2021 19:03 yev Quant Type: ISTD
Cal Date : 29-MAY-2021 18:49 Cal File: NT1421052914.D
Als bottle: 8 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: TARGETS.sub
Target Version: 4.14
Processing Host: ORGDATA102

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
1 trans-Decalin	138	7.156	7.156	(0.379)	2257	0.25000	0.2451
2 cis-Decalin	138	8.246	8.246	(0.436)	1426	0.25000	0.1821
$ 6 Naphthalene-d8	136	11.897	11.897	(0.629)	20926	0.25000	0.2438
7 Naphthalene	128	11.957	11.957	(0.632)	20929	0.25000	0.2440
12 Benzo(b)thiophene	134	12.409	12.409	(0.656)	17312	0.25000	0.2455
16 2-Methylnaphthalene	141	13.794	13.794	(0.730)	12250	0.25000	0.2443
17 1-methylnaphthalene	141	14.244	14.244	(0.753)	11816	0.25000	0.2422
18 Biphenyl	154	15.431	15.431	(0.816)	18550	0.25000	0.2503
19 2,6-Dimethylnaphthalene	156	15.508	15.508	(0.820)	13774	0.25000	0.2528
20 Acenaphthylene	152	17.091	17.091	(0.904)	21716	0.25000	0.2331
$ 21 Acenaphthene-d10	164	17.377	17.377	(0.919)	12683	0.25000	0.2406
22 Acenaphthene	153	17.486	17.486	(0.925)	13883	0.25000	0.2418
23 Dibenzofuran	168	17.860	17.860	(0.945)	20539	0.25000	0.2411
24 1,6,7-Trimethylnaphthalene	170	18.080	18.080	(0.956)	12771	0.25000	0.2301
* 25 Fluorene-d10	176	18.907	18.907	(1.000)	184642	2.00000	
26 Fluorene	166	19.009	19.009	(1.005)	16013	0.25000	0.2426
30 Dibenzothiophene	184	21.931	21.931	(1.160)	21520	0.25000	0.2310
$ 35 Phenanthrene-d10	188	22.239	22.239	(0.995)	22525	0.25000	0.2436
36 Phenanthrene	178	22.327	22.327	(0.999)	24297	0.25000	0.2452
* 250 Anthracene-d10	188	22.360	22.360	(1.000)	192206	2.00000	
37 Anthracene	178	22.425	22.425	(1.003)	22956	0.25000	0.2462
42 Carbazole	167	23.701	23.701	(1.060)	18778	0.25000	0.2283
43 1-Methylphenanthrene	192	24.151	24.151	(1.080)	15805	0.25000	0.2219
44 Fluoranthene	202	26.131	26.131	(1.169)	24930	0.25000	0.2279
46 Pyrene	202	26.977	26.977	(1.207)	25128	0.25000	0.2209
51 Naphthobenzothiophene	234	29.509	29.509	(1.320)	26538	0.25000	0.2171
55 Benzo(a)anthracene	228	30.095	30.095	(0.907)	22235	0.25000	0.2162
$ 56 Chrysene-d12	240	30.219	30.219	(0.911)	19390	0.25000	0.2336
57 Chrysene	228	30.287	30.287	(0.913)	23931	0.25000	0.2374
62 Benzo(b)fluoranthene	252	32.517	32.517	(0.980)	21800	0.25000	0.2044(M)
63 Benzo(k)fluoranthene	252	32.562	32.562	(0.981)	28179	0.25000	0.2462
293 Benzo(j)fluoranthene	252	32.629	32.629	(0.983)	27166	0.25000	0.2576(H)
246 Total Benzofluoranthenes	252	32.562	32.562	(0.981)	69324	0.75000	0.6635(M)

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
* 251 Benzo(e)pyrene-d12	264	33.181	33.181	(1.000)	265187	2.00000	
64 Benzo(e)pyrene	252	33.238	33.238	(1.002)	24356	0.25000	0.2330
66 Benzo(a)pyrene	252	33.339	33.339	(1.005)	21515	0.25000	0.2262(M)
$ 67 Perylene-d12	264	33.519	33.519	(1.010)	19920	0.25000	0.2223
68 Perylene	252	33.575	33.575	(1.012)	20842	0.25000	0.2125(M)
69 Indeno(1,2,3-cd)pyrene	276	35.637	35.637	(1.074)	21559	0.25000	0.1931(M)
70 Dibenzo(a,h)anthracene	278	35.614	35.614	(1.073)	18125	0.25000	0.1750
74 Benzo(g,h,i)perylene	276	36.549	36.549	(1.101)	23883	0.25000	0.2165

QC Flag Legend

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

Data File: \\target\share\chem3\nt14.i\20210529.b\NT1421052914.D Page 1
Report Date: 02-Jun-2021 19:03

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt14.i
Lab File ID: NT1421052914.D
Lab Smp Id: SJF0025-CAL2
Analysis Type: SV
Quant Type: ISTD
Operator: VTS
Method File: \\target\share\chem3\nt14.i\20210529.b\ALKYLPNA.m
Misc Info:

Calibration Date: 29-MAY-2021
Calibration Time: 14:01
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
25 Fluorene-d10	159478	79739	318956	184642	15.78
250 Anthracene-d10	170161	85081	340322	192206	12.96
251 Benzo(e)pyrene-d1	236612	118306	473224	265187	12.08

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
25 Fluorene-d10	18.91	18.41	19.41	18.91	-0.00
250 Anthracene-d10	22.36	21.86	22.86	22.36	-0.00
251 Benzo(e)pyrene-d1	33.18	32.68	33.68	33.18	-0.00

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

REVIEW SUMMARY FOR FILE - NT1421052914.D

Lab ID: SJF0025-CAL2
nt14.i, 20210529.b\ALKYLPNA.m, 29-MAY-2021 18:49

RT	CO-ELUTION COMPOUNDS
	NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
NONE			

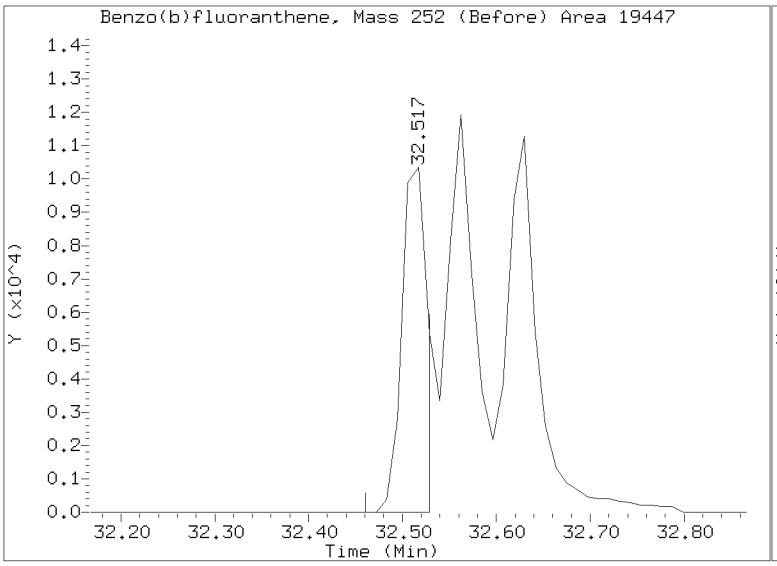
RRT check based on Ccal File: NT1421052914.D

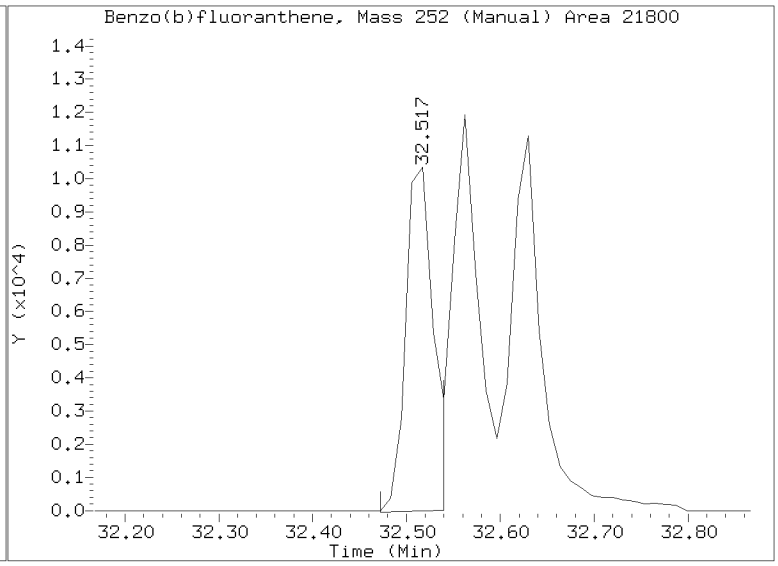
On Column LOD for nt14.i, 20210529.b\ALKYLPNA.m, TARGETS.sub = 0.0000

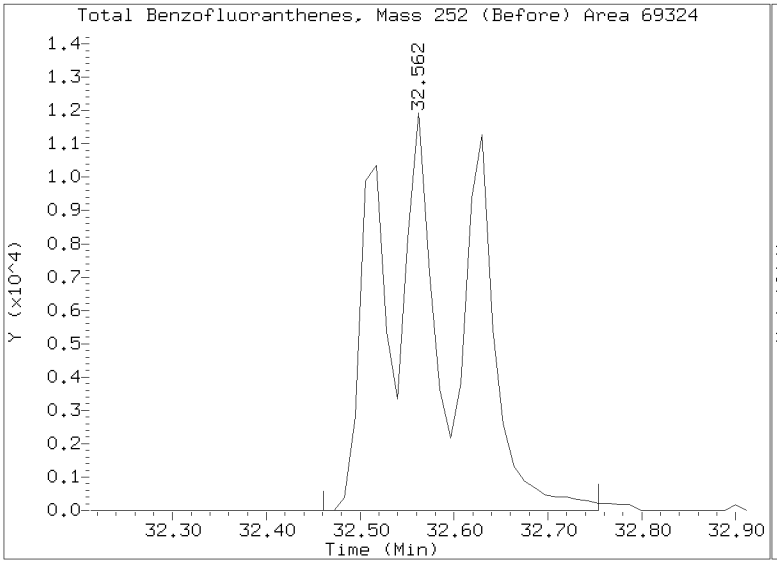
* Only compounds listed in the work order have been verified by the analyst *

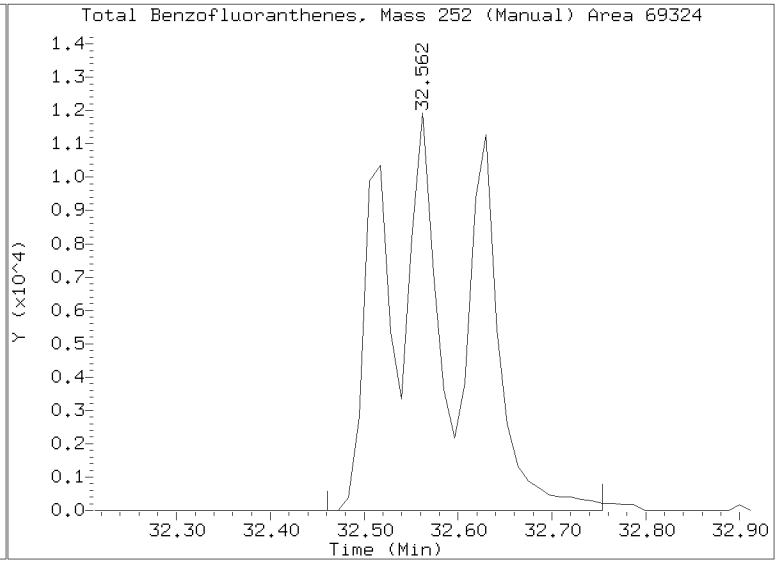
Quant Ion Manual Peak Adjustment Report

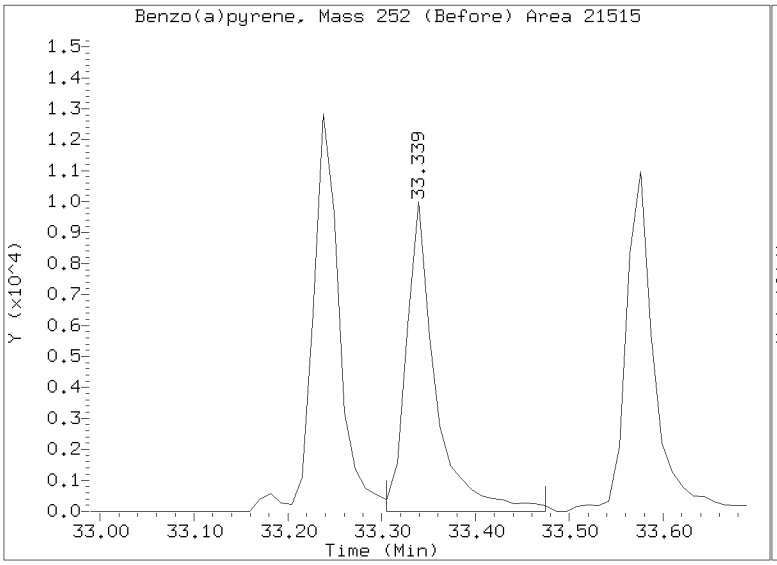
Datafile: //target/share/chem3/nt14.i/20210529.b/NT1421052914.D
Injection Date: 29-MAY-2021 18:49
Lab ID:SJF0025-CAL2 Client ID:
Report Date: 06/02/2021 19:03

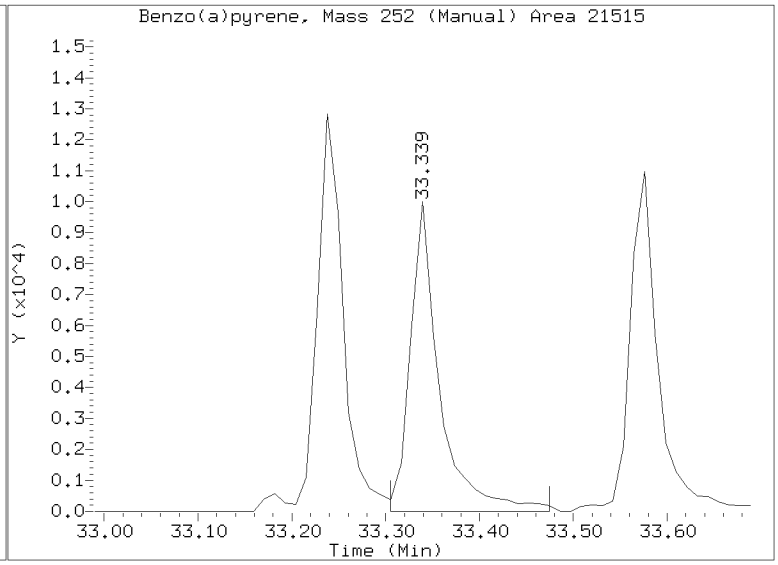






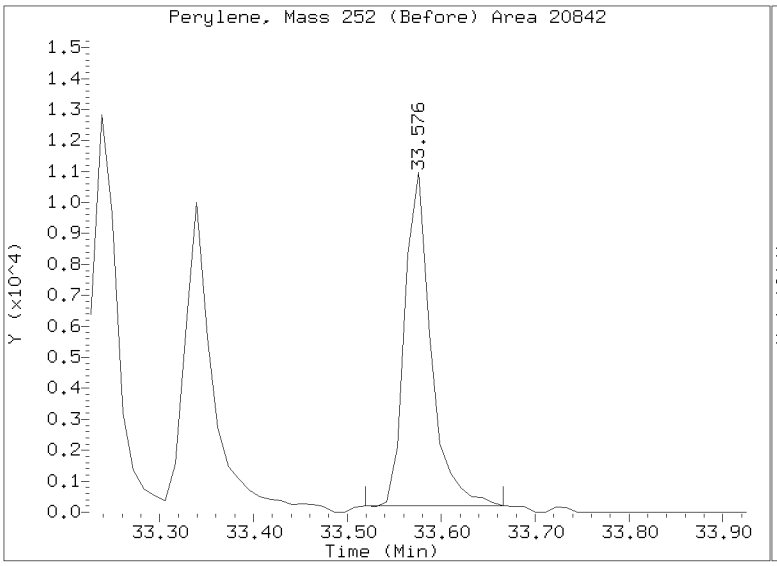


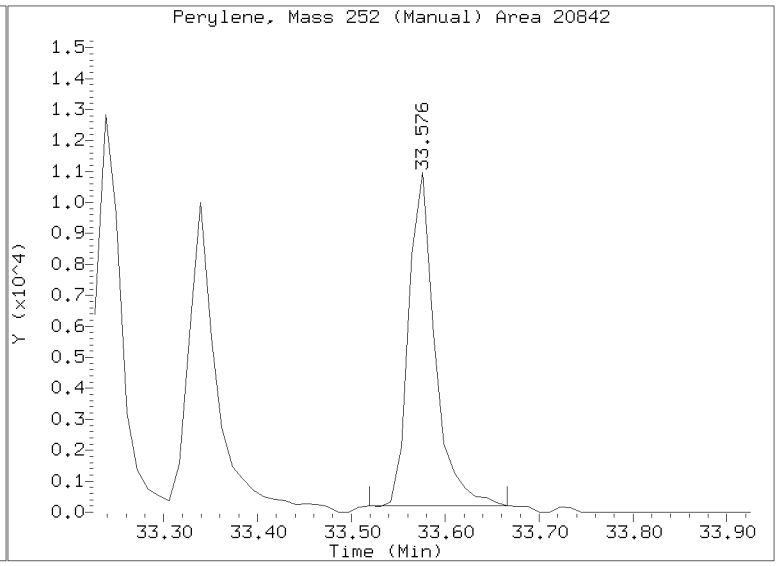


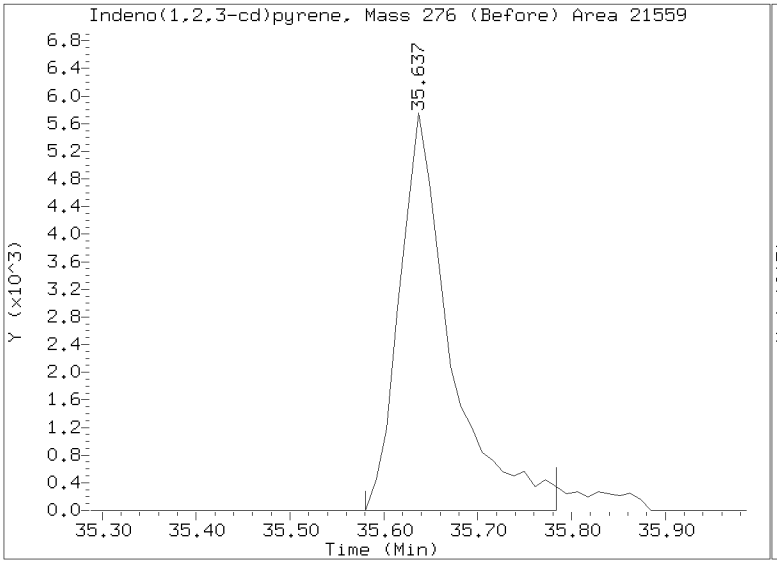


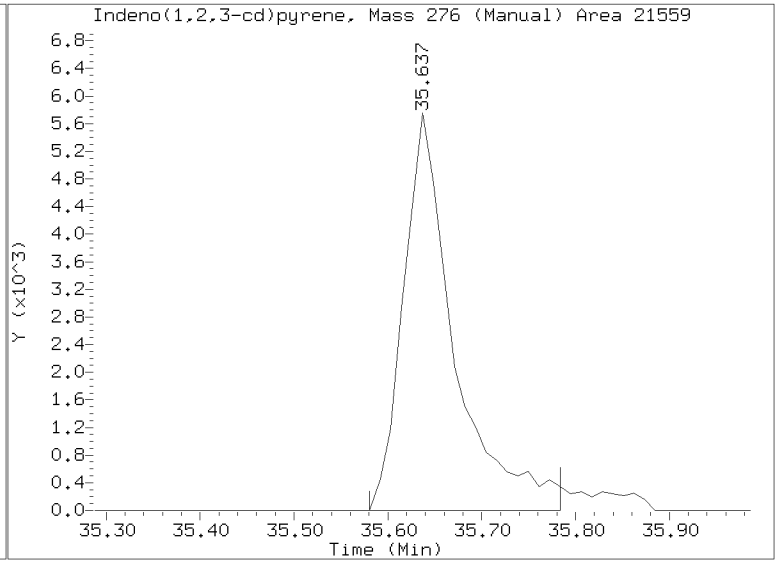
Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt14.i/20210529.b/NT1421052914.D
Injection Date: 29-MAY-2021 18:49
Lab ID:SJF0025-CAL2 Client ID:
Report Date: 06/02/2021 19:03









Data File: \\target\share\chem3\nt14.i\20210529.b\NT1421052915.D

Date : 29-MAY-2021 19:38

Client ID:

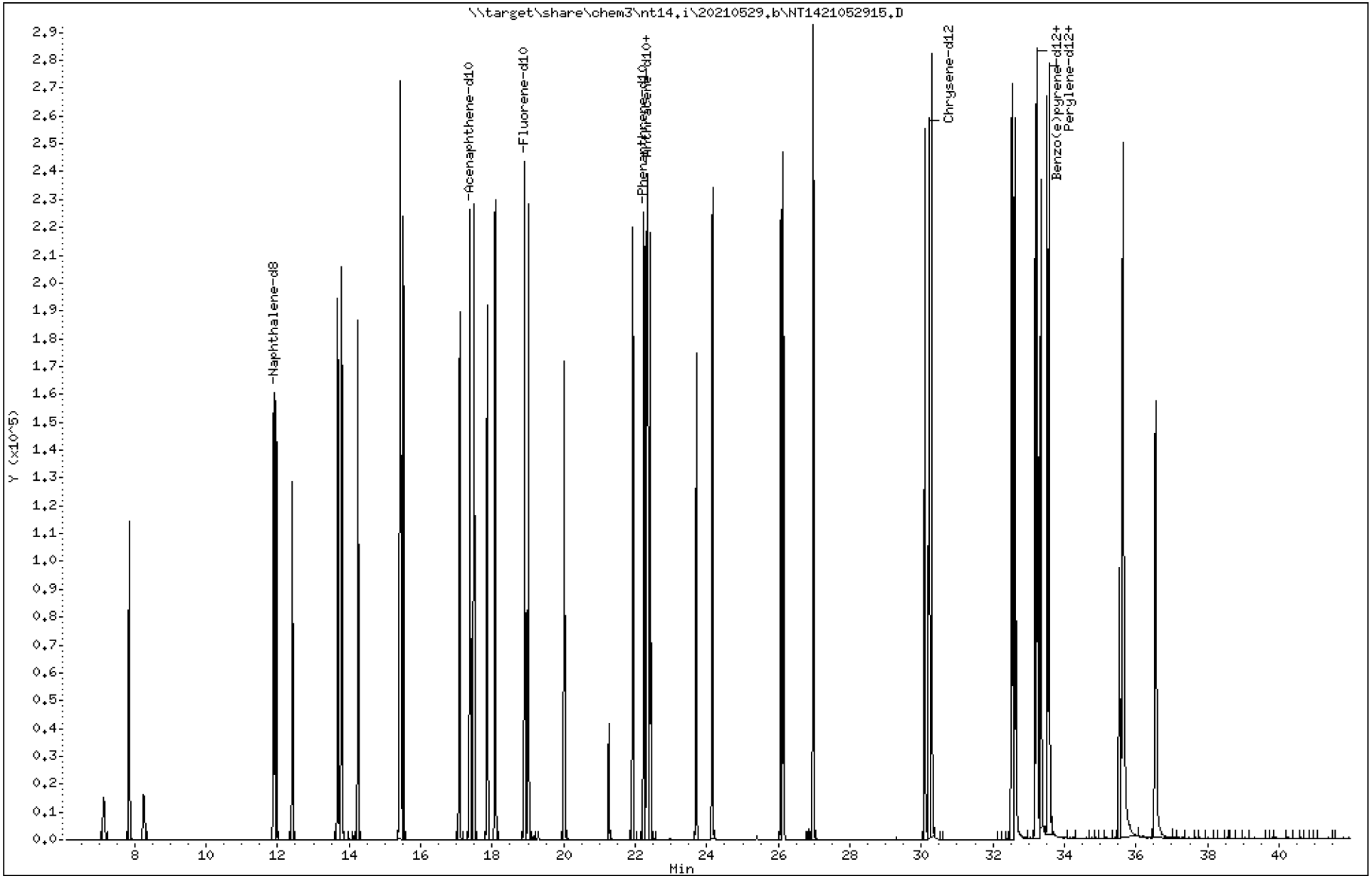
Instrument: nt14.i

Sample Info: SJF0025-SCV1

Operator: VTS

Column phase: Rxi-17Sil MS

Column diameter: 0.25



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Date : 29-MAY-2021 19:38

Client ID:

Instrument: nt14.i

Sample Info: SJF0025-SCV1

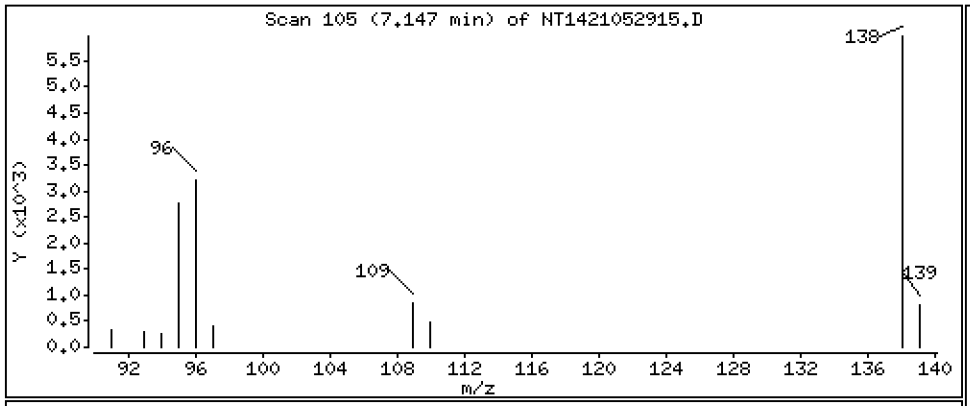
Operator: VTS

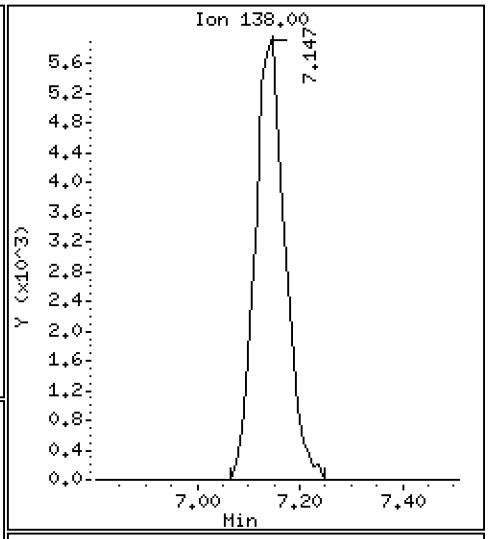
Column phase: Rxi-17Sil MS

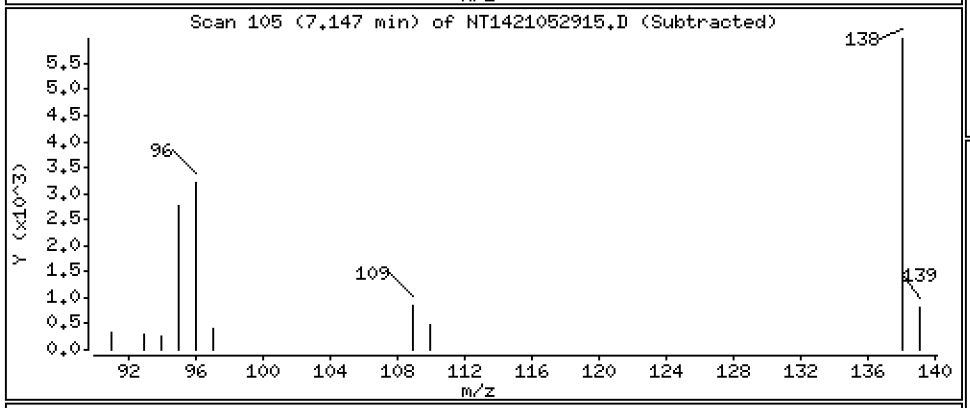
Column diameter: 0.25

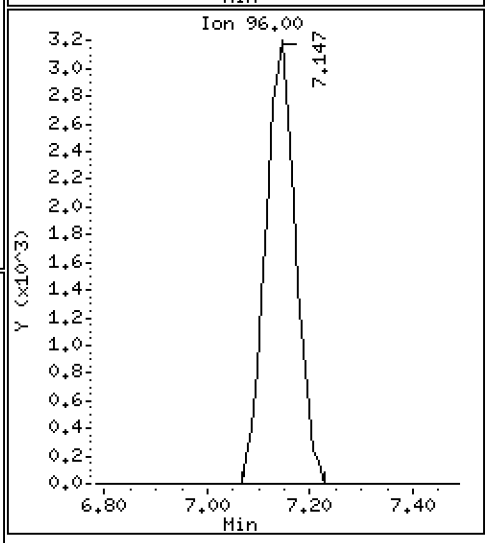
1 trans-Decalin

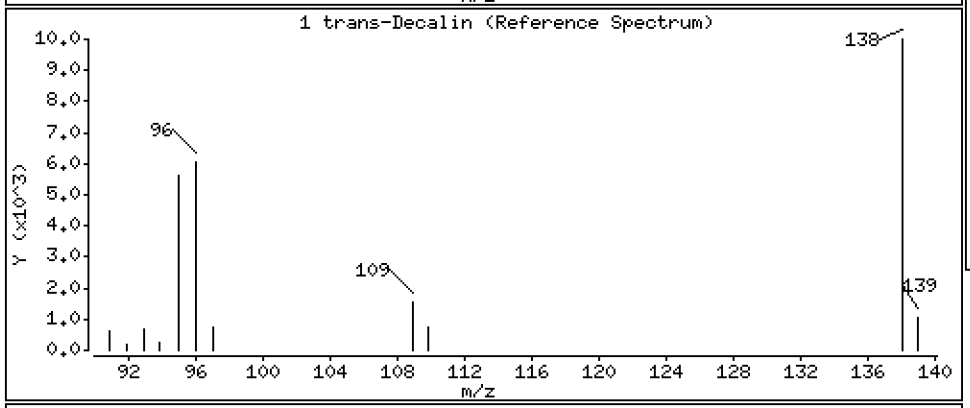
Concentration: 2.939 ug/mL

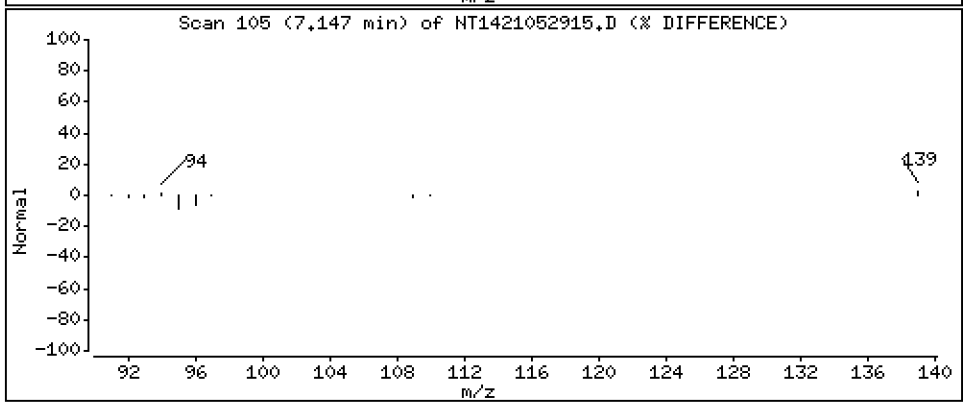












Data File: \\target\share\chem3\nt14.i\20210529.b\NT1421052915.D

Date : 29-MAY-2021 19:38

Client ID:

Instrument: nt14.i

Sample Info: SJF0025-SCV1

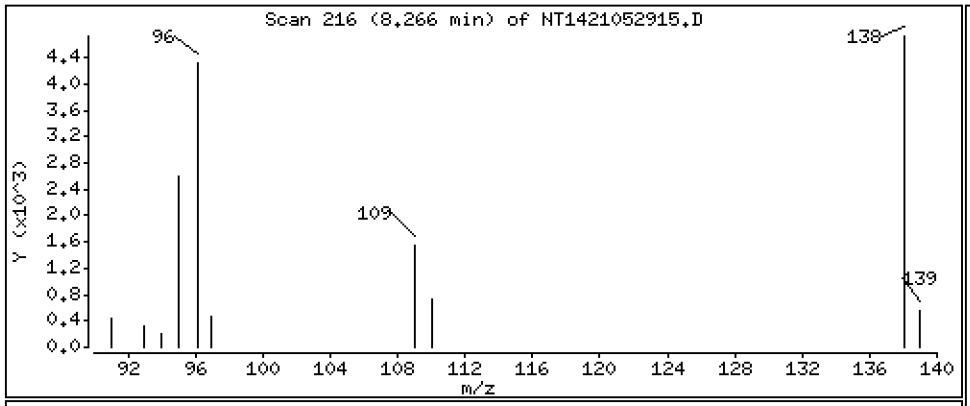
Operator: VTS

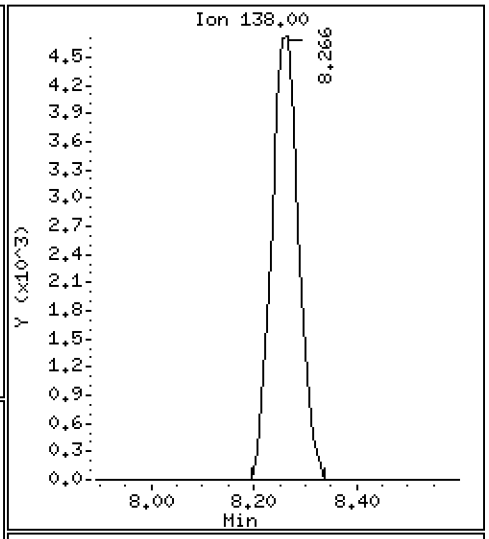
Column phase: Rxi-17Sil MS

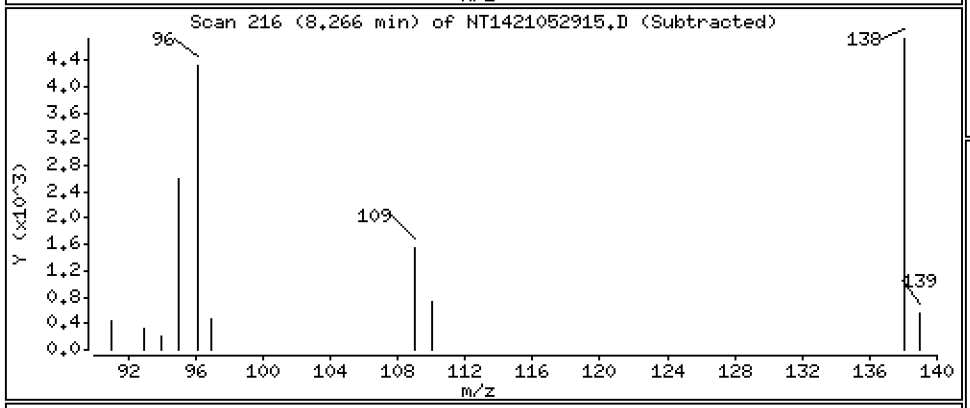
Column diameter: 0.25

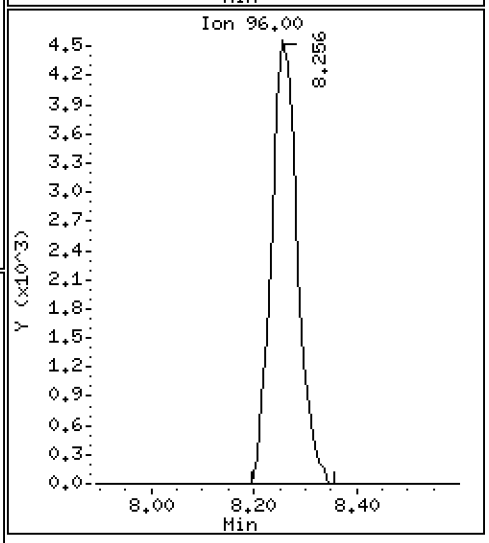
2 cis-Decalin

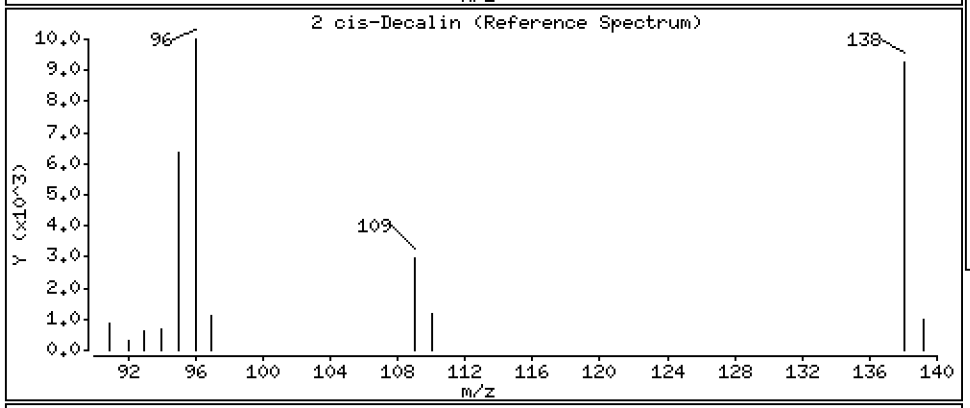
Concentration: 2.555 ug/mL

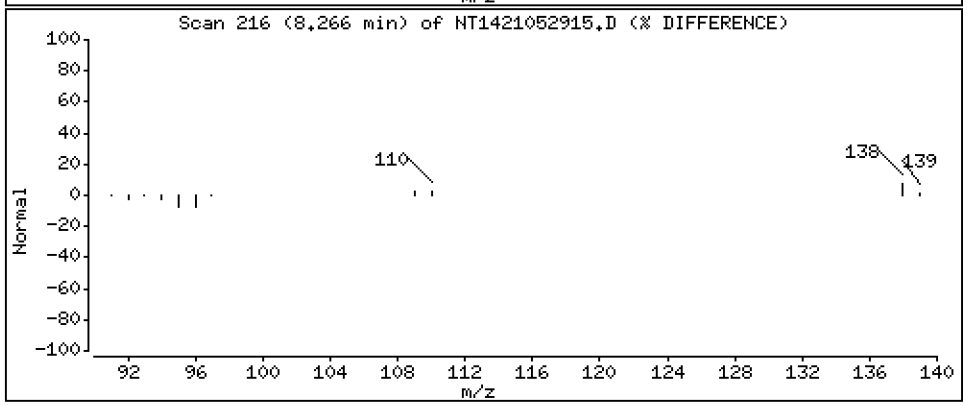












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Date : 29-MAY-2021 19:38

Client ID:

Instrument: nt14.i

Sample Info: SJF0025-SCV1

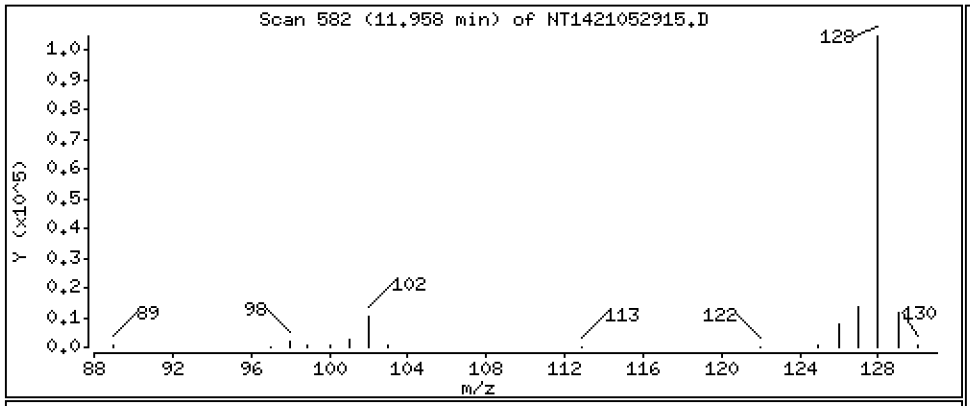
Operator: VTS

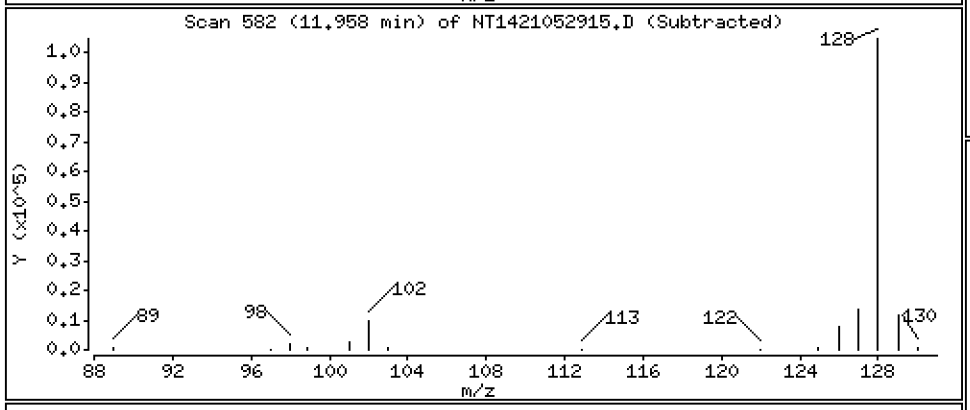
Column phase: Rxi-17Sil MS

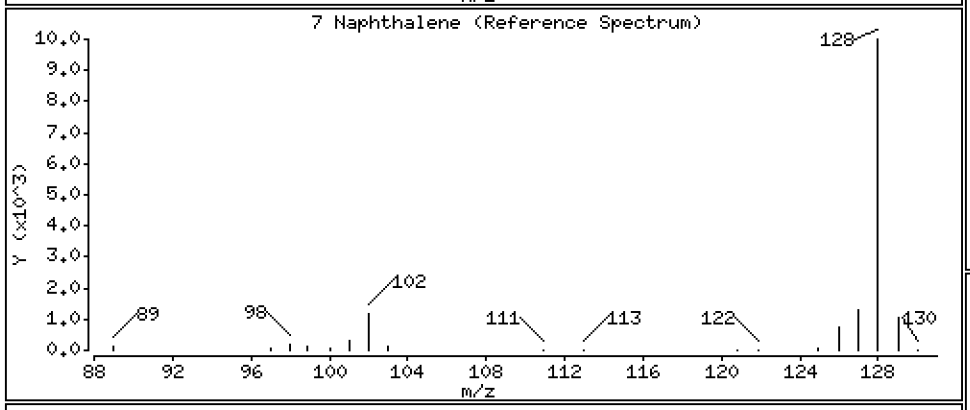
Column diameter: 0.25

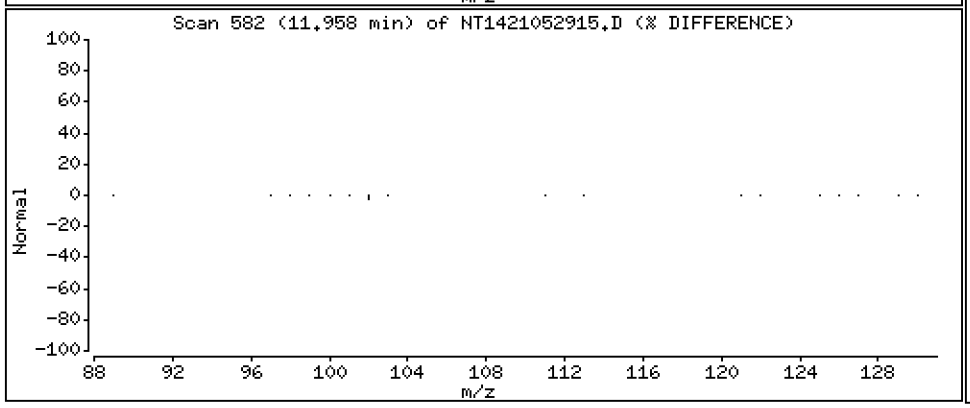
7 Naphthalene

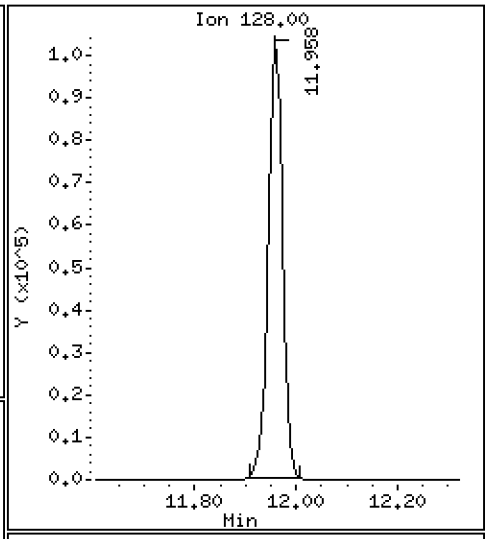
Concentration: 2.625 ug/mL

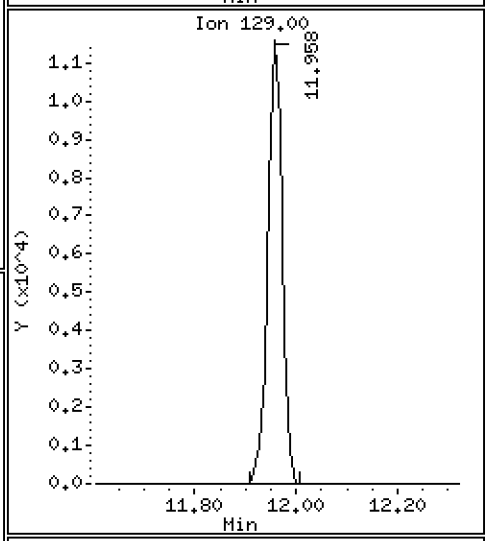


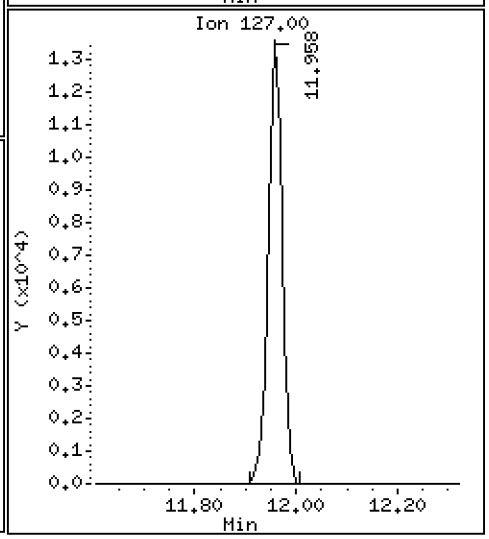












Data File: \\target\share\chem3\nt14.i\20210529.b\NT1421052915.D

Date : 29-MAY-2021 19:38

Client ID:

Instrument: nt14.i

Sample Info: SJF0025-SCV1

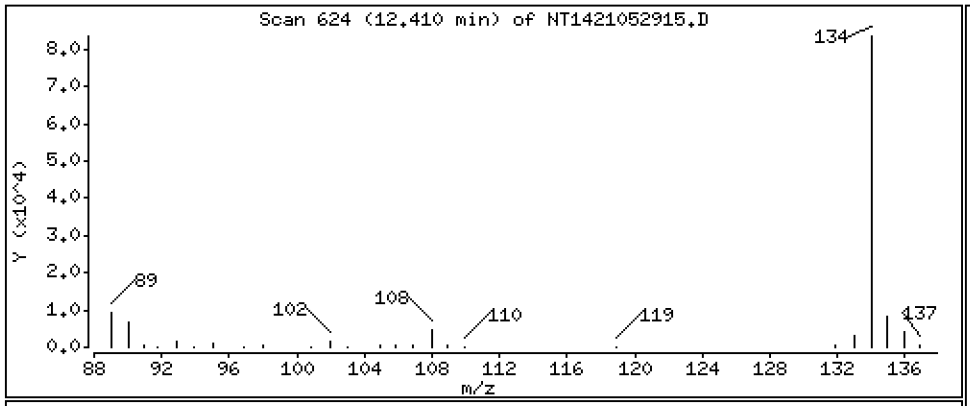
Operator: VTS

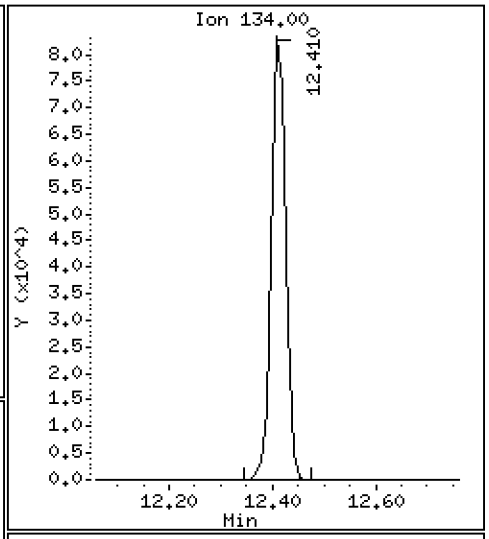
Column phase: Rxi-17Sil MS

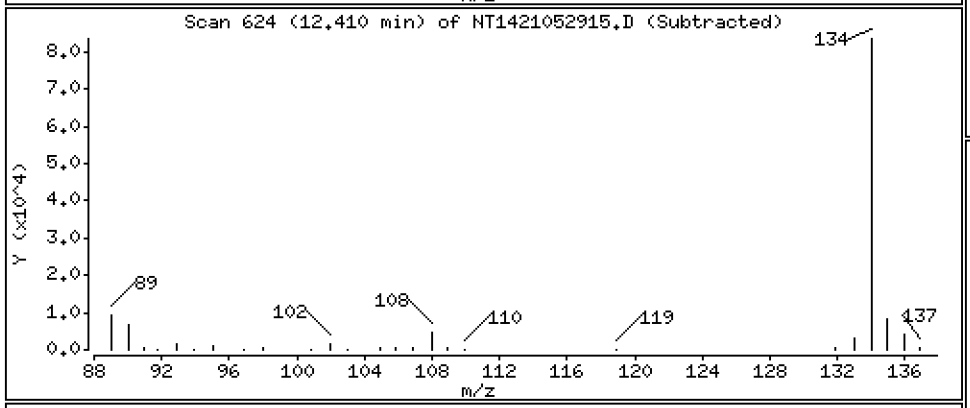
Column diameter: 0.25

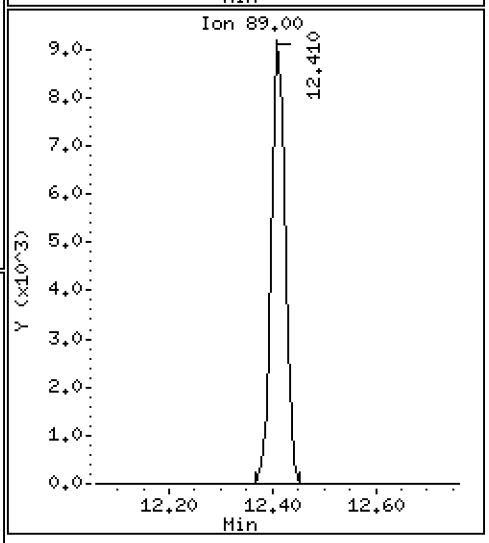
12 Benzo(b)thiophene

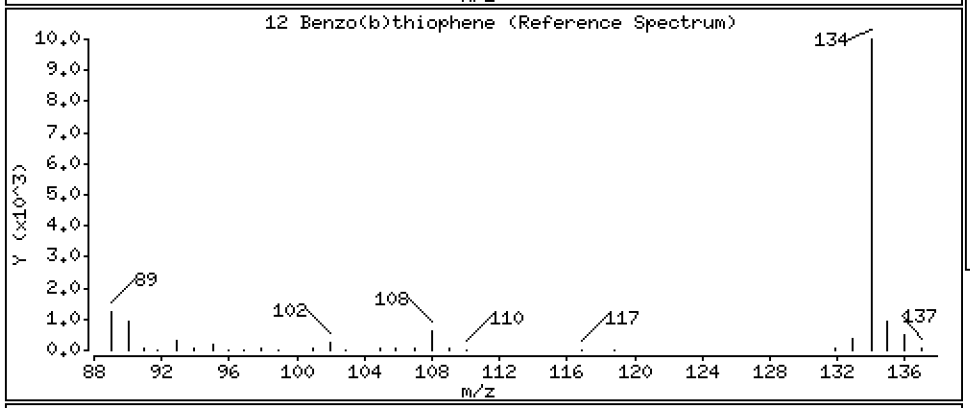
Concentration: 2.621 ug/mL

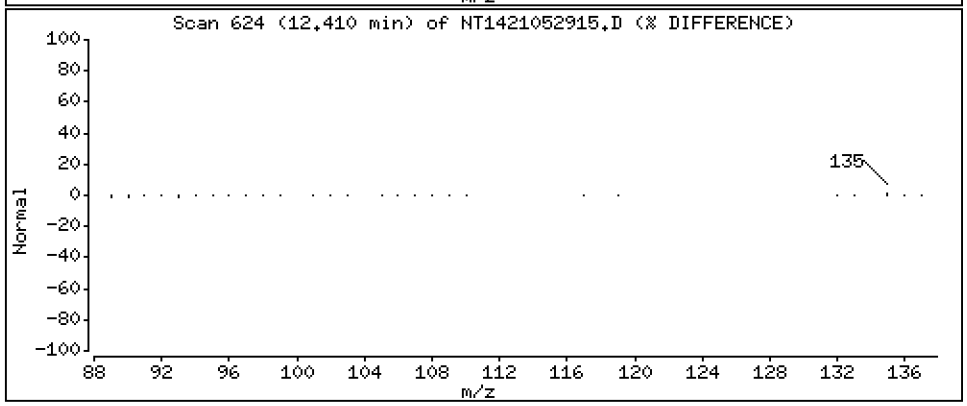












Data File: \\target\share\chem3\nt14.i\20210529.b\NT1421052915.D

Date : 29-MAY-2021 19:38

Client ID:

Instrument: nt14.i

Sample Info: SJF0025-SCV1

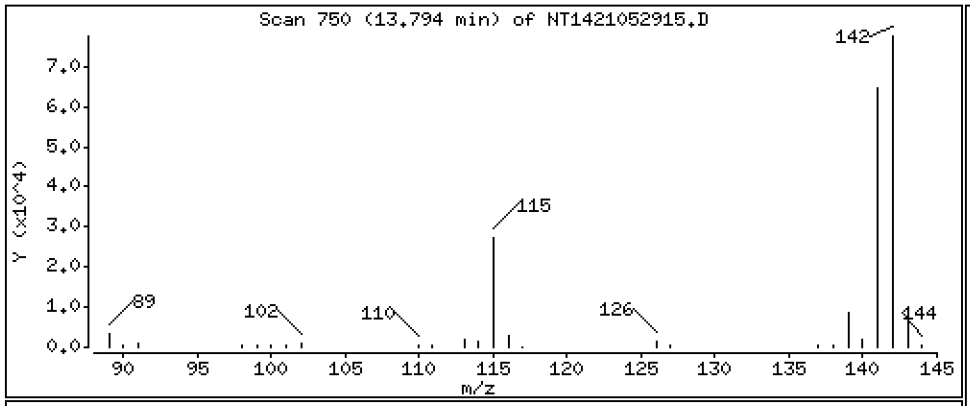
Operator: VTS

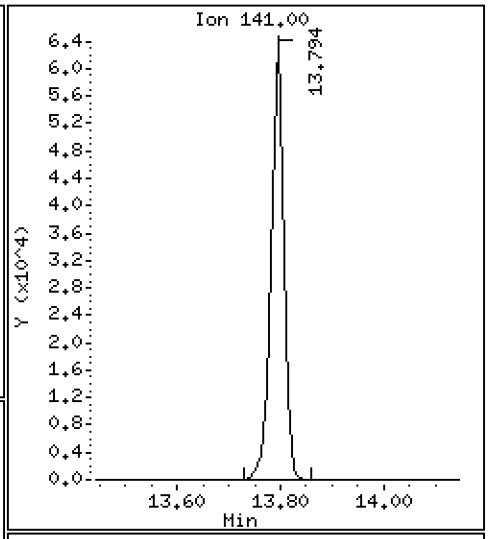
Column phase: Rxi-17Sil MS

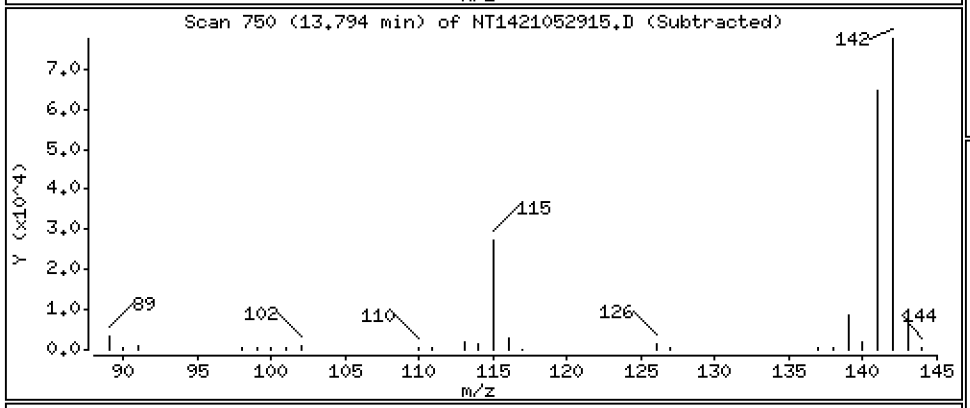
Column diameter: 0.25

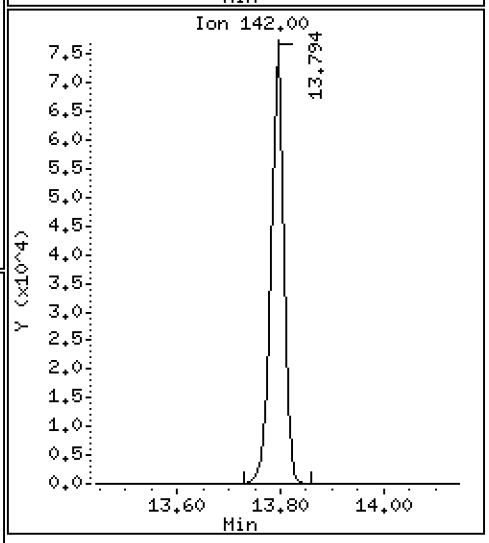
16 2-Methylnaphthalene

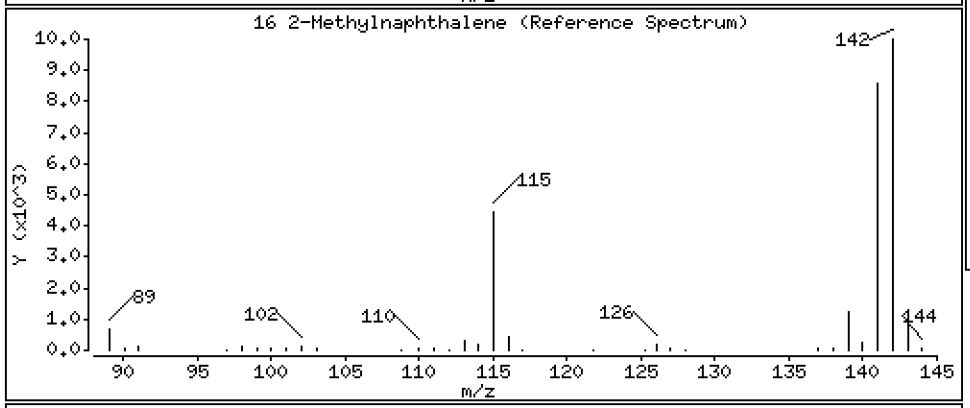
Concentration: 2.645 ug/mL

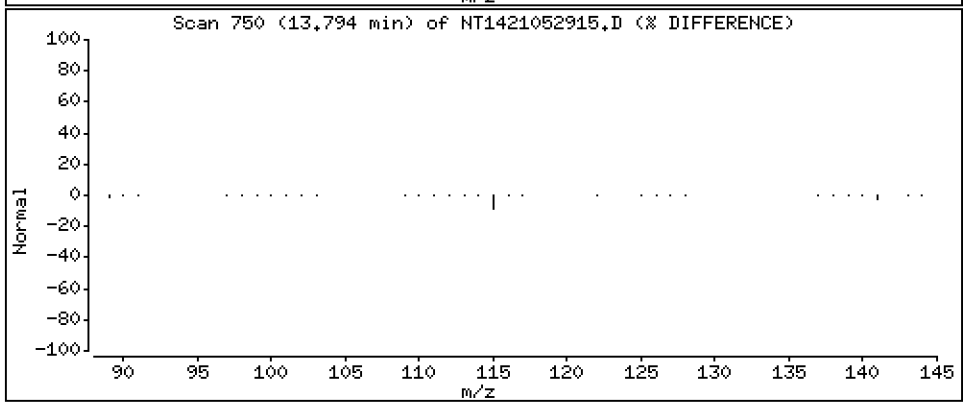












Data File: \\target\share\chem3\nt14.i\20210529.b\NT1421052915.D

Date : 29-MAY-2021 19:38

Client ID:

Instrument: nt14.i

Sample Info: SJF0025-SCV1

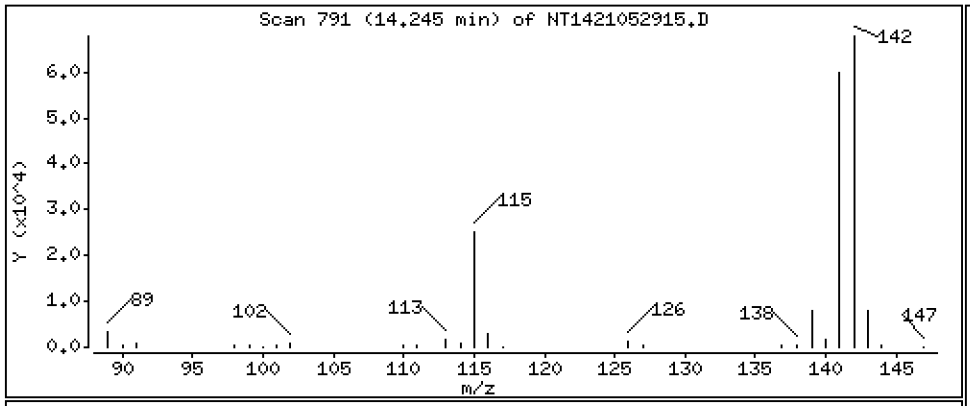
Operator: VTS

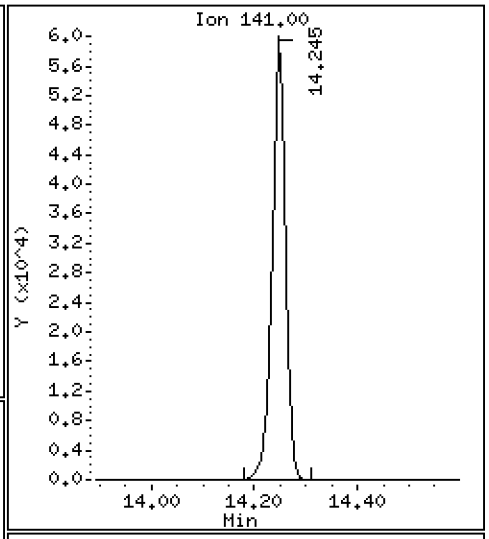
Column phase: Rxi-17Sil MS

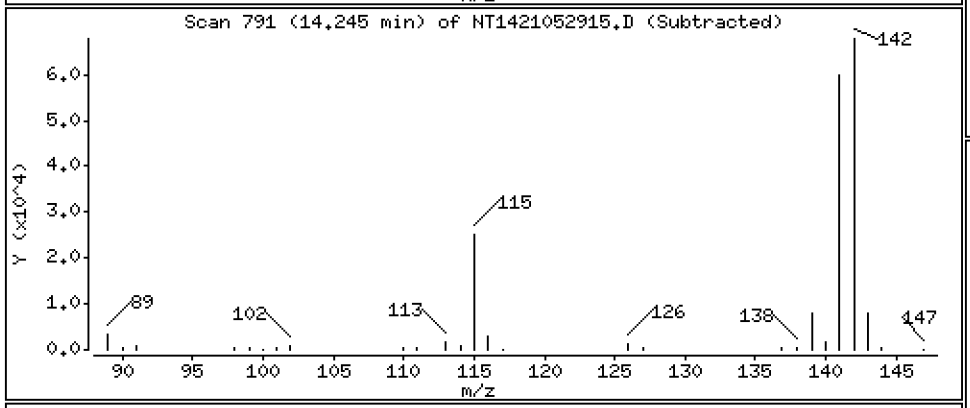
Column diameter: 0.25

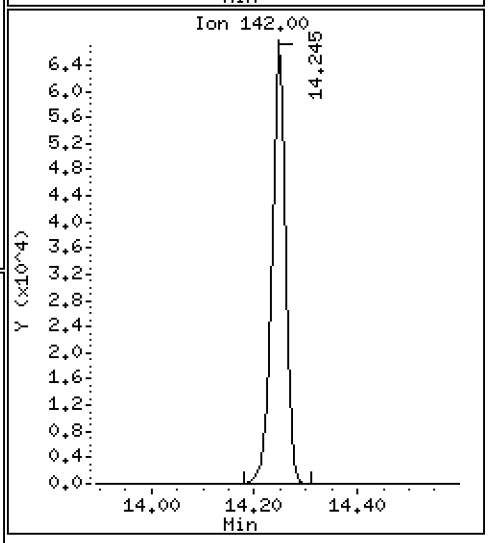
17 1-methylnaphthalene

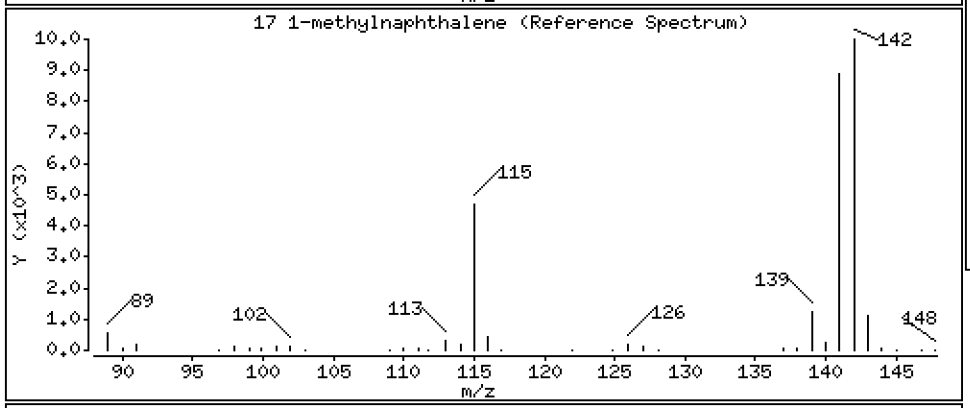
Concentration: 2.659 ug/mL

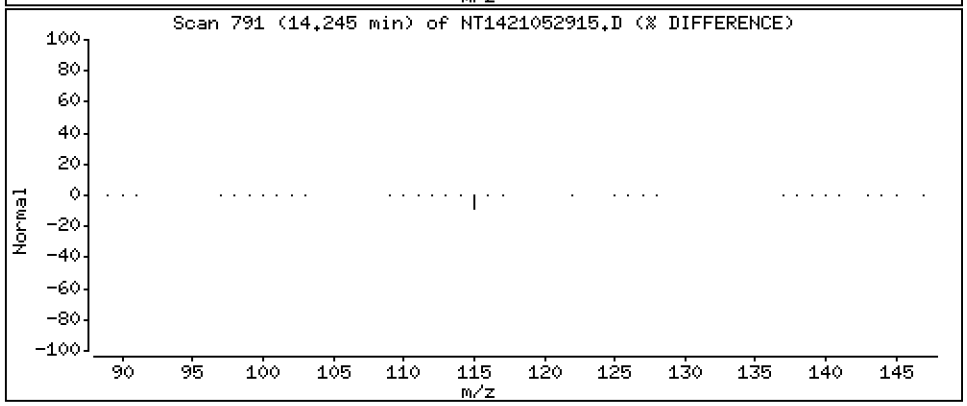












Data File: \\target\share\chem3\nt14.i\20210529.b\NT1421052915.D

Date : 29-MAY-2021 19:38

Client ID:

Instrument: nt14.i

Sample Info: SJF0025-SCV1

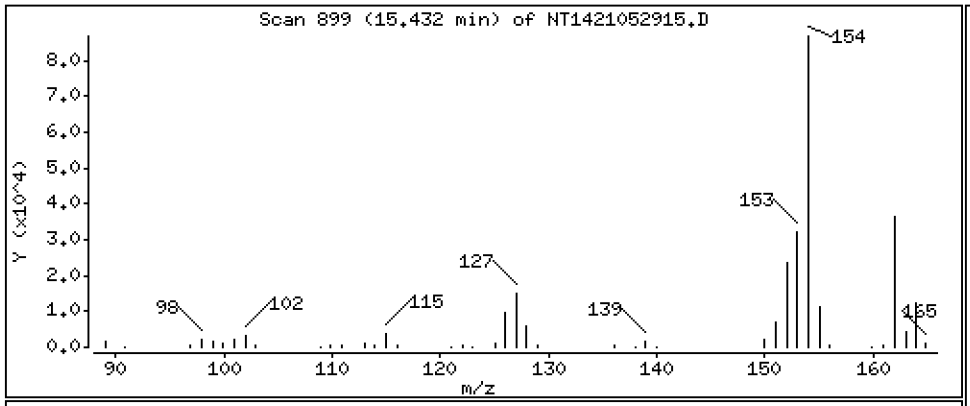
Operator: VTS

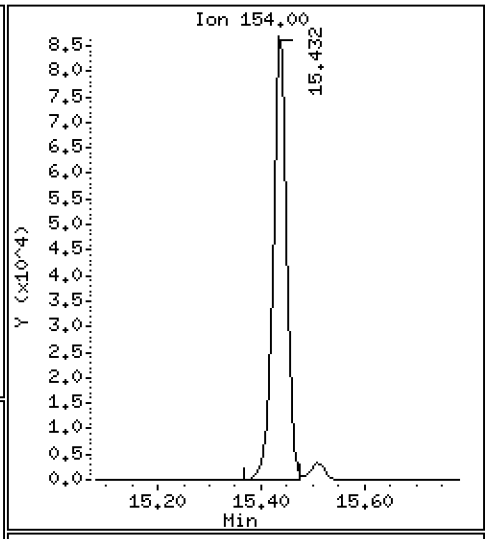
Column phase: Rxi-17Sil MS

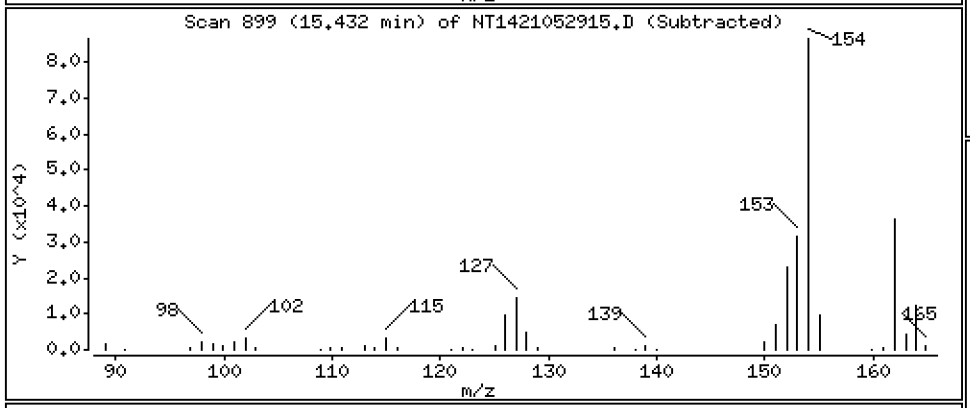
Column diameter: 0.25

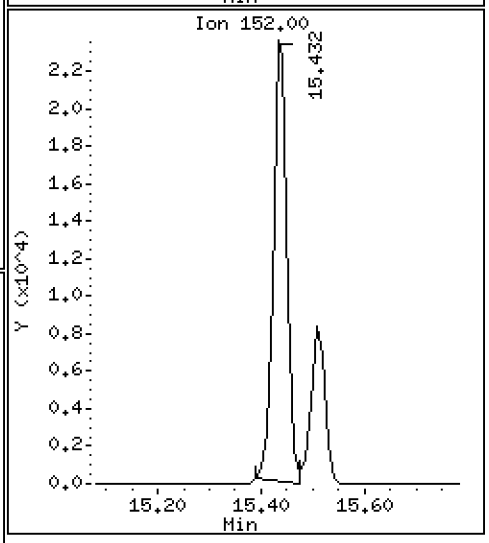
18 Biphenyl

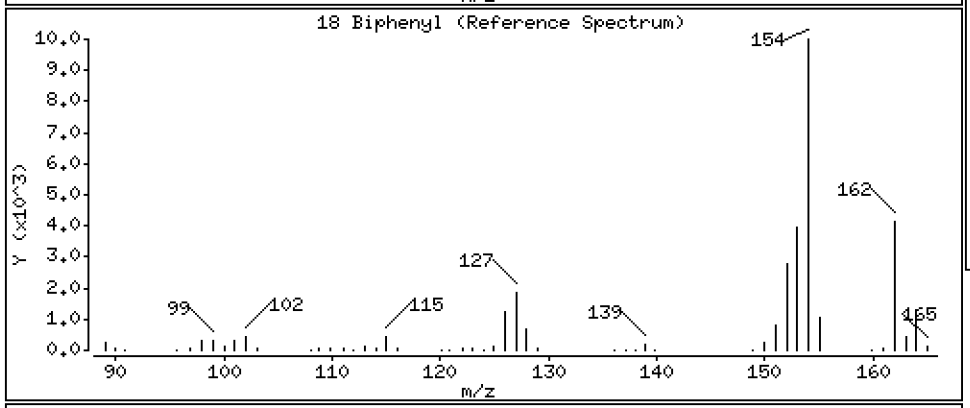
Concentration: 2.608 ug/mL

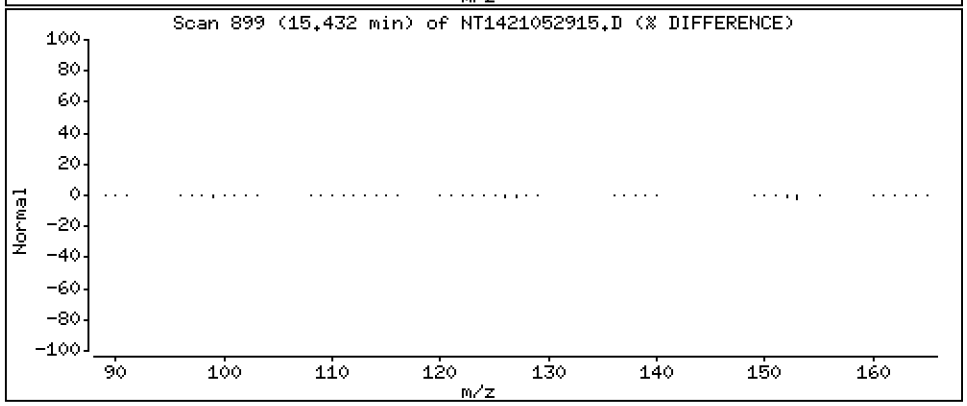












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Date : 29-MAY-2021 19:38

Client ID:

Instrument: nt14.i

Sample Info: SJF0025-SCV1

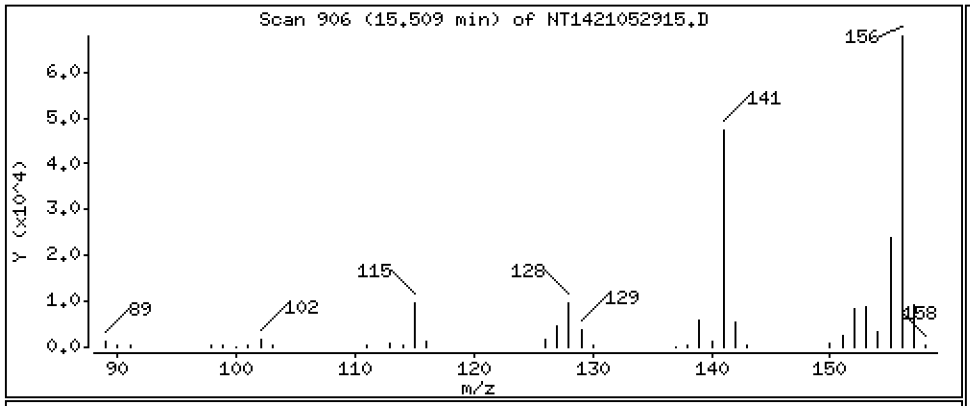
Operator: VTS

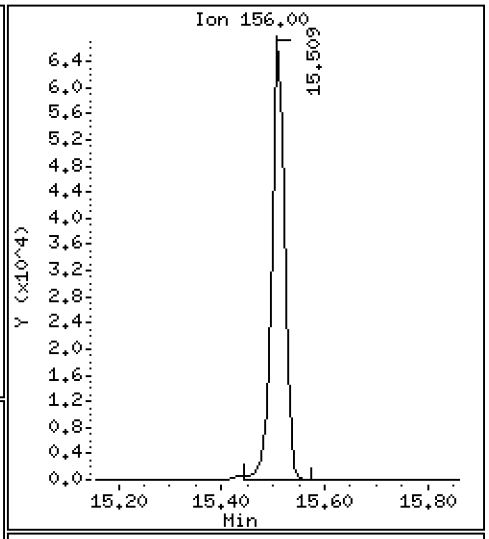
Column phase: Rxi-17Sil MS

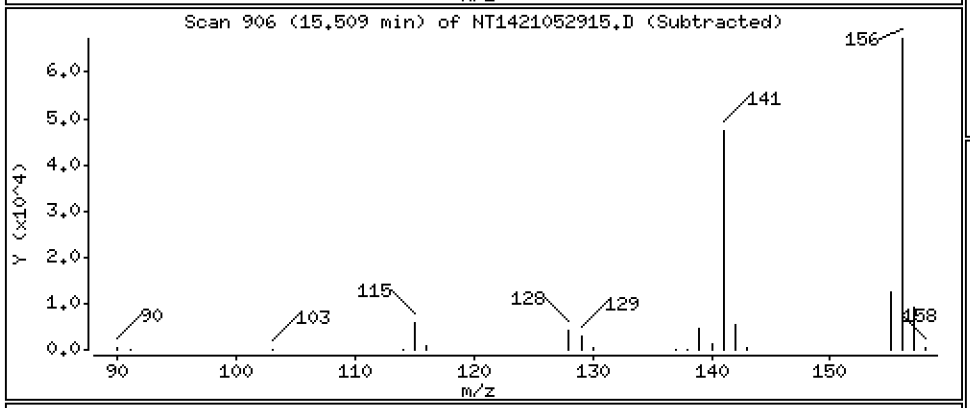
Column diameter: 0.25

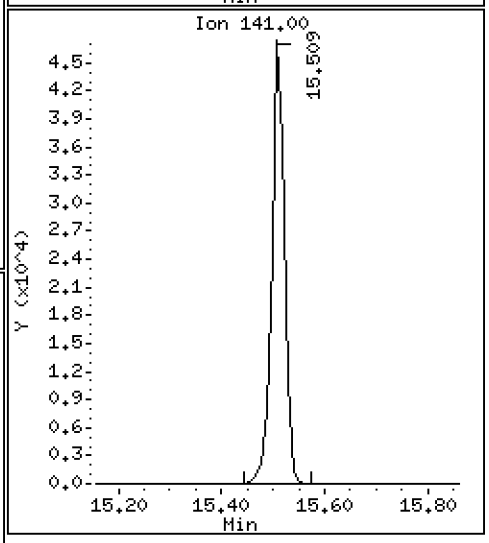
19 2,6-Dimethylnaphthalene

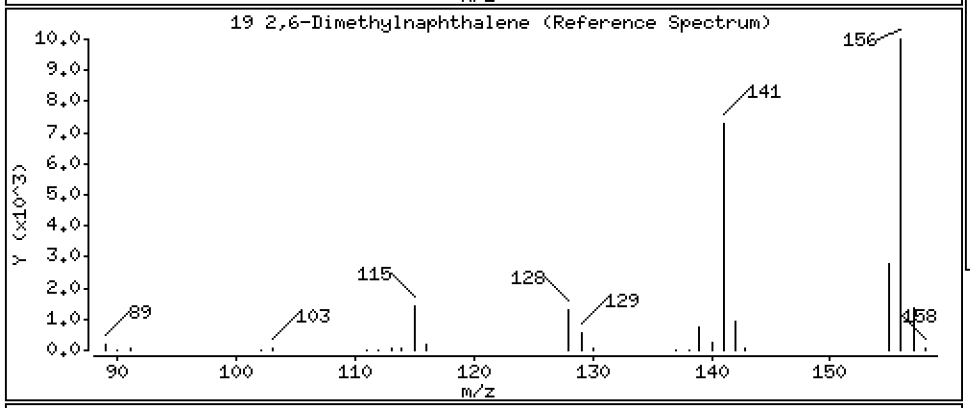
Concentration: 2.604 ug/mL

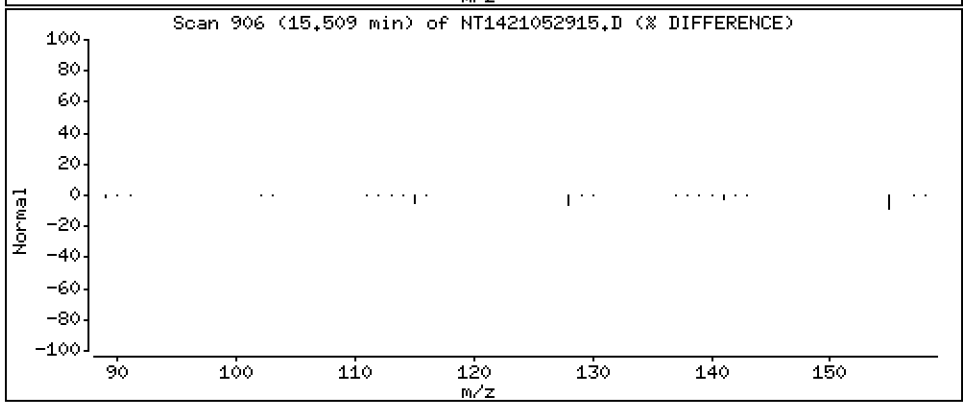












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Date : 29-MAY-2021 19:38

Client ID:

Instrument: nt14.i

Sample Info: SJF0025-SCV1

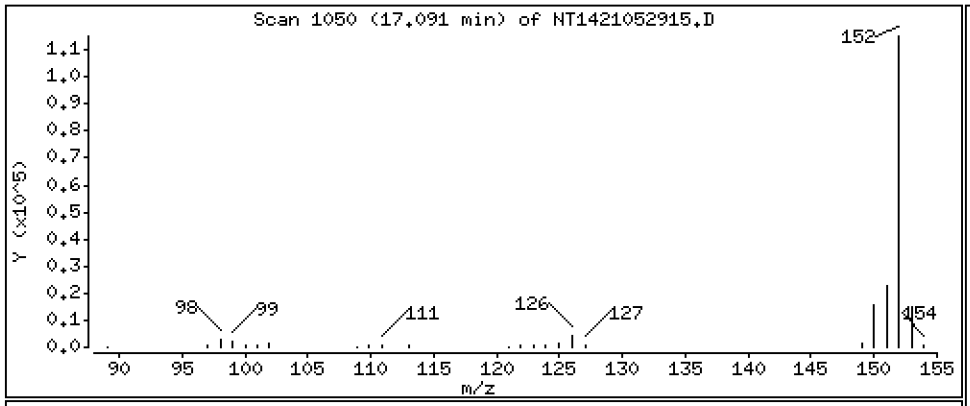
Operator: VTS

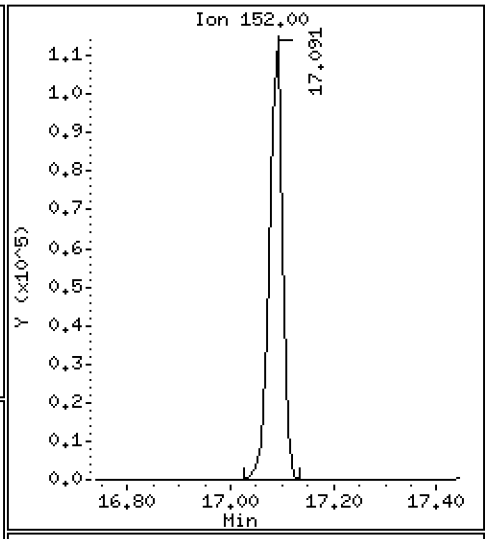
Column phase: Rxi-17Sil MS

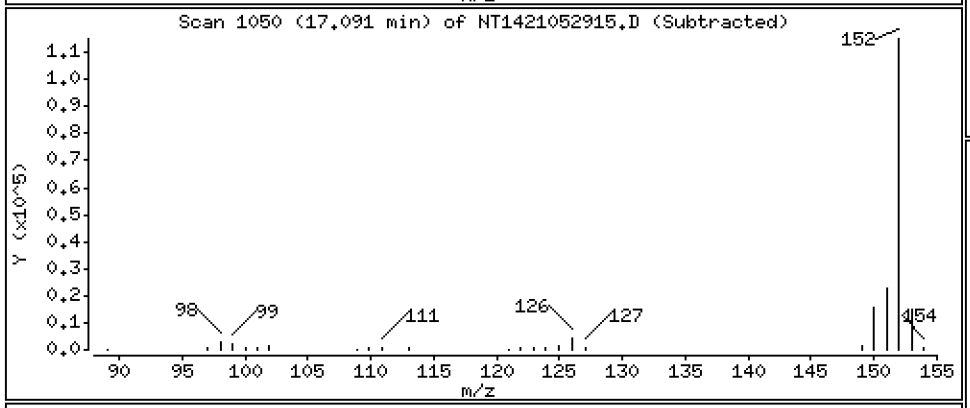
Column diameter: 0.25

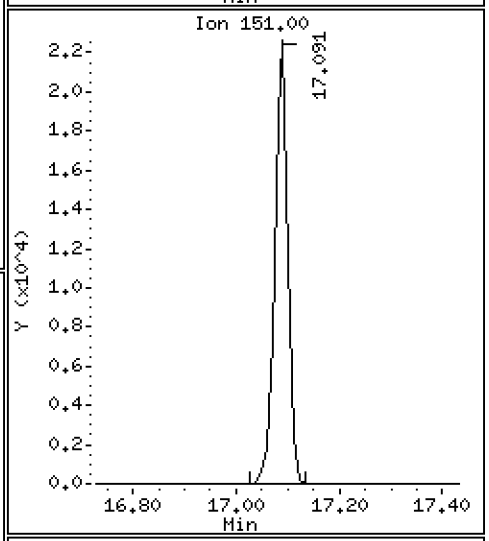
20 Acenaphthylene

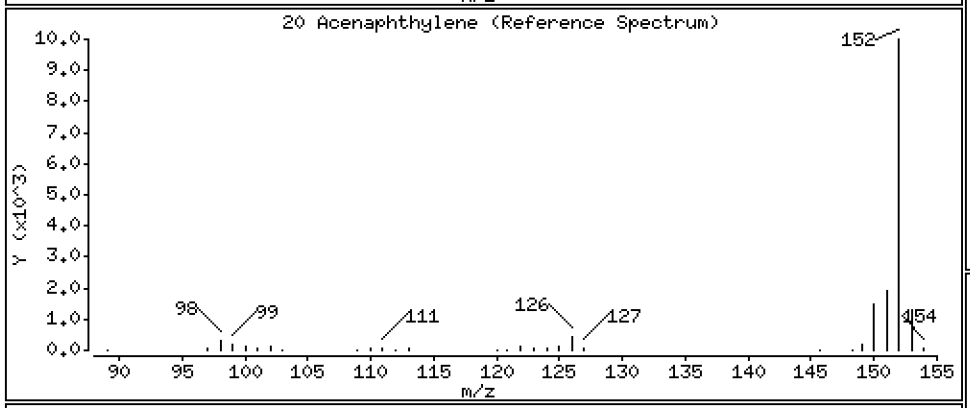
Concentration: 2.624 ug/mL

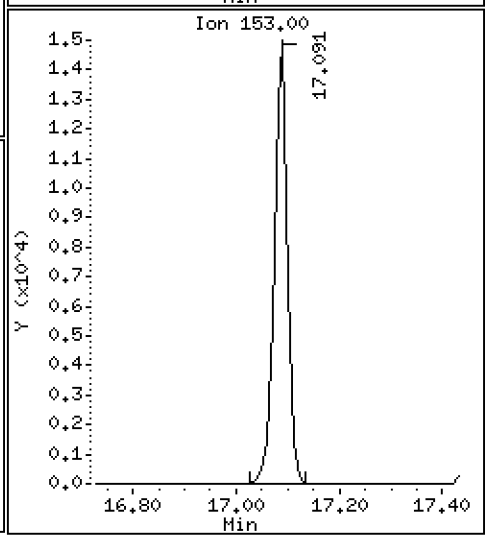


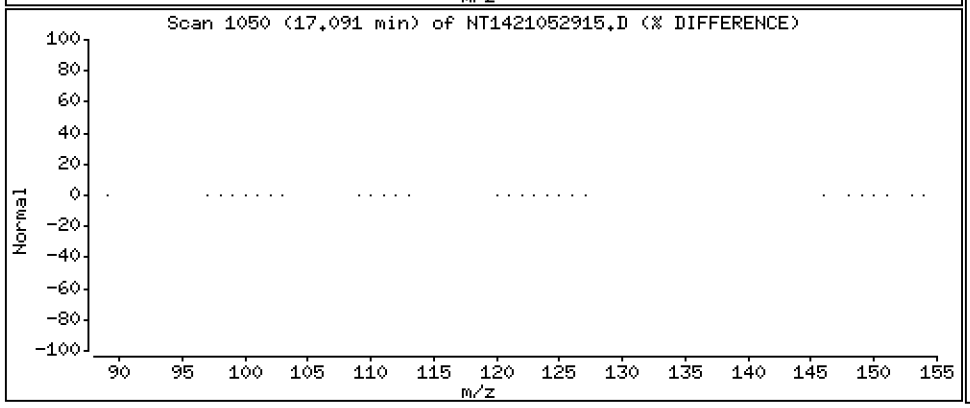












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Date : 29-MAY-2021 19:38

Client ID:

Instrument: nt14.i

Sample Info: SJF0025-SCV1

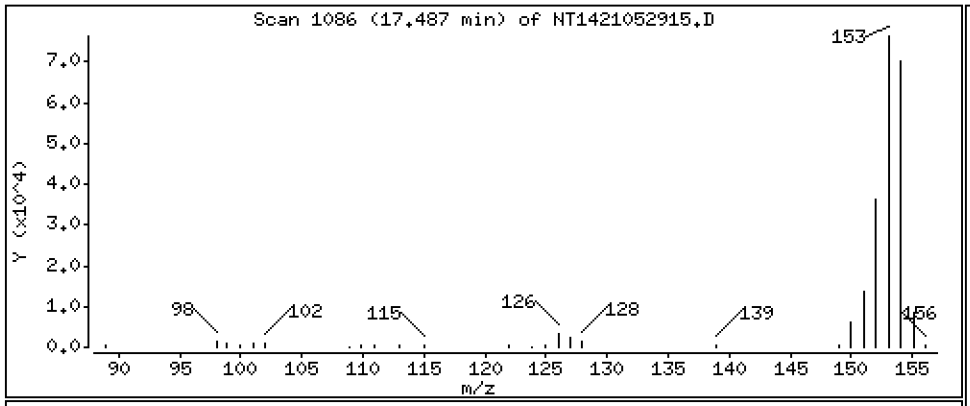
Operator: VTS

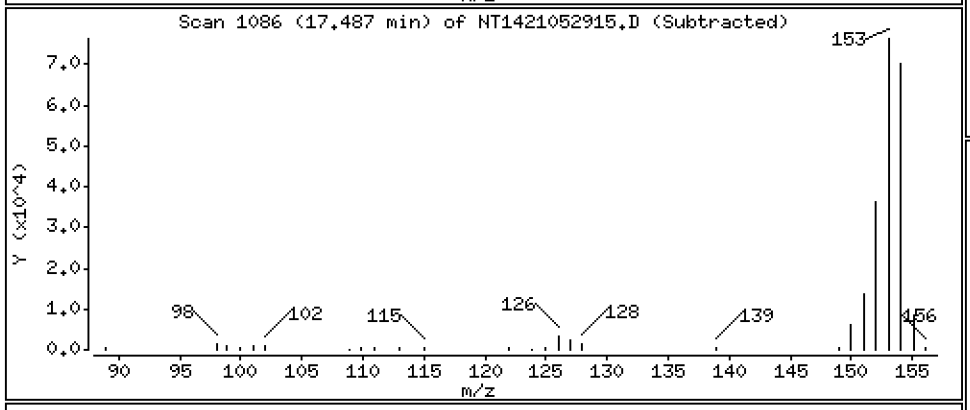
Column phase: Rxi-17Sil MS

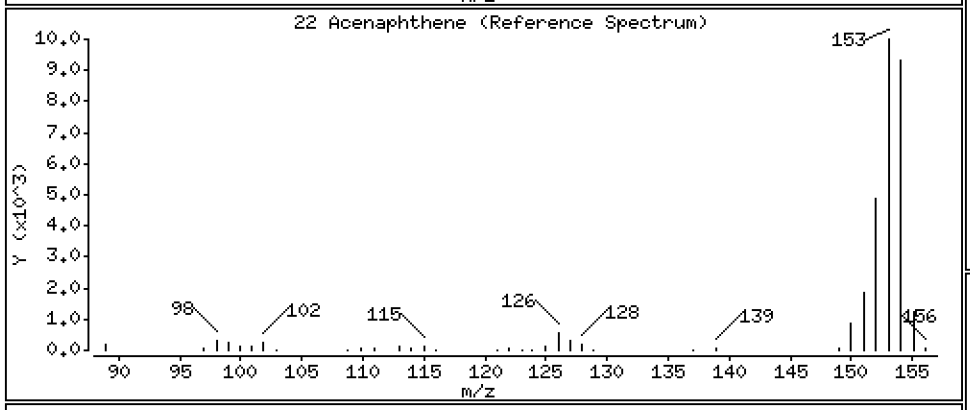
Column diameter: 0.25

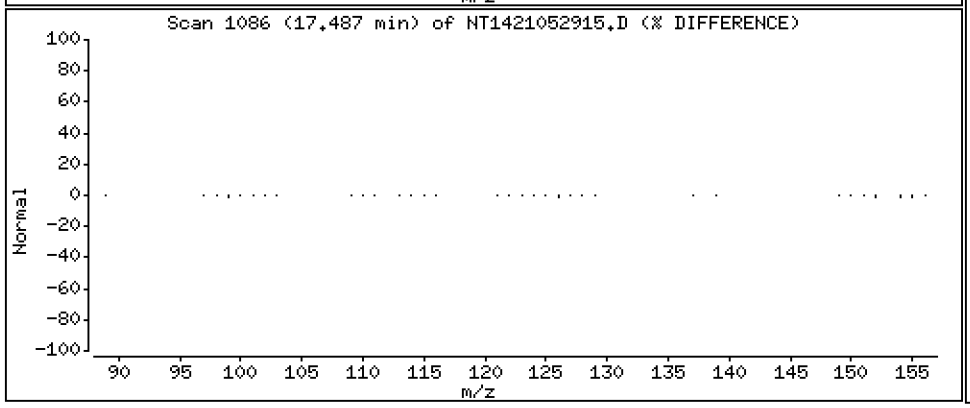
22 Acenaphthene

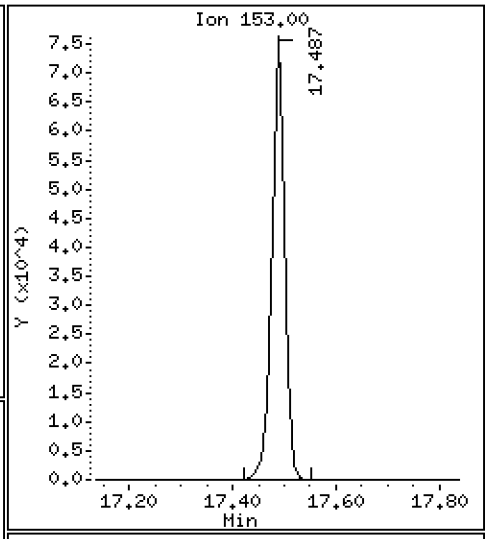
Concentration: 2.755 ug/mL

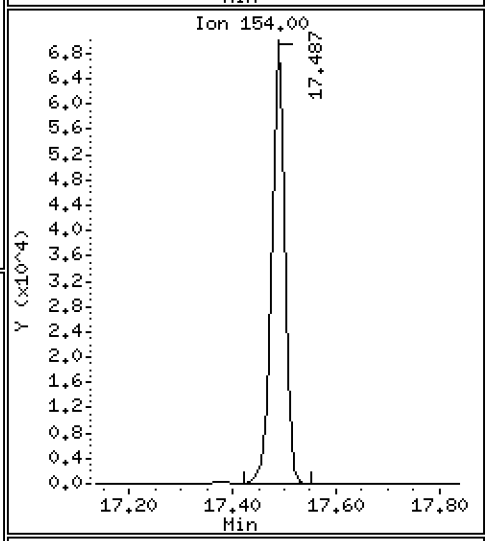


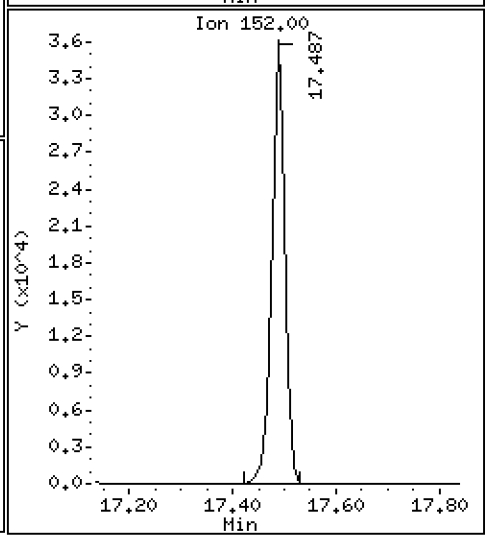












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Date : 29-MAY-2021 19:38

Client ID:

Instrument: nt14.i

Sample Info: SJF0025-SCV1

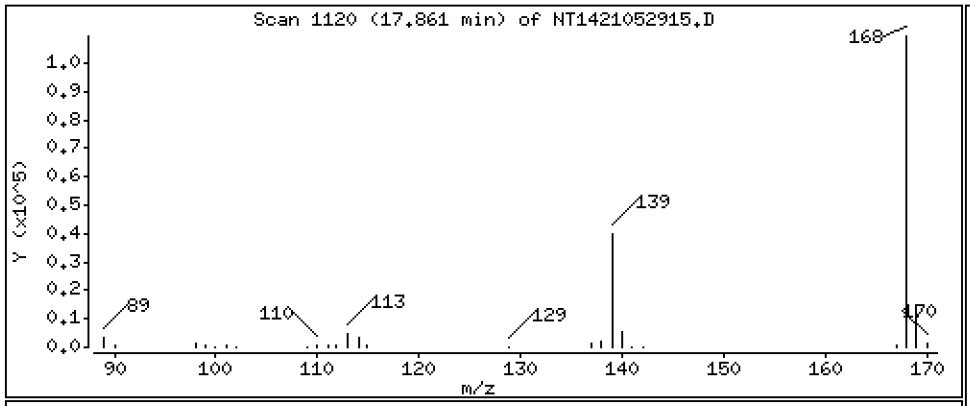
Operator: VTS

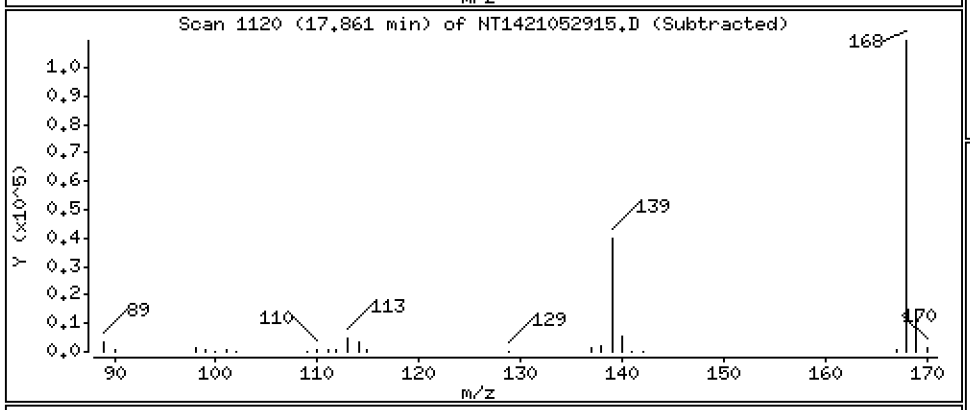
Column phase: Rxi-17Sil MS

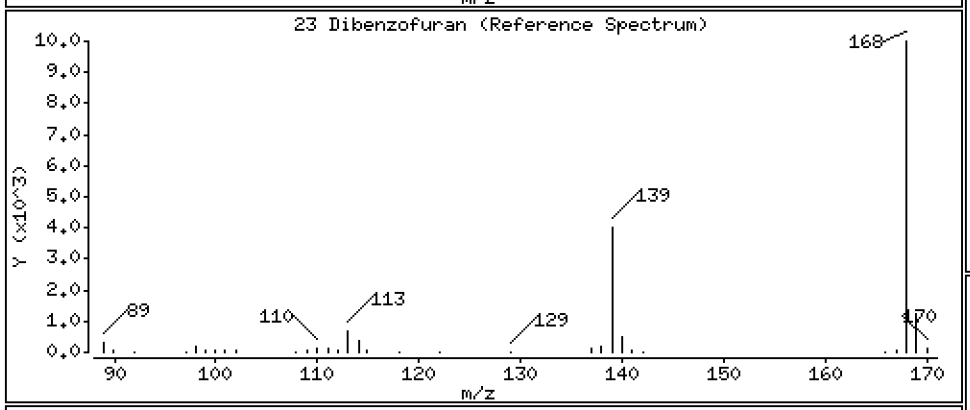
Column diameter: 0.25

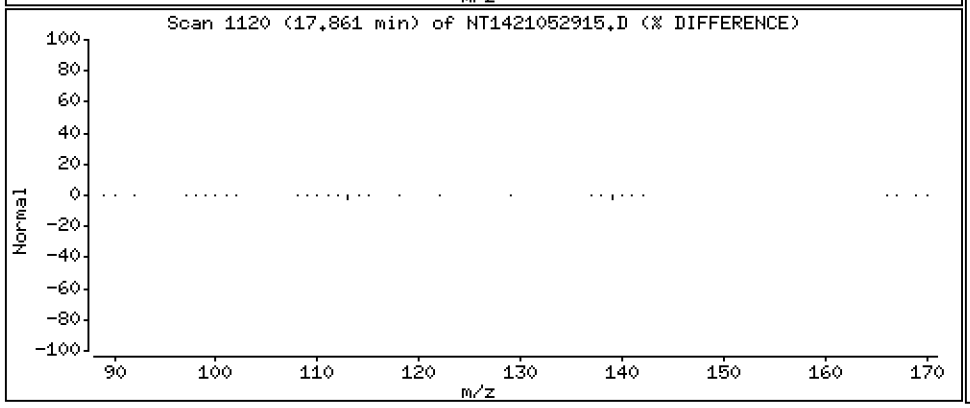
23 Dibenzofuran

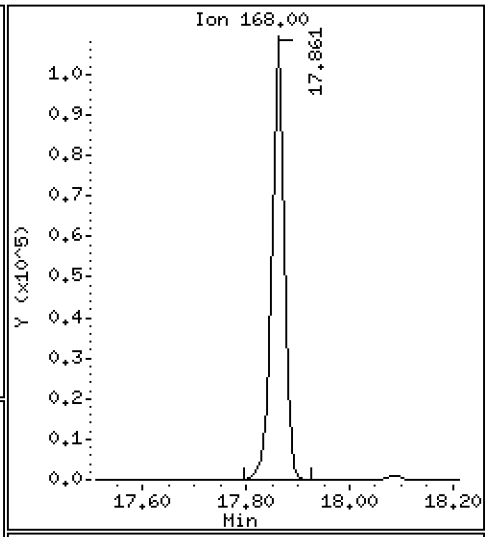
Concentration: 2.595 ug/mL

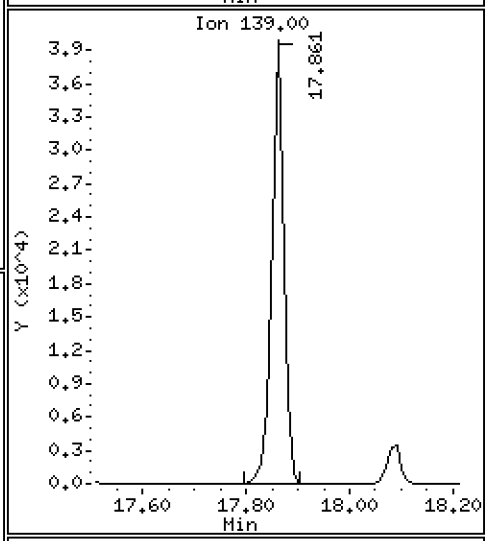


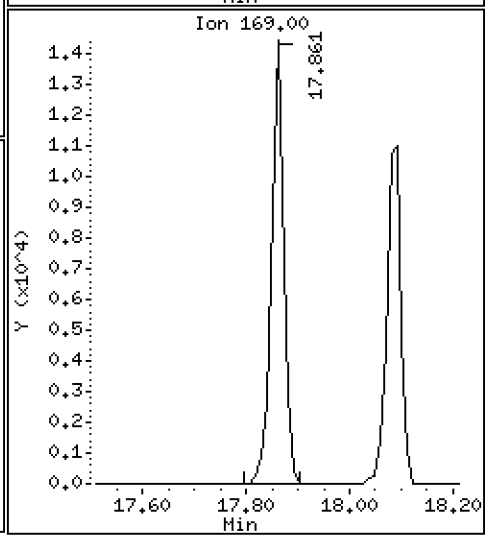












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Date : 29-MAY-2021 19:38

Client ID:

Instrument: nt14.i

Sample Info: SJF0025-SCV1

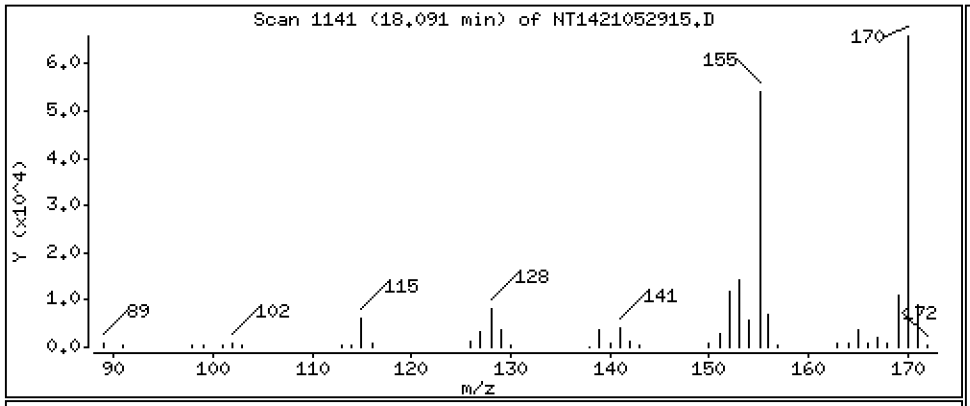
Operator: VTS

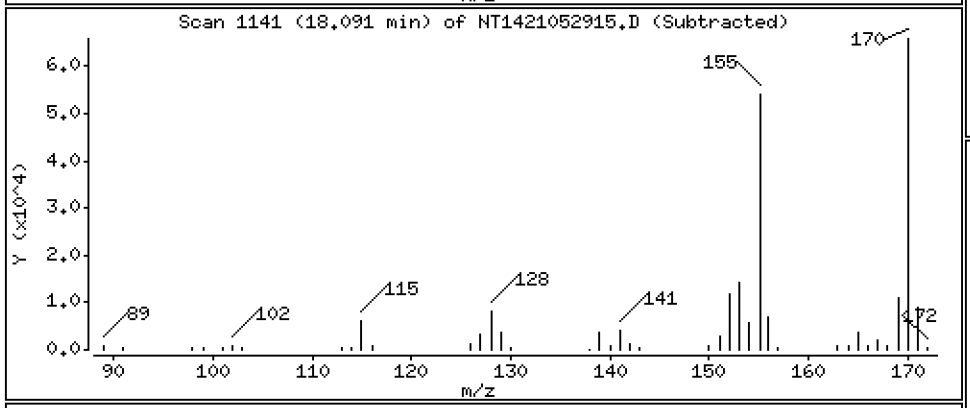
Column phase: Rxi-17Sil MS

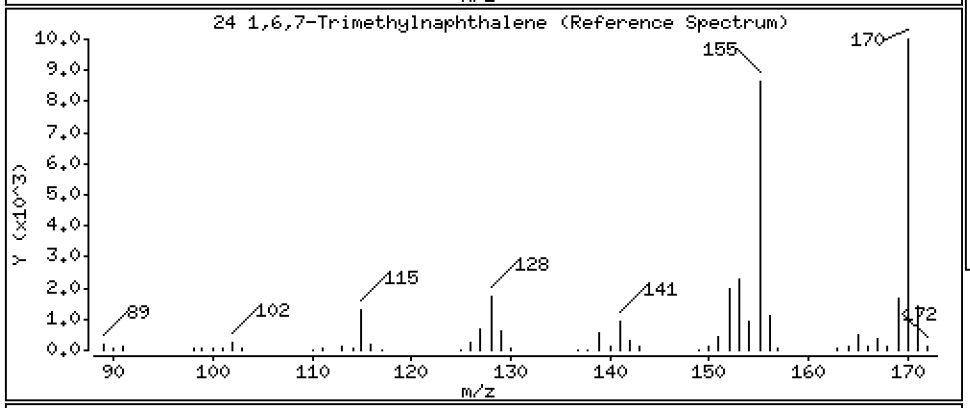
Column diameter: 0.25

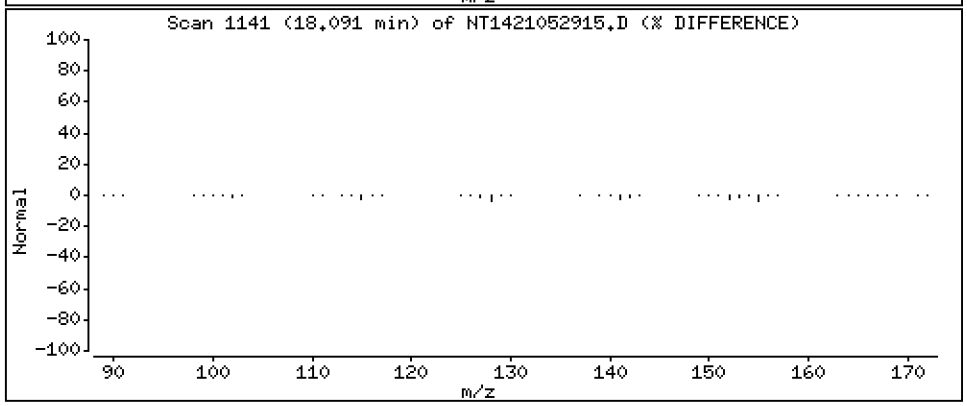
24 1,6,7-Trimethylnaphthalene

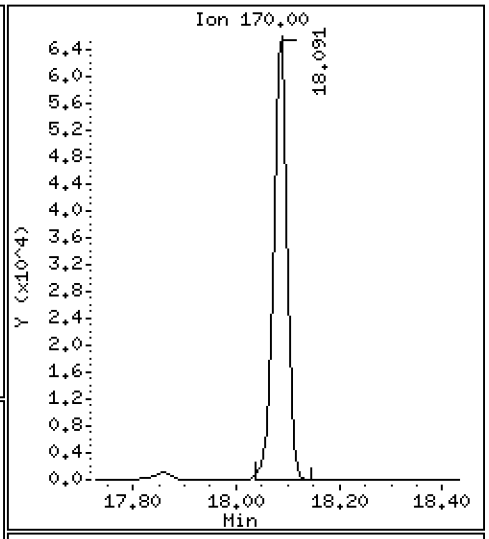
Concentration: 2.642 ug/mL

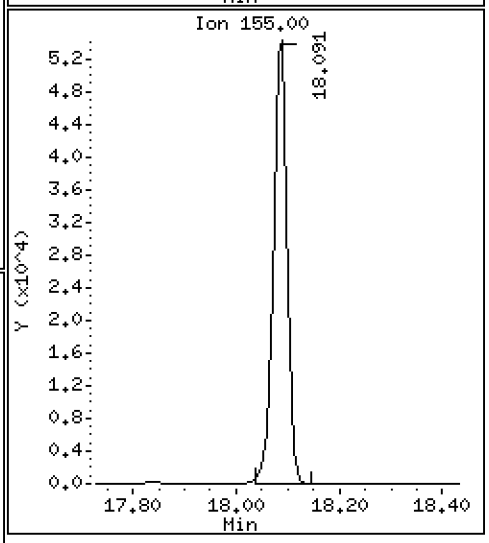












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Date : 29-MAY-2021 19:38

Client ID:

Instrument: nt14.i

Sample Info: SJF0025-SCV1

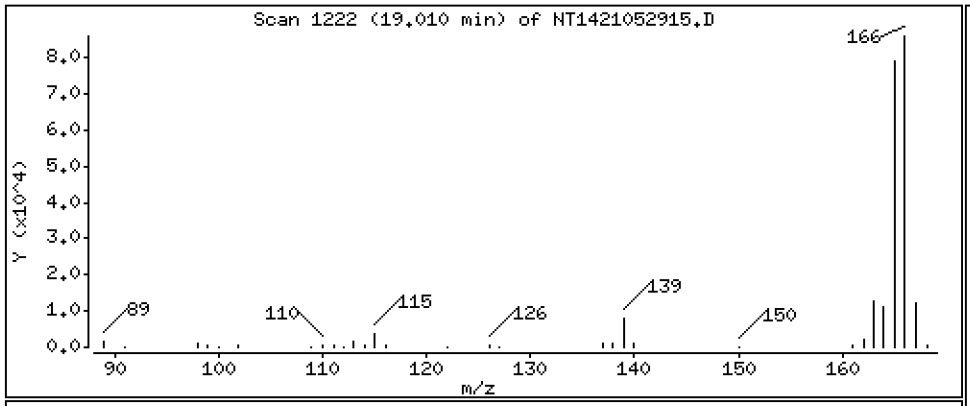
Operator: VTS

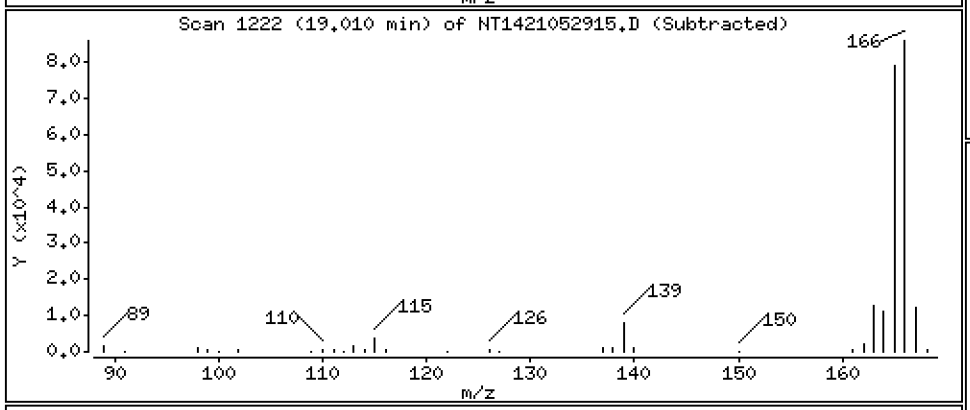
Column phase: Rxi-17Sil MS

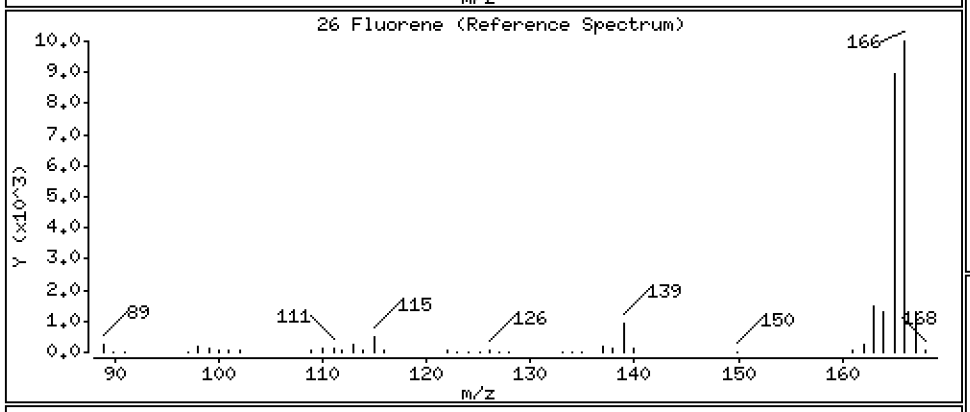
Column diameter: 0.25

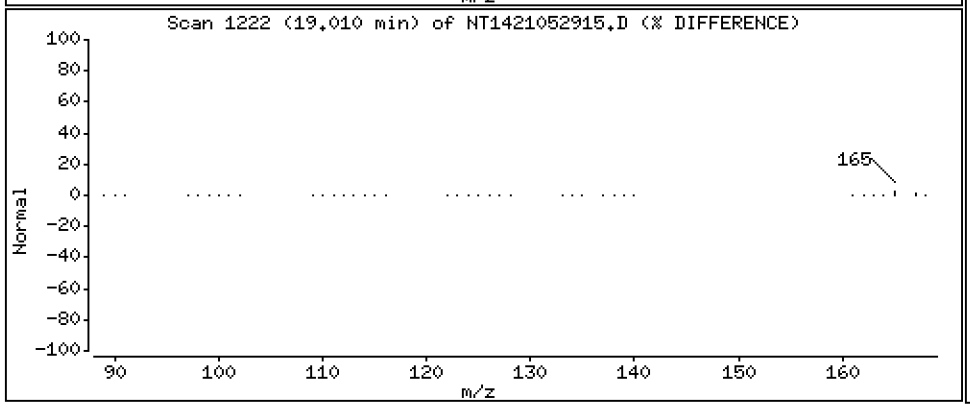
26 Fluorene

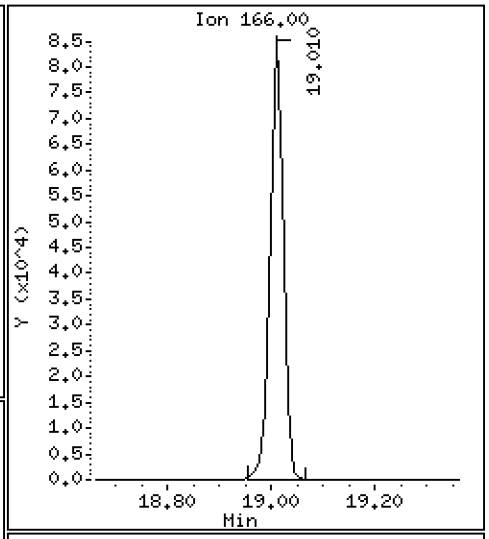
Concentration: 2.611 ug/mL

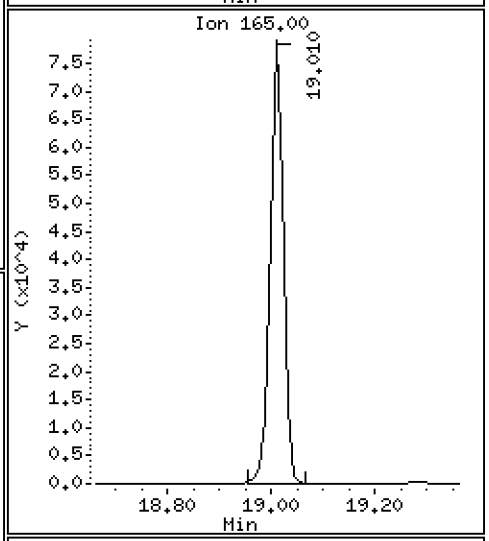


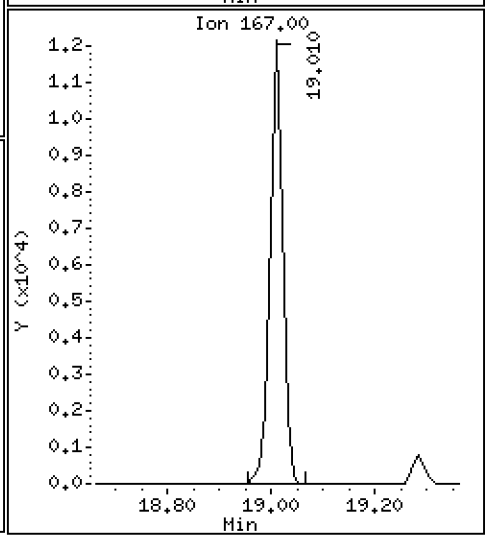












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Date : 29-MAY-2021 19:38

Client ID:

Instrument: nt14.i

Sample Info: SJF0025-SCV1

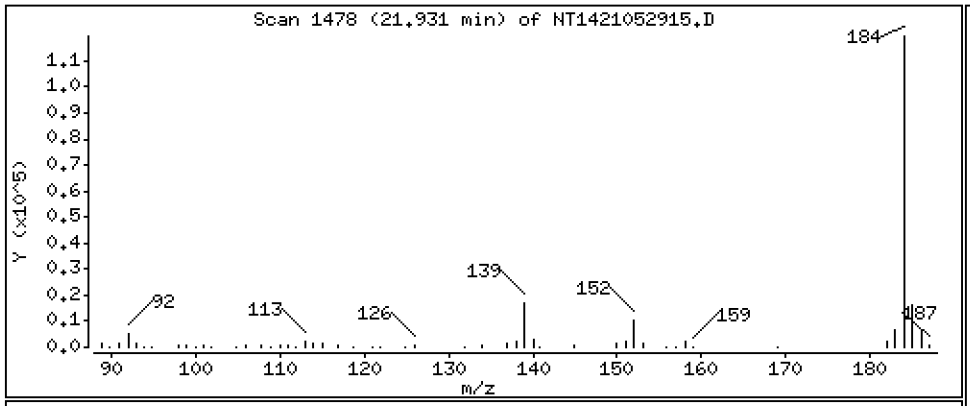
Operator: VTS

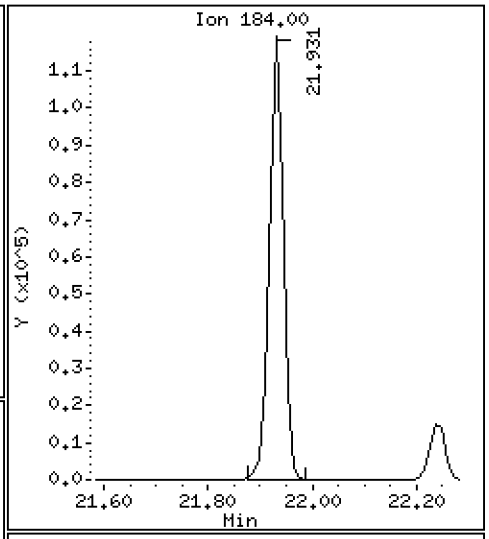
Column phase: Rxi-17Sil MS

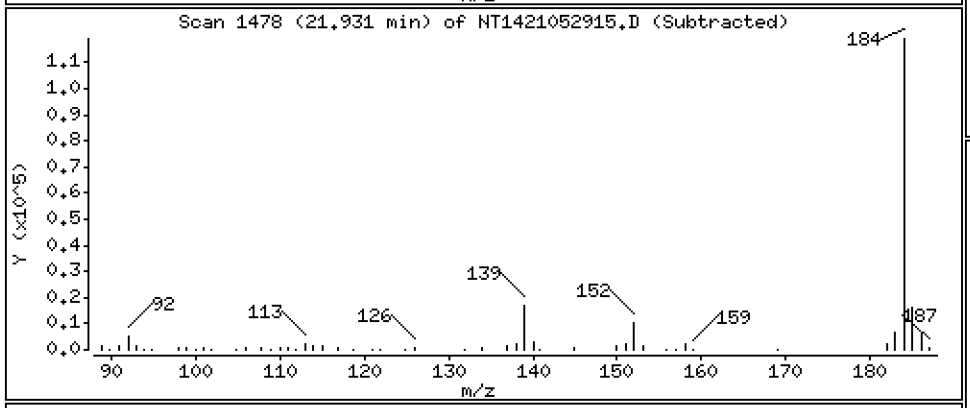
Column diameter: 0.25

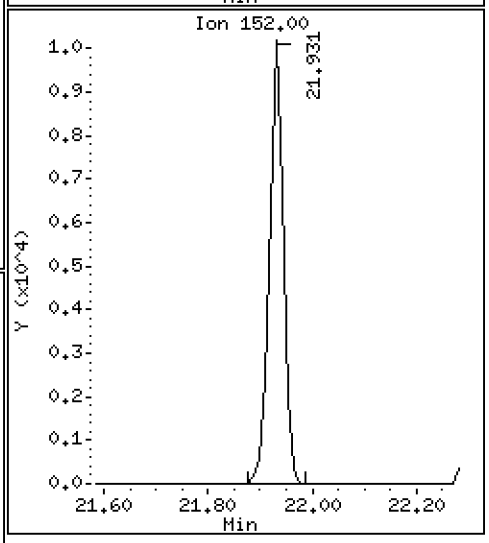
30 Dibenzothiophene

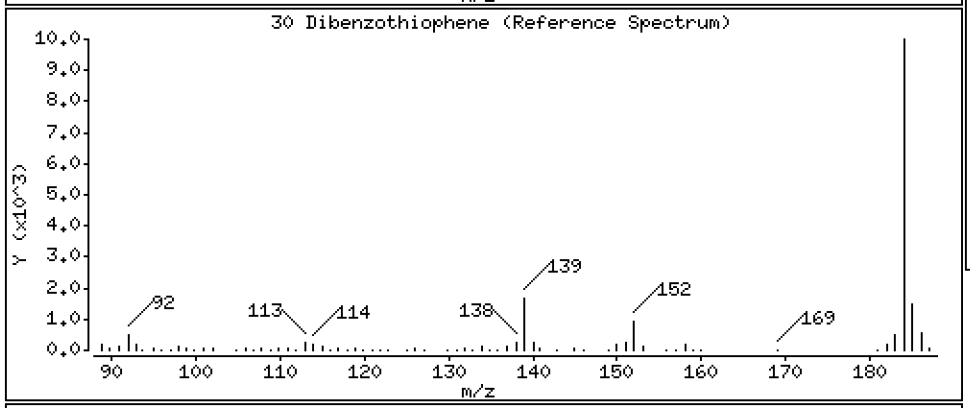
Concentration: 2.634 ug/mL

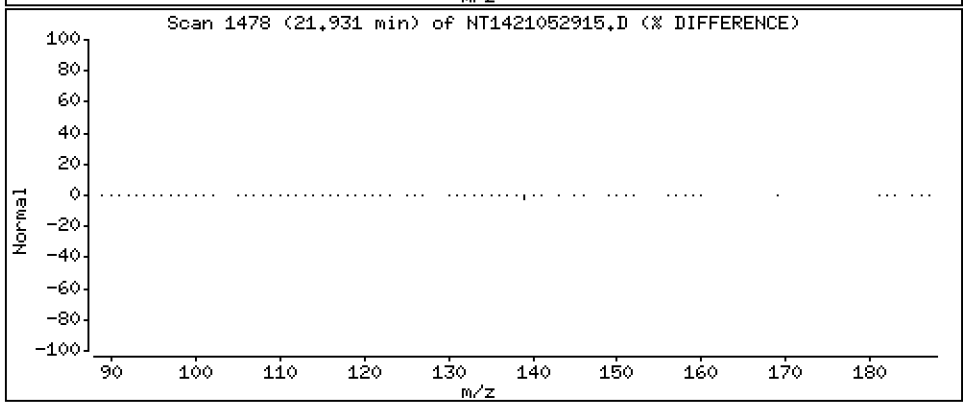












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Date : 29-MAY-2021 19:38

Client ID:

Instrument: nt14.i

Sample Info: SJF0025-SCV1

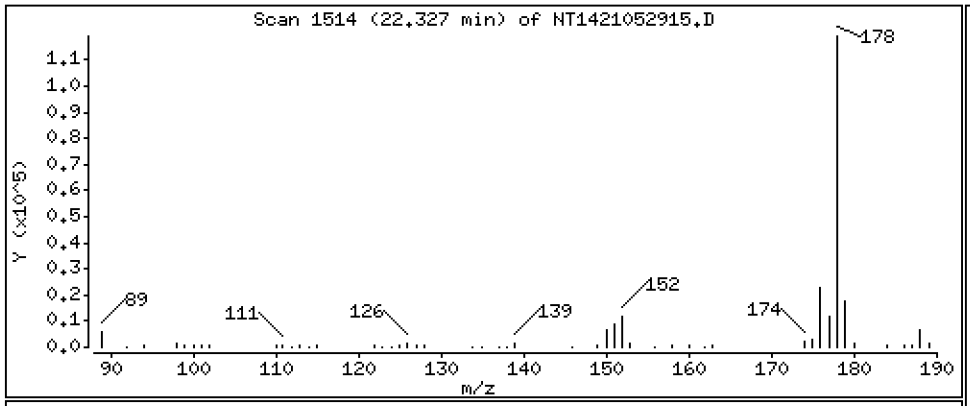
Operator: VTS

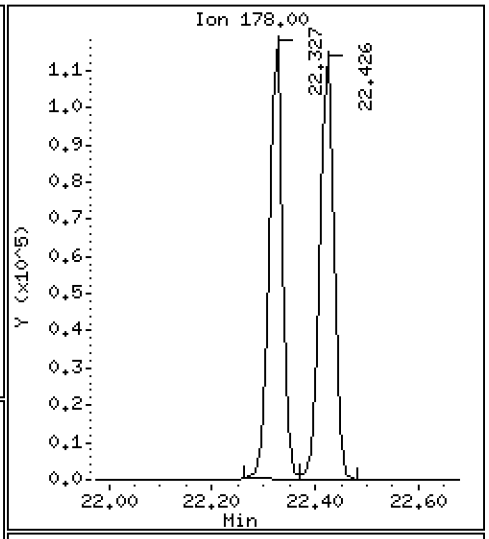
Column phase: Rxi-17Sil MS

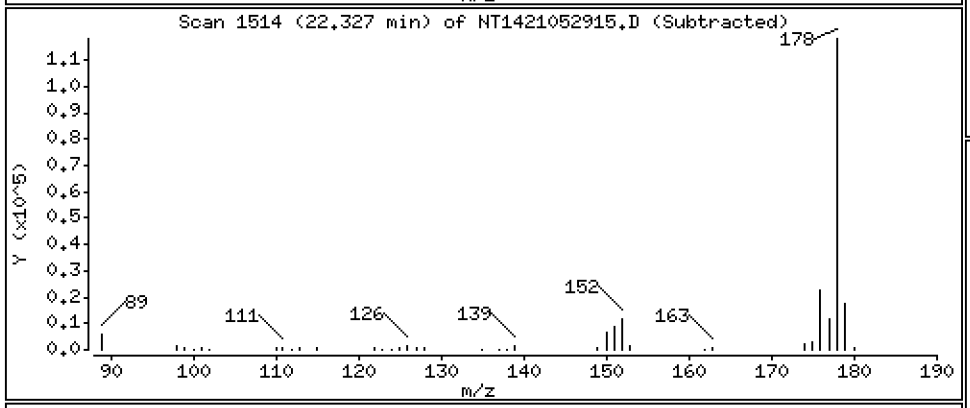
Column diameter: 0.25

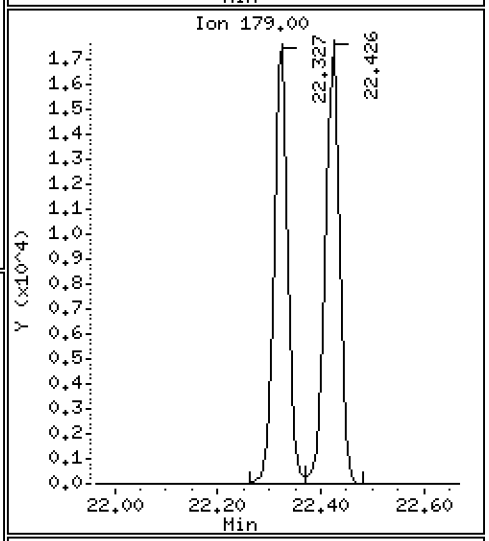
36 Phenanthrene

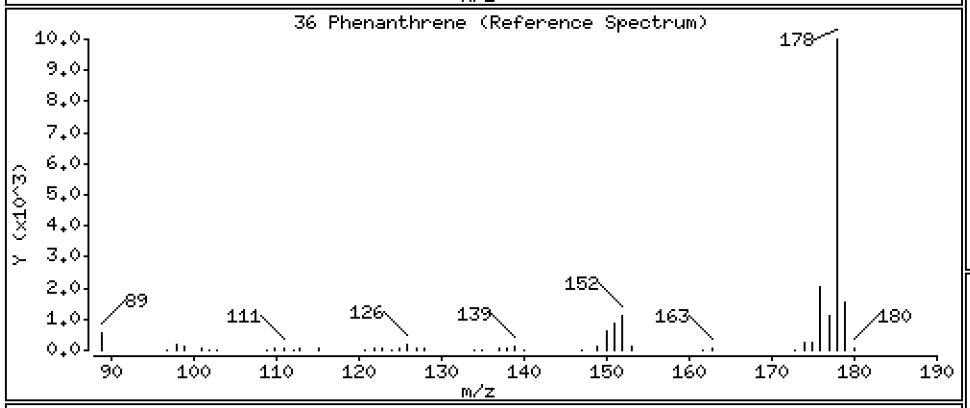
Concentration: 2.640 ug/mL

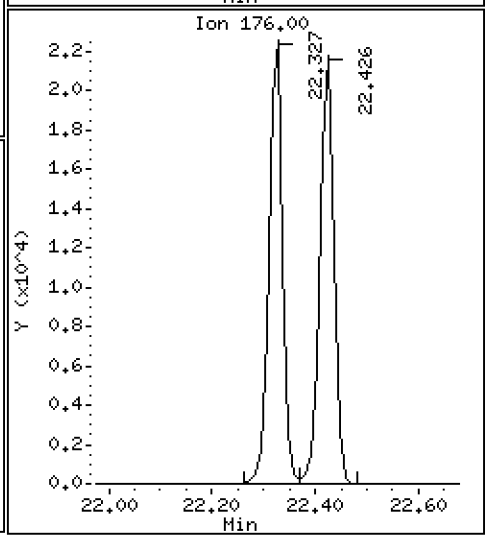


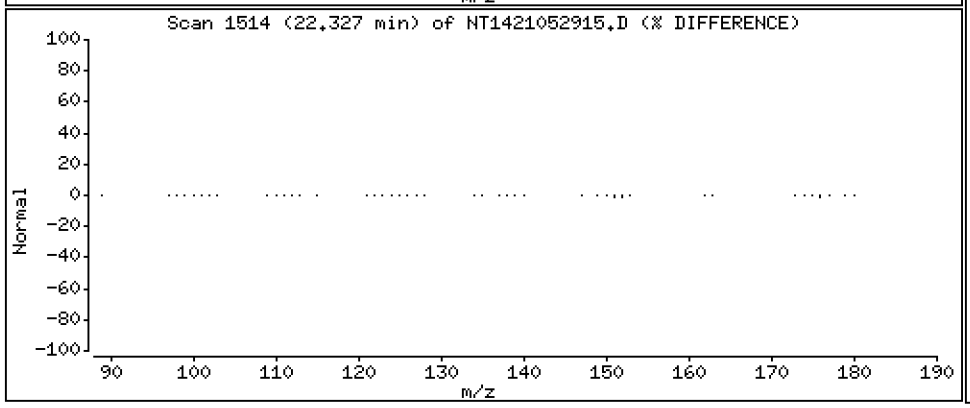












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Date : 29-MAY-2021 19:38

Client ID:

Instrument: nt14.i

Sample Info: SJF0025-SCV1

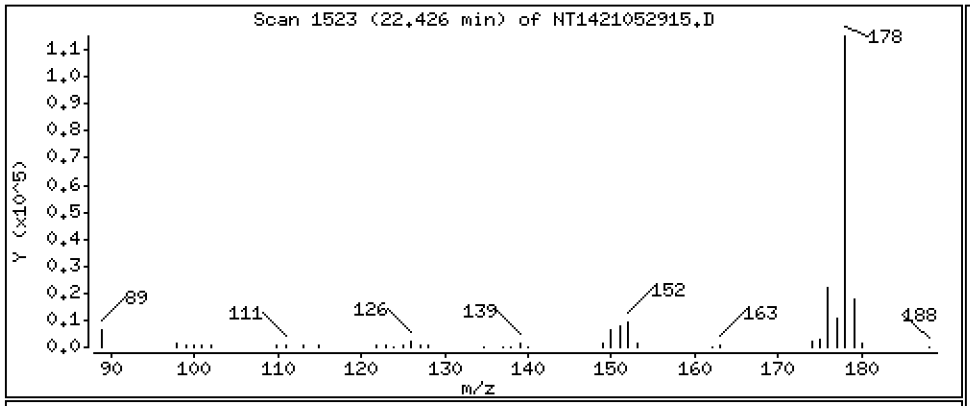
Operator: VTS

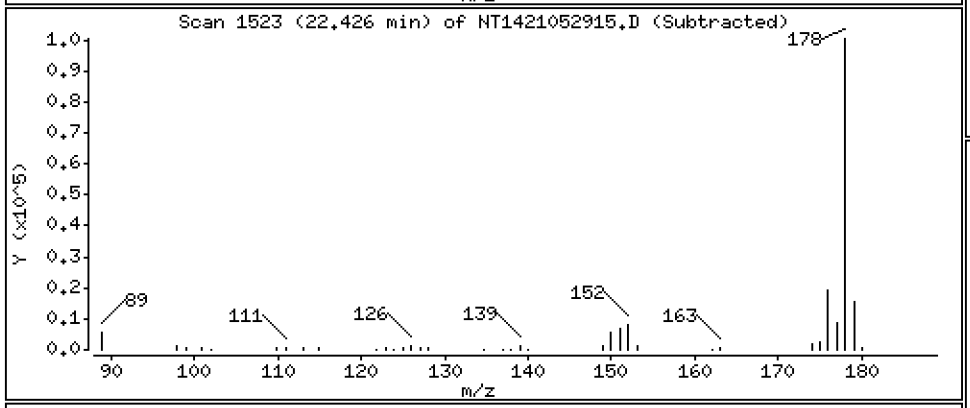
Column phase: Rxi-17Sil MS

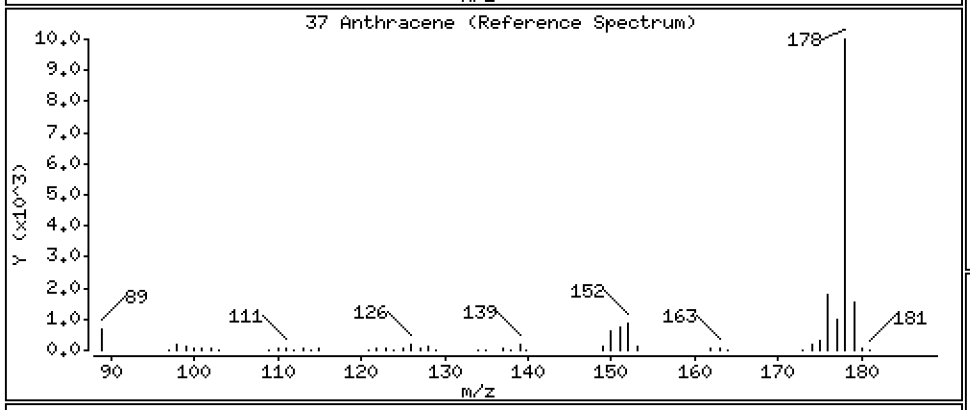
Column diameter: 0.25

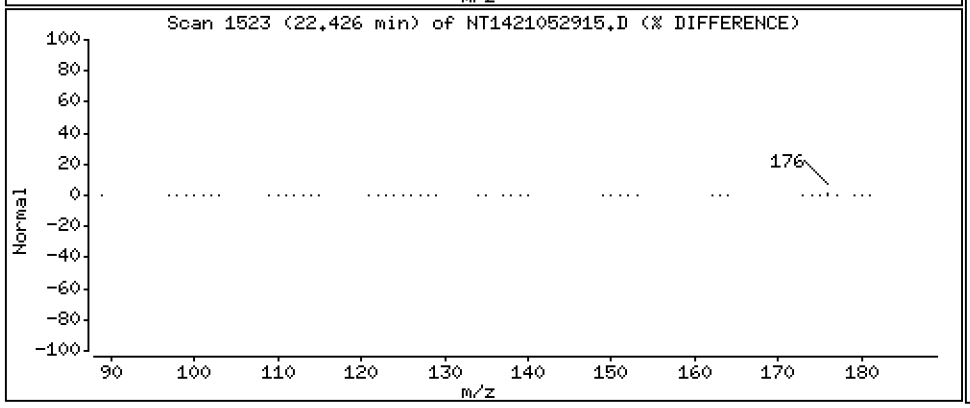
37 Anthracene

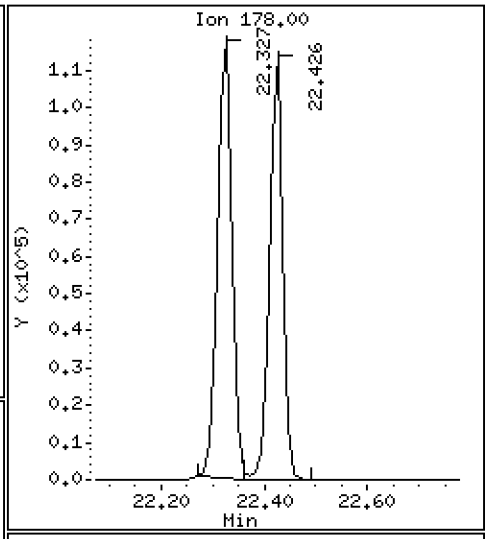
Concentration: 2.688 ug/mL

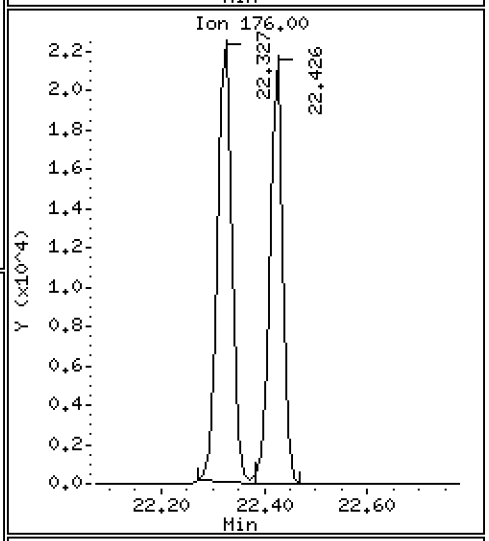


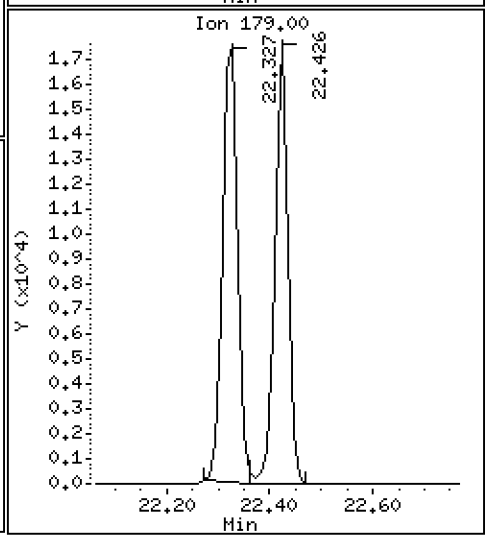












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Date : 29-MAY-2021 19:38

Client ID:

Instrument: nt14.i

Sample Info: SJF0025-SCV1

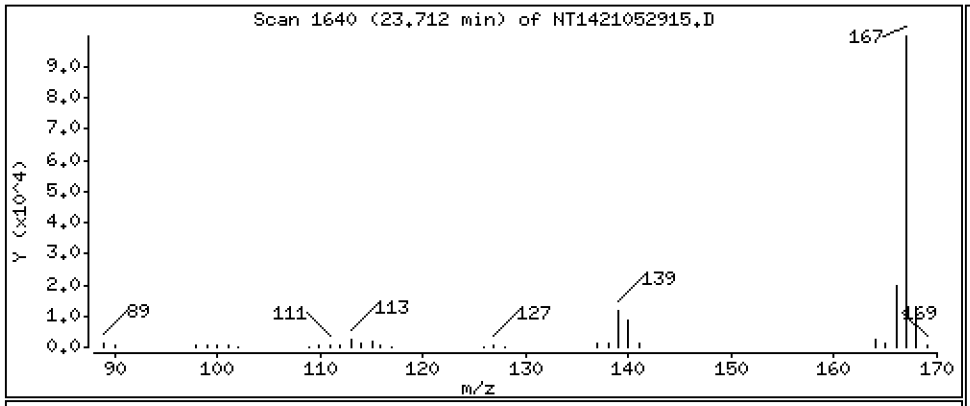
Operator: VTS

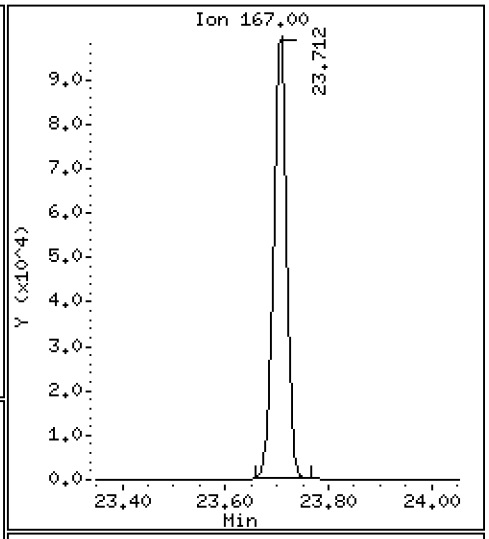
Column phase: Rxi-17Sil MS

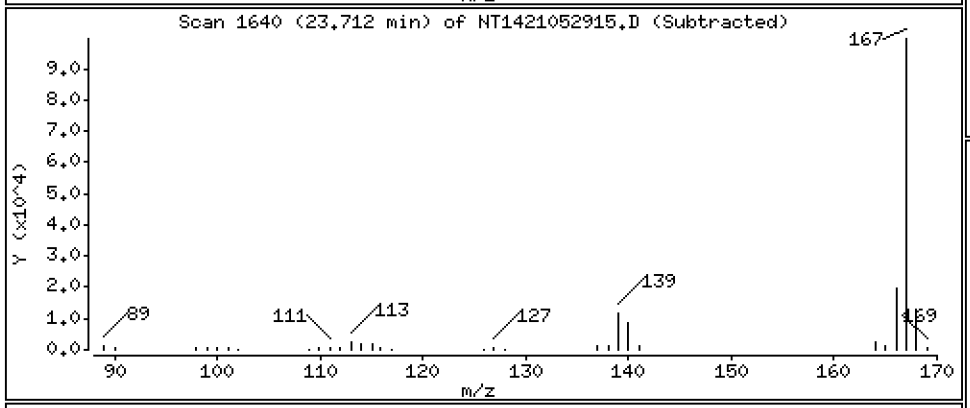
Column diameter: 0.25

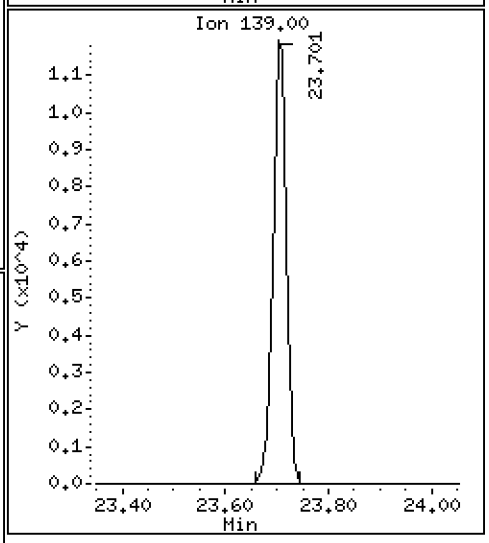
42 Carbazole

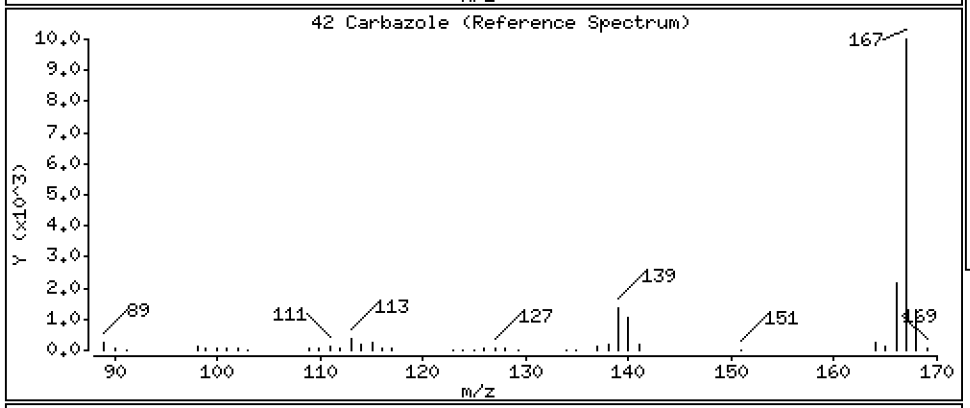
Concentration: 2.704 ug/mL

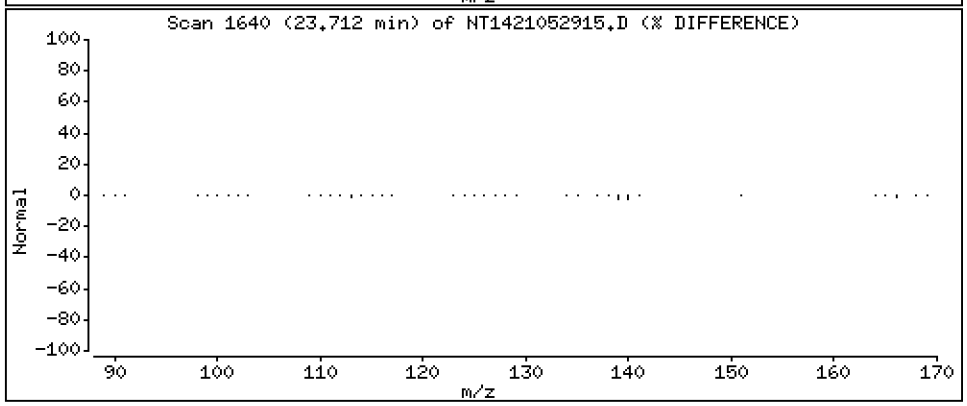












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Date : 29-MAY-2021 19:38

Client ID:

Instrument: nt14.i

Sample Info: SJF0025-SCV1

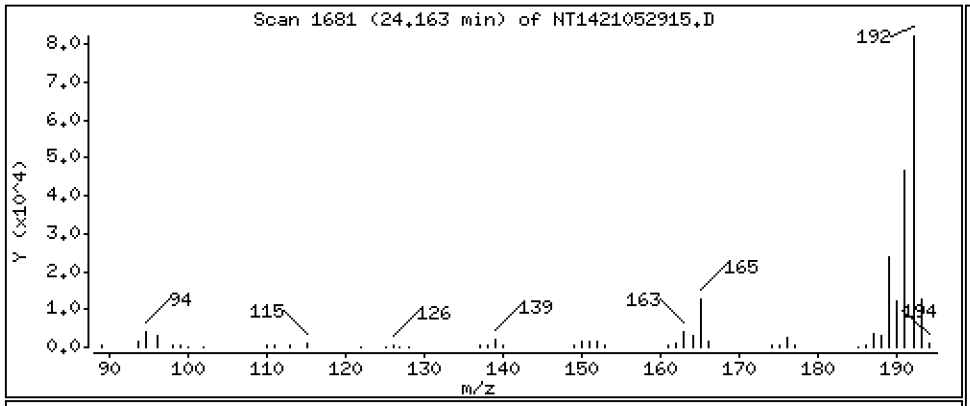
Operator: VTS

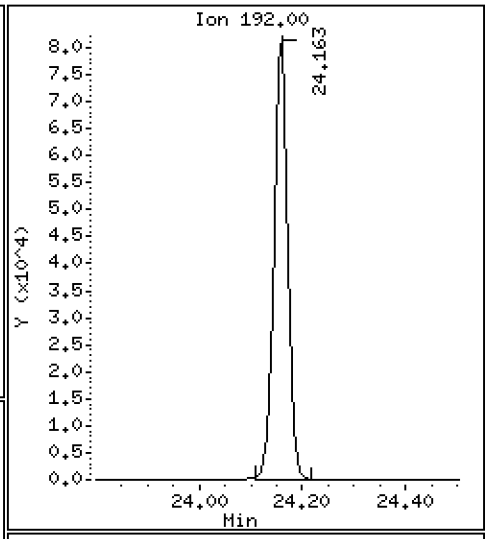
Column phase: Rxi-17Sil MS

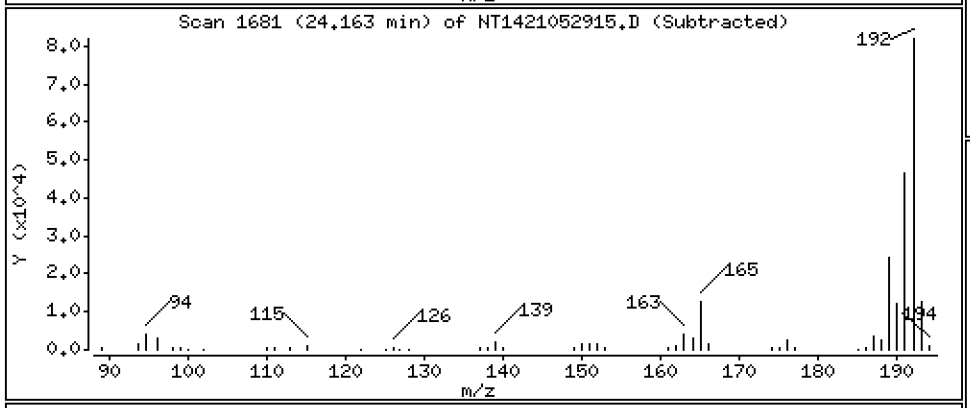
Column diameter: 0.25

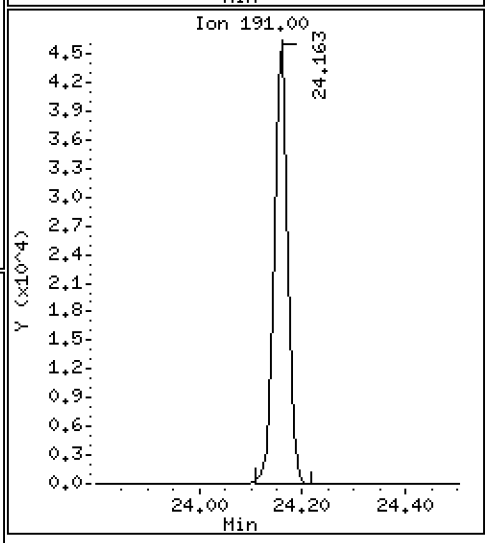
43 1-Methylphenanthrene

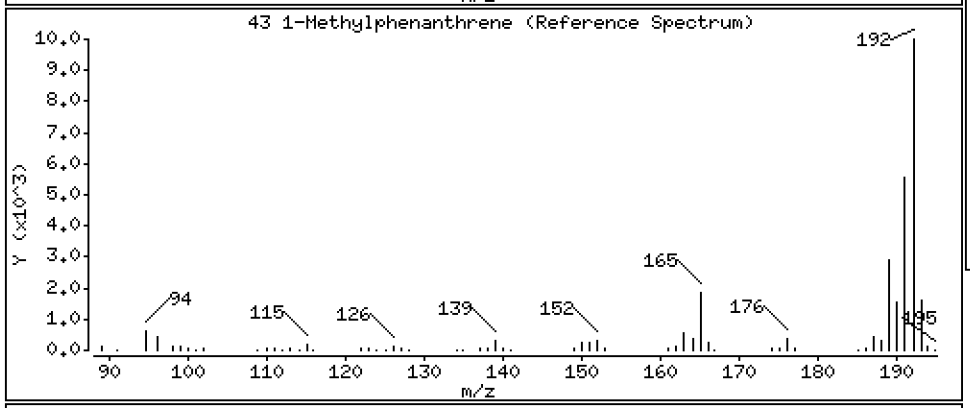
Concentration: 2.667 ug/mL

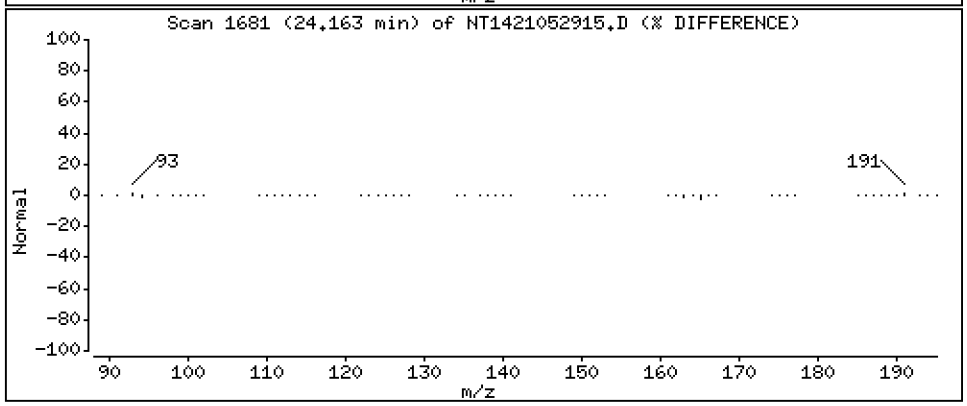












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Date : 29-MAY-2021 19:38

Client ID:

Instrument: nt14.i

Sample Info: SJF0025-SCV1

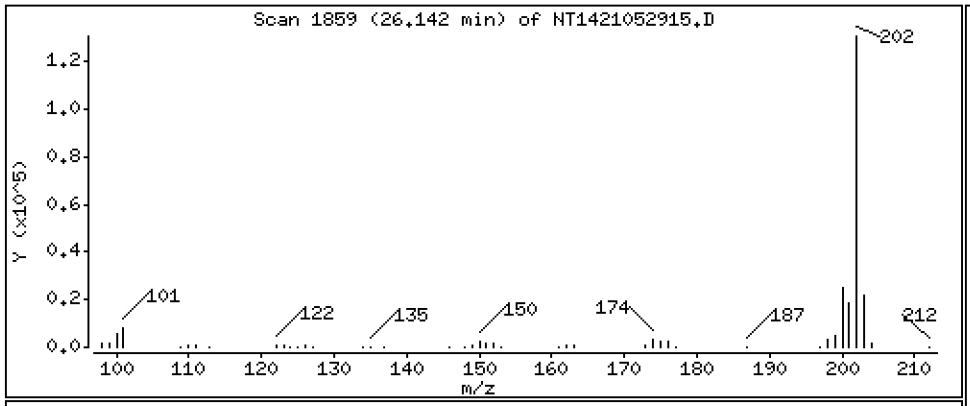
Operator: VTS

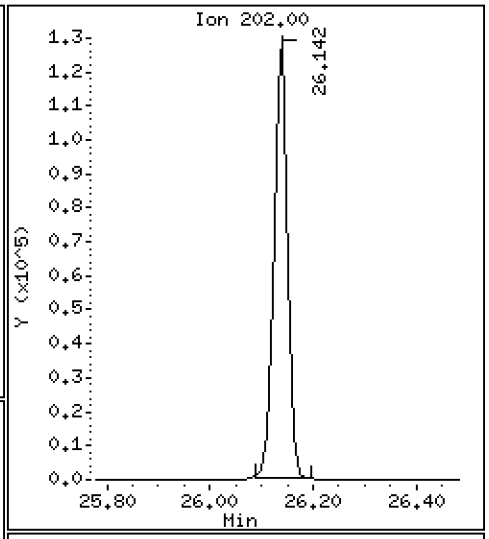
Column phase: Rxi-17Sil MS

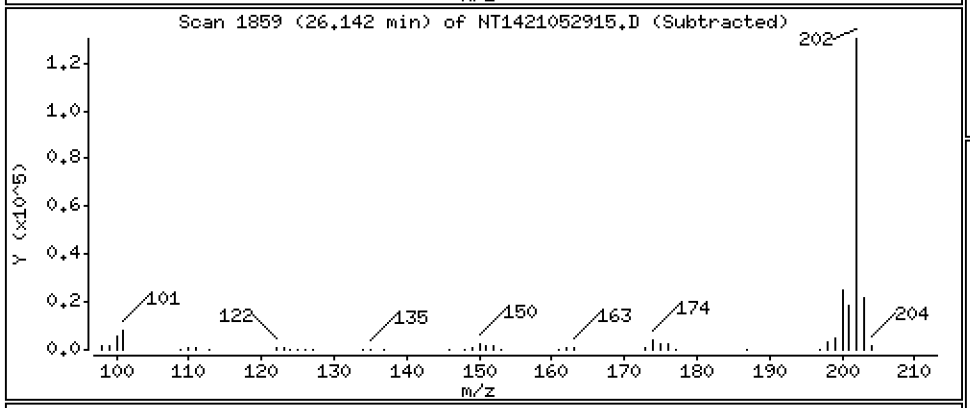
Column diameter: 0.25

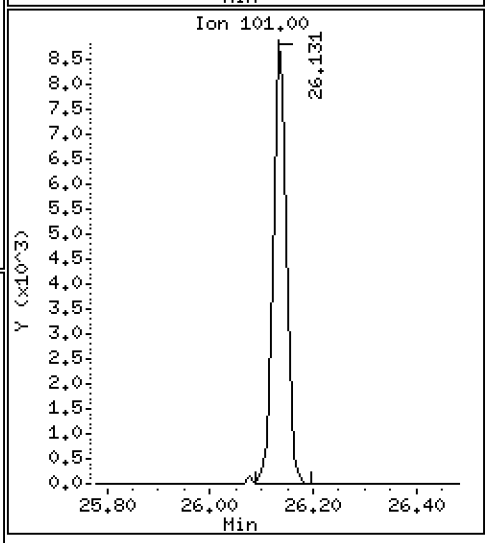
44 Fluoranthene

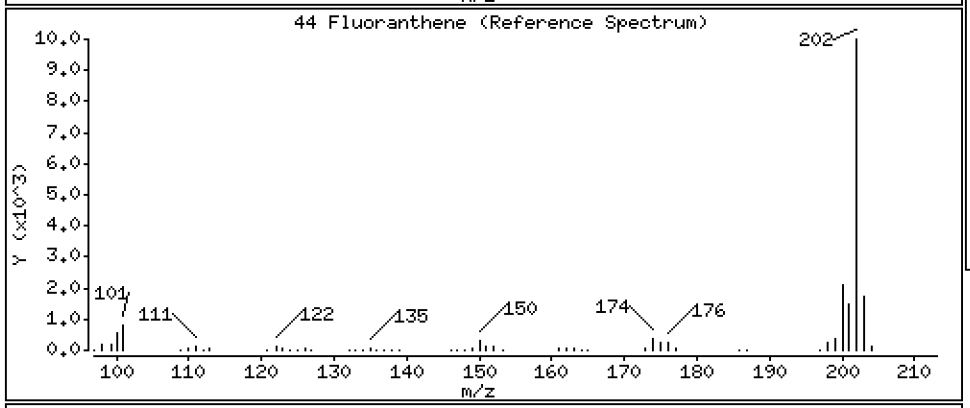
Concentration: 2.672 ug/mL

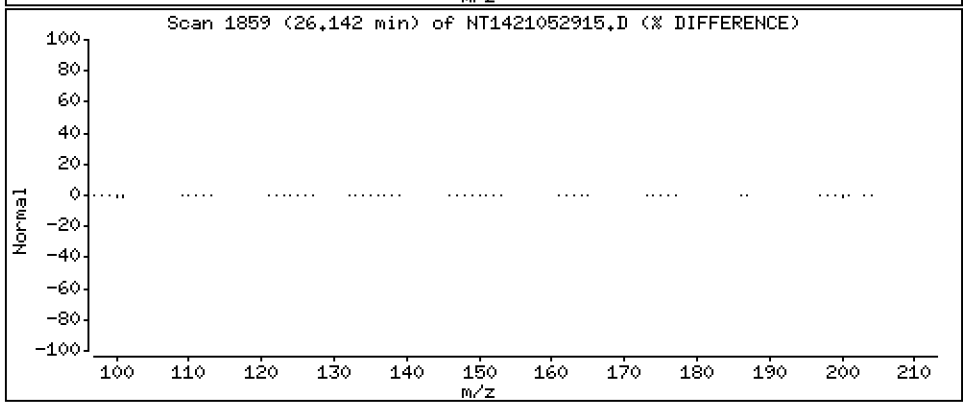












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Date : 29-MAY-2021 19:38

Client ID:

Instrument: nt14.i

Sample Info: SJF0025-SCV1

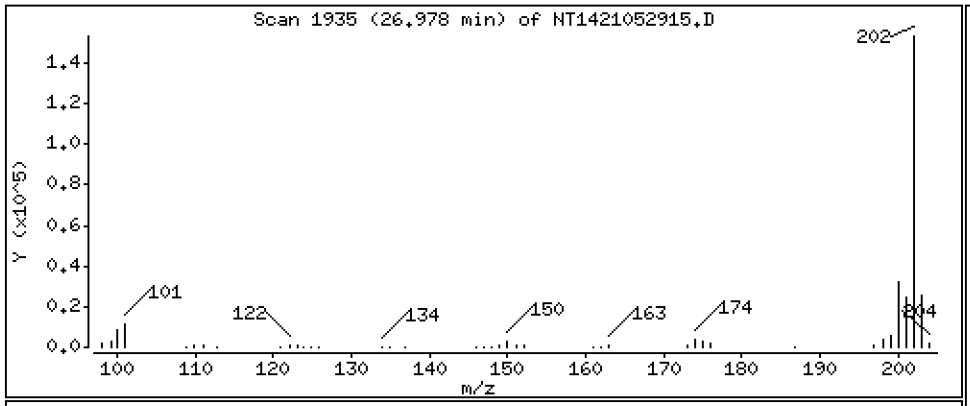
Operator: VTS

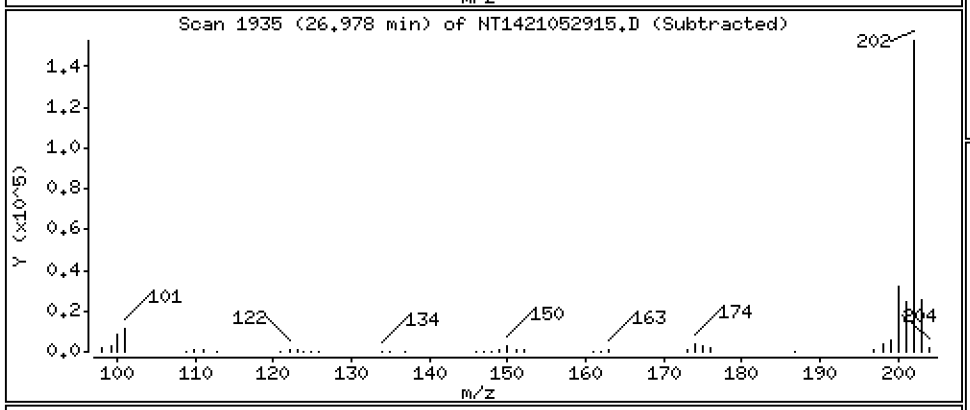
Column phase: Rxi-17Sil MS

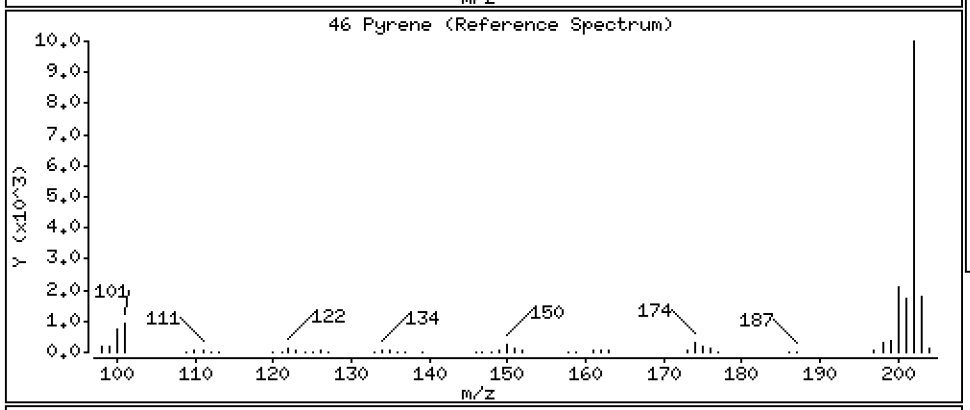
Column diameter: 0.25

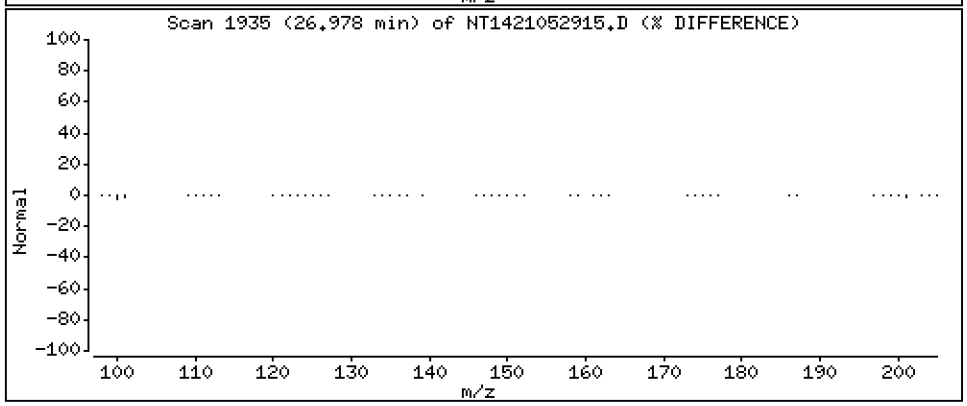
46 Pyrene

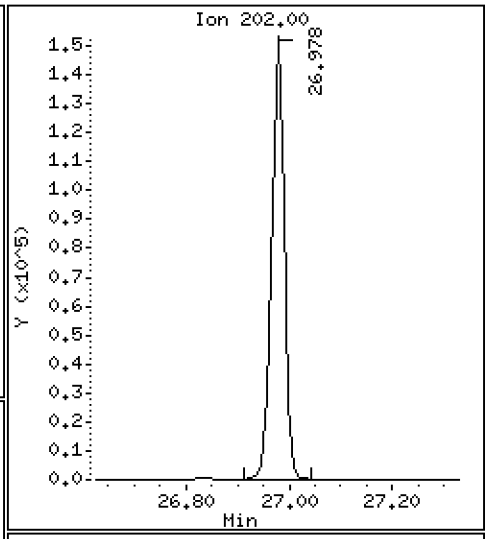
Concentration: 2.712 ug/mL

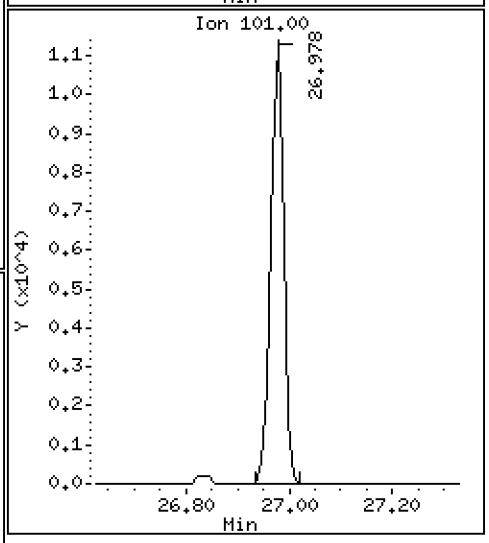












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Date : 29-MAY-2021 19:38

Client ID:

Instrument: nt14.i

Sample Info: SJF0025-SCV1

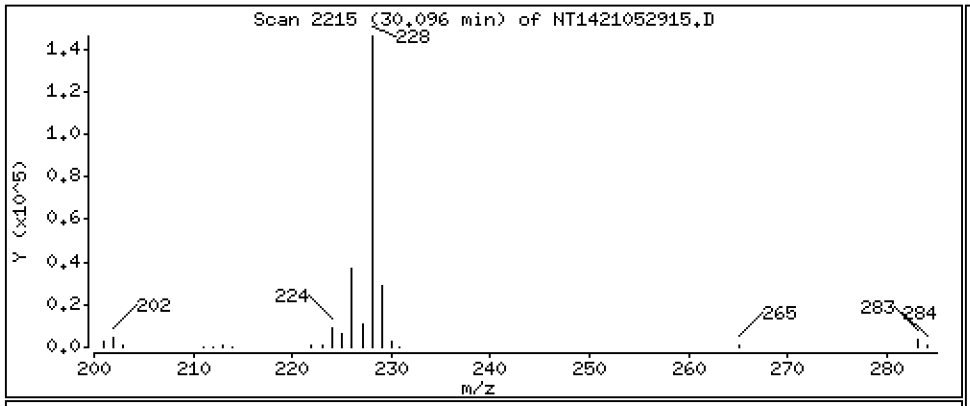
Operator: VTS

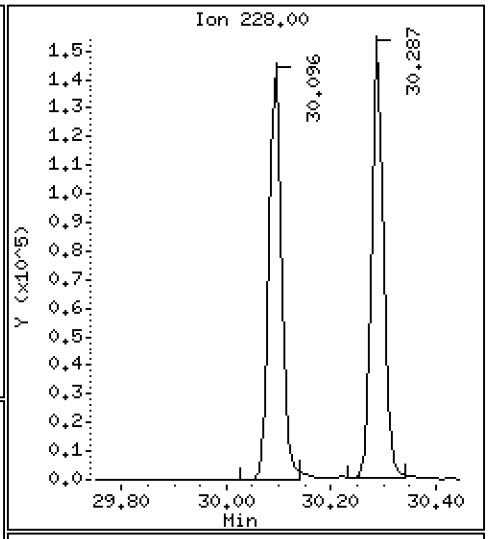
Column phase: Rxi-17Sil MS

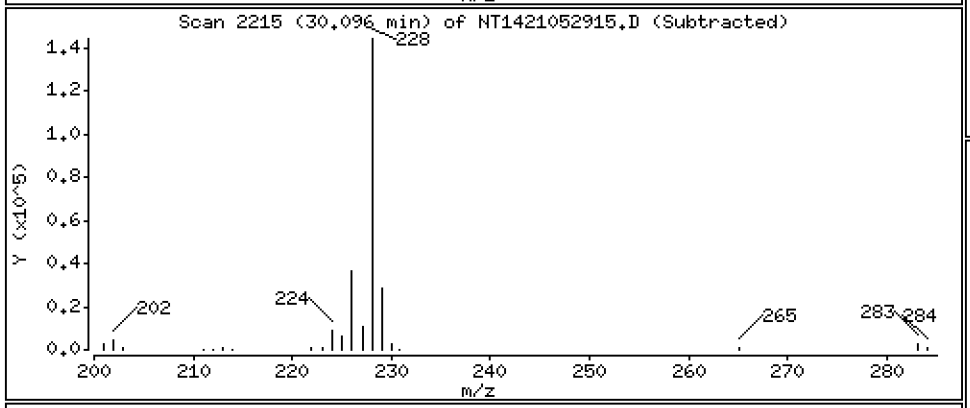
Column diameter: 0.25

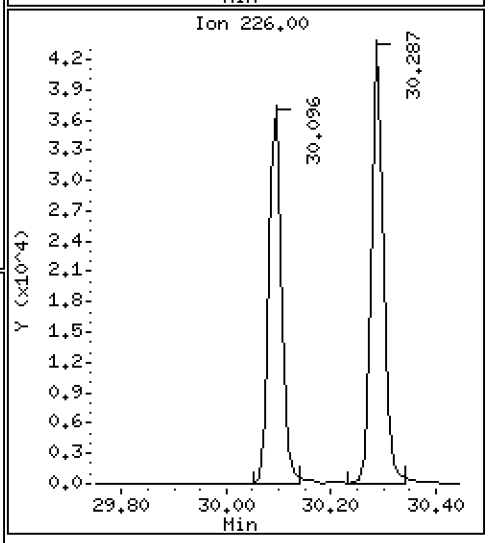
55 Benzo(a)anthracene

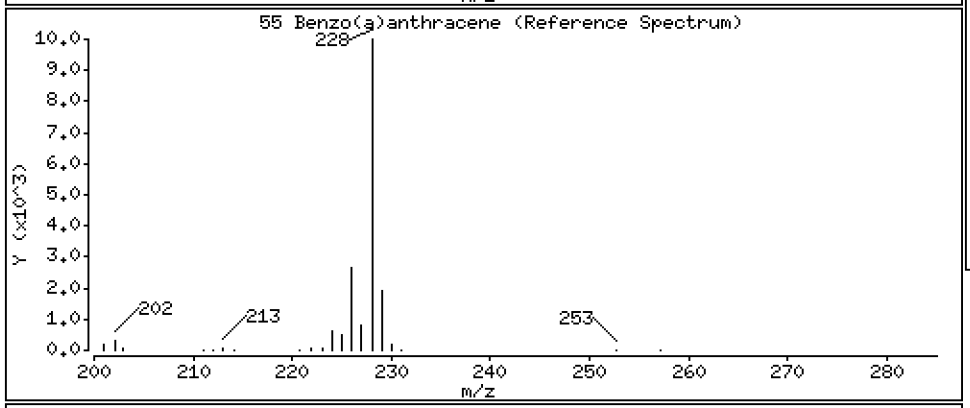
Concentration: 2.756 ug/mL

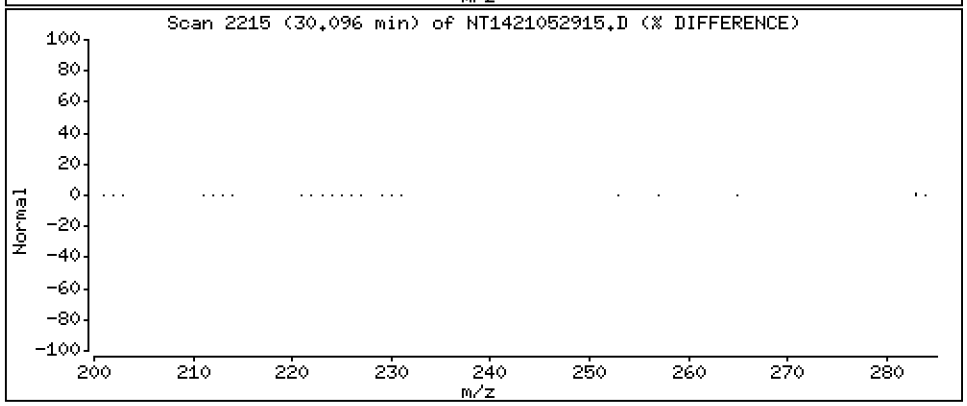












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Client ID:

Instrument: nt14.i

Sample Info: SJF0025-SCV1

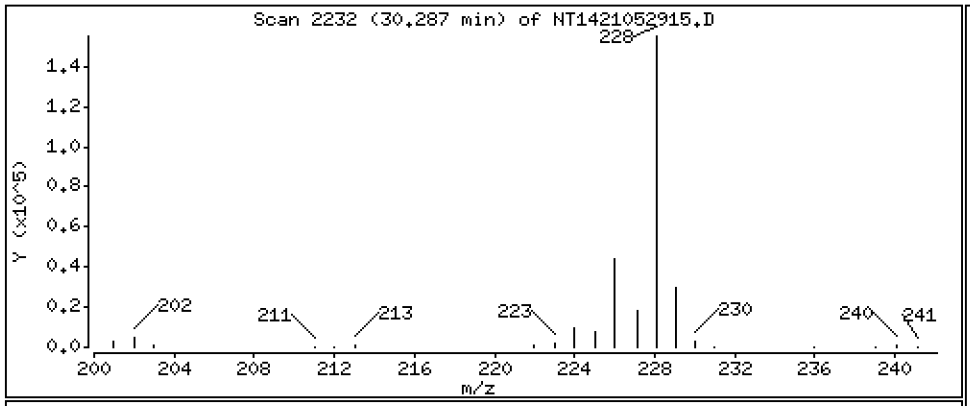
Operator: VTS

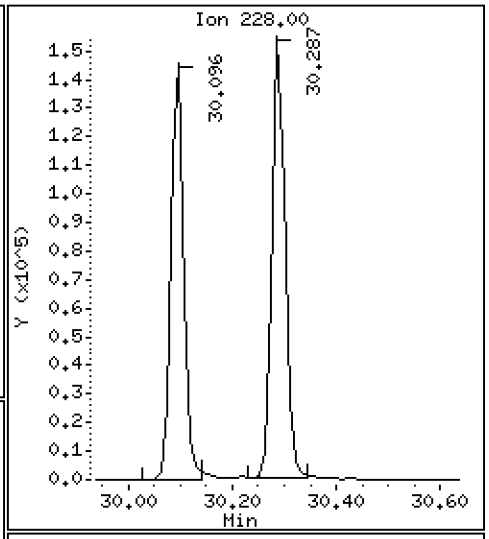
Column phase: Rxi-17Sil MS

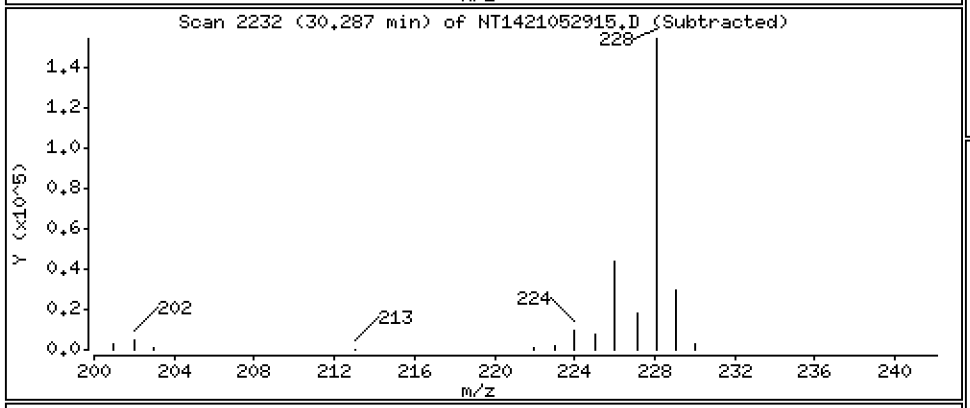
Column diameter: 0.25

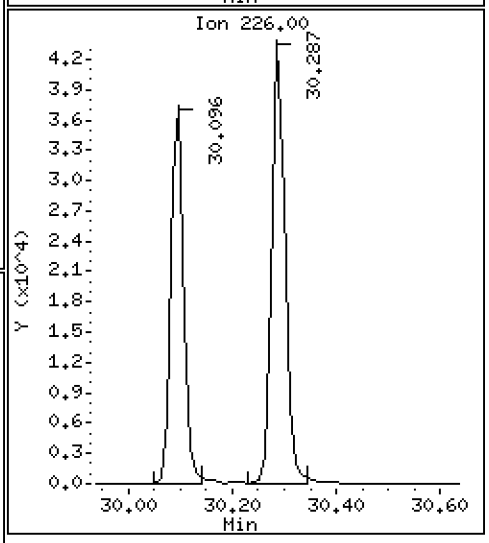
57 Chrysene

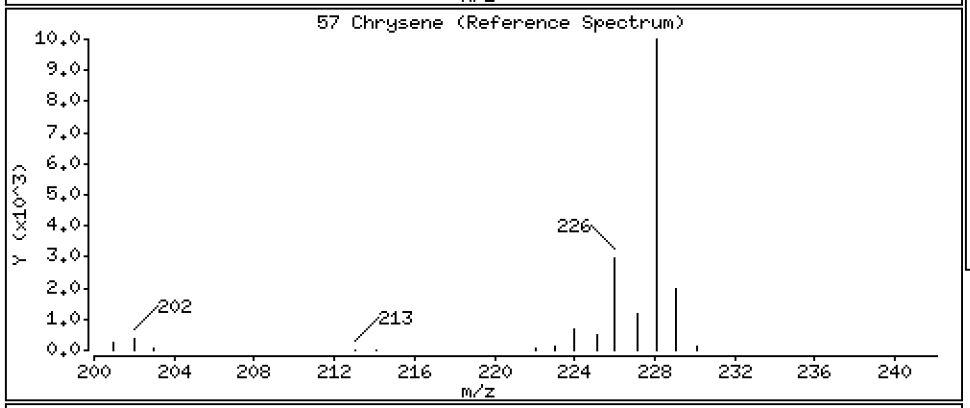
Concentration: 2.770 ug/mL

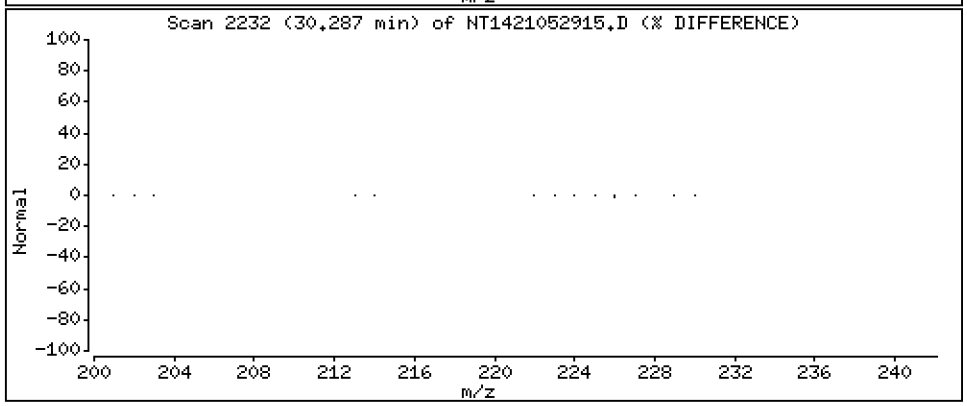












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Date : 29-MAY-2021 19:38

Client ID:

Instrument: nt14.i

Sample Info: SJF0025-SCV1

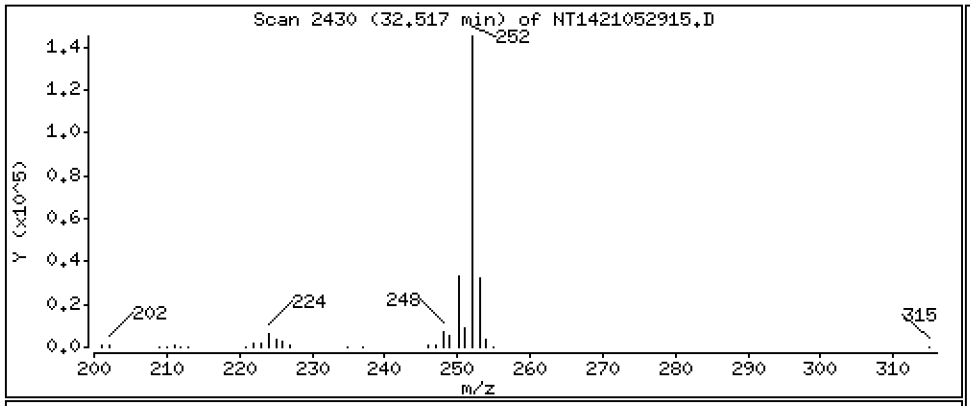
Operator: VTS

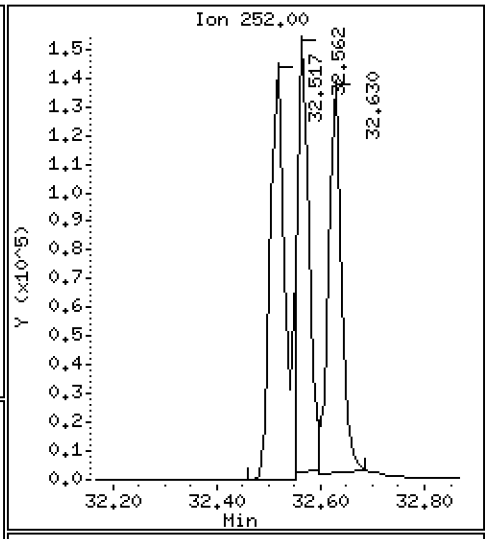
Column phase: Rxi-17Sil MS

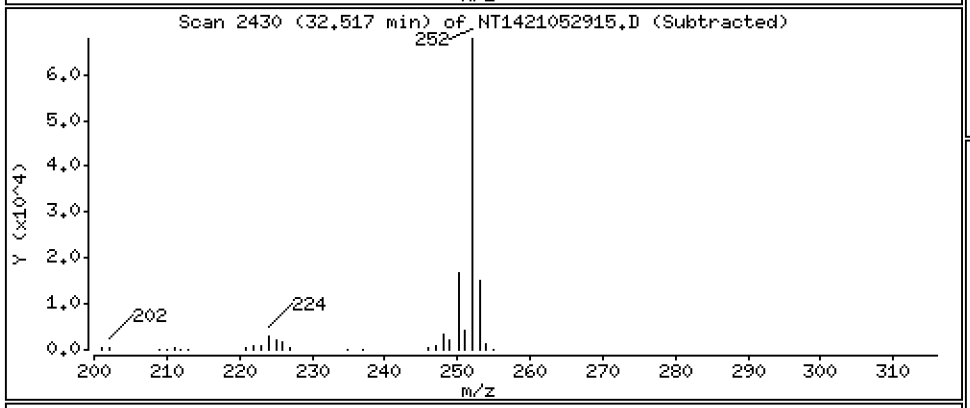
Column diameter: 0.25

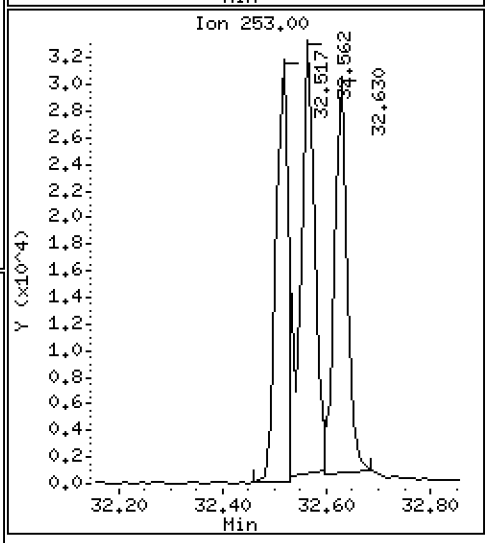
62 Benzo(b)fluoranthene

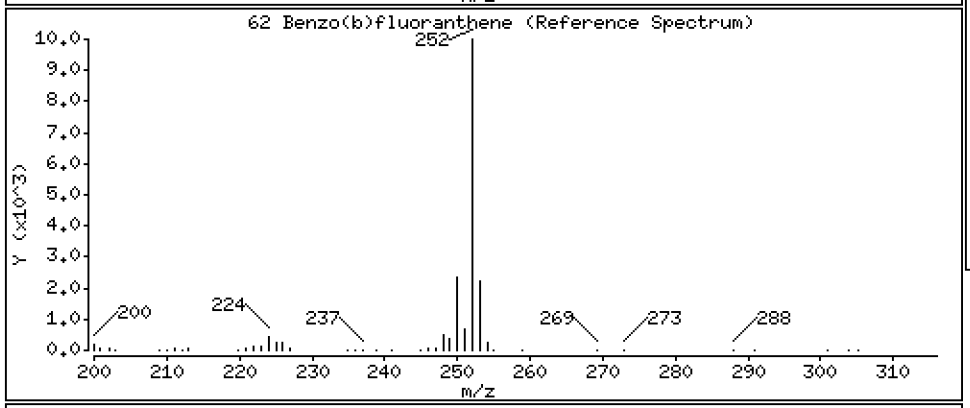
Concentration: 3.119 ug/mL

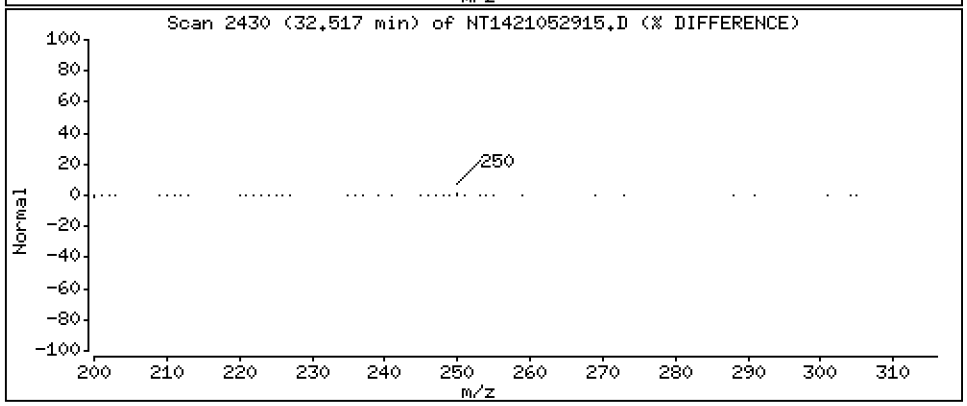












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Date : 29-MAY-2021 19:38

Client ID:

Instrument: nt14.i

Sample Info: SJF0025-SCV1

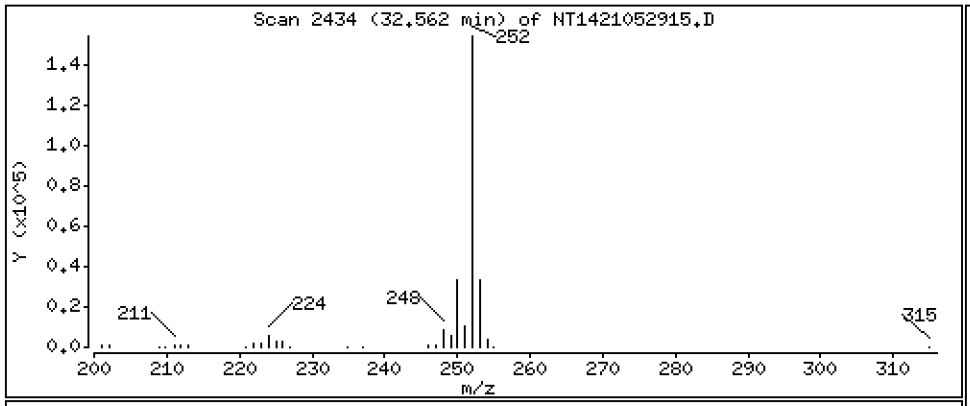
Operator: VTS

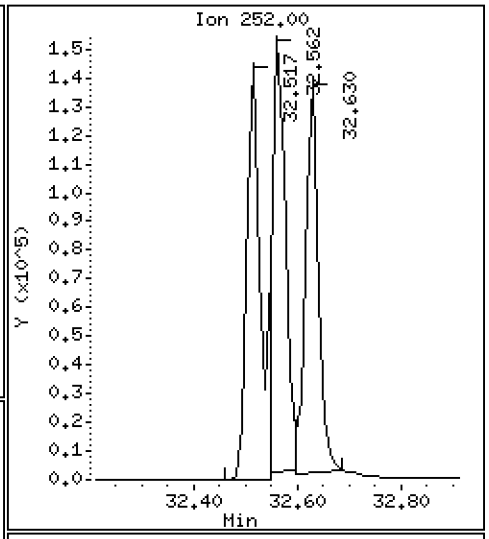
Column phase: Rxi-17Sil MS

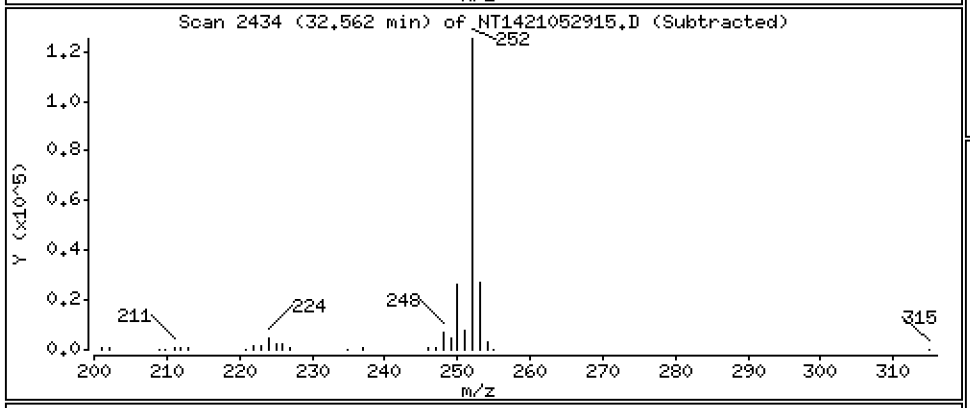
Column diameter: 0.25

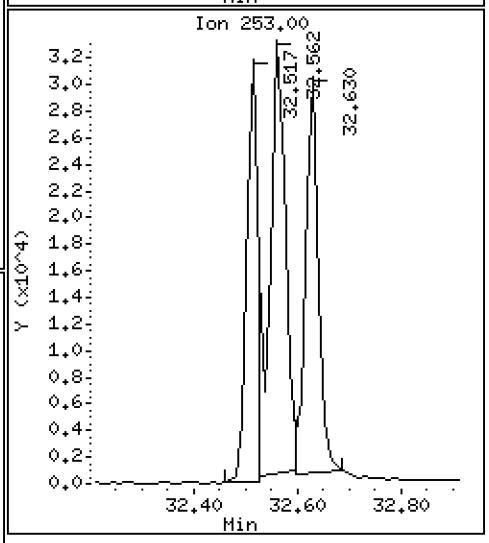
63 Benzo(k)fluoranthene

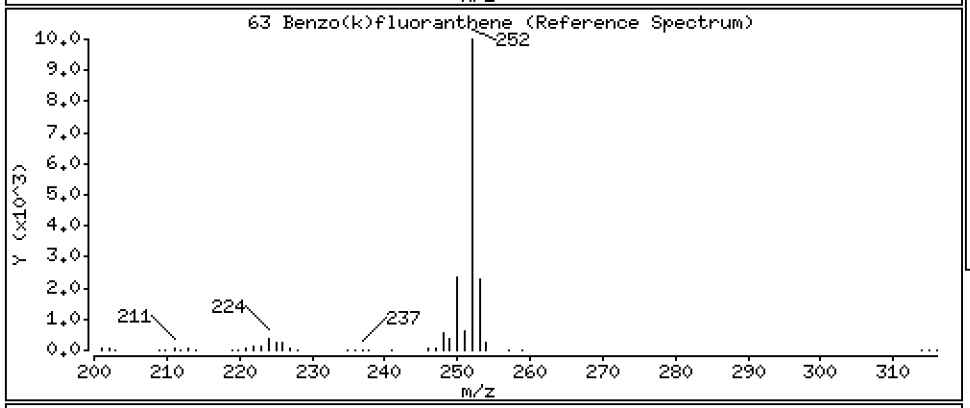
Concentration: 2.487 ug/mL

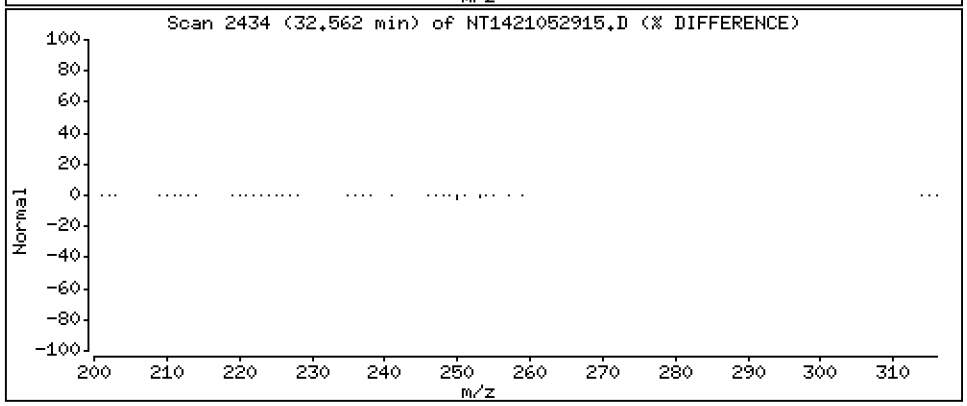












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Date : 29-MAY-2021 19:38

Client ID:

Instrument: nt14.i

Sample Info: SJF0025-SCV1

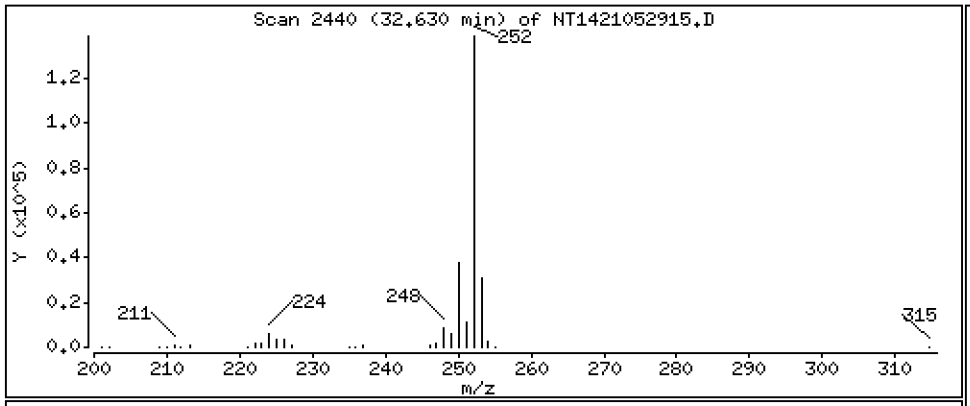
Operator: VTS

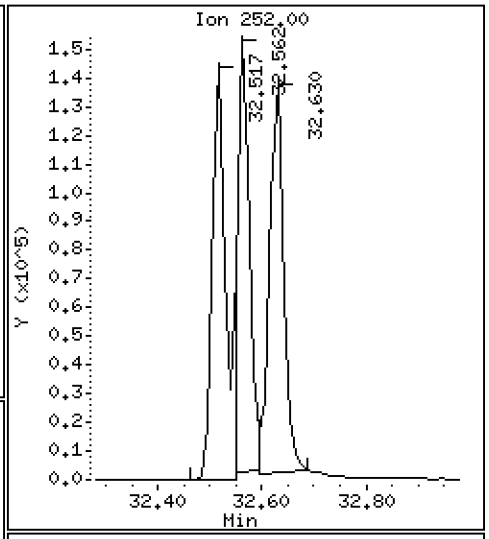
Column phase: Rxi-17Sil MS

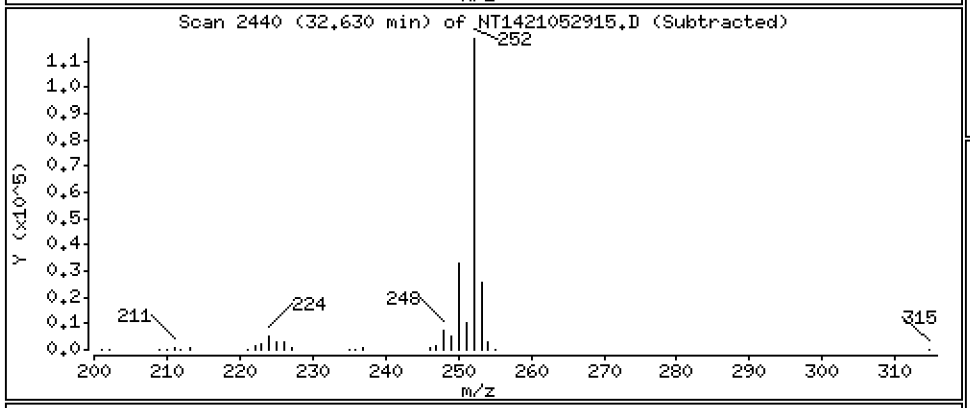
Column diameter: 0.25

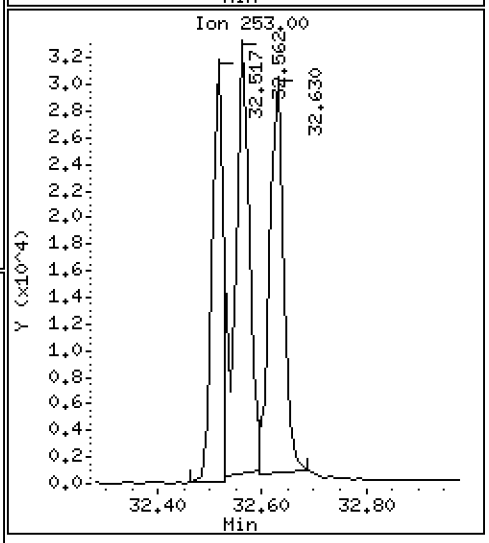
293 Benzo(j)fluoranthene

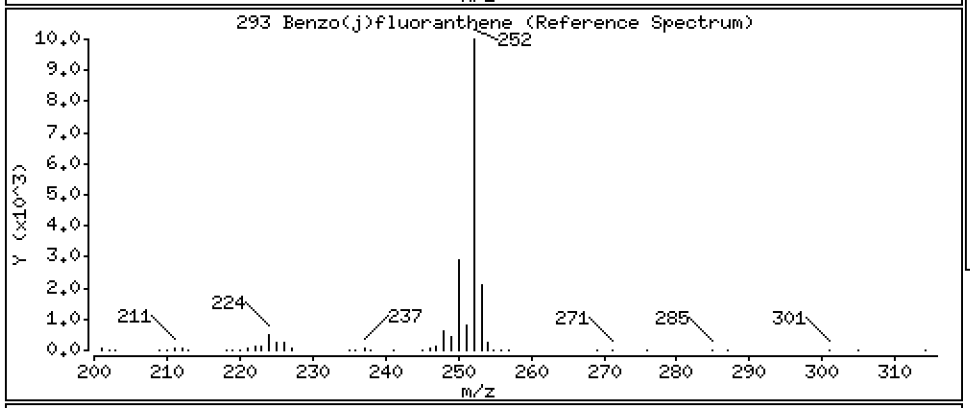
Concentration: 2.590 ug/mL

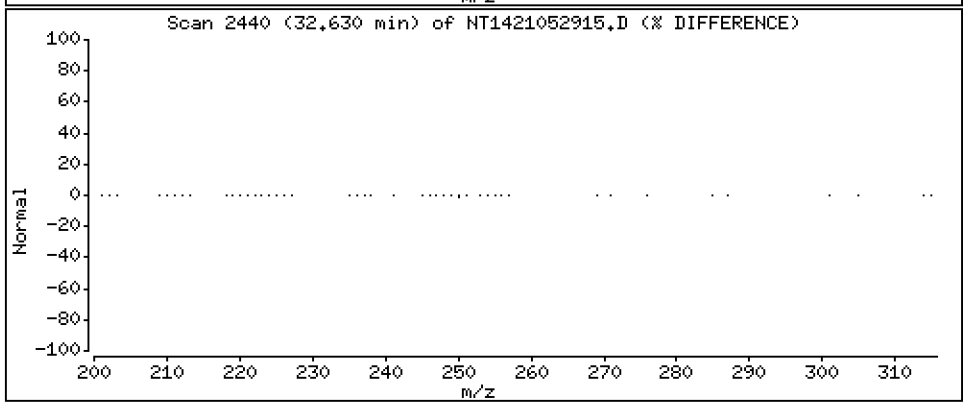












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Date : 29-MAY-2021 19:38

Client ID:

Instrument: nt14.i

Sample Info: SJF0025-SCV1

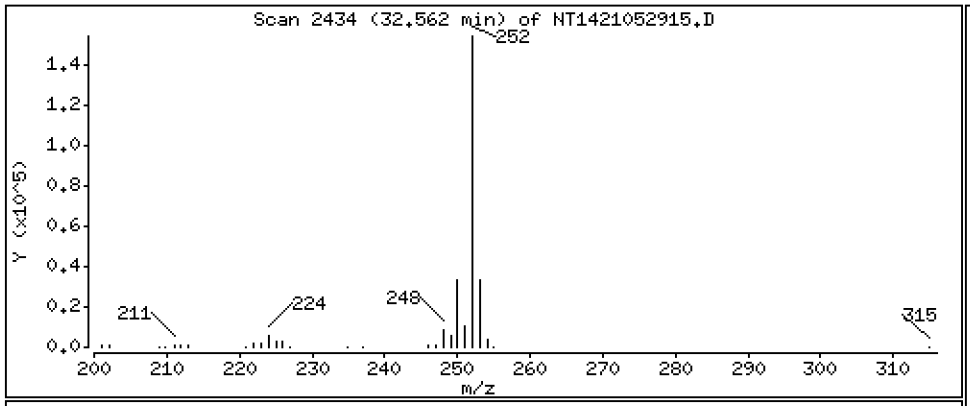
Operator: VTS

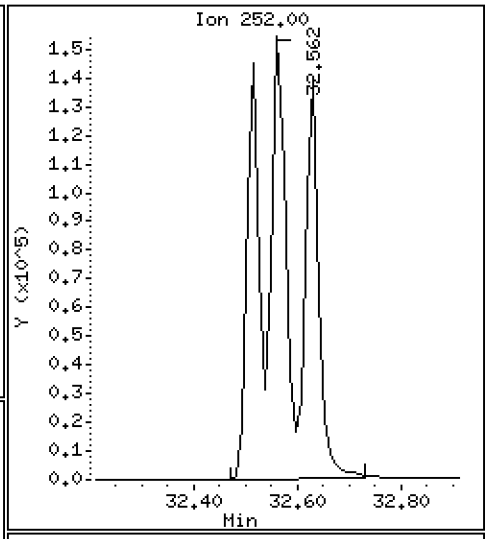
Column phase: Rxi-17Sil MS

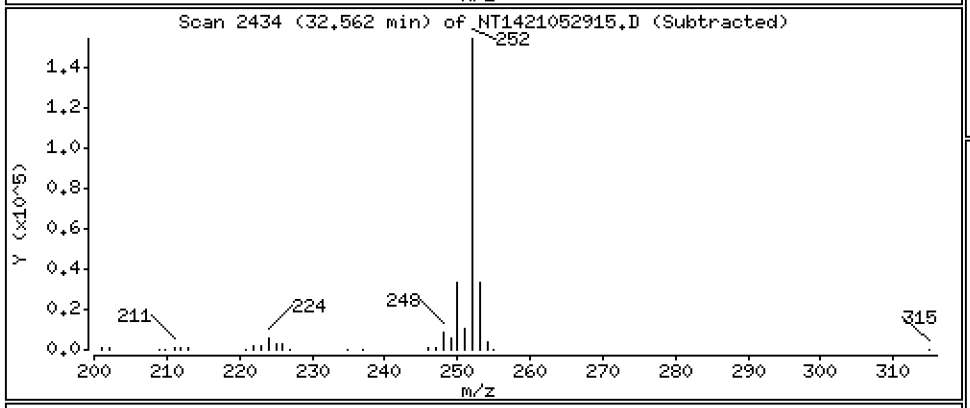
Column diameter: 0.25

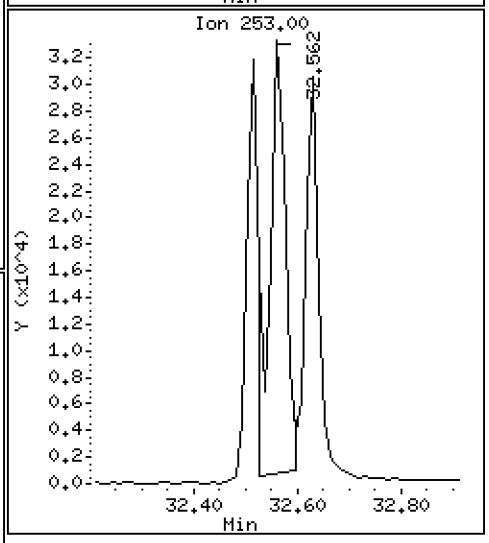
246 Total Benzofluoranthenes

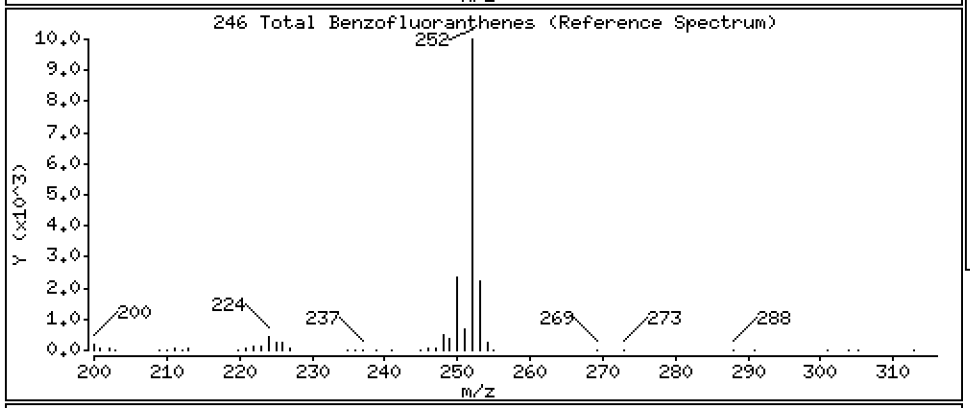
Concentration: 8.191 ug/mL

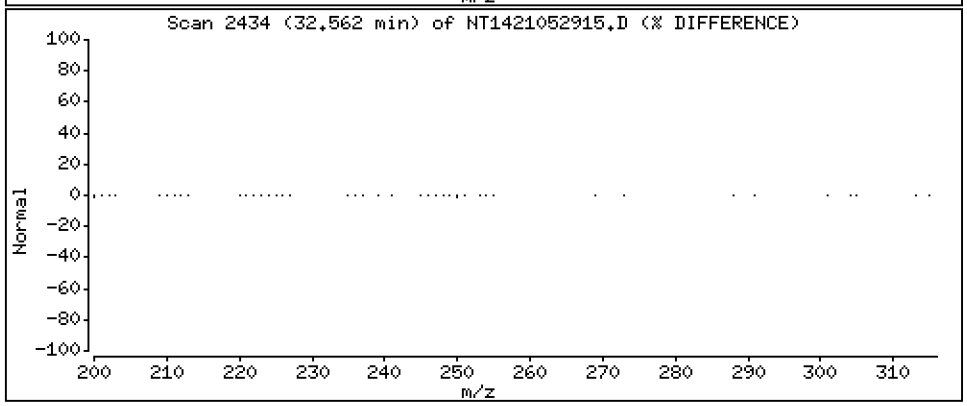












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Date : 29-MAY-2021 19:38

Client ID:

Instrument: nt14.i

Sample Info: SJF0025-SCV1

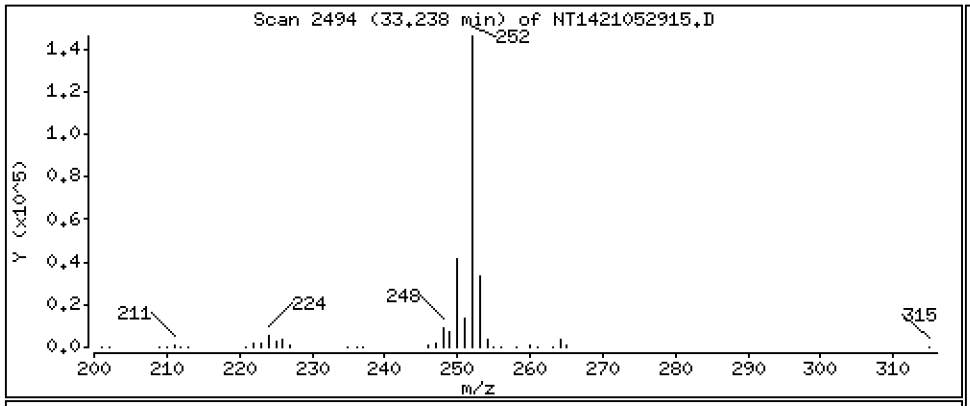
Operator: VTS

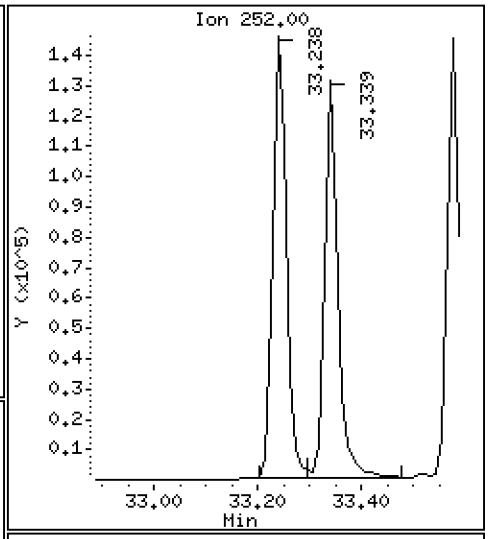
Column phase: Rxi-17Sil MS

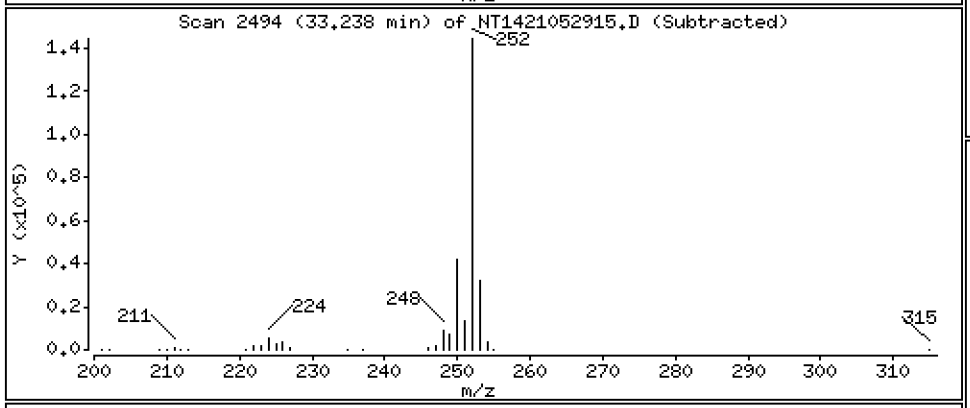
Column diameter: 0.25

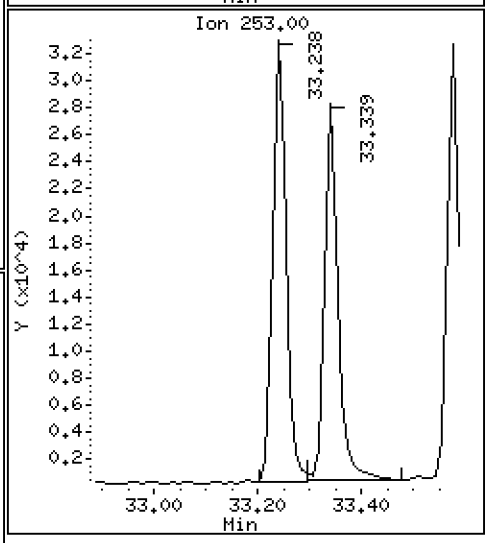
64 Benzo(e)pyrene

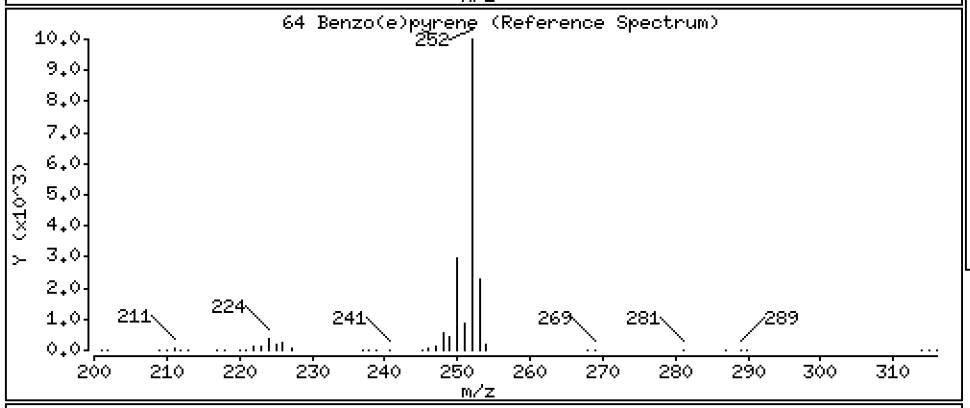
Concentration: 2.669 ug/mL

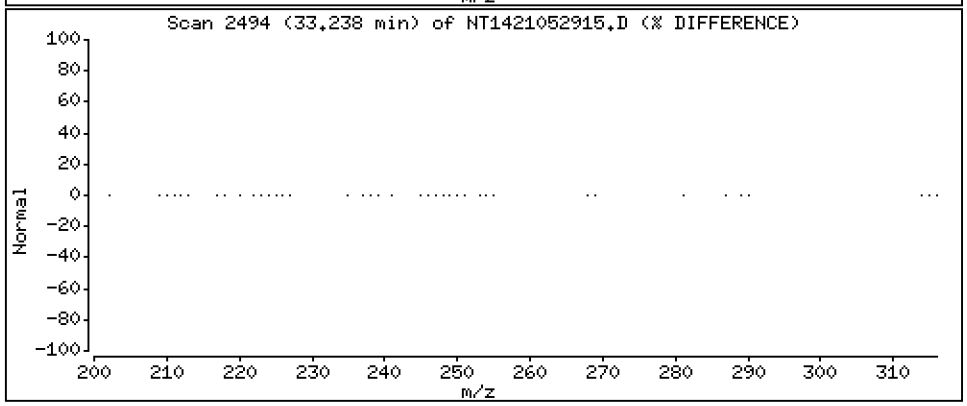












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Date : 29-MAY-2021 19:38

Client ID:

Instrument: nt14.i

Sample Info: SJF0025-SCV1

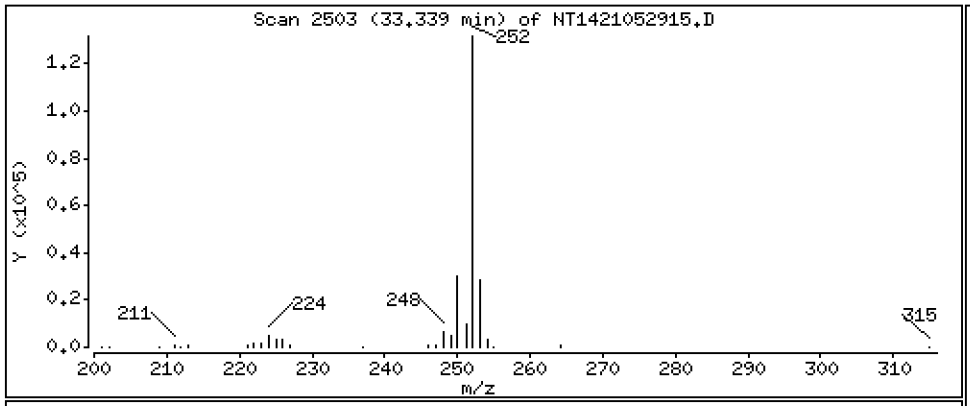
Operator: VTS

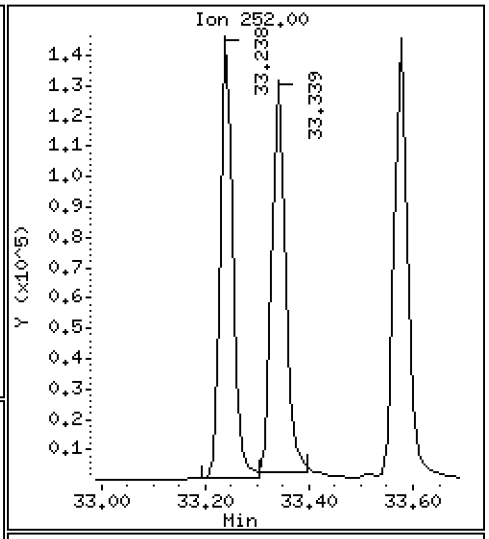
Column phase: Rxi-17Sil MS

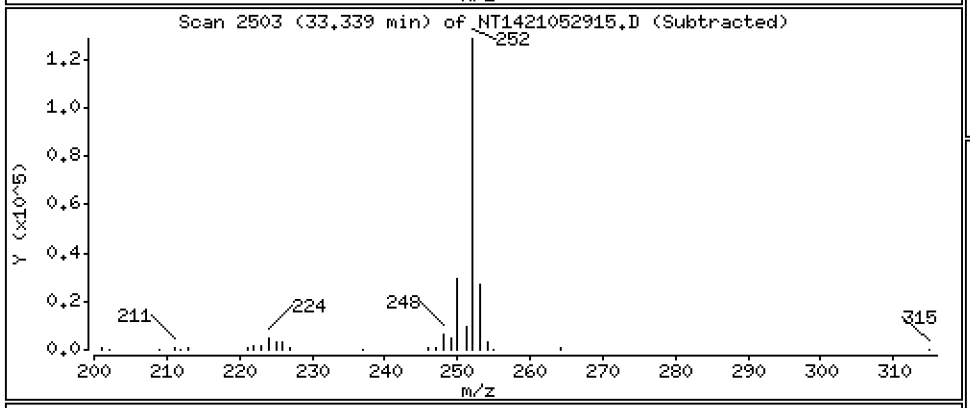
Column diameter: 0.25

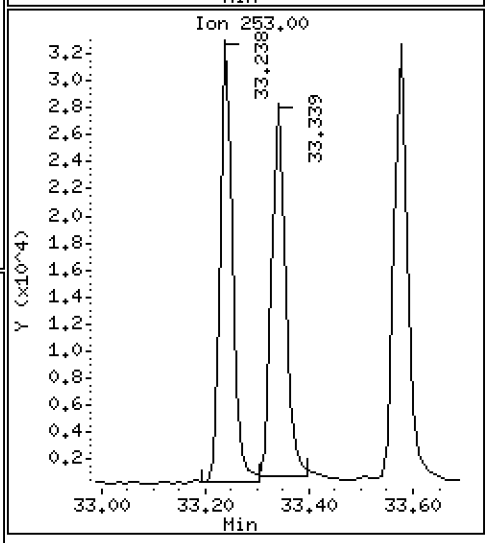
66 Benzo(a)pyrene

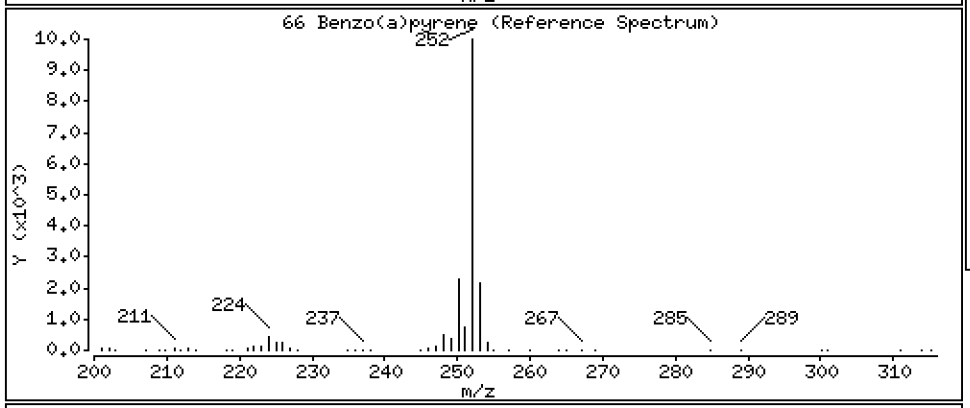
Concentration: 2.621 ug/mL

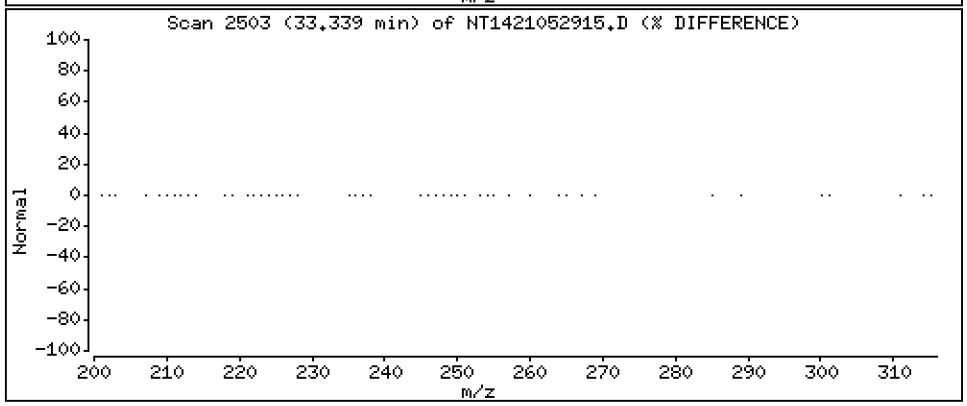












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Date : 29-MAY-2021 19:38

Client ID:

Instrument: nt14.i

Sample Info: SJF0025-SCV1

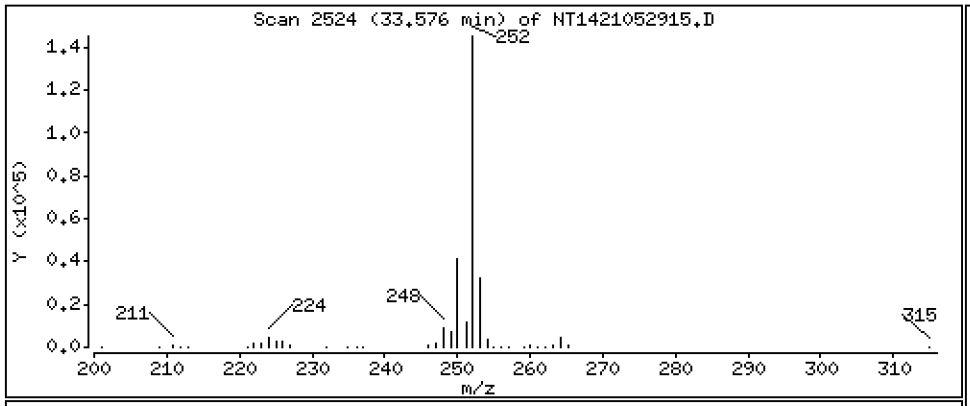
Operator: VTS

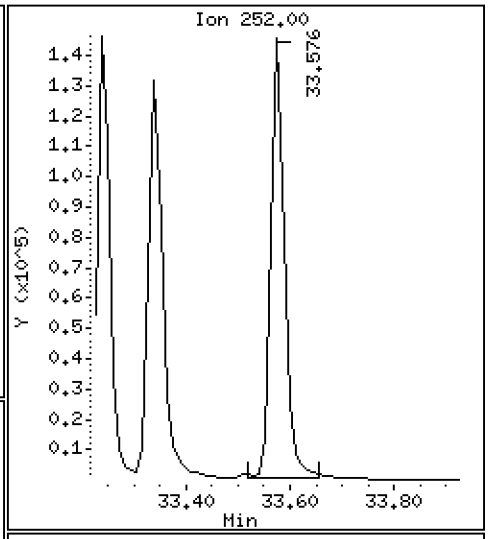
Column phase: Rxi-17Sil MS

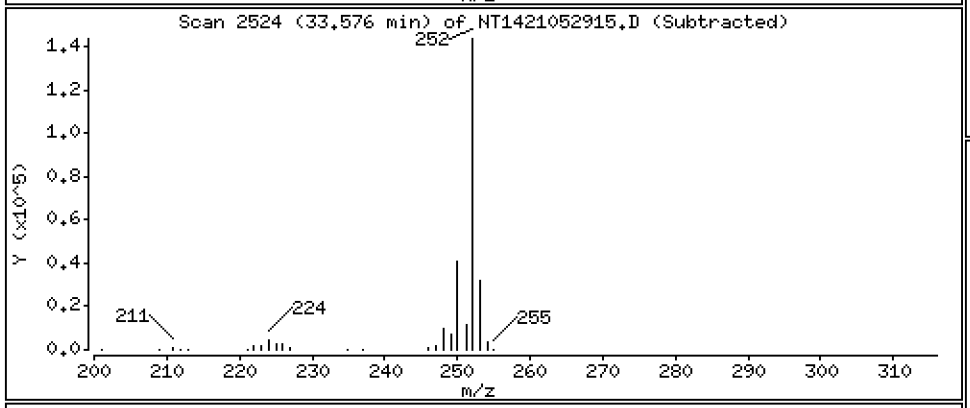
Column diameter: 0.25

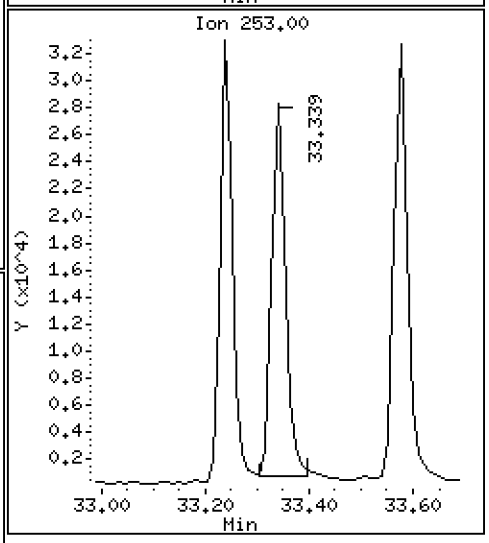
68 Perylene

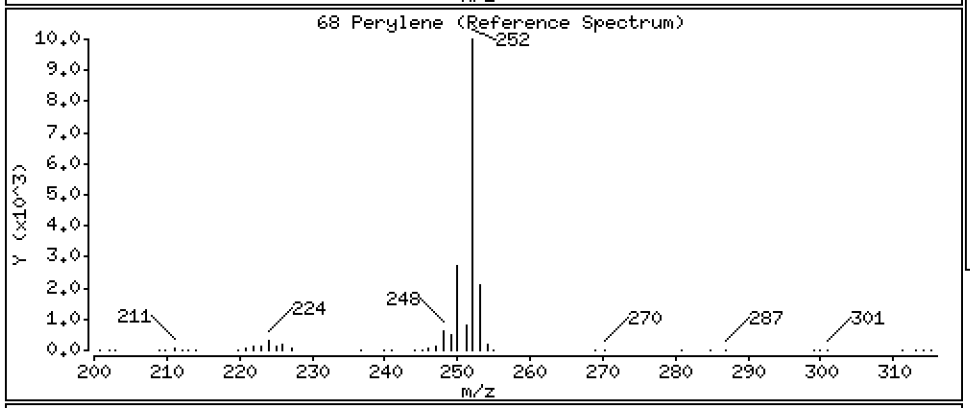
Concentration: 2.820 ug/mL

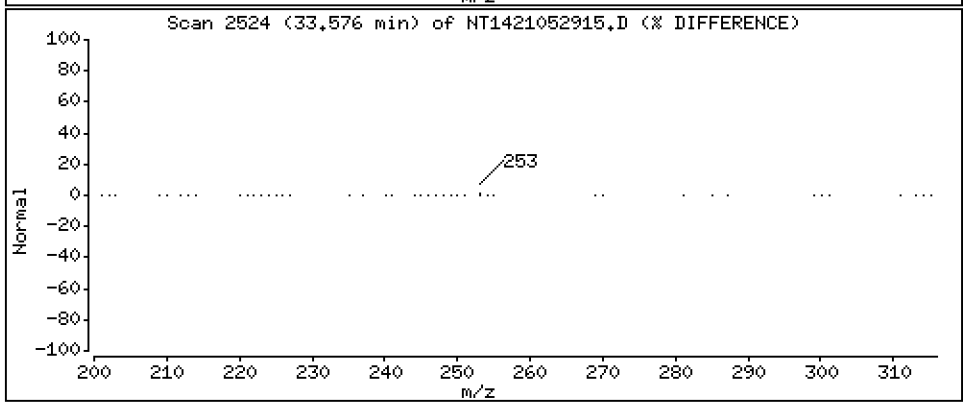












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Date : 29-MAY-2021 19:38

Client ID:

Instrument: nt14.i

Sample Info: SJF0025-SCV1

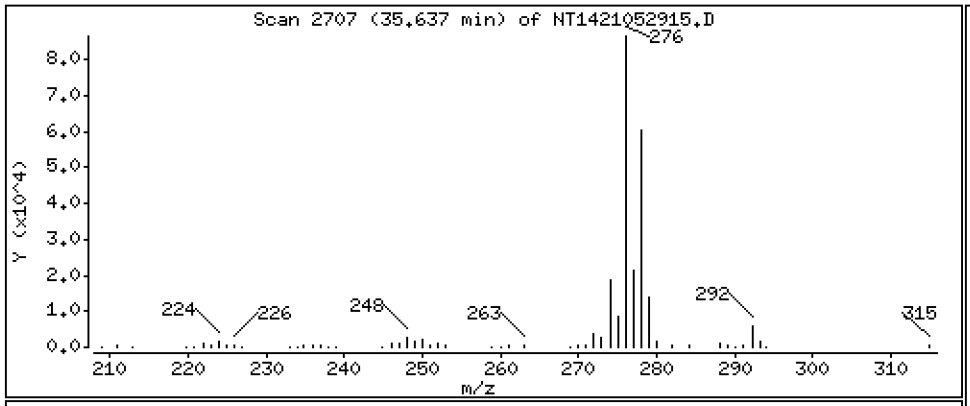
Operator: VTS

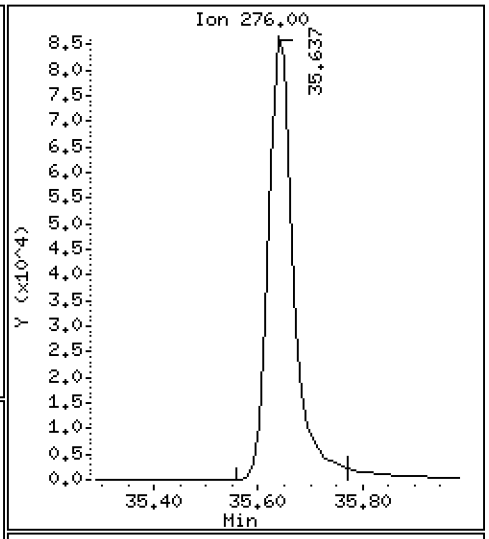
Column phase: Rxi-17Sil MS

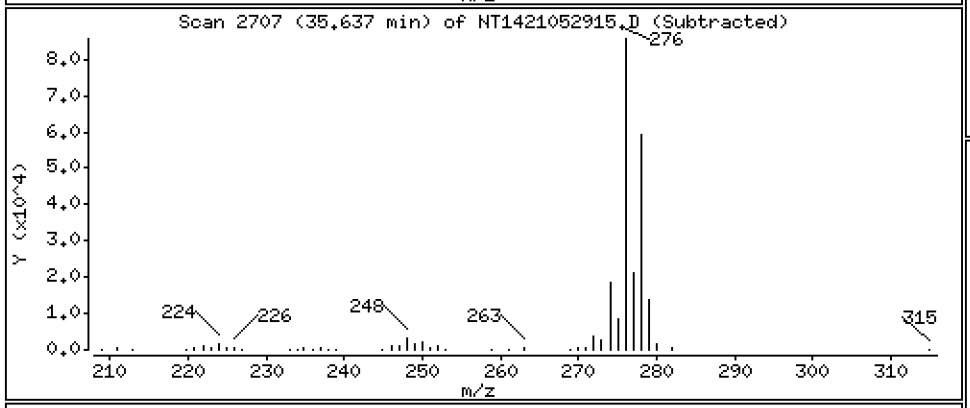
Column diameter: 0.25

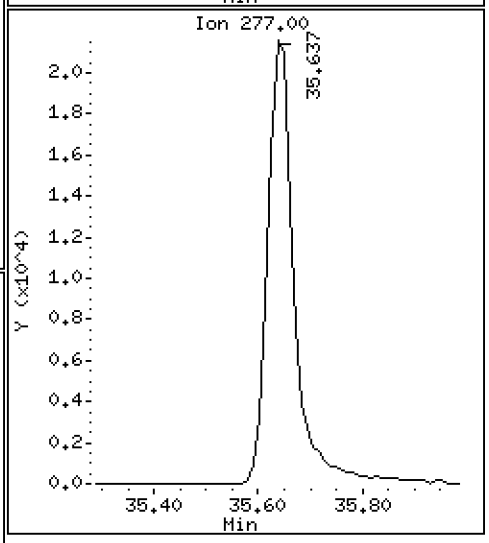
69 Indeno(1,2,3-cd)pyrene

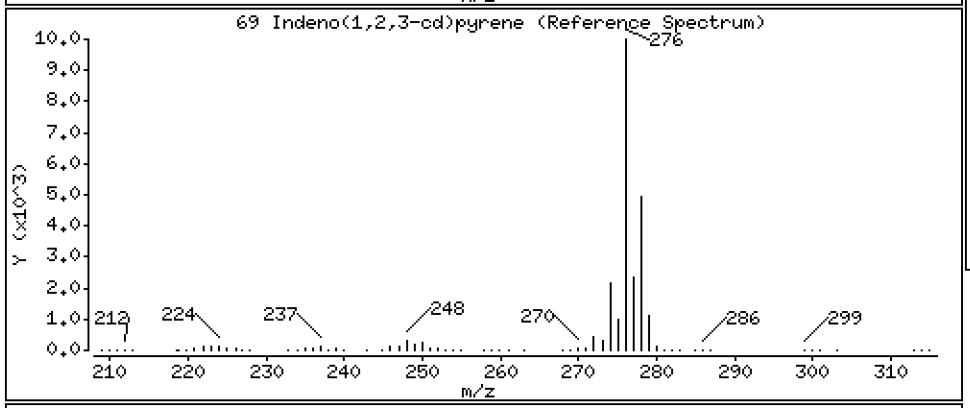
Concentration: 2.913 ug/mL

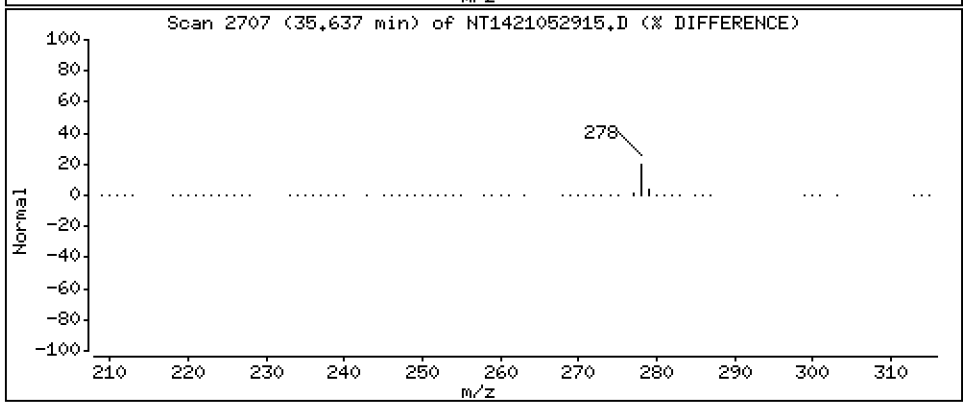












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Date : 29-MAY-2021 19:38

Client ID:

Instrument: nt14.i

Sample Info: SJF0025-SCV1

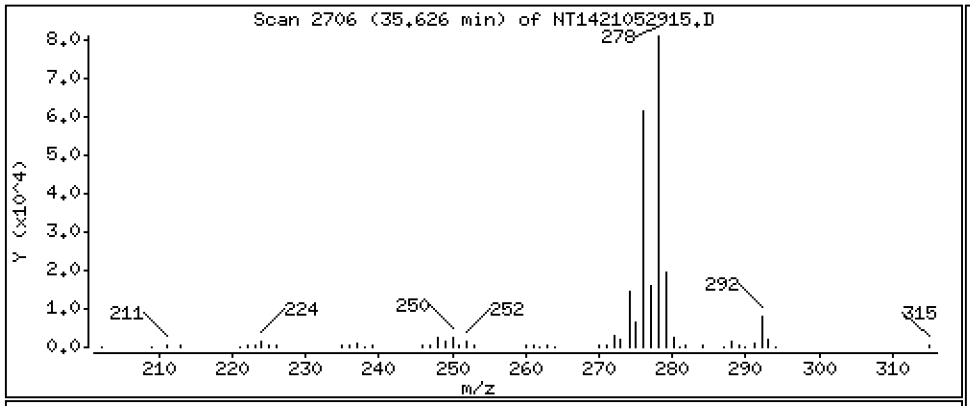
Operator: VTS

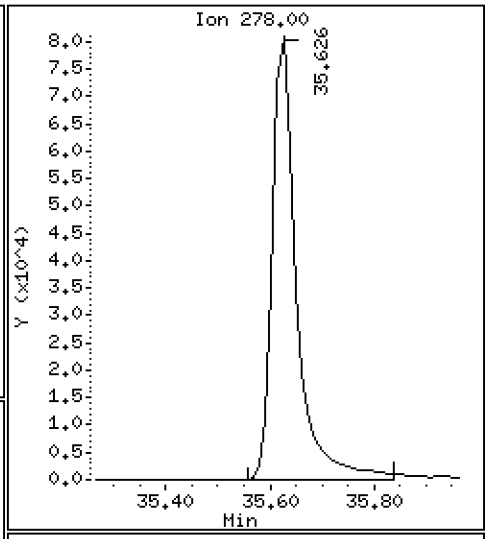
Column phase: Rxi-17Sil MS

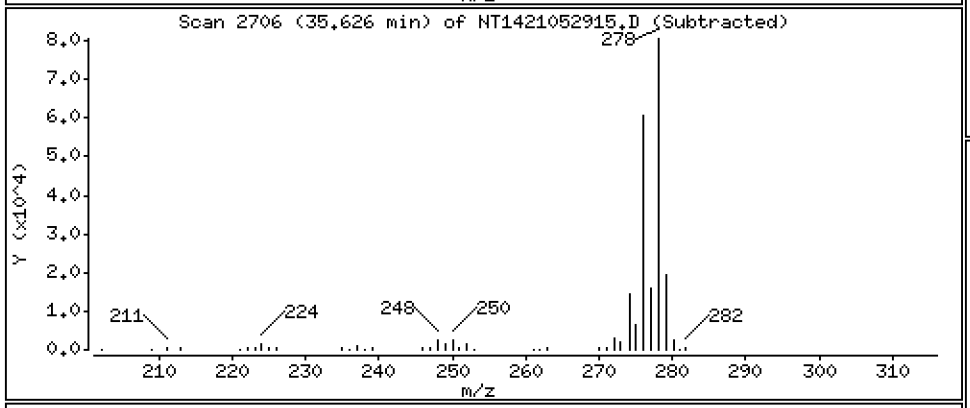
Column diameter: 0.25

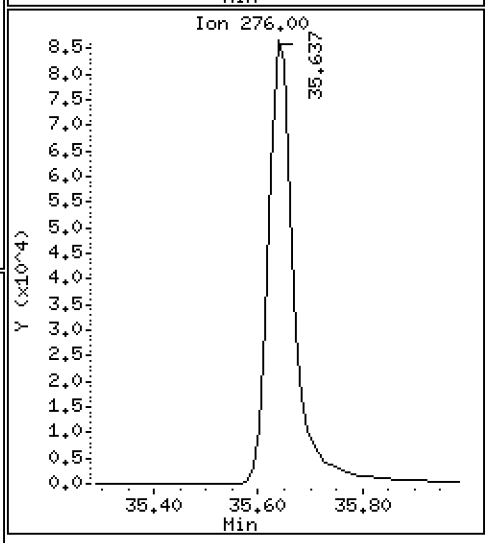
70 Dibenzo(a,h)anthracene

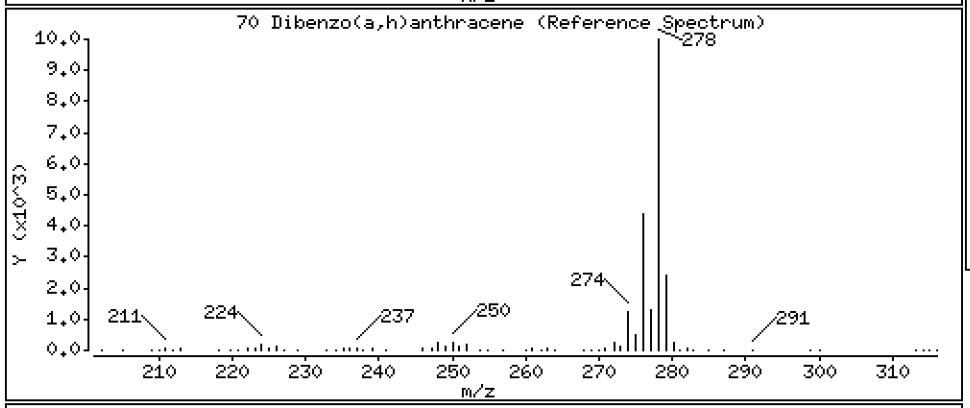
Concentration: 2.690 ug/mL

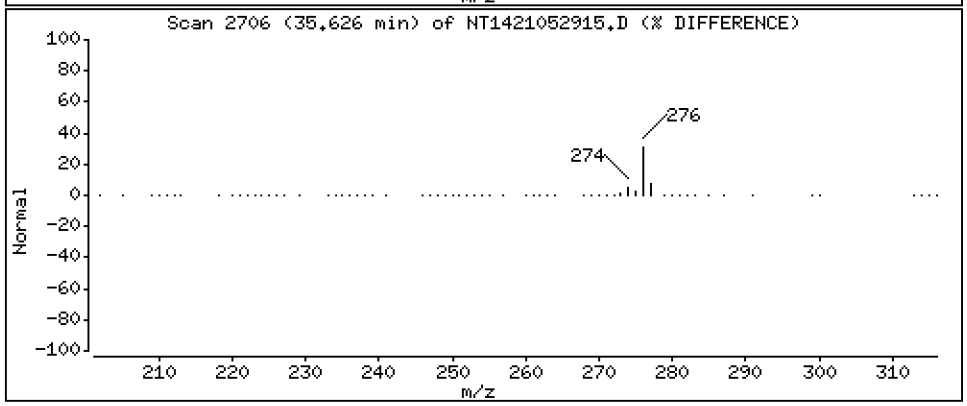












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Date : 29-MAY-2021 19:38

Client ID:

Instrument: nt14.i

Sample Info: SJF0025-SCV1

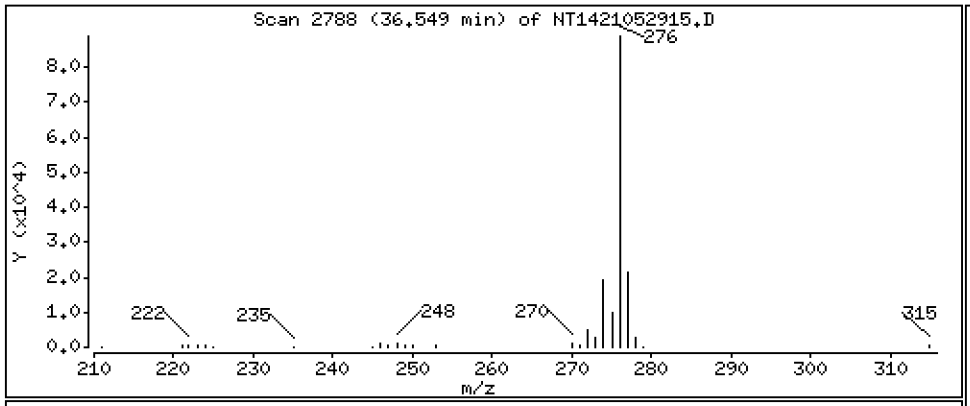
Operator: VTS

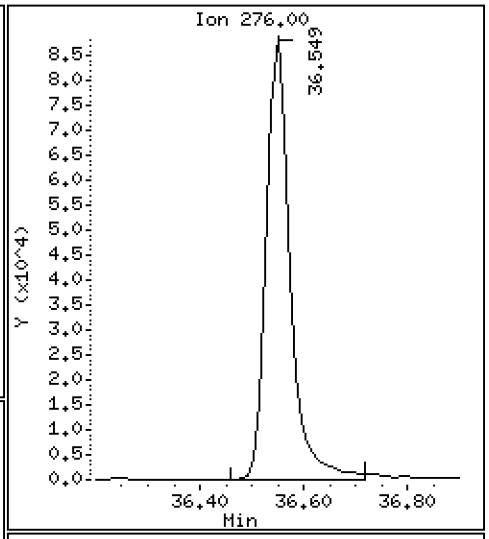
Column phase: Rxi-17Sil MS

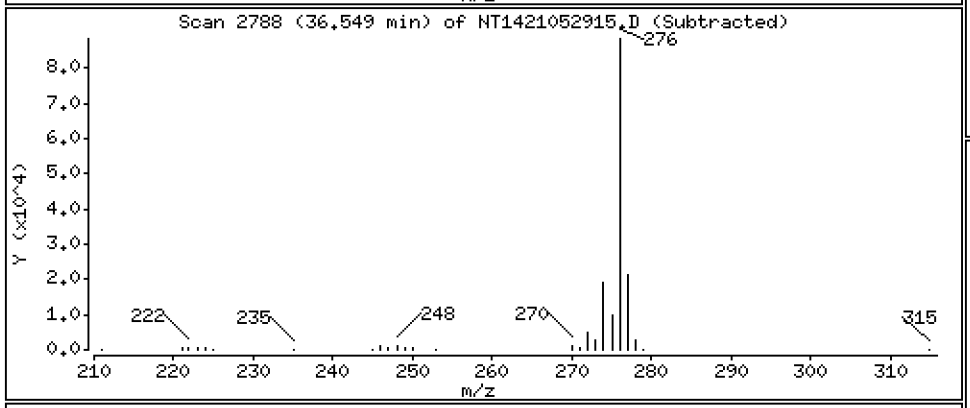
Column diameter: 0.25

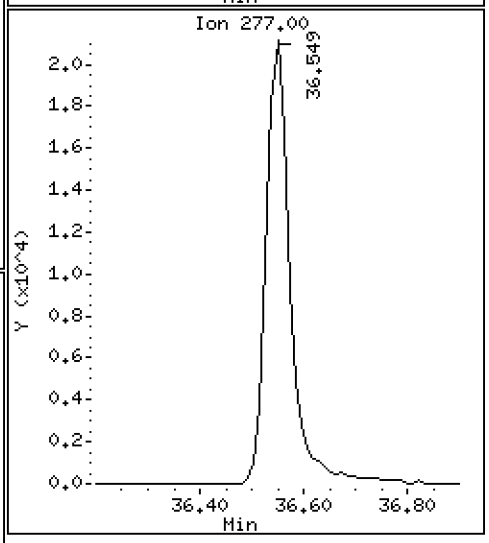
74 Benzo(g,h,i)perylene

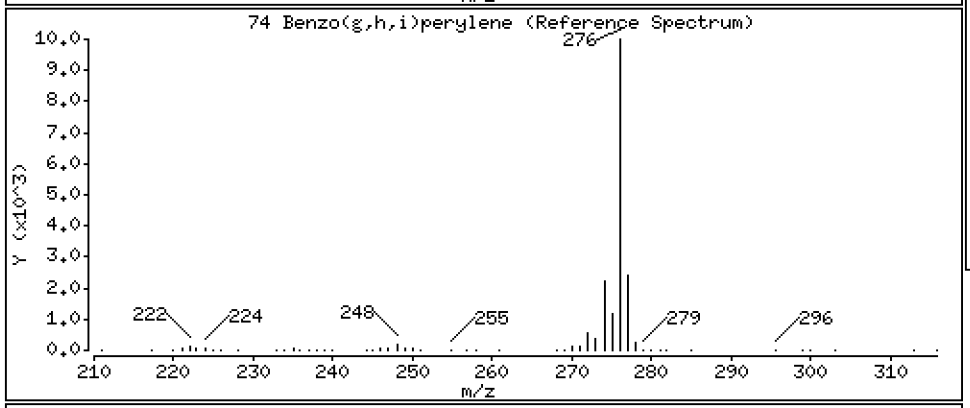
Concentration: 2.781 ug/mL

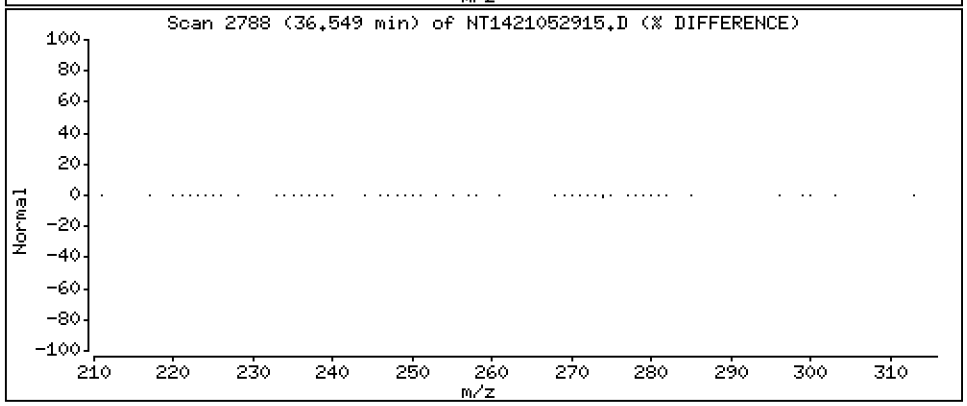












ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt14.i\20210529.b\NT1421052915.D
Lab Smp Id: SJF0025-SCV1
Inj Date : 29-MAY-2021 19:38
Operator : VTS Inst ID: nt14.i
Smp Info : SJF0025-SCV1
Misc Info :
Comment : 1ul Injection
Method : \\target\share\chem3\nt14.i\20210529.b\ALKYLPNA.m
Meth Date : 02-Jun-2021 19:03 yev Quant Type: ISTD
Cal Date : 29-MAY-2021 18:49 Cal File: NT1421052914.D
Als bottle: 9
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: TARGETS.sub
Target Version: 4.14
Processing Host: ORGDATA102

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/mL)
	1 trans-Decalin	138	7.146	7.156	(0.378)	24405	2.93881	2.939
	2 cis-Decalin	138	8.266	8.246	(0.437)	17380	2.55518	2.555
$	6 Naphthalene-d8	136	11.897	11.897	(0.629)	223244	2.88377	2.884(R)
	7 Naphthalene	128	11.957	11.957	(0.632)	203089	2.62492	2.625
	12 Benzo(b)thiophene	134	12.409	12.409	(0.656)	166732	2.62140	2.621
	16 2-Methylnaphthalene	141	13.794	13.794	(0.730)	119639	2.64523	2.645
	17 1-methylnaphthalene	141	14.245	14.244	(0.753)	117019	2.65947	2.659
	18 Biphenyl	154	15.431	15.431	(0.816)	174317	2.60835	2.608
	19 2,6-Dimethylnaphthalene	156	15.508	15.508	(0.820)	127969	2.60384	2.604
	20 Acenaphthylene	152	17.091	17.091	(0.904)	220486	2.62443	2.624
$	21 Acenaphthene-d10	164	17.377	17.377	(0.919)	134362	2.82593	2.826(R)
	22 Acenaphthene	153	17.486	17.486	(0.925)	142697	2.75525	2.755
	23 Dibenzofuran	168	17.860	17.860	(0.945)	199363	2.59511	2.595
	24 1,6,7-Trimethylnaphthalene	170	18.091	18.080	(0.957)	132237	2.64202	2.642
*	25 Fluorene-d10	176	18.907	18.907	(1.000)	166522	2.00000	
	26 Fluorene	166	19.009	19.009	(1.005)	155403	2.61087	2.611
	30 Dibenzothiophene	184	21.931	21.931	(1.160)	221357	2.63418	2.634
$	35 Phenanthrene-d10	188	22.239	22.239	(0.995)	230950	2.85128	2.851(R)
	36 Phenanthrene	178	22.327	22.327	(0.999)	229127	2.63951	2.640
*	250 Anthracene-d10	188	22.360	22.360	(1.000)	168360	2.00000	
	37 Anthracene	178	22.426	22.425	(1.003)	219523	2.68776	2.688
	42 Carbazole	167	23.712	23.701	(1.060)	194800	2.70414	2.704
	43 1-Methylphenanthrene	192	24.162	24.151	(1.081)	166388	2.66719	2.667
	44 Fluoranthene	202	26.142	26.131	(1.169)	256004	2.67188	2.672
	46 Pyrene	202	26.977	26.977	(1.207)	270263	2.71212	2.712
	51 Naphthobenzothiophene	234	Compound Not Detected.					
	55 Benzo(a)anthracene	228	30.095	30.095	(0.907)	251589	2.75565	2.756
$	56 Chrysene-d12	240	30.219	30.219	(0.911)	227348	3.08546	3.085(R)
	57 Chrysene	228	30.287	30.287	(0.913)	247820	2.77007	2.770
	62 Benzo(b)fluoranthene	252	32.517	32.517	(0.980)	295325	3.11894	3.119
	63 Benzo(k)fluoranthene	252	32.562	32.562	(0.981)	252708	2.48737	2.487
	293 Benzo(j)fluoranthene	252	32.629	32.629	(0.983)	242480	2.59014	2.590(H)
	246 Total Benzofluoranthenes	252	32.562	32.562	(0.981)	759661	8.19091	8.191(M)

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/mL)
* 251 Benzo(e)pyrene-d12	264	33.181	33.181	(1.000)	235397	2.00000	
64 Benzo(e)pyrene	252	33.238	33.238	(1.002)	247681	2.66885	2.669
66 Benzo(a)pyrene	252	33.339	33.339	(1.005)	221317	2.62146	2.621
$ 67 Perylene-d12	264	33.519	33.519	(1.010)	232231	2.91960	2.920(R)
68 Perylene	252	33.575	33.575	(1.012)	245483	2.82022	2.820(M)
69 Indeno(1,2,3-cd)pyrene	276	35.637	35.637	(1.074)	288654	2.91280	2.913(M)
70 Dibenzo(a,h)anthracene	278	35.625	35.614	(1.074)	251294	2.69021	2.690(M)
74 Benzo(g,h,i)perylene	276	36.549	36.549	(1.101)	272250	2.78084	2.781(M)

QC Flag Legend

R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

Data File: \\target\share\chem3\nt14.i\20210529.b\NT1421052915.D Page 1
Report Date: 02-Jun-2021 19:03

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt14.i
Lab File ID: NT1421052915.D
Lab Smp Id: SJF0025-SCV1
Analysis Type: SV
Quant Type: ISTD
Operator: VTS
Method File: \\target\share\chem3\nt14.i\20210529.b\ALKYLPNA.m
Misc Info:

Calibration Date: 29-MAY-2021
Calibration Time: 14:01
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
25 Fluorene-d10	159478	79739	318956	166522	4.42
250 Anthracene-d10	170161	85081	340322	168360	-1.06
251 Benzo(e)pyrene-d1	236612	118306	473224	235397	-0.51

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
25 Fluorene-d10	18.91	18.41	19.41	18.91	0.00
250 Anthracene-d10	22.36	21.86	22.86	22.36	0.00
251 Benzo(e)pyrene-d1	33.18	32.68	33.68	33.18	0.00

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

REVIEW SUMMARY FOR FILE - NT1421052915.D

Lab ID: SJF0025-SCV1
nt14.i, 20210529.b\ALKYLPNA.m, 29-MAY-2021 19:38

RT	CO-ELUTION COMPOUNDS
	NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
NONE			

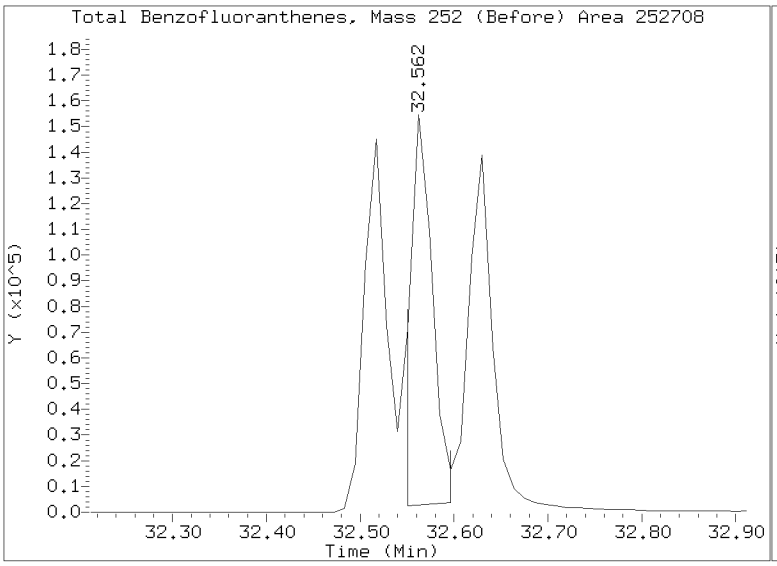
RRT check based on Ccal File: NT1421052914.D

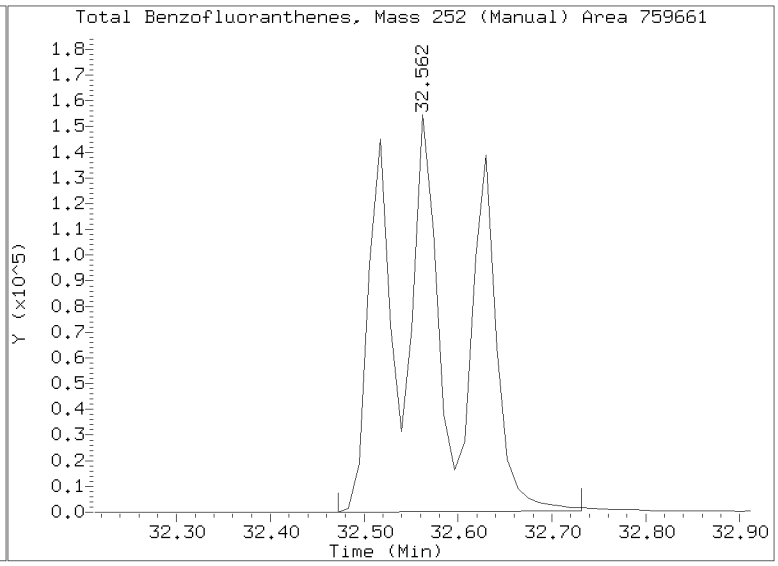
On Column LOD for nt14.i, 20210529.b\ALKYLPNA.m, TARGETS.sub = 0.0000

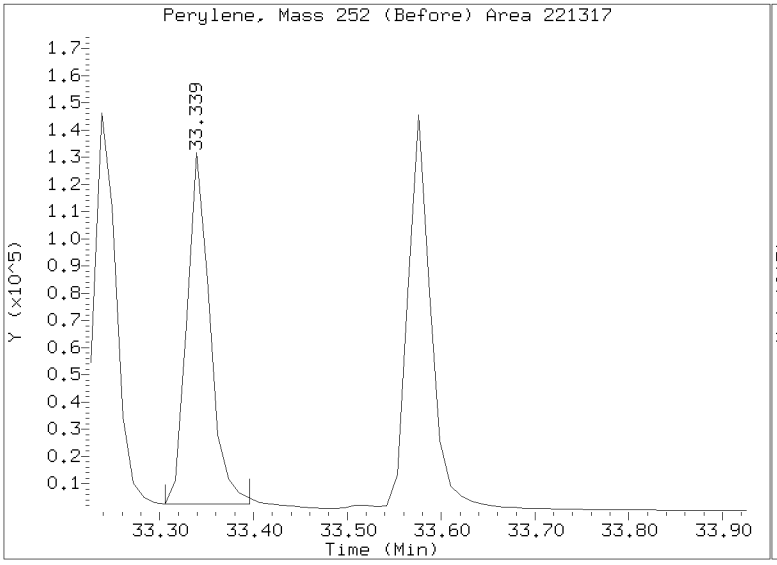
* Only compounds listed in the work order have been verified by the analyst *

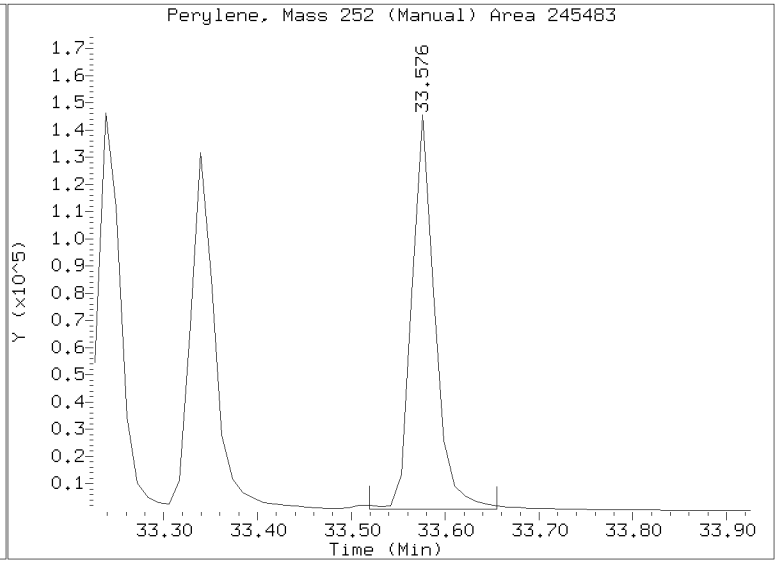
Quant Ion Manual Peak Adjustment Report

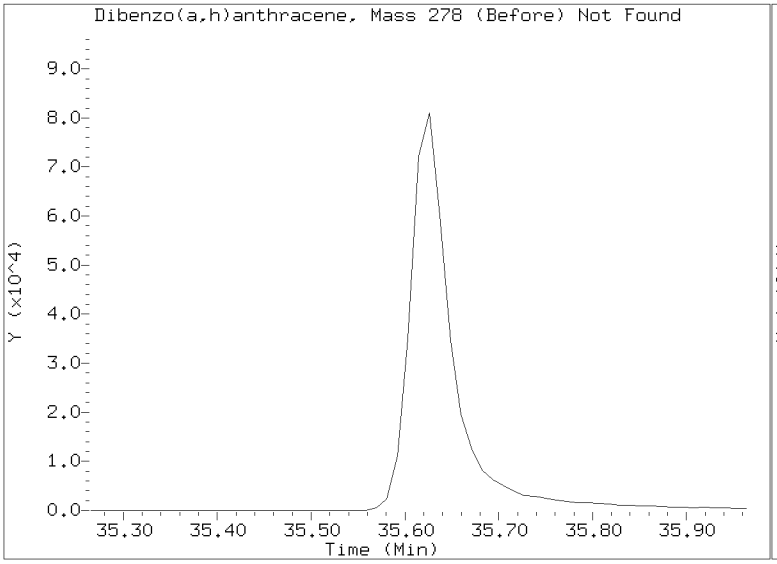
Datafile: //target/share/chem3/nt14.i/20210529.b/NT1421052915.D
Injection Date: 29-MAY-2021 19:38
Lab ID:SJF0025-SCV1 Client ID:
Report Date: 06/02/2021 19:03

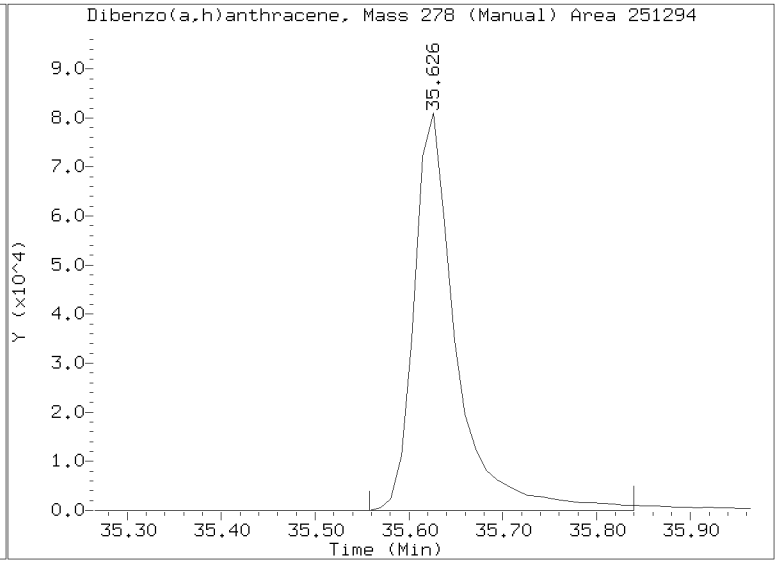






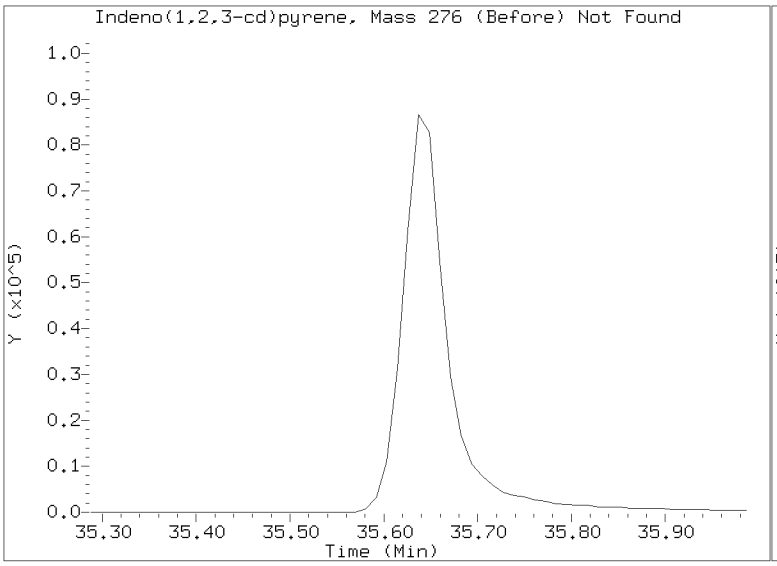


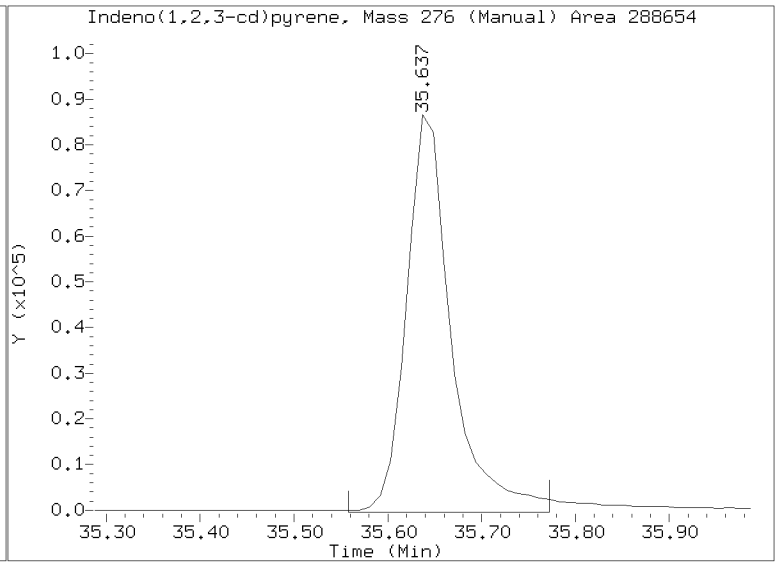


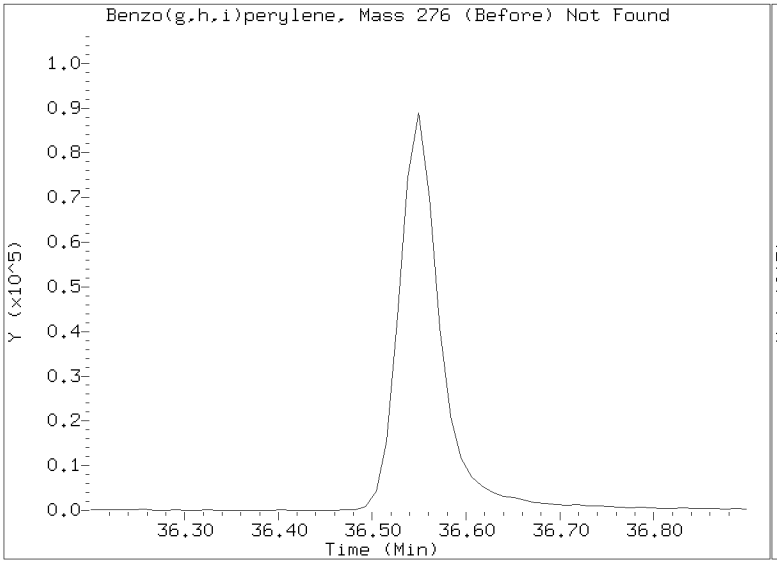


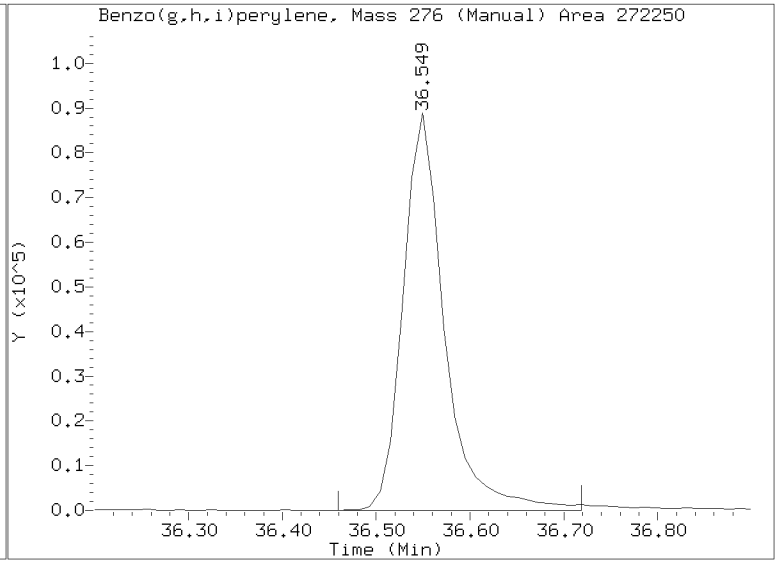
Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt14.i/20210529.b/NT1421052915.D
Injection Date: 29-MAY-2021 19:38
Lab ID:SJF0025-SCV1 Client ID:
Report Date: 06/02/2021 19:03









Data File: \\target\share\chem3\nt14.i\20210529.b\NT1421052916.D

Date : 29-MAY-2021 20:26

Client ID:

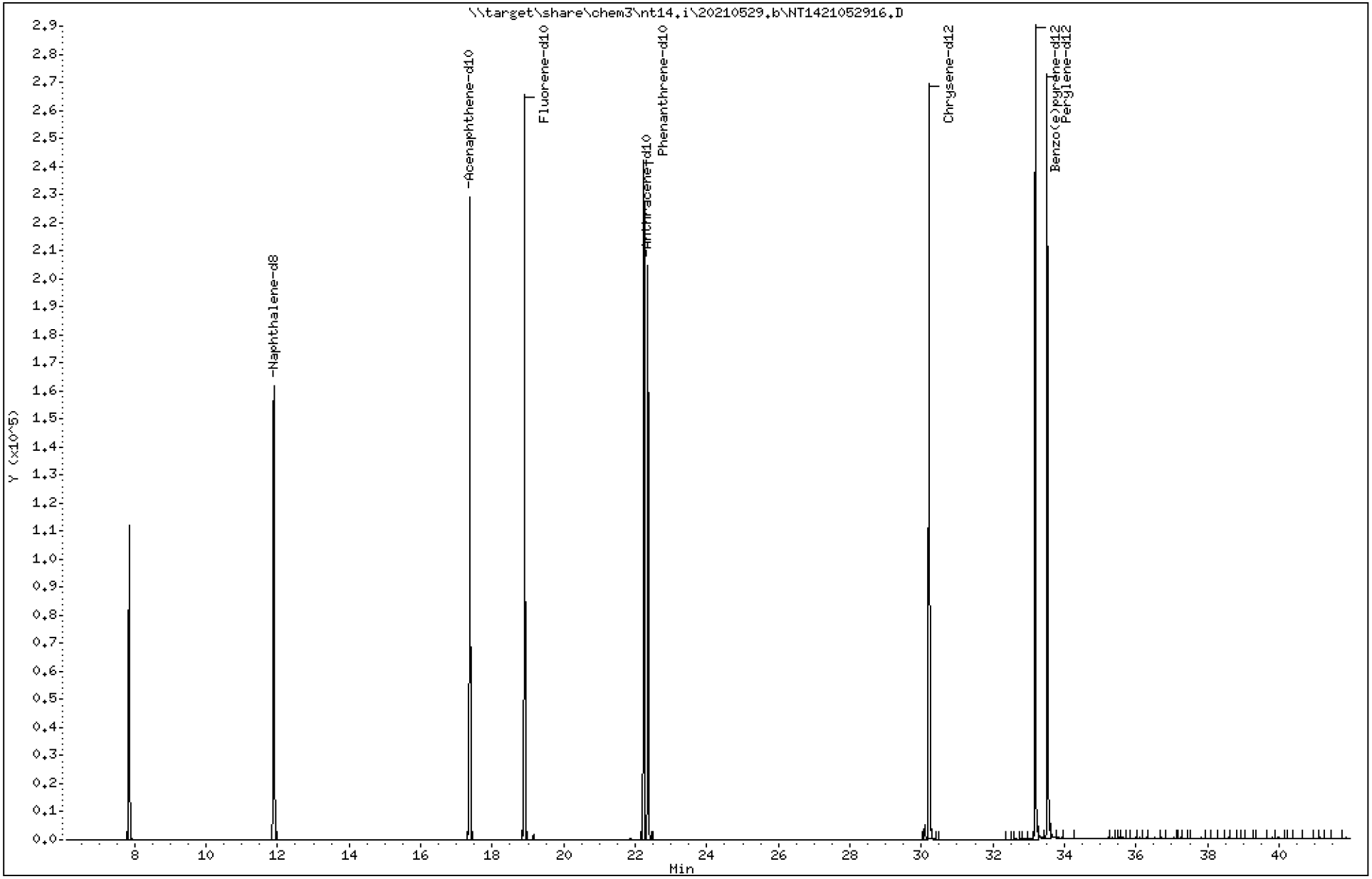
Instrument: nt14.i

Sample Info: SJF0025-ICB1

Operator: VTS

Column phase: Rxi-17Sil MS

Column diameter: 0.25



ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt14.i\20210529.b\NT1421052916.D
Lab Smp Id: SJF0025-ICB1
Inj Date : 29-MAY-2021 20:26
Operator : VTS Inst ID: nt14.i
Smp Info : SJF0025-ICB1
Misc Info :
Comment : 1ul Injection
Method : \\target\share\chem3\nt14.i\20210529.b\ALKYLPNA.m
Meth Date : 02-Jun-2021 19:03 yev Quant Type: ISTD
Cal Date : 29-MAY-2021 18:49 Cal File: NT1421052914.D
Als bottle: 10
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: TARGETS.sub
Target Version: 4.14
Processing Host: ORGDATA102

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/mL)
	1 trans-Decalin	138	Compound Not Detected.					
	2 cis-Decalin	138	Compound Not Detected.					
$	6 Naphthalene-d8	136	11.897	11.897	(0.629)	223234	2.61317	2.613(R)
	7 Naphthalene	128	Compound Not Detected.					
	12 Benzo(b)thiophene	134	Compound Not Detected.					
	16 2-Methylnaphthalene	141	Compound Not Detected.					
	17 1-methylnaphthalene	141	Compound Not Detected.					
	18 Biphenyl	154	Compound Not Detected.					
	19 2,6-Dimethylnaphthalene	156	Compound Not Detected.					
	20 Acenaphthylene	152	Compound Not Detected.					
$	21 Acenaphthene-d10	164	17.377	17.377	(0.919)	140978	2.68696	2.687(R)
	22 Acenaphthene	153	Compound Not Detected.					
	23 Dibenzofuran	168	Compound Not Detected.					
	24 1,6,7-Trimethylnaphthalene	170	Compound Not Detected.					
*	25 Fluorene-d10	176	18.907	18.907	(1.000)	183758	2.00000	
	26 Fluorene	166	Compound Not Detected.					
	30 Dibenzothiophene	184	Compound Not Detected.					
$	35 Phenanthrene-d10	188	22.239	22.239	(0.995)	246541	2.70071	2.701(R)
	36 Phenanthrene	178	Compound Not Detected.					
*	250 Anthracene-d10	188	22.360	22.360	(1.000)	189746	2.00000	
	37 Anthracene	178	Compound Not Detected.					
	42 Carbazole	167	Compound Not Detected.					
	43 1-Methylphenanthrene	192	Compound Not Detected.					
	44 Fluoranthene	202	Compound Not Detected.					
	46 Pyrene	202	Compound Not Detected.					
	51 Naphthobenzothiophene	234	Compound Not Detected.					
	55 Benzo(a)anthracene	228	Compound Not Detected.					
$	56 Chrysene-d12	240	30.219	30.219	(0.911)	237472	2.86010	2.860(R)
	57 Chrysene	228	Compound Not Detected.					
	62 Benzo(b)fluoranthene	252	Compound Not Detected.					
	63 Benzo(k)fluoranthene	252	Compound Not Detected.					
	293 Benzo(j)fluoranthene	252	Compound Not Detected.					
	246 Total Benzofluoranthenes	252	Compound Not Detected.					

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/mL)
* 251 Benzo(e)pyrene-d12	264	33.181	33.181	(1.000)	265253	2.00000	
64 Benzo(e)pyrene	252	Compound Not Detected.					
66 Benzo(a)pyrene	252	Compound Not Detected.					
$ 67 Perylene-d12	264	33.519	33.519	(1.010)	237293	2.64745	2.647(R)
68 Perylene	252	Compound Not Detected.					
69 Indeno(1,2,3-cd)pyrene	276	Compound Not Detected.					
70 Dibenzo(a,h)anthracene	278	Compound Not Detected.					
74 Benzo(g,h,i)perylene	276	Compound Not Detected.					

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

Data File: \\target\share\chem3\nt14.i\20210529.b\NT1421052916.D Page 1
Report Date: 02-Jun-2021 19:03

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt14.i
Lab File ID: NT1421052916.D
Lab Smp Id: SJF0025-ICB1
Analysis Type: SV
Quant Type: ISTD
Operator: VTS
Method File: \\target\share\chem3\nt14.i\20210529.b\ALKYLPNA.m
Misc Info:

Calibration Date: 29-MAY-2021
Calibration Time: 14:01
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
25 Fluorene-d10	159478	79739	318956	183758	15.22
250 Anthracene-d10	170161	85081	340322	189746	11.51
251 Benzo(e)pyrene-d1	236612	118306	473224	265253	12.10

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
25 Fluorene-d10	18.91	18.41	19.41	18.91	0.00
250 Anthracene-d10	22.36	21.86	22.86	22.36	0.00
251 Benzo(e)pyrene-d1	33.18	32.68	33.68	33.18	0.00

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

REVIEW SUMMARY FOR FILE - NT1421052916.D

Lab ID: SJF0025-ICB1
nt14.i, 20210529.b\ALKYLPNA.m, 29-MAY-2021 20:26

RT	CO-ELUTION COMPOUNDS
	NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
NONE			

RRT check based on Ccal File: NT1421052914.D

On Column LOD for nt14.i, 20210529.b\ALKYLPNA.m, TARGETS.sub = 0.0000

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

Analytical Resources, Incorporated
Analytical Chemists and Consultants

INITIAL CALIBRATION DATA
EPA 8270E-SIM

Laboratory:	Analytical Resources, Inc.	SDG:	21E0106
Client:	Anchor QEA, LLC	Project:	Gasco Siltronic - US Moorings
Calibration:	EF00019	Instrument:	NT14
Calibration Date:	06/08/2021	Column (1):	ZB-5MS

Compound	Level 01		Level 02		Level 03		Level 04		Level 05		Level 06	
		RRF		RRF		RRF		RRF		RRF		RRF
Fluorene-d10	2	79739										
Anthracene-d10	2	85080.5										
Benzo(e)pyrene-d12	2	118306										

Analytical Resources, Incorporated
Analytical Chemists and Consultants

INITIAL CALIBRATION DATA
EPA 8270E-SIM

Laboratory:	Analytical Resources, Inc.	SDG:	21E0106
Client:	Anchor QEA, LLC	Project:	Gasco Siltronic - US Moorings
Calibration:	EF00019	Instrument:	NT14
Calibration Date:	06/08/2021	Column (1):	ZB-5MS

COMPOUND	Mean RRF	RRF RSD	Linear COD	Quad COD	Limit Type & Limit	Q
Fluorene-d10		0.0			RSD (15)	
Anthracene-d10		0.0			RSD (15)	
Benzo(e)pyrene-d12		0.0			RSD (15)	

Analytical Resources, Incorporated
Analytical Chemists and Consultants

SECOND-SOURCE CALIBRATION VERIFICATION

EPA 8270E-SIM

Laboratory: Analytical Resources, Inc.
Client: Anchor QEA, LLC
Calibration: EF00008
Sequence: SJF0025

SDG: 21E0106
Project: Gasco Siltronic - US Moorings
Laboratory ID: SJF0025-SCV1
Sequence Name: Secondary Cal Check
Standard ID: J004707

ANALYTE	EXPECTED (ug/mL)	FOUND (ug/mL)	% DRIFT	QC LIMIT
trans-Decalin	2.5000	2.9	17.6	20.00
cis-Decalin	2.5000	2.6	2.2	20.00
Naphthalene	2.5000	2.6	5.0	20.00
1-Methylnaphthalene	2.5000	2.7	6.4	20.00
2-Methylnaphthalene	2.5000	2.6	5.8	20.00
Biphenyl	2.5000	2.6	4.3	20.00
2,6-Dimethylnaphthalene	2.5000	2.6	4.2	20.00
Acenaphthylene	2.5000	2.6	5.0	20.00
Acenaphthene	2.5000	2.8	10.2	20.00
Dibenzofuran	2.5000	2.6	3.8	20.00
2,3,5-Trimethylnaphthalene	2.5000	2.6	5.7	20.00
Fluorene	2.5000	2.6	4.4	20.00
Benzo(b)thiophene	2.5000	2.6	4.9	20.00
Phenanthrene	2.5000	2.6	5.6	20.00
Anthracene	2.5000	2.7	7.5	20.00
Carbazole	2.5000	2.7	8.2	20.00
1-Methylphenanthrene	2.5000	2.7	6.7	20.00
Fluoranthene	2.5000	2.7	6.9	20.00
Dibenzothiophene	2.5000	2.6	5.4	20.00
Pyrene	2.5000	2.7	8.5	20.00
Benzo(a)anthracene	2.5000	2.8	10.2	20.00
Chrysene	2.5000	2.8	10.8	20.00
Benzo(b)fluoranthene	2.5000	3.1	24.8	
Benzo(j)fluoranthene	2.5000	2.6	3.6	
Benzo(k)fluoranthene	2.5000	2.5	-0.5	
Benzo(e)pyrene	2.5000	2.7	6.8	20.00
Benzo(a)pyrene	2.5000	2.6	4.9	20.00
Indeno(1,2,3-cd)pyrene	2.5000	2.9	16.5	20.00
Dibenzo(a,h)anthracene	2.5000	2.7	7.6	20.00
Benzo(g,h,i)perylene	2.5000	2.8	11.2	20.00
Perylene	2.5000	2.8	12.8	20.00
Naphthalene-d8	2.5000	2.88	15.4	20.00
Acenaphthene-d10	2.5000	2.83	13.0	20.00
Phenanthrene-d10	2.5000	2.85	14.1	20.00
Chrysene-d12	2.5000	3.09	23.4	20.00

Analytical Resources, Incorporated
Analytical Chemists and Consultants

SECOND-SOURCE CALIBRATION VERIFICATION

EPA 8270E-SIM

Laboratory: Analytical Resources, Inc.
SDG: 21E0106
Client: Anchor QEA, LLC
Project: Gasco Siltronic - US Moorings
Calibration: EF00008
Laboratory ID: SJF0025-SCV1
Sequence: SJF0025
Sequence Name: Secondary Cal Check
Standard ID: J004707

Perylene-d12	2.5000	2.92	16.8	20.00

* Indicates values outside of QC limits

Data File: \\target\share\chem3\nt14.i\20210529.b\NT1421052915.D

Date : 29-MAY-2021 19:38

Client ID:

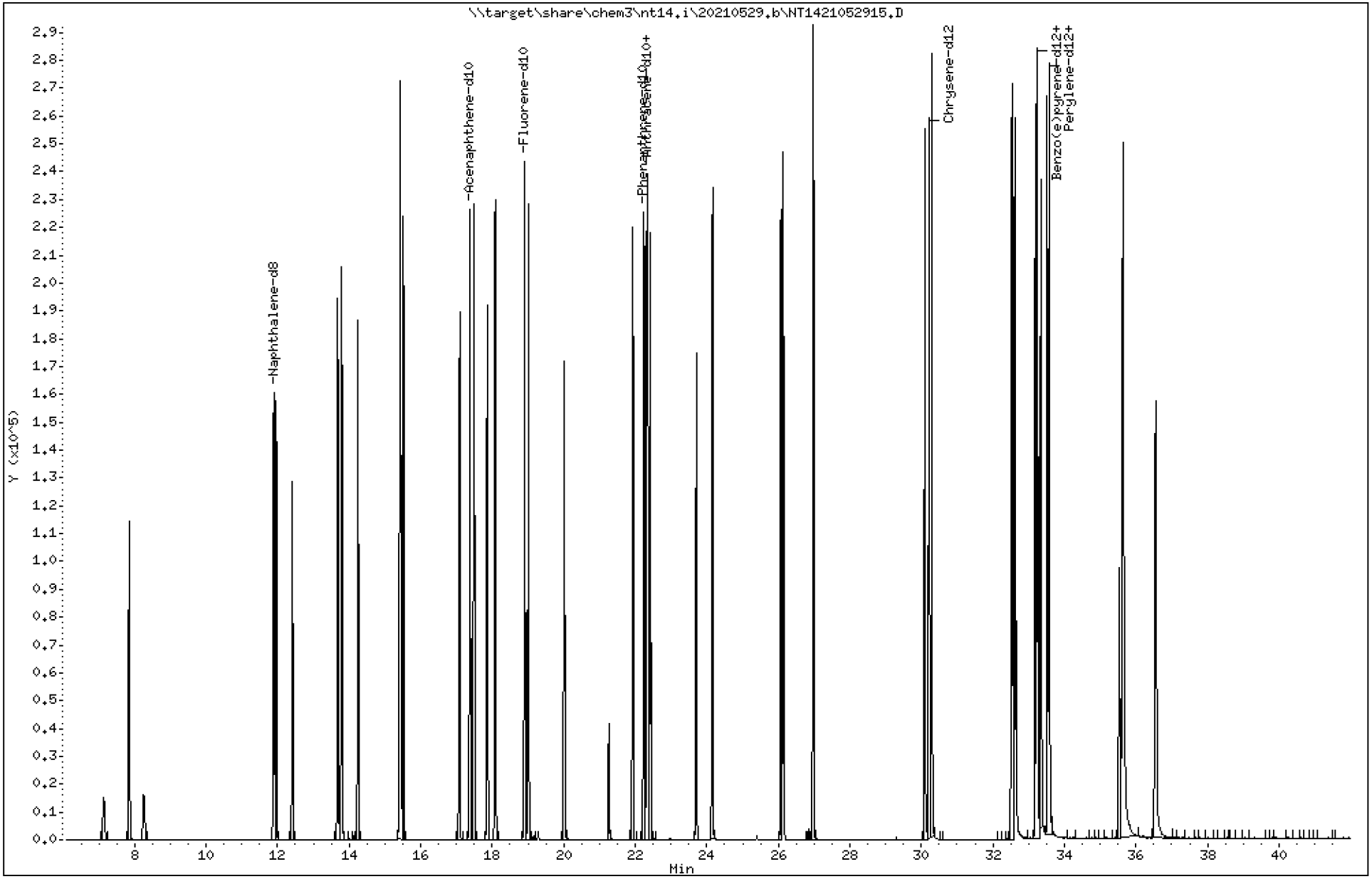
Instrument: nt14.i

Sample Info: SJF0025-SCV1

Operator: VTS

Column phase: Rxi-17Sil MS

Column diameter: 0.25



Data File: \\target\share\chem3\nt14.i\20210529.b\NT1421052915.D

Date : 29-MAY-2021 19:38

Client ID:

Instrument: nt14.i

Sample Info: SJF0025-SCV1

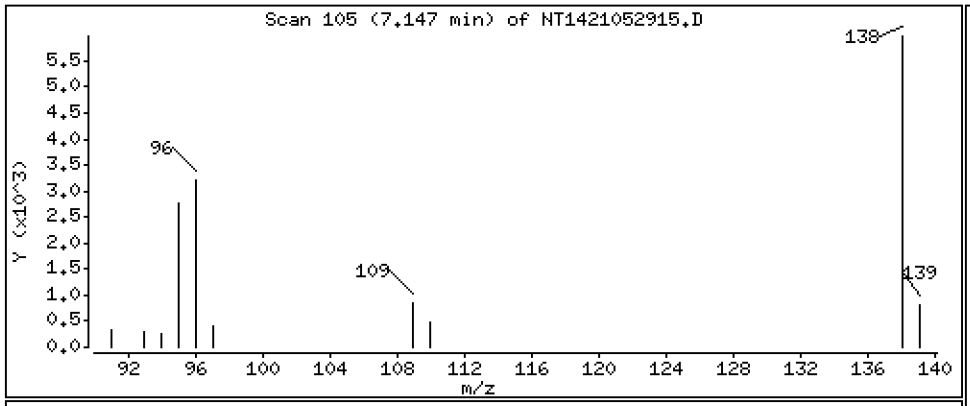
Operator: VTS

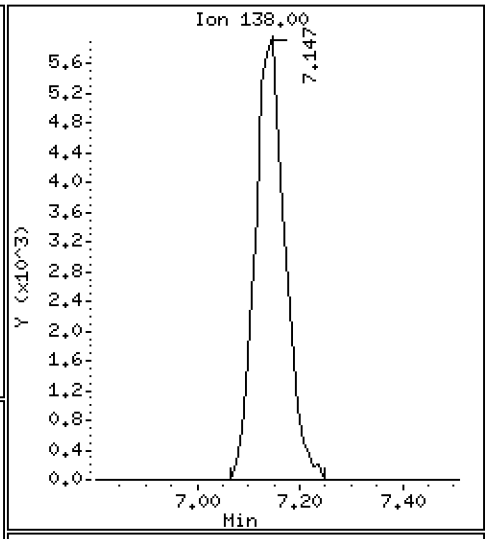
Column phase: Rxi-17Sil MS

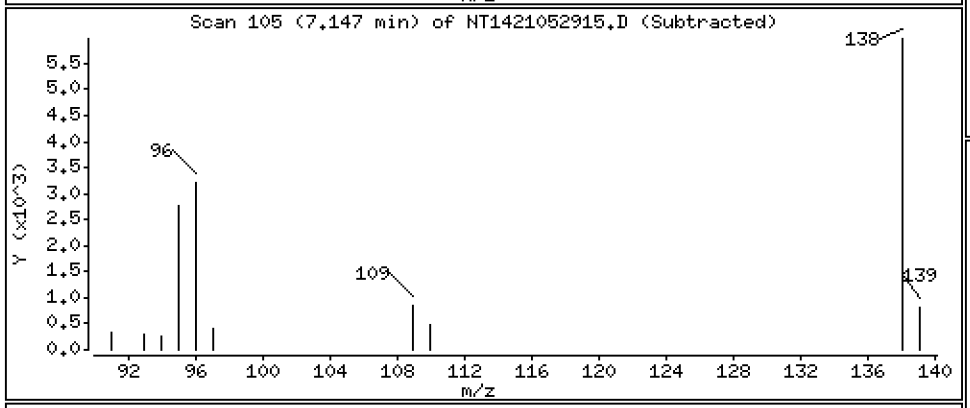
Column diameter: 0.25

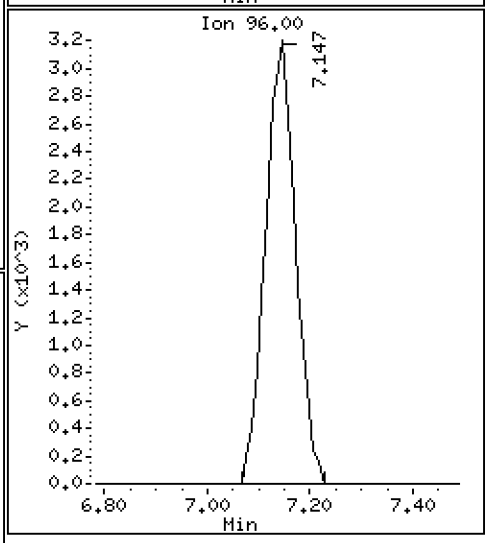
1 trans-Decalin

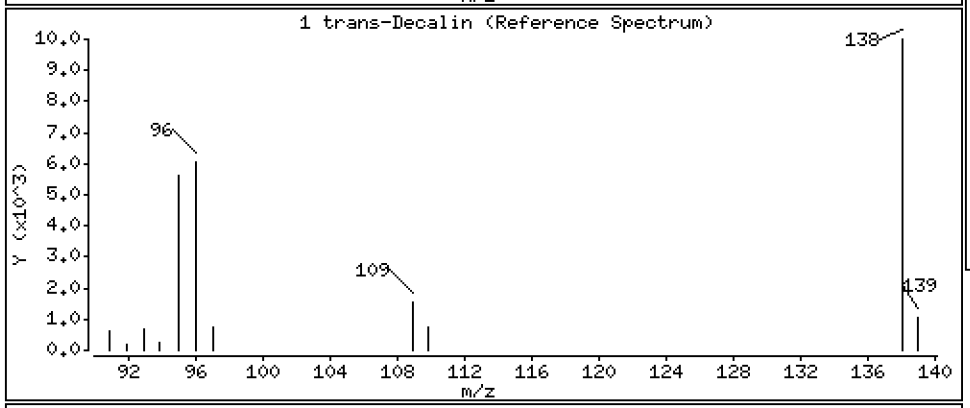
Concentration: 2.939 ug/mL

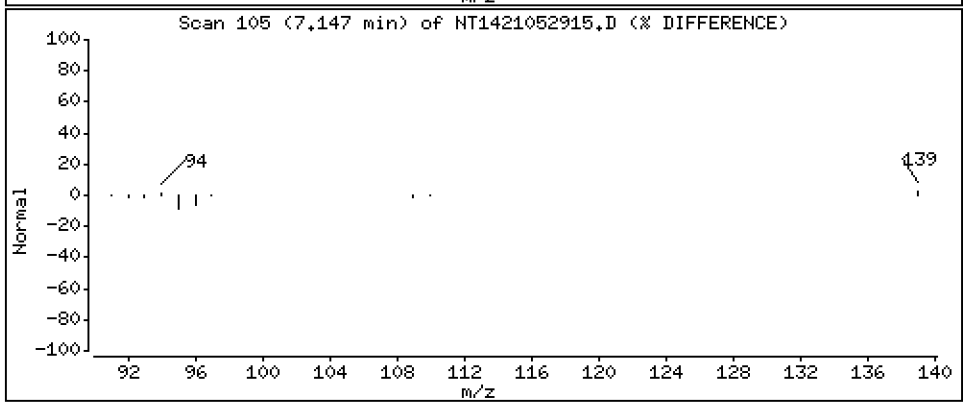












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Client ID:

Instrument: nt14.i

Sample Info: SJF0025-SCV1

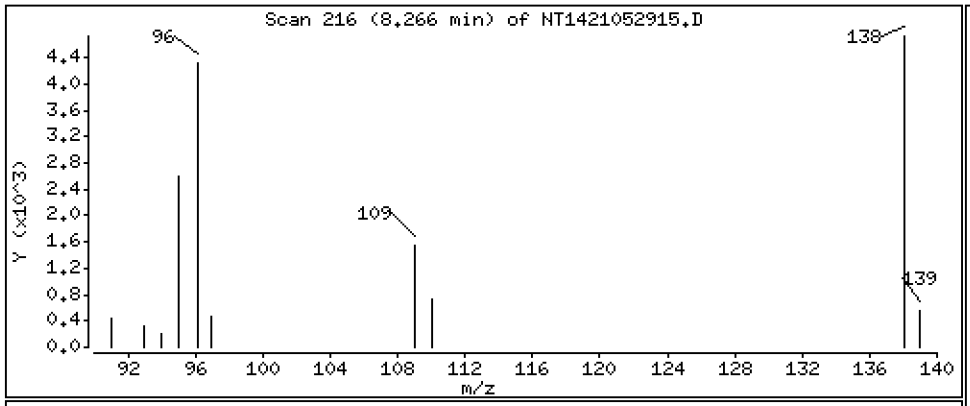
Operator: VTS

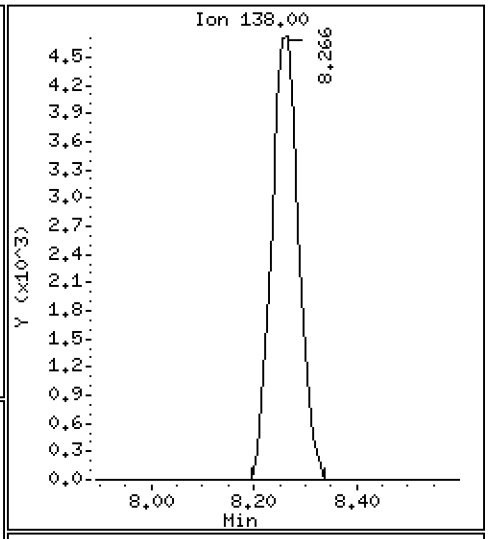
Column phase: Rxi-17Sil MS

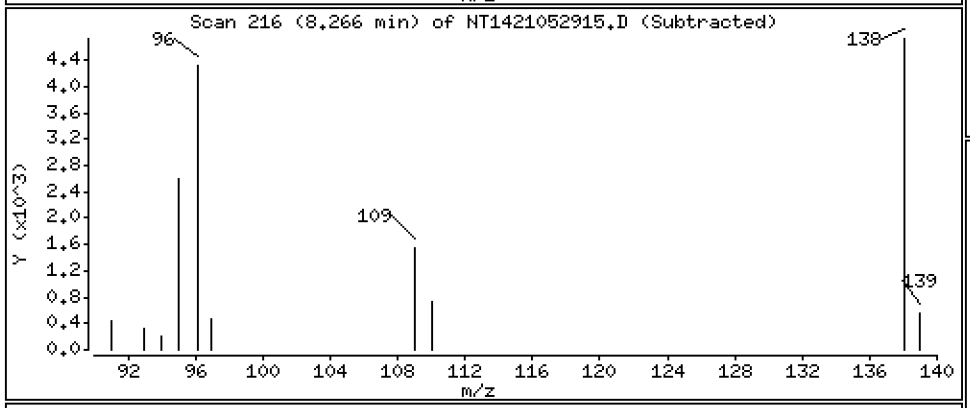
Column diameter: 0.25

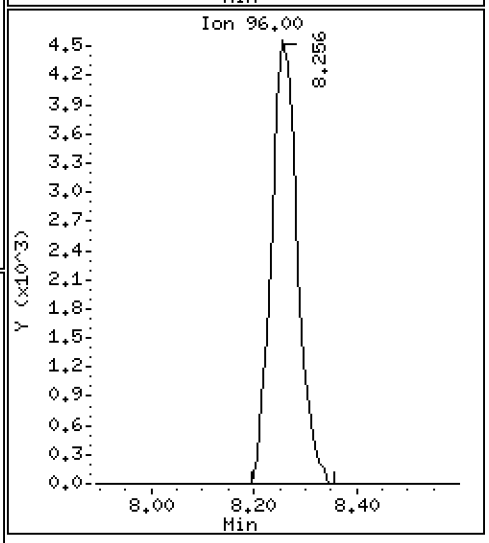
2 cis-Decalin

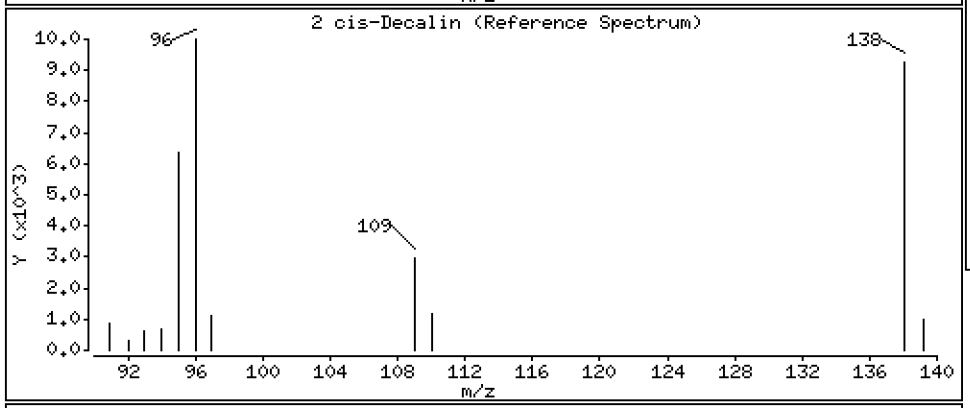
Concentration: 2.555 ug/mL

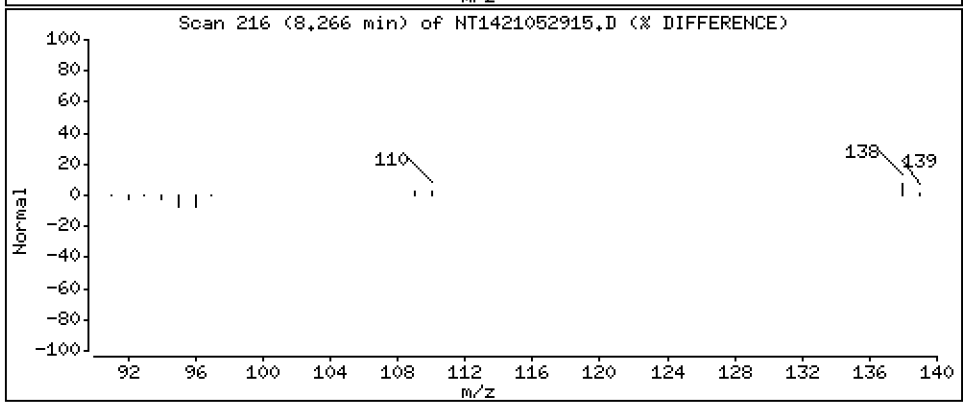












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Date : 29-MAY-2021 19:38

Client ID:

Instrument: nt14.i

Sample Info: SJF0025-SCV1

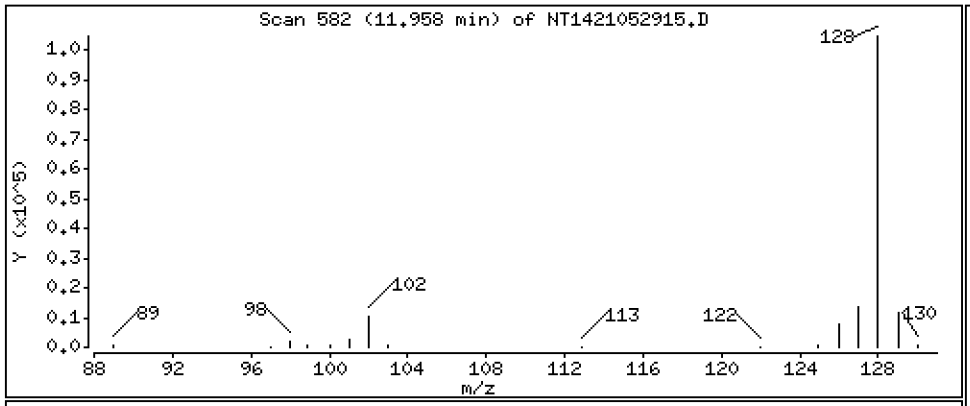
Operator: VTS

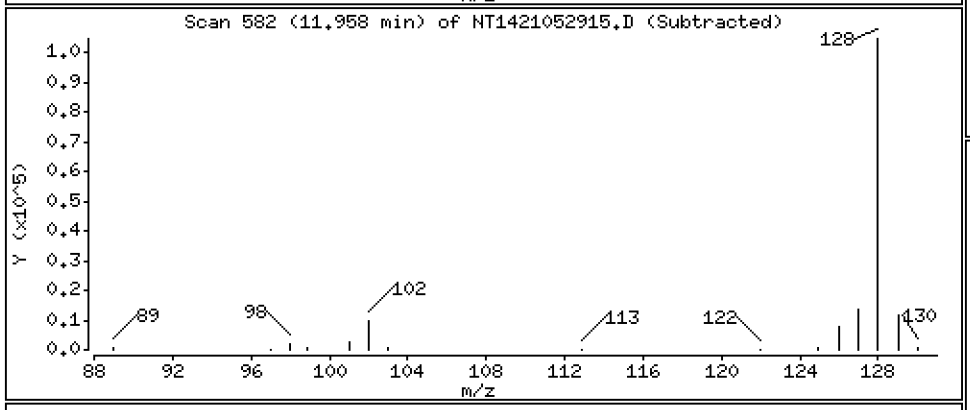
Column phase: Rxi-17Sil MS

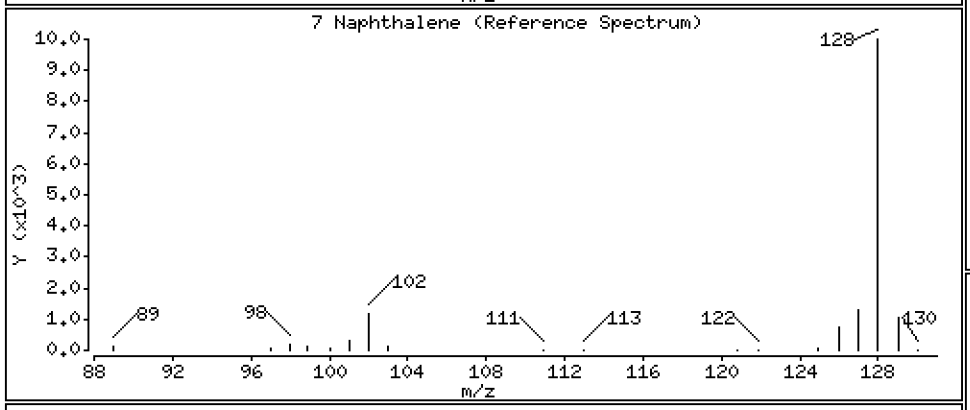
Column diameter: 0.25

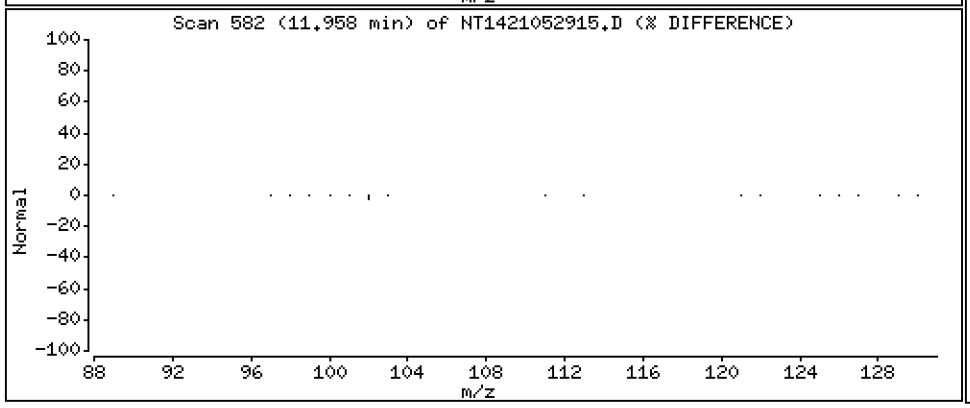
7 Naphthalene

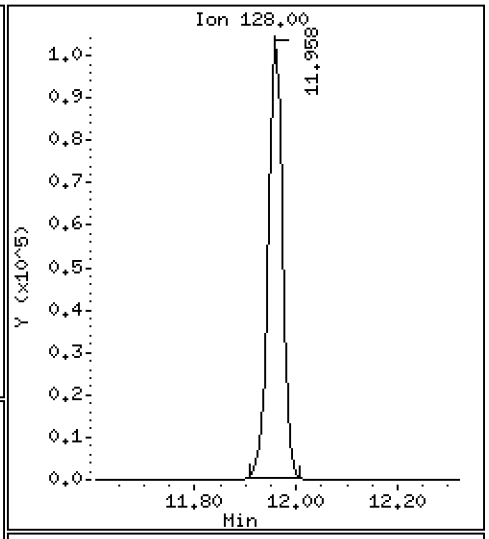
Concentration: 2.625 ug/mL

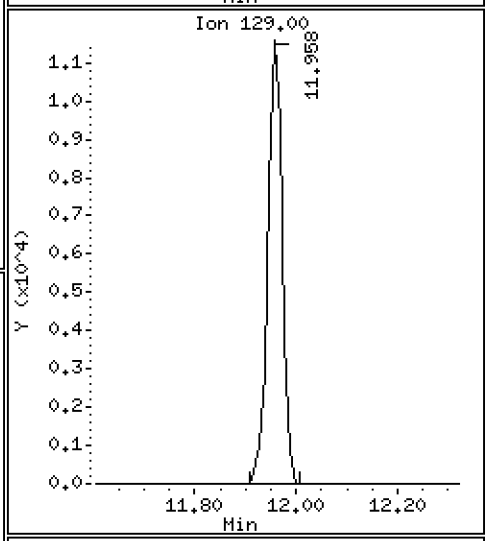


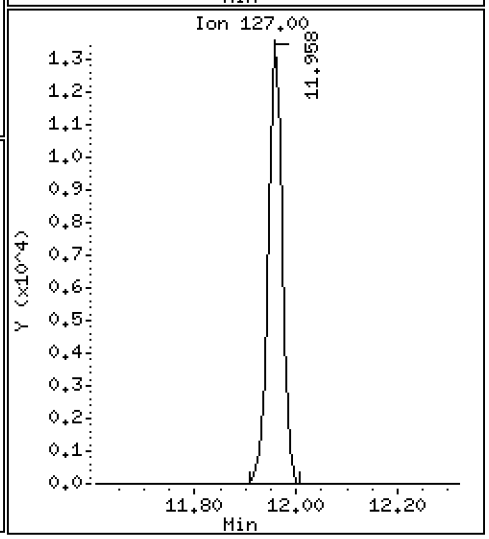












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Client ID:

Instrument: nt14.i

Sample Info: SJF0025-SCV1

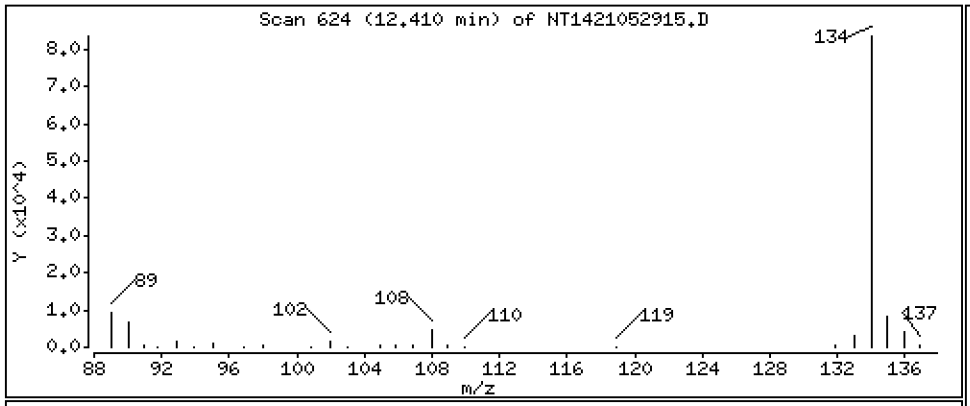
Operator: VTS

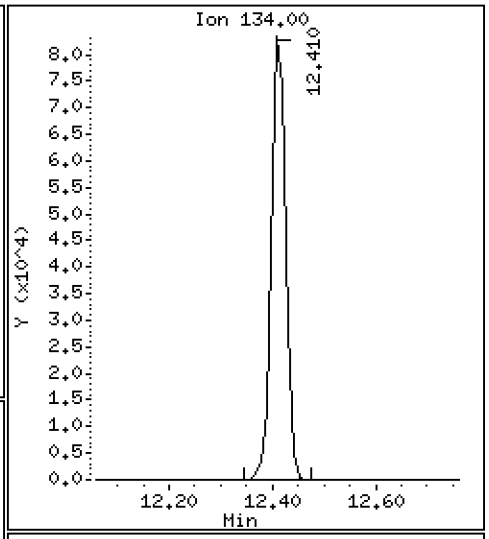
Column phase: Rxi-17Sil MS

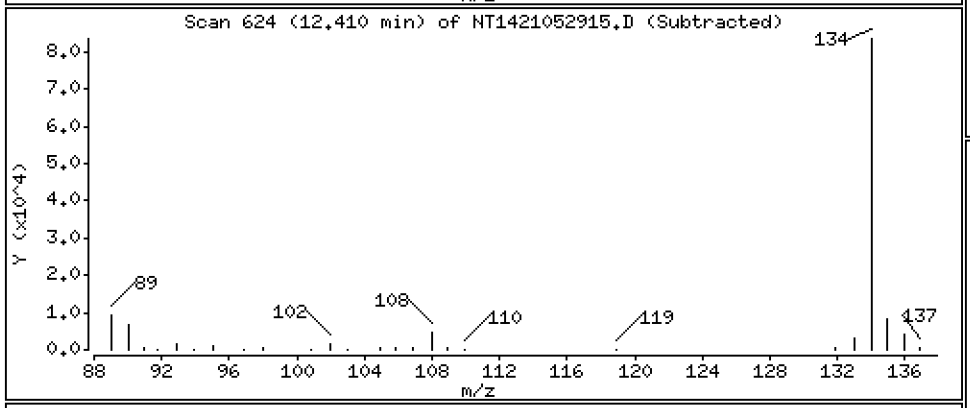
Column diameter: 0.25

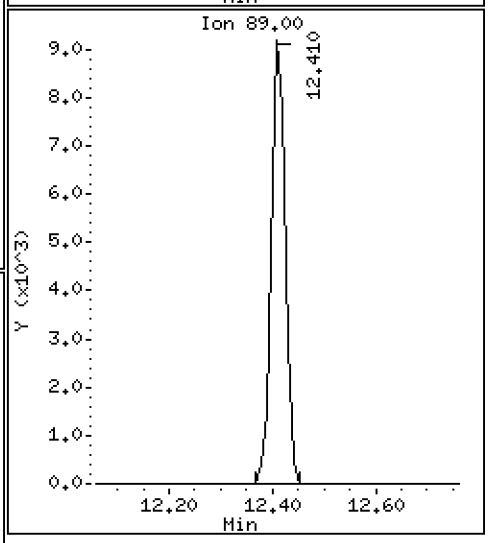
12 Benzo(b)thiophene

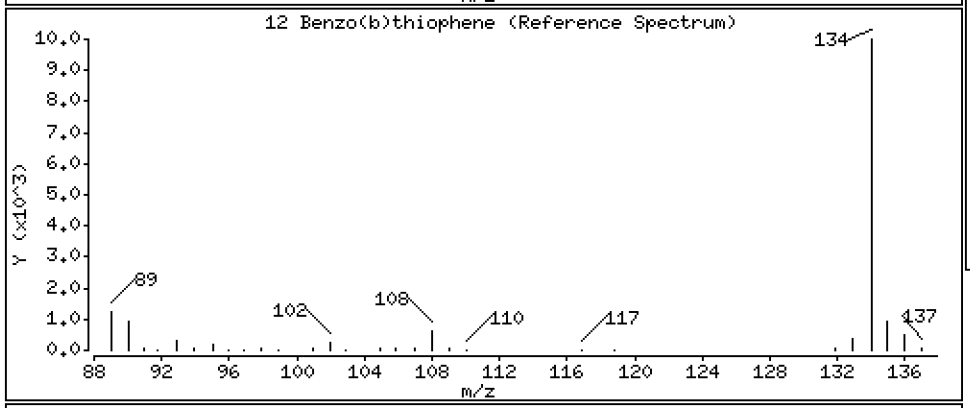
Concentration: 2.621 ug/mL

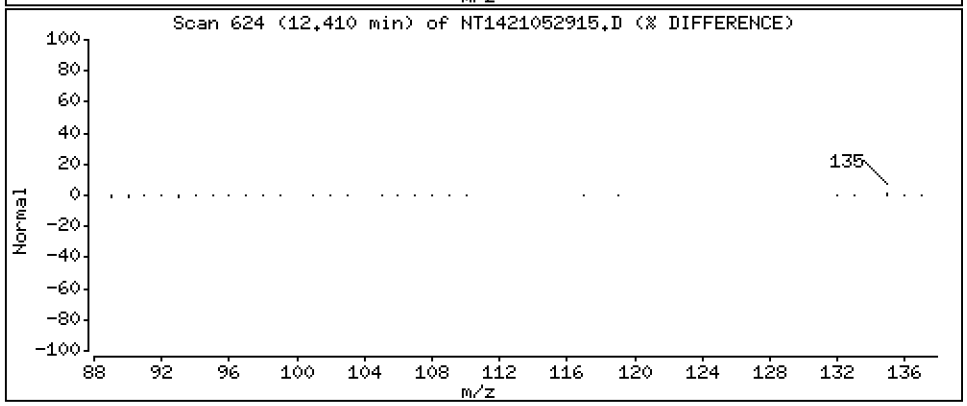












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Date : 29-MAY-2021 19:38

Client ID:

Instrument: nt14.i

Sample Info: SJF0025-SCV1

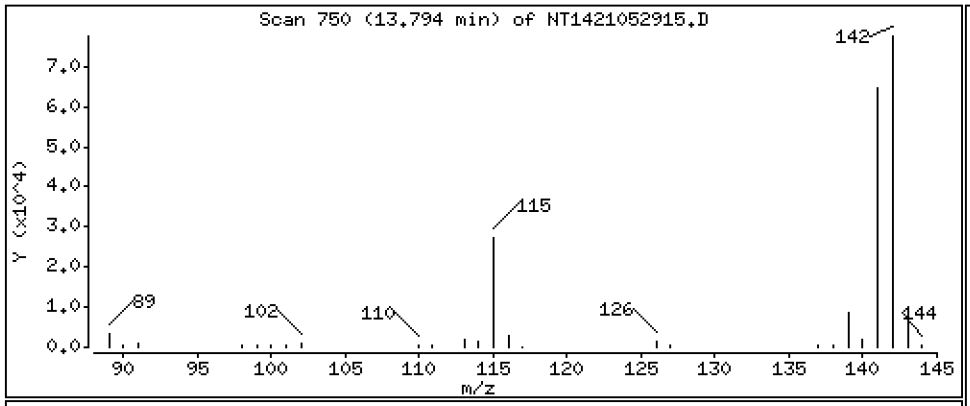
Operator: VTS

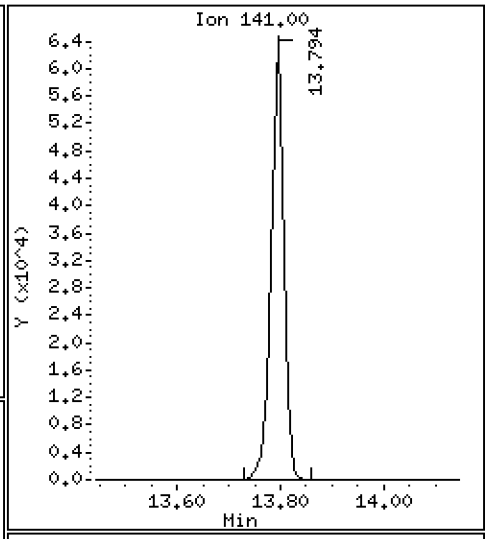
Column phase: Rxi-17Sil MS

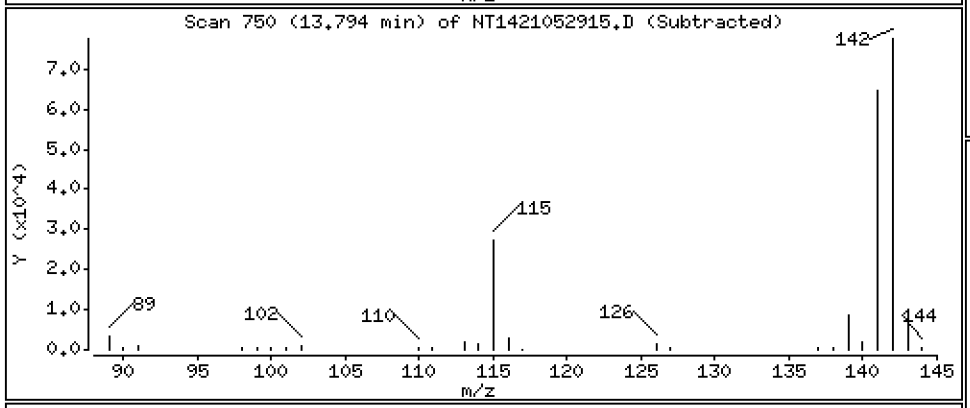
Column diameter: 0.25

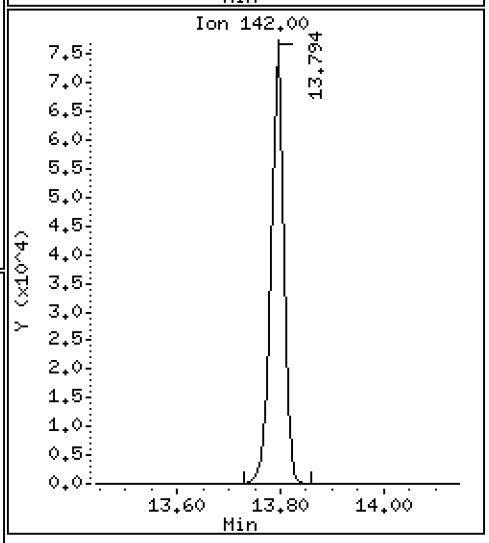
16 2-Methylnaphthalene

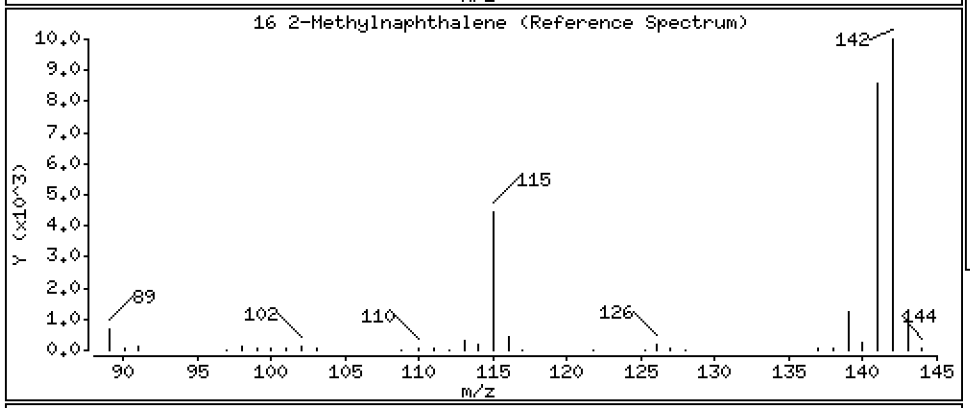
Concentration: 2.645 ug/mL

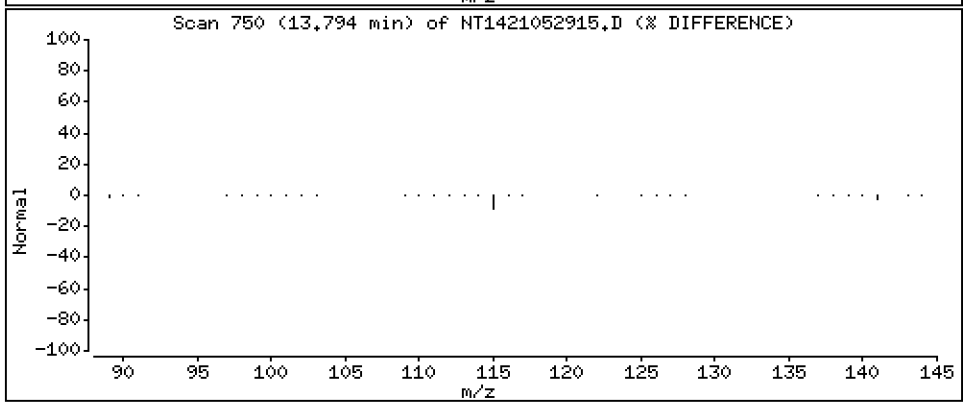












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Date : 29-MAY-2021 19:38

Client ID:

Instrument: nt14.i

Sample Info: SJF0025-SCV1

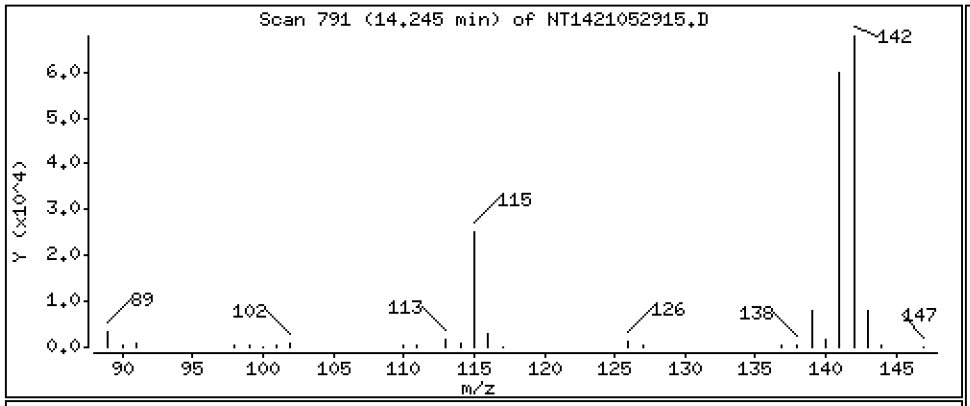
Operator: VTS

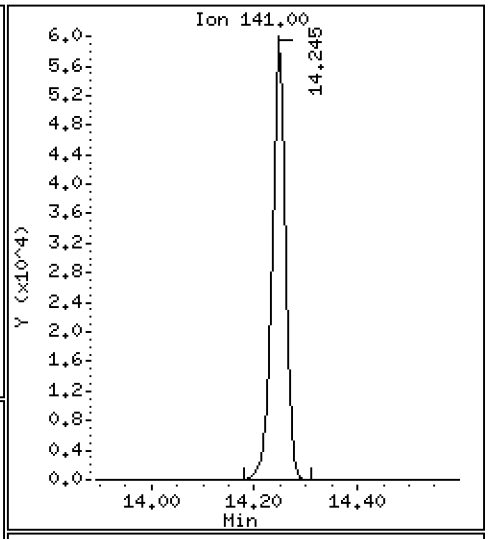
Column phase: Rxi-17Sil MS

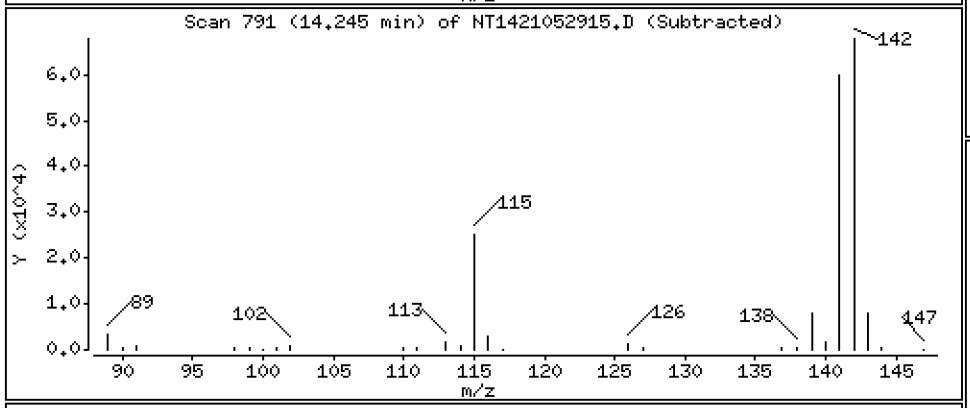
Column diameter: 0.25

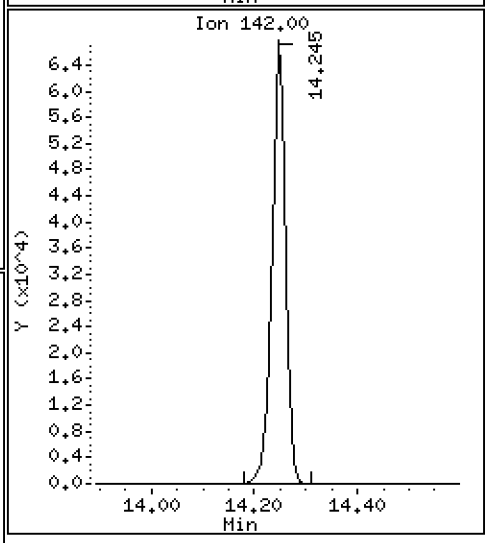
17 1-methylnaphthalene

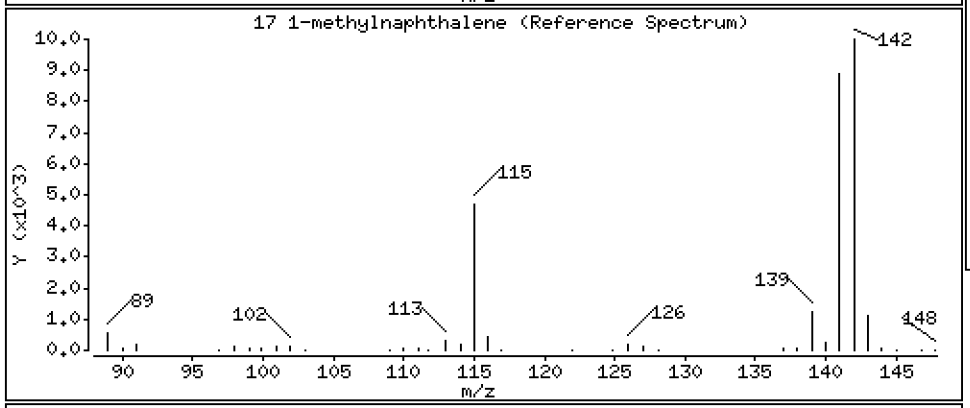
Concentration: 2.659 ug/mL

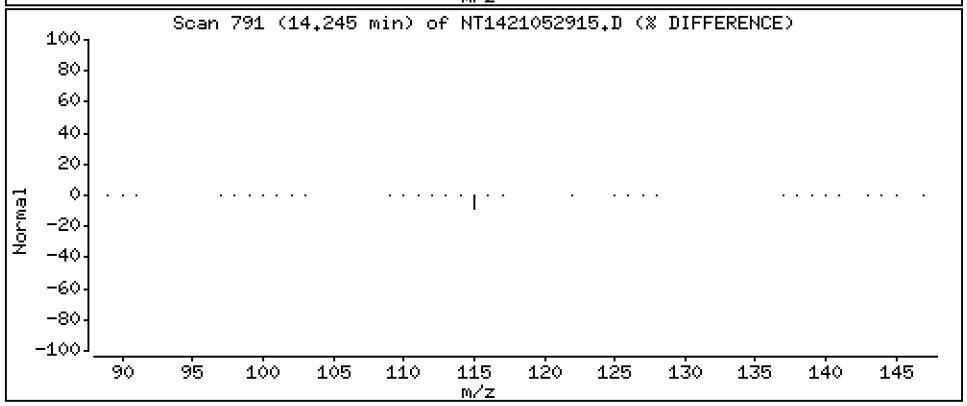












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Date : 29-MAY-2021 19:38

Client ID:

Instrument: nt14.i

Sample Info: SJF0025-SCV1

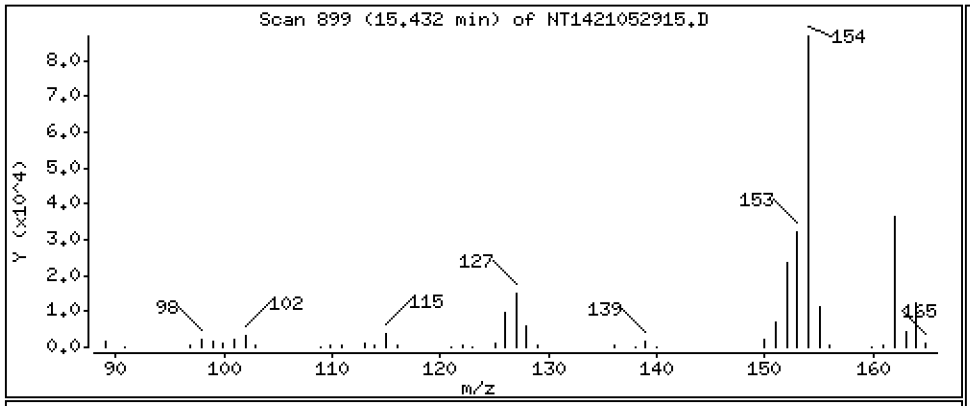
Operator: VTS

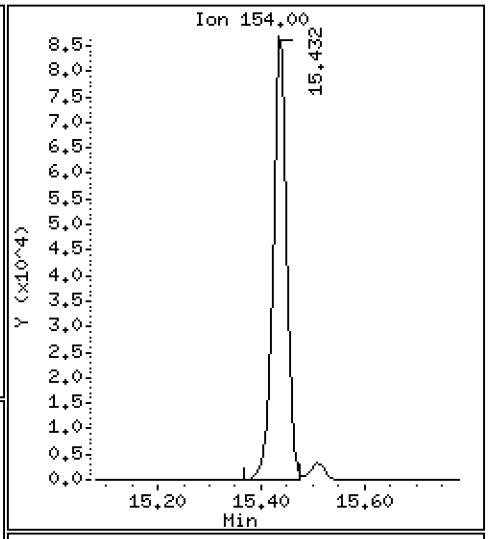
Column phase: Rxi-17Sil MS

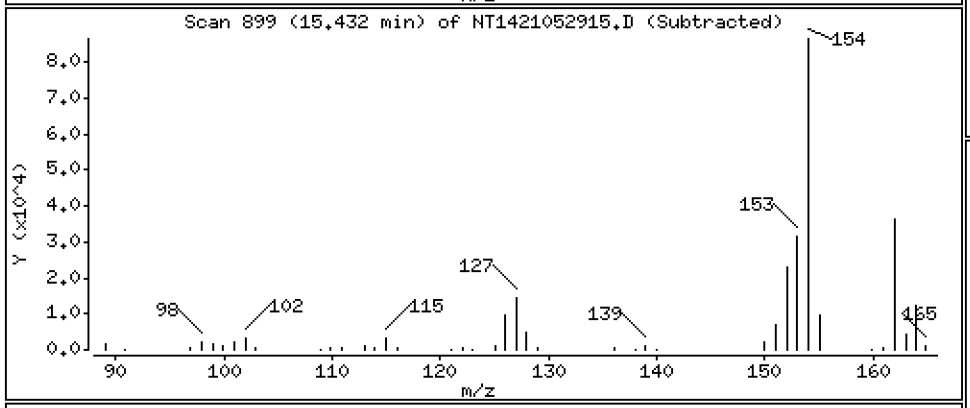
Column diameter: 0.25

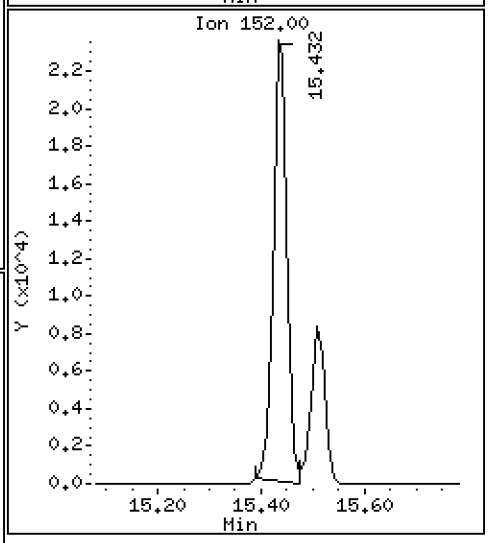
18 Biphenyl

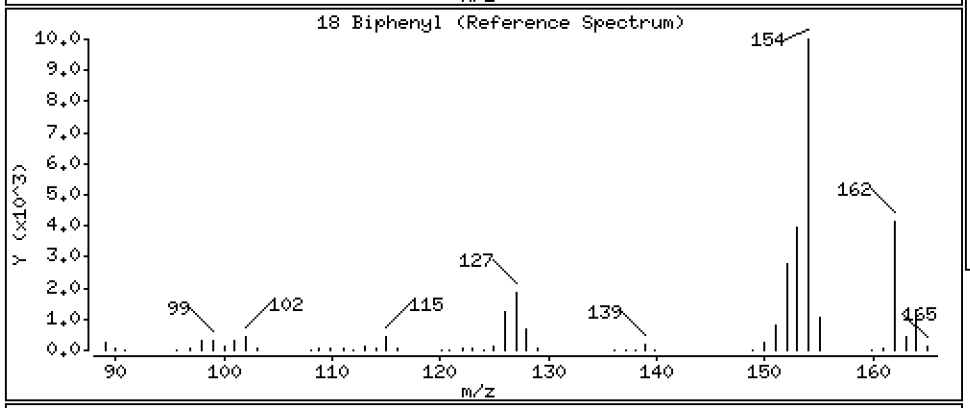
Concentration: 2.608 ug/mL

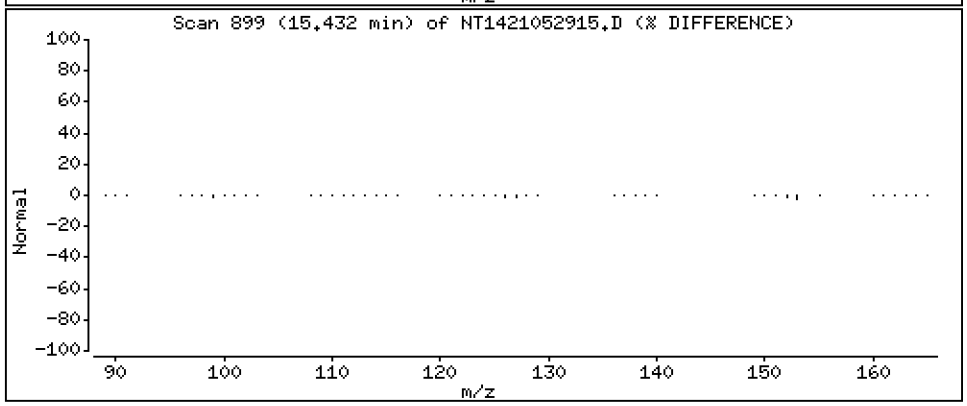












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Client ID:

Instrument: nt14.i

Sample Info: SJF0025-SCV1

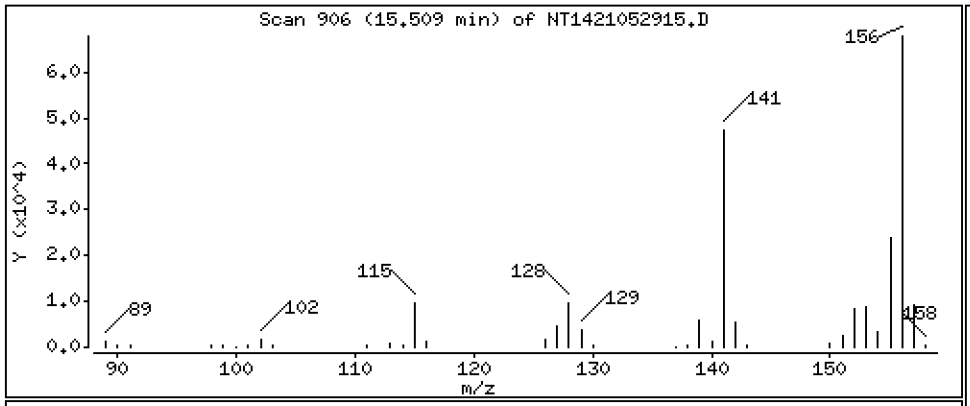
Operator: VTS

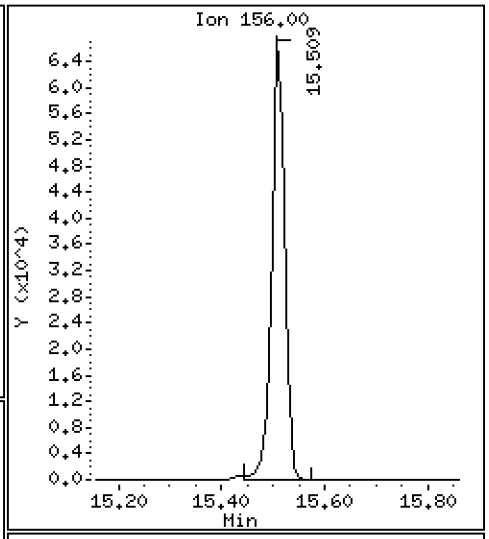
Column phase: Rxi-17Sil MS

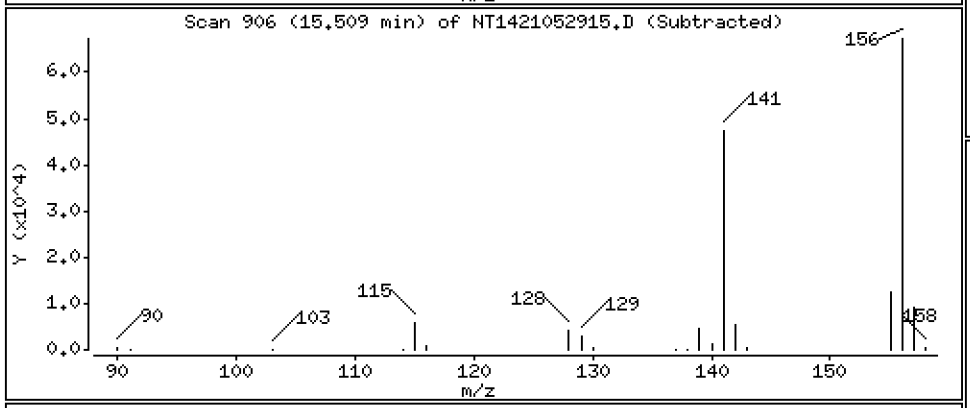
Column diameter: 0.25

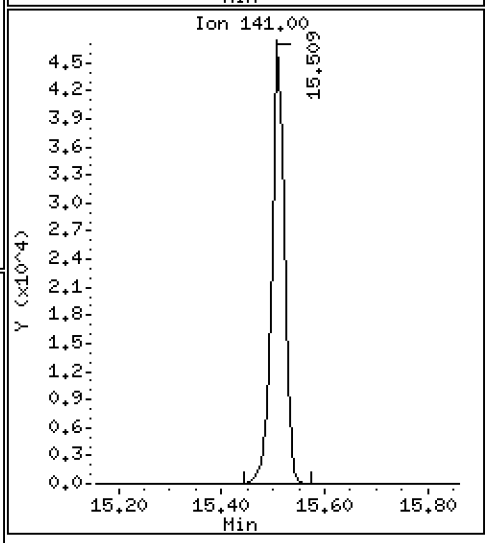
19 2,6-Dimethylnaphthalene

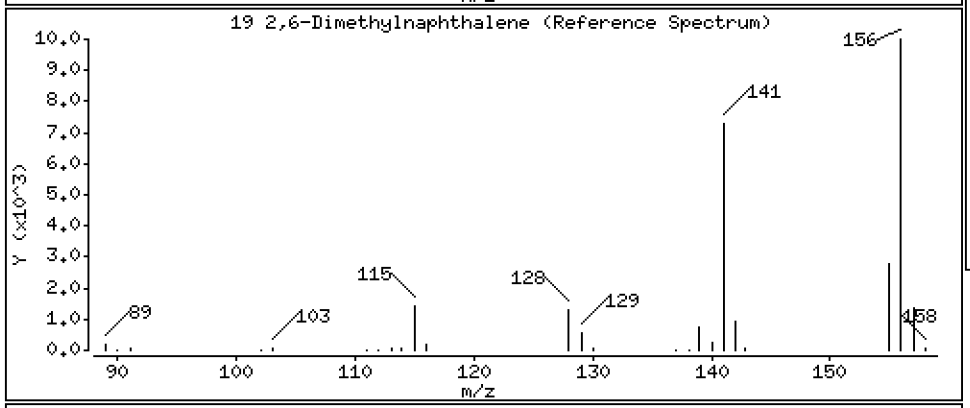
Concentration: 2.604 ug/mL

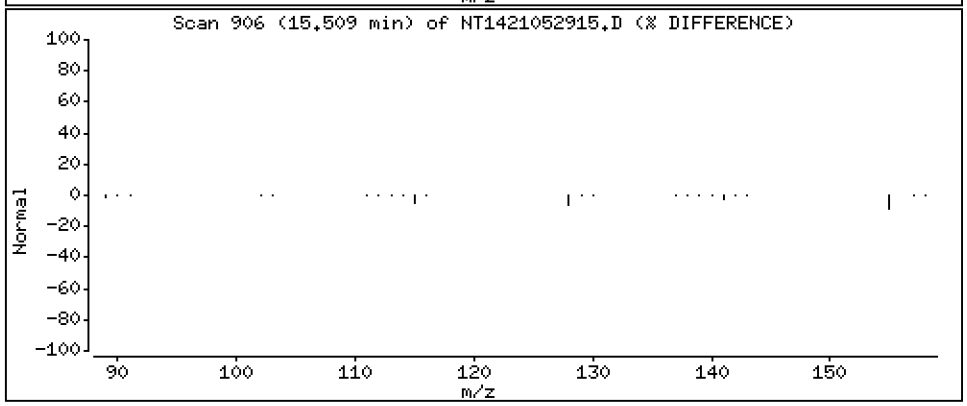












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Date : 29-MAY-2021 19:38

Client ID:

Instrument: nt14.i

Sample Info: SJF0025-SCV1

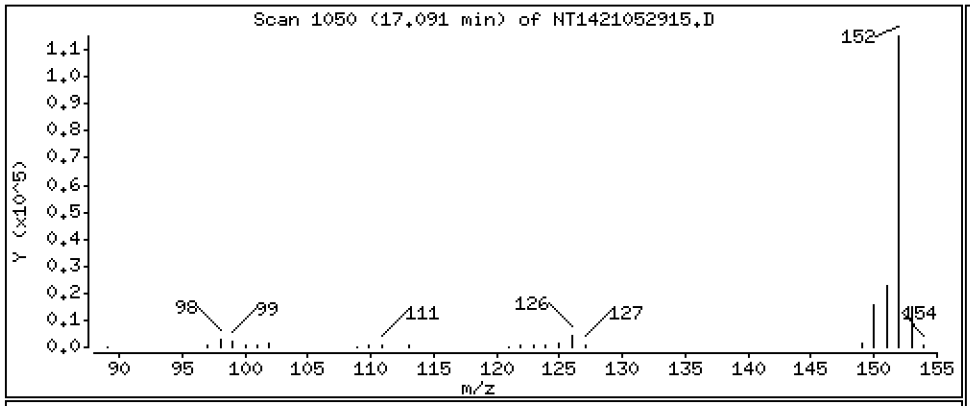
Operator: VTS

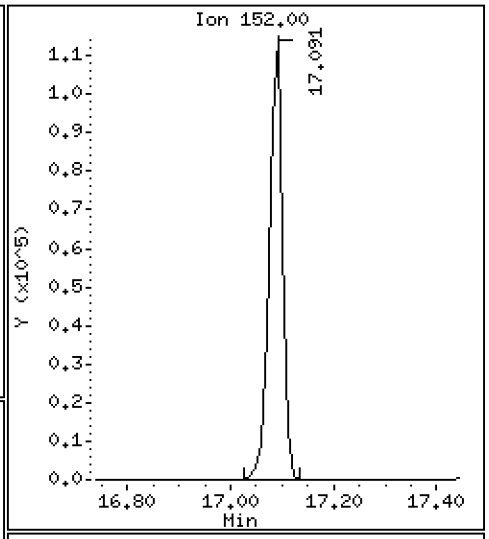
Column phase: Rxi-17Sil MS

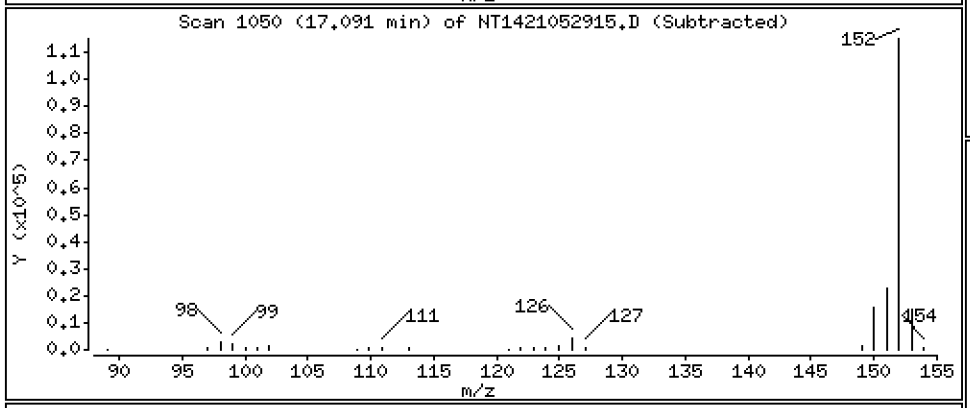
Column diameter: 0.25

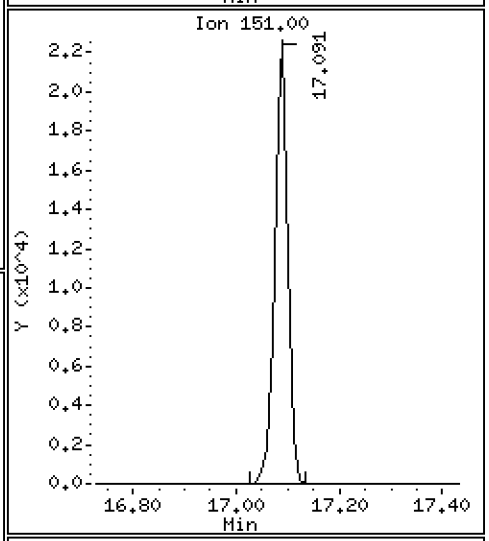
20 Acenaphthylene

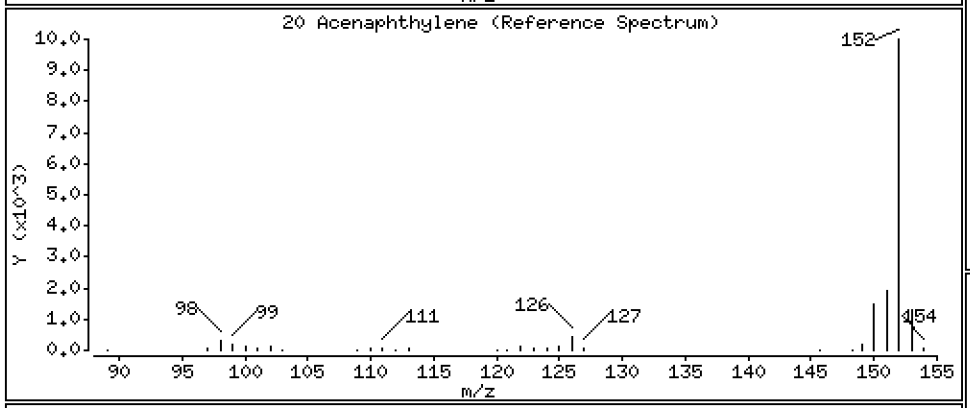
Concentration: 2.624 ug/mL

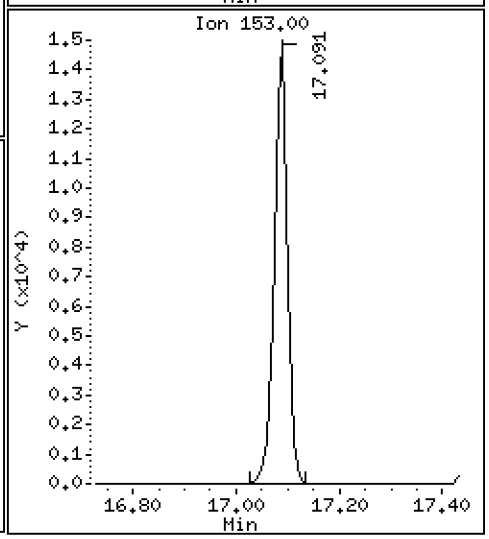


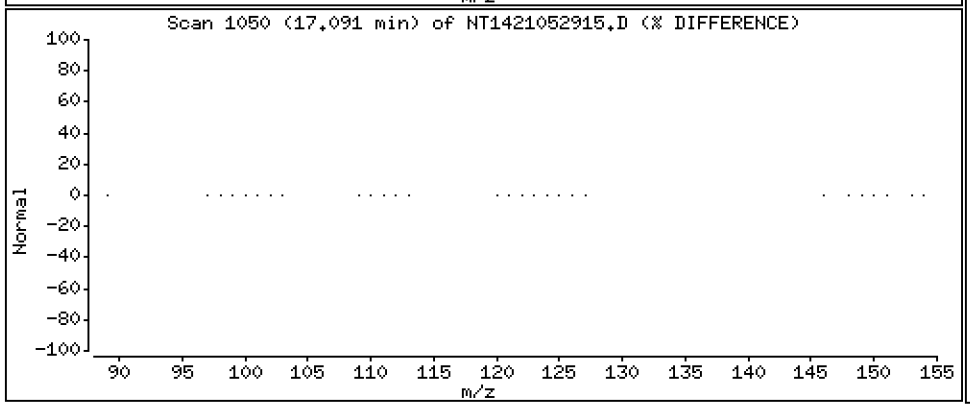












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Date : 29-MAY-2021 19:38

Client ID:

Instrument: nt14.i

Sample Info: SJF0025-SCV1

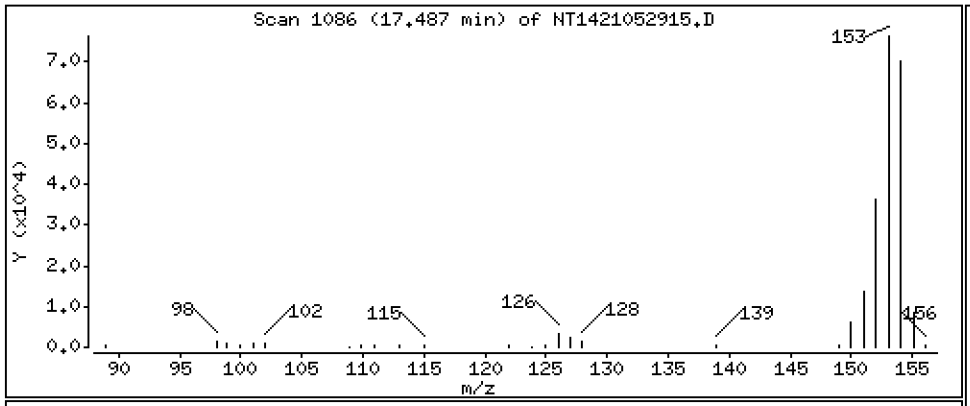
Operator: VTS

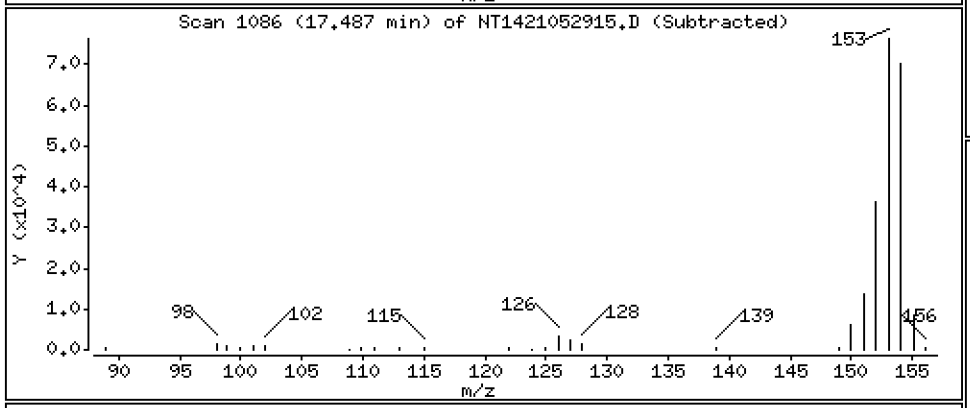
Column phase: Rxi-17Sil MS

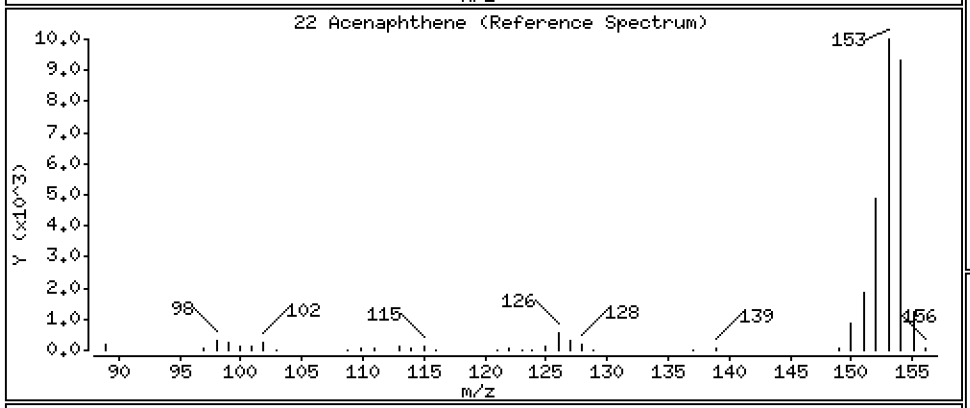
Column diameter: 0.25

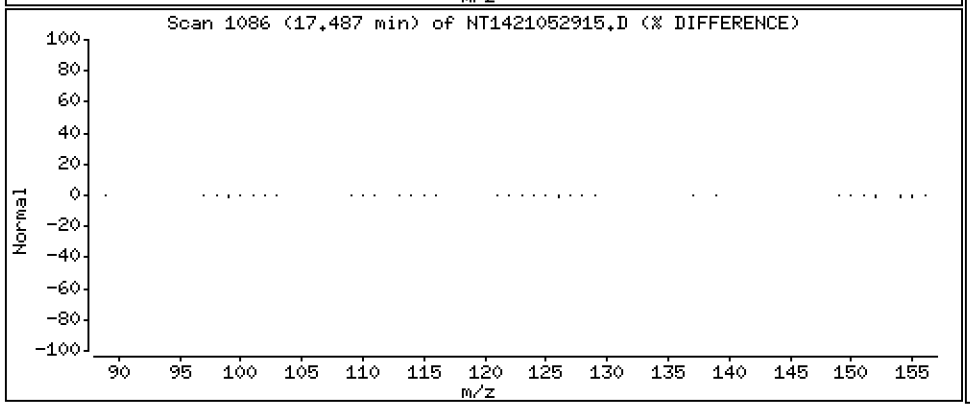
22 Acenaphthene

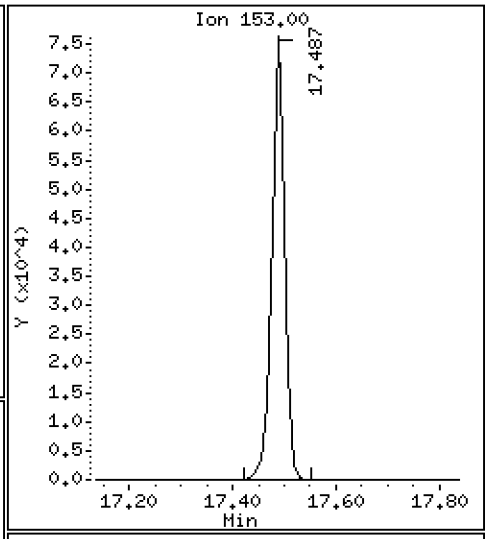
Concentration: 2.755 ug/mL

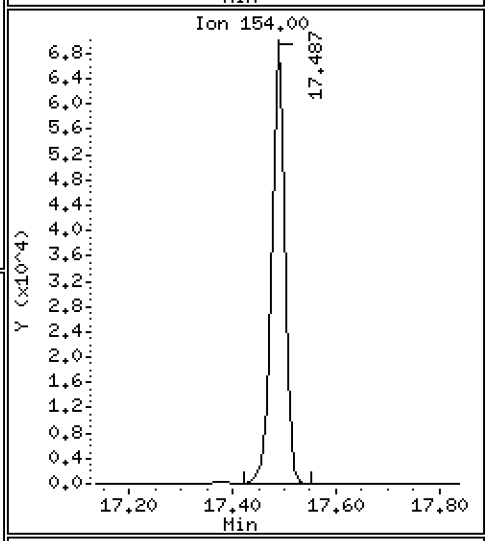


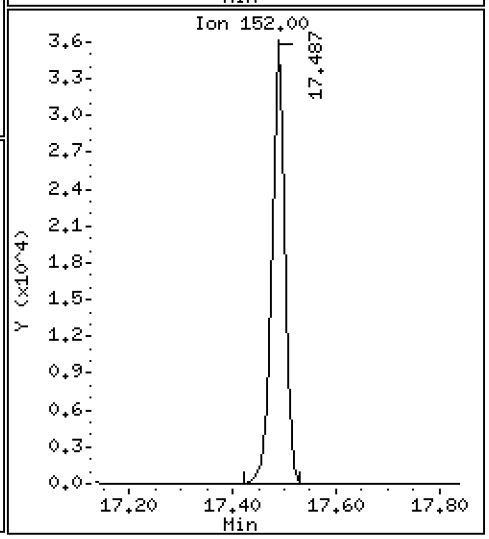












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Date : 29-MAY-2021 19:38

Client ID:

Instrument: nt14.i

Sample Info: SJF0025-SCV1

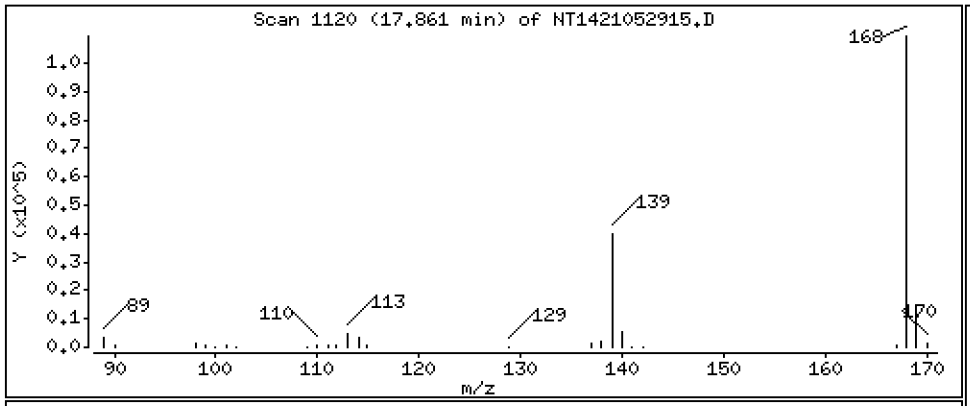
Operator: VTS

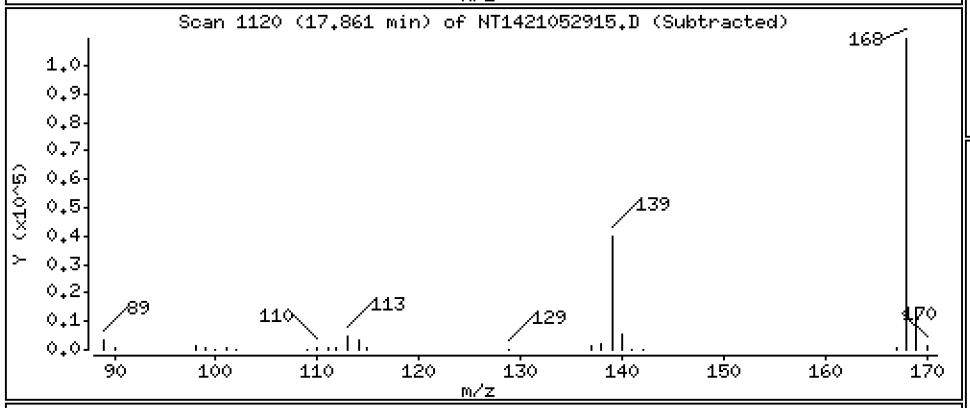
Column phase: Rxi-17Sil MS

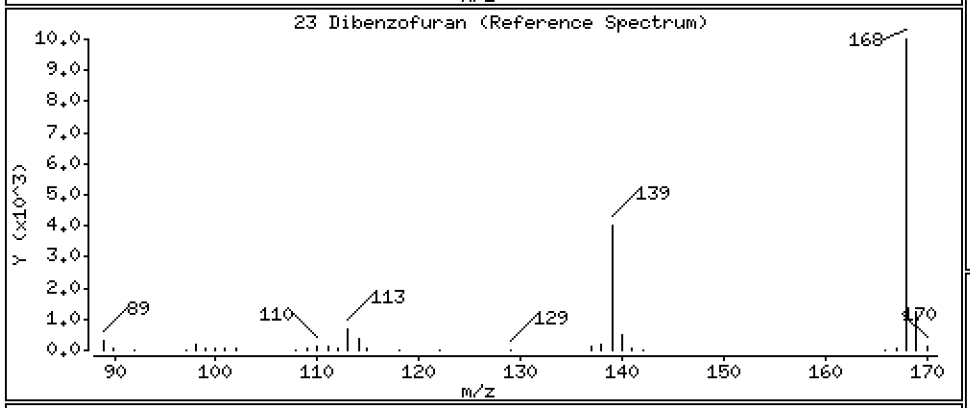
Column diameter: 0.25

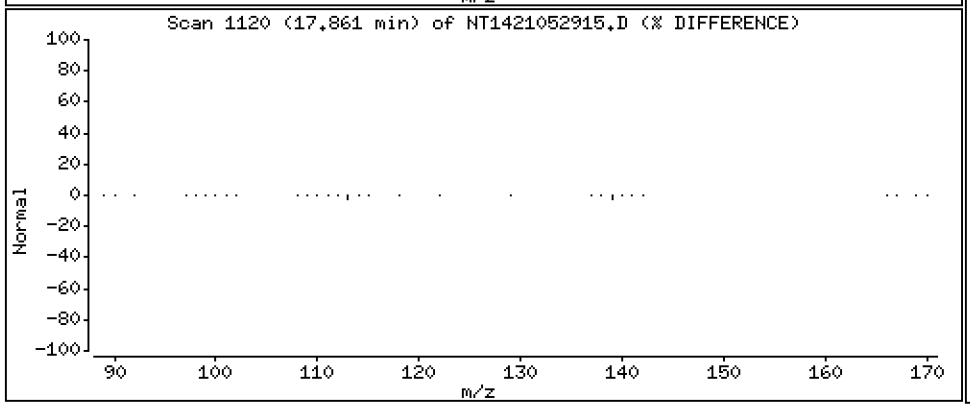
23 Dibenzofuran

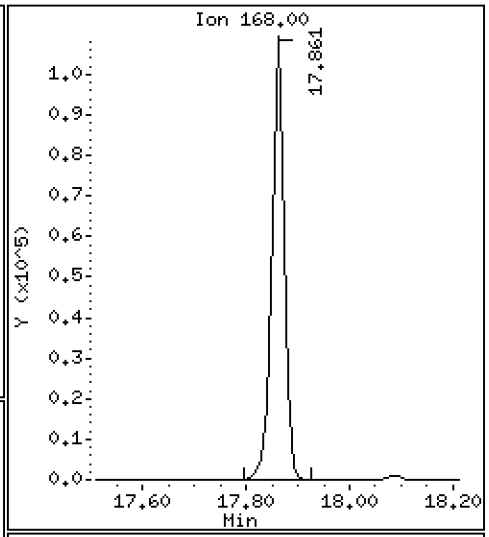
Concentration: 2.595 ug/mL

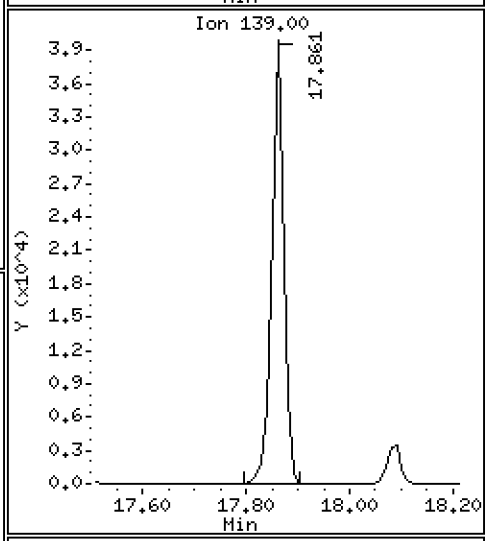


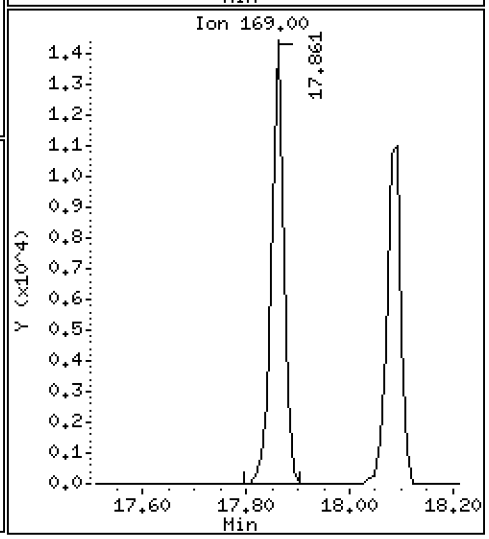












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Date : 29-MAY-2021 19:38

Client ID:

Instrument: nt14.i

Sample Info: SJF0025-SCV1

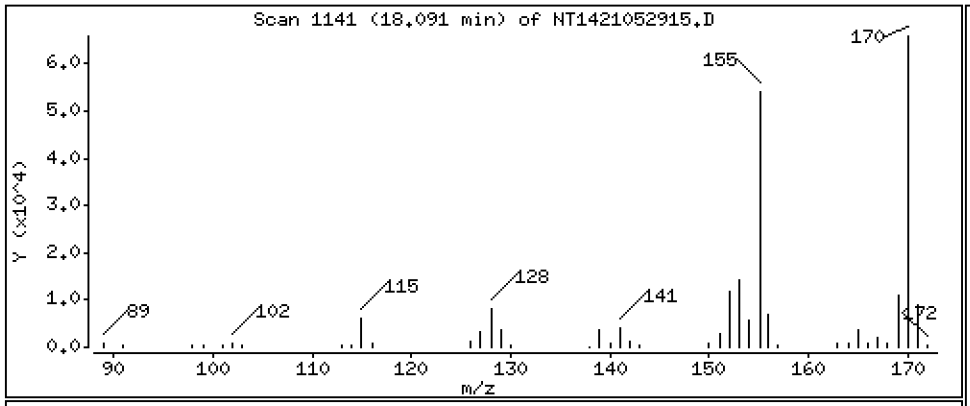
Operator: VTS

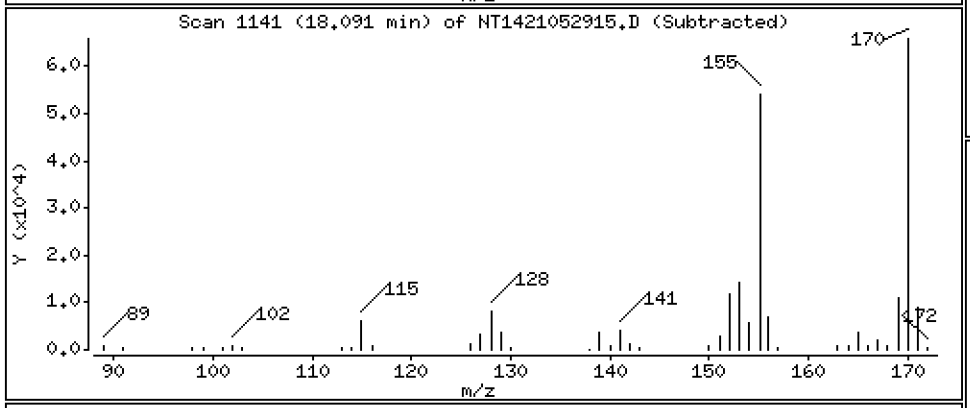
Column phase: Rxi-17Sil MS

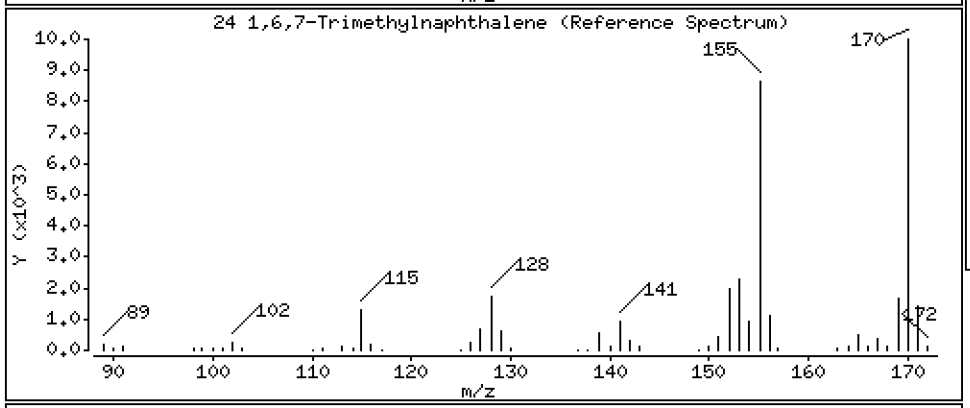
Column diameter: 0.25

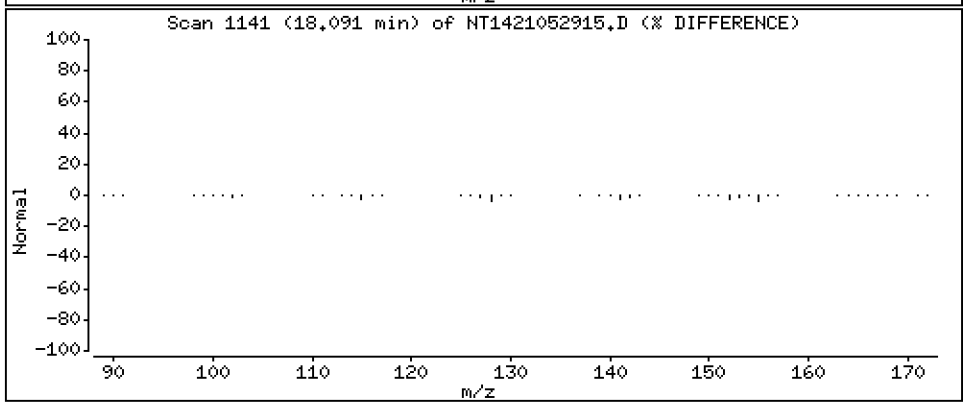
24 1,6,7-Trimethylnaphthalene

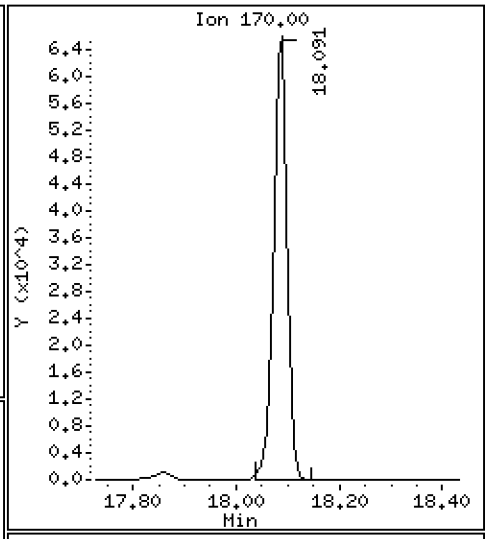
Concentration: 2.642 ug/mL

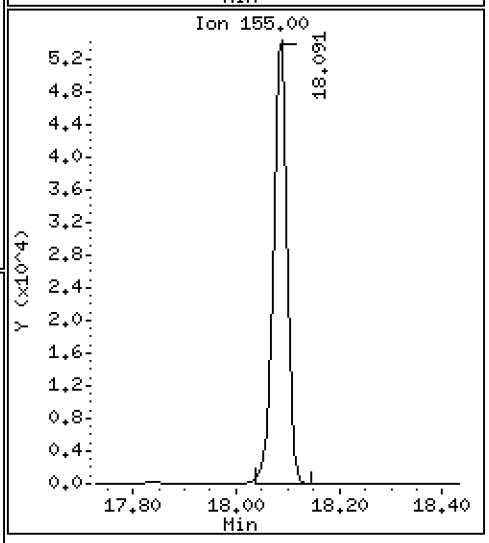












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Date : 29-MAY-2021 19:38

Client ID:

Instrument: nt14.i

Sample Info: SJF0025-SCV1

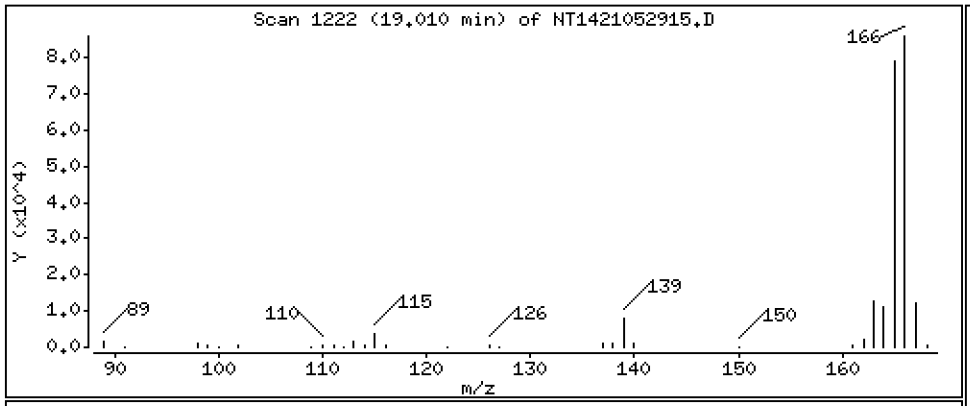
Operator: VTS

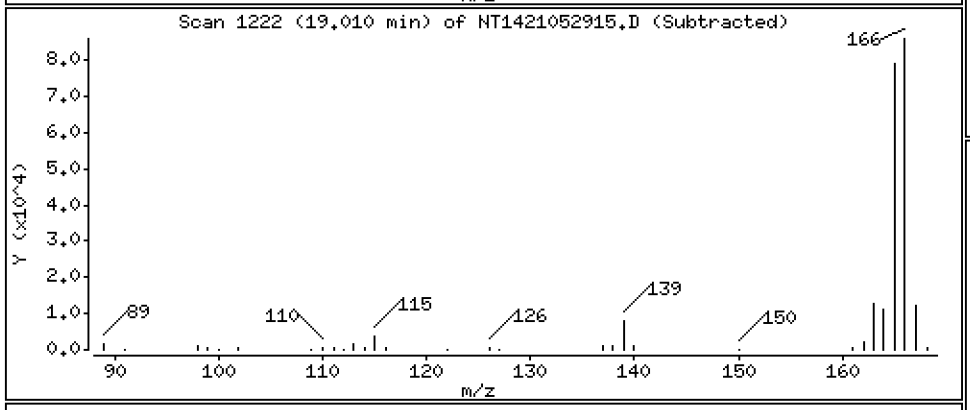
Column phase: Rxi-17Sil MS

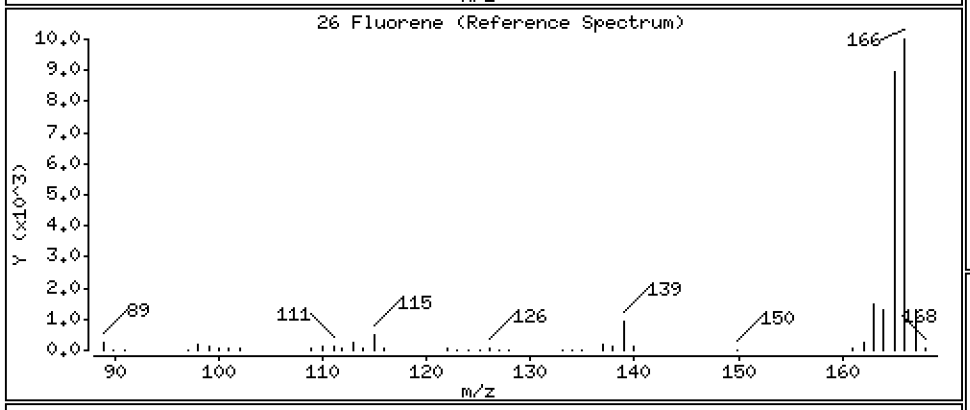
Column diameter: 0.25

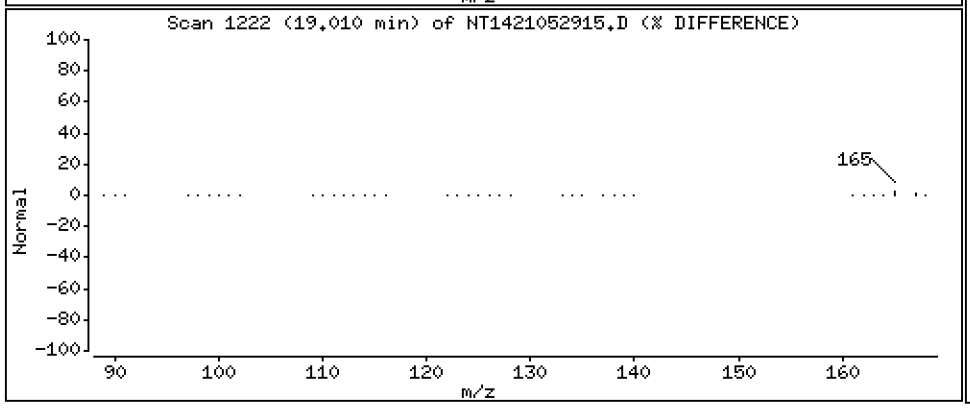
26 Fluorene

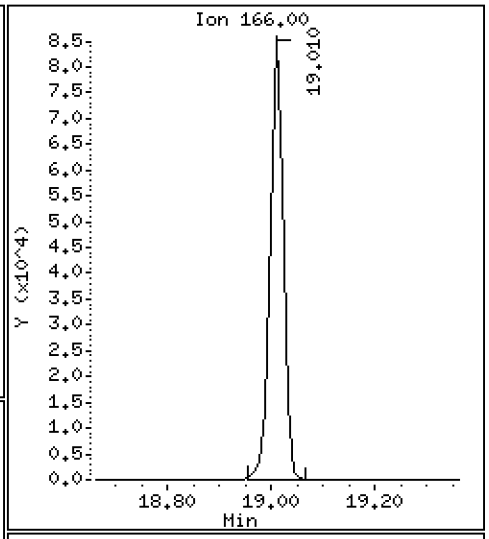
Concentration: 2.611 ug/mL

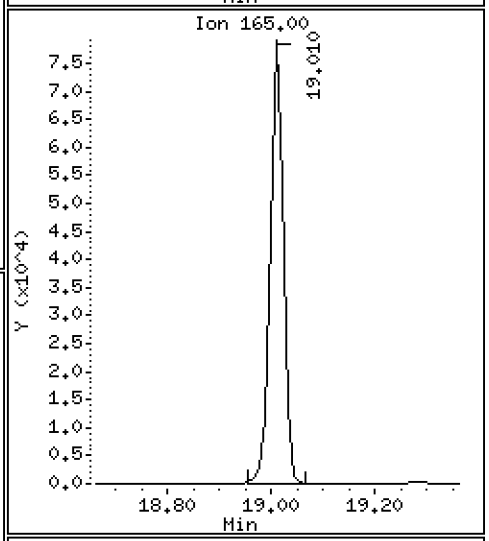


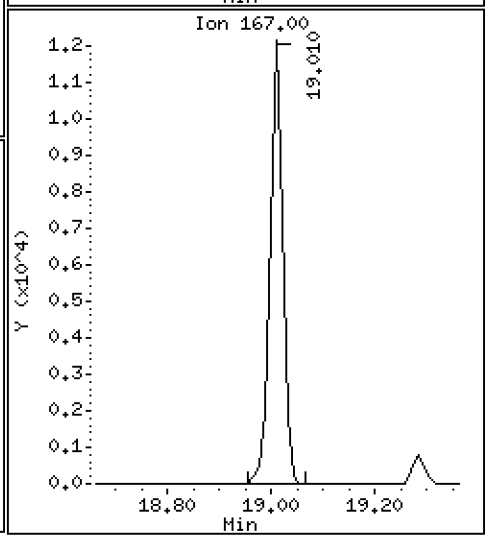












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Date : 29-MAY-2021 19:38

Client ID:

Instrument: nt14.i

Sample Info: SJF0025-SCV1

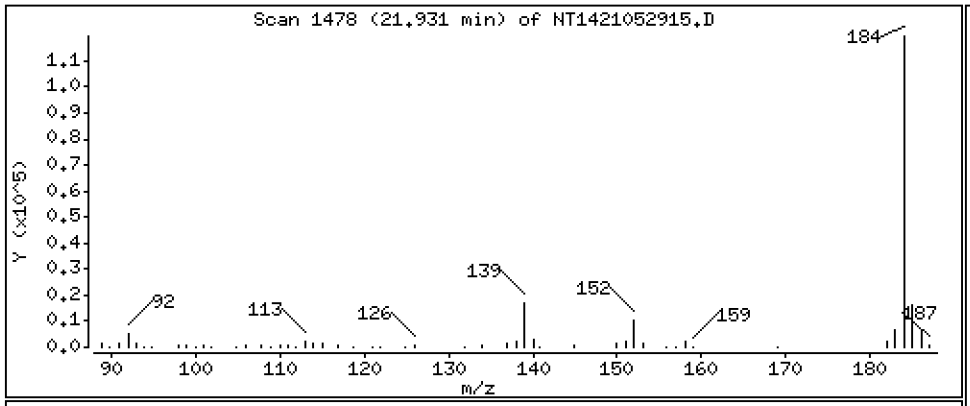
Operator: VTS

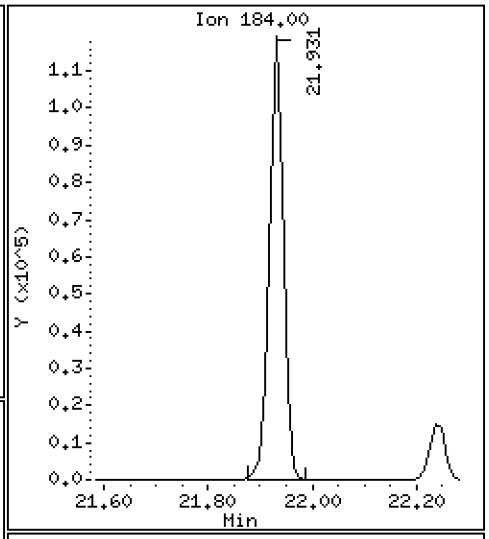
Column phase: Rxi-17Sil MS

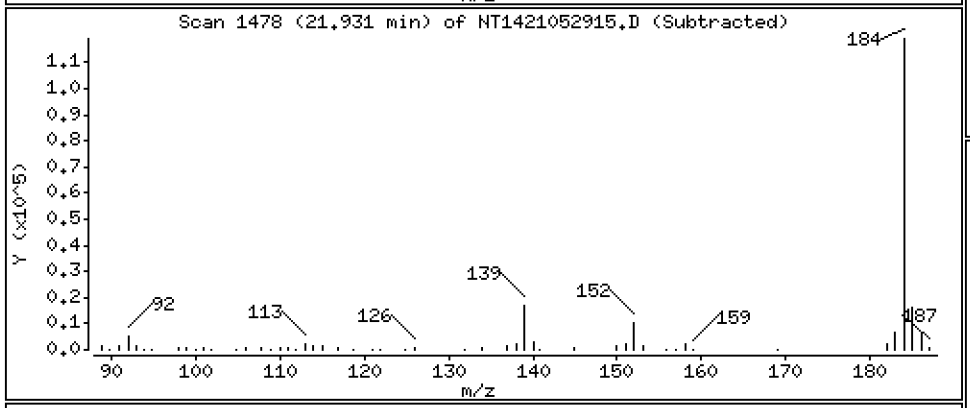
Column diameter: 0.25

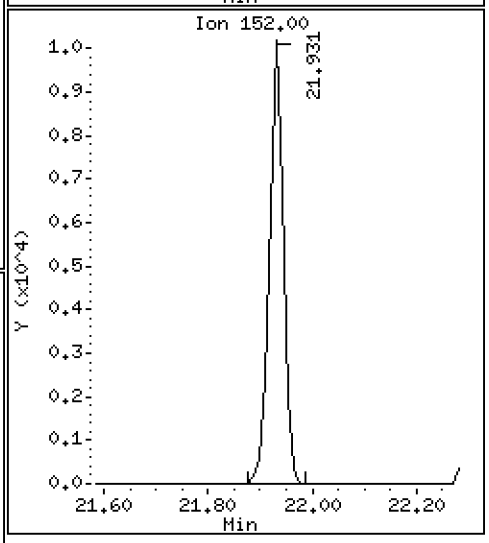
30 Dibenzothiophene

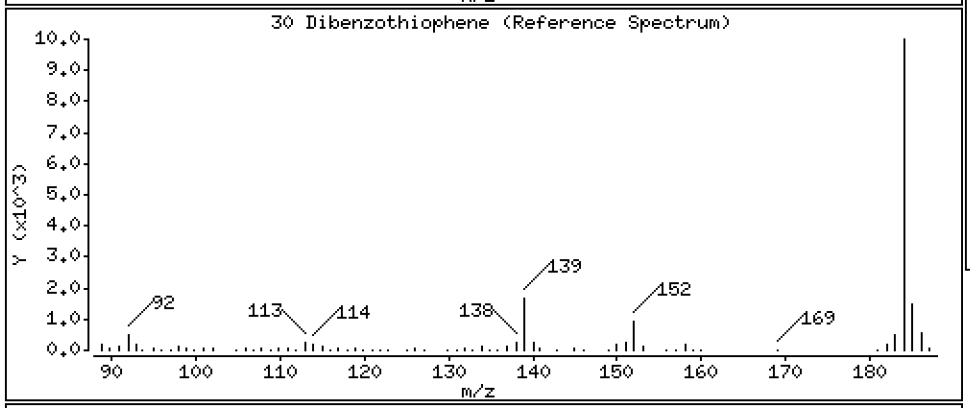
Concentration: 2.634 ug/mL

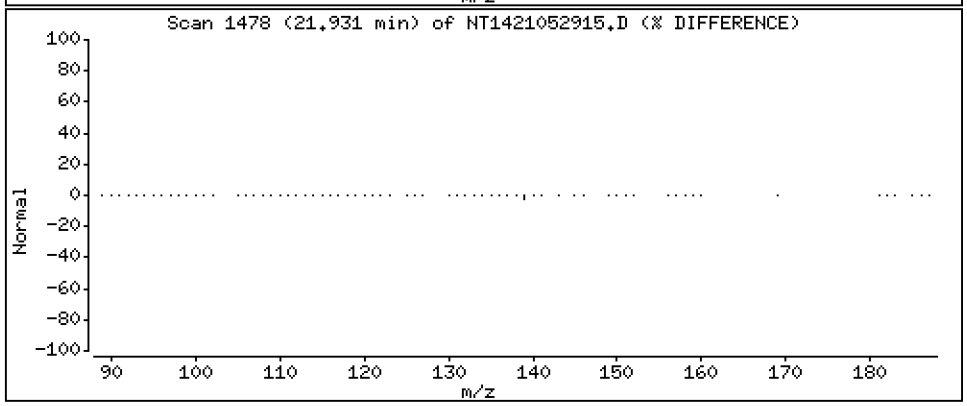












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Date : 29-MAY-2021 19:38

Client ID:

Instrument: nt14.i

Sample Info: SJF0025-SCV1

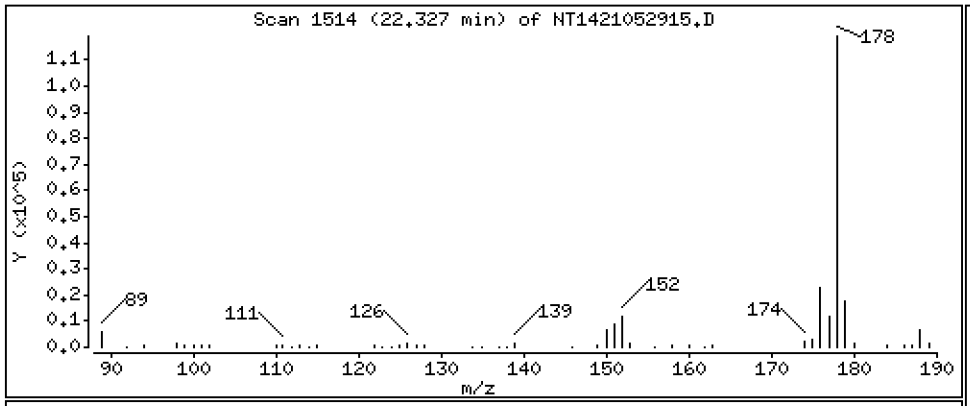
Operator: VTS

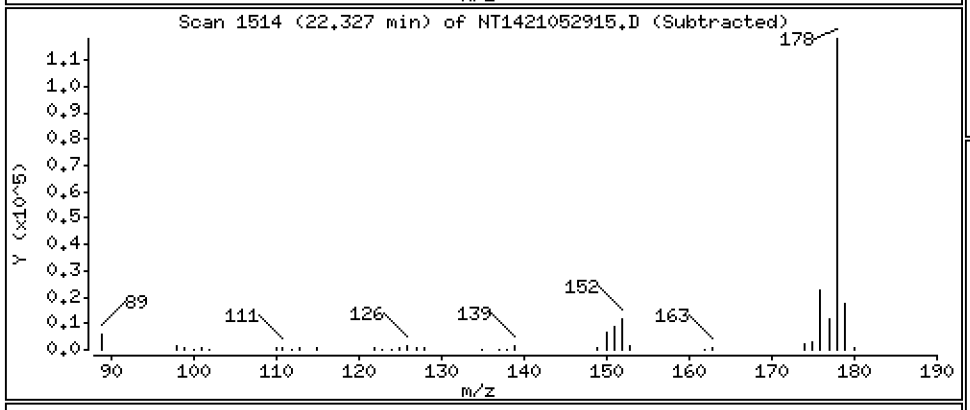
Column phase: Rxi-17Sil MS

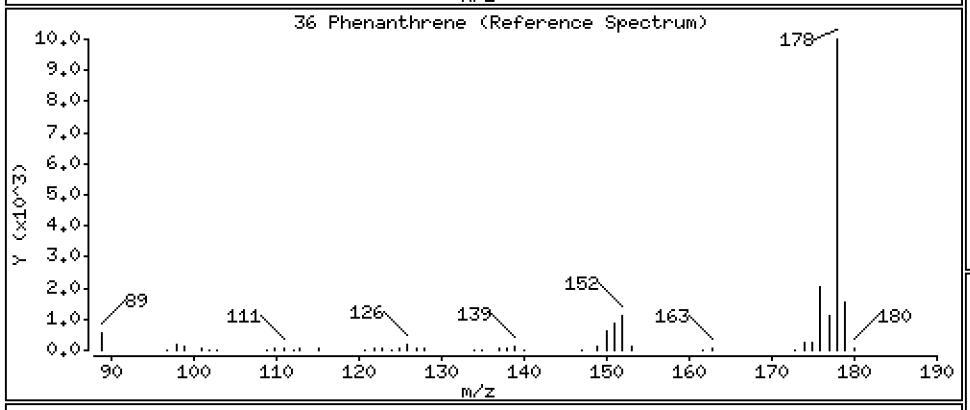
Column diameter: 0.25

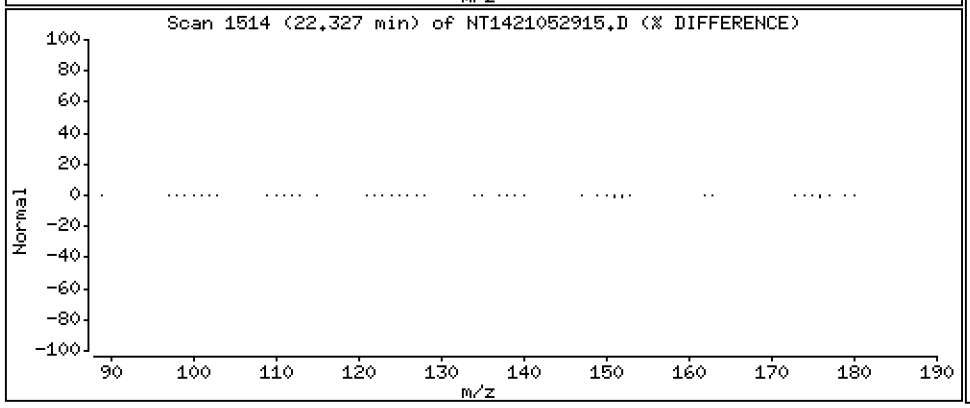
36 Phenanthrene

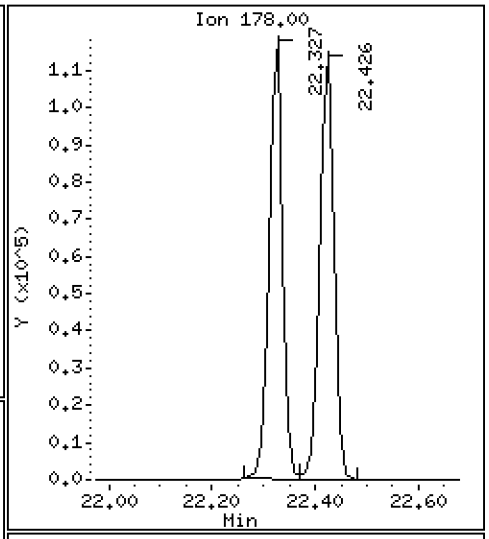
Concentration: 2.640 ug/mL

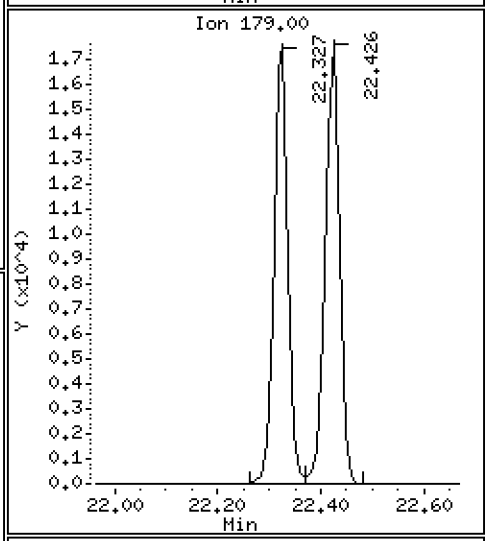


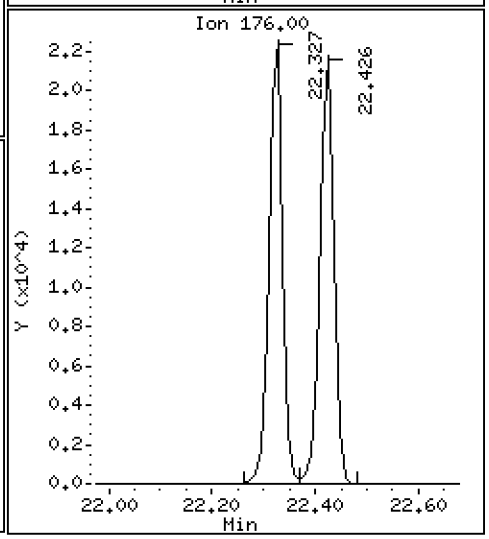












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Date : 29-MAY-2021 19:38

Client ID:

Instrument: nt14.i

Sample Info: SJF0025-SCV1

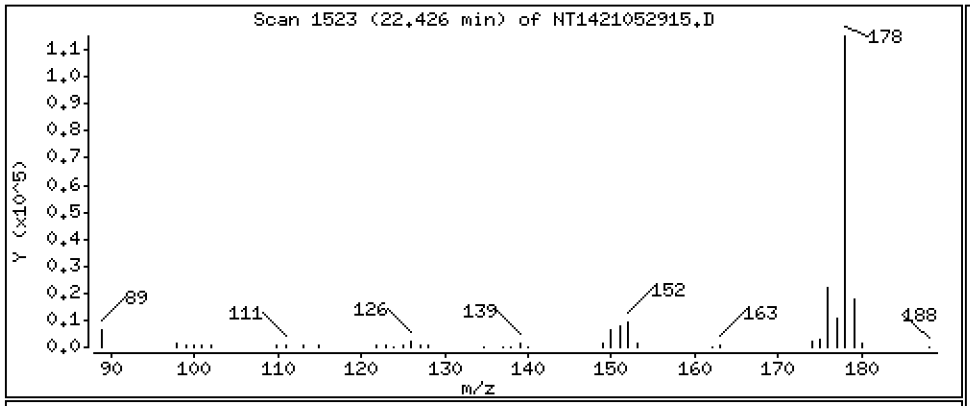
Operator: VTS

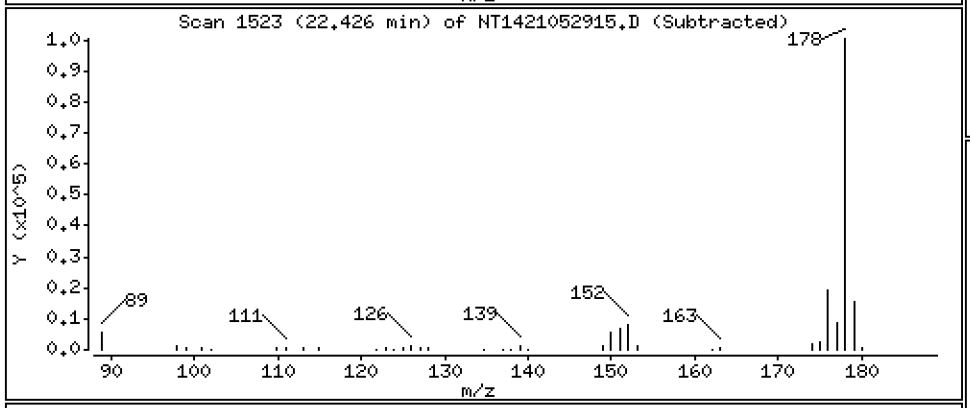
Column phase: Rxi-17Sil MS

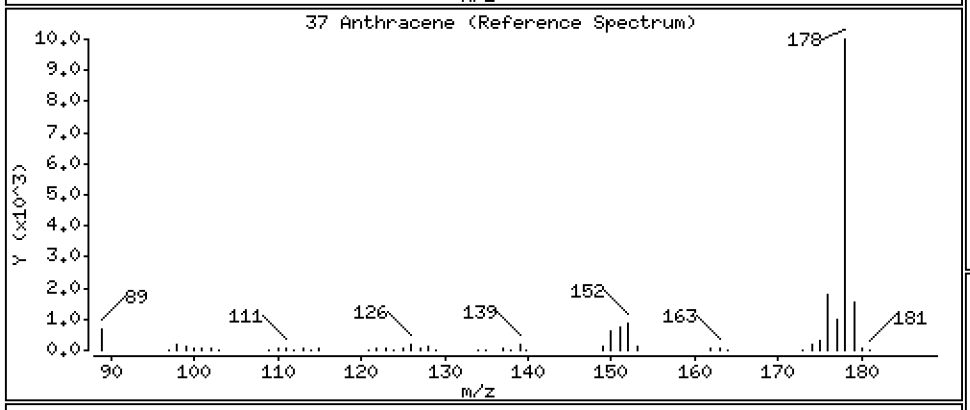
Column diameter: 0.25

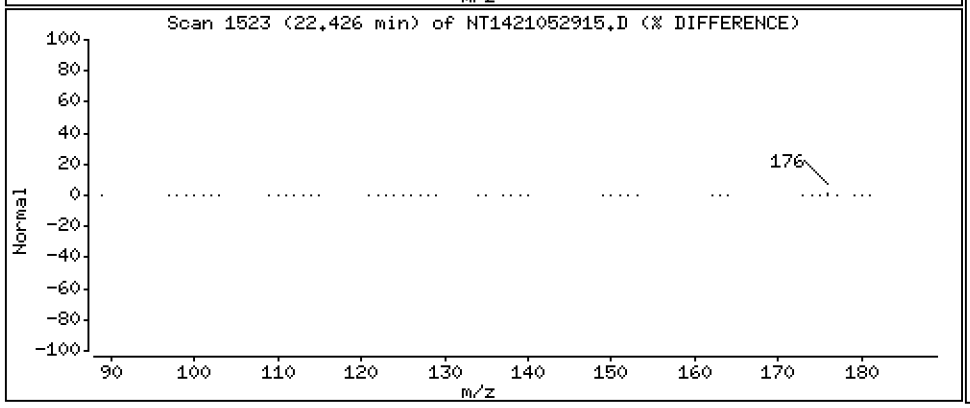
37 Anthracene

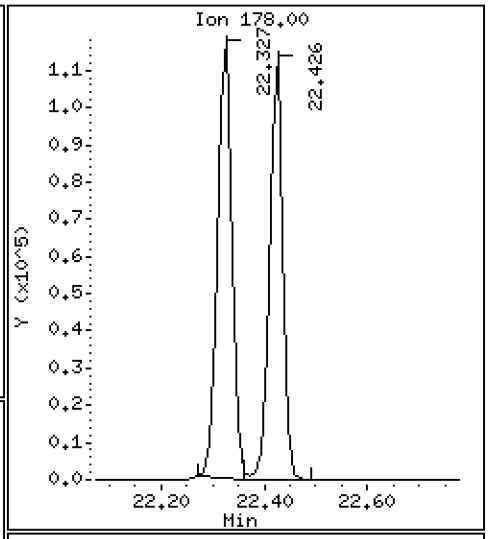
Concentration: 2.688 ug/mL

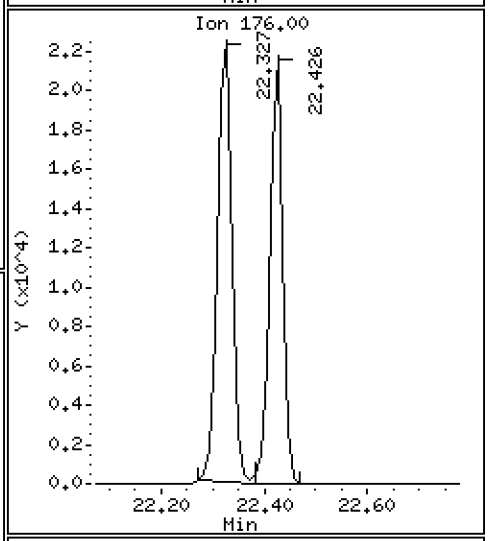


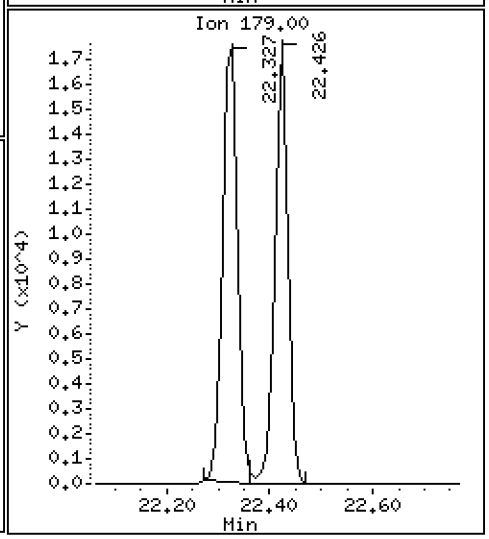












Data File: \\target\share\chem3\nt14.i\20210529.b\NT1421052915.D

Date : 29-MAY-2021 19:38

Client ID:

Instrument: nt14.i

Sample Info: SJF0025-SCV1

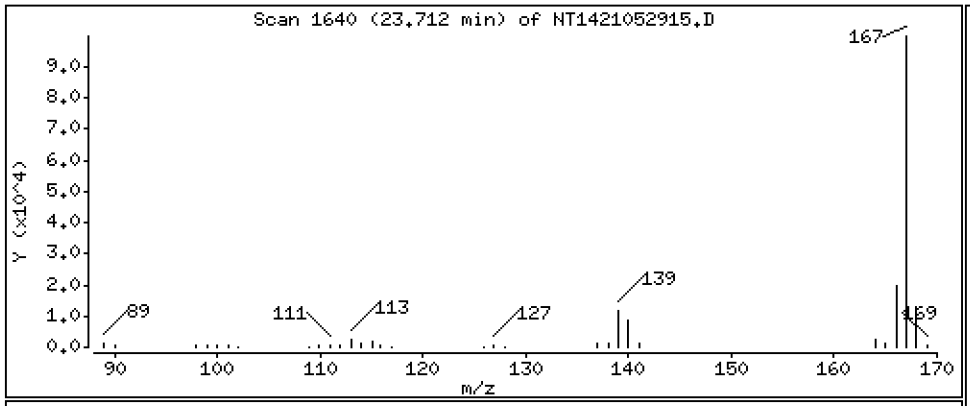
Operator: VTS

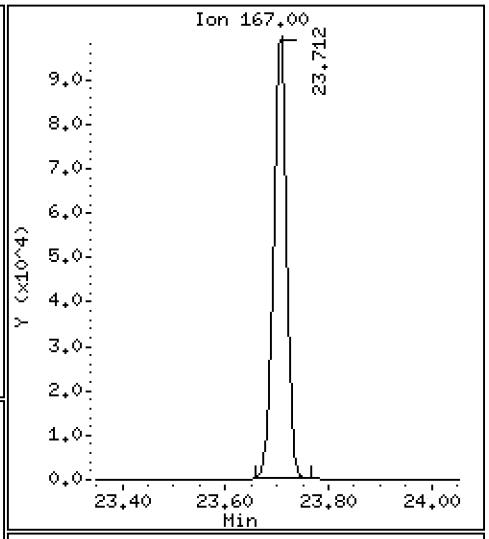
Column phase: Rxi-17Sil MS

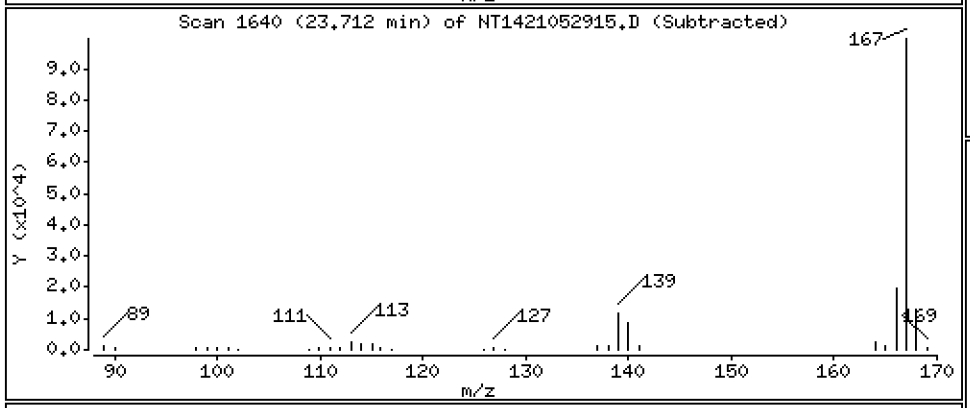
Column diameter: 0.25

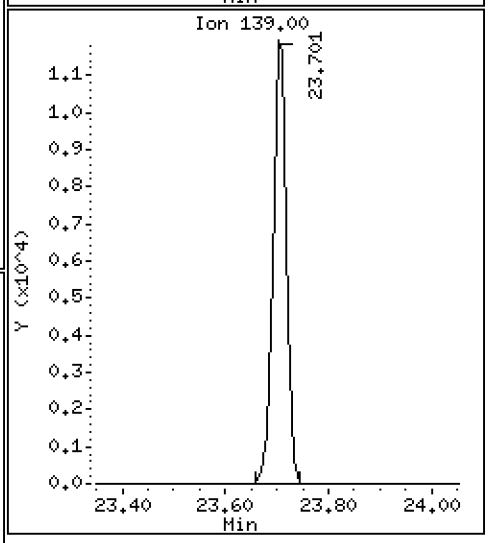
42 Carbazole

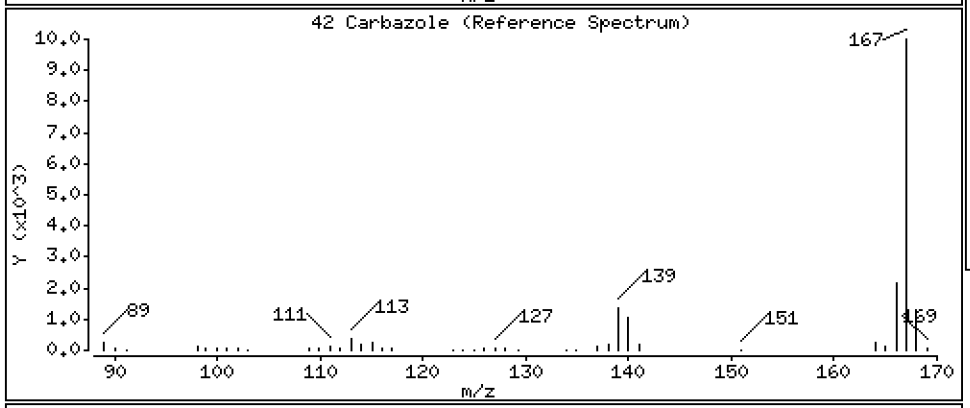
Concentration: 2.704 ug/mL

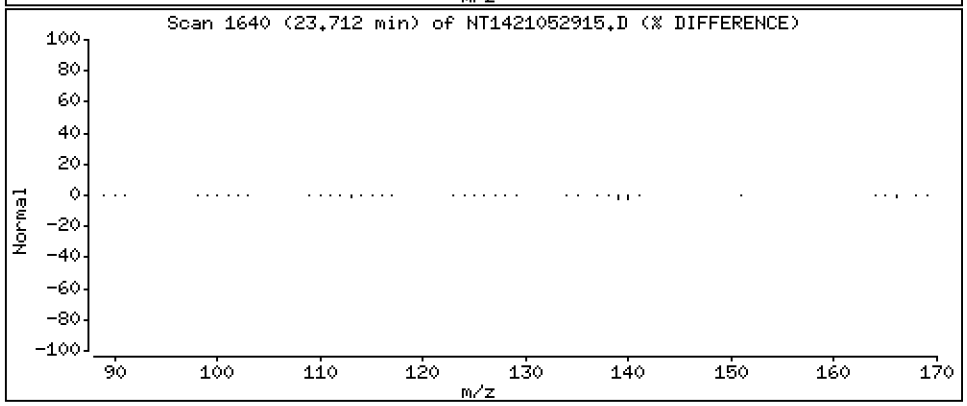












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Date : 29-MAY-2021 19:38

Client ID:

Instrument: nt14.i

Sample Info: SJF0025-SCV1

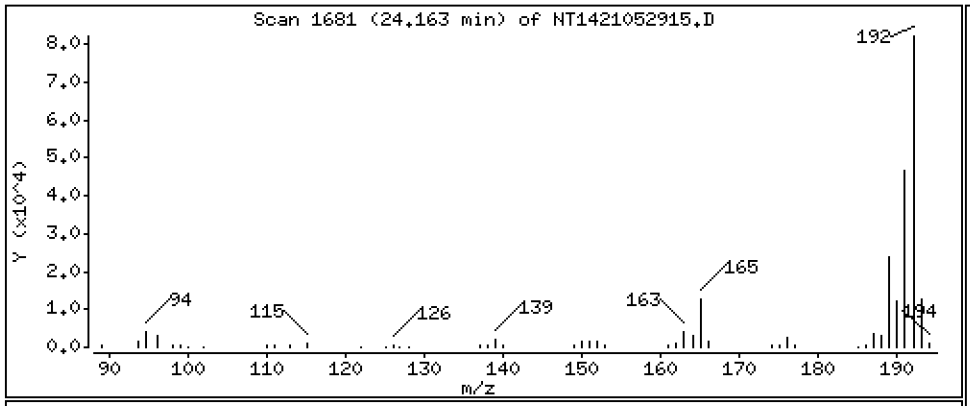
Operator: VTS

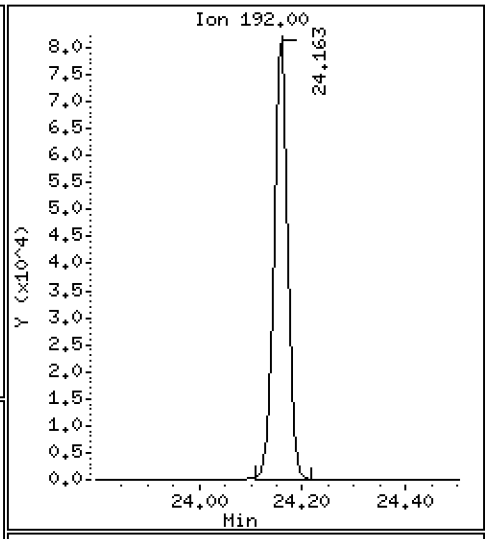
Column phase: Rxi-17Sil MS

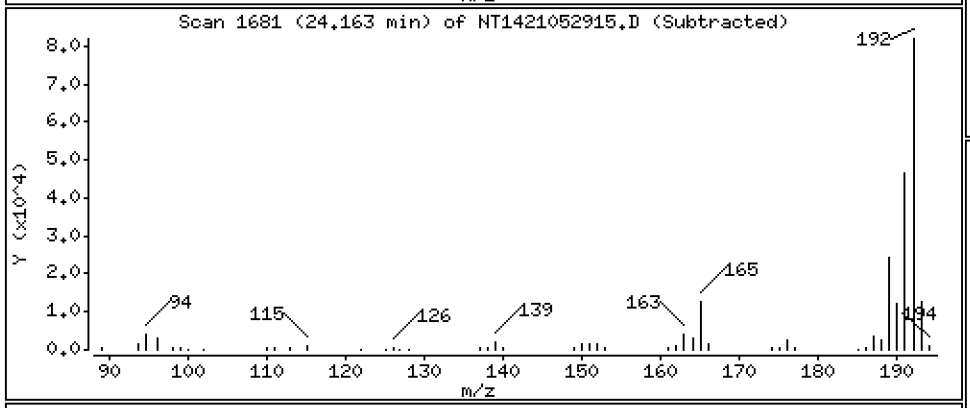
Column diameter: 0.25

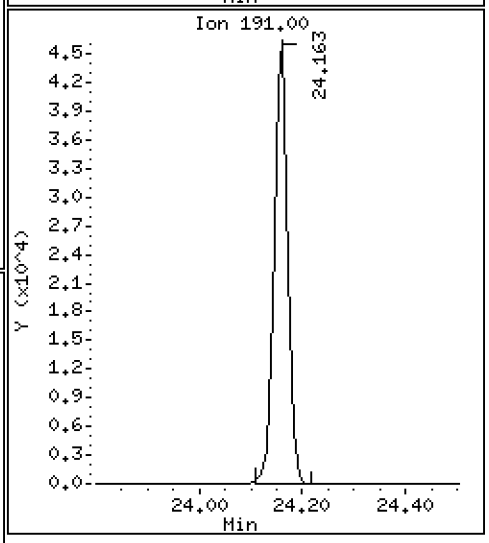
43 1-Methylphenanthrene

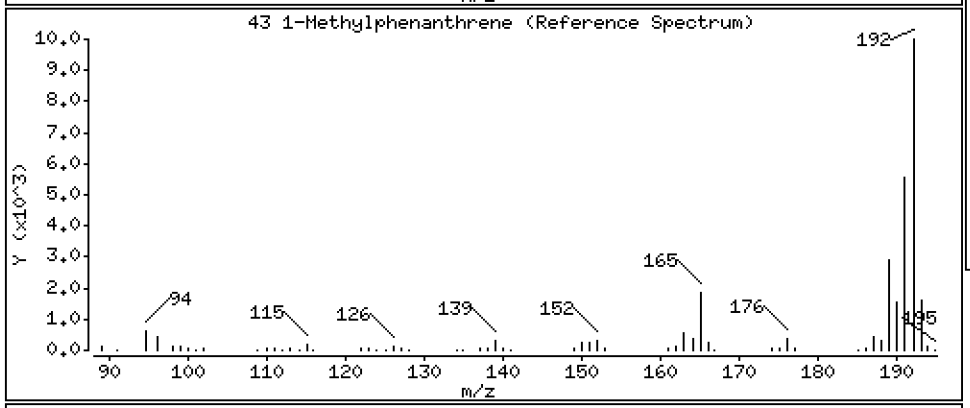
Concentration: 2.667 ug/mL

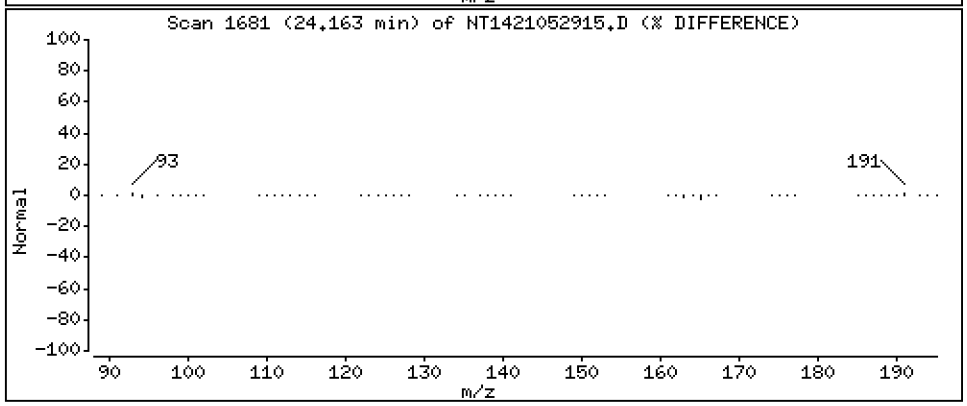












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Date : 29-MAY-2021 19:38

Client ID:

Instrument: nt14.i

Sample Info: SJF0025-SCV1

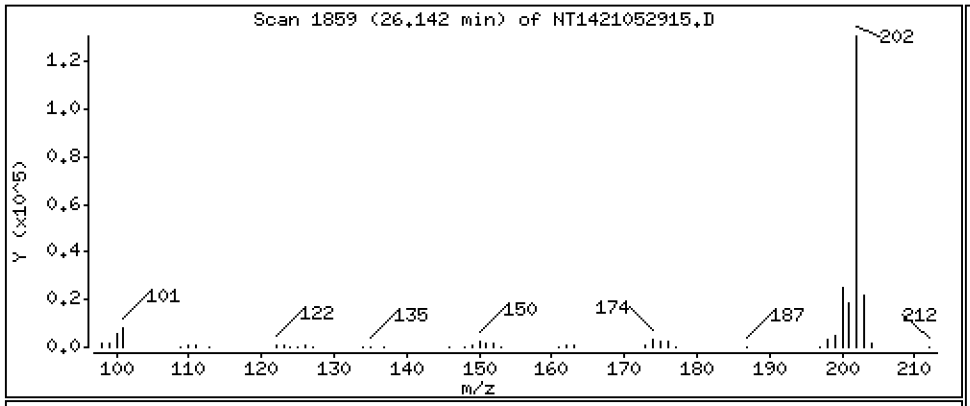
Operator: VTS

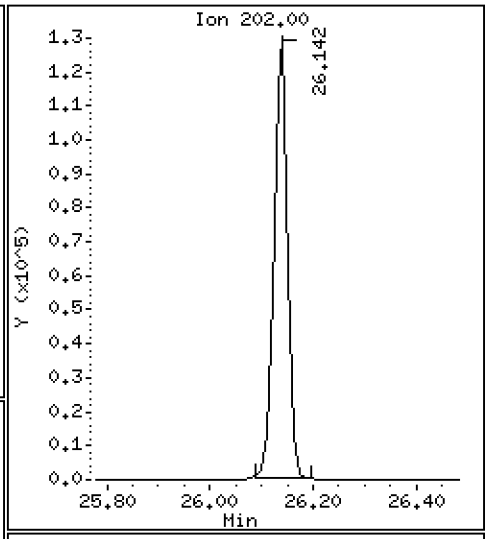
Column phase: Rxi-17Sil MS

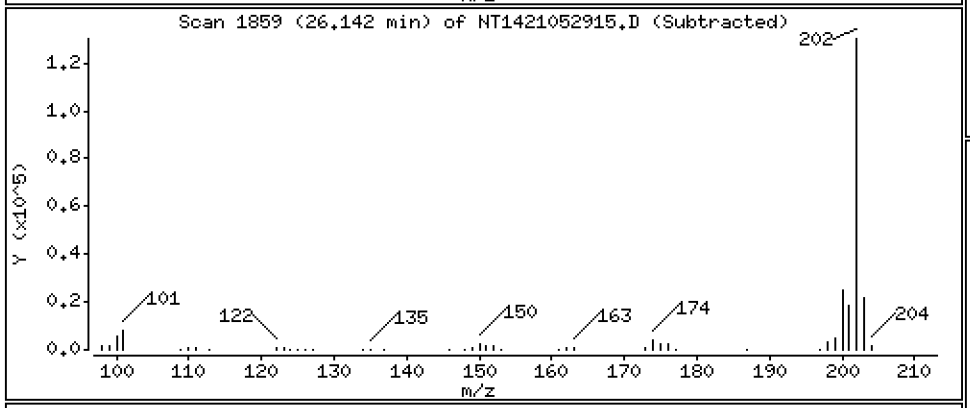
Column diameter: 0.25

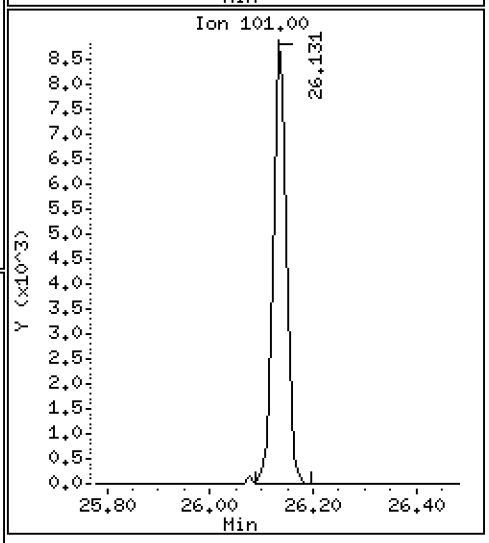
44 Fluoranthene

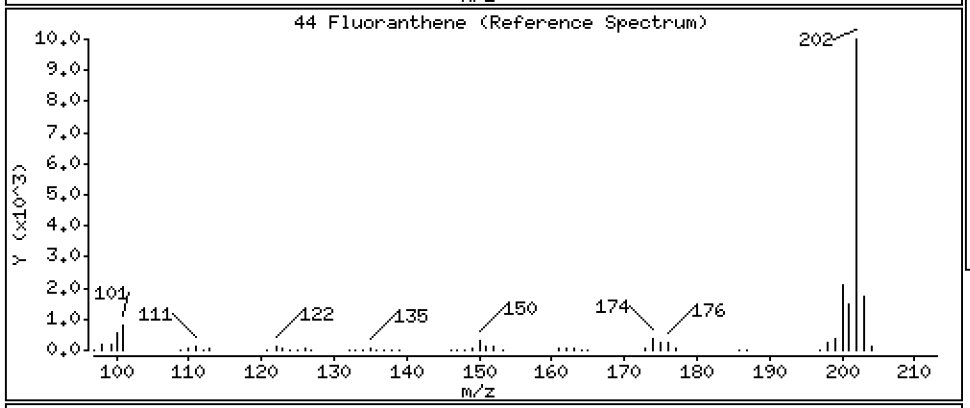
Concentration: 2.672 ug/mL

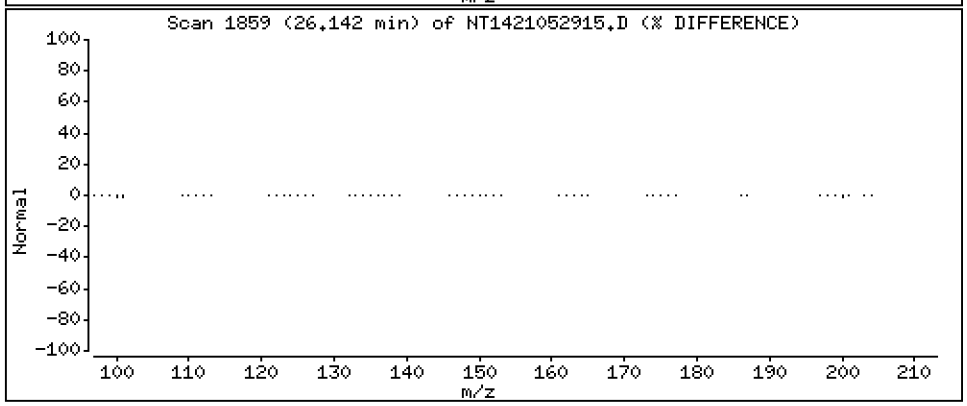












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Date : 29-MAY-2021 19:38

Client ID:

Instrument: nt14.i

Sample Info: SJF0025-SCV1

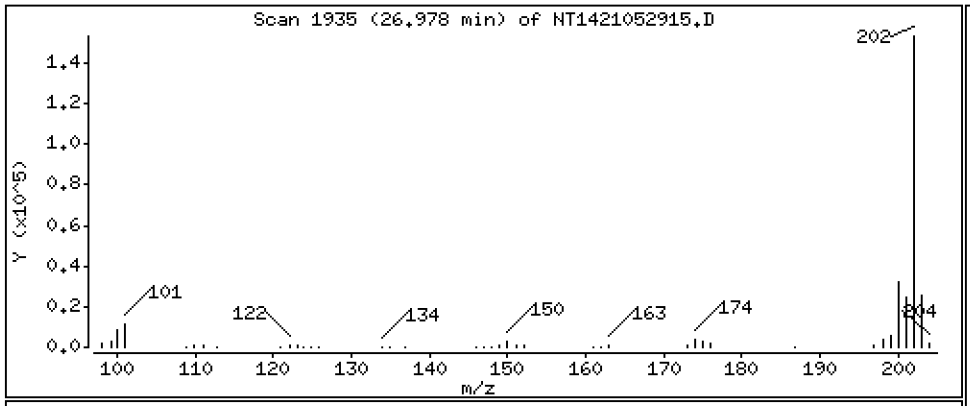
Operator: VTS

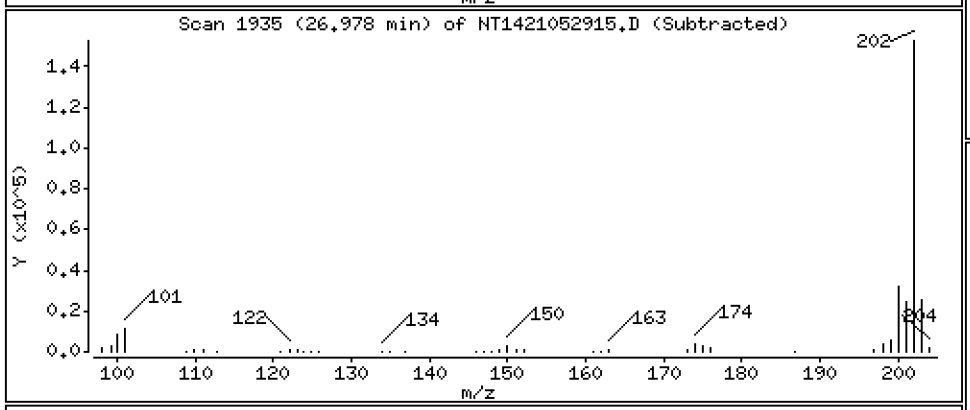
Column phase: Rxi-17Sil MS

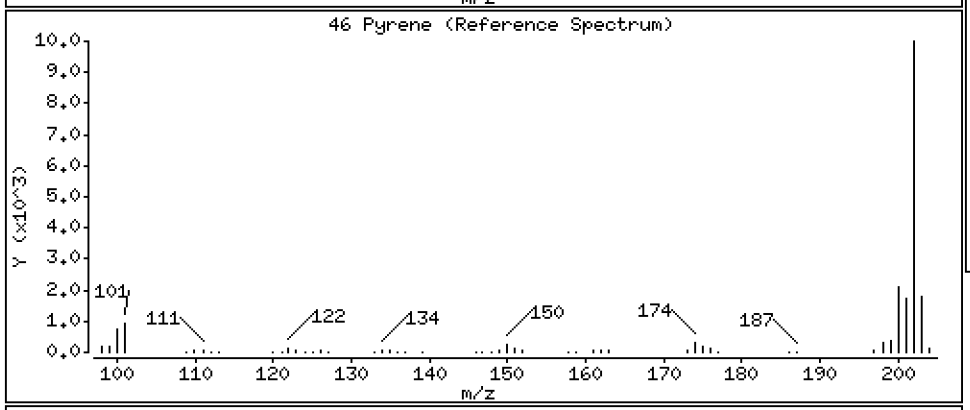
Column diameter: 0.25

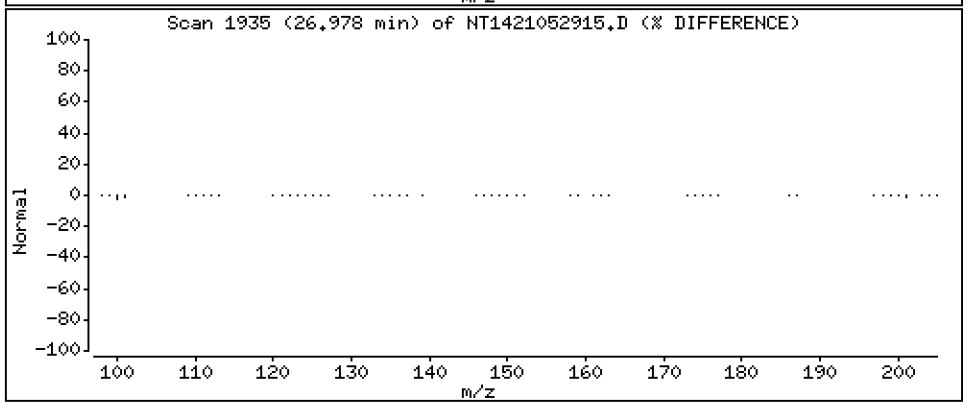
46 Pyrene

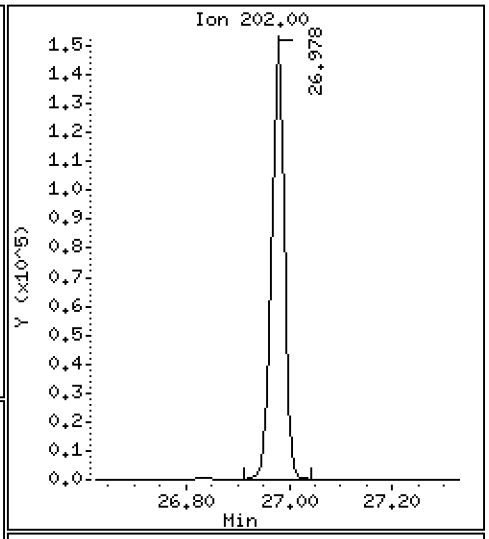
Concentration: 2.712 ug/mL

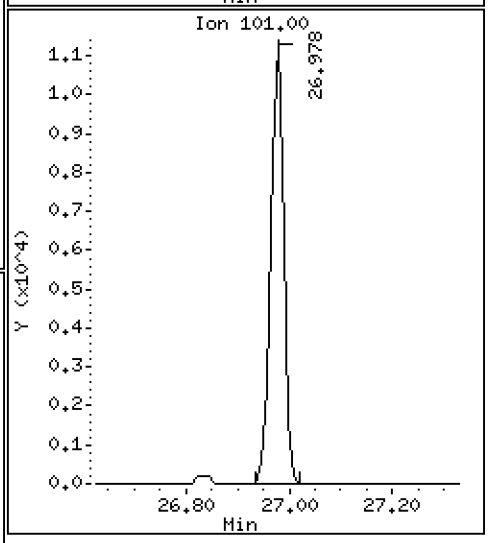












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Date : 29-MAY-2021 19:38

Client ID:

Instrument: nt14.i

Sample Info: SJF0025-SCV1

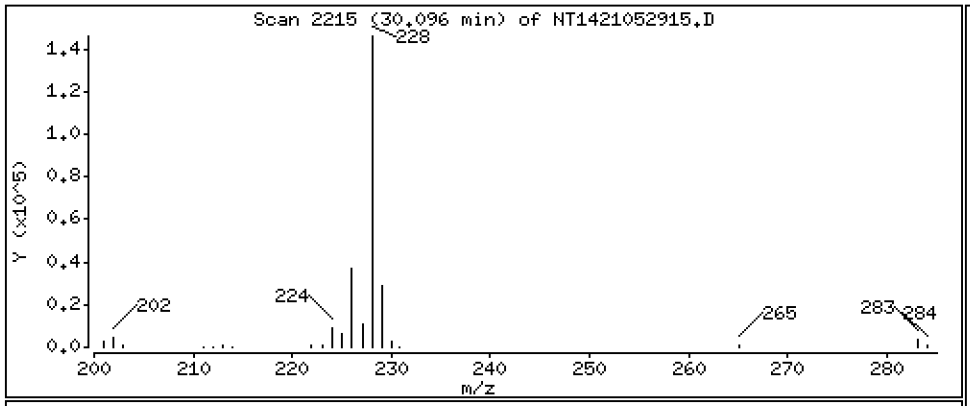
Operator: VTS

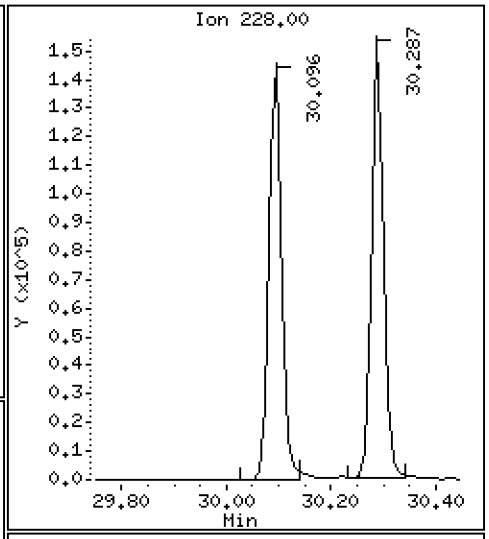
Column phase: Rxi-17Sil MS

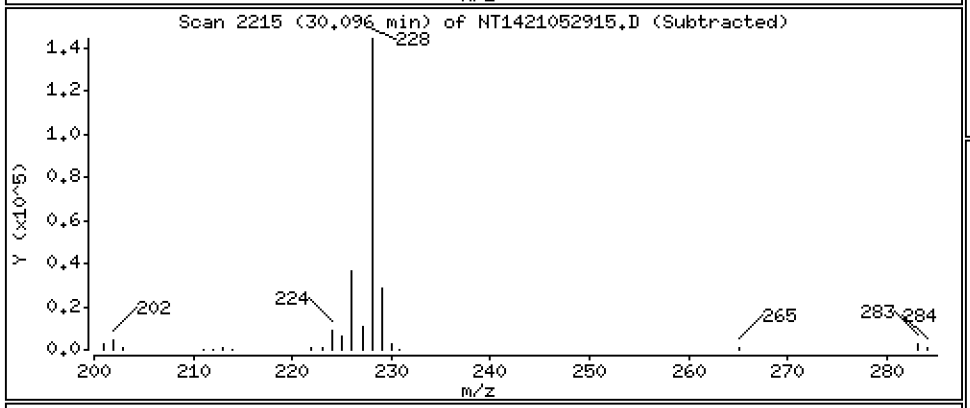
Column diameter: 0.25

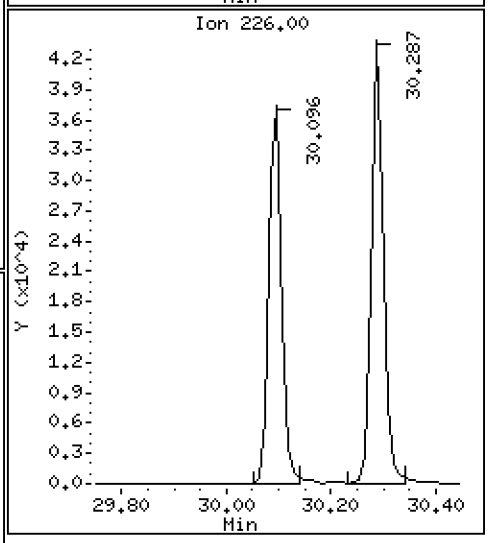
55 Benzo(a)anthracene

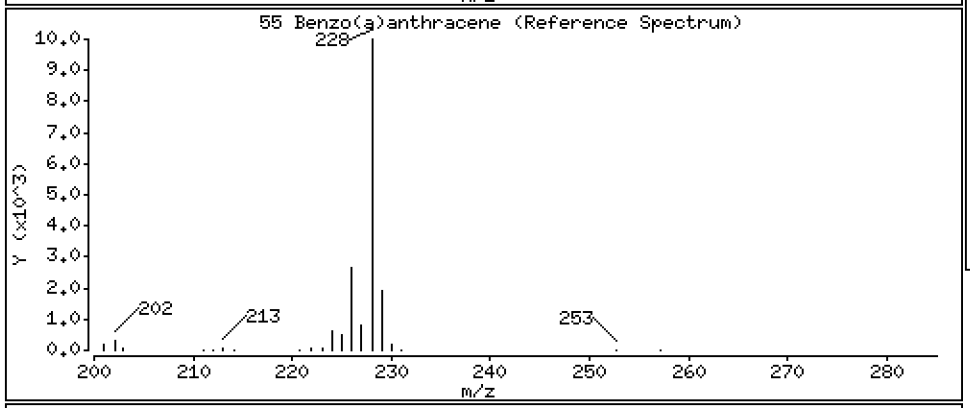
Concentration: 2.756 ug/mL

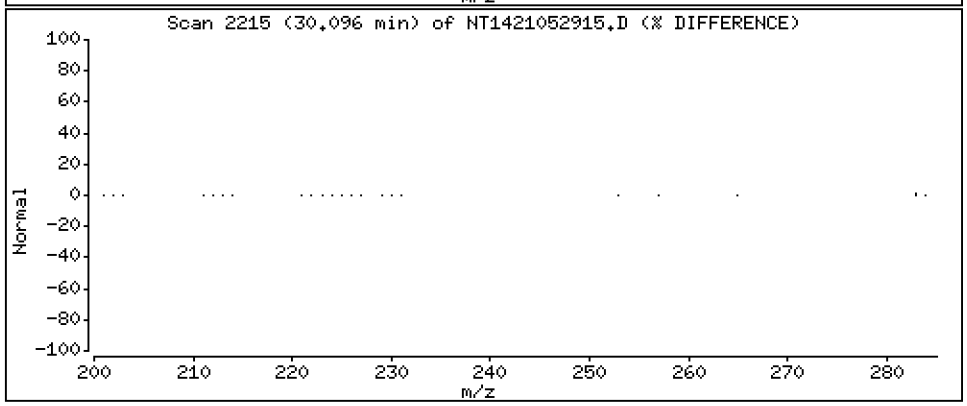












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Date : 29-MAY-2021 19:38

Client ID:

Instrument: nt14.i

Sample Info: SJF0025-SCV1

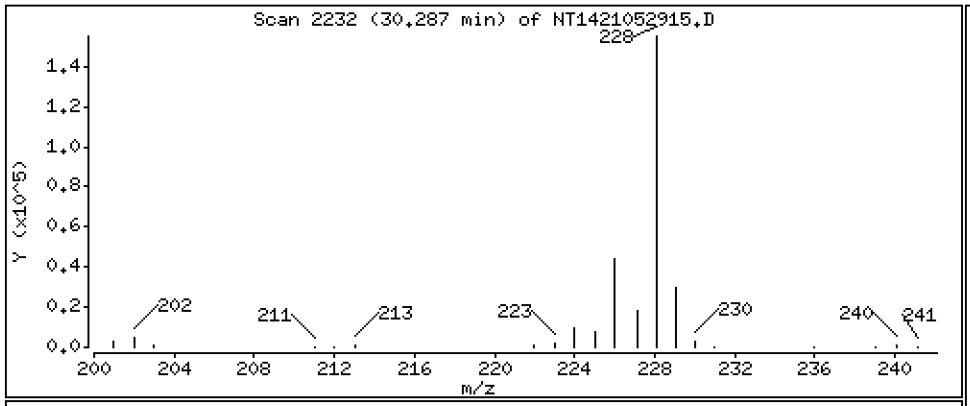
Operator: VTS

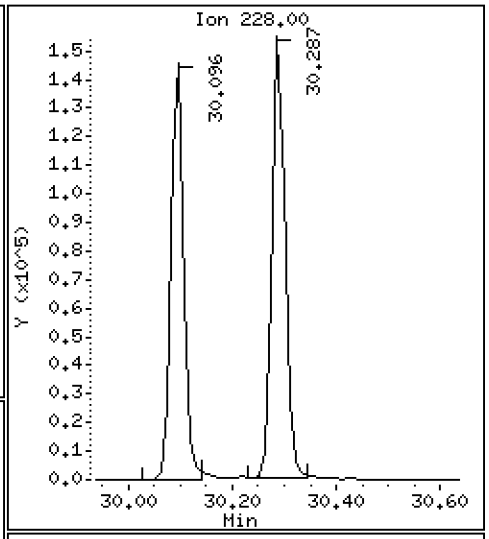
Column phase: Rxi-17Sil MS

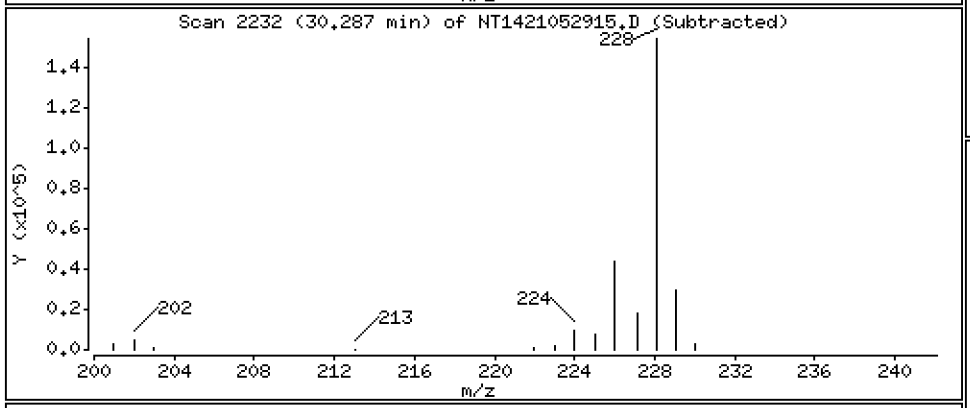
Column diameter: 0.25

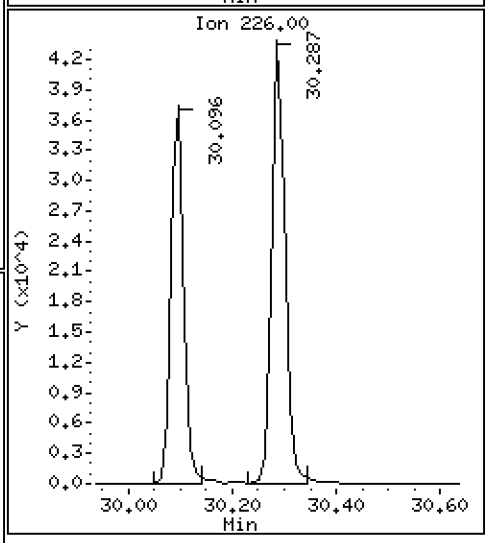
57 Chrysene

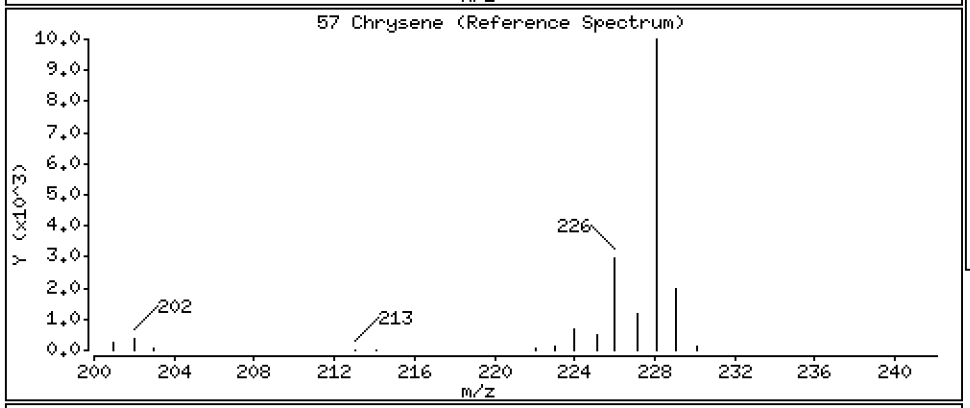
Concentration: 2.770 ug/mL

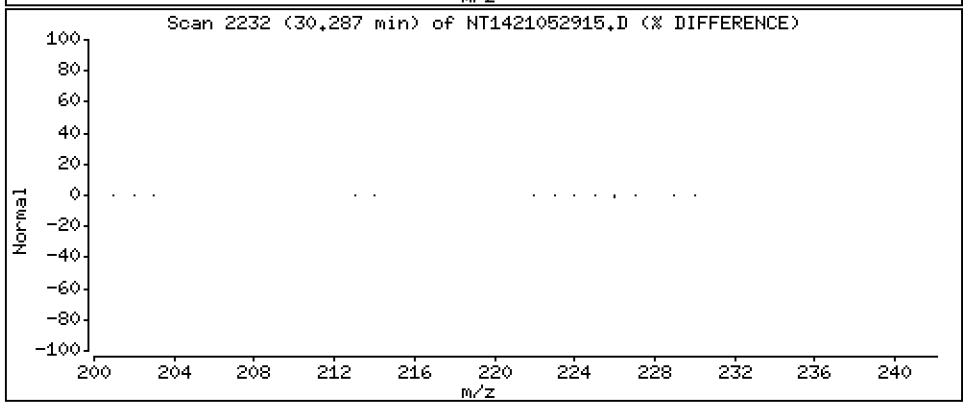












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Date : 29-MAY-2021 19:38

Client ID:

Instrument: nt14.i

Sample Info: SJF0025-SCV1

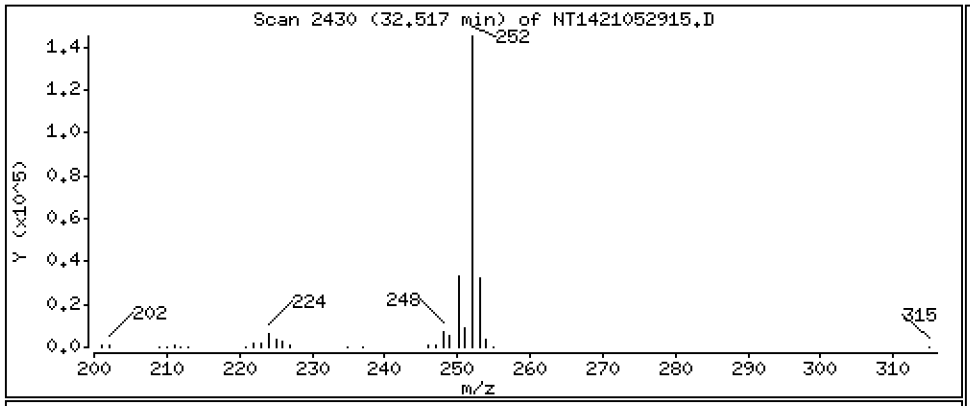
Operator: VTS

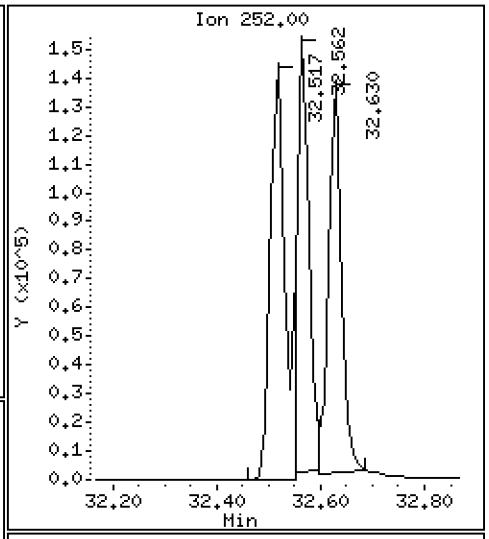
Column phase: Rxi-17Sil MS

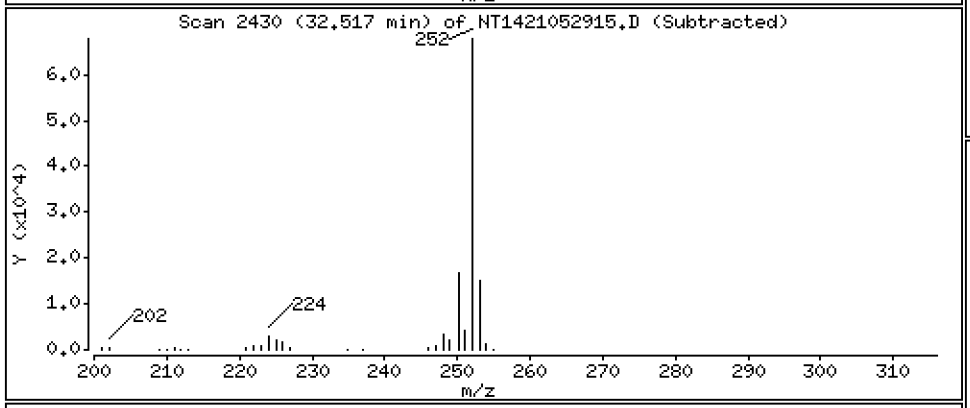
Column diameter: 0.25

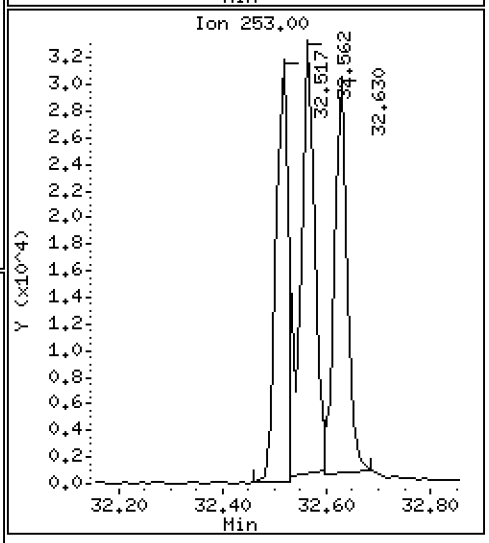
62 Benzo(b)fluoranthene

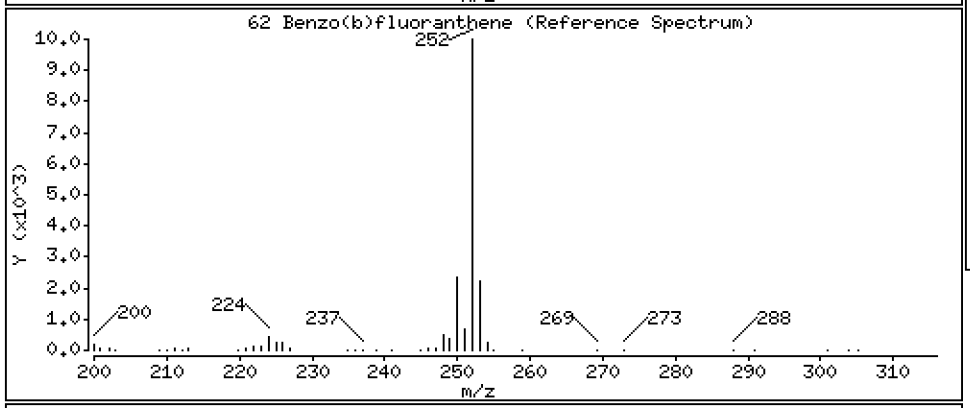
Concentration: 3.119 ug/mL

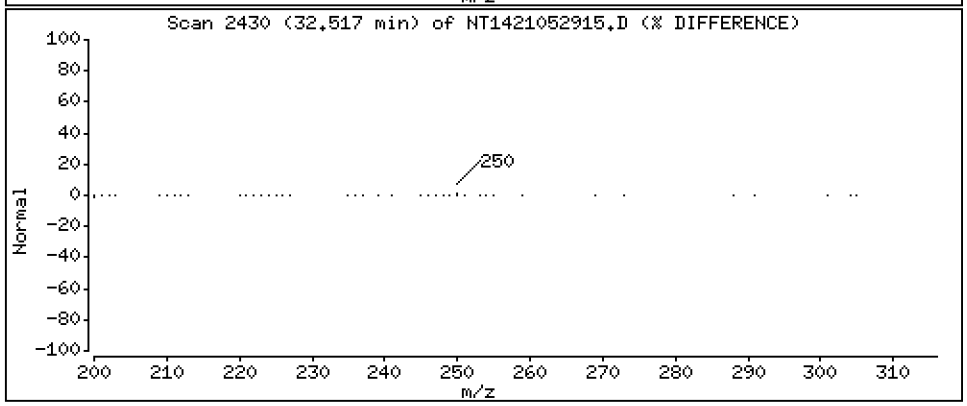












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Date : 29-MAY-2021 19:38

Client ID:

Instrument: nt14.i

Sample Info: SJF0025-SCV1

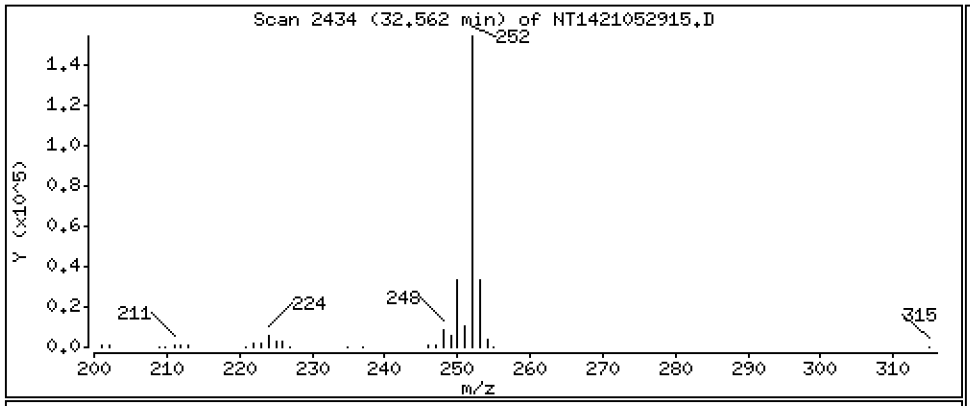
Operator: VTS

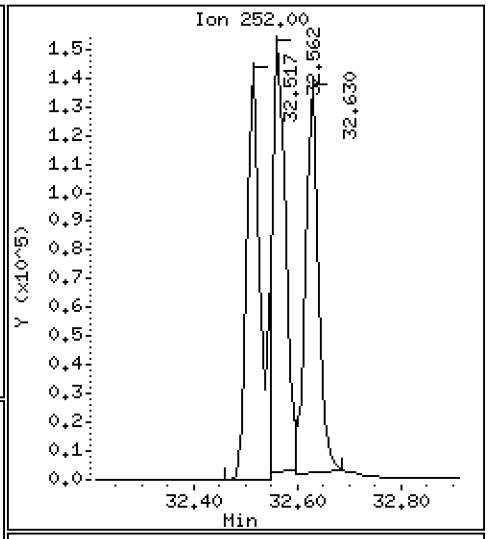
Column phase: Rxi-17Sil MS

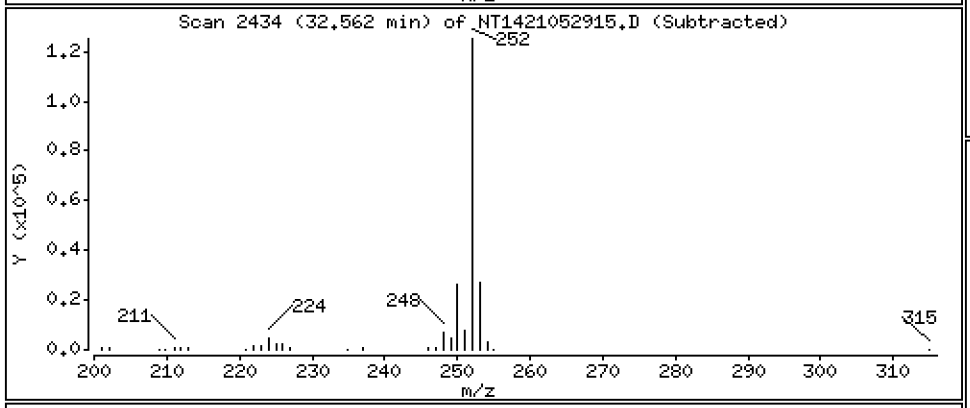
Column diameter: 0.25

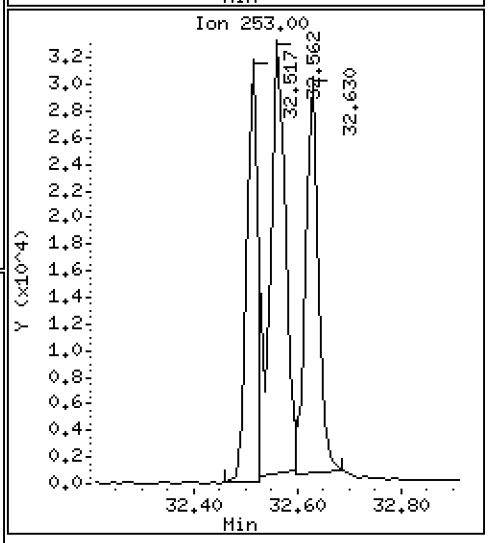
63 Benzo(k)fluoranthene

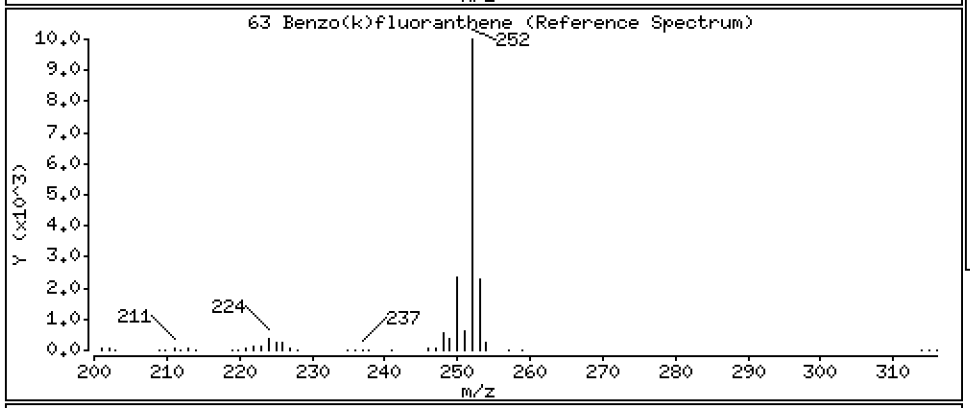
Concentration: 2.487 ug/mL

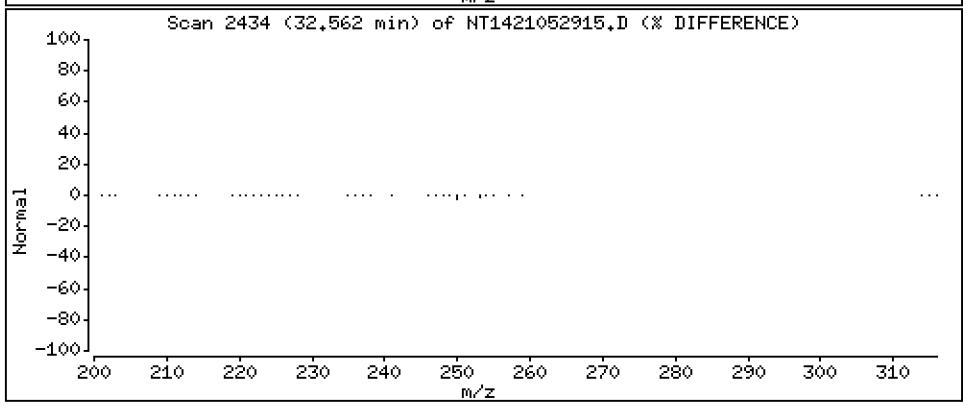












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Date : 29-MAY-2021 19:38

Client ID:

Instrument: nt14.i

Sample Info: SJF0025-SCV1

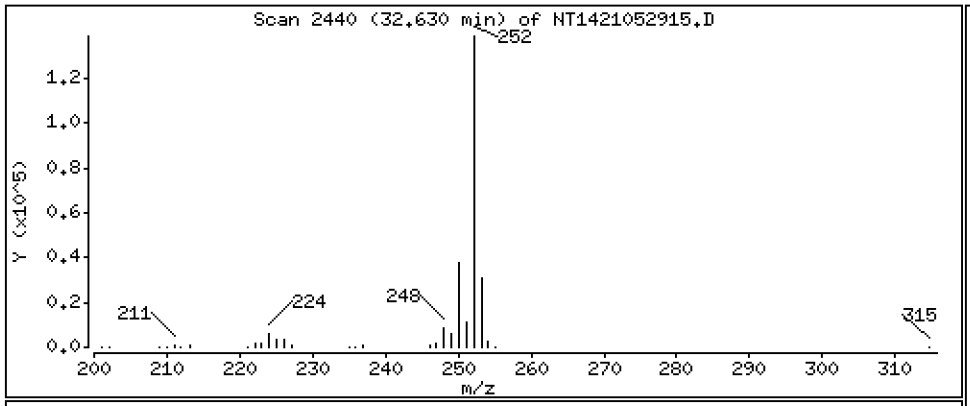
Operator: VTS

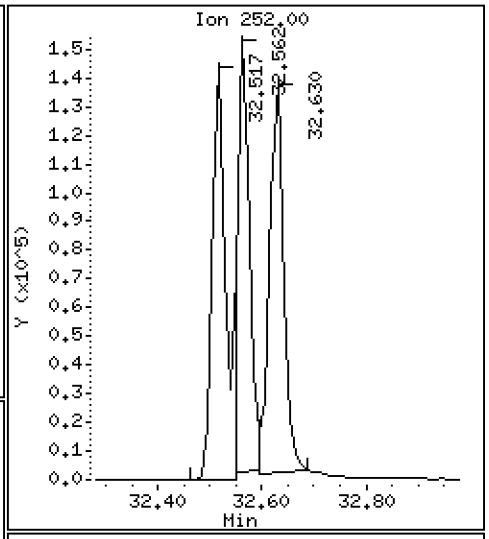
Column phase: Rxi-17Sil MS

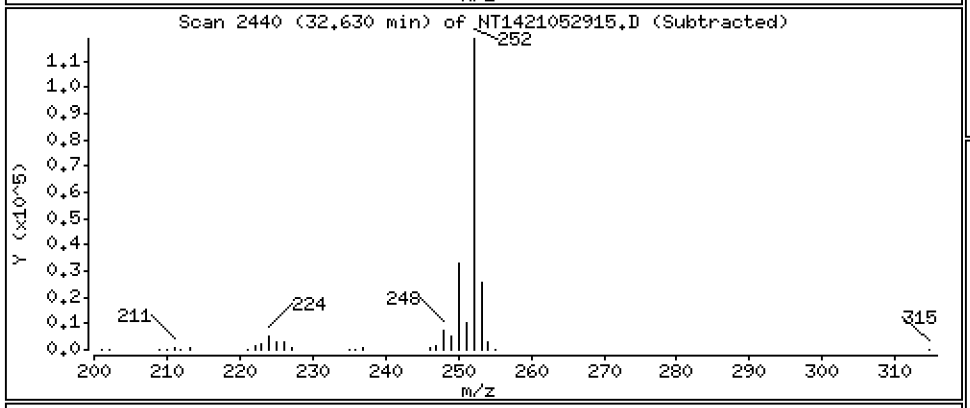
Column diameter: 0.25

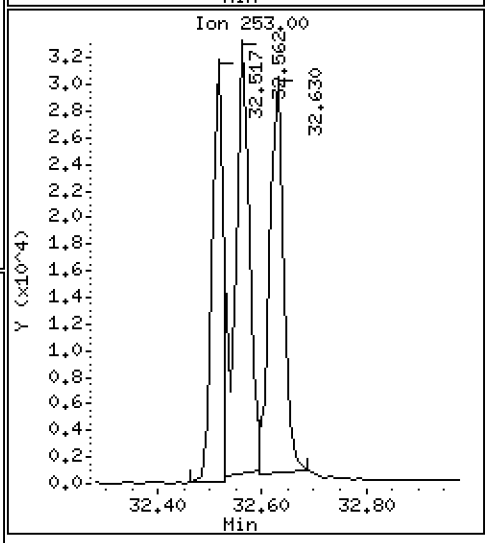
293 Benzo(j)fluoranthene

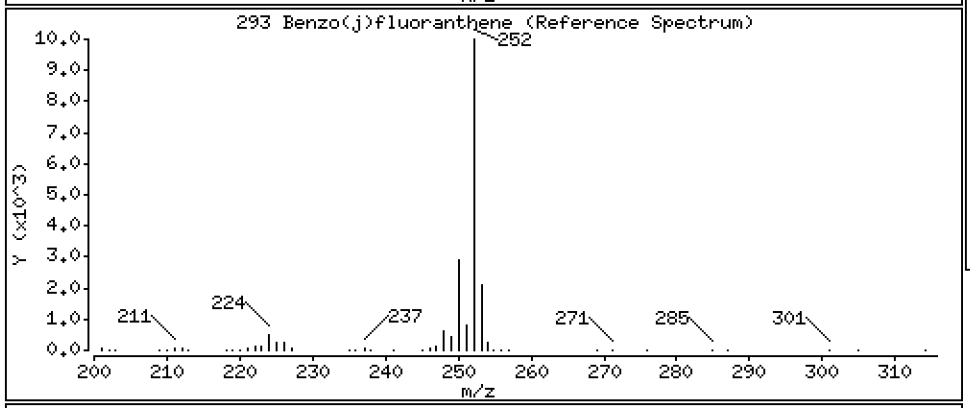
Concentration: 2.590 ug/mL

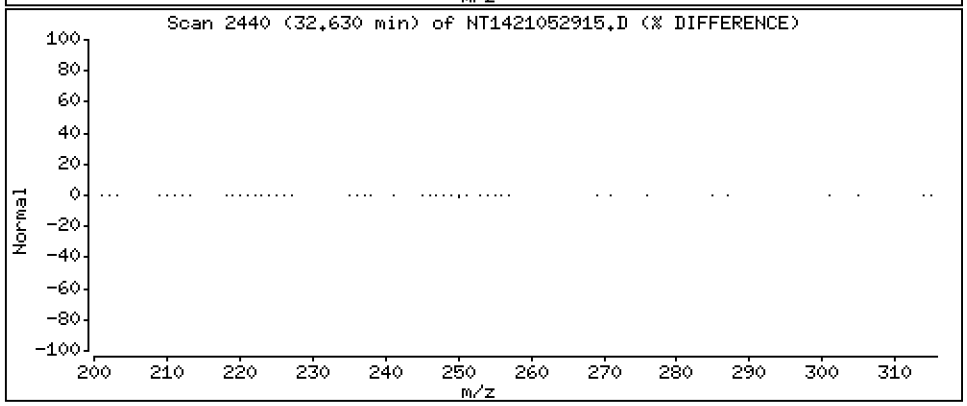












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Date : 29-MAY-2021 19:38

Client ID:

Instrument: nt14.i

Sample Info: SJF0025-SCV1

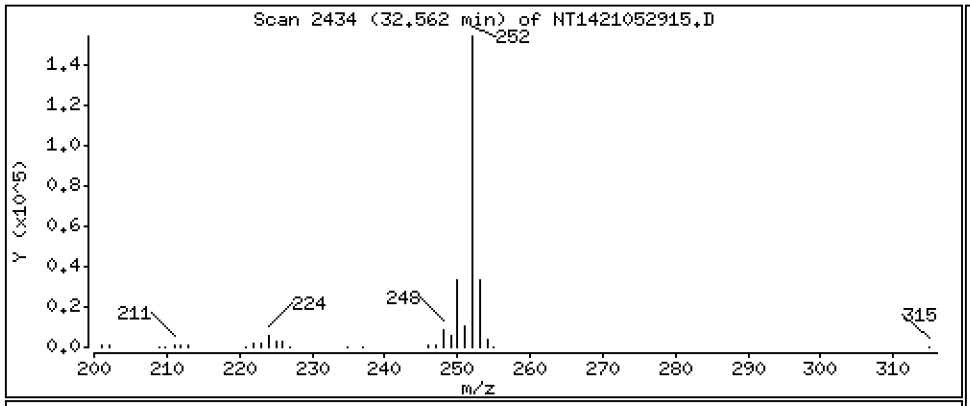
Operator: VTS

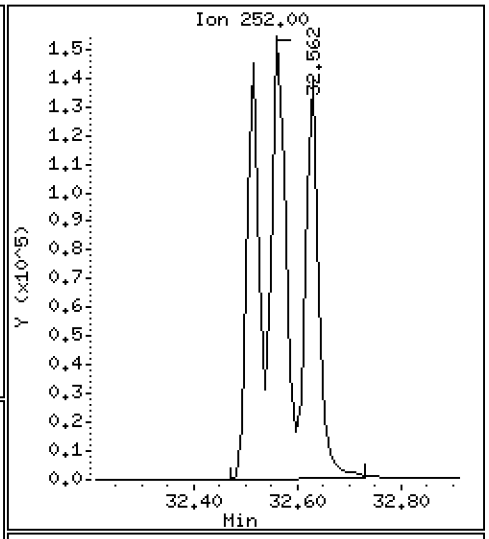
Column phase: Rxi-17Sil MS

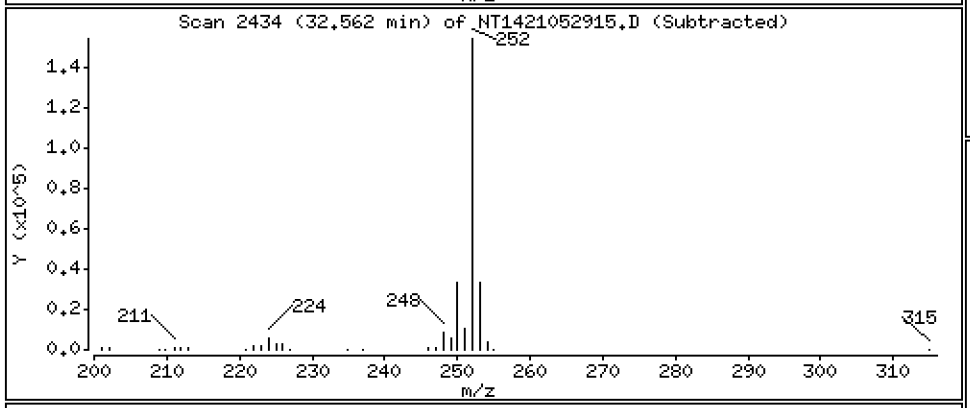
Column diameter: 0.25

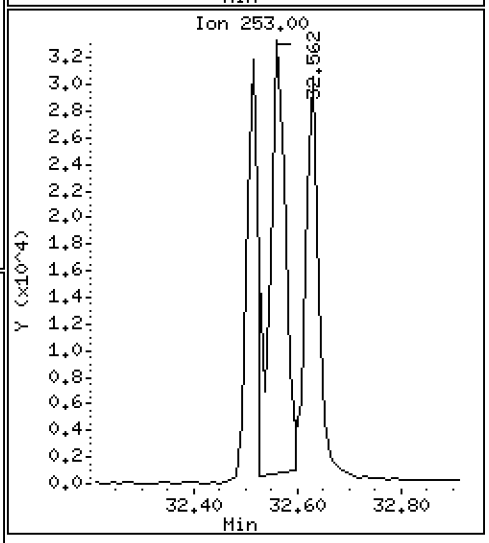
246 Total Benzofluoranthenes

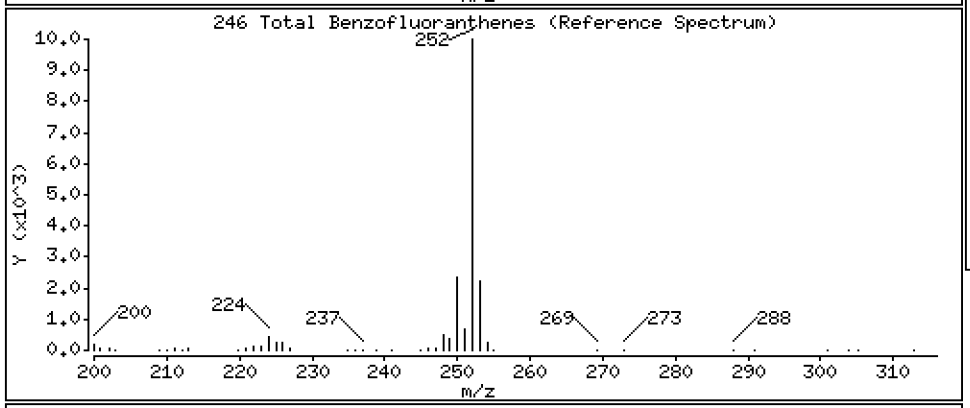
Concentration: 8.191 ug/mL

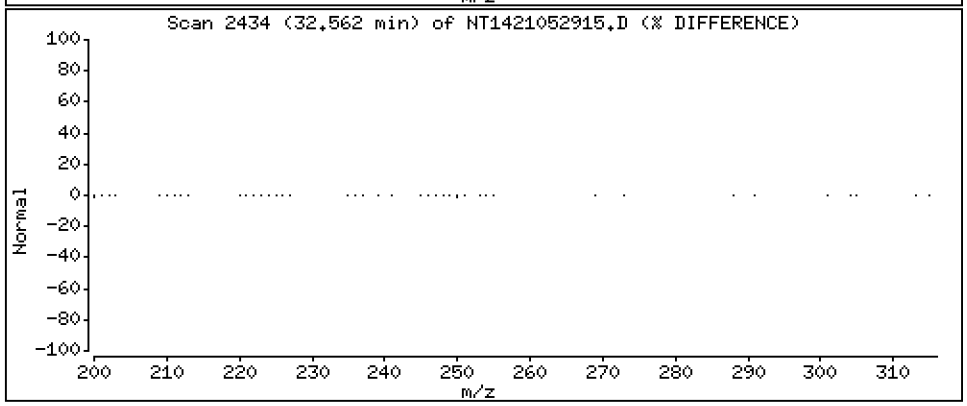












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Date : 29-MAY-2021 19:38

Client ID:

Instrument: nt14.i

Sample Info: SJF0025-SCV1

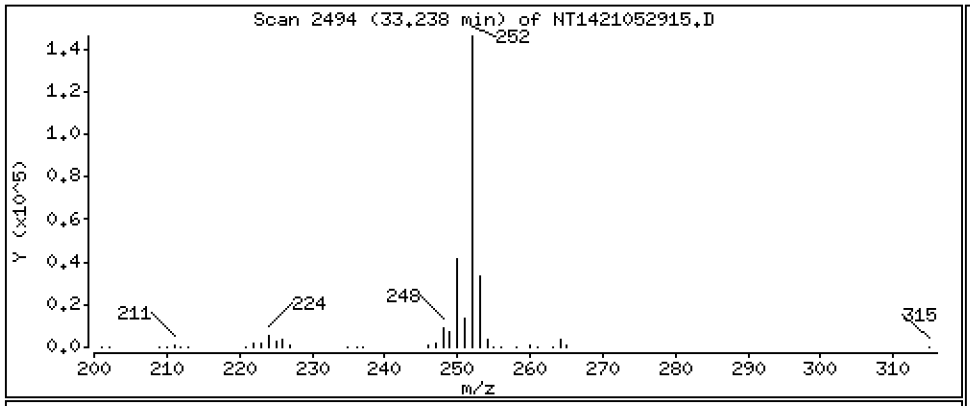
Operator: VTS

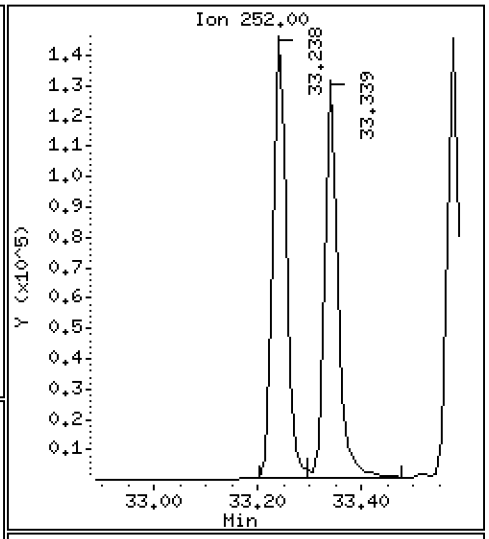
Column phase: Rxi-17Sil MS

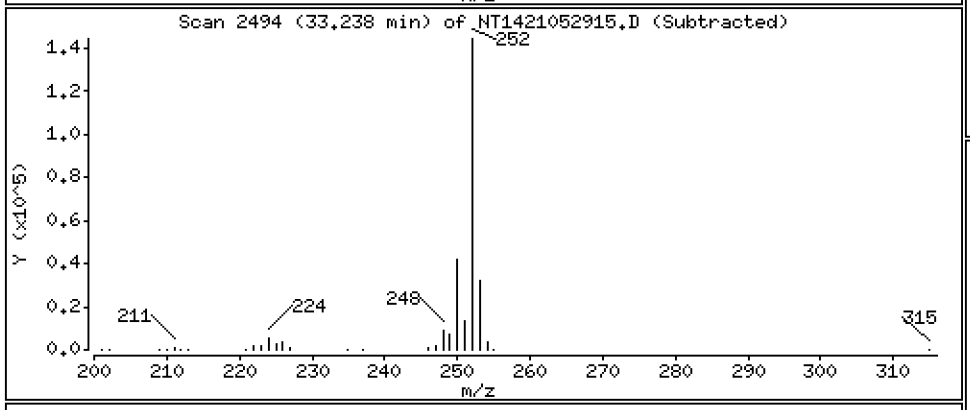
Column diameter: 0.25

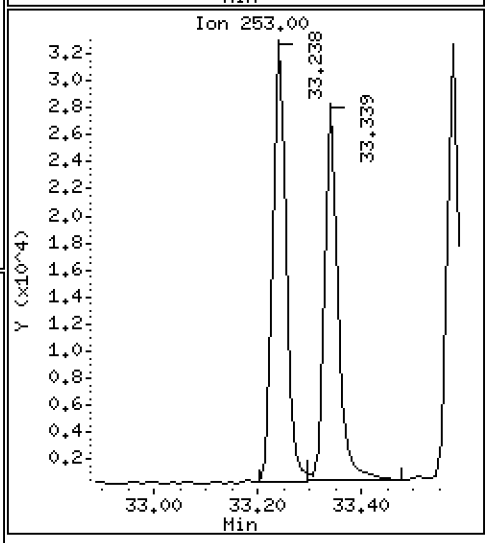
64 Benzo(e)pyrene

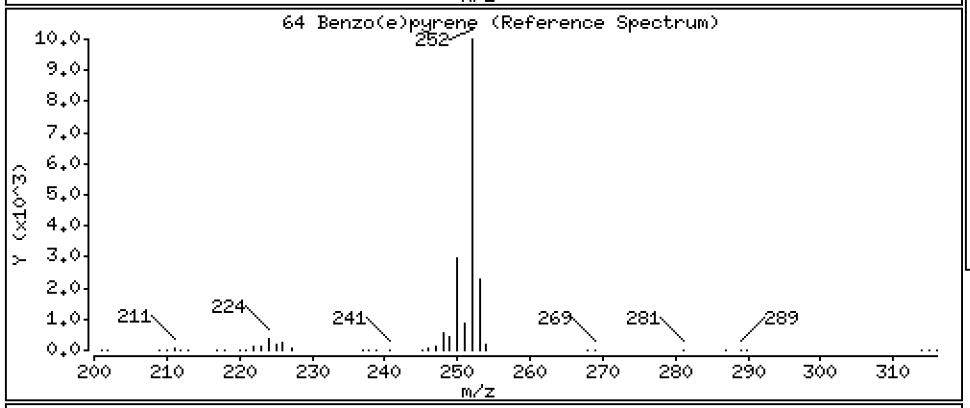
Concentration: 2.669 ug/mL

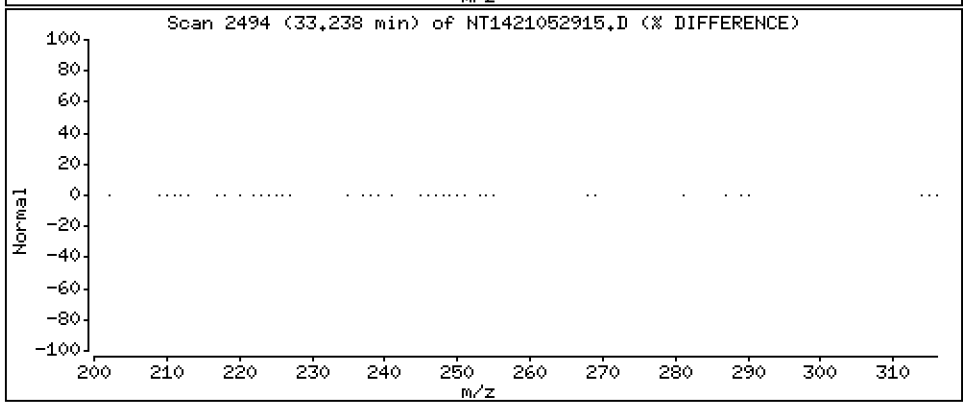












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Date : 29-MAY-2021 19:38

Client ID:

Instrument: nt14.i

Sample Info: SJF0025-SCV1

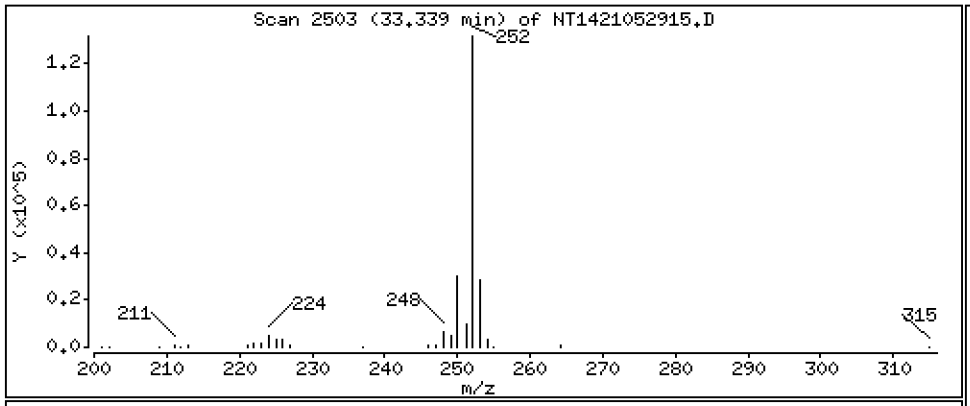
Operator: VTS

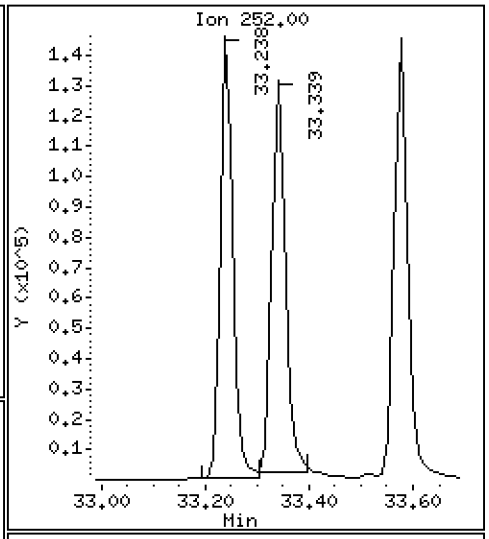
Column phase: Rxi-17Sil MS

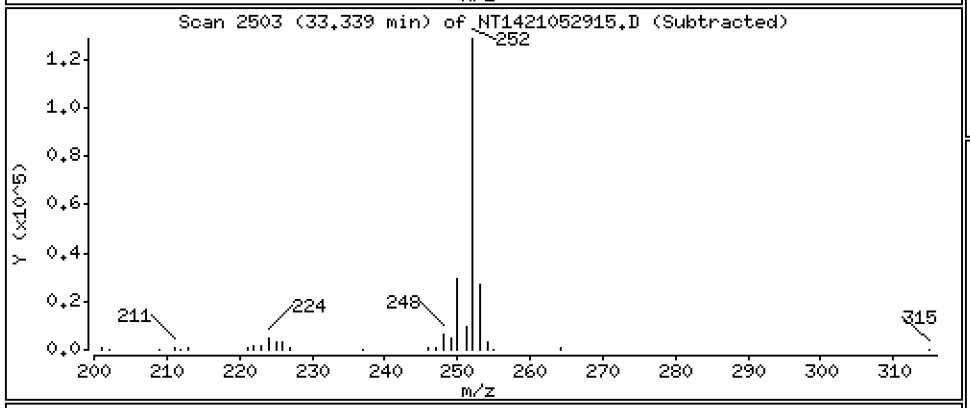
Column diameter: 0.25

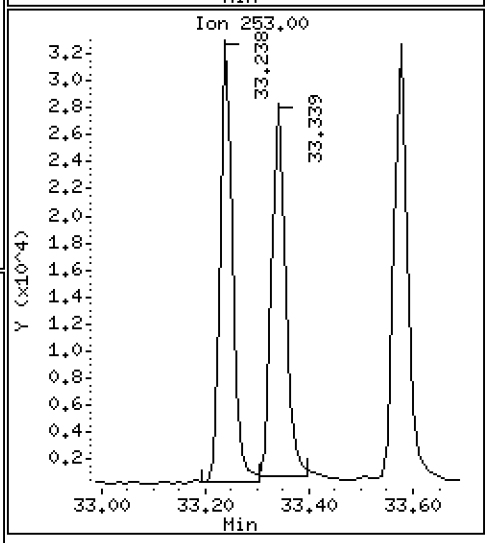
66 Benzo(a)pyrene

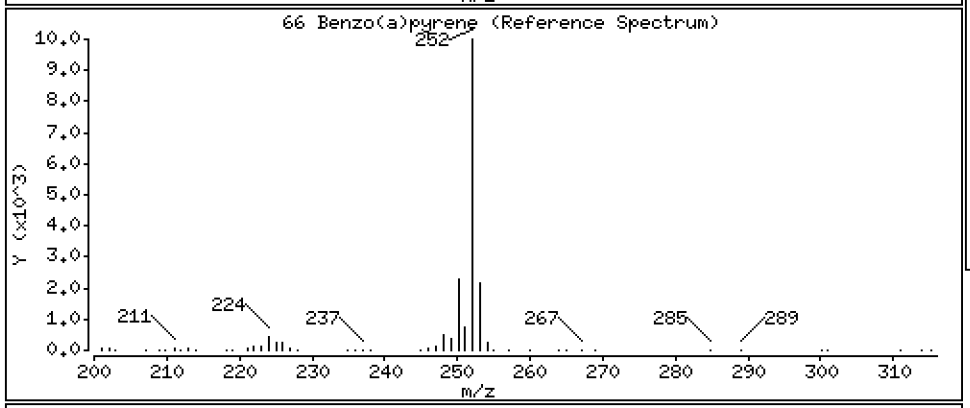
Concentration: 2.621 ug/mL

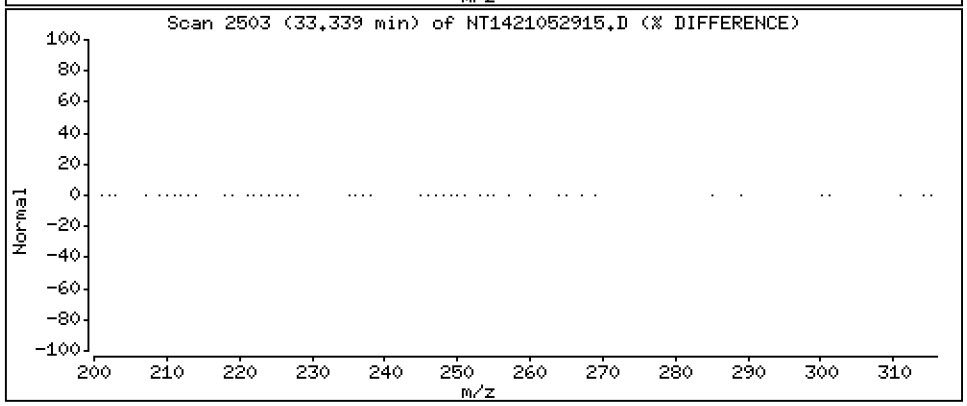












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Date : 29-MAY-2021 19:38

Client ID:

Instrument: nt14.i

Sample Info: SJF0025-SCV1

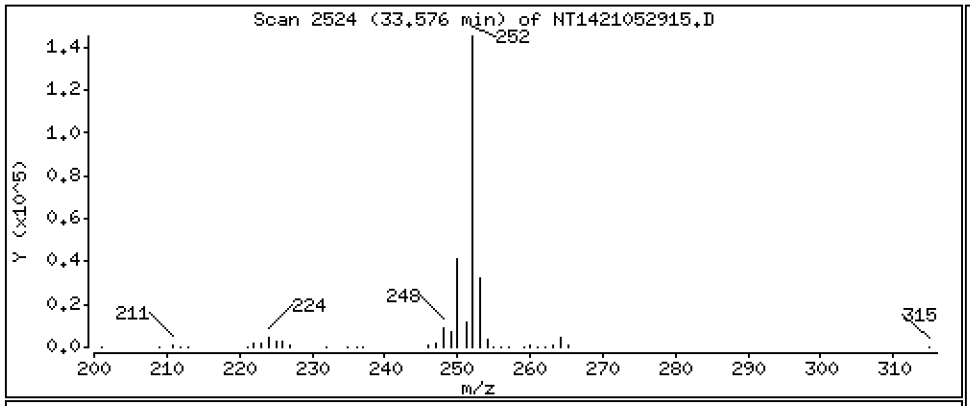
Operator: VTS

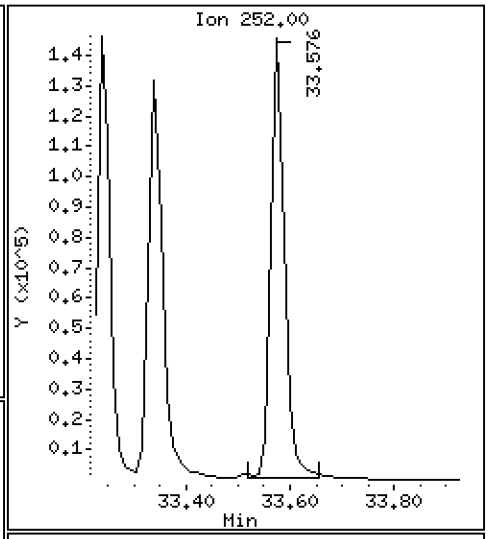
Column phase: Rxi-17Sil MS

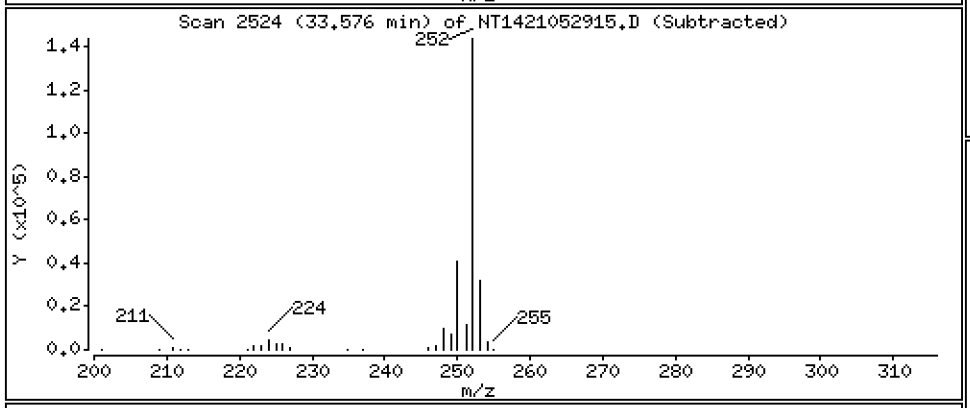
Column diameter: 0.25

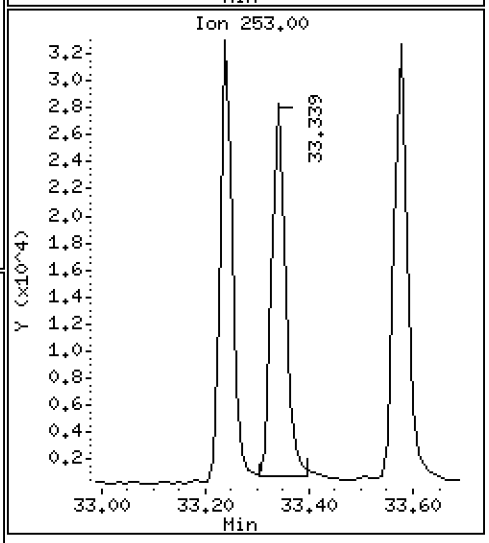
68 Perylene

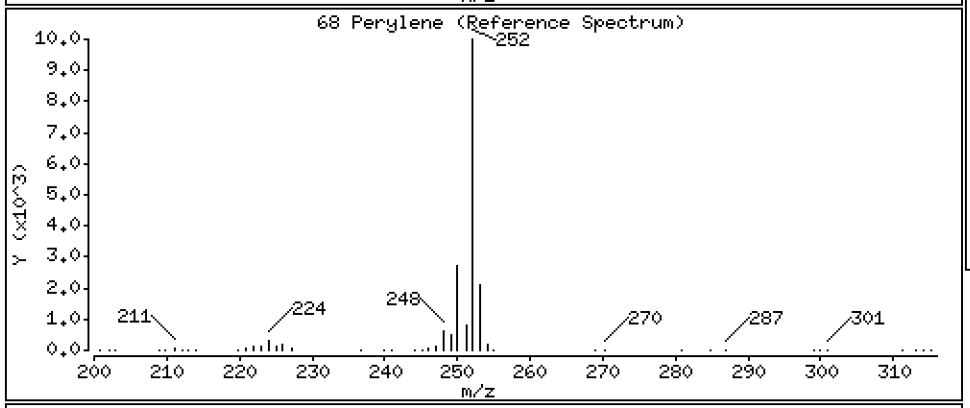
Concentration: 2.820 ug/mL

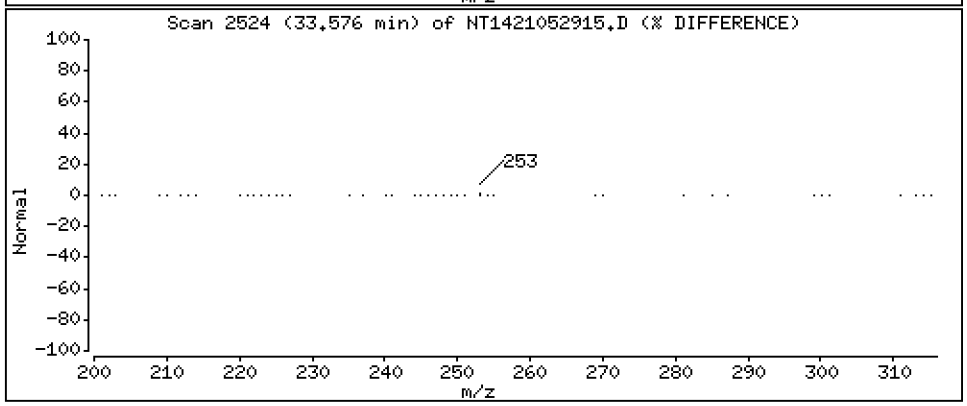












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Date : 29-MAY-2021 19:38

Client ID:

Instrument: nt14.i

Sample Info: SJF0025-SCV1

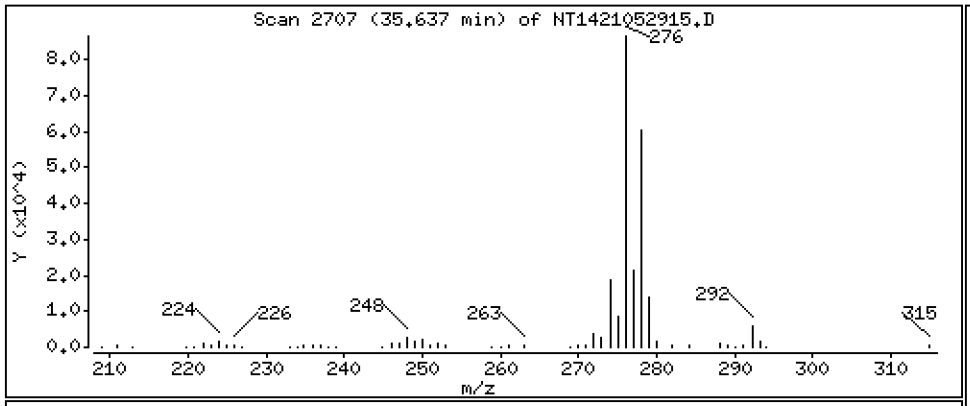
Operator: VTS

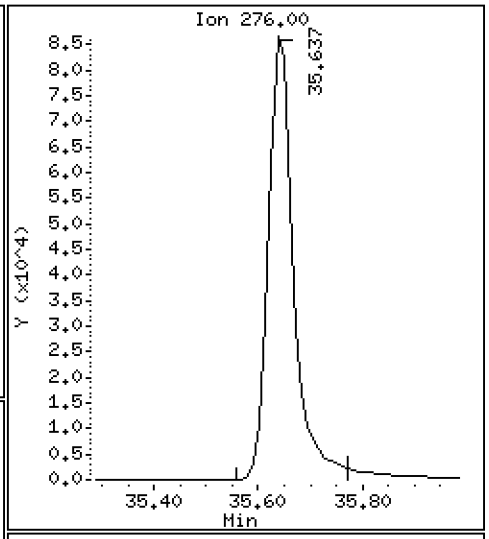
Column phase: Rxi-17Sil MS

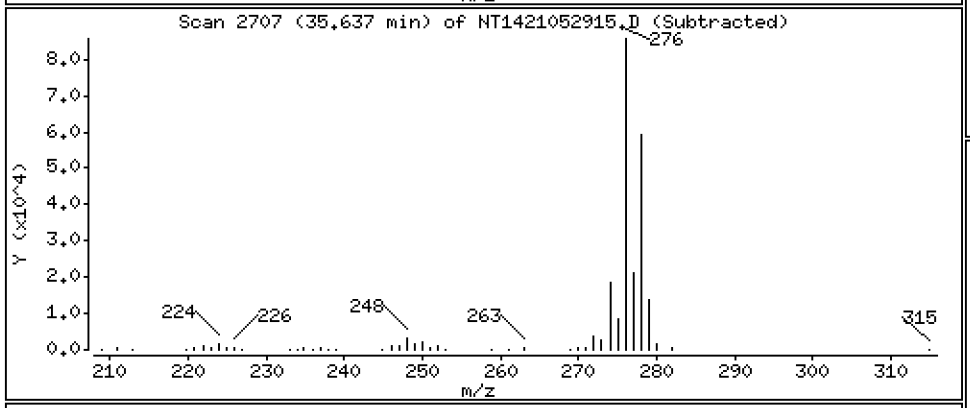
Column diameter: 0.25

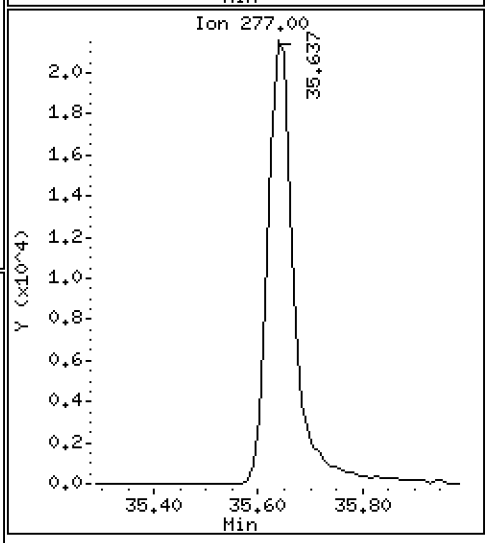
69 Indeno(1,2,3-cd)pyrene

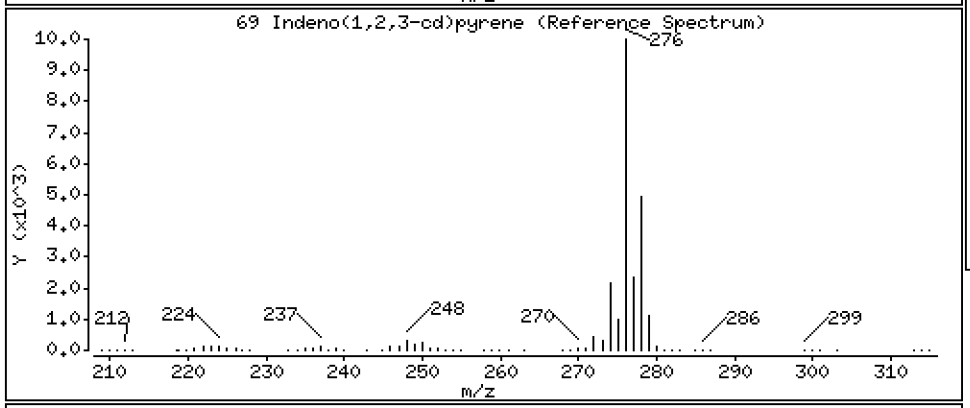
Concentration: 2.913 ug/mL

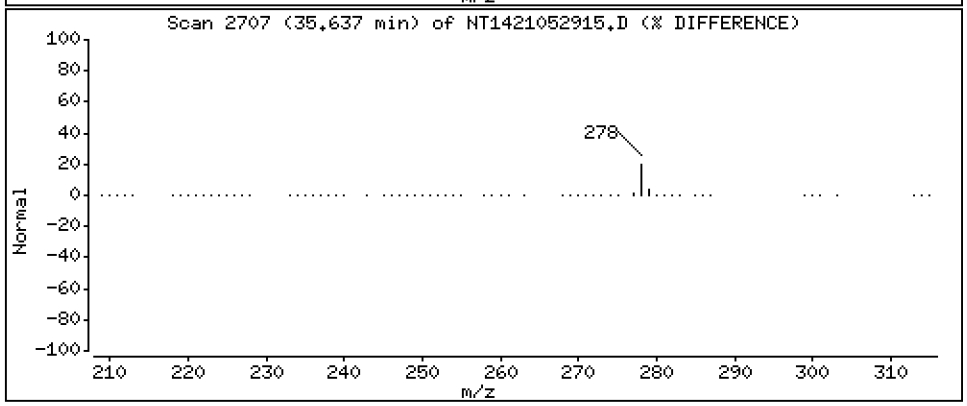












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Date : 29-MAY-2021 19:38

Client ID:

Instrument: nt14.i

Sample Info: SJF0025-SCV1

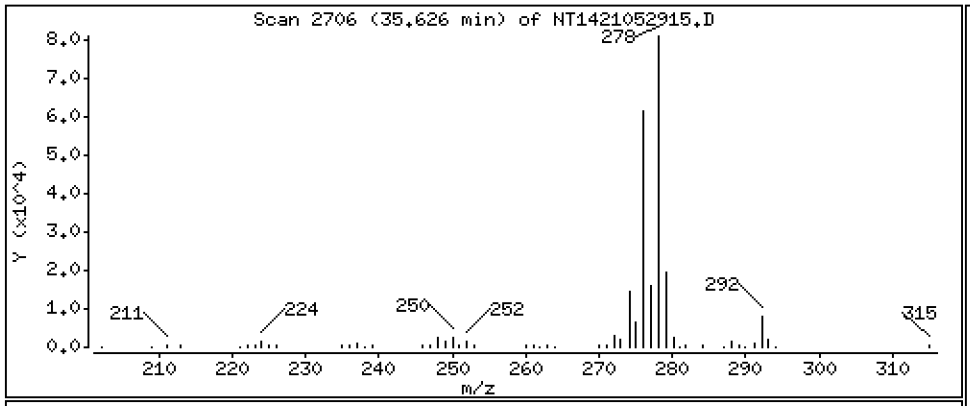
Operator: VTS

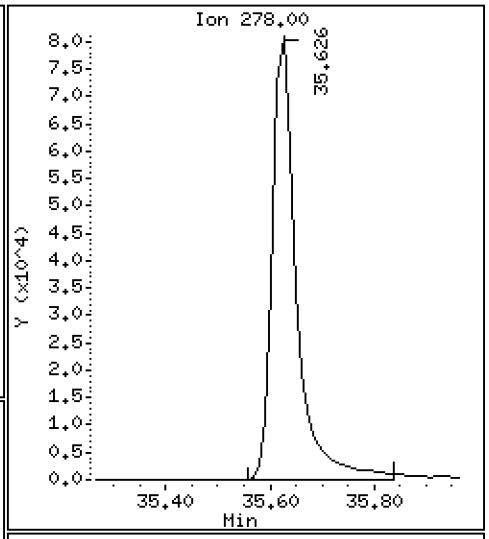
Column phase: Rxi-17Sil MS

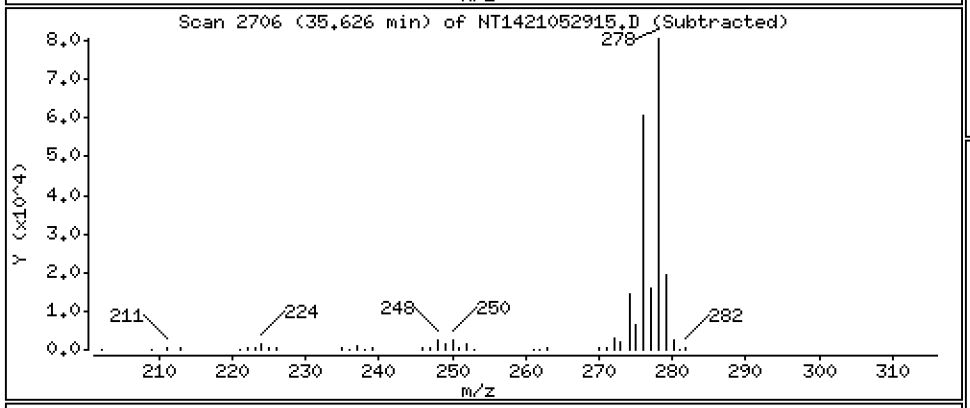
Column diameter: 0.25

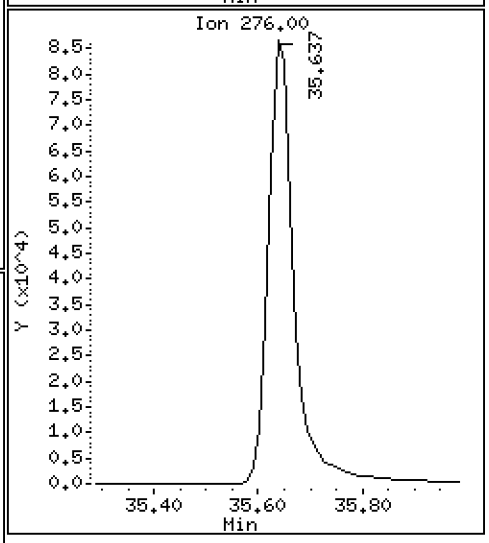
70 Dibenzo(a,h)anthracene

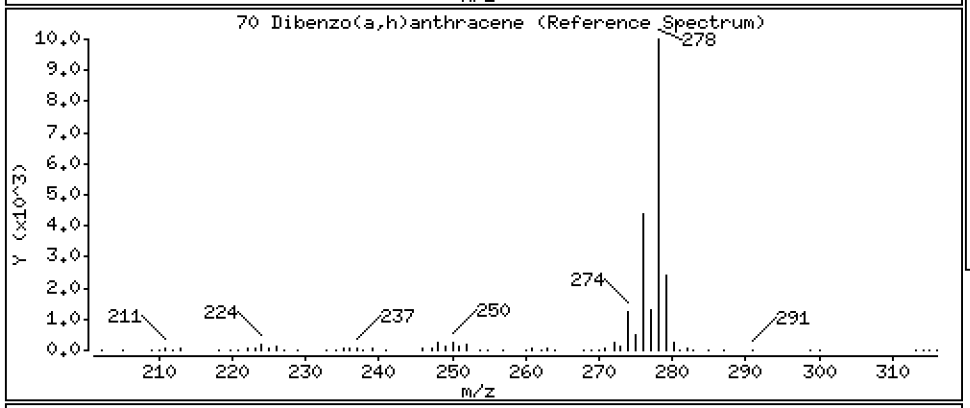
Concentration: 2.690 ug/mL

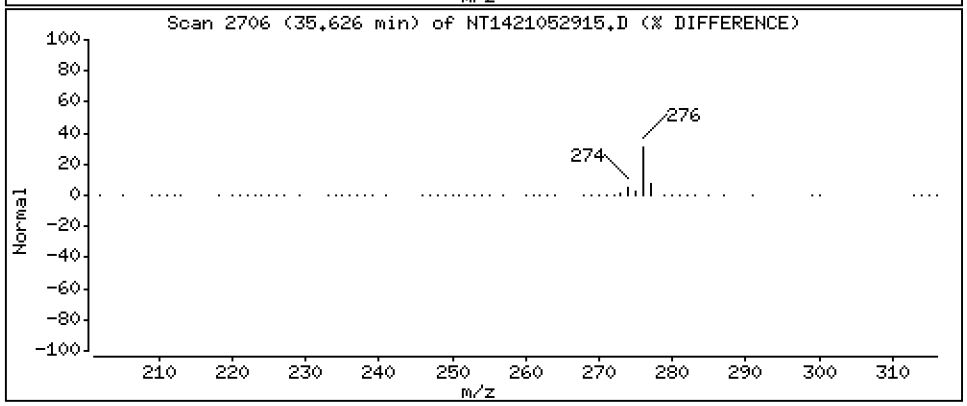












Data File: \\target\share\chem3\nt14.i\20210529.b\NT1421052915.D

Date : 29-MAY-2021 19:38

Client ID:

Instrument: nt14.i

Sample Info: SJF0025-SCV1

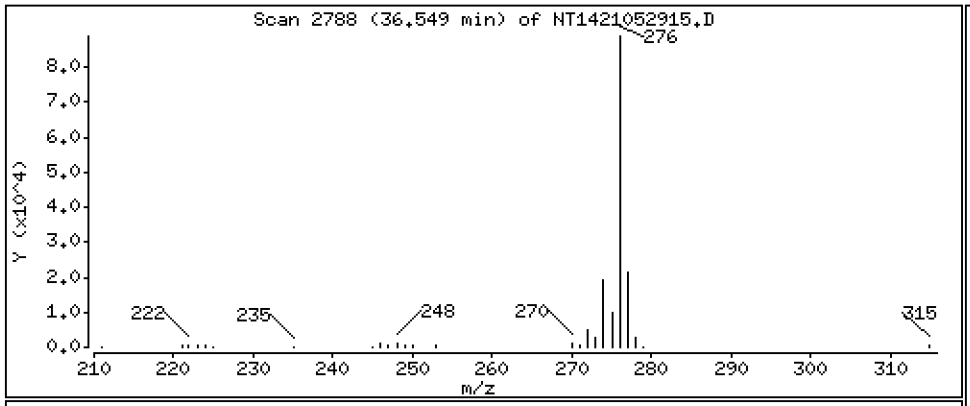
Operator: VTS

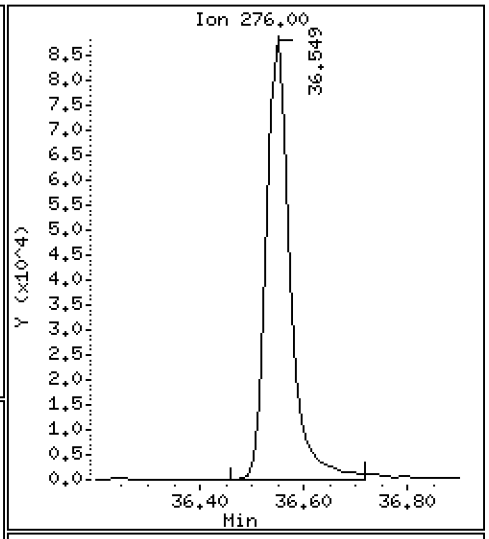
Column phase: Rxi-17Sil MS

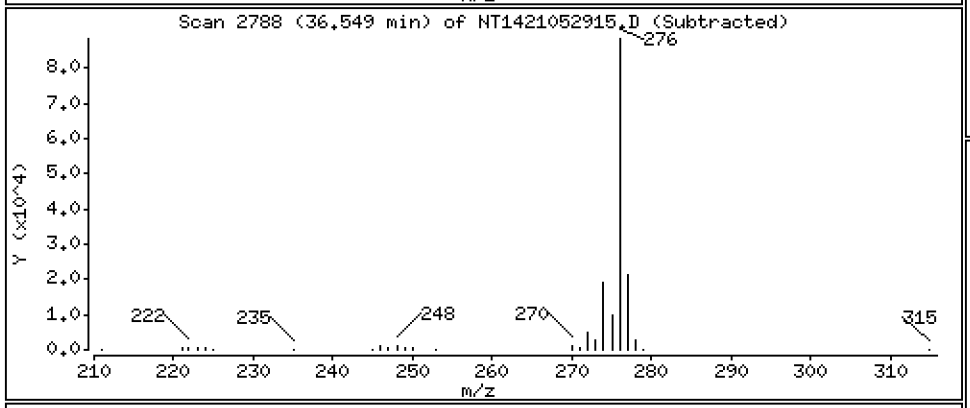
Column diameter: 0.25

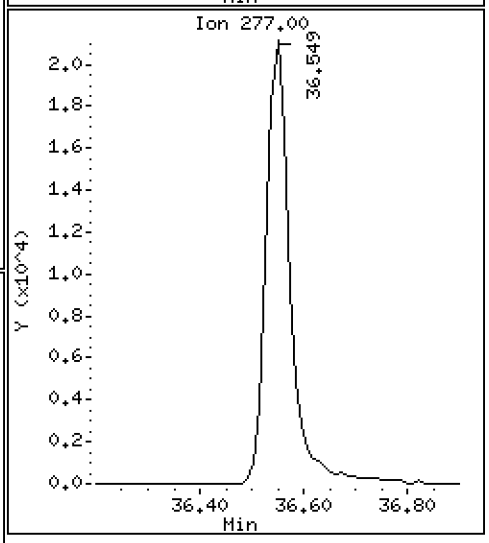
74 Benzo(g,h,i)perylene

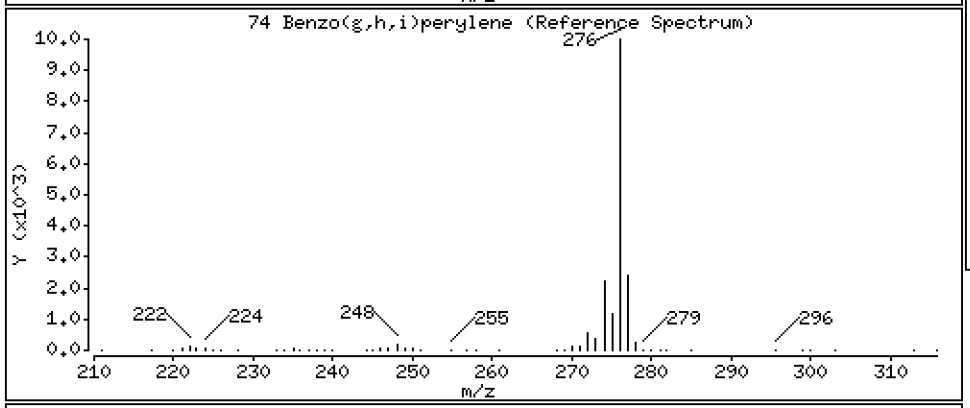
Concentration: 2.781 ug/mL

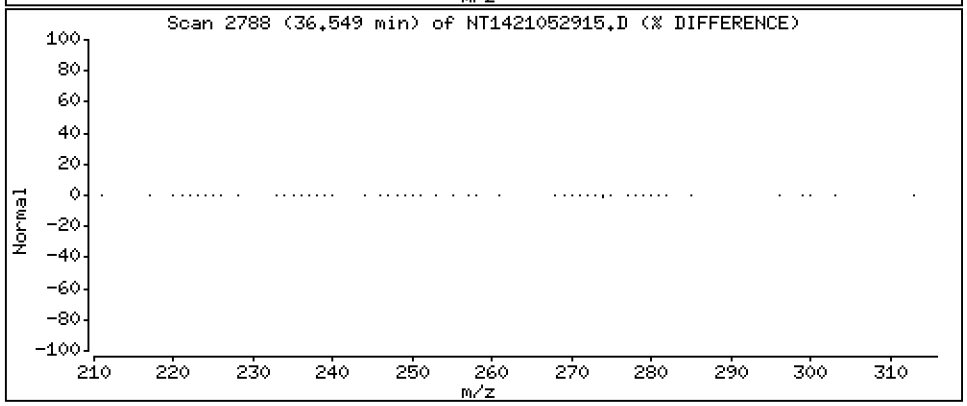












ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt14.i\20210529.b\NT1421052915.D
Lab Smp Id: SJF0025-SCV1
Inj Date : 29-MAY-2021 19:38
Operator : VTS Inst ID: nt14.i
Smp Info : SJF0025-SCV1
Misc Info :
Comment : 1ul Injection
Method : \\target\share\chem3\nt14.i\20210529.b\ALKYLPNA.m
Meth Date : 02-Jun-2021 19:03 yev Quant Type: ISTD
Cal Date : 29-MAY-2021 18:49 Cal File: NT1421052914.D
Als bottle: 9
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: TARGETS.sub
Target Version: 4.14
Processing Host: ORGDATA102

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/mL)
	1 trans-Decalin	138	7.146	7.156	(0.378)	24405	2.93881	2.939
	2 cis-Decalin	138	8.266	8.246	(0.437)	17380	2.55518	2.555
$	6 Naphthalene-d8	136	11.897	11.897	(0.629)	223244	2.88377	2.884(R)
	7 Naphthalene	128	11.957	11.957	(0.632)	203089	2.62492	2.625
	12 Benzo(b)thiophene	134	12.409	12.409	(0.656)	166732	2.62140	2.621
	16 2-Methylnaphthalene	141	13.794	13.794	(0.730)	119639	2.64523	2.645
	17 1-methylnaphthalene	141	14.245	14.244	(0.753)	117019	2.65947	2.659
	18 Biphenyl	154	15.431	15.431	(0.816)	174317	2.60835	2.608
	19 2,6-Dimethylnaphthalene	156	15.508	15.508	(0.820)	127969	2.60384	2.604
	20 Acenaphthylene	152	17.091	17.091	(0.904)	220486	2.62443	2.624
$	21 Acenaphthene-d10	164	17.377	17.377	(0.919)	134362	2.82593	2.826(R)
	22 Acenaphthene	153	17.486	17.486	(0.925)	142697	2.75525	2.755
	23 Dibenzofuran	168	17.860	17.860	(0.945)	199363	2.59511	2.595
	24 1,6,7-Trimethylnaphthalene	170	18.091	18.080	(0.957)	132237	2.64202	2.642
*	25 Fluorene-d10	176	18.907	18.907	(1.000)	166522	2.00000	
	26 Fluorene	166	19.009	19.009	(1.005)	155403	2.61087	2.611
	30 Dibenzothiophene	184	21.931	21.931	(1.160)	221357	2.63418	2.634
$	35 Phenanthrene-d10	188	22.239	22.239	(0.995)	230950	2.85128	2.851(R)
	36 Phenanthrene	178	22.327	22.327	(0.999)	229127	2.63951	2.640
*	250 Anthracene-d10	188	22.360	22.360	(1.000)	168360	2.00000	
	37 Anthracene	178	22.426	22.425	(1.003)	219523	2.68776	2.688
	42 Carbazole	167	23.712	23.701	(1.060)	194800	2.70414	2.704
	43 1-Methylphenanthrene	192	24.162	24.151	(1.081)	166388	2.66719	2.667
	44 Fluoranthene	202	26.142	26.131	(1.169)	256004	2.67188	2.672
	46 Pyrene	202	26.977	26.977	(1.207)	270263	2.71212	2.712
	51 Naphthobenzothiophene	234	Compound Not Detected.					
	55 Benzo(a)anthracene	228	30.095	30.095	(0.907)	251589	2.75565	2.756
$	56 Chrysene-d12	240	30.219	30.219	(0.911)	227348	3.08546	3.085(R)
	57 Chrysene	228	30.287	30.287	(0.913)	247820	2.77007	2.770
	62 Benzo(b)fluoranthene	252	32.517	32.517	(0.980)	295325	3.11894	3.119
	63 Benzo(k)fluoranthene	252	32.562	32.562	(0.981)	252708	2.48737	2.487
	293 Benzo(j)fluoranthene	252	32.629	32.629	(0.983)	242480	2.59014	2.590(H)
	246 Total Benzofluoranthenes	252	32.562	32.562	(0.981)	759661	8.19091	8.191(M)

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/mL)
* 251 Benzo(e)pyrene-d12	264	33.181	33.181	(1.000)	235397	2.00000	
64 Benzo(e)pyrene	252	33.238	33.238	(1.002)	247681	2.66885	2.669
66 Benzo(a)pyrene	252	33.339	33.339	(1.005)	221317	2.62146	2.621
$ 67 Perylene-d12	264	33.519	33.519	(1.010)	232231	2.91960	2.920(R)
68 Perylene	252	33.575	33.575	(1.012)	245483	2.82022	2.820(M)
69 Indeno(1,2,3-cd)pyrene	276	35.637	35.637	(1.074)	288654	2.91280	2.913(M)
70 Dibenzo(a,h)anthracene	278	35.625	35.614	(1.074)	251294	2.69021	2.690(M)
74 Benzo(g,h,i)perylene	276	36.549	36.549	(1.101)	272250	2.78084	2.781(M)

QC Flag Legend

R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt14.i
Lab File ID: NT1421052915.D
Lab Smp Id: SJF0025-SCV1
Analysis Type: SV
Quant Type: ISTD
Operator: VTS
Method File: \\target\share\chem3\nt14.i\20210529.b\ALKYLPNA.m
Misc Info:

Calibration Date: 29-MAY-2021
Calibration Time: 14:01
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
25 Fluorene-d10	159478	79739	318956	166522	4.42
250 Anthracene-d10	170161	85081	340322	168360	-1.06
251 Benzo(e)pyrene-d1	236612	118306	473224	235397	-0.51

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
25 Fluorene-d10	18.91	18.41	19.41	18.91	0.00
250 Anthracene-d10	22.36	21.86	22.86	22.36	0.00
251 Benzo(e)pyrene-d1	33.18	32.68	33.68	33.18	0.00

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

REVIEW SUMMARY FOR FILE - NT1421052915.D

Lab ID: SJF0025-SCV1
nt14.i, 20210529.b\ALKYLPNA.m, 29-MAY-2021 19:38

RT	CO-ELUTION COMPOUNDS
	NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
NONE			

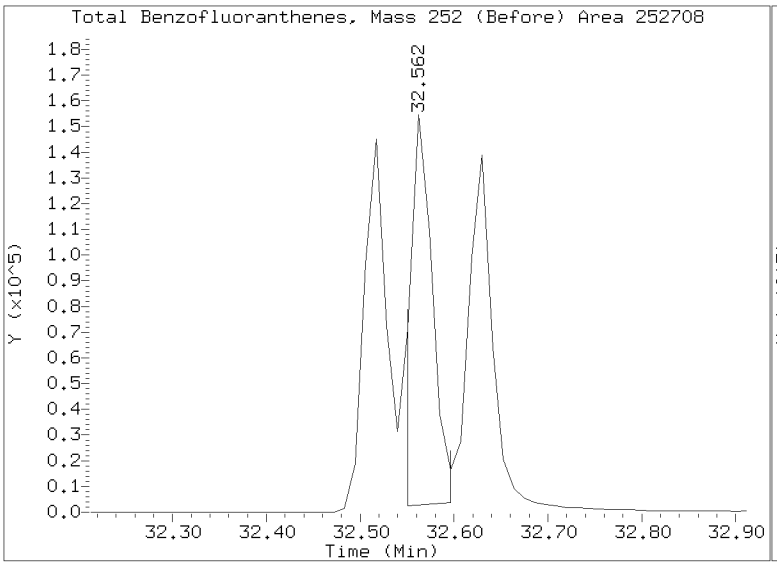
RRT check based on Ccal File: NT1421052914.D

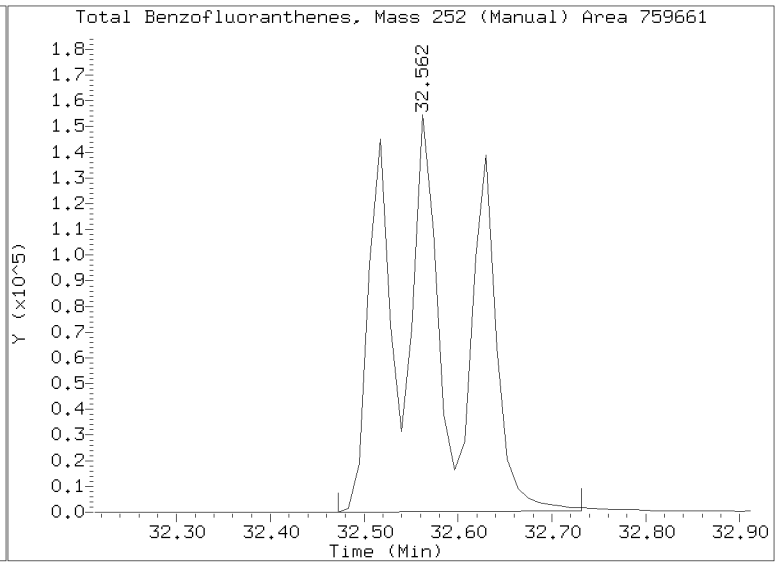
On Column LOD for nt14.i, 20210529.b\ALKYLPNA.m, TARGETS.sub = 0.0000

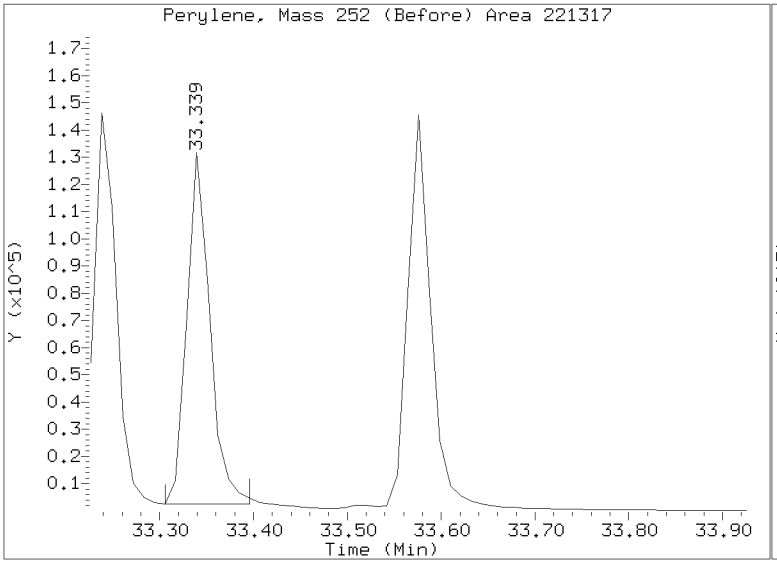
* Only compounds listed in the work order have been verified by the analyst *

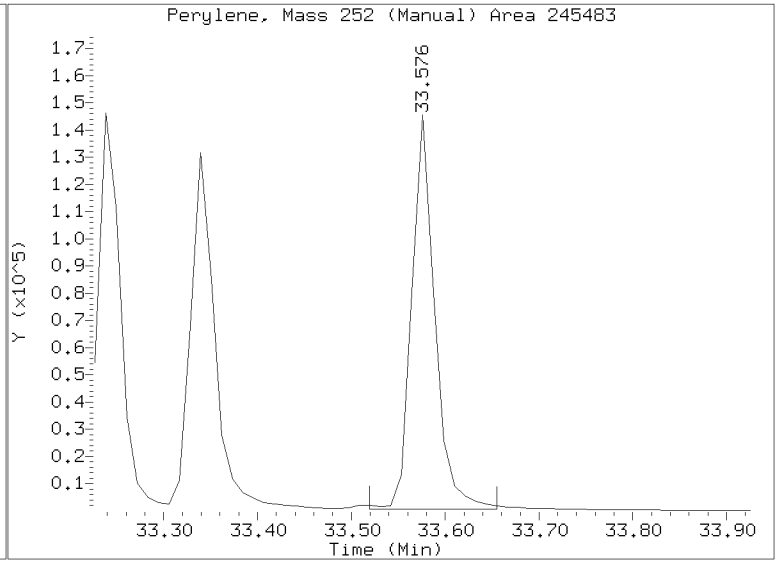
Quant Ion Manual Peak Adjustment Report

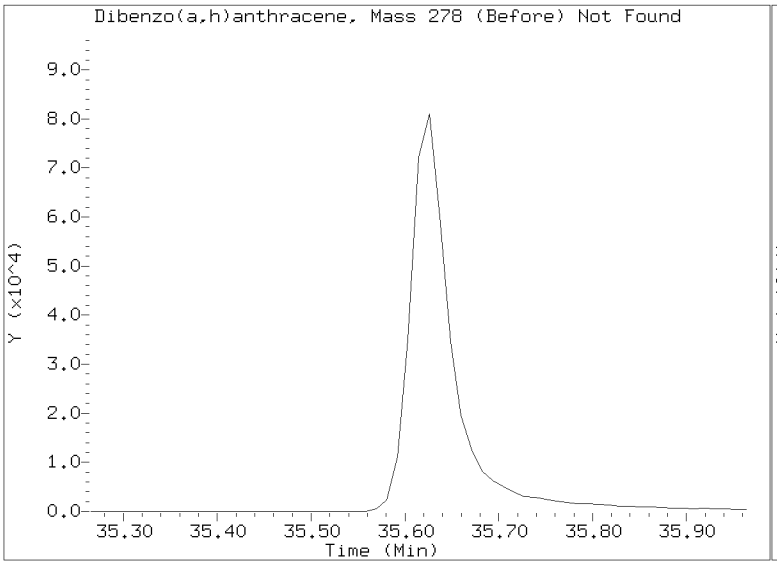
Datafile: //target/share/chem3/nt14.i/20210529.b/NT1421052915.D
Injection Date: 29-MAY-2021 19:38
Lab ID:SJF0025-SCV1 Client ID:
Report Date: 06/02/2021 19:03

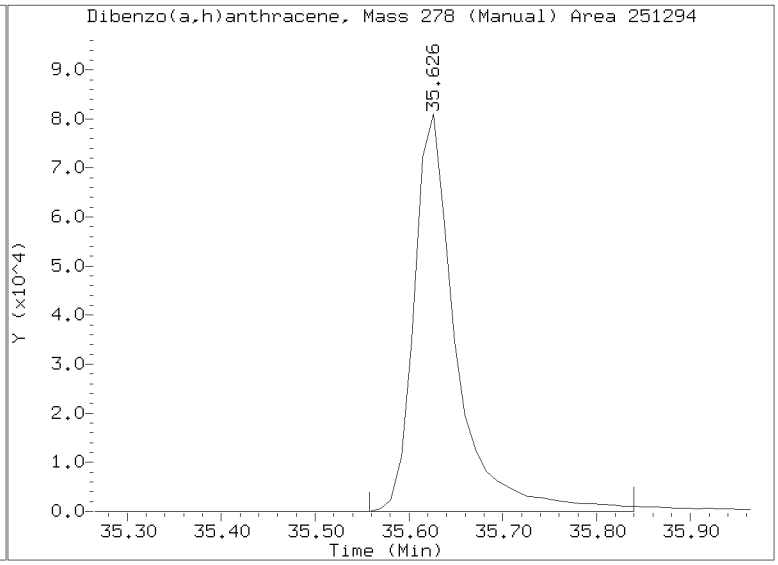












Quant Ion Manual Peak Adjustment Report

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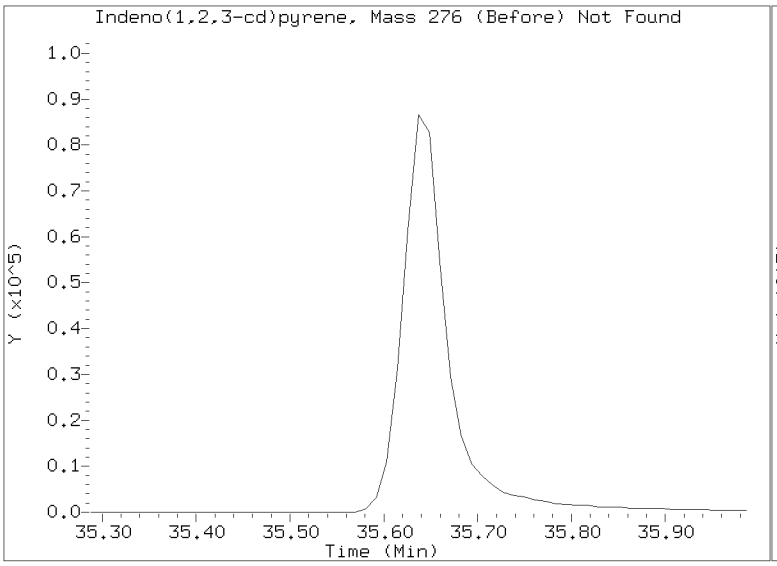
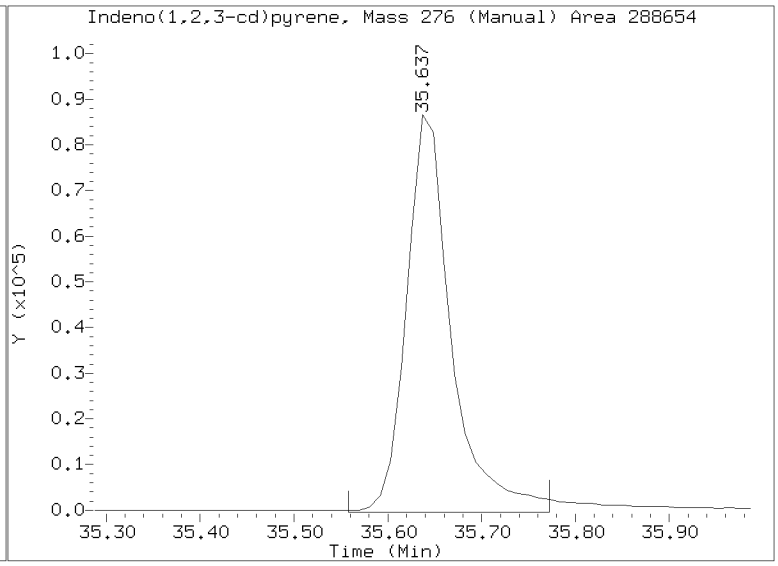
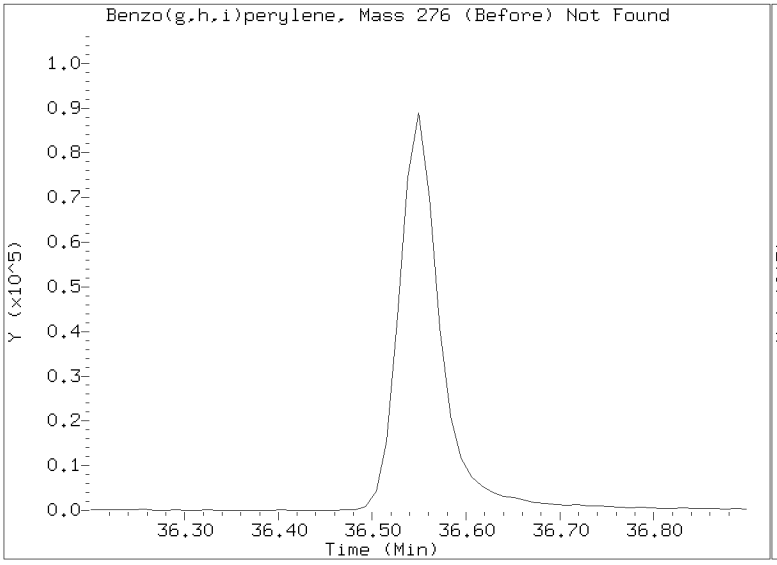
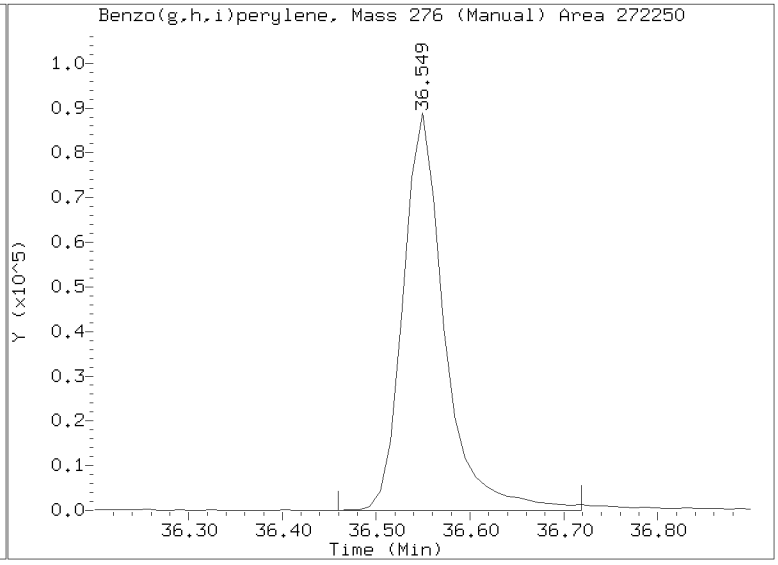
Injection Date: 29-MAY-2021 19:38
Lab ID:SJF0025-SCV1 Client ID:
Report Date: 06/02/2021 19:03









Analytical Resources, Incorporated
Analytical Chemists and Consultants

SECOND-SOURCE CALIBRATION VERIFICATION

EPA 8270E-SIM

Laboratory: Analytical Resources, Inc.
SDG: 21E0106
Client: Anchor QEA, LLC
Project: Gasco Siltronic - US Moorings
Calibration: EF00008
Laboratory ID: SJF0025-SCV1
Sequence: SJF0025
Standard ID: J004707

ANALYTE	EXPECTED (ug/mL)	FOUND (ug/mL)	% DRIFT	QC LIMIT
trans-Decalin	2.5000	2.9	17.6	20.00
cis-Decalin	2.5000	2.6	2.2	20.00
Naphthalene	2.5000	2.6	5.0	20.00
1-Methylnaphthalene	2.5000	2.7	6.4	20.00
2-Methylnaphthalene	2.5000	2.6	5.8	20.00
Biphenyl	2.5000	2.6	4.3	20.00
2,6-Dimethylnaphthalene	2.5000	2.6	4.2	20.00
Acenaphthylene	2.5000	2.6	5.0	20.00
Acenaphthene	2.5000	2.8	10.2	20.00
Dibenzofuran	2.5000	2.6	3.8	20.00
2,3,5-Trimethylnaphthalene	2.5000	2.6	5.7	20.00
Fluorene	2.5000	2.6	4.4	20.00
Benzo(b)thiophene	2.5000	2.6	4.9	20.00
Phenanthrene	2.5000	2.6	5.6	20.00
Anthracene	2.5000	2.7	7.5	20.00
Carbazole	2.5000	2.7	8.2	20.00
1-Methylphenanthrene	2.5000	2.7	6.7	20.00
Fluoranthene	2.5000	2.7	6.9	20.00
Dibenzothiophene	2.5000	2.6	5.4	20.00
Pyrene	2.5000	2.7	8.5	20.00
Benzo(a)anthracene	2.5000	2.8	10.2	20.00
Chrysene	2.5000	2.8	10.8	20.00
Benzo(b)fluoranthene	2.5000	3.1	24.8	
Benzo(j)fluoranthene	2.5000	2.6	3.6	
Benzo(k)fluoranthene	2.5000	2.5	-0.5	
Benzo(e)pyrene	2.5000	2.7	6.8	20.00
Benzo(a)pyrene	2.5000	2.6	4.9	20.00
Indeno(1,2,3-cd)pyrene	2.5000	2.9	16.5	20.00
Dibenzo(a,h)anthracene	2.5000	2.7	7.6	20.00
Benzo(g,h,i)perylene	2.5000	2.8	11.2	20.00
Perylene	2.5000	2.8	12.8	20.00
Naphthalene-d8	2.5000	2.88	15.4	20.00

Analytical Resources, Incorporated
Analytical Chemists and Consultants

SECOND-SOURCE CALIBRATION VERIFICATION

EPA 8270E-SIM

Laboratory: Analytical Resources, Inc.
SDG: 21E0106
Client: Anchor QEA, LLC
Project: Gasco Siltronic - US Moorings
Calibration: EF00008
Laboratory ID: SJF0025-SCV1
Sequence: SJF0025
Standard ID: J004707

Acenaphthene-d10	2.5000	2.83	13.0	20.00
Phenanthrene-d10	2.5000	2.85	14.1	20.00
Chrysene-d12	2.5000	3.09	23.4	20.00
Perylene-d12	2.5000	2.92	16.8	20.00

* Values outside of QC limits

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Date : 29-MAY-2021 19:38

Client ID:

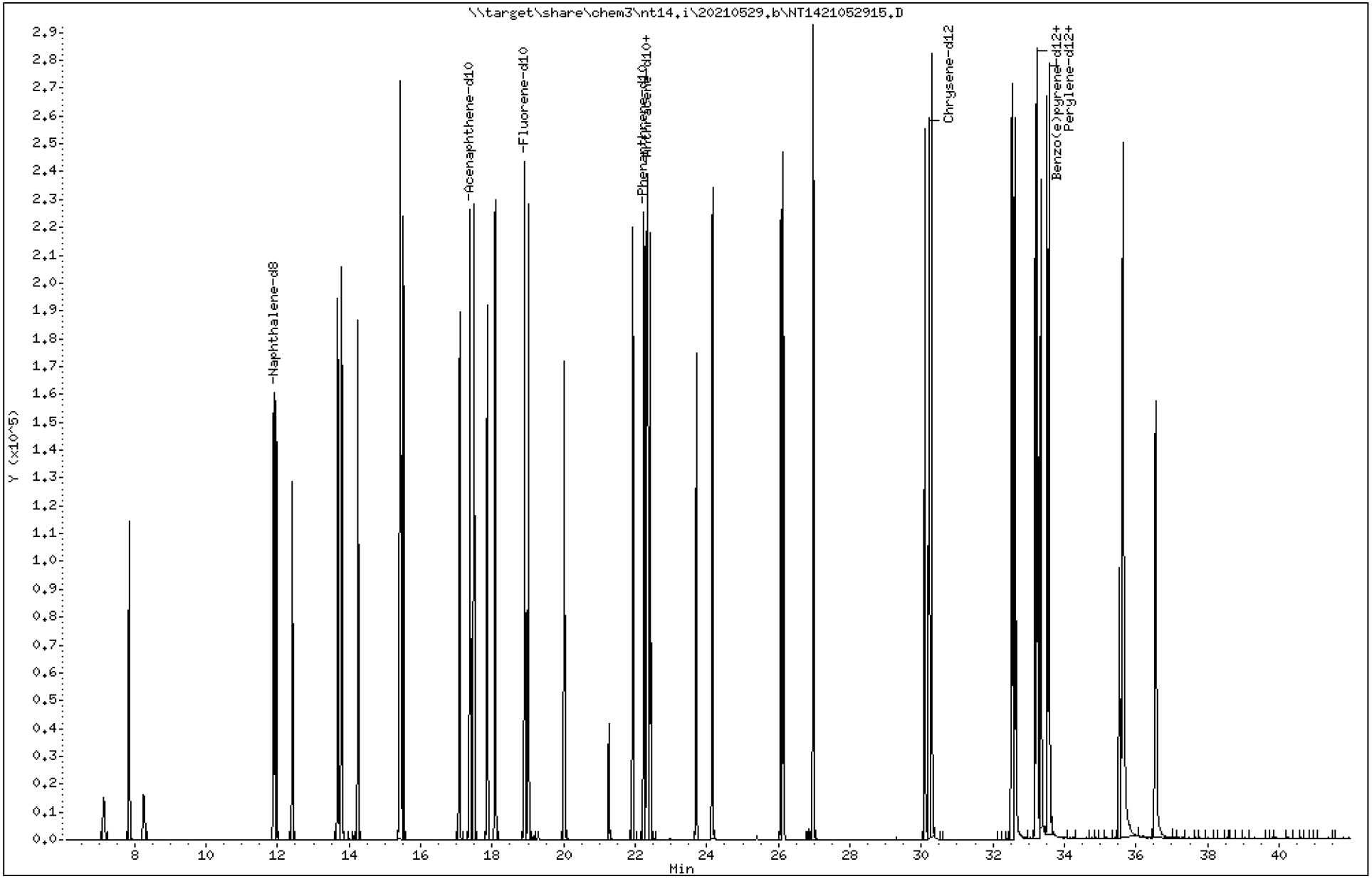
Instrument: nt14.i

Sample Info: SJF0025-SCV1

Operator: VTS

Column phase: Rxi-17Sil MS

Column diameter: 0.25



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Date : 29-MAY-2021 19:38

Client ID:

Instrument: nt14.i

Sample Info: SJF0025-SCV1

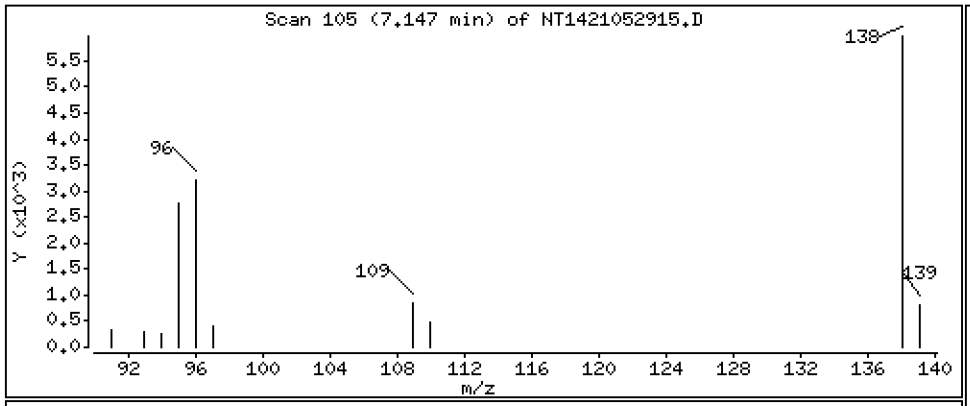
Operator: VTS

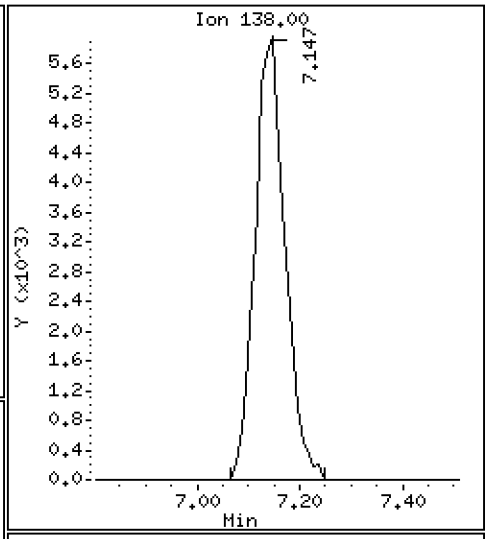
Column phase: Rxi-17Sil MS

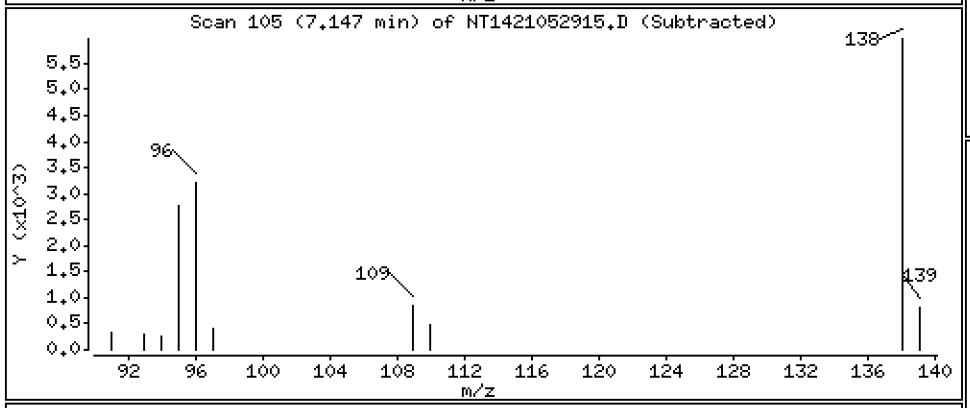
Column diameter: 0.25

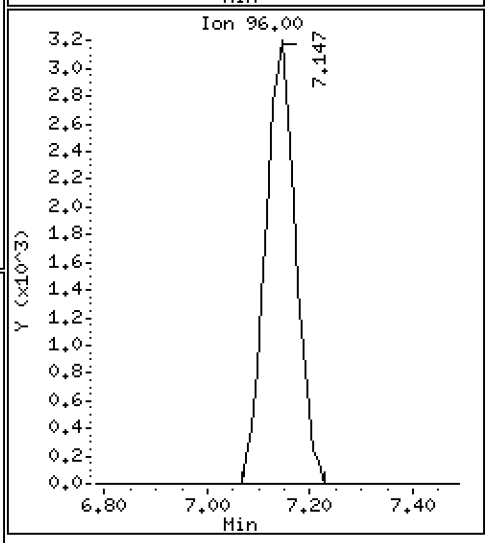
1 trans-Decalin

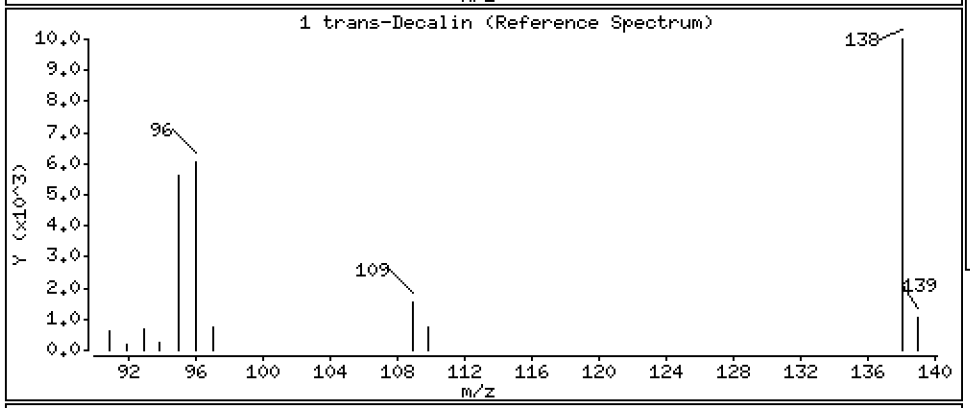
Concentration: 2.939 ug/mL

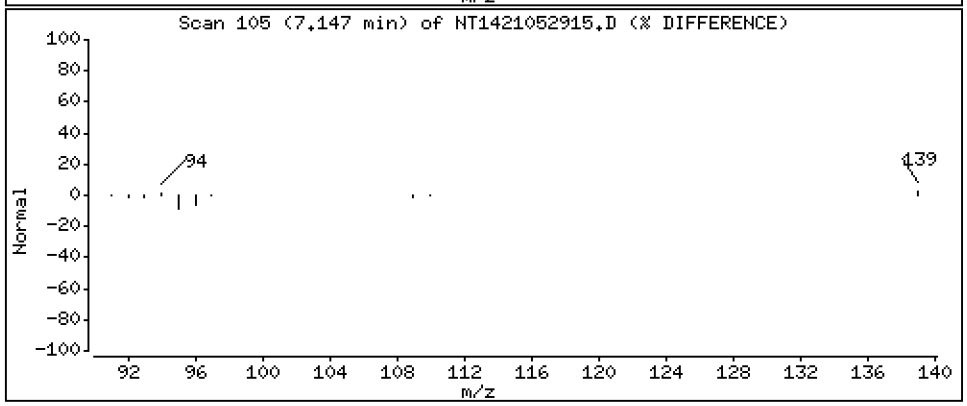












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Date : 29-MAY-2021 19:38

Client ID:

Instrument: nt14.i

Sample Info: SJF0025-SCV1

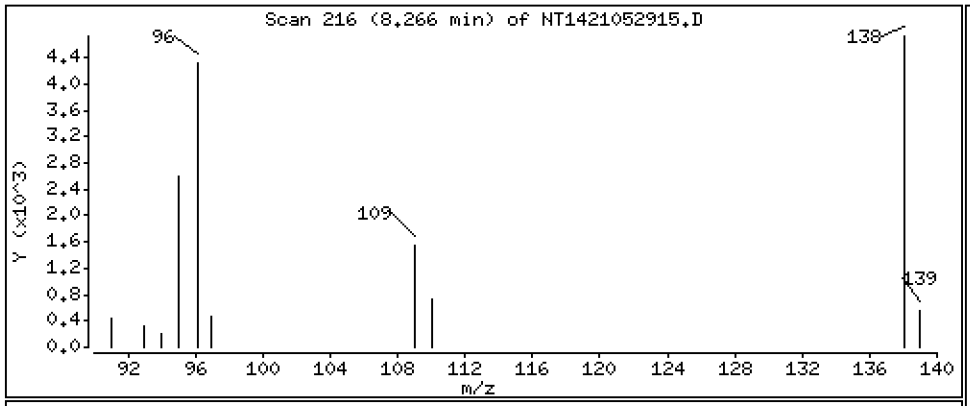
Operator: VTS

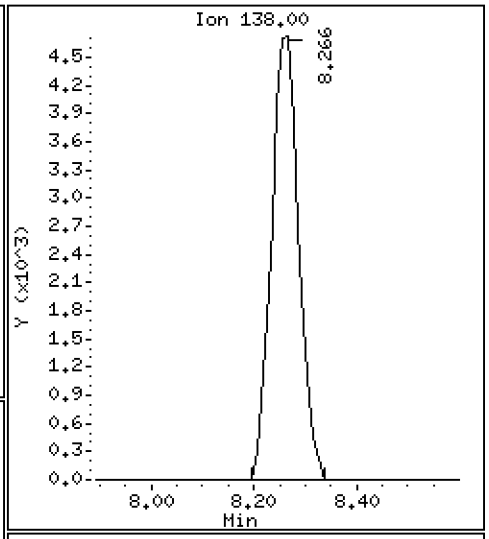
Column phase: Rxi-17Sil MS

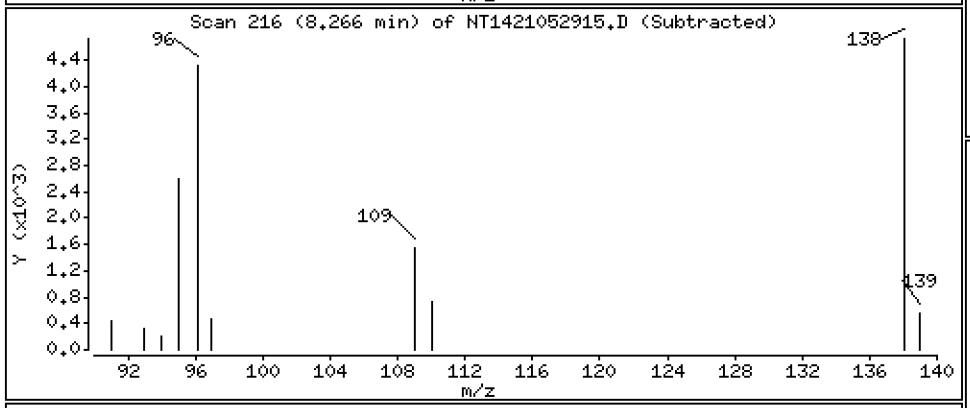
Column diameter: 0.25

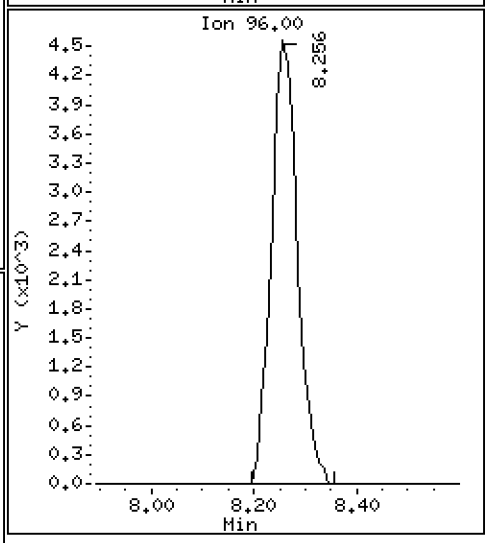
2 cis-Decalin

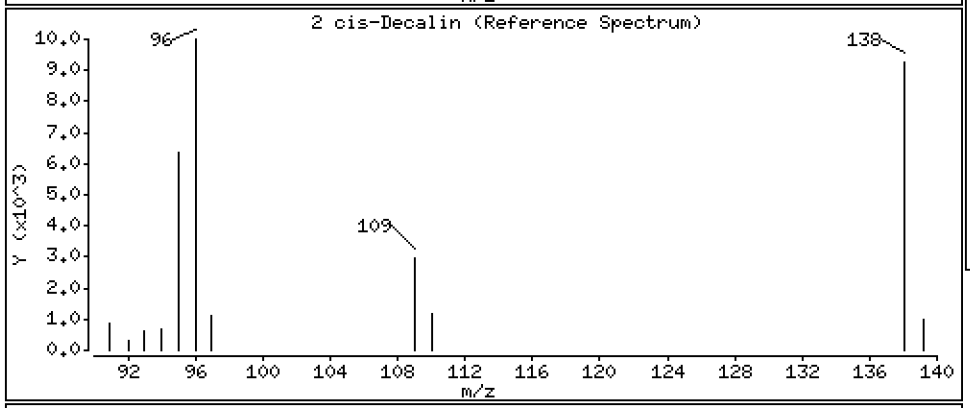
Concentration: 2.555 ug/mL

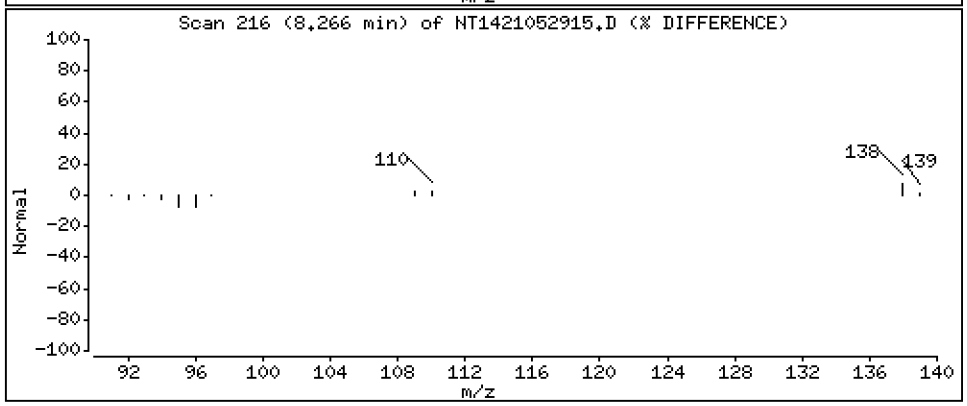












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Date : 29-MAY-2021 19:38

Client ID:

Instrument: nt14.i

Sample Info: SJF0025-SCV1

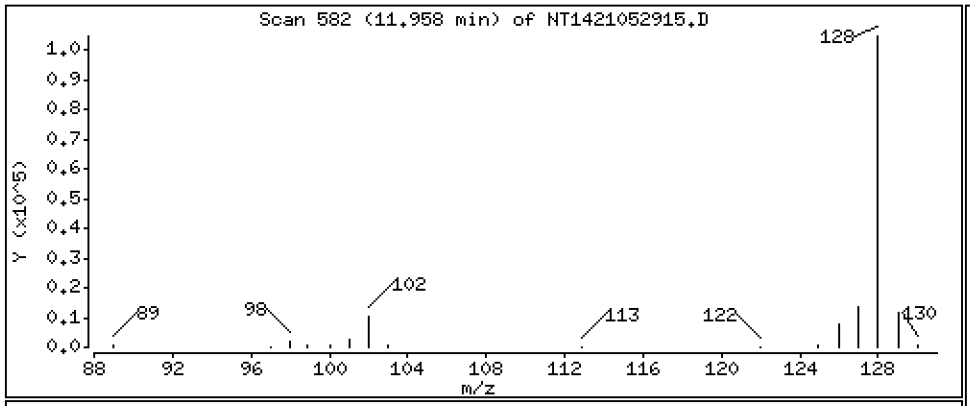
Operator: VTS

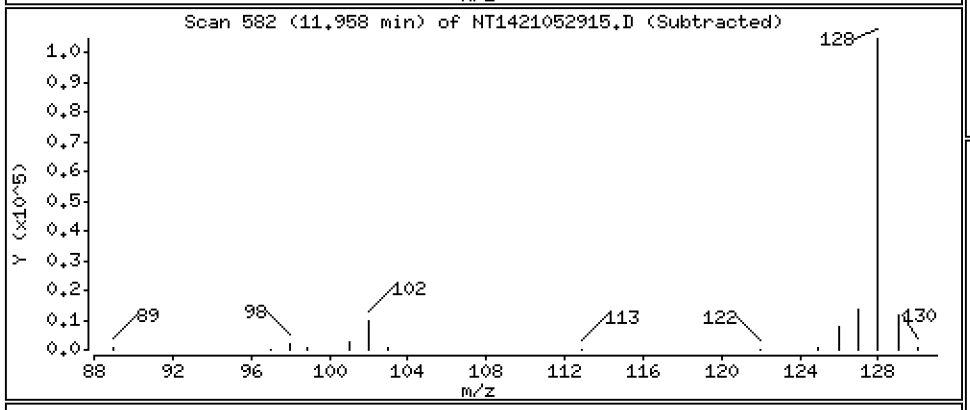
Column phase: Rxi-17Sil MS

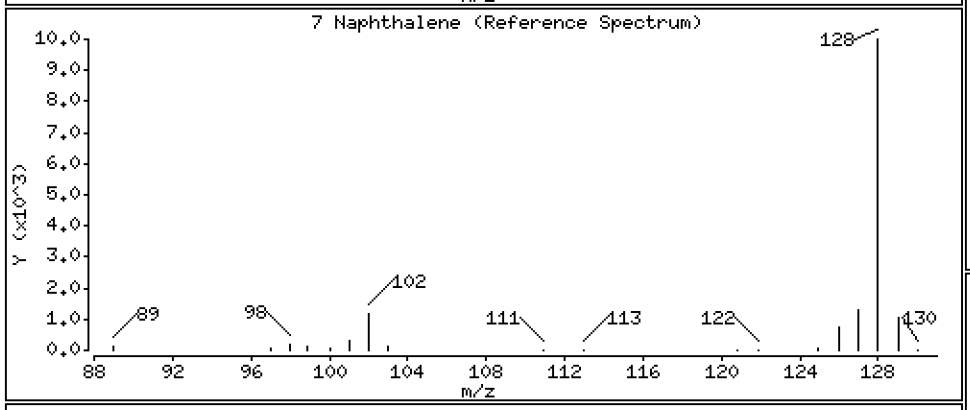
Column diameter: 0.25

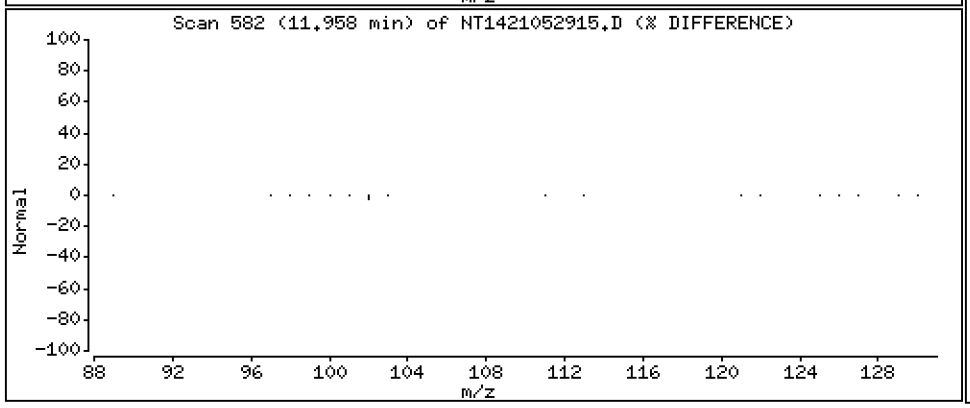
7 Naphthalene

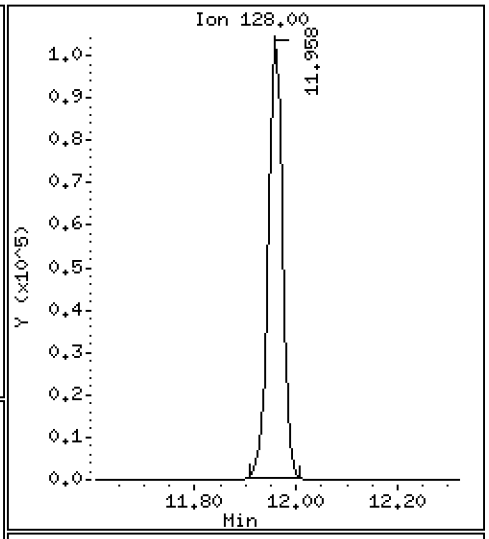
Concentration: 2.625 ug/mL

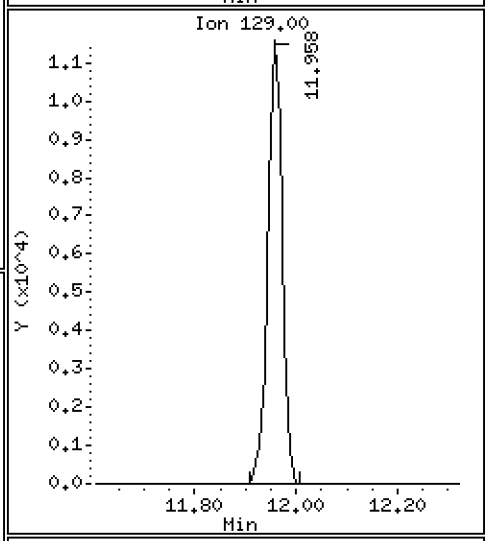


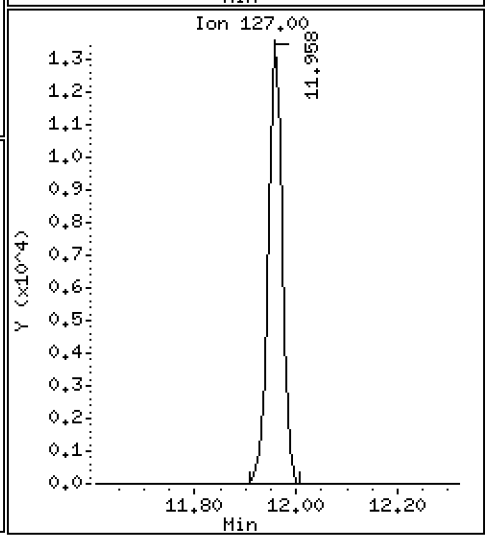












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Date : 29-MAY-2021 19:38

Client ID:

Instrument: nt14.i

Sample Info: SJF0025-SCV1

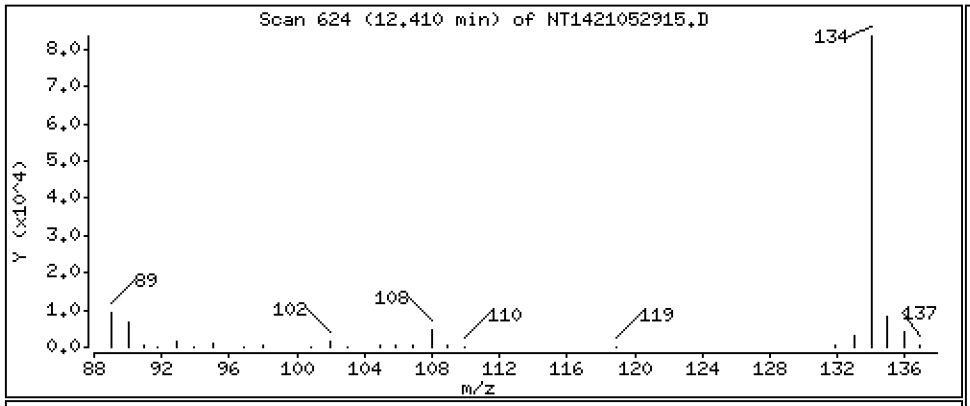
Operator: VTS

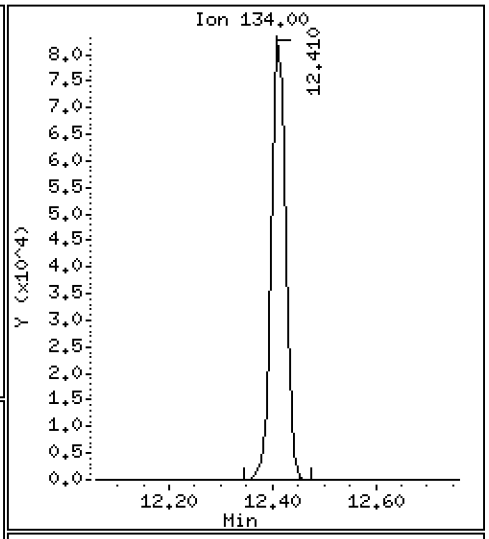
Column phase: Rxi-17Sil MS

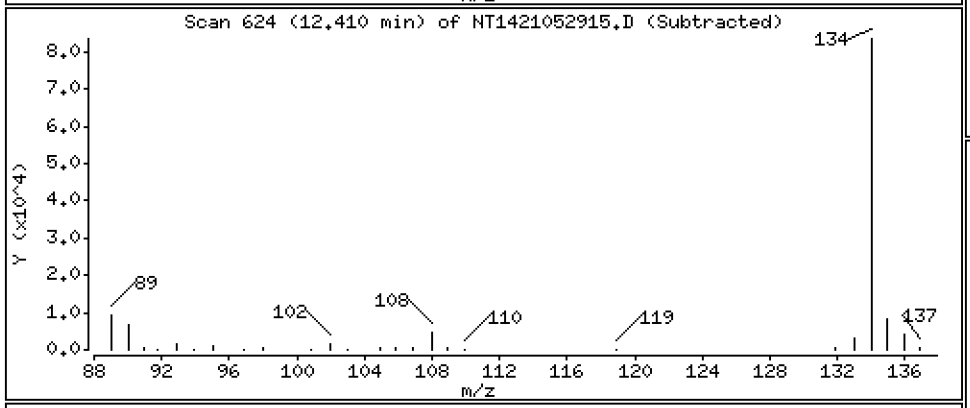
Column diameter: 0.25

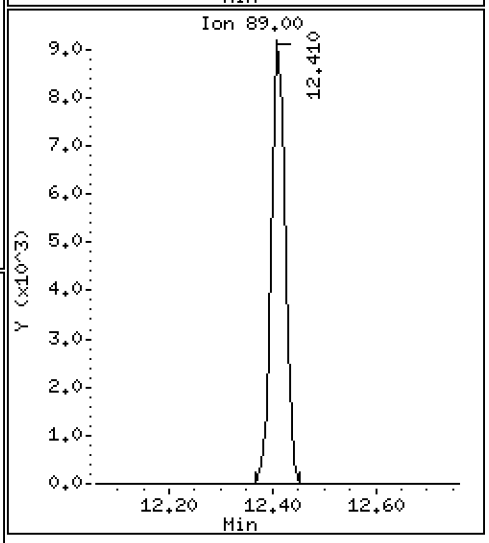
12 Benzo(b)thiophene

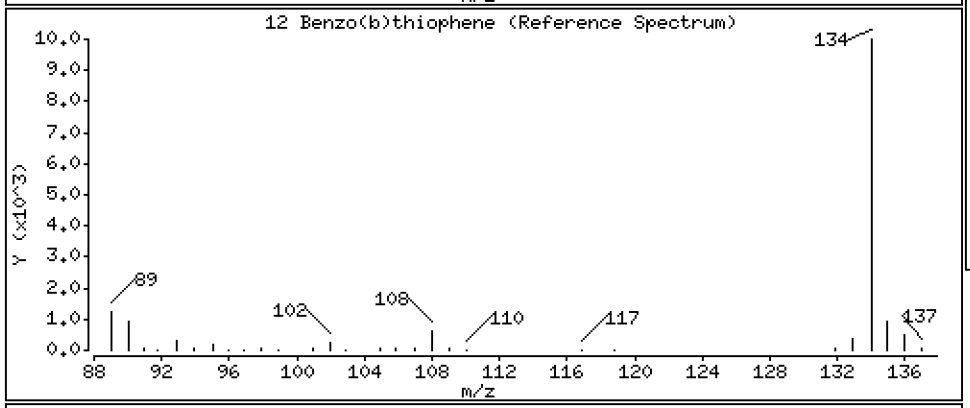
Concentration: 2.621 ug/mL

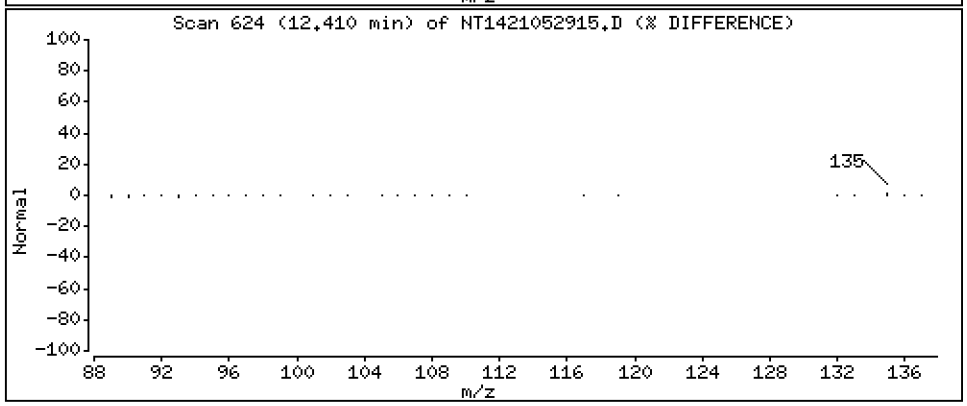












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Date : 29-MAY-2021 19:38

Client ID:

Instrument: nt14.i

Sample Info: SJF0025-SCV1

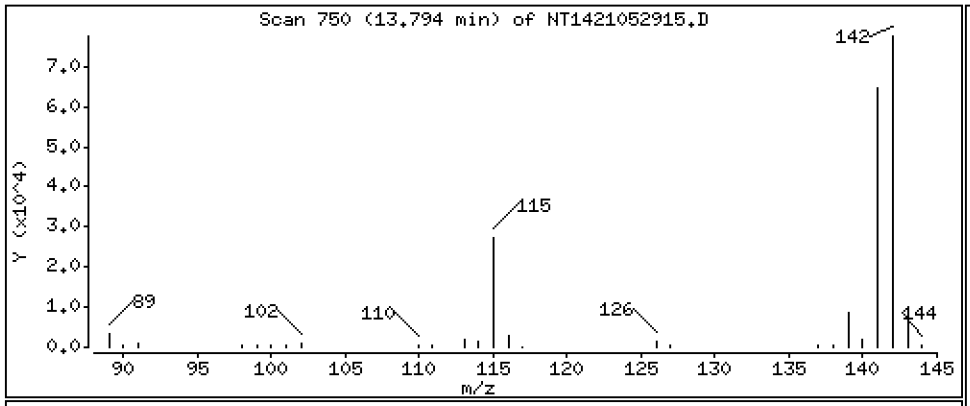
Operator: VTS

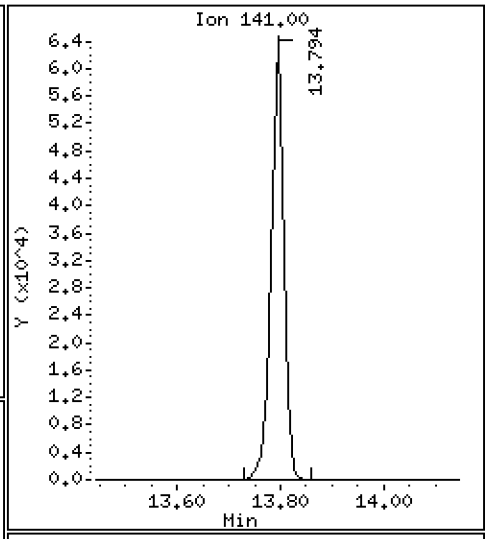
Column phase: Rxi-17Sil MS

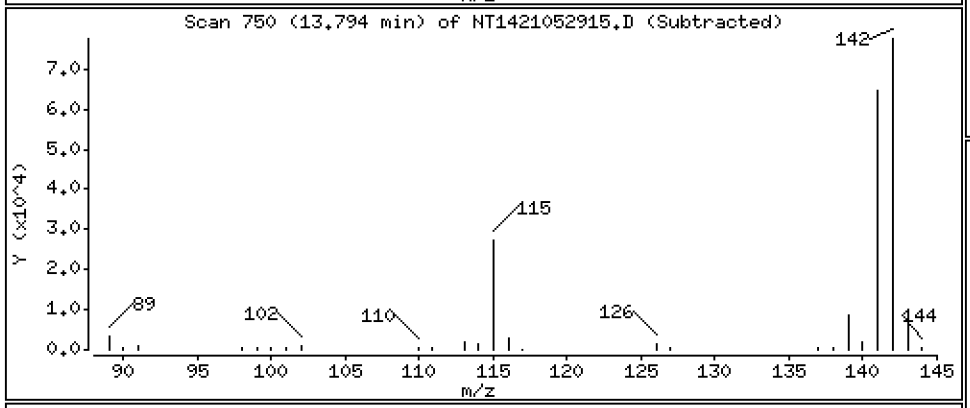
Column diameter: 0.25

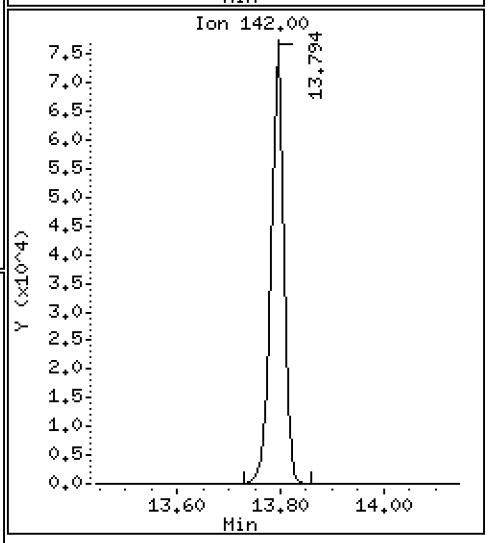
16 2-Methylnaphthalene

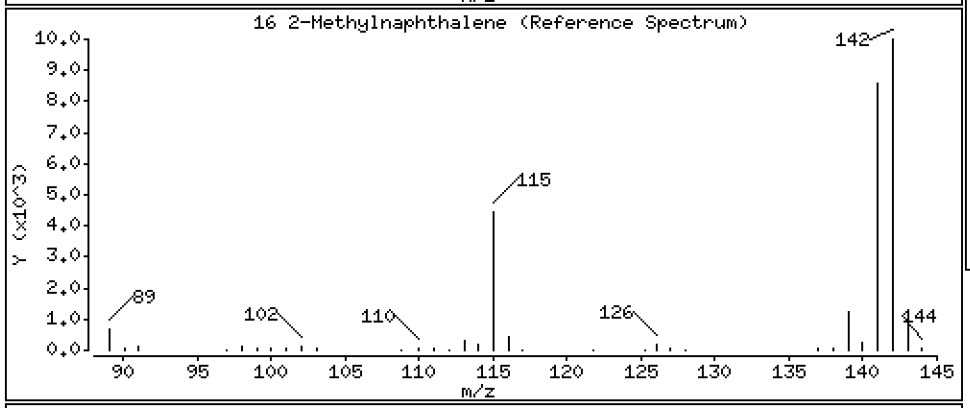
Concentration: 2.645 ug/mL

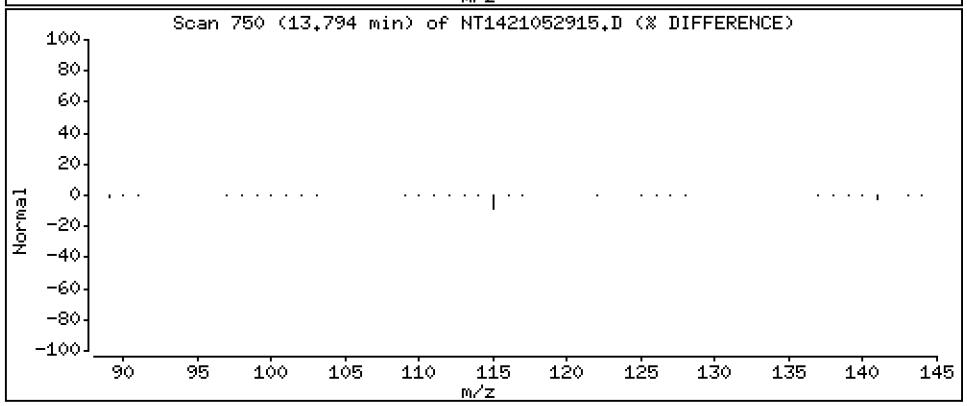












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Date : 29-MAY-2021 19:38

Client ID:

Instrument: nt14.i

Sample Info: SJF0025-SCV1

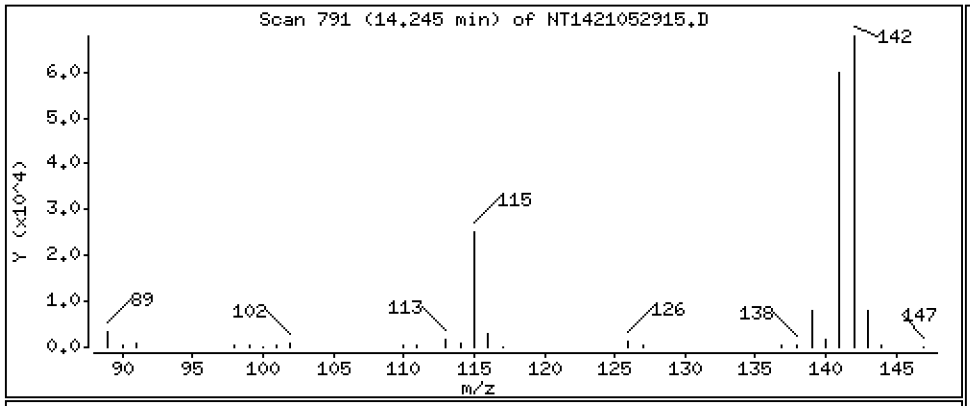
Operator: VTS

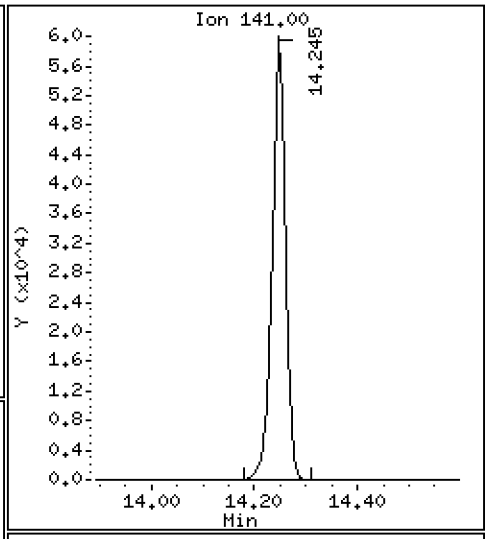
Column phase: Rxi-17Sil MS

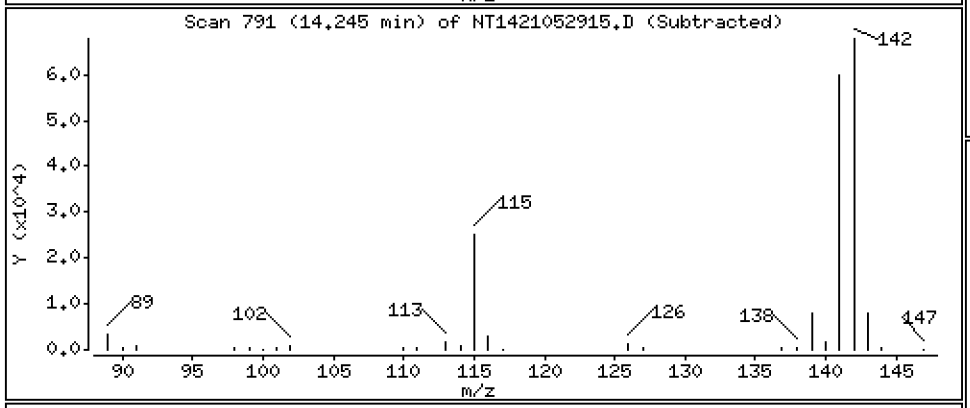
Column diameter: 0.25

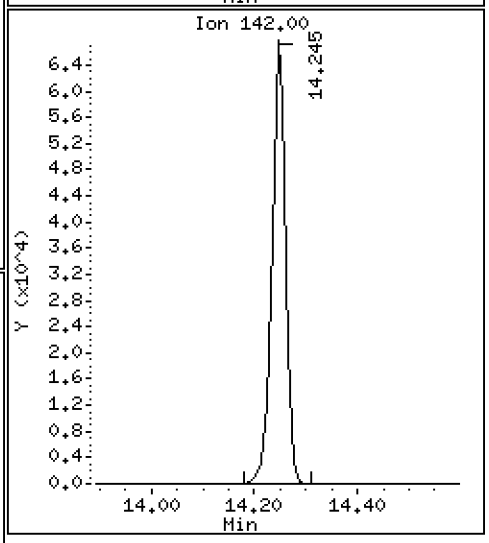
17 1-methylnaphthalene

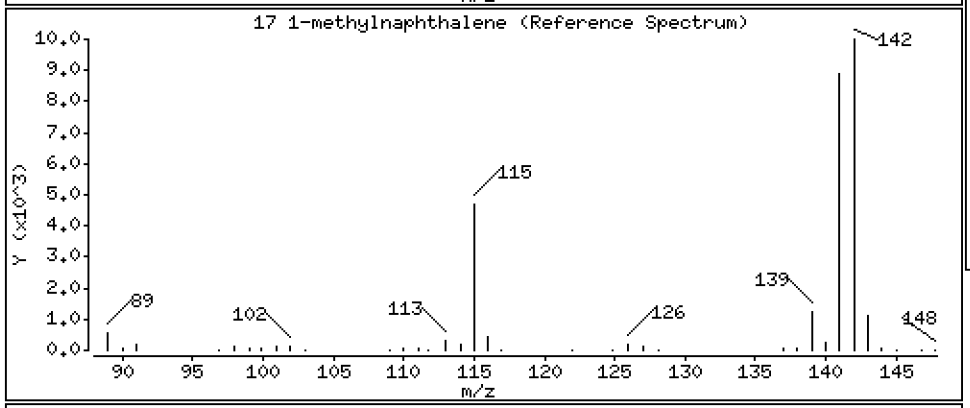
Concentration: 2.659 ug/mL

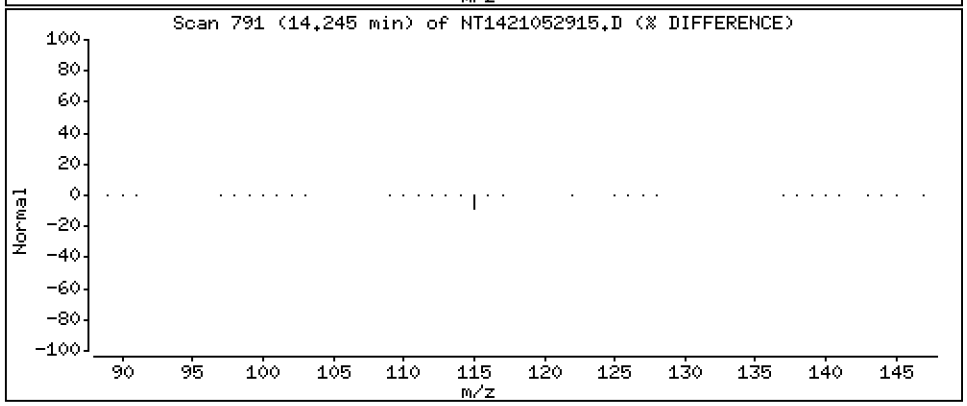












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Date : 29-MAY-2021 19:38

Client ID:

Instrument: nt14.i

Sample Info: SJF0025-SCV1

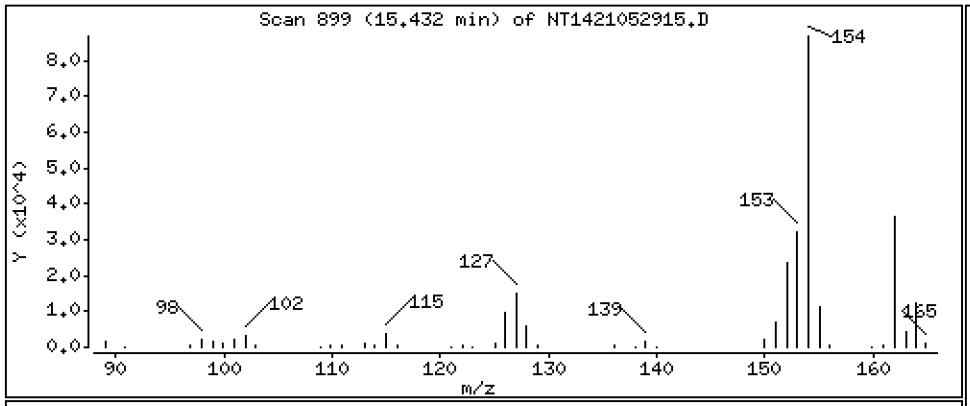
Operator: VTS

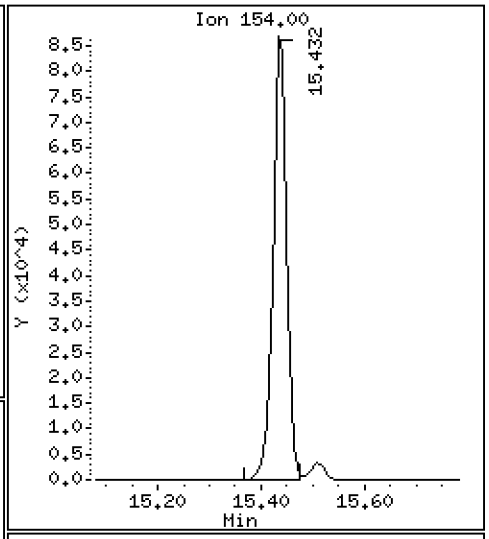
Column phase: Rxi-17Sil MS

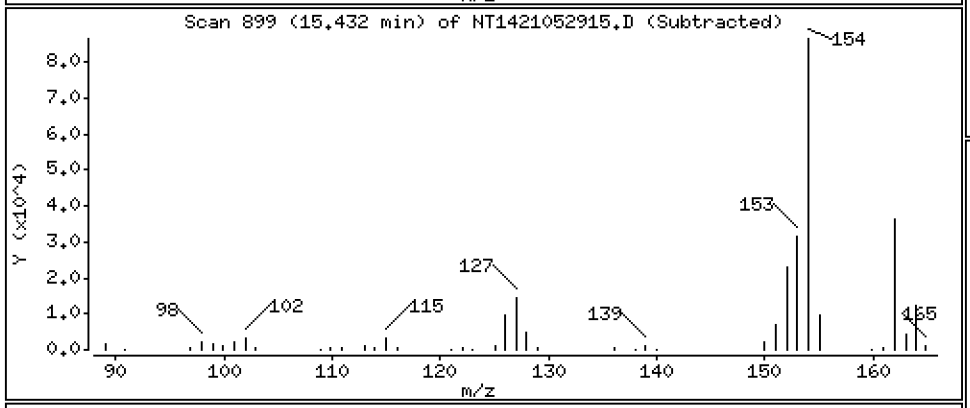
Column diameter: 0.25

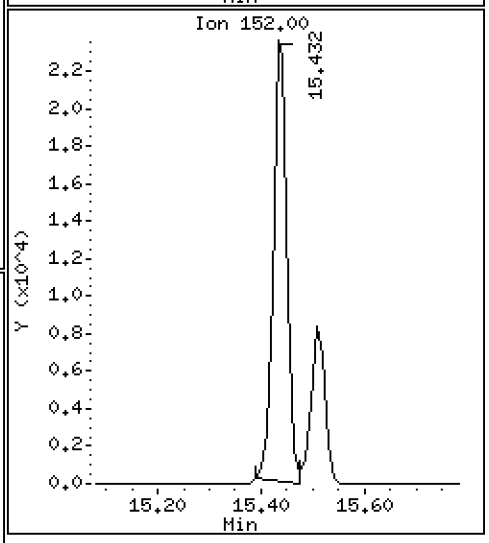
18 Biphenyl

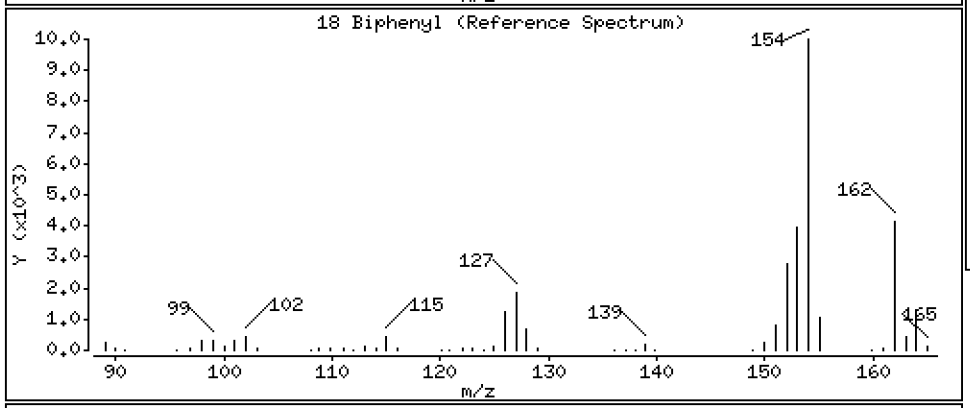
Concentration: 2.608 ug/mL

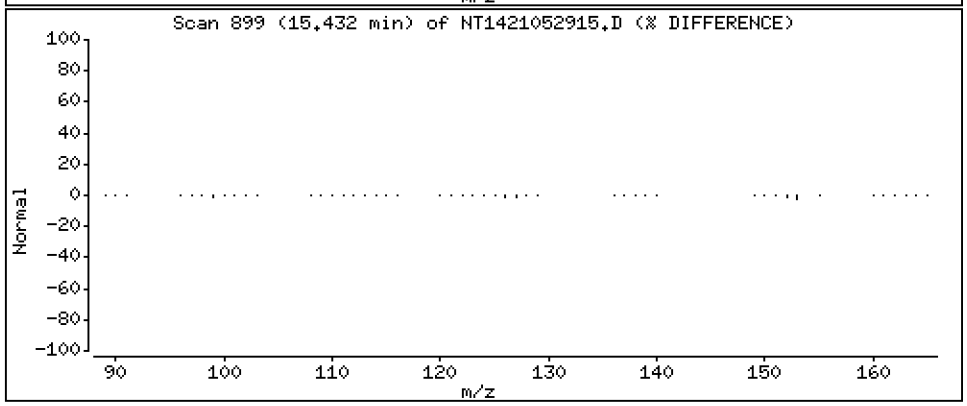












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Date : 29-MAY-2021 19:38

Client ID:

Instrument: nt14.i

Sample Info: SJF0025-SCV1

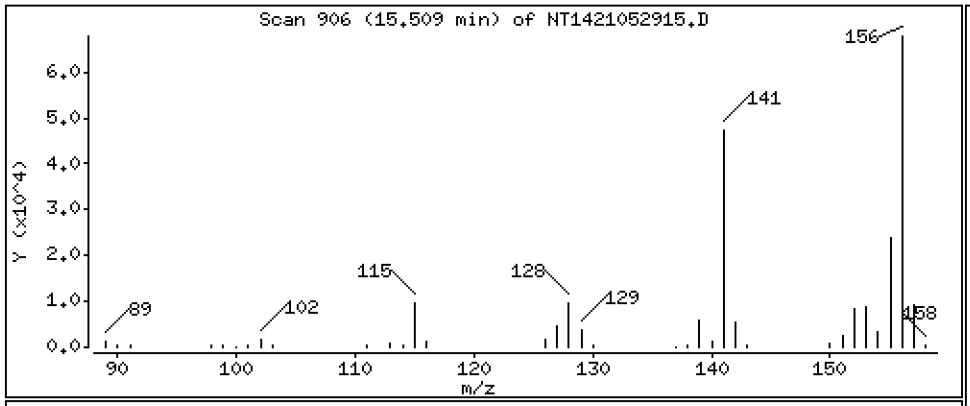
Operator: VTS

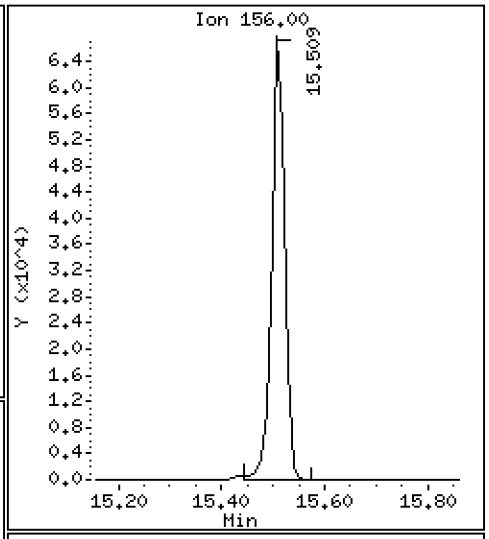
Column phase: Rxi-17Sil MS

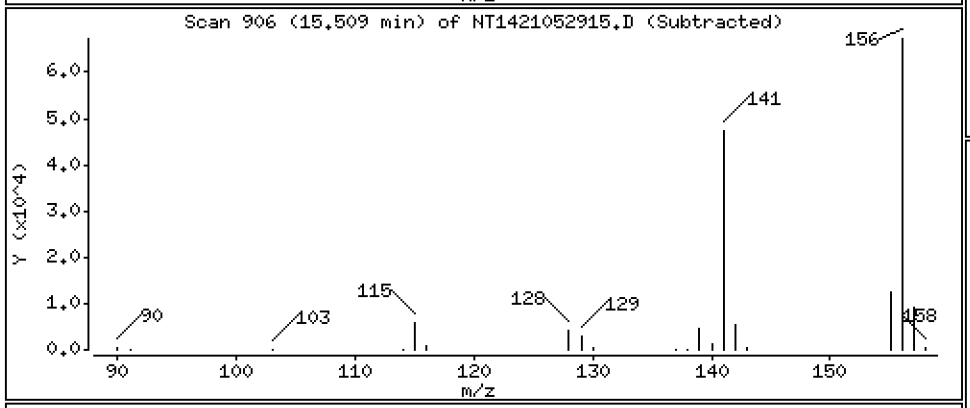
Column diameter: 0.25

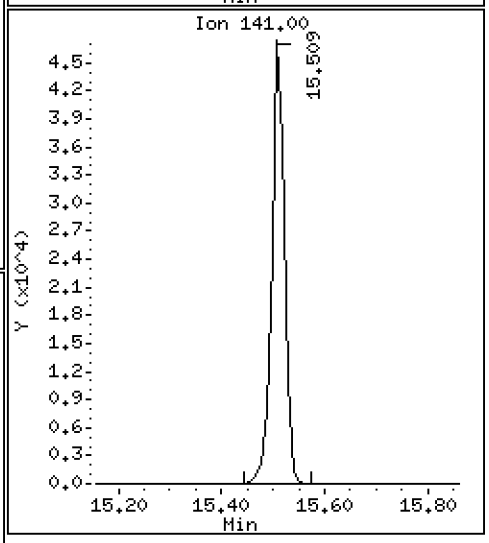
19 2,6-Dimethylnaphthalene

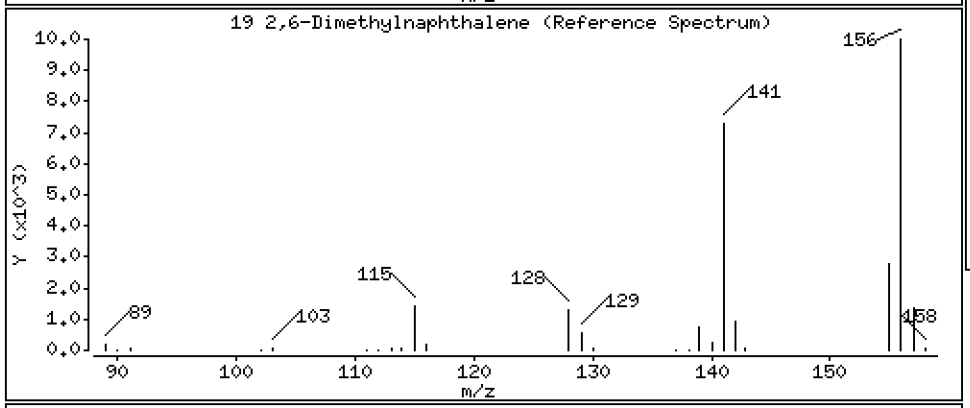
Concentration: 2.604 ug/mL

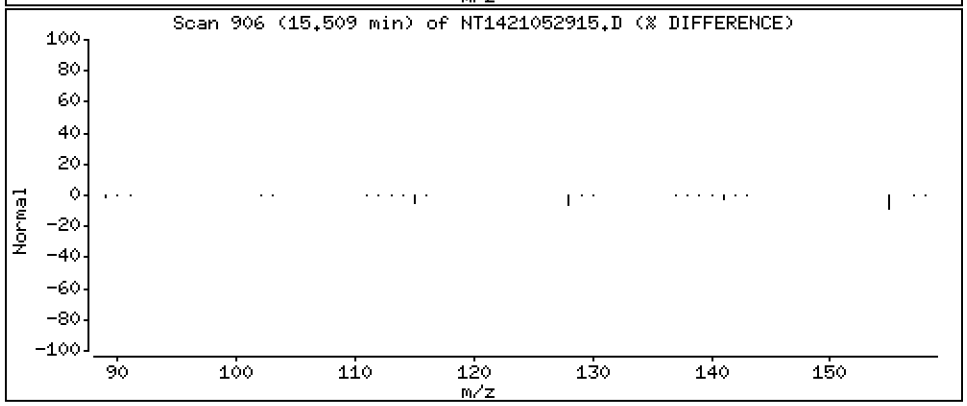












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Date : 29-MAY-2021 19:38

Client ID:

Instrument: nt14.i

Sample Info: SJF0025-SCV1

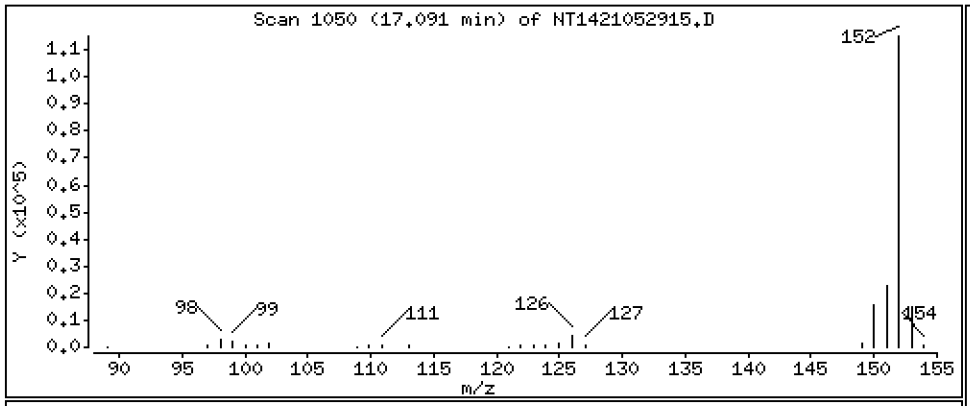
Operator: VTS

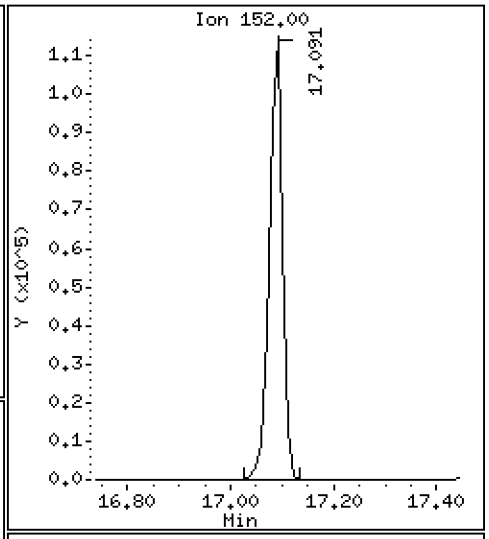
Column phase: Rxi-17Sil MS

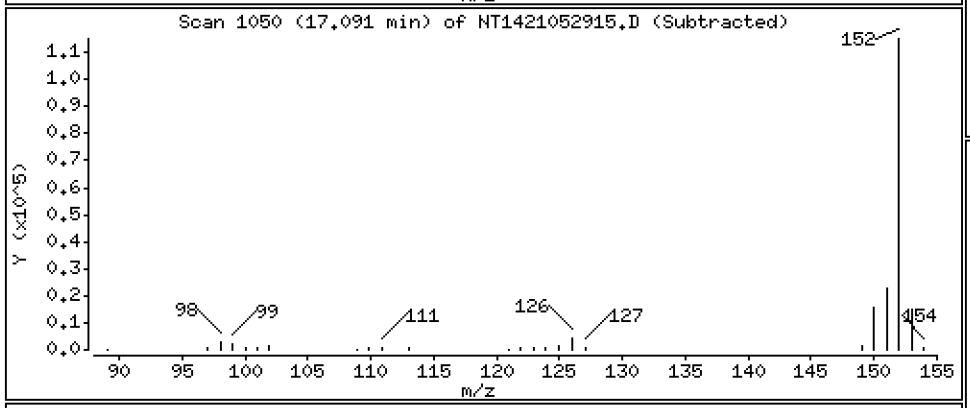
Column diameter: 0.25

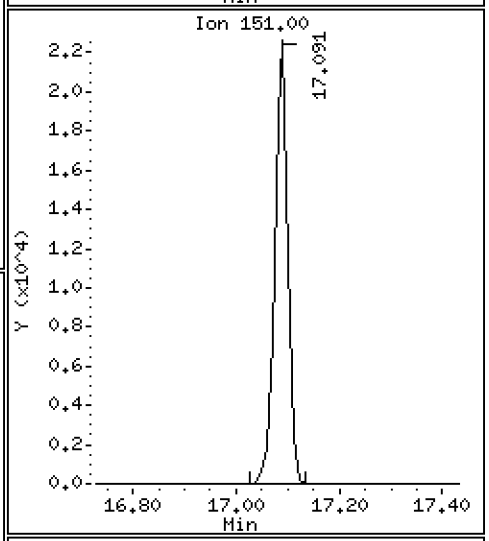
20 Acenaphthylene

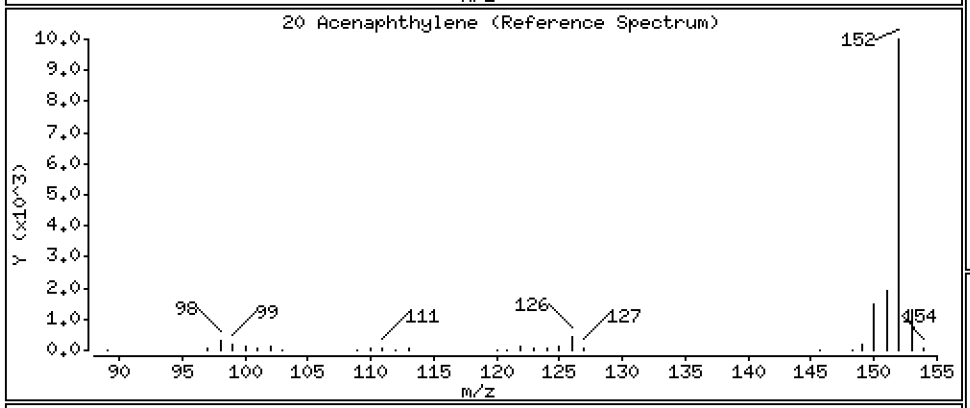
Concentration: 2.624 ug/mL

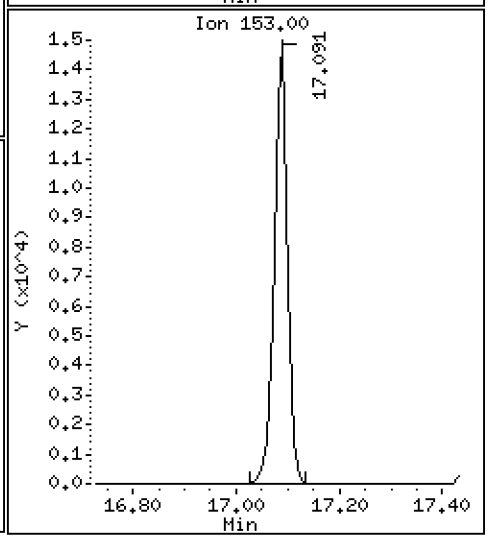


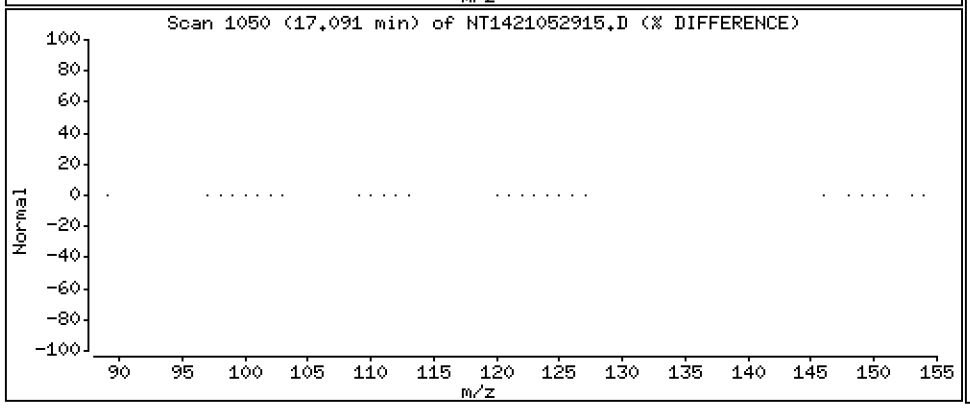












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Date : 29-MAY-2021 19:38

Client ID:

Instrument: nt14.i

Sample Info: SJF0025-SCV1

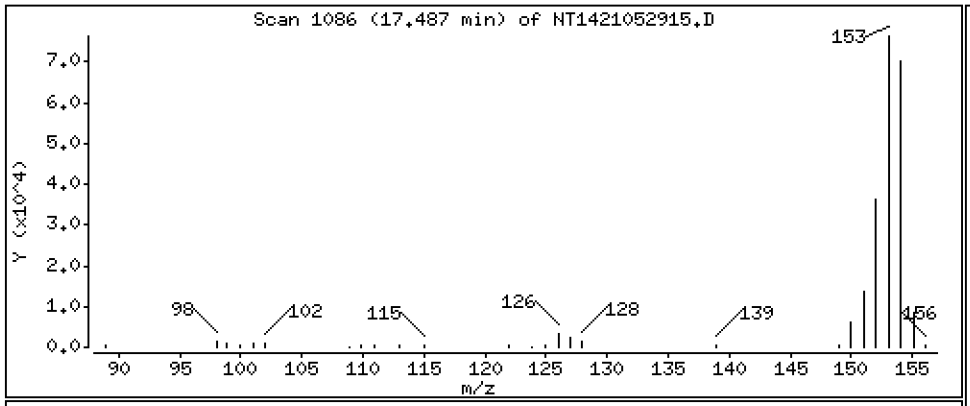
Operator: VTS

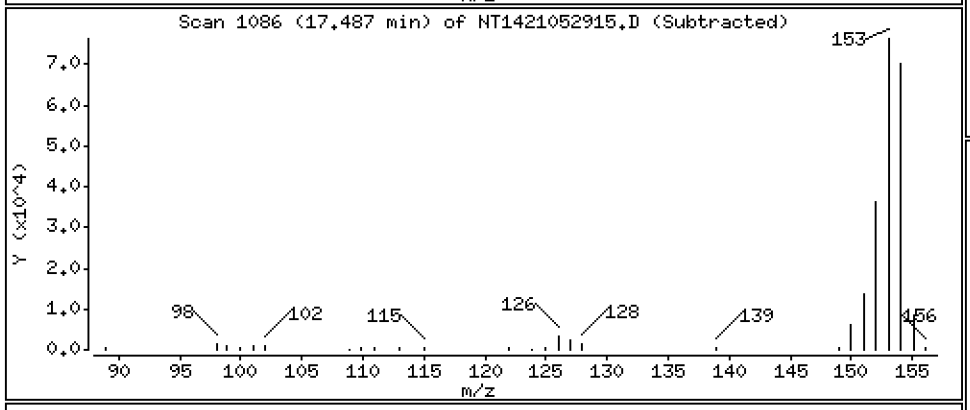
Column phase: Rxi-17Sil MS

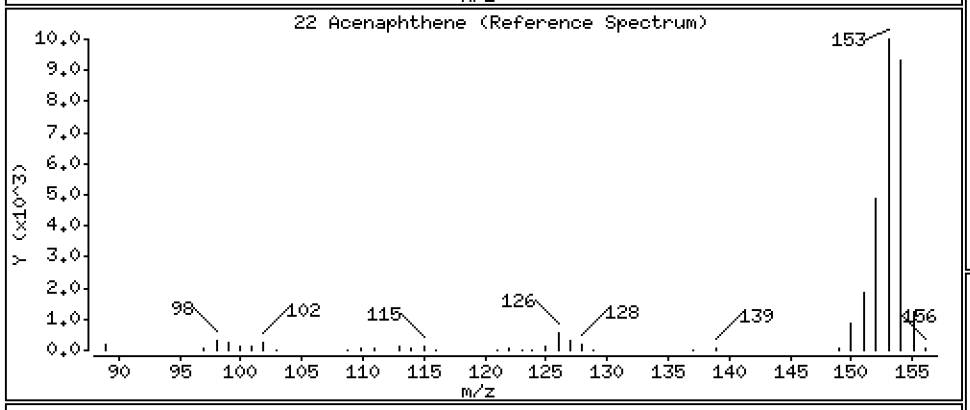
Column diameter: 0.25

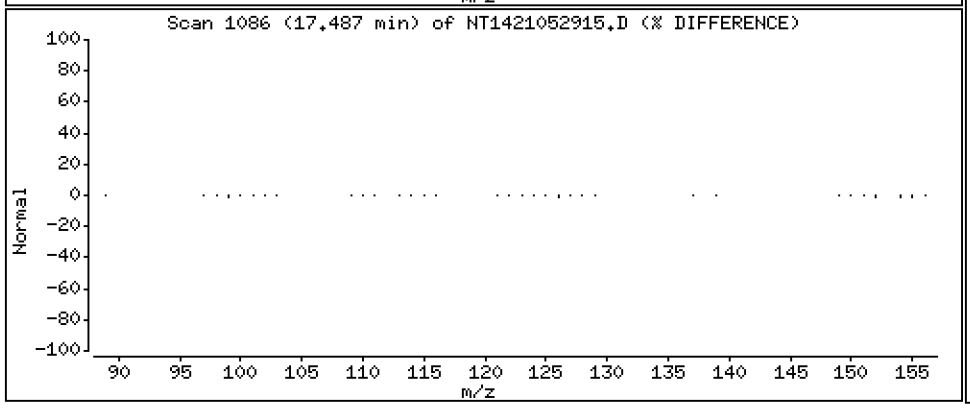
22 Acenaphthene

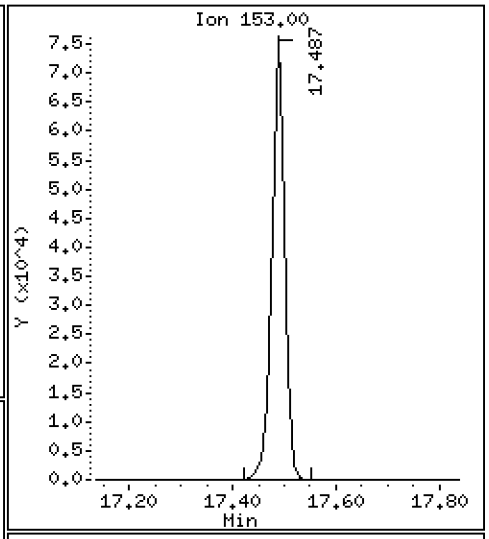
Concentration: 2.755 ug/mL

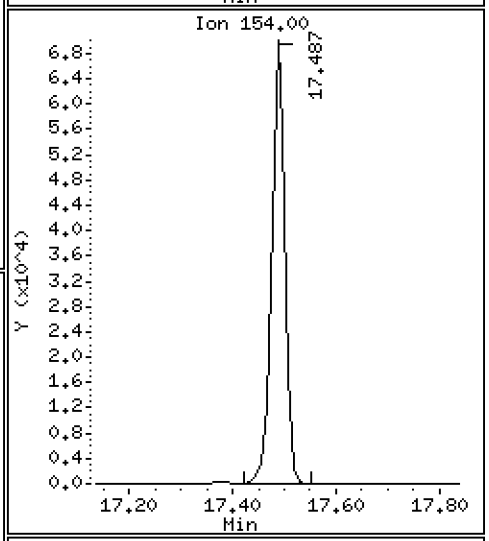


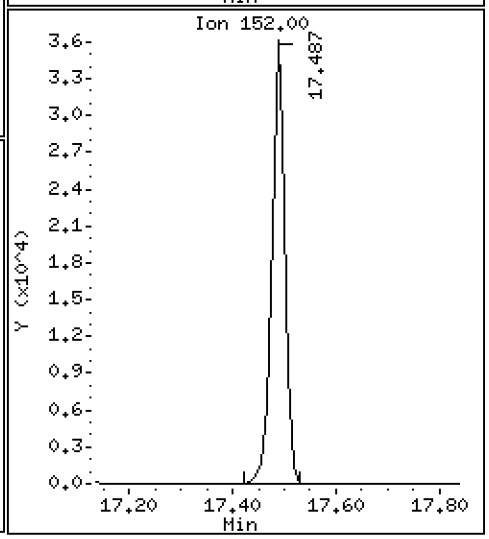












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Date : 29-MAY-2021 19:38

Client ID:

Instrument: nt14.i

Sample Info: SJF0025-SCV1

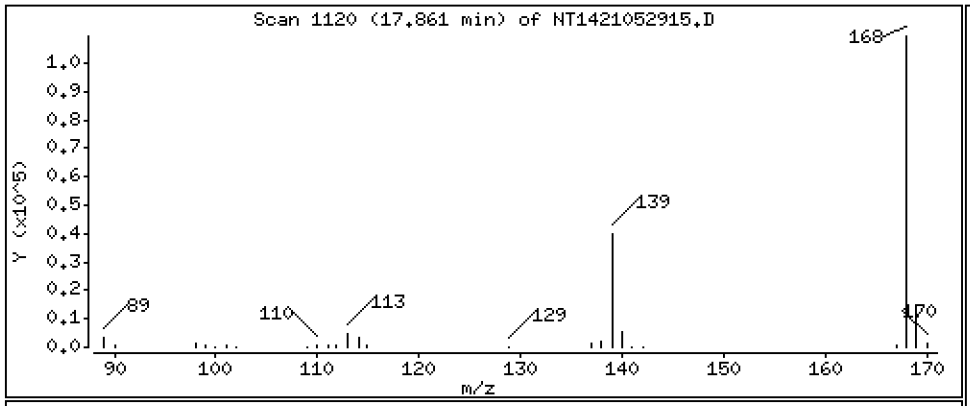
Operator: VTS

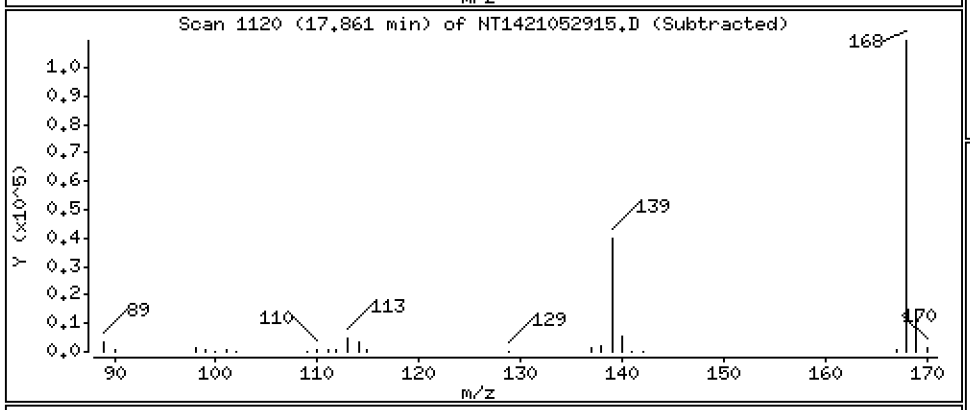
Column phase: Rxi-17Sil MS

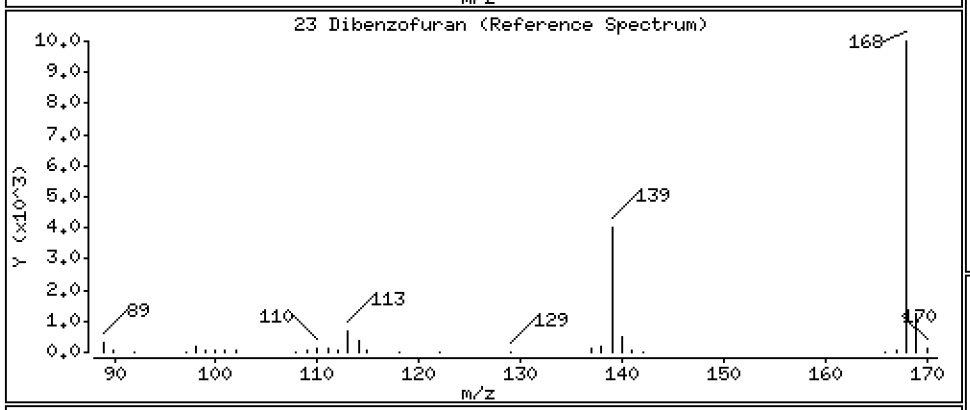
Column diameter: 0.25

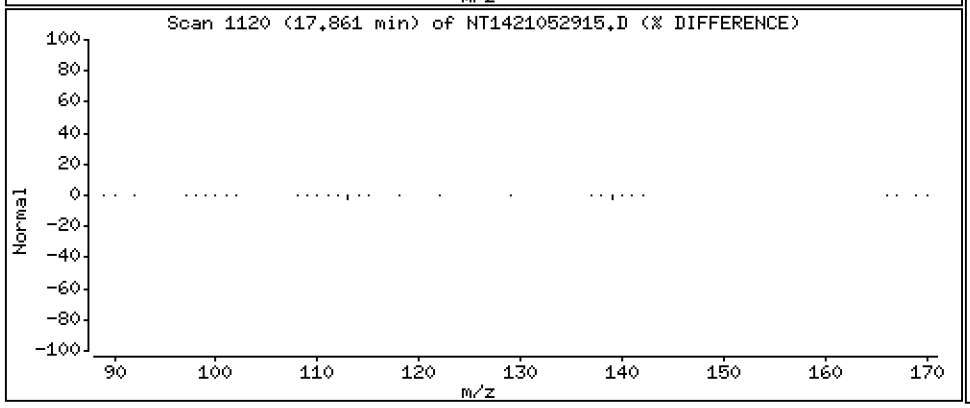
23 Dibenzofuran

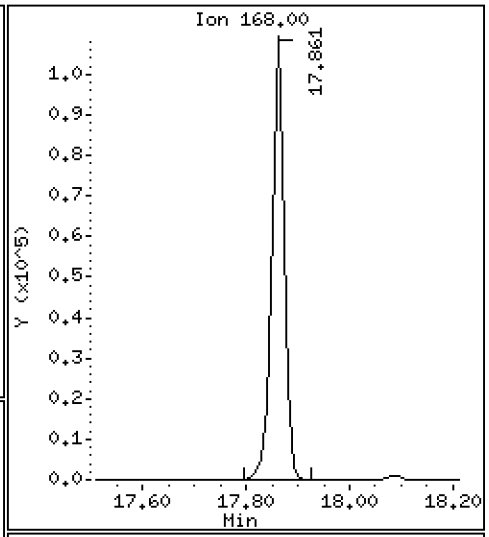
Concentration: 2.595 ug/mL

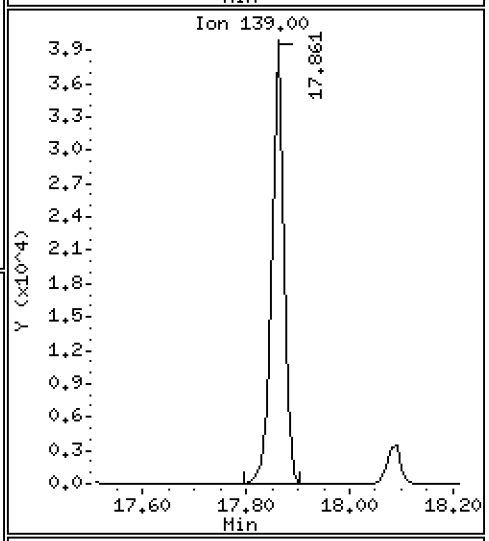


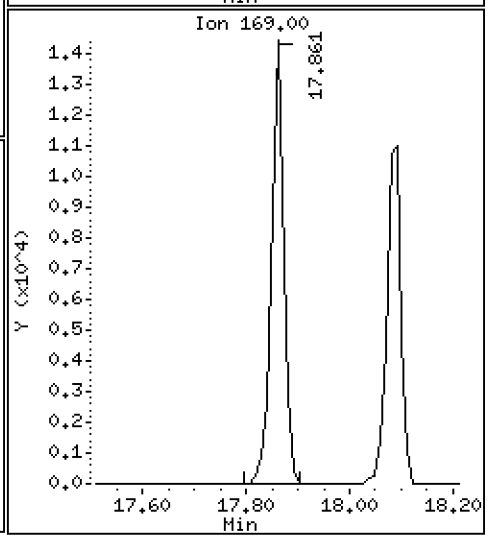












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Date : 29-MAY-2021 19:38

Client ID:

Instrument: nt14.i

Sample Info: SJF0025-SCV1

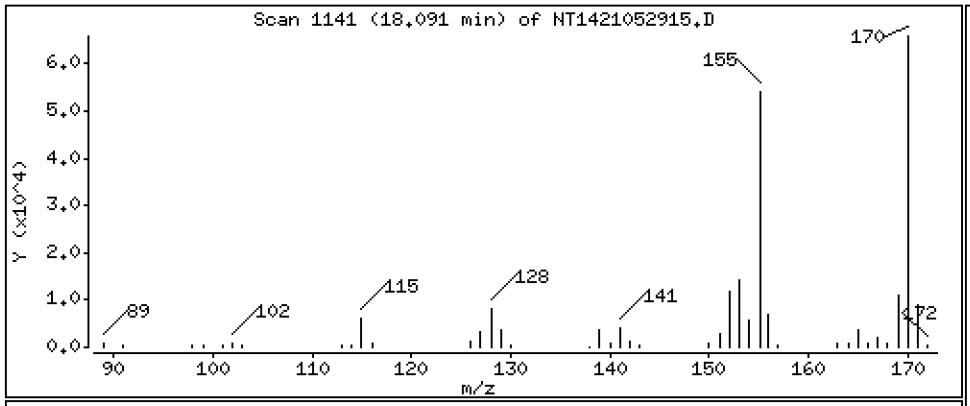
Operator: VTS

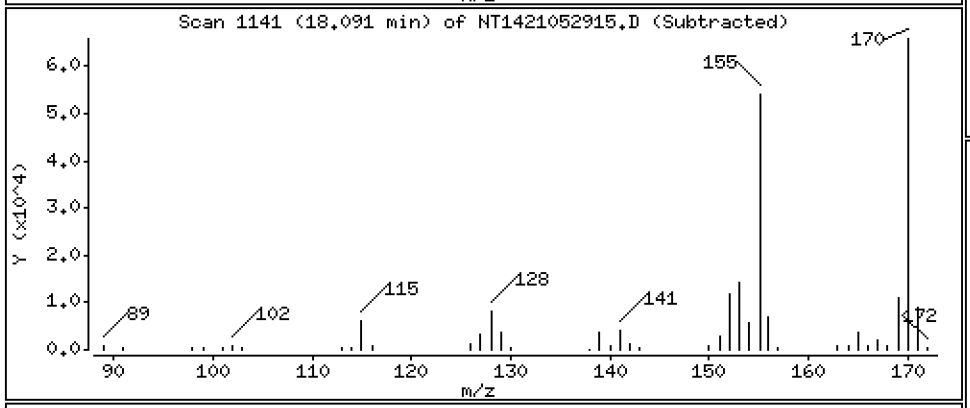
Column phase: Rxi-17Sil MS

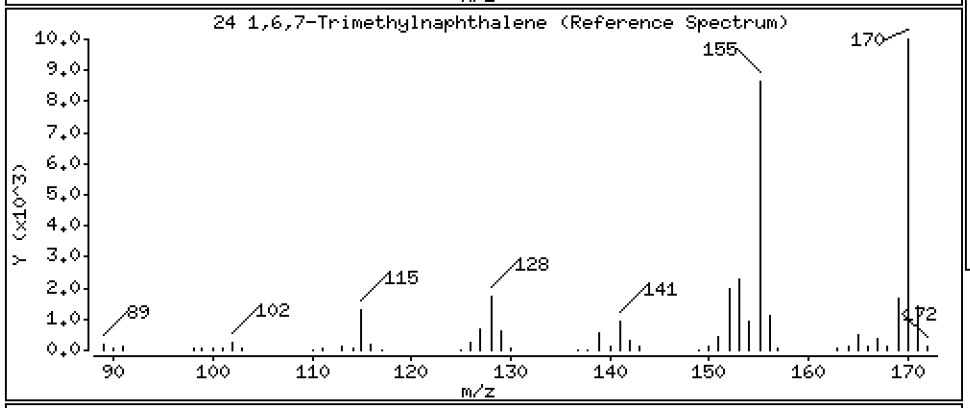
Column diameter: 0.25

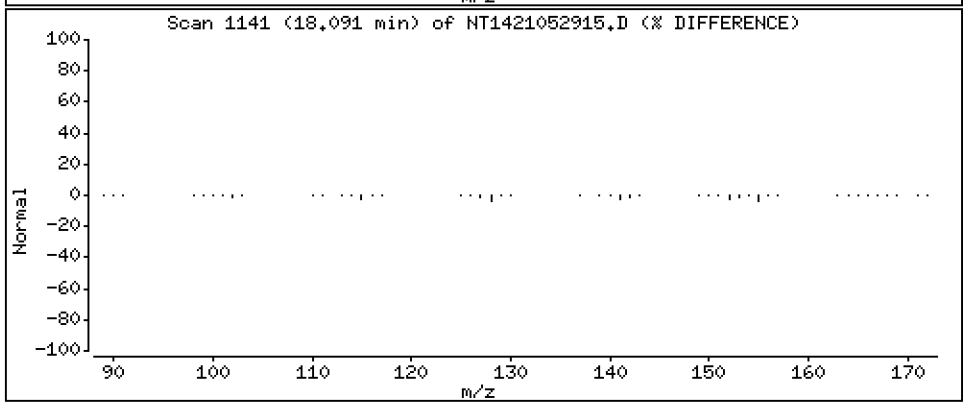
24 1,6,7-Trimethylnaphthalene

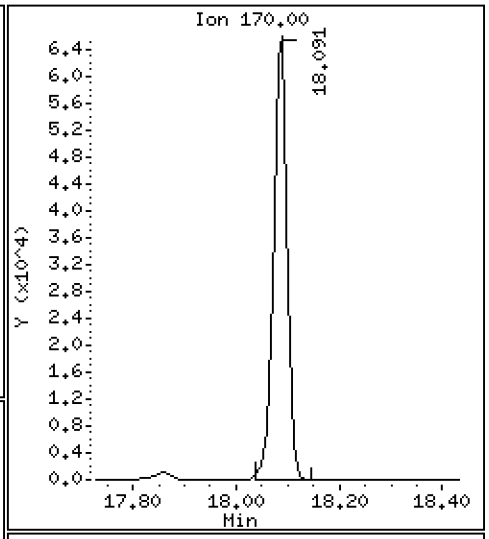
Concentration: 2.642 ug/mL

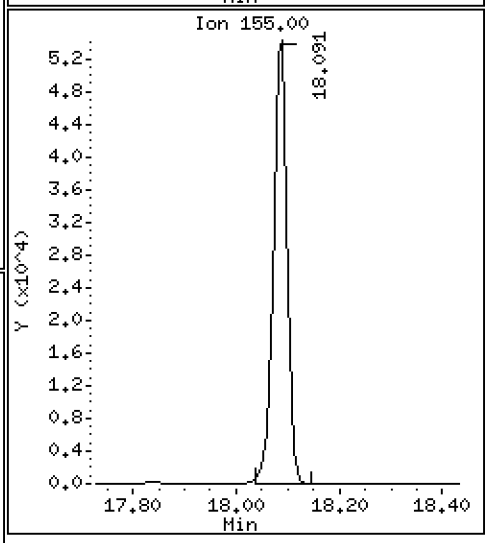












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Date : 29-MAY-2021 19:38

Client ID:

Instrument: nt14.i

Sample Info: SJF0025-SCV1

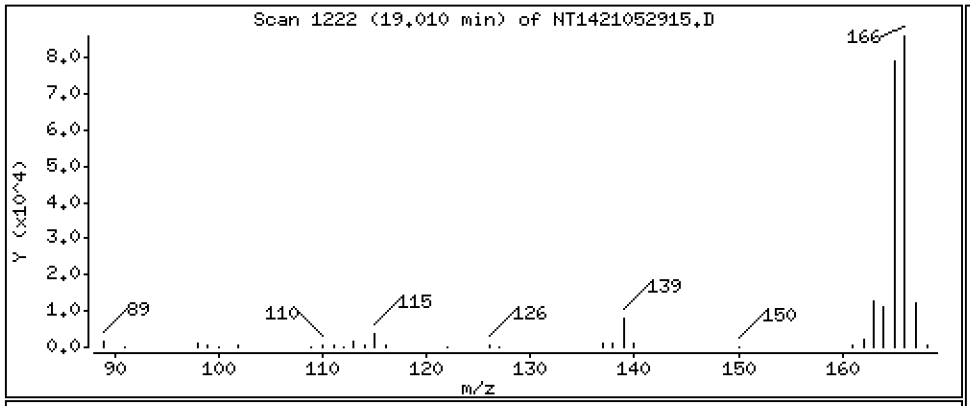
Operator: VTS

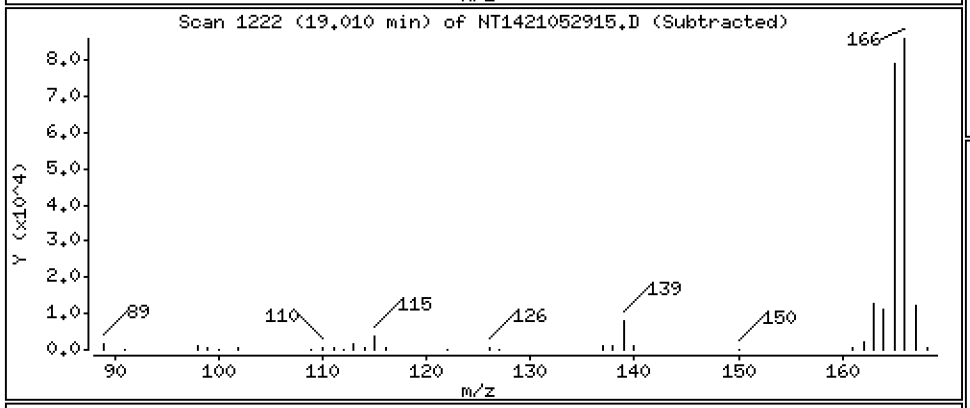
Column phase: Rxi-17Sil MS

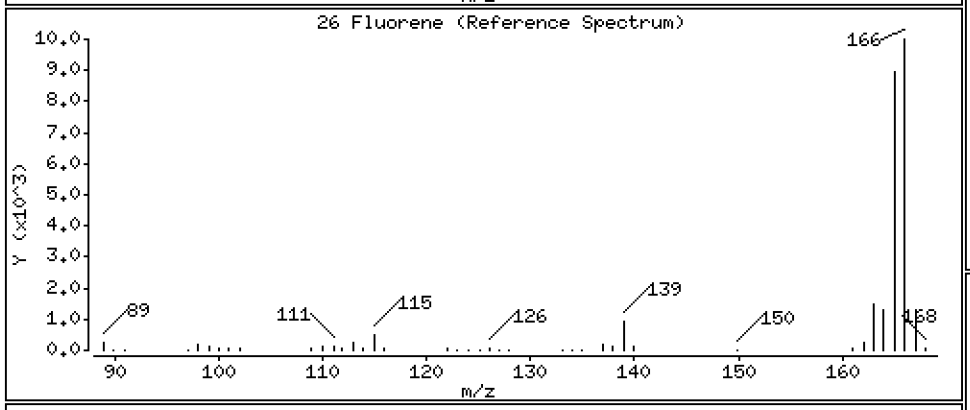
Column diameter: 0.25

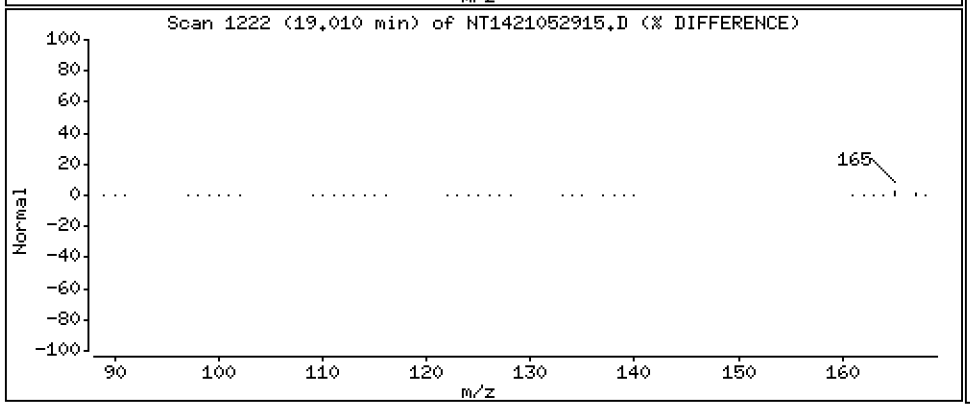
26 Fluorene

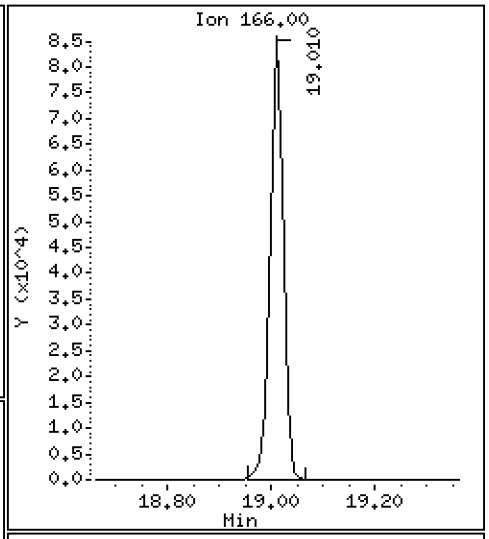
Concentration: 2.611 ug/mL

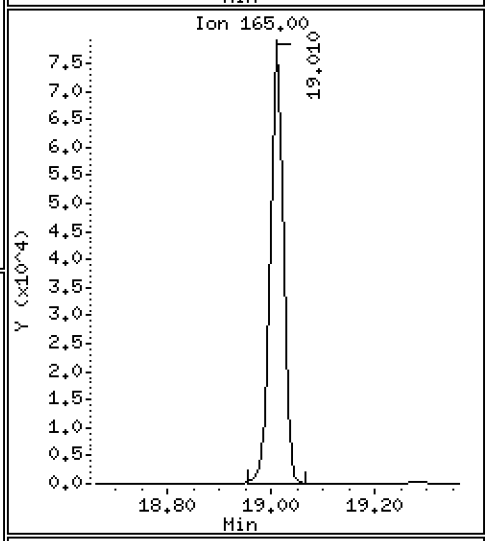


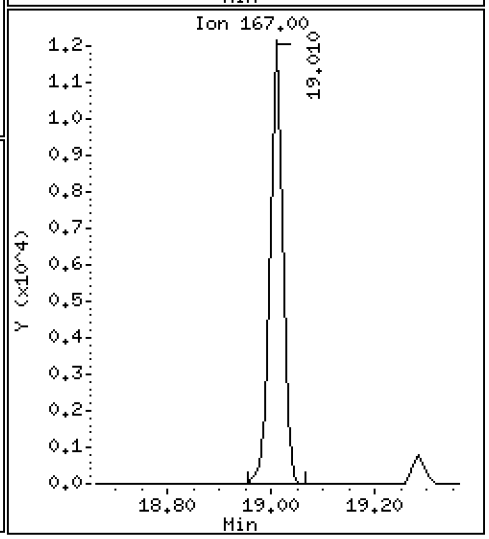












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Date : 29-MAY-2021 19:38

Client ID:

Instrument: nt14.i

Sample Info: SJF0025-SCV1

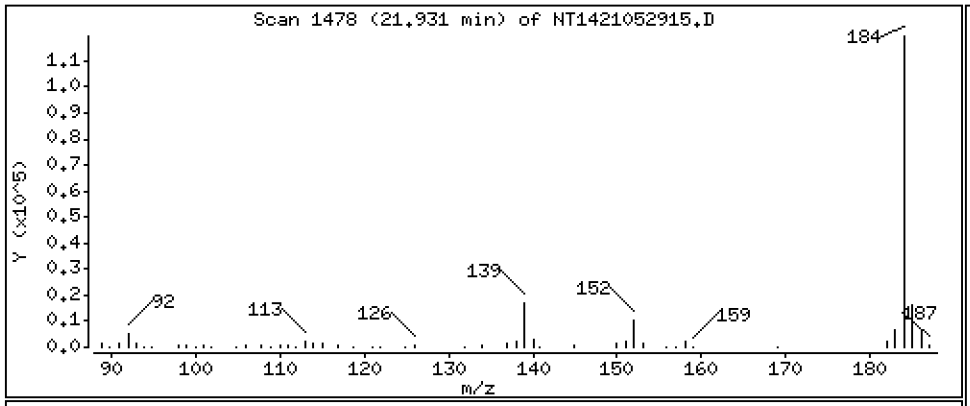
Operator: VTS

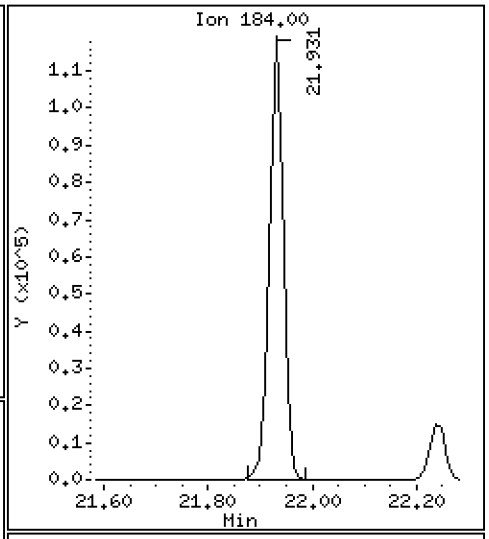
Column phase: Rxi-17Sil MS

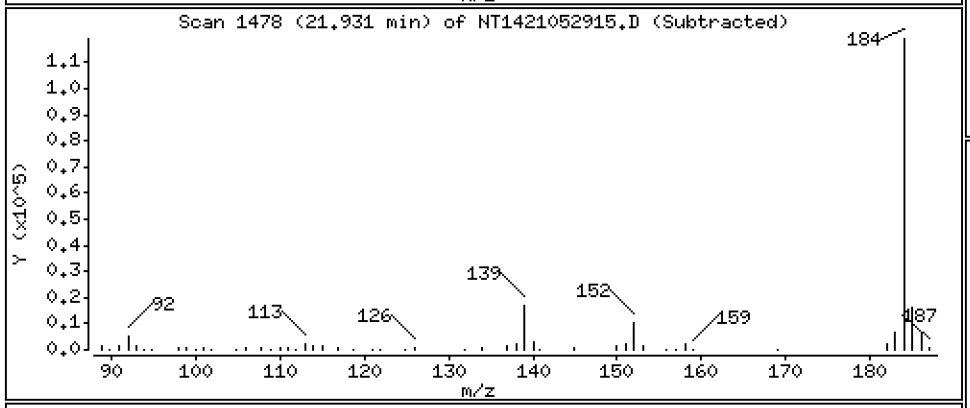
Column diameter: 0.25

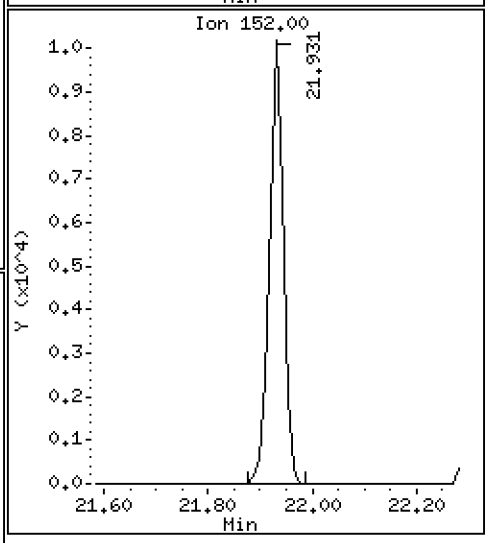
30 Dibenzothiophene

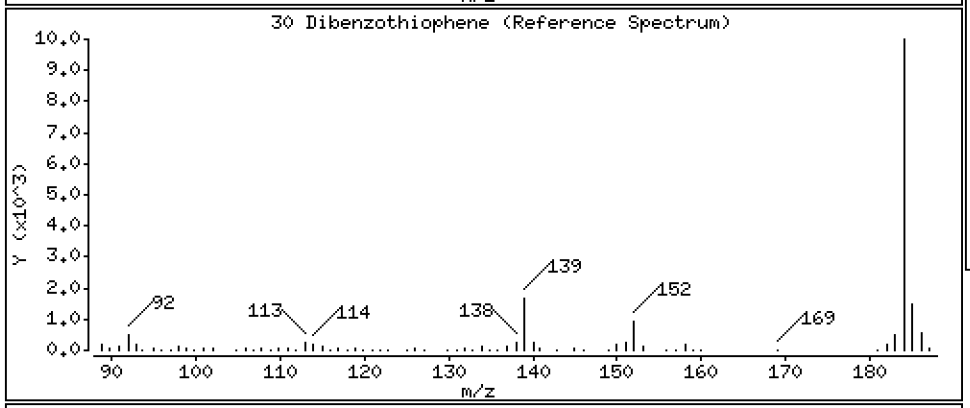
Concentration: 2.634 ug/mL

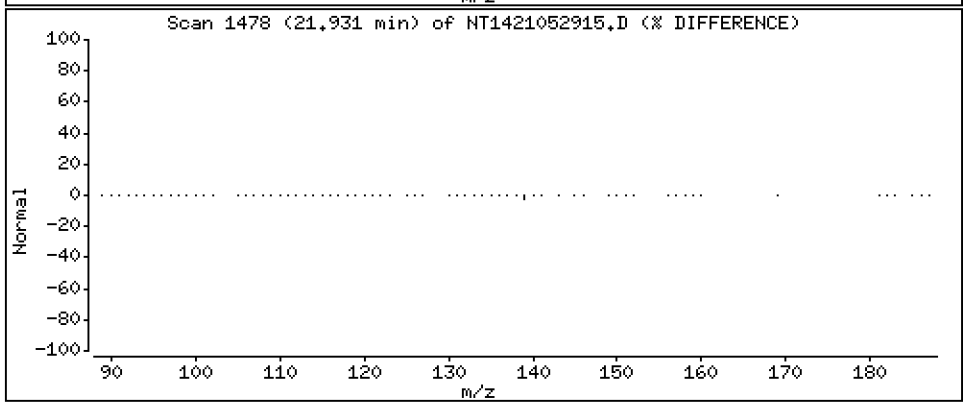












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Date : 29-MAY-2021 19:38

Client ID:

Instrument: nt14.i

Sample Info: SJF0025-SCV1

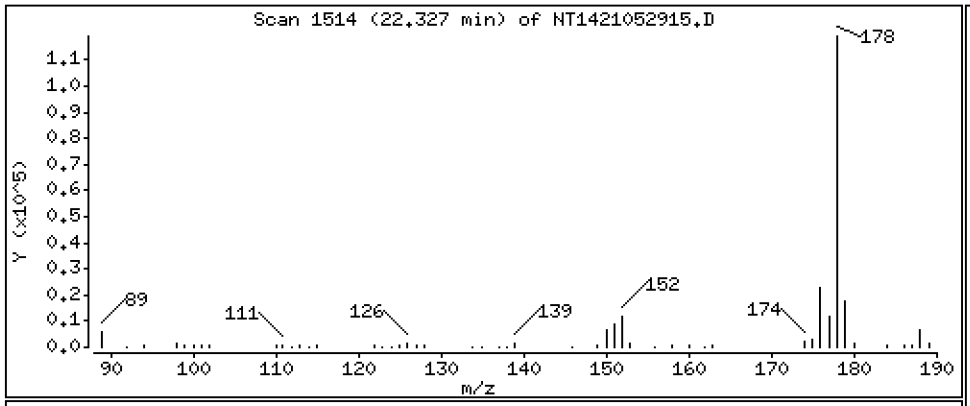
Operator: VTS

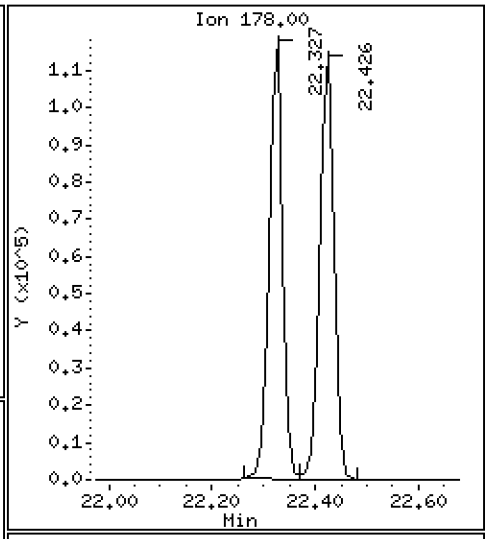
Column phase: Rxi-17Sil MS

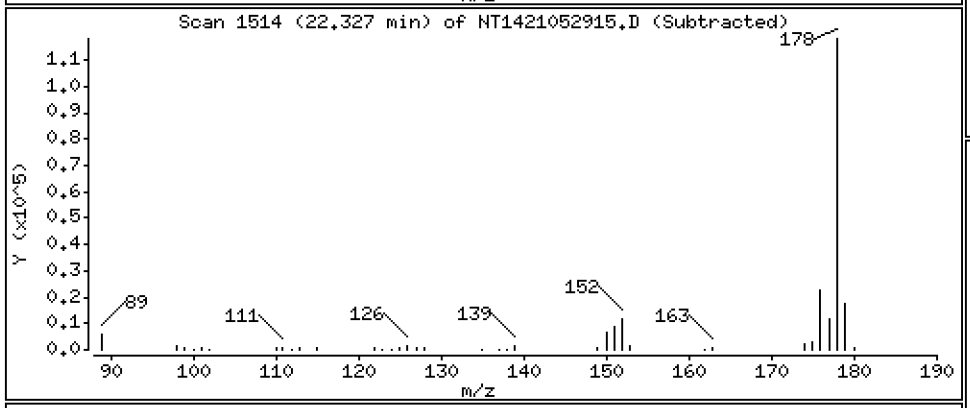
Column diameter: 0.25

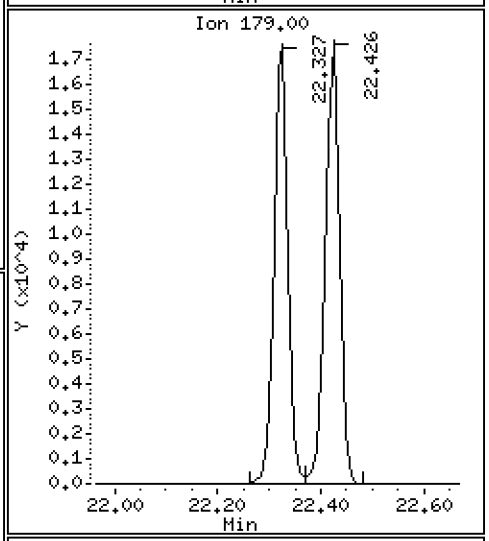
36 Phenanthrene

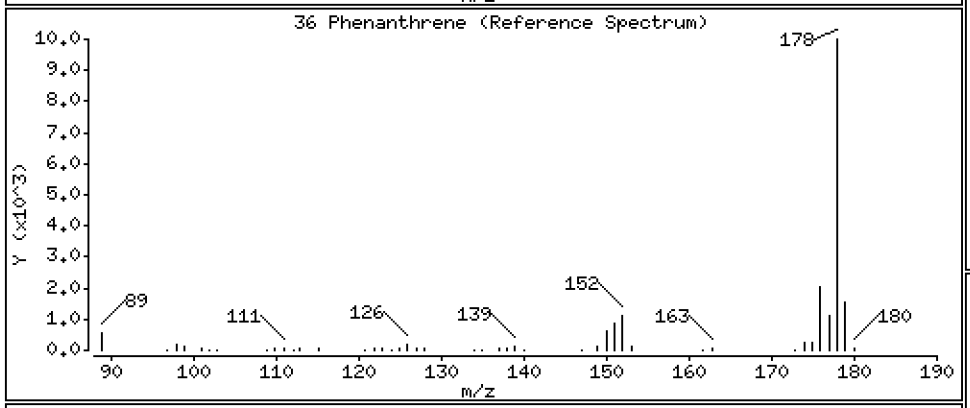
Concentration: 2.640 ug/mL

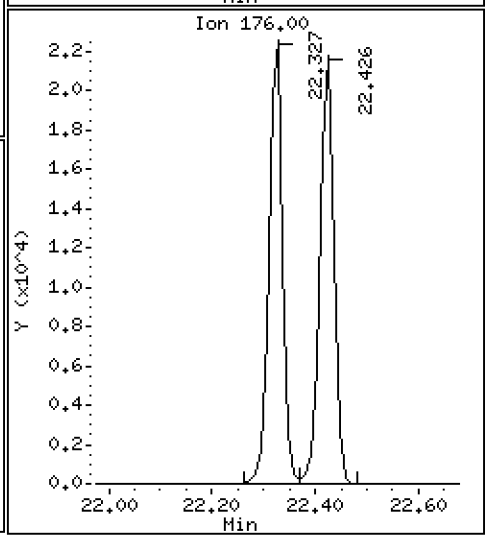


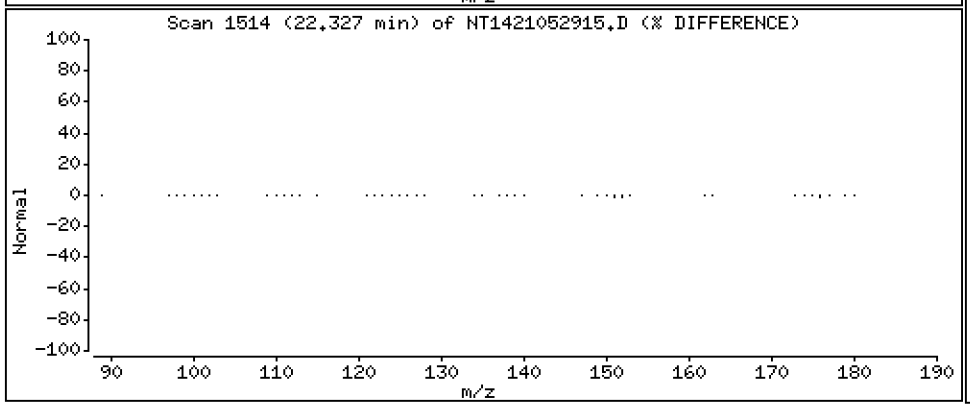












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Date : 29-MAY-2021 19:38

Client ID:

Instrument: nt14.i

Sample Info: SJF0025-SCV1

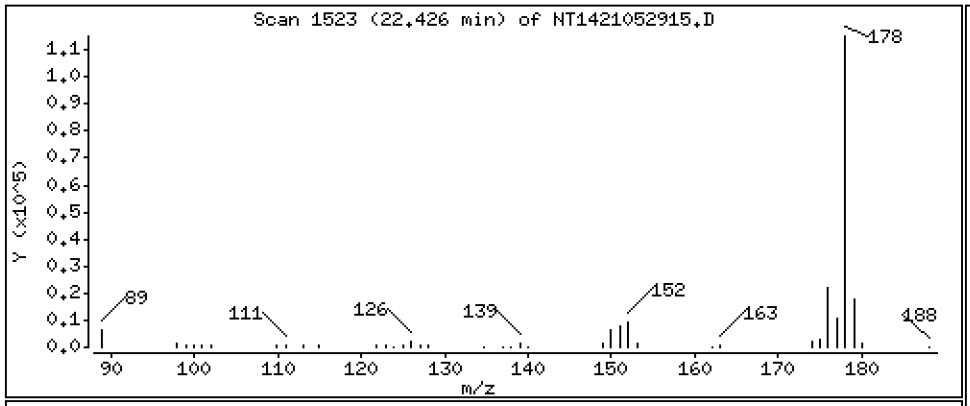
Operator: VTS

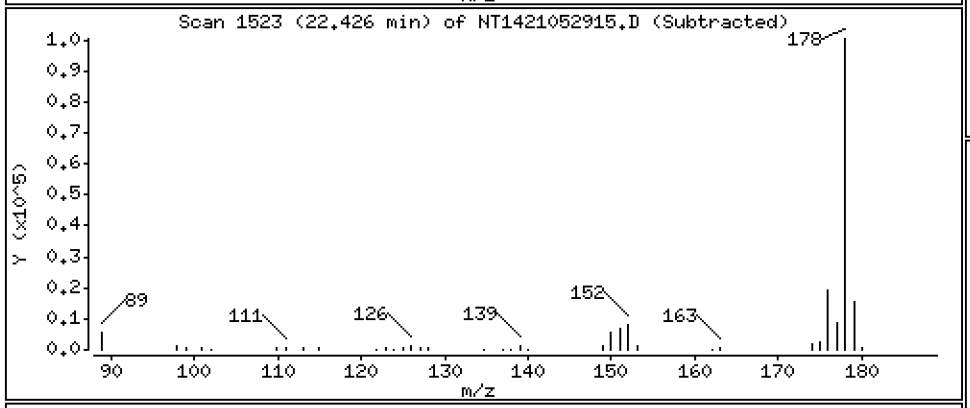
Column phase: Rxi-17Sil MS

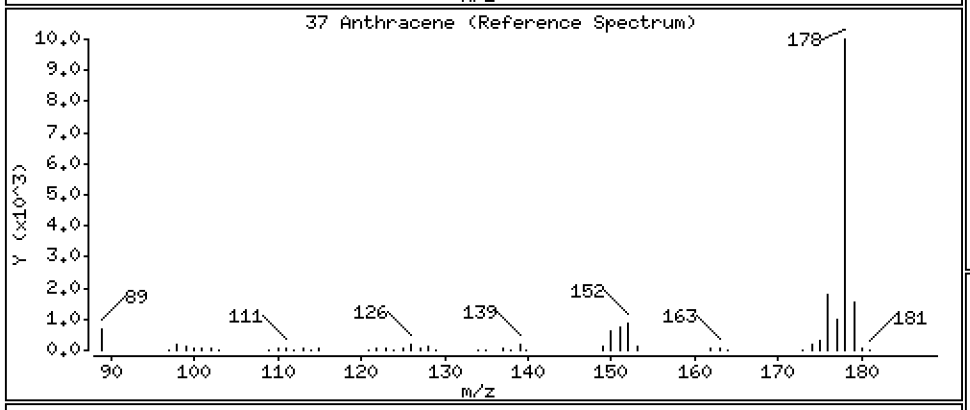
Column diameter: 0.25

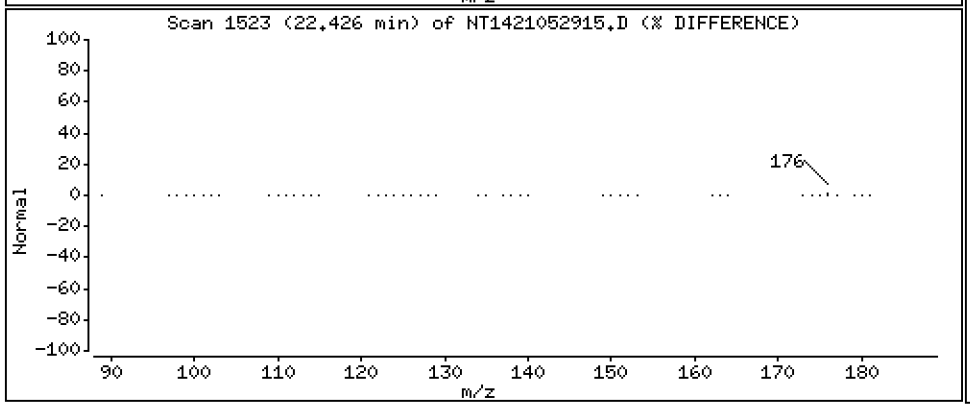
37 Anthracene

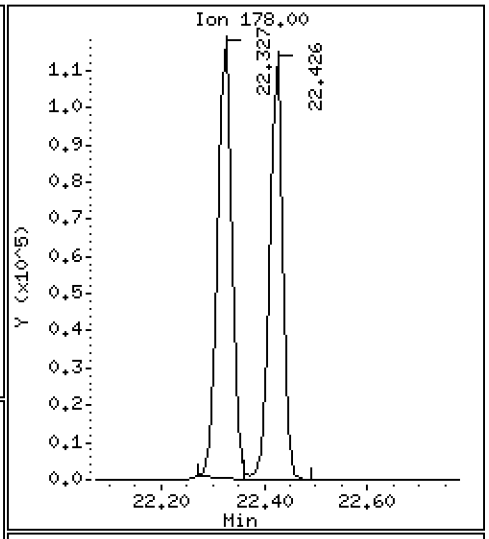
Concentration: 2.688 ug/mL

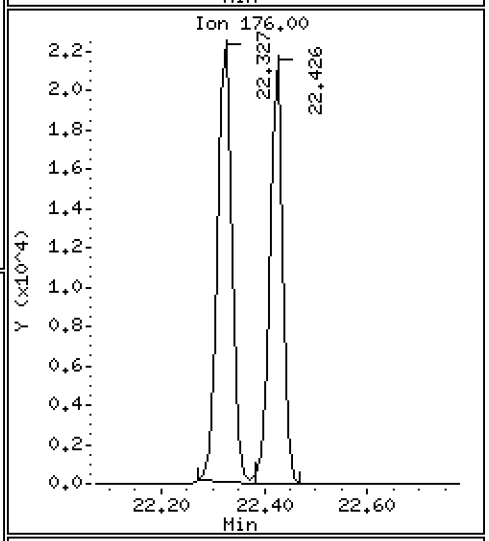


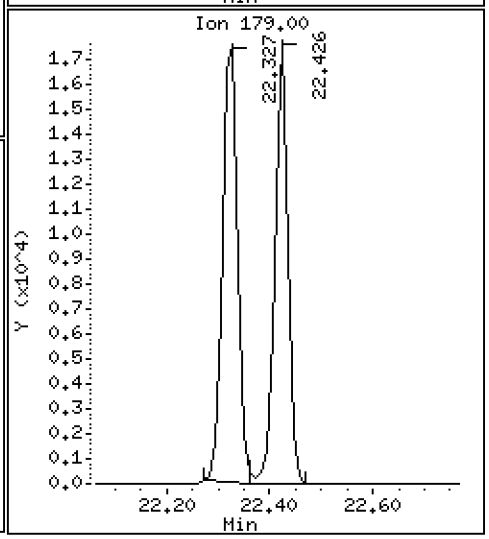












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Date : 29-MAY-2021 19:38

Client ID:

Instrument: nt14.i

Sample Info: SJF0025-SCV1

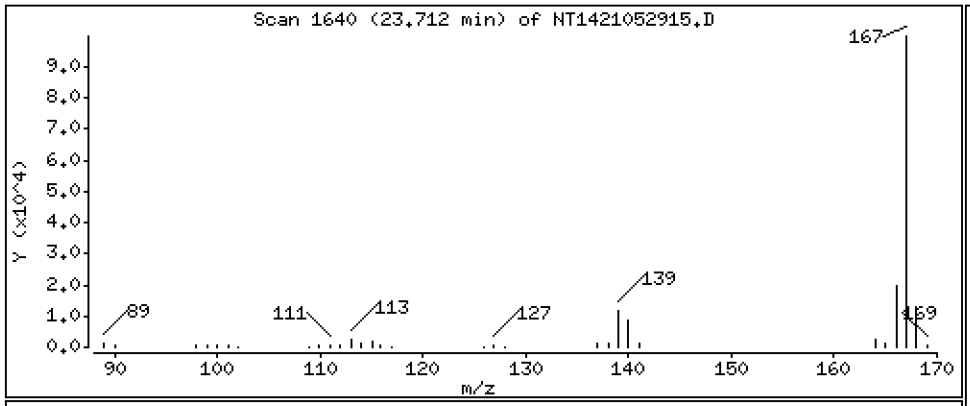
Operator: VTS

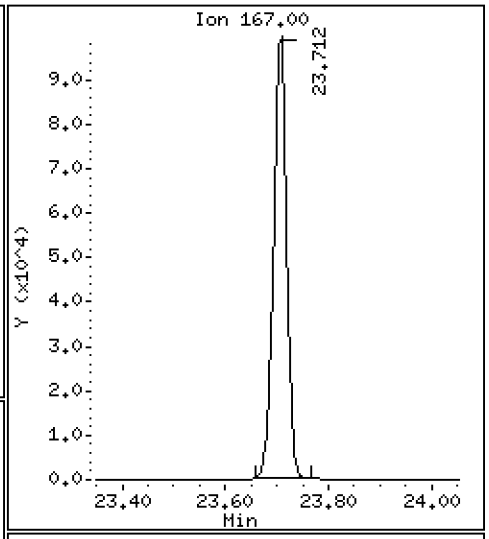
Column phase: Rxi-17Sil MS

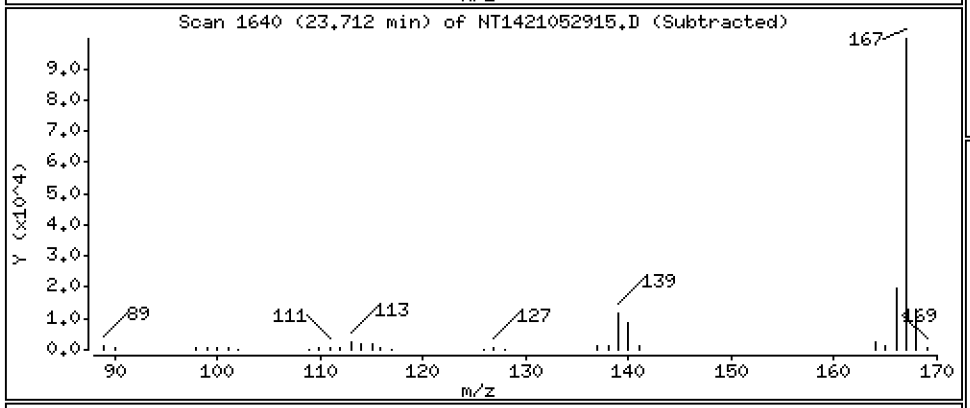
Column diameter: 0.25

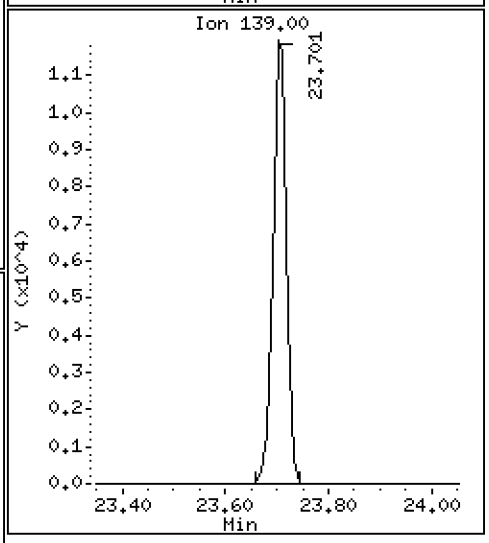
42 Carbazole

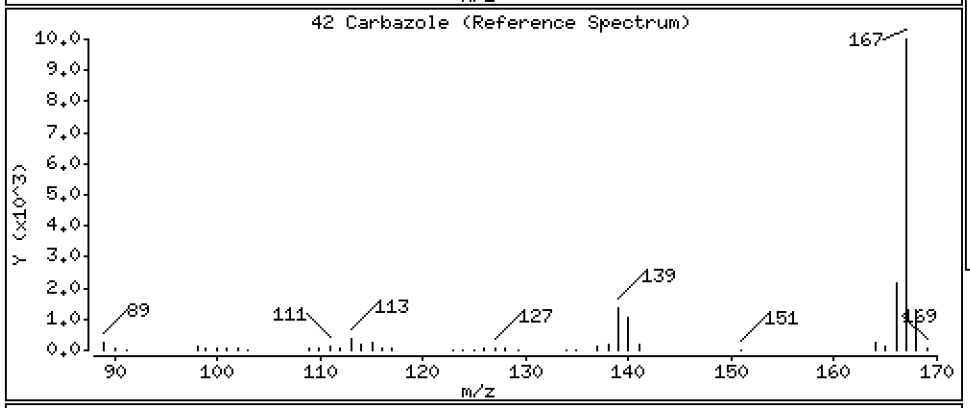
Concentration: 2.704 ug/mL

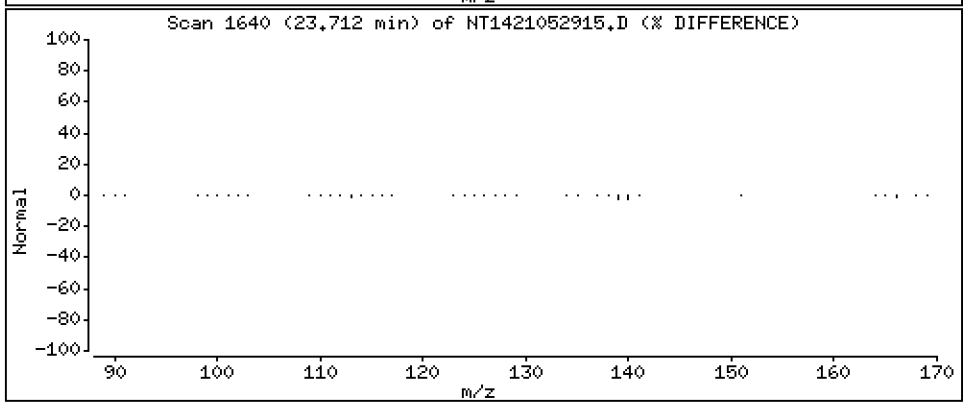












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Date : 29-MAY-2021 19:38

Client ID:

Instrument: nt14.i

Sample Info: SJF0025-SCV1

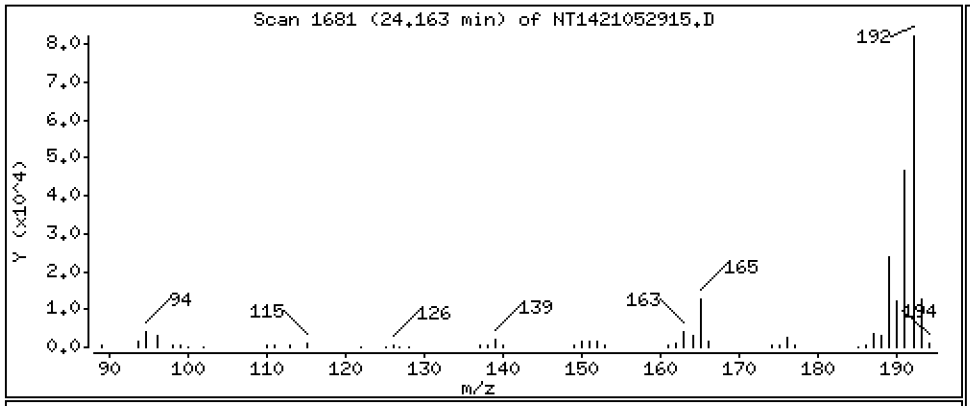
Operator: VTS

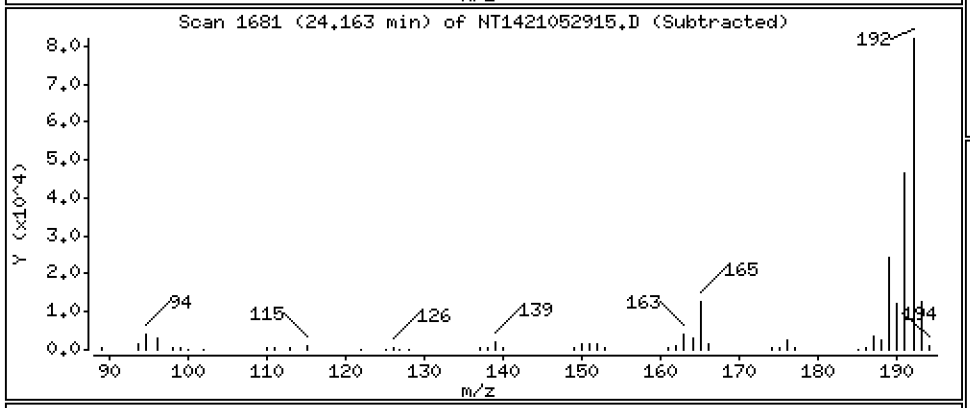
Column phase: Rxi-17Sil MS

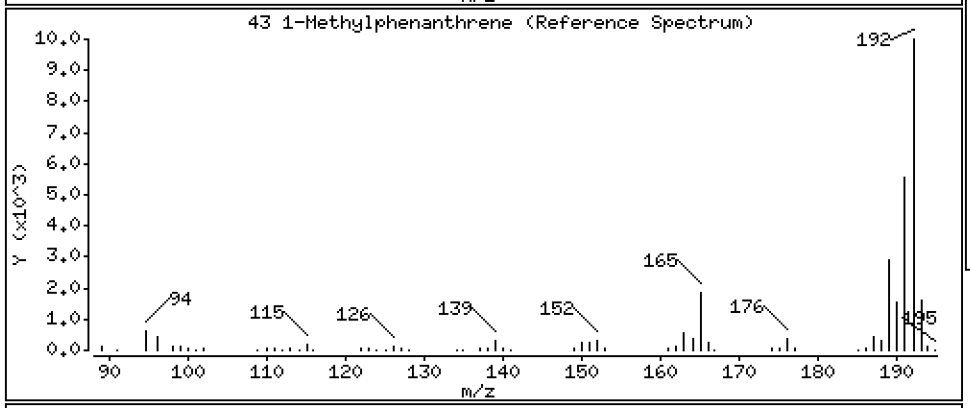
Column diameter: 0.25

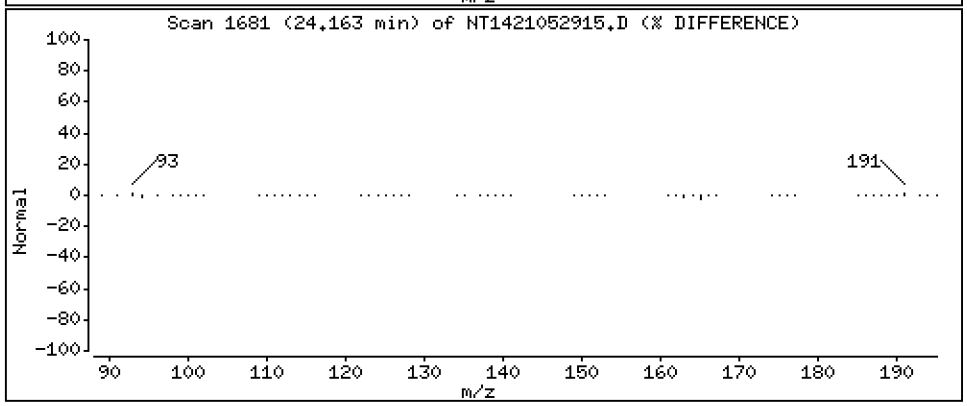
43 1-Methylphenanthrene

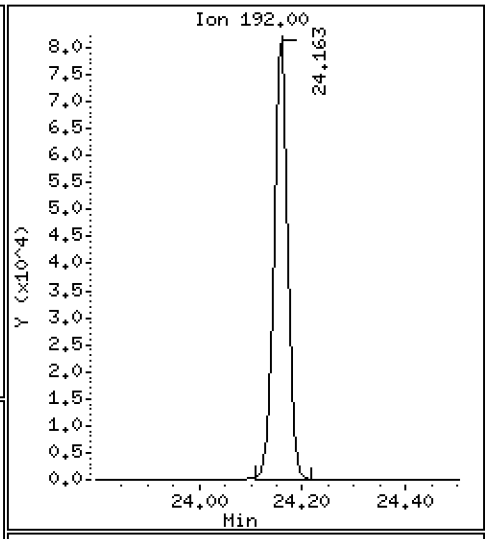
Concentration: 2.667 ug/mL

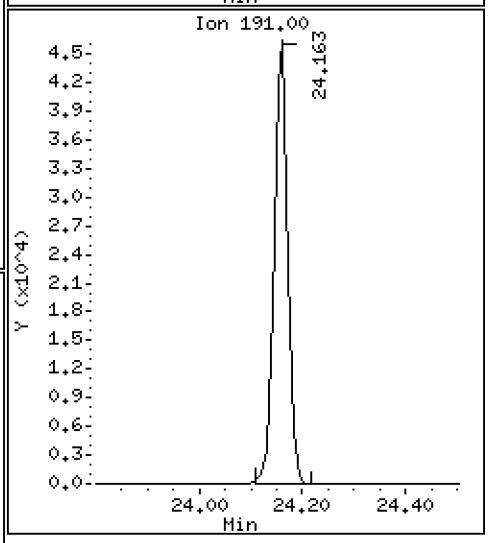












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Date : 29-MAY-2021 19:38

Client ID:

Instrument: nt14.i

Sample Info: SJF0025-SCV1

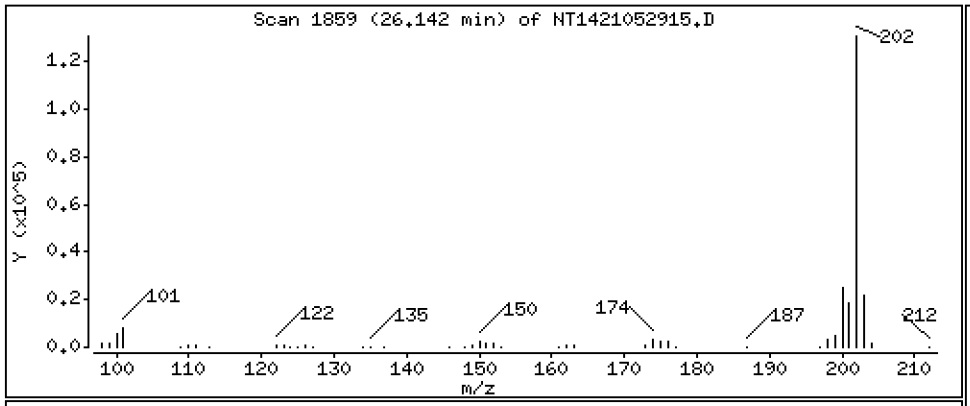
Operator: VTS

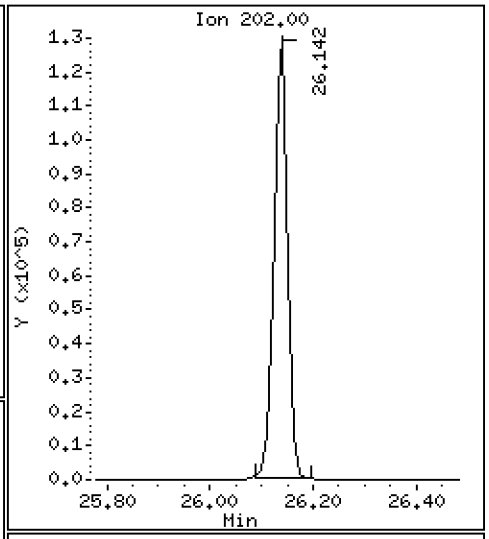
Column phase: Rxi-17Sil MS

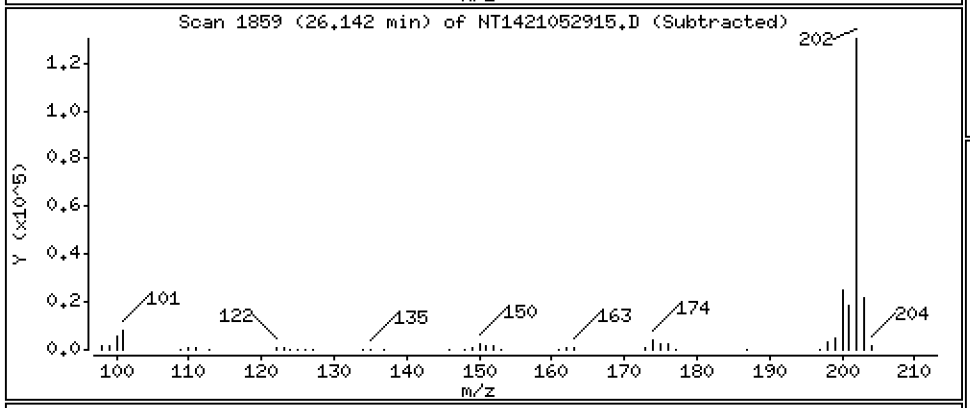
Column diameter: 0.25

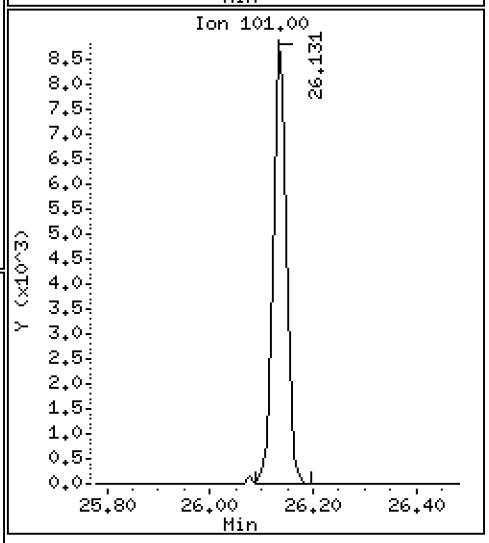
44 Fluoranthene

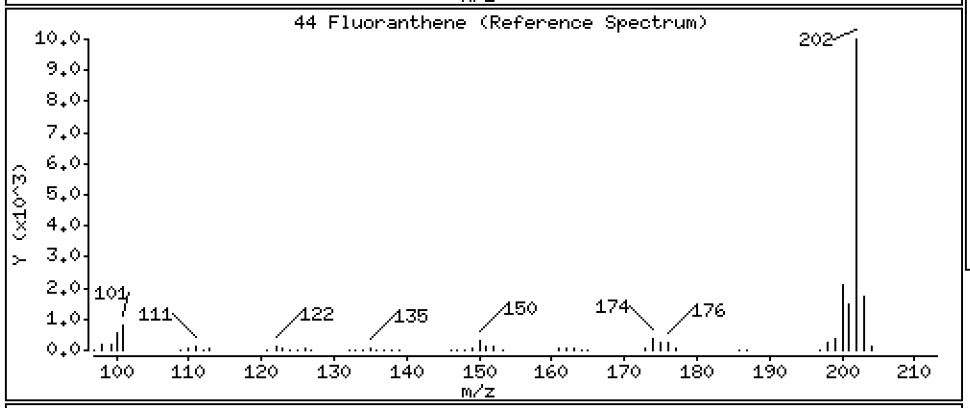
Concentration: 2.672 ug/mL

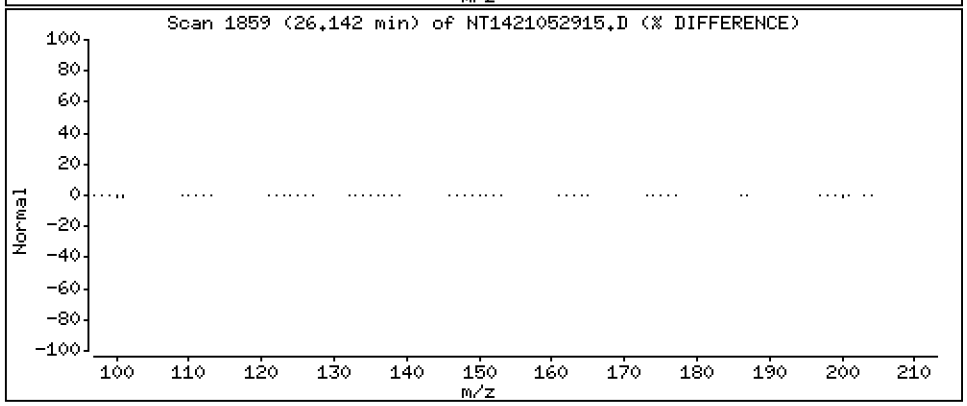












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Date : 29-MAY-2021 19:38

Client ID:

Instrument: nt14.i

Sample Info: SJF0025-SCV1

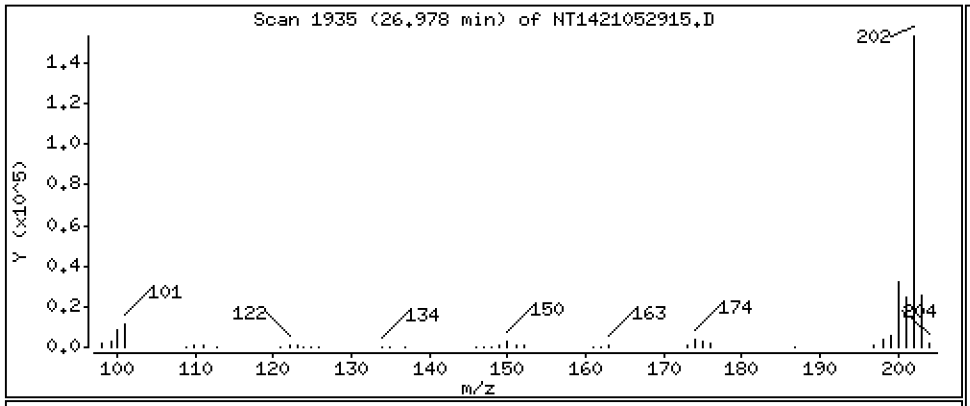
Operator: VTS

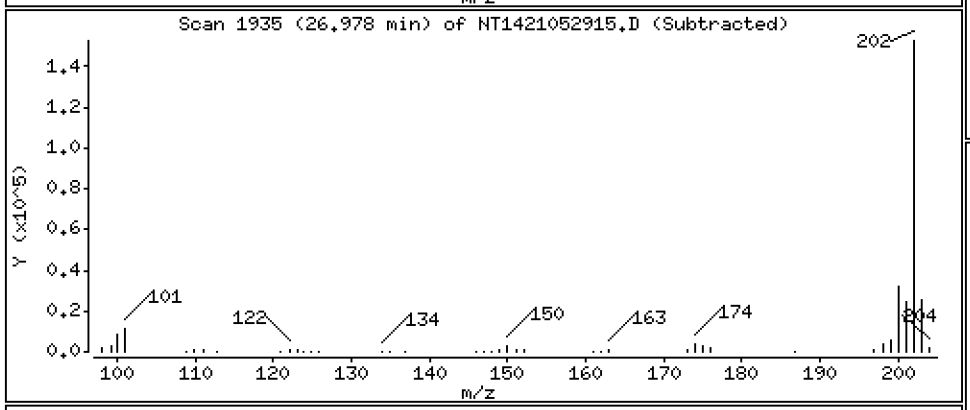
Column phase: Rxi-17Sil MS

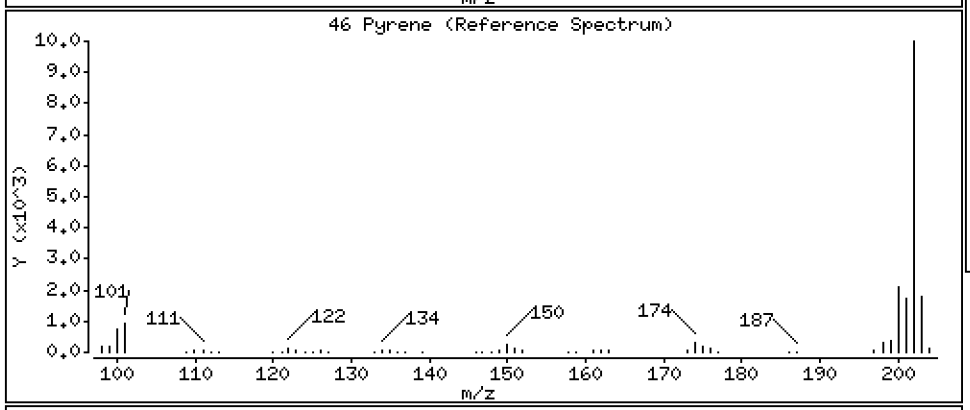
Column diameter: 0.25

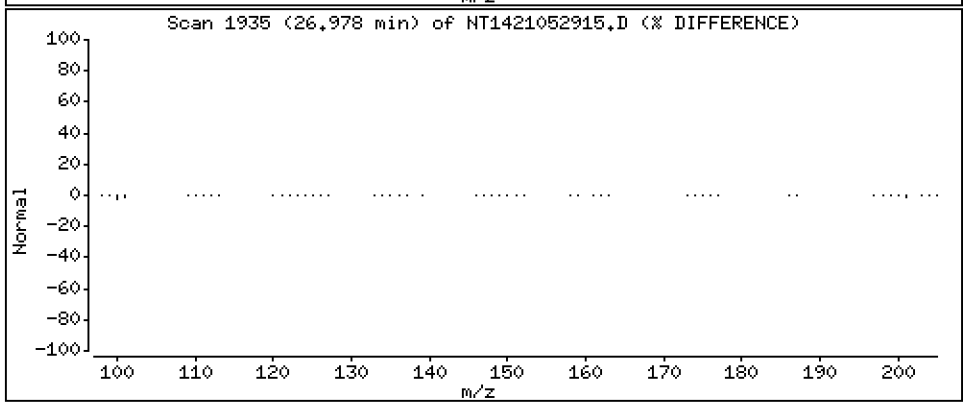
46 Pyrene

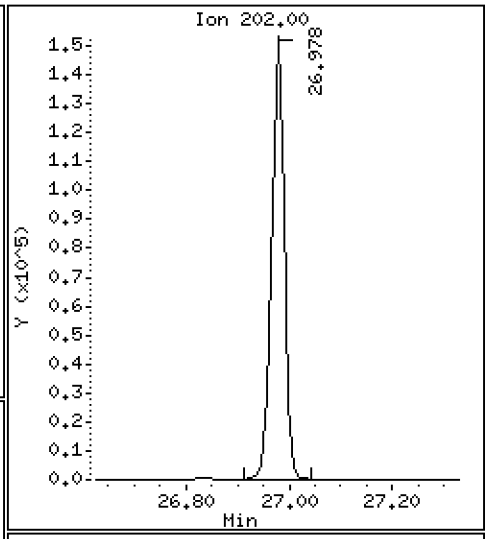
Concentration: 2.712 ug/mL

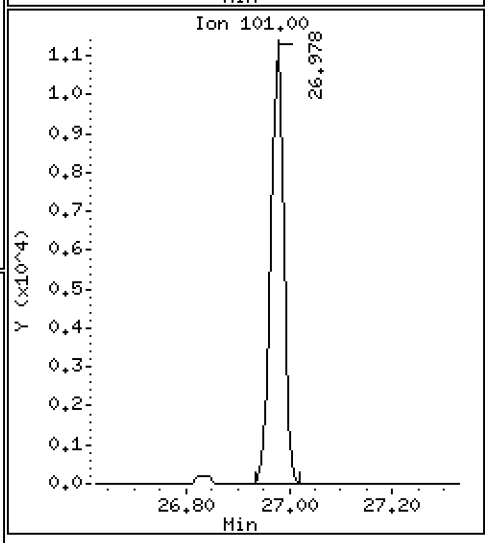












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Client ID:

Instrument: nt14.i

Sample Info: SJF0025-SCV1

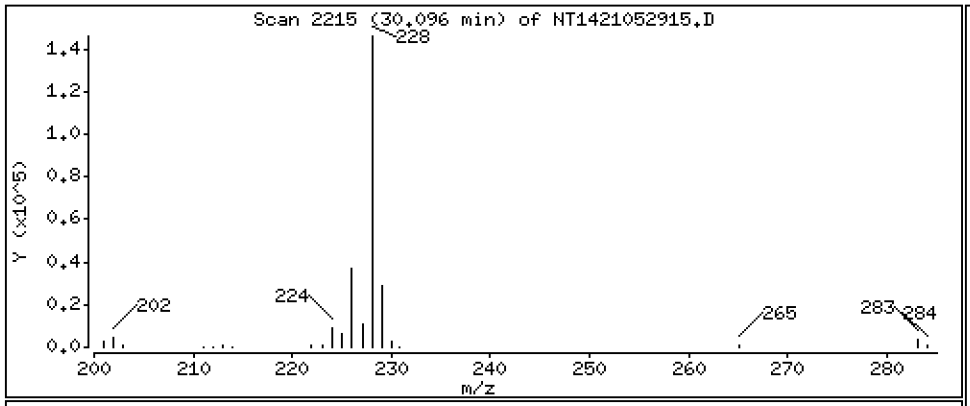
Operator: VTS

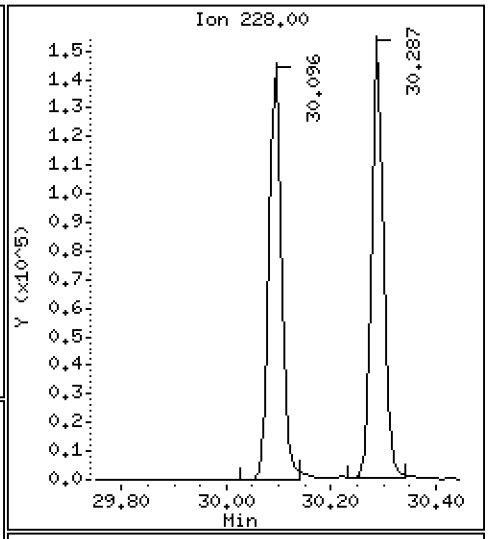
Column phase: Rxi-17Sil MS

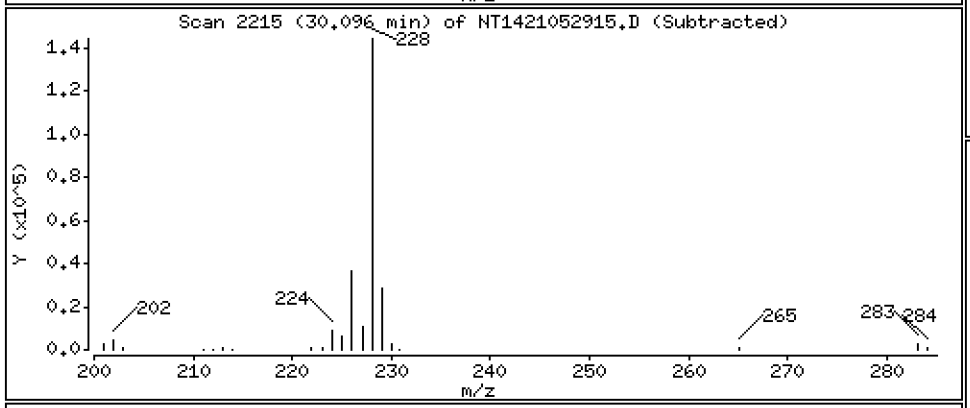
Column diameter: 0.25

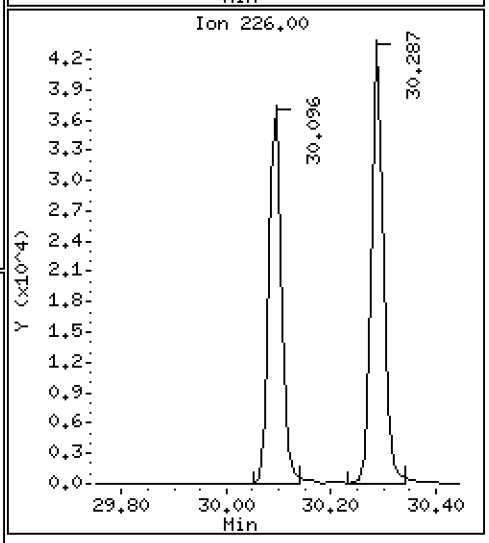
55 Benzo(a)anthracene

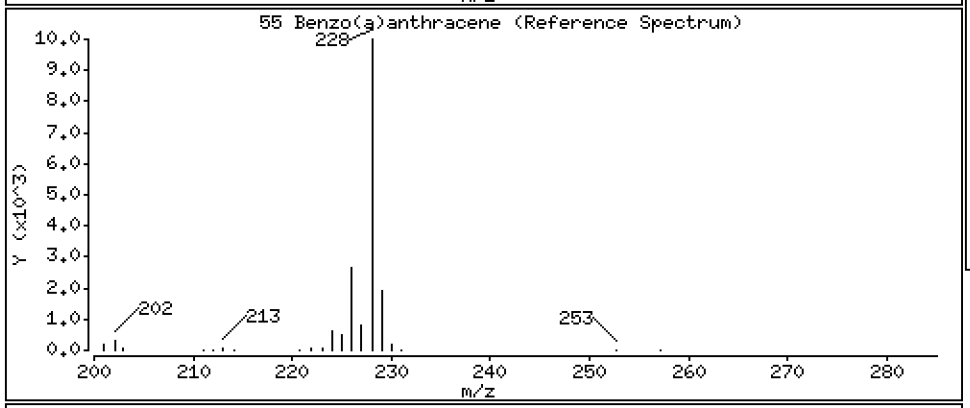
Concentration: 2.756 ug/mL

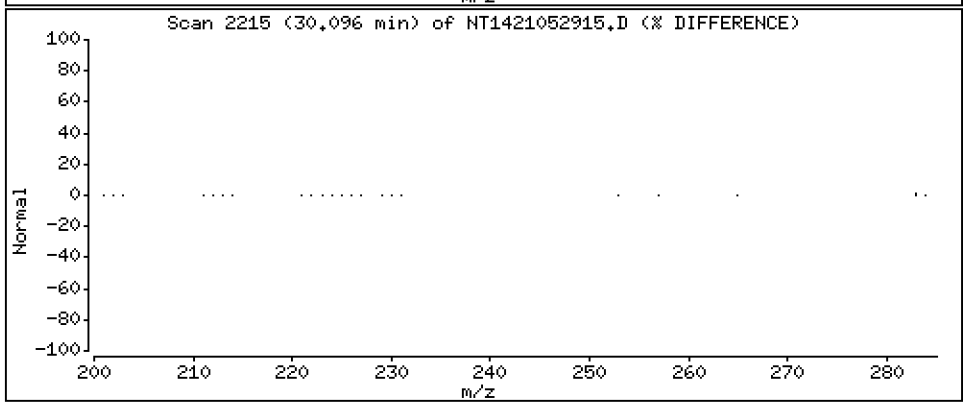












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Date : 29-MAY-2021 19:38

Client ID:

Instrument: nt14.i

Sample Info: SJF0025-SCV1

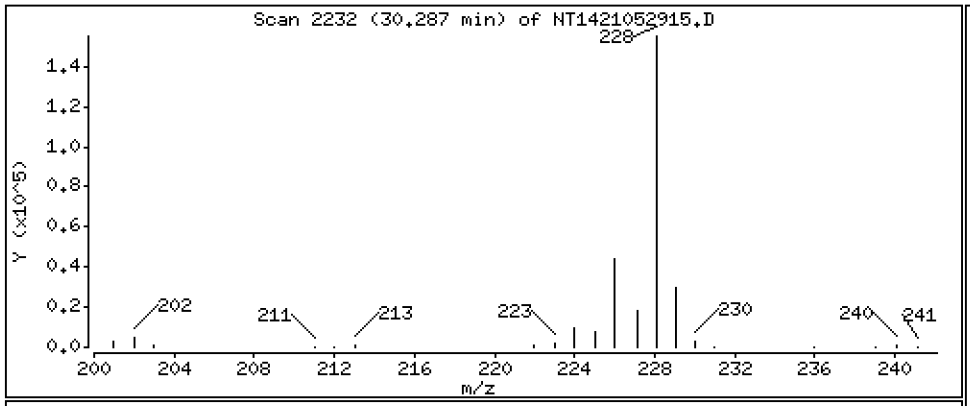
Operator: VTS

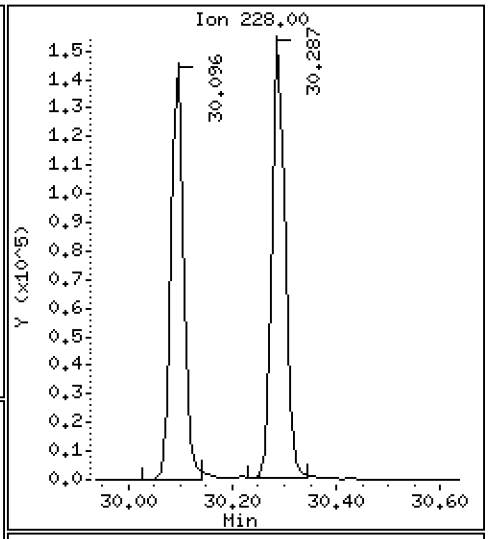
Column phase: Rxi-17Sil MS

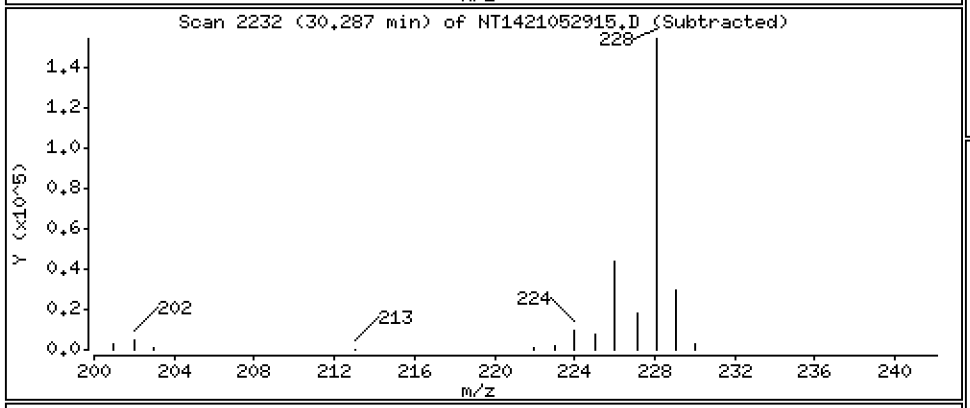
Column diameter: 0.25

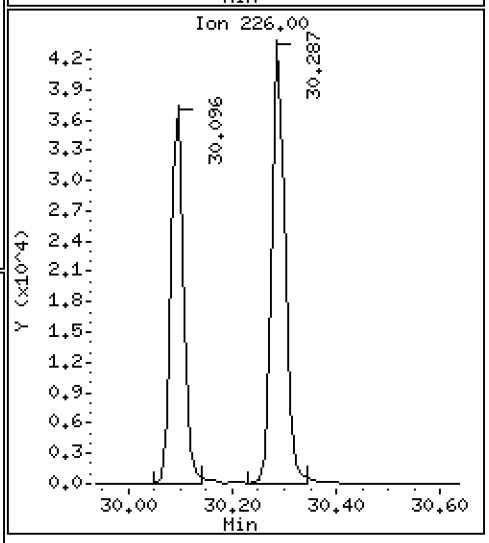
57 Chrysene

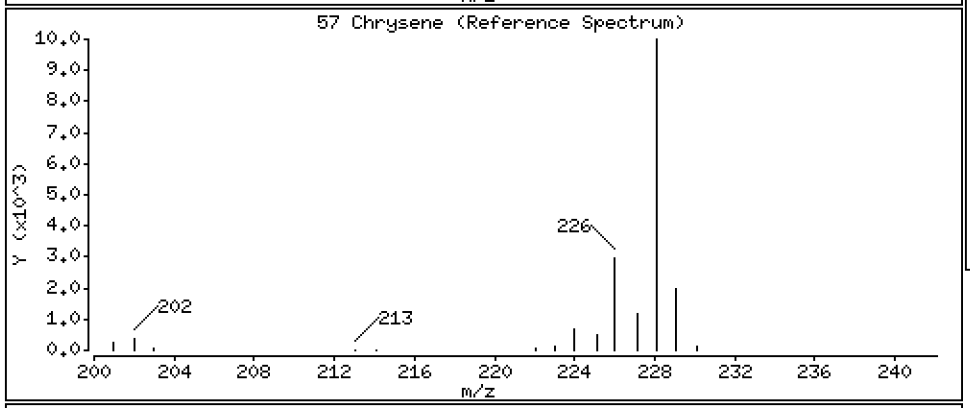
Concentration: 2.770 ug/mL

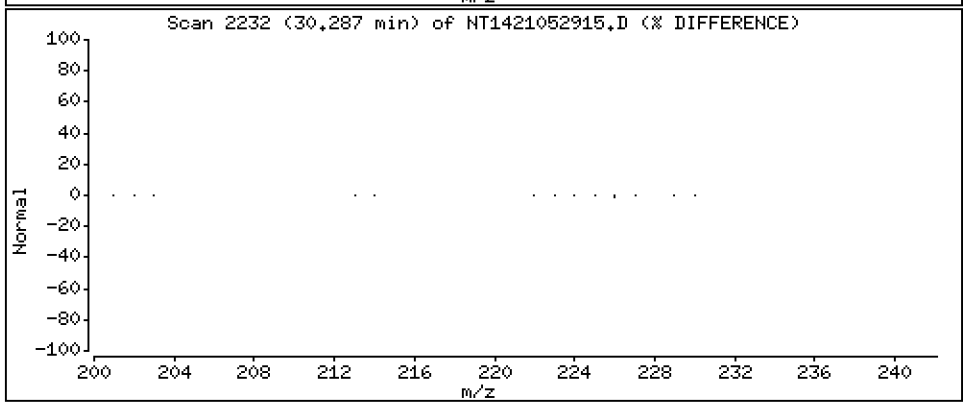












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Date : 29-MAY-2021 19:38

Client ID:

Instrument: nt14.i

Sample Info: SJF0025-SCV1

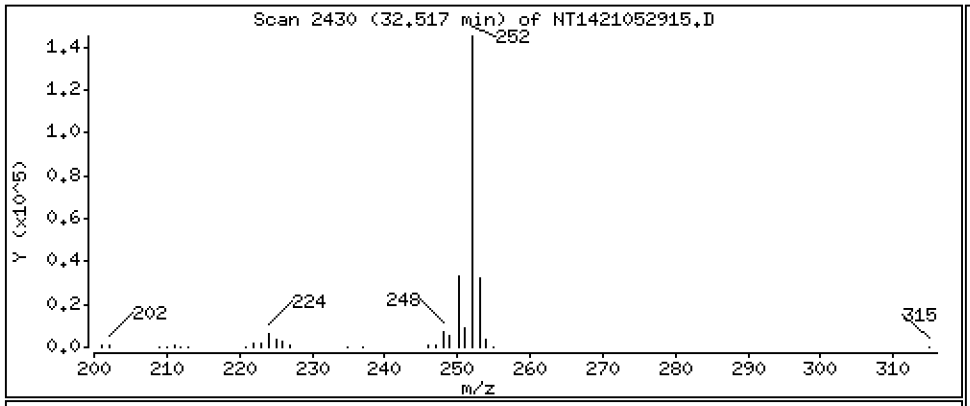
Operator: VTS

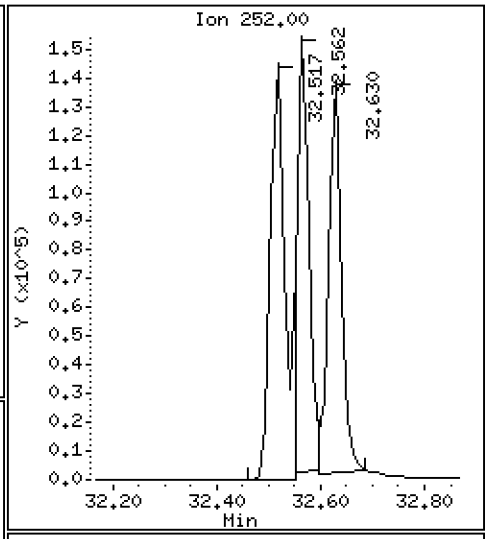
Column phase: Rxi-17Sil MS

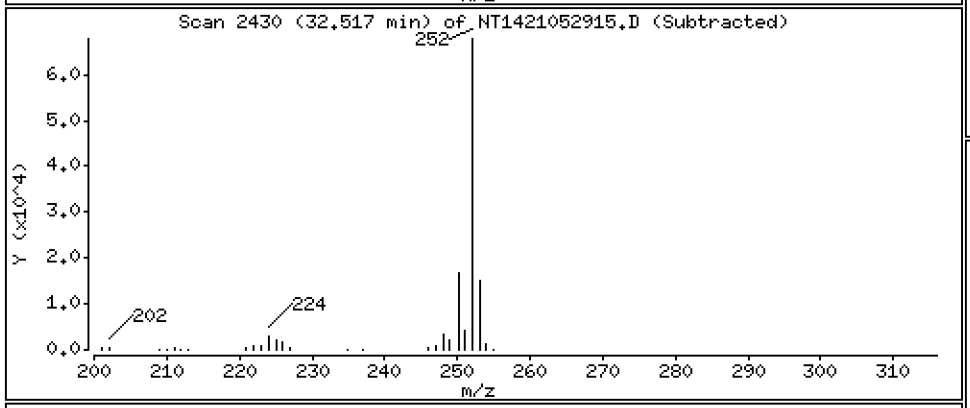
Column diameter: 0.25

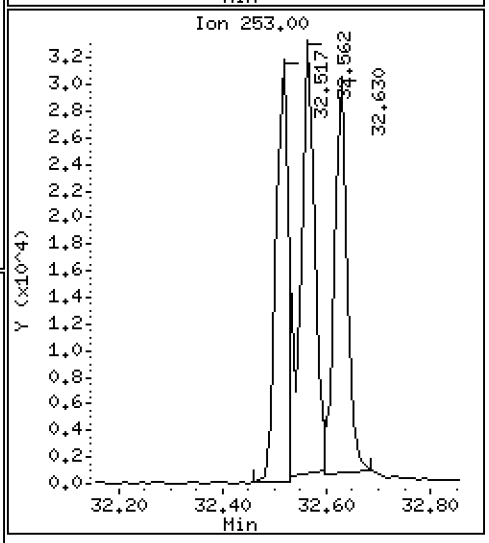
62 Benzo(b)fluoranthene

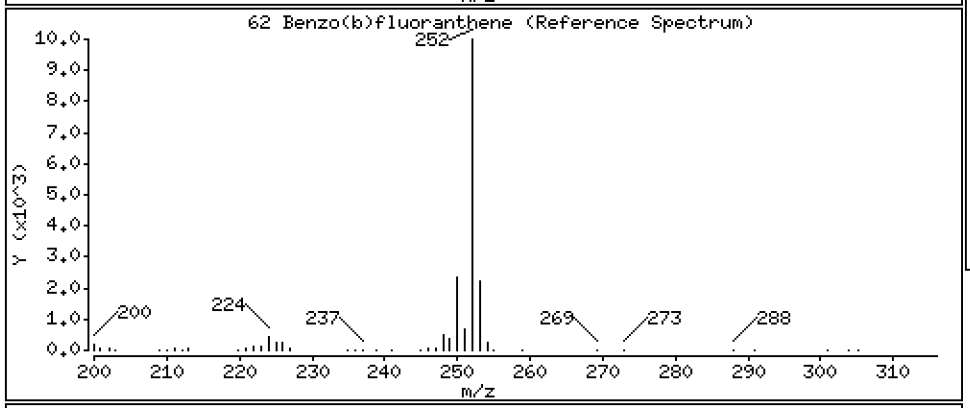
Concentration: 3.119 ug/mL

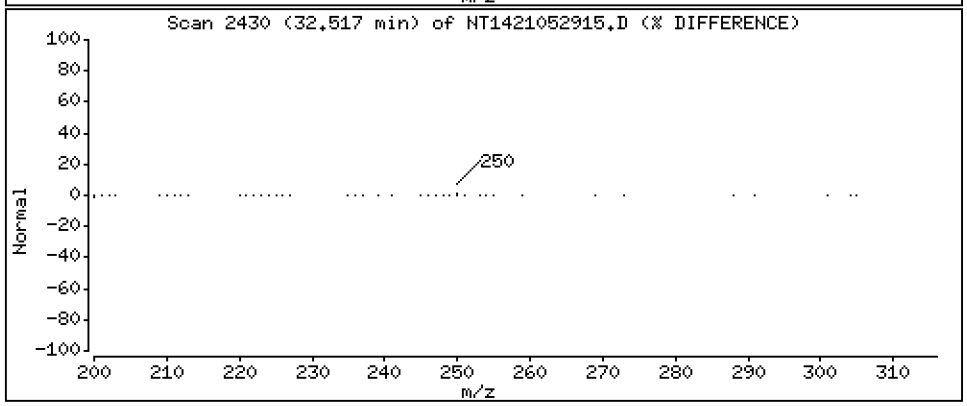












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Date : 29-MAY-2021 19:38

Client ID:

Instrument: nt14.i

Sample Info: SJF0025-SCV1

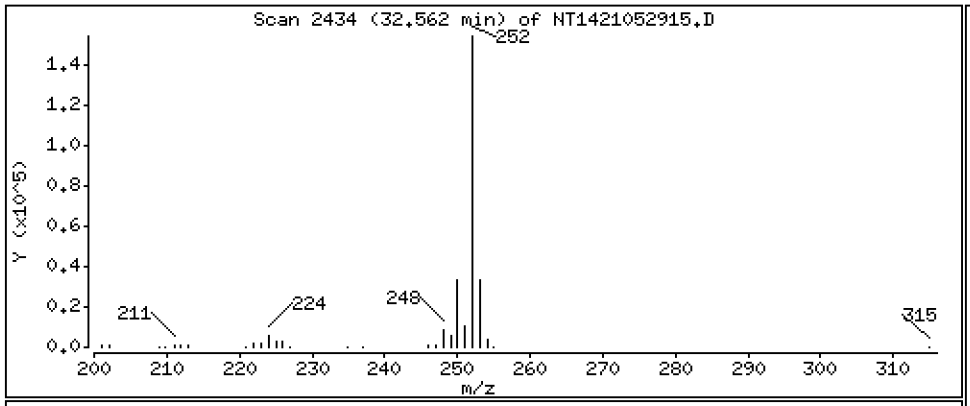
Operator: VTS

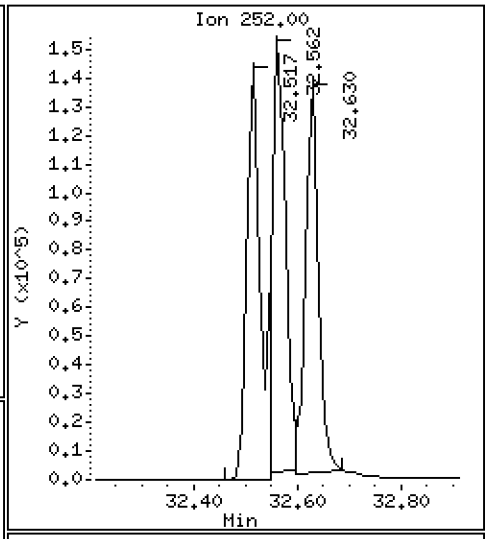
Column phase: Rxi-17Sil MS

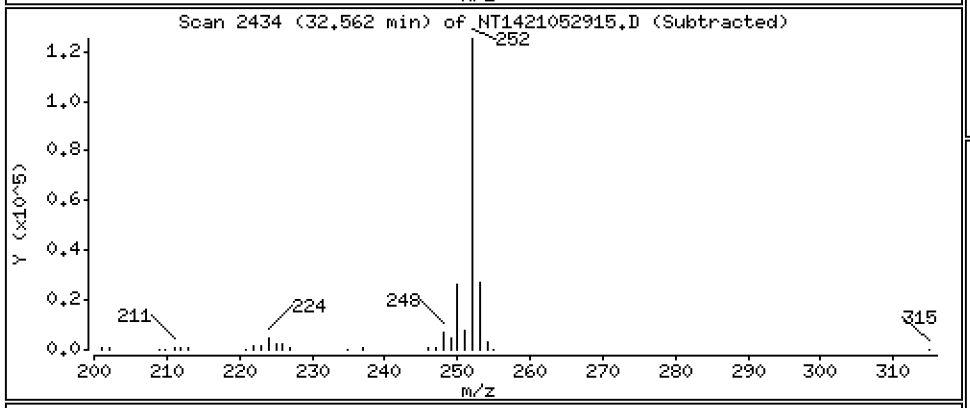
Column diameter: 0.25

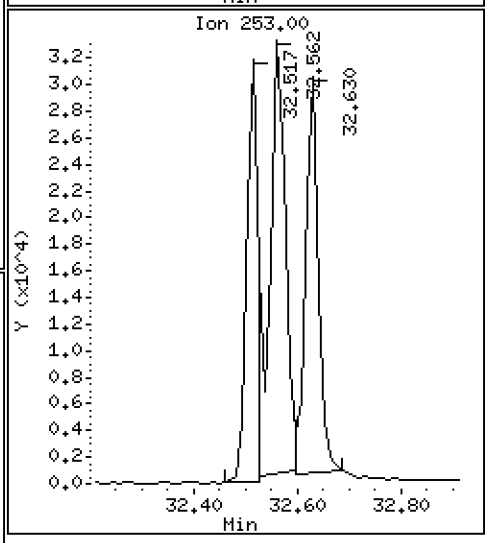
63 Benzo(k)fluoranthene

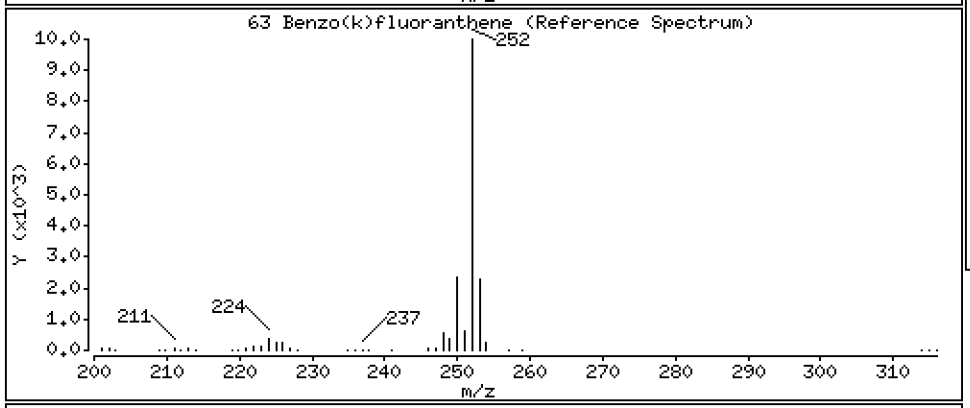
Concentration: 2.487 ug/mL

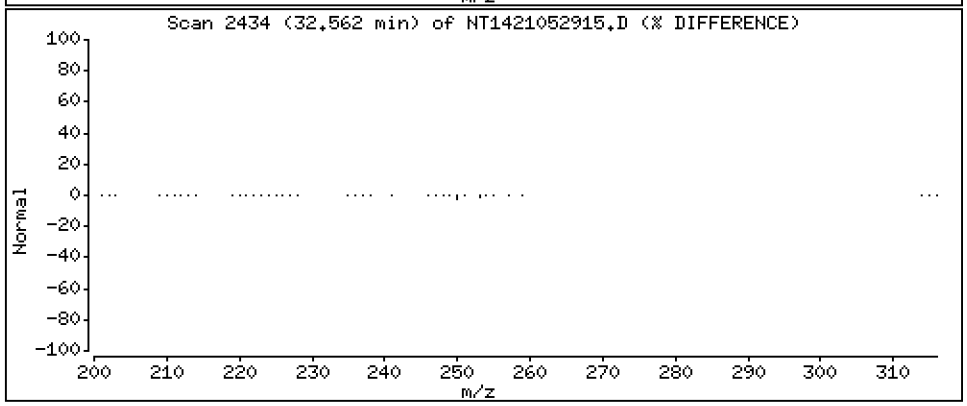












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Date : 29-MAY-2021 19:38

Client ID:

Instrument: nt14.i

Sample Info: SJF0025-SCV1

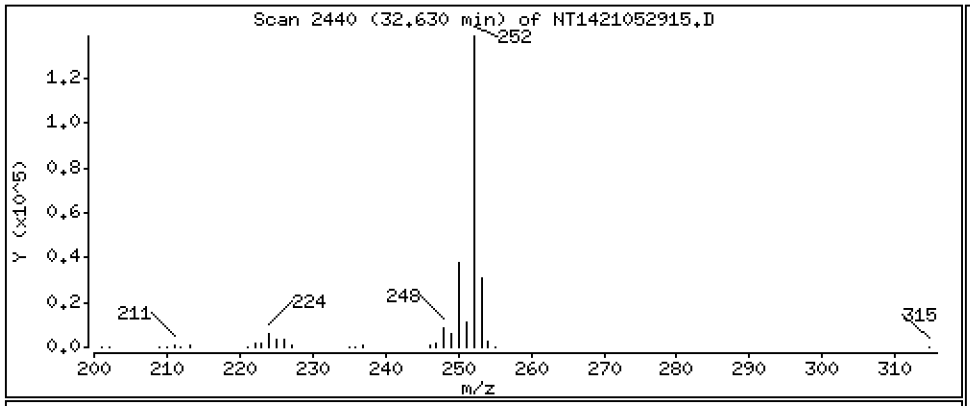
Operator: VTS

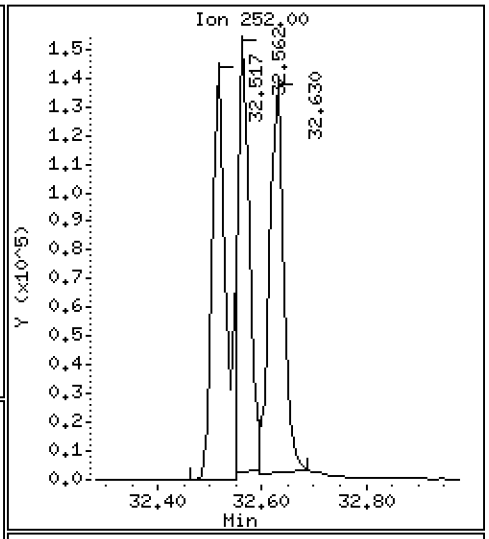
Column phase: Rxi-17Sil MS

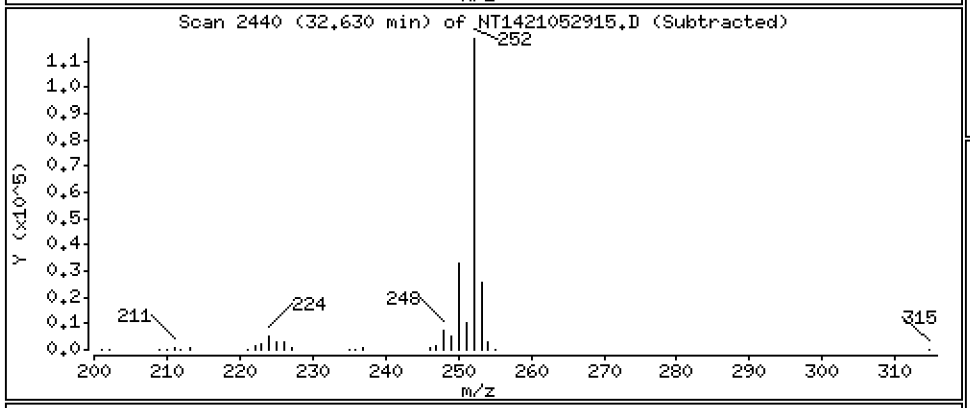
Column diameter: 0.25

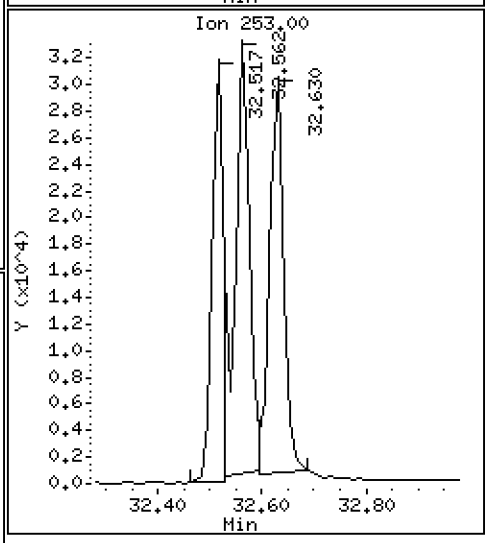
293 Benzo(j)fluoranthene

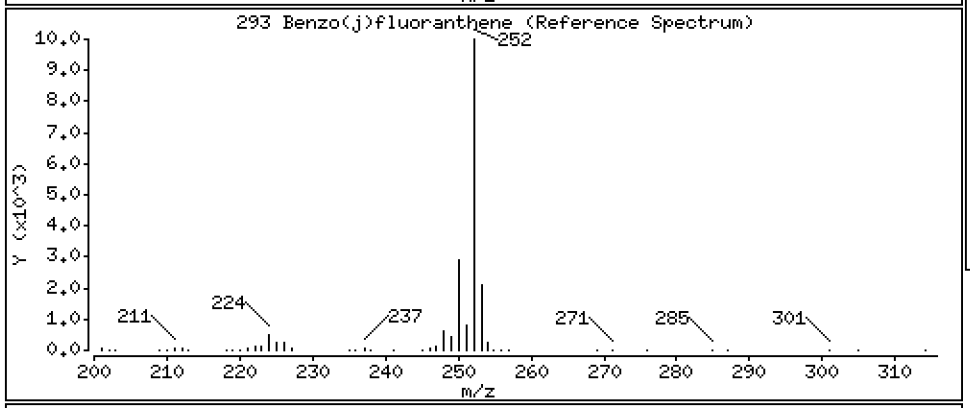
Concentration: 2.590 ug/mL

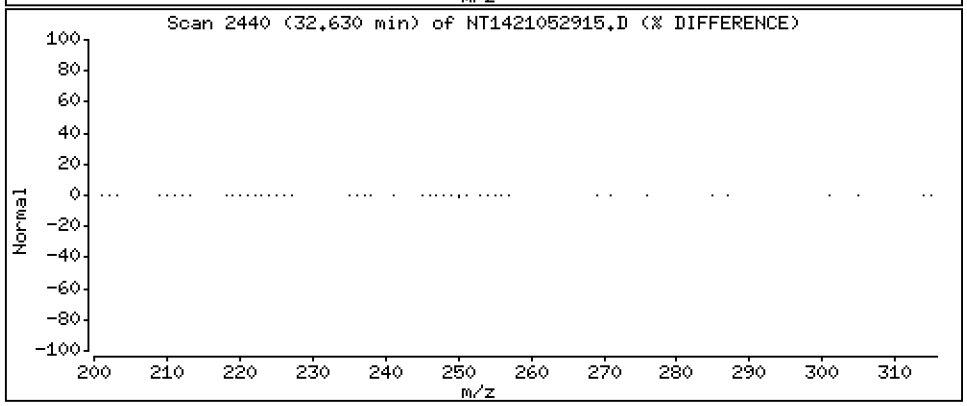












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Date : 29-MAY-2021 19:38

Client ID:

Instrument: nt14.i

Sample Info: SJF0025-SCV1

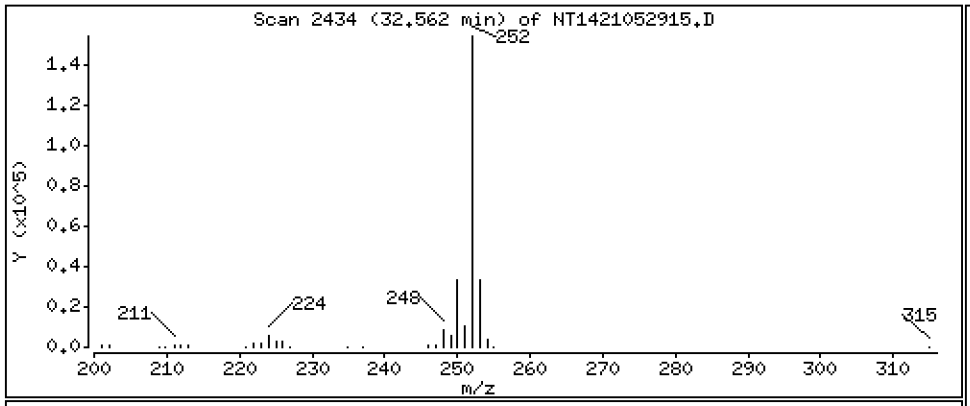
Operator: VTS

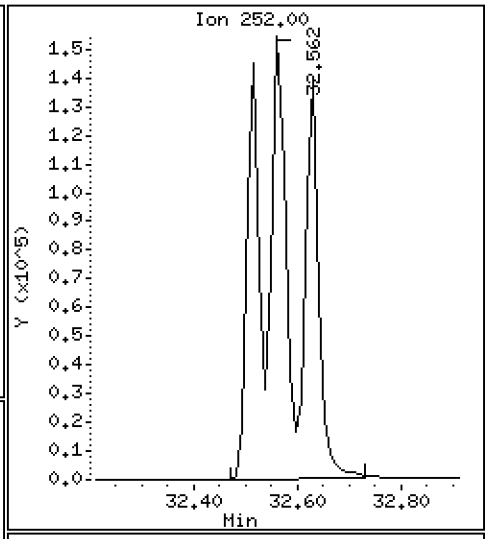
Column phase: Rxi-17Sil MS

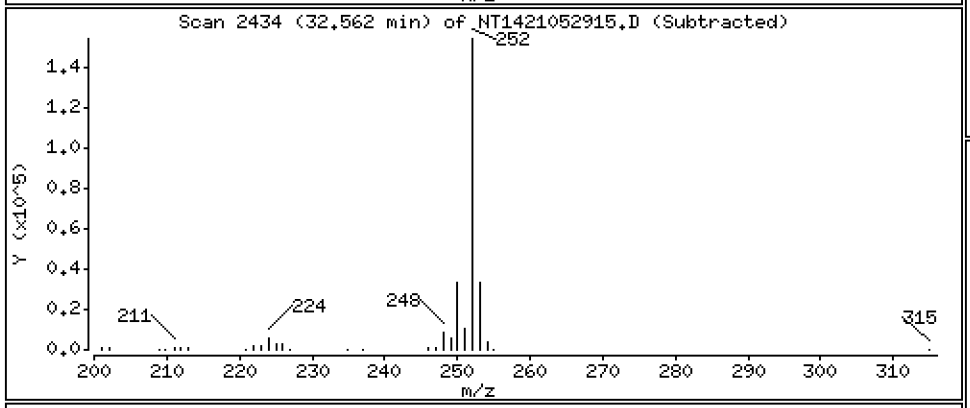
Column diameter: 0.25

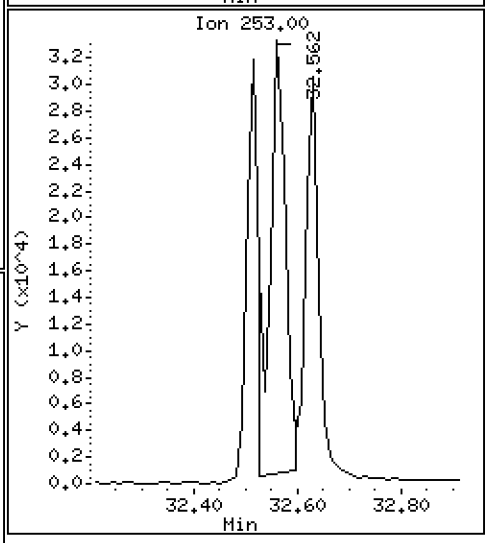
246 Total Benzofluoranthenes

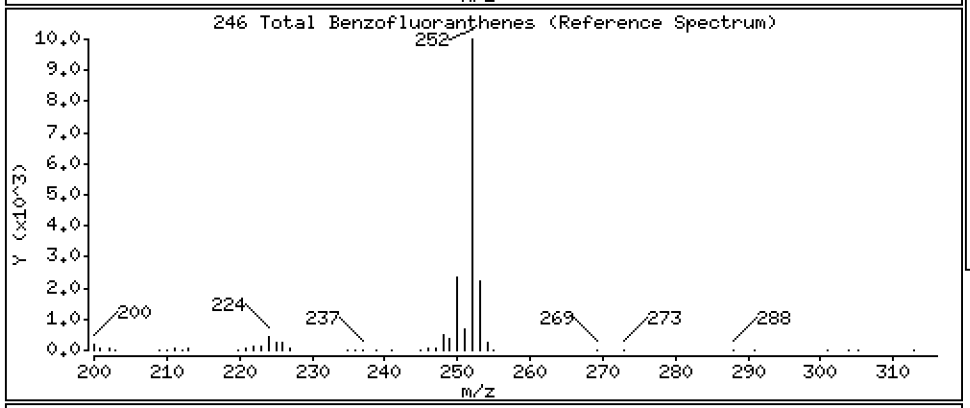
Concentration: 8.191 ug/mL

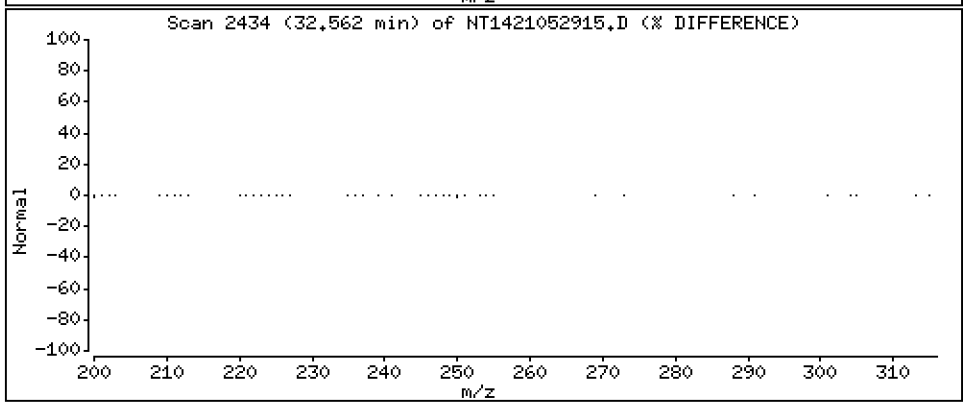












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Date : 29-MAY-2021 19:38

Client ID:

Instrument: nt14.i

Sample Info: SJF0025-SCV1

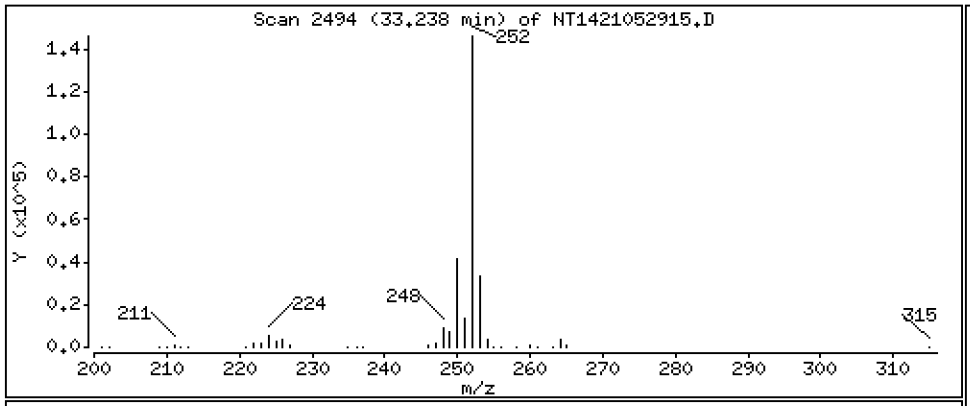
Operator: VTS

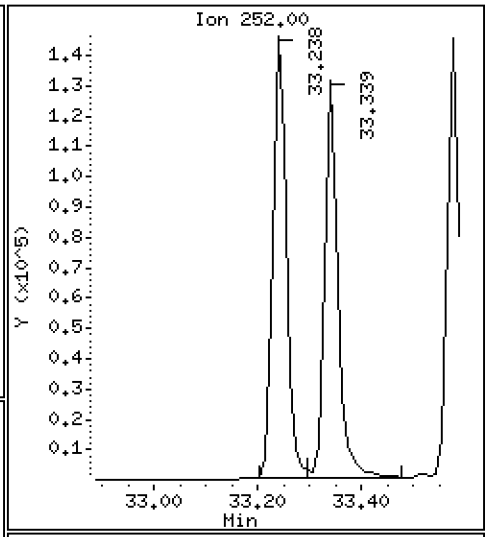
Column phase: Rxi-17Sil MS

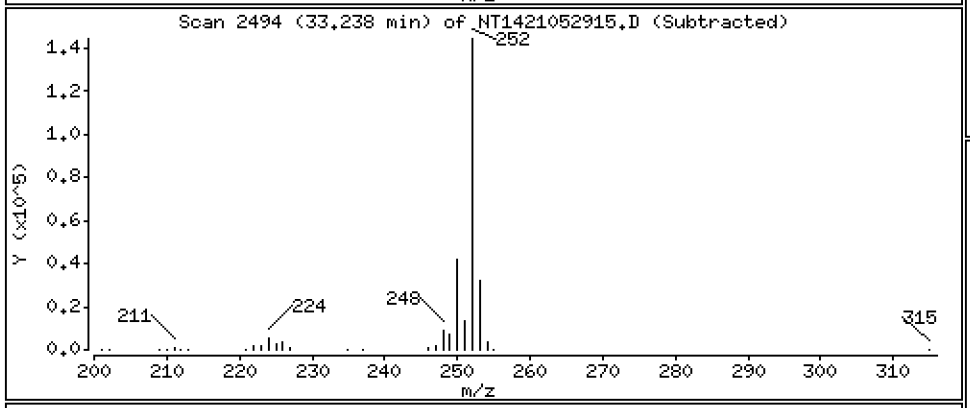
Column diameter: 0.25

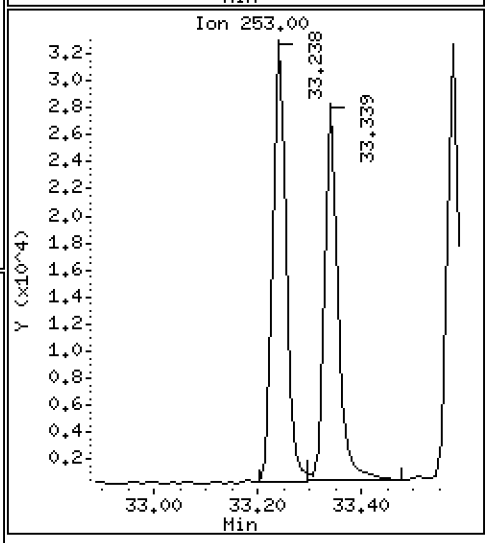
64 Benzo(e)pyrene

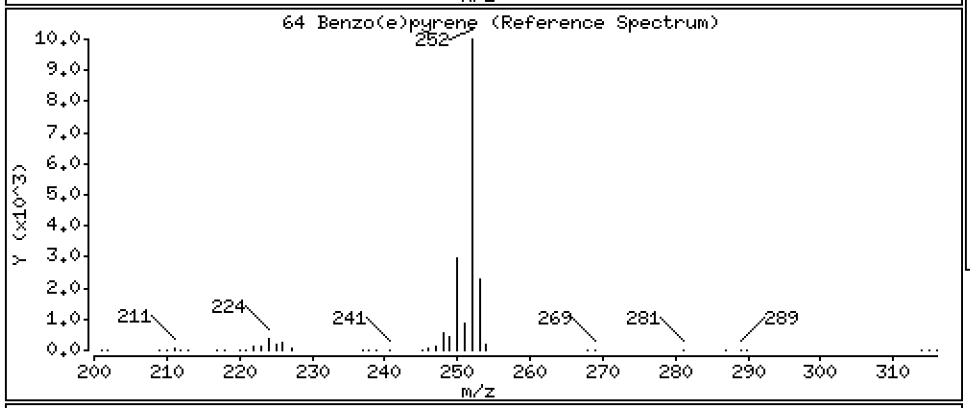
Concentration: 2.669 ug/mL

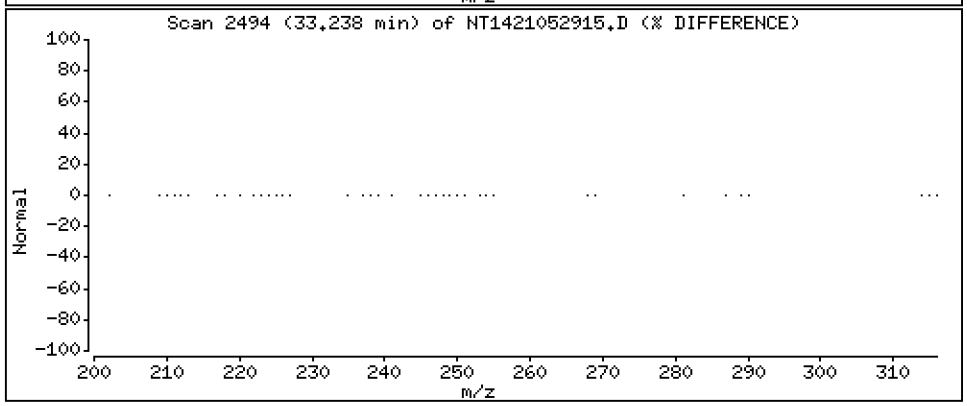












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Date : 29-MAY-2021 19:38

Client ID:

Instrument: nt14.i

Sample Info: SJF0025-SCV1

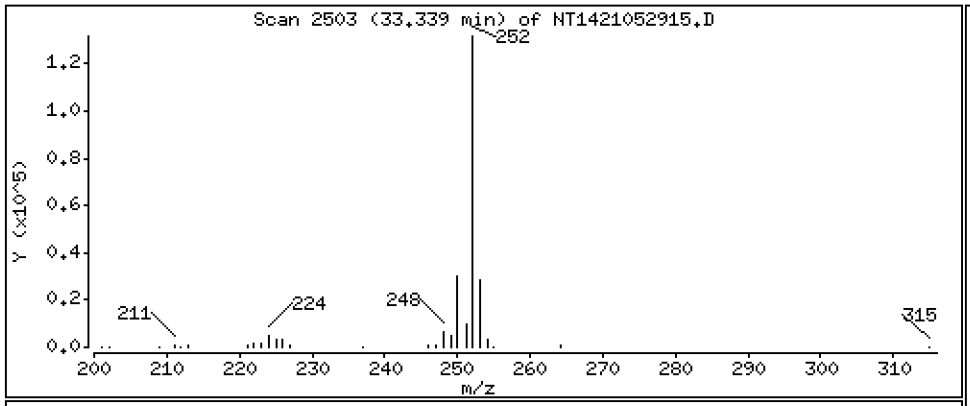
Operator: VTS

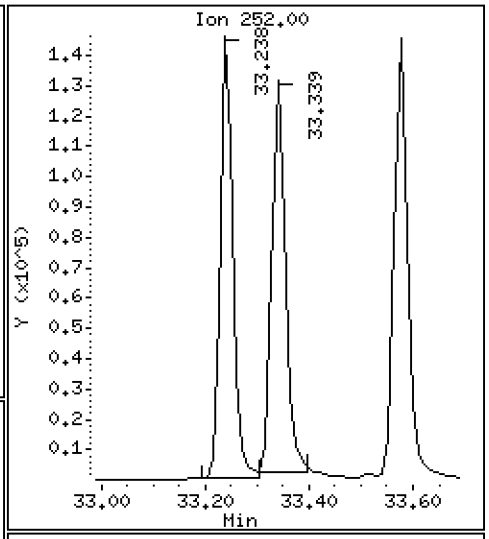
Column phase: Rxi-17Sil MS

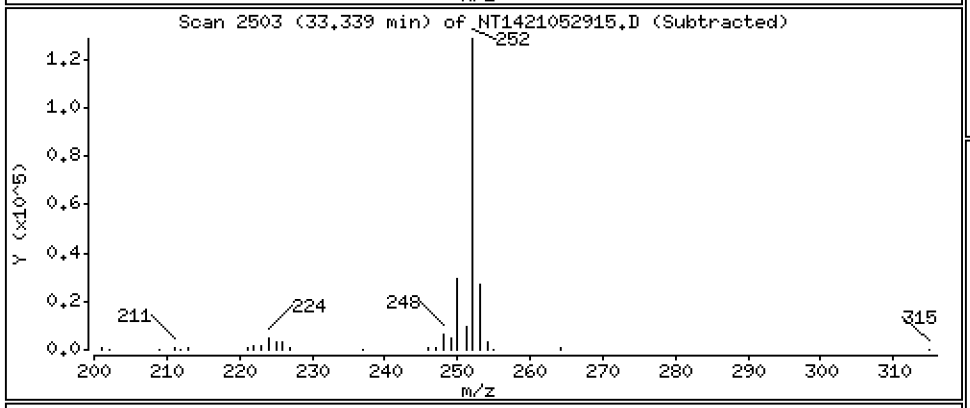
Column diameter: 0.25

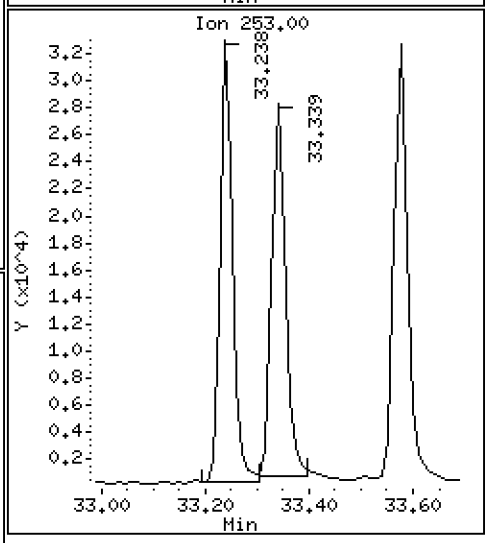
66 Benzo(a)pyrene

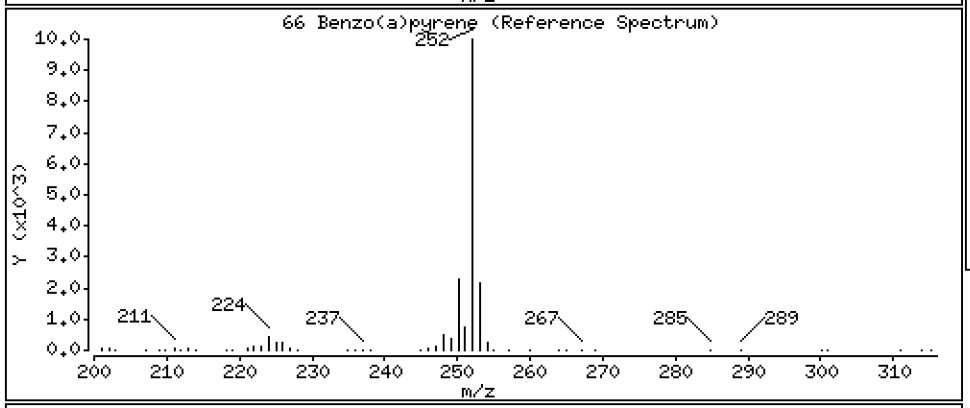
Concentration: 2.621 ug/mL

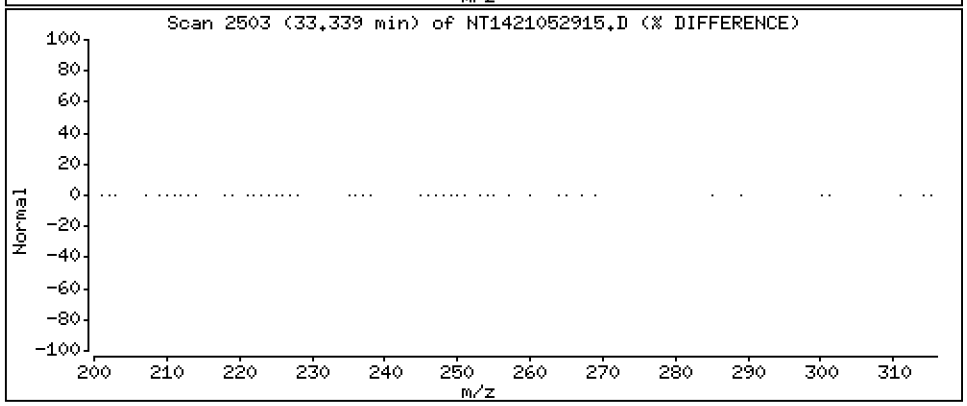












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Date : 29-MAY-2021 19:38

Client ID:

Instrument: nt14.i

Sample Info: SJF0025-SCV1

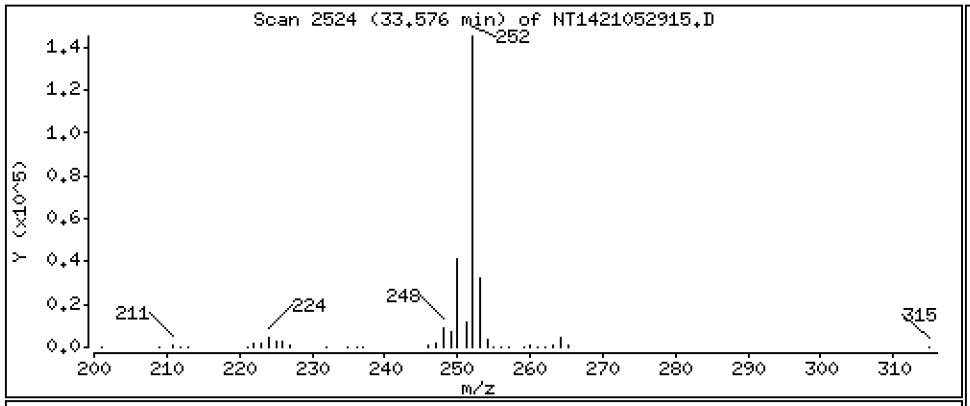
Operator: VTS

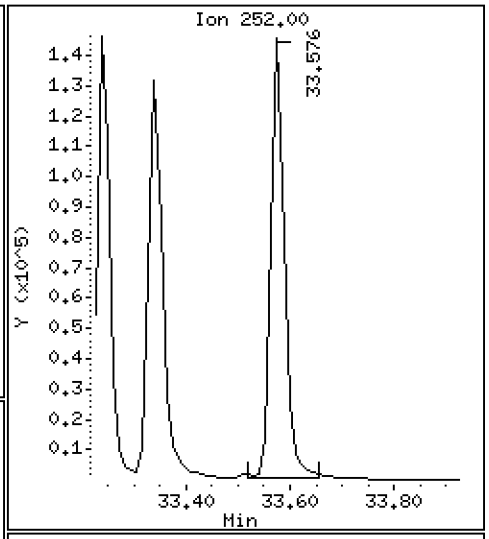
Column phase: Rxi-17Sil MS

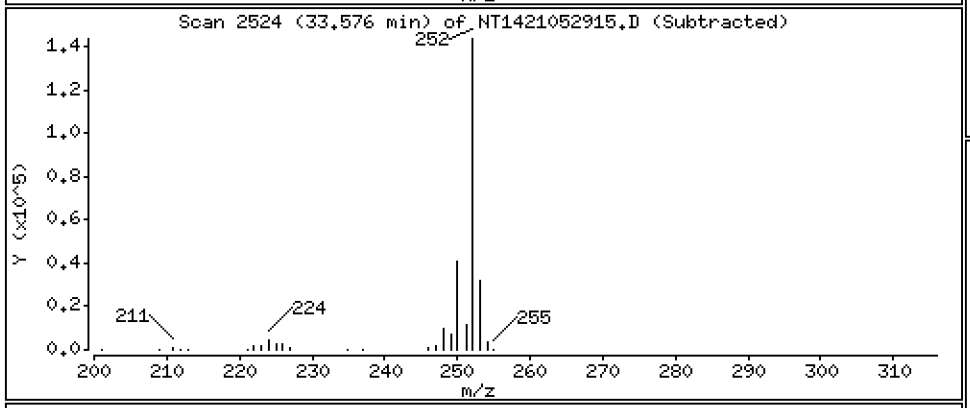
Column diameter: 0.25

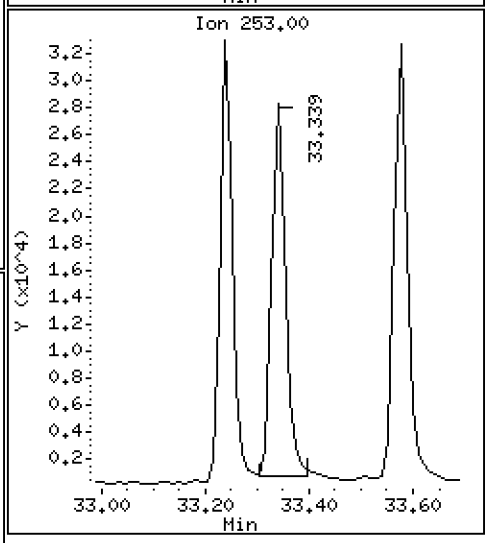
68 Perylene

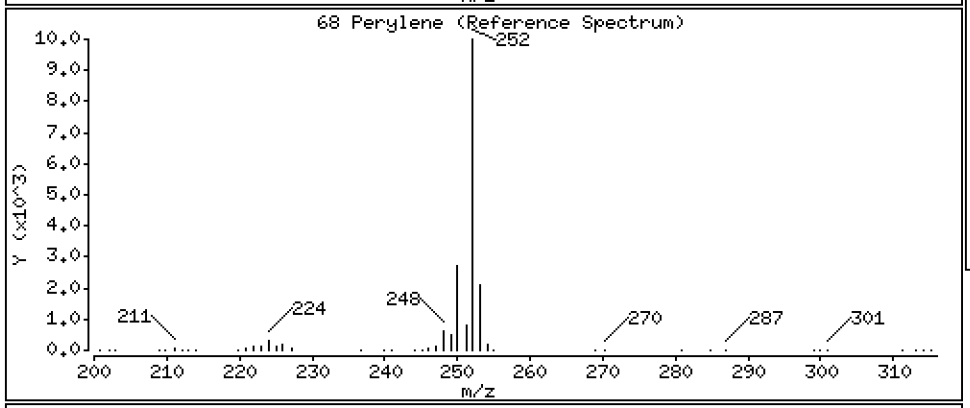
Concentration: 2.820 ug/mL

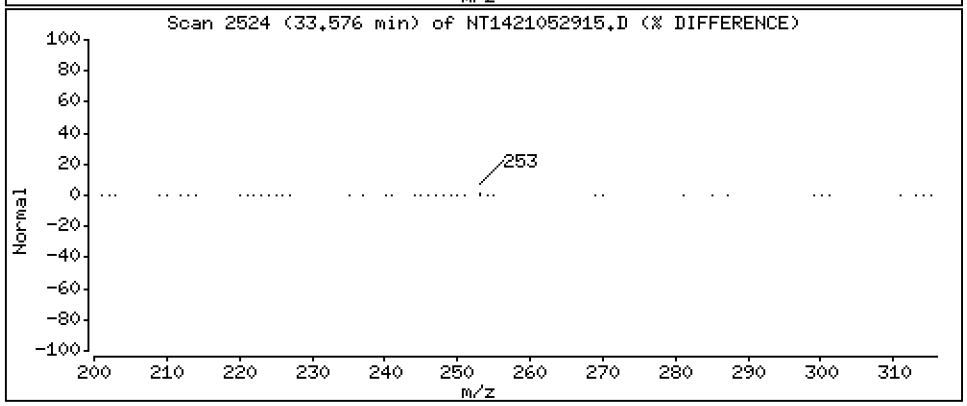












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Date : 29-MAY-2021 19:38

Client ID:

Instrument: nt14.i

Sample Info: SJF0025-SCV1

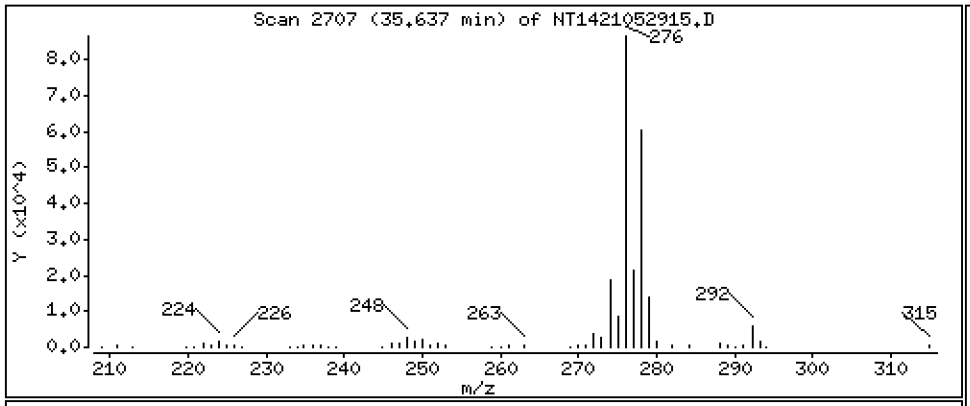
Operator: VTS

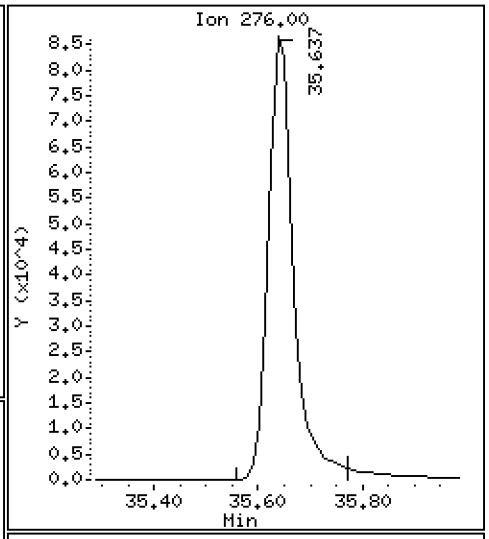
Column phase: Rxi-17Sil MS

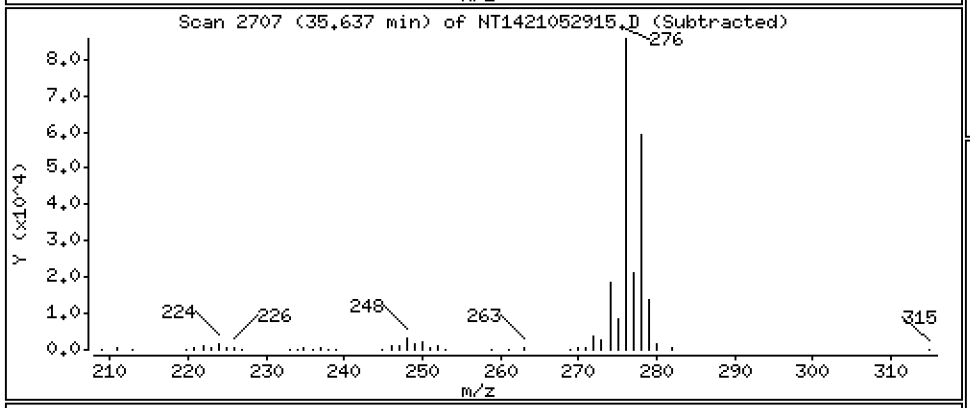
Column diameter: 0.25

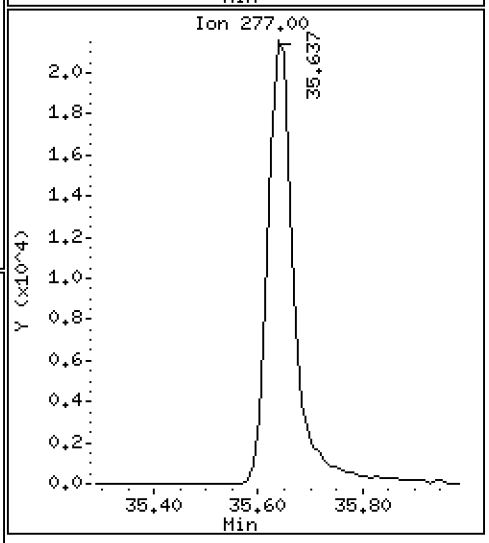
69 Indeno(1,2,3-cd)pyrene

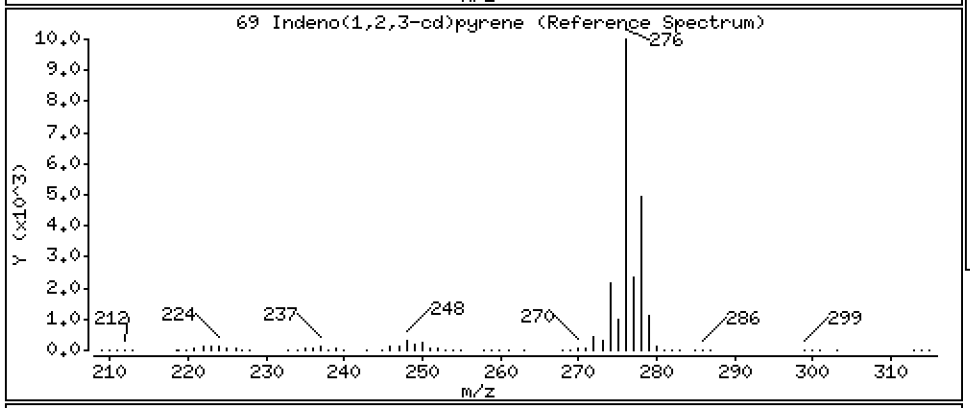
Concentration: 2.913 ug/mL

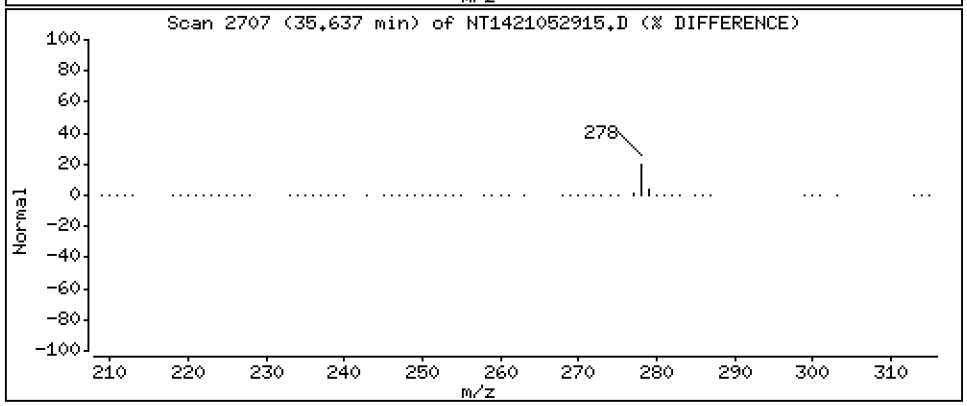












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Date : 29-MAY-2021 19:38

Client ID:

Instrument: nt14.i

Sample Info: SJF0025-SCV1

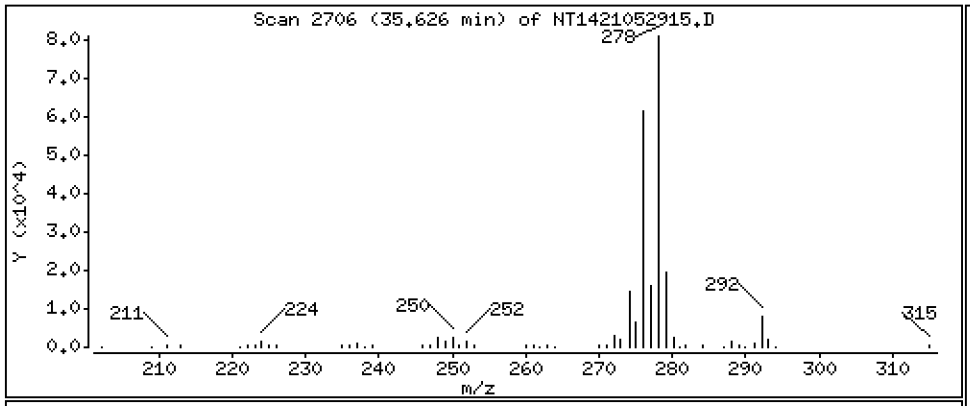
Operator: VTS

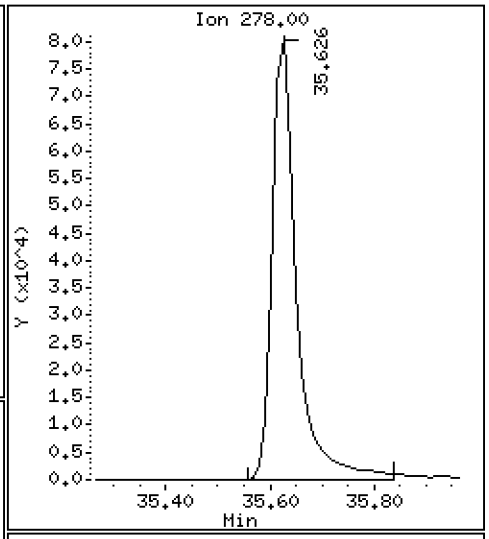
Column phase: Rxi-17Sil MS

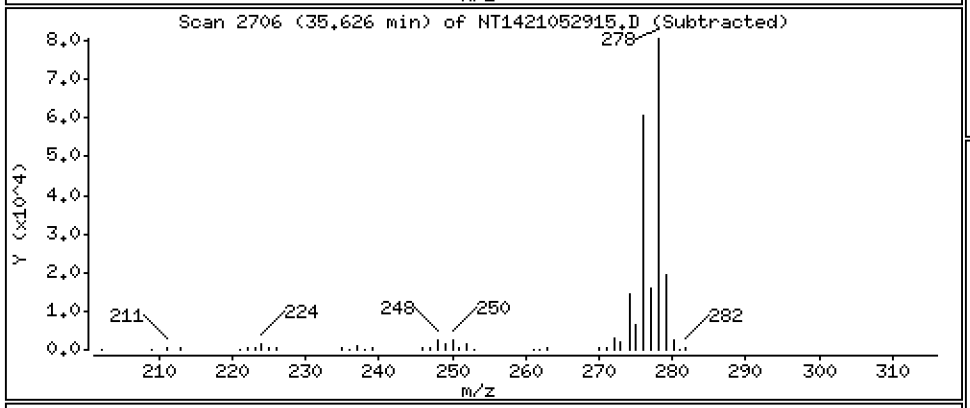
Column diameter: 0.25

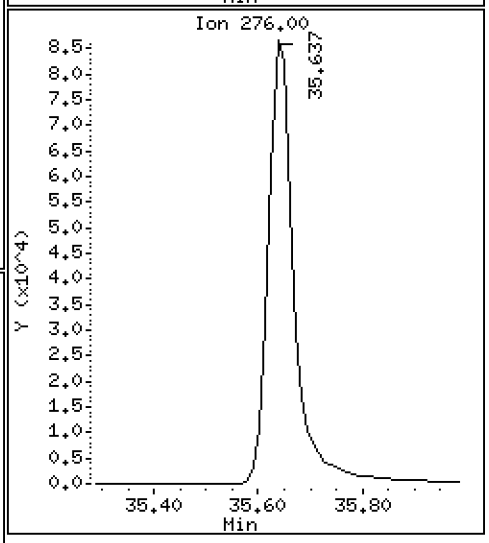
70 Dibenzo(a,h)anthracene

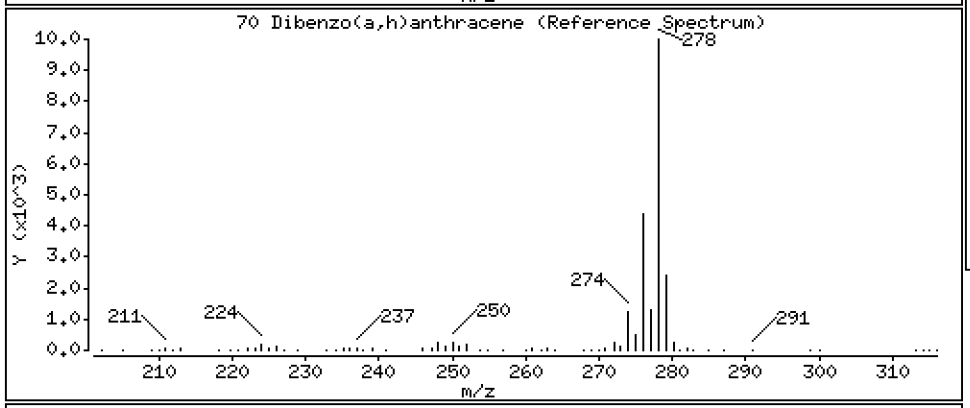
Concentration: 2.690 ug/mL

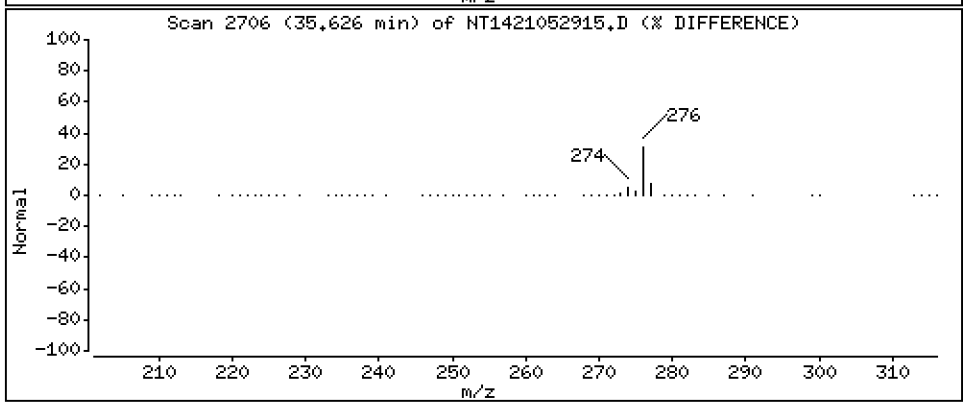












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Date : 29-MAY-2021 19:38

Client ID:

Instrument: nt14.i

Sample Info: SJF0025-SCV1

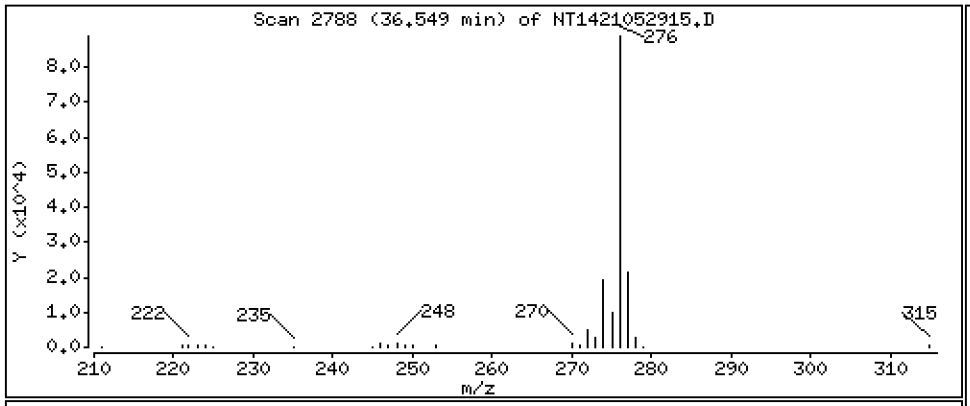
Operator: VTS

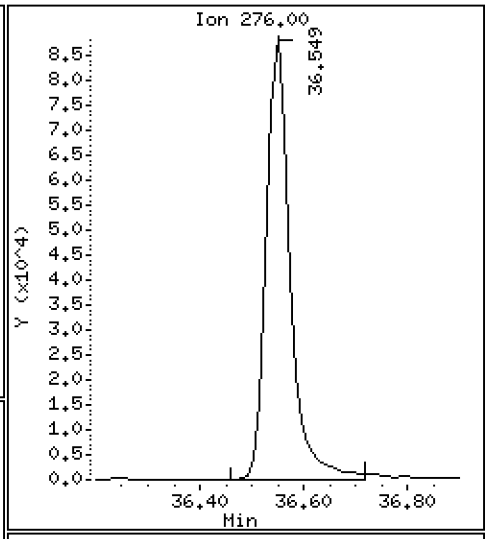
Column phase: Rxi-17Sil MS

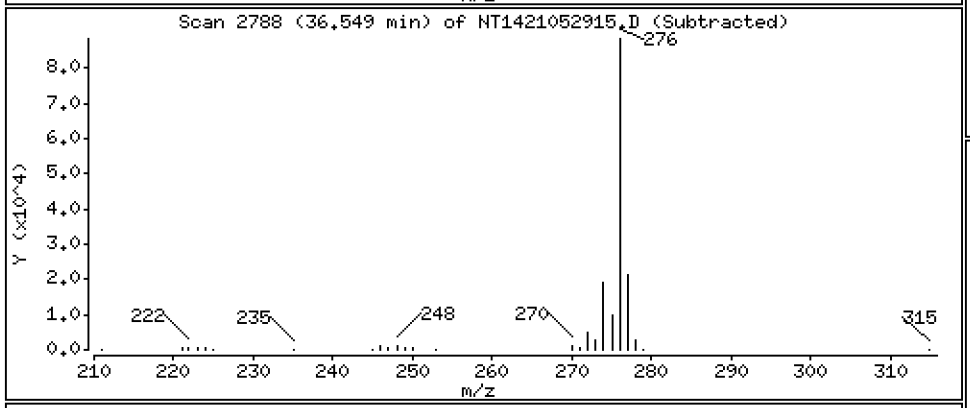
Column diameter: 0.25

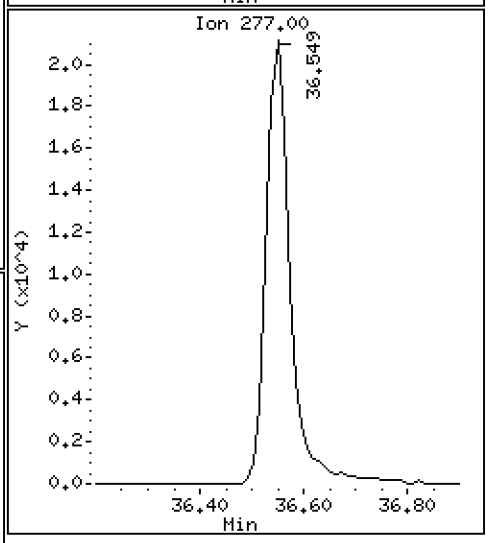
74 Benzo(g,h,i)perylene

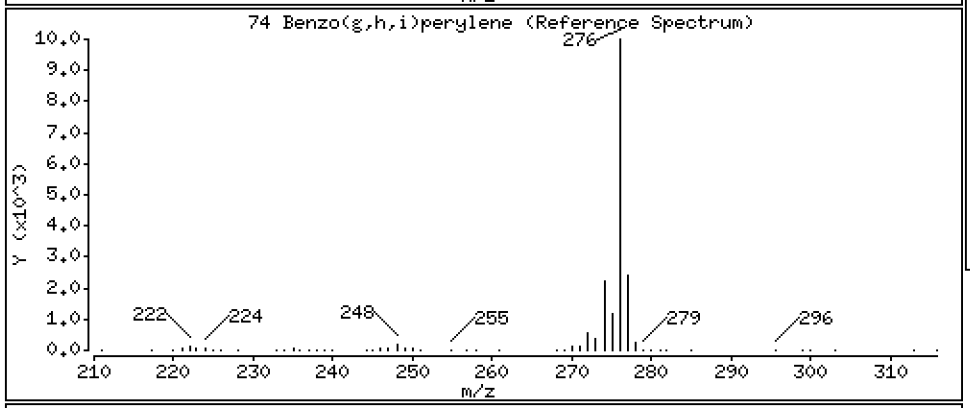
Concentration: 2.781 ug/mL

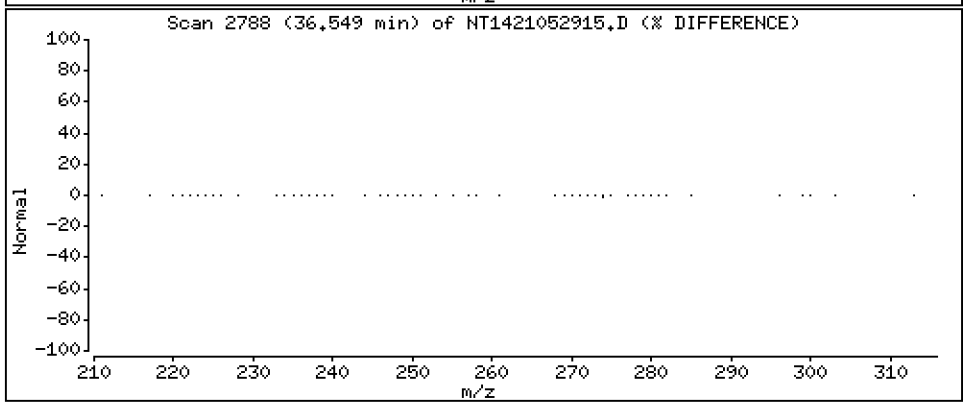












ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

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Smp Info : SJF0025-SCV1
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Method : \\target\share\chem3\nt14.i\20210529.b\ALKYLPNA.m
Meth Date : 02-Jun-2021 19:03 yev Quant Type: ISTD
Cal Date : 29-MAY-2021 18:49 Cal File: NT1421052914.D
Als bottle: 9
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: TARGETS.sub
Target Version: 4.14
Processing Host: ORGDATA102

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/mL)
	1 trans-Decalin	138	7.146	7.156	(0.378)	24405	2.93881	2.939
	2 cis-Decalin	138	8.266	8.246	(0.437)	17380	2.55518	2.555
$	6 Naphthalene-d8	136	11.897	11.897	(0.629)	223244	2.88377	2.884(R)
	7 Naphthalene	128	11.957	11.957	(0.632)	203089	2.62492	2.625
	12 Benzo(b)thiophene	134	12.409	12.409	(0.656)	166732	2.62140	2.621
	16 2-Methylnaphthalene	141	13.794	13.794	(0.730)	119639	2.64523	2.645
	17 1-methylnaphthalene	141	14.245	14.244	(0.753)	117019	2.65947	2.659
	18 Biphenyl	154	15.431	15.431	(0.816)	174317	2.60835	2.608
	19 2,6-Dimethylnaphthalene	156	15.508	15.508	(0.820)	127969	2.60384	2.604
	20 Acenaphthylene	152	17.091	17.091	(0.904)	220486	2.62443	2.624
$	21 Acenaphthene-d10	164	17.377	17.377	(0.919)	134362	2.82593	2.826(R)
	22 Acenaphthene	153	17.486	17.486	(0.925)	142697	2.75525	2.755
	23 Dibenzofuran	168	17.860	17.860	(0.945)	199363	2.59511	2.595
	24 1,6,7-Trimethylnaphthalene	170	18.091	18.080	(0.957)	132237	2.64202	2.642
*	25 Fluorene-d10	176	18.907	18.907	(1.000)	166522	2.00000	
	26 Fluorene	166	19.009	19.009	(1.005)	155403	2.61087	2.611
	30 Dibenzothiophene	184	21.931	21.931	(1.160)	221357	2.63418	2.634
$	35 Phenanthrene-d10	188	22.239	22.239	(0.995)	230950	2.85128	2.851(R)
	36 Phenanthrene	178	22.327	22.327	(0.999)	229127	2.63951	2.640
*	250 Anthracene-d10	188	22.360	22.360	(1.000)	168360	2.00000	
	37 Anthracene	178	22.426	22.425	(1.003)	219523	2.68776	2.688
	42 Carbazole	167	23.712	23.701	(1.060)	194800	2.70414	2.704
	43 1-Methylphenanthrene	192	24.162	24.151	(1.081)	166388	2.66719	2.667
	44 Fluoranthene	202	26.142	26.131	(1.169)	256004	2.67188	2.672
	46 Pyrene	202	26.977	26.977	(1.207)	270263	2.71212	2.712
	51 Naphthobenzothiophene	234	Compound Not Detected.					
	55 Benzo(a)anthracene	228	30.095	30.095	(0.907)	251589	2.75565	2.756
$	56 Chrysene-d12	240	30.219	30.219	(0.911)	227348	3.08546	3.085(R)
	57 Chrysene	228	30.287	30.287	(0.913)	247820	2.77007	2.770
	62 Benzo(b)fluoranthene	252	32.517	32.517	(0.980)	295325	3.11894	3.119
	63 Benzo(k)fluoranthene	252	32.562	32.562	(0.981)	252708	2.48737	2.487
	293 Benzo(j)fluoranthene	252	32.629	32.629	(0.983)	242480	2.59014	2.590(H)
	246 Total Benzofluoranthenes	252	32.562	32.562	(0.981)	759661	8.19091	8.191(M)

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/mL)
* 251 Benzo(e)pyrene-d12	264	33.181	33.181	(1.000)	235397	2.00000	
64 Benzo(e)pyrene	252	33.238	33.238	(1.002)	247681	2.66885	2.669
66 Benzo(a)pyrene	252	33.339	33.339	(1.005)	221317	2.62146	2.621
$ 67 Perylene-d12	264	33.519	33.519	(1.010)	232231	2.91960	2.920(R)
68 Perylene	252	33.575	33.575	(1.012)	245483	2.82022	2.820(M)
69 Indeno(1,2,3-cd)pyrene	276	35.637	35.637	(1.074)	288654	2.91280	2.913(M)
70 Dibenzo(a,h)anthracene	278	35.625	35.614	(1.074)	251294	2.69021	2.690(M)
74 Benzo(g,h,i)perylene	276	36.549	36.549	(1.101)	272250	2.78084	2.781(M)

QC Flag Legend

R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt14.i
Lab File ID: NT1421052915.D
Lab Smp Id: SJF0025-SCV1
Analysis Type: SV
Quant Type: ISTD
Operator: VTS
Method File: \\target\share\chem3\nt14.i\20210529.b\ALKYLPNA.m
Misc Info:

Calibration Date: 29-MAY-2021
Calibration Time: 14:01
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
25 Fluorene-d10	159478	79739	318956	166522	4.42
250 Anthracene-d10	170161	85081	340322	168360	-1.06
251 Benzo(e)pyrene-d1	236612	118306	473224	235397	-0.51

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
25 Fluorene-d10	18.91	18.41	19.41	18.91	0.00
250 Anthracene-d10	22.36	21.86	22.86	22.36	0.00
251 Benzo(e)pyrene-d1	33.18	32.68	33.68	33.18	0.00

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

REVIEW SUMMARY FOR FILE - NT1421052915.D

Lab ID: SJF0025-SCV1
nt14.i, 20210529.b\ALKYLPNA.m, 29-MAY-2021 19:38

RT	CO-ELUTION COMPOUNDS
	NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
NONE			

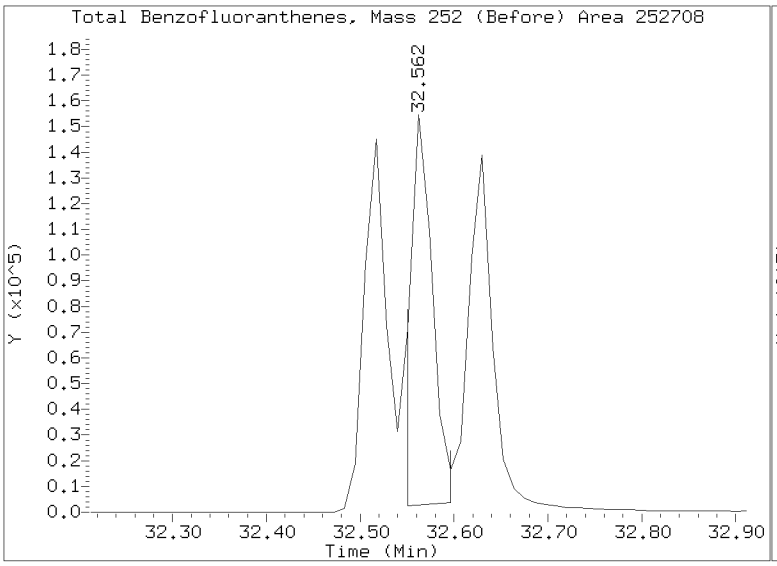
RRT check based on Ccal File: NT1421052914.D

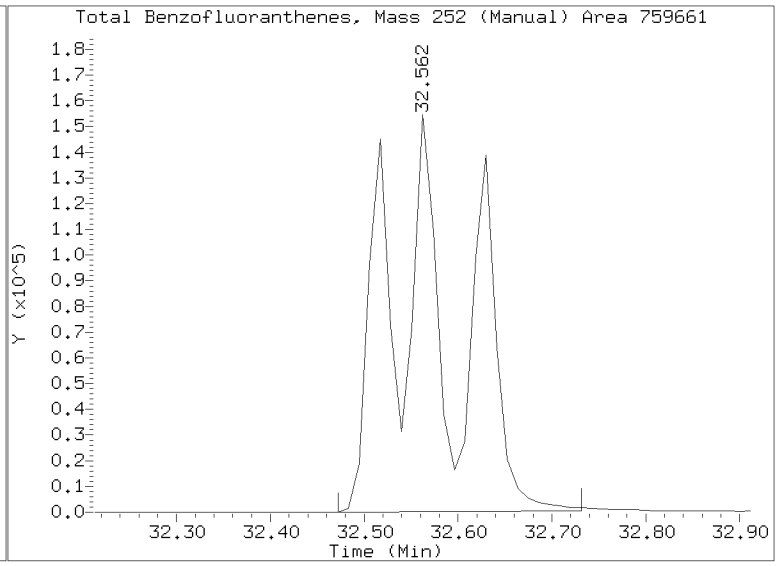
On Column LOD for nt14.i, 20210529.b\ALKYLPNA.m, TARGETS.sub = 0.0000

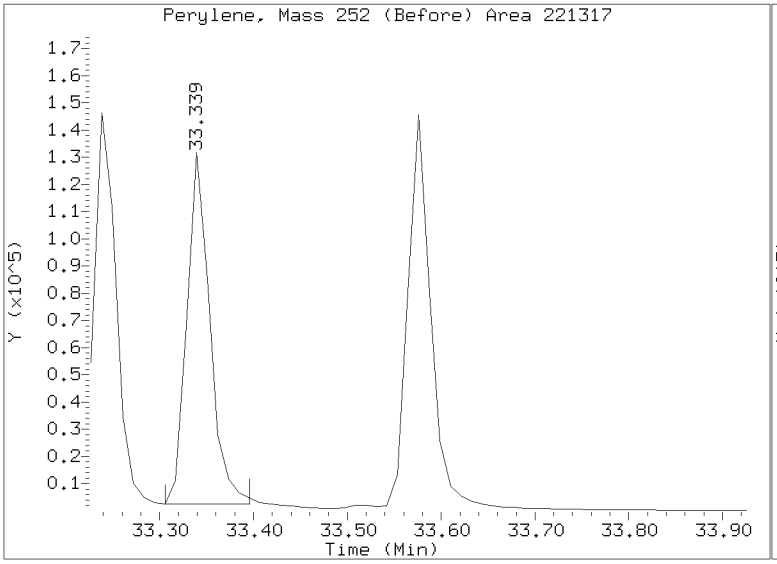
* Only compounds listed in the work order have been verified by the analyst *

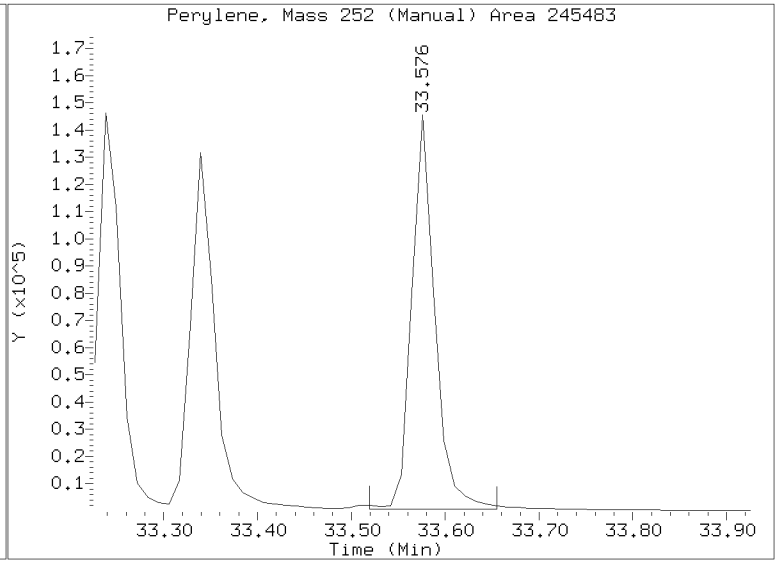
Quant Ion Manual Peak Adjustment Report

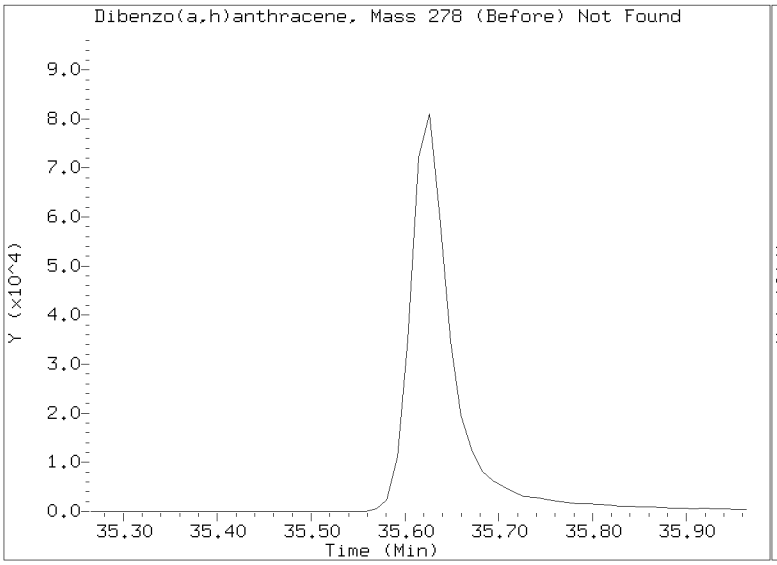
Datafile: //target/share/chem3/nt14.i/20210529.b/NT1421052915.D
Injection Date: 29-MAY-2021 19:38
Lab ID:SJF0025-SCV1 Client ID:
Report Date: 06/02/2021 19:03

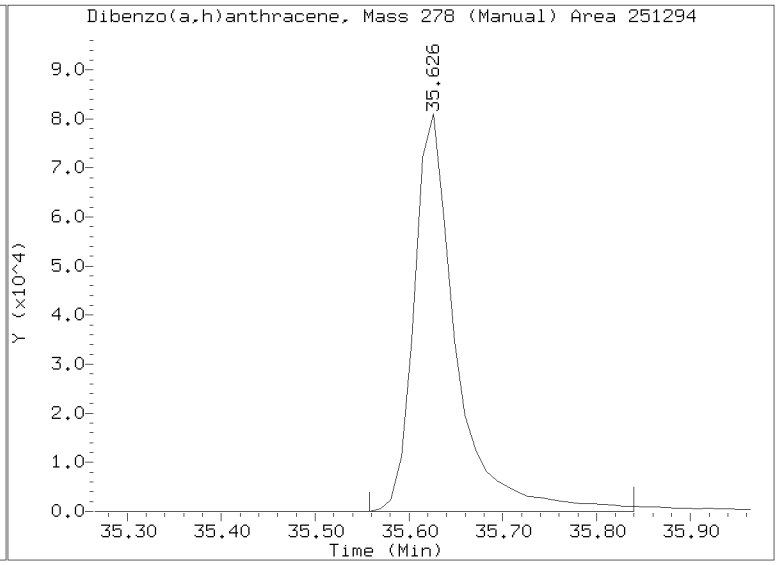






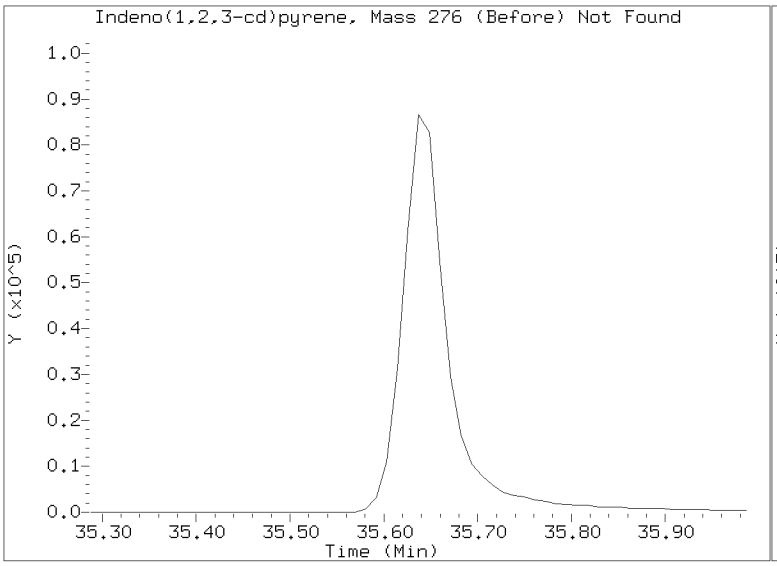


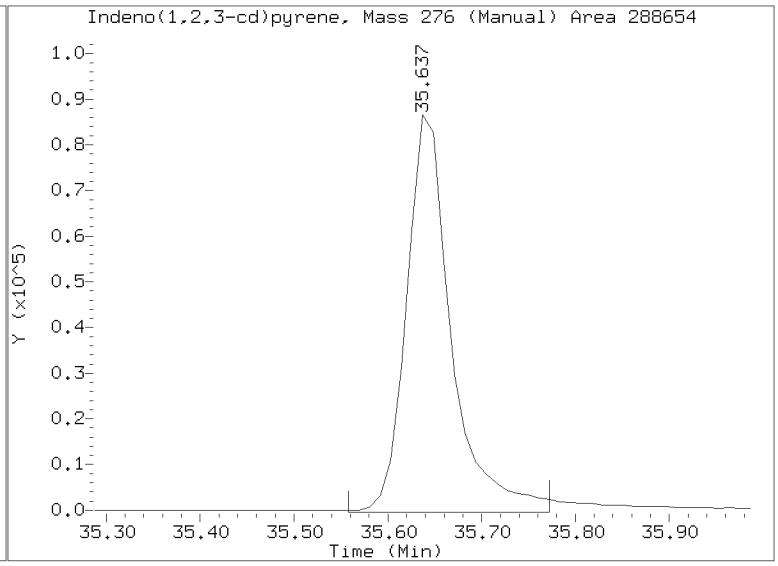


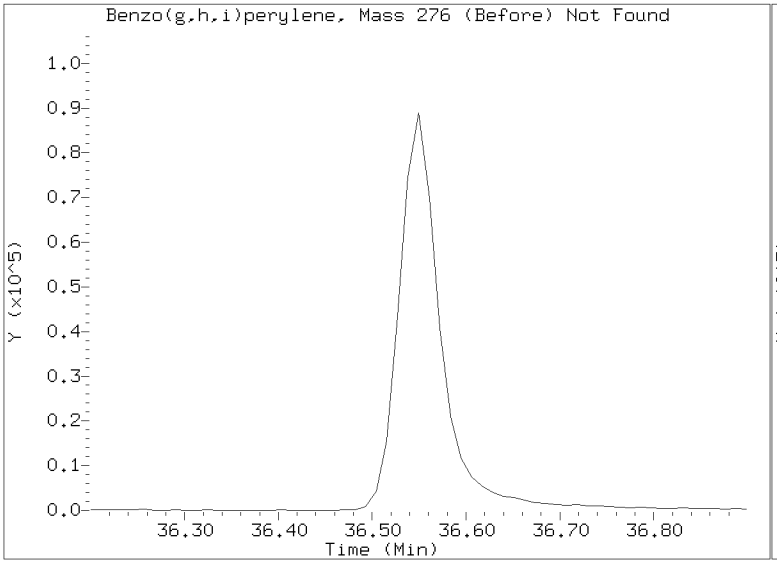


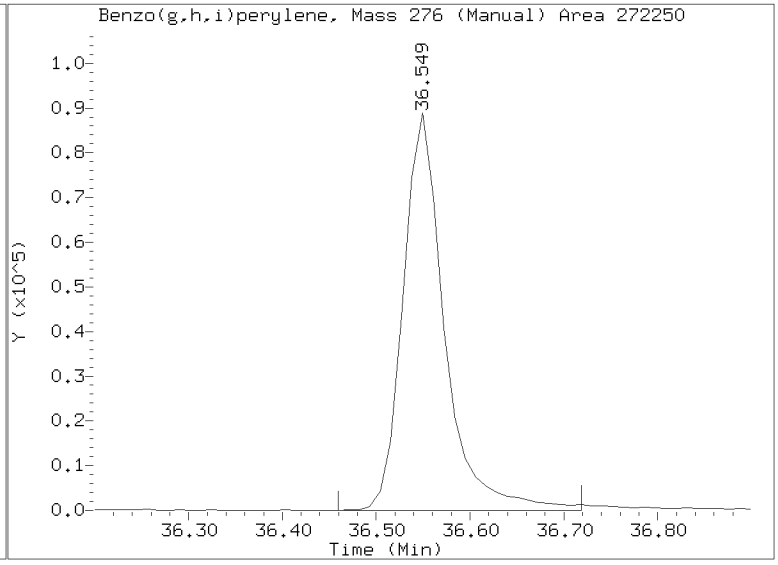
Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt14.i/20210529.b/NT1421052915.D
Injection Date: 29-MAY-2021 19:38
Lab ID:SJF0025-SCV1 Client ID:
Report Date: 06/02/2021 19:03









Analytical Resources, Incorporated
Analytical Chemists and Consultants

INITIAL CALIBRATION CHECK

EPA 8270E-SIM

Laboratory:	Analytical Resources, Inc.	SDG:	21E0106
Client:	Anchor QEA, LLC	Project:	Gasco Siltronic - US Moorings
Instrument ID:	NT14	Calibration:	EF00008
Lab File ID:	NT1421060416ICV.D	Calibration Date:	06/02/2021
Sequence:	SJF0131	Injection Date:	06/05/21
Lab Sample ID:	SJF0131-ICV1	Injection Time:	00:19
Sequence Name:	Initial Cal Check		

		CONC. (ug/mL)		RESPONSE FACTOR			% DRIFT/DIFF	
COMPOUND	TYPE	STD	ICV	ICAL	ICV	MIN	ICV	LIMIT
trans-Decalin	A	2.5000	2.5	0.0997391	0.0979117		-1.8	+/-20
cis-Decalin	A	2.5000	2.2	0.0700123	0.0735758		-10.2	+/-20
Naphthalene	A	2.5000	2.5	0.9292421	0.9187826		-1.1	+/-20
1-Methylnaphthalene	A	2.5000	2.5	0.5284699	0.5301346		0.3	+/-20
2-Methylnaphthalene	A	2.5000	2.5	0.5432098	0.5371926		-1.1	+/-20
Biphenyl	A	2.5000	2.5	0.8026611	0.7950664		-0.9	+/-20
2,6-Dimethylnaphthalene	A	2.5000	2.5	0.5902664	0.5935634		0.6	+/-20
Acenaphthylene	A	2.5000	2.5	1.0090320	1.0101720		0.1	+/-20
Acenaphthene	A	2.5000	2.5	0.6220308	0.6235002		0.2	+/-20
Dibenzofuran	A	2.5000	2.5	0.9226724	0.9288946		0.7	+/-20
2,3,5-Trimethylnaphthalene	A	2.5000	2.5	0.6011392	0.6115494		1.7	+/-20
Fluorene	A	2.5000	2.6	0.7148800	0.7340213		2.7	+/-20
Benzo(b)thiophene	A	2.5000	2.5	0.7639133	0.7495565		-1.9	+/-20
Phenanthrene	A	2.5000	2.5	1.0312030	1.0319360		0.07	+/-20
Anthracene	A	2.5000	2.6	0.9702418	1.0042470		3.5	+/-20
Carbazole	A	2.5000	2.5	0.8557591	0.9073924		1.0	+/-20
1-Methylphenanthrene	A	2.5000	2.6	0.7410711	0.7757106		4.7	+/-20
Fluoranthene	A	2.5000	2.6	1.1382070	1.2048290		5.9	+/-20
Dibenzothiophene	A	2.5000	2.6	1.0092670	1.0472020		3.8	+/-20
Pyrene	A	2.5000	2.7	1.1837730	1.2650350		6.9	+/-20
Benzo(a)anthracene	A	2.5000	2.7	0.7757052	0.8417245		8.5	+/-20
Chrysene	A	2.5000	2.6	0.7601074	0.7954432		4.6	+/-20
Benzo(b)fluoranthene	A	2.5000	2.5	0.8044926	0.8202426		2.0	+/-20
Benzo(j)fluoranthene	A	2.5000	2.5	0.7953937	0.7833322		-1.5	+/-20
Benzo(k)fluoranthene	A	2.5000	2.6	0.8631910	0.9015507		4.4	+/-20
Benzo(e)pyrene	A	2.5000	2.5	0.7884934	0.7978414		1.2	+/-20
Benzo(a)pyrene	A	2.5000	2.6	0.7172983	0.7365853		2.7	+/-20
Indeno(1,2,3-cd)pyrene	A	2.5000	2.6	0.8419699	0.8834314		4.9	+/-20
Dibenzo(a,h)anthracene	A	2.5000	2.5	0.7153598	0.7775124		-1.9	+/-20
Benzo(g,h,i)perylene	A	2.5000	2.5	0.8318028	0.8334437		0.2	+/-20
Perylene	A	2.5000	2.6	0.7395491	0.7604969		2.8	+/-20

* Values outside of QC limits

Analytical Resources, Incorporated
Analytical Chemists and Consultants

INITIAL CALIBRATION CHECK

EPA 8270E-SIM

Laboratory:	Analytical Resources, Inc.	SDG:	21E0106
Client:	Anchor QEA, LLC	Project:	Gasco Siltronic - US Moorings
Instrument ID:	NT14	Calibration:	EF00008
Lab File ID:	NT1421060416ICV.D	Calibration Date:	06/02/2021
Sequence:	SJF0131	Injection Date:	06/05/21
Lab Sample ID:	SJF0131-ICV1	Injection Time:	00:19
Sequence Name:	Initial Cal Check		

COMPOUND	TYPE	CONC. (ug/mL)		RESPONSE FACTOR			% DRIFT/DIFF	
		STD	ICV	ICAL	ICV	MIN	ICV	LIMIT
Benzo(b)naphtho(2,1-d)thiophene	A	2.5000	2.7	1.2719290	1.3602410		6.9	+/-20
Naphthalene-d8	A	2.5000	2.45	0.9297733	0.9106464		-2.1	+/-20
Acenaphthene-d10	A	2.5000	2.49	0.5710501	0.5697230		-0.2	+/-20
Phenanthrene-d10	A	2.5000	2.50	0.9622084	0.9635526		0.1	+/-20
Chrysene-d12	A	2.5000	2.67	0.6260378	0.6692600		6.9	+/-20
Perylene-d12	A	2.5000	2.55	0.6758124	0.6901527		2.1	+/-20

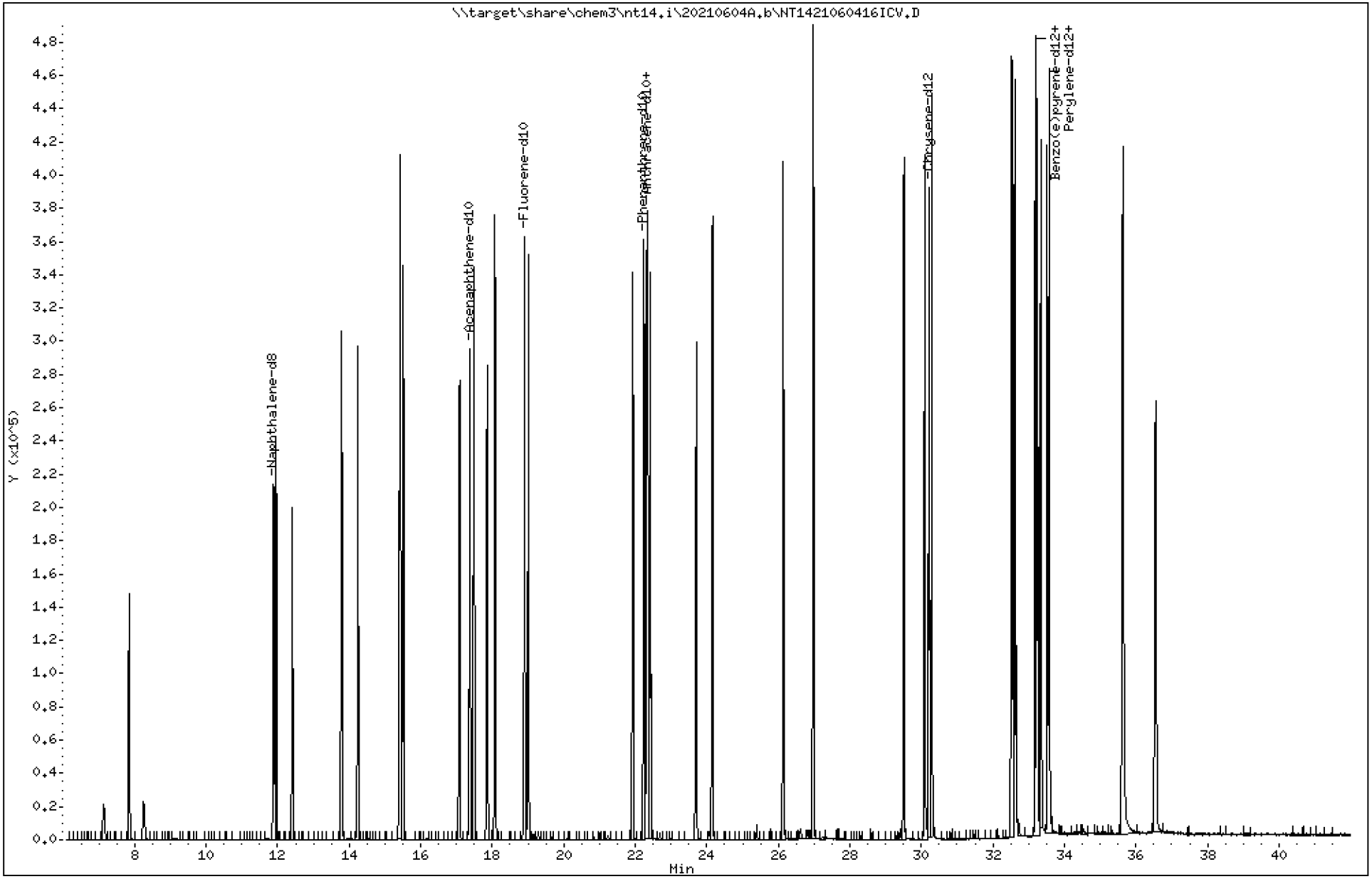
* Values outside of QC limits

Data File: \\target\share\chem3\nt14.i\20210604A.b\NT1421060416ICV.D
Date : 05-JUN-2021 00:19
Client ID:
Sample Info: SJF0131-ICV1

Instrument: nt14.i

Operator: VTS

Column phase: Rxi-17Sil MS
Column diameter: 0.25



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Date : 05-JUN-2021 00:19

Client ID:

Instrument: nt14.i

Sample Info: SJF0131-ICV1

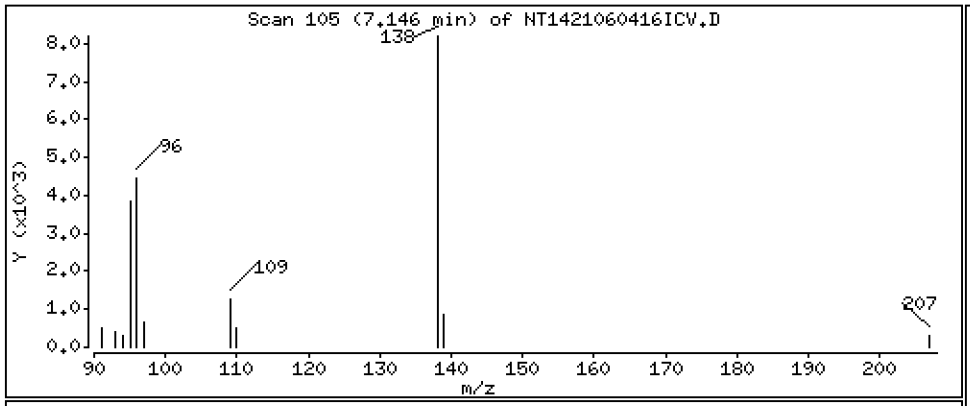
Operator: VTS

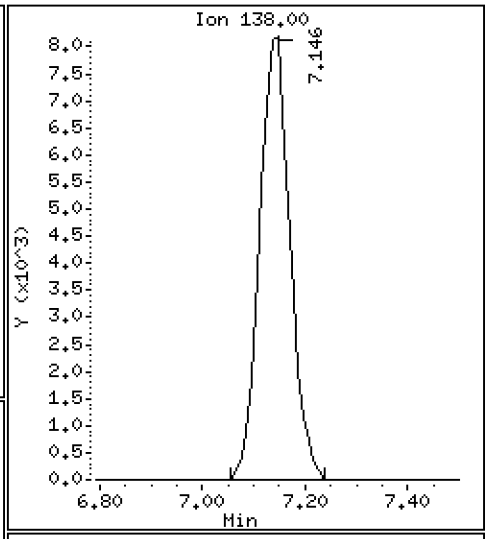
Column phase: Rxi-17Sil MS

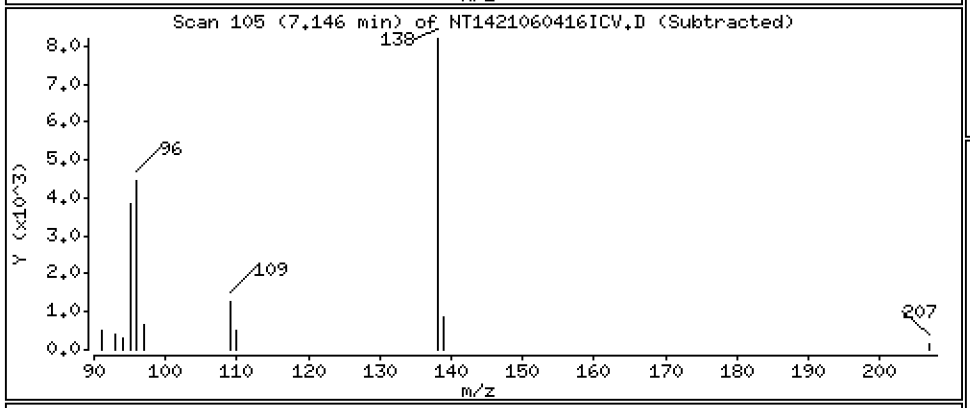
Column diameter: 0.25

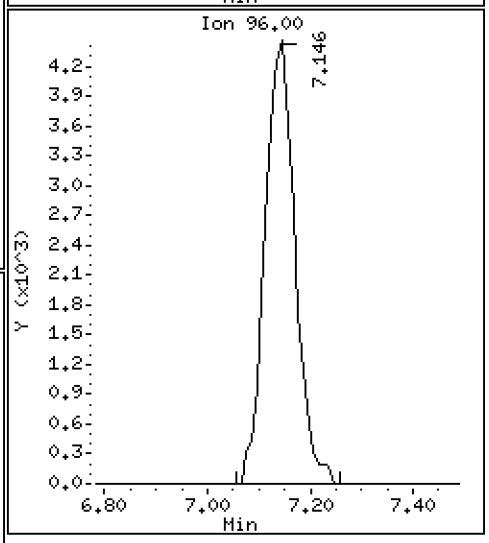
1 trans-Decalin

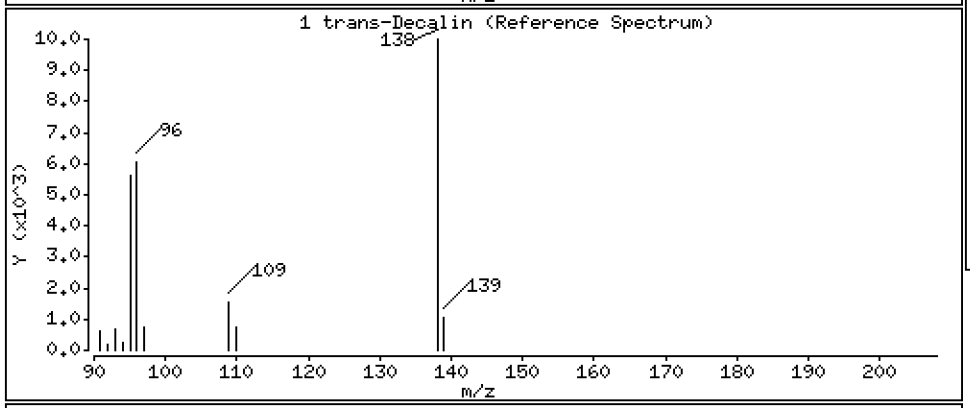
Concentration: 2.454 ug/mL

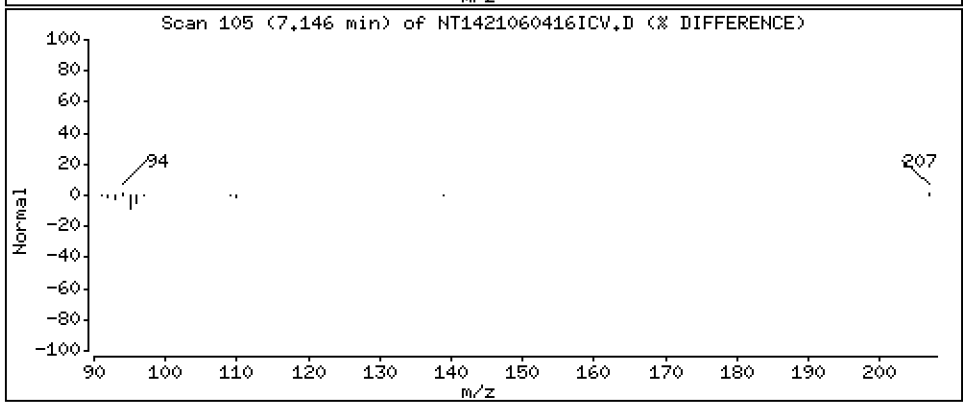












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Date : 05-JUN-2021 00:19

Client ID:

Instrument: nt14.i

Sample Info: SJF0131-ICV1

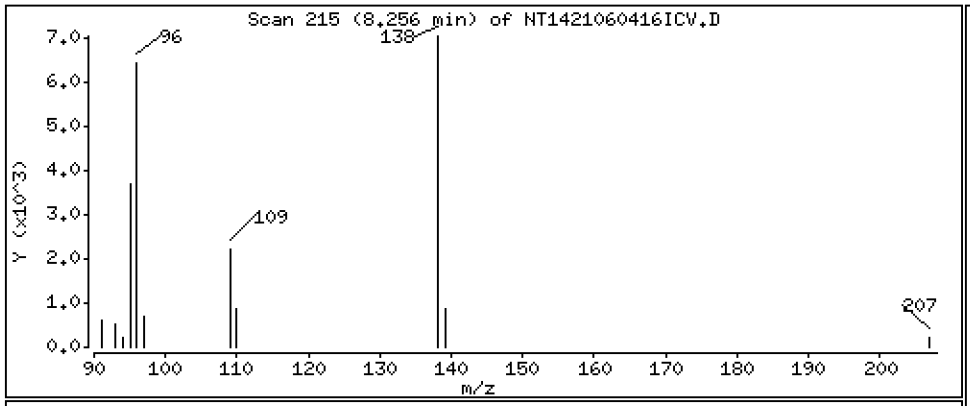
Operator: VTS

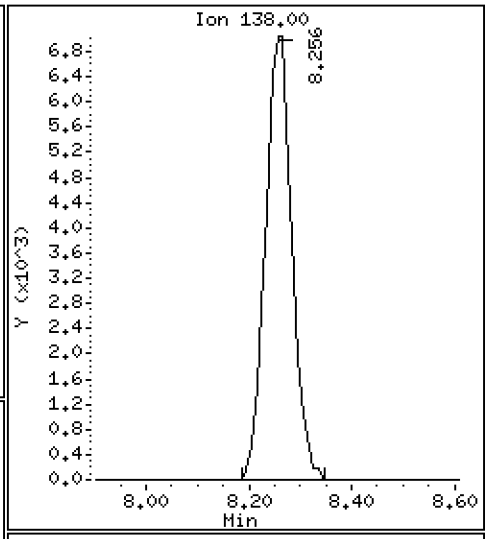
Column phase: Rxi-17Sil MS

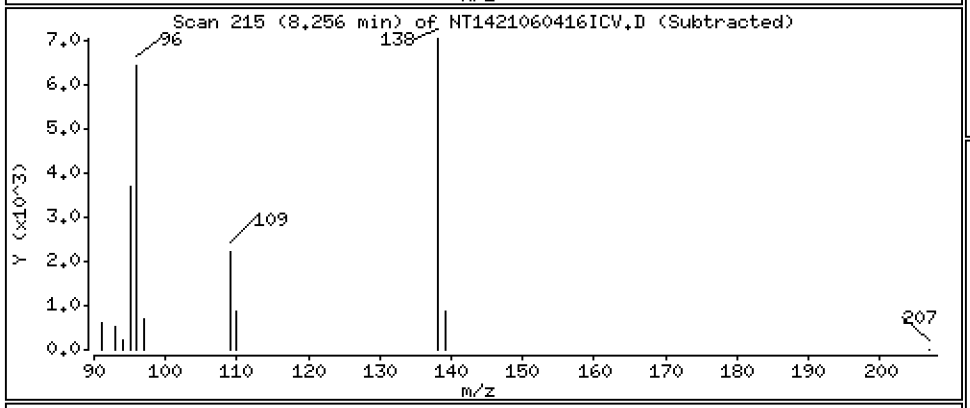
Column diameter: 0.25

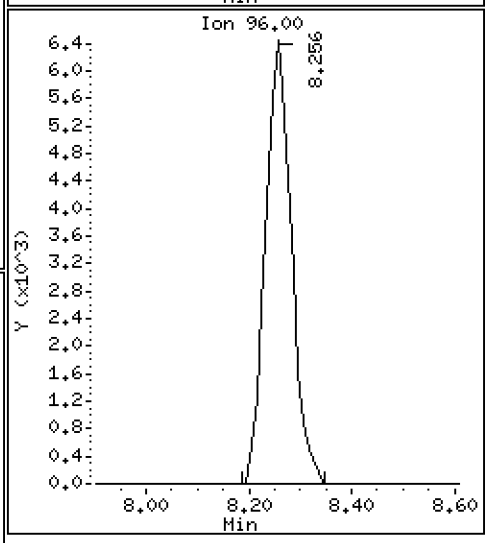
2 cis-Decalin

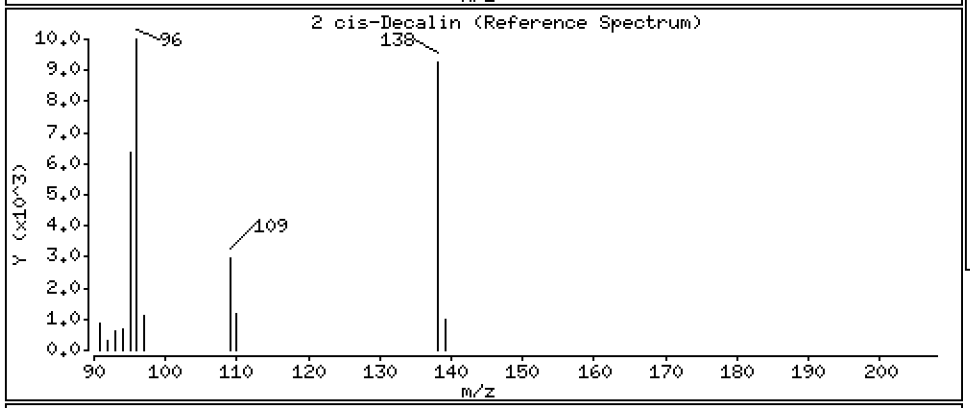
Concentration: 2.245 ug/mL

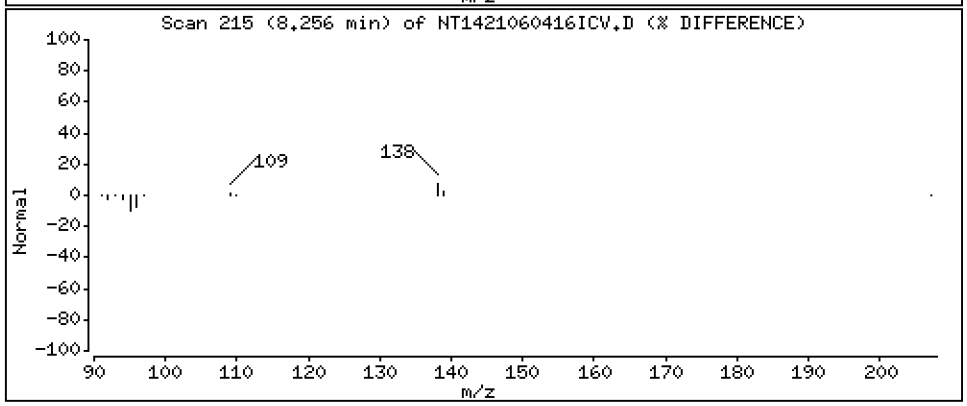












Data File: \\target\share\chem3\nt14.i\20210604A.b\NT1421060416ICV.D

Date : 05-JUN-2021 00:19

Client ID:

Instrument: nt14.i

Sample Info: SJF0131-ICV1

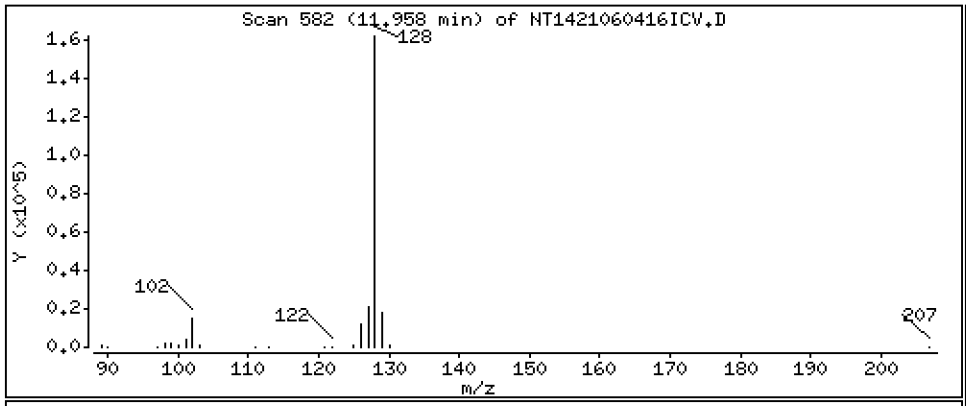
Operator: VTS

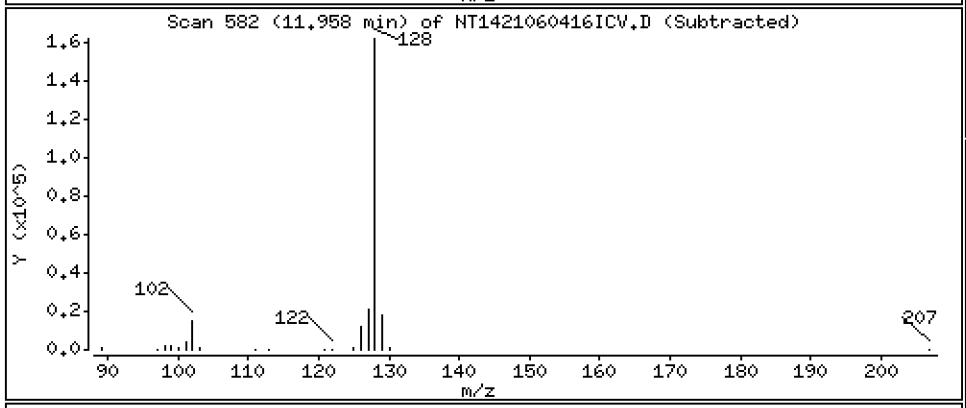
Column phase: Rxi-17Sil MS

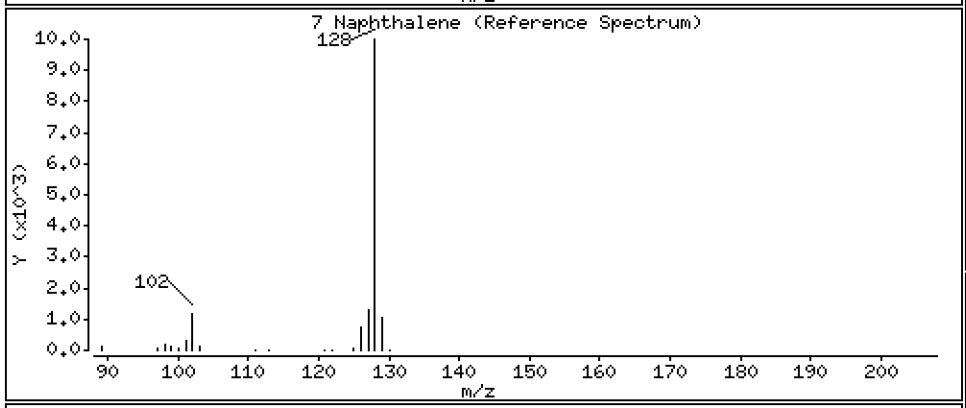
Column diameter: 0.25

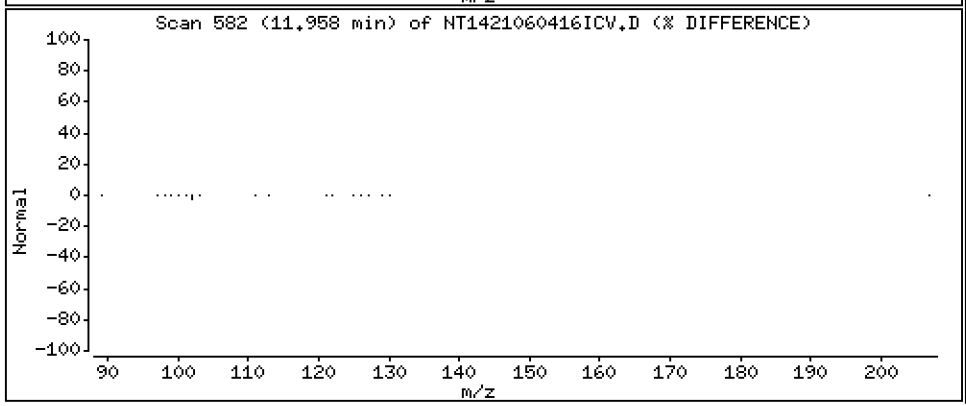
7 Naphthalene

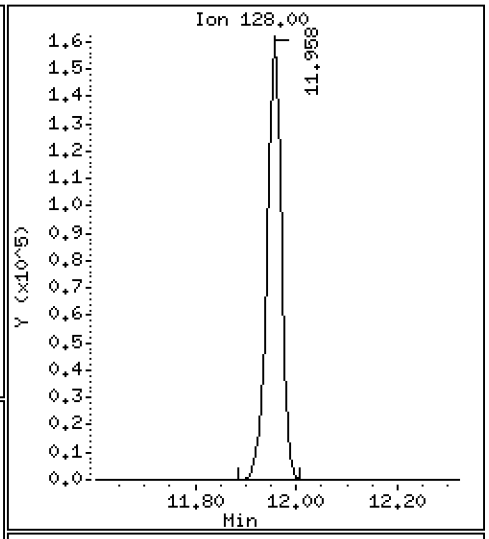
Concentration: 2.472 ug/mL

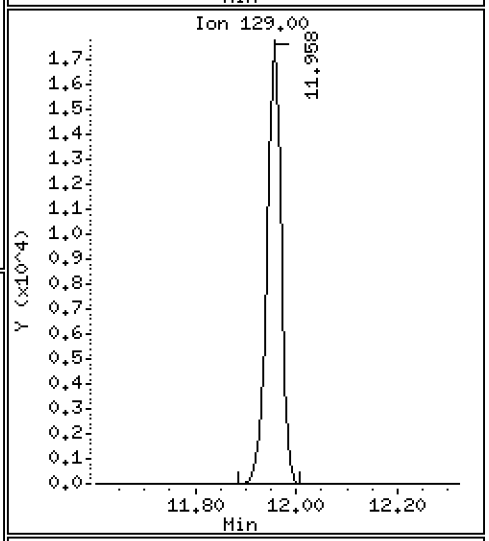


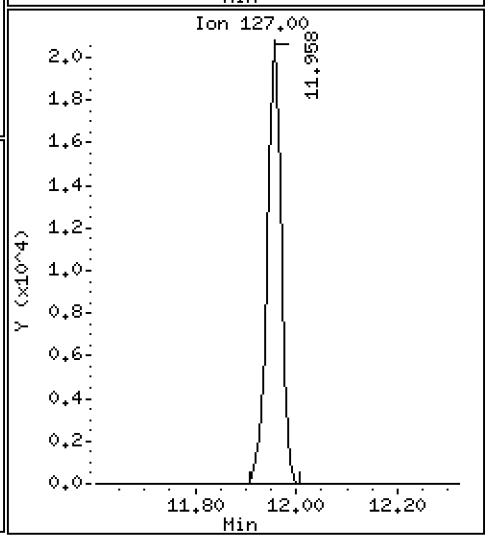












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Date : 05-JUN-2021 00:19

Client ID:

Instrument: nt14.i

Sample Info: SJF0131-ICV1

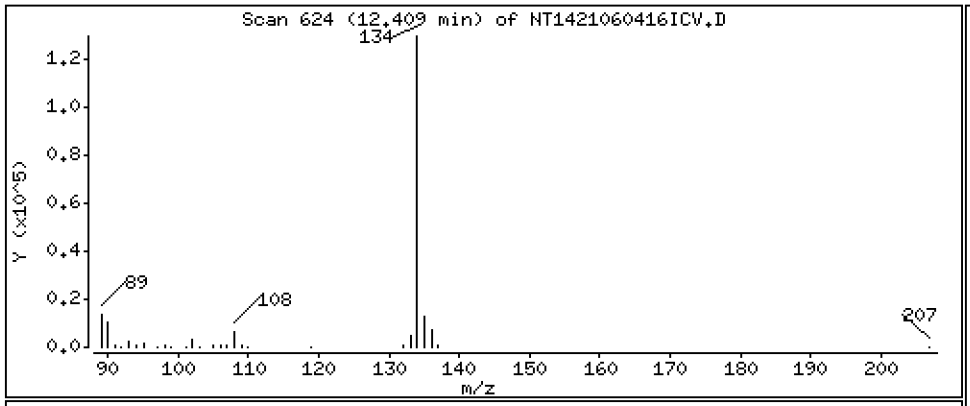
Operator: VTS

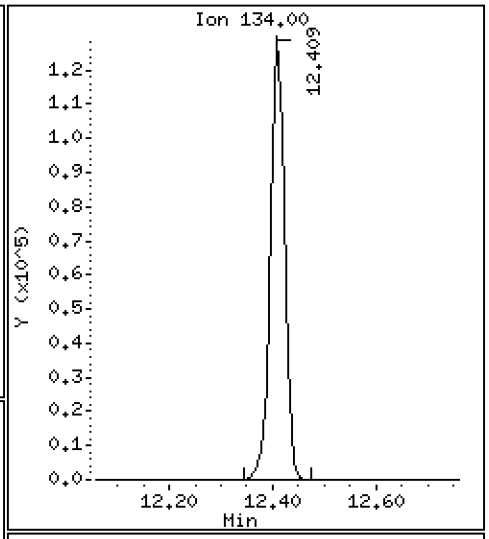
Column phase: Rxi-17Sil MS

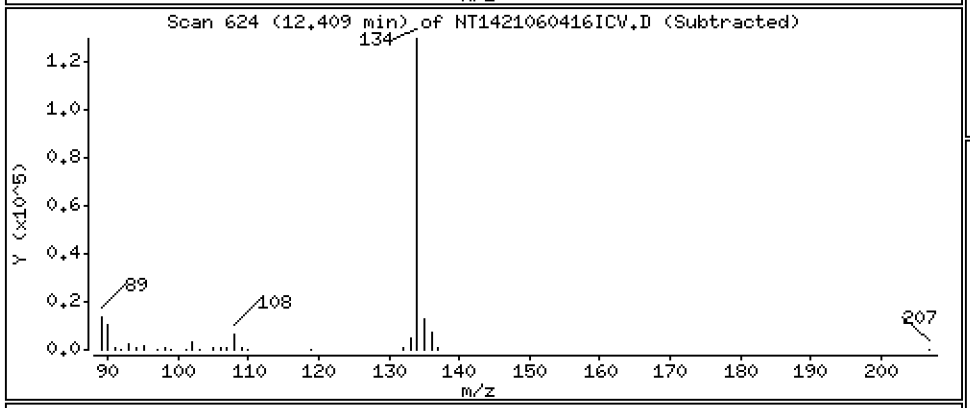
Column diameter: 0.25

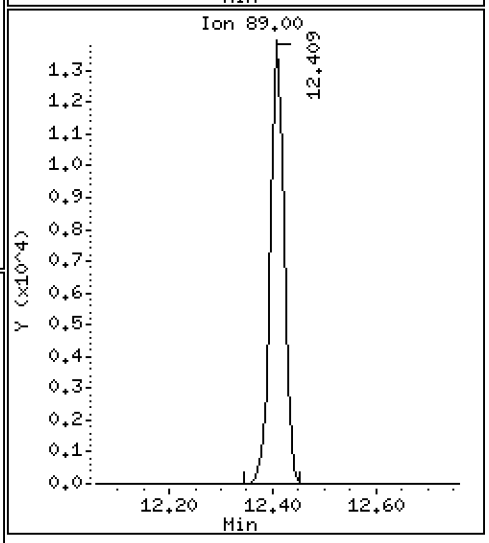
12 Benzo(b)thiophene

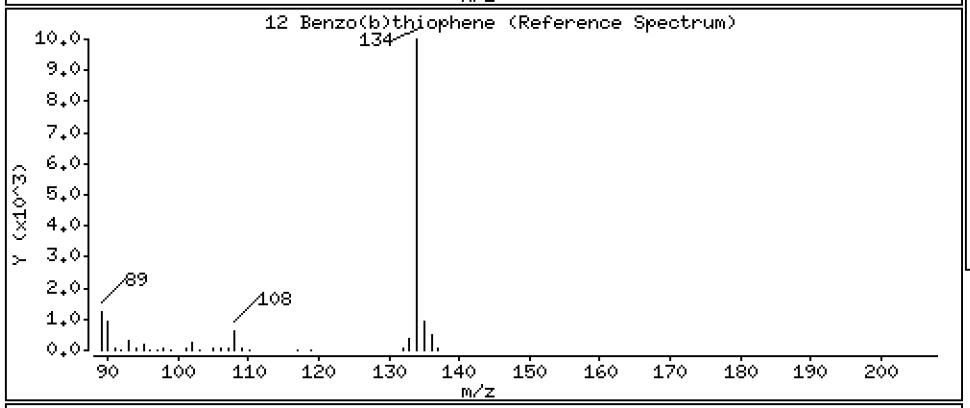
Concentration: 2.453 ug/mL

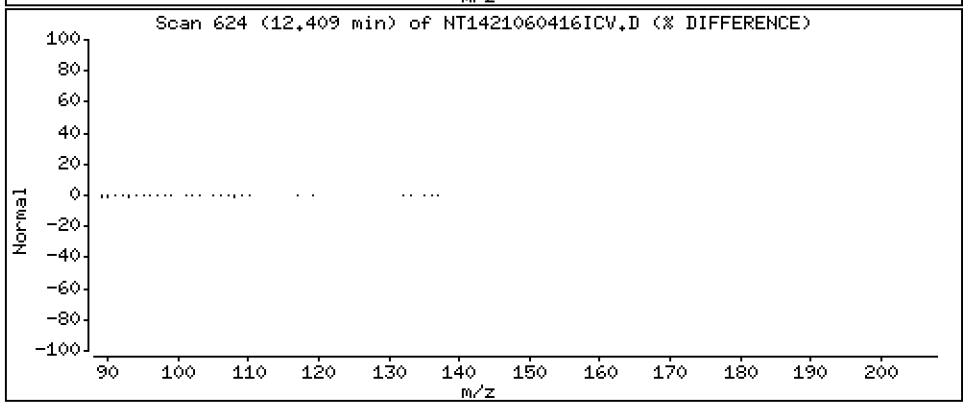












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Date : 05-JUN-2021 00:19

Client ID:

Instrument: nt14.i

Sample Info: SJF0131-ICV1

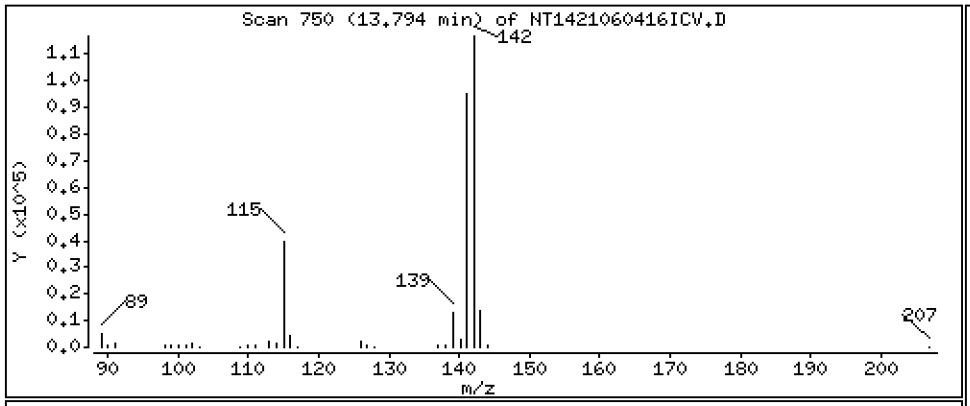
Operator: VTS

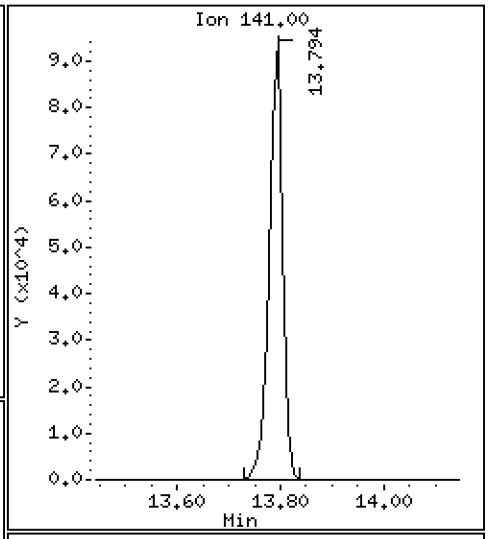
Column phase: Rxi-17Sil MS

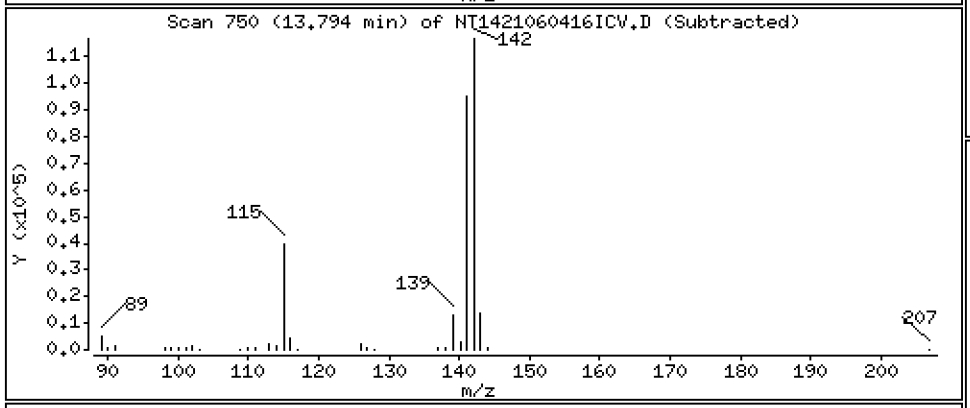
Column diameter: 0.25

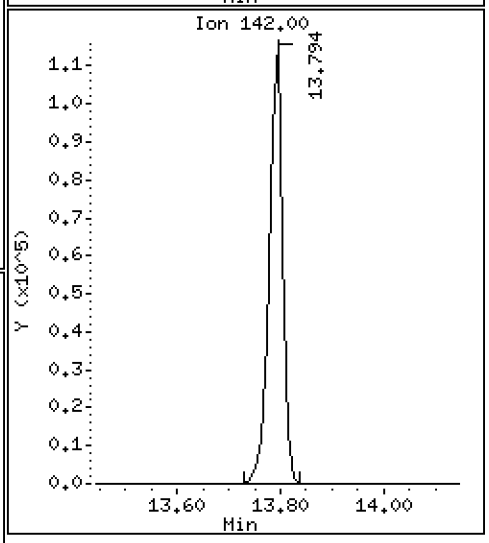
16 2-Methylnaphthalene

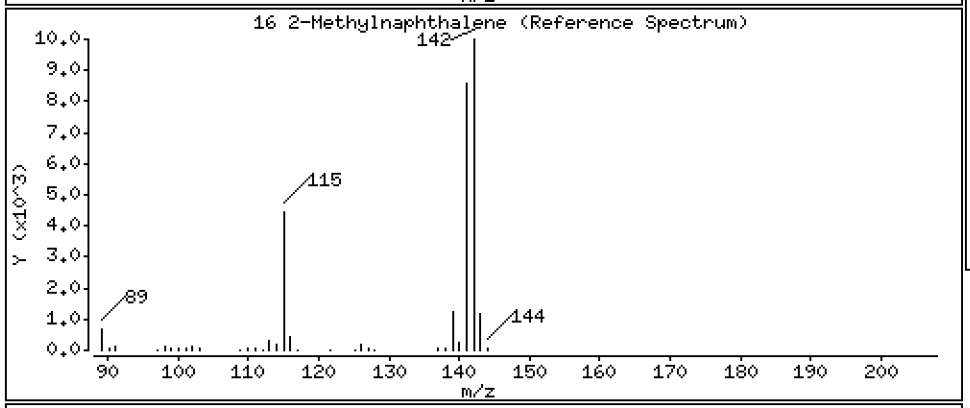
Concentration: 2.472 ug/mL

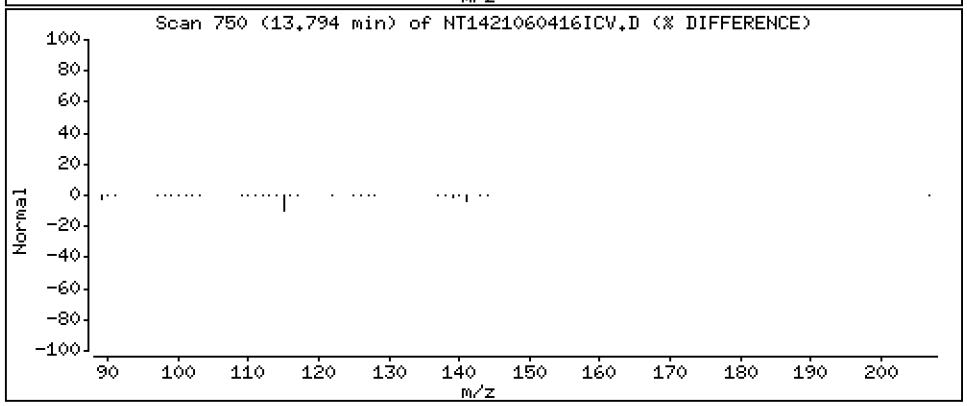












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Date : 05-JUN-2021 00:19

Client ID:

Instrument: nt14.i

Sample Info: SJF0131-ICV1

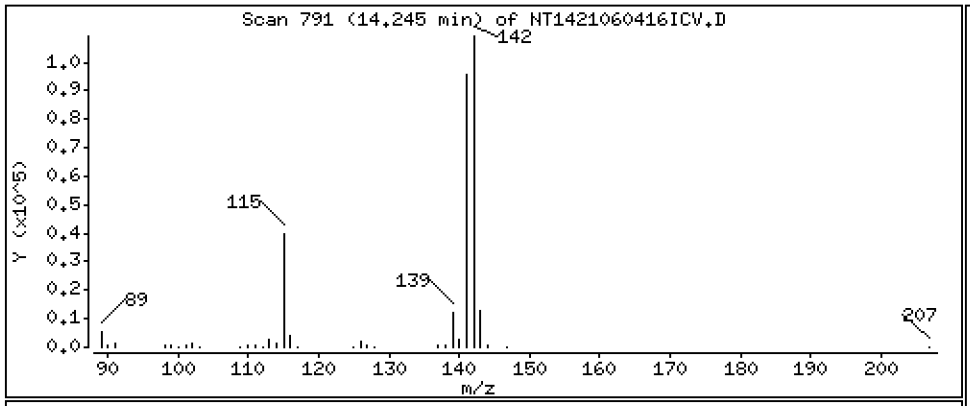
Operator: VTS

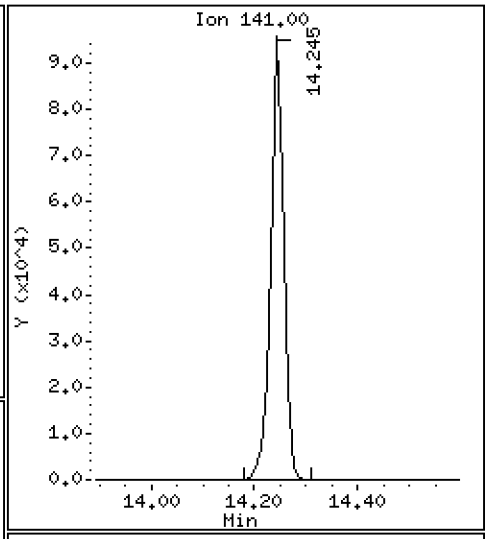
Column phase: Rxi-17Sil MS

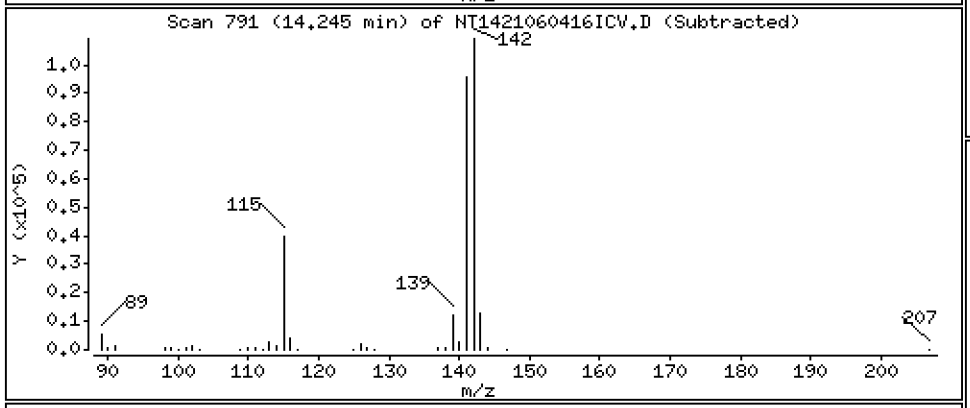
Column diameter: 0.25

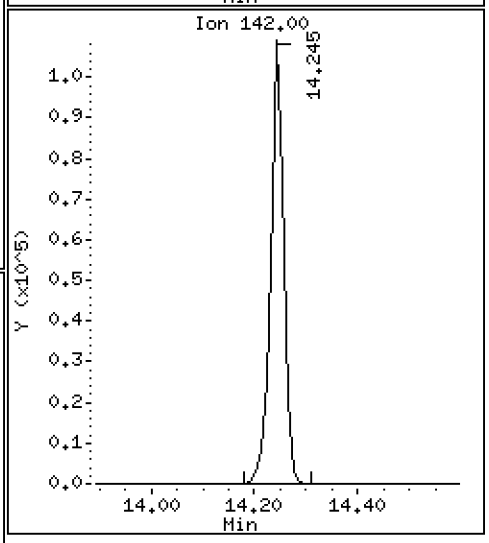
17 1-methylnaphthalene

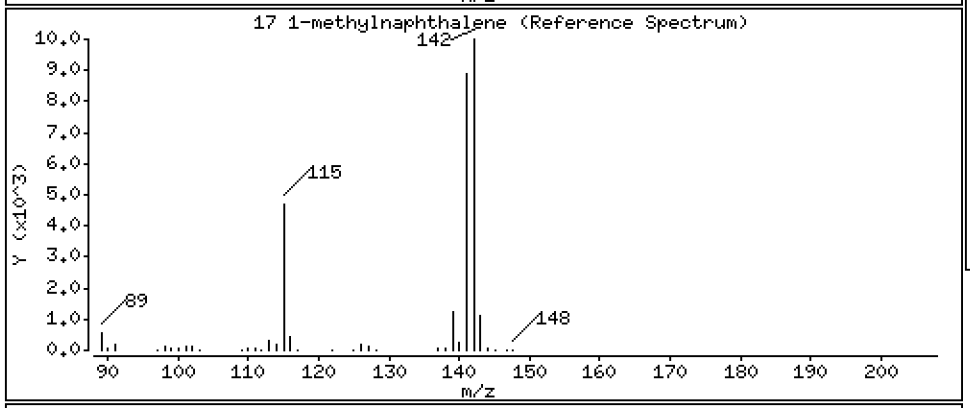
Concentration: 2.508 ug/mL

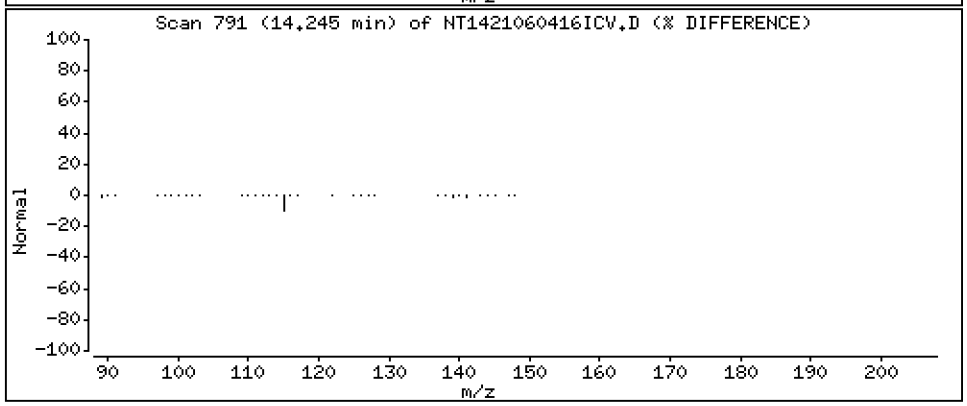












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Date : 05-JUN-2021 00:19

Client ID:

Instrument: nt14.i

Sample Info: SJF0131-ICV1

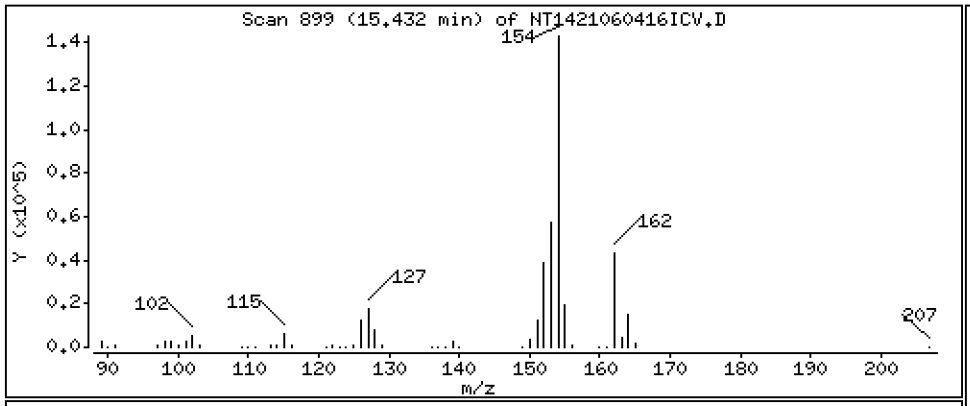
Operator: VTS

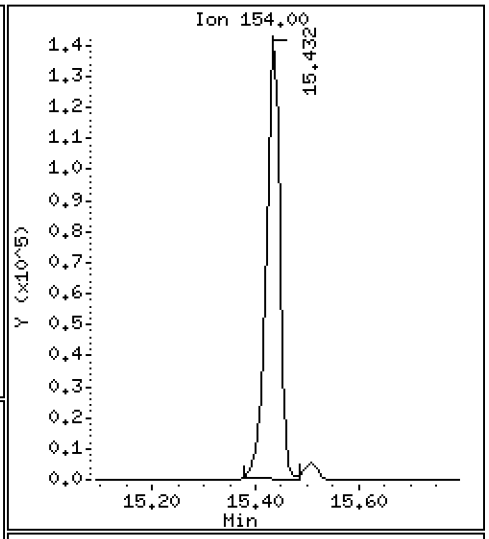
Column phase: Rxi-17Sil MS

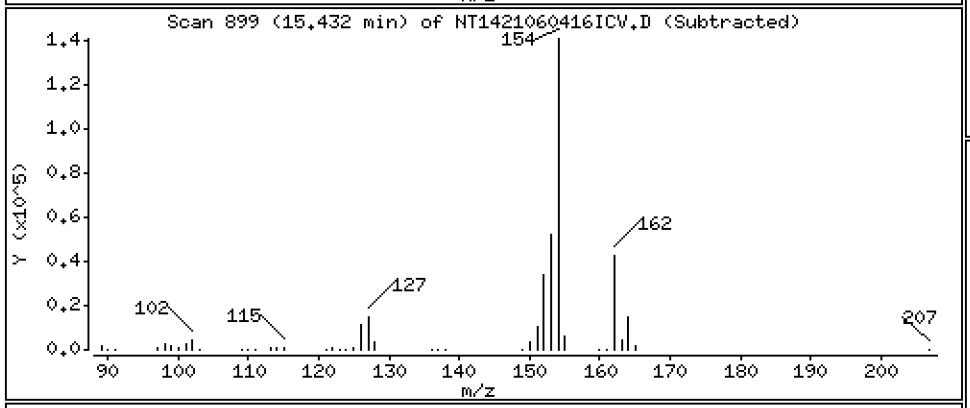
Column diameter: 0.25

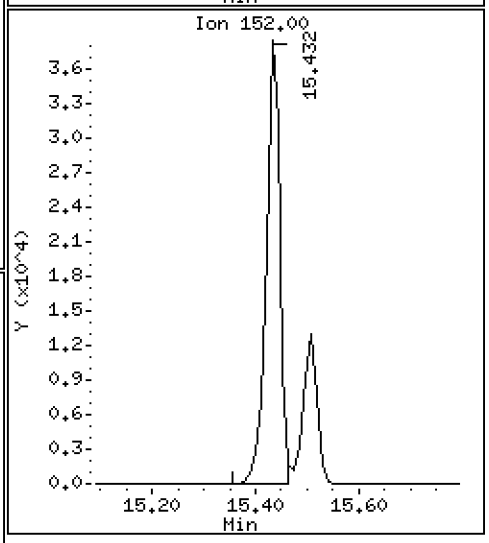
18 Biphenyl

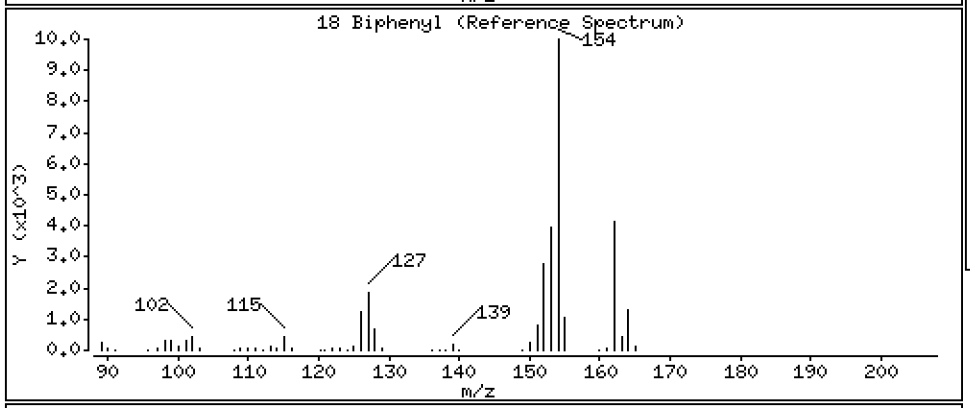
Concentration: 2.476 ug/mL

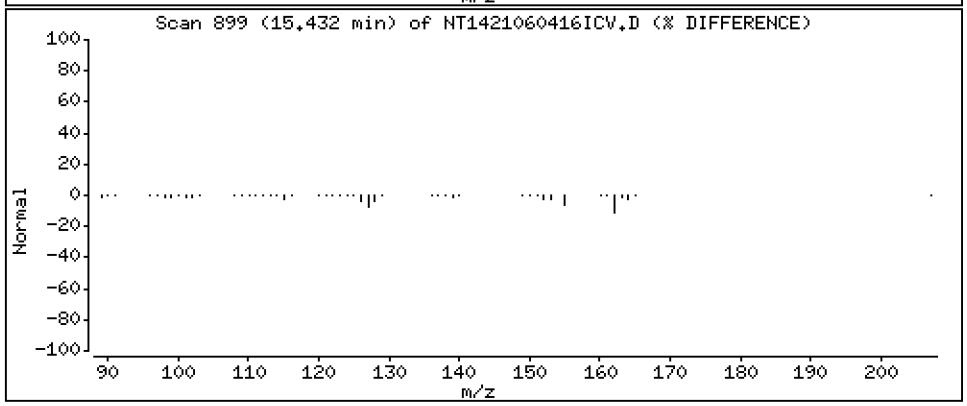












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Date : 05-JUN-2021 00:19

Client ID:

Instrument: nt14.i

Sample Info: SJF0131-ICV1

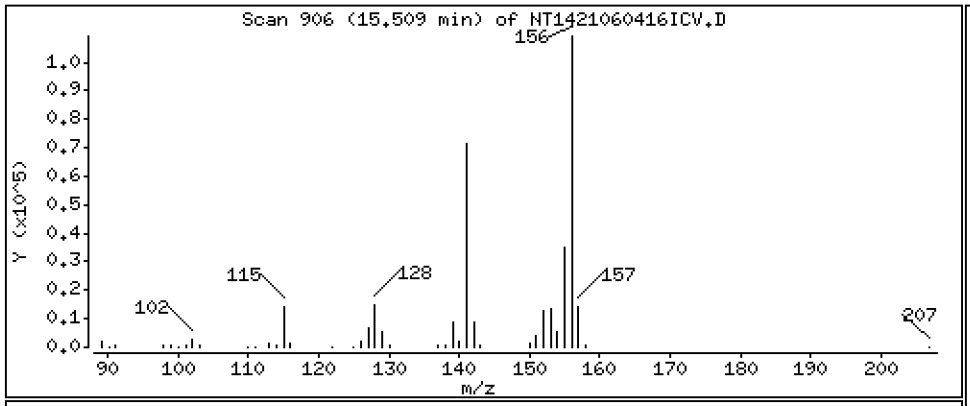
Operator: VTS

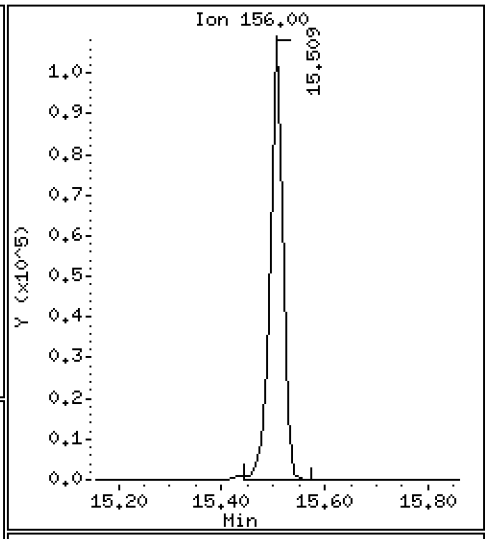
Column phase: Rxi-17Sil MS

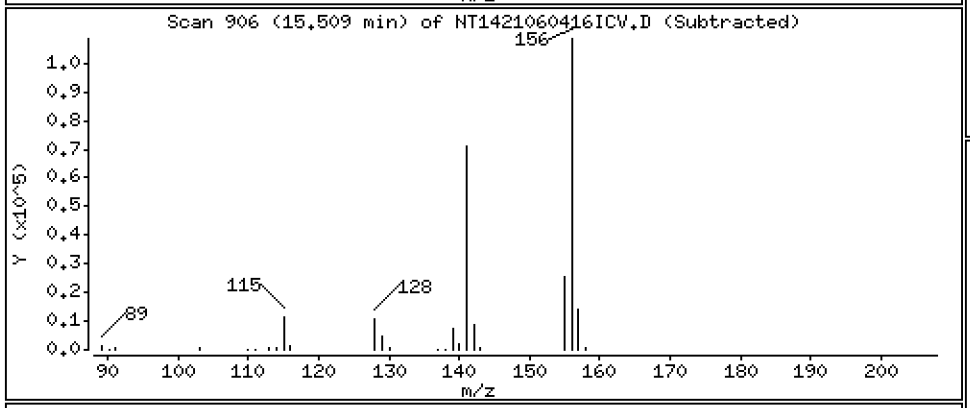
Column diameter: 0.25

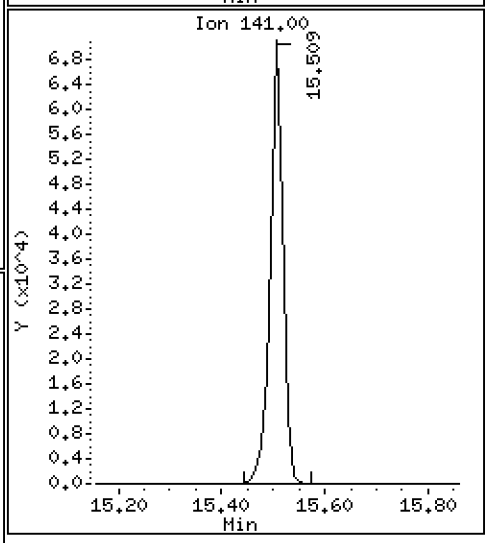
19 2,6-Dimethylnaphthalene

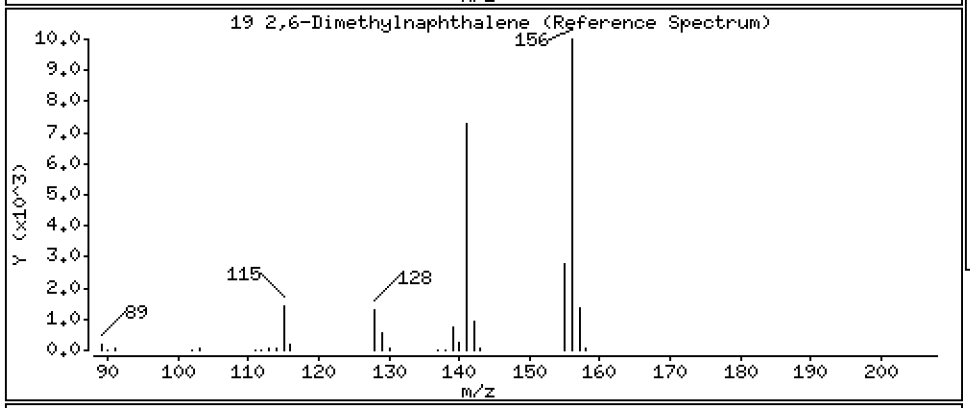
Concentration: 2.514 ug/mL

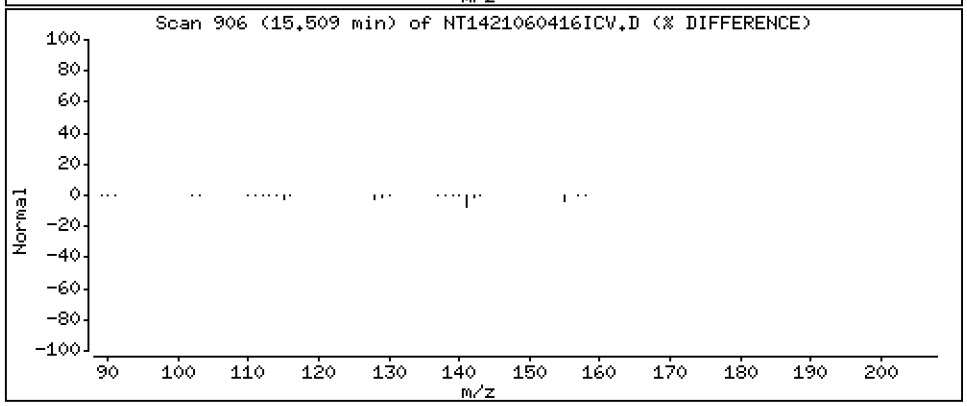












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Date : 05-JUN-2021 00:19

Client ID:

Instrument: nt14.i

Sample Info: SJF0131-ICV1

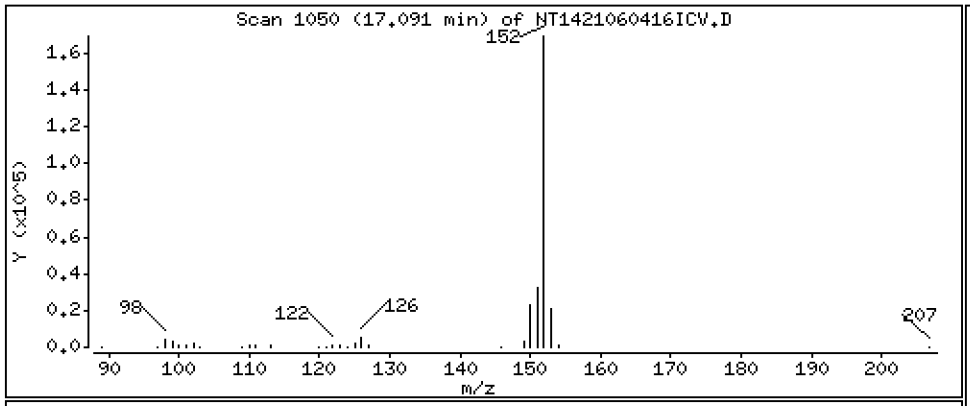
Operator: VTS

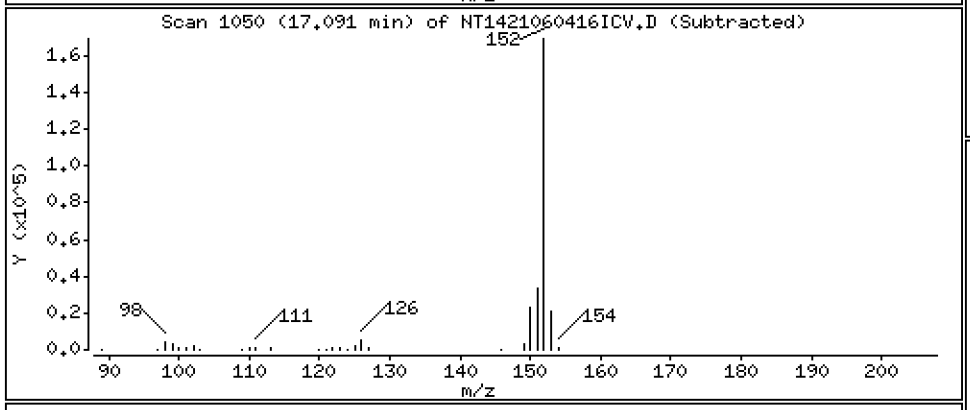
Column phase: Rxi-17Sil MS

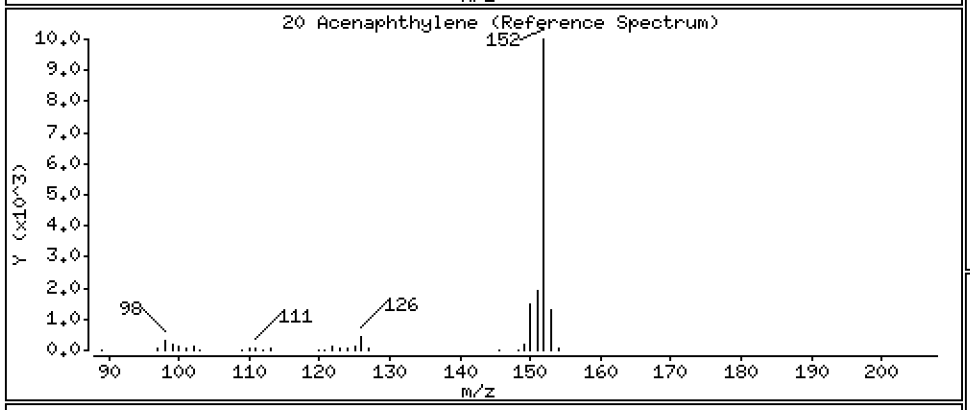
Column diameter: 0.25

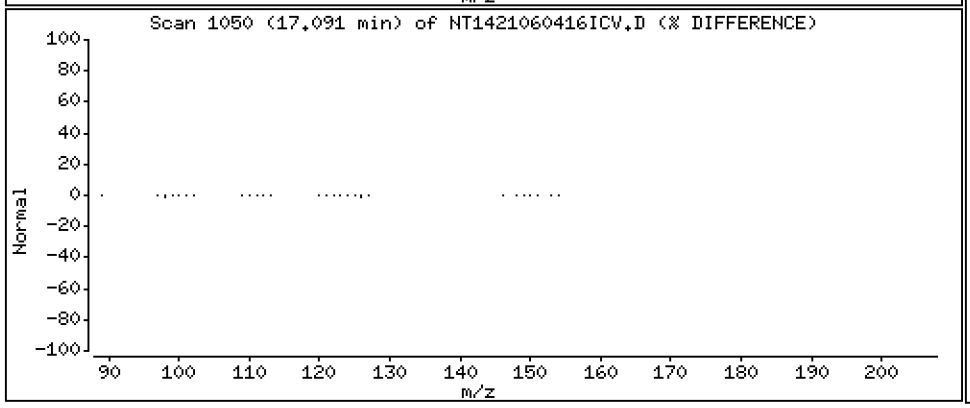
20 Acenaphthylene

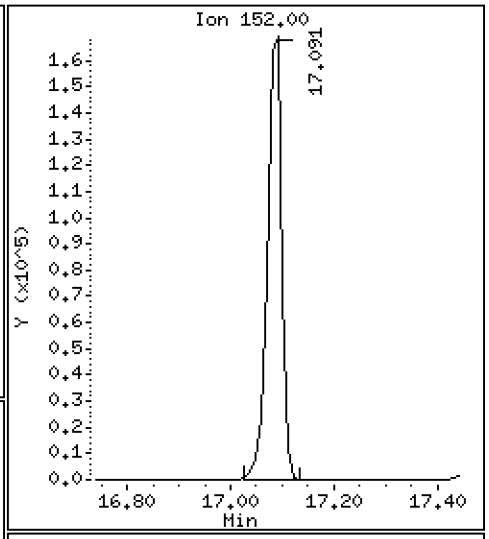
Concentration: 2.503 ug/mL

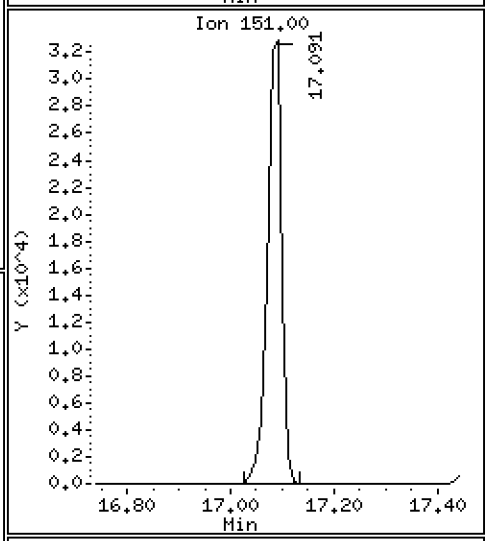


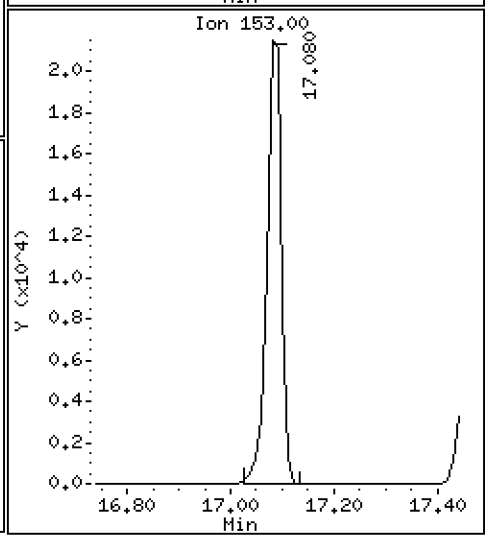












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Date : 05-JUN-2021 00:19

Client ID:

Instrument: nt14.i

Sample Info: SJF0131-ICV1

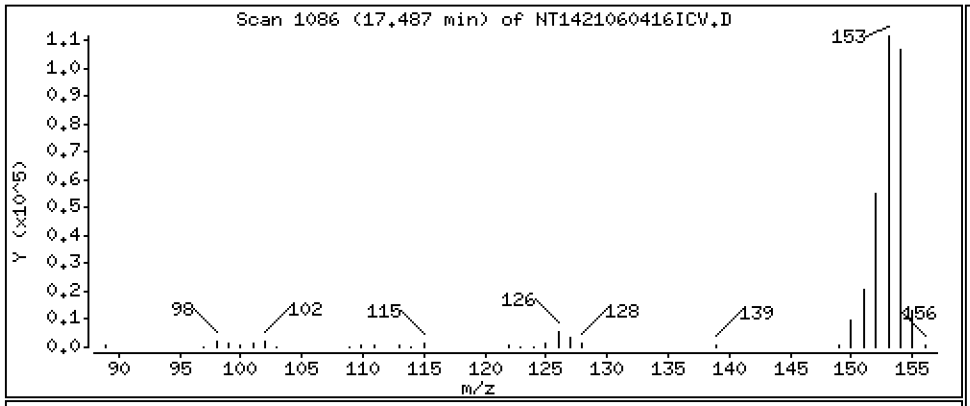
Operator: VTS

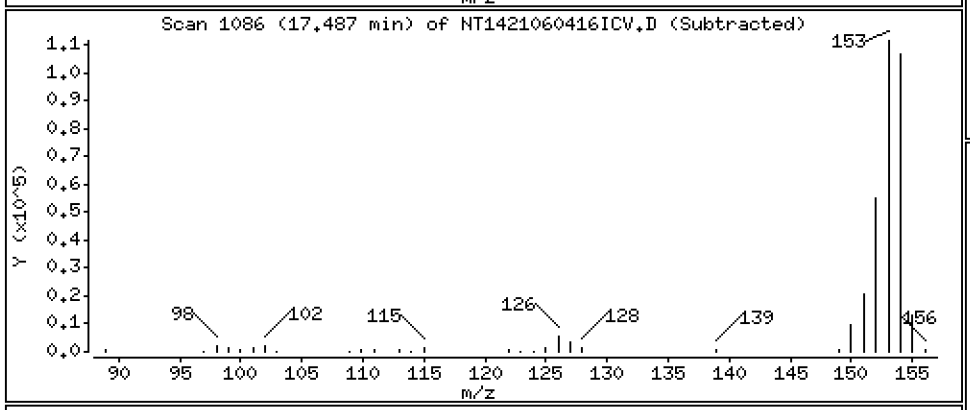
Column phase: Rxi-17Sil MS

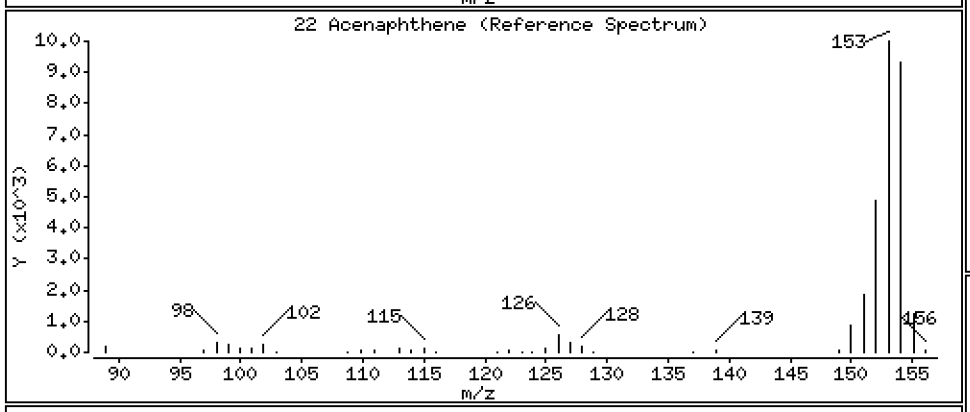
Column diameter: 0.25

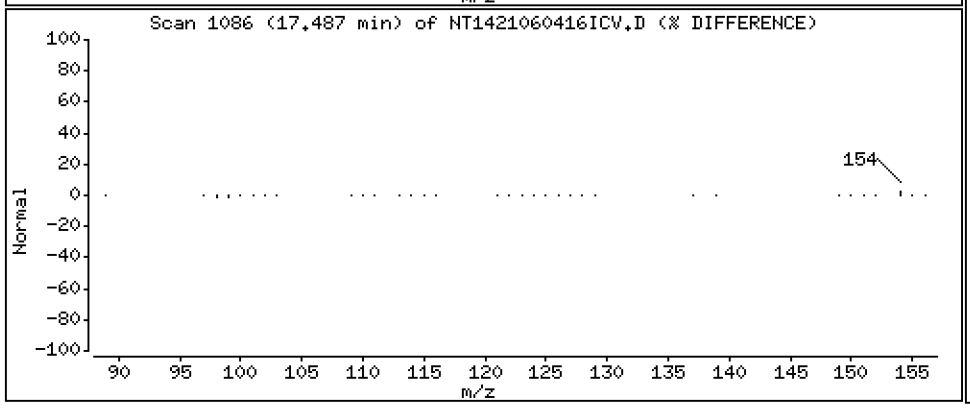
22 Acenaphthene

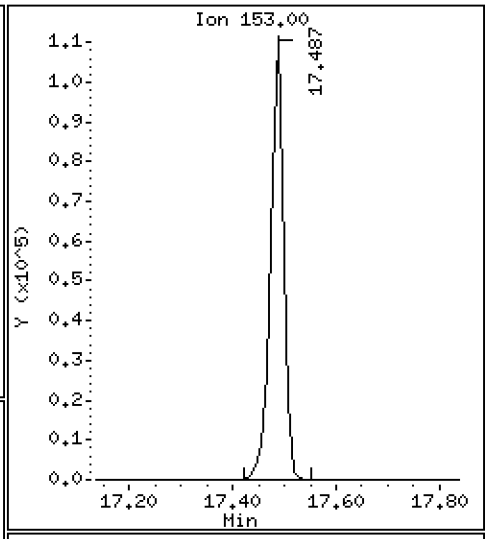
Concentration: 2.506 ug/mL

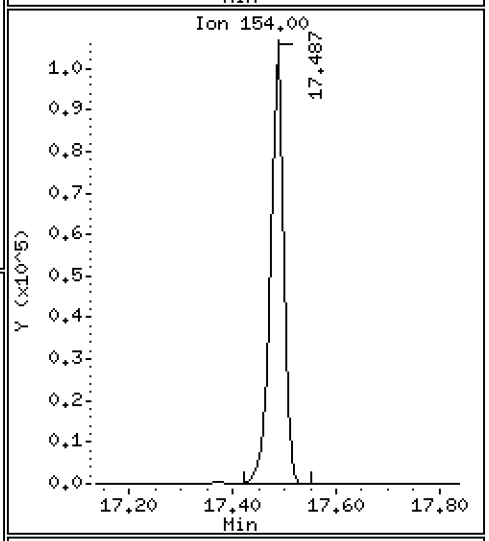


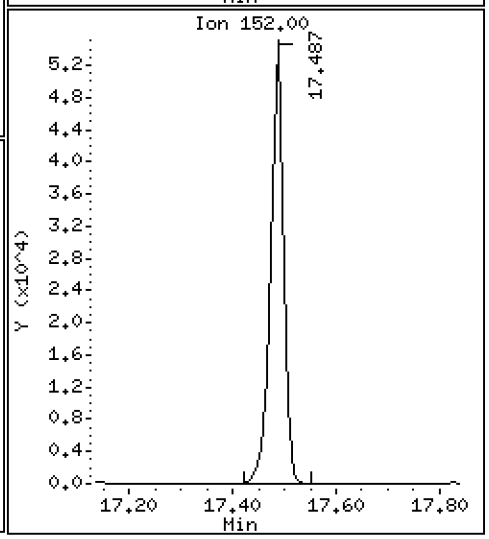












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Date : 05-JUN-2021 00:19

Client ID:

Instrument: nt14.i

Sample Info: SJF0131-ICV1

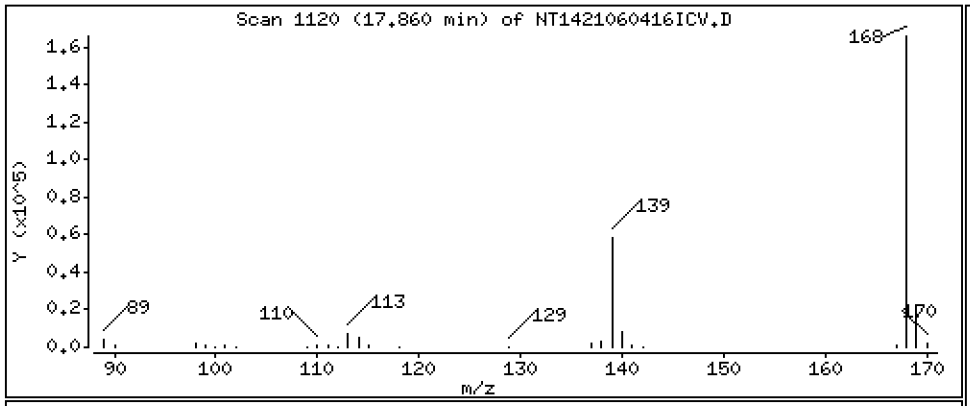
Operator: VTS

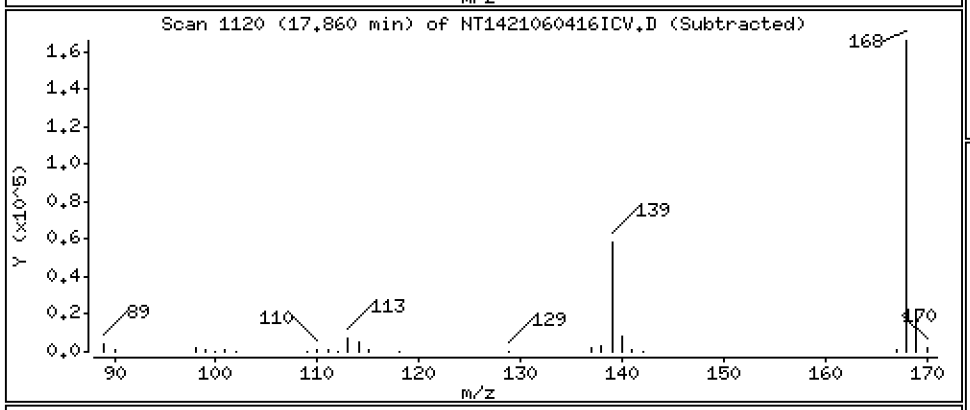
Column phase: Rxi-17Sil MS

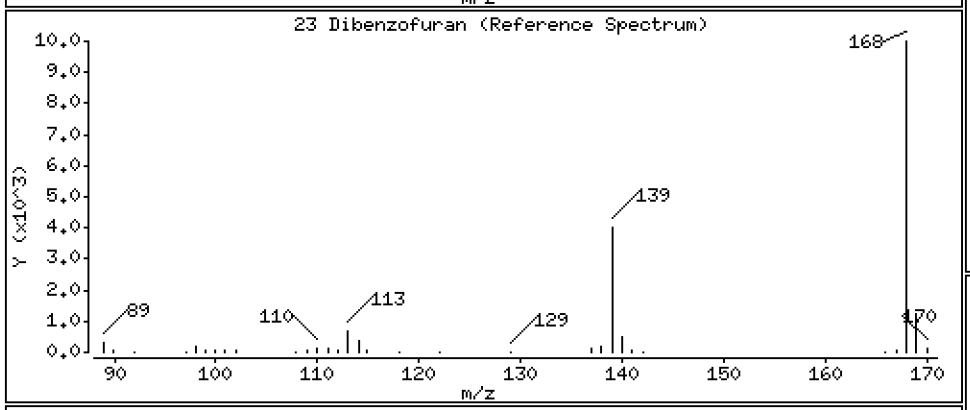
Column diameter: 0.25

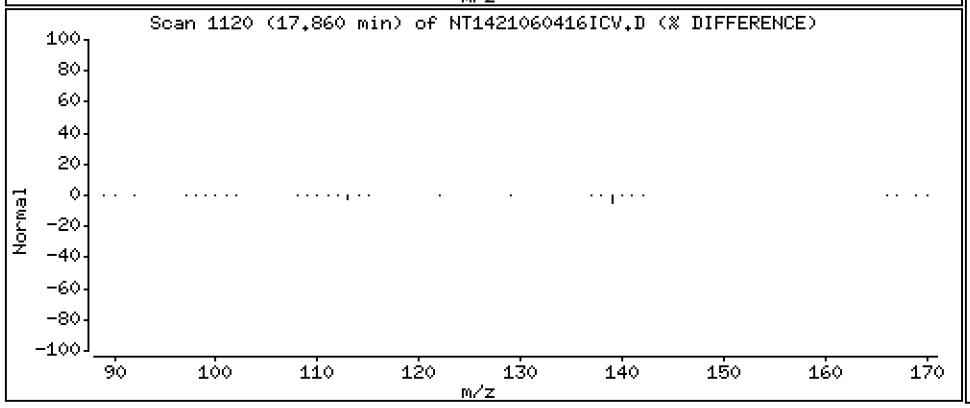
23 Dibenzofuran

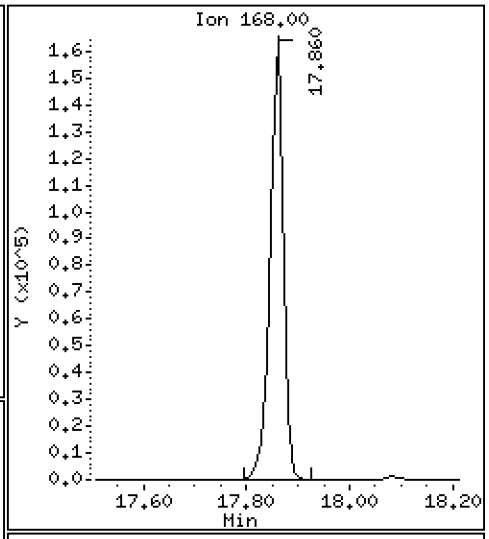
Concentration: 2.517 ug/mL

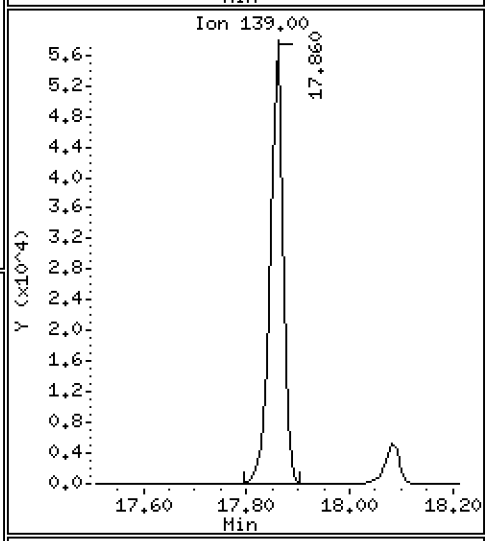


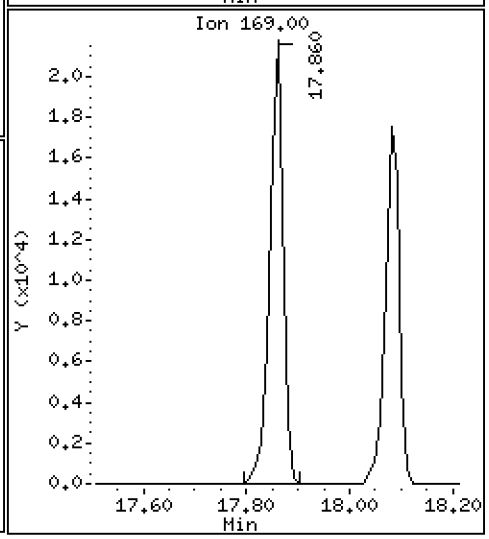












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Date : 05-JUN-2021 00:19

Client ID:

Instrument: nt14.i

Sample Info: SJF0131-ICV1

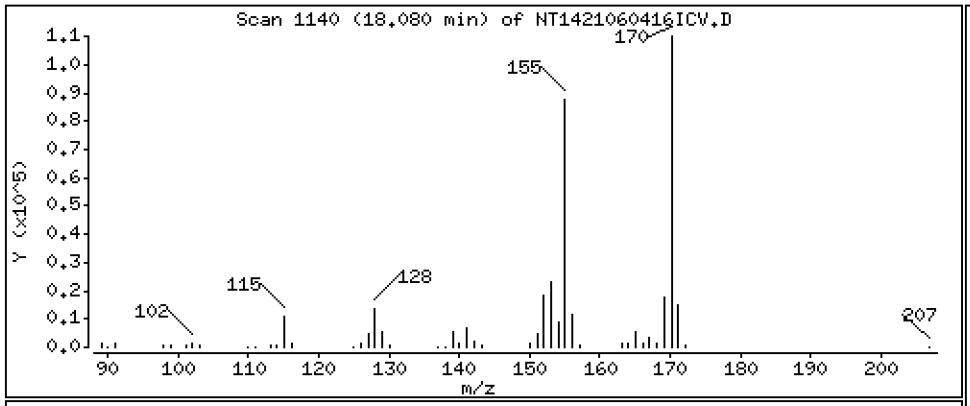
Operator: VTS

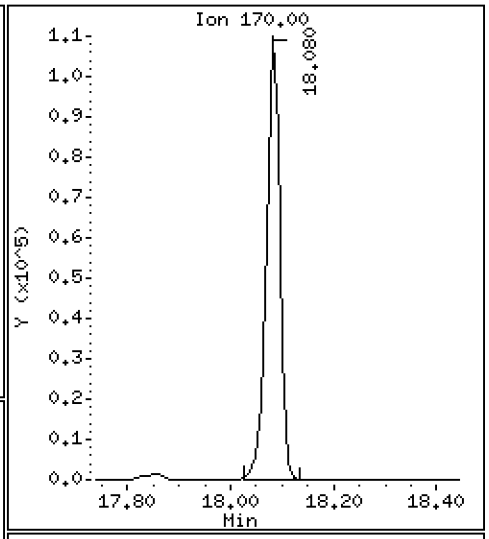
Column phase: Rxi-17Sil MS

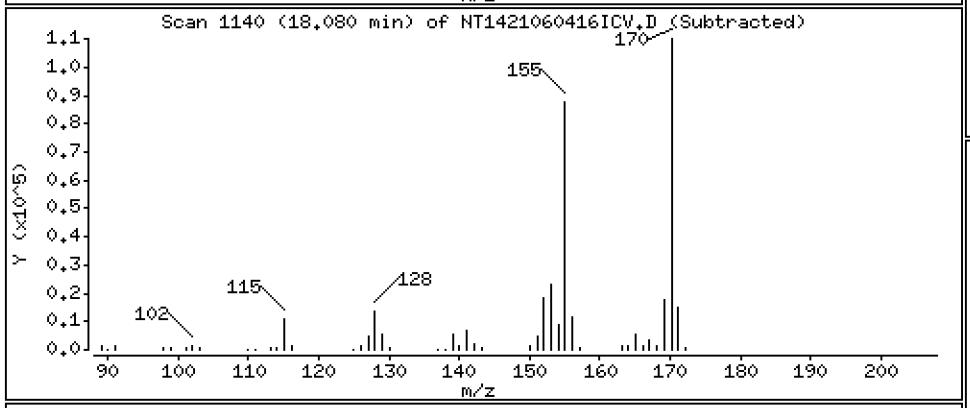
Column diameter: 0.25

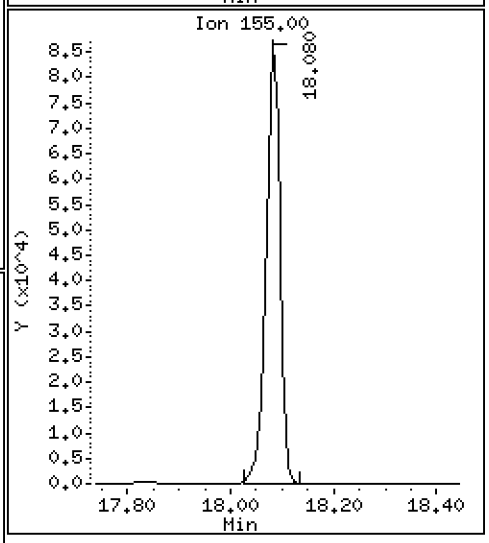
24 1,6,7-Trimethylnaphthalene

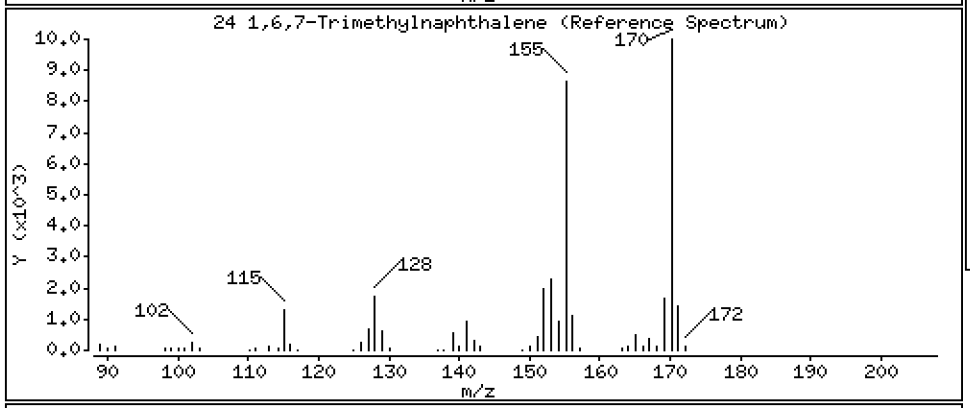
Concentration: 2.543 ug/mL

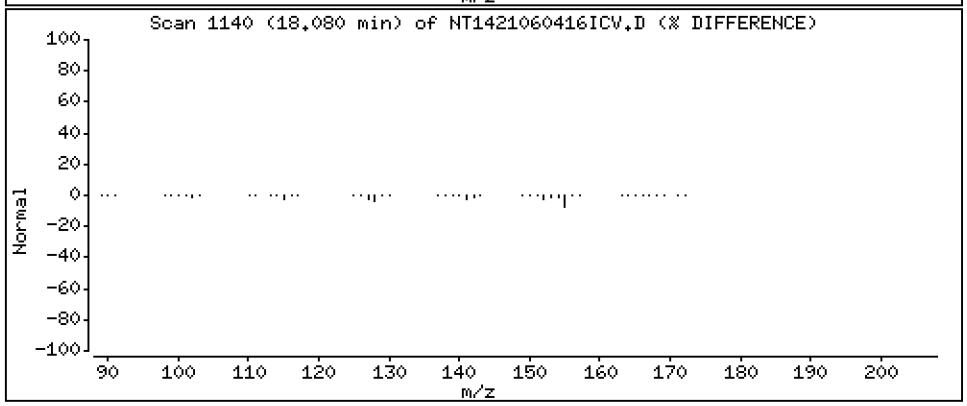












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Date : 05-JUN-2021 00:19

Client ID:

Instrument: nt14.i

Sample Info: SJF0131-ICV1

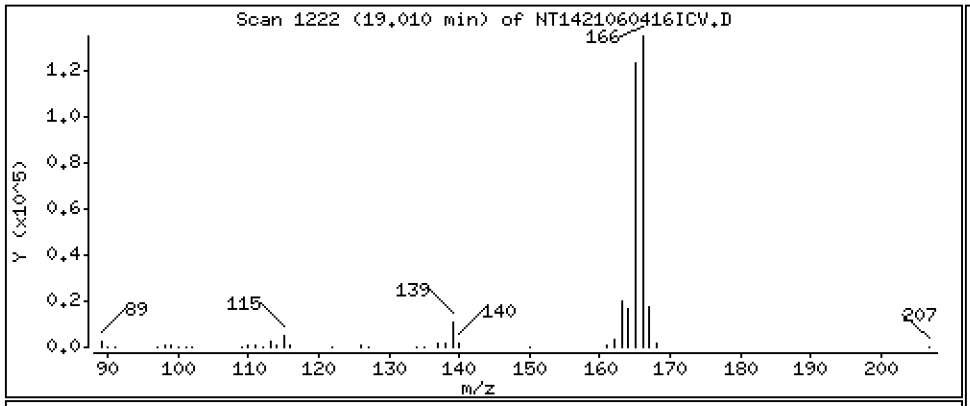
Operator: VTS

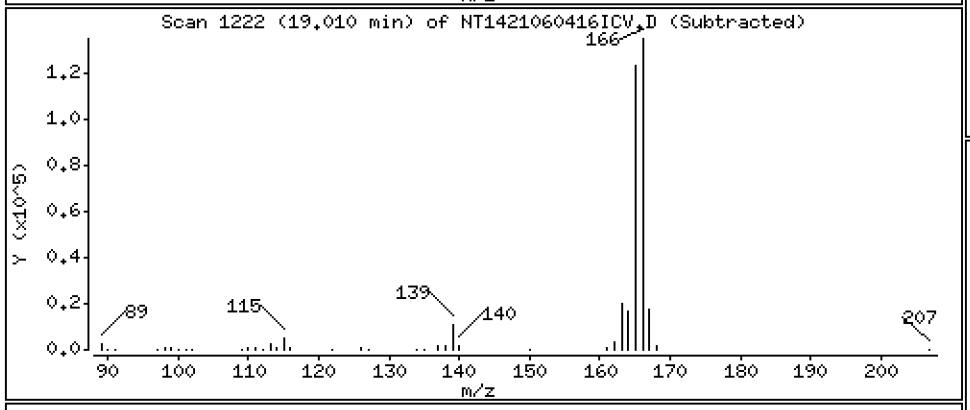
Column phase: Rxi-17Sil MS

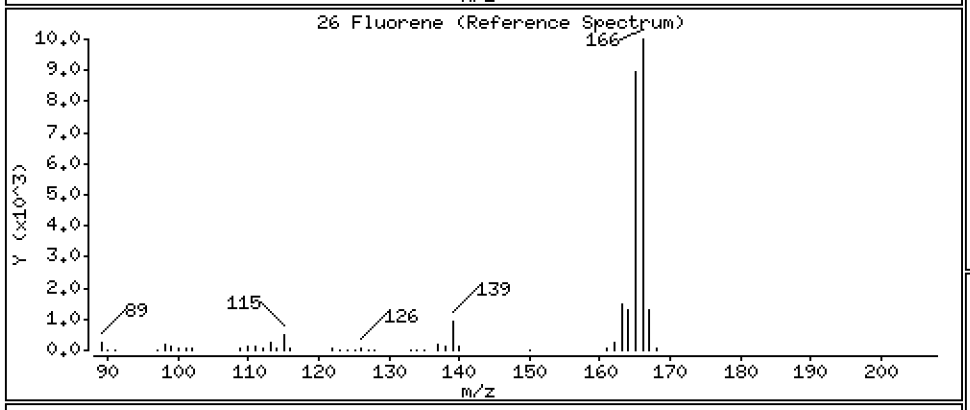
Column diameter: 0.25

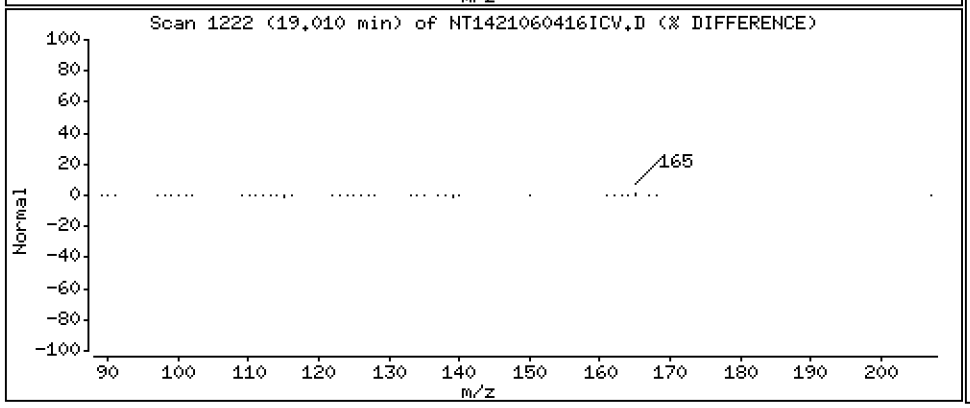
26 Fluorene

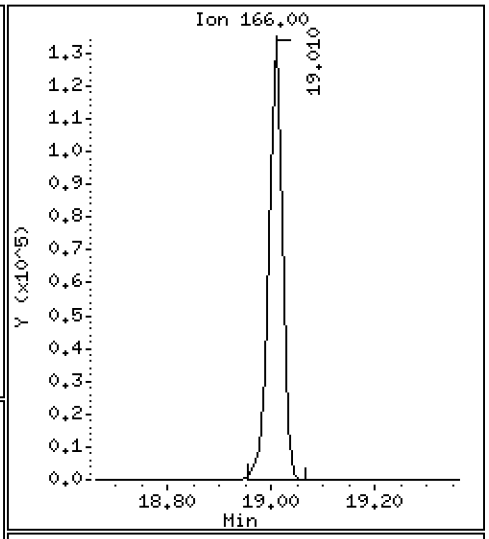
Concentration: 2.567 ug/mL

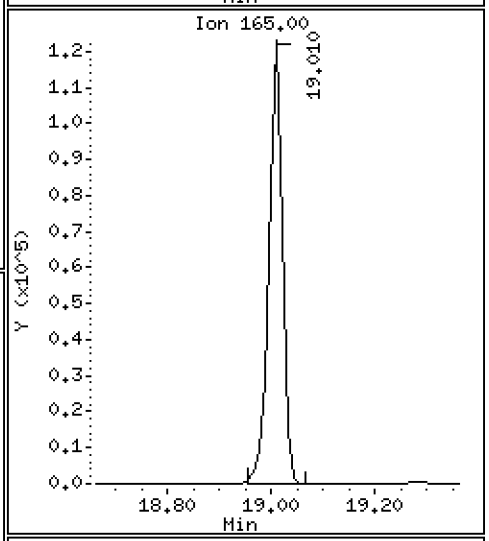


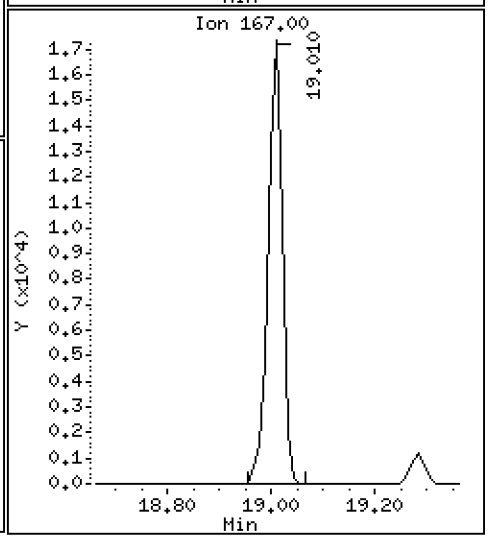












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Date : 05-JUN-2021 00:19

Client ID:

Instrument: nt14.i

Sample Info: SJF0131-ICV1

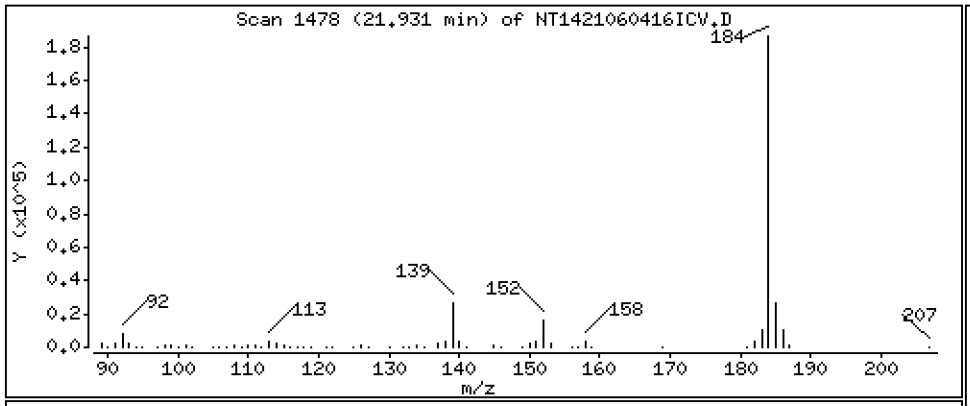
Operator: VTS

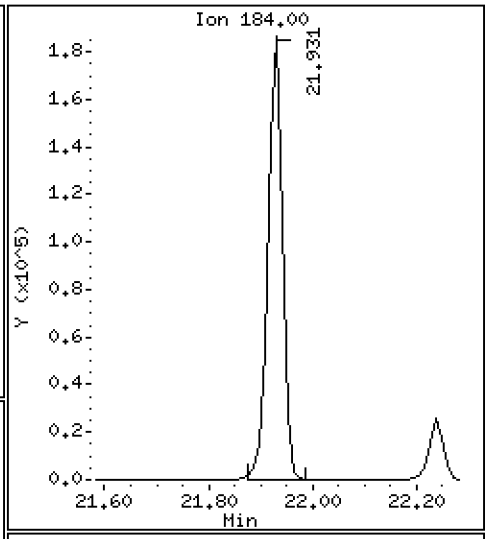
Column phase: Rxi-17Sil MS

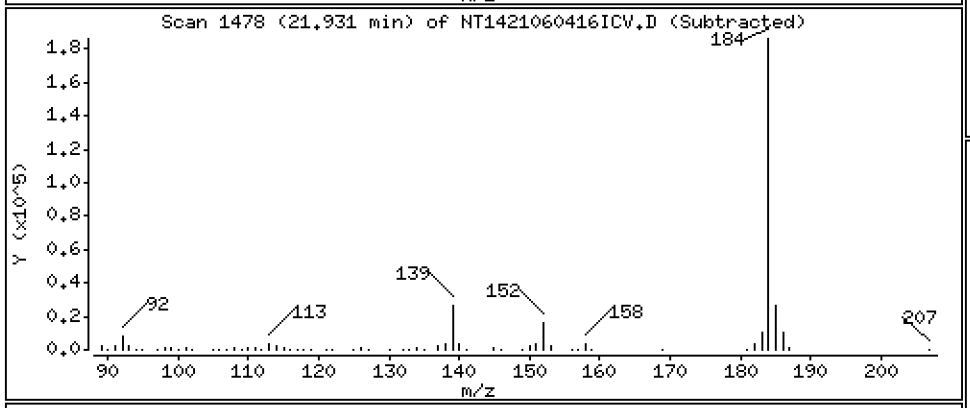
Column diameter: 0.25

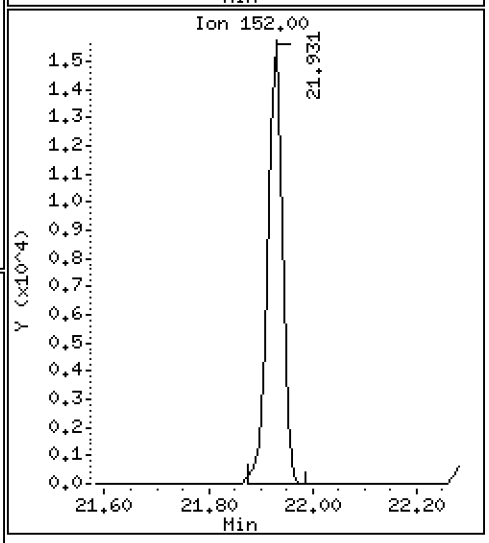
30 Dibenzothiophene

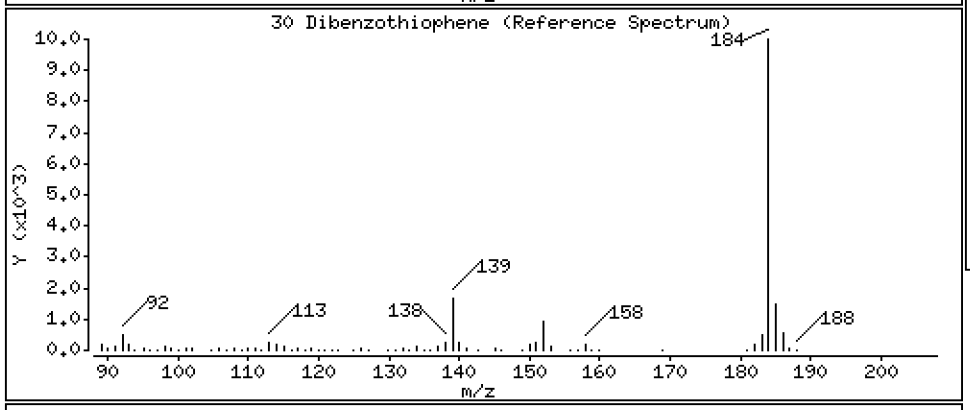
Concentration: 2.594 ug/mL

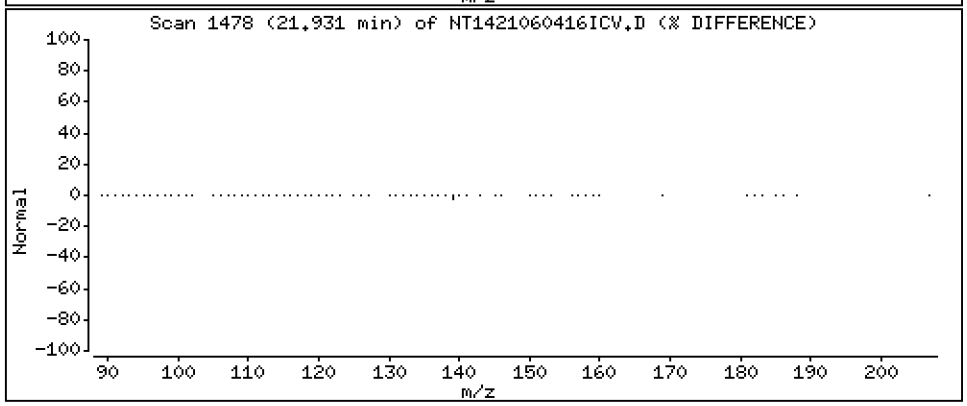












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Date : 05-JUN-2021 00:19

Client ID:

Instrument: nt14.i

Sample Info: SJF0131-ICV1

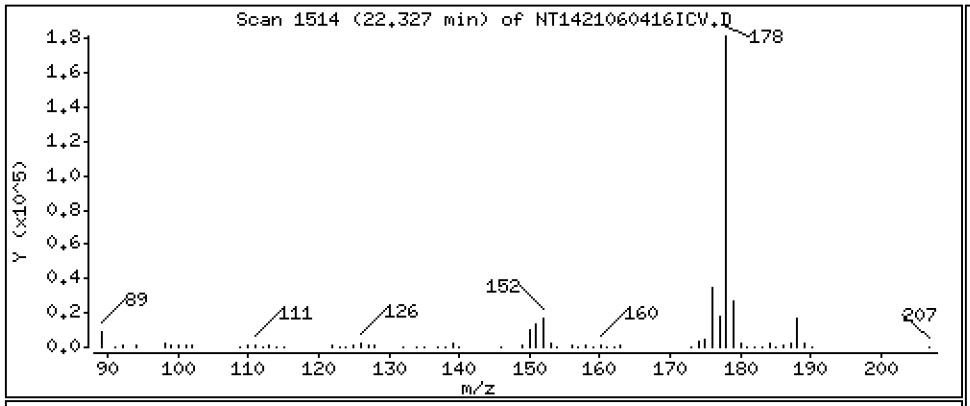
Operator: VTS

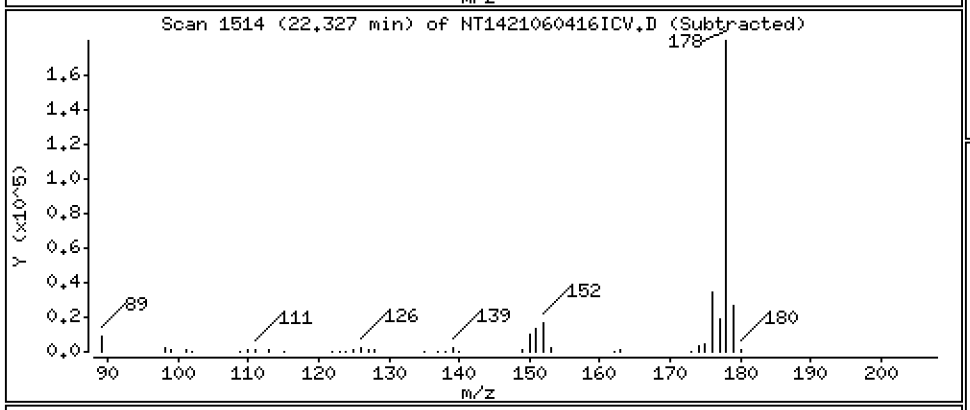
Column phase: Rxi-17Sil MS

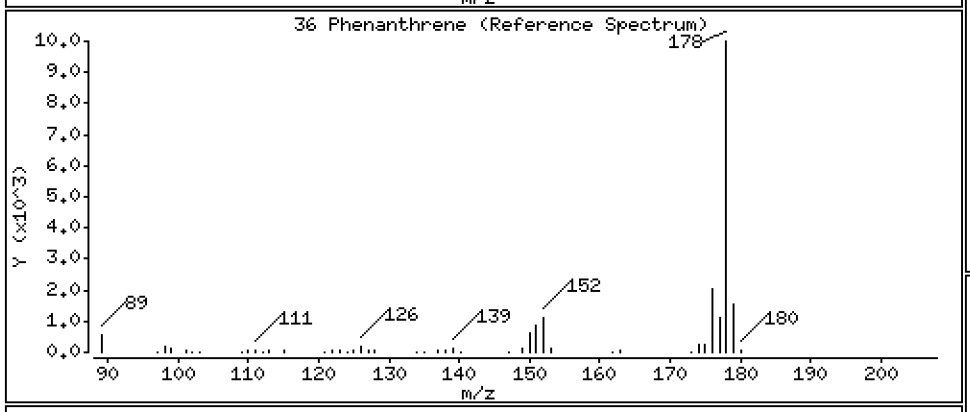
Column diameter: 0.25

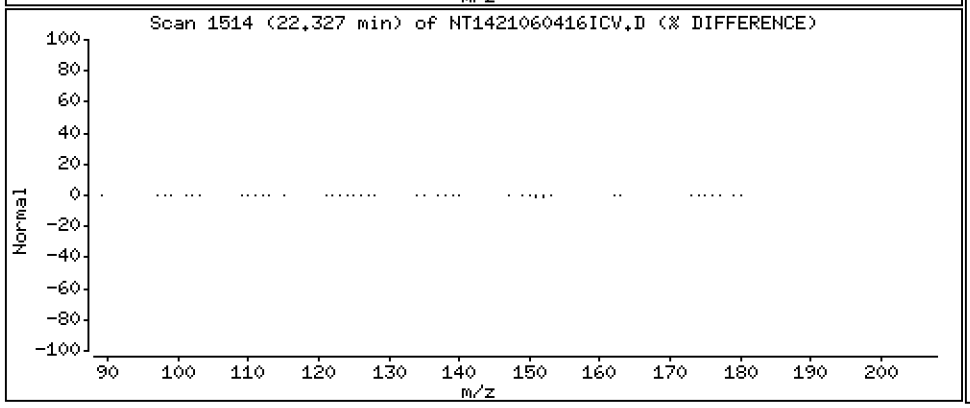
36 Phenanthrene

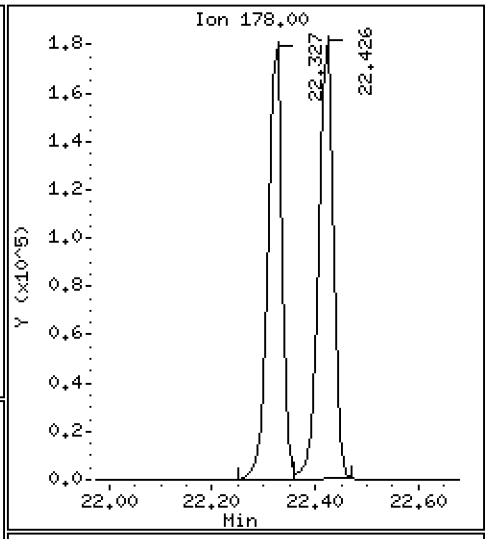
Concentration: 2.502 ug/mL

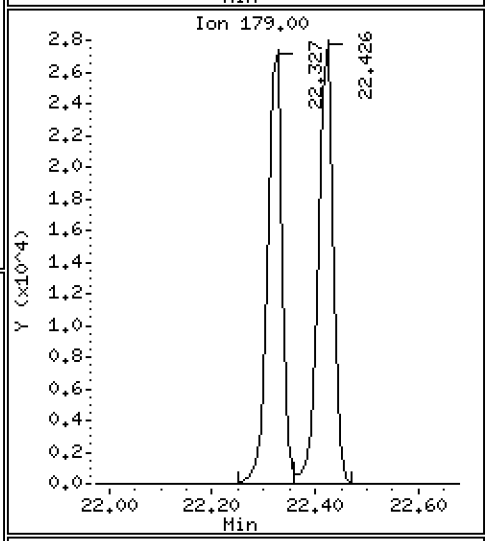


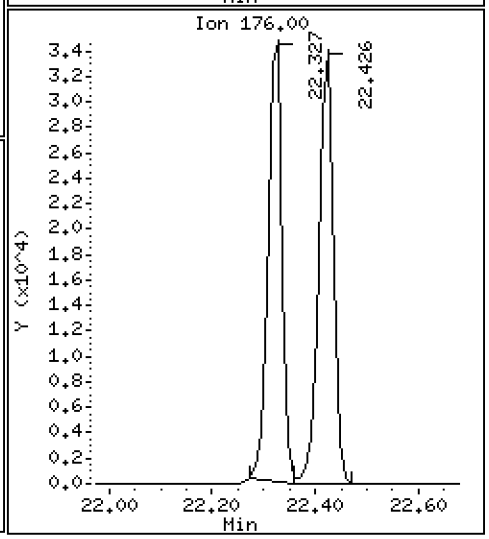












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Date : 05-JUN-2021 00:19

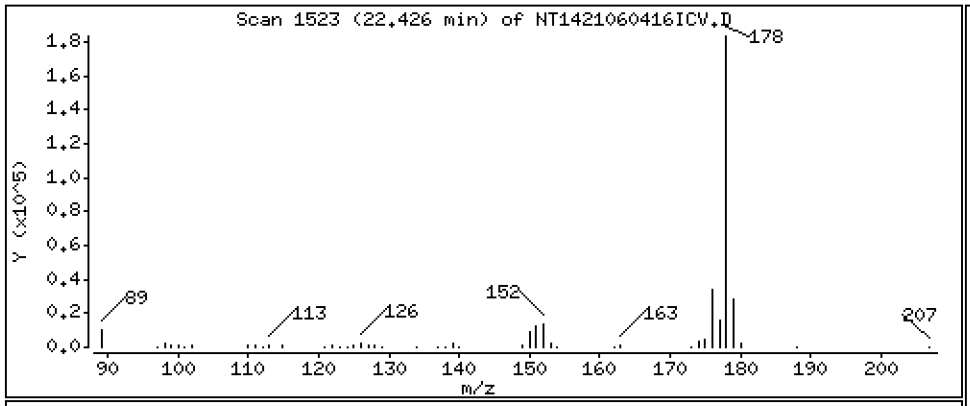
Client ID: Instrument: nt14.i

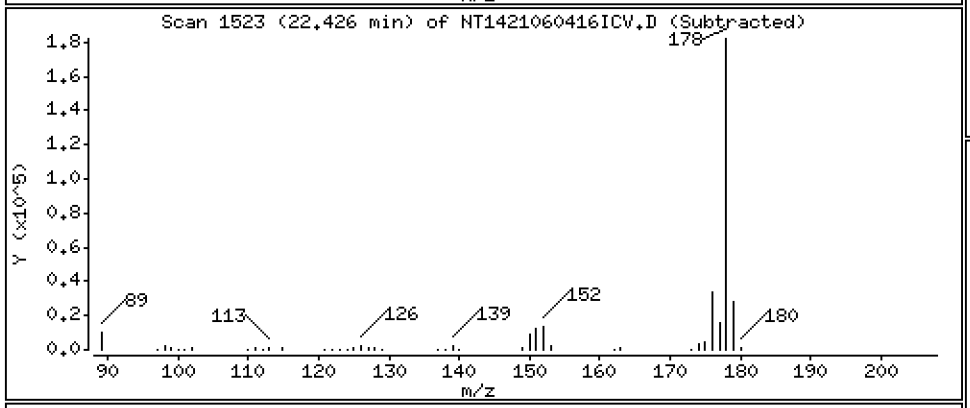
Sample Info: SJF0131-ICV1

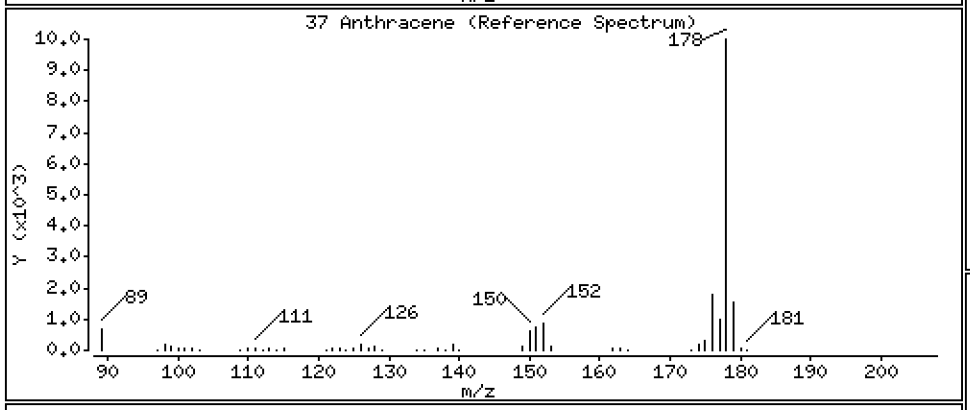
Operator: VTS

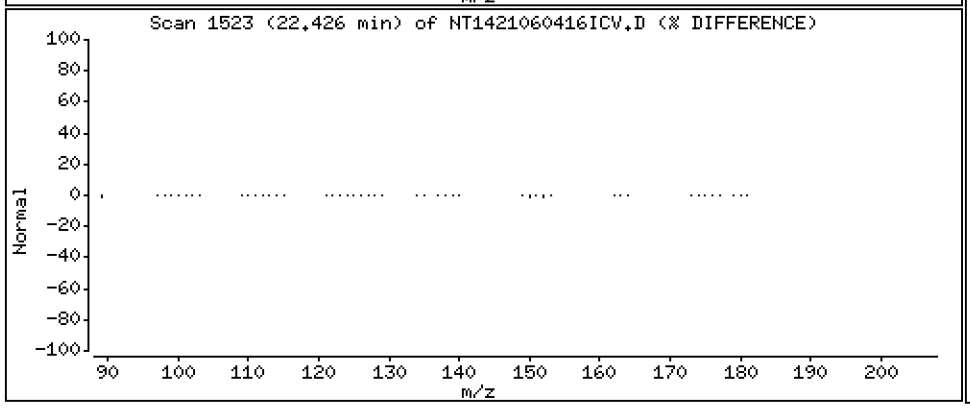
Column phase: Rxi-17Sil MS Column diameter: 0.25

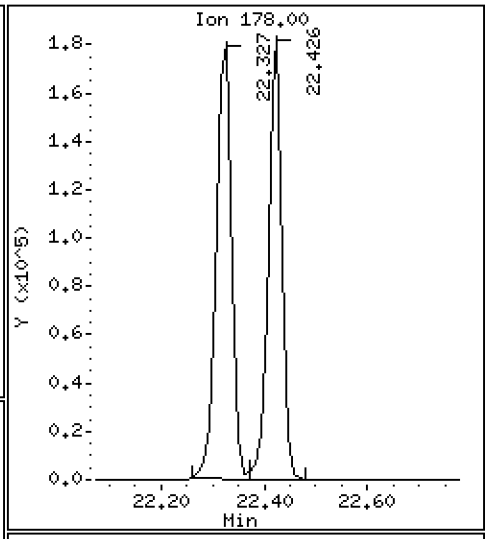
37 Anthracene Concentration: 2.588 ug/mL

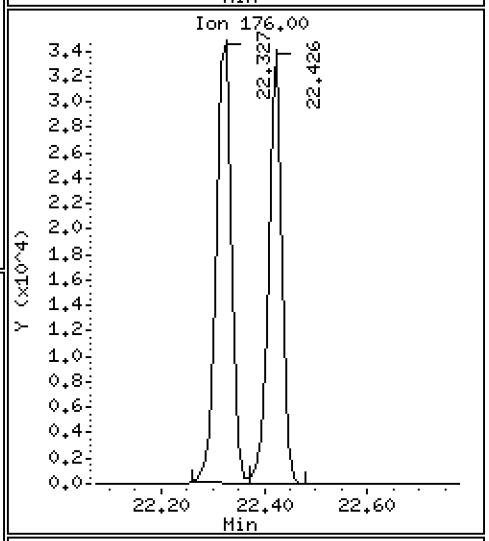


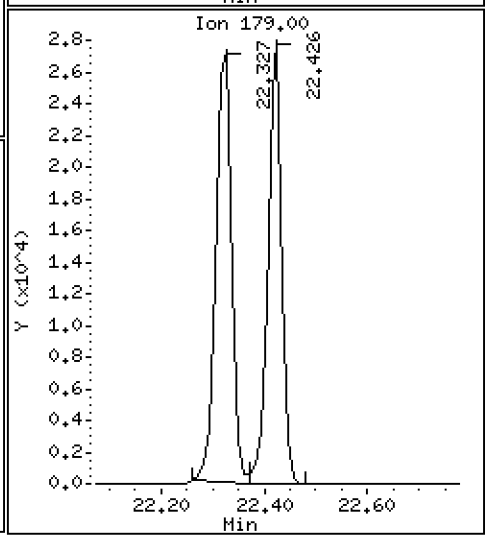












Data File: \\target\share\chem3\nt14.i\20210604A.b\NT1421060416ICV.D

Date : 05-JUN-2021 00:19

Client ID:

Instrument: nt14.i

Sample Info: SJF0131-ICV1

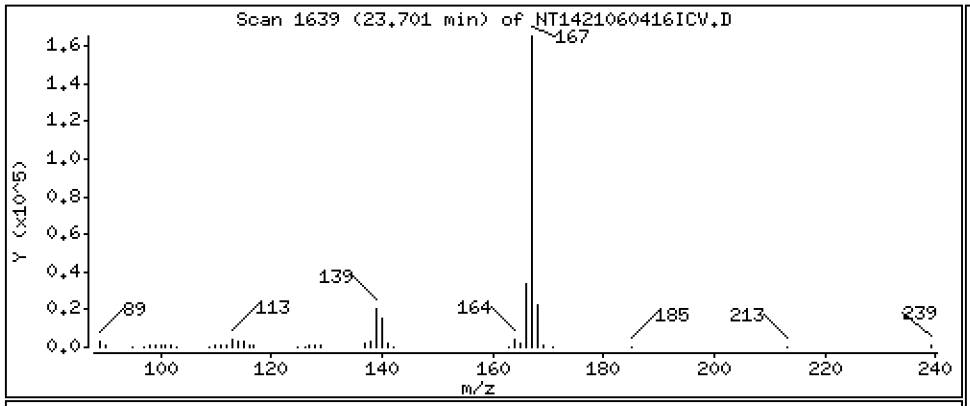
Operator: VTS

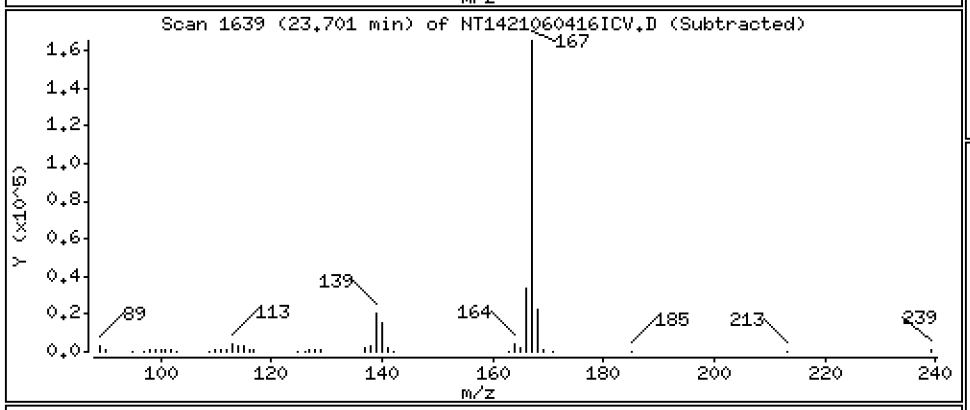
Column phase: Rxi-17Sil MS

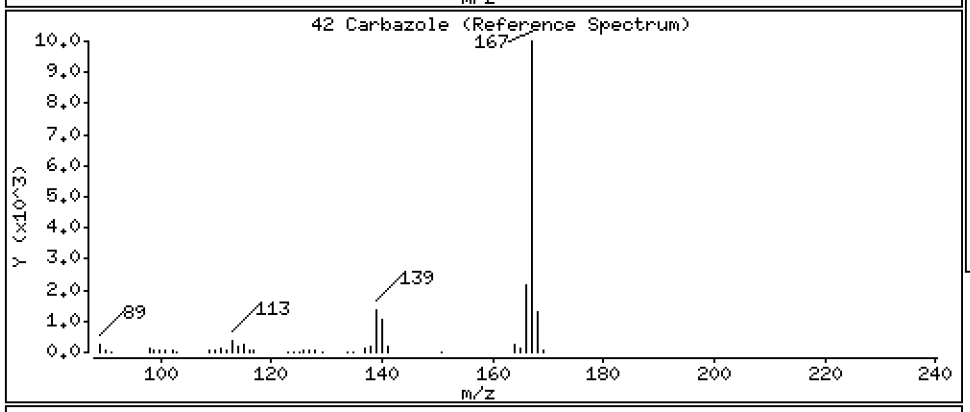
Column diameter: 0.25

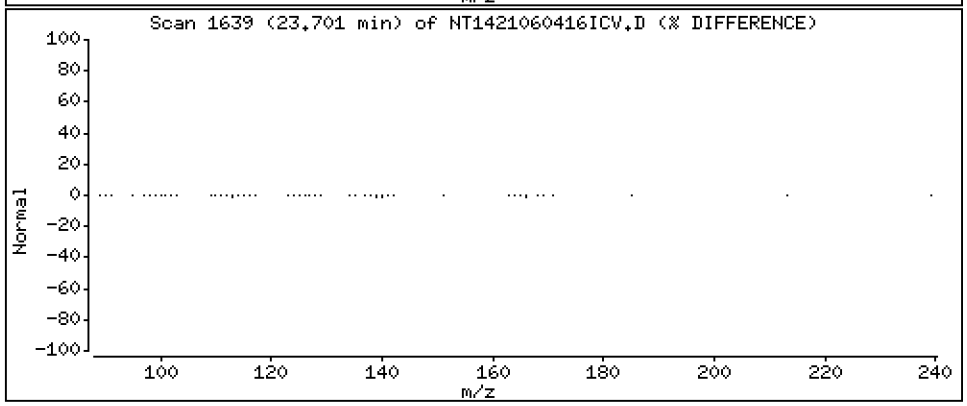
42 Carbazole

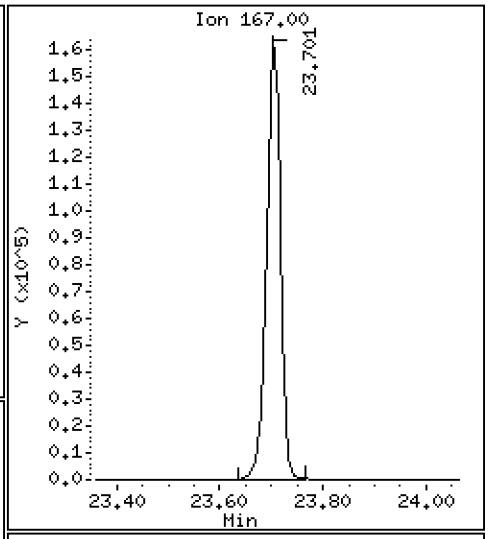
Concentration: 2.525 ug/mL

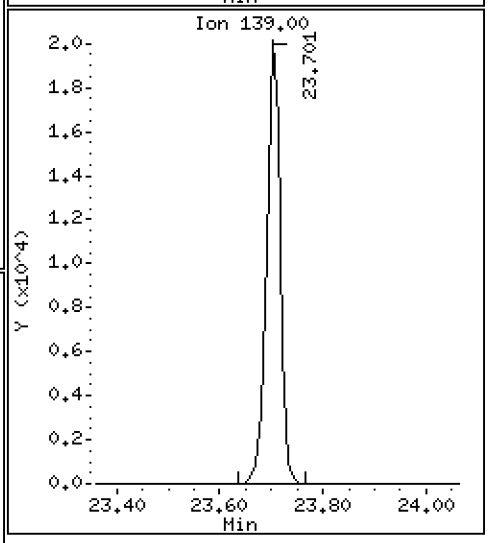












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Date : 05-JUN-2021 00:19

Client ID:

Instrument: nt14.i

Sample Info: SJF0131-ICV1

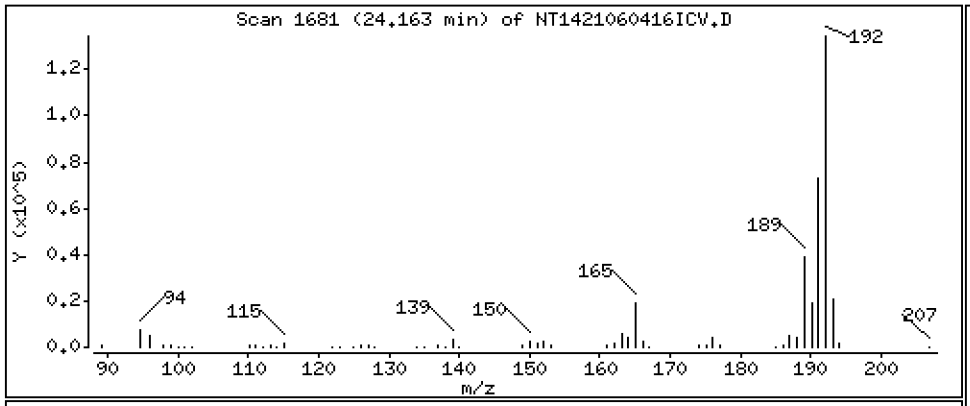
Operator: VTS

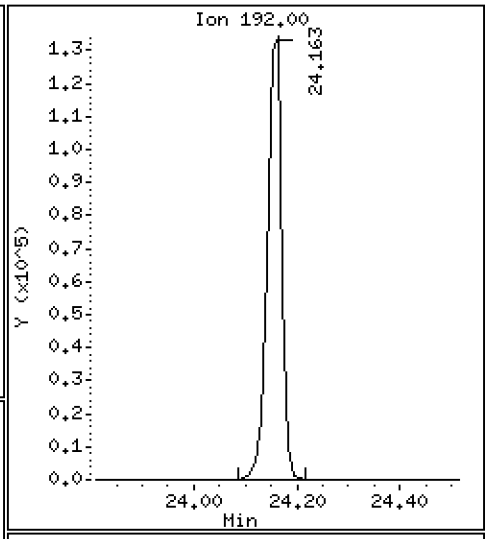
Column phase: Rxi-17Sil MS

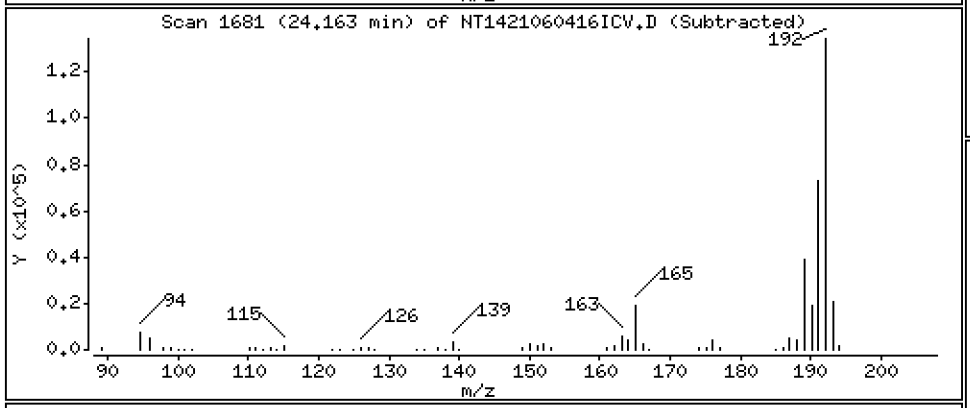
Column diameter: 0.25

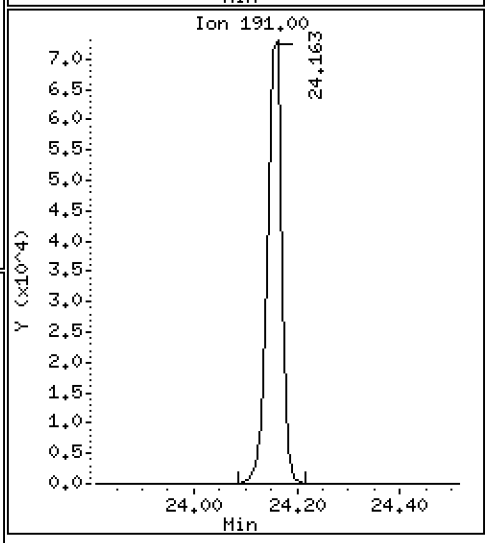
43 1-Methylphenanthrene

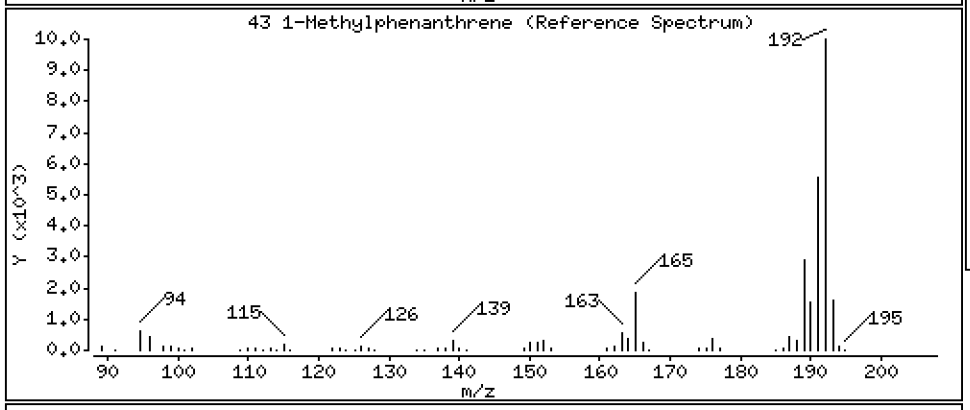
Concentration: 2.617 ug/mL

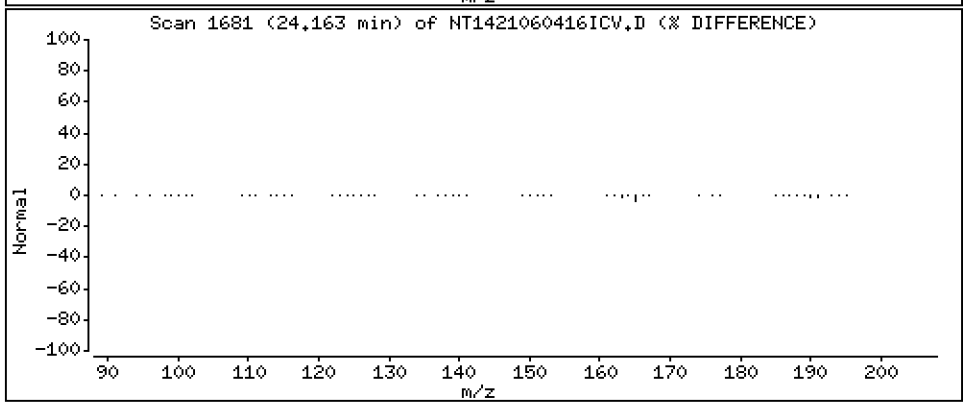












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Date : 05-JUN-2021 00:19

Client ID:

Instrument: nt14.i

Sample Info: SJF0131-ICV1

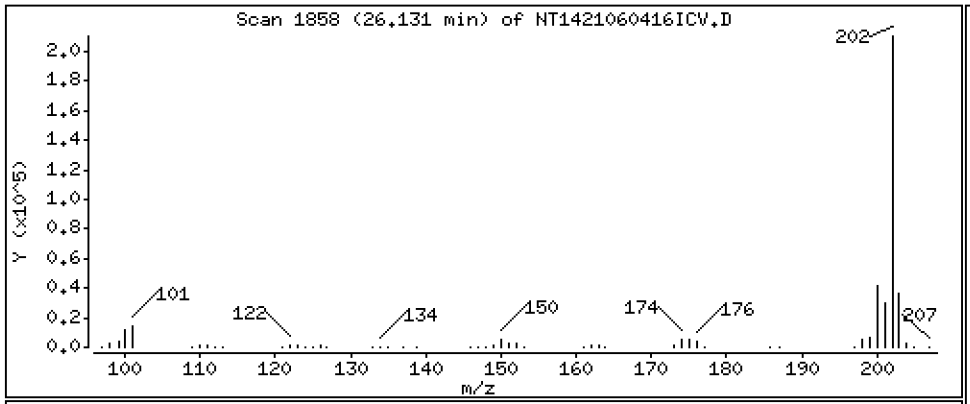
Operator: VTS

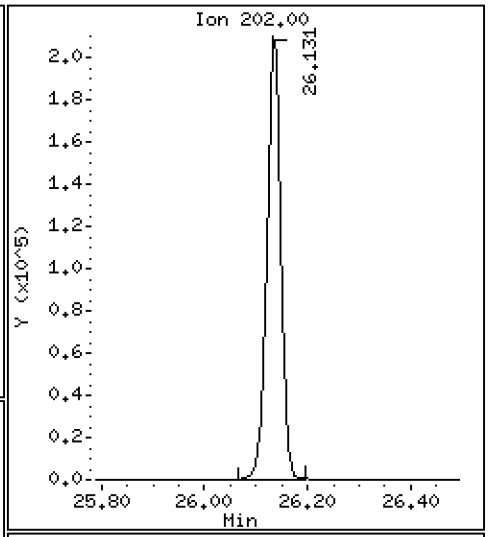
Column phase: Rxi-17Sil MS

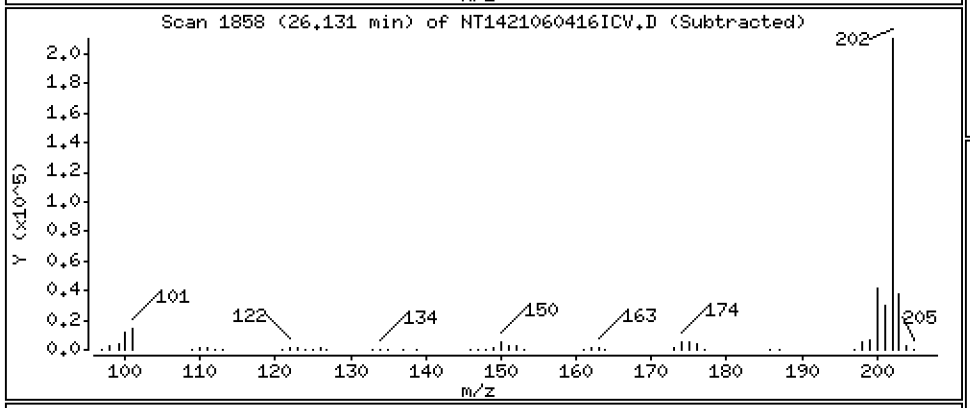
Column diameter: 0.25

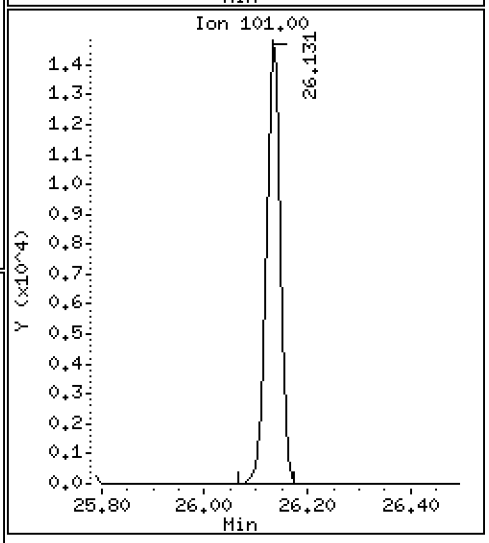
44 Fluoranthene

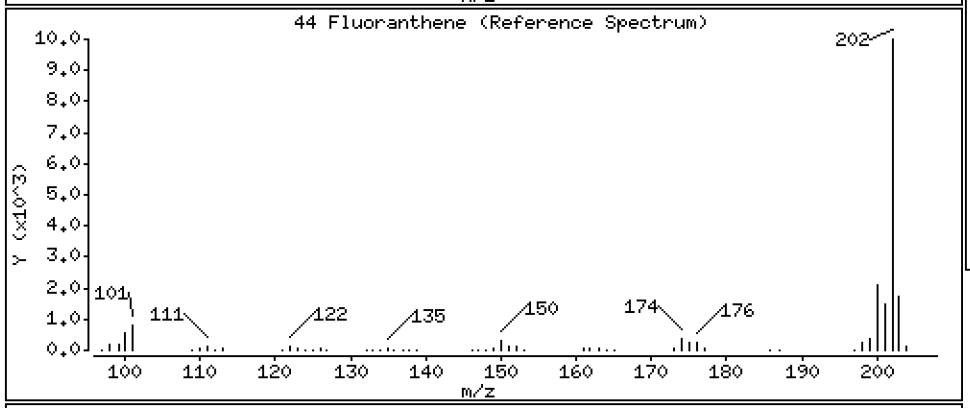
Concentration: 2.646 ug/mL

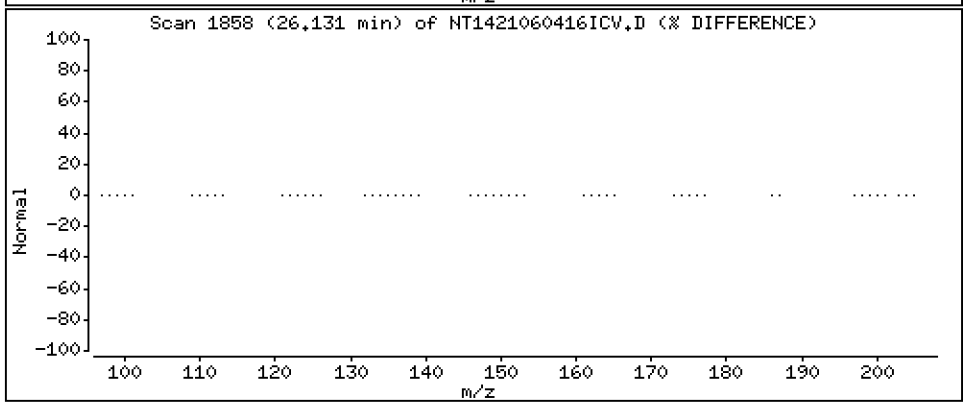












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Date : 05-JUN-2021 00:19

Client ID:

Instrument: nt14.i

Sample Info: SJF0131-ICV1

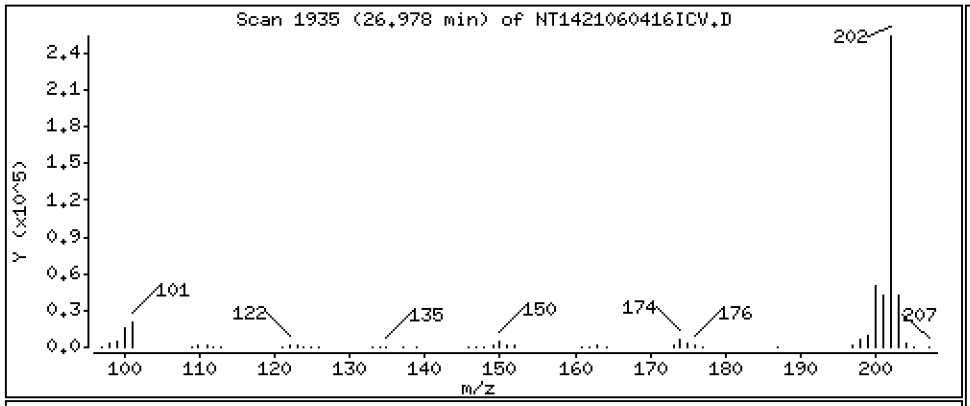
Operator: VTS

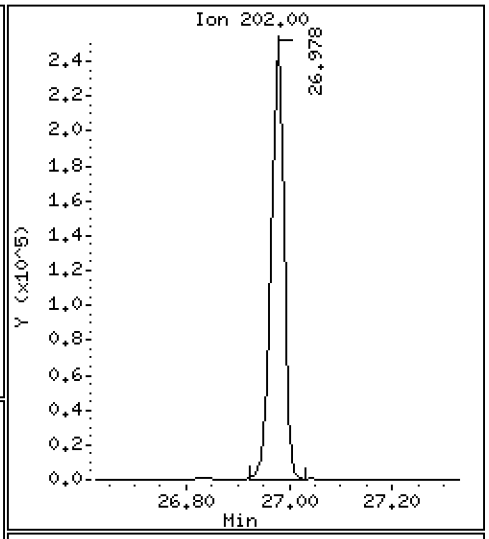
Column phase: Rxi-17Sil MS

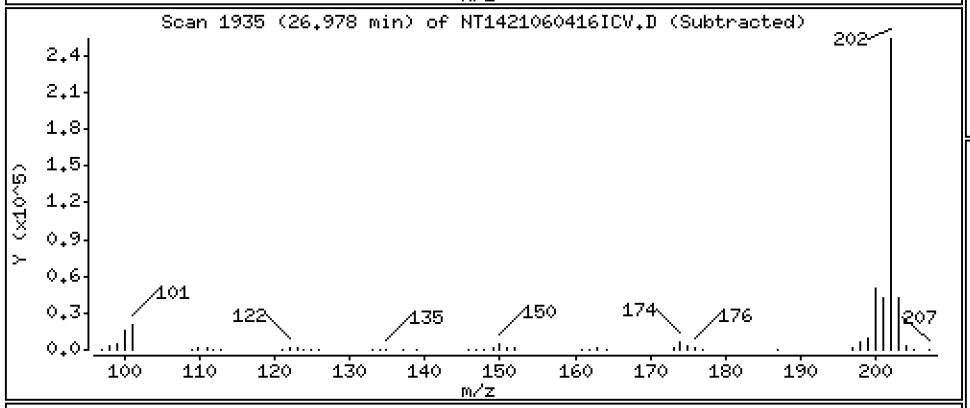
Column diameter: 0.25

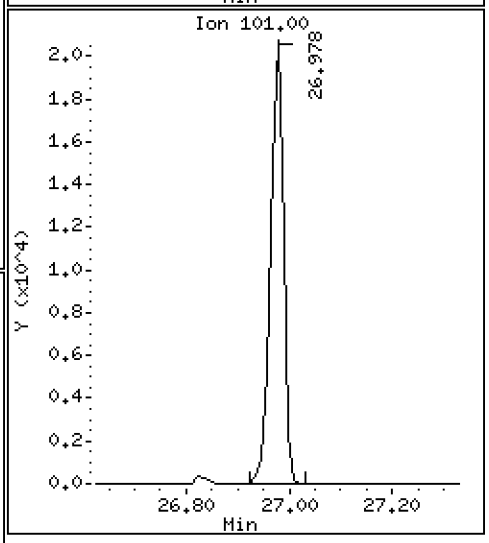
46 Pyrene

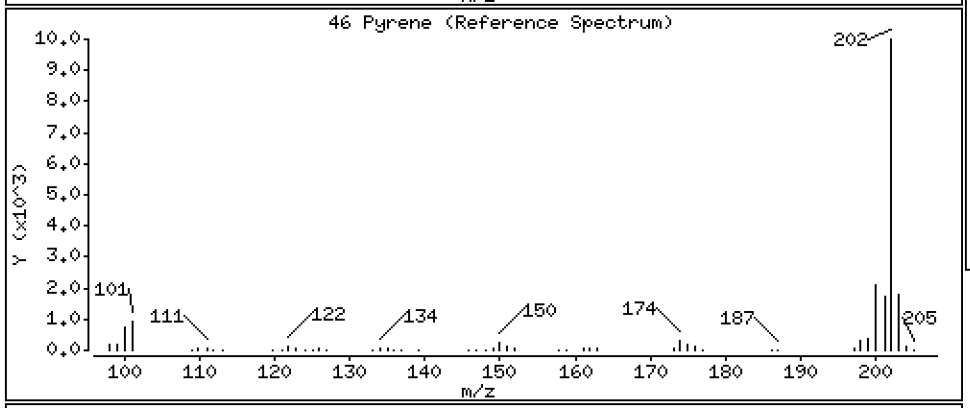
Concentration: 2.672 ug/mL

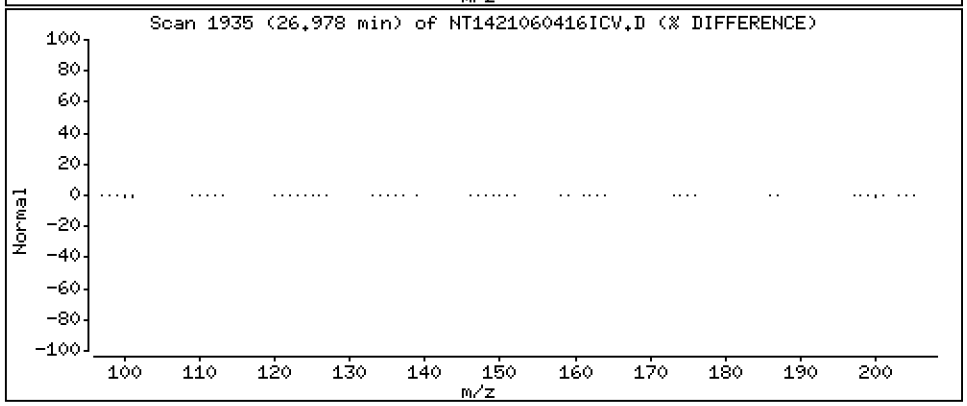












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Date : 05-JUN-2021 00:19

Client ID:

Instrument: nt14.i

Sample Info: SJF0131-ICV1

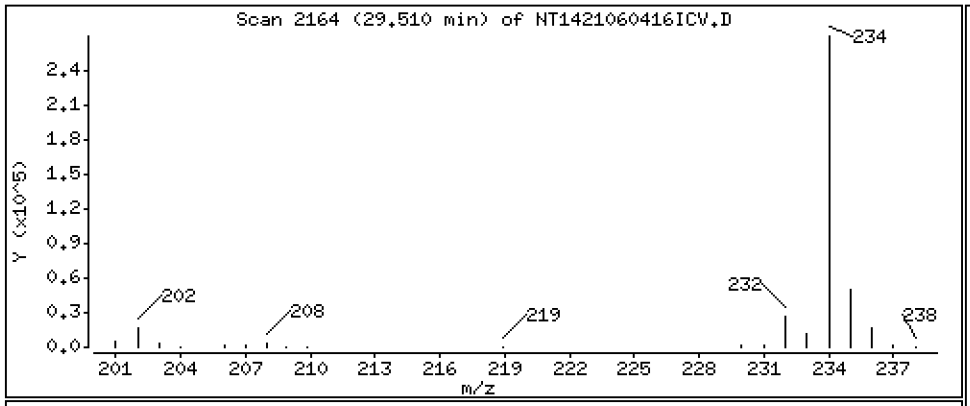
Operator: VTS

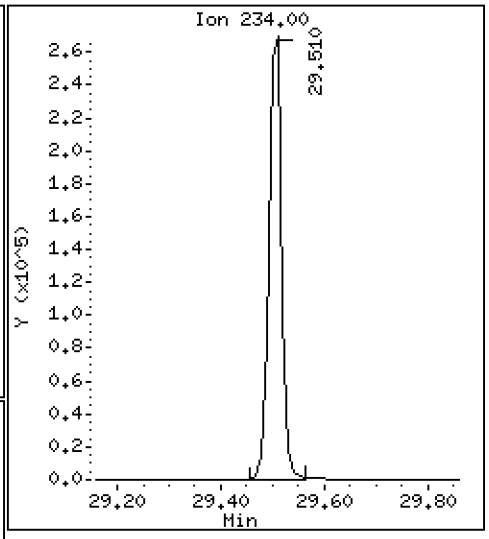
Column phase: Rxi-17Sil MS

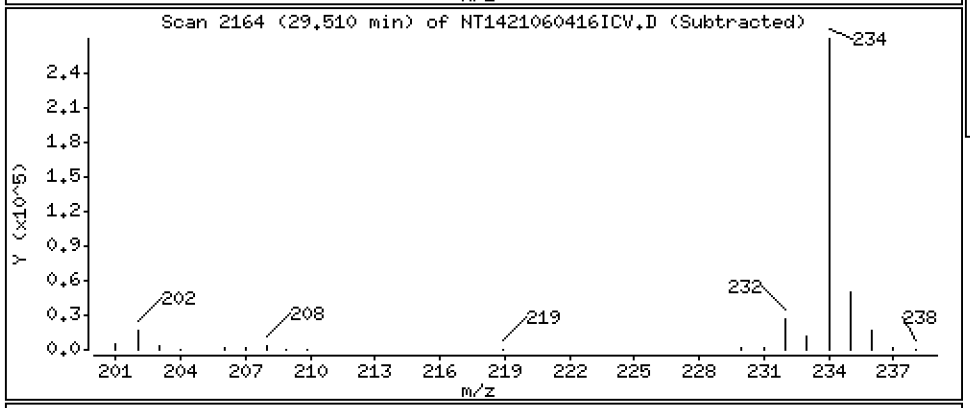
Column diameter: 0.25

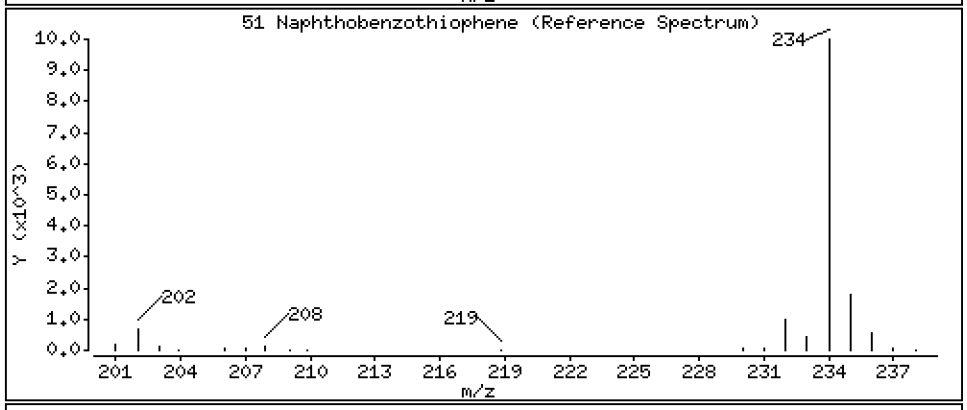
51 Naphthobenzothiophene

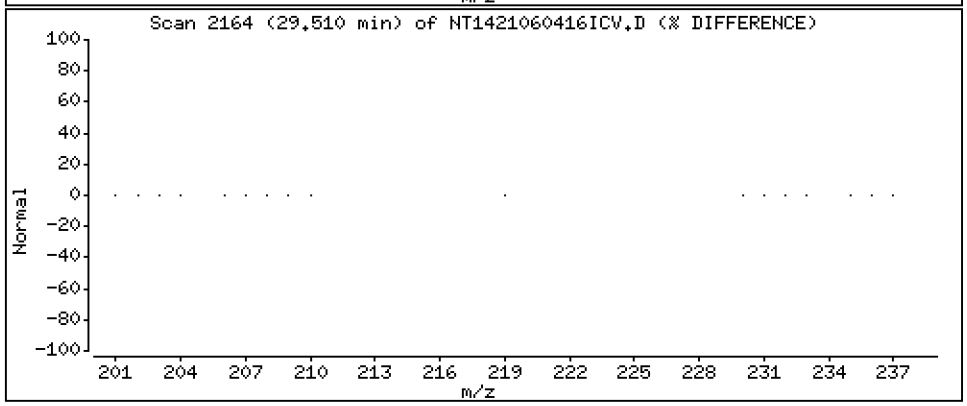
Concentration: 2.674 ug/mL











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Date : 05-JUN-2021 00:19

Client ID:

Instrument: nt14.i

Sample Info: SJF0131-ICV1

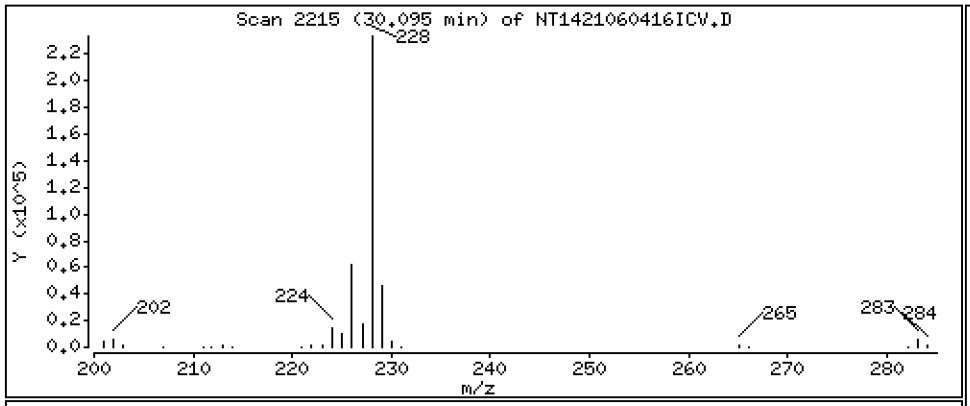
Operator: VTS

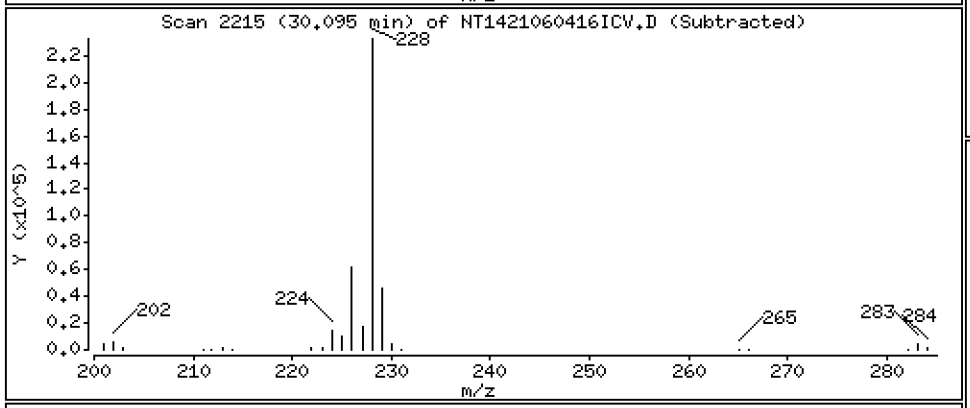
Column phase: Rxi-17Sil MS

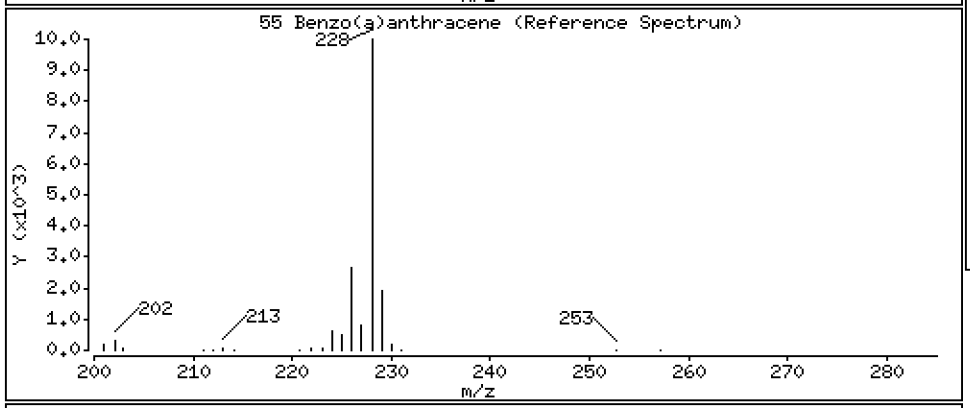
Column diameter: 0.25

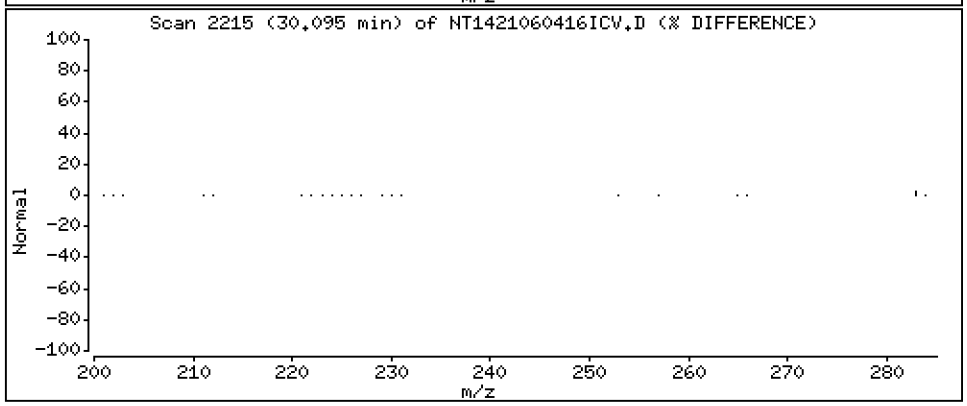
55 Benzo(a)anthracene

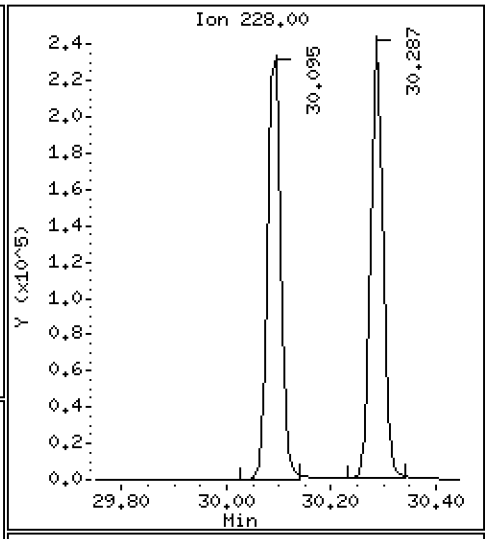
Concentration: 2.713 ug/mL

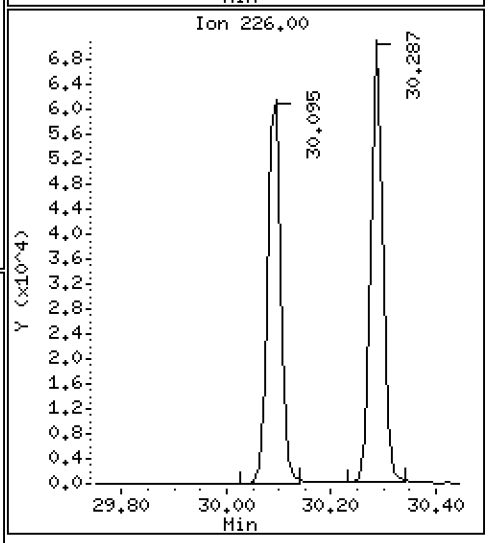












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Date : 05-JUN-2021 00:19

Client ID:

Instrument: nt14.i

Sample Info: SJF0131-ICV1

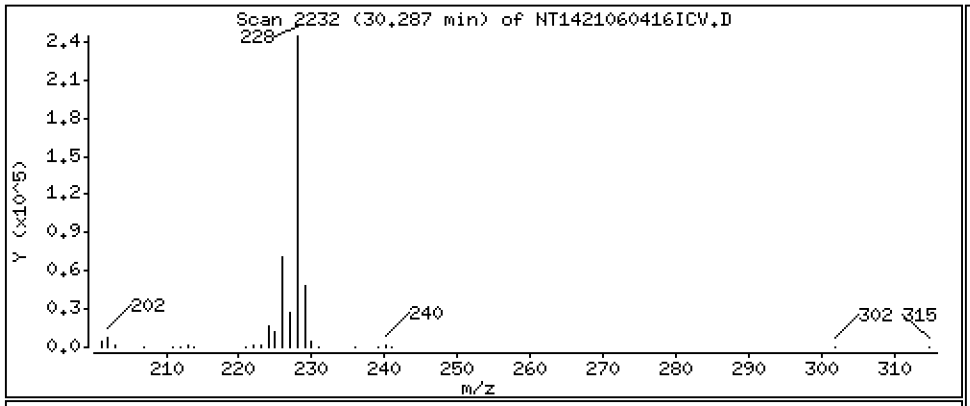
Operator: VTS

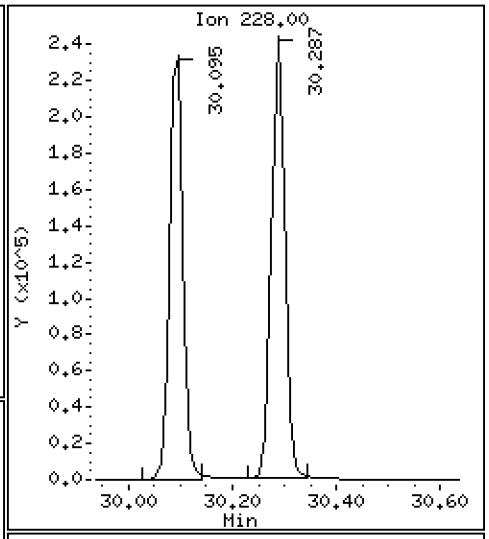
Column phase: Rxi-17Sil MS

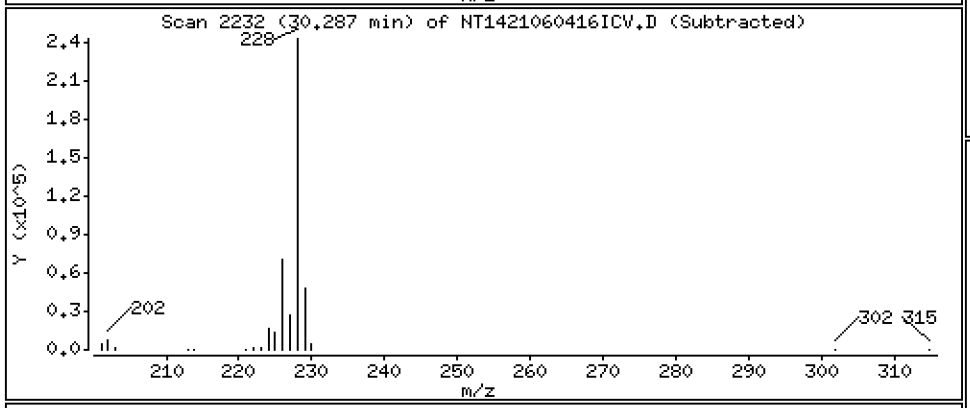
Column diameter: 0.25

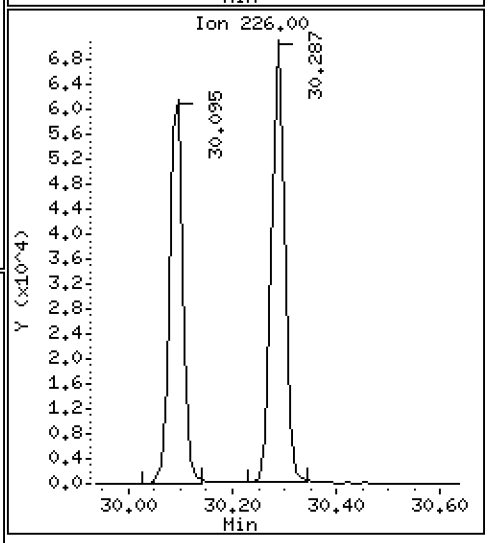
57 Chrysene

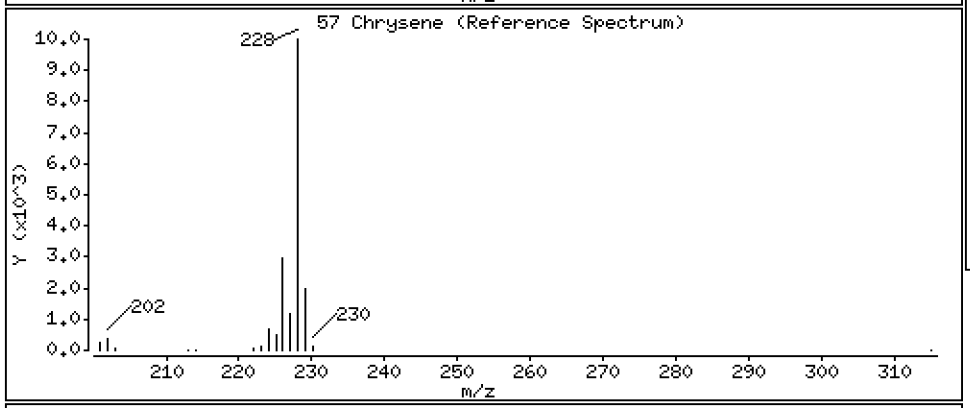
Concentration: 2.616 ug/mL

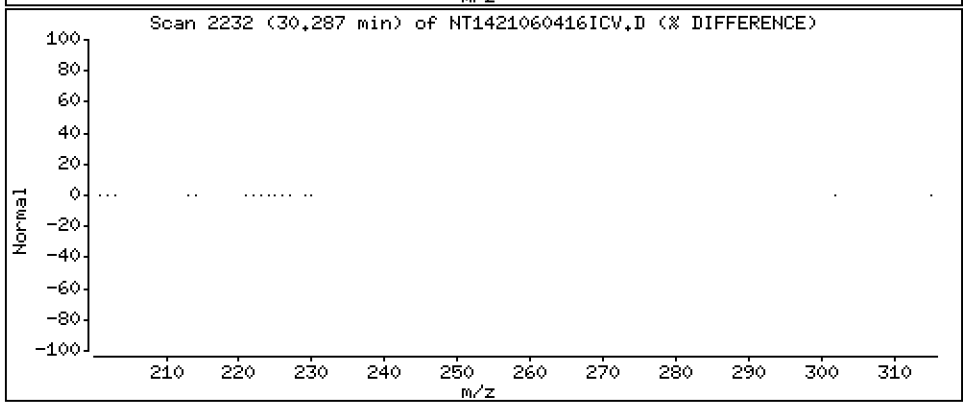












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Date : 05-JUN-2021 00:19

Client ID:

Instrument: nt14.i

Sample Info: SJF0131-ICV1

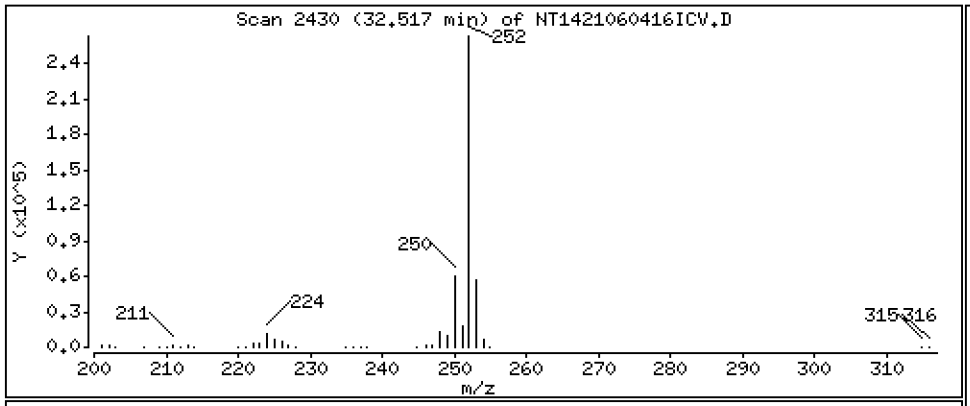
Operator: VTS

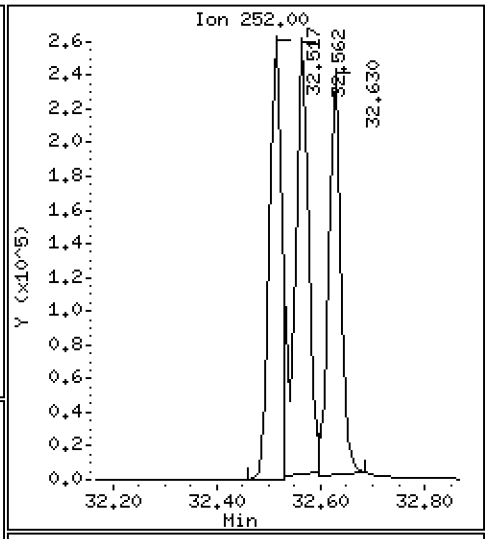
Column phase: Rxi-17Sil MS

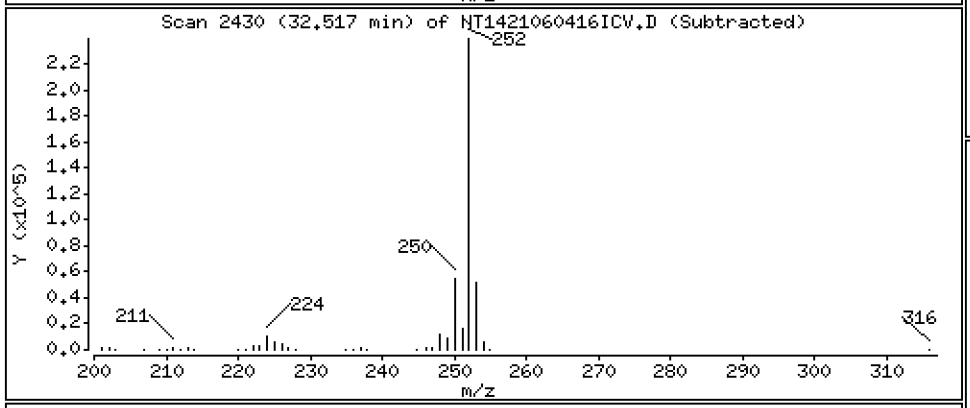
Column diameter: 0.25

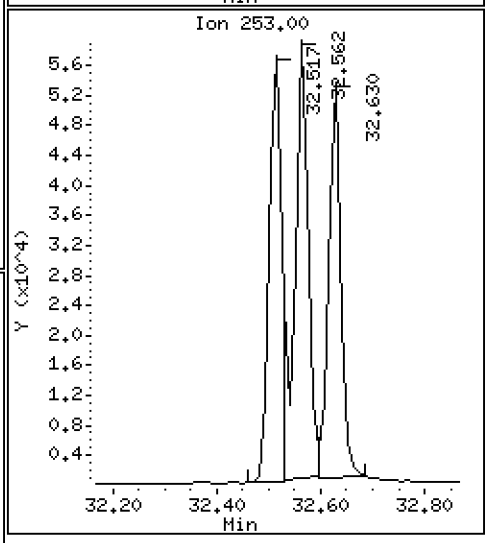
62 Benzo(b)fluoranthene

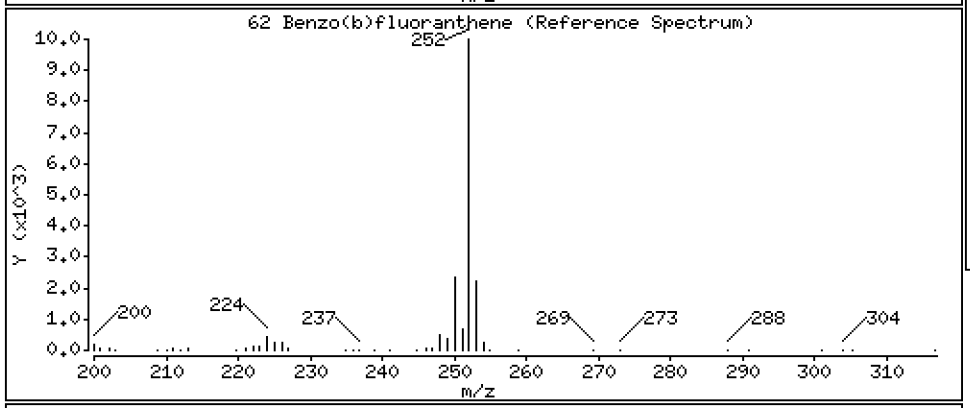
Concentration: 2.549 ug/mL

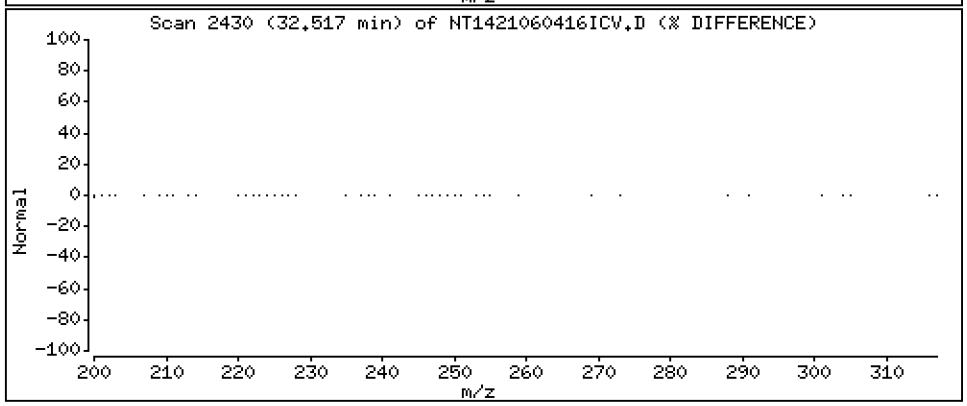












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Date : 05-JUN-2021 00:19

Client ID:

Instrument: nt14.i

Sample Info: SJF0131-ICV1

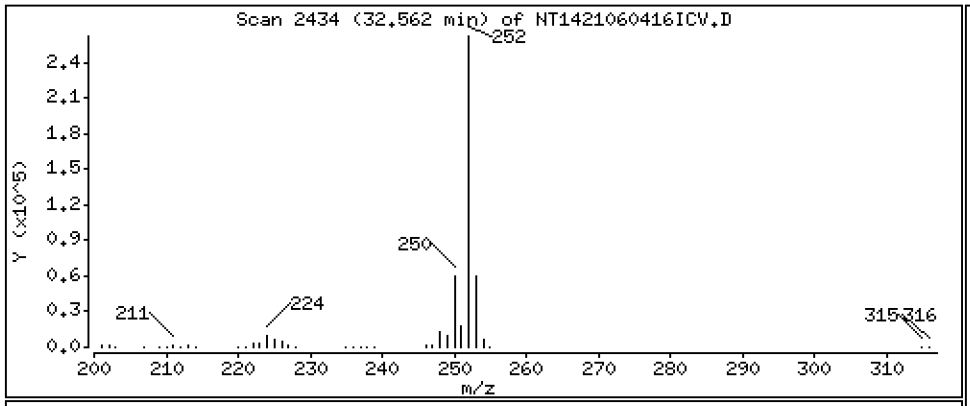
Operator: VTS

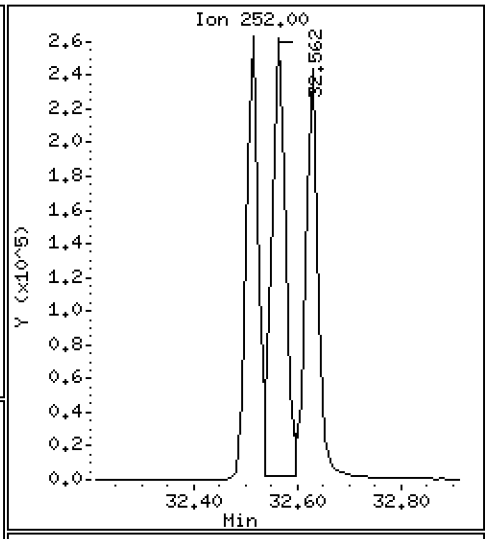
Column phase: Rxi-17Sil MS

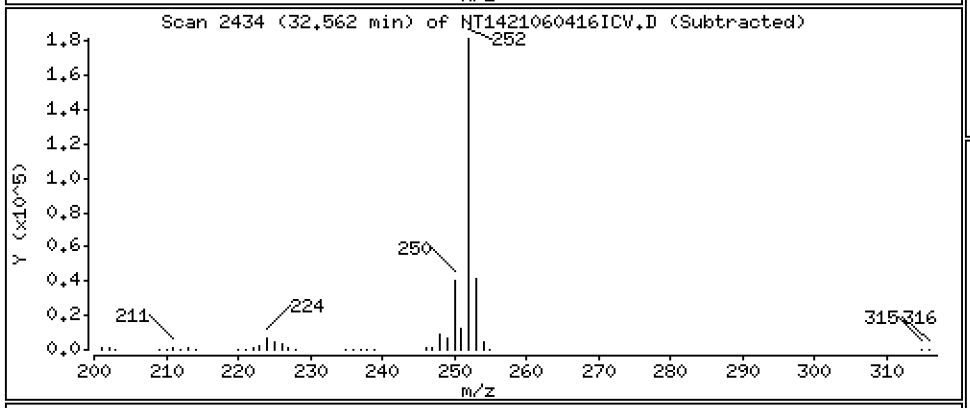
Column diameter: 0.25

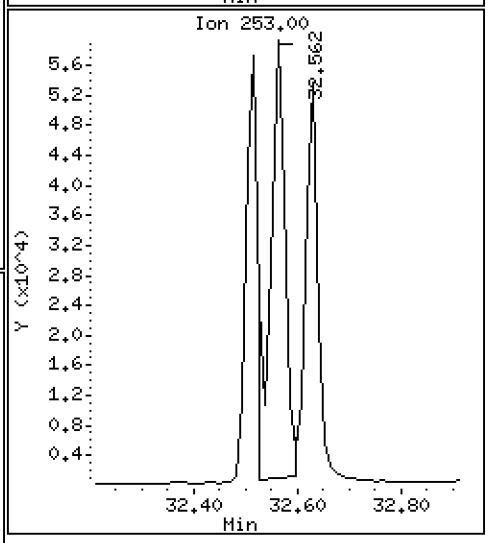
63 Benzo(k)fluoranthene

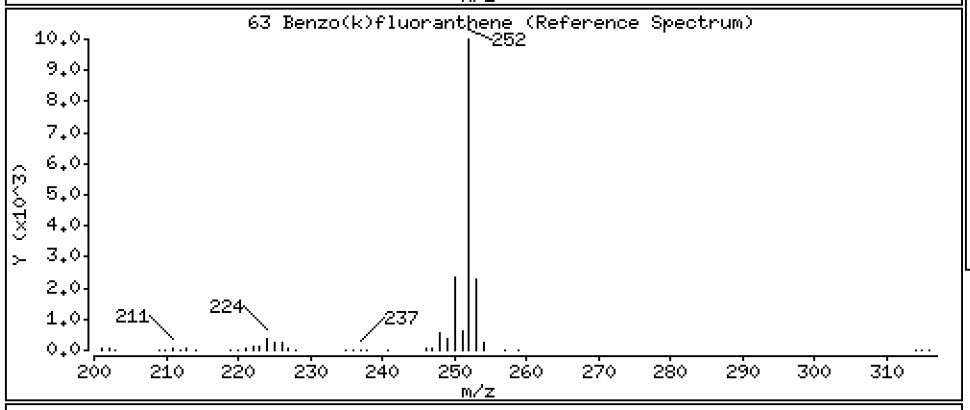
Concentration: 2.611 ug/mL

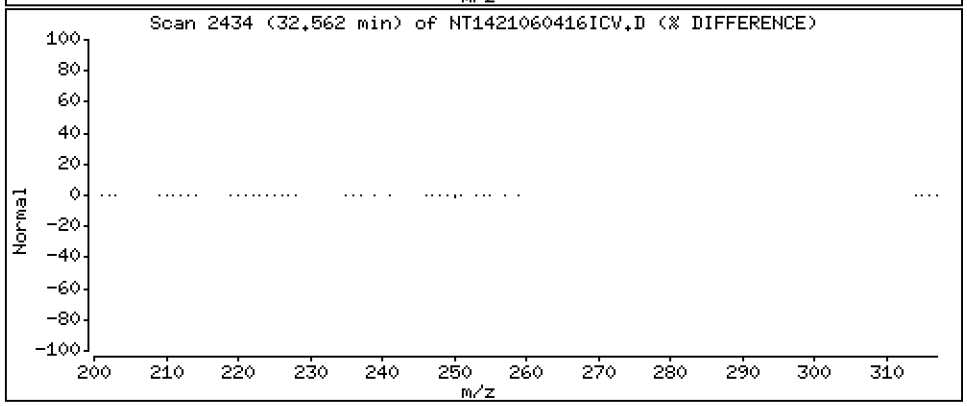












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Date : 05-JUN-2021 00:19

Client ID:

Instrument: nt14.i

Sample Info: SJF0131-ICV1

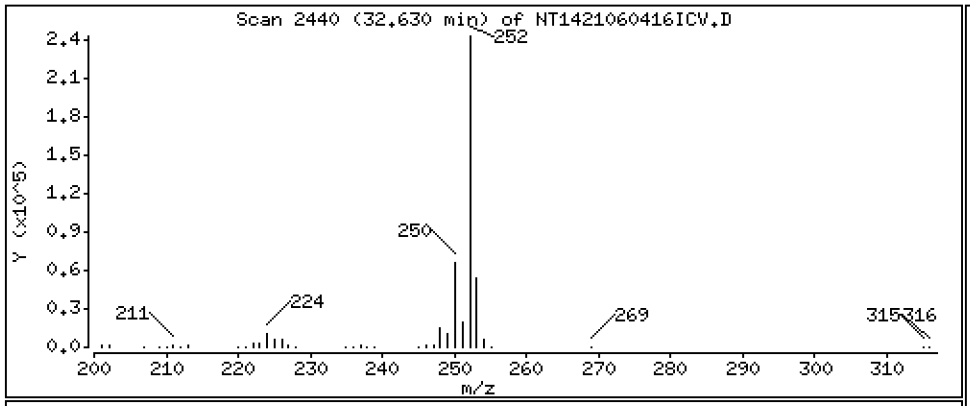
Operator: VTS

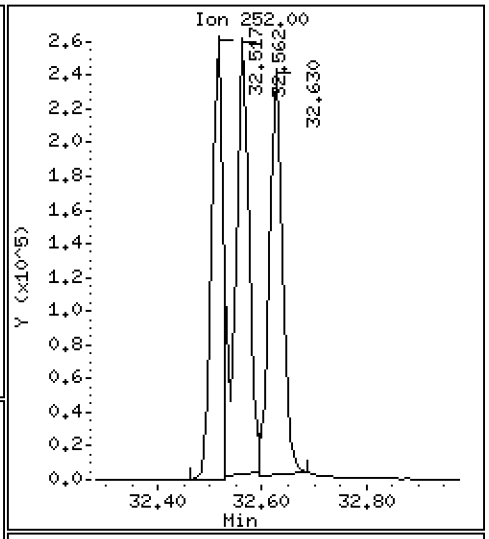
Column phase: Rxi-17Sil MS

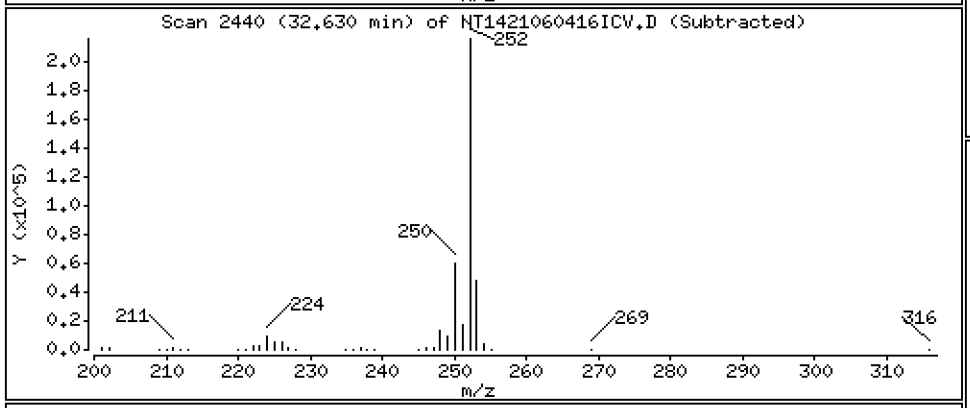
Column diameter: 0.25

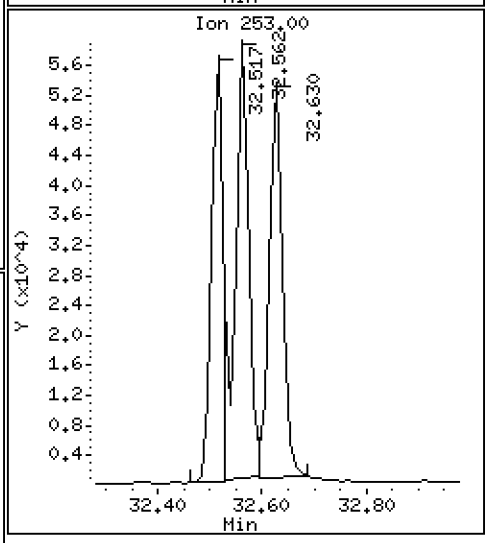
293 Benzo(j)fluoranthene

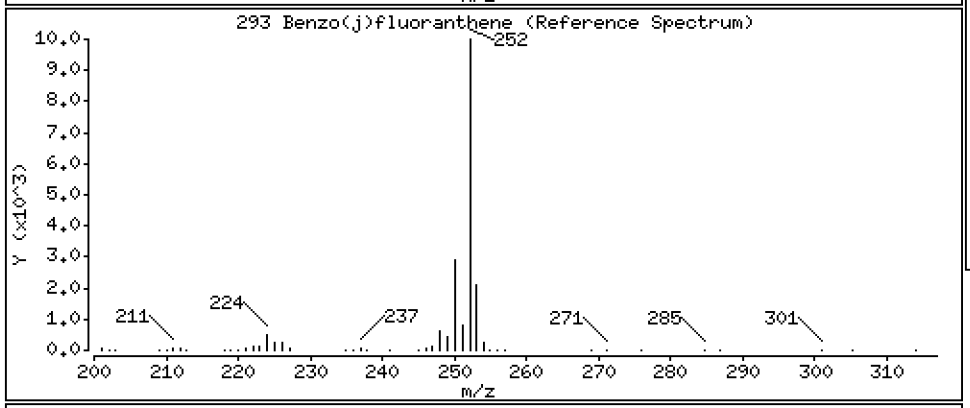
Concentration: 2.462 ug/mL

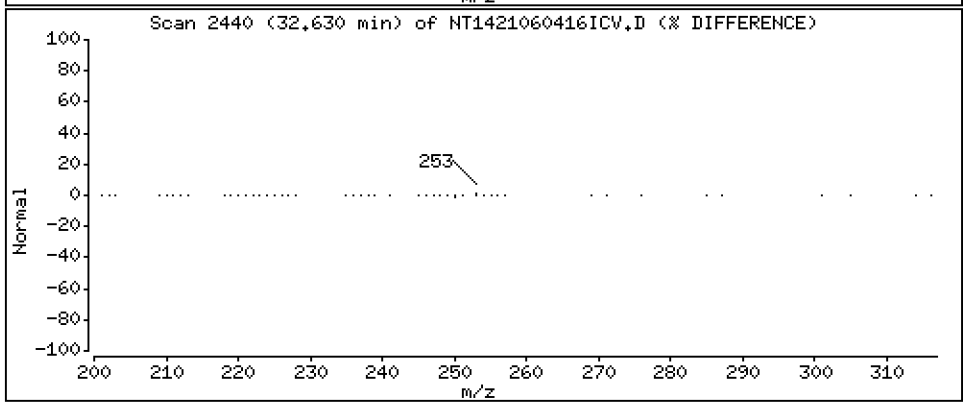












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Date : 05-JUN-2021 00:19

Client ID:

Instrument: nt14.i

Sample Info: SJF0131-ICV1

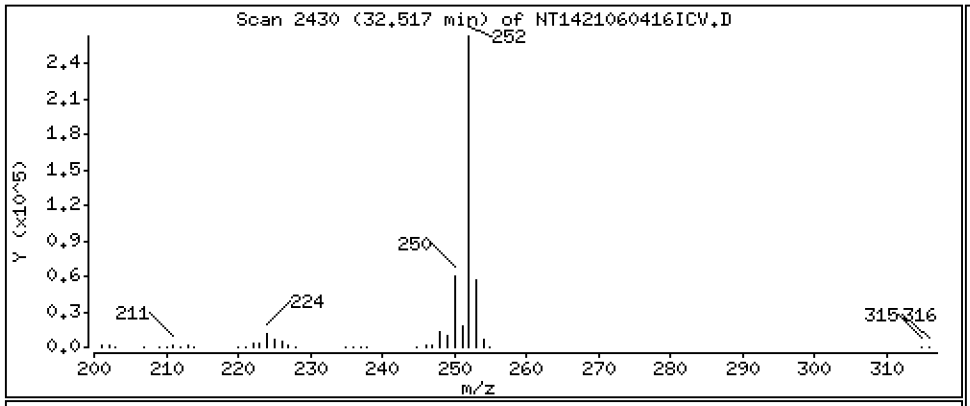
Operator: VTS

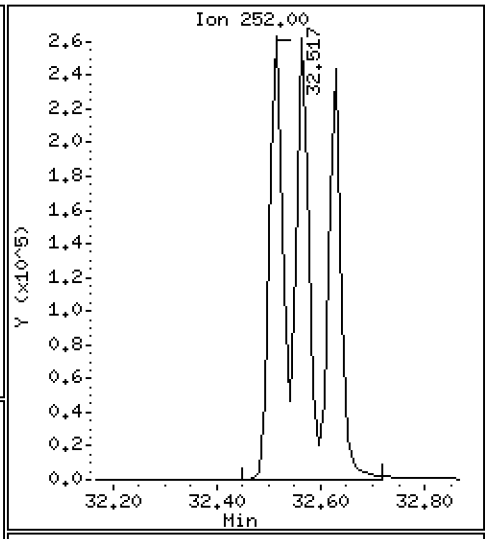
Column phase: Rxi-17Sil MS

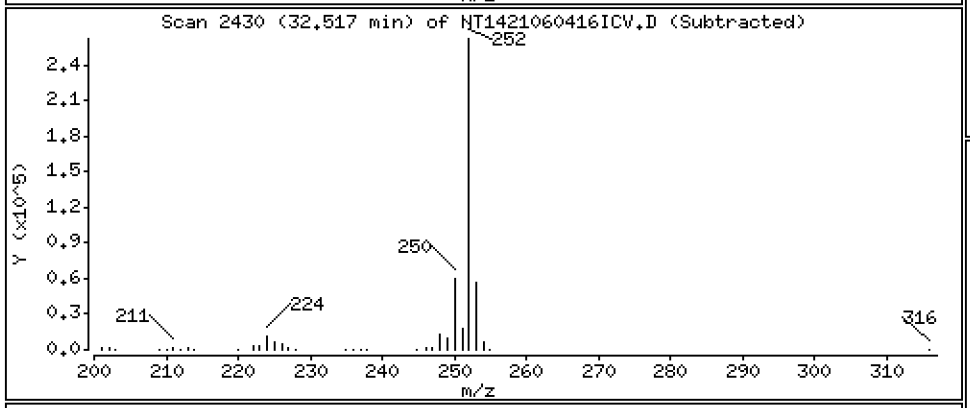
Column diameter: 0.25

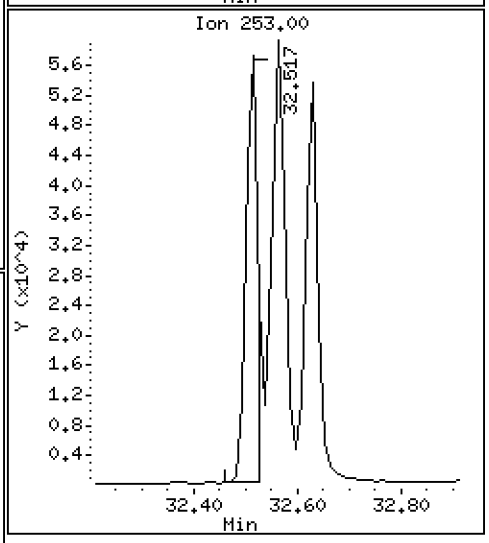
246 Total Benzofluoranthenes

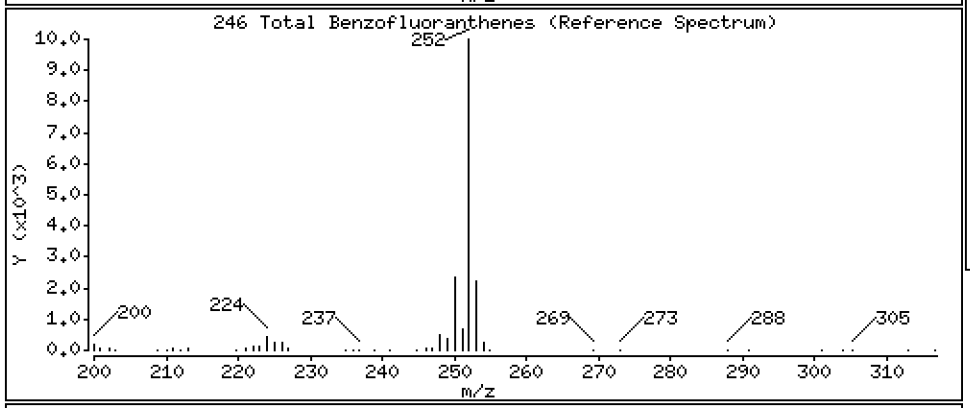
Concentration: 8.131 ug/mL

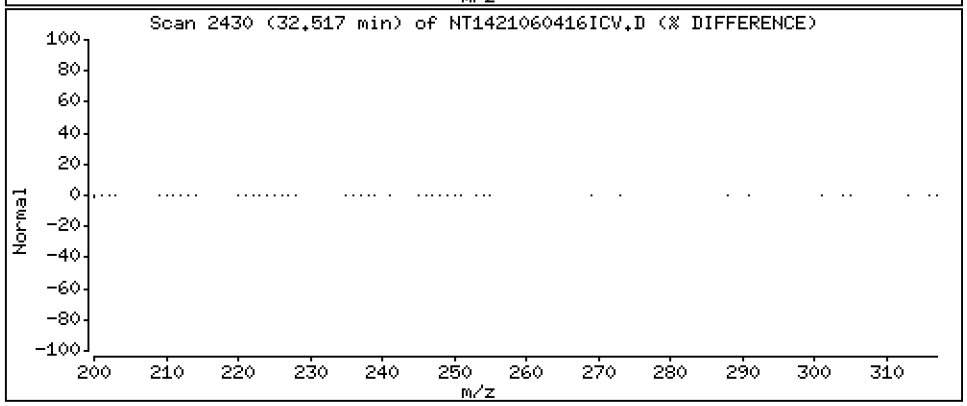












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Date : 05-JUN-2021 00:19

Client ID:

Instrument: nt14.i

Sample Info: SJF0131-ICV1

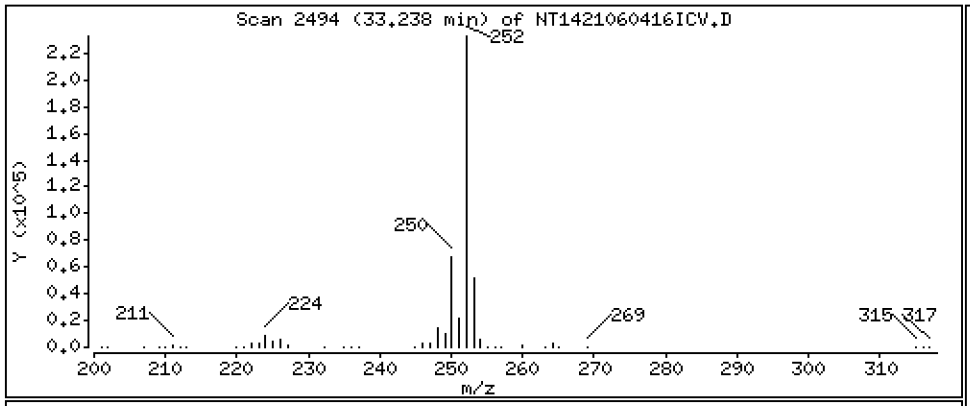
Operator: VTS

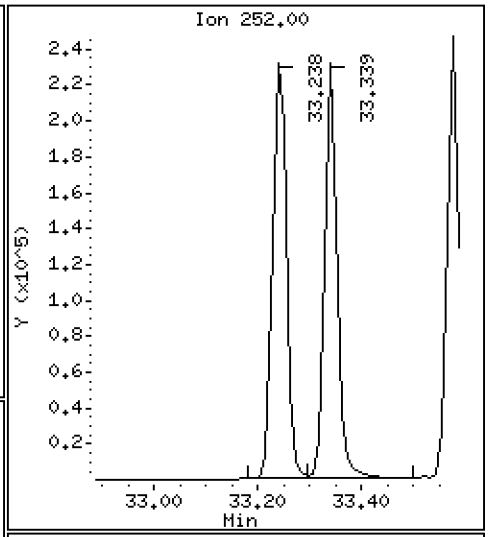
Column phase: Rxi-17Sil MS

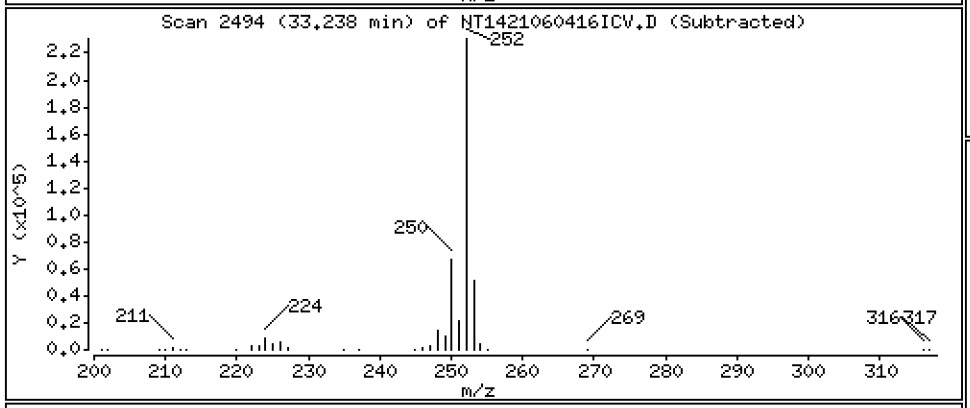
Column diameter: 0.25

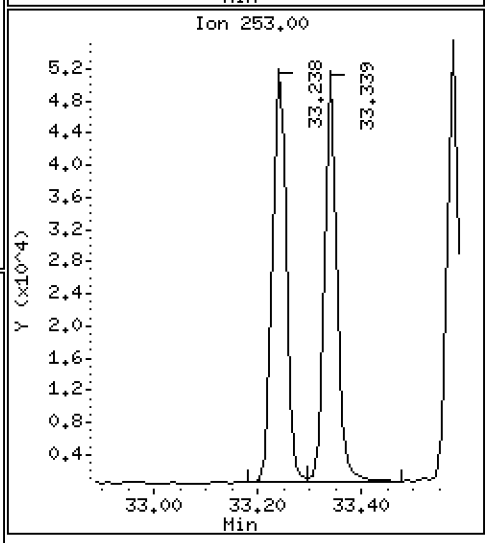
64 Benzo(e)pyrene

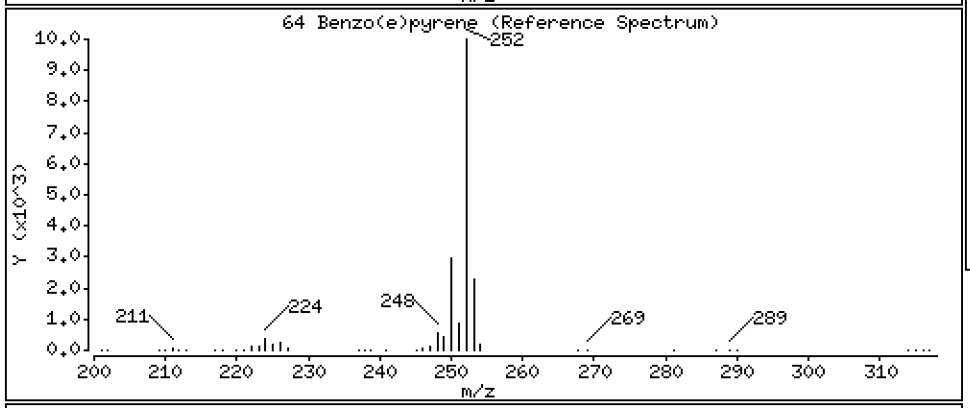
Concentration: 2.530 ug/mL

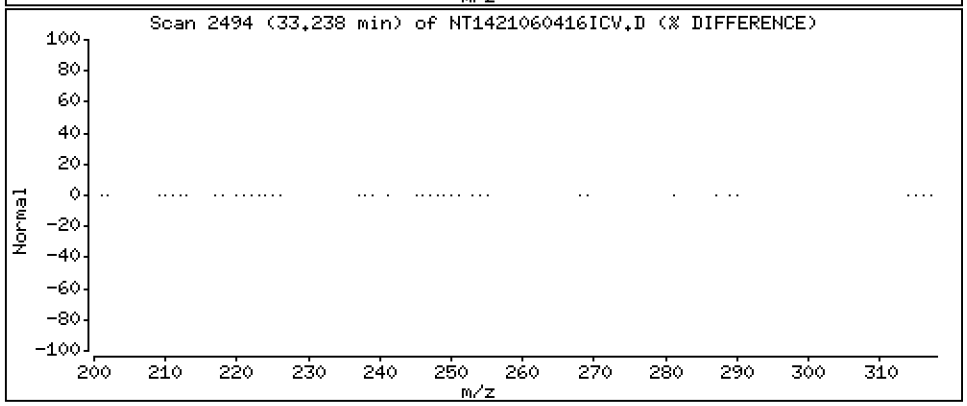












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Date : 05-JUN-2021 00:19

Client ID:

Instrument: nt14.i

Sample Info: SJF0131-ICV1

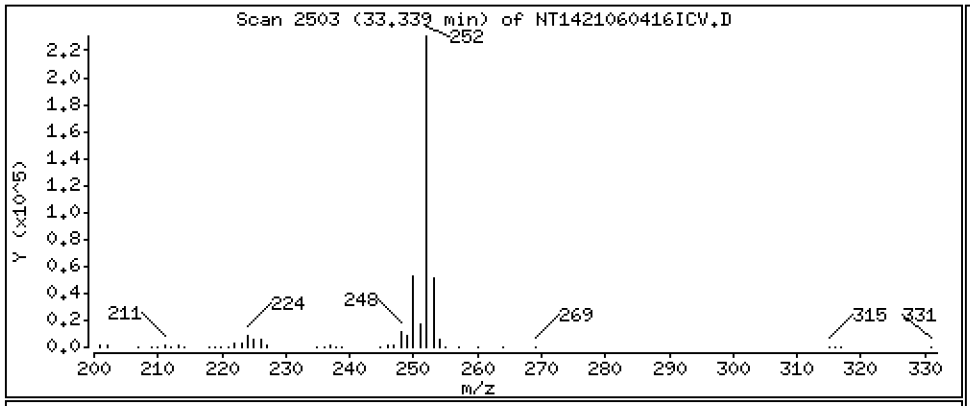
Operator: VTS

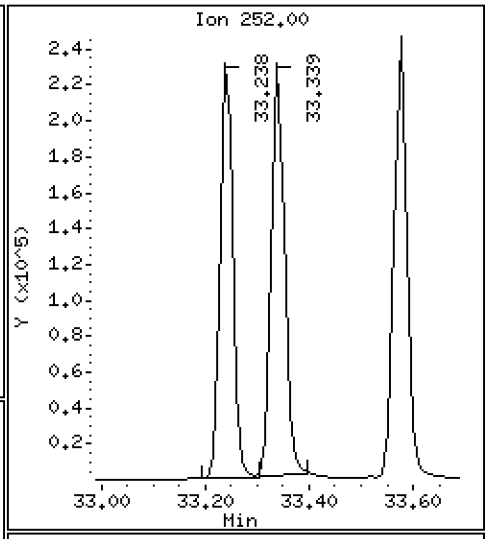
Column phase: Rxi-17Sil MS

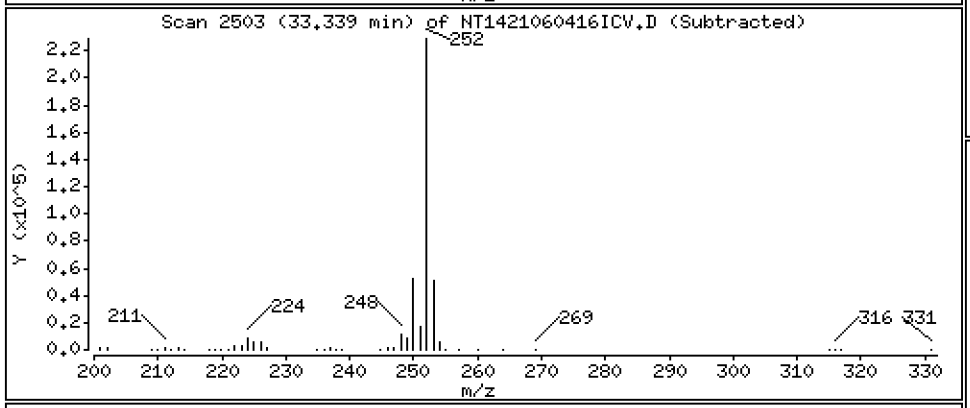
Column diameter: 0.25

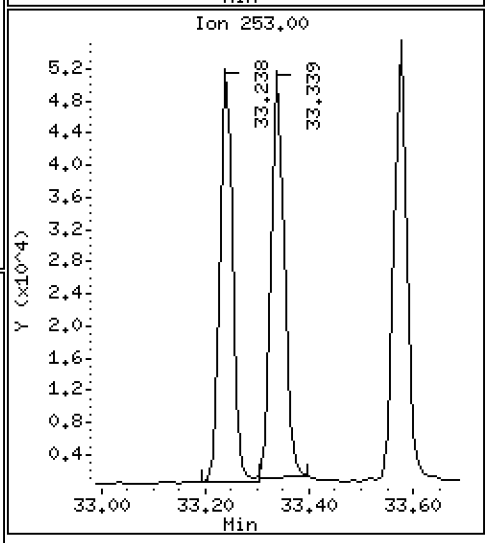
66 Benzo(a)pyrene

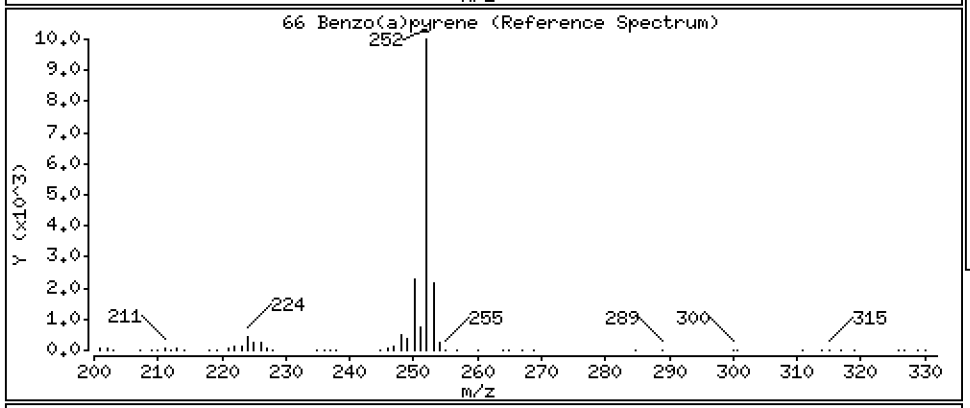
Concentration: 2.567 ug/mL

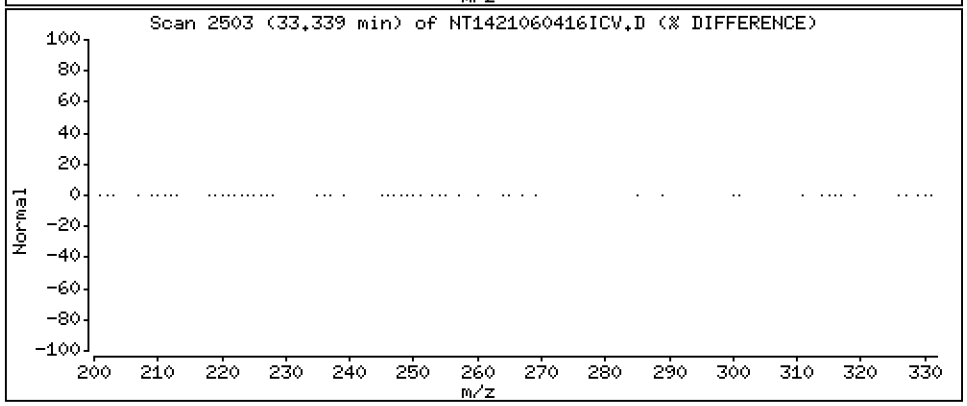












Data File: \\target\share\chem3\nt14.i\20210604A.b\NT1421060416ICV.D

Date : 05-JUN-2021 00:19

Client ID:

Instrument: nt14.i

Sample Info: SJF0131-ICV1

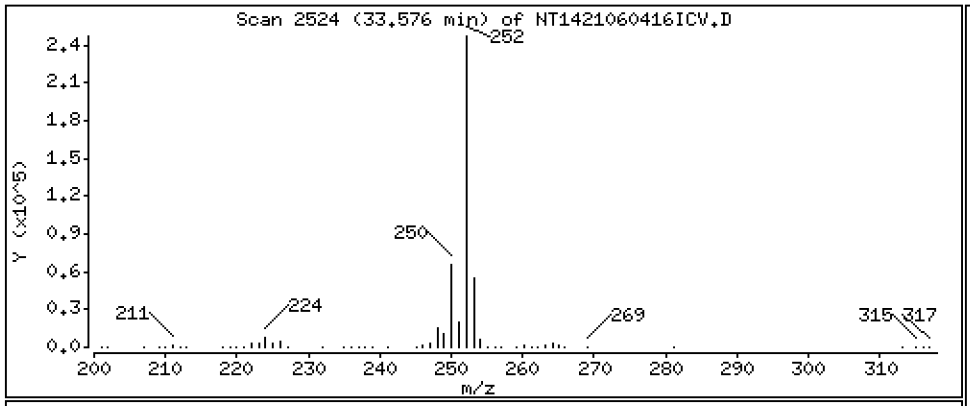
Operator: VTS

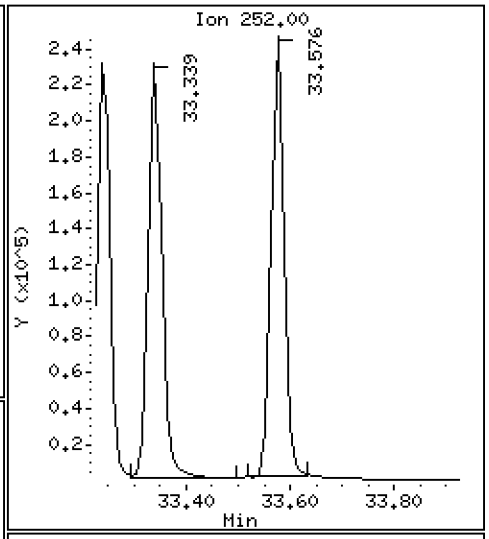
Column phase: Rxi-17Sil MS

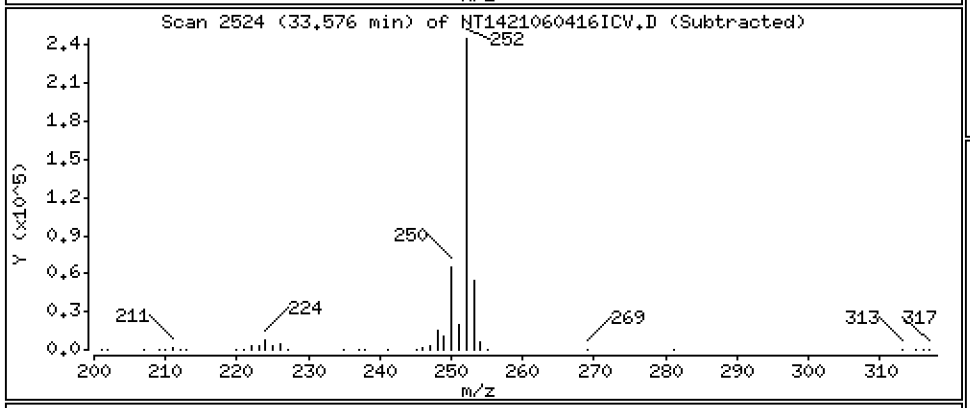
Column diameter: 0.25

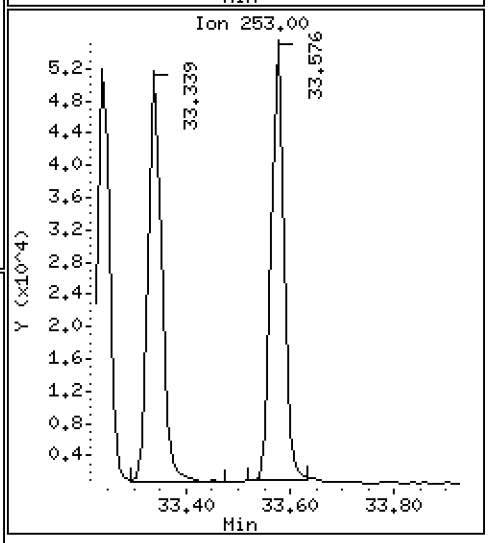
68 Perylene

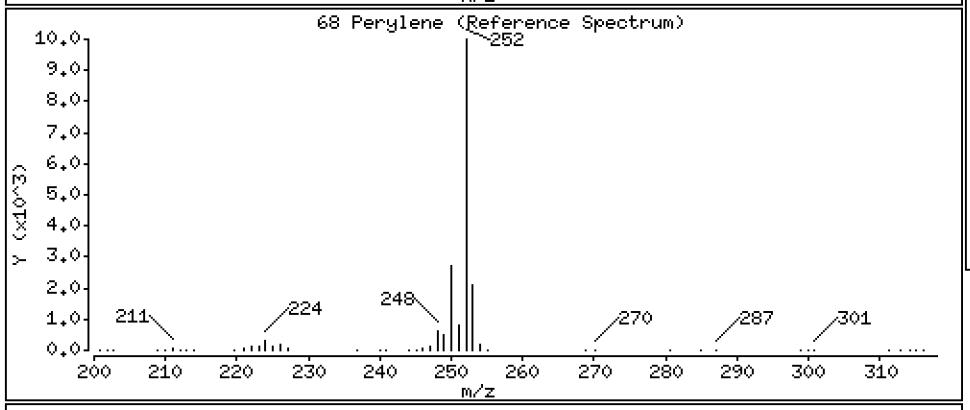
Concentration: 2.571 ug/mL

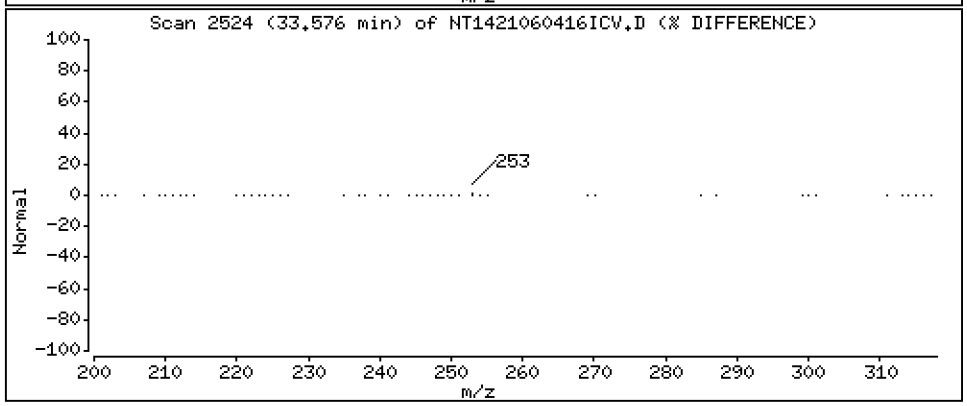












Data File: \\target\share\chem3\nt14.i\20210604A.b\NT1421060416ICV.D

Date : 05-JUN-2021 00:19

Client ID:

Instrument: nt14.i

Sample Info: SJF0131-ICV1

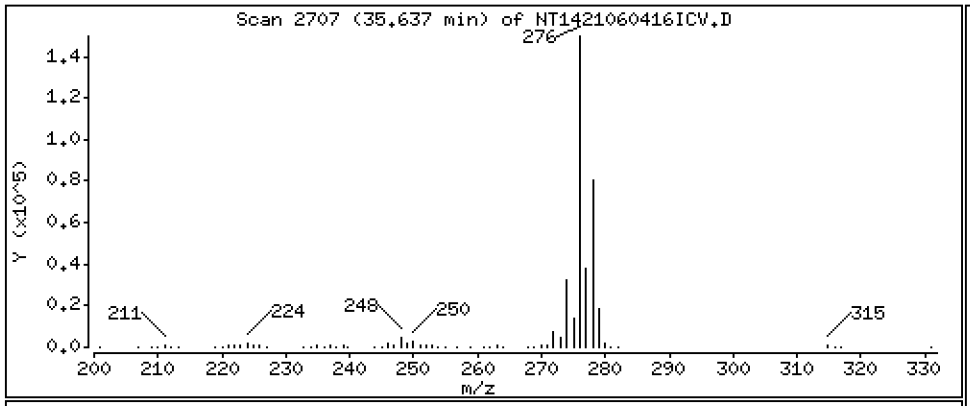
Operator: VTS

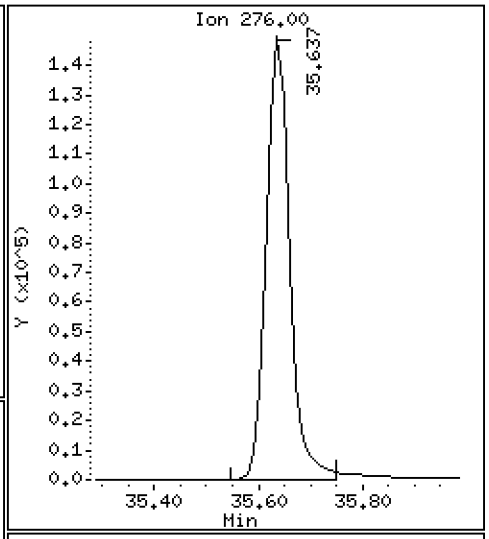
Column phase: Rxi-17Sil MS

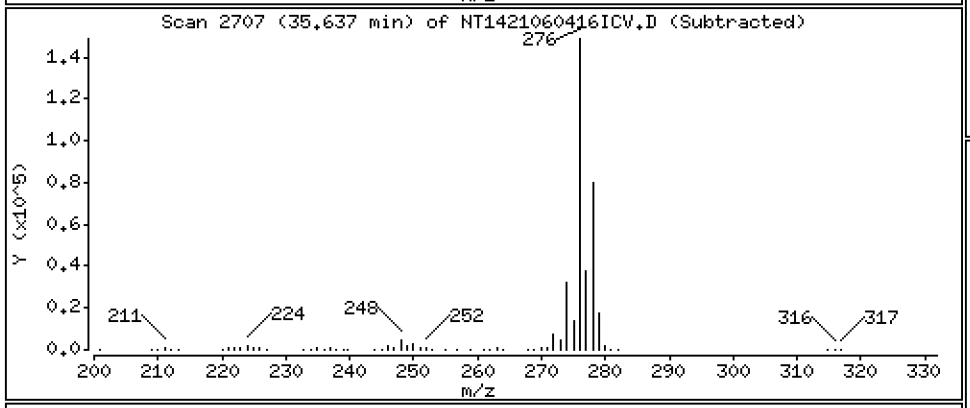
Column diameter: 0.25

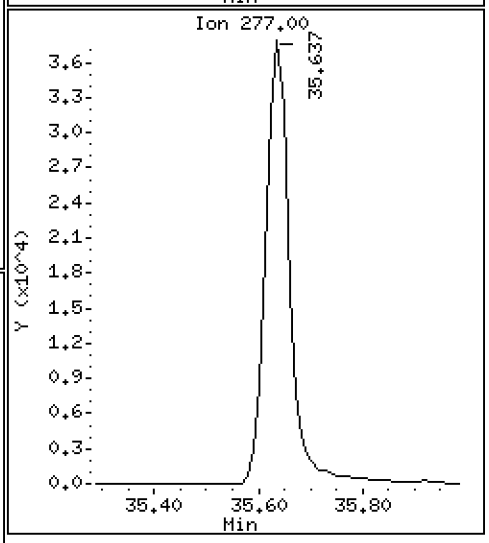
69 Indeno(1,2,3-cd)pyrene

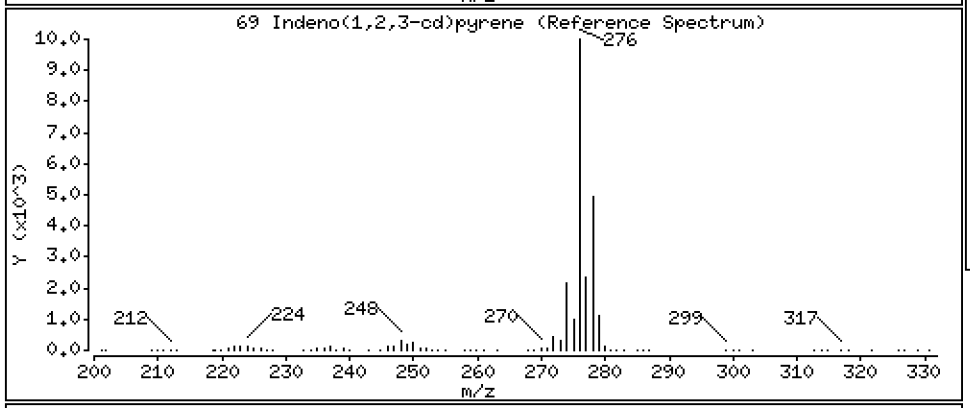
Concentration: 2.623 ug/mL

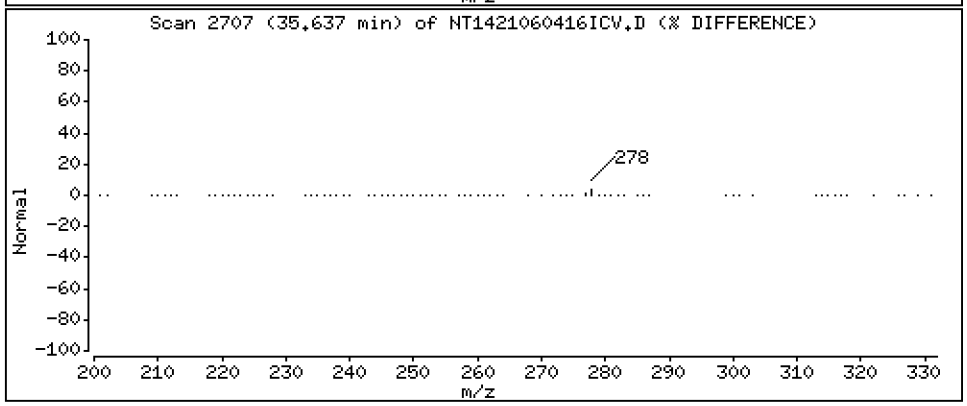












Data File: \\target\share\chem3\nt14.i\20210604A.b\NT1421060416ICV.D

Date : 05-JUN-2021 00:19

Client ID:

Instrument: nt14.i

Sample Info: SJF0131-ICV1

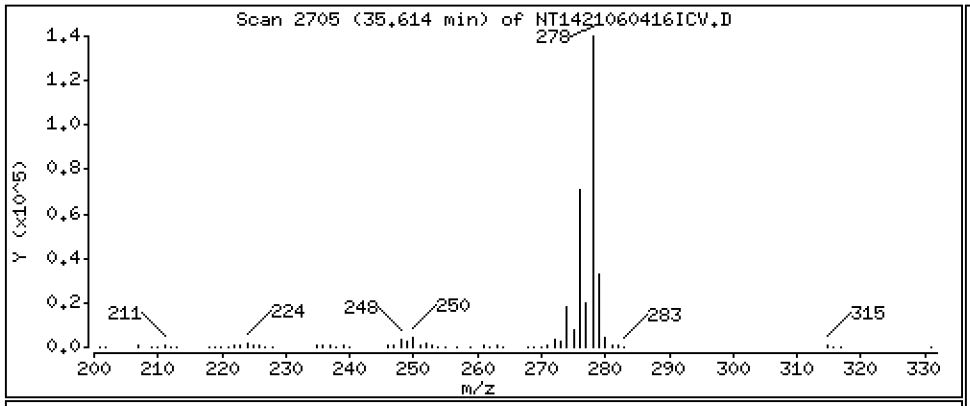
Operator: VTS

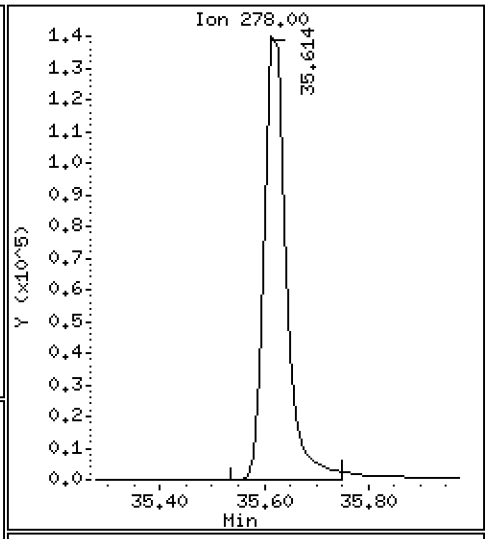
Column phase: Rxi-17Sil MS

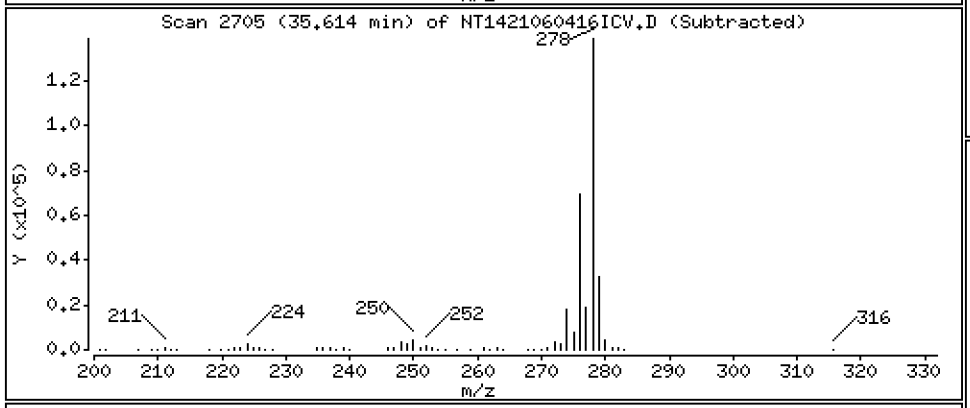
Column diameter: 0.25

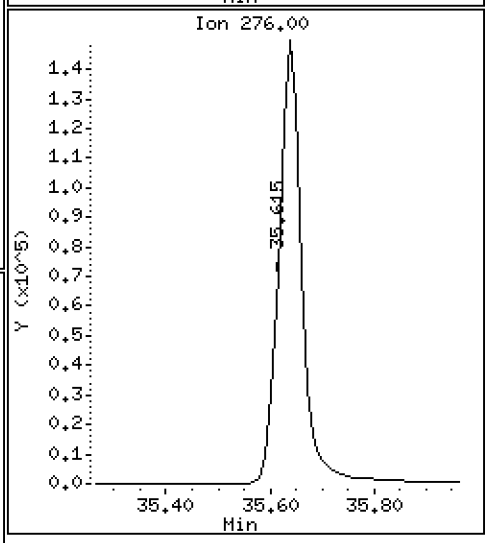
70 Dibenzo(a,h)anthracene

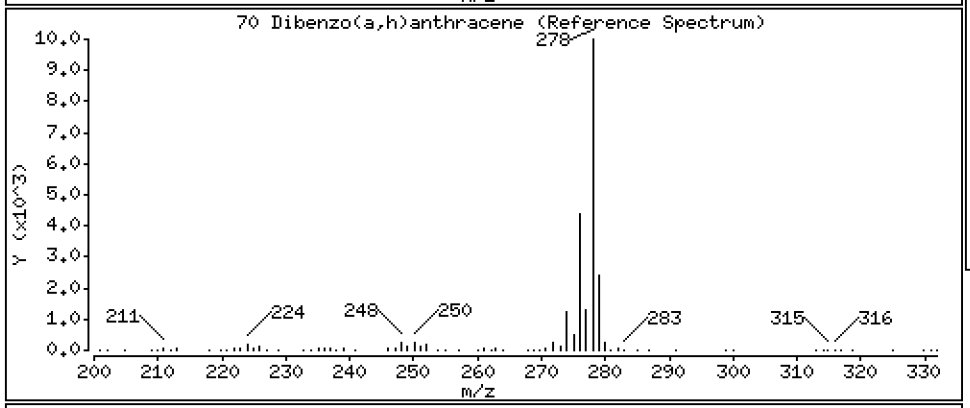
Concentration: 2.453 ug/mL

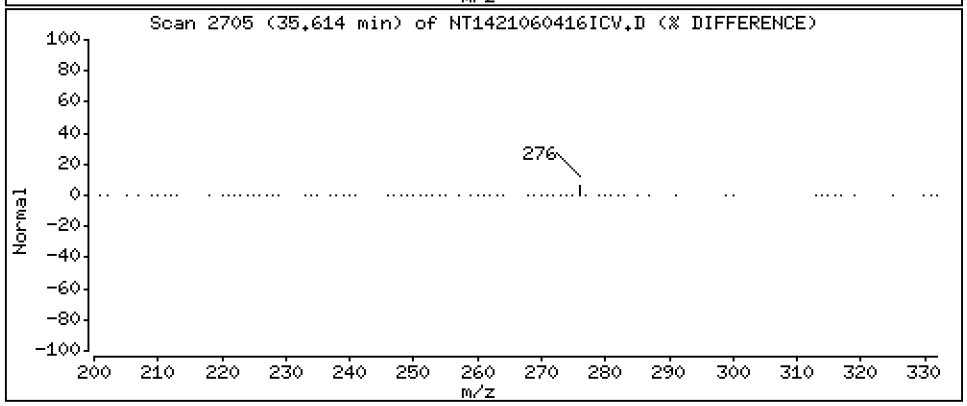












Data File: \\target\share\chem3\nt14.i\20210604A.b\NT1421060416ICV.D

Date : 05-JUN-2021 00:19

Client ID:

Instrument: nt14.i

Sample Info: SJF0131-ICV1

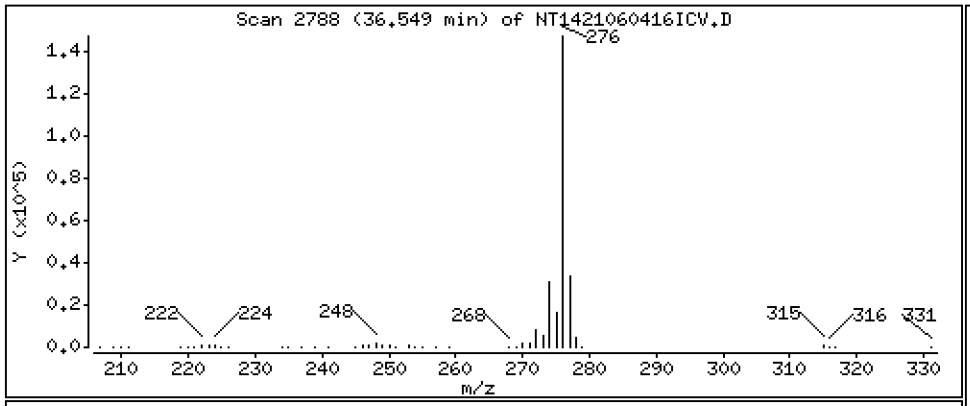
Operator: VTS

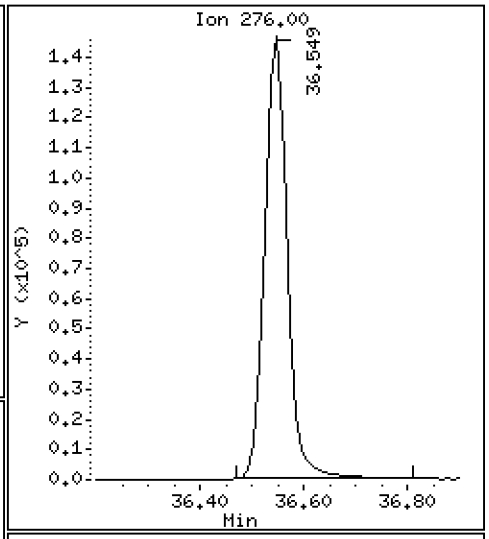
Column phase: Rxi-17Sil MS

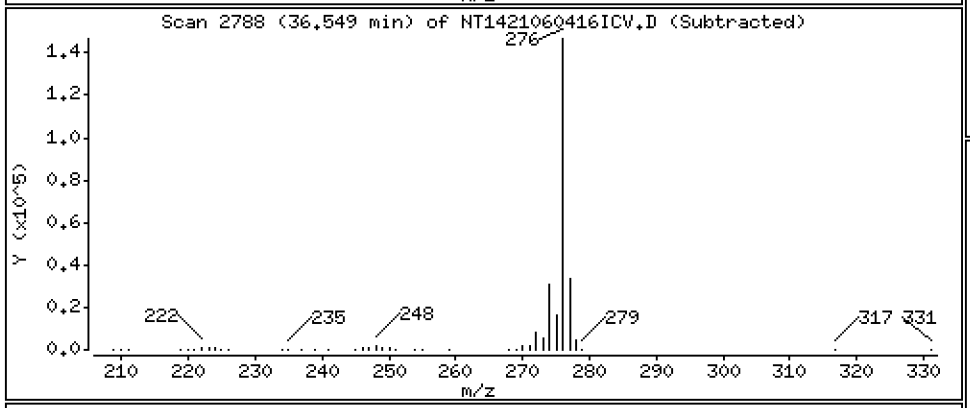
Column diameter: 0.25

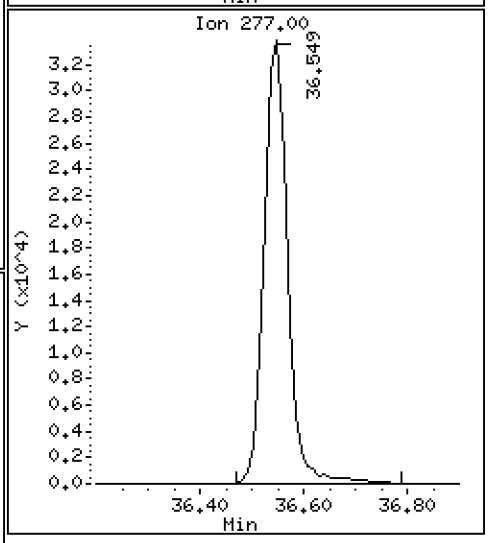
74 Benzo(g,h,i)perylene

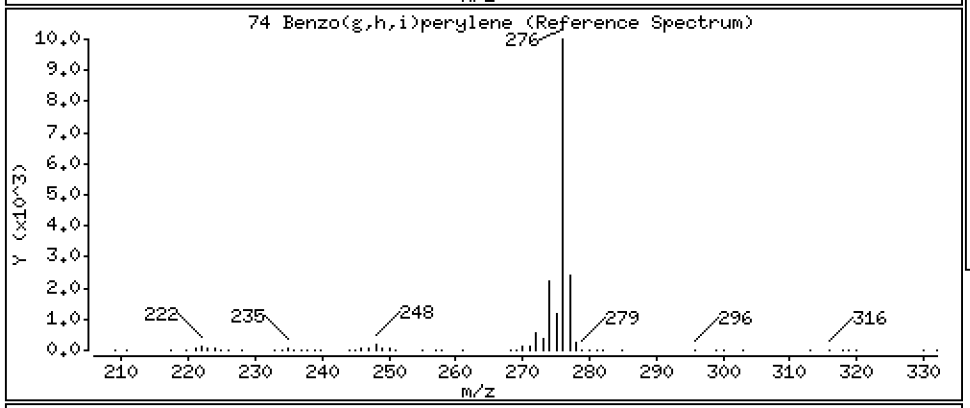
Concentration: 2.505 ug/mL

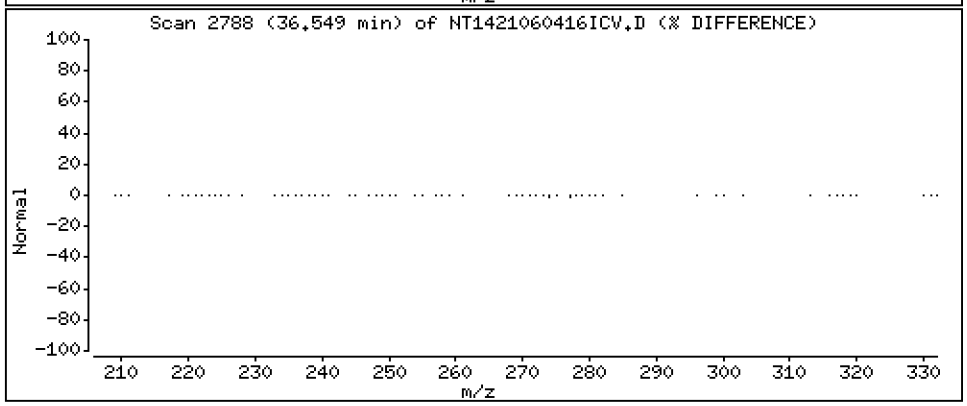












ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt14.i\20210604A.b\NT1421060416ICV.D
Lab Smp Id: SJF0131-ICV1
Inj Date : 05-JUN-2021 00:19
Operator : VTS Inst ID: nt14.i
Smp Info : SJF0131-ICV1
Misc Info :
Comment : 1ul Injection
Method : \\target\share\chem3\nt14.i\20210604.b\ALKYLPNA.m
Meth Date : 03-Jun-2021 08:55 yev Quant Type: ISTD
Cal Date : 29-MAY-2021 18:49 Cal File: NT1421052914.D
Als bottle: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: TARGETS.sub
Target Version: 4.14
Processing Host: ORGDATA102

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/mL)
1 trans-Decalin	138	7.146	7.146	(0.378)	33599	2.45419	2.454
2 cis-Decalin	138	8.255	8.256	(0.437)	25248	2.24478	2.245
$ 6 Naphthalene-d8	136	11.886	11.897	(0.629)	312494	2.44857	2.449(R)
7 Naphthalene	128	11.957	11.957	(0.632)	315286	2.47186	2.472
12 Benzo(b)thiophene	134	12.409	12.409	(0.656)	257215	2.45302	2.453
16 2-Methylnaphthalene	141	13.794	13.794	(0.730)	184341	2.47231	2.472
17 1-methylnaphthalene	141	14.244	14.244	(0.753)	181919	2.50788	2.508
18 Biphenyl	154	15.431	15.442	(0.816)	272832	2.47635	2.476
19 2,6-Dimethylnaphthalene	156	15.508	15.508	(0.820)	203685	2.51396	2.514
20 Acenaphthylene	152	17.091	17.091	(0.904)	346647	2.50283	2.503
$ 21 Acenaphthene-d10	164	17.365	17.376	(0.918)	195504	2.49419	2.494(R)
22 Acenaphthene	153	17.486	17.486	(0.925)	213958	2.50591	2.506
23 Dibenzofuran	168	17.860	17.860	(0.945)	318756	2.51686	2.517
24 1,6,7-Trimethylnaphthalene	170	18.080	18.091	(0.956)	209857	2.54329	2.543
* 25 Fluorene-d10	176	18.907	18.907	(1.000)	274525	2.00000	
26 Fluorene	166	19.009	19.009	(1.005)	251884	2.56694	2.567
30 Dibenzothiophene	184	21.931	21.931	(1.160)	359354	2.59397	2.594
$ 35 Phenanthrene-d10	188	22.238	22.239	(0.995)	346078	2.50349	2.503(R)
36 Phenanthrene	178	22.326	22.326	(0.999)	370639	2.50178	2.502
* 250 Anthracene-d10	188	22.348	22.359	(1.000)	287335	2.00000	
37 Anthracene	178	22.425	22.425	(1.003)	360694	2.58762	2.588
42 Carbazole	167	23.700	23.712	(1.061)	325907	2.52481	2.525
43 1-Methylphenanthrene	192	24.162	24.162	(1.081)	278611	2.61686	2.617
44 Fluoranthene	202	26.130	26.141	(1.169)	432737	2.64633	2.646
46 Pyrene	202	26.977	26.977	(1.207)	454361	2.67162	2.672
51 Naphthobenzothiophene	234	29.509	29.509	(1.320)	488556	2.67358	2.674
55 Benzo(a)anthracene	228	30.095	30.095	(0.907)	428543	2.71277	2.713
$ 56 Chrysene-d12	240	30.219	30.219	(0.911)	340737	2.67260	2.673(R)
57 Chrysene	228	30.286	30.287	(0.913)	404980	2.61622	2.616
62 Benzo(b)fluoranthene	252	32.516	32.517	(0.980)	417606	2.54894	2.549
63 Benzo(k)fluoranthene	252	32.562	32.562	(0.981)	459002	2.61110	2.611(M)
293 Benzo(j)fluoranthene	252	32.629	32.629	(0.983)	398814	2.46209	2.462
246 Total Benzofluoranthenes	252	32.516	32.517	(0.980)	1304830	8.13116	8.131(M)

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/mL)
* 251 Benzo(e)pyrene-d12	264	33.181	33.181	(1.000)	407300	2.00000	
64 Benzo(e)pyrene	252	33.237	33.237	(1.002)	406201	2.52964	2.530
66 Benzo(a)pyrene	252	33.339	33.339	(1.005)	375014	2.56722	2.567
$ 67 Perylene-d12	264	33.519	33.519	(1.010)	351374	2.55305	2.553(R)
68 Perylene	252	33.575	33.575	(1.012)	387188	2.57081	2.571
69 Indeno(1,2,3-cd)pyrene	276	35.636	35.637	(1.074)	449777	2.62311	2.623(M)
70 Dibenzo(a,h)anthracene	278	35.614	35.625	(1.073)	395851	2.45291	2.453(M)
74 Benzo(g,h,i)perylene	276	36.549	36.549	(1.101)	424327	2.50493	2.505

QC Flag Legend

R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.

Data File: NT1421060416ICV.D
Report Date: 10-Jun-2021 14:24

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt14.i
Lab File ID: NT1421060416ICV.D
Lab Smp Id: SJF0131-ICV1
Analysis Type: SV
Quant Type: ISTD
Operator: VTS
Method File: \\target\share\chem3\nt14.i\20210604.b\ALKYLPNA.m
Misc Info:

Calibration Date: 01-JUN-2021
Calibration Time: 15:22
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
25 Fluorene-d10	228656	114328	457312	274525	20.06
250 Anthracene-d10	234827	117414	469654	287335	22.36
251 Benzo(e)pyrene-d1	331649	165825	663298	407300	22.81

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
25 Fluorene-d10	18.91	18.41	19.41	18.91	-0.00
250 Anthracene-d10	22.36	21.86	22.86	22.35	-0.05
251 Benzo(e)pyrene-d1	33.18	32.68	33.68	33.18	-0.00

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

REVIEW SUMMARY FOR FILE - NT1421060416ICV.D

Lab ID: SJF0131-ICV1
nt14.i, 20210604.b\ALKYLPNA.m, 05-JUN-2021 00:19

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

RRT check based on Ccal File: NT1421060102.D

On Column LOD for nt14.i, 20210604.b\ALKYLPNA.m, TARGETS.sub = 0.0000

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

Analytical Resources, Incorporated
Analytical Chemists and Consultants

INITIAL CALIBRATION CHECK

EPA 8270E-SIM

Laboratory:	Analytical Resources, Inc.	SDG:	21E0106
Client:	Anchor QEA, LLC	Project:	Gasco Siltronic - US Moorings
Instrument ID:	NT14	Calibration:	EF00008
Lab File ID:	NT1421060702.D	Calibration Date:	06/02/2021
Sequence:	SJF0173	Injection Date:	06/07/21
Lab Sample ID:	SJF0173-ICV1	Injection Time:	13:18
Sequence Name:	Initial Cal Check		

		CONC. (ug/mL)		RESPONSE FACTOR			% DRIFT/DIFF	
COMPOUND	TYPE	STD	ICV	ICAL	ICV	MIN	ICV	LIMIT
trans-Decalin	A	2.5000	2.7	0.0997391	0.1061448		6.4	+/-20
cis-Decalin	A	2.5000	2.6	0.0700123	0.0836500		2.3	+/-20
Naphthalene	A	2.5000	2.7	0.9292421	0.9875806		6.3	+/-20
1-Methylnaphthalene	A	2.5000	2.6	0.5284699	0.5532649		4.7	+/-20
2-Methylnaphthalene	A	2.5000	2.6	0.5432098	0.5747027		5.8	+/-20
Biphenyl	A	2.5000	2.6	0.8026611	0.8447889		5.2	+/-20
2,6-Dimethylnaphthalene	A	2.5000	2.6	0.5902664	0.6079035		3.0	+/-20
Acenaphthylene	A	2.5000	2.7	1.0090320	1.0758980		6.6	+/-20
Acenaphthene	A	2.5000	2.6	0.6220308	0.6448616		3.7	+/-20
Dibenzofuran	A	2.5000	2.7	0.9226724	0.9816708		6.4	+/-20
2,3,5-Trimethylnaphthalene	A	2.5000	2.6	0.6011392	0.6335332		5.4	+/-20
Fluorene	A	2.5000	2.7	0.7148800	0.7590301		6.2	+/-20
Benzo(b)thiophene	A	2.5000	2.6	0.7639133	0.8028983		5.1	+/-20
Phenanthrene	A	2.5000	2.6	1.0312030	1.0649180		3.3	+/-20
Anthracene	A	2.5000	2.6	0.9702418	1.0187480		5.0	+/-20
Carbazole	A	2.5000	2.5	0.8557591	0.9093561		1.2	+/-20
1-Methylphenanthrene	A	2.5000	2.6	0.7410711	0.7852165		6.0	+/-20
Fluoranthene	A	2.5000	2.7	1.1382070	1.2385970		8.8	+/-20
Dibenzothiophene	A	2.5000	2.7	1.0092670	1.1082740		9.8	+/-20
Pyrene	A	2.5000	2.8	1.1837730	1.3298180		12.3	+/-20
Benzo(a)anthracene	A	2.5000	3.0	0.7757052	0.9261494		19.4	+/-20
Chrysene	A	2.5000	2.9	0.7601074	0.8778009		15.5	+/-20
Benzo(b)fluoranthene	A	2.5000	2.6	0.8044926	0.8245325		2.5	+/-20
Benzo(j)fluoranthene	A	2.5000	2.5	0.7953937	0.7886309		-0.9	+/-20
Benzo(k)fluoranthene	A	2.5000	2.6	0.8631910	0.9140714		5.9	+/-20
Benzo(e)pyrene	A	2.5000	2.5	0.7884934	0.7942405		0.7	+/-20
Benzo(a)pyrene	A	2.5000	2.6	0.7172983	0.7431238		3.6	+/-20
Indeno(1,2,3-cd)pyrene	A	2.5000	2.5	0.8419699	0.8527459		1.3	+/-20
Dibenzo(a,h)anthracene	A	2.5000	2.4	0.7153598	0.7667149		-3.2	+/-20
Benzo(g,h,i)perylene	A	2.5000	2.4	0.8318028	0.8099532		-2.6	+/-20
Perylene	A	2.5000	2.6	0.7395491	0.7695678		4.1	+/-20

* Values outside of QC limits

Analytical Resources, Incorporated
Analytical Chemists and Consultants

INITIAL CALIBRATION CHECK

EPA 8270E-SIM

Laboratory:	Analytical Resources, Inc.	SDG:	21E0106
Client:	Anchor QEA, LLC	Project:	Gasco Siltronic - US Moorings
Instrument ID:	NT14	Calibration:	EF00008
Lab File ID:	NT1421060702.D	Calibration Date:	06/02/2021
Sequence:	SJF0173	Injection Date:	06/07/21
Lab Sample ID:	SJF0173-ICV1	Injection Time:	13:18
Sequence Name:	Initial Cal Check		

COMPOUND	TYPE	CONC. (ug/mL)		RESPONSE FACTOR			% DRIFT/DIFF	
		STD	ICV	ICAL	ICV	MIN	ICV	LIMIT
Benzo(b)naphtho(2,1-d)thiophene	A	2.5000	2.7	1.2719290	1.3496540		6.1	+/-20
Naphthalene-d8	A	2.5000	2.66	0.9297733	0.9887738		6.3	+/-20
Acenaphthene-d10	A	2.5000	2.58	0.5710501	0.5900893		3.3	+/-20
Phenanthrene-d10	A	2.5000	2.58	0.9622084	0.9943826		3.3	+/-20
Chrysene-d12	A	2.5000	2.91	0.6260378	0.7286406		16.4	+/-20
Perylene-d12	A	2.5000	2.55	0.6758124	0.6899476		2.1	+/-20

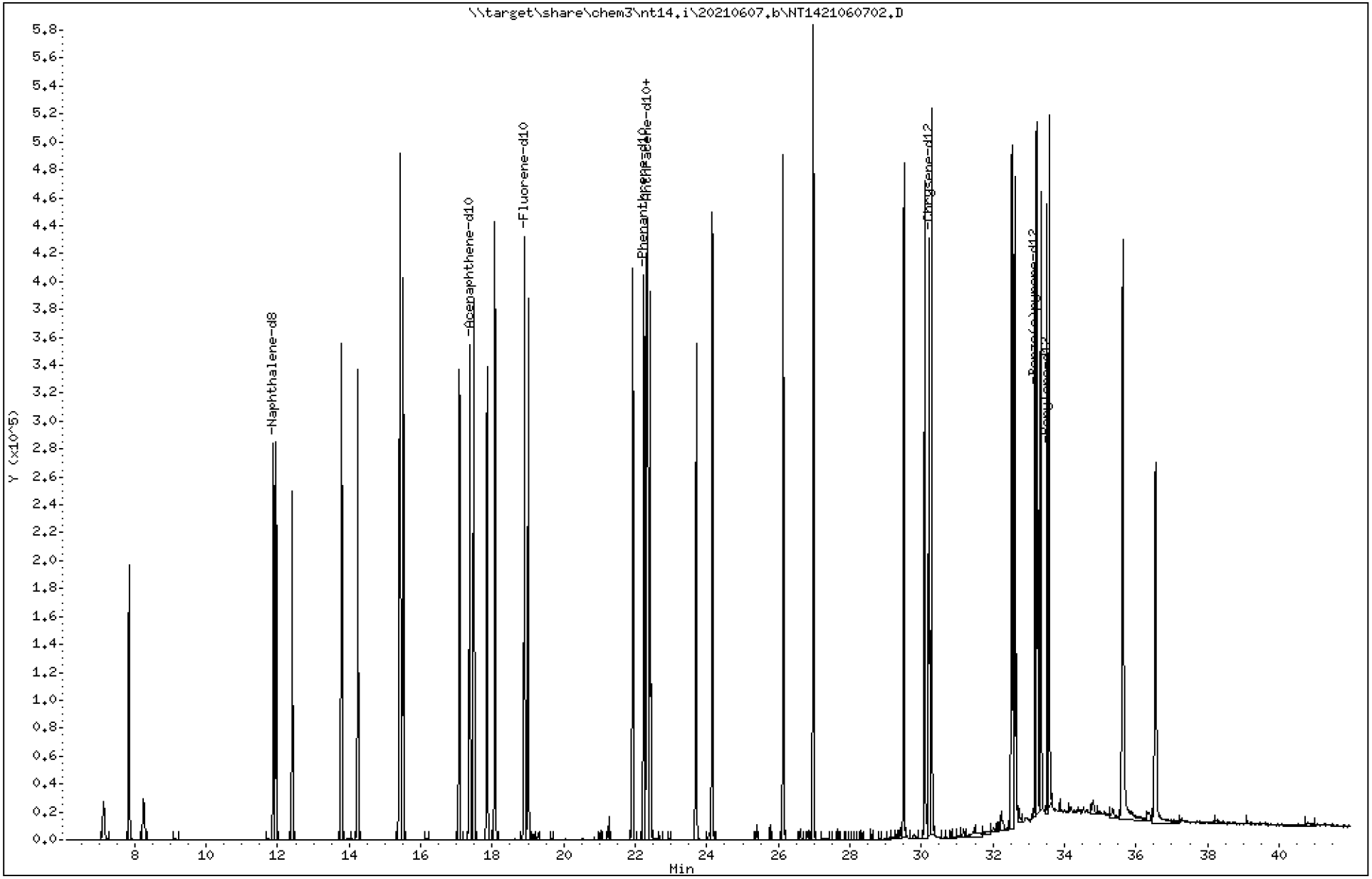
* Values outside of QC limits

Data File: \\target\share\chem3\nt14.i\20210607.b\NT1421060702.D
Date : 07-JUN-2021 13:18
Client ID:
Sample Info: SJF0173-ICV1

Instrument: nt14.i

Operator: VTS

Column phase: Rxi-17Sil MS
Column diameter: 0.25



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Date : 07-JUN-2021 13:18

Client ID:

Instrument: nt14.i

Sample Info: SJF0173-ICV1

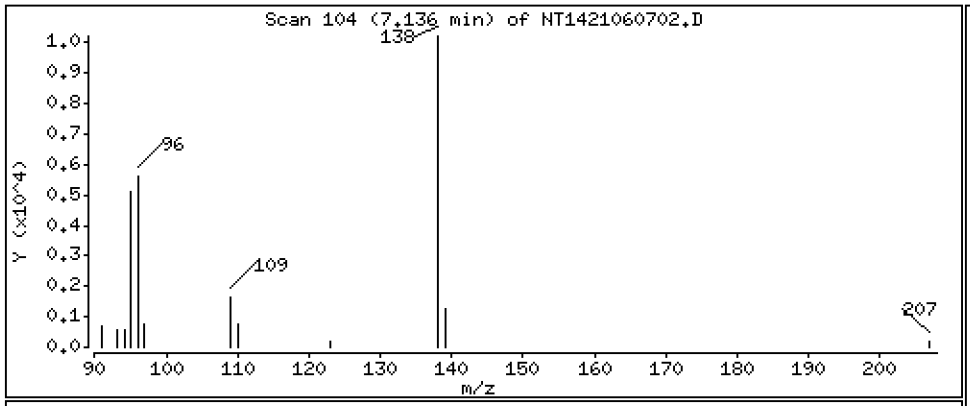
Operator: VTS

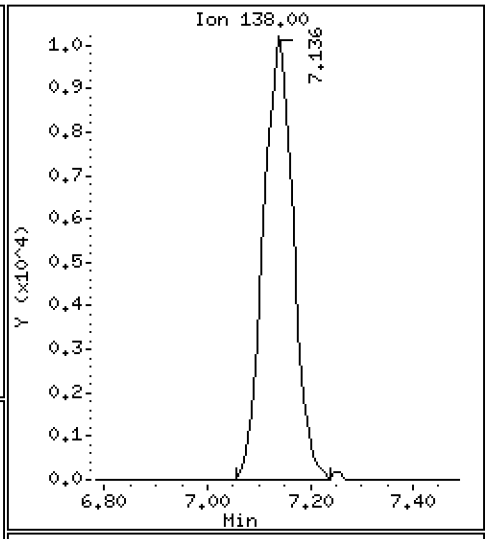
Column phase: Rxi-17Sil MS

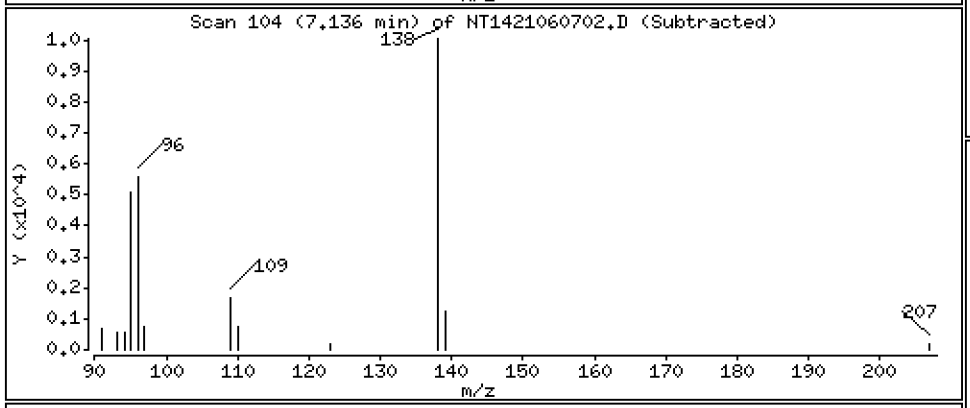
Column diameter: 0.25

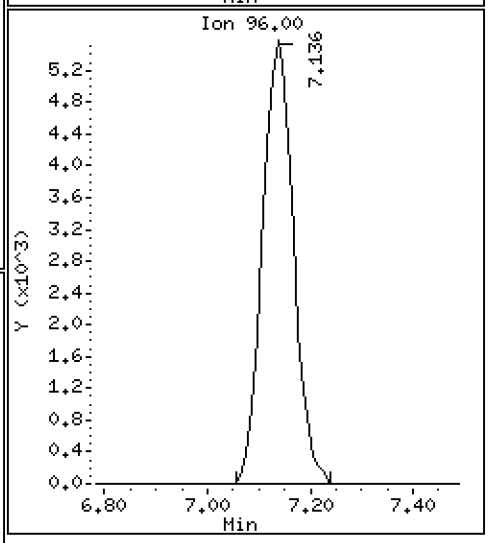
1 trans-Decalin

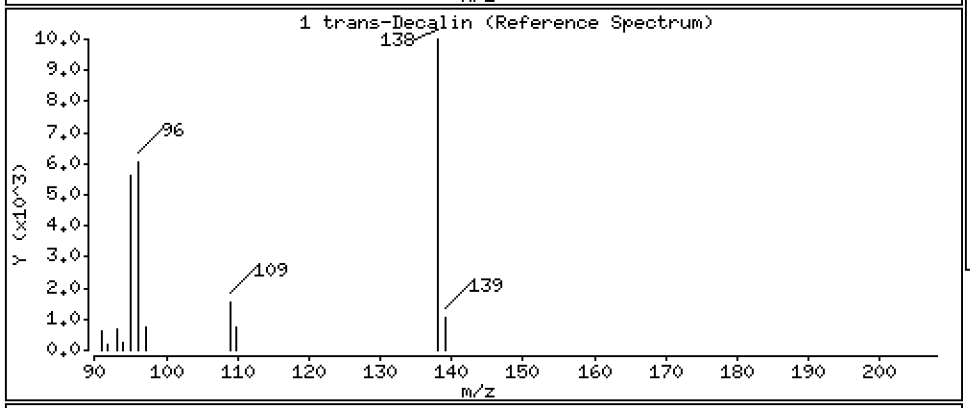
Concentration: 2.661 ug/mL

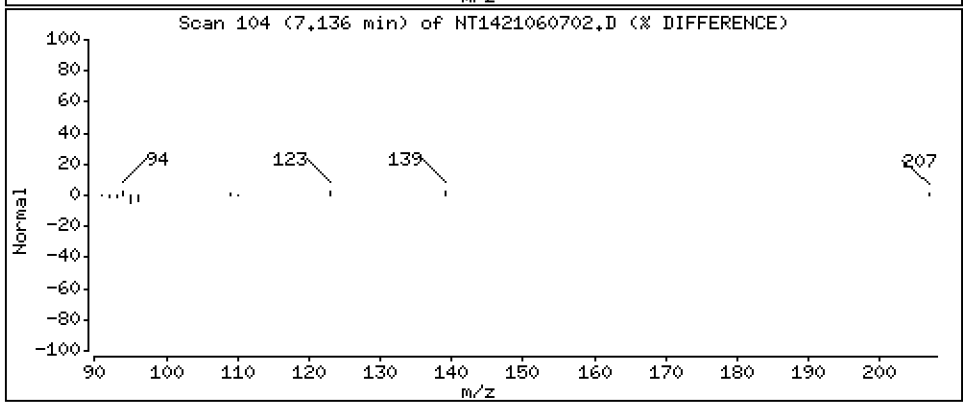












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Date : 07-JUN-2021 13:18

Client ID:

Instrument: nt14.i

Sample Info: SJF0173-ICV1

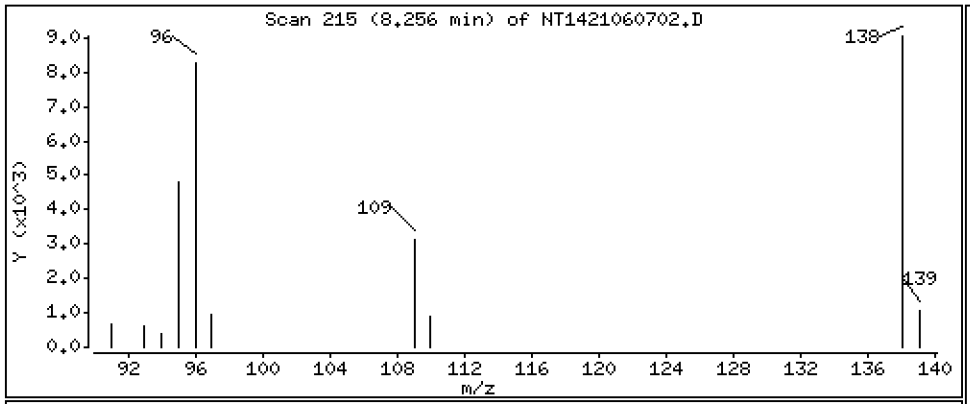
Operator: VTS

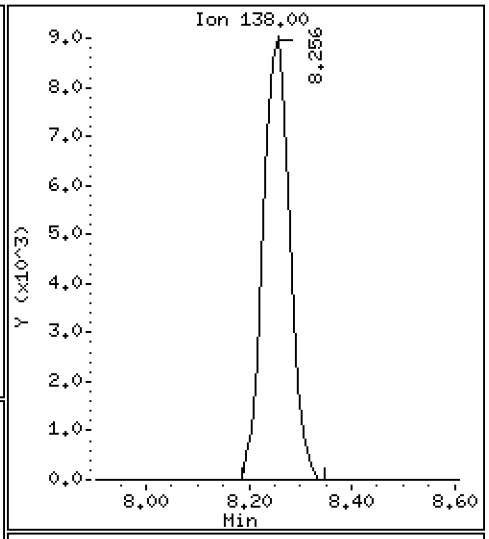
Column phase: Rxi-17Sil MS

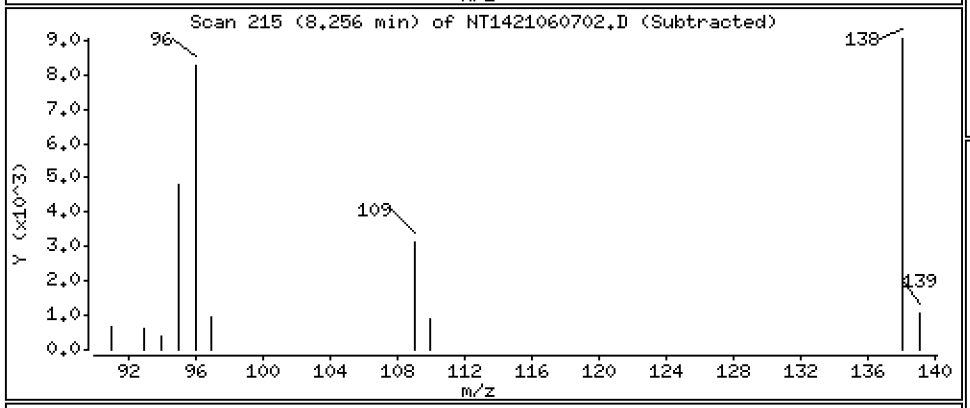
Column diameter: 0.25

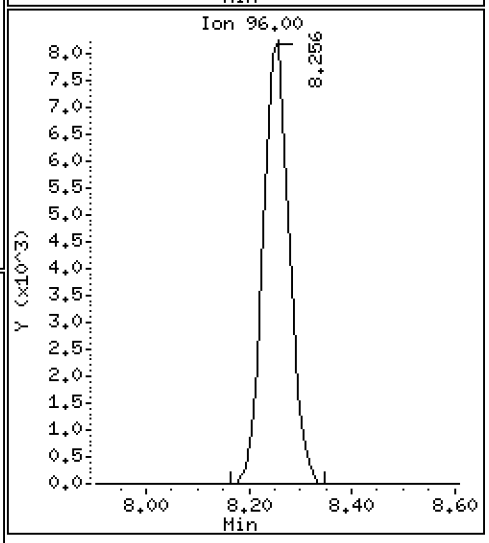
2 cis-Decalin

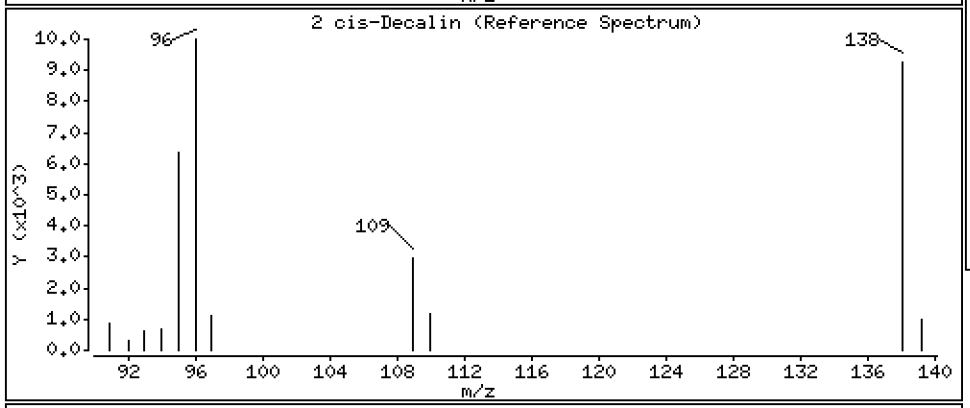
Concentration: 2.557 ug/mL

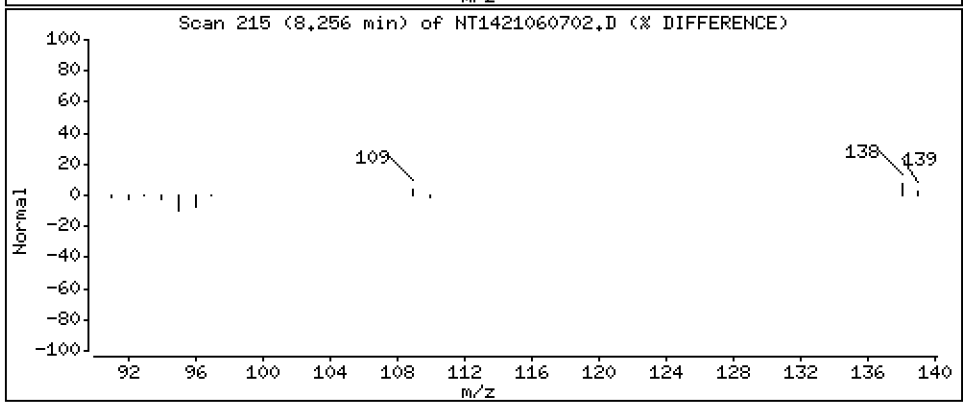












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Date : 07-JUN-2021 13:18

Client ID:

Instrument: nt14.i

Sample Info: SJF0173-ICV1

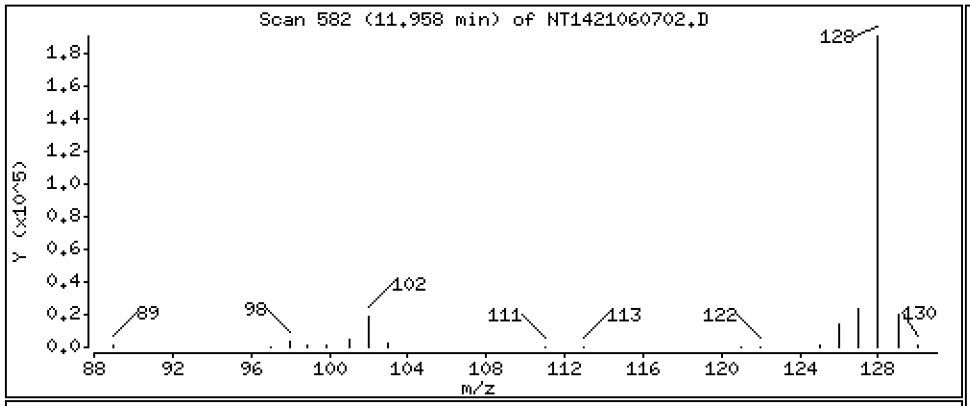
Operator: VTS

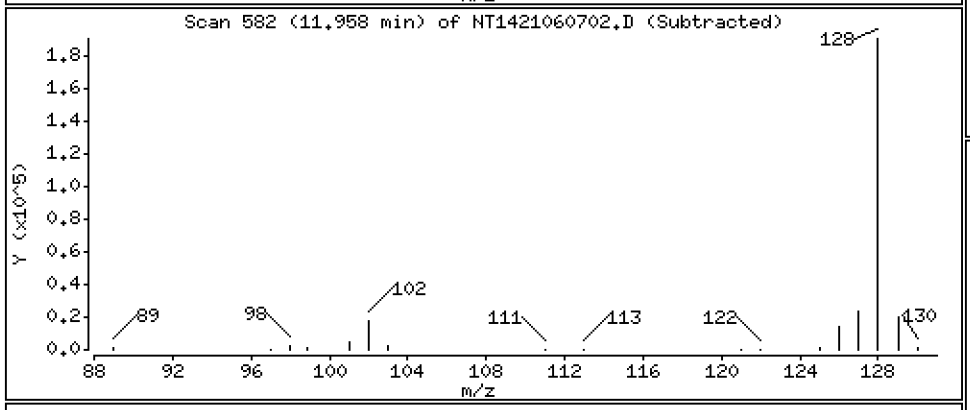
Column phase: Rxi-17Sil MS

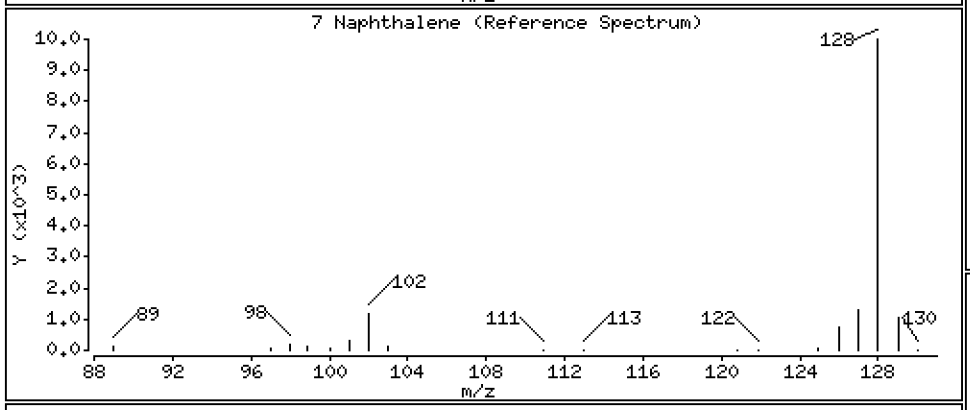
Column diameter: 0.25

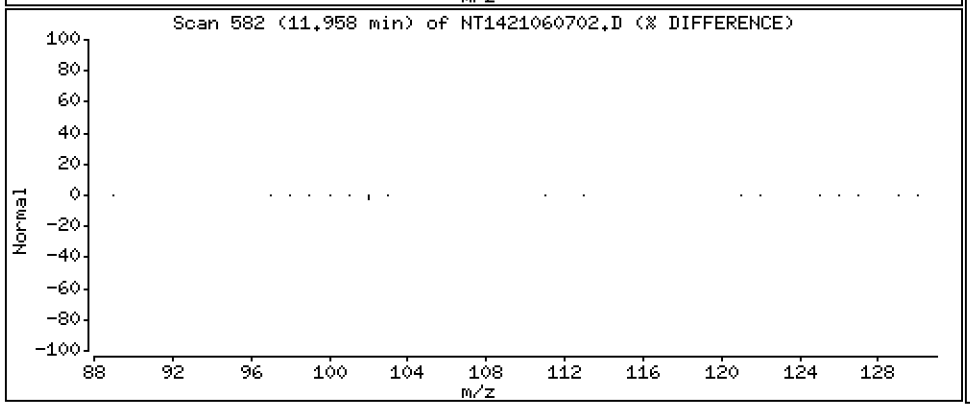
7 Naphthalene

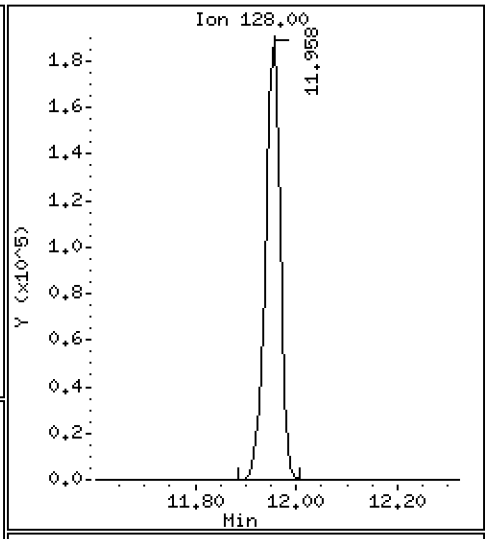
Concentration: 2.657 ug/mL

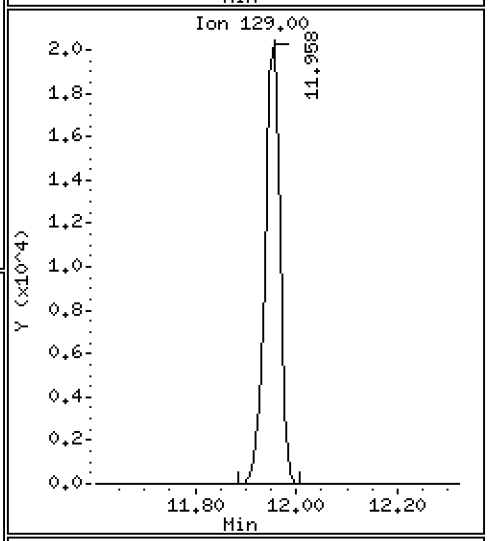


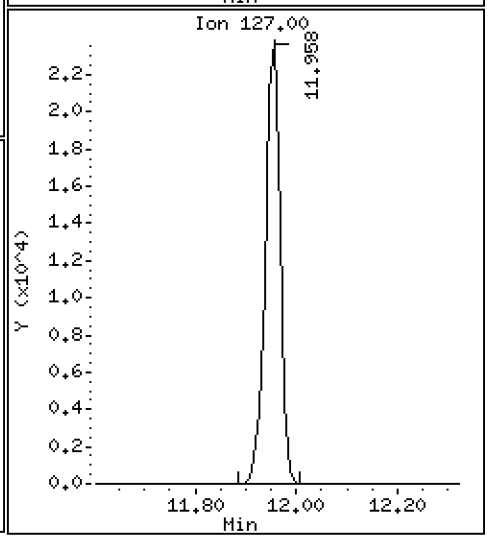












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Date : 07-JUN-2021 13:18

Client ID:

Instrument: nt14.i

Sample Info: SJF0173-ICV1

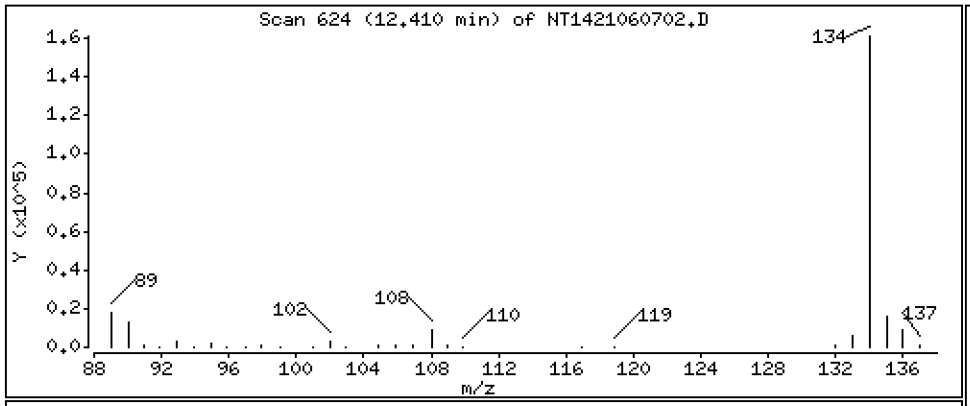
Operator: VTS

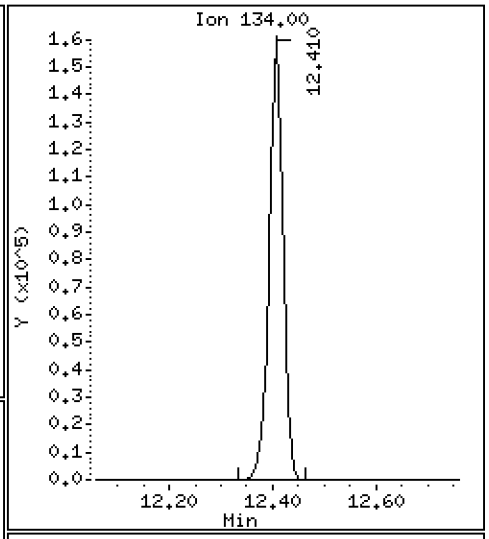
Column phase: Rxi-17Sil MS

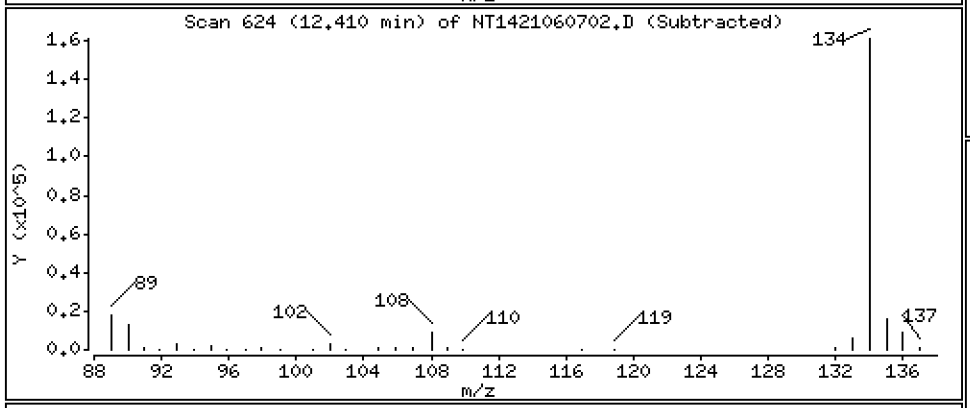
Column diameter: 0.25

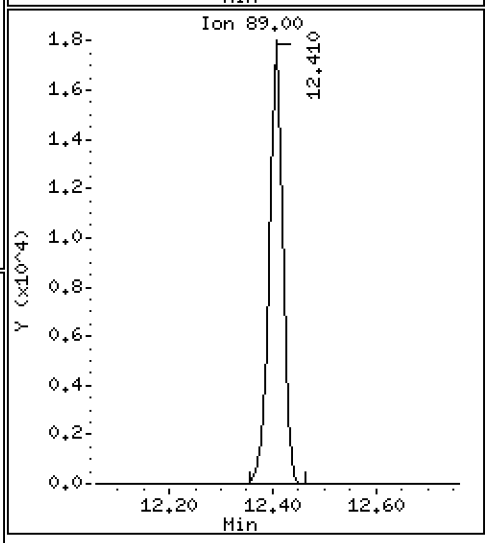
12 Benzo(b)thiophene

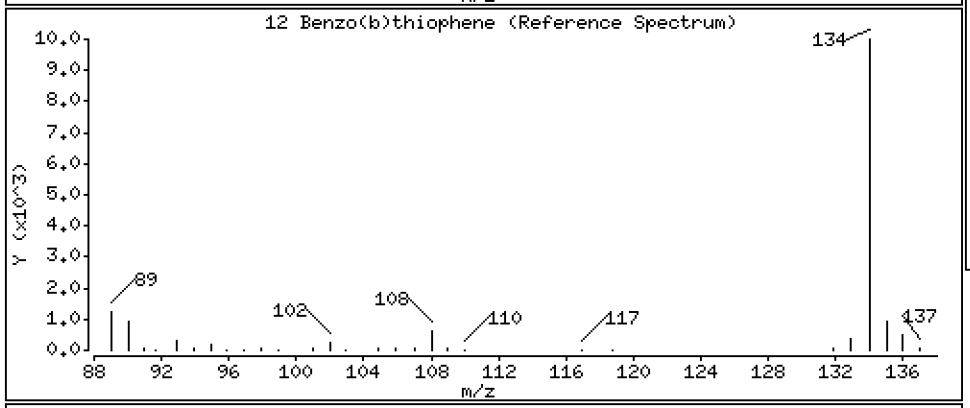
Concentration: 2.628 ug/mL

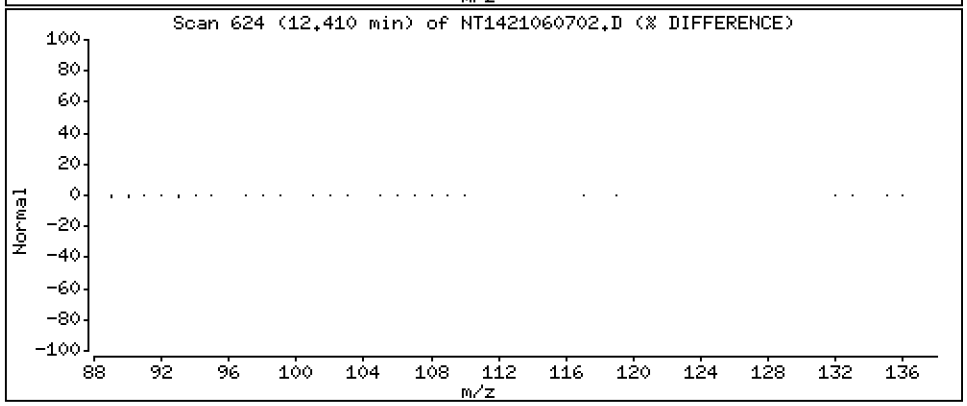












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Date : 07-JUN-2021 13:18

Client ID:

Instrument: nt14.i

Sample Info: SJF0173-ICV1

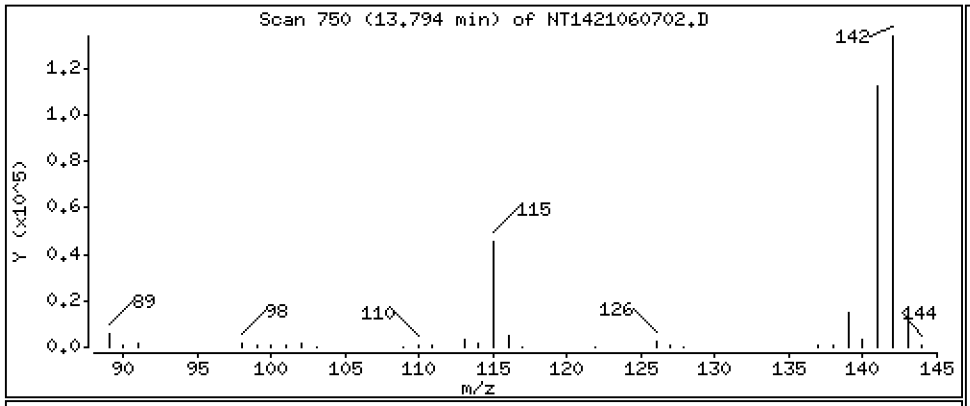
Operator: VTS

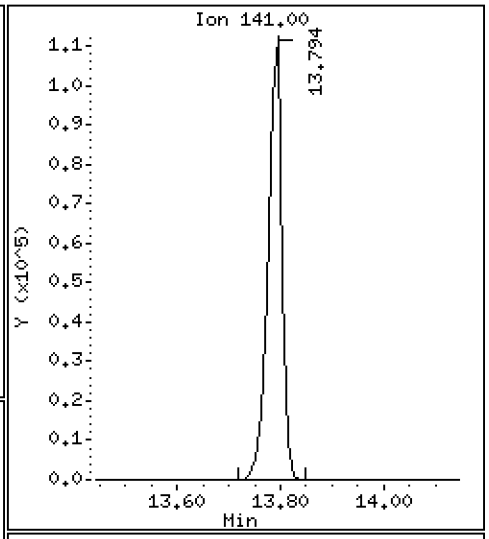
Column phase: Rxi-17Sil MS

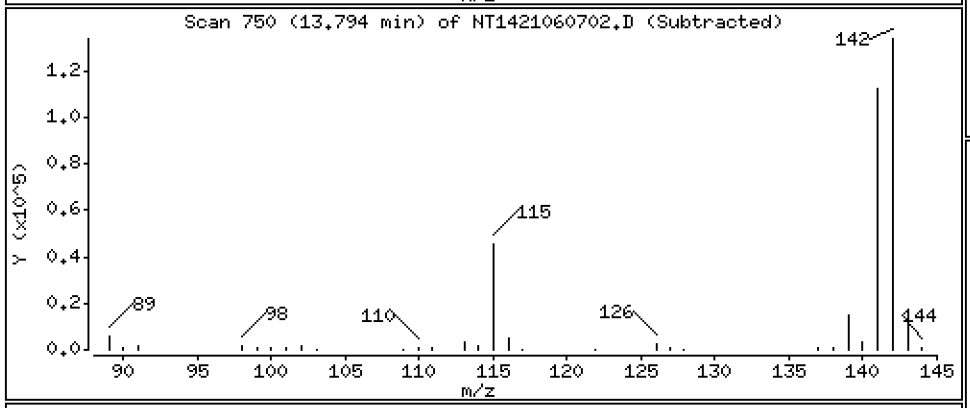
Column diameter: 0.25

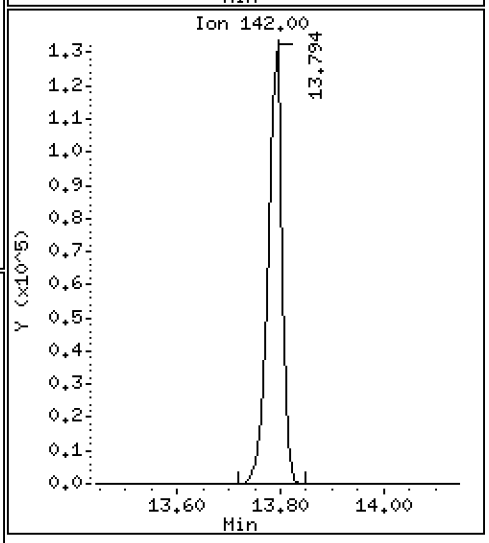
16 2-Methylnaphthalene

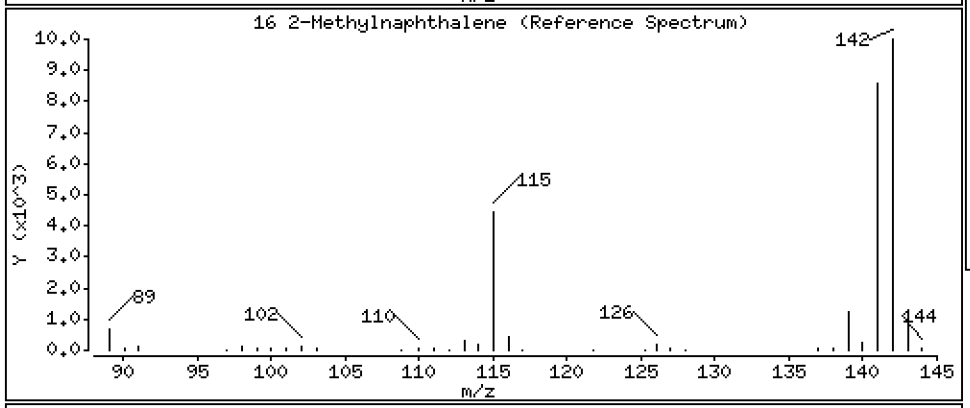
Concentration: 2.645 ug/mL

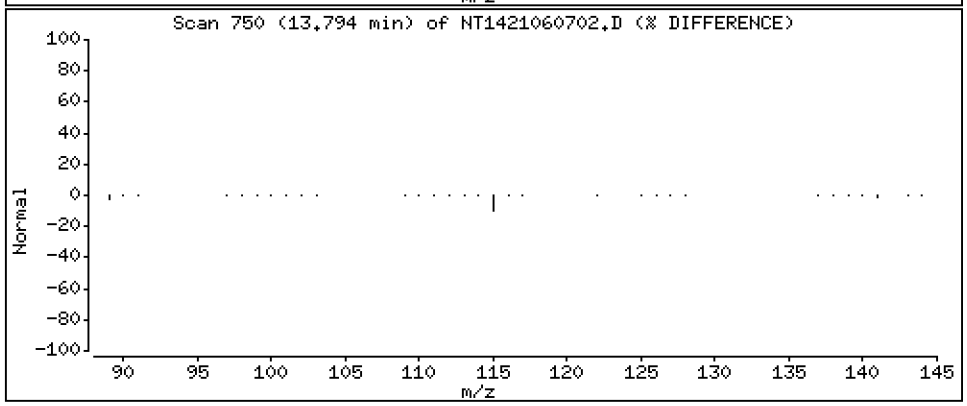












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Date : 07-JUN-2021 13:18

Client ID:

Instrument: nt14.i

Sample Info: SJF0173-ICV1

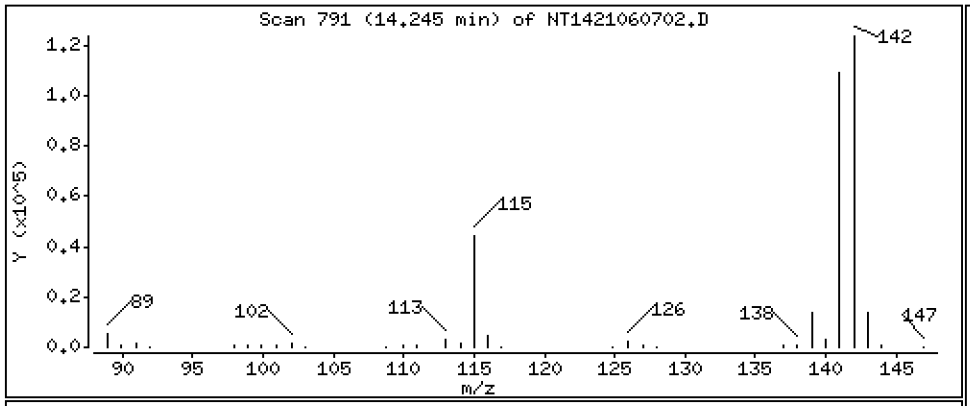
Operator: VTS

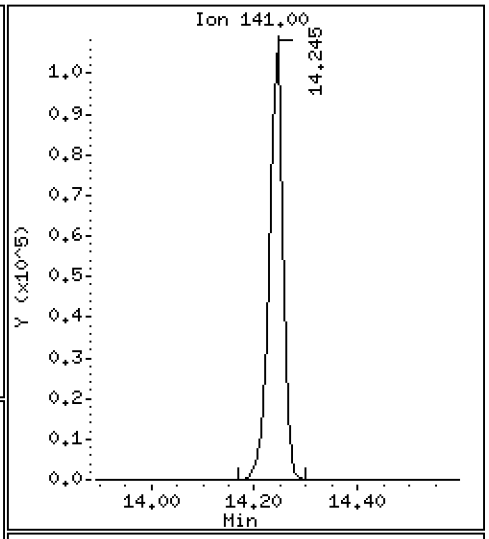
Column phase: Rxi-17Sil MS

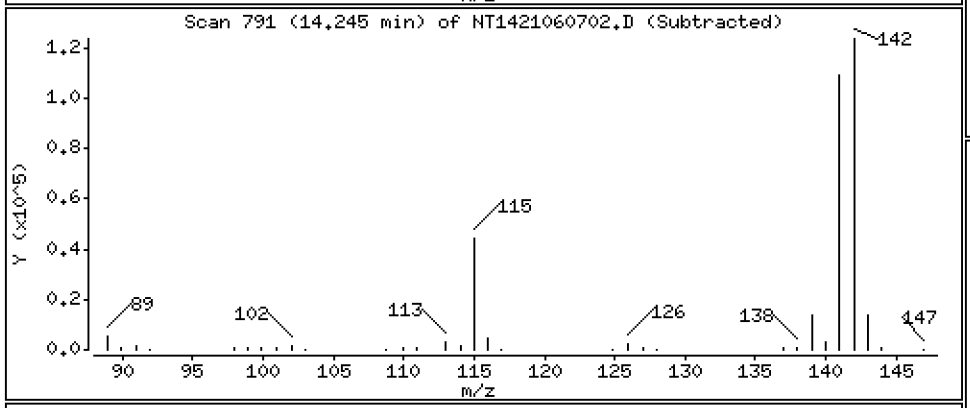
Column diameter: 0.25

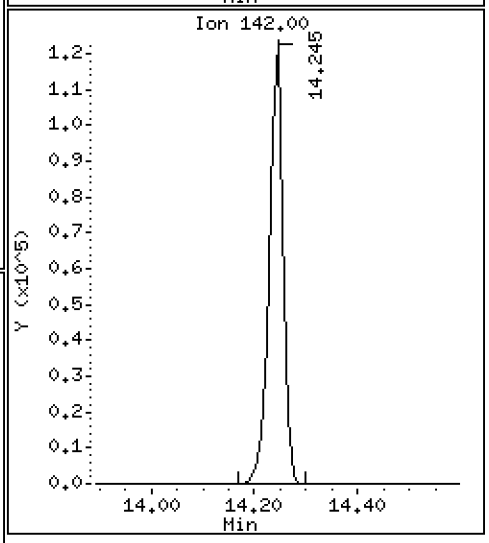
17 1-methylnaphthalene

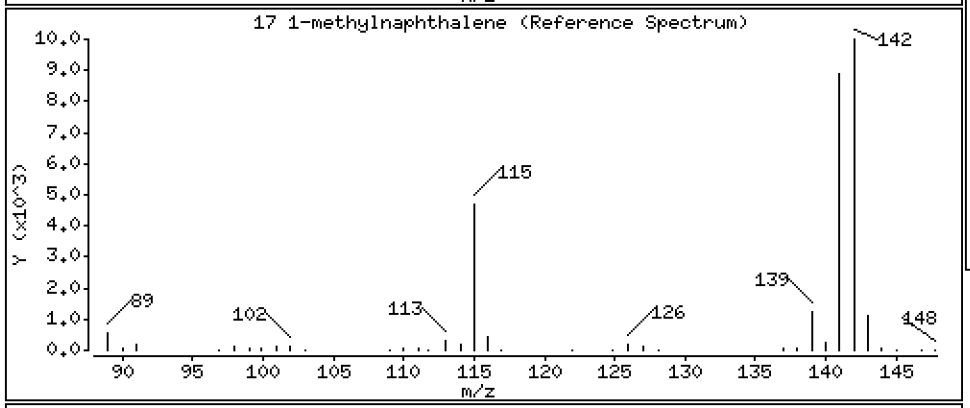
Concentration: 2.617 ug/mL

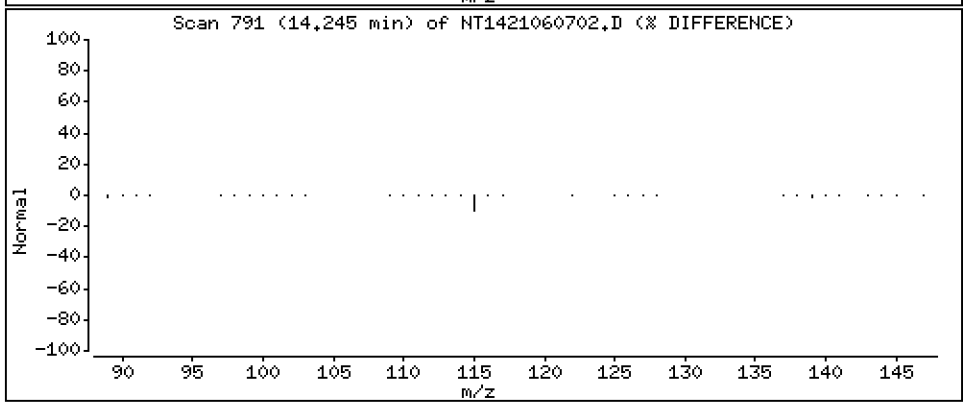












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Date : 07-JUN-2021 13:18

Client ID:

Instrument: nt14.i

Sample Info: SJF0173-ICV1

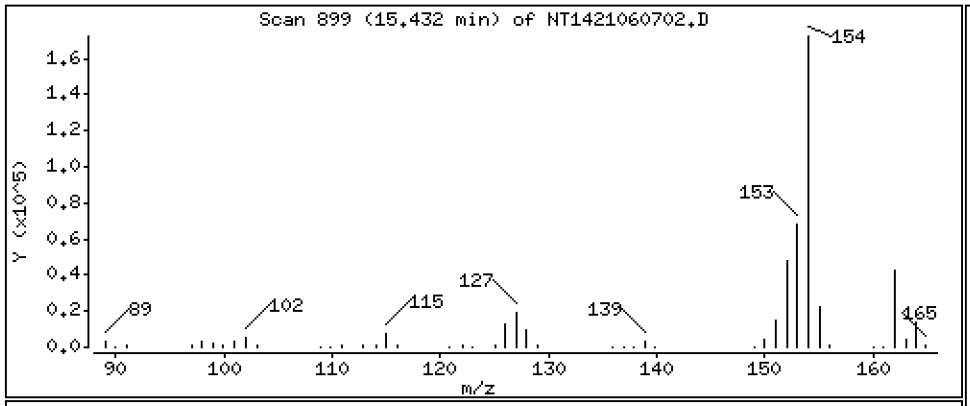
Operator: VTS

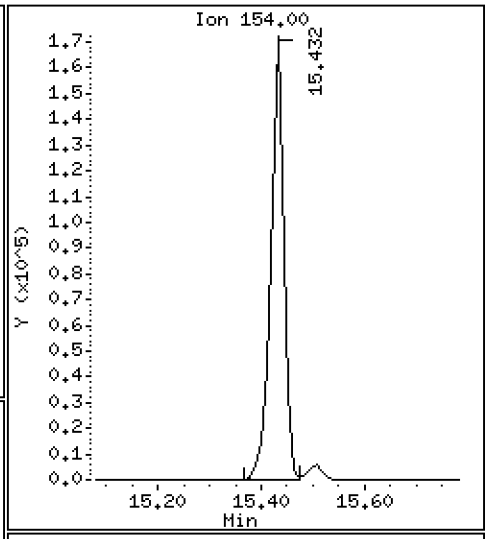
Column phase: Rxi-17Sil MS

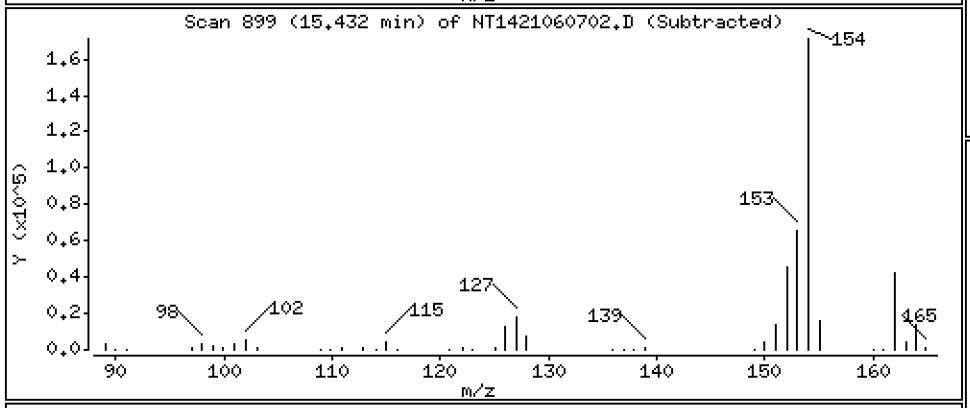
Column diameter: 0.25

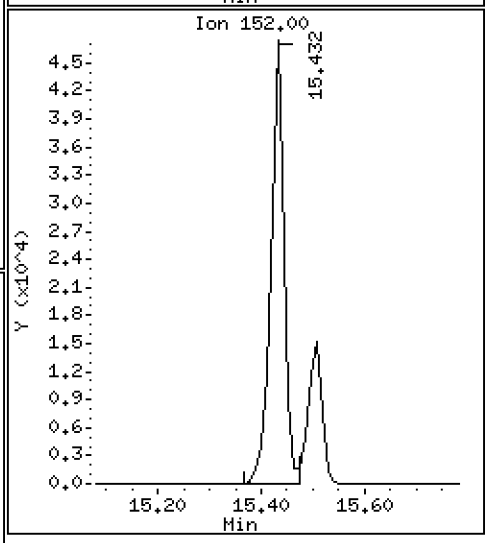
18 Biphenyl

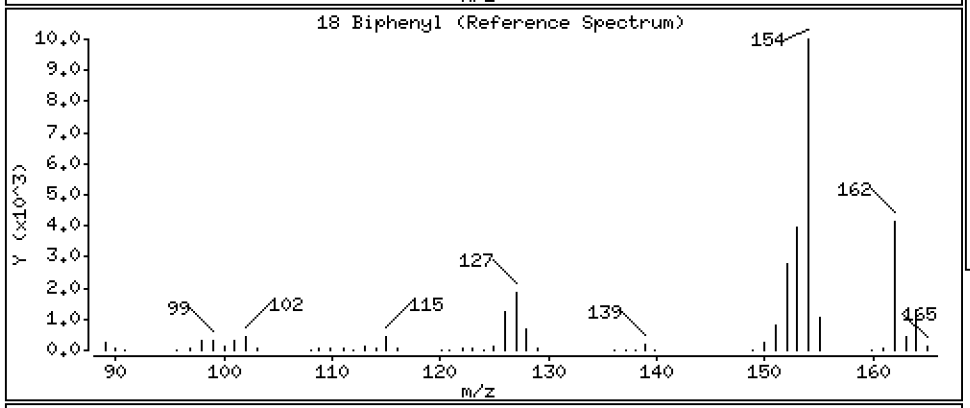
Concentration: 2.631 ug/mL

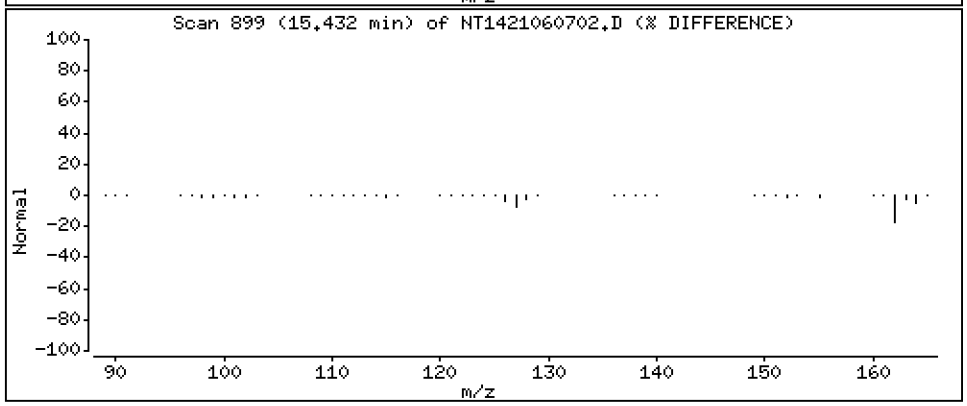












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Date : 07-JUN-2021 13:18

Client ID:

Instrument: nt14.i

Sample Info: SJF0173-ICV1

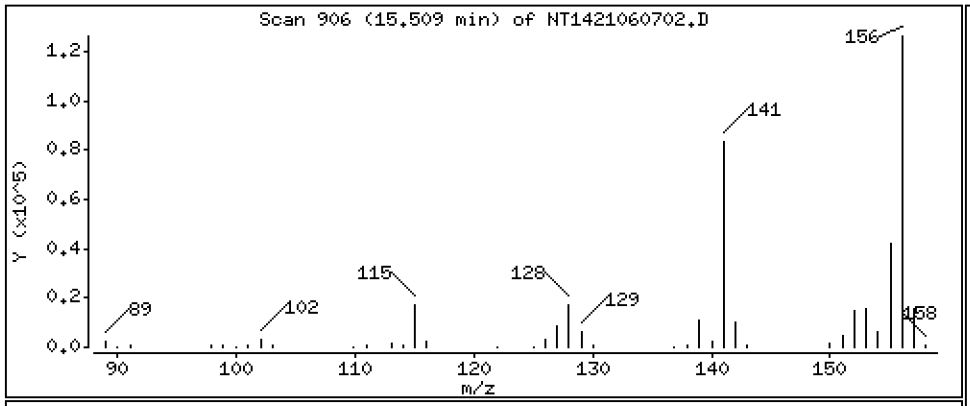
Operator: VTS

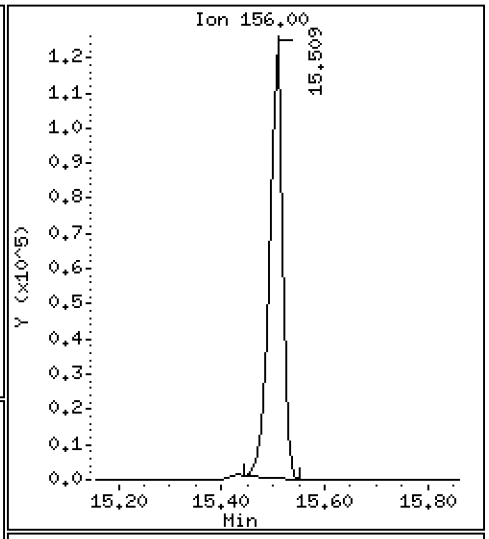
Column phase: Rxi-17Sil MS

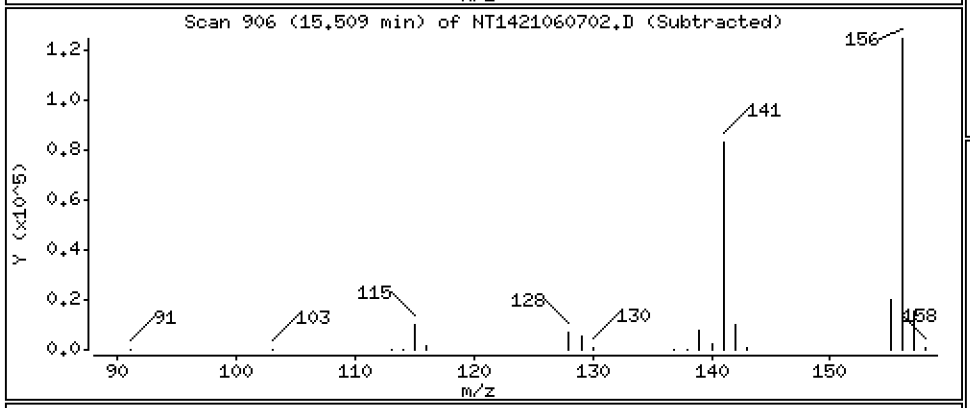
Column diameter: 0.25

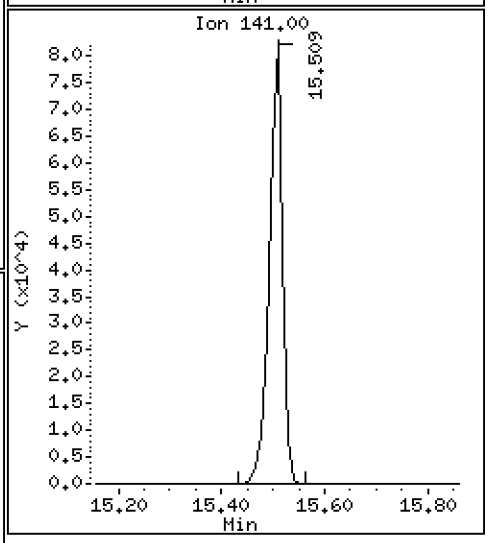
19 2,6-Dimethylnaphthalene

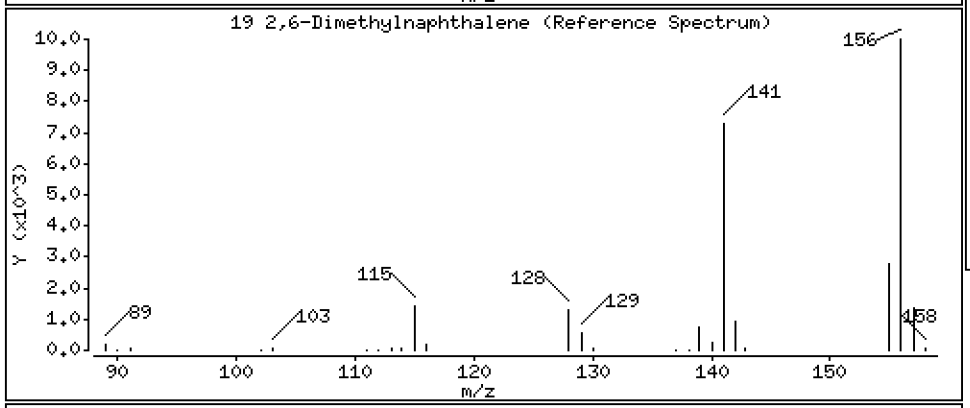
Concentration: 2.575 ug/mL

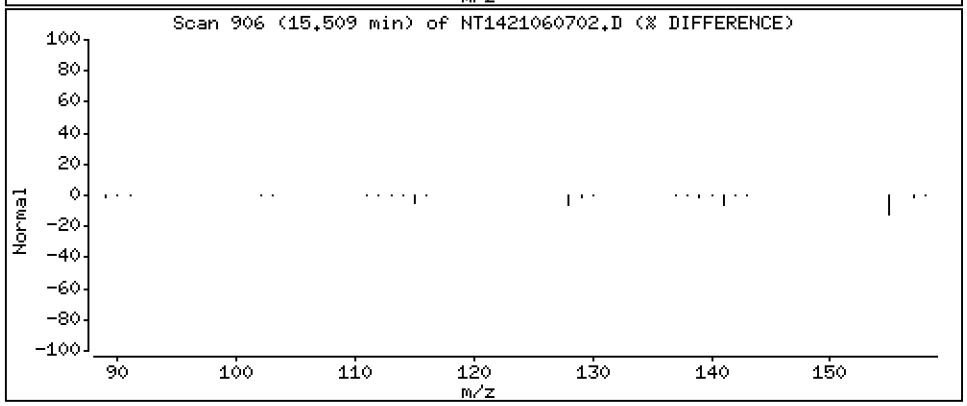












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Date : 07-JUN-2021 13:18

Client ID:

Instrument: nt14.i

Sample Info: SJF0173-ICV1

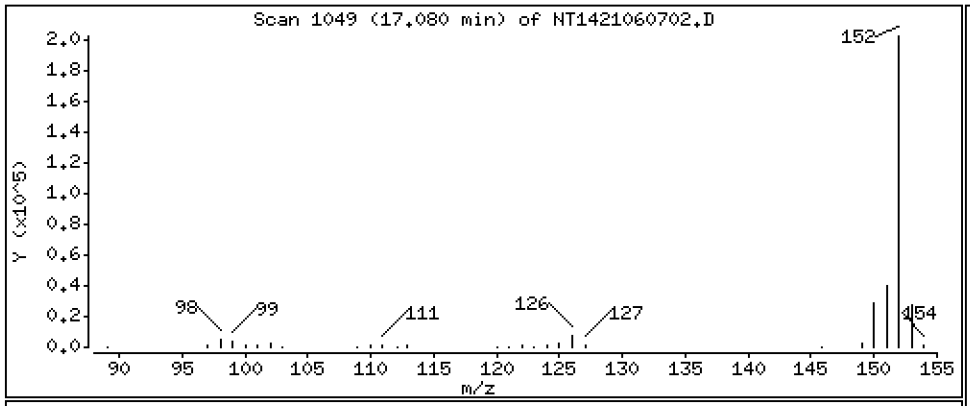
Operator: VTS

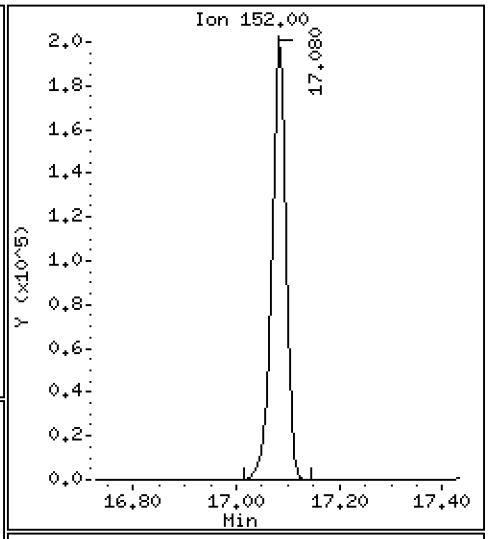
Column phase: Rxi-17Sil MS

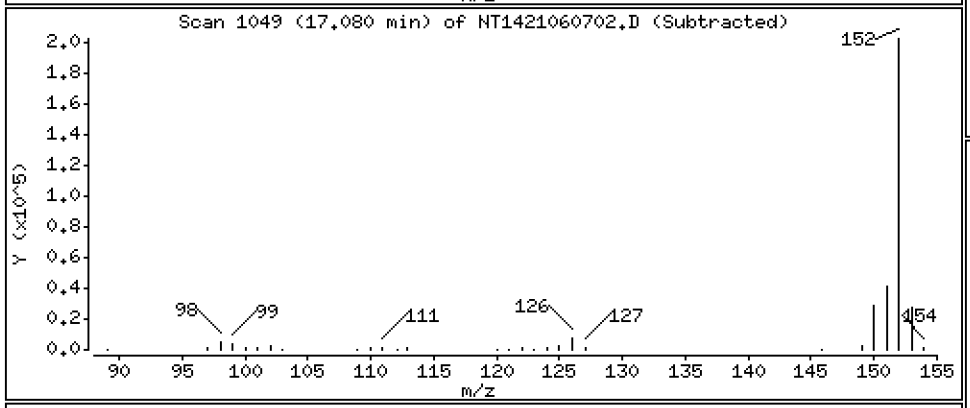
Column diameter: 0.25

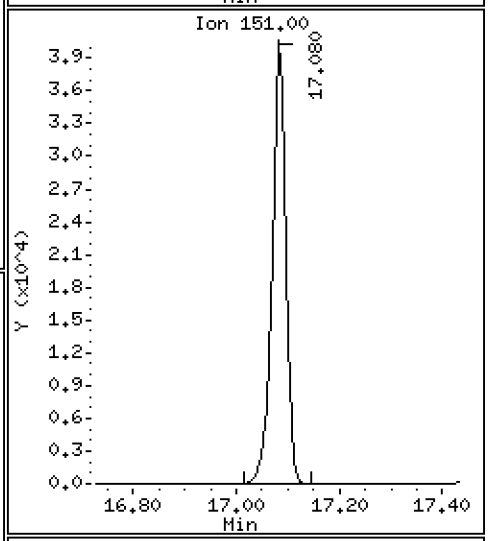
20 Acenaphthylene

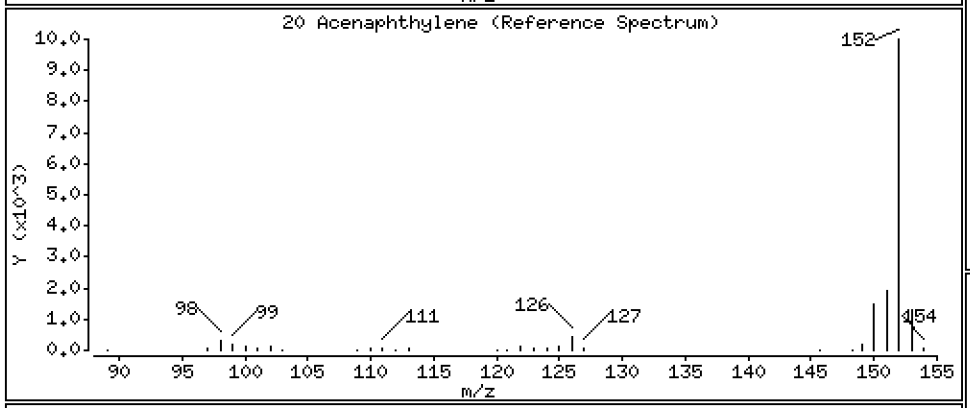
Concentration: 2.666 ug/mL

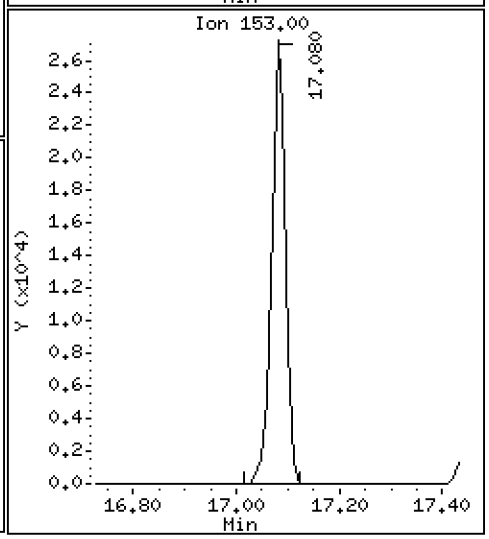


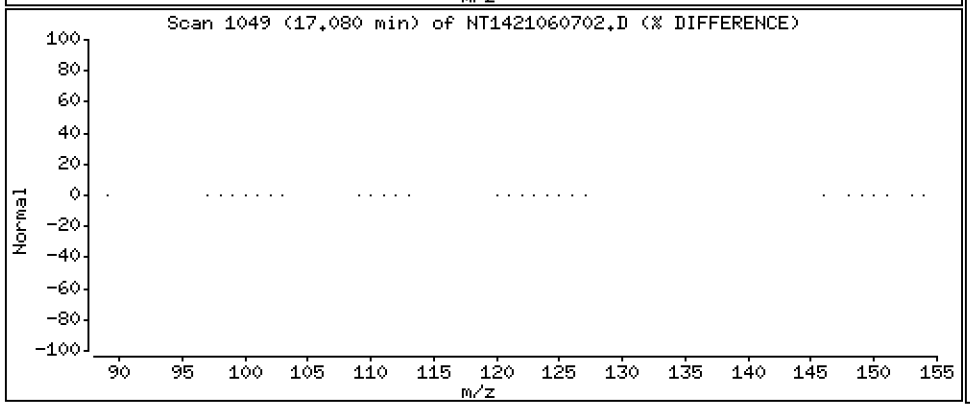












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Date : 07-JUN-2021 13:18

Client ID:

Instrument: nt14.i

Sample Info: SJF0173-ICV1

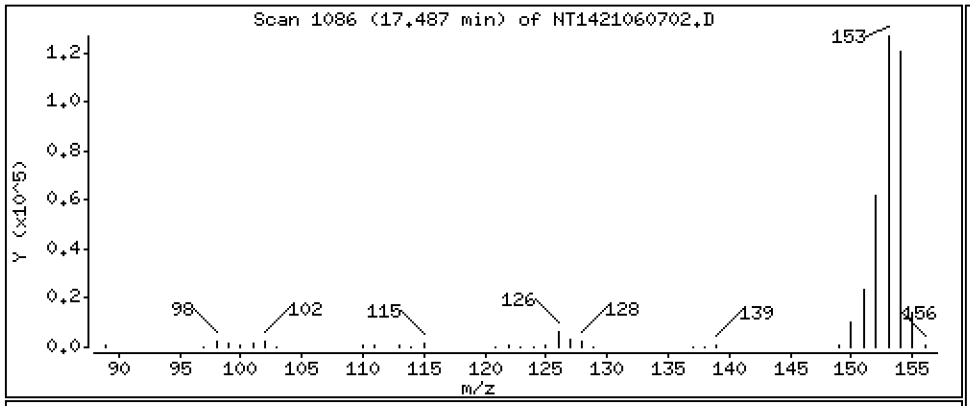
Operator: VTS

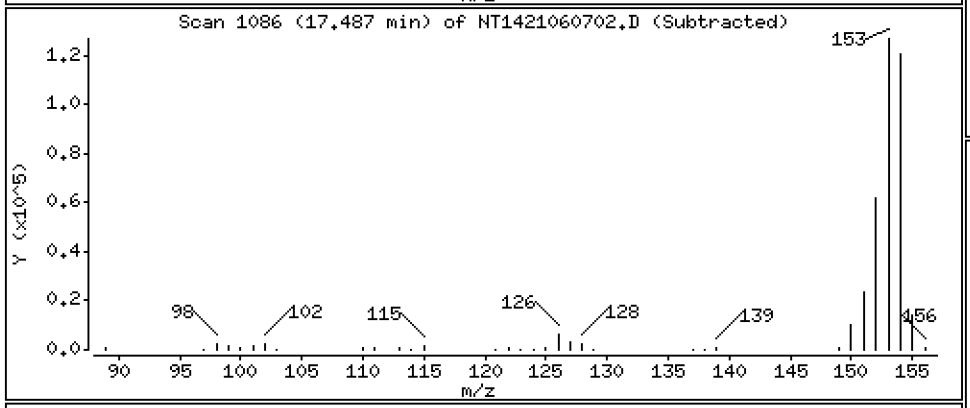
Column phase: Rxi-17Sil MS

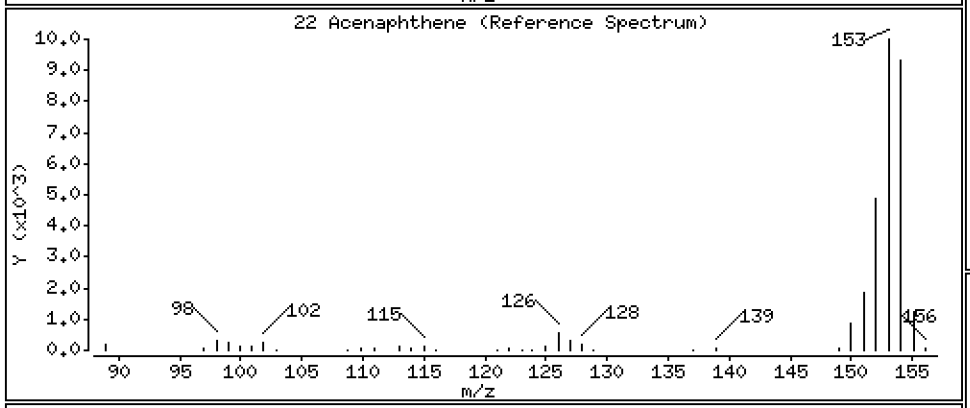
Column diameter: 0.25

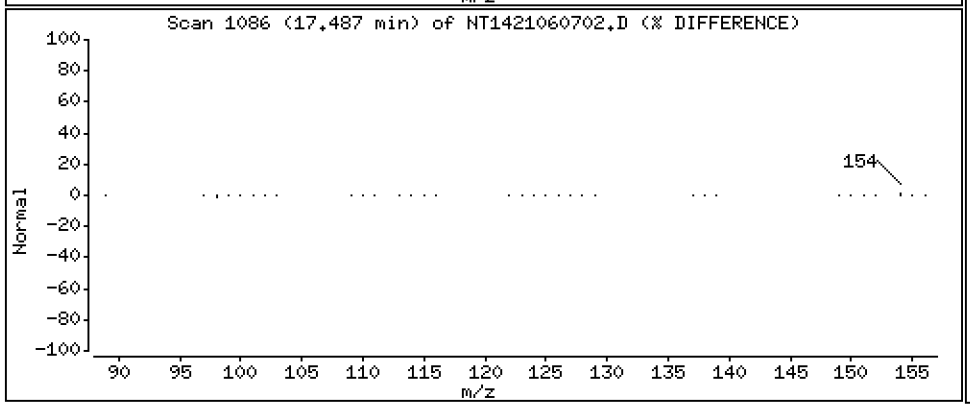
22 Acenaphthene

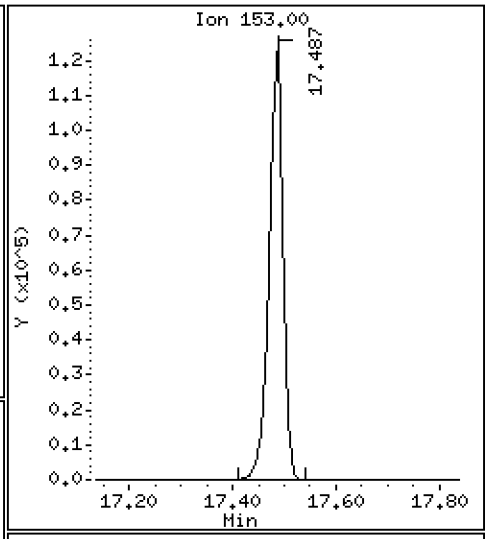
Concentration: 2.592 ug/mL

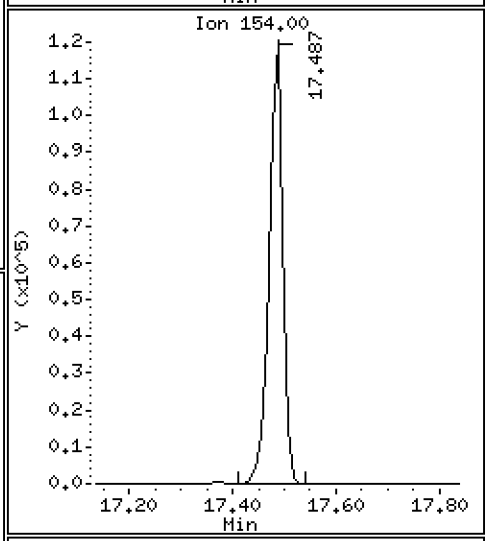


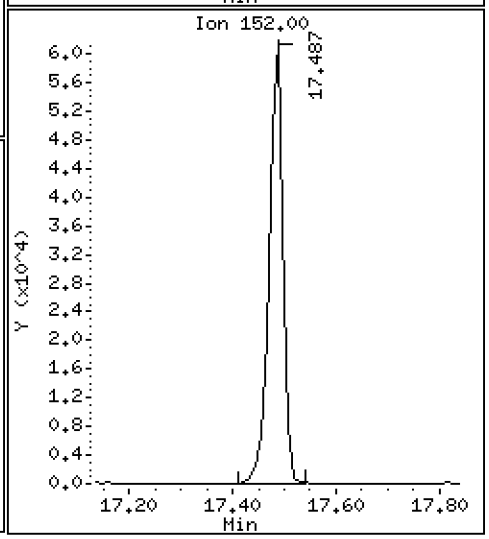












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Date : 07-JUN-2021 13:18

Client ID:

Instrument: nt14.i

Sample Info: SJF0173-ICV1

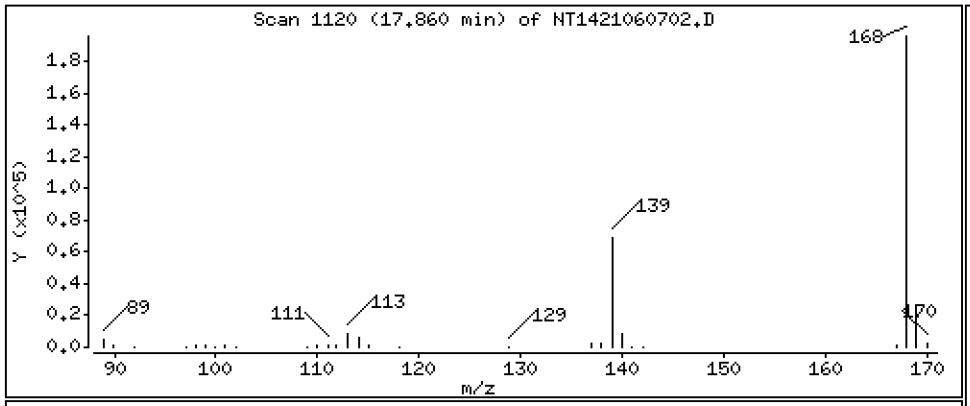
Operator: VTS

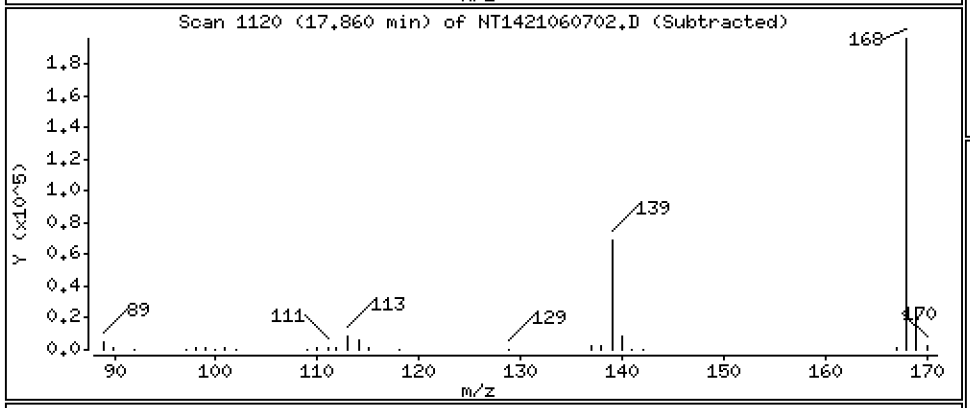
Column phase: Rxi-17Sil MS

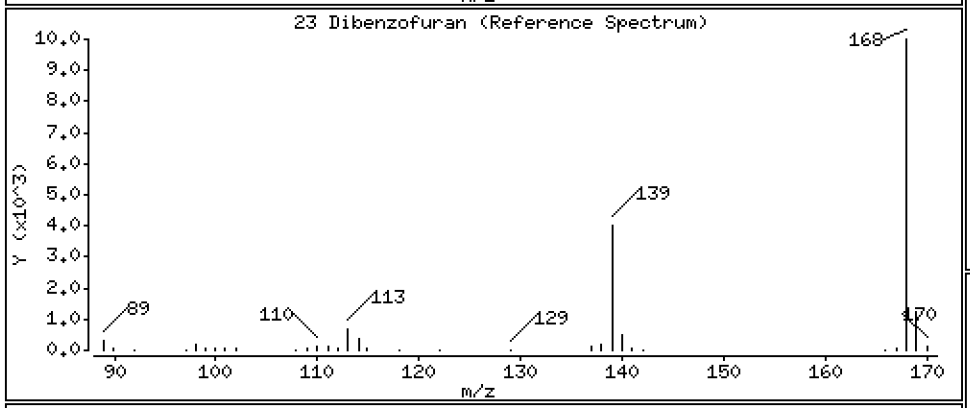
Column diameter: 0.25

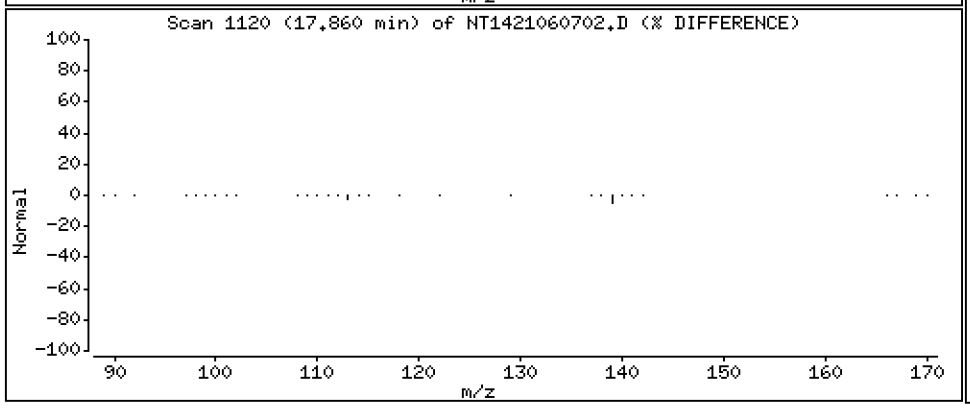
23 Dibenzofuran

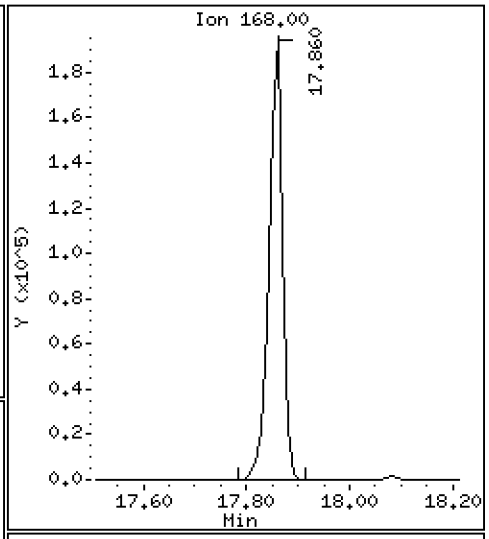
Concentration: 2.660 ug/mL

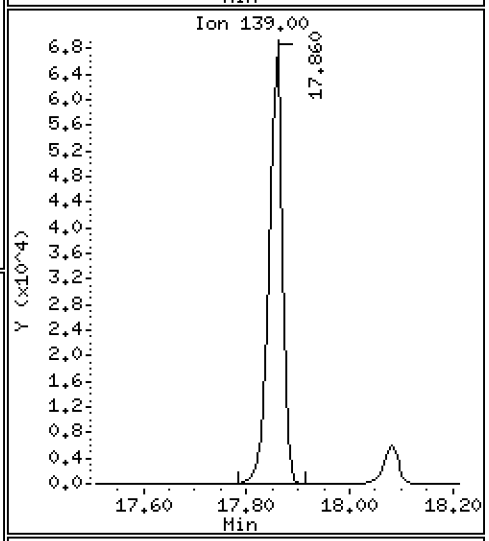


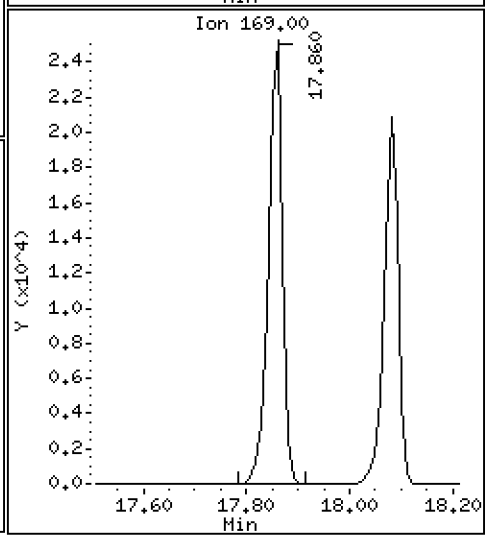












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Client ID:

Instrument: nt14.i

Sample Info: SJF0173-ICV1

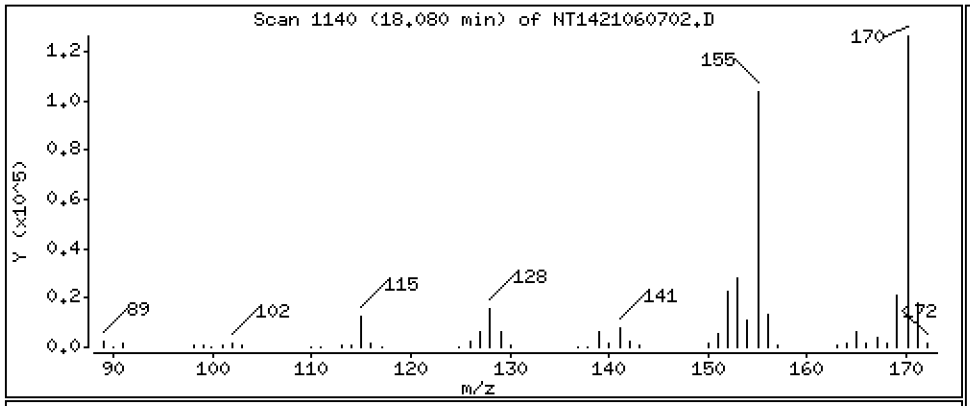
Operator: VTS

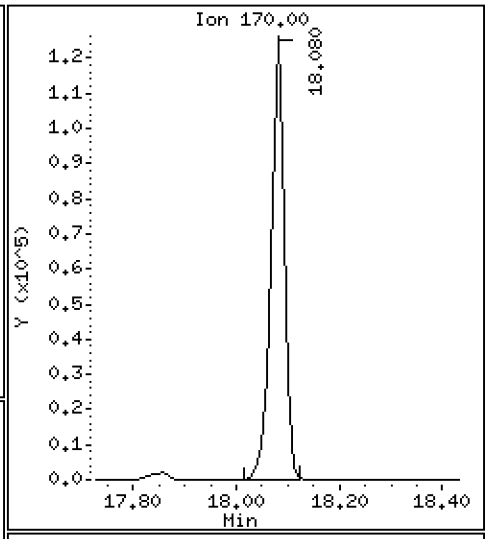
Column phase: Rxi-17Sil MS

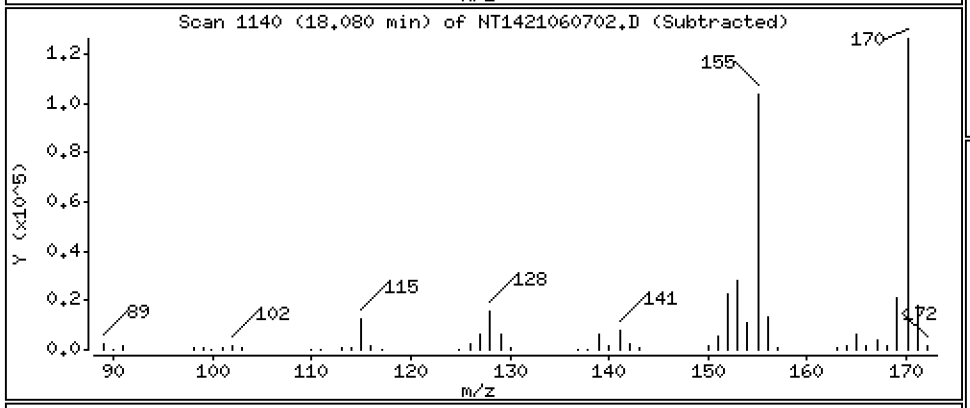
Column diameter: 0.25

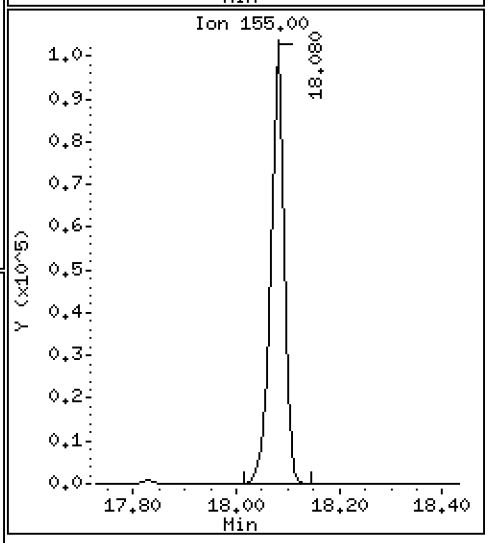
24 1,6,7-Trimethylnaphthalene

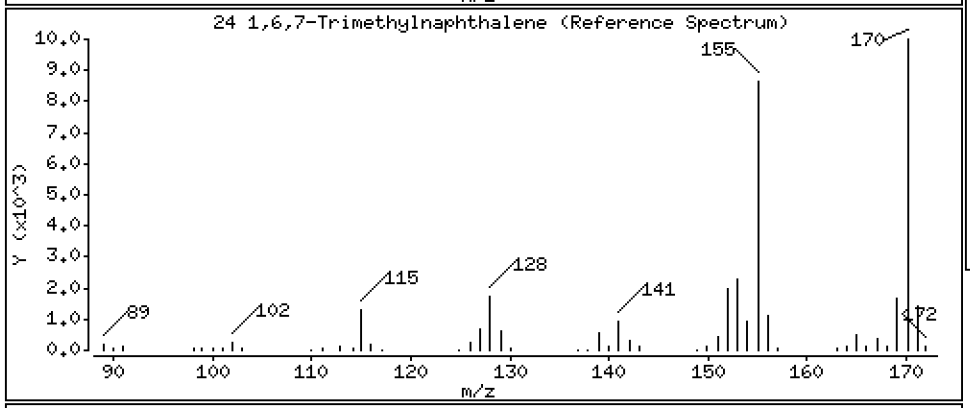
Concentration: 2.635 ug/mL

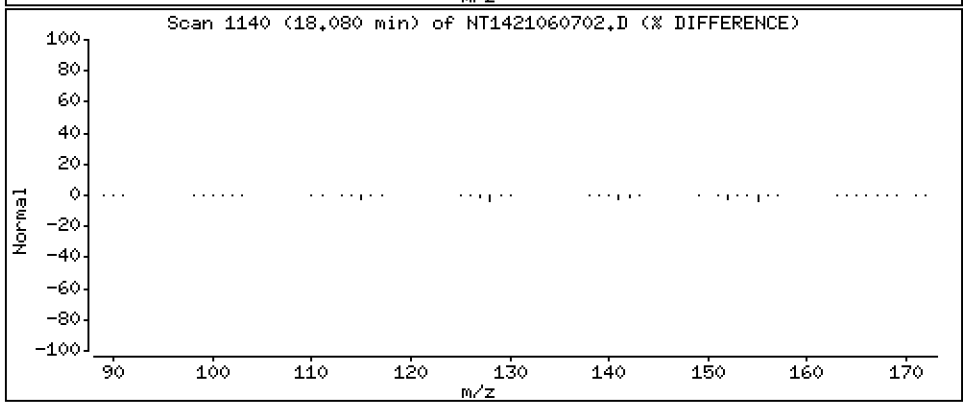












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Date : 07-JUN-2021 13:18

Client ID:

Instrument: nt14.i

Sample Info: SJF0173-ICV1

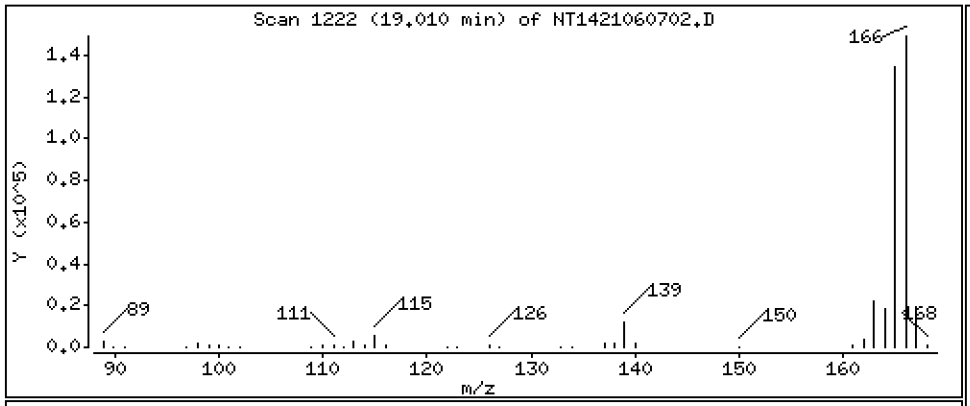
Operator: VTS

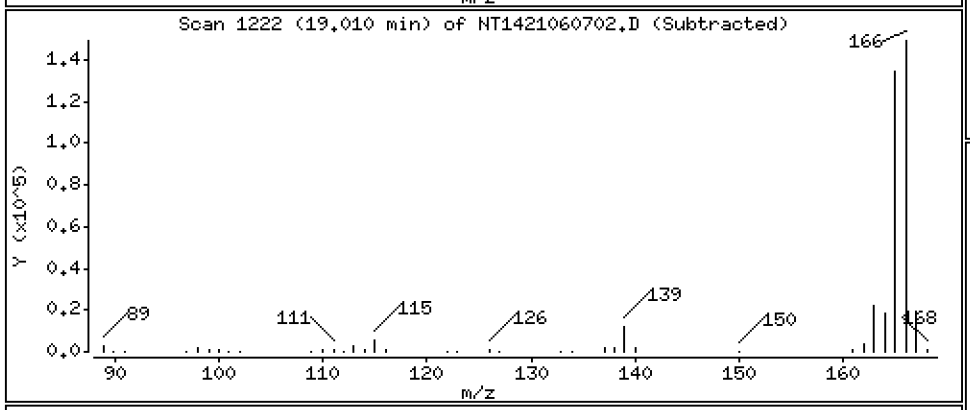
Column phase: Rxi-17Sil MS

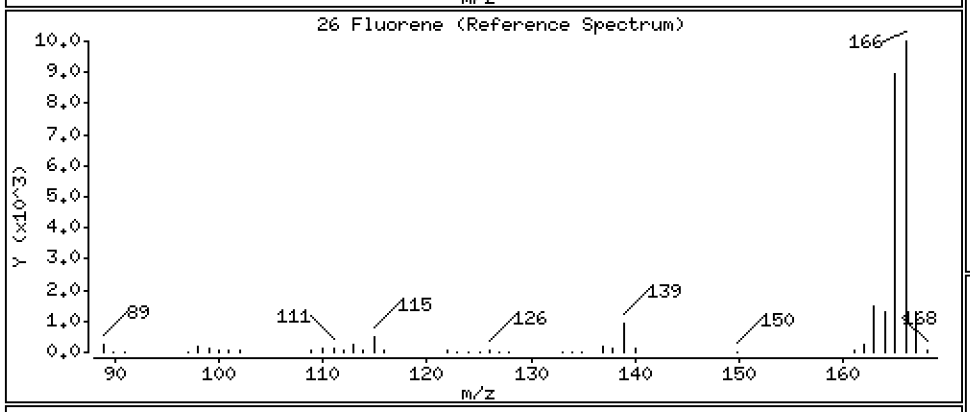
Column diameter: 0.25

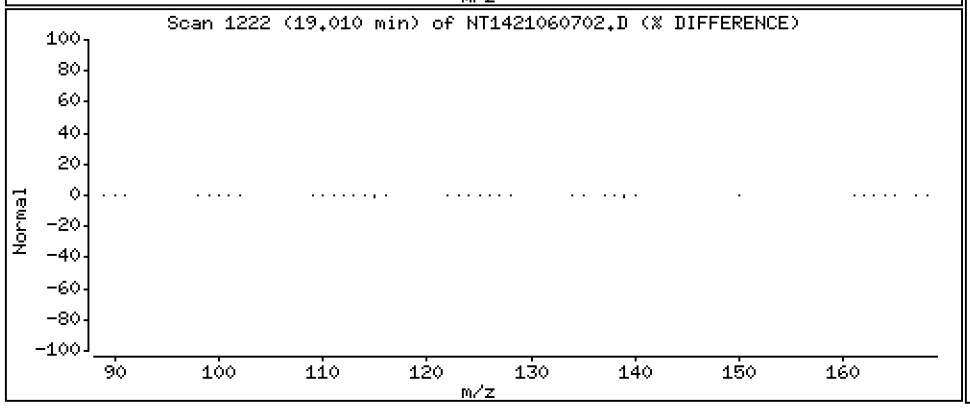
26 Fluorene

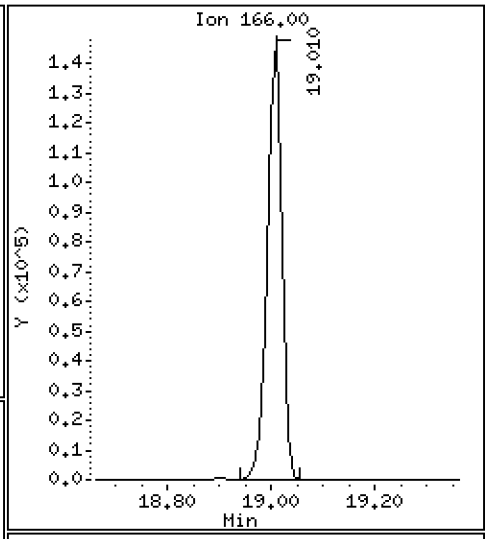
Concentration: 2.654 ug/mL

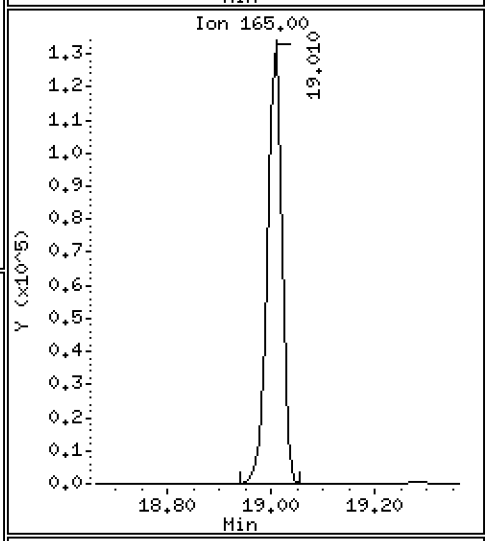


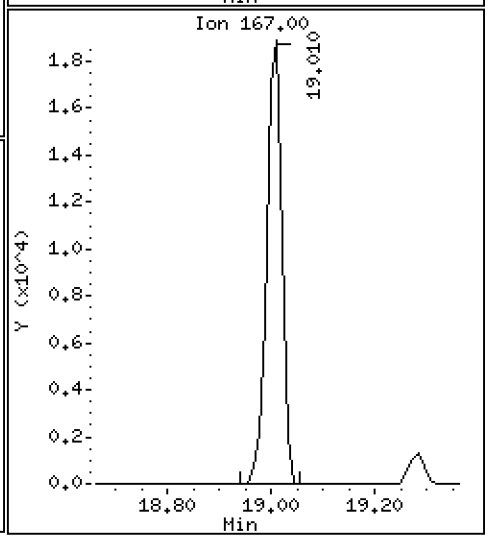












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Client ID:

Instrument: nt14.i

Sample Info: SJF0173-ICV1

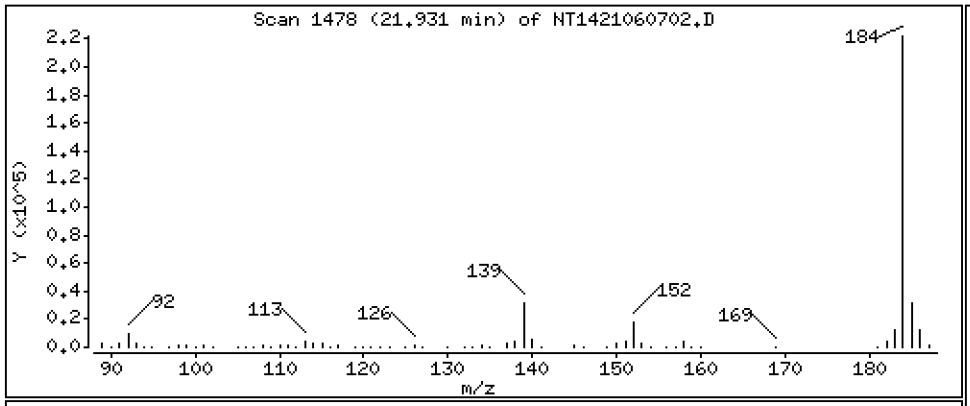
Operator: VTS

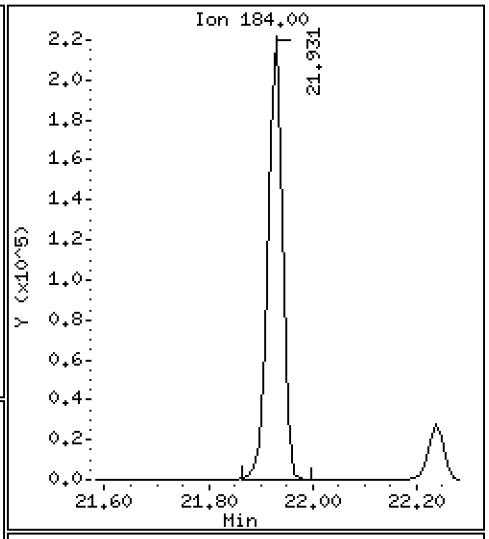
Column phase: Rxi-17Sil MS

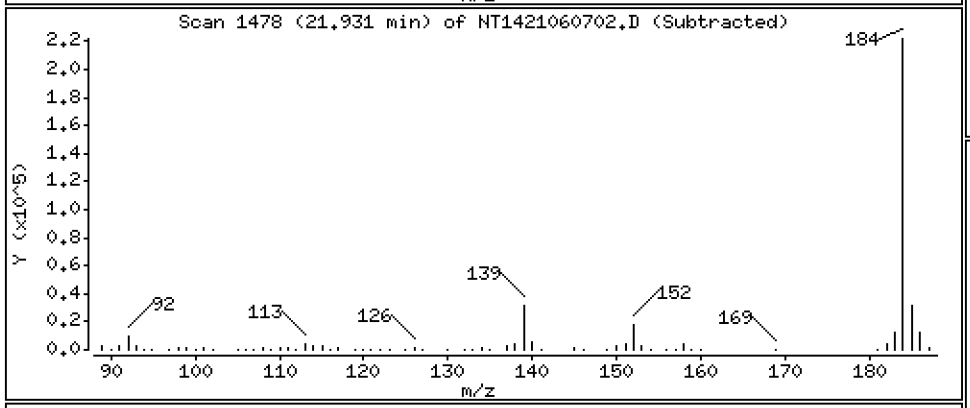
Column diameter: 0.25

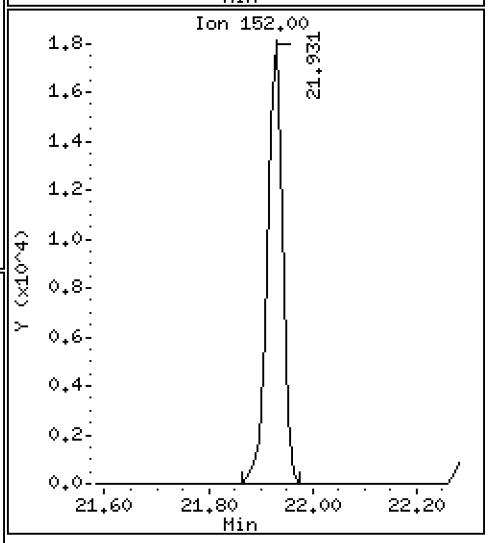
30 Dibenzothiophene

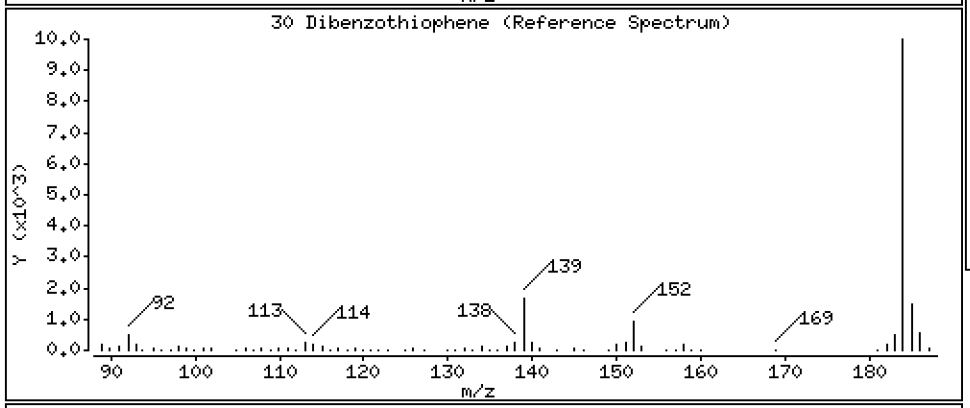
Concentration: 2.745 ug/mL

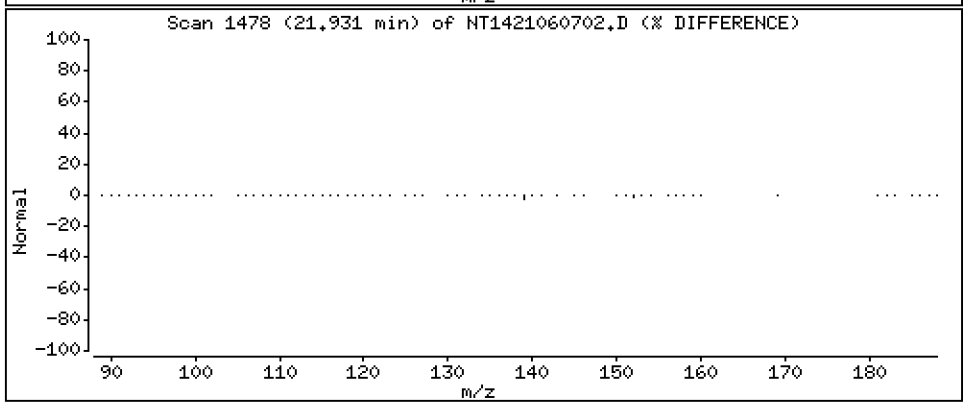












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Date : 07-JUN-2021 13:18

Client ID:

Instrument: nt14.i

Sample Info: SJF0173-ICV1

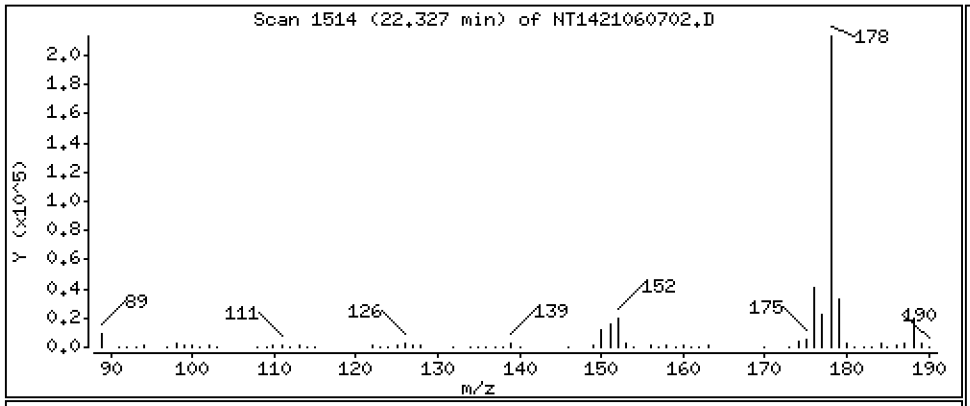
Operator: VTS

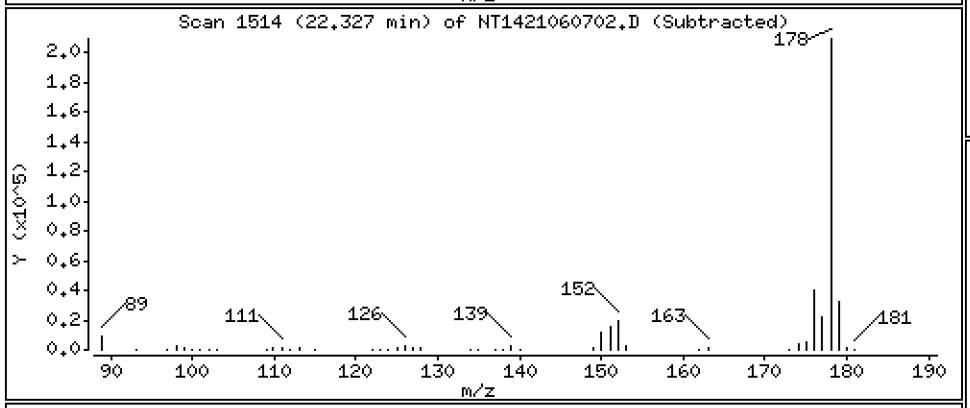
Column phase: Rxi-17Sil MS

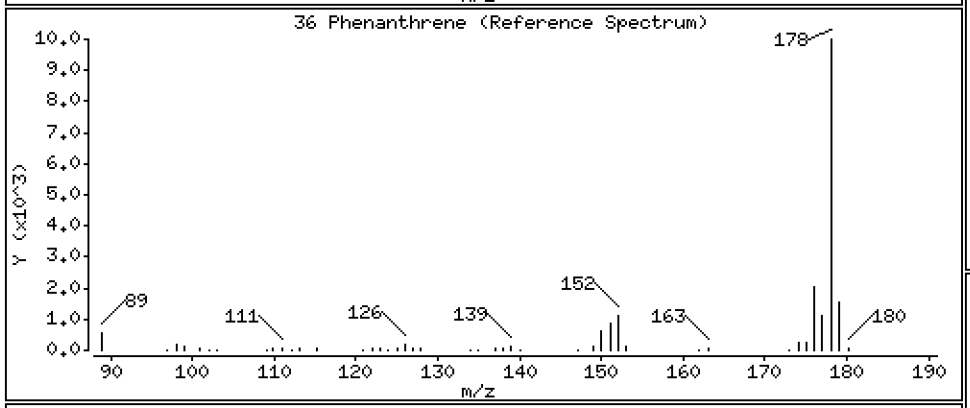
Column diameter: 0.25

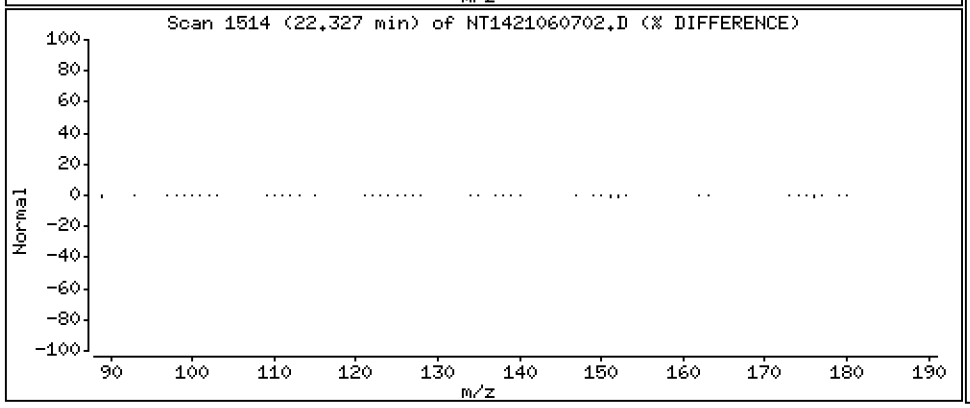
36 Phenanthrene

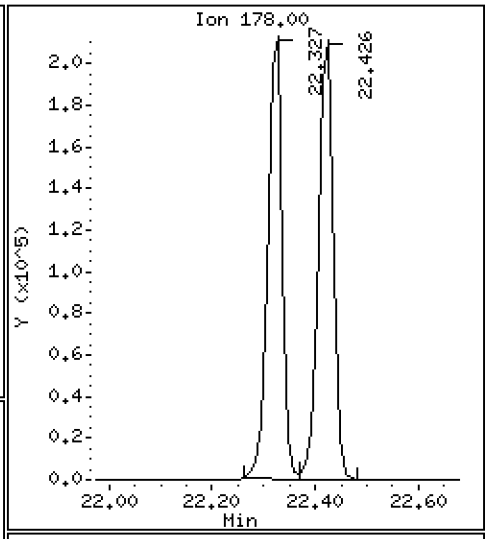
Concentration: 2.582 ug/mL

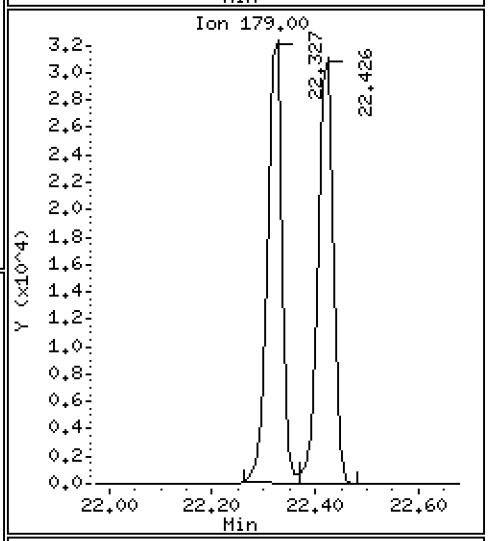


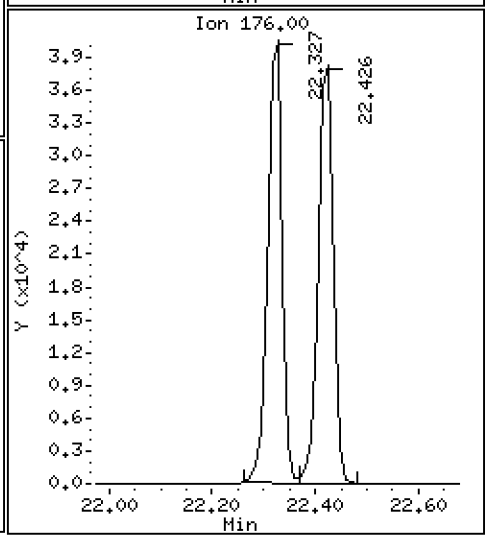












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Date : 07-JUN-2021 13:18

Client ID:

Instrument: nt14.i

Sample Info: SJF0173-ICV1

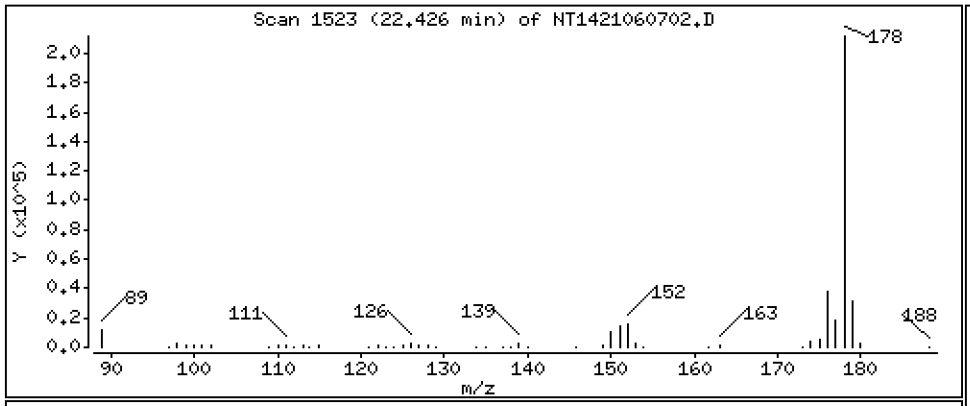
Operator: VTS

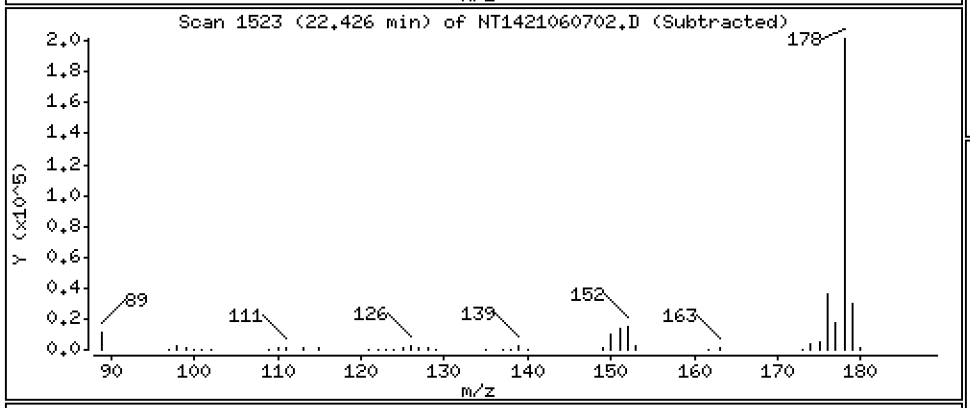
Column phase: Rxi-17Sil MS

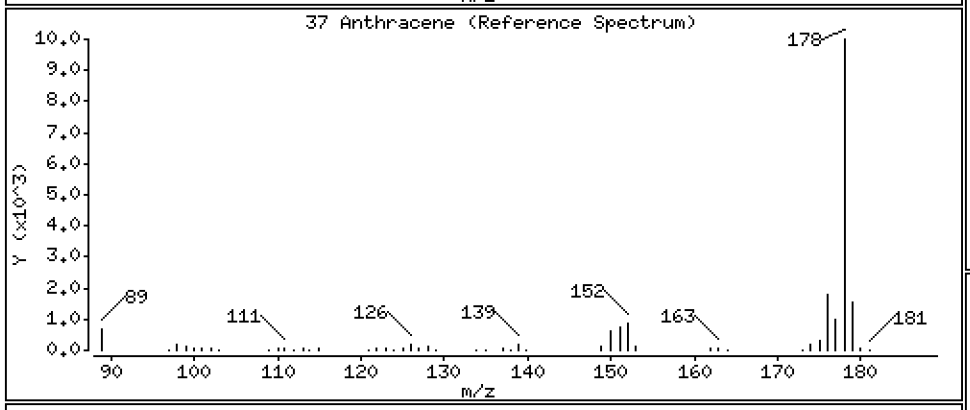
Column diameter: 0.25

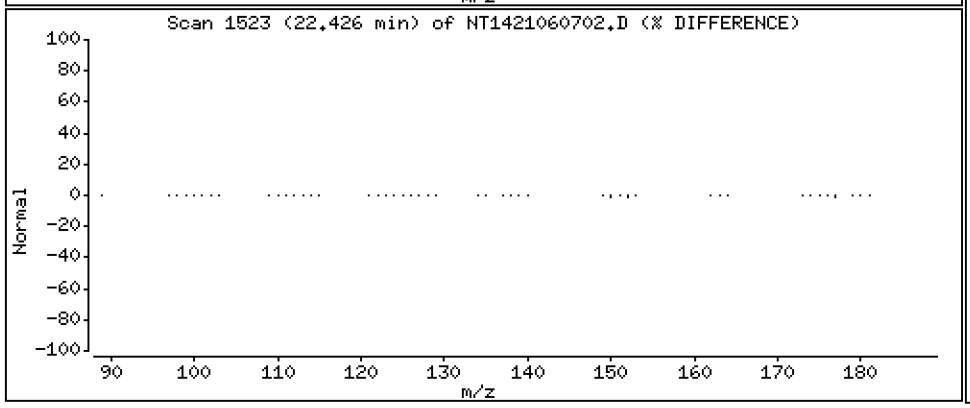
37 Anthracene

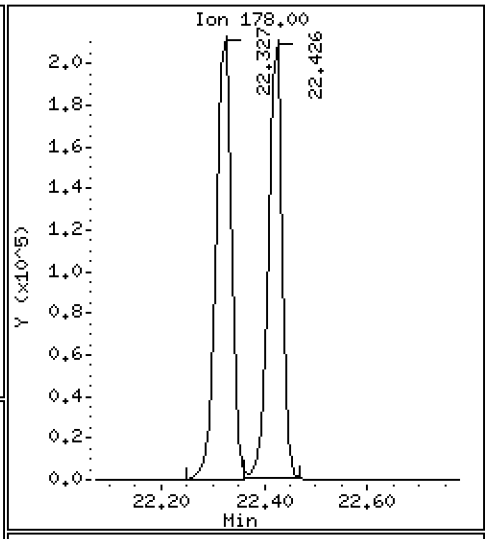
Concentration: 2.625 ug/mL

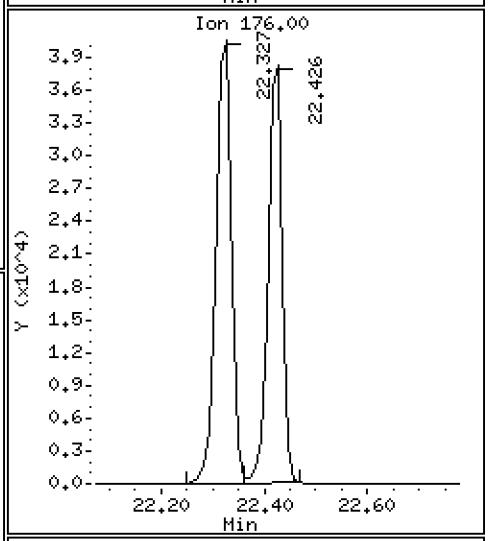


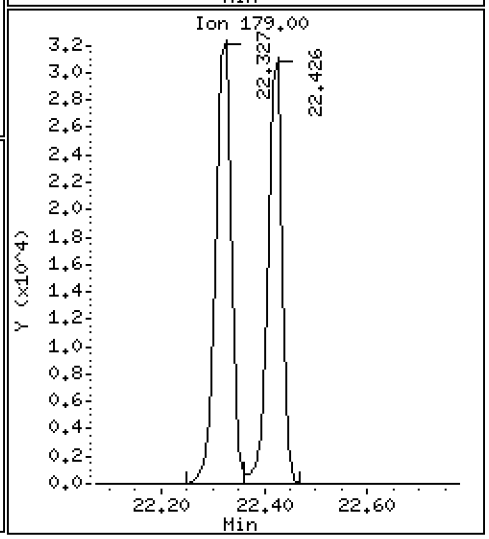












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Date : 07-JUN-2021 13:18

Client ID:

Instrument: nt14.i

Sample Info: SJF0173-ICV1

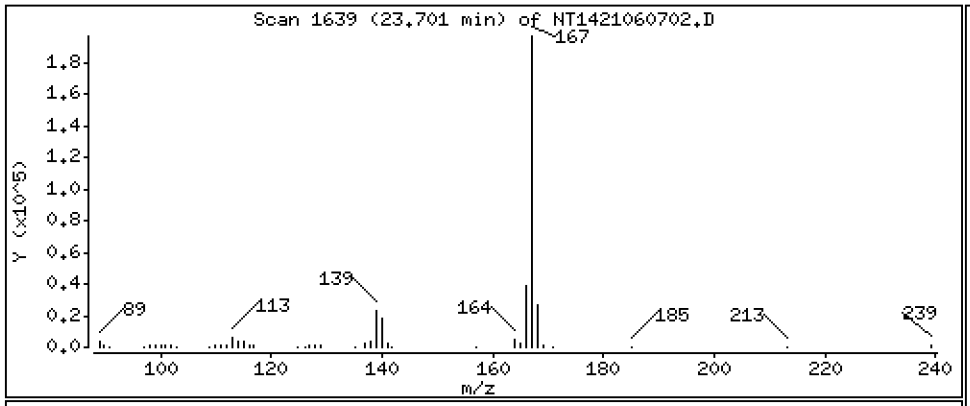
Operator: VTS

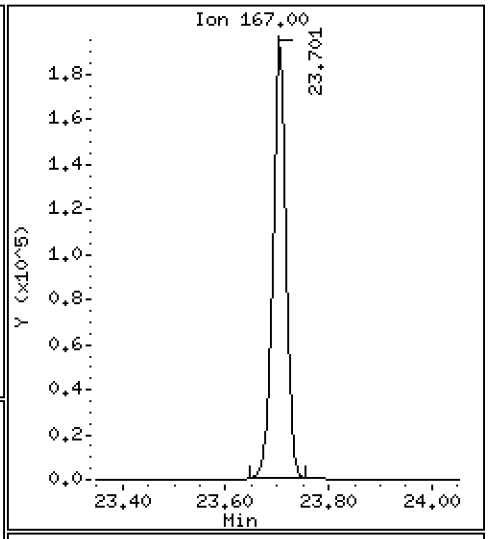
Column phase: Rxi-17Sil MS

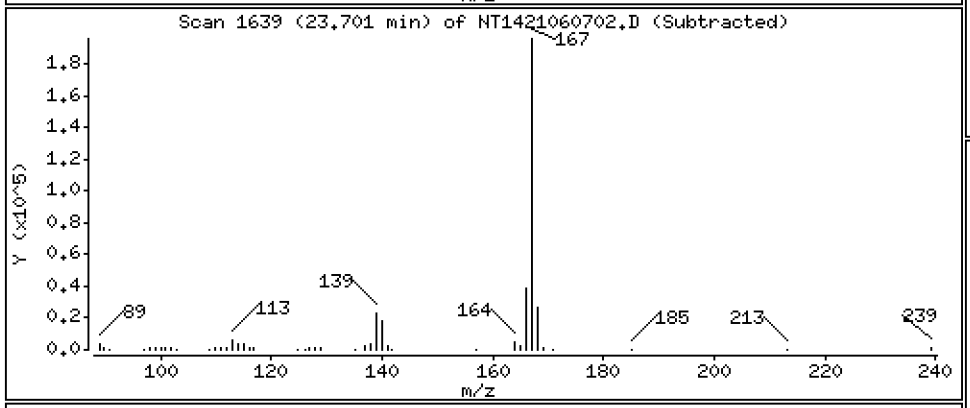
Column diameter: 0.25

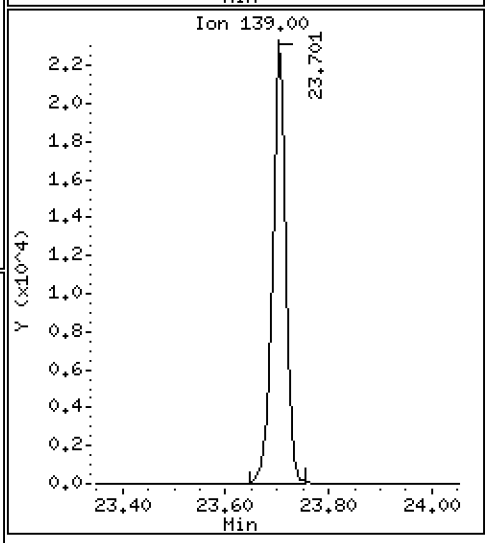
42 Carbazole

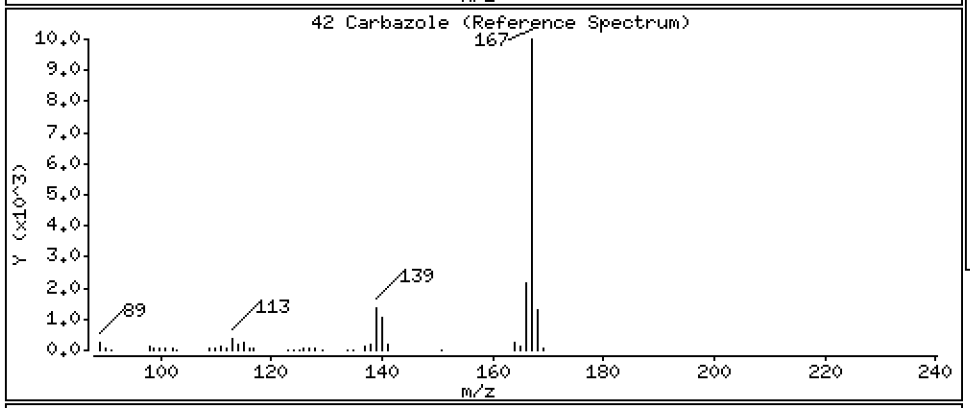
Concentration: 2.530 ug/mL

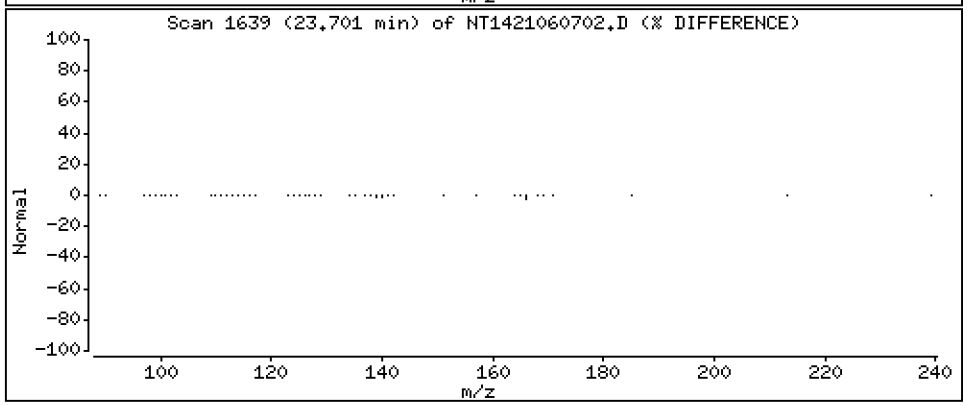












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Date : 07-JUN-2021 13:18

Client ID:

Instrument: nt14.i

Sample Info: SJF0173-ICV1

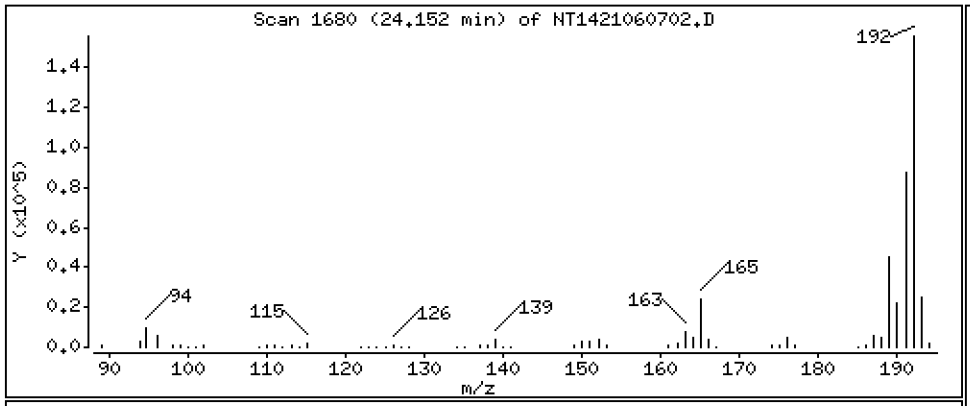
Operator: VTS

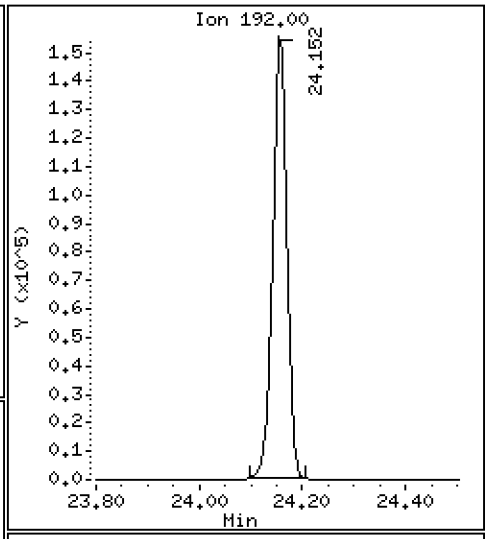
Column phase: Rxi-17Sil MS

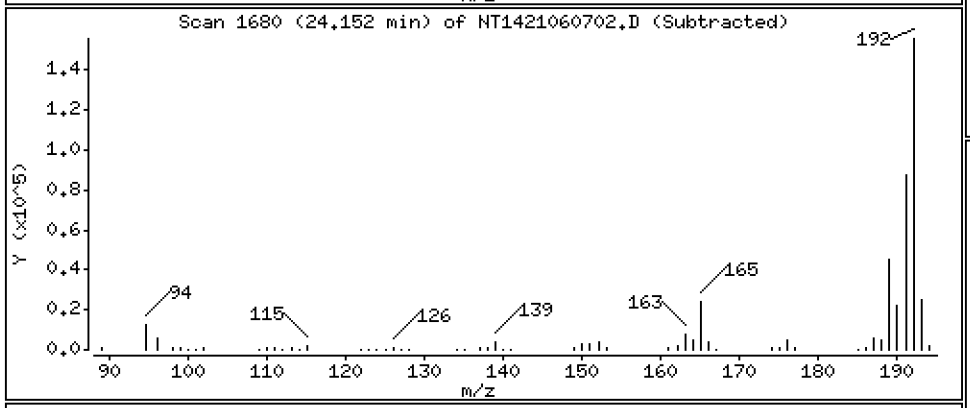
Column diameter: 0.25

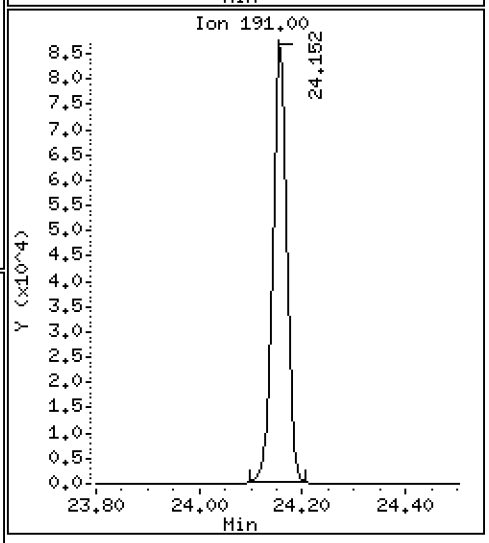
43 1-Methylphenanthrene

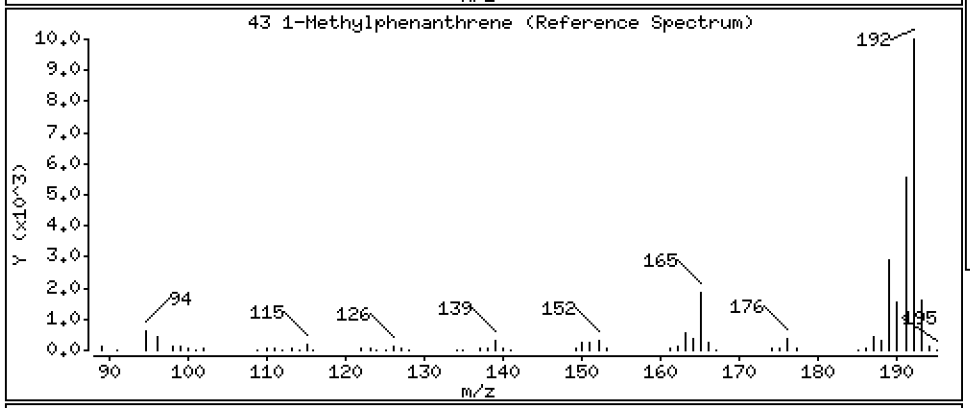
Concentration: 2.649 ug/mL

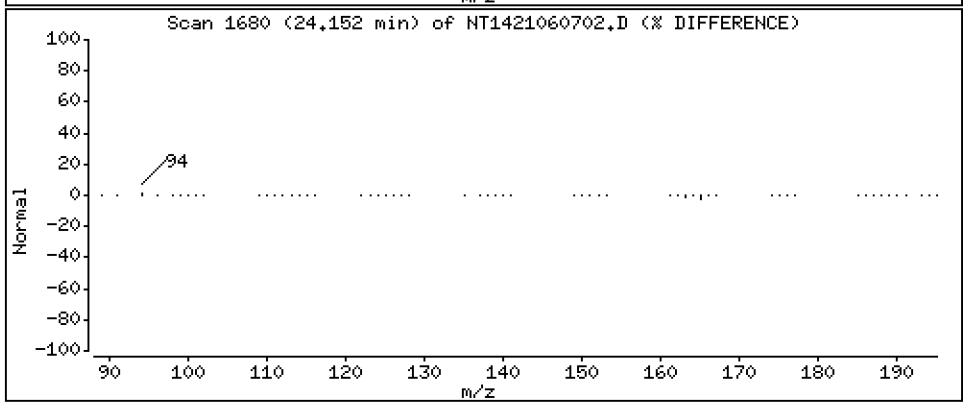












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Date : 07-JUN-2021 13:18

Client ID:

Instrument: nt14.i

Sample Info: SJF0173-ICV1

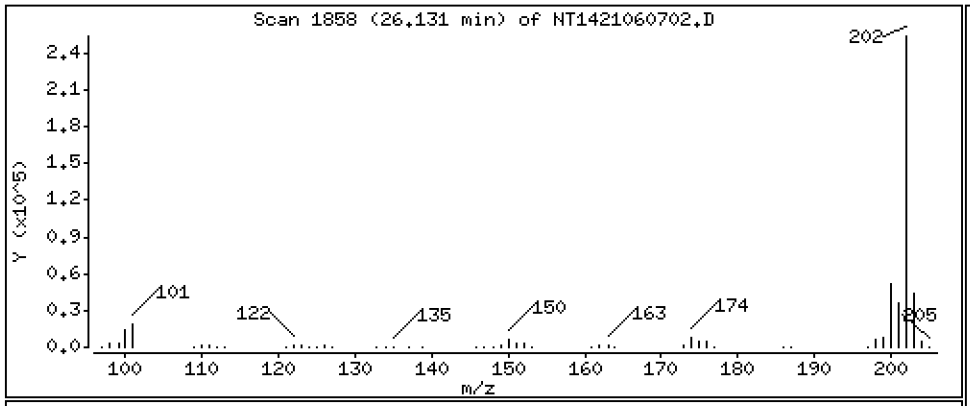
Operator: VTS

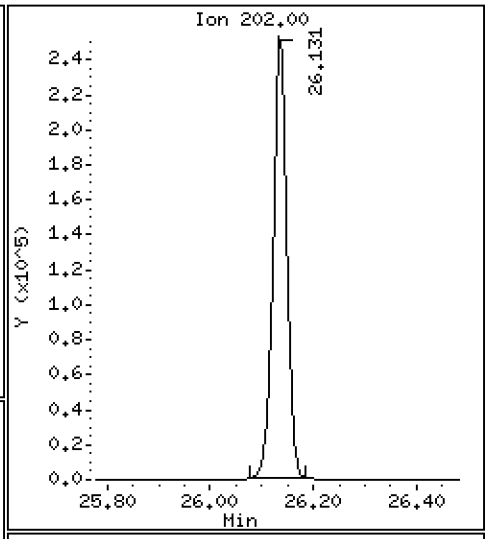
Column phase: Rxi-17Sil MS

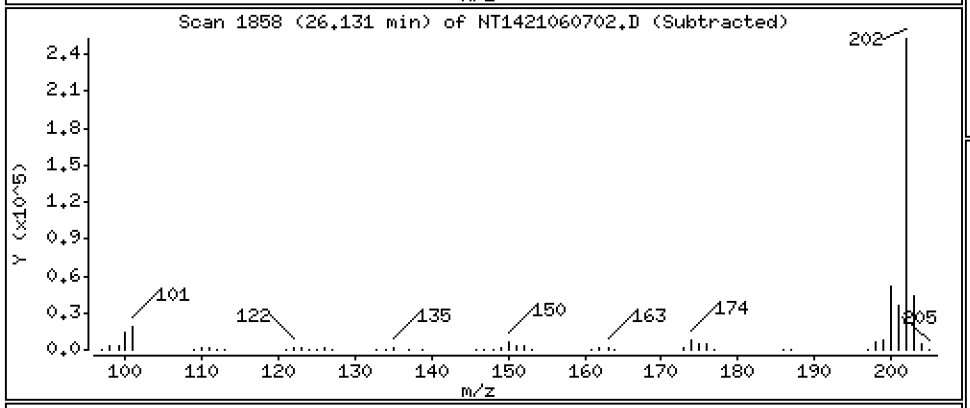
Column diameter: 0.25

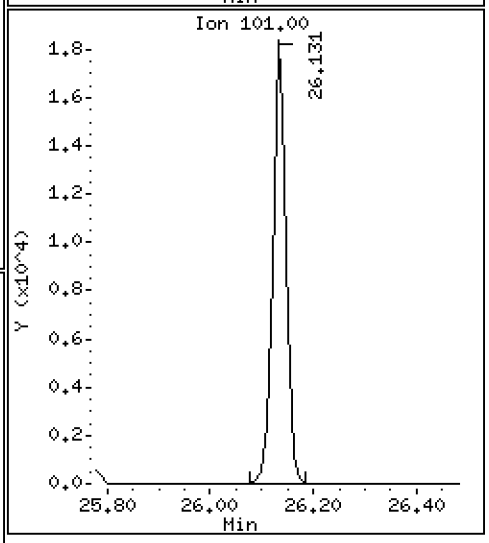
44 Fluoranthene

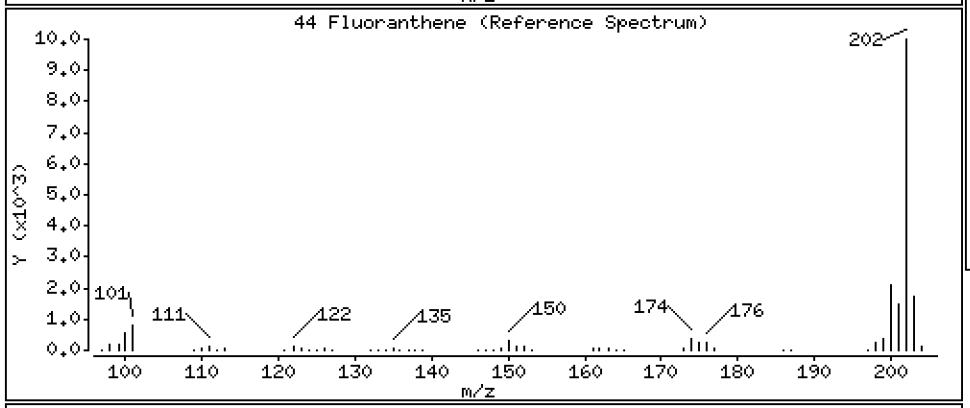
Concentration: 2.720 ug/mL

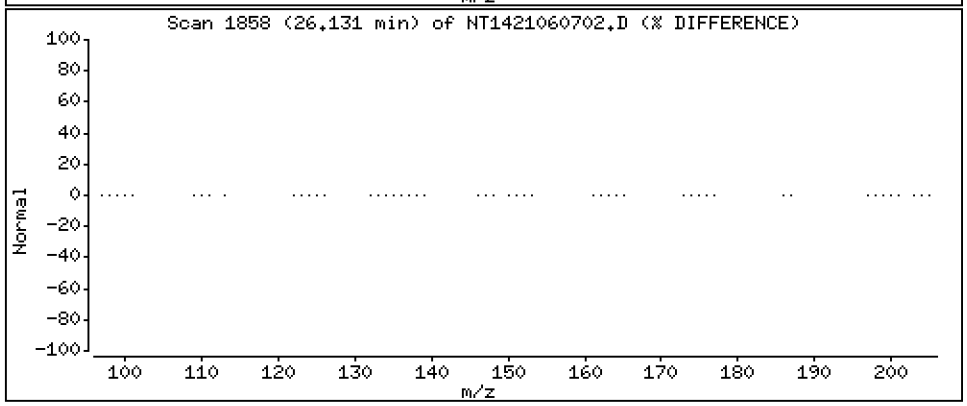












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Date : 07-JUN-2021 13:18

Client ID:

Instrument: nt14.i

Sample Info: SJF0173-ICV1

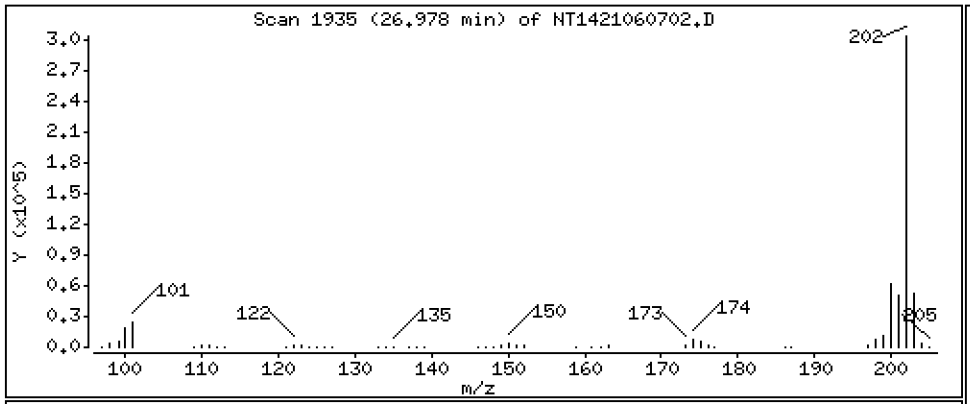
Operator: VTS

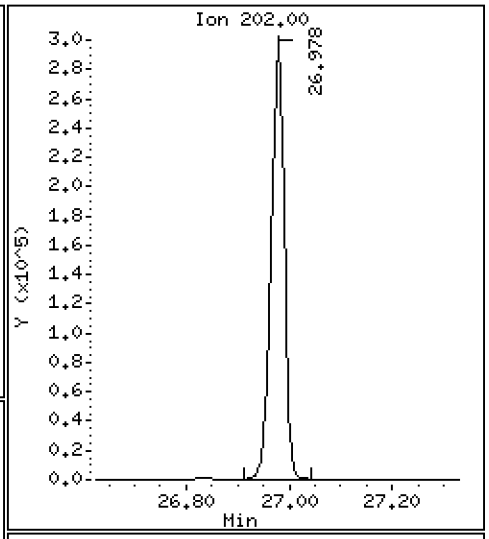
Column phase: Rxi-17Sil MS

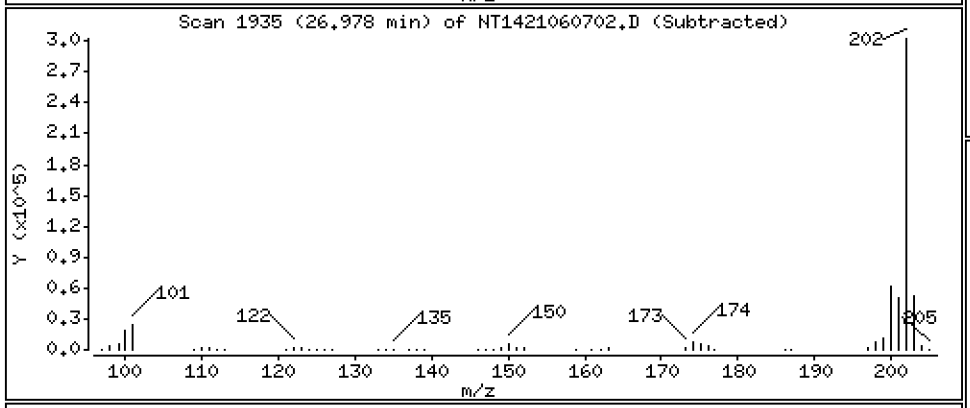
Column diameter: 0.25

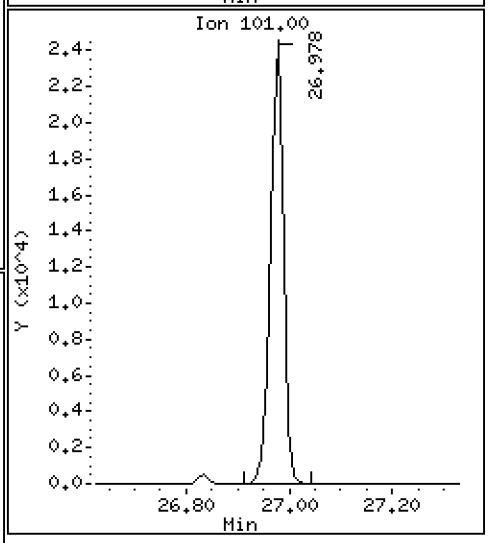
46 Pyrene

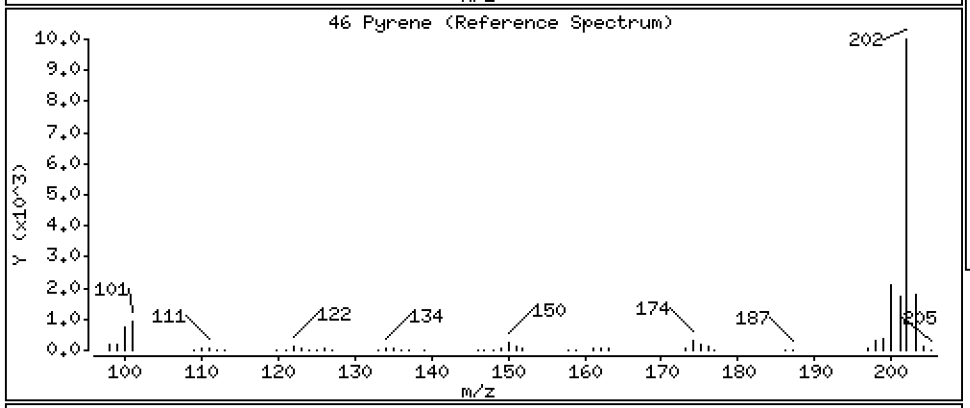
Concentration: 2.808 ug/mL

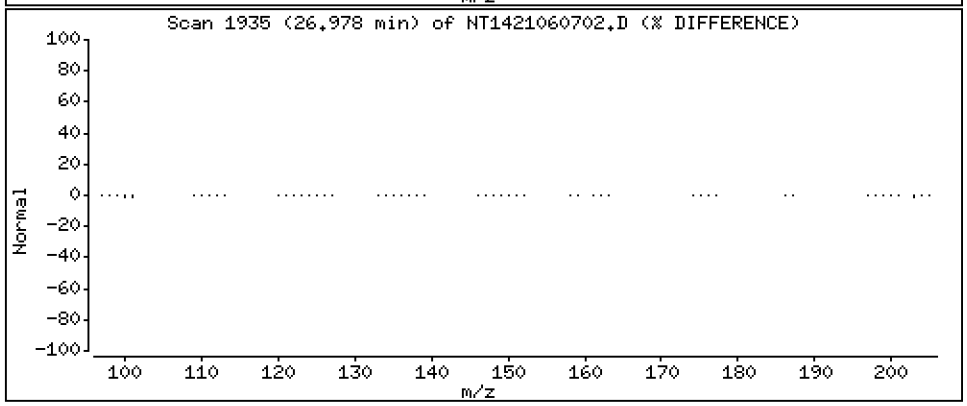












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Date : 07-JUN-2021 13:18

Client ID:

Instrument: nt14.i

Sample Info: SJF0173-ICV1

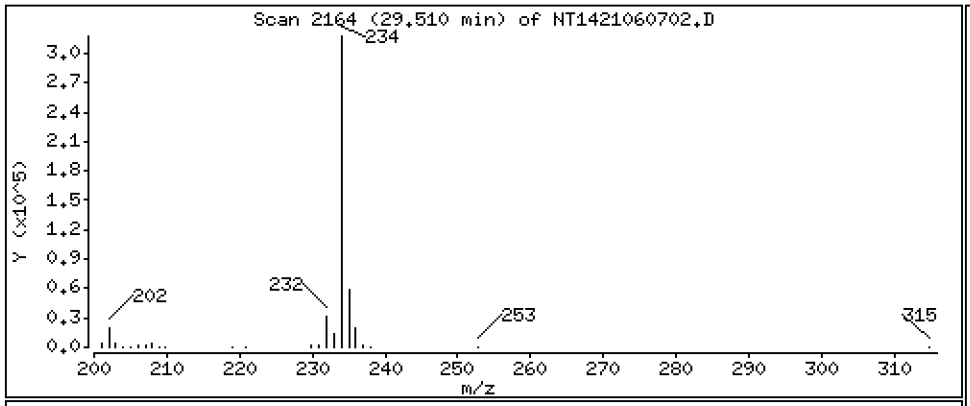
Operator: VTS

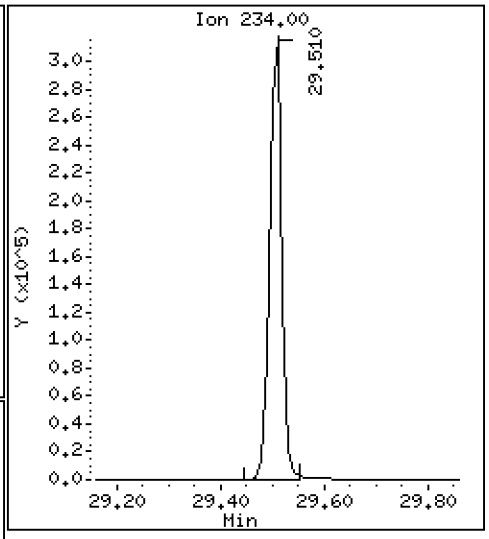
Column phase: Rxi-17Sil MS

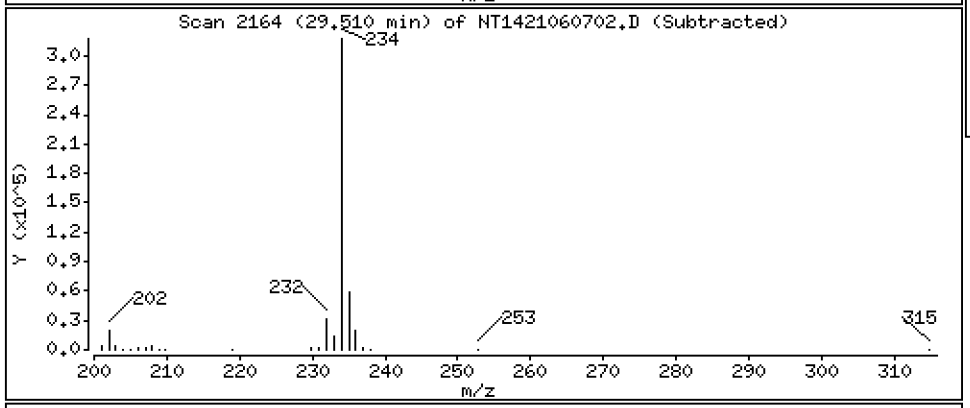
Column diameter: 0.25

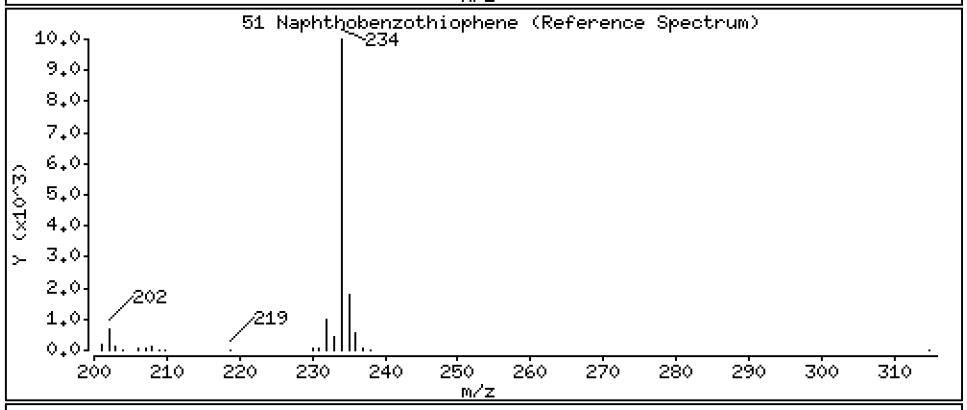
51 Naphthobenzothiophene

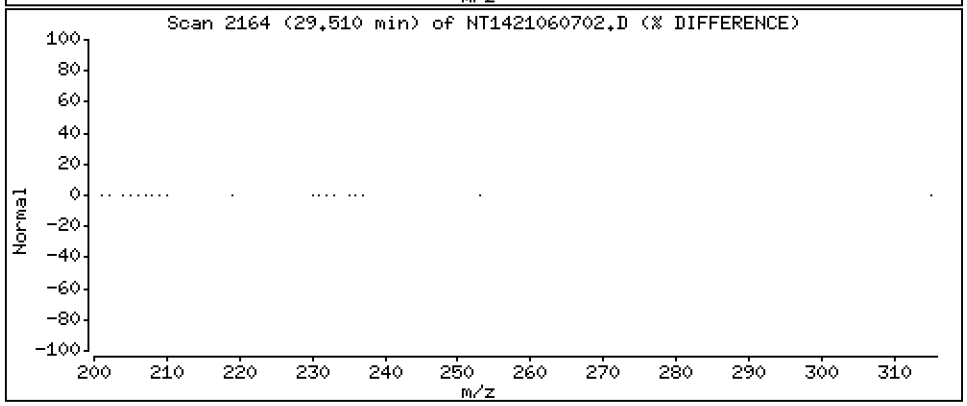
Concentration: 2.653 ug/mL











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Date : 07-JUN-2021 13:18

Client ID:

Instrument: nt14.i

Sample Info: SJF0173-ICV1

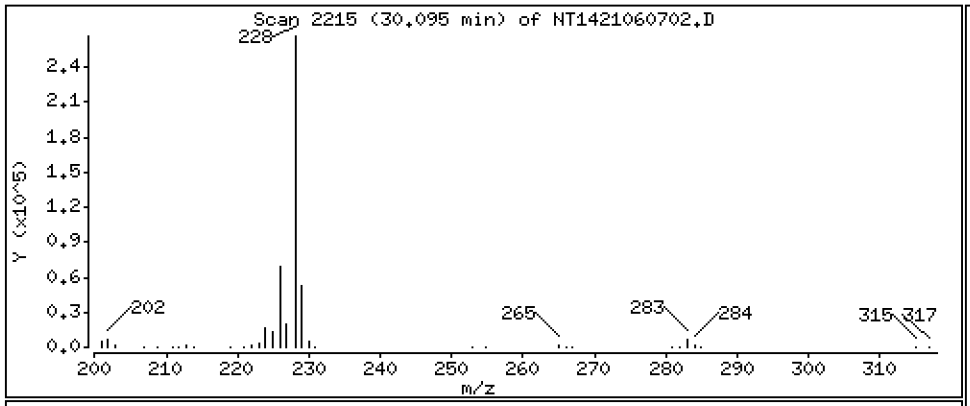
Operator: VTS

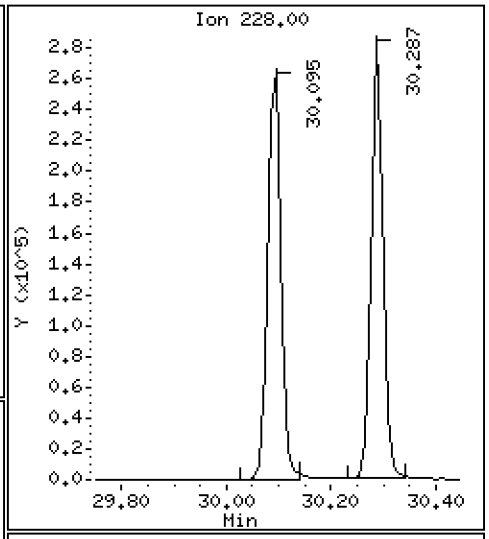
Column phase: Rxi-17Sil MS

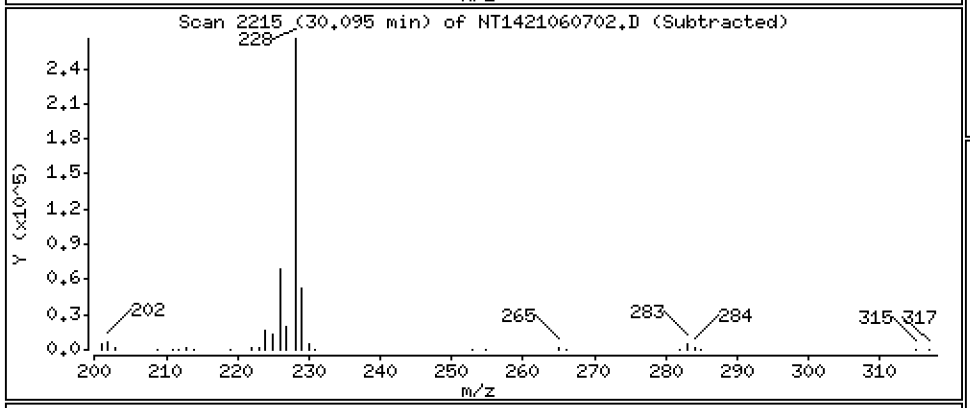
Column diameter: 0.25

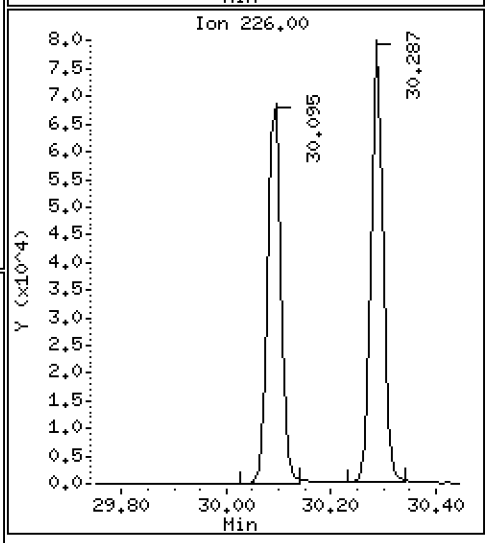
55 Benzo(a)anthracene

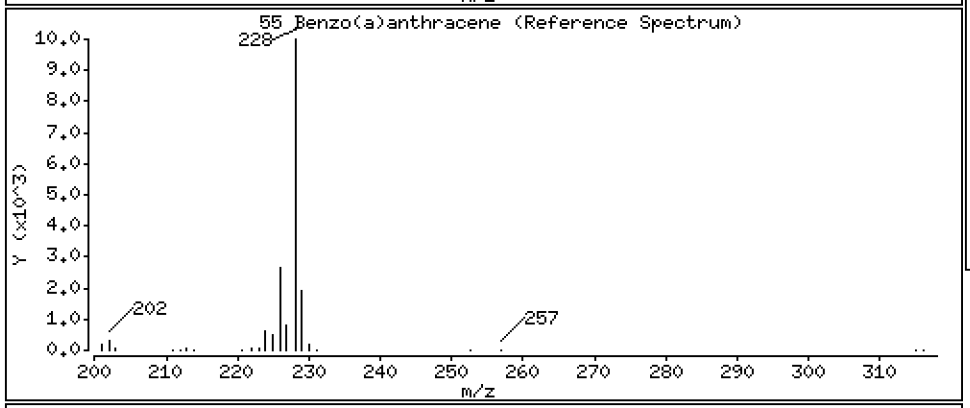
Concentration: 2.985 ug/mL

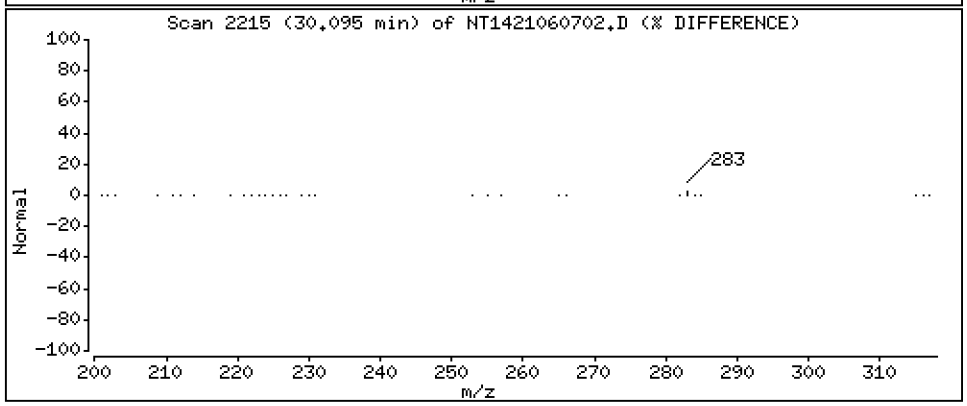












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Date : 07-JUN-2021 13:18

Client ID:

Instrument: nt14.i

Sample Info: SJF0173-ICV1

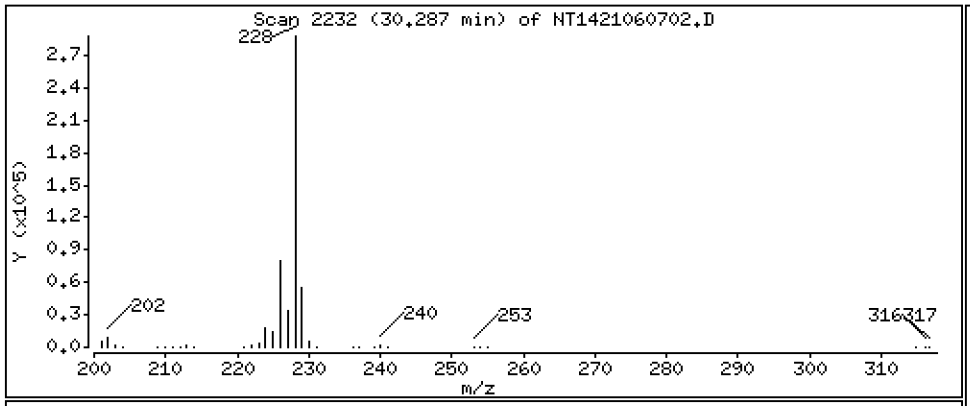
Operator: VTS

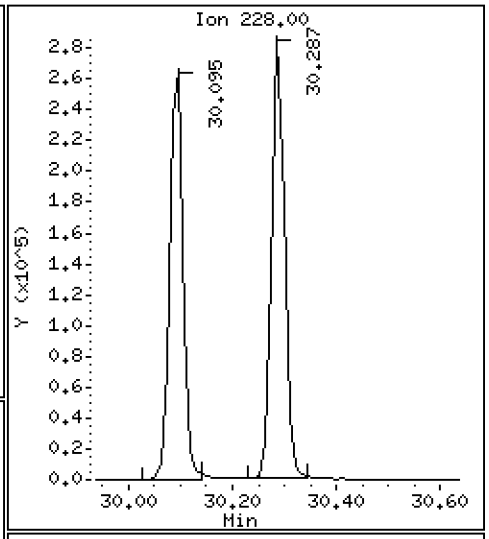
Column phase: Rxi-17Sil MS

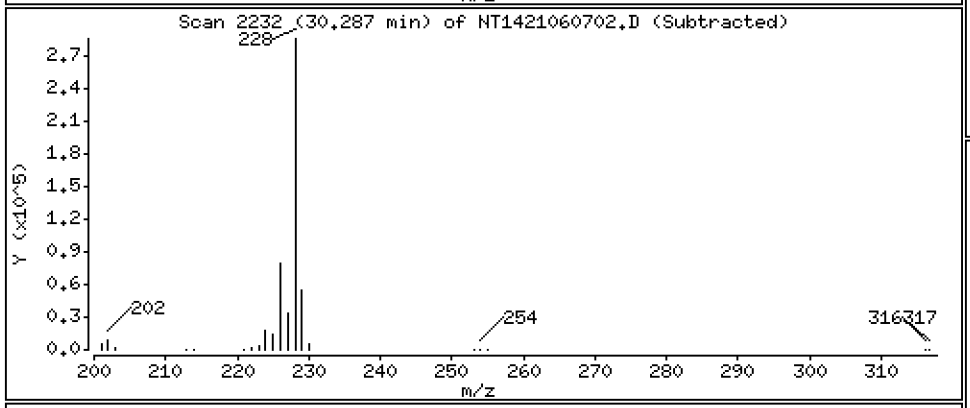
Column diameter: 0.25

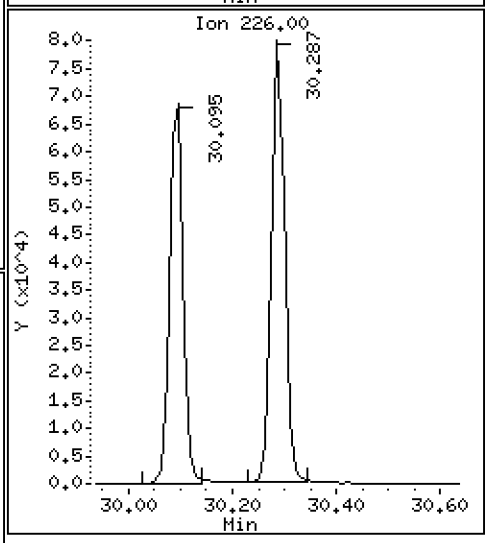
57 Chrysene

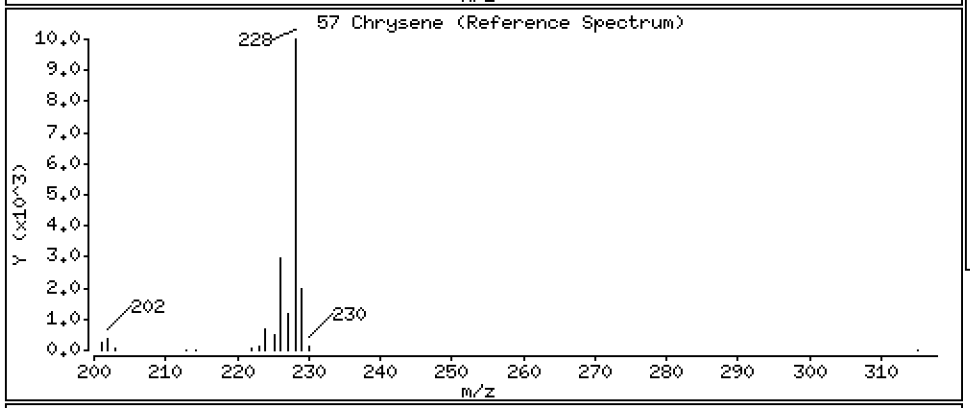
Concentration: 2.887 ug/mL

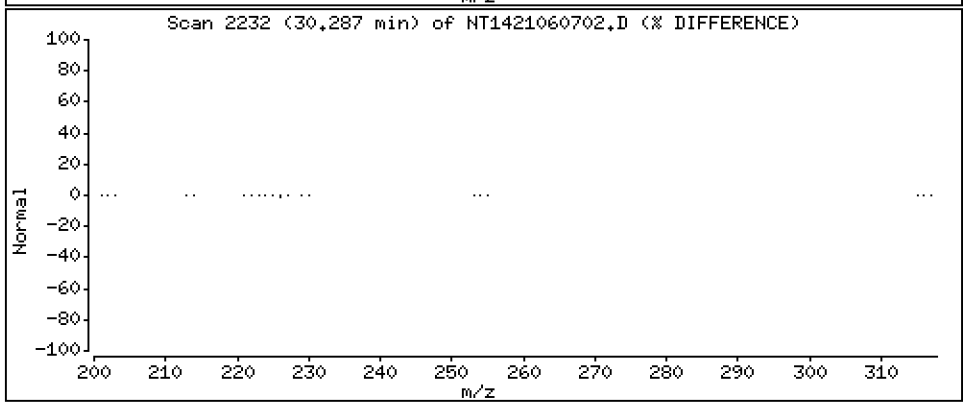












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Date : 07-JUN-2021 13:18

Client ID:

Instrument: nt14.i

Sample Info: SJF0173-ICV1

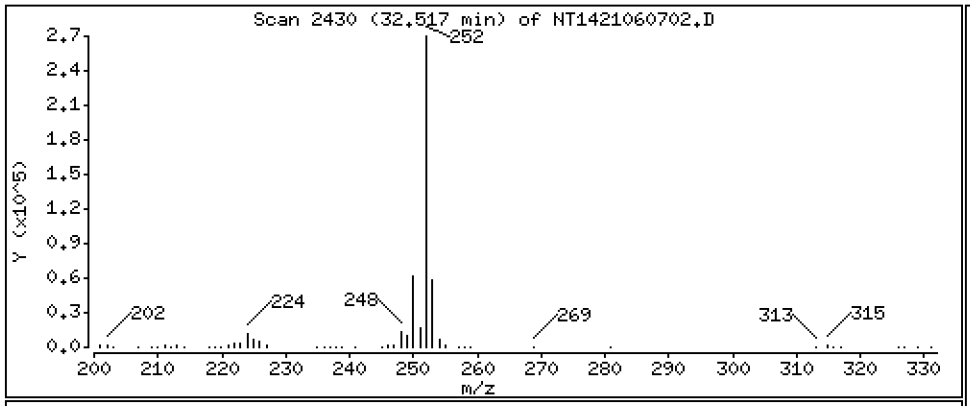
Operator: VTS

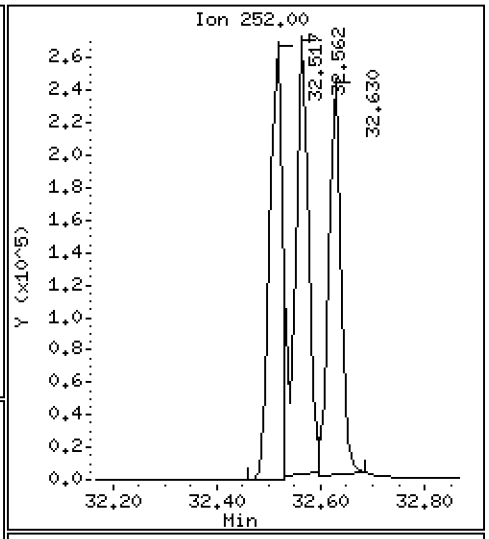
Column phase: Rxi-17Sil MS

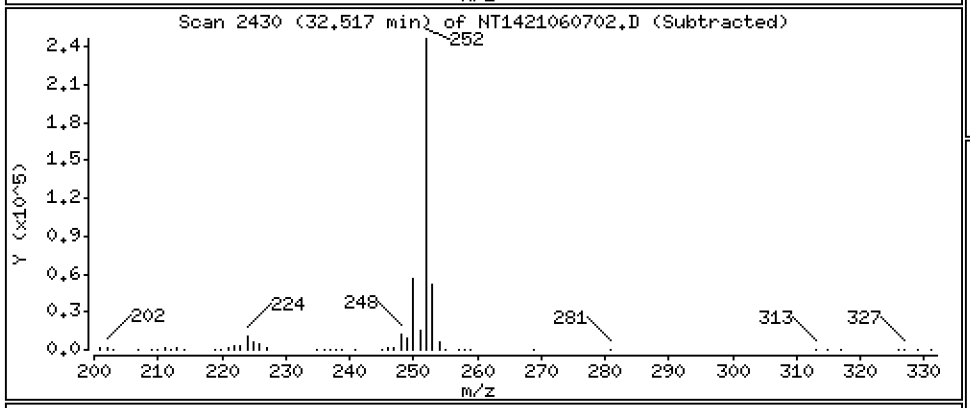
Column diameter: 0.25

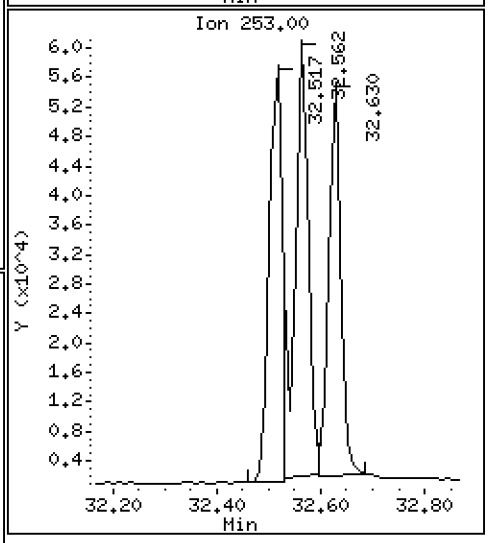
62 Benzo(b)fluoranthene

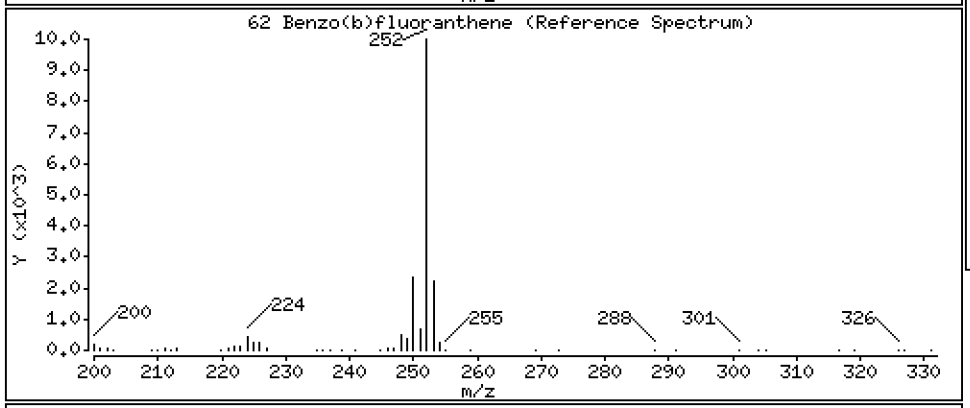
Concentration: 2.562 ug/mL

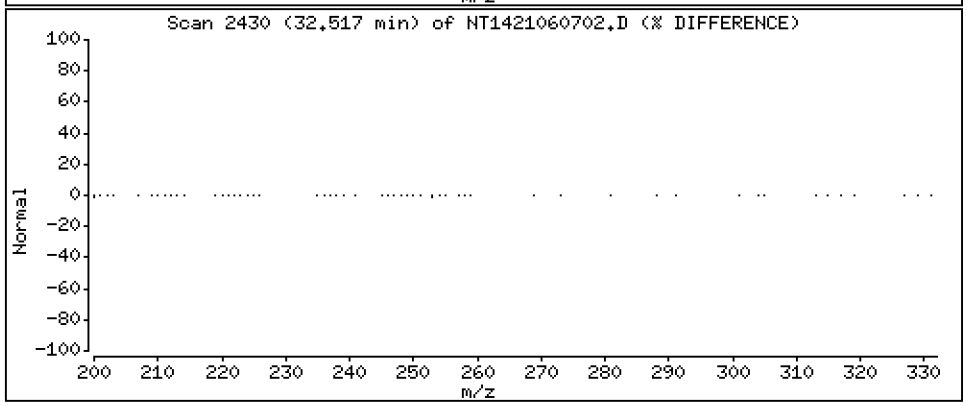












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Date : 07-JUN-2021 13:18

Client ID:

Instrument: nt14.i

Sample Info: SJF0173-ICV1

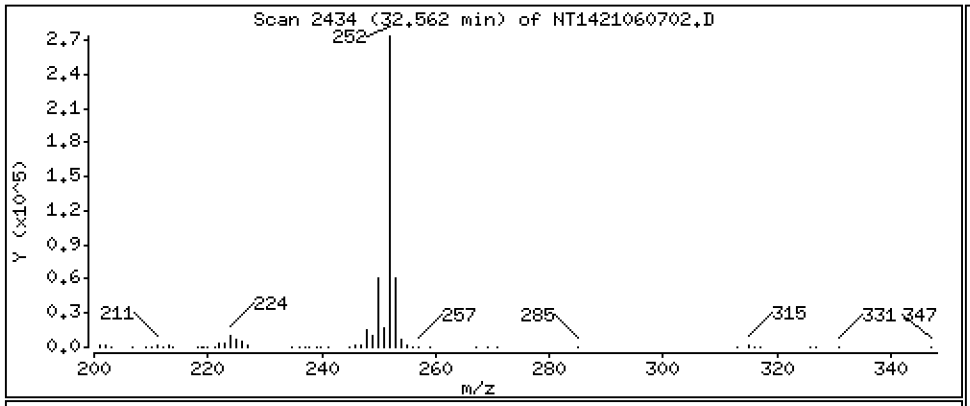
Operator: VTS

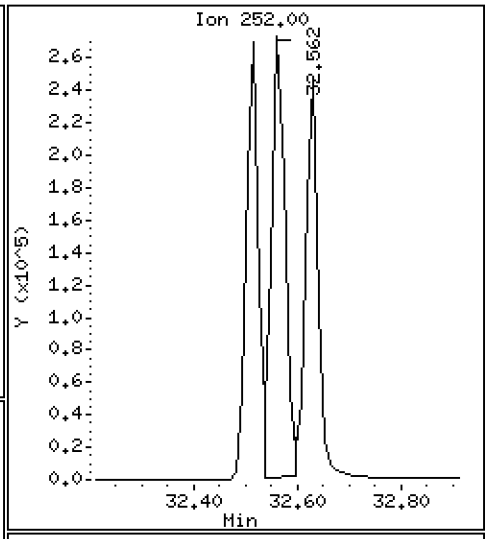
Column phase: Rxi-17Sil MS

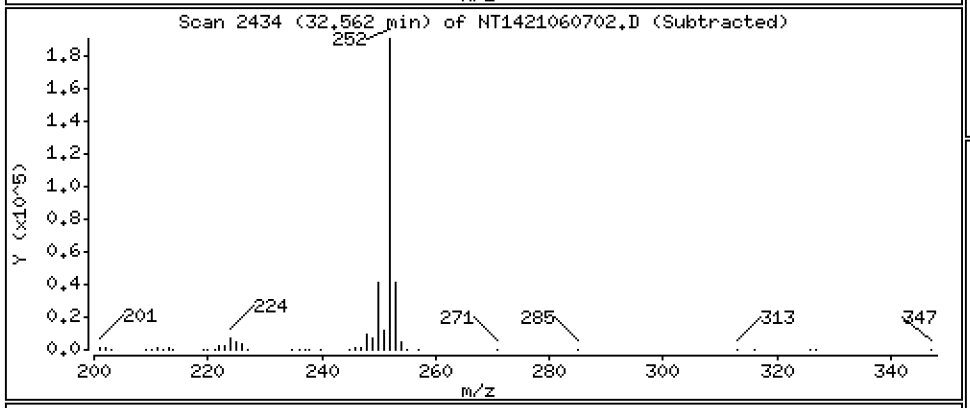
Column diameter: 0.25

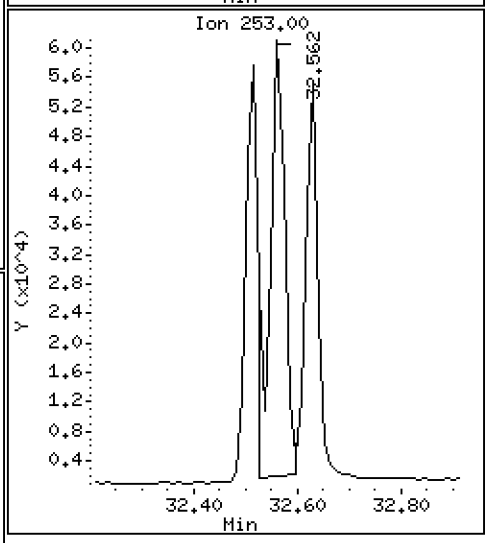
63 Benzo(k)fluoranthene

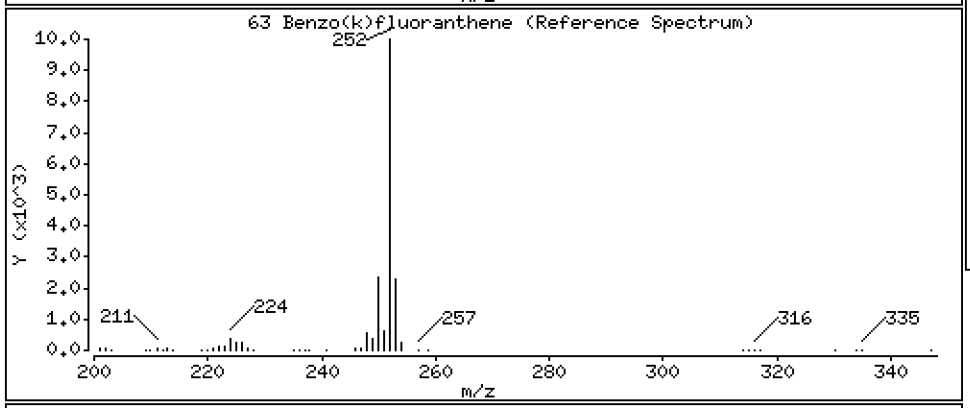
Concentration: 2.647 ug/mL

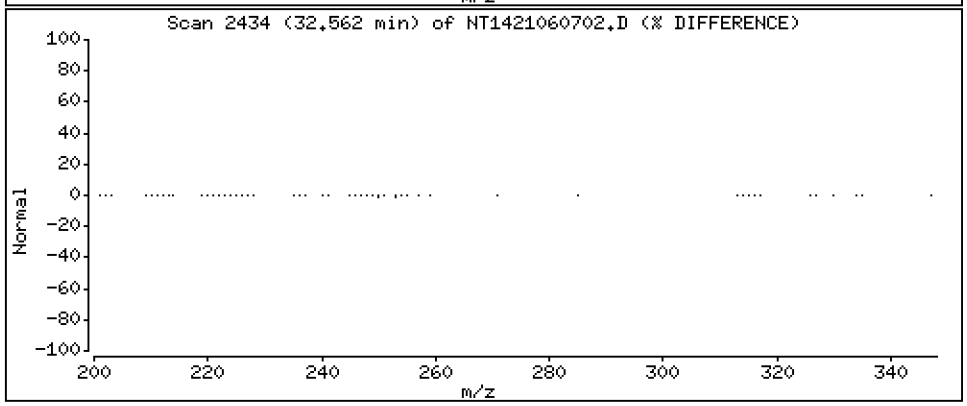












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Date : 07-JUN-2021 13:18

Client ID:

Instrument: nt14.i

Sample Info: SJF0173-ICV1

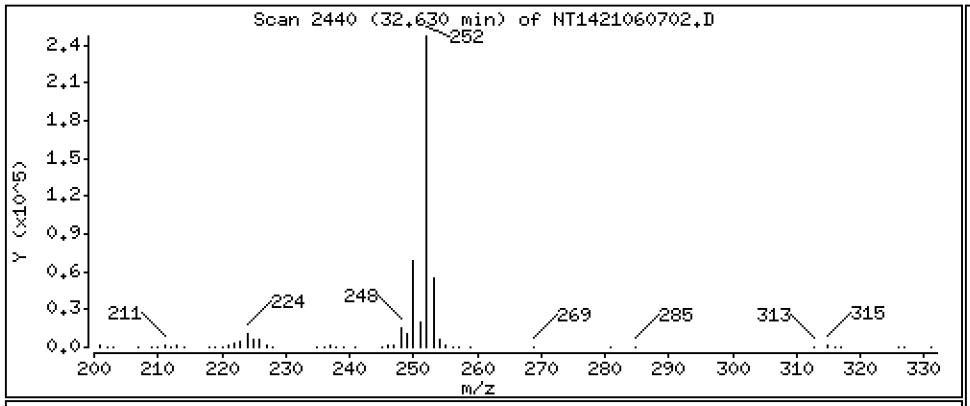
Operator: VTS

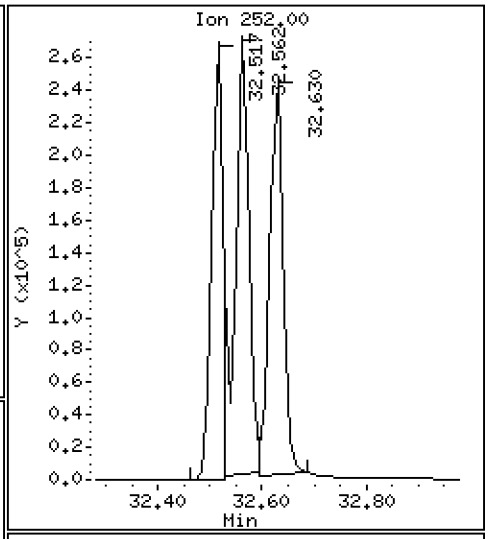
Column phase: Rxi-17Sil MS

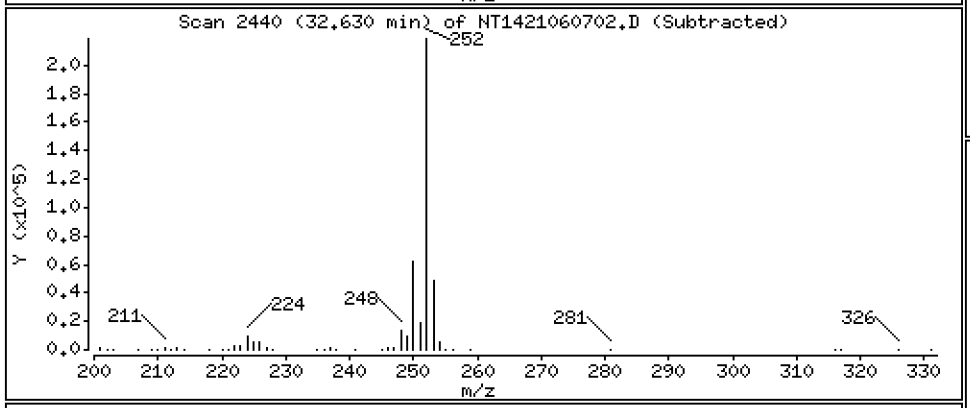
Column diameter: 0.25

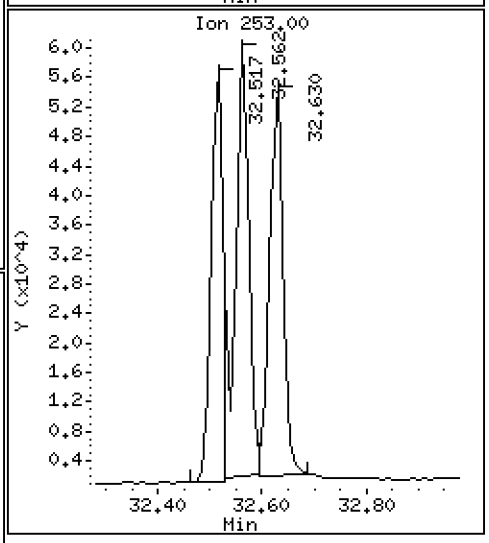
293 Benzo(j)fluoranthene

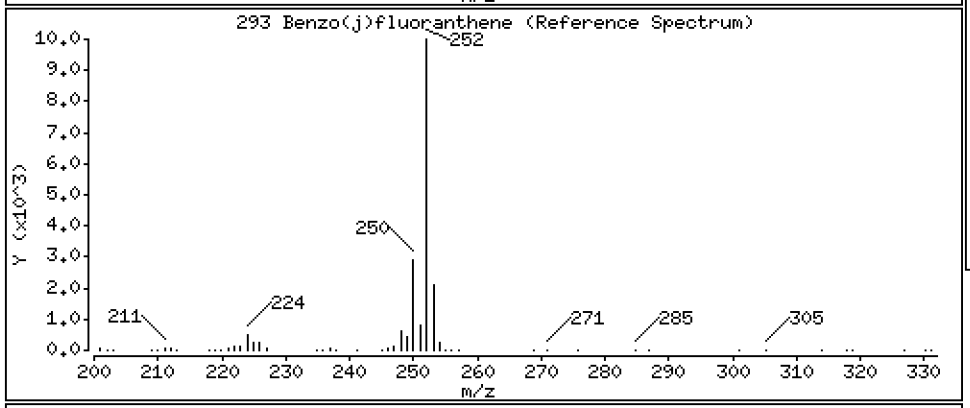
Concentration: 2.479 ug/mL

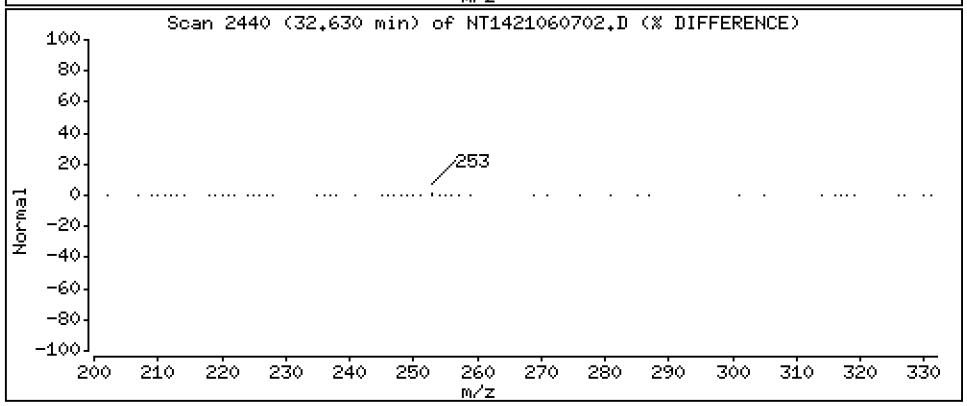












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Date : 07-JUN-2021 13:18

Client ID:

Instrument: nt14.i

Sample Info: SJF0173-ICV1

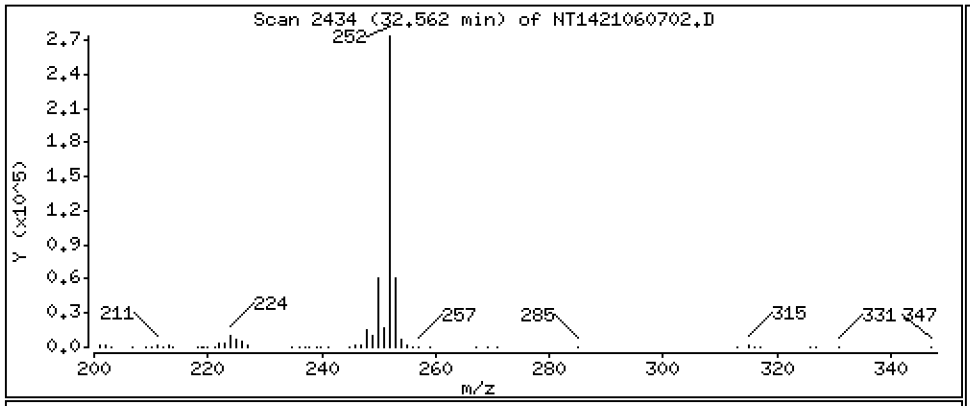
Operator: VTS

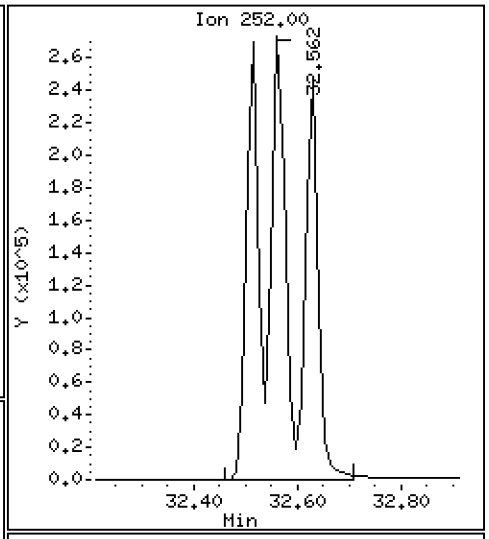
Column phase: Rxi-17Sil MS

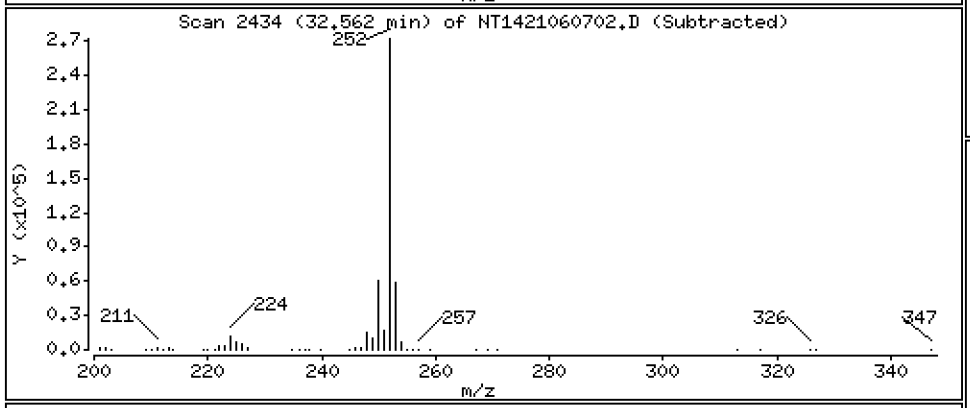
Column diameter: 0.25

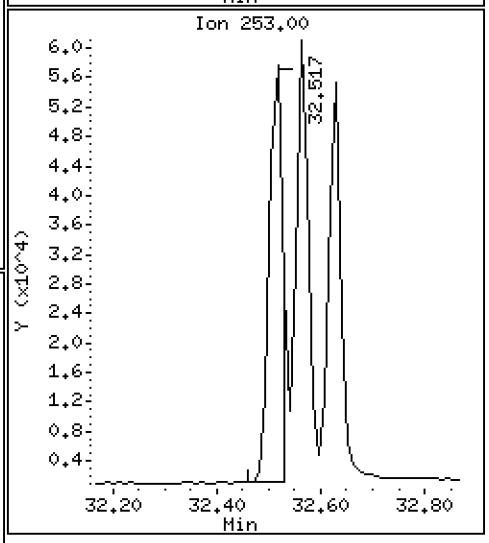
246 Total Benzofluoranthenes

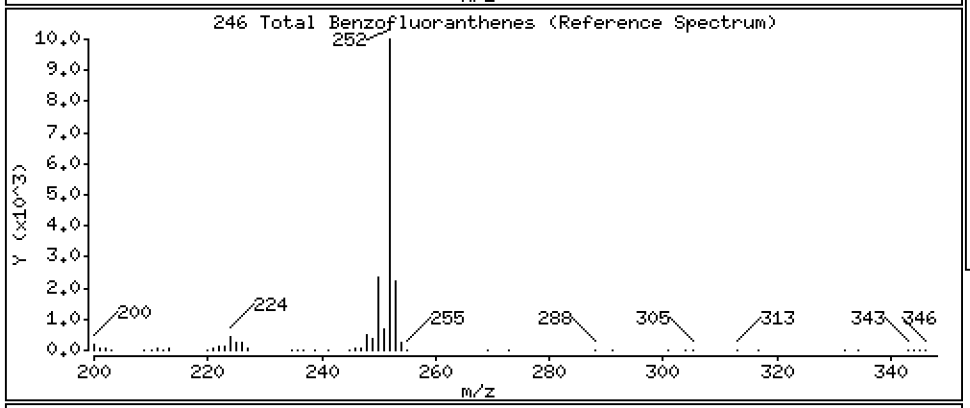
Concentration: 8.154 ug/mL

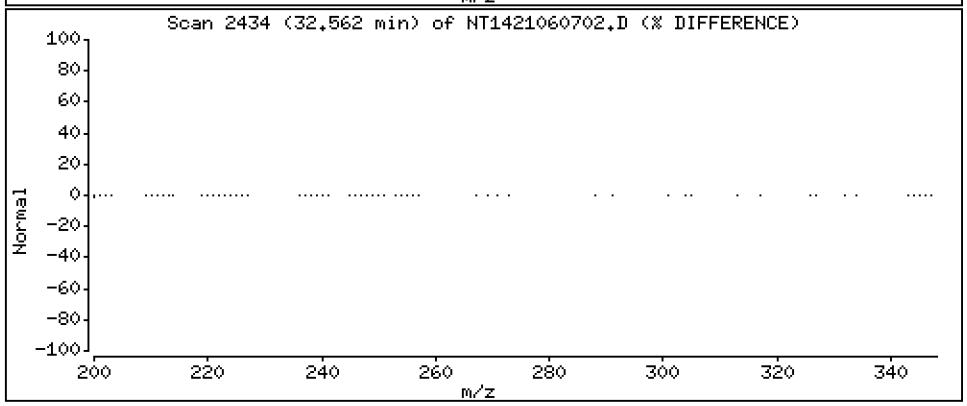












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Date : 07-JUN-2021 13:18

Client ID:

Instrument: nt14.i

Sample Info: SJF0173-ICV1

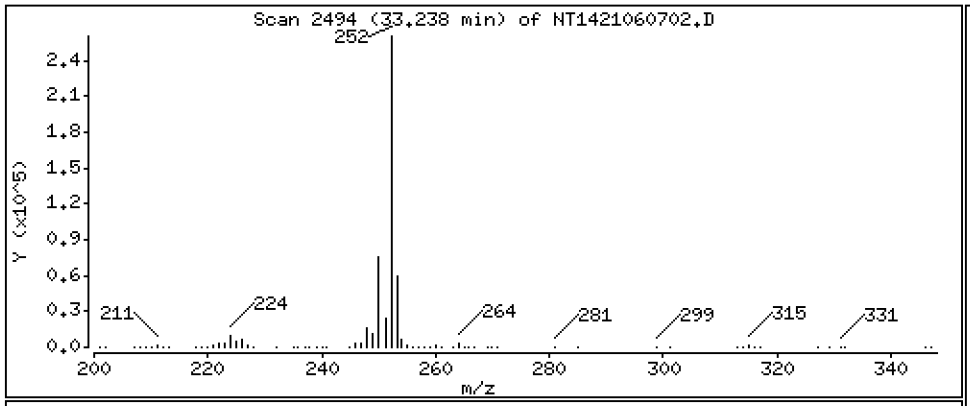
Operator: VTS

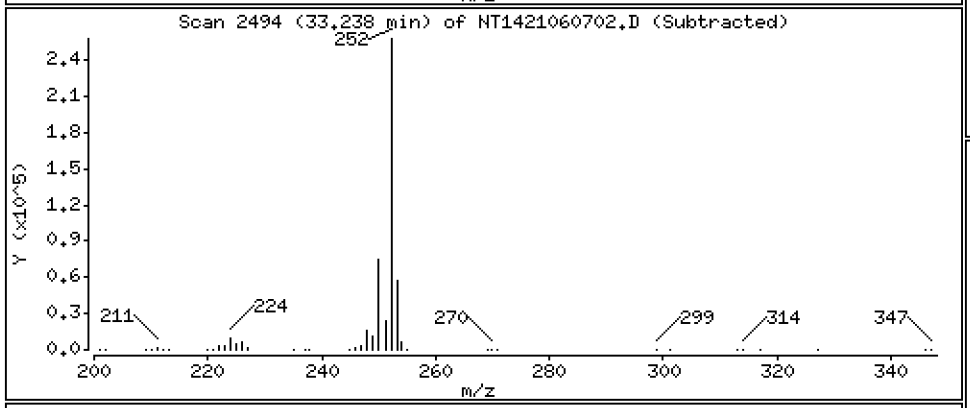
Column phase: Rxi-17Sil MS

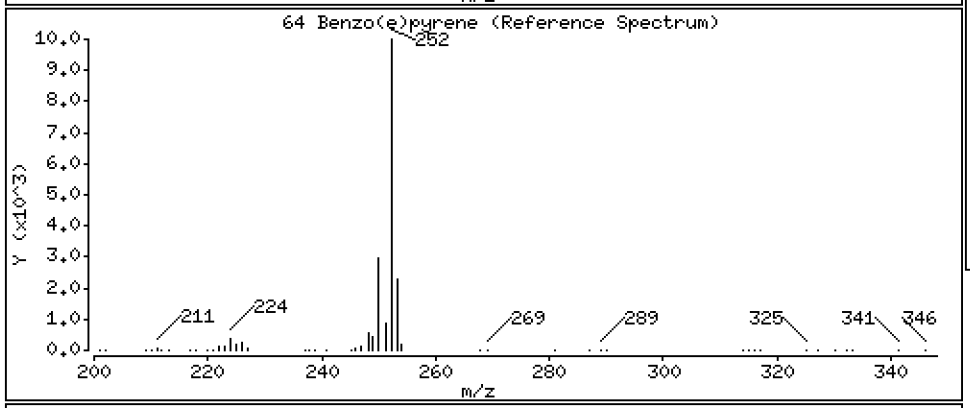
Column diameter: 0.25

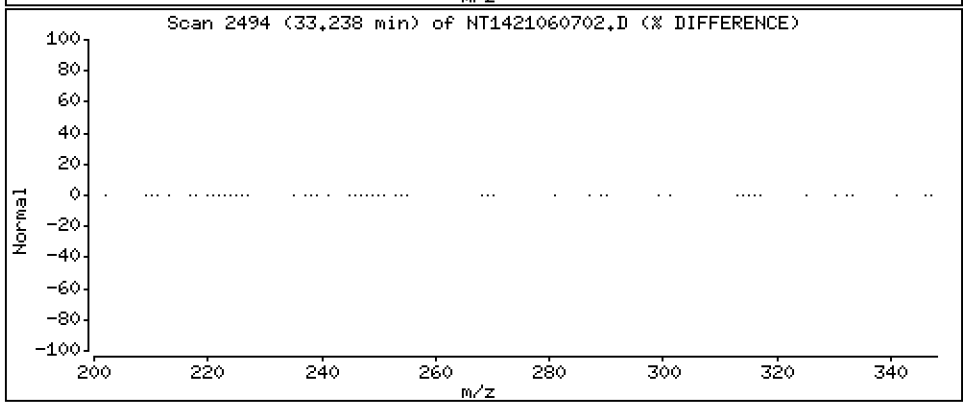
64 Benzo(e)pyrene

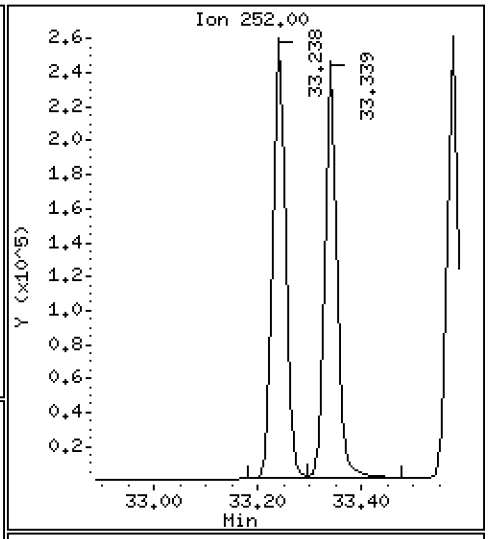
Concentration: 2.518 ug/mL

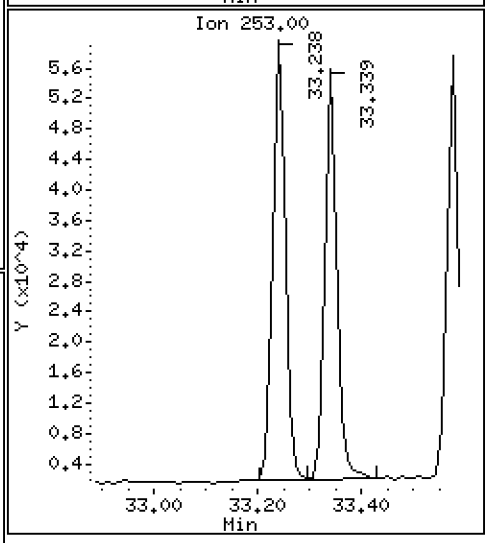












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Date : 07-JUN-2021 13:18

Client ID:

Instrument: nt14.i

Sample Info: SJF0173-ICV1

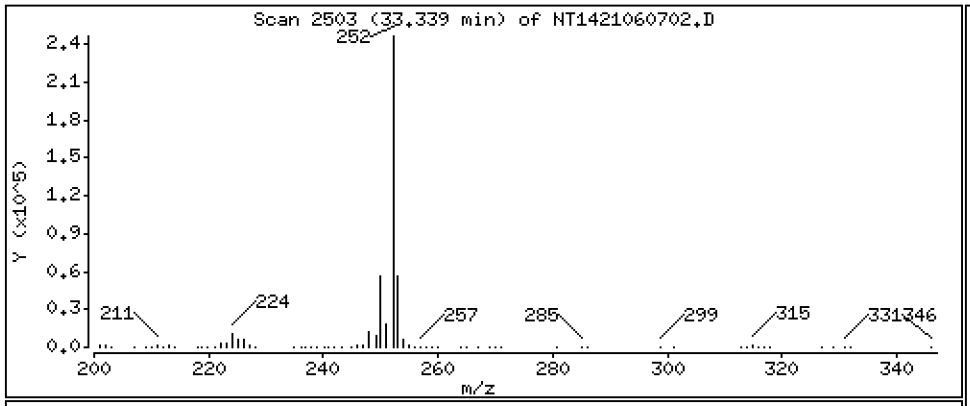
Operator: VTS

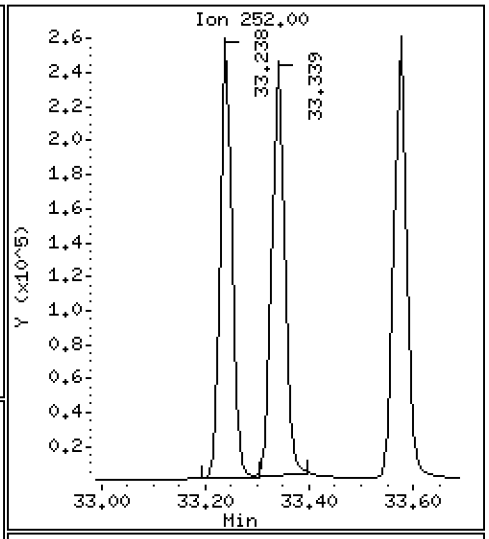
Column phase: Rxi-17Sil MS

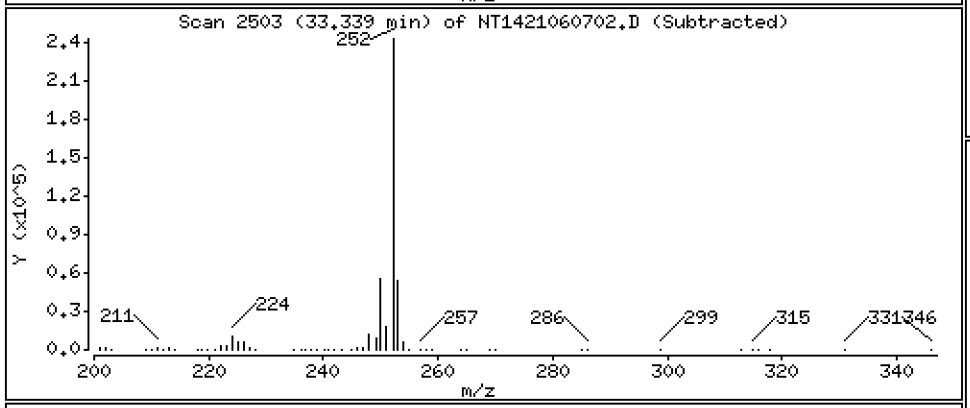
Column diameter: 0.25

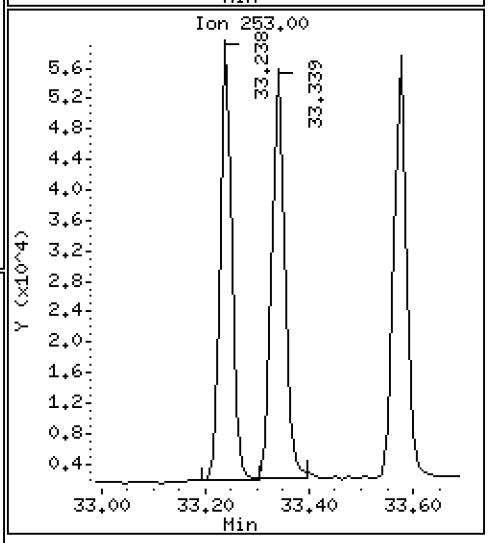
66 Benzo(a)pyrene

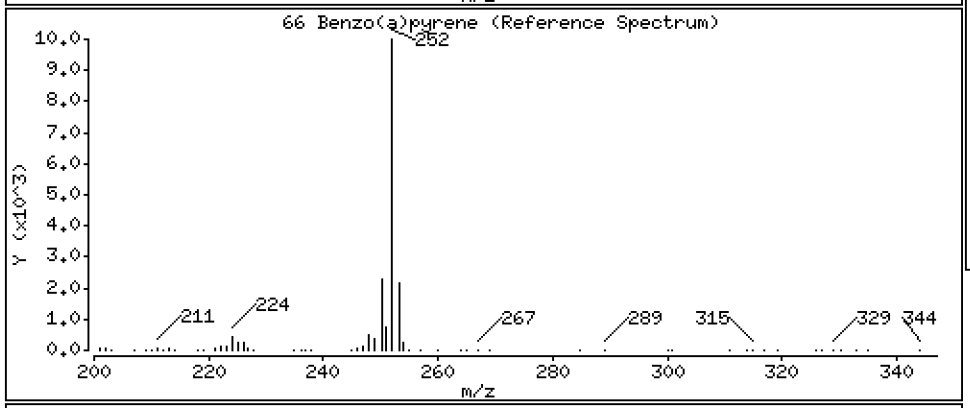
Concentration: 2.590 ug/mL

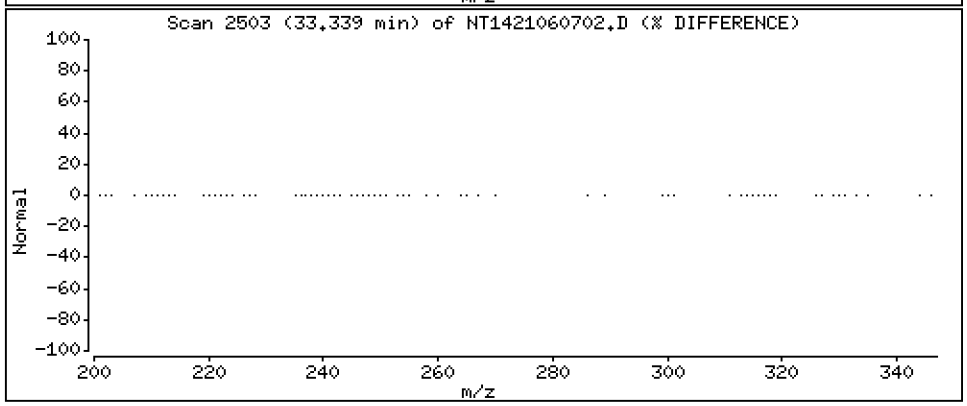












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Date : 07-JUN-2021 13:18

Client ID:

Instrument: nt14.i

Sample Info: SJF0173-ICV1

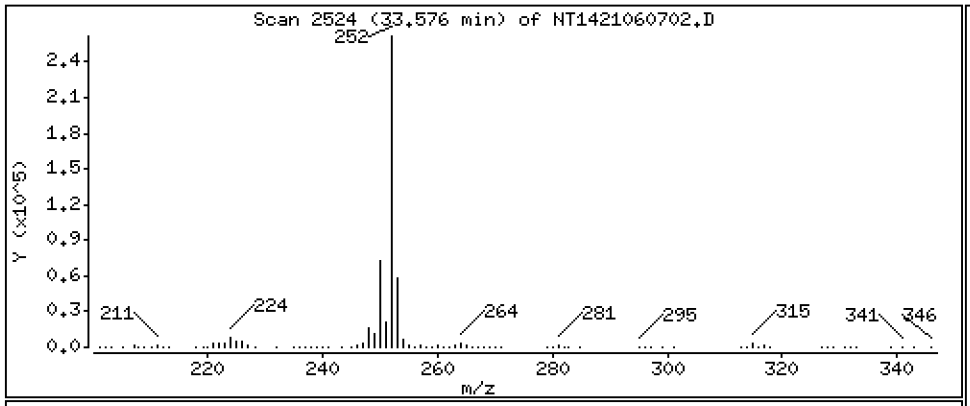
Operator: VTS

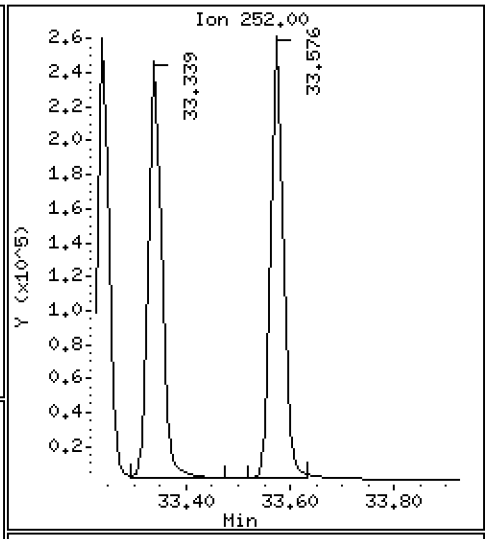
Column phase: Rxi-17Sil MS

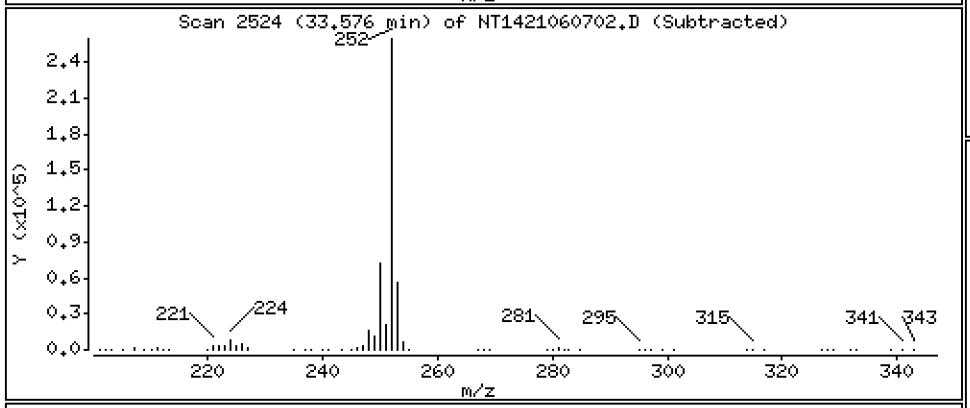
Column diameter: 0.25

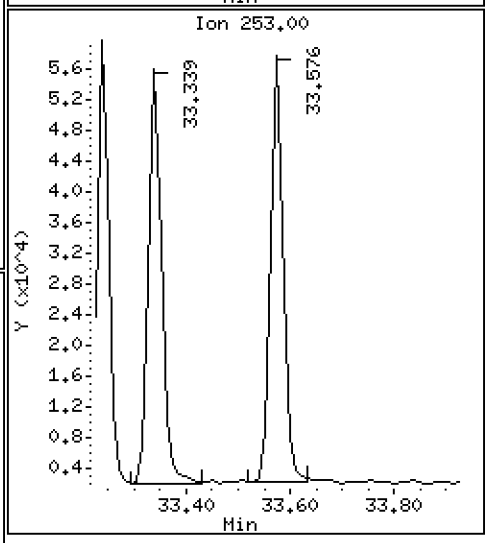
68 Perylene

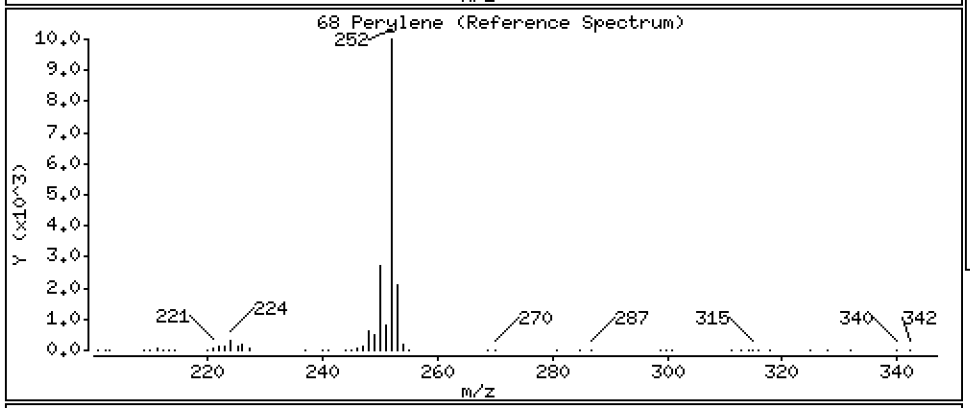
Concentration: 2.601 ug/mL

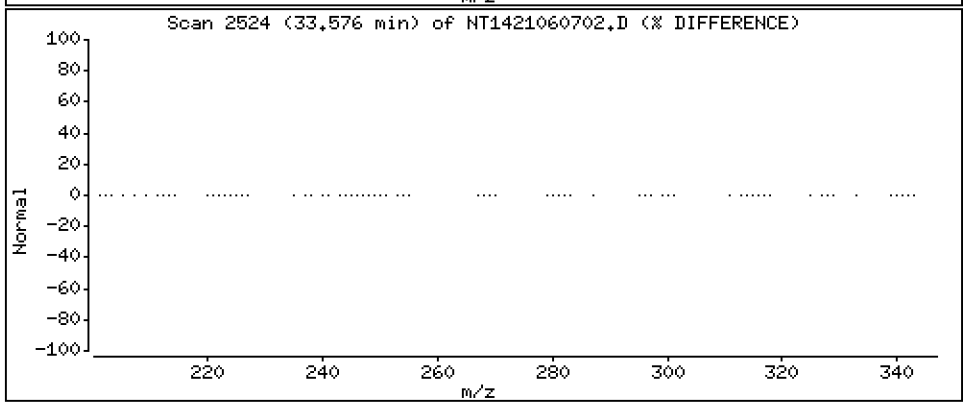












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Date : 07-JUN-2021 13:18

Client ID:

Instrument: nt14.i

Sample Info: SJF0173-ICV1

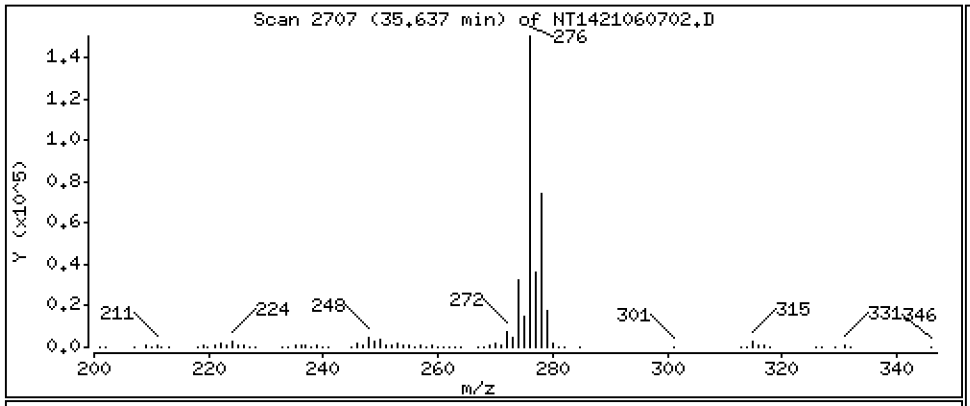
Operator: VTS

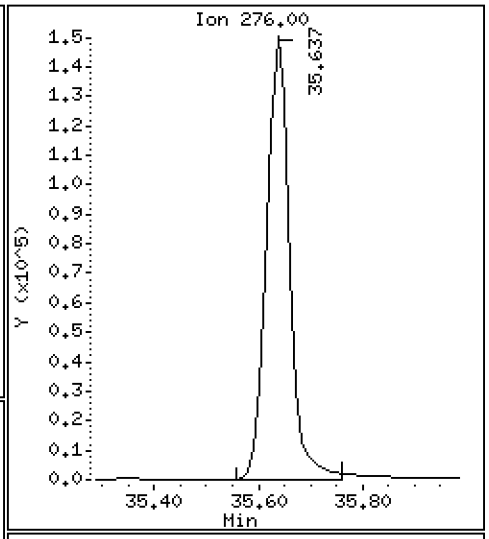
Column phase: Rxi-17Sil MS

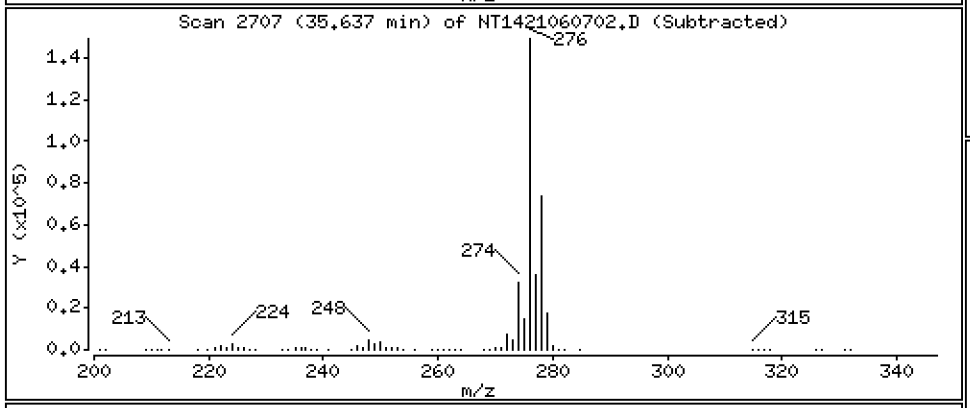
Column diameter: 0.25

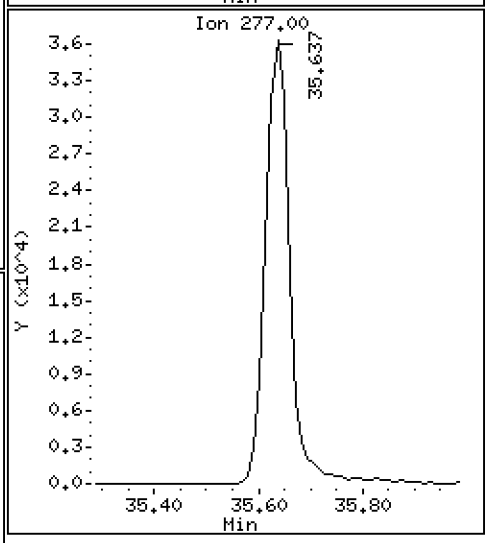
69 Indeno(1,2,3-cd)pyrene

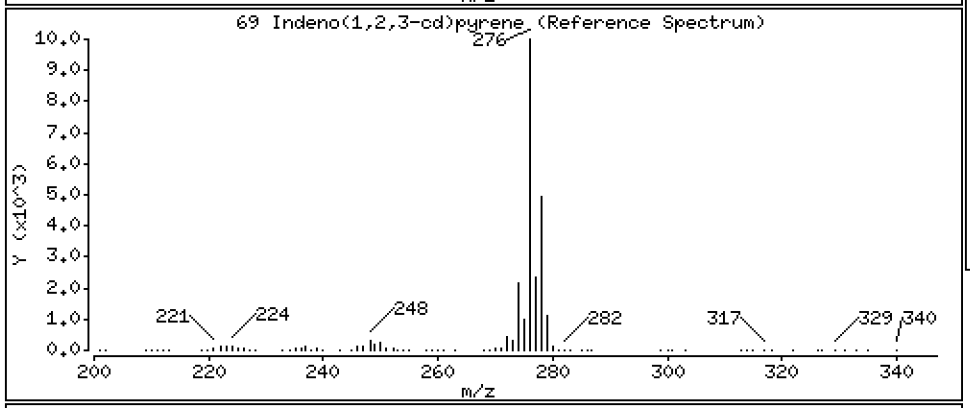
Concentration: 2.532 ug/mL

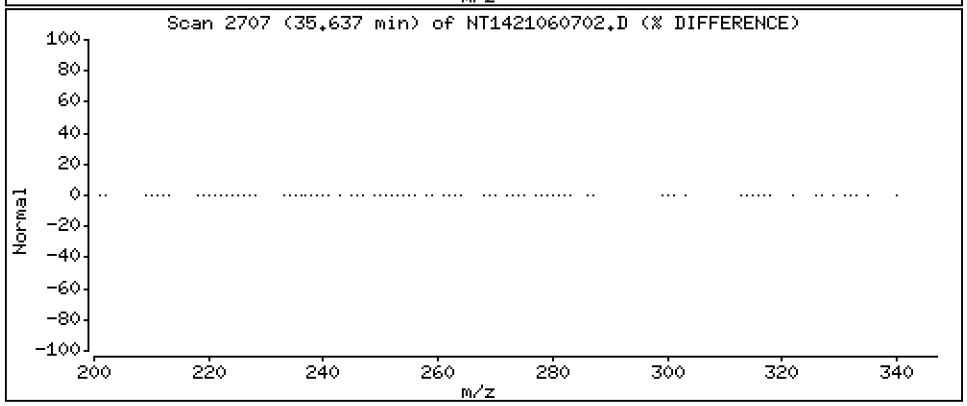












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Date : 07-JUN-2021 13:18

Client ID:

Instrument: nt14.i

Sample Info: SJF0173-ICV1

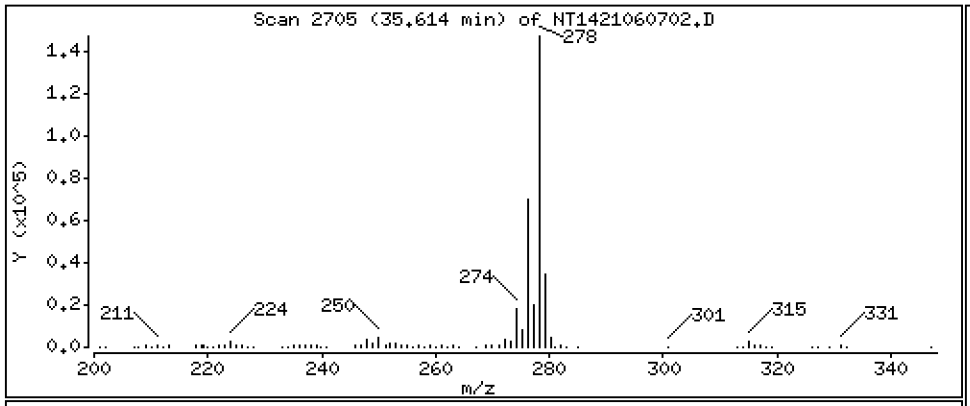
Operator: VTS

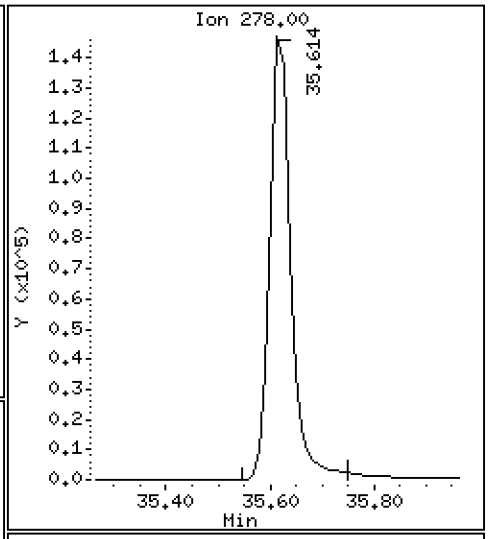
Column phase: Rxi-17Sil MS

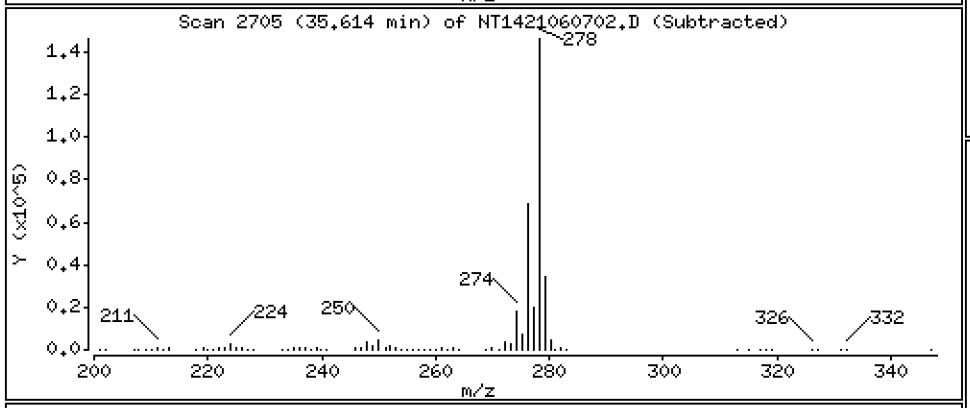
Column diameter: 0.25

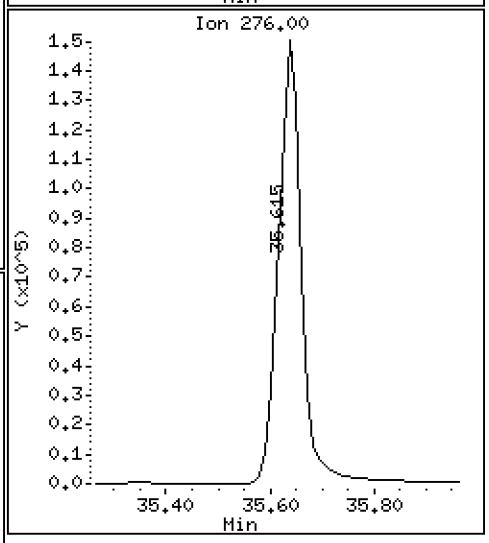
70 Dibenzo(a,h)anthracene

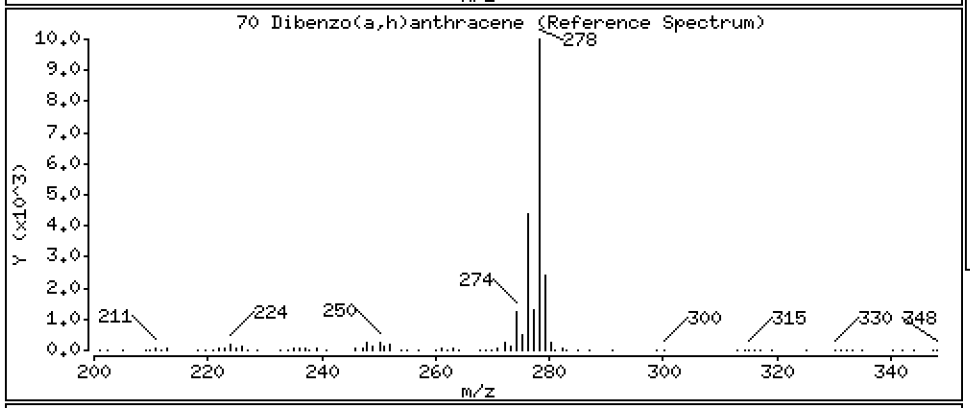
Concentration: 2.419 ug/mL

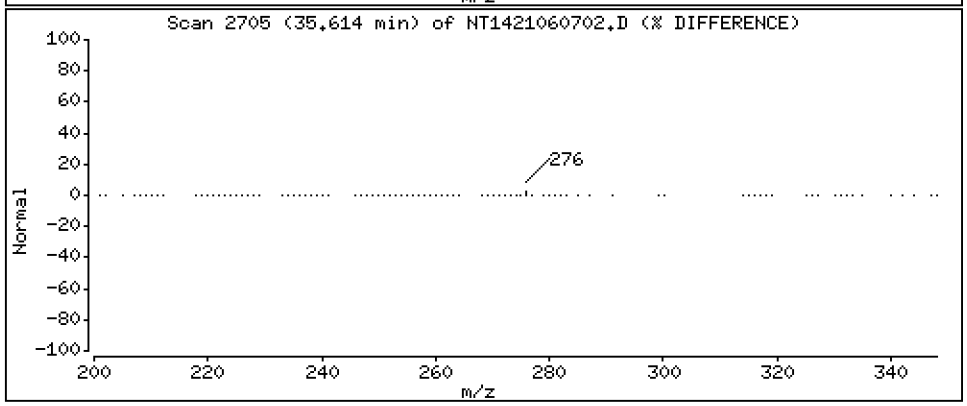












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Date : 07-JUN-2021 13:18

Client ID:

Instrument: nt14.i

Sample Info: SJF0173-ICV1

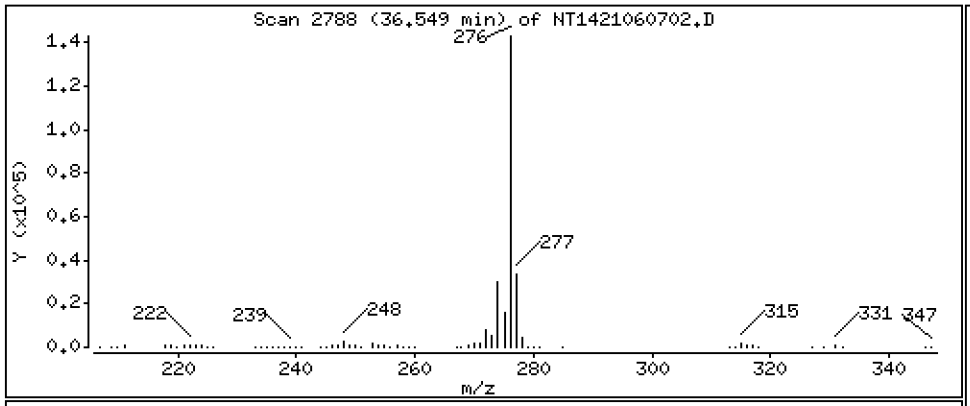
Operator: VTS

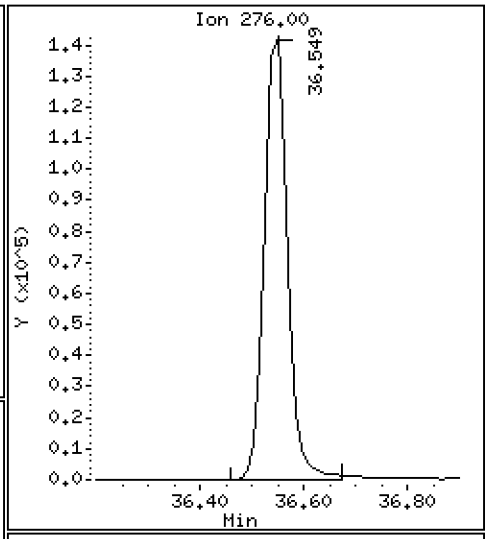
Column phase: Rxi-17Sil MS

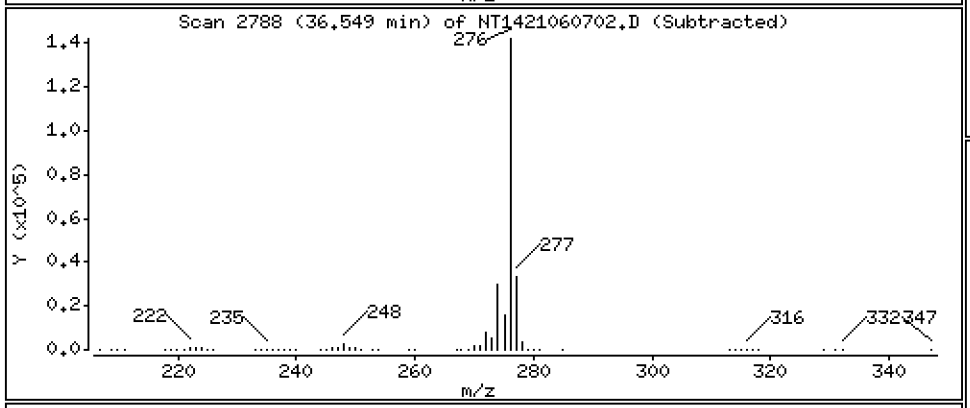
Column diameter: 0.25

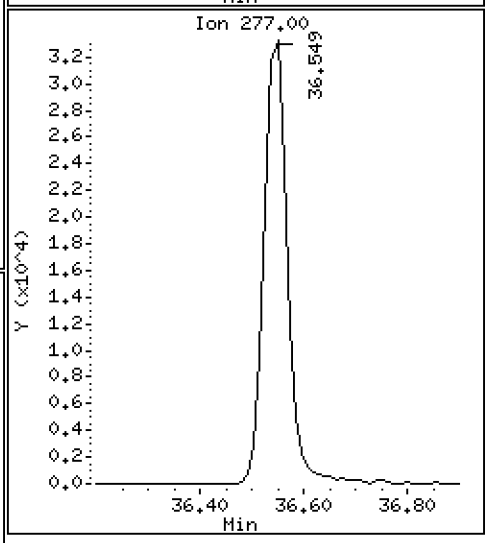
74 Benzo(g,h,i)perylene

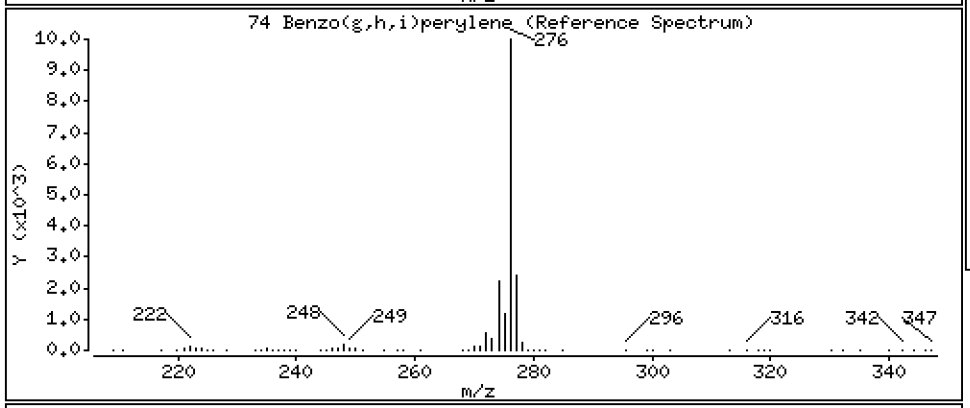
Concentration: 2.434 ug/mL

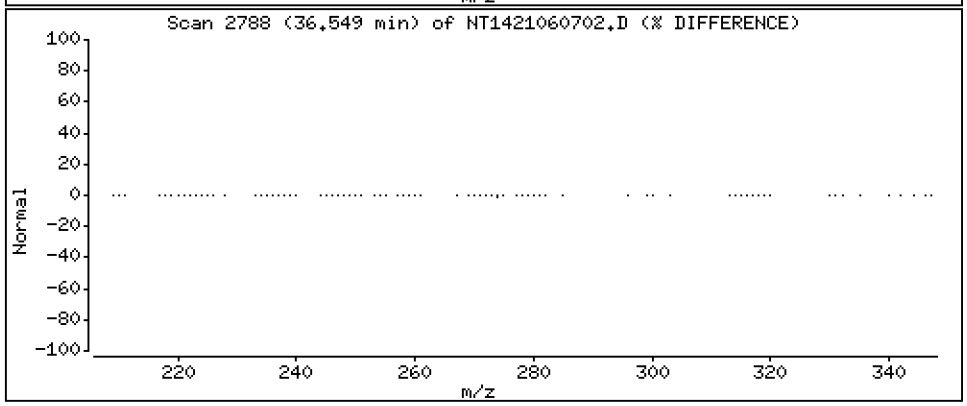












ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt14.i\20210607.b\NT1421060702.D
Lab Smp Id: SJF0173-ICV1
Inj Date : 07-JUN-2021 13:18
Operator : VTS Inst ID: nt14.i
Smp Info : SJF0173-ICV1
Misc Info :
Comment : 1ul Injection
Method : \\target\share\chem3\nt14.i\20210607.b\ALKYLPNA.m
Meth Date : 12-Jun-2021 14:57 yev Quant Type: ISTD
Cal Date : 29-MAY-2021 18:49 Cal File: NT1421052914.D
Als bottle: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: TARGETS.sub
Target Version: 4.14
Processing Host: ORGDATA102

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/mL)
1 trans-Decalin	138	7.136	7.136	(0.378)	41274	2.66056	2.661
2 cis-Decalin	138	8.255	8.255	(0.437)	32527	2.55704	2.557
$ 6 Naphthalene-d8	136	11.887	11.887	(0.629)	384481	2.65864	2.659(R)
7 Naphthalene	128	11.957	11.957	(0.633)	384017	2.65695	2.657
12 Benzo(b)thiophene	134	12.409	12.409	(0.657)	312204	2.62758	2.628
16 2-Methylnaphthalene	141	13.794	13.794	(0.730)	223471	2.64494	2.645
17 1-methylnaphthalene	141	14.244	14.244	(0.754)	215135	2.61730	2.617
18 Biphenyl	154	15.431	15.431	(0.817)	328493	2.63121	2.631
19 2,6-Dimethylnaphthalene	156	15.508	15.508	(0.821)	236381	2.57470	2.575(M)
20 Acenaphthylene	152	17.080	17.080	(0.904)	418359	2.66567	2.666
$ 21 Acenaphthene-d10	164	17.365	17.365	(0.919)	229454	2.58335	2.583(RM)
22 Acenaphthene	153	17.486	17.486	(0.925)	250752	2.59176	2.592
23 Dibenzofuran	168	17.860	17.860	(0.945)	381719	2.65986	2.660
24 1,6,7-Trimethylnaphthalene	170	18.080	18.080	(0.957)	246347	2.63472	2.635(M)
* 25 Fluorene-d10	176	18.896	18.896	(1.000)	311077	2.00000	(M)
26 Fluorene	166	19.009	19.009	(1.006)	295146	2.65440	2.654
30 Dibenzothiophene	184	21.931	21.931	(1.161)	430948	2.74524	2.745
$ 35 Phenanthrene-d10	188	22.238	22.238	(0.995)	412189	2.58359	2.584(R)
36 Phenanthrene	178	22.326	22.326	(0.999)	441427	2.58174	2.582
* 250 Anthracene-d10	188	22.359	22.359	(1.000)	331614	2.00000	(M)
37 Anthracene	178	22.425	22.425	(1.003)	422289	2.62499	2.625
42 Carbazole	167	23.701	23.701	(1.060)	376944	2.53043	2.530
43 1-Methylphenanthrene	192	24.151	24.151	(1.080)	325486	2.64892	2.649
44 Fluoranthene	202	26.130	26.130	(1.169)	513420	2.72050	2.720
46 Pyrene	202	26.977	26.977	(1.207)	551233	2.80843	2.808
51 Naphthobenzothiophene	234	29.509	29.509	(1.320)	559455	2.65277	2.653
55 Benzo(a)anthracene	228	30.095	30.095	(0.907)	482092	2.98486	2.985
$ 56 Chrysene-d12	240	30.219	30.219	(0.911)	379282	2.90973	2.910(R)
57 Chrysene	228	30.286	30.286	(0.913)	456925	2.88709	2.887
62 Benzo(b)fluoranthene	252	32.517	32.517	(0.980)	429197	2.56227	2.562
63 Benzo(k)fluoranthene	252	32.562	32.562	(0.981)	475805	2.64736	2.647(M)
293 Benzo(j)fluoranthene	252	32.629	32.629	(0.983)	410509	2.47874	2.479
246 Total Benzofluoranthenes	252	32.562	32.562	(0.981)	1337828	8.15407	8.154(M)

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/mL)
* 251 Benzo(e)pyrene-d12	264	33.181	33.181	(1.000)	416427	2.00000	
64 Benzo(e)pyrene	252	33.237	33.237	(1.002)	413429	2.51822	2.518
66 Benzo(a)pyrene	252	33.339	33.339	(1.005)	386821	2.59001	2.590
$ 67 Perylene-d12	264	33.519	33.519	(1.010)	359141	2.55229	2.552(R)
68 Perylene	252	33.575	33.575	(1.012)	400586	2.60148	2.601
69 Indeno(1,2,3-cd)pyrene	276	35.636	35.636	(1.074)	443883	2.53200	2.532(M)
70 Dibenzo(a,h)anthracene	278	35.614	35.614	(1.073)	399101	2.41936	2.419(M)
74 Benzo(g,h,i)perylene	276	36.549	36.549	(1.101)	421608	2.43433	2.434(M)

QC Flag Legend

R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt14.i
Lab File ID: NT1421060702.D
Lab Smp Id: SJF0173-ICV1
Analysis Type: SV
Quant Type: ISTD
Operator: VTS
Method File: \\target\share\chem3\nt14.i\20210607.b\ALKYLPNA.m
Misc Info:

Calibration Date: 07-JUN-2021
Calibration Time: 13:18
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
25 Fluorene-d10	323874	161937	647748	311077	-3.95
250 Anthracene-d10	339912	169956	679824	331614	-2.44
251 Benzo(e)pyrene-d1	416427	208214	832854	416427	0.00

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
25 Fluorene-d10	18.90	18.40	19.40	18.90	0.00
250 Anthracene-d10	22.36	21.86	22.86	22.36	0.00
251 Benzo(e)pyrene-d1	33.18	32.68	33.68	33.18	0.00

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

REVIEW SUMMARY FOR FILE - NT1421060702.D

Lab ID: SJF0173-ICV1
nt14.i, 20210607.b\ALKYLPNA.m, 07-JUN-2021 13:18

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

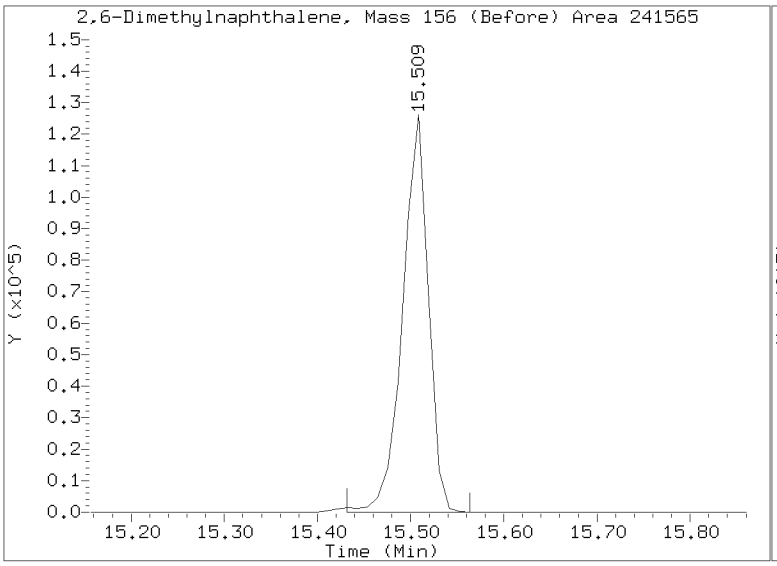
RRT check based on Ccal File: NT1421060702.D

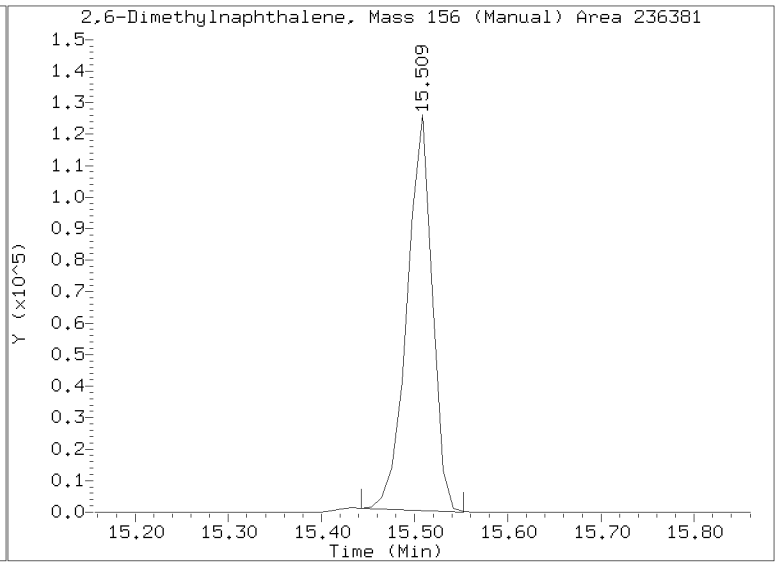
On Column LOD for nt14.i, 20210607.b\ALKYLPNA.m, TARGETS.sub = 0.0000

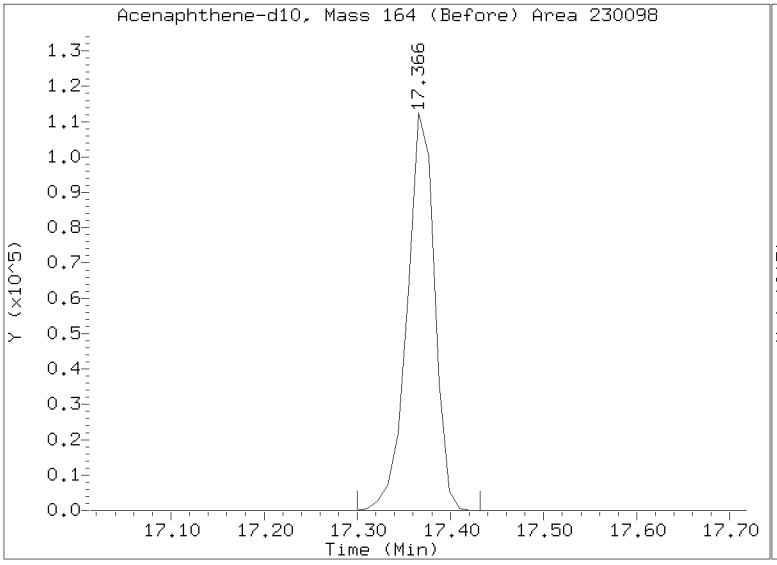
* Only compounds listed in the work order have been verified by the analyst *

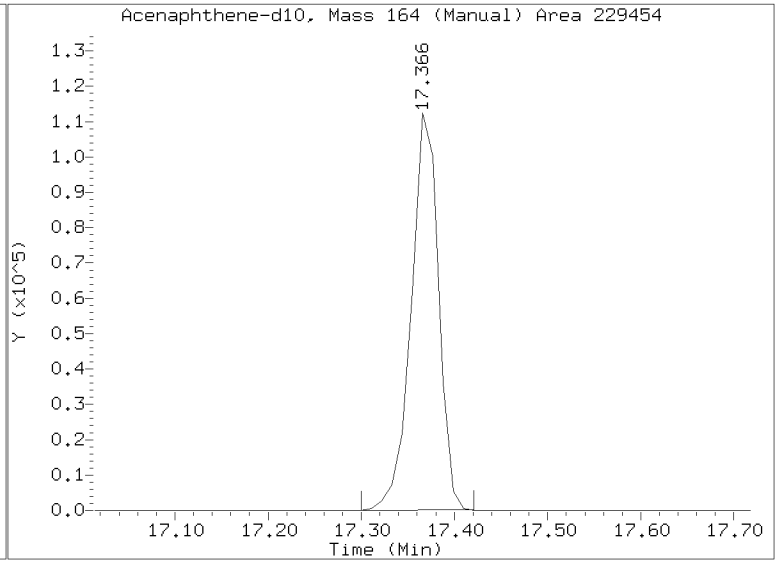
Quant Ion Manual Peak Adjustment Report

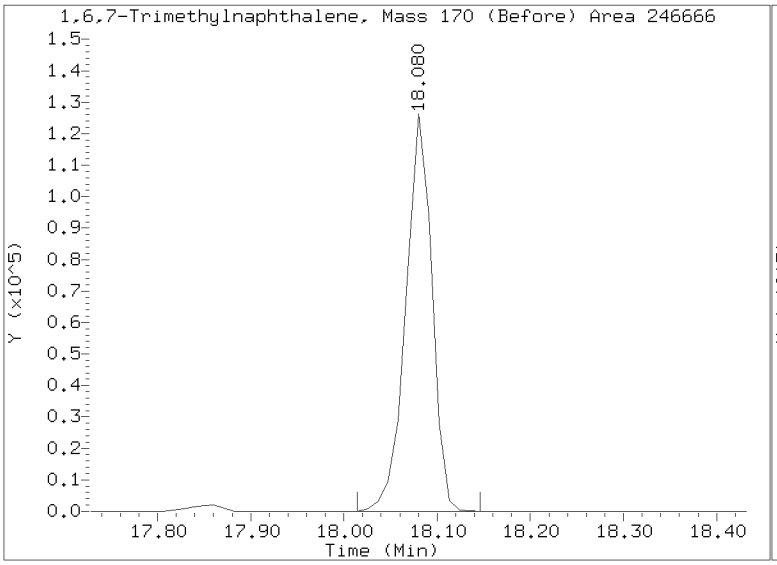
Datafile: //target/share/chem3/nt14.i/20210607.b/NT1421060702.D
Injection Date: 07-JUN-2021 13:18
Lab ID:SJF0173-ICV1 Client ID:
Report Date: 06/12/2021 15:49

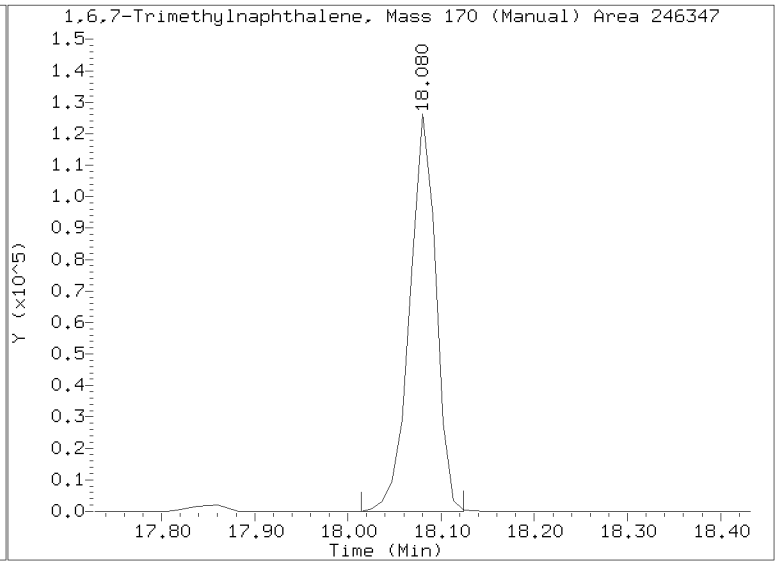






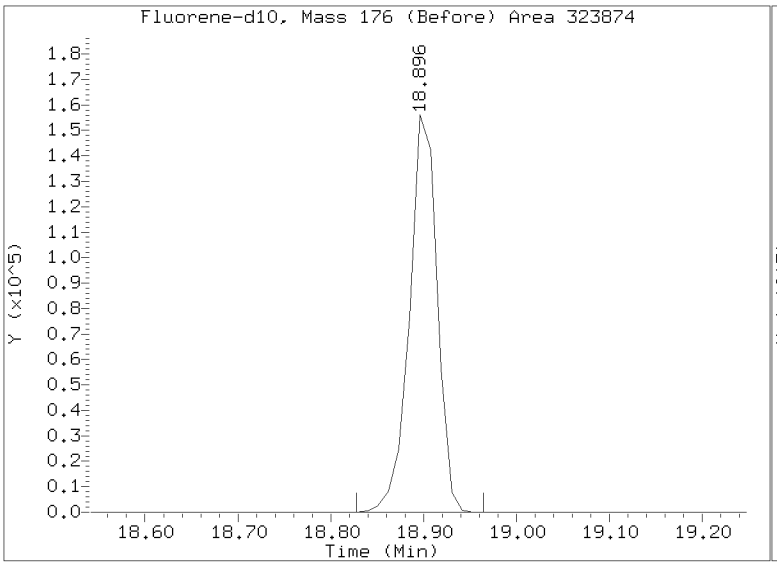


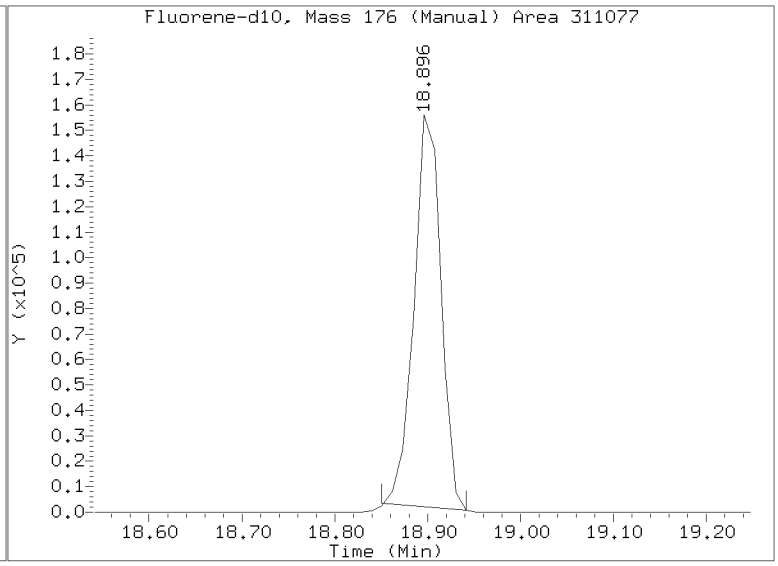


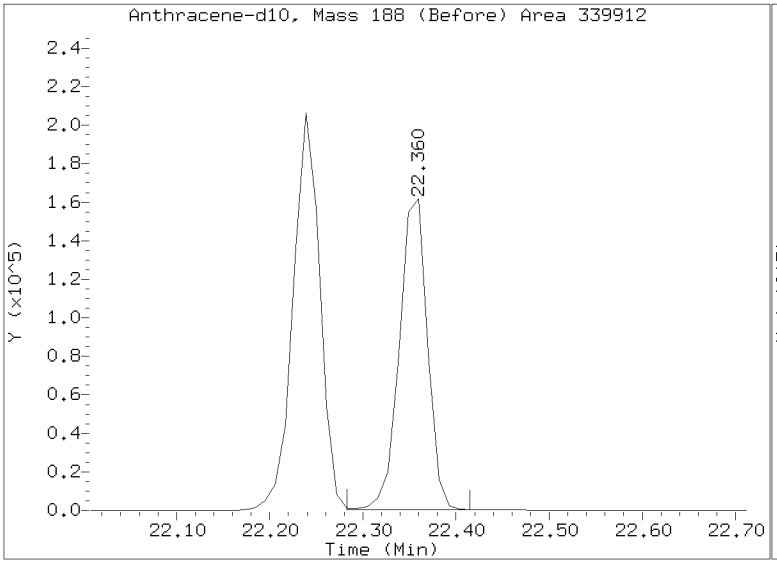


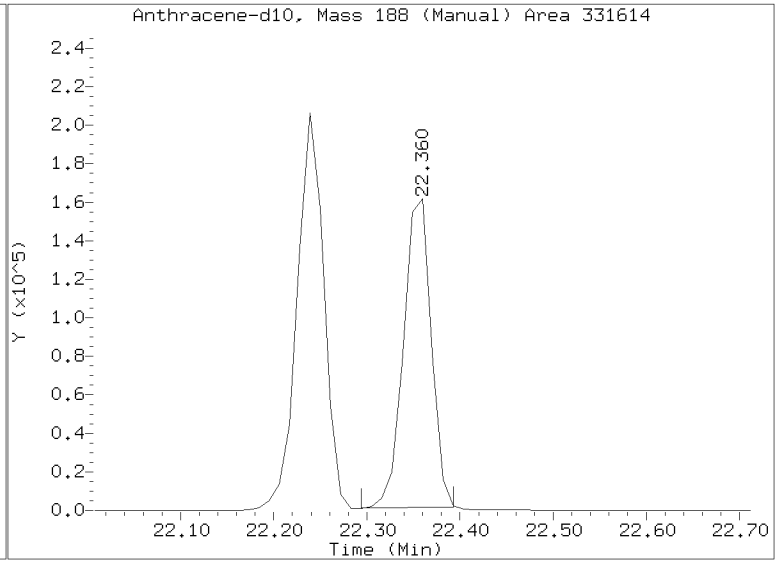
Quant Ion Manual Peak Adjustment Report

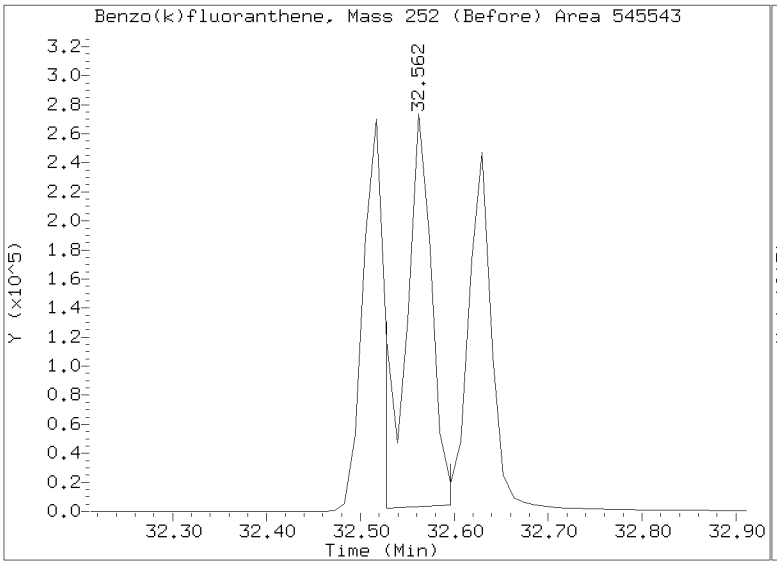
Datafile: //target/share/chem3/nt14.i/20210607.b/NT1421060702.D
Injection Date: 07-JUN-2021 13:18
Lab ID:SJF0173-ICV1 Client ID:
Report Date: 06/12/2021 15:49

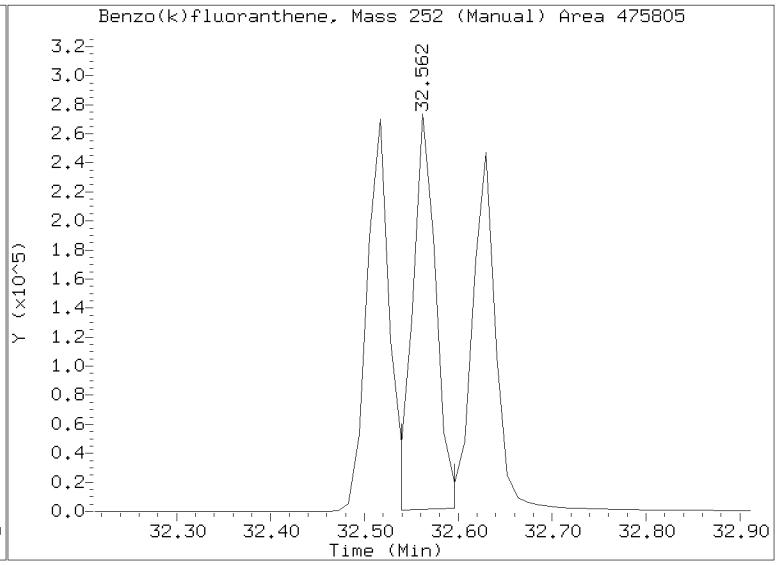






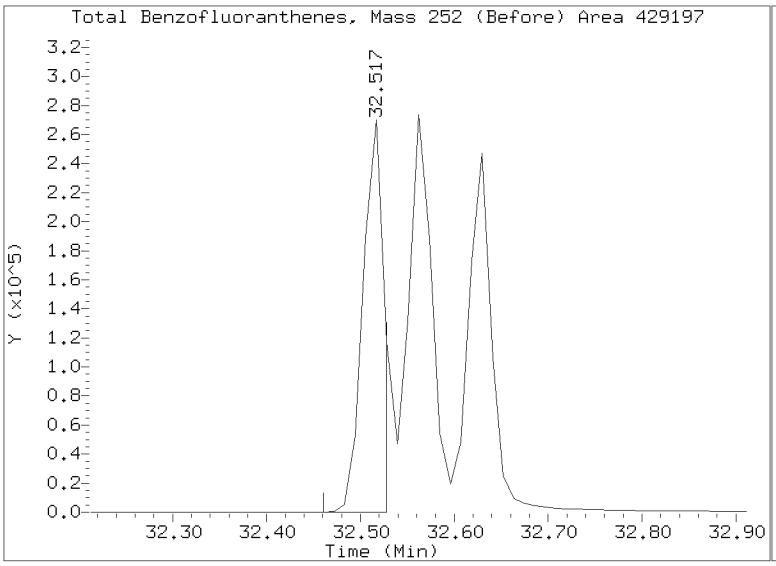


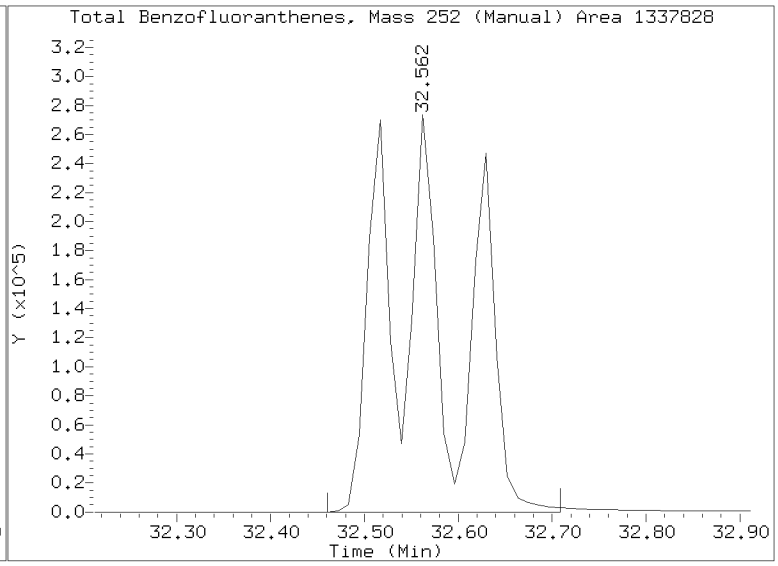


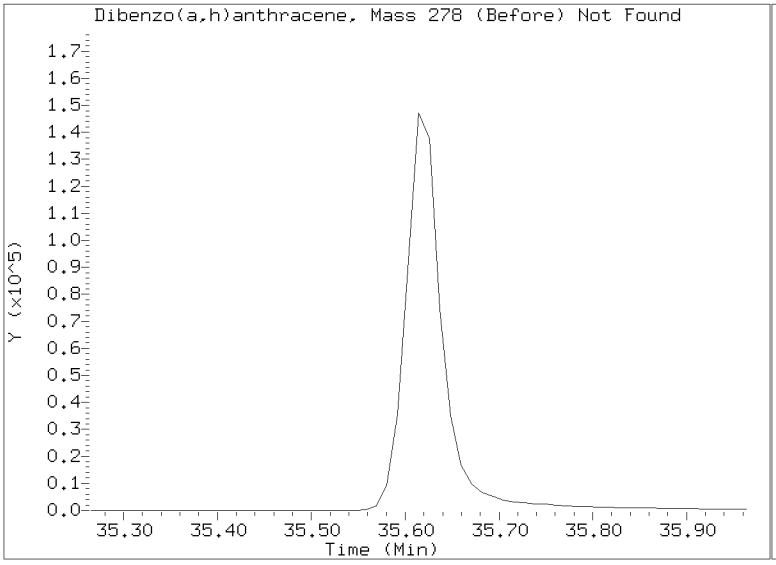


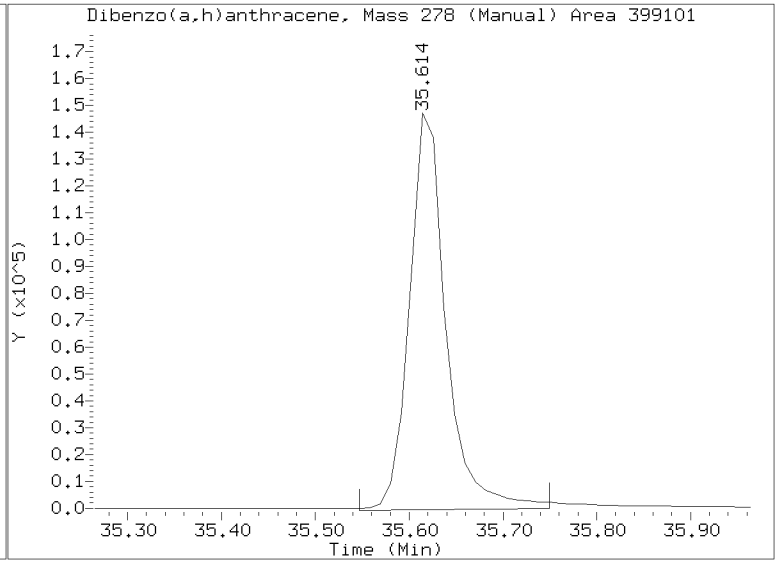
Quant Ion Manual Peak Adjustment Report

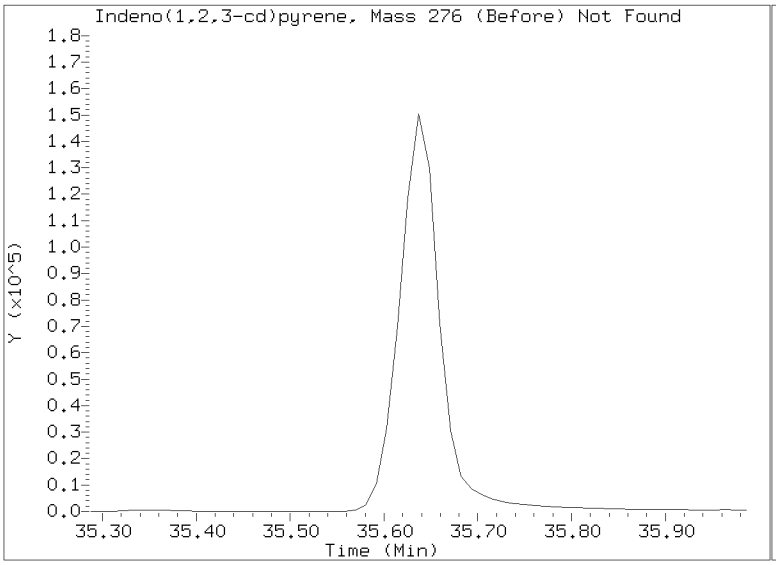
Datafile: //target/share/chem3/nt14.i/20210607.b/NT1421060702.D
Injection Date: 07-JUN-2021 13:18
Lab ID:SJF0173-ICV1 Client ID:
Report Date: 06/12/2021 15:49

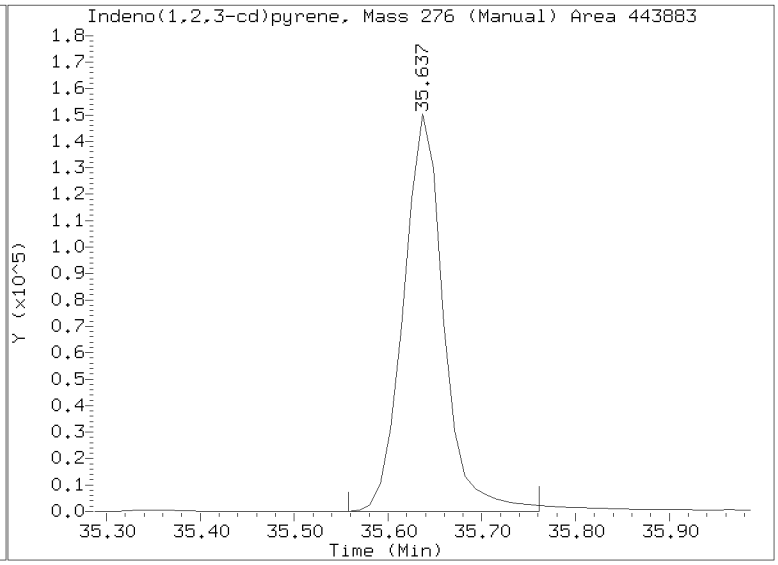






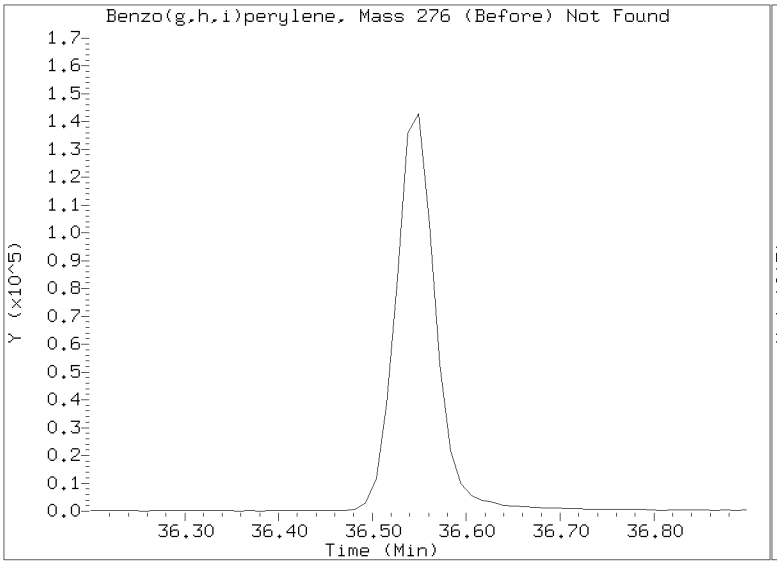


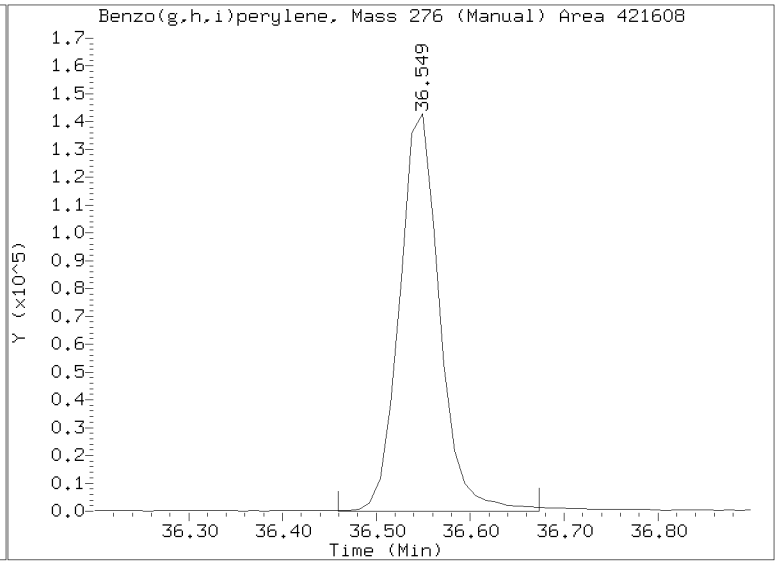




Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt14.i/20210607.b/NT1421060702.D
Injection Date: 07-JUN-2021 13:18
Lab ID:SJF0173-ICV1 Client ID:
Report Date: 06/12/2021 15:49





Q-FLAG SUMMARY FOR DATABATCH - \\target\share\chem3\nt14.i\20210607.b

Instrument: nt14.i Date: 07-JUN-2021 Method: 20210607.b\ALKYLPNA.m

INITIAL CAL: 29-MAY-2021

Compound	%RSD or R^2
NO Q-FLAGS	

ICV CAL: NT1421060702.D 07-JUN-2021 13:18

Compound	%D
NO Q-FLAGS	

Analytical Resources, Incorporated
Analytical Chemists and Consultants

SECOND-SOURCE
CONTINUING CALIBRATION CHECK
EPA 8270E-SIM

Laboratory:	Analytical Resources, Inc.	SDG:	21E0106
Client:	Anchor QEA, LLC	Project:	Gasco Siltronic - US Moorings
Instrument ID:	NT14	Calibration:	EF00008
Lab File ID:	NT1421052915.D	Calibration Date:	06/02/2021
Sequence:	SJF0025	Injection Date:	05/29/21
Lab Sample ID:	SJF0025-SCV1	Injection Time:	19:38
Sequence Name:	Secondary Cal Check		

		CONC. (ug/mL)		RESPONSE FACTOR (RRF)			% DRIFT/DIFF	
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN	CCV	LIMIT
trans-Decalin	A	2.5000	2.9	0.0997391	0.1172458		17.6	+/-20
cis-Decalin	A	2.5000	2.6	0.0700123	0.0834965		2.2	+/-20
Naphthalene	A	2.5000	2.6	0.9292421	0.9756741		5.0	+/-20
1-Methylnaphthalene	A	2.5000	2.7	0.5284699	0.5621792		6.4	+/-20
2-Methylnaphthalene	A	2.5000	2.6	0.5432098	0.5747661		5.8	+/-20
Biphenyl	A	2.5000	2.6	0.8026611	0.8374485		4.3	+/-20
2,6-Dimethylnaphthalene	A	2.5000	2.6	0.5902664	0.6147848		4.2	+/-20
Acenaphthylene	A	2.5000	2.6	1.0090320	1.0592520		5.0	+/-20
Acenaphthene	A	2.5000	2.8	0.6220308	0.6855406		10.2	+/-20
Dibenzofuran	A	2.5000	2.6	0.9226724	0.9577737		3.8	+/-20
2,3,5-Trimethylnaphthalene	A	2.5000	2.6	0.6011392	0.6352890		5.7	+/-20
Fluorene	A	2.5000	2.6	0.7148800	0.7465824		4.4	+/-20
Benzo(b)thiophene	A	2.5000	2.6	0.7639133	0.8010089		4.9	+/-20
Phenanthrene	A	2.5000	2.6	1.0312030	1.0887480		5.6	+/-20
Anthracene	A	2.5000	2.7	0.9702418	1.0431120		7.5	+/-20
Carbazole	A	2.5000	2.7	0.8557591	0.9256355		8.2	+/-20
1-Methylphenanthrene	A	2.5000	2.7	0.7410711	0.7906296		6.7	+/-20
Fluoranthene	A	2.5000	2.7	1.1382070	1.2164600		6.9	+/-20
Dibenzothiophene	A	2.5000	2.6	1.0092670	1.0634370		5.4	+/-20
Pyrene	A	2.5000	2.7	1.1837730	1.2842150		8.5	+/-20
Benzo(a)anthracene	A	2.5000	2.8	0.7757052	0.8550287		10.2	+/-20
Chrysene	A	2.5000	2.8	0.7601074	0.8422197		10.8	+/-20
Benzo(b)fluoranthene	A	2.5000	3.1	0.8044926	1.0036660		24.8	
Benzo(j)fluoranthene	A	2.5000	2.6	0.7953937	0.8240717		3.6	
Benzo(k)fluoranthene	A	2.5000	2.5	0.8631910	0.8588317		-0.5	
Benzo(e)pyrene	A	2.5000	2.7	0.7884934	0.8417473		6.8	+/-20
Benzo(a)pyrene	A	2.5000	2.6	0.7172983	0.7521489		4.9	+/-20
Indeno(1,2,3-cd)pyrene	A	2.5000	2.9	0.8419699	0.9809947		16.5	+/-20
Dibenzo(a,h)anthracene	A	2.5000	2.7	0.7153598	0.8540262		7.6	+/-20
Benzo(g,h,i)perylene	A	2.5000	2.8	0.8318028	0.9252454		11.2	+/-20
Perylene	A	2.5000	2.8	0.7395491	0.8342774		12.8	+/-20
Naphthalene-d8	A	2.5000	2.88	0.9297733	1.0725020		15.4	+/-20
Acenaphthene-d10	A	2.5000	2.83	0.5710501	0.6454979		13.0	+/-20
Phenanthrene-d10	A	2.5000	2.85	0.9622084	1.0974100		14.1	+/-20

* Values outside of QC limits

Analytical Resources, Incorporated
Analytical Chemists and Consultants

SECOND-SOURCE
CONTINUING CALIBRATION CHECK
EPA 8270E-SIM

Laboratory:	Analytical Resources, Inc.	SDG:	21E0106
Client:	Anchor QEA, LLC	Project:	Gasco Siltronic - US Moorings
Instrument ID:	NT14	Calibration:	EF00008
Lab File ID:	NT1421052915.D	Calibration Date:	06/02/2021
Sequence:	SJF0025	Injection Date:	05/29/21
Lab Sample ID:	SJF0025-SCV1	Injection Time:	19:38
Sequence Name:	Secondary Cal Check		

		CONC. (ug/mL)		RESPONSE FACTOR (RRF)			% DRIFT/DIFF	
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN	CCV	LIMIT
Chrysene-d12	A	2.5000	3.09	0.6260378	0.7726454		23.4	+/-20
Perylene-d12	A	2.5000	2.92	0.6758124	0.7892403		16.8	+/-20

* Values outside of QC limits

Data File: \\target\share\chem3\nt14.i\20210529.b\NT1421052915.D

Page 1

Date : 29-MAY-2021 19:38

Client ID:

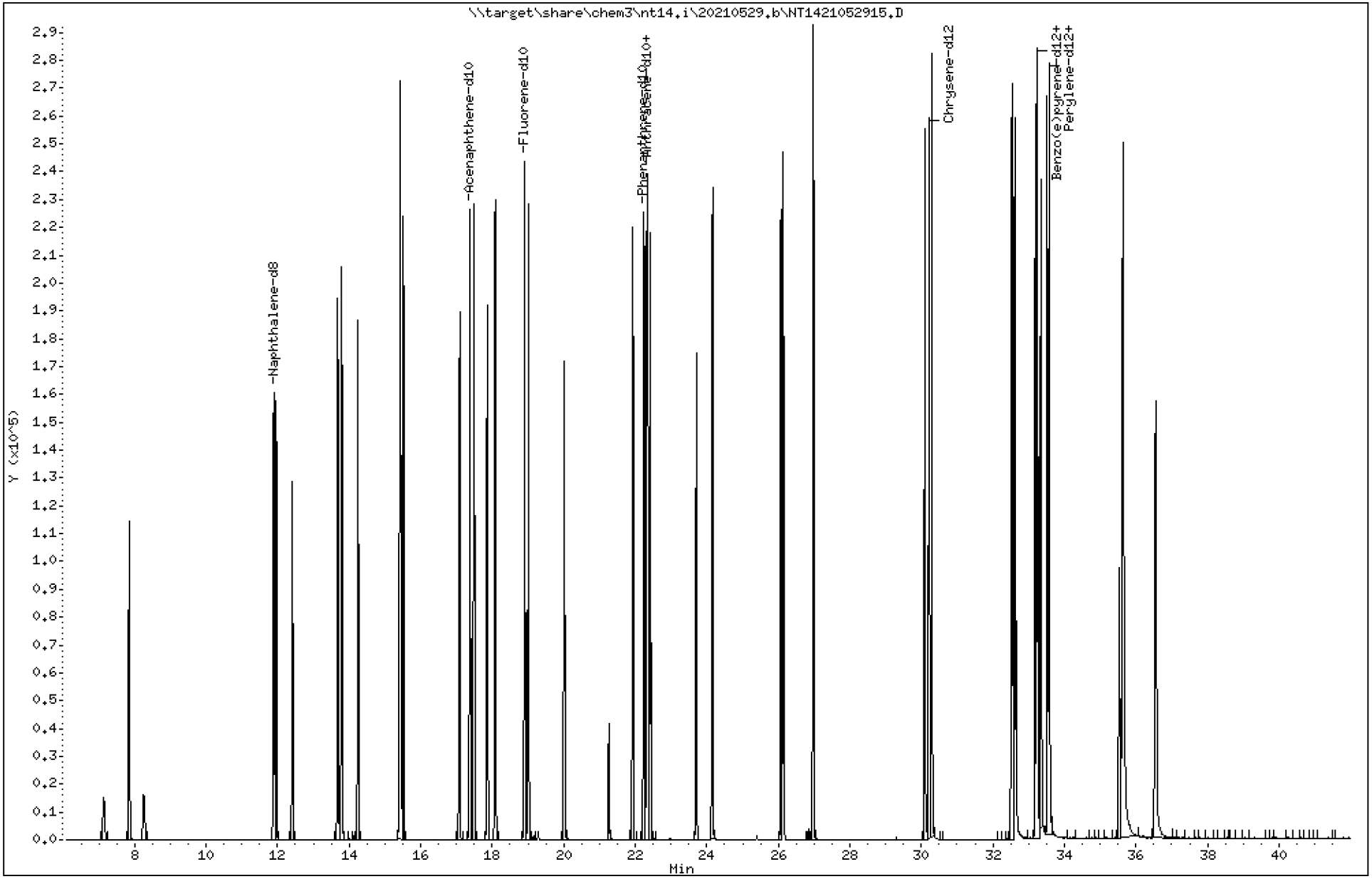
Instrument: nt14.i

Sample Info: SJF0025-SCV1

Operator: VTS

Column phase: Rxi-17Sil MS

Column diameter: 0.25



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Date : 29-MAY-2021 19:38

Client ID:

Instrument: nt14.i

Sample Info: SJF0025-SCV1

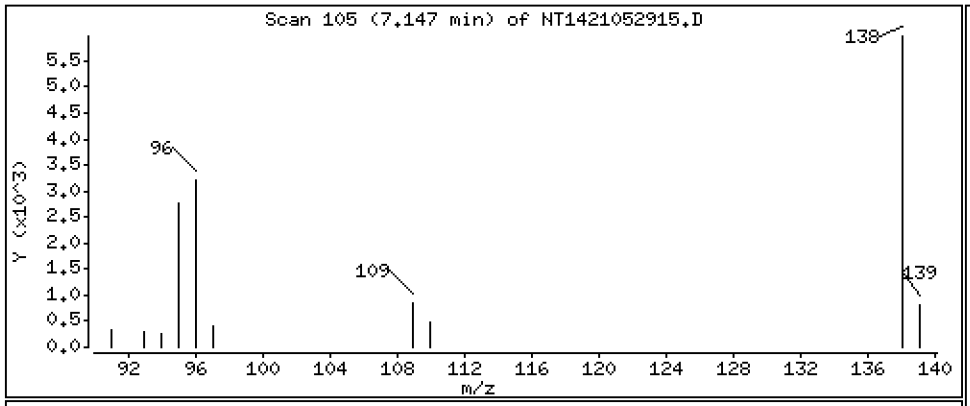
Operator: VTS

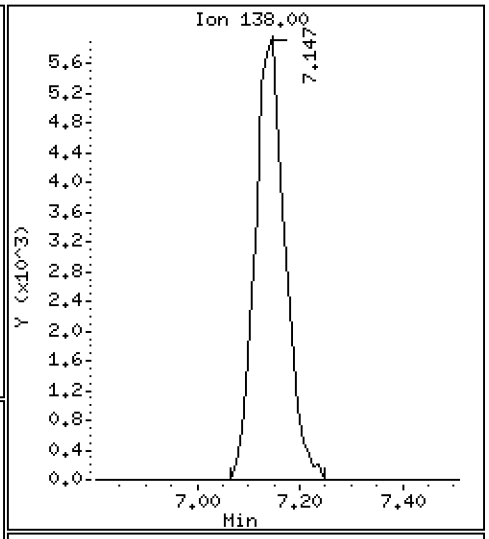
Column phase: Rxi-17Sil MS

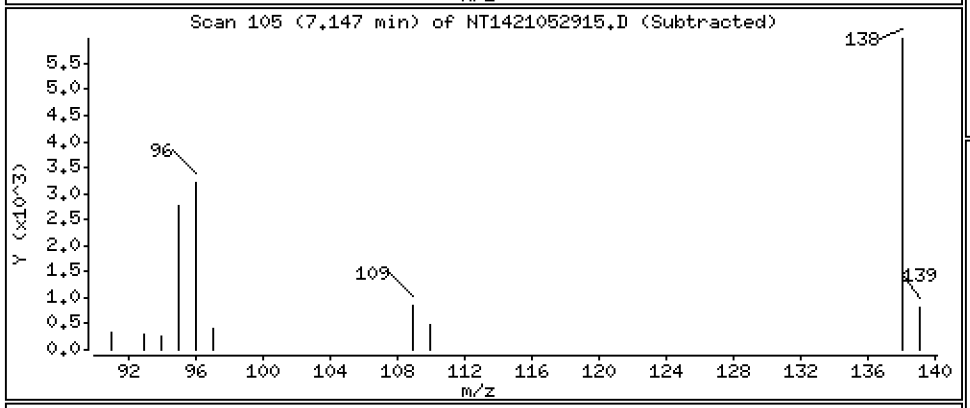
Column diameter: 0.25

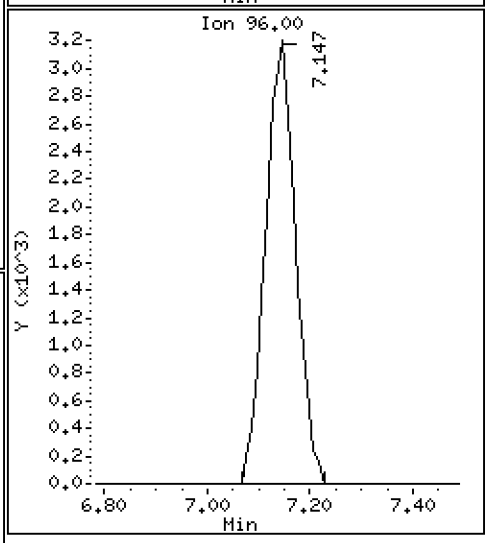
1 trans-Decalin

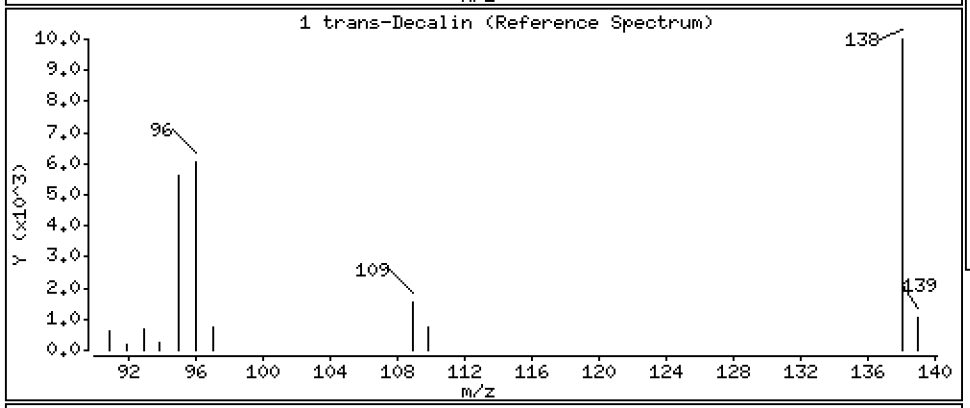
Concentration: 2.939 ug/mL

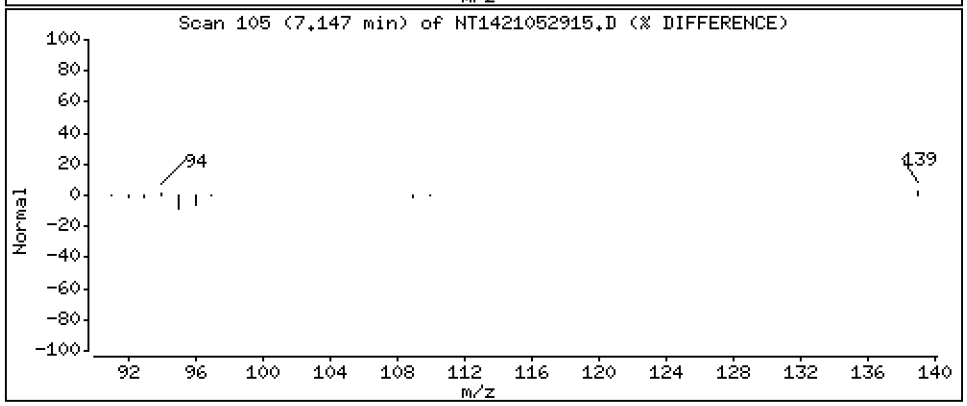












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Date : 29-MAY-2021 19:38

Client ID:

Instrument: nt14.i

Sample Info: SJF0025-SCV1

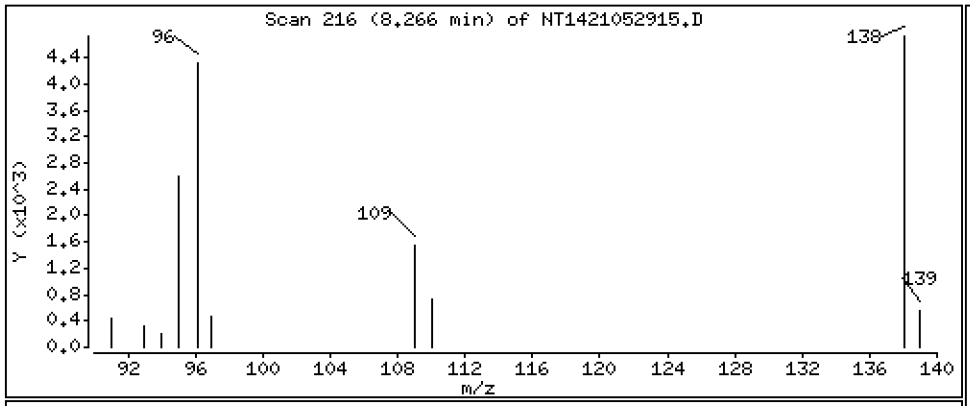
Operator: VTS

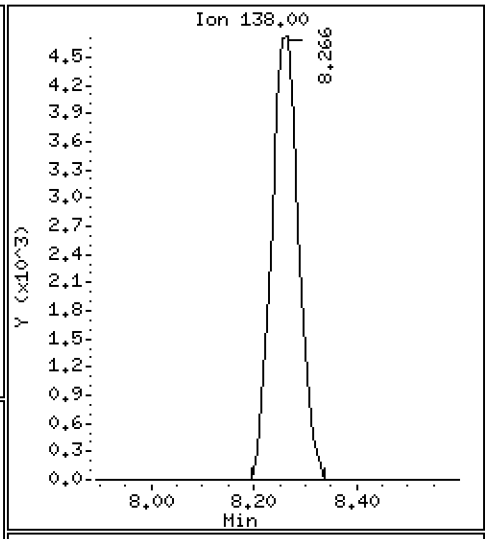
Column phase: Rxi-17Sil MS

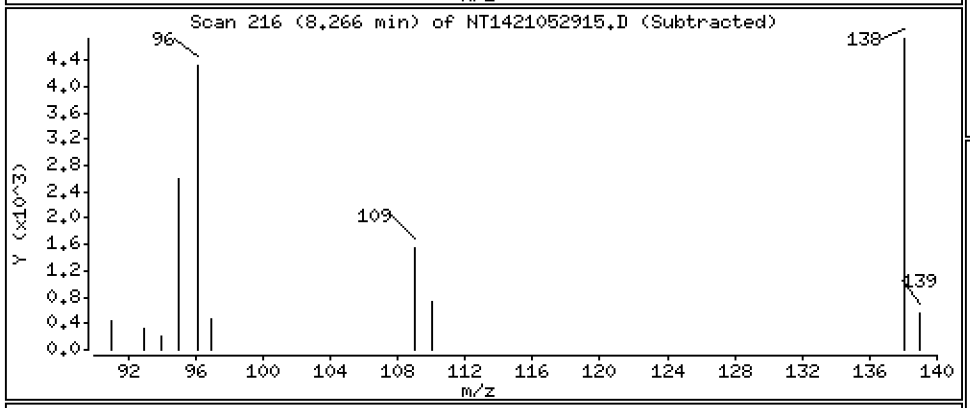
Column diameter: 0.25

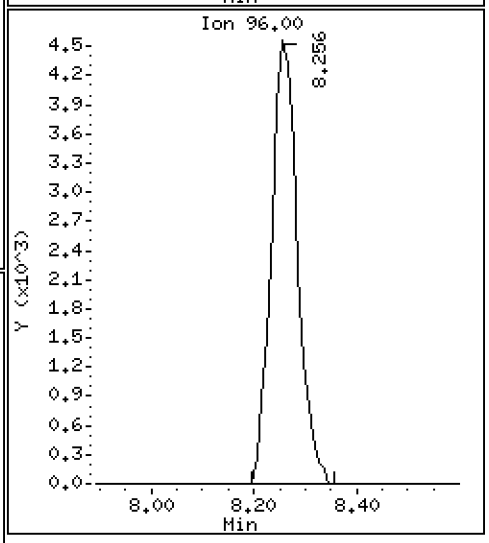
2 cis-Decalin

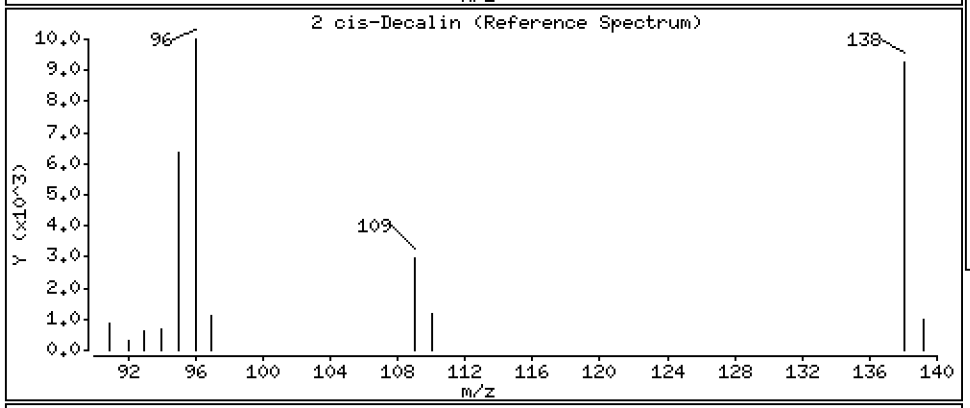
Concentration: 2.555 ug/mL

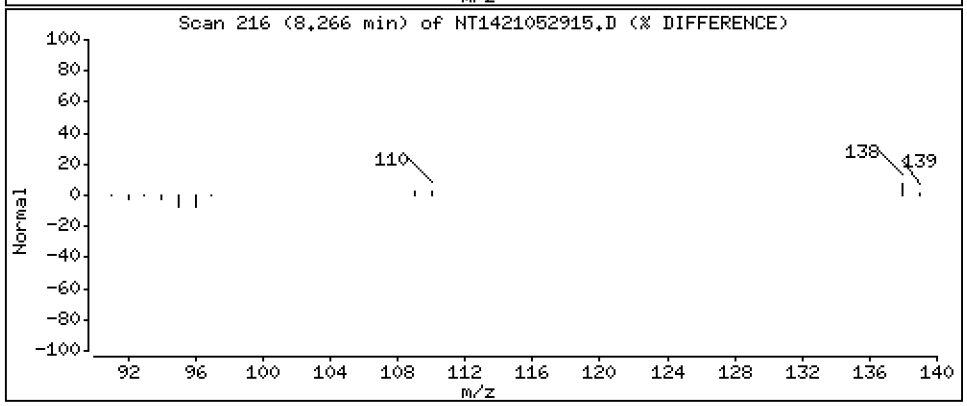












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Date : 29-MAY-2021 19:38

Client ID:

Instrument: nt14.i

Sample Info: SJF0025-SCV1

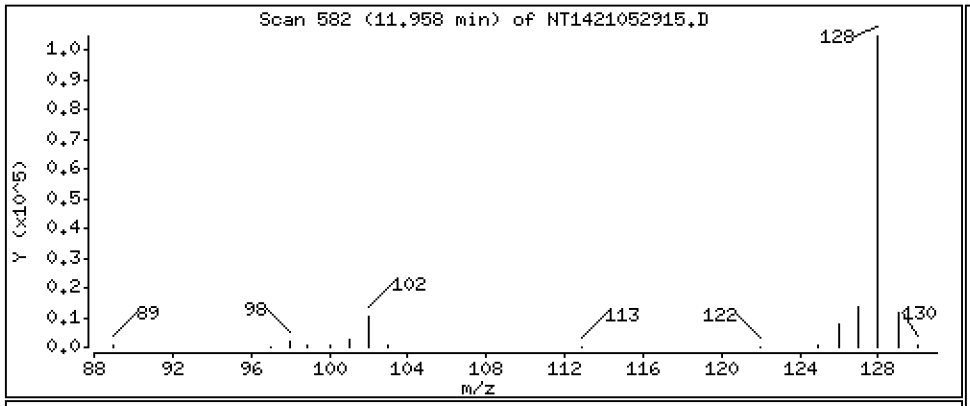
Operator: VTS

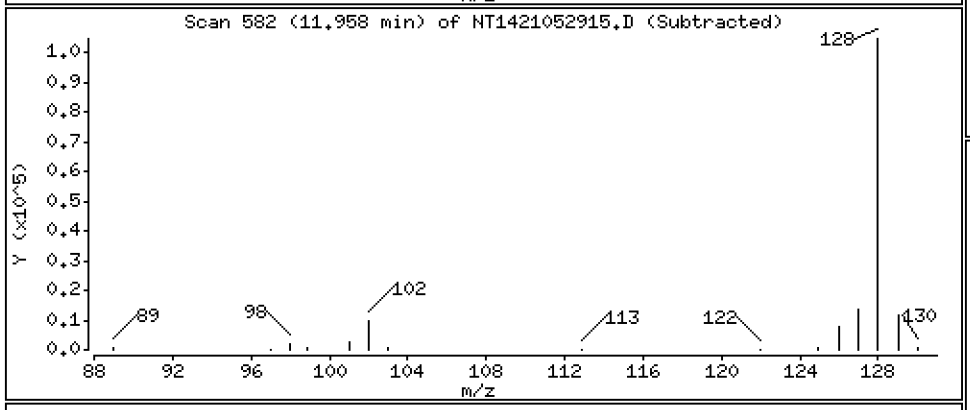
Column phase: Rxi-17Sil MS

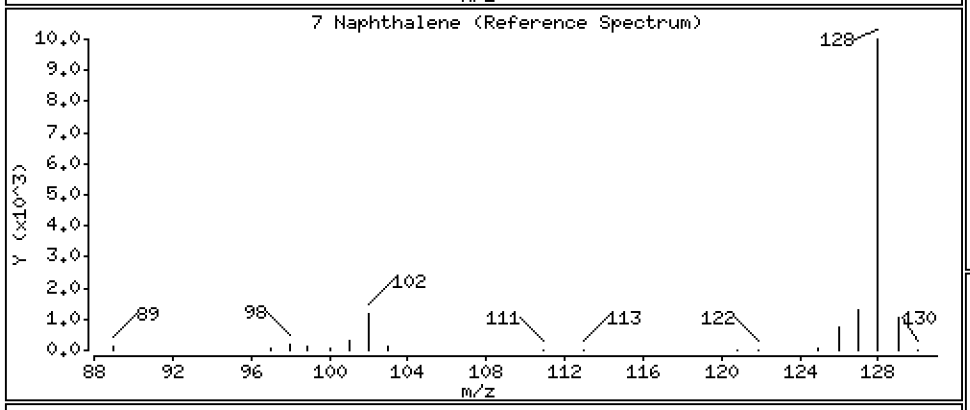
Column diameter: 0.25

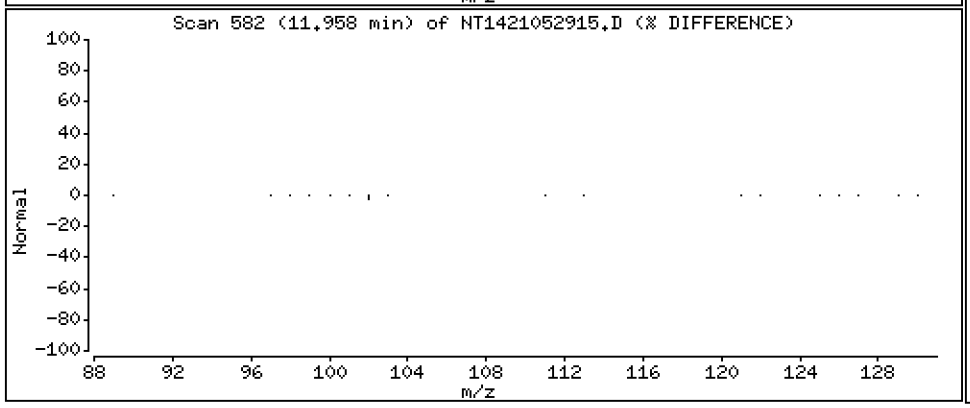
7 Naphthalene

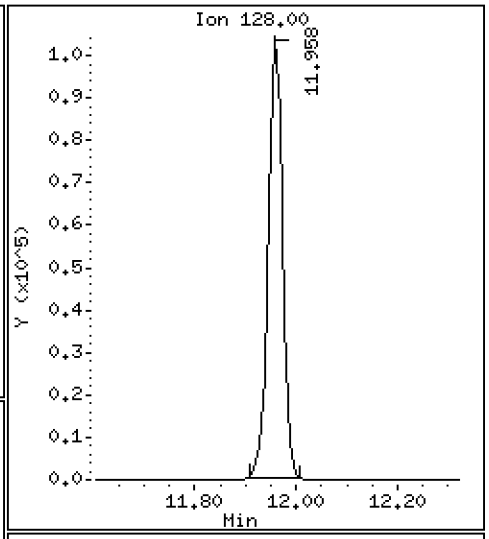
Concentration: 2.625 ug/mL

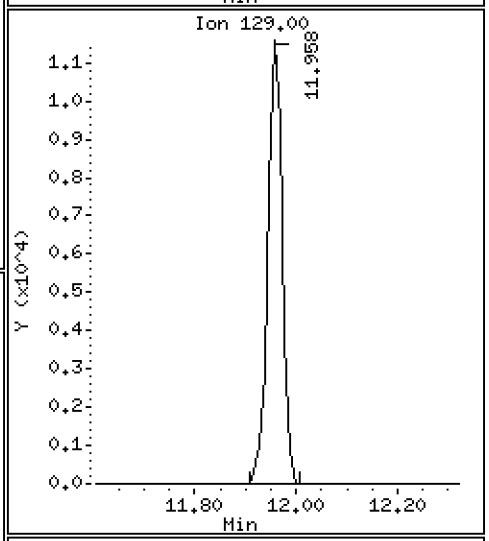


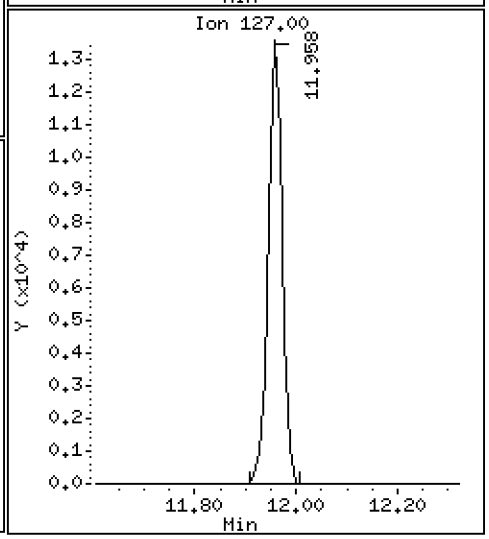












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Date : 29-MAY-2021 19:38

Client ID:

Instrument: nt14.i

Sample Info: SJF0025-SCV1

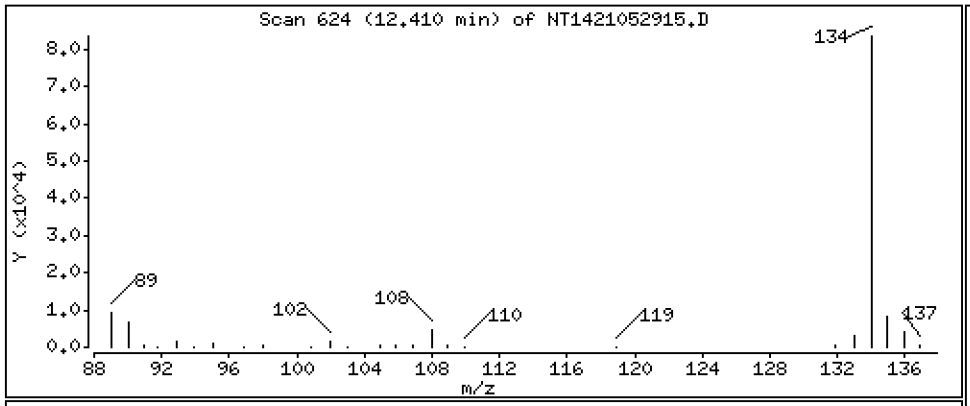
Operator: VTS

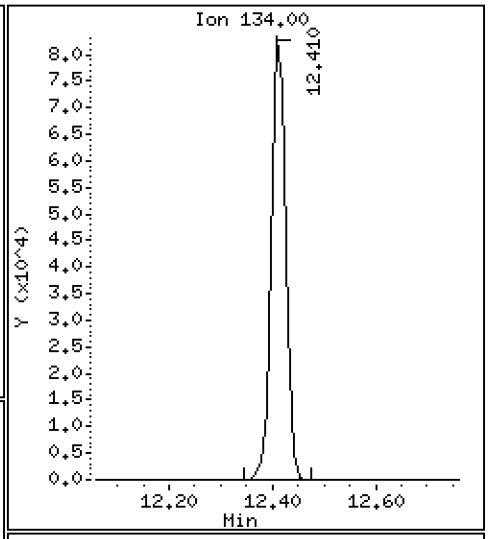
Column phase: Rxi-17Sil MS

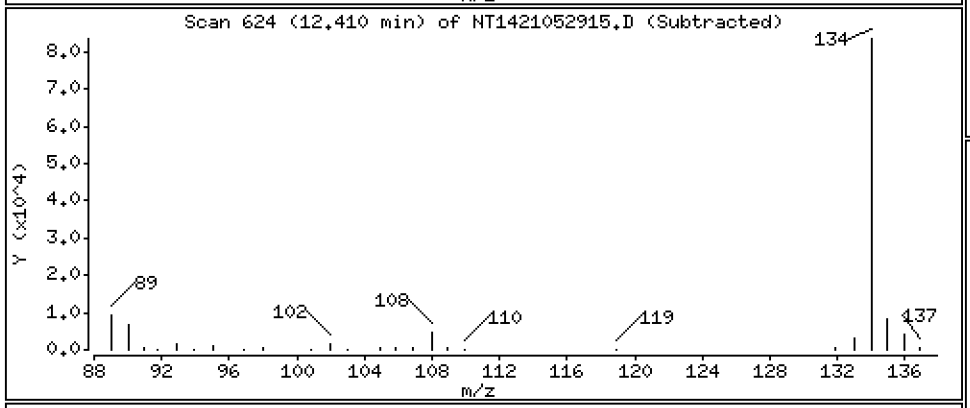
Column diameter: 0.25

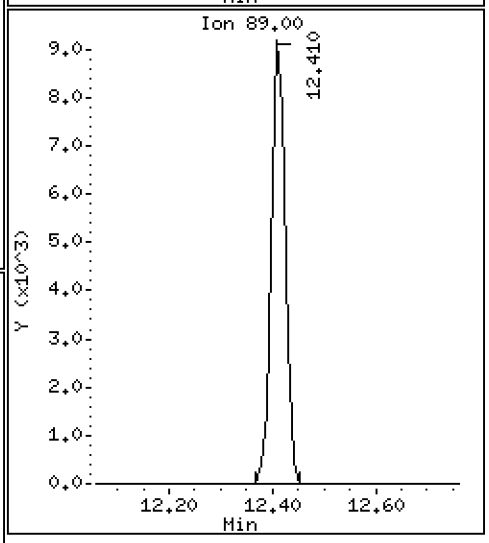
12 Benzo(b)thiophene

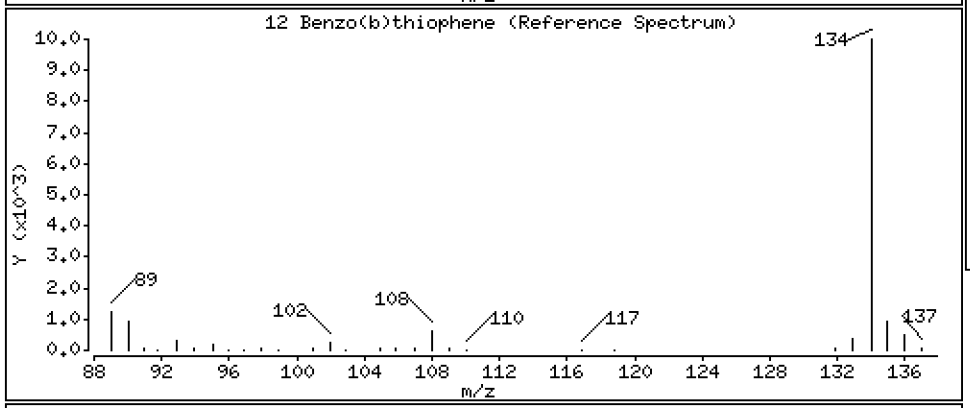
Concentration: 2.621 ug/mL

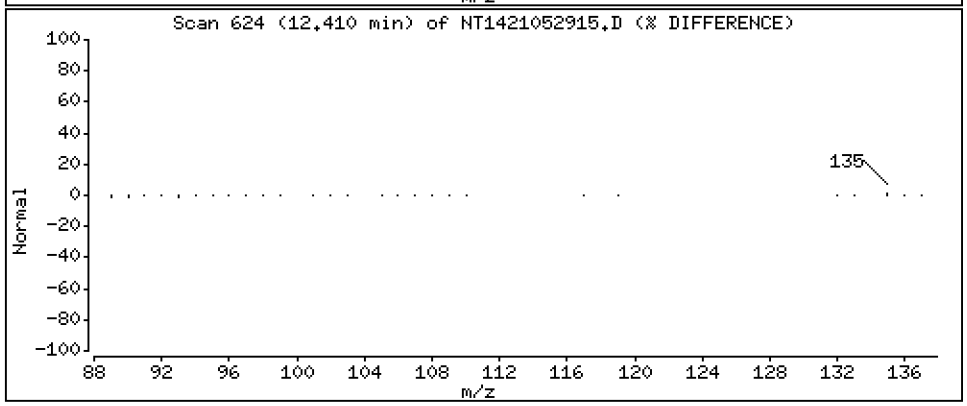












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Date : 29-MAY-2021 19:38

Client ID:

Instrument: nt14.i

Sample Info: SJF0025-SCV1

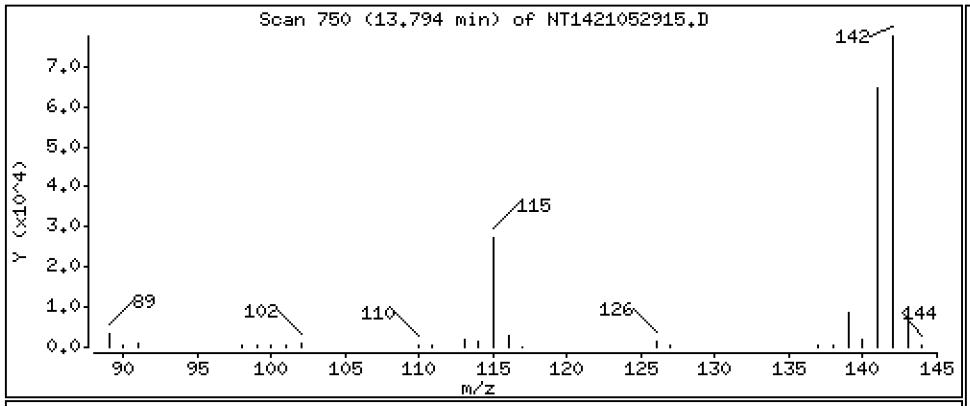
Operator: VTS

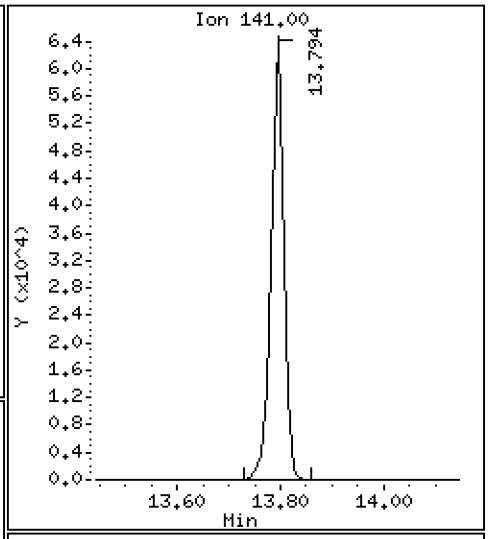
Column phase: Rxi-17Sil MS

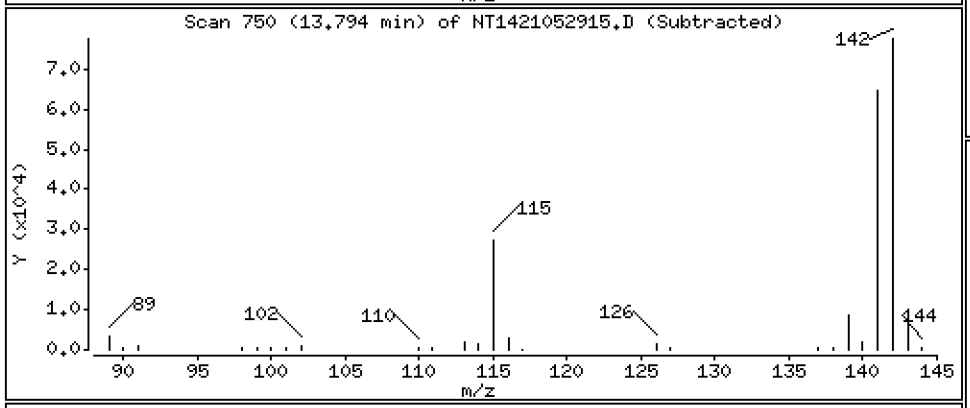
Column diameter: 0.25

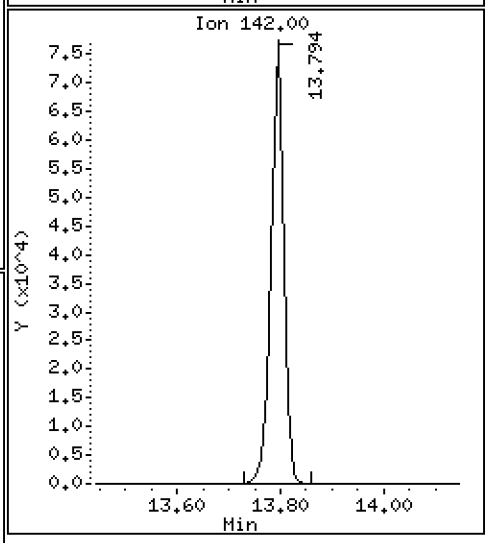
16 2-Methylnaphthalene

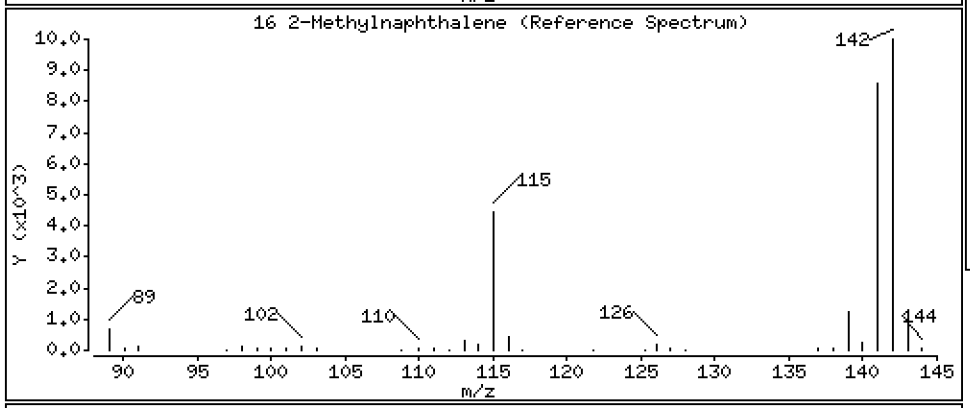
Concentration: 2.645 ug/mL

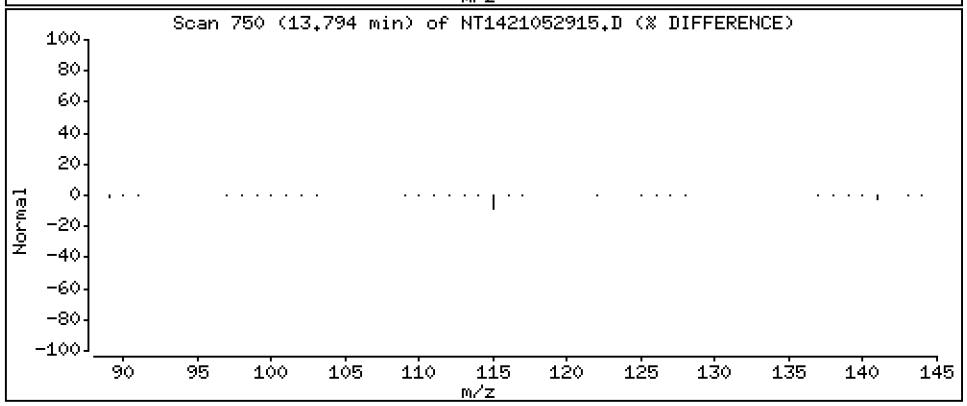












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Date : 29-MAY-2021 19:38

Client ID:

Instrument: nt14.i

Sample Info: SJF0025-SCV1

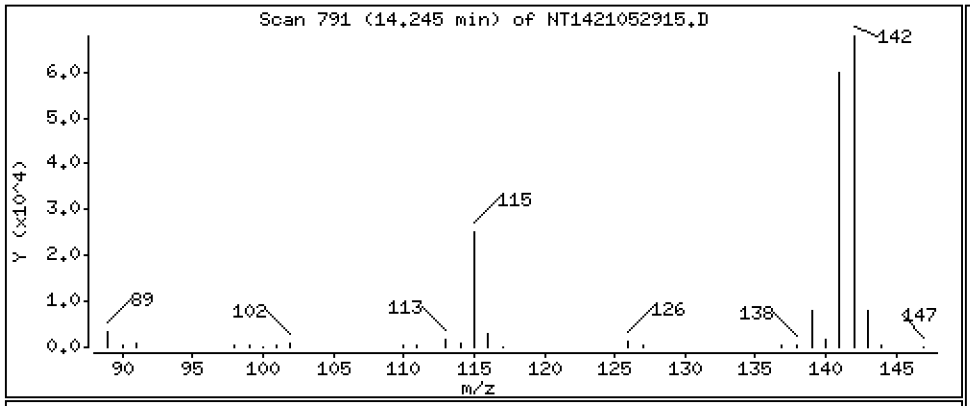
Operator: VTS

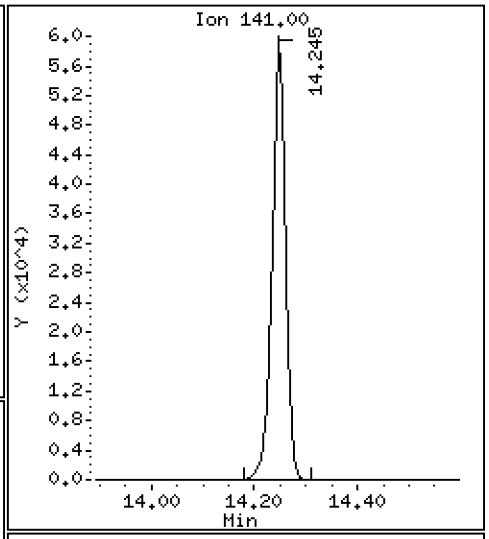
Column phase: Rxi-17Sil MS

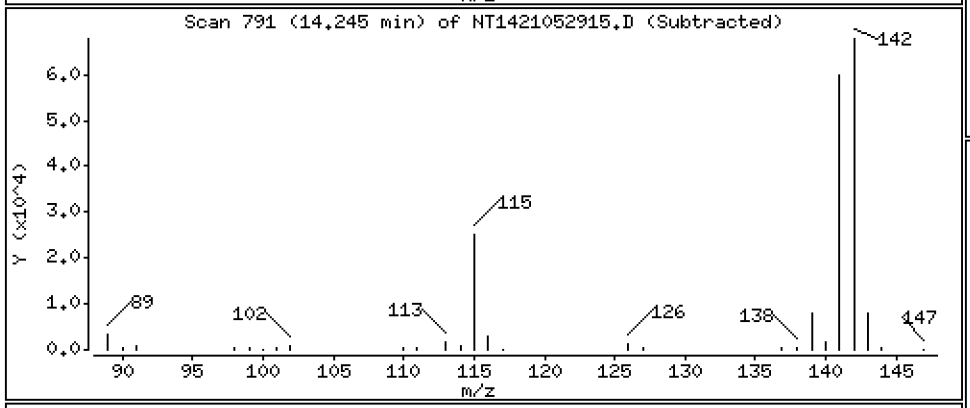
Column diameter: 0.25

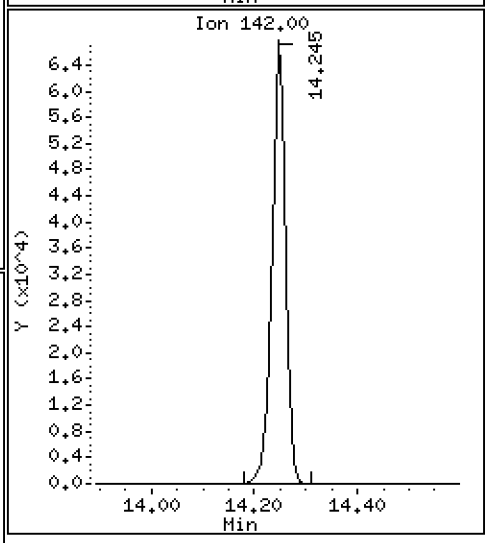
17 1-methylnaphthalene

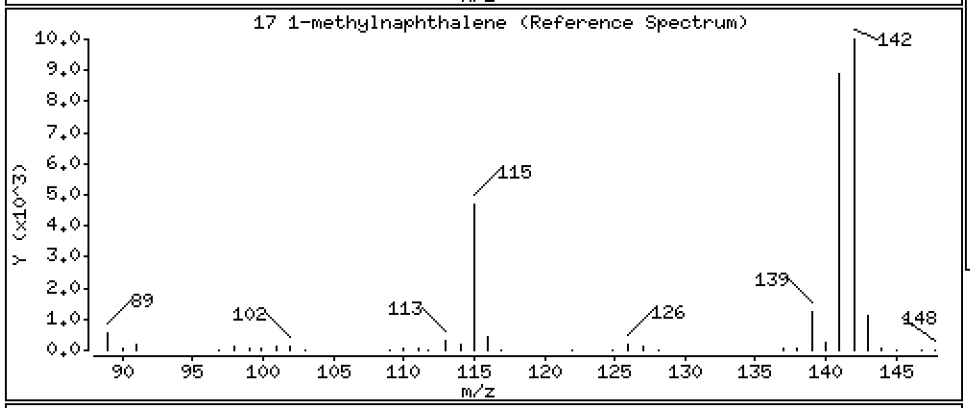
Concentration: 2.659 ug/mL

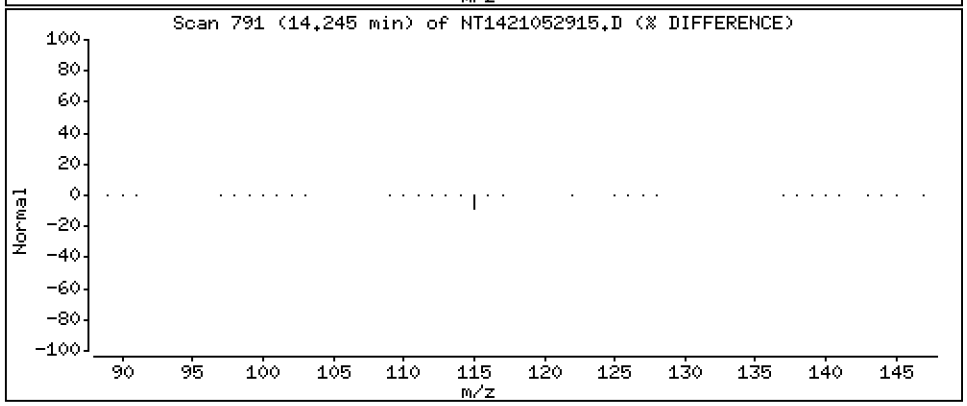












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Date : 29-MAY-2021 19:38

Client ID:

Instrument: nt14.i

Sample Info: SJF0025-SCV1

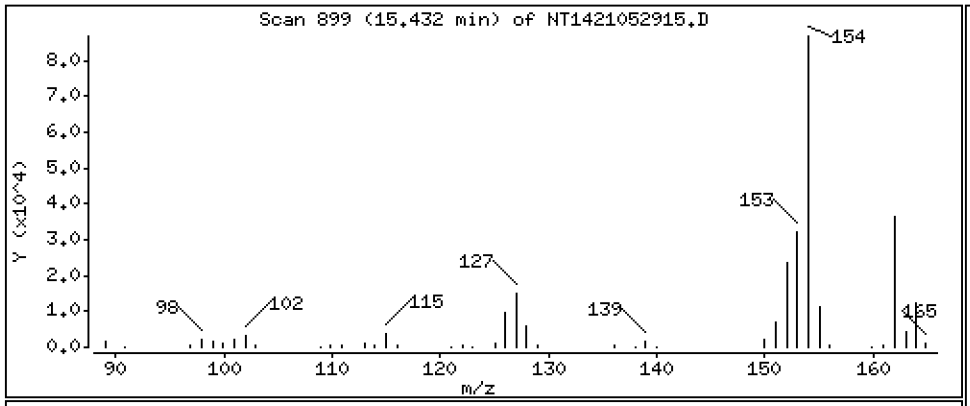
Operator: VTS

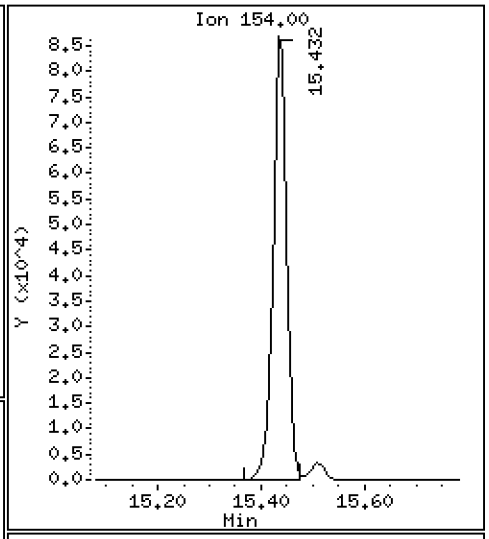
Column phase: Rxi-17Sil MS

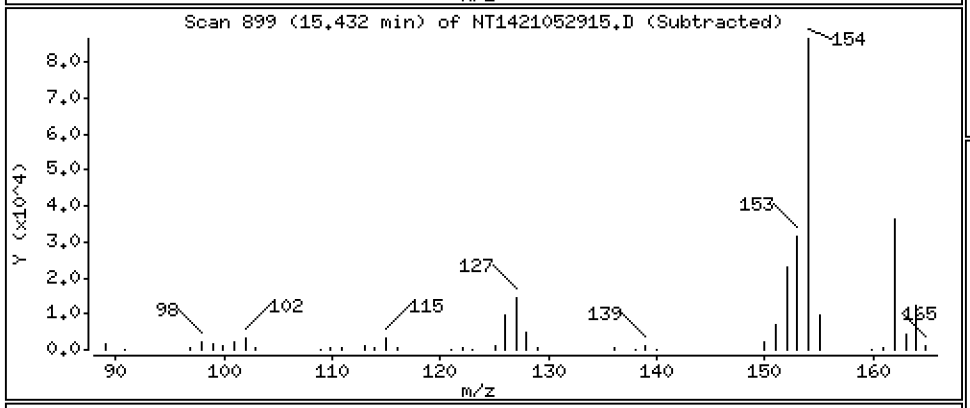
Column diameter: 0.25

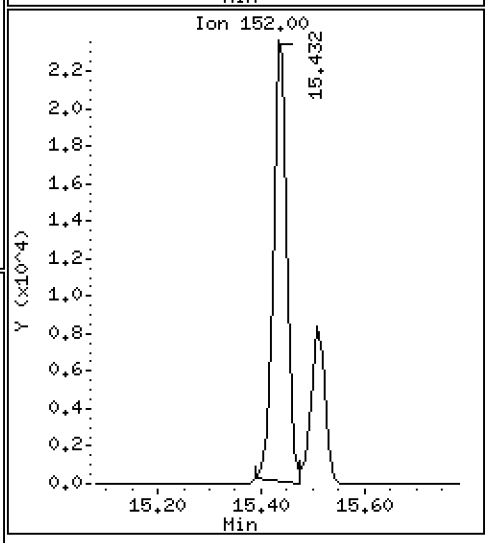
18 Biphenyl

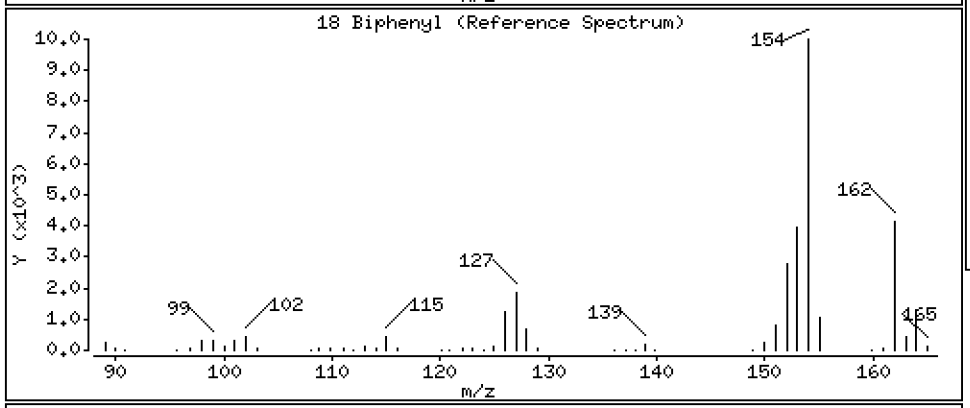
Concentration: 2.608 ug/mL

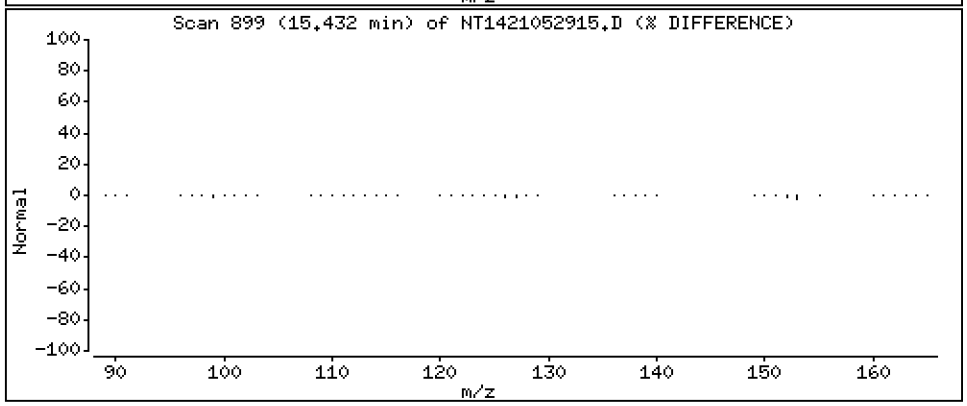












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Date : 29-MAY-2021 19:38

Client ID:

Instrument: nt14.i

Sample Info: SJF0025-SCV1

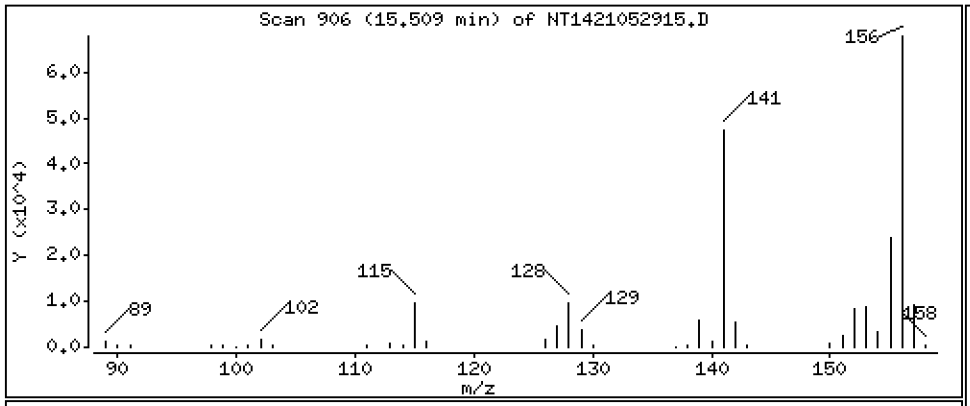
Operator: VTS

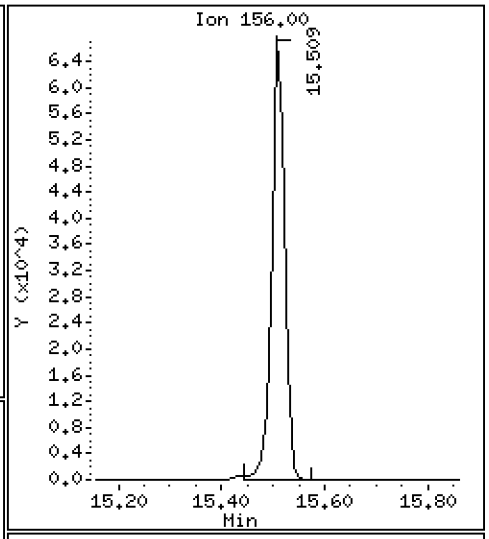
Column phase: Rxi-17Sil MS

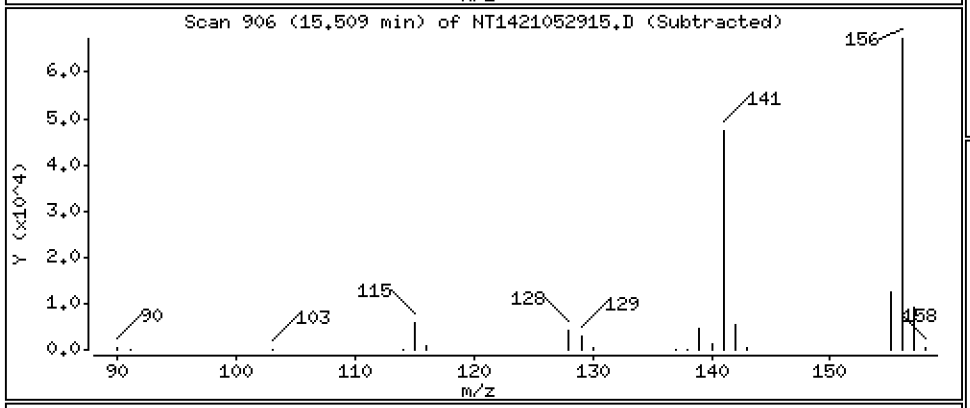
Column diameter: 0.25

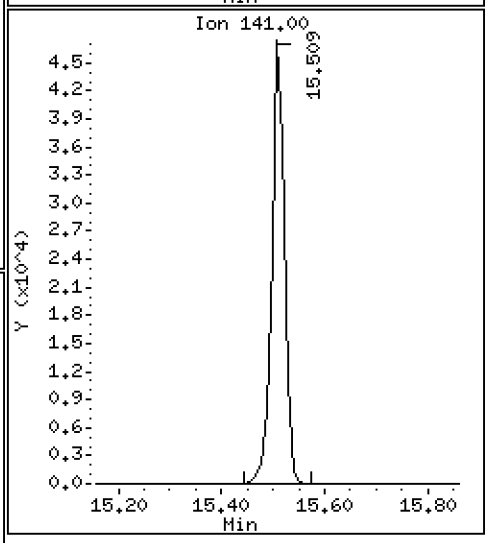
19 2,6-Dimethylnaphthalene

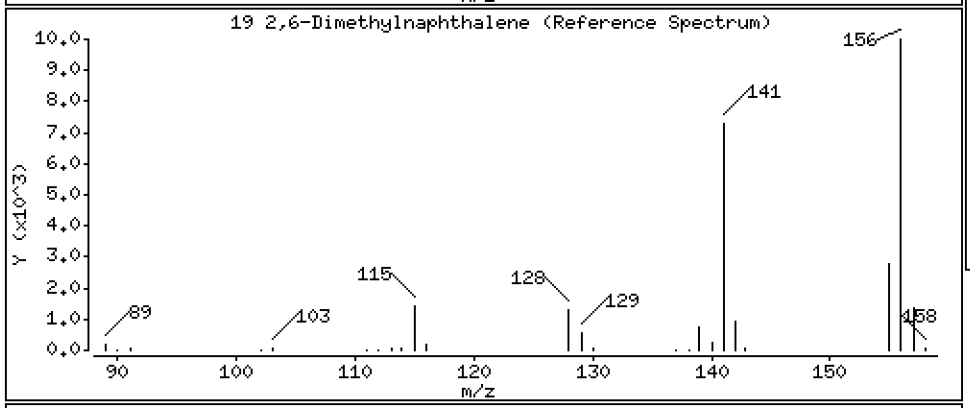
Concentration: 2.604 ug/mL

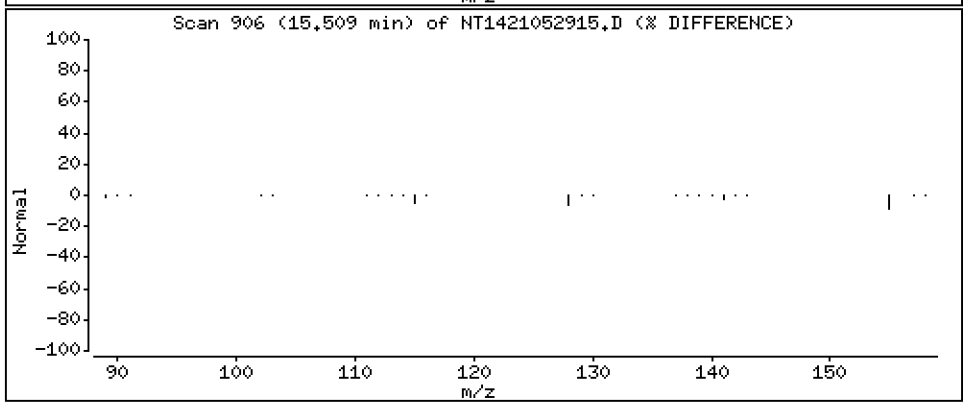












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Date : 29-MAY-2021 19:38

Client ID:

Instrument: nt14.i

Sample Info: SJF0025-SCV1

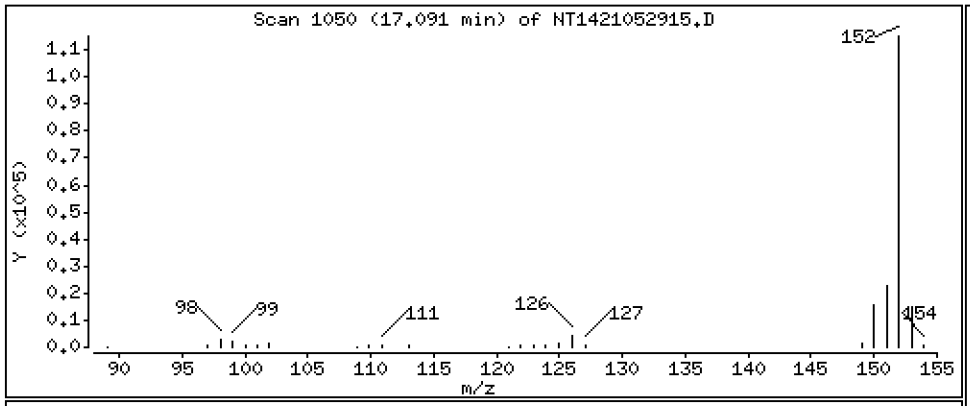
Operator: VTS

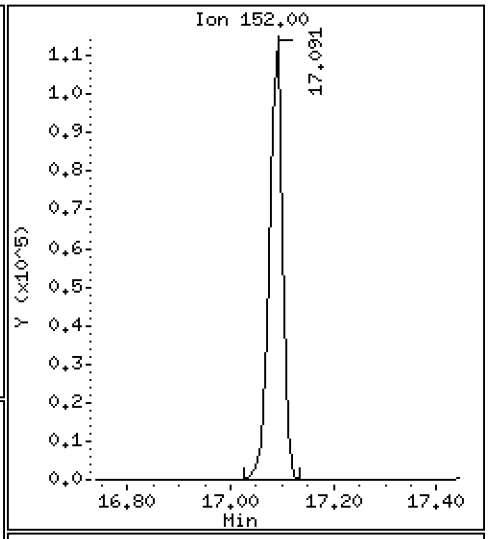
Column phase: Rxi-17Sil MS

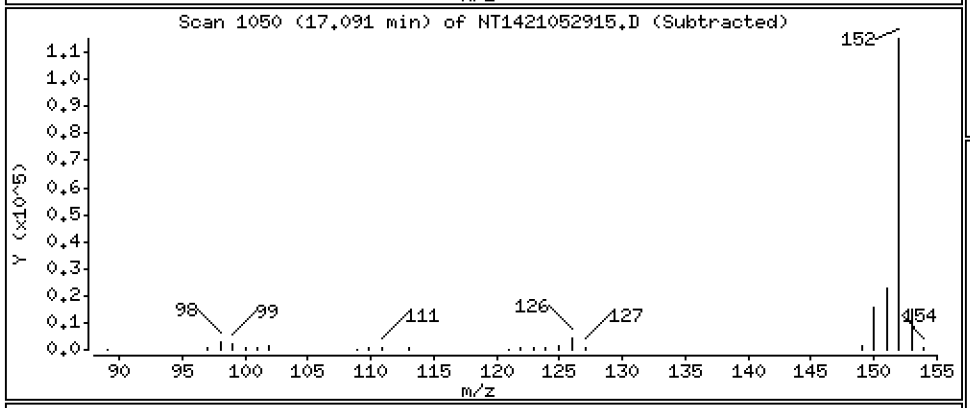
Column diameter: 0.25

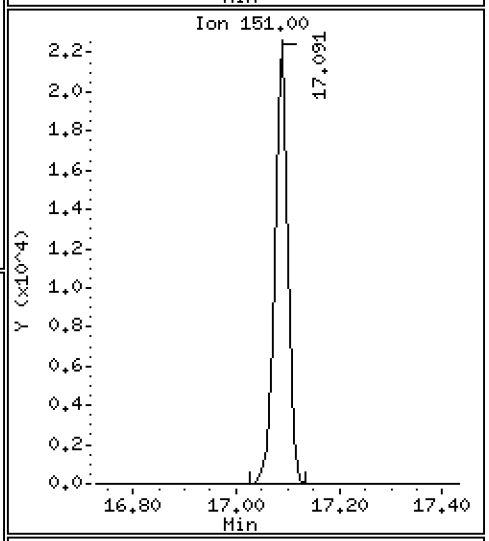
20 Acenaphthylene

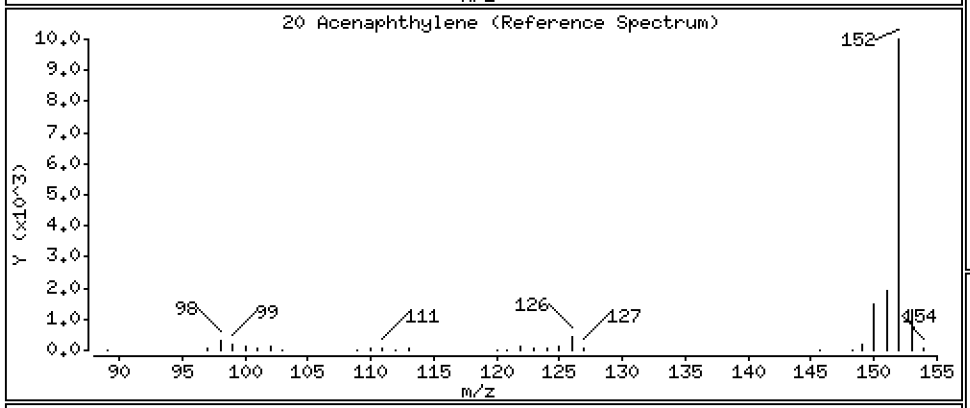
Concentration: 2.624 ug/mL

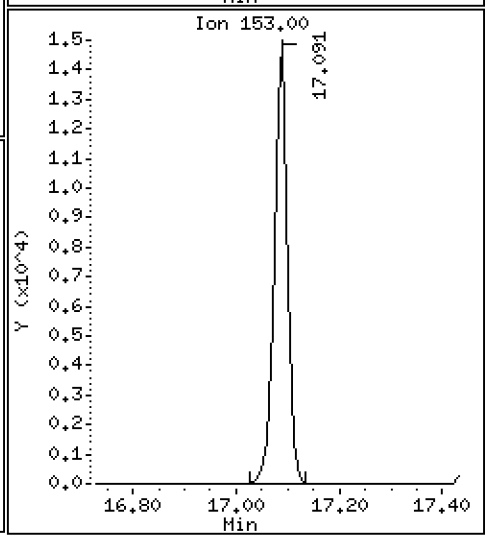


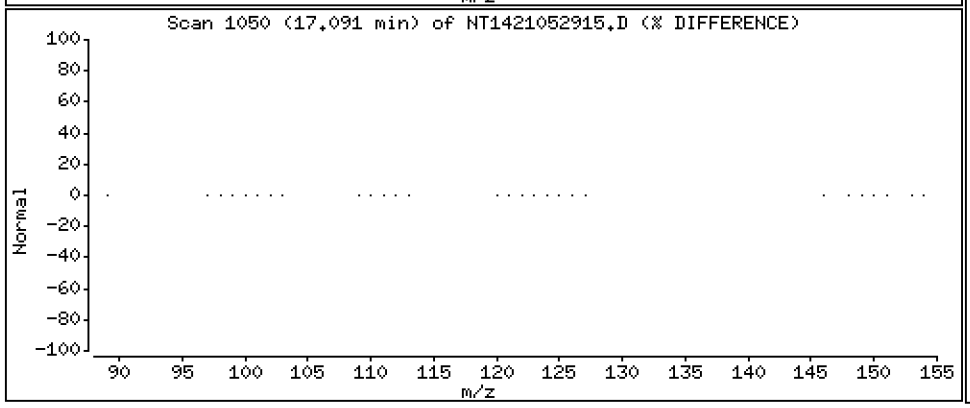












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Date : 29-MAY-2021 19:38

Client ID:

Instrument: nt14.i

Sample Info: SJF0025-SCV1

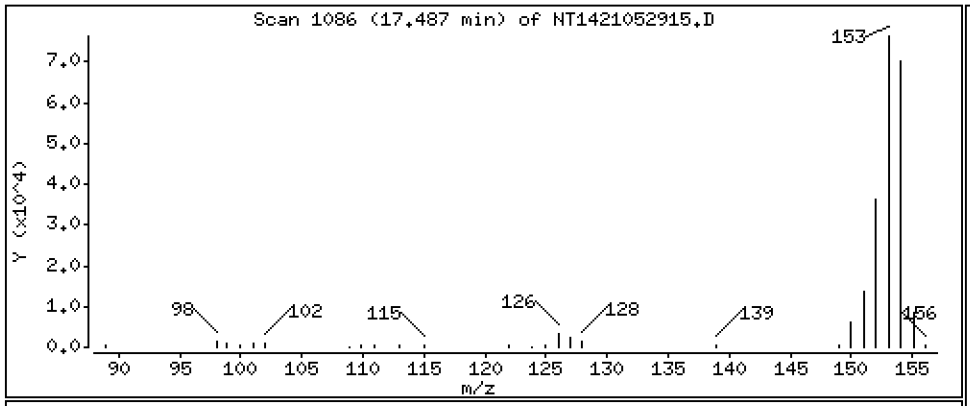
Operator: VTS

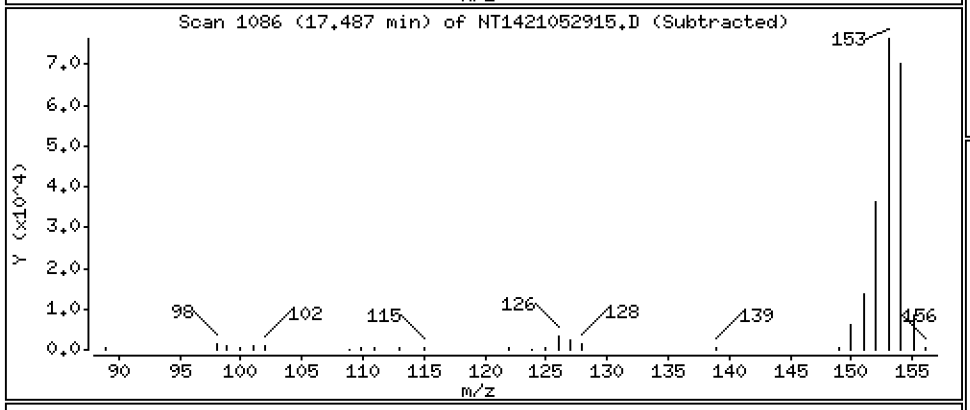
Column phase: Rxi-17Sil MS

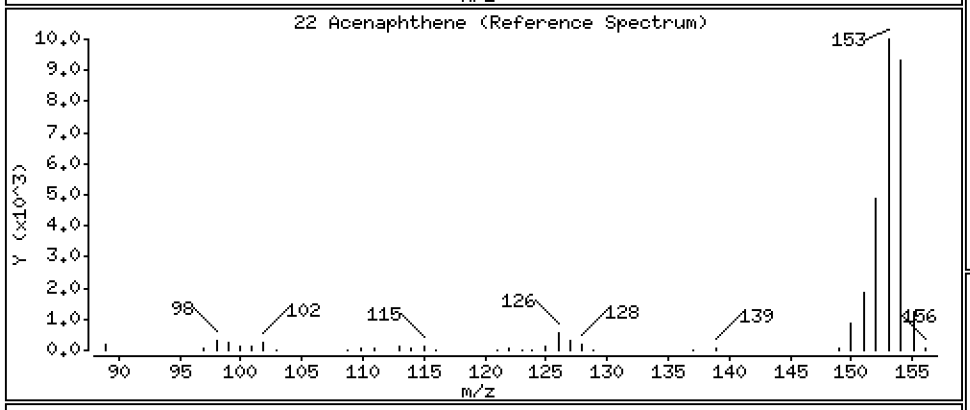
Column diameter: 0.25

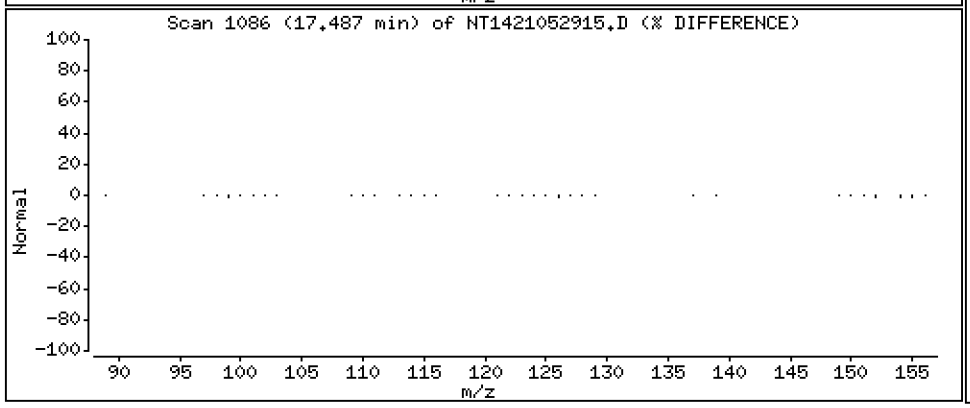
22 Acenaphthene

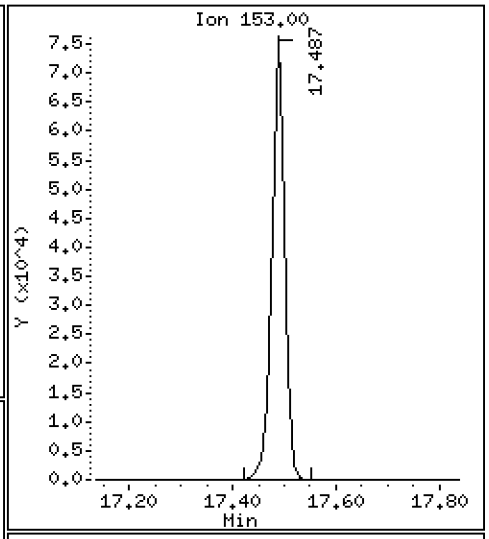
Concentration: 2.755 ug/mL

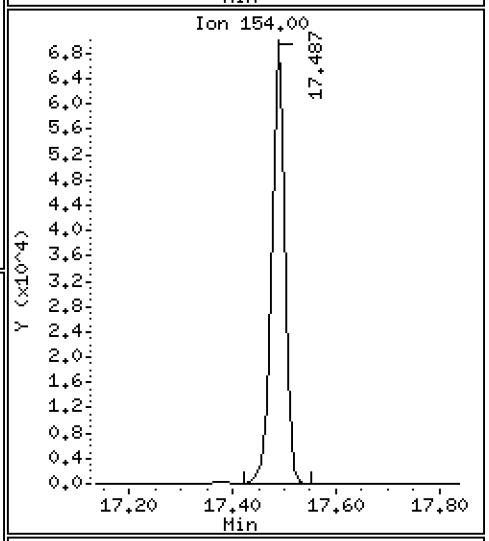


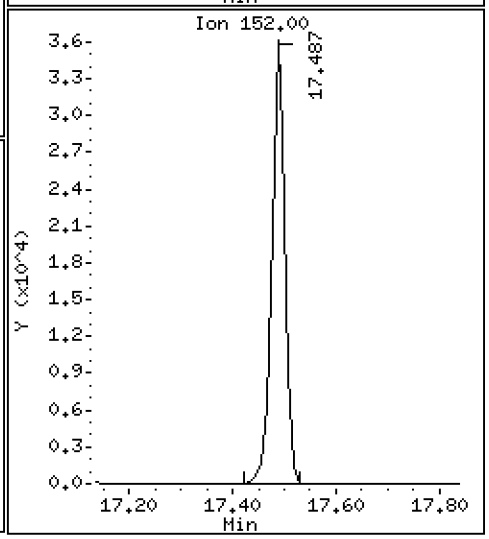












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Date : 29-MAY-2021 19:38

Client ID:

Instrument: nt14.i

Sample Info: SJF0025-SCV1

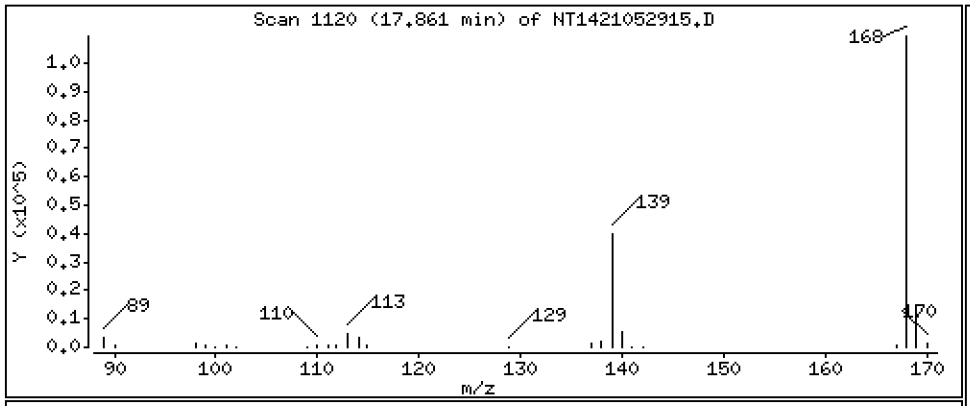
Operator: VTS

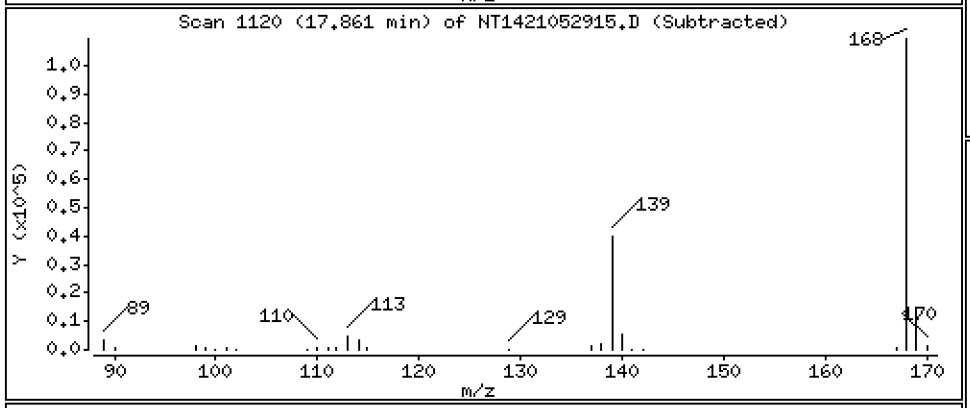
Column phase: Rxi-17Sil MS

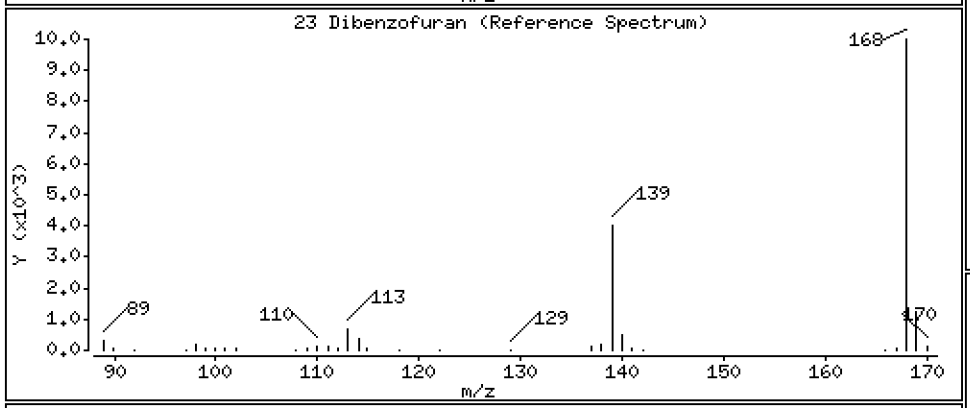
Column diameter: 0.25

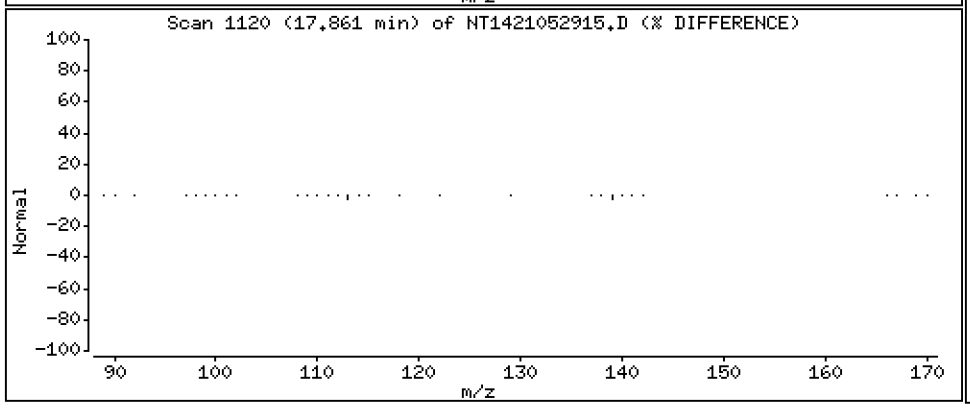
23 Dibenzofuran

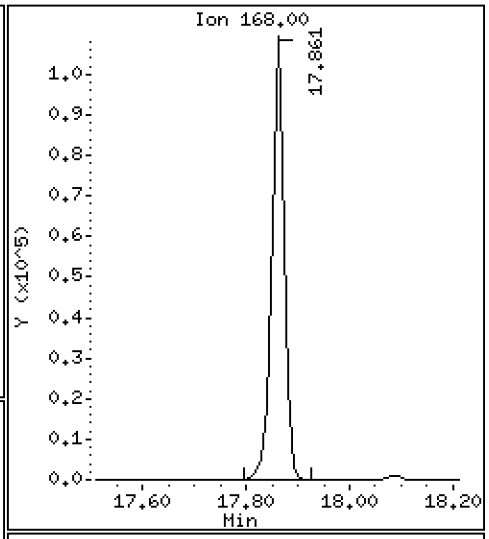
Concentration: 2.595 ug/mL

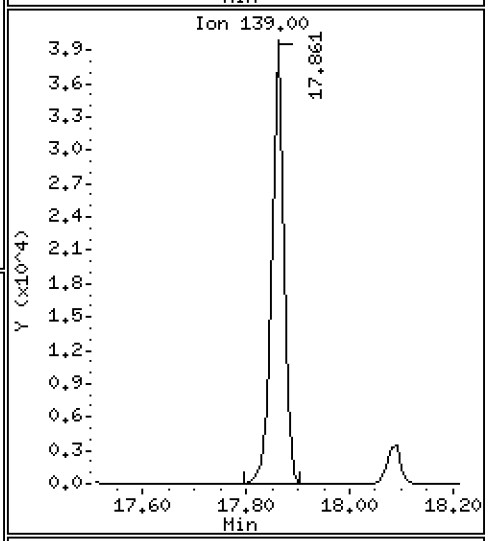


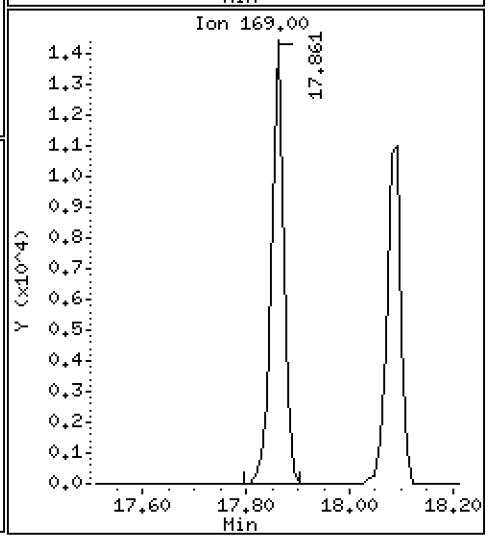












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Date : 29-MAY-2021 19:38

Client ID:

Instrument: nt14.i

Sample Info: SJF0025-SCV1

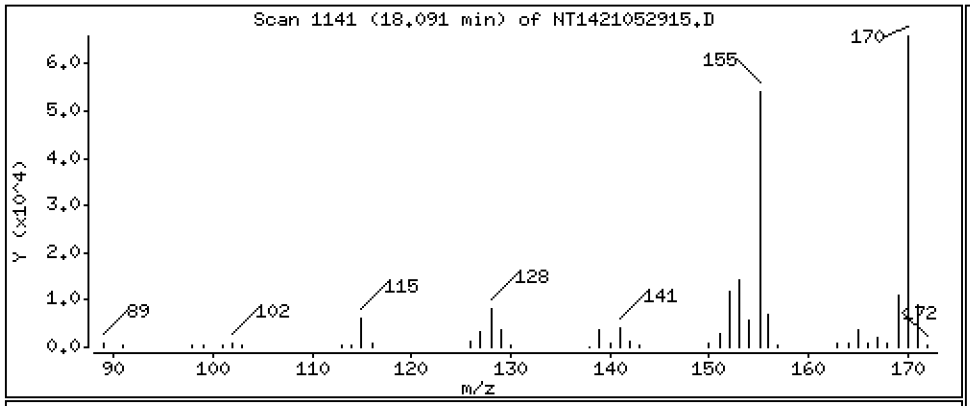
Operator: VTS

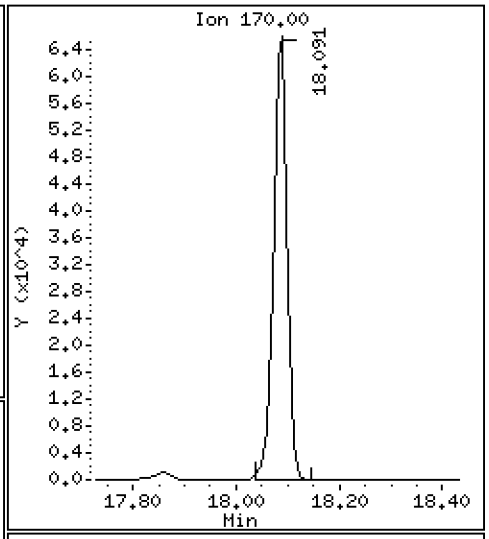
Column phase: Rxi-17Sil MS

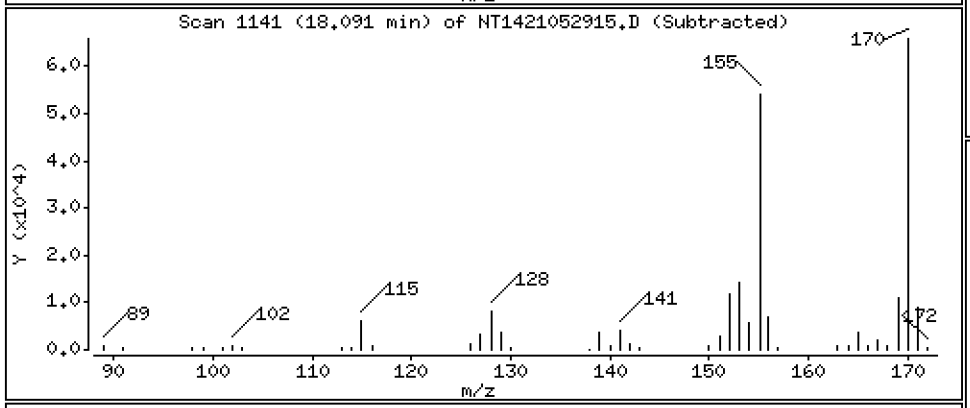
Column diameter: 0.25

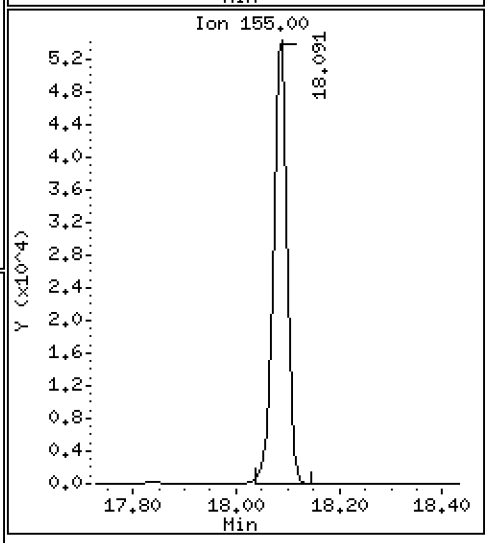
24 1,6,7-Trimethylnaphthalene

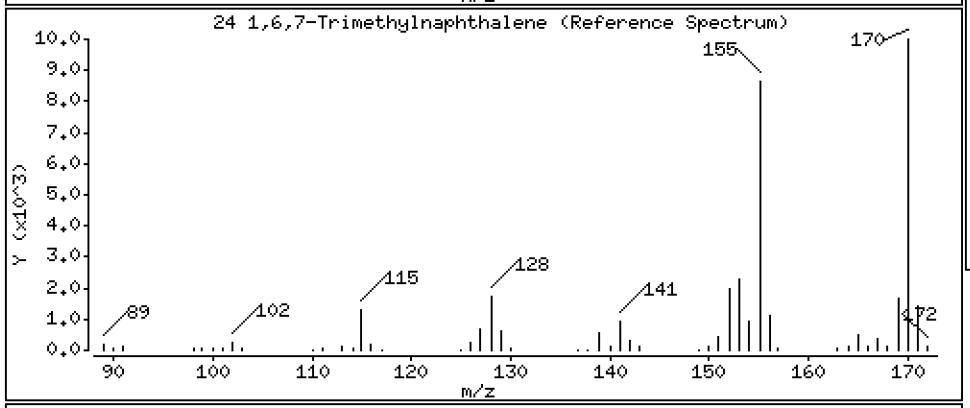
Concentration: 2.642 ug/mL

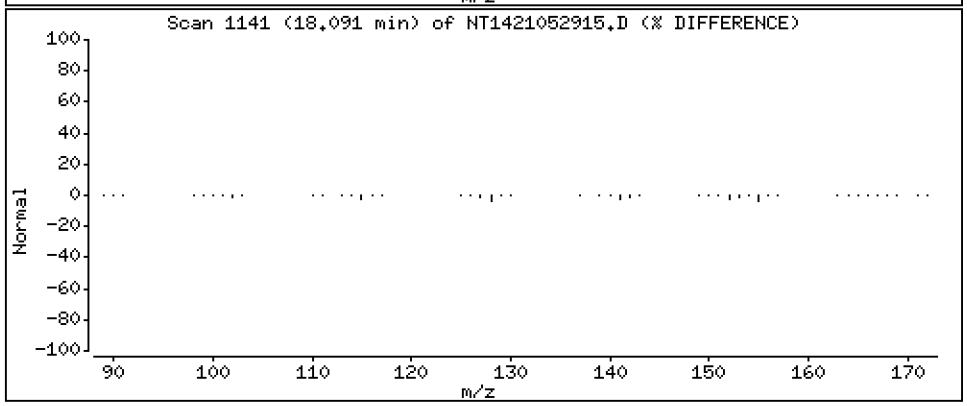












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Date : 29-MAY-2021 19:38

Client ID:

Instrument: nt14.i

Sample Info: SJF0025-SCV1

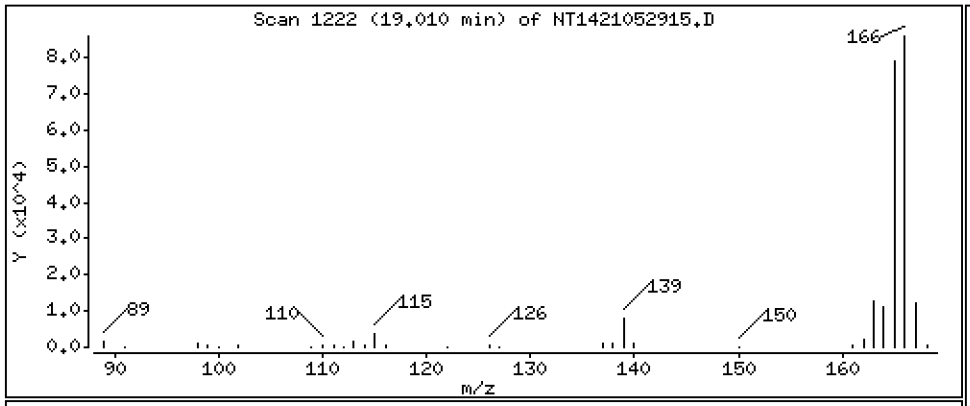
Operator: VTS

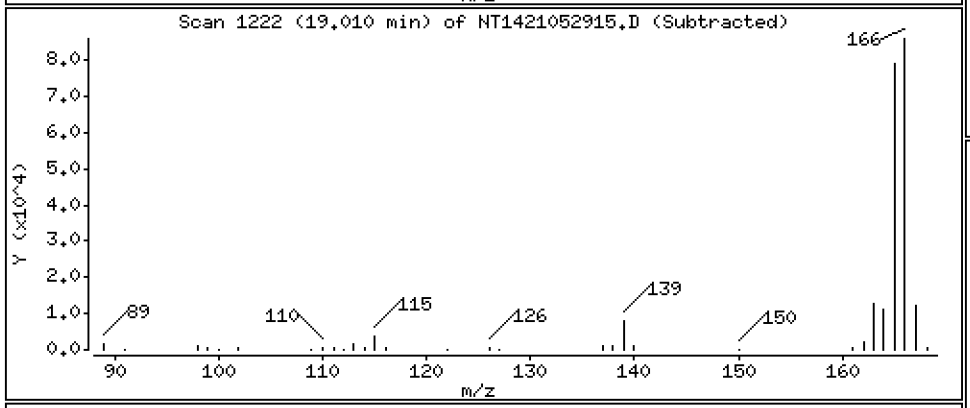
Column phase: Rxi-17Sil MS

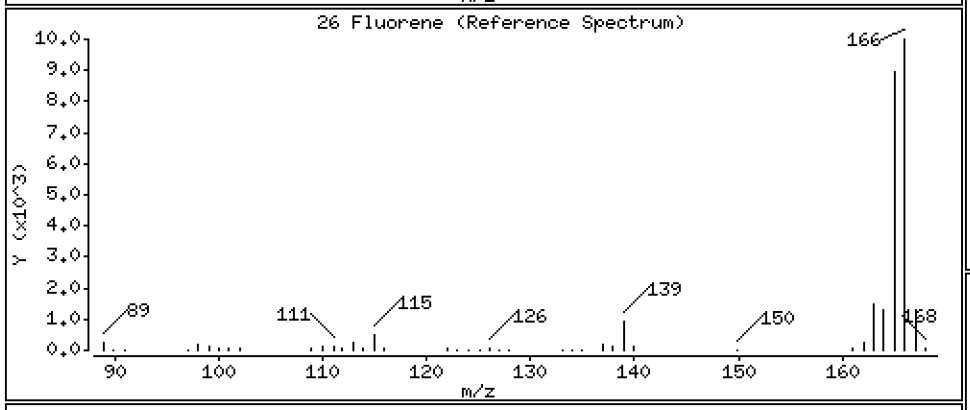
Column diameter: 0.25

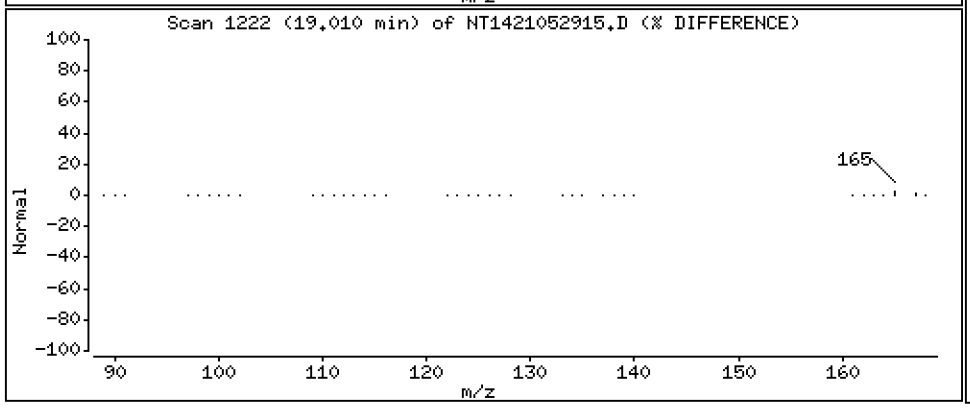
26 Fluorene

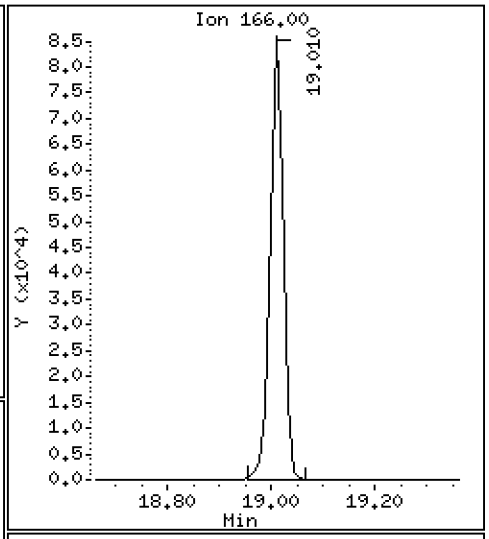
Concentration: 2.611 ug/mL

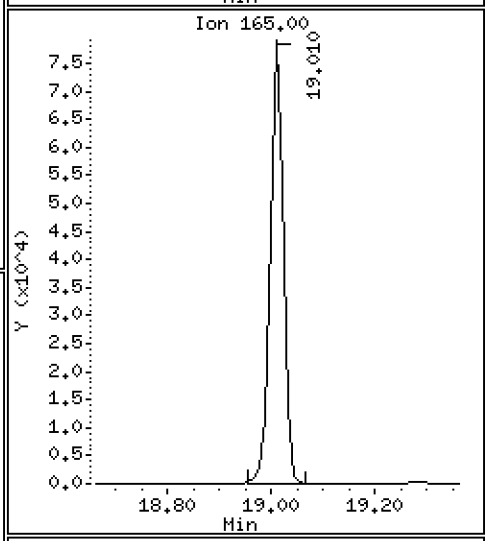


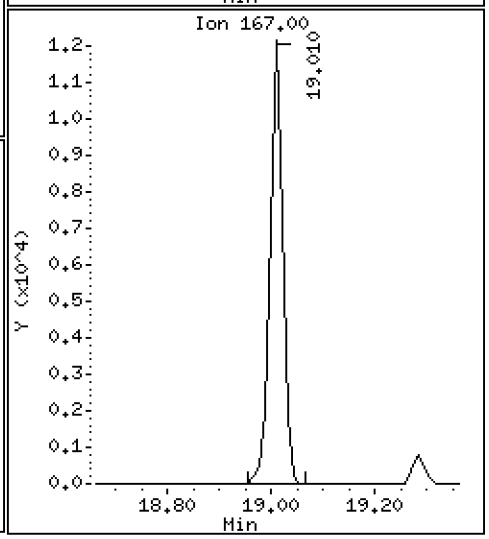












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Date : 29-MAY-2021 19:38

Client ID:

Instrument: nt14.i

Sample Info: SJF0025-SCV1

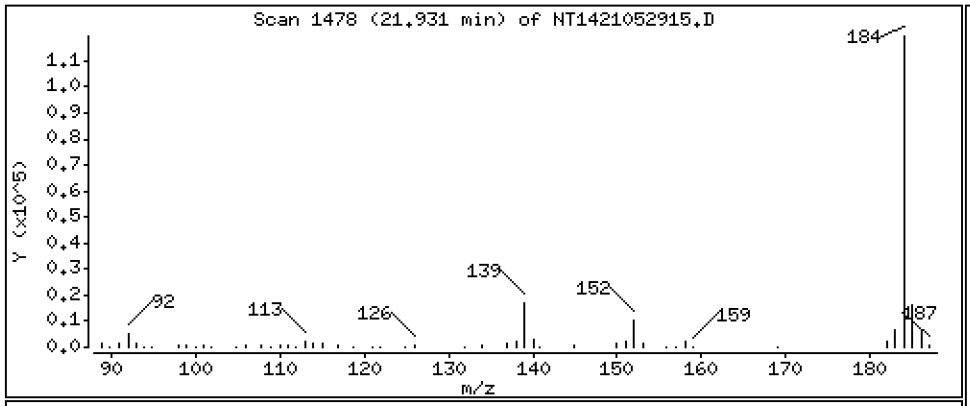
Operator: VTS

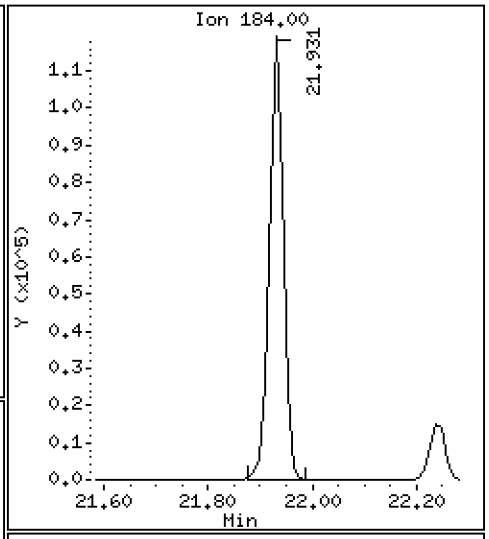
Column phase: Rxi-17Sil MS

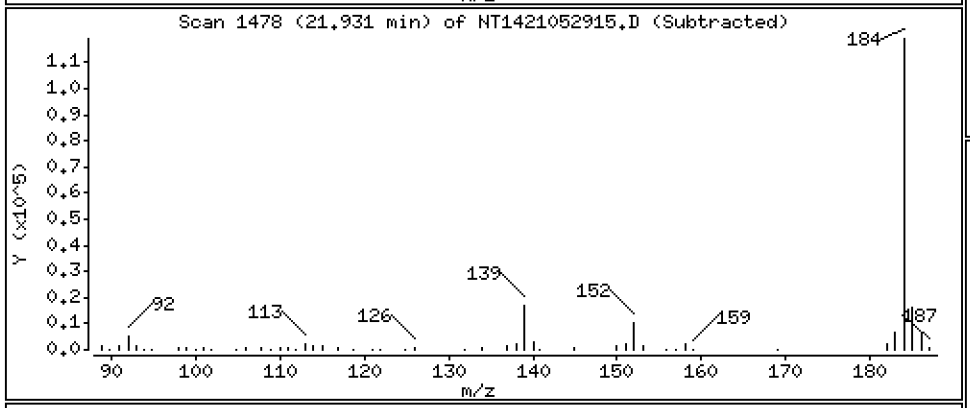
Column diameter: 0.25

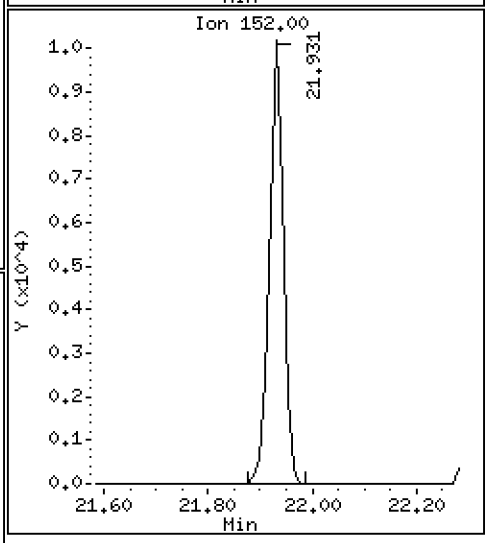
30 Dibenzothiophene

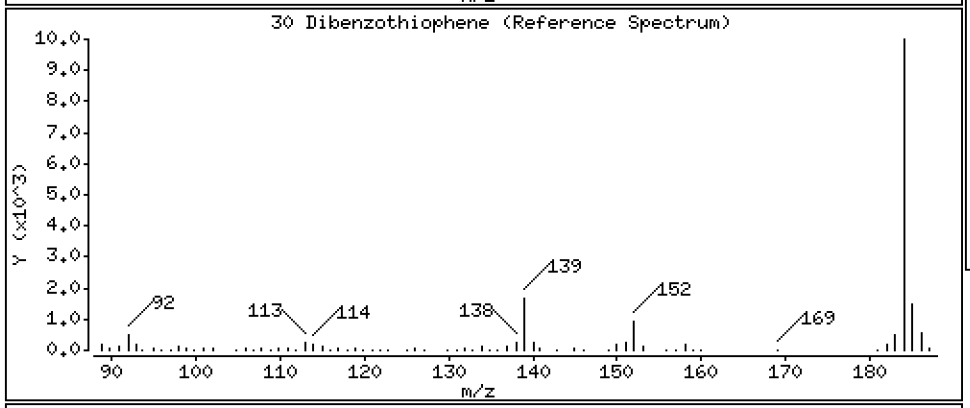
Concentration: 2.634 ug/mL

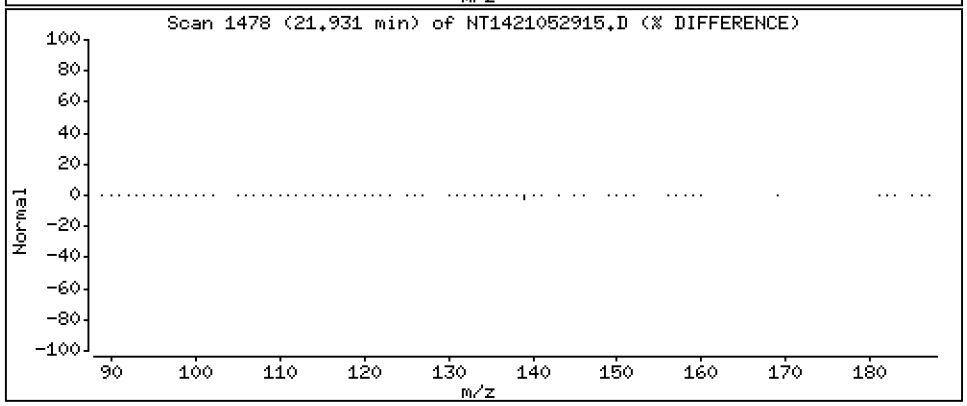












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Date : 29-MAY-2021 19:38

Client ID:

Instrument: nt14.i

Sample Info: SJF0025-SCV1

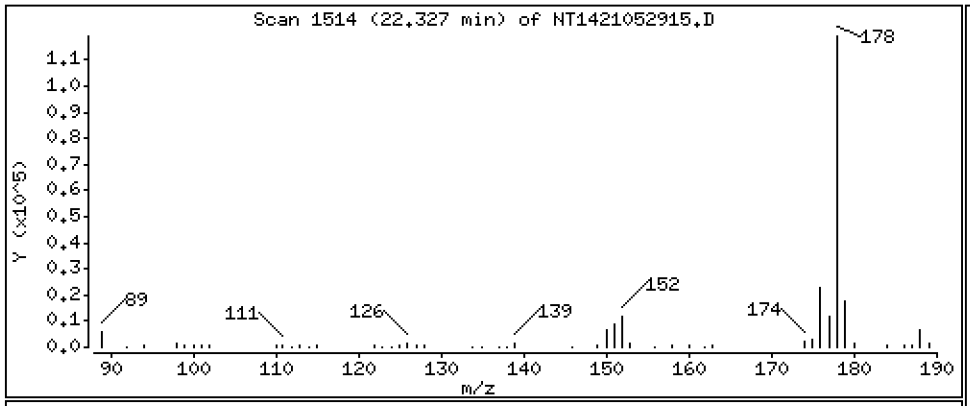
Operator: VTS

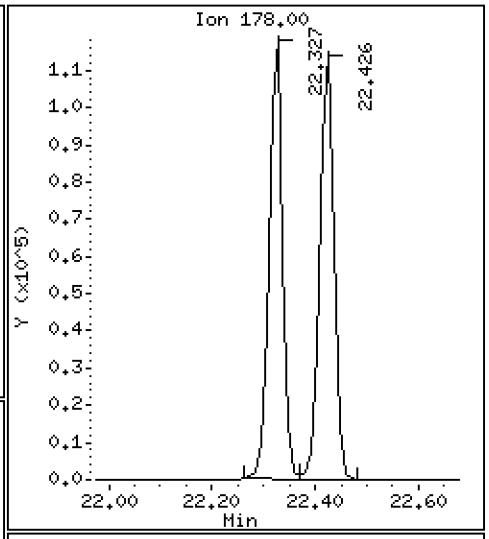
Column phase: Rxi-17Sil MS

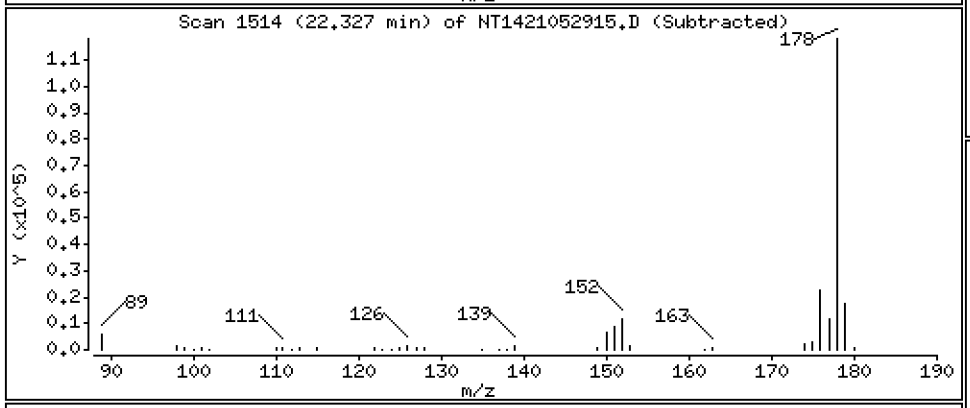
Column diameter: 0.25

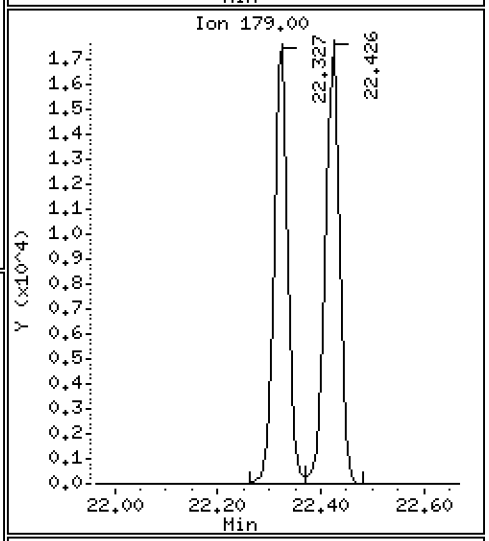
36 Phenanthrene

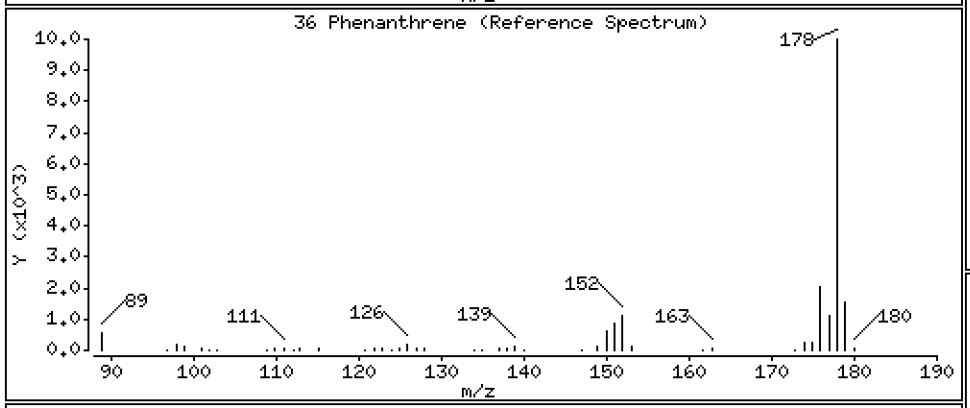
Concentration: 2.640 ug/mL

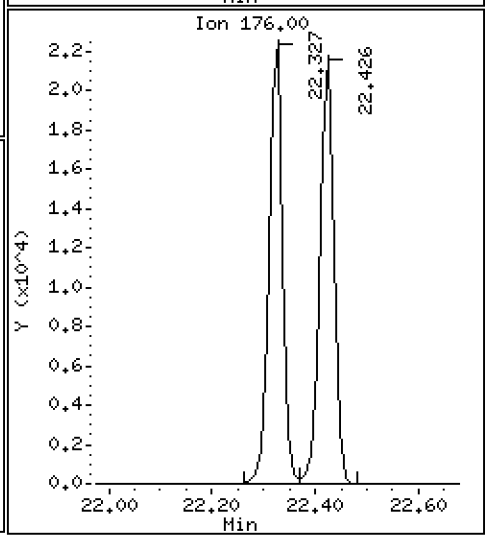


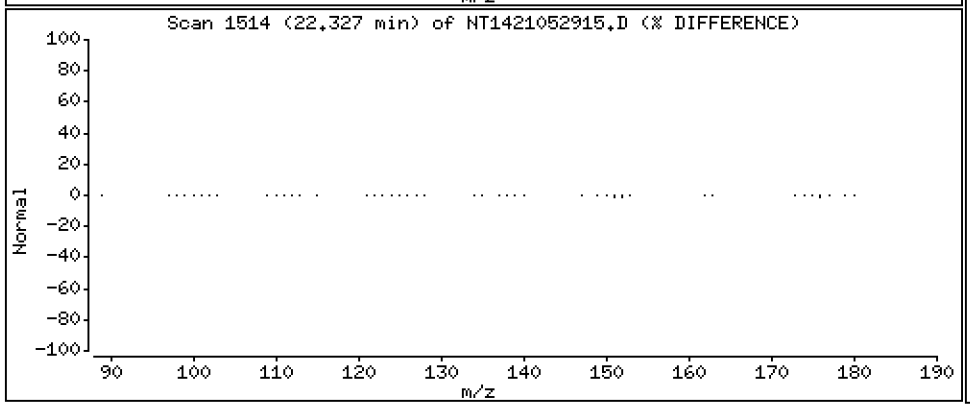












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Date : 29-MAY-2021 19:38

Client ID:

Instrument: nt14.i

Sample Info: SJF0025-SCV1

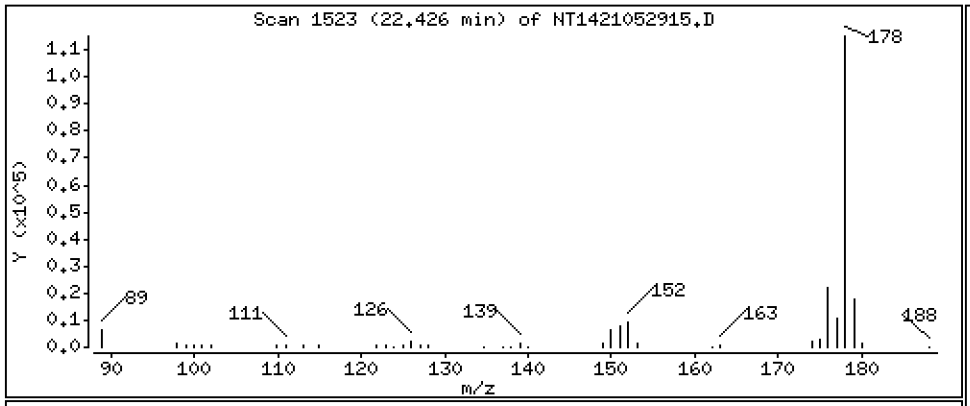
Operator: VTS

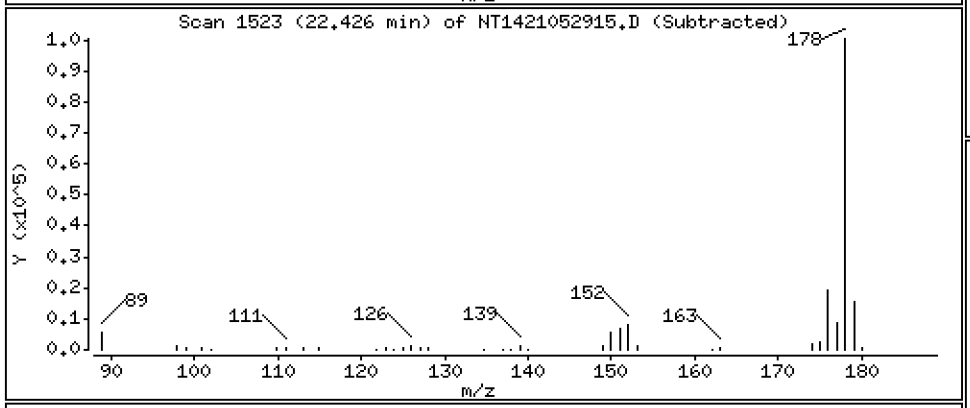
Column phase: Rxi-17Sil MS

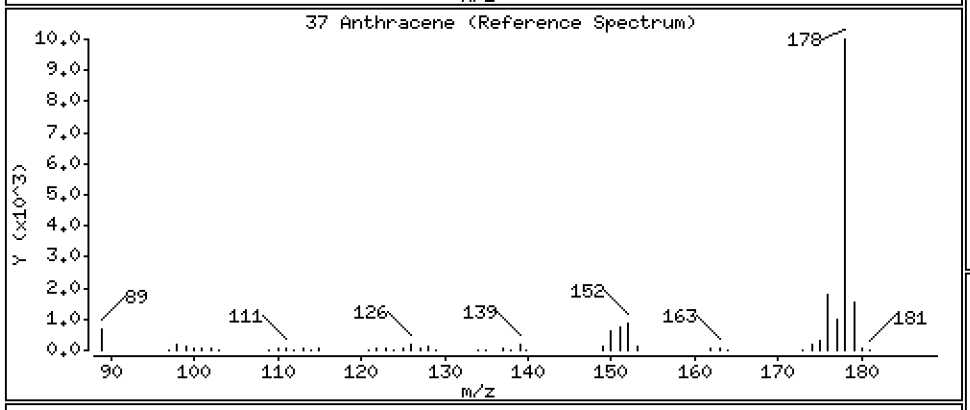
Column diameter: 0.25

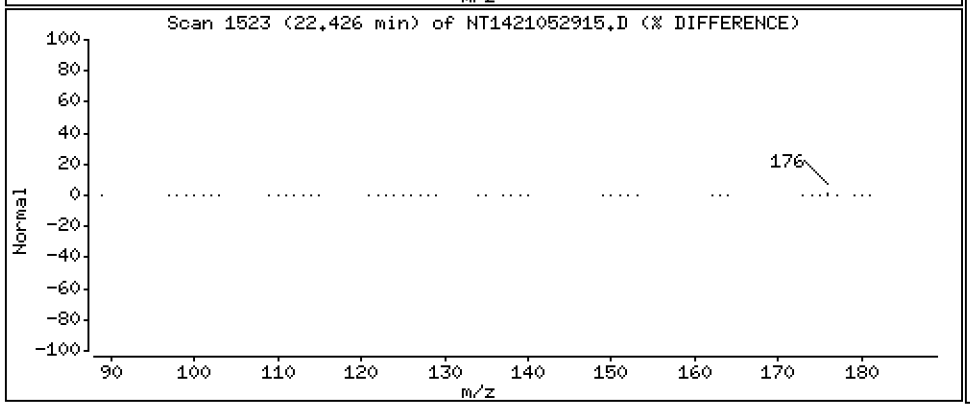
37 Anthracene

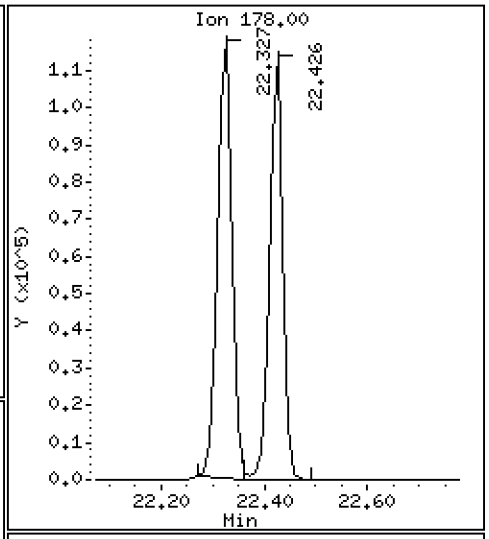
Concentration: 2.688 ug/mL

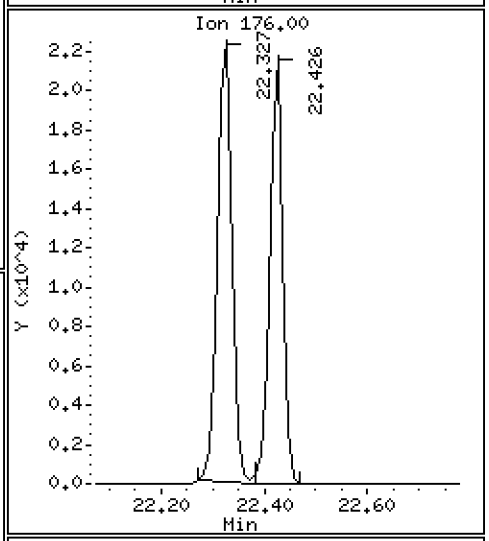


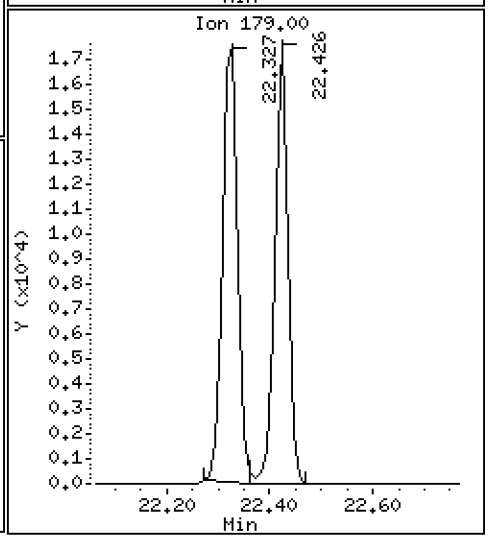












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Date : 29-MAY-2021 19:38

Client ID:

Instrument: nt14.i

Sample Info: SJF0025-SCV1

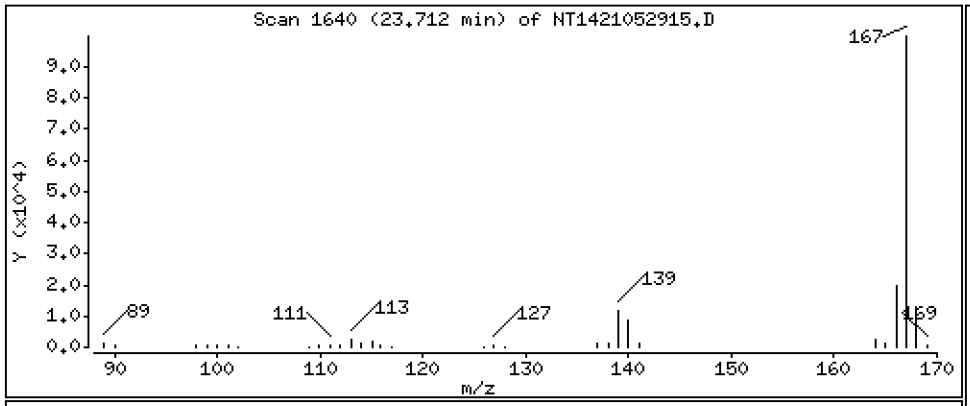
Operator: VTS

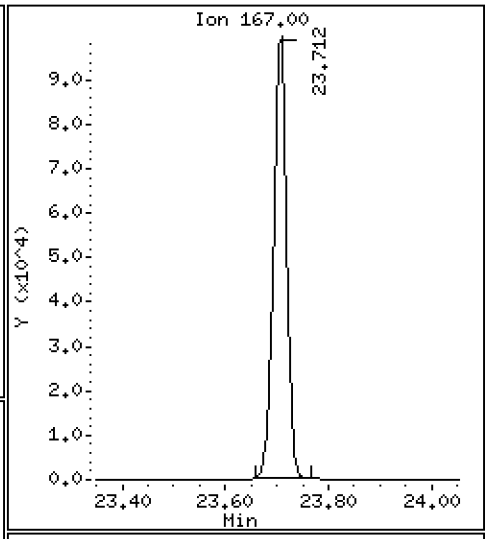
Column phase: Rxi-17Sil MS

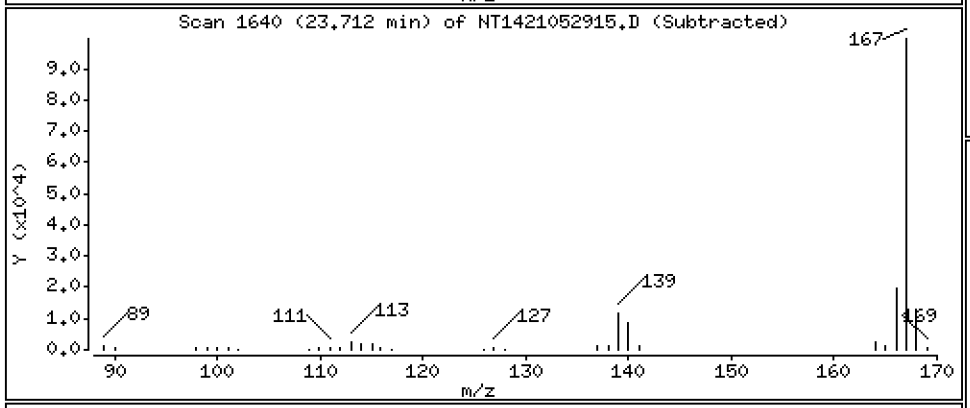
Column diameter: 0.25

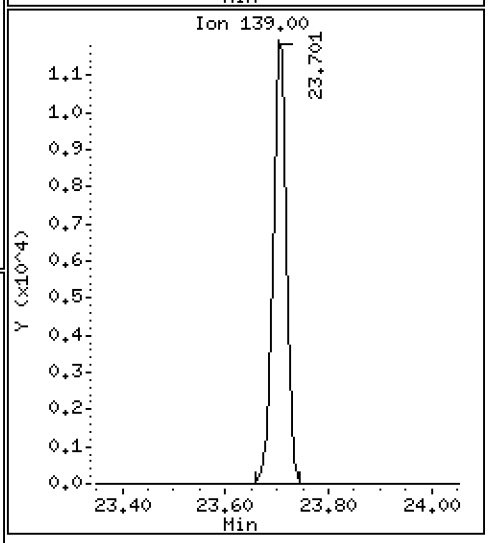
42 Carbazole

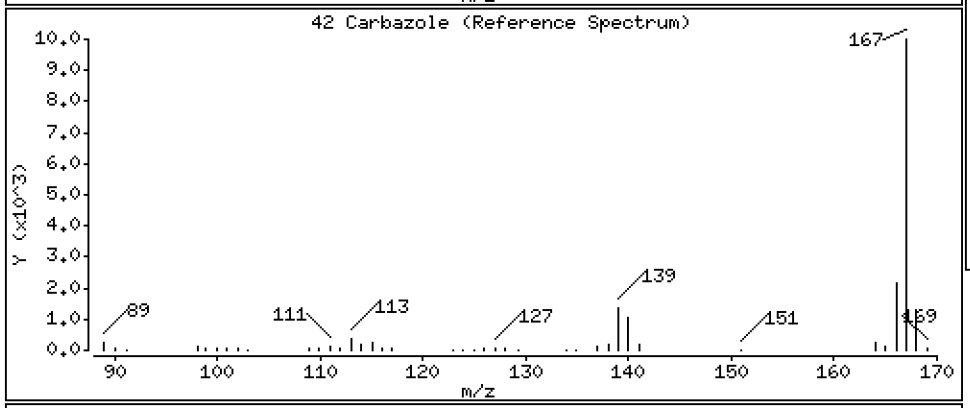
Concentration: 2.704 ug/mL

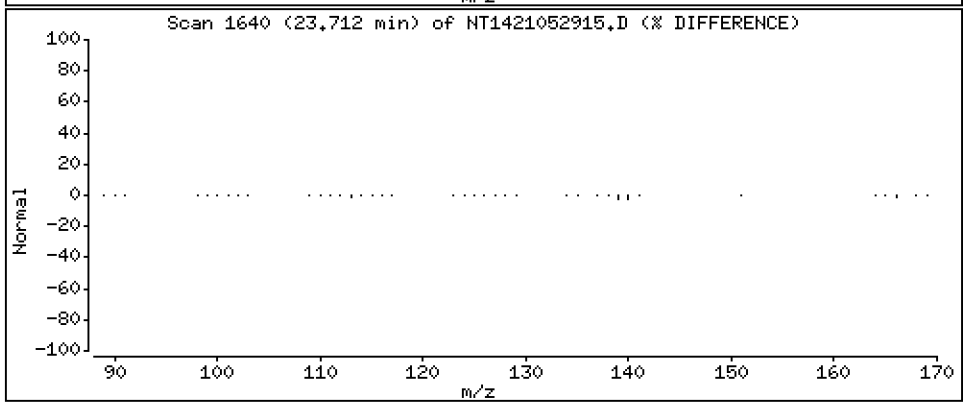












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Date : 29-MAY-2021 19:38

Client ID:

Instrument: nt14.i

Sample Info: SJF0025-SCV1

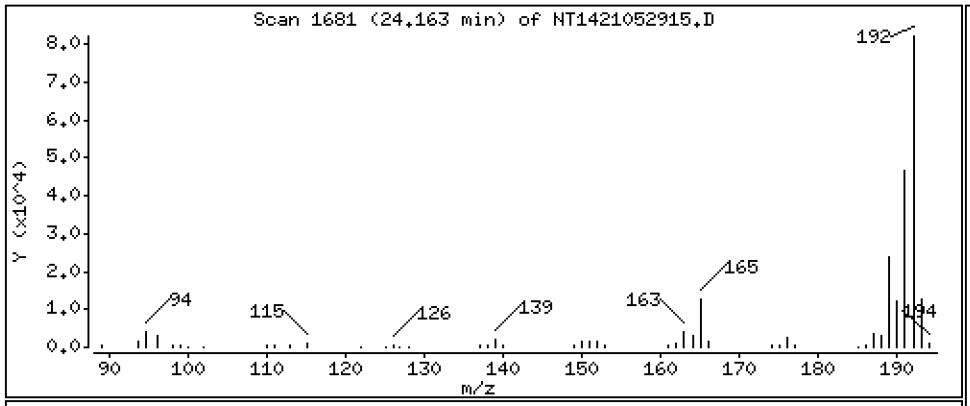
Operator: VTS

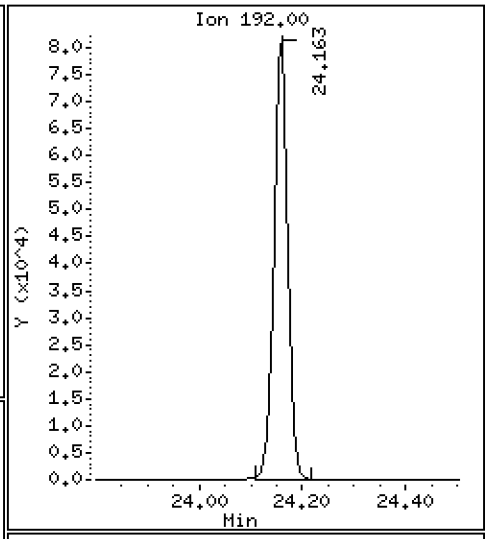
Column phase: Rxi-17Sil MS

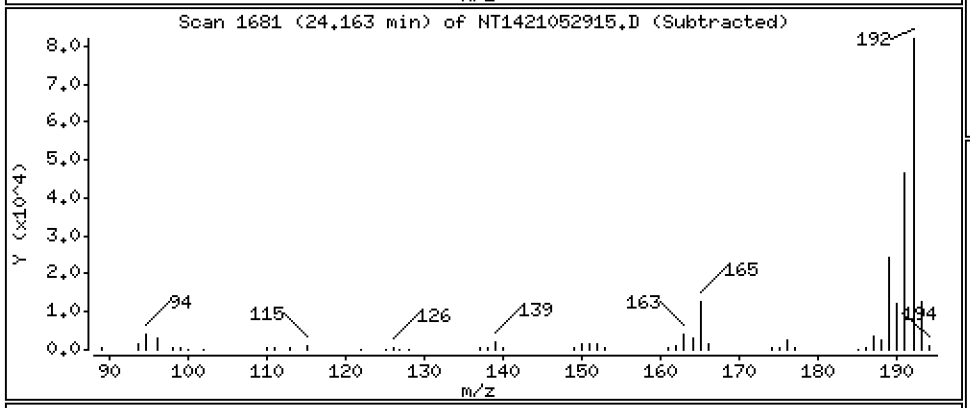
Column diameter: 0.25

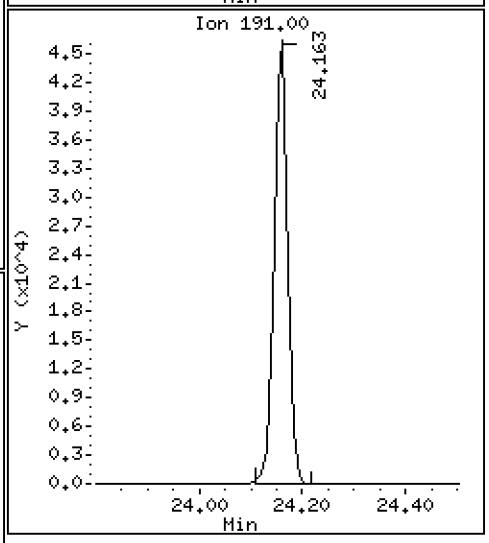
43 1-Methylphenanthrene

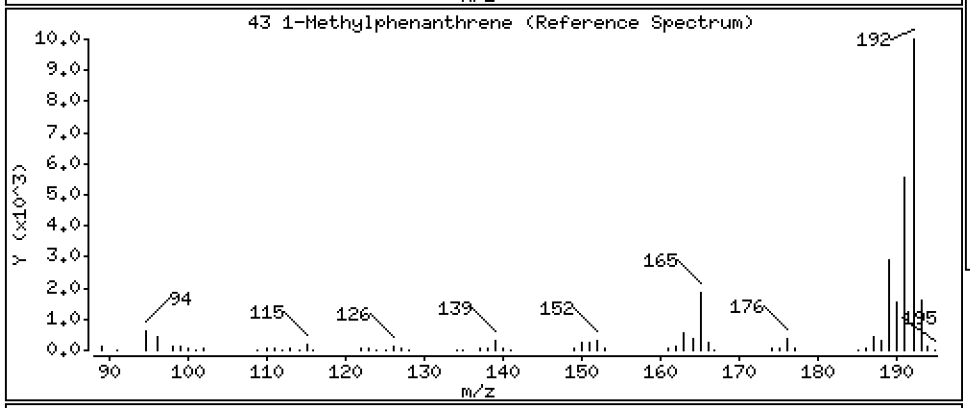
Concentration: 2.667 ug/mL

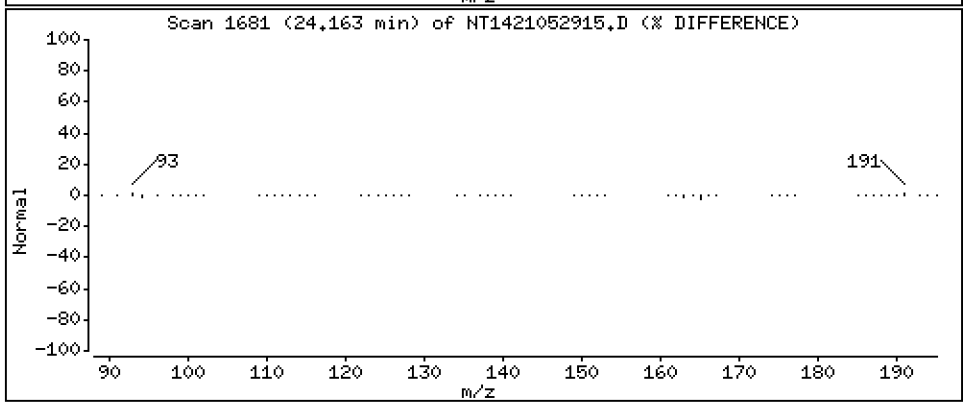












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Date : 29-MAY-2021 19:38

Client ID:

Instrument: nt14.i

Sample Info: SJF0025-SCV1

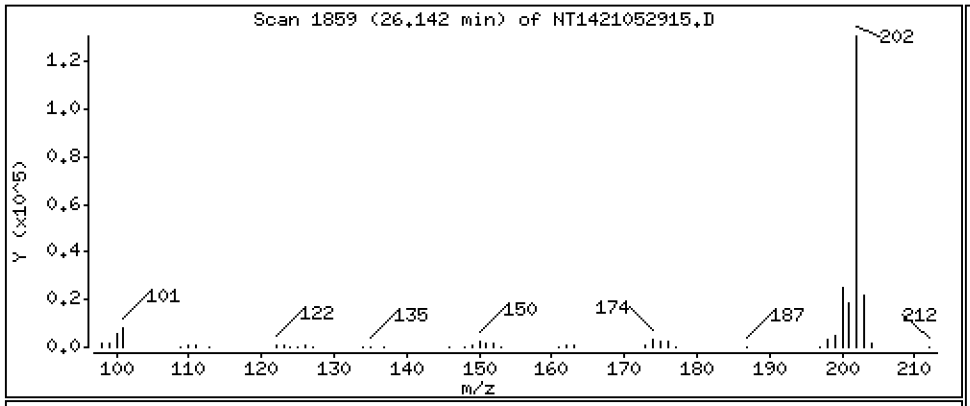
Operator: VTS

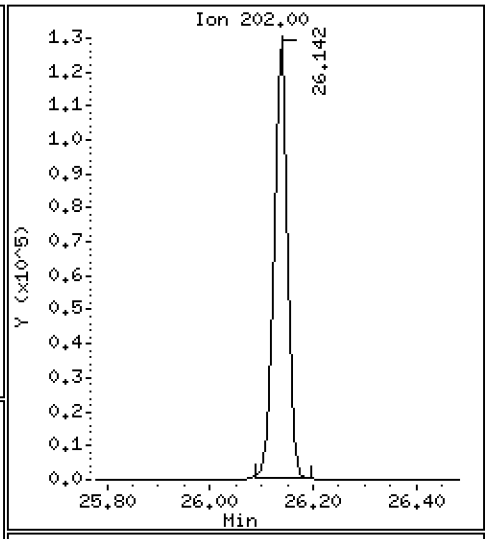
Column phase: Rxi-17Sil MS

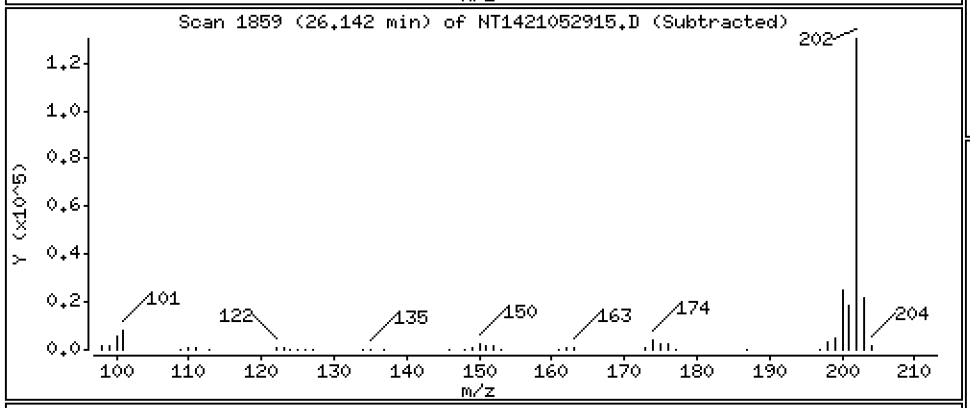
Column diameter: 0.25

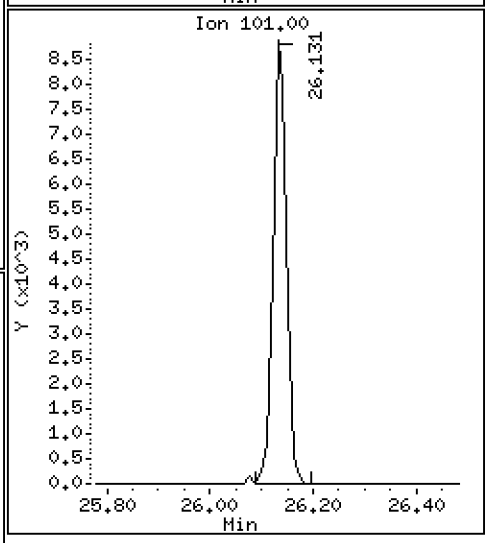
44 Fluoranthene

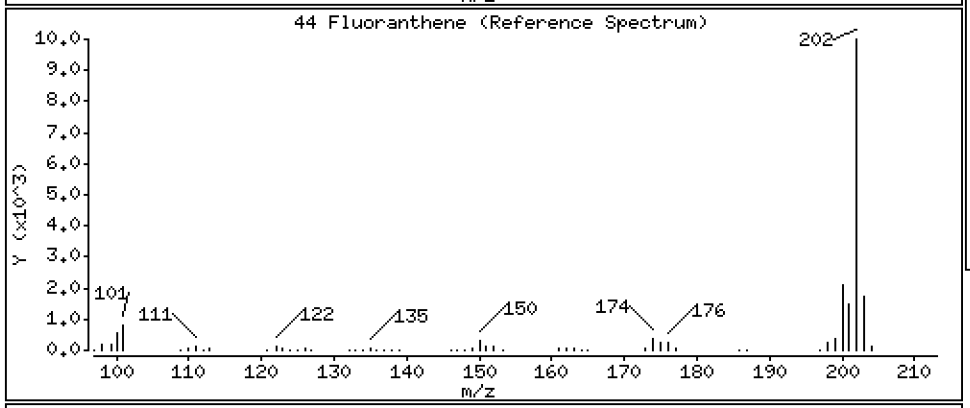
Concentration: 2.672 ug/mL

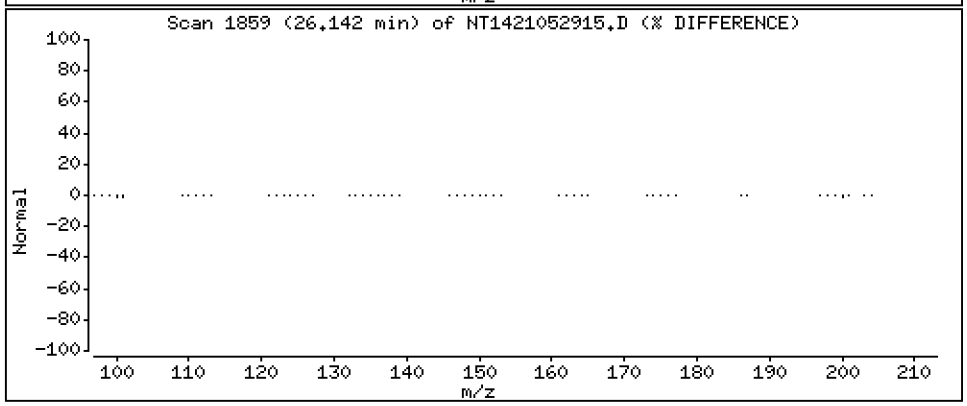












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Date : 29-MAY-2021 19:38

Client ID:

Instrument: nt14.i

Sample Info: SJF0025-SCV1

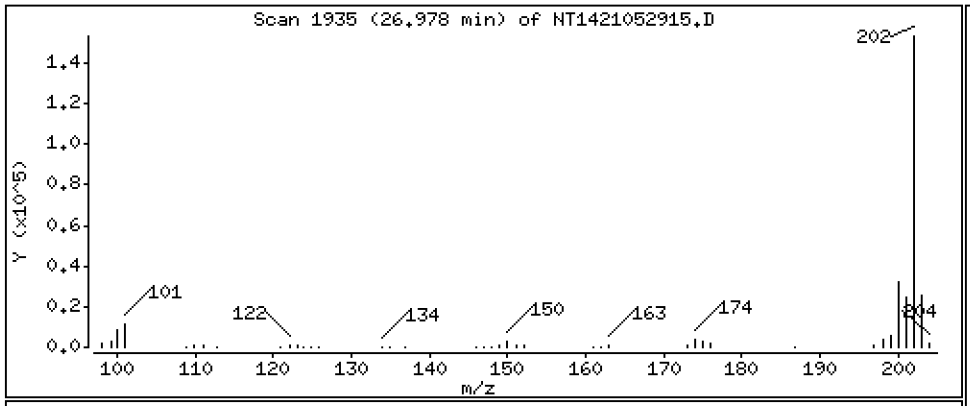
Operator: VTS

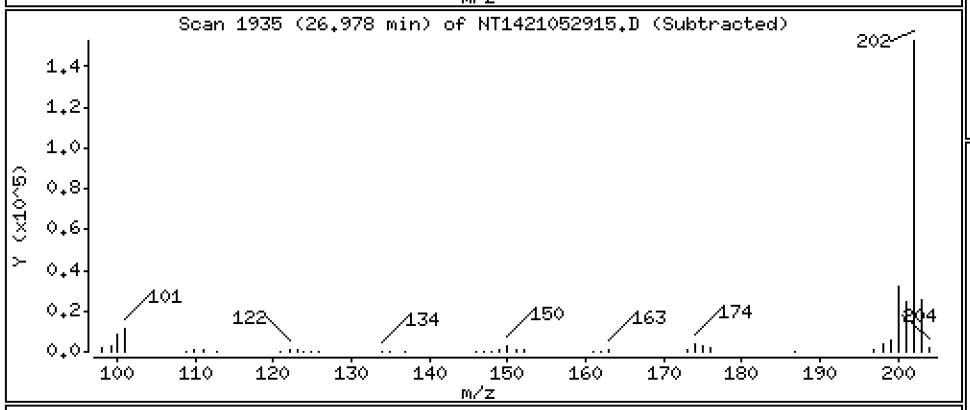
Column phase: Rxi-17Sil MS

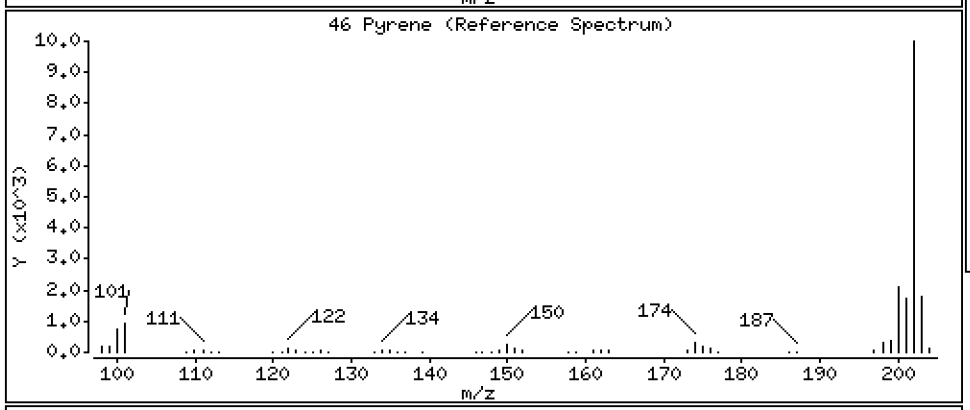
Column diameter: 0.25

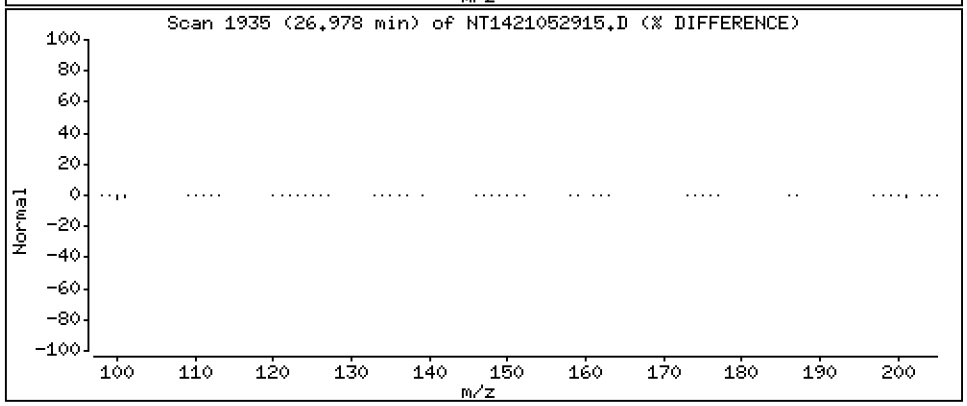
46 Pyrene

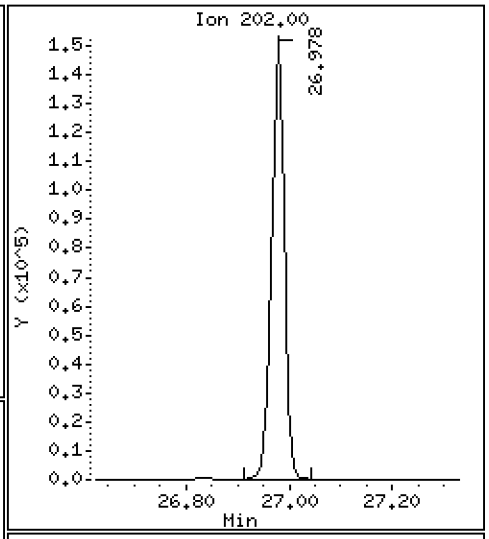
Concentration: 2.712 ug/mL

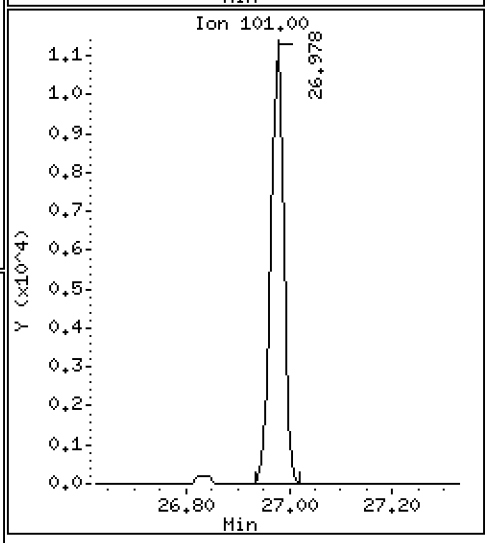












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Date : 29-MAY-2021 19:38

Client ID:

Instrument: nt14.i

Sample Info: SJF0025-SCV1

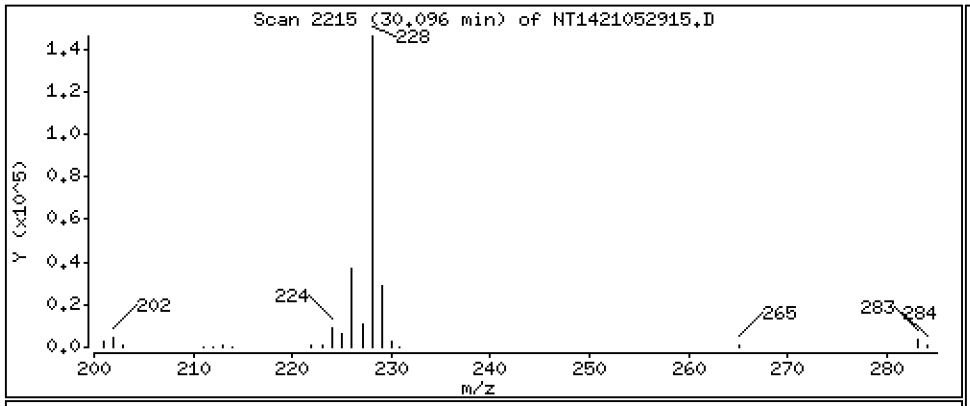
Operator: VTS

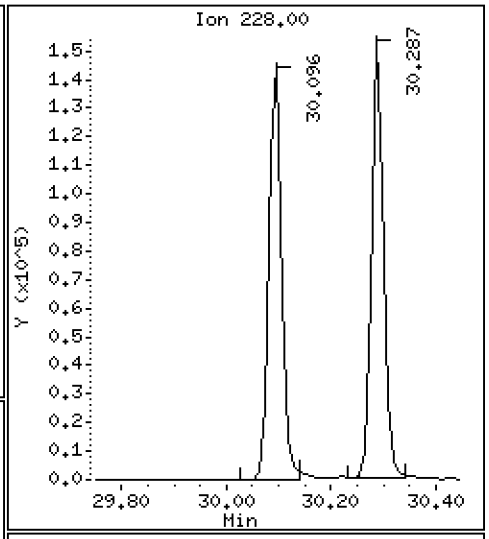
Column phase: Rxi-17Sil MS

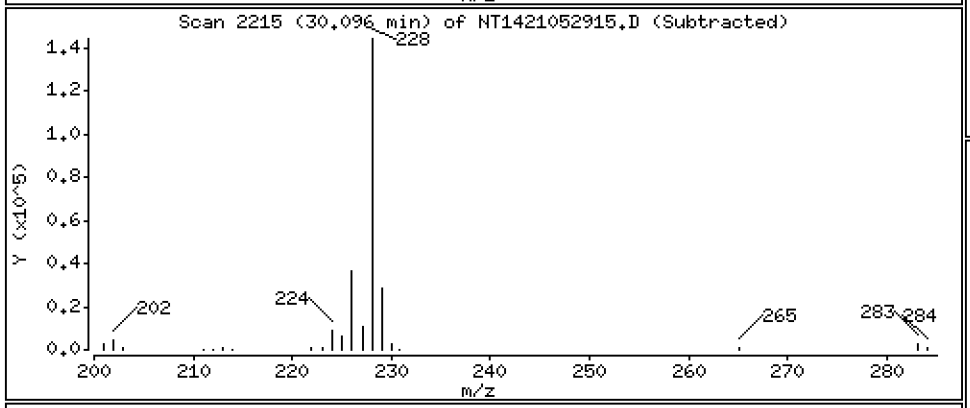
Column diameter: 0.25

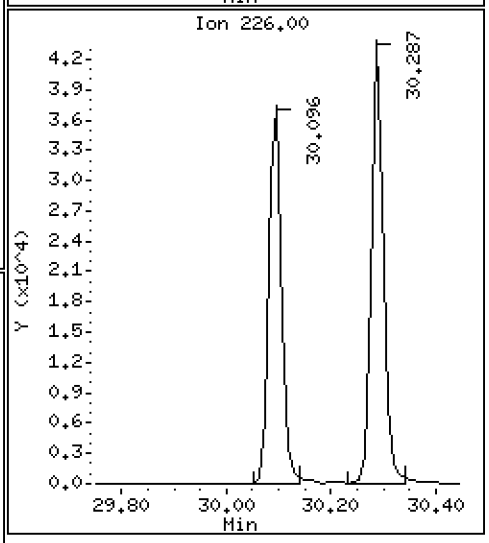
55 Benzo(a)anthracene

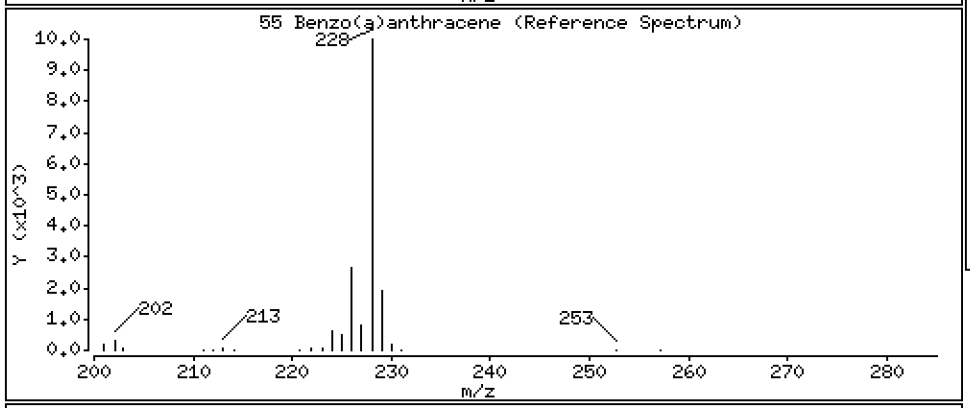
Concentration: 2.756 ug/mL

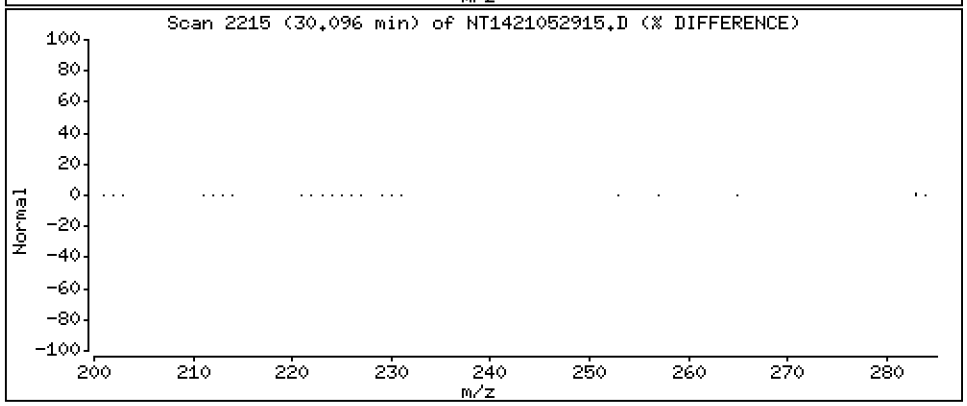












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Date : 29-MAY-2021 19:38

Client ID:

Instrument: nt14.i

Sample Info: SJF0025-SCV1

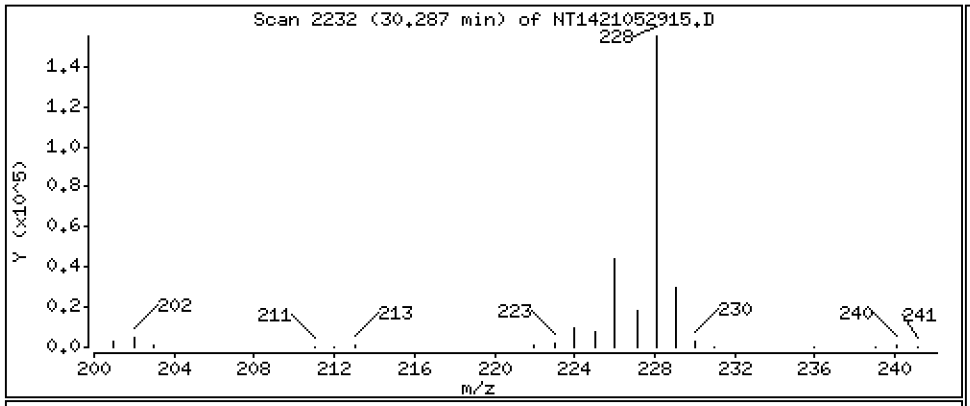
Operator: VTS

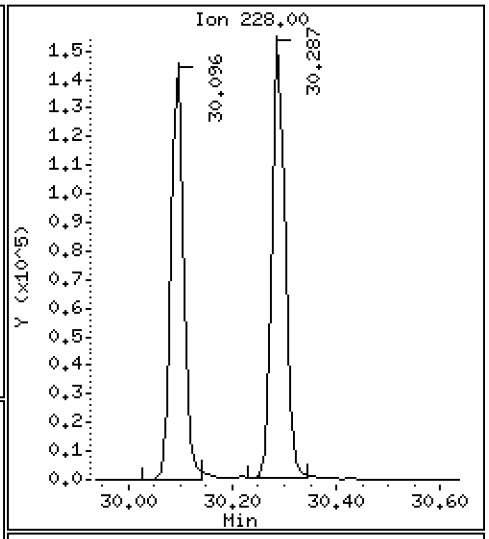
Column phase: Rxi-17Sil MS

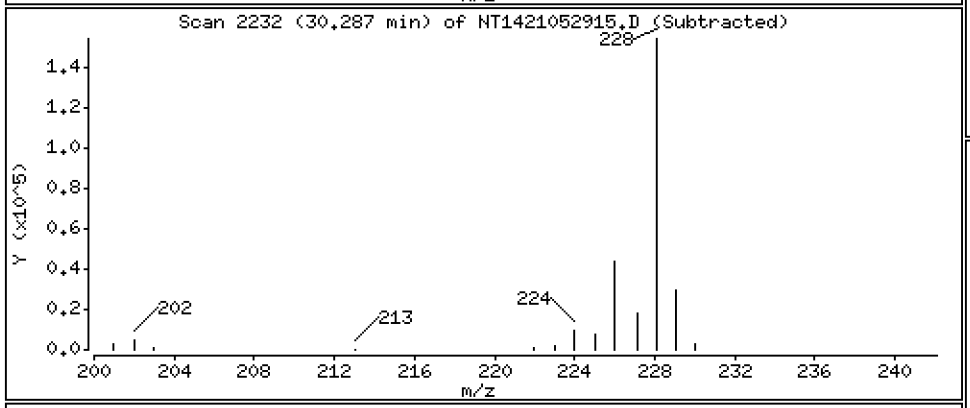
Column diameter: 0.25

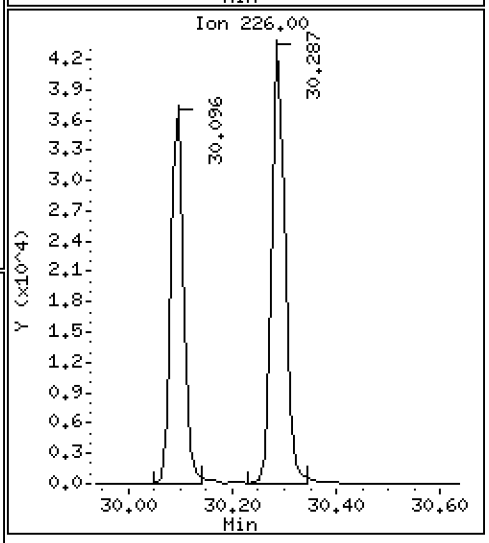
57 Chrysene

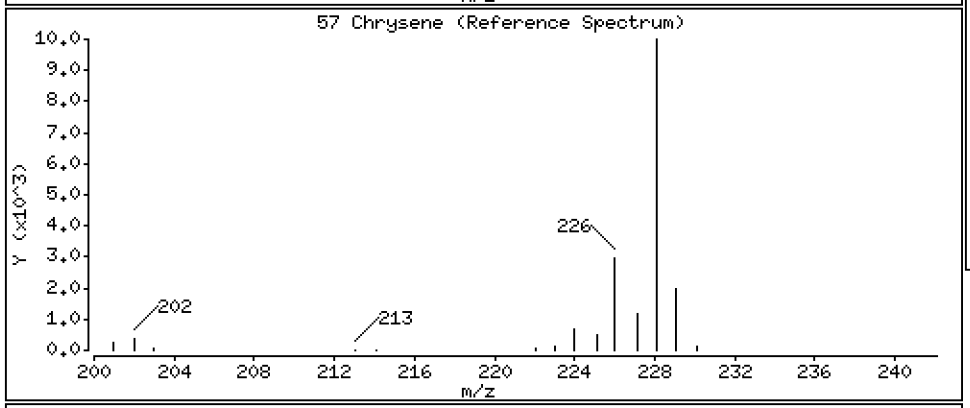
Concentration: 2.770 ug/mL

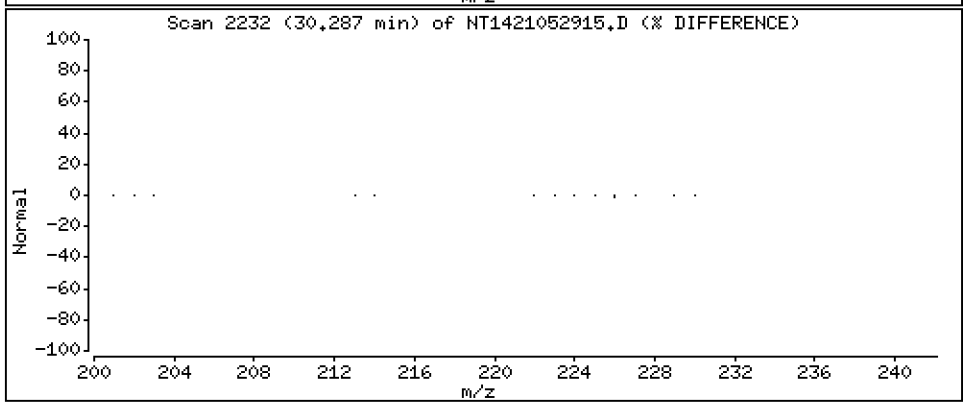












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Date : 29-MAY-2021 19:38

Client ID:

Instrument: nt14.i

Sample Info: SJF0025-SCV1

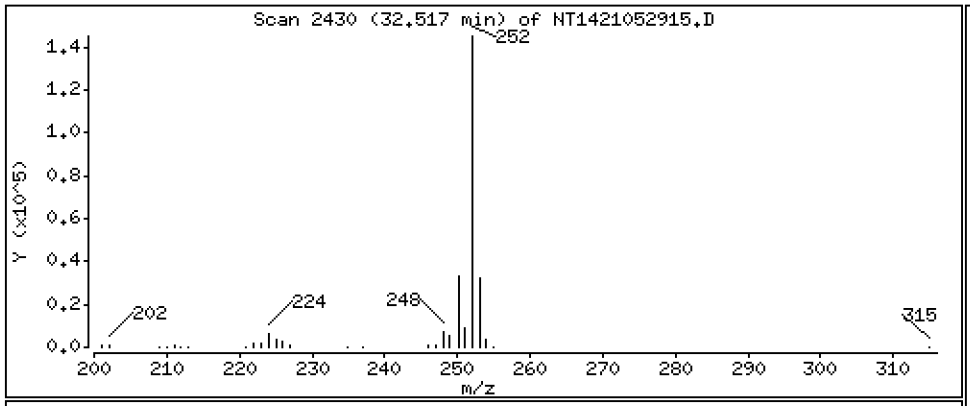
Operator: VTS

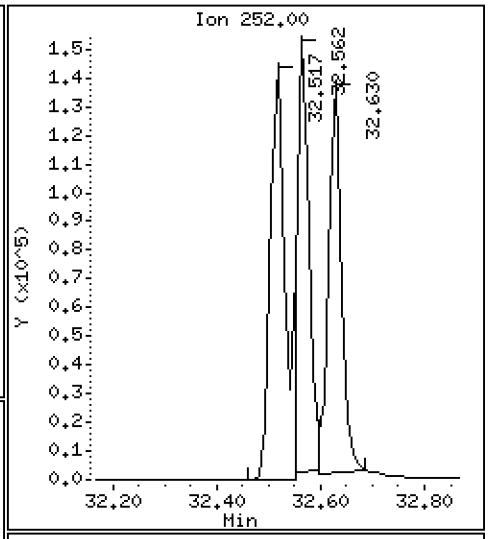
Column phase: Rxi-17Sil MS

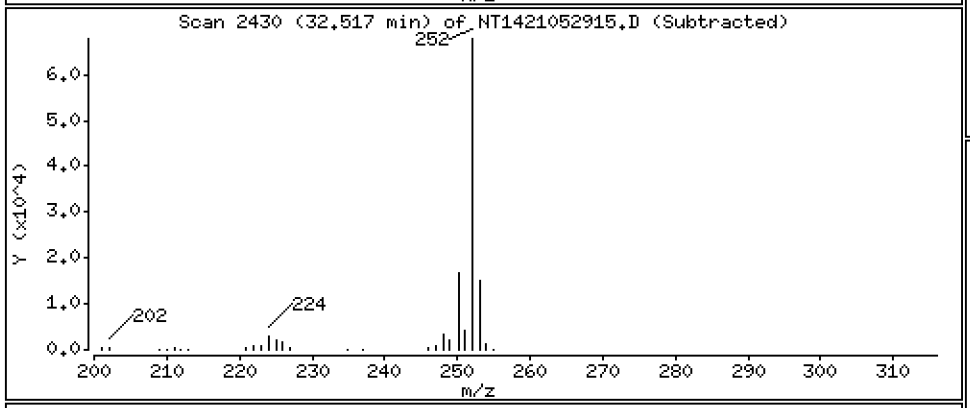
Column diameter: 0.25

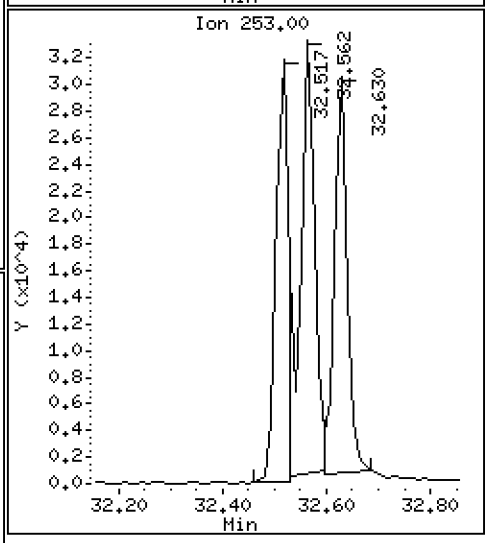
62 Benzo(b)fluoranthene

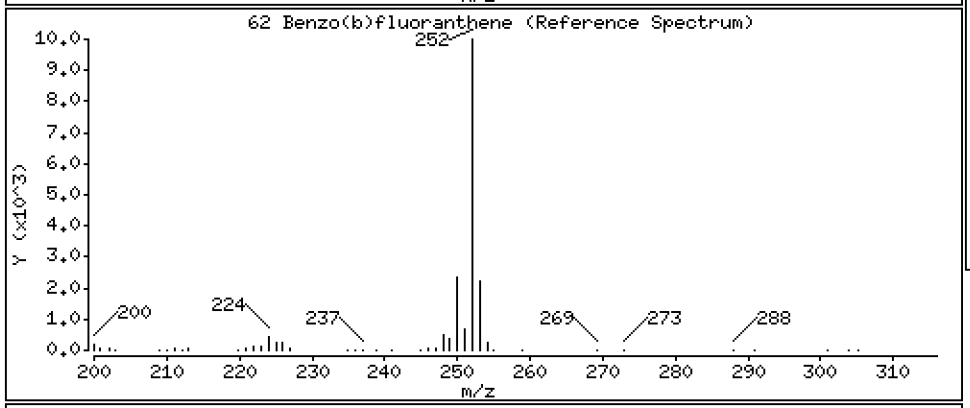
Concentration: 3.119 ug/mL

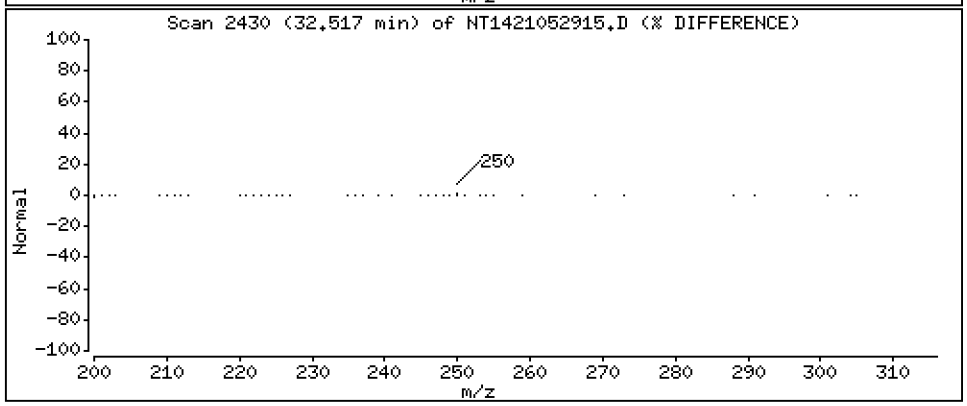












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Date : 29-MAY-2021 19:38

Client ID:

Instrument: nt14.i

Sample Info: SJF0025-SCV1

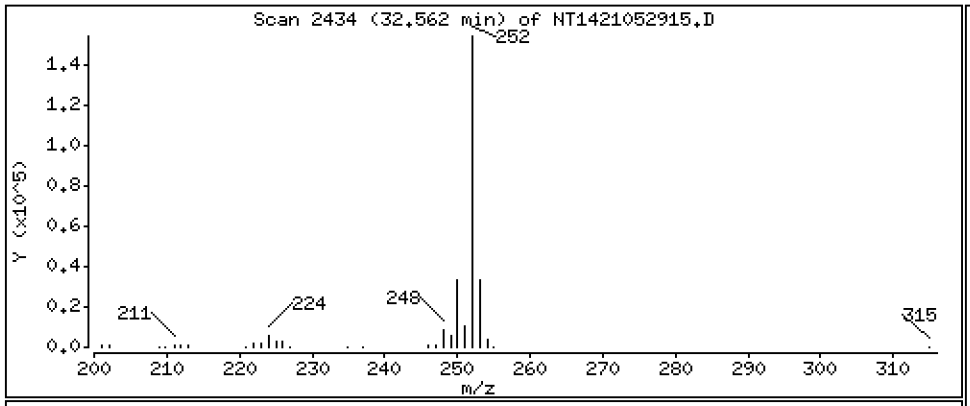
Operator: VTS

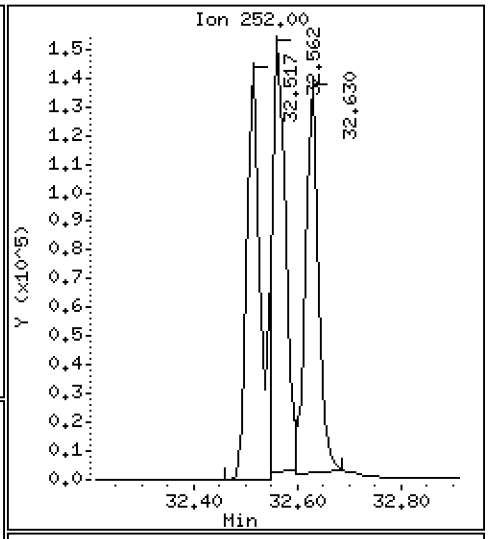
Column phase: Rxi-17Sil MS

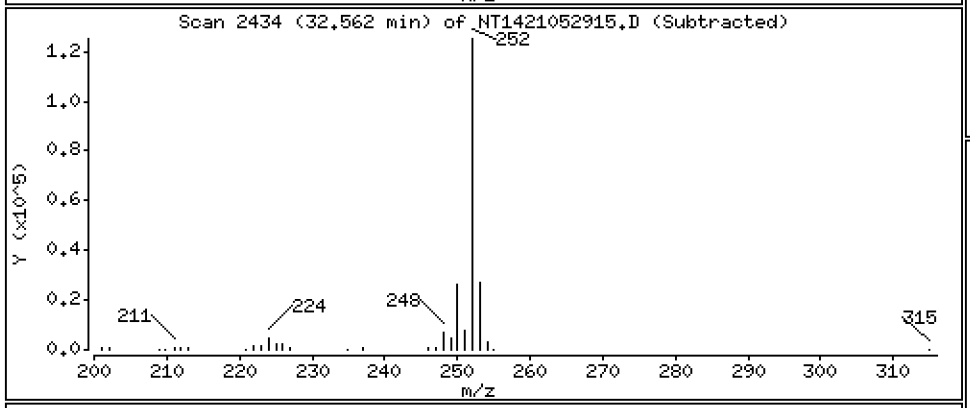
Column diameter: 0.25

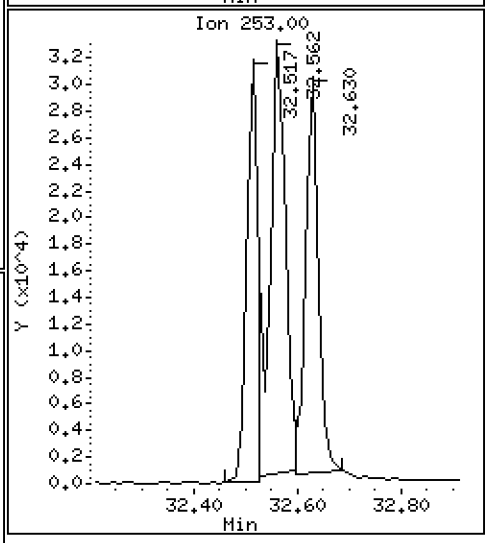
63 Benzo(k)fluoranthene

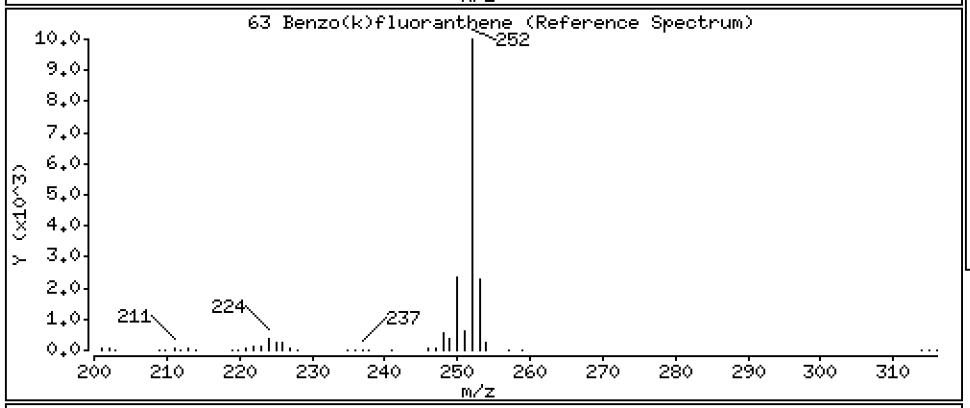
Concentration: 2.487 ug/mL

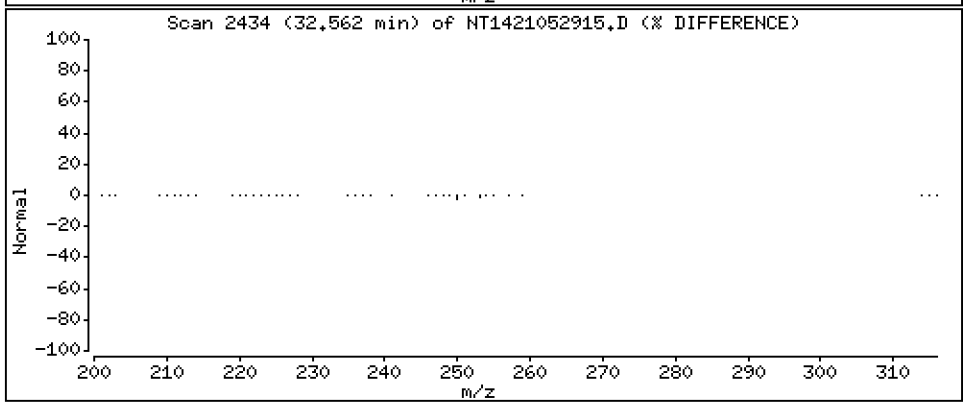












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Date : 29-MAY-2021 19:38

Client ID:

Instrument: nt14.i

Sample Info: SJF0025-SCV1

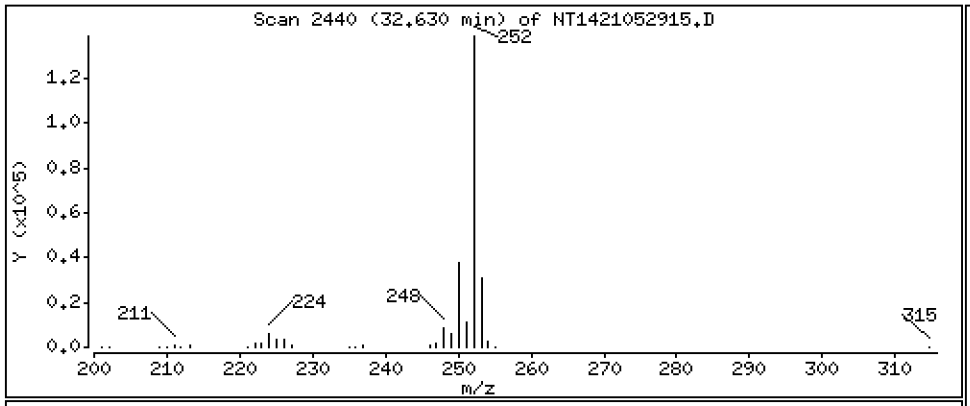
Operator: VTS

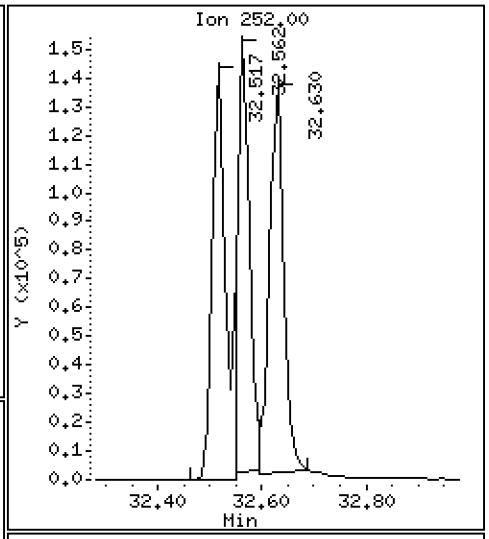
Column phase: Rxi-17Sil MS

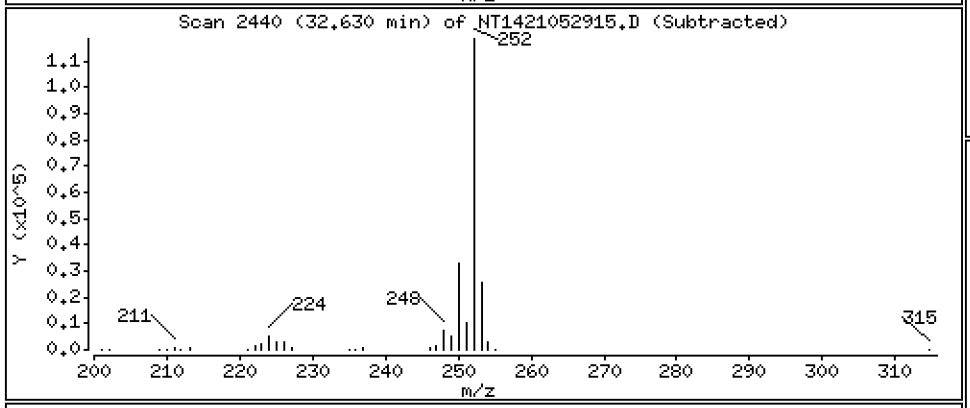
Column diameter: 0.25

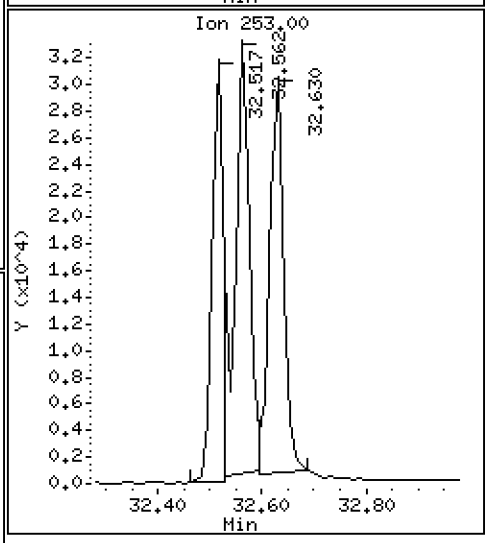
293 Benzo(j)fluoranthene

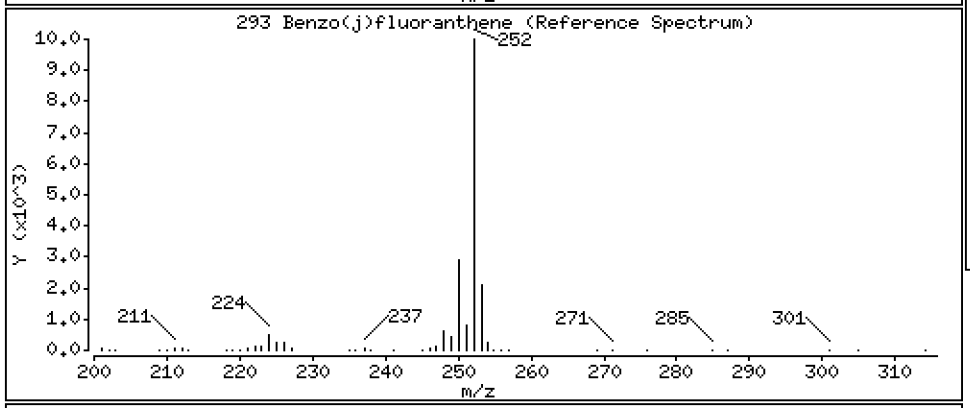
Concentration: 2.590 ug/mL

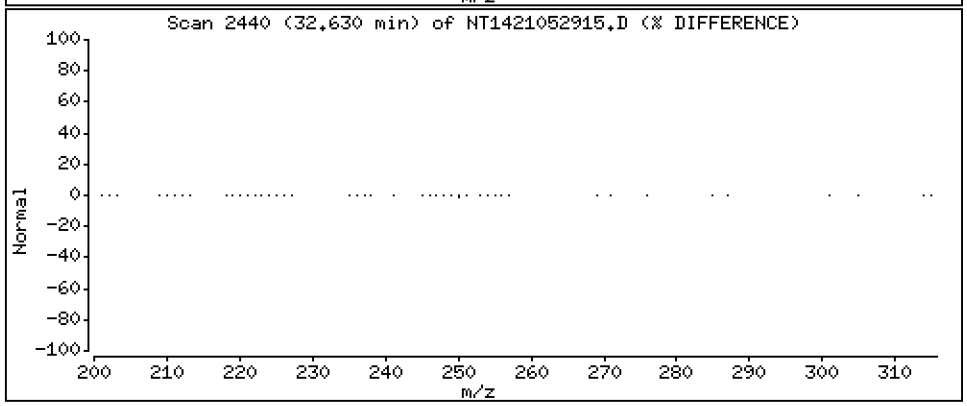












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Date : 29-MAY-2021 19:38

Client ID:

Instrument: nt14.i

Sample Info: SJF0025-SCV1

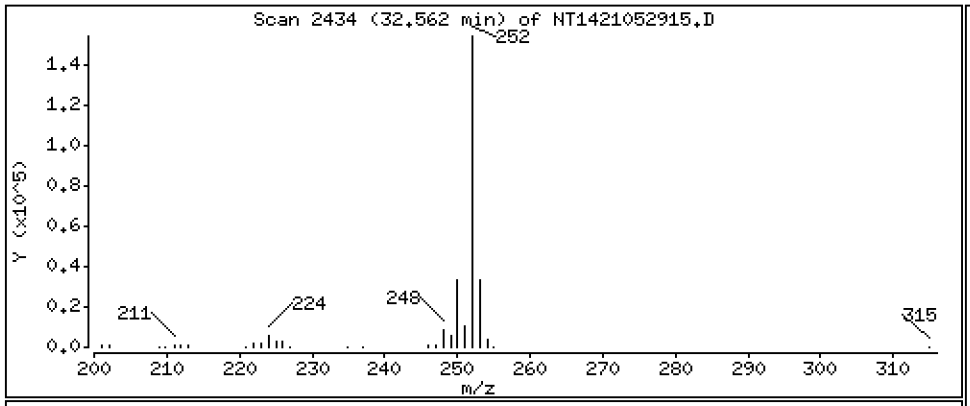
Operator: VTS

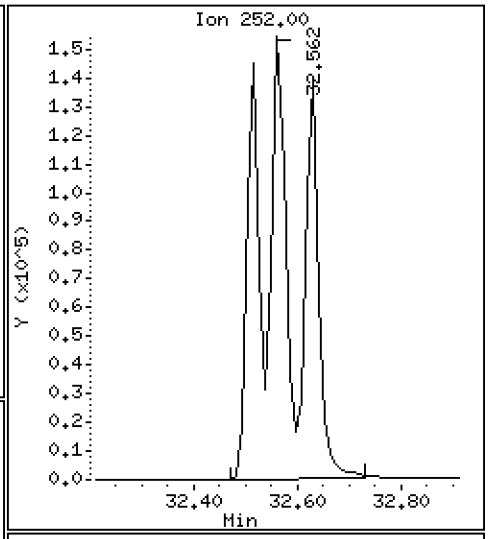
Column phase: Rxi-17Sil MS

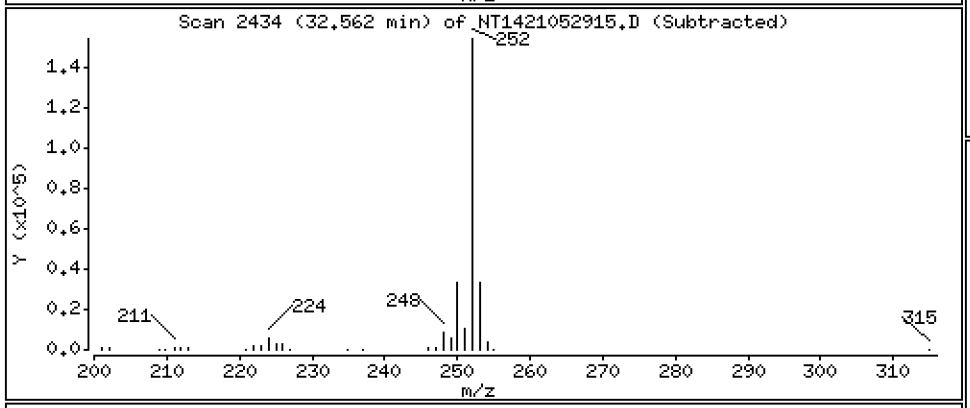
Column diameter: 0.25

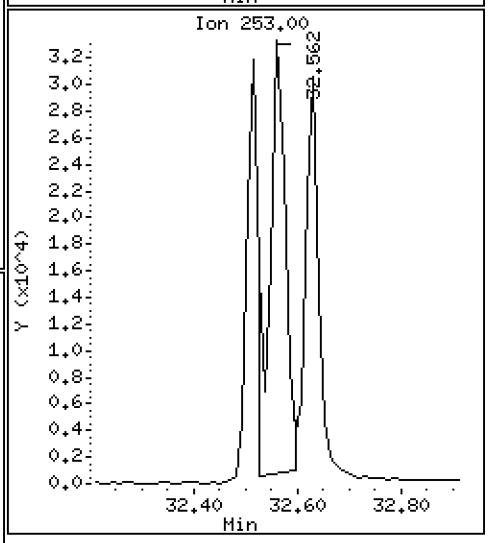
246 Total Benzofluoranthenes

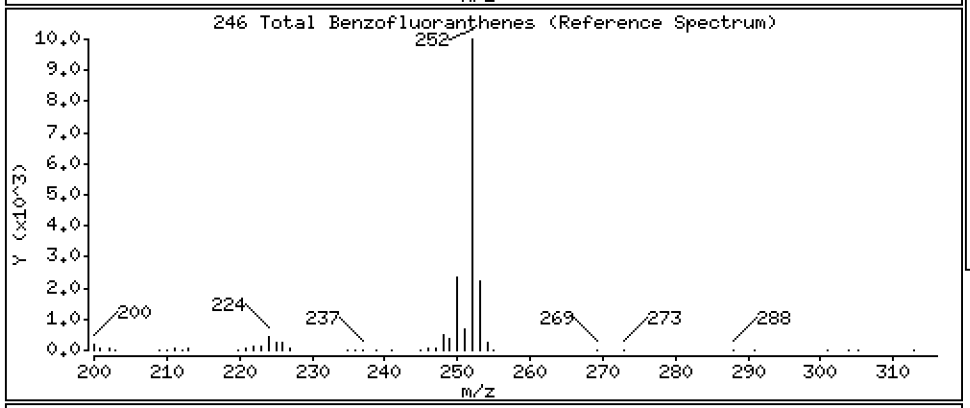
Concentration: 8.191 ug/mL

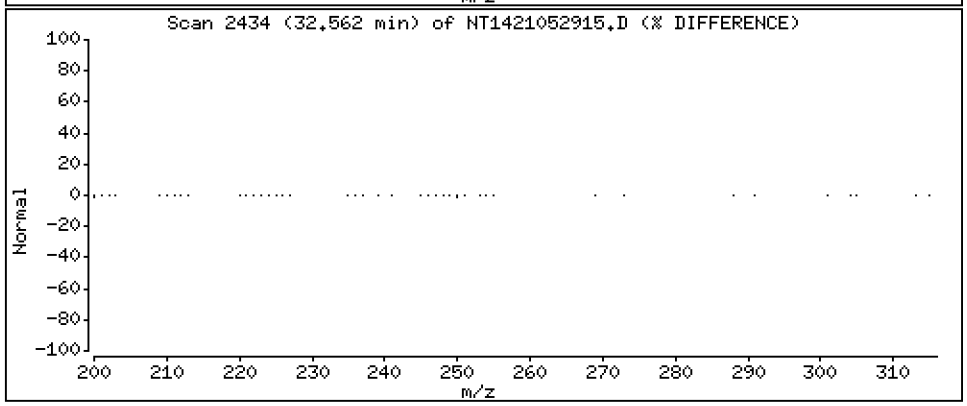












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Date : 29-MAY-2021 19:38

Client ID:

Instrument: nt14.i

Sample Info: SJF0025-SCV1

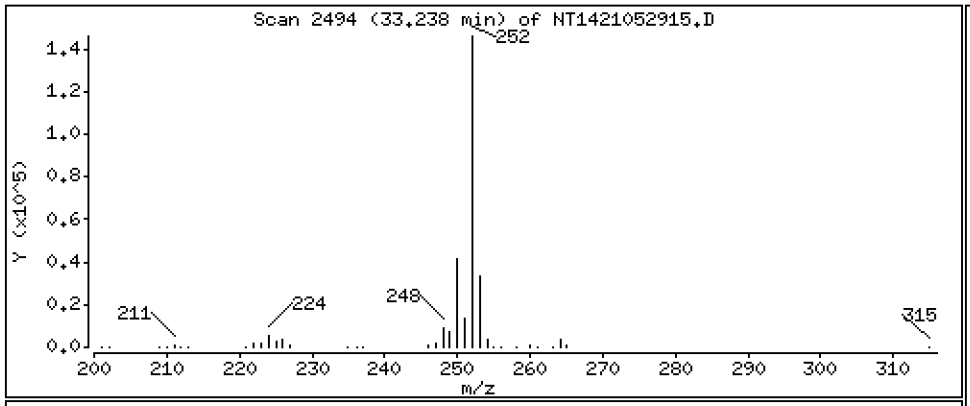
Operator: VTS

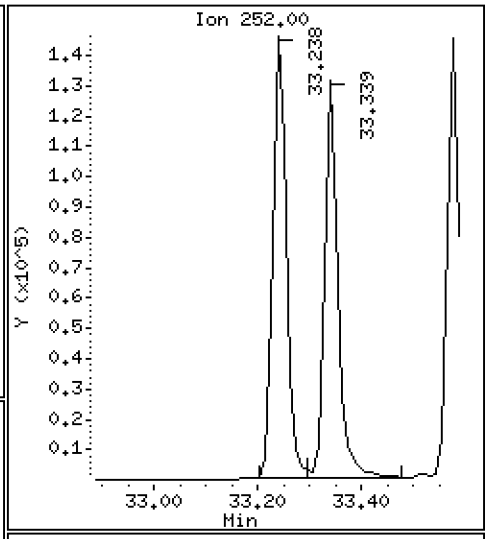
Column phase: Rxi-17Sil MS

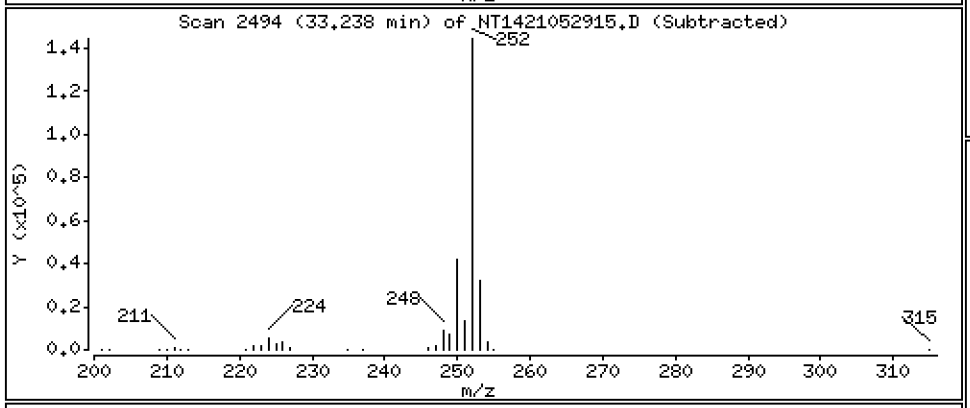
Column diameter: 0.25

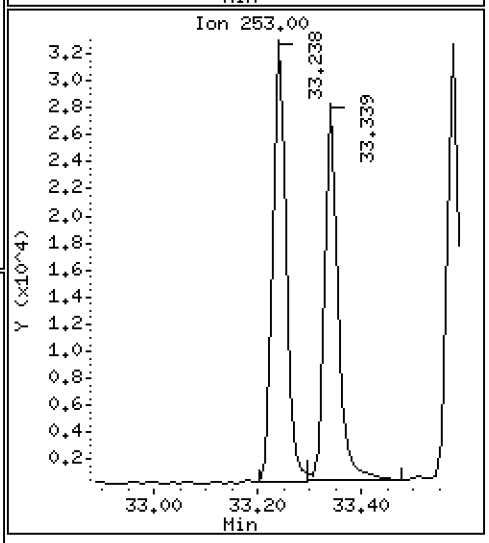
64 Benzo(e)pyrene

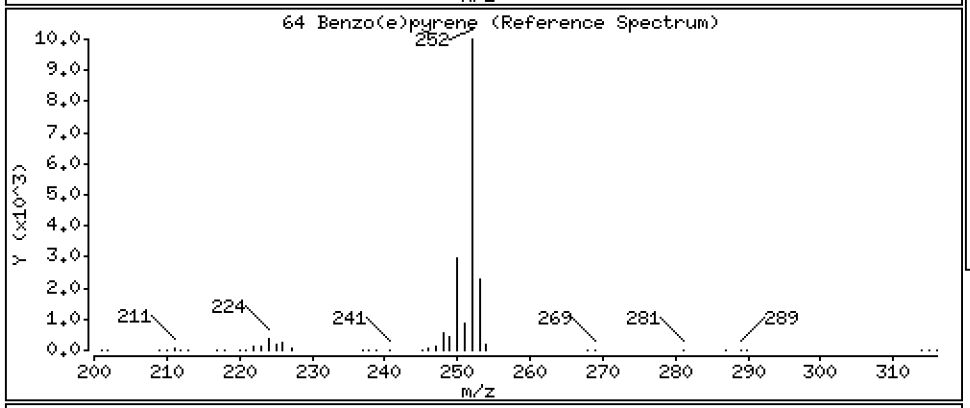
Concentration: 2.669 ug/mL

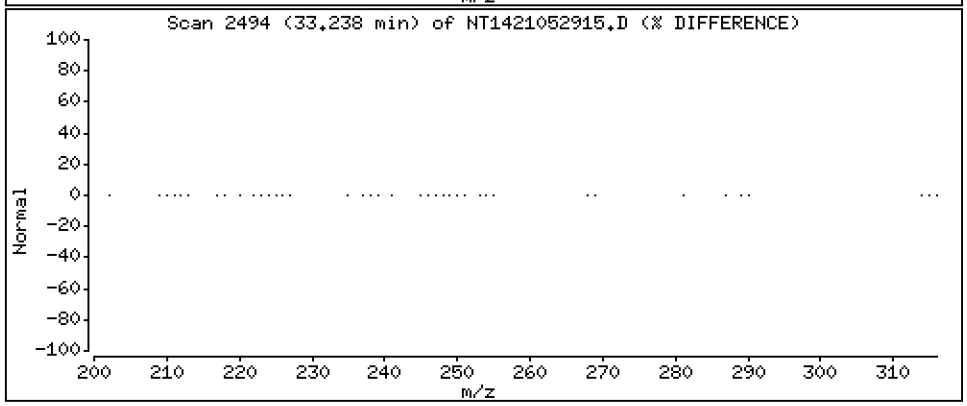












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Date : 29-MAY-2021 19:38

Client ID:

Instrument: nt14.i

Sample Info: SJF0025-SCV1

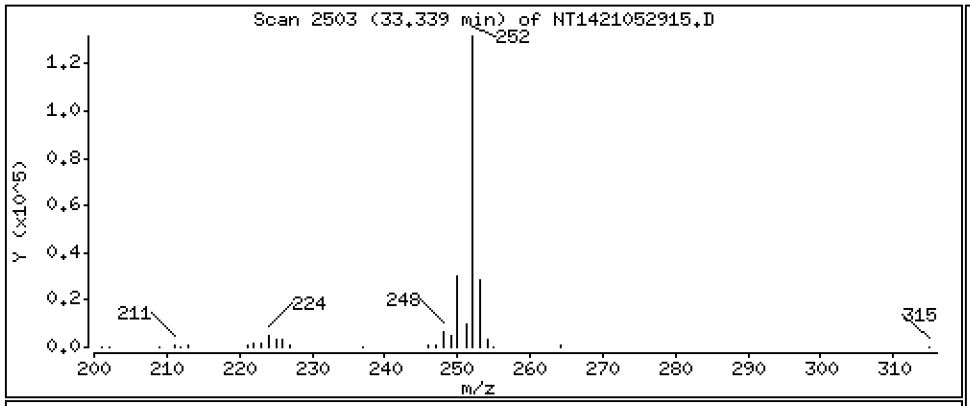
Operator: VTS

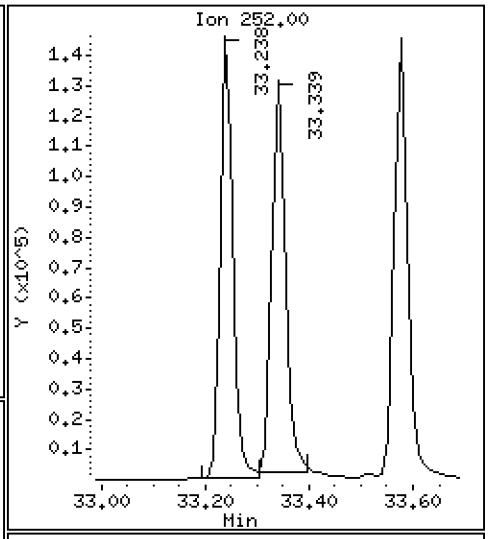
Column phase: Rxi-17Sil MS

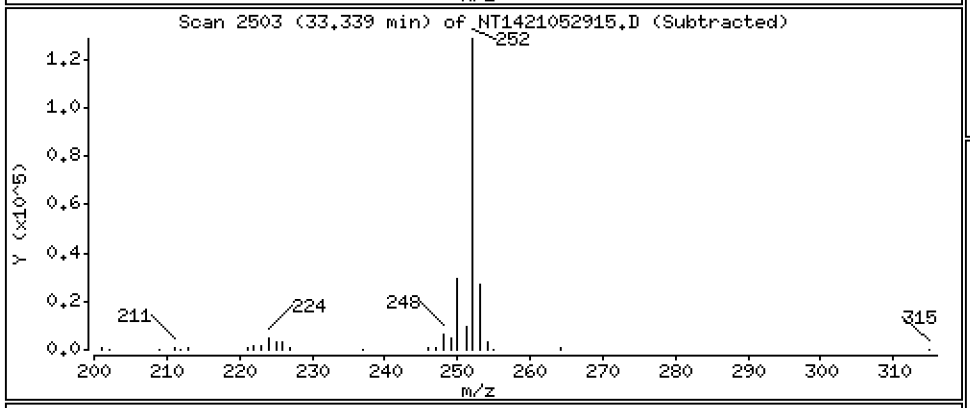
Column diameter: 0.25

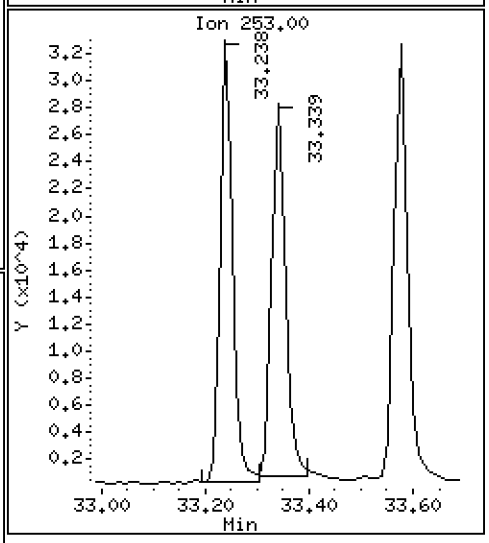
66 Benzo(a)pyrene

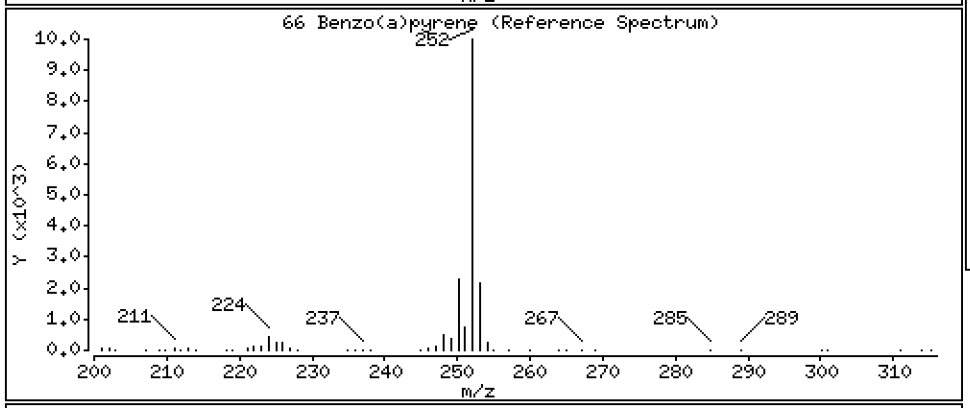
Concentration: 2.621 ug/mL

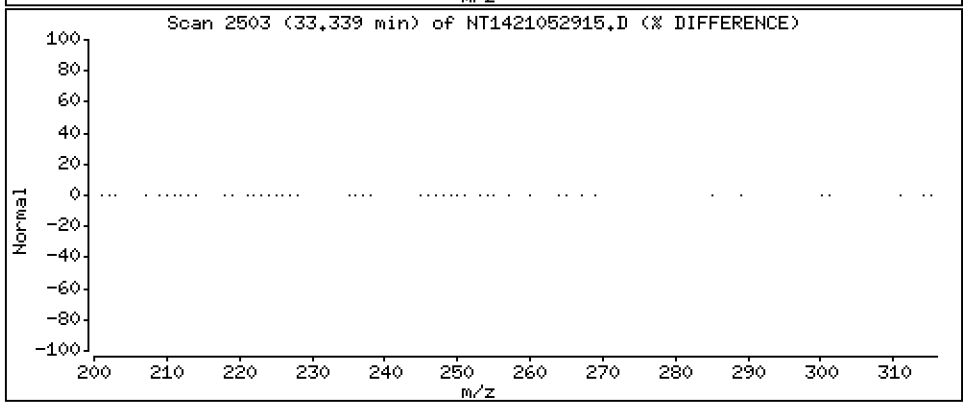












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Date : 29-MAY-2021 19:38

Client ID:

Instrument: nt14.i

Sample Info: SJF0025-SCV1

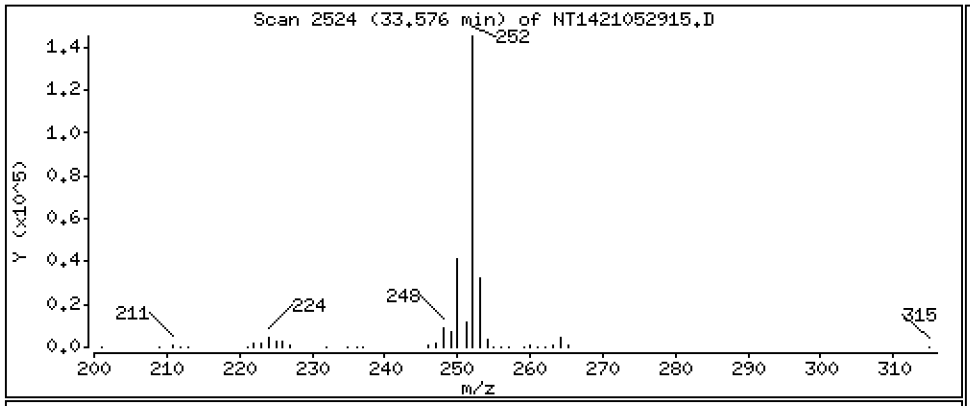
Operator: VTS

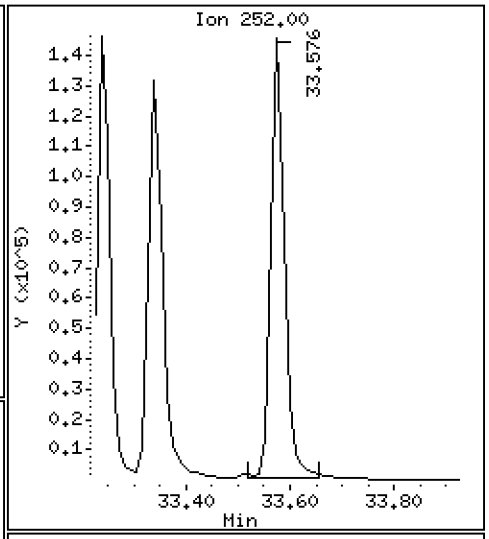
Column phase: Rxi-17Sil MS

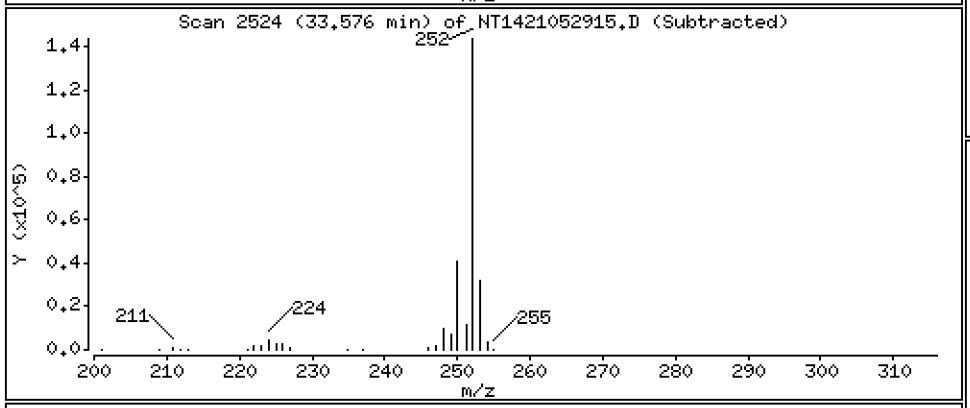
Column diameter: 0.25

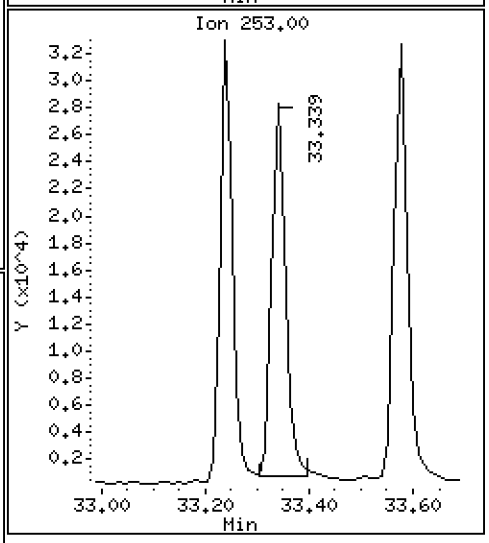
68 Perylene

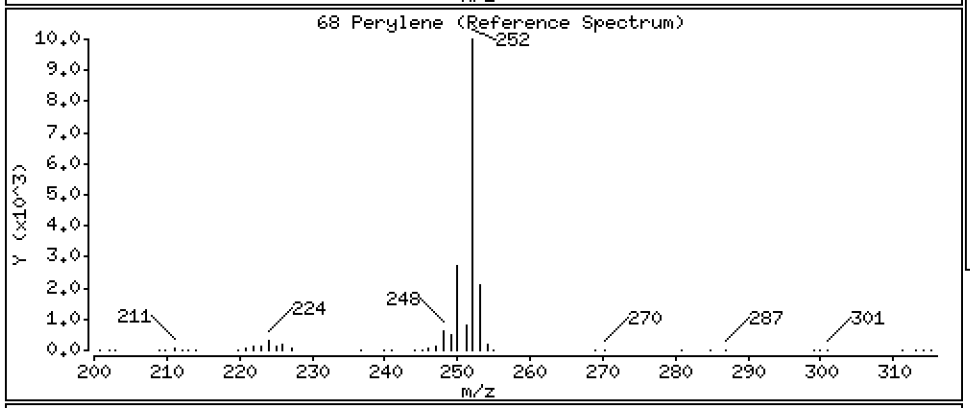
Concentration: 2.820 ug/mL

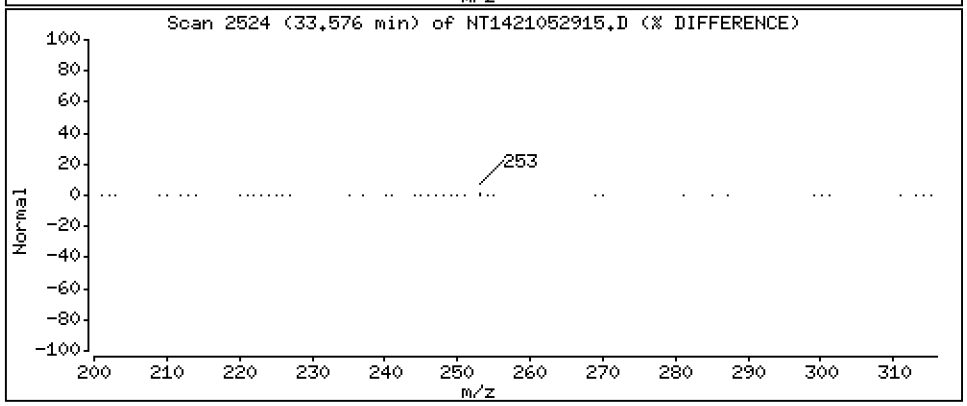












Data File: \\target\share\chem3\nt14.i\20210529.b\NT1421052915.D

Date : 29-MAY-2021 19:38

Client ID:

Instrument: nt14.i

Sample Info: SJF0025-SCV1

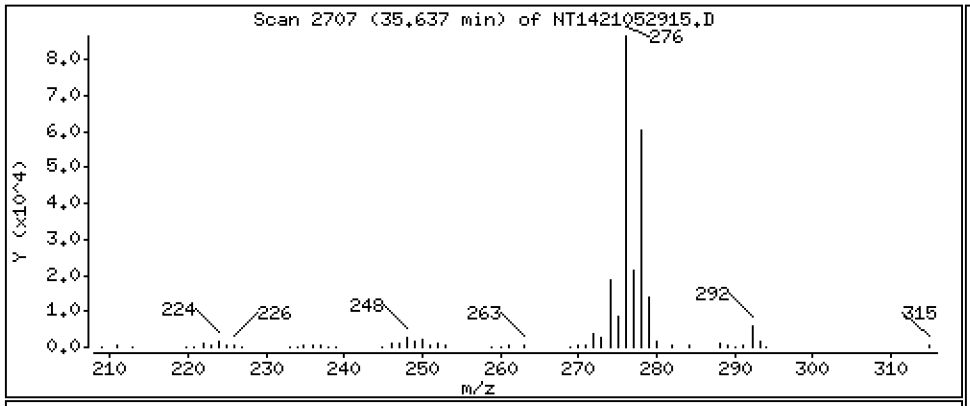
Operator: VTS

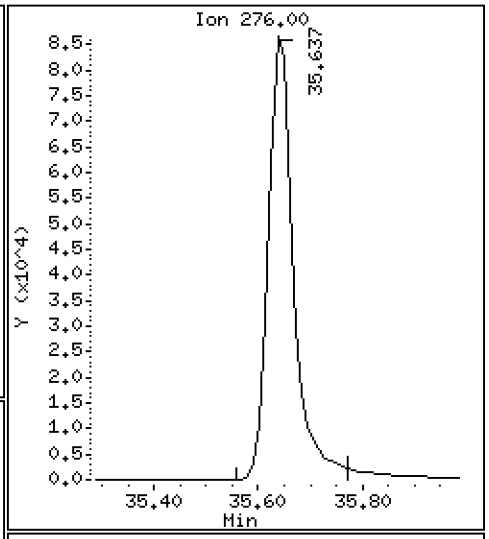
Column phase: Rxi-17Sil MS

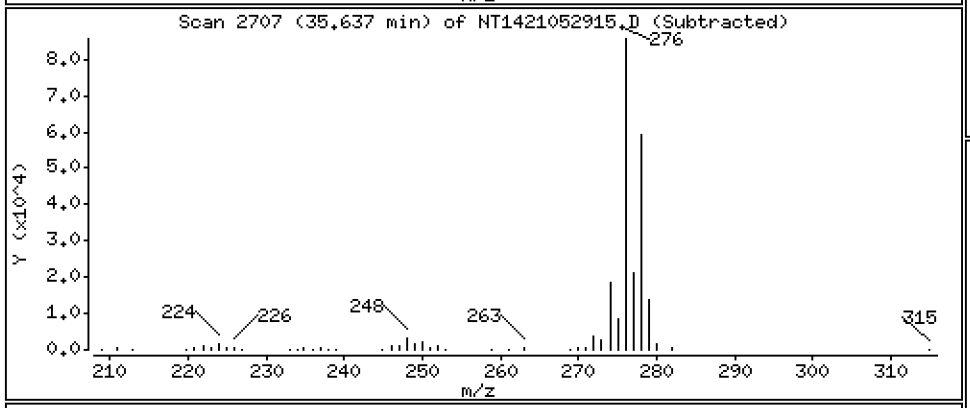
Column diameter: 0.25

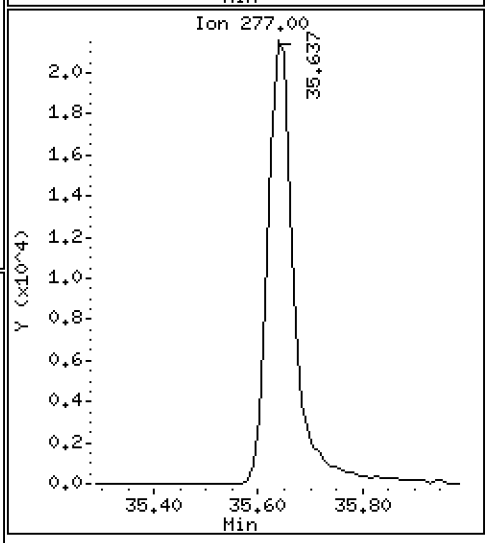
69 Indeno(1,2,3-cd)pyrene

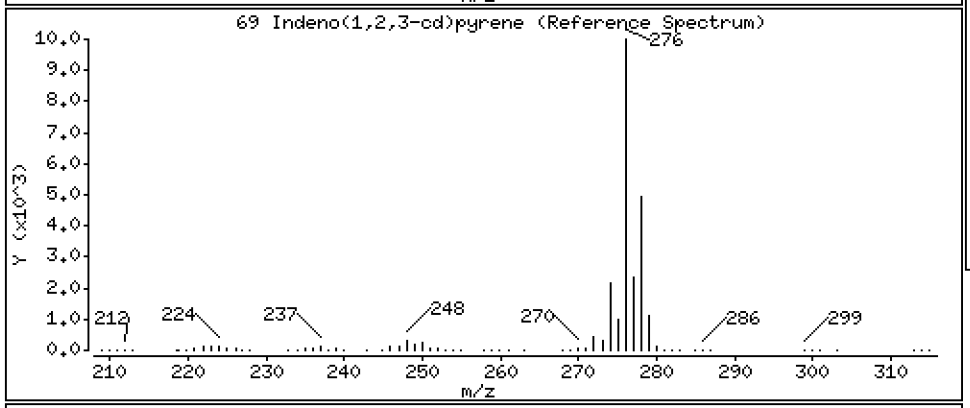
Concentration: 2.913 ug/mL

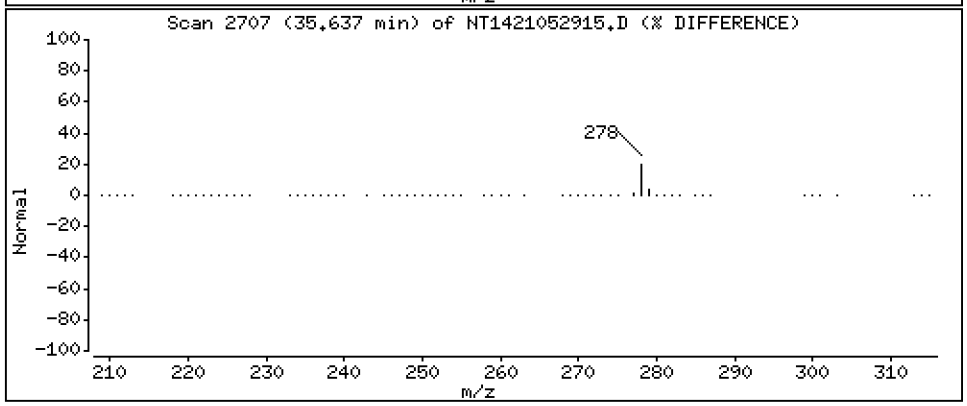












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Date : 29-MAY-2021 19:38

Client ID:

Instrument: nt14.i

Sample Info: SJF0025-SCV1

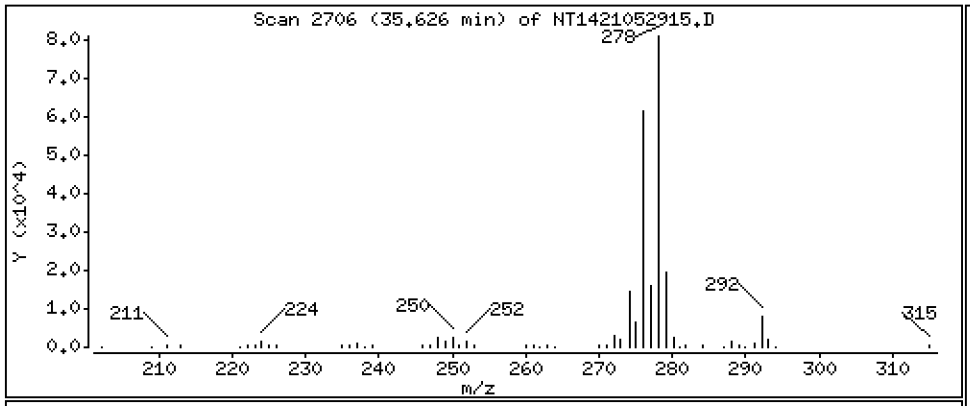
Operator: VTS

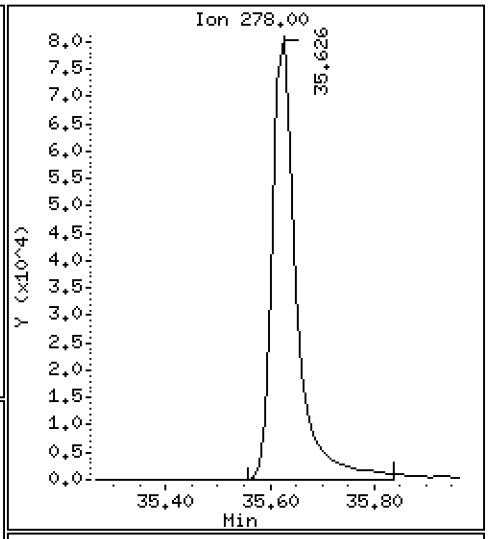
Column phase: Rxi-17Sil MS

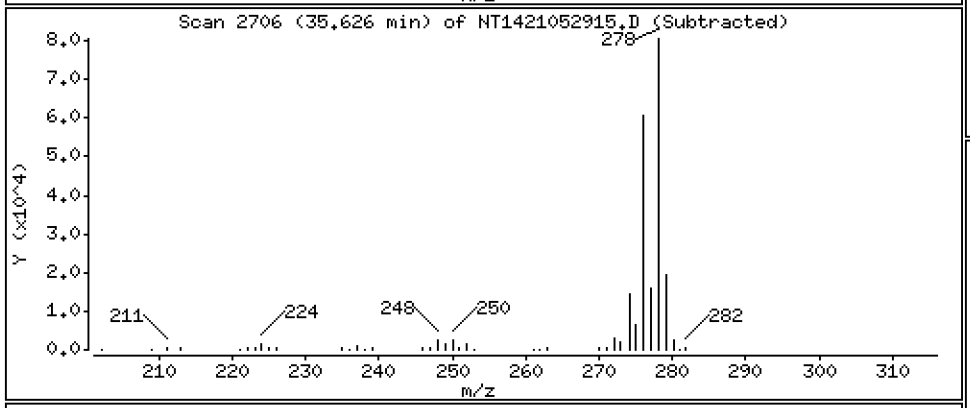
Column diameter: 0.25

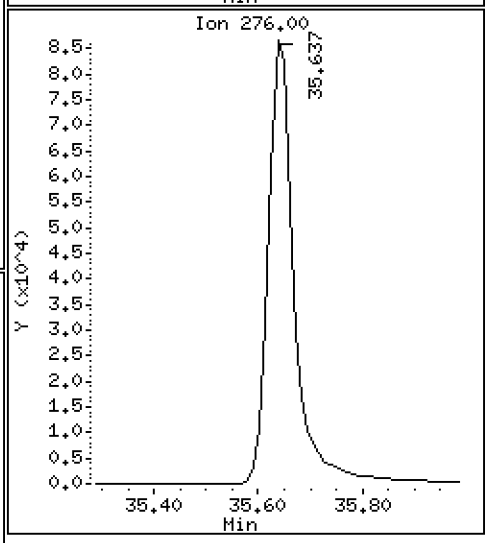
70 Dibenzo(a,h)anthracene

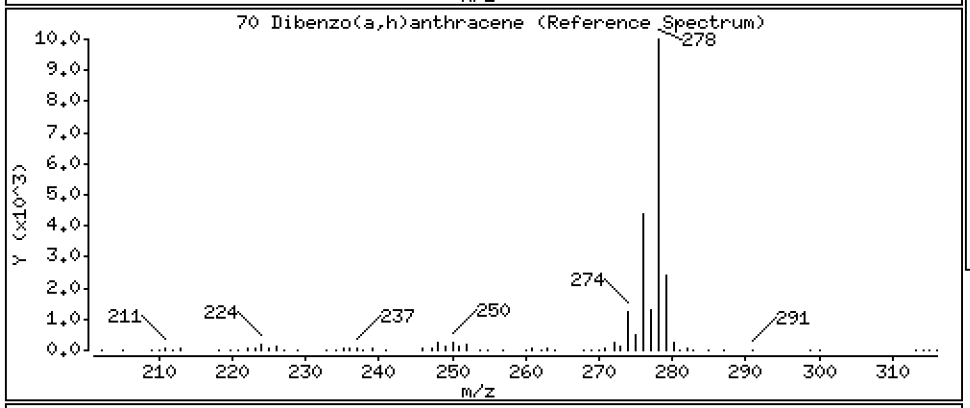
Concentration: 2.690 ug/mL

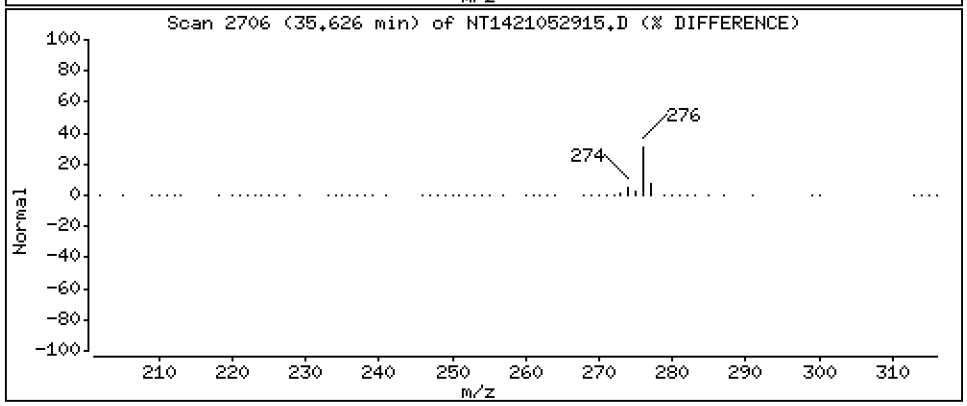












Data File: \\target\share\chem3\nt14.i\20210529.b\NT1421052915.D

Date : 29-MAY-2021 19:38

Client ID:

Instrument: nt14.i

Sample Info: SJF0025-SCV1

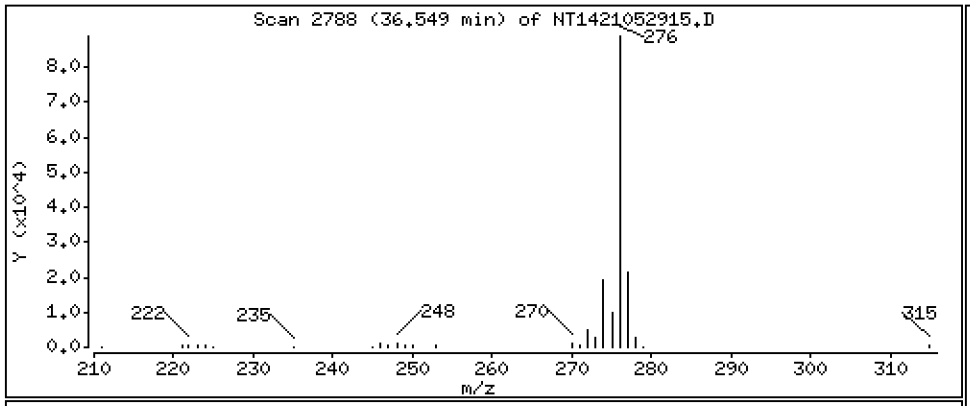
Operator: VTS

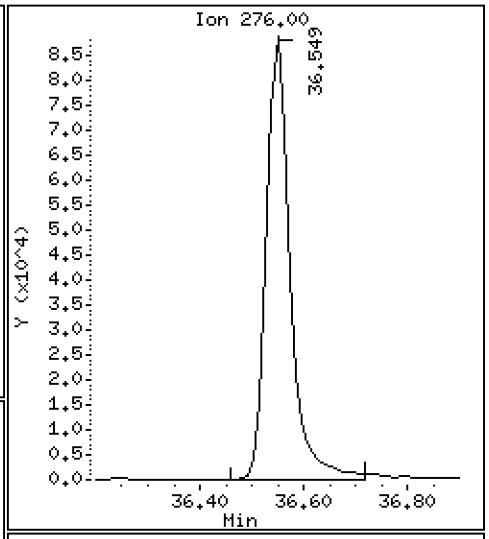
Column phase: Rxi-17Sil MS

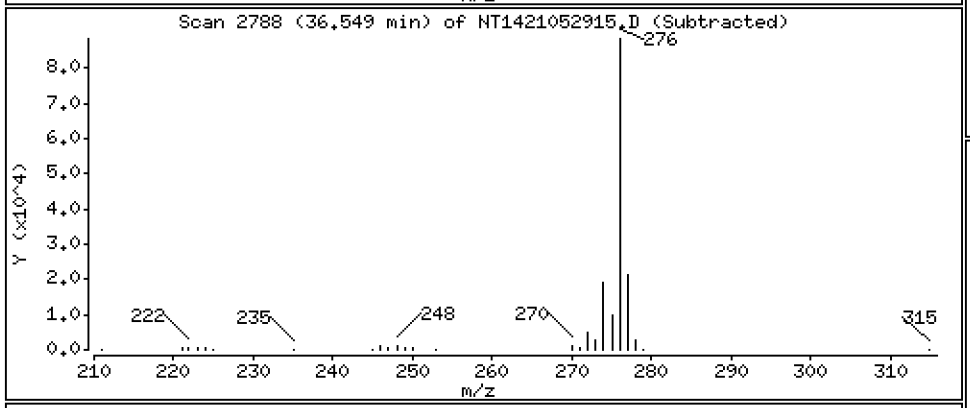
Column diameter: 0.25

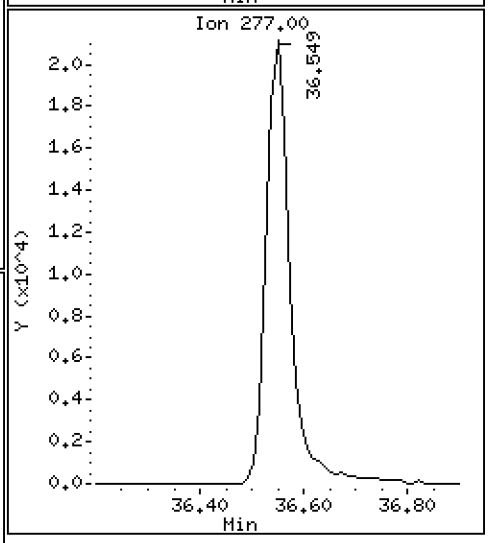
74 Benzo(g,h,i)perylene

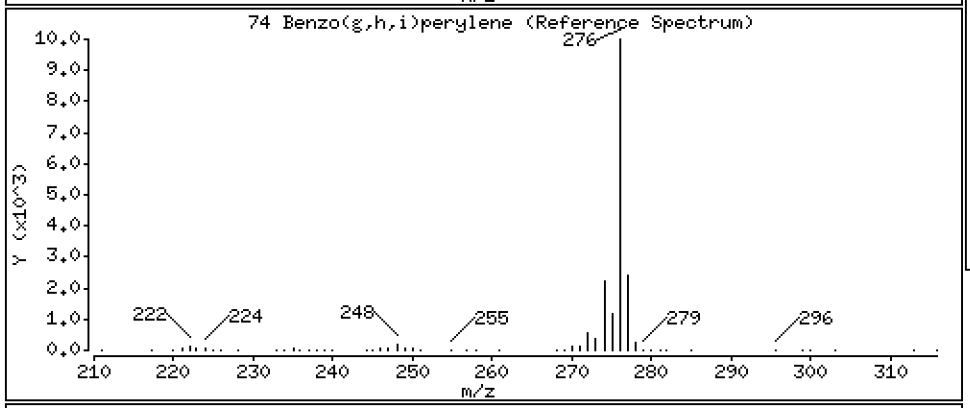
Concentration: 2.781 ug/mL

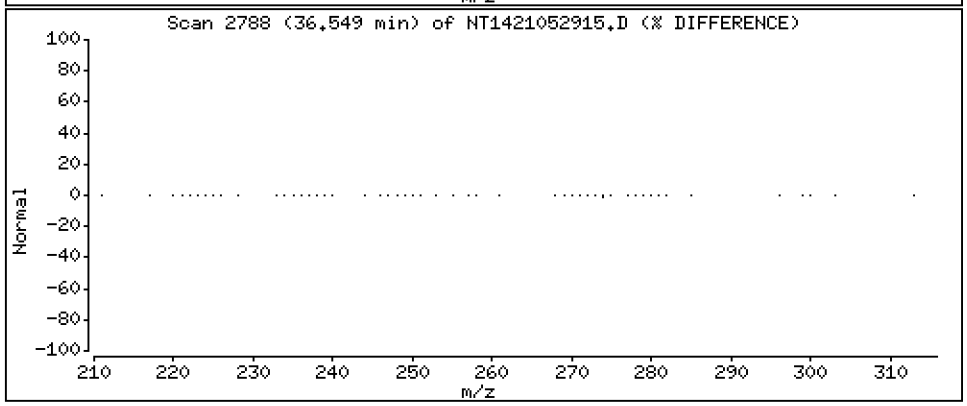












ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt14.i\20210529.b\NT1421052915.D
Lab Smp Id: SJF0025-SCV1
Inj Date : 29-MAY-2021 19:38
Operator : VTS Inst ID: nt14.i
Smp Info : SJF0025-SCV1
Misc Info :
Comment : 1ul Injection
Method : \\target\share\chem3\nt14.i\20210529.b\ALKYLPNA.m
Meth Date : 02-Jun-2021 19:03 yev Quant Type: ISTD
Cal Date : 29-MAY-2021 18:49 Cal File: NT1421052914.D
Als bottle: 9
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: TARGETS.sub
Target Version: 4.14
Processing Host: ORGDATA102

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/mL)
	1 trans-Decalin	138	7.146	7.156	(0.378)	24405	2.93881	2.939
	2 cis-Decalin	138	8.266	8.246	(0.437)	17380	2.55518	2.555
$	6 Naphthalene-d8	136	11.897	11.897	(0.629)	223244	2.88377	2.884(R)
	7 Naphthalene	128	11.957	11.957	(0.632)	203089	2.62492	2.625
	12 Benzo(b)thiophene	134	12.409	12.409	(0.656)	166732	2.62140	2.621
	16 2-Methylnaphthalene	141	13.794	13.794	(0.730)	119639	2.64523	2.645
	17 1-methylnaphthalene	141	14.245	14.244	(0.753)	117019	2.65947	2.659
	18 Biphenyl	154	15.431	15.431	(0.816)	174317	2.60835	2.608
	19 2,6-Dimethylnaphthalene	156	15.508	15.508	(0.820)	127969	2.60384	2.604
	20 Acenaphthylene	152	17.091	17.091	(0.904)	220486	2.62443	2.624
$	21 Acenaphthene-d10	164	17.377	17.377	(0.919)	134362	2.82593	2.826(R)
	22 Acenaphthene	153	17.486	17.486	(0.925)	142697	2.75525	2.755
	23 Dibenzofuran	168	17.860	17.860	(0.945)	199363	2.59511	2.595
	24 1,6,7-Trimethylnaphthalene	170	18.091	18.080	(0.957)	132237	2.64202	2.642
*	25 Fluorene-d10	176	18.907	18.907	(1.000)	166522	2.00000	
	26 Fluorene	166	19.009	19.009	(1.005)	155403	2.61087	2.611
	30 Dibenzothiophene	184	21.931	21.931	(1.160)	221357	2.63418	2.634
$	35 Phenanthrene-d10	188	22.239	22.239	(0.995)	230950	2.85128	2.851(R)
	36 Phenanthrene	178	22.327	22.327	(0.999)	229127	2.63951	2.640
*	250 Anthracene-d10	188	22.360	22.360	(1.000)	168360	2.00000	
	37 Anthracene	178	22.426	22.425	(1.003)	219523	2.68776	2.688
	42 Carbazole	167	23.712	23.701	(1.060)	194800	2.70414	2.704
	43 1-Methylphenanthrene	192	24.162	24.151	(1.081)	166388	2.66719	2.667
	44 Fluoranthene	202	26.142	26.131	(1.169)	256004	2.67188	2.672
	46 Pyrene	202	26.977	26.977	(1.207)	270263	2.71212	2.712
	51 Naphthobenzothiophene	234	Compound Not Detected.					
	55 Benzo(a)anthracene	228	30.095	30.095	(0.907)	251589	2.75565	2.756
$	56 Chrysene-d12	240	30.219	30.219	(0.911)	227348	3.08546	3.085(R)
	57 Chrysene	228	30.287	30.287	(0.913)	247820	2.77007	2.770
	62 Benzo(b)fluoranthene	252	32.517	32.517	(0.980)	295325	3.11894	3.119
	63 Benzo(k)fluoranthene	252	32.562	32.562	(0.981)	252708	2.48737	2.487
	293 Benzo(j)fluoranthene	252	32.629	32.629	(0.983)	242480	2.59014	2.590(H)
	246 Total Benzofluoranthenes	252	32.562	32.562	(0.981)	759661	8.19091	8.191(M)

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/mL)
* 251 Benzo(e)pyrene-d12	264	33.181	33.181	(1.000)	235397	2.00000	
64 Benzo(e)pyrene	252	33.238	33.238	(1.002)	247681	2.66885	2.669
66 Benzo(a)pyrene	252	33.339	33.339	(1.005)	221317	2.62146	2.621
$ 67 Perylene-d12	264	33.519	33.519	(1.010)	232231	2.91960	2.920(R)
68 Perylene	252	33.575	33.575	(1.012)	245483	2.82022	2.820(M)
69 Indeno(1,2,3-cd)pyrene	276	35.637	35.637	(1.074)	288654	2.91280	2.913(M)
70 Dibenzo(a,h)anthracene	278	35.625	35.614	(1.074)	251294	2.69021	2.690(M)
74 Benzo(g,h,i)perylene	276	36.549	36.549	(1.101)	272250	2.78084	2.781(M)

QC Flag Legend

R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt14.i
Lab File ID: NT1421052915.D
Lab Smp Id: SJF0025-SCV1
Analysis Type: SV
Quant Type: ISTD
Operator: VTS
Method File: \\target\share\chem3\nt14.i\20210529.b\ALKYLPNA.m
Misc Info:

Calibration Date: 29-MAY-2021
Calibration Time: 14:01
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
25 Fluorene-d10	159478	79739	318956	166522	4.42
250 Anthracene-d10	170161	85081	340322	168360	-1.06
251 Benzo(e)pyrene-d1	236612	118306	473224	235397	-0.51

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
25 Fluorene-d10	18.91	18.41	19.41	18.91	0.00
250 Anthracene-d10	22.36	21.86	22.86	22.36	0.00
251 Benzo(e)pyrene-d1	33.18	32.68	33.68	33.18	0.00

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

REVIEW SUMMARY FOR FILE - NT1421052915.D

Lab ID: SJF0025-SCV1
nt14.i, 20210529.b\ALKYLPNA.m, 29-MAY-2021 19:38

RT	CO-ELUTION COMPOUNDS
	NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
NONE			

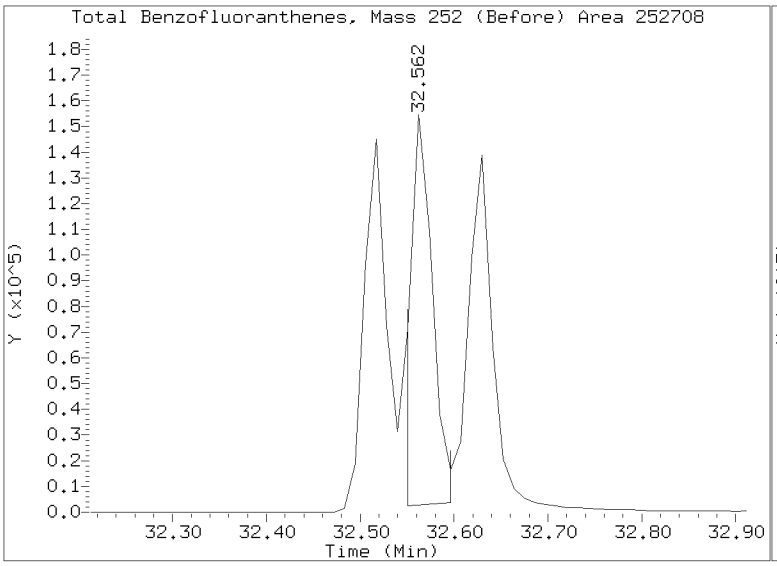
RRT check based on Ccal File: NT1421052914.D

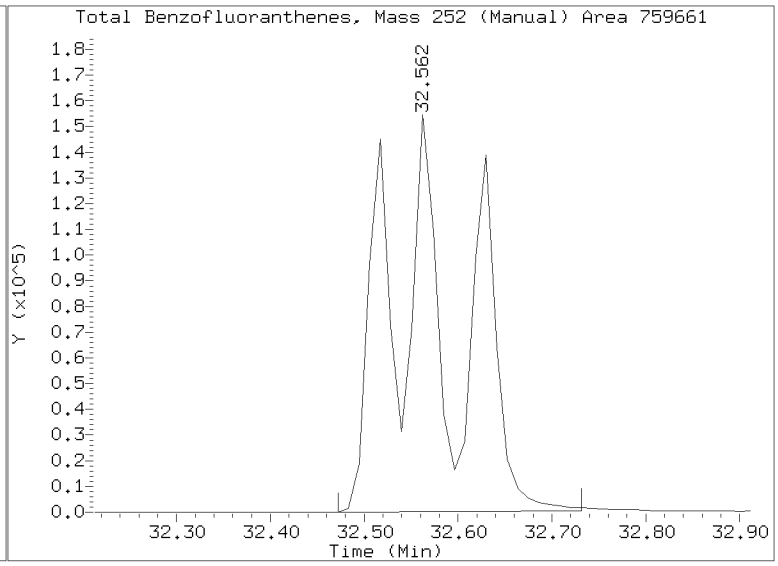
On Column LOD for nt14.i, 20210529.b\ALKYLPNA.m, TARGETS.sub = 0.0000

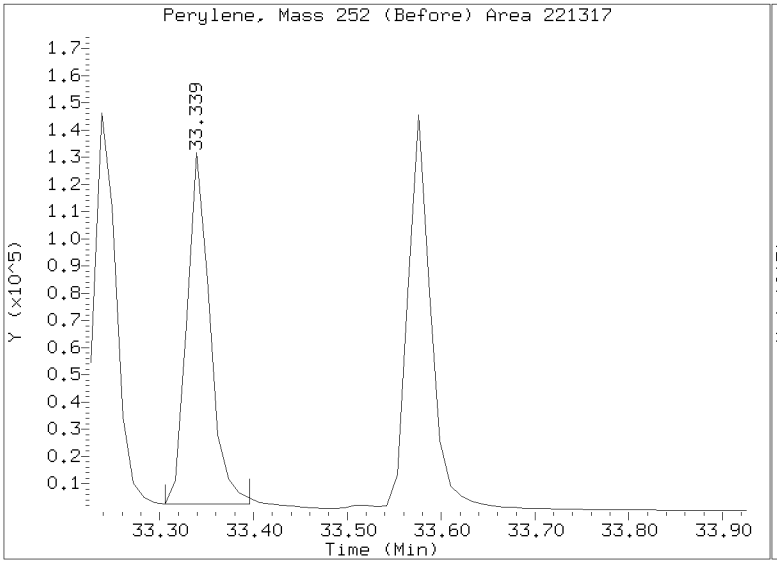
* Only compounds listed in the work order have been verified by the analyst *

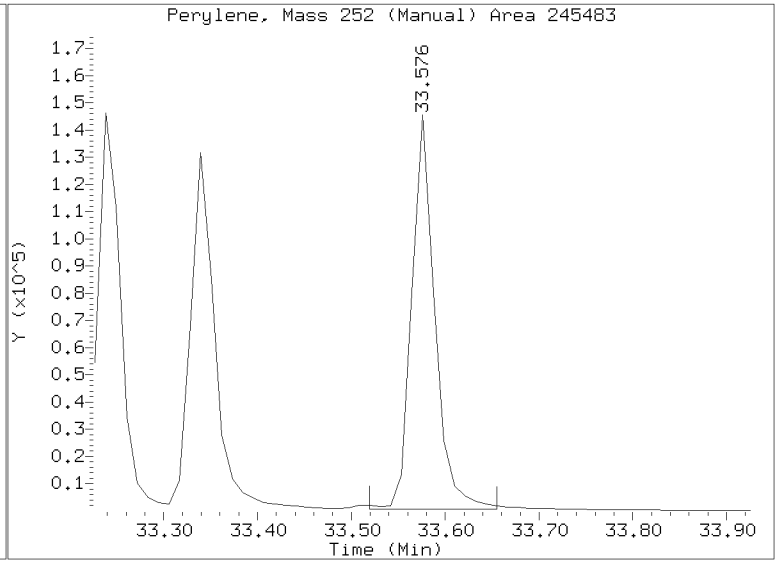
Quant Ion Manual Peak Adjustment Report

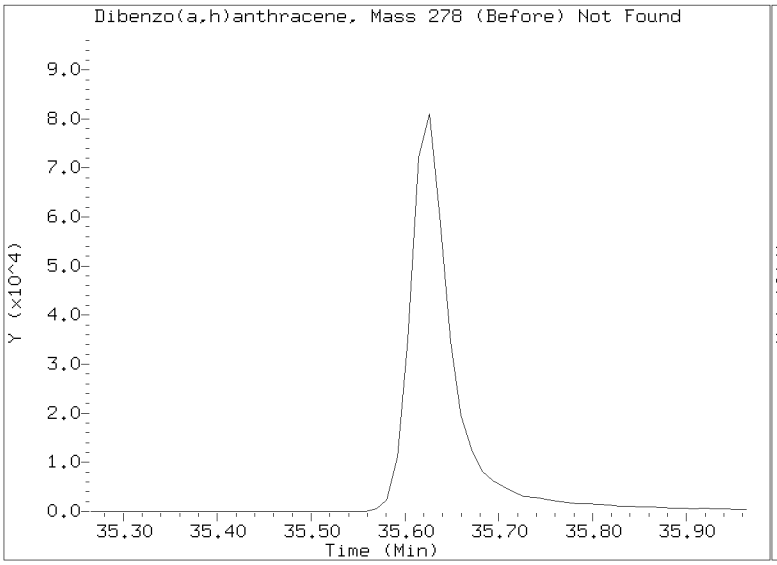
Datafile: //target/share/chem3/nt14.i/20210529.b/NT1421052915.D
Injection Date: 29-MAY-2021 19:38
Lab ID:SJF0025-SCV1 Client ID:
Report Date: 06/02/2021 19:03

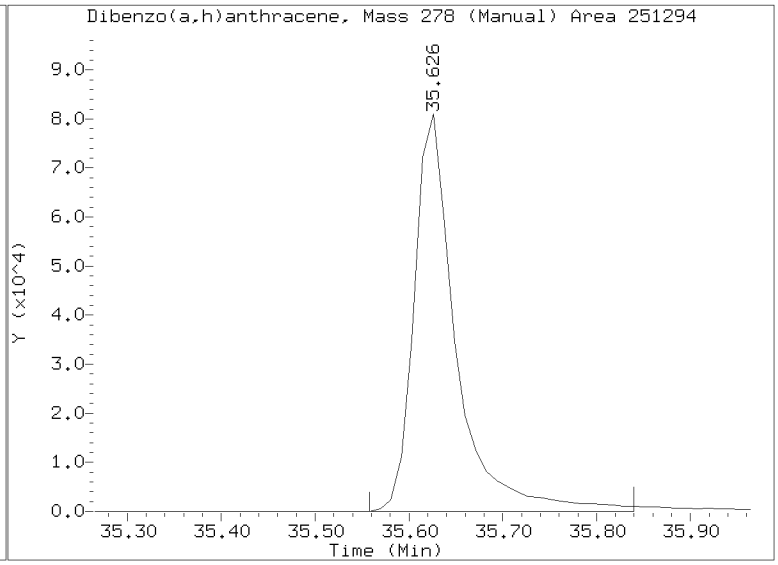






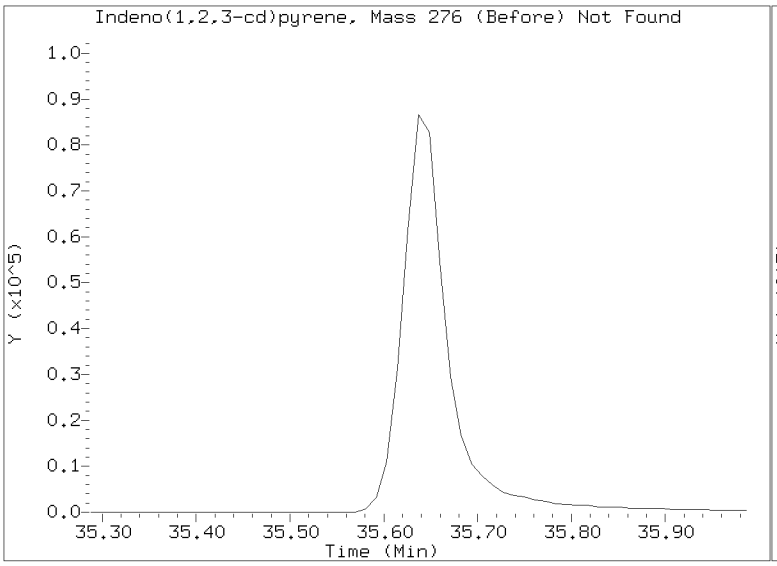


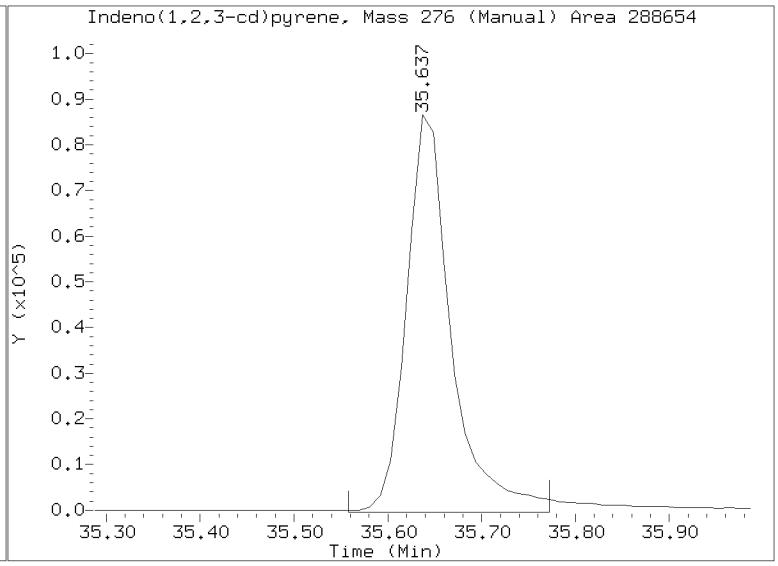


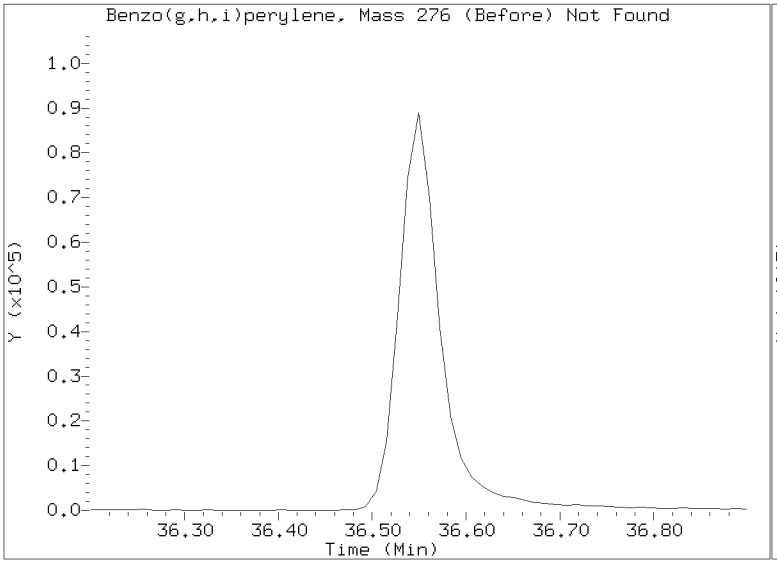


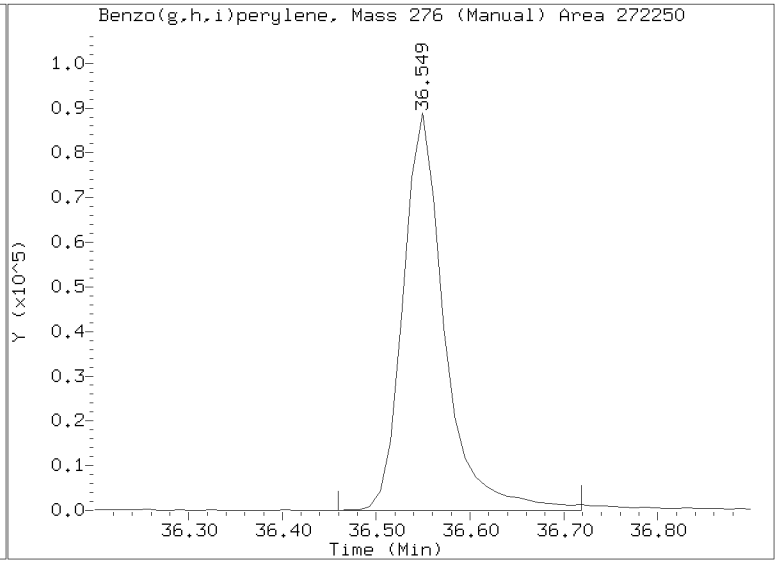
Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt14.i/20210529.b/NT1421052915.D
Injection Date: 29-MAY-2021 19:38
Lab ID:SJF0025-SCV1 Client ID:
Report Date: 06/02/2021 19:03









Analytical Resources, Incorporated
Analytical Chemists and Consultants

CONTINUING CALIBRATION CHECK
EPA 8270E-SIM

Laboratory:	Analytical Resources, Inc.	SDG:	21E0106
Client:	Anchor QEA, LLC	Project:	Gasco Siltronic - US Moorings
Instrument ID:	NT14	Calibration:	EF00008
Lab File ID:	NT1421060433.D	Calibration Date:	06/02/2021
Sequence:	SJF0131	Injection Date:	06/05/21
Lab Sample ID:	SJF0131-CCV1	Injection Time:	14:42
Sequence Name:	Calibration Check		

		CONC. (ug/mL)		RESPONSE FACTOR (RRF)			% DRIFT/DIFF	
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN	CCV	LIMIT
trans-Decalin	A	2.5000	2.8	0.0997391	0.1109380		11.2	+/-50
cis-Decalin	A	2.5000	2.5	0.0700123	0.0814784		-0.4	+/-50
Naphthalene	A	2.5000	2.6	0.9292421	0.9485974		2.1	+/-50
1-Methylnaphthalene	A	2.5000	2.5	0.5284699	0.5355459		1.3	+/-50
2-Methylnaphthalene	A	2.5000	2.6	0.5432098	0.5574847		2.6	+/-50
Biphenyl	A	2.5000	2.5	0.8026611	0.8101478		0.9	+/-50
2,6-Dimethylnaphthalene	A	2.5000	2.5	0.5902664	0.5989785		1.5	+/-50
Acenaphthylene	A	2.5000	2.6	1.0090320	1.0422160		3.3	+/-50
Acenaphthene	A	2.5000	2.5	0.6220308	0.6332339		1.8	+/-50
Dibenzofuran	A	2.5000	2.5	0.9226724	0.9362725		1.5	+/-50
2,3,5-Trimethylnaphthalene	A	2.5000	2.6	0.6011392	0.6184552		2.9	+/-50
Fluorene	A	2.5000	2.5	0.7148800	0.7194438		0.6	+/-50
Benzo(b)thiophene	A	2.5000	2.5	0.7639133	0.7604150		-0.5	+/-50
Phenanthrene	A	2.5000	2.5	1.0312030	1.0344080		0.3	+/-50
Anthracene	A	2.5000	2.5	0.9702418	0.9779367		0.8	+/-50
Carbazole	A	2.5000	2.5	0.8557591	0.8867649		-1.4	+/-50
1-Methylphenanthrene	A	2.5000	2.6	0.7410711	0.7612627		2.7	+/-50
Fluoranthene	A	2.5000	2.7	1.1382070	1.2094470		6.3	+/-50
Dibenzothiophene	A	2.5000	2.6	1.0092670	1.0432030		3.4	+/-50
Pyrene	A	2.5000	2.7	1.1837730	1.2799640		8.1	+/-50
Benzo(a)anthracene	A	2.5000	2.7	0.7757052	0.8389629		8.2	+/-50
Chrysene	A	2.5000	2.6	0.7601074	0.7870553		3.5	+/-50
Benzo(b)fluoranthene	A	2.5000	2.4	0.8044926	0.7843191		-2.5	+/-50
Benzo(j)fluoranthene	A	2.5000	2.5	0.7953937	0.7991180		0.5	+/-50
Benzo(k)fluoranthene	A	2.5000	3.0	0.8631910	1.0353130		19.9	+/-50
Benzo(e)pyrene	A	2.5000	2.6	0.7884934	0.8139942		3.2	+/-50
Benzo(a)pyrene	A	2.5000	2.5	0.7172983	0.7192239		0.3	+/-50
Indeno(1,2,3-cd)pyrene	A	2.5000	2.6	0.8419699	0.8898503		5.7	+/-50
Dibenzo(a,h)anthracene	A	2.5000	2.4	0.7153598	0.7593228		-4.1	+/-50
Benzo(g,h,i)perylene	A	2.5000	2.5	0.8318028	0.8380127		0.7	+/-50
Perylene	A	2.5000	2.6	0.7395491	0.7653809		3.5	+/-50
Benzo(b)naphtho(2,1-d)thiophene	A	2.5000	2.7	1.2719290	1.3580990		6.8	+/-50
Naphthalene-d8	A	2.5000	2.54	0.9297733	0.9441565		1.5	+/-50
Acenaphthene-d10	A	2.5000	2.54	0.5710501	0.5806924		1.7	+/-50

* Values outside of QC limits

Analytical Resources, Incorporated
Analytical Chemists and Consultants

CONTINUING CALIBRATION CHECK
EPA 8270E-SIM

Laboratory:	Analytical Resources, Inc.	SDG:	21E0106
Client:	Anchor QEA, LLC	Project:	Gasco Siltronic - US Moorings
Instrument ID:	NT14	Calibration:	EF00008
Lab File ID:	NT1421060433.D	Calibration Date:	06/02/2021
Sequence:	SJF0131	Injection Date:	06/05/21
Lab Sample ID:	SJF0131-CCV1	Injection Time:	14:42
Sequence Name:	Calibration Check		

		CONC. (ug/mL)		RESPONSE FACTOR (RRF)			% DRIFT/DIFF	
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN	CCV	LIMIT
Phenanthrene-d10	A	2.5000	2.49	0.9622084	0.9580594		-0.4	+/-50
Chrysene-d12	A	2.5000	2.66	0.6260378	0.6654769		6.3	+/-50
Perylene-d12	A	2.5000	2.55	0.6758124	0.6899428		2.1	+/-50

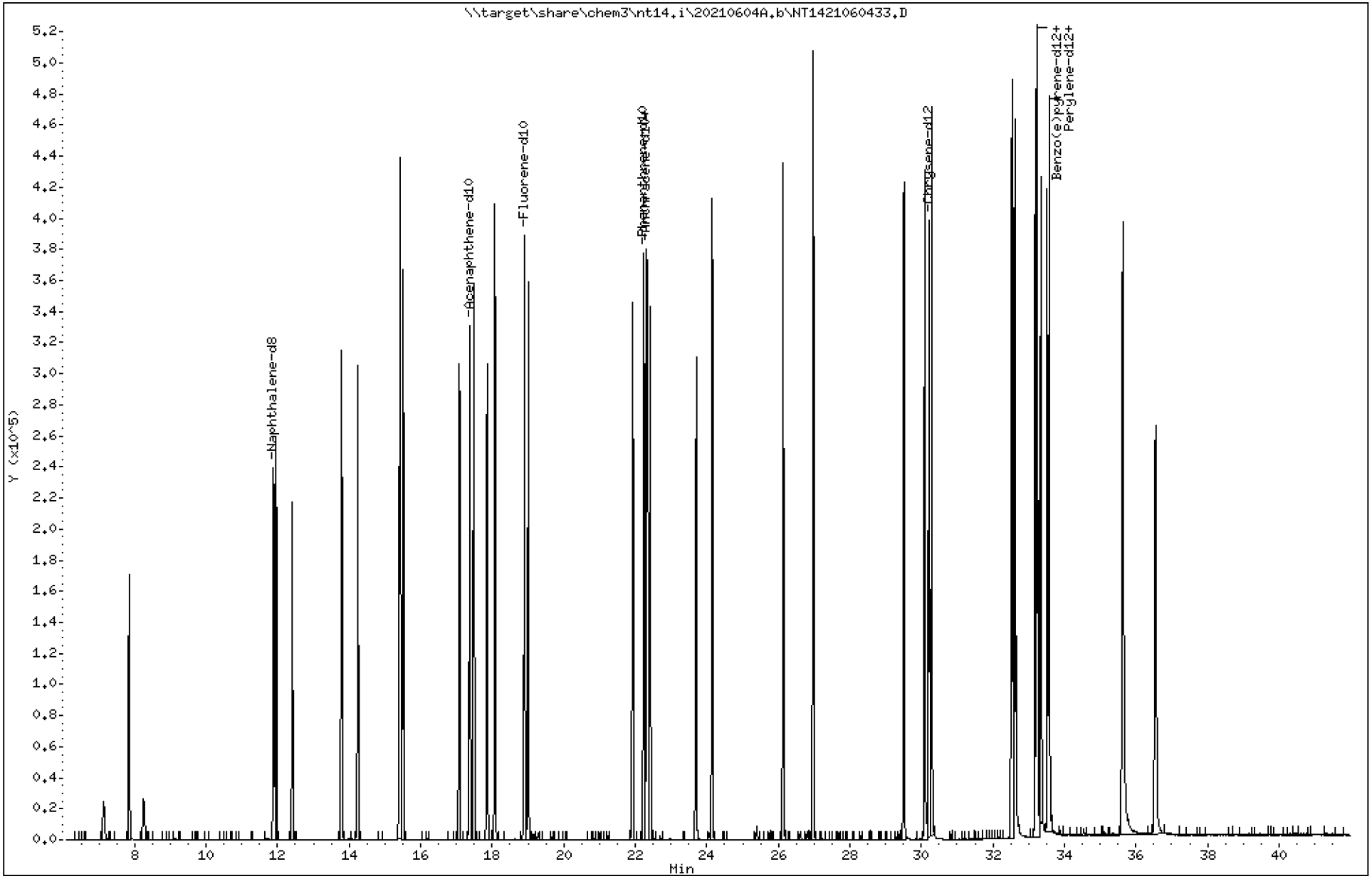
* Values outside of QC limits

Data File: \\target\share\chem3\nt14.i\20210604A.b\NT1421060433.D
Date : 05-JUN-2021 14:42
Client ID:
Sample Info: SJF0131-CCV1

Instrument: nt14.i

Operator: VTS

Column phase: Rxi-17Sil MS
Column diameter: 0.25



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Date : 05-JUN-2021 14:42

Client ID:

Instrument: nt14.i

Sample Info: SJF0131-CCV1

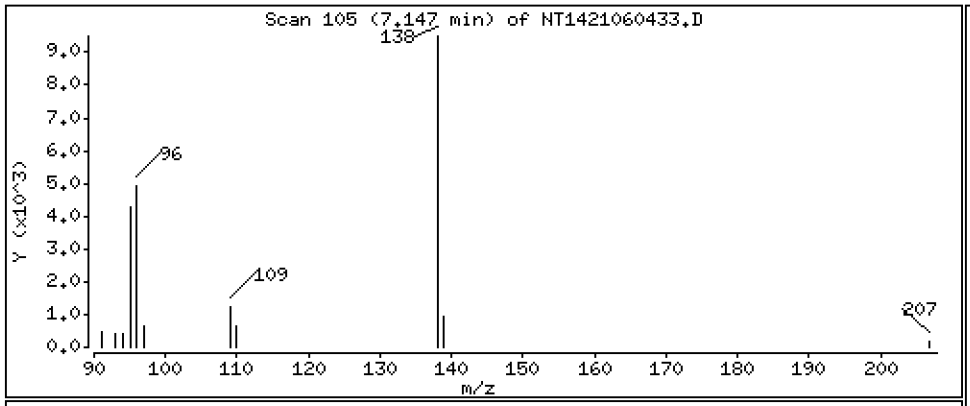
Operator: VTS

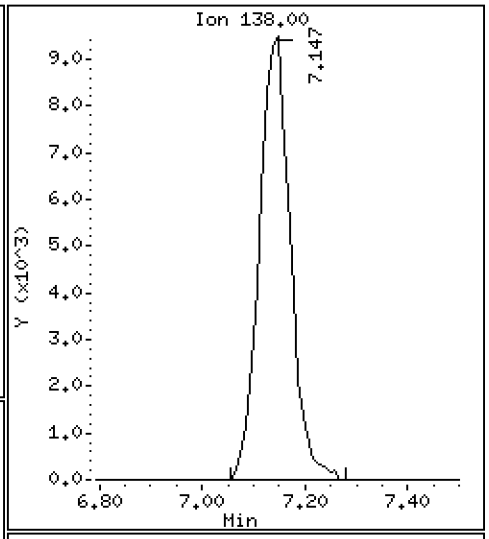
Column phase: Rxi-17Sil MS

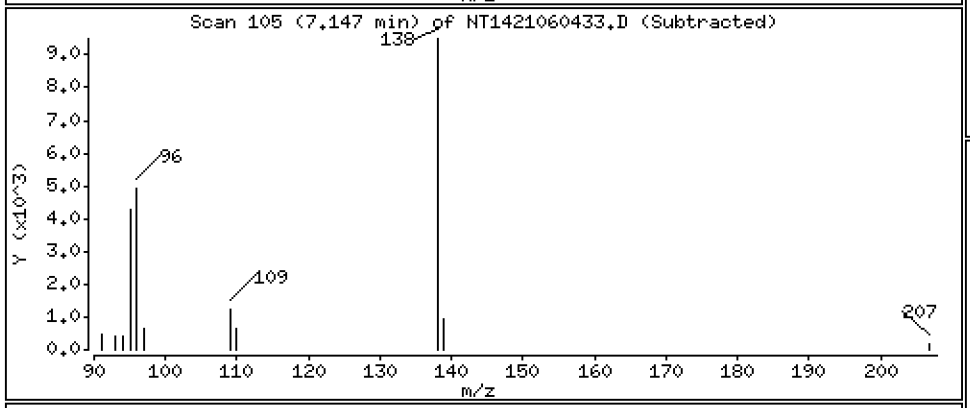
Column diameter: 0.25

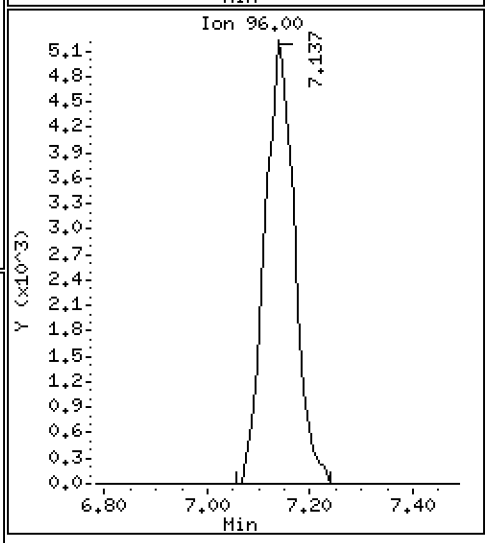
1 trans-Decalin

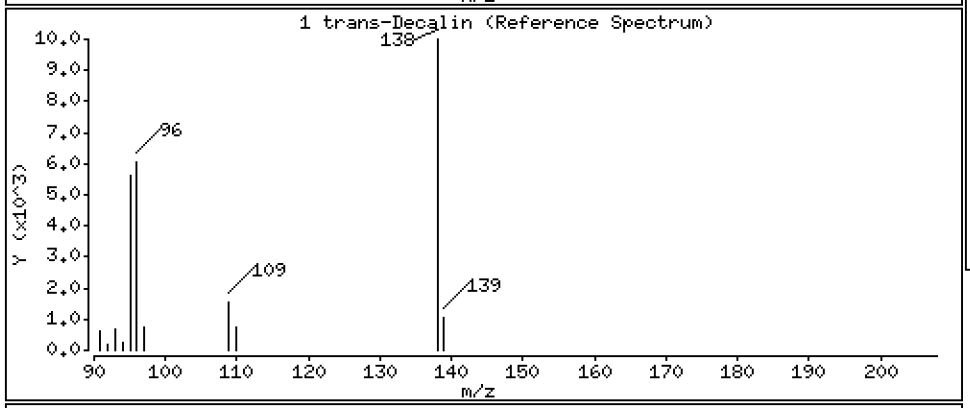
Concentration: 2.781 ug/mL

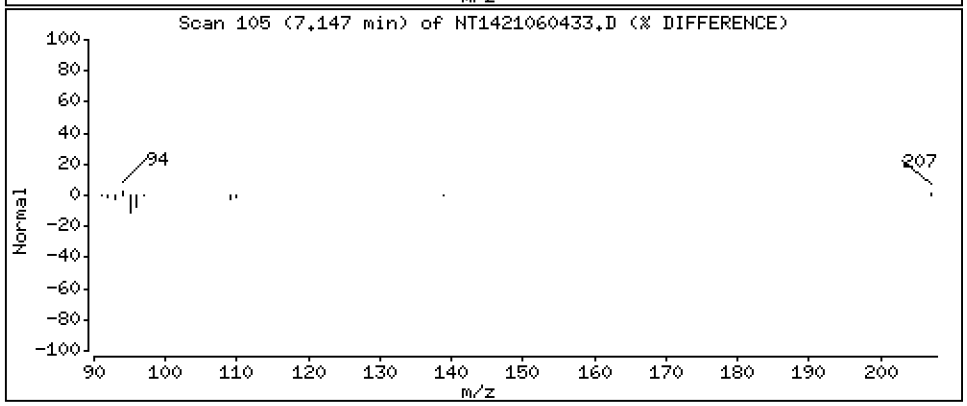












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Date : 05-JUN-2021 14:42

Client ID:

Instrument: nt14.i

Sample Info: SJF0131-CCV1

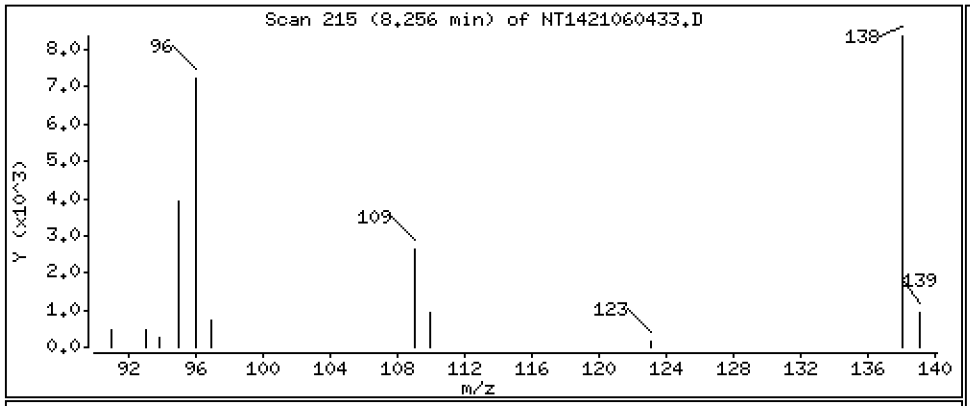
Operator: VTS

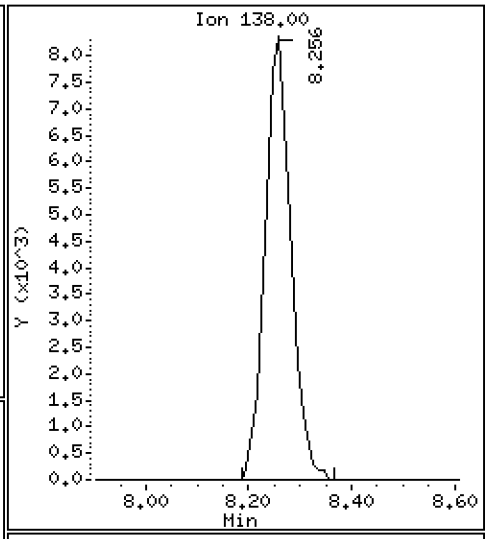
Column phase: Rxi-17Sil MS

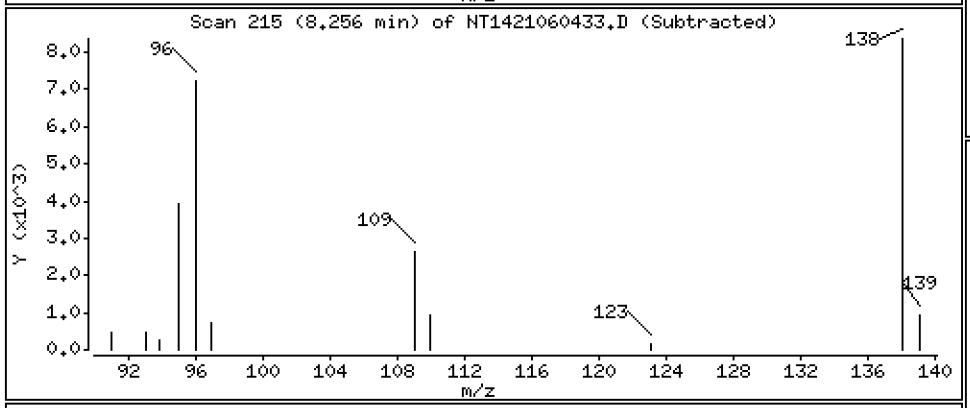
Column diameter: 0.25

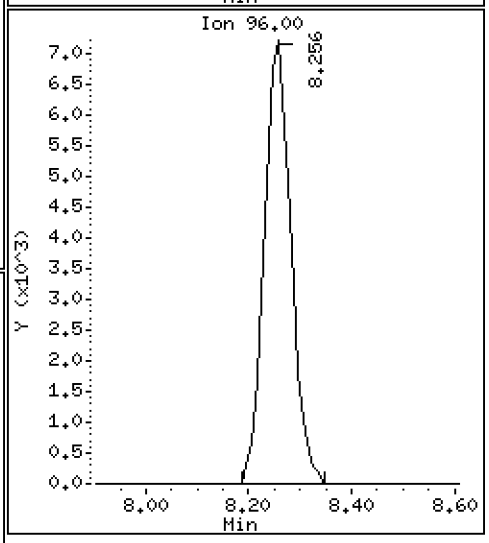
2 cis-Decalin

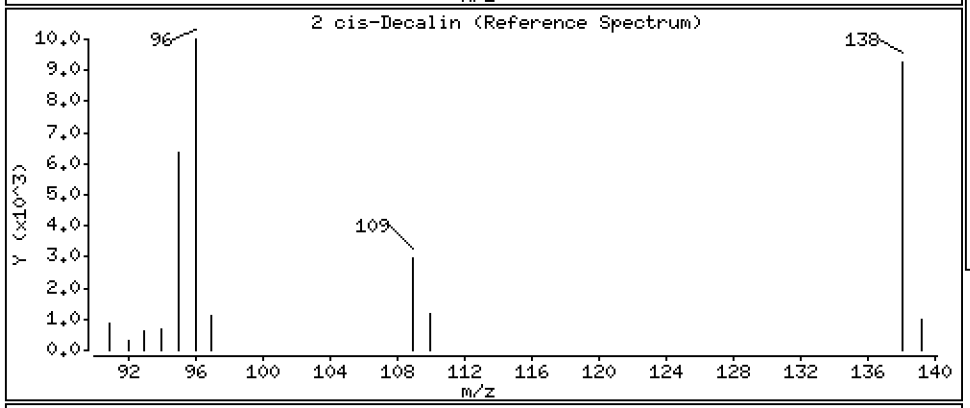
Concentration: 2.489 ug/mL

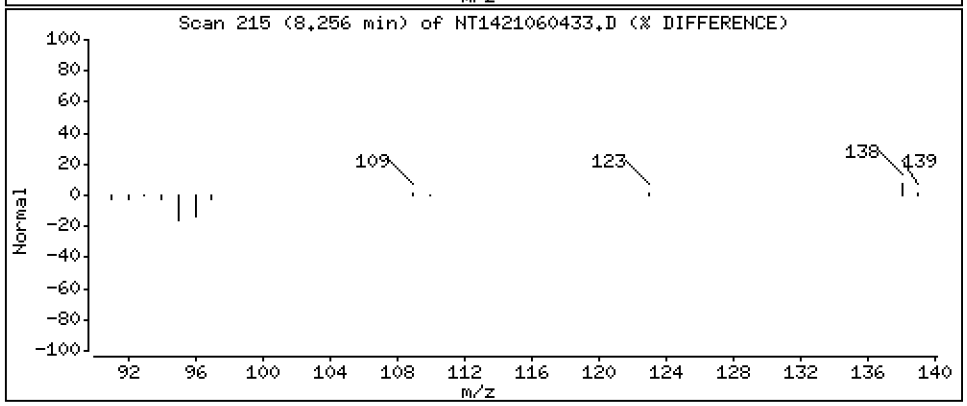












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Date : 05-JUN-2021 14:42

Client ID:

Instrument: nt14.i

Sample Info: SJF0131-CCV1

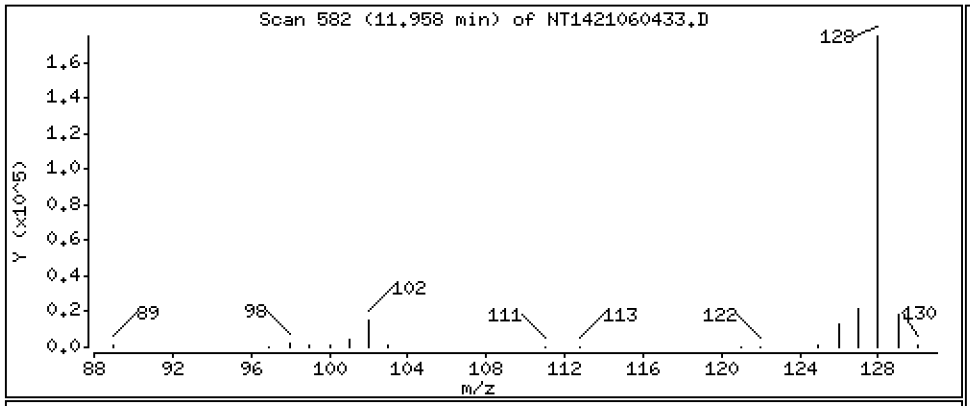
Operator: VTS

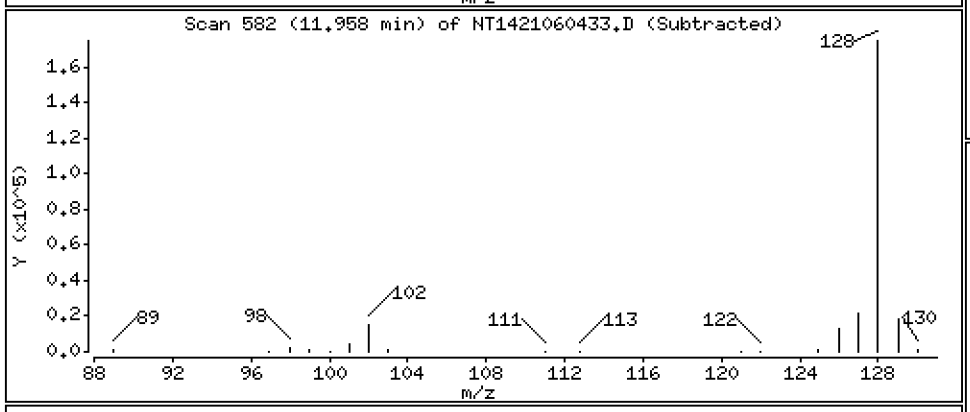
Column phase: Rxi-17Sil MS

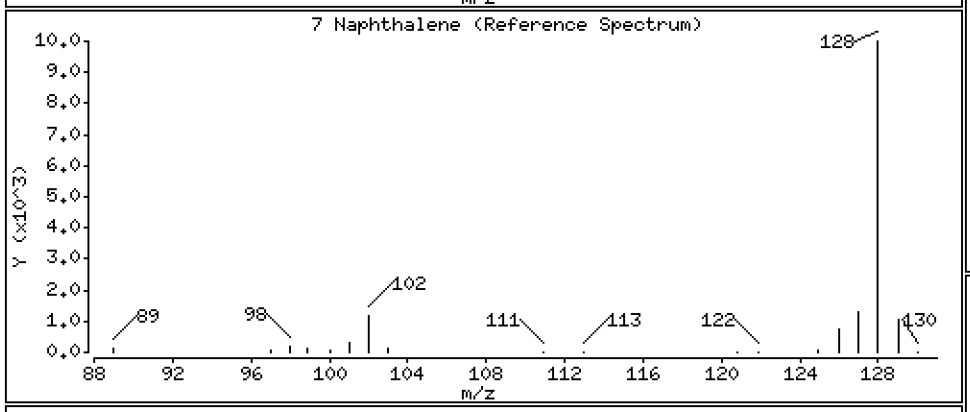
Column diameter: 0.25

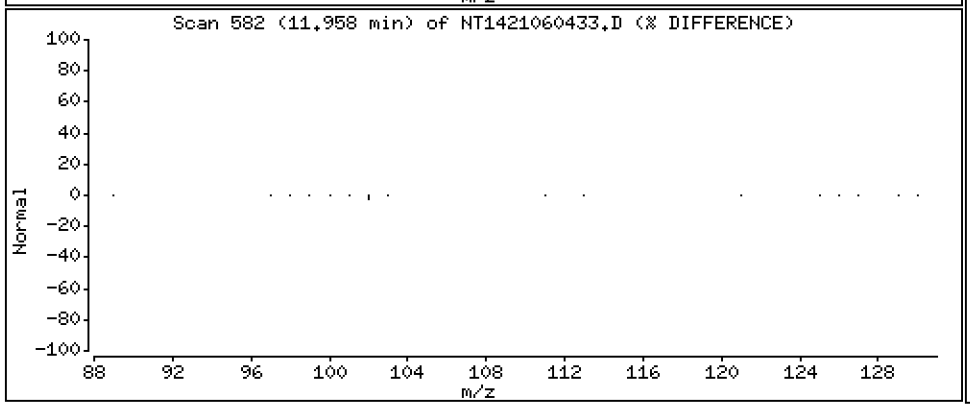
7 Naphthalene

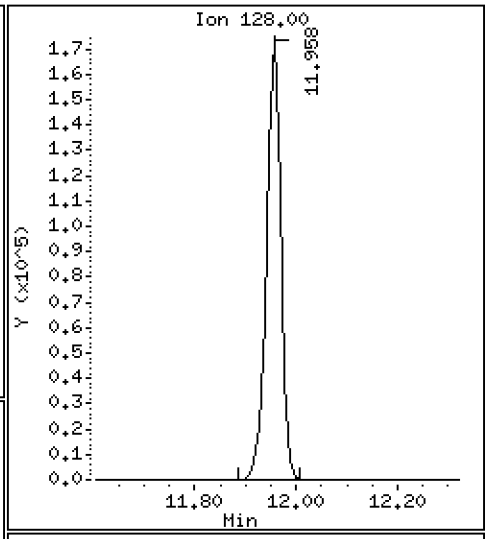
Concentration: 2.552 ug/mL

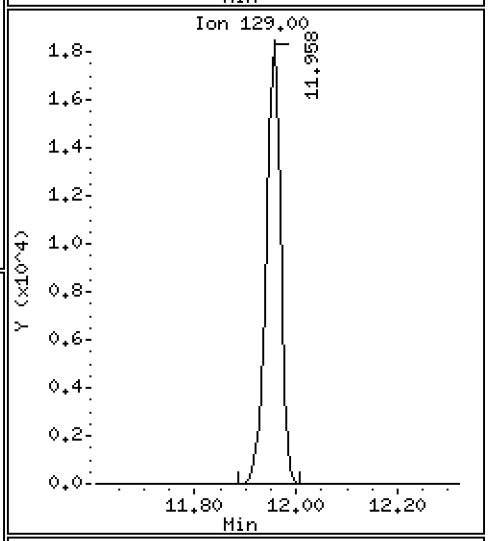


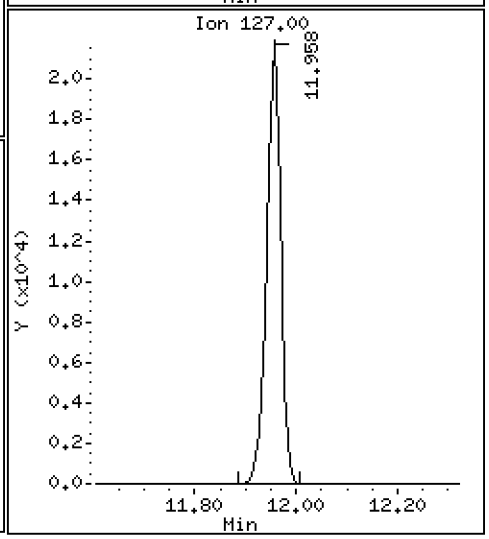












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Date : 05-JUN-2021 14:42

Client ID:

Instrument: nt14.i

Sample Info: SJF0131-CCV1

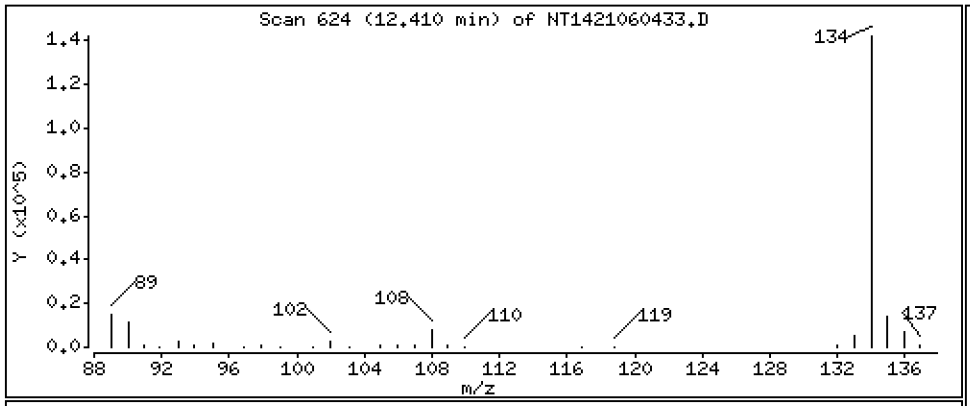
Operator: VTS

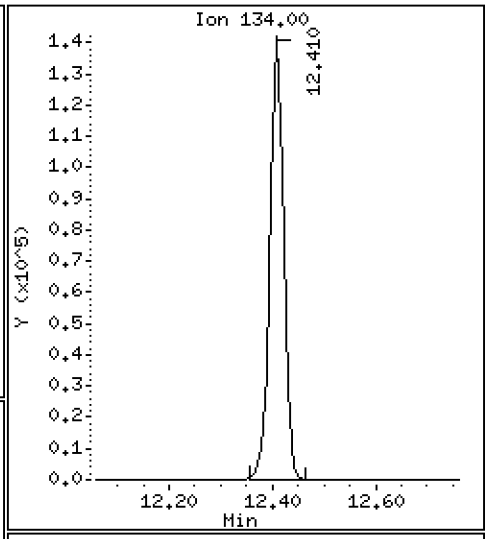
Column phase: Rxi-17Sil MS

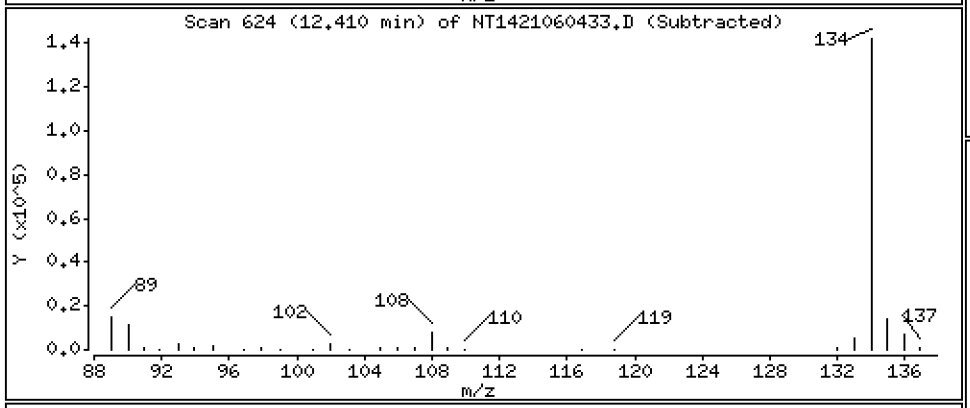
Column diameter: 0.25

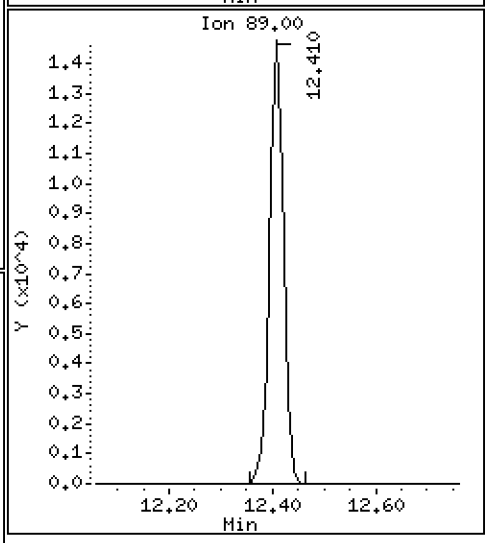
12 Benzo(b)thiophene

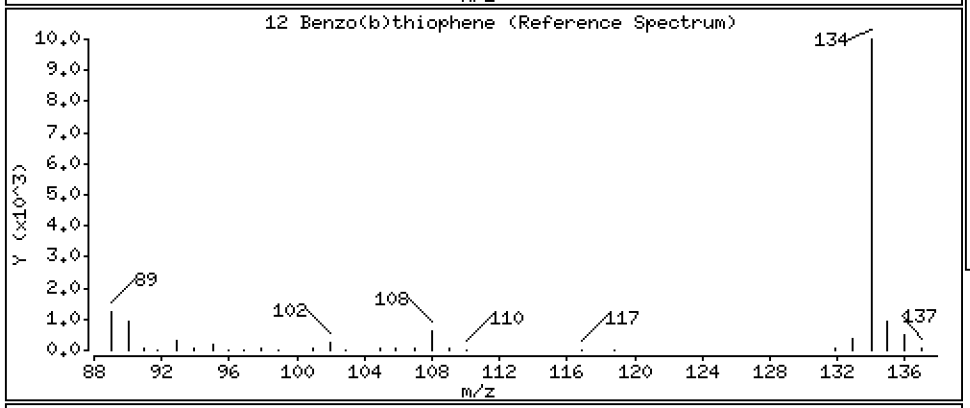
Concentration: 2.489 ug/mL

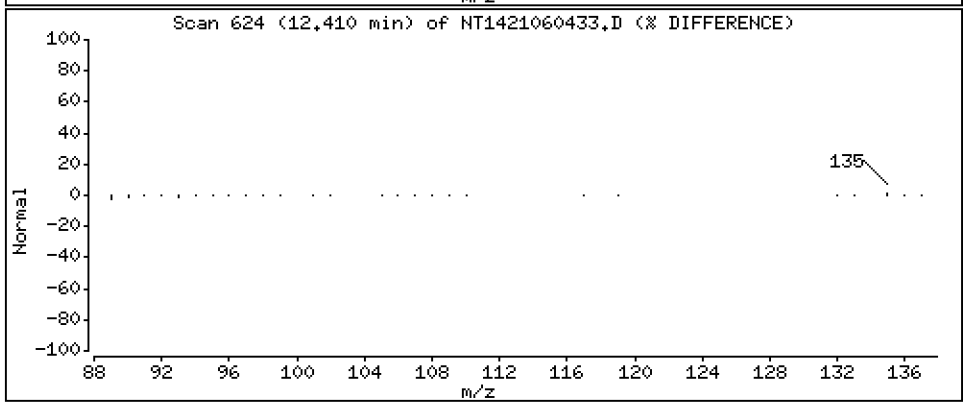












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Date : 05-JUN-2021 14:42

Client ID:

Instrument: nt14.i

Sample Info: SJF0131-CCV1

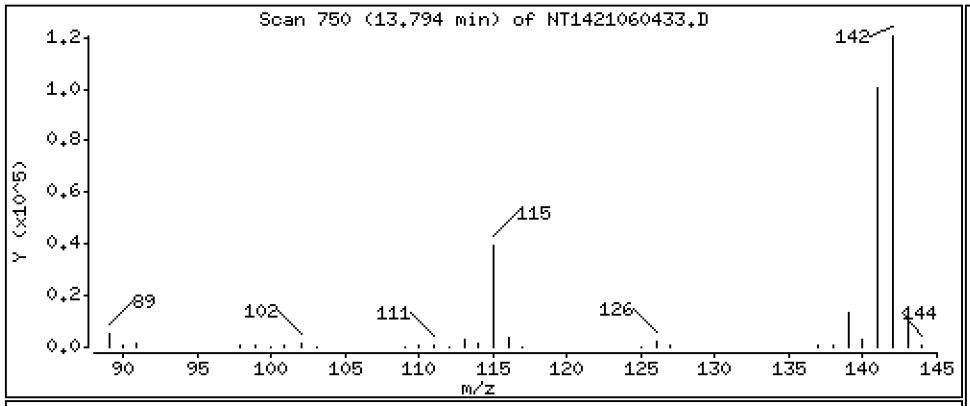
Operator: VTS

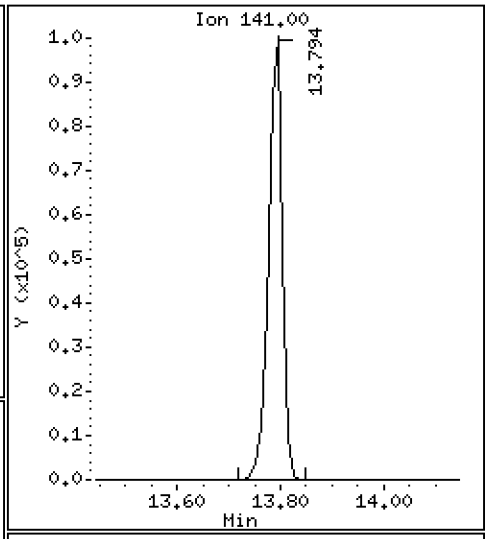
Column phase: Rxi-17Sil MS

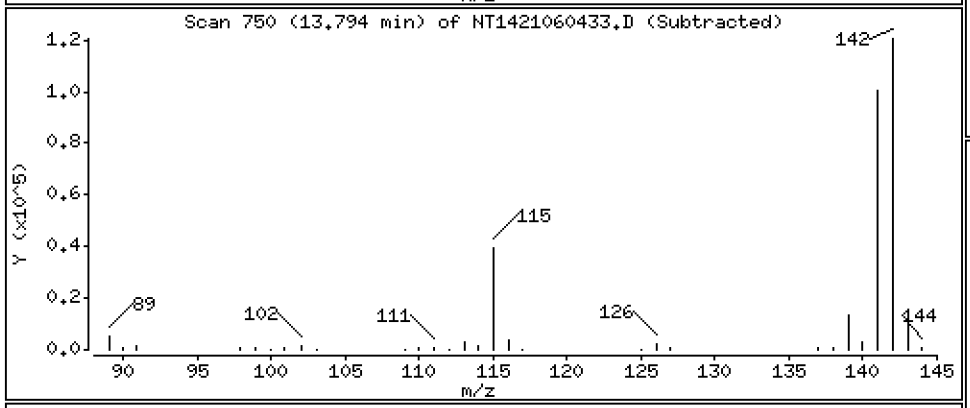
Column diameter: 0.25

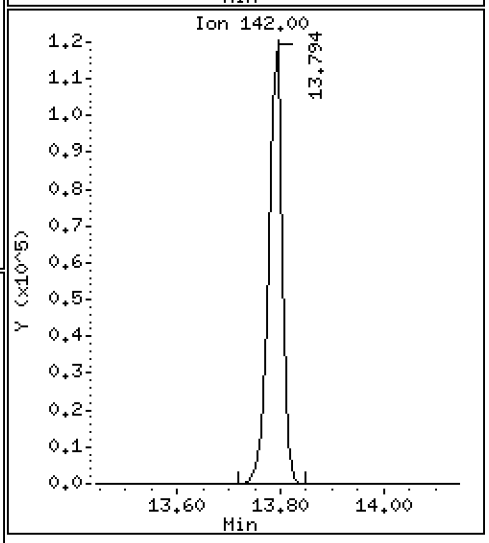
16 2-Methylnaphthalene

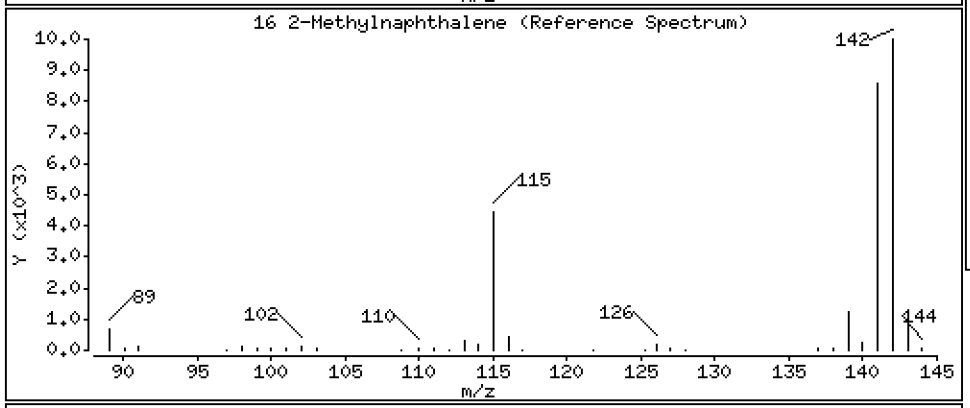
Concentration: 2.566 ug/mL

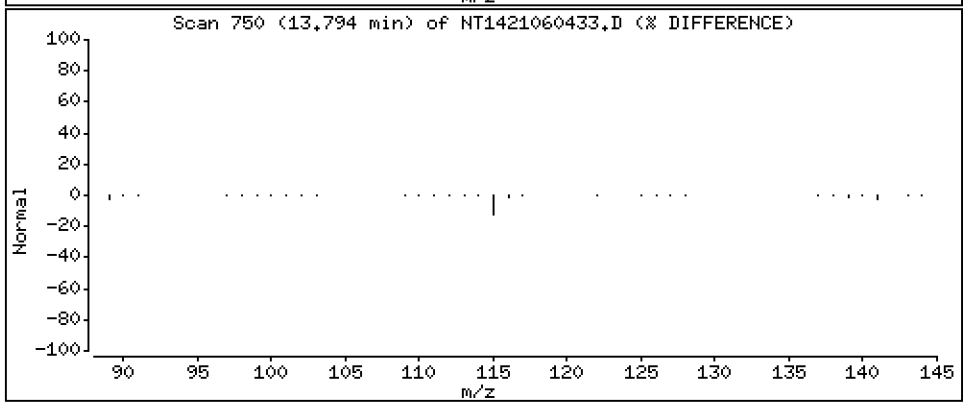












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Date : 05-JUN-2021 14:42

Client ID:

Instrument: nt14.i

Sample Info: SJF0131-CCV1

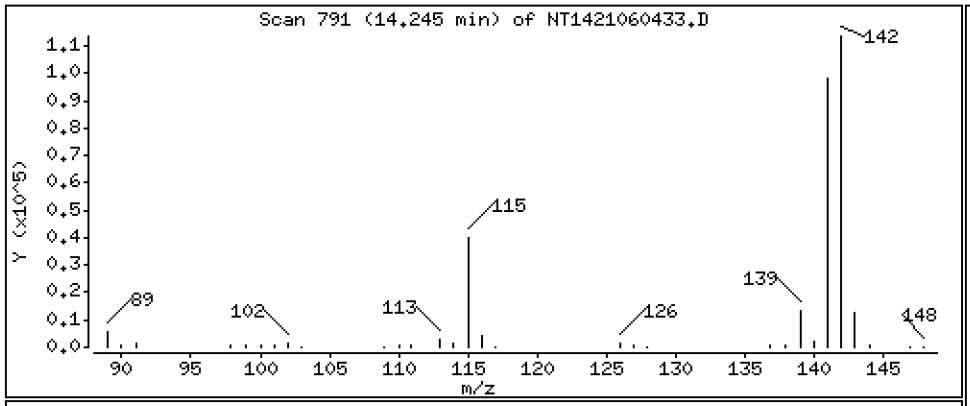
Operator: VTS

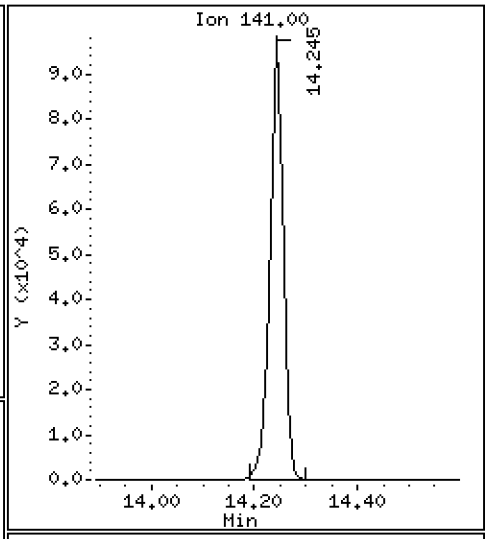
Column phase: Rxi-17Sil MS

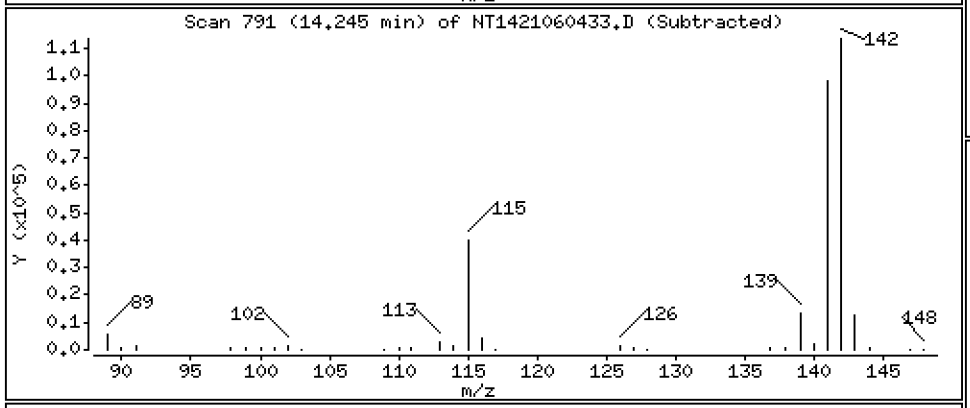
Column diameter: 0.25

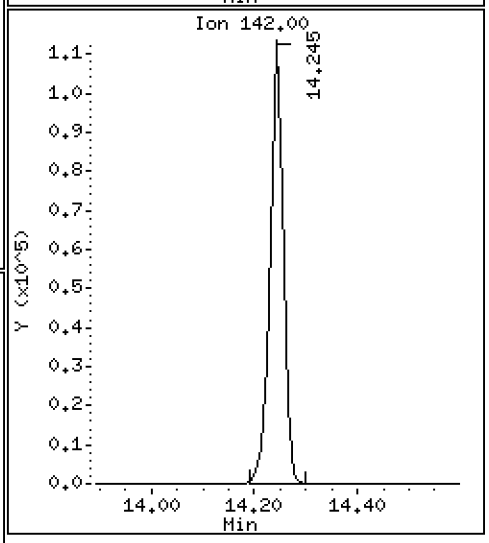
17 1-methylnaphthalene

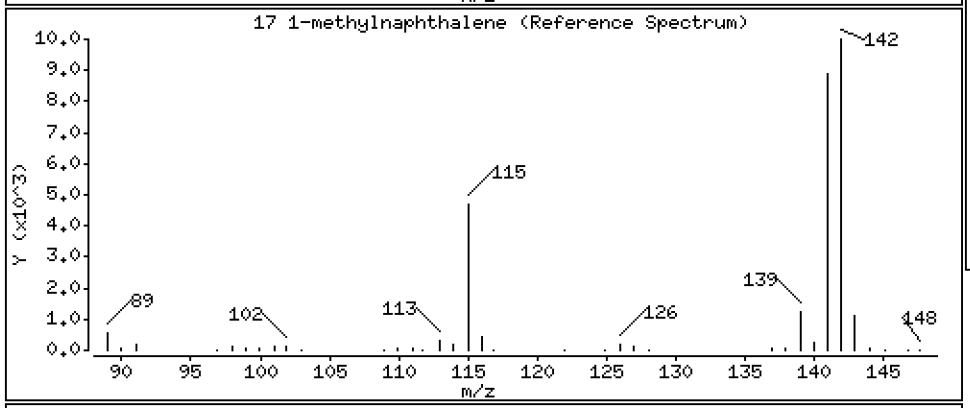
Concentration: 2.533 ug/mL

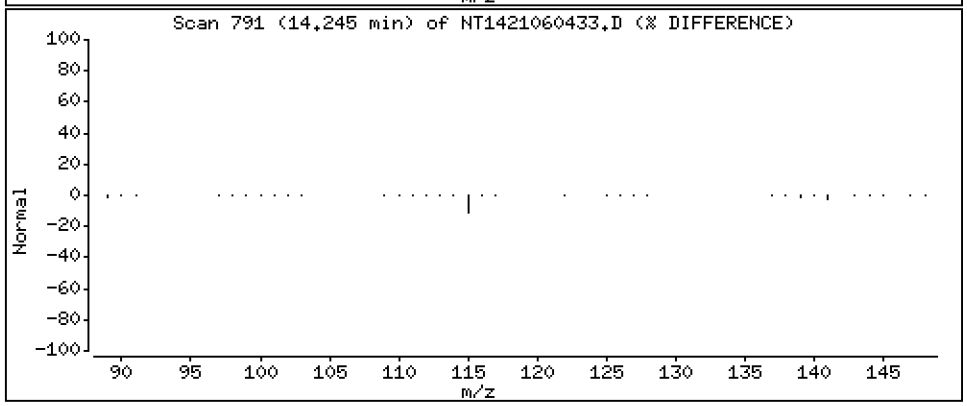












Data File: \\target\share\chem3\nt14.i\20210604A.b\NT1421060433.D

Date : 05-JUN-2021 14:42

Client ID:

Instrument: nt14.i

Sample Info: SJF0131-CCV1

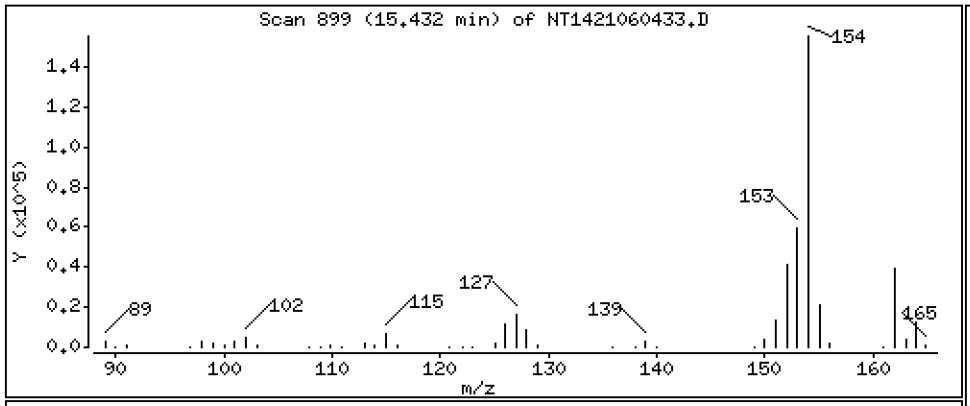
Operator: VTS

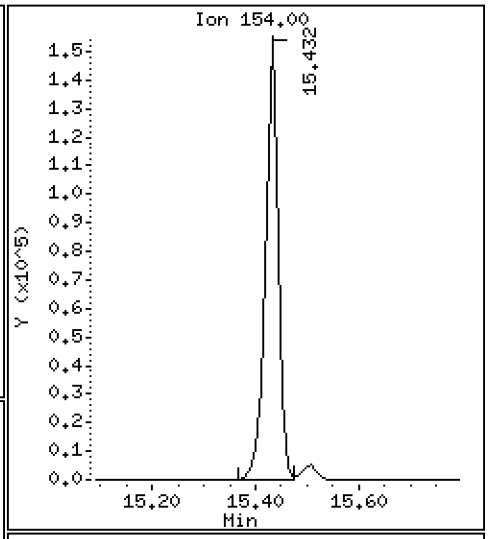
Column phase: Rxi-17Sil MS

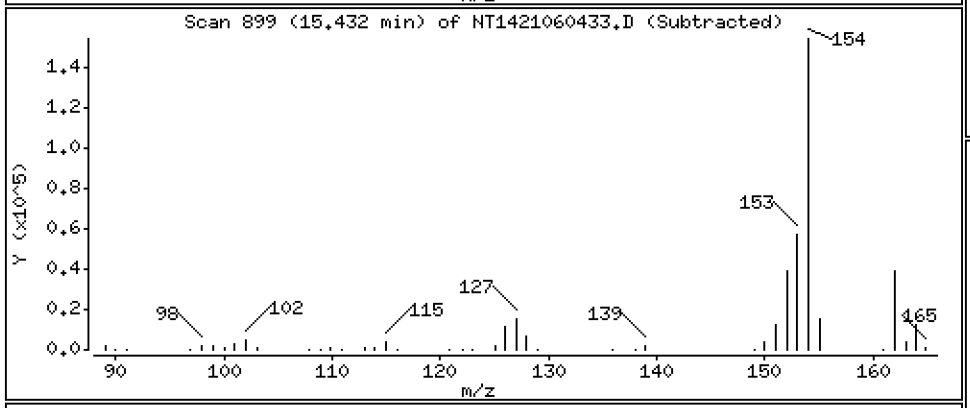
Column diameter: 0.25

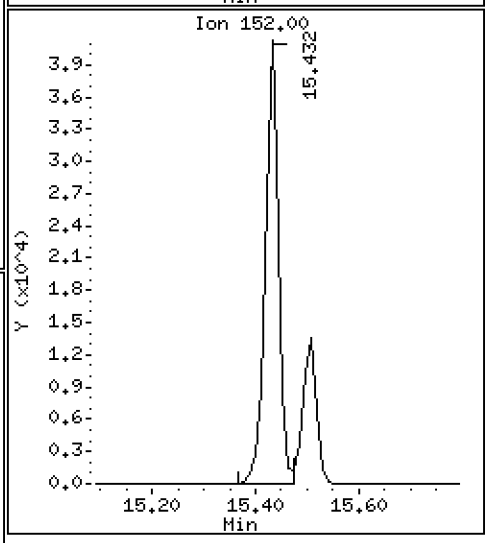
18 Biphenyl

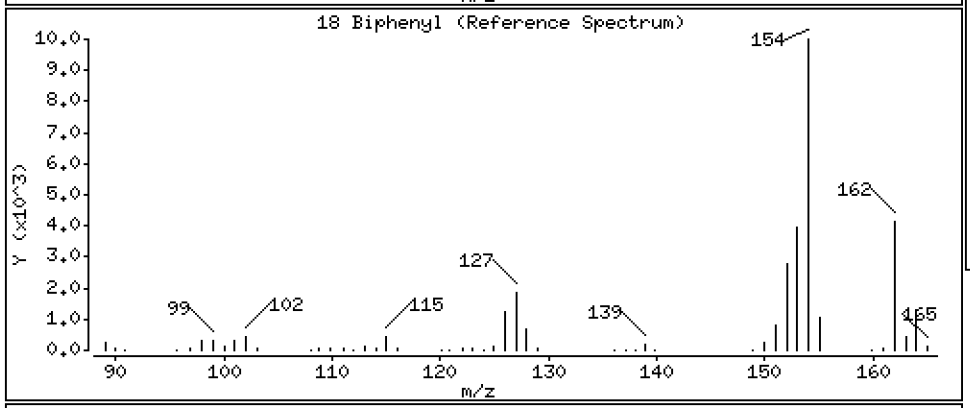
Concentration: 2.523 ug/mL

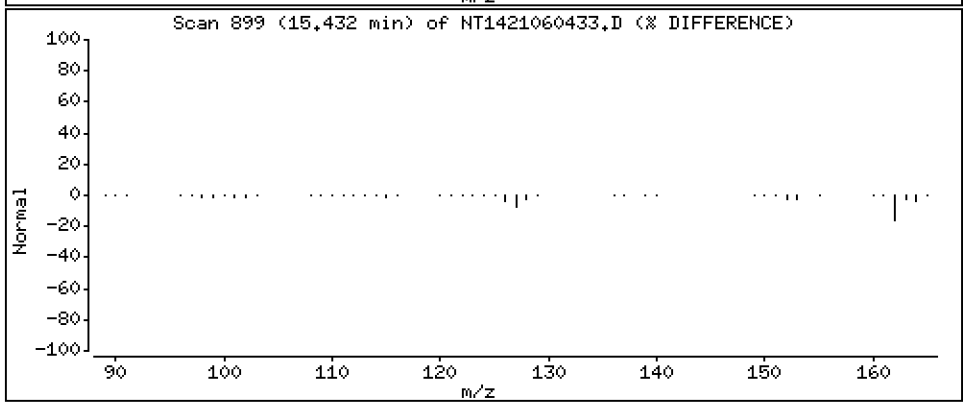












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Date : 05-JUN-2021 14:42

Client ID:

Instrument: nt14.i

Sample Info: SJF0131-CCV1

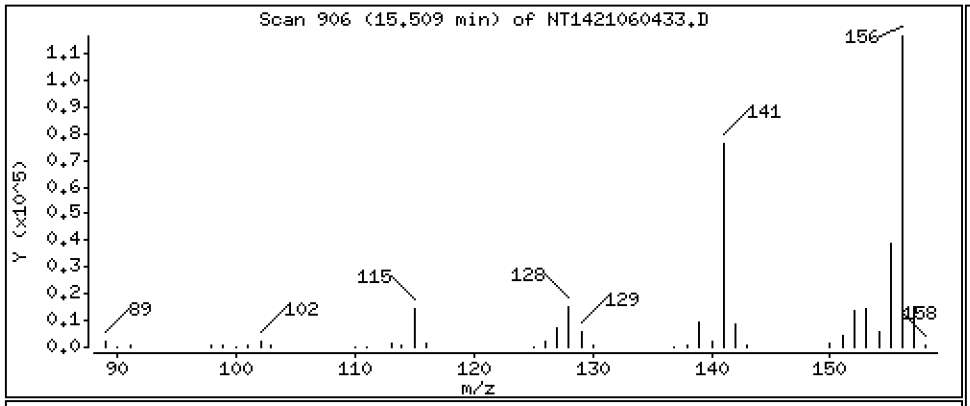
Operator: VTS

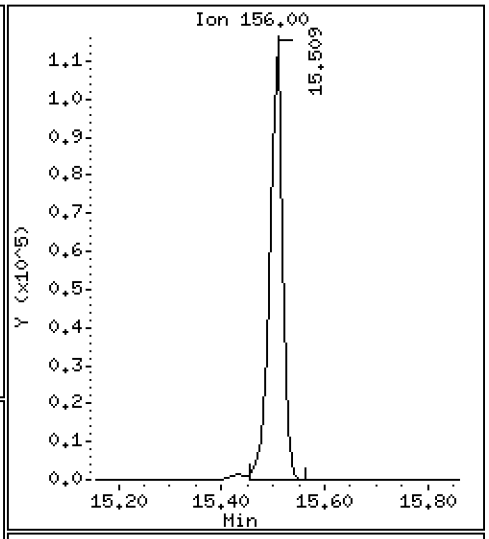
Column phase: Rxi-17Sil MS

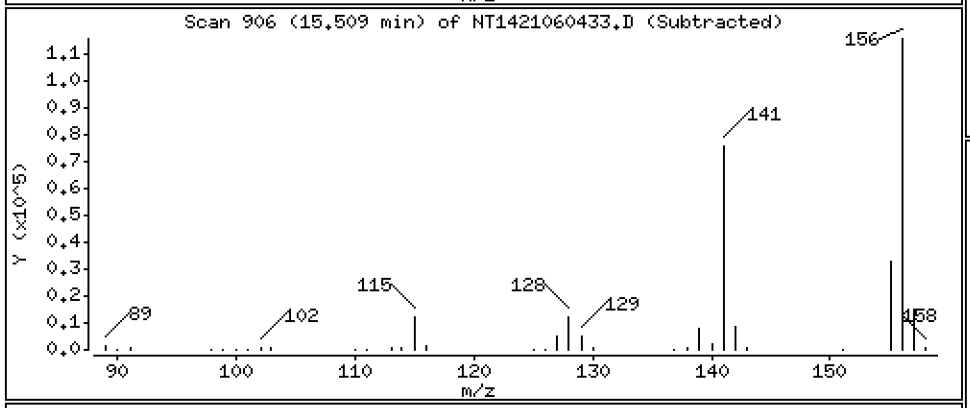
Column diameter: 0.25

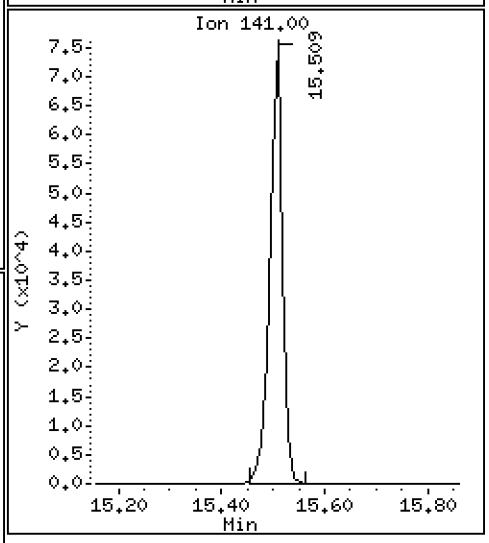
19 2,6-Dimethylnaphthalene

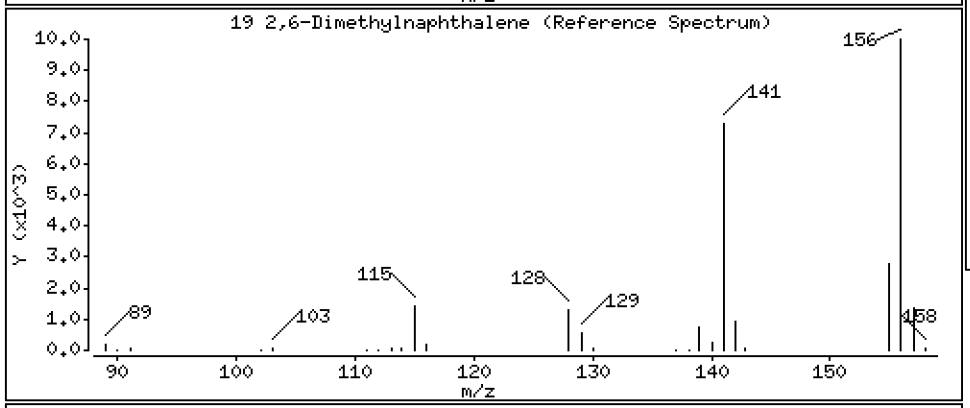
Concentration: 2.537 ug/mL

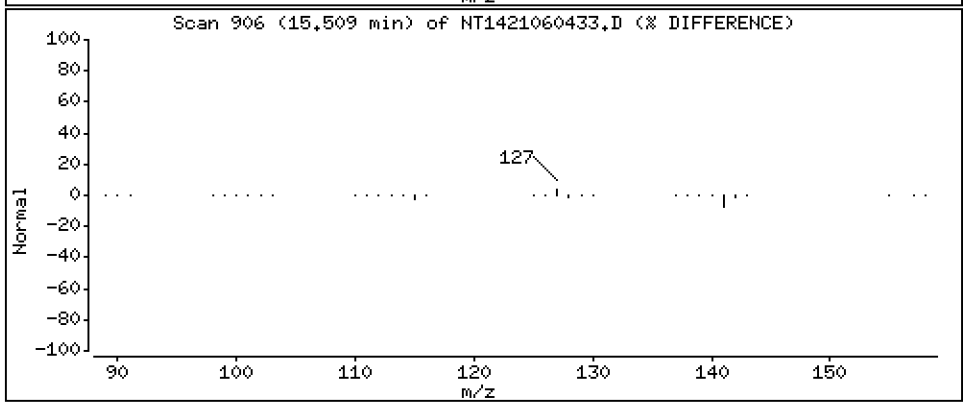












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Date : 05-JUN-2021 14:42

Client ID:

Instrument: nt14.i

Sample Info: SJF0131-CCV1

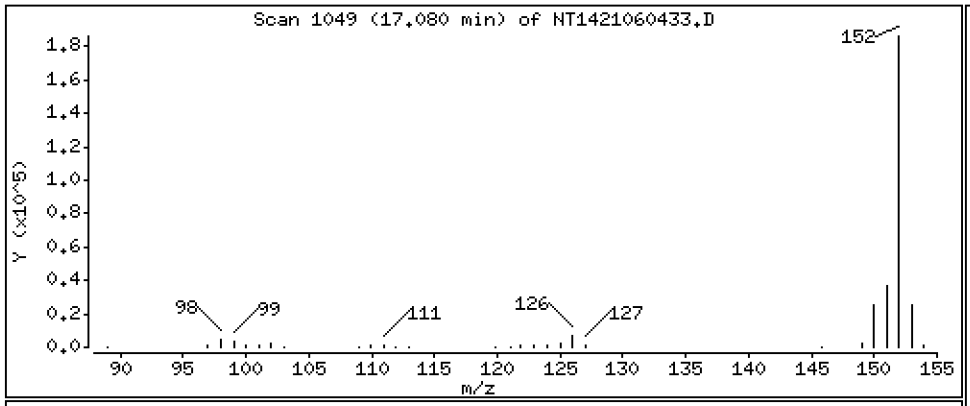
Operator: VTS

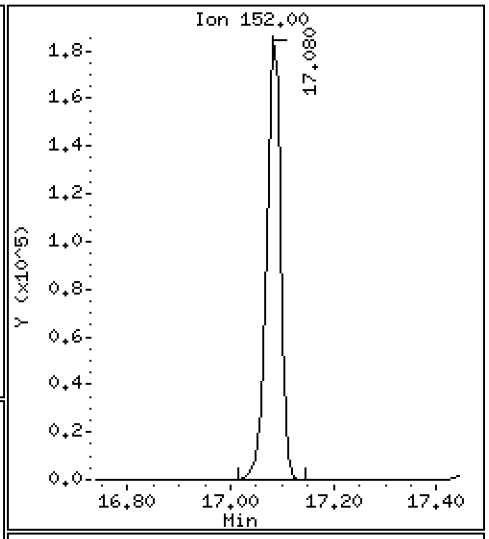
Column phase: Rxi-17Sil MS

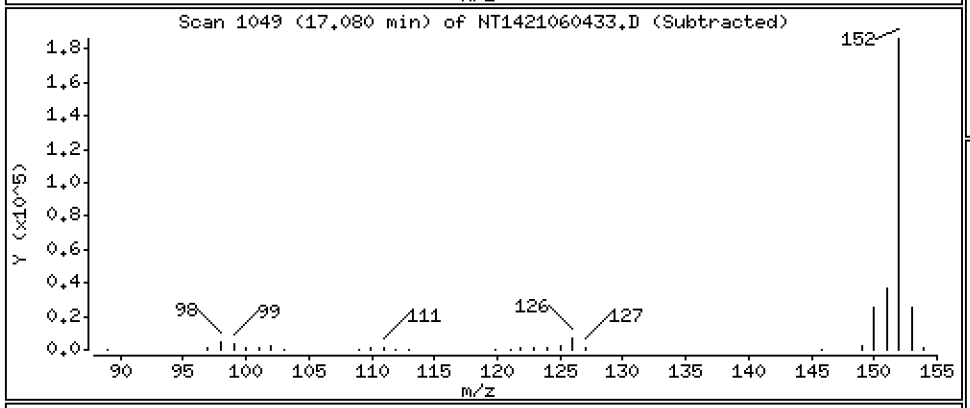
Column diameter: 0.25

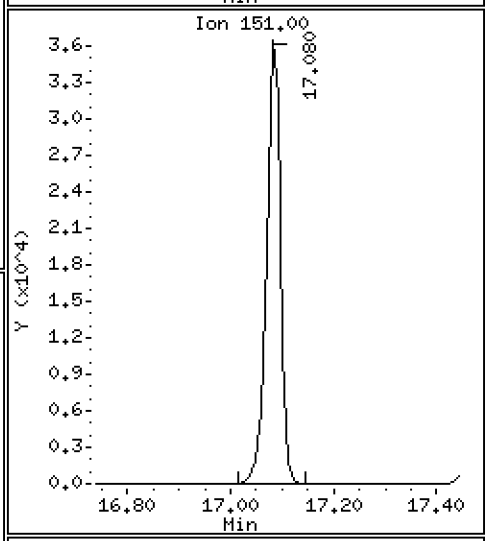
20 Acenaphthylene

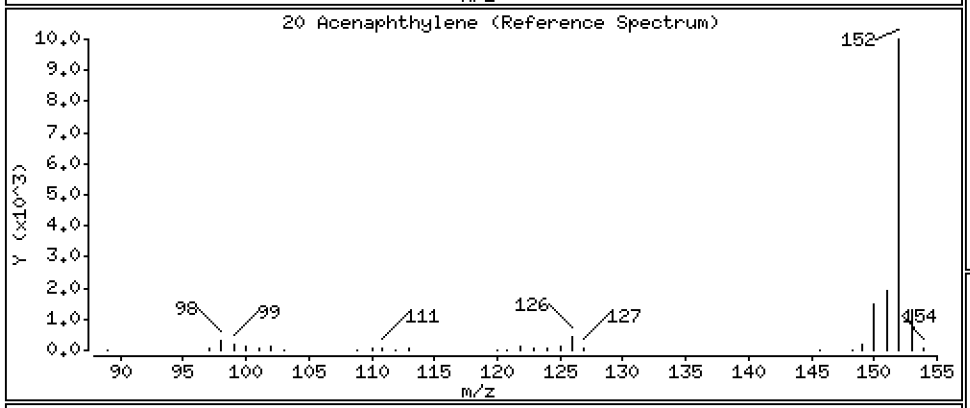
Concentration: 2.582 ug/mL

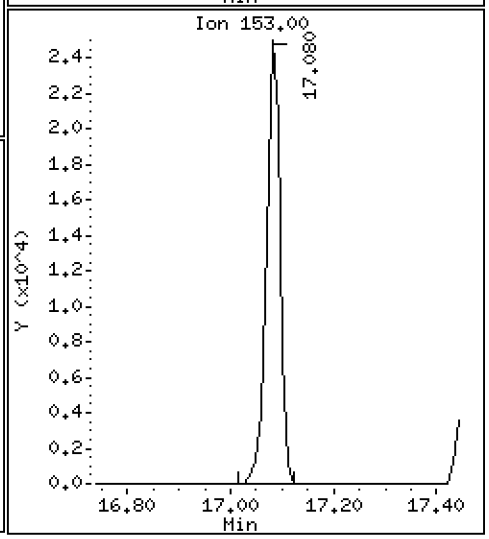


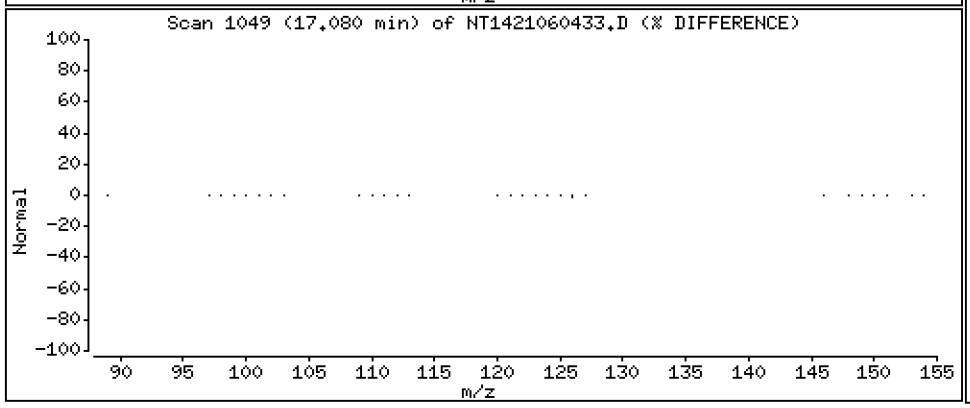












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Date : 05-JUN-2021 14:42

Client ID:

Instrument: nt14.i

Sample Info: SJF0131-CCV1

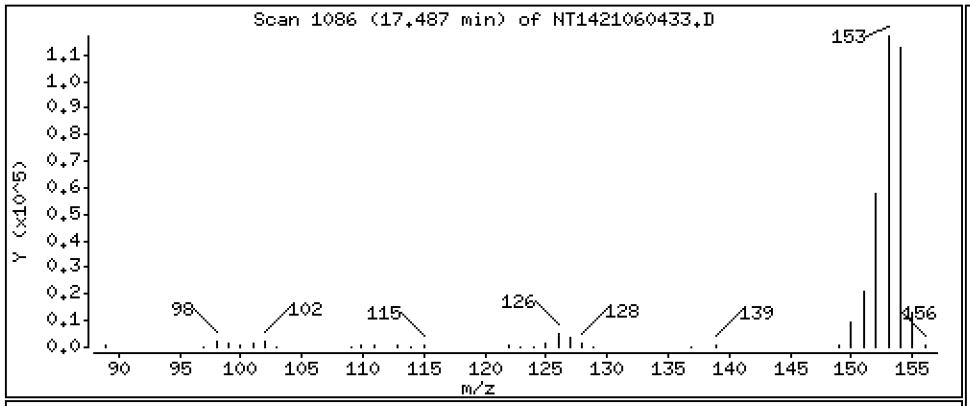
Operator: VTS

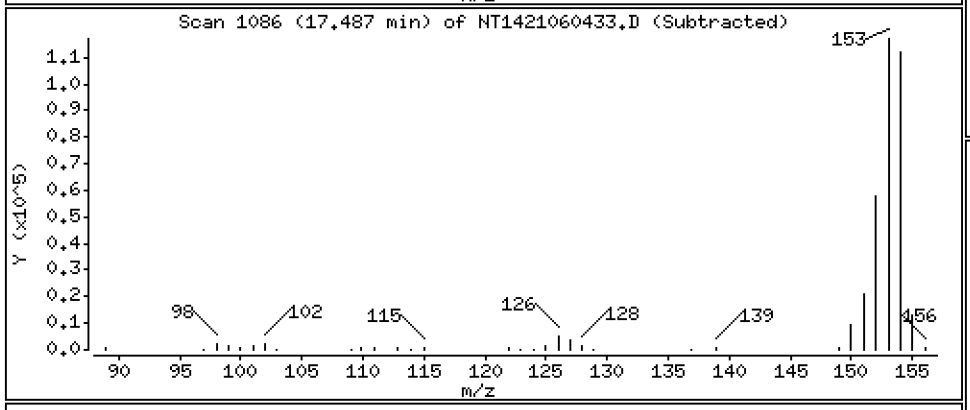
Column phase: Rxi-17Sil MS

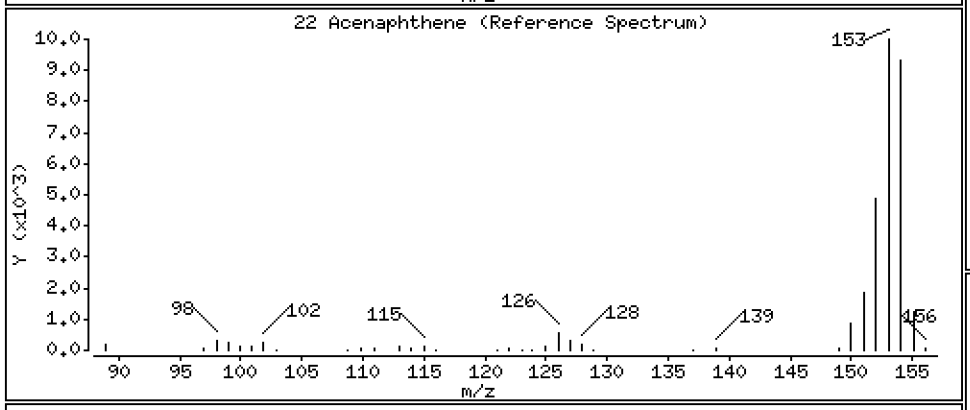
Column diameter: 0.25

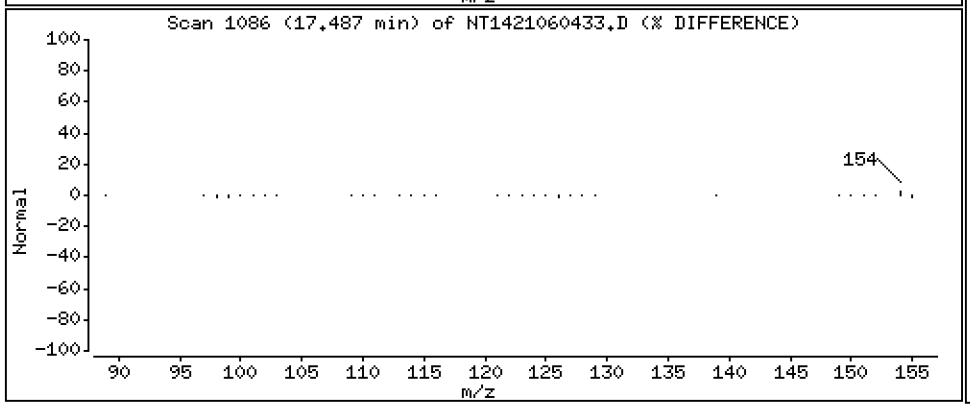
22 Acenaphthene

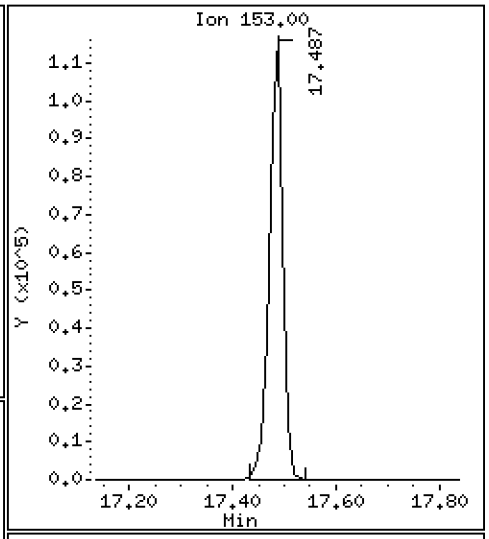
Concentration: 2.545 ug/mL

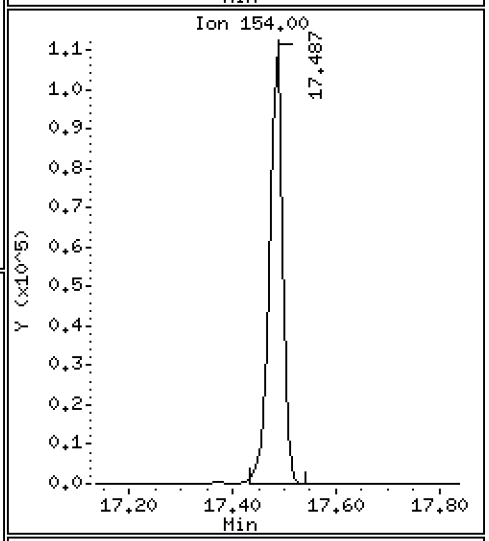


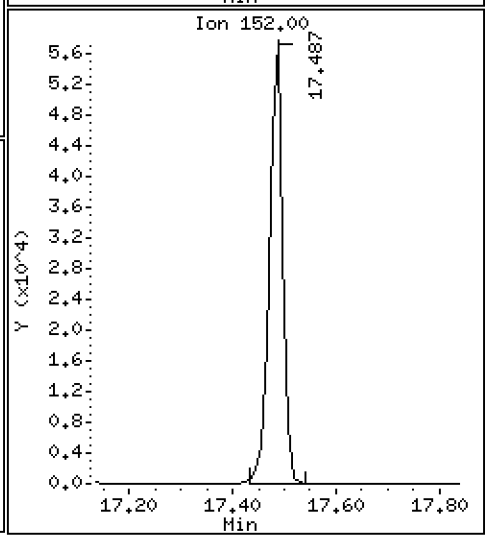












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Date : 05-JUN-2021 14:42

Client ID:

Instrument: nt14.i

Sample Info: SJF0131-CCV1

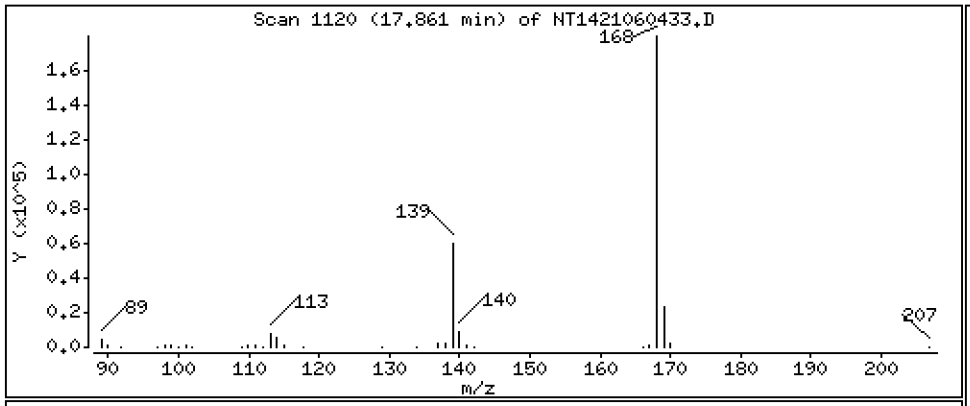
Operator: VTS

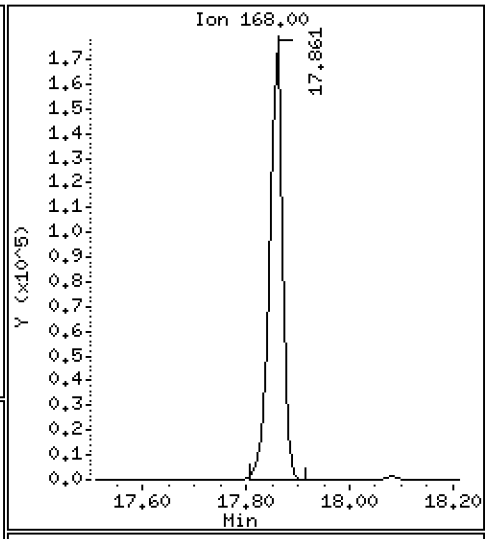
Column phase: Rxi-17Sil MS

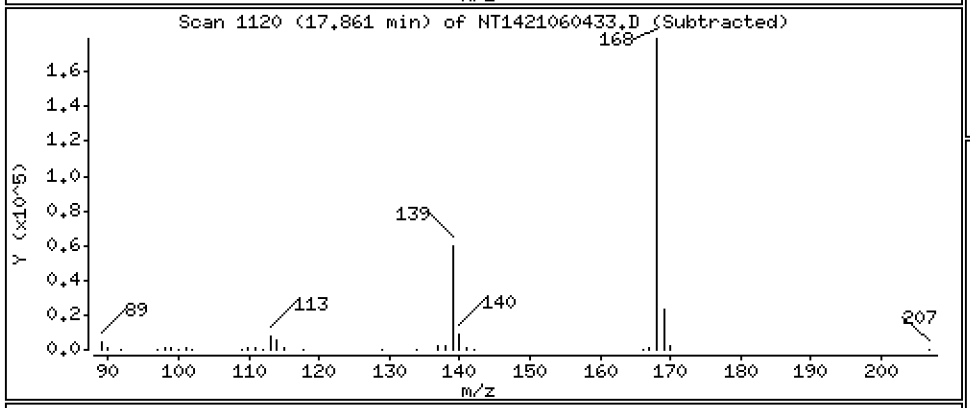
Column diameter: 0.25

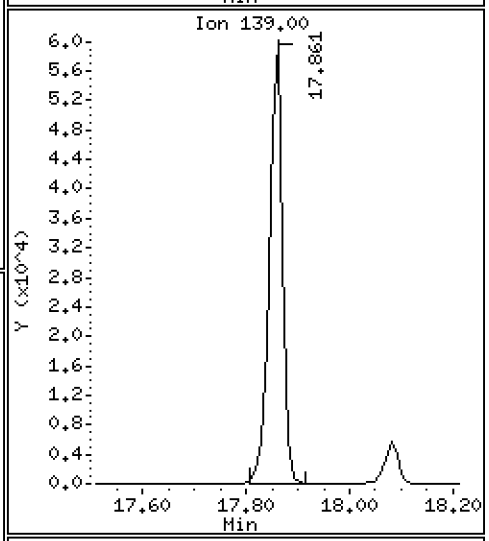
23 Dibenzofuran

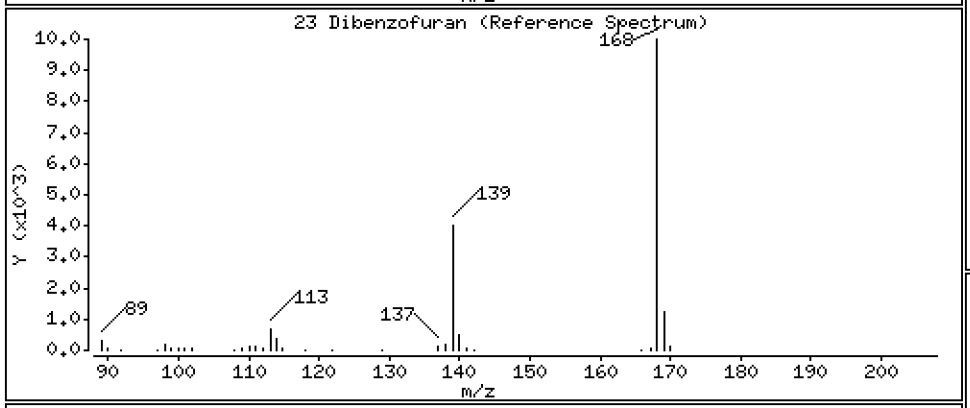
Concentration: 2.537 ug/mL

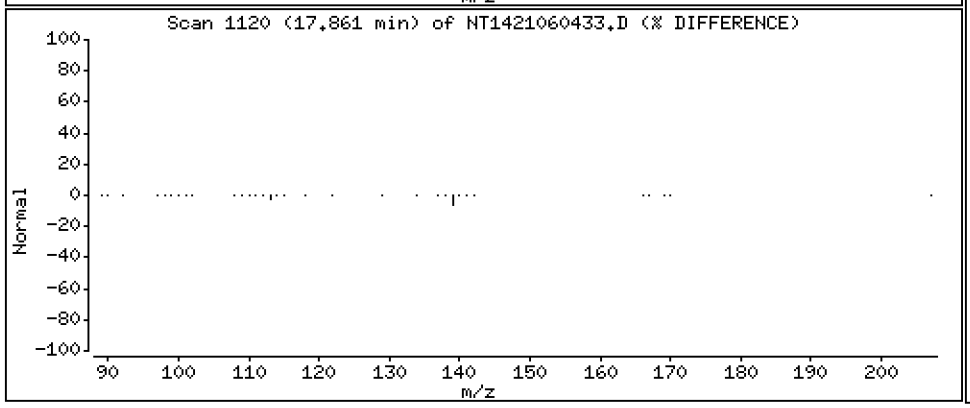


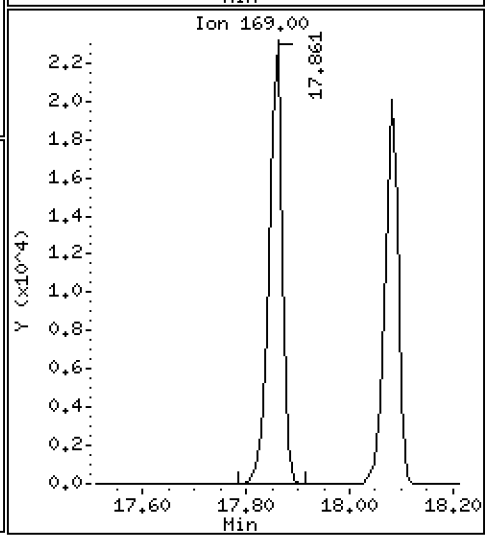












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Date : 05-JUN-2021 14:42

Client ID:

Instrument: nt14.i

Sample Info: SJF0131-CCV1

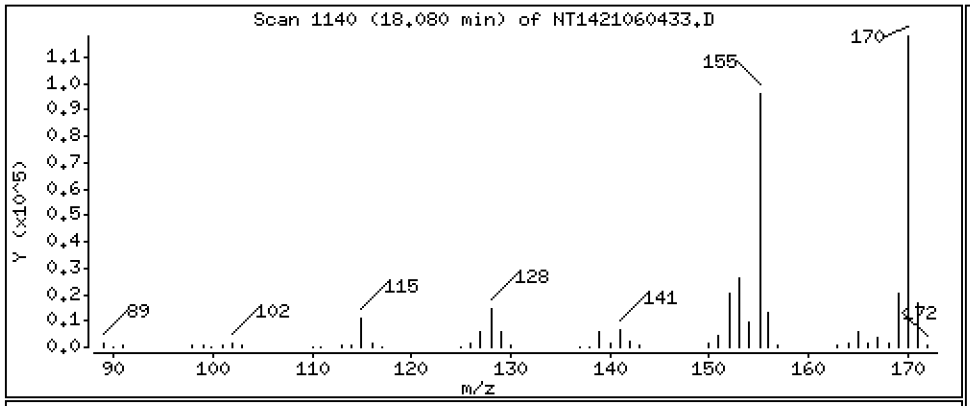
Operator: VTS

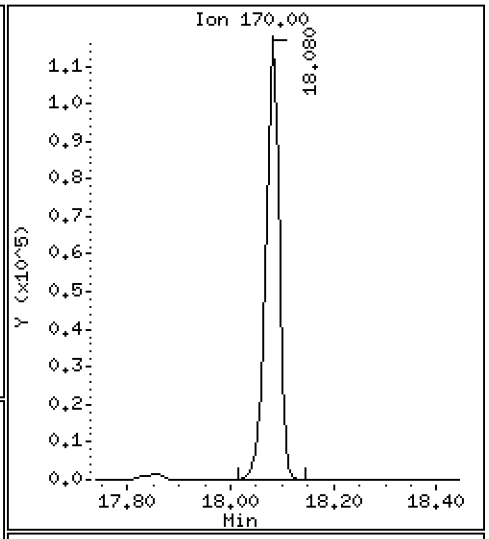
Column phase: Rxi-17Sil MS

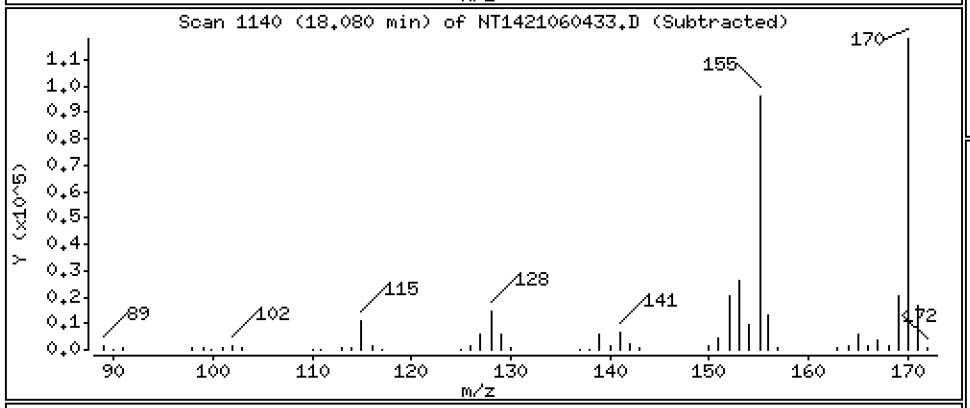
Column diameter: 0.25

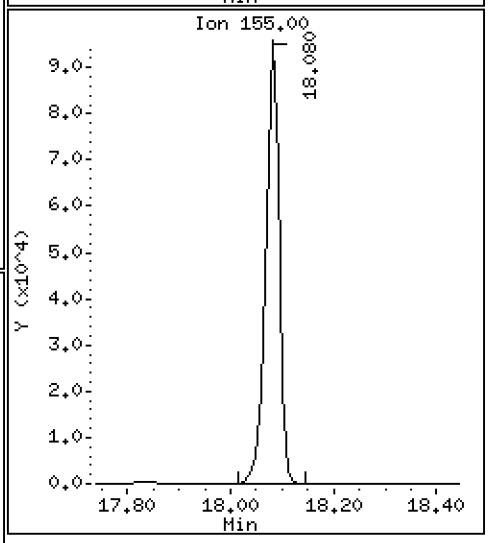
24 1,6,7-Trimethylnaphthalene

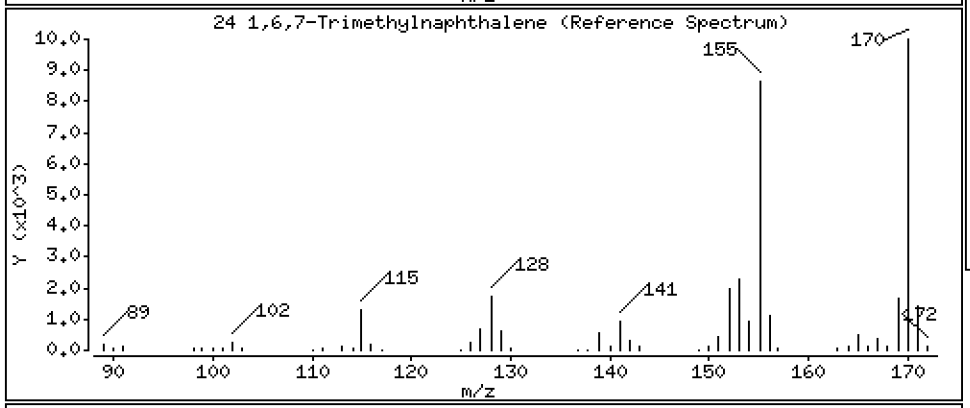
Concentration: 2.572 ug/mL

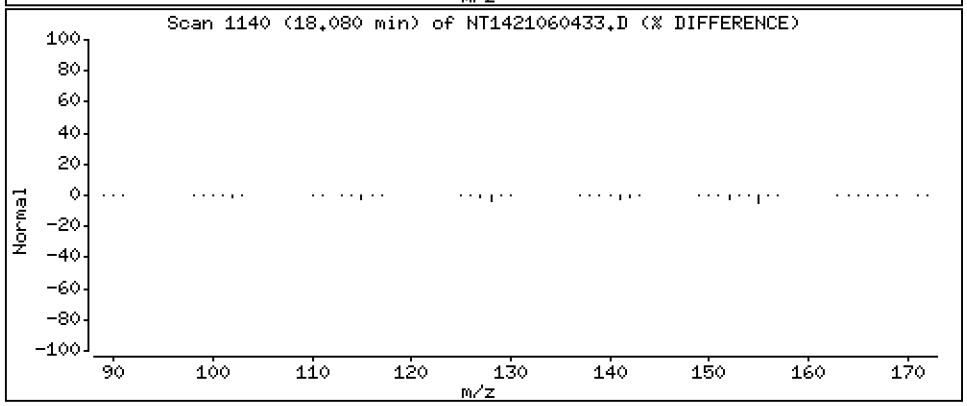












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Date : 05-JUN-2021 14:42

Client ID:

Instrument: nt14.i

Sample Info: SJF0131-CCV1

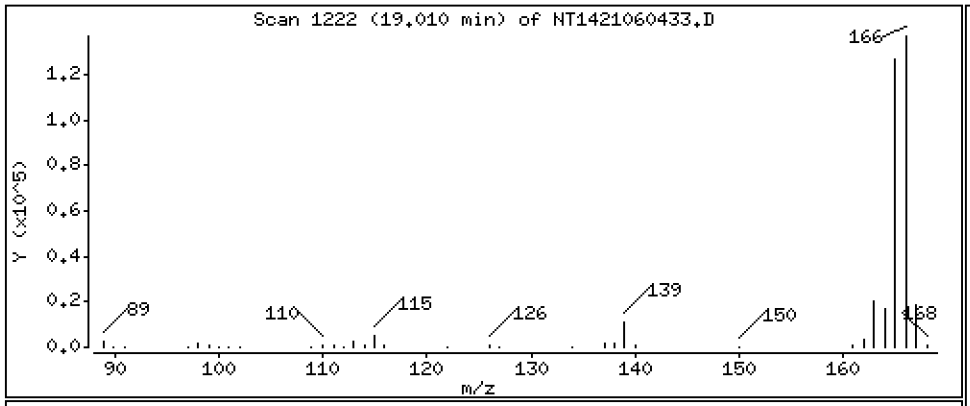
Operator: VTS

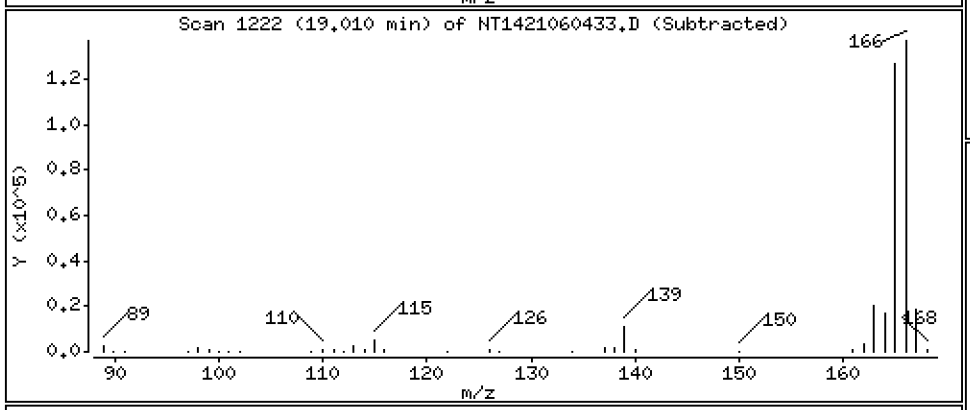
Column phase: Rxi-17Sil MS

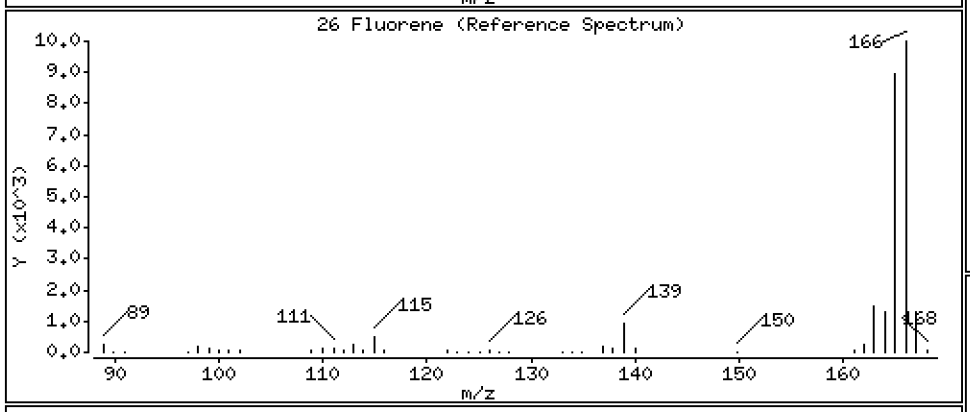
Column diameter: 0.25

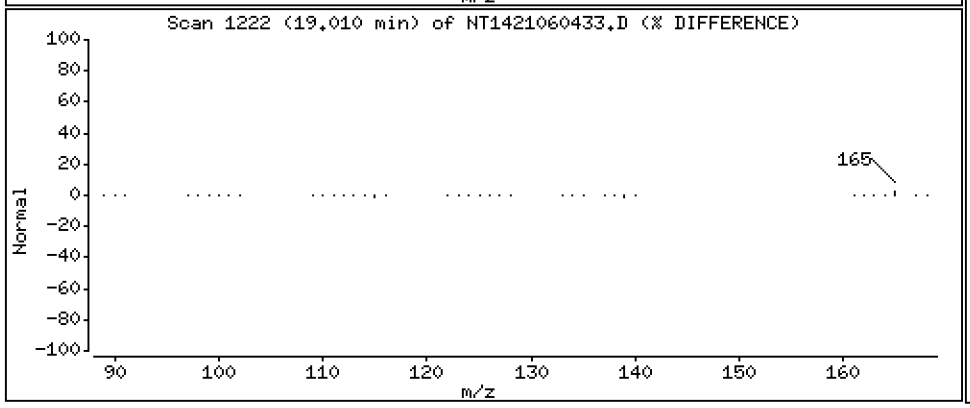
26 Fluorene

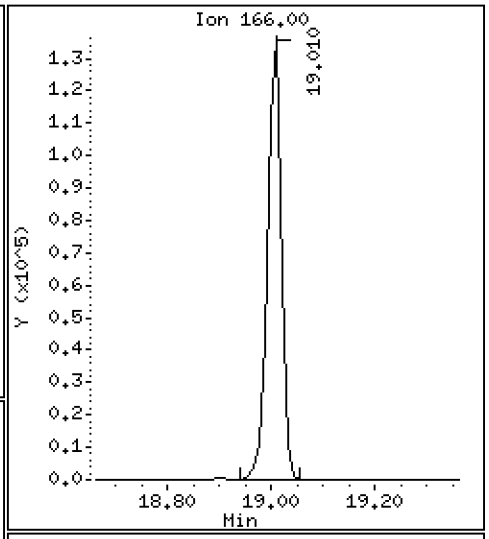
Concentration: 2.516 ug/mL

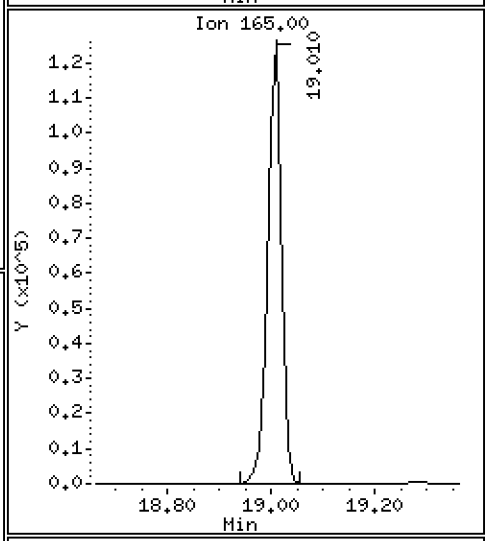


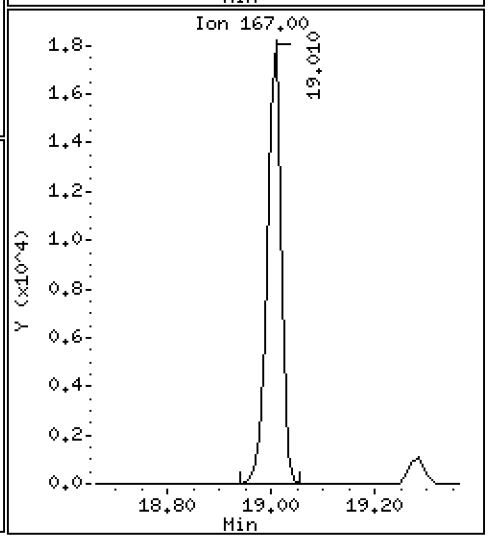












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Date : 05-JUN-2021 14:42

Client ID:

Instrument: nt14.i

Sample Info: SJF0131-CCV1

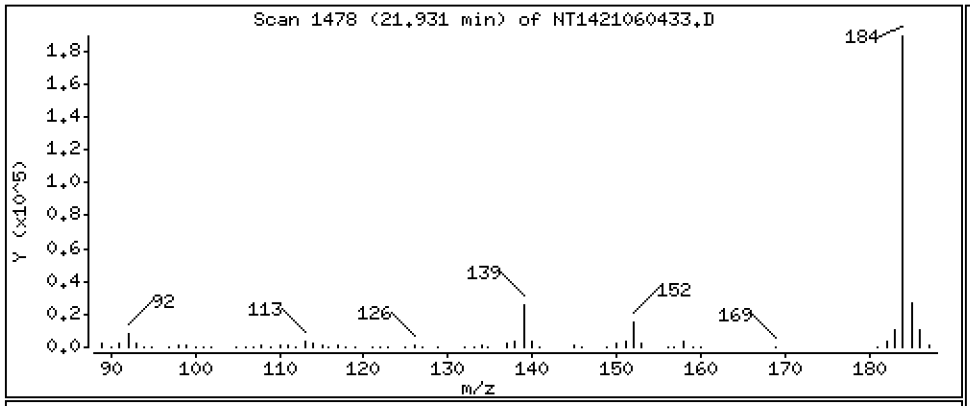
Operator: VTS

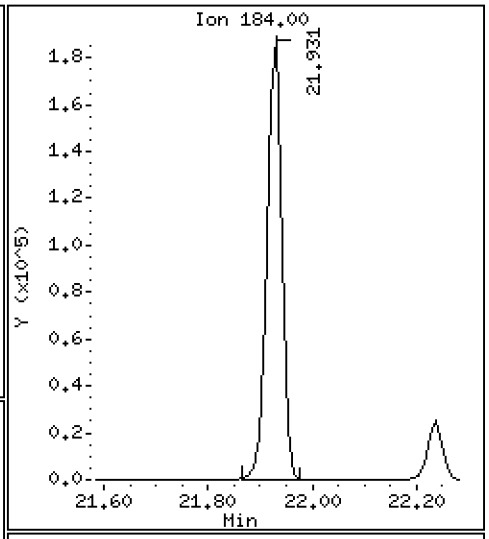
Column phase: Rxi-17Sil MS

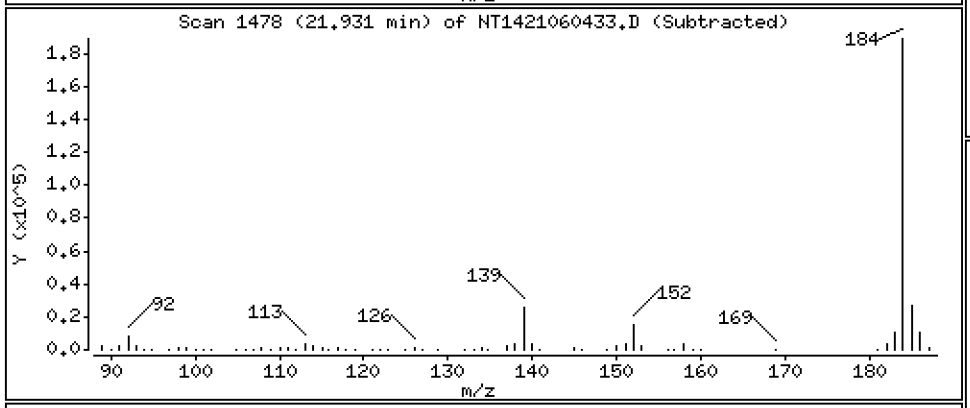
Column diameter: 0.25

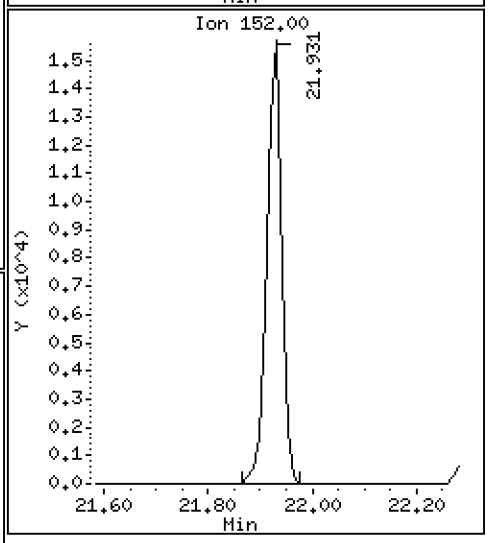
30 Dibenzothiophene

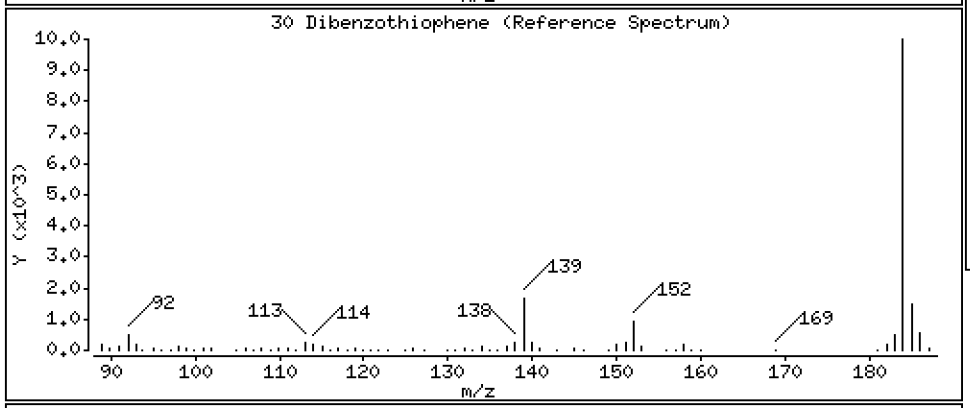
Concentration: 2.584 ug/mL

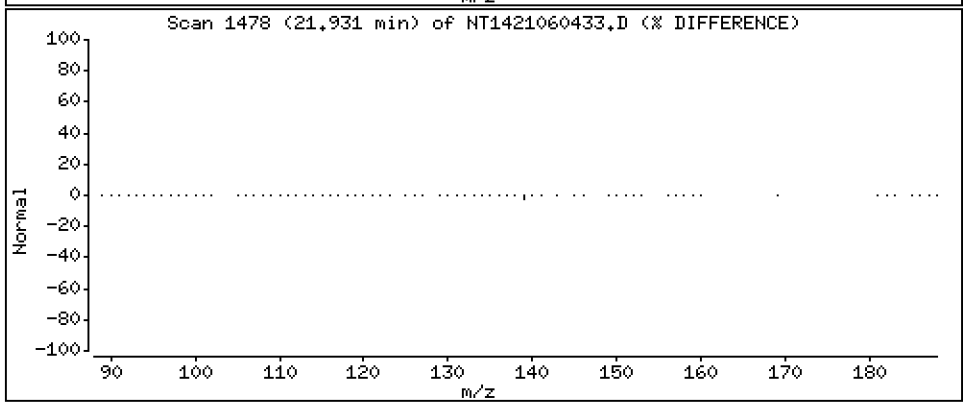












Data File: \\target\share\chem3\nt14.i\20210604A.b\NT1421060433.D

Date : 05-JUN-2021 14:42

Client ID:

Instrument: nt14.i

Sample Info: SJF0131-CCV1

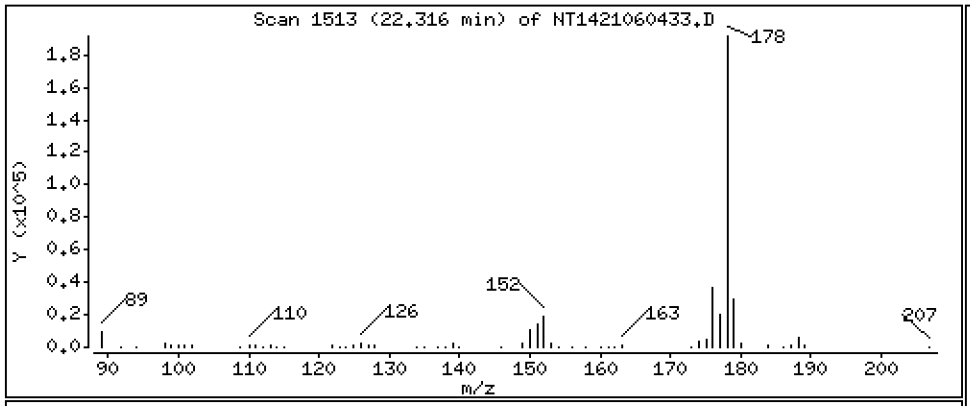
Operator: VTS

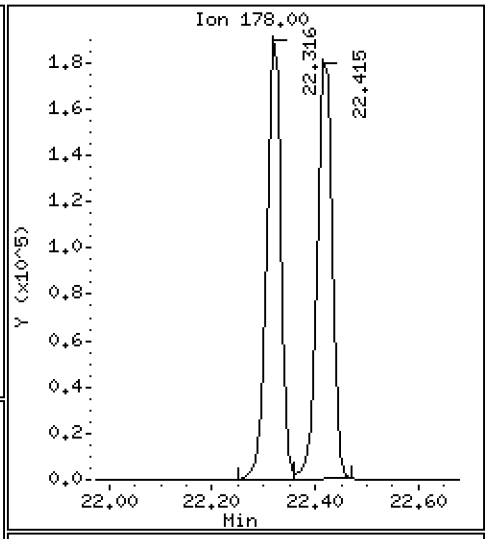
Column phase: Rxi-17Sil MS

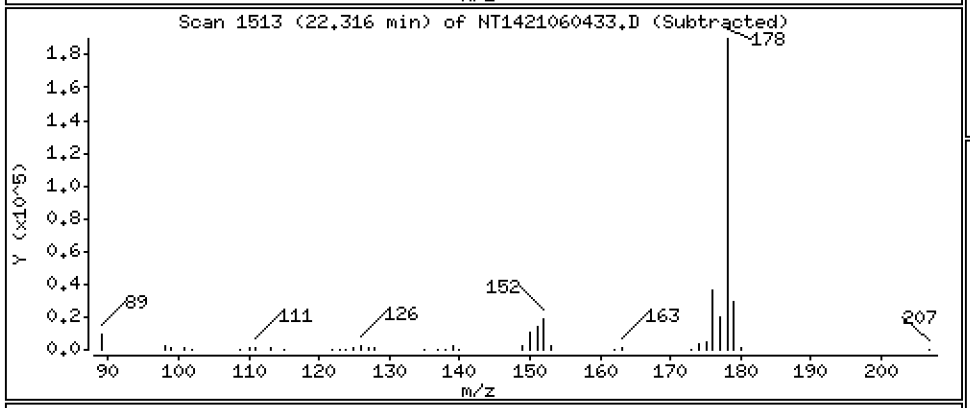
Column diameter: 0.25

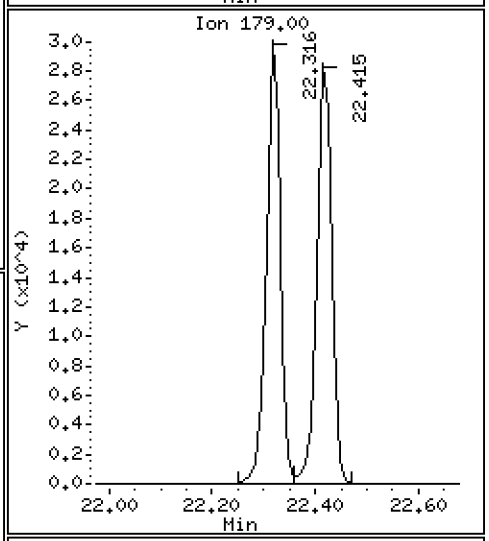
36 Phenanthrene

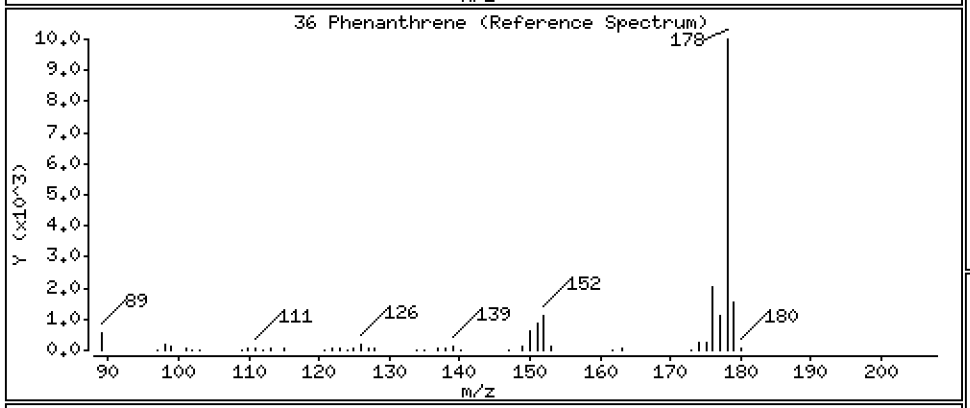
Concentration: 2.508 ug/mL

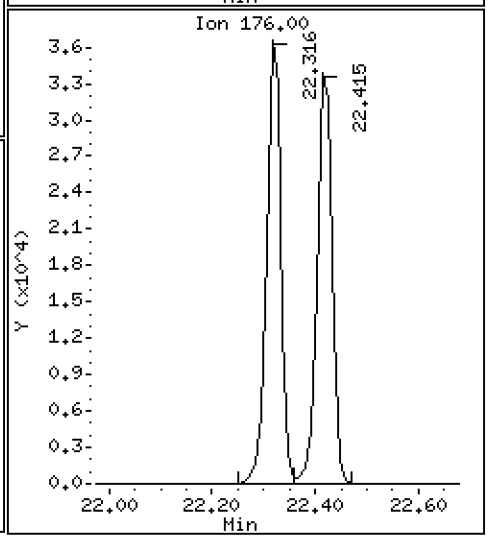


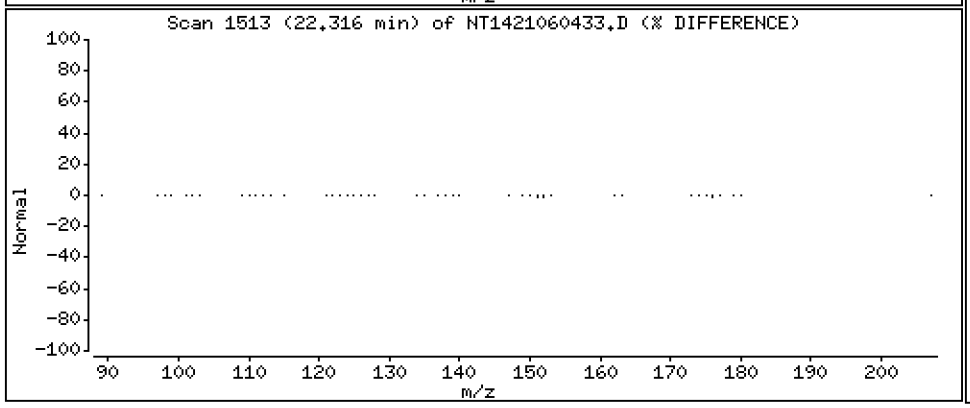












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Date : 05-JUN-2021 14:42

Client ID:

Instrument: nt14.i

Sample Info: SJF0131-CCV1

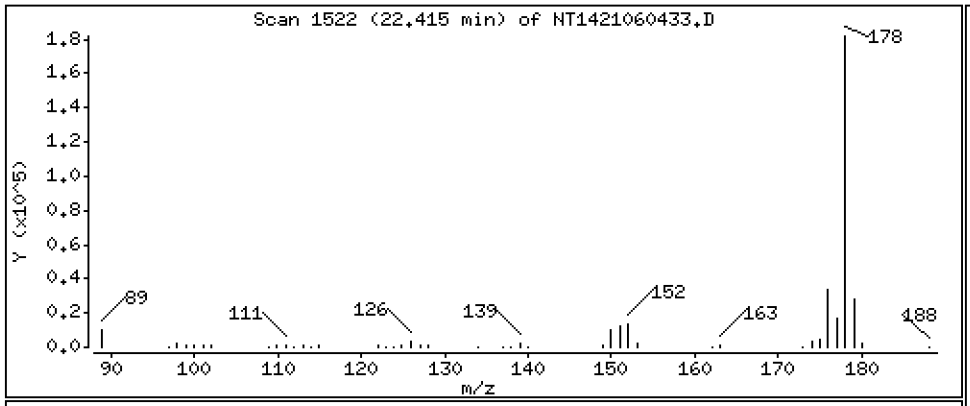
Operator: VTS

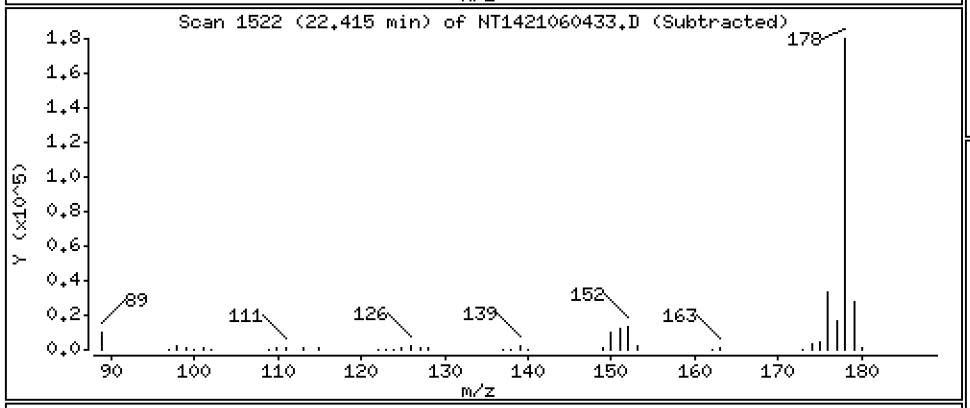
Column phase: Rxi-17Sil MS

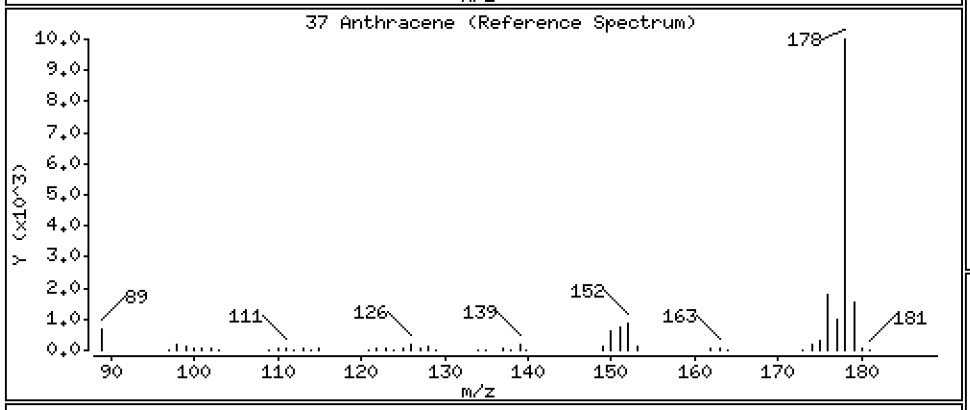
Column diameter: 0.25

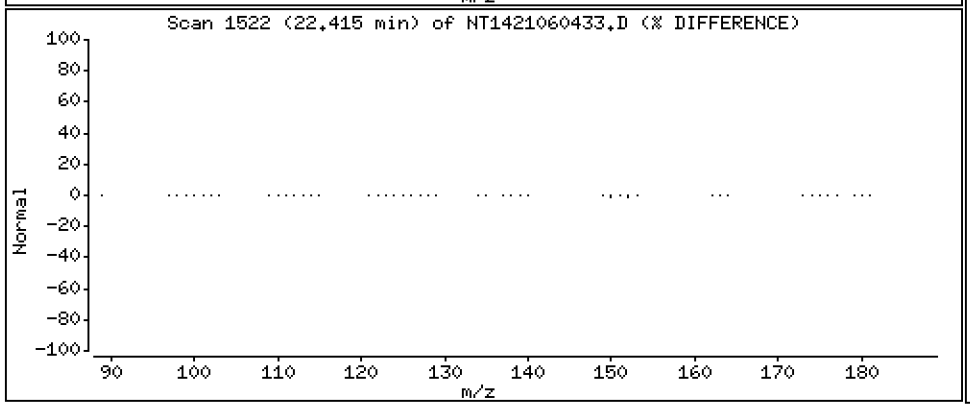
37 Anthracene

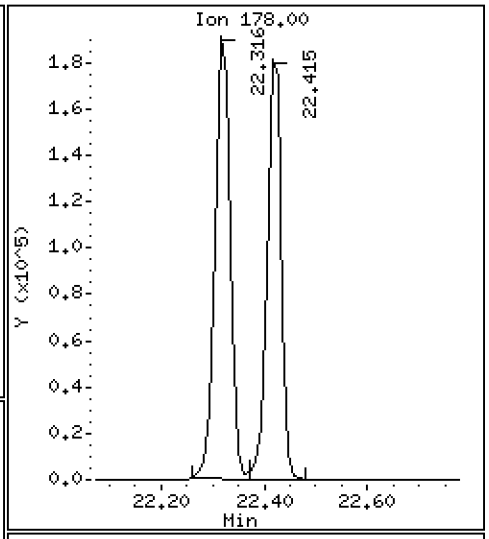
Concentration: 2.520 ug/mL

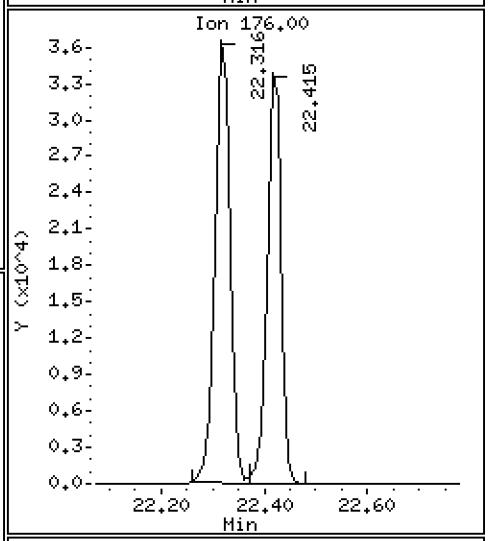


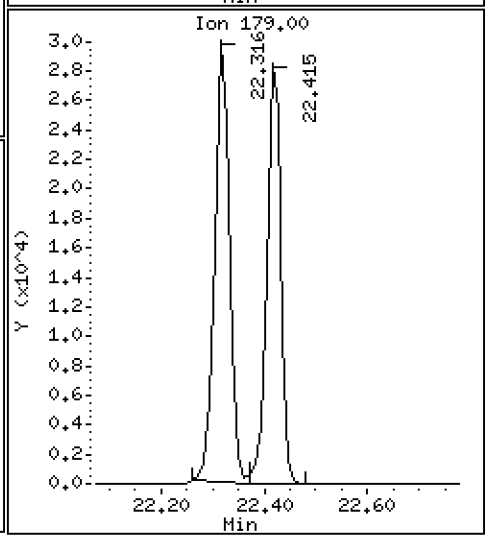












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Date : 05-JUN-2021 14:42

Client ID:

Instrument: nt14.i

Sample Info: SJF0131-CCV1

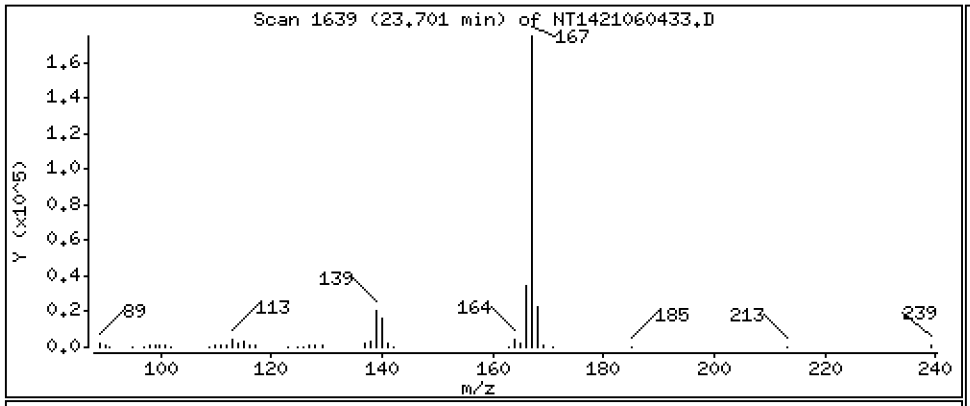
Operator: VTS

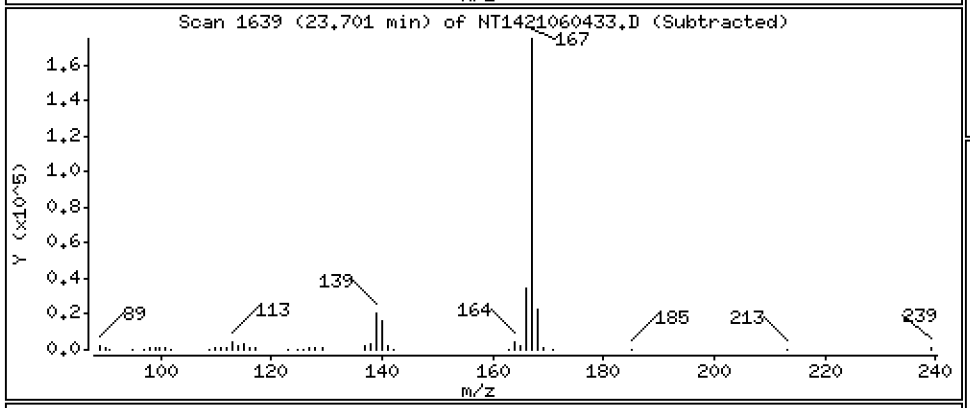
Column phase: Rxi-17Sil MS

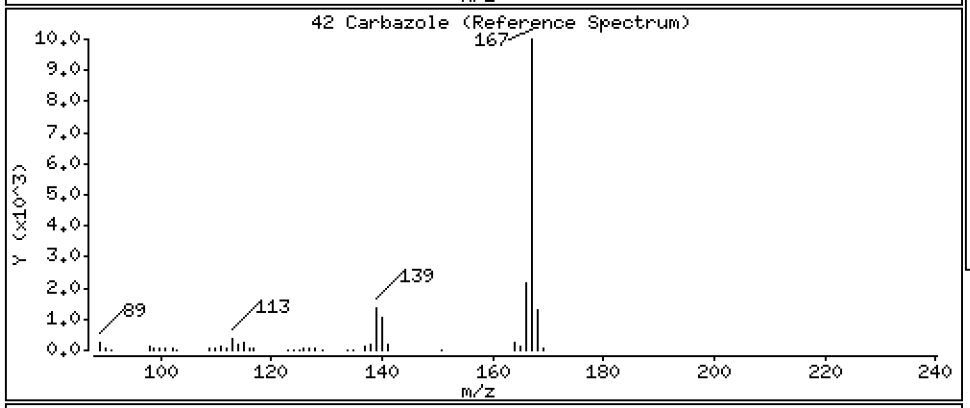
Column diameter: 0.25

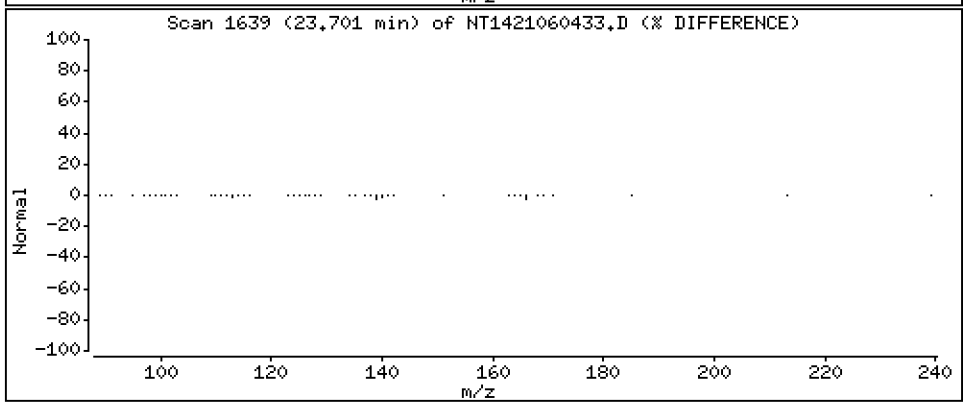
42 Carbazole

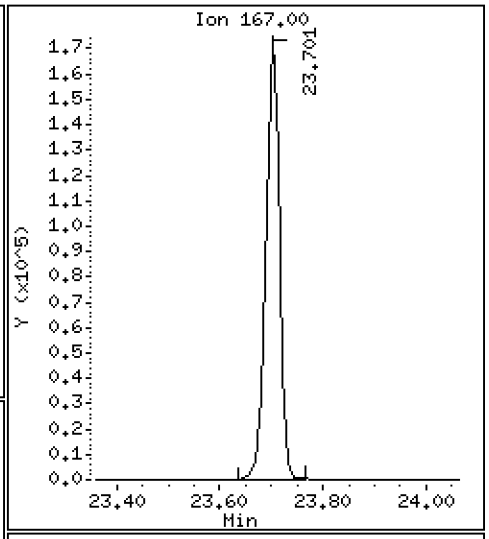
Concentration: 2.466 ug/mL

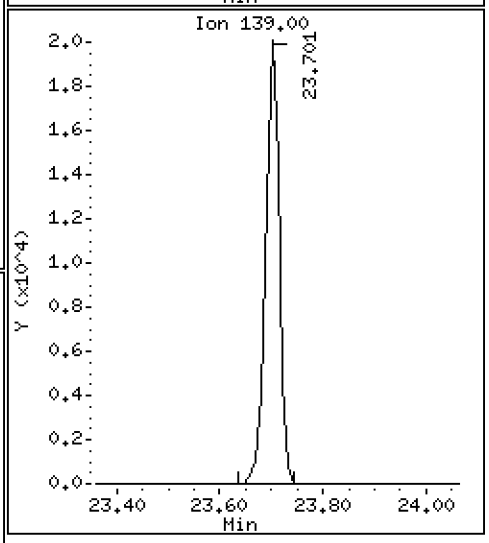












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Date : 05-JUN-2021 14:42

Client ID:

Instrument: nt14.i

Sample Info: SJF0131-CCV1

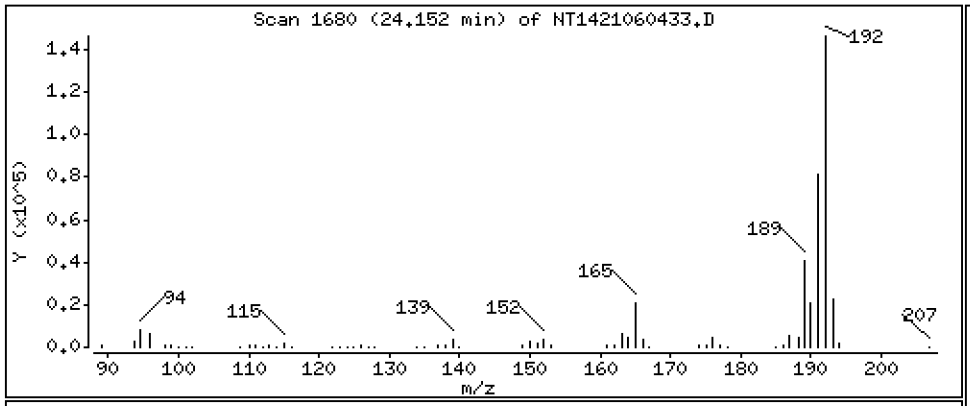
Operator: VTS

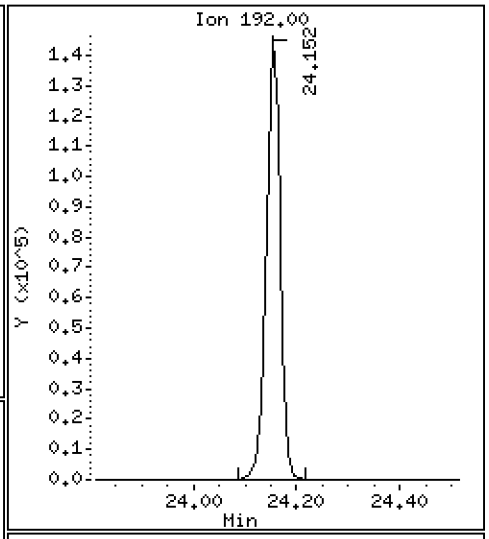
Column phase: Rxi-17Sil MS

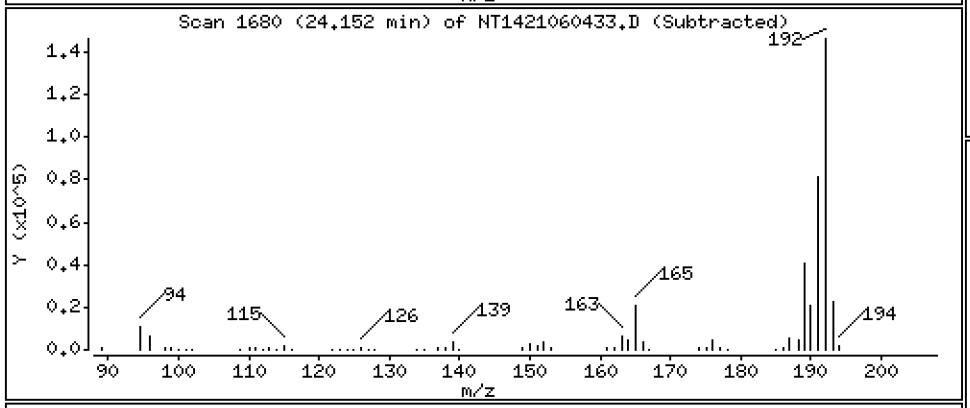
Column diameter: 0.25

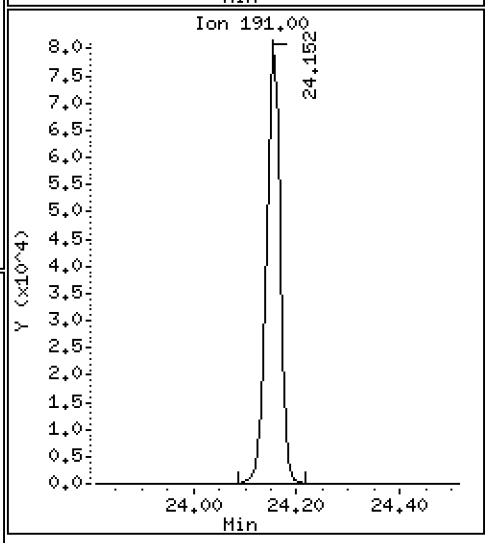
43 1-Methylphenanthrene

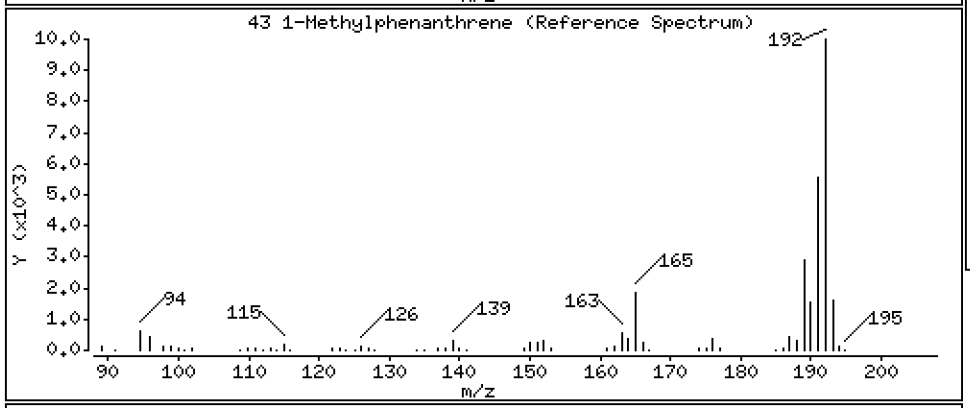
Concentration: 2.568 ug/mL

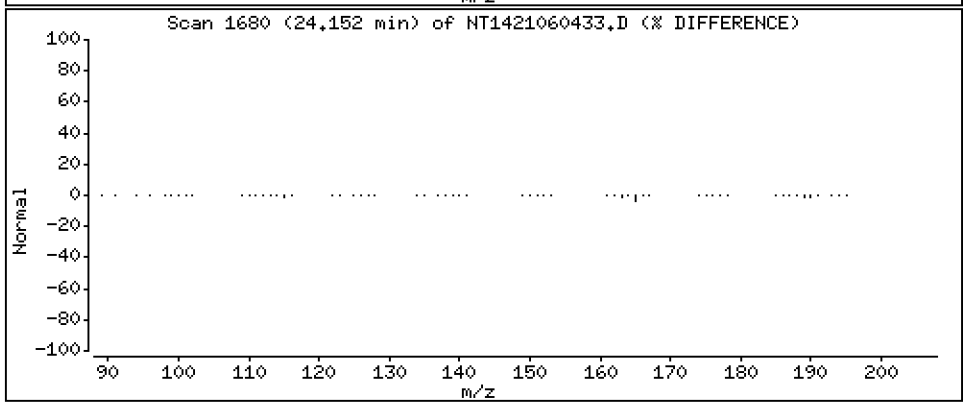












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Date : 05-JUN-2021 14:42

Client ID:

Instrument: nt14.i

Sample Info: SJF0131-CCV1

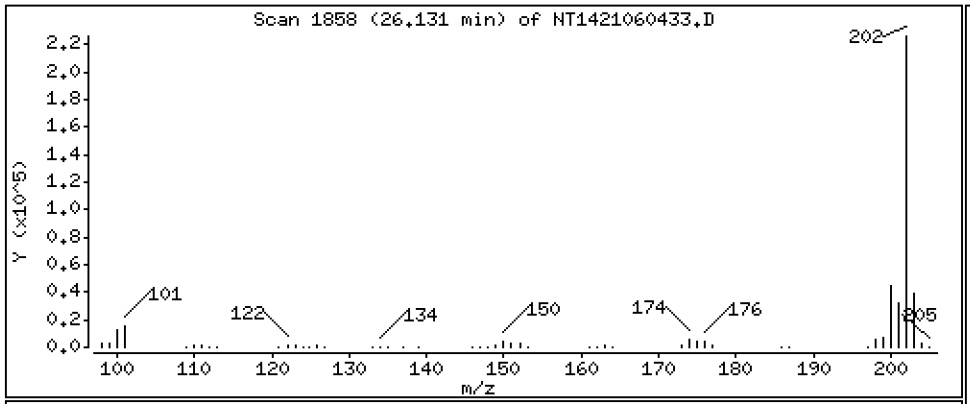
Operator: VTS

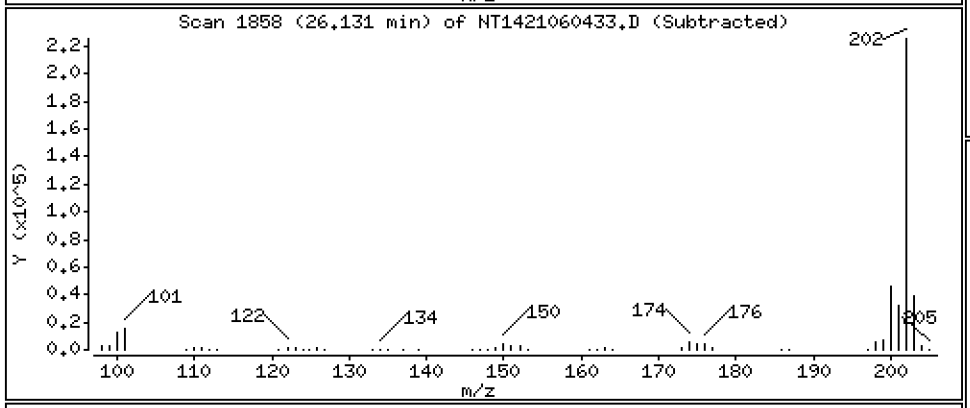
Column phase: Rxi-17Sil MS

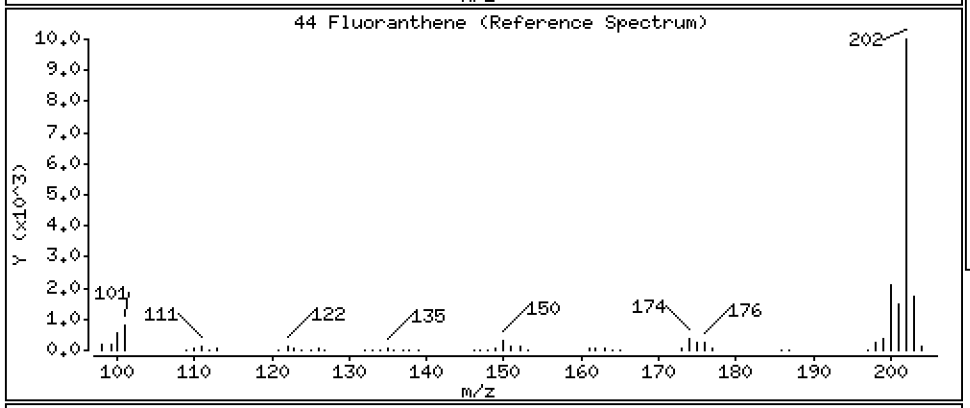
Column diameter: 0.25

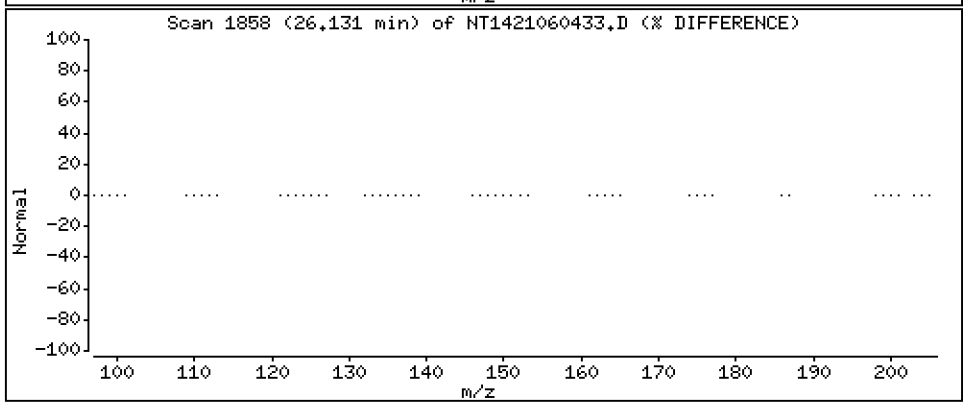
44 Fluoranthene

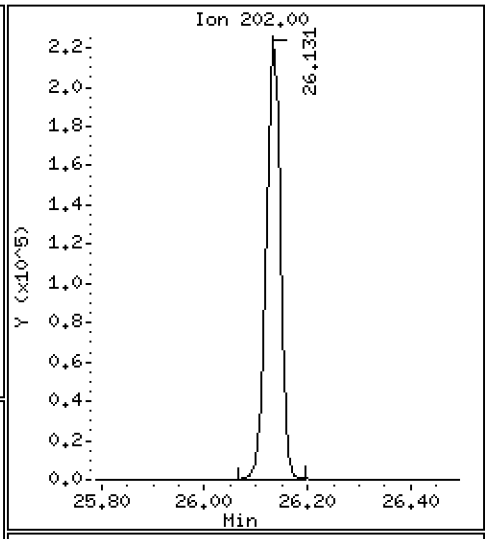
Concentration: 2.656 ug/mL

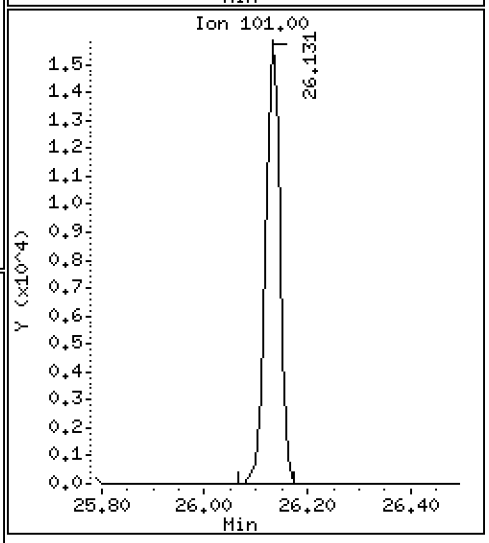












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Date : 05-JUN-2021 14:42

Client ID:

Instrument: nt14.i

Sample Info: SJF0131-CCV1

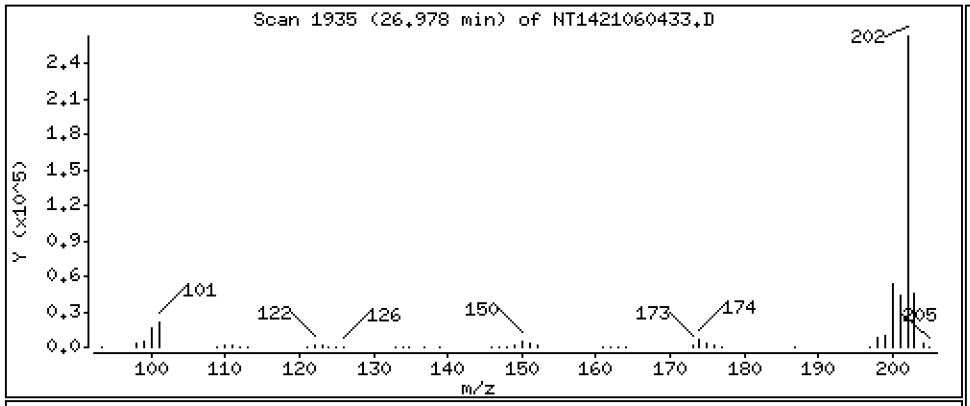
Operator: VTS

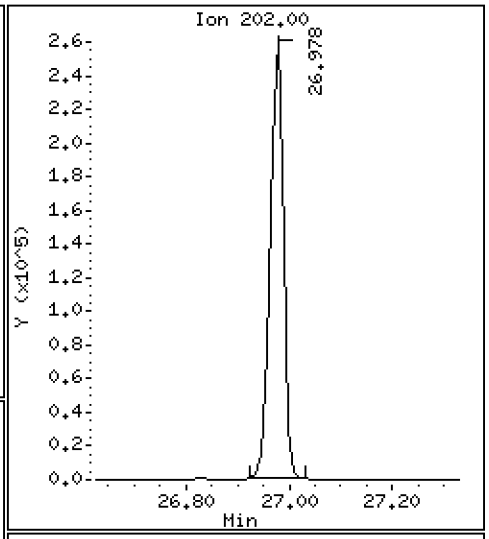
Column phase: Rxi-17Sil MS

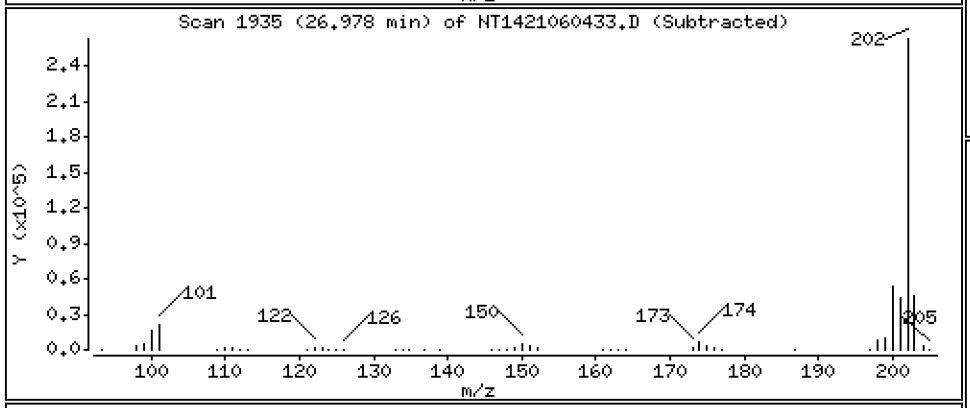
Column diameter: 0.25

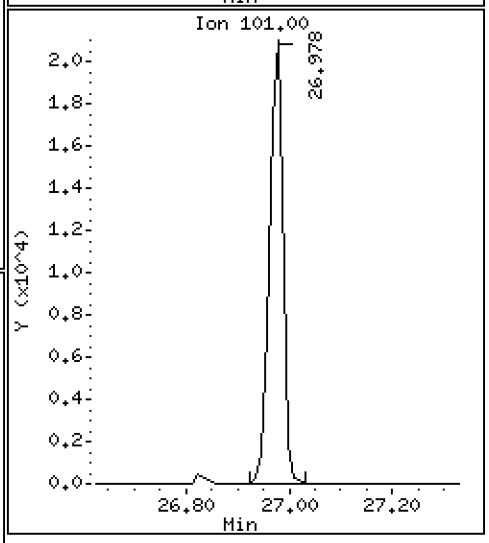
46 Pyrene

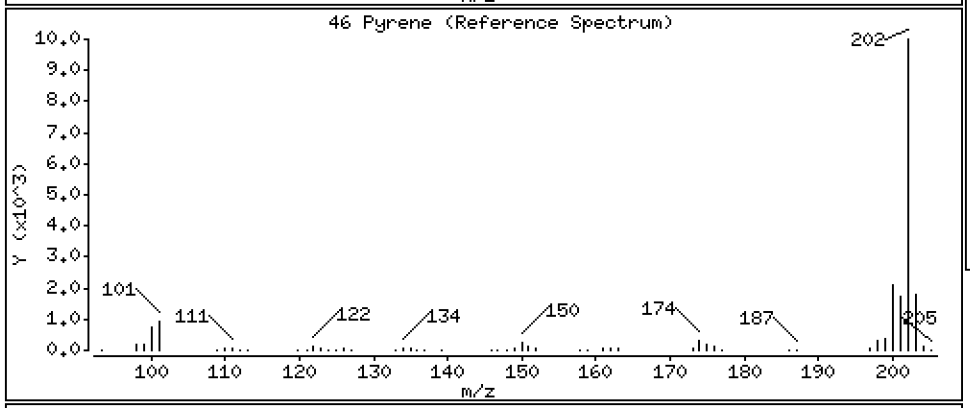
Concentration: 2.703 ug/mL

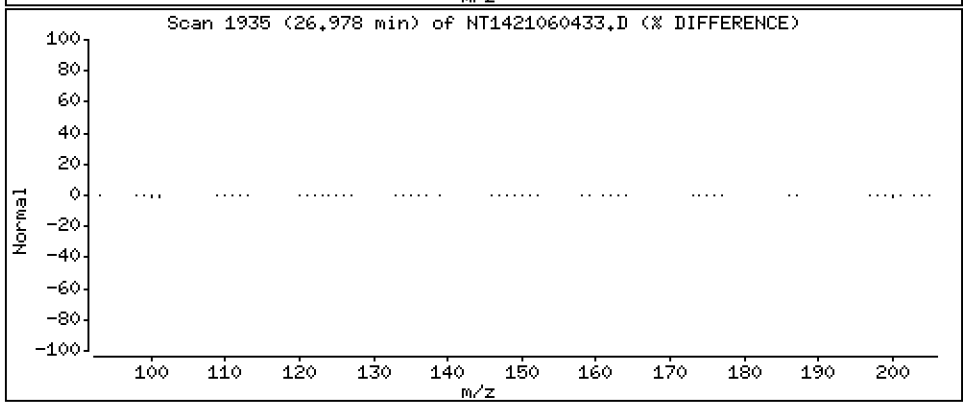












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Date : 05-JUN-2021 14:42

Client ID:

Instrument: nt14.i

Sample Info: SJF0131-CCV1

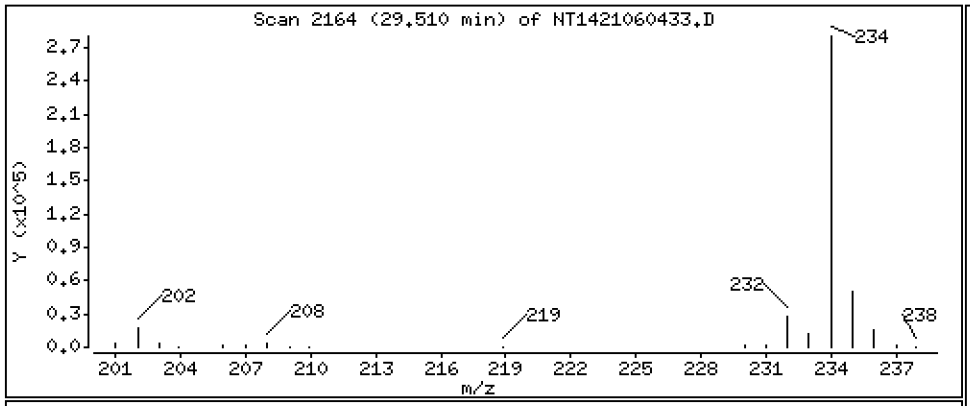
Operator: VTS

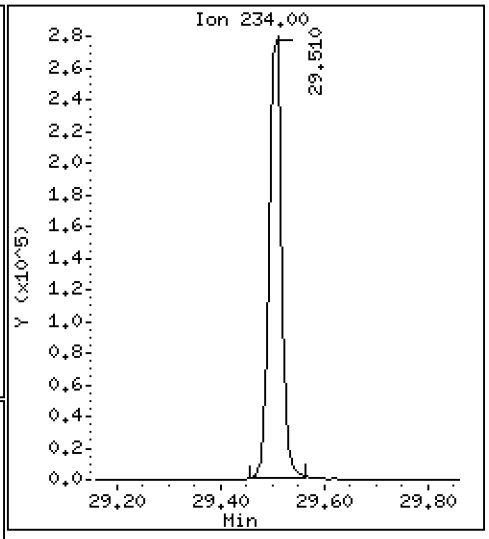
Column phase: Rxi-17Sil MS

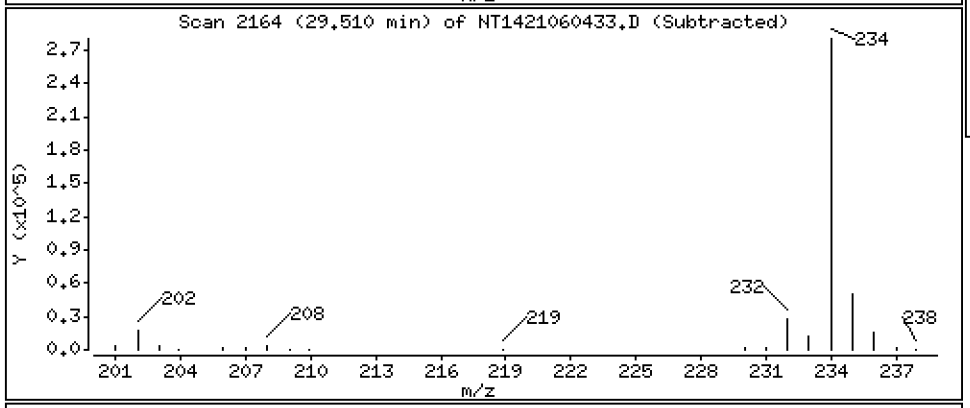
Column diameter: 0.25

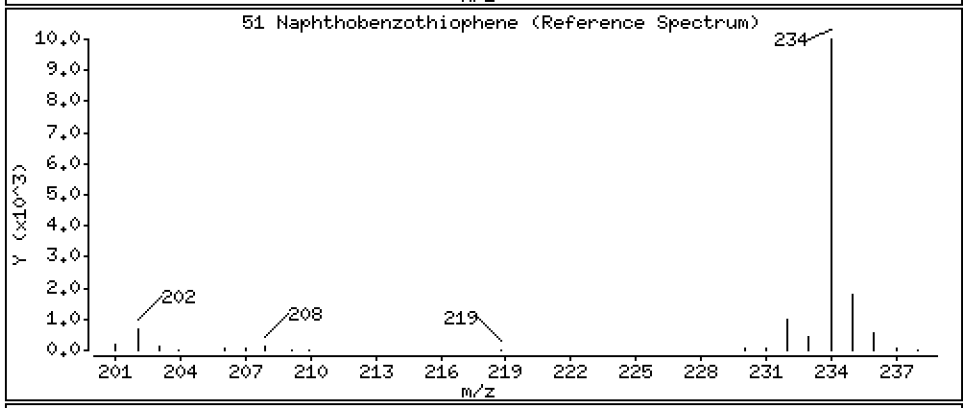
51 Naphthobenzothiophene

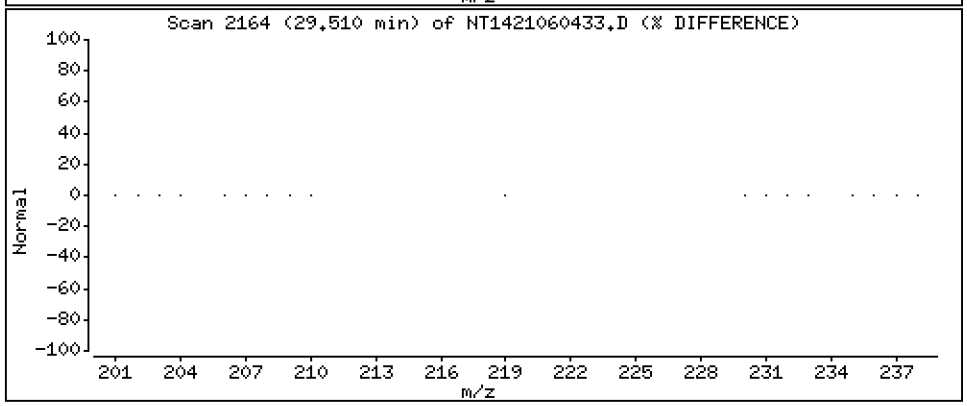
Concentration: 2.669 ug/mL











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Date : 05-JUN-2021 14:42

Client ID:

Instrument: nt14.i

Sample Info: SJF0131-CCV1

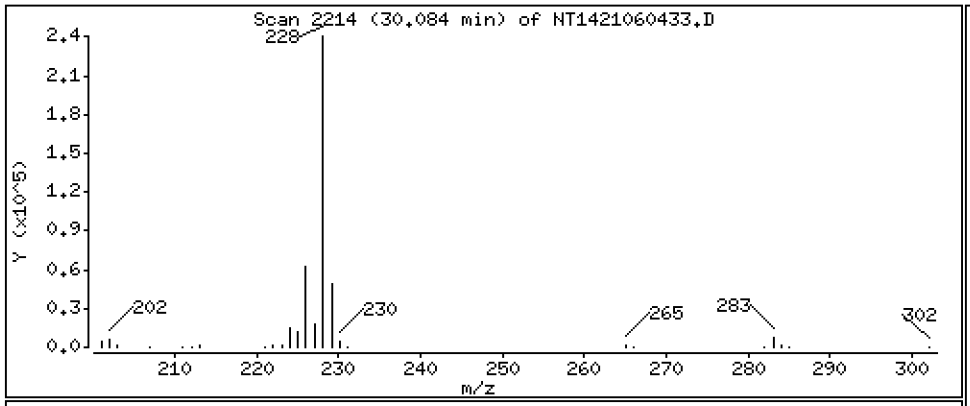
Operator: VTS

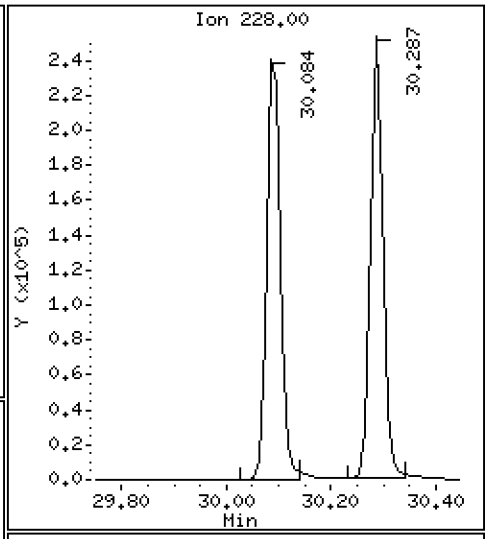
Column phase: Rxi-17Sil MS

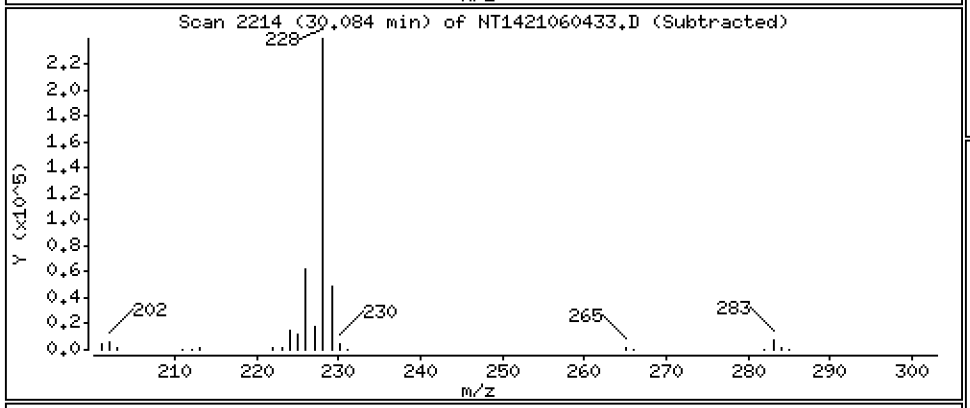
Column diameter: 0.25

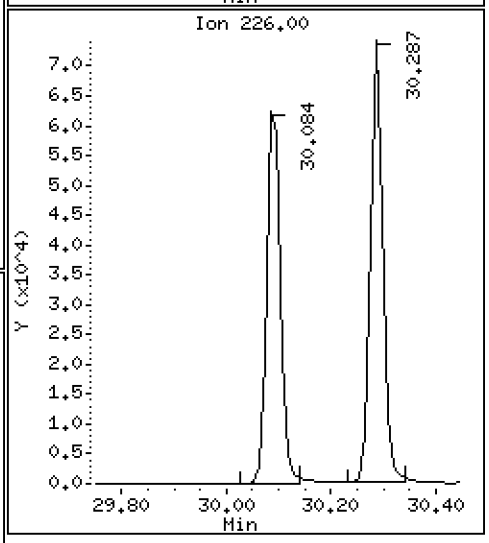
55 Benzo(a)anthracene

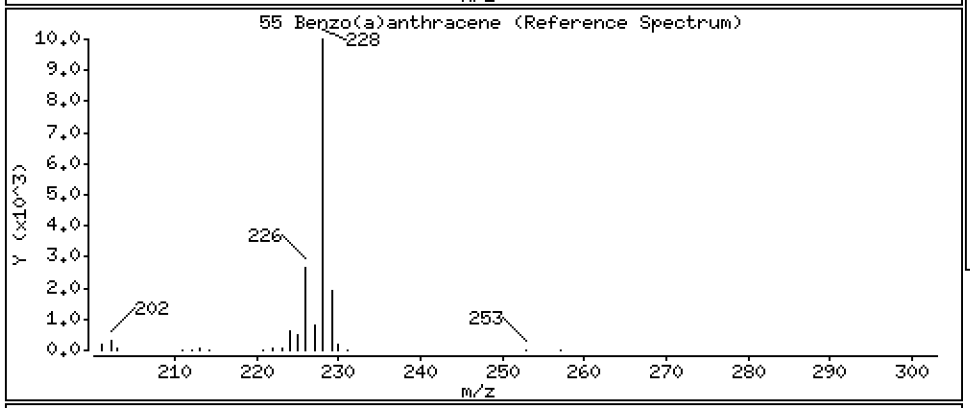
Concentration: 2.704 ug/mL

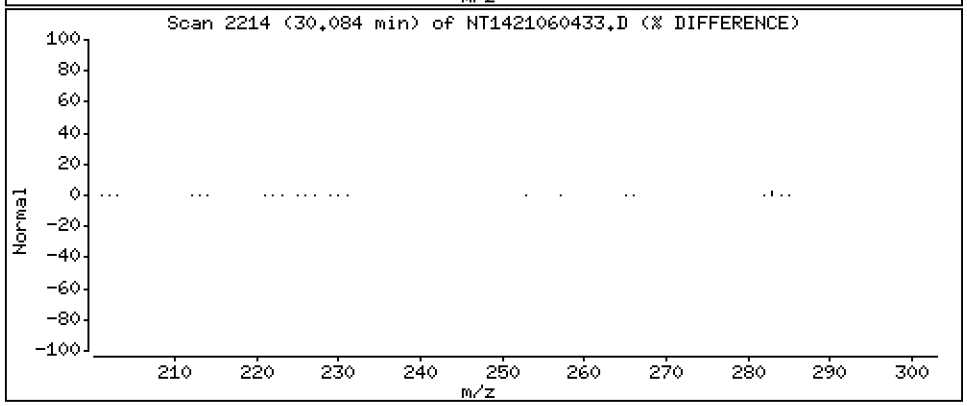












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Date : 05-JUN-2021 14:42

Client ID:

Instrument: nt14.i

Sample Info: SJF0131-CCV1

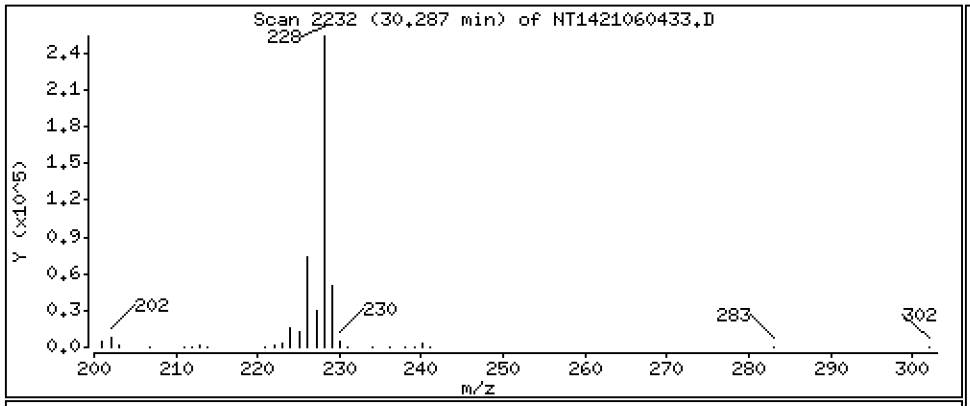
Operator: VTS

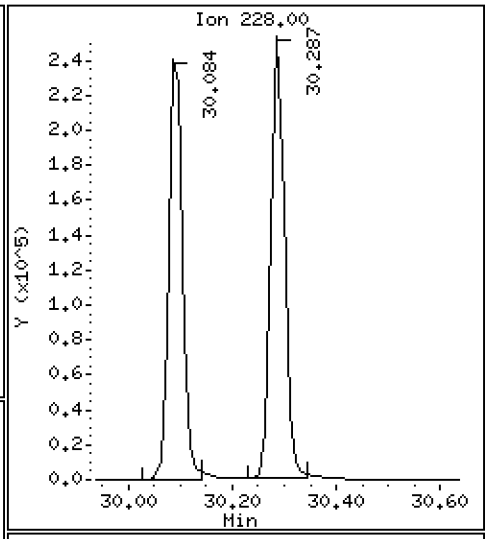
Column phase: Rxi-17Sil MS

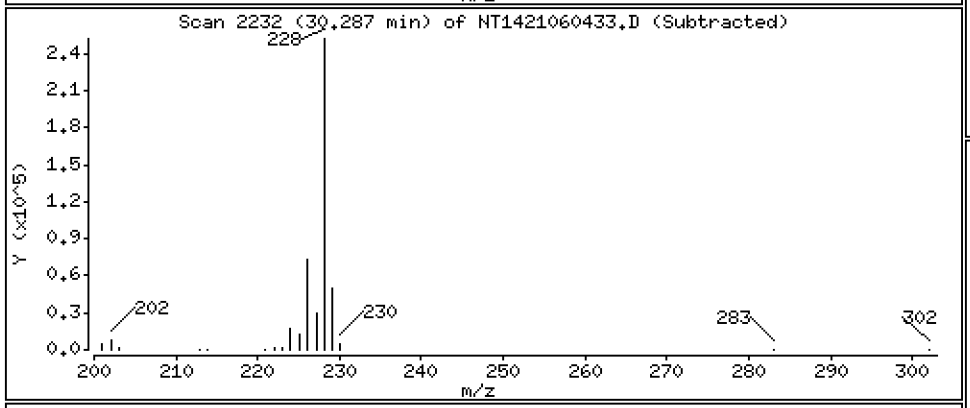
Column diameter: 0.25

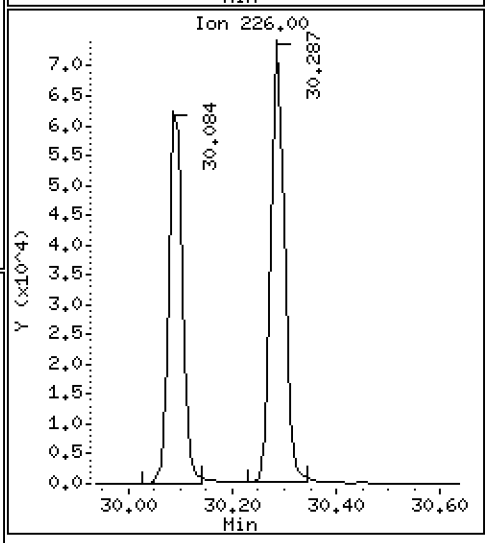
57 Chrysene

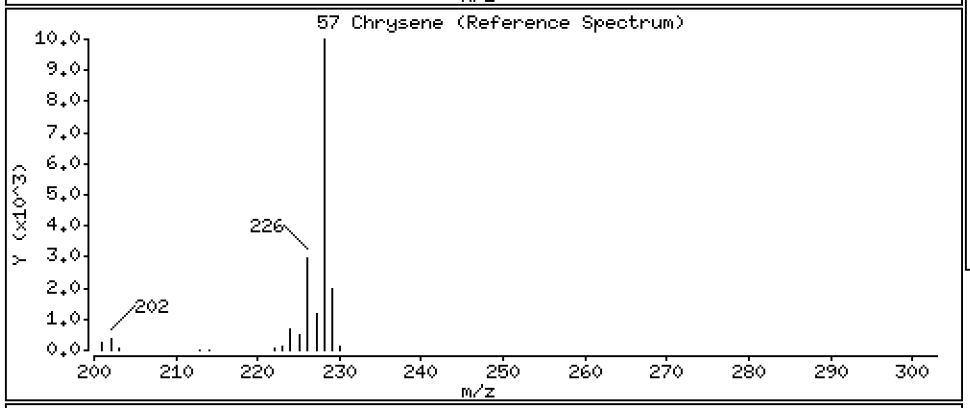
Concentration: 2.589 ug/mL

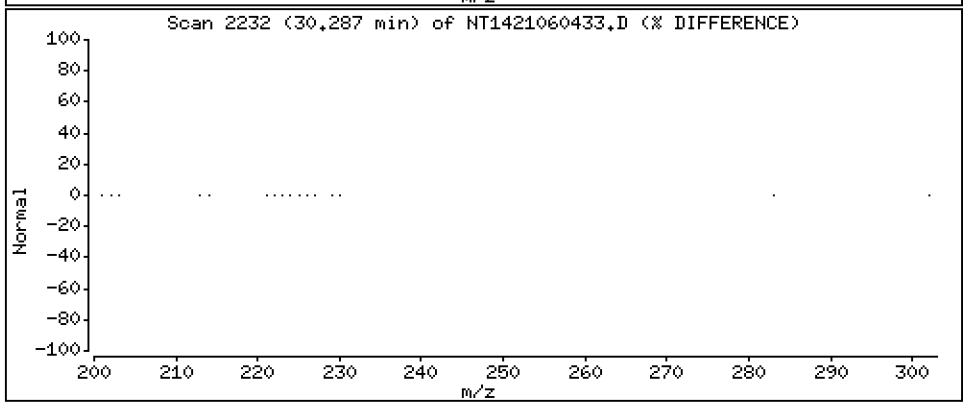












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Date : 05-JUN-2021 14:42

Client ID:

Instrument: nt14.i

Sample Info: SJF0131-CCV1

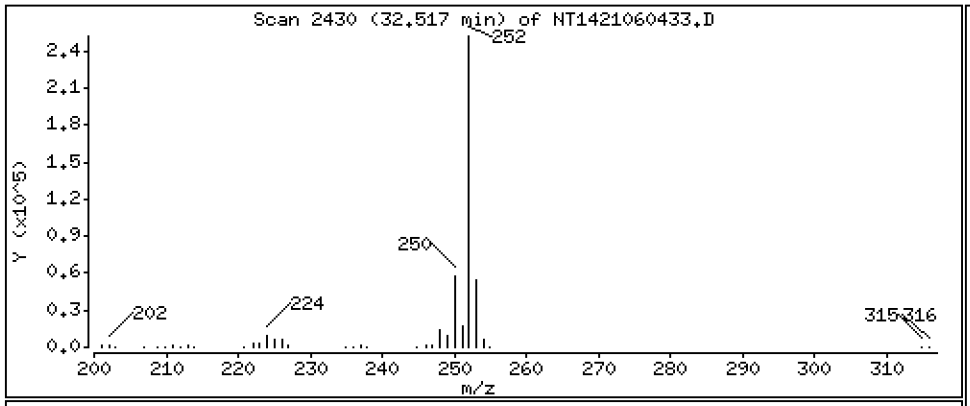
Operator: VTS

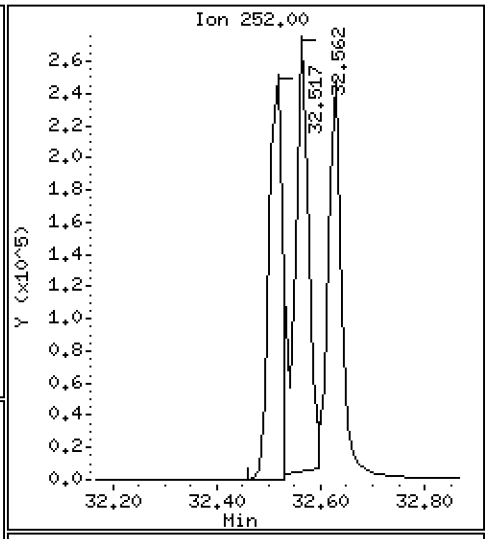
Column phase: Rxi-17Sil MS

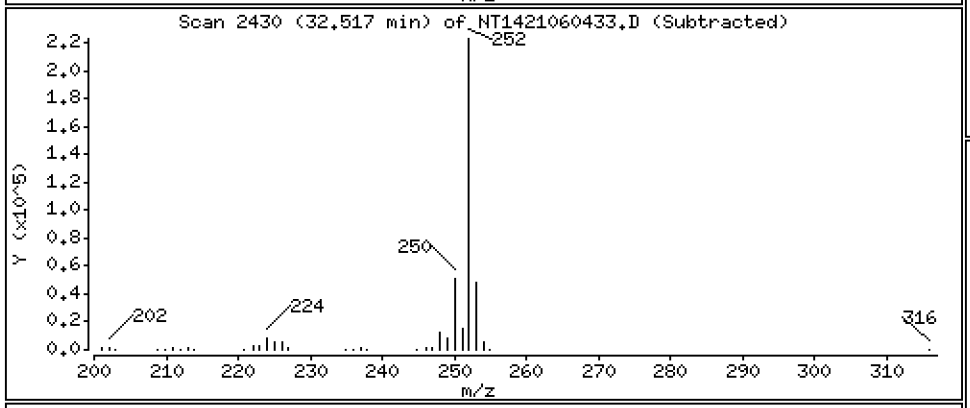
Column diameter: 0.25

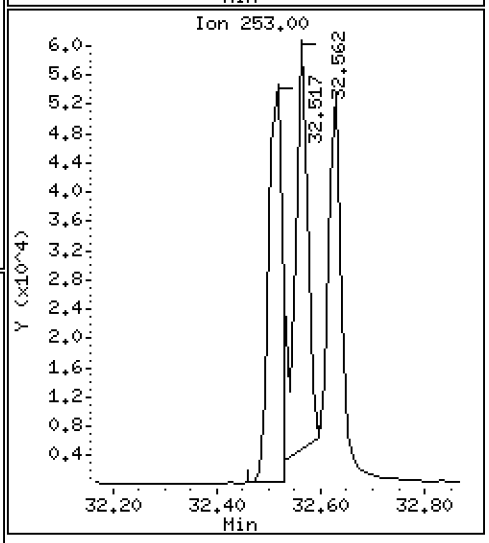
62 Benzo(b)fluoranthene

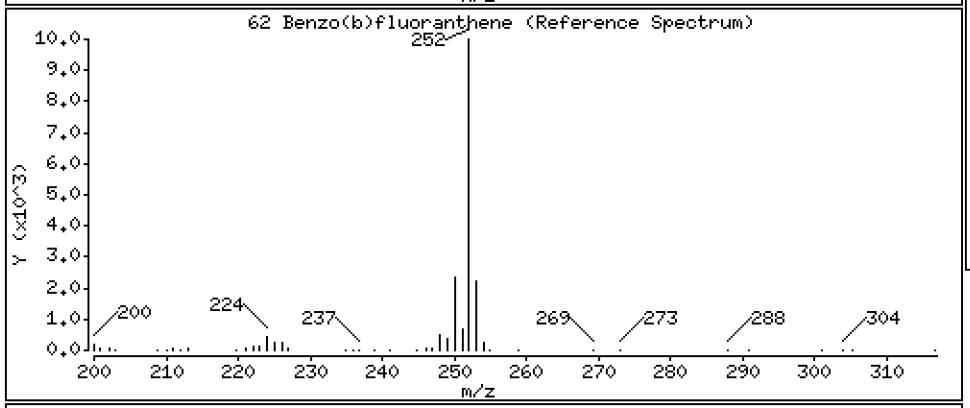
Concentration: 2.437 ug/mL

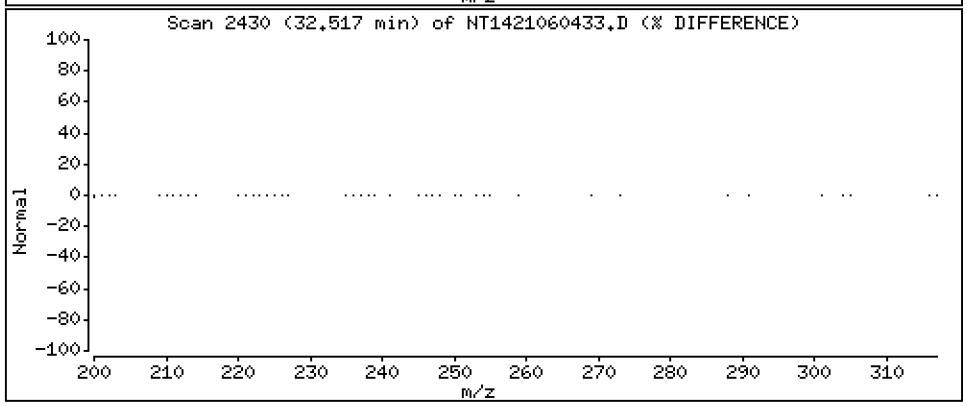












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Date : 05-JUN-2021 14:42

Client ID:

Instrument: nt14.i

Sample Info: SJF0131-CCV1

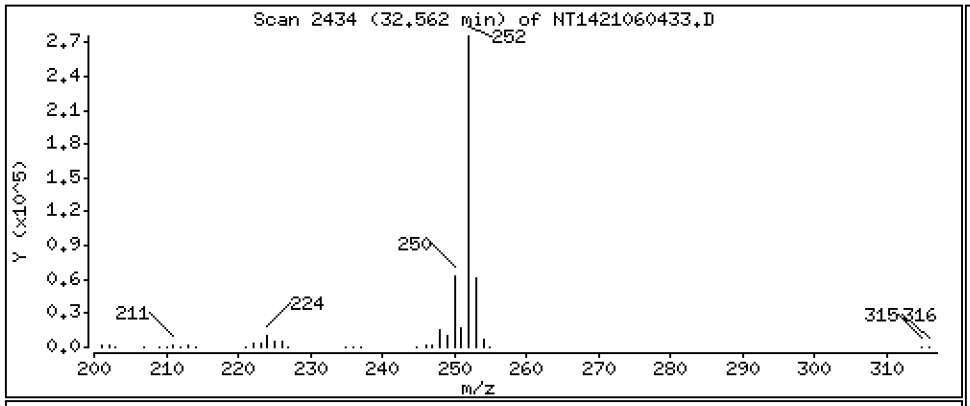
Operator: VTS

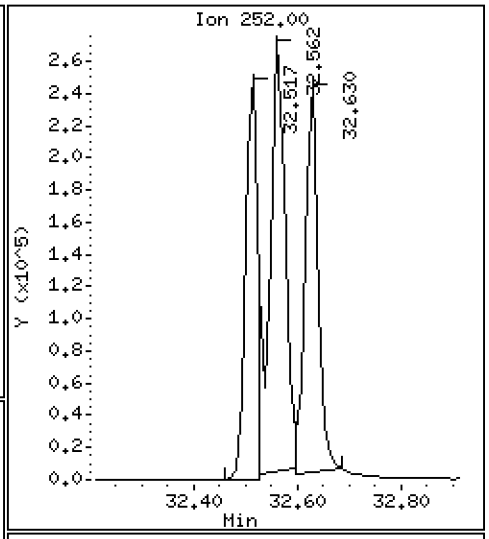
Column phase: Rxi-17Sil MS

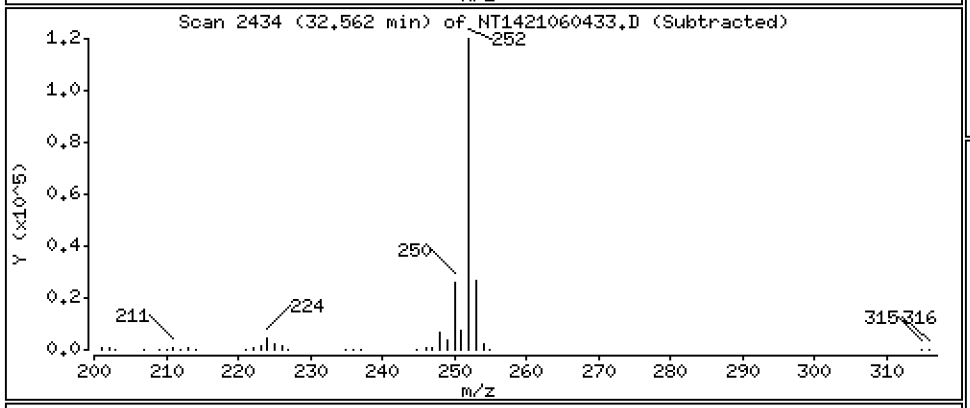
Column diameter: 0.25

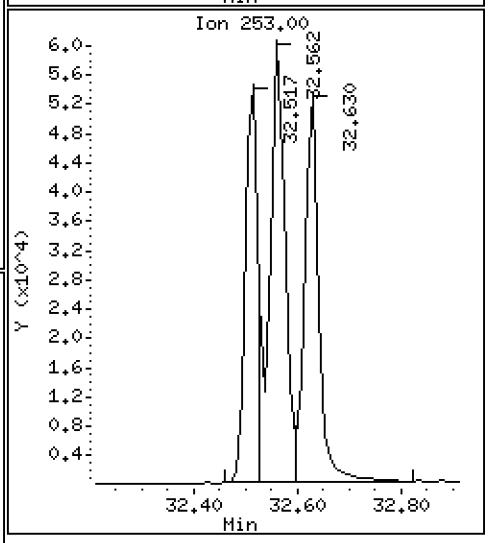
63 Benzo(k)fluoranthene

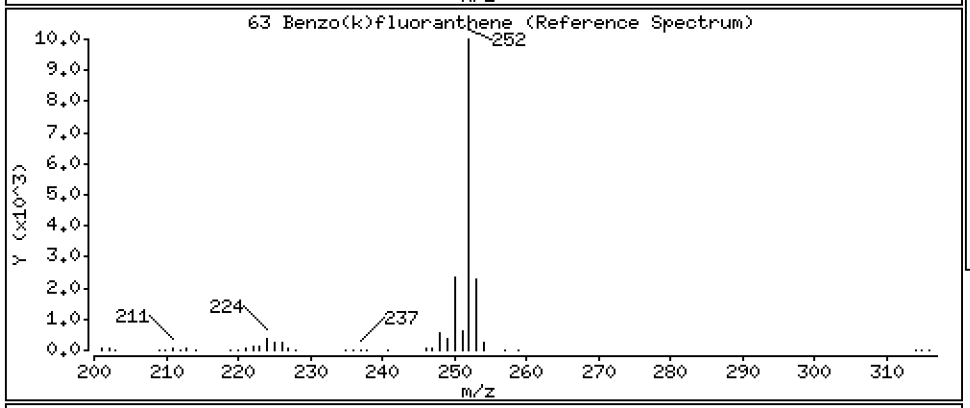
Concentration: 2.999 ug/mL

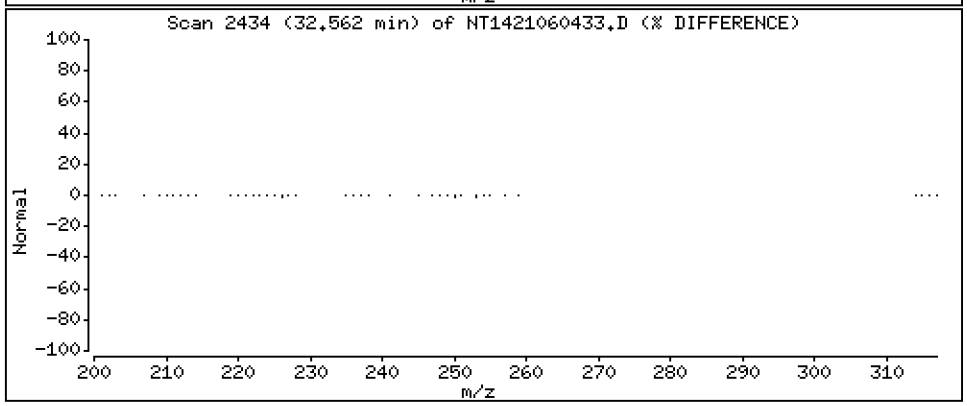












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Date : 05-JUN-2021 14:42

Client ID:

Instrument: nt14.i

Sample Info: SJF0131-CCV1

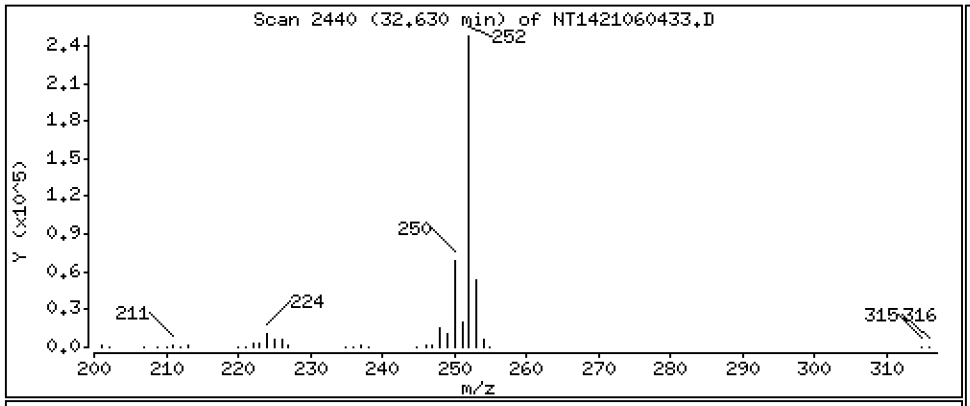
Operator: VTS

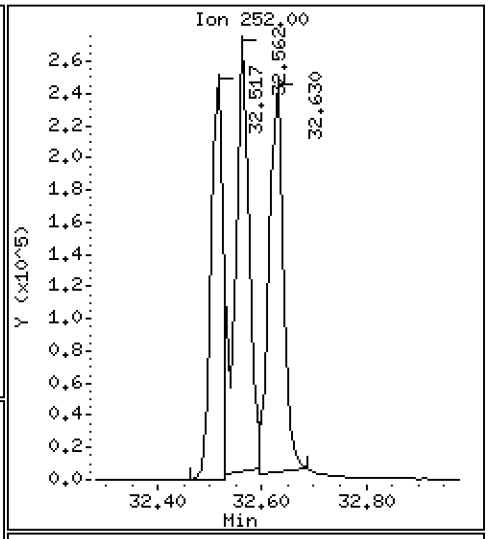
Column phase: Rxi-17Sil MS

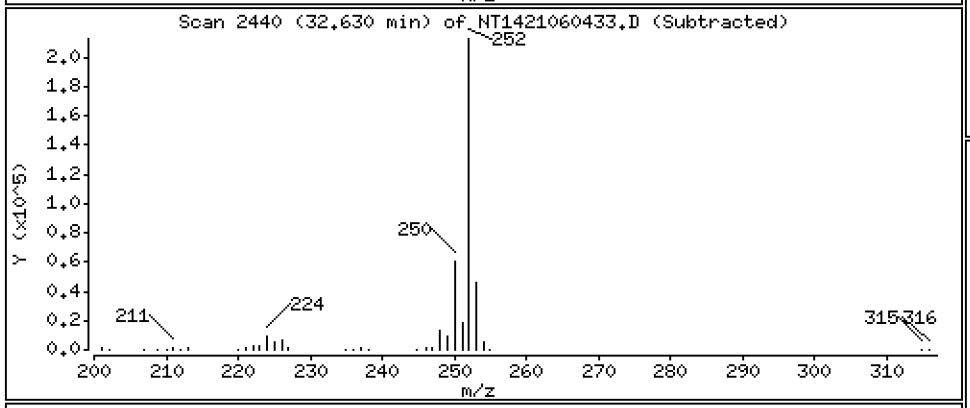
Column diameter: 0.25

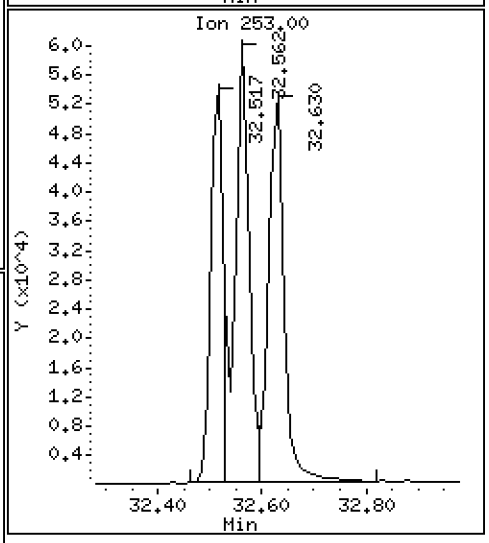
293 Benzo(j)fluoranthene

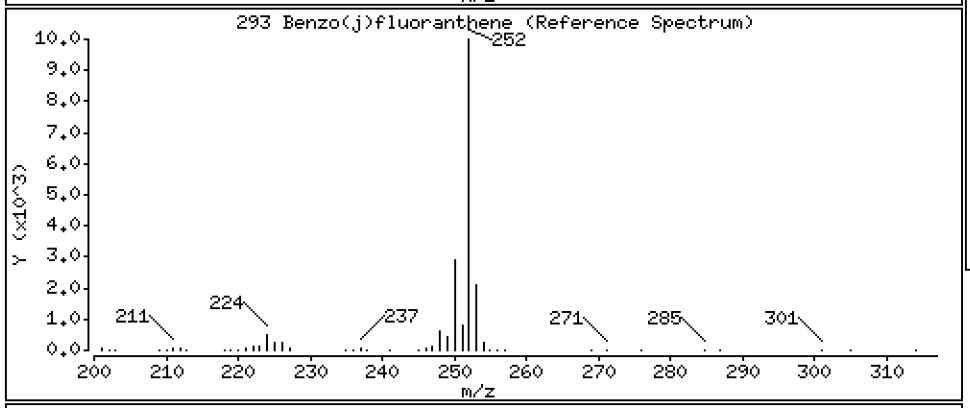
Concentration: 2.512 ug/mL

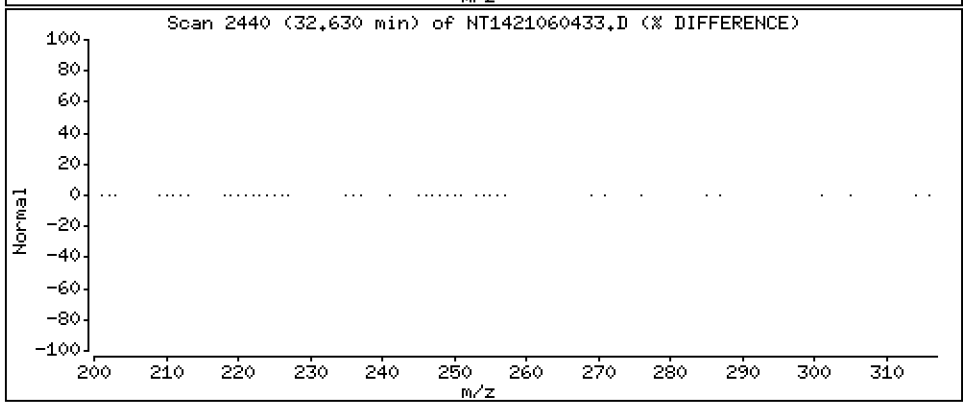












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Date : 05-JUN-2021 14:42

Client ID:

Instrument: nt14.i

Sample Info: SJF0131-CCV1

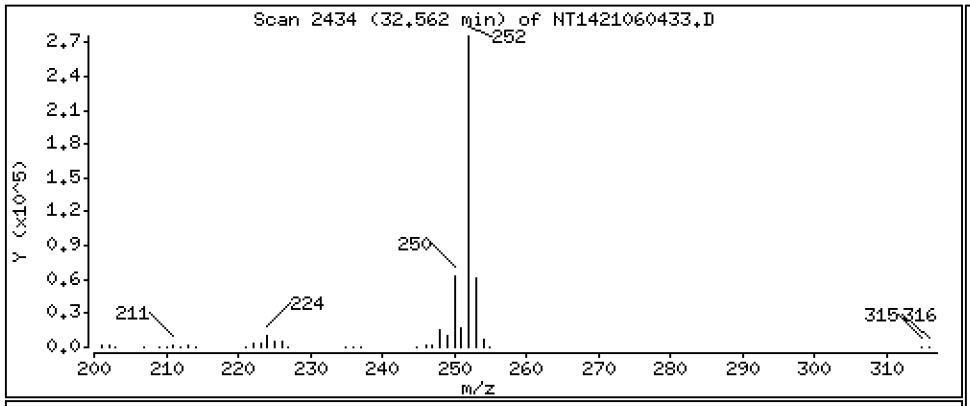
Operator: VTS

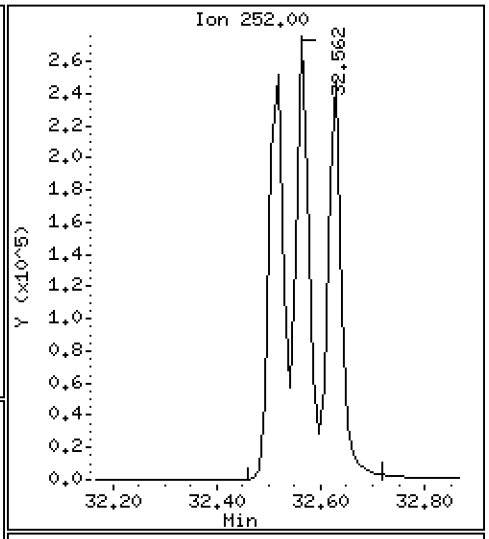
Column phase: Rxi-17Sil MS

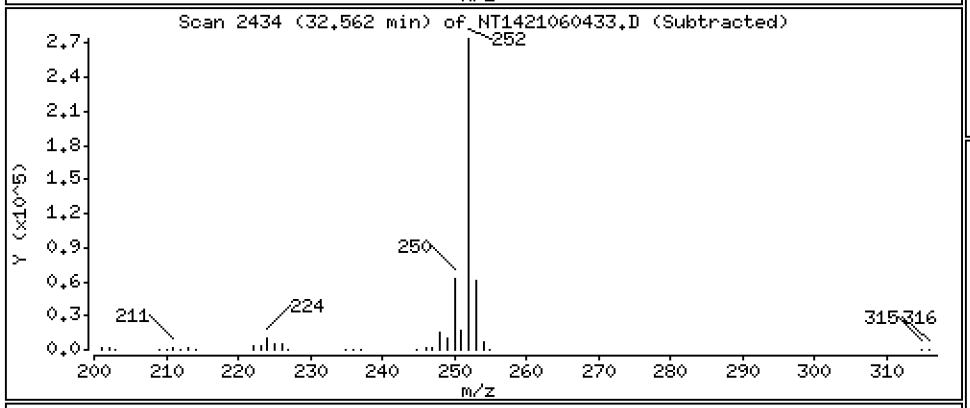
Column diameter: 0.25

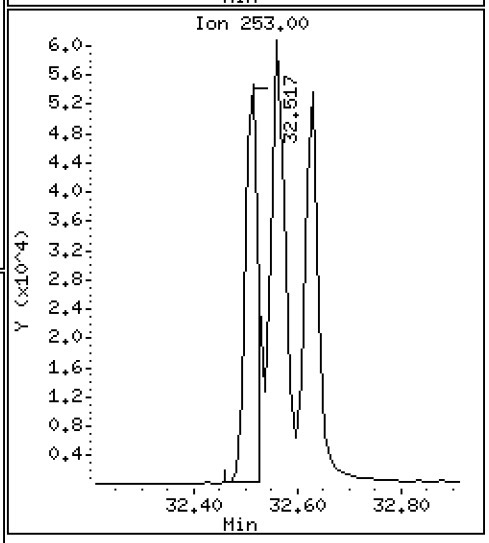
246 Total Benzofluoranthenes

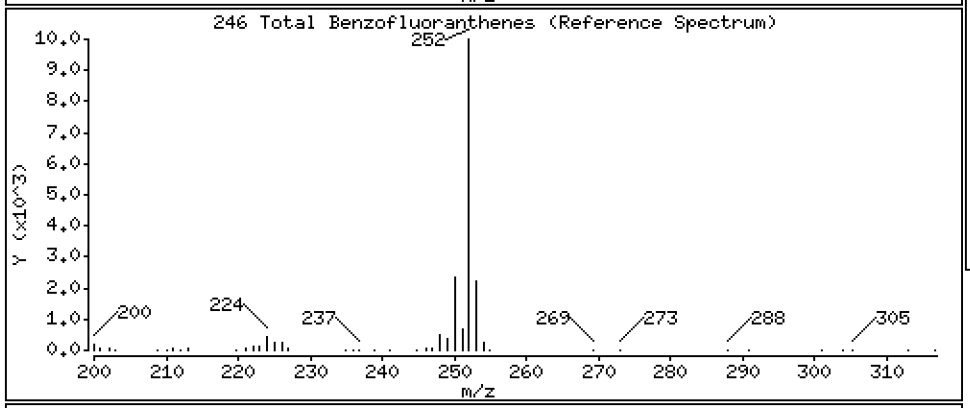
Concentration: 8.220 ug/mL

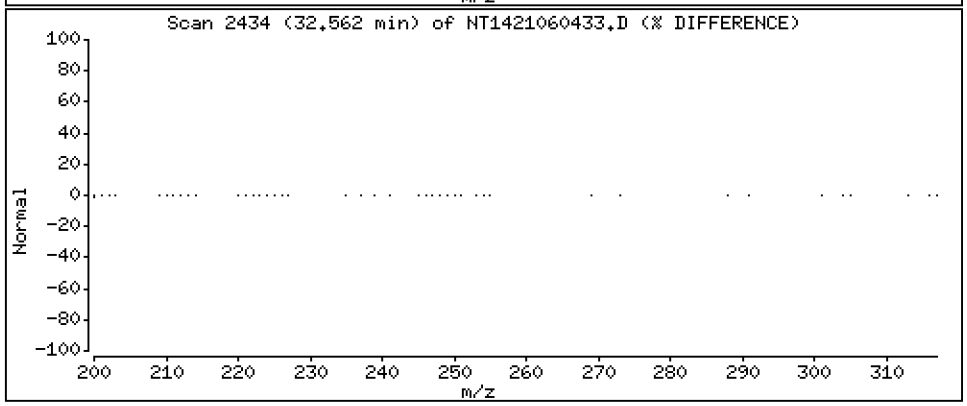












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Date : 05-JUN-2021 14:42

Client ID:

Instrument: nt14.i

Sample Info: SJF0131-CCV1

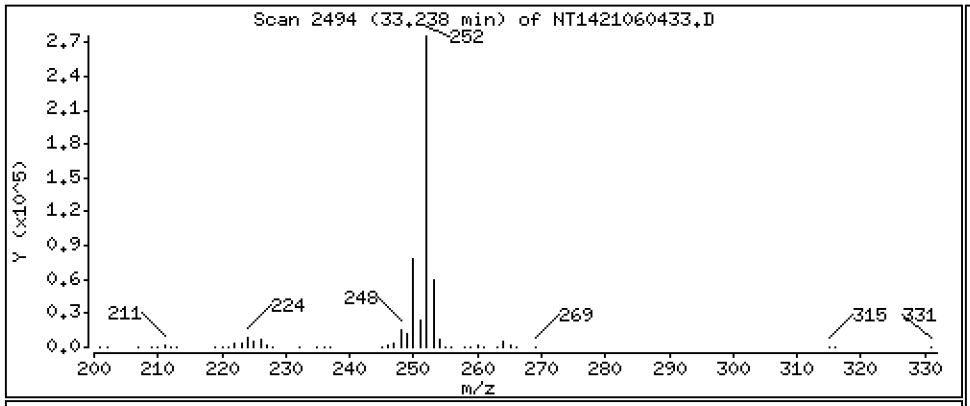
Operator: VTS

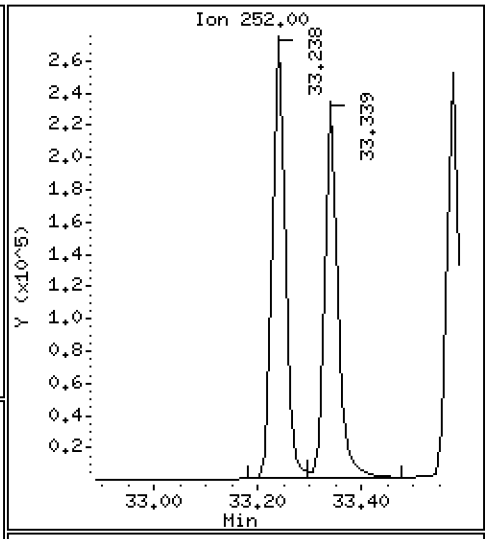
Column phase: Rxi-17Sil MS

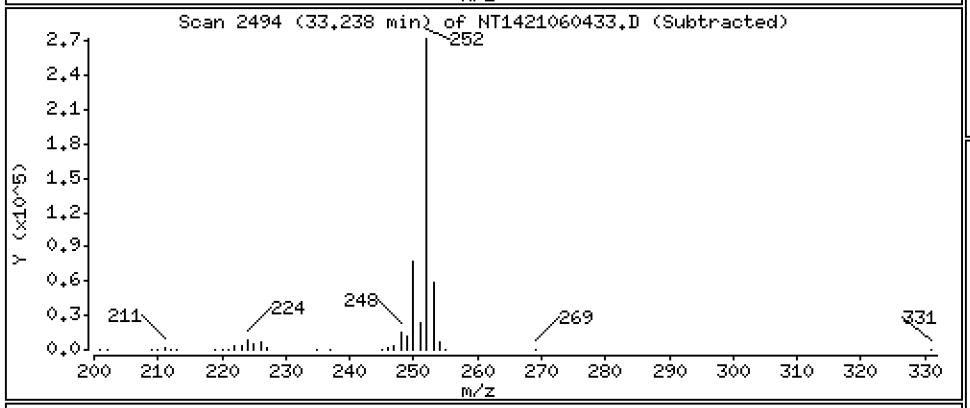
Column diameter: 0.25

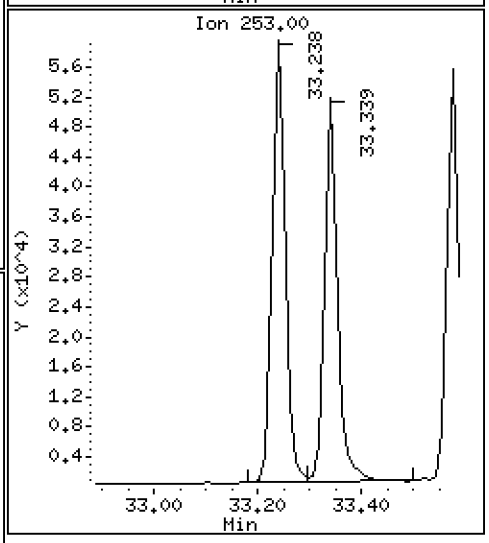
64 Benzo(e)pyrene

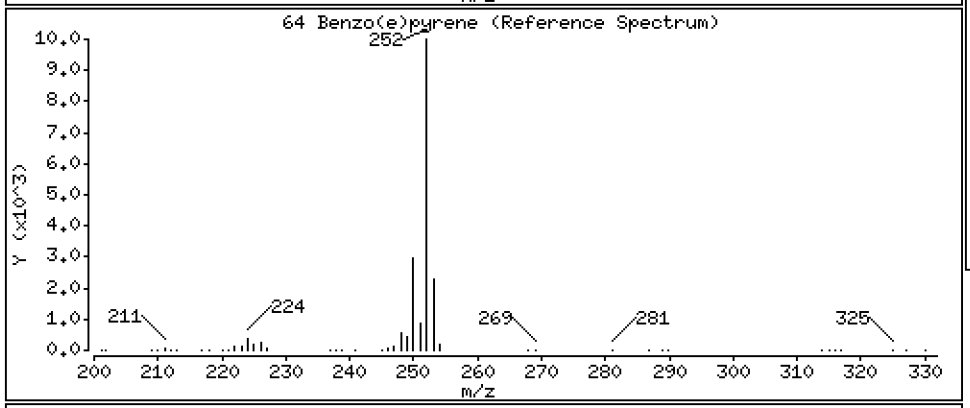
Concentration: 2.581 ug/mL

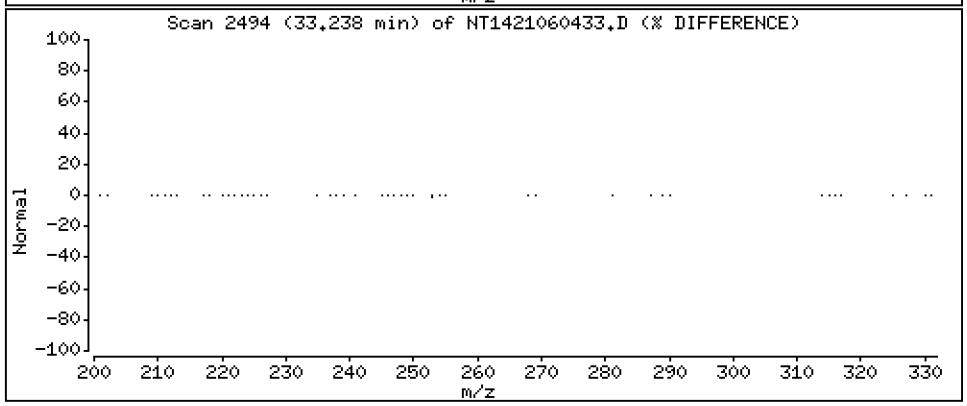












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Date : 05-JUN-2021 14:42

Client ID:

Instrument: nt14.i

Sample Info: SJF0131-CCV1

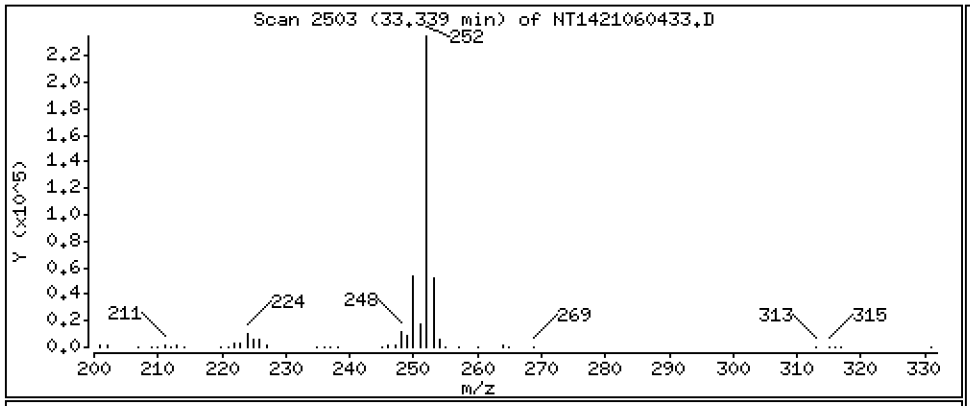
Operator: VTS

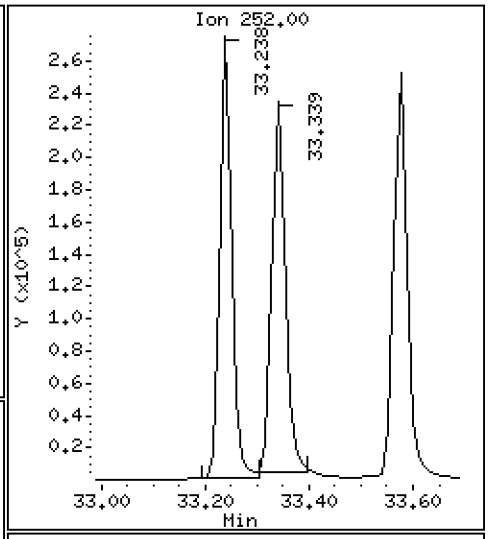
Column phase: Rxi-17Sil MS

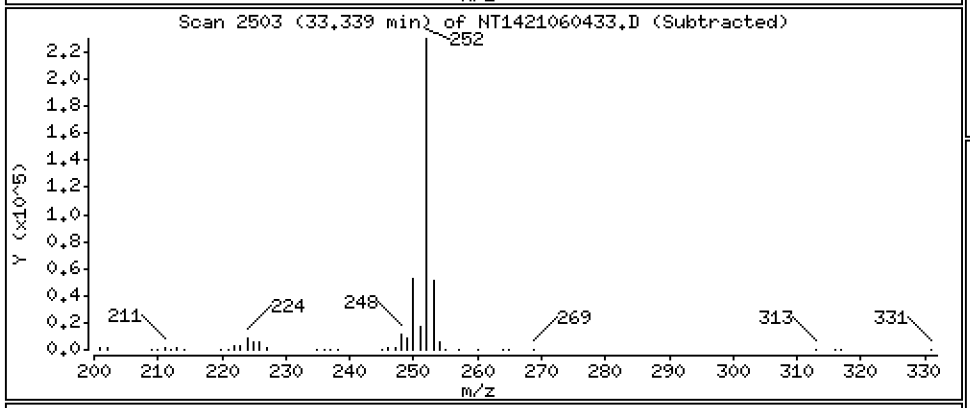
Column diameter: 0.25

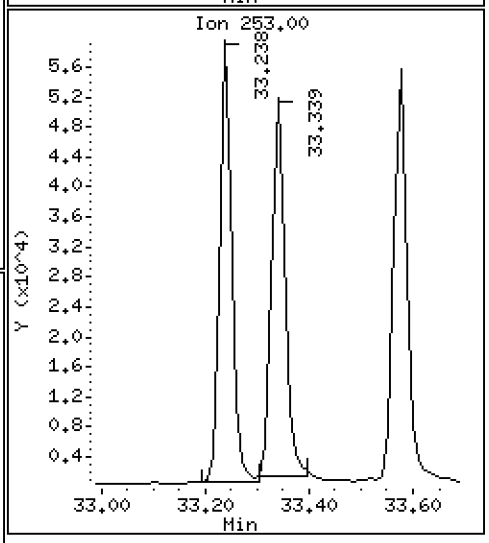
66 Benzo(a)pyrene

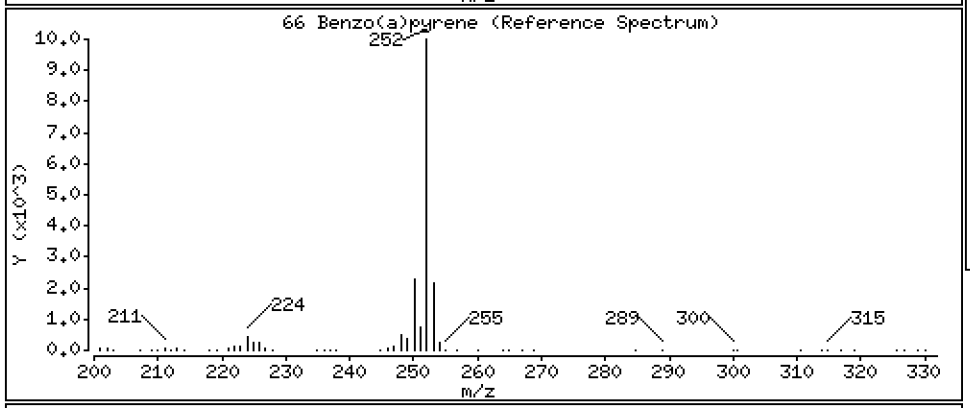
Concentration: 2.507 ug/mL

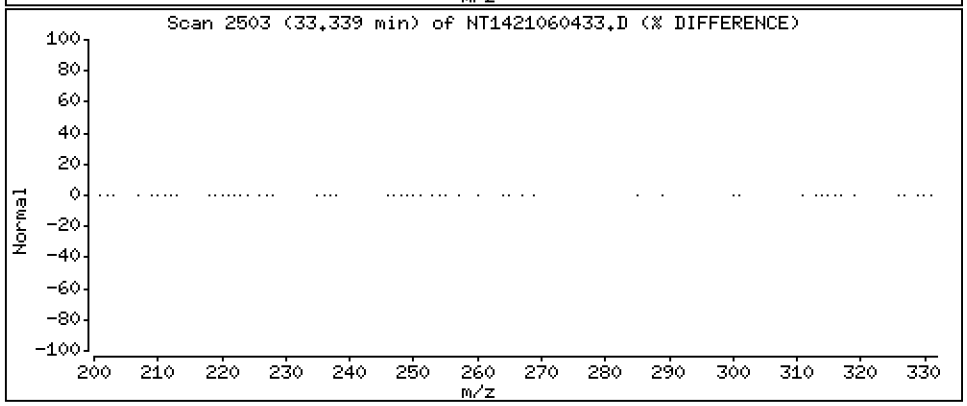












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Date : 05-JUN-2021 14:42

Client ID:

Instrument: nt14.i

Sample Info: SJF0131-CCV1

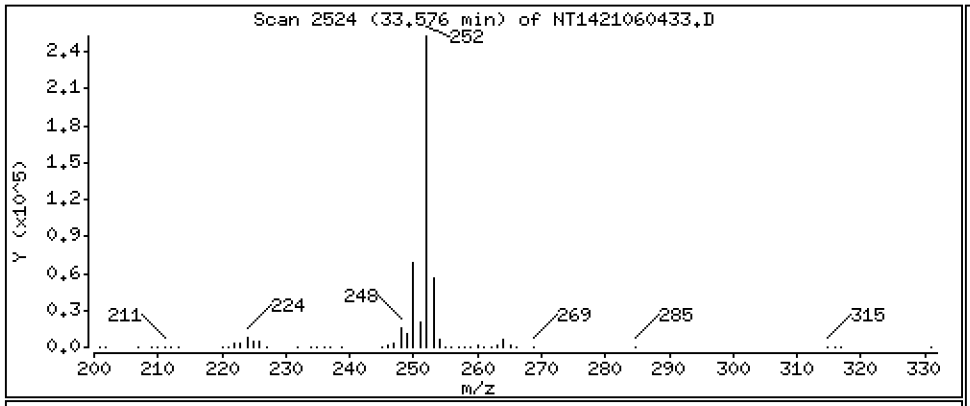
Operator: VTS

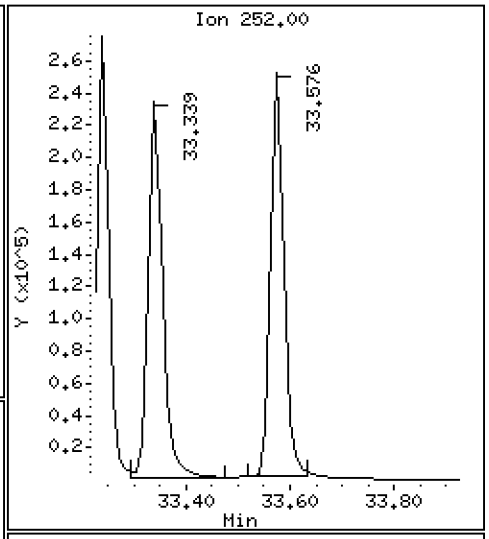
Column phase: Rxi-17Sil MS

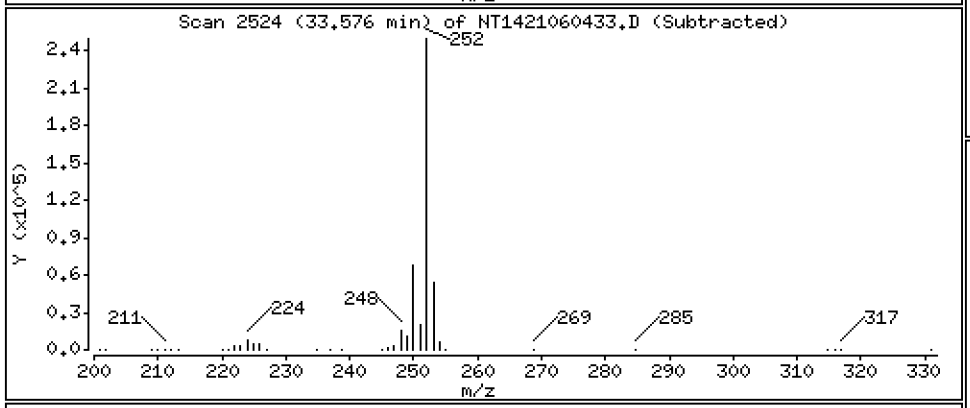
Column diameter: 0.25

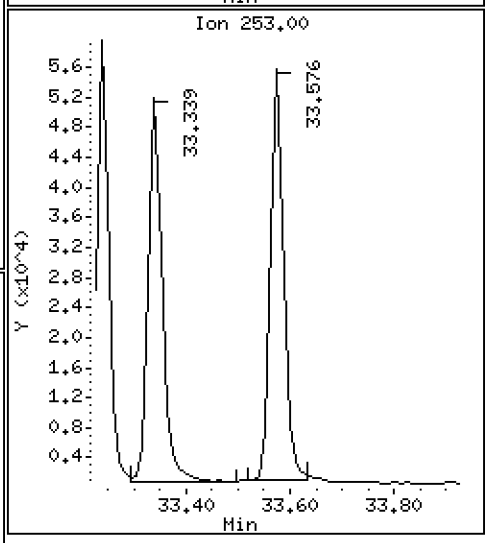
68 Perylene

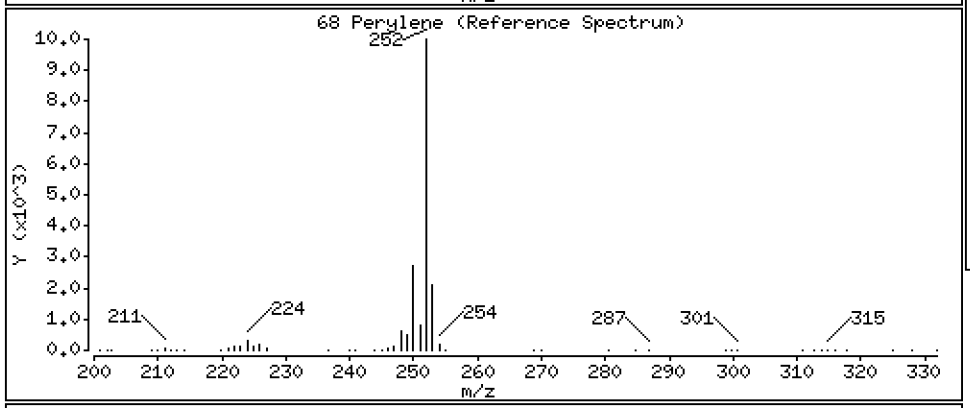
Concentration: 2.587 ug/mL

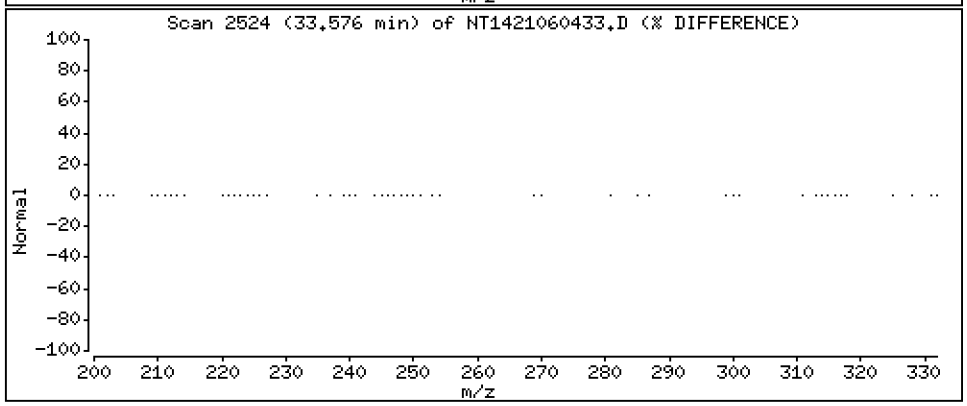












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Date : 05-JUN-2021 14:42

Client ID:

Instrument: nt14.i

Sample Info: SJF0131-CCV1

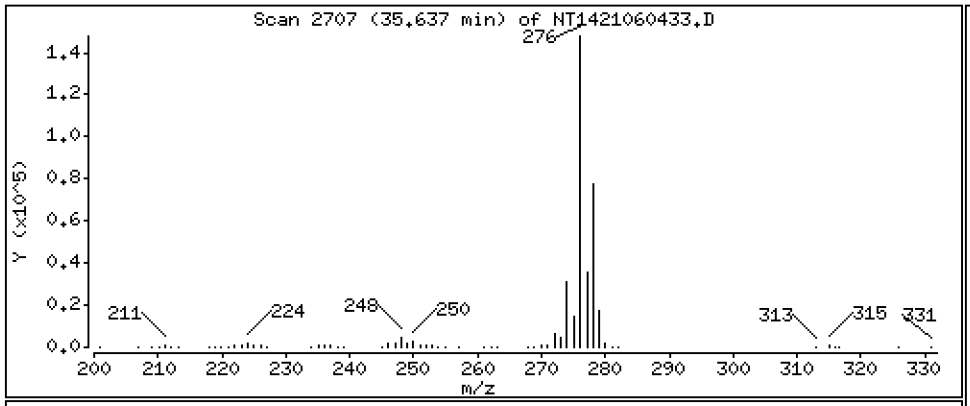
Operator: VTS

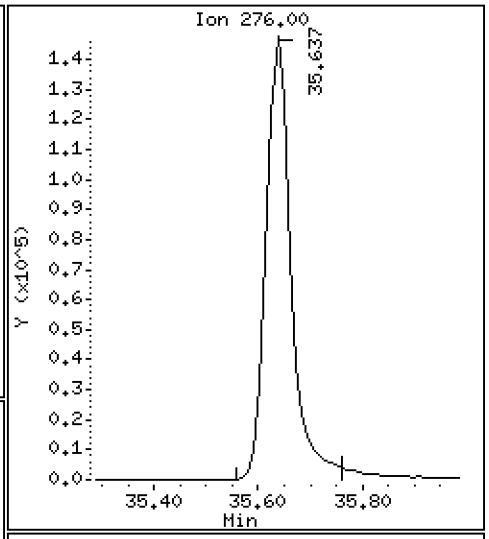
Column phase: Rxi-17Sil MS

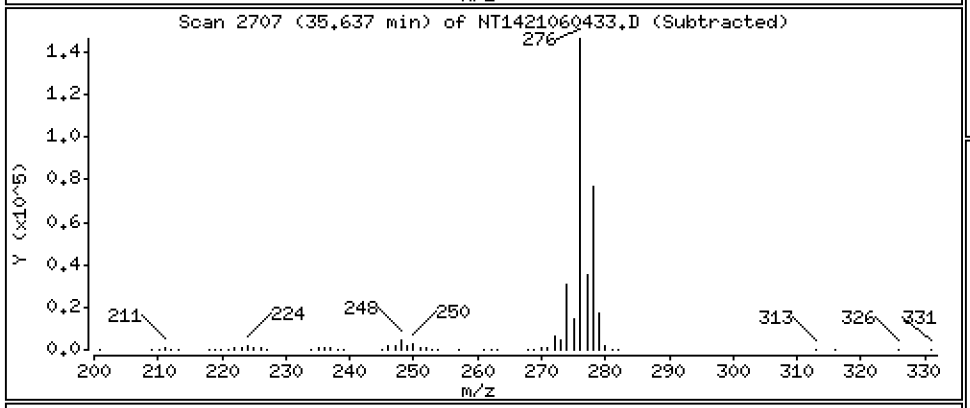
Column diameter: 0.25

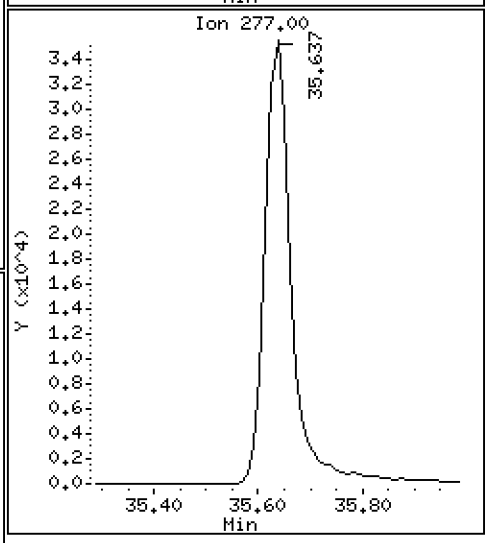
69 Indeno(1,2,3-cd)pyrene

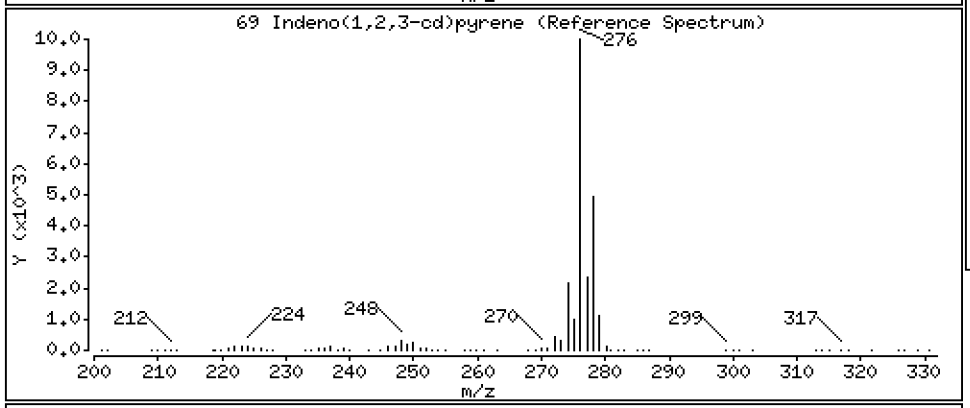
Concentration: 2.642 ug/mL

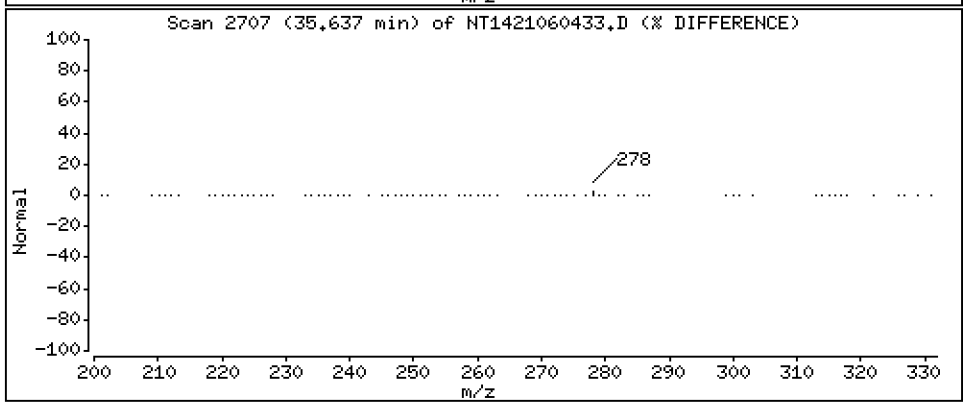












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Date : 05-JUN-2021 14:42

Client ID:

Instrument: nt14.i

Sample Info: SJF0131-CCV1

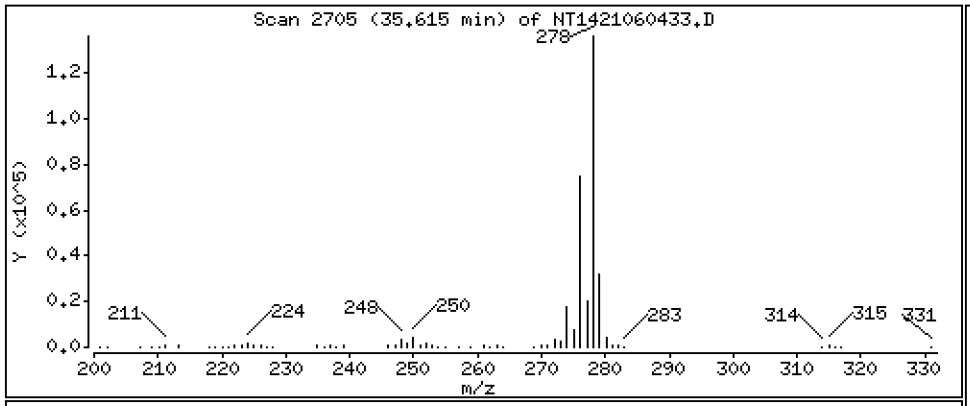
Operator: VTS

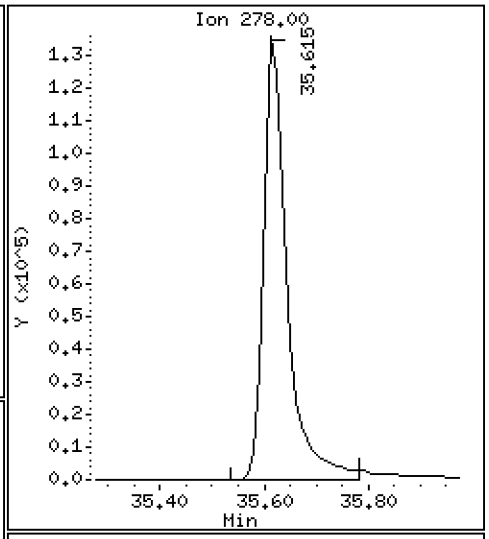
Column phase: Rxi-17Sil MS

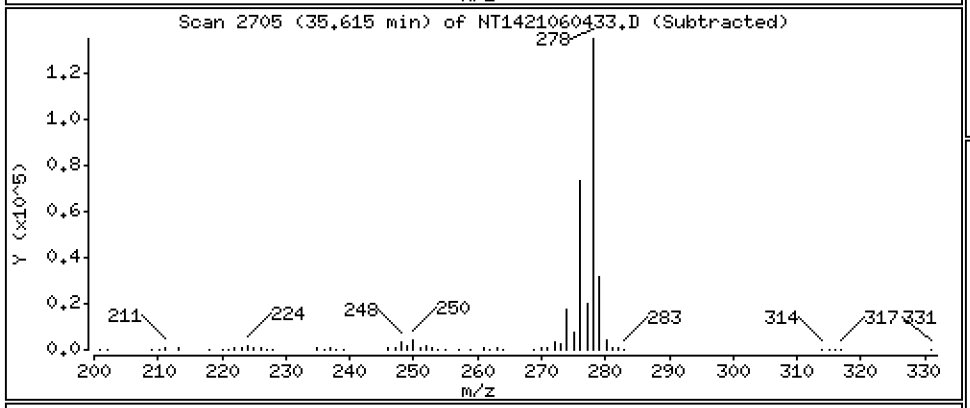
Column diameter: 0.25

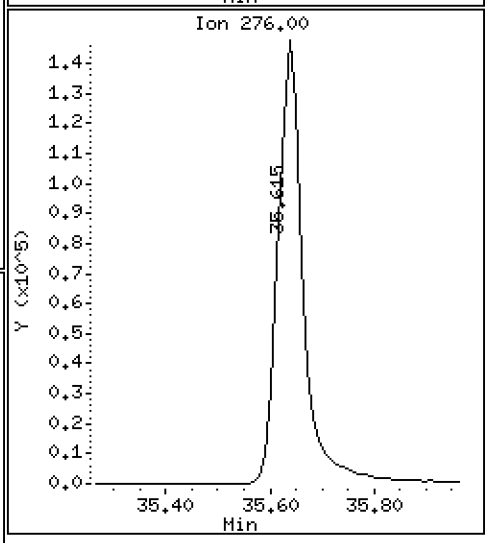
70 Dibenzo(a,h)anthracene

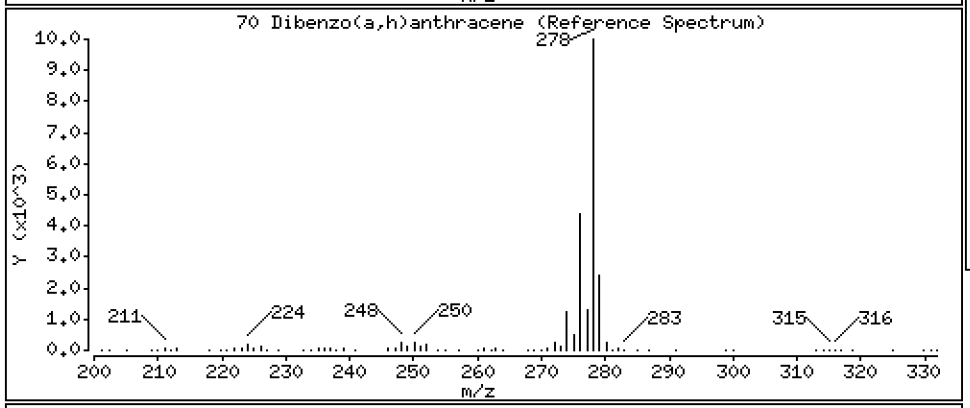
Concentration: 2.396 ug/mL

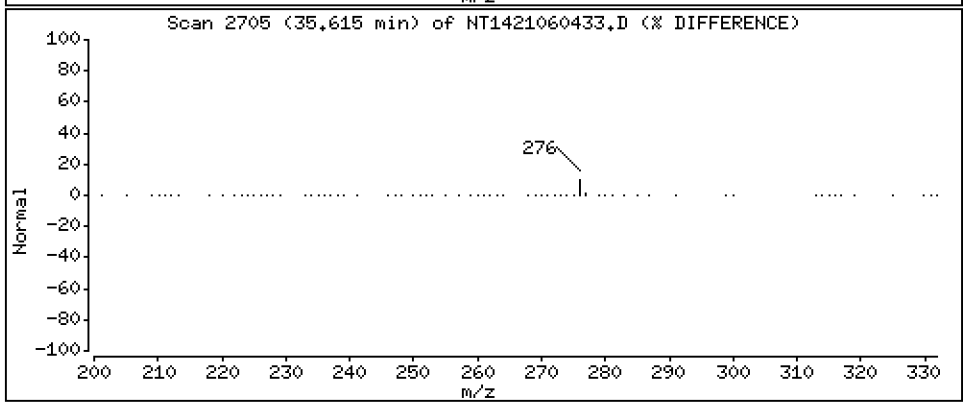












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Date : 05-JUN-2021 14:42

Client ID:

Instrument: nt14.i

Sample Info: SJF0131-CCV1

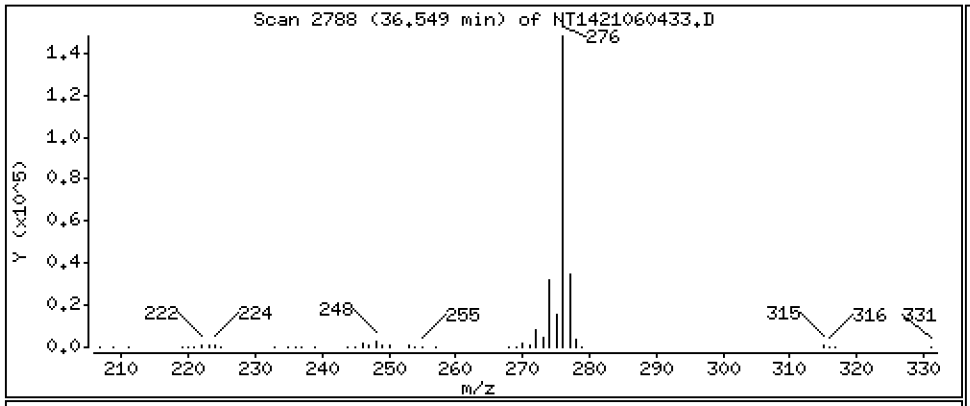
Operator: VTS

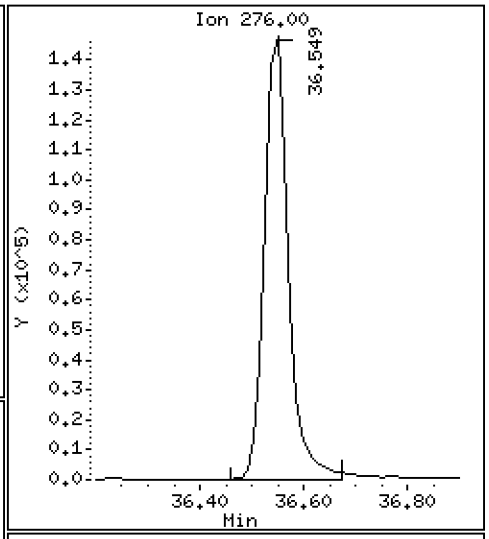
Column phase: Rxi-17Sil MS

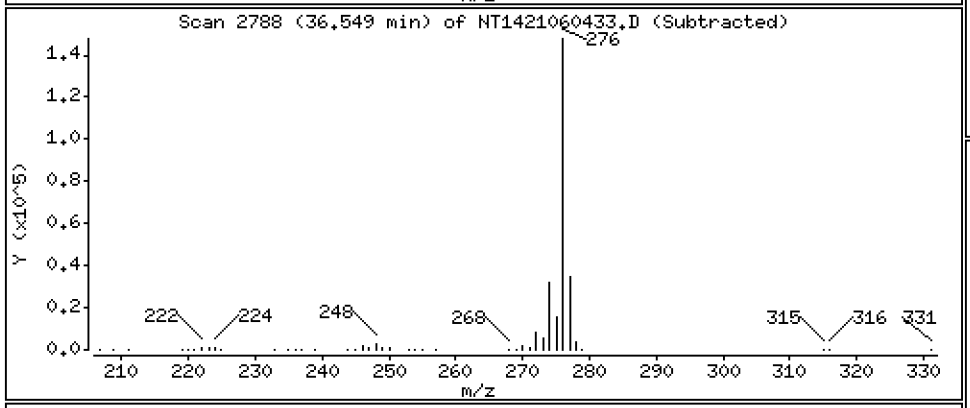
Column diameter: 0.25

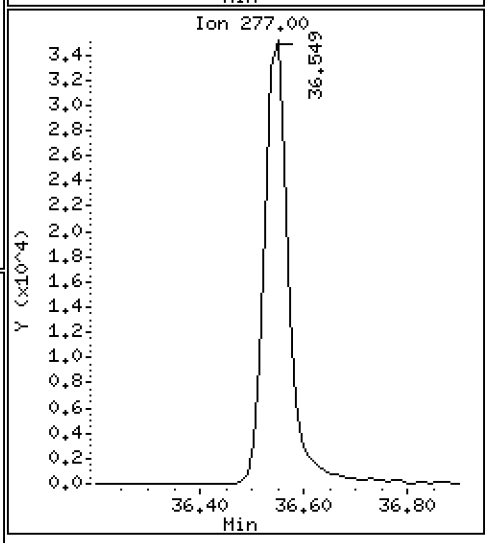
74 Benzo(g,h,i)perylene

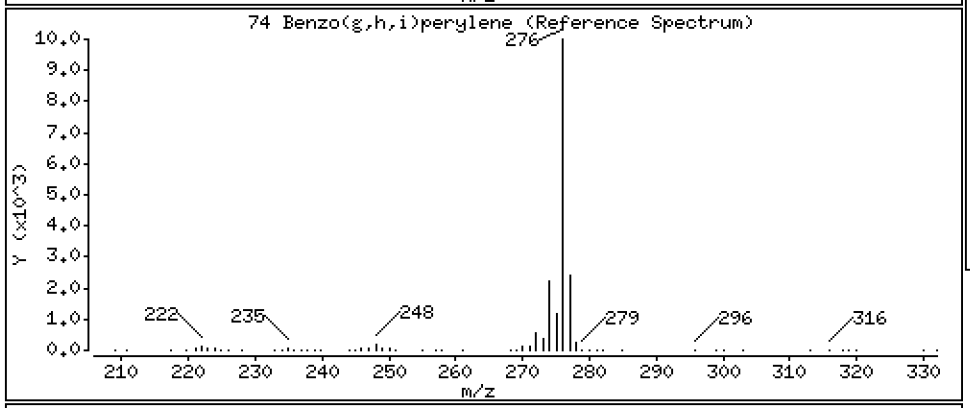
Concentration: 2.519 ug/mL

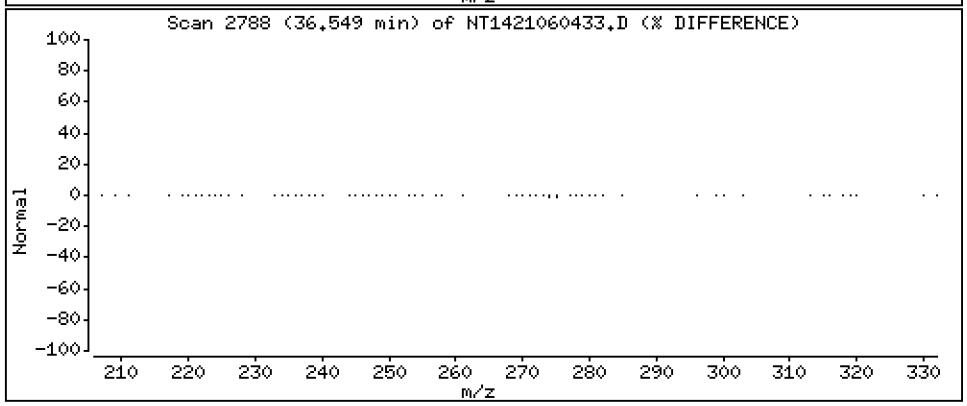












ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt14.i\20210604A.b\NT1421060433.D
Lab Smp Id: SJF0131-CCV1
Inj Date : 05-JUN-2021 14:42
Operator : VTS Inst ID: nt14.i
Smp Info : SJF0131-CCV1
Misc Info :
Comment : 1ul Injection
Method : \\target\share\chem3\nt14.i\20210604.b\ALKYLPNA.m
Meth Date : 03-Jun-2021 08:55 yev Quant Type: ISTD
Cal Date : 29-MAY-2021 18:49 Cal File: NT1421052914.D
Als bottle: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: TARGETS.sub
Target Version: 4.14
Processing Host: ORGDATA102

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/mL)
1 trans-Decalin	138	7.146	7.146	(0.378)	39695	2.78070	2.781
2 cis-Decalin	138	8.256	8.256	(0.437)	29154	2.48942	2.489
$ 6 Naphthalene-d8	136	11.887	11.897	(0.629)	337831	2.53867	2.539(R)
7 Naphthalene	128	11.957	11.957	(0.633)	339420	2.55207	2.552
12 Benzo(b)thiophene	134	12.409	12.409	(0.657)	272086	2.48855	2.489
16 2-Methylnaphthalene	141	13.794	13.794	(0.730)	199475	2.56570	2.566
17 1-methylnaphthalene	141	14.244	14.244	(0.754)	191625	2.53347	2.533
18 Biphenyl	154	15.431	15.442	(0.817)	289881	2.52332	2.523
19 2,6-Dimethylnaphthalene	156	15.508	15.508	(0.821)	214322	2.53690	2.537
20 Acenaphthylene	152	17.080	17.091	(0.904)	372918	2.58222	2.582
$ 21 Acenaphthene-d10	164	17.366	17.376	(0.919)	207779	2.54221	2.542(R)
22 Acenaphthene	153	17.486	17.486	(0.925)	226579	2.54503	2.545
23 Dibenzofuran	168	17.860	17.860	(0.945)	335010	2.53685	2.537
24 1,6,7-Trimethylnaphthalene	170	18.080	18.091	(0.957)	221291	2.57201	2.572
* 25 Fluorene-d10	176	18.896	18.907	(1.000)	286250	2.00000	
26 Fluorene	166	19.009	19.009	(1.006)	257426	2.51596	2.516
30 Dibenzothiophene	184	21.931	21.931	(1.161)	373271	2.58406	2.584
$ 35 Phenanthrene-d10	188	22.239	22.239	(0.995)	359804	2.48922	2.489(R)
36 Phenanthrene	178	22.316	22.326	(0.999)	388477	2.50777	2.508
* 250 Anthracene-d10	188	22.349	22.359	(1.000)	300444	2.00000	
37 Anthracene	178	22.414	22.425	(1.003)	367269	2.51983	2.520
42 Carbazole	167	23.701	23.712	(1.061)	333029	2.46585	2.466
43 1-Methylphenanthrene	192	24.151	24.162	(1.081)	285896	2.56812	2.568
44 Fluoranthene	202	26.131	26.141	(1.169)	454214	2.65647	2.656
46 Pyrene	202	26.977	26.977	(1.207)	480697	2.70315	2.703
51 Naphthobenzothiophene	234	29.509	29.509	(1.320)	510041	2.66937	2.669
55 Benzo(a)anthracene	228	30.084	30.095	(0.907)	455625	2.70387	2.704
$ 56 Chrysene-d12	240	30.219	30.219	(0.911)	361408	2.65749	2.657(R)
57 Chrysene	228	30.287	30.287	(0.913)	427435	2.58863	2.589
62 Benzo(b)fluoranthene	252	32.517	32.517	(0.980)	425949	2.43731	2.437
63 Benzo(k)fluoranthene	252	32.562	32.562	(0.981)	562259	2.99850	2.999
293 Benzo(j)fluoranthene	252	32.629	32.629	(0.983)	433986	2.51171	2.512
246 Total Benzofluoranthenes	252	32.562	32.517	(0.981)	1407115	8.22030	8.220(M)

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/mL)
* 251 Benzo(e)pyrene-d12	264	33.181	33.181	(1.000)	434465	2.00000	
64 Benzo(e)pyrene	252	33.238	33.237	(1.002)	442065	2.58085	2.581
66 Benzo(a)pyrene	252	33.339	33.339	(1.005)	390597	2.50671	2.507
$ 67 Perylene-d12	264	33.519	33.519	(1.010)	374695	2.55227	2.552(R)
68 Perylene	252	33.575	33.575	(1.012)	415664	2.58732	2.587
69 Indeno(1,2,3-cd)pyrene	276	35.637	35.637	(1.074)	483261	2.64217	2.642(M)
70 Dibenzo(a,h)anthracene	278	35.614	35.625	(1.073)	412374	2.39639	2.396(M)
74 Benzo(g,h,i)perylene	276	36.549	36.549	(1.101)	455109	2.51866	2.519(M)

QC Flag Legend

R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt14.i
Lab File ID: NT1421060433.D
Lab Smp Id: SJF0131-CCV1
Analysis Type: SV
Quant Type: ISTD
Operator: VTS
Method File: \\target\share\chem3\nt14.i\20210604.b\ALKYLPNA.m
Misc Info:

Calibration Date: 01-JUN-2021
Calibration Time: 15:22
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
25 Fluorene-d10	228656	114328	457312	286250	25.19
250 Anthracene-d10	234827	117414	469654	300444	27.94
251 Benzo(e)pyrene-d1	331649	165825	663298	434465	31.00

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
25 Fluorene-d10	18.91	18.41	19.41	18.90	-0.06
250 Anthracene-d10	22.36	21.86	22.86	22.35	-0.05
251 Benzo(e)pyrene-d1	33.18	32.68	33.68	33.18	0.00

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

REVIEW SUMMARY FOR FILE - NT1421060433.D

Lab ID: SJF0131-CCV1
nt14.i, 20210604.b\ALKYLPNA.m, 05-JUN-2021 14:42

RT	CO-ELUTION COMPOUNDS
	NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
NONE			

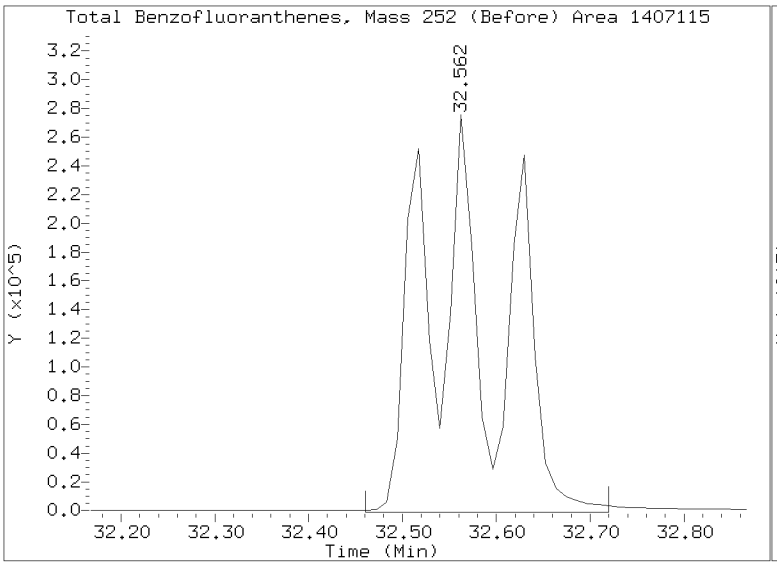
RRT check based on Ccal File: NT1421060102.D

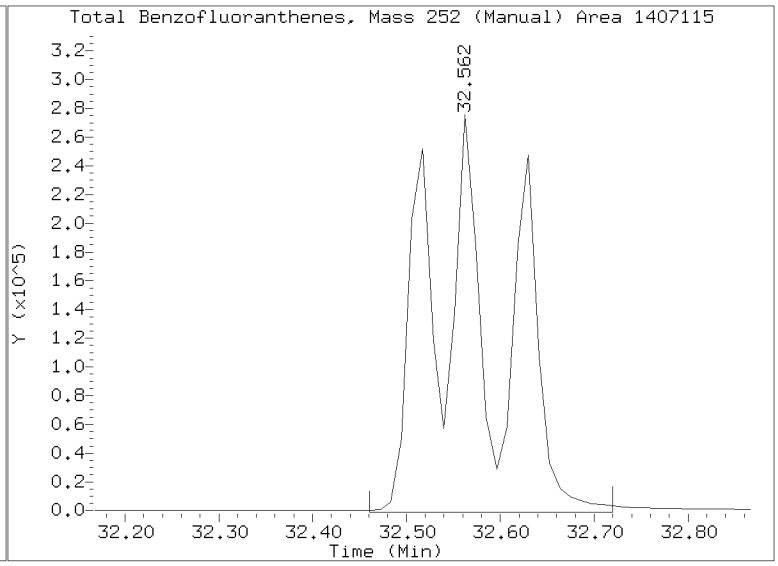
On Column LOD for nt14.i, 20210604.b\ALKYLPNA.m, TARGETS.sub = 0.0000

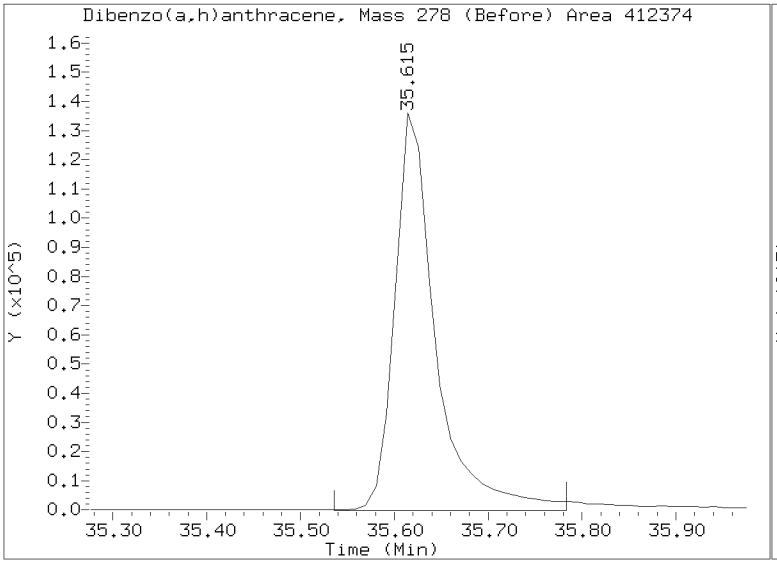
* Only compounds listed in the work order have been verified by the analyst *

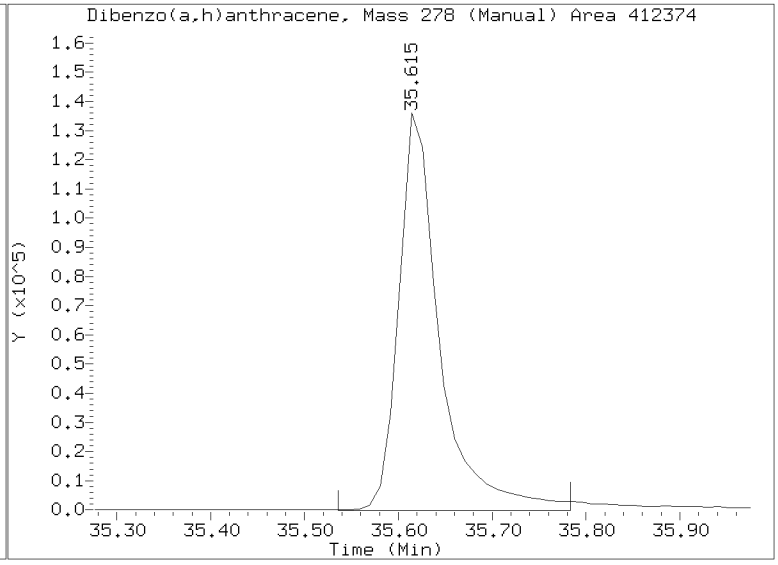
Quant Ion Manual Peak Adjustment Report

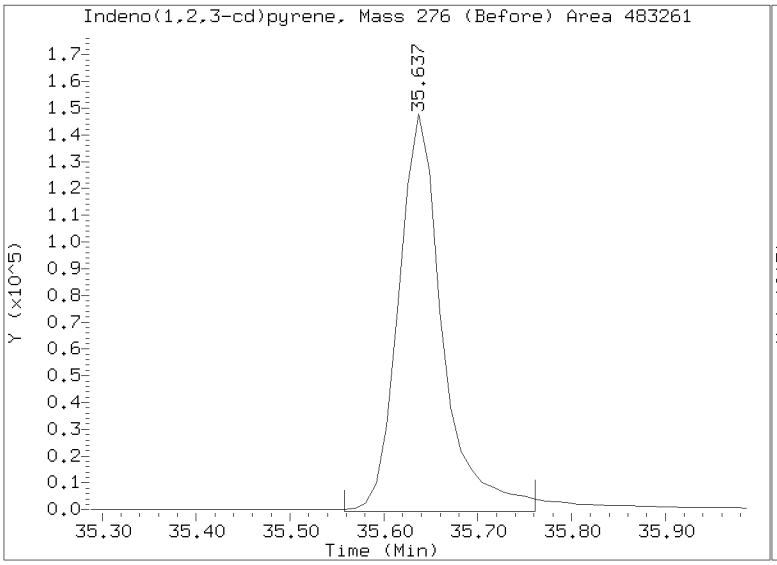
Datafile: //target/share/chem3/nt14.i/20210604A.b/NT1421060433.D
Injection Date: 05-JUN-2021 14:42
Lab ID:SJF0131-CCV1 Client ID:
Report Date: 06/10/2021 15:50

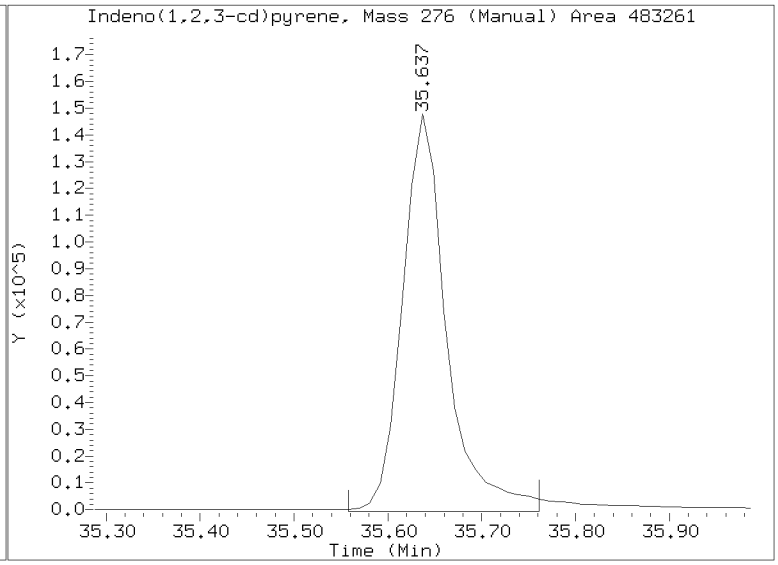






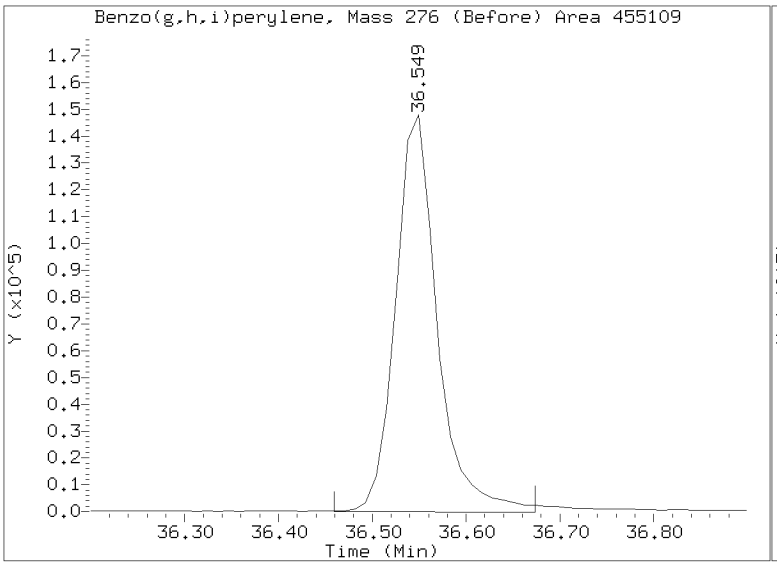


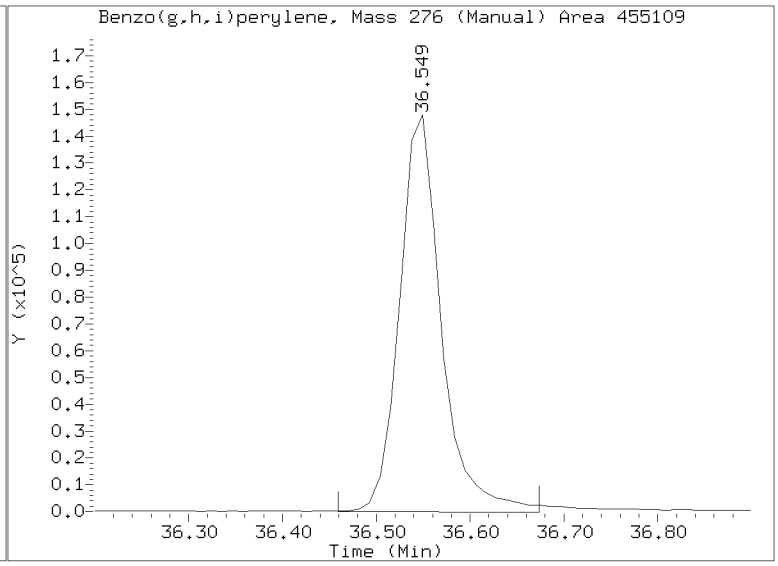




Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt14.i/20210604A.b/NT1421060433.D
Injection Date: 05-JUN-2021 14:42
Lab ID:SJF0131-CCV1 Client ID:
Report Date: 06/10/2021 15:50





Analytical Resources, Incorporated
Analytical Chemists and Consultants

CONTINUING CALIBRATION CHECK
EPA 8270E-SIM

Laboratory:	Analytical Resources, Inc.	SDG:	21E0106
Client:	Anchor QEA, LLC	Project:	Gasco Siltronic - US Moorings
Instrument ID:	NT14	Calibration:	EF00008
Lab File ID:	NT1421060719.D	Calibration Date:	06/02/2021
Sequence:	SJF0173	Injection Date:	06/08/21
Lab Sample ID:	SJF0173-CCV1	Injection Time:	02:54
Sequence Name:	Calibration Check		

		CONC. (ug/mL)		RESPONSE FACTOR (RRF)			% DRIFT/DIFF	
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN	CCV	LIMIT
trans-Decalin	A	2.5000	2.7	0.0997391	0.1070424		7.3	+/-50
cis-Decalin	A	2.5000	2.4	0.0700123	0.0787491		-3.8	+/-50
Naphthalene	A	2.5000	2.5	0.9292421	0.9453670		1.7	+/-50
1-Methylnaphthalene	A	2.5000	2.5	0.5284699	0.5302916		0.3	+/-50
2-Methylnaphthalene	A	2.5000	2.5	0.5432098	0.5540188		2.0	+/-50
Biphenyl	A	2.5000	2.5	0.8026611	0.8145836		1.5	+/-50
2,6-Dimethylnaphthalene	A	2.5000	2.5	0.5902664	0.5988104		1.4	+/-50
Acenaphthylene	A	2.5000	2.6	1.0090320	1.0371850		2.8	+/-50
Acenaphthene	A	2.5000	2.5	0.6220308	0.6245874		0.4	+/-50
Dibenzofuran	A	2.5000	2.6	0.9226724	0.9636588		4.4	+/-50
2,3,5-Trimethylnaphthalene	A	2.5000	2.6	0.6011392	0.6164320		2.5	+/-50
Fluorene	A	2.5000	2.6	0.7148800	0.7349514		2.8	+/-50
Benzo(b)thiophene	A	2.5000	2.5	0.7639133	0.7693939		0.7	+/-50
Phenanthrene	A	2.5000	2.5	1.0312030	1.0433480		1.2	+/-50
Anthracene	A	2.5000	2.5	0.9702418	0.9882540		1.9	+/-50
Carbazole	A	2.5000	2.4	0.8557591	0.8669273		-3.6	+/-50
1-Methylphenanthrene	A	2.5000	2.6	0.7410711	0.7612333		2.7	+/-50
Fluoranthene	A	2.5000	2.6	1.1382070	1.2002340		5.4	+/-50
Dibenzothiophene	A	2.5000	2.6	1.0092670	1.0582540		4.9	+/-50
Pyrene	A	2.5000	2.6	1.1837730	1.2536810		5.9	+/-50
Benzo(a)anthracene	A	2.5000	2.9	0.7757052	0.8909979		14.9	+/-50
Chrysene	A	2.5000	2.8	0.7601074	0.8484632		11.6	+/-50
Benzo(b)fluoranthene	A	2.5000	2.5	0.8044926	0.8097865		0.7	+/-50
Benzo(j)fluoranthene	A	2.5000	2.5	0.7953937	0.7827875		-1.6	+/-50
Benzo(k)fluoranthene	A	2.5000	2.8	0.8631910	0.9567737		10.8	+/-50
Benzo(e)pyrene	A	2.5000	2.5	0.7884934	0.8005431		1.5	+/-50
Benzo(a)pyrene	A	2.5000	2.7	0.7172983	0.7700623		7.4	+/-50
Indeno(1,2,3-cd)pyrene	A	2.5000	2.5	0.8419699	0.8394096		-0.3	+/-50
Dibenzo(a,h)anthracene	A	2.5000	2.3	0.7153598	0.7297809		-7.8	+/-50
Benzo(g,h,i)perylene	A	2.5000	2.4	0.8318028	0.7865770		-5.4	+/-50
Perylene	A	2.5000	2.6	0.7395491	0.7556040		2.2	+/-50
Benzo(b)naphtho(2,1-d)thiophene	A	2.5000	2.5	1.2719290	1.2730980		0.09	+/-50
Naphthalene-d8	A	2.5000	2.56	0.9297733	0.9528818		2.5	+/-50
Acenaphthene-d10	A	2.5000	2.52	0.5710501	0.5754469		0.8	+/-50

* Values outside of QC limits

Analytical Resources, Incorporated
Analytical Chemists and Consultants

CONTINUING CALIBRATION CHECK
EPA 8270E-SIM

Laboratory:	Analytical Resources, Inc.	SDG:	21E0106
Client:	Anchor QEA, LLC	Project:	Gasco Siltronic - US Moorings
Instrument ID:	NT14	Calibration:	EF00008
Lab File ID:	NT1421060719.D	Calibration Date:	06/02/2021
Sequence:	SJF0173	Injection Date:	06/08/21
Lab Sample ID:	SJF0173-CCV1	Injection Time:	02:54
Sequence Name:	Calibration Check		

		CONC. (ug/mL)		RESPONSE FACTOR (RRF)			% DRIFT/DIFF	
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN	CCV	LIMIT
Phenanthrene-d10	A	2.5000	2.49	0.9622084	0.9589427		-0.3	+/-50
Chrysene-d12	A	2.5000	2.81	0.6260378	0.7045764		12.5	+/-50
Perylene-d12	A	2.5000	2.51	0.6758124	0.6796638		0.6	+/-50

* Values outside of QC limits

Data File: \\target\share\chem3\nt14.i\20210607.b\NT1421060719.D

Date : 08-JUN-2021 02:54

Client ID:

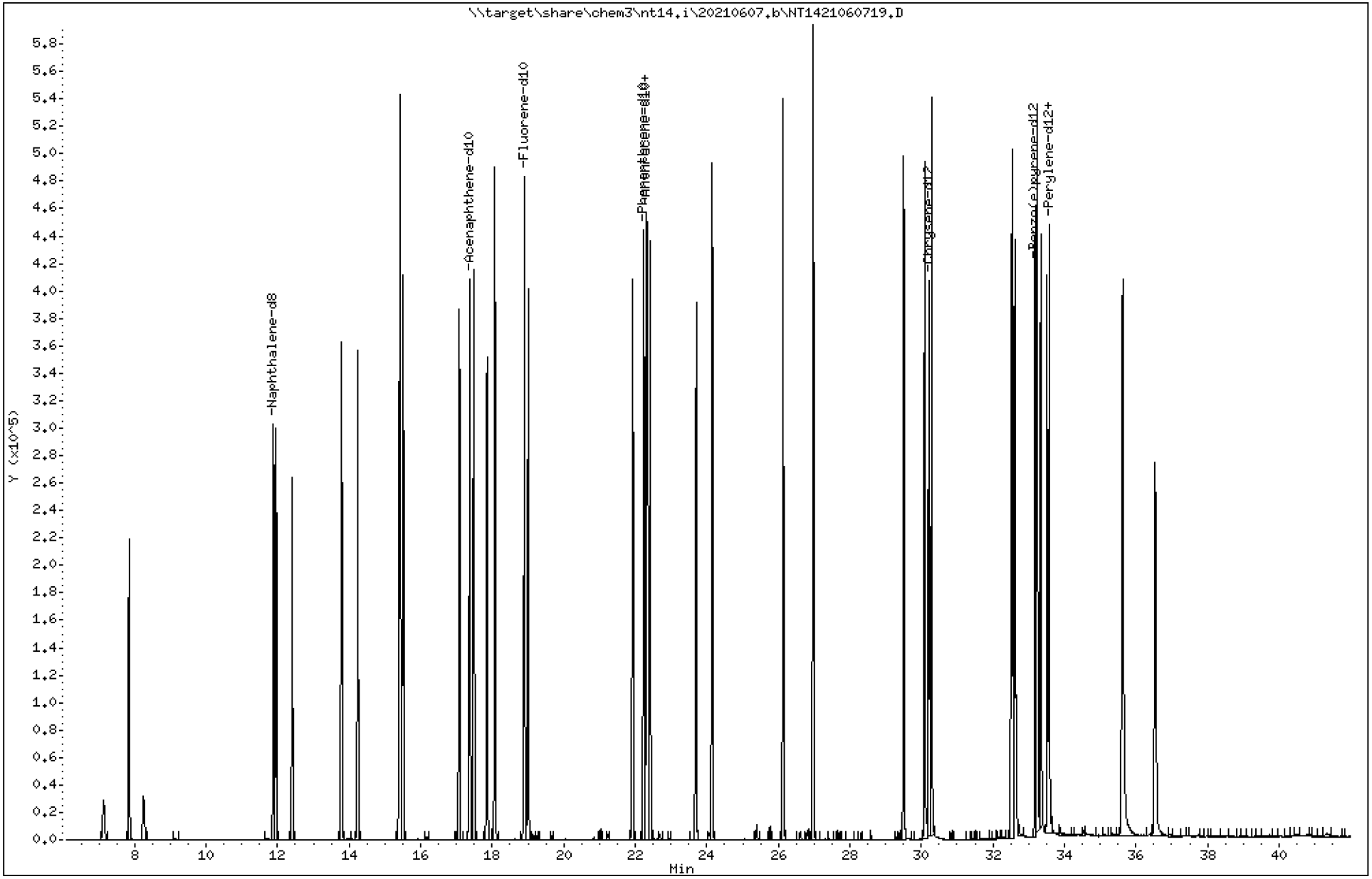
Instrument: nt14.i

Sample Info: SJF0173-CCV1

Operator: VTS

Column phase: Rxi-17Sil MS

Column diameter: 0.25



Data File: \\target\share\chem3\nt14.i\20210607.b\NT1421060719.D

Date : 08-JUN-2021 02:54

Client ID:

Instrument: nt14.i

Sample Info: SJF0173-CCV1

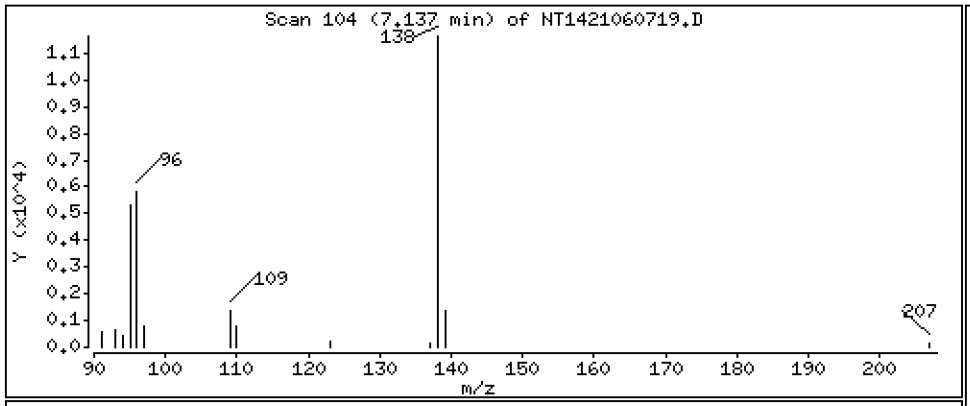
Operator: VTS

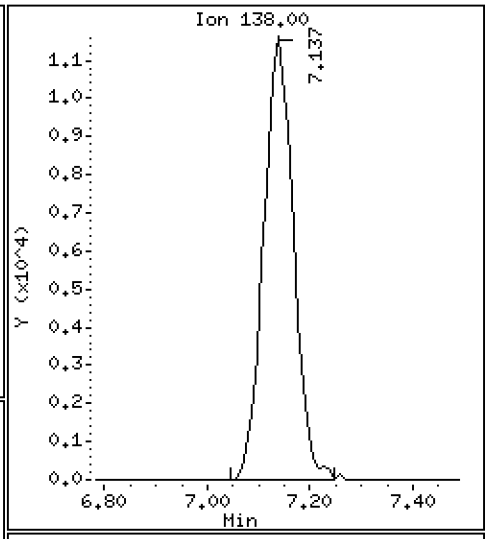
Column phase: Rxi-17Sil MS

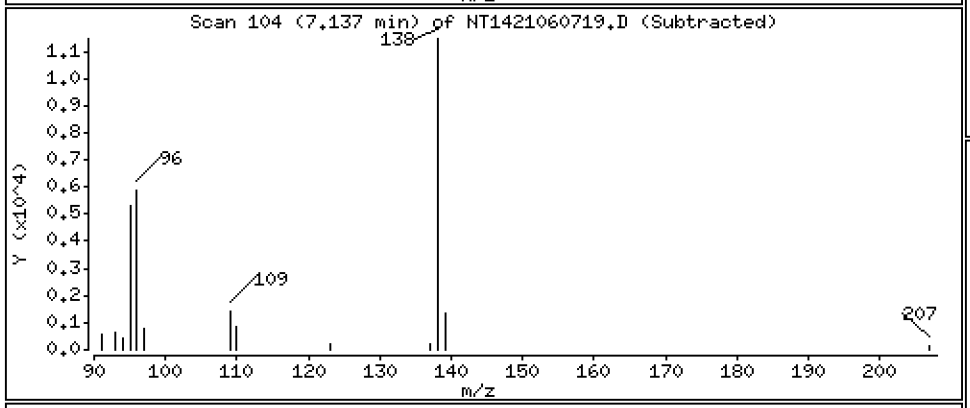
Column diameter: 0.25

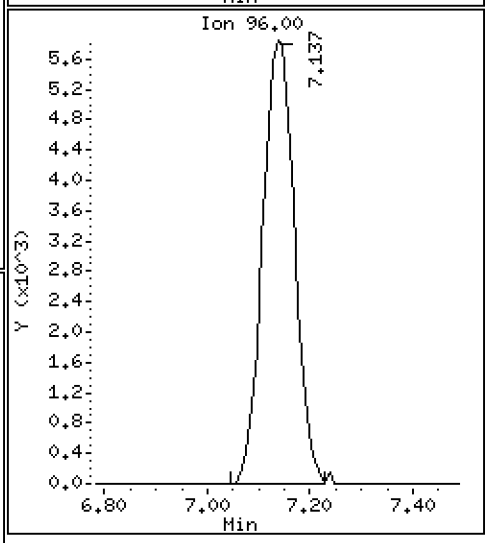
1 trans-Decalin

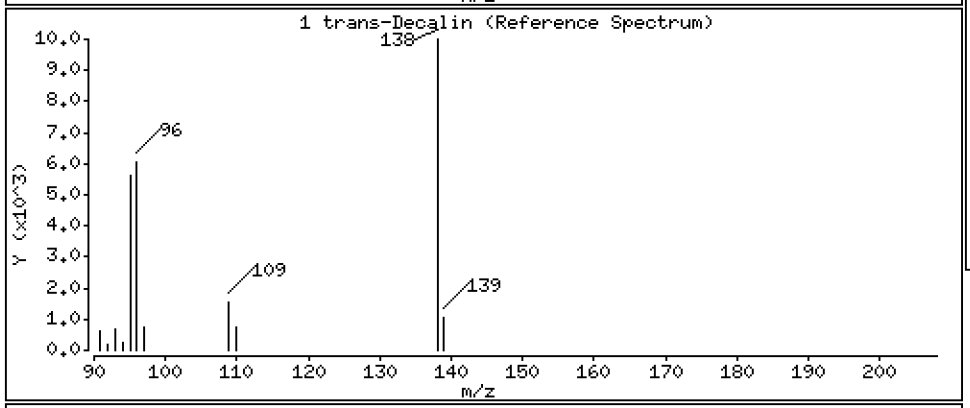
Concentration: 2.683 ug/mL

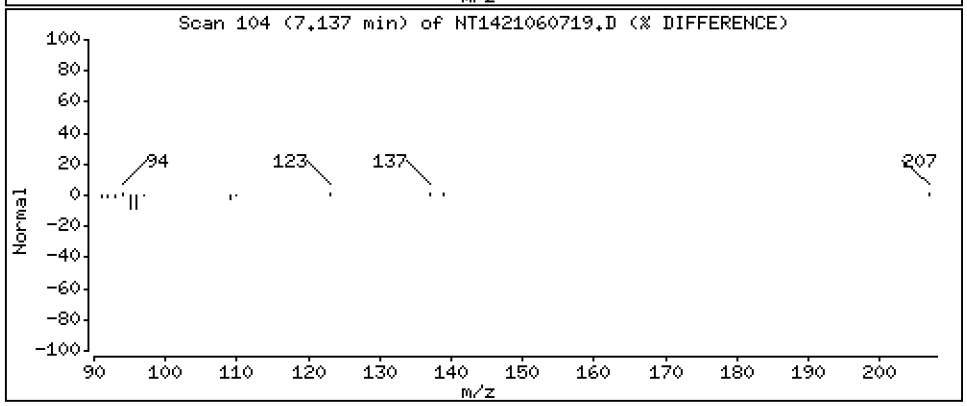












Data File: \\target\share\chem3\nt14.i\20210607.b\NT1421060719.D

Date : 08-JUN-2021 02:54

Client ID:

Instrument: nt14.i

Sample Info: SJF0173-CCV1

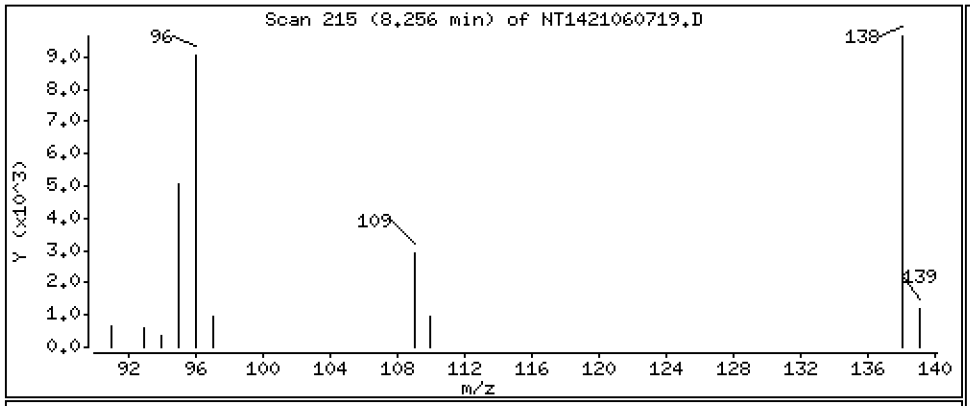
Operator: VTS

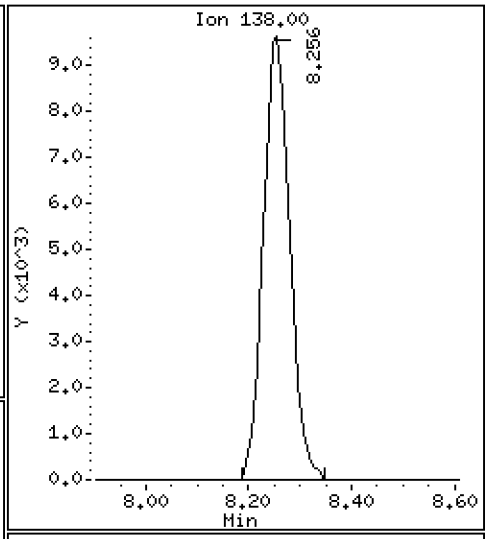
Column phase: Rxi-17Sil MS

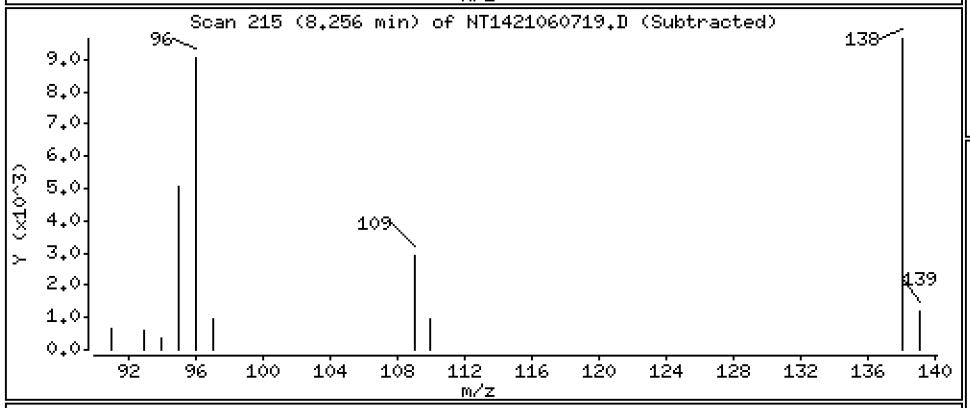
Column diameter: 0.25

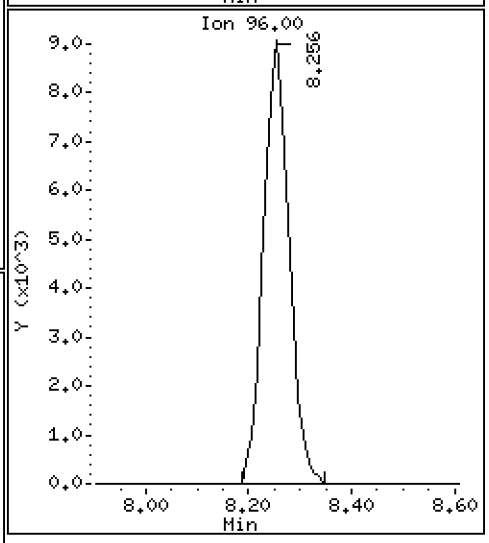
2 cis-Decalin

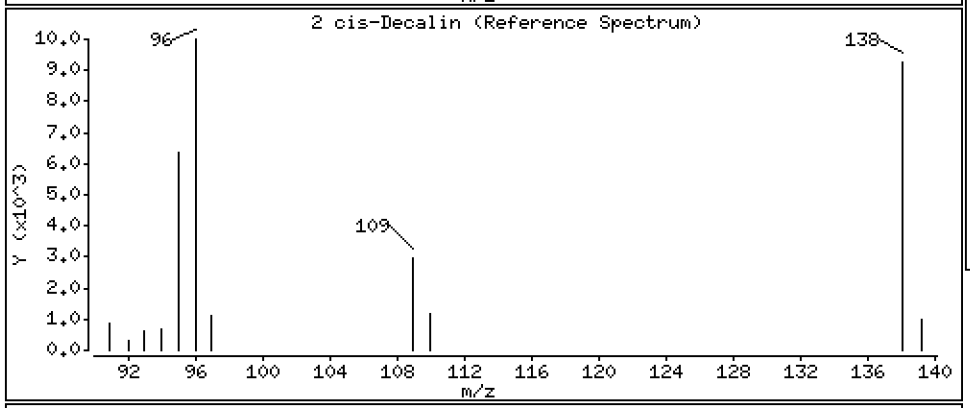
Concentration: 2.405 ug/mL

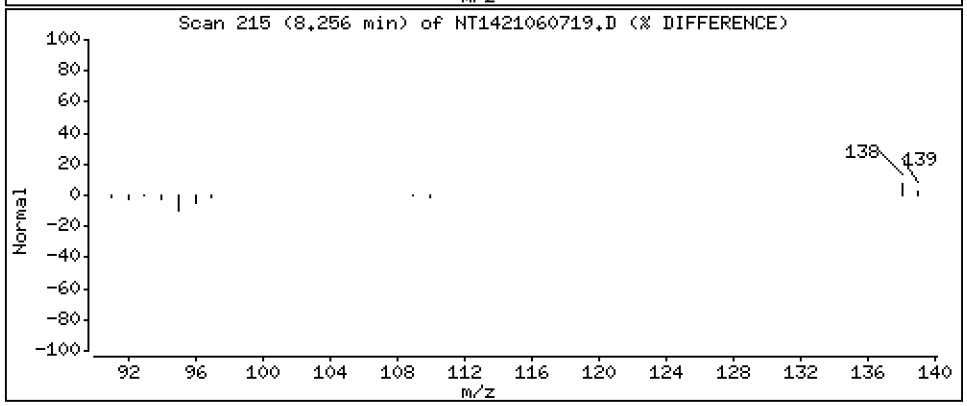












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Date : 08-JUN-2021 02:54

Client ID:

Instrument: nt14.i

Sample Info: SJF0173-CCV1

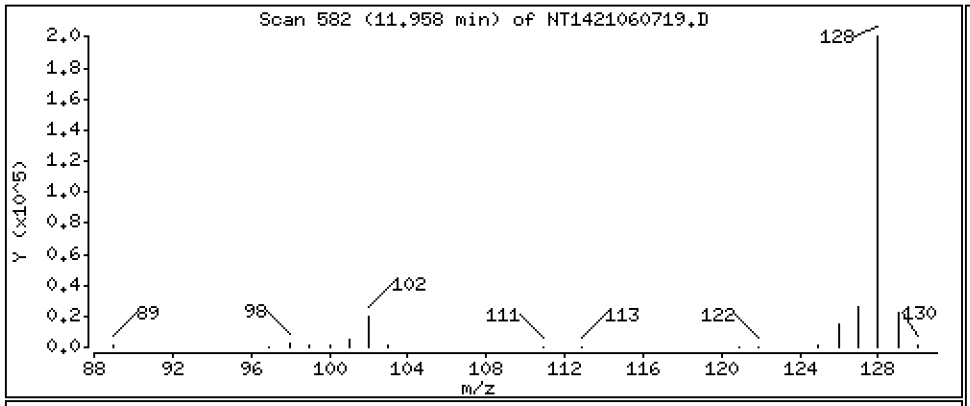
Operator: VTS

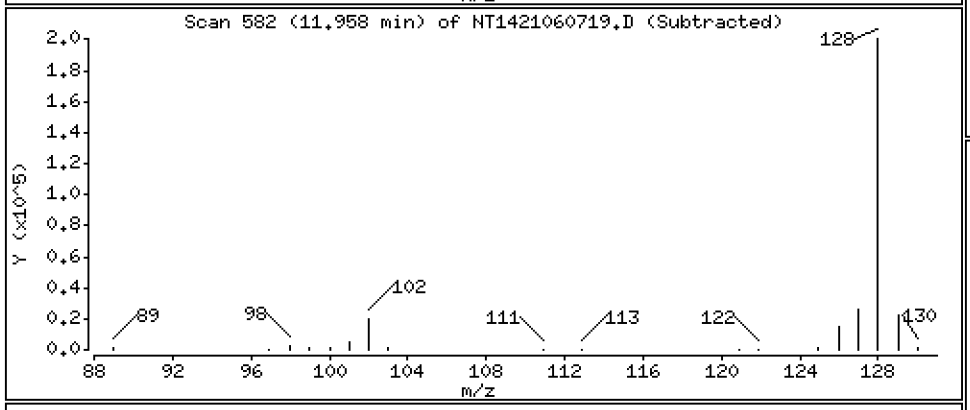
Column phase: Rxi-17Sil MS

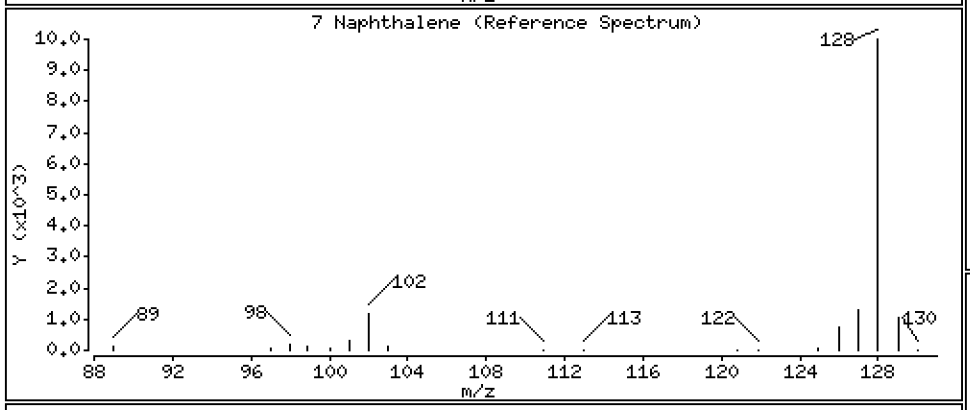
Column diameter: 0.25

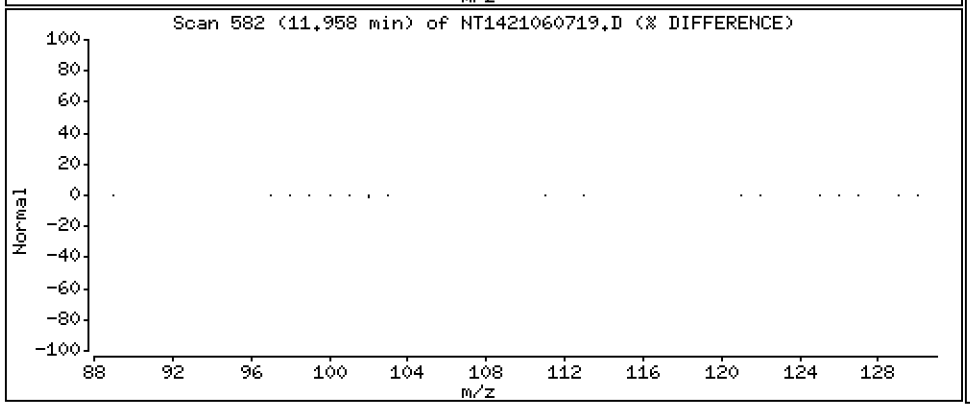
7 Naphthalene

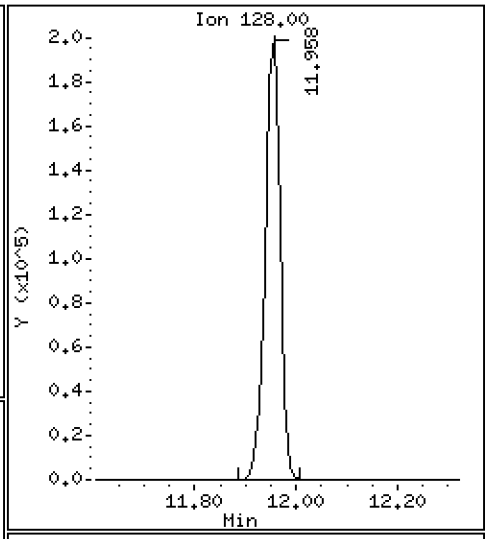
Concentration: 2.543 ug/mL

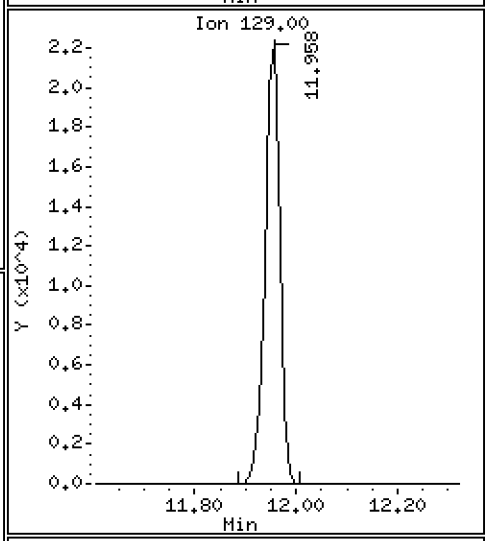


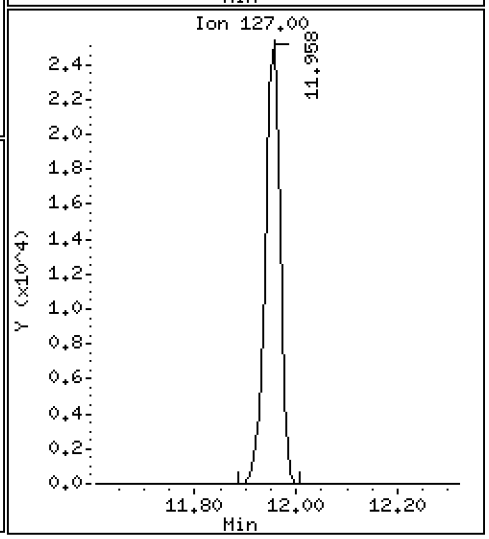












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Date : 08-JUN-2021 02:54

Client ID:

Instrument: nt14.i

Sample Info: SJF0173-CCV1

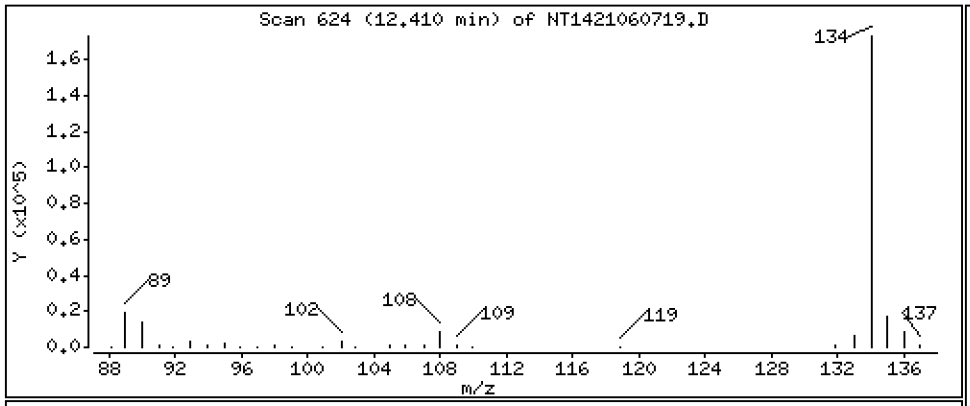
Operator: VTS

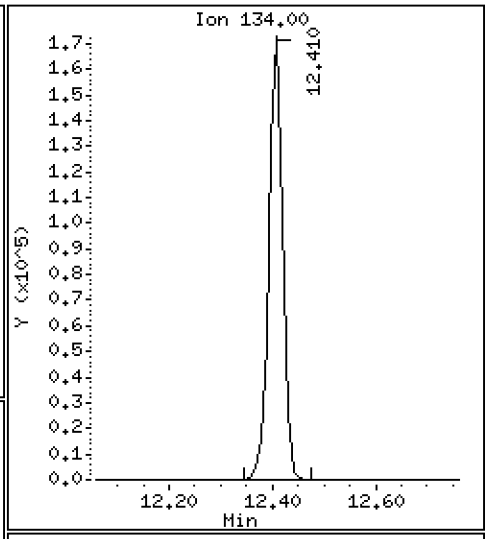
Column phase: Rxi-17Sil MS

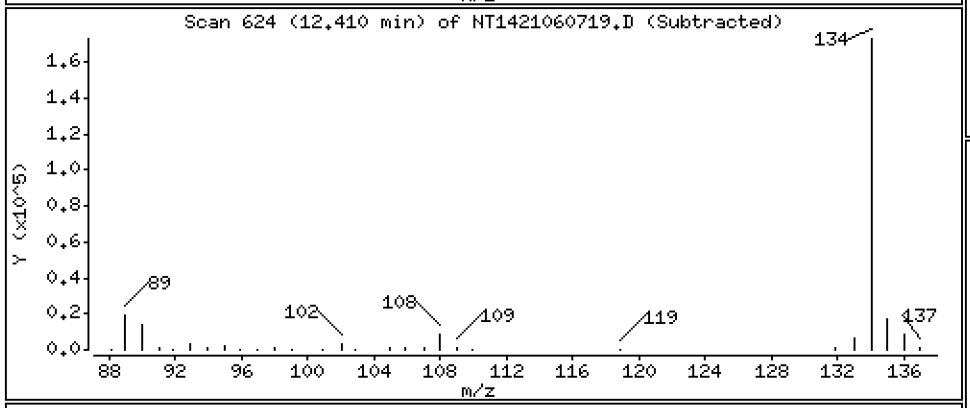
Column diameter: 0.25

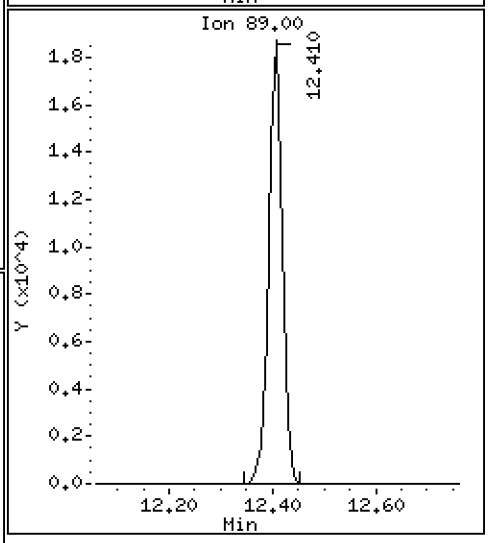
12 Benzo(b)thiophene

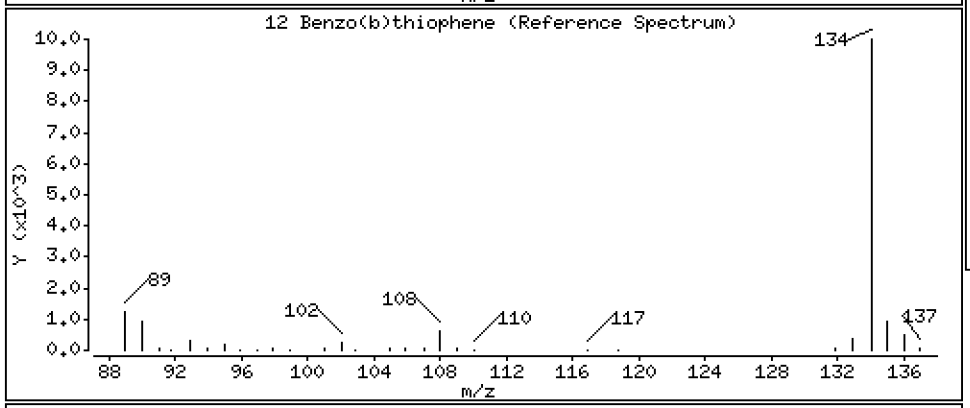
Concentration: 2.518 ug/mL

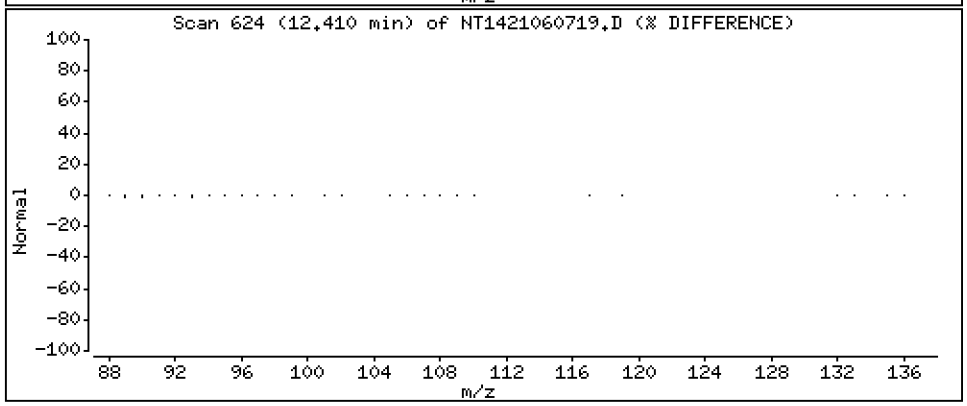












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Date : 08-JUN-2021 02:54

Client ID:

Instrument: nt14.i

Sample Info: SJF0173-CCV1

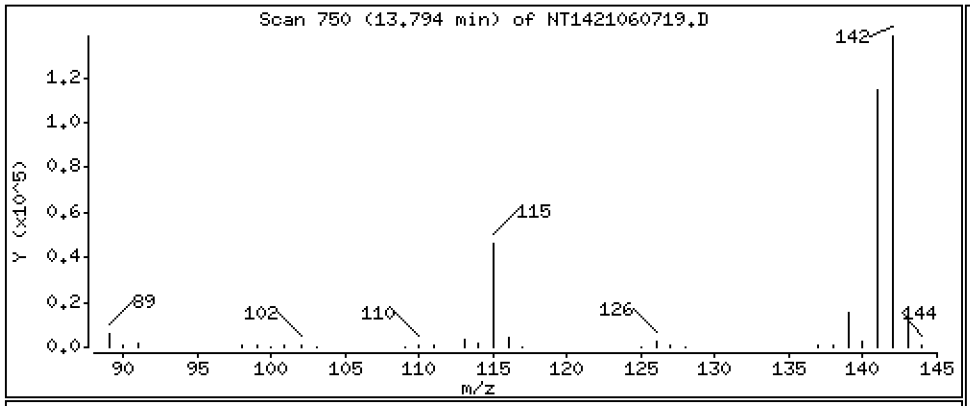
Operator: VTS

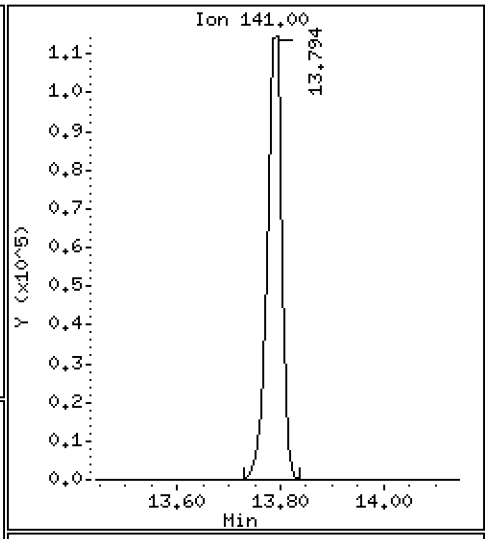
Column phase: Rxi-17Sil MS

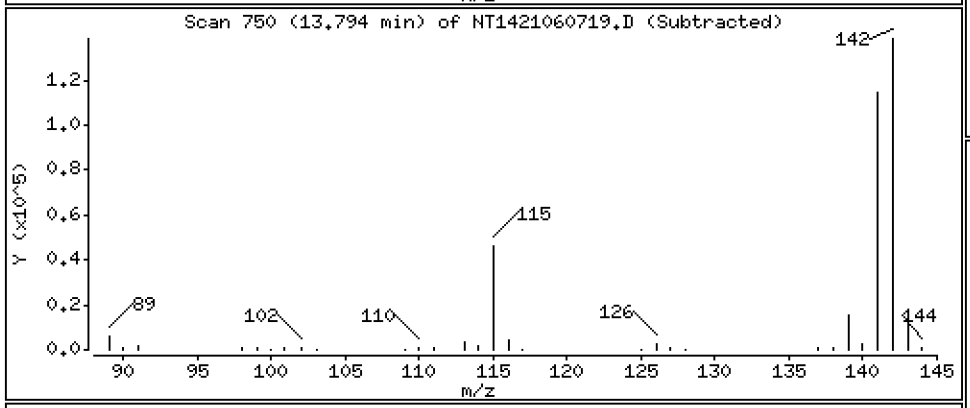
Column diameter: 0.25

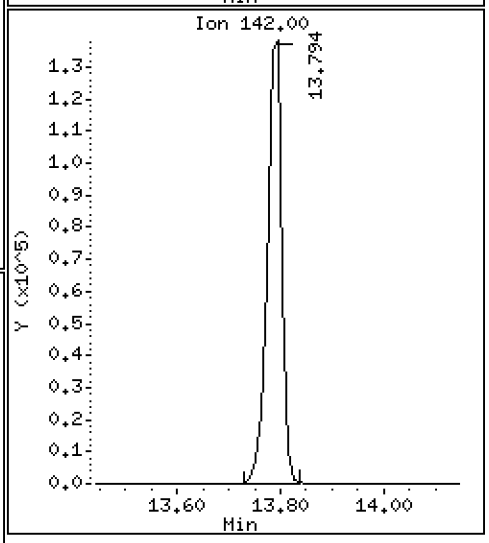
16 2-Methylnaphthalene

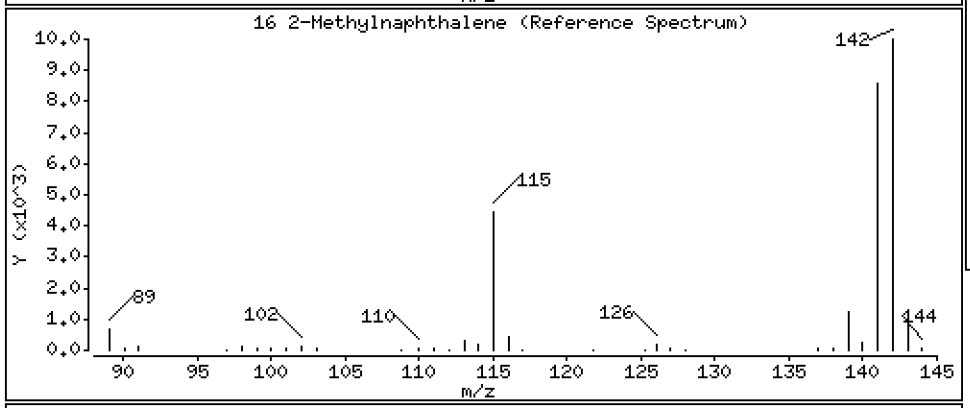
Concentration: 2.550 ug/mL

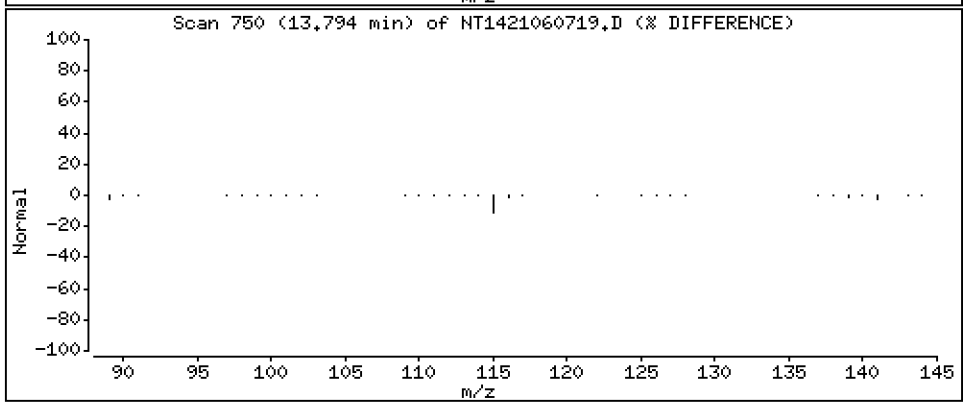












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Date : 08-JUN-2021 02:54

Client ID:

Instrument: nt14.i

Sample Info: SJF0173-CCV1

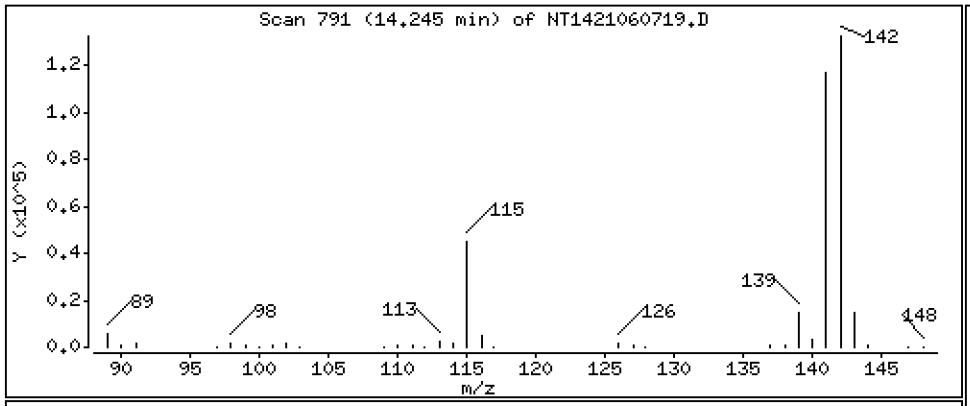
Operator: VTS

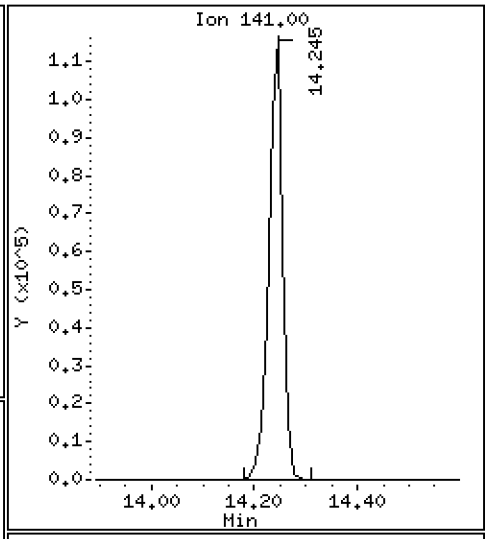
Column phase: Rxi-17Sil MS

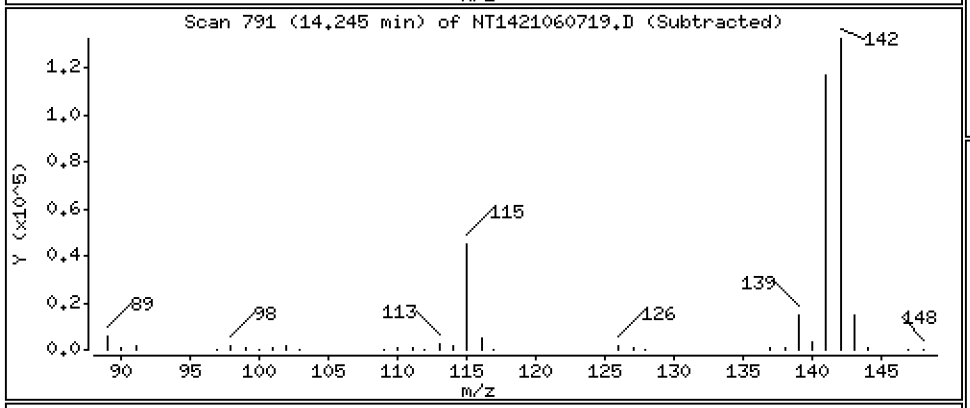
Column diameter: 0.25

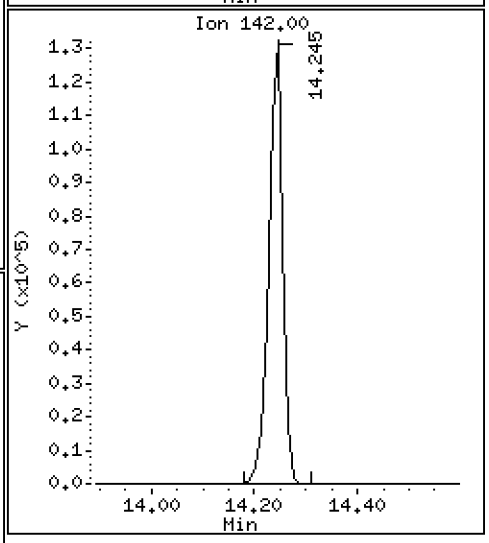
17 1-methylnaphthalene

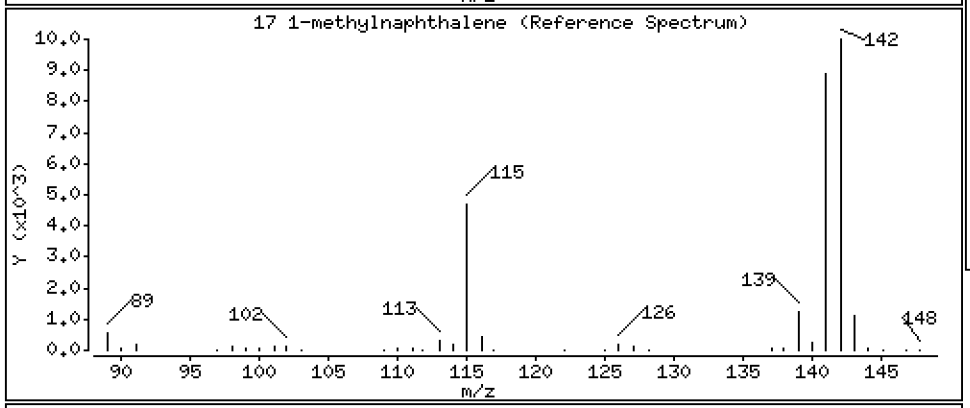
Concentration: 2.509 ug/mL

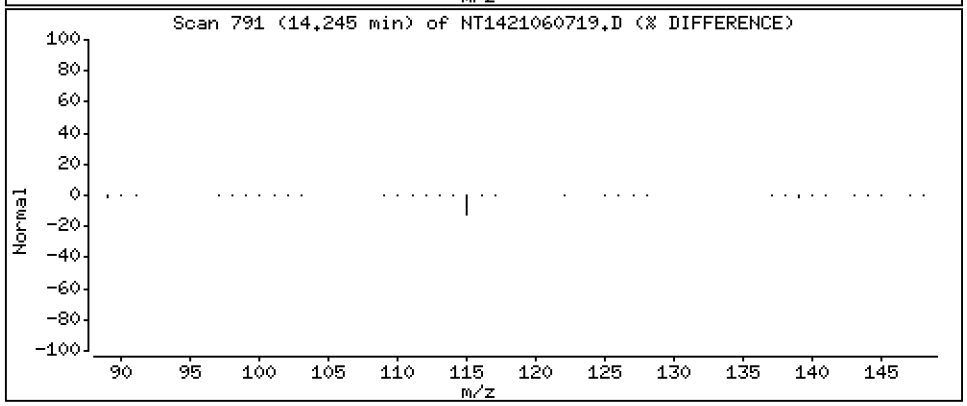












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Date : 08-JUN-2021 02:54

Client ID:

Instrument: nt14.i

Sample Info: SJF0173-CCV1

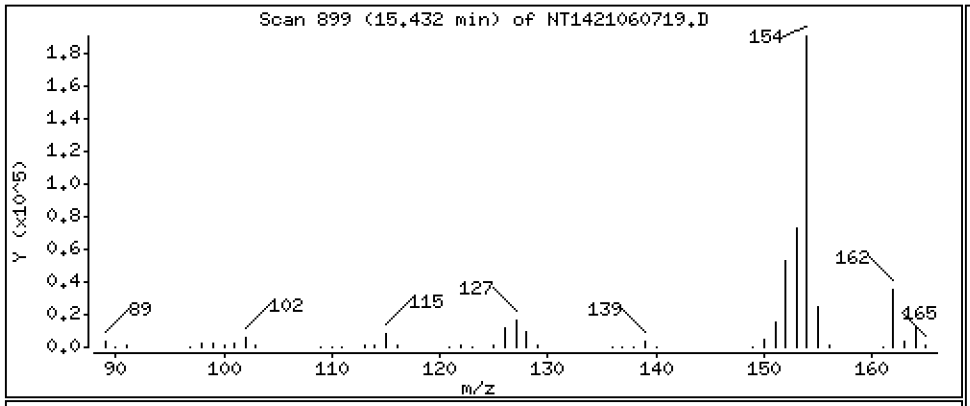
Operator: VTS

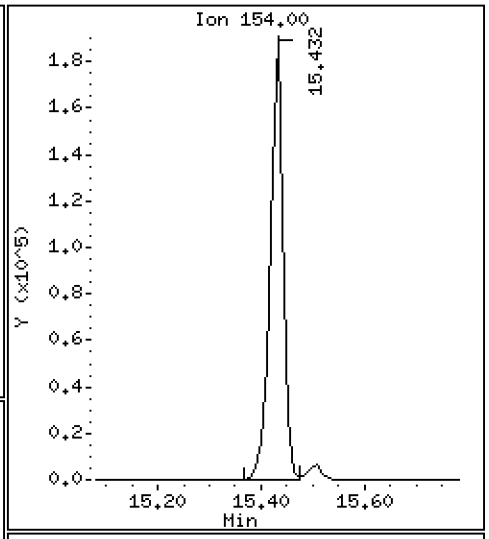
Column phase: Rxi-17Sil MS

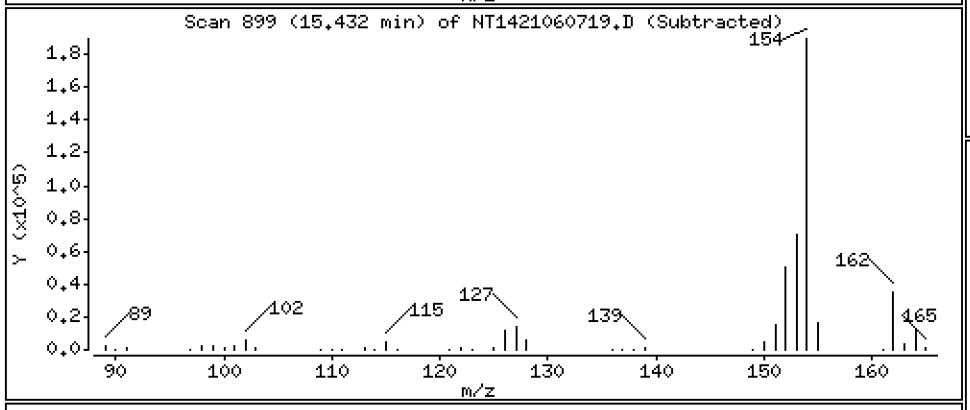
Column diameter: 0.25

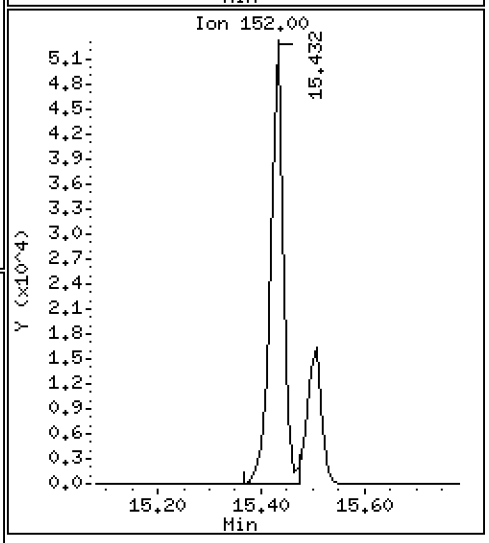
18 Biphenyl

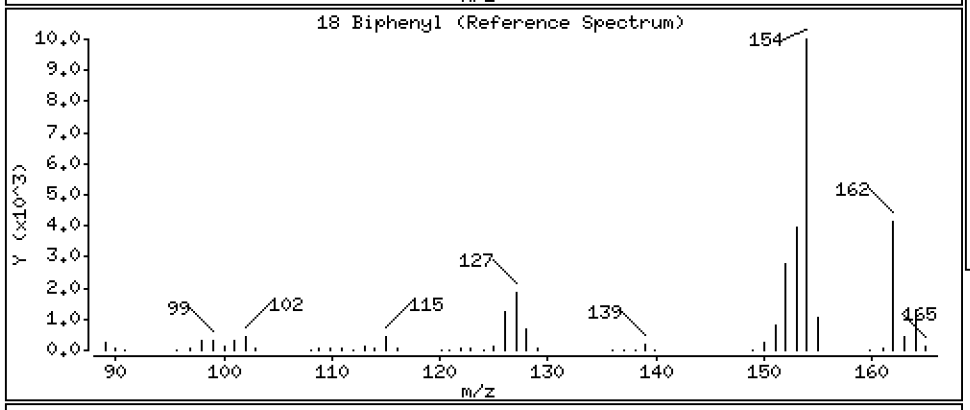
Concentration: 2.537 ug/mL

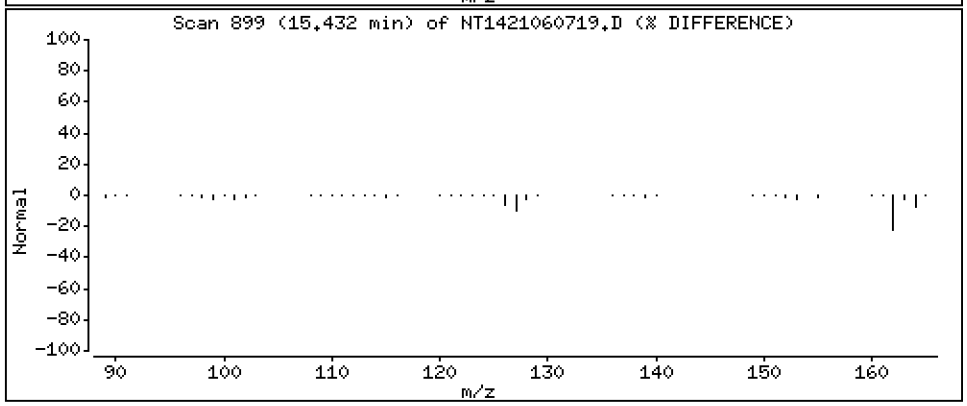












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Date : 08-JUN-2021 02:54

Client ID:

Instrument: nt14.i

Sample Info: SJF0173-CCV1

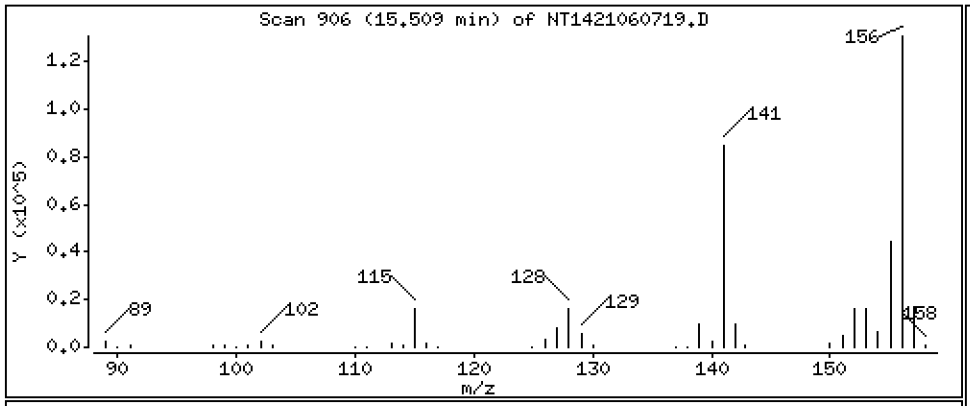
Operator: VTS

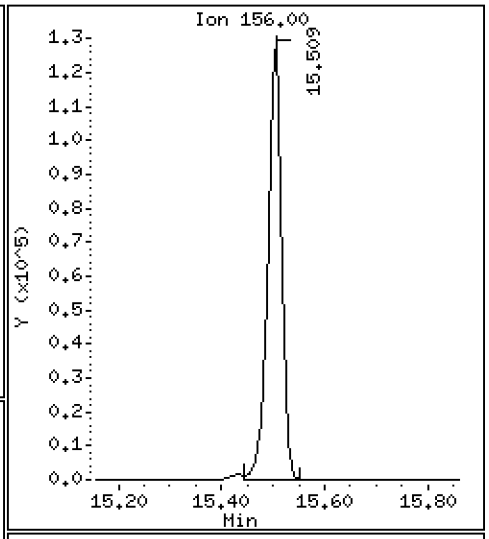
Column phase: Rxi-17Sil MS

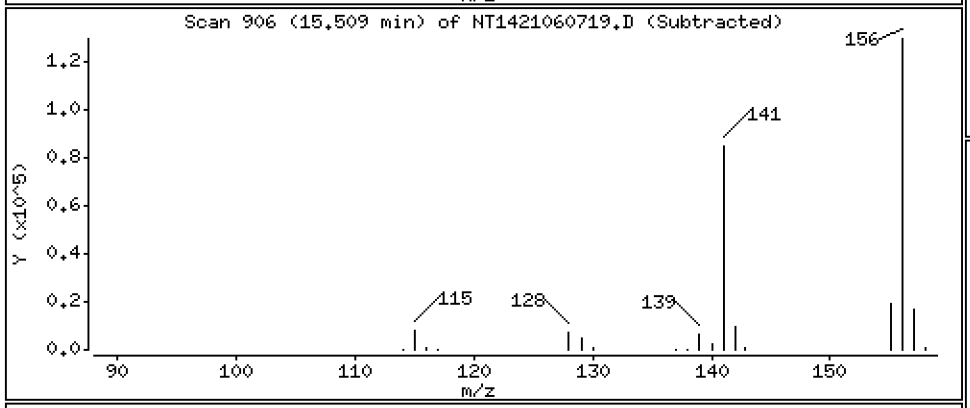
Column diameter: 0.25

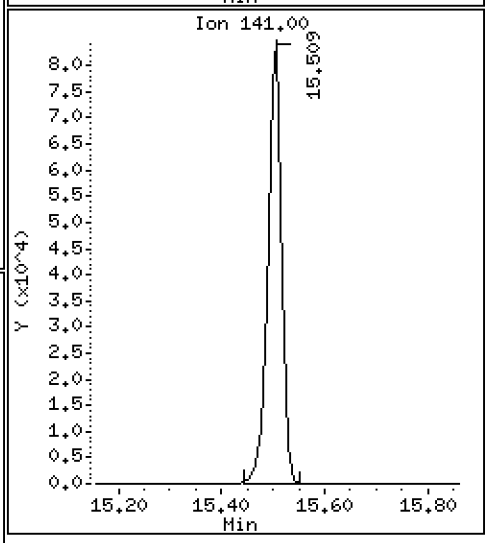
19 2,6-Dimethylnaphthalene

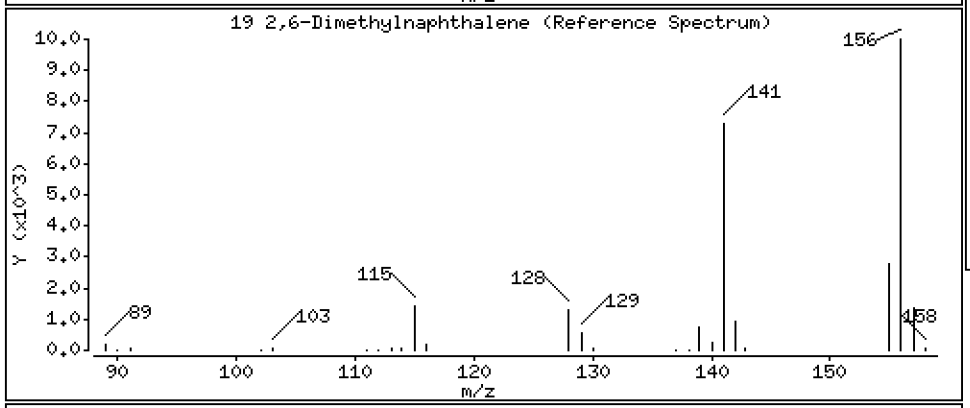
Concentration: 2.536 ug/mL

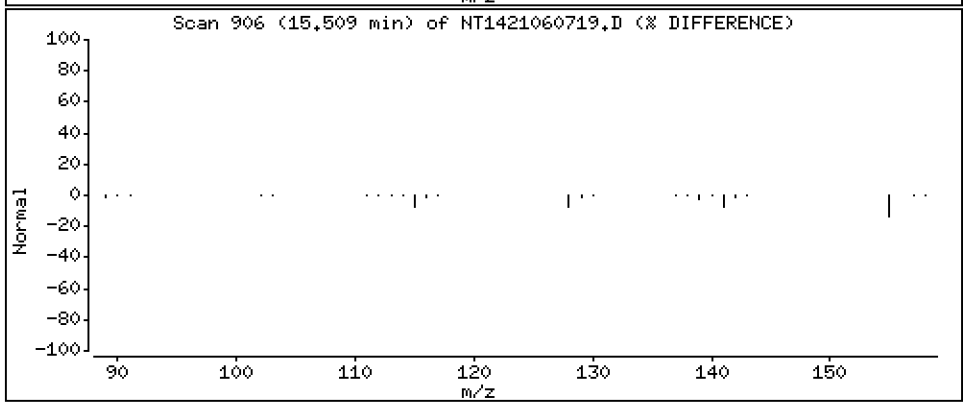












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Date : 08-JUN-2021 02:54

Client ID:

Instrument: nt14.i

Sample Info: SJF0173-CCV1

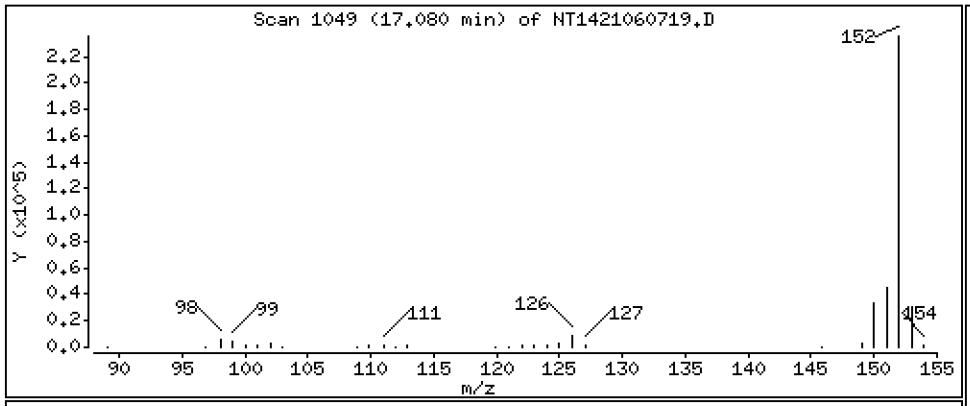
Operator: VTS

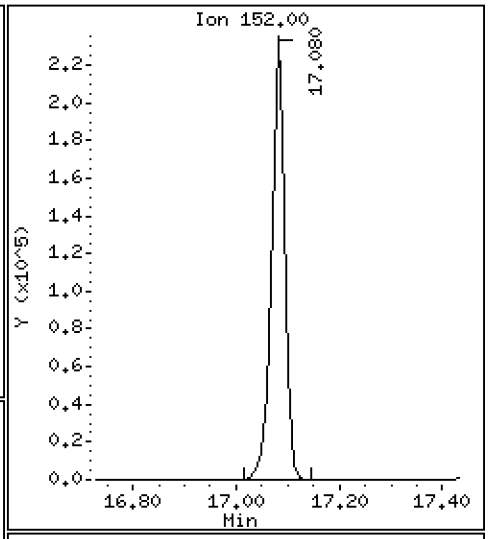
Column phase: Rxi-17Sil MS

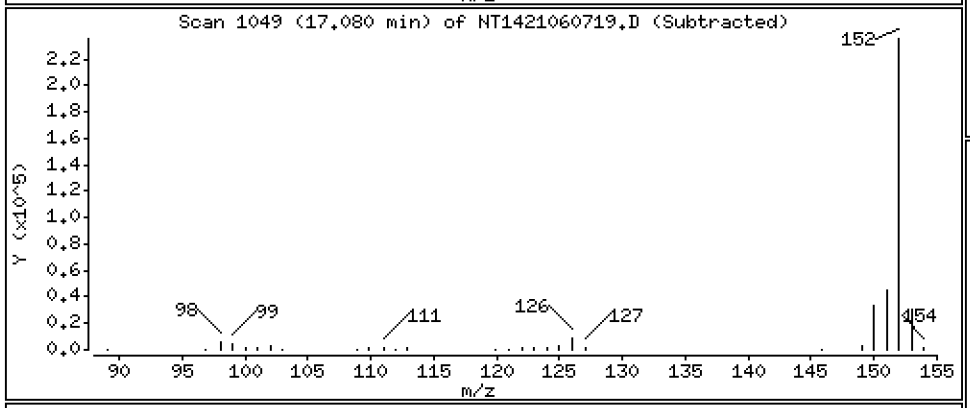
Column diameter: 0.25

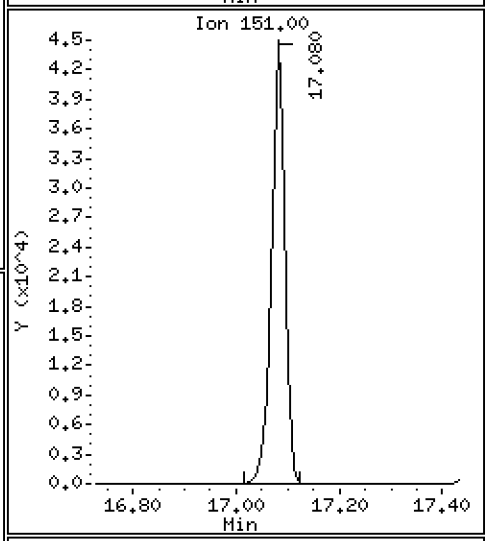
20 Acenaphthylene

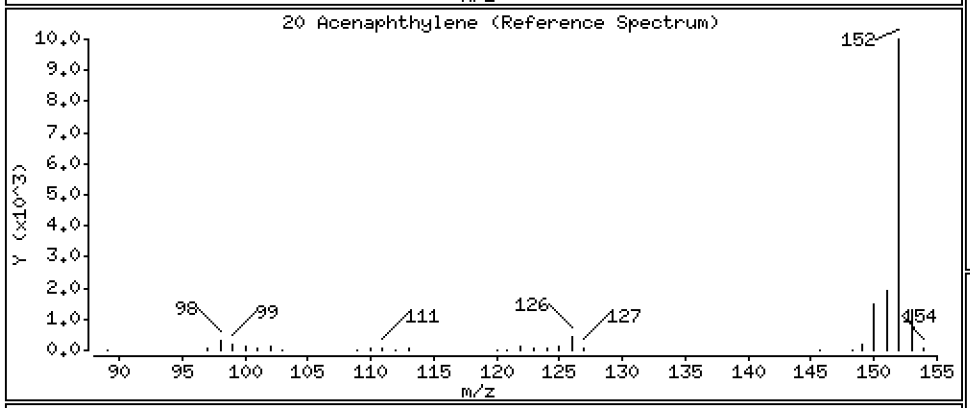
Concentration: 2.570 ug/mL

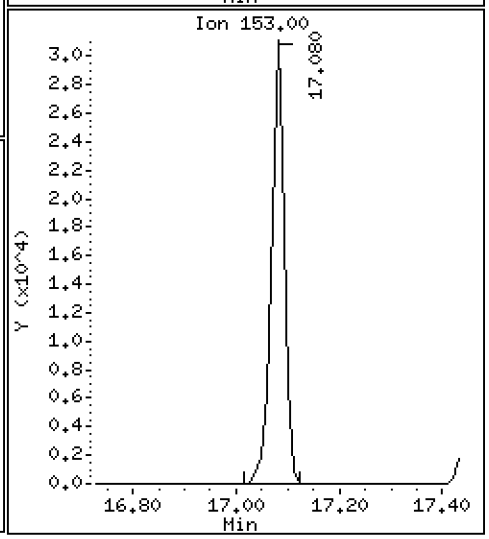


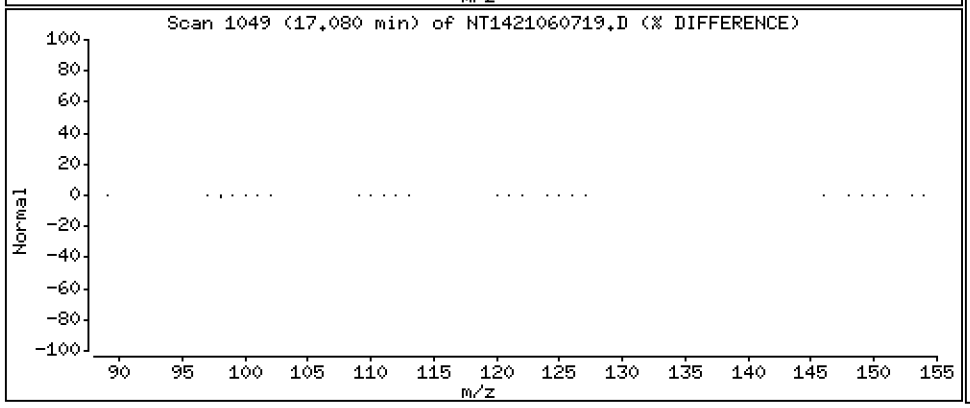












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Date : 08-JUN-2021 02:54

Client ID:

Instrument: nt14.i

Sample Info: SJF0173-CCV1

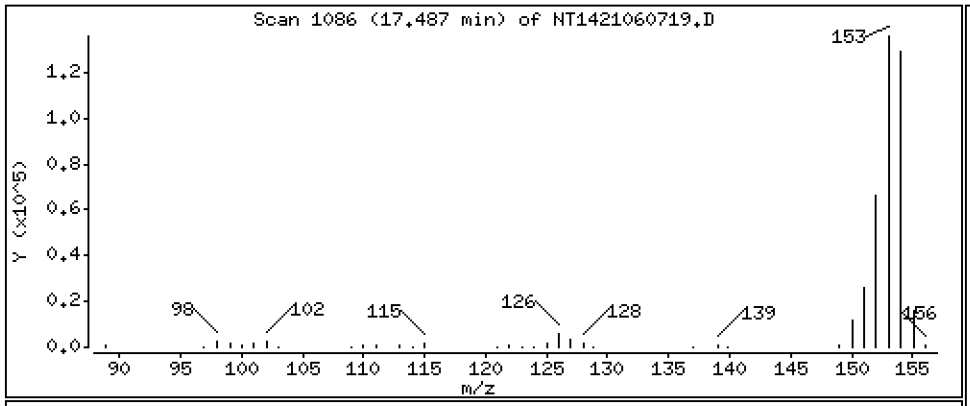
Operator: VTS

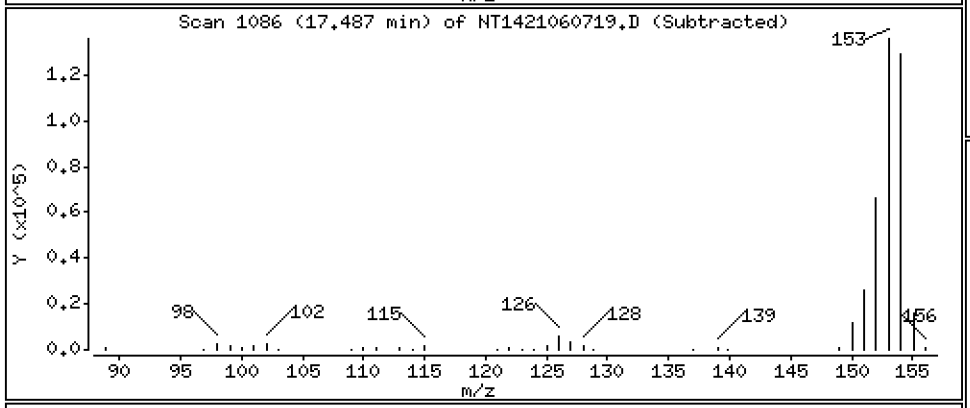
Column phase: Rxi-17Sil MS

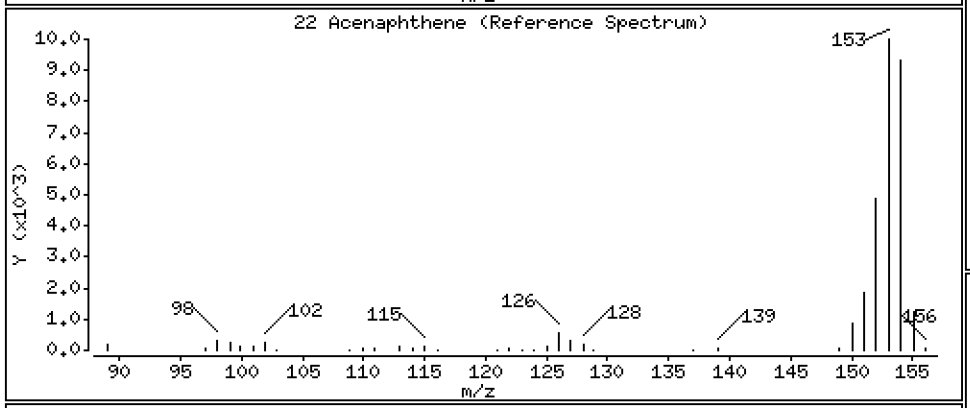
Column diameter: 0.25

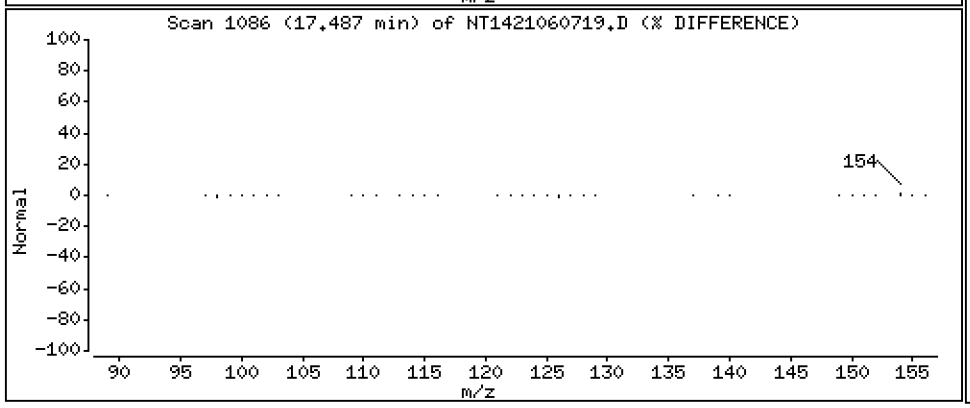
22 Acenaphthene

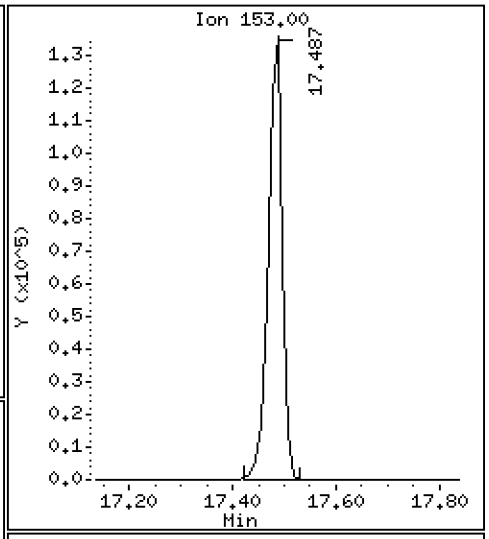
Concentration: 2.510 ug/mL

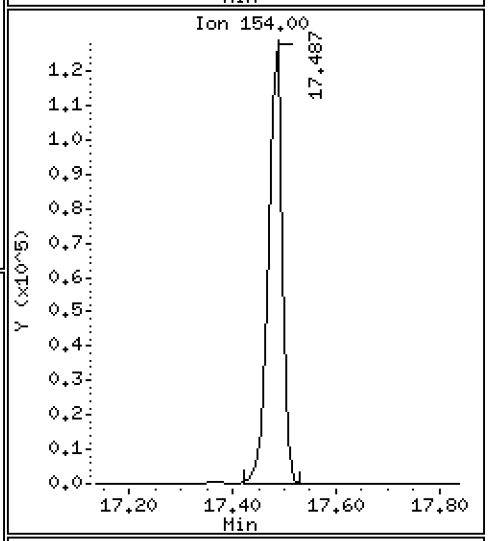


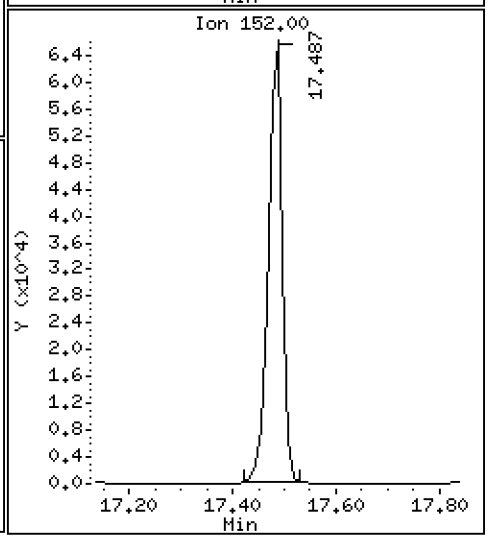












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Date : 08-JUN-2021 02:54

Client ID:

Instrument: nt14.i

Sample Info: SJF0173-CCV1

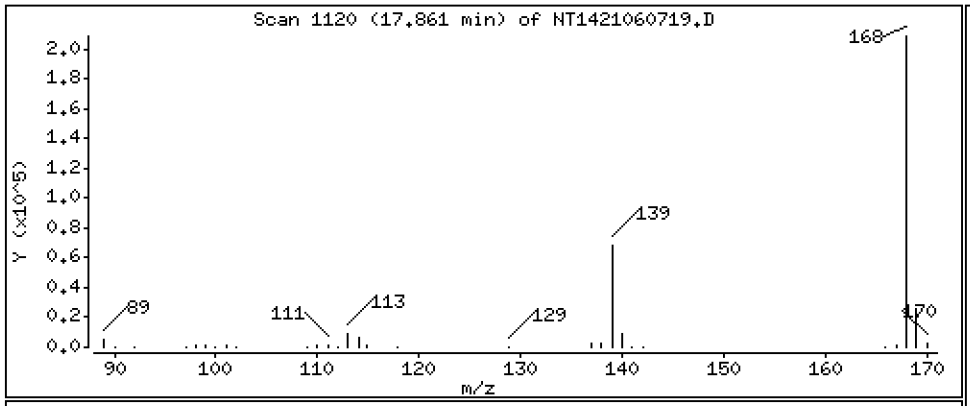
Operator: VTS

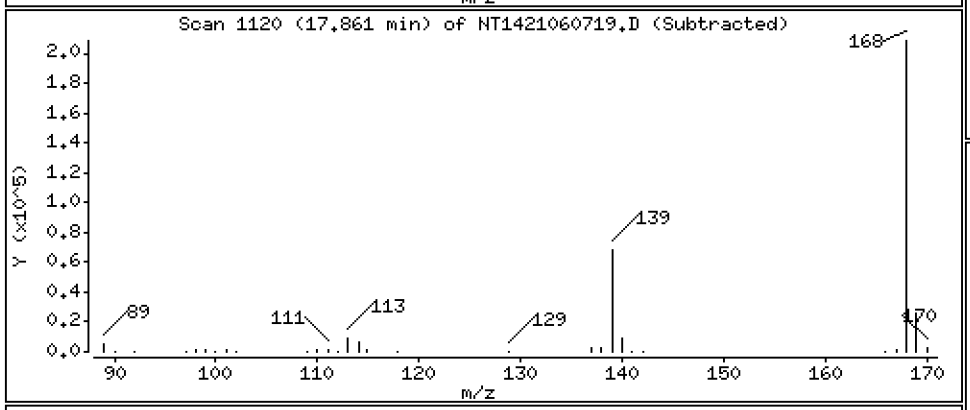
Column phase: Rxi-17Sil MS

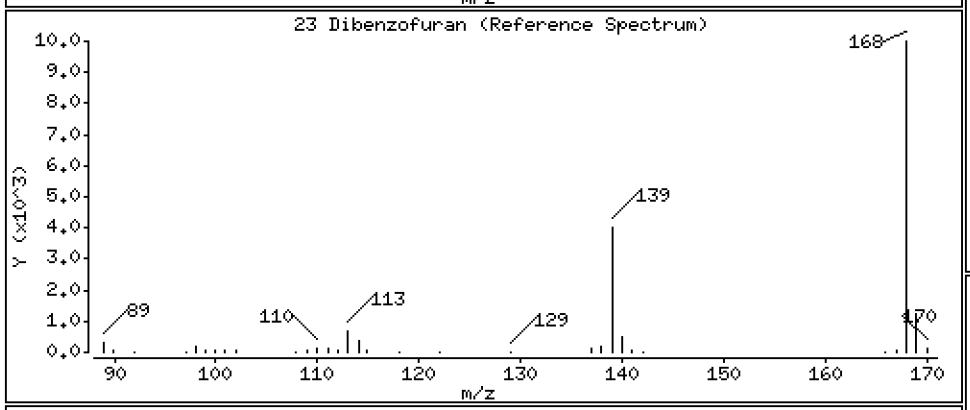
Column diameter: 0.25

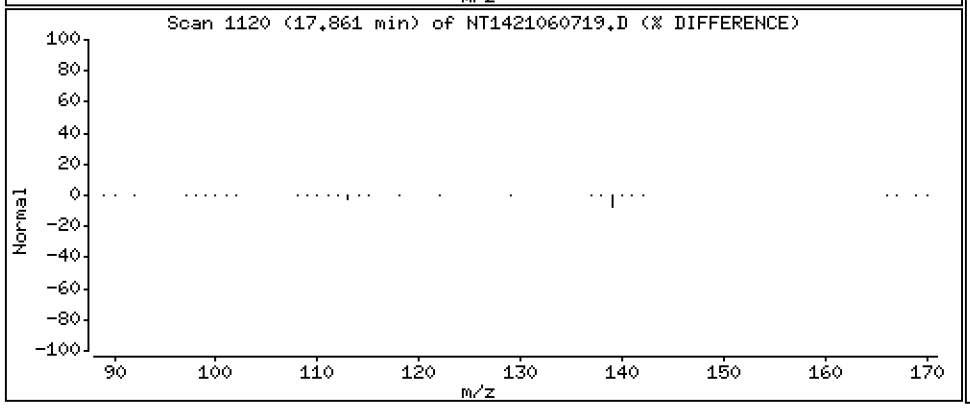
23 Dibenzofuran

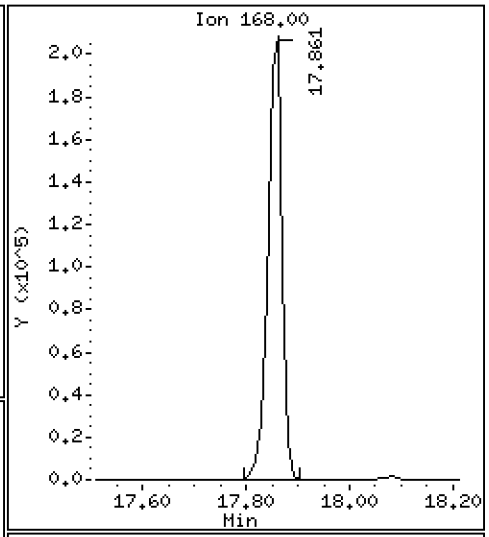
Concentration: 2.611 ug/mL

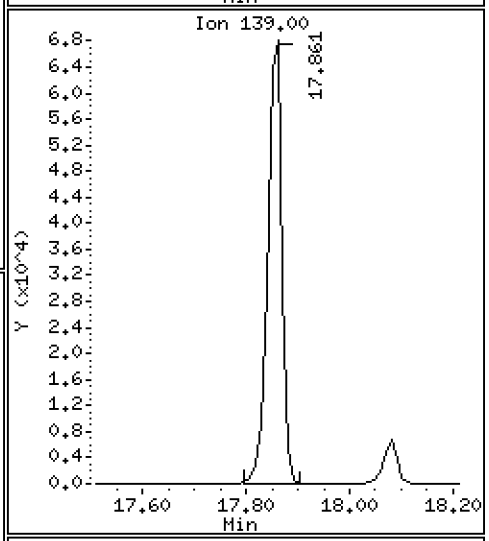


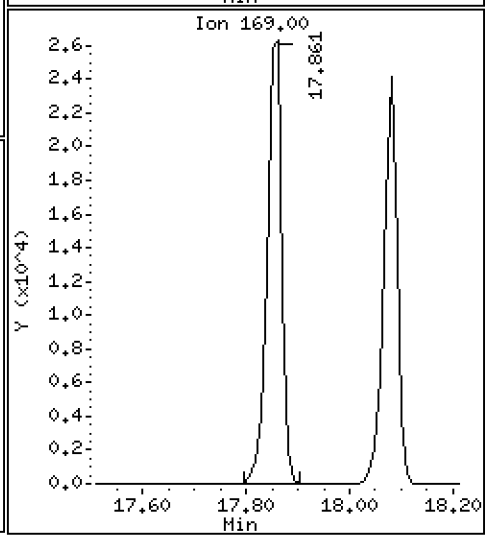












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Date : 08-JUN-2021 02:54

Client ID:

Instrument: nt14.i

Sample Info: SJF0173-CCV1

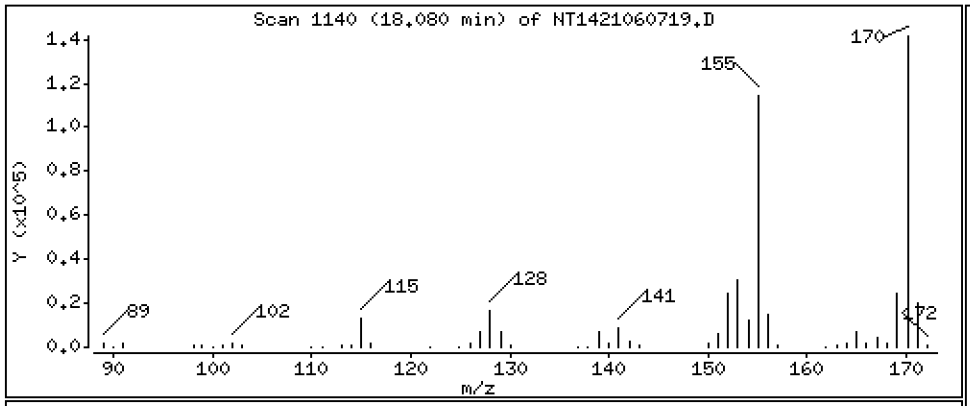
Operator: VTS

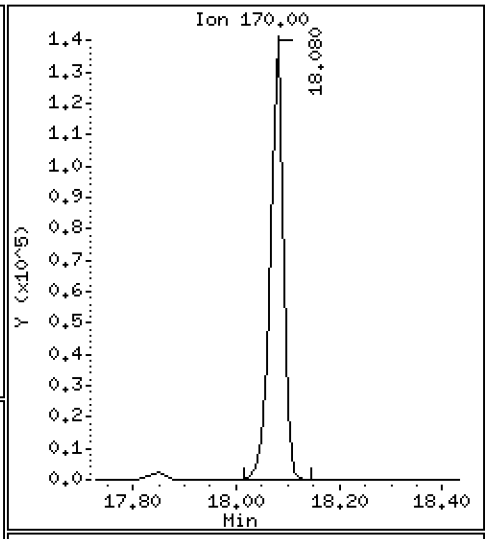
Column phase: Rxi-17Sil MS

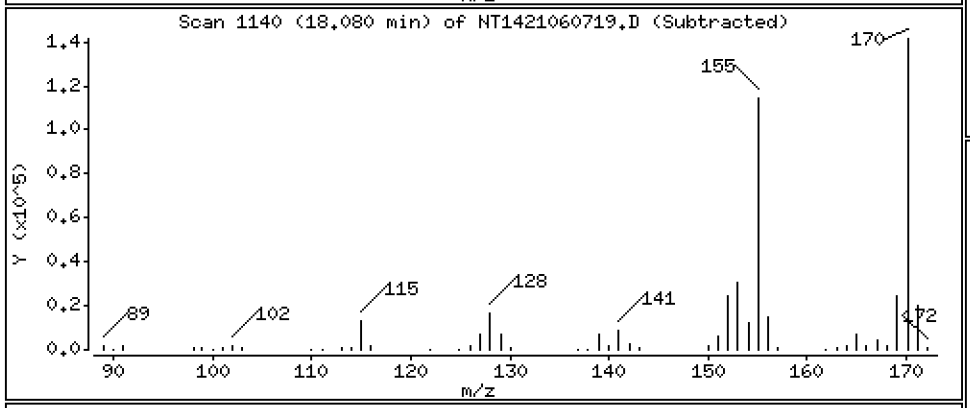
Column diameter: 0.25

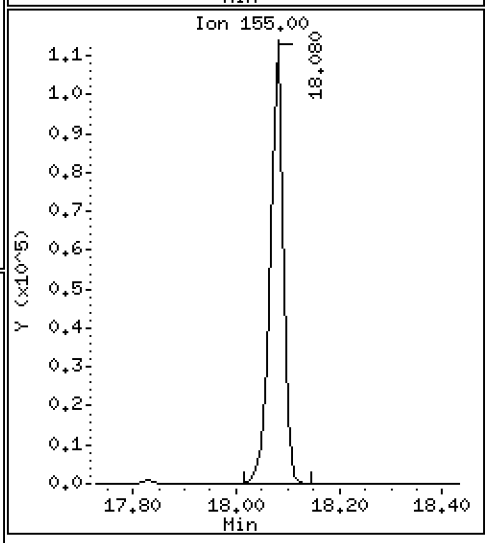
24 1,6,7-Trimethylnaphthalene

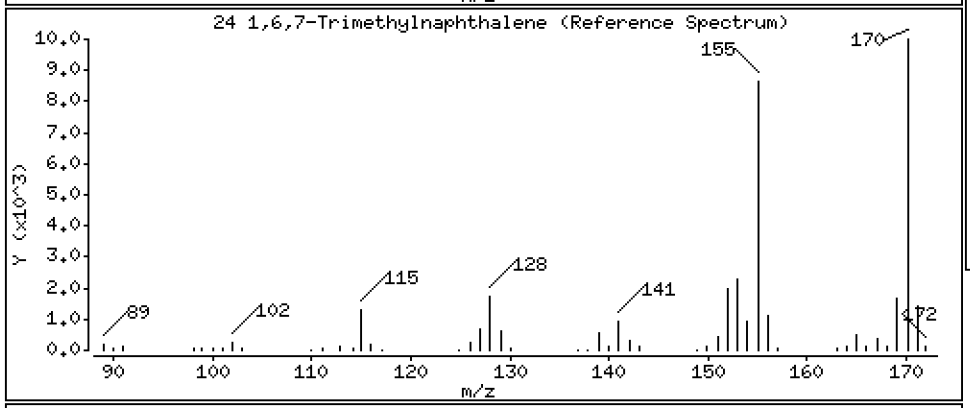
Concentration: 2.564 ug/mL

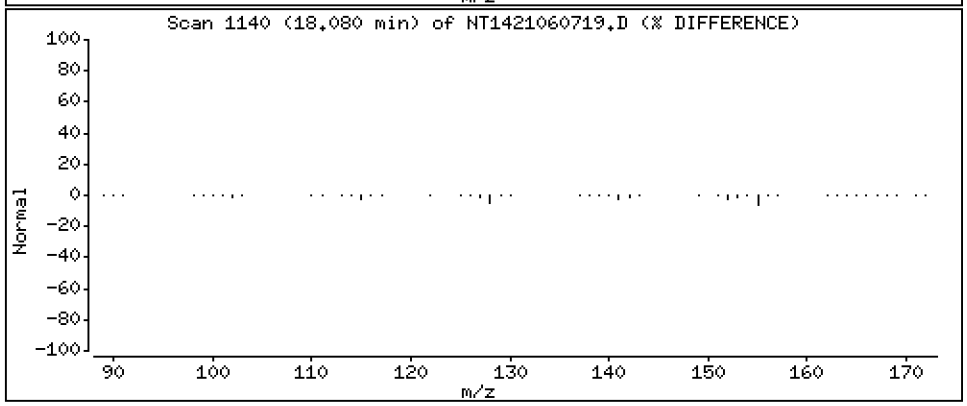












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Date : 08-JUN-2021 02:54

Client ID:

Instrument: nt14.i

Sample Info: SJF0173-CCV1

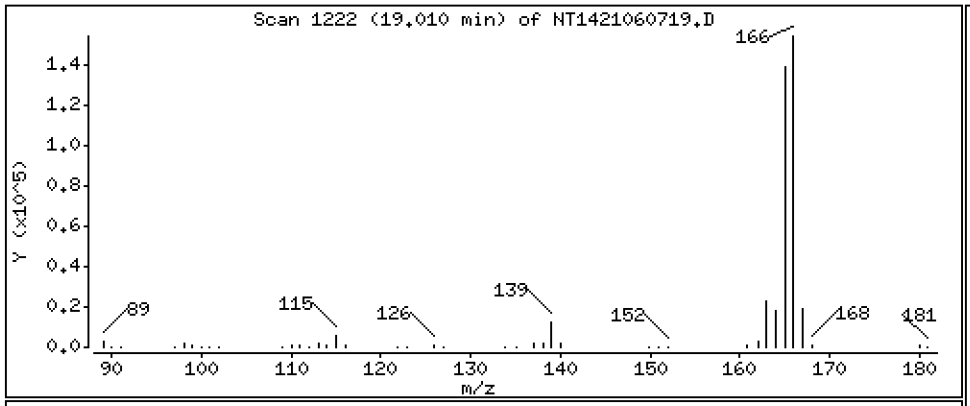
Operator: VTS

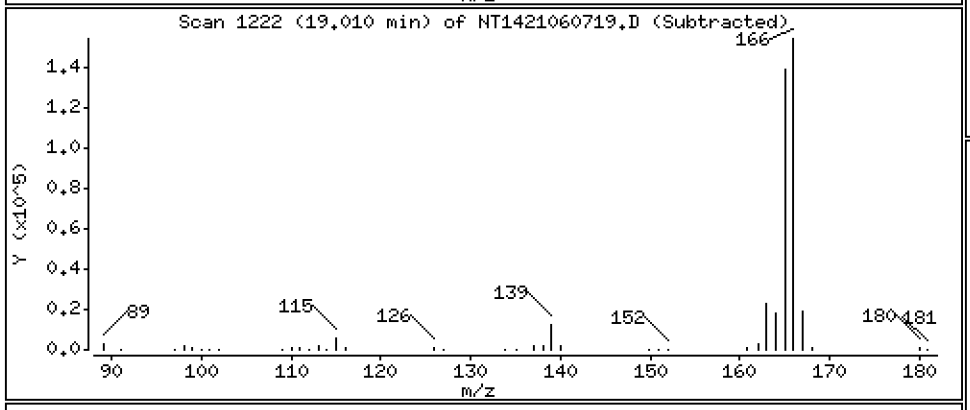
Column phase: Rxi-17Sil MS

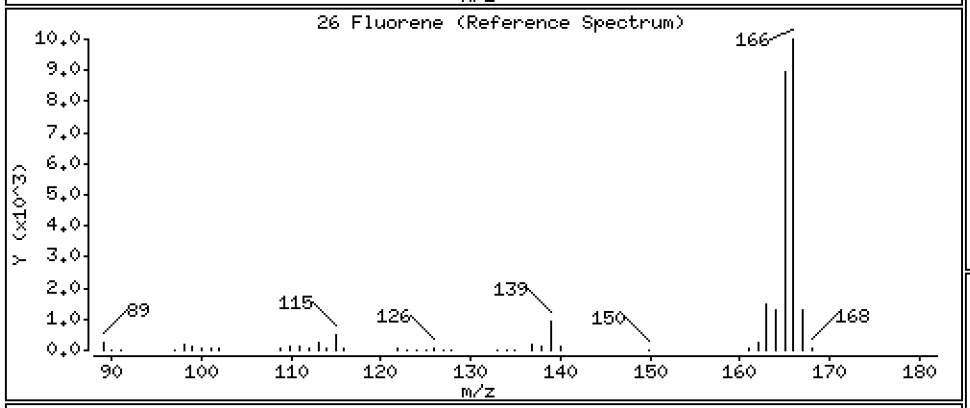
Column diameter: 0.25

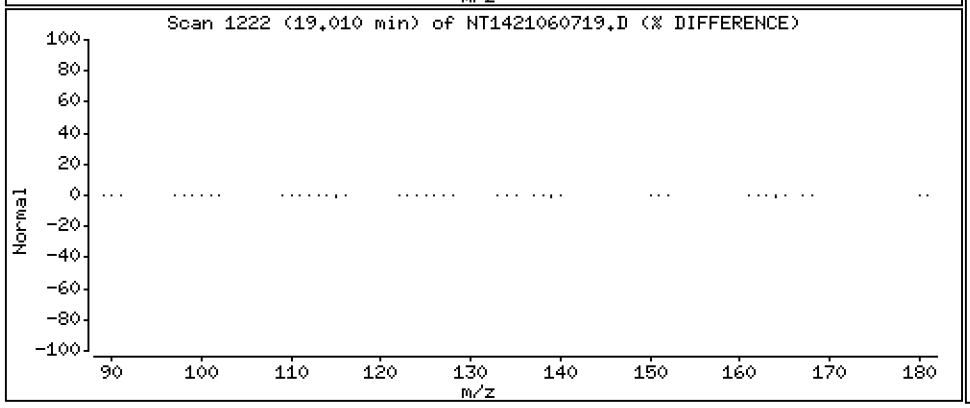
26 Fluorene

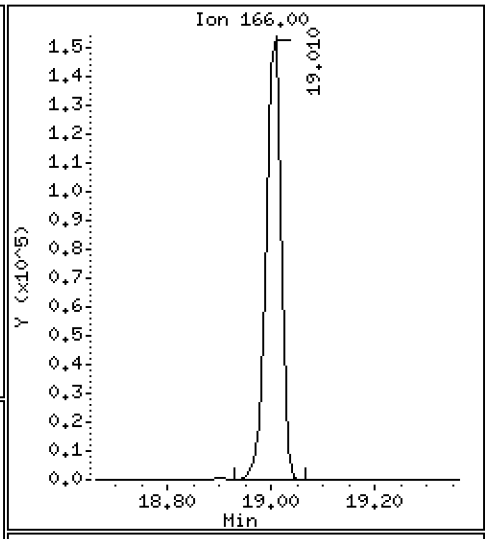
Concentration: 2.570 ug/mL

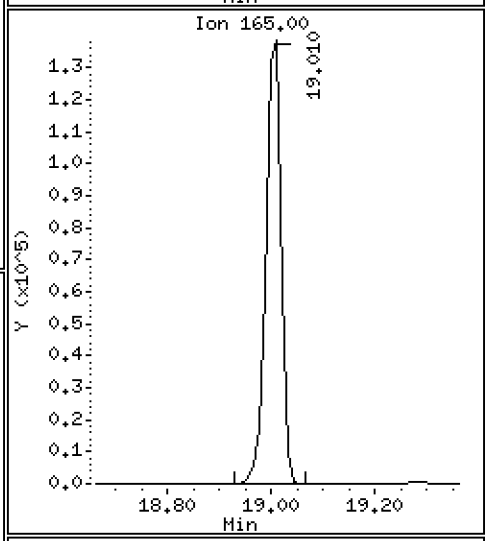


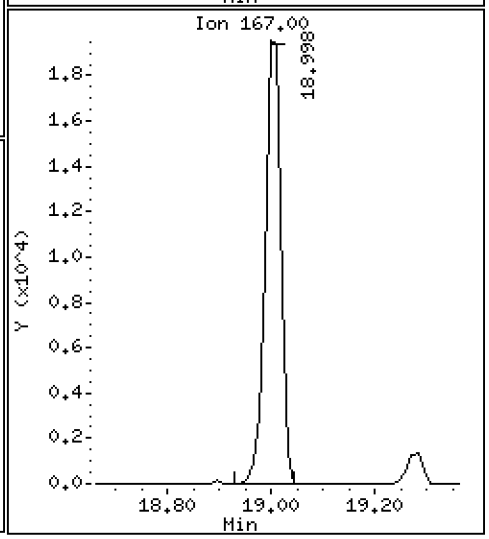












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Date : 08-JUN-2021 02:54

Client ID:

Instrument: nt14.i

Sample Info: SJF0173-CCV1

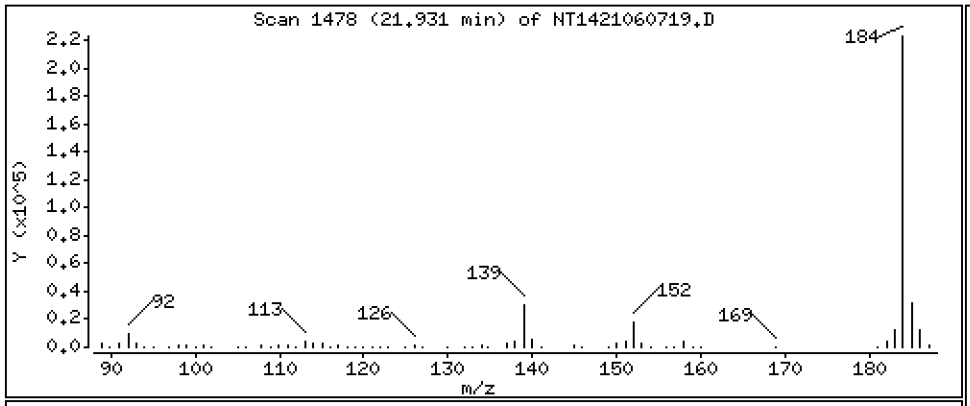
Operator: VTS

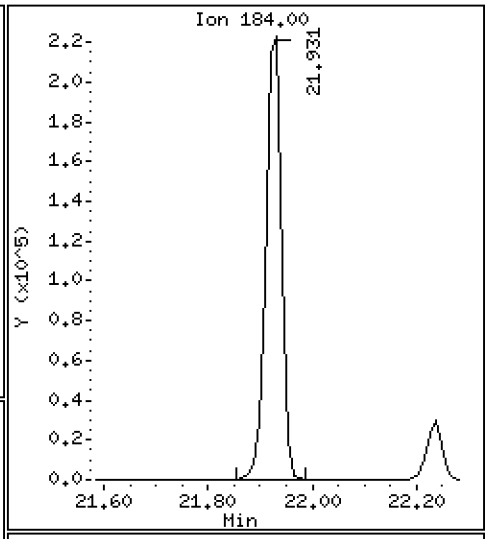
Column phase: Rxi-17Sil MS

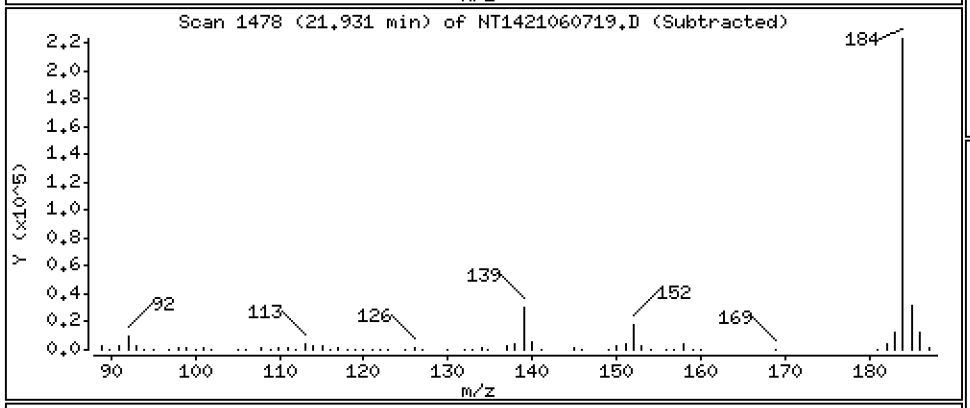
Column diameter: 0.25

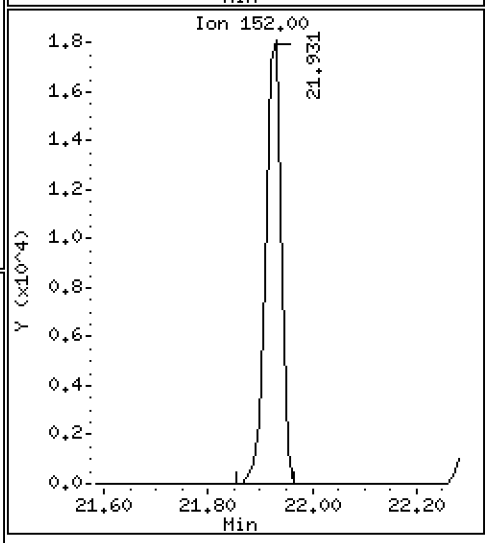
30 Dibenzothiophene

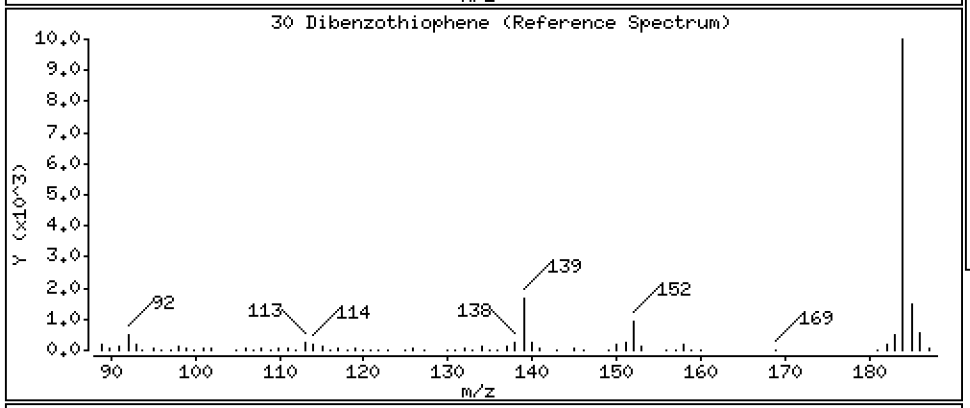
Concentration: 2.621 ug/mL

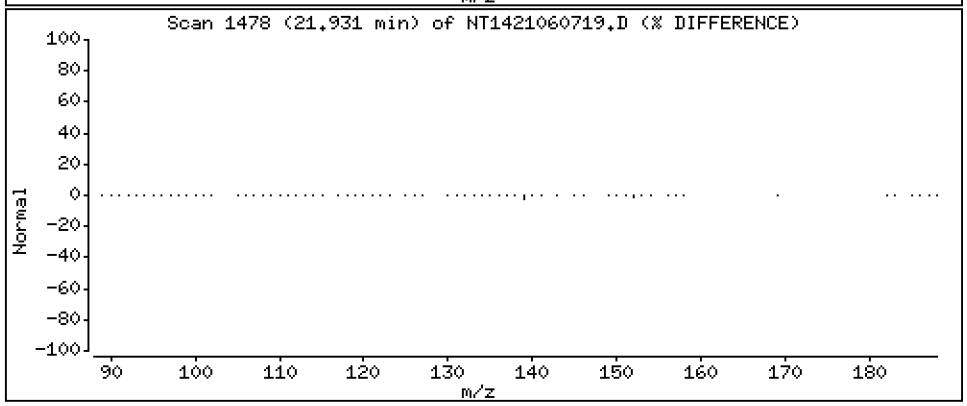












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Date : 08-JUN-2021 02:54

Client ID:

Instrument: nt14.i

Sample Info: SJF0173-CCV1

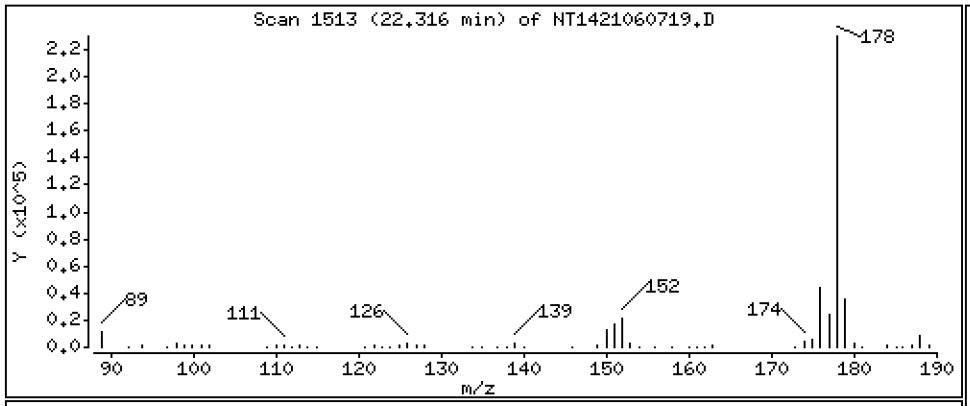
Operator: VTS

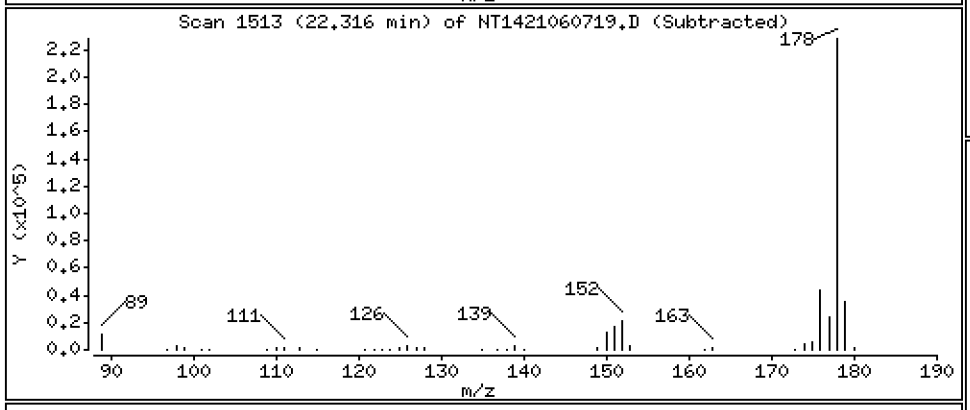
Column phase: Rxi-17Sil MS

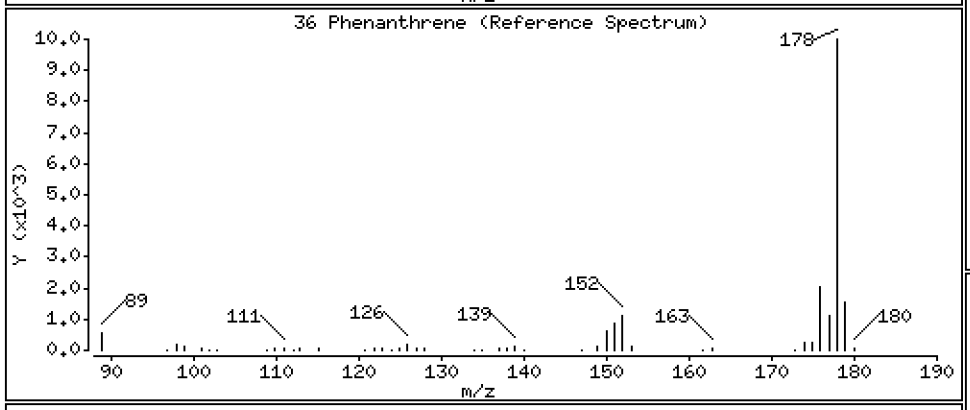
Column diameter: 0.25

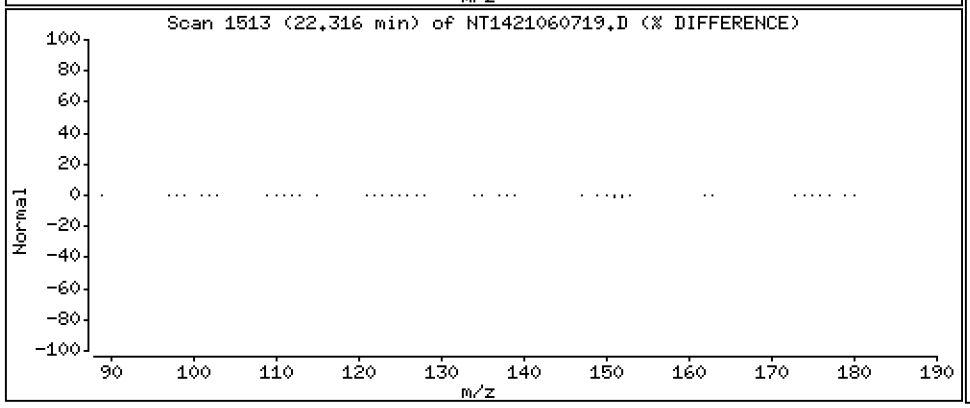
36 Phenanthrene

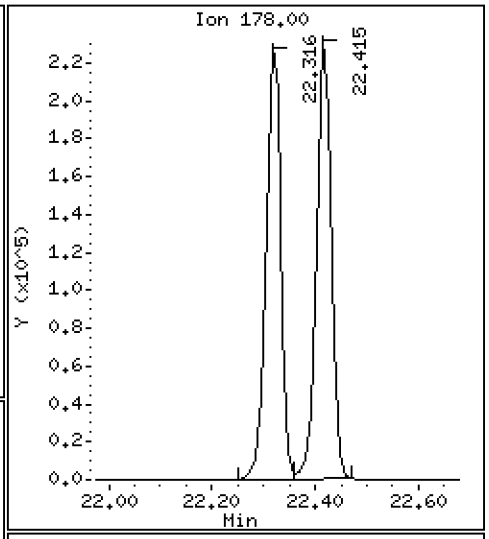
Concentration: 2.529 ug/mL

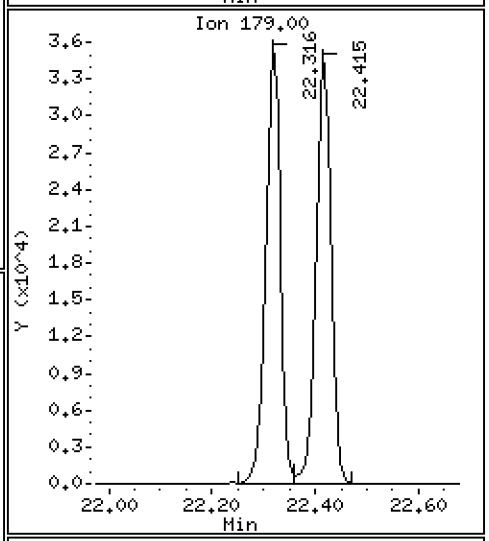


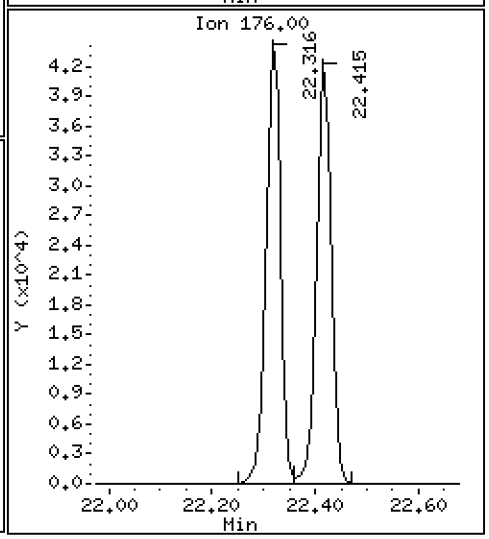












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Date : 08-JUN-2021 02:54

Client ID:

Instrument: nt14.i

Sample Info: SJF0173-CCV1

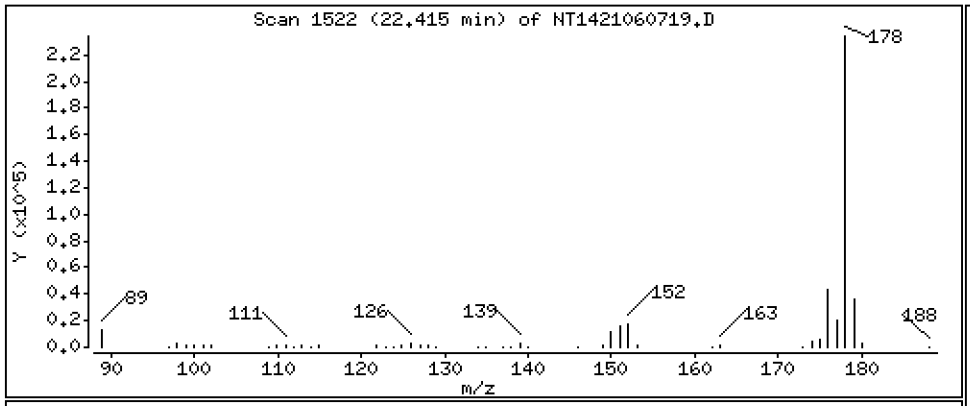
Operator: VTS

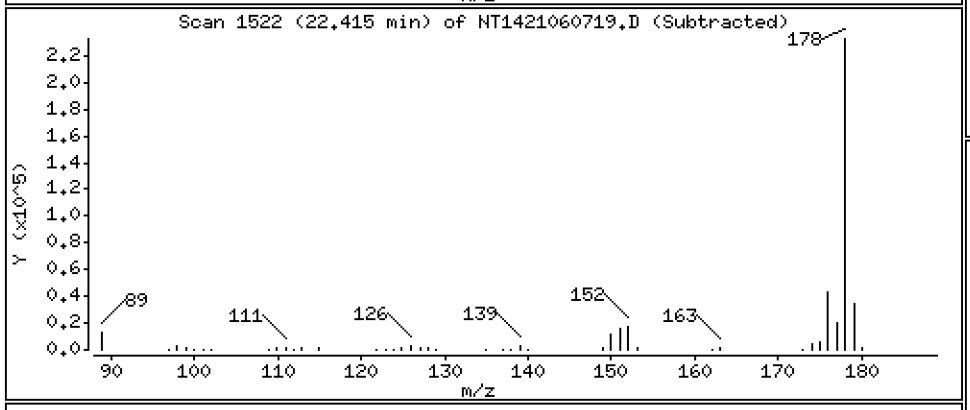
Column phase: Rxi-17Sil MS

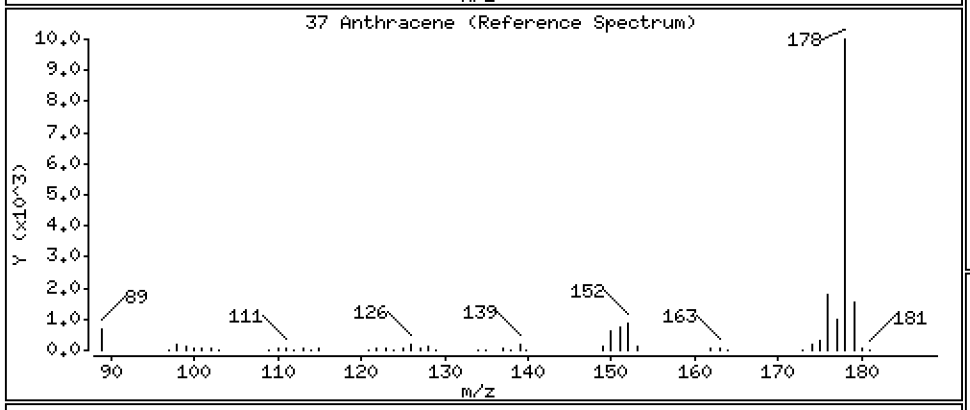
Column diameter: 0.25

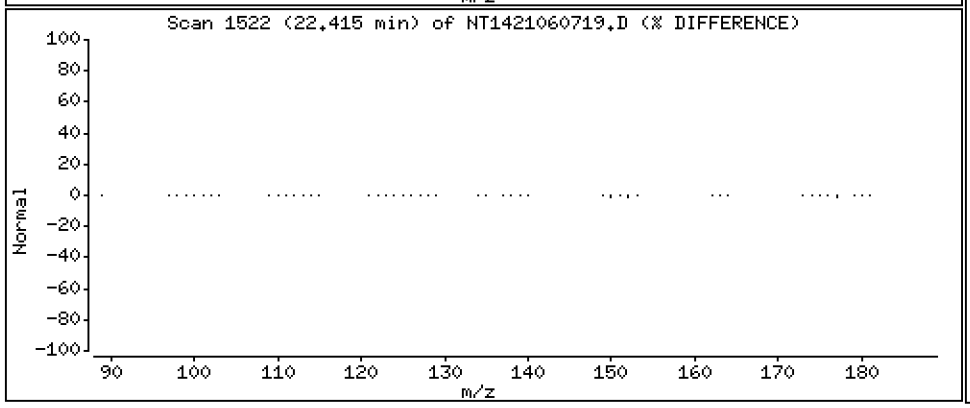
37 Anthracene

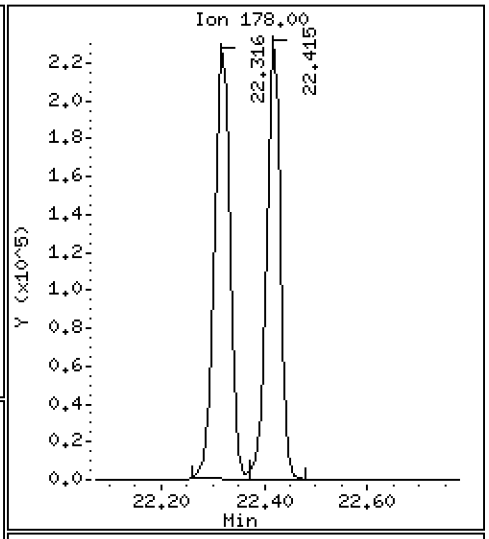
Concentration: 2.546 ug/mL

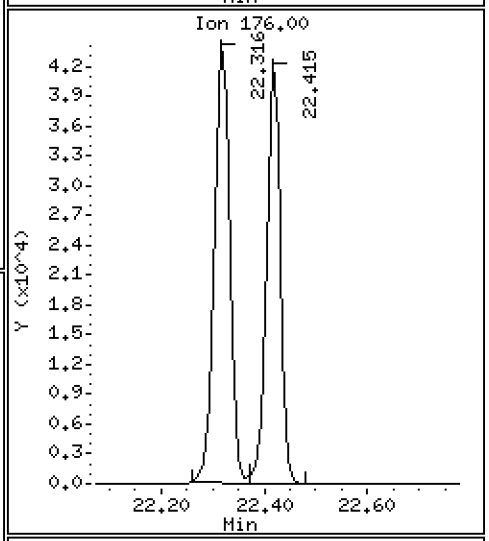


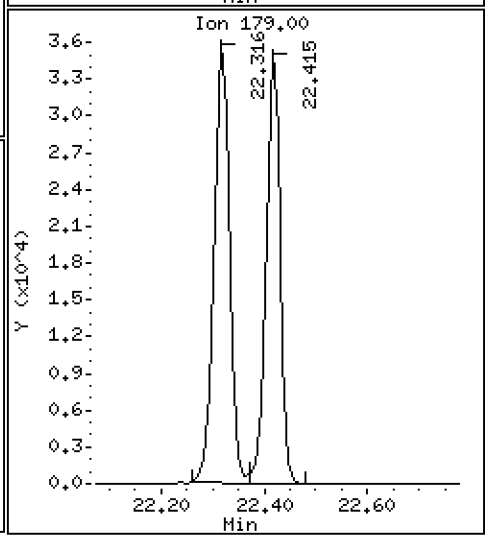












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Date : 08-JUN-2021 02:54

Client ID:

Instrument: nt14.i

Sample Info: SJF0173-CCV1

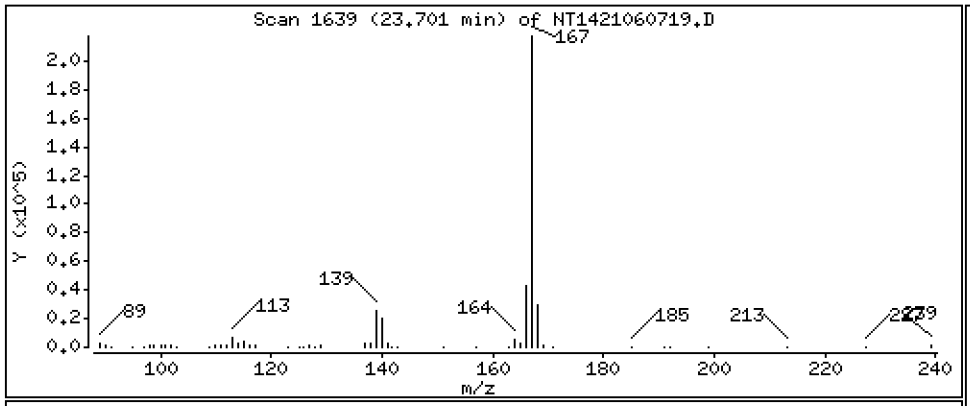
Operator: VTS

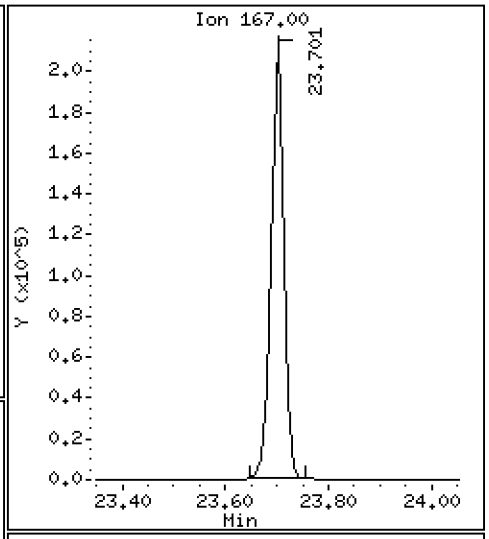
Column phase: Rxi-17Sil MS

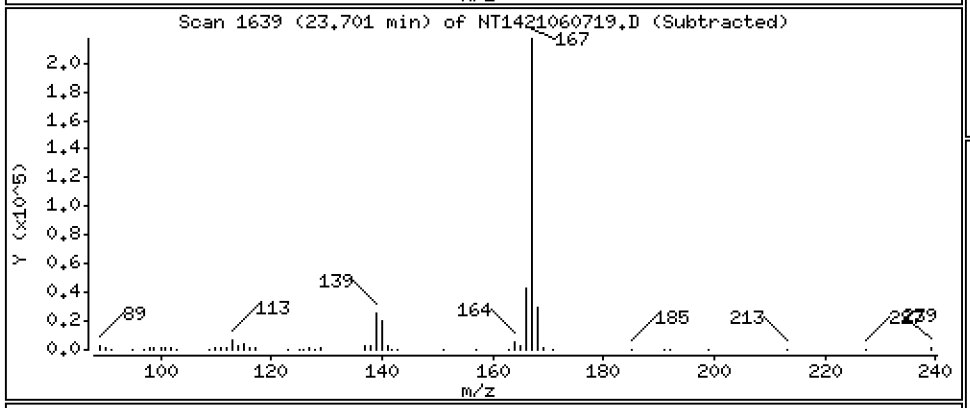
Column diameter: 0.25

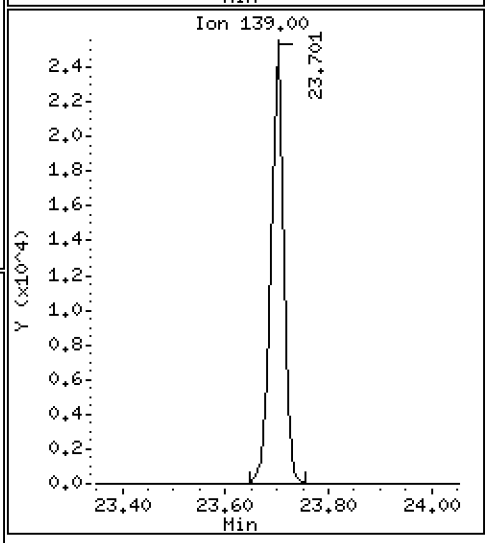
42 Carbazole

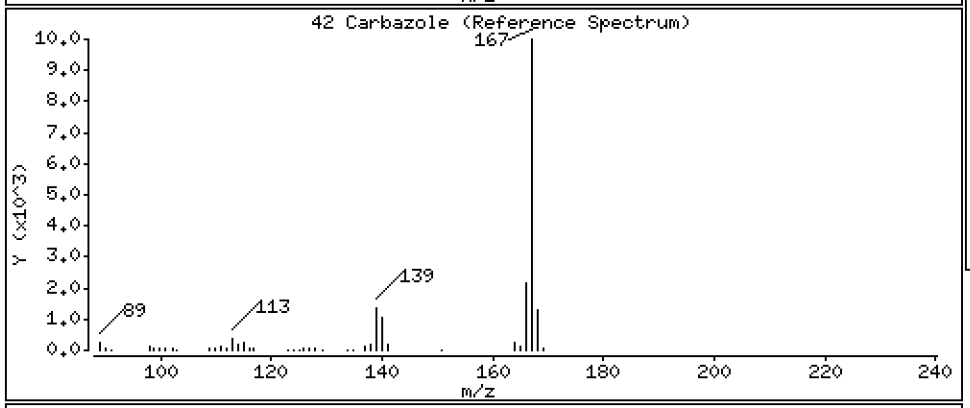
Concentration: 2.409 ug/mL

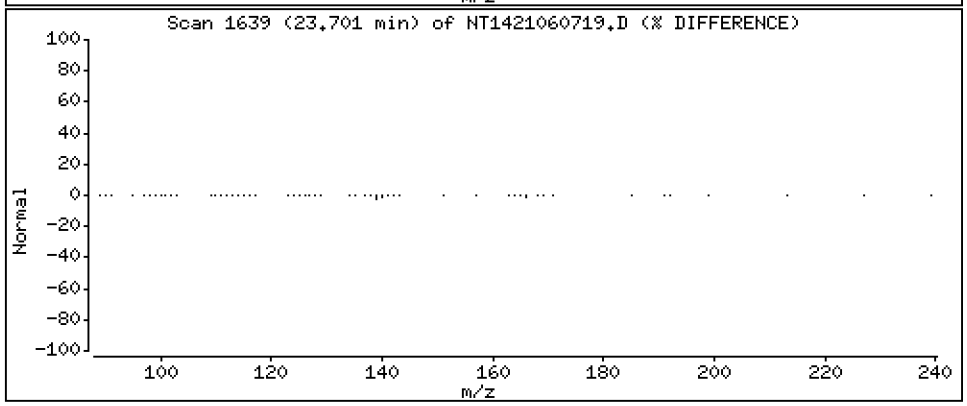












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Date : 08-JUN-2021 02:54

Client ID:

Instrument: nt14.i

Sample Info: SJF0173-CCV1

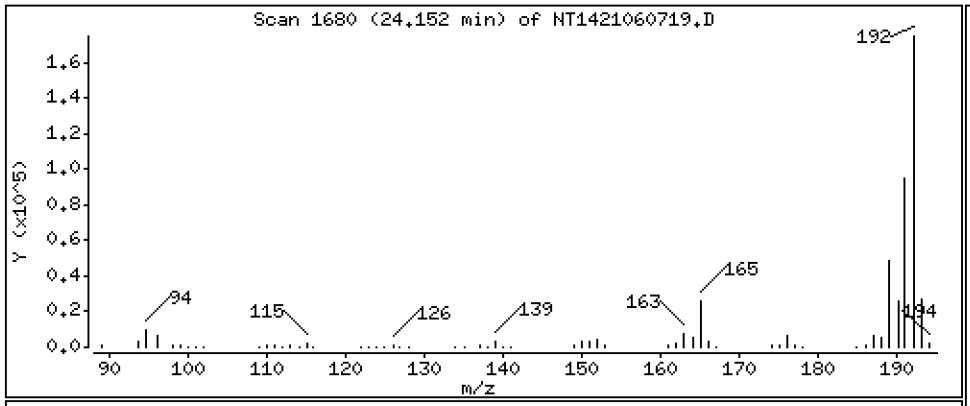
Operator: VTS

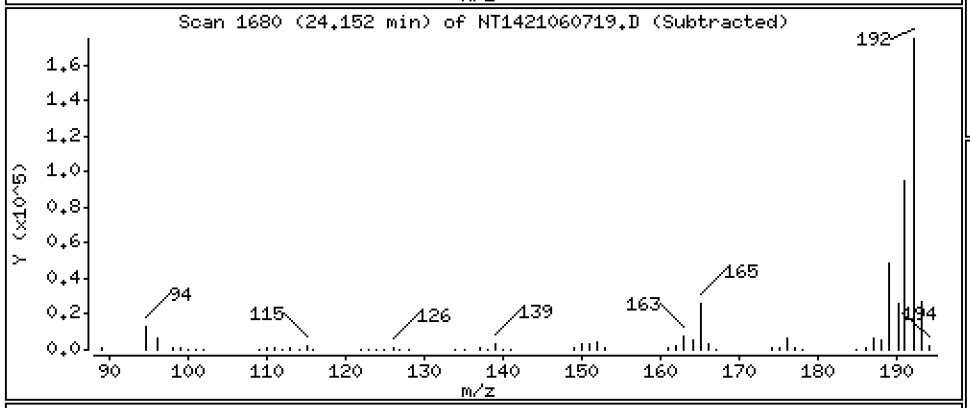
Column phase: Rxi-17Sil MS

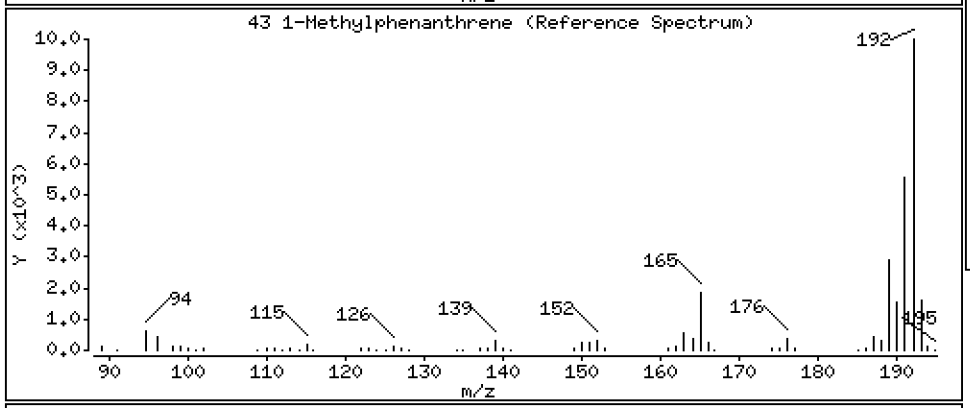
Column diameter: 0.25

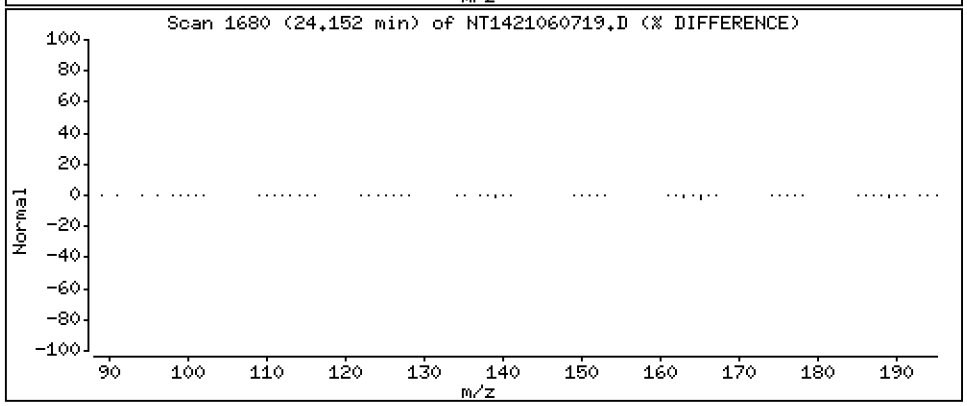
43 1-Methylphenanthrene

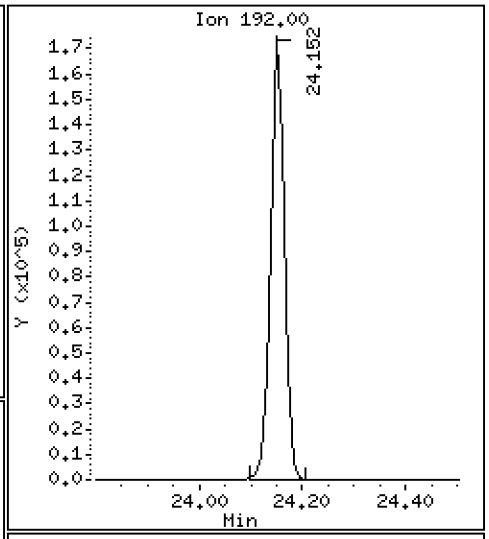
Concentration: 2.568 ug/mL

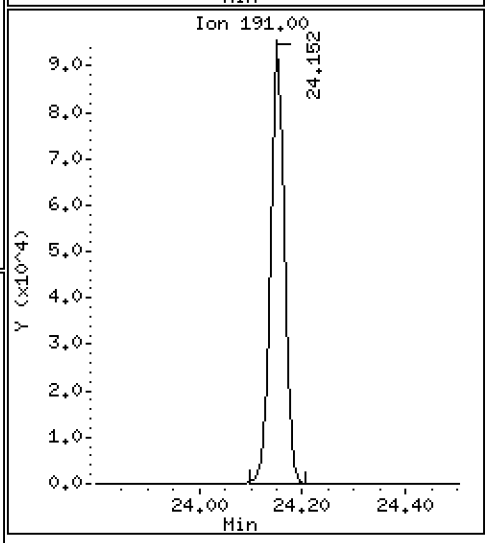












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Date : 08-JUN-2021 02:54

Client ID:

Instrument: nt14.i

Sample Info: SJF0173-CCV1

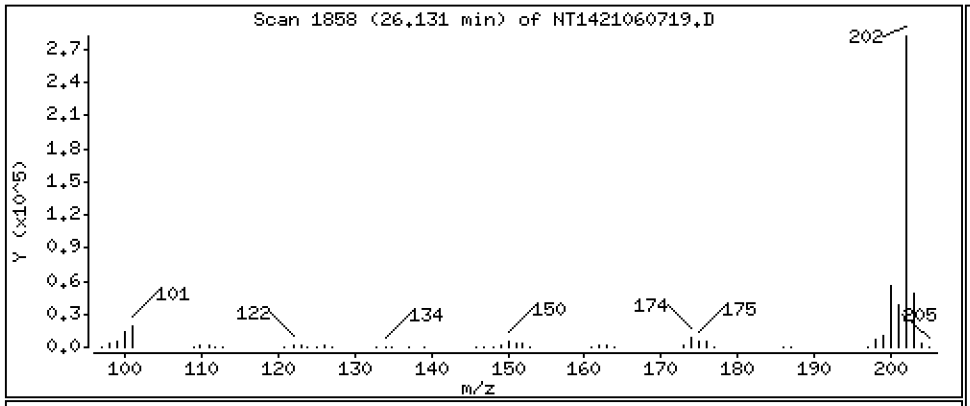
Operator: VTS

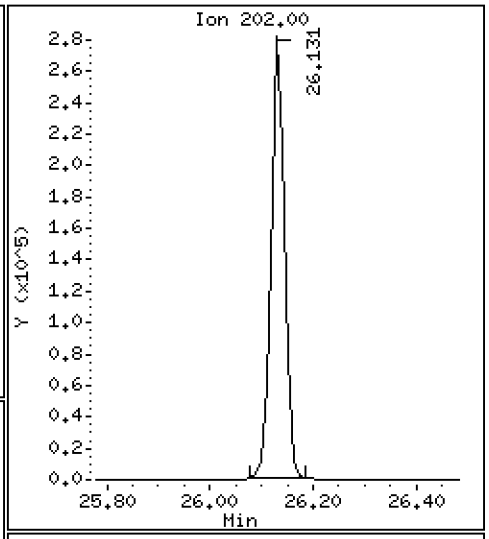
Column phase: Rxi-17Sil MS

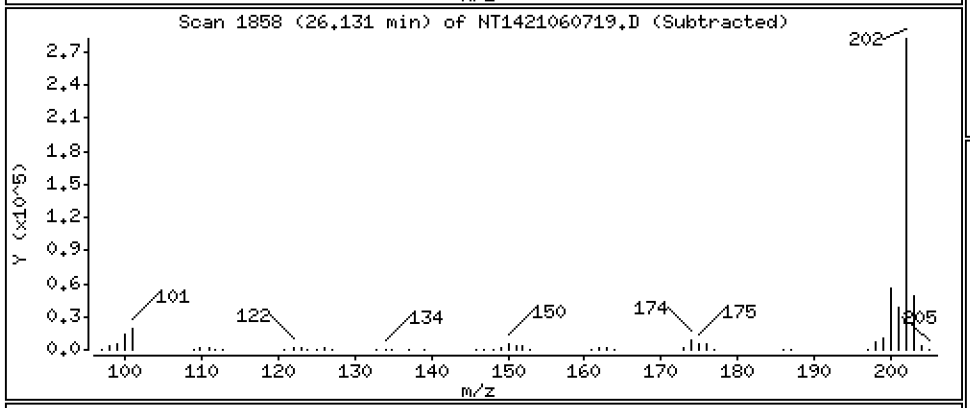
Column diameter: 0.25

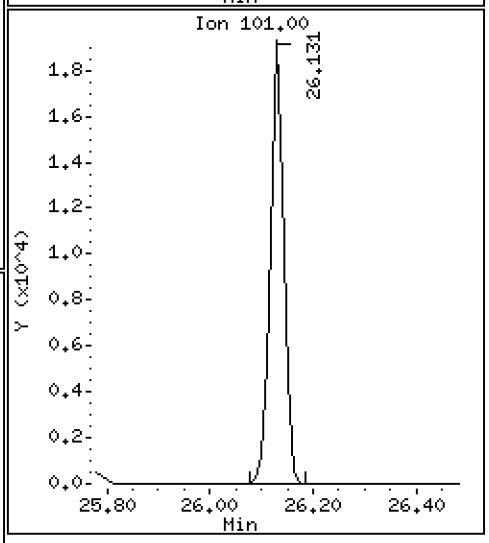
44 Fluoranthene

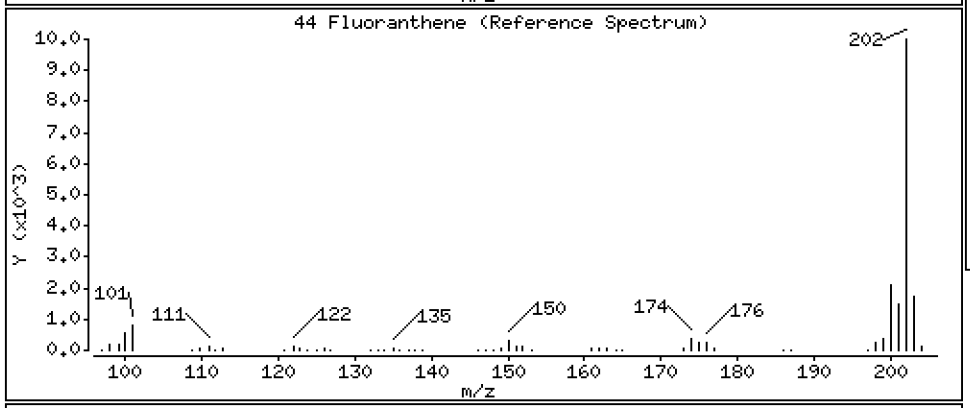
Concentration: 2.636 ug/mL

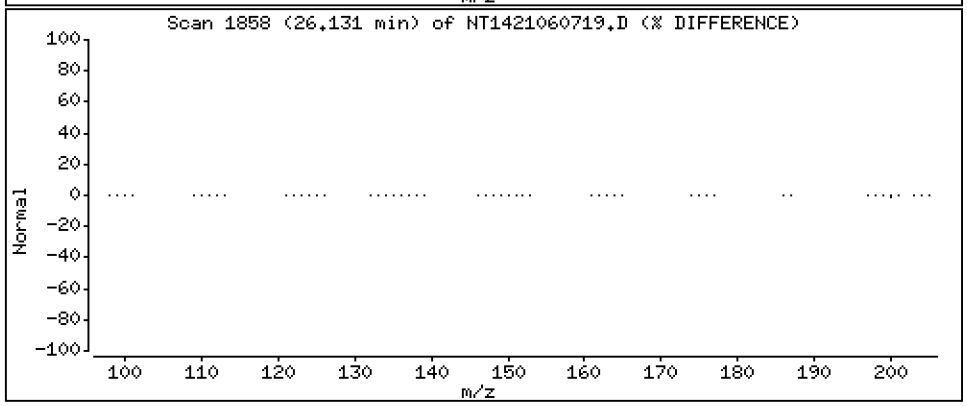












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Date : 08-JUN-2021 02:54

Client ID:

Instrument: nt14.i

Sample Info: SJF0173-CCV1

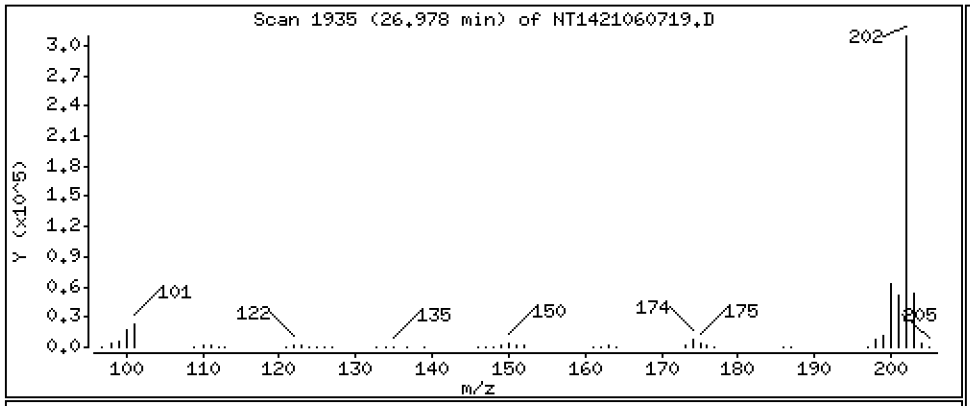
Operator: VTS

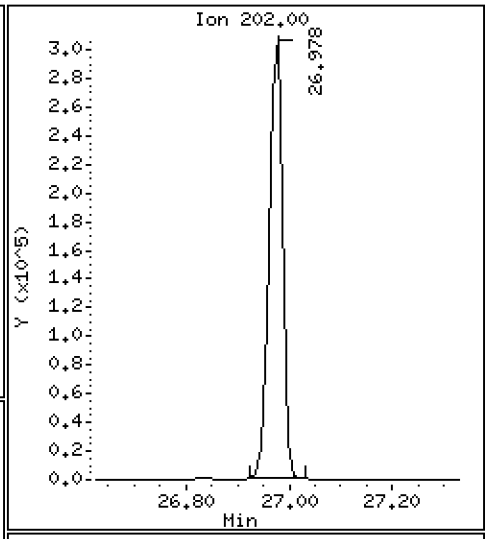
Column phase: Rxi-17Sil MS

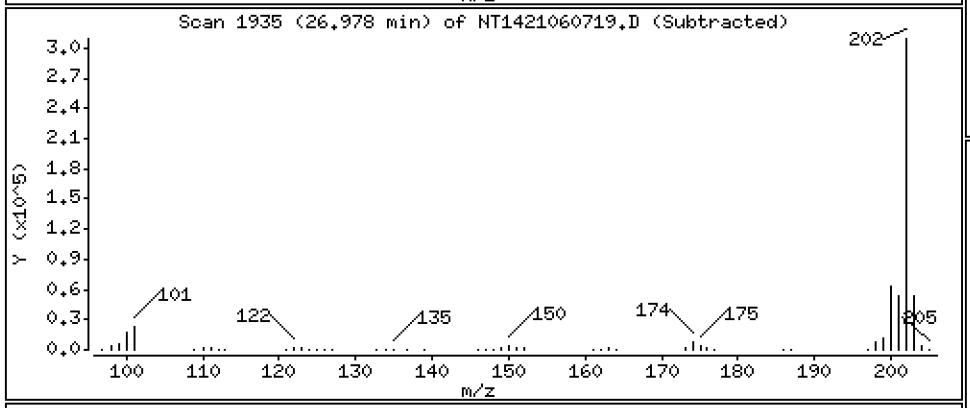
Column diameter: 0.25

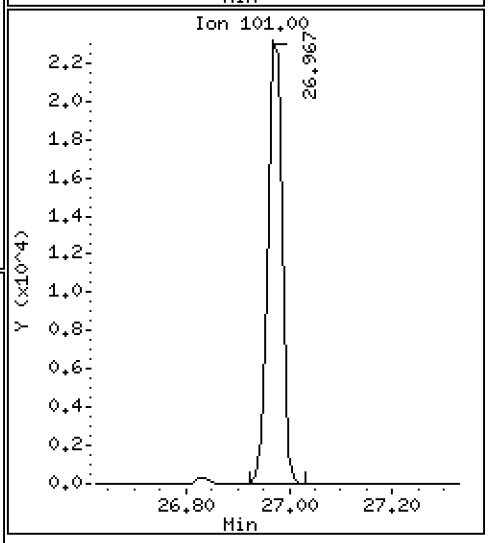
46 Pyrene

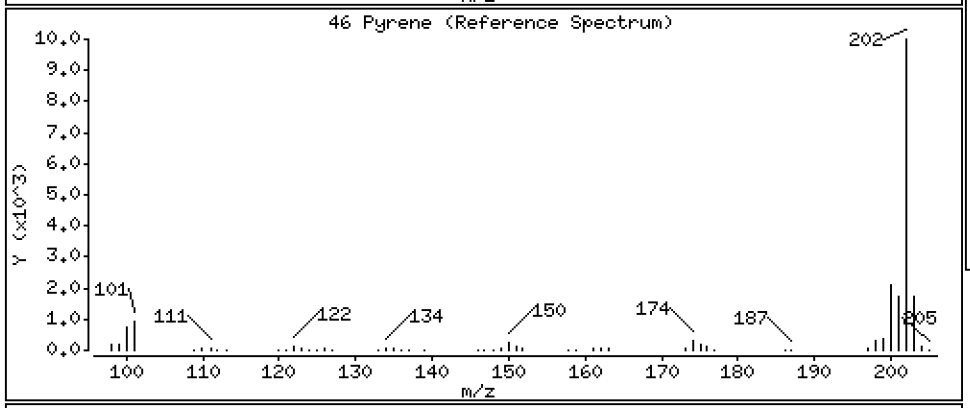
Concentration: 2.648 ug/mL

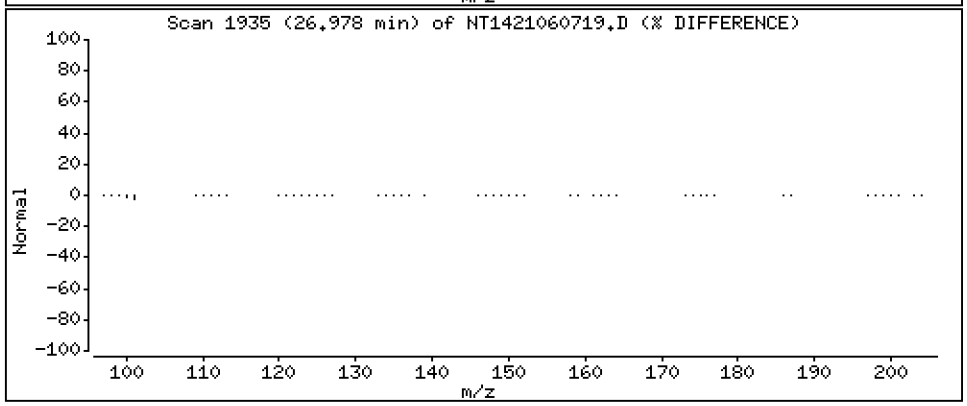












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Date : 08-JUN-2021 02:54

Client ID:

Instrument: nt14.i

Sample Info: SJF0173-CCV1

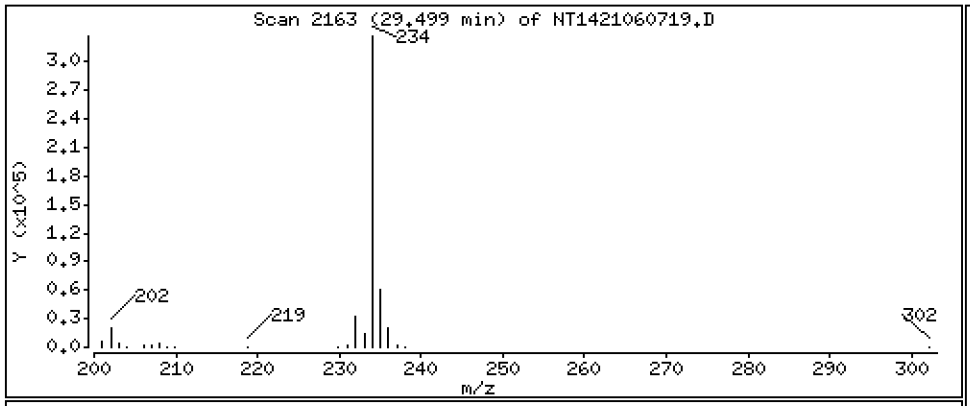
Operator: VTS

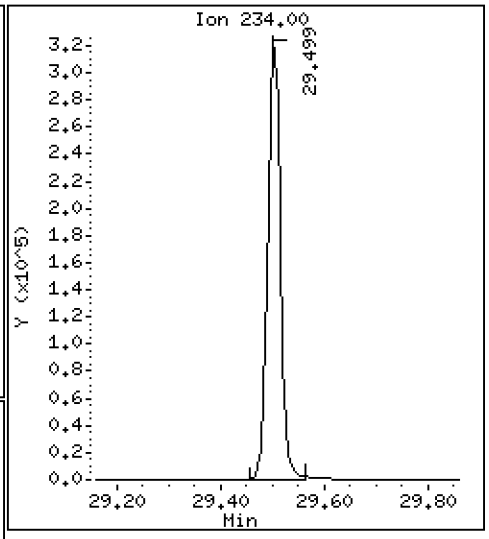
Column phase: Rxi-17Sil MS

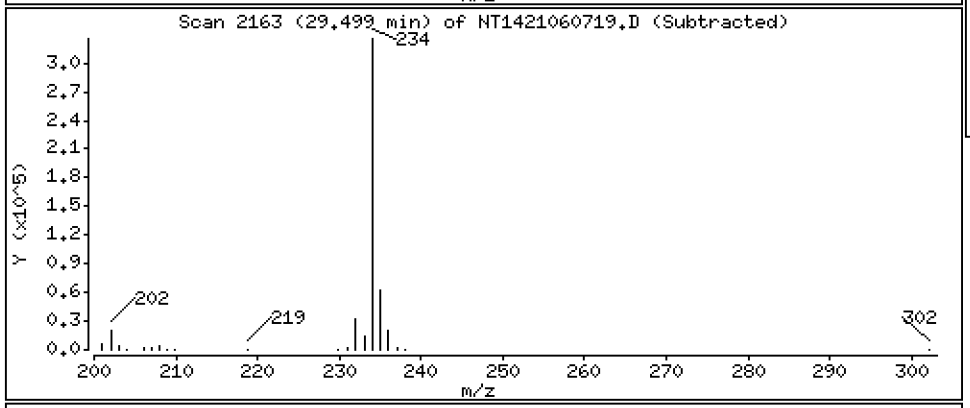
Column diameter: 0.25

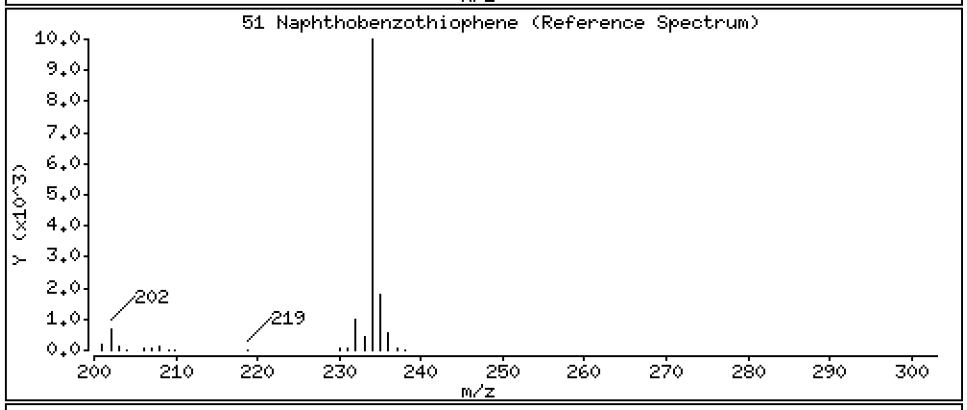
51 Naphthobenzothiophene

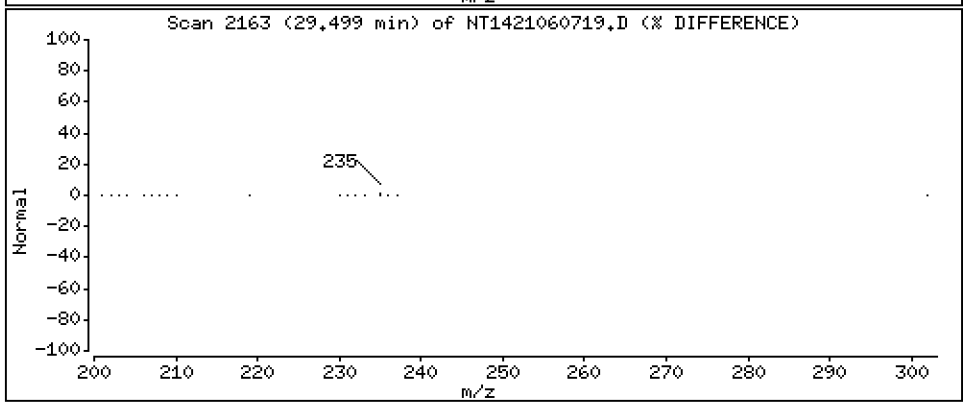
Concentration: 2.502 ug/mL











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Date : 08-JUN-2021 02:54

Client ID:

Instrument: nt14.i

Sample Info: SJF0173-CCV1

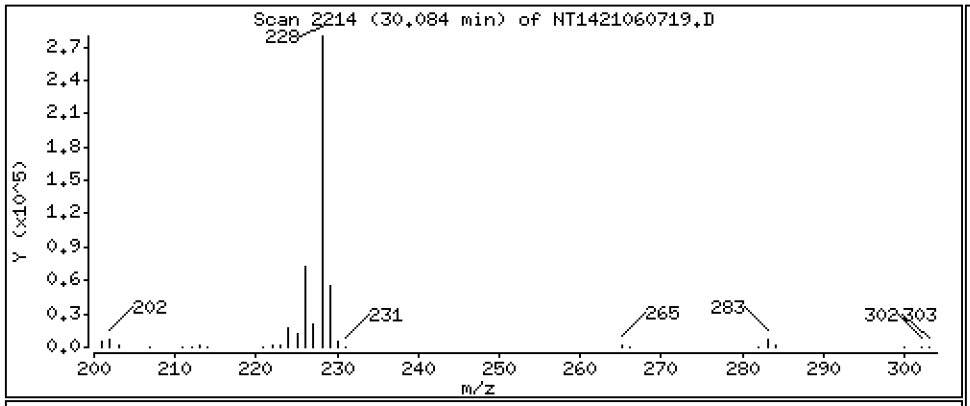
Operator: VTS

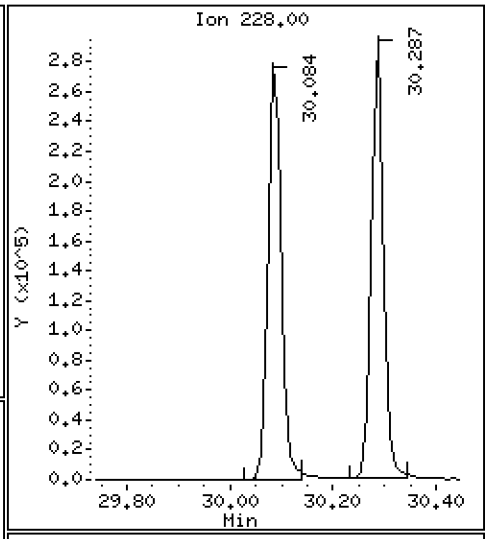
Column phase: Rxi-17Sil MS

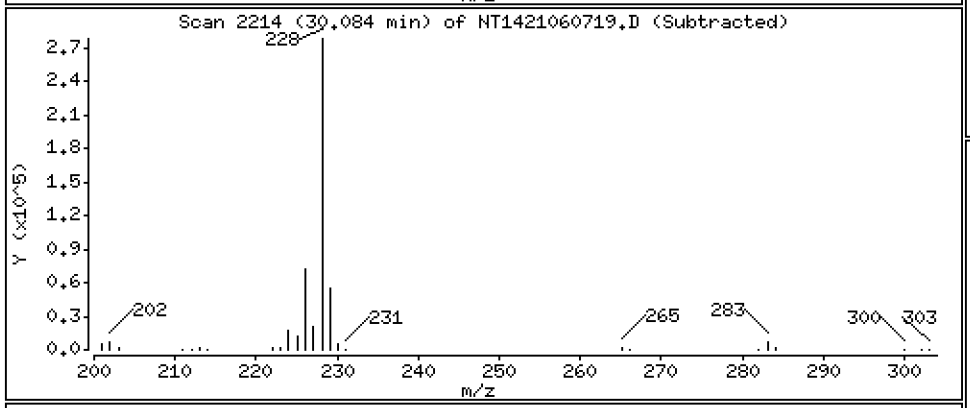
Column diameter: 0.25

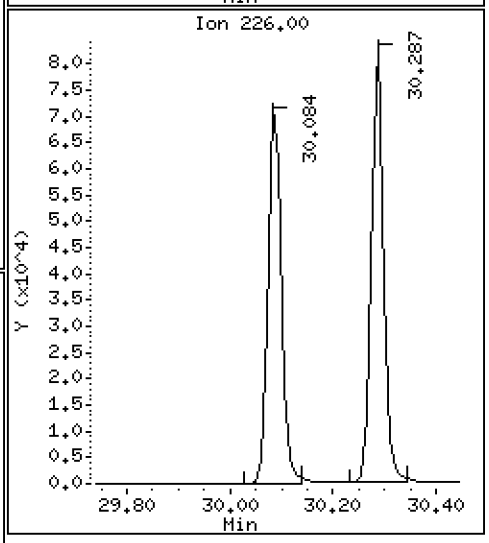
55 Benzo(a)anthracene

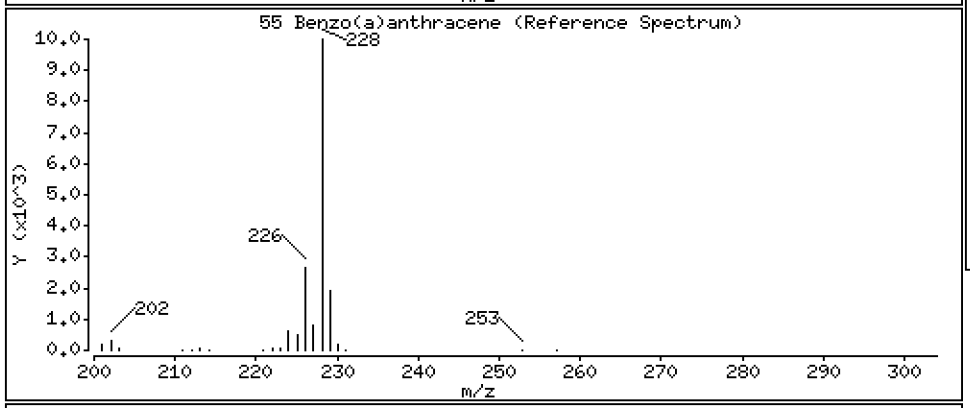
Concentration: 2.872 ug/mL

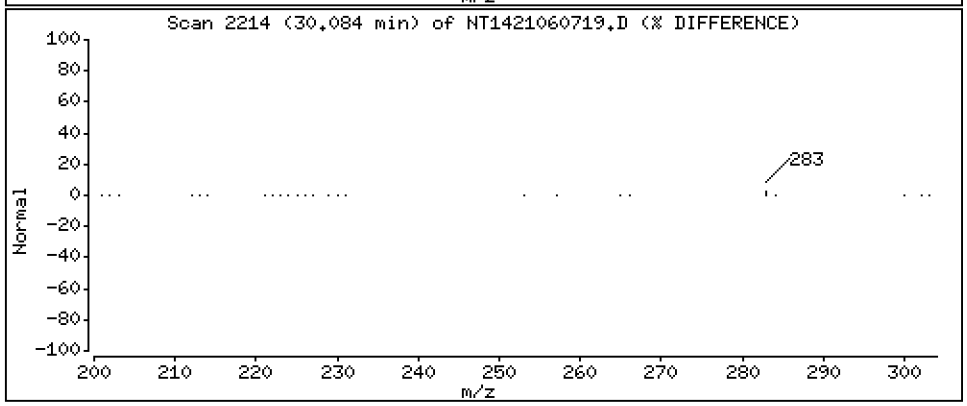












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Date : 08-JUN-2021 02:54

Client ID:

Instrument: nt14.i

Sample Info: SJF0173-CCV1

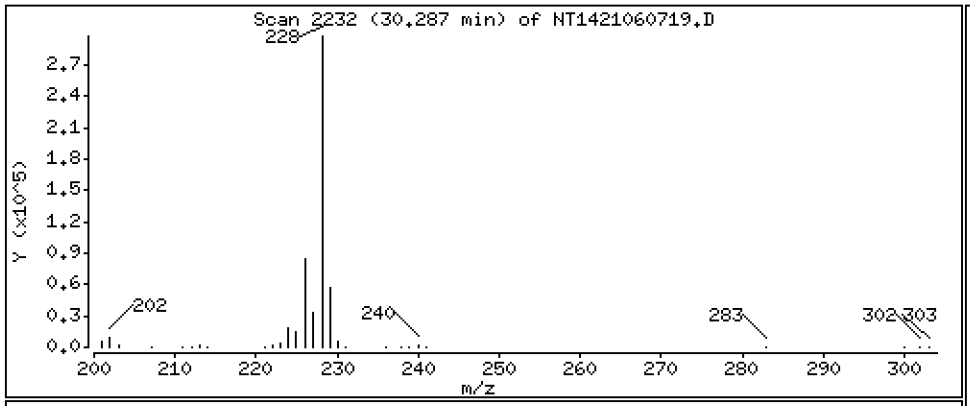
Operator: VTS

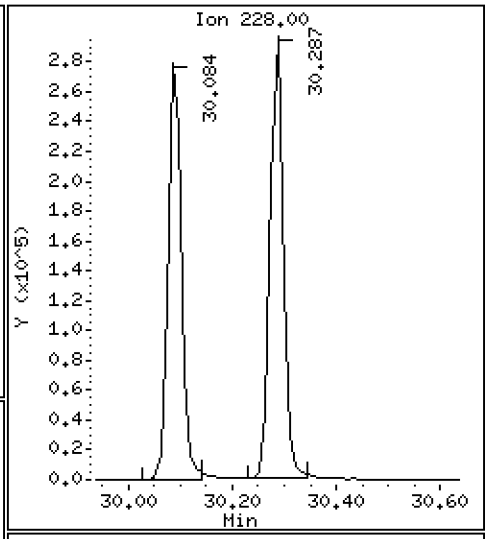
Column phase: Rxi-17Sil MS

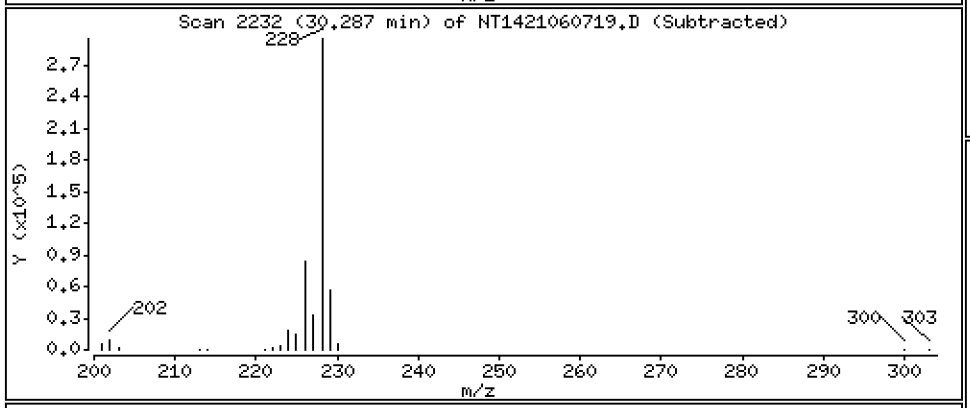
Column diameter: 0.25

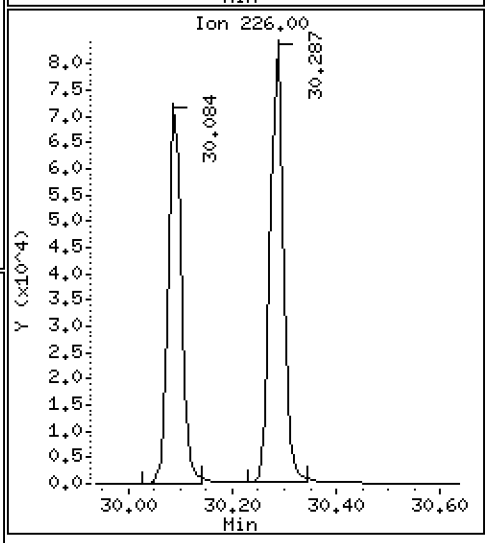
57 Chrysene

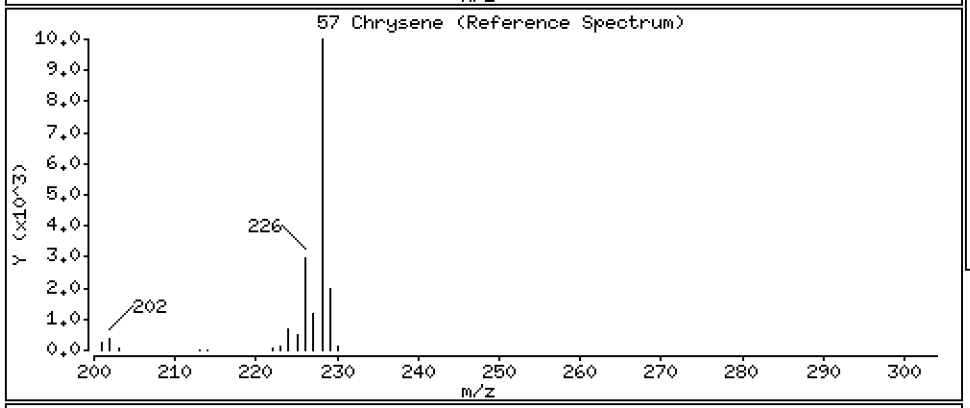
Concentration: 2.791 ug/mL

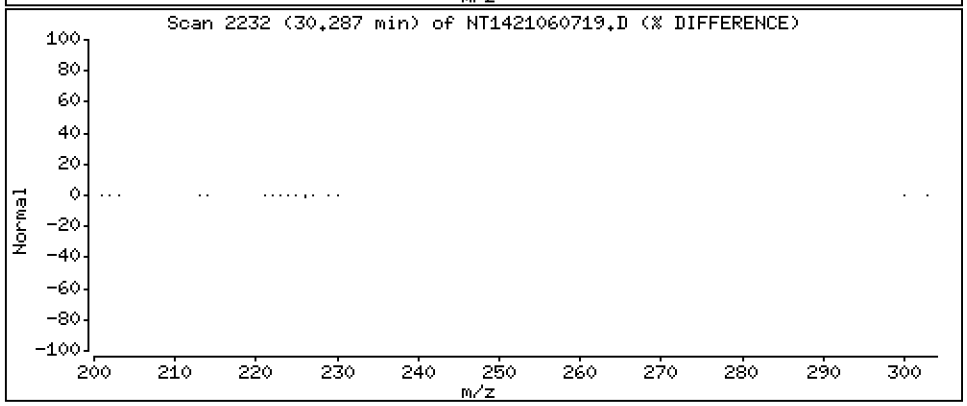












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Date : 08-JUN-2021 02:54

Client ID:

Instrument: nt14.i

Sample Info: SJF0173-CCV1

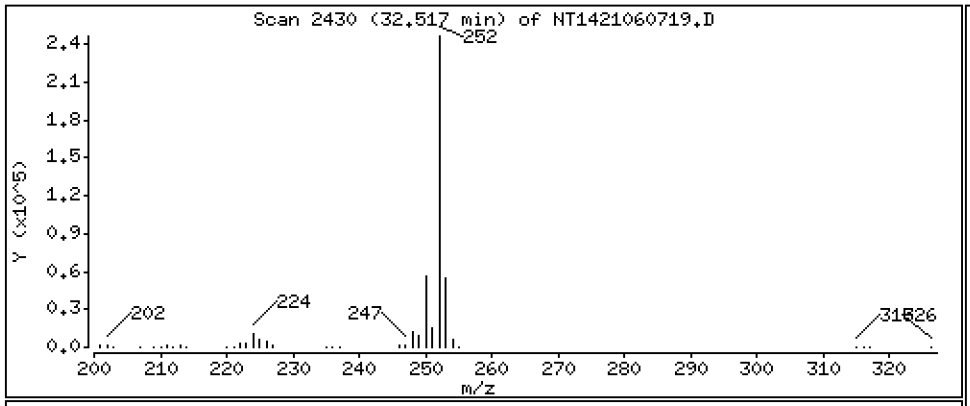
Operator: VTS

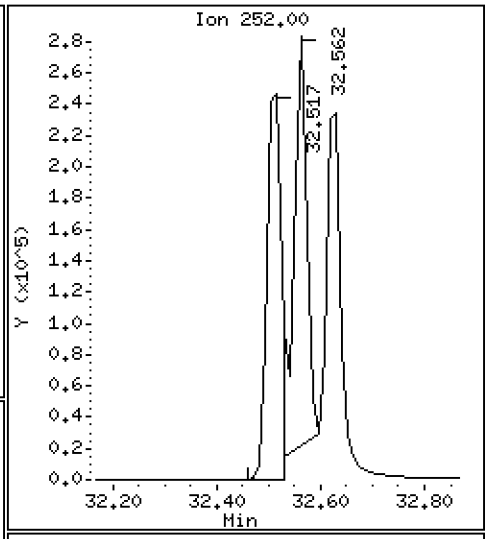
Column phase: Rxi-17Sil MS

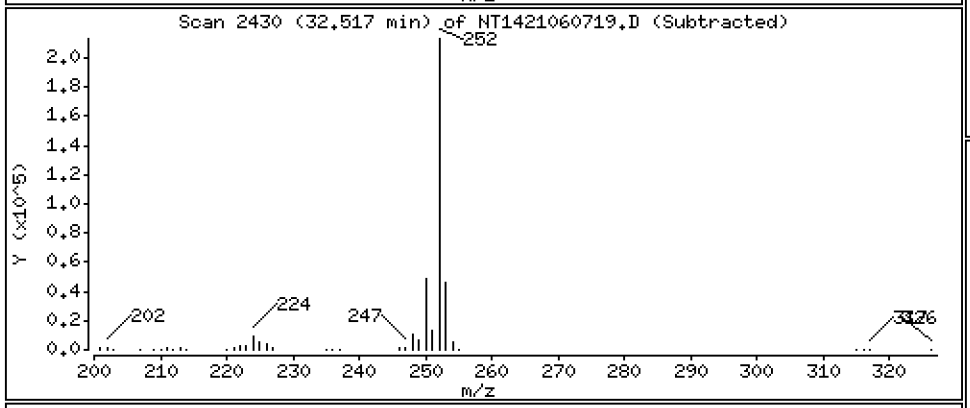
Column diameter: 0.25

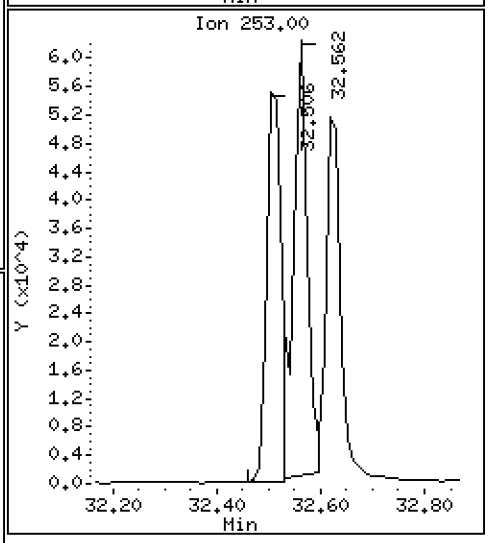
62 Benzo(b)fluoranthene

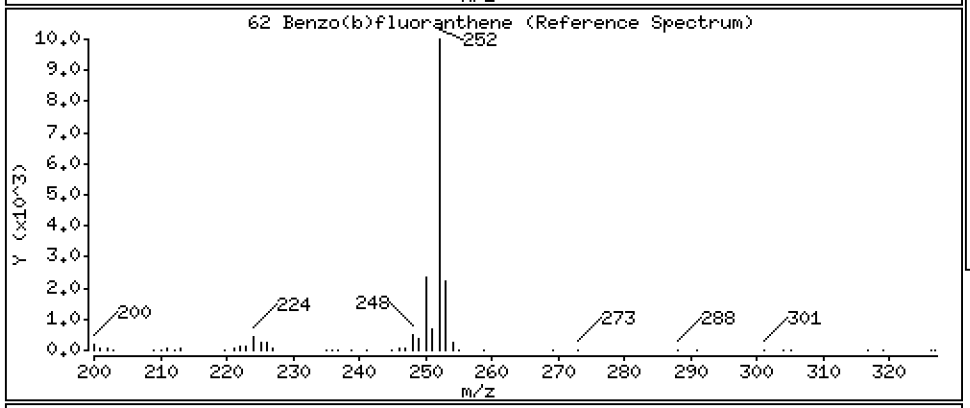
Concentration: 2.516 ug/mL

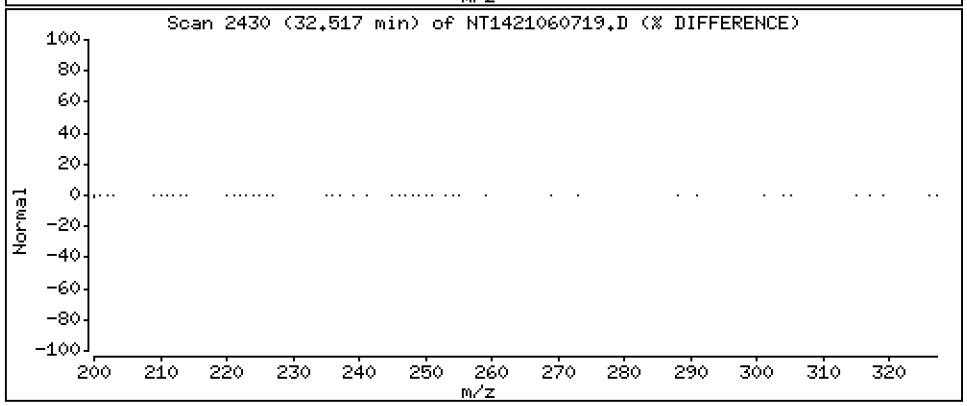












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Date : 08-JUN-2021 02:54

Client ID:

Instrument: nt14.i

Sample Info: SJF0173-CCV1

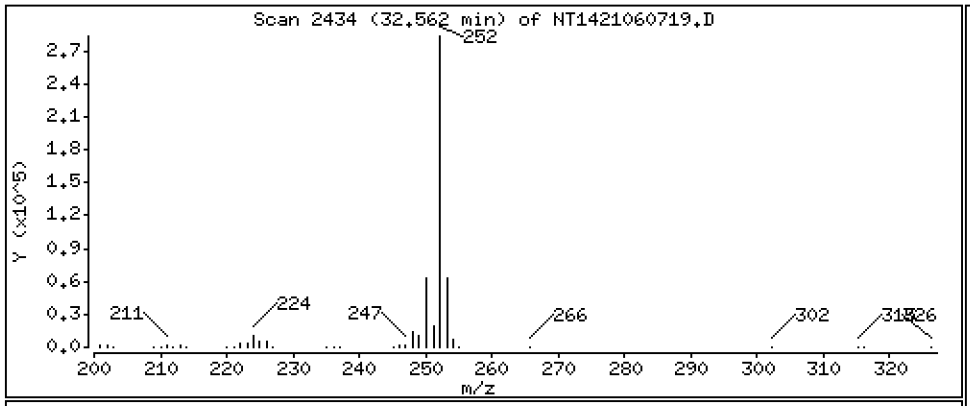
Operator: VTS

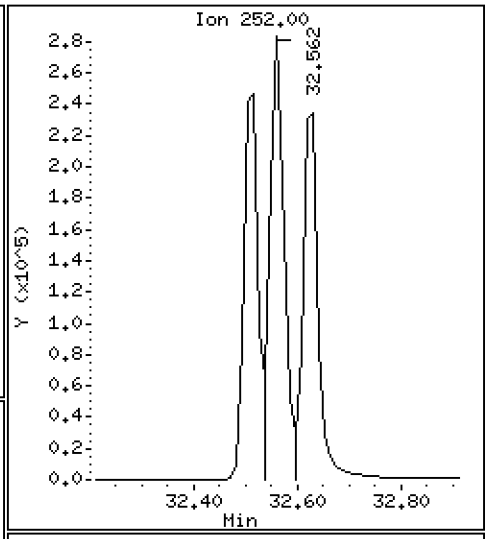
Column phase: Rxi-17Sil MS

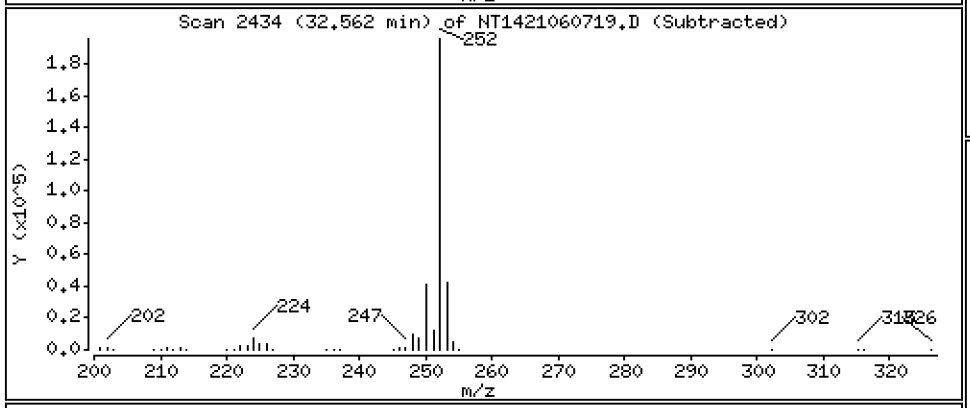
Column diameter: 0.25

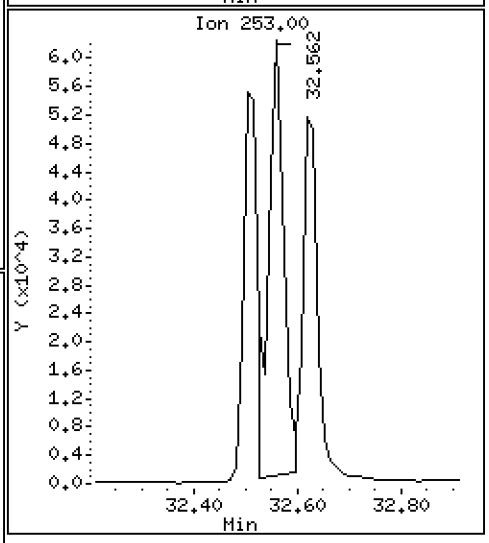
63 Benzo(k)fluoranthene

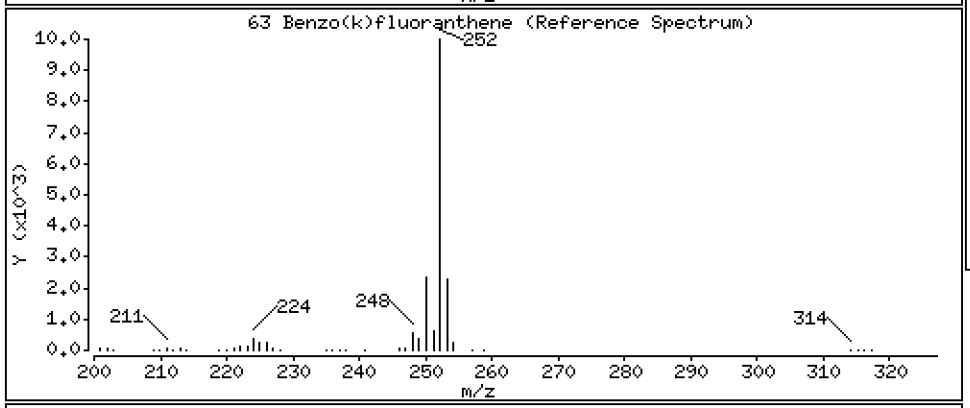
Concentration: 2.771 ug/mL

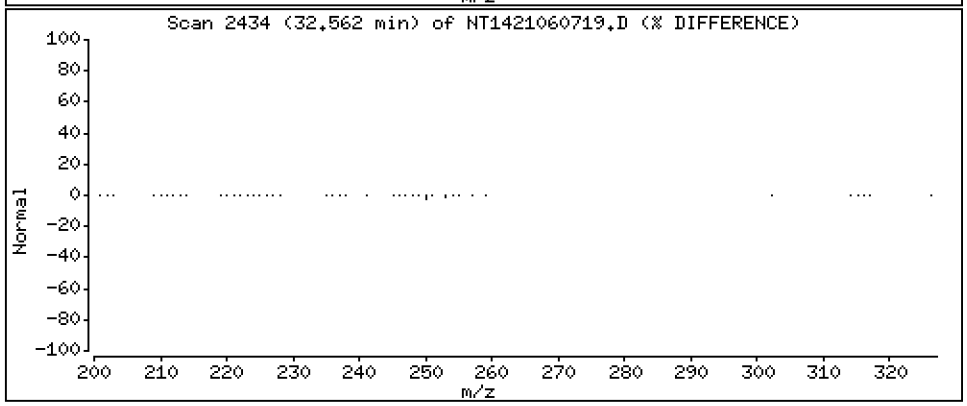












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Date : 08-JUN-2021 02:54

Client ID:

Instrument: nt14.i

Sample Info: SJF0173-CCV1

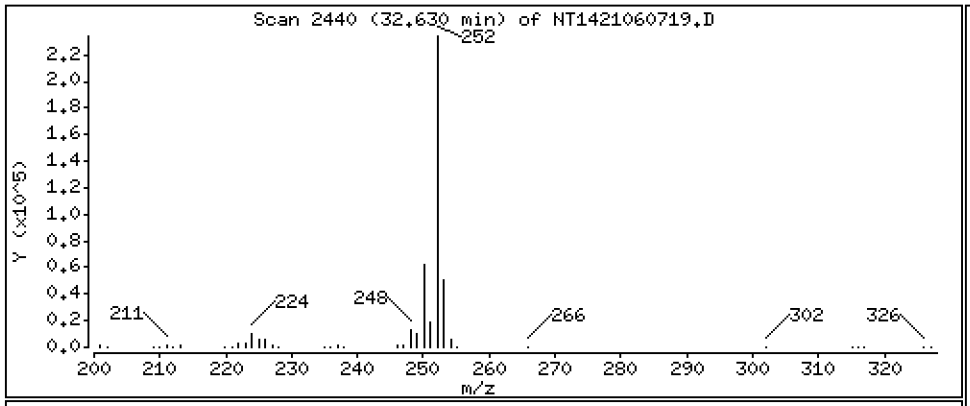
Operator: VTS

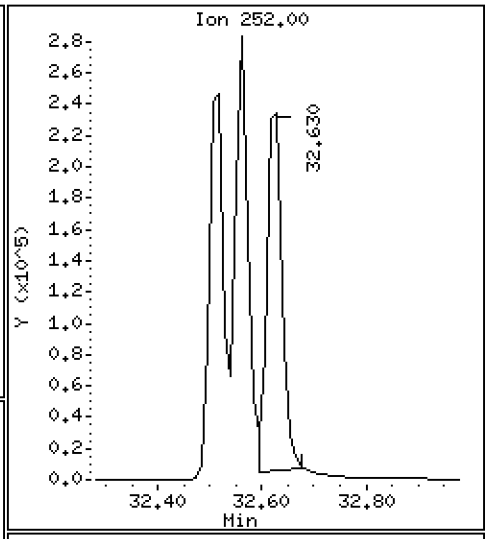
Column phase: Rxi-17Sil MS

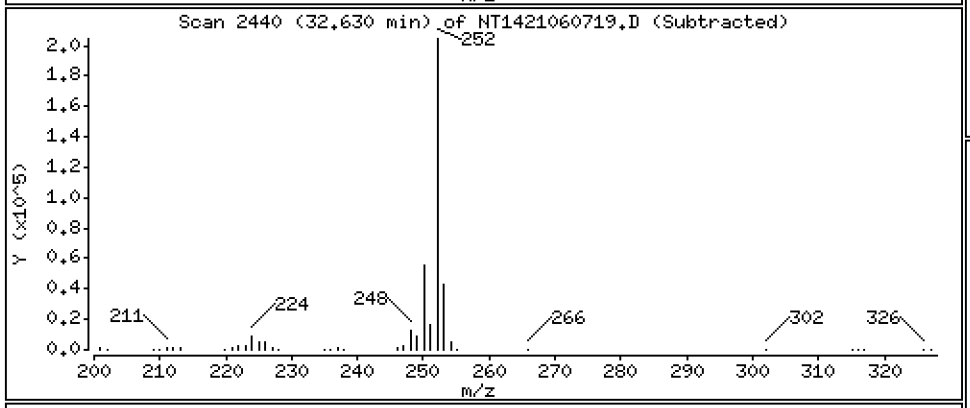
Column diameter: 0.25

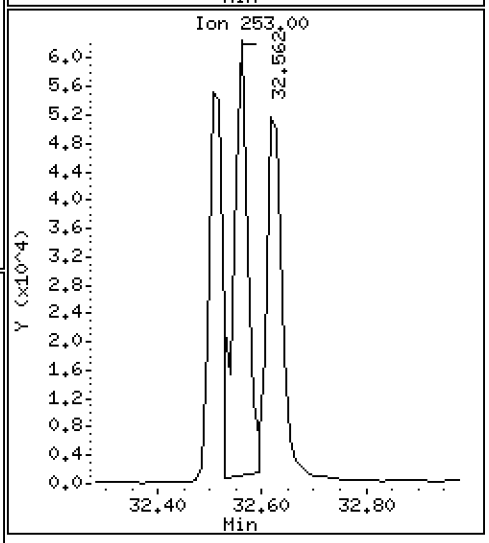
293 Benzo(j)fluoranthene

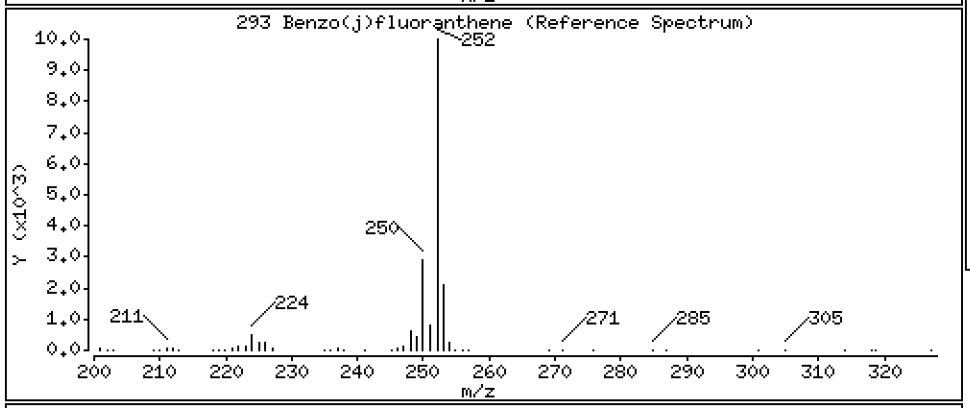
Concentration: 2.460 ug/mL

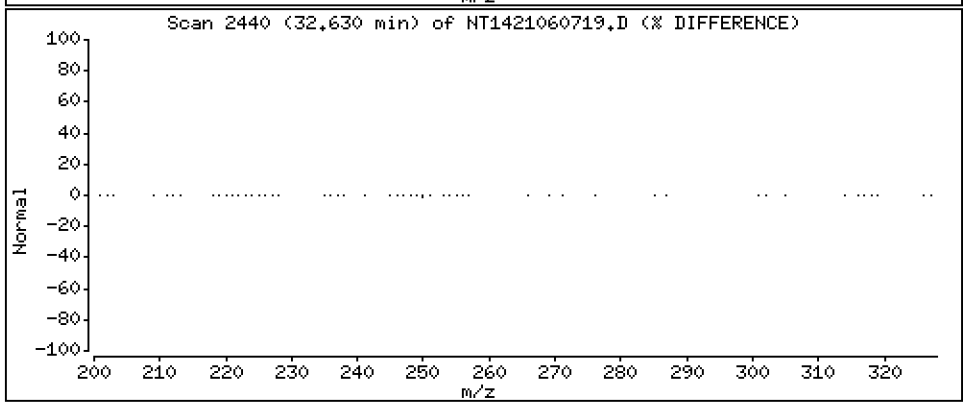












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Date : 08-JUN-2021 02:54

Client ID:

Instrument: nt14.i

Sample Info: SJF0173-CCV1

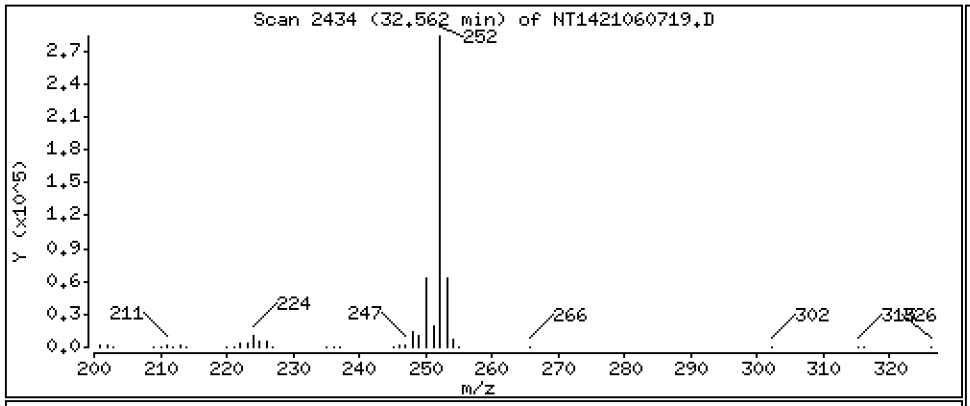
Operator: VTS

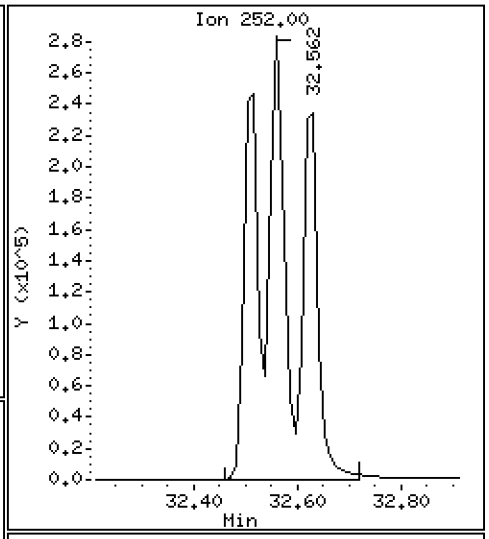
Column phase: Rxi-17Sil MS

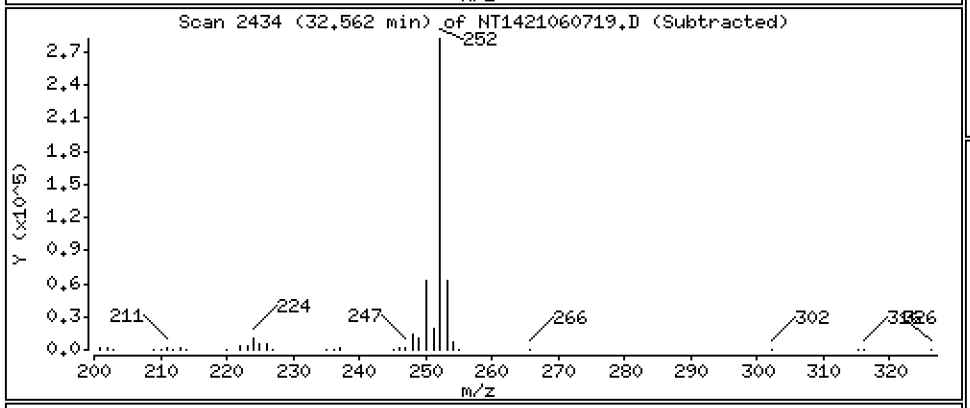
Column diameter: 0.25

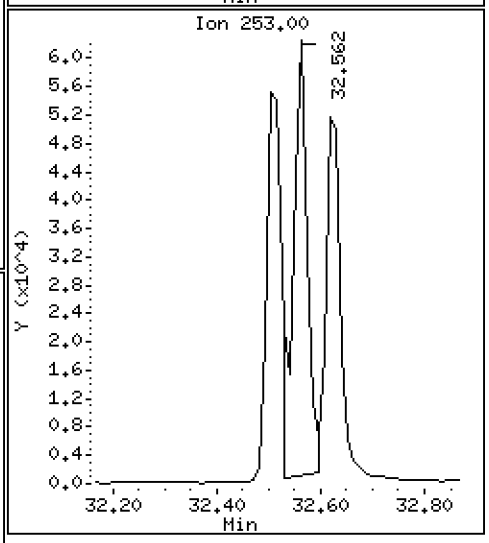
246 Total Benzofluoranthenes

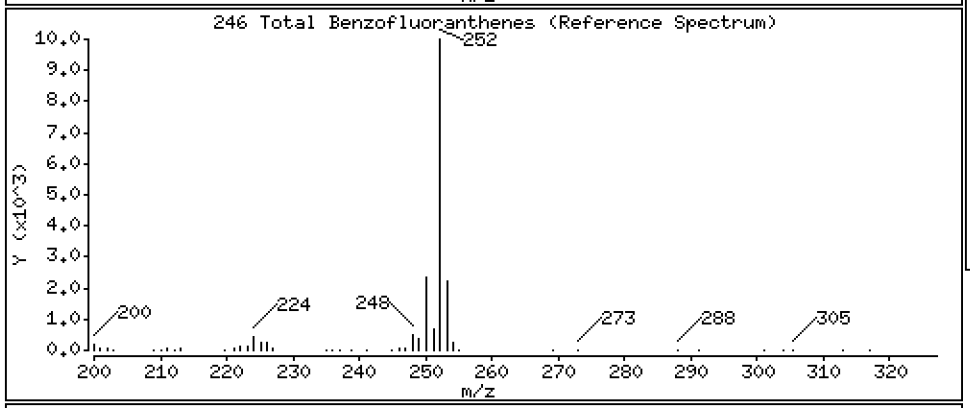
Concentration: 8.144 ug/mL

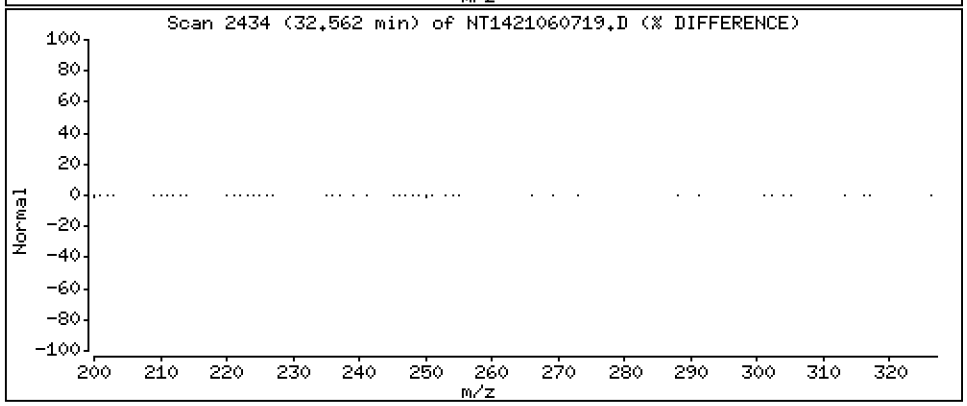












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Date : 08-JUN-2021 02:54

Client ID:

Instrument: nt14.i

Sample Info: SJF0173-CCV1

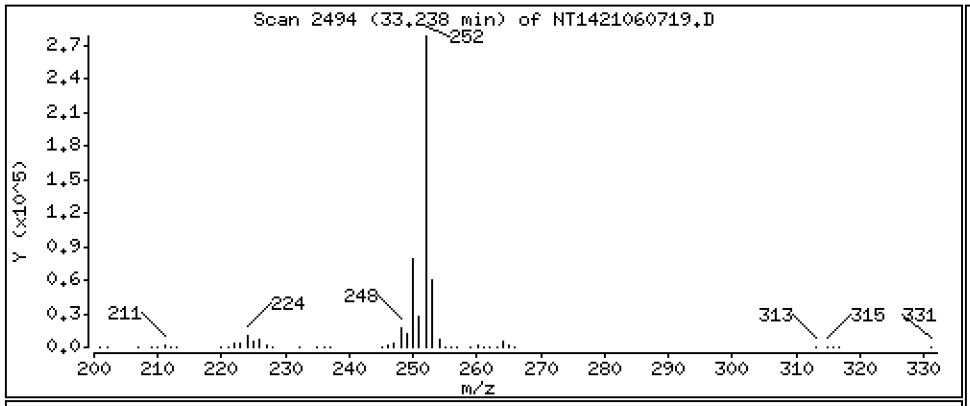
Operator: VTS

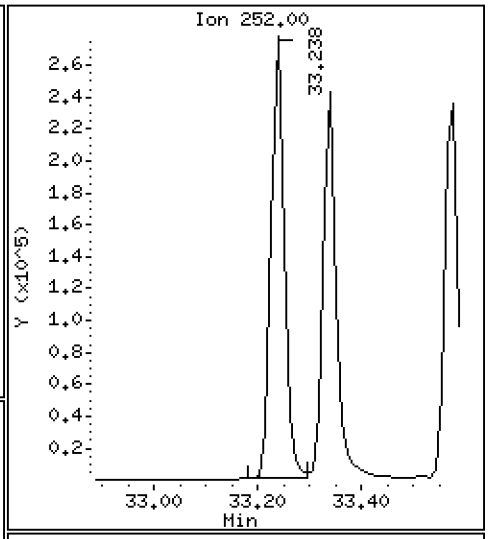
Column phase: Rxi-17Sil MS

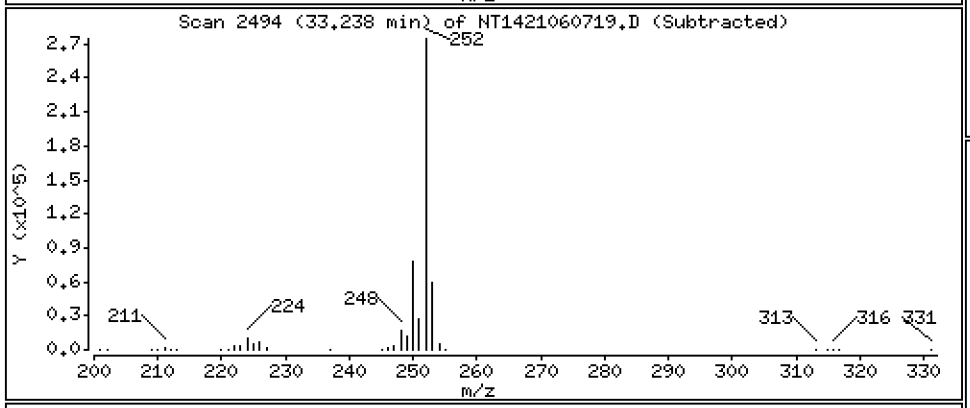
Column diameter: 0.25

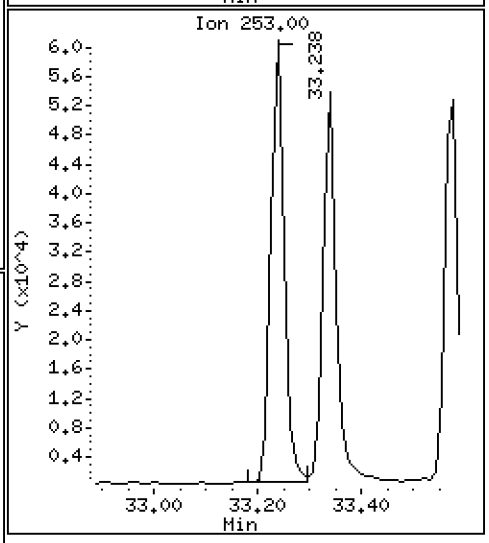
64 Benzo(e)pyrene

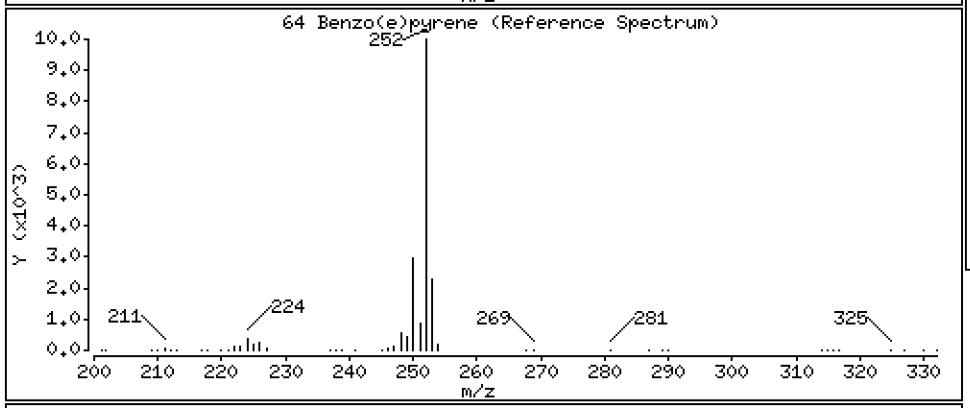
Concentration: 2.538 ug/mL

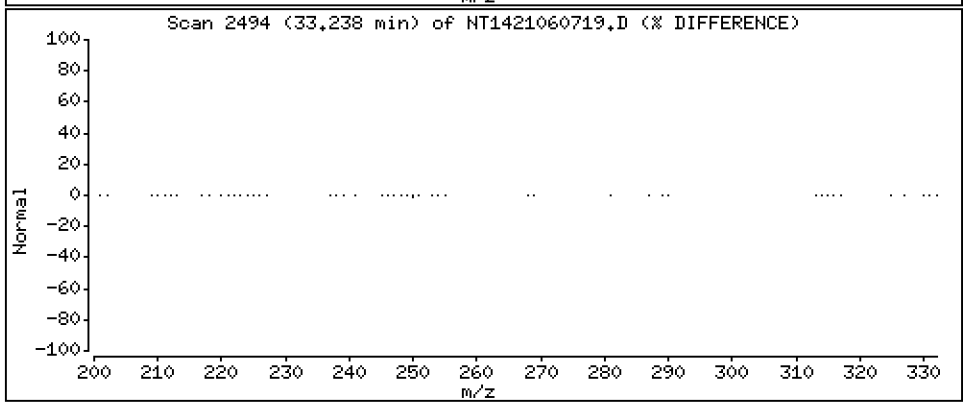












Data File: \\target\share\chem3\nt14.i\20210607.b\NT1421060719.D

Date : 08-JUN-2021 02:54

Client ID:

Instrument: nt14.i

Sample Info: SJF0173-CCV1

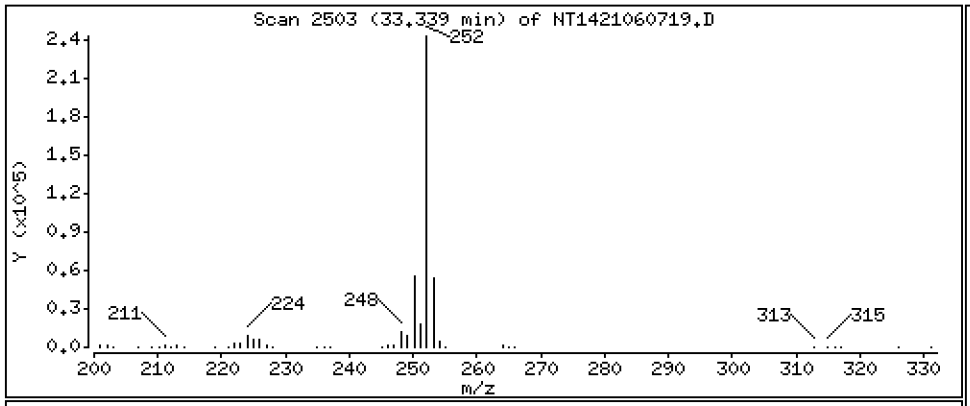
Operator: VTS

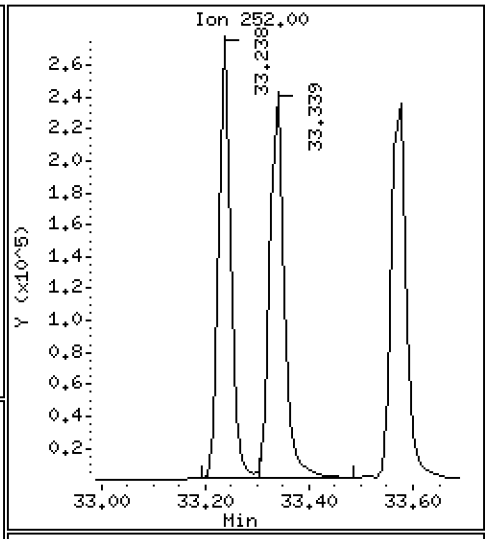
Column phase: Rxi-17Sil MS

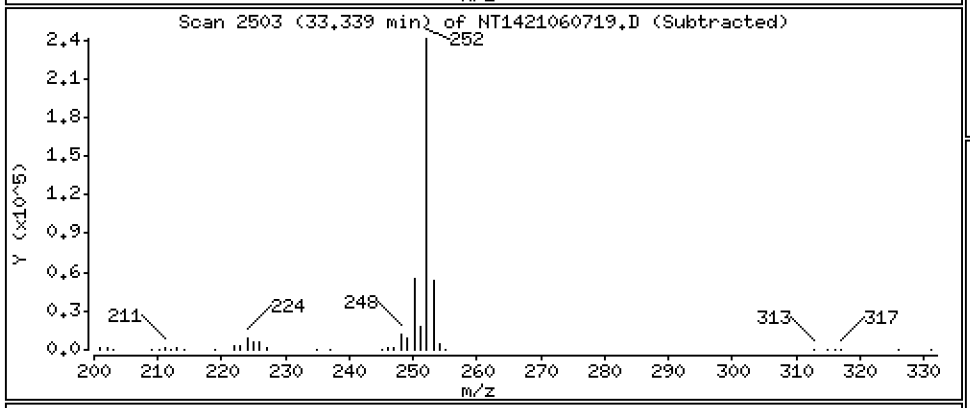
Column diameter: 0.25

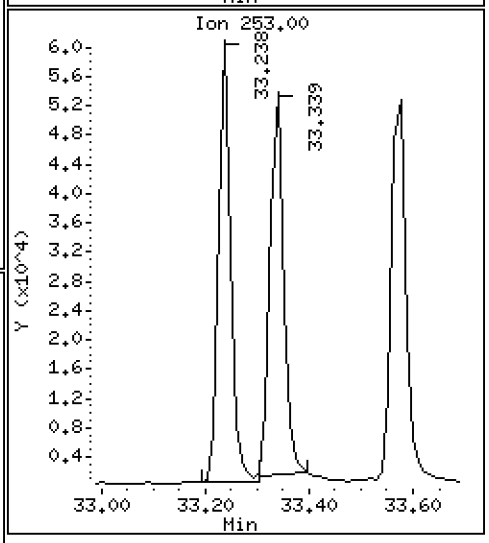
66 Benzo(a)pyrene

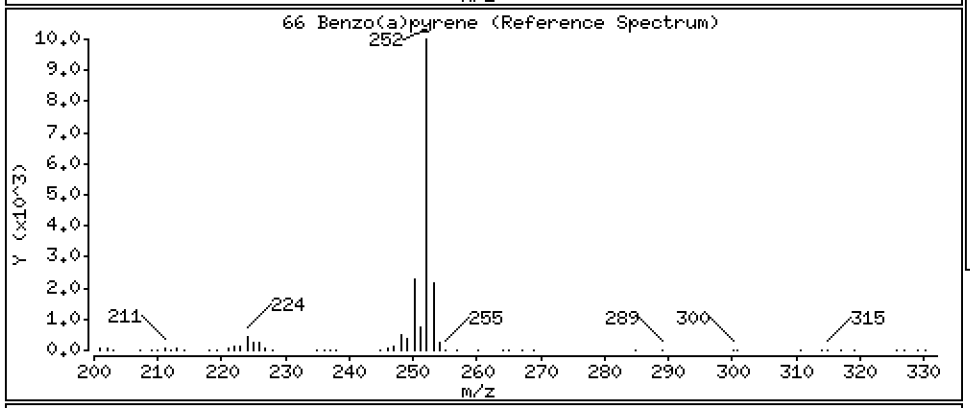
Concentration: 2.684 ug/mL

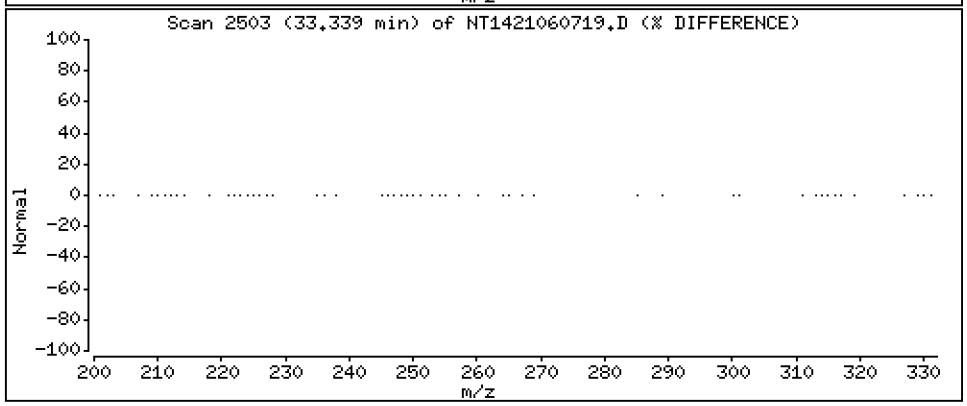












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Date : 08-JUN-2021 02:54

Client ID:

Instrument: nt14.i

Sample Info: SJF0173-CCV1

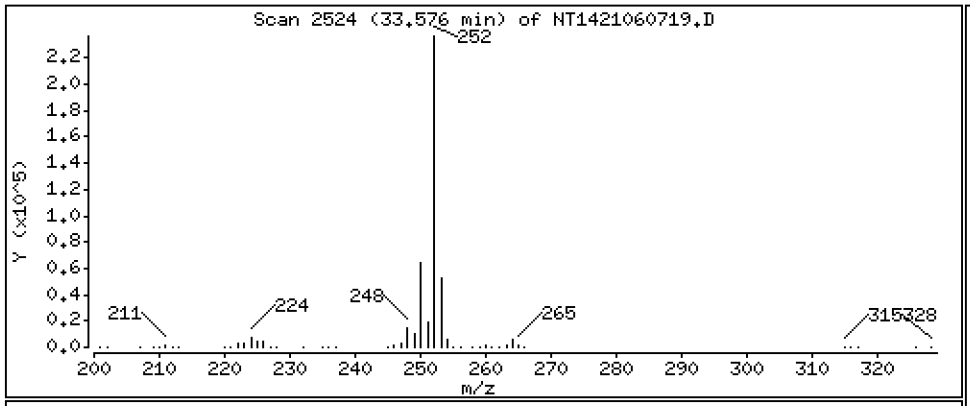
Operator: VTS

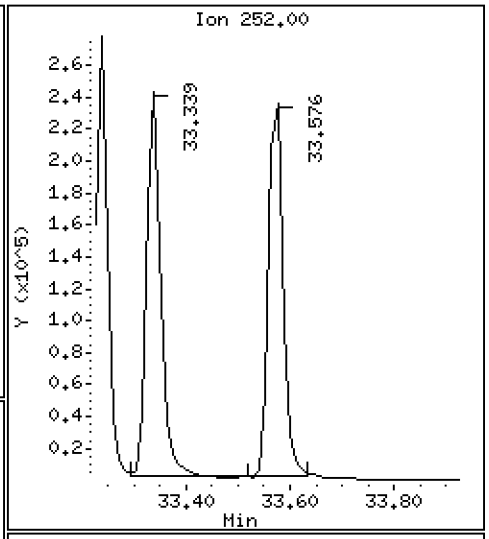
Column phase: Rxi-17Sil MS

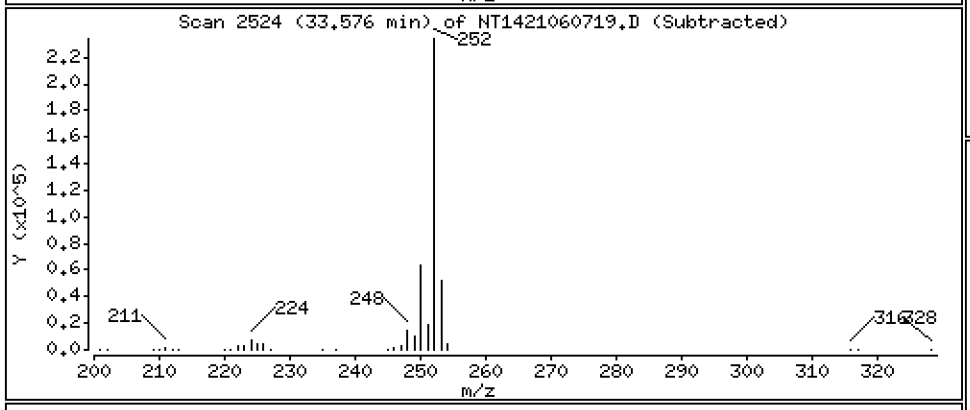
Column diameter: 0.25

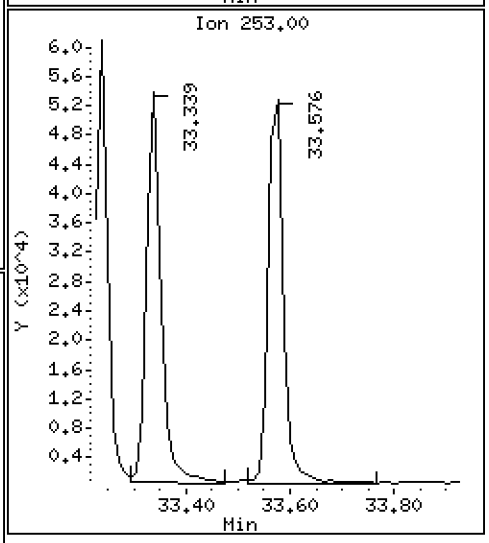
68 Perylene

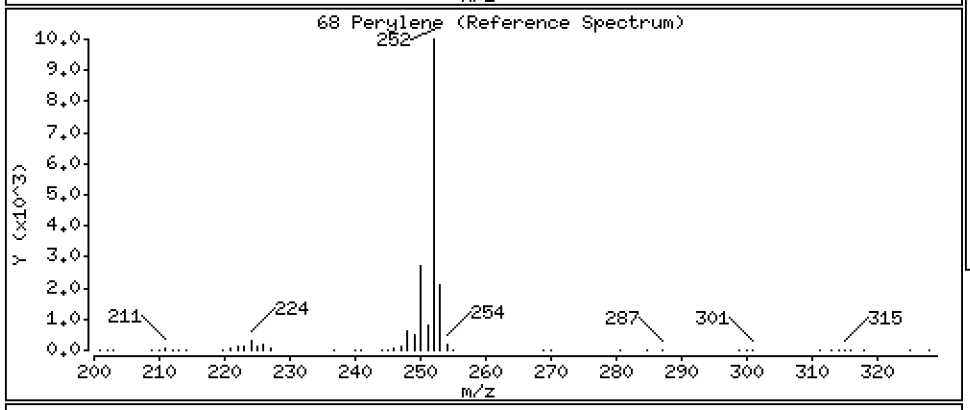
Concentration: 2.554 ug/mL

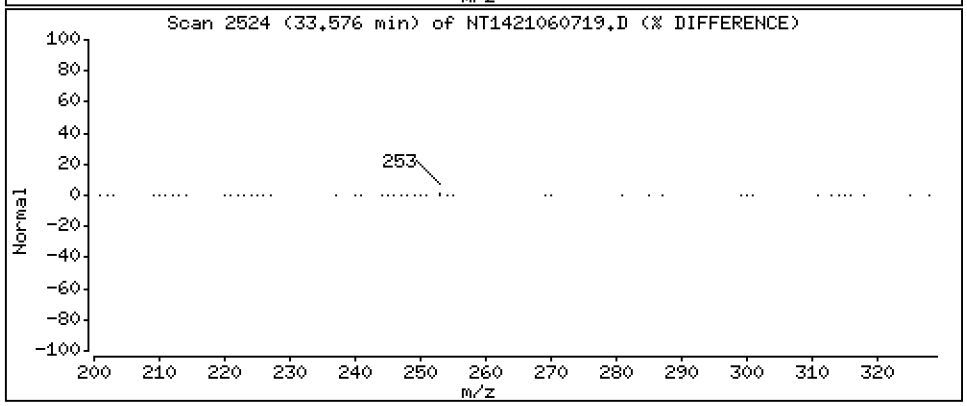












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Date : 08-JUN-2021 02:54

Client ID:

Instrument: nt14.i

Sample Info: SJF0173-CCV1

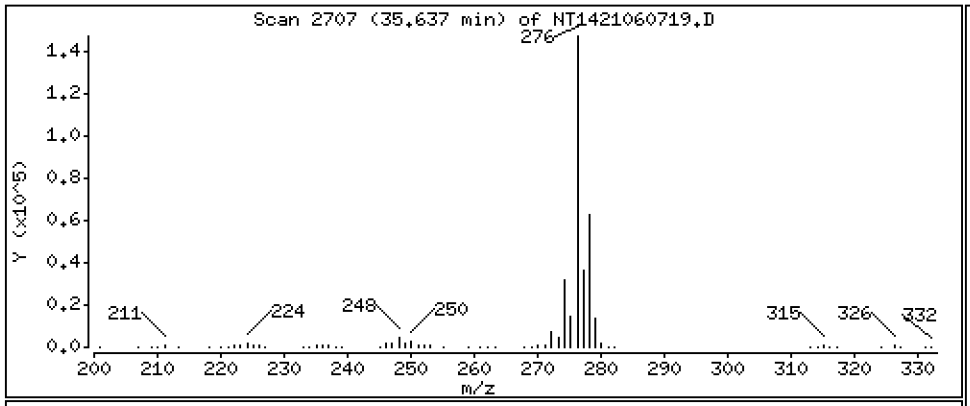
Operator: VTS

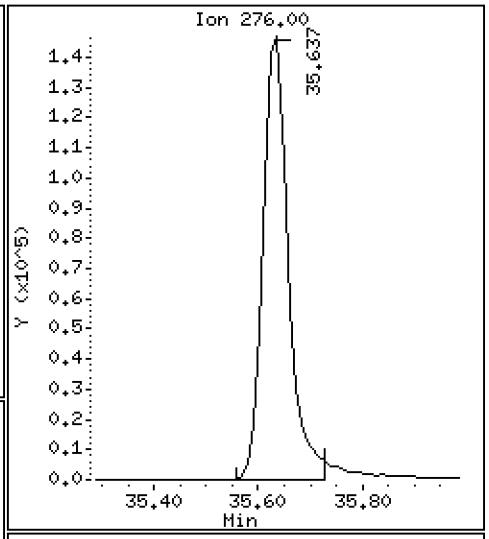
Column phase: Rxi-17Sil MS

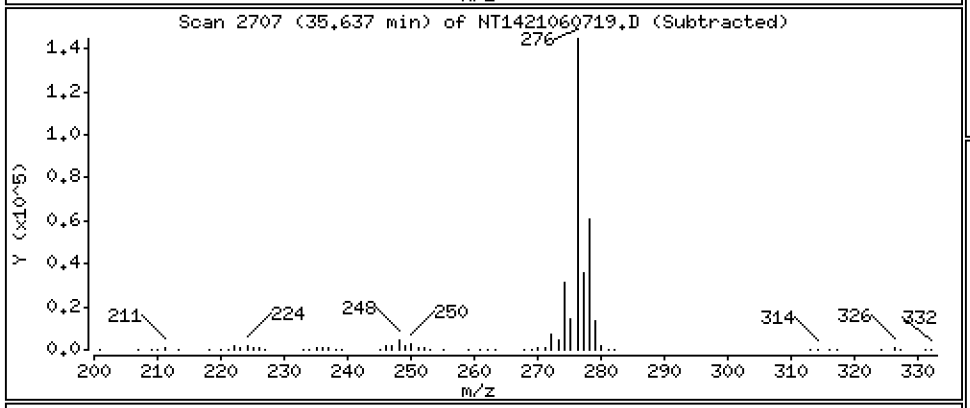
Column diameter: 0.25

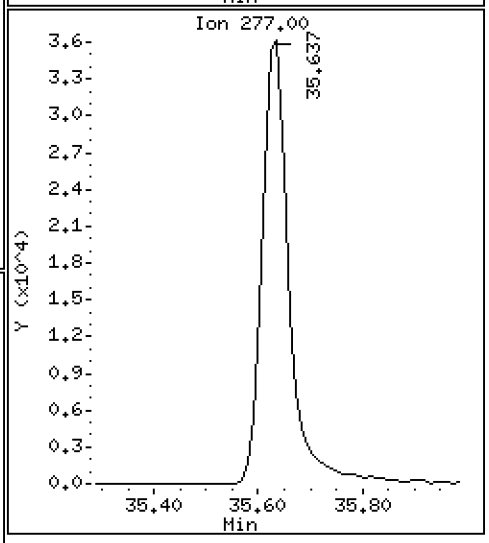
69 Indeno(1,2,3-cd)pyrene

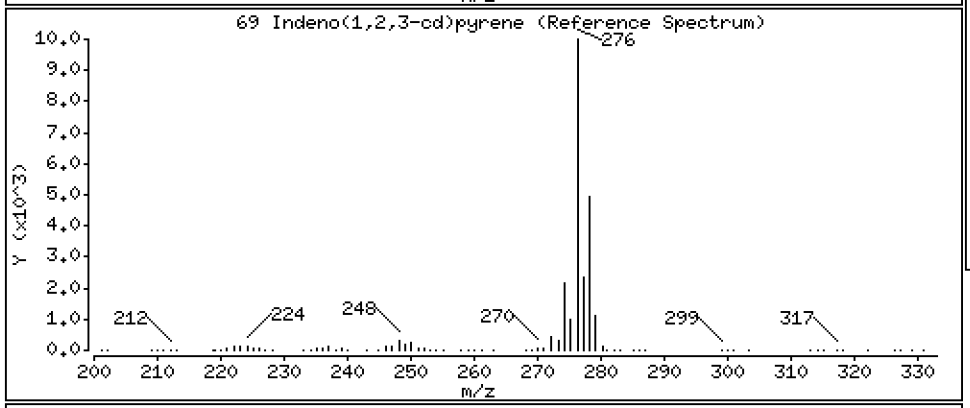
Concentration: 2.492 ug/mL

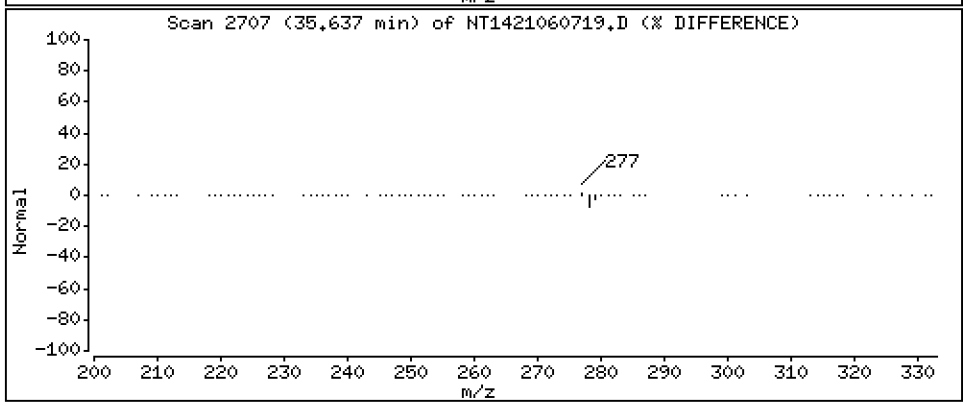












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Date : 08-JUN-2021 02:54

Client ID:

Instrument: nt14.i

Sample Info: SJF0173-CCV1

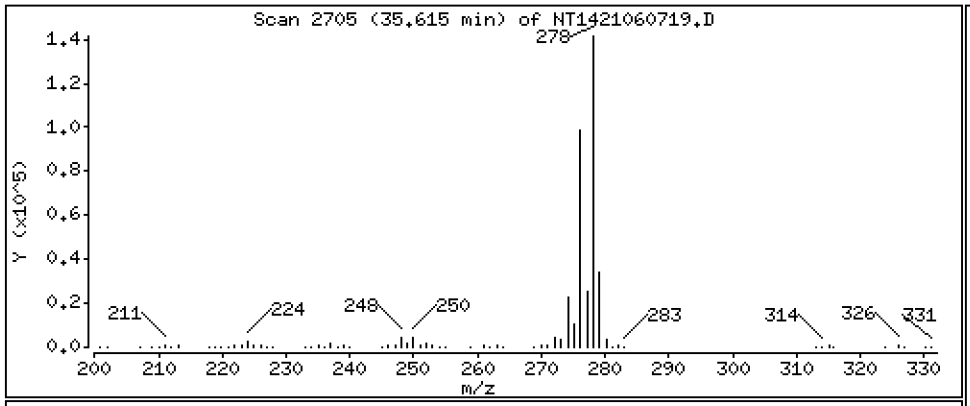
Operator: VTS

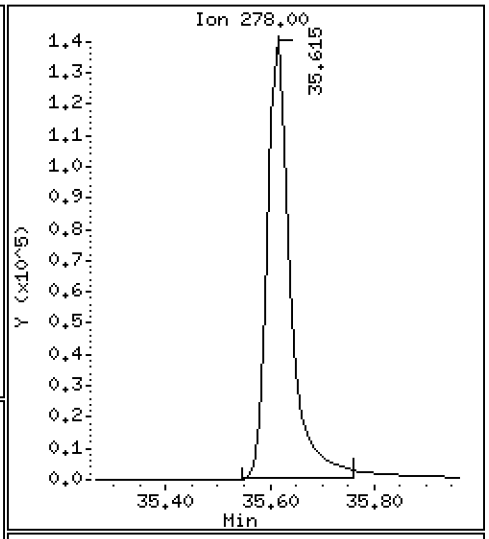
Column phase: Rxi-17Sil MS

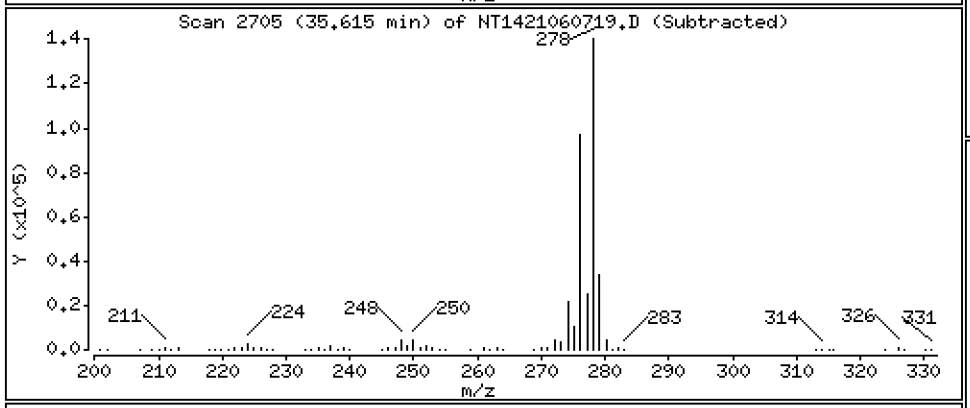
Column diameter: 0.25

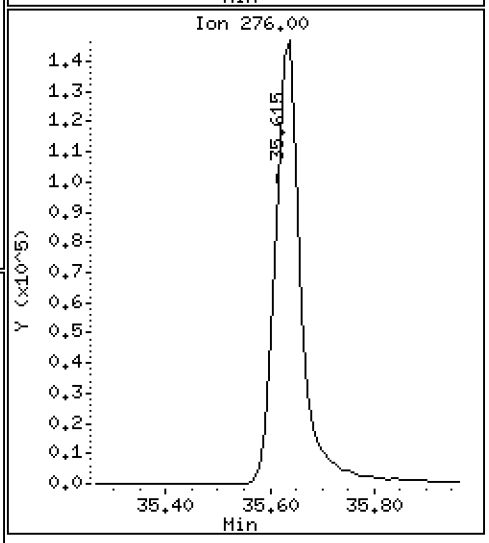
70 Dibenzo(a,h)anthracene

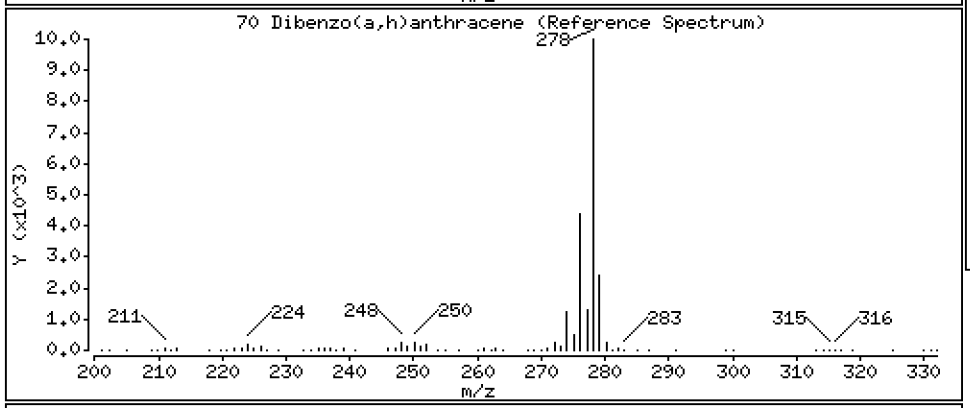
Concentration: 2.305 ug/mL

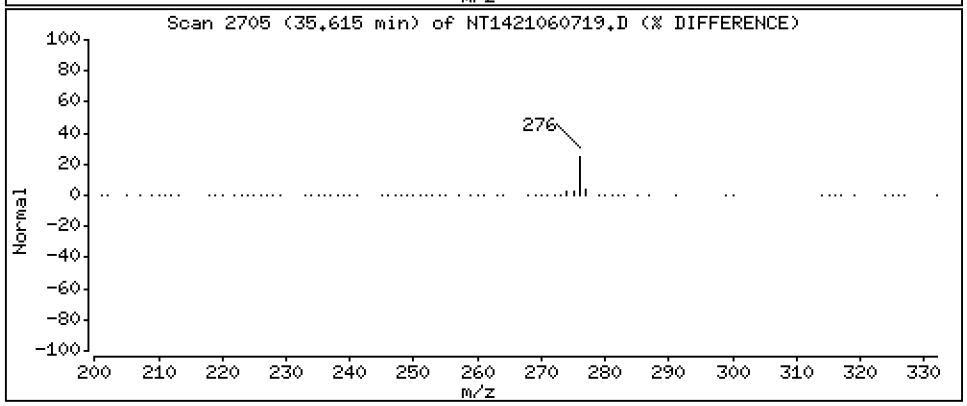












Data File: \\target\share\chem3\nt14.i\20210607.b\NT1421060719.D

Date : 08-JUN-2021 02:54

Client ID:

Instrument: nt14.i

Sample Info: SJF0173-CCV1

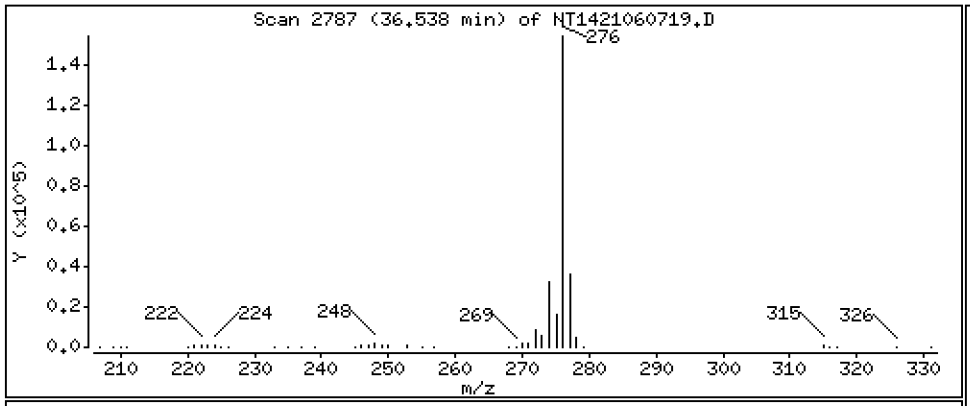
Operator: VTS

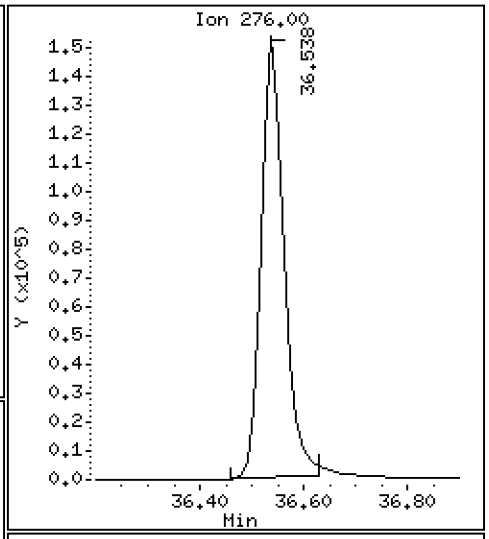
Column phase: Rxi-17Sil MS

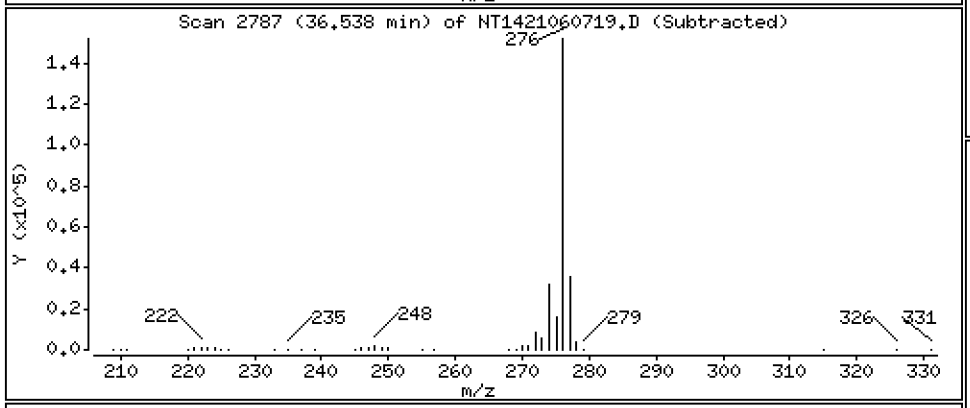
Column diameter: 0.25

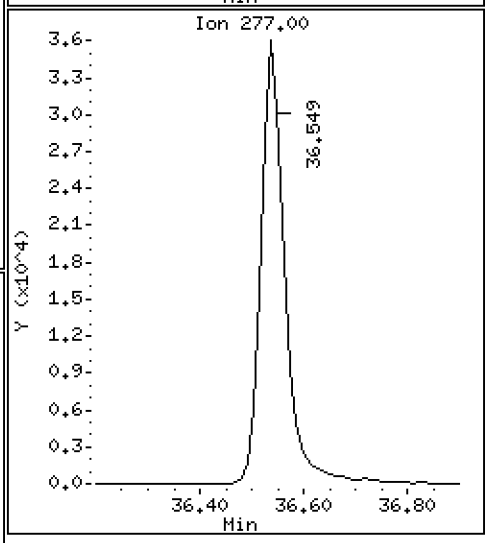
74 Benzo(g,h,i)perylene

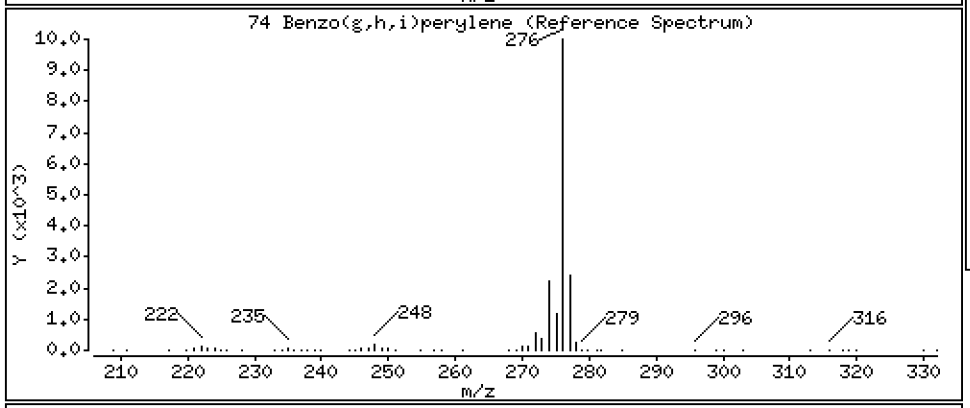
Concentration: 2.364 ug/mL

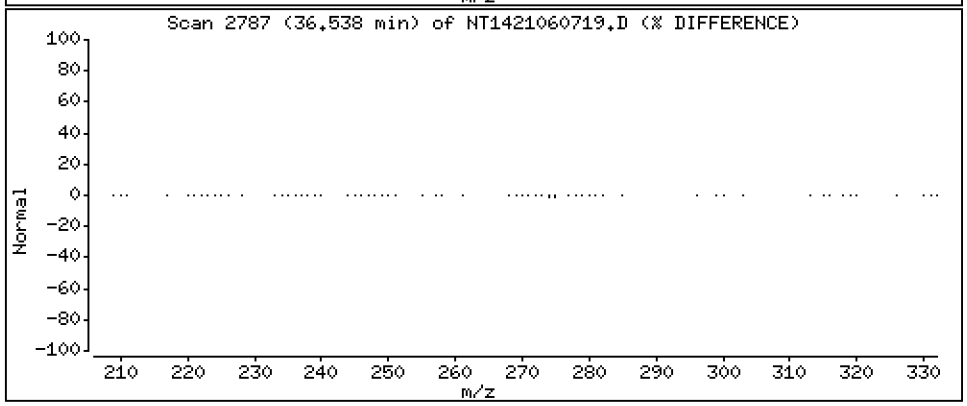












ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt14.i\20210607.b\NT1421060719.D
Lab Smp Id: SJF0173-CCV1
Inj Date : 08-JUN-2021 02:54
Operator : VTS Inst ID: nt14.i
Smp Info : SJF0173-CCV1
Misc Info :
Comment : 1ul Injection
Method : \\target\share\chem3\nt14.i\20210607.b\ALKYLPNA.m
Meth Date : 12-Jun-2021 14:57 yev Quant Type: ISTD
Cal Date : 29-MAY-2021 18:49 Cal File: NT1421052914.D
Als bottle: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: TARGETS.sub
Target Version: 4.14
Processing Host: ORGDATA102

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/mL)
	1 trans-Decalin	138	7.136	7.136	(0.378)	46792	2.68306	2.683
	2 cis-Decalin	138	8.256	8.255	(0.437)	34424	2.40468	2.405
$	6 Naphthalene-d8	136	11.887	11.887	(0.629)	416538	2.56213	2.562(R)
	7 Naphthalene	128	11.957	11.957	(0.633)	413253	2.54338	2.543
	12 Benzo(b)thiophene	134	12.409	12.409	(0.657)	336329	2.51794	2.518
	16 2-Methylnaphthalene	141	13.794	13.794	(0.730)	242181	2.54975	2.550
	17 1-methylnaphthalene	141	14.245	14.244	(0.754)	231809	2.50862	2.509
	18 Biphenyl	154	15.431	15.431	(0.817)	356083	2.53713	2.537
	19 2,6-Dimethylnaphthalene	156	15.508	15.508	(0.821)	261761	2.53619	2.536
	20 Acenaphthylene	152	17.080	17.080	(0.904)	453390	2.56975	2.570
$	21 Acenaphthene-d10	164	17.366	17.365	(0.919)	251548	2.51925	2.519(R)
	22 Acenaphthene	153	17.486	17.486	(0.925)	273029	2.51027	2.510
	23 Dibenzofuran	168	17.860	17.860	(0.945)	421249	2.61105	2.611
	24 1,6,7-Trimethylnaphthalene	170	18.080	18.080	(0.957)	269464	2.56360	2.564
*	25 Fluorene-d10	176	18.896	18.896	(1.000)	349708	2.00000	
	26 Fluorene	166	19.009	19.009	(1.006)	321273	2.57019	2.570
	30 Dibenzothiophene	184	21.931	21.931	(1.161)	462600	2.62134	2.621
$	35 Phenanthrene-d10	188	22.239	22.238	(0.995)	439143	2.49151	2.492(R)
	36 Phenanthrene	178	22.316	22.326	(0.999)	477796	2.52944	2.529
*	250 Anthracene-d10	188	22.349	22.359	(1.000)	366356	2.00000	
	37 Anthracene	178	22.415	22.425	(1.003)	452566	2.54641	2.546
	42 Carbazole	167	23.701	23.701	(1.061)	397005	2.40921	2.409
	43 1-Methylphenanthrene	192	24.151	24.151	(1.081)	348603	2.56802	2.568
	44 Fluoranthene	202	26.131	26.130	(1.169)	549641	2.63624	2.636
	46 Pyrene	202	26.977	26.977	(1.207)	574117	2.64764	2.648
	51 Naphthobenzothiophene	234	29.499	29.509	(1.320)	583009	2.50230	2.502
	55 Benzo(a)anthracene	228	30.084	30.095	(0.907)	506931	2.87157	2.872
$	56 Chrysene-d12	240	30.219	30.219	(0.911)	400867	2.81363	2.814(R)
	57 Chrysene	228	30.287	30.286	(0.913)	482731	2.79060	2.791
	62 Benzo(b)fluoranthene	252	32.517	32.517	(0.980)	460726	2.51645	2.516
	63 Benzo(k)fluoranthene	252	32.562	32.562	(0.981)	544354	2.77104	2.771(M)
	293 Benzo(j)fluoranthene	252	32.629	32.629	(0.983)	445365	2.46038	2.460(M)
	246 Total Benzofluoranthenes	252	32.562	32.562	(0.981)	1460525	8.14441	8.144(M)

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/mL)
* 251 Benzo(e)pyrene-d12	264	33.181	33.181	(1.000)	455158	2.00000	
64 Benzo(e)pyrene	252	33.238	33.237	(1.002)	455467	2.53821	2.538
66 Benzo(a)pyrene	252	33.339	33.339	(1.005)	438125	2.68390	2.684
$ 67 Perylene-d12	264	33.519	33.519	(1.010)	386693	2.51425	2.514(RM)
68 Perylene	252	33.576	33.575	(1.012)	429899	2.55427	2.554
69 Indeno(1,2,3-cd)pyrene	276	35.637	35.636	(1.074)	477580	2.49240	2.492(M)
70 Dibenzo(a,h)anthracene	278	35.614	35.614	(1.073)	415207	2.30450	2.305(M)
74 Benzo(g,h,i)perylene	276	36.538	36.549	(1.101)	447521	2.36407	2.364(M)

QC Flag Legend

R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt14.i
Lab File ID: NT1421060719.D
Lab Smp Id: SJF0173-CCV1
Analysis Type: SV
Quant Type: ISTD
Operator: VTS
Method File: \\target\share\chem3\nt14.i\20210607.b\ALKYLPNA.m
Misc Info:

Calibration Date: 07-JUN-2021
Calibration Time: 13:18
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
25 Fluorene-d10	323874	161937	647748	349708	7.98
250 Anthracene-d10	339912	169956	679824	366356	7.78
251 Benzo(e)pyrene-d1	416427	208214	832854	455158	9.30

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
25 Fluorene-d10	18.90	18.40	19.40	18.90	0.00
250 Anthracene-d10	22.36	21.86	22.86	22.35	-0.05
251 Benzo(e)pyrene-d1	33.18	32.68	33.68	33.18	0.00

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

REVIEW SUMMARY FOR FILE - NT1421060719.D

Lab ID: SJF0173-CCV1
nt14.i, 20210607.b\ALKYLPNA.m, 08-JUN-2021 02:54

RT	CO-ELUTION COMPOUNDS
	NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
NONE			

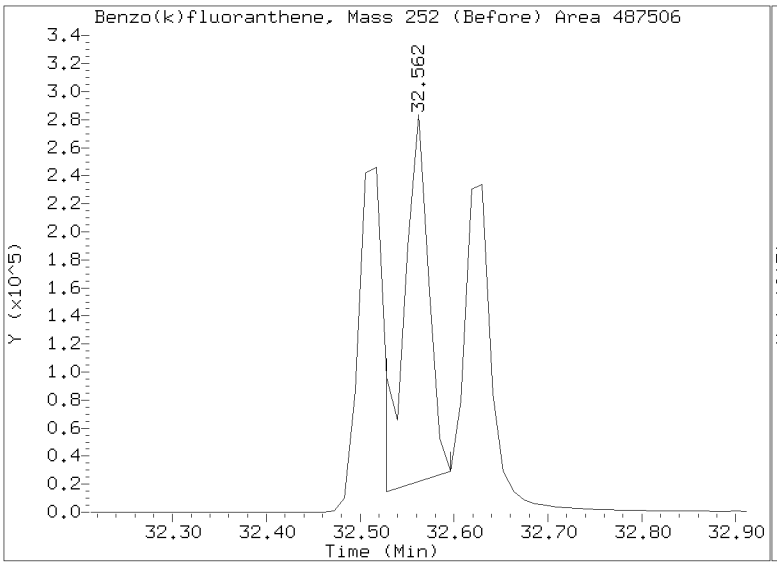
RRT check based on Ccal File: NT1421060702.D

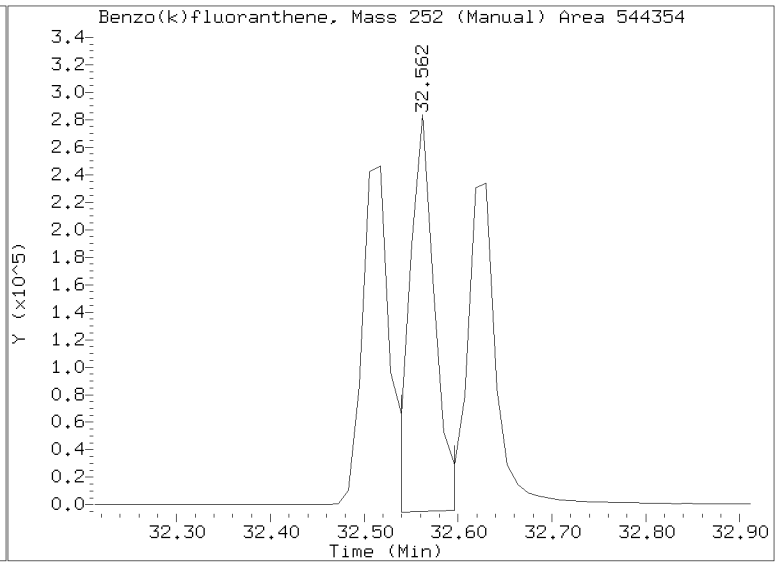
On Column LOD for nt14.i, 20210607.b\ALKYLPNA.m, TARGETS.sub = 0.0000

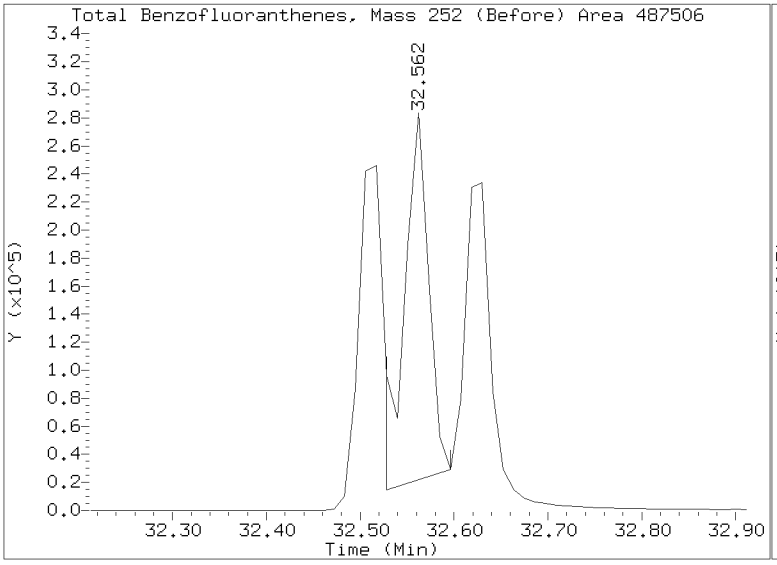
* Only compounds listed in the work order have been verified by the analyst *

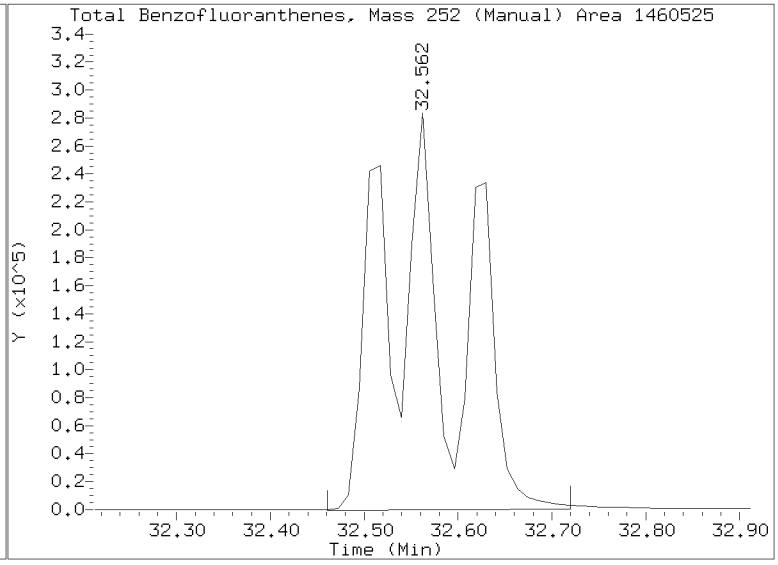
Quant Ion Manual Peak Adjustment Report

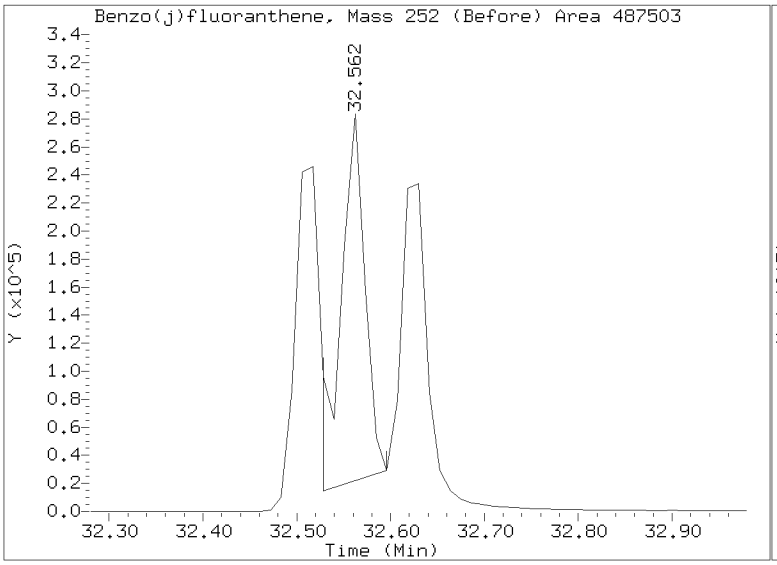
Datafile: //target/share/chem3/nt14.i/20210607.b/NT1421060719.D
Injection Date: 08-JUN-2021 02:54
Lab ID:SJF0173-CCV1 Client ID:
Report Date: 06/12/2021 15:51

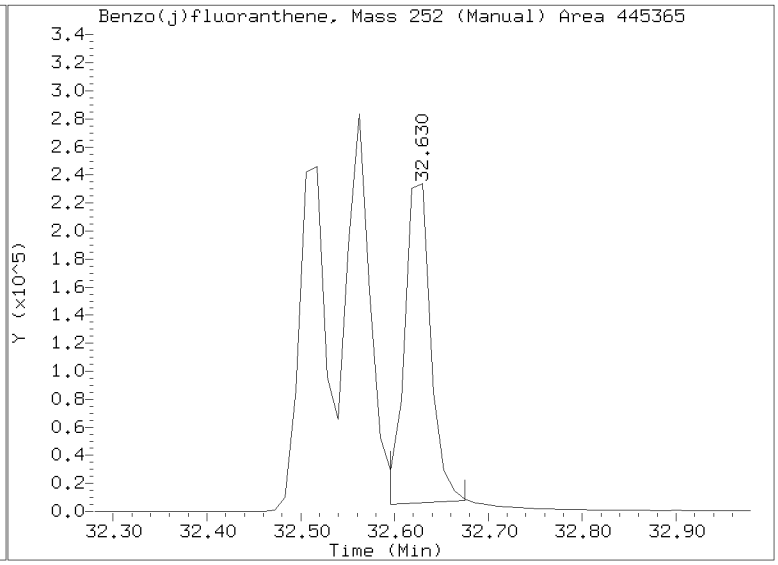






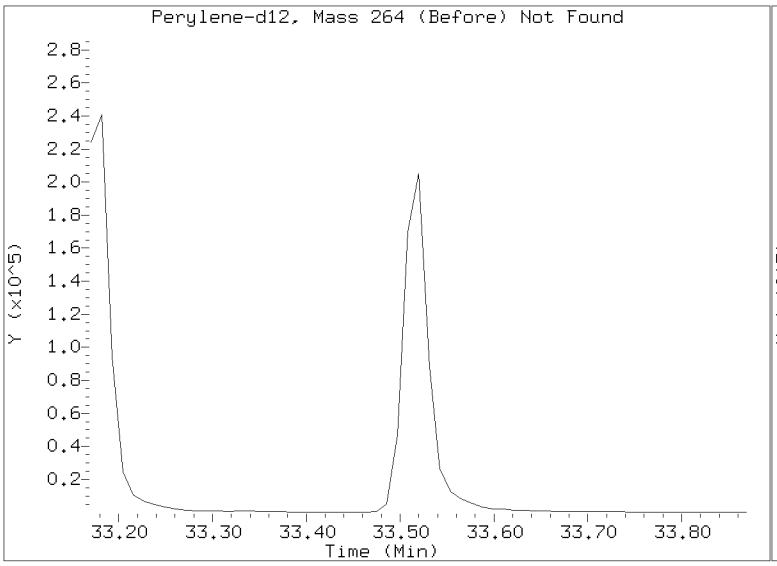


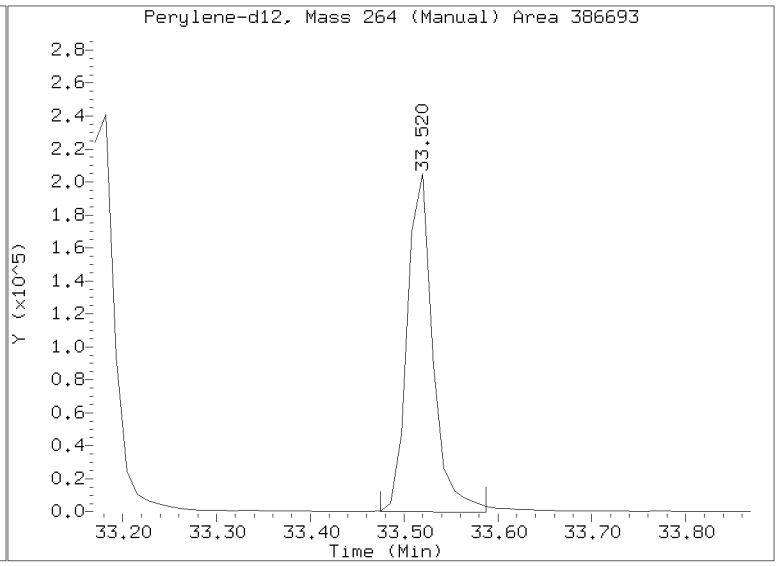


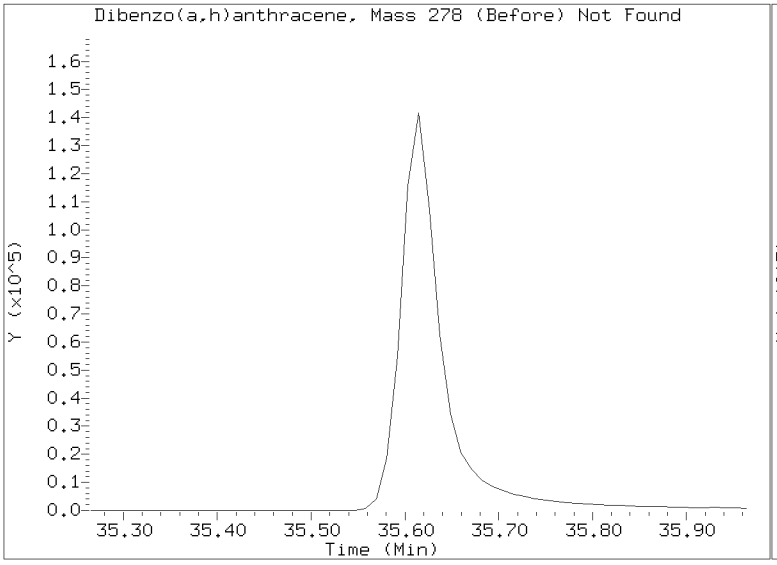


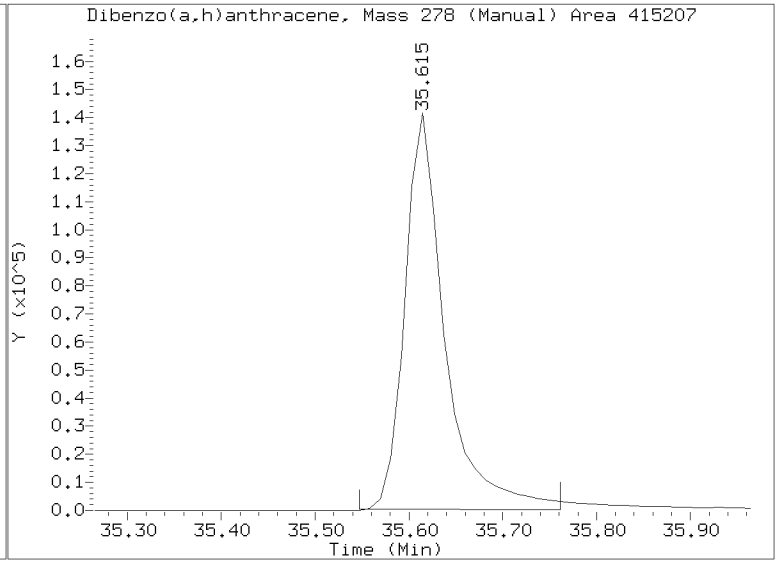
Quant Ion Manual Peak Adjustment Report

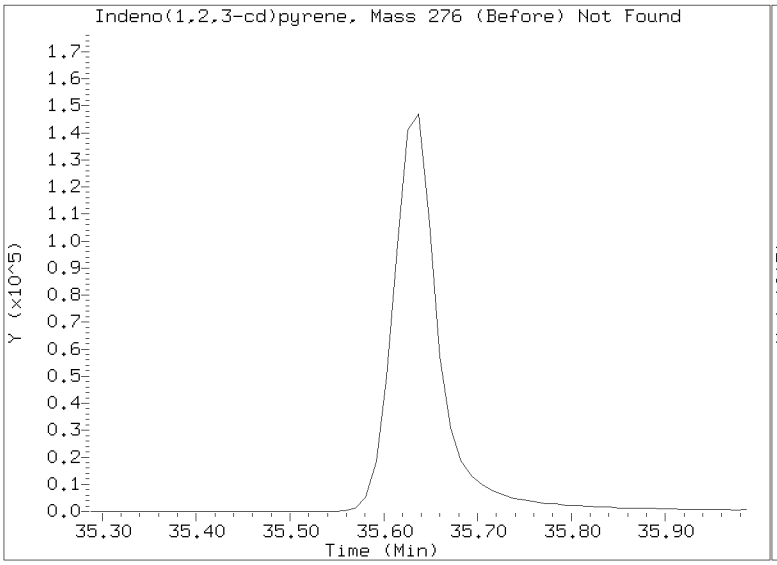
Datafile: //target/share/chem3/nt14.i/20210607.b/NT1421060719.D
Injection Date: 08-JUN-2021 02:54
Lab ID:SJF0173-CCV1 Client ID:
Report Date: 06/12/2021 15:51

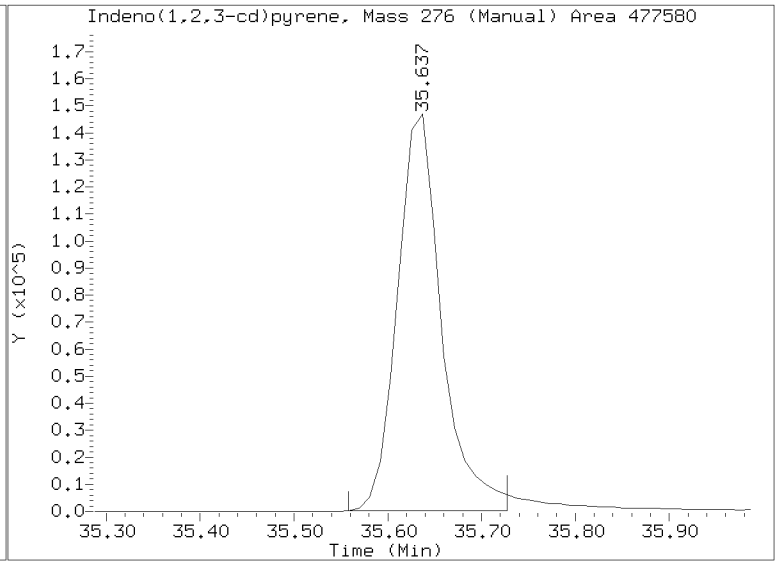






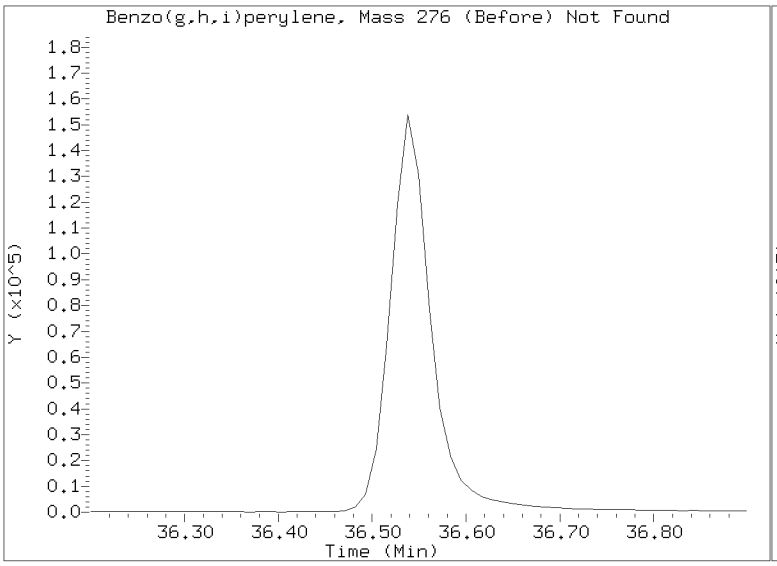


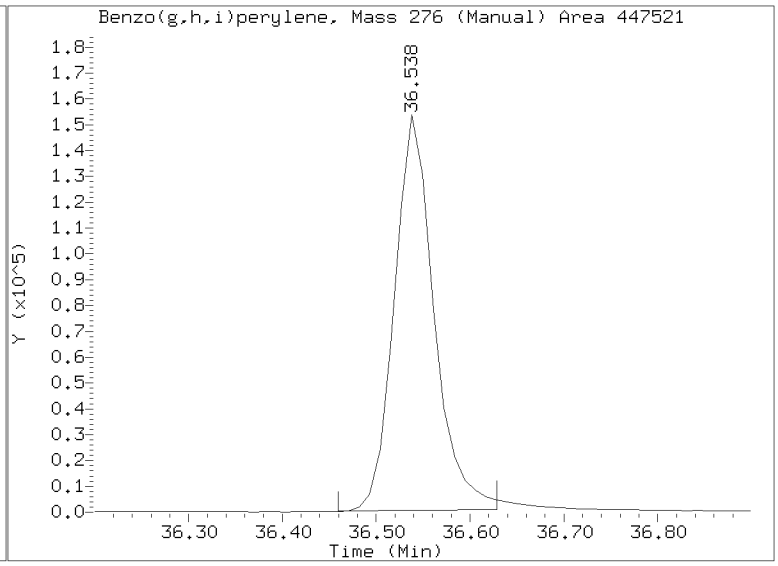




Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt14.i/20210607.b/NT1421060719.D
Injection Date: 08-JUN-2021 02:54
Lab ID:SJF0173-CCV1 Client ID:
Report Date: 06/12/2021 15:51





Analytical Resources, Incorporated
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ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 8270E-SIM

Laboratory:	Analytical Resources, Inc.	SDG:	21E0106
Client:	Anchor QEA, LLC	Project:	Gasco Siltronic - US Moorings
Sequence:	SJF0025	Instrument:	NT14
		Calibration:	EF00008

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
MS Tune	SJF0025-TUN1	NT1421052907.D	NA	05/29/21 13:39
PAH 2.5	SJF0025-CAL5	NT1421052908.D	NA	05/29/21 14:01
PAH 10.0	SJF0025-CAL7	NT1421052909.D	NA	05/29/21 14:49
PAH 0.1	SJF0025-CAL1	NT1421052910.D	NA	05/29/21 15:37
PAH 5.0	SJF0025-CAL6	NT1421052911.D	NA	05/29/21 16:25
PAH 0.5	SJF0025-CAL3	NT1421052912.D	NA	05/29/21 17:13
PAH 1.0	SJF0025-CAL4	NT1421052913.D	NA	05/29/21 18:01
PAH 0.25	SJF0025-CAL2	NT1421052914.D	NA	05/29/21 18:49
Secondary Cal Check	SJF0025-SCV1	NT1421052915.D	NA	05/29/21 19:38
Initial Cal Blank	SJF0025-ICB1	NT1421052916.D	NA	05/29/21 20:26

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Printed: 6/2/2021 6:40:59PM

ANALYSIS SEQUENCE

SJF0025

Instrument: NT14 Element Column ID: i008815
Calibration ID: UNASSIGNED Tune File: 200228u
EM Voltage: 1906

Lab Number	Sample Name	Analysis	Container	Order	STD ID	ISTD ID	Comments
SJF0025-TUN1	MS Tune	QC		1	I007631		
SJF0025-CAL1	PAH 0.1	QC		2	J004706	J004384	
SJF0025-CAL2	PAH 0.25	QC		3	J004705	J004384	
SJF0025-CAL3	PAH 0.5	QC		4	J004704	J004384	
SJF0025-CAL4	PAH 1.0	QC		5	J004703	J004384	
SJF0025-CAL5	PAH 2.5	QC		6	J004700	J004384	
SJF0025-CAL6	PAH 5.0	QC		7	J004702	J004384	
SJF0025-CAL7	PAH 10.0	QC		8	J004701	J004384	
SJF0025-SCV1	Secondary Cal Check	QC		9	J004707	J004384	

INTERNAL STANDARD SUMMARY FOR DATABATCH - \\target\share\chem3\nt14.i\20210529.b

	Time	Filename	LabID	ClientId	DF	
1	1339	NT1421052907.D	SJF0025-TUN1		1	|NO ISTDS FOUND||
2	1401	NT1421052908.D	SJF0025-CAL5		1	|18.91 159478||22.36 170161||33.18 236612|
3	1449	NT1421052909.D	SJF0025-CAL7		1	|18.91 163422||22.36 166127||33.18 247029|
4	1537	NT1421052910.D	SJF0025-CAL1		1	|18.91 185817||22.36 194904||33.18 261838|
5	1625	NT1421052911.D	SJF0025-CAL6		1	|18.91 174899||22.36 178057||33.18 261344|
6	1713	NT1421052912.D	SJF0025-CAL3		1	|18.91 188390||22.36 196353||33.18 265323|
7	1801	NT1421052913.D	SJF0025-CAL4		1	|18.91 180325||22.36 185169||33.18 261813|
8	1849	NT1421052914.D	SJF0025-CAL2		1	|18.91 184642||22.36 192206||33.18 265187|
9	1938	NT1421052915.D	SJF0025-SCV1		1	|18.91 166522||22.36 168360||33.18 235397|
10	2026	NT1421052916.D	SJF0025-ICB1		1	|18.91 183758||22.36 189746||33.18 265253|

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem3\nt14.i\20210529.b

ARI Job No.: SJF0 Method: DFTPP8270E.m Instrument: nt14.i Date: 29-MAY-2021

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
1339	NT1421052907.D	SJF0025-TUN1		1	NO MANUAL INTEGRATION
1401	NT1421052908.D	SJF0025-CAL5		1	Benzo(b)fluoranthene, Indeno(1,2,3-cd)pyrene, Dibenzo(a,h)anthracene, Benzo(g,h,i)perylene, Perylene, Total Benzofluoranthen
1449	NT1421052909.D	SJF0025-CAL7		1	Benzo(g,h,i)perylene, Perylene, Total Benzofluoranthenes,
1537	NT1421052910.D	SJF0025-CAL1		1	Benzo(b)fluoranthene, Dibenzo(a,h)anthracene, Perylene, Total Benzofluoranthenes,
1625	NT1421052911.D	SJF0025-CAL6		1	Phenanthrene, Benzo(b)fluoranthene, Indeno(1,2,3-cd)pyrene, Dibenzo(a,h)anthracene, Benzo(g,h,i)perylene, Perylene, Total Benzofluoranthenes, Benzo(j)fluoranthene,
1713	NT1421052912.D	SJF0025-CAL3		1	Benzo(b)fluoranthene, Benzo(k)fluoranthene, Dibenzo(a,h)anthracene, Benzo(g,h,i)perylene, Perylene, cis-Decalin, Total Benzofluoranthenes, Benzo(j)fluoranthene,
1801	NT1421052913.D	SJF0025-CAL4		1	Phenanthrene, Benzo(b)fluoranthene, Benzo(k)fluoranthene, Indeno(1,2,3-cd)pyrene, Dibenzo(a,h)anthracene, Benzo(g,h,i)peryle Perylene, Total Benzofluoranthenes, Benzo(j)fluoranthene,
1849	NT1421052914.D	SJF0025-CAL2		1	Benzo(b)fluoranthene, Benzo(a)pyrene, Indeno(1,2,3-cd)pyrene, Perylene, Total Benzofluoranthenes,
1938	NT1421052915.D	SJF0025-SCV1		1	Indeno(1,2,3-cd)pyrene, Dibenzo(a,h)anthracene, Benzo(g,h,i)perylene, Perylene, Total Benzofluoranthenes,
2026	NT1421052916.D	SJF0025-ICB1		1	NO MANUAL INTEGRATION

Security Status Report

Date: 02-Jun-2021 19:12

NT1421052907.D	Data Locked	yev, 02-
NT1421052908.D	Data Locked	yev, 02-
NT1421052909.D	Data Locked	yev, 02-
NT1421052910.D	Data Locked	yev, 02-
NT1421052911.D	Data Locked	yev, 02-
NT1421052912.D	Data Locked	yev, 02-
NT1421052913.D	Data Locked	yev, 02-
NT1421052914.D	Data Locked	yev, 02-
NT1421052915.D	Data Locked	yev, 02-
NT1421052916.D	Data Locked	yev, 02-

Analytical Resources, Incorporated
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ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 8270E-SIM

Laboratory:	Analytical Resources, Inc.	SDG:	21E0106
Client:	Anchor QEA, LLC	Project:	Gasco Siltronic - US Moorings
Sequence:	SJF0131	Instrument:	NT14
		Calibration:	EF00008

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
Initial Cal Check	SJF0131-ICV1	NT1421060416ICV.D	NA	06/05/21 00:19
Blank	BJE0383-BLK1	NT1421060418.D	Solid	06/05/21 01:55
LCS	BJE0383-BS1	NT1421060419.D	Solid	06/05/21 02:43
ZZZZZ	21E0098-17	NT1421060420.D	Solid	06/05/21 03:31
ZZZZZ	21E0098-18	NT1421060421.D	Solid	06/05/21 04:19
ZZZZZ	21E0098-21	NT1421060422.D	Solid	06/05/21 05:08
ZZZZZ	21E0098-22	NT1421060423.D	Solid	06/05/21 05:56
ZZZZZ	21E0098-23	NT1421060424.D	Solid	06/05/21 06:43
ZZZZZ	21E0098-25	NT1421060425.D	Solid	06/05/21 07:31
ZZZZZ	21E0103-01	NT1421060426.D	Solid	06/05/21 09:07
ZZZZZ	21E0103-08	NT1421060427.D	Solid	06/05/21 09:54
ZZZZZ	21E0103-10	NT1421060428.D	Solid	06/05/21 10:42
ZZZZZ	21E0103-16	NT1421060429.D	Solid	06/05/21 11:30
ZZZZZ	21E0103-17	NT1421060430.D	Solid	06/05/21 12:18
ZZZZZ	21E0103-23	NT1421060431.D	Solid	06/05/21 13:06
ZZZZZ	21E0105-01	NT1421060432.D	Solid	06/05/21 13:54
Calibration Check	SJF0131-CCV1	NT1421060433.D	NA	06/05/21 14:42

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Analytical Chemists and Consultants

Printed: 6/11/2021 2:27:20PM

ANALYSIS SEQUENCE

SJF0131

Instrument: NT14 Element Column ID: i008815
Calibration ID: EF00008 Tune File: 200104u
EM Voltage: 1906

Lab Number	Sample Name	Analysis	Container	Order	STD ID	ISTD ID	Comments
SJF0131-ICV1	Initial Cal Check	QC		1	J004383	J005411	
21E0098-17	JSMPDI-051SC-A-00-01-21043	8270E-SIM Alkyl PAH (Parents) Dual Scar	A 03	2		J005411	
21E0098-18	JSMPDI-051SC-A-08-09-21043	8270E-SIM Alkyl PAH (Parents) Dual Scar	A 03	3		J005411	
21E0098-21	JSMPDI-051SC-B-02-04-21043	8270E-SIM Alkyl PAH (Parents) Dual Scar	A 03	4		J005411	
21E0098-22	JSMPDI-051SC-B-04-06-21043	8270E-SIM Alkyl PAH (Parents) Dual Scar	A 03	5		J005411	
21E0098-23	JSMPDI-051SC-B-06-08-21043	8270E-SIM Alkyl PAH (Parents) Dual Scar	A 03	6		J005411	
21E0098-25	SMPDI-051SC-B-10-10.8-2104	8270E-SIM Alkyl PAH (Parents) Dual Scar	A 03	7		J005411	
BJE0383-BLK1	Blank	QC		8		J005411	
BJE0383-BS1	LCS	QC		9		J005411	
21E0103-01	JSMPDI-028SC-A-00-01-21050	8270E-SIM Alkyl PAH (Parents) Dual Scar	A 03	10		J005411	
21E0103-08	JSMPDI-028SC-B-02-05-21050	8270E-SIM Alkyl PAH (Parents) Dual Scar	A 03	11		J005411	
21E0103-10	JSMPDI-031SC-A-00-01-21050	8270E-SIM Alkyl PAH (Parents) Dual Scar	A 03	12		J005411	
21E0103-16	JSMPDI-031SC-B-02-05-21050	8270E-SIM Alkyl PAH (Parents) Dual Scar	A 03	13		J005411	
21E0103-17	JSMPDI-035SC-A-00-01-21050	8270E-SIM Alkyl PAH (Parents) Dual Scar	A 03	14		J005411	
21E0103-23	JSMPDI-035SC-B-02-05-21050	8270E-SIM Alkyl PAH (Parents) Dual Scar	A 03	15		J005411	
21E0105-01	JSMPDI-030SC-A-00-01-21050	8270E-SIM Alkyl PAH (Parents) Dual Scar	A 03	16		J005411	
SJF0131-CCV1	Calibration Check	QC		17	J004383	J005411	

INTERNAL STANDARD SUMMARY FOR DATABATCH - \\target\share\chem3\nt14.i\20210604A.b

	Time	Filename	LabID	ClientId	DF						
1	0019	NT1421060416ICV.D	SJF0131-ICV1		1	18.91	274525	22.35	287335	33.18	407300
2	0107	NT1421060417.D	SJF0000-LCV1		1	18.90	283247	22.35	295314	33.18	456592
3	0155	NT1421060418.D	BJE0383-BLK1		1	18.90	281511	22.35	298120	33.18	455154
4	0243	NT1421060419.D	BJE0383-BS1		1	18.90	289598	22.35	313224	33.18	479490
5	0331	NT1421060420.D	21E0098-17		5	18.90	265019	22.36	275477	33.18	423329
6	0419	NT1421060421.D	21E0098-18		5	18.91	273347	22.36	282143	33.18	457547
7	0508	NT1421060422.D	21E0098-19		5	18.91	282644	22.36	289166	33.18	470332
8	0556	NT1421060423.D	21E0098-20		5	18.91	278857	22.37	285543	33.19	449084
9	0643	NT1421060424.D	21E0098-23		5	18.91	274050	22.36	288002	33.18	432166
10	0731	NT1421060425.D	21E0098-25		5	18.90	341578	22.36	312281	33.18	467388
11	0907	NT1421060426.D	21E0103-01		5	18.91	303575	22.35	309339	33.18	450562
12	0954	NT1421060427.D	21E0103-08		5	18.90	294000	22.35	307505	33.18	452246
13	1042	NT1421060428.D	21E0103-10,5		5	18.90	309279	22.35	319476	33.18	474456
14	1130	NT1421060429.D	21E0103-16		5	18.91	334550	22.36	302264	33.18	461267
15	1218	NT1421060430.D	21E0103-17		5	18.90	301488	22.35	312552	33.18	456102
16	1306	NT1421060431.D	21E103-23		5	18.90	321541	22.35	334784	33.18	488053
17	1354	NT1421060432.D	21E105-01		5	18.90	320977	22.35	329318	33.18	477559
18	1442	NT1421060433.D	SJF0131-CCV1		1	18.90	286250	22.35	300444	33.18	434465

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem3\nt14.i\20210604A.b

ARI Job No.: SJF0 Method: ALKYLPNA.m Instrument: nt14.i Date: 05-JUN-2021

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
0019	NT1421060416ICV.D	SJF0131-ICV1		1	Benzo(k)fluoranthene, Indeno(1,2,3-cd)pyrene, Dibenzo(a,h)anthracene, Total Benzofluoranthenes,
0107	NT1421060417.D	SJF0000-LCV1		1	NO MANUAL INTEGRATION
0155	NT1421060418.D	BJE0383-BLK1		1	NO MANUAL INTEGRATION
0243	NT1421060419.D	BJE0383-BS1		1	Indeno(1,2,3-cd)pyrene, Dibenzo(a,h)anthracene, Benzo(g,h,i)perylene, Total Benzofluoranthenes,
0331	NT1421060420.D	21E0098-17		5	Benzo(b)fluoranthene, Benzo(k)fluoranthene, 2,6-Dimethylnaphthalene, Total Benzofluoranthenes,
0419	NT1421060421.D	21E0098-18		5	Benzo(b)fluoranthene, Benzo(k)fluoranthene, Indeno(1,2,3-cd)pyrene, 2,6-Dimethylnaphthalene, Total Benzofluoranthenes, Phenant Perylene-d12,
0508	NT1421060422.D	21E0098-19		5	Benzo(b)fluoranthene, Benzo(k)fluoranthene, Indeno(1,2,3-cd)pyrene, Dibenzo(a,h)anthracene, 2,6-Dimethylnaphthalene, Total Ben Phenanthrene-d10, Perylene-d12,
0556	NT1421060423.D	21E0098-20		5	Benzo(b)fluoranthene, Benzo(k)fluoranthene, 2,6-Dimethylnaphthalene, Total Benzofluoranthenes,
0643	NT1421060424.D	21E0098-23		5	Benzo(b)fluoranthene, Benzo(k)fluoranthene, Indeno(1,2,3-cd)pyrene, Biphenyl, 2,6-Dimethylnaphthalene, Total Benzofluoranthene
0731	NT1421060425.D	21E0098-25		5	Benzo(b)fluoranthene, Indeno(1,2,3-cd)pyrene, 2,6-Dimethylnaphthalene, Total Benzofluoranthenes, Phenanthrene-d10, Perylene-d1
0907	NT1421060426.D	21E0103-01		5	Benzo(b)fluoranthene, Benzo(k)fluoranthene, Dibenzo(a,h)anthracene, Total Benzofluoranthenes,
0954	NT1421060427.D	21E0103-08		5	Benzo(b)fluoranthene, Benzo(k)fluoranthene, Dibenzo(a,h)anthracene, 2,6-Dimethylnaphthalene, Total Benzofluoranthenes, Benzo(j Phenanthrene-d10, Perylene-d12,
1042	NT1421060428.D	21E0103-10,5		5	Benzo(b)fluoranthene, Benzo(k)fluoranthene, Total Benzofluoranthenes,
1130	NT1421060429.D	21E0103-16		5	Carbazole, Benzo(b)fluoranthene, Benzo(k)fluoranthene, Indeno(1,2,3-cd)pyrene, 2,6-Dimethylnaphthalene, Total Benzofluoranthen
1218	NT1421060430.D	21E0103-17		5	Benzo(k)fluoranthene, Indeno(1,2,3-cd)pyrene, Dibenzo(a,h)anthracene, 2,6-Dimethylnaphthalene, Total Benzofluoranthenes,
1306	NT1421060431.D	21E103-23		5	Total Benzofluoranthenes, Phenanthrene-d10, Perylene-d12,
1354	NT1421060432.D	21E105-01		5	Total Benzofluoranthenes,

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem3\nt14.i\20210604A.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
1442	NT1421060433.D	SJF0131-CCV1		1	Indeno(1,2,3-cd)pyrene, Dibenzo(a,h)anthracene, Benzo(g,h,i)perylene, Total Benzofluoranthenes,

Security Status Report

Date: 11-Jun-2021 14:21

NT1421060416ICV.D	Data Locked	yev, 11-
NT1421060417.D	Data Locked	yev, 11-
NT1421060418.D	Data Locked	yev, 11-
NT1421060419.D	Data Locked	yev, 11-
NT1421060420.D	Data Locked	yev, 11-
NT1421060421.D	Data Locked	yev, 11-
NT1421060422.D	Data Locked	yev, 11-
NT1421060423.D	Data Locked	yev, 11-
NT1421060424.D	Data Locked	yev, 11-
NT1421060425.D	Data Locked	yev, 11-
NT1421060426.D	Data Locked	yev, 11-
NT1421060427.D	Data Locked	yev, 11-
NT1421060428.D	Data Locked	yev, 11-
NT1421060429.D	Data Locked	yev, 11-
NT1421060430.D	Data Locked	yev, 11-
NT1421060431.D	Data Locked	yev, 11-
NT1421060432.D	Data Locked	yev, 11-
NT1421060433.D	Data Locked	yev, 11-

Analytical Resources, Incorporated
Analytical Chemists and Consultants

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 8270E-SIM

Laboratory:	Analytical Resources, Inc.	SDG:	21E0106
Client:	Anchor QEA, LLC	Project:	Gasco Siltronic - US Moorings
Sequence:	SJF0173	Instrument:	NT14
		Calibration:	EF00008

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
MS Tune	SJF0173-TUN1	NT1421060701.D	NA	06/07/21 13:04
Initial Cal Check	SJF0173-ICV1	NT1421060702.D	NA	06/07/21 13:18
ZZZZZ	BJE0209-BLK1	NT1421060704.D	Water	06/07/21 14:54
ZZZZZ	BJE0209-BS1	NT1421060705.D	Water	06/07/21 15:42
ZZZZZ	BJE0209-BSD1	NT1421060706.D	Water	06/07/21 16:30
ZZZZZ	21E0099-01	NT1421060707.D	Water	06/07/21 17:18
ZZZZZ	21E0099-02	NT1421060708.D	Water	06/07/21 18:06
ZZZZZ	21E0105-07	NT1421060709.D	Solid	06/07/21 18:54
USMPDI-028SG-210504	21E0106-01	NT1421060710.D	Solid	06/07/21 19:42
USMPDI-030SG-210504	21E0106-02	NT1421060711.D	Solid	06/07/21 20:30
USMPDI-030SG-210504	BJE0383-MS1	NT1421060712.D	Solid	06/07/21 21:18
USMPDI-030SG-210504	BJE0383-MSD1	NT1421060713.D	Solid	06/07/21 22:07
USMPDI-031SG-210504	21E0106-03	NT1421060714.D	Solid	06/07/21 22:55
USMPDI-035SG-210504	21E0106-04	NT1421060715.D	Solid	06/07/21 23:43
ZZZZZ	21E0096-02RE1	NT1421060716.D	Solid	06/08/21 00:31
Calibration Check	SJF0173-CCV1	NT1421060719.D	NA	06/08/21 02:54

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Printed: 6/12/2021 3:04:29PM

ANALYSIS SEQUENCE

SJF0173

Instrument: NT14 Element Column ID: i008815
Calibration ID: EF00008 Tune File: 200104u
EM Voltage: 1906

Lab Number	Sample Name	Analysis	Container	Order	STD ID	ISTD ID	Comments
SJF0173-TUN1	MS Tune	QC		1	I007631		
SJF0173-ICV1	Initial Cal Check	QC		2	J004383	J005411	
BJE0209-BLK1	Blank	QC		3		J005411	
BJE0209-BS1	LCS	QC		4		J005411	
BJE0209-BSD1	LCS Dup	QC		5		J005411	
21E0105-07	USMPDI-030SC-B-02-05-21050	8270E-SIM Alkyl PAH (Parents) Dual Scan	A 03	6		J005411	
21E0106-01	USMPDI-028SG-210504	8270E-SIM Alkyl PAH (Parents) Dual Scan	A 02	7		J005411	
21E0106-03	USMPDI-031SG-210504	8270E-SIM Alkyl PAH (Parents) Dual Scan	A 02	8		J005411	
21E0106-04	USMPDI-035SG-210504	8270E-SIM Alkyl PAH (Parents) Dual Scan	A 02	9		J005411	
BJE0383-MS1	Matrix Spike	QC		10		J005411	
BJE0383-MSD1	Matrix Spike Dup	QC		11		J005411	
21E0106-02	USMPDI-030SG-210504	8270E-SIM Alkyl PAH (Parents) Dual Scan	A 02	12		J005411	
21E0099-01	SC-FB-2105030940	8270E-SIM Alkyl PAH (Parents) Dual Scan	B 01	13		J005411	
21E0099-02	SC-RB-2105030901	8270E-SIM Alkyl PAH (Parents) Dual Scan	B 01	14		J005411	
21E0096-02RE1	USMPDI-015SC-A-06-07-21050	8270E-SIM Alkyl PAH (Parents) Dual Scan	A 03	15		J005411	Added 6/3/2021 by YZ
SJF0173-CCV1	Calibration Check	QC		16	J004383	J005411	

INTERNAL STANDARD SUMMARY FOR DATABATCH - \\target\share\chem3\nt14.i\20210607.b

	Time	Filename	LabID	ClientId	DF	
1	1304	NT1421060701.D	SJF0173-TUN1		1	|NO ISTDS FOUND||
2	1318	NT1421060702.D	SJF0173-ICV1		1	|18.90 323874||22.36 339912||33.18 416427|
3	1406	NT1421060703.D	SJF0000-LCV1		1	|18.90 299703||22.35 313132||33.18 390846|
4	1454	NT1421060704.D	BJE0209-BLK1		1	|18.90 311099||22.35 323596||33.18 409852|
5	1542	NT1421060705.D	BJE0209-BS1		1	|18.90 324204||22.35 337302||33.18 451062|
6	1630	NT1421060706.D	BJE0209-BSD1		1	|18.90 337497||22.35 344529||33.18 450572|
7	1718	NT1421060707.D	21E0099-01		1	|18.90 324435||22.35 337230||33.18 433441|
8	1806	NT1421060708.D	21E0099-02		1	|18.90 328958||22.35 339490||33.18 432962|
9	1854	NT1421060709.D	21E0105-07		1	|18.90 299955||22.35 323079||33.18 420096|
10	1942	NT1421060710.D	21E0106-01		1	|18.90 352791||22.35 369755||33.18 468246|
11	2030	NT1421060711.D	21E0106-02		1	|18.90 332176||22.35 356066||33.18 435025|
12	2118	NT1421060712.D	BJE0383-MS1		1	|18.90 325513||22.35 342885||33.18 417227|
13	2207	NT1421060713.D	BJE0383-MSD1		1	|18.90 380730||22.35 404652||33.18 501609|
14	2255	NT1421060714.D	21E0106-03		1	|18.90 351236||22.35 367693||33.18 451419|
15	2343	NT1421060715.D	21E0106-04		1	|18.90 382617||22.35 399994||33.18 474075|
16	0031	NT1421060716.D	21E0096-02RE1		20	|18.90 335139||22.35 347615||33.18 452607|
17	0119	NT1421060717.D	21E0096-05RE1		10	|18.90 327571||22.36 337428||33.18 431172|
18	0206	NT1421060718.D	21E0096-08RE1		1	|18.90 300362||22.36 313950||33.18 404331|
19	0254	NT1421060719.D	SJF0173-ICV1		1	|18.90 349708||22.35 366356||33.18 455158|

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem3\nt14.i\20210607.b

ARI Job No.: SJF0 Method: DFTPP8270E.m Instrument: nt14.i Date: 07-JUN-2021

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
1304	NT1421060701.D	SJF0173-TUN1		1	NO MANUAL INTEGRATION
1318	NT1421060702.D	SJF0173-ICV1		1	Benzo(k)fluoranthene, Indeno(1,2,3-cd)pyrene, Dibenzo(a,h)anthracene, Benzo(g,h,i)perylene, Total Benzofluoranthenes,
1406	NT1421060703.D	SJF0000-LCV1		1	NO MANUAL INTEGRATION
1454	NT1421060704.D	BJE0209-BLK1		1	NO MANUAL INTEGRATION
1542	NT1421060705.D	BJE0209-BS1		1	Indeno(1,2,3-cd)pyrene, Dibenzo(a,h)anthracene, Benzo(g,h,i)perylene, Total Benzofluoranthenes,
1630	NT1421060706.D	BJE0209-BSD1		1	Benzo(k)fluoranthene, Indeno(1,2,3-cd)pyrene, Dibenzo(a,h)anthracene, Total Benzofluoranthenes, Benzo(j)fluoranthene,
1718	NT1421060707.D	21E0099-01		1	NO MANUAL INTEGRATION
1806	NT1421060708.D	21E0099-02		1	NO MANUAL INTEGRATION
1854	NT1421060709.D	21E0105-07		1	Benzo(b)fluoranthene, Benzo(k)fluoranthene, Total Benzofluoranthenes, Phenanthrene-d10, Perylene-d12,
1942	NT1421060710.D	21E0106-01		1	Benzo(b)fluoranthene, Benzo(k)fluoranthene, Dibenzo(a,h)anthracene, Total Benzofluoranthenes,
2030	NT1421060711.D	21E0106-02		1	Benzo(b)fluoranthene, Benzo(k)fluoranthene, Total Benzofluoranthenes,
2118	NT1421060712.D	BJE0383-MS1		1	Indeno(1,2,3-cd)pyrene, Dibenzo(a,h)anthracene, Total Benzofluoranthenes,
2207	NT1421060713.D	BJE0383-MSD1		1	Indeno(1,2,3-cd)pyrene, Dibenzo(a,h)anthracene, Total Benzofluoranthenes,
2255	NT1421060714.D	21E0106-03		1	Indeno(1,2,3-cd)pyrene, Total Benzofluoranthenes,
2343	NT1421060715.D	21E0106-04		1	Benzo(k)fluoranthene, Indeno(1,2,3-cd)pyrene, Dibenzo(a,h)anthracene, Total Benzofluoranthenes,
0031	NT1421060716.D	21E0096-02RE1		20	Benzo(b)fluoranthene, Benzo(k)fluoranthene, Indeno(1,2,3-cd)pyrene, 2,6-Dimethylnaphthalene, Total Benzofluoranthenes,
0119	NT1421060717.D	21E0096-05RE1		10	NO MANUAL INTEGRATION

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem3\nt14.i\20210607.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
0206	NT1421060718.D	21E0096-08RE1		1	NO MANUAL INTEGRATION
0254	NT1421060719.D	SJF0173-ICV1		1	Benzo(k)fluoranthene, Indeno(1,2,3-cd)pyrene, Dibenzo(a,h)anthracene, Benzo(g,h,i)perylene, Benzo(j)fluoranthene, Perylene-d

Security Status Report

Date: 12-Jun-2021 15:01

NT1421060701.D	Data Locked	yev, 12-
NT1421060702.D	Data Locked	yev, 12-
NT1421060703.D	Data Locked	yev, 12-
NT1421060704.D	Data Locked	yev, 12-
NT1421060705.D	Data Locked	yev, 12-
NT1421060706.D	Data Locked	yev, 12-
NT1421060707.D	Data Locked	yev, 12-
NT1421060708.D	Data Locked	yev, 12-
NT1421060709.D	Data Locked	yev, 12-
NT1421060710.D	Data Locked	yev, 12-
NT1421060711.D	Data Locked	yev, 12-
NT1421060712.D	Data Locked	yev, 12-
NT1421060713.D	Data Locked	yev, 12-
NT1421060714.D	Data Locked	yev, 12-
NT1421060715.D	Data Locked	yev, 12-
NT1421060716.D	Data Locked	yev, 12-
NT1421060717.D	Data Locked	yev, 12-
NT1421060718.D	Data Locked	yev, 12-
NT1421060719.D	Data Locked	yev, 12-

Analytical Resources, Incorporated
Analytical Chemists and Consultants

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 8270E-SIM

Laboratory:	Analytical Resources, Inc.	SDG:	21E0106
Client:	Anchor QEA, LLC	Project:	Gasco Siltronic - US Moorings
Sequence:	SJF0189	Instrument:	NT14
		Calibration:	EF00019

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
Blank	BJE0383-BLK2	NT1421060418S.D	Solid	06/05/21 01:55
ZZZZZ	21E0098-17	NT1421060420S.D	Solid	06/05/21 03:31
ZZZZZ	21E0098-18	NT1421060421S.D	Solid	06/05/21 04:19
ZZZZZ	21E0098-21	NT1421060422S.D	Solid	06/05/21 05:08
ZZZZZ	21E0098-22	NT1421060423S.D	Solid	06/05/21 05:56
ZZZZZ	21E0098-23	NT1421060424S.D	Solid	06/05/21 06:43
ZZZZZ	21E0098-25	NT1421060425S.D	Solid	06/05/21 07:31
ZZZZZ	21E0103-01	NT1421060426S.D	Solid	06/05/21 09:07
ZZZZZ	21E0103-08	NT1421060427S.D	Solid	06/05/21 09:54
ZZZZZ	21E0103-10	NT1421060428S.D	Solid	06/05/21 10:42
ZZZZZ	21E0103-16	NT1421060429S.D	Solid	06/05/21 11:30
ZZZZZ	21E0103-17	NT1421060430S.D	Solid	06/05/21 12:18
ZZZZZ	21E0103-23	NT1421060431S.D	Solid	06/05/21 13:06
ZZZZZ	21E0105-01	NT1421060432S.D	Solid	06/05/21 13:54

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Printed: 6/14/2021 5:41:39PM

ANALYSIS SEQUENCE

SJF0189

Instrument: NT14 Element Column ID: I008815
Calibration ID: EF00019 Tune File: 200104U
EM Voltage: 1906

Lab Number	Sample Name	Analysis	Container	Order	STD ID	ISTD ID	Comments
SJF0189-ICV1	Initial Cal Check	QC		1	J004383	J004384	
BJE0383-BLK2	Blank	QC		2		J004384	
21E0098-17	JSMPDI-051SC-A-00-01-21043	8270E-SIM Alkyl PAH (Range) Dual Scan	A 04	3		J004384	
21E0098-18	JSMPDI-051SC-A-08-09-21043	8270E-SIM Alkyl PAH (Range) Dual Scan	A 04	4		J004384	
21E0098-21	JSMPDI-051SC-B-02-04-21043	8270E-SIM Alkyl PAH (Range) Dual Scan	A 04	5		J004384	
21E0098-22	JSMPDI-051SC-B-04-06-21043	8270E-SIM Alkyl PAH (Range) Dual Scan	A 04	6		J004384	
21E0098-23	JSMPDI-051SC-B-06-08-21043	8270E-SIM Alkyl PAH (Range) Dual Scan	A 04	7		J004384	
21E0098-25	SMPDI-051SC-B-10-10.8-2104	8270E-SIM Alkyl PAH (Range) Dual Scan	A 04	8		J004384	
21E0103-01	JSMPDI-028SC-A-00-01-21050	8270E-SIM Alkyl PAH (Range) Dual Scan	A 04	9		J004384	
21E0103-08	JSMPDI-028SC-B-02-05-21050	8270E-SIM Alkyl PAH (Range) Dual Scan	A 04	10		J004384	
21E0103-10	JSMPDI-031SC-A-00-01-21050	8270E-SIM Alkyl PAH (Range) Dual Scan	A 04	11		J004384	
21E0103-16	JSMPDI-031SC-B-02-05-21050	8270E-SIM Alkyl PAH (Range) Dual Scan	A 04	12		J004384	
21E0103-17	JSMPDI-035SC-A-00-01-21050	8270E-SIM Alkyl PAH (Range) Dual Scan	A 04	13		J004384	
21E0103-23	JSMPDI-035SC-B-02-05-21050	8270E-SIM Alkyl PAH (Range) Dual Scan	A 04	14		J004384	
21E0105-01	JSMPDI-030SC-A-00-01-21050	8270E-SIM Alkyl PAH (Range) Dual Scan	A 04	15		J004384	

INTERNAL STANDARD SUMMARY FOR DATABATCH - \\target\share\chem3\nt14.i\20210604.b\SIM.b

	Time	Filename	LabID	ClientId	DF						
1	0019	NT1421060416S.D	SJF0189-ICV1		1	18.90	308296	22.35	328447	33.17	473911
2	0107	NT1421060417S.D	SJF0000-LCV1		1	18.90	322572	22.35	341139	33.17	522831
3	0155	NT1421060418S.D	BJE0383-BLK2		1	18.90	318684	22.34	338914	33.17	524180
4	0243	NT1421060419S.D	BJE0383-BS1		1	18.90	334440	22.35	357563	33.17	552726
5	0331	NT1421060420S.D	21E0098-17		5	18.90	308296	22.35	320235	33.18	499060
6	0419	NT1421060421S.D	21E0098-18		5	18.90	311329	22.35	321107	33.18	525829
7	0508	NT1421060422S.D	21E0098-21		5	18.90	327672	22.36	331193	33.18	546737
8	0556	NT1421060423S.D	21E0098-22		5	18.90	318594	22.36	320321	33.18	527007
9	0643	NT1421060424S.D	21E0098-23		5	18.90	314580	22.35	328677	33.18	504790
10	0731	NT1421060425S.D	21E0098-25		5	18.90	341039	22.35	360309	33.17	550781
11	0907	NT1421060426S.D	21E0103-01		5	18.90	343732	22.35	359059	33.18	525336
12	0954	NT1421060427S.D	21E0103-08		5	18.90	336785	22.35	354324	33.17	525962
13	1042	NT1421060428S.D	21E0103-10		5	18.90	347405	22.35	371648	33.17	553005
14	1130	NT1421060429S.D	21E0103-16		5	18.90	331346	22.35	348851	33.18	533966
15	1218	NT1421060430S.D	21E0103-17		5	18.90	342749	22.35	356348	33.17	531519
16	1306	NT1421060431S.D	21E0103-23		5	18.90	362292	22.35	382380	33.17	577004
17	1354	NT1421060432S.D	21E0105-01		5	18.90	362309	22.35	379620	33.17	558180
18	1442	NT1421060433S.D	SJE0297-CCV1		1	18.90	324502	22.35	340602	33.17	509349

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem3\nt14.i\20210604.b\SIM.b

ARI Job No.: SJF0 Method: SIM.b\ALKYLRANGES.m Instrument: nt14.i Date: 05-JUN-2021

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
0019	NT1421060416S.D	SJF0189-ICV1		1	NO MANUAL INTEGRATION
0107	NT1421060417S.D	SJF0000-LCV1		1	NO MANUAL INTEGRATION
0155	NT1421060418S.D	BJE0383-BLK2		1	NO MANUAL INTEGRATION
0243	NT1421060419S.D	BJE0383-BS1		1	NO MANUAL INTEGRATION
0331	NT1421060420S.D	21E0098-17		5	C1-Decalin, C2-Decalin, C3-Decalin, C4-Decalin, C1-Naphthalenes, C4-Naphthobenzothiophenes, C4-Fluoranthenes/Pyrenes, C2-Naphthalenes, C3-Naphthalenes, C4-Naphthalenes, C1-Benzothiophenes, C2-Benzothiophenes, C3_Benzothiophenes, C1-Fluorenes, C2-Fluorenes, C3-Fluorenes, C1-Dibenzothiophenes, C2-Dibenzothiophenes, C3-Dibenzothiophenes, C1
0419	NT1421060421S.D	21E0098-18		5	C1-Decalin, C2-Decalin, C3-Decalin, C4-Decalin, C1-Naphthalenes, C4-Naphthobenzothiophenes, C4-Fluoranthenes/Pyrenes, C2-Naphthalenes, C3-Naphthalenes, C4-Naphthalenes, C1-Benzothiophenes, C2-Benzothiophenes, C3_Benzothiophenes, C1-Fluorenes, C2-Fluorenes, C3-Fluorenes, C1-Dibenzothiophenes, C2-Dibenzothiophenes, C3-Dibenzothiophenes, C1
0508	NT1421060422S.D	21E0098-21		5	C1-Decalin, C2-Decalin, C3-Decalin, C4-Decalin, C1-Naphthalenes, C4-Naphthobenzothiophenes, C4-Fluoranthenes/Pyrenes, C2-Naphthalenes, C3-Naphthalenes, C4-Naphthalenes, C1-Benzothiophenes, C2-Benzothiophenes, C3_Benzothiophenes, C1-Fluorenes, C2-Fluorenes, C3-Fluorenes, C1-Dibenzothiophenes, C2-Dibenzothiophenes, C3-Dibenzothiophenes, C1
0556	NT1421060423S.D	21E0098-22		5	C1-Decalin, C2-Decalin, C3-Decalin, C4-Decalin, C1-Naphthalenes, C4-Naphthobenzothiophenes, C4-Fluoranthenes/Pyrenes, C2-Naphthalenes, C3-Naphthalenes, C4-Naphthalenes, C1-Benzothiophenes, C3_Benzothiophenes, C1-Fluorenes, C2-Fluorenes, C3-Fluorenes, C1-Dibenzothiophenes, C2-Dibenzothiophenes, C3-Dibenzothiophenes, C1-Phenanthrenes/Anthr
0643	NT1421060424S.D	21E0098-23		5	C1-Decalin, C2-Decalin, C3-Decalin, C4-Decalin, C1-Naphthalenes, C4-Naphthobenzothiophenes, C4-Fluoranthenes/Pyrenes, C2-Naphthalenes, C3-Naphthalenes, C4-Naphthalenes, C1-Benzothiophenes, C2-Benzothiophenes, C3_Benzothiophenes, C1-Fluorenes, C2-Fluorenes, C3-Fluorenes, C1-Dibenzothiophenes, C2-Dibenzothiophenes, C3-Dibenzothiophenes, C1
0731	NT1421060425S.D	21E0098-25		5	C1-Decalin, C2-Decalin, C3-Decalin, C1-Naphthalenes, C4-Naphthobenzothiophenes, C4-Fluoranthenes/Pyrenes, C2-Naphthalenes, C3-Naphthalenes, C4-Naphthalenes, C1-Benzothiophenes, C2-Benzothiophenes, C3_Benzothiophenes, C1-Fluorenes, C2-Fluorenes, C3-Fluorenes, C1-Dibenzothiophenes, C2-Dibenzothiophenes, C3-Dibenzothiophenes, C1-Phenanthrenes/Anthr
0907	NT1421060426S.D	21E0103-01		5	C2-Decalin, C1-Naphthalenes, C4-Naphthobenzothiophenes, C4-Fluoranthenes/Pyrenes, C2-Naphthalenes, C3-Naphthalenes, C4-Naphthalenes, C1-Fluorenes, C2-Fluorenes, C3-Fluorenes, C1-Dibenzothiophenes, C2-Dibenzothiophenes, C3-Dibenzothiophenes, C1-Phenanthrenes/Anthracenes, C2-Phenanthrenes/Anthracenes, C3-Phenanthrenes/Anthracenes, C4-Phenanthrenes/A
0954	NT1421060427S.D	21E0103-08		5	C1-Decalin, C2-Decalin, C3-Decalin, C1-Naphthalenes, C4-Naphthobenzothiophenes, C4-Fluoranthenes/Pyrenes,

C2-Naphthalenes, C3-Naphthalenes, C4-Naphthalenes, C2-Benzothiophenes, C1-Fluorenes, C2-Fluorenes,
C3-Fluorenes, C1-Dibenzothiophenes, C2-Dibenzothiophenes, C3-Dibenzothiophenes, C1-Phenanthrenes/Anthracenes, C2-Phenanthrenes/Ant

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1042 NT1421060428S.D 21E0103-10 5 C2-Decalin, C1-Naphthalenes, C4-Naphthobenzothiophenes, C4-Fluoranthenes/Pyrenes, C2-Naphthalenes, C3-Naphthalenes,
C4-Naphthalenes, C1-Fluorenes, C2-Fluorenes, C3-Fluorenes, C1-Dibenzothiophenes, C2-Dibenzothiophenes,
C3-Dibenzothiophenes, C1-Phenanthrenes/Anthracenes, C2-Phenanthrenes/Anthracenes, C3-Phenanthrenes/Anthracenes, C4-Phenanthrenes/A

1130 NT1421060429S.D 21E0103-16 5 C1-Decalin, C2-Decalin, C3-Decalin, C4-Decalin, C1-Naphthalenes, C4-Naphthobenzothiophenes,
C4-Fluoranthenes/Pyrenes, C2-Naphthalenes, C3-Naphthalenes, C4-Naphthalenes, C1-Benzothiophenes, C1-Fluorenes,
C2-Fluorenes, C3-Fluorenes, C1-Dibenzothiophenes, C2-Dibenzothiophenes, C3-Dibenzothiophenes, C1-Phenanthrenes/Anthracenes, C2-Phe

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1218 NT1421060430S.D 21E0103-17 5 C2-Decalin, C3-Decalin, C1-Naphthalenes, C4-Naphthobenzothiophenes, C4-Fluoranthenes/Pyrenes, C2-Naphthalenes,
C3-Naphthalenes, C4-Naphthalenes, C1-Fluorenes, C2-Fluorenes, C3-Fluorenes, C1-Dibenzothiophenes,
C2-Dibenzothiophenes, C3-Dibenzothiophenes, C1-Phenanthrenes/Anthracenes, C2-Phenanthrenes/Anthracenes, C3-Phenanthrenes/Anthracen

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1306 NT1421060431S.D 21E0103-23 5 C1-Decalin, C2-Decalin, C1-Naphthalenes, C4-Fluoranthenes/Pyrenes, C2-Naphthalenes, C3-Naphthalenes,
C4-Naphthalenes, C1-Fluorenes, C2-Fluorenes, C3-Fluorenes, C2-Dibenzothiophenes, C3-Dibenzothiophenes,
C1-Phenanthrenes/Anthracenes, C2-Phenanthrenes/Anthracenes, C3-Phenanthrenes/Anthracenes, C4-Phenanthrenes/Anthracenes, C1-Fluoran

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1354 NT1421060432S.D 21E0105-01 5 C2-Decalin, C1-Naphthalenes, C4-Naphthobenzothiophenes, C4-Fluoranthenes/Pyrenes, C2-Naphthalenes, C3-Naphthalenes,
C4-Naphthalenes, C1-Benzothiophenes, C1-Fluorenes, C3-Fluorenes, C1-Dibenzothiophenes, C2-Dibenzothiophenes,
C3-Dibenzothiophenes, C1-Phenanthrenes/Anthracenes, C2-Phenanthrenes/Anthracenes, C3-Phenanthrenes/Anthracenes, C1-Fluoranthenes/P

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem3\nt14.i\20210604.b\SIM.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
1442	NT1421060433S.D	SJE0297-CCV1		1	NO MANUAL INTEGRATION

Security Status Report

Date: 14-Jun-2021 17:28

NT1421060417S.D	Data Locked	yev, 14-
NT1421060418S.D	Data Locked	yev, 14-
NT1421060419S.D	Data Locked	yev, 14-
NT1421060420S.D	Data Locked	yev, 14-
NT1421060421S.D	Data Locked	yev, 14-
NT1421060422S.D	Data Locked	yev, 14-
NT1421060423S.D	Data Locked	yev, 14-
NT1421060424S.D	Data Locked	yev, 14-
NT1421060425S.D	Data Locked	yev, 14-
NT1421060426S.D	Data Locked	yev, 14-
NT1421060427S.D	Data Locked	yev, 14-
NT1421060428S.D	Data Locked	yev, 14-
NT1421060429S.D	Data Locked	yev, 14-
NT1421060430S.D	Data Locked	yev, 14-
NT1421060431S.D	Data Locked	yev, 14-
NT1421060432S.D	Data Locked	yev, 14-
NT1421060433S.D	Data Locked	yev, 14-

Analytical Resources, Incorporated
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ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 8270E-SIM

Laboratory:	Analytical Resources, Inc.	SDG:	21E0106
Client:	Anchor QEA, LLC	Project:	Gasco Siltronic - US Moorings
Sequence:	SJF0198	Instrument:	NT14
		Calibration:	EF00019

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
ZZZZZ	BJE0209-BLK2	NT1421060704S.D	Water	06/07/21 14:54
ZZZZZ	21E0099-01	NT1421060707S.D	Water	06/07/21 17:18
ZZZZZ	21E0099-02	NT1421060708S.D	Water	06/07/21 18:06
ZZZZZ	21E0105-07	NT1421060709S.D	Solid	06/07/21 18:54
USMPDI-028SG-210504	21E0106-01	NT1421060710S.D	Solid	06/07/21 19:42
USMPDI-030SG-210504	21E0106-02	NT1421060711S.D	Solid	06/07/21 20:30
USMPDI-031SG-210504	21E0106-03	NT1421060714S.D	Solid	06/07/21 22:55
USMPDI-035SG-210504	21E0106-04	NT1421060715S.D	Solid	06/07/21 23:43

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Analytical Chemists and Consultants

Printed: 6/15/2021 12:20:04PM

ANALYSIS SEQUENCE

SJF0198

Instrument: NT14 Element Column ID: I008815
Calibration ID: EF00019 Tune File: 200104U
EM Voltage: 1906

Lab Number	Sample Name	Analysis	Container	Order	STD ID	ISTD ID	Comments
SJF0198-ICV1	Initial Cal Check	QC		1	J004383	J004384	
BJE0209-BLK2	Blank	QC		2			
21E0099-01	SC-FB-2105030940	8270E-SIM Alkyl PAH (Range) Dual Scan	B 02	3			
21E0099-02	SC-RB-2105030901	8270E-SIM Alkyl PAH (Range) Dual Scan	B 02	4			
21E0105-07	USMPDI-030SC-B-02-05-21050	8270E-SIM Alkyl PAH (Range) Dual Scan	A 04	5			
21E0106-01	USMPDI-028SG-210504	8270E-SIM Alkyl PAH (Range) Dual Scan	A 03	6			
21E0106-02	USMPDI-030SG-210504	8270E-SIM Alkyl PAH (Range) Dual Scan	A 03	7			
21E0106-03	USMPDI-031SG-210504	8270E-SIM Alkyl PAH (Range) Dual Scan	A 03	8			
21E0106-04	USMPDI-035SG-210504	8270E-SIM Alkyl PAH (Range) Dual Scan	A 03	9			

INTERNAL STANDARD SUMMARY FOR DATABATCH - \\target\share\chem3\nt14.i\20210607.b\SIM.b

	Time	Filename	LabID	ClientId	DF						
1	1318	NT1421060702S.D	SJF0198-ICV1		1	18.90	311077	22.36	331614	33.18	416427
2	1406	NT1421060703S.D	SJF0000-LCV1		1	18.90	336883	22.35	354452	33.17	463504
3	1454	NT1421060704S.D	BJE0209-BLK1		1	18.90	354742	22.34	372260	33.17	488355
4	1542	NT1421060705S.D	BJE0209-BS1		1	18.90	372414	22.35	393999	33.18	526547
5	1630	NT1421060706S.D	BJE0209-BSD1		1	18.90	381992	22.35	398615	33.17	521133
6	1718	NT1421060707S.D	21E0099-01		1	18.90	376090	22.34	390572	33.17	500411
7	1806	NT1421060708S.D	21E0099-02		1	18.90	378018	22.34	391781	33.17	509409
8	1854	NT1421060709S.D	21E0105-07		1	18.90	352998	22.34	374765	33.17	495361
9	1942	NT1421060710S.D	21E0106-01		1	18.90	406826	22.35	430773	33.18	545830
10	2030	NT1421060711S.D	21E0106-02		1	18.90	387046	22.35	412200	33.17	516591
11	2118	NT1421060712S.D	BJE0383-MS1		1	18.90	377592	22.35	401553	33.17	492652
12	2207	NT1421060713S.D	BJE0383-MSD1		1	18.90	445644	22.35	475026	33.17	582307
13	2255	NT1421060714S.D	21E0106-03		1	18.90	407021	22.35	428732	33.17	528014
14	2343	NT1421060715S.D	21E0106-04		1	18.90	441674	22.35	464608	33.17	567033
15	0031	NT1421060716S.D	21E0096-02RE1		20	18.90	386417	22.35	406957	33.17	532651

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem3\nt14.i\20210607.b\SIM.b

ARI Job No.: SJF0 Method: SIM.b\ALKYLRANGES.m Instrument: nt14.i Date: 07-JUN-2021

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
1318	NT1421060702S.D	SJF0198-ICV1		1	Benzo(k)fluoranthene, Indeno(1,2,3-cd)pyrene, Dibenzo(a,h)anthracene, Benzo(g,h,i)perylene, 2,6-Dimethylnaphthalene, 1,6,7-Fluorene-d10, Total Benzofluoranthenes, Anthracene-d10, Acenaphthene-d10,
1406	NT1421060703S.D	SJF0000-LCV1		1	NO MANUAL INTEGRATION
1454	NT1421060704S.D	BJE0209-BLK1		1	NO MANUAL INTEGRATION
1542	NT1421060705S.D	BJE0209-BS1		1	NO MANUAL INTEGRATION
1630	NT1421060706S.D	BJE0209-BSD1		1	NO MANUAL INTEGRATION
1718	NT1421060707S.D	21E0099-01		1	NO MANUAL INTEGRATION
1806	NT1421060708S.D	21E0099-02		1	NO MANUAL INTEGRATION
1854	NT1421060709S.D	21E0105-07		1	C1-Decalin, C2-Decalin, C3-Decalin, C1-Naphthalenes, C4-Fluoranthenes/Pyrenes, C2-Naphthalenes, C3-Naphthalenes, C4-Naphthalenes, C1-Fluorenes, C2-Fluorenes, C3-Fluorenes, C1-Dibenzothiophenes, C2-Dibenzothiophenes, C3-Dibenzothiophenes, C1-Phenanthrenes/Anthracenes, C3-Phenanthrenes/Anthracenes, C4-Phenanthrenes/Anthracen
1942	NT1421060710S.D	21E0106-01		1	C2-Decalin, C1-Naphthalenes, C4-Fluoranthenes/Pyrenes, C2-Naphthalenes, C3-Naphthalenes, C4-Naphthalenes, C1-Fluorenes, C2-Fluorenes, C3-Fluorenes, C1-Dibenzothiophenes, C2-Dibenzothiophenes, C3-Dibenzothiophenes, C1-Phenanthrenes/Anthracenes, C2-Phenanthrenes/Anthracenes, C3-Phenanthrenes/Anthracenes, C4-Phenanthrenes/Anthracenes, C1-Fluoran
2030	NT1421060711S.D	21E0106-02		1	C1-Naphthalenes, C4-Fluoranthenes/Pyrenes, C2-Naphthalenes, C3-Naphthalenes, C4-Naphthalenes, C1-Fluorenes, C3-Fluorenes, C1-Dibenzothiophenes, C2-Dibenzothiophenes, C3-Dibenzothiophenes, C1-Phenanthrenes/Anthracenes, C2-Phenanthrenes/Ant C3-Phenanthrenes/Anthracenes, C1-Fluoranthenes/Pyrenes, C2-Fluoranthenes/Pyrenes, C3-Fluoranthenes/Pyrenes, C1-Naphthobenzothiophe
2118	NT1421060712S.D	BJE0383-MS1		1	NO MANUAL INTEGRATION
2207	NT1421060713S.D	BJE0383-MSD1		1	NO MANUAL INTEGRATION
2255	NT1421060714S.D	21E0106-03		1	C2-Decalin, C3-Decalin, C1-Naphthalenes, C4-Naphthobenzothiophenes, C4-Fluoranthenes/Pyrenes, C2-Naphthalenes, C3-Naphthalenes, C4-Naphthalenes, C1-Fluorenes, C2-Fluorenes, C3-Fluorenes, C1-Dibenzothiophenes, C2-Dibenzothiophenes, C3-Dibenzothiophenes, C1-Phenanthrenes/Anthracenes, C2-Phenanthrenes/Anthracenes, C3-Phenanthrenes/Anthracen
2343	NT1421060715S.D	21E0106-04		1	C3-Decalin, C1-Naphthalenes, C4-Naphthobenzothiophenes, C4-Fluoranthenes/Pyrenes, C2-Naphthalenes, C3-Naphthalenes, C4-Naphthalenes, C1-Fluorenes, C2-Fluorenes, C3-Fluorenes, C1-Dibenzothiophenes, C2-Dibenzothiophenes,

C3-Dibenzothiophenes, C1-Phenanthrenes/Anthracenes, C2-Phenanthrenes/Anthracenes, C3-Phenanthrenes/Anthracenes, C4-Phenanthrenes/A

0031 NT1421060716S.D 21E0096-02RE1 20 NO MANUAL INTEGRATION

Security Status Report

Date: 15-Jun-2021 12:34

NT1421060702S.D	Data Locked	yev, 15-
NT1421060703S.D	Data Locked	yev, 15-
NT1421060704S.D	Data Locked	yev, 15-
NT1421060705S.D	Data Locked	yev, 15-
NT1421060706S.D	Data Locked	yev, 15-
NT1421060707S.D	Data Locked	yev, 15-
NT1421060708S.D	Data Locked	yev, 15-
NT1421060709S.D	Data Locked	yev, 15-
NT1421060710S.D	Data Locked	yev, 15-
NT1421060711S.D	Data Locked	yev, 15-
NT1421060712S.D	Data Locked	yev, 15-
NT1421060713S.D	Data Locked	yev, 15-
NT1421060714S.D	Data Locked	yev, 15-
NT1421060715S.D	Data Locked	yev, 15-
NT1421060716S.D	Data Locked	yev, 15-

Analytical Resources, Incorporated
Analytical Chemists and Consultants

SURROGATE RECOVERY AND RT SUMMARY

EPA 8270E-SIM

Laboratory:	Analytical Resources, Inc.	SDG/WO:	21E0106
Client:	Anchor QEA, LLC	Project:	Gasco Siltronic - US Moorings
Sequence:	SJF0025	Instrument:	NT14
Calibration:	EF00008	Calibration Date:	05/29/2021

Surrogate Compound	Spike Level ug/mL	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
SJF0025-SCV1 (Solid)			Lab File ID: NT1421052915.D				Analyzed: 05/29/21 19:38	
Naphthalene-d8	2.5000	115	80 - 120	11.897	11.897	0.0000	N/A	
Acenaphthene-d10	2.5000	113	80 - 120	17.377	17.375	0.0020	N/A	
Phenanthrene-d10	2.5000	114	80 - 120	22.239	22.24014	-0.0011	N/A	
Chrysene-d12	2.5000	123	80 - 120	30.219	30.219	0.0000	N/A	
Perylene-d12	2.5000	117	80 - 120	33.519	33.519	0.0000	N/A	
SJF0025-ICB1 (Solid)			Lab File ID: NT1421052916.D				Analyzed: 05/29/21 20:26	
Naphthalene-d8	2.5000	105	30 - 160	11.897	11.897	0.0000	N/A	
Acenaphthene-d10	2.5000	107	30 - 160	17.377	17.375	0.0020	N/A	
Phenanthrene-d10	2.5000	108	30 - 160	22.239	22.24014	-0.0011	N/A	
Chrysene-d12	2.5000	114	30 - 160	30.219	30.219	0.0000	N/A	
Perylene-d12	2.5000	106	30 - 160	33.519	33.519	0.0000	N/A	

Analytical Resources, Incorporated
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SURROGATE RECOVERY AND RT SUMMARY

EPA 8270E-SIM

Laboratory:	Analytical Resources, Inc.	SDG/WO:	21E0106
Client:	Anchor QEA, LLC	Project:	Gasco Siltronic - US Moorings
Sequence:	SJF0131	Instrument:	NT14
Calibration:	EF00008	Calibration Date:	05/29/2021

Surrogate Compound	Spike Level ug/mL	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
SJF0131-ICV1 (Solid)			Lab File ID: NT1421060416ICV.D				Analyzed: 06/05/21 00:19	
Naphthalene-d8	2.5000	97.9	80 - 120	11.886	11.897	-0.0110	N/A	
Acenaphthene-d10	2.5000	99.8	80 - 120	17.365	17.375	-0.0100	N/A	
Phenanthrene-d10	2.5000	100	80 - 120	22.238	22.24014	-0.0021	N/A	
Chrysene-d12	2.5000	107	80 - 120	30.219	30.219	0.0000	N/A	
Perylene-d12	2.5000	102	80 - 120	33.519	33.519	0.0000	N/A	
BJE0383-BLK1 (Solid)			Lab File ID: NT1421060418.D				Analyzed: 06/05/21 01:55	
Naphthalene-d8	150.00	39.1	30 - 160	11.887	11.897	-0.0100	N/A	
Acenaphthene-d10	150.00	41.6	30 - 160	17.366	17.375	-0.0090	N/A	
Phenanthrene-d10	150.00	50.6	30 - 160	22.239	22.24014	-0.0011	N/A	
Chrysene-d12	150.00	40.1	30 - 160	30.219	30.219	0.0000	N/A	
Perylene-d12	150.00	27.0	30 - 160	33.519	33.519	0.0000	N/A	*
BJE0383-BS1 (Solid)			Lab File ID: NT1421060419.D				Analyzed: 06/05/21 02:43	
Naphthalene-d8	150.00	31.0	30 - 160	11.887	11.897	-0.0100	N/A	
Acenaphthene-d10	150.00	33.9	30 - 160	17.365	17.375	-0.0100	N/A	
Phenanthrene-d10	150.00	43.4	30 - 160	22.238	22.24014	-0.0021	N/A	
Chrysene-d12	150.00	50.7	30 - 160	30.219	30.219	0.0000	N/A	
Perylene-d12	150.00	39.9	30 - 160	33.519	33.519	0.0000	N/A	
SJF0131-CCV1 (Solid)			Lab File ID: NT1421060433.D				Analyzed: 06/05/21 14:42	
Naphthalene-d8	2.5000	102	50 - 150	11.887	11.897	-0.0100	N/A	
Acenaphthene-d10	2.5000	102	50 - 150	17.366	17.375	-0.0090	N/A	
Phenanthrene-d10	2.5000	99.6	50 - 150	22.239	22.24014	-0.0011	N/A	
Chrysene-d12	2.5000	106	50 - 150	30.219	30.219	0.0000	N/A	
Perylene-d12	2.5000	102	50 - 150	33.519	33.519	0.0000	N/A	

Analytical Resources, Incorporated
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SURROGATE RECOVERY AND RT SUMMARY

EPA 8270E-SIM

Laboratory:	Analytical Resources, Inc.	SDG/WO:	21E0106
Client:	Anchor QEA, LLC	Project:	Gasco Siltronic - US Moorings
Sequence:	SJF0173	Instrument:	NT14
Calibration:	EF00008	Calibration Date:	05/29/2021

Surrogate Compound	Spike Level ug/mL	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
SJF0173-ICV1 (Solid)			Lab File ID: NT1421060702.D				Analyzed: 06/07/21 13:18	
Naphthalene-d8	2.5000	106	80 - 120	11.887	11.897	-0.0100	N/A	
Acenaphthene-d10	2.5000	103	80 - 120	17.365	17.375	-0.0100	N/A	
Phenanthrene-d10	2.5000	103	80 - 120	22.238	22.24014	-0.0021	N/A	
Chrysene-d12	2.5000	116	80 - 120	30.219	30.219	0.0000	N/A	
Perylene-d12	2.5000	102	80 - 120	33.519	33.519	0.0000	N/A	
21E0106-01 (Solid)			Lab File ID: NT1421060710.D				Analyzed: 06/07/21 19:42	
Naphthalene-d8	149.89	44.6	30 - 160	11.887	11.897	-0.0100	N/A	
Acenaphthene-d10	149.89	48.8	30 - 160	17.365	17.375	-0.0100	N/A	
Phenanthrene-d10	149.89	56.3	30 - 160	22.238	22.24014	-0.0021	N/A	
Chrysene-d12	149.89	63.6	30 - 160	30.219	30.219	0.0000	N/A	
Perylene-d12	149.89	61.4	30 - 160	33.519	33.519	0.0000	N/A	
21E0106-02 (Solid)			Lab File ID: NT1421060711.D				Analyzed: 06/07/21 20:30	
Naphthalene-d8	150.00	45.8	30 - 160	11.887	11.897	-0.0100	N/A	
Acenaphthene-d10	150.00	51.9	30 - 160	17.365	17.375	-0.0100	N/A	
Phenanthrene-d10	150.00	55.7	30 - 160	22.239	22.24014	-0.0011	N/A	
Chrysene-d12	150.00	65.1	30 - 160	30.219	30.219	0.0000	N/A	
Perylene-d12	150.00	64.5	30 - 160	33.519	33.519	0.0000	N/A	
BJE0383-MS1 (Solid)			Lab File ID: NT1421060712.D				Analyzed: 06/07/21 21:18	
Naphthalene-d8	150.00	51.0	30 - 160	11.887	11.897	-0.0100	N/A	
Acenaphthene-d10	150.00	56.7	30 - 160	17.365	17.375	-0.0100	N/A	
Phenanthrene-d10	150.00	60.2	30 - 160	22.239	22.24014	-0.0011	N/A	
Chrysene-d12	150.00	70.0	30 - 160	30.219	30.219	0.0000	N/A	
Perylene-d12	150.00	68.2	30 - 160	33.519	33.519	0.0000	N/A	
BJE0383-MSD1 (Solid)			Lab File ID: NT1421060713.D				Analyzed: 06/07/21 22:07	
Naphthalene-d8	150.00	49.8	30 - 160	11.887	11.897	-0.0100	N/A	
Acenaphthene-d10	150.00	57.8	30 - 160	17.366	17.375	-0.0090	N/A	
Phenanthrene-d10	150.00	60.0	30 - 160	22.239	22.24014	-0.0011	N/A	
Chrysene-d12	150.00	66.9	30 - 160	30.219	30.219	0.0000	N/A	
Perylene-d12	150.00	66.3	30 - 160	33.519	33.519	0.0000	N/A	

Analytical Resources, Incorporated
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SURROGATE RECOVERY AND RT SUMMARY

EPA 8270E-SIM

Laboratory:	Analytical Resources, Inc.	SDG/WO:	21E0106
Client:	Anchor QEA, LLC	Project:	Gasco Siltronic - US Moorings
Sequence:	SJF0173	Instrument:	NT14
Calibration:	EF00008	Calibration Date:	05/29/2021

Surrogate Compound	Spike Level ug/kg dry	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
21E0106-03 (Solid)			Lab File ID: NT1421060714.D			Analyzed: 06/07/21 22:55		
Naphthalene-d8	150.11	48.0	30 - 160	11.887	11.897	-0.0100	N/A	
Acenaphthene-d10	150.11	55.1	30 - 160	17.365	17.375	-0.0100	N/A	
Phenanthrene-d10	150.11	59.6	30 - 160	22.238	22.24014	-0.0021	N/A	
Chrysene-d12	150.11	68.8	30 - 160	30.219	30.219	0.0000	N/A	
Perylene-d12	150.11	68.4	30 - 160	33.519	33.519	0.0000	N/A	
21E0106-04 (Solid)			Lab File ID: NT1421060715.D			Analyzed: 06/07/21 23:43		
Naphthalene-d8	149.96	41.0	30 - 160	11.887	11.897	-0.0100	N/A	
Acenaphthene-d10	149.96	48.6	30 - 160	17.366	17.375	-0.0090	N/A	
Phenanthrene-d10	149.96	57.5	30 - 160	22.239	22.24014	-0.0011	N/A	
Chrysene-d12	149.96	68.5	30 - 160	30.219	30.219	0.0000	N/A	
Perylene-d12	149.96	66.5	30 - 160	33.519	33.519	0.0000	N/A	
SJF0173-CCV1 (Solid)			Lab File ID: NT1421060719.D			Analyzed: 06/08/21 02:54		
Naphthalene-d8	2.5000	102	50 - 150	11.887	11.897	-0.0100	N/A	
Acenaphthene-d10	2.5000	101	50 - 150	17.366	17.375	-0.0090	N/A	
Phenanthrene-d10	2.5000	99.7	50 - 150	22.239	22.24014	-0.0011	N/A	
Chrysene-d12	2.5000	113	50 - 150	30.219	30.219	0.0000	N/A	
Perylene-d12	2.5000	101	50 - 150	33.519	33.519	0.0000	N/A	

Analytical Resources, Incorporated
Analytical Chemists and Consultants

INTERNAL STANDARD AREA AND RT SUMMARY

EPA 8270E-SIM

Laboratory:	Analytical Resources, Inc.	SDG:	21E0106
Client:	Anchor QEA, LLC	Project:	Gasco Siltronic - US Moorings
Sequence:	SJF0025	Instrument:	NT14
		Calibration:	EF00008

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Secondary Cal Check (SJF0025-SCV1)		(Solid)		Lab File ID: NT1421052915.D				Analyzed: 05/29/21 19:38	
Fluorene-d10	166522	18.907	159478	18.907	104	50 - 200	0.000	+/-0.50	
Anthracene-d10	168360	22.36	170161	22.36	99	50 - 200	0.000	+/-0.50	
Benzo(e)pyrene-d12	235397	33.181	236612	33.181	99	50 - 200	0.000	+/-0.50	
Initial Cal Blank (SJF0025-ICB1)		(Solid)		Lab File ID: NT1421052916.D				Analyzed: 05/29/21 20:26	
Fluorene-d10	183758	18.907	159478	18.907	115	50 - 200	0.000	+/-0.50	
Anthracene-d10	189746	22.36	170161	22.36	112	50 - 200	0.000	+/-0.50	
Benzo(e)pyrene-d12	265253	33.181	236612	33.181	112	50 - 200	0.000	+/-0.50	

Analytical Resources, Incorporated
Analytical Chemists and Consultants

INTERNAL STANDARD AREA AND RT SUMMARY

EPA 8270E-SIM

Laboratory:	Analytical Resources, Inc.	SDG:	21E0106
Client:	Anchor QEA, LLC	Project:	Gasco Siltronic - US Moorings
Sequence:	SJF0131	Instrument:	NT14
		Calibration:	EF00008

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Initial Cal Check (SJF0131-ICV1)		(Solid)	Lab File ID: NT1421060416ICV.D				Analyzed: 06/05/21 00:19		
Fluorene-d10	274525	18.907	274525	18.907	100	50 - 200	0.000	+/-0.50	
Anthracene-d10	287335	22.348	287335	22.348	100	50 - 200	0.000	+/-0.50	
Benzo(e)pyrene-d12	407300	33.181	407300	33.181	100	50 - 200	0.000	+/-0.50	
Blank (BJE0383-BLK1)		(Solid)	Lab File ID: NT1421060418.D				Analyzed: 06/05/21 01:55		
Fluorene-d10	281511	18.896	274525	18.907	103	50 - 200	-0.011	+/-0.50	
Anthracene-d10	298120	22.349	287335	22.348	104	50 - 200	0.001	+/-0.50	
Benzo(e)pyrene-d12	455154	33.181	407300	33.181	112	50 - 200	0.000	+/-0.50	
LCS (BJE0383-BS1)		(Solid)	Lab File ID: NT1421060419.D				Analyzed: 06/05/21 02:43		
Fluorene-d10	289598	18.896	274525	18.907	105	50 - 200	-0.011	+/-0.50	
Anthracene-d10	313224	22.348	287335	22.348	109	50 - 200	0.000	+/-0.50	
Benzo(e)pyrene-d12	479490	33.181	407300	33.181	118	50 - 200	0.000	+/-0.50	

Analytical Resources, Incorporated
Analytical Chemists and Consultants

INTERNAL STANDARD AREA AND RT SUMMARY

EPA 8270E-SIM

Laboratory:	Analytical Resources, Inc.	SDG:	21E0106
Client:	Anchor QEA, LLC	Project:	Gasco Siltronic - US Moorings
Sequence:	SJF0173	Instrument:	NT14
		Calibration:	EF00008

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Initial Cal Check (SJF0173-ICV1)		(Solid)		Lab File ID: NT1421060702.D				Analyzed: 06/07/21 13:18	
Fluorene-d10	311077	18.896	311077	18.896	100	50 - 200	0.000	+/-0.50	
Anthracene-d10	331614	22.359	331614	22.359	100	50 - 200	0.000	+/-0.50	
Benzo(e)pyrene-d12	416427	33.181	416427	33.181	100	50 - 200	0.000	+/-0.50	
USMPDI-028SG-210504 (21E0106-01)		(Solid)		Lab File ID: NT1421060710.D				Analyzed: 06/07/21 19:42	
Fluorene-d10	352791	18.896	311077	18.896	113	50 - 200	0.000	+/-0.50	
Anthracene-d10	369755	22.348	331614	22.359	112	50 - 200	-0.011	+/-0.50	
Benzo(e)pyrene-d12	468246	33.181	416427	33.181	112	50 - 200	0.000	+/-0.50	
USMPDI-030SG-210504 (21E0106-02)		(Solid)		Lab File ID: NT1421060711.D				Analyzed: 06/07/21 20:30	
Fluorene-d10	332176	18.896	311077	18.896	107	50 - 200	0.000	+/-0.50	
Anthracene-d10	356066	22.348	331614	22.359	107	50 - 200	-0.011	+/-0.50	
Benzo(e)pyrene-d12	435025	33.181	416427	33.181	104	50 - 200	0.000	+/-0.50	
Matrix Spike (BJE0383-MS1)		(Solid)		Lab File ID: NT1421060712.D				Analyzed: 06/07/21 21:18	
Fluorene-d10	325513	18.896	311077	18.896	105	50 - 200	0.000	+/-0.50	
Anthracene-d10	342885	22.348	331614	22.359	103	50 - 200	-0.011	+/-0.50	
Benzo(e)pyrene-d12	417227	33.181	416427	33.181	100	50 - 200	0.000	+/-0.50	
Matrix Spike Dup (BJE0383-MSD1)		(Solid)		Lab File ID: NT1421060713.D				Analyzed: 06/07/21 22:07	
Fluorene-d10	380730	18.896	311077	18.896	122	50 - 200	0.000	+/-0.50	
Anthracene-d10	404652	22.349	331614	22.359	122	50 - 200	-0.010	+/-0.50	
Benzo(e)pyrene-d12	501609	33.181	416427	33.181	120	50 - 200	0.000	+/-0.50	
USMPDI-031SG-210504 (21E0106-03)		(Solid)		Lab File ID: NT1421060714.D				Analyzed: 06/07/21 22:55	
Fluorene-d10	351236	18.896	311077	18.896	113	50 - 200	0.000	+/-0.50	
Anthracene-d10	367693	22.348	331614	22.359	111	50 - 200	-0.011	+/-0.50	
Benzo(e)pyrene-d12	451419	33.181	416427	33.181	108	50 - 200	0.000	+/-0.50	
USMPDI-035SG-210504 (21E0106-04)		(Solid)		Lab File ID: NT1421060715.D				Analyzed: 06/07/21 23:43	
Fluorene-d10	382617	18.896	311077	18.896	123	50 - 200	0.000	+/-0.50	
Anthracene-d10	399994	22.349	331614	22.359	121	50 - 200	-0.010	+/-0.50	
Benzo(e)pyrene-d12	474075	33.181	416427	33.181	114	50 - 200	0.000	+/-0.50	

Analytical Resources, Incorporated
Analytical Chemists and Consultants

INTERNAL STANDARD AREA AND RT SUMMARY

EPA 8270E-SIM

Laboratory:	Analytical Resources, Inc.	SDG:	21E0106
Client:	Anchor QEA, LLC	Project:	Gasco Siltronic - US Moorings
Sequence:	SJF0189	Instrument:	NT14
		Calibration:	EF00019

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Blank (BJE0383-BLK2)		(Solid)	Lab File ID: NT1421060418S.D					Analyzed: 06/05/21 01:55	
Fluorene-d10	318684	18.898	308296	18.897	103	50 - 200		+/-0.50	
Anthracene-d10	338914	22.339	328447	22.35	103	50 - 200		+/-0.50	
Benzo(e)pyrene-d12	524180	33.172	473911	33.171	111	50 - 200		+/-0.50	

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INTERNAL STANDARD AREA AND RT SUMMARY

EPA 8270E-SIM

Laboratory:	Analytical Resources, Inc.	SDG:	21E0106
Client:	Anchor QEA, LLC	Project:	Gasco Siltronic - US Moorings
Sequence:	SJF0198	Instrument:	NT14
		Calibration:	EF00019

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
USMPDI-028SG-210504 (21E0106-01)		(Solid)		Lab File ID: NT1421060710S.D				Analyzed: 06/07/21 19:42	
Fluorene-d10	406826	18.897	311077	18.896	131	50 - 200		+/-0.50	
Anthracene-d10	430773	22.35	331614	22.359	130	50 - 200		+/-0.50	
Benzo(e)pyrene-d12	545830	33.183	416427	33.181	131	50 - 200		+/-0.50	
USMPDI-030SG-210504 (21E0106-02)		(Solid)		Lab File ID: NT1421060711S.D				Analyzed: 06/07/21 20:30	
Fluorene-d10	387046	18.898	311077	18.896	124	50 - 200		+/-0.50	
Anthracene-d10	412200	22.35	331614	22.359	124	50 - 200		+/-0.50	
Benzo(e)pyrene-d12	516591	33.172	416427	33.181	124	50 - 200		+/-0.50	
USMPDI-031SG-210504 (21E0106-03)		(Solid)		Lab File ID: NT1421060714S.D				Analyzed: 06/07/21 22:55	
Fluorene-d10	407021	18.897	311077	18.896	131	50 - 200		+/-0.50	
Anthracene-d10	428732	22.35	331614	22.359	129	50 - 200		+/-0.50	
Benzo(e)pyrene-d12	528014	33.172	416427	33.181	127	50 - 200		+/-0.50	
USMPDI-035SG-210504 (21E0106-04)		(Solid)		Lab File ID: NT1421060715S.D				Analyzed: 06/07/21 23:43	
Fluorene-d10	441674	18.898	311077	18.896	142	50 - 200		+/-0.50	
Anthracene-d10	464608	22.35	331614	22.359	140	50 - 200		+/-0.50	
Benzo(e)pyrene-d12	567033	33.172	416427	33.181	136	50 - 200		+/-0.50	

Analytical Resources, Incorporated
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HOLDING TIME SUMMARY

Analysis: EPA 8270E-SIM

Laboratory: Analytical Resources, Inc. SDG: 21E0106

Client: Anchor QEA, LLC Project: Gasco Siltronic - US Moorings

Sample Name	Date Collected	Date Received	Date Prepared	Days to Prep	Max Days to Prep	Date Analyzed	Days to Analysis	Max Days to Analysis	Q
USMPDI-028SG-210504 21E0106-01	05/04/21 00:00	05/06/21 11:40	05/17/21 13:40	13	14	06/07/21 19:42	21	40	
USMPDI-028SG-210504 21E0106-01	05/04/21 00:00	05/06/21 11:40	05/17/21 13:40	13	14	06/07/21 19:42	21	40	
USMPDI-030SG-210504 21E0106-02	05/04/21 00:00	05/06/21 11:40	05/17/21 13:40	13	14	06/07/21 20:30	21	40	
USMPDI-030SG-210504 21E0106-02	05/04/21 00:00	05/06/21 11:40	05/17/21 13:40	13	14	06/07/21 20:30	21	40	
USMPDI-031SG-210504 21E0106-03	05/04/21 00:00	05/06/21 11:40	05/17/21 13:40	13	14	06/07/21 22:55	21	40	
USMPDI-031SG-210504 21E0106-03	05/04/21 00:00	05/06/21 11:40	05/17/21 13:40	13	14	06/07/21 22:55	21	40	
USMPDI-035SG-210504 21E0106-04	05/04/21 00:00	05/06/21 11:40	05/17/21 13:40	13	14	06/07/21 23:43	21	40	
USMPDI-035SG-210504 21E0106-04	05/04/21 00:00	05/06/21 11:40	05/17/21 13:40	13	14	06/07/21 23:43	21	40	
Matrix Spike BJE0383-MS1	05/04/21 00:00	05/06/21 11:40	05/17/21 13:40	13	14	06/07/21 21:18	21	40	
Matrix Spike Dup BJE0383-MSD1	05/04/21 00:00	05/06/21 11:40	05/17/21 13:40	13	14	06/07/21 22:07	21	40	

* Indicates hold time exceedance.

Analytical Resources, Incorporated
Analytical Chemists and Consultants

METHOD DETECTION AND REPORTING LIMITS

EPA 8270E-SIM

Laboratory: Analytical Resources, Inc.
SDG: 21E0106
Client: Anchor QEA, LLC
Project: Gasco Siltronic - US Moorings
Matrix: Solid
Instrument: NT14

Analyte	MDL	RL	Units
trans-Decalin	0.03	5.0	ug/kg
cis-Decalin	0.5	5.0	ug/kg
Naphthalene	0.4	5.0	ug/kg
1-Methylnaphthalene	0.4	5.0	ug/kg
2-Methylnaphthalene	0.4	5.0	ug/kg
Biphenyl	0.3	5.0	ug/kg
2,6-Dimethylnaphthalene	0.4	5.0	ug/kg
Acenaphthylene	0.3	5.0	ug/kg
Acenaphthene	0.5	5.0	ug/kg
Dibenzofuran	0.4	5.0	ug/kg
2,3,5-Trimethylnaphthalene	0.4	5.0	ug/kg
Fluorene	0.5	5.0	ug/kg
Benzo(b)thiophene	0.4	5.0	ug/kg
Phenanthrene	0.9	5.0	ug/kg
Anthracene	0.05	5.0	ug/kg
Carbazole	0.7	5.0	ug/kg
1-Methylphenanthrene	0.5	5.0	ug/kg
Fluoranthene	1.4	5.0	ug/kg
Dibenzothiophene	0.7	5.0	ug/kg
Pyrene	1.0	5.0	ug/kg
Benzo(a)anthracene	1.4	5.0	ug/kg
Chrysene	0.7	5.0	ug/kg
Benzo(b)fluoranthene	0.8	5.0	ug/kg
Benzo(j)fluoranthene	0.7	5.0	ug/kg
Benzo(k)fluoranthene	0.8	5.0	ug/kg
Benzo(e)pyrene	0.6	5.0	ug/kg
Benzo(a)pyrene	1.0	5.0	ug/kg
Indeno(1,2,3-cd)pyrene	0.4	5.0	ug/kg
Dibenzo(a,h)anthracene	0.7	5.0	ug/kg
Benzo(g,h,i)perylene	0.5	5.0	ug/kg
Perylene	0.4	5.0	ug/kg
Benzo(b)naphtho(2,1-d)thiophene	5.0	5.0	ug/kg
C1-Decalins	0.5	5.0	ug/kg
C2-Decalins	0.5	5.0	ug/kg
C3-Decalins	0.5	5.0	ug/kg
C4-Decalins	0.5	5.0	ug/kg

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METHOD DETECTION AND REPORTING LIMITS

EPA 8270E-SIM

Laboratory: Analytical Resources, Inc.
SDG: 21E0106
Client: Anchor QEA, LLC
Project: Gasco Siltronic - US Moorings
Matrix: Solid
Instrument: NT14

Analyte	MDL	RL	Units
C1-Naphthalenes	0.4	5.0	ug/kg
C2-Naphthalenes	0.4	5.0	ug/kg
C3-Naphthalenes	0.4	5.0	ug/kg
C4-Naphthalenes	0.4	5.0	ug/kg
C1-Fluorenes	0.5	5.0	ug/kg
C2-Fluorenes	0.5	5.0	ug/kg
C3-Fluorenes	0.5	5.0	ug/kg
C1-Dibenzothiophenes	0.7	5.0	ug/kg
C2-Dibenzothiophenes	0.7	5.0	ug/kg
C3-Dibenzothiophenes	0.7	5.0	ug/kg
C4-Dibenzothiophenes	0.7	5.0	ug/kg
C1-Phenanthrenes/Anthracenes	0.9	5.0	ug/kg
C2-Phenanthrenes/Anthracenes	0.9	5.0	ug/kg
C3-Phenanthrenes/Anthracenes	0.9	5.0	ug/kg
C4-Phenanthrenes/Anthracenes	0.9	5.0	ug/kg
C1-Fluoranthenes/Pyrenes	1.0	5.0	ug/kg
C2-Fluoranthenes/Pyrenes	1.0	5.0	ug/kg
C3-Fluoranthenes/Pyrenes	1.0	5.0	ug/kg
C4-Fluoranthenes/Pyrenes	1.0	5.0	ug/kg
C1-Benzo(a)anthracenes/Chrysenes	0.7	5.0	ug/kg
C2-Benzo(a)anthracenes/Chrysenes	0.7	5.0	ug/kg
C3-Benzo(a)anthracenes/Chrysenes	0.7	5.0	ug/kg
C4-Benzo(a)anthracenes/Chrysenes	0.7	5.0	ug/kg
C1-Benzothiophenes	0.4	5.0	ug/kg
C2-Benzothiophenes	0.4	5.0	ug/kg
C3-Benzothiophenes	0.4	5.0	ug/kg
C1-Naphthobenzothiophenes	2.5	5.0	ug/kg
C2-Naphthobenzothiophenes	2.5	5.0	ug/kg
C3-Naphthobenzothiophenes	2.5	5.0	ug/kg
C4-Naphthobenzothiopenes	2.5	5.0	ug/kg
C1-Dibenzo(a)anthracenes	0.7	5.0	ug/kg
C2-Dibenzo(a)anthracenes	0.7	5.0	ug/kg
C3-Dibenzo(a)anthracenes	0.7	5.0	ug/kg

Certificate of Analysis

SIGMA-ALDRICH

Product Name	2,4,6-Tribromophenol, 99%
Product Number	137715
Product Brand	ALDRICH
CAS Number	118-79-6
Molecular Formula	$Br_3C_6H_2OH$
Molecular Weight	330.80

TEST	SPECIFICATION	LOT 03410KL RESULTS
APPEARANCE	WHITE TO OFF-WHITE TO PINK FLAKES, CHUNKS,	OFF-WHITE CHIPS
INFRARED SPECTRUM	CONFORMS TO STRUCTURE.	CONFORMS TO STRUCTURE
MELTING POINT		93 DEGREES CELSIUS
GAS LIQUID CHROMATOGRAPHY		99.4 %

Barbara Rajzer, Supervisor
Quality Control
Milwaukee, Wisconsin USA

Please wait...

I 8244

660 Tower Lane • P.O. Box 599 • West Chester, PA 19381-0599
1-800-452-9994 • 1-610-692-3026 • Fax 1-610-692-8729
info@chemservice.com • www.chemservice.com

CERTIFICATE OF ANALYSIS

2-Chloronaphthalene

CATALOG NUMBER	N-10323-100MG
LOT NUMBER	7762100
DATE CERTIFIED	05/22/18
EXPIRATION DATE	05/31/24
CAS NUMBER	91-58-7
MOLECULAR FORMULA	C10H7Cl
MOLECULAR WEIGHT	162.62
STORAGE	Store in a cool dry place.
HANDLING	See Safety Data Sheet
INTENDED USE	For laboratory use only.
ISO GUIDE 34 CERTIFIED	[ ]

Analytical Test	Value
% PURITY (GC/FID)	99.5

Chem Service, Inc. guarantees the purity to be +/- 0.5% deviation prior to the expiration date shown on the label and exclusive of any customer contamination.

G010438
2-Chloronaphthalene NEAT
Solvent / Lot: NEAT
Prep: 11/10/2018 by VS
Exp: 5/31/2024
Location: BOX P

Certified By:

Mary Beth O'Donnell

Mary Beth O'Donnell
CSM/TC

COA Form
Revision 3 (3/2015)

660 Tower Lane • P.O. Box 599 • West Chester, PA 19381-0599
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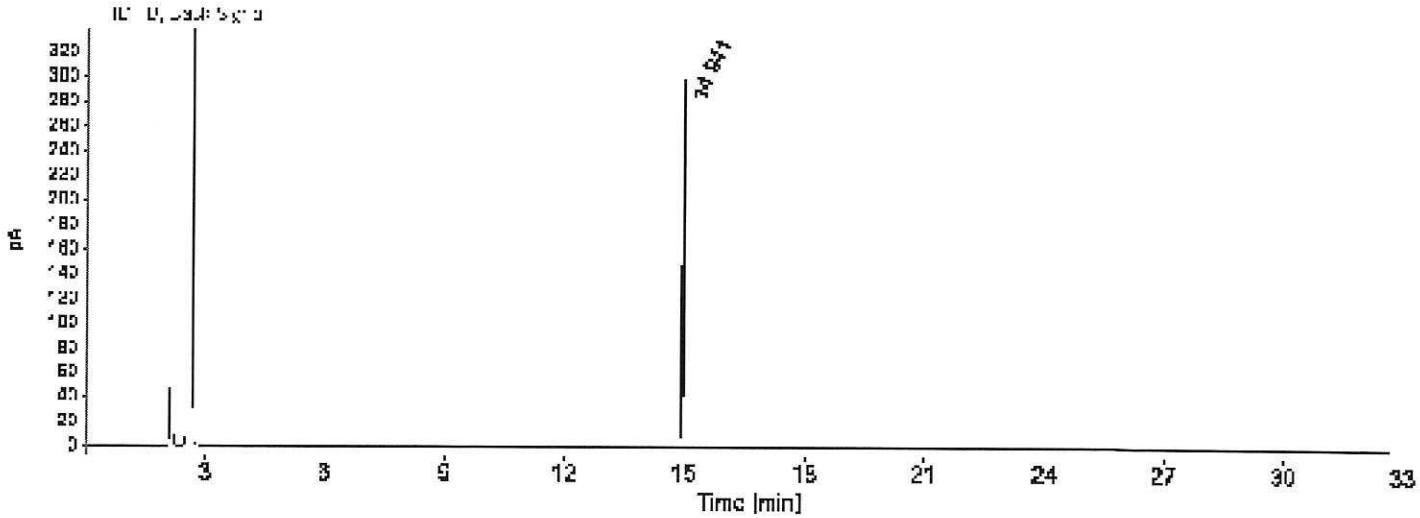
CERTIFICATE OF ANALYSIS

Gas Chromatography / Flame Ionization Detector (GC/FID)

Data file: C:\Chem32\1\Data\2018 Data\0518\2-Chloronaphthalene.D
Sample name: 2-Chloronaphthalene

Instrument: GC3 **Location:** 209
Injection date: 5/22/2018 1:12:52 PM **Injection volume:** 1.0uL
Acq. method: REAR_SCREEN.M
Col Type: pn# 7HG-G008-17-C **Diameter** 250.000 **Length** 30.000



Signal: FID1 B, Back Signal

RT [min]	Type	Width [min]	Area	Height	Area%
14.941	BB	0.0410	808.8124	308.5675	100.0000
		Sum	808.8124		

110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 31206 **Lot No.:** A0149213

Description : SV Internal Standard Mix 2mg/ml

SV Internal Standard Mix 2mg/ml 2000 µg/ml, Methylene Chloride, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : April 30, 2025 **Storage:** 10°C or colder

Handling: Sonication required. Mix is photosensitive.

C E R T I F I E D V A L U E S

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	1,4-Dichlorobenzene-d4	2,018.3 µg/mL	+/- 11.7348	µg/mL	Gravimetric
	CAS # 3855-82-1 (Lot PR-18488)		+/- 90.9069	µg/mL	Unstressed
	Purity 99%		+/- 100.8725	µg/mL	Stressed
2	Naphthalene-d8	2,013.2 µg/mL	+/- 11.7047	µg/mL	Gravimetric
	CAS # 1146-65-2 (Lot M-1452)		+/- 90.6742	µg/mL	Unstressed
	Purity 99%		+/- 100.6143	µg/mL	Stressed
3	Acenaphthene-d10	2,017.4 µg/mL	+/- 11.7294	µg/mL	Gravimetric
	CAS # 15067-26-2 (Lot PR-28021)		+/- 90.8657	µg/mL	Unstressed
	Purity 99%		+/- 100.8267	µg/mL	Stressed
4	Phenanthrene-d10	2,013.3 µg/mL	+/- 11.7057	µg/mL	Gravimetric
	CAS # 1517-22-2 (Lot PR-27621)		+/- 90.6817	µg/mL	Unstressed
	Purity 99%		+/- 100.6226	µg/mL	Stressed
5	Chrysene-d12	2,016.5 µg/mL	+/- 11.7241	µg/mL	Gravimetric
	CAS # 1719-03-5 (Lot PR-29295)		+/- 90.8244	µg/mL	Unstressed
	Purity 99%		+/- 100.7809	µg/mL	Stressed
6	Perylene-d12	2,013.8 µg/mL	+/- 11.7086	µg/mL	Gravimetric
	CAS # 1520-96-3 (Lot PR-27342)		+/- 90.7043	µg/mL	Unstressed
	Purity 99%		+/- 100.6476	µg/mL	Stressed

Solvent: Methylene chloride
CAS # 75-09-2
Purity 99%

Column:
30m x 0.25mm x 0.25µm
Rtx-5 (cat.#10223)

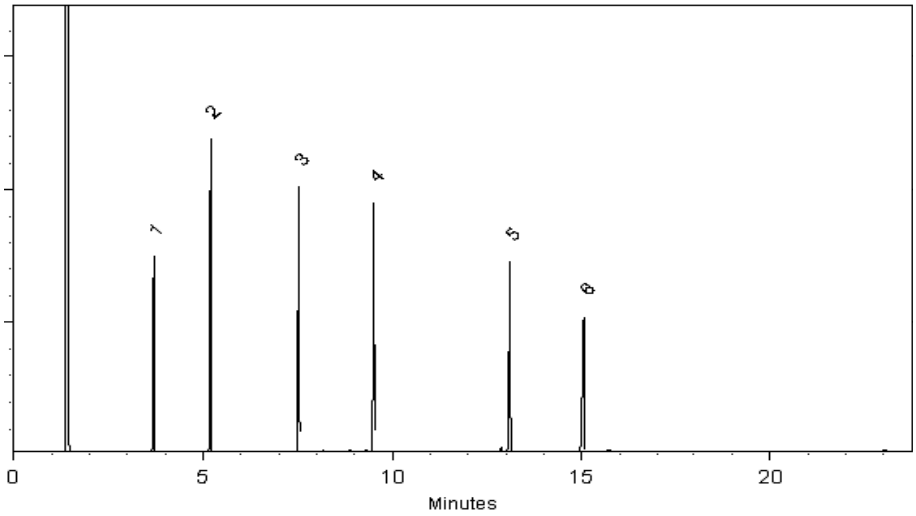
Carrier Gas:
hydrogen-constant pressure 10 psi.

Temp. Program:
75°C (hold 1 min.) to 330°C
@ 20°C/min. (hold 10 min.)

Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Walker Workman - Operations Technician I

Date Mixed: 15-May-2019 **Balance:** B345965662

Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 20-May-2019

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/µECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k\sqrt{U^2_{gravimetric} + U^2_{homogeneity} + U^2_{storage\ stability} + U^2_{shipping\ stability}}$$

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampules. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

SIGMA-ALDRICH®

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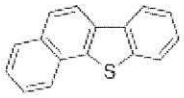
3050 Spruce Street, Saint Louis, MO 63103, USA
Website: www.sigmaaldrich.com
Email USA: techserv@sial.com
Outside USA: eurtechserv@sial.com

Certificate of Analysis

Product Name:
1,2-Benzodiphenylene sulfide - 99%

Product Number:	**255122**
Batch Number:	**MKCL4273**
Brand:	ALDRICH
CAS Number:	239-35-0
MDL Number:	MFCD00010043
Formula:	C16H10S
Formula Weight:	234.32 g/mol
Quality Release Date:	25 NOV 2019



Test	Specification	Result
Appearance (Color)	White to Off White	White
Appearance (Form) Crystalline Powder or Solid	Conforms to Requirements	Powder
Infrared Spectrum	Conforms to Structure	Conforms
Carbon Content	80.8 - 83.2 %	82.0 %
Nitrogen Content	13.4 - 14.0 %	13.7 %
Purity (TLC)	≥ 99 %	> 99 %
Solubility (Turbidity) 2.5% in CHCL3	Clear to Slightly Hazy	Clear
Solubility (Color)	Colorless to Faint Yellow	Colorless

Michael Grady, Manager
Quality Control
Milwaukee, WI US

I000979
Benzo(b)naphtho(2,1-d)thiophene
Solvent / Lot: NA
Prep: 1/31/2020 by VS
Exp: 7/29/2040
Location: R-19

Cambridge Isotope Laboratories, Inc.

Certificate of Analysis

Product Name:
(Isotopic Label & Enrichment Specification)

DI-N-OCTYL PHTHALATE
(RING-D4, 98%)

Lot Number: PR-14719

Catalog Number: DLM-1630-0

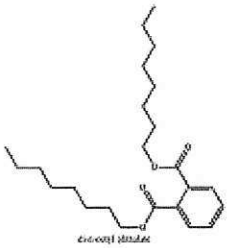
Product Information

Chemical Purity Specification: ≥ 98%

MW*: 394.58
** For isotopically labeled compounds, MW listed is for the fully enriched product.*

Labeled CAS Number: 93952-13-7

Unlabeled CAS Number: 117-84-0



Chemical Formula: C6D4-1,2-(CO2(CH2)7CH3)2

Storage: Store at room temperature away from light and moisture.

Intended Use: For Research Use Only. Not for use in diagnostic procedures.

Certification

Cambridge Isotope Laboratories, Inc. guarantees that this material meets or exceeds the specifications stated. Absolute identity as well as chemical and isotopic purities are assured by the use of unambiguous synthetic routes and multiple chemical analyses whenever possible. Results are representative of QC testing at time of release from Quality Control unless otherwise stated.

The retest date for this chemical has been designated based on CIL's experience in working with chemical standards for over 30 years, and includes review of actual analytical results and relevant literature references. The retest date is valid only for unopened vials or ampoules that have been stored as recommended.

Approved by: Jeffrey O Neill
Jeffrey O'Neill, Quality Review

Quality Control Tests and Results

1H NMR for Chemical Purity	Pass
GC/MS for Chemical Purity	99.8%
GC/MS for Isotopic Enrichment	99.1%

I2078
I2079
I2080

Additional Testing Information:
Retest/Review Date: 01/17/23

CIL subscribes to the following standards for different products: ISO Guide 34, ISO/IEC 17025, ISO 13485 and cGMP as appropriate.

110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

ACCREDITED
ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 33913 **Lot No.:** A0154854

Description : SOM01.0 SIM Analysis Standard

SOM01.0 SIM Analysis Standard 2000µg/mL, Methylene chloride, 1mL /ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : October 31, 2025 **Storage:** 10°C or colder

Handling: Sonication required. Mix is photosensitive.

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	2-Methylnaphthalene-d10 **CAS #** 7297-45-2 (Lot AC-257) **Purity** 98%	2,017.8 µg/mL	+/- 11.8417 µg/mL Gravimetric +/- 90.8981 µg/mL Unstressed +/- 100.8597 µg/mL Stressed	
2	Fluoranthene-d10 **CAS #** 93951-69-0 (Lot PR-20668) **Purity** 98%	1,999.2 µg/mL	+/- 11.7324 µg/mL Gravimetric +/- 90.0593 µg/mL Unstressed +/- 99.9290 µg/mL Stressed	

Solvent: Methylene chloride
CAS # 75-09-2
Purity 99%

I 4369

Cambridge Isotope Laboratories, Inc.

Certificate of Analysis

Product Name: DIBENZ[A,H]ANTHRACENE
(Isotopic Label & Enrichment Specification) (D14, 98%)

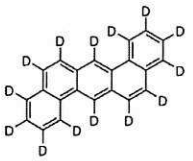
Lot Number: PR-30906

Catalog Number: DLM-677-0

Product Information

Chemical Purity Specification: ≥ 98%

MW*: 292.43
** For isotopically labeled compounds, MW listed is for the fully enriched product.*



Labeled CAS Number: 13250-98-1

Unlabeled CAS Number: 53-70-3

Chemical Formula: C22D14

I4874

Storage: Store at room temperature away from light and moisture.

Intended Use: For Research Use Only. Not for use in diagnostic procedures.

Certification

Cambridge Isotope Laboratories, Inc. guarantees that this material meets or exceeds the specifications stated. Absolute identity as well as chemical and isotopic purities are assured by the use of unambiguous synthetic routes and multiple chemical analyses whenever possible. Results are representative of QC testing at time of release from Quality Control unless otherwise stated.

The retest date for this chemical has been designated based on CIL's experience in working with chemical standards for over 30 years, and includes review of actual analytical results and relevant literature references. The retest date is valid only for unopened vials or ampoules that have been stored as recommended.

Approved by: Sashi Sivendran-Basak

Sashi Sivendran-Basak, Ph.D., Quality Review

Quality Control Tests and Results

1H NMR for Chemical Purity	Pass
1H NMR for Isotopic Enrichment	99.4%
2H NMR for Chemical Purity	Pass
GC/FID for Chemical Purity	99.4%
GC/MS for Identification	Conforms
Melting Point Range Determination	261-267°C

Additional Testing Information:

CIL subscribes to the following standards for different products: ISO Guide 34, ISO/IEC 17025, ISO 13485 and cGMP as appropriate.

phenomenex

Certificate of Analysis

Phenova Certified Reference Materials are sold by Phenomenex.
411 Madrid Ave., Torrance, CA 90501 USA ▪ Tel: 310-212-0555 ▪ Fax: 310-328-7768 ▪ info@phenomenex.com
Access your MSDS and digital C of A at **www.phenomenex.com/mysupport. Re-order at www.phenomenex.com/standards**

Certified Reference Material

This product is included in Phenova's ISO/IEC 17025 and ISO Guide 34 Scopes of Accreditation

Catalog No.:	AL0-101291	**Lot Number:**	CL10999
Description:	GC/MS Tuning Mix	**Certification Date:**	May 9, 2014
Storage:	4 °C	**Expiration Date:**	December 31, 2023
Provided As:	1 mL in 2 mL Ampoule in Methylene chloride	**Revision Date:**	June 19, 2015

Andrea L Gill

Andrea Gill, Certified Reference Materials Manager

Component	CAS #	Certified Value µg/mL	Expanded Uncertainty (%)
Benzidine	92-87-5	1000	± 4.575%
Decafluorotriphenylphosphine (DFTPP)	5074-71-5	1000	± 2.420%
4,4'-DDT	50-29-3	1000	± 2.772%
Pentachlorophenol	87-86-5	1000	± 2.616%

I 5998

ACCREDITED
Reference Material Producer
Certificate No. 2427.02

phenova
Certified Reference Materials

Manufactured by Phenova, Inc.
Phenova's testing and calibration results are internationally recognized through the ILAC MRA. Phenova is an accredited ISO Guide 34 Reference Material Provider and ISO/IEC 17025 accredited Chemical Testing Laboratory.

ilac-MRA ACCREDITED
Chemical Testing Laboratory
Certificate No. 2427.03

IL11110613_us

Certificate of Analysis

Produced by Phenova
6390 Joyce Drive STE 100, Golden, CO 80403 USA ▪ Tel: 303-940-0033 ▪ Fax: 303-940-0043 ▪ info@phenova.com
Access your Safety Data Sheets and digital Certificates at www.phenova.com/documents.

1. Quality Document: This Certificate of Analysis has been created in accordance with ISO Guide 31[1] and ISO Guide 35.[2]

2. Quality Standards: Phenova is accredited by A2LA to ISO 17034[3] and ISO/IEC 17025[4] as a producer of Certified Reference Materials and Reference Materials. This ensures that our manufacturing processes have been accredited to and meet strict international standards.

3. Intended Use: The product is manufactured for use in calibration, calibration verification, quantification, identification and other appropriate analytical control applications. The product is intended for routine laboratory analysis and research purposes only. Only trained personnel should handle this product.

4. Handling and Usage Notes: Store according to recommended conditions listed and avoid prolonged exposure to light. Visually inspect the solution inside the ampoule for any un-dissolved material. If particulate is visible, sonicate the unopened ampoule until material is fully dissolved. Dilute as required, use only class A glassware and diluents compatible with all analytes in the mixture. Considerations should be made related to repeated use of the opened product. Once opened, exposure to light, air, heat, objects, and additional transfer vessels may cause evaporation, degradation or contamination resulting in changes in concentration, uncertainty and stability duration. Store opened standards in a clean, tightly capped vessel under the recommended temperature. Appropriate controls, such as the use of additional verification standards should be used to confirm the opened product is fit for purpose under repeated use conditions.

5. Hazardous Situation: The product is intended for use by experienced professional personnel. A Safety Data Sheet (SDS) is available at www.phenova.com/documents.

6. Level of Homogeneity: The product has been certified to guarantee the certified values and their uncertainties at a volume of 25 µL.

7. Certified Value: Certified Value is based upon gravimetric and volumetric preparation using calibrated balances and Class A glassware.

8. Raw Materials and Purity: Phenova reference standard products are prepared from the highest quality starting materials. The purity of this material was verified using an ISO/IEC 17025 methodology.

9. Expanded Uncertainty: The expanded uncertainty (uCRM) as stated is determined in accordance with ISO/IEC Guide 98[5] and ISO Guide 35 incorporating Type A standard uncertainty at a 95% confidence level. The uncertainty contains elements of manufacturing (uM), homogeneity analysis (uH) and long-term stability testing (uLTS). The uncertainty is calculated based on the root-sum-of-squares equation times a coverage factor (k=2).

$$uCRM = k\sqrt{uM^2 + uH^2 + uLTS^2}$$

Transport conditions (short-term stability) have been tested such that there is no contribution to the uncertainty reported. The expanded uncertainty applies to the product as received.

10. Metrological Traceability: The property value (certified value and its uncertainty) are traceable through an unbroken chain of calibration to the SI base unit kg through a NIST traceable weight in accordance with ISO 17034. This is achieved through calibration of balances, verification of weights, use of national methodology for glassware calibration and product homogeneity and stability testing utilizing an ISO/IEC 17025 methodology.

11. Values Obtained During Product Testing: This product is subjected to verification, homogeneity and stability testing using an ISO/IEC 17025 chromatographic methodology. All values obtained during testing meet criteria in accordance with ISO 17034.

12. Period of Validity: The Certified Values, Uncertainties and Expiration Date are based on the unopened product being stored according to the recommended storage condition listed and are guaranteed until the expiration date. This product will be monitored during the period of validity and customers notified of any significant changes in stability.

References:

[1] ISO Guide 31 – Reference Materials – Contents of Certificates and Labels.
[2] ISO Guide 35 – Reference Material – General and Statistical Principles for Certification.
[3] ISO 17034 – General Requirements for the Competence of Reference Material Producers.
[4] ISO/IEC 17025 – General Requirements for the Competence of Testing and Calibration Laboratories.
[5] ISO/IEC Guide 98-3:2008(E) – Uncertainty of Measurement – Part 3: Guide to Expression of Uncertainty in Measurement (GUM: 1995)

Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT

Part Number: 93462
Lot Number: 092220
Description: PAH Standard
30 components
Expiration Date: 092225
Recommended Storage: Refrigerate (4 °C)
Nominal Concentration (µg/mL): 1000
NIST Test ID#: 23060

Solvent(s): Methylene chloride **Lot#** 102669

5E-05 Balance Uncertainty
Volume(s) shown below were combined and diluted to (mL): 20.0 0.003 Flask Uncertainty

Formulated By:	Benson Chan	092220 DATE
Reviewed By:	Pedro L. Rentas	092220 DATE

SDS Information
(Solvent Safety Info. On Attached pg.)

	Compound	Part Number	Lot Number	Dil. Factor	Initial Vol. (mL)	Uncertainty Pipette (mL)	Initial Conc.(ug/mL)	Final Conc.(ug/mL)	Expanded Uncertainty (+/-) (µg/mL)	CAS#	OSHA PEL (TWA)	LD50
1.	Acenaphthene	10007	060118	0.50	10.00	0.042	2000.1	999.5	9.3	83-32-9	N/A	ipr-rat 600mg/kg
2.	Acenaphthylene	10007	060118	0.50	10.00	0.042	2000.2	999.5	9.4	208-96-8	N/A	N/A
3.	Anthracene	10007	060118	0.50	10.00	0.042	2000.3	999.5	9.3	120-12-7	0.2mg/m3 (8H)	ipr-mus 430mg/kg
4.	Benzo(a)anthracene	10007	060118	0.50	10.00	0.042	2000.9	999.9	9.4	56-55-3	N/A	N/A
5.	Benzo(a)pyrene	10007	060118	0.50	10.00	0.042	2000.3	999.6	9.3	50-32-8	0.2mg/m3 (8H)	scu-rat 50mg/kg
6.	Benzo(b)fluoranthene	10007	060118	0.50	10.00	0.042	2000.7	999.8	9.4	205-99-2	N/A	N/A
7.	Benzo(k)fluoranthene	10007	060118	0.50	10.00	0.042	2000.6	999.7	9.4	207-08-9	N/A	N/A
8.	Benzo(g,h,i)perylene	10007	060118	0.50	10.00	0.042	2000.4	999.6	9.3	191-24-2	N/A	N/A
9.	Carbazole	10007	060118	0.50	10.00	0.042	2000.7	999.7	9.4	86-74-8	N/A	ipr-mus 200mg/kg
10.	Chrysene	10007	060118	0.50	10.00	0.042	2000.4	999.6	9.4	218-01-9	0.2mg/m3	N/A
11.	Dibenzo(a,h)anthracene	10007	060118	0.50	10.00	0.042	2000.5	999.7	9.4	53-70-3	0.2mg/m3	N/A
12.	Fluoranthene	10007	060118	0.50	10.00	0.042	2000.5	999.6	9.4	206-44-0	N/A	orl-rat 2000mg/kg
13.	Fluorene	10007	060118	0.50	10.00	0.042	2000.4	999.6	9.4	86-73-7	N/A	ipr-mus 2 g/kg
14.	Indeno(1,2,3-cd)pyrene	10007	060118	0.50	10.00	0.042	2000.3	999.5	9.4	193-39-5	N/A	N/A
15.	Naphthalene	10007	060118	0.50	10.00	0.042	2000.8	999.8	9.4	91-20-3	10 ppm (50mg/m3/8H)	orl-rat 490mg/kg
16.	Phenanthrene	10007	060118	0.50	10.00	0.042	2000.8	999.8	9.4	85-01-8	0.2mg/m3/8H	orl-mus 700mg/kg
17.	Pyrene	10007	060118	0.50	10.00	0.042	2000.0	999.4	9.4	129-00-0	0.2mg/m3/8H	orl-rat 2700mg/kg
18.	Benzo(e)pyrene	94851	021119	0.50	10.00	0.042	2001.6	1000.2	9.4	192-97-2	N/A	N/A
19.	Biphenyl	94851	021119	0.50	10.00	0.042	2003.6	1001.2	9.4	92-52-4	0.2 ppm(1mg/m3/8H)	orl-rat 2400mg/kg
20.	Decalin (49% cis, 51% trans)	94851	021119	0.50	10.00	0.042	2004.1	1001.4	9.4	91-17-8	N/A	N/A
21.	Dibenzofuran	94851	021119	0.50	10.00	0.042	2000.9	999.9	9.4	132-64-9	N/A	N/A
22.	Dibenzothiophene	94851	021119	0.50	10.00	0.042	2002.7	1000.7	9.4	132-65-0	N/A	orl-mus 470 mg/kg
23.	2,6-Dimethylnaphthalene	94851	021119	0.50	10.00	0.042	2000.7	999.8	9.4	581-42-0	N/A	N/A
24.	1-Methylnaphthalene	94851	021119	0.50	10.00	0.042	2001.0	999.9	9.4	90-12-0	N/A	orl-rat 1840mg/kg
25.	2-Methylnaphthalene	94851	021119	0.50	10.00	0.042	2001.6	1000.2	9.4	91-57-6	N/A	orl-rat 1630mg/kg
26.	1-Methylphenanthrene	94851	021119	0.50	10.00	0.042	2003.3	1001.1	13.2	832-69-9	N/A	N/A
27.	Pentachlorophenol	94851	021119	0.50	10.00	0.042	2003.0	1000.9	9.4	87-86-5	0.5mg/m3/8H (skin)	orl-rat 27mg/kg
28.	Perylene	94851	021119	0.50	10.00	0.042	2003.3	1001.0	9.4	198-55-0	N/A	N/A
29.	Thianaphthene	94851	021119	0.50	10.00	0.042	2000.3	999.6	9.4	95-15-8	N/A	N/A
30.	2,3,5-Trimethylnaphthalene	94851	021119	0.50	10.00	0.042	2003.3	1001.0	9.5	2245-38-7	N/A	N/A

- The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
- Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
- Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
- All Standards, after opening ampule, should be stored with caps tight and under appropriate laboratory conditions.
- Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, DC, (1994).

I009060
SVOA PAH STD-RMP-1000ug/ml
Solvent / Lot: 092220
Prep: 10/3/2020 by VS
Exp: 9/22/2025
Location: Fridge 19

Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT

Part Number: 70476
Lot Number: 092220
Description: Benzo(j)fluoranthene

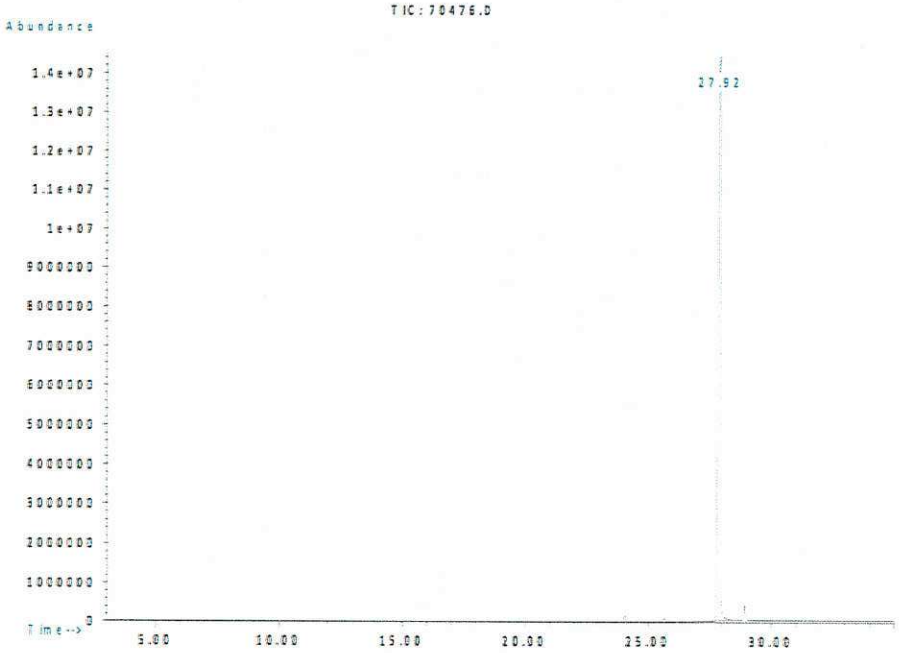
Solvent(s): **Lot#**
Methylene chloride 104929

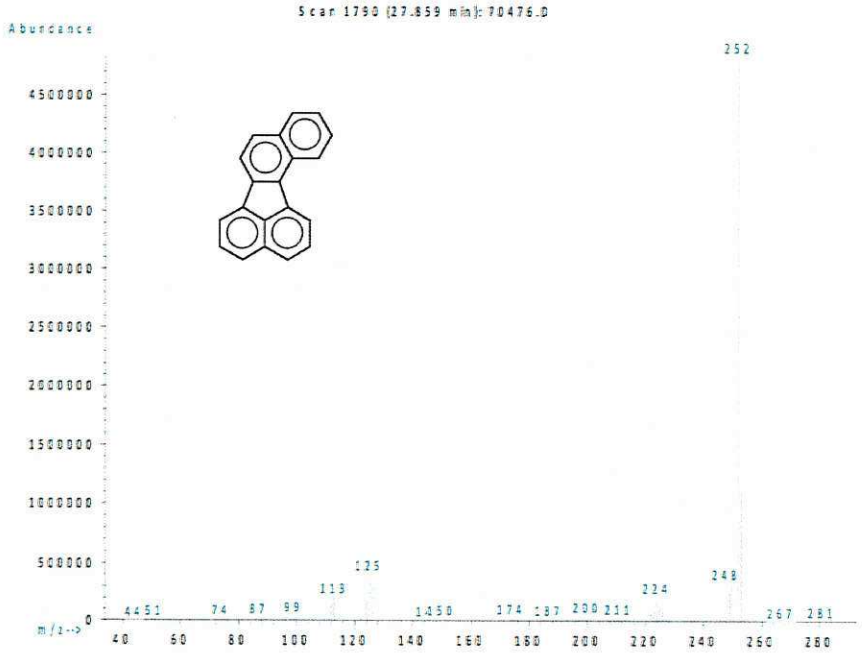
Expiration Date: 092225
Recommended Storage: Refrigerate (4 °C)
Nominal Concentration (µg/mL): 1000
NIST Test ID#: 23060 5E-05 Balance Uncertainty
Weight(s) shown below were combined and diluted to (mL): 25.0 0.001 Flask Uncertainty

Formulated By: Benson Chan	092220 DATE
Reviewed By: Pedro L. Rentas	092220 DATE

Compound	RM#	Lot Number	Nominal Conc (µg/mL)	Purity (%)	Uncertainty Purity	Target Weight(g)	Actual Weight(g)	Actual Conc (µg/mL)	Expanded Uncertainty (+/-) (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50
1. Benzo(j)fluoranthene	476	3-CSZ-153-20	1000	98.1	0.2	0.02547	0.02552	1001.8	5.7	205-82-3	0.2mg/m3	N/A

Method GC8MSD1M: Column:SBB-5 (30m X 0.25mm ID X 0.25µm film thickness) Temp 1 = 50°C (1min.), Temp 2 = 300°C (9 min.), Rate = 10°C/min., Injector B= 200°C, Detector B = 290°C, Split Ratio = 100:1, Scan Rate = 2. Analysis performed by Candice Warren.





- The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
- Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
- Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
- All Standards, after opening ampule, should be stored with caps tight and under appropriate laboratory conditions.
- Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, DC, (1994).

I009061
Benzo(j)fluoranthene 1000ug/mL
Solvent / Lot: 092220
Prep: 10/3/2020 by VS
Exp: 9/22/2025
Location:

RESTEK® CERTIFIED REFERENCE MATERIAL

110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

www.restek.com

ACCREDITED
ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

Certificate of Analysis

ilac-MRA

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

11/19/2020

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 31206 **Lot No.:** A0162879

Description : SV Internal Standard Mix 2mg/ml

SV Internal Standard Mix 2mg/ml 2000 µg/ml, Methylene Chloride, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : June 30, 2026 **Storage:** 10°C or colder

Handling: Sonication required. Mix is photosensitive.

I010724
SVOA 8270 IS Mix-2mg/ml
Solvent / Lot: DCM
Prep: 11/19/2020 by JZ
Exp: 5/31/2026
Location: GC

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	1,4-Dichlorobenzene-d4		2,014.5 µg/mL	+/- 11.7123	µg/mL	Gravimetric
	CAS # 3855-82-1	(Lot PR-18488)		+/- 90.7328	µg/mL	Unstressed
	Purity 99%			+/- 100.6792	µg/mL	Stressed
2	Naphthalene-d8		2,014.9 µg/mL	+/- 11.7150	µg/mL	Gravimetric
	CAS # 1146-65-2	(Lot M-1452)		+/- 90.7538	µg/mL	Unstressed
	Purity 99%			+/- 100.7026	µg/mL	Stressed
3	Acenaphthene-d10		2,011.9 µg/mL	+/- 11.6972	µg/mL	Gravimetric
	CAS # 15067-26-2	(Lot PR-30913)		+/- 90.6157	µg/mL	Unstressed
	Purity 99%			+/- 100.5493	µg/mL	Stressed
4	Phenanthrene-d10		2,015.7 µg/mL	+/- 11.7196	µg/mL	Gravimetric
	CAS # 1517-22-2	(Lot PR-29119)		+/- 90.7898	µg/mL	Unstressed
	Purity 99%			+/- 100.7425	µg/mL	Stressed
5	Chrysene-d12		2,004.0 µg/mL	+/- 11.6514	µg/mL	Gravimetric
	CAS # 1719-03-5	(Lot PR-30486)		+/- 90.2614	µg/mL	Unstressed
	Purity 99%			+/- 100.1561	µg/mL	Stressed
6	Perylene-d12		2,013.6 µg/mL	+/- 11.7072	µg/mL	Gravimetric
	CAS # 1520-96-3	(Lot PR-30020)		+/- 90.6938	µg/mL	Unstressed
	Purity 99%			+/- 100.6359	µg/mL	Stressed

Solvent: Methylene chloride
CAS # 75-09-2
Purity 99%

Column:
30m x 0.25mm x 0.25µm
Rtx-5 (cat.#10223)

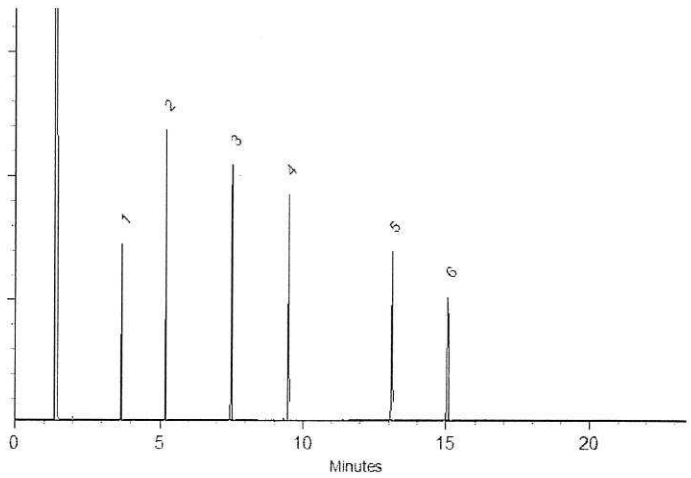
Carrier Gas:
hydrogen-constant pressure 10 psi.

Temp. Program:
75°C (hold 1 min.) to 330°C
@ 20°C/min. (hold 10 min.)

Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Cydnei L. Crust
Cydnei L. Crust - Mix Technician

Date Mixed: 23-Jul-2020 **Balance:** B251644995

Justine Albertson - Operations Tech-ARM QC

Date Passed: 24-Jul-2020

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/µECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k\sqrt{U^2_{gravimetric} + U^2_{homogeneity} + U^2_{storage\ stability} + U^2_{shipping\ stability}}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer) -20°C or colder (Deep Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampules. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.

Analytical Resources, Incorporated
Analytical Chemists and Consultants

USMPDI-028SG-210504

Form I
ORGANIC ANALYSIS DATA SHEET
NWTPH-Dx
TPH (Extractables) low level

Laboratory:	Analytical Resources, Inc.				
Client:	Anchor QEA, LLC				
Project:	Gasco Siltronic - US Moorings				
Matrix:	Sediment	Laboratory ID:	21E0106-01 A	SDG:	21E0106
Sampled:	05/04/21 00:00	Prepared:	05/17/21 10:37	File ID:	421E2046.D
% Solids:	47.16	Preparation:	EPA 3546 (Microwave)	Analyzed:	05/21/21 04:56
Batch:	BJE0366	Sequence:	SJE0284	Initial/Final:	10 g Wet / 1 mL
Instrument:	FID4	Column:	RTX-1	Calibration:	ED00037

CAS NO.	COMPOUND	DILUTION	CONC: (mg/kg dry)	Q	DL	RL
DRO	Diesel Range Organics (C12-C24)	1	19.2		4.96	10.6
RRO	Motor Oil Range Organics (C24-C38)	1	114		6.34	21.2

SURROGATES	ADDED: (mg/kg dry)	FOUND: (mg/kg dry)	% REC	QC LIMITS	Q
o-Terphenyl	23.855	19.0	79.8	50 - 150	

Data File: \\target\share\chem2\fid4a.i\20210520.b\421E2046.D

Date : 21-MAY-2021 04:56

Client ID:

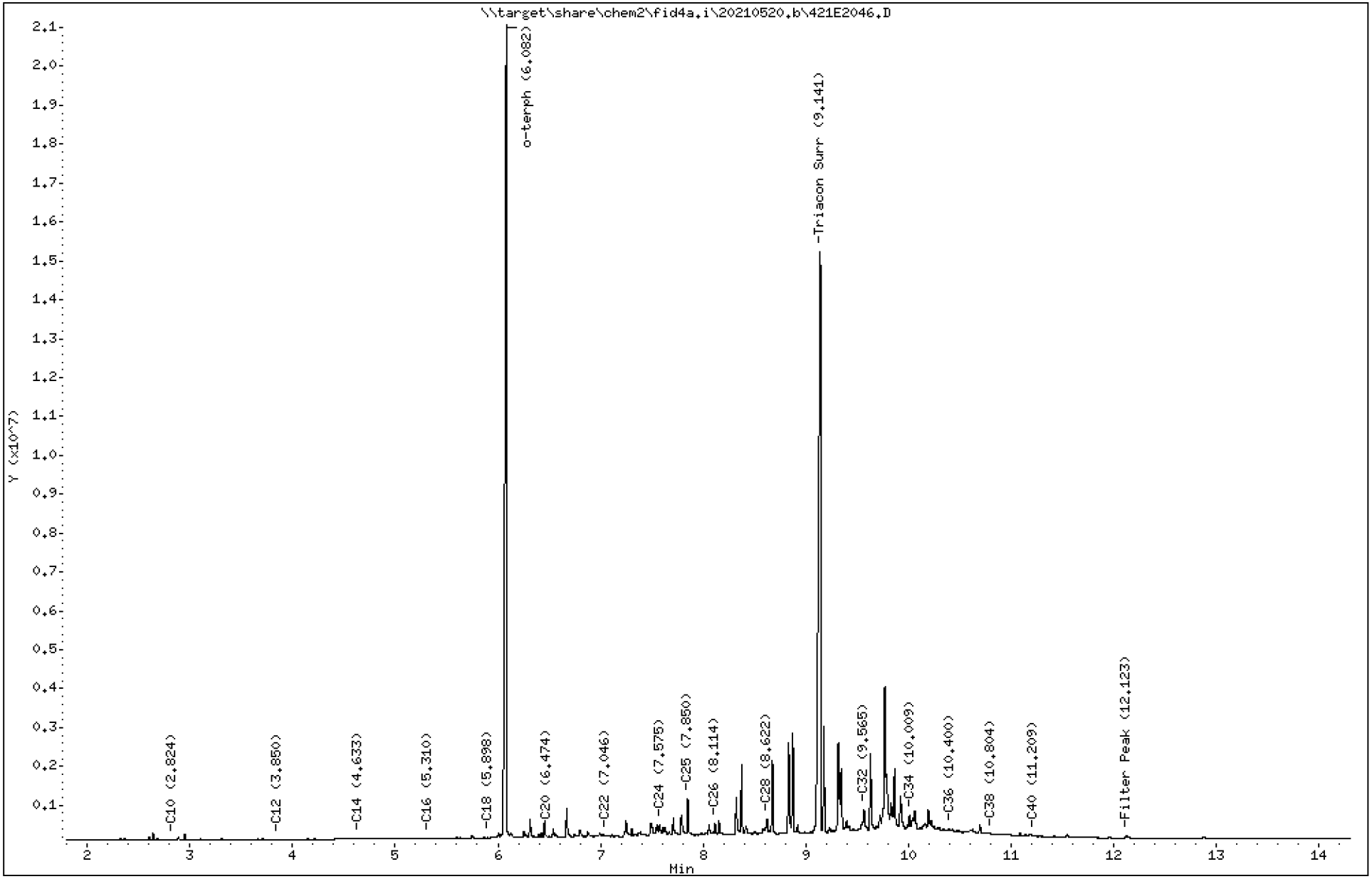
Instrument: fid4a.i

Sample Info: 21E0106-01

Operator: CTO

Column phase: RTX-1

Column diameter: 0.25



Analytical Resources Inc.
TPH Quantitation Report

Data file: 20210520.b/421E2046.D
Method: 20210520.b\FID4TPH.m
Instrument: fid4a.i, CTO
Report Date: 05/21/2021
Macro: 09-SEP-2019
Calibration Dates: Gas:XX-XXX-XXXX Diesel:14-APR-2021 M.Oil:14-APR-2021

ARI ID: 21E0106-01
Client ID:
Injection: 21-MAY-2021 04:56
Dilution Factor: 1
RT Std: 419H1603.D

FID:4A RESULTS

Compound	RT	Shift	Height	Area	Method	Range	Total Area	Conc(mg/L)
C8	1.525	-0.012	14749	19287	WATPHD	(C12-C24)	16559636	90.6
C10	2.824	-0.007	10207	7645	WATPHM	(C24-C38)	70358894	535.3
C12	3.850	0.003	9746	2415	AK102	(C10-C25)	19448406	90.3
C14	4.633	0.002	50045	95097	AK103	(C25-C36)	63599635	629.3
C16	5.310	0.005	29019	35247	OR.DIES	(C10-C28)	33353896	170.2
C18	5.898	-0.010	64645	112631				
C20	6.474	0.001	107444	94527	JET-A	(C10-C18)	3977628	27.1
C22	7.046	0.010	110852	113271				
C24	7.575	-0.014	396634	651039				
C25	7.850	-0.010	1039539	927962				
C26	8.114	-0.011	426018	556966				
C28	8.622	-0.012	526443	961049				
C32	9.565	-0.009	773572	1501876				
C34	10.009	0.005	647773	751657				
Filter Peak	12.123	-0.016	91605	352989	BUNKERC	(C10-C38)	87493587	1949.0
C36	10.400	-0.012	272758	322909				
C38	10.804	0.003	147269	51226				
C40	11.209	0.008	96711	121175				
o-terph	6.082	-0.001	20958780	22359923				
Triacon Surr	9.141	-0.002	14890784	20618514	NAS DIES	(C10-C24)	17134693	87.8

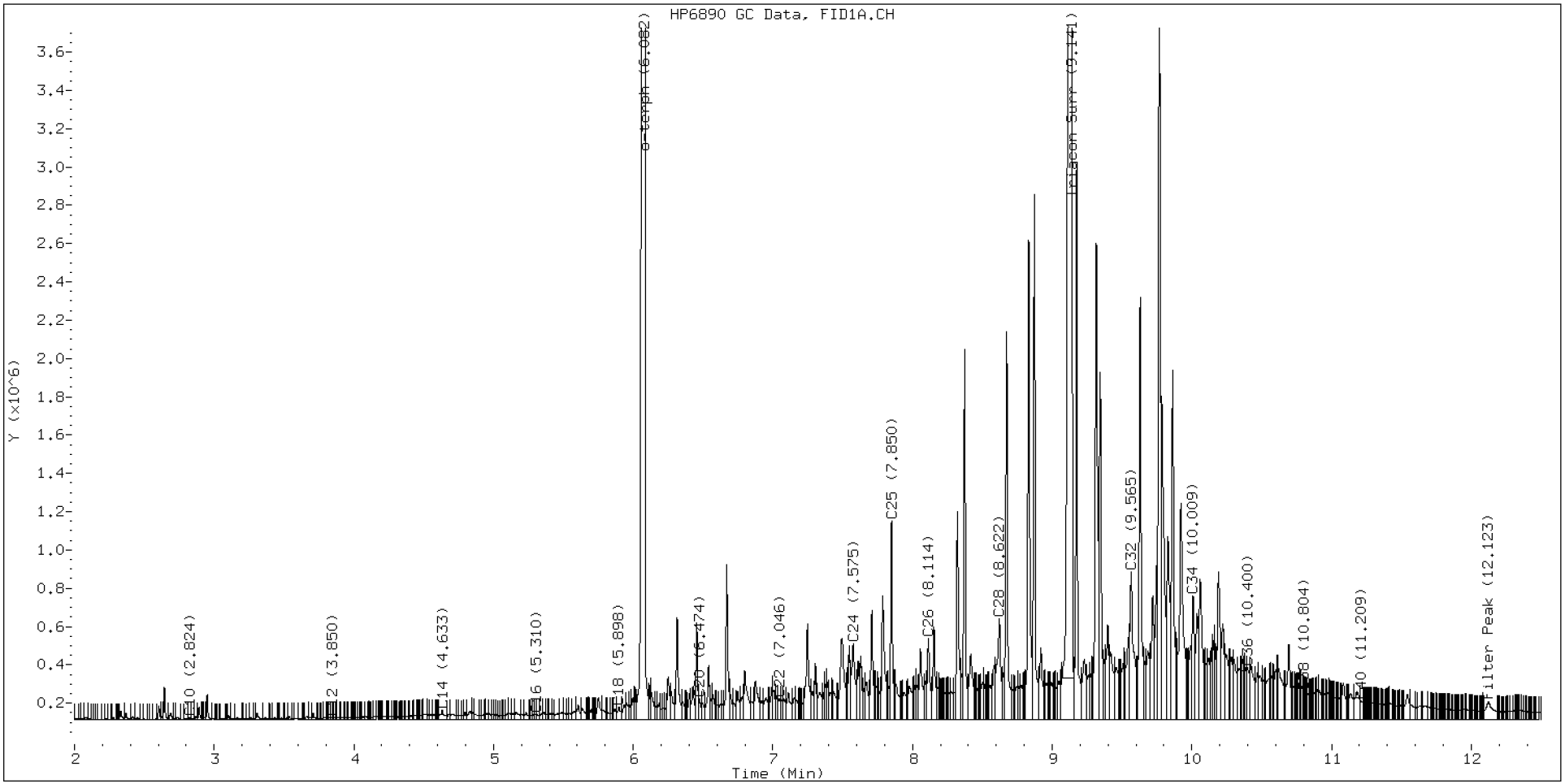
Range Times: NW Diesel(3.846 - 7.589) AK102(2.83 - 7.86) Jet A(2.83 - 5.91)
NW M.Oil(7.59 - 10.80) AK103(7.86 - 10.41) OR Diesel(2.83 - 8.63)

Surrogate	Area	Amount	
o-Terphenyl	22359923	89.8	
Triacontane	20618514	97.3	M

M Indicates the peak was manually integrated

Analyte	RF	Curve Date
o-Terph Surr	249011.3	25-OCT-2019
Triacon Surr	211827.9	25-OCT-2019
Gas	15000.0	XX-XXX-XXXX
Diesel	182831.3	14-APR-2021
Motor Oil	131440.7	14-APR-2021
AK102	215421.2	14-APR-2021
AK103	101056.3	14-APR-2021
JetA	146652.4	20-MAY-2020
OR Diesel	195999.1	25-OCT-2019
NAS Diesel	195148.2	25-OCT-2019
Bunker C	44892.5	21-APR-2021

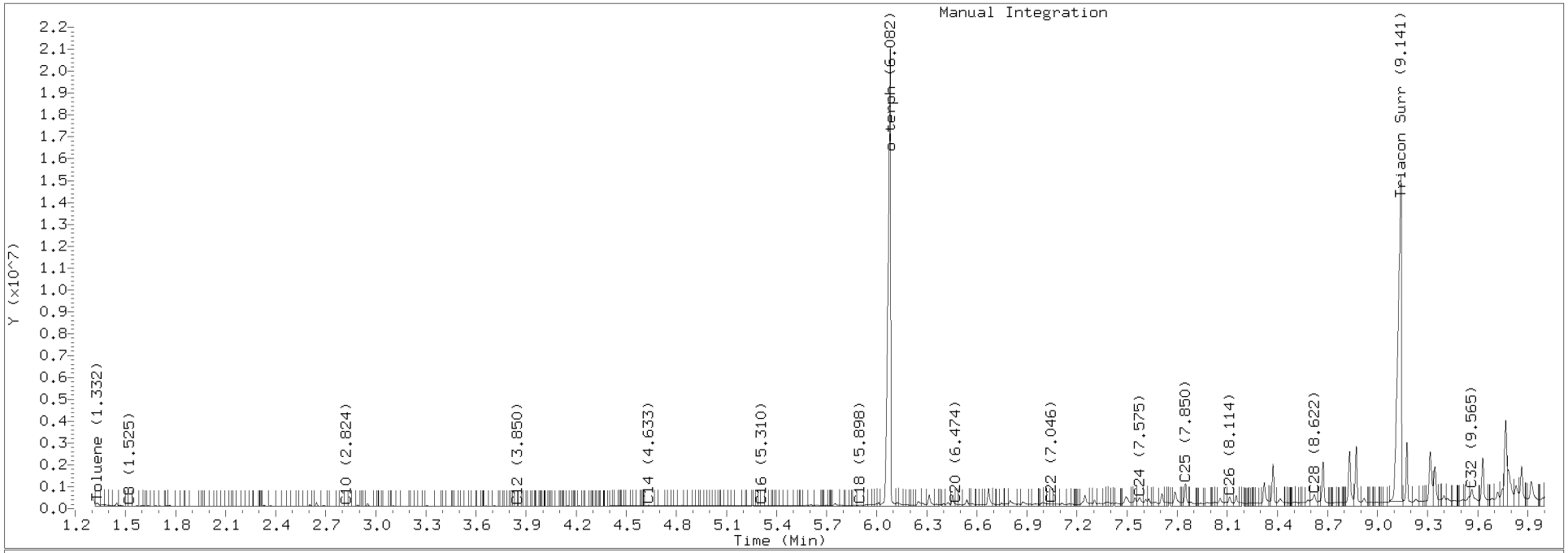
Datafile: FID4A, 20210520.b/421E2046.D 21E0106-01

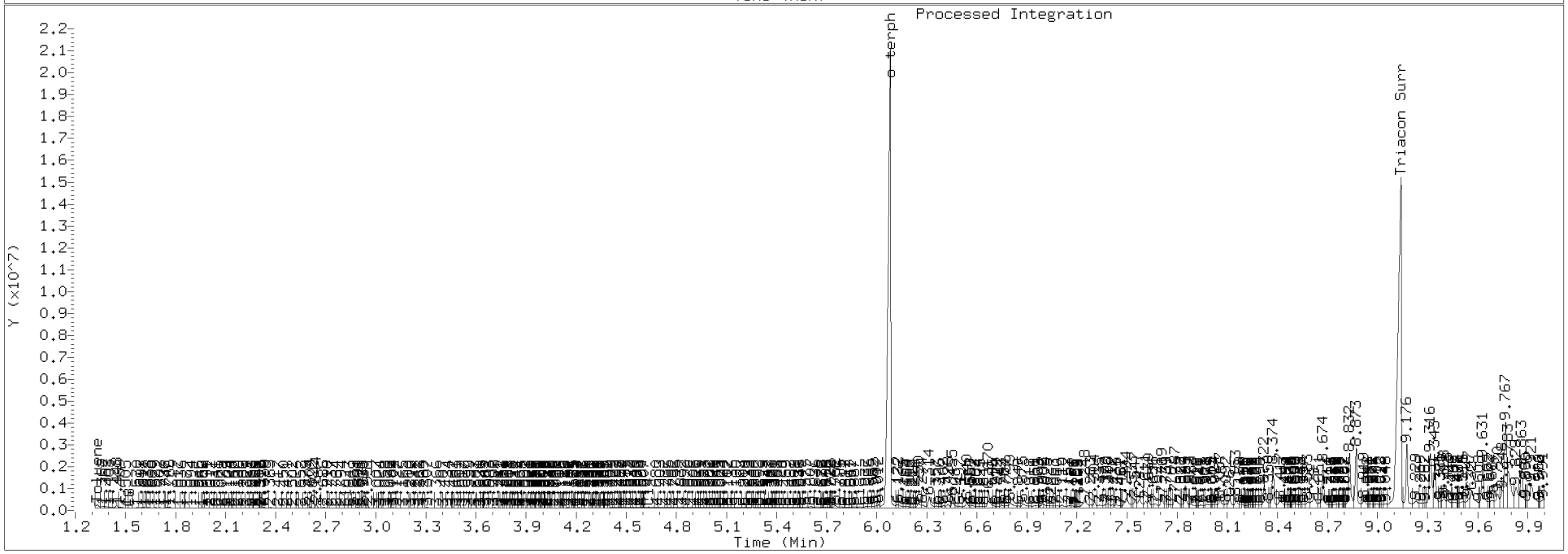


TPH Manual Integrations Report

Datafile: FID4A, 20210520.b/421E2046.D Injection: 21-MAY-2021 04:56

Lab ID:21E0106-01





Analytical Resources, Incorporated
Analytical Chemists and Consultants

USMPDI-030SG-210504

Form I
ORGANIC ANALYSIS DATA SHEET
NWTPH-Dx
TPH (Extractables) low level

Laboratory:	Analytical Resources, Inc.				
Client:	Anchor QEA, LLC				
Project:	Gasco Siltronic - US Moorings				
Matrix:	Sediment	Laboratory ID:	21E0106-02 A	SDG:	21E0106
Sampled:	05/04/21 00:00	Prepared:	05/17/21 10:37	File ID:	421E2047.D
% Solids:	58.79	Preparation:	EPA 3546 (Microwave)	Analyzed:	05/21/21 05:17
Batch:	BJE0366	Sequence:	SJE0284	Initial/Final:	10 g Wet / 1 mL
Instrument:	FID4	Column:	RTX-1	Calibration:	ED00037

CAS NO.	COMPOUND	DILUTION	CONC: (mg/kg dry)	Q	DL	RL
DRO	Diesel Range Organics (C12-C24)	1	16.4		3.98	8.50
RRO	Motor Oil Range Organics (C24-C38)	1	104		5.09	17.0

SURROGATES	ADDED: (mg/kg dry)	FOUND: (mg/kg dry)	% REC	QC LIMITS	Q
o-Terphenyl	19.136	15.9	82.9	50 - 150	

Data File: \\target\share\chem2\fid4a.i\20210520.b\421E2047.D

Date : 21-MAY-2021 05:17

Client ID:

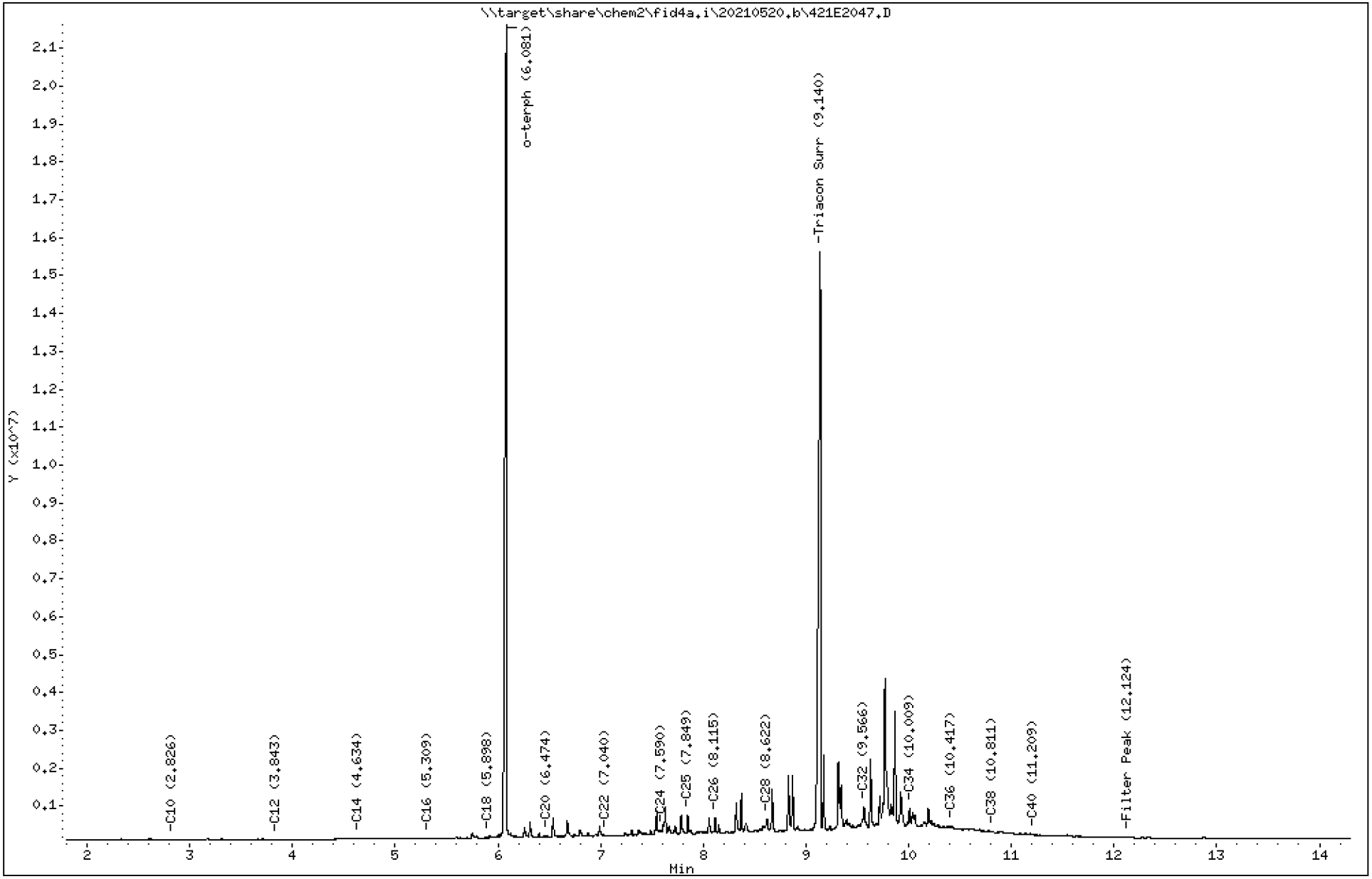
Instrument: fid4a.i

Sample Info: 21E0106-02

Operator: CTO

Column phase: RTX-1

Column diameter: 0.25



Analytical Resources Inc.
TPH Quantitation Report

Data file: 20210520.b/421E2047.D
Method: 20210520.b\FID4TPH.m
Instrument: fid4a.i, CTO
Report Date: 05/21/2021
Macro: 09-SEP-2019
Calibration Dates: Gas:XX-XXX-XXXX Diesel:14-APR-2021 M.Oil:14-APR-2021

ARI ID: 21E0106-02
Client ID:
Injection: 21-MAY-2021 05:17
Dilution Factor: 1
RT Std: 419H1603.D

FID:4A RESULTS

Compound	RT	Shift	Height	Area	Method	Range	Total Area	Conc(mg/L)
C8	1.534	-0.003	12470	11549	WATPHD	(C12-C24)	17587706	96.2
C10	2.826	-0.004	10155	8457	WATPHM	(C24-C38)	80425770	611.9
C12	3.843	-0.004	10741	11480	AK102	(C10-C25)	20634751	95.8
C14	4.634	0.002	33481	62013	AK103	(C25-C36)	71865970	711.1
C16	5.309	0.005	25720	30214	OR.DIES	(C10-C28)	35988231	183.6
C18	5.898	-0.010	70807	78450				
C20	6.474	0.001	112383	124243	JET-A	(C10-C18)	3936922	26.8
C22	7.040	0.005	114609	22822				
C24	7.590	0.001	254999	252590				
C25	7.849	-0.010	641558	659762				
C26	8.115	-0.009	587292	796696				
C28	8.622	-0.012	552359	1062247				
C32	9.566	-0.008	867629	1420826				
C34	10.009	0.006	836729	1003868				
Filter Peak	12.124	-0.015	84816	297850	BUNKERC	(C10-C38)	98478135	2193.6
C36	10.417	0.005	344767	183377				
C38	10.811	0.011	207709	51593				
C40	11.209	0.009	134251	59604				
o-terph	6.081	-0.001	21503520	23242611				
Triacon Surr	9.140	-0.002	15170715	20937998	NAS DIES	(C10-C24)	18052364	92.5

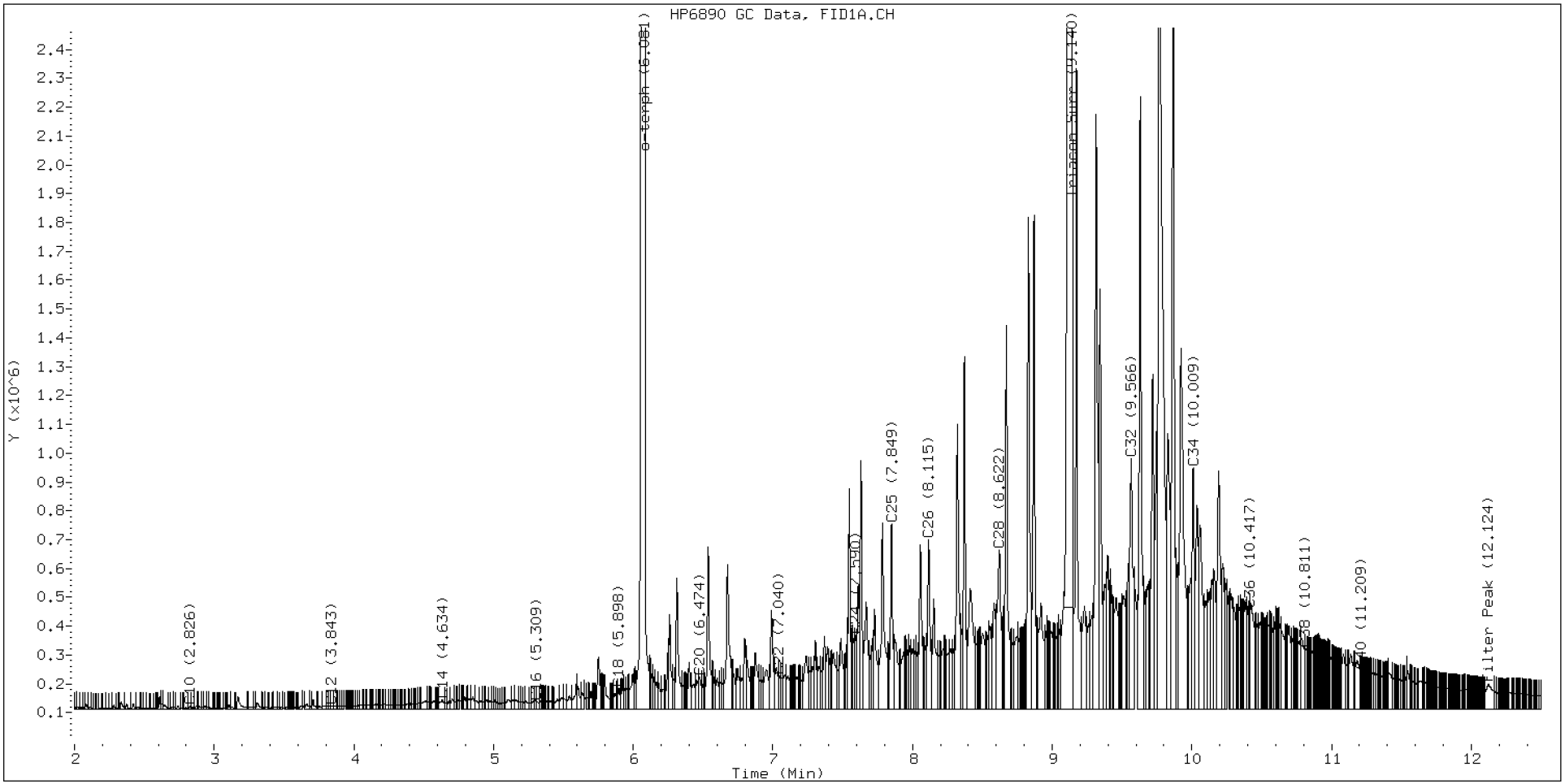
Range Times: NW Diesel(3.846 - 7.589) AK102(2.83 - 7.86) Jet A(2.83 - 5.91)
NW M.Oil(7.59 - 10.80) AK103(7.86 - 10.41) OR Diesel(2.83 - 8.63)

Surrogate	Area	Amount	
o-Terphenyl	23242611	93.3	
Triacontane	20937998	98.8	M

M Indicates the peak was manually integrated

Analyte	RF	Curve Date
o-Terph Surr	249011.3	25-OCT-2019
Triacon Surr	211827.9	25-OCT-2019
Gas	15000.0	XX-XXX-XXXX
Diesel	182831.3	14-APR-2021
Motor Oil	131440.7	14-APR-2021
AK102	215421.2	14-APR-2021
AK103	101056.3	14-APR-2021
JetA	146652.4	20-MAY-2020
OR Diesel	195999.1	25-OCT-2019
NAS Diesel	195148.2	25-OCT-2019
Bunker C	44892.5	21-APR-2021

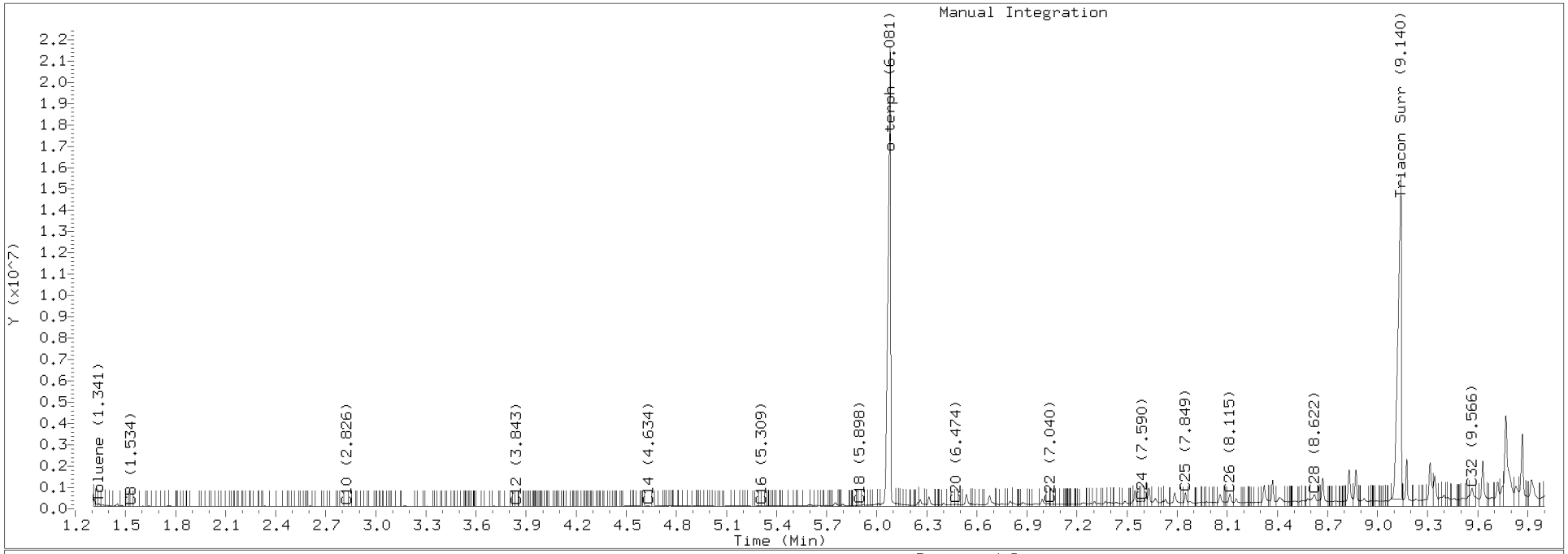
Datafile: FID4A, 20210520.b/421E2047.D 21E0106-02

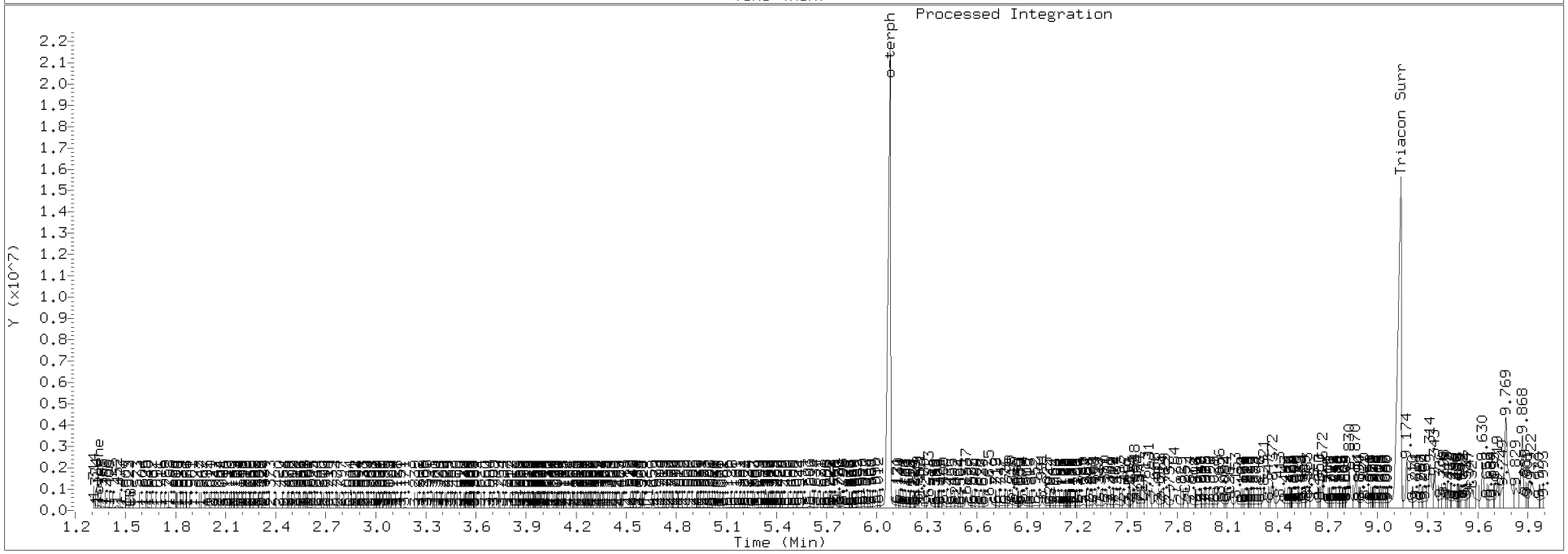


TPH Manual Integrations Report

Datafile: FID4A, 20210520.b/421E2047.D Injection: 21-MAY-2021 05:17

Lab ID:21E0106-02





Analytical Resources, Incorporated
Analytical Chemists and Consultants

USMPDI-031SG-210504

Form I
ORGANIC ANALYSIS DATA SHEET
NWTPH-Dx
TPH (Extractables) low level

Laboratory:	Analytical Resources, Inc.				
Client:	Anchor QEA, LLC				
Project:	Gasco Siltronic - US Moorings				
Matrix:	Sediment	Laboratory ID:	21E0106-03 A	SDG:	21E0106
Sampled:	05/04/21 00:00	Prepared:	05/17/21 10:37	File ID:	421E2048.D
% Solids:	46.39	Preparation:	EPA 3546 (Microwave)	Analyzed:	05/21/21 05:38
Batch:	BJE0366	Sequence:	SJE0284	Initial/Final:	10 g Wet / 1 mL
Instrument:	FID4	Column:	RTX-1	Calibration:	ED00037

CAS NO.	COMPOUND	DILUTION	CONC: (mg/kg dry)	Q	DL	RL
DRO	Diesel Range Organics (C12-C24)	1	21.9		5.04	10.8
RRO	Motor Oil Range Organics (C24-C38)	1	163		6.45	21.6

SURROGATES	ADDED: (mg/kg dry)	FOUND: (mg/kg dry)	% REC	QC LIMITS	Q
o-Terphenyl	24.251	19.2	79.1	50 - 150	

Data File: \\target\share\chem2\fid4a.i\20210520.b\421E2048.D

Date : 21-MAY-2021 05:38

Client ID:

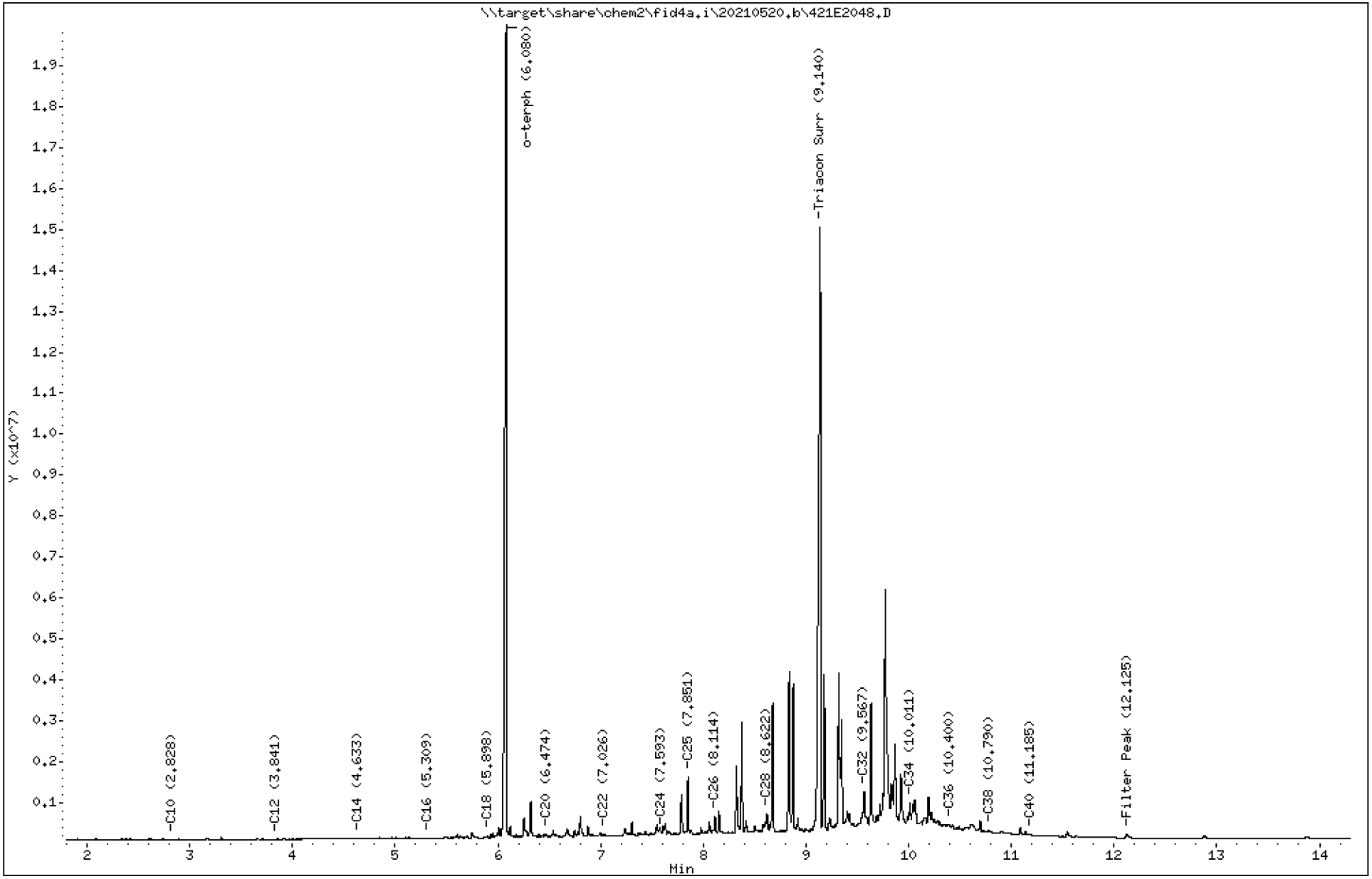
Instrument: fid4a.i

Sample Info: 21E0106-03

Operator: CTO

Column phase: RTX-1

Column diameter: 0.25



Analytical Resources Inc.
TPH Quantitation Report

Data file: 20210520.b/421E2048.D
Method: 20210520.b\FID4TPH.m
Instrument: fid4a.i, CTO
Report Date: 05/21/2021
Macro: 09-SEP-2019
Calibration Dates: Gas:XX-XXX-XXXX Diesel:14-APR-2021 M.Oil:14-APR-2021

ARI ID: 21E0106-03
Client ID:
Injection: 21-MAY-2021 05:38
Dilution Factor: 1
RT Std: 419H1603.D

FID:4A RESULTS

Compound	RT	Shift	Height	Area	Method	Range	Total Area	Conc(mg/L)
C8	1.544	0.007	20196	19561	WATPHD	(C12-C24)	18577381	101.6
C10	2.828	-0.003	12803	8853	WATPHM	(C24-C38)	99389770	756.2
C12	3.841	-0.005	16063	16792	AK102	(C10-C25)	21487142	99.7
C14	4.633	0.001	45380	85770	AK103	(C25-C36)	91048844	901.0
C16	5.309	0.005	34371	38005	OR.DIES	(C10-C28)	40016823	204.2
C18	5.898	-0.010	100742	122710				
C20	6.474	0.001	130223	129100	JET-A	(C10-C18)	5380039	36.7
C22	7.026	-0.009	147488	160390				
C24	7.593	0.004	178369	88081				
C25	7.851	-0.009	1523694	1295170				
C26	8.114	-0.010	549890	702938				
C28	8.622	-0.012	617935	821941				
C32	9.567	-0.007	1155802	1565931				
C34	10.011	0.007	884905	1075957				
Filter Peak	12.125	-0.014	127741	428077	BUNKERC	(C10-C38)	118597197	2641.8
C36	10.400	-0.012	377250	407615				
C38	10.790	-0.010	217065	368296				
C40	11.185	-0.015	148967	307179				
o-terph	6.080	-0.002	19868507	22161428				
Triacon Surr	9.140	-0.002	14573130	19841986	NAS DIES	(C10-C24)	19207427	98.4

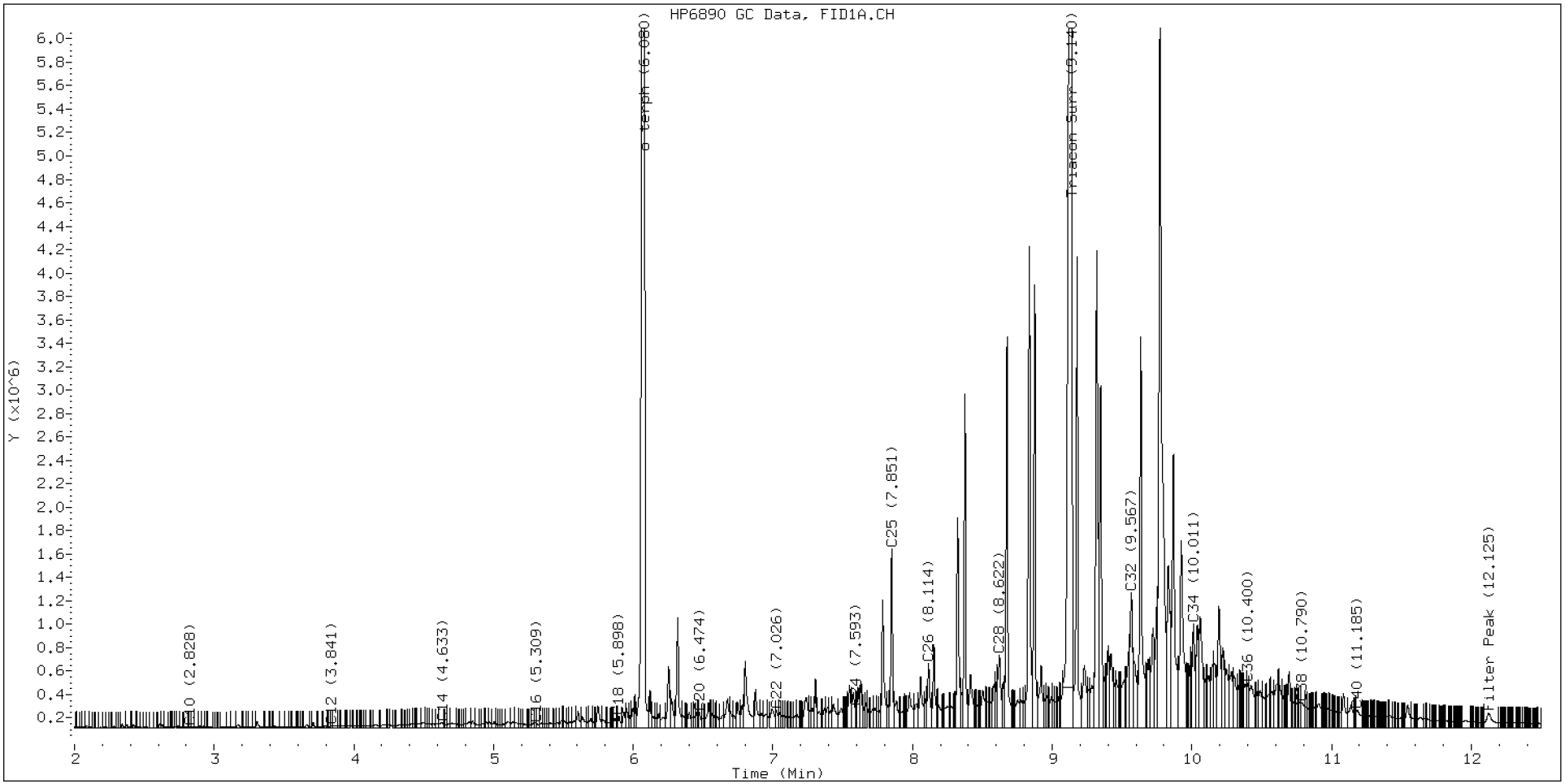
Range Times: NW Diesel(3.846 - 7.589) AK102(2.83 - 7.86) Jet A(2.83 - 5.91)
NW M.Oil(7.59 - 10.80) AK103(7.86 - 10.41) OR Diesel(2.83 - 8.63)

Surrogate	Area	Amount	
o-Terphenyl	22161428	89.0	
Triacontane	19841986	93.7	M

M Indicates the peak was manually integrated

Analyte	RF	Curve Date
o-Terph Surr	249011.3	25-OCT-2019
Triacon Surr	211827.9	25-OCT-2019
Gas	15000.0	XX-XXX-XXXX
Diesel	182831.3	14-APR-2021
Motor Oil	131440.7	14-APR-2021
AK102	215421.2	14-APR-2021
AK103	101056.3	14-APR-2021
JetA	146652.4	20-MAY-2020
OR Diesel	195999.1	25-OCT-2019
NAS Diesel	195148.2	25-OCT-2019
Bunker C	44892.5	21-APR-2021

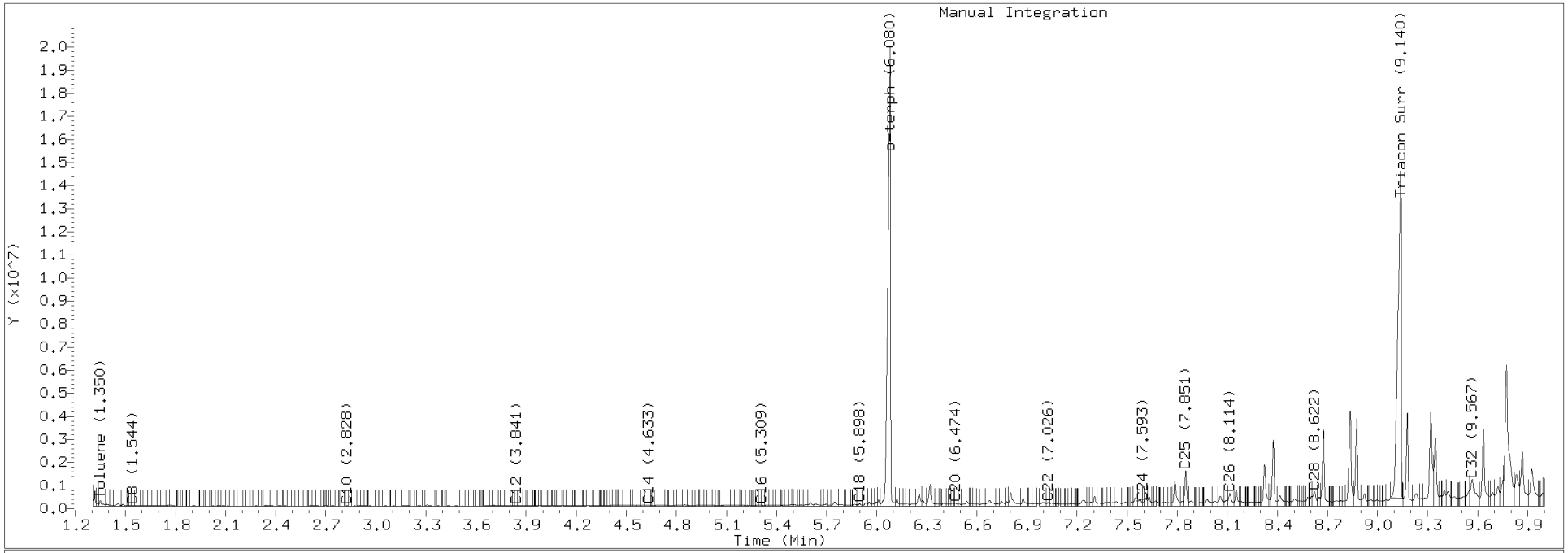
Datafile: FID4A, 20210520.b/421E2048.D 21E0106-03

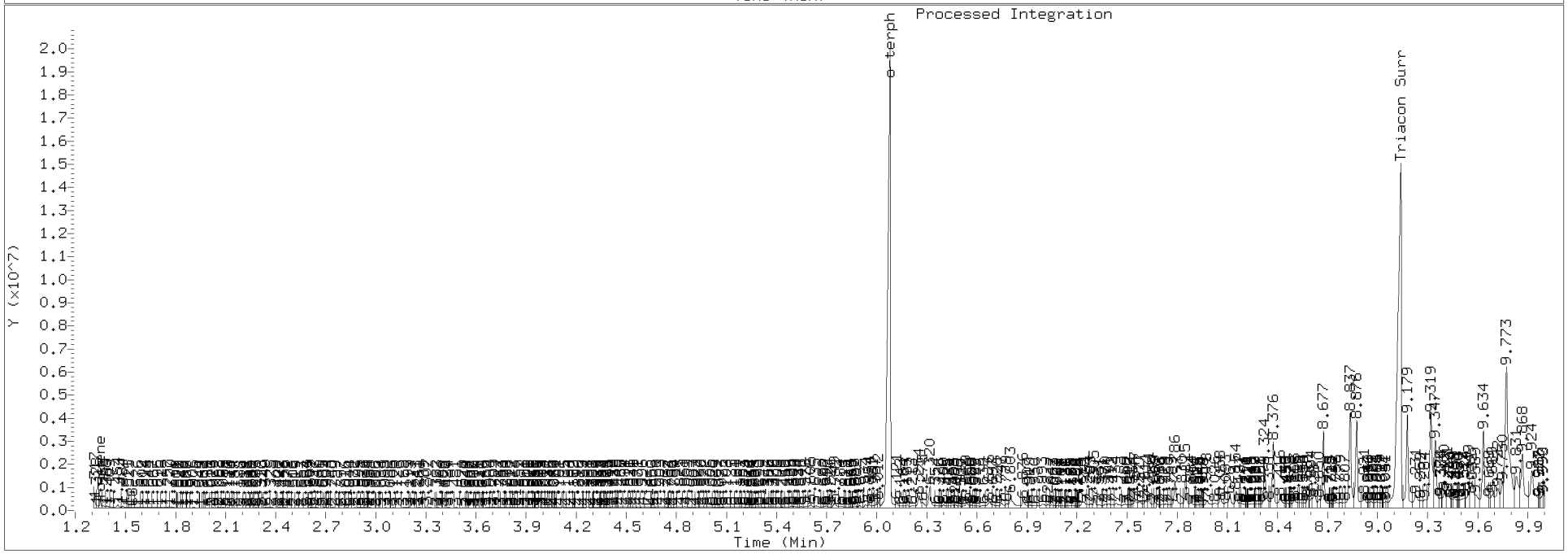


TPH Manual Integrations Report

Datafile: FID4A, 20210520.b/421E2048.D Injection: 21-MAY-2021 05:38

Lab ID:21E0106-03





Analytical Resources, Incorporated
Analytical Chemists and Consultants

USMPDI-035SG-210504

Form I
ORGANIC ANALYSIS DATA SHEET
NWTPH-Dx
TPH (Extractables) low level

Laboratory:	Analytical Resources, Inc.				
Client:	Anchor QEA, LLC				
Project:	Gasco Siltronic - US Moorings				
Matrix:	Sediment	Laboratory ID:	21E0106-04 A	SDG:	21E0106
Sampled:	05/04/21 00:00	Prepared:	05/17/21 10:37	File ID:	421E2049.D
% Solids:	51.35	Preparation:	EPA 3546 (Microwave)	Analyzed:	05/21/21 05:59
Batch:	BJE0366	Sequence:	SJE0284	Initial/Final:	10 g Wet / 1 mL
Instrument:	FID4	Column:	RTX-1	Calibration:	ED00037

CAS NO.	COMPOUND	DILUTION	CONC: (mg/kg dry)	Q	DL	RL
DRO	Diesel Range Organics (C12-C24)	1	25.2		4.56	9.74
RRO	Motor Oil Range Organics (C24-C38)	1	167		5.82	19.5

SURROGATES	ADDED: (mg/kg dry)	FOUND: (mg/kg dry)	% REC	QC LIMITS	Q
o-Terphenyl	21.908	17.7	81.0	50 - 150	

Data File: \\target\share\chem2\fid4a.i\20210520.b\421E2049.D

Date : 21-MAY-2021 05:59

Client ID:

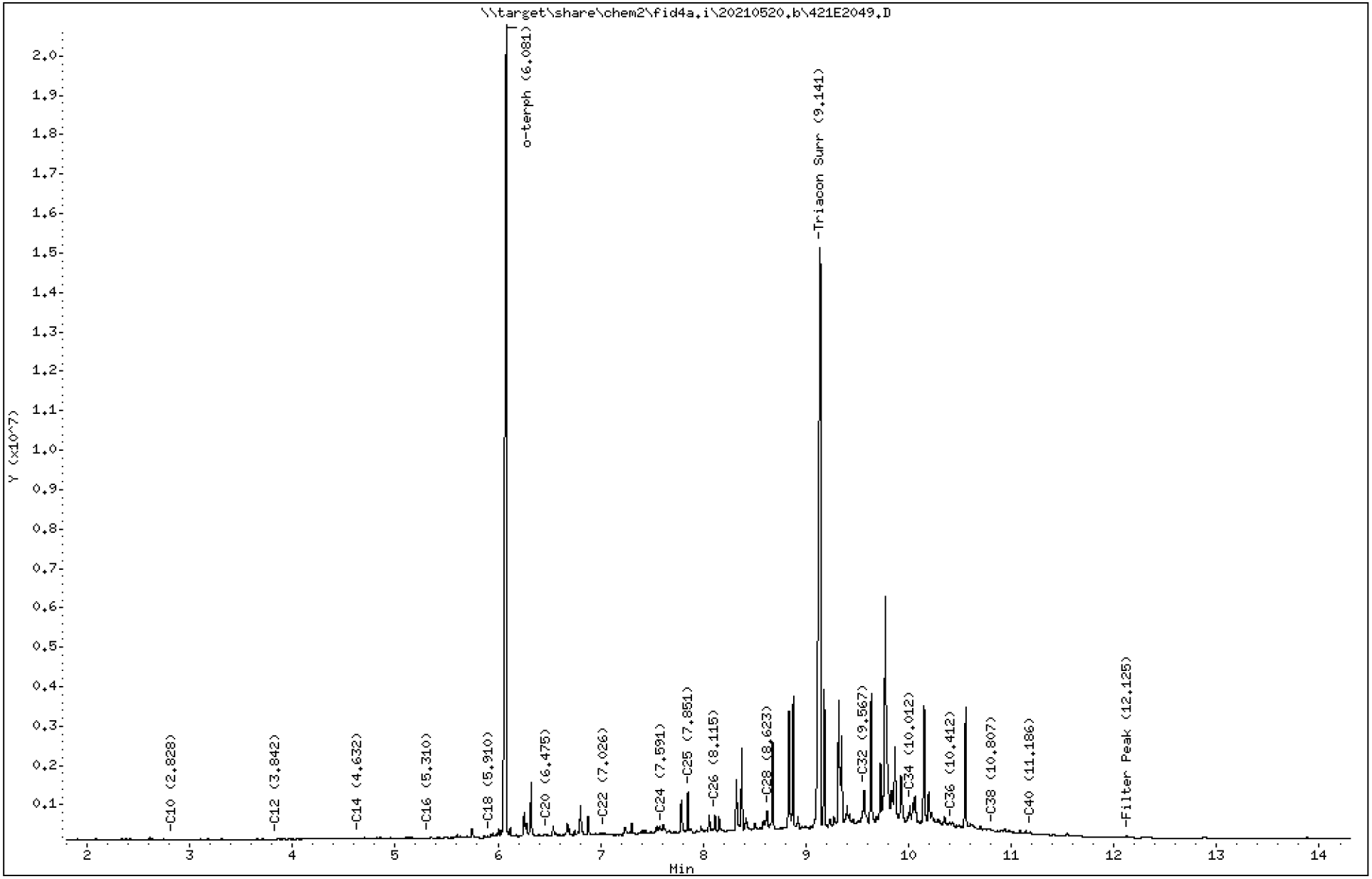
Instrument: fid4a.i

Sample Info: 21E0106-04

Operator: CTO

Column phase: RTX-1

Column diameter: 0.25



Analytical Resources Inc.
TPH Quantitation Report

Data file: 20210520.b/421E2049.D
Method: 20210520.b\FID4TPH.m
Instrument: fid4a.i, CTO
Report Date: 05/21/2021
Macro: 09-SEP-2019
Calibration Dates: Gas:XX-XXX-XXXX Diesel:14-APR-2021 M.Oil:14-APR-2021

ARI ID: 21E0106-04
Client ID:
Injection: 21-MAY-2021 05:59
Dilution Factor: 1
RT Std: 419H1603.D

FID:4A RESULTS

Compound	RT	Shift	Height	Area	Method	Range	Total Area	Conc(mg/L)
C8	1.535	-0.002	10008	1495	WATPHD	(C12-C24)	23632257	129.3
C10	2.828	-0.002	12890	8954	WATPHM	(C24-C38)	112457719	855.6
C12	3.842	-0.004	16399	15931	AK102	(C10-C25)	27054757	125.6
C14	4.632	0.001	43961	48078	AK103	(C25-C36)	100346824	993.0
C16	5.310	0.005	39036	29668	OR.DIES	(C10-C28)	47681494	243.3
C18	5.910	0.002	67394	45150				
C20	6.475	0.002	146360	136742	JET-A	(C10-C18)	6160848	42.0
C22	7.026	-0.010	186178	219837				
C24	7.591	0.002	262485	162684				
C25	7.851	-0.009	1211303	1051698				
C26	8.115	-0.010	611083	818262				
C28	8.623	-0.011	739193	1415244				
C32	9.567	-0.007	1258341	1705851				
C34	10.012	0.008	874947	1055997				
Filter Peak	12.125	-0.014	106573	286618	BUNKERC	(C10-C38)	136751321	3046.2
C36	10.412	0.000	388379	77454				
C38	10.807	0.007	243653	96684				
C40	11.186	-0.014	191701	492420				
o-terph	6.081	-0.002	20677486	22686268				
Triacon Surr	9.141	-0.002	14612311	20549422	NAS DIES	(C10-C24)	24293603	124.5

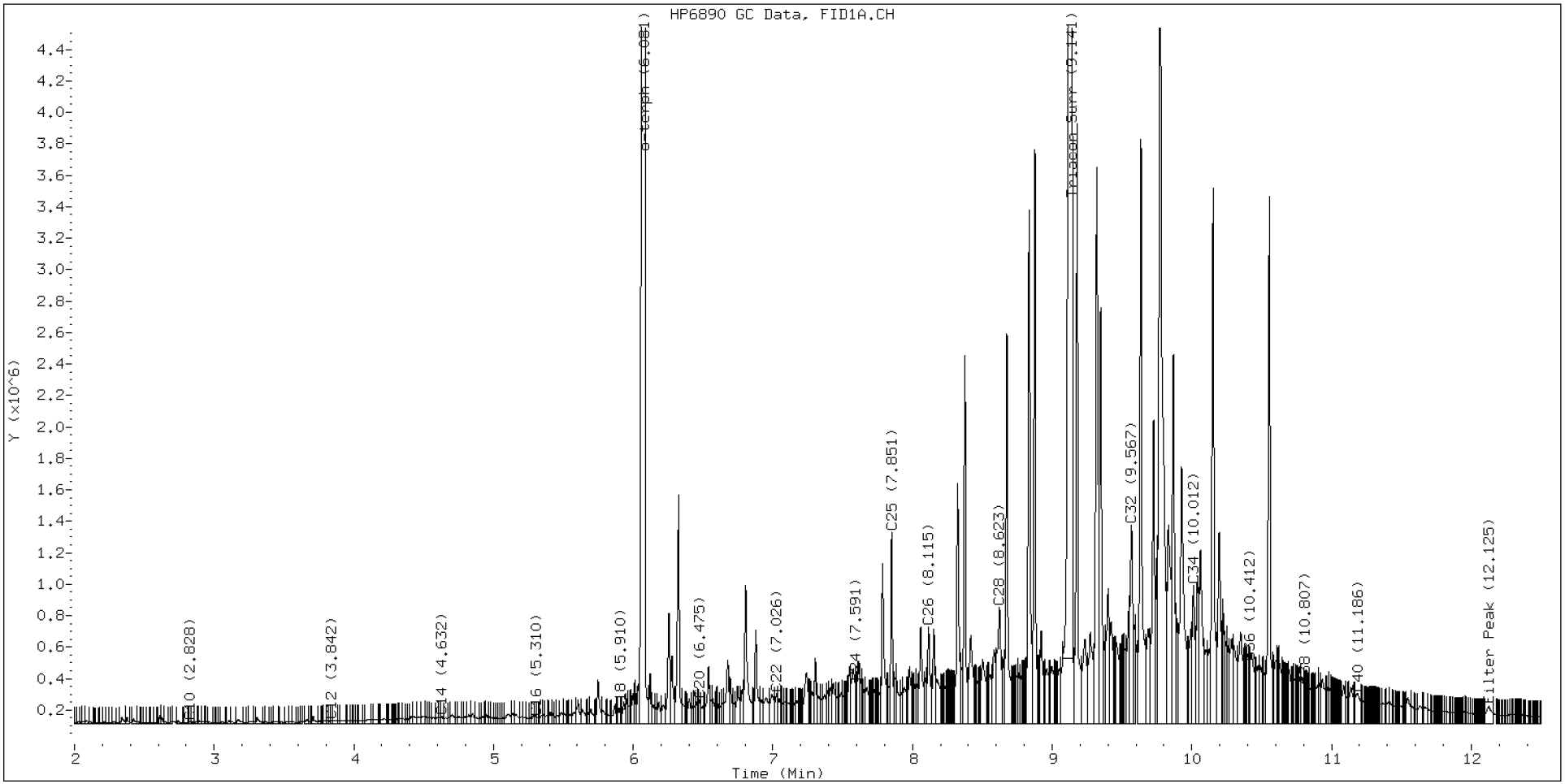
Range Times: NW Diesel(3.846 - 7.589) AK102(2.83 - 7.86) Jet A(2.83 - 5.91)
NW M.Oil(7.59 - 10.80) AK103(7.86 - 10.41) OR Diesel(2.83 - 8.63)

Surrogate	Area	Amount	
o-Terphenyl	22686268	91.1	
Triacontane	20549422	97.0	M

M Indicates the peak was manually integrated

Analyte	RF	Curve Date
o-Terph Surr	249011.3	25-OCT-2019
Triacon Surr	211827.9	25-OCT-2019
Gas	15000.0	XX-XXX-XXXX
Diesel	182831.3	14-APR-2021
Motor Oil	131440.7	14-APR-2021
AK102	215421.2	14-APR-2021
AK103	101056.3	14-APR-2021
JetA	146652.4	20-MAY-2020
OR Diesel	195999.1	25-OCT-2019
NAS Diesel	195148.2	25-OCT-2019
Bunker C	44892.5	21-APR-2021

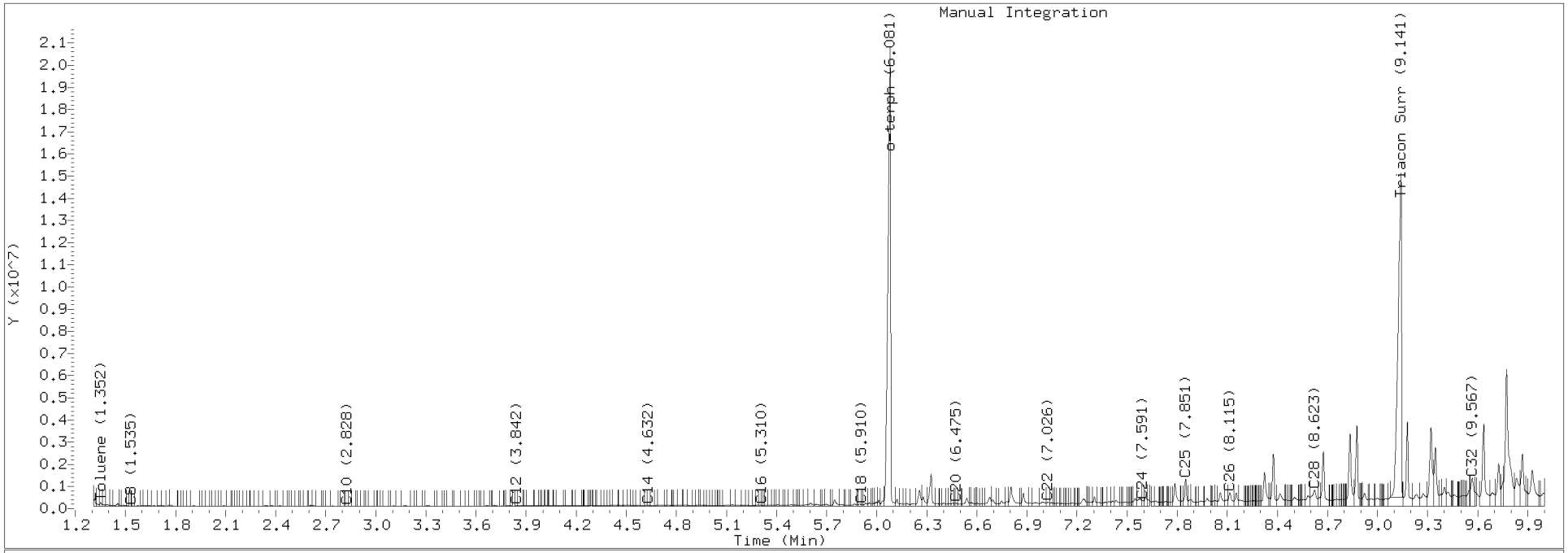
Datafile: FID4A, 20210520.b/421E2049.D 21E0106-04

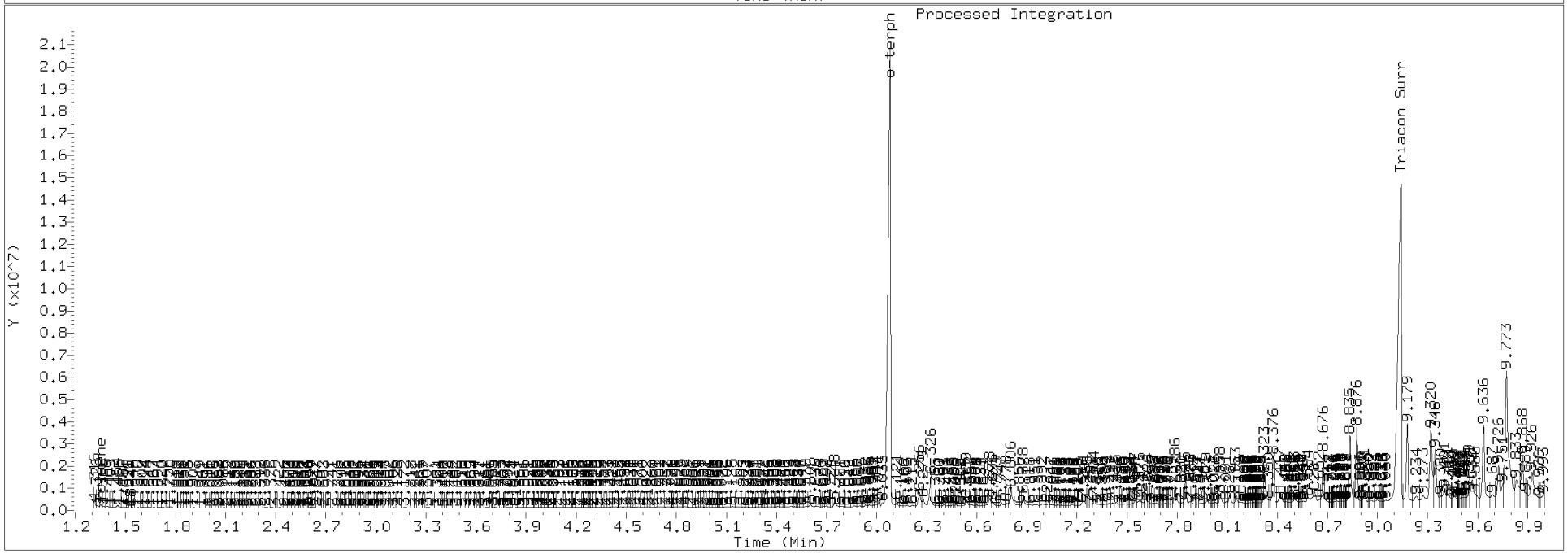


TPH Manual Integrations Report

Datafile: FID4A, 20210520.b/421E2049.D Injection: 21-MAY-2021 05:59

Lab ID:21E0106-04





Analytical Resources, Incorporated
Analytical Chemists and Consultants

PREPARATION BATCH SUMMARY

NWTPH-Dx

Laboratory:	Analytical Resources, Inc.	SDG:	21E0106
Client:	Anchor QEA, LLC	Project:	Gasco Siltronic - US Moorings
Batch:	BJE0366 Batch Matrix: Solid	Preparation:	EPA 3546 (Microwave)

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
USMPDI-028SG-210504	21E0106-01	421E2046.D	05/17/21 10:37	Do not use version unless COC list DRO only
USMPDI-030SG-210504	21E0106-02	421E2047.D	05/17/21 10:37	Do not use version unless COC list DRO only
USMPDI-031SG-210504	21E0106-03	421E2048.D	05/17/21 10:37	Do not use version unless COC list DRO only
USMPDI-035SG-210504	21E0106-04	421E2049.D	05/17/21 10:37	Do not use version unless COC list DRO only
Blank	BJE0366-BLK1	421E2032.D	05/17/21 10:37	
LCS	BJE0366-BS1	421E2033.D	05/17/21 10:37	

Analytical Resources, Incorporated
Analytical Chemists and Consultants

ORGANICS PREPARATION BENCH SHEET

Batch: BJE0366

Prepared using: EPA 3546 (Microwave)

TPH NW (Extractables) low level in Solid (Version:)

Matrix: Solid **Date Prepared:** 05/17/21 **Balance ID:** ~~B146462614~~ B146462614 05/17/21 **Set Up By:** CTO 5/19/21

The following standards may be missing from this batch!

Designator	Description
QLS 18	QLS Spike

Analysis: TPH NW (Extractables) low level

Lab Number & Container	Initial (g) Target Wet: 10 (Wet)	Actual	Acid C/U (1:1) Y/N	Silica Gel C/U (1:1) Y/N	Final Effective Vol (mL)	Vol to Lab	Extraction Comments
21E0103-01 A	(10.000)	10.00	(1:1) Y/N	(1:1) Y/N	1	1.0	
21E0103-08 A	(10.000)	10.00	(1:1) Y/N	(1:1) Y/N	1	1.0	
21E0103-10 A	(10.000)	10.00	(1:1) Y/N	(1:1) Y/N	1	1.0	
21E0103-16 A	(10.000)	10.00	(1:1) Y/N	(1:1) Y/N	1	1.0	
21E0103-17 A	(10.000)	10.00	(1:1) Y/N	(1:1) Y/N	1	1.0	
21E0103-23 A	(10.000)	10.00	(1:1) Y/N	(1:1) Y/N	1	1.0	
21E0105-01 A	(10.000)	10.00	(1:1) Y/N	(1:1) Y/N	1	1.0	
21E0105-07 A	(10.000)	10.00	(1:1) Y/N	(1:1) Y/N	1	1.0	
21E0106-01 A	(10.000)	10.00	(1:1) Y/N	(1:1) Y/N	1	1.0	
21E0106-02 A	(10.000)	10.00	(1:1) Y/N	(1:1) Y/N	1	1.0	
21E0106-03 A	(10.000)	10.00	(1:1) Y/N	(1:1) Y/N	1	1.0	
21E0106-04 A	(10.000)	10.00	(1:1) Y/N	(1:1) Y/N	1	1.0	

Batch QC

Lab Number	Initial (g) Target Wet: 10 (Wet)	Actual	Acid C/U (1:1) Y/N	Silica Gel C/U (1:1) Y/N	Final Effective Vol (mL)	Vol to Lab	Extraction Comments
BJE0366-BLK1	(10.000)	10.00	(1:1) Y/N	(1:1) Y/N	1	1.0	
BJE0366-BS1	(10.000)	10.00	(1:1) Y/N	(1:1) Y/N	1	1.0	
BJE0366-MS1	(10.000)	10.00	(1:1) Y/N	(1:1) Y/N	1	1.0	Use 21E0103-01
BJE0366-MSD1	(10.000)	10.00	(1:1) Y/N	(1:1) Y/N	1	1.0	Use 21E0103-01

05/17/21 — Client ID verified By — Date

BH — Preparation Reviewed By — 5/20/21 Date

05/17/21 10:37 — Extraction Date and Time

Printed: 5/14/2021 12:58:48PM

3066F
Page 1 of 2

Analytical Resources, Incorporated
Analytical Chemists and Consultants

ORGANICS PREPARATION BENCH SHEET

Batch: BJE0366

Prepared using: EPA 3546 (Microwave)

TPH NW (Extractables) low level in Solid (Version:)

Prep Steps

Microwave	
1 (2) 3	
DR 05/17/21 GT	Analyst/Date
TurboVap	
~~Pre Acid/Silica Clean~~	
1 2 3 (4) 5	
BH 5/20/21	Analyst/Date
Vialing	
BH 5/20/21	Analyst/Date

Reagents Used

Station/Reagent	Standard ID
Microwave Analyst: GT/DS Date: 05/17/21	
Methylene Chloride	J003930
Anhydrous Sodium Sulfate	J005005
Neutral Glass Wool	J003346
Vialing Analyst: BH Date: 5/20/21	
Methylene Chloride	J003930
~~Concentrated Sulfuric Acid~~	
~~6% Silica Gel~~	

Surrogates & Spike Standards Used

Type	Vial ID / Standard ID	Vol uL	Analyst	Witness
Surrogate 1125µg/mL	P DR J002741 Exp: 08/08/2021	100µL	DP	
Spike 15000µg/mL	11 DR J004082 Exp: 12/01/2021	100µL	DP	

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

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

Analytical Resources, Incorporated
Analytical Chemists and Consultants

ORGANICS PREPARATION BENCH SHEET

Batch: BJE0366

Prepared using: EPA 3546 (Microwave)

TPH NW (Extractables) low level in Solid (Version:)

Prep Instructions	
SPECIAL INSTRUCTIONS: 1. Weigh into 100mL beakers-dry with Sodium Sulfate. 2. Transfer to microwave vessel. 3. Add DCM to the vessel until the solvent is 1 inch above soil layer after homogenization. 4. Add surr/spike. 5. Microwave on appropriate power setting determined by # of samples. 6. After microwave-Re-homogenize while hot then let cool 15 min. in Refridgerator 05. Re-homogenize while cool. 7. Collect into turbo tube with sm. funnel containing glasswool and 1 Inch sodium sulfate. 8. Add (2) 10mL DCM rinses to vessel and transfer to turbo tube. 9. TurboVap. 10. Acid/Silica Clean-up?= Y / N. 11. Vial in DCM. A. Need Total Solids Y / N B. Archive/Freeze Y / N	

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Printed: 5/14/2021 12:58:48PM

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Organic Extractions Laboratory Analyst Notes

Extraction Parameter: TPHD Extraction Batch: BJE0366

Total Solids Batch: BJE0230 Work Order(s): 21E0103 1-20

Screens: Soil/Sediment/Solid/Other: SH 05/11/21	Analyst/Date
[X] No Anomalies (standard soil/wet sediment/sand/gravel)= 04 05, 09, 12, 14, 13, 16, 20	SH 05/11/21
[X] Standing Water Decanted (Not shared)= 01, 02, 03, 04, 06, 07, 08, 11, 10, 15, 17, 18, 19	SH 05/11/21
[ ] Standing Water Homogenized (Shared samples)=	
[ ] Clay/Clumps (Difficult to homogenize)=	
[ ] Rocks (%+size)?	
[ ] Organics (Leaves/sticks/grass)=	
[ ] Oily, obvious fuel/sulfur odors=	
[ ] Received in 32oz jar(s)=Homogenized in Pyrex dish=	
[ ] Previously Frozen =	
[ ] Other (Details)=	
Aqueous:	
[ ] No Anomalies	
[ ] Turbid/Color=	
[ ] Particulates(%)=(Note: >5%=Notify Supervisor/Lead)	
[ ] Emulsions (%)=	
[ ] Oily, obvious fuel/sulfur odors=	
[ ] Other (Details)=	
[ ] Received in 1.0L Bottle(s)=No Bottle Rinse=	
[ ] Other Notes/Comments= (Note problems, concerns, corrective actions).	
[X] Share Samples Y / (N)	SH 05/11/21
[X] Multiple Jars Y / (N)	SH 05/11/21
[ ] Sample Pre-Screens indicate analyte activity=	
[ ] Sample weights/volumes reduced based on Pre-Screen=	

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Organic Extractions Laboratory Analyst Notes

Extraction Parameter: TPHD Extraction Batch BJE0366

Total Solids Batch: BJE0251 Work Order(s): 21E0103 21-23

Screens: Soil/Sediment/Solid/Other:	Analyst/Date
☐ No Anomalies (standard soil/wet sediment/sand/gravel)=	
☐ Standing Water Decanted (Not shared)=	
☑ Standing Water Homogenized (Shared samples)= 22	AR 05/11/21
☑ Clay/Clumps (Difficult to homogenize)= 21, 23	AR 05/11/21
☐ Rocks (%+size)?	
☐ Organics (Leaves/sticks/grass)=	
☐ Oily, obvious fuel/sulfur odors=	
☐ Received in 32oz jar(s)=Homogenized in Pyrex dish=	
☐ Previously Frozen =	
☐ Other (Details)=	
Aqueous:	
☐ No Anomalies	
☐ Turbid/Color=	
☐ Particulates(%)=(Note: >5%=Notify Supervisor/Lead)	
☐ Emulsions (%)=	
☐ Oily, obvious fuel/sulfur odors=	
☐ Other (Details)=	
☐ Received in 1.0L Bottle(s)=No Bottle Rinse=	
☐ Other Notes/Comments= (Note problems, concerns, corrective actions).	
☒ Share Samples Y / (N)	
☒ Multiple Jars Y / (N)	AR 05/11/21
☐ Sample Pre-Screens indicate analyte activity=	AR 05/11/21
☐ Sample weights/volumes reduced based on Pre-Screen=	

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Revision 15
07/01/19

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Organic Extractions Laboratory Analyst Notes

Extraction Parameter: TPHD Extraction Batch BJE0366

Total Solids Batch: BJE0232 Work Order(s): 21E0105

Screens: Soil/Sediment/Solid/Other:	Analyst/Date
☐ No Anomalies (standard soil/wet sediment/sand/gravel)=	
☑ Standing Water Decanted (Not shared)= 01	AR 05/11/21
☐ Standing Water Homogenized (Shared samples)=	
☐ Clay/Clumps (Difficult to homogenize)=	
☐ Rocks (%+size)?	
☐ Organics (Leaves/sticks/grass)=	
☑ Oily, obvious fuel/sulfur odors= 02, 03, 04, 05, 06, 07	05/11/21 AR
☐ Received in 32oz jar(s)=Homogenized in Pyrex dish=	
☐ Previously Frozen =	
☐ Other (Details)=	
Aqueous:	
☐ No Anomalies	
☐ Turbid/Color=	
☐ Particulates(%)=(Note: >5%=Notify Supervisor/Lead)	
☐ Emulsions (%)=	
☐ Oily, obvious fuel/sulfur odors=	
☐ Other (Details)=	
☐ Received in 1.0L Bottle(s)=No Bottle Rinse=	
☐ Other Notes/Comments= (Note problems, concerns, corrective actions).	
☒ Share Samples Y/(N)	AR 05/11/21
☒ Multiple Jars (Y)/N 21E0105 07, X2	AR 05/11/21
☐ Sample Pre-Screens indicate analyte activity=	
☐ Sample weights/volumes reduced based on Pre-Screen=	

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Revision 15
07/01/19

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Organic Extractions Laboratory Analyst Notes

Extraction Parameter: TPHD Extraction Batch BJE0366

Total Solids Batch: BJE0233 Work Order(s): 21E0106

Screens: Soil/Sediment/Solid/Other:	Analyst/Date
☐ No Anomalies (standard soil/wet sediment/sand/gravel)=	
☑ Standing Water Decanted (Not shared)= Ø1, Ø2, Ø3, Ø4	AR Ø5/11/21
☑ Standing Water Homogenized (Shared samples)= ~~0~~	
☑ Clay/Clumps (Difficult to homogenize)= Ø1	AR Ø5/11/21
☐ Rocks (%+size)?	
☐ Organics (Leaves/sticks/grass)=	
☐ Oily, obvious fuel/sulfur odors=	
☐ Received in 32oz jar(s)=Homogenized in Pyrex dish=	
☐ Previously Frozen =	
☐ Other (Details)=	
Aqueous:	
☐ No Anomalies	
☐ Turbid/Color=	
☐ Particulates(%)=(Note: >5%=Notify Supervisor/Lead)	
☐ Emulsions (%)=	
☐ Oily, obvious fuel/sulfur odors=	
☐ Other (Details)=	
☐ Received in 1.0L Bottle(s)=No Bottle Rinse=	
☐ Other Notes/Comments= (Note problems, concerns, corrective actions).	
☒ Share Samples Y / N	AR Ø5/11/21
☒ Multiple Jars Y / N	AR Ø5/11/21
☐ Sample Pre-Screens indicate analyte activity=	
☐ Sample weights/volumes reduced based on Pre-Screen=	

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Revision 15
07/01/19

Batch: BJE0366
Batch Comment: **NONE**
Project: Gasco Siltronic - US Moorings
Project Comments: <G> MS/MSD per 20 samples, please batch with other work orders, SM2540 Needed </G>
Work Order:21E0103
Work Order Comments: <G> MS/MSD per 20 samples, please batch with other work orders, SM2540 Needed </G>
Sample: 21E0103-01
Sample Comments: **NONE**
Sample: 21E0103-08
Sample Comments: **NONE**
Sample: 21E0103-10
Sample Comments: **NONE**
Sample: 21E0103-16
Sample Comments: **NONE**
Sample: 21E0103-17
Sample Comments: **NONE**
Sample: 21E0103-23
Sample Comments: **NONE**
Work Order:21E0105
Work Order Comments: <G> MS/MSD per 20 samples, please batch with other work orders, SM2540 Needed </G>
Sample: 21E0105-01
Sample Comments: **NONE**
Sample: 21E0105-07
Sample Comments: **NONE**
Work Order:21E0106
Work Order Comments: <G> MS/MSD per 20 samples, please batch with other work orders, SM2540 Needed </G>
Sample: 21E0106-01
Sample Comments: **NONE**
Sample: 21E0106-02
Sample Comments: **NONE**
Sample: 21E0106-03
Sample Comments: **NONE**
Sample: 21E0106-04
Sample Comments: **NONE**

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Form I
METHOD BLANK DATA SHEET
NWTPH-Dx

Blank

Laboratory:	Analytical Resources, Inc.			SDG:	21E0106
Client:	Anchor QEA, LLC			Project:	Gasco Siltronic - US Moorings
Matrix:	Solid	Laboratory ID:	BJE0366-BLK1	File ID:	421E2032.D
Sampled:	N/A	Prepared:	05/17/21 10:37	Analyzed:	05/21/21 00:01
Solids:		Preparation:	EPA 3546 (Microwave)	Initial/Final:	10 g / 1 mL
Batch:	BJE0366	Sequence:	SJE0284	Calibration:	ED00037
Instrument:	FID4	Column:	RTX-1		

CAS NO.	COMPOUND	DILUTION	CONC: (mg/kg wet)	Q	DL	RL
DRO	Diesel Range Organics (C12-C24)	1	5.00	U	2.34	5.00
RRO	Motor Oil Range Organics (C24-C38)	1	10.0	U	2.99	10.0

SURROGATES	ADDED: (mg/kg wet)	FOUND: (mg/kg wet)	% REC	QC LIMITS	Q
o-Terphenyl	11.250	7.36	65.4	50 - 150	

Data File: \\target\share\chem2\fid4a.i\20210520.b\421E2032.D

Date : 21-MAY-2021 00:01

Client ID:

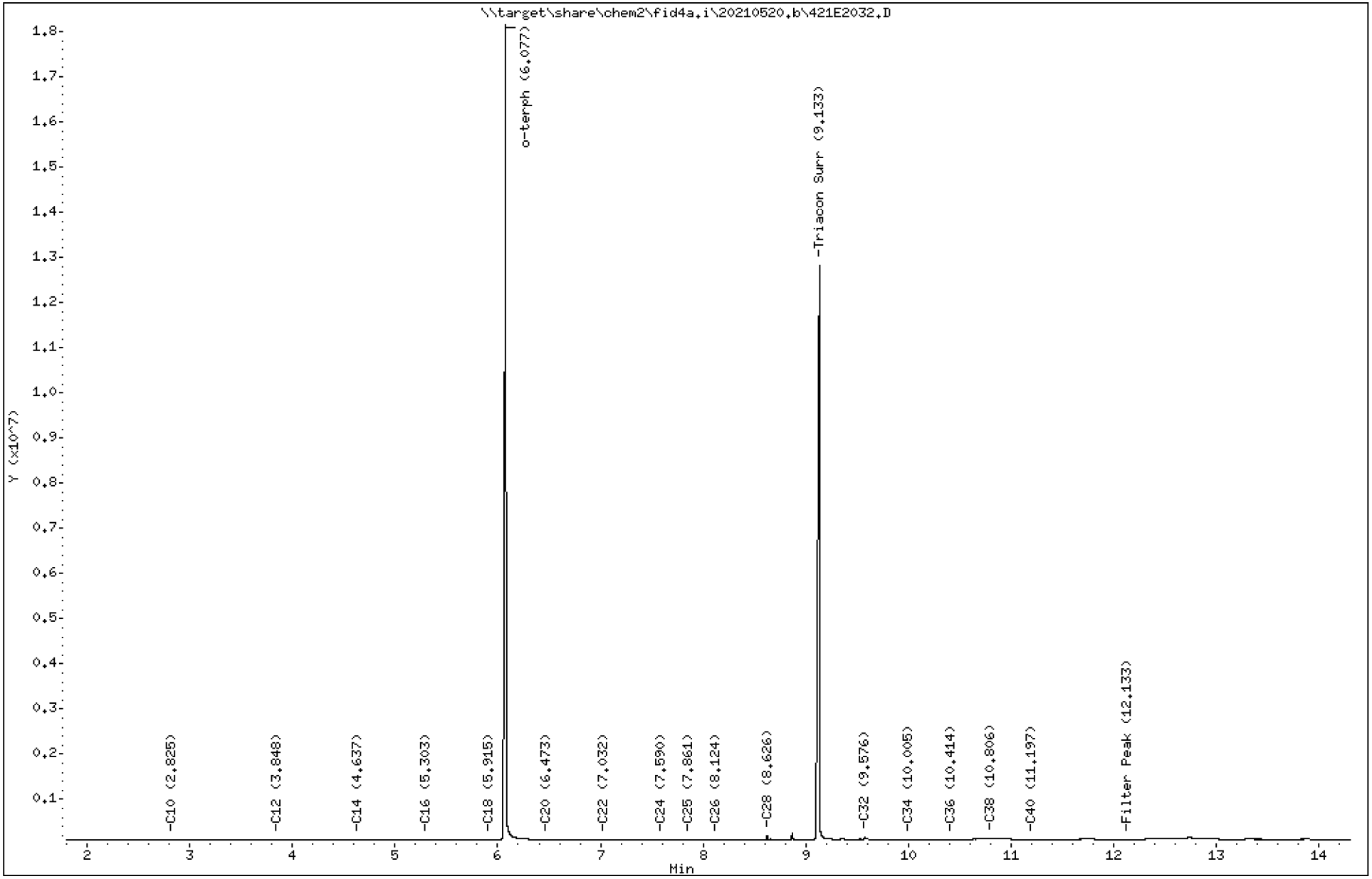
Instrument: fid4a.i

Sample Info: BJE0366-BLK1

Operator: CTO

Column phase: RTX-1

Column diameter: 0.25



Analytical Resources Inc.
TPH Quantitation Report

Data file: 20210520.b/421E2032.D
Method: 20210520.b\FID4TPH.m
Instrument: fid4a.i, CTO
Report Date: 05/21/2021
Macro: 09-SEP-2019
Calibration Dates: Gas:XX-XXX-XXXX Diesel:14-APR-2021 M.Oil:14-APR-2021

ARI ID: BJE0366-BLK1
Client ID:
Injection: 21-MAY-2021 00:01
Dilution Factor: 1
RT Std: 419H1603.D

FID:4A RESULTS

Compound	RT	Shift	Height	Area	Method	Range	Total Area	Conc(mg/L)
C8	1.520	-0.017	16684	22431	WATPHD	(C12-C24)	881944	4.8
C10	2.825	-0.006	6965	5684	WATPHM	(C24-C38)	1953734	14.9
C12	3.848	0.002	2066	1513	AK102	(C10-C25)	1063837	4.9
C14	4.637	0.005	2667	2606	AK103	(C25-C36)	1404718	13.9
C16	5.303	-0.002	3203	929	OR.DIES	(C10-C28)	1399891	7.1
C18	5.915	0.007	3105	615				
C20	6.473	0.000	11531	2870	JET-A	(C10-C18)	441219	3.0
C22	7.032	-0.004	4728	3009				
C24	7.590	0.001	4877	2363				
C25	7.861	0.001	6105	4927				
C26	8.124	-0.001	5711	8302				
C28	8.626	-0.008	89785	76303				
C32	9.576	0.002	48392	113519				
C34	10.005	0.001	8950	3090				
Filter Peak	12.133	-0.006	13900	7554	BUNKERC	(C10-C38)	2978702	66.4
C36	10.414	0.002	10331	4625				
C38	10.806	0.005	28992	7199				
C40	11.197	-0.004	13753	6856				
o-terph	6.077	-0.006	18045292	18317722				
Triacon Surr	9.133	-0.009	12728986	16238500	NAS DIES	(C10-C24)	1024967	5.3

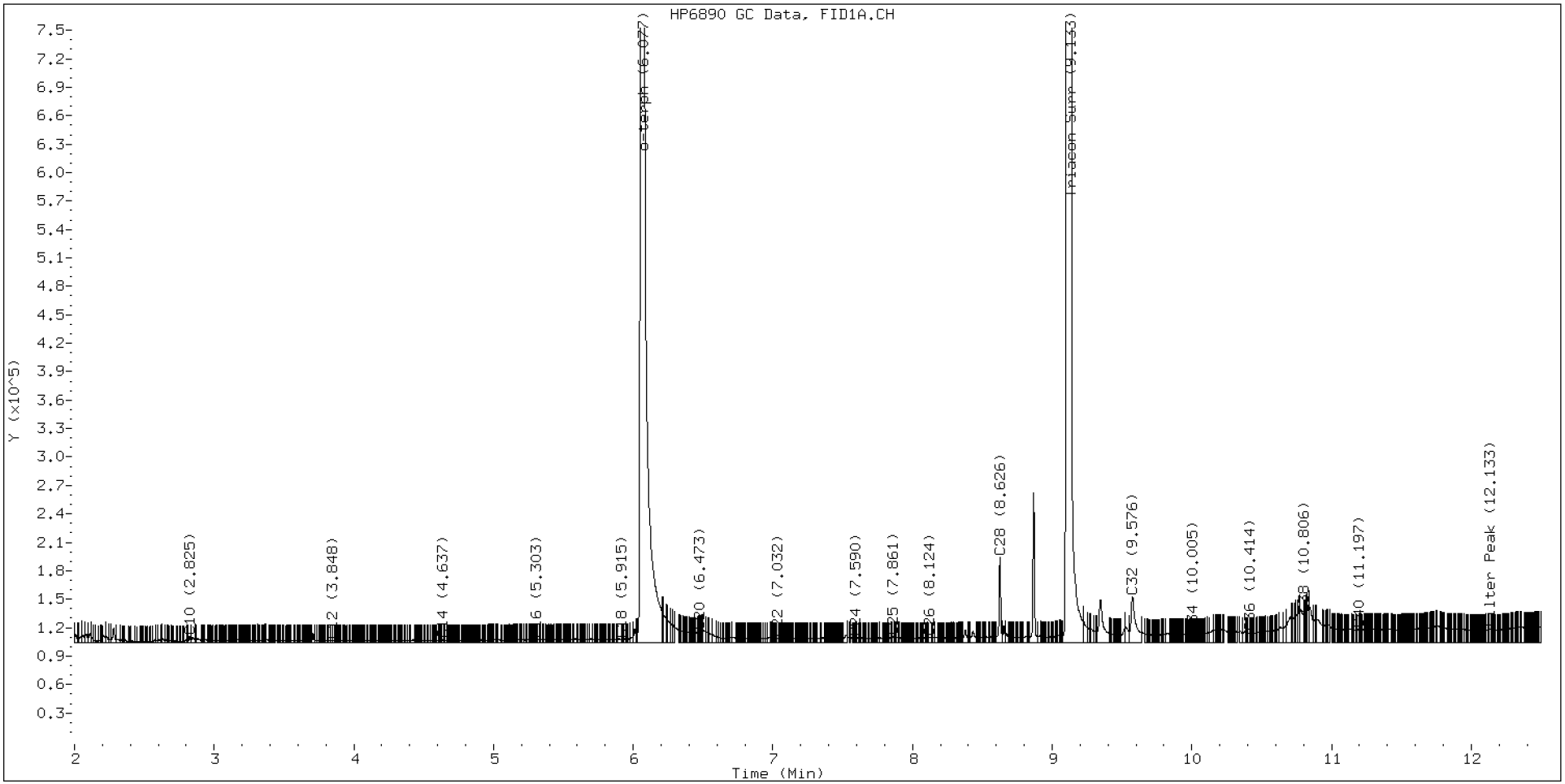
Range Times: NW Diesel(3.846 - 7.589) AK102(2.83 - 7.86) Jet A(2.83 - 5.91)
NW M.Oil(7.59 - 10.80) AK103(7.86 - 10.41) OR Diesel(2.83 - 8.63)

Surrogate	Area	Amount
o-Terphenyl	18317722	73.6
Triacontane	16238500	76.7

M Indicates the peak was manually integrated

Analyte	RF	Curve Date
o-Terph Surr	249011.3	25-OCT-2019
Triacon Surr	211827.9	25-OCT-2019
Gas	15000.0	XX-XXX-XXXX
Diesel	182831.3	14-APR-2021
Motor Oil	131440.7	14-APR-2021
AK102	215421.2	14-APR-2021
AK103	101056.3	14-APR-2021
JetA	146652.4	20-MAY-2020
OR Diesel	195999.1	25-OCT-2019
NAS Diesel	195148.2	25-OCT-2019
Bunker C	44892.5	21-APR-2021

Datafile: FID4A, 20210520.b/421E2032.D BJE0366-BLK1



Analytical Resources, Incorporated
Analytical Chemists and Consultants

LCS / LCS DUPLICATE RECOVERY
NWTPH-Dx

Laboratory:	Analytical Resources, Inc.	SDG:	21E0106
Client:	Anchor QEA, LLC	Project:	Gasco Siltronic - US Moorings
Matrix:	Solid	Analyzed:	05/21/21 00:22
Batch:	BJE0366	Laboratory ID:	BJE0366-BS1
Preparation:	EPA 3546 (Microwave)	Sequence Name:	LCS
Initial/Final:	10 g / 1 mL		

COMPOUND	SPIKE ADDED (mg/kg wet)	LCS CONCENTRATION (mg/kg wet)	Q	LCS % REC. #	QC LIMITS REC.
Diesel Range Organics (C12-C24)	150	98.1		65.4	63 - 120

* Indicates values outside of QC limits

Data File: \\target\share\chem2\fid4a.i\20210520.b\421E2033.D

Date : 21-MAY-2021 00:22

Client ID:

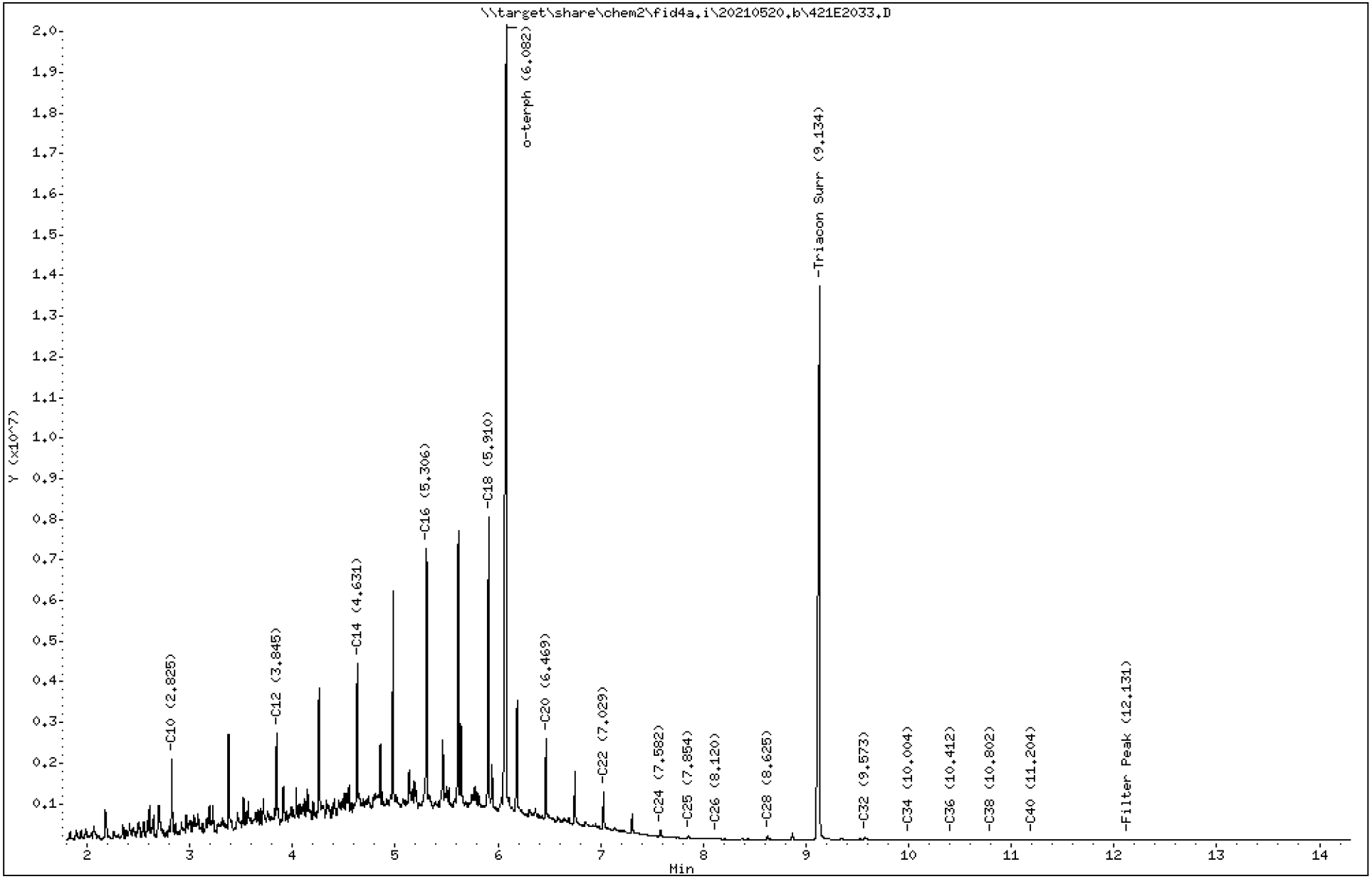
Instrument: fid4a.i

Sample Info: BJE0366-BS1

Operator: CTO

Column phase: RTX-1

Column diameter: 0.25



Analytical Resources Inc.
TPH Quantitation Report

Data file: 20210520.b/421E2033.D
Method: 20210520.b\FID4TPH.m
Instrument: fid4a.i, CTO
Report Date: 05/21/2021
Macro: 09-SEP-2019
Calibration Dates: Gas:XX-XXX-XXXX Diesel:14-APR-2021 M.Oil:14-APR-2021

ARI ID: BJE0366-BS1
Client ID:
Injection: 21-MAY-2021 00:22
Dilution Factor: 1
RT Std: 419H1603.D

FID:4A RESULTS

Compound	RT	Shift	Height	Area	Method	Range	Total Area	Conc(mg/L)
C8	1.539	0.003	71211	52841	WATPHD	(C12-C24)	179427246	981.4
C10	2.825	-0.005	1971277	1522039	WATPHM	(C24-C38)	2595975	19.8
C12	3.845	-0.001	2632255	1992723	AK102	(C10-C25)	211916311	983.7
C14	4.631	-0.000	4359265	3902114	AK103	(C25-C36)	1920274	19.0
C16	5.306	0.001	7166067	7531870	OR.DIES	(C10-C28)	212985940	1086.7
C18	5.910	0.002	7952837	7759614				
C20	6.469	-0.005	2480551	2594147	JET-A	(C10-C18)	165717705	1130.0
C22	7.029	-0.007	1166387	1265700				
C24	7.582	-0.007	246563	405049				
C25	7.854	-0.005	99250	190862				
C26	8.120	-0.005	46902	78860				
C28	8.625	-0.009	107341	94333				
C32	9.573	-0.001	56162	104437				
C34	10.004	-0.000	4490	3780				
Filter Peak	12.131	-0.008	1713	2405	BUNKERC	(C10-C38)	213933213	4765.5
C36	10.412	-0.000	4430	1943				
C38	10.802	0.001	4676	1591				
C40	11.204	0.004	2677	916				
o-terph	6.082	-0.000	19189490	19872960				
Triacon Surr	9.134	-0.008	13618581	18138360	NAS DIES	(C10-C24)	211337238	1083.0

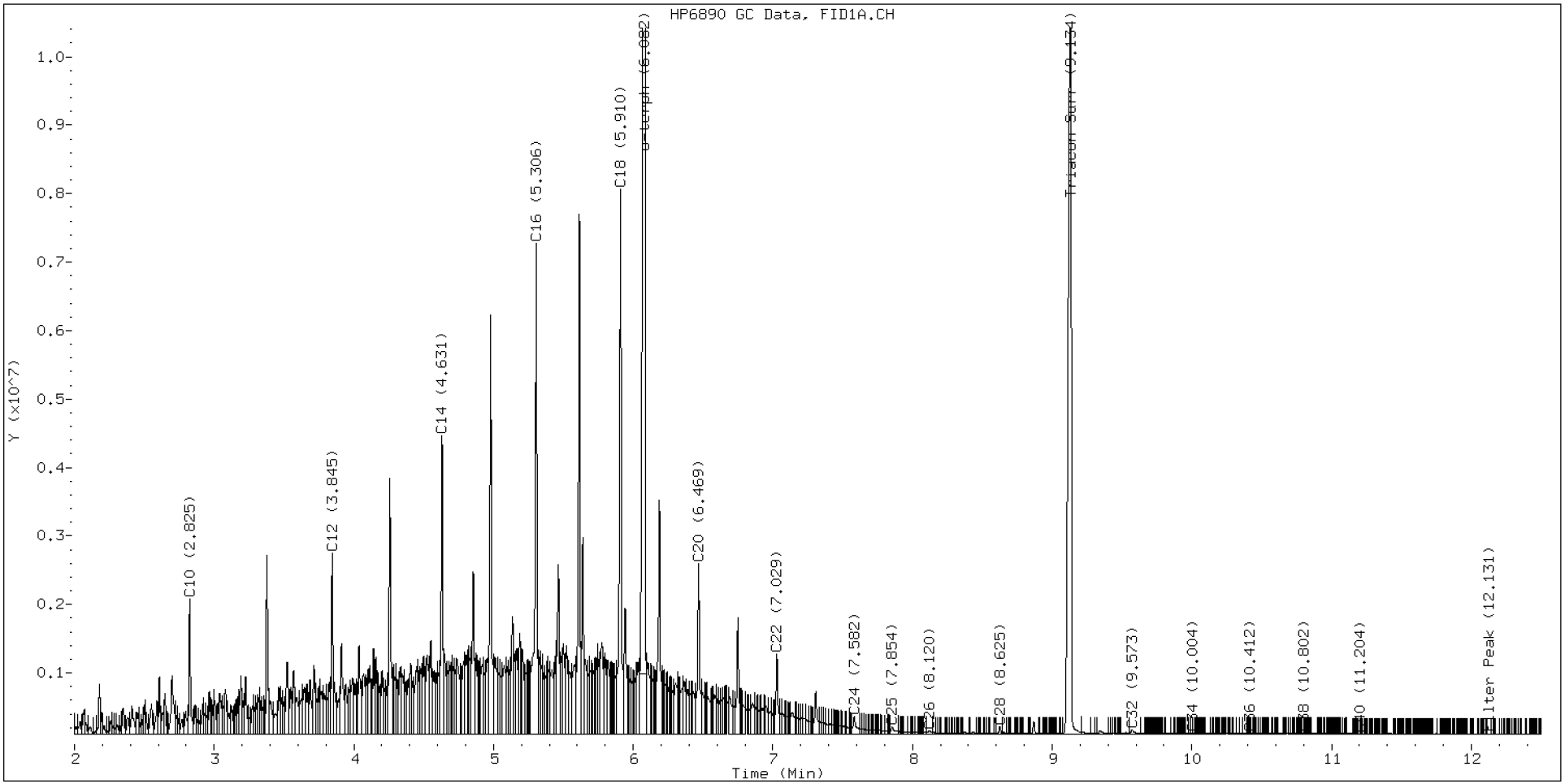
Range Times: NW Diesel(3.846 - 7.589) AK102(2.83 - 7.86) Jet A(2.83 - 5.91)
NW M.Oil(7.59 - 10.80) AK103(7.86 - 10.41) OR Diesel(2.83 - 8.63)

Surrogate	Area	Amount	
o-Terphenyl	19872960	79.8	M
Triacontane	18138360	85.6	

M Indicates the peak was manually integrated

Analyte	RF	Curve Date
o-Terph Surr	249011.3	25-OCT-2019
Triacon Surr	211827.9	25-OCT-2019
Gas	15000.0	XX-XXX-XXXX
Diesel	182831.3	14-APR-2021
Motor Oil	131440.7	14-APR-2021
AK102	215421.2	14-APR-2021
AK103	101056.3	14-APR-2021
JetA	146652.4	20-MAY-2020
OR Diesel	195999.1	25-OCT-2019
NAS Diesel	195148.2	25-OCT-2019
Bunker C	44892.5	21-APR-2021

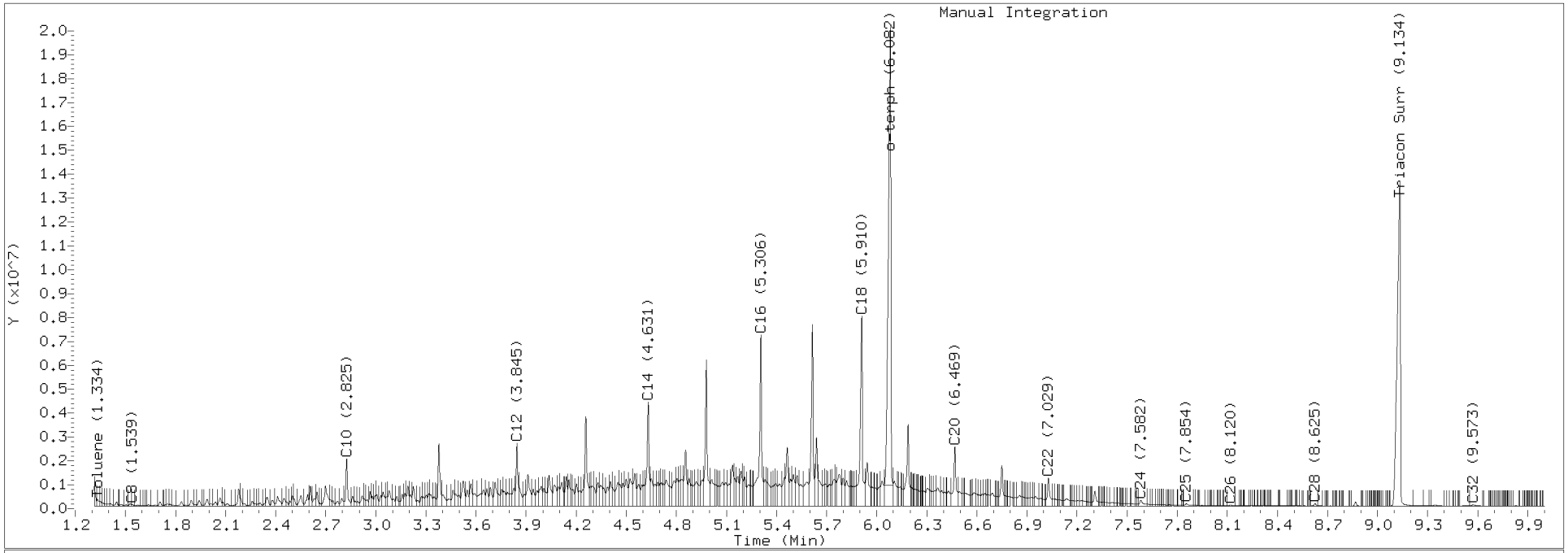
Datafile: FID4A, 20210520.b/421E2033.D BJE0366-BS1

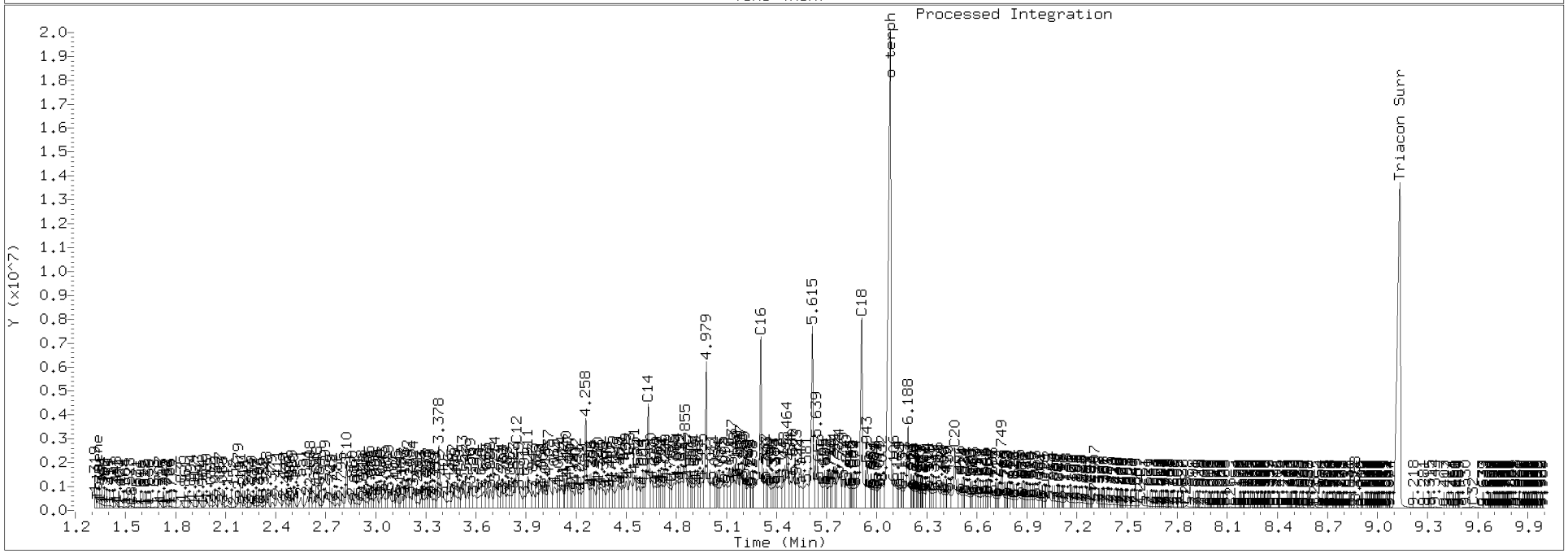


TPH Manual Integrations Report

Datafile: FID4A, 20210520.b/421E2033.D Injection: 21-MAY-2021 00:22

Lab ID:BJE0366-BS1





Analytical Resources, Incorporated
Analytical Chemists and Consultants

INITIAL CALIBRATION DATA
NWTPH-Dx

Laboratory:	Analytical Resources, Inc.	SDG:	21E0106
Client:	Anchor QEA, LLC	Project:	Gasco Siltronic - US Moorings
Calibration:	ED00037	Instrument:	FID4
Calibration Date:	04/13/2021	Column (1):	RTX-1

Compound	Level 01		Level 02		Level 03		Level 04		Level 05		Level 06	
		RF		RF		RF		RF		RF		RF
Diesel Range Organics (C12-C24)	50	185091.5	100	192889.4	250	190655.4	500	180854	1000	186039.7	2500	161458
o-Terphenyl	9	255700.8	18	256232.4	45	251136.4	90	247098.2	180	257460.6	450	226439.8

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INITIAL CALIBRATION DATA
NWTPH-Dx

Laboratory:	Analytical Resources, Inc.	SDG:	21E0106
Client:	Anchor QEA, LLC	Project:	Gasco Siltronic - US Moorings
Calibration:	ED00037	Instrument:	FID4
Calibration Date:	04/13/2021	Column (1):	RTX-1

Compound	Level 07		Level 08		Level 09		Level 10		Level 11		Level 12	
		RF		RF		RF		RF		RF		RF
Motor Oil Range Organics (C24-C38)	100	141072.4	250	134029.6	500	128843.9	1000	129766.7	2500	127391.3	5000	127540.4

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INITIAL CALIBRATION DATA

NWTPH-Dx

Laboratory:	Analytical Resources, Inc.	SDG:	21E0106
Client:	Anchor QEA, LLC	Project:	Gasco Siltronic - US Moorings
Calibration:	ED00037	Instrument:	FID4
Calibration Date:	04/13/2021	Column (1):	RTX-1

Compound	Level 13		Level 14		Level 15		Level 16		Level 17		Level 18	

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INITIAL CALIBRATION DATA
NWTPH-Dx

Laboratory:	Analytical Resources, Inc.	SDG:	21E0106
Client:	Anchor QEA, LLC	Project:	Gasco Siltronic - US Moorings
Calibration:	ED00037	Instrument:	FID4
Calibration Date:	04/13/2021	Column (1):	RTX-1

Compound	Level 19		Level 20		Level 21		Level 22		Level 23		Level 24	
		RF		RF		RF		RF		RF		RF
Creosote Range Organics (C12-C22)	100	43842.26	250	36736.52	500	36068.84	1000	42528.1	2500	36907.96	5000	38011.38

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Analytical Chemists and Consultants

INITIAL CALIBRATION DATA
NWTPH-Dx

Laboratory:	Analytical Resources, Inc.	SDG:	21E0106
Client:	Anchor QEA, LLC	Project:	Gasco Siltronic - US Moorings
Calibration:	ED00037	Instrument:	FID4
Calibration Date:	04/13/2021	Column (1):	RTX-1

Compound	Level 25		Level 26		Level 27		Level 28		Level 29		Level 30	
		RF		RF		RF		RF		RF		RF
Bunker C Range Organics (C10-C38)	100	42522.64	250	42298	500	41787.4	1000	44367.74	2500	49793.08	5000	48586.3

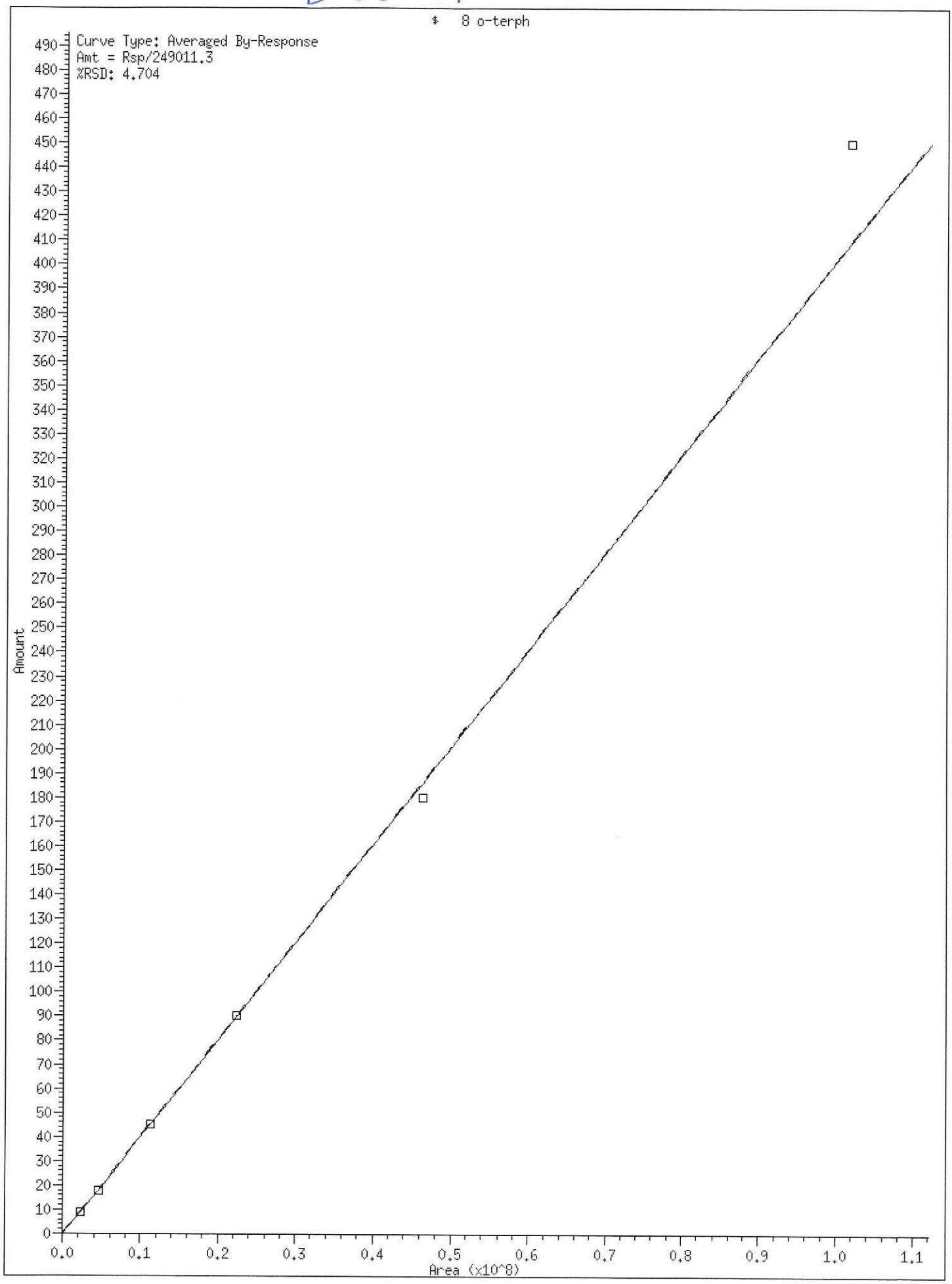
Analytical Resources, Incorporated
Analytical Chemists and Consultants

INITIAL CALIBRATION DATA
NWTPH-Dx

Laboratory:	Analytical Resources, Inc.	SDG:	21E0106
Client:	Anchor QEA, LLC	Project:	Gasco Siltronic - US Moorings
Calibration:	ED00037	Instrument:	FID4
Calibration Date:	04/13/2021	Column (1):	RTX-1

COMPOUND	Mean RF	RF RSD	Linear COD	Quad COD	Limit Type & Limit	Q
Diesel Range Organics (C12-C24)	182831.3	6.2			RSD (20)	
Motor Oil Range Organics (C24-C38)	131440.7	4.0			RSD (20)	
Creosote Range Organics (C12-C22)	39015.84	8.5			RSD (20)	
Bunker C Range Organics (C10-C38)	44892.53	7.7			RSD (20)	
o-Terphenyl	249011.4	4.7			RSD (20)	

ED00037


8 o-terph
Curve Type: Averaged By-Response
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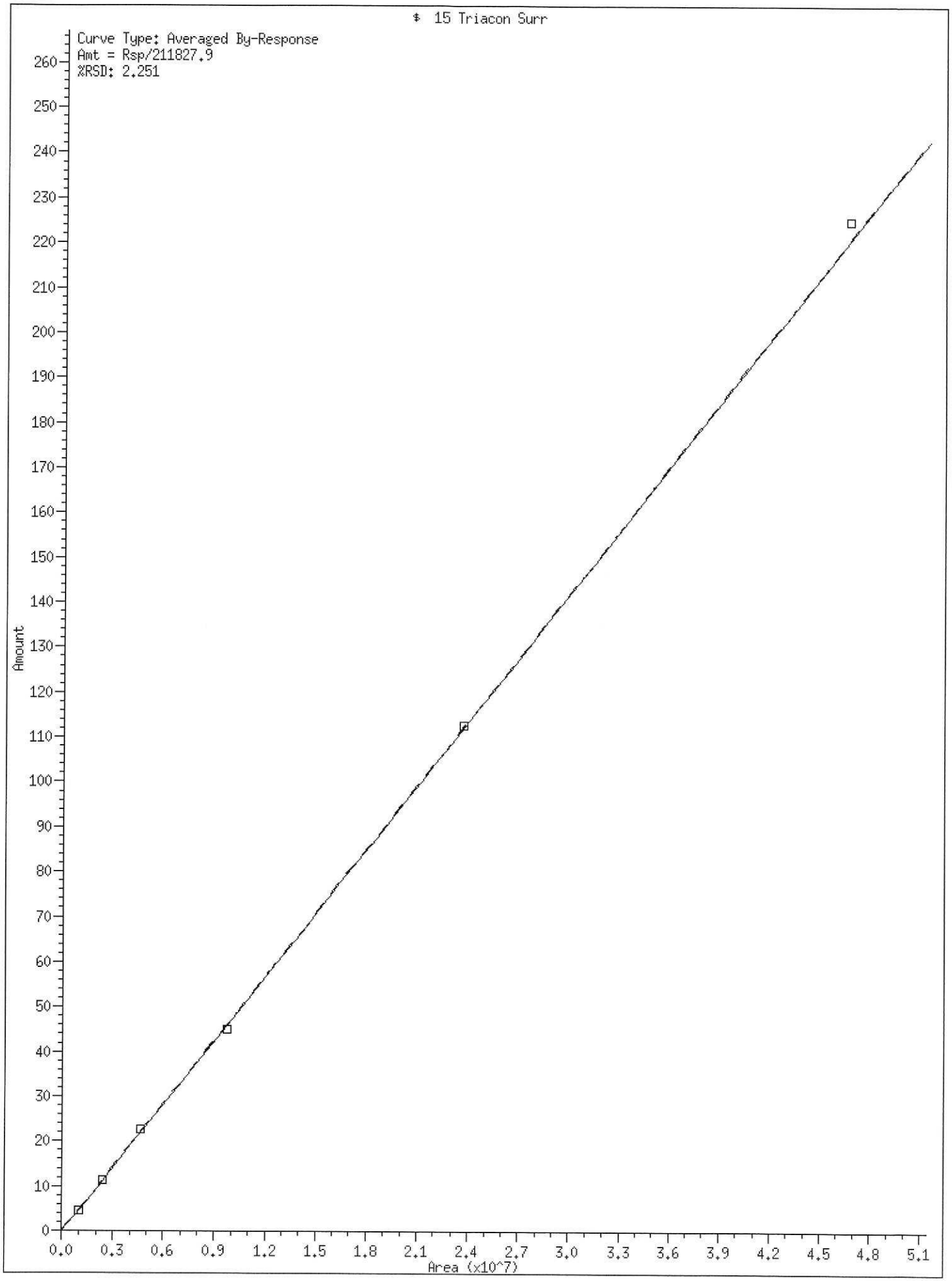
Amount
Area (x10^8)


$ 15 Triacon Surr
Curve Type: Averaged By-Response
Amt = Rsp/211827.9
%RSD: 2.251
Amount
Area (x10^7)
0
10
20
30
40
50
60
70
80
90
100
110
120
130
140
150
160
170
180
190
200
210
220
230
240
250
260
0.0
0.3
0.6
0.9
1.2
1.5
1.8
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2.4
2.7
3.0
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3.9
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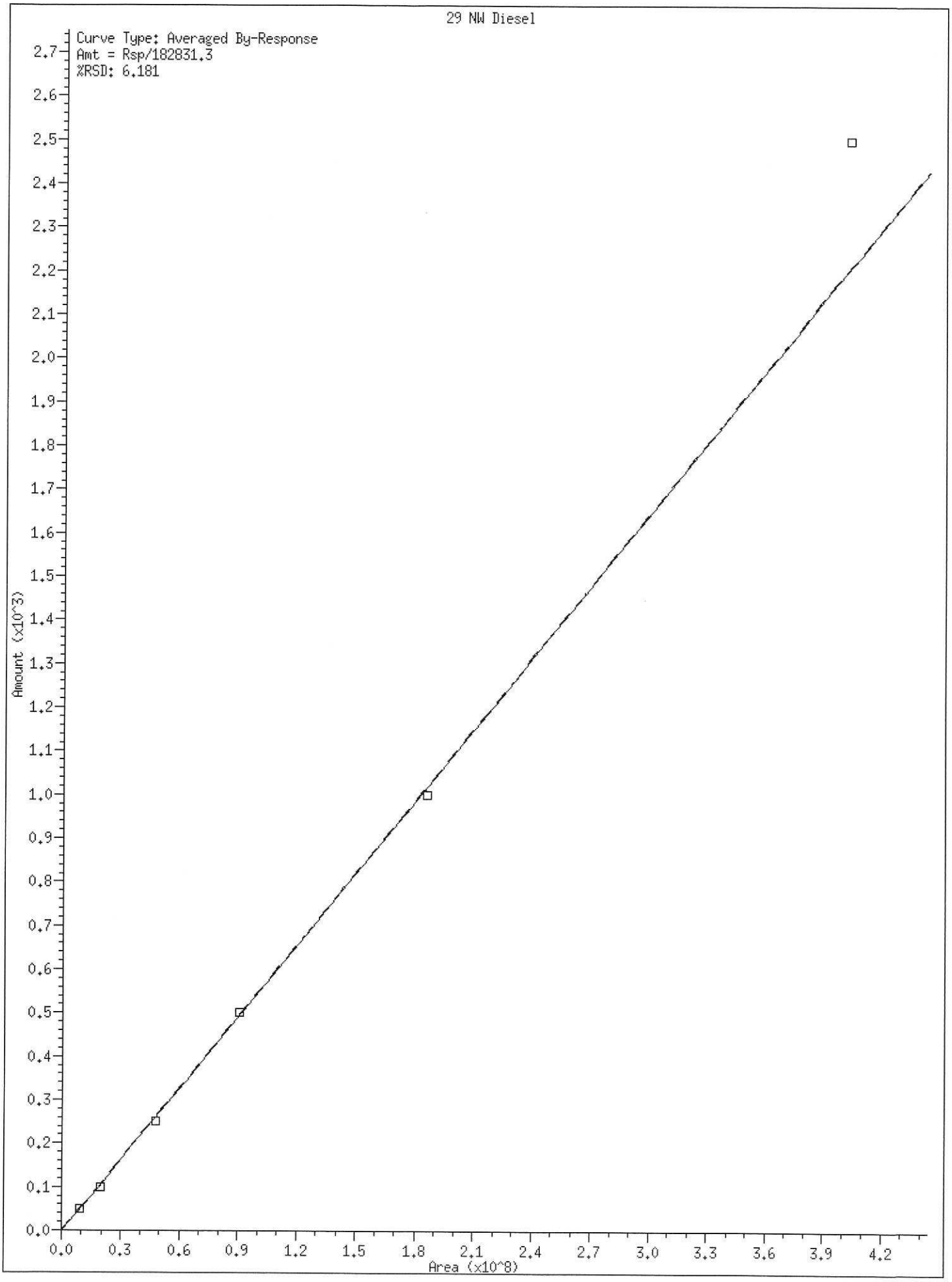
4.8
5.1


29 NW Diesel
Curve Type: Averaged By-Response
Amt = Rsp/182831.3
%RSD: 6.181
Amount (x10^3)
Area (x10^8)
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0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1.0
1.1
1.2
1.3
1.4
1.5
1.6
1.7
1.8
1.9
2.0
2.1
2.2
2.3
2.4
2.5
2.6
2.7
0.0
0.3
0.6
0.9
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1.8
2.1
2.4
2.7
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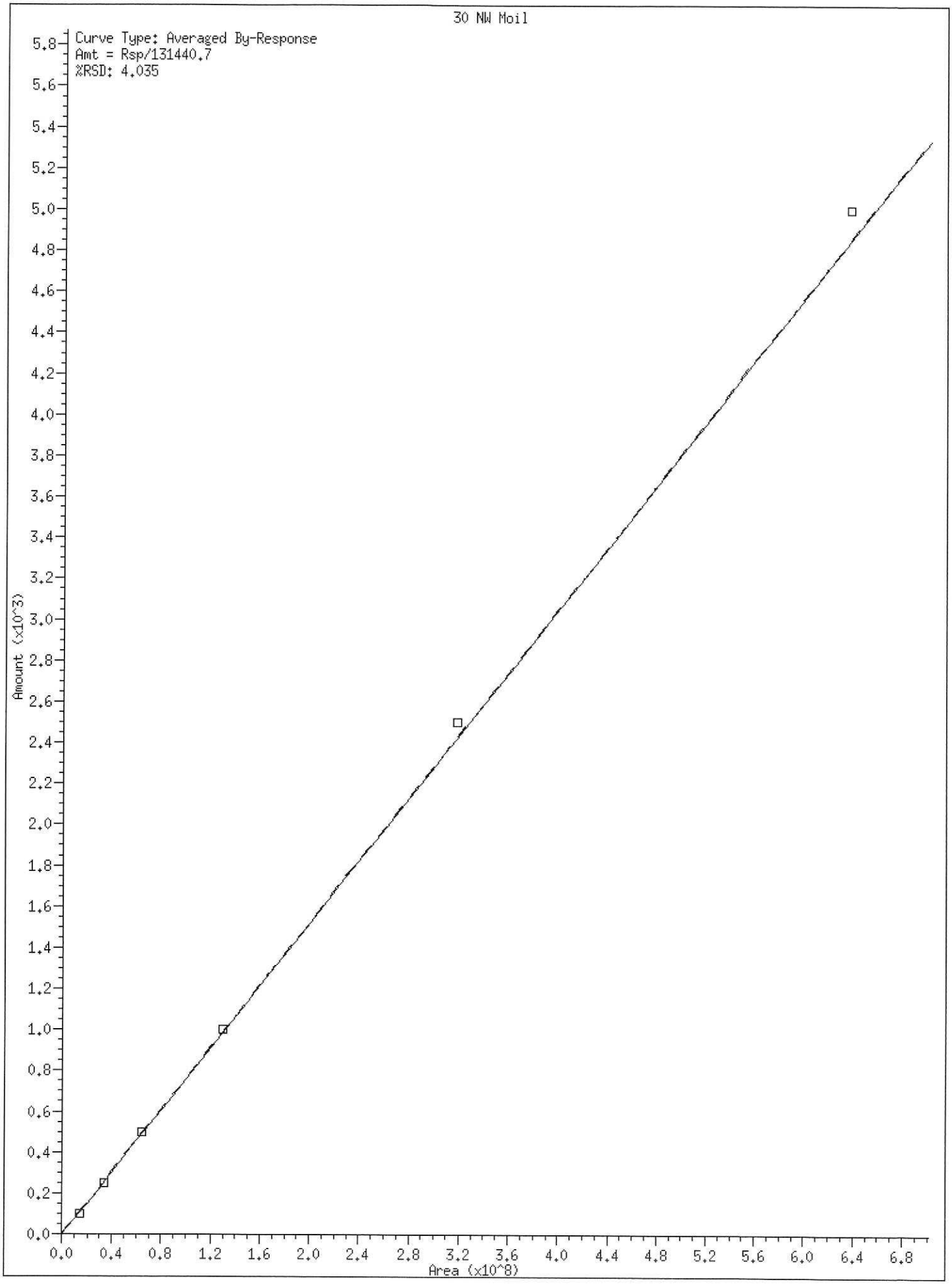
3.3
3.6
3.9
4.2


30 NW Moil
Curve Type: Averaged By-Response
Amt = Rsp/131440.7
%RSD: 4.035
Amount (x10^3)
Area (x10^8)
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0.2
0.4
0.6
0.8
1.0
1.2
1.4
1.6
1.8
2.0
2.2
2.4
2.6
2.8
3.0
3.2
3.4
3.6
3.8
4.0
4.2
4.4
4.6
4.8
5.0
5.2
5.4
5.6
5.8
0.0
0.4
0.8
1.2
1.6
2.0
2.4
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4.4
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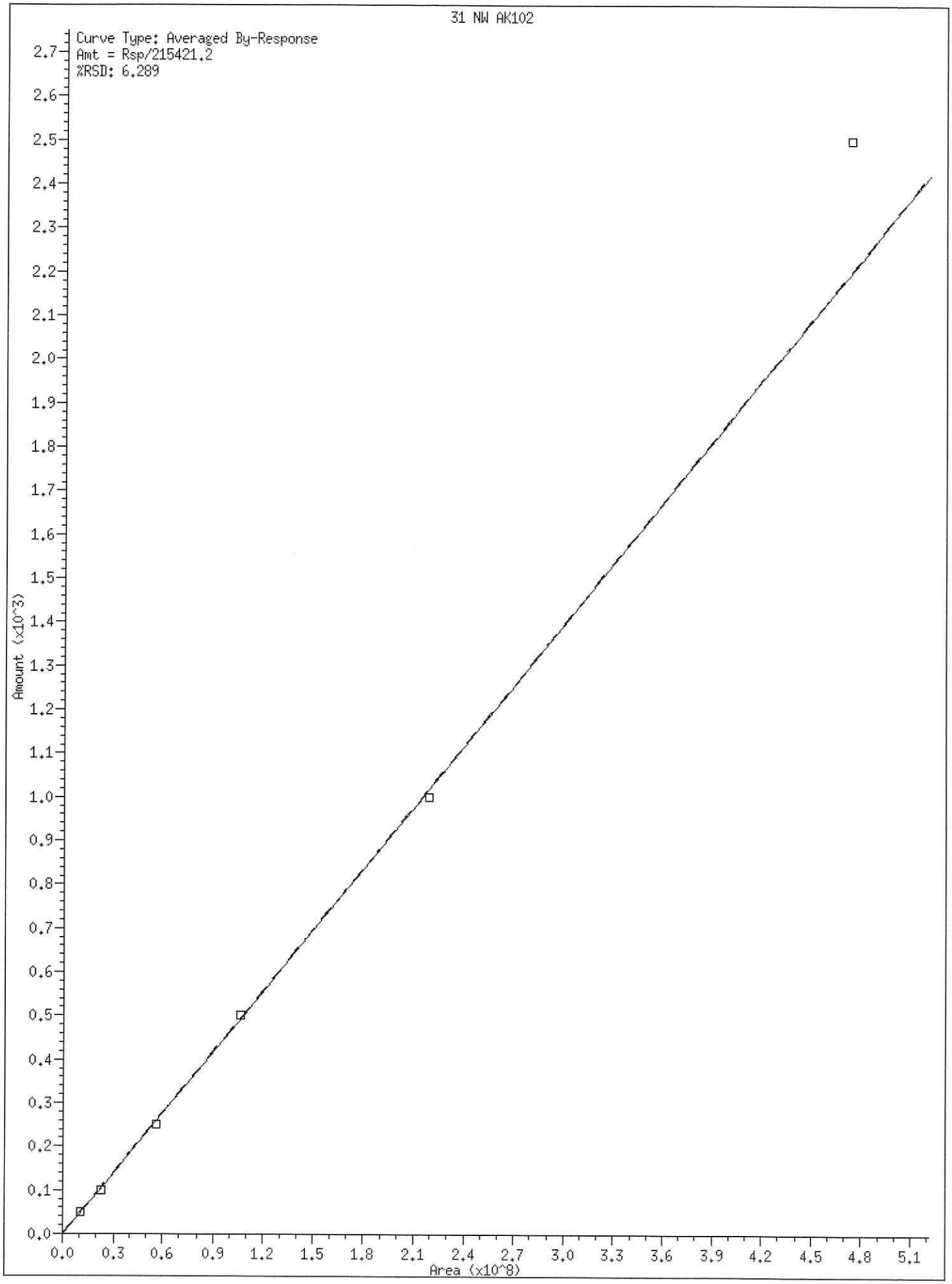
6.0
6.4
6.8


31 NW AK102
Curve Type: Averaged By-Response
Amt = Rsp/215421.2
%RSD: 6.289
Amount (x10^3)
Area (x10^8)
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0.3
0.4
0.5
0.6
0.7
0.8
0.9
1.0
1.1
1.2
1.3
1.4
1.5
1.6
1.7
1.8
1.9
2.0
2.1
2.2
2.3
2.4
2.5
2.6
2.7
0.0
0.3
0.6
0.9
1.2
1.5
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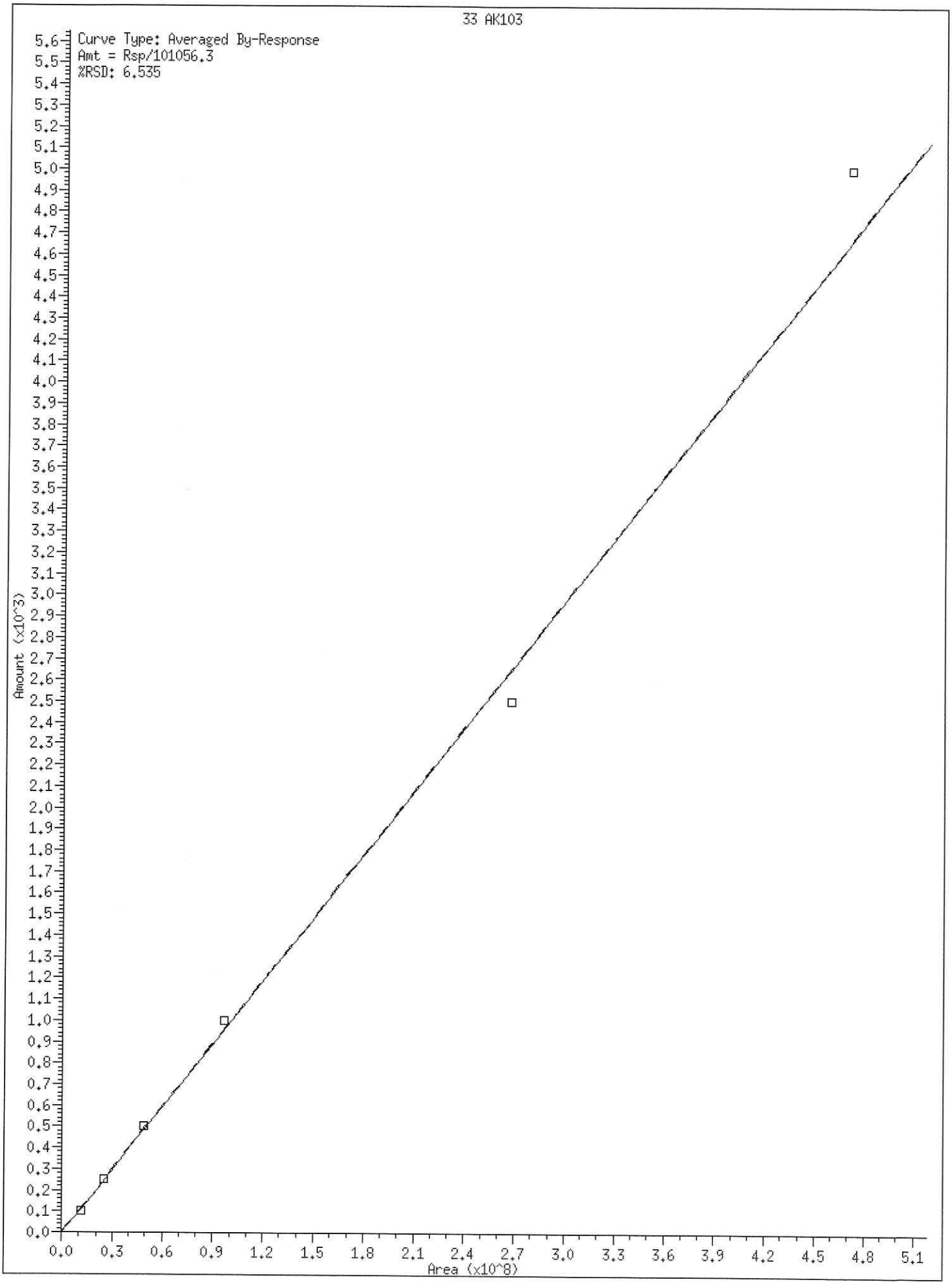
4.8
5.1


33 AK103
Curve Type: Averaged By-Response
Amt = Rsp/101056.3
%RSD: 6.535
Amount (x10^3)
Area (x10^8)

Analytical Resources, Incorporated
Analytical Chemists and Consultants

SECOND-SOURCE CALIBRATION VERIFICATION

NWTPH-Dx

Laboratory: Analytical Resources, Inc.
Client: Anchor QEA, LLC
Calibration: ED00037
Sequence: SJD0189

SDG: 21E0106
Project: Gasco Siltronic - US Moorings
Laboratory ID: SJD0189-SCV1
Sequence Name: DIESEL SCV
Standard ID: I004025

ANALYTE	EXPECTED (mg/L)	FOUND (mg/L)	% DRIFT	QC LIMIT
Diesel Range Organics (C12-C24)	500.00	492	-1.7	30.00

* Indicates values outside of QC limits

Data File: \\target\share\chem2\fid4a.i\20210413.b\421D1315.D

Date : 13-APR-2021 15:37

Client ID:

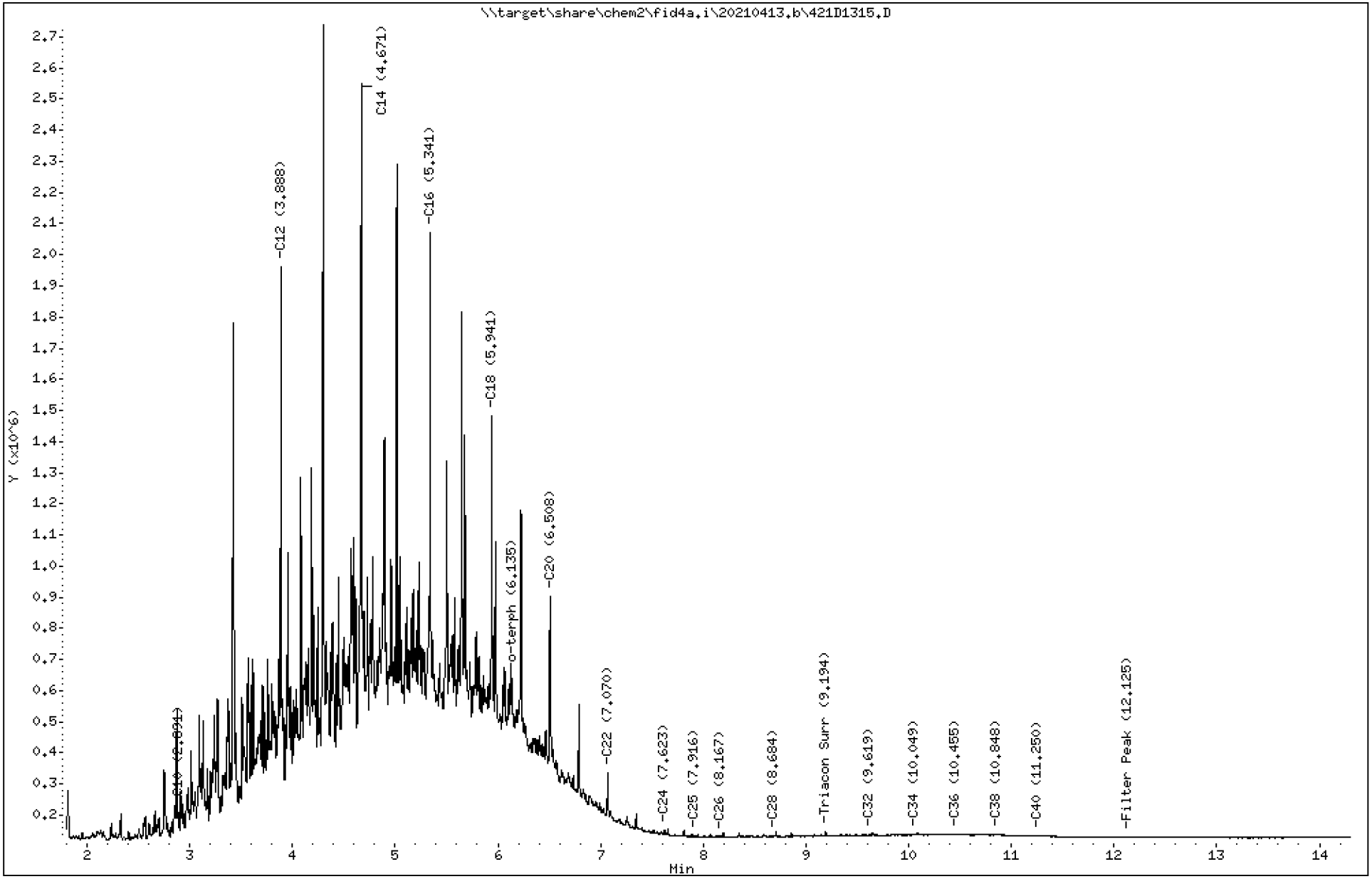
Instrument: fid4a.i

Sample Info: SEQ-SCV1

Operator: CTO

Column phase: RTX-1

Column diameter: 0.25



Analytical Resources Inc.
TPH Quantitation Report

Data file: 20210413.b/421D1315.D
Method: 20210413.b\FID4TPH.m
Instrument: fid4a.i, CTO
Report Date: 04/14/2021
Macro: 09-SEP-2019
Calibration Dates: Gas:XX-XXX-XXXX Diesel:14-APR-2021 M.Oil:14-APR-2021

ARI ID: SEQ-SCV1
Client ID:
Injection: 13-APR-2021 15:37
Dilution Factor: 1
RT Std: 419H1603.D

FID:4A RESULTS

Compound	RT	Shift	Height	Area	Method	Range	Total Area	Conc(mg/L)
C8	1.643	0.008	54603	64091	WATPHD	(C12-C24)	89863949	491.5
C10	2.891	0.001	88521	60047	WATPHM	(C24-C38)	2579689	19.6
C12	3.888	-0.007	1839965	1228653	AK102	(C10-C25)	107410855	498.6
C14	4.671	-0.006	2430486	1810508	AK103	(C25-C36)	2086166	20.6
C16	5.341	-0.007	1950234	1476241	OR.DIES	(C10-C28)	107974378	550.9
C18	5.941	-0.008	1361376	1097598				
C20	6.508	-0.009	783405	864803	JET-A	(C10-C18)	89494855	610.3
C22	7.070	-0.012	216300	223341				
C24	7.623	-0.012	29214	46183				
C25	7.916	0.008	13547	12777				
C26	8.167	-0.005	8723	1733				
C28	8.684	0.003	11097	3231				
C32	9.619	-0.004	16094	18913				
C34	10.049	-0.003	16451	8995				
Filter Peak	12.125	0.003	8610	2562	CREOSOT	(C12-C22)	88684804	8332.6
C36	10.455	-0.004	16099	8787				
C38	10.848	0.002	15723	4681				
C40	11.250	-0.002	12238	2441				
o-terph	6.135	0.005	518842	594571				
Triacon Surr	9.194	0.000	24981	26960	NAS DIES	(C10-C24)	107276298	549.7

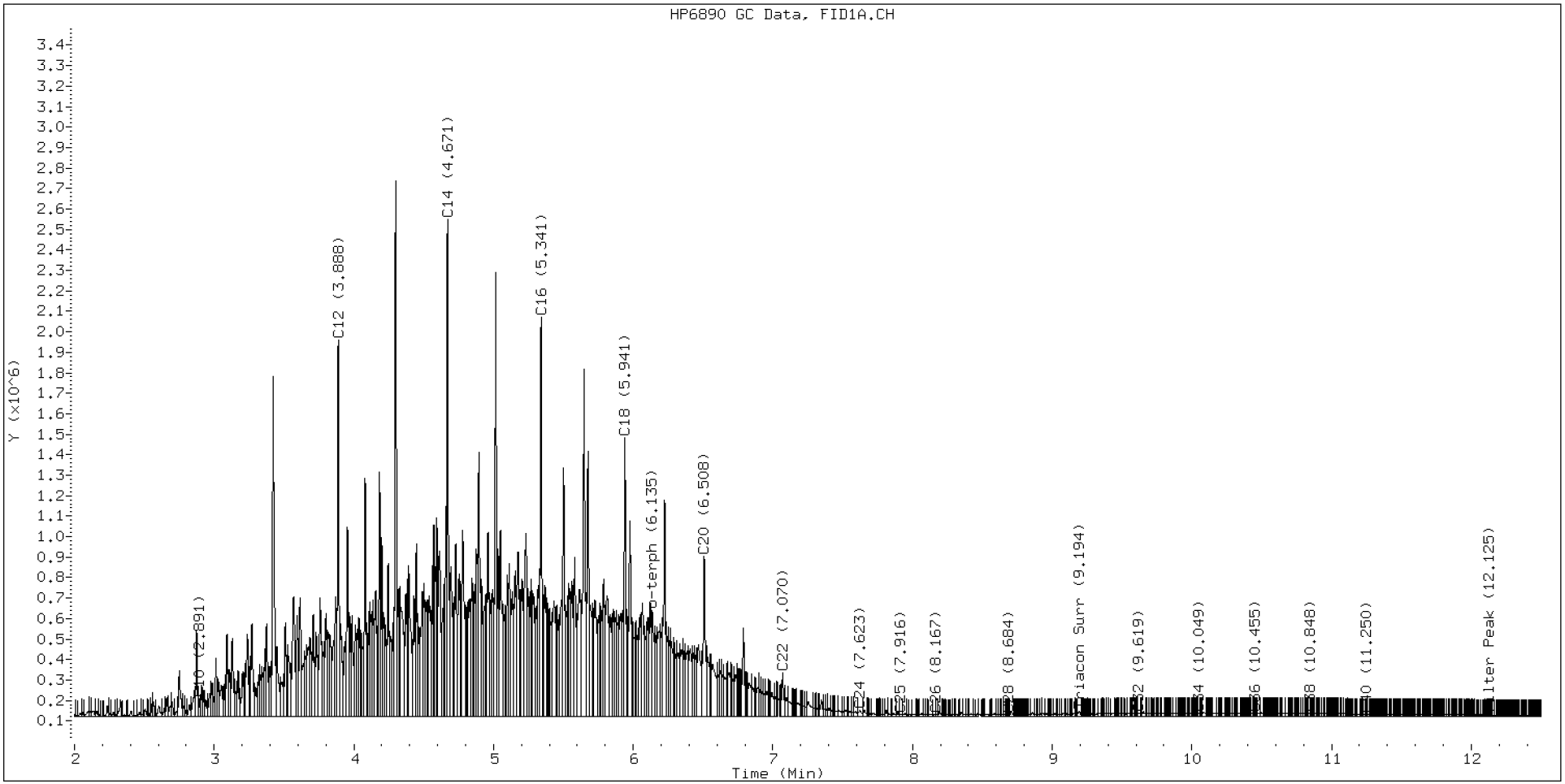
Range Times: NW Diesel(3.894 - 7.635) AK102(2.89 - 7.91) Jet A(2.89 - 5.95)
NW M.Oil(7.64 - 10.85) AK103(7.91 - 10.46) OR Diesel(2.89 - 8.68)

Surrogate	Area	Amount
o-Terphenyl	594571	2.4
Triacontane	26960	0.1

M Indicates the peak was manually integrated

Analyte	RF	Curve Date
o-Terph Surr	249011.3	25-OCT-2019
Triacon Surr	211827.9	25-OCT-2019
Gas	15000.0	XX-XXX-XXXX
Diesel	182831.3	14-APR-2021
Motor Oil	131440.7	14-APR-2021
AK102	215421.2	14-APR-2021
AK103	101056.3	14-APR-2021
JetA	146652.4	20-MAY-2020
OR Diesel	195999.1	25-OCT-2019
NAS Diesel	195148.2	25-OCT-2019
Creosote	10643.2	30-MAR-2020

Datafile: FID4A, 20210413.b/421D1315.D SEQ-SCV1



Analytical Resources, Incorporated
Analytical Chemists and Consultants

SECOND-SOURCE CALIBRATION VERIFICATION

NWTPH-Dx

Laboratory: Analytical Resources, Inc.
Client: Anchor QEA, LLC
Calibration: ED00037
Sequence: SJD0189

SDG: 21E0106
Project: Gasco Siltronic - US Moorings
Laboratory ID: SJD0189-SCV2
Sequence Name: MOIL SCV
Standard ID: I004757

ANALYTE	EXPECTED (mg/L)	FOUND (mg/L)	% DRIFT	QC LIMIT
Motor Oil Range Organics (C24-C38)	1000.0	918	-8.2	30.00

* Indicates values outside of QC limits

Data File: \\target\share\chem2\fid4a.i\20210413.b\421D1322.D

Date : 13-APR-2021 18:07

Client ID:

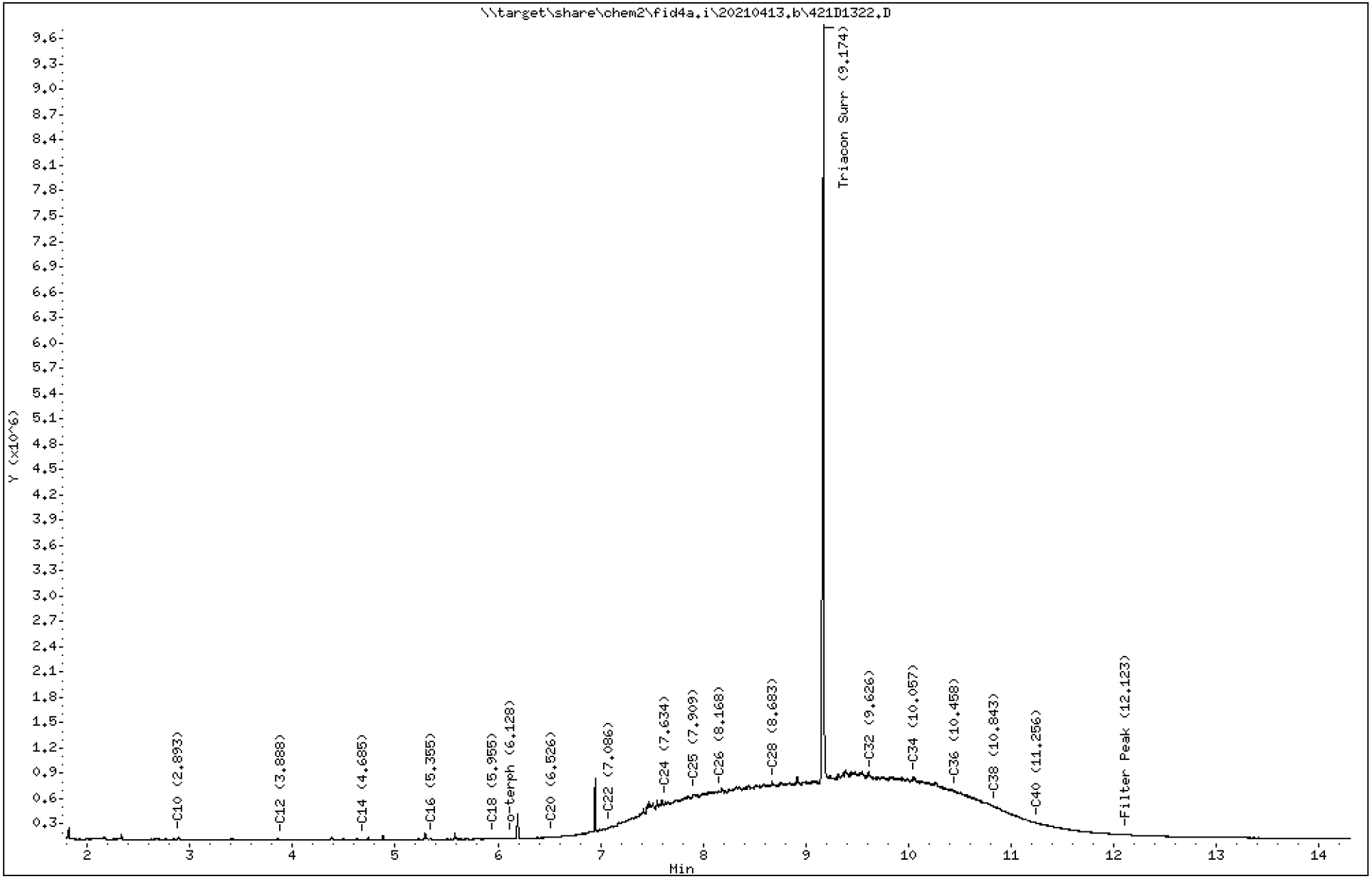
Instrument: fid4a.i

Sample Info: SEQ-SCV2

Operator: CTO

Column phase: RTX-1

Column diameter: 0.25



Analytical Resources Inc.
TPH Quantitation Report

Data file: 20210413.b/421D1322.D
Method: 20210413.b\FID4TPH.m
Instrument: fid4a.i, CTO
Report Date: 04/14/2021
Macro: 09-SEP-2019
Calibration Dates: Gas:XX-XXX-XXXX Diesel:14-APR-2021 M.Oil:14-APR-2021

ARI ID: SEQ-SCV2
Client ID:
Injection: 13-APR-2021 18:07
Dilution Factor: 1
RT Std: 419H1603.D

FID:4A RESULTS

Compound	RT	Shift	Height	Area	Method	Range	Total Area	Conc(mg/L)
C8	1.626	-0.008	65747	96813	WATPHD	(C12-C24)	15532252	85.0
C10	2.893	0.003	32970	23142	WATPHM	(C24-C38)	120611856	917.6
C12	3.888	-0.006	5389	3628	AK102	(C10-C25)	20669789	96.0
C14	4.685	0.008	3945	1476	AK103	(C25-C36)	105207415	1041.1
C16	5.355	0.007	9584	10953	OR.DIES	(C10-C28)	51331560	261.9
C18	5.955	0.006	19031	17530				
C20	6.526	0.009	34956	39910	JET-A	(C10-C18)	962360	6.6
C22	7.086	0.004	142736	70767				
C24	7.634	-0.001	455529	454995				
C25	7.909	0.002	536300	187150				
C26	8.168	-0.004	569572	113374				
C28	8.683	0.001	657302	357915				
C32	9.626	0.003	760723	638055				
C34	10.057	0.005	726792	323841				
Filter Peak	12.123	0.002	60871	41807	CREOSOT	(C12-C22)	4882924	458.8
C36	10.458	-0.002	571891	252641				
C38	10.843	-0.003	392748	215443				
C40	11.256	0.004	196755	78044				
o-terph	6.128	-0.002	13513	9103				
Triacon Surr	9.174	-0.019	8966637	9459500	NAS DIES	(C10-C24)	15747411	80.7

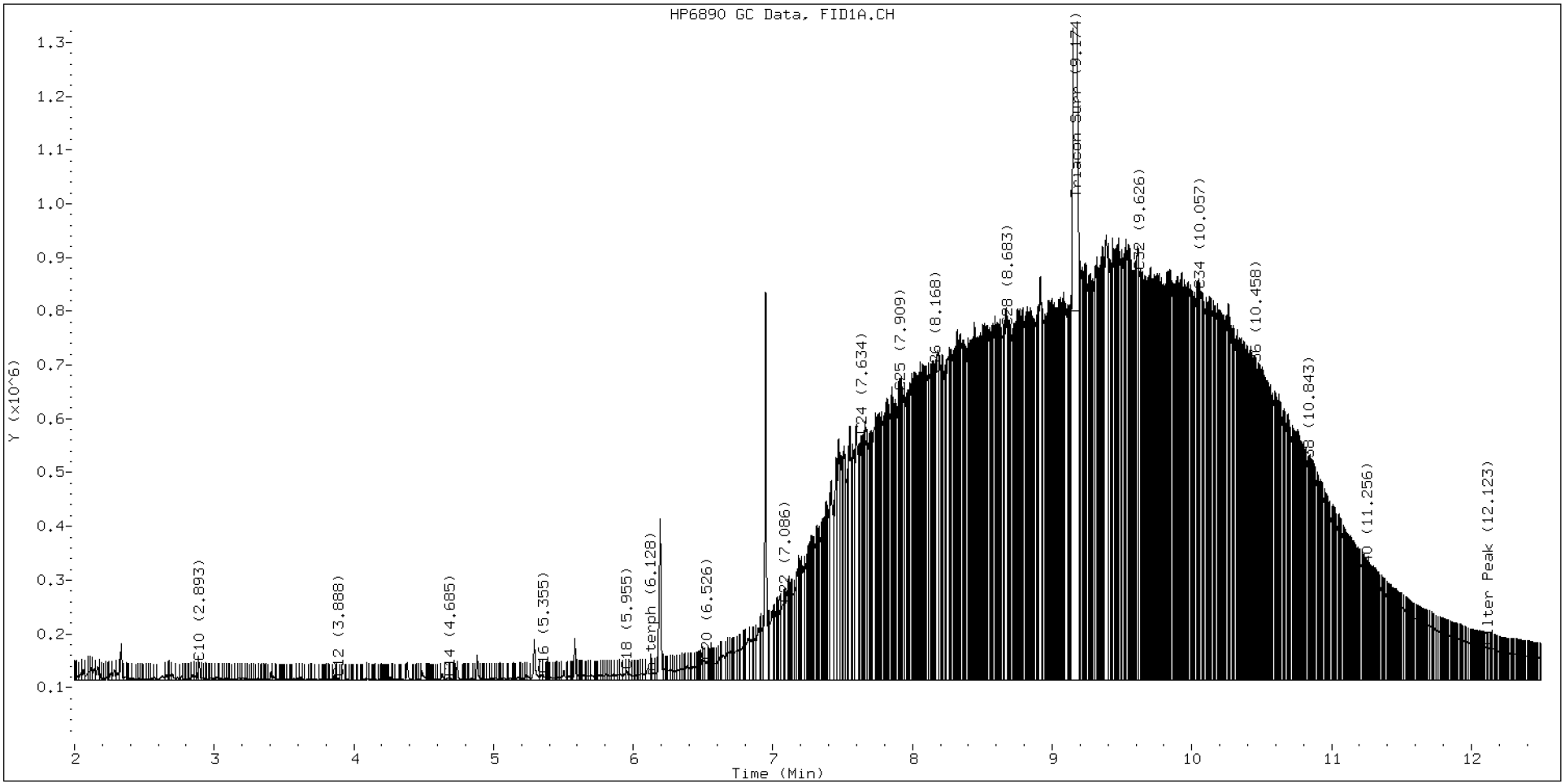
Range Times: NW Diesel(3.894 - 7.635) AK102(2.89 - 7.91) Jet A(2.89 - 5.95)
NW M.Oil(7.64 - 10.85) AK103(7.91 - 10.46) OR Diesel(2.89 - 8.68)

Surrogate	Area	Amount	
o-Terphenyl	9103	0.0	
Triacontane	9459500	44.7	M

M Indicates the peak was manually integrated

Analyte	RF	Curve Date
o-Terph Surr	249011.3	25-OCT-2019
Triacon Surr	211827.9	25-OCT-2019
Gas	15000.0	XX-XXX-XXXX
Diesel	182831.3	14-APR-2021
Motor Oil	131440.7	14-APR-2021
AK102	215421.2	14-APR-2021
AK103	101056.3	14-APR-2021
JetA	146652.4	20-MAY-2020
OR Diesel	195999.1	25-OCT-2019
NAS Diesel	195148.2	25-OCT-2019
Creosote	10643.2	30-MAR-2020

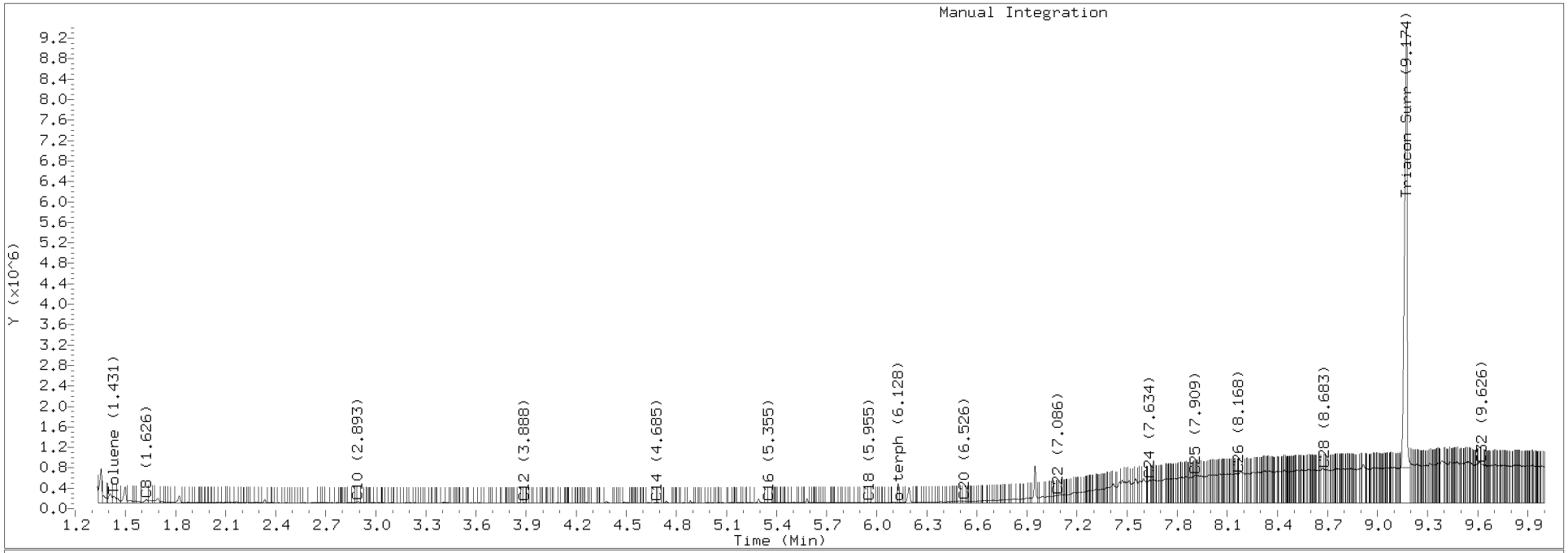
Datafile: FID4A, 20210413.b/421D1322.D SEQ-SCV2

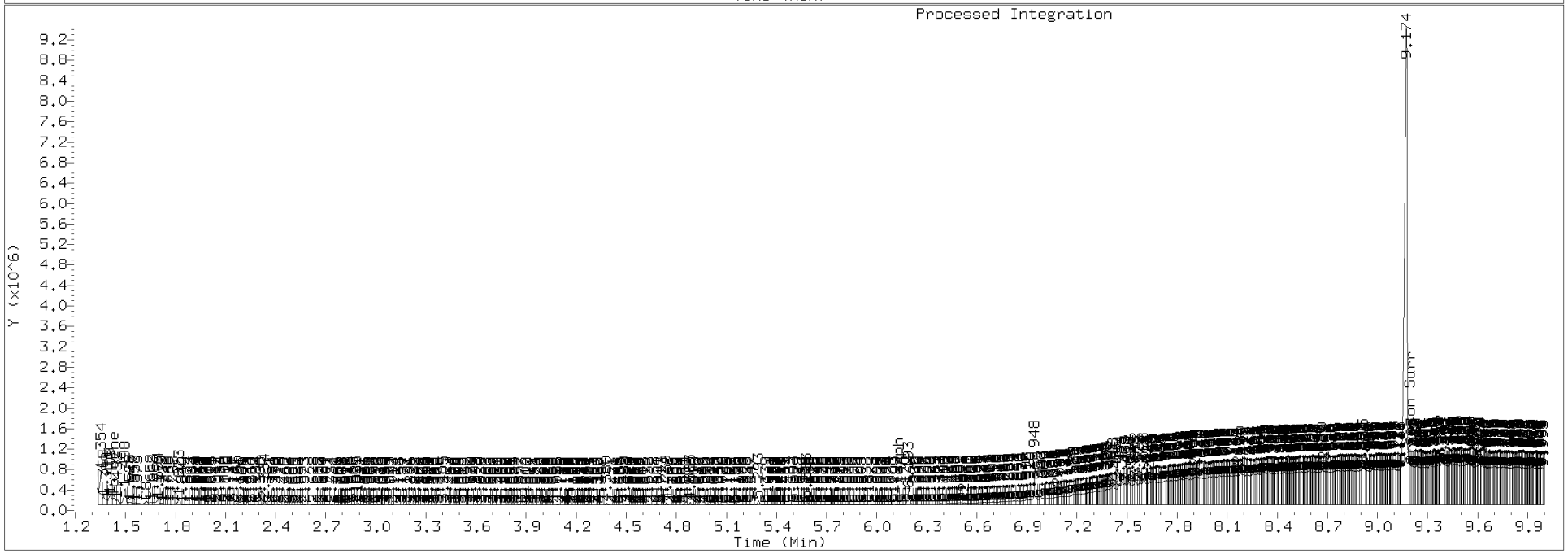


TPH Manual Integrations Report

Datafile: FID4A, 20210413.b/421D1322.D Injection: 13-APR-2021 18:07

Lab ID:SEQ-SCV2





Analytical Resources, Incorporated
Analytical Chemists and Consultants

INITIAL CALIBRATION CHECK

NWTPH-Dx

Laboratory:	Analytical Resources, Inc.	SDG:	21E0106
Client:	Anchor QEA, LLC	Project:	Gasco Siltronic - US Moorings
Instrument ID:	FID4	Calibration:	ED00037
Lab File ID:	421D1561.D	Calibration Date:	04/13/2021
Sequence:	SJD0260	Injection Date:	04/16/21
Lab Sample ID:	SJD0260-ICV1	Injection Time:	06:21
Sequence Name:	DIESEL ICV		

COMPOUND	TYPE	CONC. (mg/L)		RESPONSE FACTOR			% DRIFT/DIFF	
		STD	ICV	ICAL	ICV	MIN	ICV	LIMIT
Diesel Range Organics (C12-C24)	A	500.00	499	182831.3000	182439.2000		-0.2	+/-15
o-Terphenyl	A	90.000	87.0	249011.4000	240625.8000		-3.3	+/-15

* Values outside of QC limits

* Values outside of QC limits

Data File: \\target\share\chem2\fid4a.i\20210415b.b\421D1561.D

Date : 16-APR-2021 06:21

Client ID:

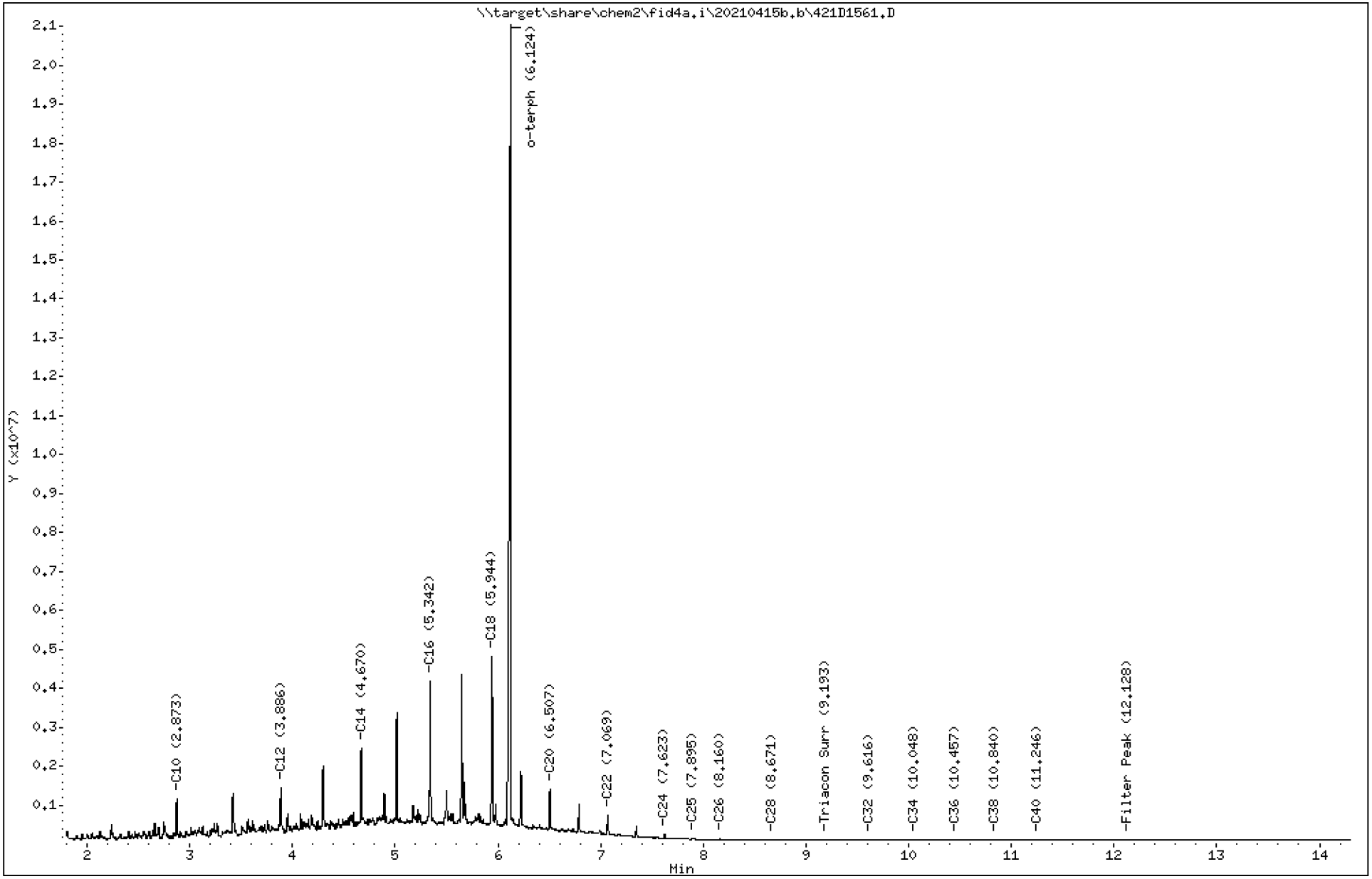
Instrument: fid4a.i

Sample Info: SEQ-ICV1

Operator: CTO

Column phase: RTX-1

Column diameter: 0.25



Analytical Resources Inc.
TPH Quantitation Report

Data file: 20210415b.b/421D1561.D
Method: 20210415b.b\FID4TPH.m
Instrument: fid4a.i, CTO
Report Date: 04/19/2021
Macro: 09-SEP-2019
Calibration Dates: Gas:XX-XXX-XXXX Diesel:14-APR-2021 M.Oil:14-APR-2021

ARI ID: SEQ-ICV1
Client ID:
Injection: 16-APR-2021 06:21
Dilution Factor: 1
RT Std: 419H1603.D

FID:4A RESULTS

Compound	RT	Shift	Height	Area	Method	Range	Total Area	Conc(mg/L)
C8	1.609	-0.001	112644	125856	WATPHD	(C12-C24)	91219617	498.9
C10	2.873	-0.006	1038507	786922	WATPHM	(C24-C38)	877375	6.7
C12	3.886	-0.002	1337018	1070306	AK102	(C10-C25)	107631460	499.6
C14	4.670	-0.001	2351029	2027178	AK103	(C25-C36)	532809	5.3
C16	5.342	-0.001	4060546	3872792	OR.DIES	(C10-C28)	108018043	551.1
C18	5.944	-0.001	4691534	3670982				
C20	6.507	-0.007	1287445	1292118	JET-A	(C10-C18)	84182999	574.0
C22	7.069	-0.008	632412	655045				
C24	7.623	-0.008	140665	184376				
C25	7.895	-0.007	48878	80604				
C26	8.160	-0.007	17884	30824				
C28	8.671	-0.005	3768	5029				
C32	9.616	-0.000	702	162				
C34	10.048	0.002	1056	404				
Filter Peak	12.128	0.003	6822	1932	CREOSOT	(C12-C22)	88435872	2266.7
C36	10.457	0.003	2877	818				
C38	10.840	0.001	5073	3458				
C40	11.246	-0.001	6257	1849				
o-terph	6.124	0.001	20516680	21656325				
Triacon Surr	9.193	0.007	3523	3605	NAS DIES	(C10-C24)	107377182	550.2

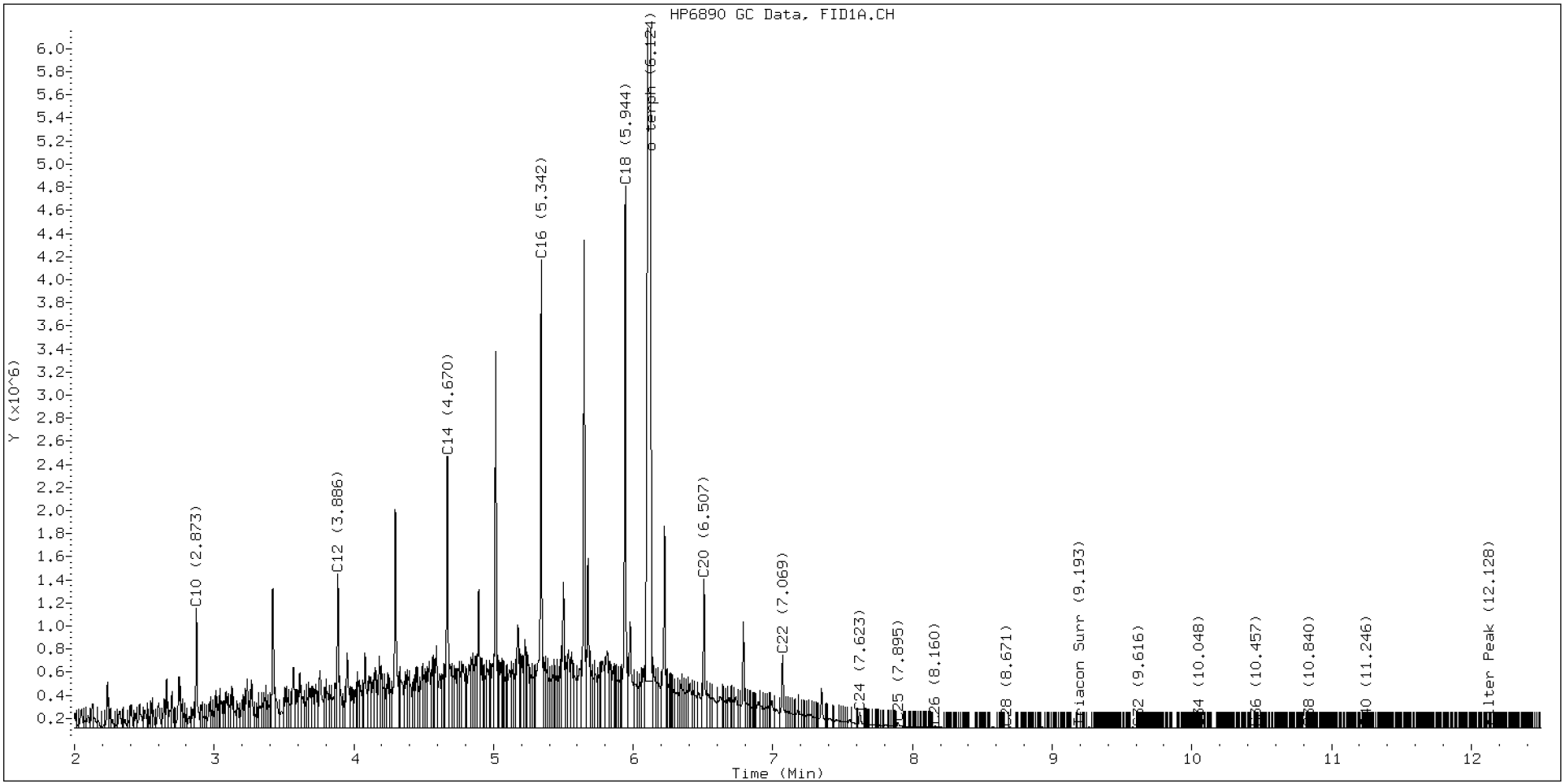
Range Times: NW Diesel(3.888 - 7.631) AK102(2.88 - 7.90) Jet A(2.88 - 5.95)
NW M.Oil(7.63 - 10.84) AK103(7.90 - 10.45) OR Diesel(2.88 - 8.68)

Surrogate	Area	Amount	
o-Terphenyl	21656325	87.0	M
Triacontane	3605	0.0	

M Indicates the peak was manually integrated

Analyte	RF	Curve Date
o-Terph Surr	249011.3	25-OCT-2019
Triacon Surr	211827.9	25-OCT-2019
Gas	15000.0	XX-XXX-XXXX
Diesel	182831.3	14-APR-2021
Motor Oil	131440.7	14-APR-2021
AK102	215421.2	14-APR-2021
AK103	101056.3	14-APR-2021
JetA	146652.4	20-MAY-2020
OR Diesel	195999.1	25-OCT-2019
NAS Diesel	195148.2	25-OCT-2019
Creosote	39015.8	30-MAR-2020

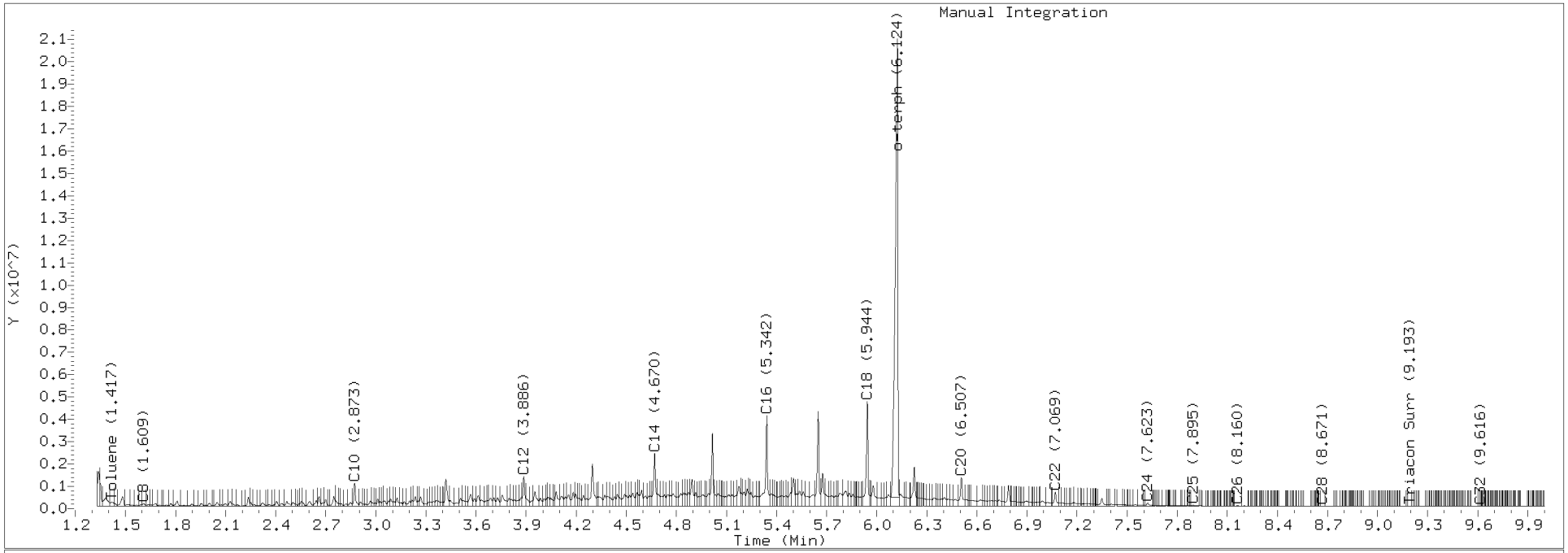
Datafile: FID4A, 20210415b.b/421D1561.D SEQ-ICV1

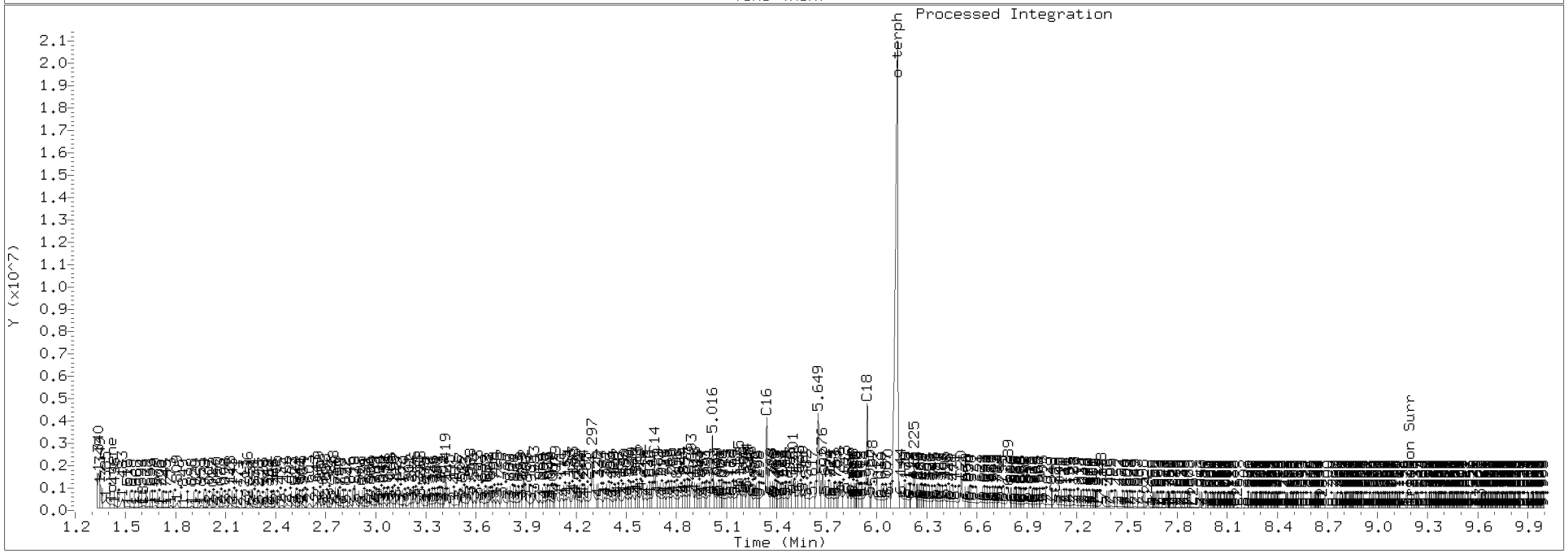


TPH Manual Integrations Report

Datafile: FID4A, 20210415b.b/421D1561.D Injection: 16-APR-2021 06:21

Lab ID:SEQ-ICV1





Analytical Resources, Incorporated
Analytical Chemists and Consultants

INITIAL CALIBRATION CHECK

NWTPH-Dx

Laboratory:	Analytical Resources, Inc.	SDG:	21E0106
Client:	Anchor QEA, LLC	Project:	Gasco Siltronic - US Moorings
Instrument ID:	FID4	Calibration:	ED00037
Lab File ID:	421D1562.D	Calibration Date:	04/13/2021
Sequence:	SJD0260	Injection Date:	04/16/21
Lab Sample ID:	SJD0260-ICV2	Injection Time:	06:42
Sequence Name:	MOIL ICV		

COMPOUND	TYPE	CONC. (mg/L)		RESPONSE FACTOR			% DRIFT/DIFF	
		STD	ICV	ICAL	ICV	MIN	ICV	LIMIT
Motor Oil Range Organics (C24-C38)	A	1000.0	1180	131440.7000	155644.0000		18.4	+/-15 *

* Values outside of QC limits

* Values outside of QC limits

Data File: \\target\share\chem2\fid4a.i\20210415b.b\421D1562.D

Date : 16-APR-2021 06:42

Client ID:

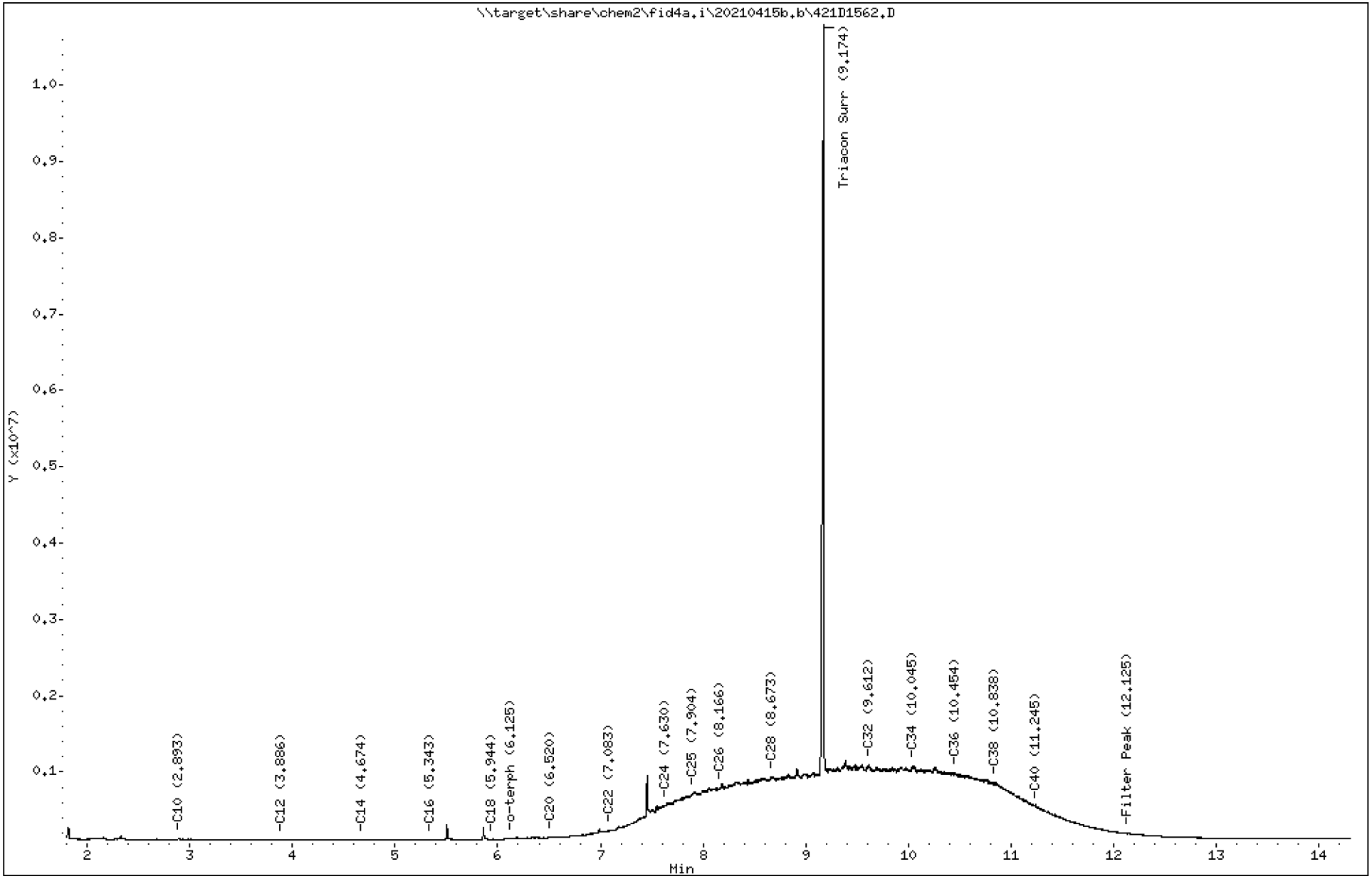
Instrument: fid4a.i

Sample Info: SEQ-ICV2

Operator: CTO

Column phase: RTX-1

Column diameter: 0.25



Analytical Resources Inc.
TPH Quantitation Report

Data file: 20210415b.b/421D1562.D
Method: 20210415b.b\FID4TPH.m
Instrument: fid4a.i, CTO
Report Date: 04/19/2021
Macro: 09-SEP-2019
Calibration Dates: Gas:XX-XXX-XXXX Diesel:14-APR-2021 M.Oil:14-APR-2021

ARI ID: SEQ-ICV2
Client ID:
Injection: 16-APR-2021 06:42
Dilution Factor: 1
RT Std: 419H1603.D

FID:4A RESULTS

Compound	RT	Shift	Height	Area	Method	Range	Total Area	Conc(mg/L)
C8	1.620	0.010	79445	114551	WATPHD	(C12-C24)	13969364	76.4
C10	2.893	0.014	21986	28723	WATPHM	(C24-C38)	155644038	1184.1
C12	3.886	-0.001	1914	1485	AK102	(C10-C25)	19406620	90.1
C14	4.674	0.003	3193	943	AK103	(C25-C36)	132173405	1307.9
C16	5.343	0.000	4315	2109	OR.DIES	(C10-C28)	56265963	287.1
C18	5.944	-0.001	8251	1644				
C20	6.520	0.006	30709	20749	JET-A	(C10-C18)	821458	5.6
C22	7.083	0.005	116656	28892				
C24	7.630	-0.001	451736	112436				
C25	7.904	0.002	610127	479843				
C26	8.166	-0.001	689125	272337				
C28	8.673	-0.003	832047	329420				
C32	9.612	-0.004	989937	532388				
C34	10.045	-0.001	964151	381225				
Filter Peak	12.125	-0.001	84250	29053	CREOSOT	(C12-C22)	3721874	95.4
C36	10.454	0.000	871779	518981				
C38	10.838	-0.001	751332	514765				
C40	11.245	-0.001	436685	108472				
o-terph	6.125	0.001	11073	3279				
Triacon Surr	9.174	-0.012	9847122	10778658	NAS DIES	(C10-C24)	14137722	72.4

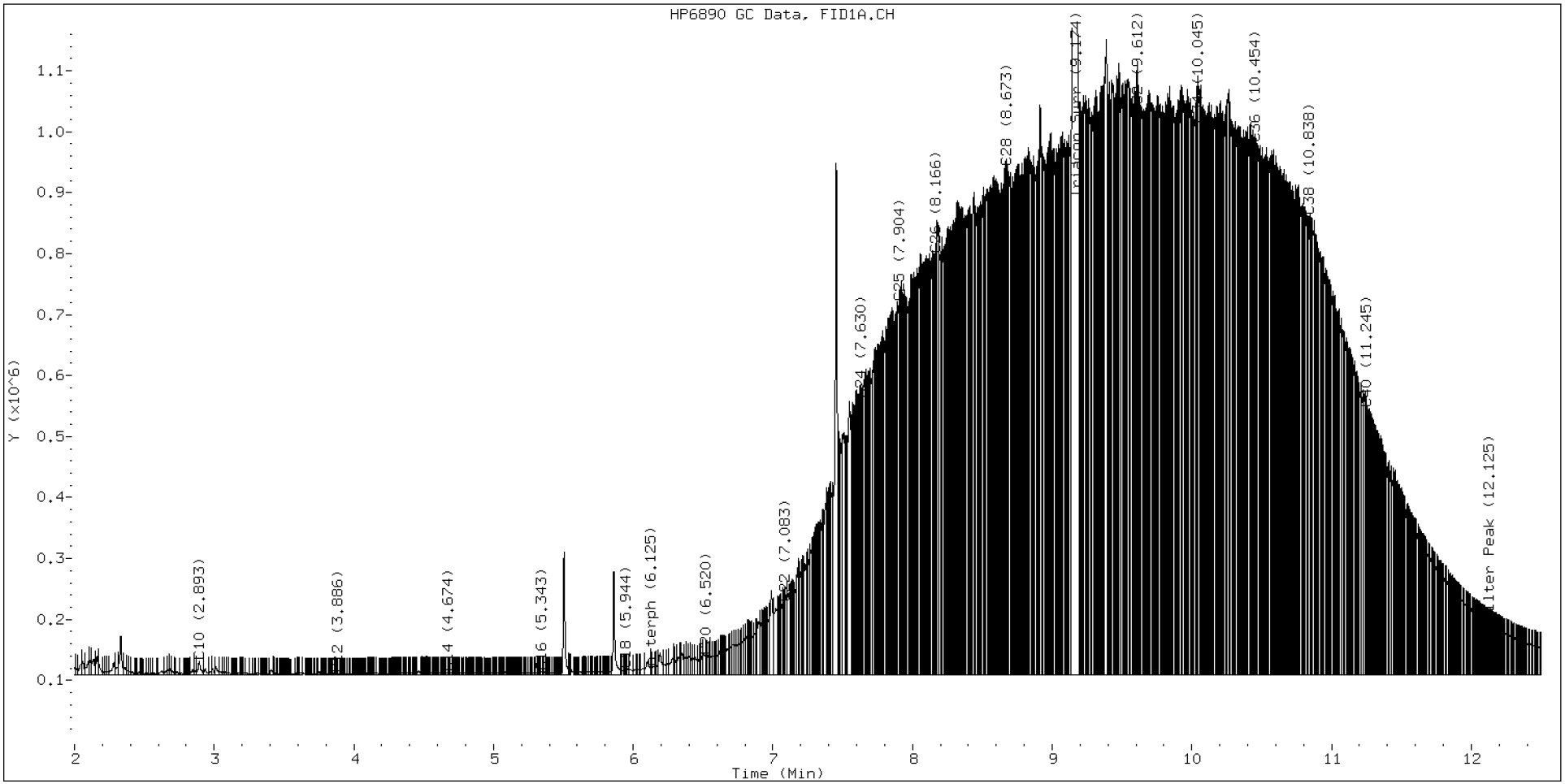
Range Times: NW Diesel(3.888 - 7.631) AK102(2.88 - 7.90) Jet A(2.88 - 5.95)
NW M.Oil(7.63 - 10.84) AK103(7.90 - 10.45) OR Diesel(2.88 - 8.68)

Surrogate	Area	Amount	
o-Terphenyl	3279	0.0	
Triacontane	10778658	50.9	M

M Indicates the peak was manually integrated

Analyte	RF	Curve Date
o-Terph Surr	249011.3	25-OCT-2019
Triacon Surr	211827.9	25-OCT-2019
Gas	15000.0	XX-XXX-XXXX
Diesel	182831.3	14-APR-2021
Motor Oil	131440.7	14-APR-2021
AK102	215421.2	14-APR-2021
AK103	101056.3	14-APR-2021
JetA	146652.4	20-MAY-2020
OR Diesel	195999.1	25-OCT-2019
NAS Diesel	195148.2	25-OCT-2019
Creosote	39015.8	30-MAR-2020

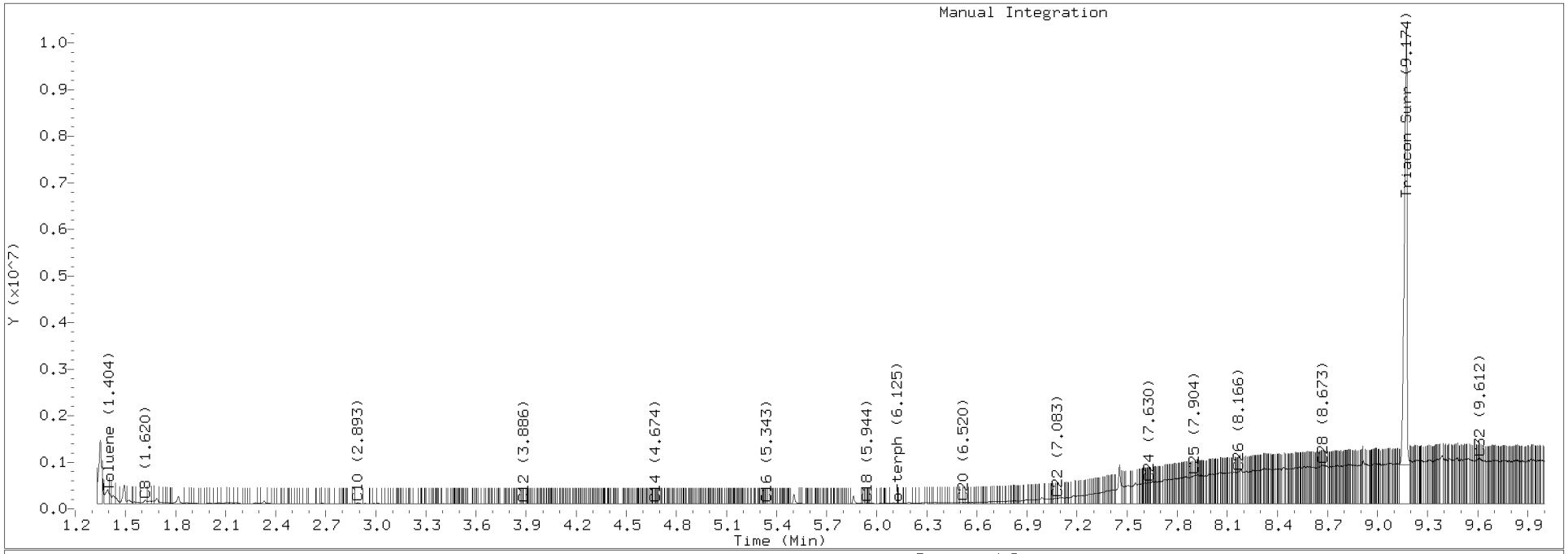
Datafile: FID4A, 20210415b.b/421D1562.D SEQ-ICV2

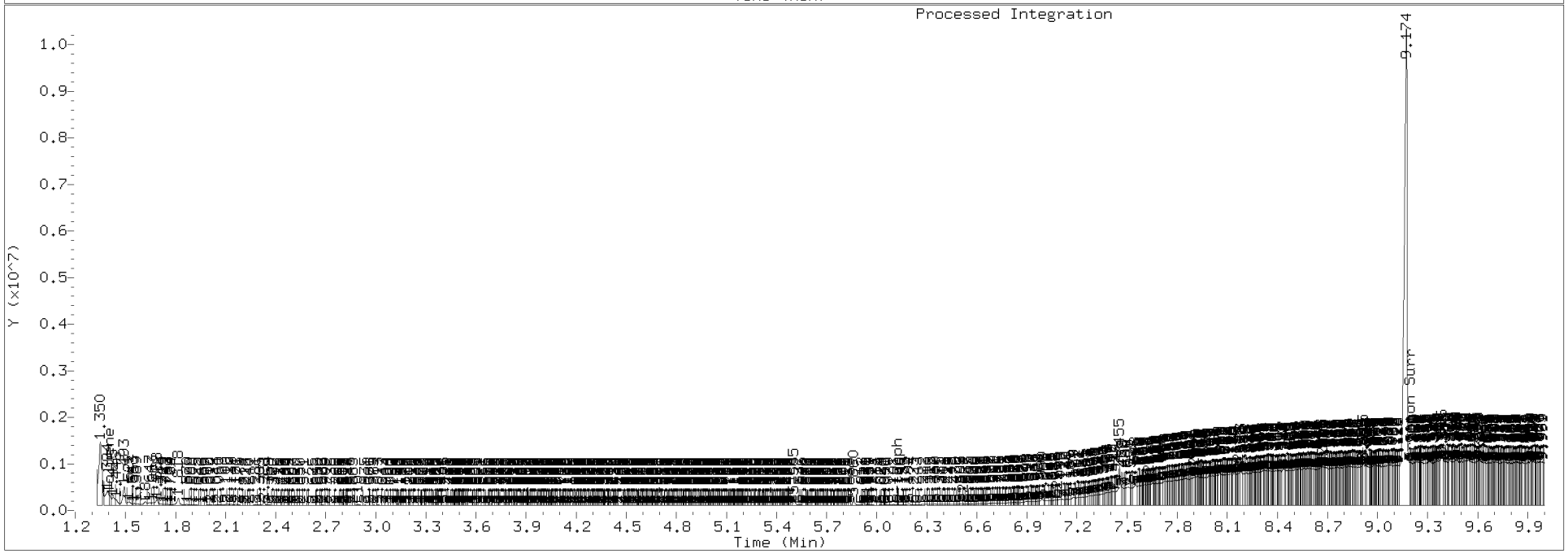


TPH Manual Integrations Report

Datafile: FID4A, 20210415b.b/421D1562.D Injection: 16-APR-2021 06:42

Lab ID:SEQ-ICV2





Analytical Resources, Incorporated
Analytical Chemists and Consultants

INITIAL CALIBRATION CHECK

NWTPH-Dx

Laboratory:	Analytical Resources, Inc.	SDG:	21E0106
Client:	Anchor QEA, LLC	Project:	Gasco Siltronic - US Moorings
Instrument ID:	FID4	Calibration:	ED00037
Lab File ID:	421D1563.D	Calibration Date:	04/13/2021
Sequence:	SJD0260	Injection Date:	04/16/21
Lab Sample ID:	SJD0260-ICV3	Injection Time:	07:03
Sequence Name:	A/S Creosote ICV		

		CONC. (mg/L)		RESPONSE FACTOR			% DRIFT/DIFF	
COMPOUND	TYPE	STD	ICV	ICAL	ICV	MIN	ICV	LIMIT
Creosote Range Organics (C12-C22)	A	1000.0	942	39015.8400	36759.2300		-5.8	+/-15
o-Terphenyl	A	90.000	80.9	249011.4000	223885.7000		-10.1	+/-15

* Values outside of QC limits

Data File: \\target\share\chem2\fid4a.i\20210415b.b\421D1563.D

Date : 16-APR-2021 07:03

Client ID:

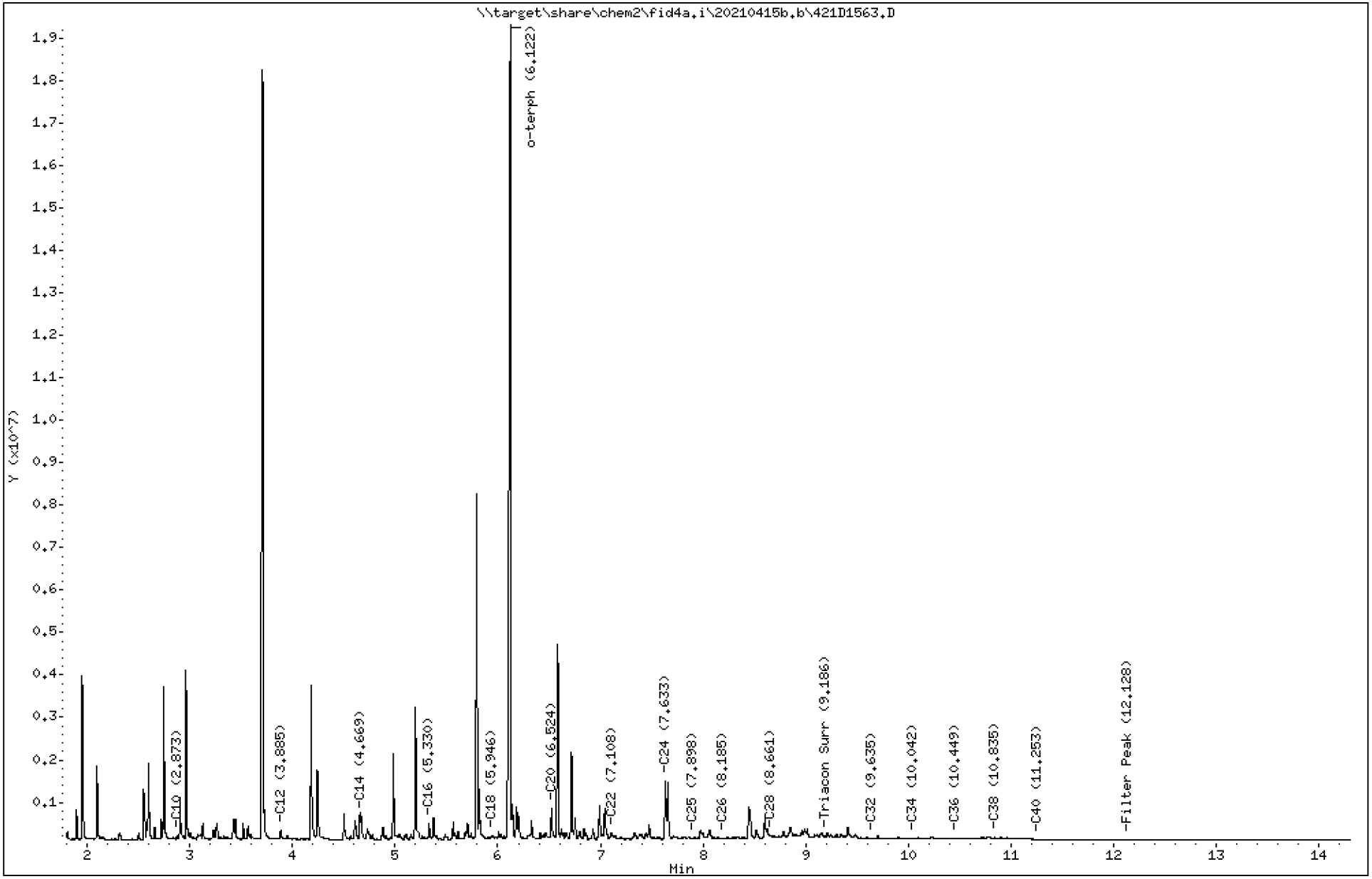
Instrument: fid4a.i

Sample Info: SEQ-ICV3

Operator: CTO

Column phase: RTX-1

Column diameter: 0.25



Analytical Resources Inc.
TPH Quantitation Report

Data file: 20210415b.b/421D1563.D
Method: 20210415b.b\FID4TPH.m
Instrument: fid4a.i, CTO
Report Date: 04/19/2021
Macro: 09-SEP-2019
Calibration Dates: Gas:XX-XXX-XXXX Diesel:14-APR-2021 M.Oil:14-APR-2021

ARI ID: SEQ-ICV3
Client ID:
Injection: 16-APR-2021 07:03
Dilution Factor: 1
RT Std: 419H1603.D

FID:4A RESULTS

Compound	RT	Shift	Height	Area	Method	Range	Total Area	Conc(mg/L)
C8	1.610	0.000	83533	121908	WATPHD	(C12-C24)	41084434	224.7
C10	2.873	-0.006	84020	54114	WATPHM	(C24-C38)	13445948	102.3
C12	3.885	-0.002	228898	243746	AK102	(C10-C25)	65972947	306.3
C14	4.669	-0.002	544251	492987	AK103	(C25-C36)	12179350	120.5
C16	5.330	-0.013	379787	343677	OR.DIES	(C10-C28)	71078269	362.6
C18	5.946	0.001	81234	101276				
C20	6.524	0.010	756175	690943	JET-A	(C10-C18)	47063943	320.9
C22	7.108	0.030	157344	256653				
C24	7.633	0.002	1383061	1245338				
C25	7.898	-0.004	39353	35911				
C26	8.185	0.019	28749	21842				
C28	8.661	-0.015	97719	140386				
C32	9.635	0.019	36560	57770				
C34	10.042	-0.004	30823	16346				
Filter Peak	12.128	0.003	4121	2203	CREOSOT	(C12-C22)	36759229	942.2
C36	10.449	-0.005	38987	62090				
C38	10.835	-0.005	48555	63116				
C40	11.253	0.006	13503	12291				
o-terph	6.122	-0.001	19198875	20149713				
Triacon Surr	9.186	0.000	89900	105769	NAS DIES	(C10-C24)	65524403	335.8

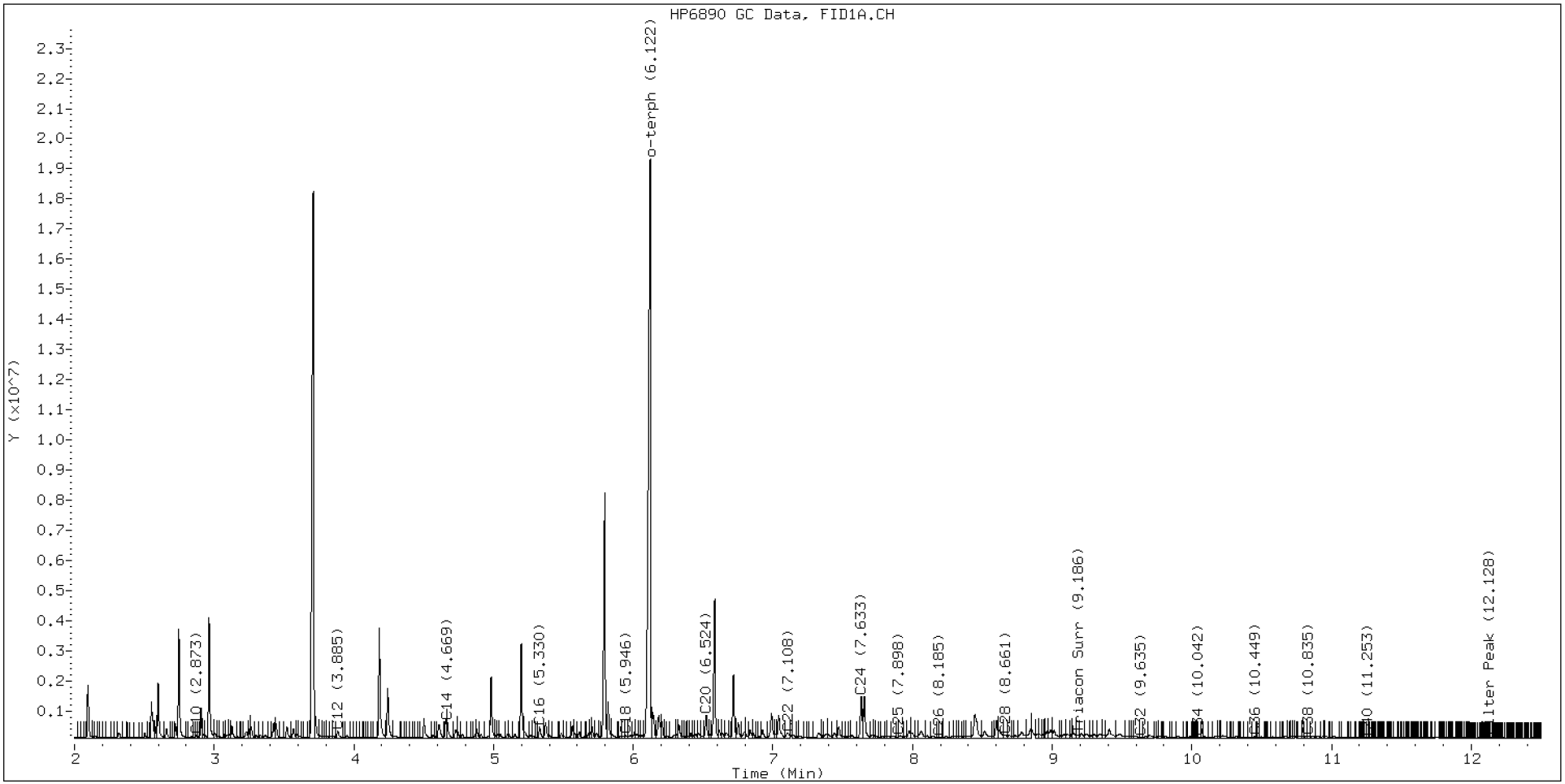
Range Times: NW Diesel(3.888 - 7.631) AK102(2.88 - 7.90) Jet A(2.88 - 5.95)
NW M.Oil(7.63 - 10.84) AK103(7.90 - 10.45) OR Diesel(2.88 - 8.68)

Surrogate	Area	Amount
o-Terphenyl	20149713	80.9
Triacontane	105769	0.5

M Indicates the peak was manually integrated

Analyte	RF	Curve Date
o-Terph Surr	249011.3	25-OCT-2019
Triacon Surr	211827.9	25-OCT-2019
Gas	15000.0	XX-XXX-XXXX
Diesel	182831.3	14-APR-2021
Motor Oil	131440.7	14-APR-2021
AK102	215421.2	14-APR-2021
AK103	101056.3	14-APR-2021
JetA	146652.4	20-MAY-2020
OR Diesel	195999.1	25-OCT-2019
NAS Diesel	195148.2	25-OCT-2019
Creosote	39015.8	30-MAR-2020

Datafile: FID4A, 20210415b.b/421D1563.D SEQ-ICV3



Analytical Resources, Incorporated
Analytical Chemists and Consultants

INITIAL CALIBRATION CHECK

NWTPH-Dx

Laboratory:	Analytical Resources, Inc.	SDG:	21E0106
Client:	Anchor QEA, LLC	Project:	Gasco Siltronic - US Moorings
Instrument ID:	FID4	Calibration:	ED00037
Lab File ID:	421D2011.D	Calibration Date:	04/13/2021
Sequence:	SJD0282	Injection Date:	04/20/21
Lab Sample ID:	SJD0282-ICV1	Injection Time:	17:08
Sequence Name:	DIESEL ICV		

		CONC. (mg/L)		RESPONSE FACTOR			% DRIFT/DIFF	
COMPOUND	TYPE	STD	ICV	ICAL	ICV	MIN	ICV	LIMIT
Diesel Range Organics (C12-C24)	A	500.00	516	182831.3000	188573.8000		3.1	+/-15
o-Terphenyl	A	90.000	90.7	249011.4000	250908.6000		0.8	+/-15

* Values outside of QC limits

* Values outside of QC limits

Data File: \\target\share\chem2\fid4a.i\20210420.b\421D2011.D

Date : 20-APR-2021 17:08

Client ID:

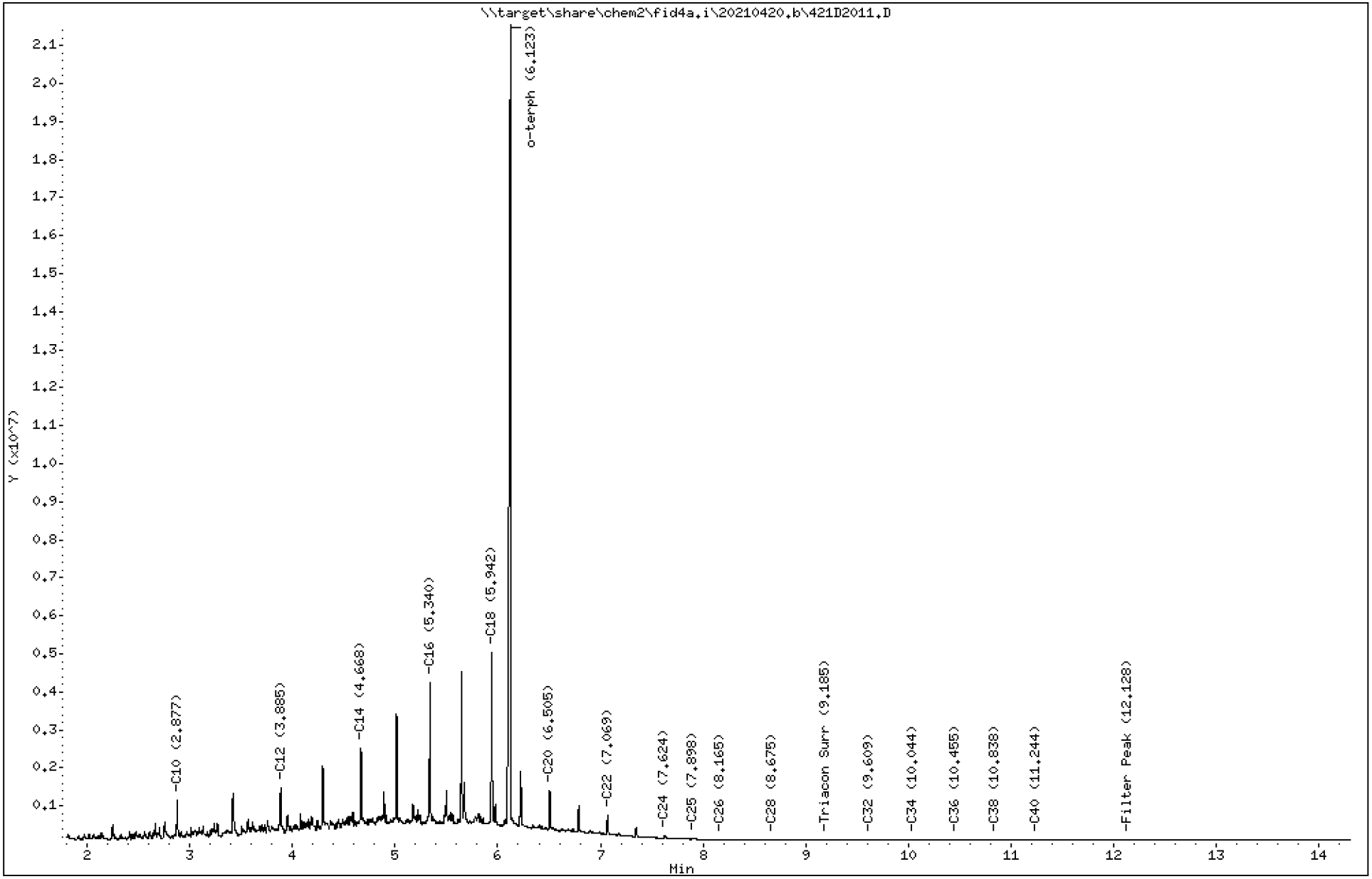
Instrument: fid4a.i

Sample Info: SEQ-ICV1

Operator: CTO

Column phase: RTX-1

Column diameter: 0.25



Analytical Resources Inc.
TPH Quantitation Report

Data file: 20210420.b/421D2011.D
Method: 20210420.b\FID4TPH.m
Instrument: fid4a.i, CTO
Report Date: 04/21/2021
Macro: 09-SEP-2019
Calibration Dates: Gas:XX-XXX-XXXX Diesel:14-APR-2021 M.Oil:14-APR-2021

ARI ID: SEQ-ICV1
Client ID:
Injection: 20-APR-2021 17:08
Dilution Factor: 1
RT Std: 419H1603.D

FID:4A RESULTS

Compound	RT	Shift	Height	Area	Method	Range	Total Area	Conc(mg/L)
C8	1.619	0.001	103614	105478	WATPHD	(C12-C24)	94286922	515.7
C10	2.877	-0.004	1058088	793077	WATPHM	(C24-C38)	899507	6.8
C12	3.885	-0.002	1354738	1093753	AK102	(C10-C25)	110996676	515.3
C14	4.668	-0.003	2418638	2102930	AK103	(C25-C36)	554262	5.5
C16	5.340	-0.002	4151721	4161098	OR.DIES	(C10-C28)	111424849	568.5
C18	5.942	-0.002	4921098	3981609				
C20	6.505	-0.007	1301000	1397131	JET-A	(C10-C18)	86483930	589.7
C22	7.069	-0.007	637950	634934				
C24	7.624	-0.006	123389	210018				
C25	7.898	-0.003	42457	92565				
C26	8.165	-0.001	16568	32758				
C28	8.675	-0.001	2665	2524				
C32	9.609	-0.007	676	370				
C34	10.044	-0.002	1322	254				
Filter Peak	12.128	0.002	6596	2905	BUNKERC	(C10-C38)	111639644	2486.8
C36	10.455	0.003	2681	1046				
C38	10.838	-0.002	4581	2420				
C40	11.244	0.000	6106	1804				
o-terph	6.123	0.001	21002714	22581772				
Triacon Surr	9.185	0.001	1079	403	NAS DIES	(C10-C24)	110740137	567.5

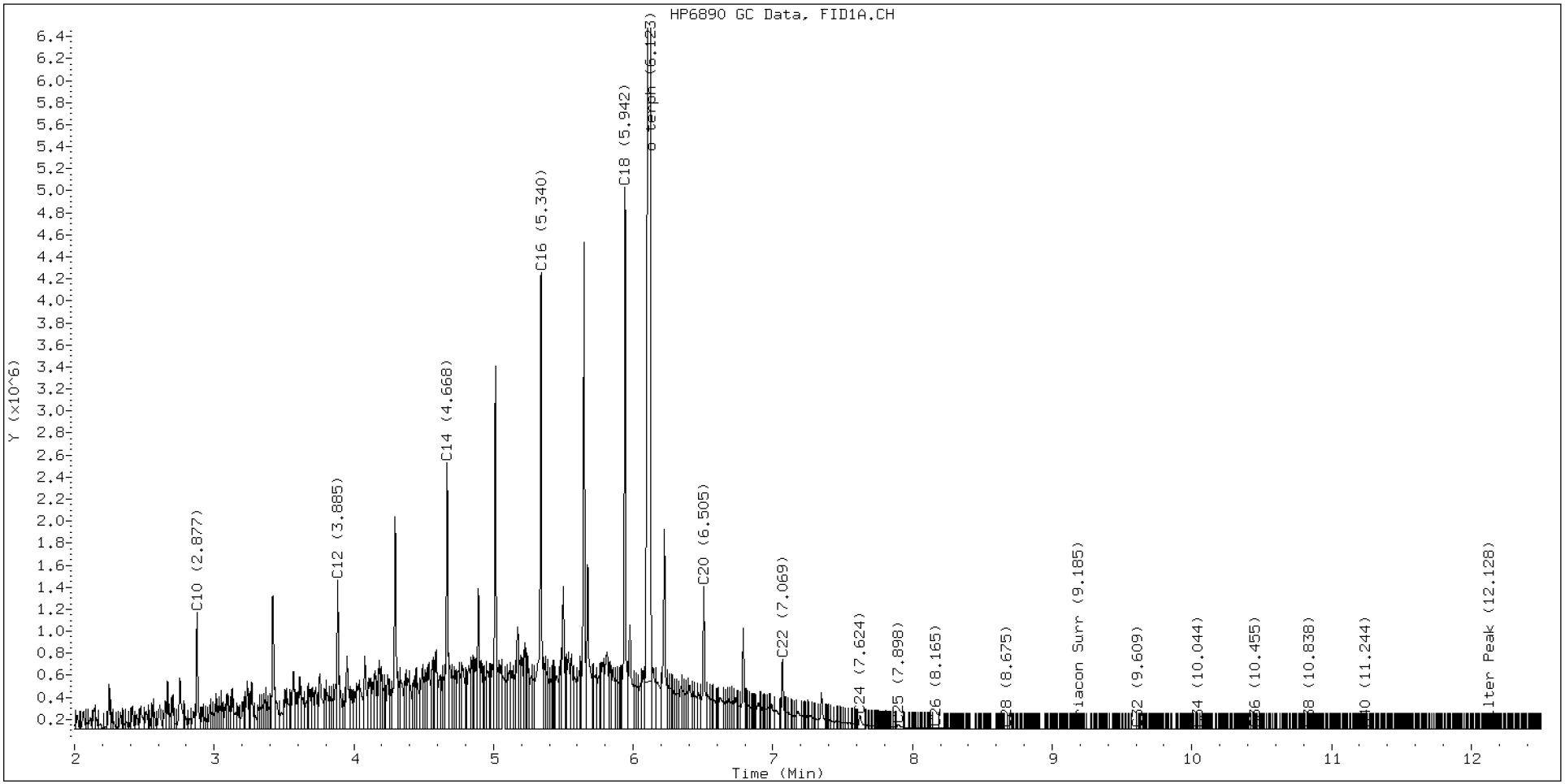
Range Times: NW Diesel(3.888 - 7.630) AK102(2.88 - 7.90) Jet A(2.88 - 5.94)
NW M.Oil(7.63 - 10.84) AK103(7.90 - 10.45) OR Diesel(2.88 - 8.68)

Surrogate	Area	Amount	
o-Terphenyl	22581772	90.7	M
Triacontane	403	0.0	

M Indicates the peak was manually integrated

Analyte	RF	Curve Date
o-Terph Surr	249011.3	25-OCT-2019
Triacon Surr	211827.9	25-OCT-2019
Gas	15000.0	XX-XXX-XXXX
Diesel	182831.3	14-APR-2021
Motor Oil	131440.7	14-APR-2021
AK102	215421.2	14-APR-2021
AK103	101056.3	14-APR-2021
JetA	146652.4	20-MAY-2020
OR Diesel	195999.1	25-OCT-2019
NAS Diesel	195148.2	25-OCT-2019
Bunker C	44892.5	21-APR-2021

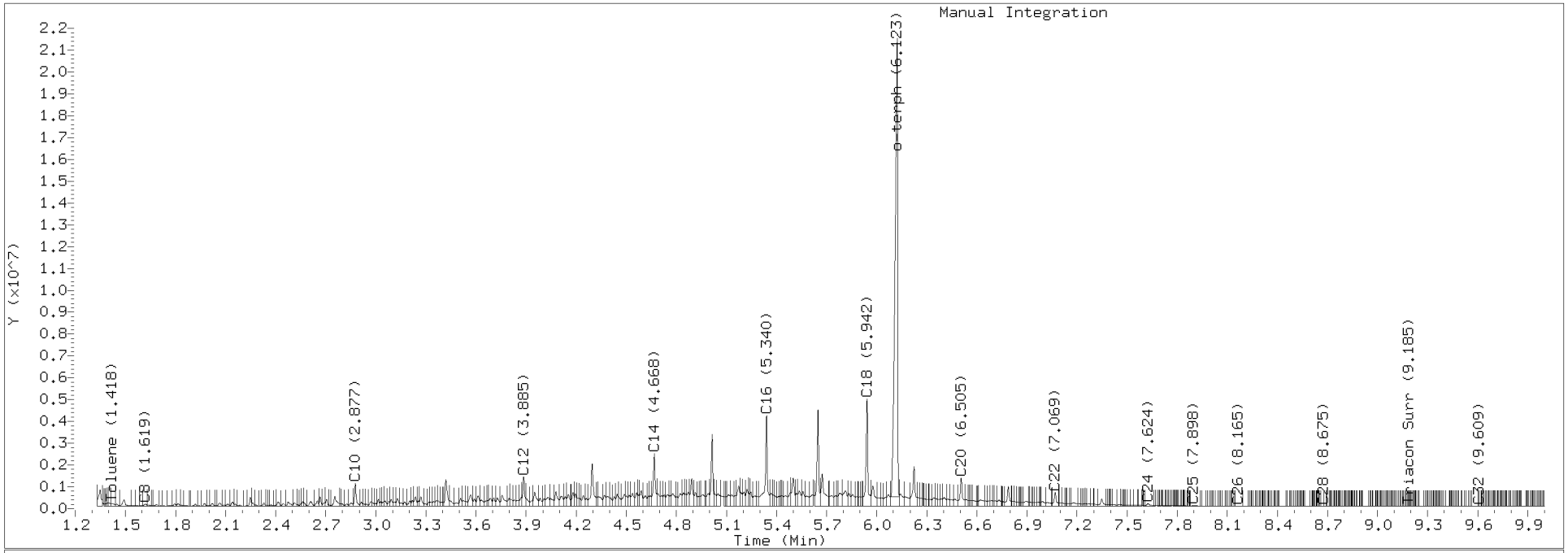
Datafile: FID4A, 20210420.b/421D2011.D SEQ-ICV1

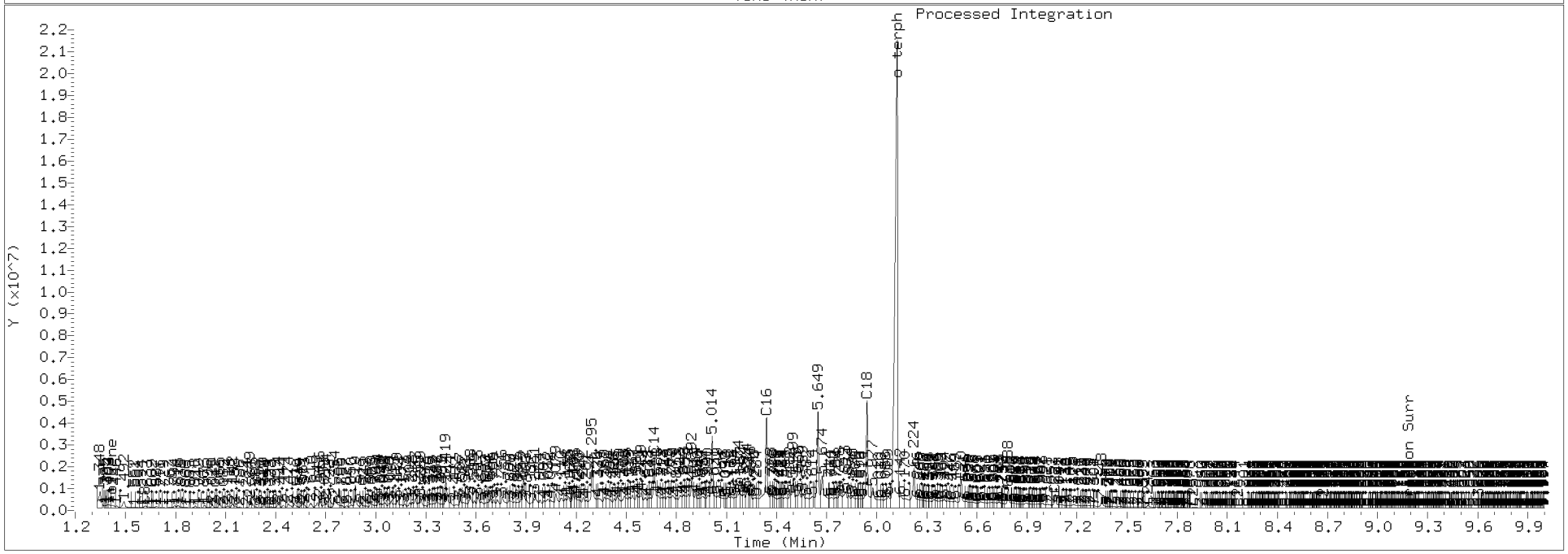


TPH Manual Integrations Report

Datafile: FID4A, 20210420.b/421D2011.D Injection: 20-APR-2021 17:08

Lab ID:SEQ-ICV1





Analytical Resources, Incorporated
Analytical Chemists and Consultants

INITIAL CALIBRATION CHECK

NWTPH-Dx

Laboratory:	Analytical Resources, Inc.	SDG:	21E0106
Client:	Anchor QEA, LLC	Project:	Gasco Siltronic - US Moorings
Instrument ID:	FID4	Calibration:	ED00037
Lab File ID:	421D2012.D	Calibration Date:	04/13/2021
Sequence:	SJD0282	Injection Date:	04/20/21
Lab Sample ID:	SJD0282-ICV2	Injection Time:	17:30
Sequence Name:	MOIL ICV		

COMPOUND	TYPE	CONC. (mg/L)		RESPONSE FACTOR			% DRIFT/DIFF	
		STD	ICV	ICAL	ICV	MIN	ICV	LIMIT
Motor Oil Range Organics (C24-C38)	A	1000.0	1030	131440.7000	135055.5000		2.8	+/-15

* Values outside of QC limits

* Values outside of QC limits

Data File: \\target\share\chem2\fid4a.i\20210420.b\421D2012.D

Date : 20-APR-2021 17:30

Client ID:

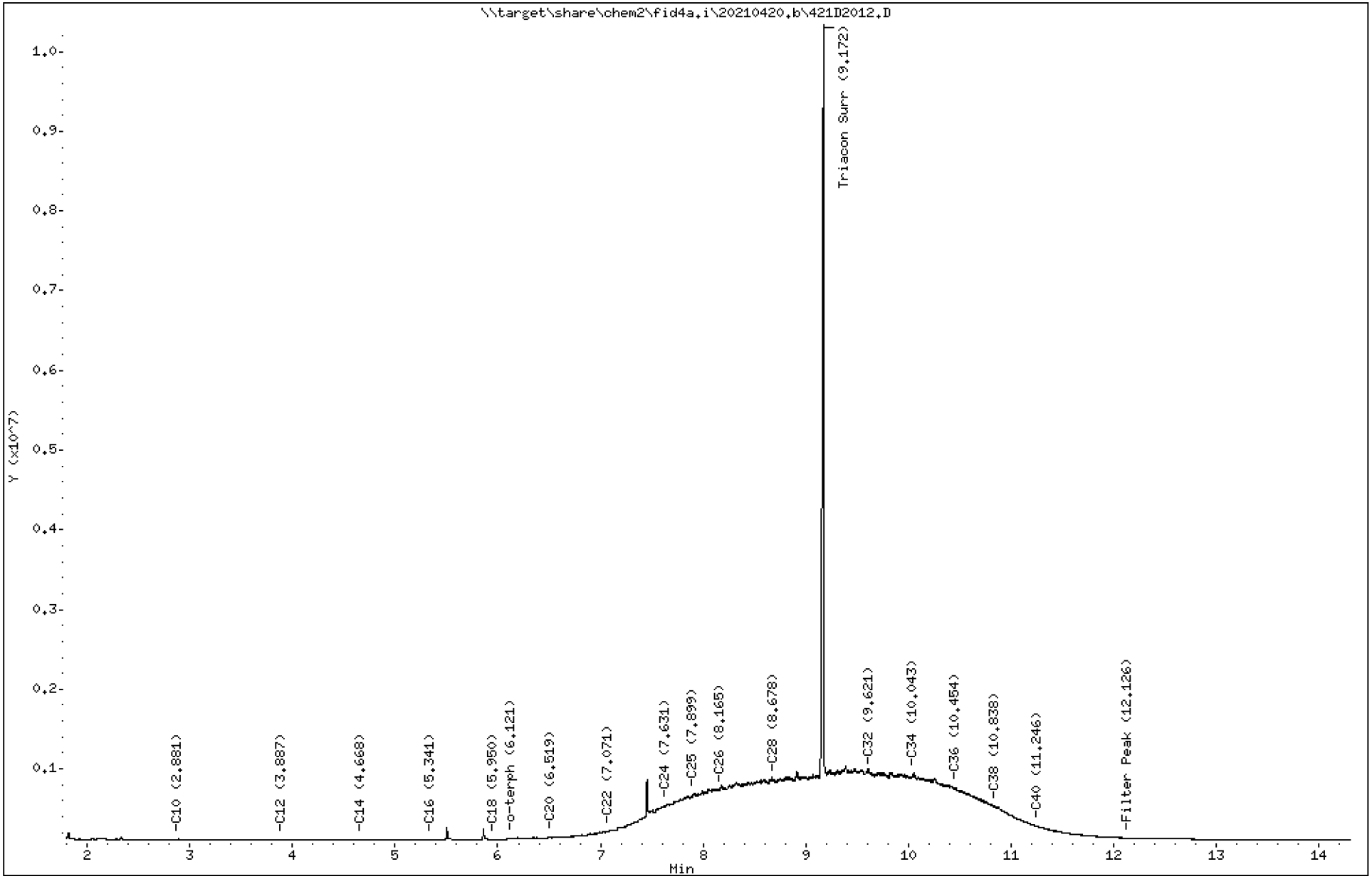
Instrument: fid4a.i

Sample Info: SEQ-ICV2

Operator: CTO

Column phase: RTX-1

Column diameter: 0.25



Analytical Resources Inc.
TPH Quantitation Report

Data file: 20210420.b/421D2012.D
Method: 20210420.b\FID4TPH.m
Instrument: fid4a.i, CTO
Report Date: 04/21/2021
Macro: 09-SEP-2019
Calibration Dates: Gas:XX-XXX-XXXX Diesel:14-APR-2021 M.Oil:14-APR-2021

ARI ID: SEQ-ICV2
Client ID:
Injection: 20-APR-2021 17:30
Dilution Factor: 1
RT Std: 419H1603.D

FID:4A RESULTS

Compound	RT	Shift	Height	Area	Method	Range	Total Area	Conc(mg/L)
C8	1.621	0.004	53060	80480	WATPHD	(C12-C24)	12568205	68.7
C10	2.881	-0.000	6786	4387	WATPHM	(C24-C38)	135055495	1027.5
C12	3.887	-0.000	558	245	AK102	(C10-C25)	18071372	83.9
C14	4.668	-0.003	1753	835	AK103	(C25-C36)	117930032	1167.0
C16	5.341	-0.001	2390	1581	OR.DIES	(C10-C28)	52471110	267.7
C18	5.950	0.006	7086	6144				
C20	6.519	0.006	26720	16957	JET-A	(C10-C18)	561683	3.8
C22	7.071	-0.005	110635	147977				
C24	7.631	0.000	422151	105029				
C25	7.899	-0.002	561091	112008				
C26	8.165	-0.001	626123	93800				
C28	8.678	0.002	746837	111880				
C32	9.621	0.005	841443	125750				
C34	10.043	-0.002	818926	203248				
Filter Peak	12.126	0.000	22603	8933	BUNKERC	(C10-C38)	147709173	3290.3
C36	10.454	0.001	644112	160284				
C38	10.838	-0.001	412466	82315				
C40	11.246	0.002	171620	109739				
o-terph	6.121	-0.000	9962	3418				
Triacon Surr	9.172	-0.012	9430808	9858755	NAS DIES	(C10-C24)	12653678	64.8

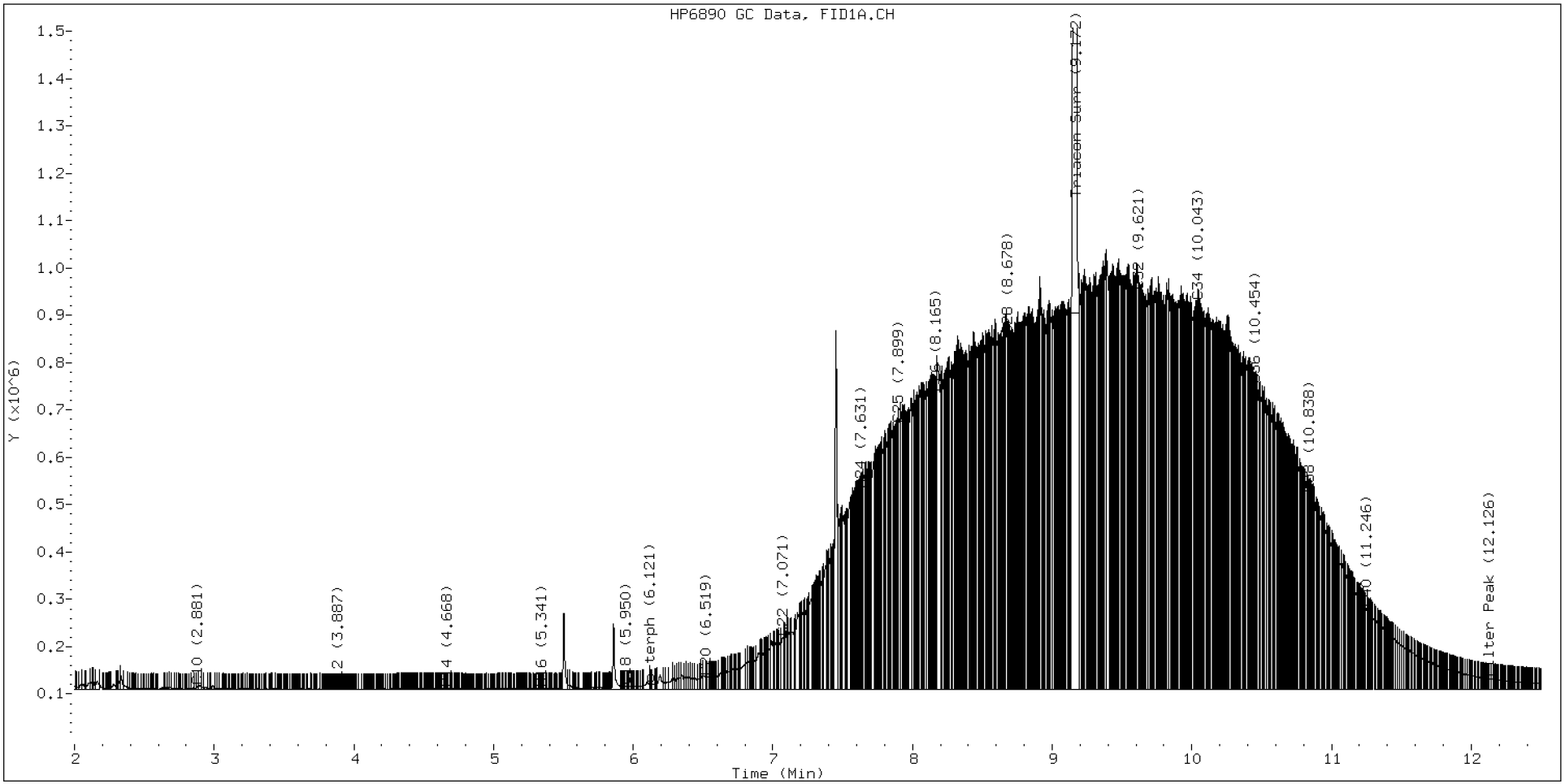
Range Times: NW Diesel(3.888 - 7.630) AK102(2.88 - 7.90) Jet A(2.88 - 5.94)
NW M.Oil(7.63 - 10.84) AK103(7.90 - 10.45) OR Diesel(2.88 - 8.68)

Surrogate	Area	Amount	
o-Terphenyl	3418	0.0	
Triacontane	9858755	46.5	M

M Indicates the peak was manually integrated

Analyte	RF	Curve Date
o-Terph Surr	249011.3	25-OCT-2019
Triacon Surr	211827.9	25-OCT-2019
Gas	15000.0	XX-XXX-XXXX
Diesel	182831.3	14-APR-2021
Motor Oil	131440.7	14-APR-2021
AK102	215421.2	14-APR-2021
AK103	101056.3	14-APR-2021
JetA	146652.4	20-MAY-2020
OR Diesel	195999.1	25-OCT-2019
NAS Diesel	195148.2	25-OCT-2019
Bunker C	44892.5	21-APR-2021

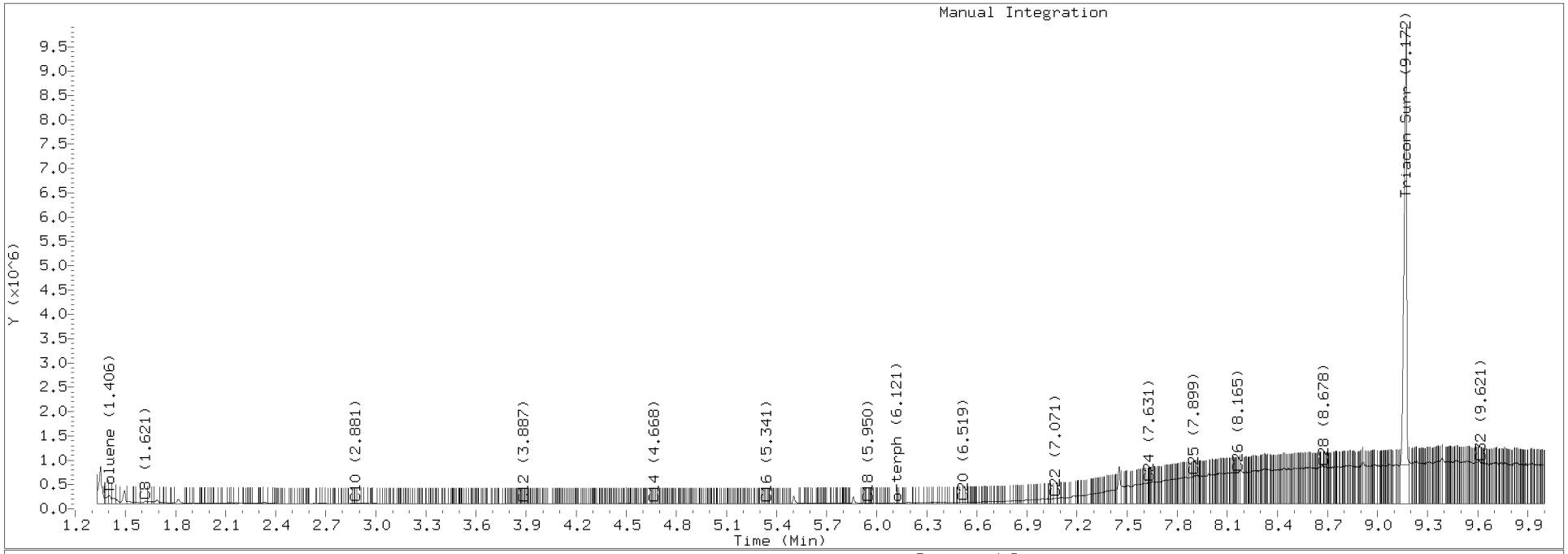
Datafile: FID4A, 20210420.b/421D2012.D SEQ-ICV2

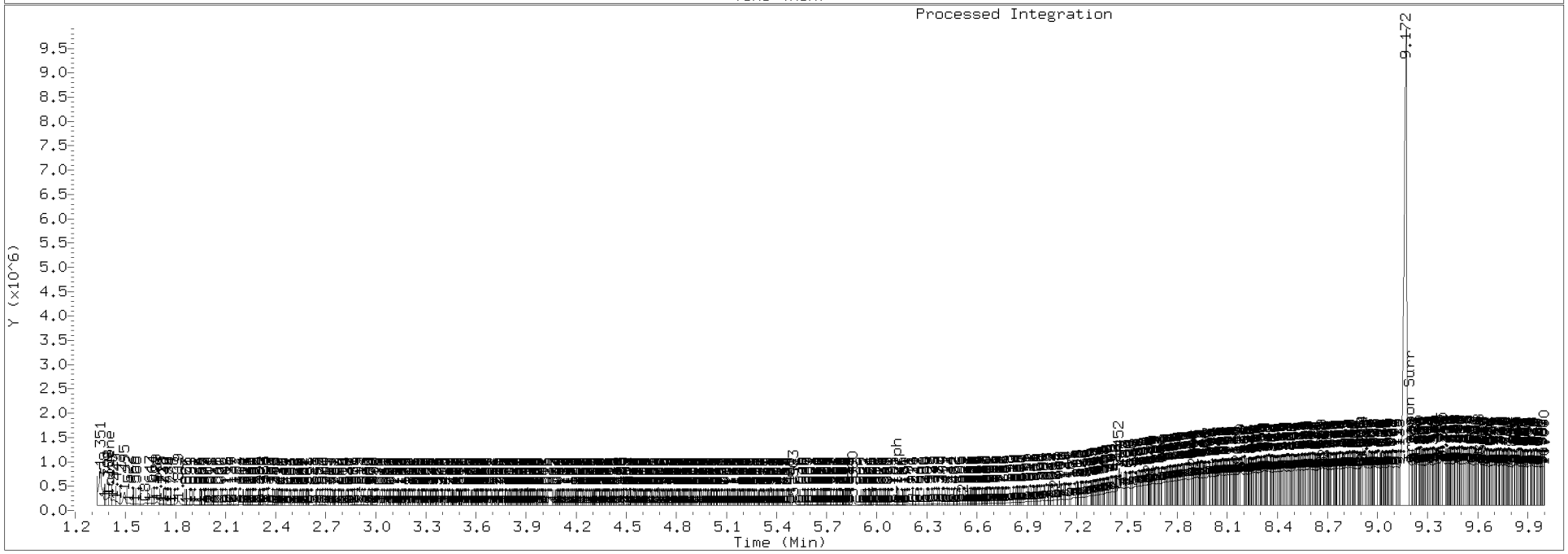


TPH Manual Integrations Report

Datafile: FID4A, 20210420.b/421D2012.D Injection: 20-APR-2021 17:30

Lab ID:SEQ-ICV2





Analytical Resources, Incorporated
Analytical Chemists and Consultants

INITIAL CALIBRATION CHECK

NWTPH-Dx

Laboratory:	Analytical Resources, Inc.	SDG:	21E0106
Client:	Anchor QEA, LLC	Project:	Gasco Siltronic - US Moorings
Instrument ID:	FID4	Calibration:	ED00037
Lab File ID:	421D2013.D	Calibration Date:	04/13/2021
Sequence:	SJD0282	Injection Date:	04/20/21
Lab Sample ID:	SJD0282-ICV3	Injection Time:	17:51
Sequence Name:	A/S BUNKER C		

COMPOUND	TYPE	CONC. (mg/L)		RESPONSE FACTOR			% DRIFT/DIFF	
		STD	ICV	ICAL	ICV	MIN	ICV	LIMIT
Bunker C Range Organics (C10-C38)	A	1000.0	990	44892.5300	44426.3000		-1.0	+/-15
o-Terphenyl	A	45.000	41.9	249011.4000	231845.8000		-6.9	+/-15

* Values outside of QC limits

Data File: \\target\share\chem2\fid4a.i\20210420.b\421D2013.D

Date : 20-APR-2021 17:51

Client ID:

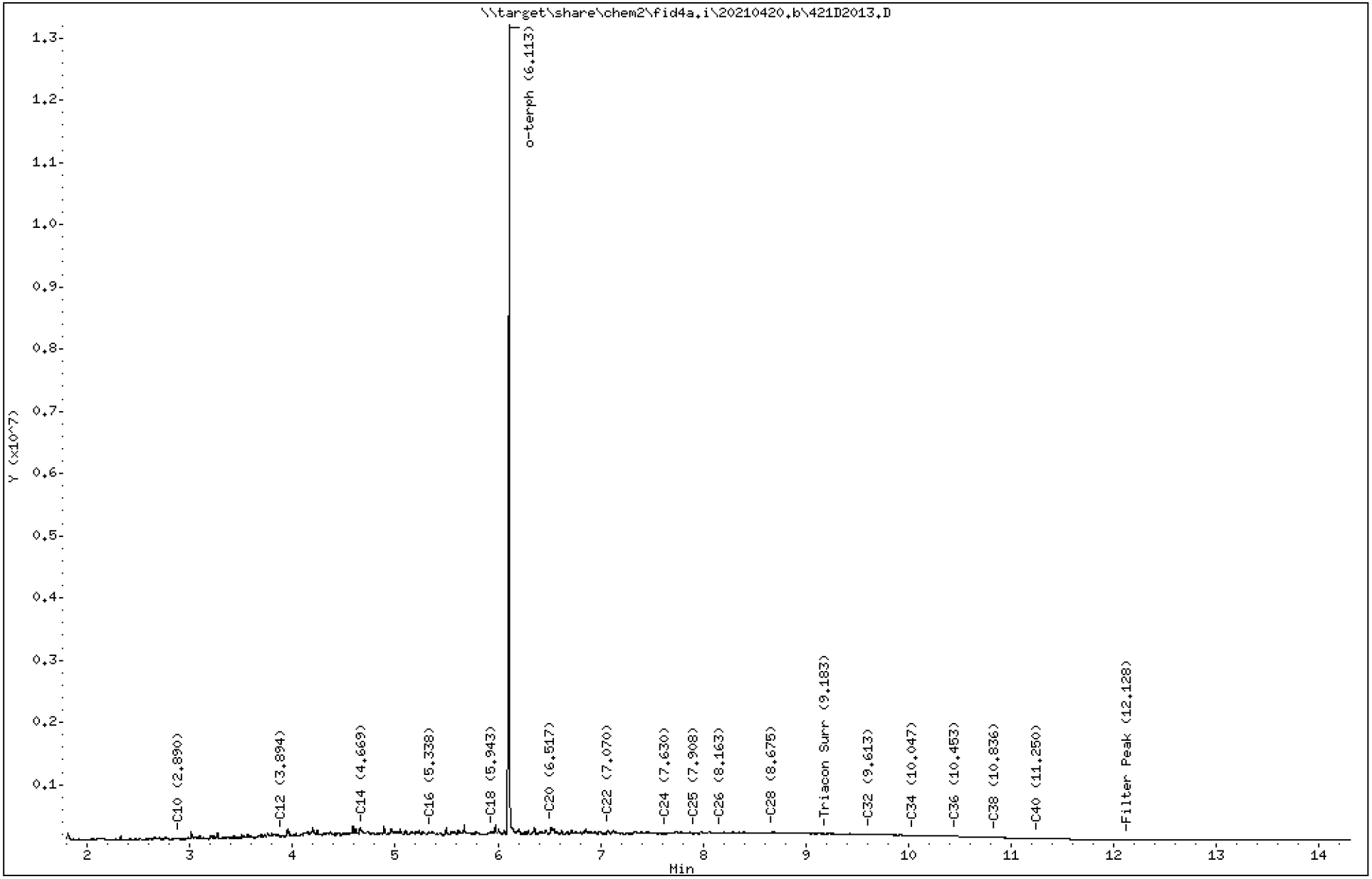
Instrument: fid4a.i

Sample Info: SEQ-ICV3

Operator: CTO

Column phase: RTX-1

Column diameter: 0.25



Analytical Resources Inc.
TPH Quantitation Report

Data file: 20210420.b/421D2013.D
Method: 20210420.b\FID4TPH.m
Instrument: fid4a.i, CTO
Report Date: 04/21/2021
Macro: 09-SEP-2019
Calibration Dates: Gas:XX-XXX-XXXX Diesel:14-APR-2021 M.Oil:14-APR-2021

ARI ID: SEQ-ICV3
Client ID:
Injection: 20-APR-2021 17:51
Dilution Factor: 1
RT Std: 419H1603.D

FID:4A RESULTS

Compound	RT	Shift	Height	Area	Method	Range	Total Area	Conc(mg/L)
C8	1.618	-0.000	56846	81837	WATPHD	(C12-C24)	24686907	135.0
C10	2.890	0.009	31460	32944	WATPHM	(C24-C38)	16748650	127.4
C12	3.894	0.007	60229	54024	AK102	(C10-C25)	28783068	133.6
C14	4.669	-0.002	162251	193126	AK103	(C25-C36)	14611153	144.6
C16	5.338	-0.003	116117	72644	OR.DIES	(C10-C28)	34465621	175.8
C18	5.943	-0.000	128718	153387				
C20	6.517	0.004	203137	295452	JET-A	(C10-C18)	16273777	111.0
C22	7.070	-0.006	147032	356588				
C24	7.630	-0.000	101705	89852				
C25	7.908	0.007	99410	63450				
C26	8.163	-0.003	113186	39538				
C28	8.675	-0.001	123368	89655				
C32	9.613	-0.003	85304	59072				
C34	10.047	0.002	75936	26390				
Filter Peak	12.128	0.002	5931	1469	BUNKERC	(C10-C38)	44426295	989.6
C36	10.453	0.001	56466	27924				
C38	10.836	-0.003	38070	24375				
C40	11.250	0.007	18675	7354				
o-terph	6.113	-0.009	13005175	10433064				
Triacon Surr	9.183	-0.001	96919	19322	NAS DIES	(C10-C24)	27677645	141.8

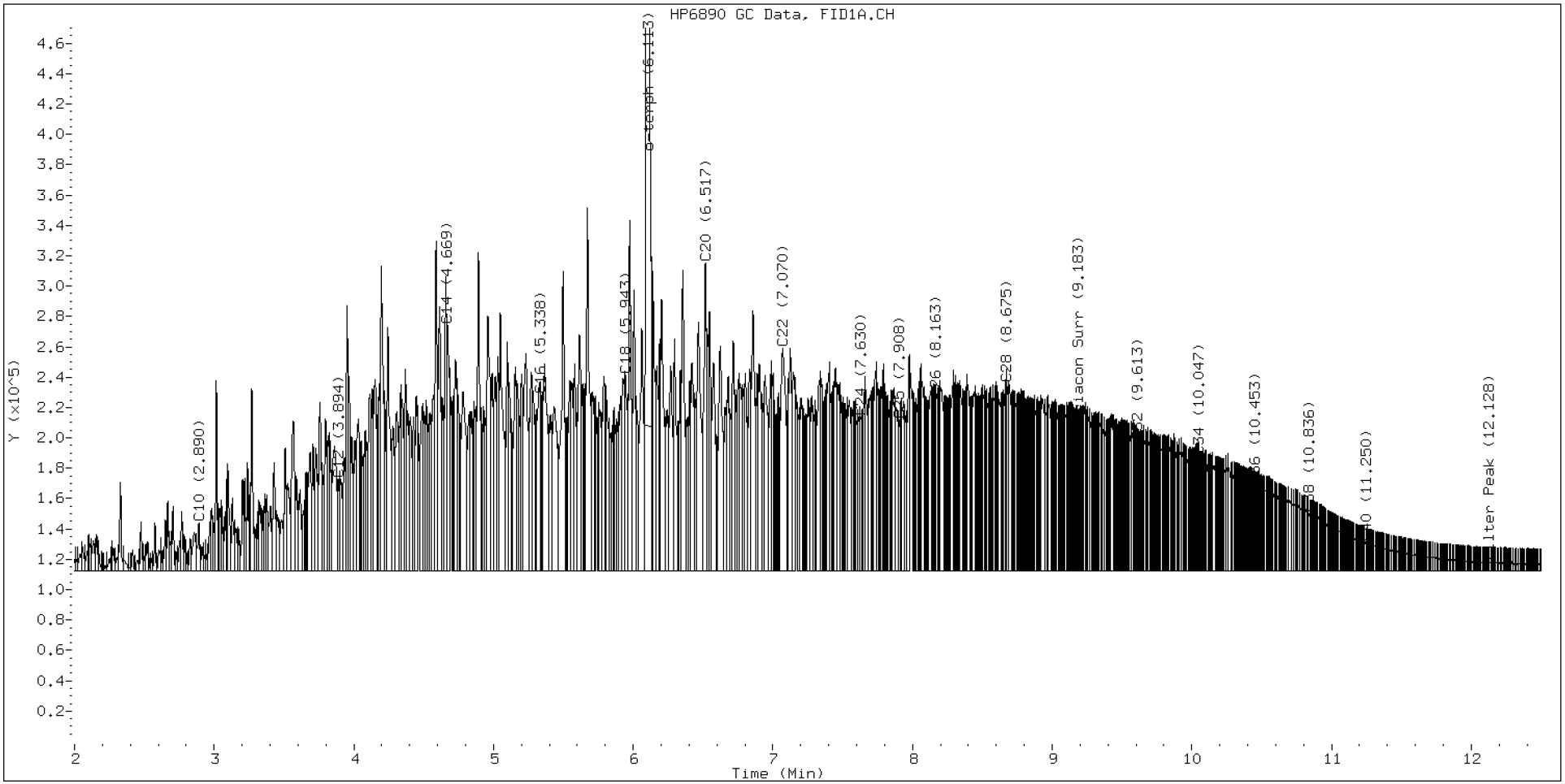
Range Times: NW Diesel(3.888 - 7.630) AK102(2.88 - 7.90) Jet A(2.88 - 5.94)
NW M.Oil(7.63 - 10.84) AK103(7.90 - 10.45) OR Diesel(2.88 - 8.68)

Surrogate	Area	Amount	
o-Terphenyl	10433064	41.9	M
Triacontane	19322	0.1	

M Indicates the peak was manually integrated

Analyte	RF	Curve Date
o-Terph Surr	249011.3	25-OCT-2019
Triacon Surr	211827.9	25-OCT-2019
Gas	15000.0	XX-XXX-XXXX
Diesel	182831.3	14-APR-2021
Motor Oil	131440.7	14-APR-2021
AK102	215421.2	14-APR-2021
AK103	101056.3	14-APR-2021
JetA	146652.4	20-MAY-2020
OR Diesel	195999.1	25-OCT-2019
NAS Diesel	195148.2	25-OCT-2019
Bunker C	44892.5	21-APR-2021

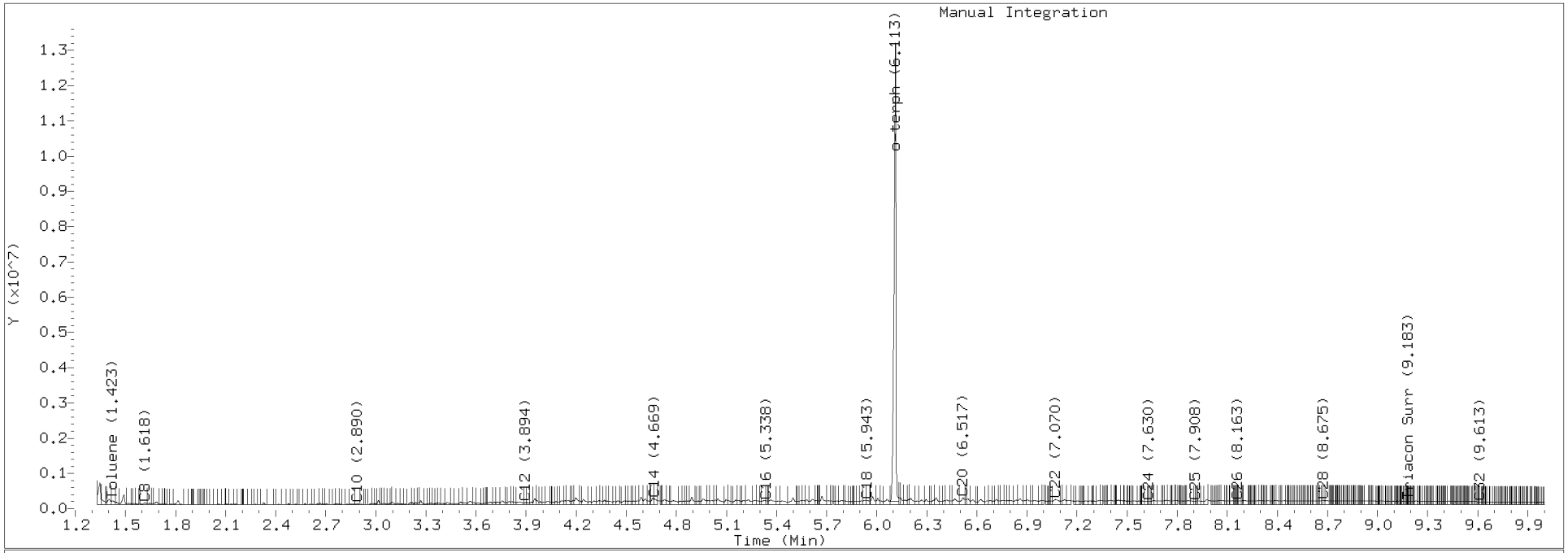
Datafile: FID4A, 20210420.b/421D2013.D SEQ-ICV3

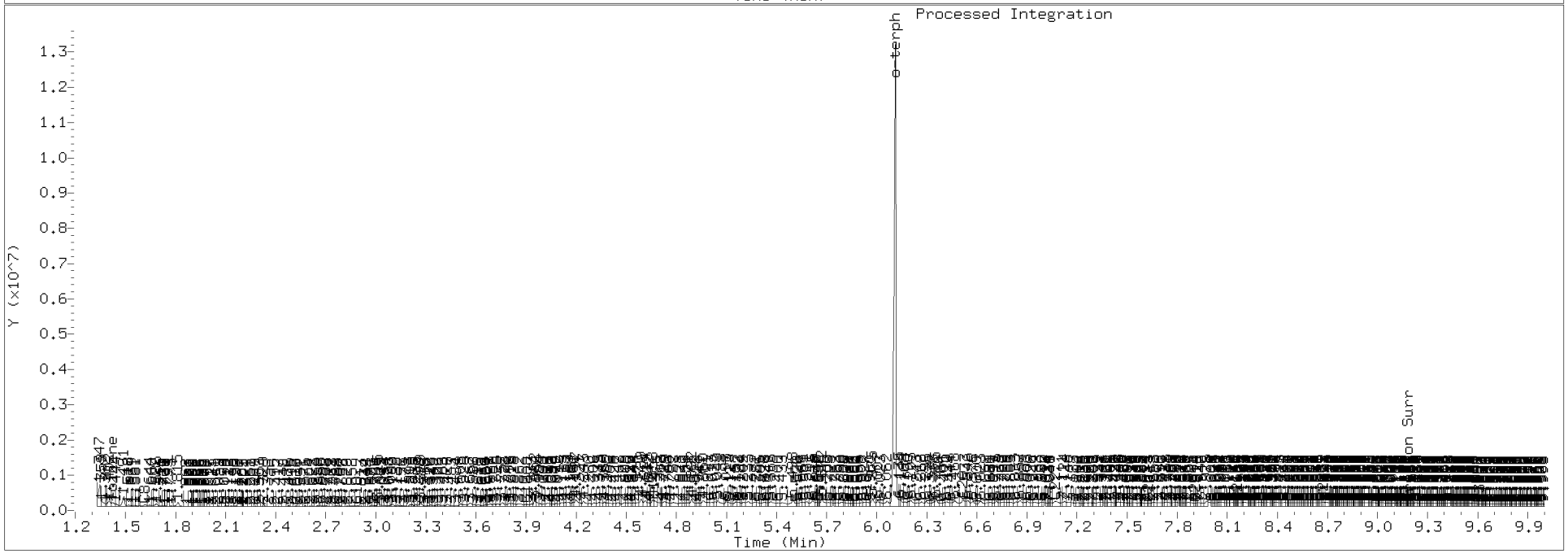


TPH Manual Integrations Report

Datafile: FID4A, 20210420.b/421D2013.D Injection: 20-APR-2021 17:51

Lab ID:SEQ-ICV3





Analytical Resources, Incorporated
Analytical Chemists and Consultants

INITIAL CALIBRATION CHECK

NWTPH-Dx

Laboratory:	Analytical Resources, Inc.	SDG:	21E0106
Client:	Anchor QEA, LLC	Project:	Gasco Siltronic - US Moorings
Instrument ID:	FID4	Calibration:	ED00037
Lab File ID:	421E2005.D	Calibration Date:	04/13/2021
Sequence:	SJE0284	Injection Date:	05/20/21
Lab Sample ID:	SJE0284-ICV1	Injection Time:	14:30
Sequence Name:	DIESEL ICV		

COMPOUND	TYPE	CONC. (mg/L)		RESPONSE FACTOR			% DRIFT/DIFF	
		STD	ICV	ICAL	ICV	MIN	ICV	LIMIT
Diesel Range Organics (C12-C24)	A	500.00	475	182831.3000	173607.5000		-5.0	+/-15
o-Terphenyl	A	90.000	79.0	249011.4000	218584.2000		-12.2	+/-15

* Values outside of QC limits

* Values outside of QC limits

Data File: \\target\share\chem2\fid4a.i\20210520.b\421E2005.D

Date : 20-MAY-2021 14:30

Client ID:

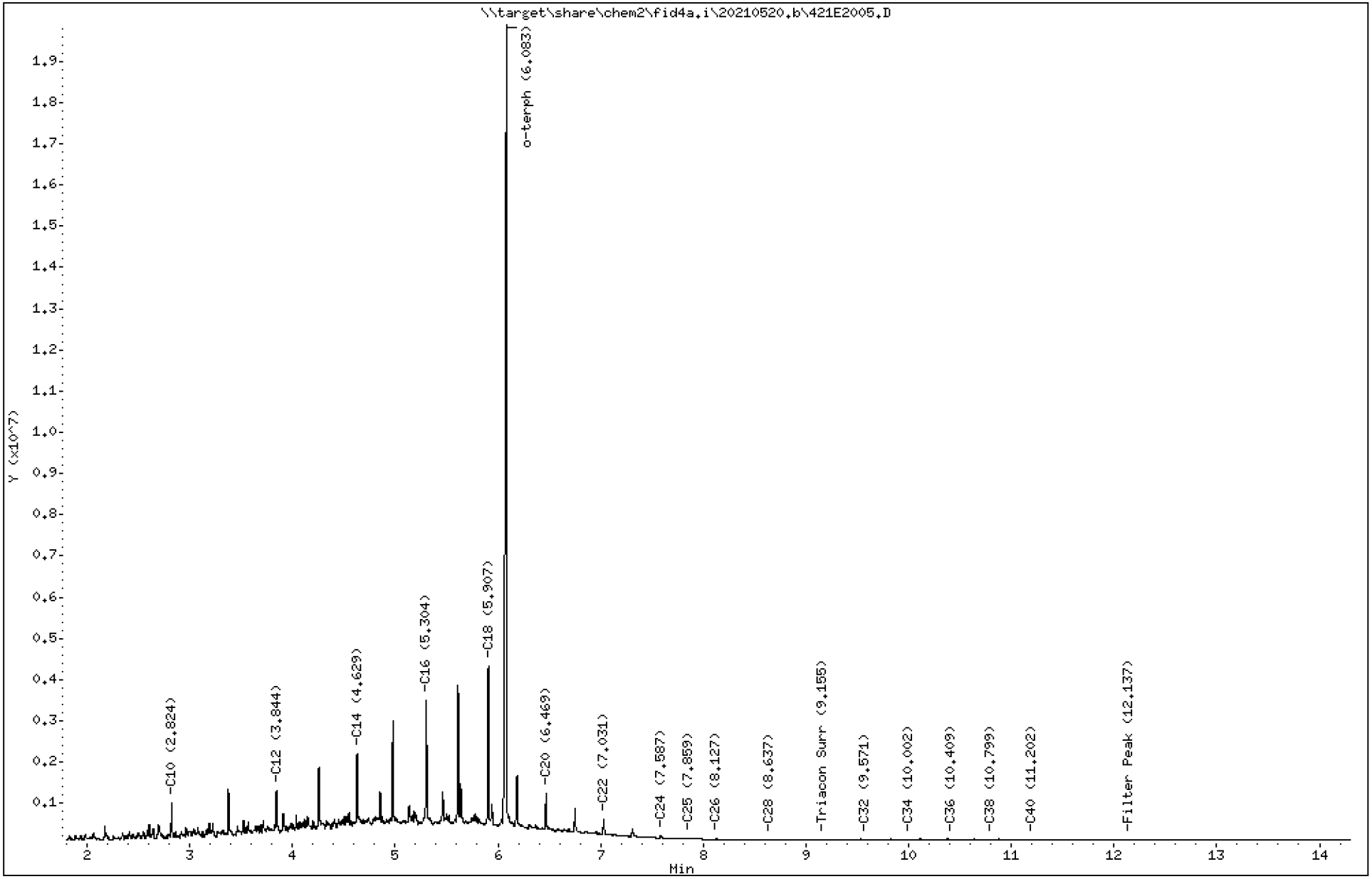
Instrument: fid4a.i

Sample Info: SEQ-ICV1

Operator: CTO

Column phase: RTX-1

Column diameter: 0.25



Analytical Resources Inc.
TPH Quantitation Report

Data file: 20210520.b/421E2005.D
Method: 20210520.b\FID4TPH.m
Instrument: fid4a.i, CTO
Report Date: 05/21/2021
Macro: 09-SEP-2019
Calibration Dates: Gas:XX-XXX-XXXX Diesel:14-APR-2021 M.Oil:14-APR-2021

ARI ID: SEQ-ICV1
Client ID:
Injection: 20-MAY-2021 14:30
Dilution Factor: 1
RT Std: 419H1603.D

FID:4A RESULTS

Compound	RT	Shift	Height	Area	Method	Range	Total Area	Conc(mg/L)
C8	1.535	-0.001	42218	28814	WATPHD	(C12-C24)	86803737	474.8
C10	2.824	-0.007	907138	676299	WATPHM	(C24-C38)	1669885	12.7
C12	3.844	-0.003	1210876	905756	AK102	(C10-C25)	101651115	471.9
C14	4.629	-0.002	2088079	1855652	AK103	(C25-C36)	1203427	11.9
C16	5.304	-0.001	3371101	2768721	OR.DIES	(C10-C28)	102285211	521.9
C18	5.907	-0.001	4214164	3431511				
C20	6.469	-0.004	1115842	1222625	JET-A	(C10-C18)	78968569	538.5
C22	7.031	-0.005	508295	609046				
C24	7.587	-0.002	108960	207698				
C25	7.859	-0.000	44887	99399				
C26	8.127	0.002	21803	36903				
C28	8.637	0.003	7919	7805				
C32	9.571	-0.003	4645	2928				
C34	10.002	-0.002	5387	2344				
Filter Peak	12.137	-0.002	12006	7157	BUNKERC	(C10-C38)	103029424	2295.0
C36	10.409	-0.003	6602	2927				
C38	10.799	-0.001	8686	6002				
C40	11.202	0.001	10428	2077				
o-terph	6.083	0.001	19364872	19672581				
Triacon Surr	9.155	0.013	4671	3011	NAS DIES	(C10-C24)	101359539	519.4

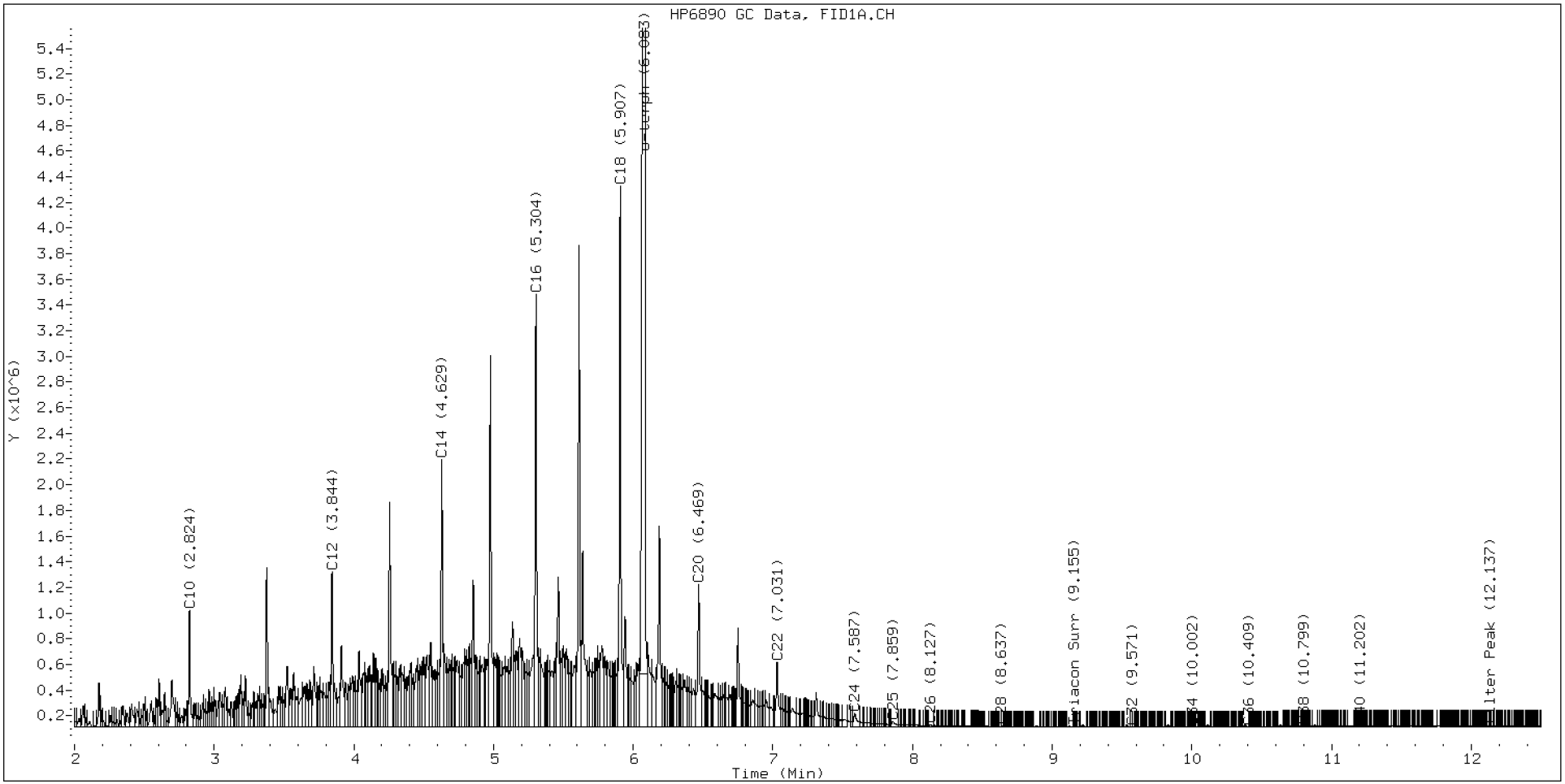
Range Times: NW Diesel(3.846 - 7.589) AK102(2.83 - 7.86) Jet A(2.83 - 5.91)
NW M.Oil(7.59 - 10.80) AK103(7.86 - 10.41) OR Diesel(2.83 - 8.63)

Surrogate	Area	Amount	
o-Terphenyl	19672581	79.0	M
Triacontane	3011	0.0	

M Indicates the peak was manually integrated

Analyte	RF	Curve Date
o-Terph Surr	249011.3	25-OCT-2019
Triacon Surr	211827.9	25-OCT-2019
Gas	15000.0	XX-XXX-XXXX
Diesel	182831.3	14-APR-2021
Motor Oil	131440.7	14-APR-2021
AK102	215421.2	14-APR-2021
AK103	101056.3	14-APR-2021
JetA	146652.4	20-MAY-2020
OR Diesel	195999.1	25-OCT-2019
NAS Diesel	195148.2	25-OCT-2019
Bunker C	44892.5	21-APR-2021

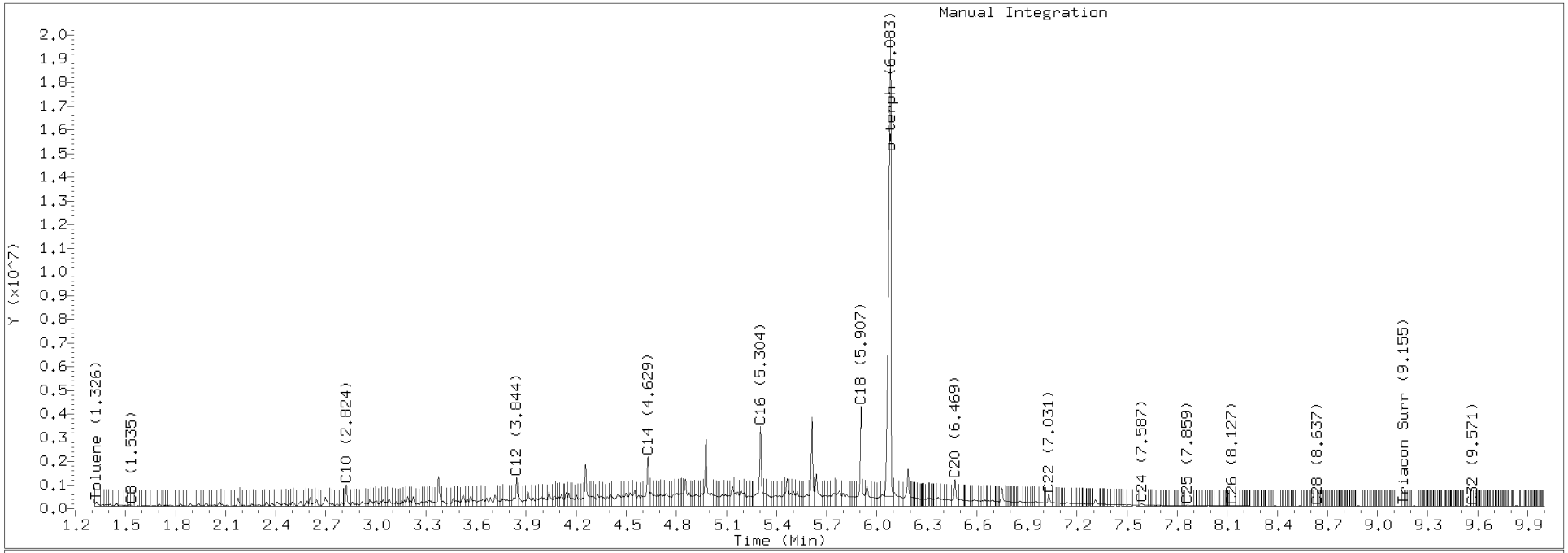
Datafile: FID4A, 20210520.b/421E2005.D SEQ-ICV1

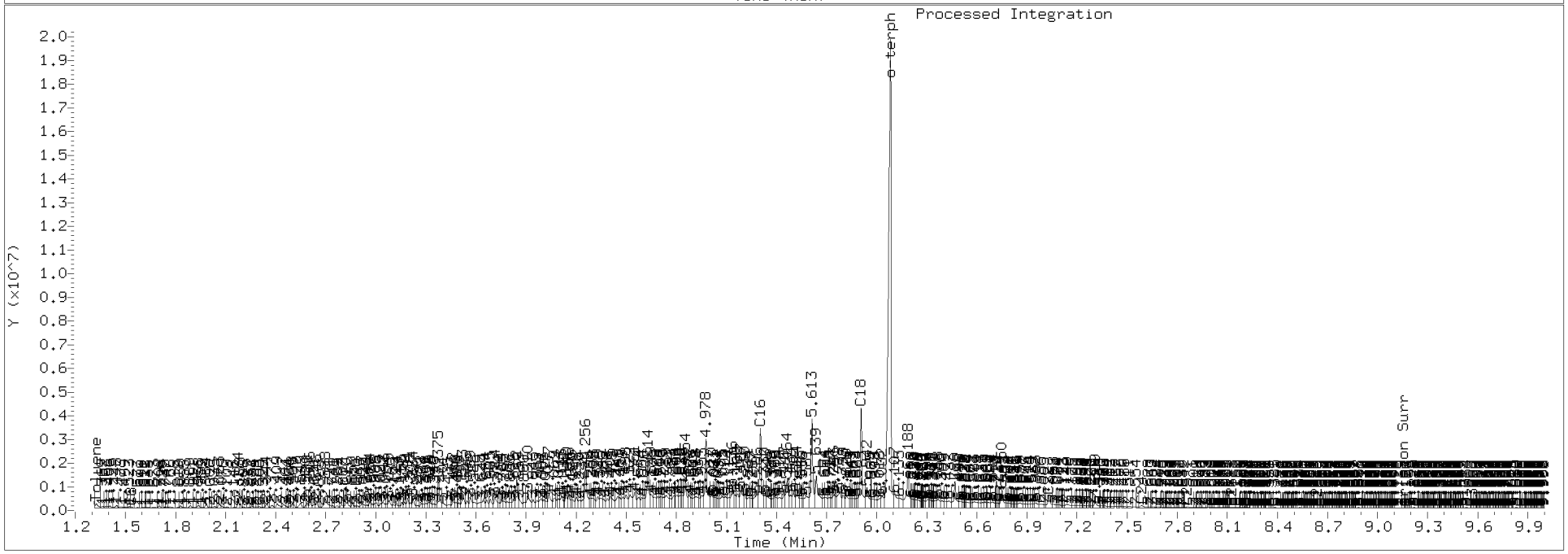


TPH Manual Integrations Report

Datafile: FID4A, 20210520.b/421E2005.D Injection: 20-MAY-2021 14:30

Lab ID:SEQ-ICV1





Analytical Resources, Incorporated
Analytical Chemists and Consultants

INITIAL CALIBRATION CHECK

NWTPH-Dx

Laboratory:	Analytical Resources, Inc.	SDG:	21E0106
Client:	Anchor QEA, LLC	Project:	Gasco Siltronic - US Moorings
Instrument ID:	FID4	Calibration:	ED00037
Lab File ID:	421E2006.D	Calibration Date:	04/13/2021
Sequence:	SJE0284	Injection Date:	05/20/21
Lab Sample ID:	SJE0284-ICV2	Injection Time:	14:51
Sequence Name:	MOIL ICV		

COMPOUND	TYPE	CONC. (mg/L)		RESPONSE FACTOR			% DRIFT/DIFF	
		STD	ICV	ICAL	ICV	MIN	ICV	LIMIT
Motor Oil Range Organics (C24-C38)	A	1000.0	982	131440.7000	129032.8000		-1.8	+/-15

* Values outside of QC limits

Data File: \\target\share\chem2\fid4a.i\20210520.b\421E2006.D

Date : 20-MAY-2021 14:51

Client ID:

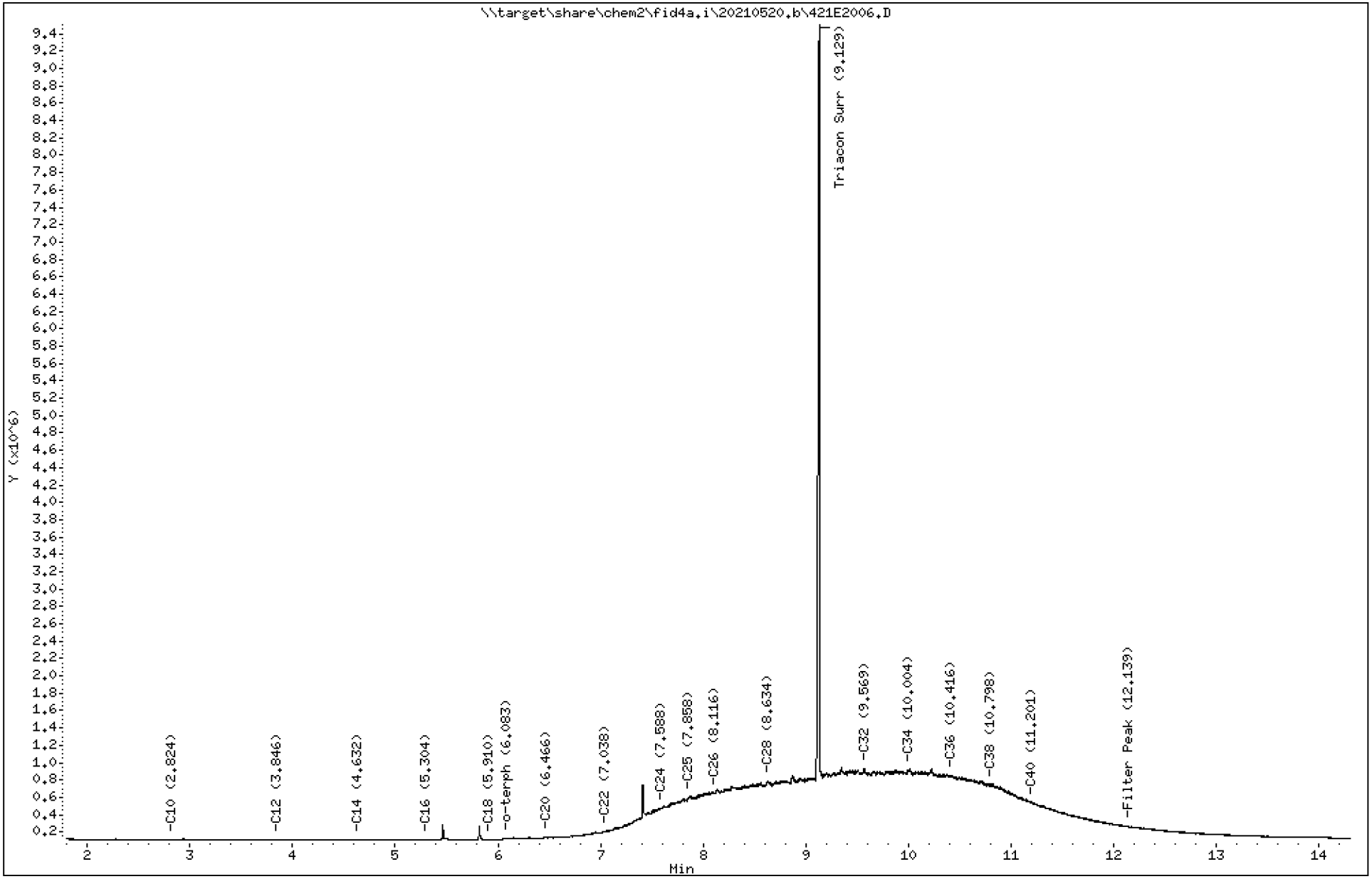
Instrument: fid4a.i

Sample Info: SEQ-ICV2

Operator: CTO

Column phase: RTX-1

Column diameter: 0.25



Analytical Resources Inc.
TPH Quantitation Report

Data file: 20210520.b/421E2006.D
Method: 20210520.b\FID4TPH.m
Instrument: fid4a.i, CTO
Report Date: 05/21/2021
Macro: 09-SEP-2019
Calibration Dates: Gas:XX-XXX-XXXX Diesel:14-APR-2021 M.Oil:14-APR-2021

ARI ID: SEQ-ICV2
Client ID:
Injection: 20-MAY-2021 14:51
Dilution Factor: 1
RT Std: 419H1603.D

FID:4A RESULTS

Compound	RT	Shift	Height	Area	Method	Range	Total Area	Conc(mg/L)
C8	1.538	0.002	8490	2098	WATPHD	(C12-C24)	11013053	60.2
C10	2.824	-0.006	4807	4127	WATPHM	(C24-C38)	129032842	981.7
C12	3.846	-0.000	997	843	AK102	(C10-C25)	15357928	71.3
C14	4.632	0.000	1741	340	AK103	(C25-C36)	109368404	1082.3
C16	5.304	-0.000	2551	1082	OR.DIES	(C10-C28)	45359500	231.4
C18	5.910	0.002	7053	8437				
C20	6.466	-0.007	26743	34617	JET-A	(C10-C18)	579491	4.0
C22	7.038	0.003	95140	37740				
C24	7.588	-0.001	365581	108814				
C25	7.858	-0.002	489189	193301				
C26	8.116	-0.009	540643	348731				
C28	8.634	0.000	674946	332745				
C32	9.569	-0.005	819069	830368				
C34	10.004	0.000	806135	440121				
Filter Peak	12.139	0.000	154837	61210	BUNKERC	(C10-C38)	140142285	3121.7
C36	10.416	0.004	747642	369069				
C38	10.798	-0.003	638228	221238				
C40	11.201	0.000	431547	107139				
o-terph	6.083	0.000	9014	2227				
Triacon Surr	9.129	-0.013	8705190	8719179	NAS DIES	(C10-C24)	11109443	56.9

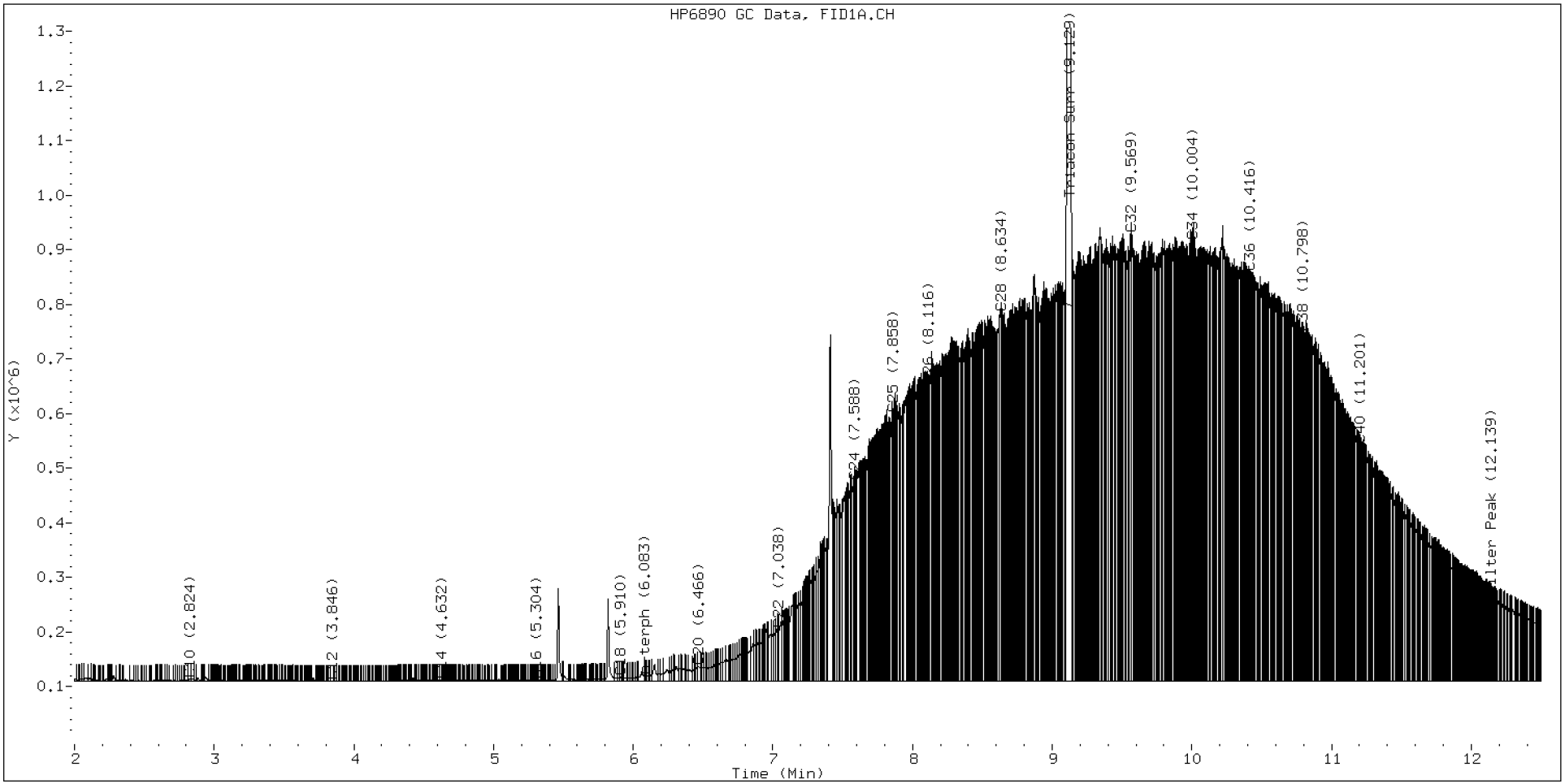
Range Times: NW Diesel(3.846 - 7.589) AK102(2.83 - 7.86) Jet A(2.83 - 5.91)
NW M.Oil(7.59 - 10.80) AK103(7.86 - 10.41) OR Diesel(2.83 - 8.63)

Surrogate	Area	Amount	
o-Terphenyl	2227	0.0	
Triacontane	8719179	41.2	M

M Indicates the peak was manually integrated

Analyte	RF	Curve Date
o-Terph Surr	249011.3	25-OCT-2019
Triacon Surr	211827.9	25-OCT-2019
Gas	15000.0	XX-XXX-XXXX
Diesel	182831.3	14-APR-2021
Motor Oil	131440.7	14-APR-2021
AK102	215421.2	14-APR-2021
AK103	101056.3	14-APR-2021
JetA	146652.4	20-MAY-2020
OR Diesel	195999.1	25-OCT-2019
NAS Diesel	195148.2	25-OCT-2019
Bunker C	44892.5	21-APR-2021

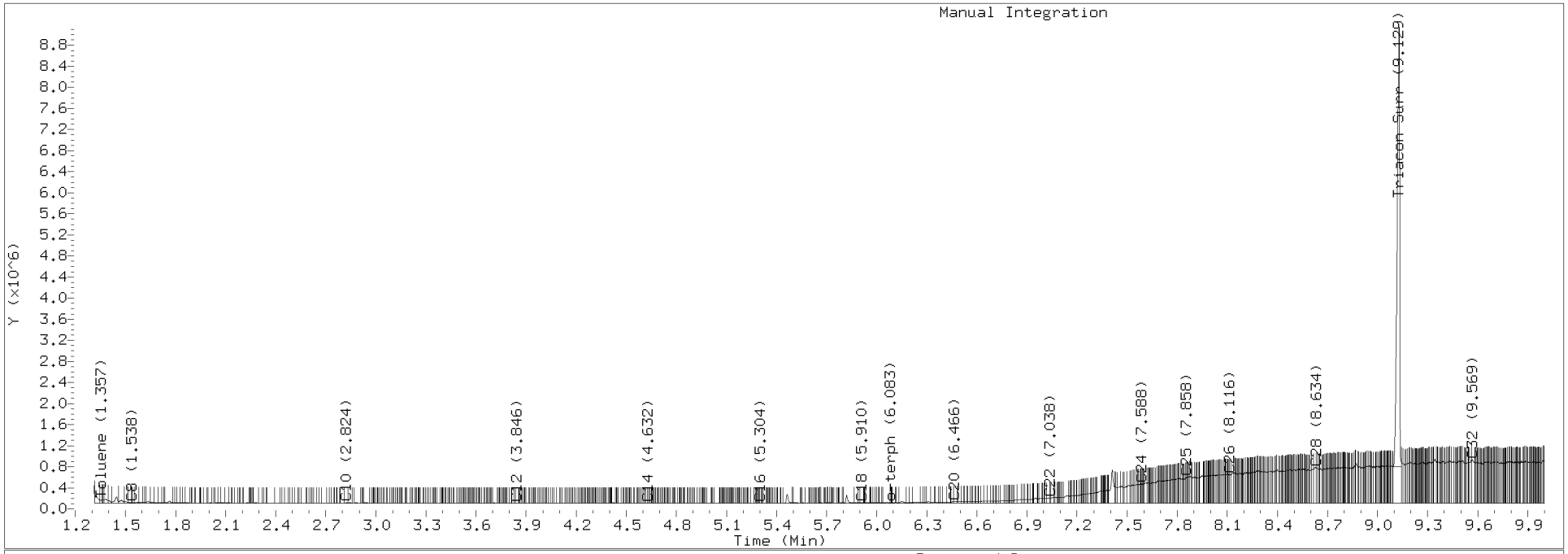
Datafile: FID4A, 20210520.b/421E2006.D SEQ-ICV2

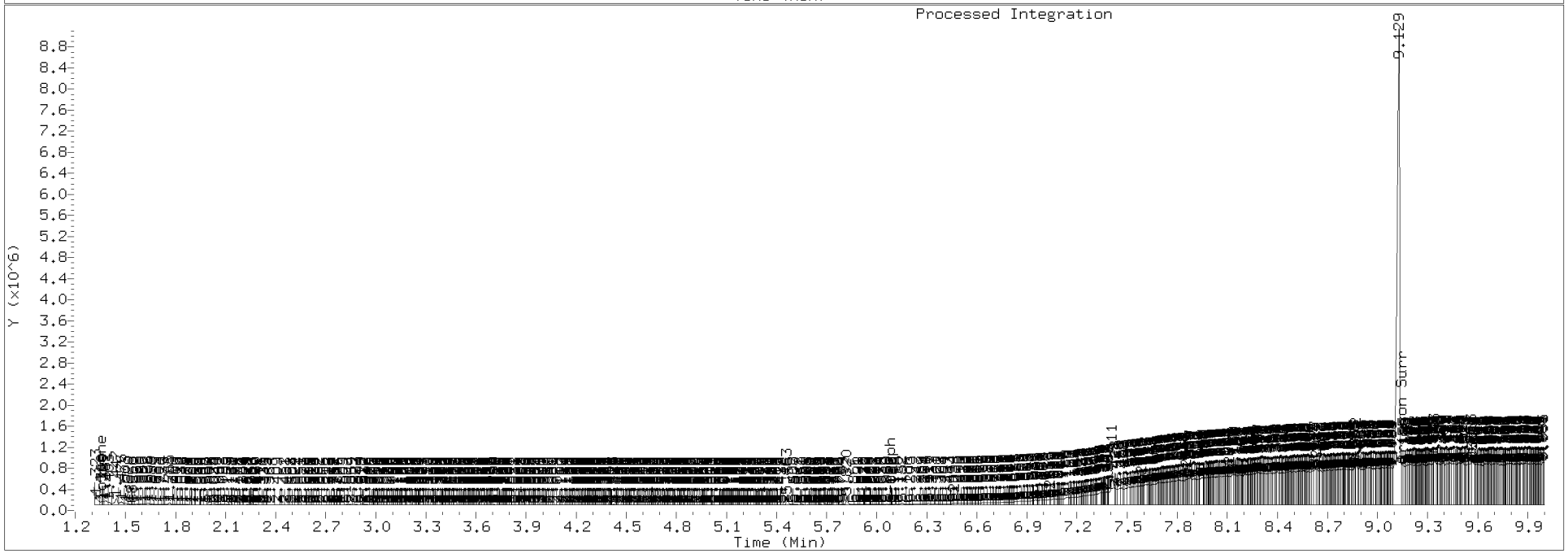


TPH Manual Integrations Report

Datafile: FID4A, 20210520.b/421E2006.D Injection: 20-MAY-2021 14:51

Lab ID:SEQ-ICV2





Analytical Resources, Incorporated
Analytical Chemists and Consultants

SECOND-SOURCE
CONTINUING CALIBRATION CHECK
NWTPH-Dx

Laboratory:	Analytical Resources, Inc.	SDG:	21E0106
Client:	Anchor QEA, LLC	Project:	Gasco Siltronic - US Moorings
Instrument ID:	FID4	Calibration:	ED00037
Lab File ID:	421D1315.D	Calibration Date:	04/13/2021
Sequence:	SJD0189	Injection Date:	04/13/21
Lab Sample ID:	SJD0189-SCV1	Injection Time:	15:37
Sequence Name:	DIESEL SCV		

		CONC. (mg/L)		RESPONSE FACTOR (RF)			% DRIFT/DIFF	
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN	CCV	LIMIT
Diesel Range Organics (C12-C24)	A	500.00	492	182831.3	179727.9		-1.7	+/-30

* Values outside of QC limits

* Values outside of QC limits

Data File: \\target\share\chem2\fid4a.i\20210413.b\421D1315.D

Date : 13-APR-2021 15:37

Client ID:

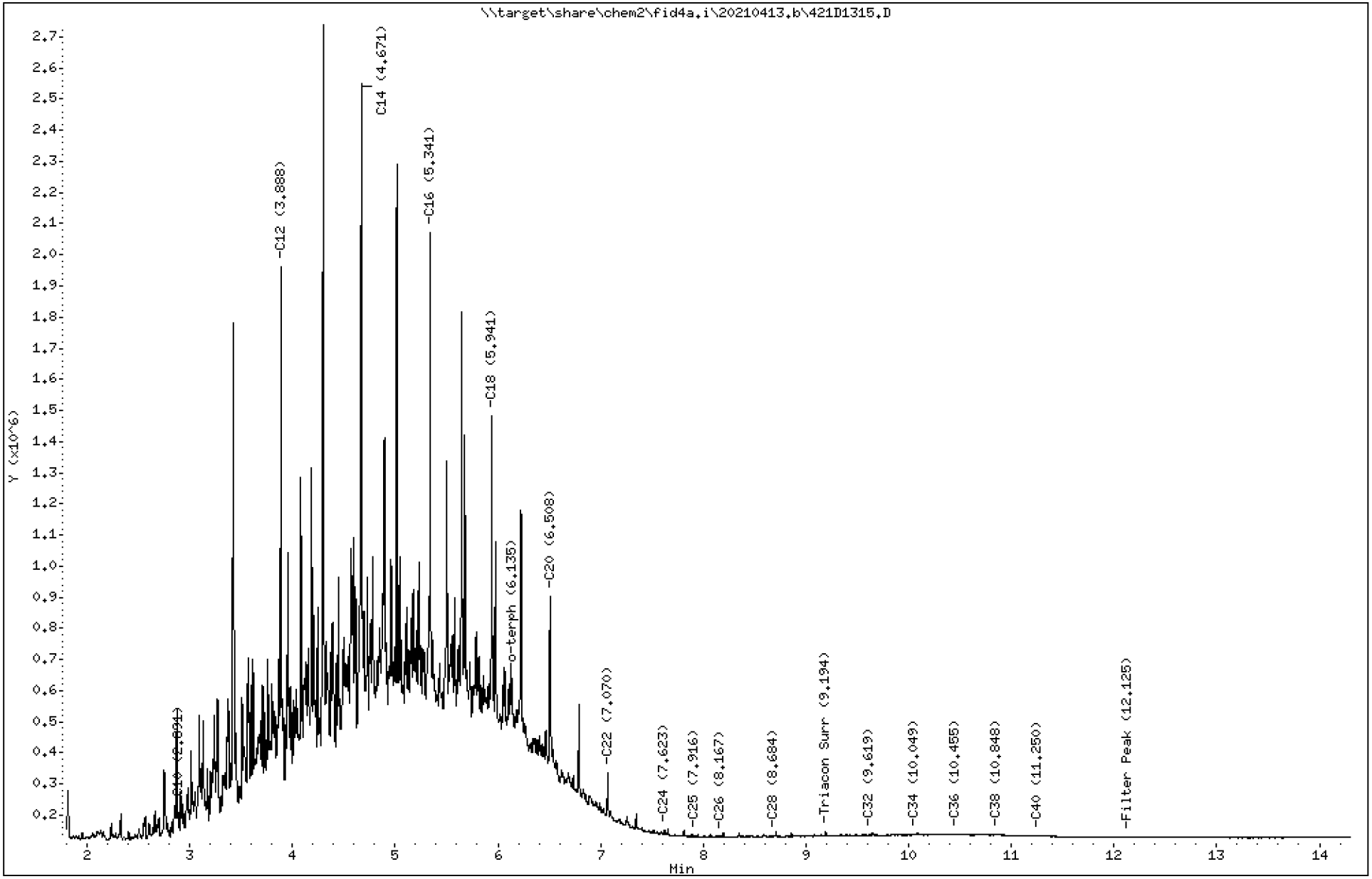
Instrument: fid4a.i

Sample Info: SEQ-SCV1

Operator: CTO

Column phase: RTX-1

Column diameter: 0.25



Analytical Resources Inc.
TPH Quantitation Report

Data file: 20210413.b/421D1315.D
Method: 20210413.b\FID4TPH.m
Instrument: fid4a.i, CTO
Report Date: 04/14/2021
Macro: 09-SEP-2019
Calibration Dates: Gas:XX-XXX-XXXX Diesel:14-APR-2021 M.Oil:14-APR-2021

ARI ID: SEQ-SCV1
Client ID:
Injection: 13-APR-2021 15:37
Dilution Factor: 1
RT Std: 419H1603.D

FID:4A RESULTS

Compound	RT	Shift	Height	Area	Method	Range	Total Area	Conc(mg/L)
C8	1.643	0.008	54603	64091	WATPHD	(C12-C24)	89863949	491.5
C10	2.891	0.001	88521	60047	WATPHM	(C24-C38)	2579689	19.6
C12	3.888	-0.007	1839965	1228653	AK102	(C10-C25)	107410855	498.6
C14	4.671	-0.006	2430486	1810508	AK103	(C25-C36)	2086166	20.6
C16	5.341	-0.007	1950234	1476241	OR.DIES	(C10-C28)	107974378	550.9
C18	5.941	-0.008	1361376	1097598				
C20	6.508	-0.009	783405	864803	JET-A	(C10-C18)	89494855	610.3
C22	7.070	-0.012	216300	223341				
C24	7.623	-0.012	29214	46183				
C25	7.916	0.008	13547	12777				
C26	8.167	-0.005	8723	1733				
C28	8.684	0.003	11097	3231				
C32	9.619	-0.004	16094	18913				
C34	10.049	-0.003	16451	8995				
Filter Peak	12.125	0.003	8610	2562	CREOSOT	(C12-C22)	88684804	8332.6
C36	10.455	-0.004	16099	8787				
C38	10.848	0.002	15723	4681				
C40	11.250	-0.002	12238	2441				
o-terph	6.135	0.005	518842	594571				
Triacon Surr	9.194	0.000	24981	26960	NAS DIES	(C10-C24)	107276298	549.7

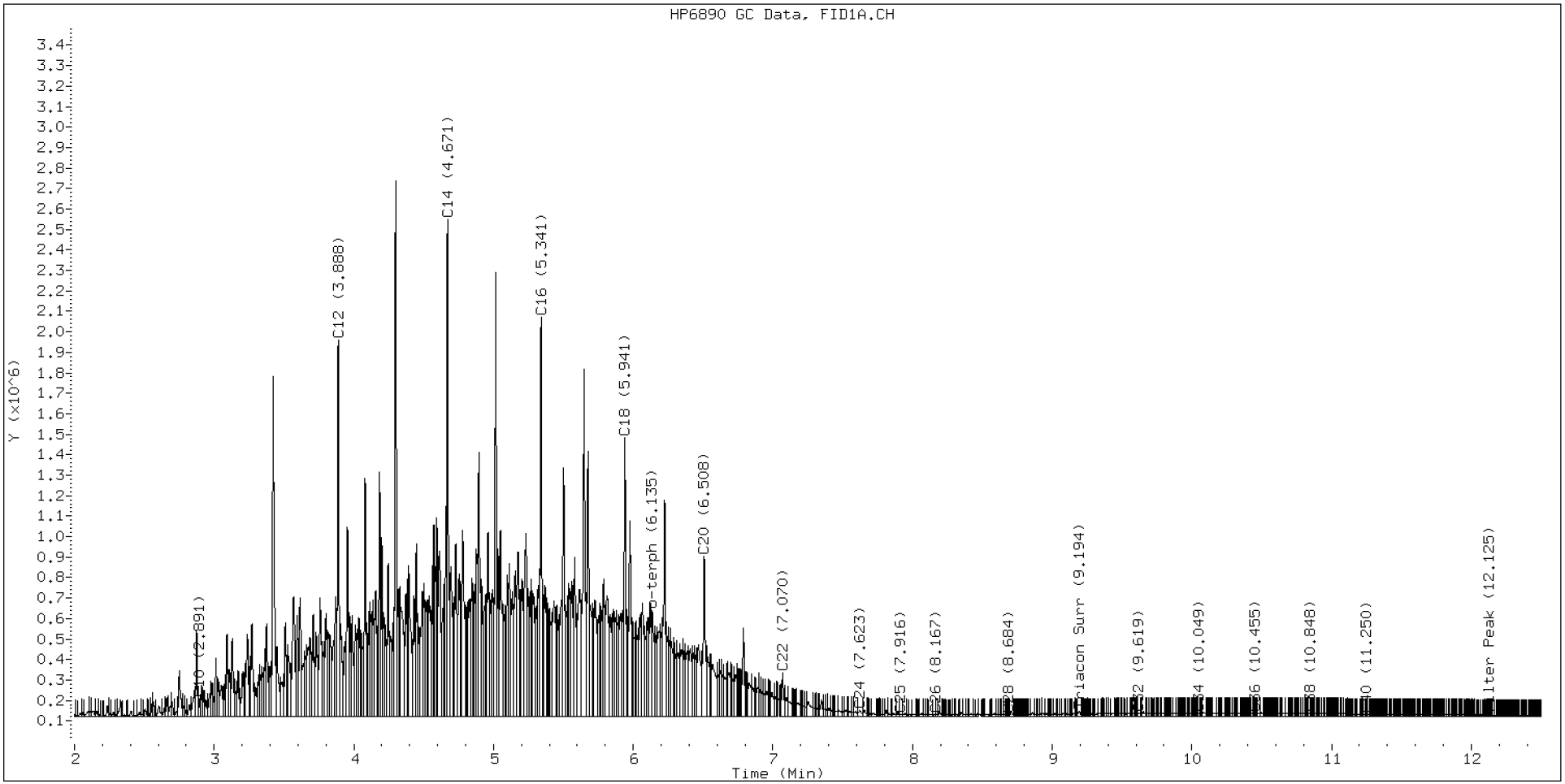
Range Times: NW Diesel(3.894 - 7.635) AK102(2.89 - 7.91) Jet A(2.89 - 5.95)
NW M.Oil(7.64 - 10.85) AK103(7.91 - 10.46) OR Diesel(2.89 - 8.68)

Surrogate	Area	Amount
o-Terphenyl	594571	2.4
Triacontane	26960	0.1

M Indicates the peak was manually integrated

Analyte	RF	Curve Date
o-Terph Surr	249011.3	25-OCT-2019
Triacon Surr	211827.9	25-OCT-2019
Gas	15000.0	XX-XXX-XXXX
Diesel	182831.3	14-APR-2021
Motor Oil	131440.7	14-APR-2021
AK102	215421.2	14-APR-2021
AK103	101056.3	14-APR-2021
JetA	146652.4	20-MAY-2020
OR Diesel	195999.1	25-OCT-2019
NAS Diesel	195148.2	25-OCT-2019
Creosote	10643.2	30-MAR-2020

Datafile: FID4A, 20210413.b/421D1315.D SEQ-SCV1



Analytical Resources, Incorporated
Analytical Chemists and Consultants

SECOND-SOURCE
CONTINUING CALIBRATION CHECK
NWTPH-Dx

Laboratory:	Analytical Resources, Inc.	SDG:	21E0106
Client:	Anchor QEA, LLC	Project:	Gasco Siltronic - US Moorings
Instrument ID:	FID4	Calibration:	ED00037
Lab File ID:	421D1322.D	Calibration Date:	04/13/2021
Sequence:	SJD0189	Injection Date:	04/13/21
Lab Sample ID:	SJD0189-SCV2	Injection Time:	18:07
Sequence Name:	MOIL SCV		

		CONC. (mg/L)		RESPONSE FACTOR (RF)			% DRIFT/DIFF	
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN	CCV	LIMIT
Motor Oil Range Organics (C24-C38)	A	1000.0	918	131440.7	120611.9		-8.2	+/-30

* Values outside of QC limits

Data File: \\target\share\chem2\fid4a.i\20210413.b\421D1322.D

Date : 13-APR-2021 18:07

Client ID:

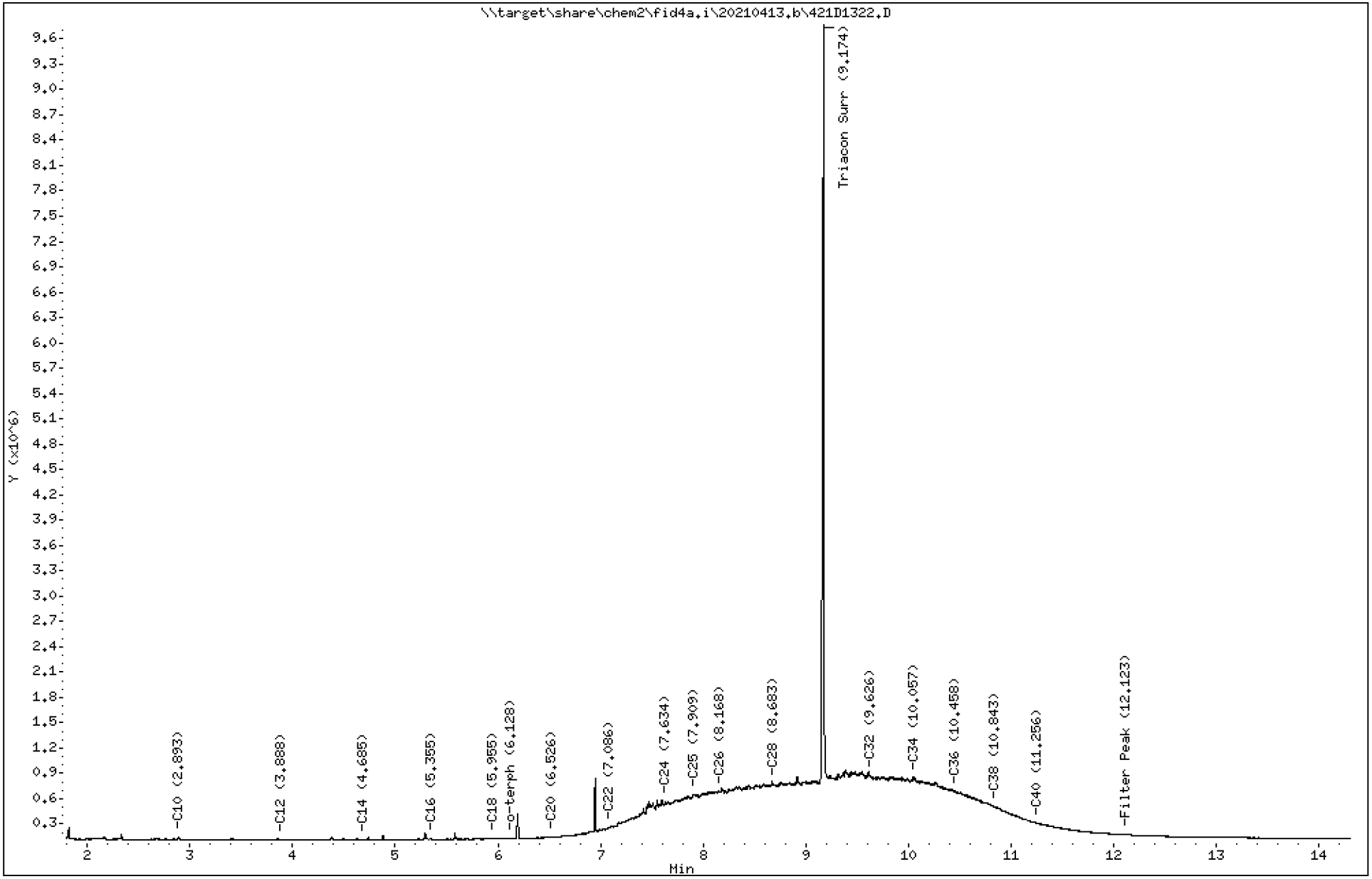
Instrument: fid4a.i

Sample Info: SEQ-SCV2

Operator: CTO

Column phase: RTX-1

Column diameter: 0.25



Analytical Resources Inc.
TPH Quantitation Report

Data file: 20210413.b/421D1322.D
Method: 20210413.b\FID4TPH.m
Instrument: fid4a.i, CTO
Report Date: 04/14/2021
Macro: 09-SEP-2019
Calibration Dates: Gas:XX-XXX-XXXX Diesel:14-APR-2021 M.Oil:14-APR-2021

ARI ID: SEQ-SCV2
Client ID:
Injection: 13-APR-2021 18:07
Dilution Factor: 1
RT Std: 419H1603.D

FID:4A RESULTS

Compound	RT	Shift	Height	Area	Method	Range	Total Area	Conc(mg/L)
C8	1.626	-0.008	65747	96813	WATPHD	(C12-C24)	15532252	85.0
C10	2.893	0.003	32970	23142	WATPHM	(C24-C38)	120611856	917.6
C12	3.888	-0.006	5389	3628	AK102	(C10-C25)	20669789	96.0
C14	4.685	0.008	3945	1476	AK103	(C25-C36)	105207415	1041.1
C16	5.355	0.007	9584	10953	OR.DIES	(C10-C28)	51331560	261.9
C18	5.955	0.006	19031	17530				
C20	6.526	0.009	34956	39910	JET-A	(C10-C18)	962360	6.6
C22	7.086	0.004	142736	70767				
C24	7.634	-0.001	455529	454995				
C25	7.909	0.002	536300	187150				
C26	8.168	-0.004	569572	113374				
C28	8.683	0.001	657302	357915				
C32	9.626	0.003	760723	638055				
C34	10.057	0.005	726792	323841				
Filter Peak	12.123	0.002	60871	41807	CREOSOT	(C12-C22)	4882924	458.8
C36	10.458	-0.002	571891	252641				
C38	10.843	-0.003	392748	215443				
C40	11.256	0.004	196755	78044				
o-terph	6.128	-0.002	13513	9103				
Triacon Surr	9.174	-0.019	8966637	9459500	NAS DIES	(C10-C24)	15747411	80.7

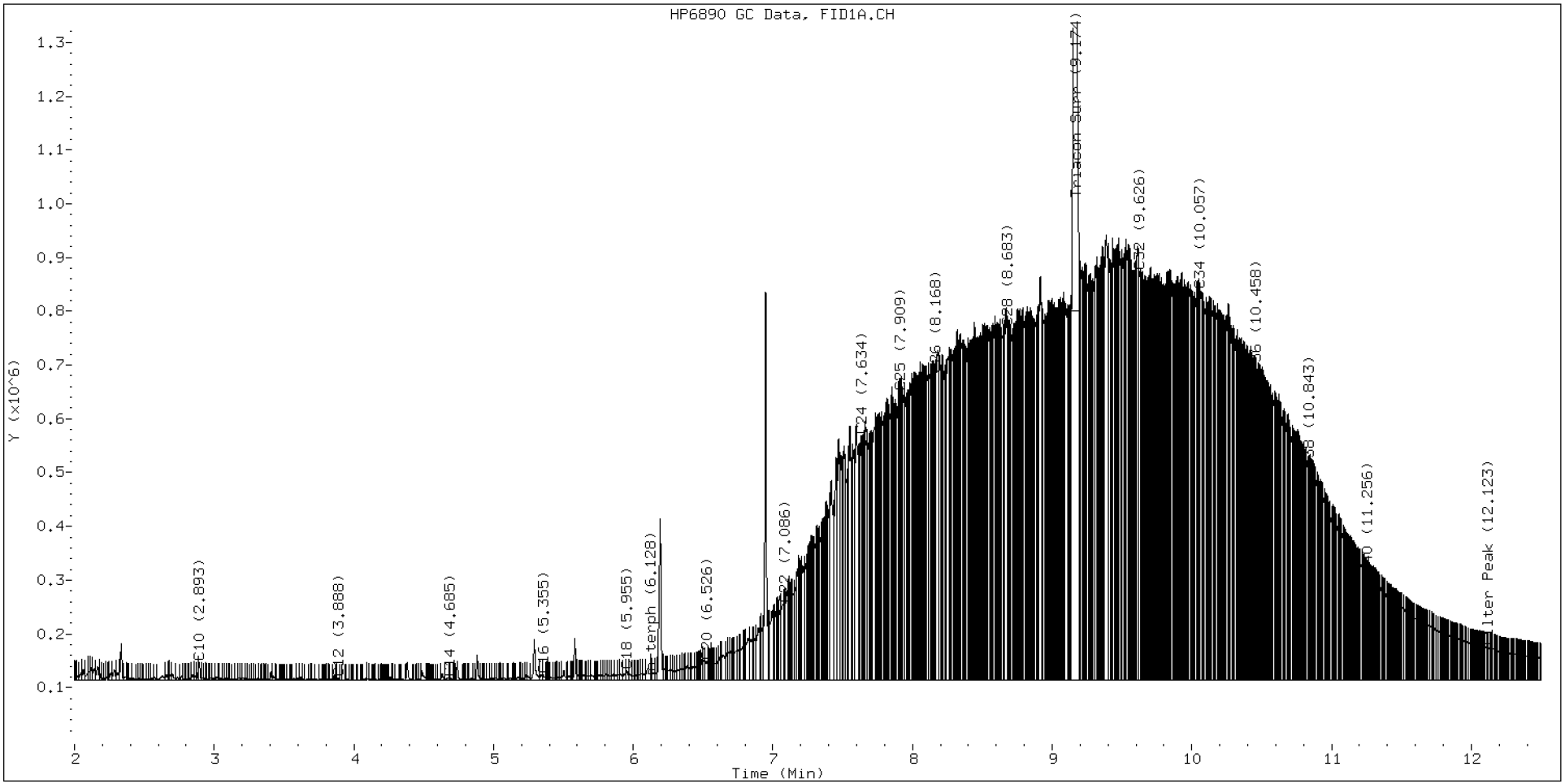
Range Times: NW Diesel(3.894 - 7.635) AK102(2.89 - 7.91) Jet A(2.89 - 5.95)
NW M.Oil(7.64 - 10.85) AK103(7.91 - 10.46) OR Diesel(2.89 - 8.68)

Surrogate	Area	Amount	
o-Terphenyl	9103	0.0	
Triacontane	9459500	44.7	M

M Indicates the peak was manually integrated

Analyte	RF	Curve Date
o-Terph Surr	249011.3	25-OCT-2019
Triacon Surr	211827.9	25-OCT-2019
Gas	15000.0	XX-XXX-XXXX
Diesel	182831.3	14-APR-2021
Motor Oil	131440.7	14-APR-2021
AK102	215421.2	14-APR-2021
AK103	101056.3	14-APR-2021
JetA	146652.4	20-MAY-2020
OR Diesel	195999.1	25-OCT-2019
NAS Diesel	195148.2	25-OCT-2019
Creosote	10643.2	30-MAR-2020

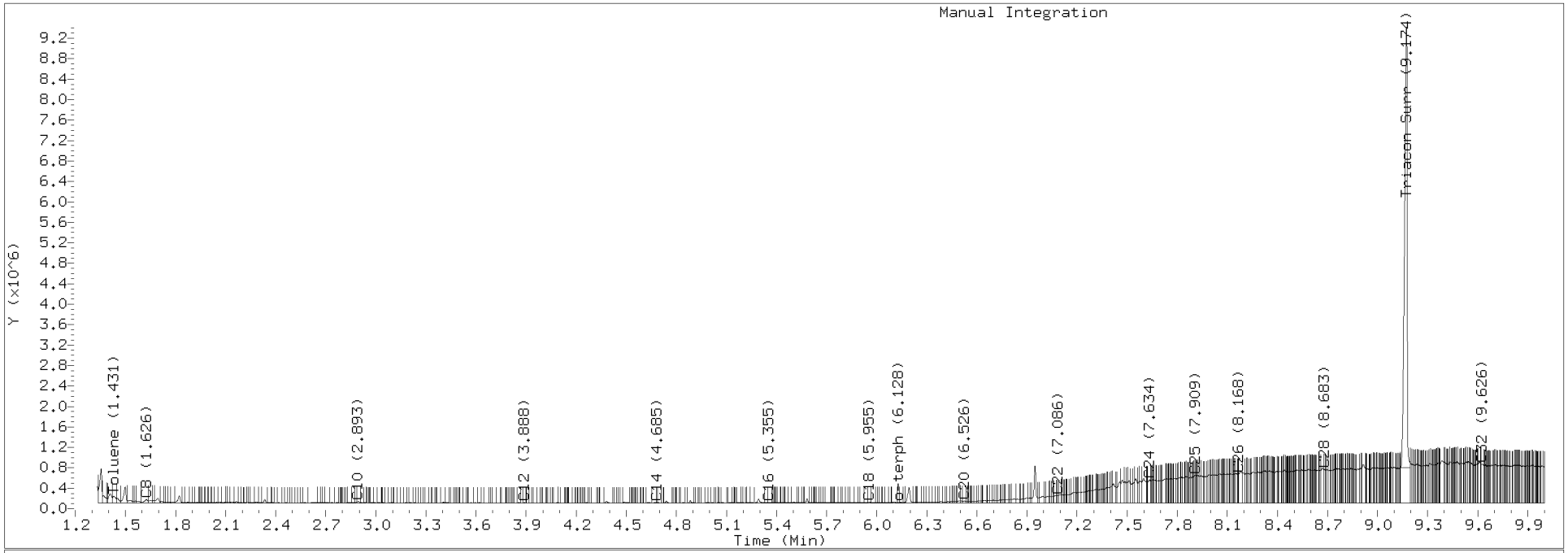
Datafile: FID4A, 20210413.b/421D1322.D SEQ-SCV2

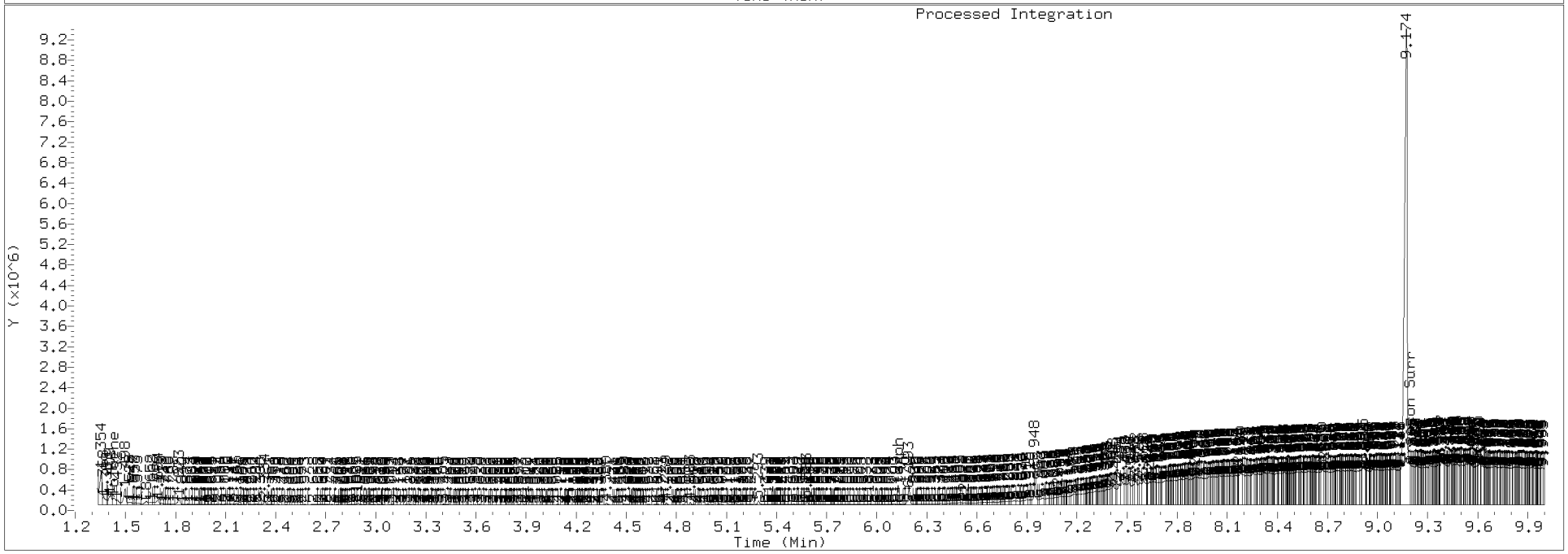


TPH Manual Integrations Report

Datafile: FID4A, 20210413.b/421D1322.D Injection: 13-APR-2021 18:07

Lab ID:SEQ-SCV2





Analytical Resources, Incorporated
Analytical Chemists and Consultants

CONTINUING CALIBRATION CHECK
NWTPH-Dx

Laboratory:	Analytical Resources, Inc.	SDG:	21E0106
Client:	Anchor QEA, LLC	Project:	Gasco Siltronic - US Moorings
Instrument ID:	FID4	Calibration:	ED00037
Lab File ID:	421D1577.D	Calibration Date:	04/13/2021
Sequence:	SJD0260	Injection Date:	04/16/21
Lab Sample ID:	SJD0260-CCV1	Injection Time:	11:57
Sequence Name:	DIESEL CCV		

COMPOUND	TYPE	CONC. (mg/L)		RESPONSE FACTOR (RF)			% DRIFT/DIFF	
		STD	CCV	ICAL	CCV	MIN	CCV	LIMIT
Diesel Range Organics (C12-C24)	A	500.00	515	182831.3	188269		3.0	+/-15
o-Terphenyl	A	90.000	90.2	249011.4	249451.7		0.2	+/-15

* Values outside of QC limits

Data File: \\target\share\chem2\fid4a.i\20210415b.b\421D1577.D

Date : 16-APR-2021 11:57

Client ID:

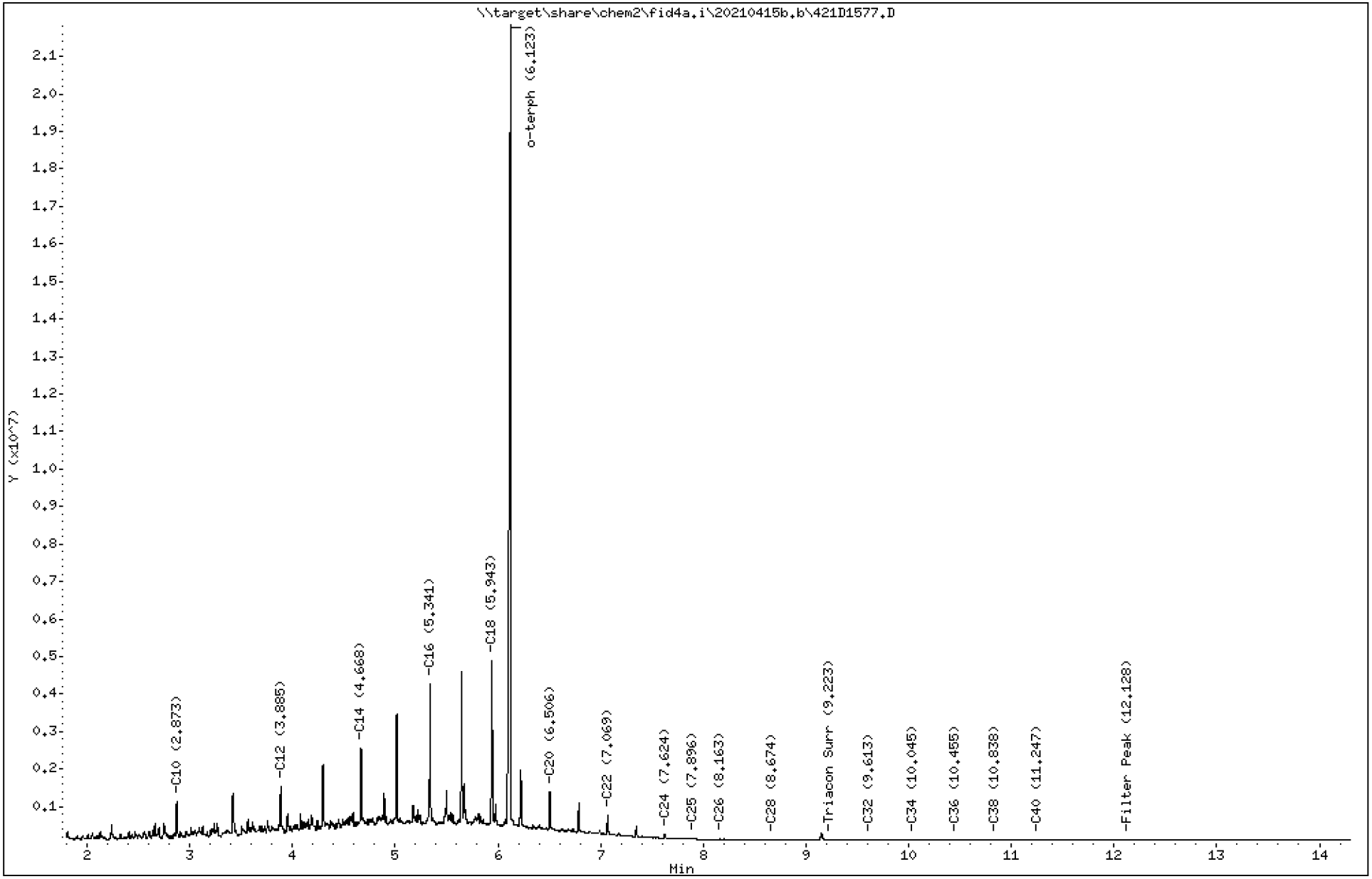
Instrument: fid4a.i

Sample Info: SEQ-CCV1

Operator: CTO

Column phase: RTX-1

Column diameter: 0.25



Analytical Resources Inc.
TPH Quantitation Report

Data file: 20210415b.b/421D1577.D
Method: 20210415b.b\FID4TPH.m
Instrument: fid4a.i, CTO
Report Date: 04/19/2021
Macro: 09-SEP-2019
Calibration Dates: Gas:XX-XXX-XXXX Diesel:14-APR-2021 M.Oil:14-APR-2021

ARI ID: SEQ-CCV1
Client ID:
Injection: 16-APR-2021 11:57
Dilution Factor: 1
RT Std: 419H1603.D

FID:4A RESULTS

Compound	RT	Shift	Height	Area	Method	Range	Total Area	Conc(mg/L)
C8	1.612	0.001	114564	177969	WATPHD	(C12-C24)	94134493	514.9
C10	2.873	-0.006	1034638	810602	WATPHM	(C24-C38)	1468613	11.2
C12	3.885	-0.003	1407224	1128460	AK102	(C10-C25)	111146558	515.9
C14	4.668	-0.003	2455286	2074212	AK103	(C25-C36)	1060863	10.5
C16	5.341	-0.002	4174787	3340301	OR.DIES	(C10-C28)	111641998	569.6
C18	5.943	-0.003	4791783	4018537				
C20	6.506	-0.008	1290571	1389200	JET-A	(C10-C18)	87086990	593.8
C22	7.069	-0.009	655790	684291				
C24	7.624	-0.007	140932	208203				
C25	7.896	-0.006	50322	85262				
C26	8.163	-0.004	20433	37327				
C28	8.674	-0.002	6930	11139				
C32	9.613	-0.003	3397	2064				
C34	10.045	-0.001	2956	864				
Filter Peak	12.128	0.002	7502	2589	CREOSOT	(C12-C22)	91360417	2341.6
C36	10.455	0.001	4121	612				
C38	10.838	-0.001	5509	2412				
C40	11.247	-0.000	7077	2460				
o-terph	6.123	-0.000	21299849	22450648				
Triacon Surr	9.223	0.037	4283	3481	NAS DIES	(C10-C24)	110846579	568.0

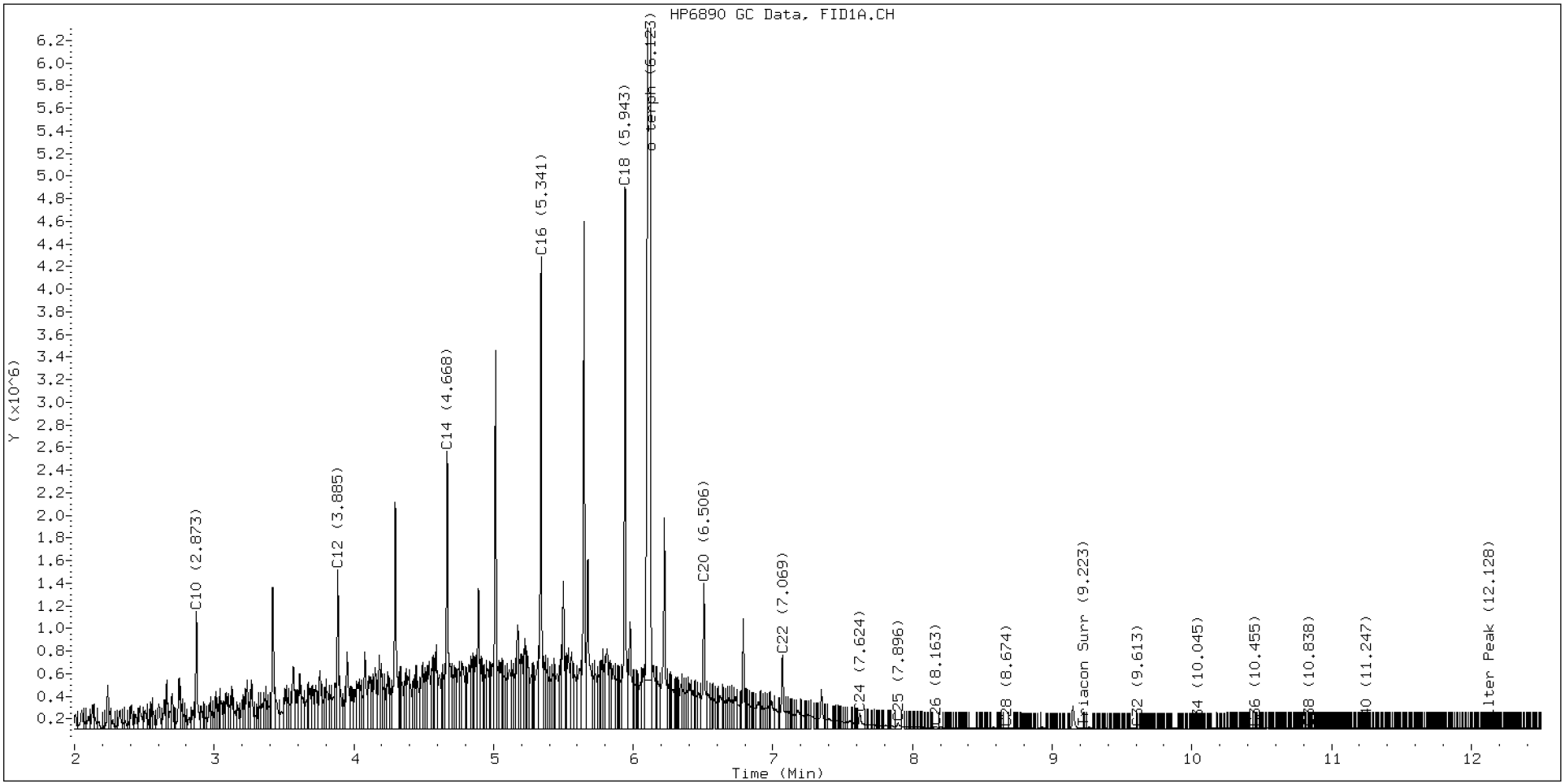
Range Times: NW Diesel(3.888 - 7.631) AK102(2.88 - 7.90) Jet A(2.88 - 5.95)
NW M.Oil(7.63 - 10.84) AK103(7.90 - 10.45) OR Diesel(2.88 - 8.68)

Surrogate	Area	Amount	
o-Terphenyl	22450648	90.2	M
Triacontane	3481	0.0	

M Indicates the peak was manually integrated

Analyte	RF	Curve Date
o-Terph Surr	249011.3	25-OCT-2019
Triacon Surr	211827.9	25-OCT-2019
Gas	15000.0	XX-XXX-XXXX
Diesel	182831.3	14-APR-2021
Motor Oil	131440.7	14-APR-2021
AK102	215421.2	14-APR-2021
AK103	101056.3	14-APR-2021
JetA	146652.4	20-MAY-2020
OR Diesel	195999.1	25-OCT-2019
NAS Diesel	195148.2	25-OCT-2019
Creosote	39015.8	30-MAR-2020

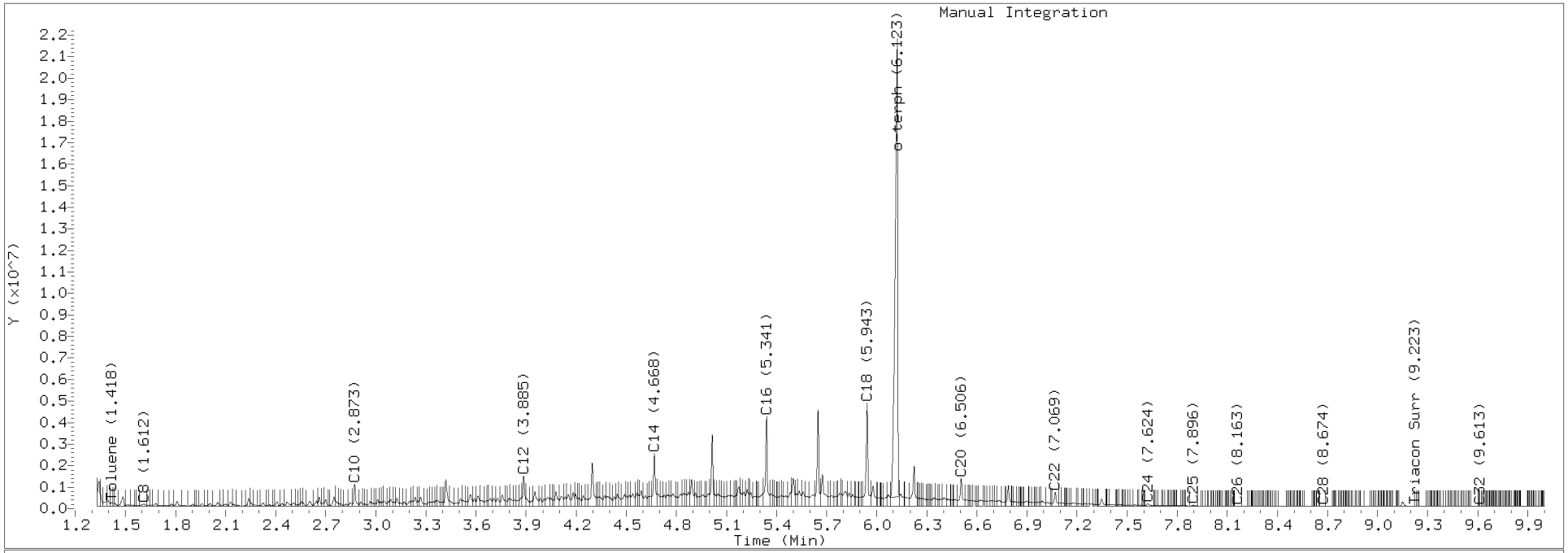
Datafile: FID4A, 20210415b.b/421D1577.D SEQ-CCV1

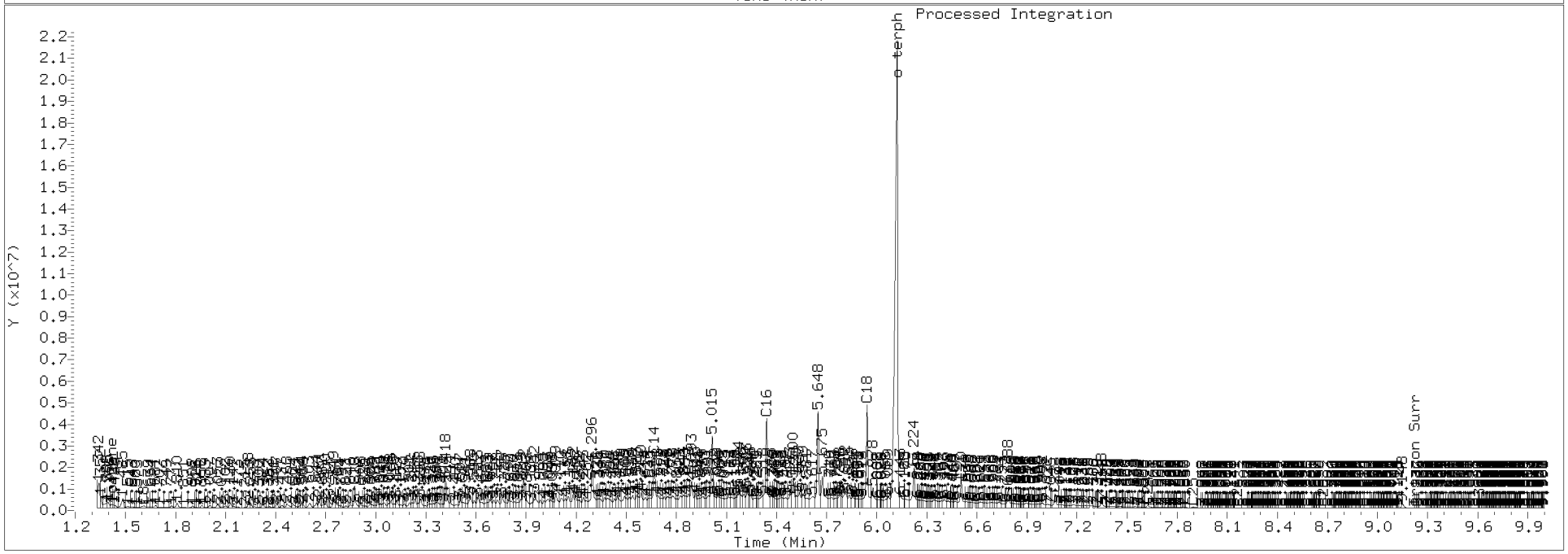


TPH Manual Integrations Report

Datafile: FID4A, 20210415b.b/421D1577.D Injection: 16-APR-2021 11:57

Lab ID:SEQ-CCV1





Analytical Resources, Incorporated
Analytical Chemists and Consultants

CONTINUING CALIBRATION CHECK
NWTPH-Dx

Laboratory:	Analytical Resources, Inc.	SDG:	21E0106
Client:	Anchor QEA, LLC	Project:	Gasco Siltronic - US Moorings
Instrument ID:	FID4	Calibration:	ED00037
Lab File ID:	421D2029.D	Calibration Date:	04/13/2021
Sequence:	SJD0282	Injection Date:	04/21/21
Lab Sample ID:	SJD0282-CCV1	Injection Time:	23:31
Sequence Name:	DIESEL CCV		

COMPOUND	TYPE	CONC. (mg/L)		RESPONSE FACTOR (RF)			% DRIFT/DIFF	
		STD	CCV	ICAL	CCV	MIN	CCV	LIMIT
Diesel Range Organics (C12-C24)	A	500.00	482	182831.3	176249.6		-3.6	+/-15
o-Terphenyl	A	90.000	84.8	249011.4	234688.2		-5.8	+/-15

* Values outside of QC limits

Data File: \\target\share\chem2\fid4a.i\20210420.b\421D2029.D

Date : 21-APR-2021 23:31

Client ID:

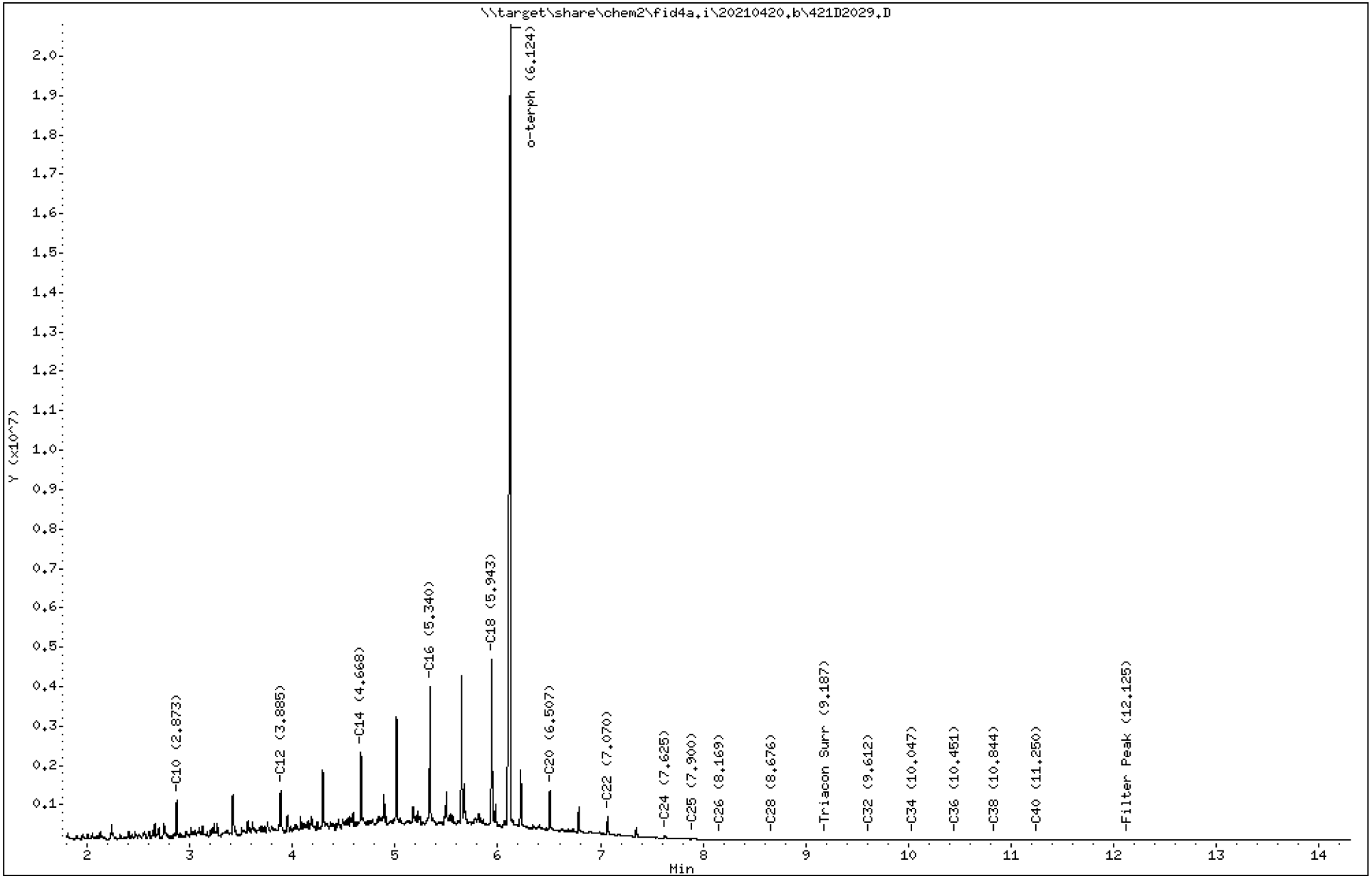
Instrument: fid4a.i

Sample Info: SEQ-CCV1

Operator: CTO

Column phase: RTX-1

Column diameter: 0.25



Analytical Resources Inc.
TPH Quantitation Report

Data file: 20210420.b/421D2029.D
Method: 20210420.b\FID4TPH.m
Instrument: fid4a.i, CTO
Report Date: 04/21/2021
Macro: 09-SEP-2019
Calibration Dates: Gas:XX-XXX-XXXX Diesel:14-APR-2021 M.Oil:14-APR-2021

ARI ID: SEQ-CCV1
Client ID:
Injection: 21-APR-2021 23:31
Dilution Factor: 1
RT Std: 419H1603.D

FID:4A RESULTS

Compound	RT	Shift	Height	Area	Method	Range	Total Area	Conc(mg/L)
C8	1.613	-0.005	93917	105034	WATPHD	(C12-C24)	88124796	482.0
C10	2.873	-0.008	994047	753291	WATPHM	(C24-C38)	787518	6.0
C12	3.885	-0.003	1243946	1041847	AK102	(C10-C25)	103702663	481.4
C14	4.668	-0.003	2230259	1918845	AK103	(C25-C36)	492064	4.9
C16	5.340	-0.001	3899335	3006283	OR.DIES	(C10-C28)	104099901	531.1
C18	5.943	-0.001	4581380	3772430				
C20	6.507	-0.006	1249279	1279848	JET-A	(C10-C18)	80822380	551.1
C22	7.070	-0.006	576910	673910				
C24	7.625	-0.005	107559	187239				
C25	7.900	-0.001	36739	96562				
C26	8.169	0.003	13760	17559				
C28	8.676	0.000	2645	896				
C32	9.612	-0.003	619	294				
C34	10.047	0.002	735	225				
Filter Peak	12.125	-0.001	4128	2803	BUNKERC	(C10-C38)	104238929	2322.0
C36	10.451	-0.001	1377	390				
C38	10.844	0.004	2337	462				
C40	11.250	0.007	3571	2254				
o-terph	6.124	0.002	20299823	21121939				
Triacon Surr	9.187	0.003	1352	576	NAS DIES	(C10-C24)	103451411	530.1

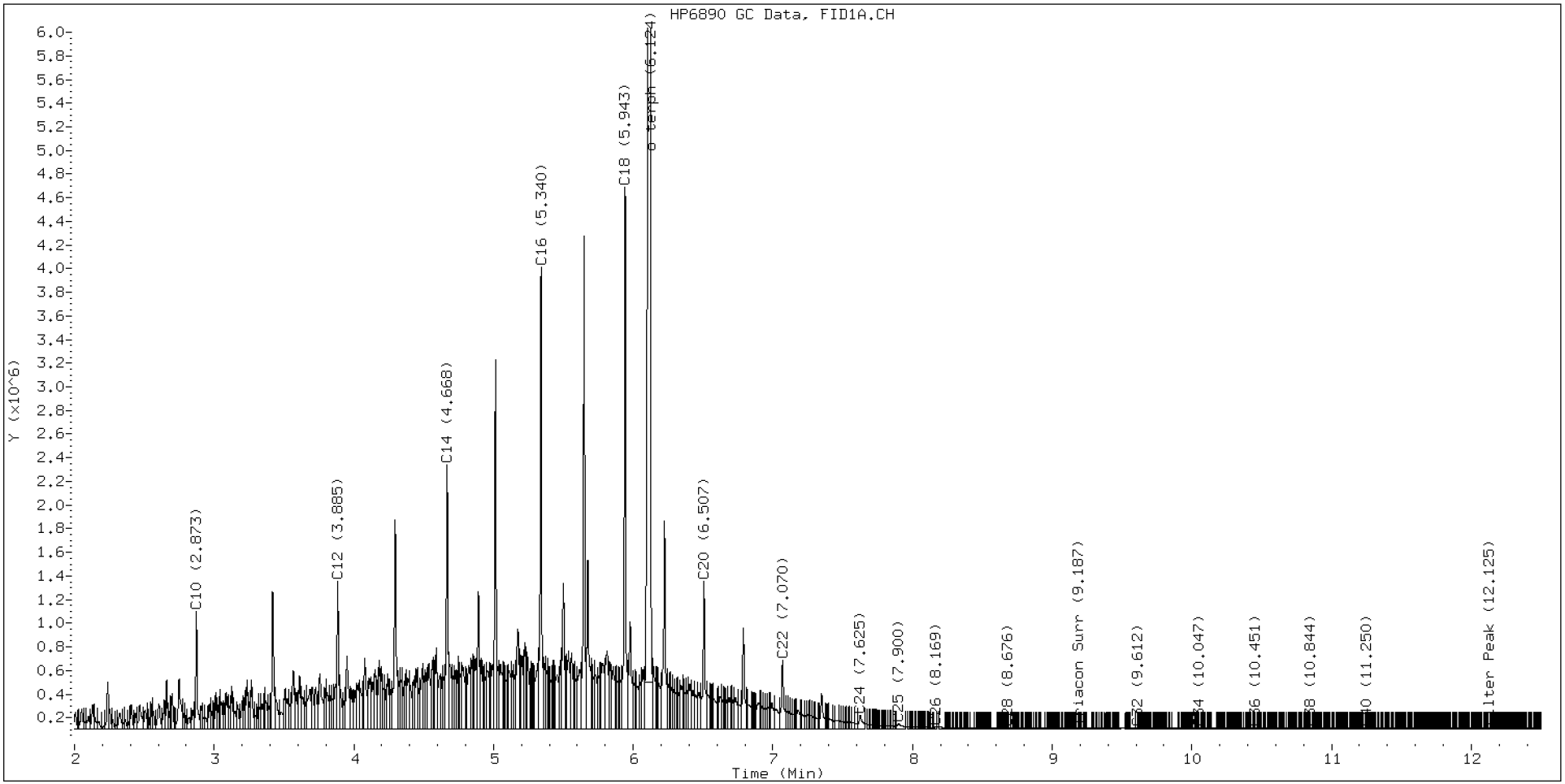
Range Times: NW Diesel(3.888 - 7.630) AK102(2.88 - 7.90) Jet A(2.88 - 5.94)
NW M.Oil(7.63 - 10.84) AK103(7.90 - 10.45) OR Diesel(2.88 - 8.68)

Surrogate	Area	Amount	
o-Terphenyl	21121939	84.8	M
Triacontane	576	0.0	

M Indicates the peak was manually integrated

Analyte	RF	Curve Date
o-Terph Surr	249011.3	25-OCT-2019
Triacon Surr	211827.9	25-OCT-2019
Gas	15000.0	XX-XXX-XXXX
Diesel	182831.3	14-APR-2021
Motor Oil	131440.7	14-APR-2021
AK102	215421.2	14-APR-2021
AK103	101056.3	14-APR-2021
JetA	146652.4	20-MAY-2020
OR Diesel	195999.1	25-OCT-2019
NAS Diesel	195148.2	25-OCT-2019
Bunker C	44892.5	21-APR-2021

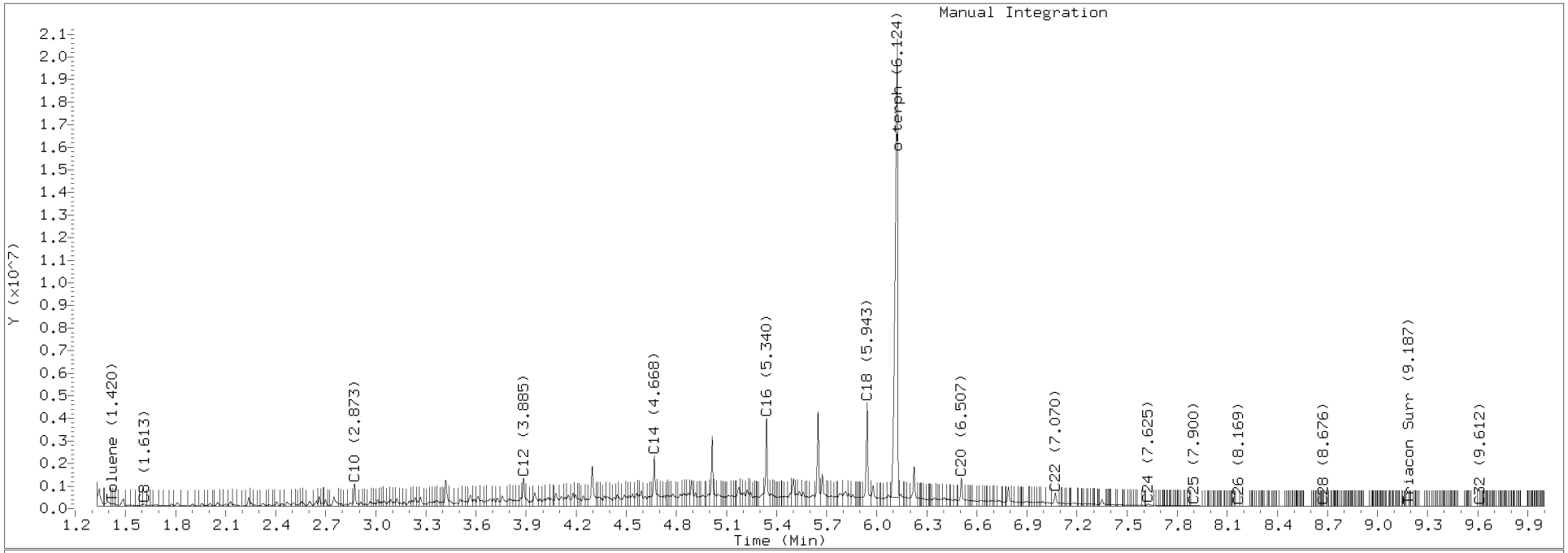
Datafile: FID4A, 20210420.b/421D2029.D SEQ-CCV1

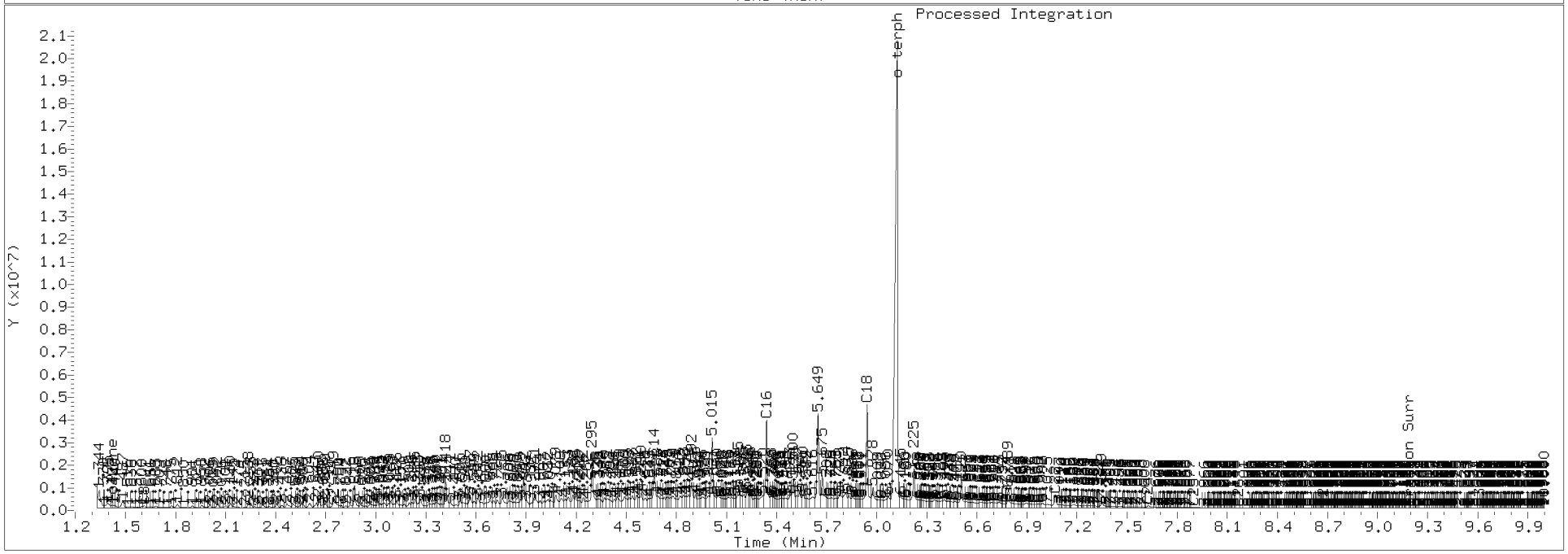


TPH Manual Integrations Report

Datafile: FID4A, 20210420.b/421D2029.D Injection: 21-APR-2021 23:31

Lab ID:SEQ-CCV1





Analytical Resources, Incorporated
Analytical Chemists and Consultants

CONTINUING CALIBRATION CHECK
NWTPH-Dx

Laboratory:	Analytical Resources, Inc.	SDG:	21E0106
Client:	Anchor QEA, LLC	Project:	Gasco Siltronic - US Moorings
Instrument ID:	FID4	Calibration:	ED00037
Lab File ID:	421E2025.D	Calibration Date:	04/13/2021
Sequence:	SJE0284	Injection Date:	05/20/21
Lab Sample ID:	SJE0284-CCV1	Injection Time:	21:33
Sequence Name:	DIESEL CCV		

COMPOUND	TYPE	CONC. (mg/L)		RESPONSE FACTOR (RF)			% DRIFT/DIFF	
		STD	CCV	ICAL	CCV	MIN	CCV	LIMIT
Diesel Range Organics (C12-C24)	A	500.00	525	182831.3	192002.4		5.0	+/-15
o-Terphenyl	A	90.000	87.5	249011.4	242068.8		-2.8	+/-15

* Values outside of QC limits

* Values outside of QC limits

Data File: \\target\share\chem2\fid4a.i\20210520.b\421E2025.D

Date : 20-MAY-2021 21:33

Client ID:

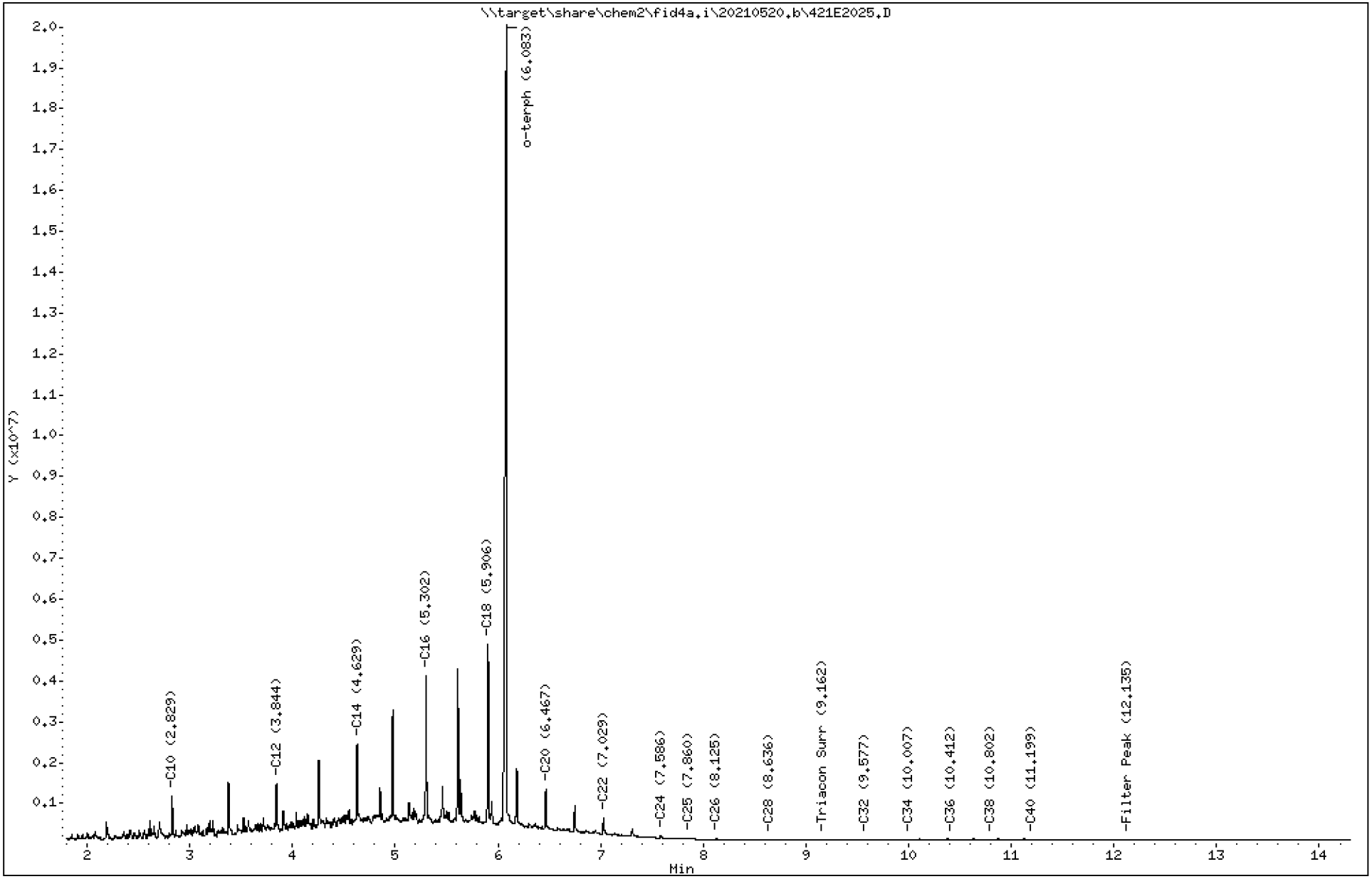
Instrument: fid4a.i

Sample Info: SEQ-CCV1

Operator: CTO

Column phase: RTX-1

Column diameter: 0.25



Analytical Resources Inc.
TPH Quantitation Report

Data file: 20210520.b/421E2025.D
Method: 20210520.b\FID4TPH.m
Instrument: fid4a.i, CTO
Report Date: 05/21/2021
Macro: 09-SEP-2019
Calibration Dates: Gas:XX-XXX-XXXX Diesel:14-APR-2021 M.Oil:14-APR-2021

ARI ID: SEQ-CCV1
Client ID:
Injection: 20-MAY-2021 21:33
Dilution Factor: 1
RT Std: 419H1603.D

FID:4A RESULTS

Compound	RT	Shift	Height	Area	Method	Range	Total Area	Conc(mg/L)
C8	1.526	-0.011	44257	33603	WATPHD	(C12-C24)	96001200	525.1
C10	2.829	-0.002	1086969	809310	WATPHM	(C24-C38)	1026864	7.8
C12	3.844	-0.002	1388263	1054101	AK102	(C10-C25)	113223376	525.6
C14	4.629	-0.002	2326114	2063517	AK103	(C25-C36)	663315	6.6
C16	5.302	-0.002	4008989	4021470	OR.DIES	(C10-C28)	113720002	580.2
C18	5.906	-0.002	4775008	4048790				
C20	6.467	-0.006	1225952	1372855	JET-A	(C10-C18)	88654543	604.5
C22	7.029	-0.007	537174	689203				
C24	7.586	-0.003	110813	202765				
C25	7.860	0.000	45176	94763				
C26	8.125	0.000	19247	34388				
C28	8.636	0.003	4471	4936				
C32	9.577	0.003	342	160				
C34	10.007	0.003	1045	861				
Filter Peak	12.135	-0.004	8671	15099	BUNKERC	(C10-C38)	113969040	2538.7
C36	10.412	0.000	1898	465				
C38	10.802	0.002	3542	1219				
C40	11.199	-0.002	5040	3459				
o-terph	6.083	0.001	19479620	21786190				
Triacon Surr	9.162	0.019	884	475	NAS DIES	(C10-C24)	112942176	578.8

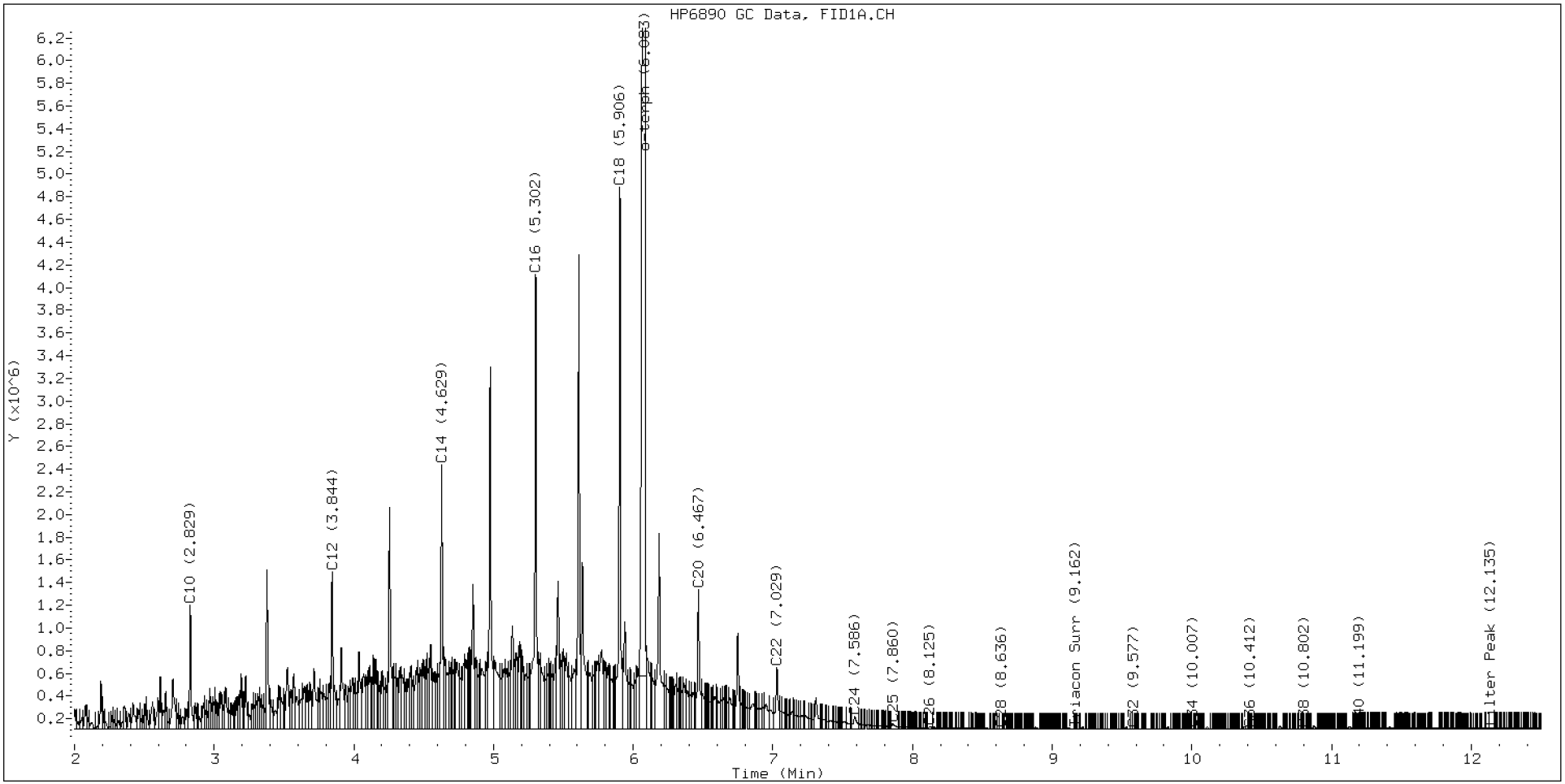
Range Times: NW Diesel(3.846 - 7.589) AK102(2.83 - 7.86) Jet A(2.83 - 5.91)
NW M.Oil(7.59 - 10.80) AK103(7.86 - 10.41) OR Diesel(2.83 - 8.63)

Surrogate	Area	Amount	
o-Terphenyl	21786190	87.5	M
Triacontane	475	0.0	

M Indicates the peak was manually integrated

Analyte	RF	Curve Date
o-Terph Surr	249011.3	25-OCT-2019
Triacon Surr	211827.9	25-OCT-2019
Gas	15000.0	XX-XXX-XXXX
Diesel	182831.3	14-APR-2021
Motor Oil	131440.7	14-APR-2021
AK102	215421.2	14-APR-2021
AK103	101056.3	14-APR-2021
JetA	146652.4	20-MAY-2020
OR Diesel	195999.1	25-OCT-2019
NAS Diesel	195148.2	25-OCT-2019
Bunker C	44892.5	21-APR-2021

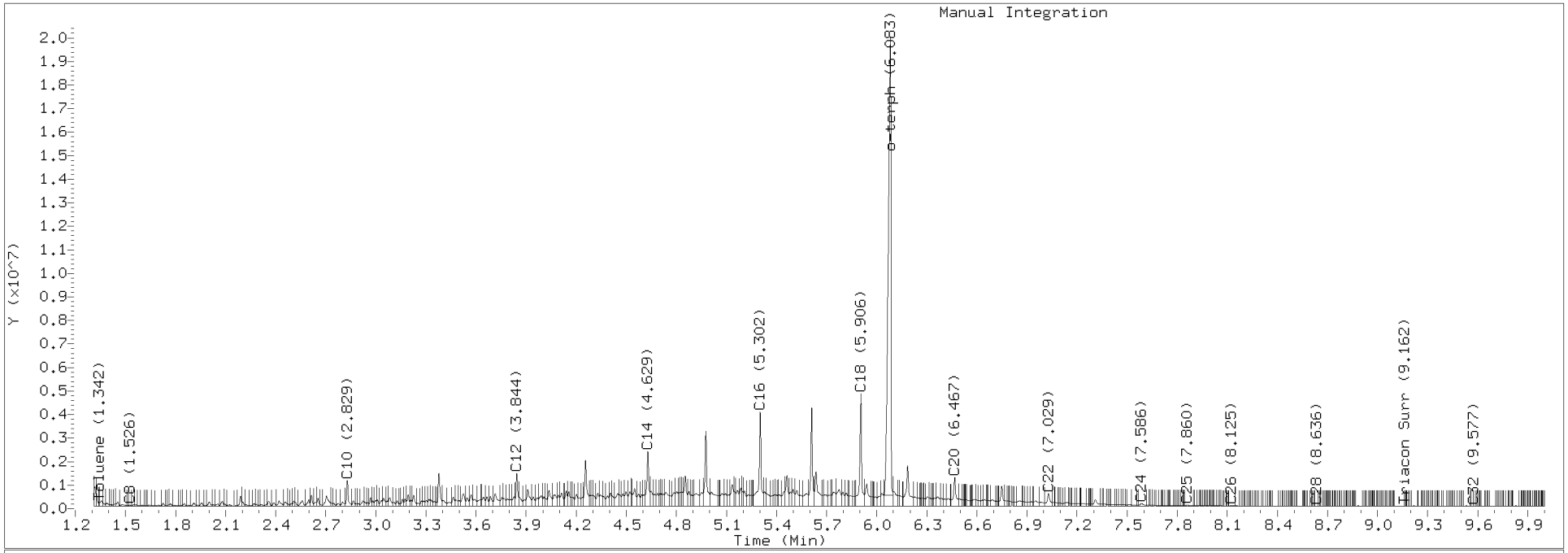
Datafile: FID4A, 20210520.b/421E2025.D SEQ-CCV1

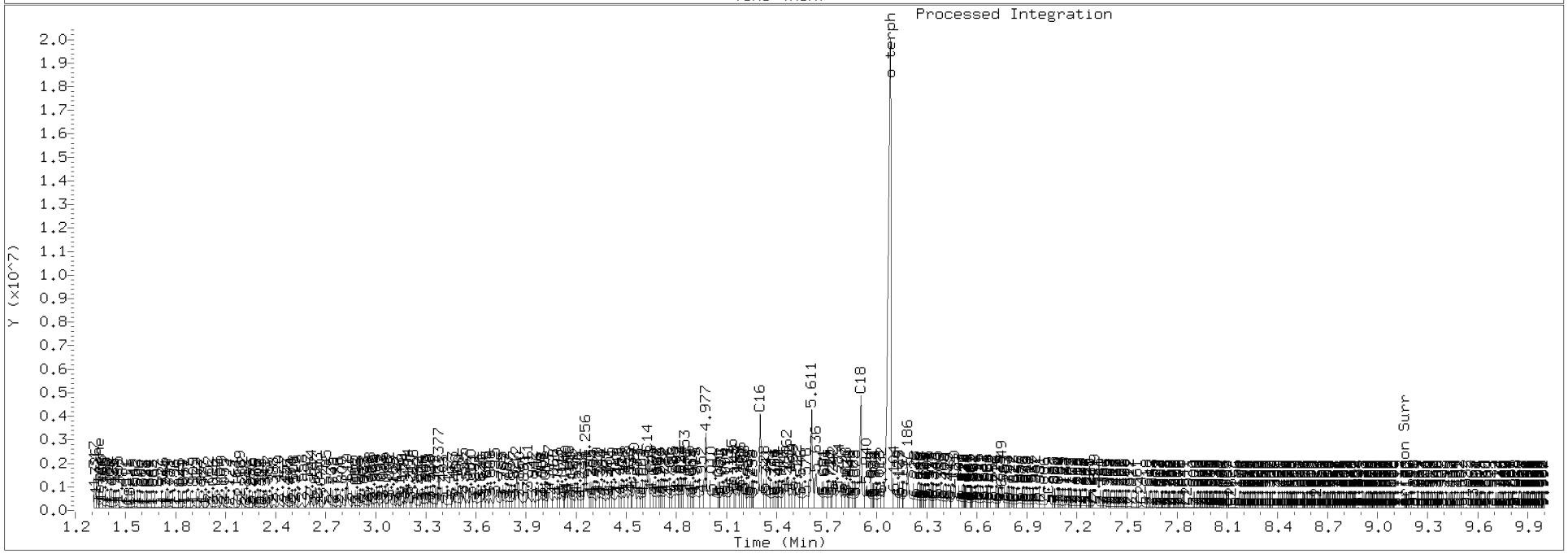


TPH Manual Integrations Report

Datafile: FID4A, 20210520.b/421E2025.D Injection: 20-MAY-2021 21:33

Lab ID:SEQ-CCV1





Analytical Resources, Incorporated
Analytical Chemists and Consultants

CONTINUING CALIBRATION CHECK
NWTPH-Dx

Laboratory:	Analytical Resources, Inc.	SDG:	21E0106
Client:	Anchor QEA, LLC	Project:	Gasco Siltronic - US Moorings
Instrument ID:	FID4	Calibration:	ED00037
Lab File ID:	421E2026.D	Calibration Date:	04/13/2021
Sequence:	SJE0284	Injection Date:	05/20/21
Lab Sample ID:	SJE0284-CCV2	Injection Time:	21:54
Sequence Name:	MOIL CCV		

COMPOUND	TYPE	CONC. (mg/L)		RESPONSE FACTOR (RF)			% DRIFT/DIFF	
		STD	CCV	ICAL	CCV	MIN	CCV	LIMIT
Motor Oil Range Organics (C24-C38)	A	1000.0	1070	131440.7	140997.9		7.3	+/-15

* Values outside of QC limits

* Values outside of QC limits

Data File: \\target\share\chem2\fid4a.i\20210520.b\421E2026.D

Date : 20-MAY-2021 21:54

Client ID:

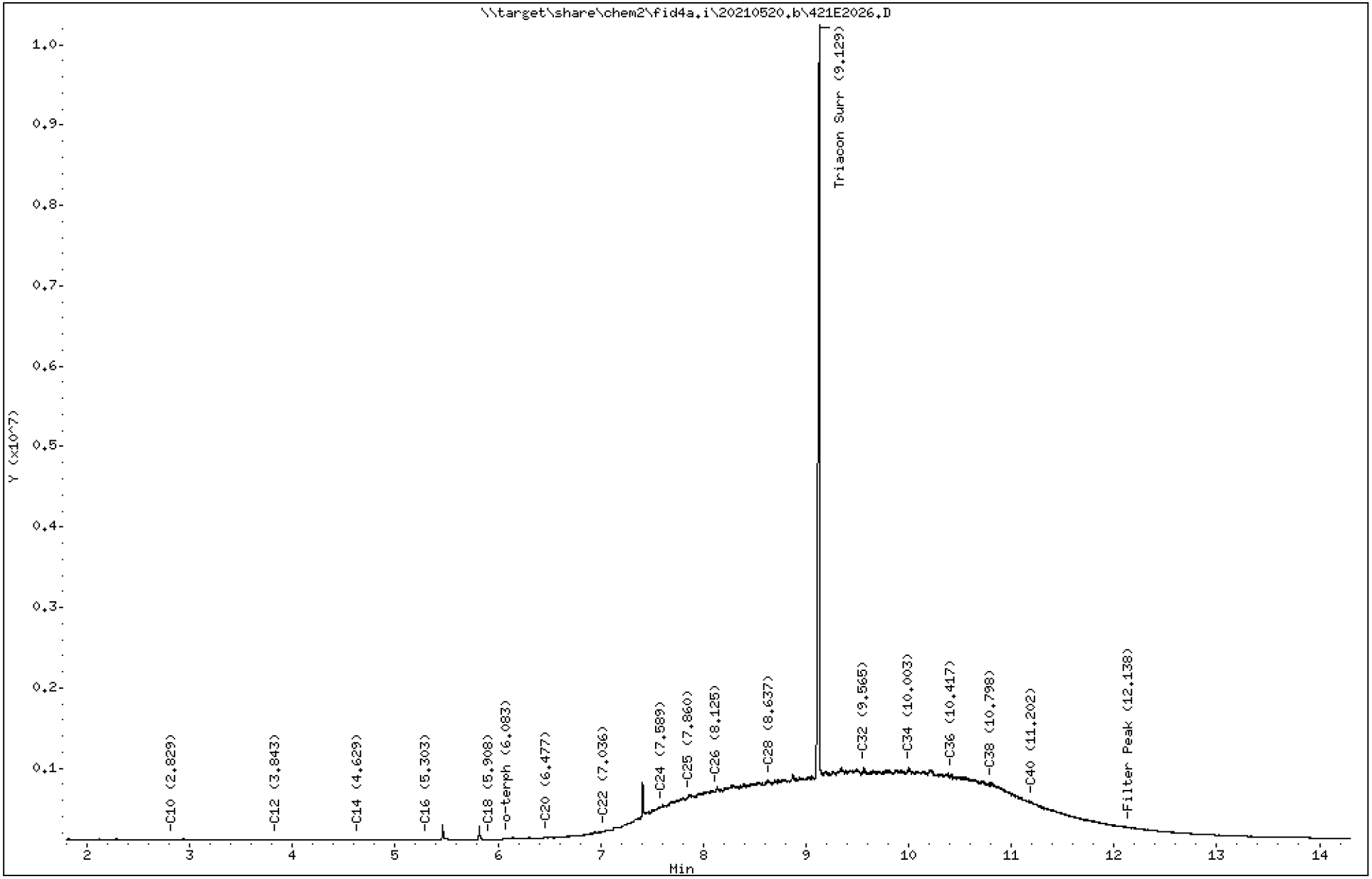
Instrument: fid4a.i

Sample Info: SEQ-CCV2

Operator: CTO

Column phase: RTX-1

Column diameter: 0.25



Analytical Resources Inc.
TPH Quantitation Report

Data file: 20210520.b/421E2026.D
Method: 20210520.b\FID4TPH.m
Instrument: fid4a.i, CTO
Report Date: 05/21/2021
Macro: 09-SEP-2019
Calibration Dates: Gas:XX-XXX-XXXX Diesel:14-APR-2021 M.Oil:14-APR-2021

ARI ID: SEQ-CCV2
Client ID:
Injection: 20-MAY-2021 21:54
Dilution Factor: 1
RT Std: 419H1603.D

FID:4A RESULTS

Compound	RT	Shift	Height	Area	Method	Range	Total Area	Conc(mg/L)
C8	1.528	-0.009	16293	22416	WATPHD	(C12-C24)	12352889	67.6
C10	2.829	-0.001	5522	4387	WATPHM	(C24-C38)	140997863	1072.7
C12	3.843	-0.004	1686	1032	AK102	(C10-C25)	17385526	80.7
C14	4.629	-0.002	1898	944	AK103	(C25-C36)	119209943	1179.6
C16	5.303	-0.001	2274	865	OR.DIES	(C10-C28)	50329909	256.8
C18	5.908	-0.000	7121	10051				
C20	6.477	0.004	26897	19584	JET-A	(C10-C18)	646938	4.4
C22	7.036	0.000	106084	47150				
C24	7.589	0.000	410607	182911				
C25	7.860	0.000	546733	135597				
C26	8.125	0.000	612457	152352				
C28	8.637	0.003	724046	251978				
C32	9.565	-0.009	905173	1375101				
C34	10.003	-0.001	893735	611988				
Filter Peak	12.138	-0.000	152020	45233	BUNKERC	(C10-C38)	153483068	3418.9
C36	10.417	0.005	817271	399586				
C38	10.798	-0.003	692768	239544				
C40	11.202	0.001	467807	161600				
o-terph	6.083	0.001	9077	3145				
Triacon Surr	9.129	-0.013	9363666	9563167	NAS DIES	(C10-C24)	12485205	64.0

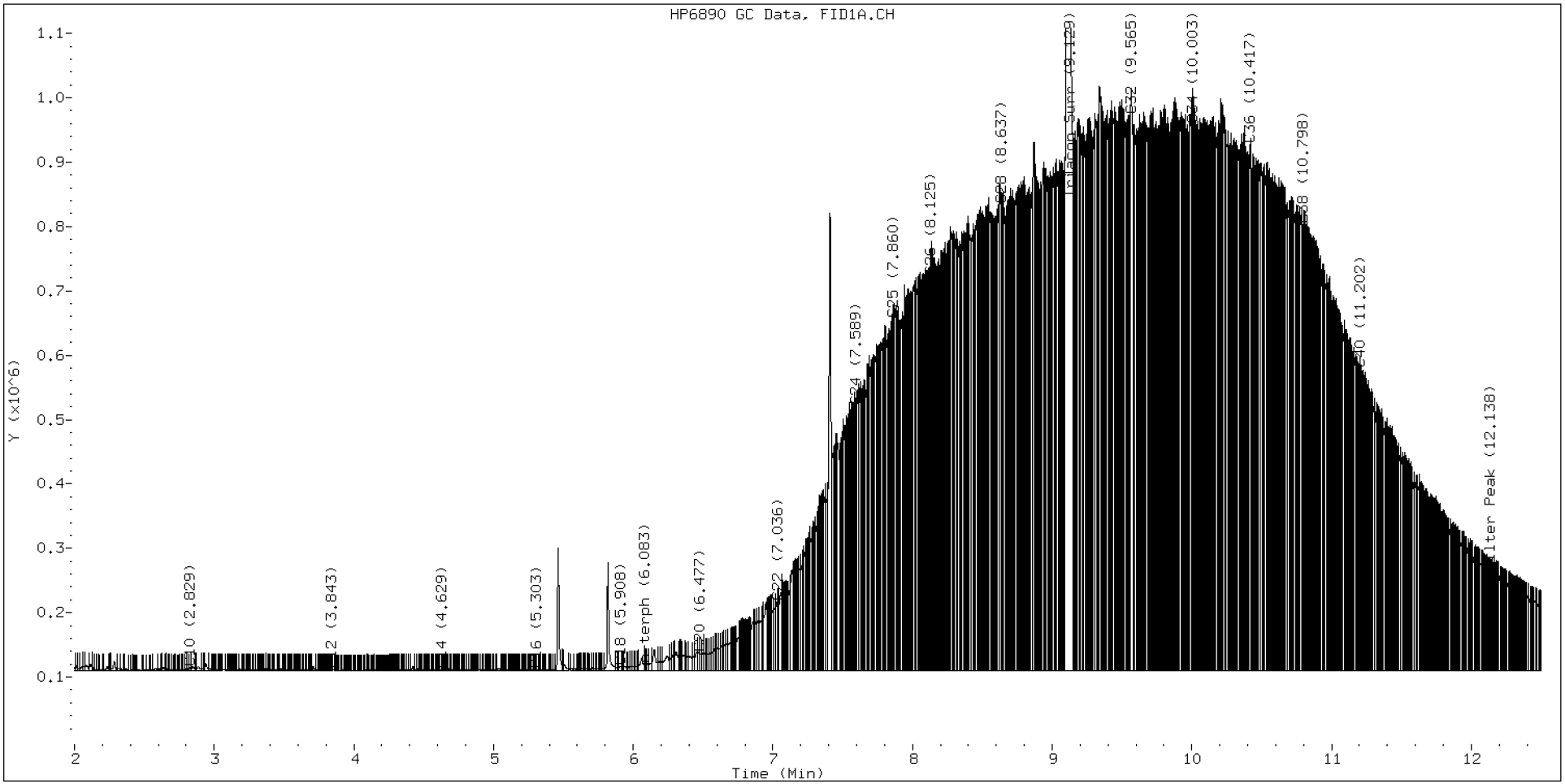
Range Times: NW Diesel(3.846 - 7.589) AK102(2.83 - 7.86) Jet A(2.83 - 5.91)
NW M.Oil(7.59 - 10.80) AK103(7.86 - 10.41) OR Diesel(2.83 - 8.63)

Surrogate	Area	Amount	
o-Terphenyl	3145	0.0	
Triacontane	9563167	45.1	M

M Indicates the peak was manually integrated

Analyte	RF	Curve Date
o-Terph Surr	249011.3	25-OCT-2019
Triacon Surr	211827.9	25-OCT-2019
Gas	15000.0	XX-XXX-XXXX
Diesel	182831.3	14-APR-2021
Motor Oil	131440.7	14-APR-2021
AK102	215421.2	14-APR-2021
AK103	101056.3	14-APR-2021
JetA	146652.4	20-MAY-2020
OR Diesel	195999.1	25-OCT-2019
NAS Diesel	195148.2	25-OCT-2019
Bunker C	44892.5	21-APR-2021

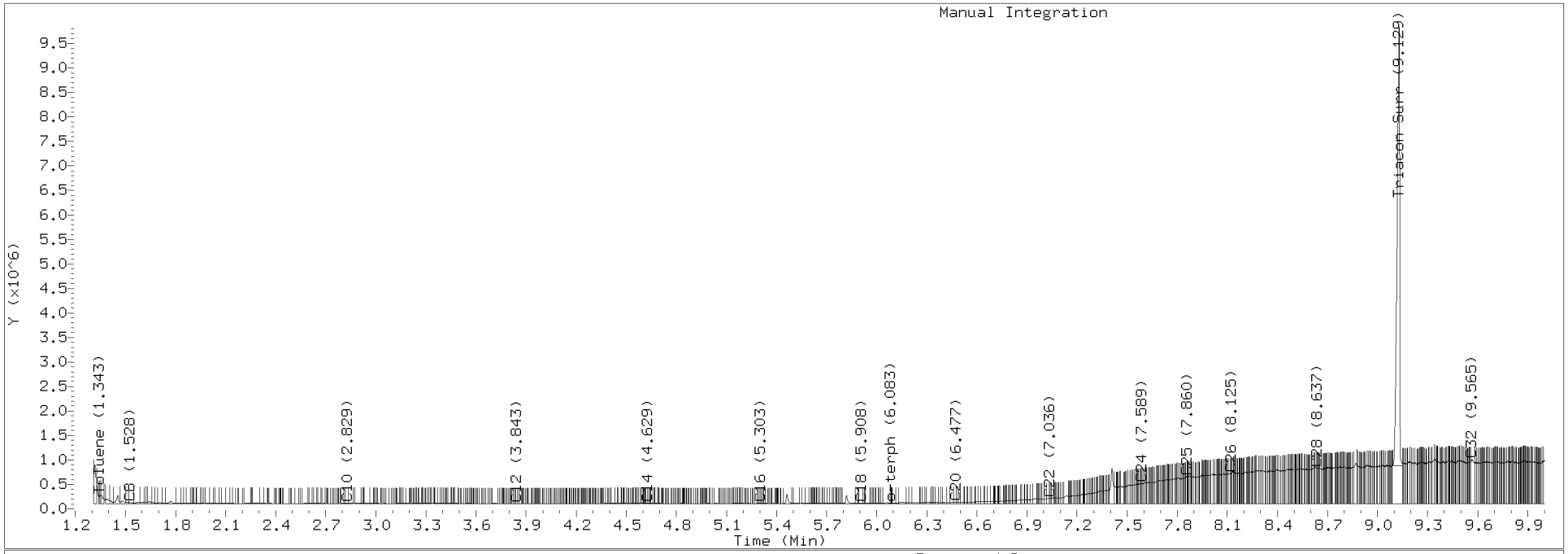
Datafile: FID4A, 20210520.b/421E2026.D SEQ-CCV2

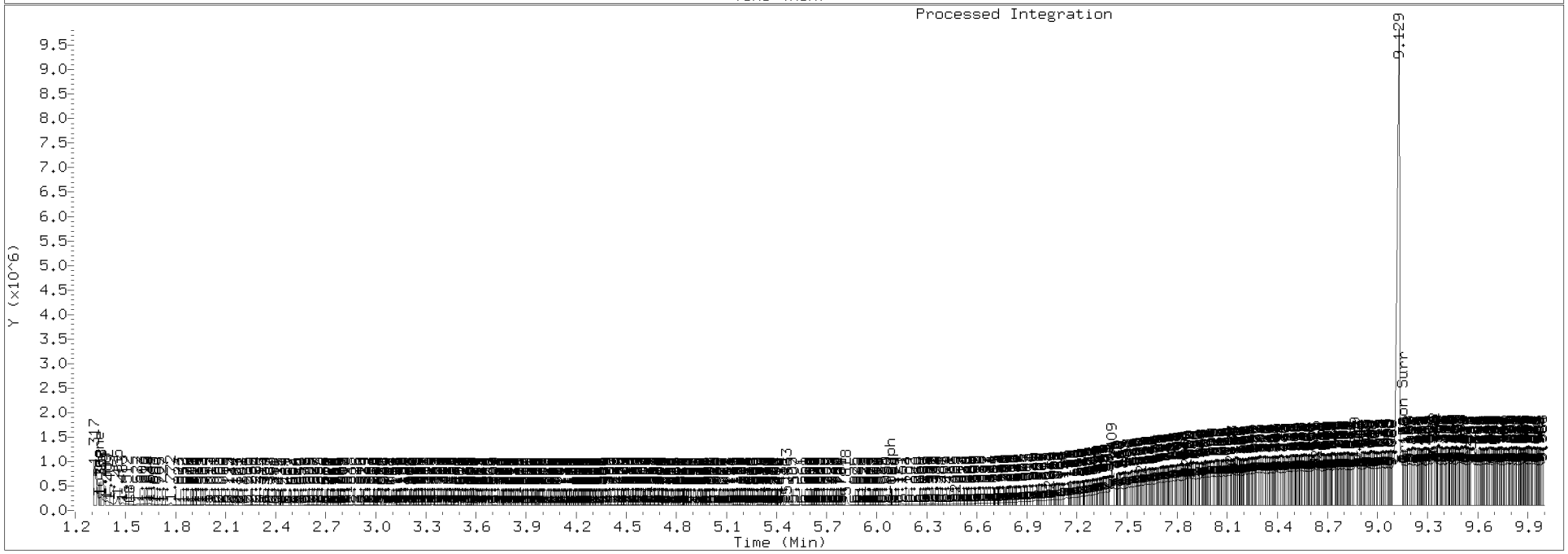


TPH Manual Integrations Report

Datafile: FID4A, 20210520.b/421E2026.D Injection: 20-MAY-2021 21:54

Lab ID:SEQ-CCV2





Analytical Resources, Incorporated
Analytical Chemists and Consultants

CONTINUING CALIBRATION CHECK
NWTPH-Dx

Laboratory:	Analytical Resources, Inc.	SDG:	21E0106
Client:	Anchor QEA, LLC	Project:	Gasco Siltronic - US Moorings
Instrument ID:	FID4	Calibration:	ED00037
Lab File ID:	421E2041.D	Calibration Date:	04/13/2021
Sequence:	SJE0284	Injection Date:	05/21/21
Lab Sample ID:	SJE0284-CCV3	Injection Time:	03:11
Sequence Name:	DIESEL CCV		

COMPOUND	TYPE	CONC. (mg/L)		RESPONSE FACTOR (RF)			% DRIFT/DIFF	
		STD	CCV	ICAL	CCV	MIN	CCV	LIMIT
Diesel Range Organics (C12-C24)	A	500.00	502	182831.3	183508.4		0.4	+/-15
o-Terphenyl	A	90.000	84.5	249011.4	233844.7		-6.1	+/-15

* Values outside of QC limits

* Values outside of QC limits

Data File: \\target\share\chem2\fid4a.i\20210520.b\421E2041.D

Date : 21-MAY-2021 03:11

Client ID:

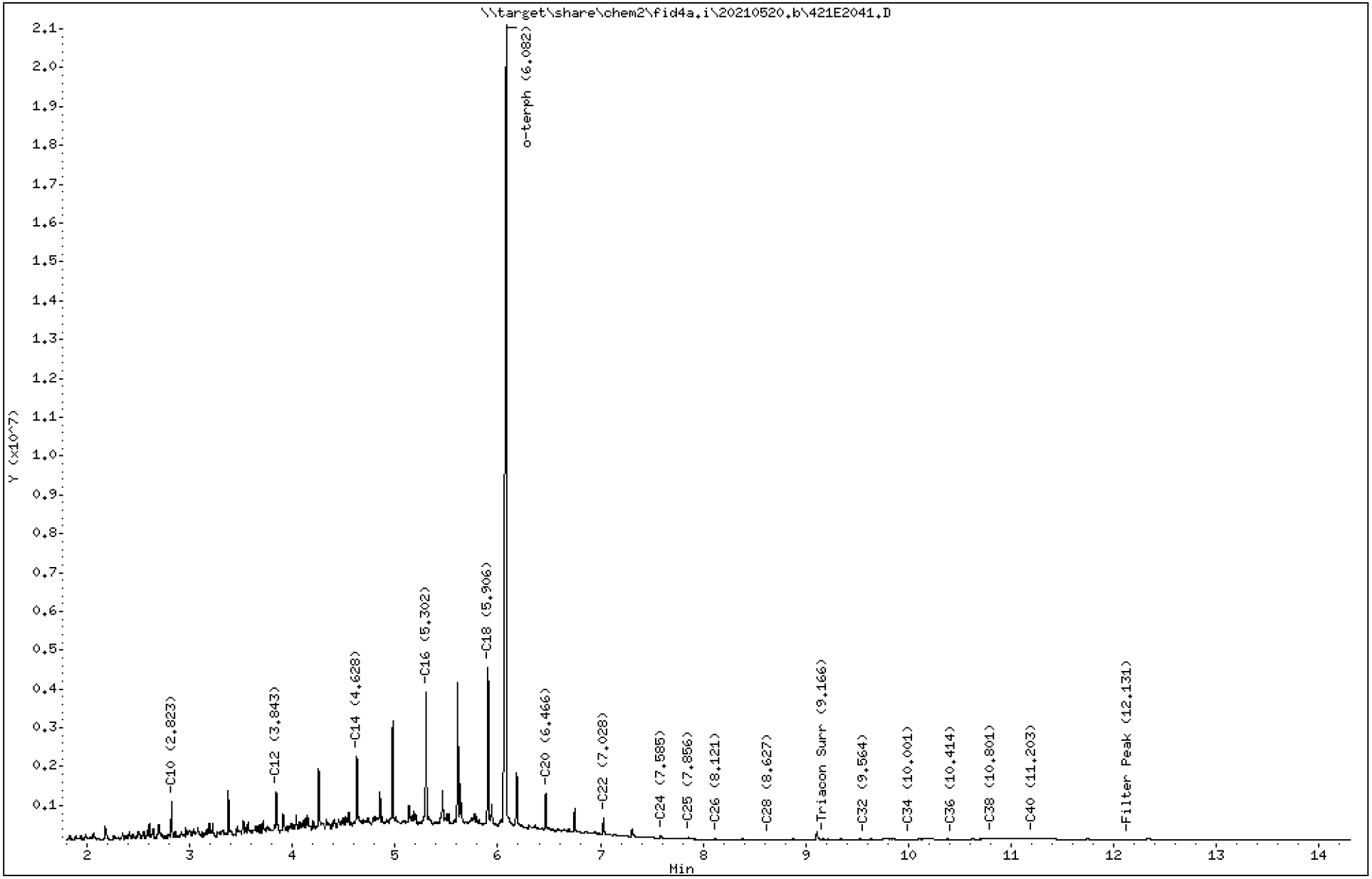
Instrument: fid4a.i

Sample Info: SEQ-CCV3

Operator: CTO

Column phase: RTX-1

Column diameter: 0.25



Analytical Resources Inc.
TPH Quantitation Report

Data file: 20210520.b/421E2041.D
Method: 20210520.b\FID4TPH.m
Instrument: fid4a.i, CTO
Report Date: 05/21/2021
Macro: 09-SEP-2019
Calibration Dates: Gas:XX-XXX-XXXX Diesel:14-APR-2021 M.Oil:14-APR-2021

ARI ID: SEQ-CCV3
Client ID:
Injection: 21-MAY-2021 03:11
Dilution Factor: 1
RT Std: 419H1603.D

FID:4A RESULTS

Compound	RT	Shift	Height	Area	Method	Range	Total Area	Conc(mg/L)
C8	1.536	0.000	41769	29800	WATPHD	(C12-C24)	91754193	501.9
C10	2.823	-0.007	995411	737106	WATPHM	(C24-C38)	2854582	21.7
C12	3.843	-0.003	1238921	998392	AK102	(C10-C25)	107572011	499.4
C14	4.628	-0.003	2148589	1955348	AK103	(C25-C36)	2142729	21.2
C16	5.302	-0.002	3804052	3035152	OR.DIES	(C10-C28)	108241917	552.3
C18	5.906	-0.002	4434992	3651593				
C20	6.466	-0.007	1204851	1282339	JET-A	(C10-C18)	83601411	570.1
C22	7.028	-0.007	547313	662023				
C24	7.585	-0.004	118834	214280				
C25	7.856	-0.004	53149	99815				
C26	8.121	-0.003	24834	40262				
C28	8.627	-0.007	12011	16661				
C32	9.564	-0.010	12771	27259				
C34	10.001	-0.002	14320	18538				
Filter Peak	12.131	-0.007	16388	22530	BUNKERC	(C10-C38)	110119956	2453.0
C36	10.414	0.002	15342	9049				
C38	10.801	0.001	19671	9726				
C40	11.203	0.003	19399	11526				
o-terph	6.082	0.000	20515999	21046017				
Triacon Surr	9.166	0.024	24864	42724	NAS DIES	(C10-C24)	107265373	549.7

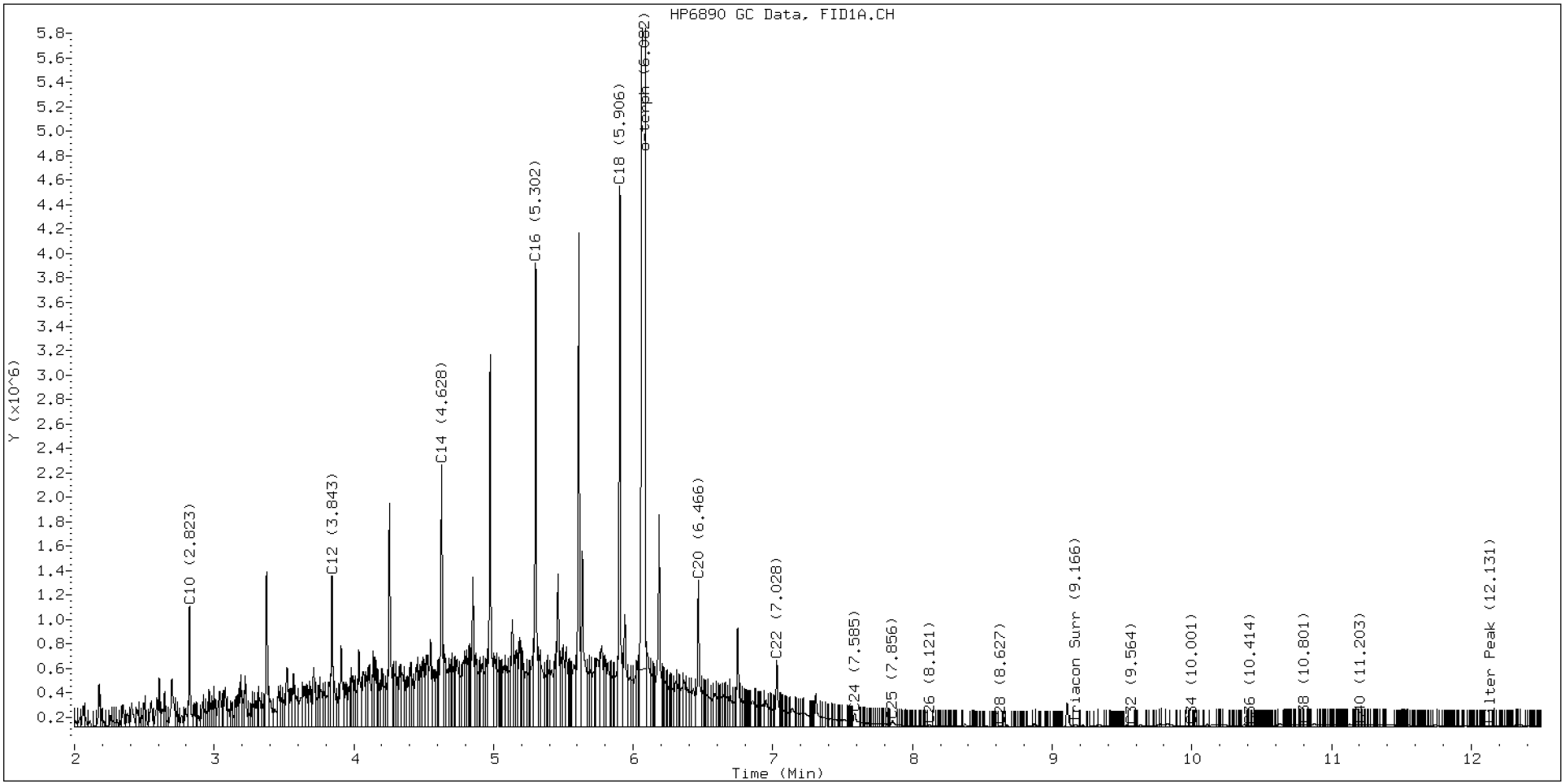
Range Times: NW Diesel(3.846 - 7.589) AK102(2.83 - 7.86) Jet A(2.83 - 5.91)
NW M.Oil(7.59 - 10.80) AK103(7.86 - 10.41) OR Diesel(2.83 - 8.63)

Surrogate	Area	Amount	
o-Terphenyl	21046017	84.5	M
Triacontane	42724	0.2	

M Indicates the peak was manually integrated

Analyte	RF	Curve Date
o-Terph Surr	249011.3	25-OCT-2019
Triacon Surr	211827.9	25-OCT-2019
Gas	15000.0	XX-XXX-XXXX
Diesel	182831.3	14-APR-2021
Motor Oil	131440.7	14-APR-2021
AK102	215421.2	14-APR-2021
AK103	101056.3	14-APR-2021
JetA	146652.4	20-MAY-2020
OR Diesel	195999.1	25-OCT-2019
NAS Diesel	195148.2	25-OCT-2019
Bunker C	44892.5	21-APR-2021

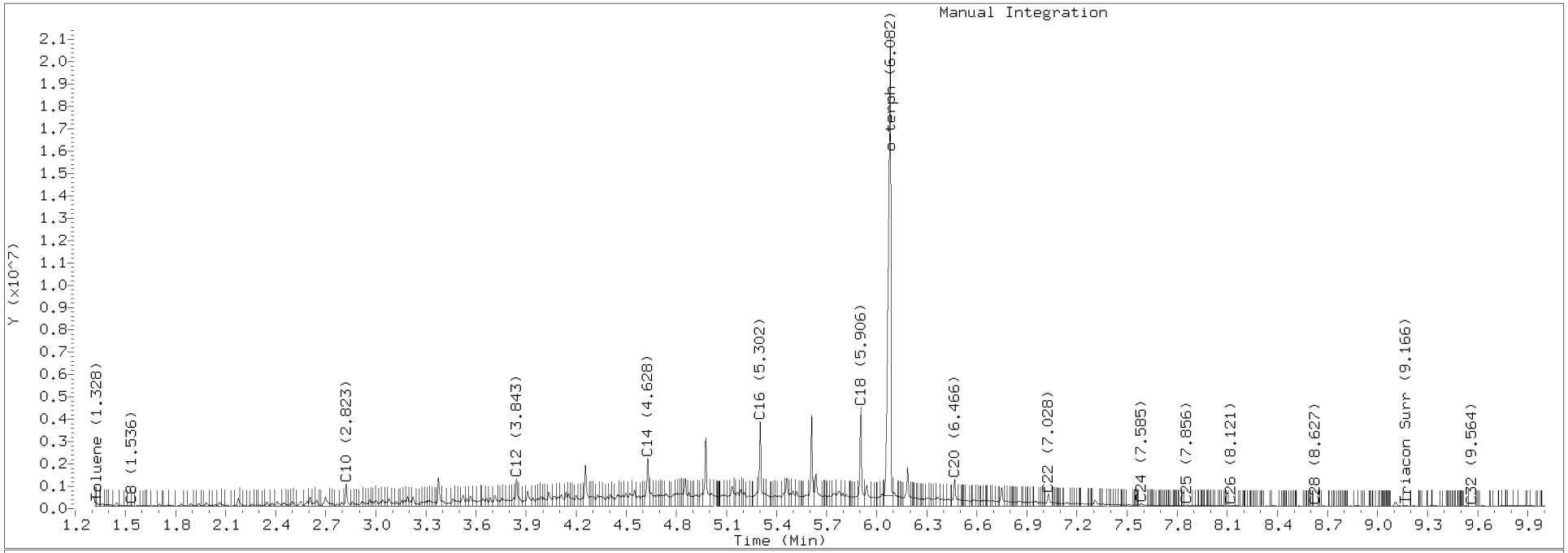
Datafile: FID4A, 20210520.b/421E2041.D SEQ-CCV3

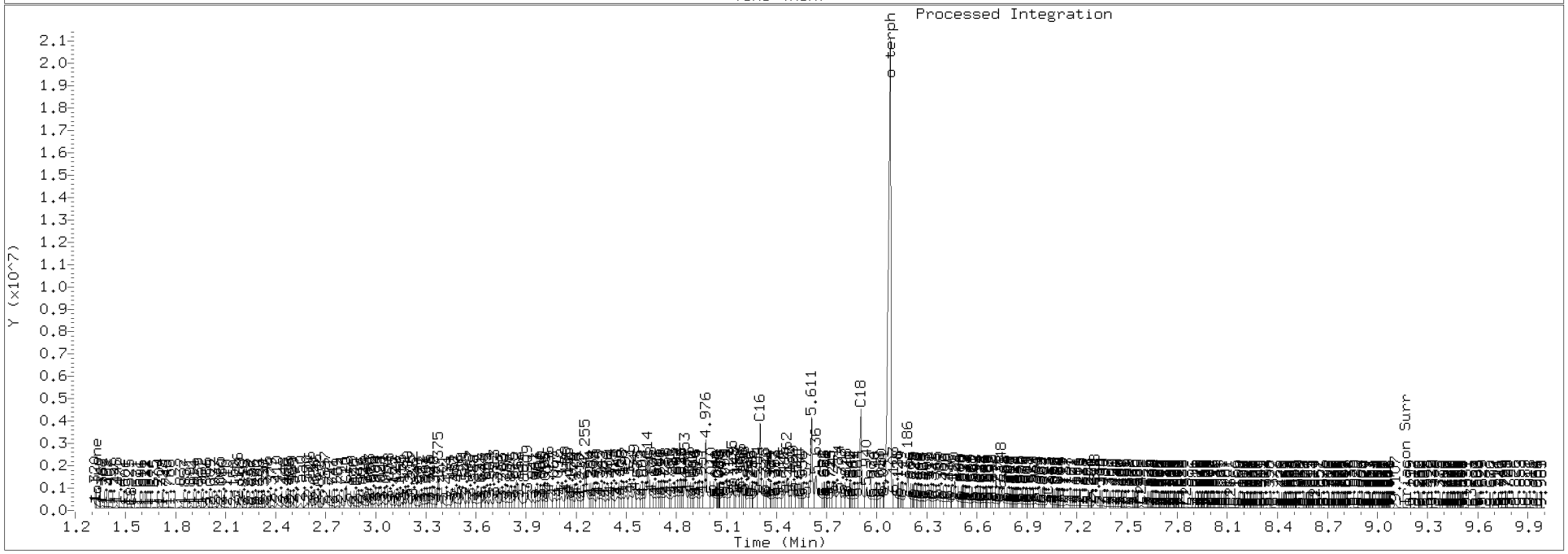


TPH Manual Integrations Report

Datafile: FID4A, 20210520.b/421E2041.D Injection: 21-MAY-2021 03:11

Lab ID:SEQ-CCV3





Analytical Resources, Incorporated
Analytical Chemists and Consultants

CONTINUING CALIBRATION CHECK
NWTPH-Dx

Laboratory:	Analytical Resources, Inc.	SDG:	21E0106
Client:	Anchor QEA, LLC	Project:	Gasco Siltronic - US Moorings
Instrument ID:	FID4	Calibration:	ED00037
Lab File ID:	421E2042.D	Calibration Date:	04/13/2021
Sequence:	SJE0284	Injection Date:	05/21/21
Lab Sample ID:	SJE0284-CCV4	Injection Time:	03:32
Sequence Name:	MOIL CCV		

		CONC. (mg/L)		RESPONSE FACTOR (RF)			% DRIFT/DIFF	
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN	CCV	LIMIT
Motor Oil Range Organics (C24-C38)	A	1000.0	1020	131440.7	134404.1		2.3	+/-15

* Values outside of QC limits

* Values outside of QC limits

Data File: \\target\share\chem2\fid4a.i\20210520.b\421E2042.D

Date : 21-MAY-2021 03:32

Client ID:

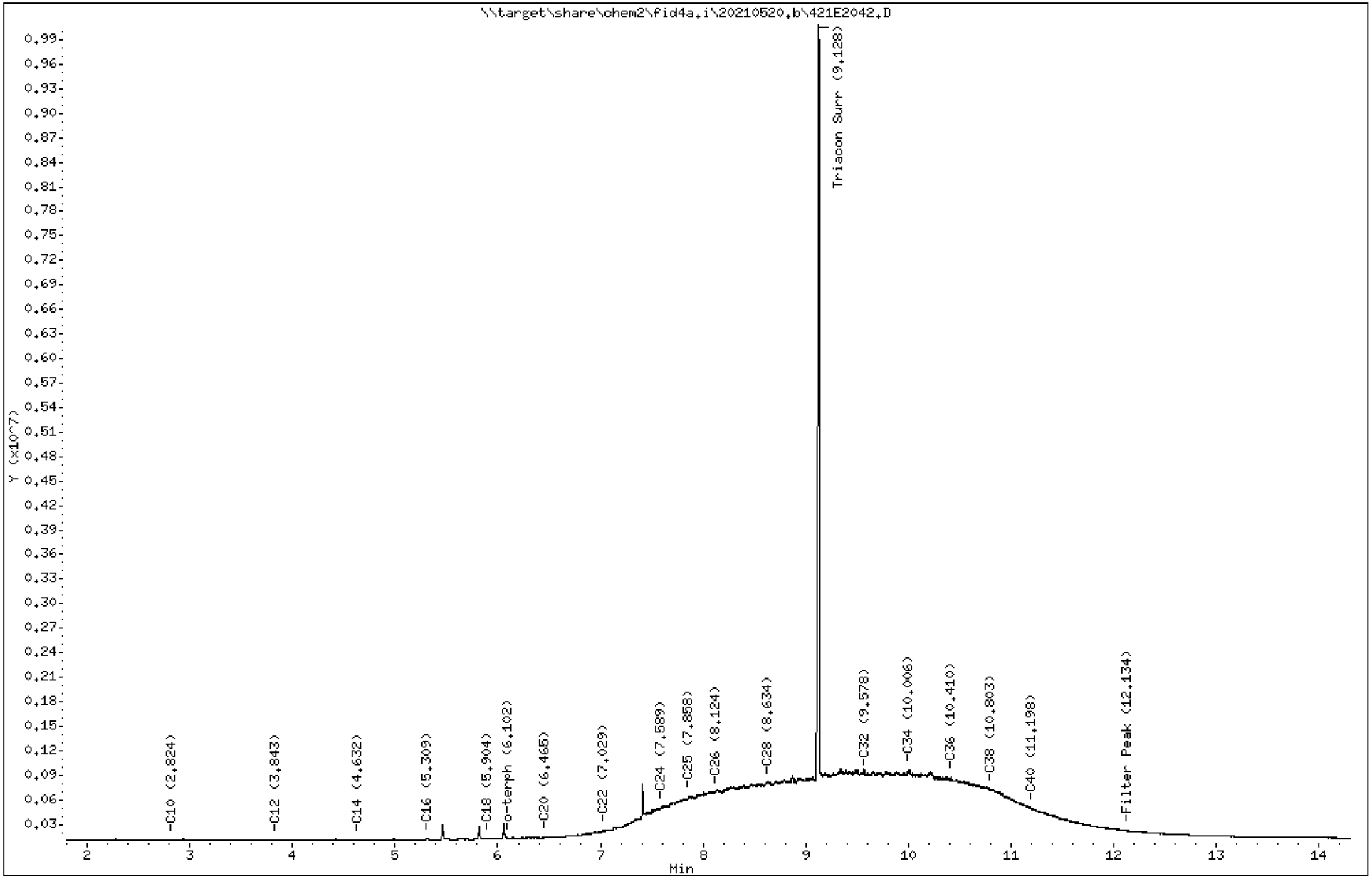
Instrument: fid4a.i

Sample Info: SEQ-CCV4

Operator: CTO

Column phase: RTX-1

Column diameter: 0.25



Analytical Resources Inc.
TPH Quantitation Report

Data file: 20210520.b/421E2042.D
Method: 20210520.b\FID4TPH.m
Instrument: fid4a.i, CTO
Report Date: 05/21/2021
Macro: 09-SEP-2019
Calibration Dates: Gas:XX-XXX-XXXX Diesel:14-APR-2021 M.Oil:14-APR-2021

ARI ID: SEQ-CCV4
Client ID:
Injection: 21-MAY-2021 03:32
Dilution Factor: 1
RT Std: 419H1603.D

FID:4A RESULTS

Compound	RT	Shift	Height	Area	Method	Range	Total Area	Conc(mg/L)
C8	1.519	-0.017	13471	17113	WATPHD	(C12-C24)	12877242	70.4
C10	2.824	-0.007	7060	6430	WATPHM	(C24-C38)	134404092	1022.5
C12	3.843	-0.004	3165	3120	AK102	(C10-C25)	17534402	81.4
C14	4.632	0.001	5450	2374	AK103	(C25-C36)	114349952	1131.5
C16	5.309	0.005	11110	16666	OR.DIES	(C10-C28)	49181187	250.9
C18	5.904	-0.004	20868	33564				
C20	6.465	-0.008	35091	54089	JET-A	(C10-C18)	1138297	7.8
C22	7.029	-0.006	116528	160812				
C24	7.589	-0.000	396444	117772				
C25	7.858	-0.002	528096	235012				
C26	8.124	-0.001	587830	116923				
C28	8.634	-0.000	702048	346552				
C32	9.578	0.004	797081	158924				
C34	10.006	0.002	850034	627223				
Filter Peak	12.134	-0.004	114387	77172	BUNKERC	(C10-C38)	147439049	3284.3
C36	10.410	-0.002	762957	481376				
C38	10.803	0.002	615437	336297				
C40	11.198	-0.003	384709	95404				
o-terph	6.102	0.020	18540	19415				
Triacon Surr	9.128	-0.014	9243611	9291233	NAS DIES	(C10-C24)	13034957	66.8

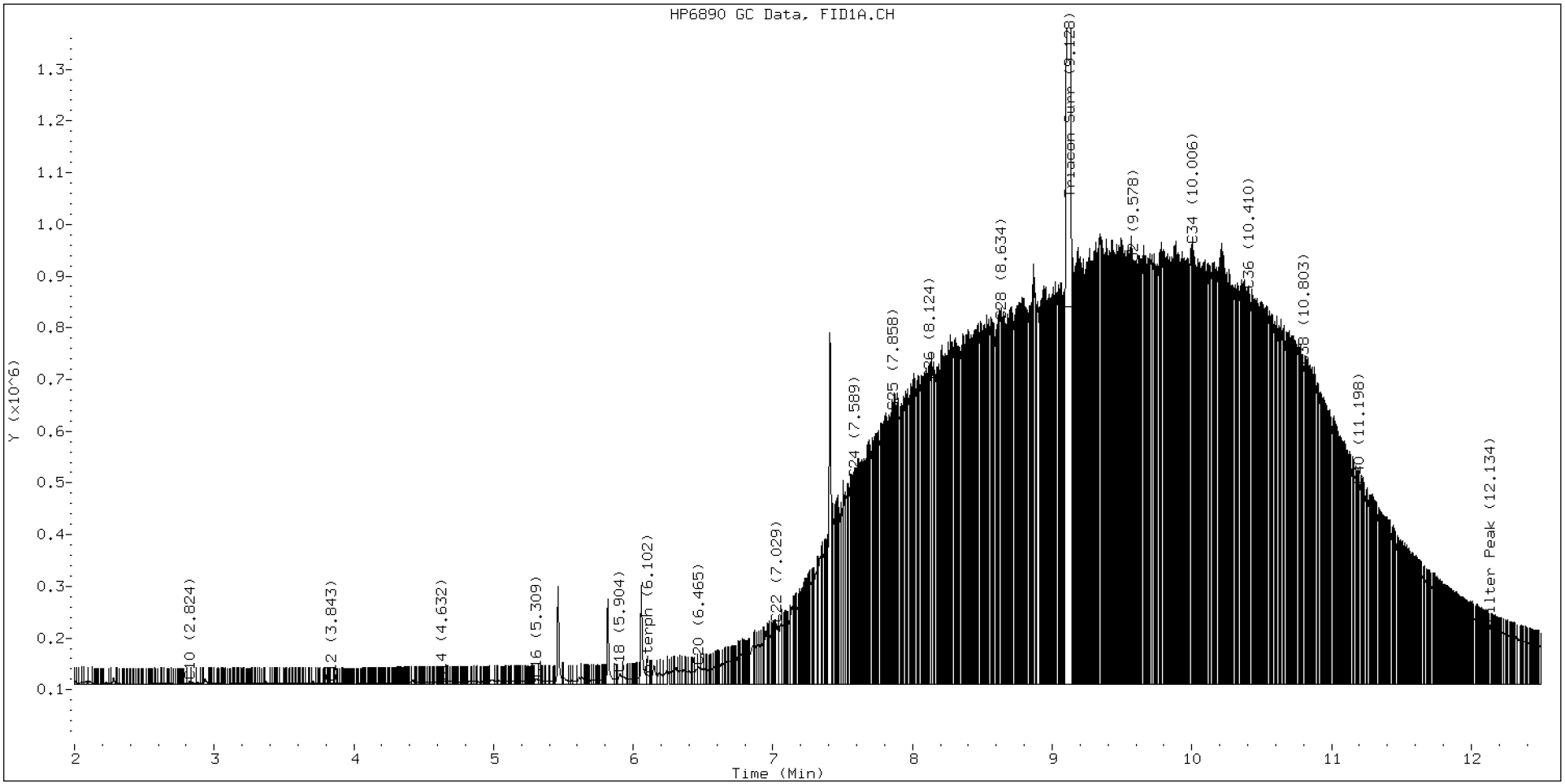
Range Times: NW Diesel(3.846 - 7.589) AK102(2.83 - 7.86) Jet A(2.83 - 5.91)
NW M.Oil(7.59 - 10.80) AK103(7.86 - 10.41) OR Diesel(2.83 - 8.63)

Surrogate	Area	Amount	
o-Terphenyl	19415	0.1	
Triacontane	9291233	43.9	M

M Indicates the peak was manually integrated

Analyte	RF	Curve Date
o-Terph Surr	249011.3	25-OCT-2019
Triacon Surr	211827.9	25-OCT-2019
Gas	15000.0	XX-XXX-XXXX
Diesel	182831.3	14-APR-2021
Motor Oil	131440.7	14-APR-2021
AK102	215421.2	14-APR-2021
AK103	101056.3	14-APR-2021
JetA	146652.4	20-MAY-2020
OR Diesel	195999.1	25-OCT-2019
NAS Diesel	195148.2	25-OCT-2019
Bunker C	44892.5	21-APR-2021

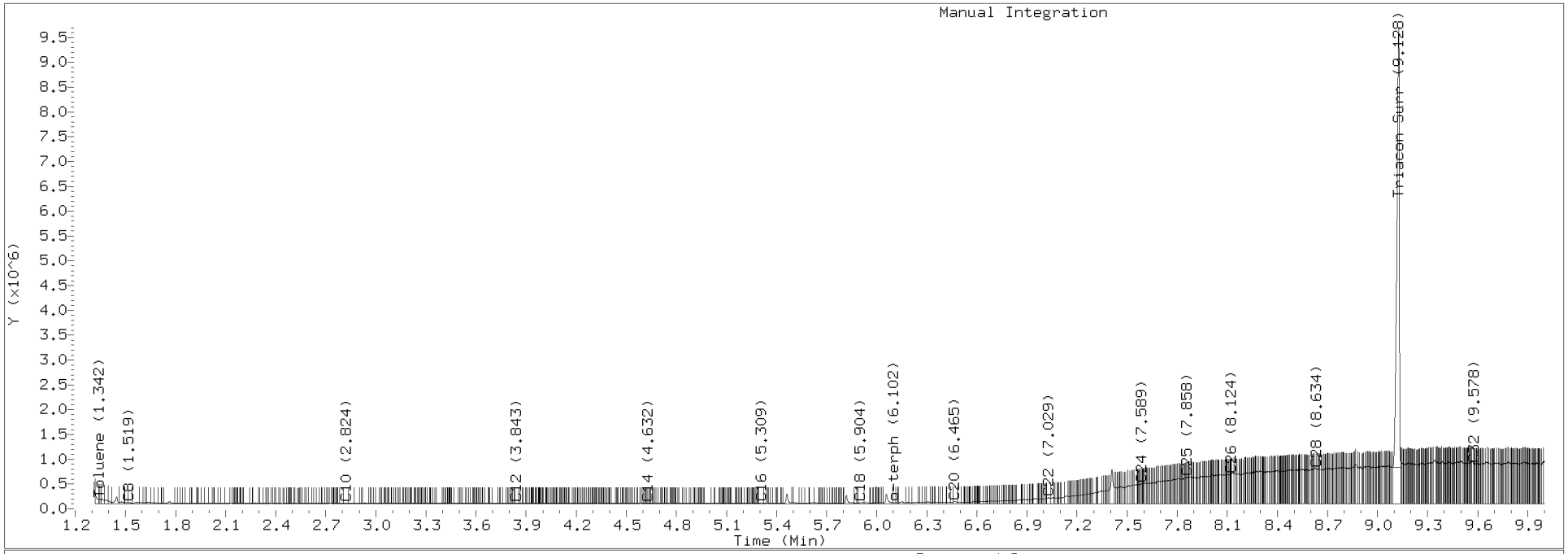
Datafile: FID4A, 20210520.b/421E2042.D SEQ-CCV4

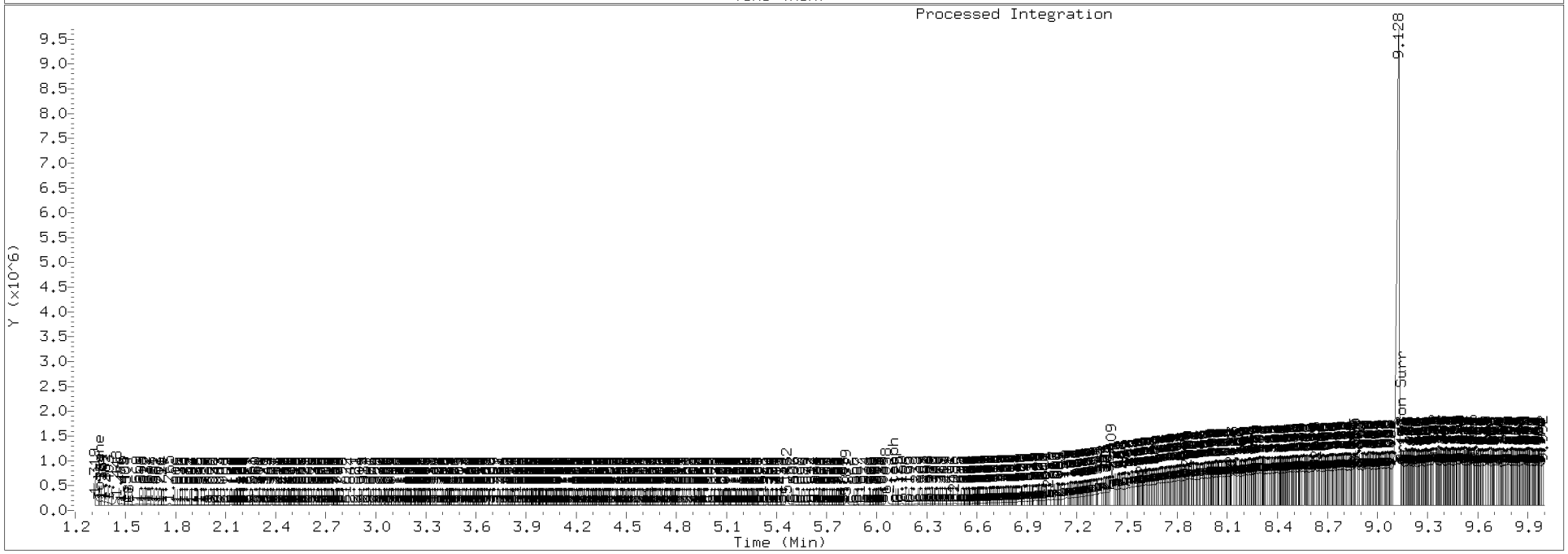


TPH Manual Integrations Report

Datafile: FID4A, 20210520.b/421E2042.D Injection: 21-MAY-2021 03:32

Lab ID:SEQ-CCV4





Analytical Resources, Incorporated
Analytical Chemists and Consultants

CONTINUING CALIBRATION CHECK
NWTPH-Dx

Laboratory:	Analytical Resources, Inc.	SDG:	21E0106
Client:	Anchor QEA, LLC	Project:	Gasco Siltronic - US Moorings
Instrument ID:	FID4	Calibration:	ED00037
Lab File ID:	421E2050.D	Calibration Date:	04/13/2021
Sequence:	SJE0284	Injection Date:	05/21/21
Lab Sample ID:	SJE0284-CCV5	Injection Time:	06:20
Sequence Name:	DIESEL CCV		

COMPOUND	TYPE	CONC. (mg/L)		RESPONSE FACTOR (RF)			% DRIFT/DIFF	
		STD	CCV	ICAL	CCV	MIN	CCV	LIMIT
Diesel Range Organics (C12-C24)	A	500.00	512	182831.3	187178.7		2.4	+/-15
o-Terphenyl	A	90.000	85.4	249011.4	236373.9		-5.1	+/-15

* Values outside of QC limits

* Values outside of QC limits

Data File: \\target\share\chem2\fid4a.i\20210520.b\421E2050.D

Date : 21-MAY-2021 06:20

Client ID:

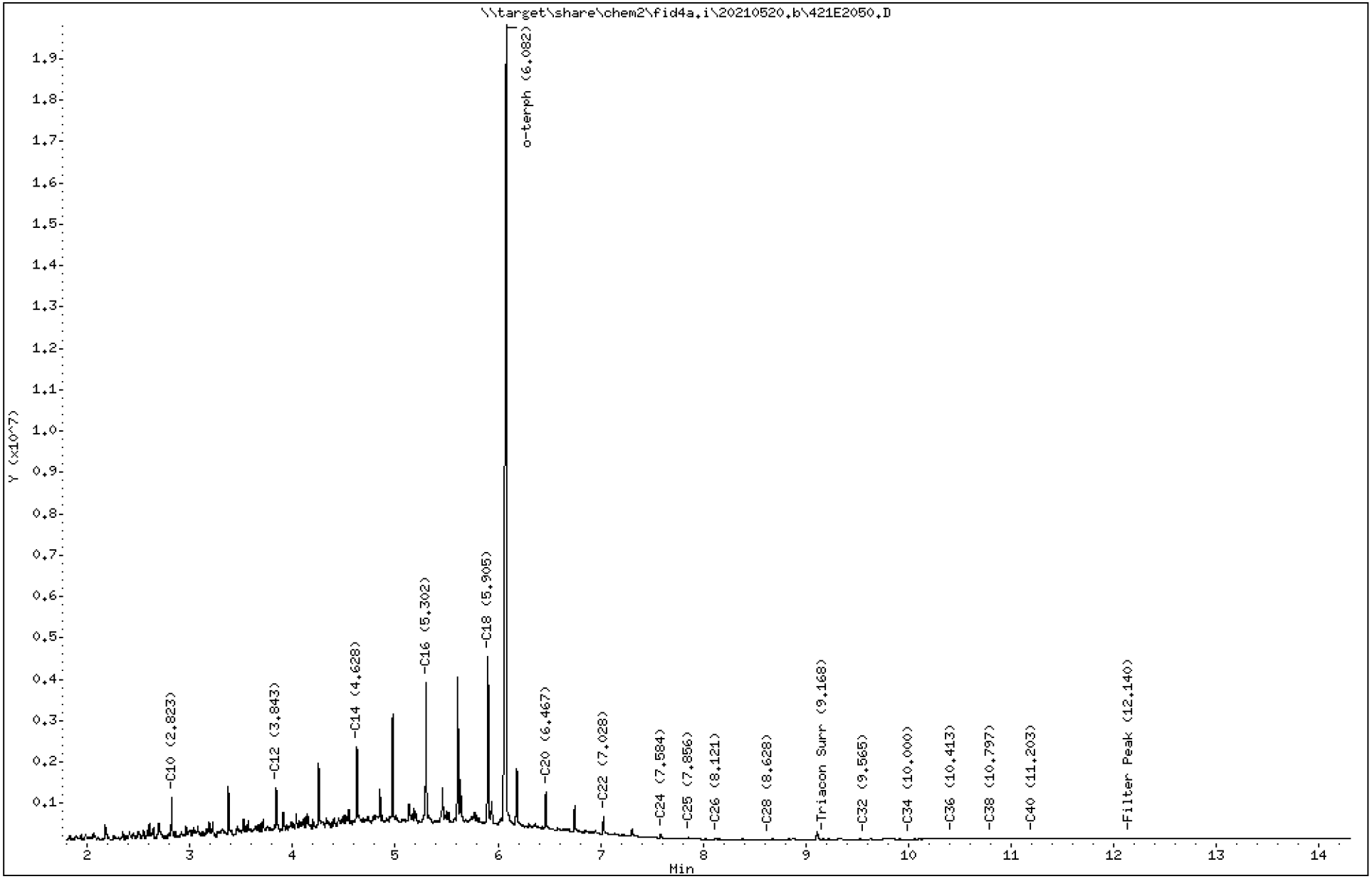
Instrument: fid4a.i

Sample Info: SEQ-CCV5

Operator: CTO

Column phase: RTX-1

Column diameter: 0.25



Analytical Resources Inc.
TPH Quantitation Report

Data file: 20210520.b/421E2050.D
Method: 20210520.b\FID4TPH.m
Instrument: fid4a.i, CTO
Report Date: 05/21/2021
Macro: 09-SEP-2019
Calibration Dates: Gas:XX-XXX-XXXX Diesel:14-APR-2021 M.Oil:14-APR-2021

ARI ID: SEQ-CCV5
Client ID:
Injection: 21-MAY-2021 06:20
Dilution Factor: 1
RT Std: 419H1603.D

FID:4A RESULTS

Compound	RT	Shift	Height	Area	Method	Range	Total Area	Conc(mg/L)
C8	1.536	-0.000	41116	28401	WATPHD	(C12-C24)	93589366	511.9
C10	2.823	-0.007	1028850	746510	WATPHM	(C24-C38)	3152116	24.0
C12	3.843	-0.004	1270450	995973	AK102	(C10-C25)	109634238	508.9
C14	4.628	-0.004	2261131	2009740	AK103	(C25-C36)	2320161	23.0
C16	5.302	-0.003	3808222	3985728	OR.DIES	(C10-C28)	110333516	562.9
C18	5.905	-0.003	4441281	3963057				
C20	6.467	-0.006	1165122	1385370	JET-A	(C10-C18)	85207252	581.0
C22	7.028	-0.007	548877	682465				
C24	7.584	-0.005	122254	203662				
C25	7.856	-0.004	56248	102816				
C26	8.121	-0.004	26730	42477				
C28	8.628	-0.006	13400	25768				
C32	9.565	-0.009	14833	35513				
C34	10.000	-0.004	15670	34256				
Filter Peak	12.140	0.001	23762	20892	BUNKERC	(C10-C38)	112459588	2505.1
C36	10.413	0.000	17418	5208				
C38	10.797	-0.004	24139	14318				
C40	11.203	0.003	23721	18807				
o-terph	6.082	-0.000	19226457	21273652				
Triacon Surr	9.168	0.025	28255	51080	NAS DIES	(C10-C24)	109307471	560.1

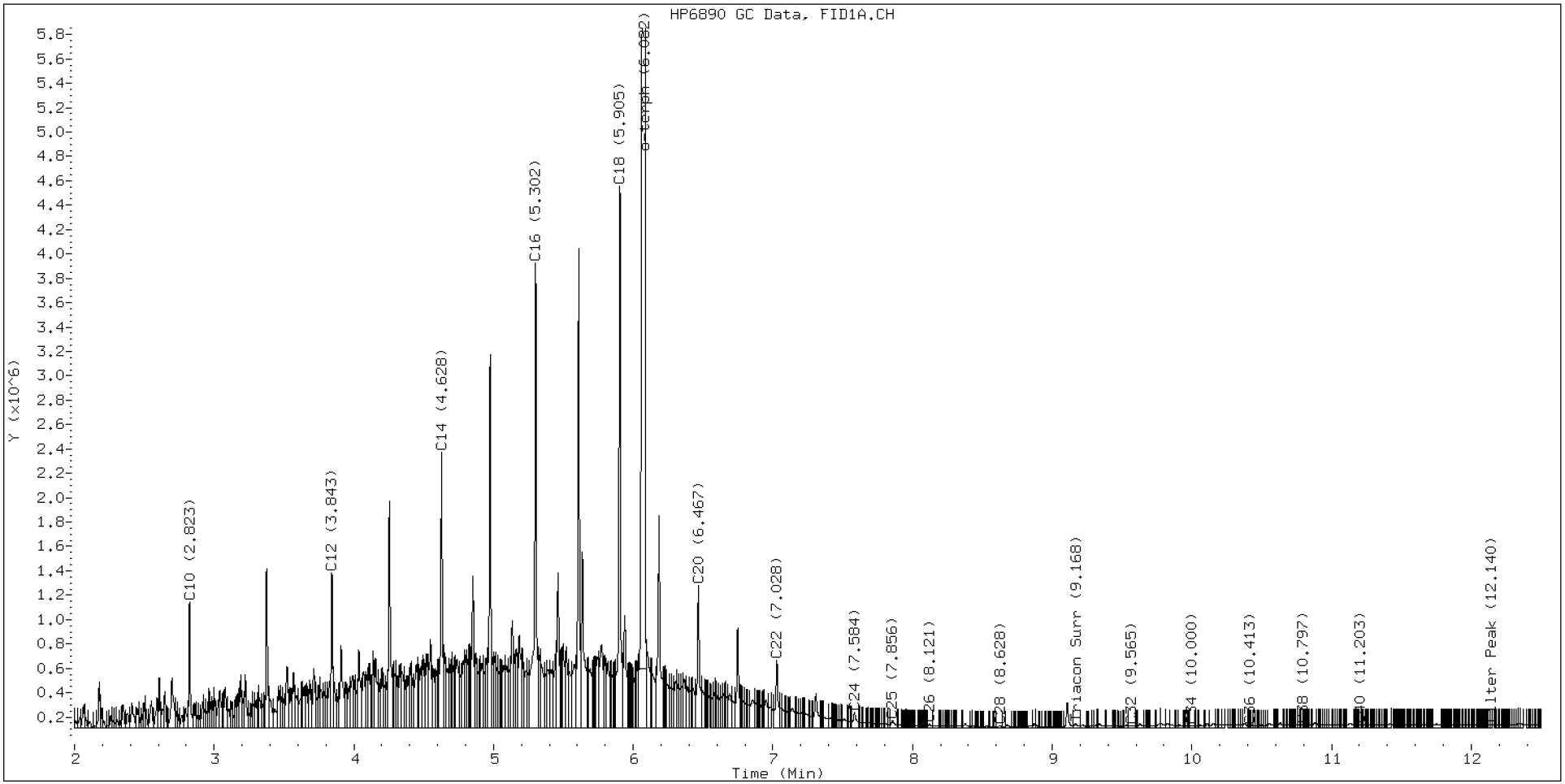
Range Times: NW Diesel(3.846 - 7.589) AK102(2.83 - 7.86) Jet A(2.83 - 5.91)
NW M.Oil(7.59 - 10.80) AK103(7.86 - 10.41) OR Diesel(2.83 - 8.63)

Surrogate	Area	Amount	
o-Terphenyl	21273652	85.4	M
Triacontane	51080	0.2	

M Indicates the peak was manually integrated

Analyte	RF	Curve Date
o-Terph Surr	249011.3	25-OCT-2019
Triacon Surr	211827.9	25-OCT-2019
Gas	15000.0	XX-XXX-XXXX
Diesel	182831.3	14-APR-2021
Motor Oil	131440.7	14-APR-2021
AK102	215421.2	14-APR-2021
AK103	101056.3	14-APR-2021
JetA	146652.4	20-MAY-2020
OR Diesel	195999.1	25-OCT-2019
NAS Diesel	195148.2	25-OCT-2019
Bunker C	44892.5	21-APR-2021

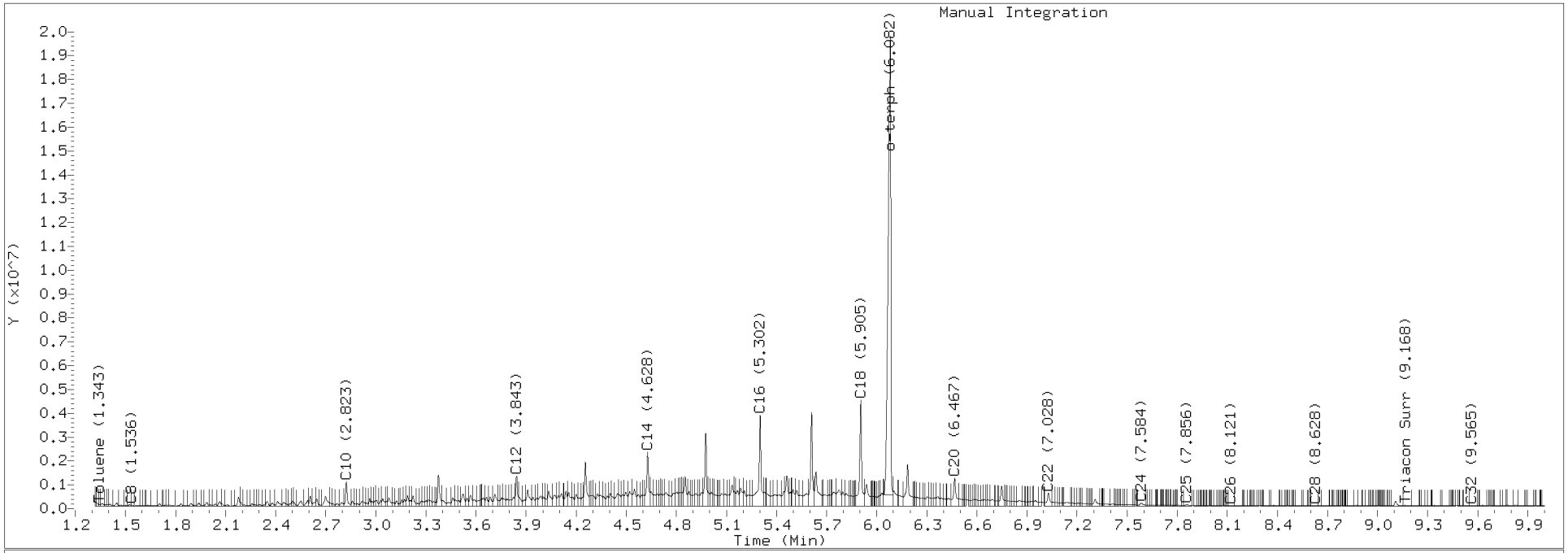
Datafile: FID4A, 20210520.b/421E2050.D SEQ-CCV5

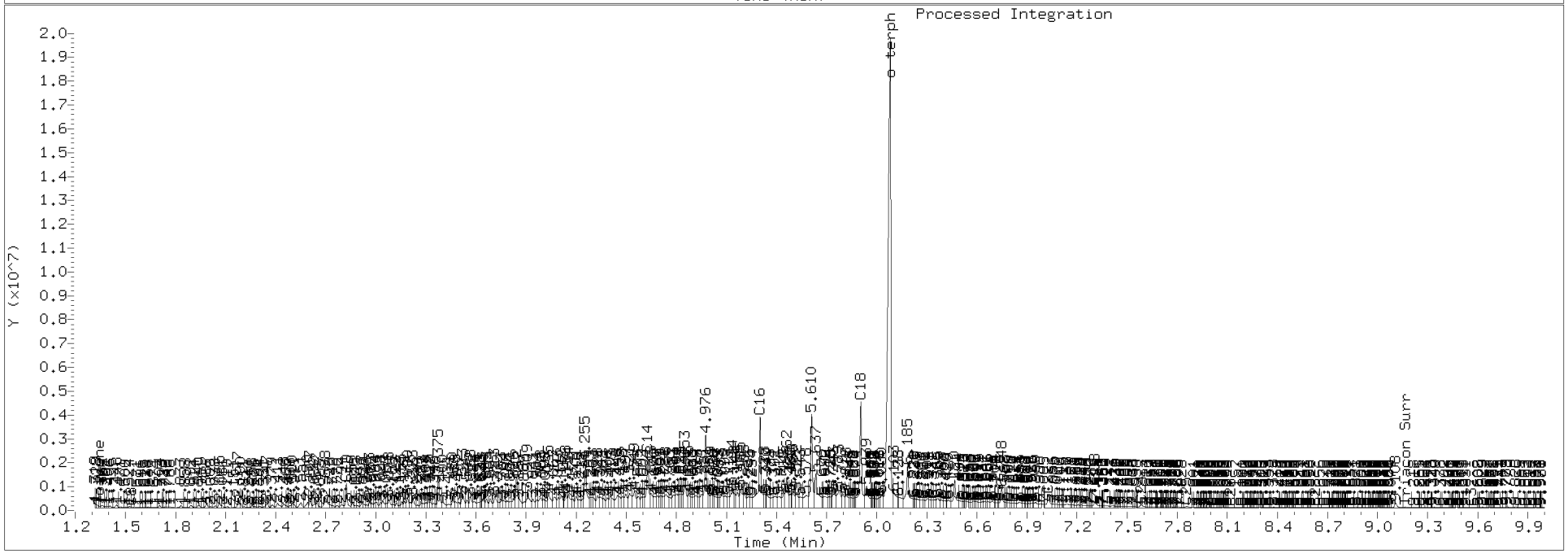


TPH Manual Integrations Report

Datafile: FID4A, 20210520.b/421E2050.D Injection: 21-MAY-2021 06:20

Lab ID:SEQ-CCV5





Analytical Resources, Incorporated
Analytical Chemists and Consultants

CONTINUING CALIBRATION CHECK
NWTPH-Dx

Laboratory:	Analytical Resources, Inc.	SDG:	21E0106
Client:	Anchor QEA, LLC	Project:	Gasco Siltronic - US Moorings
Instrument ID:	FID4	Calibration:	ED00037
Lab File ID:	421E2051.D	Calibration Date:	04/13/2021
Sequence:	SJE0284	Injection Date:	05/21/21
Lab Sample ID:	SJE0284-CCV6	Injection Time:	06:42
Sequence Name:	MOIL CCV		

COMPOUND	TYPE	CONC. (mg/L)		RESPONSE FACTOR (RF)			% DRIFT/DIFF	
		STD	CCV	ICAL	CCV	MIN	CCV	LIMIT
Motor Oil Range Organics (C24-C38)	A	1000.0	1020	131440.7	134012		2.0	+/-15

* Values outside of QC limits

Data File: \\target\share\chem2\fid4a.i\20210520.b\421E2051.D

Date : 21-MAY-2021 06:42

Client ID:

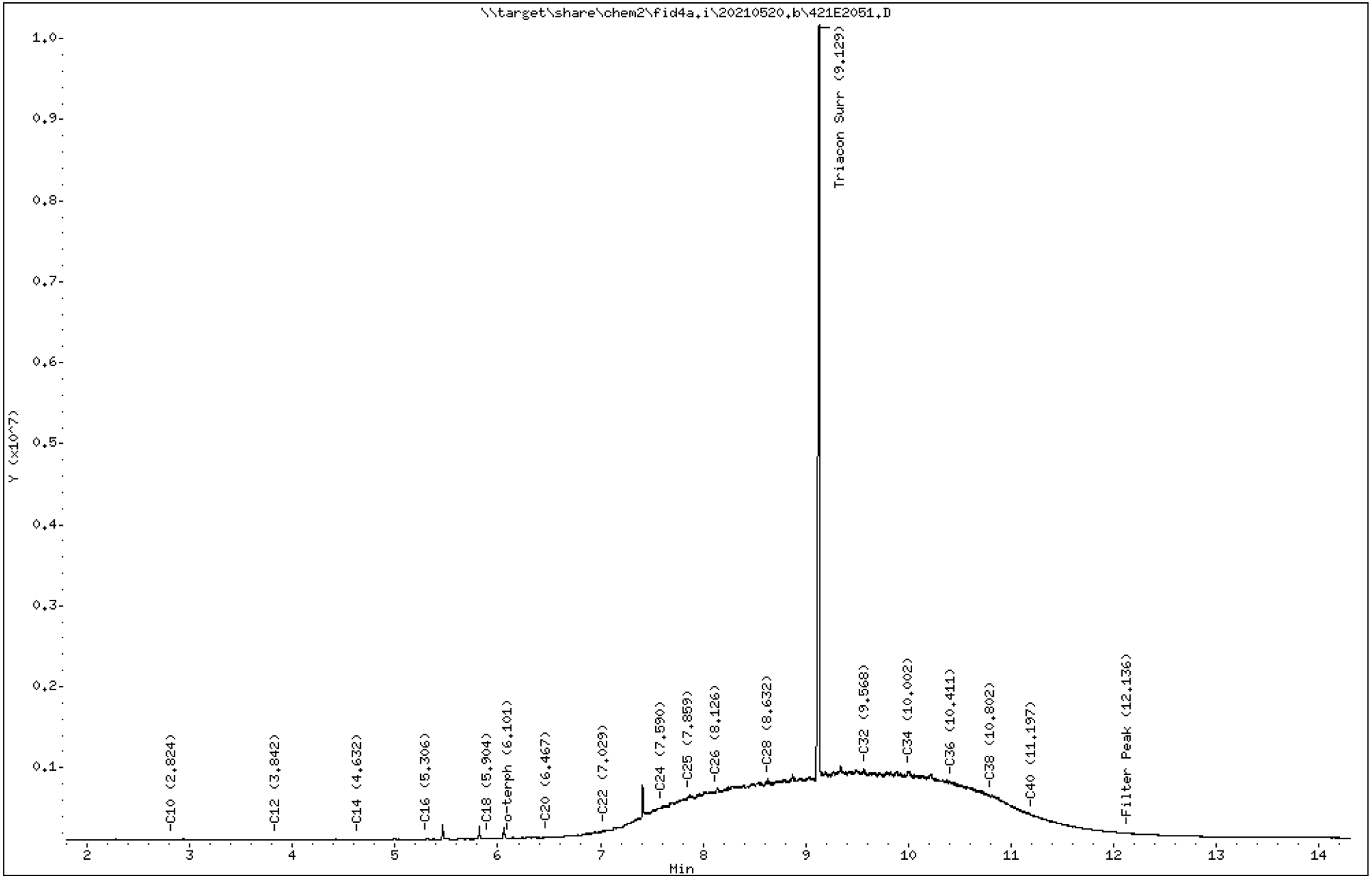
Instrument: fid4a.i

Sample Info: SEQ-CCV6

Operator: CTO

Column phase: RTX-1

Column diameter: 0.25



Analytical Resources Inc.
TPH Quantitation Report

Data file: 20210520.b/421E2051.D
Method: 20210520.b\FID4TPH.m
Instrument: fid4a.i, CTO
Report Date: 05/21/2021
Macro: 09-SEP-2019
Calibration Dates: Gas:XX-XXX-XXXX Diesel:14-APR-2021 M.Oil:14-APR-2021

ARI ID: SEQ-CCV6
Client ID:
Injection: 21-MAY-2021 06:42
Dilution Factor: 1
RT Std: 419H1603.D

FID:4A RESULTS

Compound	RT	Shift	Height	Area	Method	Range	Total Area	Conc(mg/L)
C8	1.541	0.004	6976	1736	WATPHD	(C12-C24)	13043557	71.3
C10	2.824	-0.007	8001	6827	WATPHM	(C24-C38)	134011978	1019.6
C12	3.842	-0.004	3878	4371	AK102	(C10-C25)	17767629	82.5
C14	4.632	0.001	5952	1475	AK103	(C25-C36)	115326975	1141.2
C16	5.306	0.001	10610	7888	OR.DIES	(C10-C28)	50407378	257.2
C18	5.904	-0.004	19313	30763				
C20	6.467	-0.006	35085	59627	JET-A	(C10-C18)	1223583	8.3
C22	7.029	-0.007	125758	166923				
C24	7.590	0.001	404204	219034				
C25	7.859	-0.001	540966	629399				
C26	8.126	0.002	599752	119517				
C28	8.632	-0.002	724158	250742				
C32	9.568	-0.006	868116	552441				
C34	10.002	-0.002	849517	292945				
Filter Peak	12.136	-0.003	84140	41664	BUNKERC	(C10-C38)	147252165	3280.1
C36	10.411	-0.001	710764	211391				
C38	10.802	0.002	544045	188136				
C40	11.197	-0.003	310916	138647				
o-terph	6.101	0.018	19039	11269				
Triacon Surr	9.129	-0.013	9322184	9534412	NAS DIES	(C10-C24)	13240187	67.8

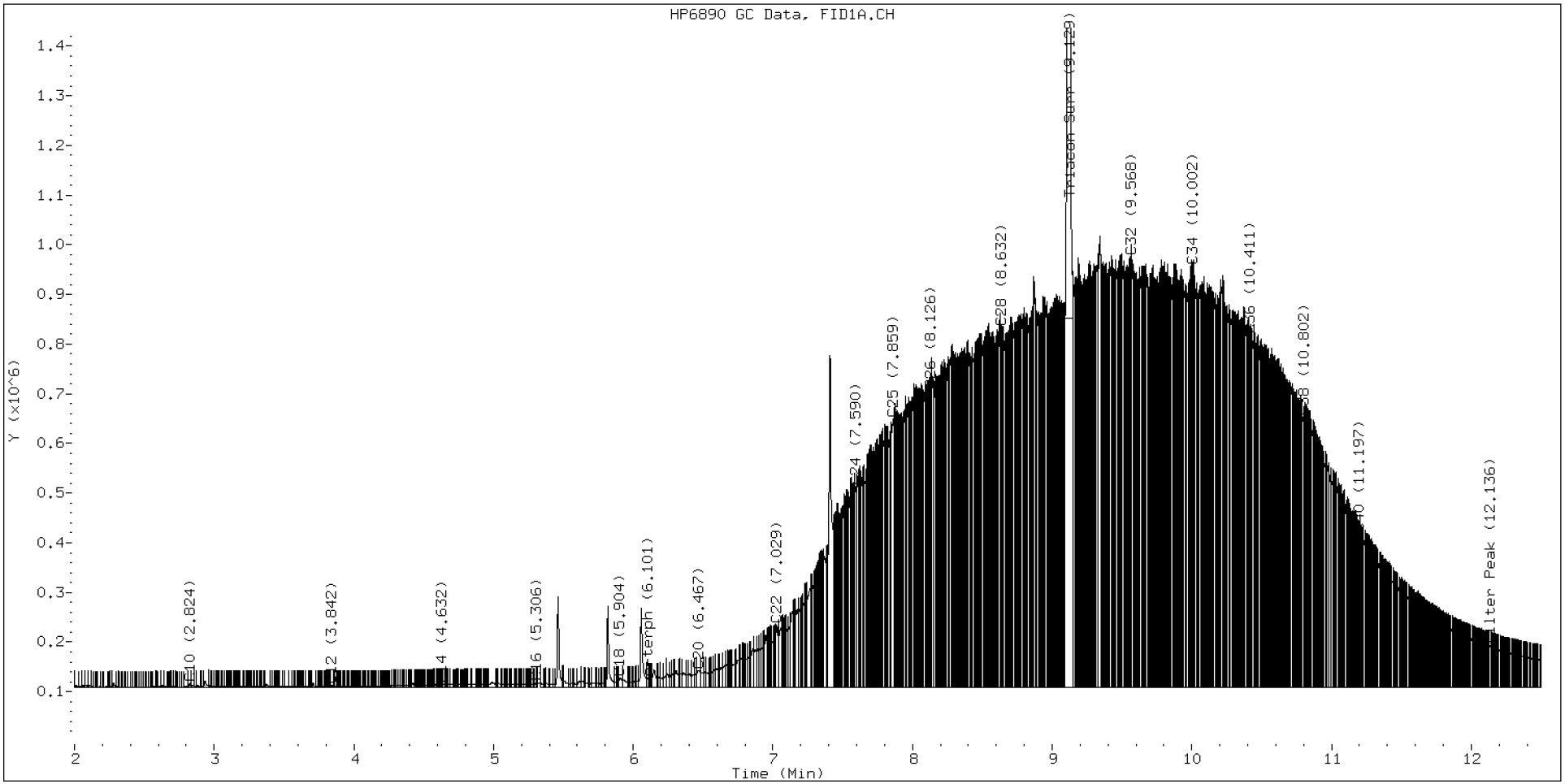
Range Times: NW Diesel(3.846 - 7.589) AK102(2.83 - 7.86) Jet A(2.83 - 5.91)
NW M.Oil(7.59 - 10.80) AK103(7.86 - 10.41) OR Diesel(2.83 - 8.63)

Surrogate	Area	Amount	
o-Terphenyl	11269	0.0	
Triacontane	9534412	45.0	M

M Indicates the peak was manually integrated

Analyte	RF	Curve Date
o-Terph Surr	249011.3	25-OCT-2019
Triacon Surr	211827.9	25-OCT-2019
Gas	15000.0	XX-XXX-XXXX
Diesel	182831.3	14-APR-2021
Motor Oil	131440.7	14-APR-2021
AK102	215421.2	14-APR-2021
AK103	101056.3	14-APR-2021
JetA	146652.4	20-MAY-2020
OR Diesel	195999.1	25-OCT-2019
NAS Diesel	195148.2	25-OCT-2019
Bunker C	44892.5	21-APR-2021

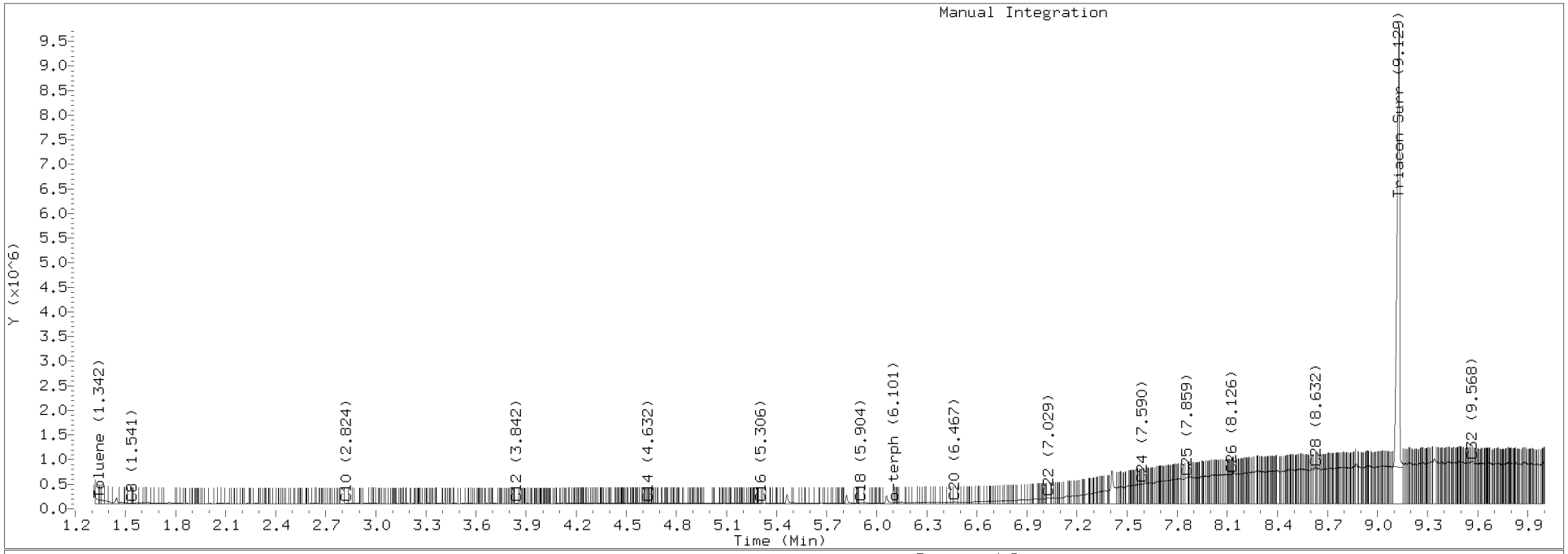
Datafile: FID4A, 20210520.b/421E2051.D SEQ-CCV6

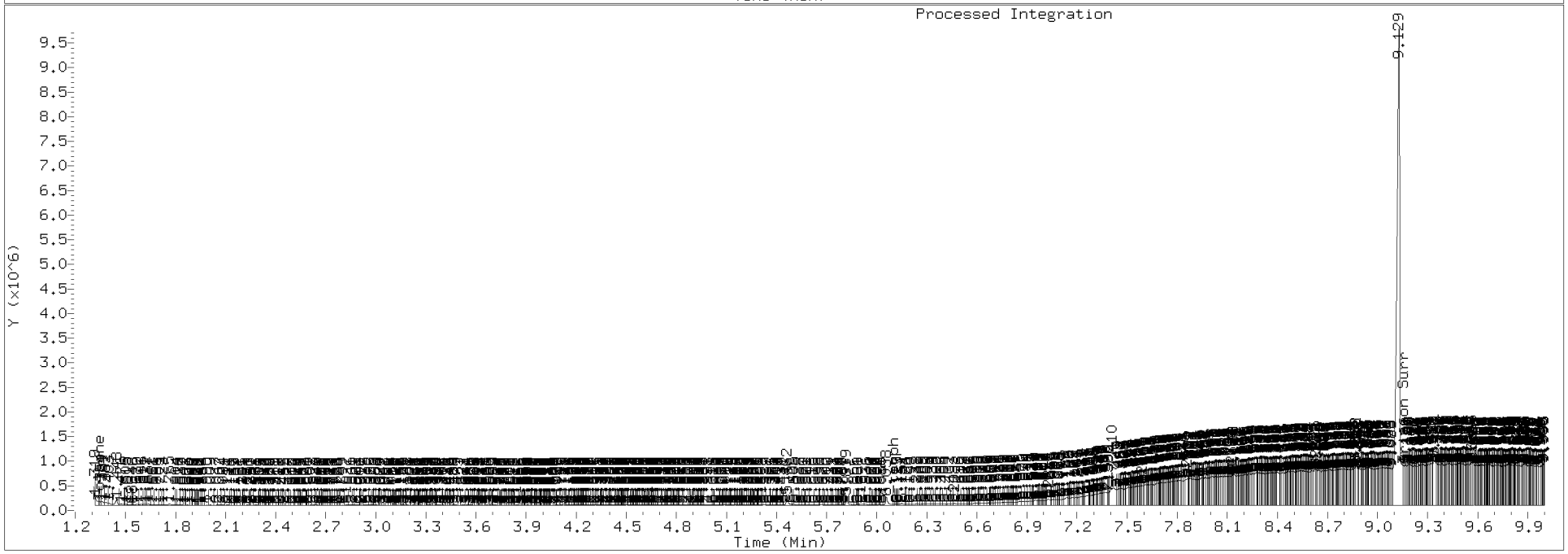


TPH Manual Integrations Report

Datafile: FID4A, 20210520.b/421E2051.D Injection: 21-MAY-2021 06:42

Lab ID:SEQ-CCV6





Analytical Resources, Incorporated
Analytical Chemists and Consultants

ANALYSIS BATCH (SEQUENCE) SUMMARY

NWTPH-Dx

Laboratory:	Analytical Resources, Inc.	SDG:	21E0106
Client:	Anchor QEA, LLC	Project:	Gasco Siltronic - US Moorings
Sequence:	SJD0189	Instrument:	FID4
		Calibration:	ED00037

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
Retention Time Standard	SJD0189-IBL1	421D1307.D	NA	04/13/21 12:46
Instrument Blank	SJD0189-IBL2	421D1308.D	NA	04/13/21 13:07
DIESEL 50	SJD0189-CAL1	421D1309.D	NA	04/13/21 13:29
DIESEL 100	SJD0189-CAL2	421D1310.D	NA	04/13/21 13:50
DIESEL 250	SJD0189-CAL3	421D1311.D	NA	04/13/21 14:11
DIESEL 500	SJD0189-CAL4	421D1312.D	NA	04/13/21 14:33
DIESEL 1000	SJD0189-CAL5	421D1313.D	NA	04/13/21 14:54
DIESEL 2500	SJD0189-CAL6	421D1314.D	NA	04/13/21 15:16
DIESEL SCV	SJD0189-SCV1	421D1315.D	NA	04/13/21 15:37
MOIL 100	SJD0189-CAL7	421D1316.D	NA	04/13/21 15:59
MOIL 250	SJD0189-CAL8	421D1317.D	NA	04/13/21 16:20
MOIL 500	SJD0189-CAL9	421D1318.D	NA	04/13/21 16:42
MOIL 1000	SJD0189-CALA	421D1319.D	NA	04/13/21 17:03
MOIL 2500	SJD0189-CALB	421D1320.D	NA	04/13/21 17:24
MOIL 5000	SJD0189-CALC	421D1321.D	NA	04/13/21 17:46
MOIL SCV	SJD0189-SCV2	421D1322.D	NA	04/13/21 18:07
AK103 100	SJD0189-CALD	421D1323.D	NA	04/13/21 18:28
AK103 250	SJD0189-CALE	421D1324.D	NA	04/13/21 18:50
AK103 500	SJD0189-CALF	421D1325.D	NA	04/13/21 19:11
AK103 1000	SJD0189-CALG	421D1326.D	NA	04/13/21 19:32
AK103 2500	SJD0189-CALH	421D1327.D	NA	04/13/21 19:53
AK103 5000	SJD0189-CALI	421D1328.D	NA	04/13/21 20:14

Analytical Resources, Incorporated
Analytical Chemists and Consultants

ANALYSIS BATCH (SEQUENCE) SUMMARY

NWTPH-Dx

Laboratory:	Analytical Resources, Inc.	SDG:	21E0106
Client:	Anchor QEA, LLC	Project:	Gasco Siltronic - US Moorings
Sequence:	SJD0260	Instrument:	FID4
		Calibration:	ED00037

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
Retention Time Standard	SJD0260-IBL1	421D1553.D	NA	04/16/21 03:34
Instrument Blank	SJD0260-IBL2	421D1554.D	NA	04/16/21 03:55
A/S CREOSOTE 100	SJD0260-CAL1	421D1555.D	NA	04/16/21 04:16
A/S CREOSOTE 250	SJD0260-CAL2	421D1556.D	NA	04/16/21 04:37
A/S CREOSOTE 500	SJD0260-CAL3	421D1557.D	NA	04/16/21 04:57
A/S CREOSOTE 1000	SJD0260-CAL4	421D1558.D	NA	04/16/21 05:18
A/S CREOSOTE 2500	SJD0260-CAL5	421D1559.D	NA	04/16/21 05:39
A/S CREOSOTE 5000	SJD0260-CAL6	421D1560.D	NA	04/16/21 06:00
DIESEL ICV	SJD0260-ICV1	421D1561.D	NA	04/16/21 06:21
MOIL ICV	SJD0260-ICV2	421D1562.D	NA	04/16/21 06:42
A/S Creosote ICV	SJD0260-ICV3	421D1563.D	NA	04/16/21 07:03
ZZZZZ	BJC0355-BLK1	421D1564.D	Water	04/16/21 07:24
ZZZZZ	BJC0355-BS1	421D1565.D	Water	04/16/21 07:45
ZZZZZ	BJC0355-BSD1	421D1566.D	Water	04/16/21 08:06
ZZZZZ	21C0181-02RE1	421D1567.D	Water	04/16/21 08:27
ZZZZZ	21C0181-03RE1	421D1568.D	Water	04/16/21 08:48
ZZZZZ	21C0181-04RE1	421D1569.D	Water	04/16/21 09:09
ZZZZZ	21C0181-05RE1	421D1570.D	Water	04/16/21 09:30
ZZZZZ	21C0181-06RE1	421D1571.D	Water	04/16/21 09:51
ZZZZZ	21C0181-07RE1	421D1572.D	Water	04/16/21 10:12
ZZZZZ	21C0181-08RE1	421D1573.D	Water	04/16/21 10:33
ZZZZZ	21C0181-09RE1	421D1574.D	Water	04/16/21 10:54
ZZZZZ	21C0181-10RE1	421D1575.D	Water	04/16/21 11:15
ZZZZZ	21C0181-11RE2	421D1576.D	Water	04/16/21 11:36
DIESEL CCV	SJD0260-CCV1	421D1577.D	NA	04/16/21 11:57
MOIL CCV	SJD0260-CCV2	421D1578.D	NA	04/16/21 12:18
A/S CRESOTE CCV	SJD0260-CCV3	421D1579.D	NA	04/16/21 12:39
ZZZZZ	21C0181-12RE1	421D1580.D	Water	04/16/21 13:00
ZZZZZ	21C0181-13RE1	421D1581.D	Water	04/16/21 13:21
ZZZZZ	21C0181-14RE1	421D1582.D	Water	04/16/21 13:42

Analytical Resources, Incorporated
Analytical Chemists and Consultants

ANALYSIS BATCH (SEQUENCE) SUMMARY

NWTPH-Dx

Laboratory:	Analytical Resources, Inc.	SDG:	21E0106
Client:	Anchor QEA, LLC	Project:	Gasco Siltronic - US Moorings
Sequence:	SJD0260	Instrument:	FID4
		Calibration:	ED00037

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
ZZZZZ	21C0181-15RE2	421D1584.D	Water	04/16/21 14:24
ZZZZZ	21C0181-16RE1	421D1585.D	Water	04/16/21 14:45
DIESEL CCV	SJD0260-CCV4	421D1586.D	NA	04/16/21 15:06
MOIL CCV	SJD0260-CCV5	421D1587.D	NA	04/16/21 15:28
A/S CRESOTE CCV	SJD0260-CCV6	421D1588.D	NA	04/16/21 15:49

Analytical Resources, Incorporated
Analytical Chemists and Consultants

ANALYSIS BATCH (SEQUENCE) SUMMARY

NWTPH-Dx

Laboratory:	Analytical Resources, Inc.	SDG:	21E0106
Client:	Anchor QEA, LLC	Project:	Gasco Siltronic - US Moorings
Sequence:	SJD0282	Instrument:	FID4
		Calibration:	ED00037

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
Retention Time Standard	SJD0282-IBL1	421D2003.D	NA	04/20/21 14:16
Instrument Blank	SJD0282-IBL2	421D2004.D	NA	04/20/21 14:38
A/S LAI BUNKER C 100	SJD0282-CAL1	421D2005.D	NA	04/20/21 14:59
A/S LAI BUNKER C 250	SJD0282-CAL2	421D2006.D	NA	04/20/21 15:21
A/S LAI BUNKER C 500	SJD0282-CAL3	421D2007.D	NA	04/20/21 15:42
A/S LAI BUNKER C 1000	SJD0282-CAL4	421D2008.D	NA	04/20/21 16:04
A/S LAI BUNKER C 2500	SJD0282-CAL5	421D2009.D	NA	04/20/21 16:25
A/S LAI BUNKER C 5000	SJD0282-CAL6	421D2010.D	NA	04/20/21 16:47
DIESEL ICV	SJD0282-ICV1	421D2011.D	NA	04/20/21 17:08
MOIL ICV	SJD0282-ICV2	421D2012.D	NA	04/20/21 17:30
A/S BUNKER C	SJD0282-ICV3	421D2013.D	NA	04/20/21 17:51
ZZZZZ	BJC0848-BLK1	421D2014.D	Water	04/20/21 18:13
ZZZZZ	BJC0848-BS1	421D2015.D	Water	04/20/21 18:34
ZZZZZ	BJC0848-BSD1	421D2016.D	Water	04/20/21 18:55
ZZZZZ	21C0428-01	421D2017.D	Water	04/20/21 19:17
ZZZZZ	21C0428-02	421D2020.D	Water	04/20/21 20:21
ZZZZZ	21C0428-03	421D2021.D	Water	04/20/21 20:42
ZZZZZ	21C0428-04	421D2022.D	Water	04/20/21 21:03
ZZZZZ	21C0428-05	421D2023.D	Water	04/20/21 21:24
ZZZZZ	21C0428-06	421D2024.D	Water	04/20/21 21:45
ZZZZZ	21C0428-07	421D2025.D	Water	04/20/21 22:07
ZZZZZ	21C0428-08	421D2026.D	Water	04/20/21 22:28
ZZZZZ	21C0428-09	421D2027.D	Water	04/20/21 22:49
A/S BUNKER C	SJD0282-CCV3	421D2031.D	NA	04/21/21 00:13
ZZZZZ	21C0428-11	421D2032.D	Water	04/21/21 00:34
ZZZZZ	21C0428-12	421D2033.D	Water	04/21/21 00:55
ZZZZZ	21C0428-13	421D2034.D	Water	04/21/21 01:16
ZZZZZ	BJD0124-BLK1	421D2035.D	Water	04/21/21 01:37
ZZZZZ	BJD0124-BS1	421D2036.D	Water	04/21/21 01:58
ZZZZZ	21D0041-01	421D2037.D	Water	04/21/21 02:19

Analytical Resources, Incorporated
Analytical Chemists and Consultants

ANALYSIS BATCH (SEQUENCE) SUMMARY

NWTPH-Dx

Laboratory:	Analytical Resources, Inc.	SDG:	21E0106
Client:	Anchor QEA, LLC	Project:	Gasco Siltronic - US Moorings
Sequence:	SJD0282	Instrument:	FID4
		Calibration:	ED00037

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
ZZZZZ	21D0041-03	421D2038.D	Water	04/21/21 02:40
ZZZZZ	21D0041-05	421D2039.D	Water	04/21/21 03:01
ZZZZZ	21D0041-07	421D2040.D	Water	04/21/21 03:22
ZZZZZ	21D0041-09	421D2041.D	Water	04/21/21 03:43
ZZZZZ	21D0041-11	421D2042.D	Water	04/21/21 04:04
DIESEL CCV	SJD0282-CCV4	421D2043.D	NA	04/21/21 04:25
MOIL CCV	SJD0282-CCV5	421D2044.D	NA	04/21/21 04:46
A/S BUNKER C	SJD0282-CCV6	421D2045.D	NA	04/21/21 05:07
ZZZZZ	BJD0328-BLK1	421D2046.D	Water	04/21/21 05:28
ZZZZZ	BJD0328-BS1	421D2047.D	Water	04/21/21 05:49
ZZZZZ	BJD0328-BSD1	421D2048.D	Water	04/21/21 06:10
ZZZZZ	21D0104-01	421D2049.D	Water	04/21/21 06:31
ZZZZZ	21D0104-02	421D2050.D	Water	04/21/21 06:52
ZZZZZ	21D0104-03	421D2051.D	Water	04/21/21 07:13
ZZZZZ	21D0104-04	421D2052.D	Water	04/21/21 07:34
ZZZZZ	21D0104-05	421D2053.D	Water	04/21/21 07:55
ZZZZZ	21D0104-06	421D2054.D	Water	04/21/21 08:16
ZZZZZ	21D0104-07	421D2055.D	Water	04/21/21 08:37
ZZZZZ	21D0104-08	421D2056.D	Water	04/21/21 08:58
ZZZZZ	21D0116-01	421D2057.D	Water	04/21/21 09:19
DIESEL CCV	SJD0282-CCV7	421D2058.D	NA	04/21/21 09:40
MOIL CCV	SJD0282-CCV8	421D2059.D	NA	04/21/21 10:01
ZZZZZ	21D0116-03	421D2060.D	Water	04/21/21 10:22
ZZZZZ	21D0116-04	421D2061.D	Water	04/21/21 10:43
ZZZZZ	21D0116-05	421D2062.D	Water	04/21/21 11:04
ZZZZZ	21D0116-06	421D2063.D	Water	04/21/21 11:25
ZZZZZ	21D0116-07	421D2064.D	Water	04/21/21 11:46
ZZZZZ	21D0116-08	421D2065.D	Water	04/21/21 12:07
ZZZZZ	21D0116-09	421D2066.D	Water	04/21/21 12:28
ZZZZZ	21D0116-10	421D2067.D	Water	04/21/21 12:50

Analytical Resources, Incorporated
Analytical Chemists and Consultants

ANALYSIS BATCH (SEQUENCE) SUMMARY

NWTPH-Dx

Laboratory:	Analytical Resources, Inc.	SDG:	21E0106
Client:	Anchor QEA, LLC	Project:	Gasco Siltronic - US Moorings
Sequence:	SJD0282	Instrument:	FID4
		Calibration:	ED00037

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
ZZZZZ	21D0116-11	421D2068.D	Water	04/21/21 13:11
DIESEL CCV	SJD0282-CCV9	421D2069.D	NA	04/21/21 13:32
MOIL CCV	SJD0282-CCVA	421D2070.D	NA	04/21/21 13:53
ZZZZZ	21C0428-10	421D2028.D	Water	04/21/21 23:10
DIESEL CCV	SJD0282-CCV1	421D2029.D	NA	04/21/21 23:31
MOIL CCV	SJD0282-CCV2	421D2030.D	NA	04/21/21 23:52

Analytical Resources, Incorporated
Analytical Chemists and Consultants

ANALYSIS BATCH (SEQUENCE) SUMMARY

NWTPH-Dx

Laboratory:	Analytical Resources, Inc.	SDG:	21E0106
Client:	Anchor QEA, LLC	Project:	Gasco Siltronic - US Moorings
Sequence:	SJE0284	Instrument:	FID4
		Calibration:	ED00037

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
Retention Time Standard	SJE0284-IBL1	421E2003.D	NA	05/20/21 13:48
Instrument Blank	SJE0284-IBL2	421E2004.D	NA	05/20/21 14:09
DIESEL ICV	SJE0284-ICV1	421E2005.D	NA	05/20/21 14:30
MOIL ICV	SJE0284-ICV2	421E2006.D	NA	05/20/21 14:51
ZZZZZ	21E0115-01	421E2009.D	Solid	05/20/21 15:55
ZZZZZ	21E0115-02	421E2010.D	Solid	05/20/21 16:16
ZZZZZ	21E0115-03	421E2011.D	Solid	05/20/21 16:37
ZZZZZ	BJE0433-BLK1	421E2012.D	Solid	05/20/21 16:58
ZZZZZ	BJE0433-BS1	421E2013.D	Solid	05/20/21 17:19
ZZZZZ	BJE0433-BSD1	421E2014.D	Solid	05/20/21 17:40
ZZZZZ	21E0148-03	421E2015.D	Solid	05/20/21 18:01
ZZZZZ	21E0148-06	421E2017.D	Solid	05/20/21 18:43
ZZZZZ	21E0148-11	421E2018.D	Solid	05/20/21 19:04
ZZZZZ	21E0148-14	421E2019.D	Solid	05/20/21 19:25
ZZZZZ	21E0148-17	421E2020.D	Solid	05/20/21 19:47
ZZZZZ	21E0148-20	421E2023.D	Solid	05/20/21 20:50
ZZZZZ	21E0148-25	421E2024.D	Solid	05/20/21 21:12
DIESEL CCV	SJE0284-CCV1	421E2025.D	NA	05/20/21 21:33
MOIL CCV	SJE0284-CCV2	421E2026.D	NA	05/20/21 21:54
ZZZZZ	21E0148-28	421E2027.D	Solid	05/20/21 22:15
ZZZZZ	21E0148-31	421E2028.D	Solid	05/20/21 22:37
ZZZZZ	21E0148-36	421E2029.D	Solid	05/20/21 22:58
Blank	BJE0366-BLK1	421E2032.D	Solid	05/21/21 00:01
LCS	BJE0366-BS1	421E2033.D	Solid	05/21/21 00:22
ZZZZZ	21E0103-01	421E2034.D	Solid	05/21/21 00:43
ZZZZZ	21E0103-08	421E2037.D	Solid	05/21/21 01:47
ZZZZZ	21E0103-10	421E2038.D	Solid	05/21/21 02:08
ZZZZZ	21E0103-16	421E2039.D	Solid	05/21/21 02:29
ZZZZZ	21E0103-17	421E2040.D	Solid	05/21/21 02:50
DIESEL CCV	SJE0284-CCV3	421E2041.D	NA	05/21/21 03:11

Analytical Resources, Incorporated
Analytical Chemists and Consultants

ANALYSIS BATCH (SEQUENCE) SUMMARY

NWTPH-Dx

Laboratory:	Analytical Resources, Inc.	SDG:	21E0106
Client:	Anchor QEA, LLC	Project:	Gasco Siltronic - US Moorings
Sequence:	SJE0284	Instrument:	FID4
		Calibration:	ED00037

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
MOIL CCV	SJE0284-CCV4	421E2042.D	NA	05/21/21 03:32
ZZZZZ	21E0103-23	421E2043.D	Solid	05/21/21 03:53
ZZZZZ	21E0105-01	421E2044.D	Solid	05/21/21 04:14
ZZZZZ	21E0105-07	421E2045.D	Solid	05/21/21 04:35
USMPDI-028SG-210504	21E0106-01	421E2046.D	Solid	05/21/21 04:56
USMPDI-030SG-210504	21E0106-02	421E2047.D	Solid	05/21/21 05:17
USMPDI-031SG-210504	21E0106-03	421E2048.D	Solid	05/21/21 05:38
USMPDI-035SG-210504	21E0106-04	421E2049.D	Solid	05/21/21 05:59
DIESEL CCV	SJE0284-CCV5	421E2050.D	NA	05/21/21 06:20
MOIL CCV	SJE0284-CCV6	421E2051.D	NA	05/21/21 06:42
ZZZZZ	21E0148-42	421E2030.D	Solid	05/21/21 23:19
ZZZZZ	21E0169-01	421E2031.D	Solid	05/21/21 23:40

Analytical Resources, Incorporated
Analytical Chemists and Consultants

SURROGATE RECOVERY AND RT SUMMARY

NWTPH-Dx

Laboratory:	Analytical Resources, Inc.	SDG/WO:	21E0106
Client:	Anchor QEA, LLC	Project:	Gasco Siltronic - US Moorings
Sequence:	SJD0260	Instrument:	FID4
Calibration:	ED00037	Calibration Date:	04/13/2021

Surrogate Compound	Spike Level mg/L	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
SJD0260-ICV1 (Water)			Lab File ID: 421D1561.D				Analyzed: 04/16/21 06:21	
o-Terphenyl	90.000	96.7	85 - 115	6.12	6.13	-0.0100	N/A	
SJD0260-ICV3 (Water)			Lab File ID: 421D1563.D				Analyzed: 04/16/21 07:03	
o-Terphenyl	90.000	89.9	85 - 115	6.12	6.13	-0.0100	N/A	
SJD0260-CCV1 (Water)			Lab File ID: 421D1577.D				Analyzed: 04/16/21 11:57	
o-Terphenyl	90.000	100	85 - 115	6.12	6.13	-0.0100	N/A	

Analytical Resources, Incorporated
Analytical Chemists and Consultants

SURROGATE RECOVERY AND RT SUMMARY

NWTPH-Dx

Laboratory:	Analytical Resources, Inc.	SDG/WO:	21E0106
Client:	Anchor QEA, LLC	Project:	Gasco Siltronic - US Moorings
Sequence:	SJD0282	Instrument:	FID4
Calibration:	ED00037	Calibration Date:	04/13/2021

Surrogate Compound	Spike Level mg/L	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
SJD0282-ICV1 (Water)			Lab File ID: 421D2011.D				Analyzed: 04/20/21 17:08	
o-Terphenyl	90.000	101	85 - 115	6.12	6.13	-0.0100	N/A	
SJD0282-ICV3 (Water)			Lab File ID: 421D2013.D				Analyzed: 04/20/21 17:51	
o-Terphenyl	45.000	93.1	85 - 115	6.11	6.13	-0.0200	N/A	
SJD0282-CCV1 (Water)			Lab File ID: 421D2029.D				Analyzed: 04/21/21 23:31	
o-Terphenyl	90.000	94.2	85 - 115	6.12	6.13	-0.0100	N/A	

Analytical Resources, Incorporated
Analytical Chemists and Consultants

SURROGATE RECOVERY AND RT SUMMARY

NWTPH-Dx

Laboratory:	Analytical Resources, Inc.	SDG/WO:	21E0106
Client:	Anchor QEA, LLC	Project:	Gasco Siltronic - US Moorings
Sequence:	SJE0284	Instrument:	FID4
Calibration:	ED00037	Calibration Date:	04/20/2021

Surrogate Compound	Spike Level mg/L	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
SJE0284-IBL1 (Solid)			Lab File ID: 421E2003.D				Analyzed: 05/20/21 13:48	
o-Terphenyl	100.00	82.3	50 - 150	6.08	6.13	-0.0500	N/A	
SJE0284-IBL2 (Solid)			Lab File ID: 421E2004.D				Analyzed: 05/20/21 14:09	
o-Terphenyl	100.00	78.0	50 - 150	6.08	6.13	-0.0500	N/A	
SJE0284-ICV1 (Solid)			Lab File ID: 421E2005.D				Analyzed: 05/20/21 14:30	
o-Terphenyl	90.000	87.8	85 - 115	6.08	6.13	-0.0500	N/A	
SJE0284-CCV1 (Solid)			Lab File ID: 421E2025.D				Analyzed: 05/20/21 21:33	
o-Terphenyl	90.000	97.2	85 - 115	6.08	6.13	-0.0500	N/A	
BJE0366-BLK1 (Solid)			Lab File ID: 421E2032.D				Analyzed: 05/21/21 00:01	
o-Terphenyl	11.250	65.4	50 - 150	6.08	6.13	-0.0500	N/A	
BJE0366-BS1 (Solid)			Lab File ID: 421E2033.D				Analyzed: 05/21/21 00:22	
o-Terphenyl	11.250	70.9	50 - 150	6.08	6.13	-0.0500	N/A	
SJE0284-CCV3 (Solid)			Lab File ID: 421E2041.D				Analyzed: 05/21/21 03:11	
o-Terphenyl	90.000	93.9	85 - 115	6.08	6.13	-0.0500	N/A	
21E0106-01 (Solid)			Lab File ID: 421E2046.D				Analyzed: 05/21/21 04:56	
o-Terphenyl	23.855	79.8	50 - 150	6.08	6.13	-0.0500	N/A	
21E0106-02 (Solid)			Lab File ID: 421E2047.D				Analyzed: 05/21/21 05:17	
o-Terphenyl	19.136	82.9	50 - 150	6.08	6.13	-0.0500	N/A	
21E0106-03 (Solid)			Lab File ID: 421E2048.D				Analyzed: 05/21/21 05:38	
o-Terphenyl	24.251	79.1	50 - 150	6.08	6.13	-0.0500	N/A	
21E0106-04 (Solid)			Lab File ID: 421E2049.D				Analyzed: 05/21/21 05:59	
o-Terphenyl	21.908	81.0	50 - 150	6.08	6.13	-0.0500	N/A	
SJE0284-CCV5 (Solid)			Lab File ID: 421E2050.D				Analyzed: 05/21/21 06:20	
o-Terphenyl	90.000	94.9	85 - 115	6.08	6.13	-0.0500	N/A	

Analytical Resources, Incorporated
Analytical Chemists and Consultants

HOLDING TIME SUMMARY

Analysis: NWTPH-Dx

Laboratory: Analytical Resources, Inc. SDG: 21E0106

Client: Anchor QEA, LLC Project: Gasco Siltronic - US Moorings

Sample Name	Date Collected	Date Received	Date Prepared	Days to Prep	Max Days to Prep	Date Analyzed	Days to Analysis	Max Days to Analysis	Q
USMPDI-028SG-210504 21E0106-01	05/04/21 00:00	05/06/21 11:40	05/17/21 10:37	13	14	05/21/21 04:56	4	40	
USMPDI-030SG-210504 21E0106-02	05/04/21 00:00	05/06/21 11:40	05/17/21 10:37	13	14	05/21/21 05:17	4	40	
USMPDI-031SG-210504 21E0106-03	05/04/21 00:00	05/06/21 11:40	05/17/21 10:37	13	14	05/21/21 05:38	4	40	
USMPDI-035SG-210504 21E0106-04	05/04/21 00:00	05/06/21 11:40	05/17/21 10:37	13	14	05/21/21 05:59	4	40	

* Indicates hold time exceedance.

Analytical Resources, Incorporated
Analytical Chemists and Consultants

METHOD DETECTION AND REPORTING LIMITS

NWTPH-Dx

Laboratory: Analytical Resources, Inc.
SDG: 21E0106
Client: Anchor QEA, LLC
Project: Gasco Siltronic - US Moorings
Matrix: Solid
Instrument: FID4

Analyte	MDL	RL	Units
Diesel Range Organics (C12-C24)	2.34	5.00	mg/kg
Motor Oil Range Organics (C24-C38)	2.99	10.0	mg/kg

Analytical Resources, Incorporated
Analytical Chemists and Consultants

METHOD DETECTION AND REPORTING LIMITS

NWTPH-Dx

Laboratory: Analytical Resources, Inc.
SDG: 21E0106
Client: Anchor QEA, LLC
Project: Gasco Siltronic - US Moorings
Matrix: Water
Instrument: FID4

Analyte	MDL	RL	Units
Diesel Range Organics (C12-C24)	0.033	0.100	mg/L
Motor Oil Range Organics (C24-C38)	0.056	0.200	mg/L

I-6884 - Chevron Motor Oil SAE30
I-6885 - Valvoline Motor Oil SAE30
I-6886 - Valvoline Motor Oil SAE 5W-30
I-6887 - Valvoline Motor Oil SAE 40
I-6888 - Mobil 1 Synthetic Motor Oil 10W30

5/13/11

5/13/11

O'Reilly AUTO PARTS PROFESSIONAL PARTS PEOPLE

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PHONE (417) 862-3333

STORE PHONE # 425 021-0000
REMIT TO: PO BOX 790098
ST LOUIS MO 63179-0090

BILL TO 999990

SHIP TO

INVOICE NUMBER 2509-248059
INVOICE TYPE CHG. CARD SALE
INVOICE DATE 5/13/11

CASH SALE
CHEVRON INJECTOR CLEANER
SAVE INSTANTLY
BUY 1 GET 1 FREE 00000

COUNTER NO.	SPECIAL INSTRUCTIONS	SHIP VIA	CUSTOMER ORDER NO.	TIME OF ORDER	FILLED BY	CHECKED BY
5				00:00:50		

TAX	R C	QTY.	LINE	ITEM NUMBER	UNIT MEAS.	CD.	DESCRIPTION	LIST PRICE	NET PRICE	DISC %	CORE PRICE	EXTENDED PRICE
T		1		~~OAS WUDE10-30~~	~~EA~~		~~10tMotorOil~~	~~14.79~~	~~5.99~~			~~5.99~~
T		1		~~OAS EDGE10-30~~	~~EA~~		~~10tMotorOil~~	~~14.79~~	~~5.99~~			~~5.99~~
T	*	1		MOB 1-10-30	EA		10tSynthcOil	13.99	8.19			8.19
T	*	1		VAL 5-30	EA		10tMotorOil	7.95	4.69			4.69
T	*	1		VAL HD30	EA		10tMotorOil	7.95	4.69			4.69
T	*	1		VAL HD40	EA		10tMotorOil	7.95	4.69			4.69
T	*	1		CHV HD30	EA		MOTOR OIL	6.25	3.69			3.69
	*			MFG. DEFECT WARRANTY								

CREDIT CARD-MASTER CARD 1264 EXPIRATION DATE-XX/XX AUTHORIZATION-966947

TOTALS 7 CUSTOMER COPY "We appreciate your business" PAGE 1 73.44 37.93

SUB-TOTAL 37.93
MISC.
TAX/FEES
TOTAL

CASH TEND.
CHANGE

CUSTOMER SIGNATURE

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ALL MERCHANDISE RETURNED MUST BE ACCOMPANIED BY THIS INVOICE

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5				00:00:50		

TAX	R C	QTY.	LINE	ITEM NUMBER	UNIT MEAS.	CD.	DESCRIPTION	LIST PRICE	NET PRICE	DISC %	CORE PRICE	EXTENDED PRICE

I-6884 - Chevron Motor Oil SAE30
I-6885 - Valvoline Motor Oil SAE30
I-6886 - Valvoline Motor Oil SAE 5W-30
I-6887 - Valvoline Motor Oil SAE 40
I-6888 - Mobil 1 Synthetic Motor Oil 10W30

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COUNTER NO.	SPECIAL INSTRUCTIONS	SHIP VIA	CUSTOMER ORDER NO.	TIME OF ORDER	FILLED BY	CHECKED BY
5				00:00:50		

TAX	R C	QTY.	LINE	ITEM NUMBER	UNIT MEAS.	CD.	DESCRIPTION	LIST PRICE	NET PRICE	DISC %	CORE PRICE	EXTENDED PRICE
T		1		~~CAS EDGE10-30~~	~~EA~~		~~10tMotorOil~~	~~14.73~~	~~5.99~~			~~5.99~~
T		1		CAS EDGE10-30	EA		10tMotorOil	14.73	5.99			5.99
T	*	1		MOB 1-10-30	EA		10tSynthcOil	13.99	8.19			8.19
T	*	1		VAL 5-30	EA		10tMotorOil	7.95	4.69			4.69
T	*	1		VAL HD30	EA		10tMotorOil	7.95	4.69			4.69
T	*	1		VAL HD40	EA		10tMotorOil	7.95	4.69			4.69
T	*	1		CHV HD30	EA		MOTOR OIL	6.25	3.69			3.69
	*			MFG. DEFECT WARRANTY								

CREDIT CARD-MASTER CARD 1264 EXPIRATION DATE-XX/XX AUTHORIZATION-966947

TOTALS 7 CUSTOMER COPY "We appreciate your business" PAGE 1 73.44 37.93

SUB-TOTAL 37.93
MISC.
TAX/FEES
TOTAL

CASH TEND.
CHANGE

CUSTOMER SIGNATURE

Visit Us At: www.oreillyauto.com

ALL MERCHANDISE RETURNED MUST BE ACCOMPANIED BY THIS INVOICE

Ans N Sebo
5/13/11

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CASH SALE
CHEVRON INJECTOR CLEANER
SAVE INSTANTLY
BUY 1 GET 1 FREE 00000

COUNTER NO.	SPECIAL INSTRUCTIONS	SHIP VIA	CUSTOMER ORDER NO.	TIME OF ORDER	FILLED BY	CHECKED BY
5				00:00:50		

TAX	R C	QTY.	LINE	ITEM NUMBER	UNIT MEAS.	CD.	DESCRIPTION	LIST PRICE	NET PRICE	DISC %	CORE PRICE	EXTENDED PRICE

I 7906

SIGMA-ALDRICH

sigma-aldrich.com

1 Spruce Street, Saint Louis, MO 63103, USA
Website: www.sigmaaldrich.com
Email USA: techserv@sial.com
Outside USA: eurtechserv@sial.com

C003092
TPHD Triacontane NEAT
Solvent / Lot: NEAT
Prep: 8/19/2014 by VS
Exp: 2/15/2030
Location: GC

Certificate of Analysis

Product Name
Triacontane - 98%

$CH_3(CH_2)_{28}CH_3$

Product Number:	**263842**
Batch Number:	**MKBL2826V**
Brand:	ALDRICH
CAS Number:	638-68-6
MDL Number:	MFCD00009410
Formula:	C30H62
Formula Weight:	422.81 g/mol
Quality Release Date	20 JUN 2012

Test	Specification	Result
Appearance (Color)	White	White
Appearance (Form) Flakes or Crystalline Flakes	Conforms to Requirements	Flakes
Melting Point	65.0 - 69.0 °C	65.7 °C
Infrared spectrum	Conforms to Structure	Conforms
Purity (GC)	≥ 97.5 %	98.1 %

Jamie Gleason

Jamie Gleason, Manager
Quality Control
Milwaukee, Wisconsin US

Version Number: 1

E003343

Alfa Aesar

Certificate of analysis

Product No.:	A19680
Product:	o-Terphenyl, 98%
Lot No.:	10114703

Appearance	White, crystalline powder
Melting point	55.0-55.9ºC
Assay (GC)	99.9+ %

This document has been electronically generated and does not require a signature.

SIGMA-ALDRICH

sigma-aldrich.com

3050 Spruce Street, Saint Louis, MO 63103, USA
Website: www.sigmaaldrich.com
Email USA: techserv@sial.com
Outside USA: eurtechserv@sial.com

Certificate of Analysis

Product Name:
Triacontane - 98%

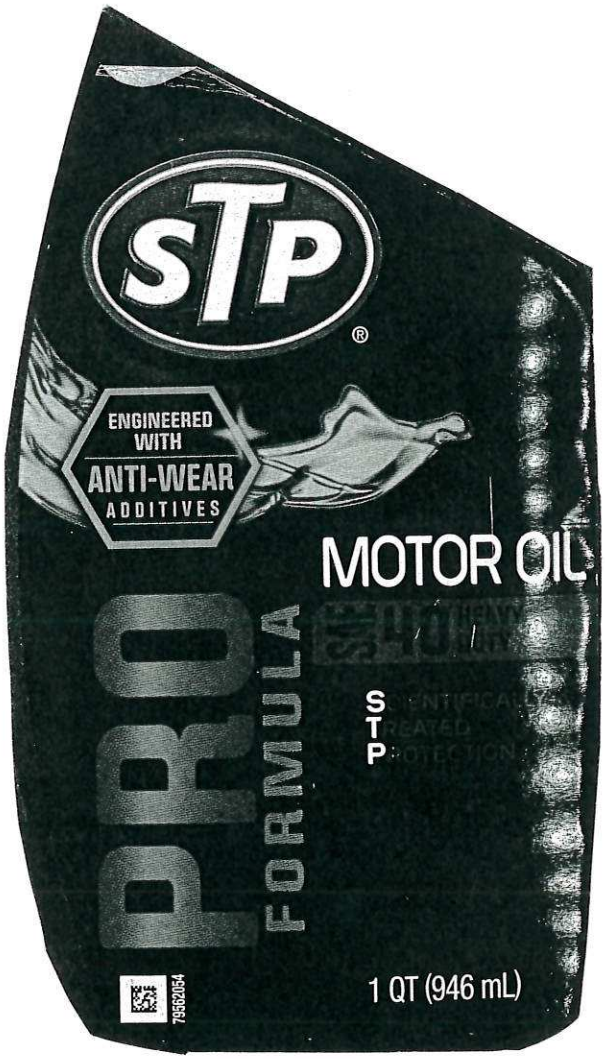
Product Number:	**263842**
Batch Number:	**MKCD2349**
Brand:	ALDRICH
CAS Number:	638-68-6
MDL Number:	MFCD00009410
Formula:	C30H62
Formula Weight:	422.81 g/mol
Quality Release Date:	01 JUN 2017

$CH_3(CH_2)_{28}CH_3$

F8659
Recd.
09/21/17 JR

Test	Specification	Result
Appearance (Color)	White	White
Appearance (Form) Flakes or Crystalline Flakes	Conforms to Requirements	Flakes
Melting Point	65.0 - 69.0 °C	65.4 °C
Infrared Spectrum	Conforms to Structure	Conforms
Purity (GC)	≥ 97.5 %	98.2 %

Michael Grady, Manager
Quality Control
Milwaukee, WI US



front

back

G 004796

5264

Chain of Custody Record & Laboratory Analysis Request

ARI Assigned Number:	Turn-around Requested:
ARI Client Company: Landau Assc Inc	Phone: 509 327-9737
Client Contact: Ryan Reich	
Client Project Name: Avista Central Steam Plant (CSP)	
Client Project #: 0236040	Samplers: Ryan Reich

Page: 2 of 2

Date: 3-27-19 | Ice Present? Yes

No. of Coolers: 2 | Cooler Temps: 2.7°C 2.4°C

Analytical Resources, Incorporated
Analytical Chemists and Consultants
4611 South 134th Place, Suite 100
Tukwila, WA 98168
206-695-6200 206-695-6201 (fax)

Sample ID	Date	Time	Matrix	No. Containers	NWTPH-Dx to Bunker C								Notes/Comments
MW28-032719	3-27-19	15:45	w	2	X								
MW 25-032819	3-28-19	9:05	w	2	X								
MW 7-032819	3-28-19	9:55	w	2	X								
EW3-102418	10-24-18	13:00	Product Liquid	2									Site Bunker C Standard

A003225

Comments/Special Instructions
* w/ acid silica gel cleanup

Relinquished by: (Signature) Ryan Reich	Received by: (Signature)	Relinquished by: (Signature)	Received by: (Signature)
Printed Name: Ryan Reich	Printed Name: Jacob Walter	Printed Name:	Printed Name:
Company: Landau Assc	Company: ARI	Company:	Company:
Date & Time: 3-28-19 16:30	Date & Time: 03/29/19 0950	Date & Time:	Date & Time:

Limits of Liability: *ARI will perform all requested services in accordance with appropriate methodology following ARI Standard Operating Procedures and the ARI Quality Assurance Program. This program meets standards for the industry. The total liability of ARI, its officers, agents, employees, or successors, arising out of or in connection with the requested services, shall not exceed the Invoiced amount for said services. The acceptance by the client of a proposal for services by ARI release ARI from any liability in excess thereof, not withstanding any provision to the contrary in any contract, purchase order or co-signed agreement between ARI and the Client.*

Sample Retention Policy: All samples submitted to ARI will be appropriately discarded no sooner than 90 days after receipt or 60 days after submission of hardcopy data, whichever is longer, unless alternate retention schedules have been established by work-order or contract.

Appendix 20.1

ALTERNATE CERTIFICATE OF ANALYSIS

The manufacturer of the below chemical was unable to provide a Certificate of Analysis at the time of request by ARI.

Date Requested from Manufacturer: 7.16.19 - not requested.

Chemical: Pentacosane-n

Manufacturer: Chem service

Product #: NA

Lot #: 184-125A

Purity: 99%

Analyst: VTS

H006758
n-Pentacosane-Neat
Solvent / Lot: NA
Prep: 7/15/2019 by VS
Exp: 1/12/2030
Location: GC

125 Market Street
New Haven, CT 06513
USA

AccuStandard®

Tel (203)786-5290
Fax (203)786-5287
www.AccuStandard.com

CERTIFICATE OF ANALYSIS

Catalog No: DRH-004S-R1-5X
Description: Calibration/Window Defining Hydrocarbon Standard
Lot: 219041075
Solvent: Chloroform
Hazards: *Refer to SDS for complete safety information*

Date Certified: Apr 8, 2019
Expiration: Apr 8, 2029
Sample Size: 1 mL
Components: 17
Storage Condition: Ambient (>5 °C)/Sonicate

Signal Word: Warning

Certified Reference Material

ANAB ACCREDITED REFERENCE MATERIAL PRODUCER AR-1463 ANAB ACCREDITED TESTING LABORATORY AT-1339 ilac-MRA

Component	CAS #	Purity % (GC/MS)	Prepared Concentration[2] (µg/mL)	Certified Analyte Concentration[1] (µg/mL)
n-Octane	111-65-9	100.0	1017	1017
Decane	124-18-5	100.0	1014	1014
Dodecane	112-40-3	98.1	1013	994
n-Tetradecane	629-59-4	99.9	1008	1007
Hexadecane	544-76-3	98.9	1004	993
n-Octadecane	593-45-3	99.1	1013	1004
Eicosane	112-95-8	99.8	1008	1006
Docosane	629-97-0	99.1	1002	993
n-Tetracosane	646-31-1	100.0	1000	1000
Hexacosane	630-01-3	99.5	1008	1003
n-Octacosane	630-02-4	99.0	1017	1007
n-Triacontane	638-68-6	100.0	1017	1017
Dotriacontane	544-85-4	98.0	1014	994
Tetratriacontane	14167-59-0	99.0	1012	1002
Hexatriacontane	630-06-8	98.0	1003	983
n-Octatriacontane	7194-85-6	98.5	1009	994
Tetracontane	4181-95-7	99.0	1009	999

H 007050
Recd JL
07/24/19

A product with a suffix (-1A, -2B, etc. or -01, -02, etc.) on its lot number has had its expiration date extended and is identical to the same lot number without the suffix.

[2] All weights are traceable through NIST, Test No. 684/289871-17

[1] Certified Analyte Concentration = Purity x Prepared Concentration.

The Uncertainty associated with the certified concentration reported on this certificate is ±2.4%. This value is the combined expanded uncertainty and represents an estimated standard deviation equal to the positive square root of the total variation of the uncertainty of components. A normal distribution is assumed and a coverage factor of K=2 is chosen using approximately a 95% confidence level.

Labels and certificates follow U.S. Conventions in reporting numerical values: A comma (,) is used to separate units of one-thousand or greater. A period (.) is used as a decimal place marker.

Certified By: Larry Decker, Organic QC Manager

For use in routine laboratory analysis.

AccuStandard is accredited to ISO 17034, ISO/IEC 17025 and certified to ISO 9001:2015

QR-ORG/INO-001
Rev. 5/18

Appendix 13.1

ALTERNATE CERTIFICATE OF ANALYSIS

An effort has been made to locate the Certificate of Analysis for the below chemical and the manufacturer of the chemical was unable to provide a certificate at the time of request by ARI. This form is serving as a substitute for documentation purposes.

Date Requested from Manufacturer: 09/20/19 purchased at gas station

Chemical: Diesel # 2 NEAT

Manufacturer: 76 gas station

Product #: N/A

1+00 9117

Lot #: N/A

09/20/19

Purity: NEAT

Analyst: JP

13310 Interurban Ave S
Tukwila Wa 98168

STANLEY H & REBECCA
00061106449
13310 INTERURBAN A
TUKWILA , WA
09/20/2019 415774136
11:10:20 AM

3605
MASTERCRD

INVOICE 110939
AUTH 00-024386
REF370230920191109

PUMP# 8
DIESEL 2 0.056G
PRICE/GAL $3.599

FUEL TOTAL $ 0.20

CREDIT $ 0.20

COMPLETION
SWIPE Exp.Date:**/**
Batch: 37 Seq Num: 23
Term ID: 8
Workstation ID: 00
Your opinion
counts! Enter to
Win 1 of 60 $25
gas gift cards!!!
Provide feedback
www.gasvisit.com
Learn how to earn
50 cents/gallon in
fuel statement
credits. Go to
drivesavvy.com or
see details at the
pump. Restrictions
apply. Offer
expires 9/30/19.
18

COMPLETRE A SURVEY
WWW.GASVISIT.COM
REGISTER TO WIN!!

H009117
M
09/20/19

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Tel: (800)356-1688
Fax: (814)353-1309

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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

ACCREDITED
ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ilac-MRA

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 31233 **Lot No.:** A0157505

Description : Diesel Fuel #2 Standard (Unweathered)

Diesel Fuel #2 Standard (Unweathered) 5,000 µg/mL, Methylene Chloride, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : March 31, 2027 **Storage:** 25°C nominal

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)			
1	Diesel Fuel #2 - Single Source	5,000.0 µg/mL	+/-	29.3428	µg/mL	Gravimetric
	CAS # 68334-30-5.C (Lot 032404SZ)		+/-	148.9194	µg/mL	Unstressed
	Purity ----%		+/-	158.8208	µg/mL	Stressed

Solvent: Methylene chloride
CAS # 75-09-2
Purity 99%

I 3995
Recd. JR
05/07/20

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Dioxin Extractions QC Benchsheet

Reagent and Standard QC

Chemical Receiving Inventory #	Reageant/ Standard	Brand	Lot #	Date Received/ Made	Intial Amount	Solvent Exchange	FEV	GC/ HRMS Pass Y/N
	Toluene	Omni Solv	I005216	6/15/20	100mL	Nonane	10µL	
	DCM	Omni Solv			100mL	Nonane	10µL	
	Hexane	Omni Solv	OK		100mL	Nonane	10µL	
	MeOH	B&J		6/15/20	100mL	Nonane	10µL	
	Nonane	Acros Organics			100µL	N/A	10µL	
	Purified Sand	Sakrete			2 scoop	Nonane	10µL	
	Glasswool	Corning Life Sciences			1" in column	Nonane	10µL	
	0% Silica	Fisher			2 scoop	Nonane	10µL	
	Acid Silica	Fisher			2 scoop	Nonane	10µL	
	Basic Silica	Fisher			2 scoop	Nonane	10µL	
	Florisil	Fluka			1 scoop	Nonane	10µL	
	Rec Standard	Wellington Labs			1mL	Nonane	10µL	
	Clean-up Standard	Wellington Labs			1mL	Nonane	10µL	
	OPR Standard	Wellington Labs			20µL	Nonane	10µL	
	QLS Standard	Wellington Labs			20µL	Nonane	10µL	

Prep Analyst/Date:	Inst. Run Date:
6/24/20	

Quantify Sample Summary Report **MassLynx MassLynx V4.1 SCN909**
Dataset: Untitled
Last Altered: Monday, June 29, 2020 10:03:07 Pacific Daylight Time
Printed: Monday, June 29, 2020 10:04:40 Pacific Daylight Time

Method: T:\Autospec\Methods\Dioxin200625.mdb 26 Jun 2020 07:56:21
Calibration: T:\Autospec\Curves\200530ICIH.cdb 01 Jun 2020 10:55:54

ID: TOL I5216, Name: 20062529, Date: 26-Jun-2020, Time: 13:22:47, Conditions: AUTOSPEC01, User: pk

Compound	RT	RRT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	Noise 1	Noise 2	Height 1	Height 2	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
2378-TCDF					0.795		0.770	502	912								
12378-PeCDF					0.797		1.550	617	1077								
23478-PeCDF	30.165	1.001	1.227e2	1.579e2	0.962	0.777	1.550	617	1077	2.10e3	3.93e3	3.4	YES	YES	bb	db	0.021
123478-HxCDF					0.973		1.240	730	521								
234678-HxCDF					0.984		1.240	730	521								
123678-HxCDF					0.916		1.240	730	521								
123789-HxCDF					0.922		1.240	730	521								
1234678-HpCDF					1.096		1.050	407	561								
1234789-HpCDF					1.055		1.050	407	561								
OCDF					1.325		0.890	699	892								
2378-TCDD					1.140		0.770	598	496								
12378-PeCDD					1.091		1.550	796	359								
123478-HxCDD					0.922		1.240	426	461								
123678-HxCDD					0.949		1.240	426	461								
123789-HxCDD					0.847		1.240	426	461								
1234678-HpCDD	39.214	1.000	1.780e2	1.648e2	1.124	1.080	1.050	623	450	5.26e3	4.42e3	8.4	YES	NO	db	bd	0.056
OCDD	43.632	1.001	7.460e2	8.959e2	1.237	0.833	0.890	548	755	1.46e4	1.18e4	26.6	YES	NO	db	bb	0.395
13C-2378-TCDF	24.683	1.007	8.253e5	1.052e6	2.214	0.784	0.770	2142	1231	1.27e7	1.60e7	5920.7	YES	NO	bb	bb	104.193
13C-12378-PeCDF	28.785	1.175	9.077e5	5.652e5	1.903	1.606	1.550	3236	2267	1.39e7	8.73e6	4292.3	YES	NO	bb	bb	95.101
13C-23478-PeCDF	30.132	1.230	8.542e5	5.386e5	1.845	1.586	1.550	3236	2267	1.36e7	8.60e6	4196.7	YES	NO	bb	bb	92.784
13C-123478-HxCDF	33.782	0.953	3.067e5	6.177e5	1.198	0.496	0.510	985	2180	4.77e6	9.43e6	4845.3	YES	NO	bd	bd	100.338
13C-123678-HxCDF	33.927	0.957	3.240e5	6.472e5	1.488	0.501	0.510	985	2180	4.94e6	9.69e6	5021.3	YES	NO	db	db	84.878
13C-234678-HxCDF	34.828	0.982	2.825e5	5.661e5	1.195	0.499	0.510	985	2180	4.58e6	9.04e6	4654.9	YES	NO	bb	bb	92.321
13C-123789-HxCDF	35.875	1.012	2.245e5	4.600e5	1.014	0.488	0.510	985	2180	3.58e6	7.24e6	3633.6	YES	NO	bb	bb	87.800
13C-1234678-HpCDF	37.756	1.065	2.347e5	5.376e5	1.197	0.437	0.440	1921	1828	3.90e6	8.90e6	2030.5	YES	NO	bb	bb	83.898
13C-1234789-HpCDF	39.893	1.125	1.546e5	3.545e5	0.893	0.436	0.440	1921	1828	2.31e6	5.25e6	1200.4	YES	NO	bb	bb	74.159
13C-1234-TCDD	24.501	0.000	3.592e5	4.546e5	1.000	0.790	0.770	1294	805	5.73e6	7.24e6	4430.9	YES	NO	bb	bb	100.000
13C-2378-TCDD	25.302	1.033	4.262e5	5.508e5	1.193	0.774	0.770	1294	805	6.55e6	8.49e6	5063.6	YES	NO	bb	bb	100.651
13C-12378-PeCDD	30.388	1.240	5.085e5	2.920e5	0.962	1.741	1.550	1585	769	8.14e6	4.57e6	5135.1	YES	NO	bb	bb	102.293
13C-123478-HxCDD	34.951	0.986	4.607e5	3.535e5	1.059	1.303	1.240	1709	1194	7.44e6	5.71e6	4354.5	YES	NO	bd	bd	99.975
13C-123678-HxCDD	35.062	0.989	4.656e5	3.558e5	1.278	1.309	1.240	1709	1194	7.41e6	5.66e6	4332.5	YES	NO	db	db	83.562
13C-1234678-HpCDD	39.203	1.105	2.827e5	2.610e5	0.843	1.083	1.050	1161	1015	4.45e6	4.04e6	3833.9	YES	NO	bb	bb	83.842
13C-OCDD	43.605	1.230	3.233e5	3.491e5	0.616	0.926	0.890	1678	2408	4.02e6	4.31e6	2392.6	YES	NO	bb	bb	141.987

Quantify Sample Summary Report **MassLynx MassLynx V4.1 SCN909**
Dataset: Untitled
Last Altered: Monday, June 29, 2020 10:03:07 Pacific Daylight Time
Printed: Monday, June 29, 2020 10:04:40 Pacific Daylight Time

ID: TOL I5216, Name: 20062529, Date: 26-Jun-2020, Time: 13:22:47, Conditions: AUTOSPEC01, User: pk

Compound	RT	RRT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	Noise 1	Noise 2	Height 1	Height 2	S/N 1	SNFlag	EMPC	Int.1	Int.2	pg
13C-123789-HxCDD	35.463	0.000	4.323e5	3.368e5	1.000	1.283	1.240	1709	1194	6.94e6	5.37e6	4058.0	YES	NO	bb	bb	100.000
37CL-2378-TCDD	25.227	1.030	1.071e2		1.258			1328		2.42e3		1.8	NO		db		0.010
1368-TCDF					1.007		0.770	502	912								
1289-TCDF					0.754		0.770	502	912								
13468-PECDF					1.099		1.550	293	640								
12389-PECDF	31.178	1.083	1.504e2	7.409e1	0.841	2.030	1.550	617	1077	2.46e3	2.87e3	4.0	NO	YES	bb	bb	0.018
123468-HXCDF					1.142		1.240	730	521								
1368-TCDD					1.214		0.770	598	496								
1289-TCDD					1.061		0.770	598	496								
12479-PECDD					2.040		1.550	796	359								
12389-PECDD					1.257		1.550	796	359								
124679-HXCDD					1.164		1.240	426	461								
1234679-HPCDD	38.245	0.976	8.609e1	1.019e2	1.378	0.845	1.050	623	450	1.89e3	2.90e3	3.0	YES	YES	bb	bb	0.025
Total-tetrafurans			0.000e0		0.852			502		0.00e0							
Total-penta1			0.000e0					293		0.00e0							
Total-pentafurans			0.000e0		0.867			617		0.00e0							
Total-hexafurans			0.000e0		0.987			730		0.00e0							
Total-heptafurans			0.000e0		1.076			407		0.00e0							
Total-Furans			0.000e0		0.978			502		0.00e0							
Total-tetradioxins			0.000e0		1.138			598		0.00e0							
Total-pentadioxins			0.000e0		1.463			796		0.00e0							
Total-hexadioxins			0.000e0		0.971			426		0.00e0							
Total-heptadioxins			1.780e2		1.251			623		5.26e3							0.056
Total-Dioxins			9.240e2		1.187			598		1.99e4							0.451
Total-TEQ			9.240e2					598		1.99e4							0.451
FUNCTION1 PFK			1.728e5					220633		4.73e6							
FUNCTION2 PFK			0.000e0					159655		0.00e0							
FUNCTION3 PFK			0.000e0					198585		0.00e0							
FUNCTION4 PFK			2.228e5					179610		7.02e6							
FUNCTION5 PFK			2.507e4					138501		1.09e6							
FUNCTION1 HXCDPE			0.000e0					189		0.00e0							
FUNCTION1 HPCDPE			4.279e2					738		9.46e3							0.000
FUNCTION2 HPCDPE			1.573e2					792		4.18e3							0.000
FUNCTION3 OCDPE			8.296e1					216		3.72e3							0.000
FUNCTION4 NCDPE			0.000e0					279		0.00e0							
FUNCTION5 DCDPE			0.000e0					233		0.00e0							

ThermoFisher SCIENTIFIC

Certificate of Analysis

1 Reagent Lane
Fair Lawn, NJ 07410
201.796.7100 tel
201.796.1329 fax

ThermoFisher Scientific's Quality System has been found to conform to Quality Management System Standard ISO9001:2008 standard by SAI Global Certificate Number CERT - 0090918

This is to certify that units of the lot number below were tested and found to comply with the specifications of the grade listed. Certain data have been supplied by third parties. ThermoFisher Scientific expressly disclaims all warranties, expressed or implied, including the implied warranties of merchantability and fitness for a particular purpose. Certain products (USP/FCC/NF/EP/BP/JP grades) are sold for use in food, drug, or medical device manufacturing.ThermoFisher does not maintain DMF's with the FDA. The following are the actual analytical results obtained:

Catalog Number	T291	Quality Test / Release Date	08/15/2018
Lot Number	184485		
Description	TOLUENE - OPTIMA		
Country of Origin	United States	Suggested Retest Date	Aug/2023
Chemical Origin	Organic - non animal		
BSE/TSE Comment	No animal products are used as starting raw material ingredients, or used in processing, including lubricants, processing aids, or any other material that might migrate to the finished product.		
Chemical Comment			

N/A

Result Name	Units	Specifications	Test Value
APPEARANCE		REPORT	Clear colorless liquid free of suspended matter
ASSAY	%	>= 99.8	99.9
BENZENE	%	<= 0.05	<0.05
COLOR	APHA	<= 10	<5
EVAPORATION RESIDUE	ppm	<= 1	<0.1
IDENTIFICATION	PASS/FAIL	= PASS TEST	PASS TEST
OPTICAL ABS AT 285 NM	ABSORBANCE UNITS	<= 1	0.69
WATER (H2O)	%	<= 0.02	0.02
OPTICAL ABS AT 325 NM	ABSORBANCE UNITS	<= 0.02	0.01
OPTICAL ABS AT 350 NM	ABSORBANCE UNITS	<= 0.005	0.001
PESTICIDE RESIDUE ANALYSIS	NG/L	<= 10	<1
REFRACTIVE INDEX @ 25 DEG C		Inclusive Between 1.4930 - 1.4950	1.4940
SUBSTANCES DARKENED BY H2SO4	PASS/FAIL	= PASS TEST	PASS TEST
SULFUR COMPOUNDS	%	<= 0.003	<0.0003
OPTICAL ABS AT 300 NM	ABSORBANCE UNITS	<= 0.1	0.07

Teresa Bailey-Wyche

Quality Assurance Specialist - Certificate of Analysis Bridgewater

Note: The data listed is valid for all package sizes of this lot of this product, expressed as an extension of this catalog number listed above.
If there are any questions with this certificate, please call at (800) 227-6701.
*Based on suggested storage condition.

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Form I
INORGANIC ANALYSIS DATA SHEET
SM 2540 G-97

USMPDI-028SG-210504

Laboratory:	Analytical Resources, Inc.				
Client:	Anchor QEA, LLC				
Project:	Gasco Siltronic - US Moorings				
Matrix:	Sediment	Laboratory ID:	21E0106-01 A	SDG:	21E0106
Sampled:	05/04/21 00:00	Prepared:	05/10/21 16:26	File ID:	
% Solids:	45.70	Preparation:	No Prep Wet Chem	Analyzed:	05/10/21 16:29
Batch:	BJE0243	Sequence:		Initial/Final:	5 g Wet / 5 g
Instrument:	BAL2			Calibration:	

CAS NO.	Analyte	Concentration (%)	Dilution Factor	MDL	MRL	Q
	Total Solids	45.70	1	0.04	0.04	

Analytical Resources, Incorporated
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Form I
INORGANIC ANALYSIS DATA SHEET
SM 2540 G-97

USMPDI-030SG-210504

Laboratory:	Analytical Resources, Inc.				
Client:	Anchor QEA, LLC				
Project:	Gasco Siltronic - US Moorings				
Matrix:	Sediment	Laboratory ID:	21E0106-02 A	SDG:	21E0106
Sampled:	05/04/21 00:00	Prepared:	05/10/21 16:26	File ID:	
% Solids:	59.18	Preparation:	No Prep Wet Chem	Analyzed:	05/10/21 16:29
Batch:	BJE0243	Sequence:		Initial/Final:	5 g Wet / 5 g
Instrument:	BAL2			Calibration:	

CAS NO.	Analyte	Concentration (%)	Dilution Factor	MDL	MRL	Q
	Total Solids	59.18	1	0.04	0.04	

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Form I
INORGANIC ANALYSIS DATA SHEET
SM 2540 G-97

USMPDI-031SG-210504

Laboratory:	Analytical Resources, Inc.				
Client:	Anchor QEA, LLC				
Project:	Gasco Siltronic - US Moorings				
Matrix:	Sediment	Laboratory ID:	21E0106-03 A	SDG:	21E0106
Sampled:	05/04/21 00:00	Prepared:	05/10/21 16:26	File ID:	
% Solids:	44.46	Preparation:	No Prep Wet Chem	Analyzed:	05/10/21 16:29
Batch:	BJE0243	Sequence:		Initial/Final:	5 g Wet / 5 g
Instrument:	BAL2			Calibration:	

CAS NO.	Analyte	Concentration (%)	Dilution Factor	MDL	MRL	Q
	Total Solids	44.46	1	0.04	0.04	

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Form I
INORGANIC ANALYSIS DATA SHEET
SM 2540 G-97

USMPDI-035SG-210504

Laboratory:	Analytical Resources, Inc.				
Client:	Anchor QEA, LLC				
Project:	Gasco Siltronic - US Moorings				
Matrix:	Sediment	Laboratory ID:	21E0106-04 A	SDG:	21E0106
Sampled:	05/04/21 00:00	Prepared:	05/10/21 16:26	File ID:	
% Solids:	50.99	Preparation:	No Prep Wet Chem	Analyzed:	05/10/21 16:29
Batch:	BJE0243	Sequence:		Initial/Final:	5 g Wet / 5 g
Instrument:	BAL2			Calibration:	

CAS NO.	Analyte	Concentration (%)	Dilution Factor	MDL	MRL	Q
	Total Solids	50.99	1	0.04	0.04	

Analytical Resources, Incorporated
Analytical Chemists and Consultants

PREPARATION BATCH SUMMARY

SM 2540 G-97

Laboratory:	Analytical Resources, Inc.	SDG:	21E0106
Client:	Anchor QEA, LLC	Project:	Gasco Siltronic - US Moorings
Batch:	BJE0243 Batch Matrix: Solid	Preparation:	No Prep Wet Chem

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
USMPDI-028SG-210504	21E0106-01		05/10/21 16:26	Keep solids
USMPDI-030SG-210504	21E0106-02		05/10/21 16:26	Keep solids
USMPDI-031SG-210504	21E0106-03		05/10/21 16:26	Keep solids
USMPDI-035SG-210504	21E0106-04		05/10/21 16:26	Keep solids
Blank	BJE0243-BLK1		05/10/21 16:26	

TOTAL SOLIDS/VOLATILE SOLIDS (TS / TVS) BENCHSHEET for Solid samples

Method: PSEP 1986, SM2540, EPA 160.1

(dry at 104 (12-24 hr) then combust at 550 (30 min))

Batch:	BJE0243
Date:	5/10/2021 16:29
Analyst:	UW

Instrumentation

Drying Ovens:	12	**Analytical Balance:**	BAL2
Muffle Furnace:	2		

Batch drying time		
record times as mm/dd/yy hh:mm		
date/time in oven:	5/10/2021 17:00	
date/time out:	5/11/2021 10:25	
elapsed hrs =	17.4	OK

TS (%) calculated as:
Final dry wt (g) = (Dry Wt - Tare Wt)
TS = (Final Dry Wt)/ (grams Sample-Tare)

TVS (mg/kg dry wt) calculated as:
Final ash wt (g) = (min ash wt - tare wt)
TVS (mg/kg) = [(Dry wt-Ash wt)/ (dry weight)] *1,000,000
if ash wt > dry wt, "Chk for Err"
if dry wt-ash wt < 0.001 g, "< (1/dry wt)*1,000,000

Balance Calibration Check

Record weights to 4 places															
	Cal Weight ID:	CV-02	CV-02	CV-02	CV-02	CV-02				CV-02	CV-02	CV-02			
	Date & Time:	5/10/21 10.	5/10/21 16:35	5/11/21 11:50											
Cal Wt (g):	10.0000	10.0000	10.0000	10.0003											
		Cal OK!	Cal OK!	Cal OK!											

Sample ID	**Dish #**	**Tare Wt. (g)**	**Dish & Sample (g)**	**Dry Wt 104C (grams) 1**	**2**	**3**	**dry Wt (g)**	**TS (%)**	**Notes**	**ASH WT 550C (grams) 1**	**2**	**3**	**Ash Wt (g)**	**TVS (mg/kg)**	**(%)**	**Notes**
BJE0243-BLK1	70	0.7761	0.0000	0.7762			0.0001	-0.01%								
21E0089-21	71	0.8081	7.3838	4.1328			3.3247	50.56%								
BJE0243-DUP1	72	0.8077	7.5649	4.2038			3.3961	50.26%	RPD=0.6							
BJE0243-DUP2	73	0.7991	6.0419	3.4124			2.6133	49.85%	RSD=0.7							
21E0089-22	74	0.8217	7.7972	4.6308			3.8091	54.61%								
21E0089-23	75	0.8102	9.9198	5.9375			5.1273	56.28%								
21E0089-24	76	0.8146	7.0489	4.4607			3.6461	58.48%								
21E0089-25	77	0.8081	8.9742	5.7438			4.9357	60.44%								
21E0105-01	78	0.7854	8.2141	5.1500			4.3646	58.75%								
21E0105-02	79	0.8083	6.8483	4.1040			3.2957	54.56%								
21E0105-03	80	0.8172	6.4705	4.0873			3.2701	57.84%								
21E0105-04	81	0.8029	5.8899	3.6725			2.8696	56.41%								
21E0105-05	82	0.7944	8.2652	5.0472			4.2528	56.93%								
21E0105-06	83	0.8142	8.1030	4.8074			3.9932	54.79%								
21E0105-07	84	0.7987	8.3973	5.1691			4.3704	57.52%								
21E0106-01	85	0.7949	7.3917	3.8095			3.0146	45.70%								
21E0106-02	86	0.7924	9.2880	5.8200			5.0276	59.18%								
21E0106-03	87	0.8098	8.0676	4.0367			3.2269	44.46%								
21E0106-04	88	0.7983	9.3277	5.1477			4.3494	50.99%								

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Analytical Chemists and Consultants

Form I

METHOD BLANK DATA SHEET

SM 2540 G-97

TotalAnalytes

Blank

Laboratory: Analytical Resources, Inc.
SDG: 21E0106
Client: Anchor QEA, LLC
Project: Gasco Siltronic - US Moorings
Batch: BJE0243
Laboratory ID: BJE0243-BLK1
Prepared: 05/10/21 16:26
Matrix: Solid
Preparation: No Prep Wet Chem
Analyzed: 05/10/21 16:29
Sequence:
Calibration:
Instrument: BAL2

CAS NO.	Analyte	Concentration (%)	Dilution Factor	MDL	MRL	Q
	Total Solids	ND	1	0.04	0.04	U

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HOLDING TIME SUMMARY

Analysis: SM 2540 G-97

Laboratory: Analytical Resources, Inc. SDG: 21E0106

Client: Anchor QEA, LLC Project: Gasco Siltronic - US Moorings

Sample Name	Date Collected	Date Received	Date Prepared	Days to Prep	Max Days to Prep	Date Analyzed	Days to Analysis	Max Days to Analysis	Q
USMPDI-028SG-210504 21E0106-01	05/04/21 00:00	05/06/21 11:40	05/10/21 16:26	6	28	05/10/21 16:29	7	28	
USMPDI-030SG-210504 21E0106-02	05/04/21 00:00	05/06/21 11:40	05/10/21 16:26	6	28	05/10/21 16:29	7	28	
USMPDI-031SG-210504 21E0106-03	05/04/21 00:00	05/06/21 11:40	05/10/21 16:26	6	28	05/10/21 16:29	7	28	
USMPDI-035SG-210504 21E0106-04	05/04/21 00:00	05/06/21 11:40	05/10/21 16:26	6	28	05/10/21 16:29	7	28	

* Indicates hold time exceedance.

Analytical Resources, Incorporated
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METHOD DETECTION AND REPORTING LIMITS

SM 2540 G-97

Laboratory: Analytical Resources, Inc.
SDG: 21E0106
Client: Anchor QEA, LLC
Project: Gasco Siltronic - US Moorings
Matrix: Solid
Instrument:

Analyte	MDL	RL	Units
Total Solids	0.04	0.04	%

TOTAL SOLIDS BENCHSHEET	**Batch:**	BJE0233
Method: PSEP 1986	**Date:**	5/10/2021 13:17
(dry at 103-105 C)	**Analyst:**	AR
Instrumentation	**Drying Oven:**	15
	Analytical Balance:	B139298002

Batch drying time		
record times as mm/dd/yy hh:mm		
date/time in oven:	5/11/2021 17:00	
date/time out:	5/12/2021 8:20	
elapsed hrs:	15.3	

TS (%) calculated as:

Final dry wt (g) = (Dry Wt - Tare Wt)

TS = (Final Dry Wt X 100)/ (sample & dish -dish tare)

SAMPLE ID	Dish Tare Wt (g)	Dish with Sample (g)	Dry Wt (g)	Solids Wt (g)	TS (%)	Sample Decanted
21E0106-01	0.8000	12.7600	6.4400	5.64	**47.16%**	No
21E0106-02	0.8000	12.8600	7.8900	7.09	**58.79%**	No
21E0106-03	0.8000	12.7200	6.3300	5.53	**46.39%**	No
21E0106-04	0.8100	12.2800	6.7000	5.89	**51.35%**	No

TOTAL SOLIDS BENCHSHEET	Batch:	BJE0233
Method: PSEP 1986	Date:	5/10/2021 13:17
(dry at 103-105 C)	Analyst:	BC
Instrumentation	Drying Oven:	015
	Analytical Balance:	B139298002

Batch drying time		
record times as mm/dd/yy hh:mm		
date/time in oven:	05/11/21	17:00
date/time out:	05/12/21	08:24
elapsed hrs:	0.0	

TS (%) calculated as:

Final dry wt (g) = (Dry Wt - Tare Wt)

TS = (Final Dry Wt X 100)/ (sample & dish -dish tare)

SAMPLE ID	Dish Tare Wt (g)	Dish with Sample (g)	Dry Wt (g)	Solids Wt (g)	TS (%)	Sample Decanted
21E0106-01 A	0.80	12.76	6.44			No
21E0106-02	0.80	12.86	7.29			No
21E0106-03	0.80	12.72	6.33			No
21E0106-04 A	0.81	12.28	6.70			No

T/S + Screens

2 copies