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Electronic Comprehensive Validation Package (eCVP)

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COMPREHENSIVE VALIDATION PACKAGE

Modified TO-17 VI

INVENTORY SHEET

Work Order #: 1602029

	Page Nos. From	Page Nos. To
1. Work Order Cover Page & Laboratory Narrative	1	6
a. Lumen Validation Report	--	--
2. Sample Results and Raw Data (Organized by Sample)	7	173
a. ATL Sample Results Form		
b. Target Compound Raw Data		
-Internal Standard Area and Retention Time Summary		
-Surrogate Recovery Summary (If Applicable)		
-Chromatogram(s) and Ion Profiles (If Applicable)		
3. QC Results and Raw Data		
a. Method Blank (Results+ Raw Data)	174	189
b. Surrogate Recover Summary Form (If Applicable)	190	191
c. Internal Standard Summary Form (If Applicable)	192	194
d. Duplicate Results Summary Sheet	195	198
e. Matrix Spike/Matrix Spike Duplicate (Results + Raw Data	--	--
f. Initial Calibration Data (Summary Sheet + Raw Data)	199	542
g. MDL Study (If Applicable)	543	556
h. Continuing Calibration Verification Data (Summary Sheet	557	583
i. Second Source LCS(Summary + Raw Data)	584	881
j. Extraction Logs	--	--
k. Instrument Run Logs/Software Verification	882	885
l. GC/MS Tune (Results + Raw Data)	886	897
4. Shipping/Receiving Documents		
a. Login Receipt Summary Sheet	898	899
b. Chain-of-Custody Records	900	902
c. Sample Log-In Sheet	903	904
d. Misc Shipping/Receiving Records (list of individual records)		
Sample Receipt Discrepancy Report	--	--
5. Other Records (describe or list)		
a. Manual Spectral Defense	--	--
b. Manual Integrations	905	907
c. Manual Calculations	--	--
d. Canister Dilution Factors	--	--
e. Laboratory Corrective Action Request	--	--
f. CAS Number Reference	908	909
g. Variance Table	--	--
h. Canister Certification	--	--
i. Data Review Check Sheet	910	911

Comments:

Completed by:

Vera Belitsky	Vera Belitsky / Document Control	2/23/16
(Signature)	(Print Name & Title)	(Date)

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WORK ORDER #: 1602029

Work Order Summary

CLIENT:	Mr. Terry Taylor Anderson Mulholland & Associates, Inc. 2700 Westchester Avenue Suite 417 Purchase, NY 10577	**BILL TO:**	Accounts Payable Anderson Mulholland & Associates, Inc. 2700 Westchester Avenue Suite 417 Purchase, NY 10577
PHONE:	(914) 251-0400	**P.O. #**	
FAX:		**PROJECT #**	BMS VI
DATE RECEIVED:	02/02/2016	**CONTACT:**	Brian Whittaker
DATE COMPLETED:	02/12/2016		

FRACTION #	NAME	TEST
01A	B30-1IA013016	Modified TO-17 VI
02A	B30-2IA013016	Modified TO-17 VI
03A	B30-3IA013016	Modified TO-17 VI
04A	B30-4IA013016	Modified TO-17 VI
05A	B30-4IAD013016	Modified TO-17 VI
06A	B30-5IA013016	Modified TO-17 VI
07A	B3042AA013016	Modified TO-17 VI
08A	B42-1IA013016	Modified TO-17 VI
09A	B42-2IA013016	Modified TO-17 VI
10A	B42-3IA013016	Modified TO-17 VI
11A	B3042-FB1IA	Modified TO-17 VI
12A	B3042-FB2SSV	Modified TO-17 VI
13A	B30-1SSV013116	Modified TO-17 VI
14A	B30-2SSV013116	Modified TO-17 VI
15A	B30-3SSV013116	Modified TO-17 VI
16A	B30-4SSV013116	Modified TO-17 VI
17A	B30-4DSSV013116	Modified TO-17 VI
18A	B30-5SSV013116	Modified TO-17 VI
19A	B42-1SSV013116	Modified TO-17 VI
20A	B42-2SSV013116	Modified TO-17 VI
21A	B42-3SSV013116	Modified TO-17 VI
22A	Lab Blank	Modified TO-17 VI
22B	Lab Blank	Modified TO-17 VI

Continued on next page

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WORK ORDER #: 1602029

Work Order Summary

CLIENT:	Mr. Terry Taylor Anderson Mulholland & Associates, Inc. 2700 Westchester Avenue Suite 417 Purchase, NY 10577	**BILL TO:**	Accounts Payable Anderson Mulholland & Associates, Inc. 2700 Westchester Avenue Suite 417 Purchase, NY 10577
PHONE:	(914) 251-0400	**P.O. #**	
FAX:		**PROJECT #**	BMS VI
DATE RECEIVED:	02/02/2016	**CONTACT:**	Brian Whittaker
DATE COMPLETED:	02/12/2016		

FRACTION #	NAME	TEST
23A	CCV	Modified TO-17 VI
23B	CCV	Modified TO-17 VI
24A	LCS	Modified TO-17 VI
24AA	LCSD	Modified TO-17 VI
24B	LCS	Modified TO-17 VI
24BB	LCSD	Modified TO-17 VI

CERTIFIED BY: Heidi Hayes

Technical Director

DATE: 02/12/16

Certification numbers: AZ Licensure AZ0775, NJ NELAP - CA016, NY NELAP - 11291,
TX NELAP - T104704343-14-7, UT NELAP CA009332014-5, VA NELAP - 460197, WA NELAP - C935
Name of Accreditation Body: NELAP/ORELAP (Oregon Environmental Laboratory Accreditation Program)
Accreditation number: CA300005, Effective date: 10/18/2014, Expiration date: 10/17/2015.
Eurofins Air Toxics Inc.. certifies that the test results contained in this report meet all requirements of the NELAC standards

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LABORATORY NARRATIVE
Modified EPA Method TO-17 (VI Tubes)
Anderson Mulholland & Associates, Inc.
Workorder# 1602029

Twenty-one TO-17 VI Tube samples were received on February 02, 2016. The laboratory performed the analysis via modified EPA Method TO-17 using GC/MS in the full scan mode. TO-17 'VI' sorbent tubes are thermally desorbed onto a secondary trap. The trap is thermally desorbed to elute the components into the GC/MS system for compound separation and detection.

A modification that may be applied to EPA Method TO-17 at the client's discretion is the requirement to transport sorbent tubes at 4 deg C. Laboratory studies demonstrate a high level of stability for VOCs on the TO-17 'VI' tube at room temperature for periods of up to 14 days. Tubes can be shipped to and from the field site at ambient conditions as long as the 14-day sample hold time is upheld. Trip blanks and field surrogate spikes are used as additional control measures to monitor recovery and background contribution during tube transport.

Since the TO-17 VI application significantly extends the scope of target compounds addressed in EPA Method TO-15 and TO-17, the laboratory has implemented several method modifications outlined in the table below. Specific project requirements may over-ride the laboratory modifications.

Requirement	***TO-17***	***ATL Modifications***
Initial Calibration	%RSD</=30% with 2 allowed out up to 40%	VOC list: %RSD</=30% with 2 allowed out up to 40% SVOC list: %RSD</=30% with 2 allowed out up to 40%
Daily Calibration	%D for each target compound within +/-30%.	Fluorene, Phenanthrene, Anthracene, Fluoranthene, and Pyrene within +/-40%D
Audit Accuracy	70-130%	Second source recovery limits for Fluorene, Phenanthrene, Anthracene, Fluoranthene, and Pyrene = 60-140%.
Distributed Volume Pairs	Collection of distributed volume pairs required for monitoring ambient air to insure high quality.	If site is well-characterized or performance previously verified, single tube sampling may be appropriate. Distributed pairs may be impractical for soil gas collection due to configuration and volume constraints.
Analytical Precision	</=20% RPD	<30% RPD for Fluorene, Phenanthrene, Anthracene, Fluoranthene, and Pyrene.

Receiving Notes

There were no receiving discrepancies.

Analytical Notes

A sampling volume of 14.9 L was used to convert ng to ug/m3 for the associated Lab Blanks and samples B3042-FB1IA and B3042-FB2SSV.

As per project specific client request the laboratory has reported estimated values for target compound hits that are below the Reporting Limit but greater than the Method Detection Limit. Concentrations that are below the level at which the sorbent media was certified may be false positives.

Due to the Method Detection Limit study performed on the instrument, the reporting limit for Vinyl Chloride was raised from 2.6ng to 5.1ng.

Due to the linear calibration range of the instrument, the reporting limit for trans-1,2-Dichloroethene was raised from 4.0ng to 8.0ng.

Sample B30-1SSV013116 had mass concentrations for m,p-Xylene well above the standard calibration range at saturated levels. To provide reliable results, the recollected tube sample was analyzed at a higher split than the initial calibration. The results for m,p-Xylene was reported from the higher split analysis resulting in a dilution of 4 to 1, while the remaining compounds were reported from the original analysis. The reporting limit and calibration range were raised accordingly. Despite the dilution, m,p-Xylene was still saturated and S-flagged. A third run at a greater dilution was not possible due to limitations of the thermal desorption instrumentation.

Definition of Data Qualifying Flags

Eight qualifiers may have been used on the data analysis sheets and indicates as follows:

B - Compound present in blank (subtraction not performed).
J - Estimated value.
E - Exceeds instrument calibration range.
S - Saturated peak.
Q - Exceeds quality control limits.
U - Compound analyzed for but not detected above the reporting limit, LOD, or MDL value. See data page for project specific U-flag definition.
UJ- Non-detected compound associated with low bias in the CCV
N - The identification is based on presumptive evidence.

File extensions may have been used on the data analysis sheets and indicates as follows:

a-File was requantified
b-File was quantified by a second column and detector
r1-File was requantified for the purpose of reissue

Table 1

Client Sample ID	Lab Sample ID	Date Collected	Date Received	Date Extracted	Sample Holding Time (Days)	Date Analyzed	Sample Extract Holding Time (Days)	Sample Condition
B30-1IA013016	1602029-01A	1/31/2016	2/ 2/2016	NA	3	2/ 3/2016	NA	Good
B30-2IA013016	1602029-02A	1/31/2016	2/ 2/2016	NA	3	2/ 3/2016	NA	Good
B30-3IA013016	1602029-03A	1/31/2016	2/ 2/2016	NA	3	2/ 3/2016	NA	Good
B30-4IA013016	1602029-04A	1/31/2016	2/ 2/2016	NA	3	2/ 3/2016	NA	Good
B30-4IAD013016	1602029-05A	1/31/2016	2/ 2/2016	NA	3	2/ 3/2016	NA	Good
B30-5IA013016	1602029-06A	1/31/2016	2/ 2/2016	NA	3	2/ 3/2016	NA	Good
B3042AA013016	1602029-07A	1/30/2016	2/ 2/2016	NA	4	2/ 3/2016	NA	Good
B42-1IA013016	1602029-08A	1/31/2016	2/ 2/2016	NA	3	2/ 3/2016	NA	Good
B42-2IA013016	1602029-09A	1/31/2016	2/ 2/2016	NA	3	2/ 3/2016	NA	Good
B42-3IA013016	1602029-10A	1/31/2016	2/ 2/2016	NA	4	2/ 4/2016	NA	Good
B3042-FB1IA	1602029-11A	1/31/2016	2/ 2/2016	NA	3	2/ 3/2016	NA	Good
B3042-FB2SSV	1602029-12A	1/31/2016	2/ 2/2016	NA	3	2/ 3/2016	NA	Good
B30-1SSV013116	1602029-13A	1/31/2016	2/ 2/2016	NA	4	2/ 4/2016	NA	Good
B30-2SSV013116	1602029-14A	1/31/2016	2/ 2/2016	NA	3	2/ 3/2016	NA	Good
B30-3SSV013116	1602029-15A	1/31/2016	2/ 2/2016	NA	3	2/ 3/2016	NA	Good
B30-4SSV013116	1602029-16A	1/31/2016	2/ 2/2016	NA	4	2/ 4/2016	NA	Good
B30-4DSSV013116	1602029-17A	1/31/2016	2/ 2/2016	NA	4	2/ 4/2016	NA	Good
B30-5SSV013116	1602029-18A	1/31/2016	2/ 2/2016	NA	4	2/ 4/2016	NA	Good
B42-1SSV013116	1602029-19A	1/31/2016	2/ 2/2016	NA	4	2/ 4/2016	NA	Good
B42-2SSV013116	1602029-20A	1/31/2016	2/ 2/2016	NA	4	2/ 4/2016	NA	Good
B42-3SSV013116	1602029-21A	1/31/2016	2/ 2/2016	NA	4	2/ 4/2016	NA	Good
Lab Blank	1602029-22A	NA	NA	NA	NA	2/ 3/2016	NA	Good
Lab Blank	1602029-22B	NA	NA	NA	NA	2/ 4/2016	NA	Good
CCV	1602029-23A	NA	NA	NA	NA	2/ 3/2016	NA	Good
CCV	1602029-23B	NA	NA	NA	NA	2/ 4/2016	NA	Good
LCS	1602029-24A	NA	NA	NA	NA	2/ 3/2016	NA	Good
LCSD	1602029-24AA	NA	NA	NA	NA	2/ 3/2016	NA	Good
LCS	1602029-24B	NA	NA	NA	NA	2/ 4/2016	NA	Good
LCSD	1602029-24BB	NA	NA	NA	NA	2/ 4/2016	NA	Good

Sample Results and Raw Data

Summary of Detected Compounds
EPA METHOD TO-17

Client Sample ID: B30-1IA013016

Lab ID#: 1602029-01A

Compound	Rpt. Limit (ng)	Rpt. Limit (ug/m3)	Amount (ng)	Amount (ug/m3)
Naphthalene	1.0	0.11	5.0	0.54

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Client Sample ID: B30-1IA013016

Lab ID#: 1602029-01A

EPA METHOD TO-17

File Name:	**18020310**	**Date of Extraction: NA**	**Date of Collection: 1/31/16 1:35:00 AM**
Dil. Factor:	**1.00**		**Date of Analysis: 2/3/16 04:35 PM**

Compound	Rpt. Limit (ng)	Rpt. Limit (ug/m3)	Amount (ng)	Amount (ug/m3)
Naphthalene	1.0	0.11	5.0	0.54

Air Sample Volume(L): 9.30
Container Type: TO-17 VI Tube

Surrogates	%Recovery	Method Limits
Naphthalene-d8	90	50-150

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EPA Method TO-17 GC/MS

Data file : /chem/msd18.i/03Feb2016.b/18020310.d
Lab Smp Id: 1602029-01A
Inj Date : 03-FEB-2016 16:35
Operator : LA Inst ID: msd18.i
Smp Info : ;1602029-01A
Misc Info : DP G0137179
Comment :
Method : /chem/msd18.i/03Feb2016.b/186z0114vi.m
Meth Date : 12-Feb-2016 11:48 lantonic Quant Type: ISTD
Cal Date : 14-JAN-2016 18:27 Cal File: 18011415.d
Als bottle: 21
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: naph.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

RT	EXP RT	(REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (ng)	FINAL (NG)	TARGET RANGE	RATIO
* 79 Bromofluorobenzene						CAS #: 460-00-4		
13.208	13.200	(1.000)	174	419553	36.0000		80.00- 120.00	100.00
13.200	13.200	(1.000)	95	603437			78.78- 138.78	143.83
13.208	13.200	(1.000)	176	407739			67.05- 127.05	97.18
$ 97 Naphthalene-d8						CAS #: 1146-65-2		
17.728	17.728	(1.342)	136	367789	22.4035	22.404	80.00- 120.00	100.00
17.728	17.728	(1.342)	108	36030			0.00- 39.05	9.80
98 Naphthalene						CAS #: 91-20-3		
17.770	17.771	(1.345)	128	85705	5.05768	5.058	80.00- 120.00	100.00
17.770	17.771	(1.345)	127	12025			0.00- 43.03	14.03

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INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd18.i
Lab File ID: 18020310.d
Lab Smp Id: 1602029-01A
Analysis Type: VOA
Quant Type: ISTD
Operator: LA
Method File: /chem/msd18.i/03Feb2016.b/186z0114vi.m
Misc Info: DP G0137179

Calibration Date: 03-FEB-2016
Calibration Time: 11:04

Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
79 Bromofluorobenzen	345554	207332	483776	419553	21.41

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
79 Bromofluorobenzen	13.20	12.87	13.53	13.21	0.05

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Report Date: 12-Feb-2016 11:50

Eurofins Air Toxics Inc.

RECOVERY REPORT

Client Name:
Client SDG: 03Feb2016
Sample Matrix: GAS
Fraction: VOA
Lab Smp Id: 1602029-01A
Level: LOW
Operator: LA
Data Type: MS DATA
SampleType: SAMPLE
SpikeList File: VOC+PAHlcs50.spk
Quant Type: ISTD
Sublist File: naph.sub
Method File: /chem/msd18.i/03Feb2016.b/186z0114vi.m
Misc Info: DP G0137179

SURROGATE COMPOUND	CONC ADDED NG	CONC RECOVERED NG	% RECOVERED	LIMITS
$ 97 Naphthalene-d8	25.000	22.404	89.61	50-150

Data File: /chem/msd18.i/03Feb2016.b/18020310.d

Date : 03-FEB-2016 16:35

Client ID:

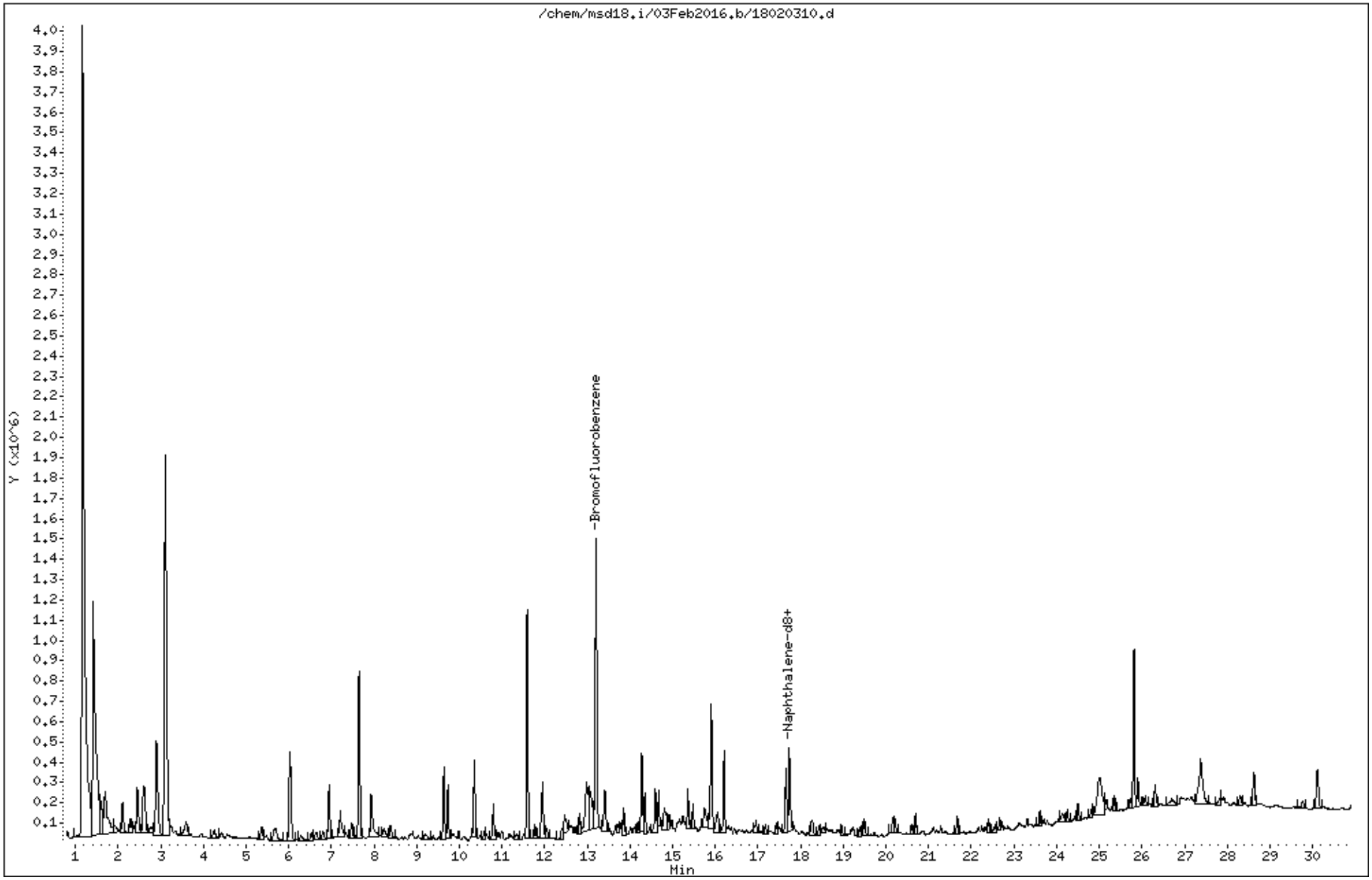
Instrument: msd18.i

Sample Info: ;1602029-01A

Operator: LA

Column phase: RTx-624

Column diameter: 0.53



Data File: /chem/msd18.i/03Feb2016.b/18020310.d

Date : 03-FEB-2016 16:35

Client ID:

Instrument: msd18.i

Sample Info: ;1602029-01A

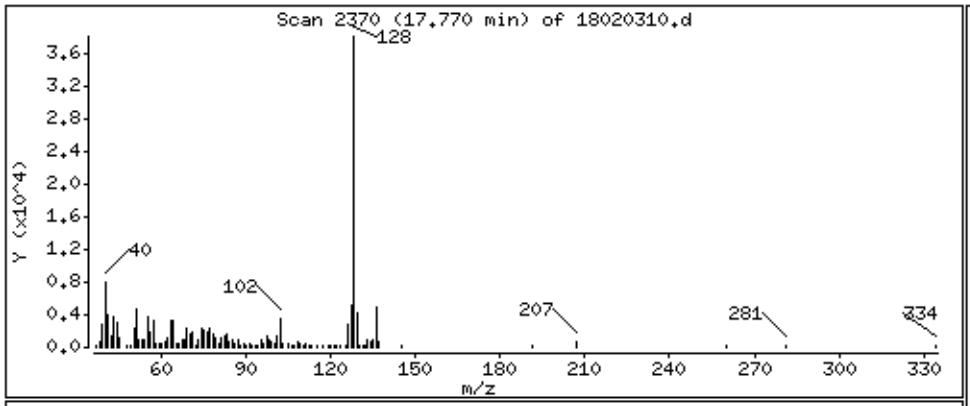
Operator: LA

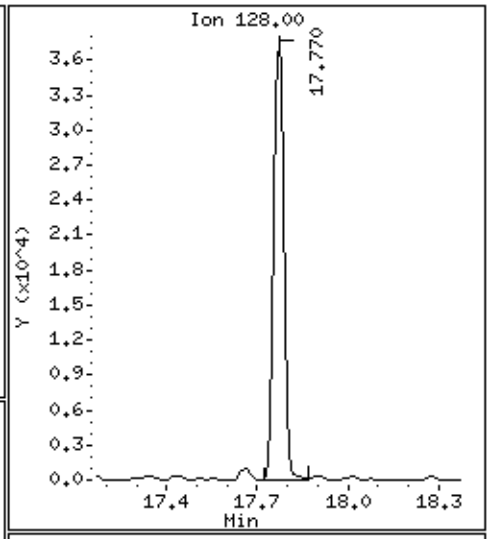
Column phase: RTx-624

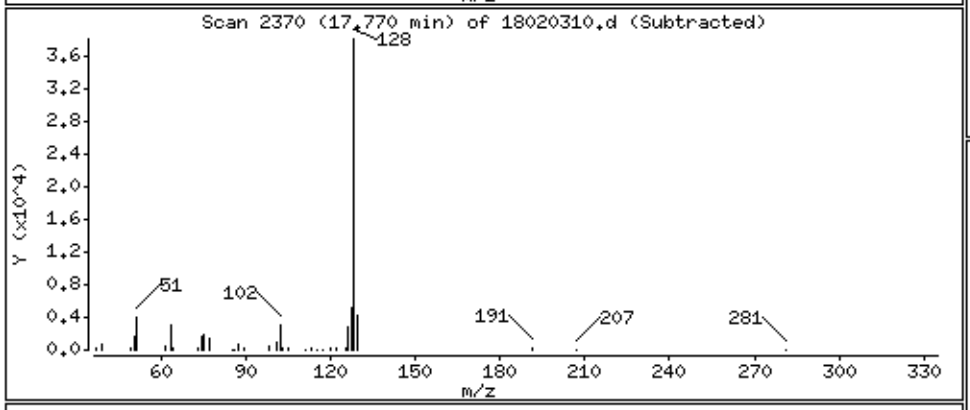
Column diameter: 0.53

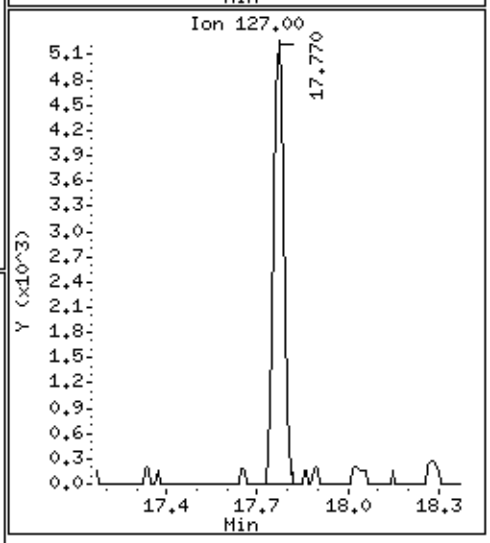
98 Naphthalene

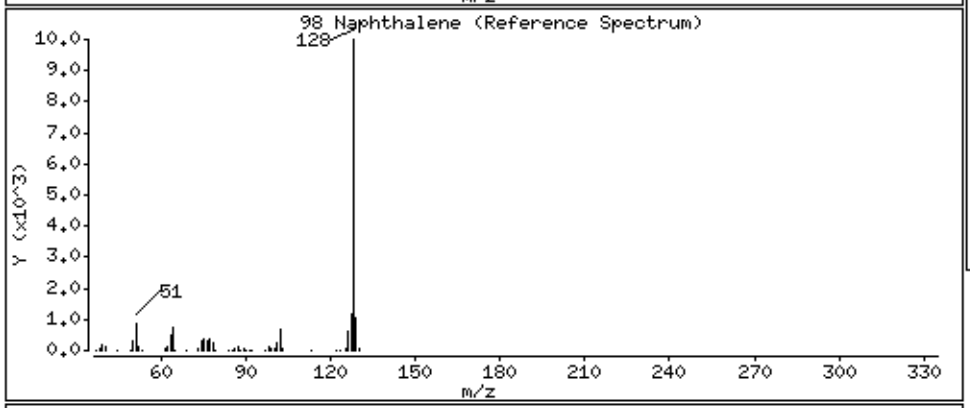
Concentration: 5.058 NG

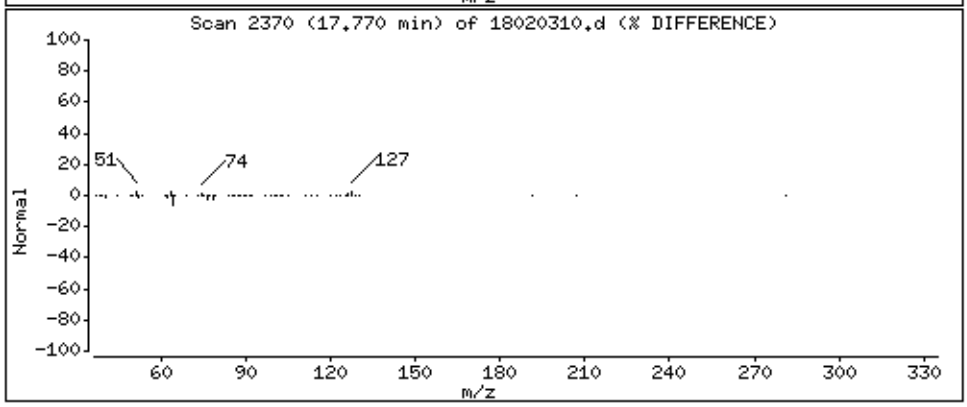












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Summary of Detected Compounds
EPA METHOD TO-17

Client Sample ID: B30-2IA013016

Lab ID#: 1602029-02A

Compound	Rpt. Limit (ng)	Rpt. Limit (ug/m3)	Amount (ng)	Amount (ug/m3)
Naphthalene	1.0	0.079	0.98 J	0.077 J

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Client Sample ID: B30-2IA013016

Lab ID#: 1602029-02A

EPA METHOD TO-17

File Name:	**18020311**	**Date of Extraction: NA**	**Date of Collection: 1/31/16 6:42:00 AM**
Dil. Factor:	**1.00**		**Date of Analysis: 2/3/16 05:13 PM**

Compound	Rpt. Limit (ng)	Rpt. Limit (ug/m3)	Amount (ng)	Amount (ug/m3)
Naphthalene	1.0	0.079	0.98 J	0.077 J

Air Sample Volume(L): 12.6

J = Estimated value.

Container Type: TO-17 VI Tube

Surrogates	%Recovery	Method Limits
Naphthalene-d8	88	50-150

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EPA Method TO-17 GC/MS

Data file : /chem/msd18.i/03Feb2016.b/18020311.d
Lab Smp Id: 1602029-02A
Inj Date : 03-FEB-2016 17:13
Operator : LA Inst ID: msd18.i
Smp Info : ;1602029-02A
Misc Info : DP G0152248
Comment :
Method : /chem/msd18.i/03Feb2016.b/186z0114vi.m
Meth Date : 12-Feb-2016 11:48 lantonic Quant Type: ISTD
Cal Date : 14-JAN-2016 18:27 Cal File: 18011415.d
Als bottle: 22
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: naph.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

RT	EXP RT	(REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (ng)	FINAL (NG)	TARGET RANGE	RATIO
* 79 Bromofluorobenzene						CAS #: 460-00-4		
13.208	13.200	(1.000)	174	411695	36.0000		80.00- 120.00	100.00
13.208	13.200	(1.000)	95	590458			78.78- 138.78	143.42
13.208	13.200	(1.000)	176	395351			67.05- 127.05	96.03
$ 97 Naphthalene-d8						CAS #: 1146-65-2		
17.728	17.728	(1.342)	136	355842	22.0895	22.090	80.00- 120.00	100.00
17.728	17.728	(1.342)	108	36383			0.00- 39.05	10.22
98 Naphthalene						CAS #: 91-20-3		
17.771	17.771	(1.345)	128	16230	0.97606	0.9761	80.00- 120.00	100.00(a)
17.771	17.771	(1.345)	127	2252			0.00- 43.03	13.88

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Report Date: 12-Feb-2016 11:50

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd18.i
Lab File ID: 18020311.d
Lab Smp Id: 1602029-02A
Analysis Type: VOA
Quant Type: ISTD
Operator: LA
Method File: /chem/msd18.i/03Feb2016.b/186z0114vi.m
Misc Info: DP G0152248

Calibration Date: 03-FEB-2016
Calibration Time: 11:04

Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
79 Bromofluorobenzen	345554	207332	483776	411695	19.14

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
79 Bromofluorobenzen	13.20	12.87	13.53	13.21	0.06

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Report Date: 12-Feb-2016 11:50

Eurofins Air Toxics Inc.

RECOVERY REPORT

Client Name:
Client SDG: 03Feb2016
Sample Matrix: GAS
Fraction: VOA
Lab Smp Id: 1602029-02A
Level: LOW
Operator: LA
Data Type: MS DATA
SampleType: SAMPLE
SpikeList File: VOC+PAHlcs50.spk
Quant Type: ISTD
Sublist File: naph.sub
Method File: /chem/msd18.i/03Feb2016.b/186z0114vi.m
Misc Info: DP G0152248

SURROGATE COMPOUND	CONC ADDED NG	CONC RECOVERED NG	% RECOVERED	LIMITS
$ 97 Naphthalene-d8	25.000	22.090	88.36	50-150

Data File: /chem/msd18.i/03Feb2016.b/18020311.d

Date : 03-FEB-2016 17:13

Client ID:

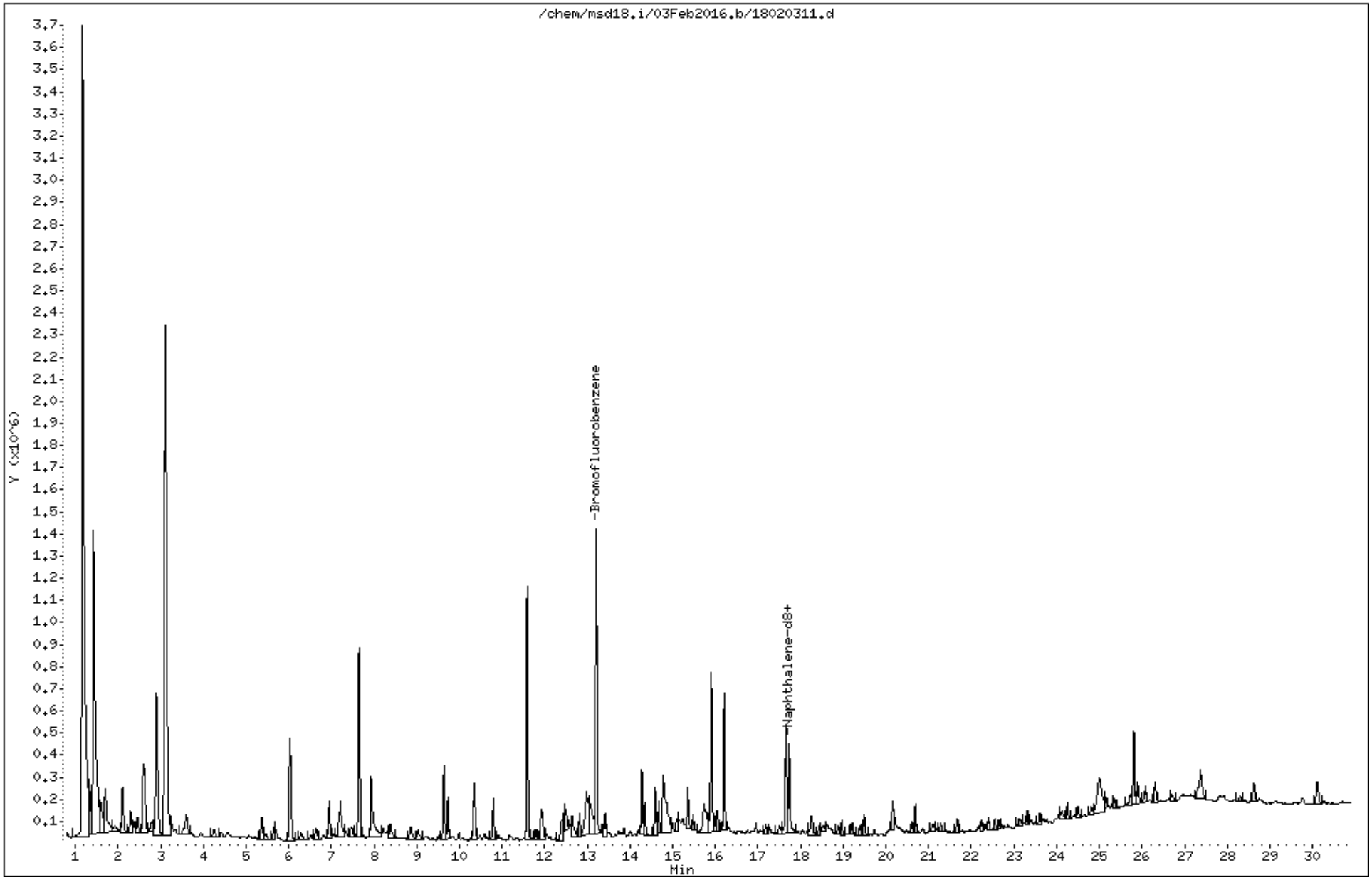
Instrument: msd18.i

Sample Info: ;1602029-02A

Operator: LA

Column phase: RTx-624

Column diameter: 0.53



Data File: /chem/msd18.i/03Feb2016.b/18020311.d

Date : 03-FEB-2016 17:13

Client ID:

Instrument: msd18.i

Sample Info: ;1602029-02A

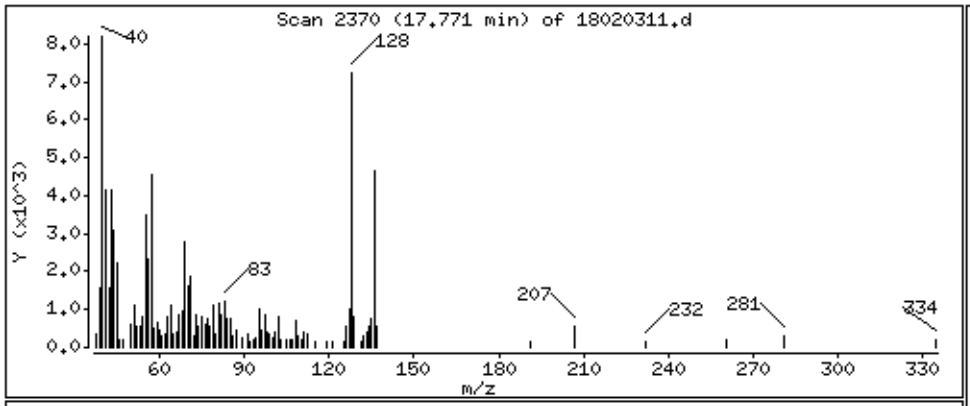
Operator: LA

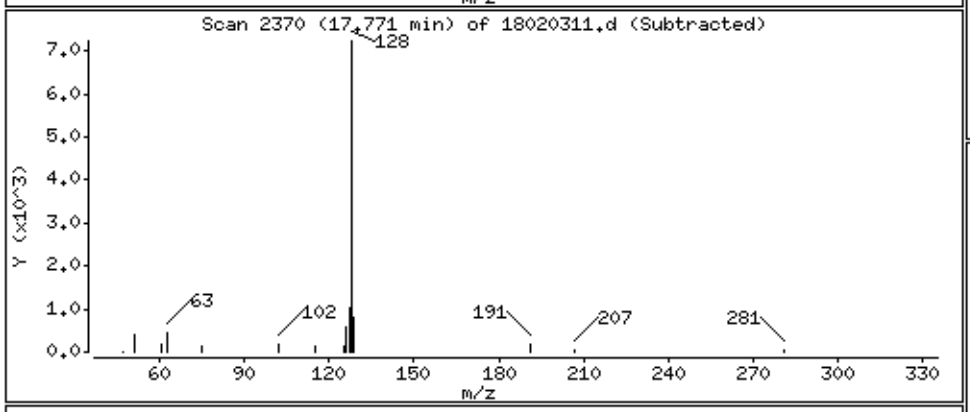
Column phase: RTx-624

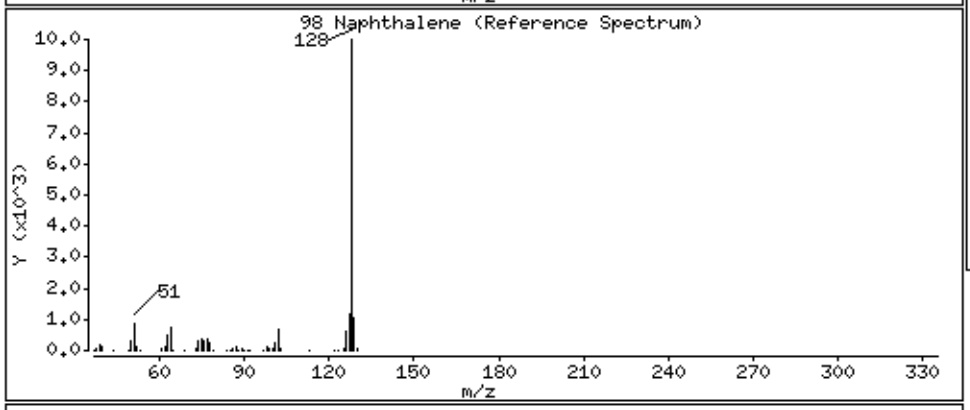
Column diameter: 0.53

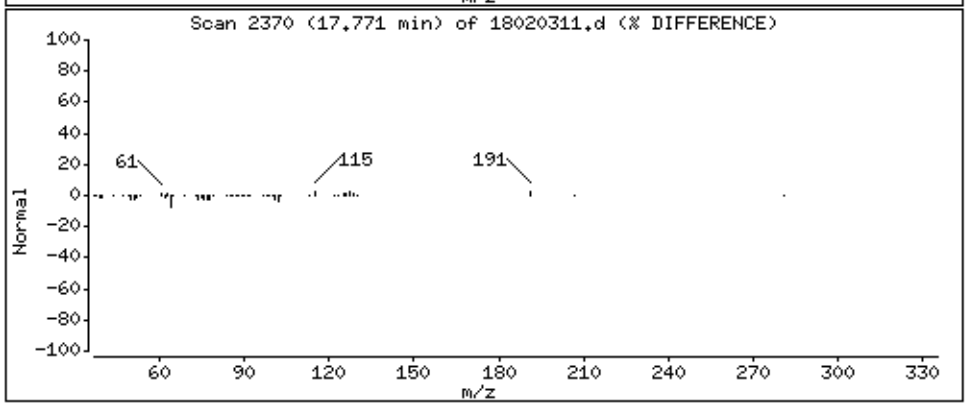
98 Naphthalene

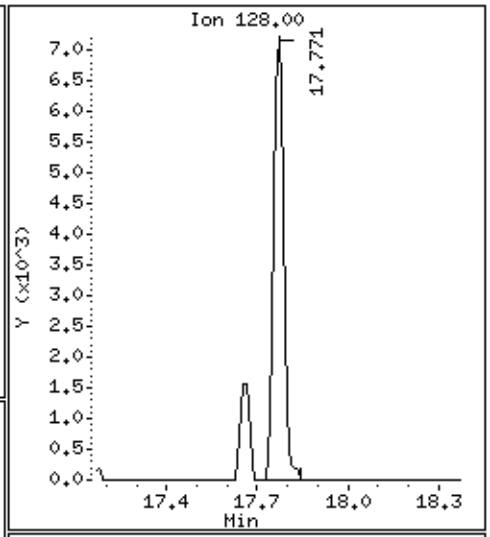
Concentration: 0.9761 NG

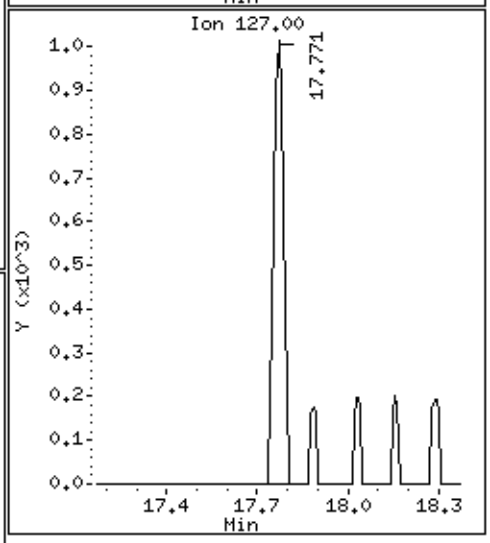












Summary of Detected Compounds
EPA METHOD TO-17

Client Sample ID: B30-3IA013016

Lab ID#: 1602029-03A

Compound	Rpt. Limit (ng)	Rpt. Limit (ug/m3)	Amount (ng)	Amount (ug/m3)
Naphthalene	1.0	0.068	1.4	0.095

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Client Sample ID: B30-3IA013016

Lab ID#: 1602029-03A

EPA METHOD TO-17

File Name:	**18020312**	**Date of Extraction: NA**	**Date of Collection: 1/31/16 10:42:00 AM**
Dil. Factor:	**1.00**		**Date of Analysis: 2/3/16 05:51 PM**

Compound	Rpt. Limit (ng)	Rpt. Limit (ug/m3)	Amount (ng)	Amount (ug/m3)
Naphthalene	1.0	0.068	1.4	0.095

Air Sample Volume(L): 14.8
Container Type: TO-17 VI Tube

Surrogates	%Recovery	Method Limits
Naphthalene-d8	95	50-150

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EPA Method TO-17 GC/MS

Data file : /chem/msd18.i/03Feb2016.b/18020312.d
Lab Smp Id: 1602029-03A
Inj Date : 03-FEB-2016 17:51
Operator : LA Inst ID: msd18.i
Smp Info : ;1602029-03A
Misc Info : DP G0188144
Comment :
Method : /chem/msd18.i/03Feb2016.b/186z0114vi.m
Meth Date : 12-Feb-2016 11:48 lantonic Quant Type: ISTD
Cal Date : 14-JAN-2016 18:27 Cal File: 18011415.d
Als bottle: 23
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: naph.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

RT	EXP RT	(REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (ng)	FINAL (NG)	TARGET RANGE	RATIO
* 79 Bromofluorobenzene						CAS #: 460-00-4		
13.208	13.200	(1.000)	174	414971	36.0000		80.00- 120.00	100.00
13.208	13.200	(1.000)	95	593209			78.78- 138.78	142.95
13.215	13.200	(1.000)	176	398071			67.05- 127.05	95.93
$ 97 Naphthalene-d8						CAS #: 1146-65-2		
17.728	17.728	(1.342)	136	384754	23.6957	23.696	80.00- 120.00	100.00
17.728	17.728	(1.342)	108	39391			0.00- 39.05	10.24
98 Naphthalene						CAS #: 91-20-3		
17.771	17.771	(1.345)	128	23599	1.40807	1.408	80.00- 120.00	100.00
17.771	17.771	(1.345)	127	3390			0.00- 43.03	14.37

Report Date: 12-Feb-2016 11:50

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd18.i
Lab File ID: 18020312.d
Lab Smp Id: 1602029-03A
Analysis Type: VOA
Quant Type: ISTD
Operator: LA
Method File: /chem/msd18.i/03Feb2016.b/186z0114vi.m
Misc Info: DP G0188144

Calibration Date: 03-FEB-2016
Calibration Time: 11:04

Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
79 Bromofluorobenzen	345554	207332	483776	414971	20.09

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
79 Bromofluorobenzen	13.20	12.87	13.53	13.21	0.05

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Report Date: 12-Feb-2016 11:50

Eurofins Air Toxics Inc.

RECOVERY REPORT

Client Name:
Client SDG: 03Feb2016
Sample Matrix: GAS
Fraction: VOA
Lab Smp Id: 1602029-03A
Level: LOW
Operator: LA
Data Type: MS DATA
SampleType: SAMPLE
SpikeList File: VOC+PAHlcs50.spk
Quant Type: ISTD
Sublist File: naph.sub
Method File: /chem/msd18.i/03Feb2016.b/186z0114vi.m
Misc Info: DP G0188144

SURROGATE COMPOUND	CONC ADDED NG	CONC RECOVERED NG	% RECOVERED	LIMITS
$ 97 Naphthalene-d8	25.000	23.696	94.78	50-150

Data File: /chem/msd18.i/03Feb2016.b/18020312.d

Date : 03-FEB-2016 17:51

Client ID:

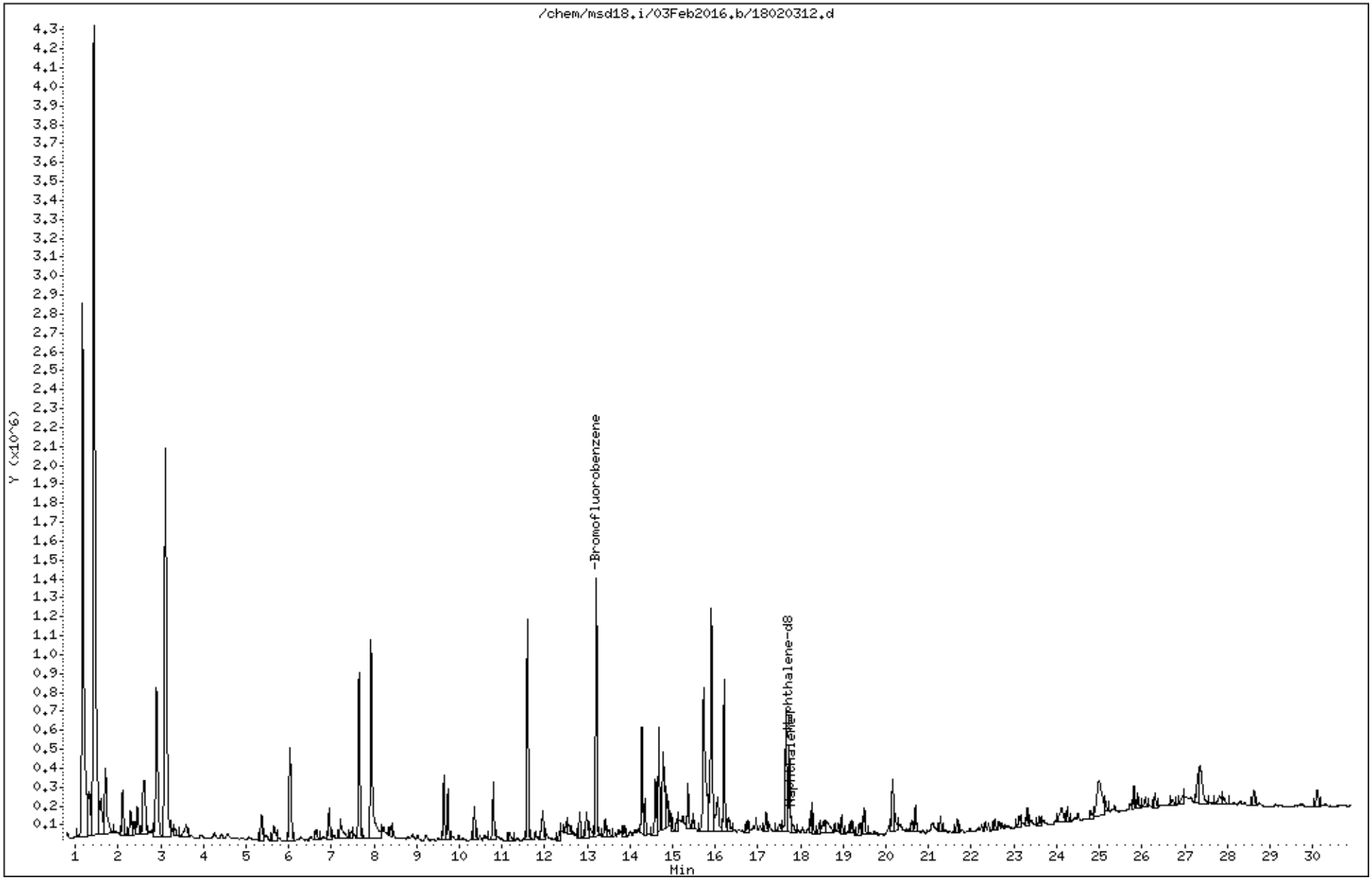
Instrument: msd18.i

Sample Info: ;1602029-03A

Operator: LA

Column phase: RTx-624

Column diameter: 0.53



Data File: /chem/msd18.i/03Feb2016.b/18020312.d

Date : 03-FEB-2016 17:51

Client ID:

Instrument: msd18.i

Sample Info: ;1602029-03A

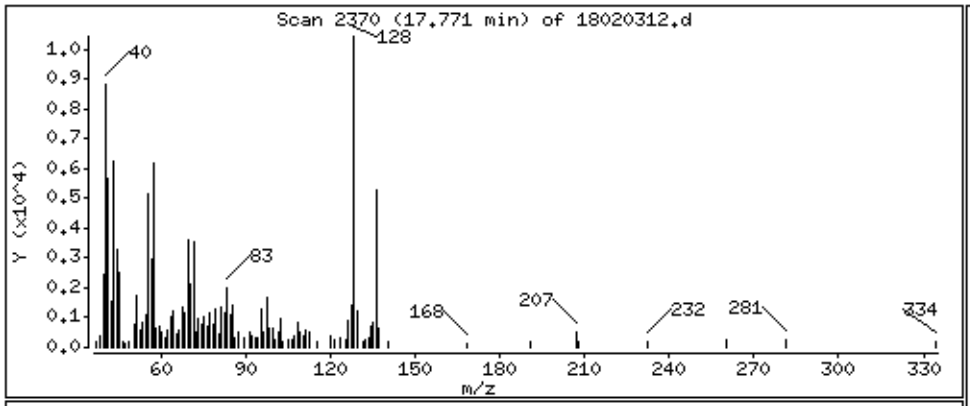
Operator: LA

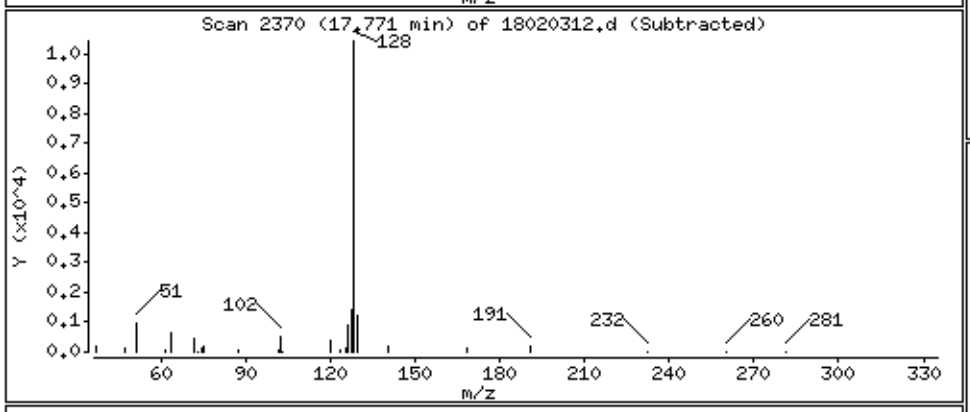
Column phase: RTx-624

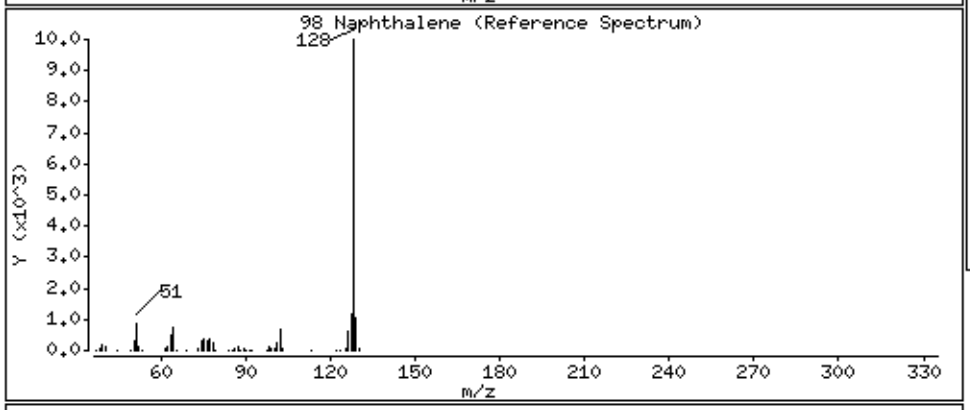
Column diameter: 0.53

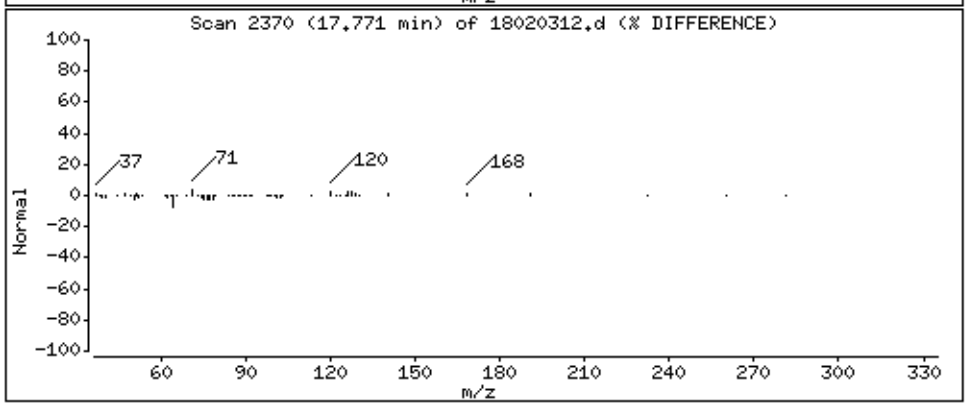
98 Naphthalene

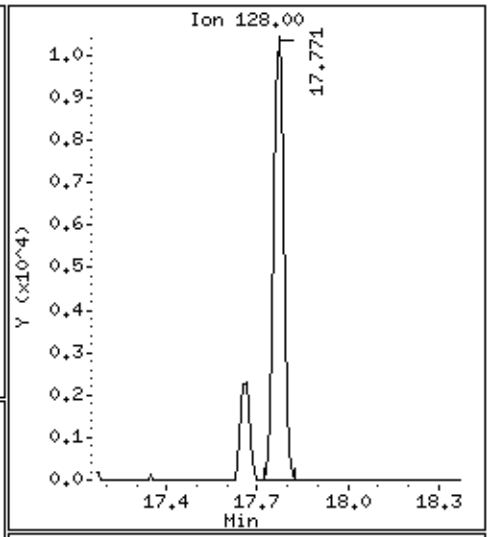
Concentration: 1.408 NG

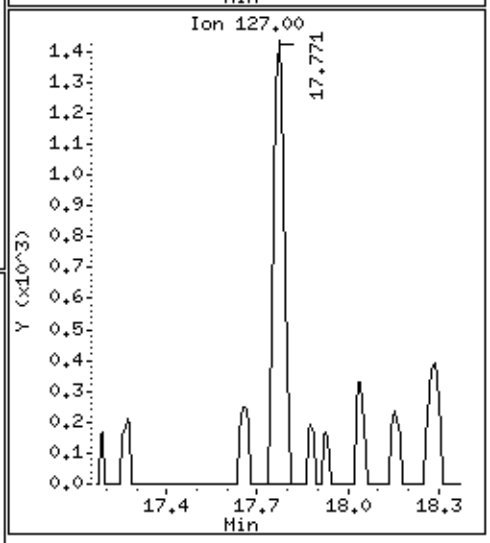












Summary of Detected Compounds
EPA METHOD TO-17

Client Sample ID: B30-4IA013016

Lab ID#: 1602029-04A

Compound	Rpt. Limit (ng)	Rpt. Limit (ug/m3)	Amount (ng)	Amount (ug/m3)
Naphthalene	1.0	0.068	2.3	0.16

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Client Sample ID: B30-4IA013016

Lab ID#: 1602029-04A

EPA METHOD TO-17

File Name:	**18020313**	**Date of Extraction: NA**	**Date of Collection: 1/31/16 10:42:00 AM**
Dil. Factor:	**1.00**		**Date of Analysis: 2/3/16 06:30 PM**

Compound	Rpt. Limit (ng)	Rpt. Limit (ug/m3)	Amount (ng)	Amount (ug/m3)
Naphthalene	1.0	0.068	2.3	0.16

Air Sample Volume(L): 14.8
Container Type: TO-17 VI Tube

Surrogates	%Recovery	Method Limits
Naphthalene-d8	99	50-150

Eurofins Air Toxics Inc.

EPA Method TO-17 GC/MS

Data file : /chem/msd18.i/03Feb2016.b/18020313.d
Lab Smp Id: 1602029-04A
Inj Date : 03-FEB-2016 18:30
Operator : LA Inst ID: msd18.i
Smp Info : ;1602029-04A
Misc Info : DP G0132032
Comment :
Method : /chem/msd18.i/03Feb2016.b/186z0114vi.m
Meth Date : 12-Feb-2016 11:48 lantonic Quant Type: ISTD
Cal Date : 14-JAN-2016 18:27 Cal File: 18011415.d
Als bottle: 24
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: naph.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

RT	EXP RT	(REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (ng)	FINAL (NG)	TARGET RANGE	RATIO
* 79 Bromofluorobenzene						CAS #: 460-00-4		
13.215	13.200	(1.000)	174	419769	36.0000		80.00- 120.00	100.00
13.208	13.200	(1.000)	95	600944			78.78- 138.78	143.16
13.215	13.200	(1.000)	176	405828			67.05- 127.05	96.68
$ 97 Naphthalene-d8						CAS #: 1146-65-2		
17.728	17.728	(1.341)	136	408138	24.8485	24.848	80.00- 120.00	100.00
17.728	17.728	(1.341)	108	40987			0.00- 39.05	10.04
98 Naphthalene						CAS #: 91-20-3		
17.771	17.771	(1.345)	128	39087	2.30549	2.305	80.00- 120.00	100.00
17.771	17.771	(1.345)	127	5384			0.00- 43.03	13.78

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd18.i
Lab File ID: 18020313.d
Lab Smp Id: 1602029-04A
Analysis Type: VOA
Quant Type: ISTD
Operator: LA
Method File: /chem/msd18.i/03Feb2016.b/186z0114vi.m
Misc Info: DP G0132032

Calibration Date: 03-FEB-2016
Calibration Time: 11:04

Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
79 Bromofluorobenzen	345554	207332	483776	419769	21.48

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
79 Bromofluorobenzen	13.20	12.87	13.53	13.21	0.11

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Report Date: 12-Feb-2016 11:50

Eurofins Air Toxics Inc.

RECOVERY REPORT

Client Name:
Client SDG: 03Feb2016
Sample Matrix: GAS
Fraction: VOA
Lab Smp Id: 1602029-04A
Level: LOW
Operator: LA
Data Type: MS DATA
SampleType: SAMPLE
SpikeList File: VOC+PAHlcs50.spk
Quant Type: ISTD
Sublist File: naph.sub
Method File: /chem/msd18.i/03Feb2016.b/186z0114vi.m
Misc Info: DP G0132032

SURROGATE COMPOUND	CONC ADDED NG	CONC RECOVERED NG	% RECOVERED	LIMITS
$ 97 Naphthalene-d8	25.000	24.848	99.39	50-150

Data File: /chem/msd18.i/03Feb2016.b/18020313.d

Page 1

Date : 03-FEB-2016 18:30

Client ID:

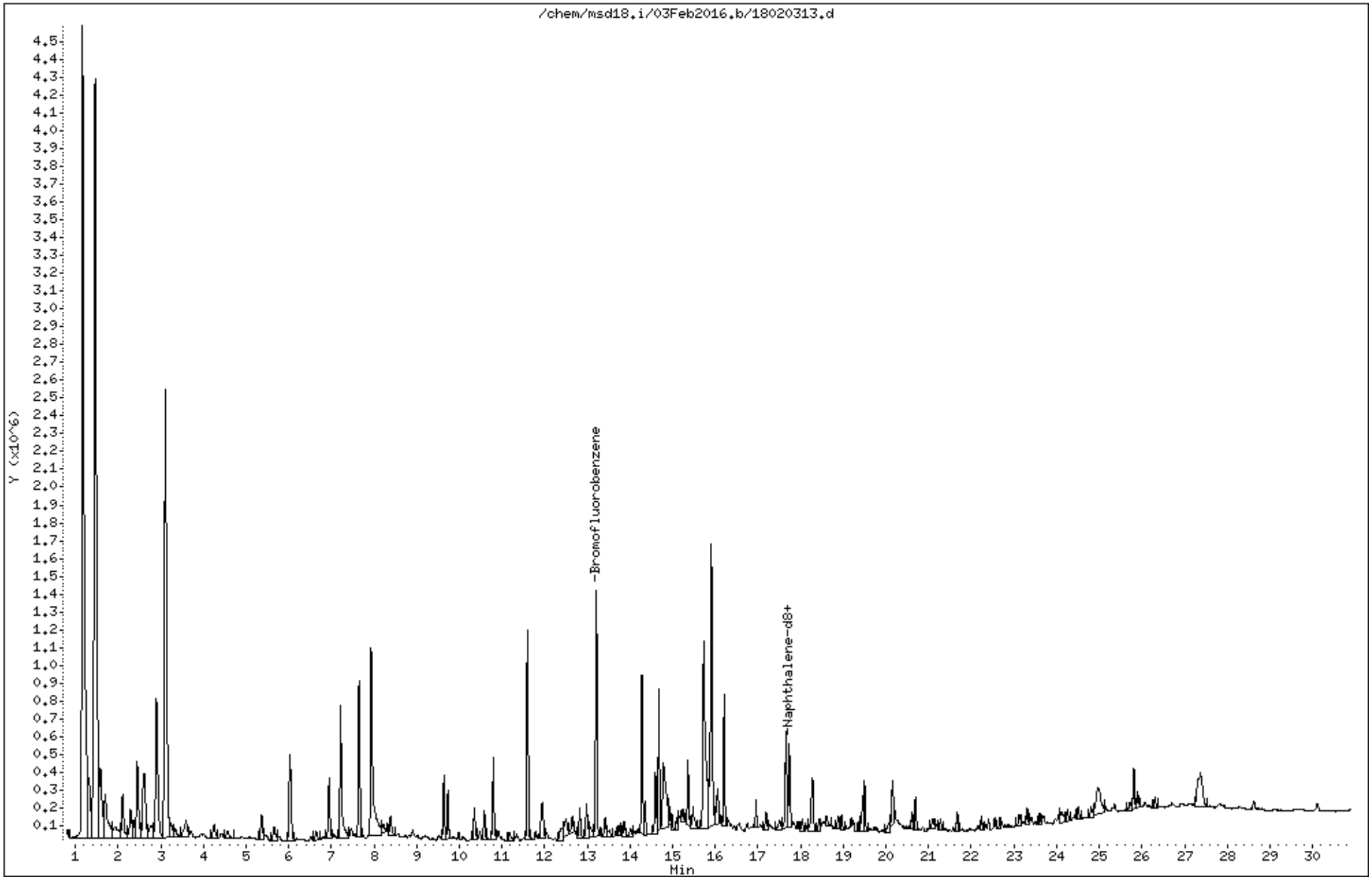
Instrument: msd18.i

Sample Info: ;1602029-04A

Operator: LA

Column phase: RTx-624

Column diameter: 0.53



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Date : 03-FEB-2016 18:30

Client ID:

Instrument: msd18.i

Sample Info: ;1602029-04A

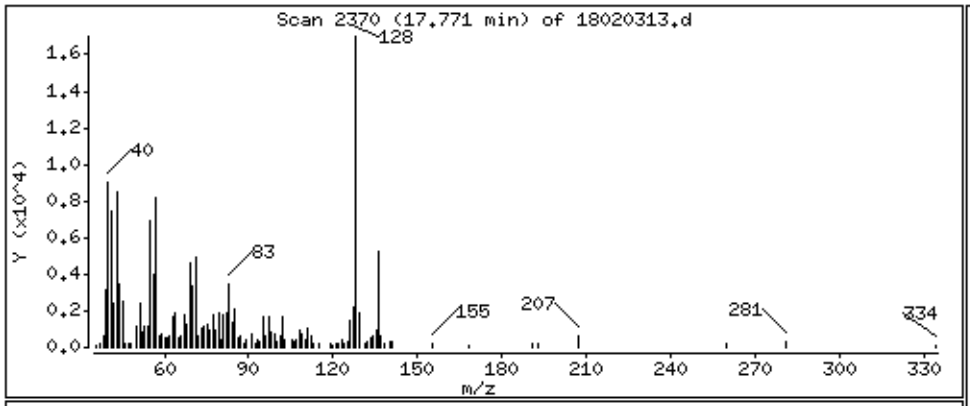
Operator: LA

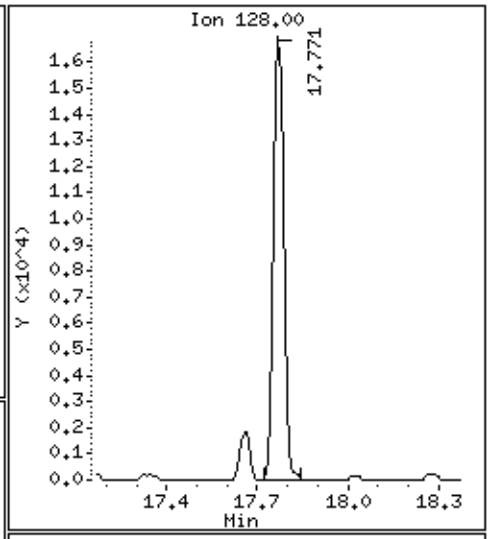
Column phase: RTx-624

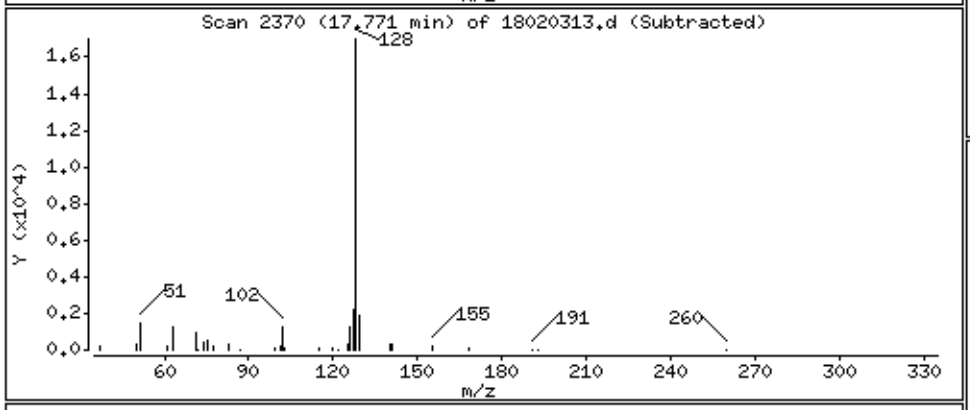
Column diameter: 0.53

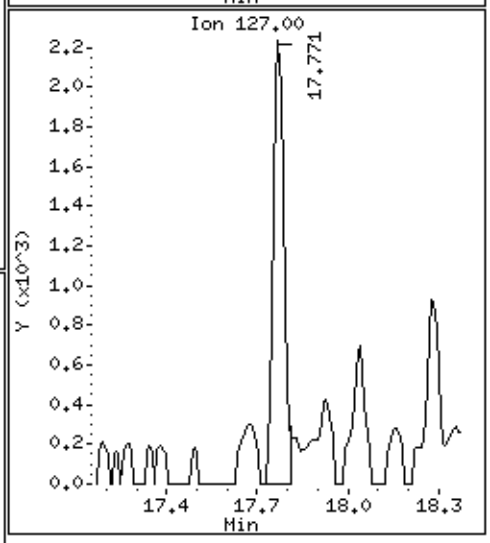
98 Naphthalene

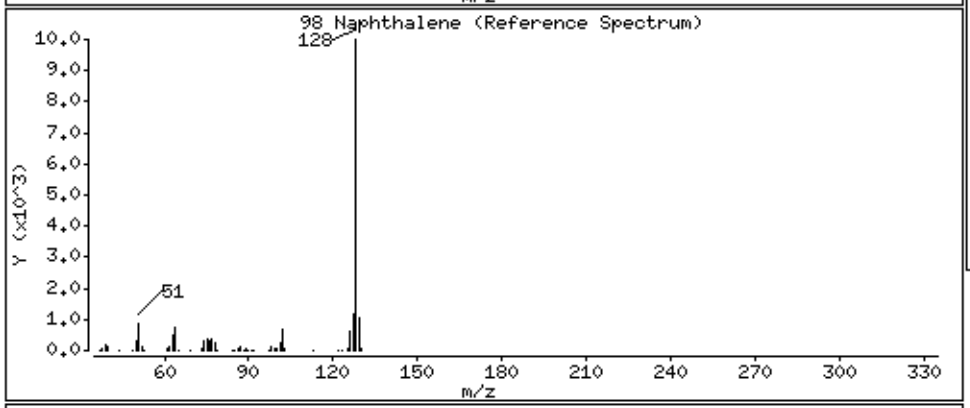
Concentration: 2.305 NG

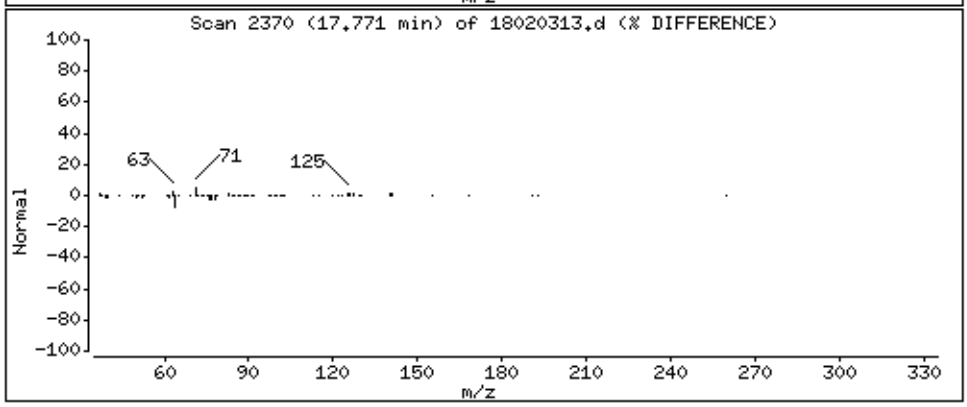












Summary of Detected Compounds
EPA METHOD TO-17

Client Sample ID: B30-4IAD013016

Lab ID#: 1602029-05A

Compound	Rpt. Limit (ng)	Rpt. Limit (ug/m3)	Amount (ng)	Amount (ug/m3)
Naphthalene	1.0	0.069	2.5	0.18

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Client Sample ID: B30-4IAD013016

Lab ID#: 1602029-05A

EPA METHOD TO-17

File Name:	**18020314**	**Date of Extraction: NA**	**Date of Collection: 1/31/16 10:42:00 AM**
Dil. Factor:	**1.00**		**Date of Analysis: 2/3/16 07:08 PM**

Compound	Rpt. Limit (ng)	Rpt. Limit (ug/m3)	Amount (ng)	Amount (ug/m3)
Naphthalene	1.0	0.069	2.5	0.18

Air Sample Volume(L): 14.4
Container Type: TO-17 VI Tube

Surrogates	%Recovery	Method Limits
Naphthalene-d8	97	50-150

Eurofins Air Toxics Inc.

EPA Method TO-17 GC/MS

Data file : /chem/msd18.i/03Feb2016.b/18020314.d
Lab Smp Id: 1602029-05A
Inj Date : 03-FEB-2016 19:08
Operator : LA Inst ID: msd18.i
Smp Info : ;1602029-05A
Misc Info : DP G0139959
Comment :
Method : /chem/msd18.i/03Feb2016.b/186z0114vi.m
Meth Date : 12-Feb-2016 11:48 lantonic Quant Type: ISTD
Cal Date : 14-JAN-2016 18:27 Cal File: 18011415.d
Als bottle: 25
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: naph.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (ng)	FINAL (NG)	TARGET RANGE	RATIO
* 79 Bromofluorobenzene					CAS #: 460-00-4		
13.208	13.200 (1.000)	174	428005	36.0000		80.00- 120.00	100.00
13.208	13.200 (1.000)	95	609249			78.78- 138.78	142.35
13.208	13.200 (1.000)	176	411888			67.05- 127.05	96.23
$ 97 Naphthalene-d8					CAS #: 1146-65-2		
17.728	17.728 (1.342)	136	407827	24.3518	24.352	80.00- 120.00	100.00
17.728	17.728 (1.342)	108	40500			0.00- 39.05	9.93
98 Naphthalene					CAS #: 91-20-3		
17.771	17.771 (1.345)	128	43634	2.52412	2.524	80.00- 120.00	100.00
17.771	17.771 (1.345)	127	5884			0.00- 43.03	13.49

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd18.i
Lab File ID: 18020314.d
Lab Smp Id: 1602029-05A
Analysis Type: VOA
Quant Type: ISTD
Operator: LA
Method File: /chem/msd18.i/03Feb2016.b/186z0114vi.m
Misc Info: DP G0139959

Calibration Date: 03-FEB-2016
Calibration Time: 11:04

Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
79 Bromofluorobenzen	345554	207332	483776	428005	23.86

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
79 Bromofluorobenzen	13.20	12.87	13.53	13.21	0.06

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Report Date: 12-Feb-2016 11:50

Eurofins Air Toxics Inc.

RECOVERY REPORT

Client Name:
Client SDG: 03Feb2016
Sample Matrix: GAS
Fraction: VOA
Lab Smp Id: 1602029-05A
Level: LOW
Operator: LA
Data Type: MS DATA
SampleType: SAMPLE
SpikeList File: VOC+PAHlcs50.spk
Quant Type: ISTD
Sublist File: naph.sub
Method File: /chem/msd18.i/03Feb2016.b/186z0114vi.m
Misc Info: DP G0139959

SURROGATE COMPOUND	CONC ADDED NG	CONC RECOVERED NG	% RECOVERED	LIMITS
$ 97 Naphthalene-d8	25.000	24.352	97.41	50-150

Data File: /chem/msd18.i/03Feb2016.b/18020314.d

Date : 03-FEB-2016 19:08

Client ID:

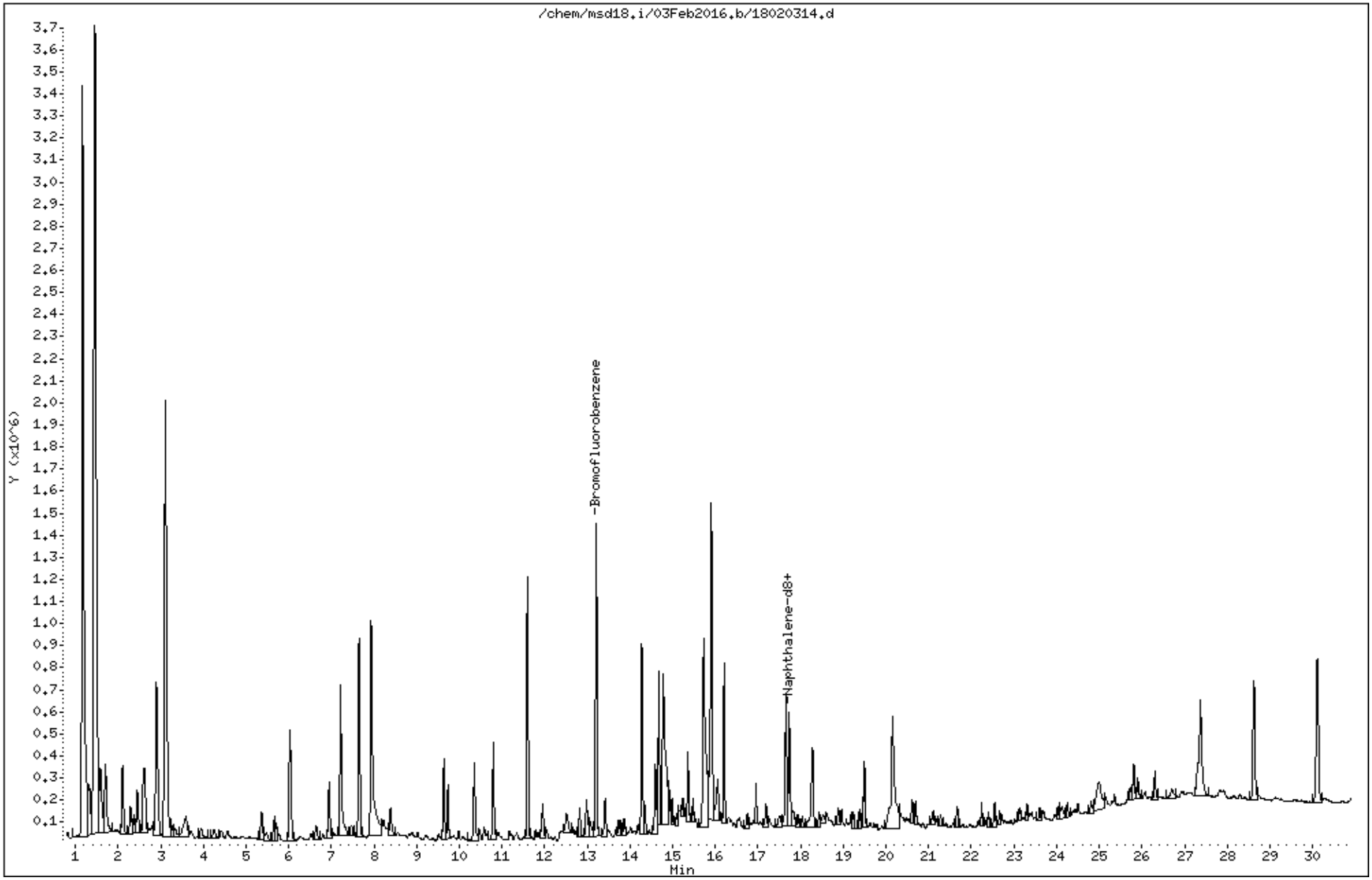
Instrument: msd18.i

Sample Info: :1602029-05A

Operator: LA

Column phase: RTx-624

Column diameter: 0.53



Data File: /chem/msd18.i/03Feb2016.b/18020314.d

Date : 03-FEB-2016 19:08

Client ID:

Instrument: msd18.i

Sample Info: ;1602029-05A

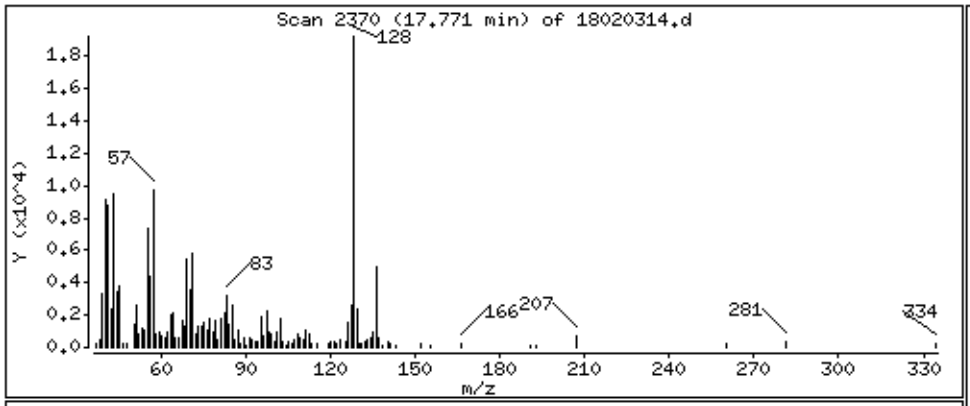
Operator: LA

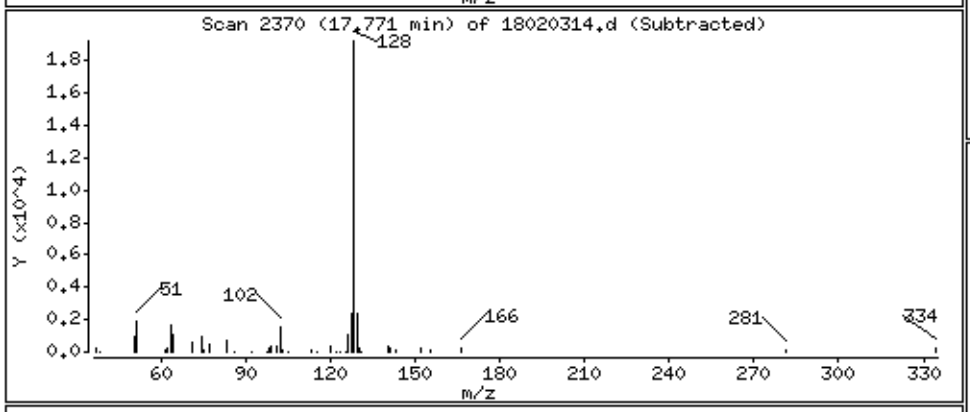
Column phase: RTx-624

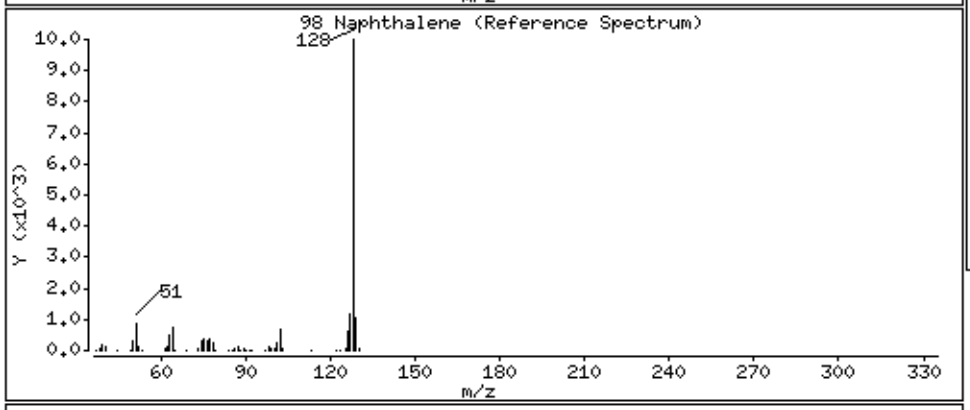
Column diameter: 0.53

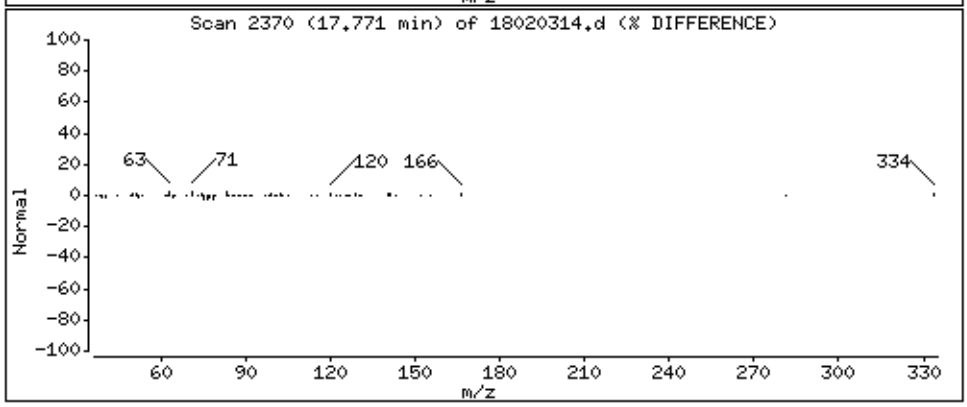
98 Naphthalene

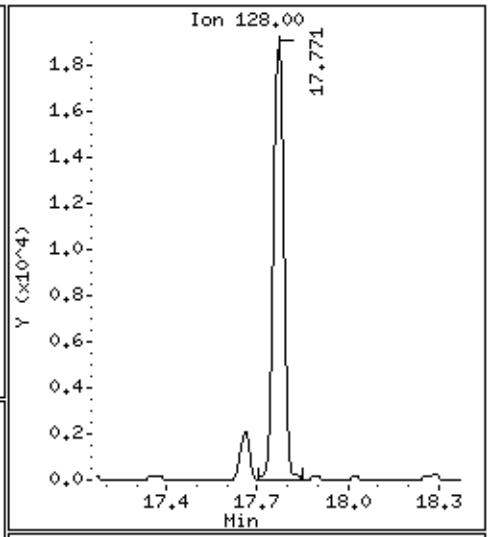
Concentration: 2.524 NG

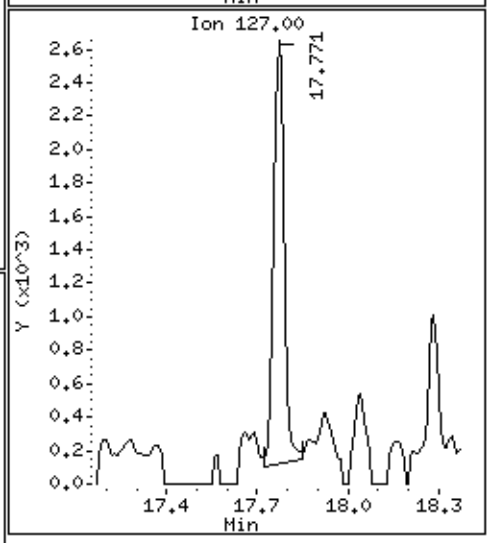












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Summary of Detected Compounds
EPA METHOD TO-17

Client Sample ID: B30-5IA013016

Lab ID#: 1602029-06A

Compound	Rpt. Limit (ng)	Rpt. Limit (ug/m3)	Amount (ng)	Amount (ug/m3)
Naphthalene	1.0	0.067	1.2	0.082

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Client Sample ID: B30-5IA013016

Lab ID#: 1602029-06A

EPA METHOD TO-17

File Name:	**18020315**	**Date of Extraction: NA**	**Date of Collection: 1/31/16 10:55:00 AM**
Dil. Factor:	**1.00**		**Date of Analysis: 2/3/16 07:47 PM**

Compound	Rpt. Limit (ng)	Rpt. Limit (ug/m3)	Amount (ng)	Amount (ug/m3)
Naphthalene	1.0	0.067	1.2	0.082

Air Sample Volume(L): 14.9
Container Type: TO-17 VI Tube

Surrogates	%Recovery	Method Limits
Naphthalene-d8	92	50-150

Eurofins Air Toxics Inc.

EPA Method TO-17 GC/MS

Data file : /chem/msd18.i/03Feb2016.b/18020315.d
Lab Smp Id: 1602029-06A
Inj Date : 03-FEB-2016 19:47
Operator : LA Inst ID: msd18.i
Smp Info : ;1602029-06A
Misc Info : DP G0144385
Comment :
Method : /chem/msd18.i/03Feb2016.b/186z0114vi.m
Meth Date : 12-Feb-2016 11:48 lantonic Quant Type: ISTD
Cal Date : 14-JAN-2016 18:27 Cal File: 18011415.d
Als bottle: 26
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: naph.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

RT	EXP RT	(REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (ng)	FINAL (NG)	TARGET RANGE	RATIO
* 79 Bromofluorobenzene						CAS #: 460-00-4		
13.208	13.200	(1.000)	174	433385	36.0000		80.00- 120.00	100.00
13.208	13.200	(1.000)	95	614546			78.78- 138.78	141.80
13.208	13.200	(1.000)	176	418373			67.05- 127.05	96.54
$ 97 Naphthalene-d8						CAS #: 1146-65-2		
17.728	17.728	(1.342)	136	388793	22.9271	22.927	80.00- 120.00	100.00
17.728	17.728	(1.342)	108	40072			0.00- 39.05	10.31
98 Naphthalene						CAS #: 91-20-3		
17.771	17.771	(1.345)	128	21328	1.21847	1.218	80.00- 120.00	100.00
17.771	17.771	(1.345)	127	3353			0.00- 43.03	15.73

Report Date: 12-Feb-2016 11:50

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd18.i
Lab File ID: 18020315.d
Lab Smp Id: 1602029-06A
Analysis Type: VOA
Quant Type: ISTD
Operator: LA
Method File: /chem/msd18.i/03Feb2016.b/186z0114vi.m
Misc Info: DP G0144385

Calibration Date: 03-FEB-2016
Calibration Time: 11:04

Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
79 Bromofluorobenzen	345554	207332	483776	433385	25.42

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
79 Bromofluorobenzen	13.20	12.87	13.53	13.21	0.05

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Report Date: 12-Feb-2016 11:50

Eurofins Air Toxics Inc.

RECOVERY REPORT

Client Name:
Client SDG: 03Feb2016
Sample Matrix: GAS
Fraction: VOA
Lab Smp Id: 1602029-06A
Level: LOW
Operator: LA
Data Type: MS DATA
SampleType: SAMPLE
SpikeList File: VOC+PAHlcs50.spk
Quant Type: ISTD
Sublist File: naph.sub
Method File: /chem/msd18.i/03Feb2016.b/186z0114vi.m
Misc Info: DP G0144385

SURROGATE COMPOUND	CONC ADDED NG	CONC RECOVERED NG	% RECOVERED	LIMITS
$ 97 Naphthalene-d8	25.000	22.927	91.71	50-150

Data File: /chem/msd18.i/03Feb2016.b/18020315.d

Page 1

Date : 03-FEB-2016 19:47

Client ID:

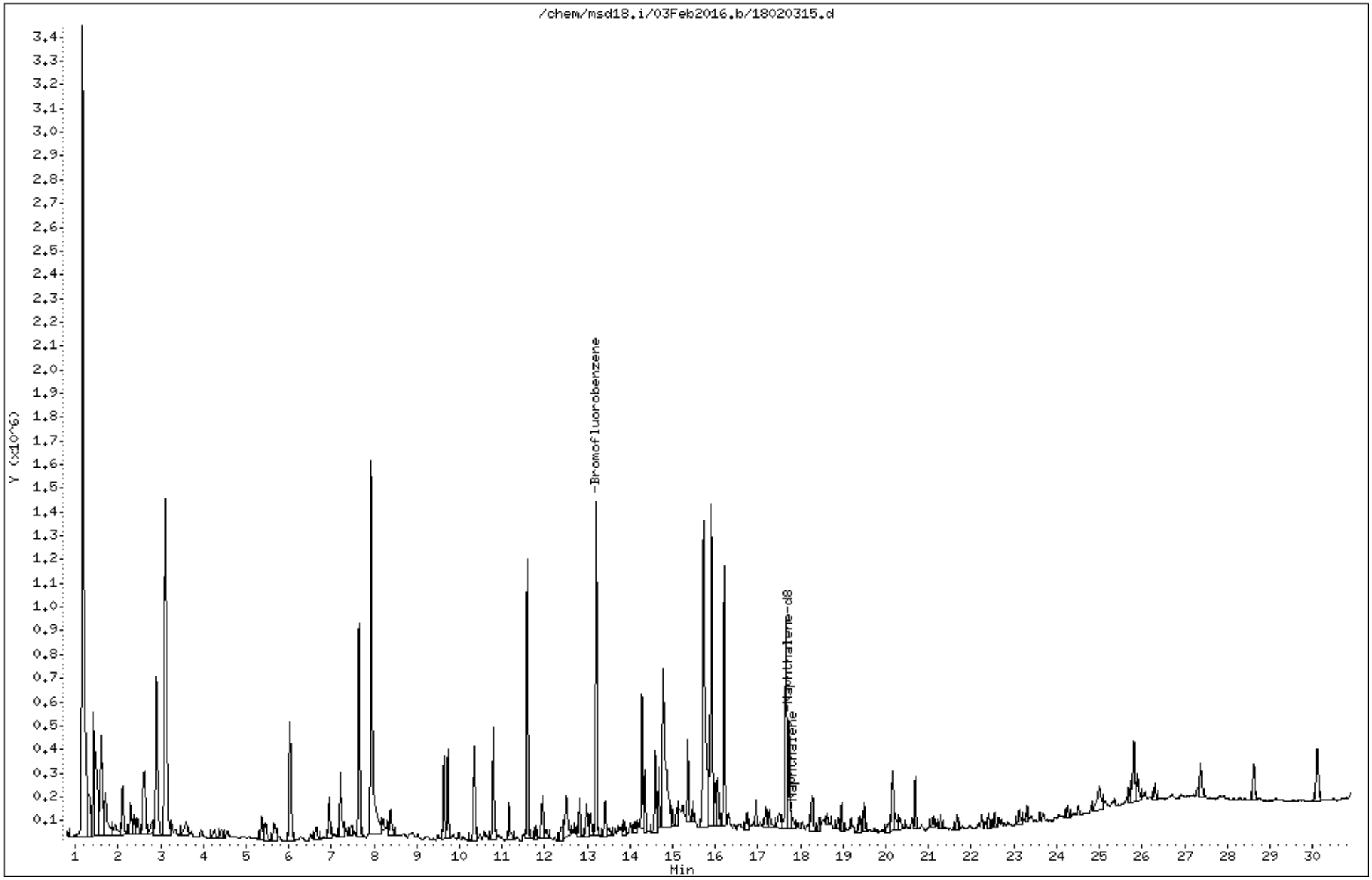
Instrument: msd18.i

Sample Info: :1602029-06A

Operator: LA

Column phase: RTx-624

Column diameter: 0.53



Data File: /chem/msd18.i/03Feb2016.b/18020315.d

Date : 03-FEB-2016 19:47

Client ID:

Instrument: msd18.i

Sample Info: ;1602029-06A

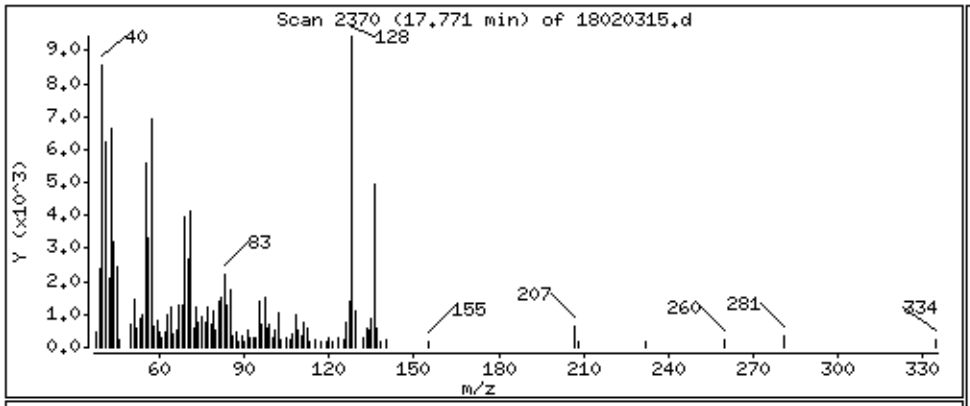
Operator: LA

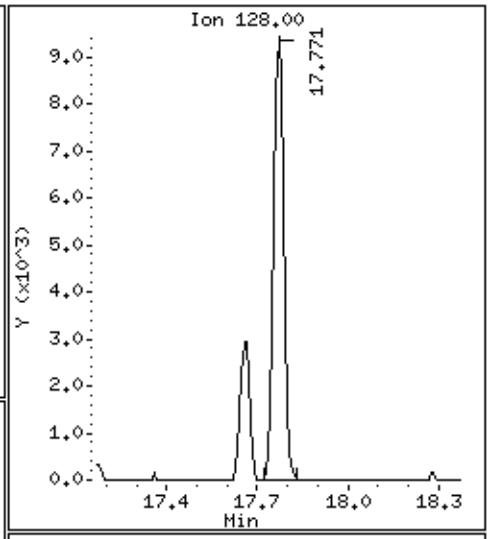
Column phase: RTx-624

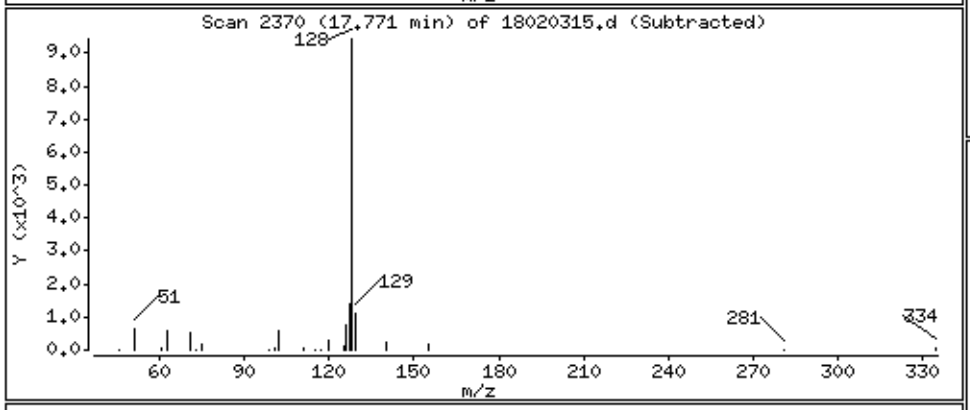
Column diameter: 0.53

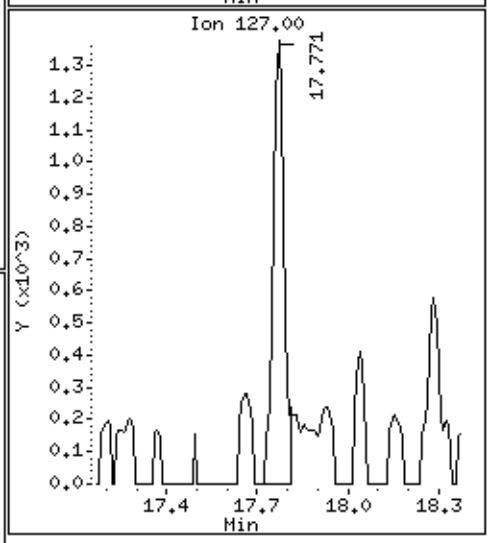
98 Naphthalene

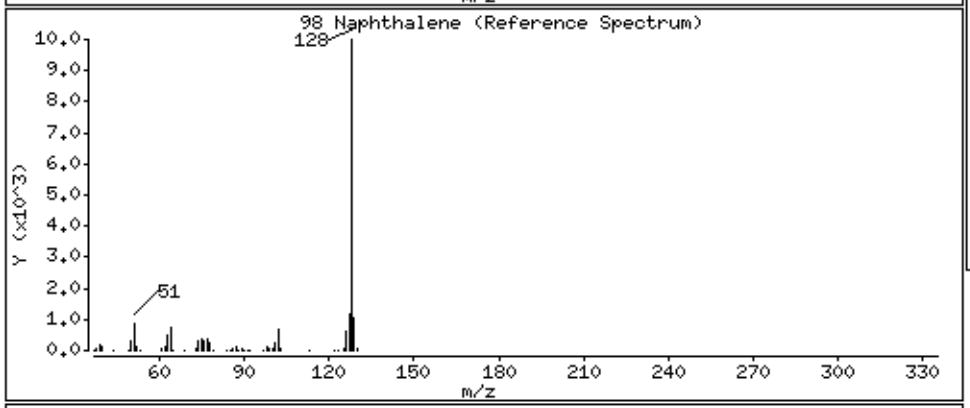
Concentration: 1.218 NG

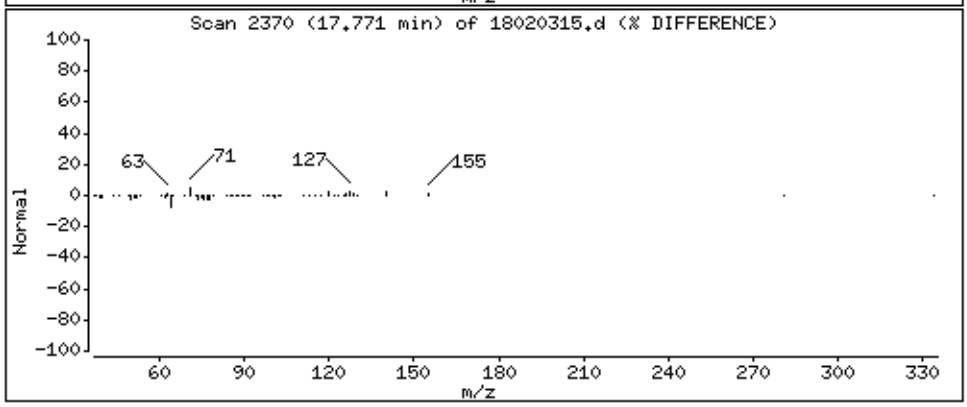












Summary of Detected Compounds
EPA METHOD TO-17

Client Sample ID: B3042AA013016

Lab ID#: 1602029-07A

No Detections Were Found.

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Client Sample ID: B3042AA013016

Lab ID#: 1602029-07A

EPA METHOD TO-17

File Name:	**18020316**	**Date of Extraction: NA**	**Date of Collection: 1/30/16 5:55:00 PM**
Dil. Factor:	**1.00**		**Date of Analysis: 2/3/16 08:25 PM**

Compound	Rpt. Limit (ng)	Rpt. Limit (ug/m3)	Amount (ng)	Amount (ug/m3)
Naphthalene	1.0	0.068	Not Detected	Not Detected

Air Sample Volume(L): 14.6
Container Type: TO-17 VI Tube

Surrogates	%Recovery	Method Limits
Naphthalene-d8	61	50-150

Eurofins Air Toxics Inc.

EPA Method TO-17 GC/MS

Data file : /chem/msd18.i/03Feb2016.b/18020316.d
Lab Smp Id: 1602029-07A
Inj Date : 03-FEB-2016 20:25
Operator : LA Inst ID: msd18.i
Smp Info : ;1602029-07A
Misc Info : DP G0143465
Comment :
Method : /chem/msd18.i/03Feb2016.b/186z0114vi.m
Meth Date : 12-Feb-2016 11:48 lantonic Quant Type: ISTD
Cal Date : 14-JAN-2016 18:27 Cal File: 18011415.d
Als bottle: 27
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: naph.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

RT	EXP RT	(REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (ng)	FINAL (NG)	TARGET RANGE	RATIO
* 79 Bromofluorobenzene						CAS #: 460-00-4		
13.208	13.200	(1.000)	174	425644	36.0000		80.00- 120.00	100.00
13.208	13.200	(1.000)	95	610385			78.78- 138.78	143.40
13.208	13.200	(1.000)	176	413520			67.05- 127.05	97.15
$ 97 Naphthalene-d8						CAS #: 1146-65-2		
17.728	17.728	(1.342)	136	253869	15.2429	15.243	80.00- 120.00	100.00
17.728	17.728	(1.342)	108	27523			0.00- 39.05	10.84

Report Date: 12-Feb-2016 11:50

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd18.i
Lab File ID: 18020316.d
Lab Smp Id: 1602029-07A
Analysis Type: VOA
Quant Type: ISTD
Operator: LA
Method File: /chem/msd18.i/03Feb2016.b/186z0114vi.m
Misc Info: DP G0143465

Calibration Date: 03-FEB-2016
Calibration Time: 11:04

Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
79 Bromofluorobenzen	345554	207332	483776	425644	23.18

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
79 Bromofluorobenzen	13.20	12.87	13.53	13.21	0.05

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Report Date: 12-Feb-2016 11:50

Eurofins Air Toxics Inc.

RECOVERY REPORT

Client Name: Client SDG: 03Feb2016
Sample Matrix: GAS Fraction: VOA
Lab Smp Id: 1602029-07A
Level: LOW Operator: LA
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: VOC+PAHlcs50.spk Quant Type: ISTD
Sublist File: naph.sub
Method File: /chem/msd18.i/03Feb2016.b/186z0114vi.m
Misc Info: DP G0143465

SURROGATE COMPOUND	CONC ADDED NG	CONC RECOVERED NG	% RECOVERED	LIMITS
$ 97 Naphthalene-d8	25.000	15.243	60.97	50-150

Data File: /chem/msd18.i/03Feb2016.b/18020316.d

Date : 03-FEB-2016 20:25

Client ID:

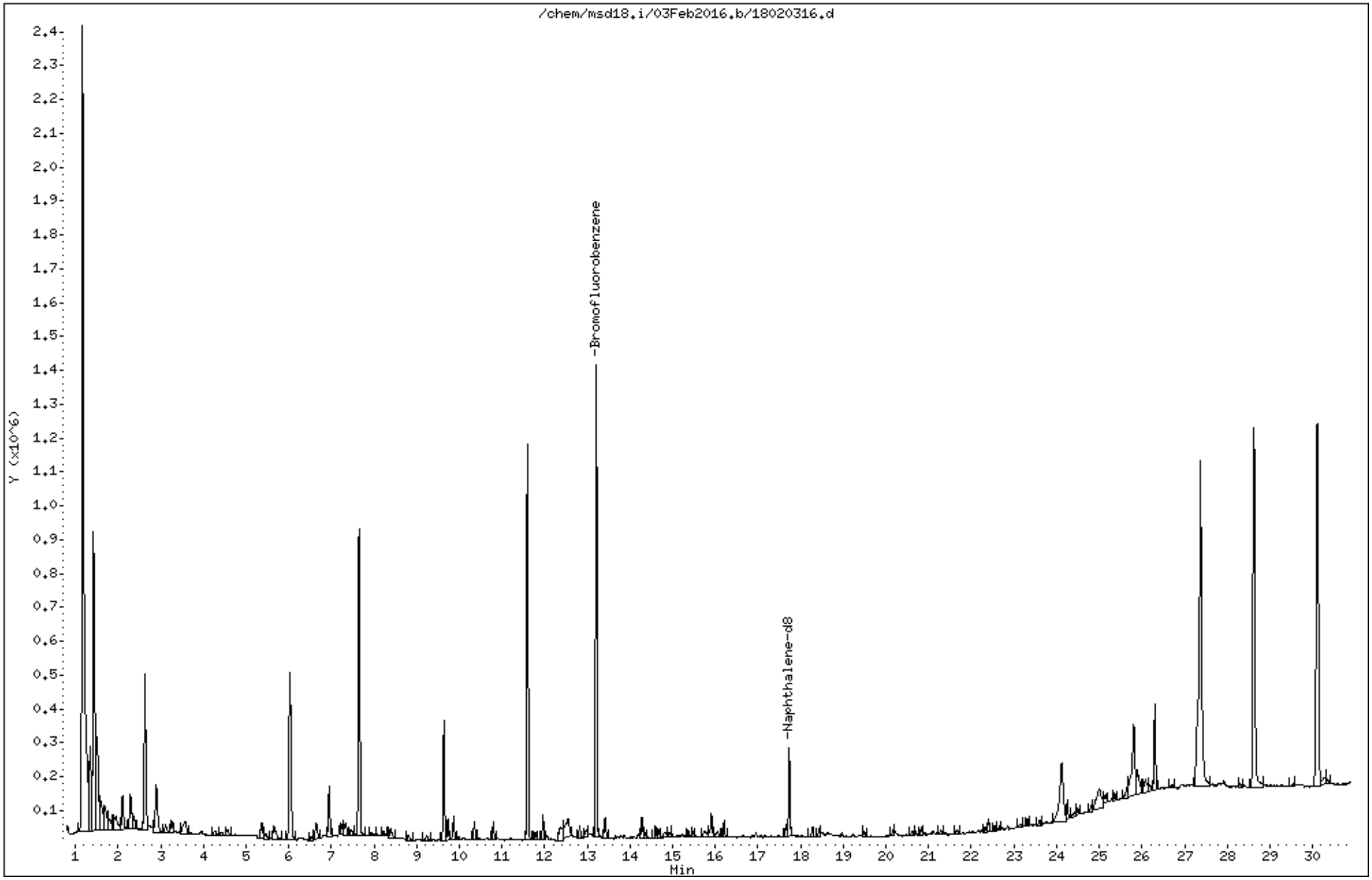
Instrument: msd18.i

Sample Info: ;1602029-07A

Operator: LA

Column phase: RTx-624

Column diameter: 0.53



Summary of Detected Compounds
EPA METHOD TO-17

Client Sample ID: B42-1IA013016

Lab ID#: 1602029-08A

Compound	Rpt. Limit (ng)	Rpt. Limit (ug/m3)	Amount (ng)	Amount (ug/m3)
Naphthalene	1.0	0.067	1.7	0.12

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Client Sample ID: B42-1IA013016

Lab ID#: 1602029-08A

EPA METHOD TO-17

File Name:	**18020317**	**Date of Extraction: NA**	**Date of Collection: 1/31/16 11:20:00 AM**
Dil. Factor:	**1.00**		**Date of Analysis: 2/3/16 09:03 PM**

Compound	Rpt. Limit (ng)	Rpt. Limit (ug/m3)	Amount (ng)	Amount (ug/m3)
Naphthalene	1.0	0.067	1.7	0.12

Air Sample Volume(L): 14.9
Container Type: TO-17 VI Tube

Surrogates	%Recovery	Method Limits
Naphthalene-d8	84	50-150

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EPA Method TO-17 GC/MS

Data file : /chem/msd18.i/03Feb2016.b/18020317.d
Lab Smp Id: 1602029-08A
Inj Date : 03-FEB-2016 21:03
Operator : LA Inst ID: msd18.i
Smp Info : ;1602029-08A
Misc Info : DP G0140124
Comment :
Method : /chem/msd18.i/03Feb2016.b/186z0114vi.m
Meth Date : 12-Feb-2016 11:48 lantonic Quant Type: ISTD
Cal Date : 14-JAN-2016 18:27 Cal File: 18011415.d
Als bottle: 28
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: naph.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

RT	EXP RT	(REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (ng)	FINAL (NG)	TARGET RANGE	RATIO
* 79 Bromofluorobenzene						CAS #: 460-00-4		
13.208	13.200	(1.000)	174	440094	36.0000		80.00- 120.00	100.00
13.208	13.200	(1.000)	95	630667			78.78- 138.78	143.30
13.208	13.200	(1.000)	176	425735			67.05- 127.05	96.74
$ 97 Naphthalene-d8						CAS #: 1146-65-2		
17.728	17.728	(1.342)	136	363942	21.1345	21.134	80.00- 120.00	100.00
17.728	17.728	(1.342)	108	36722			0.00- 39.05	10.09
98 Naphthalene						CAS #: 91-20-3		
17.771	17.771	(1.345)	128	30764	1.73074	1.731	80.00- 120.00	100.00
17.771	17.771	(1.345)	127	4283			0.00- 43.03	13.93

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd18.i
Lab File ID: 18020317.d
Lab Smp Id: 1602029-08A
Analysis Type: VOA
Quant Type: ISTD
Operator: LA
Method File: /chem/msd18.i/03Feb2016.b/186z0114vi.m
Misc Info: DP G0140124

Calibration Date: 03-FEB-2016
Calibration Time: 11:04

Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
79 Bromofluorobenzen	345554	207332	483776	440094	27.36

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
79 Bromofluorobenzen	13.20	12.87	13.53	13.21	0.05

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Report Date: 12-Feb-2016 11:50

Eurofins Air Toxics Inc.

RECOVERY REPORT

Client Name:
Client SDG: 03Feb2016
Sample Matrix: GAS
Fraction: VOA
Lab Smp Id: 1602029-08A
Level: LOW
Operator: LA
Data Type: MS DATA
SampleType: SAMPLE
SpikeList File: VOC+PAHlcs50.spk
Quant Type: ISTD
Sublist File: naph.sub
Method File: /chem/msd18.i/03Feb2016.b/186z0114vi.m
Misc Info: DP G0140124

SURROGATE COMPOUND	CONC ADDED NG	CONC RECOVERED NG	% RECOVERED	LIMITS
$ 97 Naphthalene-d8	25.000	21.134	84.54	50-150

Data File: /chem/msd18.i/03Feb2016.b/18020317.d

Date : 03-FEB-2016 21:03

Client ID:

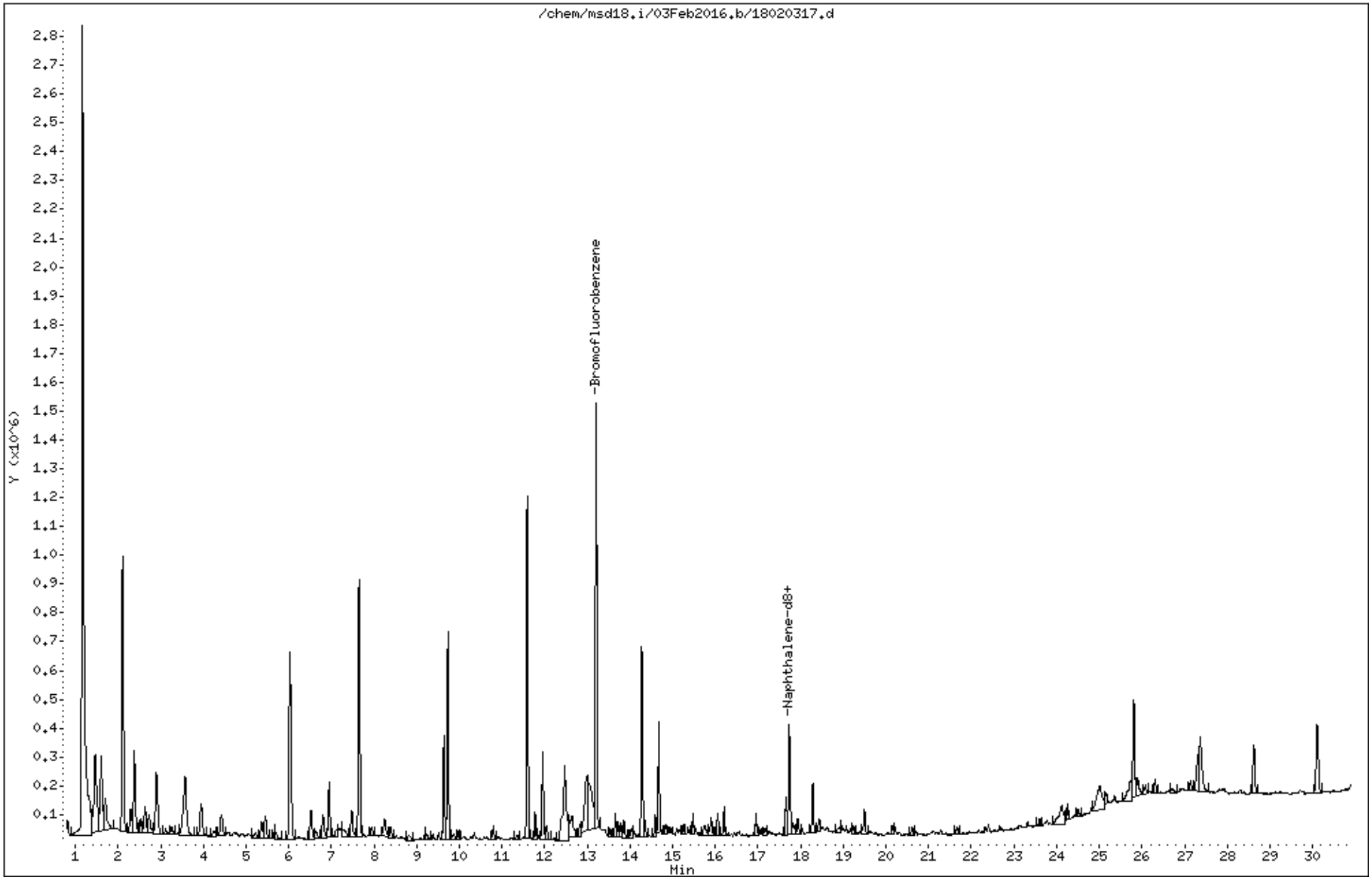
Instrument: msd18.i

Sample Info: ;1602029-08A

Operator: LA

Column phase: RTx-624

Column diameter: 0.53



Data File: /chem/msd18.i/03Feb2016.b/18020317.d

Date : 03-FEB-2016 21:03

Client ID:

Instrument: msd18.i

Sample Info: ;1602029-08A

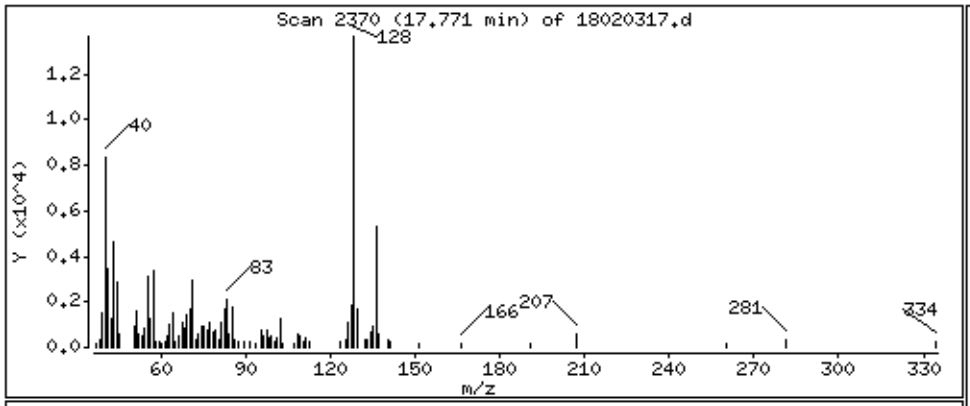
Operator: LA

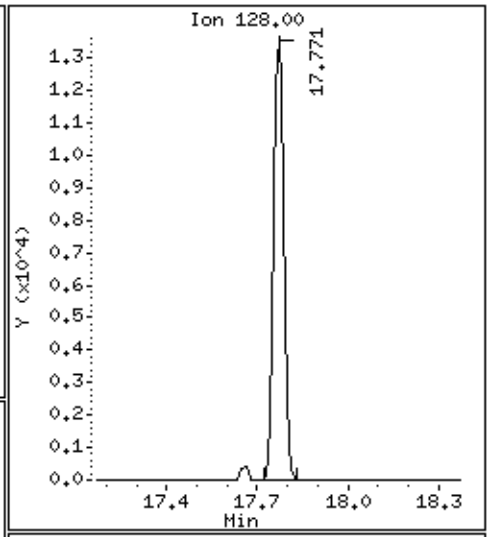
Column phase: RTx-624

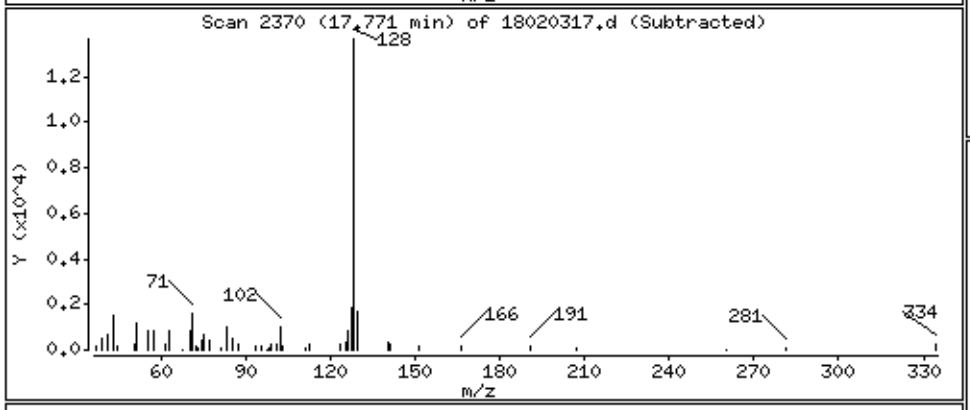
Column diameter: 0.53

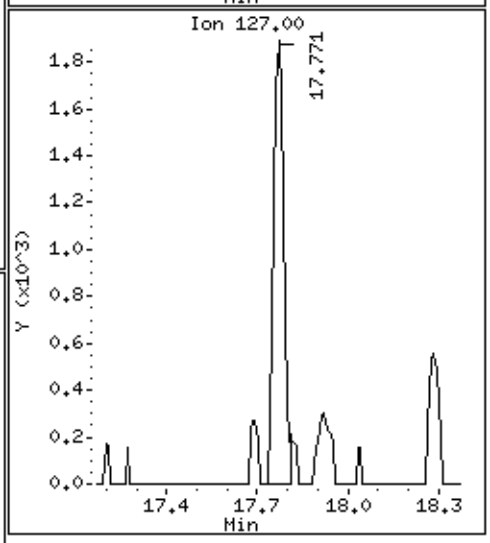
98 Naphthalene

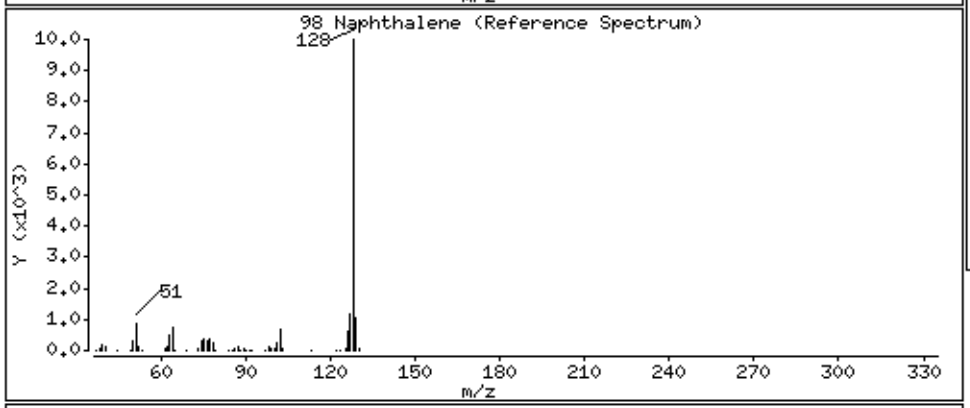
Concentration: 1.731 NG

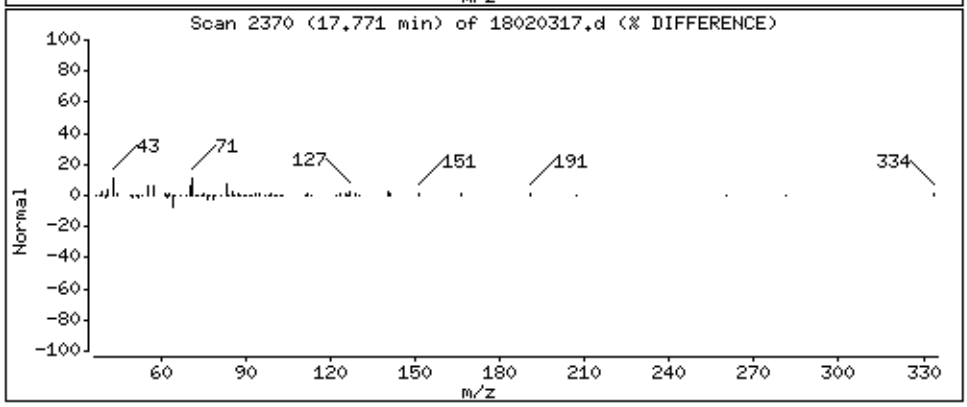












Summary of Detected Compounds
EPA METHOD TO-17

Client Sample ID: B42-2IA013016

Lab ID#: 1602029-09A

Compound	Rpt. Limit (ng)	Rpt. Limit (ug/m3)	Amount (ng)	Amount (ug/m3)
Naphthalene	1.0	0.068	1.5	0.10

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Client Sample ID: B42-2IA013016

Lab ID#: 1602029-09A

EPA METHOD TO-17

File Name:	**18020318**	**Date of Extraction: NA**	**Date of Collection: 1/31/16 11:08:00 AM**
Dil. Factor:	**1.00**		**Date of Analysis: 2/3/16 09:41 PM**

Compound	Rpt. Limit (ng)	Rpt. Limit (ug/m3)	Amount (ng)	Amount (ug/m3)
Naphthalene	1.0	0.068	1.5	0.10

Air Sample Volume(L): 14.8
Container Type: TO-17 VI Tube

Surrogates	%Recovery	Method Limits
Naphthalene-d8	99	50-150

Eurofins Air Toxics Inc.

EPA Method TO-17 GC/MS

Data file : /chem/msd18.i/03Feb2016.b/18020318.d
Lab Smp Id: 1602029-09A
Inj Date : 03-FEB-2016 21:41
Operator : LA Inst ID: msd18.i
Smp Info : ;1602029-09A
Misc Info : DP G0137189
Comment :
Method : /chem/msd18.i/03Feb2016.b/186z0114vi.m
Meth Date : 12-Feb-2016 11:48 lantonic Quant Type: ISTD
Cal Date : 14-JAN-2016 18:27 Cal File: 18011415.d
Als bottle: 29
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: naph.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

RT	EXP RT	(REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (ng)	FINAL (NG)	TARGET RANGE	RATIO
* 79 Bromofluorobenzene						CAS #: 460-00-4		
13.208	13.200	(1.000)	174	424756	36.0000		80.00- 120.00	100.00
13.208	13.200	(1.000)	95	605542			78.78- 138.78	142.56
13.208	13.200	(1.000)	176	405623			67.05- 127.05	95.50
$ 97 Naphthalene-d8						CAS #: 1146-65-2		
17.728	17.728	(1.342)	136	411657	24.7686	24.768	80.00- 120.00	100.00
17.728	17.728	(1.342)	108	40372			0.00- 39.05	9.81
98 Naphthalene						CAS #: 91-20-3		
17.771	17.771	(1.345)	128	26064	1.51928	1.519	80.00- 120.00	100.00
17.771	17.771	(1.345)	127	3754			0.00- 43.03	14.40

Report Date: 12-Feb-2016 11:50

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd18.i
Lab File ID: 18020318.d
Lab Smp Id: 1602029-09A
Analysis Type: VOA
Quant Type: ISTD
Operator: LA
Method File: /chem/msd18.i/03Feb2016.b/186z0114vi.m
Misc Info: DP G0137189

Calibration Date: 03-FEB-2016
Calibration Time: 11:04

Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
79 Bromofluorobenzen	345554	207332	483776	424756	22.92

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
79 Bromofluorobenzen	13.20	12.87	13.53	13.21	0.06

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Report Date: 12-Feb-2016 11:50

Eurofins Air Toxics Inc.

RECOVERY REPORT

Client Name:
Client SDG: 03Feb2016
Sample Matrix: GAS
Fraction: VOA
Lab Smp Id: 1602029-09A
Level: LOW
Operator: LA
Data Type: MS DATA
SampleType: SAMPLE
SpikeList File: VOC+PAHlcs50.spk
Quant Type: ISTD
Sublist File: naph.sub
Method File: /chem/msd18.i/03Feb2016.b/186z0114vi.m
Misc Info: DP G0137189

SURROGATE COMPOUND	CONC ADDED NG	CONC RECOVERED NG	% RECOVERED	LIMITS
$ 97 Naphthalene-d8	25.000	24.768	99.07	50-150

Data File: /chem/msd18.i/03Feb2016.b/18020318.d

Date : 03-FEB-2016 21:41

Client ID:

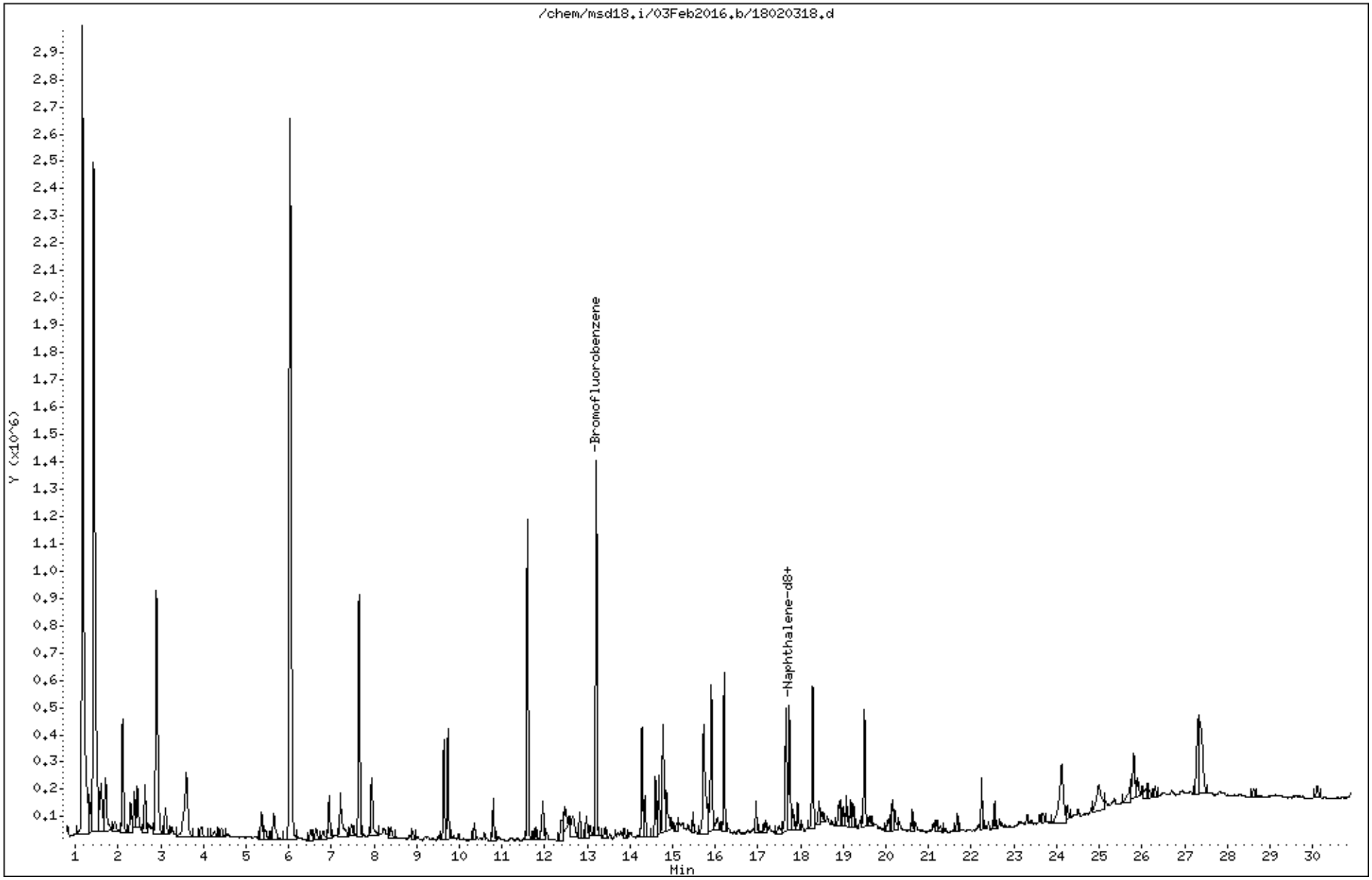
Instrument: msd18.i

Sample Info: ;1602029-09A

Operator: LA

Column phase: RTx-624

Column diameter: 0.53



Data File: /chem/msd18.i/03Feb2016.b/18020318.d

Date : 03-FEB-2016 21:41

Client ID:

Instrument: msd18.i

Sample Info: ;1602029-09A

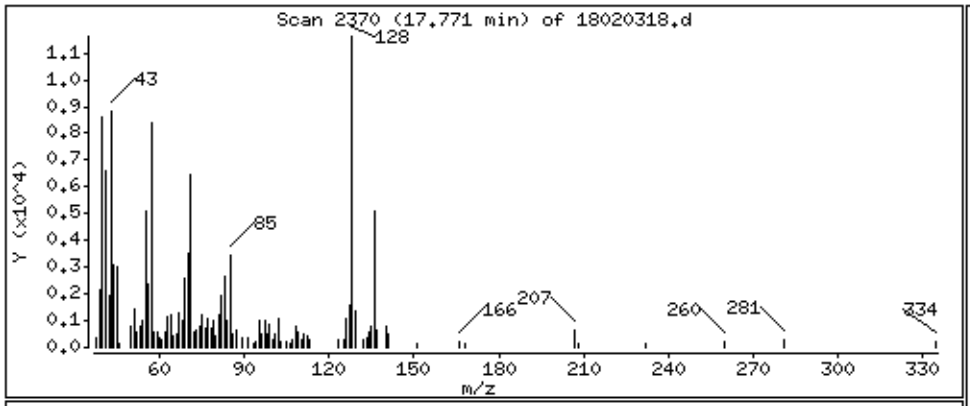
Operator: LA

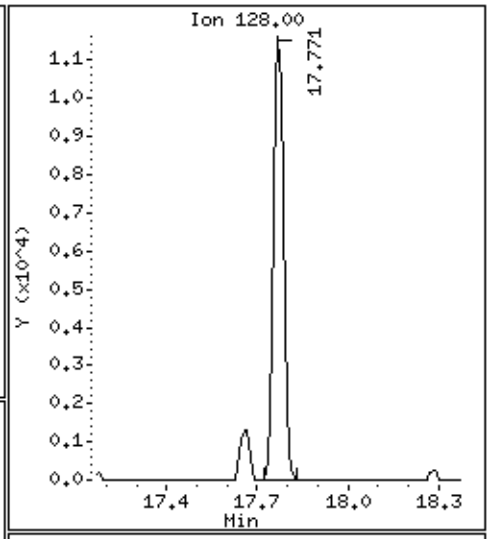
Column phase: RTx-624

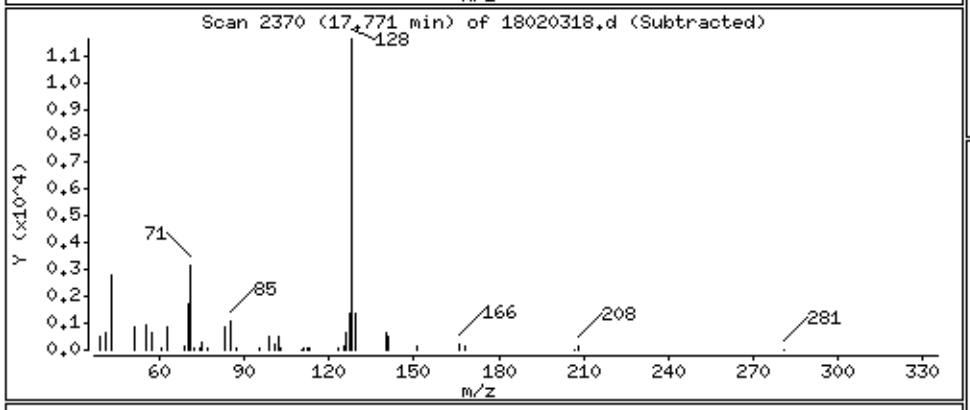
Column diameter: 0.53

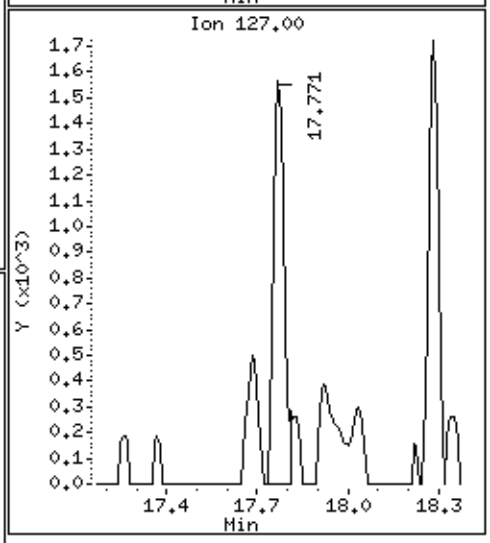
98 Naphthalene

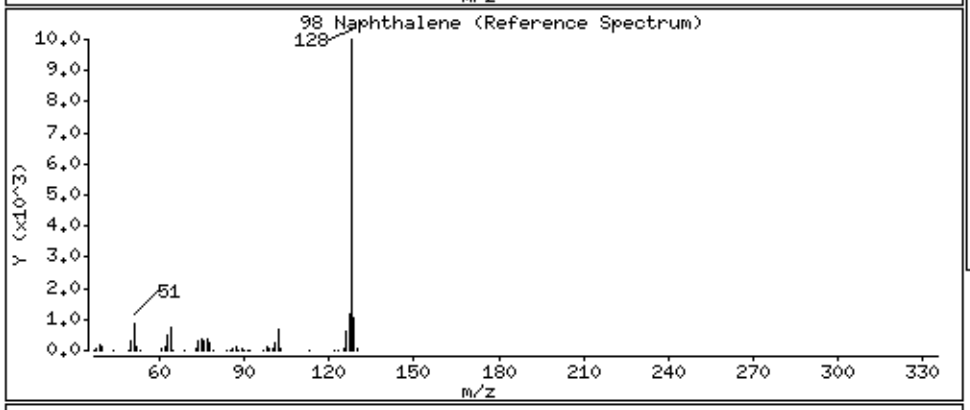
Concentration: 1.519 NG

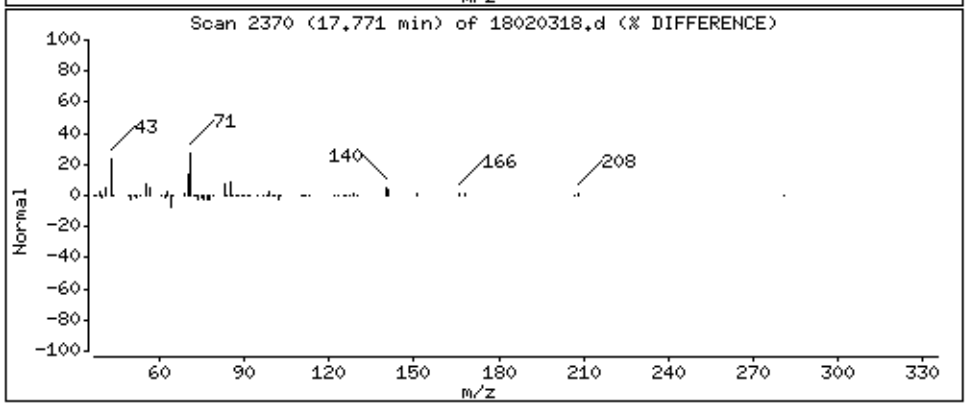












Summary of Detected Compounds
EPA METHOD TO-17

Client Sample ID: B42-3IA013016

Lab ID#: 1602029-10A

Compound	Rpt. Limit (ng)	Rpt. Limit (ug/m3)	Amount (ng)	Amount (ug/m3)
Naphthalene	1.0	0.068	1.3	0.091

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Client Sample ID: B42-3IA013016

Lab ID#: 1602029-10A

EPA METHOD TO-17

File Name:	**18020329**	**Date of Extraction: NA**	**Date of Collection: 1/31/16 11:15:00 AM**
Dil. Factor:	**1.00**		**Date of Analysis: 2/4/16 09:20 AM**

Compound	Rpt. Limit (ng)	Rpt. Limit (ug/m3)	Amount (ng)	Amount (ug/m3)
Naphthalene	1.0	0.068	1.3	0.091

Air Sample Volume(L): 14.8
Container Type: TO-17 VI Tube

Surrogates	%Recovery	Method Limits
Naphthalene-d8	90	50-150

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EPA Method TO-17 GC/MS

Data file : /chem/msd18.i/03Feb2016.b/18020329.d
Lab Smp Id: 1602029-10A
Inj Date : 04-FEB-2016 09:20
Operator : LA Inst ID: msd18.i
Smp Info : ;1602029-10A
Misc Info : DP G0145581, reanalysis
Comment :
Method : /chem/msd18.i/03Feb2016.b/186z0114vi.m
Meth Date : 12-Feb-2016 11:48 lantonic Quant Type: ISTD
Cal Date : 14-JAN-2016 18:27 Cal File: 18011415.d
Als bottle: 30
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: naph.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

RT	EXP RT	(REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (ng)	FINAL (NG)	TARGET RANGE	RATIO
* 79 Bromofluorobenzene						CAS #: 460-00-4		
13.208	13.200	(1.000)	174	356294	36.0000		80.00- 120.00	100.00
13.208	13.200	(1.000)	95	496681			78.78- 138.78	139.40
13.208	13.200	(1.000)	176	343838			67.05- 127.05	96.50
$ 97 Naphthalene-d8						CAS #: 1146-65-2		
17.728	17.728	(1.342)	136	312474	22.4136	22.414	80.00- 120.00	100.00
17.728	17.728	(1.342)	108	30848			0.00- 39.05	9.87
98 Naphthalene						CAS #: 91-20-3		
17.771	17.771	(1.345)	128	19312	1.34201	1.342	80.00- 120.00	100.00
17.771	17.771	(1.345)	127	2697			0.00- 43.03	13.97

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd18.i
Lab File ID: 18020329.d
Lab Smp Id: 1602029-10A
Analysis Type: VOA
Quant Type: ISTD
Operator: LA
Method File: /chem/msd18.i/03Feb2016.b/186z0114vi.m
Misc Info: DP G0145581, reanalysis

Calibration Date: 03-FEB-2016
Calibration Time: 11:04

Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
79 Bromofluorobenzen	345554	207332	483776	356294	3.11

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
79 Bromofluorobenzen	13.20	12.87	13.53	13.21	0.05

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Report Date: 12-Feb-2016 11:51

Eurofins Air Toxics Inc.

RECOVERY REPORT

Client Name:
Client SDG: 03Feb2016
Sample Matrix: GAS
Fraction: VOA
Lab Smp Id: 1602029-10A
Level: LOW
Operator: LA
Data Type: MS DATA
SampleType: SAMPLE
SpikeList File: VOC+PAHlcs50.spk
Quant Type: ISTD
Sublist File: naph.sub
Method File: /chem/msd18.i/03Feb2016.b/186z0114vi.m
Misc Info: DP G0145581, reanalysis

SURROGATE COMPOUND	CONC ADDED NG	CONC RECOVERED NG	% RECOVERED	LIMITS
$ 97 Naphthalene-d8	25.000	22.414	89.65	50-150

Data File: /chem/msd18.i/03Feb2016.b/18020329.d

Date : 04-FEB-2016 09:20

Client ID:

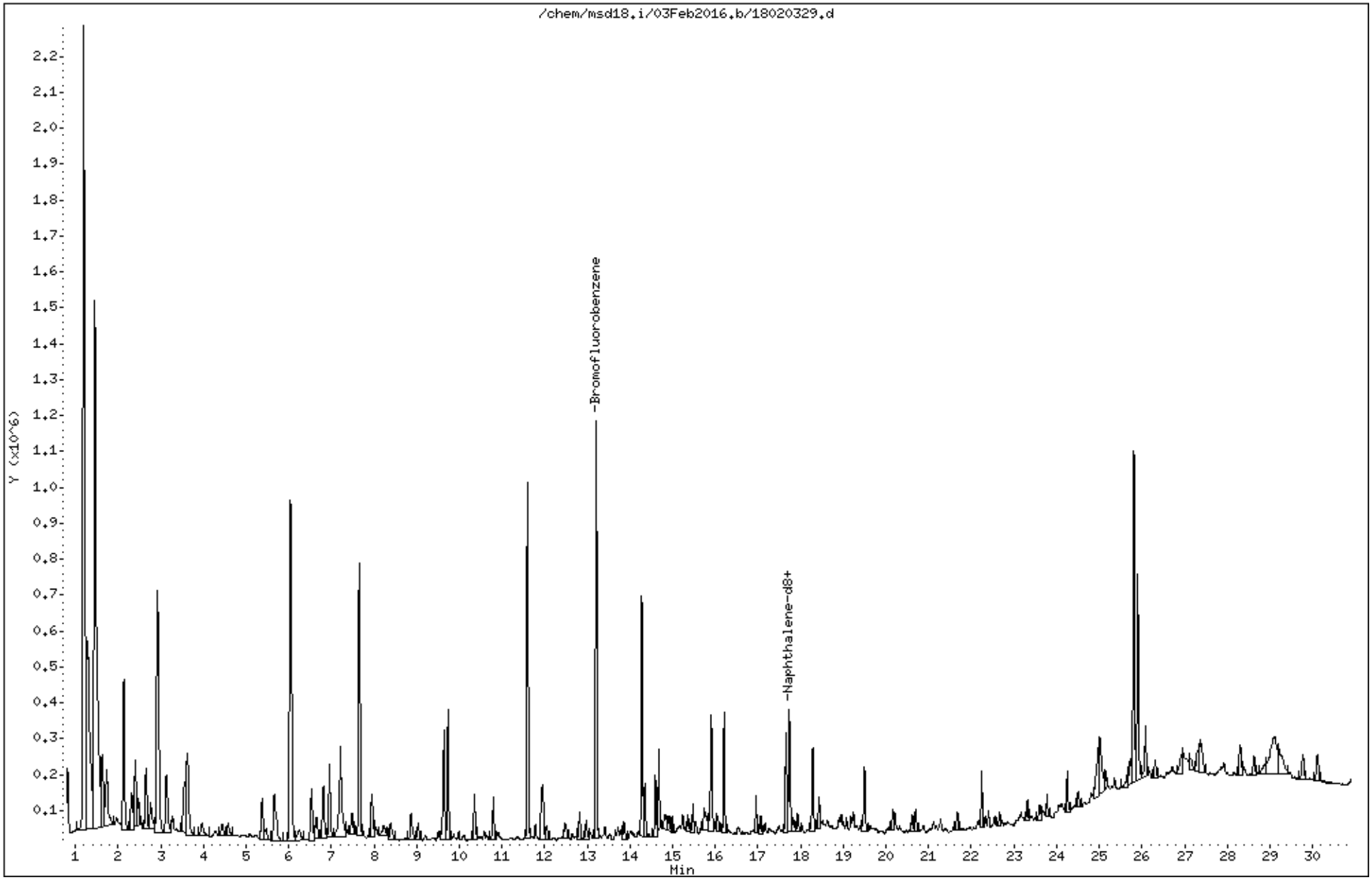
Instrument: msd18.i

Sample Info: ;1602029-10A

Operator: LA

Column phase: RTx-624

Column diameter: 0.53



Data File: /chem/msd18.i/03Feb2016.b/18020329.d

Date : 04-FEB-2016 09:20

Client ID:

Instrument: msd18.i

Sample Info: ;1602029-10A

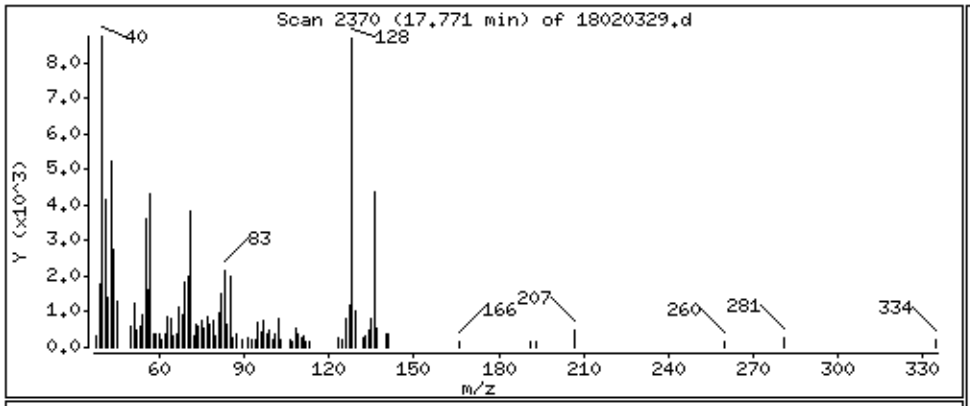
Operator: LA

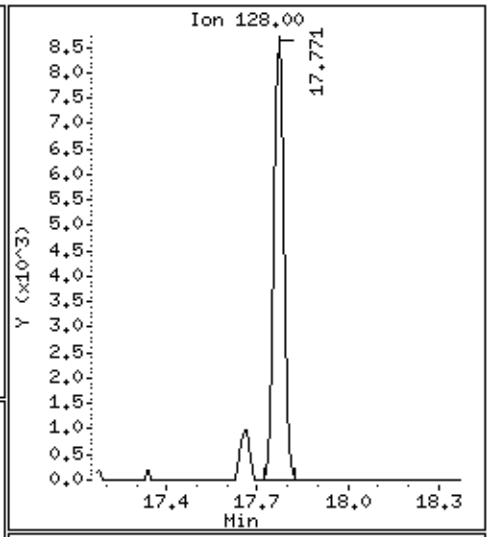
Column phase: RTx-624

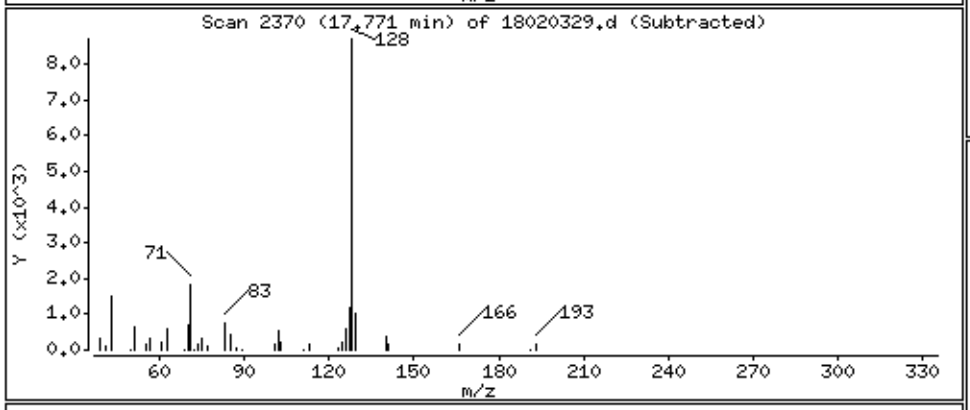
Column diameter: 0.53

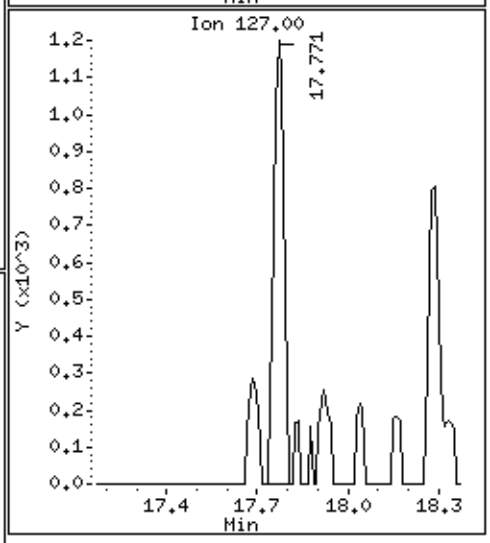
98 Naphthalene

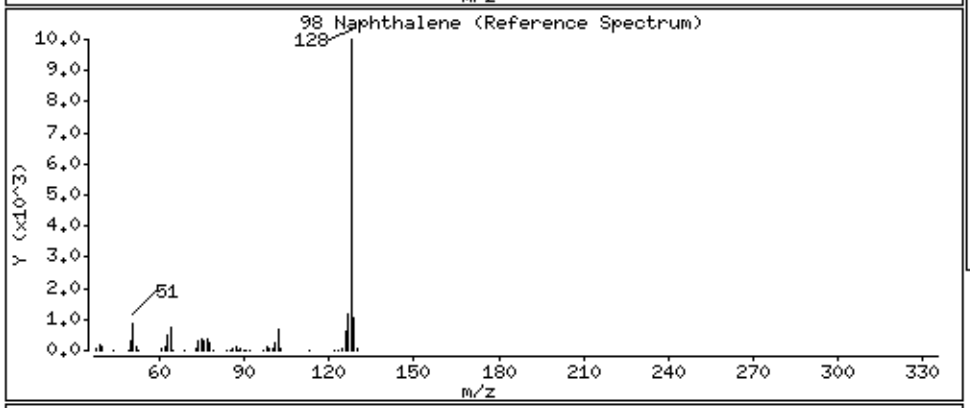
Concentration: 1.342 NG

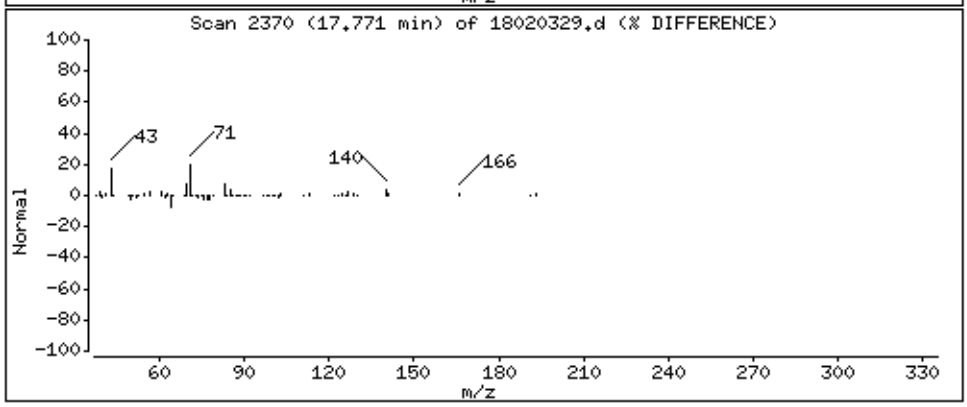












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Summary of Detected Compounds
EPA METHOD TO-17

Client Sample ID: B3042-FB1IA

Lab ID#: 1602029-11A

Compound	Rpt. Limit (ng)	Rpt. Limit (ug/m3)	Amount (ng)	Amount (ug/m3)
Naphthalene	1.0	0.067	0.48 J	0.032 J

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Client Sample ID: B3042-FB1IA

Lab ID#: 1602029-11A

EPA METHOD TO-17

File Name:	**18020309**	**Date of Extraction: NA**	**Date of Collection: 1/31/16 10:52:00 AM**
Dil. Factor:	**1.00**		**Date of Analysis: 2/3/16 03:56 PM**

Compound	Rpt. Limit (ng)	Rpt. Limit (ug/m3)	Amount (ng)	Amount (ug/m3)
Naphthalene	1.0	0.067	0.48 J	0.032 J

Air Sample Volume(L): 14.9

J = Estimated value.

Container Type: TO-17 VI Tube

Surrogates	%Recovery	Method Limits
Naphthalene-d8	87	50-150

Eurofins Air Toxics Inc.

EPA Method TO-17 GC/MS

Data file : /chem/msd18.i/03Feb2016.b/18020309.d
Lab Smp Id: 1602029-11A
Inj Date : 03-FEB-2016 15:56
Operator : LA Inst ID: msd18.i
Smp Info : ;1602029-11A
Misc Info : DP G0130962, reanalysis
Comment :
Method : /chem/msd18.i/03Feb2016.b/186z0114vi.m
Meth Date : 12-Feb-2016 11:48 lantonic Quant Type: ISTD
Cal Date : 14-JAN-2016 18:27 Cal File: 18011415.d
Als bottle: 11
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: naph.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

RT	EXP RT	(REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (ng)	FINAL (NG)	TARGET RANGE	RATIO
* 79 Bromofluorobenzene						CAS #: 460-00-4		
13.215	13.200	(1.000)	174	312613	36.0000		80.00- 120.00	100.00
13.208	13.200	(1.000)	95	440345			78.78- 138.78	140.86
13.215	13.200	(1.000)	176	301314			67.05- 127.05	96.39
$ 97 Naphthalene-d8						CAS #: 1146-65-2		
17.735	17.728	(1.342)	136	264826	21.6500	21.650	80.00- 120.00	100.00
17.735	17.728	(1.342)	108	26212			0.00- 39.05	9.90
98 Naphthalene						CAS #: 91-20-3		
17.778	17.771	(1.345)	128	6095	0.48272	0.4827	80.00- 120.00	100.00(a)
17.771	17.771	(1.345)	127	555			0.00- 43.03	9.11

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd18.i
Lab File ID: 18020309.d
Lab Smp Id: 1602029-11A
Analysis Type: VOA
Quant Type: ISTD
Operator: LA
Method File: /chem/msd18.i/03Feb2016.b/186z0114vi.m
Misc Info: DP G0130962, reanalysis

Calibration Date: 03-FEB-2016
Calibration Time: 11:04

Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
79 Bromofluorobenzen	345554	207332	483776	312613	-9.53

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
79 Bromofluorobenzen	13.20	12.87	13.53	13.22	0.11

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Report Date: 12-Feb-2016 12:41

Eurofins Air Toxics Inc.

RECOVERY REPORT

Client Name:
Client SDG: 03Feb2016
Sample Matrix: GAS
Fraction: VOA
Lab Smp Id: 1602029-11A
Level: LOW
Operator: LA
Data Type: MS DATA
SampleType: SAMPLE
SpikeList File: VOC+PAHlcs50.spk
Quant Type: ISTD
Sublist File: naph.sub
Method File: /chem/msd18.i/03Feb2016.b/186z0114vi.m
Misc Info: DP G0130962, reanalysis

SURROGATE COMPOUND	CONC ADDED NG	CONC RECOVERED NG	% RECOVERED	LIMITS
$ 97 Naphthalene-d8	25.000	21.650	86.60	50-150

Data File: /chem/msd18.i/03Feb2016.b/18020309.d

Date : 03-FEB-2016 15:56

Client ID:

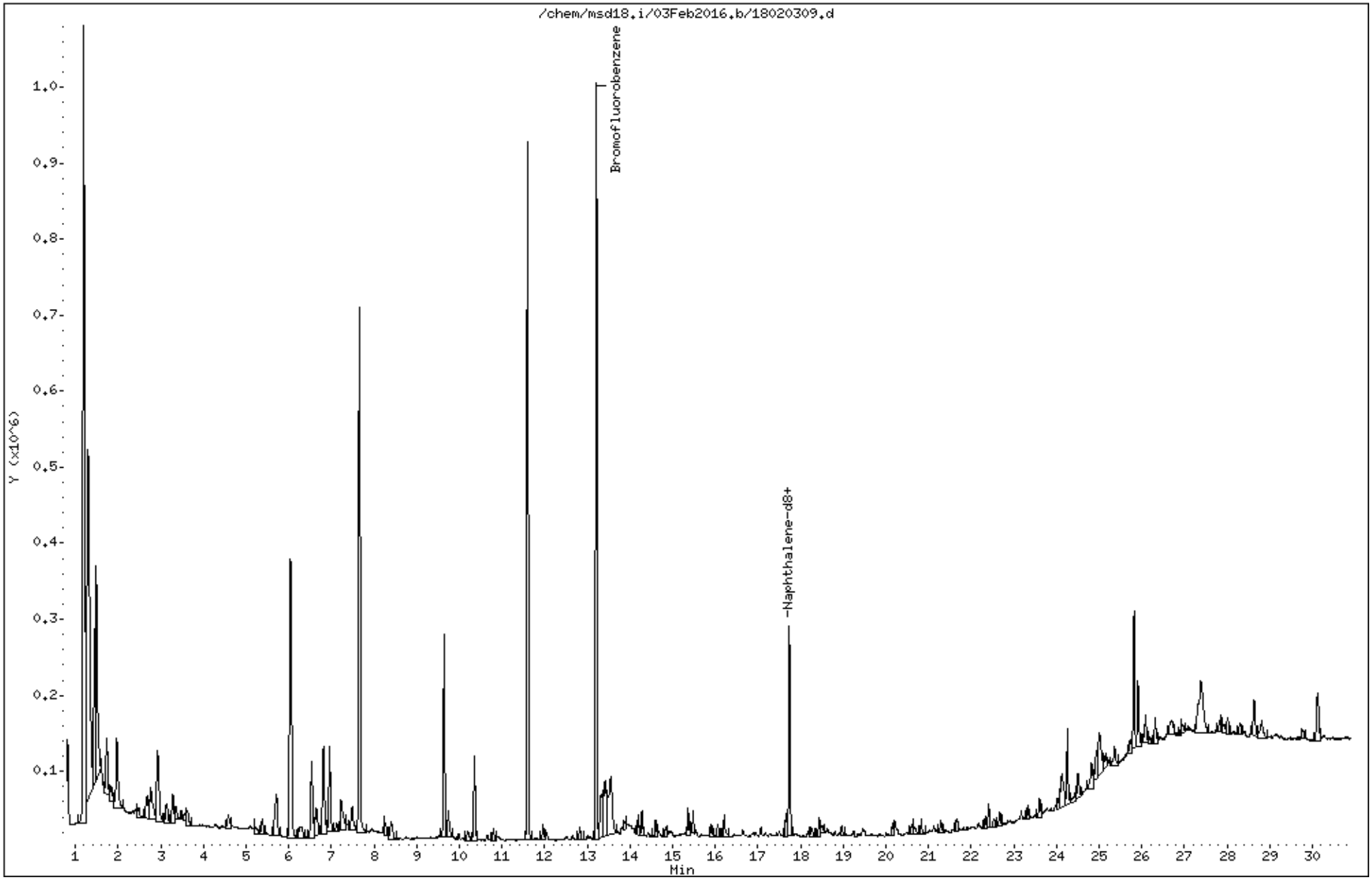
Instrument: msd18.i

Sample Info: ;1602029-11A

Operator: LA

Column phase: RTx-624

Column diameter: 0.53



Data File: /chem/msd18.i/03Feb2016.b/18020309.d

Date : 03-FEB-2016 15:56

Client ID:

Instrument: msd18.i

Sample Info: ;1602029-11A

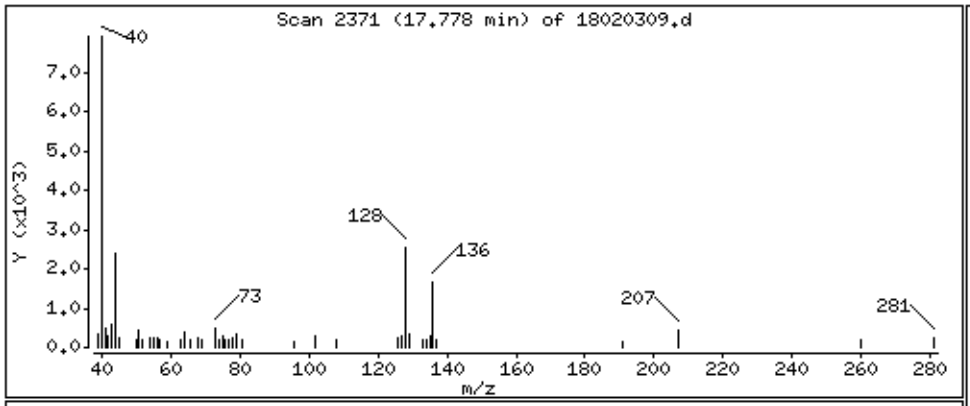
Operator: LA

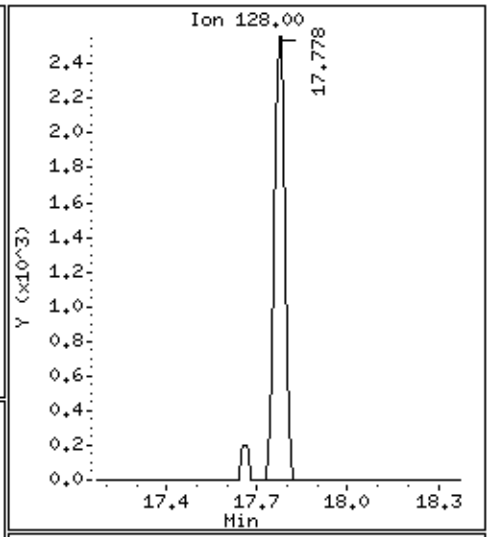
Column phase: RTx-624

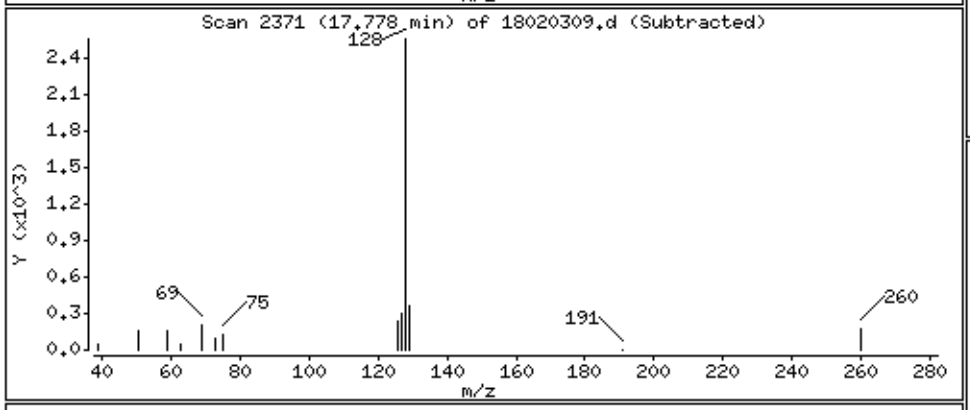
Column diameter: 0.53

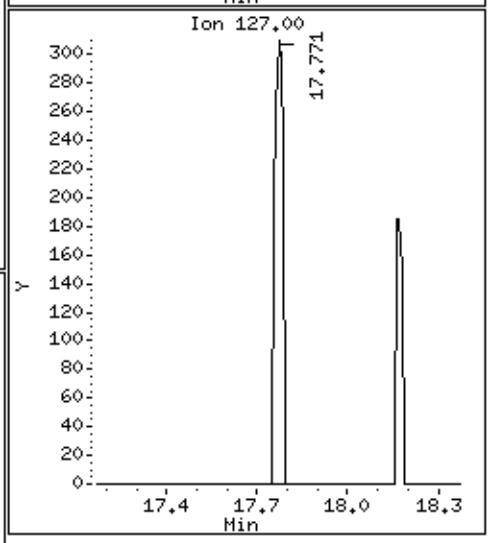
98 Naphthalene

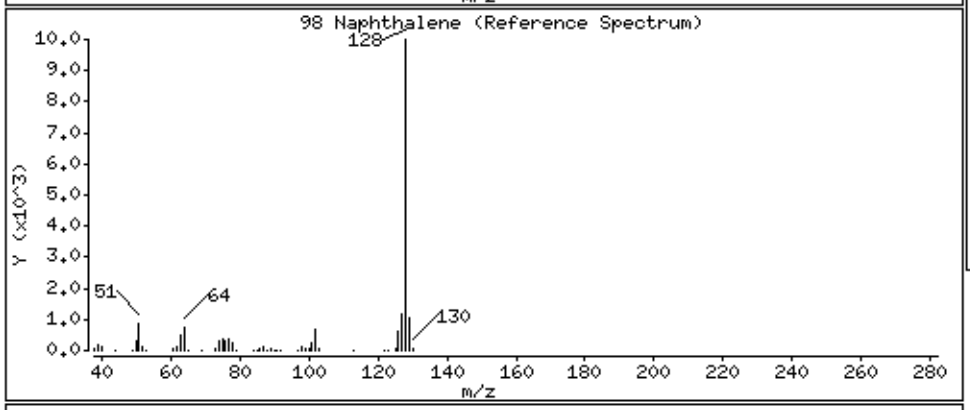
Concentration: 0.4827 NG

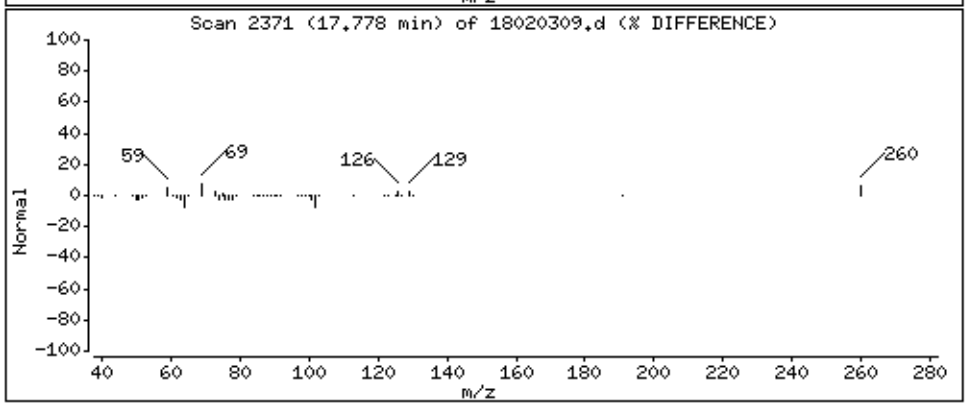












Summary of Detected Compounds
EPA METHOD TO-17

Client Sample ID: B3042-FB2SSV

Lab ID#: 1602029-12A

No Detections Were Found.

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Client Sample ID: B3042-FB2SSV

Lab ID#: 1602029-12A

EPA METHOD TO-17

File Name:	**18020308**	**Date of Extraction: NA**	**Date of Collection: 1/31/16 10:59:00 AM**
Dil. Factor:	**1.00**		**Date of Analysis: 2/3/16 02:52 PM**

Compound	**Rpt. Limit (ng)**	**Rpt. Limit (ug/m3)**	**Amount (ng)**	**Amount (ug/m3)**
Naphthalene	1.0	0.067	Not Detected	Not Detected

Air Sample Volume(L): 14.9
Container Type: TO-17 VI Tube

Surrogates	**%Recovery**	**Method Limits**
Naphthalene-d8	91	50-150

Eurofins Air Toxics Inc.

EPA Method TO-17 GC/MS

Data file : /chem/msd18.i/03Feb2016.b/18020308.d
Lab Smp Id: 1602029-12A
Inj Date : 03-FEB-2016 14:52
Operator : LA Inst ID: msd18.i
Smp Info : ;1602029-12A
Misc Info : DP G0187158
Comment :
Method : /chem/msd18.i/03Feb2016.b/186z0114vi.m
Meth Date : 12-Feb-2016 11:48 lantonic Quant Type: ISTD
Cal Date : 14-JAN-2016 18:27 Cal File: 18011415.d
Als bottle: 12
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: naph.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

RT	EXP RT	(REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (ng)	FINAL (NG)	TARGET RANGE	RATIO
* 79 Bromofluorobenzene						CAS #: 460-00-4		
13.215	13.200	(1.000)	174	387902	36.0000		80.00- 120.00	100.00
13.215	13.200	(1.000)	95	547609			78.78- 138.78	141.17
13.215	13.200	(1.000)	176	372272			67.05- 127.05	95.97
$ 97 Naphthalene-d8						CAS #: 1146-65-2		
17.742	17.728	(1.343)	136	346326	22.8175	22.817	80.00- 120.00	100.00
17.735	17.728	(1.342)	108	33559			0.00- 39.05	9.69

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd18.i
Lab File ID: 18020308.d
Lab Smp Id: 1602029-12A
Analysis Type: VOA
Quant Type: ISTD
Operator: LA
Method File: /chem/msd18.i/03Feb2016.b/186z0114vi.m
Misc Info: DP G0187158

Calibration Date: 03-FEB-2016
Calibration Time: 11:04

Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
79 Bromofluorobenzen	345554	207332	483776	387902	12.26

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
79 Bromofluorobenzen	13.20	12.87	13.53	13.21	0.11

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Report Date: 12-Feb-2016 12:41

Eurofins Air Toxics Inc.

RECOVERY REPORT

Client Name:
Client SDG: 03Feb2016
Sample Matrix: GAS
Fraction: VOA
Lab Smp Id: 1602029-12A
Level: LOW
Operator: LA
Data Type: MS DATA
SampleType: SAMPLE
SpikeList File: VOC+PAHlcs50.spk
Quant Type: ISTD
Sublist File: naph.sub
Method File: /chem/msd18.i/03Feb2016.b/186z0114vi.m
Misc Info: DP G0187158

SURROGATE COMPOUND	CONC ADDED NG	CONC RECOVERED NG	% RECOVERED	LIMITS
$ 97 Naphthalene-d8	25.000	22.817	91.27	50-150

Data File: /chem/msd18.i/03Feb2016.b/18020308.d

Date : 03-FEB-2016 14:52

Client ID:

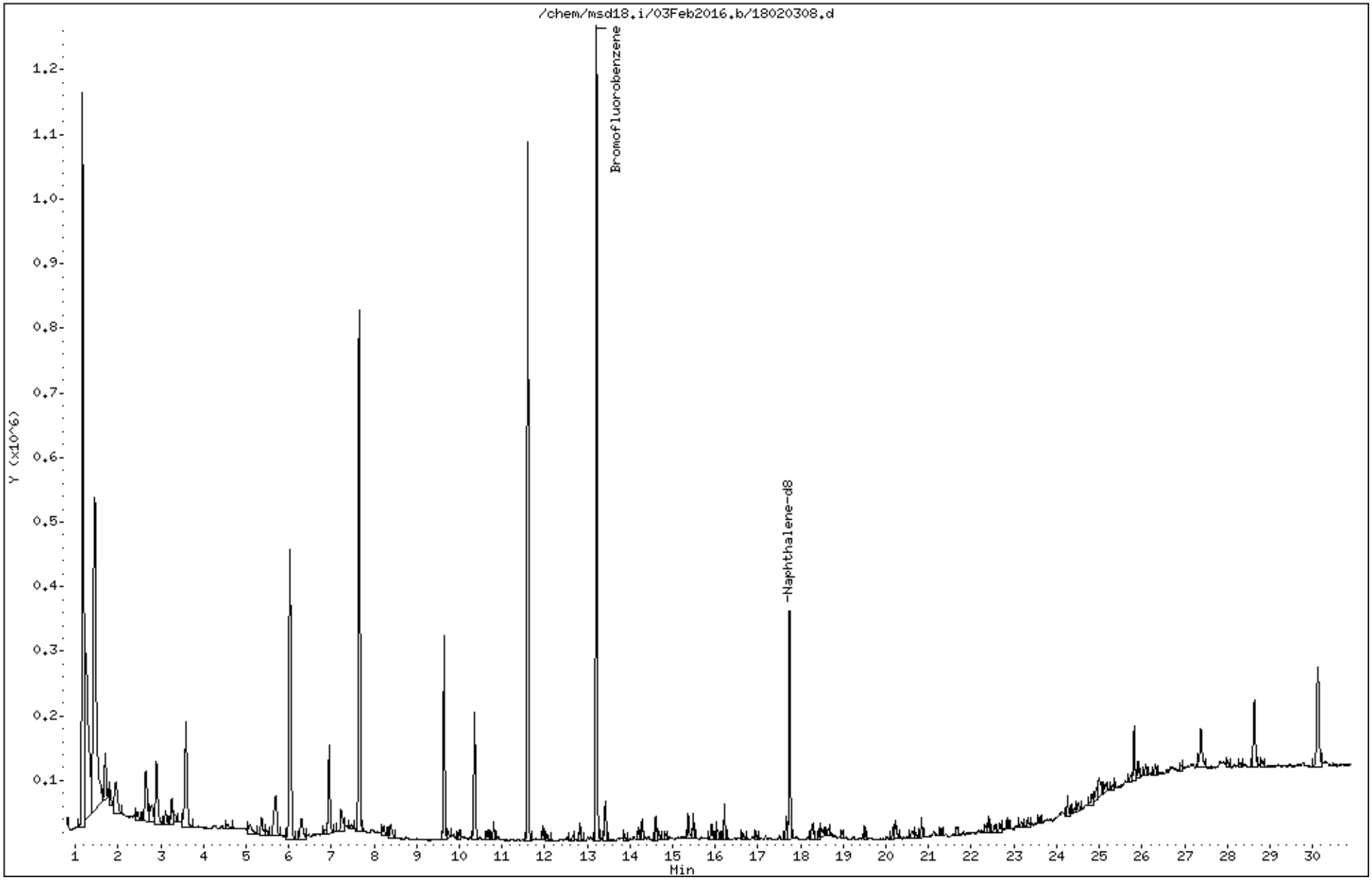
Instrument: msd18.i

Sample Info: ;1602029-12A

Operator: LA

Column phase: RTx-624

Column diameter: 0.53



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Summary of Detected Compounds
EPA METHOD TO-17

Client Sample ID: B30-1SSV013116

Lab ID#: 1602029-13A

Compound	Rpt. Limit (ng)	Rpt. Limit (ug/m3)	Amount (ng)	Amount (ug/m3)
Vinyl Chloride	5.1	13	69	170
Isopentane	5.9	15	370	920
1,1-Dichloroethene	4.0	10	30	74
Methylene Chloride	21	52	15 J	38 J
trans-1,2-Dichloroethene	8.0	20	4.2 J	11 J
1,1-Dichloroethane	4.0	10	15	39
cis-1,2-Dichloroethene	4.0	10	22	55
Hexane	35	88	1300 E	3200 E
Benzene	6.4	16	270	680
Cyclohexane	6.9	17	1000 E	2600 E
Trichloroethene	5.4	14	3.1 J	7.8 J
2,2,4-Trimethylpentane	9.4	24	23	56
Heptane	8.2	20	220	560
Methylcyclohexane	8.0	20	150	370
Toluene	7.5	19	18	44
Tetrachloroethene	6.8	17	2.1 J	5.3 J
Ethyl Benzene	4.3	11	2500 E	6200 E
m,p-Xylene	35	87	>38000 S	>95000 S
o-Xylene	8.7	22	620	1600
Cumene	9.8	24	5.1 J	13 J
Propylbenzene	9.8	24	2.2 J	5.6 J
1,3,5-Trimethylbenzene	9.8	24	3.0 J	7.5 J
1,2,4-Trimethylbenzene	29	72	10 J	26 J
1,3-Dichlorobenzene	6.0	15	20	49
Naphthalene	1.0	2.5	0.60 J	1.5 J

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Client Sample ID: B30-1SSV013116

Lab ID#: 1602029-13A

EPA METHOD TO-17

File Name:	**11020417**	**Date of Extraction: NA**	**Date of Collection: 1/31/16 12:27:00 PM**
Dil. Factor:	**1.00**		**Date of Analysis: 2/4/16 11:53 PM**

Compound	Rpt. Limit (ng)	Rpt. Limit (ug/m3)	Amount (ng)	Amount (ug/m3)
Freon 114	14	35	Not Detected	Not Detected
Vinyl Chloride	5.1	13	69	170
1,3-Butadiene	2.2	5.5	Not Detected	Not Detected
Isopentane	5.9	15	370	920
Freon 11	11	28	Not Detected	Not Detected
1,1-Dichloroethene	4.0	10	30	74
Methylene Chloride	21	52	15 J	38 J
Freon 113	7.7	19	Not Detected	Not Detected
trans-1,2-Dichloroethene	8.0	20	4.2 J	11 J
1,1-Dichloroethane	4.0	10	15	39
cis-1,2-Dichloroethene	4.0	10	22	55
Hexane	35	88	1300 E	3200 E
Chloroform	4.9	12	Not Detected	Not Detected
1,2-Dichloroethane	4.0	10	Not Detected	Not Detected
1,1,1-Trichloroethane	5.4	14	Not Detected	Not Detected
Benzene	6.4	16	270	680
Carbon Tetrachloride	6.3	16	Not Detected	Not Detected
Cyclohexane	6.9	17	1000 E	2600 E
1,2-Dichloropropane	4.6	12	Not Detected	Not Detected
Trichloroethene	5.4	14	3.1 J	7.8 J
1,4-Dioxane	11	28	Not Detected	Not Detected
2,2,4-Trimethylpentane	9.4	24	23	56
Heptane	8.2	20	220	560
Methylcyclohexane	8.0	20	150	370
1,1,2-Trichloroethane	5.4	14	Not Detected	Not Detected
4-Methyl-2-pentanone	8.2	20	Not Detected	Not Detected
Toluene	7.5	19	18	44
2-Hexanone	8.2	20	Not Detected	Not Detected
Tetrachloroethene	6.8	17	2.1 J	5.3 J
Chlorobenzene	4.6	12	Not Detected	Not Detected
Ethyl Benzene	4.3	11	2500 E	6200 E
m,p-Xylene	35	87	>38000 S	>95000 S
o-Xylene	8.7	22	620	1600
Styrene	8.5	21	Not Detected	Not Detected
1,1,2,2-Tetrachloroethane	6.9	17	Not Detected	Not Detected
Cumene	9.8	24	5.1 J	13 J
Propylbenzene	9.8	24	2.2 J	5.6 J
4-Ethyltoluene	9.8	24	Not Detected	Not Detected
1,3,5-Trimethylbenzene	9.8	24	3.0 J	7.5 J
1,2,4-Trimethylbenzene	29	72	10 J	26 J
1,3-Dichlorobenzene	6.0	15	20	49
1,4-Dichlorobenzene	6.0	15	Not Detected	Not Detected

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Client Sample ID: B30-1SSV013116

Lab ID#: 1602029-13A

EPA METHOD TO-17

File Name:	**11020417**	**Date of Extraction: NA**	**Date of Collection: 1/31/16 12:27:00 PM**
Dil. Factor:	**1.00**		**Date of Analysis: 2/4/16 11:53 PM**

Compound	Rpt. Limit (ng)	Rpt. Limit (ug/m3)	Amount (ng)	Amount (ug/m3)
1,2-Dichlorobenzene	6.0	15	Not Detected	Not Detected
1,2,4-Trichlorobenzene	15	38	Not Detected	Not Detected
Hexachlorobutadiene	21	52	Not Detected	Not Detected
Naphthalene	1.0	2.5	0.60 J	1.5 J

Air Sample Volume(L): 0.400

J = Estimated value.
E = Exceeds instrument calibration range.
S = Saturated peak; data reported as estimated.
m,p-Xylene was reported from file #11020832, analyzed on 2/9/16 with a dilution factor of 4.00.

Container Type: TO-17 VI Tube

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	86	50-150
Toluene-d8	119	50-150
Naphthalene-d8	103	50-150

Eurofins Air Toxics Inc.

EPA Method TO-17 GC/MS

Data file : /chem/msd11.i/04feb16.b/11020417.d
Lab Smp Id: 1602029-13A
Inj Date : 04-FEB-2016 23:53
Operator : LA Inst ID: msd11.i
Smp Info : ;1602029-13A
Misc Info : DP G0129354
Comment :
Method : /chem/msd11.i/04feb16.b/115z1120vi.m
Meth Date : 10-Feb-2016 11:24 lantonic Quant Type: ISTD
Cal Date : 21-NOV-2015 00:39 Cal File: 11112010.d
Als bottle: 16
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AND19256.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (ng)	FINAL (NG)	TARGET RANGE	RATIO
* 40 Bromochloromethane					CAS #: 74-97-5		
6.953	6.946 (1.000)	130	67035	26.0000		80.00- 120.00	100.00
6.953	6.946 (1.000)	128	52158			49.46- 109.46	77.81
6.946	6.946 (1.000)	49	83290			96.52- 156.52	124.25
* 54 1,4-Difluorobenzene					CAS #: 540-36-3		
8.343	8.329 (1.000)	114	269809	23.0000		80.00- 120.00	100.00
8.336	8.329 (1.000)	88	36562			0.00- 44.32	13.55
* 79 Chlorobenzene-d5					CAS #: 3114-55-4		
11.660	11.645 (1.000)	117	257561	24.0000		80.00- 120.00	100.00
11.660	11.645 (1.000)	82	128015			20.08- 80.08	49.70
* 92 Bromofluorobenzene					CAS #: 460-00-4		
13.071	13.071 (1.000)	174	194684	36.0000		80.00- 120.00	100.00
13.071	13.071 (1.000)	95	180526			68.42- 128.42	92.73
13.071	13.071 (1.000)	176	186506			64.69- 124.69	95.80
$ 49 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
7.756	7.734 (0.930)	65	24312	21.6415	21.642	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (ng)	FINAL (NG)	TARGET RANGE	RATIO
$ 49 1,2-Dichloroethane-d4 (continued)							
7.749	7.734 (0.929)	67	12668			25.09- 85.09	52.11
$ 66 Toluene-d8						CAS #: 2037-26-5	
10.012	9.998 (0.859)	98	121075	29.7808	29.781	80.00- 120.00	100.00
10.019	9.998 (0.859)	70	74723			0.00- 41.37	61.72
10.012	9.998 (0.859)	100	61023			33.98- 93.98	50.40
$ 108 Naphthalene-d8						CAS #: 1146-65-2	
17.218	17.232 (1.317)	136	179617	25.7314	25.731	80.00- 120.00	100.00
17.218	17.232 (1.317)	108	14195			0.00- 38.36	7.90
6 Vinyl Chloride						CAS #: 75-01-4	
2.140	2.169 (0.308)	62	102912	68.8356	68.836	80.00- 120.00	100.00
2.140	2.169 (0.308)	64	33578			1.67- 61.67	32.63
10 Isopentane						CAS #: 78-78-4	
2.792	2.792 (0.401)	57	410992	369.169	369.17	80.00- 120.00	100.00
2.792	2.792 (0.401)	43	601924			125.87- 185.87	146.46
14 1,1-Dichloroethene						CAS #: 75-35-4	
3.752	3.759 (0.540)	98	21755	29.8126	29.812	80.00- 120.00	100.00
3.752	3.759 (0.540)	96	33316			126.05- 186.05	153.14
3.759	3.759 (0.541)	61	52835			223.83- 283.83	242.86
22 Methylene Chloride						CAS #: 75-09-2	
4.582	4.583 (0.659)	49	25975	15.2852	15.285	80.00- 120.00	100.00(a)
4.582	4.583 (0.659)	84	18986			41.05- 101.05	73.09
4.575	4.583 (0.658)	51	14746			0.46- 60.46	56.77
25 trans-1,2-Dichloroethene						CAS #: 156-60-5	
5.077	5.077 (0.730)	98	2924	4.25158	4.252	80.00- 120.00	100.00
5.077	5.077 (0.730)	61	7837			190.70- 250.70	268.02
5.091	5.077 (0.732)	96	5793			126.37- 186.37	198.13
28 Hexane						CAS #: 110-54-3	
5.564	5.564 (0.800)	57	2299995	1290.46	1290.4	80.00- 120.00	100.00(A)
5.564	5.564 (0.800)	43	1507042			37.71- 97.71	65.52
5.564	5.564 (0.800)	86	365772			0.00- 45.83	15.90
29 1,1-Dichloroethane						CAS #: 75-34-3	
5.772	5.779 (0.830)	63	27713	15.4624	15.462	80.00- 120.00	100.00
5.779	5.779 (0.831)	65	9197			1.45- 61.45	33.19
37 cis-1,2-Dichloroethene						CAS #: 156-59-2	
6.631	6.624 (0.954)	98	16532	22.0227	22.023	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (ng)	FINAL (NG)	TARGET RANGE	RATIO
37 cis-1,2-Dichloroethene (continued)							
6.631	6.624 (0.954)	96	25477			126.86- 186.86	154.11
6.631	6.624 (0.954)	61	33215			171.58- 231.58	200.91
46 Cyclohexane					CAS #: 110-82-7		
7.419	7.405 (0.889)	84	1820867	1058.77	1058.8	80.00- 120.00	100.00(A)
7.419	7.405 (0.889)	56	2313327			91.54- 151.54	127.05
7.412	7.405 (0.888)	41	1749831			46.84- 106.84	96.10
51 2,2,4-Trimethylpentane					CAS #: 540-84-1		
7.971	7.956 (0.955)	57	113400	22.6038	22.604	80.00- 120.00	100.00
7.992	7.956 (0.958)	56	78043			1.98- 61.98	68.82
7.992	7.956 (0.958)	41	63332			0.94- 60.94	55.85
48 Benzene					CAS #: 71-43-2		
7.770	7.756 (0.931)	78	1227297	272.333	272.33	80.00- 120.00	100.00
7.770	7.756 (0.931)	77	289360			0.00- 53.25	23.58
53 Heptane					CAS #: 142-82-5		
8.214	8.200 (0.985)	71	266554	222.278	222.28	80.00- 120.00	100.00
8.214	8.200 (0.985)	43	499469			156.82- 216.82	187.38
8.214	8.200 (0.985)	57	253060			66.52- 126.52	94.94
56 Trichloroethene					CAS #: 79-01-6		
8.608	8.587 (1.032)	95	4397	3.12643	3.126	80.00- 120.00	100.00(a)
8.608	8.587 (1.032)	130	4775			82.18- 142.18	108.59
8.608	8.587 (1.032)	97	37106			35.46- 95.46	843.73
58 Methyl Cyclohexane					CAS #: 108-87-2		
8.887	8.873 (1.065)	83	326745	147.752	147.75	80.00- 120.00	100.00
8.887	8.873 (1.065)	98	127838			16.90- 76.90	39.12
8.880	8.873 (1.064)	55	395349			52.37- 112.37	121.00
67 Toluene					CAS #: 108-88-3		
10.091	10.069 (0.865)	91	87668	17.7763	17.776	80.00- 120.00	100.00
10.091	10.069 (0.865)	92	50744			29.25- 89.25	57.88
71 Tetrachloroethene					CAS #: 127-18-4		
10.678	10.657 (0.916)	166	3063	2.13492	2.135	80.00- 120.00	100.00(a)
10.678	10.657 (0.916)	129	2507			41.79- 101.79	81.87
10.671	10.657 (0.915)	131	2414			38.31- 98.31	78.82
82 Ethyl Benzene					CAS #: 100-41-4		
11.824	11.810 (1.014)	106	4288790	2475.80	2475.8	80.00- 120.00	100.00(A)
11.824	11.810 (1.014)	91	11870659			263.98- 323.98	276.78

RT	EXP RT	(REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (ng)	FINAL (NG)	TARGET RANGE	RATIO
88 o-Xylene						CAS #: 95-47-6		
12.419	12.412	(0.950)	106	1369926	620.357	620.36	80.00- 120.00	100.00
12.419	12.412	(0.950)	91	2632597			163.65- 223.65	192.17
91 Cumene						CAS #: 98-82-8		
12.863	12.863	(0.984)	105	28636	5.12285	5.123	80.00- 120.00	100.00(a)
12.863	12.863	(0.984)	120	8044			0.00- 59.10	28.09
12.863	12.863	(0.984)	51	3509			0.00- 40.54	12.25
96 Propylbenzene						CAS #: 103-65-1		
13.371	13.364	(1.023)	91	14361	2.22376	2.224	80.00- 120.00	100.00(a)
13.357	13.364	(1.022)	120	1116			0.00- 54.66	7.77
13.357	13.364	(1.022)	105	1312			0.00- 33.61	9.14
98 1,3,5-Trimethylbenzene						CAS #: 108-67-8		
13.594	13.601	(1.040)	120	7173	3.01313	3.013	80.00- 120.00	100.00(a)
13.594	13.601	(1.040)	105	17673			157.79- 217.79	246.37
100 1,2,4-Trimethylbenzene						CAS #: 95-63-6		
14.045	14.052	(1.075)	120	23182	10.3403	10.340	80.00- 120.00	100.00(a)
14.045	14.052	(1.075)	105	57772			169.74- 229.74	249.20
101 1,3-Dichlorobenzene						CAS #: 541-73-1		
14.374	14.382	(1.100)	146	55290	19.5979	19.598	80.00- 120.00	100.00
14.374	14.382	(1.100)	148	35831			34.32- 94.32	64.81
14.374	14.382	(1.100)	111	21142			5.94- 65.94	38.24
109 Naphthalene						CAS #: 91-20-3		
17.261	17.268	(1.321)	128	4641	0.60581	0.6058	80.00- 120.00	100.00(a)
17.261	17.268	(1.321)	127	666			0.00- 43.21	14.36

QC Flag Legend

a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).
A - Target compound detected but, quantitated amount exceeded maximum amount.

Report Date: 12-Feb-2016 12:05

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd11.i
Lab File ID: 11020417.d
Lab Smp Id: 1602029-13A
Analysis Type: VOA
Quant Type: ISTD
Operator: LA
Method File: /chem/msd11.i/04feb16.b/115z1120vi.m
Misc Info: DP G0129354

Calibration Date: 04-FEB-2016
Calibration Time: 12:29

Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
40 Bromochloromethan	65872	39523	92221	67035	1.77
54 1,4-Difluorobenze	263308	157985	368631	269809	2.47
79 Chlorobenzene-d5	242803	145682	339924	257561	6.08
92 Bromofluorobenzen	175852	105511	246193	194684	10.71

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
40 Bromochloromethan	6.95	6.62	7.28	6.95	0.10
54 1,4-Difluorobenze	8.33	8.00	8.66	8.34	0.17
79 Chlorobenzene-d5	11.65	11.32	11.98	11.66	0.12
92 Bromofluorobenzen	13.07	12.74	13.40	13.07	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Report Date: 12-Feb-2016 12:05

Eurofins Air Toxics Inc.

RECOVERY REPORT

Client Name:
Client SDG: 04feb16
Sample Matrix: GAS
Fraction: VOA
Lab Smp Id: 1602029-13A
Level: LOW
Operator: LA
Data Type: MS DATA
SampleType: SAMPLE
SpikeList File: VOC+PAHlcs50.spk
Quant Type: ISTD
Sublist File: AND19256.sub
Method File: /chem/msd11.i/04feb16.b/115z1120vi.m
Misc Info: DP G0129354

SURROGATE COMPOUND	AMOUNT ADDED ng	AMOUNT RECOVERED ng	% RECOVERED	LIMITS
$ 49 1,2-Dichloroethane	25.000	21.642	86.57	50-150
$ 66 Toluene-d8	25.000	29.781	119.12	50-150
$ 108 Naphthalene-d8	25.000	25.731	102.93	50-150

Data File: /chem/msd11.i/04feb16.b/11020417.d

Date : 04-FEB-2016 23:53

Client ID:

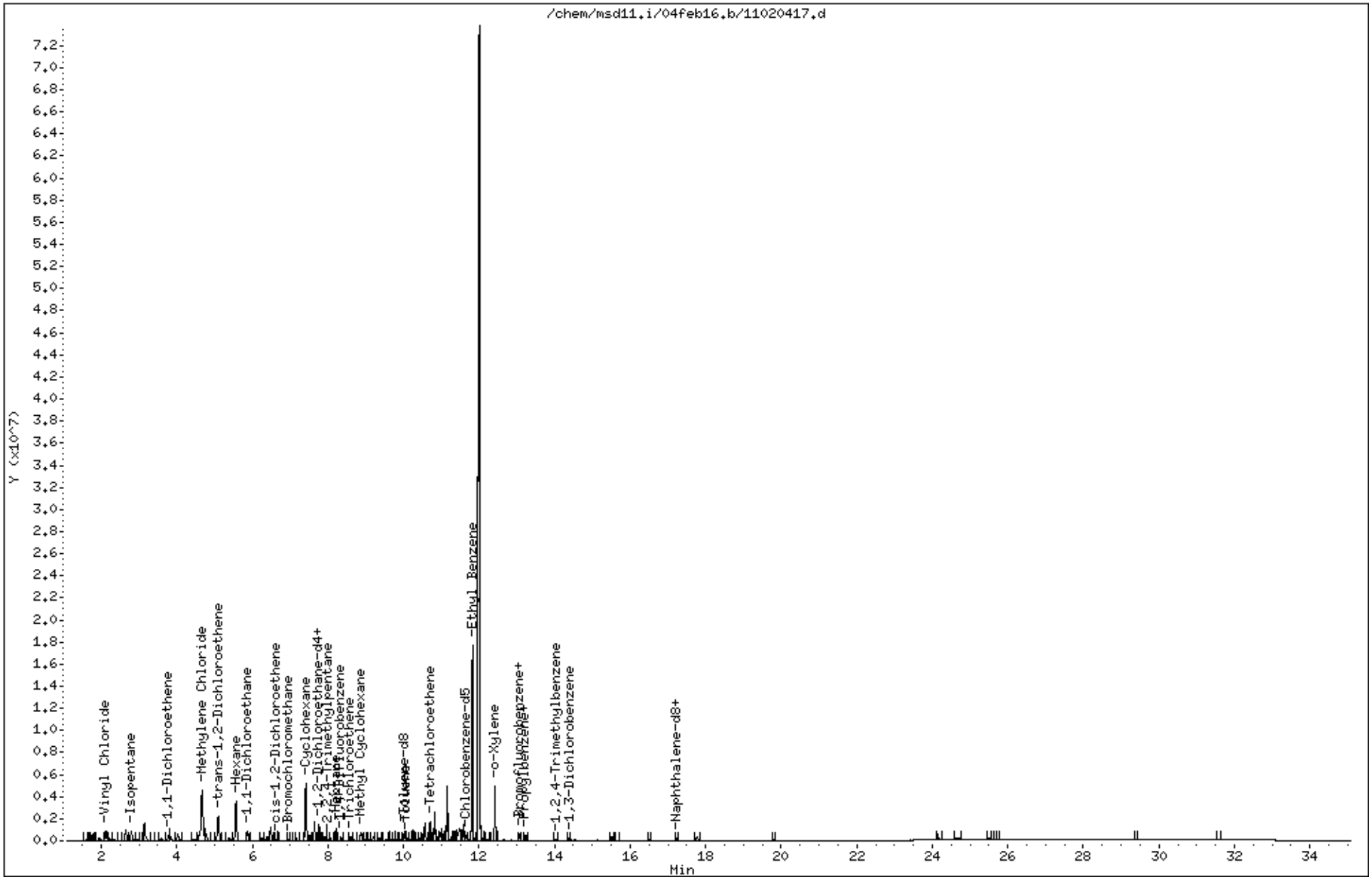
Sample Info: ;1602029-13A

Column phase: RTx-624

Instrument: msd11.i

Operator: LA

Column diameter: 0.53



Data File: /chem/msd11.i/04feb16.b/11020417.d

Date : 04-FEB-2016 23:53

Client ID:

Instrument: msd11.i

Sample Info: ;1602029-13A

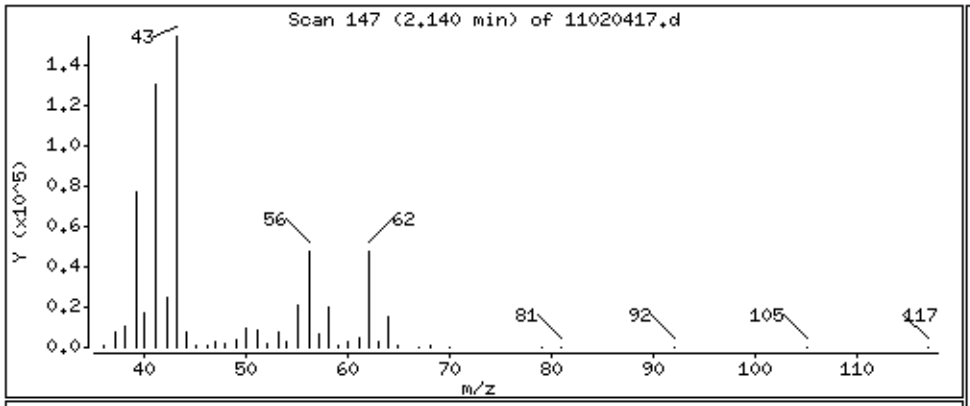
Operator: LA

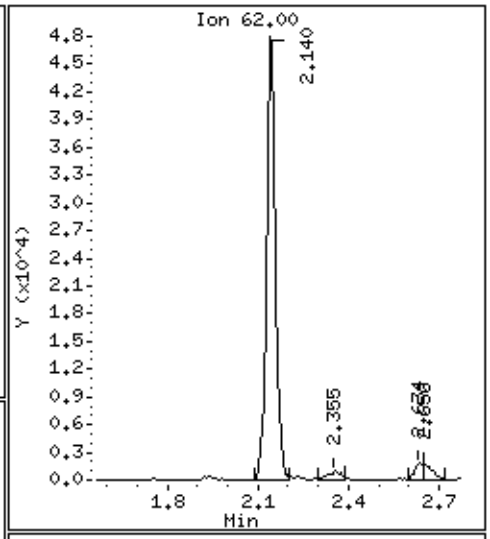
Column phase: RTx-624

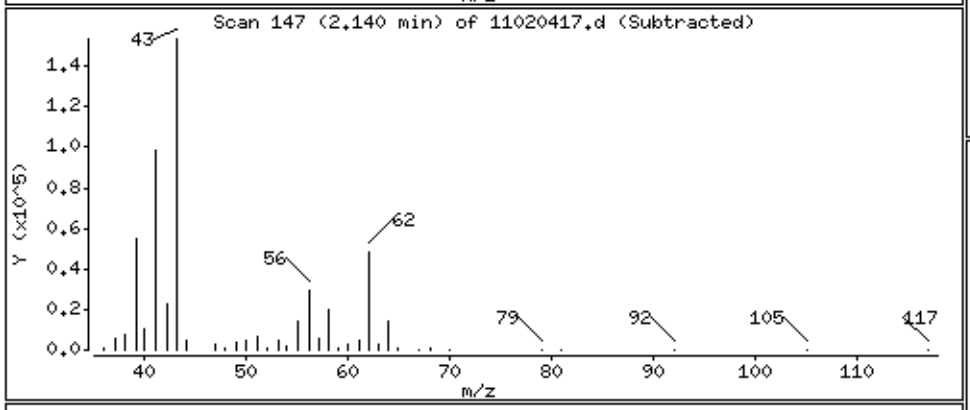
Column diameter: 0.53

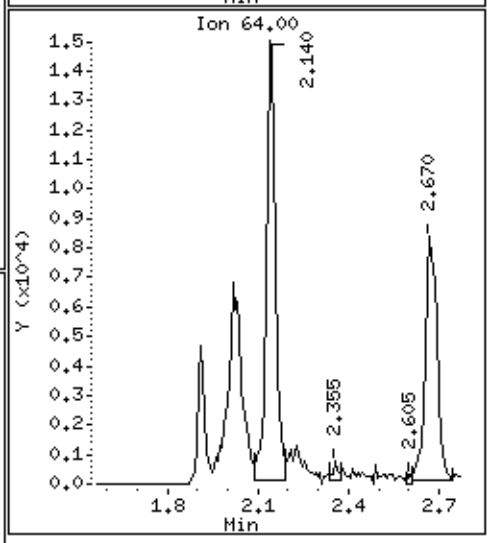
6 Vinyl Chloride

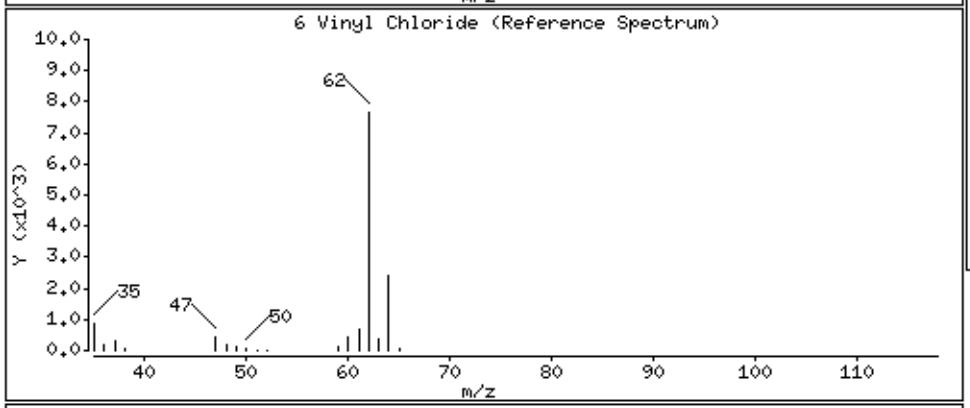
Concentration: 68.836 NG

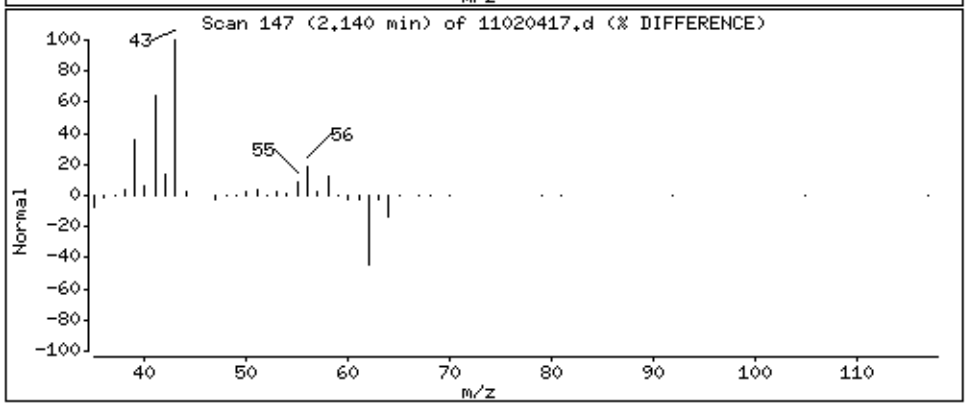












Data File: /chem/msd11.i/04feb16.b/11020417.d

Date : 04-FEB-2016 23:53

Client ID:

Instrument: msd11.i

Sample Info: ;1602029-13A

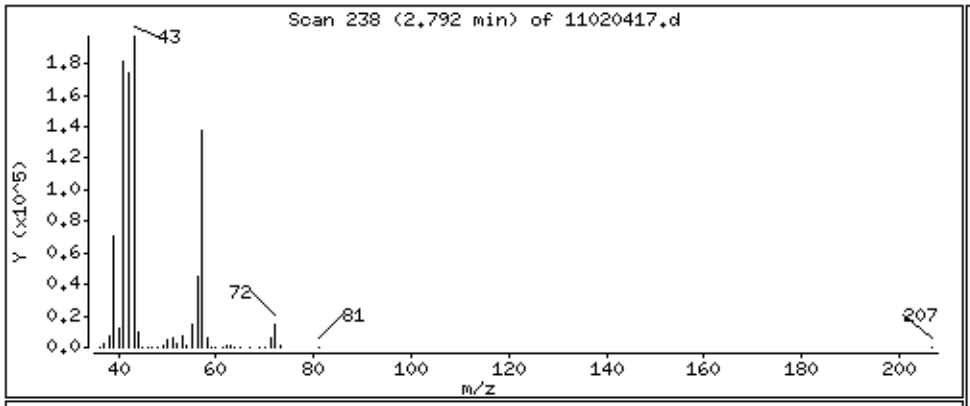
Operator: LA

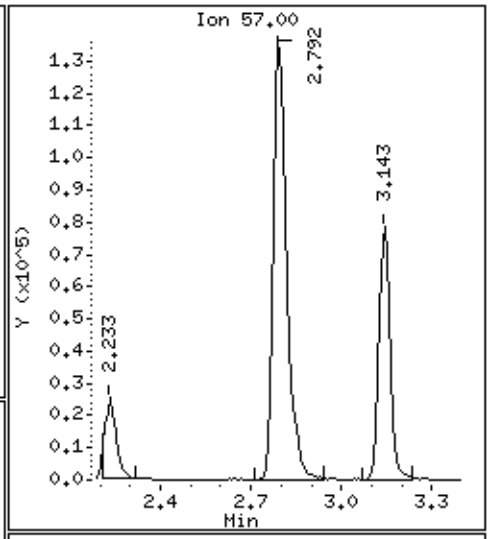
Column phase: RTx-624

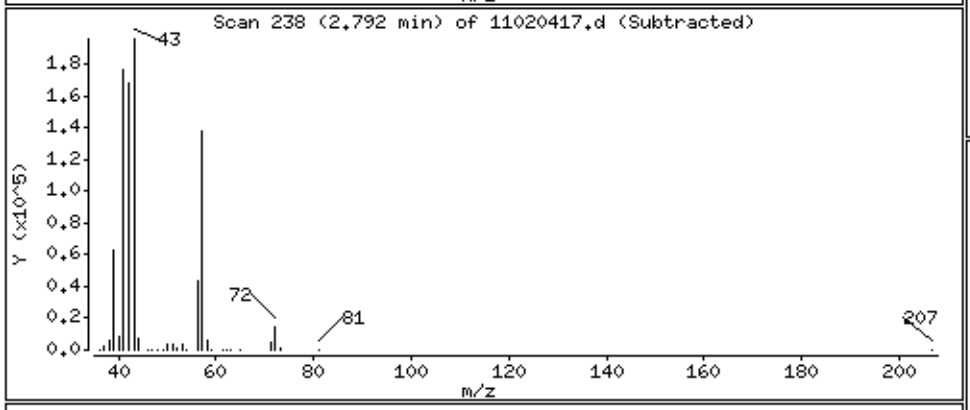
Column diameter: 0.53

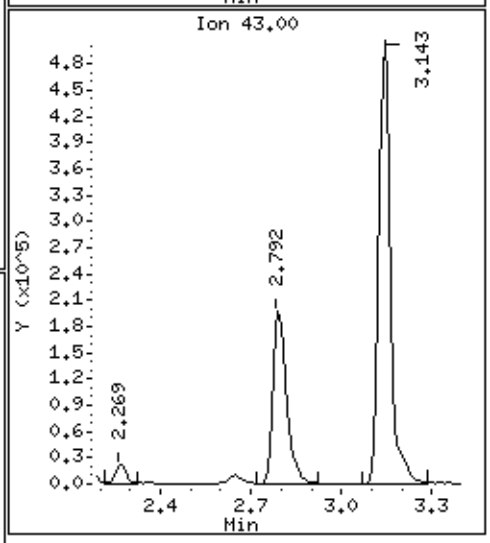
10 Isopentane

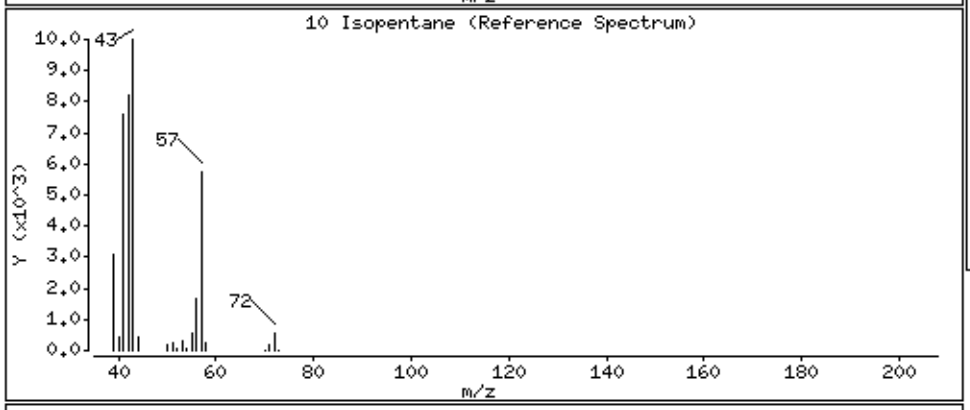
Concentration: 369.17 NG

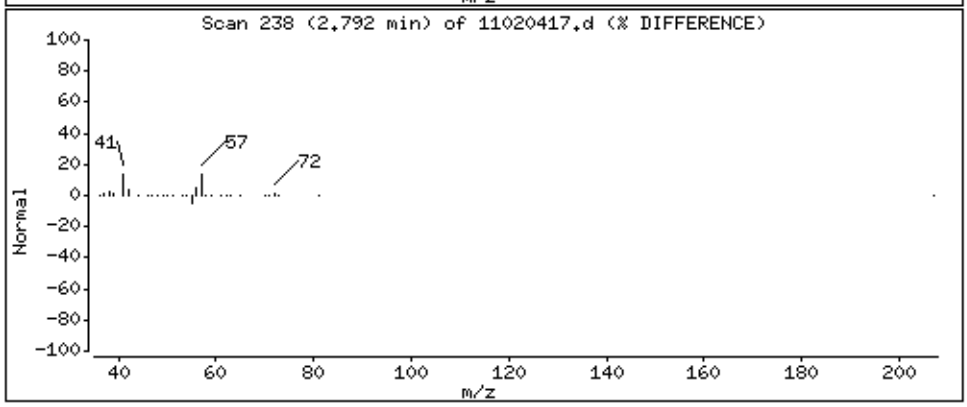












Data File: /chem/msd11.i/04feb16.b/11020417.d

Date : 04-FEB-2016 23:53

Client ID:

Instrument: msd11.i

Sample Info: ;1602029-13A

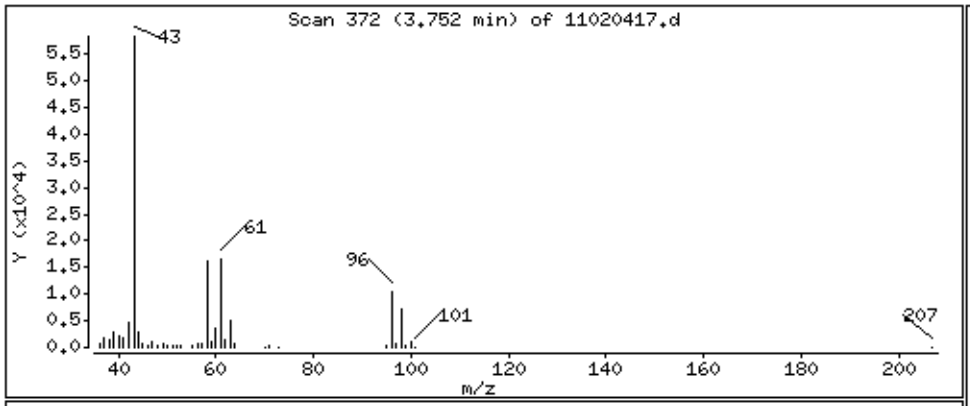
Operator: LA

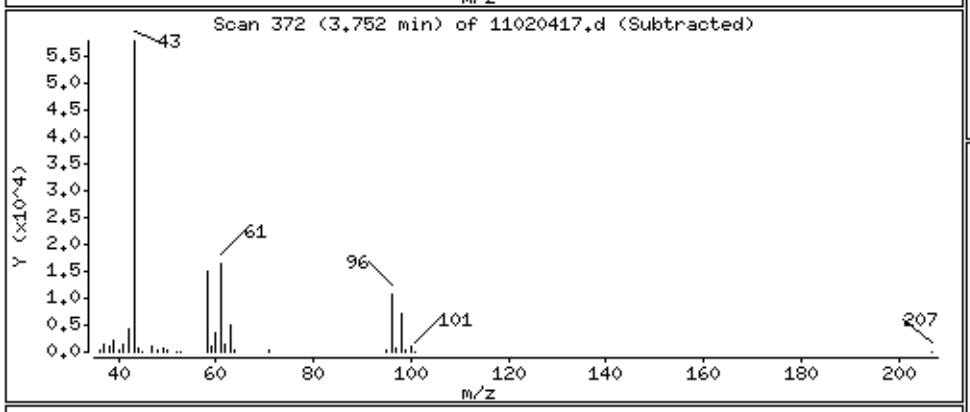
Column phase: RTx-624

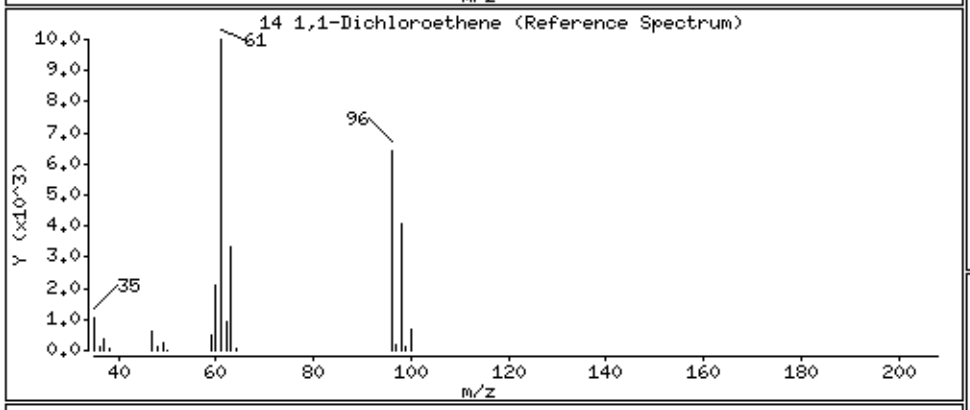
Column diameter: 0.53

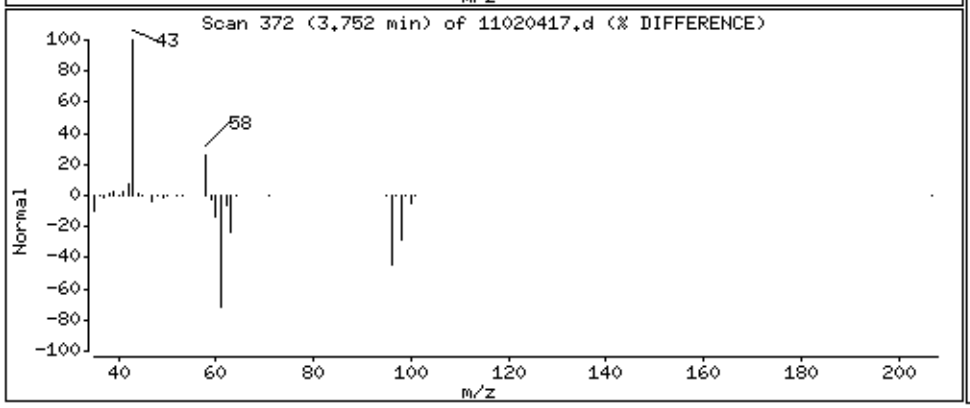
14 1,1-Dichloroethene

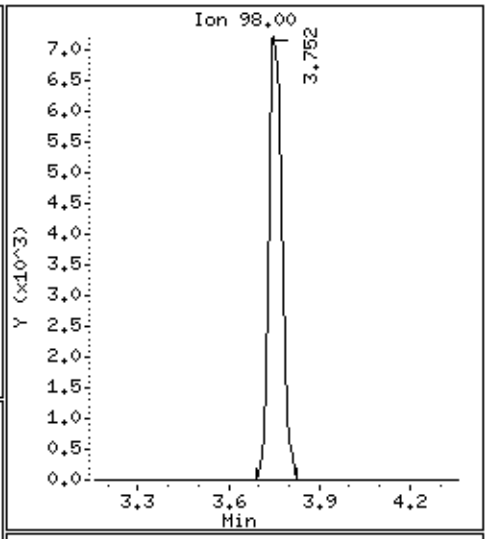
Concentration: 29.812 NG

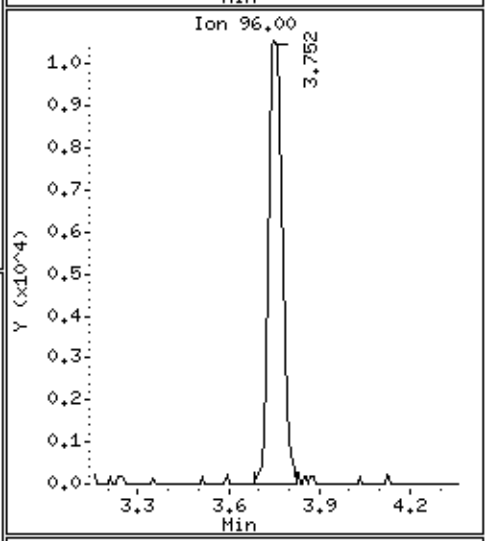


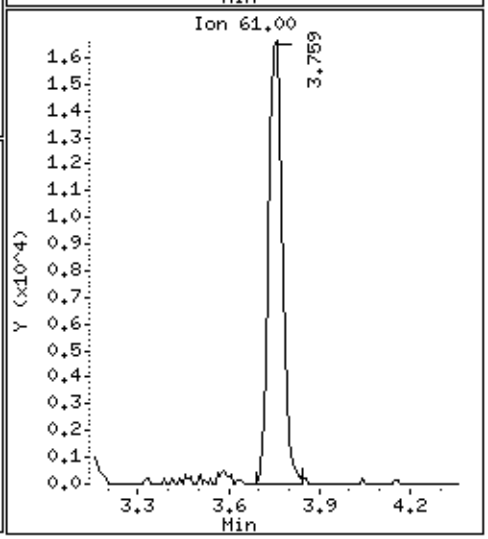












Data File: /chem/msd11.i/04feb16.b/11020417.d

Date : 04-FEB-2016 23:53

Client ID:

Instrument: msd11.i

Sample Info: ;1602029-13A

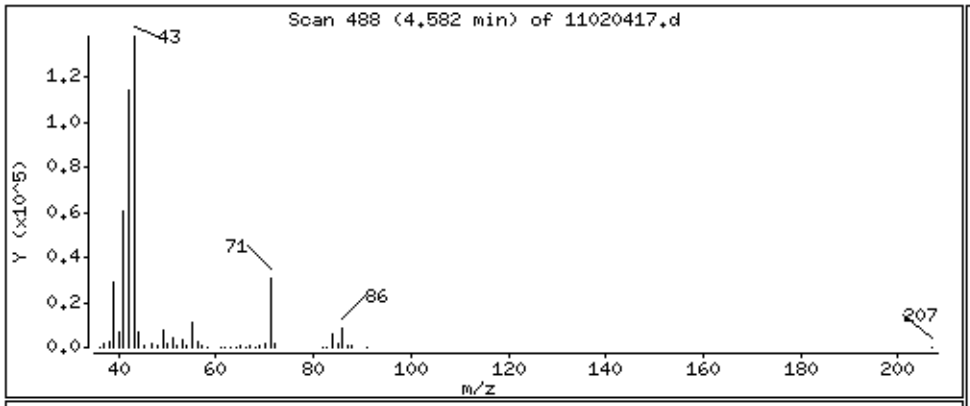
Operator: LA

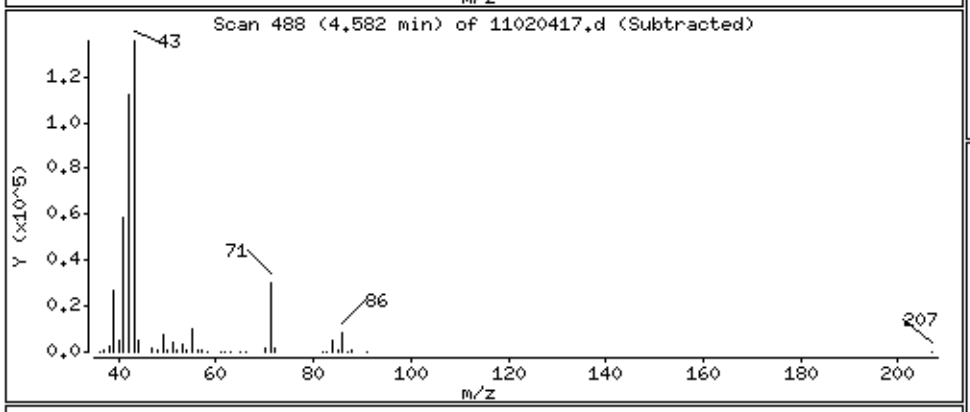
Column phase: RTx-624

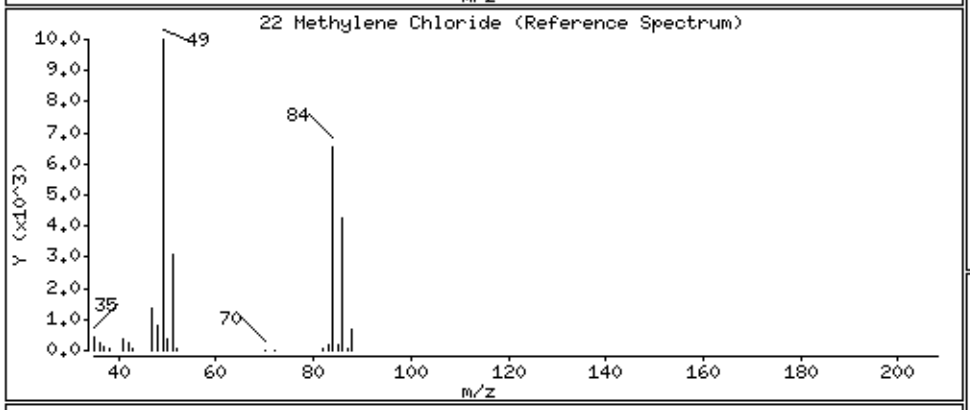
Column diameter: 0.53

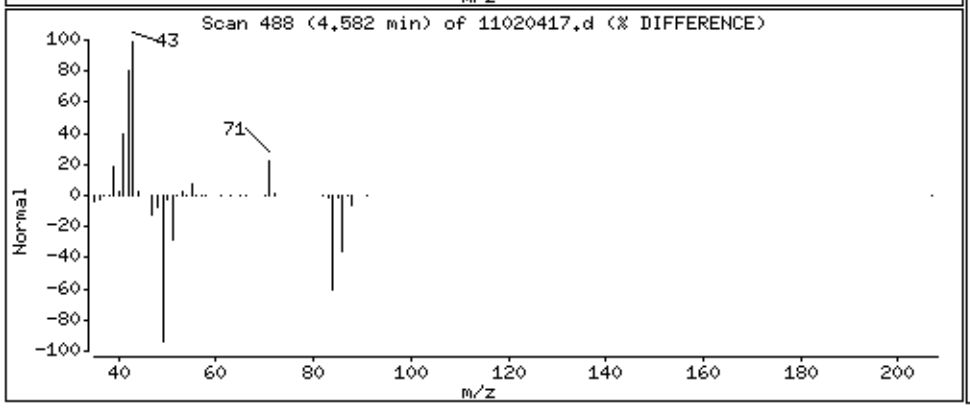
22 Methylene Chloride

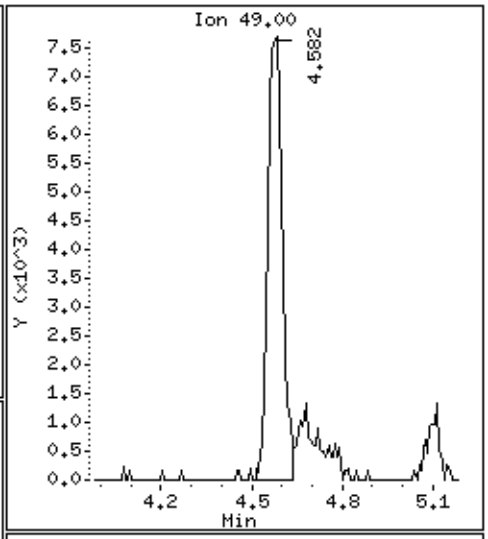
Concentration: 15.285 NG

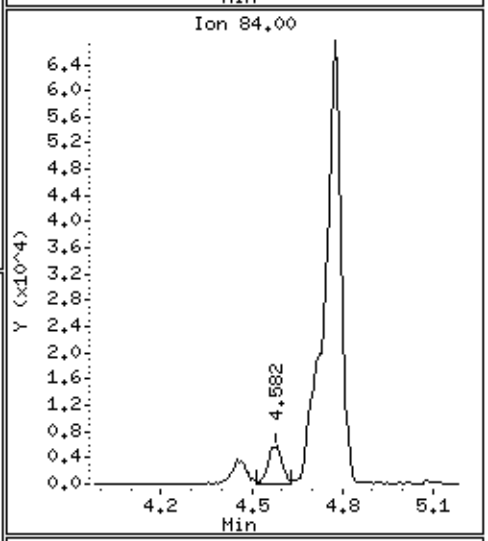


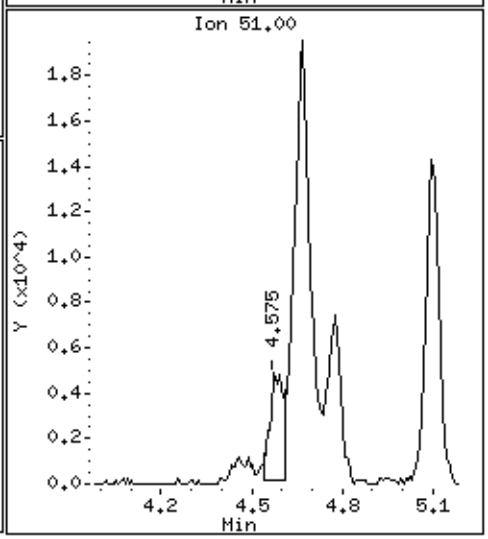












Data File: /chem/msd11.i/04feb16.b/11020417.d

Date : 04-FEB-2016 23:53

Client ID:

Instrument: msd11.i

Sample Info: ;1602029-13A

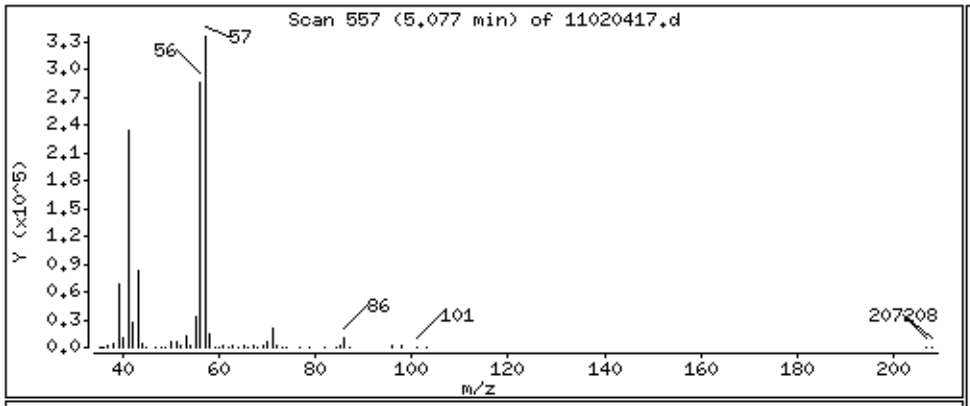
Operator: LA

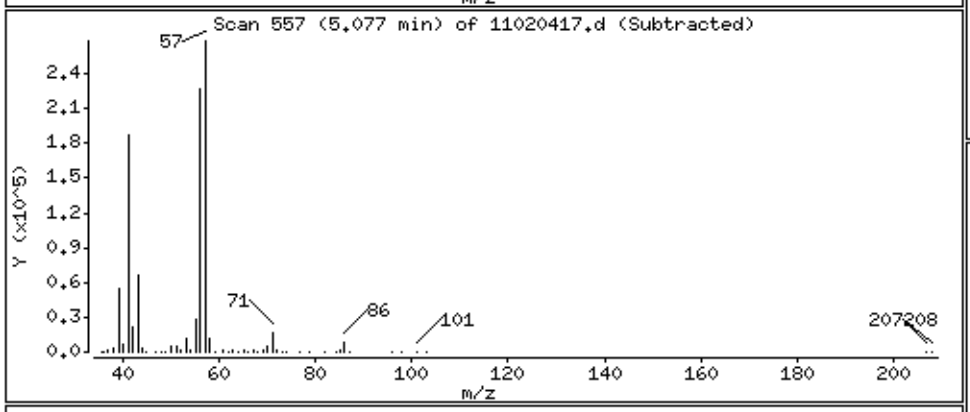
Column phase: RTx-624

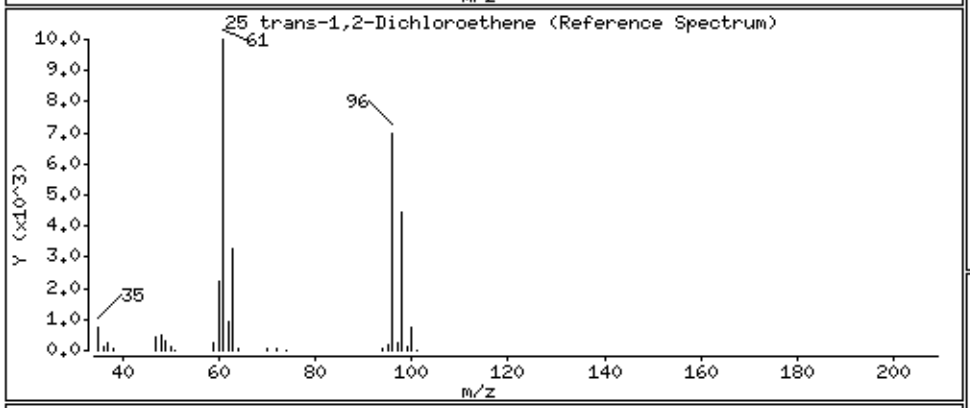
Column diameter: 0.53

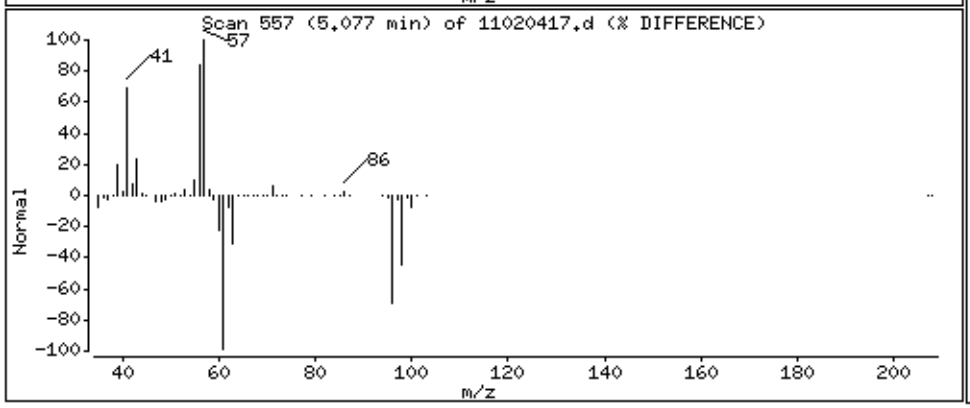
25 trans-1,2-Dichloroethene

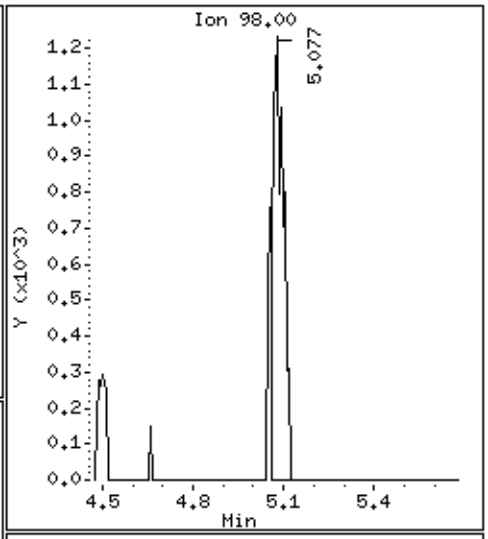
Concentration: 4.252 NG

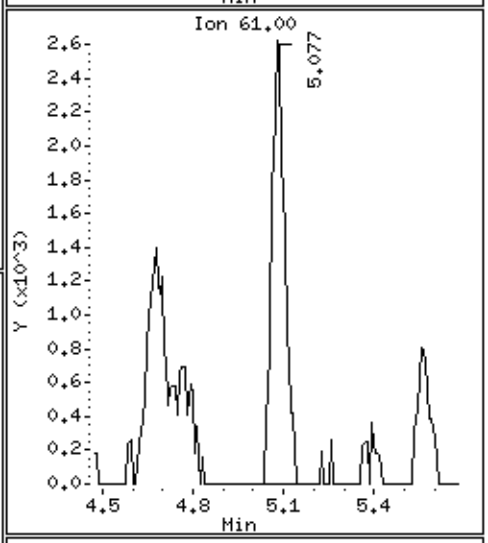


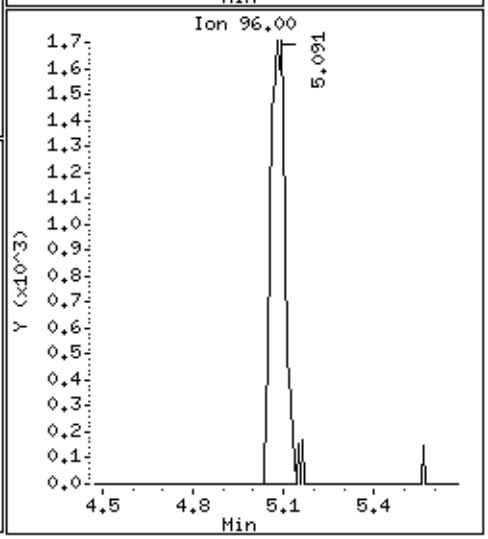












Data File: /chem/msd11.i/04feb16.b/11020417.d

Date : 04-FEB-2016 23:53

Client ID:

Instrument: msd11.i

Sample Info: ;1602029-13A

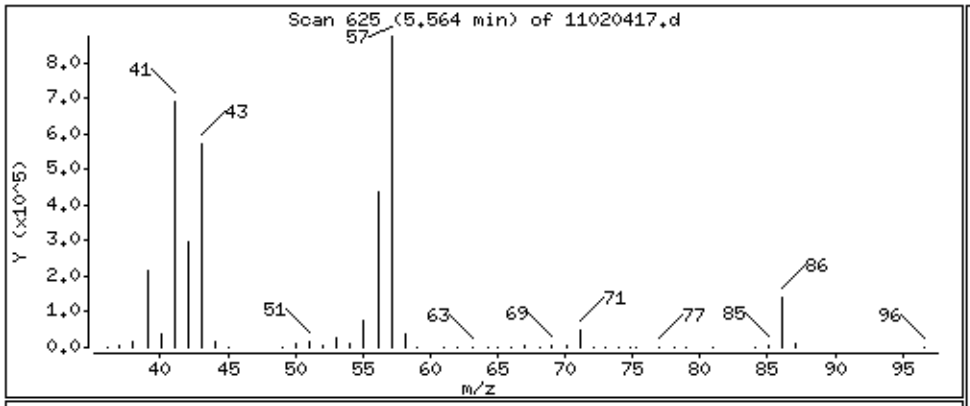
Operator: LA

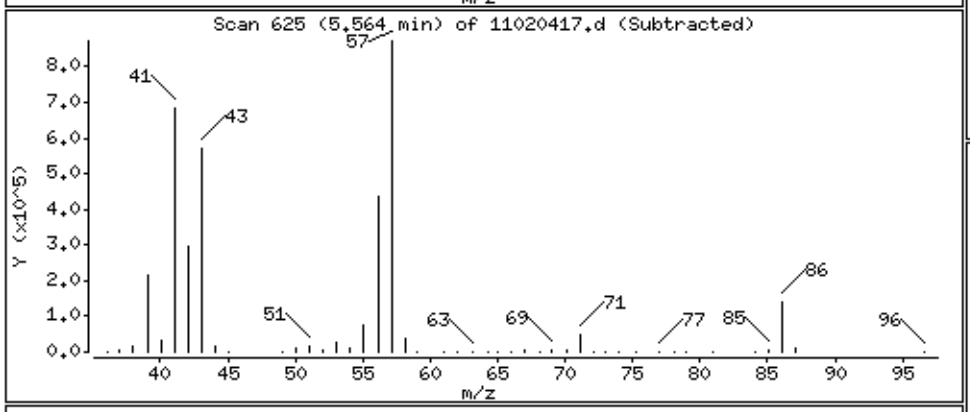
Column phase: RTx-624

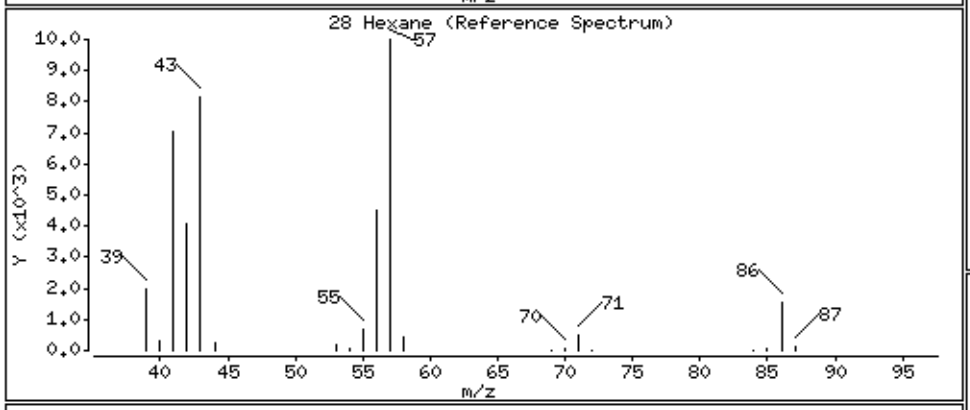
Column diameter: 0.53

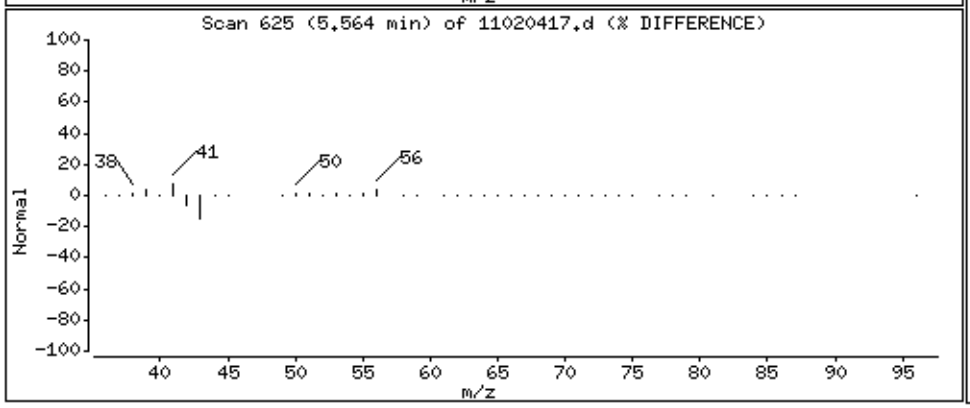
28 Hexane

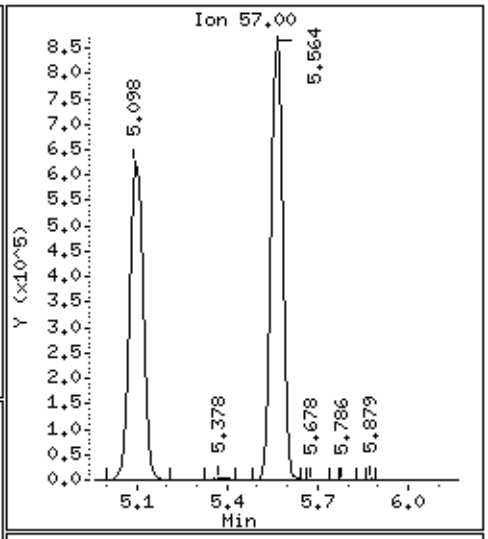
Concentration: 1290.4 NG

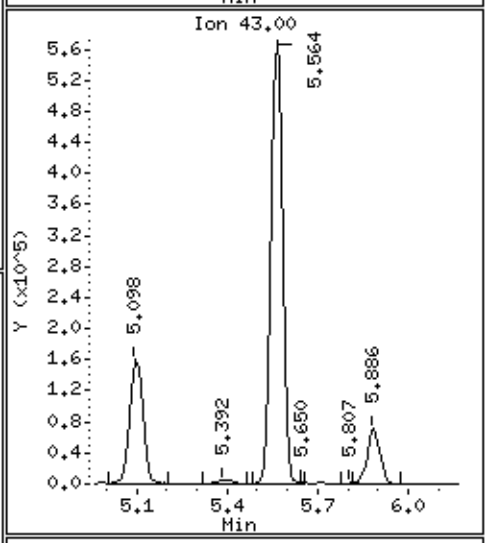


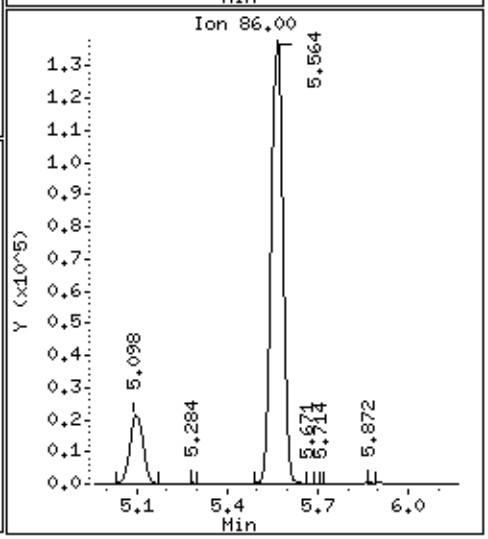












Data File: /chem/msd11.i/04feb16.b/11020417.d

Date : 04-FEB-2016 23:53

Client ID:

Instrument: msd11.i

Sample Info: ;1602029-13A

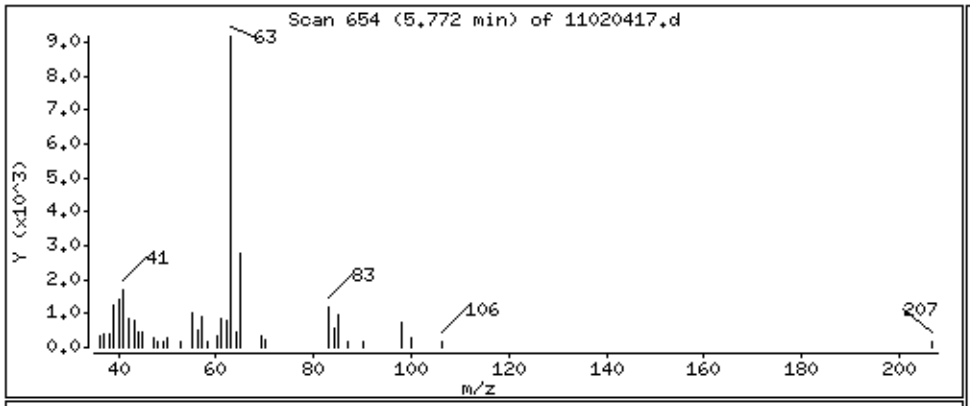
Operator: LA

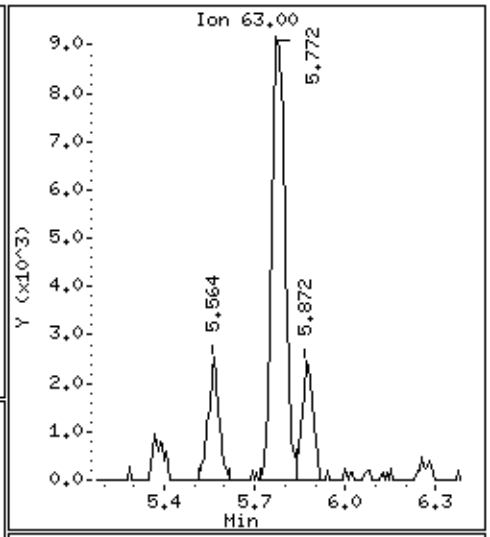
Column phase: RTx-624

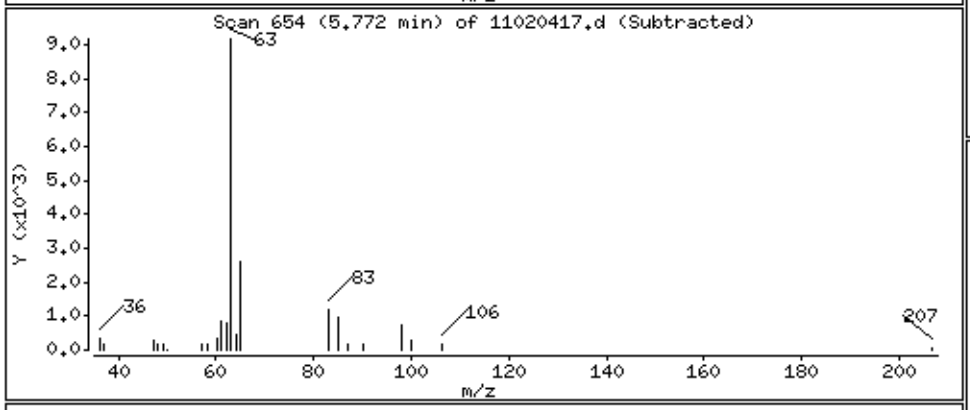
Column diameter: 0.53

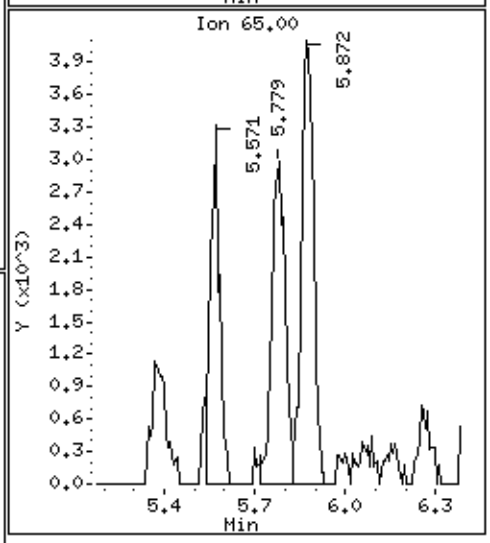
29 1,1-Dichloroethane

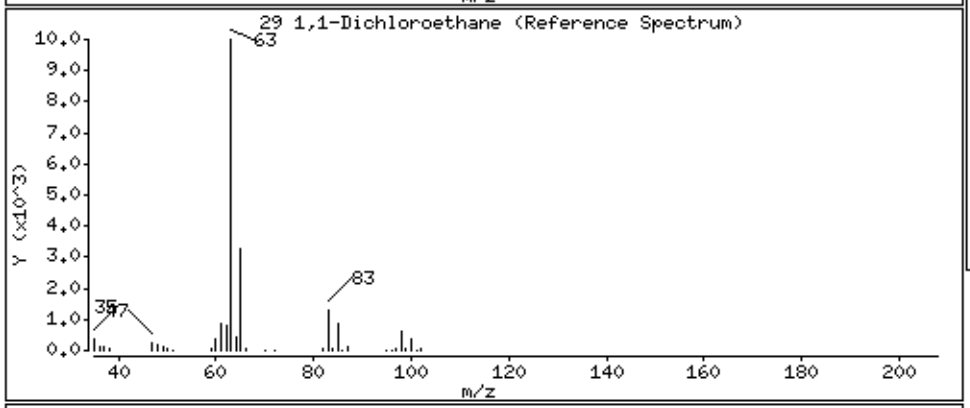
Concentration: 15.462 NG

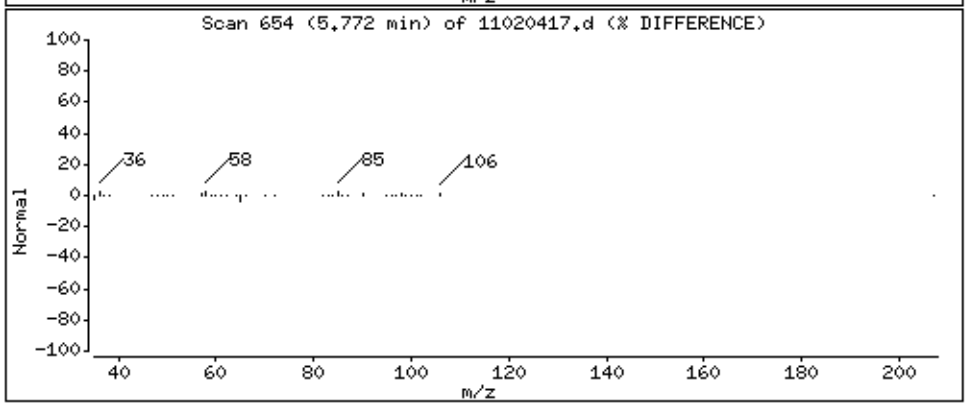












Data File: /chem/msd11.i/04feb16.b/11020417.d

Date : 04-FEB-2016 23:53

Client ID:

Instrument: msd11.i

Sample Info: ;1602029-13A

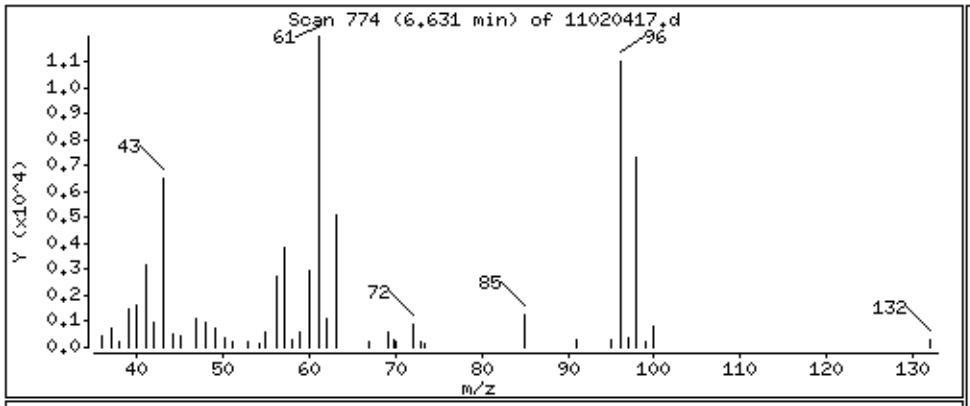
Operator: LA

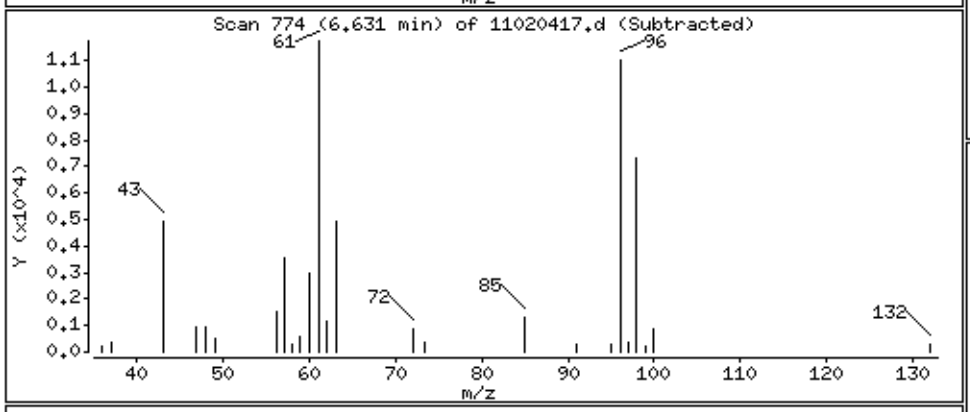
Column phase: RTx-624

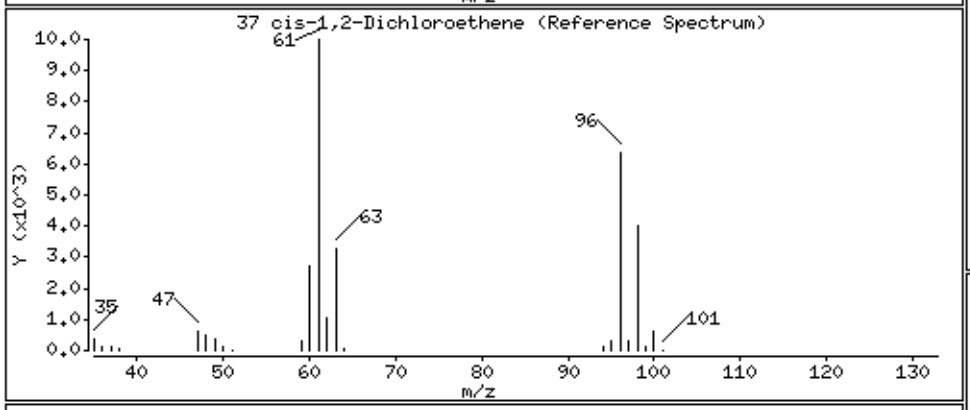
Column diameter: 0.53

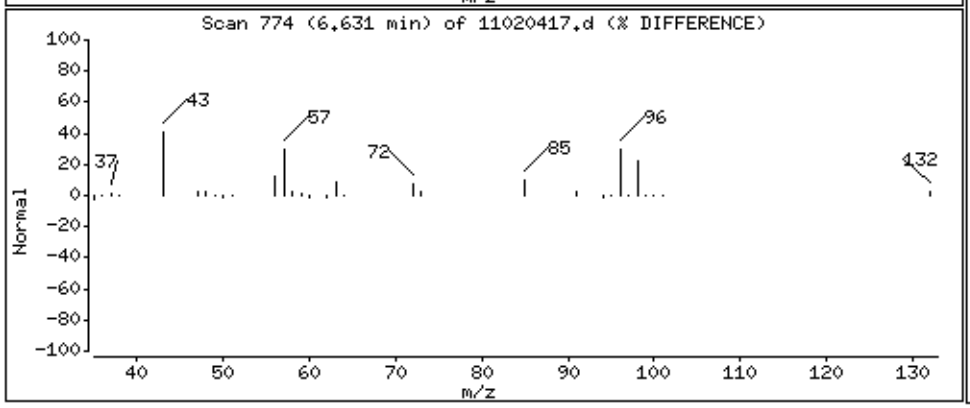
37 cis-1,2-Dichloroethene

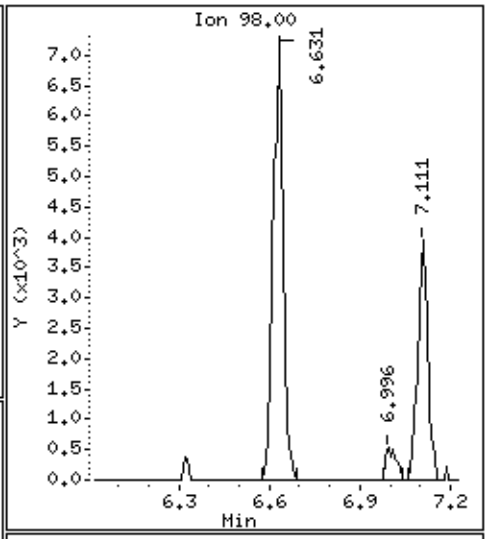
Concentration: 22.023 NG

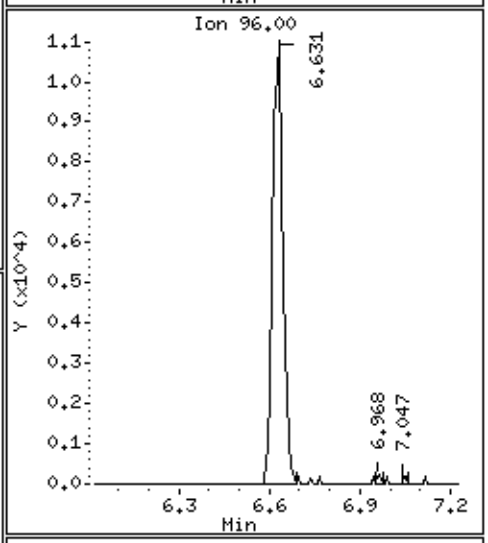


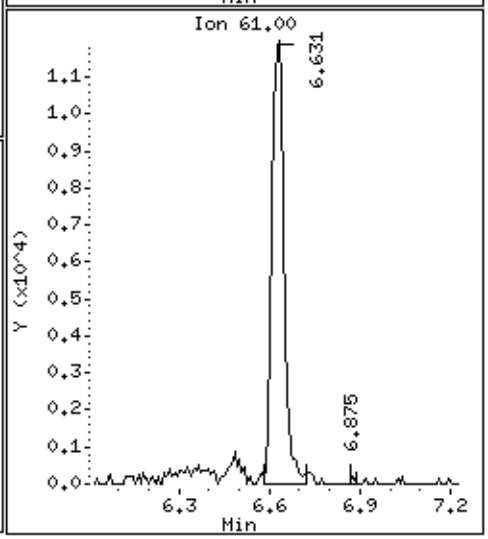












Data File: /chem/msd11.i/04feb16.b/11020417.d

Date : 04-FEB-2016 23:53

Client ID:

Instrument: msd11.i

Sample Info: ;1602029-13A

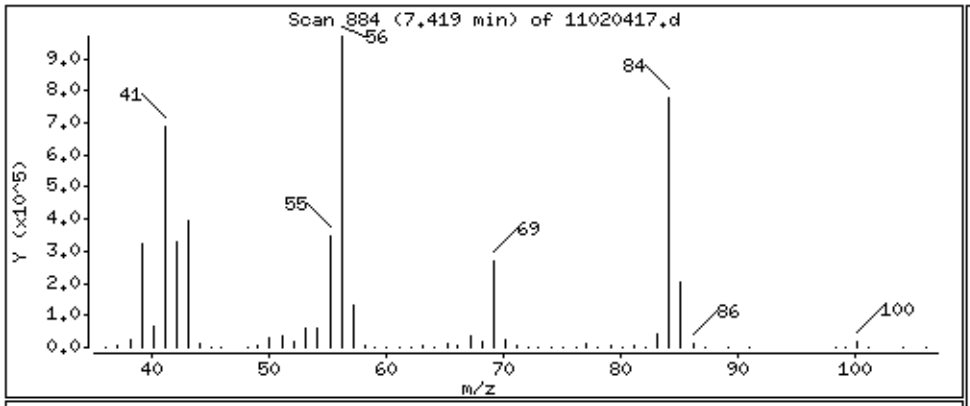
Operator: LA

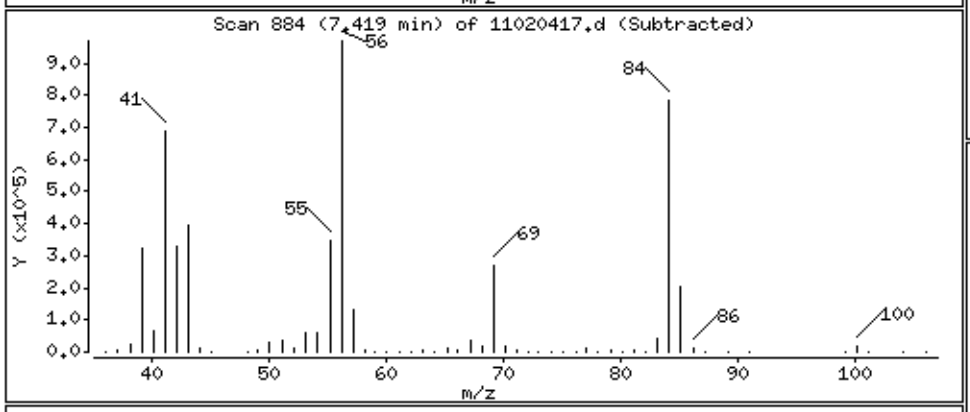
Column phase: RTx-624

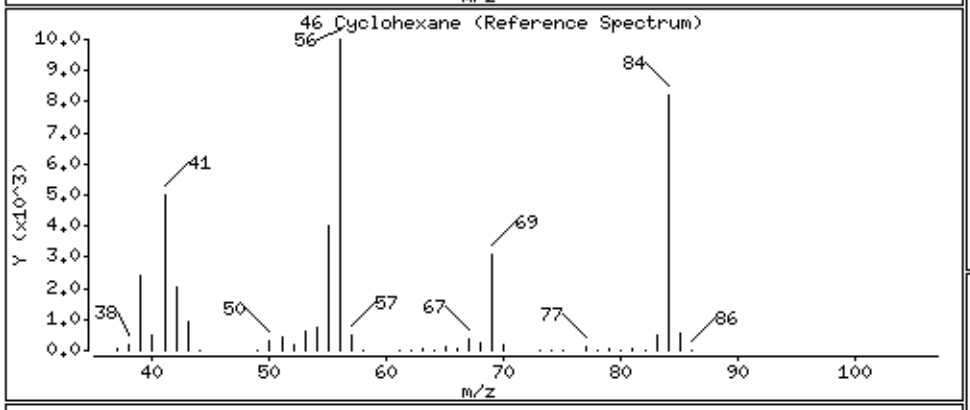
Column diameter: 0.53

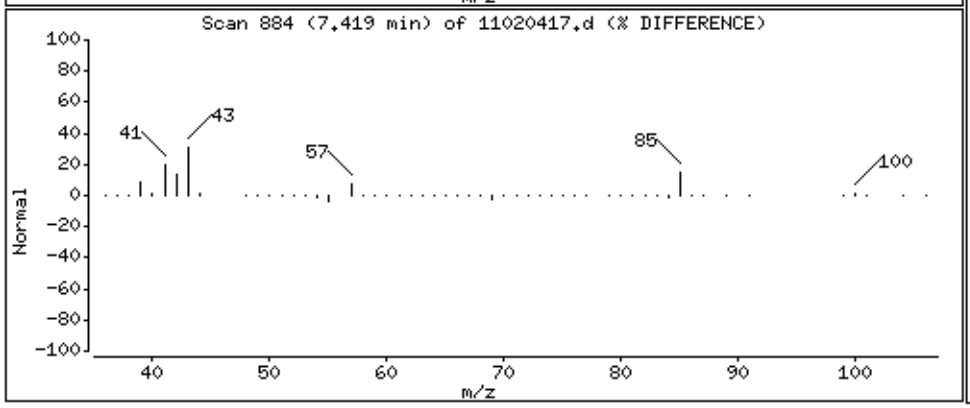
46 Cyclohexane

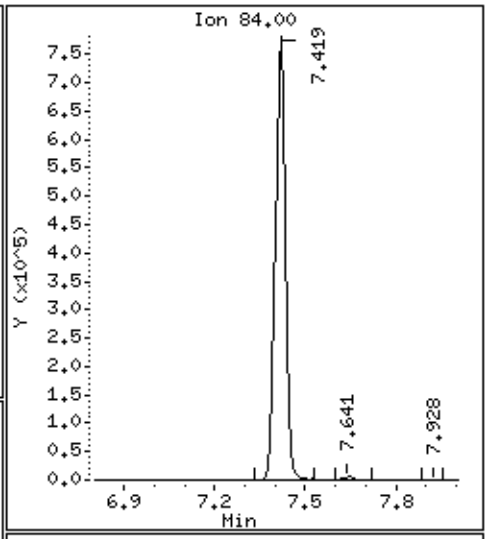
Concentration: 1058.8 NG

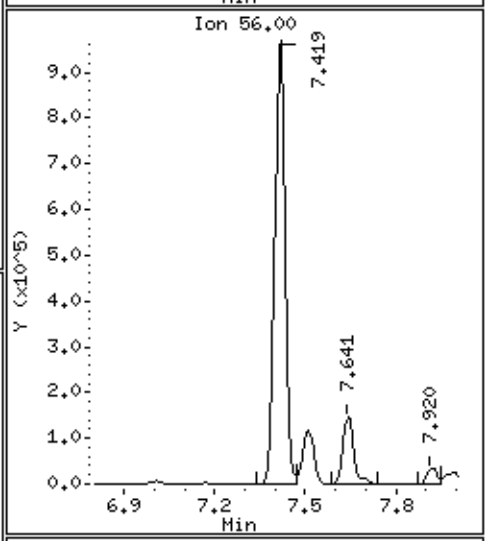


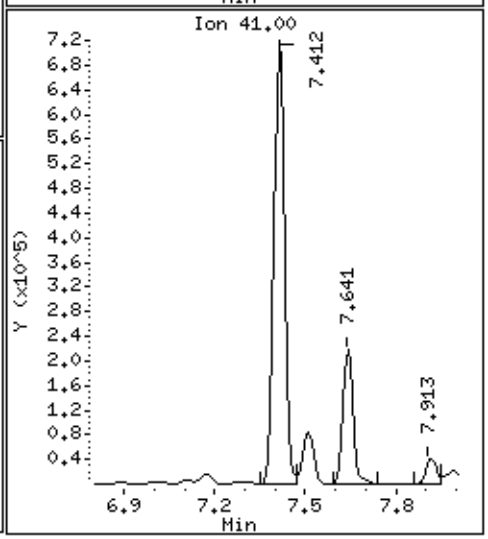












Data File: /chem/msd11.i/04feb16.b/11020417.d

Date : 04-FEB-2016 23:53

Client ID:

Instrument: msd11.i

Sample Info: ;1602029-13A

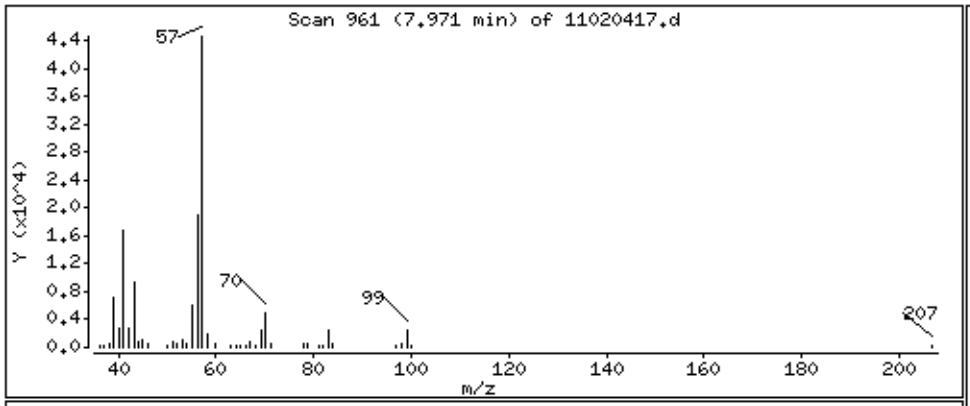
Operator: LA

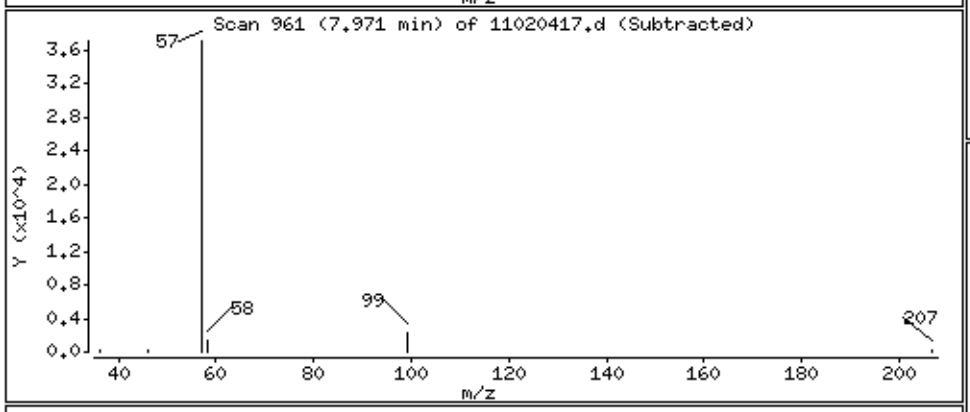
Column phase: RTx-624

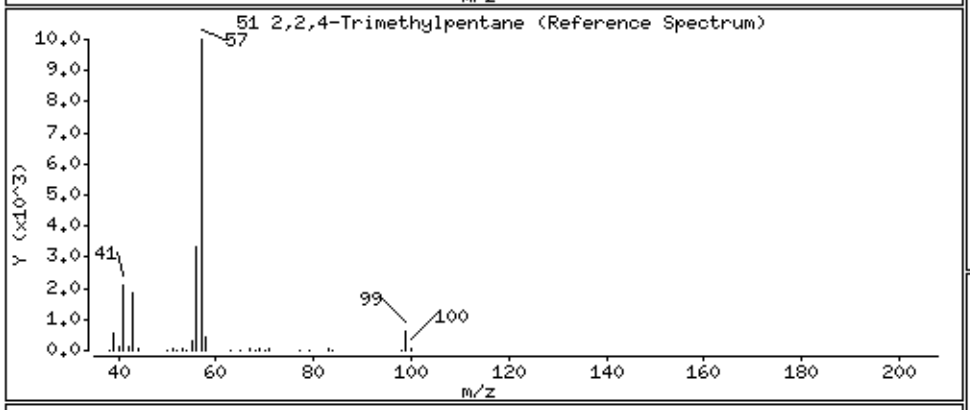
Column diameter: 0.53

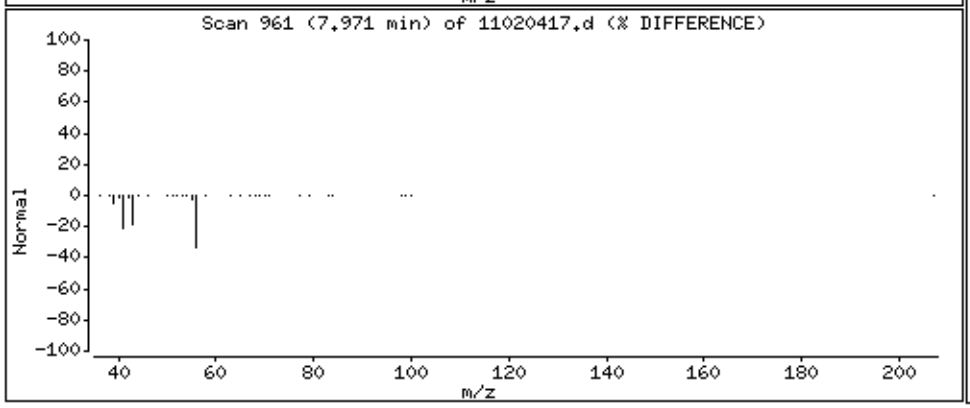
51 2,2,4-Trimethylpentane

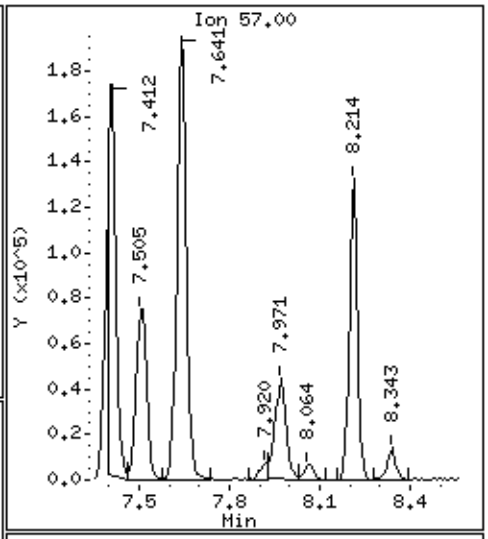
Concentration: 22.604 NG

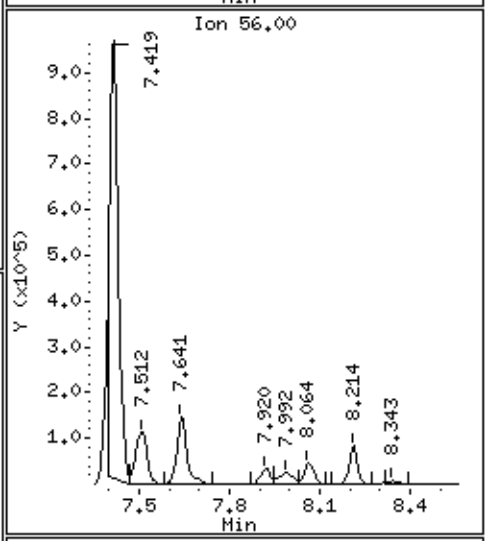


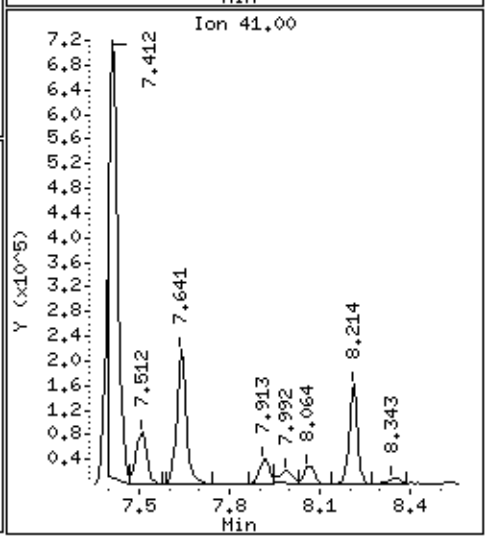












Data File: /chem/msd11.i/04feb16.b/11020417.d

Date : 04-FEB-2016 23:53

Client ID:

Instrument: msd11.i

Sample Info: ;1602029-13A

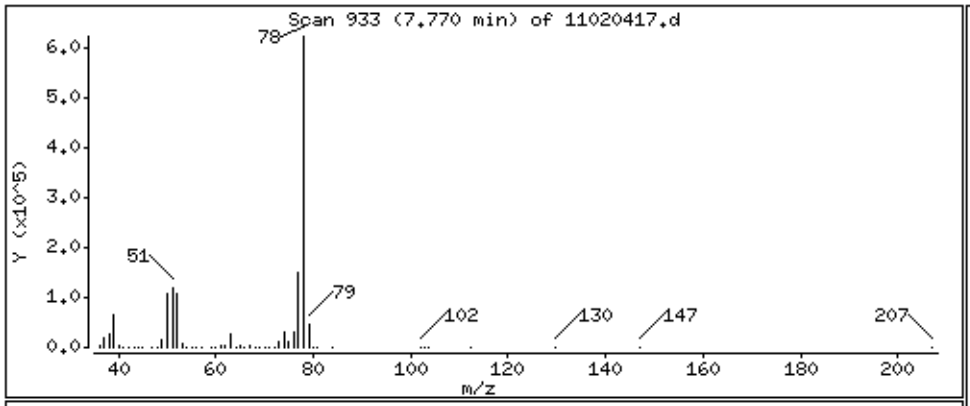
Operator: LA

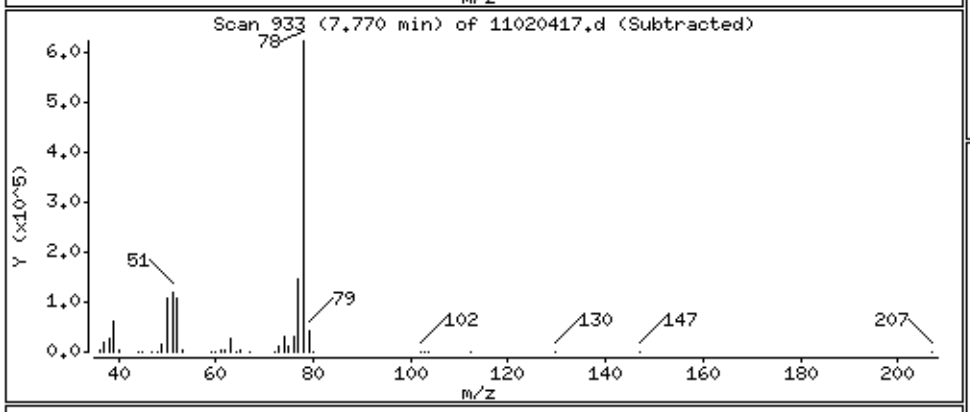
Column phase: RTx-624

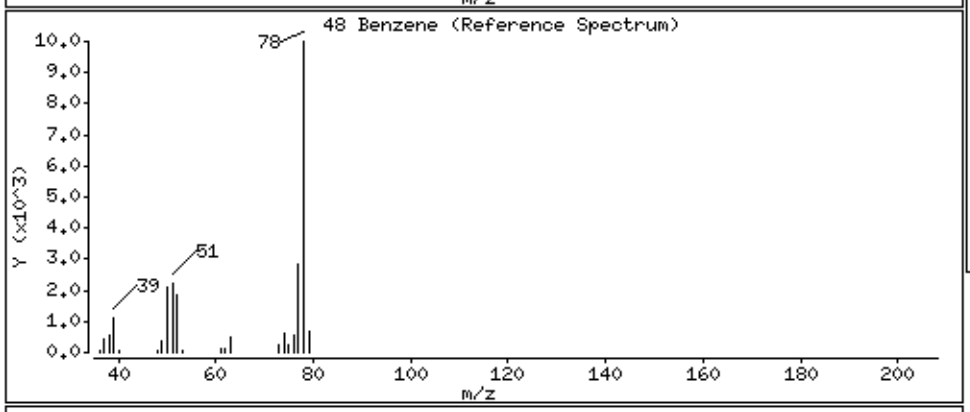
Column diameter: 0.53

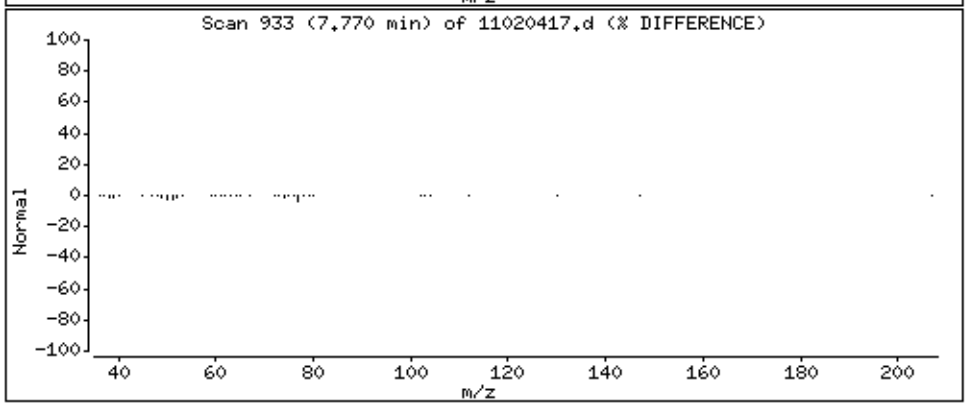
48 Benzene

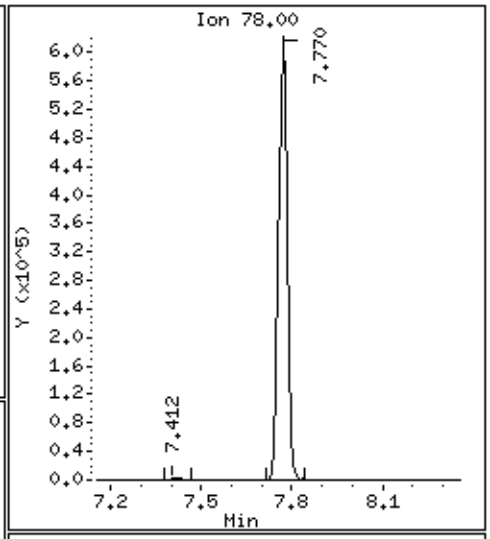
Concentration: 272.33 NG

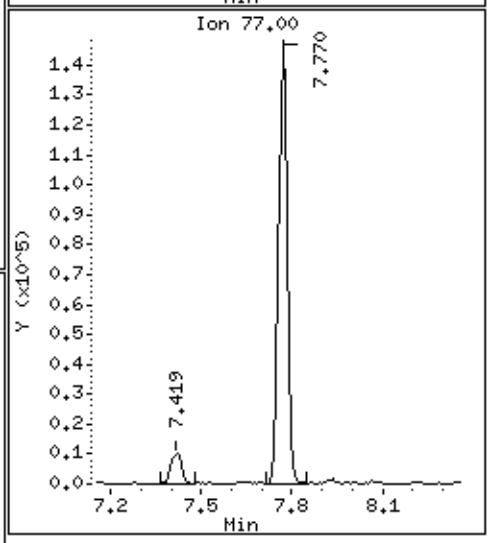












Data File: /chem/msd11.i/04feb16.b/11020417.d

Date : 04-FEB-2016 23:53

Client ID:

Instrument: msd11.i

Sample Info: ;1602029-13A

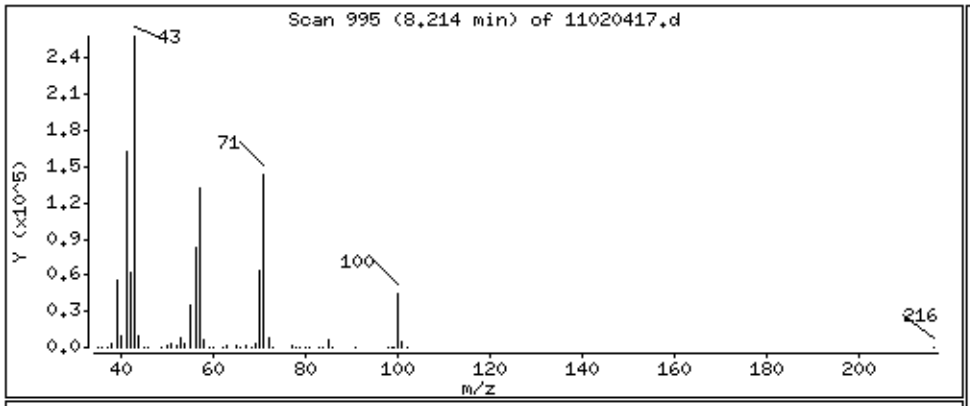
Operator: LA

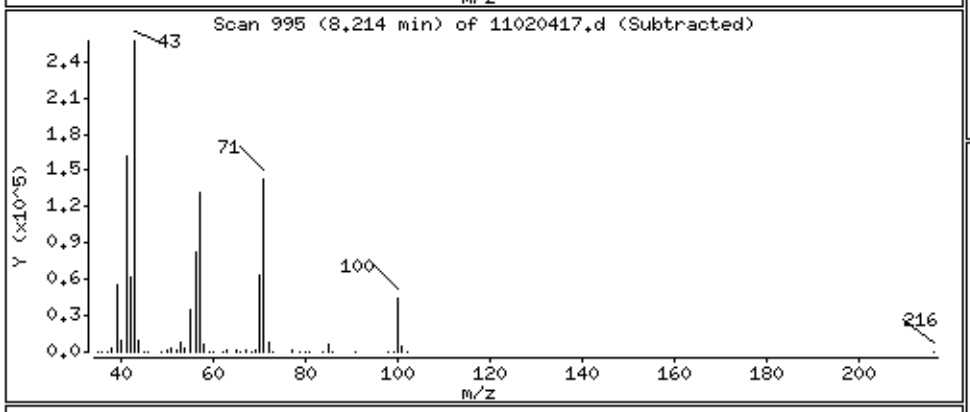
Column phase: RTx-624

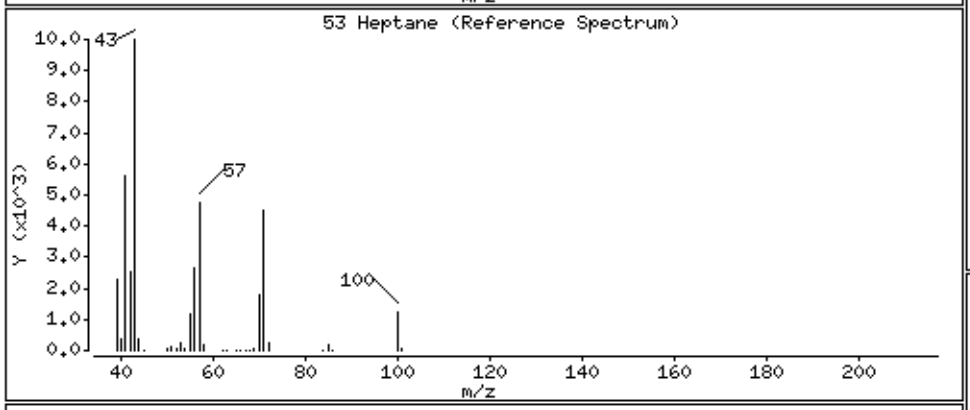
Column diameter: 0.53

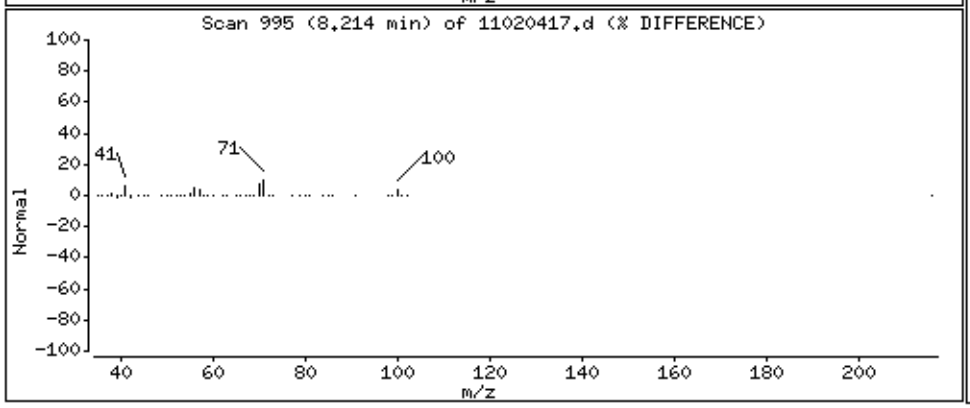
53 Heptane

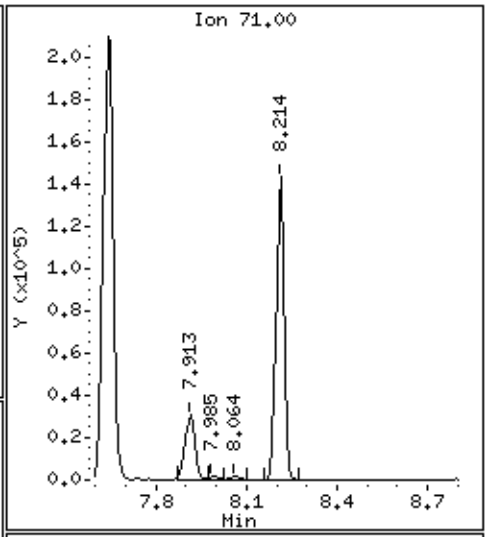
Concentration: 222.28 NG

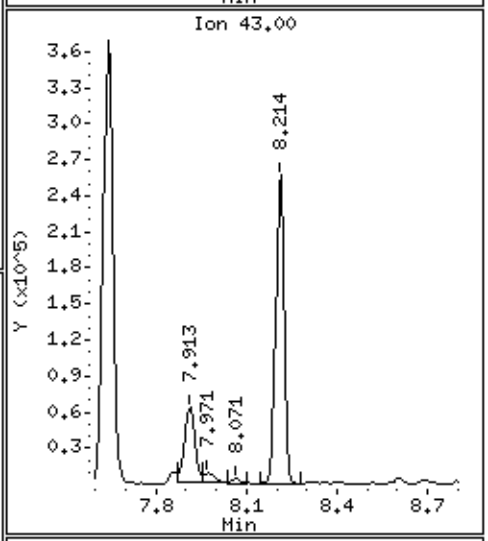


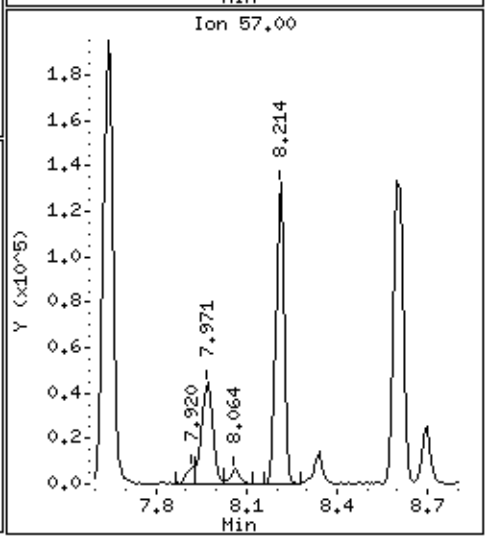












Data File: /chem/msd11.i/04feb16.b/11020417.d

Date : 04-FEB-2016 23:53

Client ID:

Instrument: msd11.i

Sample Info: ;1602029-13A

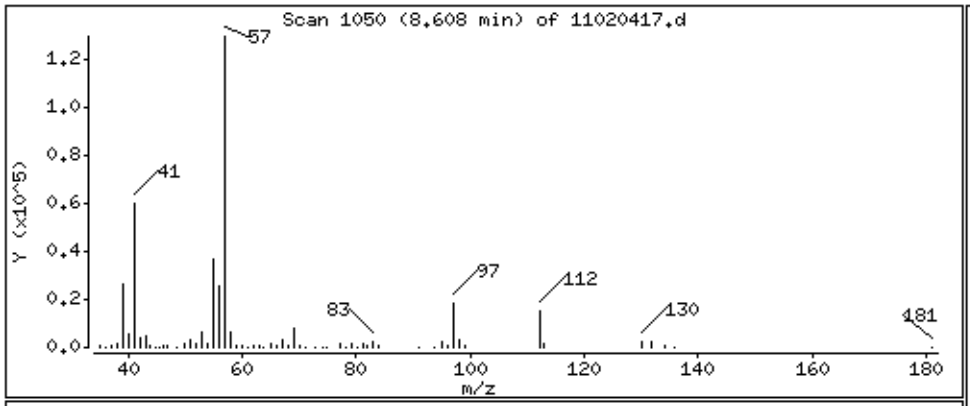
Operator: LA

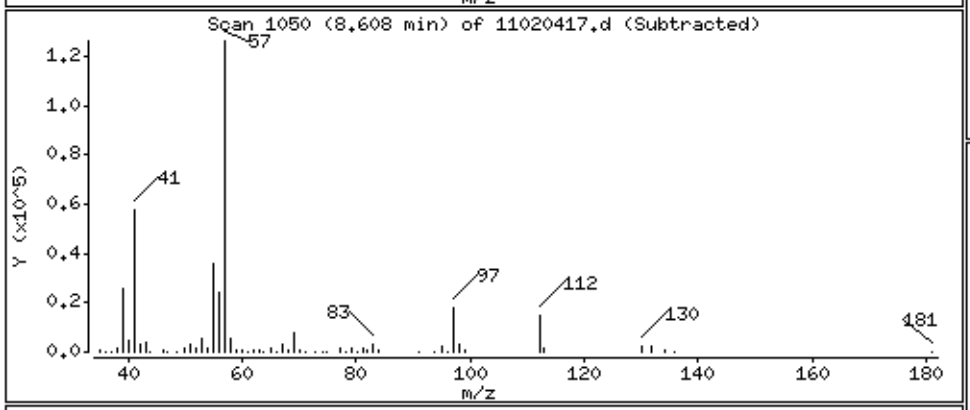
Column phase: RTx-624

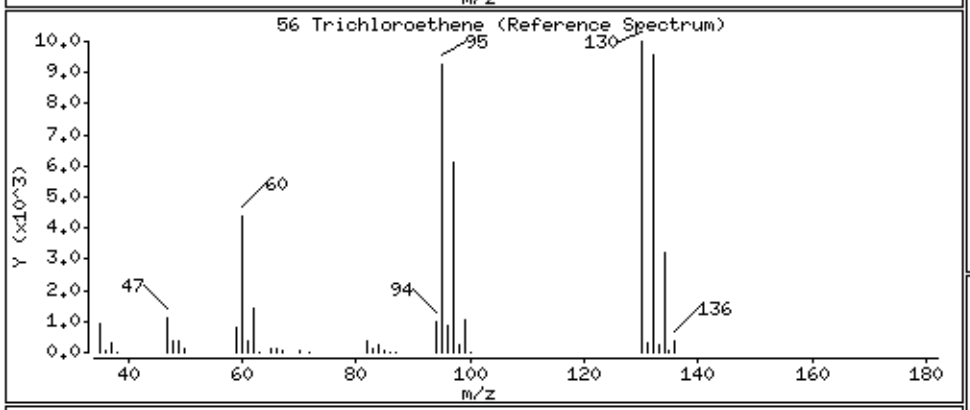
Column diameter: 0.53

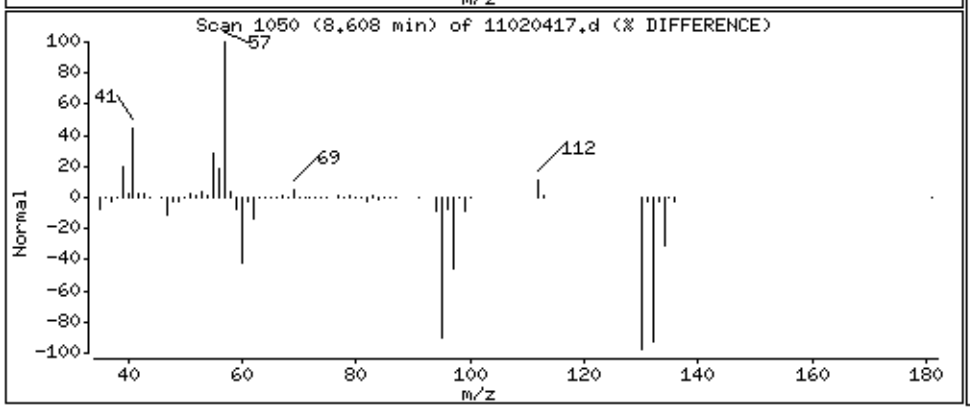
56 Trichloroethene

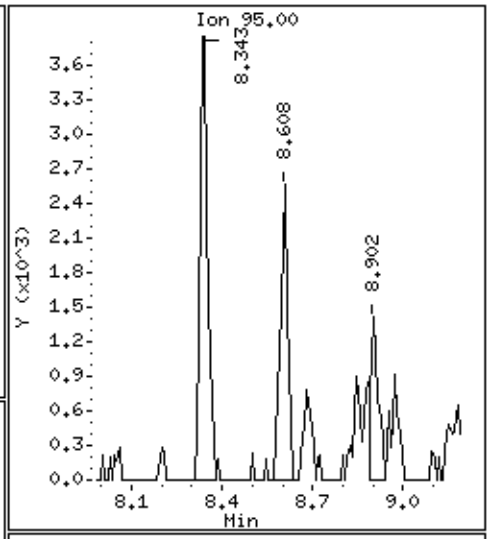
Concentration: 3.126 NG

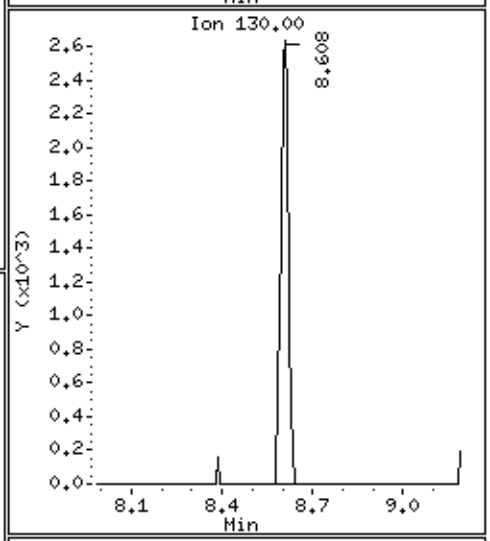


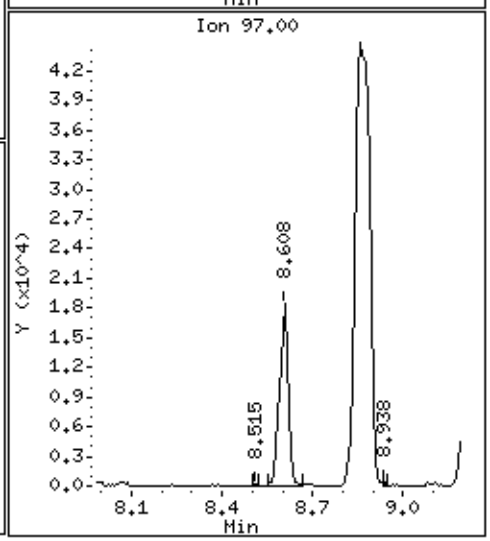












Data File: /chem/msd11.i/04feb16.b/11020417.d

Date : 04-FEB-2016 23:53

Client ID:

Instrument: msd11.i

Sample Info: ;1602029-13A

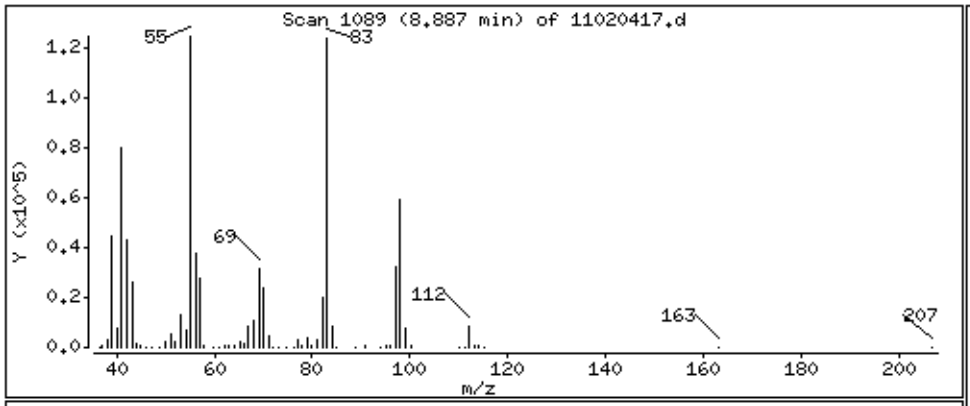
Operator: LA

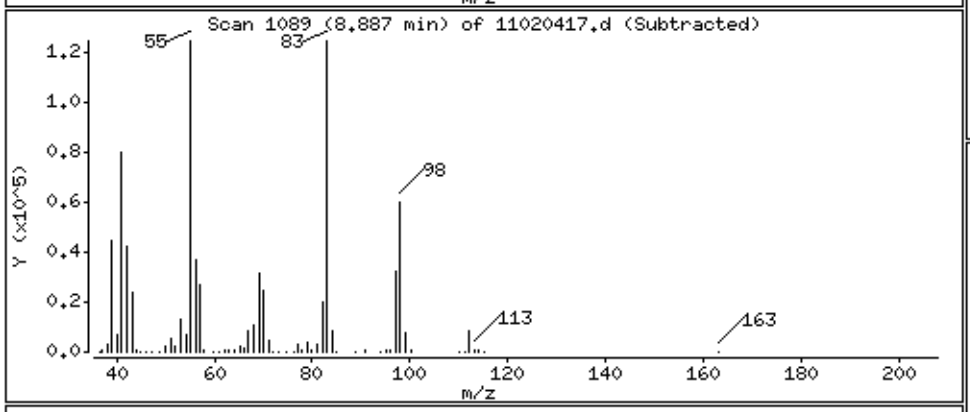
Column phase: RTx-624

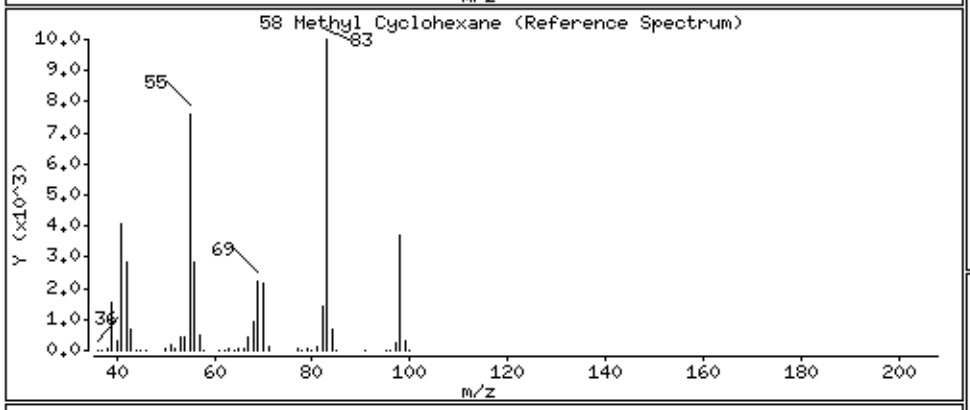
Column diameter: 0.53

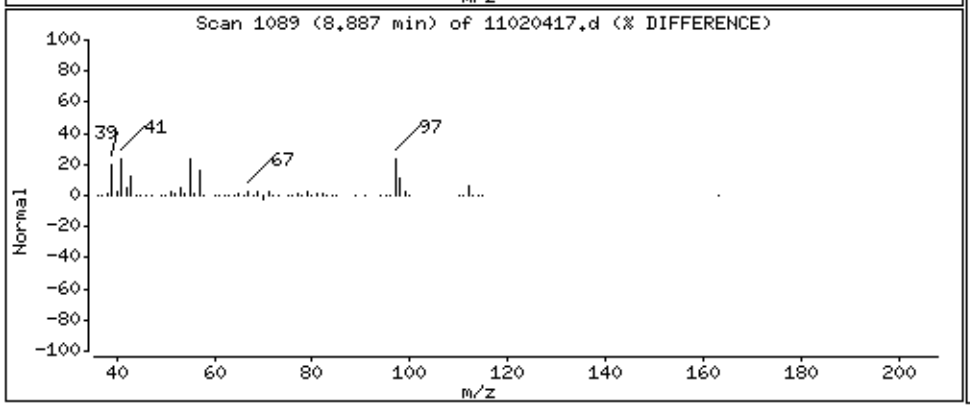
58 Methyl Cyclohexane

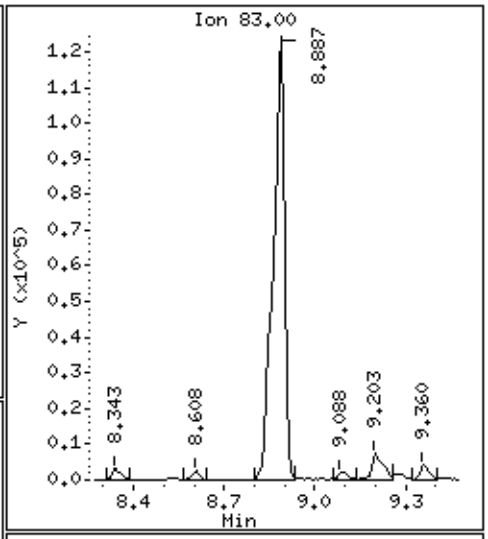
Concentration: 147.75 NG

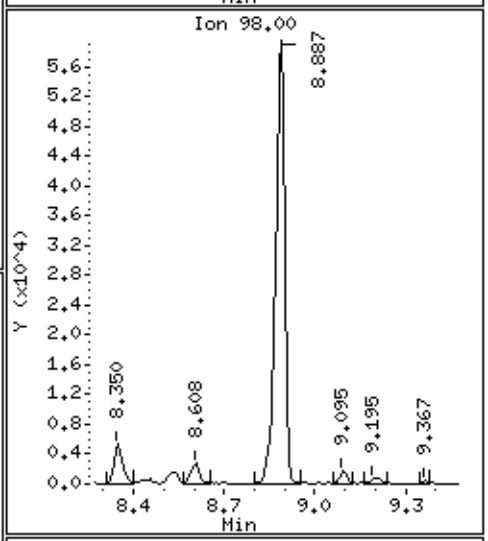


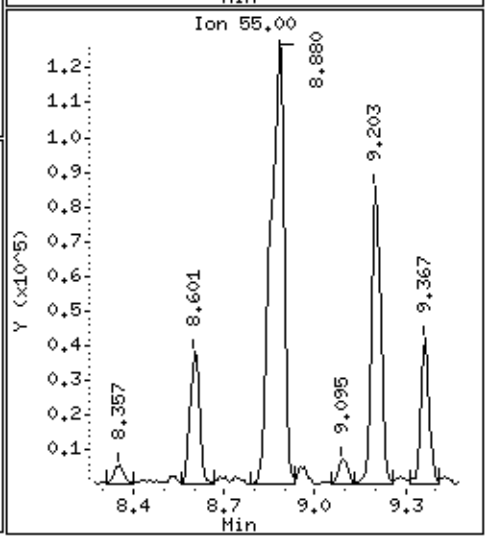












Data File: /chem/msd11.i/04feb16.b/11020417.d

Date : 04-FEB-2016 23:53

Client ID:

Instrument: msd11.i

Sample Info: ;1602029-13A

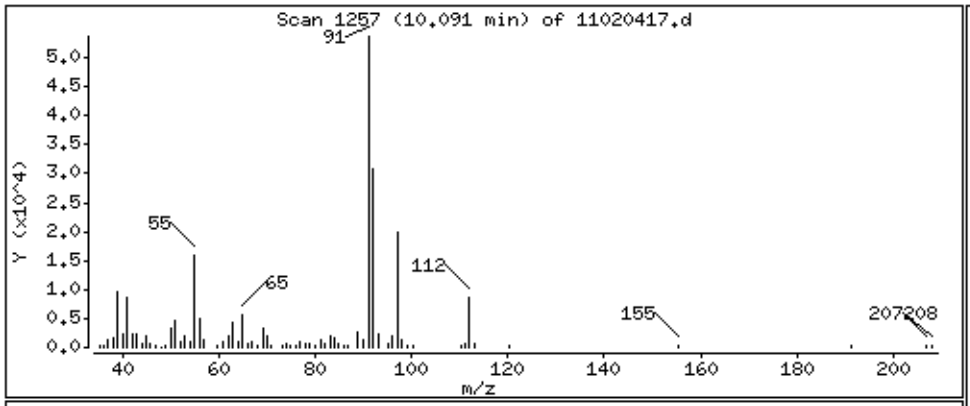
Operator: LA

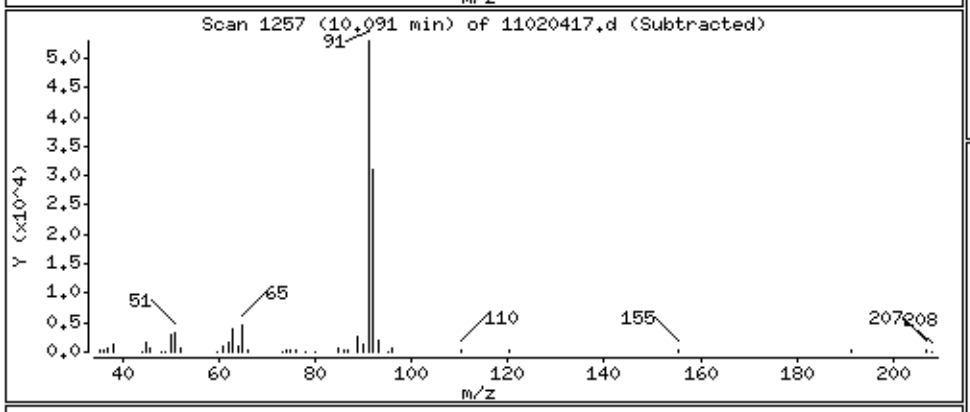
Column phase: RTx-624

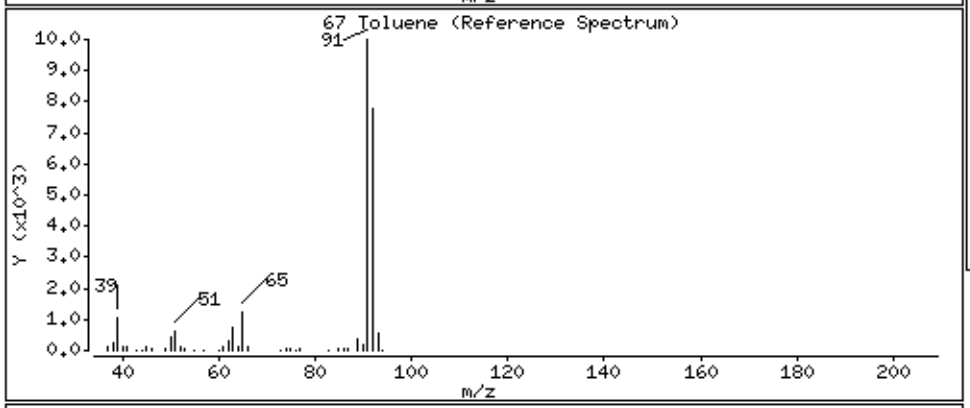
Column diameter: 0.53

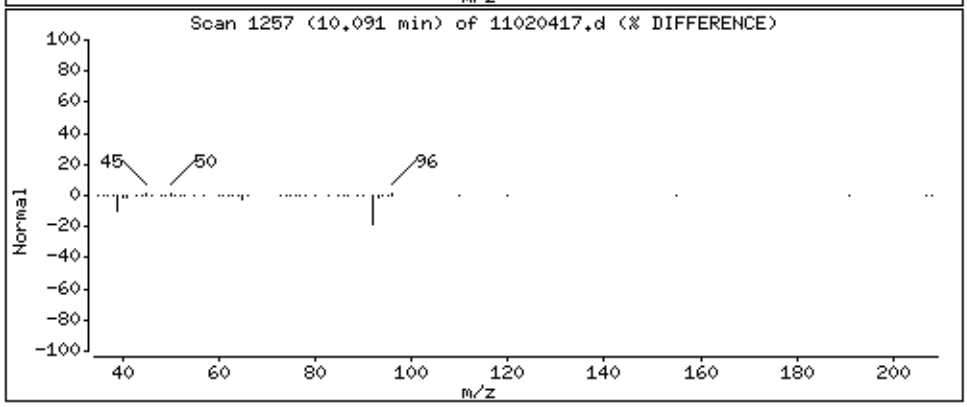
67 Toluene

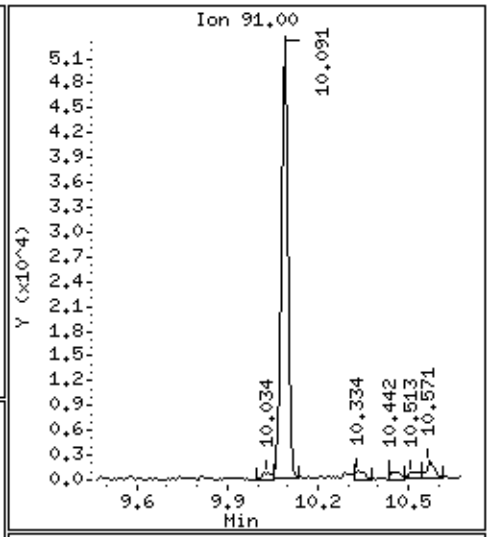
Concentration: 17.776 NG

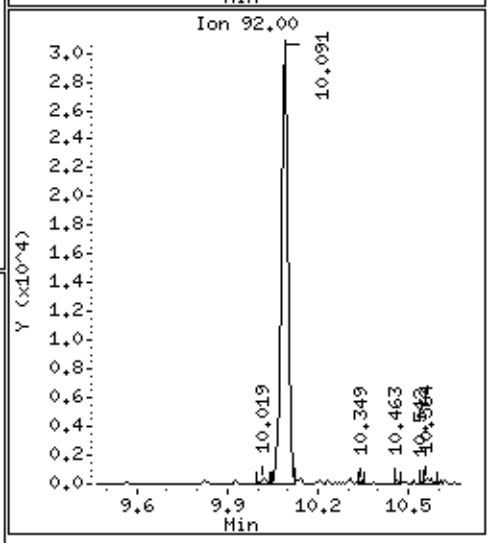












Data File: /chem/msd11.i/04feb16.b/11020417.d

Date : 04-FEB-2016 23:53

Client ID:

Instrument: msd11.i

Sample Info: ;1602029-13A

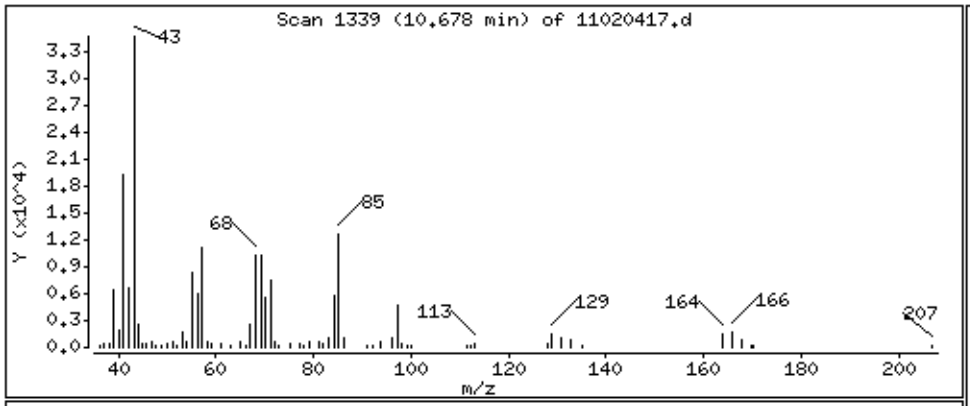
Operator: LA

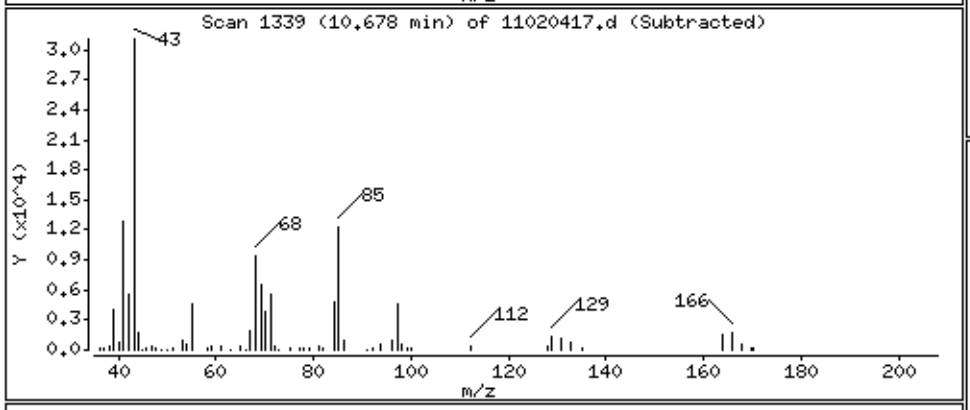
Column phase: RTx-624

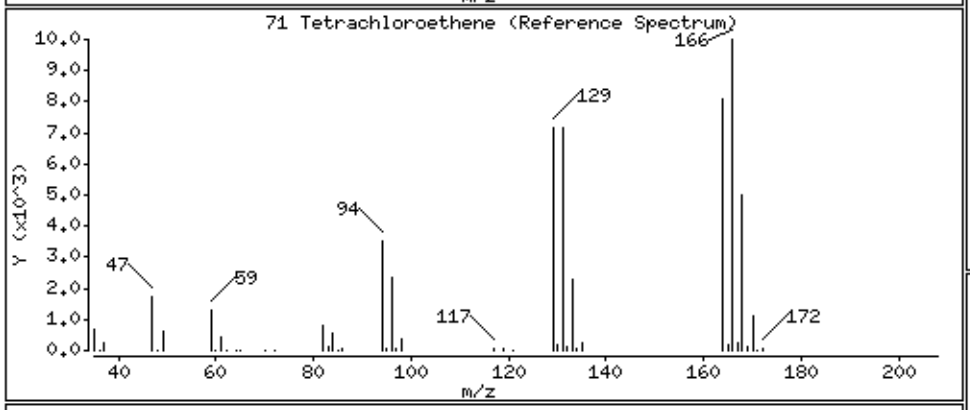
Column diameter: 0.53

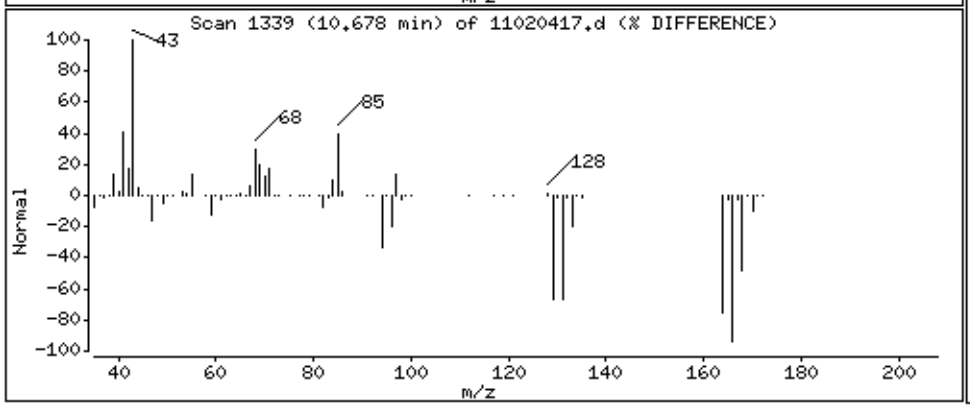
71 Tetrachloroethene

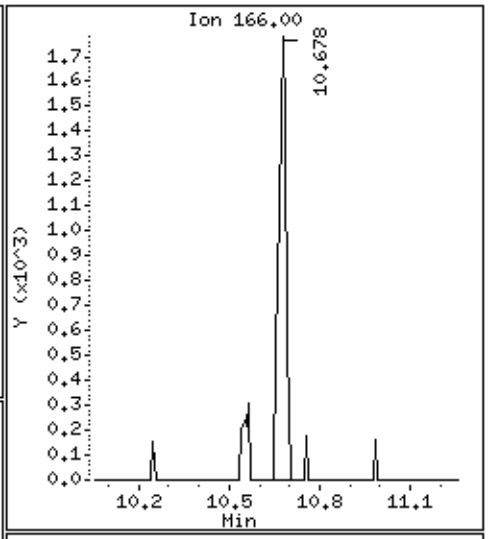
Concentration: 2.135 NG

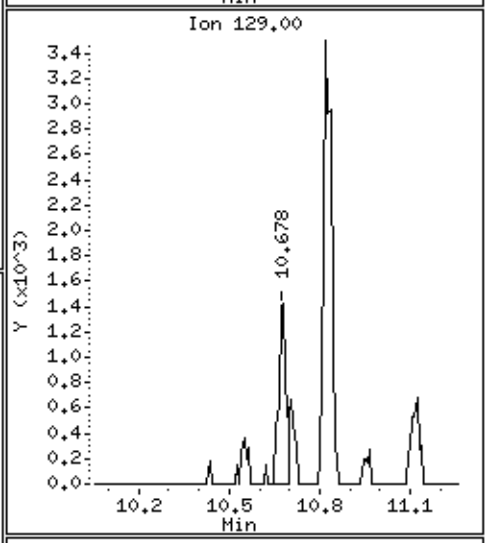


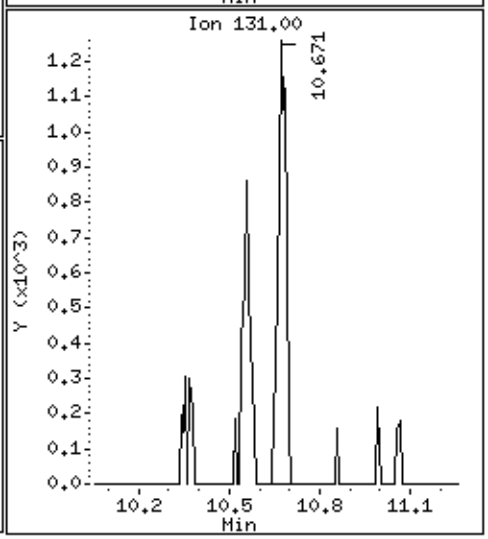












Data File: /chem/msd11.i/04feb16.b/11020417.d

Date : 04-FEB-2016 23:53

Client ID:

Instrument: msd11.i

Sample Info: ;1602029-13A

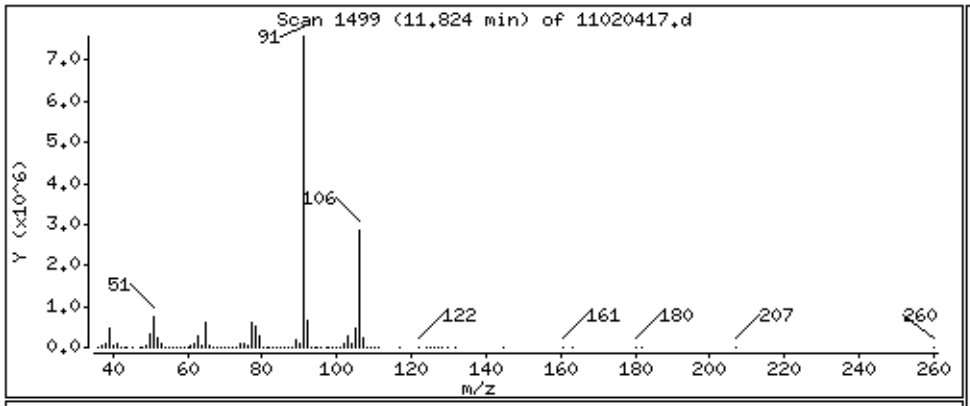
Operator: LA

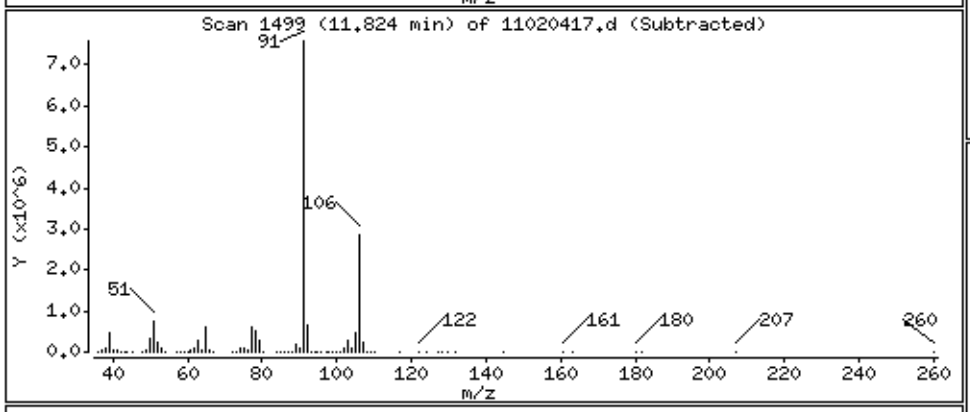
Column phase: RTx-624

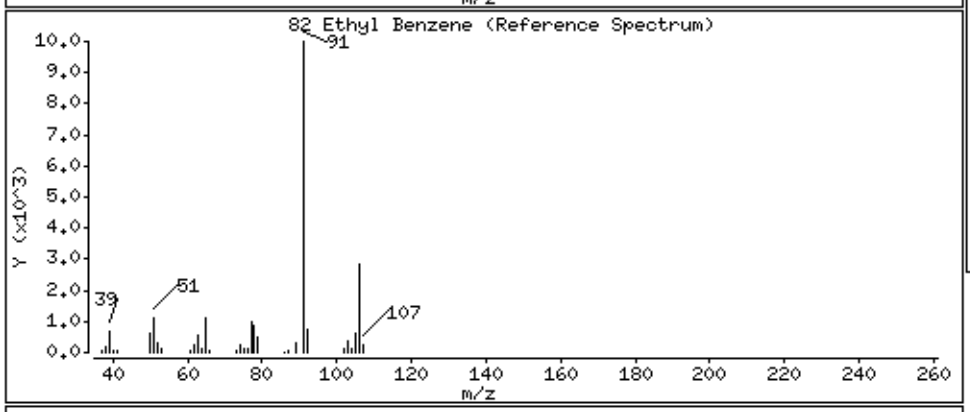
Column diameter: 0.53

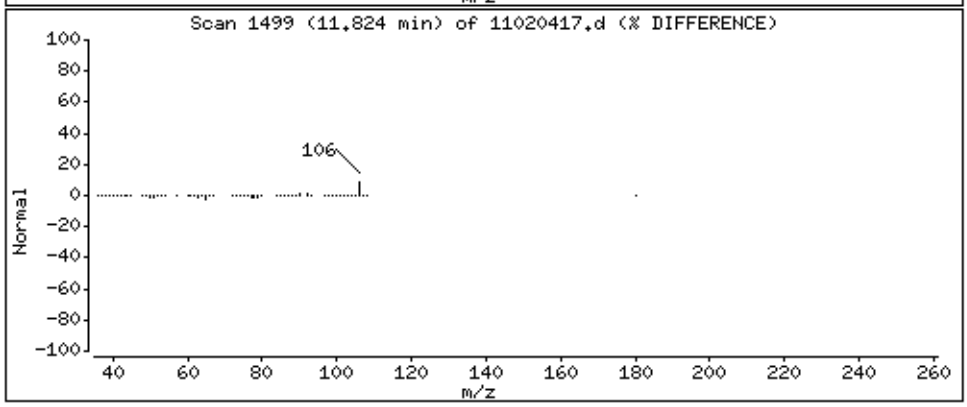
82 Ethyl Benzene

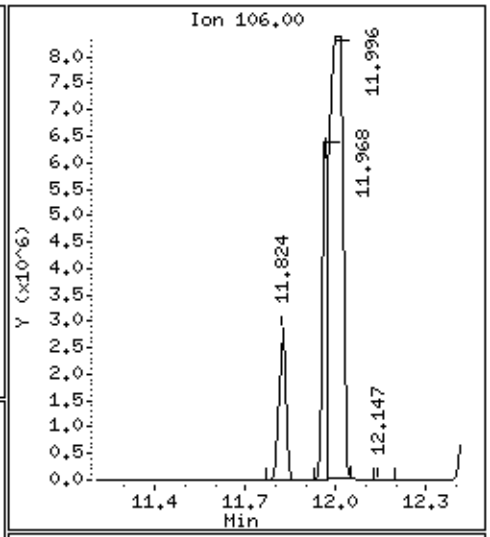
Concentration: 2475.8 NG

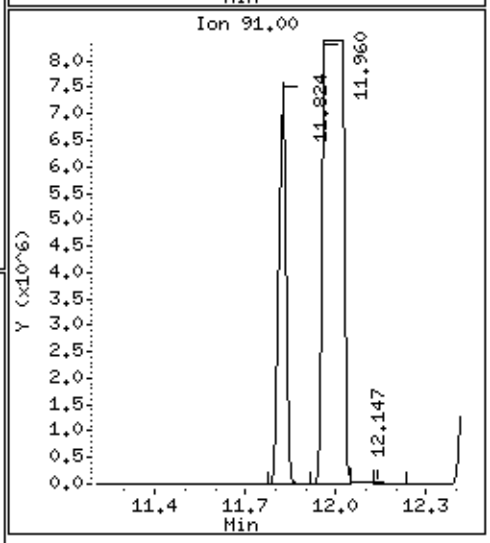












Data File: /chem/msd11.i/04feb16.b/11020417.d

Date : 04-FEB-2016 23:53

Client ID:

Instrument: msd11.i

Sample Info: ;1602029-13A

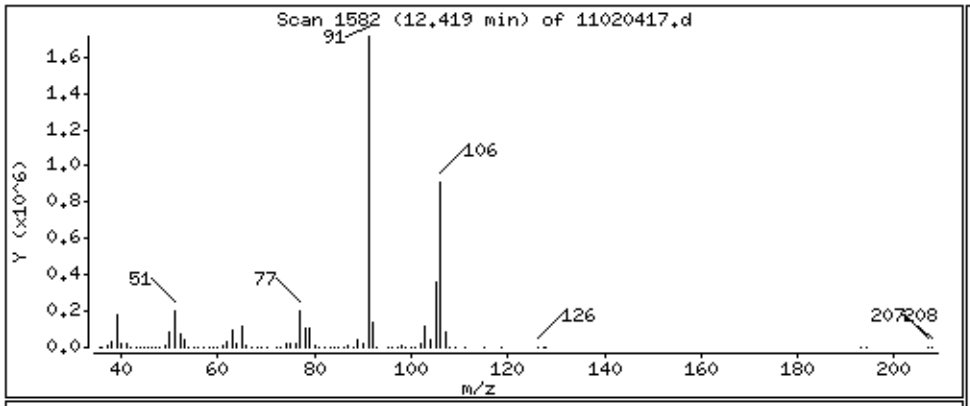
Operator: LA

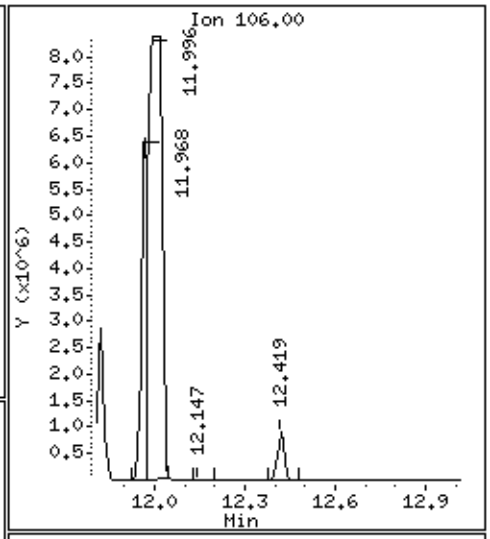
Column phase: RTx-624

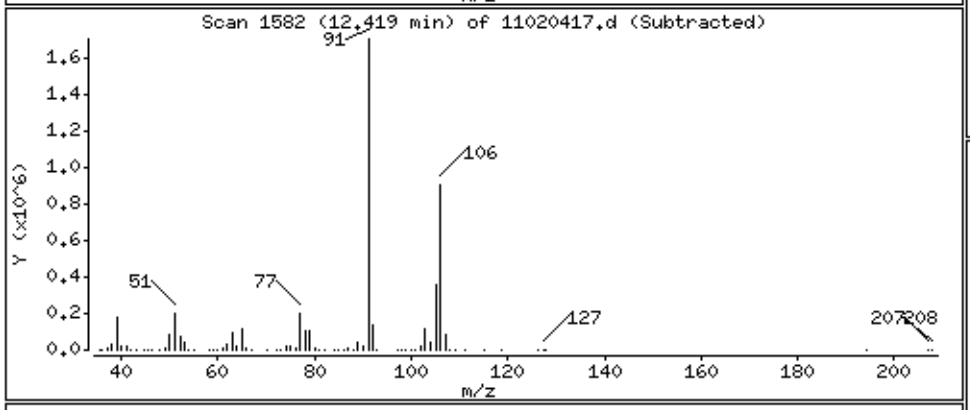
Column diameter: 0.53

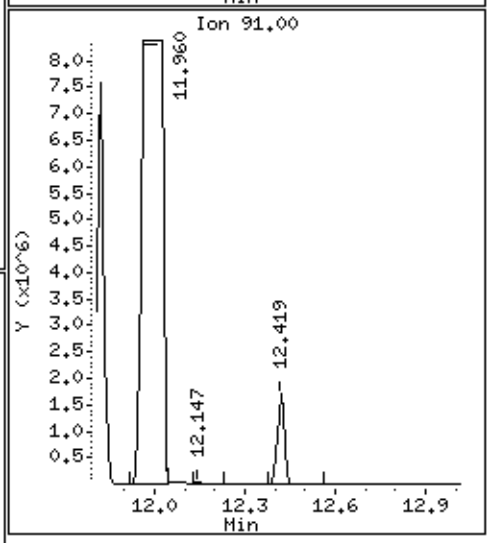
88 o-Xylene

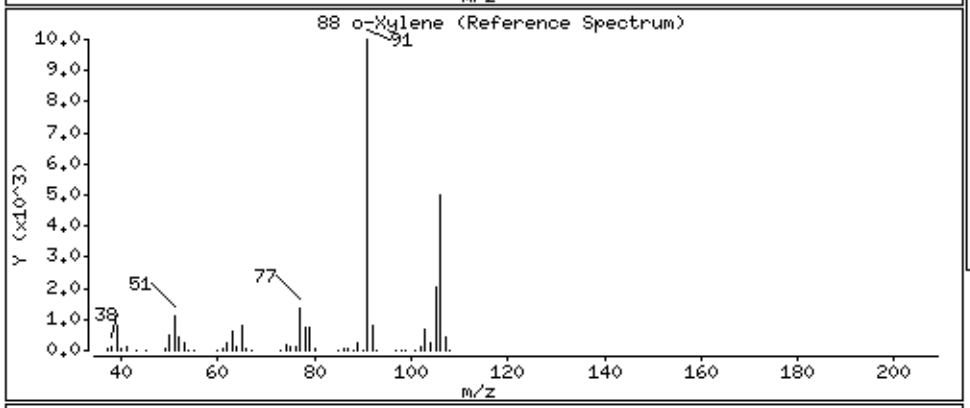
Concentration: 620.36 NG

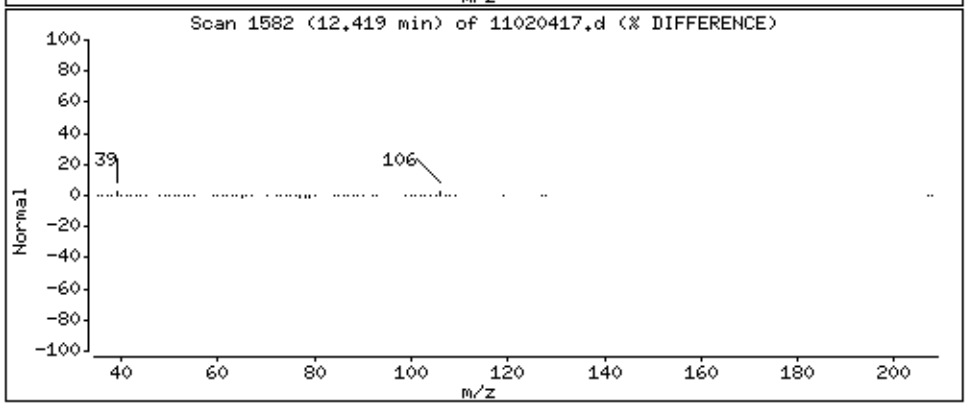












Data File: /chem/msd11.i/04feb16.b/11020417.d

Date : 04-FEB-2016 23:53

Client ID:

Instrument: msd11.i

Sample Info: ;1602029-13A

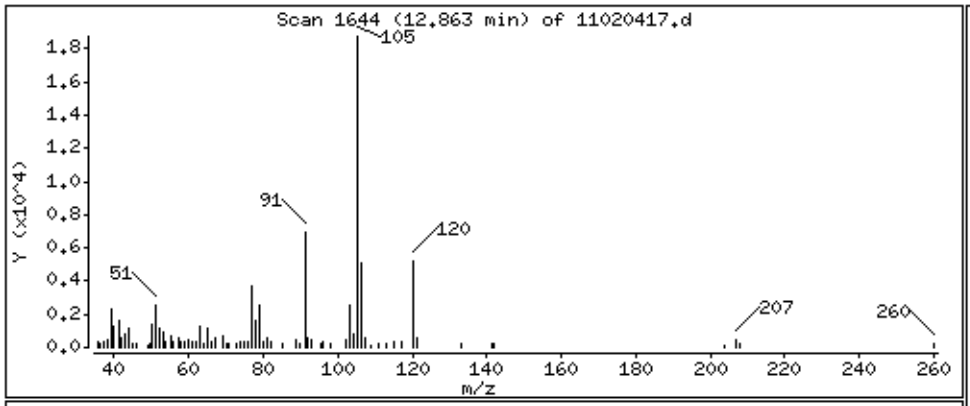
Operator: LA

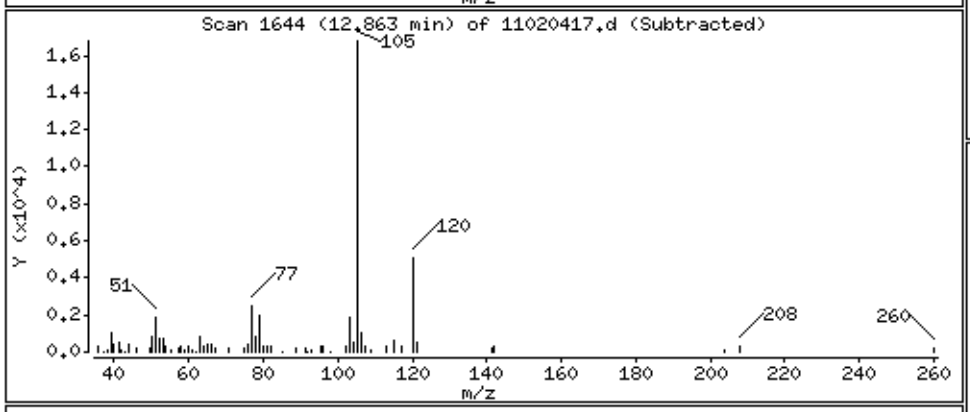
Column phase: RTx-624

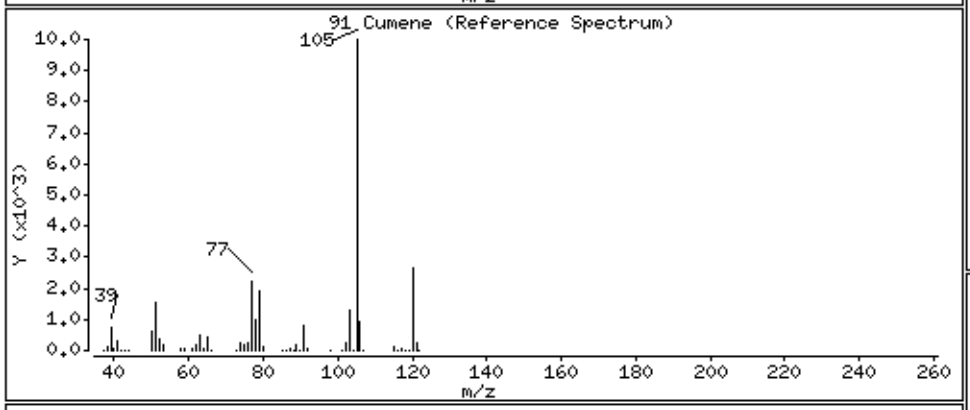
Column diameter: 0.53

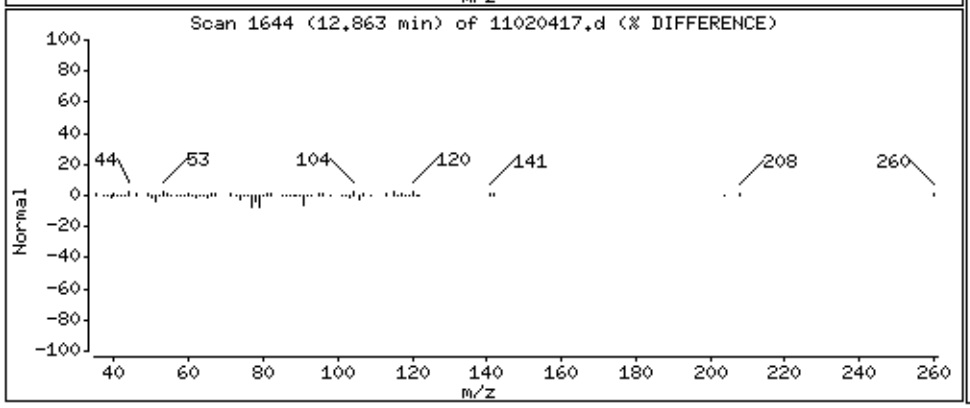
91 Cumene

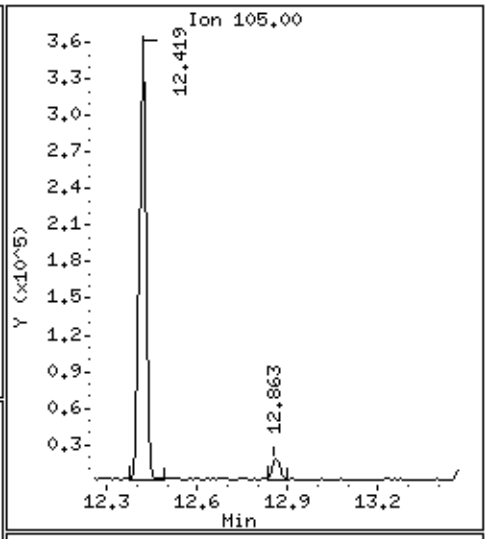
Concentration: 5.123 NG

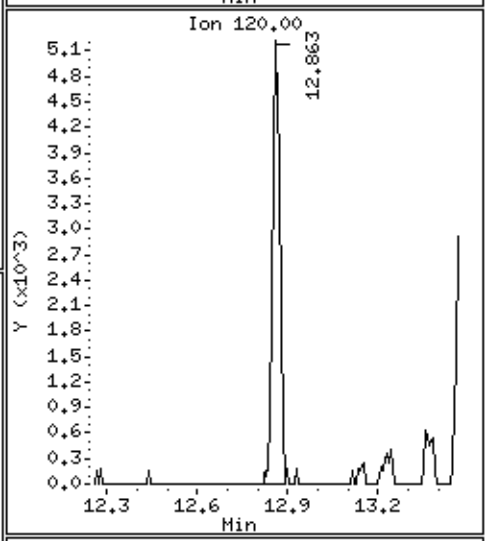


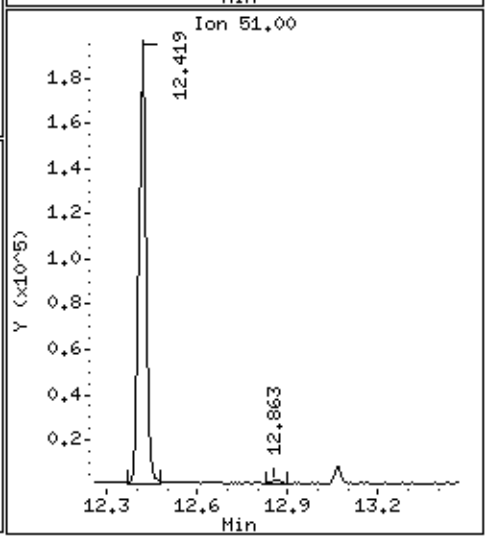












Data File: /chem/msd11.i/04feb16.b/11020417.d

Date : 04-FEB-2016 23:53

Client ID:

Instrument: msd11.i

Sample Info: ;1602029-13A

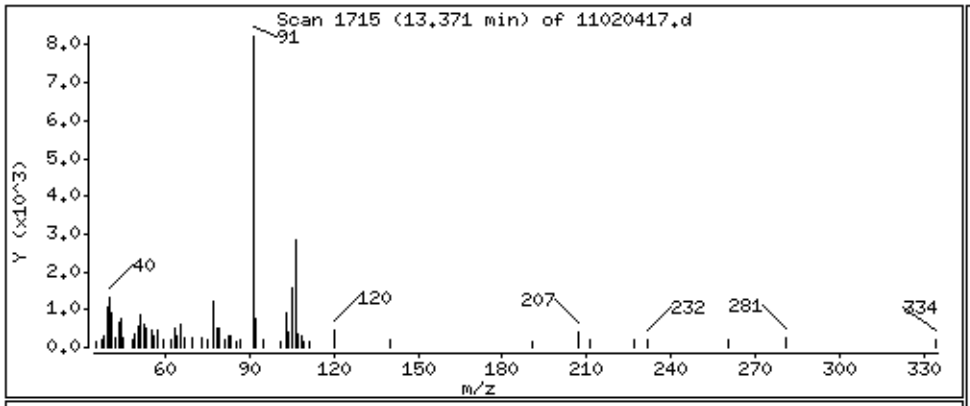
Operator: LA

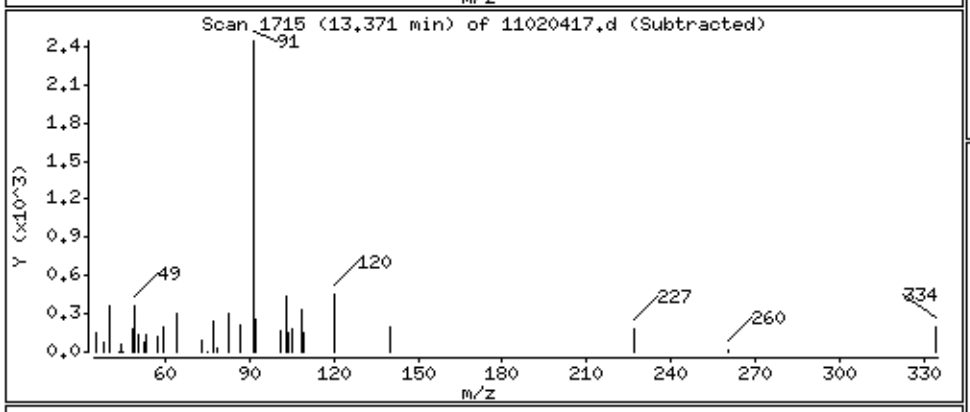
Column phase: RTx-624

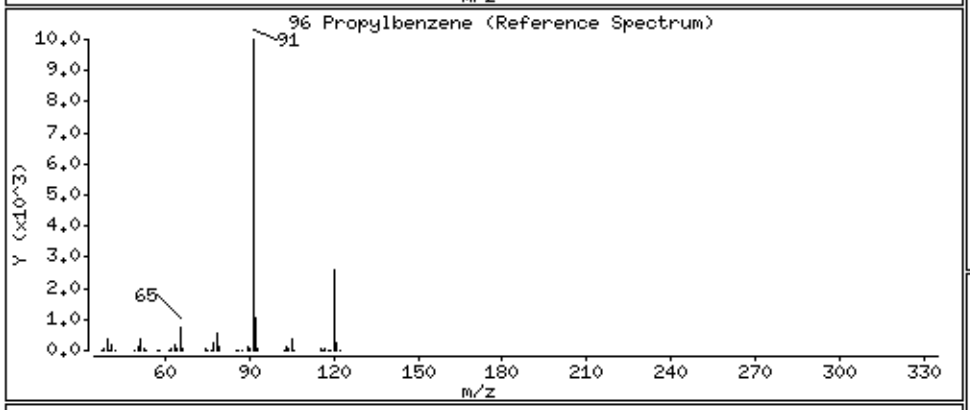
Column diameter: 0.53

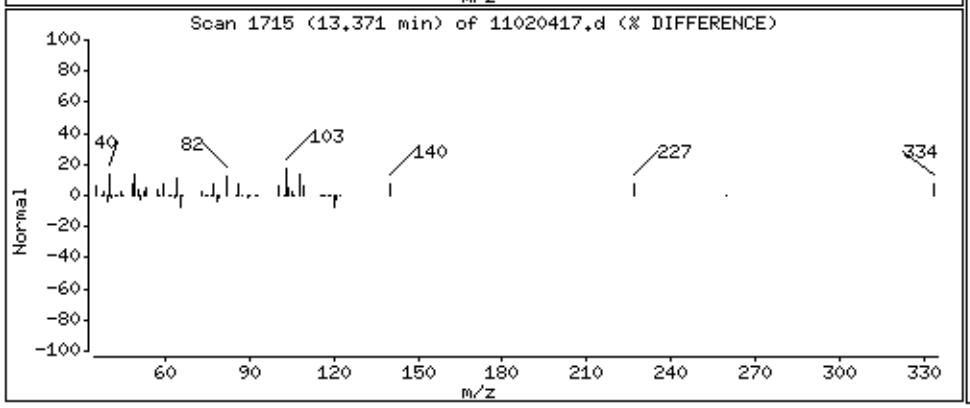
96 Propylbenzene

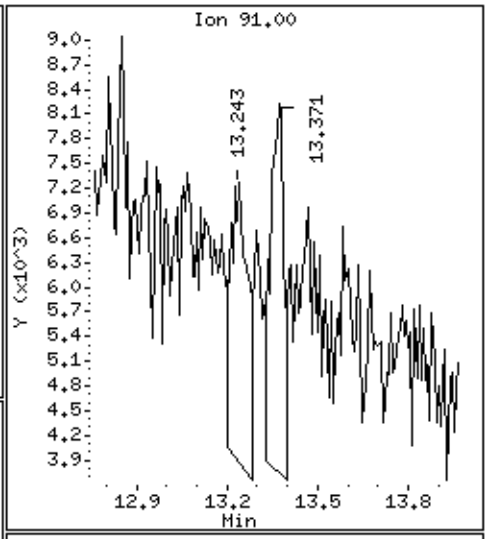
Concentration: 2.224 NG

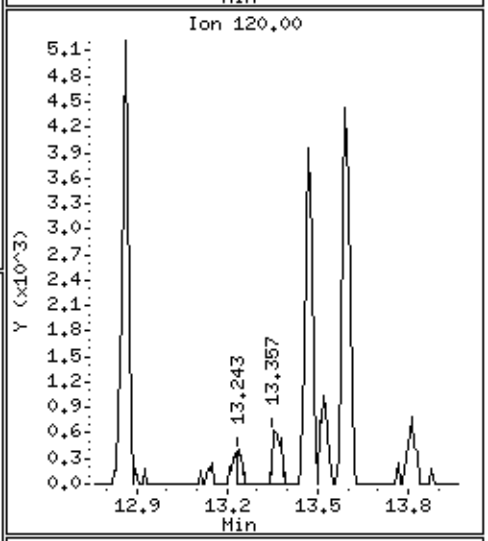


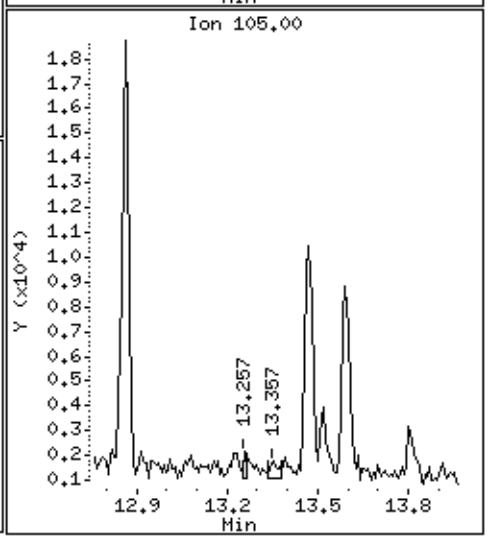












Data File: /chem/msd11.i/04feb16.b/11020417.d

Date : 04-FEB-2016 23:53

Client ID:

Instrument: msd11.i

Sample Info: ;1602029-13A

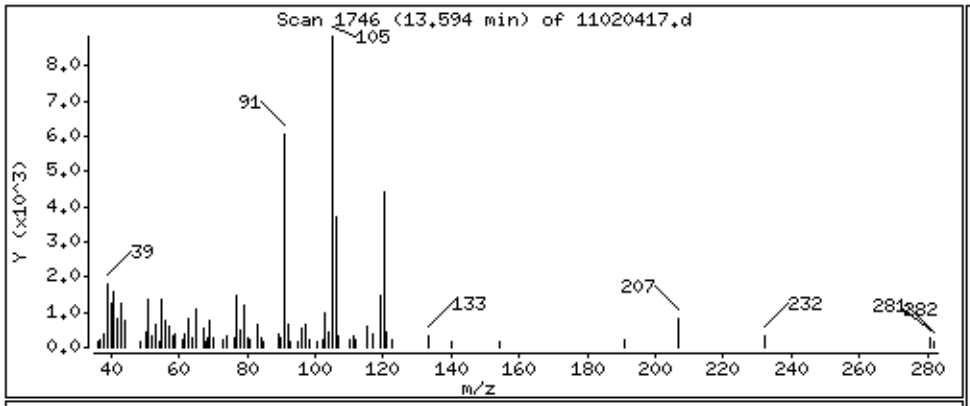
Operator: LA

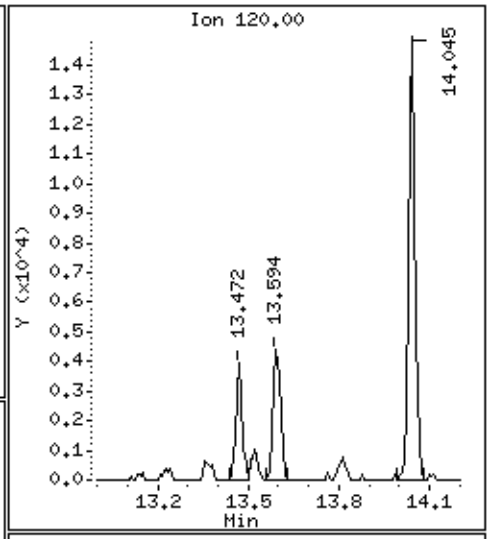
Column phase: RTx-624

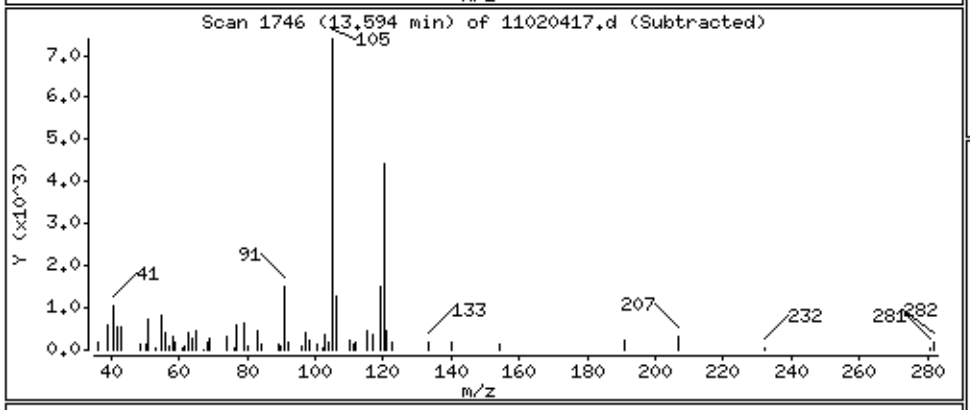
Column diameter: 0.53

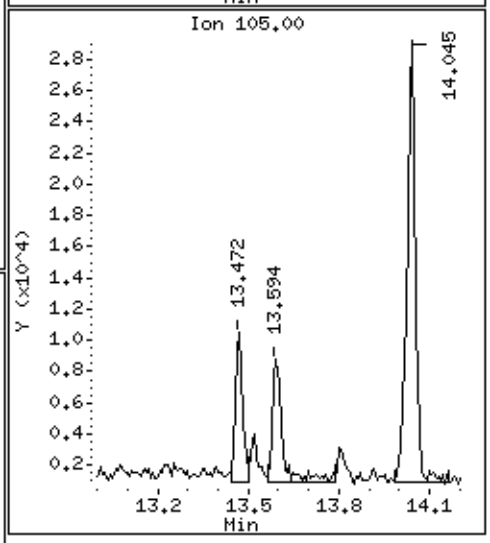
98 1,3,5-Trimethylbenzene

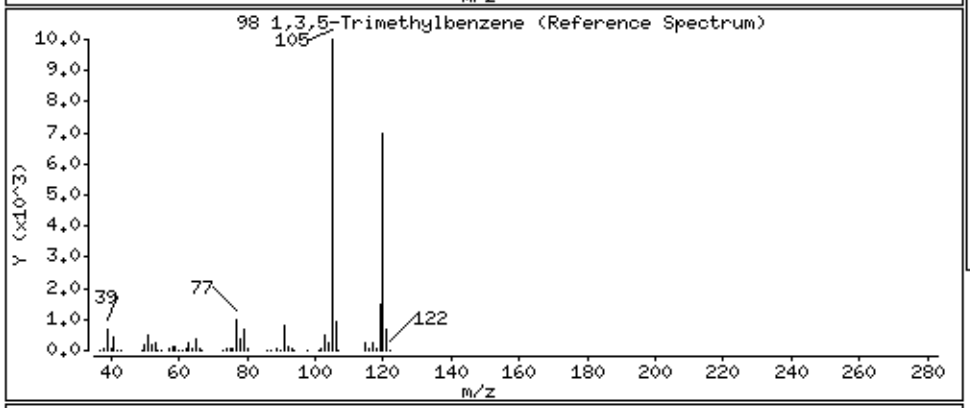
Concentration: 3.013 NG

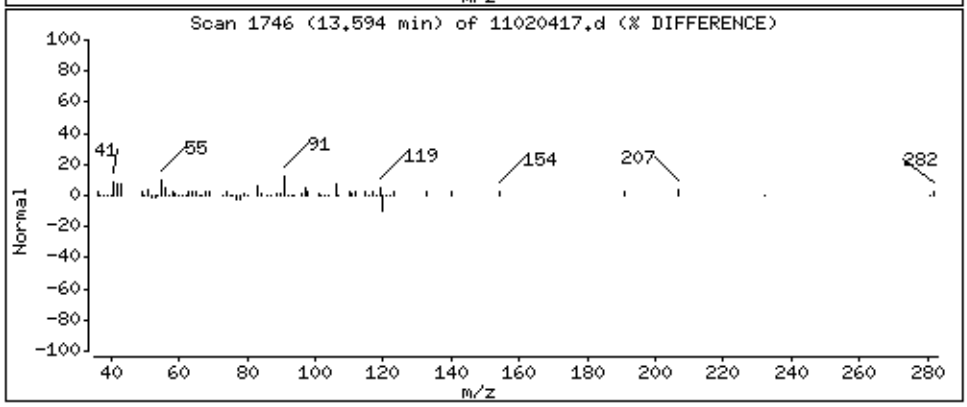












Data File: /chem/msd11.i/04feb16.b/11020417.d

Date : 04-FEB-2016 23:53

Client ID:

Instrument: msd11.i

Sample Info: ;1602029-13A

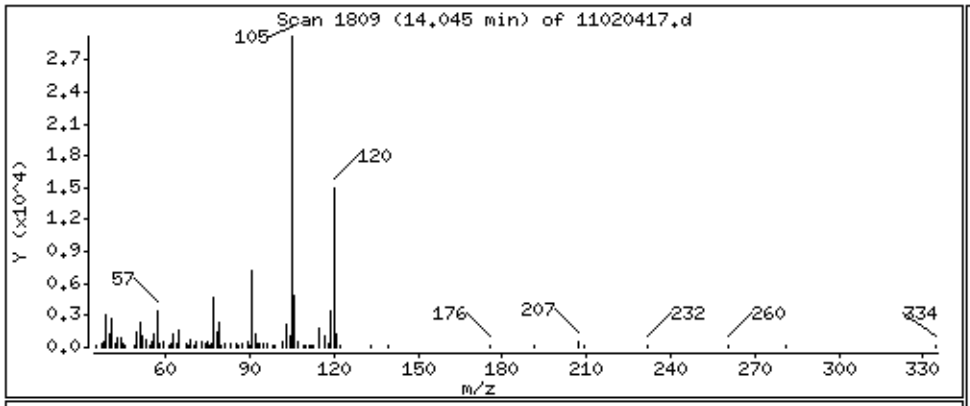
Operator: LA

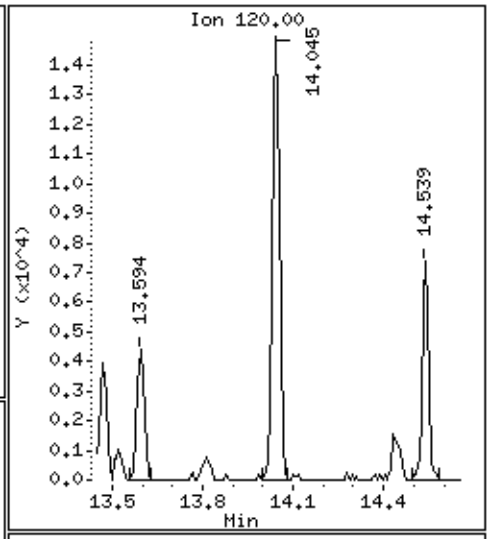
Column phase: RTx-624

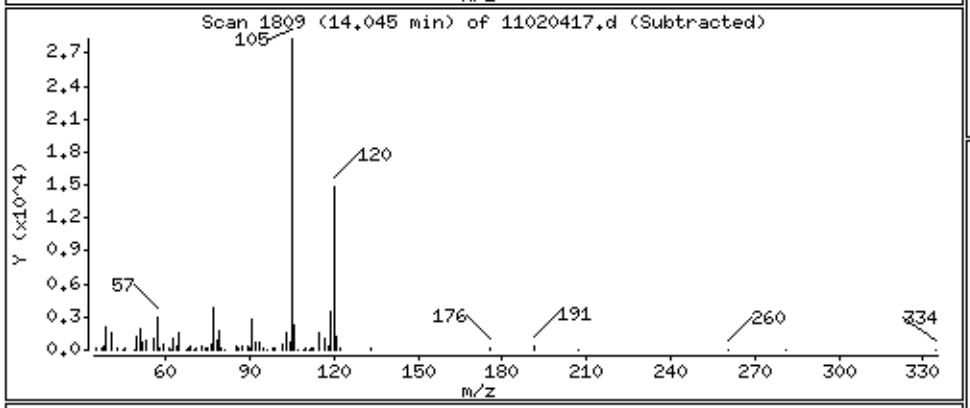
Column diameter: 0.53

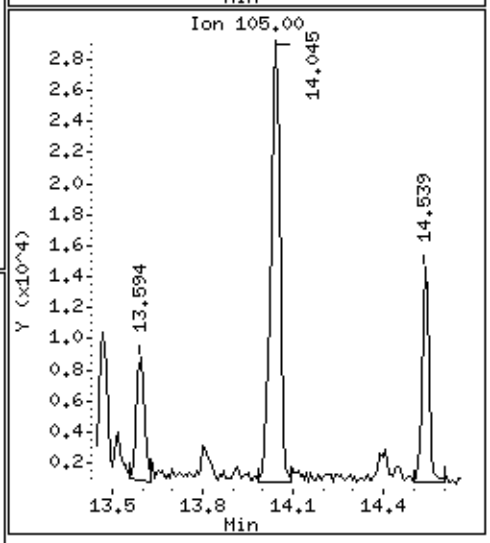
100 1,2,4-Trimethylbenzene

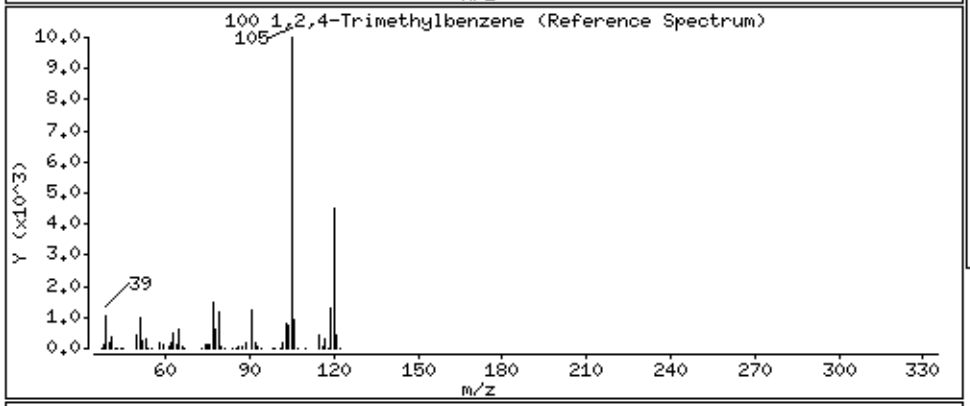
Concentration: 10.340 NG

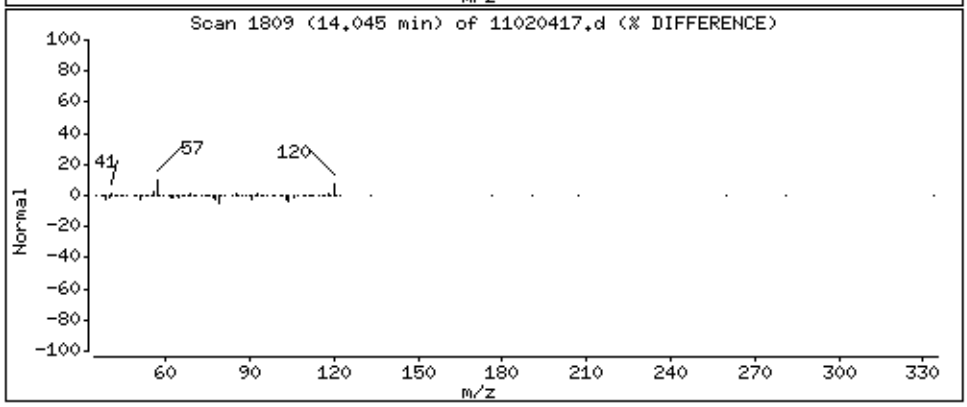












Data File: /chem/msd11.i/04feb16.b/11020417.d

Date : 04-FEB-2016 23:53

Client ID:

Instrument: msd11.i

Sample Info: ;1602029-13A

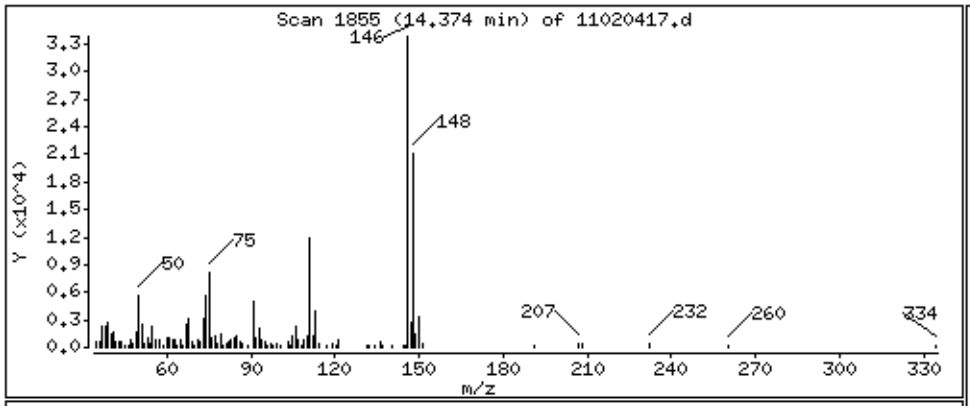
Operator: LA

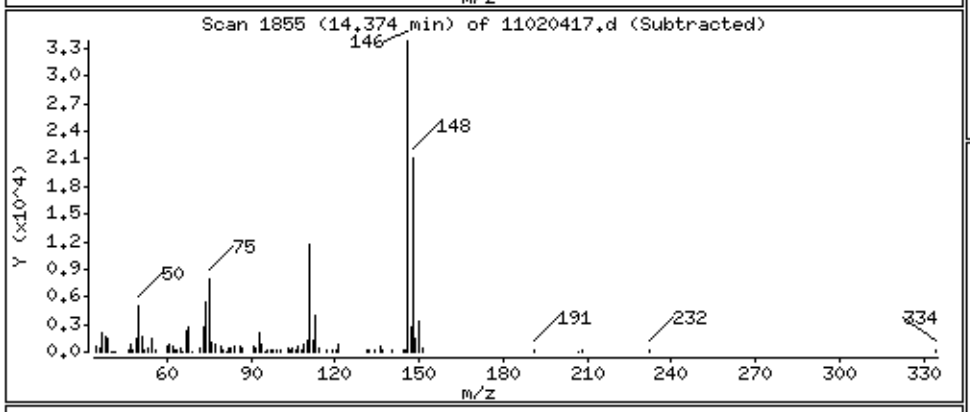
Column phase: RTx-624

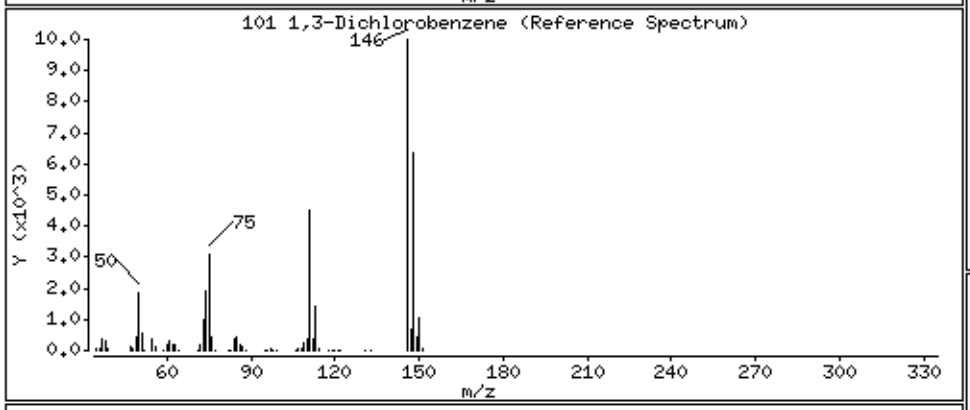
Column diameter: 0.53

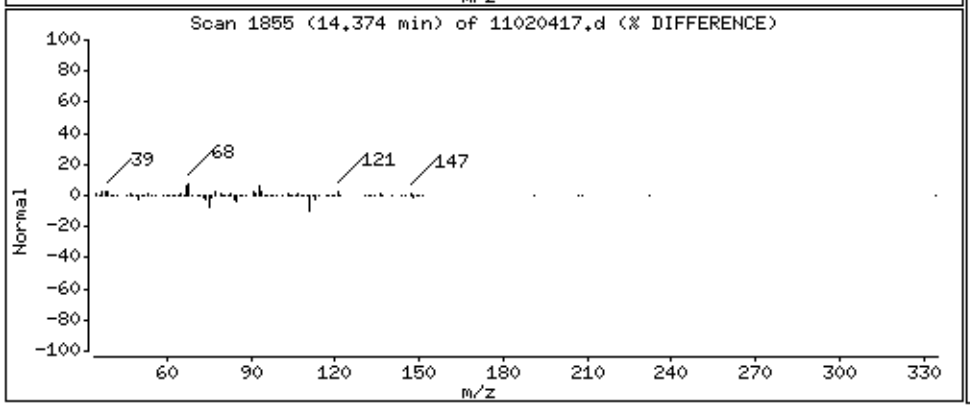
101 1,3-Dichlorobenzene

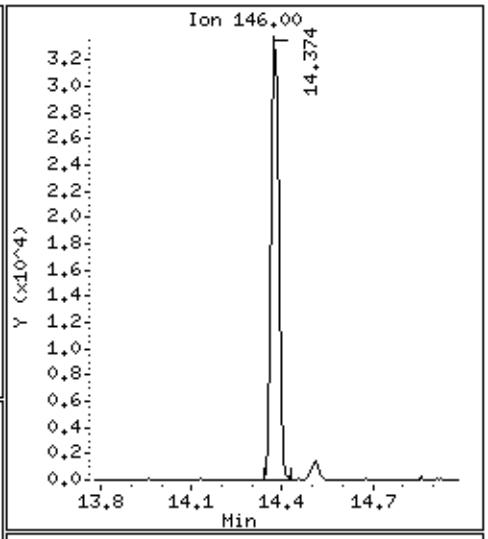
Concentration: 19.598 NG

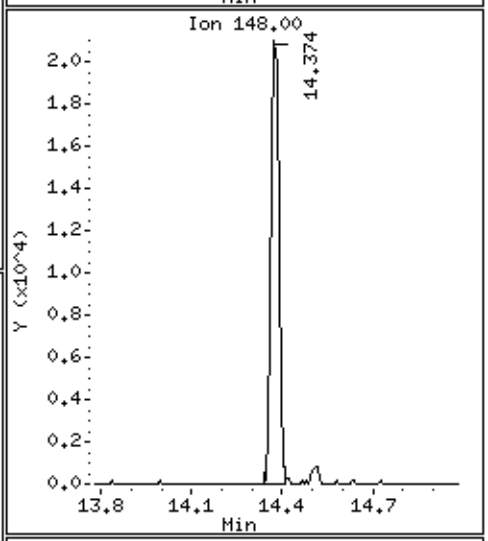


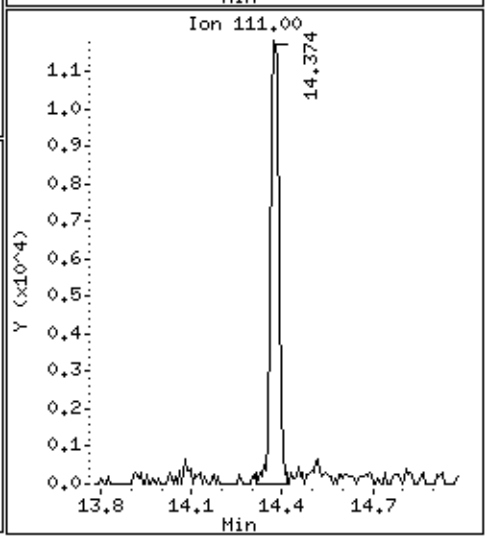












Data File: /chem/msd11.i/04feb16.b/11020417.d

Date : 04-FEB-2016 23:53

Client ID:

Instrument: msd11.i

Sample Info: ;1602029-13A

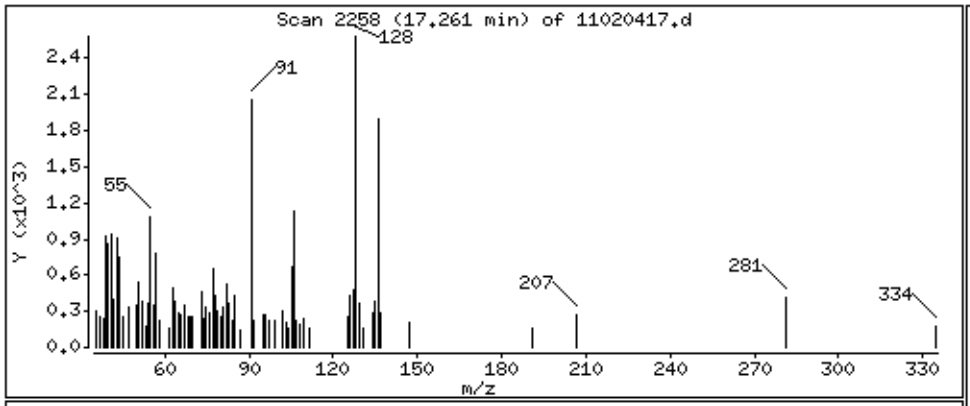
Operator: LA

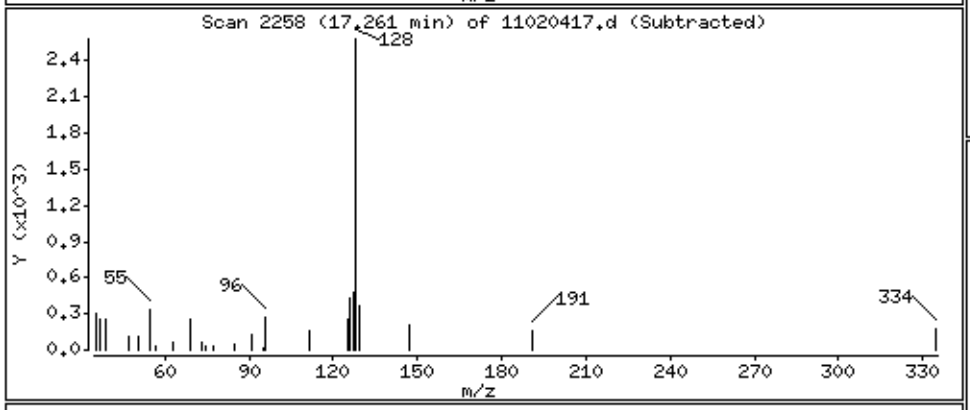
Column phase: RTx-624

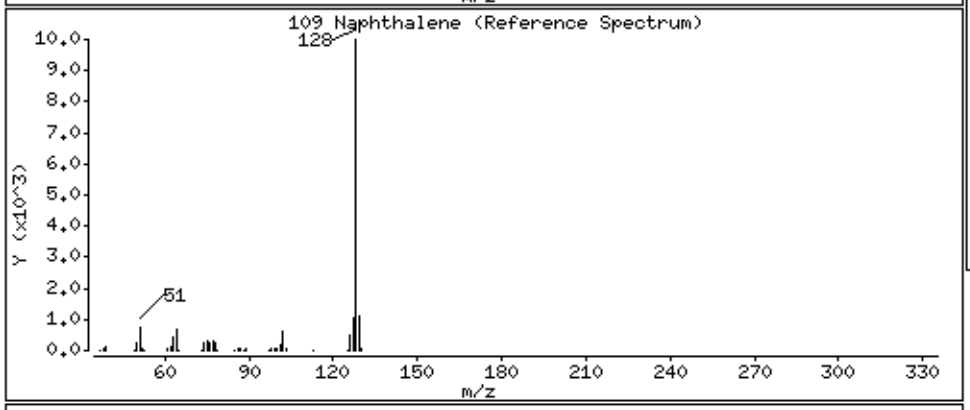
Column diameter: 0.53

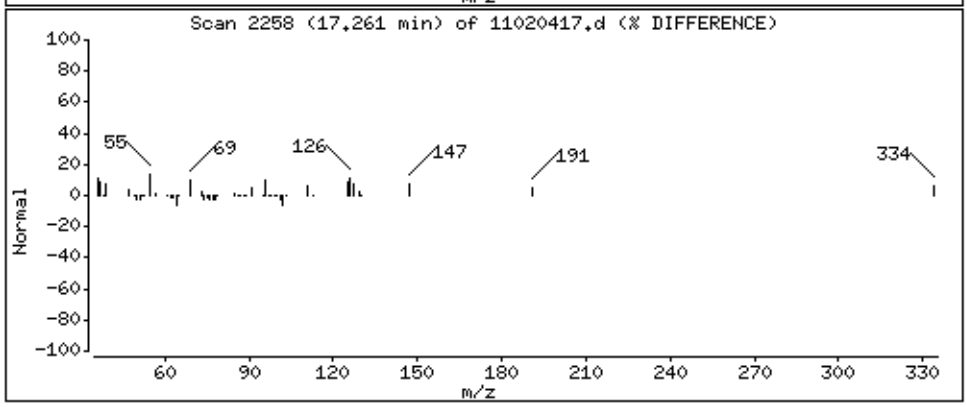
109 Naphthalene

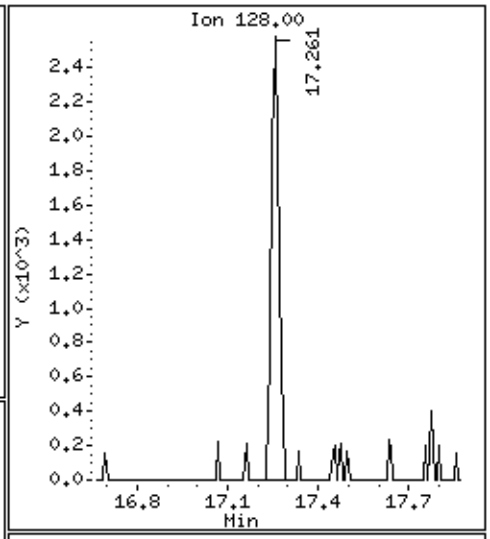
Concentration: 0.6058 NG

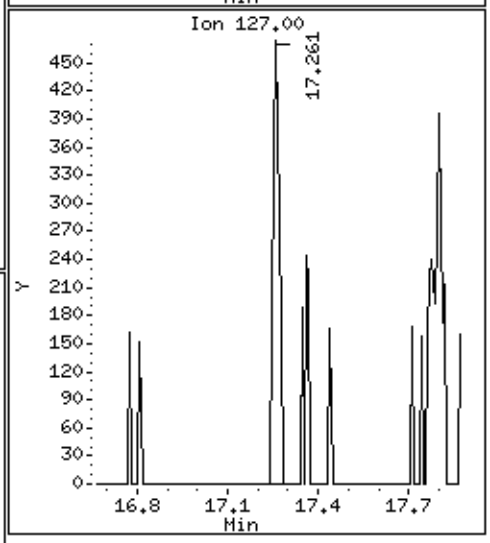












Summary of Detected Compounds
EPA METHOD TO-17

Client Sample ID: B30-2SSV013116

Lab ID#: 1602029-14A

No Detections Were Found.

eurofins | Air Toxics

Client Sample ID: B30-2SSV013116

Lab ID#: 1602029-14A

EPA METHOD TO-17

File Name:	**18020320**	**Date of Extraction: NA**	**Date of Collection: 1/31/16 12:45:00 PM**
Dil. Factor:	**1.00**		**Date of Analysis: 2/3/16 10:58 PM**

Compound	Rpt. Limit (ng)	Rpt. Limit (ug/m3)	Amount (ng)	Amount (ug/m3)
Naphthalene	1.0	2.5	Not Detected	Not Detected

Air Sample Volume(L): 0.400
Container Type: TO-17 VI Tube

Surrogates	%Recovery	Method Limits
Naphthalene-d8	82	50-150

Eurofins Air Toxics Inc.

EPA Method TO-17 GC/MS

Data file : /chem/msd18.i/03Feb2016.b/18020320.d
Lab Smp Id: 1602029-14A
Inj Date : 03-FEB-2016 22:58
Operator : LA Inst ID: msd18.i
Smp Info : ;1602029-14A
Misc Info : DP G0143780
Comment :
Method : /chem/msd18.i/03Feb2016.b/186z0114vi.m
Meth Date : 12-Feb-2016 11:48 lantonic Quant Type: ISTD
Cal Date : 14-JAN-2016 18:27 Cal File: 18011415.d
Als bottle: 31
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: naph.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

RT	EXP RT	(REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (ng)	FINAL (NG)	TARGET RANGE	RATIO
* 79 Bromofluorobenzene						CAS #: 460-00-4		
13.208	13.200	(1.000)	174	452511	36.0000		80.00- 120.00	100.00
13.200	13.200	(1.000)	95	639614			78.78- 138.78	141.35
13.208	13.200	(1.000)	176	432140			67.05- 127.05	95.50
$ 97 Naphthalene-d8						CAS #: 1146-65-2		
17.728	17.728	(1.342)	136	363482	20.5286	20.528	80.00- 120.00	100.00
17.728	17.728	(1.342)	108	36247			0.00- 39.05	9.97

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd18.i
Lab File ID: 18020320.d
Lab Smp Id: 1602029-14A
Analysis Type: VOA
Quant Type: ISTD
Operator: LA
Method File: /chem/msd18.i/03Feb2016.b/186z0114vi.m
Misc Info: DP G0143780

Calibration Date: 03-FEB-2016
Calibration Time: 11:04

Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
79 Bromofluorobenzen	345554	207332	483776	452511	30.95

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
79 Bromofluorobenzen	13.20	12.87	13.53	13.21	0.05

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Report Date: 12-Feb-2016 11:50

Eurofins Air Toxics Inc.

RECOVERY REPORT

Client Name:
Client SDG: 03Feb2016
Sample Matrix: GAS
Fraction: VOA
Lab Smp Id: 1602029-14A
Level: LOW
Operator: LA
Data Type: MS DATA
SampleType: SAMPLE
SpikeList File: VOC+PAHlcs50.spk
Quant Type: ISTD
Sublist File: naph.sub
Method File: /chem/msd18.i/03Feb2016.b/186z0114vi.m
Misc Info: DP G0143780

SURROGATE COMPOUND	CONC ADDED NG	CONC RECOVERED NG	% RECOVERED	LIMITS
$ 97 Naphthalene-d8	25.000	20.528	82.11	50-150

Data File: /chem/msd18.i/03Feb2016.b/18020320.d

Date : 03-FEB-2016 22:58

Client ID:

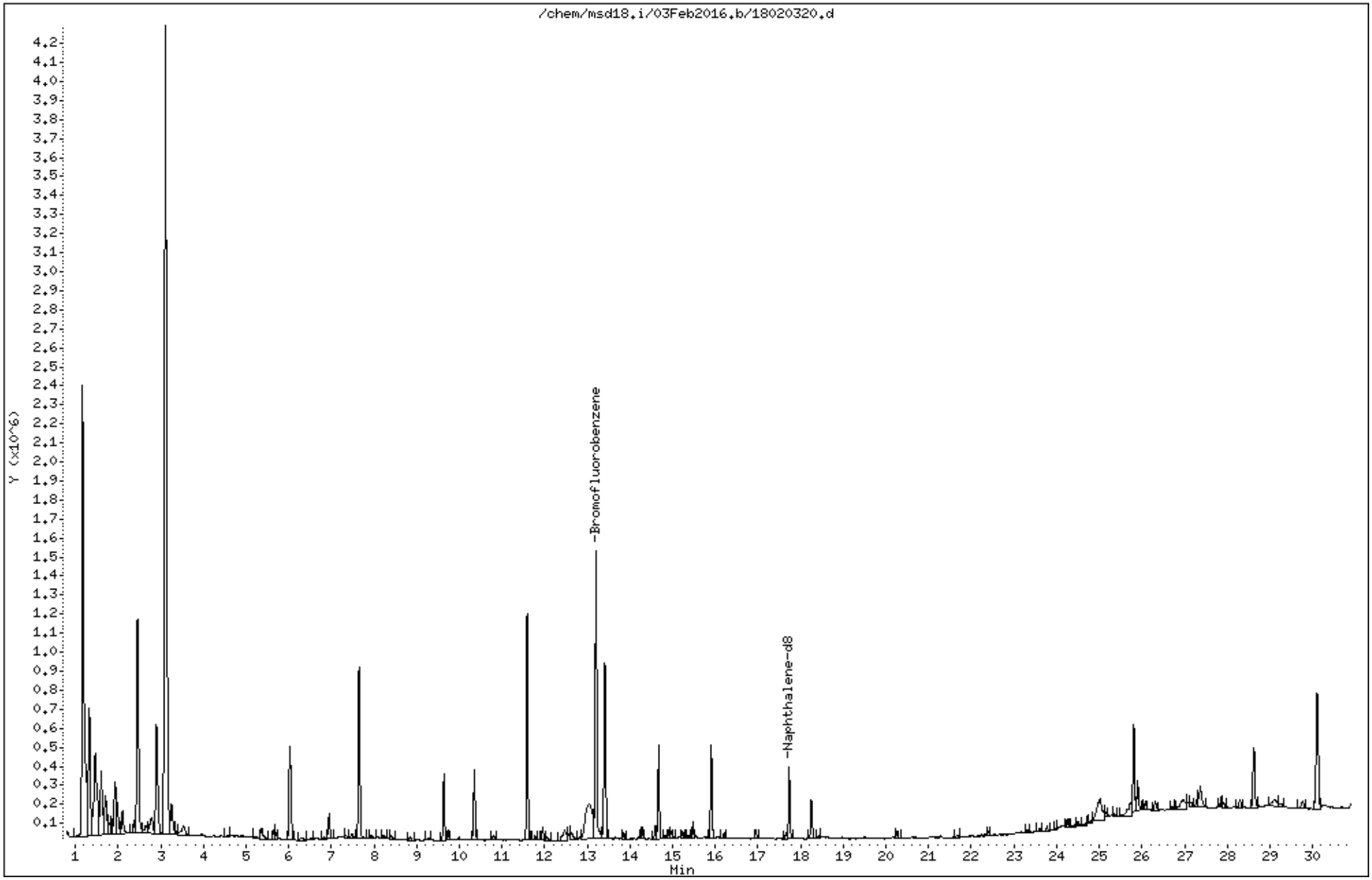
Instrument: msd18.i

Sample Info: ;1602029-14A

Operator: LA

Column phase: RTx-624

Column diameter: 0.53



Summary of Detected Compounds
EPA METHOD TO-17

Client Sample ID: B30-3SSV013116

Lab ID#: 1602029-15A

No Detections Were Found.

eurofins | Air Toxics

Client Sample ID: B30-3SSV013116

Lab ID#: 1602029-15A

EPA METHOD TO-17

File Name:	**18020321**	**Date of Extraction: NA**	**Date of Collection: 1/31/16 1:04:00 PM**
Dil. Factor:	**1.00**		**Date of Analysis: 2/3/16 11:36 PM**

Compound	**Rpt. Limit (ng)**	**Rpt. Limit (ug/m3)**	**Amount (ng)**	**Amount (ug/m3)**
Naphthalene	1.0	2.5	Not Detected	Not Detected

Air Sample Volume(L): 0.400
Container Type: TO-17 VI Tube

Surrogates	**%Recovery**	**Method Limits**
Naphthalene-d8	92	50-150

Eurofins Air Toxics Inc.

EPA Method TO-17 GC/MS

Data file : /chem/msd18.i/03Feb2016.b/18020321.d
Lab Smp Id: 1602029-15A
Inj Date : 03-FEB-2016 23:36
Operator : LA Inst ID: msd18.i
Smp Info : ;1602029-15A
Misc Info : DP G0135686
Comment :
Method : /chem/msd18.i/03Feb2016.b/186z0114vi.m
Meth Date : 12-Feb-2016 11:48 lantonic Quant Type: ISTD
Cal Date : 14-JAN-2016 18:27 Cal File: 18011415.d
Als bottle: 32
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: naph.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

RT	EXP RT	(REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (ng)	FINAL (NG)	TARGET RANGE	RATIO
* 79 Bromofluorobenzene						CAS #: 460-00-4		
13.208	13.200	(1.000)	174	422261	36.0000		80.00- 120.00	100.00
13.208	13.200	(1.000)	95	597819			78.78- 138.78	141.58
13.208	13.200	(1.000)	176	405249			67.05- 127.05	95.97
$ 97 Naphthalene-d8						CAS #: 1146-65-2		
17.728	17.728	(1.342)	136	378078	22.8826	22.882	80.00- 120.00	100.00
17.728	17.728	(1.342)	108	37386			0.00- 39.05	9.89

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd18.i
Lab File ID: 18020321.d
Lab Smp Id: 1602029-15A
Analysis Type: VOA
Quant Type: ISTD
Operator: LA
Method File: /chem/msd18.i/03Feb2016.b/186z0114vi.m
Misc Info: DP G0135686

Calibration Date: 03-FEB-2016
Calibration Time: 11:04

Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
79 Bromofluorobenzen	345554	207332	483776	422261	22.20

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
79 Bromofluorobenzen	13.20	12.87	13.53	13.21	0.06

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Report Date: 12-Feb-2016 11:50

Eurofins Air Toxics Inc.

RECOVERY REPORT

Client Name:
Client SDG: 03Feb2016
Sample Matrix: GAS
Fraction: VOA
Lab Smp Id: 1602029-15A
Level: LOW
Operator: LA
Data Type: MS DATA
SampleType: SAMPLE
SpikeList File: VOC+PAHlcs50.spk
Quant Type: ISTD
Sublist File: naph.sub
Method File: /chem/msd18.i/03Feb2016.b/186z0114vi.m
Misc Info: DP G0135686

SURROGATE COMPOUND	CONC ADDED NG	CONC RECOVERED NG	% RECOVERED	LIMITS
$ 97 Naphthalene-d8	25.000	22.882	91.53	50-150

Data File: /chem/msd18.i/03Feb2016.b/18020321.d

Date : 03-FEB-2016 23:36

Client ID:

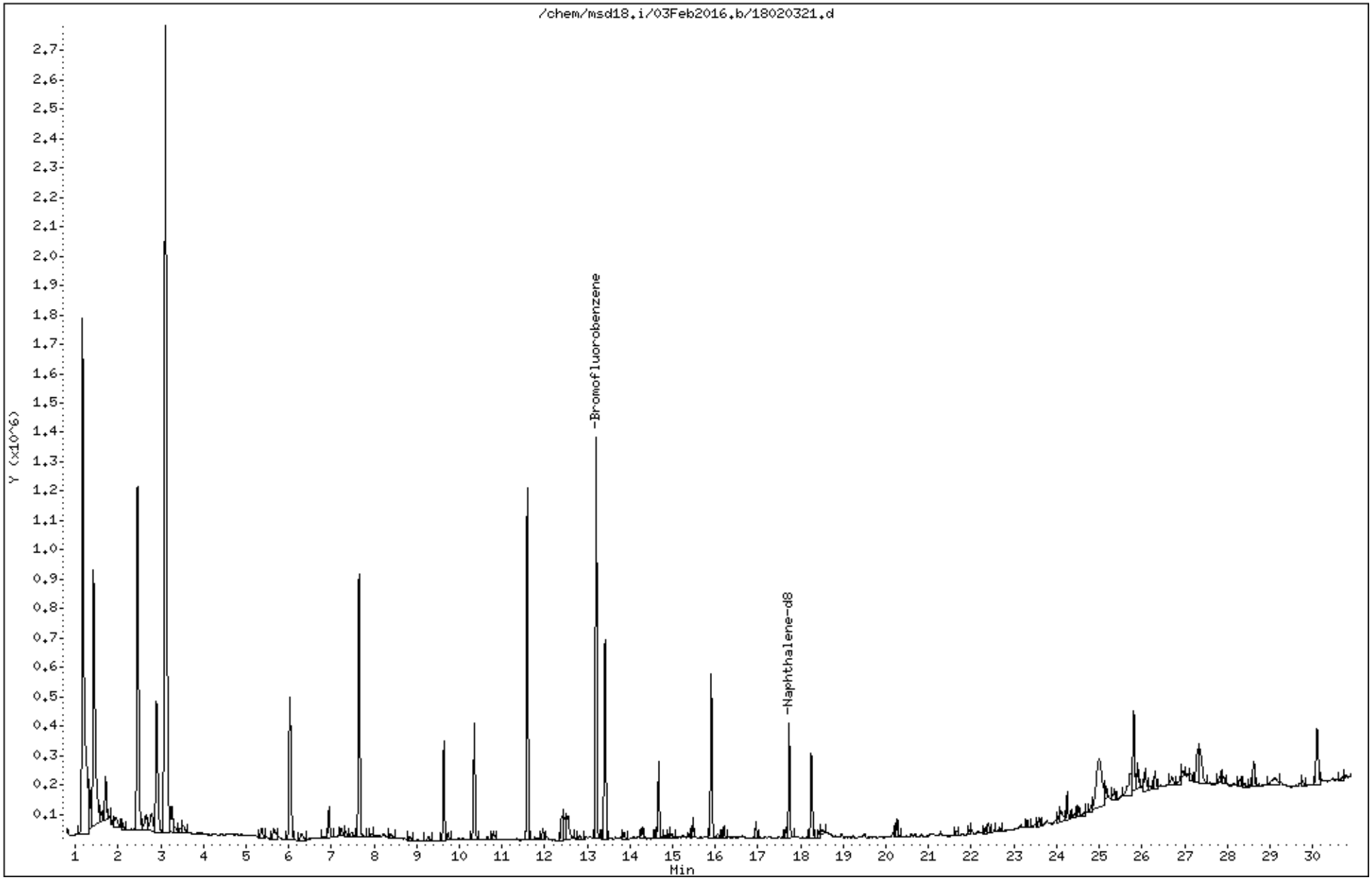
Instrument: msd18.i

Sample Info: ;1602029-15A

Operator: LA

Column phase: RTx-624

Column diameter: 0.53



Summary of Detected Compounds
EPA METHOD TO-17

Client Sample ID: B30-4SSV013116

Lab ID#: 1602029-16A

No Detections Were Found.

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Client Sample ID: B30-4SSV013116

Lab ID#: 1602029-16A

EPA METHOD TO-17

File Name:	**18020322**	**Date of Extraction: NA**	**Date of Collection: 1/31/16 1:33:00 PM**
Dil. Factor:	**1.00**		**Date of Analysis: 2/4/16 12:15 AM**

Compound	Rpt. Limit (ng)	Rpt. Limit (ug/m3)	Amount (ng)	Amount (ug/m3)
Naphthalene	1.0	2.5	Not Detected	Not Detected

Air Sample Volume(L): 0.400
Container Type: TO-17 VI Tube

Surrogates	%Recovery	Method Limits
Naphthalene-d8	92	50-150

Eurofins Air Toxics Inc.

EPA Method TO-17 GC/MS

Data file : /chem/msd18.i/03Feb2016.b/18020322.d
Lab Smp Id: 1602029-16A
Inj Date : 04-FEB-2016 00:15
Operator : LA Inst ID: msd18.i
Smp Info : ;1602029-16A
Misc Info : DP G0150385
Comment :
Method : /chem/msd18.i/03Feb2016.b/186z0114vi.m
Meth Date : 12-Feb-2016 11:48 lantonic Quant Type: ISTD
Cal Date : 14-JAN-2016 18:27 Cal File: 18011415.d
Als bottle: 33
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: naph.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

RT	EXP RT	(REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (ng)	FINAL (NG)	TARGET RANGE	RATIO
* 79 Bromofluorobenzene						CAS #: 460-00-4		
13.208	13.200	(1.000)	174	421480	36.0000		80.00- 120.00	100.00
13.208	13.200	(1.000)	95	600452			78.78- 138.78	142.46
13.208	13.200	(1.000)	176	406254			67.05- 127.05	96.39
$ 97 Naphthalene-d8						CAS #: 1146-65-2		
17.728	17.728	(1.342)	136	379846	23.0322	23.032	80.00- 120.00	100.00
17.728	17.728	(1.342)	108	38752			0.00- 39.05	10.20

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd18.i
Lab File ID: 18020322.d
Lab Smp Id: 1602029-16A
Analysis Type: VOA
Quant Type: ISTD
Operator: LA
Method File: /chem/msd18.i/03Feb2016.b/186z0114vi.m
Misc Info: DP G0150385

Calibration Date: 03-FEB-2016
Calibration Time: 11:04

Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
79 Bromofluorobenzen	345554	207332	483776	421480	21.97

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
79 Bromofluorobenzen	13.20	12.87	13.53	13.21	0.05

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Report Date: 12-Feb-2016 11:50

Eurofins Air Toxics Inc.

RECOVERY REPORT

Client Name:
Client SDG: 03Feb2016
Sample Matrix: GAS
Fraction: VOA
Lab Smp Id: 1602029-16A
Level: LOW
Operator: LA
Data Type: MS DATA
SampleType: SAMPLE
SpikeList File: VOC+PAHlcs50.spk
Quant Type: ISTD
Sublist File: naph.sub
Method File: /chem/msd18.i/03Feb2016.b/186z0114vi.m
Misc Info: DP G0150385

SURROGATE COMPOUND	CONC ADDED NG	CONC RECOVERED NG	% RECOVERED	LIMITS
$ 97 Naphthalene-d8	25.000	23.032	92.13	50-150

Data File: /chem/msd18.i/03Feb2016.b/18020322.d

Date : 04-FEB-2016 00:15

Client ID:

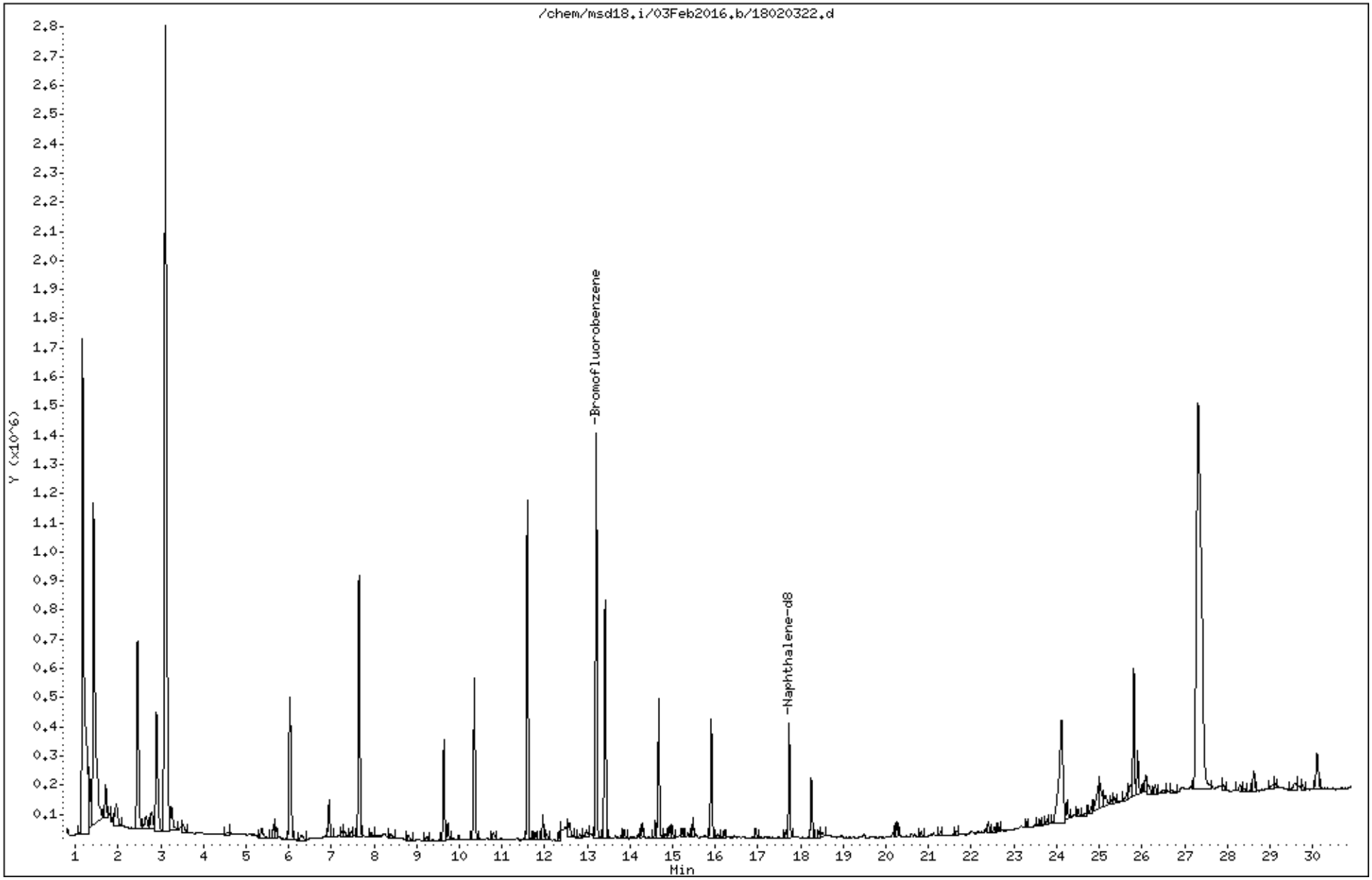
Instrument: msd18.i

Sample Info: ;1602029-16A

Operator: LA

Column phase: RTx-624

Column diameter: 0.53



Summary of Detected Compounds
EPA METHOD TO-17

Client Sample ID: B30-4DSSV013116

Lab ID#: 1602029-17A

No Detections Were Found.

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Client Sample ID: B30-4DSSV013116

Lab ID#: 1602029-17A

EPA METHOD TO-17

File Name:	**18020323**	**Date of Extraction: NA**	**Date of Collection: 1/31/16 1:28:00 PM**
Dil. Factor:	**1.00**		**Date of Analysis: 2/4/16 12:53 AM**

Compound	**Rpt. Limit (ng)**	**Rpt. Limit (ug/m3)**	**Amount (ng)**	**Amount (ug/m3)**
Naphthalene	1.0	2.5	Not Detected	Not Detected

Air Sample Volume(L): 0.400
Container Type: TO-17 VI Tube

Surrogates	**%Recovery**	**Method Limits**
Naphthalene-d8	92	50-150

Eurofins Air Toxics Inc.

EPA Method TO-17 GC/MS

Data file : /chem/msd18.i/03Feb2016.b/18020323.d
Lab Smp Id: 1602029-17A
Inj Date : 04-FEB-2016 00:53
Operator : LA Inst ID: msd18.i
Smp Info : ;1602029-17A
Misc Info : DP G0143423
Comment :
Method : /chem/msd18.i/03Feb2016.b/186z0114vi.m
Meth Date : 12-Feb-2016 11:48 lantonic Quant Type: ISTD
Cal Date : 14-JAN-2016 18:27 Cal File: 18011415.d
Als bottle: 34
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: naph.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

RT	EXP RT	(REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (ng)	FINAL (NG)	TARGET RANGE	RATIO
* 79 Bromofluorobenzene						CAS #: 460-00-4		
13.208	13.200	(1.000)	174	423792	36.0000		80.00- 120.00	100.00
13.208	13.200	(1.000)	95	598406			78.78- 138.78	141.20
13.208	13.200	(1.000)	176	406091			67.05- 127.05	95.82
$ 97 Naphthalene-d8						CAS #: 1146-65-2		
17.728	17.728	(1.342)	136	383284	23.1139	23.114	80.00- 120.00	100.00
17.728	17.728	(1.342)	108	39413			0.00- 39.05	10.28

Report Date: 12-Feb-2016 11:50

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd18.i
Lab File ID: 18020323.d
Lab Smp Id: 1602029-17A
Analysis Type: VOA
Quant Type: ISTD
Operator: LA
Method File: /chem/msd18.i/03Feb2016.b/186z0114vi.m
Misc Info: DP G0143423

Calibration Date: 03-FEB-2016
Calibration Time: 11:04

Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
79 Bromofluorobenzen	345554	207332	483776	423792	22.64

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
79 Bromofluorobenzen	13.20	12.87	13.53	13.21	0.06

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Report Date: 12-Feb-2016 11:50

Eurofins Air Toxics Inc.

RECOVERY REPORT

Client Name:
Client SDG: 03Feb2016
Sample Matrix: GAS
Fraction: VOA
Lab Smp Id: 1602029-17A
Level: LOW
Operator: LA
Data Type: MS DATA
SampleType: SAMPLE
SpikeList File: VOC+PAHlcs50.spk
Quant Type: ISTD
Sublist File: naph.sub
Method File: /chem/msd18.i/03Feb2016.b/186z0114vi.m
Misc Info: DP G0143423

SURROGATE COMPOUND	CONC ADDED NG	CONC RECOVERED NG	% RECOVERED	LIMITS
$ 97 Naphthalene-d8	25.000	23.114	92.46	50-150

Data File: /chem/msd18.i/03Feb2016.b/18020323.d

Date : 04-FEB-2016 00:53

Client ID:

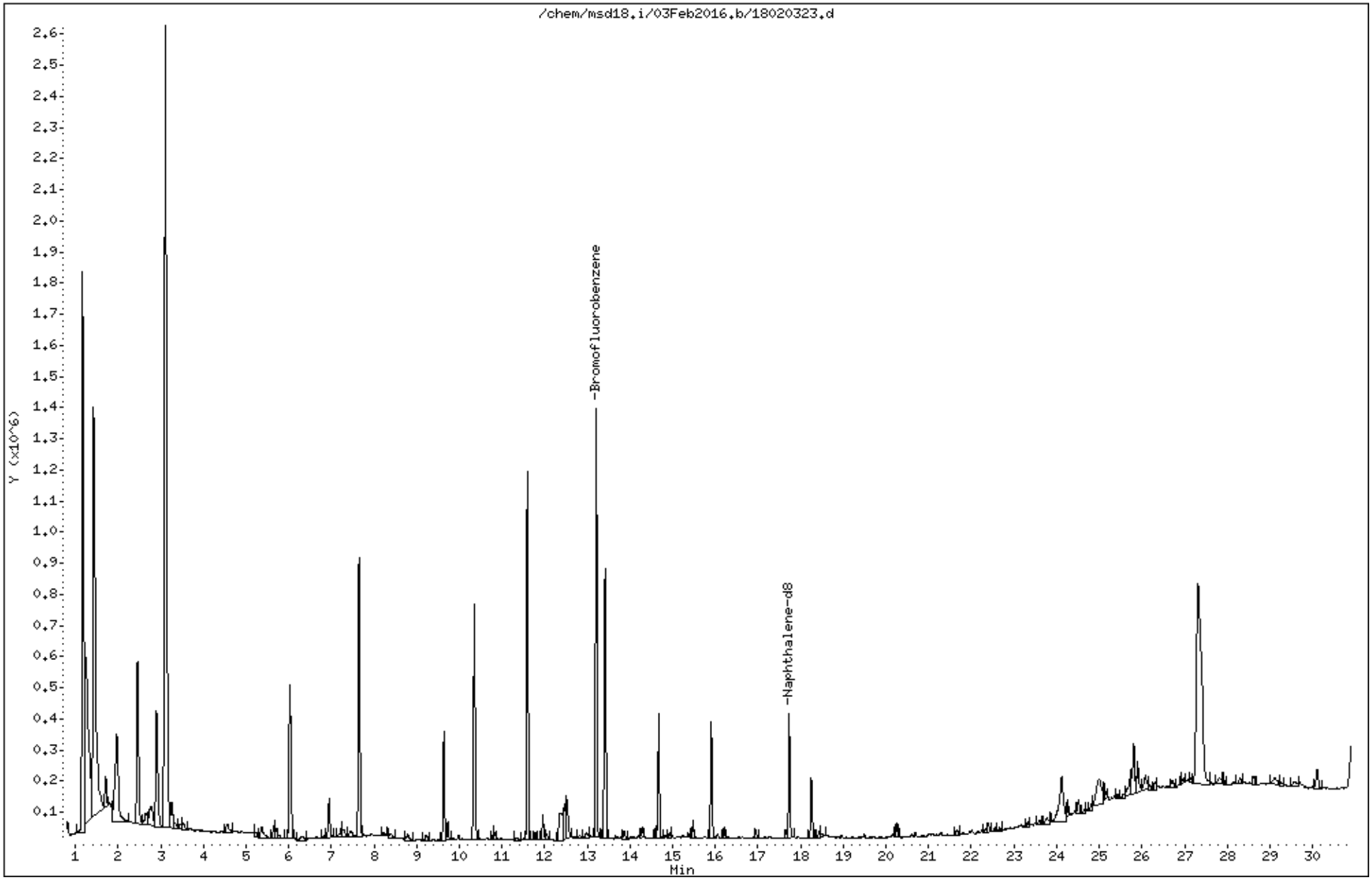
Instrument: msd18.i

Sample Info: ;1602029-17A

Operator: LA

Column phase: RTx-624

Column diameter: 0.53



Summary of Detected Compounds
EPA METHOD TO-17

Client Sample ID: B30-5SSV013116

Lab ID#: 1602029-18A

No Detections Were Found.

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Client Sample ID: B30-5SSV013116

Lab ID#: 1602029-18A

EPA METHOD TO-17

File Name:	**18020324**	**Date of Extraction: NA**	**Date of Collection: 1/31/16 1:55:00 PM**
Dil. Factor:	**1.00**		**Date of Analysis: 2/4/16 01:31 AM**

Compound	Rpt. Limit (ng)	Rpt. Limit (ug/m3)	Amount (ng)	Amount (ug/m3)
Naphthalene	1.0	2.5	Not Detected	Not Detected

Air Sample Volume(L): 0.400
Container Type: TO-17 VI Tube

Surrogates	%Recovery	Method Limits
Naphthalene-d8	91	50-150

Eurofins Air Toxics Inc.

EPA Method TO-17 GC/MS

Data file : /chem/msd18.i/03Feb2016.b/18020324.d
Lab Smp Id: 1602029-18A
Inj Date : 04-FEB-2016 01:31
Operator : LA Inst ID: msd18.i
Smp Info : ;1602029-18A
Misc Info : DP G0143629
Comment :
Method : /chem/msd18.i/03Feb2016.b/186z0114vi.m
Meth Date : 12-Feb-2016 11:48 lantonic Quant Type: ISTD
Cal Date : 14-JAN-2016 18:27 Cal File: 18011415.d
Als bottle: 35
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: naph.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

RT	EXP RT	(REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (ng)	FINAL (NG)	TARGET RANGE	RATIO
* 79 Bromofluorobenzene						CAS #: 460-00-4		
13.208	13.200	(1.000)	174	420770	36.0000		80.00- 120.00	100.00
13.208	13.200	(1.000)	95	602956			78.78- 138.78	143.30
13.208	13.200	(1.000)	176	406937			67.05- 127.05	96.71
$ 97 Naphthalene-d8						CAS #: 1146-65-2		
17.727	17.728	(1.342)	136	373557	22.6891	22.689	80.00- 120.00	100.00
17.727	17.728	(1.342)	108	37477			0.00- 39.05	10.03

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd18.i
Lab File ID: 18020324.d
Lab Smp Id: 1602029-18A
Analysis Type: VOA
Quant Type: ISTD
Operator: LA
Method File: /chem/msd18.i/03Feb2016.b/186z0114vi.m
Misc Info: DP G0143629

Calibration Date: 03-FEB-2016
Calibration Time: 11:04

Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
79 Bromofluorobenzen	345554	207332	483776	420770	21.77

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
79 Bromofluorobenzen	13.20	12.87	13.53	13.21	0.05

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Report Date: 12-Feb-2016 11:50

Eurofins Air Toxics Inc.

RECOVERY REPORT

Client Name:
Client SDG: 03Feb2016
Sample Matrix: GAS
Fraction: VOA
Lab Smp Id: 1602029-18A
Level: LOW
Operator: LA
Data Type: MS DATA
SampleType: SAMPLE
SpikeList File: VOC+PAHlcs50.spk
Quant Type: ISTD
Sublist File: naph.sub
Method File: /chem/msd18.i/03Feb2016.b/186z0114vi.m
Misc Info: DP G0143629

SURROGATE COMPOUND	CONC ADDED NG	CONC RECOVERED NG	% RECOVERED	LIMITS
$ 97 Naphthalene-d8	25.000	22.689	90.76	50-150

Data File: /chem/msd18.i/03Feb2016.b/18020324.d

Date : 04-FEB-2016 01:31

Client ID:

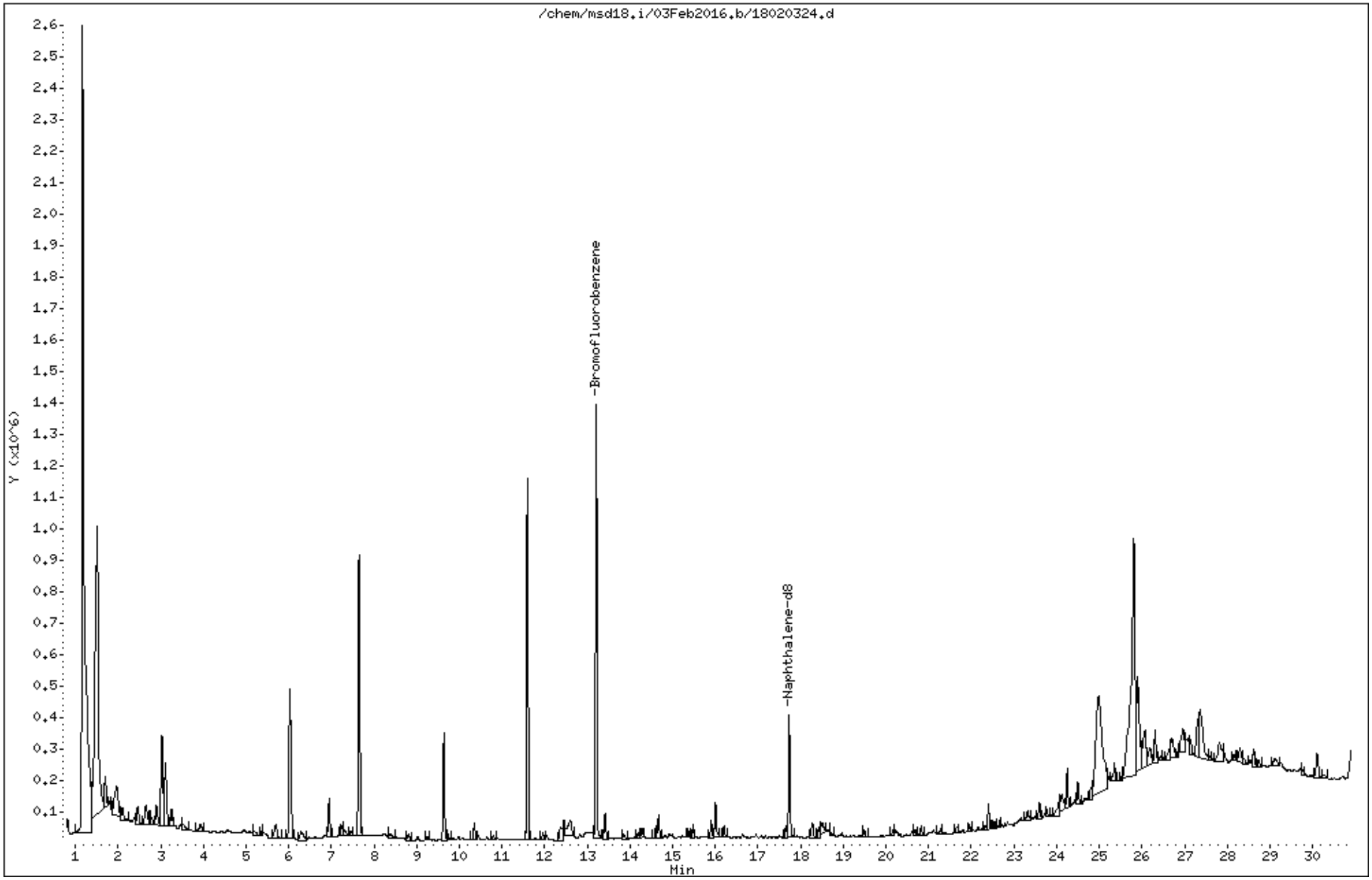
Instrument: msd18.i

Sample Info: ;1602029-18A

Operator: LA

Column phase: RTx-624

Column diameter: 0.53



Summary of Detected Compounds
EPA METHOD TO-17

Client Sample ID: B42-1SSV013116

Lab ID#: 1602029-19A

Compound	Rpt. Limit (ng)	Rpt. Limit (ug/m3)	Amount (ng)	Amount (ug/m3)
Naphthalene	1.0	2.5	0.52 J	1.3 J

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Client Sample ID: B42-1SSV013116

Lab ID#: 1602029-19A

EPA METHOD TO-17

File Name:	**18020325**	**Date of Extraction: NA**	**Date of Collection: 1/31/16 4:44:00 PM**
Dil. Factor:	**1.00**		**Date of Analysis: 2/4/16 02:09 AM**

Compound	Rpt. Limit (ng)	Rpt. Limit (ug/m3)	Amount (ng)	Amount (ug/m3)
Naphthalene	1.0	2.5	0.52 J	1.3 J

Air Sample Volume(L): 0.400

J = Estimated value.

Container Type: TO-17 VI Tube

Surrogates	%Recovery	Method Limits
Naphthalene-d8	92	50-150

Eurofins Air Toxics Inc.

EPA Method TO-17 GC/MS

Data file : /chem/msd18.i/03Feb2016.b/18020325.d
Lab Smp Id: 1602029-19A
Inj Date : 04-FEB-2016 02:09
Operator : LA Inst ID: msd18.i
Smp Info : ;1602029-19A
Misc Info : DP G0137246
Comment :
Method : /chem/msd18.i/03Feb2016.b/186z0114vi.m
Meth Date : 12-Feb-2016 11:48 lantonic Quant Type: ISTD
Cal Date : 14-JAN-2016 18:27 Cal File: 18011415.d
Als bottle: 36
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: naph.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

RT	EXP RT	(REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (ng)	FINAL (NG)	TARGET RANGE	RATIO
* 79 Bromofluorobenzene						CAS #: 460-00-4		
13.208	13.200	(1.000)	174	429539	36.0000		80.00- 120.00	100.00
13.208	13.200	(1.000)	95	612266			78.78- 138.78	142.54
13.208	13.200	(1.000)	176	416116			67.05- 127.05	96.87
$ 97 Naphthalene-d8						CAS #: 1146-65-2		
17.728	17.728	(1.342)	136	386566	22.9999	23.000	80.00- 120.00	100.00
17.728	17.728	(1.342)	108	39140			0.00- 39.05	10.13
98 Naphthalene						CAS #: 91-20-3		
17.771	17.771	(1.345)	128	9114	0.52537	0.5254	80.00- 120.00	100.00(a)
17.771	17.771	(1.345)	127	959			0.00- 43.03	10.53

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd18.i
Lab File ID: 18020325.d
Lab Smp Id: 1602029-19A
Analysis Type: VOA
Quant Type: ISTD
Operator: LA
Method File: /chem/msd18.i/03Feb2016.b/186z0114vi.m
Misc Info: DP G0137246

Calibration Date: 03-FEB-2016
Calibration Time: 11:04

Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
79 Bromofluorobenzen	345554	207332	483776	429539	24.30

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
79 Bromofluorobenzen	13.20	12.87	13.53	13.21	0.06

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Report Date: 12-Feb-2016 11:50

Eurofins Air Toxics Inc.

RECOVERY REPORT

Client Name:
Client SDG: 03Feb2016
Sample Matrix: GAS
Fraction: VOA
Lab Smp Id: 1602029-19A
Level: LOW
Operator: LA
Data Type: MS DATA
SampleType: SAMPLE
SpikeList File: VOC+PAHlcs50.spk
Quant Type: ISTD
Sublist File: naph.sub
Method File: /chem/msd18.i/03Feb2016.b/186z0114vi.m
Misc Info: DP G0137246

SURROGATE COMPOUND	CONC ADDED NG	CONC RECOVERED NG	% RECOVERED	LIMITS
$ 97 Naphthalene-d8	25.000	23.000	92.00	50-150

Data File: /chem/msd18.i/03Feb2016.b/18020325.d

Date : 04-FEB-2016 02:09

Client ID:

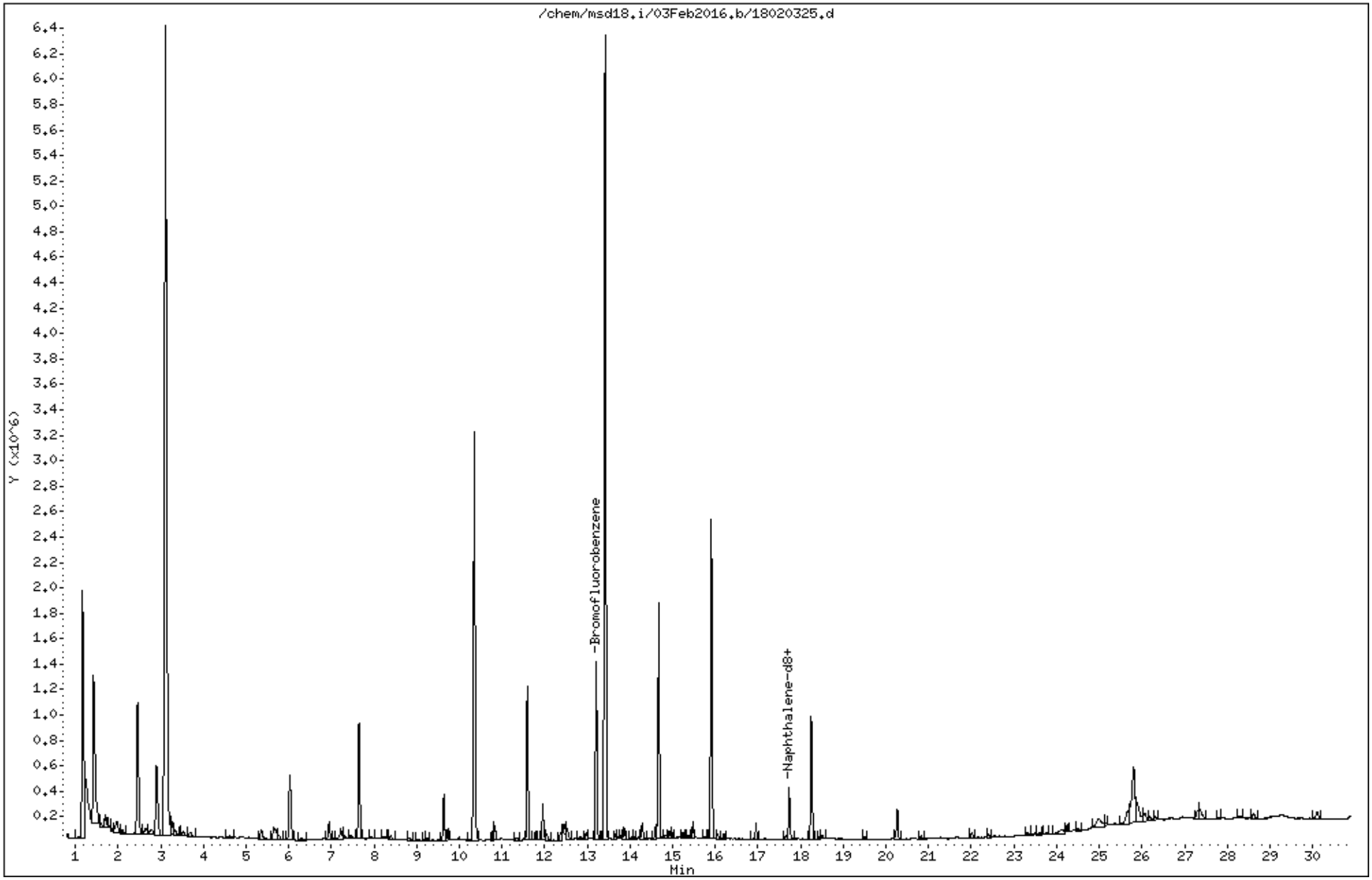
Instrument: msd18.i

Sample Info: ;1602029-19A

Operator: LA

Column phase: RTx-624

Column diameter: 0.53



Data File: /chem/msd18.i/03Feb2016.b/18020325.d

Date : 04-FEB-2016 02:09

Client ID:

Instrument: msd18.i

Sample Info: ;1602029-19A

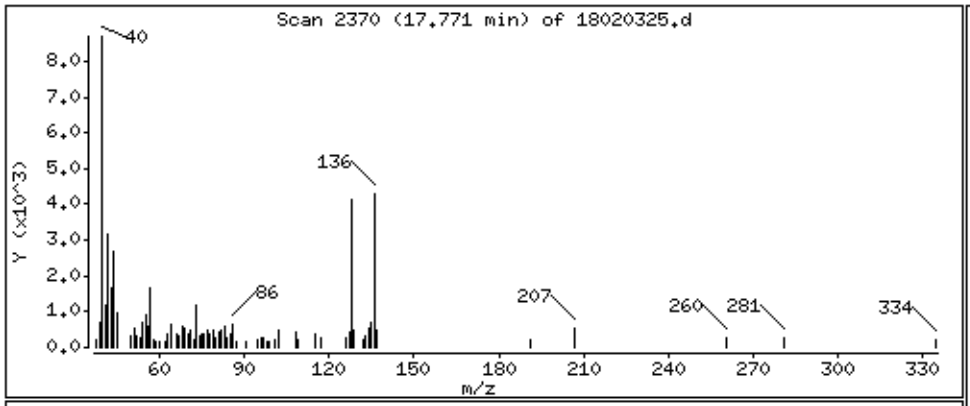
Operator: LA

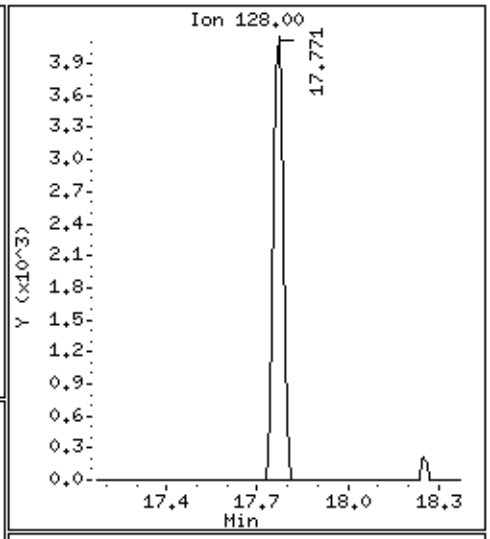
Column phase: RTx-624

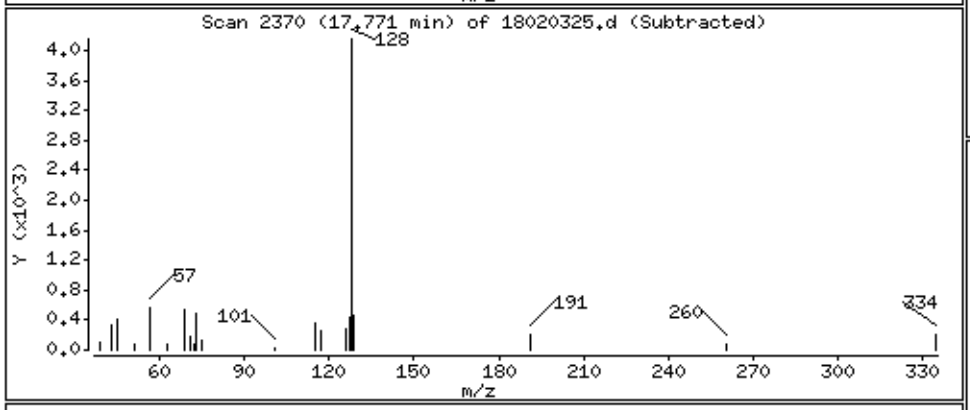
Column diameter: 0.53

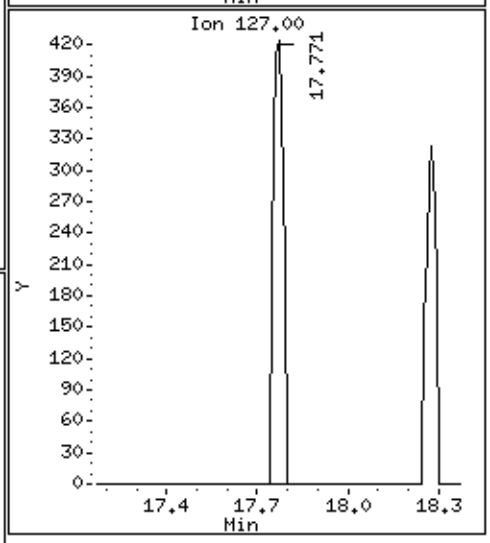
98 Naphthalene

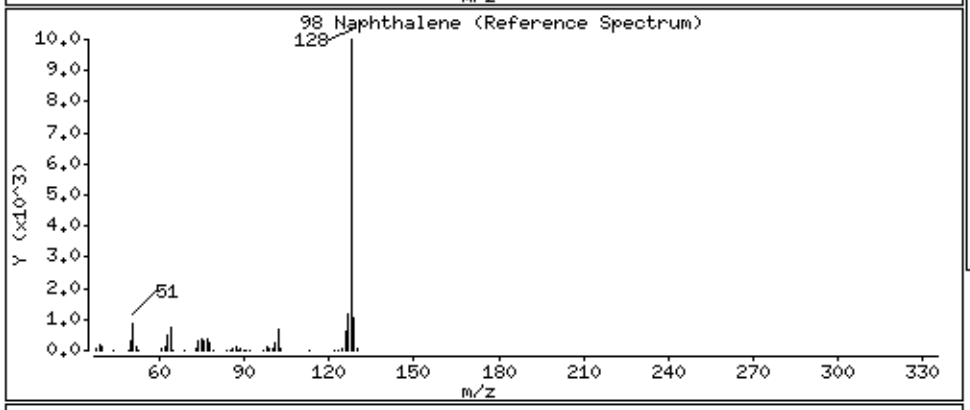
Concentration: 0.5254 NG

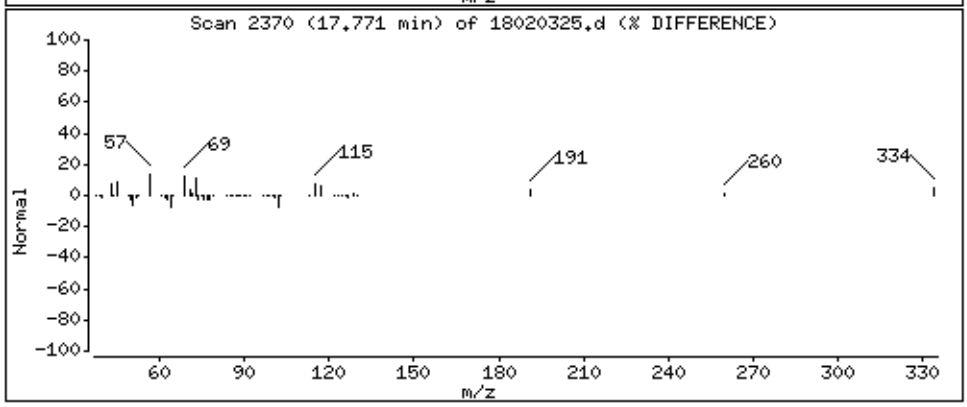












Summary of Detected Compounds
EPA METHOD TO-17

Client Sample ID: B42-2SSV013116

Lab ID#: 1602029-20A

Compound	Rpt. Limit (ng)	Rpt. Limit (ug/m3)	Amount (ng)	Amount (ug/m3)
Naphthalene	1.0	2.5	3.0	7.5

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Client Sample ID: B42-2SSV013116

Lab ID#: 1602029-20A

EPA METHOD TO-17

File Name:	**18020326**	**Date of Extraction: NA**	**Date of Collection: 1/31/16 4:28:00 PM**
Dil. Factor:	**1.00**		**Date of Analysis: 2/4/16 02:48 AM**

Compound	**Rpt. Limit (ng)**	**Rpt. Limit (ug/m3)**	**Amount (ng)**	**Amount (ug/m3)**
Naphthalene	1.0	2.5	3.0	7.5

Air Sample Volume(L): 0.400
Container Type: TO-17 VI Tube

Surrogates	**%Recovery**	**Method Limits**
Naphthalene-d8	96	50-150

Eurofins Air Toxics Inc.

EPA Method TO-17 GC/MS

Data file : /chem/msd18.i/03Feb2016.b/18020326.d
Lab Smp Id: 1602029-20A
Inj Date : 04-FEB-2016 02:48
Operator : LA Inst ID: msd18.i
Smp Info : ;1602029-20A
Misc Info : DP G0137108
Comment :
Method : /chem/msd18.i/03Feb2016.b/186z0114vi.m
Meth Date : 12-Feb-2016 11:48 lantonic Quant Type: ISTD
Cal Date : 14-JAN-2016 18:27 Cal File: 18011415.d
Als bottle: 37
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: naph.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

RT	EXP RT	(REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (ng)	FINAL (NG)	TARGET RANGE	RATIO
* 79 Bromofluorobenzene						CAS #: 460-00-4		
13.208	13.200	(1.000)	174	428094	36.0000		80.00- 120.00	100.00
13.208	13.200	(1.000)	95	615000			78.78- 138.78	143.66
13.208	13.200	(1.000)	176	418316			67.05- 127.05	97.72
$ 97 Naphthalene-d8						CAS #: 1146-65-2		
17.728	17.728	(1.342)	136	400695	23.9210	23.921	80.00- 120.00	100.00
17.728	17.728	(1.342)	108	40419			0.00- 39.05	10.09
98 Naphthalene						CAS #: 91-20-3		
17.771	17.771	(1.345)	128	52087	3.01251	3.012	80.00- 120.00	100.00
17.771	17.771	(1.345)	127	7161			0.00- 43.03	13.75

Report Date: 12-Feb-2016 11:50

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd18.i
Lab File ID: 18020326.d
Lab Smp Id: 1602029-20A
Analysis Type: VOA
Quant Type: ISTD
Operator: LA
Method File: /chem/msd18.i/03Feb2016.b/186z0114vi.m
Misc Info: DP G0137108

Calibration Date: 03-FEB-2016
Calibration Time: 11:04

Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
79 Bromofluorobenzen	345554	207332	483776	428094	23.89

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
79 Bromofluorobenzen	13.20	12.87	13.53	13.21	0.05

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Report Date: 12-Feb-2016 11:50

Eurofins Air Toxics Inc.

RECOVERY REPORT

Client Name:
Client SDG: 03Feb2016
Sample Matrix: GAS
Fraction: VOA
Lab Smp Id: 1602029-20A
Level: LOW
Operator: LA
Data Type: MS DATA
SampleType: SAMPLE
SpikeList File: VOC+PAHlcs50.spk
Quant Type: ISTD
Sublist File: naph.sub
Method File: /chem/msd18.i/03Feb2016.b/186z0114vi.m
Misc Info: DP G0137108

SURROGATE COMPOUND	CONC ADDED NG	CONC RECOVERED NG	% RECOVERED	LIMITS
$ 97 Naphthalene-d8	25.000	23.921	95.68	50-150

Data File: /chem/msd18.i/03Feb2016.b/18020326.d

Date : 04-FEB-2016 02:48

Client ID:

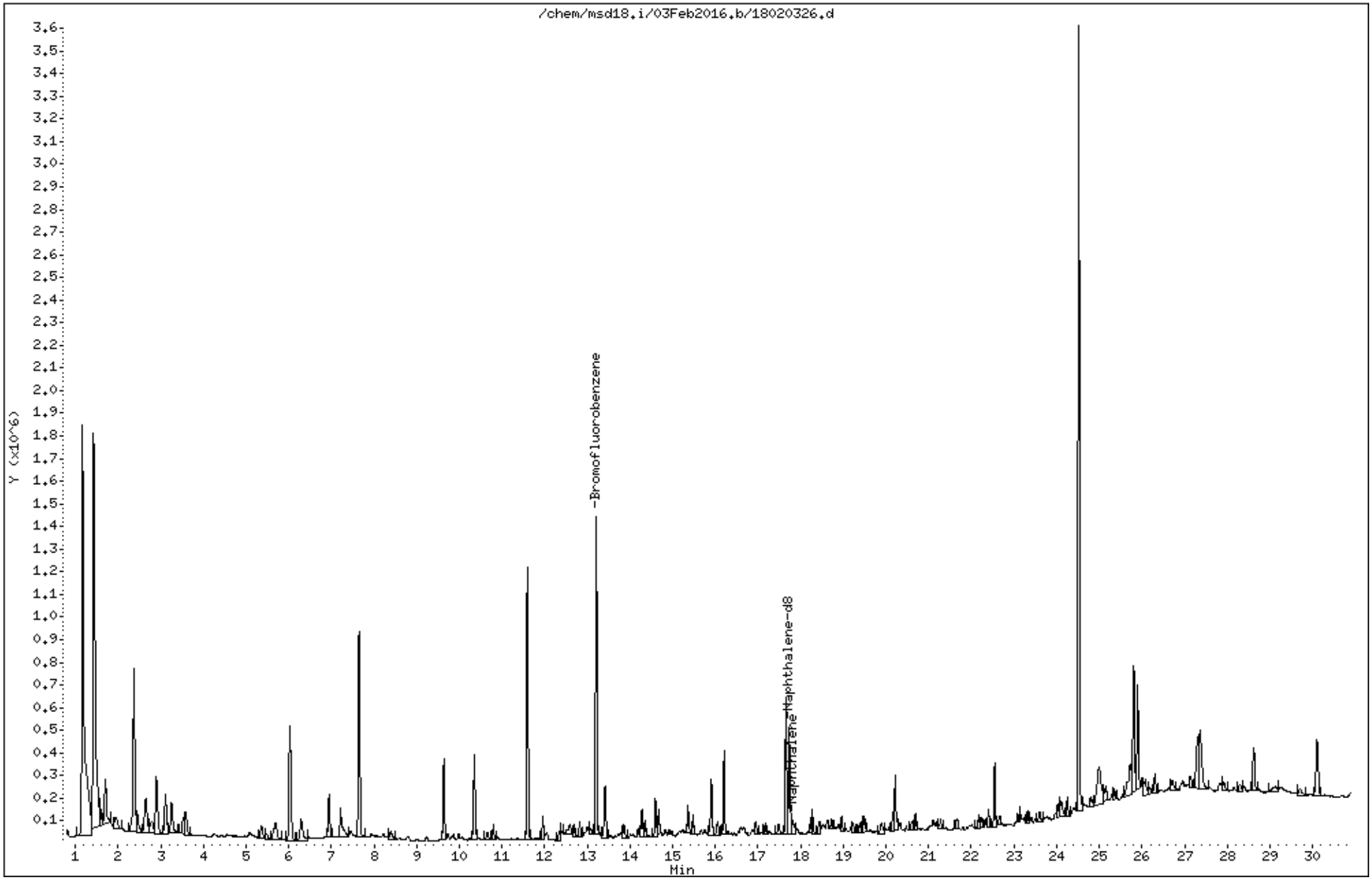
Instrument: msd18.i

Sample Info: ;1602029-20A

Operator: LA

Column phase: RTx-624

Column diameter: 0.53



Data File: /chem/msd18.i/03Feb2016.b/18020326.d

Date : 04-FEB-2016 02:48

Client ID:

Instrument: msd18.i

Sample Info: ;1602029-20A

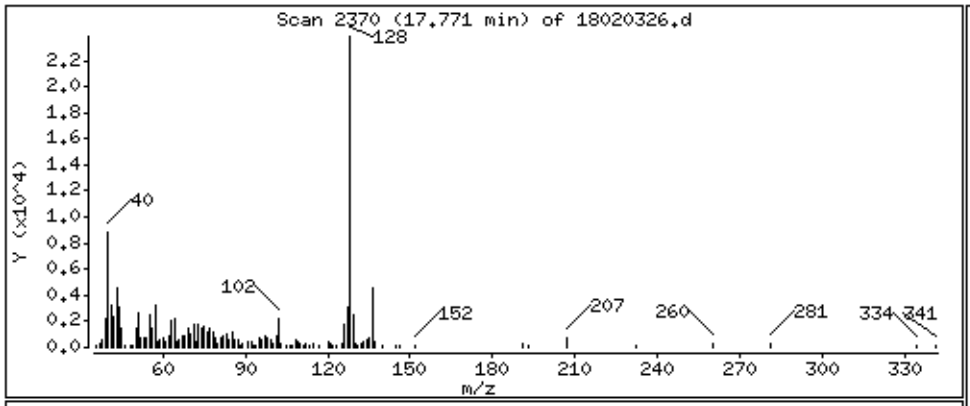
Operator: LA

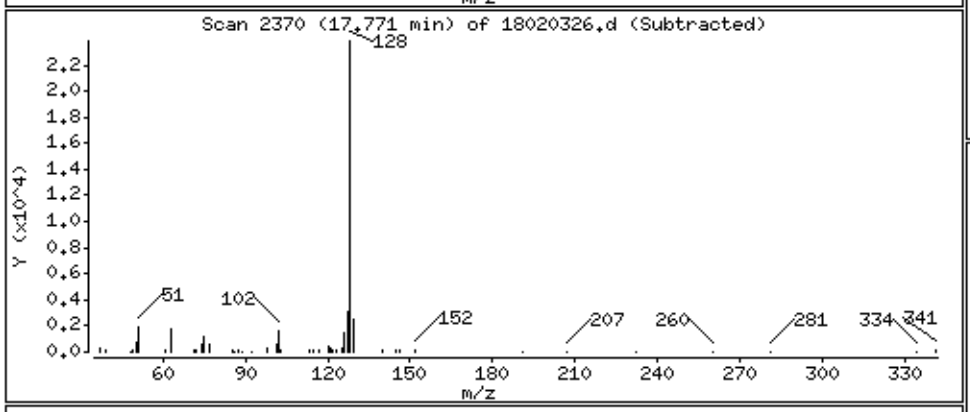
Column phase: RTx-624

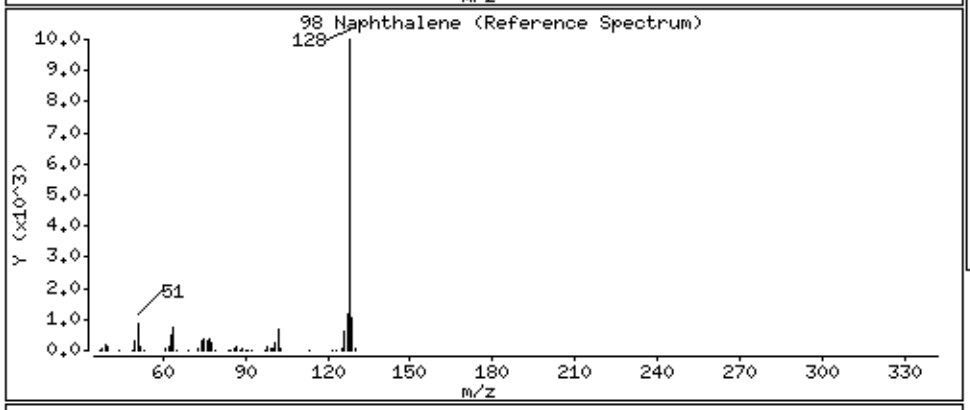
Column diameter: 0.53

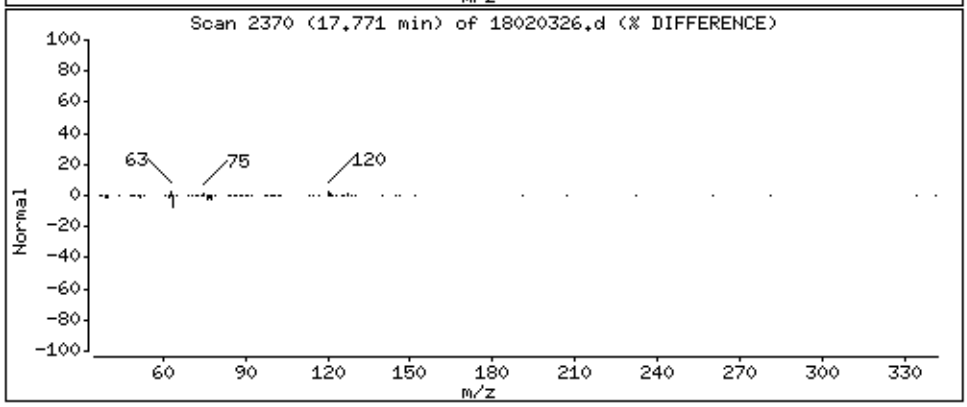
98 Naphthalene

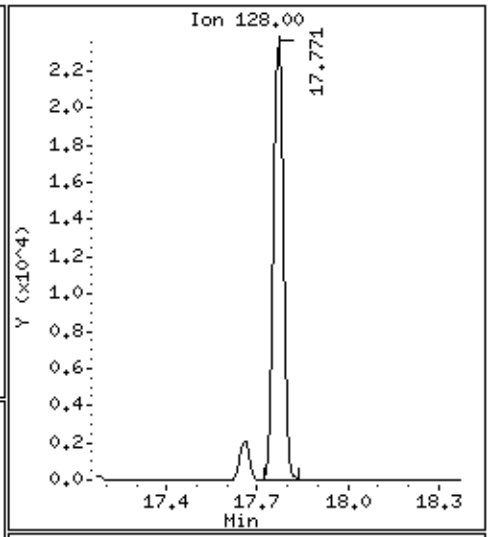
Concentration: 3.012 NG

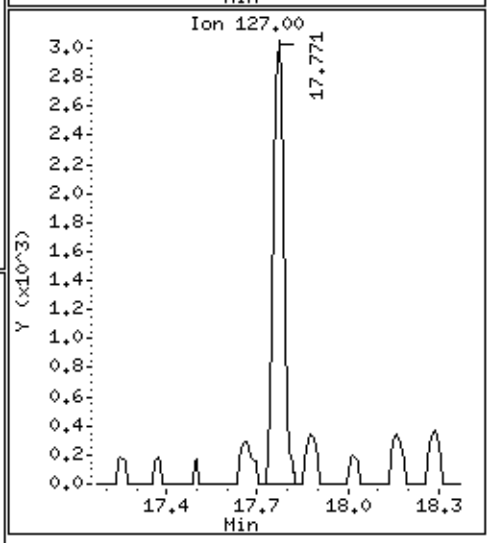












Summary of Detected Compounds
EPA METHOD TO-17

Client Sample ID: B42-3SSV013116

Lab ID#: 1602029-21A

No Detections Were Found.

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Client Sample ID: B42-3SSV013116

Lab ID#: 1602029-21A

EPA METHOD TO-17

File Name:	**18020330**	**Date of Extraction: NA**	**Date of Collection: 1/31/16 4:10:00 PM**
Dil. Factor:	**1.00**		**Date of Analysis: 2/4/16 09:59 AM**

Compound	Rpt. Limit (ng)	Rpt. Limit (ug/m3)	Amount (ng)	Amount (ug/m3)
Naphthalene	1.0	2.5	Not Detected	Not Detected

Air Sample Volume(L): 0.400
Container Type: TO-17 VI Tube

Surrogates	%Recovery	Method Limits
Naphthalene-d8	95	50-150

Eurofins Air Toxics Inc.

EPA Method TO-17 GC/MS

Data file : /chem/msd18.i/03Feb2016.b/18020330.d
Lab Smp Id: 1602029-21A
Inj Date : 04-FEB-2016 09:59
Operator : LA Inst ID: msd18.i
Smp Info : ;1602029-21A
Misc Info : DP G0139913, reanalysis
Comment :
Method : /chem/msd18.i/03Feb2016.b/186z0114vi.m
Meth Date : 12-Feb-2016 11:48 lantonic Quant Type: ISTD
Cal Date : 14-JAN-2016 18:27 Cal File: 18011415.d
Als bottle: 38
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: naph.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (ng)	FINAL (NG)	TARGET RANGE	RATIO
* 79 Bromofluorobenzene					CAS #: 460-00-4		
13.215	13.200 (1.000)	174	358583	36.0000		80.00- 120.00	100.00
13.215	13.200 (1.000)	95	500380			78.78- 138.78	139.54
13.215	13.200 (1.000)	176	342156			67.05- 127.05	95.42
$ 97 Naphthalene-d8					CAS #: 1146-65-2		
17.735	17.728 (1.342)	136	334273	23.8241	23.824	80.00- 120.00	100.00
17.735	17.728 (1.342)	108	34153			0.00- 39.05	10.22

Report Date: 12-Feb-2016 11:51

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd18.i
Lab File ID: 18020330.d
Lab Smp Id: 1602029-21A
Analysis Type: VOA
Quant Type: ISTD
Operator: LA
Method File: /chem/msd18.i/03Feb2016.b/186z0114vi.m
Misc Info: DP G0139913, reanalysis

Calibration Date: 03-FEB-2016
Calibration Time: 11:04

Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
79 Bromofluorobenzen	345554	207332	483776	358583	3.77

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
79 Bromofluorobenzen	13.20	12.87	13.53	13.21	0.11

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Report Date: 12-Feb-2016 11:51

Eurofins Air Toxics Inc.

RECOVERY REPORT

Client Name:
Client SDG: 03Feb2016
Sample Matrix: GAS
Fraction: VOA
Lab Smp Id: 1602029-21A
Level: LOW
Operator: LA
Data Type: MS DATA
SampleType: SAMPLE
SpikeList File: VOC+PAHlcs50.spk
Quant Type: ISTD
Sublist File: naph.sub
Method File: /chem/msd18.i/03Feb2016.b/186z0114vi.m
Misc Info: DP G0139913, reanalysis

SURROGATE COMPOUND	CONC ADDED NG	CONC RECOVERED NG	% RECOVERED	LIMITS
$ 97 Naphthalene-d8	25.000	23.824	95.30	50-150

Data File: /chem/msd18.i/03Feb2016.b/18020330.d

Date : 04-FEB-2016 09:59

Client ID:

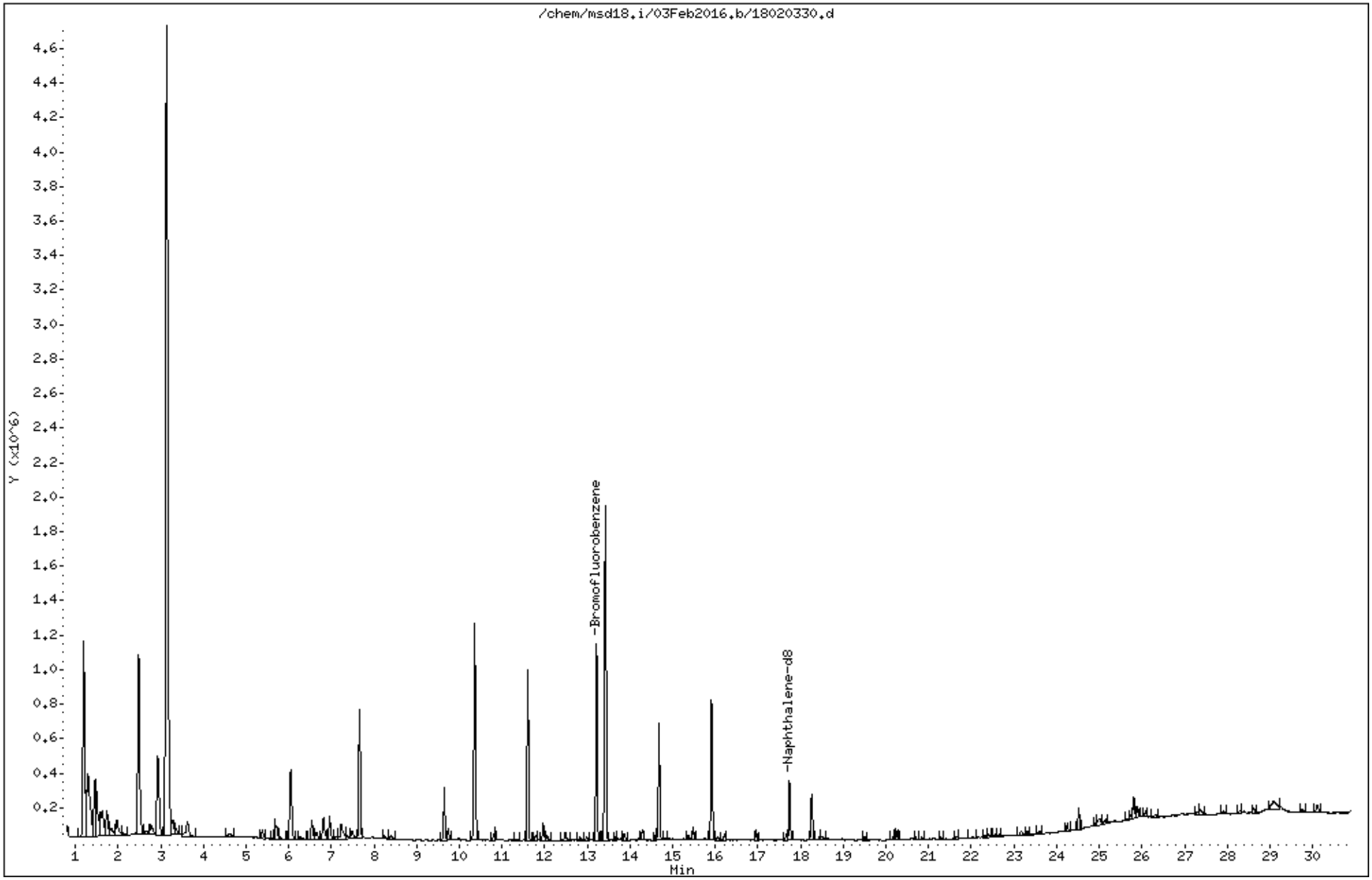
Instrument: msd18.i

Sample Info: ;1602029-21A

Operator: LA

Column phase: RTx-624

Column diameter: 0.53



QC Results and Raw Data

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Client Sample ID: Lab Blank

Lab ID#: 1602029-22A

EPA METHOD TO-17

File Name:	**18020306**	**Date of Extraction: NA**	**Date of Collection: NA**
Dil. Factor:	**1.00**		**Date of Analysis: 2/3/16 01:01 PM**

Compound	Rpt. Limit (ng)	Rpt. Limit (ug/m3)	Amount (ng)	Amount (ug/m3)
Naphthalene	1.0	0.067	0.94 J	0.063 J

Air Sample Volume(L): 14.9

J = Estimated value.

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Naphthalene-d8	101	50-150

Eurofins Air Toxics Inc.

EPA Method TO-17 GC/MS

Data file : /chem/msd18.i/03Feb2016.b/18020306.d
Lab Smp Id: Lab Blank Client Smp ID: Lab Blank
Inj Date : 03-FEB-2016 13:01
Operator : LA Inst ID: msd18.i
Smp Info : ;Lab Blank;Lab Blank
Misc Info : DP G0145528
Comment :
Method : /chem/msd18.i/03Feb2016.b/186z0114vi.m
Meth Date : 12-Feb-2016 11:48 lantonic Quant Type: ISTD
Cal Date : 14-JAN-2016 18:27 Cal File: 18011415.d
Als bottle: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: naph.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (ng)	FINAL (NG)	TARGET RANGE	RATIO
* 79 Bromofluorobenzene					CAS #: 460-00-4		
13.215	13.200 (1.000)	174	370447	36.0000		80.00- 120.00	100.00
13.215	13.200 (1.000)	95	522997			78.78- 138.78	141.18
13.215	13.200 (1.000)	176	354422			67.05- 127.05	95.67
$ 97 Naphthalene-d8					CAS #: 1146-65-2		
17.742	17.728 (1.343)	136	366857	25.3090	25.309	80.00- 120.00	100.00
17.735	17.728 (1.342)	108	37179			0.00- 39.05	10.13
98 Naphthalene					CAS #: 91-20-3		
17.778	17.771 (1.345)	128	14121	0.94379	0.9438	80.00- 120.00	100.00(a)
17.785	17.771 (1.346)	127	1821			0.00- 43.03	12.90

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Report Date: 12-Feb-2016 11:50

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd18.i
Lab File ID: 18020306.d
Lab Smp Id: Lab Blank
Analysis Type: VOA
Quant Type: ISTD
Operator: LA
Method File: /chem/msd18.i/03Feb2016.b/186z0114vi.m
Misc Info: DP G0145528

Calibration Date: 03-FEB-2016
Calibration Time: 11:04
Client Smp ID: Lab Blank
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
79 Bromofluorobenzen	345554	207332	483776	370447	7.20

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
79 Bromofluorobenzen	13.20	12.87	13.53	13.21	0.11

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Report Date: 12-Feb-2016 11:50

Eurofins Air Toxics Inc.

RECOVERY REPORT

Client Name:
Client SDG: 03Feb2016
Sample Matrix: GAS
Fraction: VOA
Lab Smp Id: Lab Blank
Client Smp ID: Lab Blank
Level: LOW
Operator: LA
Data Type: MS DATA
SampleType: SAMPLE
SpikeList File: VOC+PAHlcs50.spk
Quant Type: ISTD
Sublist File: naph.sub
Method File: /chem/msd18.i/03Feb2016.b/186z0114vi.m
Misc Info: DP G0145528

SURROGATE COMPOUND	CONC ADDED NG	CONC RECOVERED NG	% RECOVERED	LIMITS
$ 97 Naphthalene-d8	25.000	25.309	101.24	50-150

Data File: /chem/msd18.i/03Feb2016.b/18020306.d

Date : 03-FEB-2016 13:01

Client ID: Lab Blank

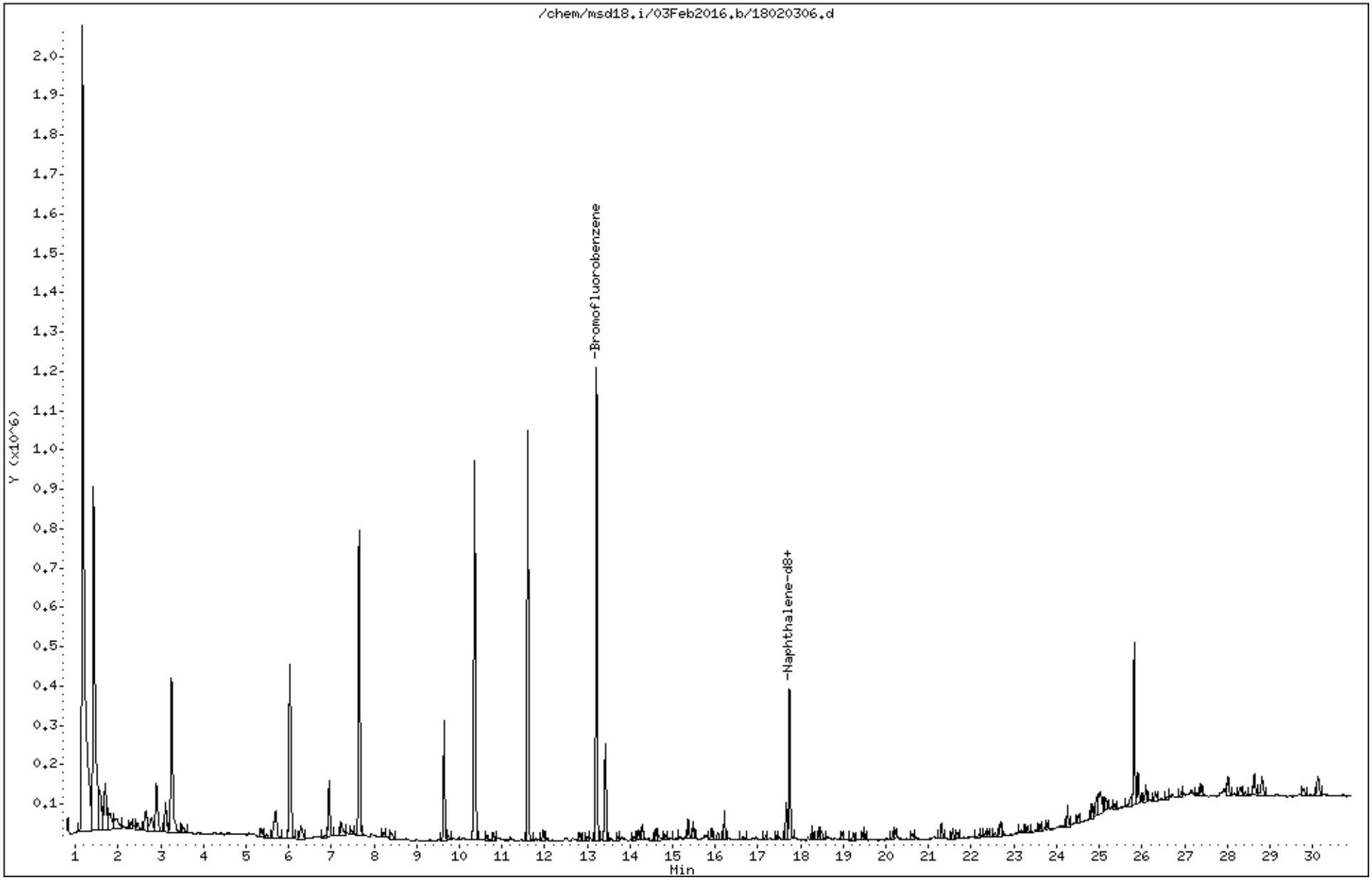
Instrument: msd18.i

Sample Info: ;Lab Blank;Lab Blank

Operator: LA

Column phase: RTx-624

Column diameter: 0.53



Data File: /chem/msd18.i/03Feb2016.b/18020306.d

Date : 03-FEB-2016 13:01

Client ID: Lab Blank

Instrument: msd18.i

Sample Info: ;Lab Blank;Lab Blank

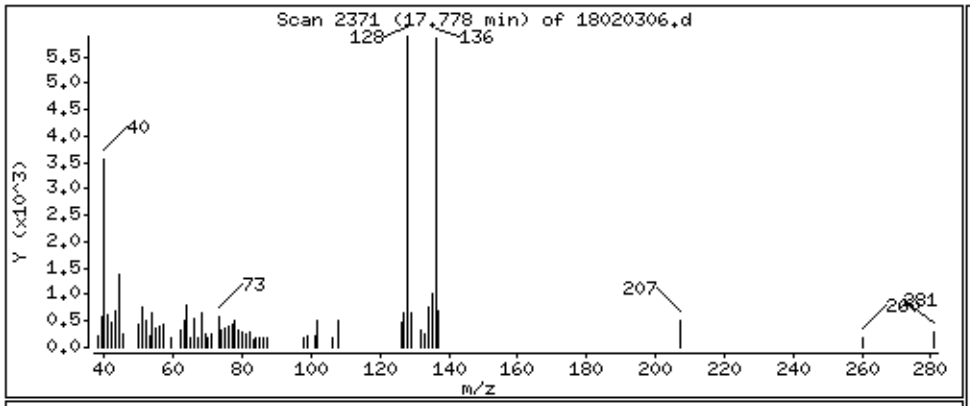
Operator: LA

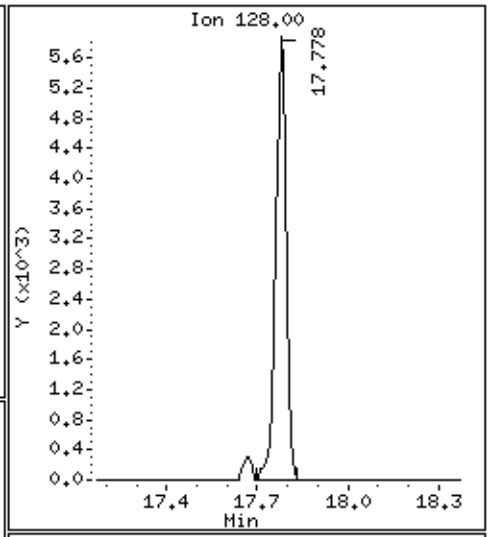
Column phase: RTx-624

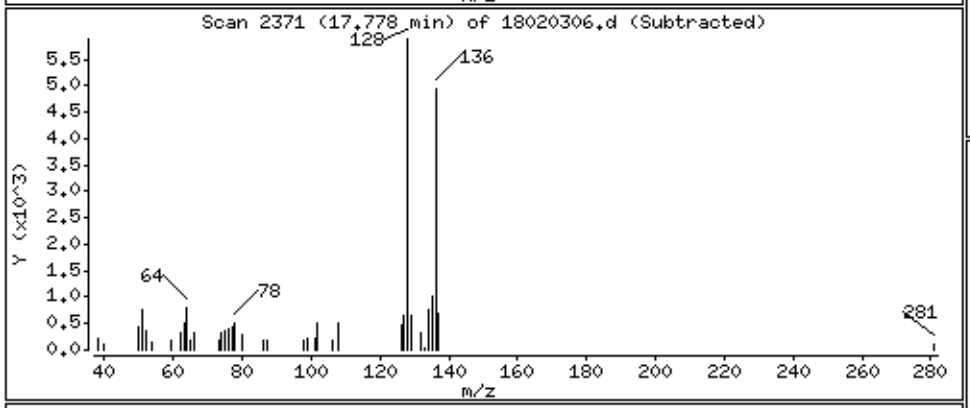
Column diameter: 0.53

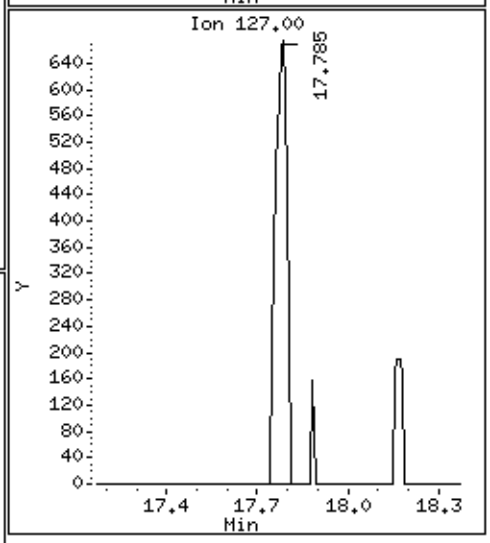
98 Naphthalene

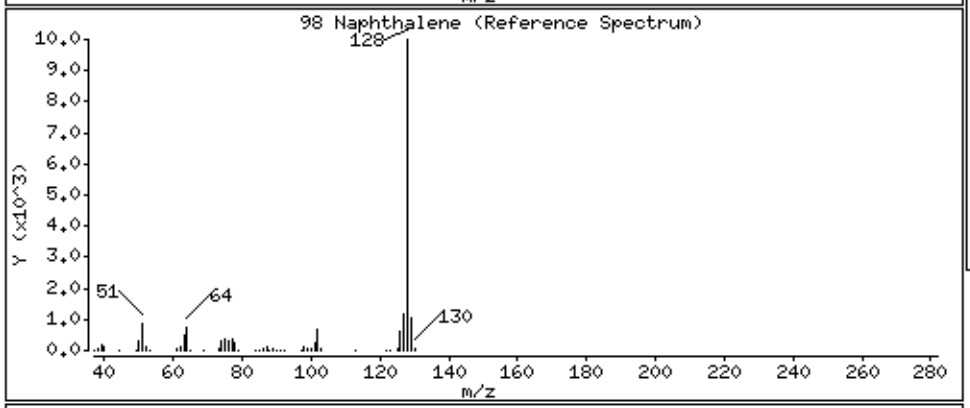
Concentration: 0.9438 NG

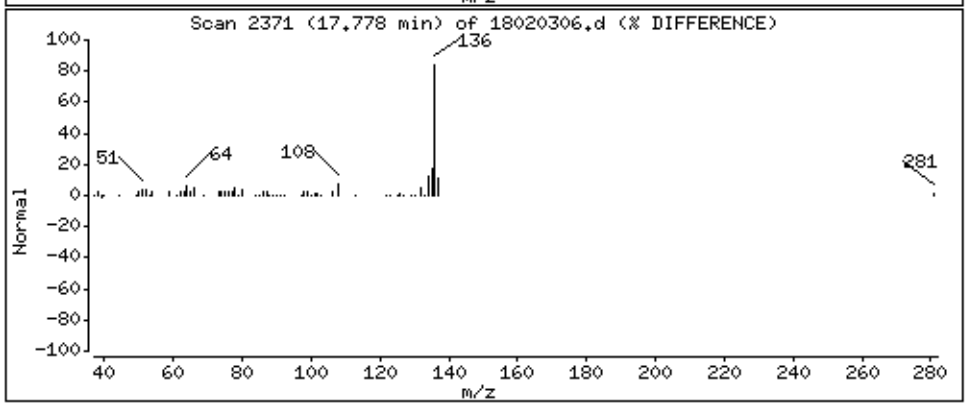












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Client Sample ID: Lab Blank

Lab ID#: 1602029-22B

EPA METHOD TO-17

File Name:	**11020406a**	**Date of Extraction: NA**	**Date of Collection: NA**
Dil. Factor:	**1.00**		**Date of Analysis: 2/4/16 02:30 PM**

Compound	Rpt. Limit (ng)	Rpt. Limit (ug/m3)	Amount (ng)	Amount (ug/m3)
Freon 114	14	0.94	Not Detected	Not Detected
Vinyl Chloride	5.1	0.34	Not Detected	Not Detected
1,3-Butadiene	2.2	0.15	Not Detected	Not Detected
Isopentane	5.9	0.40	Not Detected	Not Detected
Freon 11	11	0.74	Not Detected	Not Detected
1,1-Dichloroethene	4.0	0.27	Not Detected	Not Detected
Methylene Chloride	21	1.4	Not Detected	Not Detected
Freon 113	7.7	0.52	Not Detected	Not Detected
trans-1,2-Dichloroethene	8.0	0.54	Not Detected	Not Detected
1,1-Dichloroethane	4.0	0.27	Not Detected	Not Detected
cis-1,2-Dichloroethene	4.0	0.27	Not Detected	Not Detected
Hexane	35	2.3	Not Detected	Not Detected
Chloroform	4.9	0.33	Not Detected	Not Detected
1,2-Dichloroethane	4.0	0.27	Not Detected	Not Detected
1,1,1-Trichloroethane	5.4	0.36	Not Detected	Not Detected
Benzene	6.4	0.43	1.0 J	0.069 J
Carbon Tetrachloride	6.3	0.42	Not Detected	Not Detected
Cyclohexane	6.9	0.46	Not Detected	Not Detected
1,2-Dichloropropane	4.6	0.31	Not Detected	Not Detected
Trichloroethene	5.4	0.36	Not Detected	Not Detected
1,4-Dioxane	11	0.74	Not Detected	Not Detected
2,2,4-Trimethylpentane	9.4	0.63	Not Detected	Not Detected
Heptane	8.2	0.55	Not Detected	Not Detected
Methylcyclohexane	8.0	0.54	Not Detected	Not Detected
1,1,2-Trichloroethane	5.4	0.36	Not Detected	Not Detected
4-Methyl-2-pentanone	8.2	0.55	Not Detected	Not Detected
Toluene	7.5	0.50	0.44 J	0.030 J
2-Hexanone	8.2	0.55	Not Detected	Not Detected
Tetrachloroethene	6.8	0.46	Not Detected	Not Detected
Chlorobenzene	4.6	0.31	Not Detected	Not Detected
Ethyl Benzene	4.3	0.29	Not Detected	Not Detected
m,p-Xylene	8.7	0.58	Not Detected	Not Detected
o-Xylene	8.7	0.58	Not Detected	Not Detected
Styrene	8.5	0.57	Not Detected	Not Detected
1,1,2,2-Tetrachloroethane	6.9	0.46	Not Detected	Not Detected
Cumene	9.8	0.66	Not Detected	Not Detected
Propylbenzene	9.8	0.66	Not Detected	Not Detected
4-Ethyltoluene	9.8	0.66	Not Detected	Not Detected
1,3,5-Trimethylbenzene	9.8	0.66	Not Detected	Not Detected
1,2,4-Trimethylbenzene	29	1.9	Not Detected	Not Detected
1,3-Dichlorobenzene	6.0	0.40	Not Detected	Not Detected
1,4-Dichlorobenzene	6.0	0.40	Not Detected	Not Detected

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Client Sample ID: Lab Blank

Lab ID#: 1602029-22B

EPA METHOD TO-17

File Name:	**11020406a**	**Date of Extraction: NA**	**Date of Collection: NA**
Dil. Factor:	**1.00**		**Date of Analysis: 2/4/16 02:30 PM**

Compound	Rpt. Limit (ng)	Rpt. Limit (ug/m3)	Amount (ng)	Amount (ug/m3)
1,2-Dichlorobenzene	6.0	0.40	Not Detected	Not Detected
1,2,4-Trichlorobenzene	15	1.0	Not Detected	Not Detected
Hexachlorobutadiene	21	1.4	Not Detected	Not Detected
Naphthalene	1.0	0.067	Not Detected	Not Detected

Air Sample Volume(L): 14.9

J = Estimated value.

m,p-Xylene was reported from file #11020829, analyzed on 2/9/16 with a dilution factor of 4.00.

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	89	50-150
Toluene-d8	95	50-150
Naphthalene-d8	111	50-150

Eurofins Air Toxics Inc.

EPA Method TO-17 GC/MS

Data file : /chem/msd11.i/04feb16.b/11020406a.d
Lab Smp Id: Lab Blank Client Smp ID: Lab Blank
Inj Date : 04-FEB-2016 14:30
Operator : LA Inst ID: msd11.i
Smp Info : ;Lab Blank;Lab Blank
Misc Info : DP G0144300
Comment :
Method : /chem/msd11.i/04feb16.b/115z1120vi.m
Meth Date : 10-Feb-2016 11:24 lantonic Quant Type: ISTD
Cal Date : 21-NOV-2015 00:39 Cal File: 11112010.d
Als bottle: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AND19256.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (ng)	FINAL (NG)	TARGET RANGE	RATIO
* 40 Bromochloromethane					CAS #: 74-97-5		
6.953	6.946 (1.000)	130	68445	26.0000		80.00- 120.00	100.00
6.953	6.946 (1.000)	128	53354			49.46- 109.46	77.95
6.953	6.946 (1.000)	49	83587			96.52- 156.52	122.12
* 54 1,4-Difluorobenzene					CAS #: 540-36-3		
8.336	8.329 (1.000)	114	258113	23.0000		80.00- 120.00	100.00
8.336	8.329 (1.000)	88	35566			0.00- 44.32	13.78
* 79 Chlorobenzene-d5					CAS #: 3114-55-4		
11.659	11.645 (1.000)	117	246404	24.0000		80.00- 120.00	100.00
11.659	11.645 (1.000)	82	111743			20.08- 80.08	45.35
* 92 Bromofluorobenzene					CAS #: 460-00-4		
13.070	13.071 (1.000)	174	164393	36.0000		80.00- 120.00	100.00
13.070	13.071 (1.000)	95	164283			68.42- 128.42	99.93
13.070	13.071 (1.000)	176	162648			64.69- 124.69	98.94
$ 49 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
7.748	7.734 (0.930)	65	23882	22.2221	22.222	80.00- 120.00	100.00

```
                                        CONCENTRATIONS
                                        ON-COL    FINAL
   RT   EXP RT (REL RT)  MASS  RESPONSE (   ng)  (   NG)   TARGET RANGE    RATIO
   ==   ====== ========  ====  ======== =======  =======   ============    =====

$  49 1,2-Dichloroethane-d4 (continued)
  7.741   7.734 (0.929)    67     13747                    25.09-  85.09    57.56
-------------------------------------------------------------------------------
$  66 Toluene-d8                                   CAS #: 2037-26-5
 10.012   9.998 (0.859)    98     92203 23.7060   23.706  80.00- 120.00   100.00
 10.005   9.998 (0.858)    70      9289                    0.00-  41.37    10.07
 10.012   9.998 (0.859)   100     60707                   33.98-  93.98    65.84
-------------------------------------------------------------------------------
$ 108 Naphthalene-d8                              CAS #: 1146-65-2
 17.225  17.232 (1.318)   136    163201 27.6877   27.688  80.00- 120.00   100.00
 17.225  17.232 (1.318)   108     12823                    0.00-  38.36     7.86
-------------------------------------------------------------------------------
   48 Benzene                                     CAS #: 71-43-2
  7.770   7.756 (0.932)    78      4451 1.03242    1.032  80.00- 120.00   100.00(a)
  7.763   7.756 (0.931)    77      1043                    0.00-  53.25    23.44
-------------------------------------------------------------------------------
   67 Toluene                                     CAS #: 108-88-3
 10.083  10.069 (0.865)    91      2083 0.44149   0.4415  80.00- 120.00   100.00(a)
 10.091  10.069 (0.865)    92      1188                   29.25-  89.25    57.02
-------------------------------------------------------------------------------
```

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Report Date: 12-Feb-2016 11:58

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd11.i
Lab File ID: 11020406a.d
Lab Smp Id: Lab Blank
Analysis Type: VOA
Quant Type: ISTD
Operator: LA
Method File: /chem/msd11.i/04feb16.b/115z1120vi.m
Misc Info: DP G0144300

Calibration Date: 04-FEB-2016
Calibration Time: 12:29
Client Smp ID: Lab Blank
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
40 Bromochloromethan	65872	39523	92221	68445	3.91
54 1,4-Difluorobenze	263308	157985	368631	258113	-1.97
79 Chlorobenzene-d5	242803	145682	339924	246404	1.48
92 Bromofluorobenzen	175852	105511	246193	164393	-6.52

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
40 Bromochloromethan	6.95	6.62	7.28	6.95	0.10
54 1,4-Difluorobenze	8.33	8.00	8.66	8.34	0.08
79 Chlorobenzene-d5	11.65	11.32	11.98	11.66	0.12
92 Bromofluorobenzen	13.07	12.74	13.40	13.07	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Report Date: 12-Feb-2016 11:58

Eurofins Air Toxics Inc.

RECOVERY REPORT

Client Name:
Client SDG: 04feb16
Sample Matrix: GAS
Fraction: VOA
Lab Smp Id: Lab Blank
Client Smp ID: Lab Blank
Level: LOW
Operator: LA
Data Type: MS DATA
SampleType: SAMPLE
SpikeList File: VOC+PAHlcs50.spk
Quant Type: ISTD
Sublist File: AND19256.sub
Method File: /chem/msd11.i/04feb16.b/115z1120vi.m
Misc Info: DP G0144300

SURROGATE COMPOUND	AMOUNT ADDED ng	AMOUNT RECOVERED ng	% RECOVERED	LIMITS
$ 49 1,2-Dichloroethane	25.000	22.222	88.89	50-150
$ 66 Toluene-d8	25.000	23.706	94.82	50-150
$ 108 Naphthalene-d8	25.000	27.688	110.75	50-150

Data File: /chem/msd11.i/04feb16.b/11020406a.d

Date : 04-FEB-2016 14:30

Client ID: Lab Blank

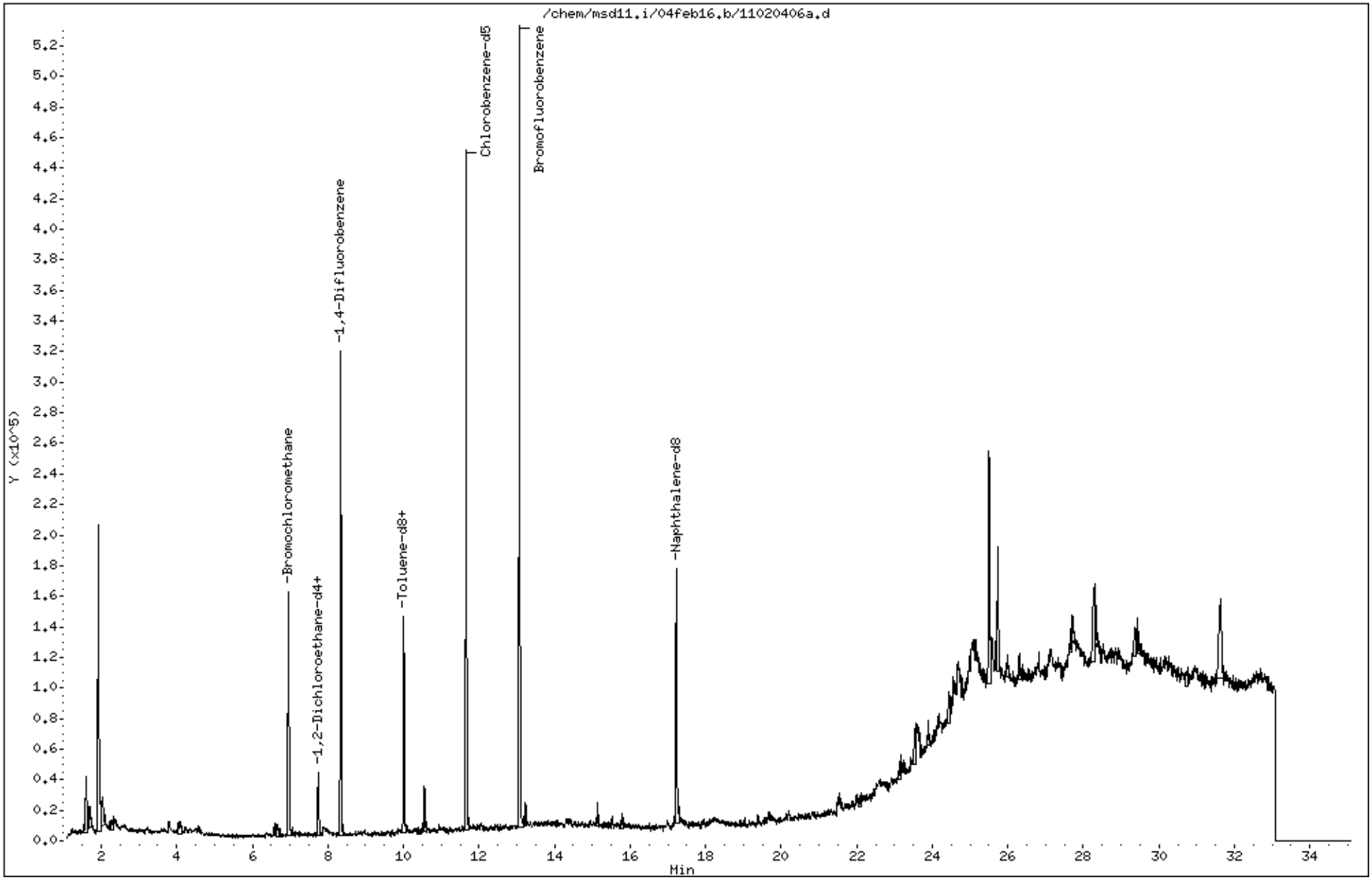
Sample Info: ;Lab Blank;Lab Blank

Column phase: RTx-624

Instrument: msd11.i

Operator: LA

Column diameter: 0.53



Data File: /chem/msd11.i/04feb16.b/11020406a.d

Date : 04-FEB-2016 14:30

Client ID: Lab Blank

Instrument: msd11.i

Sample Info: ;Lab Blank;Lab Blank

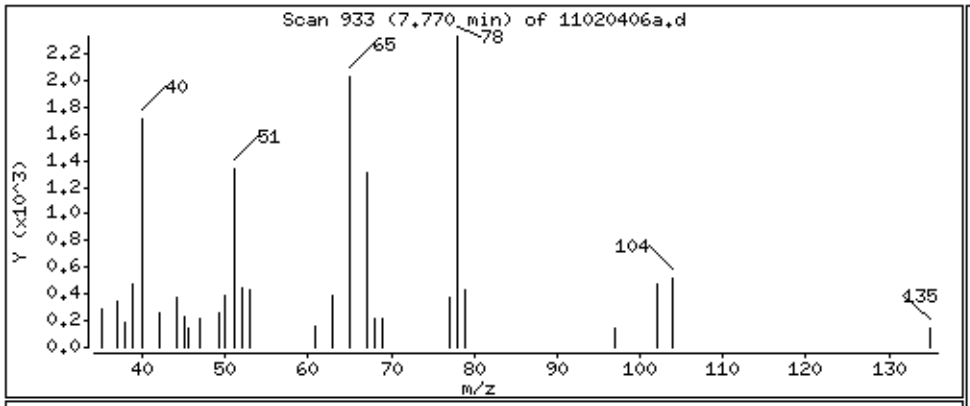
Operator: LA

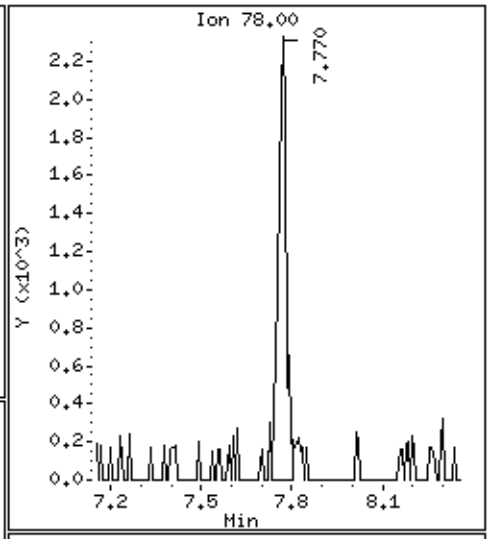
Column phase: RTx-624

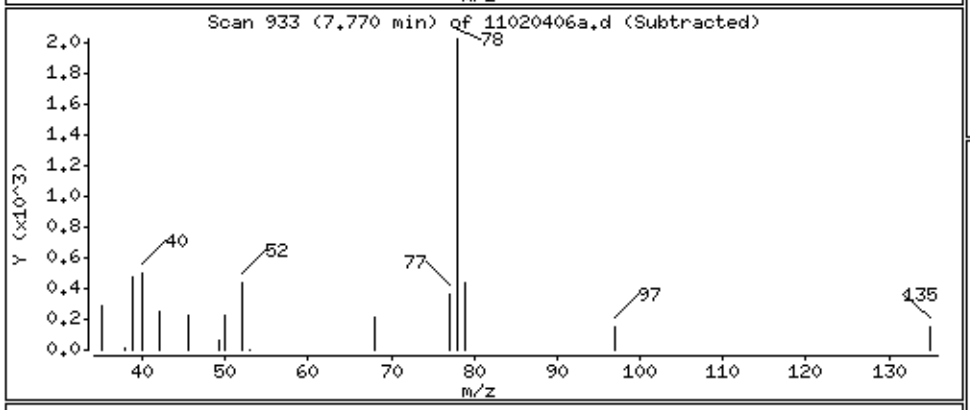
Column diameter: 0.53

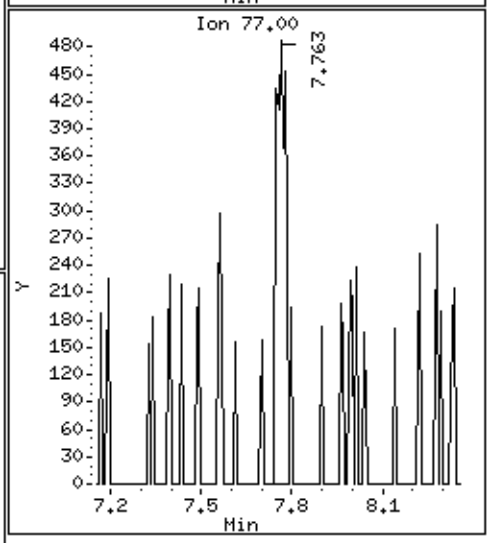
48 Benzene

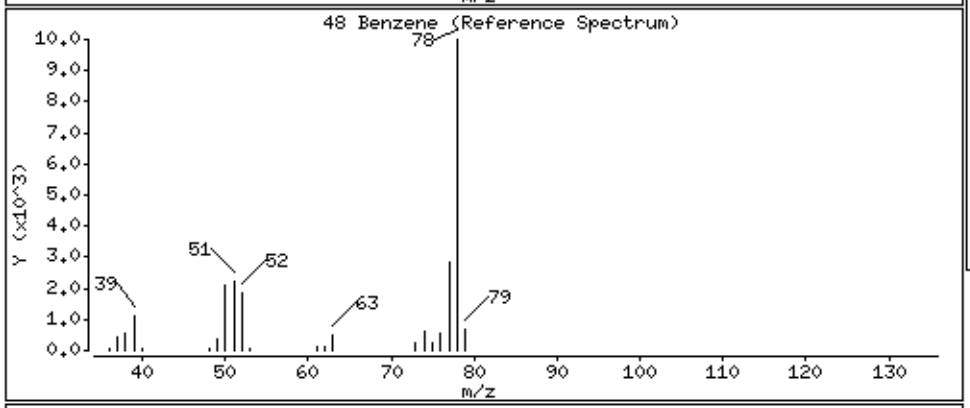
Concentration: 1.032 NG

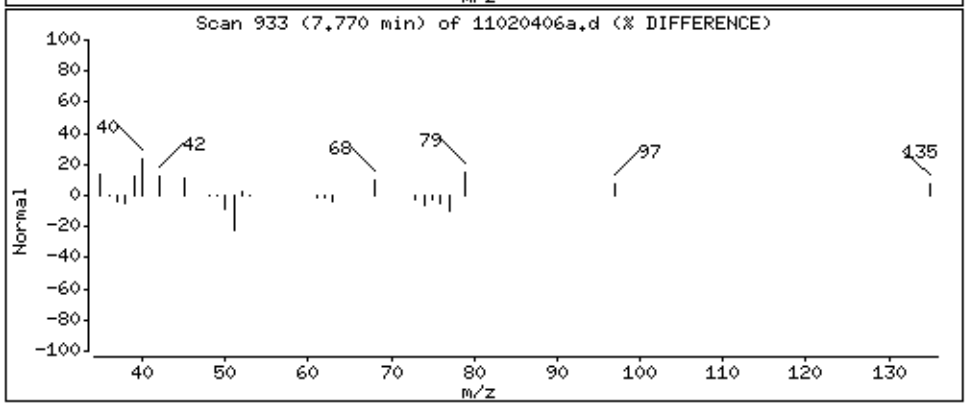












Data File: /chem/msd11.i/04feb16.b/11020406a.d

Date : 04-FEB-2016 14:30

Client ID: Lab Blank

Instrument: msd11.i

Sample Info: ;Lab Blank;Lab Blank

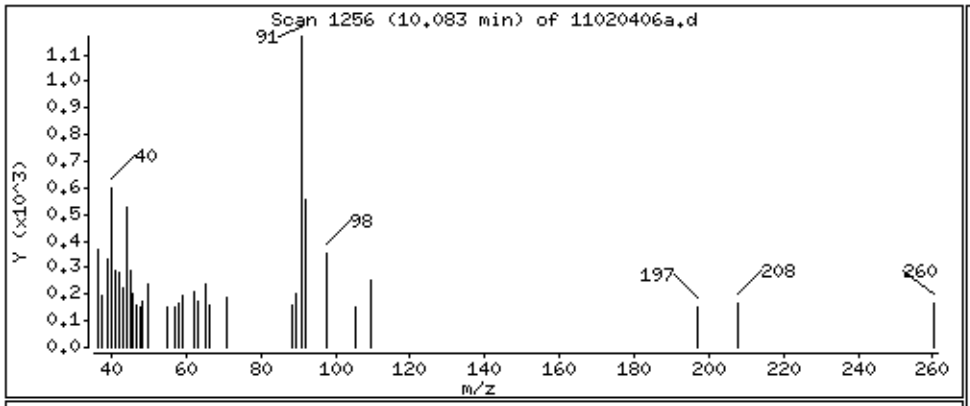
Operator: LA

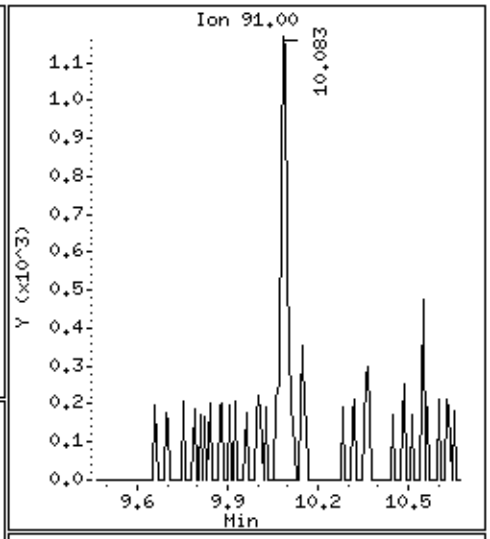
Column phase: RTx-624

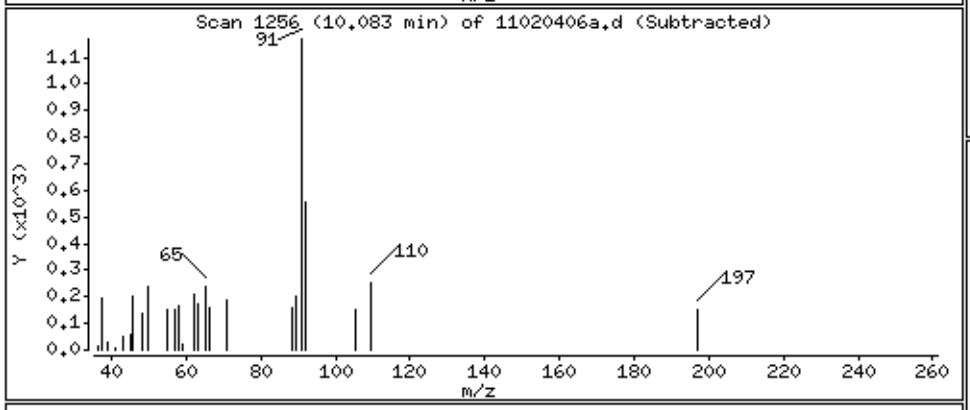
Column diameter: 0.53

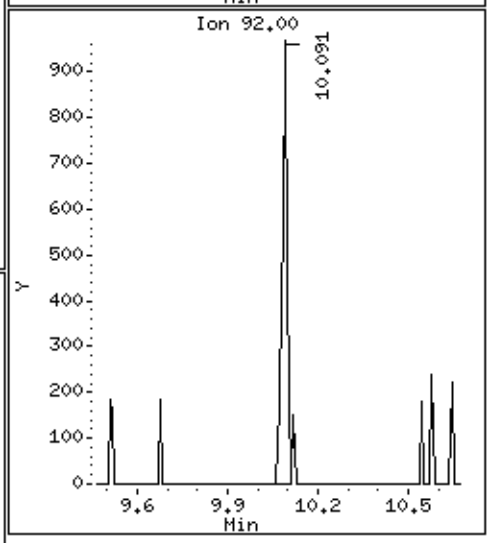
67 Toluene

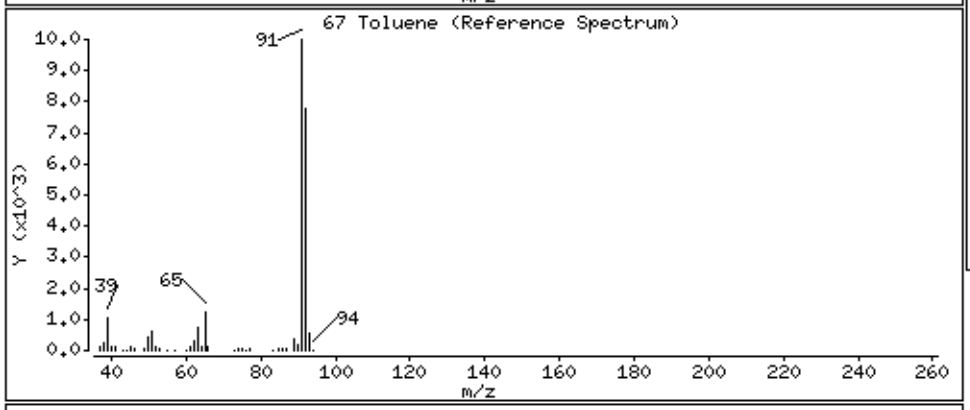
Concentration: 0.4415 NG

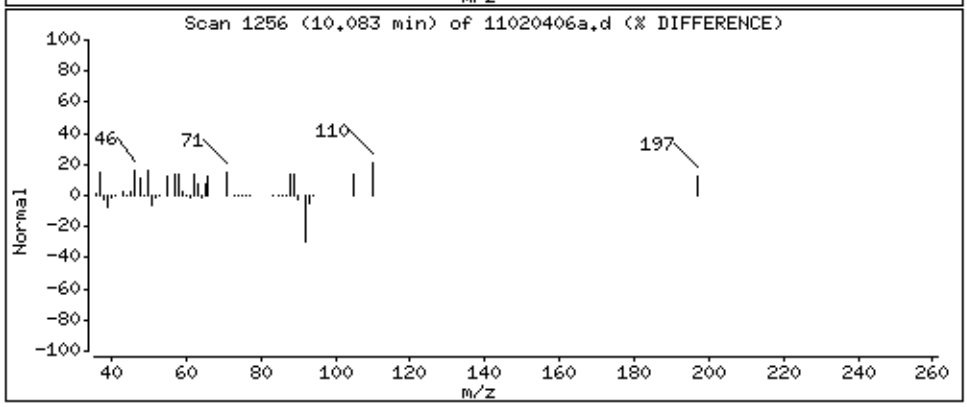












LEVEL-IV VALIDATABLE

EPA METHOD TO-17

SURROGATE RECOVERY FORM

Lab Name: AIR TOXICS LIMITED. SDG No.: 1602029

	CLIENT SAMPLE NO.	SURROGATE % RECOVERY								
		Naphthalene-d8	#	1,2-Dichloroethane-d4	#	Toluene-d8	#		#	TOTAL OUT
01	B30-1IA013016	90								0
02	B30-2IA013016	88								0
03	B30-3IA013016	95								0
04	B30-4IA013016	99								0
05	B30-4IAD013016	97								0
06	B30-5IA013016	92								0
07	B3042AA013016	61								0
08	B42-1IA013016	84								0
09	B42-2IA013016	99								0
10	B42-3IA013016	90								0
11	B3042-FB1IA	87								0
12	B3042-FB2SSV	91								0
13	B30-1SSV013116	103		86		119				0
14	B30-2SSV013116	82								0
15	B30-3SSV013116	92								0
16	B30-4SSV013116	92								0
17	B30-4DSSV013116	92								0
18	B30-5SSV013116	91								0
19	B42-1SSV013116	92								0
20	B42-2SSV013116	96								0
21	B42-3SSV013116	95								0
22	Lab Blank	101								0
23	Lab Blank	111		89		95				0
24	CCV	99								0

Surrogate Recovery Limits

Naphthalene-d8 50 - 150
1,2-Dichloroethane-d4 50 - 150
Toluene-d8 50 - 150

* Designates values outside of QC limits

LEVEL-IV VALIDATABLE

EPA METHOD TO-17

SURROGATE RECOVERY FORM

Lab Name: AIR TOXICS LIMITED. SDG No.: 1602029

	CLIENT SAMPLE NO.	SURROGATE % RECOVERY								TOTAL OUT
			#		#		#		#	
01	CCV	110		94		101				0
02	LCS	102								0
03	LCSD	100								0
04	LCS	108		103		93				0
05	LCSD	104		90		94				0
06										0
07										0
08										0
09										0
10										0
11										0
12										0
13										0
14										0
15										0
16										0
17										0
18										0
19										0
20										0
21										0
22										0
23										0
24										0

Surrogate Recovery Limits

* Designates values outside of QC limits

LEVEL-IV VALIDATABLE

EPA Method TO-17

INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: AIR TOXICS, LTD

SDG No: 1602029

Lab File ID: 18020303.d

Date Analyzed: 02/03/2016

Instrument ID: msd18.i

Time Analyzed: 11:04 AM

		4-Bromofluorobenzene Area	#	RT	#	Area	#	RT	#	Area	#	RT	#
	24-HOUR STD	345554		13.2									
	UPPER LIMIT	483776		13.53									
	LOWER LIMIT	207332		12.87									
	CLIENT SAMPLE NO												
01	B30-1IA013016	419553		13.21									
02	B30-2IA013016	411695		13.21									
03	B30-3IA013016	414971		13.21									
04	B30-4IA013016	419769		13.21									
05	B30-4IAD013016	428005		13.21									
06	B30-5IA013016	433385		13.21									
07	B3042AA013016	425644		13.21									
08	B42-1IA013016	440094		13.21									
09	B42-2IA013016	424756		13.21									
10	B42-3IA013016	356294		13.21									
11	B3042-FB1IA	312613		13.22									
12	B3042-FB2SSV	387902		13.21									
13	B30-2SSV013116	452511		13.21									
14	B30-3SSV013116	422261		13.21									
15	B30-4SSV013116	421480		13.21									
16	B30-4DSSV013116	423792		13.21									
17	B30-5SSV013116	420770		13.21									
18	B42-1SSV013116	429539		13.21									
19	B42-2SSV013116	428094		13.21									
20	B42-3SSV013116	358583		13.21									
21	Lab Blank	370447		13.21									
22	CCV	345554		13.2									
23	LCS	371236		13.21									
24	LCSD	302941		13.21									
25													
26													
27													
28													
29													

* Designates values outside of QC limits

LEVEL-IV VALIDATABLE

EPA Method TO-17

INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name:	AIR TOXICS, LTD	SDG No:	1602029
Lab File ID:	18020303.d	Date Analyzed:	02/03/2016
Instrument ID:	msd18.i	Time Analyzed:	11:04 AM

		4-Bromofluorobenzene Area	#	RT	#	Area	#	RT	#	Area	#	RT	#
	24-HOUR STD	345554		13.2									
	UPPER LIMIT	483776		13.53									
	LOWER LIMIT	207332		12.87									
	CLIENT SAMPLE NO												
30													
31													
32													
33													
34													
35													
36													
37													
38													
39													
40													
41													
42													
43													
44													

'Area Upper Limit=+40% of internal standard area'
'Area Lower Limit=-40% of internal standard area'

RT Upper Limit=+0.33 minutes of internal standard RT
RT Lower Limit=-0.33 minutes of internal standard RT

* Designates values outside of QC limits

LEVEL-IV VALIDATABLE

EPA Method TO-17

INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name:	AIR TOXICS, LTD	SDG No:	1602029
Lab File ID:	11020404.d	Date Analyzed:	02/04/2016
Instrument ID:	msd11.i	Time Analyzed:	12:29 PM

		4-Bromofluorobenzene Area	#	RT	#	Area	#	RT	#	Area	#	RT	#
	24-HOUR STD	175852		13.07									
	UPPER LIMIT	246193		13.40									
	LOWER LIMIT	105511		12.74									
	CLIENT SAMPLE NO												
01	B30-1SSV013116	194684		13.07									
02	Lab Blank	164393		13.07									
03	CCV	175852		13.07									
04	LCS	170698		13.08									
05	LCSD	127625		13.06									
06													
07													
08													
09													
10													
11													
12													
13													
14													
15													
16													
17													
18													
19													
20													
21													
22													

'Area Upper Limit=+40% of internal standard area'
'Area Lower Limit=-40% of internal standard area'

RT Upper Limit=+0.33 minutes of internal standard RT
RT Lower Limit=-0.33 minutes of internal standard RT

* Designates values outside of QC limits

SAMPLE RESULTS/SAMPLE RESULTS DUPLICATE

Lab Name: Air Toxics Ltd.

Lab File ID: 18020305.d & 18020304.d

Lab Sample ID: &

Dilution: 1.00 & 1.00

Client Sample ID: LCS & LCSD

Date Analyzed: 2/3/16 & 2/3/16

CAS Number	Compound	Original Amount	Original Flags	Duplicate Amount	Duplicate Flags	RPD	Result Less Than 5X RL
71-55-6	1,1,1-Trichloroethane	ND		ND		0	
79-34-5	1,1,2,2-Tetrachloroethane	ND		ND		0	
79-00-5	1,1,2-Trichloroethane	ND		ND		0	
75-34-3	1,1-Dichloroethane	ND		ND		0	
75-35-4	1,1-Dichloroethene	ND		ND		0	
120-82-1	1,2,4-Trichlorobenzene	ND		ND		0	
95-63-6	1,2,4-Trimethylbenzene	ND		ND		0	
95-50-1	1,2-Dichlorobenzene	ND		ND		0	
107-06-2	1,2-Dichloroethane	ND		ND		0	
78-87-5	1,2-Dichloropropane	ND		ND		0	
108-67-8	1,3,5-Trimethylbenzene	ND		ND		0	
106-99-0	1,3-Butadiene	ND		ND		0	
541-73-1	1,3-Dichlorobenzene	ND		ND		0	
106-46-7	1,4-Dichlorobenzene	ND		ND		0	
123-91-1	1,4-Dioxane	ND		ND		0	
540-84-1	2,2,4-Trimethylpentane	ND		ND		0	
591-78-6	2-Hexanone	ND		ND		0	
622-96-8	4-Ethyltoluene	ND		ND		0	
108-10-1	4-Methyl-2-pentanone	ND		ND		0	
71-43-2	Benzene	ND		ND		0	
56-23-5	Carbon Tetrachloride	ND		ND		0	
108-90-7	Chlorobenzene	ND		ND		0	
67-66-3	Chloroform	ND		ND		0	
156-59-2	cis-1,2-Dichloroethene	ND		ND		0	
98-82-8	Cumene	ND		ND		0	
110-82-7	Cyclohexane	ND		ND		0	
100-41-4	Ethyl Benzene	ND		ND		0	
75-69-4	Freon 11	ND		ND		0	
76-13-1	Freon 113	ND		ND		0	
76-14-2	Freon 114	ND		ND		0	
142-82-5	Heptane	ND		ND		0	
87-68-3	Hexachlorobutadiene	ND		ND		0	
110-54-3	Hexane	ND		ND		0	
78-78-4	Isopentane	ND		ND		0	
108-38-3	m,p-Xylene	ND		ND		0	
108-87-2	Methylcyclohexane	ND		ND		0	
75-09-2	Methylene Chloride	ND		ND		0	
91-20-3	Naphthalene	110		109		0.91	
95-47-6	o-Xylene	ND		ND		0	
103-65-1	Propylbenzene	ND		ND		0	
100-42-5	Styrene	ND		ND		0	
127-18-4	Tetrachloroethene	ND		ND		0	
108-88-3	Toluene	ND		ND		0	
156-60-5	trans-1,2-Dichloroethene	ND		ND		0	
79-01-6	Trichloroethene	ND		ND		0	

Note: The results appearing in the Amount columns are the raw, unrounded numbers acquired from the instrument.

SAMPLE RESULTS/SAMPLE RESULTS DUPLICATE

Lab Name: Air Toxics Ltd.

Lab File ID: 18020305.d & 18020304.d

Lab Sample ID: &

Dilution: 1.00 & 1.00

Client Sample ID: LCS & LCSD

Date Analyzed: 2/3/16 & 2/3/16

CAS Number	Compound	Original Amount	Original Flags	Duplicate Amount	Duplicate Flags	RPD	Result Less Than 5X RL
75-01-4	Vinyl Chloride	ND		ND		0	

Note: The results appearing in the Amount columns are the raw, unrounded numbers acquired from the instrument.

SAMPLE RESULTS/SAMPLE RESULTS DUPLICATE

Lab Name: Air Toxics Ltd.

Lab File ID: 11020403.d & 11020402.d

Lab Sample ID: &

Dilution: 1.00 & 1.00

Client Sample ID: LCS & LCSD

Date Analyzed: 2/4/16 & 2/4/16

CAS Number	Compound	Original Amount	Original Flags	Duplicate Amount	Duplicate Flags	RPD	Result Less Than 5X RL
71-55-6	1,1,1-Trichloroethane	105		99		5.9	
79-34-5	1,1,2,2-Tetrachloroethane	111		108		2.7	
79-00-5	1,1,2-Trichloroethane	99		95		4.1	
75-34-3	1,1-Dichloroethane	105		101		3.9	
75-35-4	1,1-Dichloroethene	99		101		2.0	
120-82-1	1,2,4-Trichlorobenzene	97		96		1.0	
95-63-6	1,2,4-Trimethylbenzene	99		99		0	Y
95-50-1	1,2-Dichlorobenzene	100		98		2.0	
107-06-2	1,2-Dichloroethane	101		96		5.1	
78-87-5	1,2-Dichloropropane	92		90		2.2	
108-67-8	1,3,5-Trimethylbenzene	101		98		3.0	
106-99-0	1,3-Butadiene	106		105		0.95	
541-73-1	1,3-Dichlorobenzene	100		99		1.0	
106-46-7	1,4-Dichlorobenzene	102		101		0.98	
123-91-1	1,4-Dioxane	90		96		6.4	
540-84-1	2,2,4-Trimethylpentane	96		95		1.0	
591-78-6	2-Hexanone	109		108		0.92	
622-96-8	4-Ethyltoluene	102		99		3.0	
108-10-1	4-Methyl-2-pentanone	103		98		5.0	
71-43-2	Benzene	98		100		2.0	
56-23-5	Carbon Tetrachloride	111		106		4.6	
108-90-7	Chlorobenzene	97		97		0	
67-66-3	Chloroform	98		100		2.0	
156-59-2	cis-1,2-Dichloroethene	110		112		1.8	
98-82-8	Cumene	100		101		1.0	
110-82-7	Cyclohexane	99		96		3.1	
100-41-4	Ethyl Benzene	96		97		1.0	
75-69-4	Freon 11	104		104		0	
76-13-1	Freon 113	99		102		3.0	
76-14-2	Freon 114	104		106		1.9	
142-82-5	Heptane	93		94		1.1	
87-68-3	Hexachlorobutadiene	91		88		3.4	Y
110-54-3	Hexane	101		102		0.98	Y
78-78-4	Isopentane	95		100		5.1	
108-38-3	m,p-Xylene	94		93		1.1	
108-87-2	Methylcyclohexane	96		95		1.0	
75-09-2	Methylene Chloride	97		96		1.0	Y
91-20-3	Naphthalene	105		104		0.96	
95-47-6	o-Xylene	100		96		4.1	
103-65-1	Propylbenzene	100		100		0	
100-42-5	Styrene	101		100		1.0	
127-18-4	Tetrachloroethene	97		98		1.0	
108-88-3	Toluene	93		93		0	
156-60-5	trans-1,2-Dichloroethene	84		84		0	
79-01-6	Trichloroethene	84		83		1.2	

Note: The results appearing in the Amount columns are the raw, unrounded numbers acquired from the instrument.

SAMPLE RESULTS/SAMPLE RESULTS DUPLICATE

Lab Name: Air Toxics Ltd.

Lab File ID: 11020403.d & 11020402.d

Lab Sample ID: &

Dilution: 1.00 & 1.00

Client Sample ID: LCS & LCSD

Date Analyzed: 2/4/16 & 2/4/16

CAS Number	Compound	Original Amount	Original Flags	Duplicate Amount	Duplicate Flags	RPD	Result Less Than 5X RL
75-01-4	Vinyl Chloride	113		107		5.4	

Note: The results appearing in the Amount columns are the raw, unrounded numbers acquired from the instrument.

Eurofins Air Toxics Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 14-JAN-2016 13:56
End Cal Date : 14-JAN-2016 18:27
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msd18.i/14Jan2016.b/186z0114vi.m
Cal Date : 18-Jan-2016 15:01 lantonic
Curve Type : Average

Calibration File Names:
Level 1: /chem/msd18.i/14Jan2016.b/18011408.d
Level 2: /chem/msd18.i/14Jan2016.b/18011409.d
Level 3: /chem/msd18.i/14Jan2016.b/18011410.d
Level 4: /chem/msd18.i/14Jan2016.b/18011411.d
Level 5: /chem/msd18.i/14Jan2016.b/18011412.d
Level 6: /chem/msd18.i/14Jan2016.b/18011413.d
Level 7: /chem/msd18.i/14Jan2016.b/18011414.d
Level 8: /chem/msd18.i/14Jan2016.b/18011415.d

Compound	0.50000 Level 1 / 100.000 Level 7	1.000 Level 2 / 250.000 Level 8	5.000 Level 3	10.000 Level 4	25.000 Level 5	50.000 Level 6	___ RRF	% RSD
1 Propylene	+++++ / +++++	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	+++++
2 Dichlorodifluoromethane/Fr12	+++++ / +++++	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	+++++
3 Chloromethane	+++++ / +++++	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	+++++
4 Freon 114	0.64432 / 0.54214	0.59908 / 0.52870	0.57498	0.58240	0.58168	0.56574	0.57738	6.123
5 Butane	+++++ / +++++	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	+++++
6 Vinyl Chloride	0.91405 / 0.76631	0.81169 / 0.75881	0.79092	0.83039	0.78793	0.78582	0.80574	6.128
7 1,3-Butadiene	0.83895 / 0.65326	0.73057 / 0.65004	0.70075	0.68636	0.68541	0.66929	0.70183	8.724

Eurofins Air Toxics Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 14-JAN-2016 13:56
End Cal Date : 14-JAN-2016 18:27
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msd18.i/14Jan2016.b/186z0114vi.m
Cal Date : 18-Jan-2016 15:01 lantonic
Curve Type : Average

Compound	0.50000 Level 1 100.000 Level 7	1.000 Level 2 250.000 Level 8	5.000 Level 3	10.000 Level 4	25.000 Level 5	50.000 Level 6	RRF	% RSD
8 Bromomethane	+++++ +++++	+++++ +++++	+++++	+++++	+++++	+++++	+++++	+++++
9 Chloroethane	+++++ 0.35008	0.44551 0.32935	0.39871	0.39618	0.38021	0.35165	0.37881	10.313
10 Isopentane	+++++ 0.57069	0.57589 0.48371	0.56214	0.57724	0.58674	0.52860	0.55500	6.585
11 Trichlorofluoromethane/Fr11	0.92187 0.81482	0.83274 0.79135	0.81057	0.84759	0.86306	0.84222	0.84053	4.762
12 Ethanol	+++++ +++++	+++++ +++++	+++++	+++++	+++++	+++++	+++++	+++++
13 Freon123a	+++++ +++++	+++++ +++++	+++++	+++++	+++++	+++++	+++++	+++++
14 1,1-Dichloroethene	0.33440 0.32263	0.31040 0.30225	0.29228	0.30296	0.30773	0.31442	0.31088	4.207
15 Freon 113	0.42470 0.40898	0.42116 0.39856	0.39546	0.41021	0.41189	0.40901	0.41000	2.419
16 Acetone	+++++ +++++	+++++ +++++	+++++	+++++	+++++	+++++	+++++	+++++
17 2-Propanol	+++++ 1.30054	+++++ 1.18514	2.16424	1.94745	1.46614	1.36817	1.57195	24.929

Eurofins Air Toxics Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 14-JAN-2016 13:56
End Cal Date : 14-JAN-2016 18:27
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msd18.i/14Jan2016.b/186z0114vi.m
Cal Date : 18-Jan-2016 15:01 lantonic
Curve Type : Average

Compound	0.50000 Level 1	1.000 Level 2	5.000 Level 3	10.000 Level 4	25.000 Level 5	50.000 Level 6	RRF	% RSD
	100.000 Level 7	250.000 Level 8						
18 Carbon Disulfide	2.79803	2.24529	1.94570	2.07698	2.00415	1.86067		
	1.79308	1.72477					2.05608	16.633
19 3-Chloropropene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
20 Acrolein	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
21 Methylene Chloride	+++++	+++++	0.99817	0.83090	0.69732	0.63898		
	0.59972	0.56511					0.72170	22.785
22 tert-Butyl-Alcohol	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
23 MTBE	1.55280	1.52742	1.40571	1.43659	1.46106	1.27208		
	0.94231	1.25200					1.35624	14.671
24 trans-1,2-Dichloroethene	0.32353	0.28954	0.28917	0.29858	0.29850	0.29594		
	0.28805	0.28795					0.29641	4.004
25 Hexane	+++++	0.91136	0.79181	0.84157	0.82015	0.80591		
	0.78452	0.76100					0.81662	6.013
26 1,1-Dichloroethane	0.86985	0.81808	0.80057	0.83780	0.83084	0.81411		
	0.77852	0.76285					0.81408	4.163
27 Vinyl Acetate	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++

Eurofins Air Toxics Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 14-JAN-2016 13:56
End Cal Date : 14-JAN-2016 18:27
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msd18.i/14Jan2016.b/186z0114vi.m
Cal Date : 18-Jan-2016 15:01 lantonic
Curve Type : Average

Compound	0.50000 Level 1 100.000 Level 7	1.000 Level 2 250.000 Level 8	5.000 Level 3	10.000 Level 4	25.000 Level 5	50.000 Level 6	RRF	% RSD
28 2-Butanone	+++++ 0.28396	+++++ 0.27403	+++++	0.50773	0.35139	0.30564	0.34455	27.850
29 cis-1,2-Dichloroethene	0.29572 0.28525	0.28853 0.28131	0.26596	0.28803	0.28744	0.28774	0.28500	3.042
30 Isopropyl ether	+++++ +++++	+++++ +++++	+++++	+++++	+++++	+++++	+++++	+++++
31 Chloroprene	+++++ +++++	+++++ +++++	+++++	+++++	+++++	+++++	+++++	+++++
33 1-Propanol	+++++ +++++	+++++ +++++	+++++	+++++	+++++	+++++	+++++	+++++
34 Tetrahydrofuran	+++++ +++++	+++++ +++++	+++++	+++++	+++++	+++++	+++++	+++++
35 Chloroform	0.70106 0.66504	0.68499 0.65863	0.67194	0.69191	0.69002	0.68213	0.68072	2.119
36 1,1,1-Trichloroethane	0.15373 0.14610	0.14883 0.15472	0.14168	0.15095	0.15451	0.14915	0.14996	3.023
37 Cyclohexane	0.19029 0.15487	0.16190 0.15315	0.14728	0.15229	0.15458	0.15254	0.15836	8.537
38 Carbon Tetrachloride	0.12883 0.12958	0.12306 0.13223	0.11856	0.12509	0.12940	0.12855	0.12691	3.471

Eurofins Air Toxics Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 14-JAN-2016 13:56
End Cal Date : 14-JAN-2016 18:27
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msd18.i/14Jan2016.b/186z0114vi.m
Cal Date : 18-Jan-2016 15:01 lantonic
Curve Type : Average

Compound	0.50000 Level 1 / 100.000 Level 7	1.000 Level 2 / 250.000 Level 8	5.000 Level 3	10.000 Level 4	25.000 Level 5	50.000 Level 6	RRF	% RSD	
40 2,2-Dichloropropane	+++++ / +++++	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	+++++	
41 Benzene	+++++ / 0.39028	0.78253 / 0.38204	0.48310	0.42545	0.39879	0.39236	0.46493	31.025	<-
42 t-Butylethyl Ether	+++++ / +++++	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	+++++	
43 1,2-Dichloroethane	0.12455 / 0.12610	0.12113 / 0.12489	0.11360	0.12384	0.12462	0.12427	0.12288	3.260	
44 Ethyl Acetate	+++++ / +++++	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	+++++	
45 2,2,4-Trimethylpentane	0.42748 / 0.42144	0.40370 / 0.41068	0.38917	0.74572	0.41375	0.41031	0.45278	26.264	
46 Heptane	+++++ / 0.10573	0.11096 / 0.10760	0.09493	0.10287	0.10293	0.10280	0.10397	4.818	
48 Trichloroethene	0.10295 / 0.10154	0.09252 / 0.10583	0.09065	0.10325	0.10583	0.09728	0.09998	5.859	
49 2-Chloroethyl vinyl ether	+++++ / +++++	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	+++++	
50 1,1-Dichloropropene	+++++ / +++++	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	+++++	

Eurofins Air Toxics Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 14-JAN-2016 13:56
End Cal Date : 14-JAN-2016 18:27
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msd18.i/14Jan2016.b/186z0114vi.m
Cal Date : 18-Jan-2016 15:01 lantonic
Curve Type : Average

Compound	0.50000 Level 1 100.000 Level 7	1.000 Level 2 250.000 Level 8	5.000 Level 3	10.000 Level 4	25.000 Level 5	50.000 Level 6	___ RRF	% RSD
51 Methyl Cyclohexane	0.17298 0.18038	0.16876 0.18451	0.16376	0.17095	0.17151	0.17500	0.17348	3.766
52 1,2-Dichloropropane	0.09229 0.09365	0.09383 0.09951	0.08631	0.09332	0.09351	0.09253	0.09312	3.832
53 1,4-Dioxane	0.07479 0.07679	0.07841 0.07695	0.07250	0.07495	0.07393	0.07493	0.07541	2.495
54 Bromodichloromethane	+++++ +++++	+++++ +++++	+++++	+++++	+++++	+++++	+++++	+++++
55 cis-1,3-Dichloropropene	+++++ +++++	+++++ +++++	+++++	+++++	+++++	+++++	+++++	+++++
56 4-Methyl-2-pentanone	0.07627 0.08150	0.07388 0.08617	0.07236	0.07925	0.07945	0.08081	0.07871	5.647
58 Toluene	+++++ 0.45512	0.44509 0.46612	0.42636	0.45387	0.42752	0.42677	0.44298	3.668
59 trans-1,3-Dichloropropene	+++++ +++++	+++++ +++++	+++++	+++++	+++++	+++++	+++++	+++++
60 tert-amyl-Methyl Ether	+++++ +++++	+++++ +++++	+++++	+++++	+++++	+++++	+++++	+++++
61 1,1,2-Trichloroethane	0.09850 0.08783	0.11755 0.09083	0.08294	0.08867	0.08705	0.08629	0.09246	12.004

Eurofins Air Toxics Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 14-JAN-2016 13:56
End Cal Date : 14-JAN-2016 18:27
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msd18.i/14Jan2016.b/186z0114vi.m
Cal Date : 18-Jan-2016 15:01 lantonic
Curve Type : Average

Compound	0.50000 Level 1 / 100.000 Level 7	1.000 Level 2 / 250.000 Level 8	5.000 Level 3	10.000 Level 4	25.000 Level 5	50.000 Level 6	RRF	% RSD
62 Tetrachloroethene	0.12066	0.11649	0.11302	0.12013	0.11946	0.11955		
	0.12902	0.13453					0.12161	5.680
63 2-Hexanone	0.11145	0.11790	0.11513	0.11683	0.12067	0.11871		
	0.12371	0.12974					0.11927	4.677
64 Vinyl Bromide	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
65 Dibromochloromethane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
66 1,2-Dibromoethane	0.09617	0.10302	0.09871	0.09742	0.10180	0.10372		
	0.10479	0.11267					0.10229	5.105
68 Chlorobenzene	0.27565	0.26737	0.26127	0.27307	0.27625	0.27718		
	0.28780	0.29576					0.27679	3.925
69 Ethyl Benzene	0.14658	0.14826	0.14099	0.14956	0.15192	0.15131		
	0.16279	0.17046					0.15273	6.181
70 Dodecane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
71 m,p-Xylene	+++++	0.18251	0.17430	0.18545	0.18743	0.18706		
	0.19736	0.21124					0.18934	6.253
72 Pentane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++

Eurofins Air Toxics Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 14-JAN-2016 13:56
End Cal Date : 14-JAN-2016 18:27
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msd18.i/14Jan2016.b/186z0114vi.m
Cal Date : 18-Jan-2016 15:01 lantonic
Curve Type : Average

Compound	0.50000 Level 1 / 100.000 Level 7	1.000 Level 2 / 250.000 Level 8	5.000 Level 3	10.000 Level 4	25.000 Level 5	50.000 Level 6	RRF	% RSD
73 Acrylonitrile	+++++ / +++++	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	+++++
74 o-Xylene	0.36274 / 0.38387	0.35309 / 0.41153	0.38424	0.67794	0.38299	0.37687	0.41666	25.671
75 Styrene	0.63753 / 0.67345	0.60041 / 0.72524	0.56345	1.11517	0.90007	0.64814	0.73293	25.275
76 Bromoform	+++++ / +++++	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	+++++
77 Cumene	0.99831 / 1.04325	0.99059 / 1.05779	0.99346	1.08960	0.99345	1.72111	1.11095	22.438
78 1,3-Dichloropropane	+++++ / +++++	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	+++++
80 1,1,2,2-Tetrachloroethane	0.33762 / 0.37956	0.35716 / 0.40663	0.36654	0.36318	0.32716	0.37996	0.36472	6.887
81 Propylbenzene	1.12101 / 1.21579	1.21834 / 1.15467	1.19663	1.25849	1.19626	1.21154	1.19659	3.513
82 4-Ethyltoluene	0.11659 / 0.32121	0.29274 / 0.34788	0.30138	0.31480	0.30538	0.31336	0.28917	24.774
83 1,3,5-Trimethylbenzene	0.21596 / 0.44253	0.40614 / 0.47780	0.41076	0.43385	0.42231	0.42718	0.40457	19.619

Eurofins Air Toxics Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 14-JAN-2016 13:56
End Cal Date : 14-JAN-2016 18:27
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msd18.i/14Jan2016.b/186z0114vi.m
Cal Date : 18-Jan-2016 15:01 lantonic
Curve Type : Average

Compound	0.50000 Level 1 / 100.000 Level 7	1.000 Level 2 / 250.000 Level 8	5.000 Level 3	10.000 Level 4	25.000 Level 5	50.000 Level 6	RRF	% RSD
84 1,2,4-Trimethylbenzene	0.37433	0.35621	0.37688	0.39442	0.38998	0.39988		
	0.40949	0.43887					0.39251	6.384
85 1,1,1,2-Tetrachloroethane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
86 1,3-Dichlorobenzene	0.45331	0.44486	0.47869	0.50223	0.48143	0.49613		
	0.51171	0.53854					0.48836	6.277
87 1,4-Dichlorobenzene	0.45897	0.45274	0.47383	0.50516	0.48707	0.49980		
	0.51588	0.54024					0.49171	6.012
88 alpha-Chlorotoluene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
89 Phenol	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
90 1,2-Dichlorobenzene	0.44524	0.42659	0.46039	0.48837	0.46047	0.47822		
	0.48914	0.51550					0.47049	5.969
91 Bromobenzene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
92 1,2,3-Trichloropropane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
93 2-Chlorotoluene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++

Eurofins Air Toxics Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 14-JAN-2016 13:56
End Cal Date : 14-JAN-2016 18:27
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msd18.i/14Jan2016.b/186z0114vi.m
Cal Date : 18-Jan-2016 15:01 lantonic
Curve Type : Average

Compound	0.50000 Level 1 / 100.000 Level 7	1.000 Level 2 / 250.000 Level 8	5.000 Level 3	10.000 Level 4	25.000 Level 5	50.000 Level 6	RRF	% RSD
94 4-Chlorotoluene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
95 1,2,4-Trichlorobenzene	+++++	0.26759	0.28727	0.36632	0.33845	0.33336		
	0.34991	0.39411					0.33386	13.128
96 Hexachlorobutadiene	+++++	0.16893	0.18476	0.22687	0.19537	0.19562		
	0.21542	0.27799					0.20928	17.092
98 Naphthalene	1.69276	1.42025	1.43331	1.39109	1.38200	1.45661		
	1.40213	+++++					1.45402	7.450
99 tert-Butylbenzene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
100 sec-Butylbenzene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
101 p-Cymene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
102 Butylbenzene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
103 2-Methylnaphthalene	0.87447	0.87851	0.91864	0.89839	0.89810	0.95865		
	0.94234	+++++					0.90987	3.481
104 1-Methylnaphthalene	0.76356	0.81857	0.85208	0.82492	0.82203	0.88879		
	0.86764	+++++					0.83394	4.868

Eurofins Air Toxics Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 14-JAN-2016 13:56
End Cal Date : 14-JAN-2016 18:27
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msd18.i/14Jan2016.b/186z0114vi.m
Cal Date : 18-Jan-2016 15:01 lantonic
Curve Type : Average

Compound	0.50000 Level 1 100.000 Level 7	1.000 Level 2 250.000 Level 8	5.000 Level 3	10.000 Level 4	25.000 Level 5	50.000 Level 6	RRF	% RSD	
105 1,2-Dibromo-3-Chloropropane	+++++ +++++	+++++ +++++	+++++	+++++	+++++	+++++	+++++	+++++	
106 1,3,5-Trichlorobenzene	+++++ +++++	+++++ +++++	+++++	+++++	+++++	+++++	+++++	+++++	
107 Acenaphthylene	+++++ 1.54839	1.76682 +++++	1.53132	1.55834	1.56597	1.50604	1.57948	5.967	
108 Octane	+++++ +++++	+++++ +++++	+++++	+++++	+++++	+++++	+++++	+++++	
109 Acenaphthene	+++++ 0.88790	0.52002 +++++	0.88191	0.78938	0.73402	0.92709	0.79005	19.016	
110 1,2,3-Trichlorobenzene	+++++ +++++	+++++ +++++	+++++	+++++	+++++	+++++	+++++	+++++	
111 Fluorene	+++++ 0.99254	0.37570 +++++	1.01209	0.80586	0.75585	1.08752	0.83826	31.014	<-
112 Phenanthrene	+++++ 1.48448	0.86701 +++++	1.52990	1.37208	1.38093	1.57925	1.36894	18.924	
113 Anthracene	+++++ 1.42621	0.60528 +++++	1.37735	1.25118	1.24156	1.58196	1.24726	27.145	
114 Decane	+++++ +++++	+++++ +++++	+++++	+++++	+++++	+++++	+++++	+++++	

Eurofins Air Toxics Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 14-JAN-2016 13:56
End Cal Date : 14-JAN-2016 18:27
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msd18.i/14Jan2016.b/186z0114vi.m
Cal Date : 18-Jan-2016 15:01 lantonic
Curve Type : Average

Compound	0.50000 Level 1 100.000 Level 7	1.000 Level 2 250.000 Level 8	5.000 Level 3	10.000 Level 4	25.000 Level 5	50.000 Level 6	___ RRF	% RSD
115 1,2,3-Trimethylbenzene	+++++ +++++	+++++ +++++	+++++	+++++	+++++	+++++	+++++	+++++
116 Undecane	+++++ +++++	+++++ +++++	+++++	+++++	+++++	+++++	+++++	+++++
117 Fluoranthene	+++++ 0.76007	+++++ +++++	1.11979	1.17223	1.01357	1.22684	1.05850	17.427
118 Pyrene	+++++ 0.78782	+++++ +++++	1.12988	1.20891	1.05501	1.28235	1.09279	17.436
$ 39 1,2-Dichloroethane-d4	+++++ 0.09984	0.11202 +++++	0.10963	0.10185	0.11906	0.10797	0.10840	6.452
$ 57 Toluene-d8	+++++ 0.35660	0.33920 +++++	0.37144	0.36891	0.41936	0.37166	0.37120	7.190
$ 97 Naphthalene-d8	+++++ 1.27988	1.47122 +++++	1.41997	1.34096	1.53723	1.40252	1.40863	6.489

Calibration History

Method : /chem/msd18.i/14Jan2016.b/186z0114vi.m
Start Cal Date: 14-JAN-2016 13:56
End Cal Date : 14-JAN-2016 18:27

Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 1 , Cal Amount: 0.50000		
14-JAN-2016 13:56	VOC+naphs_noSS	/chem/msd18.i/14Jan2016.b/18011408.d
Cal Level: 2 , Cal Amount: 1.00000		
14-JAN-2016 14:35	VOC+PAH_ICAL	/chem/msd18.i/14Jan2016.b/18011409.d
Cal Level: 3 , Cal Amount: 5.00000		
14-JAN-2016 15:13	VOC+PAH_ICAL	/chem/msd18.i/14Jan2016.b/18011410.d
Cal Level: 4 , Cal Amount: 10.00000		
14-JAN-2016 15:52	VOC+PAH_ICAL	/chem/msd18.i/14Jan2016.b/18011411.d
Cal Level: 5 , Cal Amount: 25.00000		
14-JAN-2016 16:31	VOC+PAH_ICAL	/chem/msd18.i/14Jan2016.b/18011412.d
Cal Level: 6 , Cal Amount: 50.00000		
14-JAN-2016 17:10	VOC+PAH_ICAL	/chem/msd18.i/14Jan2016.b/18011413.d
Cal Level: 7 , Cal Amount: 100.00000		
14-JAN-2016 17:49	VOC+PAH_ICAL	/chem/msd18.i/14Jan2016.b/18011414.d
Cal Level: 8 , Cal Amount: 250.00000		

```
|14-JAN-2016 18:27 |VOC_ICAL         |/chem/msd18.i/14Jan2016.b/18011415.d    |
+------------------+-----------------+----------------------------------------+


Continuing Calibration
Ccal Level Mode: GLOBAL LEVEL 5
+------------------+-----------------+----------------------------------------+
| Ccal Level: 5 , Ccal Amount: 25.000                                          |
+==============================================================================+
|14-JAN-2016 16:31 |VOC+PAH_ICAL     |/chem/msd18.i/14Jan2016.b/18011412.d    |
+------------------+-----------------+----------------------------------------+
| Ccal Level: 5 , Ccal Amount: 25.000                                          |
+==============================================================================+
|14-JAN-2016 16:31 |VOC+PAH_ICAL     |/chem/msd18.i/14Jan2016.b/18011412a.d   |
+------------------+-----------------+----------------------------------------+
```

Eurofins Air Toxics Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 14-JAN-2016 13:56
End Cal Date : 14-JAN-2016 18:27
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msd18.i/14Jan2016.b/186z0114vi.m
Cal Date : 15-Jan-2016 10:06 dpage
Curve Type : Average

DB 1/15/16

LA 1/18/16

Calibration File Names:
Level 1: /chem/msd18.i/14Jan2016.b/18011408.d
Level 2: /chem/msd18.i/14Jan2016.b/18011409.d
Level 3: /chem/msd18.i/14Jan2016.b/18011410.d
Level 4: /chem/msd18.i/14Jan2016.b/18011411.d
Level 5: /chem/msd18.i/14Jan2016.b/18011412.d
Level 6: /chem/msd18.i/14Jan2016.b/18011413.d
Level 7: /chem/msd18.i/14Jan2016.b/18011414.d
Level 8: /chem/msd18.i/14Jan2016.b/18011415.d

Compound	0.50000 Level 1	1.000 Level 2	5.000 Level 3	10.000 Level 4	25.000 Level 5	50.000 Level 6	RRF	% RSD
	100.000 Level 7	250.000 Level 8						
1 Propylene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
2 Dichlorodifluoromethane/Fr12	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
3 Chloromethane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
4 Freon 114	0.64432	0.59908	0.57498	0.58240	0.58168	0.56574		
	0.54214	0.52870					0.57738	6.123
5 Butane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
6 Vinyl Chloride	0.91405	0.81169	0.79092	0.83039	0.78793	0.78582		
	0.76631	0.75881					0.80574	6.128
7 1,3-Butadiene	0.83895	0.73057	0.70075	0.68636	0.68541	0.66929		
	0.65326	0.65004					0.70183	8.724

Initial Calibration Narrative

An 8 point calibration curve was performed on instrument MSD-18 using VI sorbent media on January 14, 2016 for VOC and PAH compounds.

- The VOC compounds were spiked in a vapor phase onto the VI tubes using the ATIS.
- The PAH compounds were spiked directly onto the tube.
- ICAL name: 186z0114vi.m
- 2 compounds were out. The %RSD for Benzene and Fluorene is 31.
- Units: in ng
- Markes Unity Method: VI.mth
- Chemstation Method: TO17+PAH.m
- ICV file: 18011420.d – 0 out.
- **Due to unacceptable linearity, the reporting limit for Fluoranthene and Pyrene had was raised to 10ng.**
- MDL:
  - VI VOC MDL 3 Dates: 11/05/15
  - 11/06/15
  - 11/07/15
  - VI Naphs Only MDL: 7/21/15
  - VI PAH (no Naphs) MDL: 9/3/15
  - Fluoranthene and Pyrene RL must be raised from 5.0ng to 10ng due to the MDL study.

Desorption Efficiency (%DE) Verification - EPA Method TO-17

Target Method:	186z0114vi.m
Instrument Method:	msd-18
Initial Run File:	18011414
Repeat Run File:	18011418

Compound	Enter mass (ng) Initial Run (m_i)	Repeat Run (m_r)	%DE
Naphthalene	248.0	0.7	99.7%
2-Methylnaphthalene	252.0	0.7	99.7%
Acenaphthylene	251.0	0.7	99.7%
Acenaphthene	261.0	0.5	99.8%
Fluorene	262.0	1.1	99.6%
Phenanthrene	251.0	11.5	95.6%
Anthracene	252.0	24.8	**91.0%**
Fluoranthene*	170.0	48.6	**77.8%**
Pyrene*	168.0	47.7	**77.9%**

Acceptance criterion $\geq$ 95%
*Acceptance criterion $\geq$ 90%

$$\%DE = [(m_i)/(m_i + m_r)] \times 100\%$$

Where m_i = mass measured in initial run (ng)
m_r = mass measured in repeat run (ng)

Eurofin Air Toxics Run Log for MSD-18 Method TO17
BFB verification of 176/174 Ratio: 227,456/233,024 x100 = 97.61%
Standard ID 2299-835 Exp. date 3/10/16
Bromochloromethane 260,347 File ID: 18011420
1,4-Difluorobenzene 915,705
Chlorobenzene-d5 838,049
Bromofluorobenzene 602,381
Verification CCV IS vs ICAL mid-point (-40%) Initial: DB
Calculation Check for Compound Vinyl Chloride:

ngs of compound = (Area of compound / Area of IS) * (Concentration of IS / RRF) = (422,196 / 250,469) * (26 / 0.80574)

Method: 18bz0114vi.m

= 54.392 (54.39)

Data Directory: D:\MassHunter\GCMS\1\data\14jan16.b\

Use	SampleName	Tube pos.	Injection Time	Init.
1) X	18011401.D Comments ;System Blank	1	14 Jan 2016 08:09 am	DB
2) X	18011402.D Comments 173 ↑ 5.0ml #2299-835 ; FB Tune Chec e. 3/10/16	1	14 Jan 2016 08:54 am	
3) X	18011403.D Comments 1.0ml #2516-212, 1.0ul 2744-31 e. 7/5/16	2	14 Jan 2016 09:39 am	
4) X	18011404.D Comments 2.0ml #2516-212, 1.0ul 2749-31 2.0ul 2744-22-1, e. 6/15/	3	14 Jan 2016 10:24 am	
5) X	18011405.D Comments 3.0ml #2516-212, 1.0ul 2749-31 2.0ul 2744-22-1, e. 6/15/	3	14 Jan 2016 11:08 am	
6) X	18011406.D Comments Filament #1 ;System Blank	1	14 Jan 2016 12:18 pm	
7) ✓	18011407.D Comments 5.0ml #2299-835 ;BFB Tune Chec e. 3/10/16	1	14 Jan 2016 12:57 pm	
8) ✓	18011408.D Comments 1.0ml #2516-212, 1.0ul 2744-31 e. 7/5/16	2	14 Jan 2016 01:56 pm	
9) ✓	18011409.D Comments 2.0ml #2516-212, 1.0ul 2749-31 1.0ul 2744-22-1, e. 6/15/	3	14 Jan 2016 02:35 pm	
10) ✓	18011410.D Comments 3.0ml #2516-212, 1.0ul 2744-31 1.0ul 2744-22-5	4	14 Jan 2016 03:13 pm	
11) ✓	18011411.D Comments 6.0ml #2516-212, 1.0ul 2744-31 1.0ul 2744-22-10	5	14 Jan 2016 03:52 pm	
12) ✓	18011412.D Comments 20ml #2516-212, 1.0ul 2744-31- 1.0ul 2744-22-25	6	14 Jan 2016 04:31 pm	
13) ✓	18011413.D Comments 50ml #2516-212, 1.0ul 2744-31- 1.0ul 2744-22-50	7	14 Jan 2016 05:10 pm	
14) ✓	18011414.D Comments 100ml #2516-212, 1.0ul 2744-31 1.0ul 2744-22-100	8	14 Jan 2016 05:49 pm	
15) ✓	18011415.D Comments 200ml #2516-212;ICAL; Level 8 1000ppbv, e. 3/31/16	9	14 Jan 2016 06:27 pm	
16) X	18011416.D Comments ;System Blank	2	14 Jan 2016 07:06 pm	✓
17) ✓	18011417.D Comments			

Signed _____ Date _____ Reviewed _____

;System Blank 2 14 Jan 2016 07:44 pm DB

18) ✓ 18011418.D Comments
100ml #2516-212, 1.0ul 2744-31 After Level 7 8 14 Jan 2016 08:23 pm

19) ✓ 18011419.D Comments No hits for voc's at ½ RL
200ml #2516-212; DE After Level 8 9 14 Jan 2016 09:02 pm

20) ✓ 18011420.D Comments
20ml #2516-203, 1.0ul 2595-246 e. 2/17/16, 1/21/16 10 14 Jan 2016 09:40 pm

Signed [illegible] Date 1/15/16 Reviewed

of ppbv to ng based on amount spiked onto TO-17 tube

Mass (ng) = Amount (ppbv) * (MW/24.45)* Vol spiked (mL) * (1L/1000 mL)

Enter working standard #1 conc		200							
Enter working standard #2 conc		1000							
Working Standard (Enter 1 or 2)		2	2	2	2	2	2	2	2
Volume spiked (mL) =>		1	2	3	6	20	50	100	200
Compound	**MW**	**Level 1**	**Level 2**	**Level 3**	**Level 4**	**Level 5**	**Level 6**	**Level 7**	**Level 8**
Propylene	42.08	1.72	3.44	5.16	10.3	34.4	86.1	172	344
Freon 12	120.92	4.95	9.89	14.84	29.7	98.9	247.3	495	989
Freon 114	170.93	6.99	13.98	20.97	41.9	139.8	349.6	699	1398
Chloromethane	50.49	2.07	4.13	6.20	12.4	41.3	103.3	207	413
Butane	58.12	2.38	4.75	7.13	14.3	47.5	118.9	238	475
Vinyl Chloride	62.5	2.56	5.11	7.67	15.3	51.1	127.8	256	511
1,3-Butadiene	54.09	2.21	4.42	6.64	13.3	44.2	110.6	221	442
Bromomethane	94.95	3.88	7.77	11.65	23.3	77.7	194.2	388	777
Chloroethane	64.52	2.64	5.28	7.92	15.8	52.8	131.9	264	528
Isopentane	72.15	2.95	5.90	8.85	17.7	59.0	147.5	295	590
Freon 11	137.37	5.62	11.24	16.86	33.7	112.4	280.9	562	1124
Ethanol	46.07	1.88	3.77	5.65	11.3	37.7	94.2	188	377
1,1-Dichloroethene	96.95	3.97	7.93	11.90	23.8	79.3	198.3	397	793
Freon 113	187.39	7.66	15.33	22.99	46.0	153.3	383.2	766	1533
Carbon disulfide	76.14	3.11	6.23	9.34	18.7	62.3	155.7	311	623
Acetone	58.08	2.38	4.75	7.13	14.3	47.5	118.8	238	475
3-Chloropropene	76.53	3.13	6.26	9.39	18.8	62.6	156.5	313	626
2-Propanol	60.09	2.46	4.92	7.37	14.7	49.2	122.9	246	492
Methylene Chloride	84.94	3.47	6.95	10.42	20.8	69.5	173.7	347	695
trans-1,2-Dichloroethene	96.94	3.96	7.93	11.89	23.8	79.3	198.2	396	793
MTBE	88.15	3.61	7.21	10.82	21.6	72.1	180.3	361	721
tert-Butyl alcohol	74.12	3.03	6.06	9.09	18.2	60.6	151.6	303	606
Hexane	86.17	3.52	7.05	10.57	21.1	70.5	176.2	352	705
1,1-dichloroethane	98.97	4.05	8.10	12.14	24.3	81.0	202.4	405	810
Isopropyl ether	102.18	4.18	8.36	12.54	25.1	83.6	209.0	418	836
Vinyl acetate	86.09	3.52	7.04	10.56	21.1	70.4	176.1	352	704
t-butylethyl ether	102.17	4.18	8.36	12.54	25.1	83.6	208.9	418	836
cis-1,2-Dichloroethene	96.94	3.96	7.93	11.89	23.8	79.3	198.2	396	793
2-butanone	72.1	2.95	5.90	8.85	17.7	59.0	147.4	295	590
Tetrahydrofuran	72.1	2.95	5.90	8.85	17.7	59.0	147.4	295	590

Chloroform	119.39	4.88	9.77	14.65	29.3	97.7	244.2	488	977
Cyclohexane	84.16	3.44	6.88	10.33	20.7	68.8	172.1	344	688
1,1,1-Trichloroethane	133.42	5.46	10.91	16.37	32.7	109.1	272.8	546	1091
Carbon tetrachloride	153.84	6.29	12.58	18.88	37.8	125.8	314.6	629	1258
2,2,4-Trimethylpentane	114.23	4.67	9.34	14.02	28.0	93.4	233.6	467	934
Benzene	78.11	3.19	6.39	9.58	19.2	63.9	159.7	319	639
tert-amyl-methyl ether	102.18	4.18	8.36	12.54	25.1	83.6	209.0	418	836
1,2-Dichloroethane	98.96	4.05	8.09	12.14	24.3	80.9	202.4	405	809
Heptane	100.2	4.10	8.20	12.29	24.6	82.0	204.9	410	820
Trichloroethene	131.4	5.37	10.75	16.12	32.2	107.5	268.7	537	1075
Methylcyclohexane	98.19	4.02	8.03	12.05	24.1	80.3	200.8	402	803
1,2-Dichloropropane	112.99	4.62	9.24	13.86	27.7	92.4	231.1	462	924
1,4-Dioxane	88.11	3.60	7.21	10.81	21.6	72.1	180.2	360	721
Bromodichloromethane	163.83	6.70	13.40	20.10	40.2	134.0	335.0	670	1340
cis-1,3-Dichloropropene	110.97	4.54	9.08	13.62	27.2	90.8	226.9	454	908
4-Methyl-2-pentanone	100.16	4.10	8.19	12.29	24.6	81.9	204.8	410	819
Toluene	92.13	3.77	7.54	11.30	22.6	75.4	188.4	377	754
trans-1,3-Dichloropropene	110.97	4.54	9.08	13.62	27.2	90.8	226.9	454	908
1,1,2-Trichloroethane	133.42	5.46	10.91	16.37	32.7	109.1	272.8	546	1091
Tetrachloroethene	165.85	6.78	13.57	20.35	40.7	135.7	339.2	678	1357
2-Hexanone	100.16	4.10	8.19	12.29	24.6	81.9	204.8	410	819
Dibromochloromethane	208.29	8.52	17.04	25.56	51.1	170.4	426.0	852	1704
1,2-Dibromoethane	187.861	7.68	15.37	23.05	46.1	153.7	384.2	768	1537
Chlorobenzene	112.56	4.60	9.21	13.81	27.6	92.1	230.2	460	921
ethyl benzene	106.16	4.34	8.68	13.03	26.1	86.8	217.1	434	868
m,p-Xylene	106.17	4.34	8.68	13.03	26.1	86.8	217.1	434	868
o-Xylene	106.17	4.34	8.68	13.03	26.1	86.8	217.1	434	868
Styrene	104.14	4.26	8.52	12.78	25.6	85.2	213.0	426	852
Bromoform	252.77	10.34	20.68	31.01	62.0	206.8	516.9	1034	2068
cumene	120.19	4.92	9.83	14.75	29.5	98.3	245.8	492	983
1,1,2,2-Tetrachloroethane	167.86	6.87	13.73	20.60	41.2	137.3	343.3	687	1373
Propylbenzene	120.2	4.92	9.83	14.75	29.5	98.3	245.8	492	983
4-Ethyltoluene	120.2	4.92	9.83	14.75	29.5	98.3	245.8	492	983
1,3,5-Trimethylbenzene	120.2	4.92	9.83	14.75	29.5	98.3	245.8	492	983
1,2,4-Trimethylbenzene	120.2	4.92	9.83	14.75	29.5	98.3	245.8	492	983
1,3-Dichlorobenzene	147.01	6.01	12.03	18.04	36.1	120.3	300.6	601	1203
1,4-Dichlorobenzene	147.01	6.01	12.03	18.04	36.1	120.3	300.6	601	1203
alpha-Chlorotoluene	126.58	5.18	10.35	15.53	31.1	103.5	258.9	518	1035
1,2-Dichlorobenzene	147.01	6.01	12.03	18.04	36.1	120.3	300.6	601	1203
1,2,4-Trichlorobenzene	181.46	7.42	14.84	22.27	44.5	148.4	371.1	742	1484

Hexachlorobutadiene	260.76	10.67	21.33	32.00	64.0	213.3	533.3	1067	2133
Naphthalene	128	0.52	1.05	1.57	3.14	10.47			

Compound	**Level 1**	**Level 2**	**Level 3**	**Level 4**	**Level 5**	**Level 6**	**Level 7**	**Level 8**
Naphthalene	1.0	5.0	10	25	50	100	250	
2-Methylnaphthalene	1.0	5.0	10	25	50	100	250	
1-Methylnaphthalene	1.0	5.0	10	25	50	100	250	
Acenaphthylene	1.0	5.0	10	25	50	100	250	
Acenaphthene	1.0	5.0	10	25	50	100	250	
Fluorene	1.0	5.0	10	25	50	100	250	
Phenanthrene	1.0	5.0	10	25	50	100	250	
Anthracene	1.0	5.0	10	25	50	100	250	
Fluoranthene	1.0	5.0	10	25	50	100	250	
Pyrene	1.0	5.0	10	25	50	100	250	

Mass (ng) = Amount (ppbv) * (MW/24.45)* Vol spiked (mL) * (1L/1000 mL)

Enter IS/Surr standard concen 1000

5

Internal Standards/Surrogates	**MW**
Bromofluorobenzene	174.998
Bromochloromethane	129.39
1,4-Difluorobenzene	114.0928
Chlorobenzene-d5	117.56

Field Surrogates	**Mass (ng)**
1,2-Dichloroethane-d4	25
Toluene-d8	25
Naphthalene-d8	25

Eurofins Air Toxics Inc.

EPA Method TO-17 GC/MS

Data file : /chem/msd18.i/14Jan2016.b/18011420.d
Lab Smp Id: ICV
Inj Date : 14-JAN-2016 21:40
Operator : db Inst ID: msd18.i
Smp Info : 20ml #2516-203, 1.0ul 2595-246-50
Misc Info : e. 2/17/16, 1/21/16
Comment :
Method : /chem/msd18.i/14Jan2016.b/186z0114vi.m
Meth Date : 18-Jan-2016 15:01 lantonic Quant Type: ISTD
Cal Date : 14-JAN-2016 18:27 Cal File: 18011415.d
Als bottle: 10 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: VOC+PAH_ICAL.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (ng)	FINAL (NG)	TARGET RANGE	RATIO
* 32 Bromochloromethane					CAS #: 74-97-5		
6.045	6.052 (1.000)	130	250469	26.0000		80.00- 120.00	100.00
6.045	6.052 (1.000)	128	195280			47.81- 107.81	77.97
6.045	6.052 (1.000)	49	340233			99.93- 159.93	135.84
* 47 1,4-Difluorobenzene					CAS #: 540-36-3		
7.671	7.671 (1.000)	114	873893	23.0000		80.00- 120.00	100.00
7.671	7.671 (1.000)	88	133750			0.00- 45.51	15.31
* 67 Chlorobenzene-d5					CAS #: 3114-55-4		
11.617	11.610 (1.000)	117	815631	24.0000		80.00- 120.00	100.00
11.617	11.610 (1.000)	82	441555			23.87- 83.87	54.14
* 79 Bromofluorobenzene					CAS #: 460-00-4		
13.236	13.222 (1.000)	174	568258	36.0000		80.00- 120.00	100.00
13.229	13.222 (1.000)	95	618376			78.78- 138.78	108.82
13.236	13.222 (1.000)	176	551548			67.05- 127.05	97.06
$ 39 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
6.969	6.976 (0.908)	65	92872	22.5498	22.550	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (ng)	FINAL (NG)	TARGET RANGE	RATIO
$ 39 1,2-Dichloroethane-d4 (continued)							
6.969	6.976 (0.908)	67	52081			25.86- 85.86	56.08
$ 57 Toluene-d8					CAS #: 2037-26-5		
9.662	9.655 (0.832)	98	287246	22.7703	22.770	80.00- 120.00	100.00
9.662	9.655 (0.832)	70	30066			0.00- 40.57	10.47
9.662	9.655 (0.832)	100	184804			34.56- 94.56	64.34
$ 97 Naphthalene-d8					CAS #: 1146-65-2		
17.756	17.756 (1.341)	136	503917	22.6630	22.663	80.00- 120.00	100.00
17.756	17.756 (1.341)	108	45930			0.00- 39.05	9.11
4 Freon 114					CAS #: 76-14-2		
1.460	1.453 (0.242)	135	815135	146.551	146.55	80.00- 120.00	100.00
1.460	1.453 (0.242)	137	260616			1.93- 61.93	31.97
6 Vinyl Chloride					CAS #: 75-01-4		
1.625	1.618 (0.269)	62	422196	54.3925	54.392	80.00- 120.00	100.00
1.625	1.618 (0.269)	64	162237			15.41- 75.41	38.43
7 1,3-Butadiene					CAS #: 106-99-0		
1.646	1.646 (0.272)	54	297057	43.9367	43.937	80.00- 120.00	100.00
1.646	1.646 (0.272)	39	403487			104.89- 164.89	135.83
9 Chloroethane					CAS #: 75-00-3		
2.040	2.033 (0.338)	64	207051	56.7375	56.738	80.00- 120.00	100.00
2.040	2.033 (0.338)	66	65097			1.74- 61.74	31.44
2.033	2.033 (0.336)	49	57561			0.00- 57.57	27.80
10 Isopentane					CAS #: 78-78-4		
2.105	2.119 (0.348)	57	326332	61.0357	61.036	80.00- 120.00	100.00
2.105	2.119 (0.348)	43	475862			112.49- 172.49	145.82
11 Trichlorofluoromethane/Fr11					CAS #: 75-69-4		
2.291	2.298 (0.379)	101	976849	120.641	120.64	80.00- 120.00	100.00
2.291	2.298 (0.379)	103	635519			34.96- 94.96	65.06
15 Freon 113					CAS #: 76-13-1		
2.893	2.907 (0.479)	151	606858	153.648	153.65	80.00- 120.00	100.00
2.893	2.907 (0.479)	153	387080			34.01- 94.01	63.78
2.893	2.907 (0.479)	101	788879			98.52- 158.52	129.99
14 1,1-Dichloroethene					CAS #: 75-35-4		
2.871	2.871 (0.475)	98	238060	79.4895	79.490	80.00- 120.00	100.00
2.871	2.871 (0.475)	96	383545			130.53- 190.53	161.11
2.871	2.871 (0.475)	61	669573			241.31- 301.31	281.26

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (ng)	FINAL (NG)	TARGET RANGE	RATIO
18 Carbon Disulfide					CAS #: 75-15-0		
3.122	3.122 (0.516)	76	1049286	52.9752	52.975	80.00- 120.00	100.00
17 2-Propanol					CAS #: 67-63-0		
3.122	3.122 (0.516)	45	718587	47.4527	47.453	80.00- 120.00	100.00(a)
3.115	3.122 (0.515)	43	128652			0.00- 48.48	17.90
3.122	3.122 (0.516)	59	27631			0.00- 34.02	3.85
21 Methylene Chloride					CAS #: 75-09-2		
3.545	3.545 (0.586)	49	456319	65.6344	65.634	80.00- 120.00	100.00
3.545	3.545 (0.586)	84	345132			46.74- 106.74	75.63
3.545	3.545 (0.586)	51	143073			1.74- 61.74	31.35
24 trans-1,2-Dichloroethene					CAS #: 156-60-5		
3.953	3.967 (0.654)	98	200234	70.1241	70.124	80.00- 120.00	100.00
3.953	3.967 (0.654)	61	479854			203.10- 263.10	239.65
3.953	3.967 (0.654)	96	317821			127.09- 187.09	158.72
23 MTBE					CAS #: 1634-04-4		
3.946	3.946 (0.653)	73	1022310	78.2463	78.246	80.00- 120.00	100.00
3.946	3.946 (0.653)	57	239375			0.00- 53.10	23.42
3.939	3.946 (0.652)	41	212623			0.00- 50.25	20.80
25 Hexane					CAS #: 110-54-3		
4.433	4.440 (0.733)	57	583593	74.1840	74.184	80.00- 120.00	100.00
4.433	4.440 (0.733)	43	364823			31.56- 91.56	62.51
4.433	4.440 (0.733)	86	84861			0.00- 44.94	14.54
26 1,1-Dichloroethane					CAS #: 75-34-3		
4.712	4.719 (0.780)	63	671970	85.6847	85.685	80.00- 120.00	100.00
4.712	4.719 (0.780)	65	212675			1.52- 61.52	31.65
29 cis-1,2-Dichloroethene					CAS #: 156-59-2		
5.672	5.679 (0.938)	98	246800	89.8923	89.892	80.00- 120.00	100.00
5.672	5.679 (0.938)	96	394115			127.88- 187.88	159.69
5.672	5.679 (0.938)	61	520944			179.74- 239.74	211.08
28 2-Butanone					CAS #: 78-93-3		
5.665	5.679 (0.937)	72	174129	52.4611	52.461	80.00- 120.00	100.00(a)
5.665	5.679 (0.937)	43	679320			351.97- 411.97	390.12
5.672	5.679 (0.938)	57	58272			2.17- 62.17	33.46
35 Chloroform					CAS #: 67-66-3		
6.245	6.259 (1.033)	83	655795	100.005	100.00	80.00- 120.00	100.00
6.252	6.259 (1.034)	85	429998			34.57- 94.57	65.57

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (ng)	FINAL (NG)	TARGET RANGE	RATIO
37 Cyclohexane					CAS #: 110-82-7		
6.524	6.532 (0.851)	84	415550	69.0620	69.062	80.00- 120.00	100.00
6.524	6.532 (0.851)	56	511793			92.60- 152.60	123.16
6.524	6.532 (0.851)	41	281644			35.57- 95.57	67.78
36 1,1,1-Trichloroethane					CAS #: 71-55-6		
6.431	6.438 (0.838)	97	653067	114.619	114.62	80.00- 120.00	100.00
6.431	6.438 (0.838)	99	423078			34.22- 94.22	64.78
38 Carbon Tetrachloride					CAS #: 56-23-5		
6.661	6.668 (0.868)	119	625106	129.633	129.63	80.00- 120.00	100.00
6.661	6.668 (0.868)	117	652373			74.59- 134.59	104.36
45 2,2,4-Trimethylpentane					CAS #: 540-84-1		
7.191	7.198 (0.937)	57	1519323	88.3142	88.314	80.00- 120.00	100.00
7.191	7.198 (0.937)	56	496930			2.36- 62.36	32.71
7.191	7.198 (0.937)	41	401958			0.00- 55.73	26.46
41 Benzene					CAS #: 71-43-2		
6.961	6.969 (0.908)	78	1015629	57.4929	57.493	80.00- 120.00	100.00
6.961	6.969 (0.908)	77	240125			0.00- 53.82	23.64
43 1,2-Dichloroethane					CAS #: 107-06-2		
7.083	7.090 (0.923)	62	393962	84.3839	84.384	80.00- 120.00	100.00
7.083	7.090 (0.923)	64	126732			2.51- 62.51	32.17
46 Heptane					CAS #: 142-82-5		
7.491	7.499 (0.977)	71	327869	82.9941	82.994	80.00- 120.00	100.00
7.491	7.499 (0.977)	43	531660			132.26- 192.26	162.16
7.491	7.499 (0.977)	57	296968			60.63- 120.63	90.58
48 Trichloroethene					CAS #: 79-01-6		
7.964	7.964 (1.038)	95	441749	116.286	116.28	80.00- 120.00	100.00
7.964	7.964 (1.038)	130	447960			73.40- 133.40	101.41
7.964	7.964 (1.038)	97	282351			35.04- 95.04	63.92
51 Methyl Cyclohexane					CAS #: 108-87-2		
8.265	8.272 (1.077)	83	541572	82.1626	82.163	80.00- 120.00	100.00
8.265	8.272 (1.077)	98	238806			15.23- 75.23	44.09
8.265	8.272 (1.077)	55	413860			45.63- 105.63	76.42
52 1,2-Dichloropropane					CAS #: 78-87-5		
8.322	8.322 (1.085)	63	341998	96.6618	96.662	80.00- 120.00	100.00
8.322	8.322 (1.085)	62	236604			38.55- 98.55	69.18
8.322	8.322 (1.085)	41	171192			21.51- 81.51	50.06

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (ng)	FINAL (NG)	TARGET RANGE	RATIO
53 1,4-Dioxane					CAS #: 123-91-1		
8.437	8.444 (1.100)	88	195710	68.3070	68.307	80.00- 120.00	100.00
8.437	8.444 (1.100)	58	133789			36.73- 96.73	68.36
8.437	8.444 (1.100)	57	56773			2.93- 62.93	29.01
56 4-Methyl-2-pentanone					CAS #: 108-10-1		
9.533	9.533 (1.243)	58	256849	85.8810	85.881	80.00- 120.00	100.00
9.533	9.533 (1.243)	43	622960			210.10- 270.10	242.54
9.533	9.533 (1.243)	85	113209			14.24- 74.24	44.08
58 Toluene					CAS #: 108-88-3		
9.748	9.748 (0.839)	91	1084590	72.0446	72.044	80.00- 120.00	100.00
9.748	9.748 (0.839)	92	630517			27.36- 87.36	58.13
61 1,1,2-Trichloroethane					CAS #: 79-00-5		
10.364	10.364 (1.351)	97	370027	105.332	105.33	80.00- 120.00	100.00
10.364	10.364 (1.351)	99	229472			31.64- 91.64	62.01
10.364	10.364 (1.351)	83	324825			56.72- 116.72	87.78
62 Tetrachloroethene					CAS #: 127-18-4		
10.436	10.435 (0.898)	166	552530	133.696	133.70	80.00- 120.00	100.00
10.436	10.435 (0.898)	129	391624			40.21- 100.21	70.88
10.436	10.435 (0.898)	131	376347			37.97- 97.97	68.11
63 2-Hexanone					CAS #: 591-78-6		
10.665	10.665 (0.918)	58	330033	81.4239	81.424	80.00- 120.00	100.00
10.665	10.665 (0.918)	43	569724			138.90- 198.90	172.63
10.665	10.665 (0.918)	100	66454			0.00- 50.74	20.14
66 1,2-Dibromoethane					CAS #: 106-93-4		
10.987	10.987 (0.946)	107	534214	153.677	153.68	80.00- 120.00	100.00
10.987	10.987 (0.946)	109	498789			63.94- 123.94	93.37
68 Chlorobenzene					CAS #: 108-90-7		
11.653	11.653 (1.003)	112	862381	91.6768	91.677	80.00- 120.00	100.00
11.653	11.653 (1.003)	114	279726			2.24- 62.24	32.44
11.653	11.653 (1.003)	77	486011			25.99- 85.99	56.36
69 Ethyl Benzene					CAS #: 100-41-4		
11.804	11.804 (1.016)	106	445757	85.8780	85.878	80.00- 120.00	100.00
11.804	11.804 (1.016)	91	1400251			279.23- 339.23	314.13
71 m,p-Xylene					CAS #: 108-38-3		
11.990	11.983 (1.032)	106	550990	85.6303	85.630	80.00- 120.00	100.00
11.990	11.983 (1.032)	91	1088213			163.71- 223.71	197.50

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (ng)	FINAL (NG)	TARGET RANGE	RATIO
74 o-Xylene					CAS #: 95-47-6		
12.498	12.491 (0.944)	106	532509	80.9664	80.966	80.00- 120.00	100.00
12.491	12.491 (0.944)	91	1105417			176.46- 236.46	207.59
75 Styrene					CAS #: 100-42-5		
12.527	12.520 (0.946)	104	864272	74.7039	74.704	80.00- 120.00	100.00
12.527	12.520 (0.946)	78	409419			17.37- 77.37	47.37
77 Cumene					CAS #: 98-82-8		
13.000	12.993 (0.982)	105	1625622	92.7008	92.701	80.00- 120.00	100.00
13.000	12.993 (0.982)	120	442411			0.00- 57.05	27.21
13.000	12.993 (0.982)	51	140842			0.00- 38.51	8.66
80 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
13.437	13.430 (1.015)	83	755250	131.185	131.18	80.00- 120.00	100.00
13.437	13.430 (1.015)	85	482133			33.93- 93.93	63.84
81 Propylbenzene					CAS #: 103-65-1		
13.566	13.551 (1.025)	91	1992742	105.502	105.50	80.00- 120.00	100.00
13.566	13.551 (1.025)	120	474232			0.00- 53.66	23.80
13.566	13.551 (1.025)	105	73301			0.00- 33.72	3.68
82 4-Ethyltoluene					CAS #: 622-96-8		
13.738	13.731 (1.038)	120	503506	110.309	110.31	80.00- 120.00	100.00
13.738	13.731 (1.038)	105	1652662			299.89- 359.89	328.23
83 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
13.824	13.816 (1.044)	120	684569	107.198	107.20	80.00- 120.00	100.00
13.817	13.816 (1.044)	105	1358512			166.45- 226.45	198.45
84 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
14.318	14.311 (1.082)	120	644615	104.042	104.04	80.00- 120.00	100.00
14.318	14.311 (1.082)	105	1382448			185.90- 245.90	214.46
86 1,3-Dichlorobenzene					CAS #: 541-73-1		
14.683	14.676 (1.109)	146	976986	126.737	126.74	80.00- 120.00	100.00
14.683	14.676 (1.109)	148	625936			33.73- 93.73	64.07
14.683	14.676 (1.109)	111	372863			8.03- 68.03	38.16
87 1,4-Dichlorobenzene					CAS #: 106-46-7		
14.827	14.819 (1.120)	146	979614	126.212	126.21	80.00- 120.00	100.00
14.827	14.819 (1.120)	148	628587			33.15- 93.15	64.17
14.827	14.819 (1.120)	111	359577			6.74- 66.74	36.71
90 1,2-Dichlorobenzene					CAS #: 95-50-1		
15.299	15.292 (1.156)	146	924063	124.425	124.42	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (ng)	FINAL (NG)	TARGET RANGE	RATIO
90 1,2-Dichlorobenzene (continued)							
15.299	15.292 (1.156)	148	586169			33.98- 93.98	63.43
15.299	15.292 (1.156)	111	363917			9.89- 69.89	39.38
95 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
17.463	17.463 (1.319)	180	799614	151.732	151.73	80.00- 120.00	100.00
17.463	17.463 (1.319)	182	761672			66.29- 126.29	95.25
96 Hexachlorobutadiene					CAS #: 87-68-3		
17.663	17.656 (1.334)	225	660934	200.073	200.07	80.00- 120.00	100.00
17.663	17.656 (1.334)	223	416819			33.08- 93.08	63.07
98 Naphthalene					CAS #: 91-20-3		
17.799	17.792 (1.345)	128	1220734	53.1872	53.187	80.00- 120.00	100.00
17.799	17.792 (1.345)	127	158696			0.00- 43.03	13.00
103 2-Methylnaphthalene					CAS #: 91-57-6		
19.260	19.253 (1.455)	142	803506	55.9457	55.946	80.00- 120.00	100.00
19.260	19.253 (1.455)	141	692247			56.76- 116.76	86.15
19.260	19.253 (1.455)	115	247086			1.56- 61.56	30.75
104 1-Methylnaphthalene					CAS #: 90-12-0		
19.483	19.475 (1.472)	142	726745	55.2081	55.208	80.00- 120.00	100.00
19.483	19.475 (1.472)	141	652890			59.80- 119.80	89.84
19.483	19.475 (1.472)	115	239732			3.48- 63.48	32.99
107 Acenaphthylene					CAS #: 208-96-8		
21.331	21.331 (1.612)	152	1327151	53.2309	53.231	80.00- 120.00	100.00
21.331	21.331 (1.612)	151	264987			0.00- 49.75	19.97
21.331	21.331 (1.612)	153	172678			0.00- 43.01	13.01
109 Acenaphthene					CAS #: 83-32-9		
21.588	21.581 (1.631)	154	580985	46.5872	46.587	80.00- 120.00	100.00
21.588	21.581 (1.631)	152	312900			26.17- 86.17	53.86
21.588	21.581 (1.631)	153	634624			78.75- 138.75	109.23
111 Fluorene					CAS #: 86-73-7		
22.713	22.713 (1.716)	166	550611	41.6124	41.612	80.00- 120.00	100.00
22.713	22.713 (1.716)	165	516213			65.26- 125.26	93.75
112 Phenanthrene					CAS #: 85-01-8		
24.855	24.848 (1.878)	178	1139368	52.7274	52.727	80.00- 120.00	100.00
24.855	24.848 (1.878)	176	219877			0.00- 49.34	19.30
24.848	24.848 (1.877)	179	174108			0.00- 45.21	15.28
113 Anthracene					CAS #: 120-12-7		
24.955	24.955 (1.885)	178	1027584	52.1938	52.194	80.00- 120.00	100.00

RT	EXP RT	(REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (ng)	FINAL (NG)	TARGET RANGE	RATIO
113 Anthracene (continued)								
24.955	24.955	(1.885)	176	189867			0.00- 48.82	18.48
24.955	24.955	(1.885)	179	155197			0.00- 44.74	15.10
117 Fluoranthene						CAS #: 206-44-0		
28.064	28.057	(2.120)	202	774099	46.3300	46.330	80.00- 120.00	100.00
28.064	28.057	(2.120)	101	107372			0.00- 43.29	13.87
118 Pyrene						CAS #: 129-00-0		
28.859	28.852	(2.180)	202	774827	44.9183	44.918	80.00- 120.00	100.00
28.859	28.852	(2.180)	101	125061			0.00- 45.23	16.14
28.859	28.852	(2.180)	100	101591			0.00- 42.66	13.11

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Report Date: 18-Jan-2016 15:01

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd18.i
Lab File ID: 18011420.d
Lab Smp Id: ICV
Analysis Type: VOA
Quant Type: ISTD
Operator: db
Method File: /chem/msd18.i/14Jan2016.b/186z0114vi.m
Misc Info: e. 2/17/16, 1/21/16

Calibration Date: 14-JAN-2016
Calibration Time: 16:31

Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
32 Bromochloromethan	260347	156208	364486	250469	-3.79
47 1,4-Difluorobenze	915705	549423	1281987	873893	-4.57
67 Chlorobenzene-d5	838049	502829	1173269	815631	-2.68
79 Bromofluorobenzen	602381	361429	843333	568258	-5.66

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
32 Bromochloromethan	6.05	5.72	6.38	6.04	-0.12
47 1,4-Difluorobenze	7.67	7.34	8.00	7.67	0.00
67 Chlorobenzene-d5	11.60	11.27	11.93	11.62	0.12
79 Bromofluorobenzen	13.22	12.89	13.55	13.24	0.11

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Report Date: 18-Jan-2016 15:01

Eurofins Air Toxics Inc.

RECOVERY REPORT

Client Name:
Client SDG: 14Jan2016
Sample Matrix: GAS
Fraction: VOA
Lab Smp Id: ICV
Level: LOW
Operator: db
Data Type: MS DATA
SampleType: LCS
SpikeList File: VOC+PAHlcs50.spk
Quant Type: ISTD
Sublist File: VOC+PAH_ICAL.sub
Method File: /chem/msd18.i/14Jan2016.b/186z0114vi.m
Misc Info: e. 2/17/16, 1/21/16

SPIKE COMPOUND	CONC ADDED NG	CONC RECOVERED NG	% RECOVERED	LIMITS
4 Freon 114	139.80	146.55	104.83	70-130
6 Vinyl Chloride	51.100	54.392	106.44	70-130
7 1,3-Butadiene	44.200	43.937	99.40	70-130
9 Chloroethane	52.800	56.738	107.46	70-130
10 Isopentane	59.000	61.036	103.45	70-130
11 Trichlorofluoromet	112.40	120.64	107.33	70-130
14 1,1-Dichloroethene	79.300	79.490	100.24	70-130
15 Freon 113	153.30	153.65	100.23	70-130
18 Carbon Disulfide	62.300	52.975	85.03	70-130
17 2-Propanol	49.200	47.453	96.45	70-130
21 Methylene Chloride	69.500	65.634	94.44	70-130
24 trans-1,2-Dichloro	79.300	70.124	88.43	70-130
23 MTBE	72.100	78.246	108.52	70-130
25 Hexane	70.500	74.184	105.23	70-130
26 1,1-Dichloroethane	81.000	85.685	105.78	70-130
29 cis-1,2-Dichloroet	79.300	89.892	113.36	70-130
28 2-Butanone	59.000	52.461	88.92	70-130
35 Chloroform	97.700	100.00	102.36	70-130
36 1,1,1-Trichloroeth	109.10	114.62	105.06	70-130
37 Cyclohexane	68.800	69.062	100.38	70-130
38 Carbon Tetrachlori	125.80	129.63	103.05	70-130
41 Benzene	63.900	57.493	89.97	70-130
43 1,2-Dichloroethane	80.900	84.384	104.31	70-130
45 2,2,4-Trimethylpen	93.400	88.314	94.55	70-130
46 Heptane	82.000	82.994	101.21	70-130
48 Trichloroethene	107.50	116.28	108.17	70-130
51 Methyl Cyclohexane	80.300	82.163	102.32	70-130
52 1,2-Dichloropropan	92.400	96.662	104.61	70-130
53 1,4-Dioxane	72.100	68.307	94.74	70-130
56 4-Methyl-2-pentano	81.900	85.881	104.86	70-130
58 Toluene	75.400	72.044	95.55	70-130
61 1,1,2-Trichloroeth	109.10	105.33	96.55	70-130
62 Tetrachloroethene	135.70	133.70	98.52	70-130

SPIKE COMPOUND	CONC ADDED NG	CONC RECOVERED NG	% RECOVERED	LIMITS
63 2-Hexanone	81.900	81.424	99.42	70-130
66 1,2-Dibromoethane	153.70	153.68	99.99	70-130
68 Chlorobenzene	92.100	91.677	99.54	70-130
69 Ethyl Benzene	86.800	85.878	98.94	70-130
71 m,p-Xylene	86.800	85.630	98.65	70-130
74 o-Xylene	86.800	80.966	93.28	70-130
75 Styrene	85.200	74.704	87.68	70-130
77 Cumene	98.300	92.701	94.30	70-130
80 1,1,2,2-Tetrachlor	137.30	131.18	95.55	70-130
81 Propylbenzene	98.300	105.50	107.33	70-130
82 4-Ethyltoluene	98.300	110.31	112.22	70-130
83 1,3,5-Trimethylben	98.300	107.20	109.05	70-130
84 1,2,4-Trimethylben	98.300	104.04	105.84	70-130
86 1,3-Dichlorobenzen	120.30	126.74	105.35	70-130
87 1,4-Dichlorobenzen	120.30	126.21	104.91	70-130
90 1,2-Dichlorobenzen	120.30	124.42	103.43	70-130
95 1,2,4-Trichloroben	148.40	151.73	102.24	70-130
96 Hexachlorobutadien	213.30	200.07	93.80	70-130
98 Naphthalene	50.000	53.187	106.37	70-130
103 2-Methylnaphthalen	50.000	55.946	111.89	70-130
104 1-Methylnaphthalen	50.000	55.208	110.42	70-130
107 Acenaphthylene	50.000	53.231	106.46	70-130
109 Acenaphthene	50.000	46.587	93.17	70-130
111 Fluorene	50.000	41.612	83.22	60-140
112 Phenanthrene	50.000	52.727	105.45	60-140
113 Anthracene	50.000	52.194	104.39	60-140
117 Fluoranthene	50.000	46.330	92.66	60-140
118 Pyrene	50.000	44.918	89.84	60-140

SURROGATE COMPOUND	CONC ADDED NG	CONC RECOVERED NG	% RECOVERED	LIMITS
$ 39 1,2-Dichloroethane	25.000	22.550	90.20	50-150
$ 57 Toluene-d8	25.000	22.770	91.08	50-150
$ 97 Naphthalene-d8	25.000	22.663	90.65	50-150

Data File: /chem/msd18.i/14Jan2016.b/18011420.d

Date : 14-JAN-2016 21:40

Client ID:

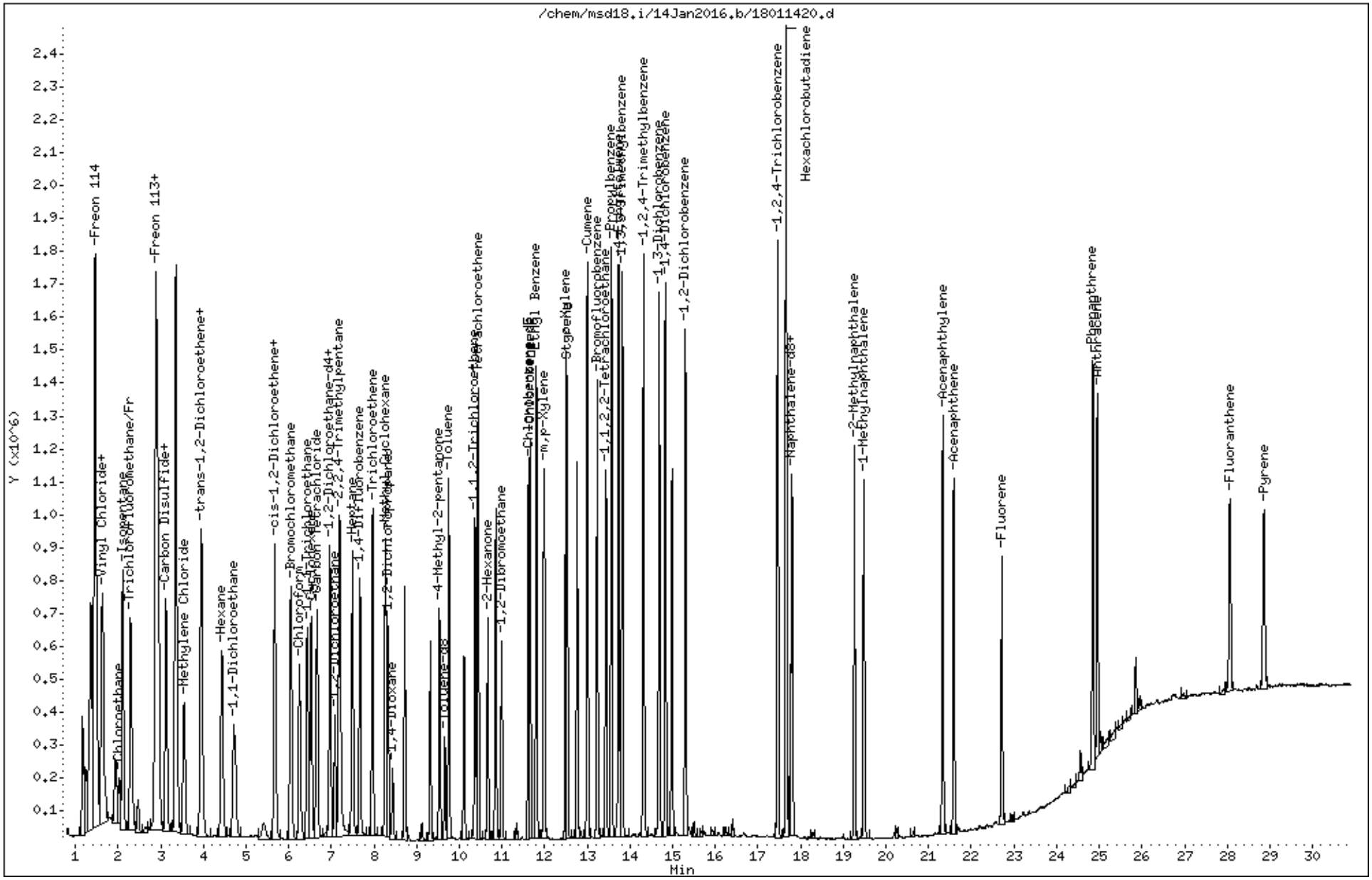
Instrument: msd18.i

Sample Info: 20ml #2516-203, 1.0ul 2595-246-50

Operator: db

Column phase: RTx-624

Column diameter: 0.53



Data File: /chem/msd18.i/14Jan2016.b/18011420.d

Date : 14-JAN-2016 21:40

Client ID:

Instrument: msd18.i

Sample Info: 20ml #2516-203, 1.0ul 2595-246-50

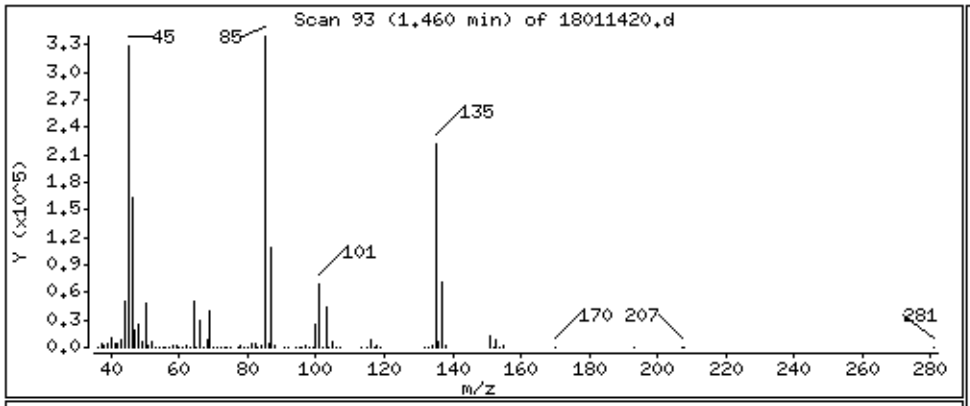
Operator: db

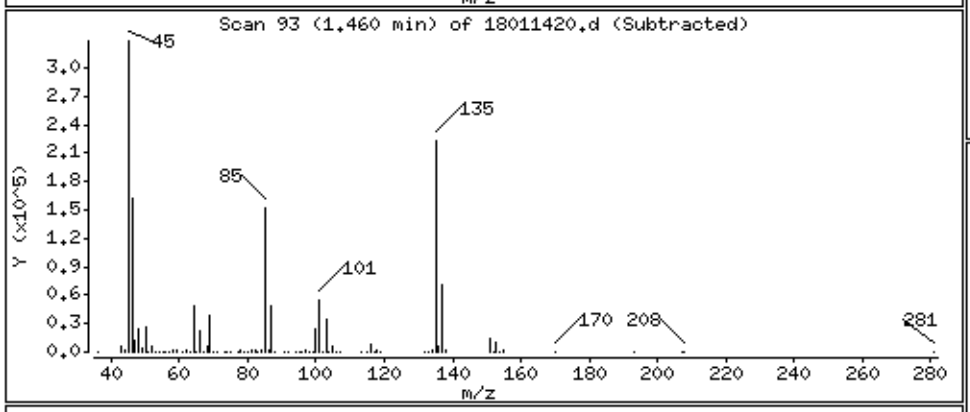
Column phase: RTx-624

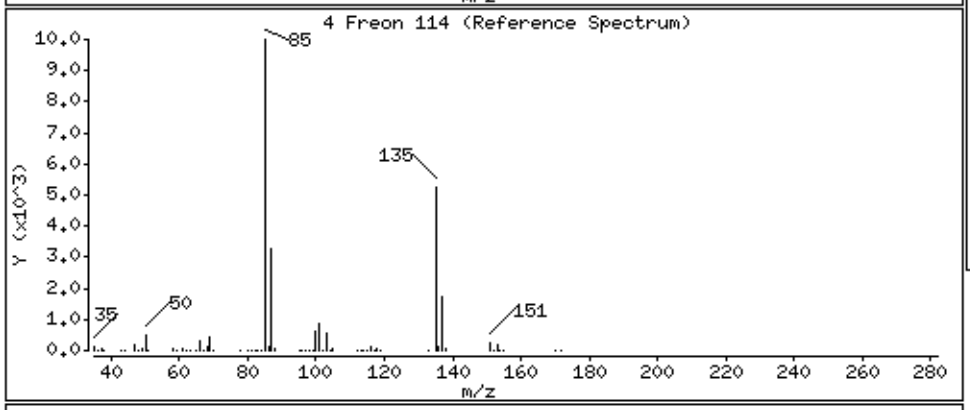
Column diameter: 0.53

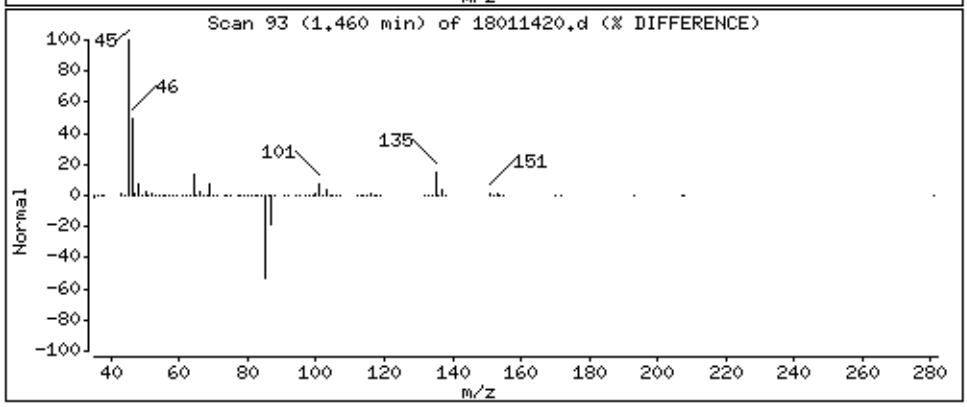
4 Freon 114

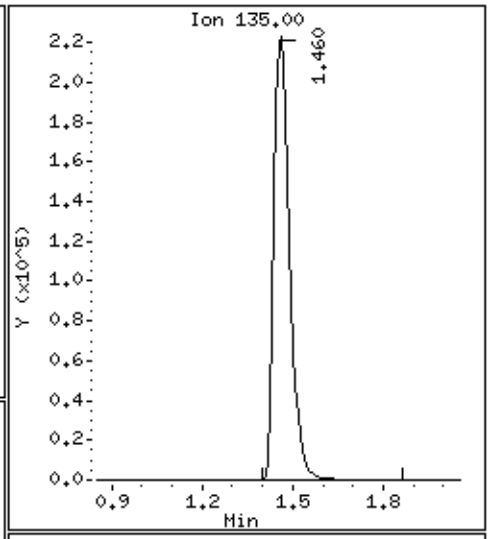
Concentration: 146.55 NG

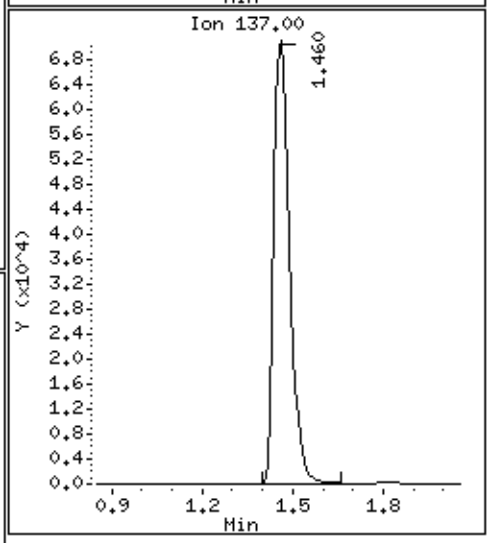












Data File: /chem/msd18.i/14Jan2016.b/18011420.d

Date : 14-JAN-2016 21:40

Client ID:

Instrument: msd18.i

Sample Info: 20ml #2516-203, 1.0ul 2595-246-50

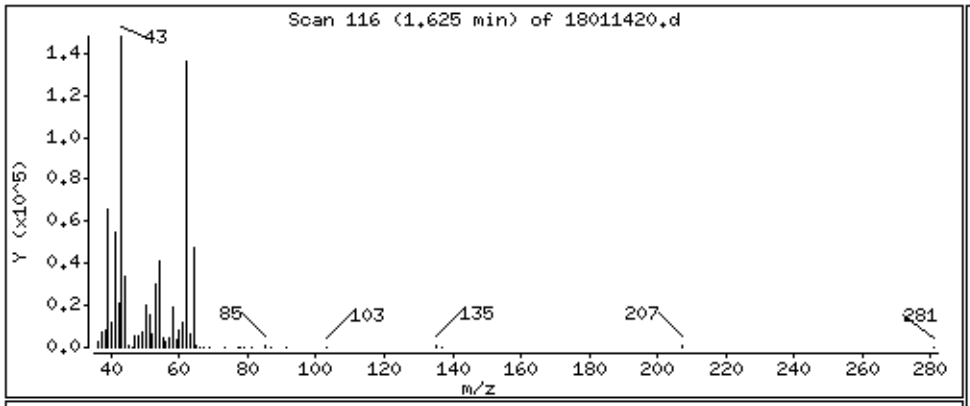
Operator: db

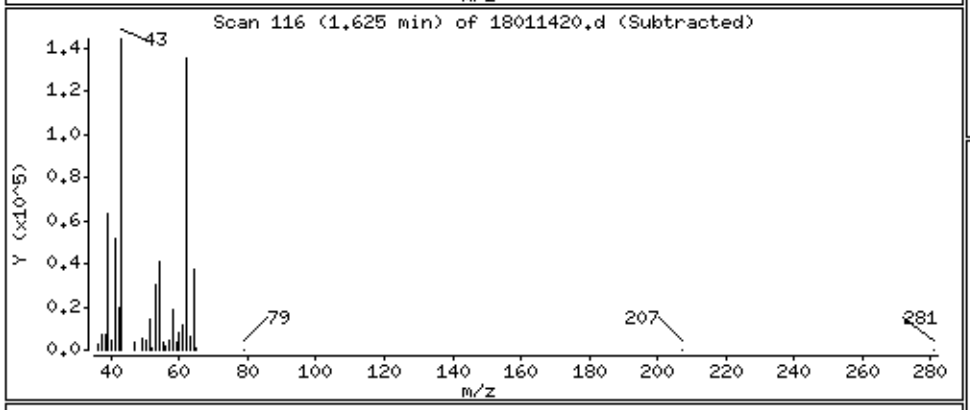
Column phase: RTx-624

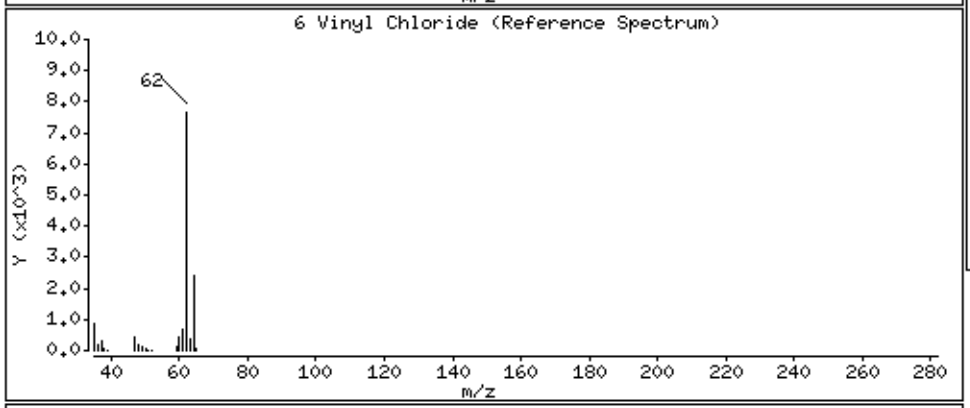
Column diameter: 0.53

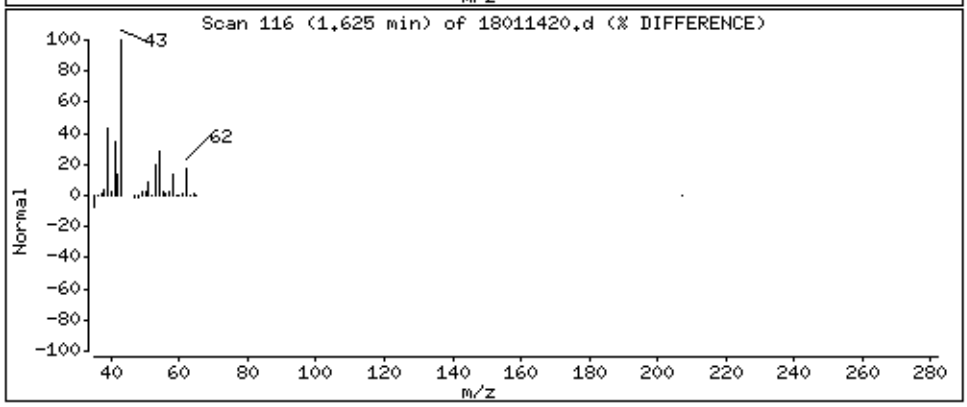
6 Vinyl Chloride

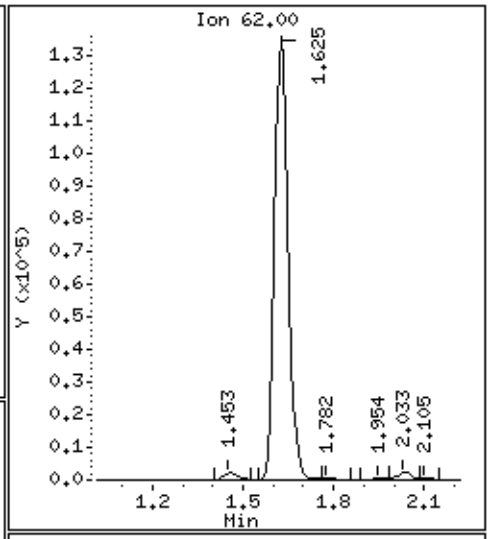
Concentration: 54.392 NG

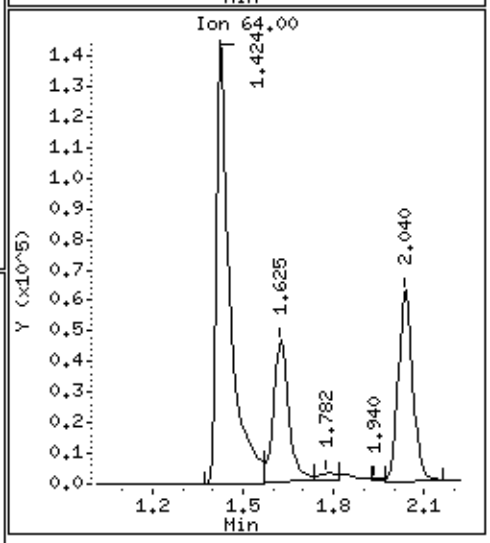












Data File: /chem/msd18.i/14Jan2016.b/18011420.d

Date : 14-JAN-2016 21:40

Client ID:

Instrument: msd18.i

Sample Info: 20ml #2516-203, 1.0ul 2595-246-50

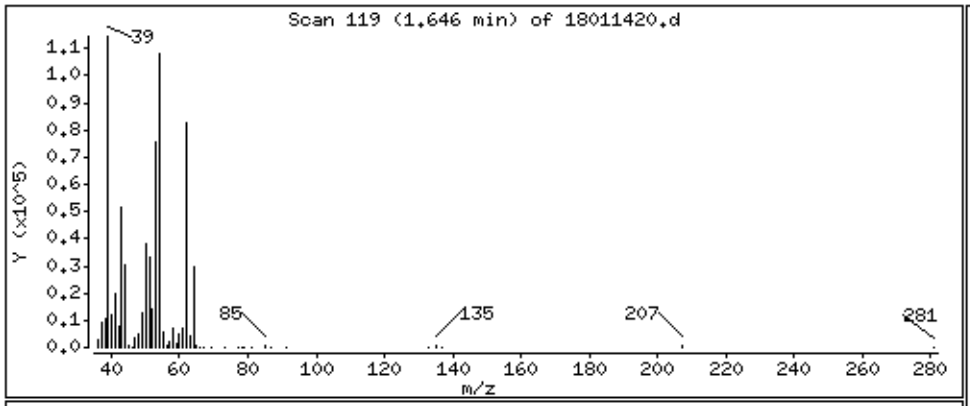
Operator: db

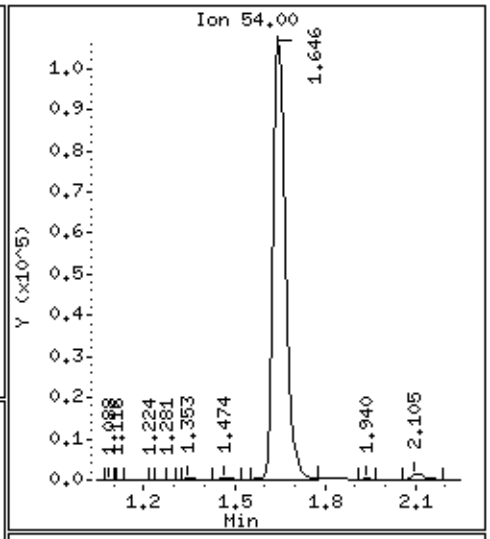
Column phase: RTx-624

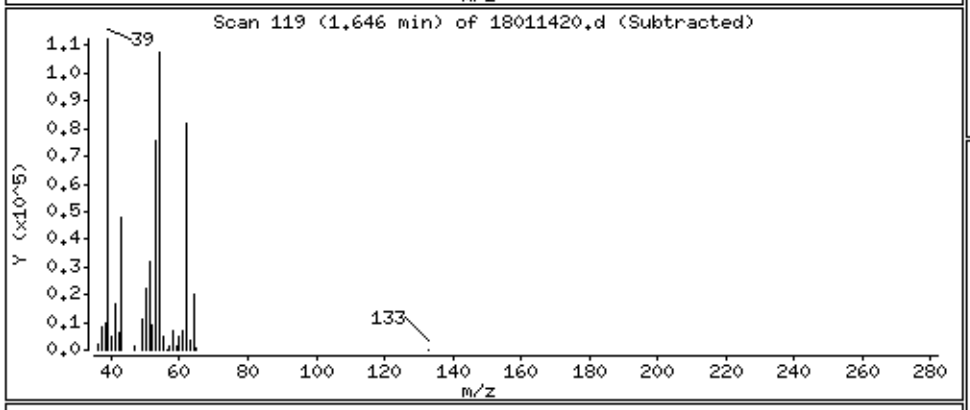
Column diameter: 0.53

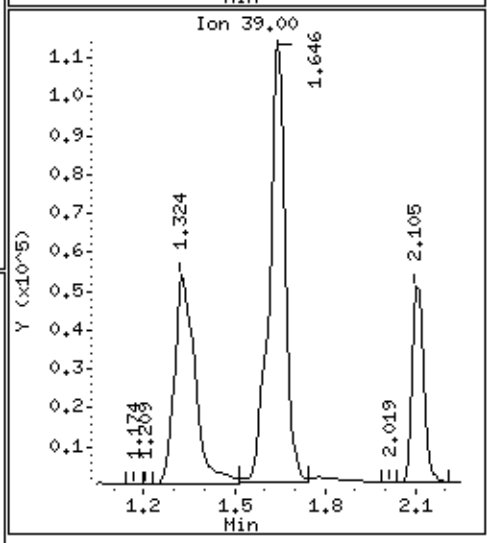
7 1,3-Butadiene

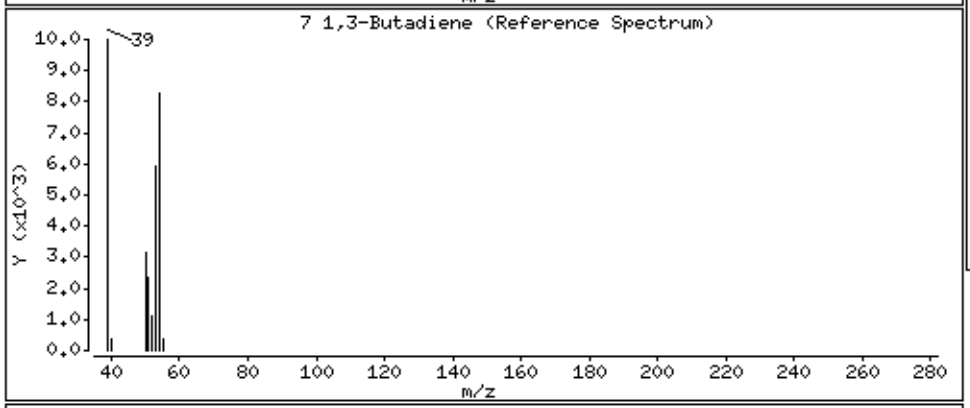
Concentration: 43.937 NG

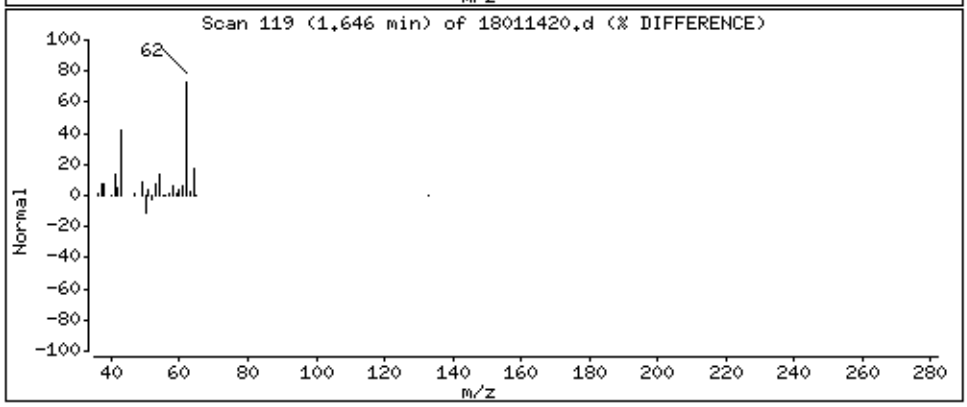












Data File: /chem/msd18.i/14Jan2016.b/18011420.d

Date : 14-JAN-2016 21:40

Client ID:

Instrument: msd18.i

Sample Info: 20ml #2516-203, 1.0ul 2595-246-50

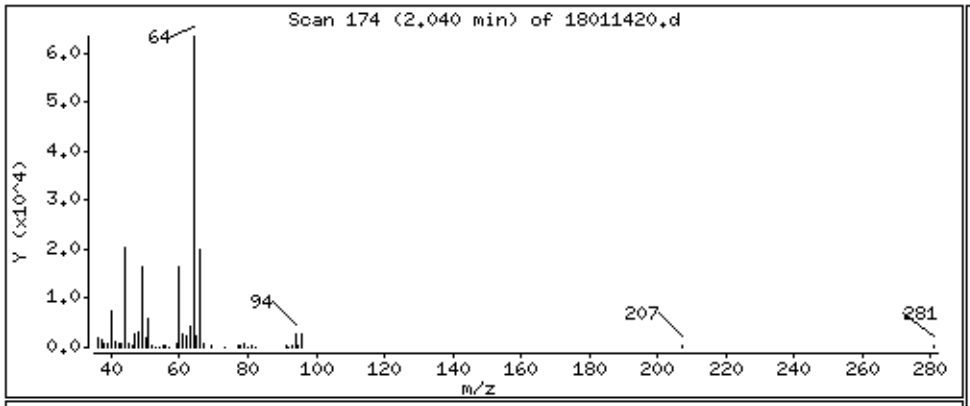
Operator: db

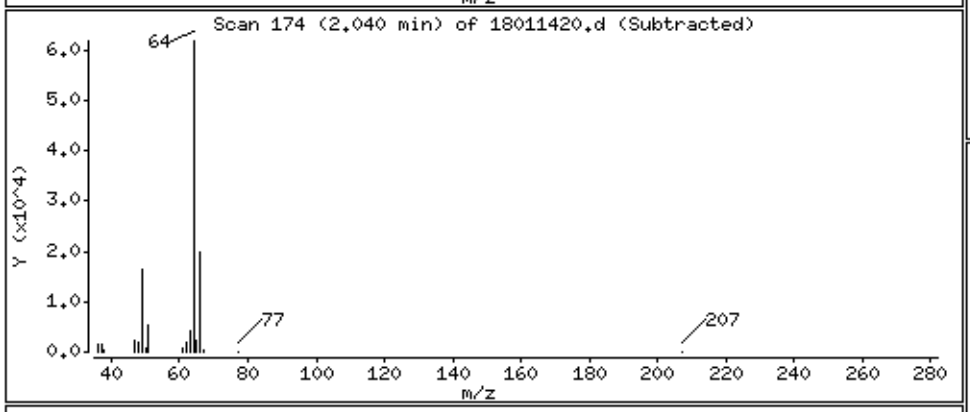
Column phase: RTx-624

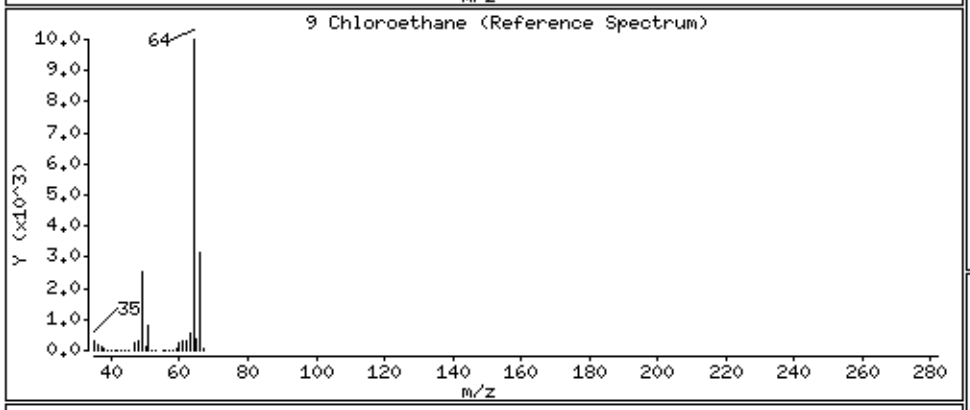
Column diameter: 0.53

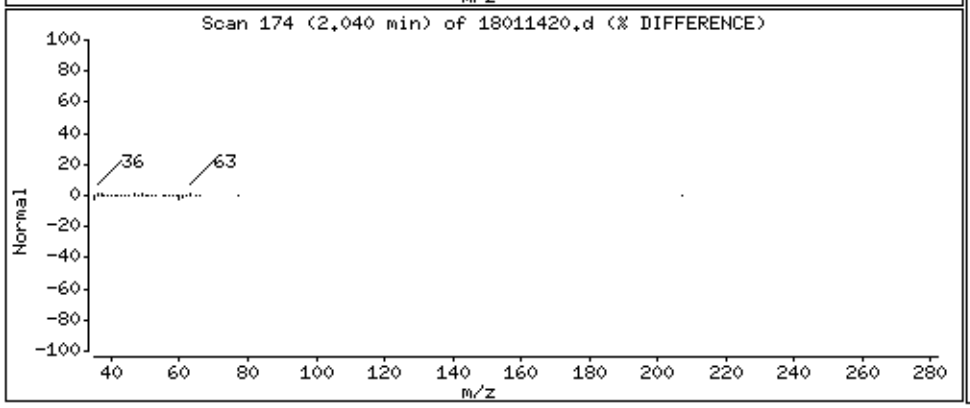
9 Chloroethane

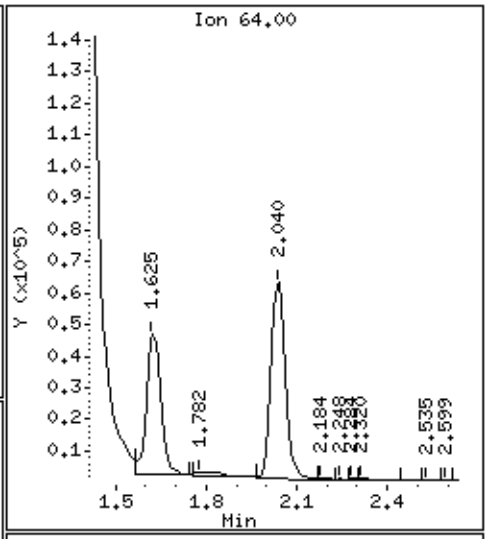
Concentration: 56.738 NG

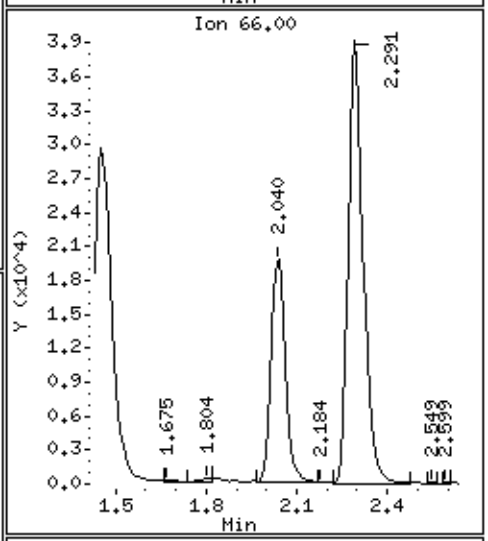


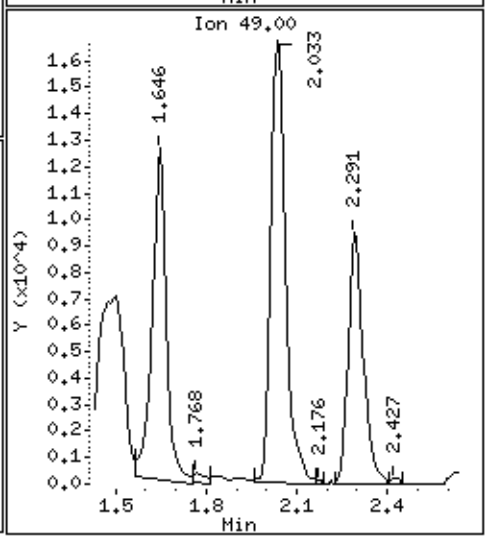












Data File: /chem/msd18.i/14Jan2016.b/18011420.d

Date : 14-JAN-2016 21:40

Client ID:

Instrument: msd18.i

Sample Info: 20ml #2516-203, 1.0ul 2595-246-50

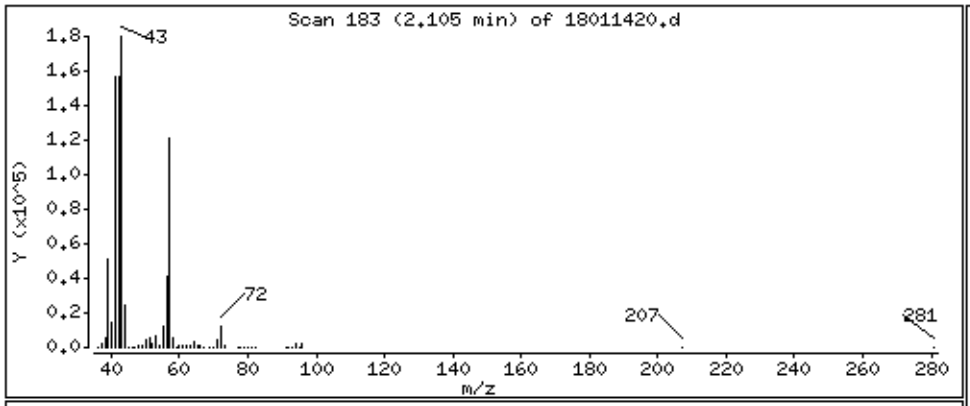
Operator: db

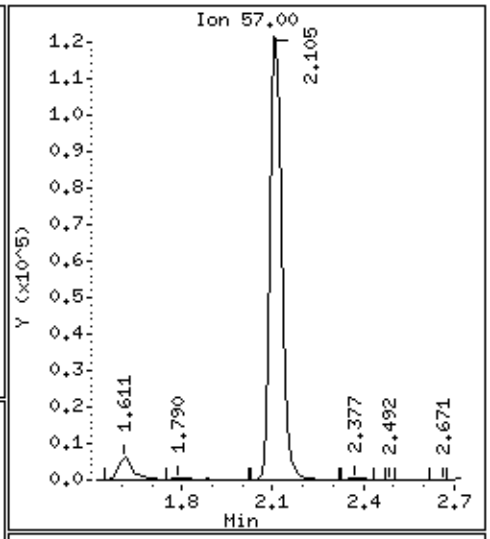
Column phase: RTx-624

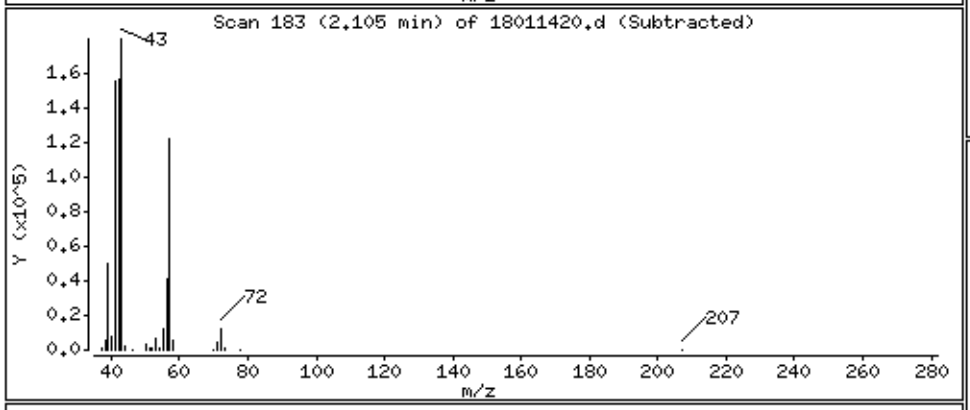
Column diameter: 0.53

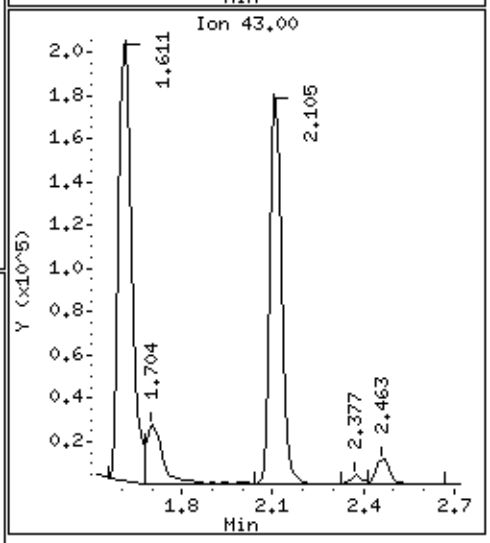
10 Isopentane

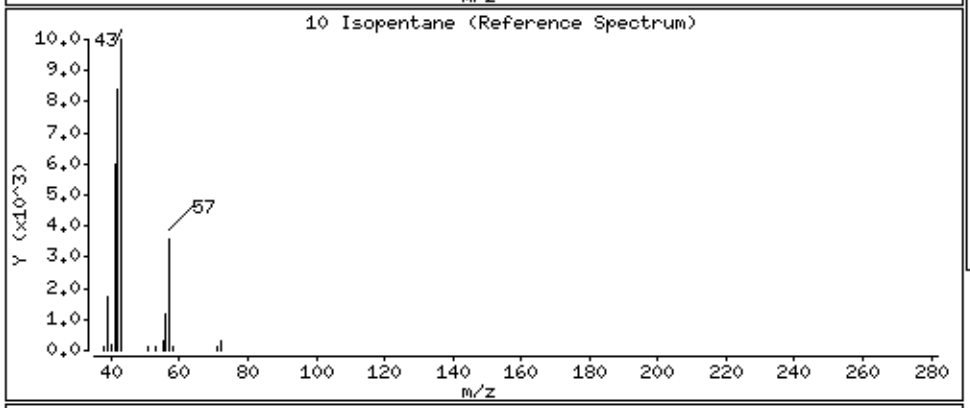
Concentration: 61.036 NG

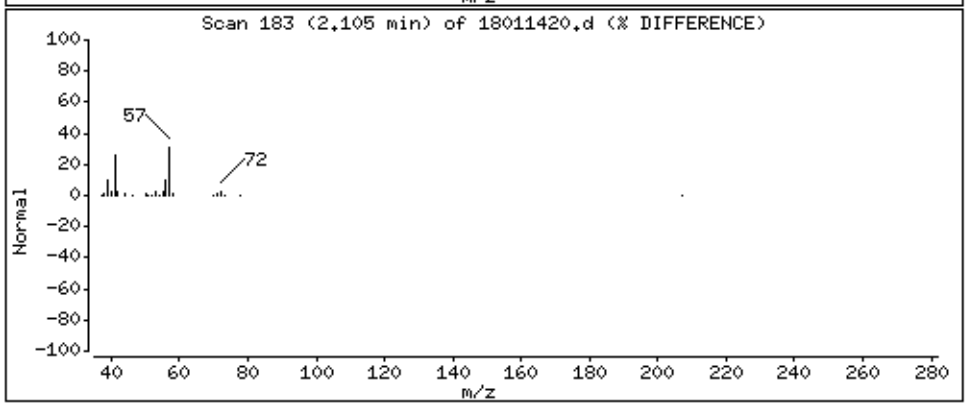












Data File: /chem/msd18.i/14Jan2016.b/18011420.d

Date : 14-JAN-2016 21:40

Client ID:

Instrument: msd18.i

Sample Info: 20ml #2516-203, 1.0ul 2595-246-50

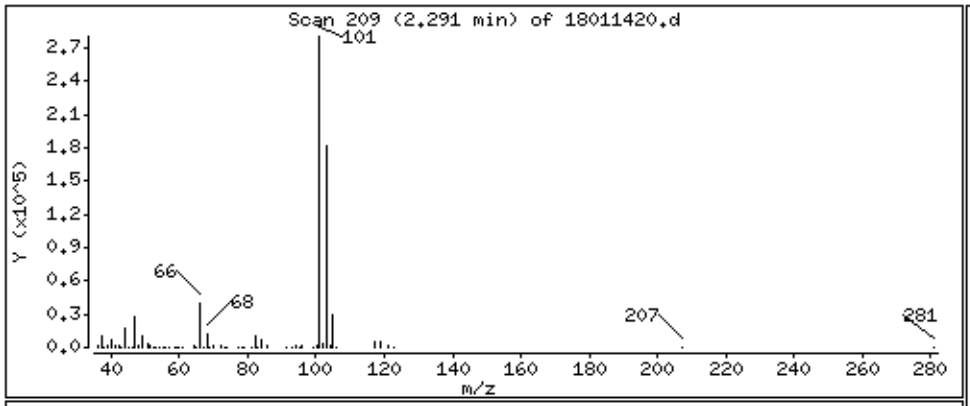
Operator: db

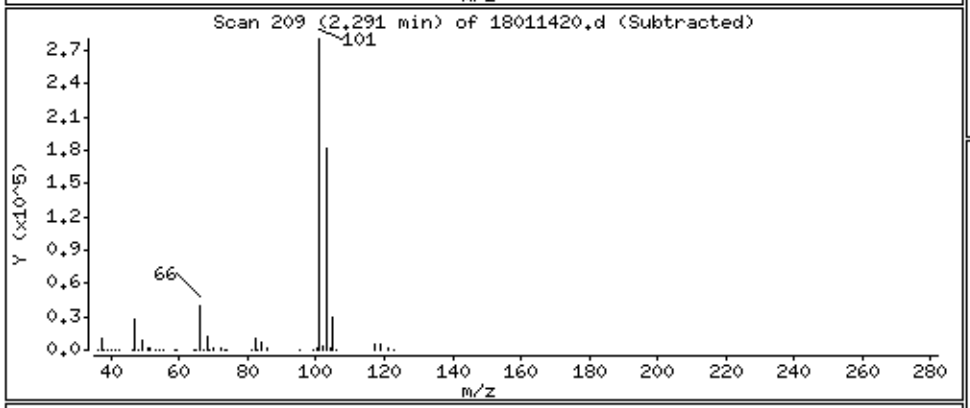
Column phase: RTx-624

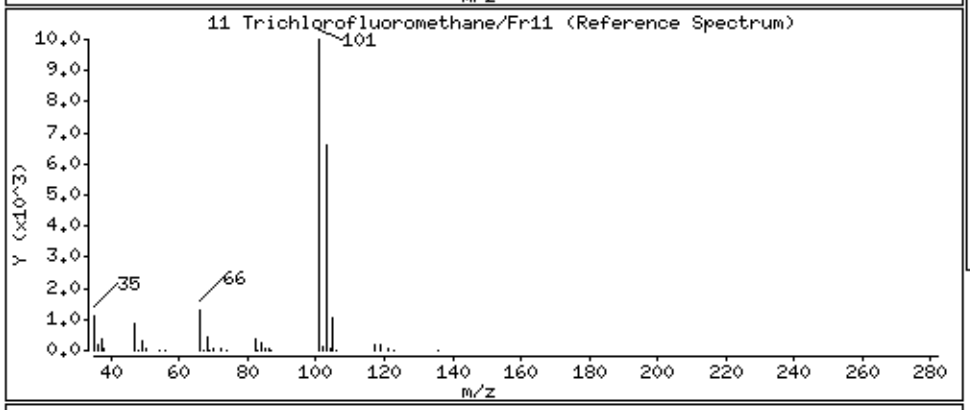
Column diameter: 0.53

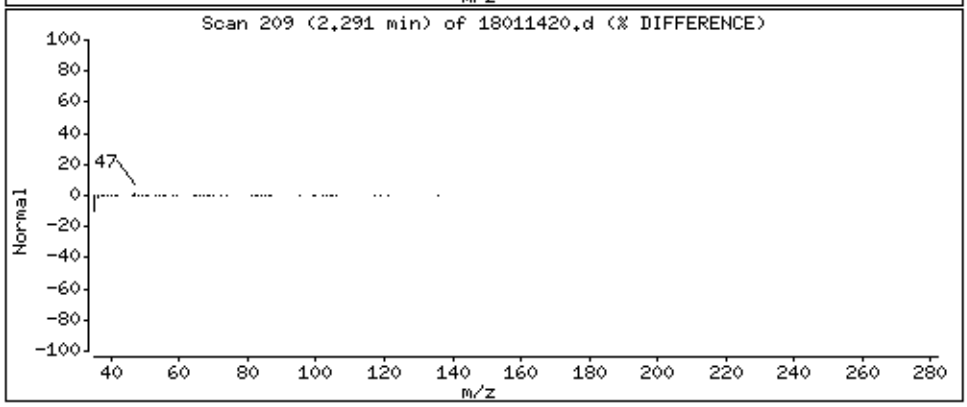
11 Trichlorofluoromethane/Fr11

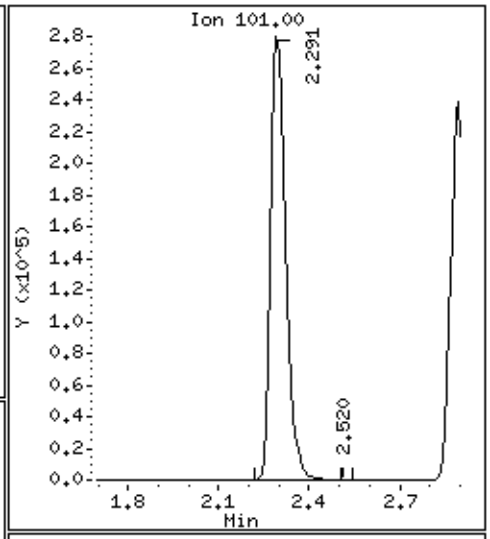
Concentration: 120.64 NG

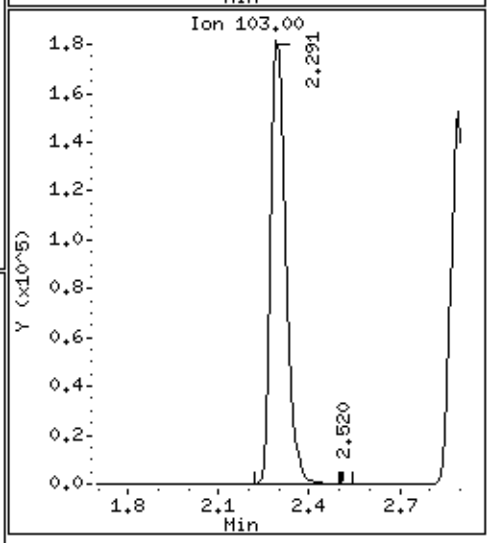












Data File: /chem/msd18.i/14Jan2016.b/18011420.d

Date : 14-JAN-2016 21:40

Client ID:

Instrument: msd18.i

Sample Info: 20ml #2516-203, 1.0ul 2595-246-50

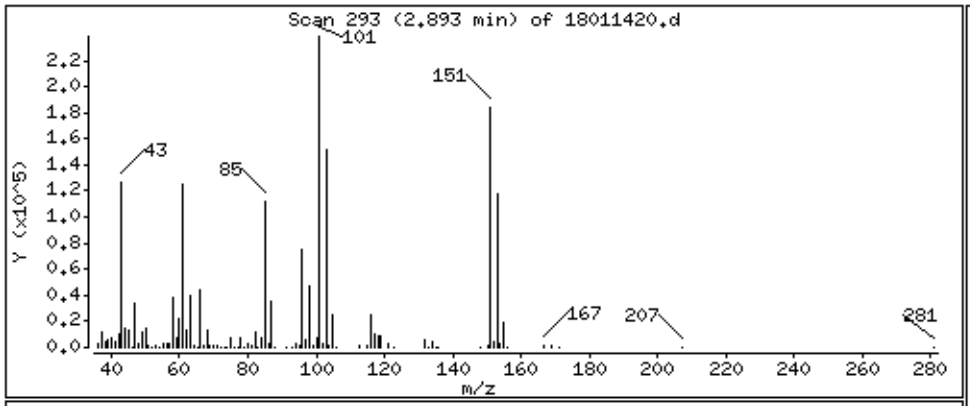
Operator: db

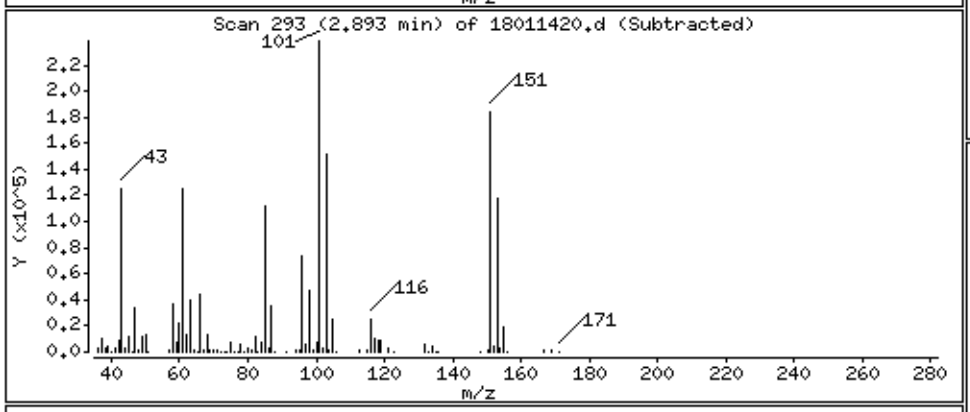
Column phase: RTx-624

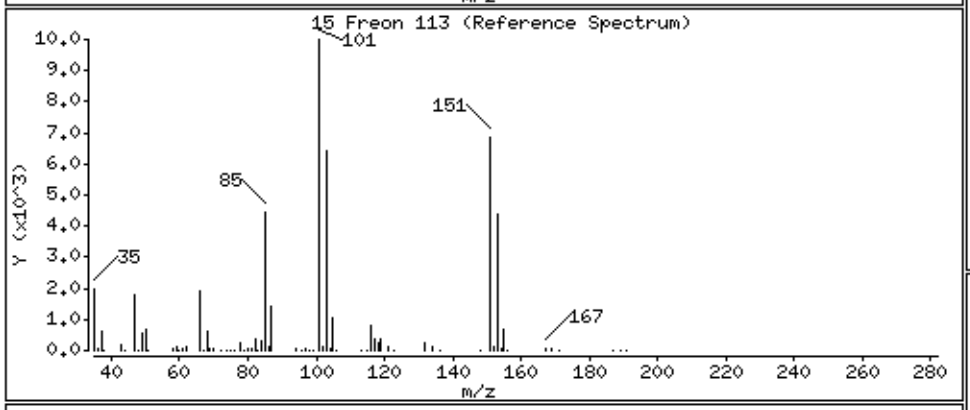
Column diameter: 0.53

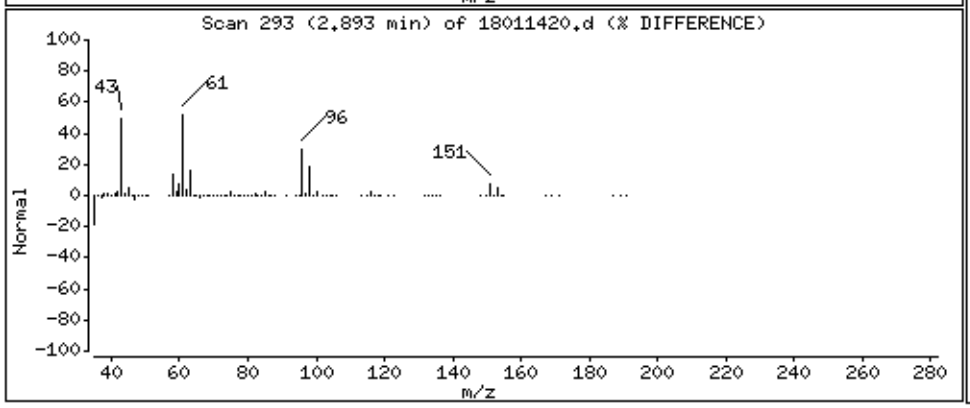
15 Freon 113

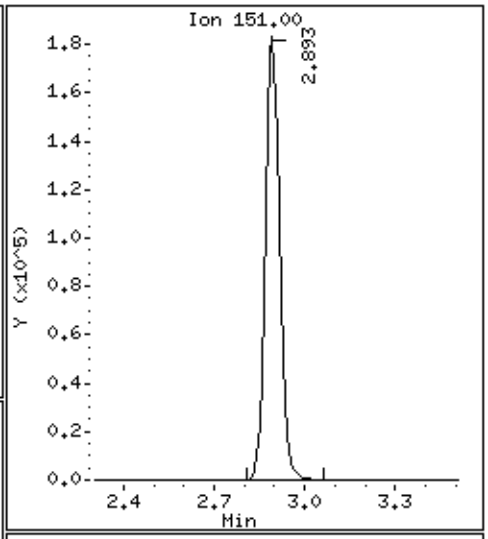
Concentration: 153.65 NG

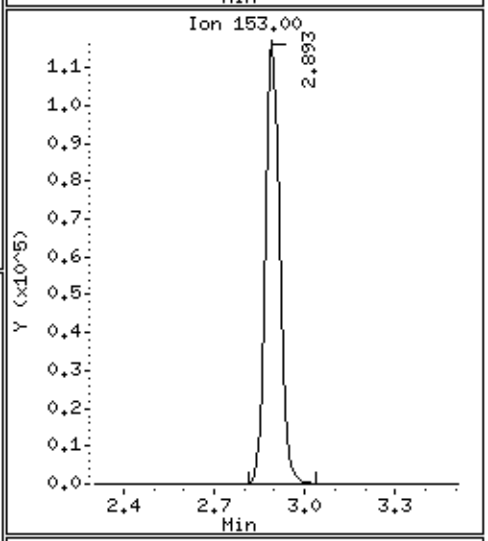


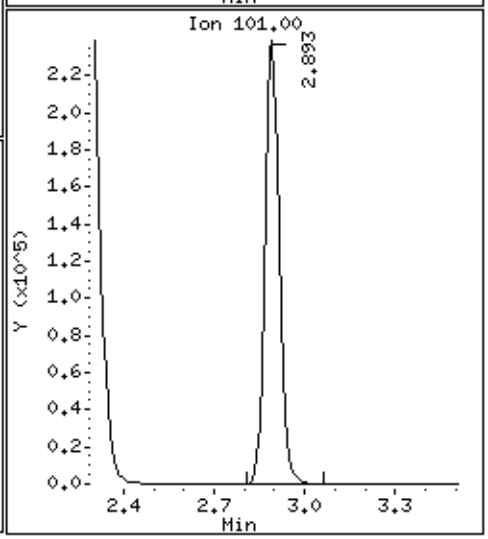












Data File: /chem/msd18.i/14Jan2016.b/18011420.d

Date : 14-JAN-2016 21:40

Client ID:

Instrument: msd18.i

Sample Info: 20ml #2516-203, 1.0ul 2595-246-50

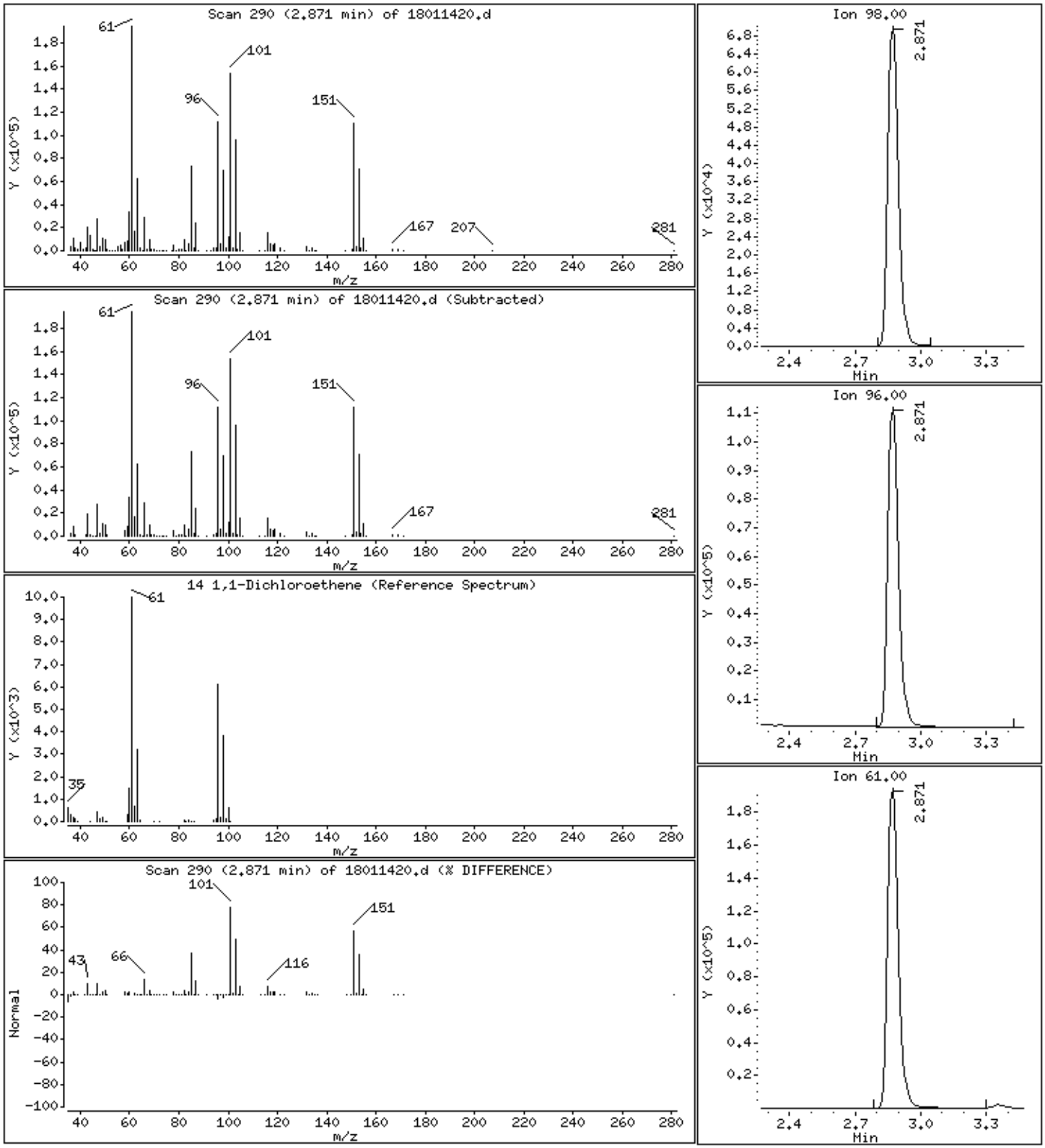
Operator: db

Column phase: RTx-624

Column diameter: 0.53

14 1,1-Dichloroethene

Concentration: 79.490 NG



Data File: /chem/msd18.i/14Jan2016.b/18011420.d

Date : 14-JAN-2016 21:40

Client ID:

Instrument: msd18.i

Sample Info: 20ml #2516-203, 1.0ul 2595-246-50

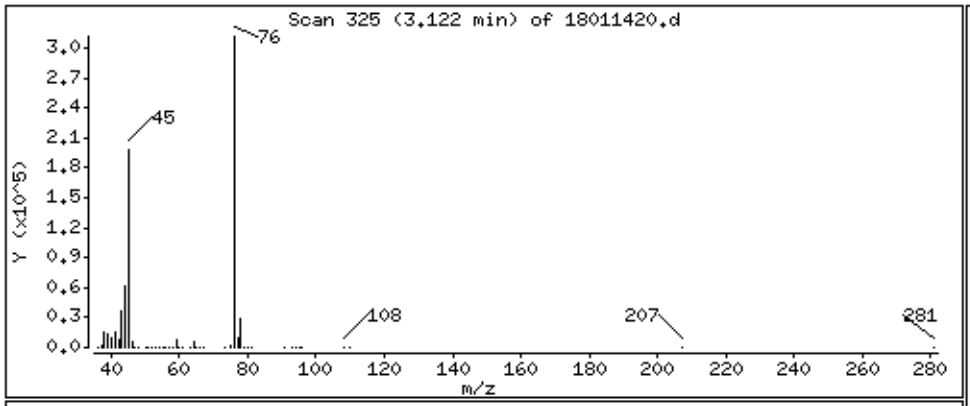
Operator: db

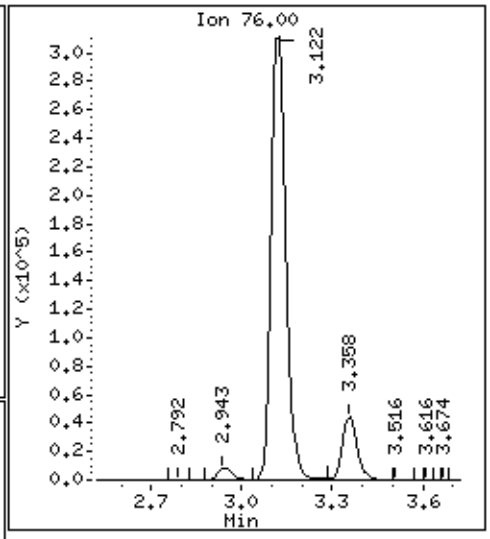
Column phase: RTx-624

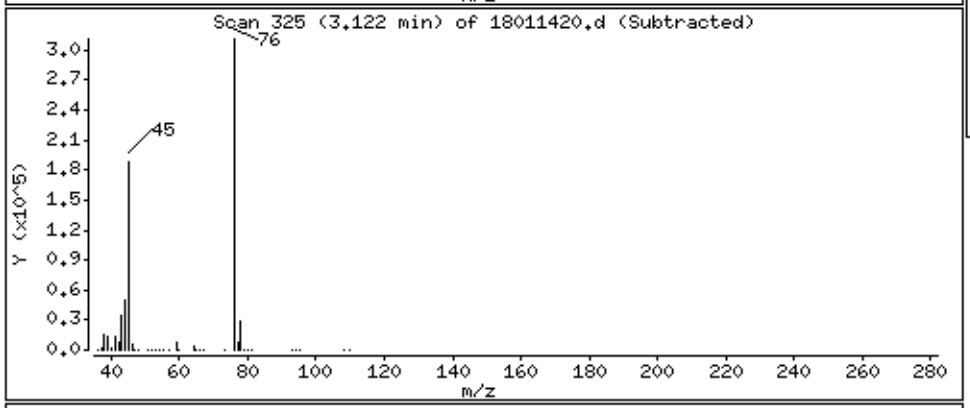
Column diameter: 0.53

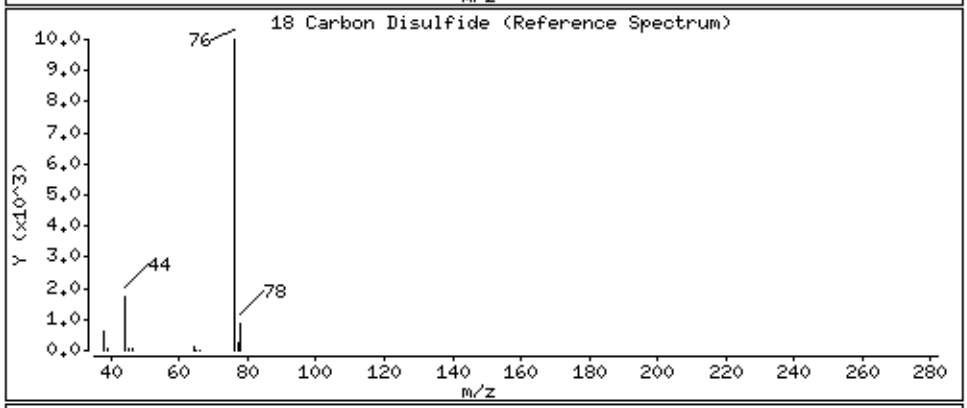
18 Carbon Disulfide

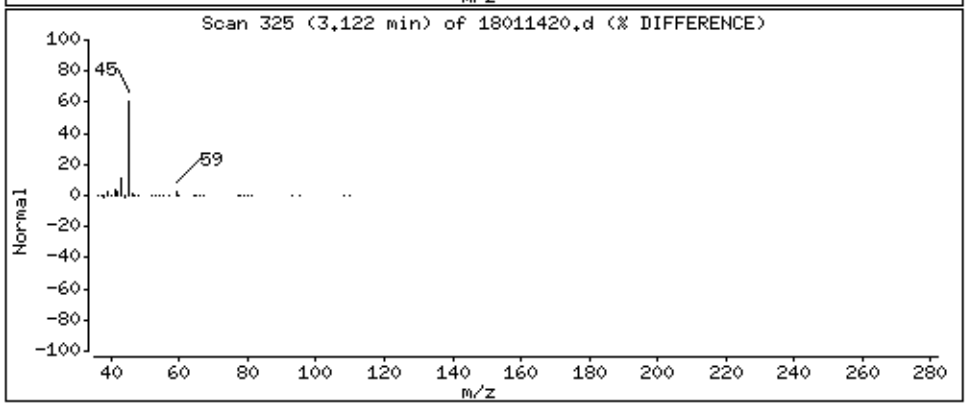
Concentration: 52.975 NG











Data File: /chem/msd18.i/14Jan2016.b/18011420.d

Date : 14-JAN-2016 21:40

Client ID:

Instrument: msd18.i

Sample Info: 20ml #2516-203, 1.0ul 2595-246-50

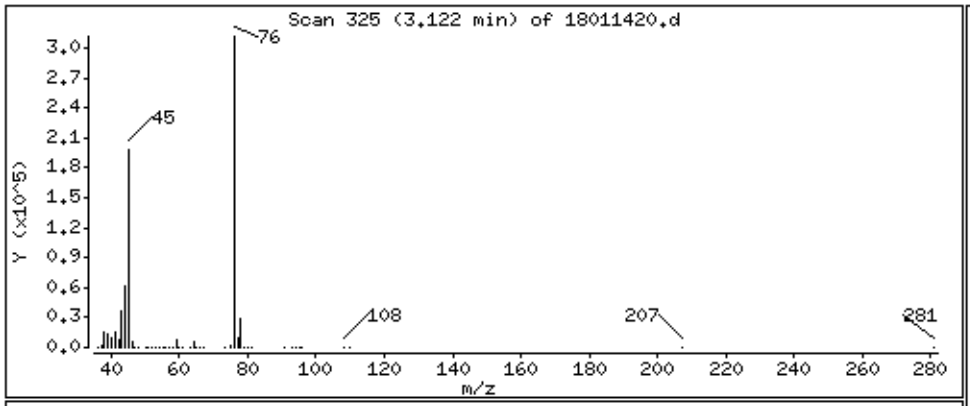
Operator: db

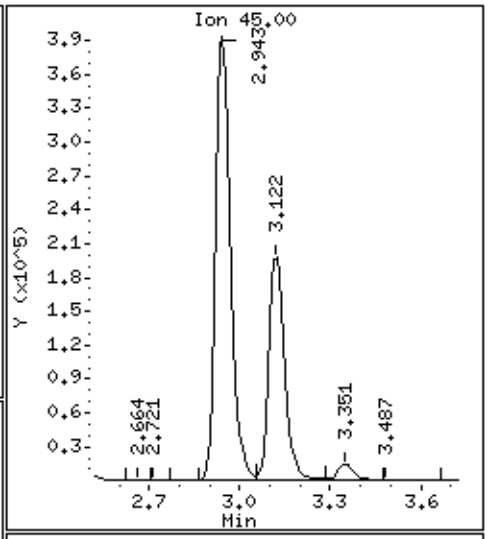
Column phase: RTx-624

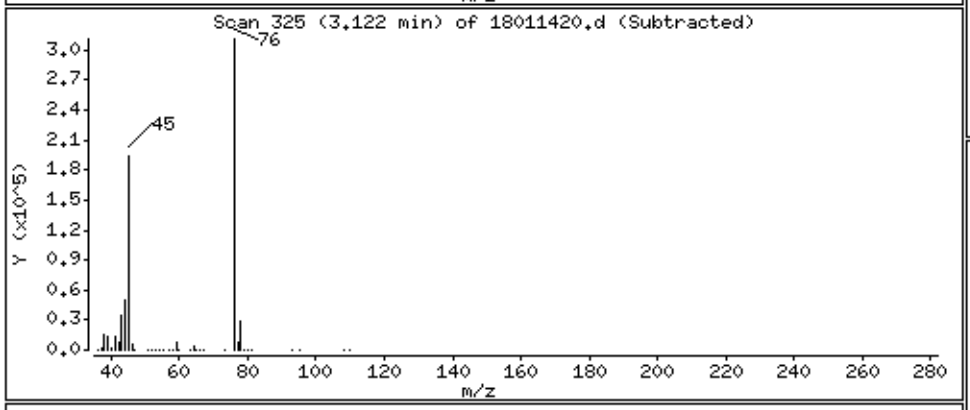
Column diameter: 0.53

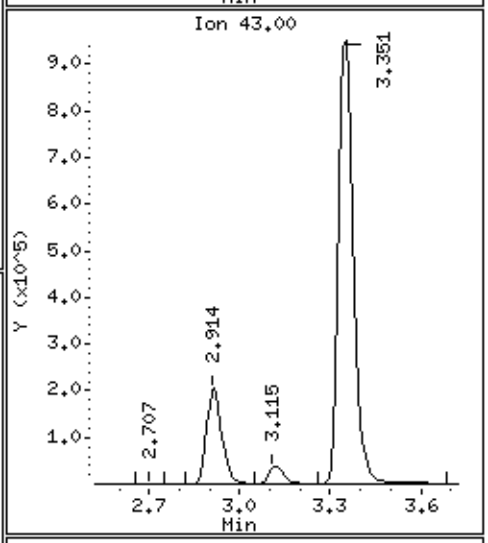
17 2-Propanol

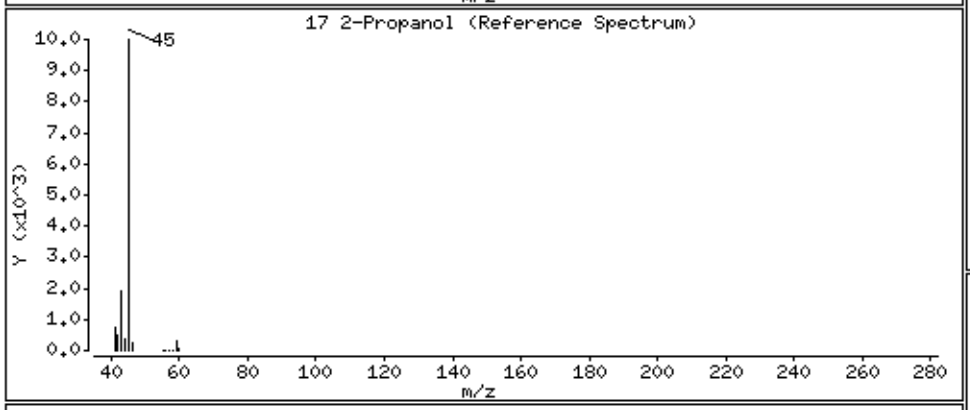
Concentration: 47.453 NG

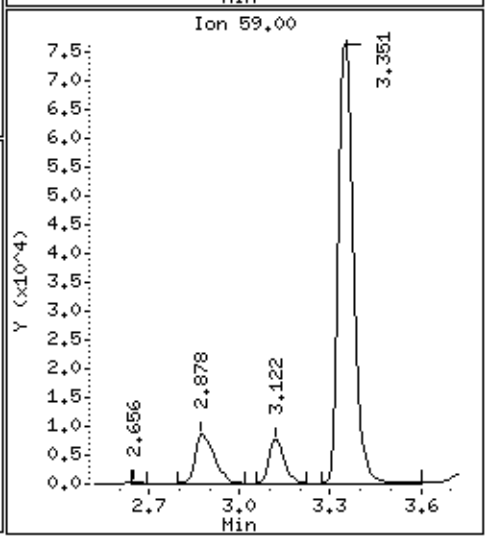


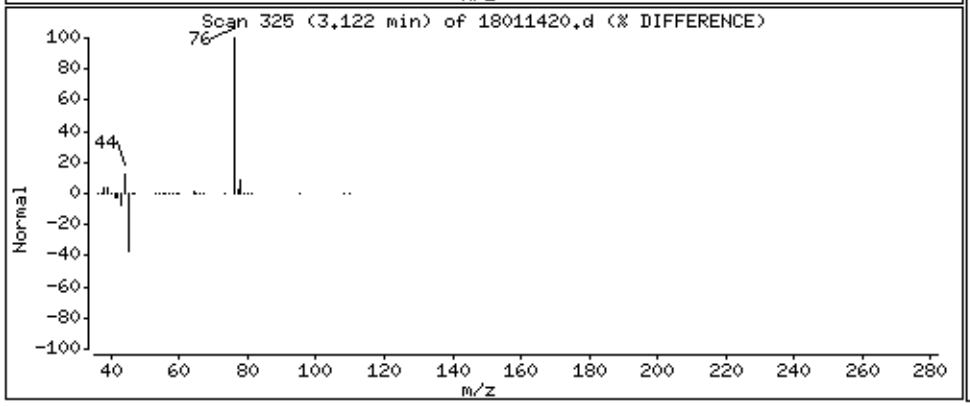












Data File: /chem/msd18.i/14Jan2016.b/18011420.d

Date : 14-JAN-2016 21:40

Client ID:

Instrument: msd18.i

Sample Info: 20ml #2516-203, 1.0ul 2595-246-50

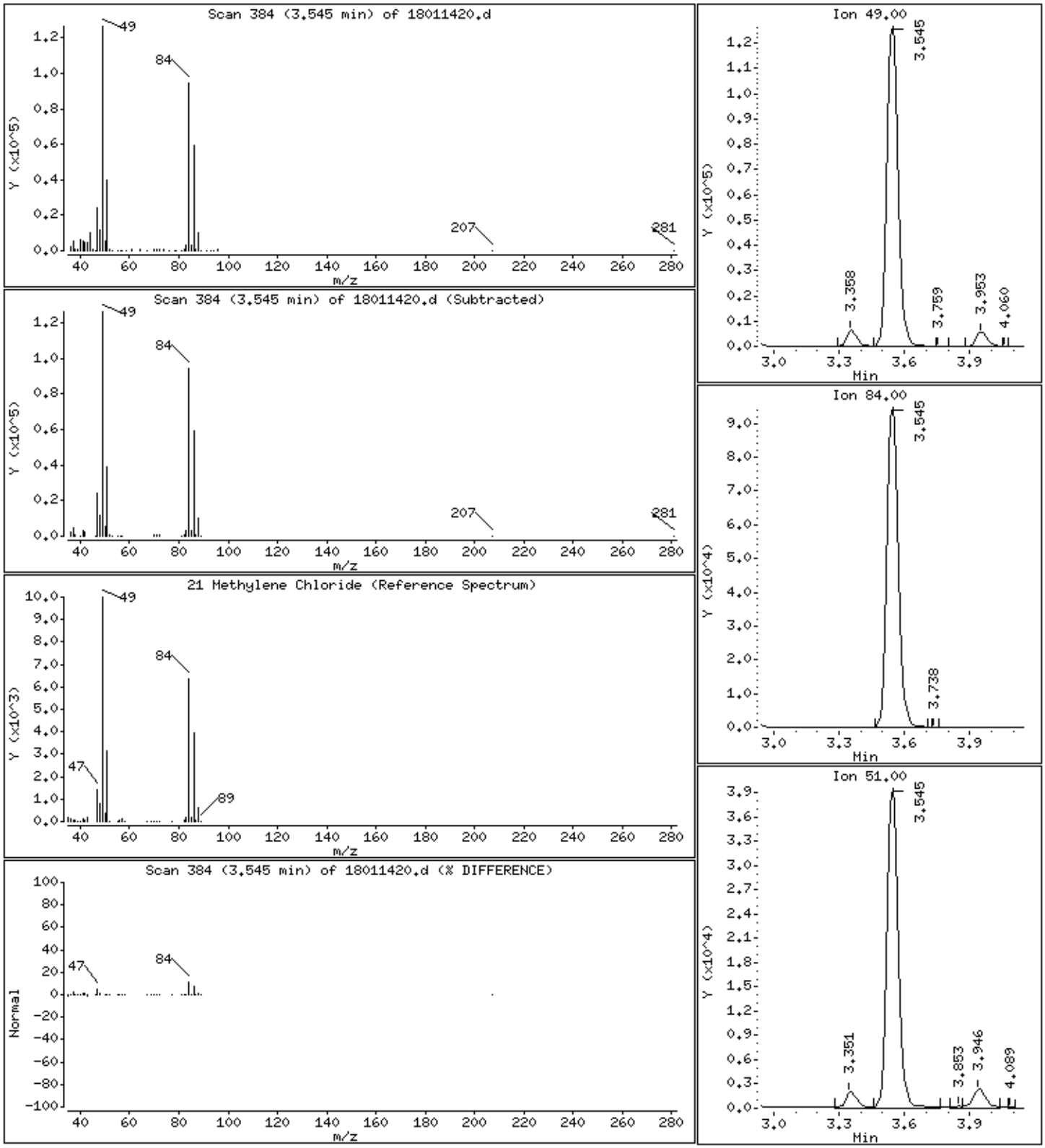
Operator: db

Column phase: RTx-624

Column diameter: 0.53

21 Methylene Chloride

Concentration: 65.634 NG



Data File: /chem/msd18.i/14Jan2016.b/18011420.d

Date : 14-JAN-2016 21:40

Client ID:

Instrument: msd18.i

Sample Info: 20ml #2516-203, 1.0ul 2595-246-50

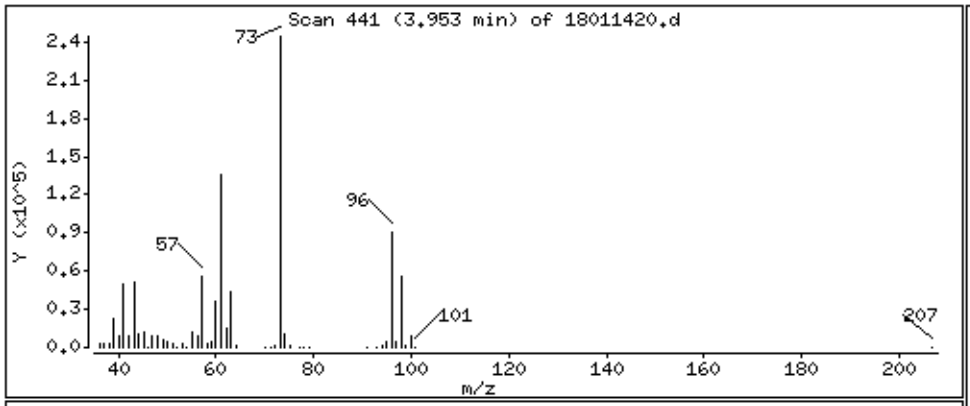
Operator: db

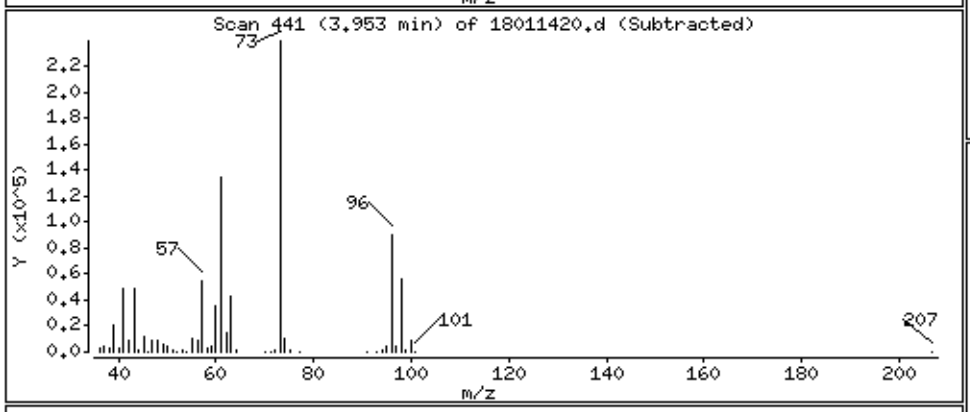
Column phase: RTx-624

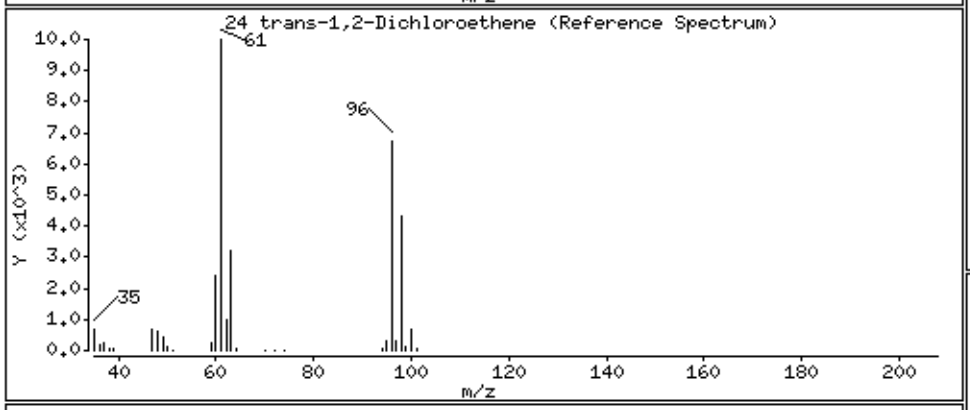
Column diameter: 0.53

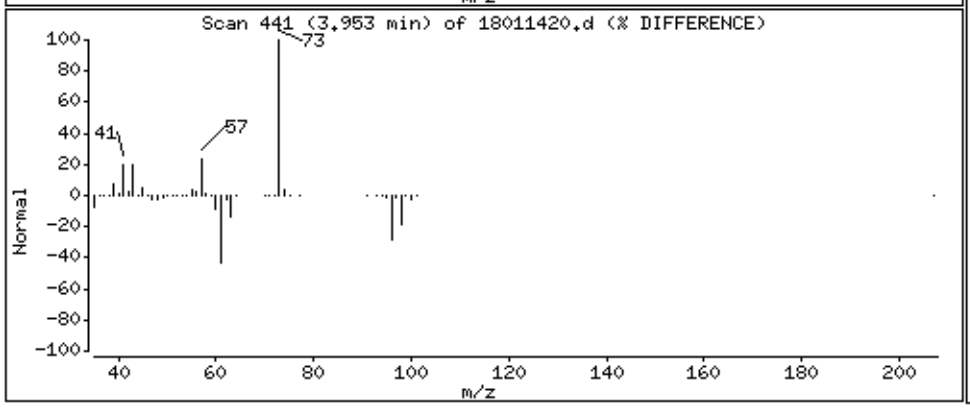
24 trans-1,2-Dichloroethene

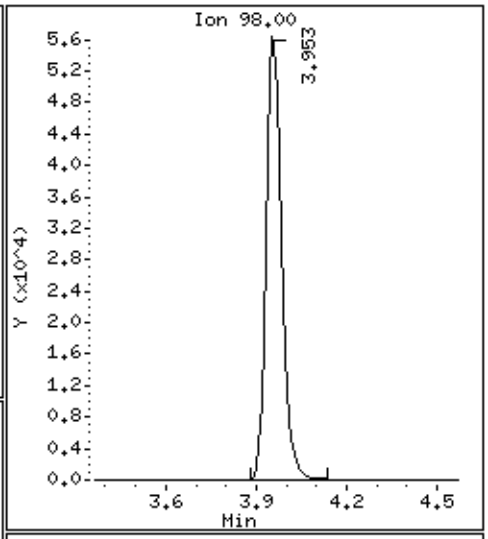
Concentration: 70.124 NG

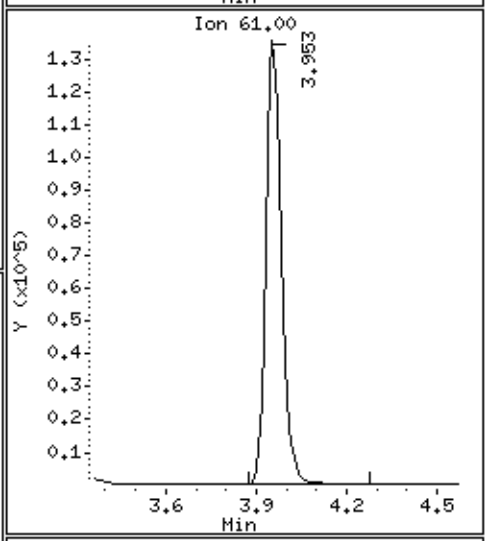


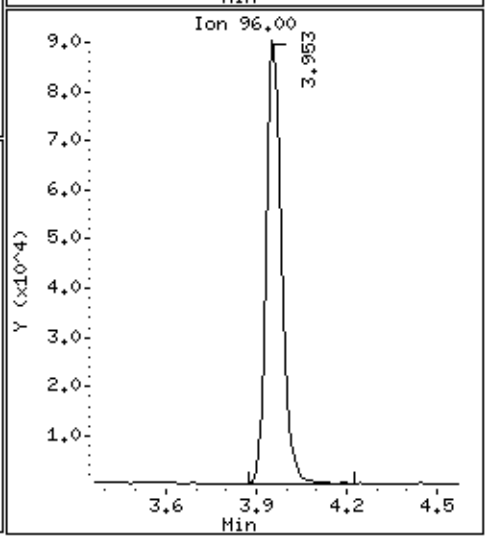












Data File: /chem/msd18.i/14Jan2016.b/18011420.d

Date : 14-JAN-2016 21:40

Client ID:

Instrument: msd18.i

Sample Info: 20ml #2516-203, 1.0ul 2595-246-50

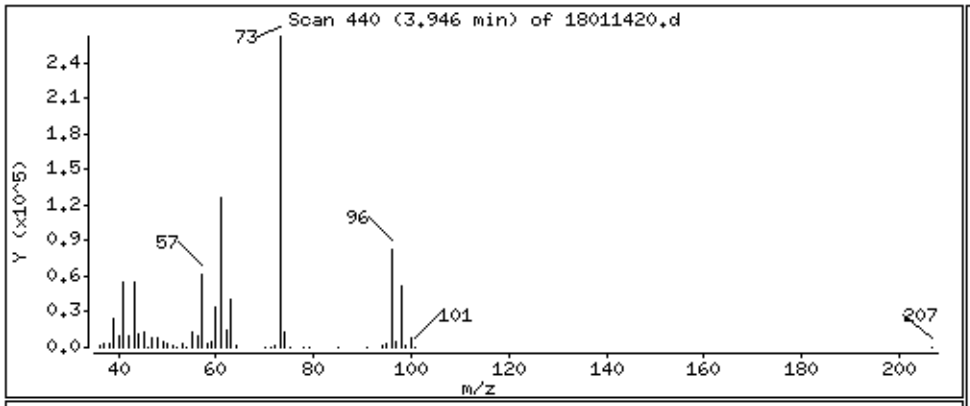
Operator: db

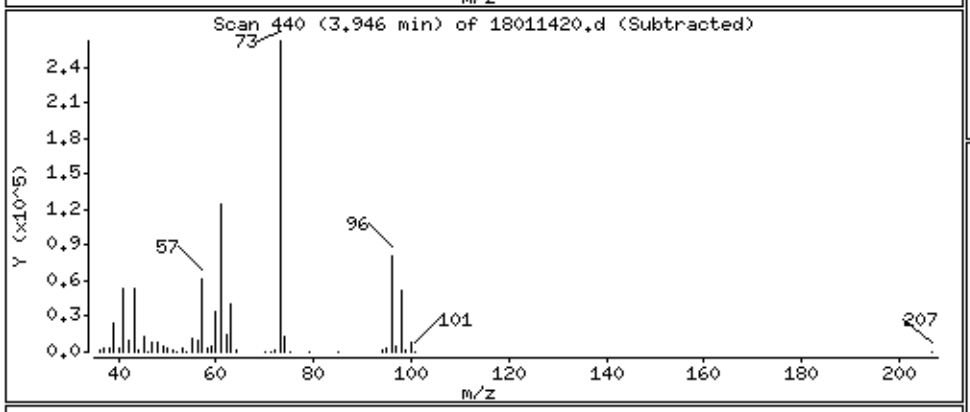
Column phase: RTx-624

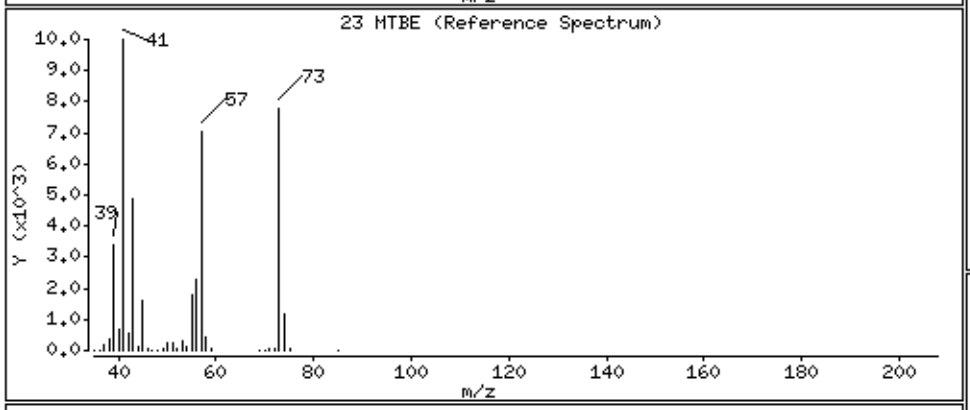
Column diameter: 0.53

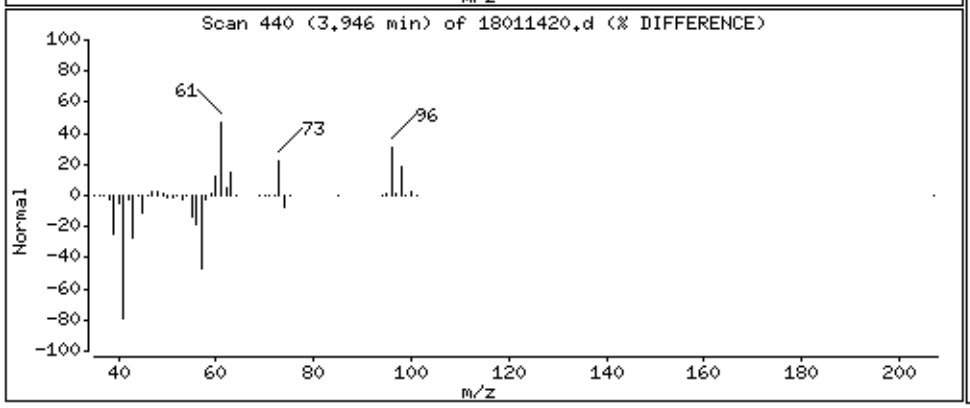
23 MTBE

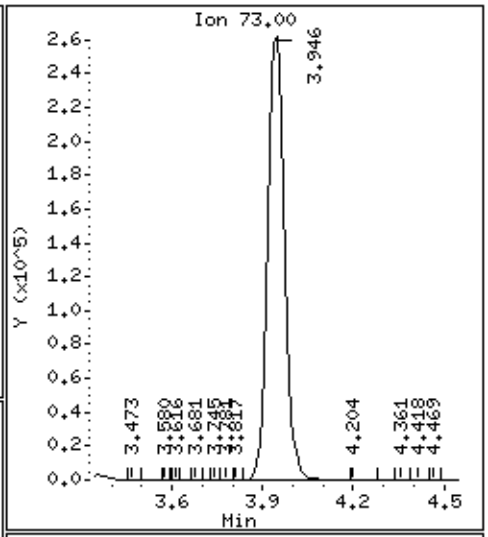
Concentration: 78.246 NG

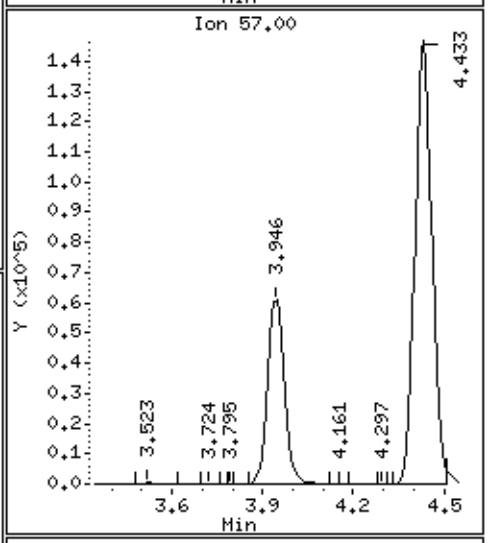


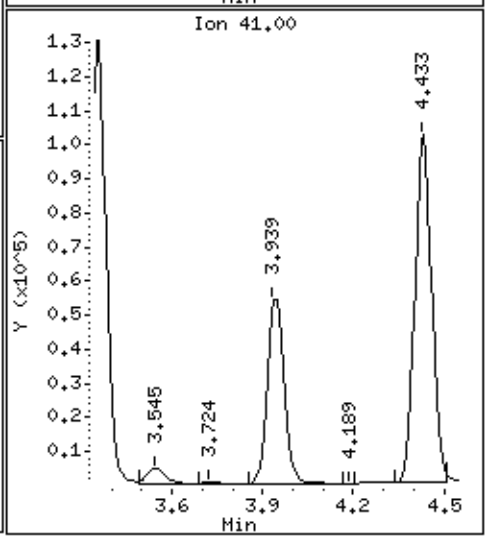












Data File: /chem/msd18.i/14Jan2016.b/18011420.d

Date : 14-JAN-2016 21:40

Client ID:

Instrument: msd18.i

Sample Info: 20ml #2516-203, 1.0ul 2595-246-50

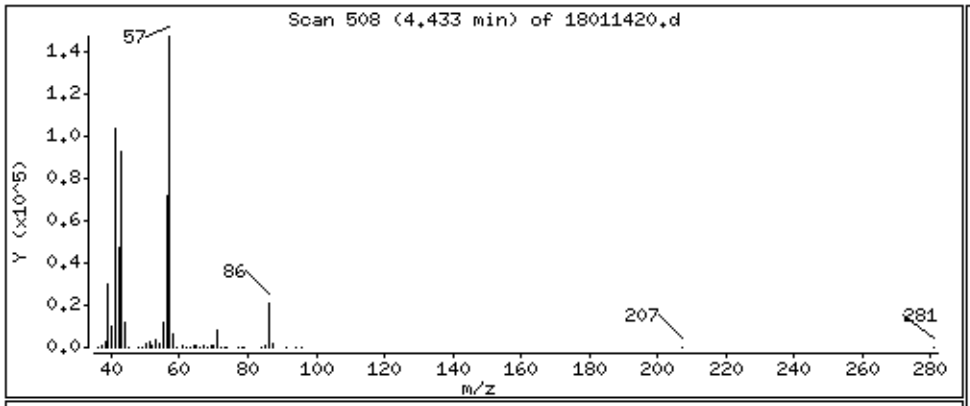
Operator: db

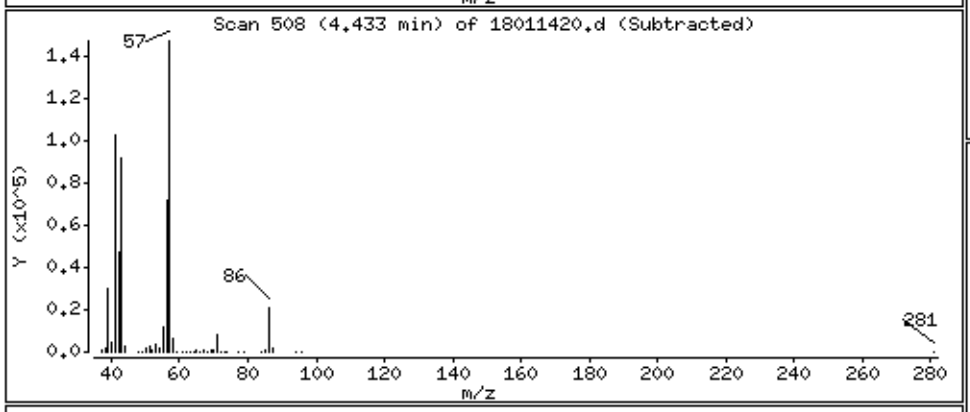
Column phase: RTx-624

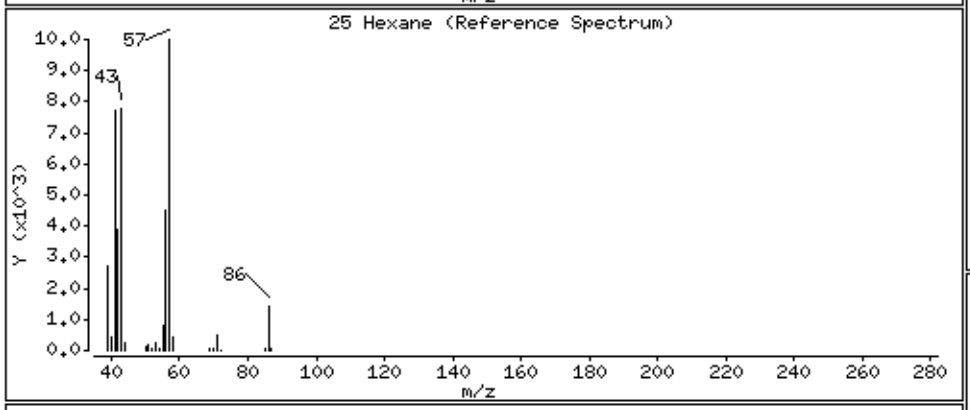
Column diameter: 0.53

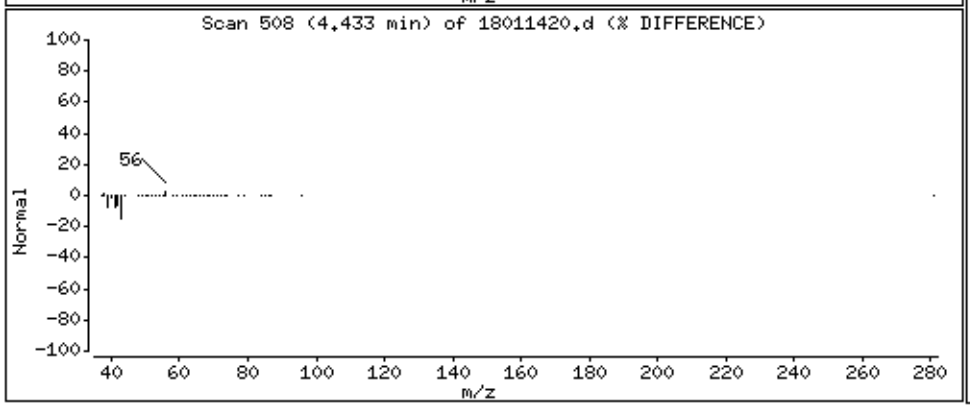
25 Hexane

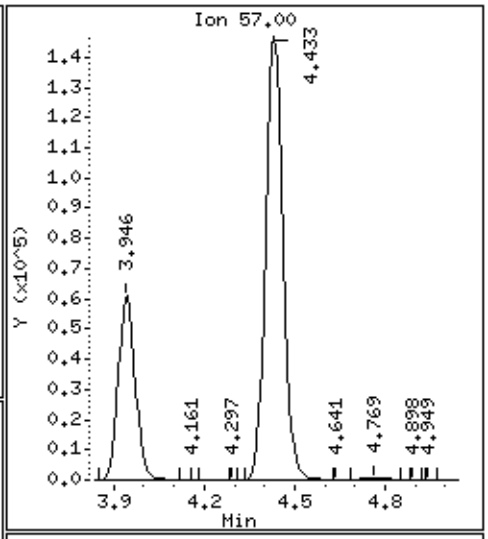
Concentration: 74.184 NG

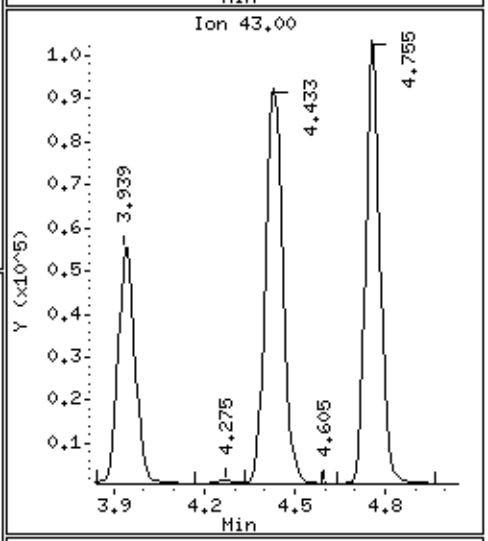


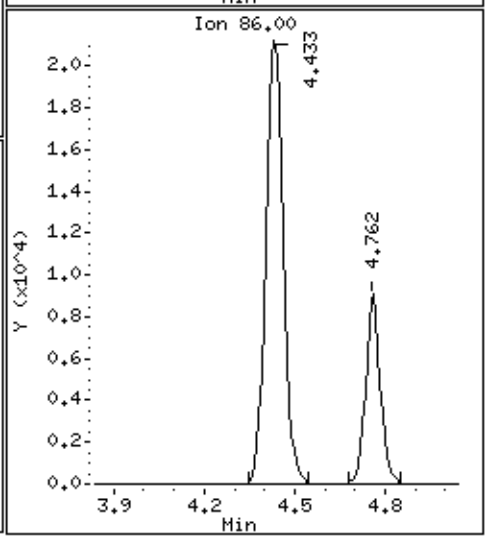












Data File: /chem/msd18.i/14Jan2016.b/18011420.d

Date : 14-JAN-2016 21:40

Client ID:

Instrument: msd18.i

Sample Info: 20ml #2516-203, 1.0ul 2595-246-50

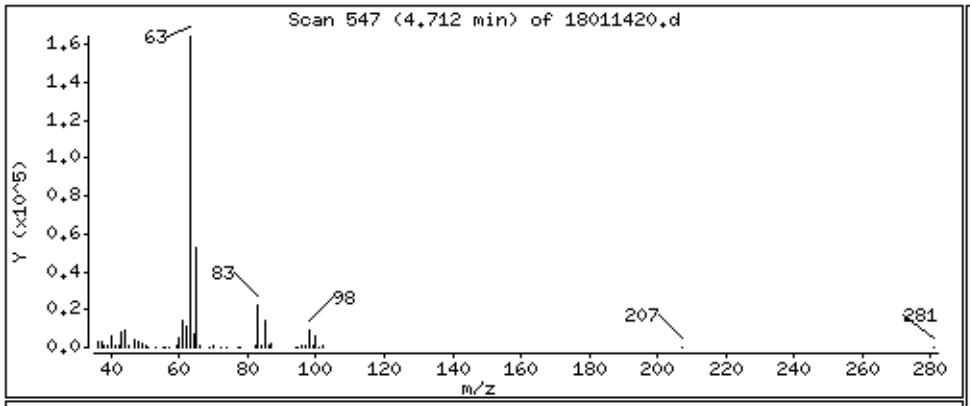
Operator: db

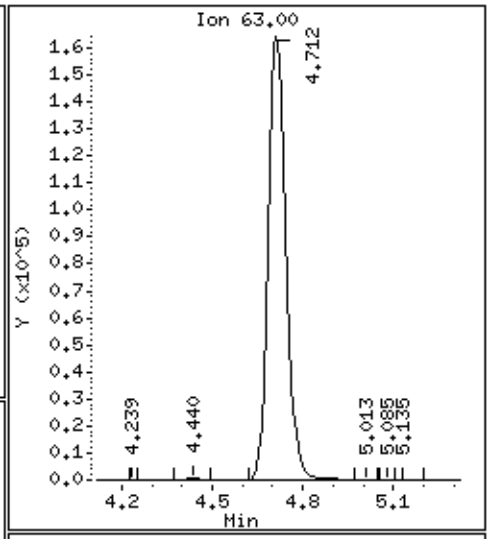
Column phase: RTx-624

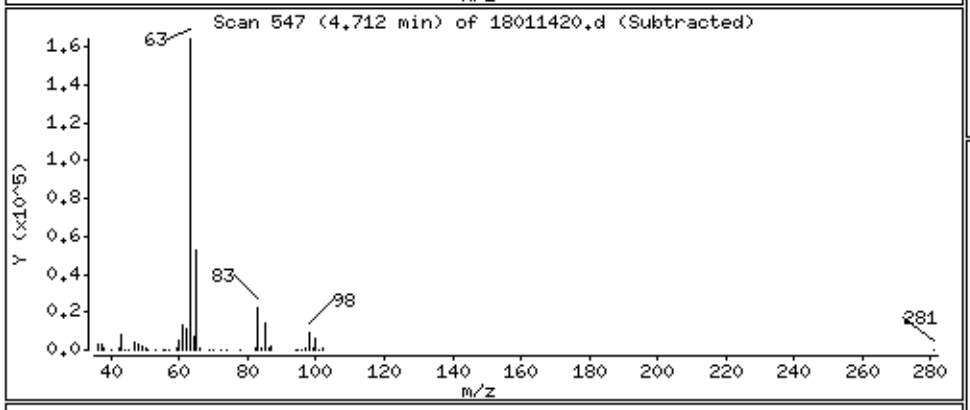
Column diameter: 0.53

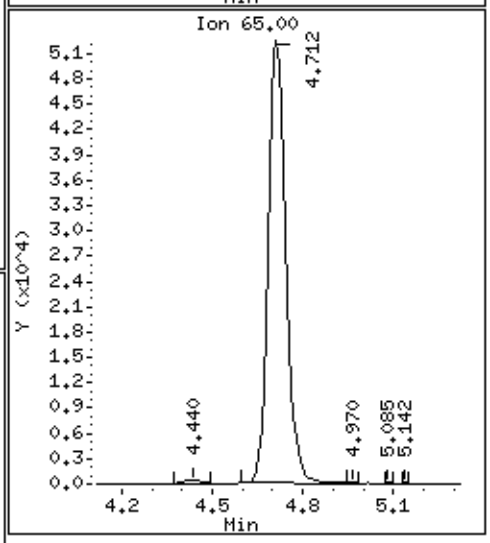
26 1,1-Dichloroethane

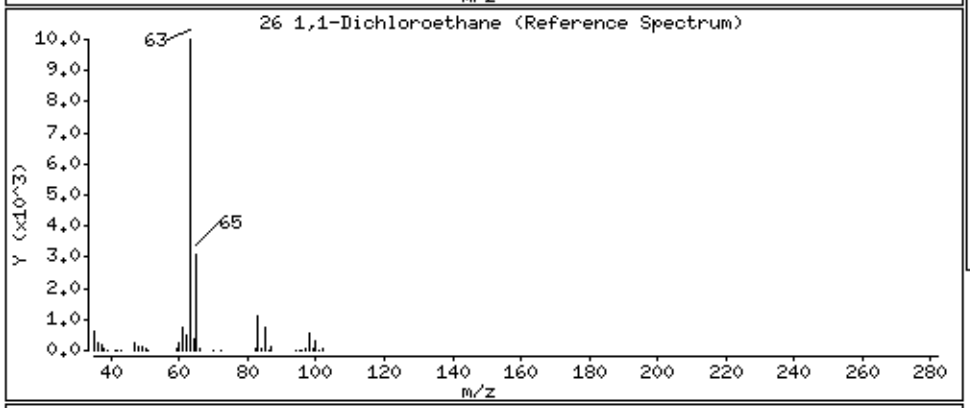
Concentration: 85.685 NG

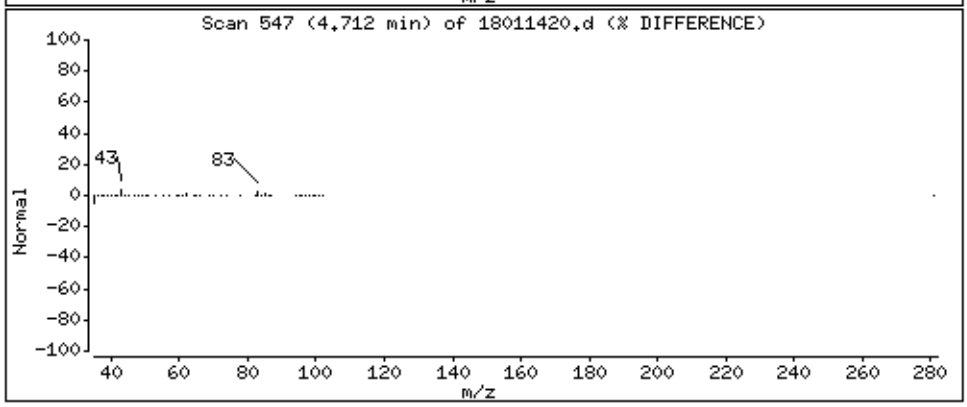












Data File: /chem/msd18.i/14Jan2016.b/18011420.d

Date : 14-JAN-2016 21:40

Client ID:

Instrument: msd18.i

Sample Info: 20ml #2516-203, 1.0ul 2595-246-50

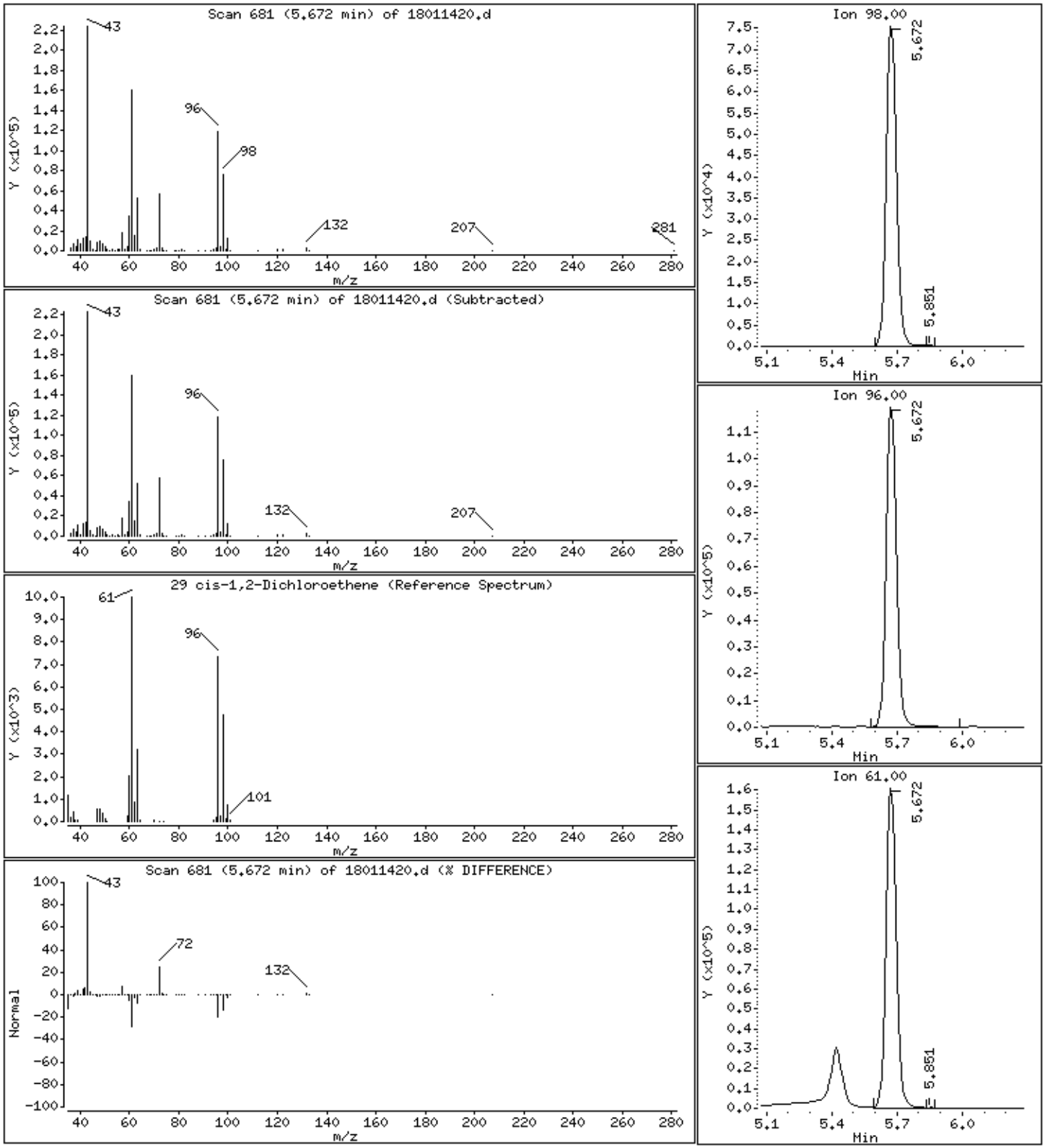
Operator: db

Column phase: RTx-624

Column diameter: 0.53

29 cis-1,2-Dichloroethene

Concentration: 89.892 NG



Data File: /chem/msd18.i/14Jan2016.b/18011420.d

Date : 14-JAN-2016 21:40

Client ID:

Instrument: msd18.i

Sample Info: 20ml #2516-203, 1.0ul 2595-246-50

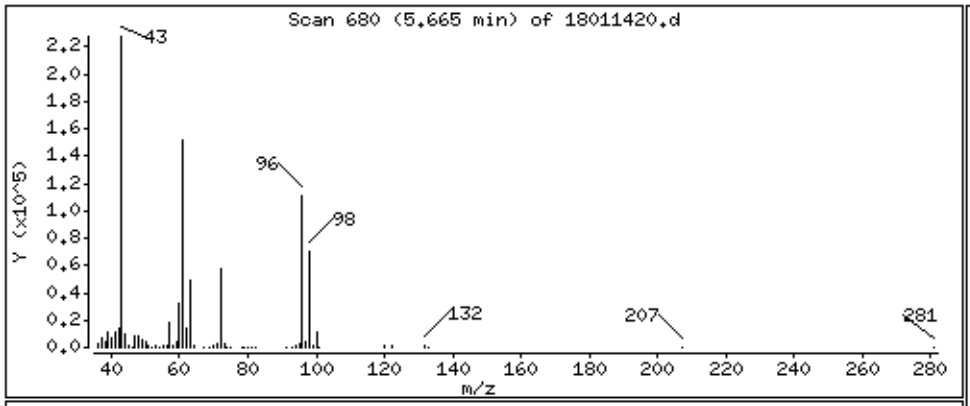
Operator: db

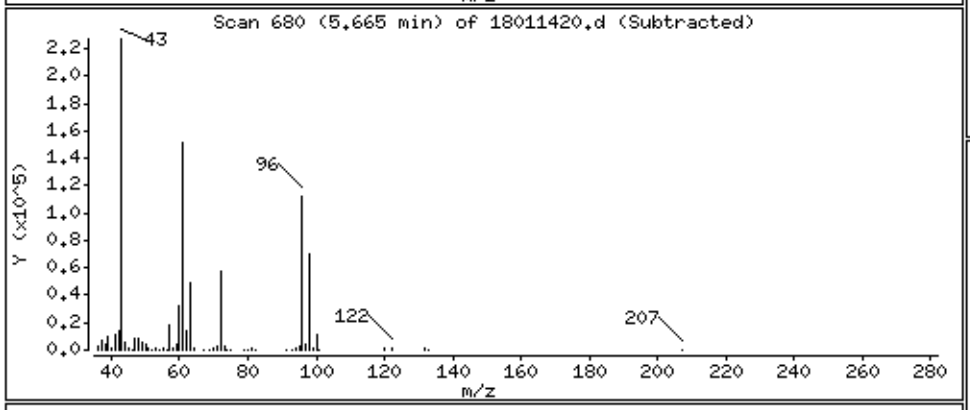
Column phase: RTx-624

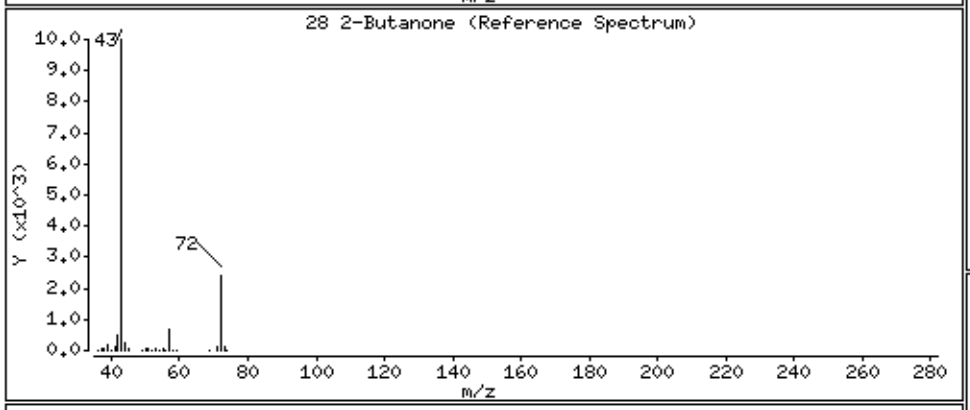
Column diameter: 0.53

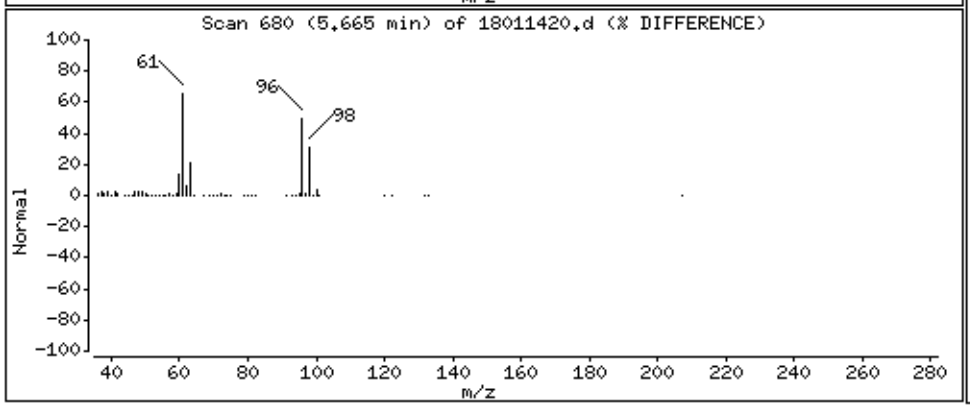
28 2-Butanone

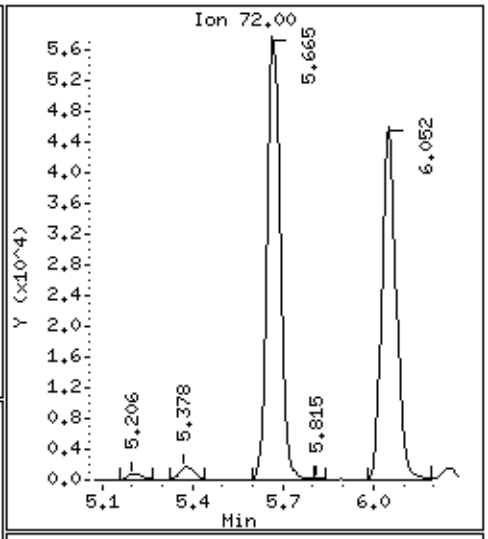
Concentration: 52.461 NG

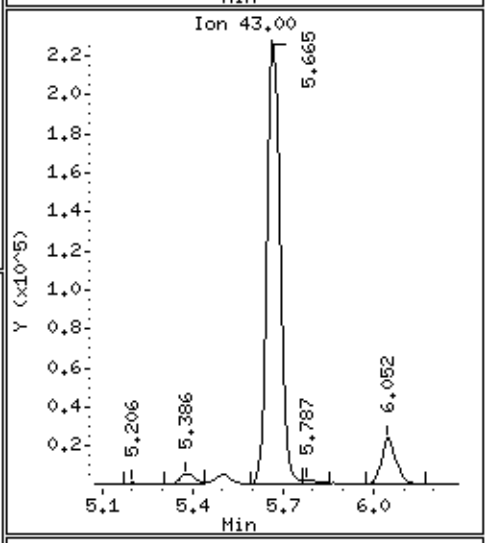


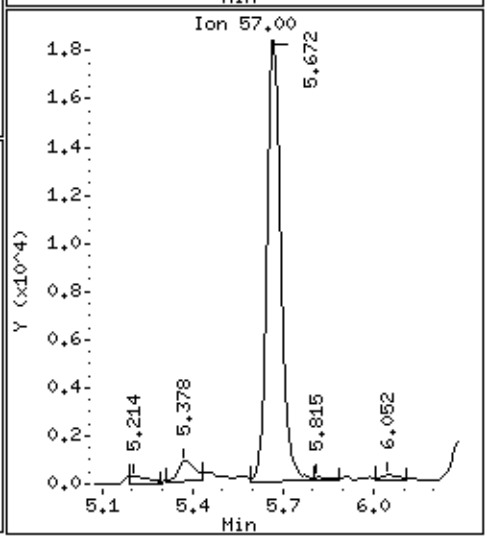












Data File: /chem/msd18.i/14Jan2016.b/18011420.d

Date : 14-JAN-2016 21:40

Client ID:

Instrument: msd18.i

Sample Info: 20ml #2516-203, 1.0ul 2595-246-50

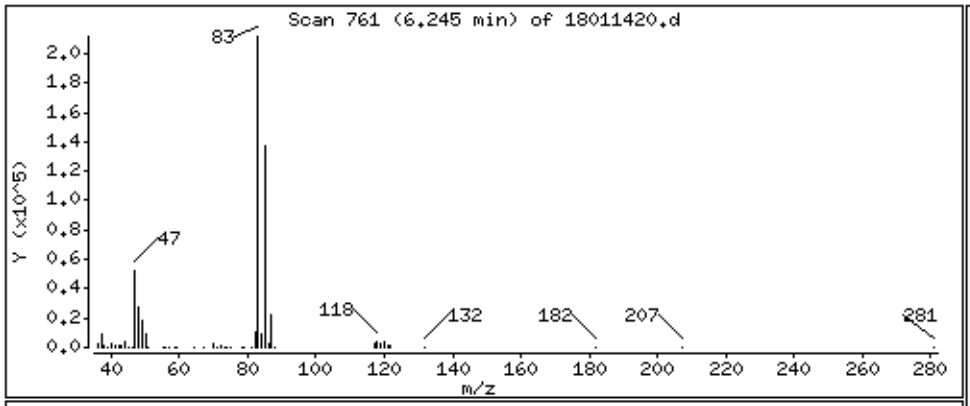
Operator: db

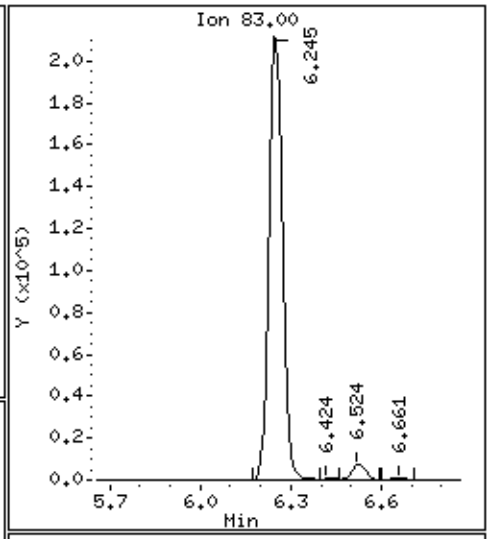
Column phase: RTx-624

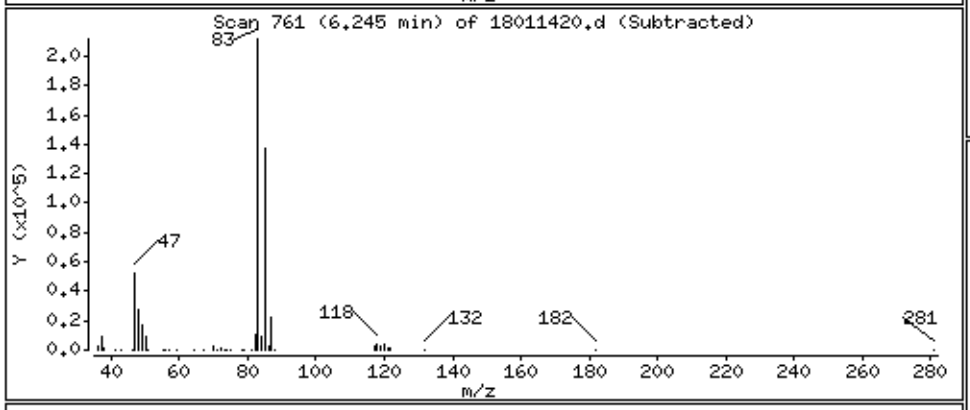
Column diameter: 0.53

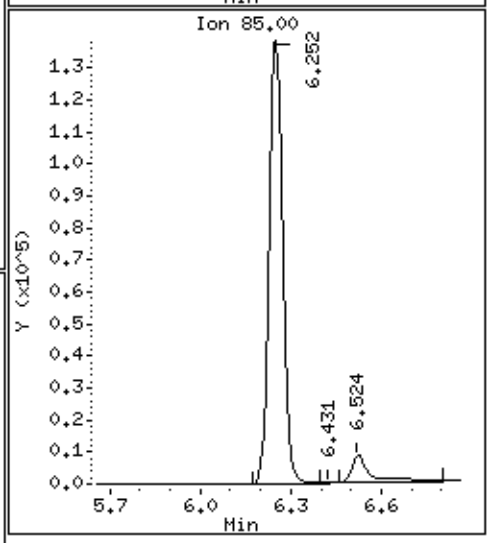
35 Chloroform

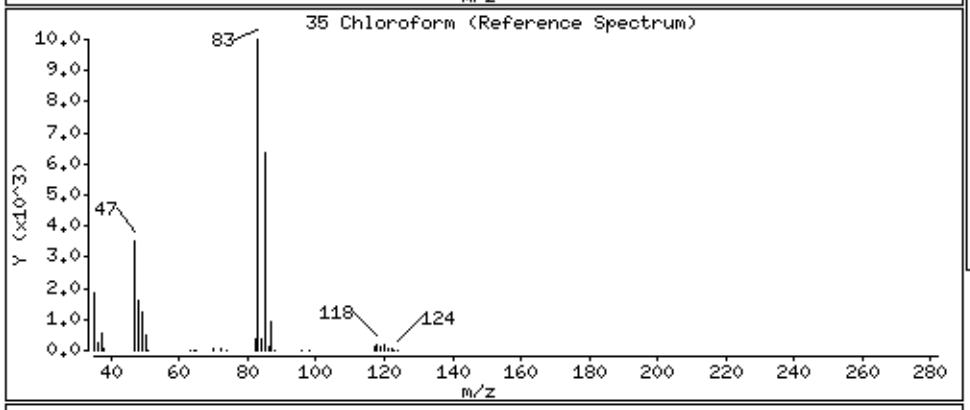
Concentration: 100.00 NG

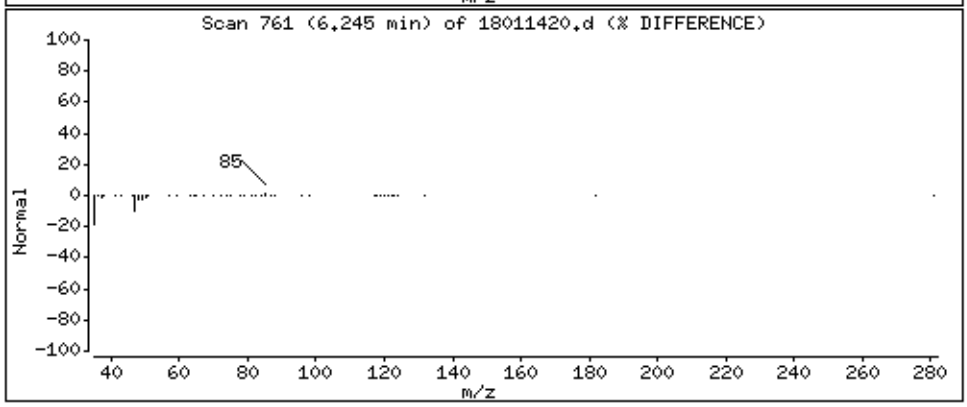












Data File: /chem/msd18.i/14Jan2016.b/18011420.d

Date : 14-JAN-2016 21:40

Client ID:

Instrument: msd18.i

Sample Info: 20ml #2516-203, 1.0ul 2595-246-50

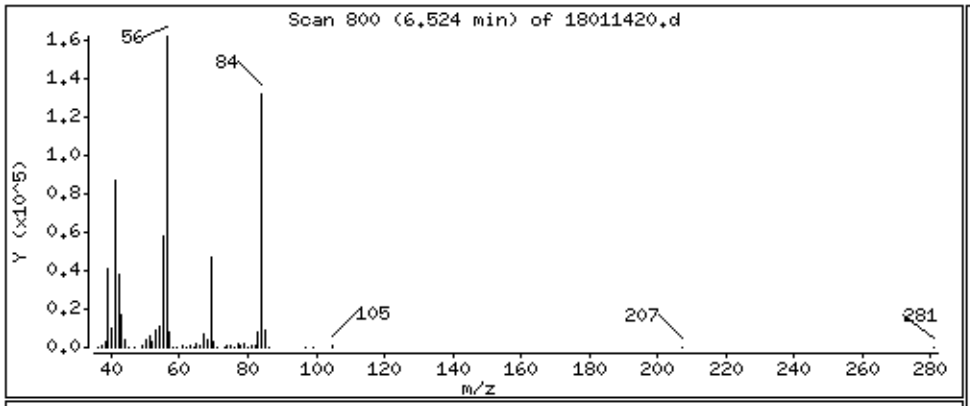
Operator: db

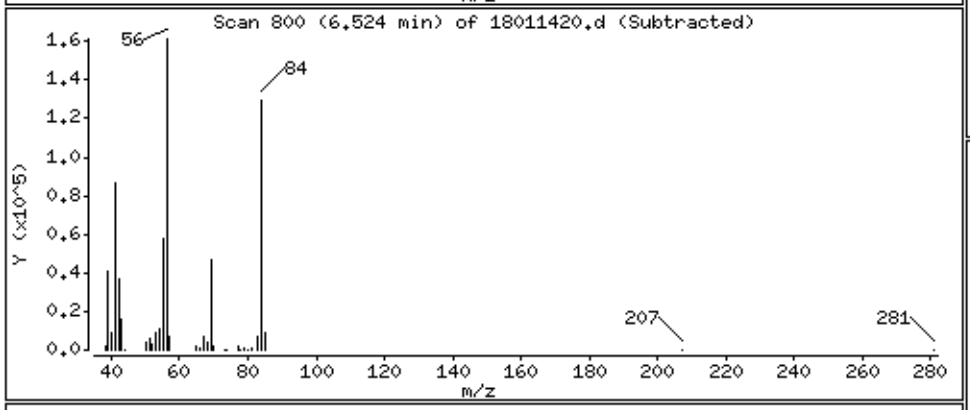
Column phase: RTx-624

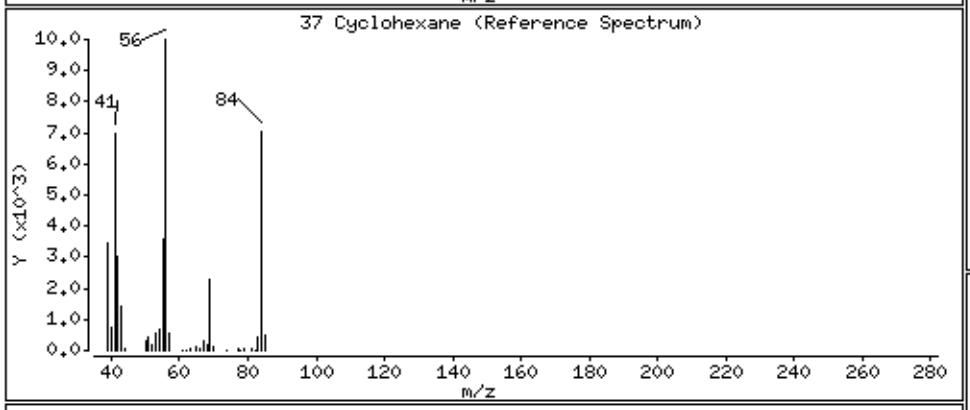
Column diameter: 0.53

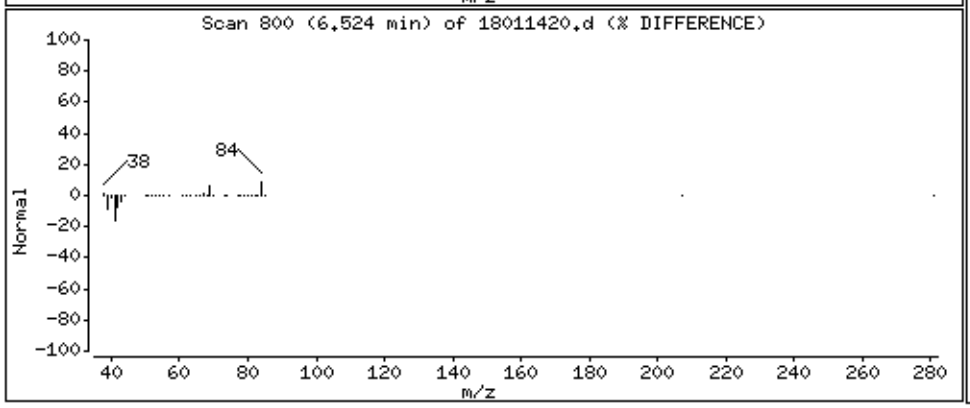
37 Cyclohexane

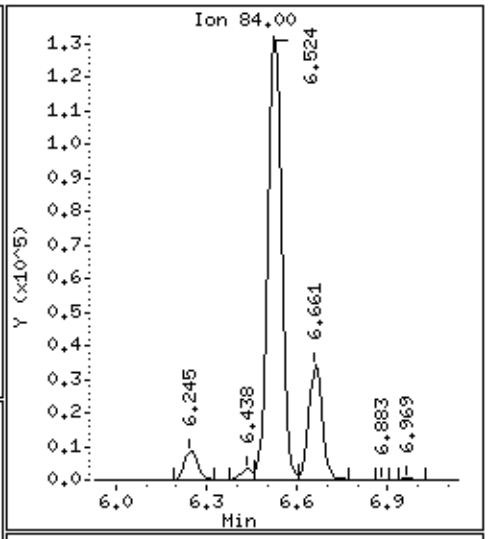
Concentration: 69.062 NG

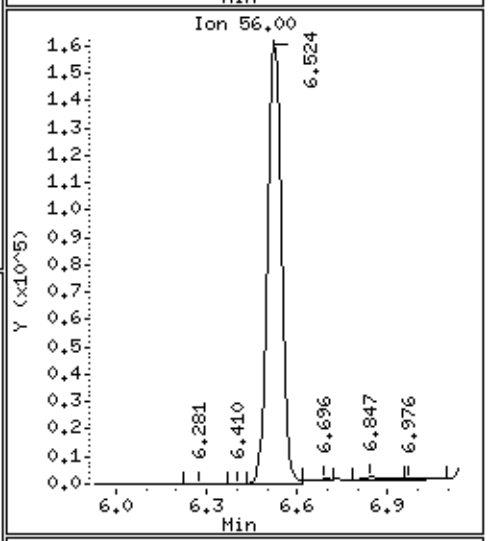


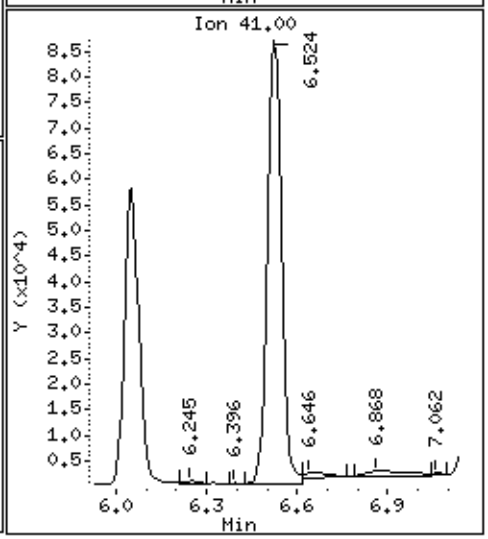












Data File: /chem/msd18.i/14Jan2016.b/18011420.d

Date : 14-JAN-2016 21:40

Client ID:

Instrument: msd18.i

Sample Info: 20ml #2516-203, 1.0ul 2595-246-50

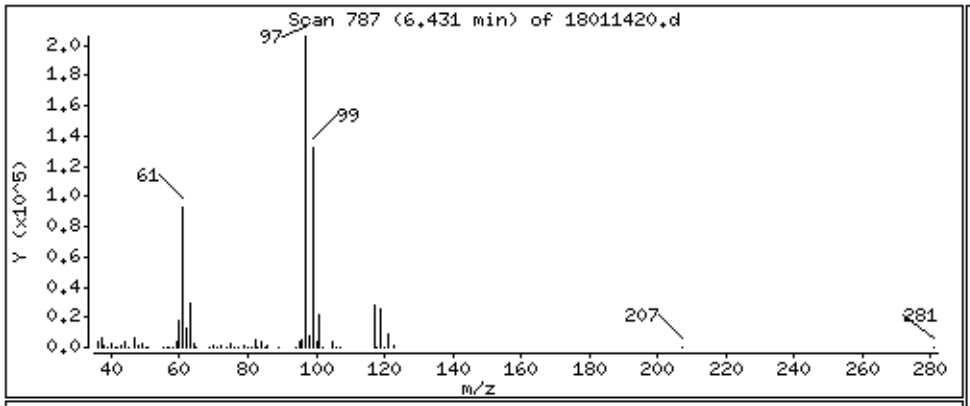
Operator: db

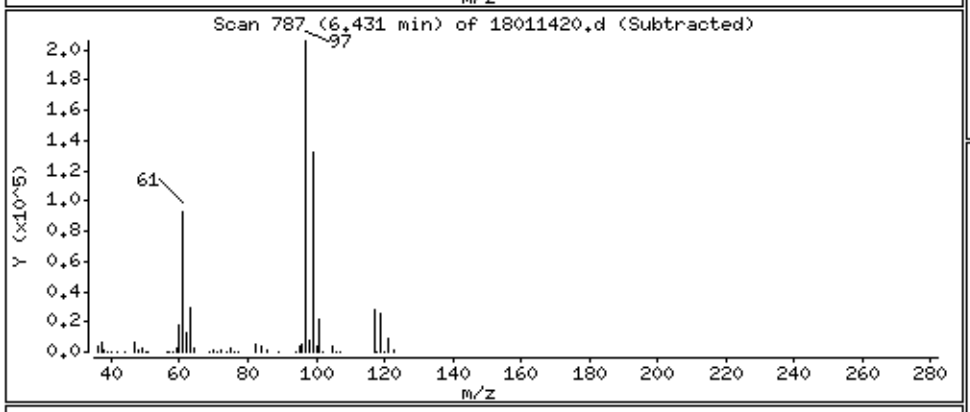
Column phase: RTx-624

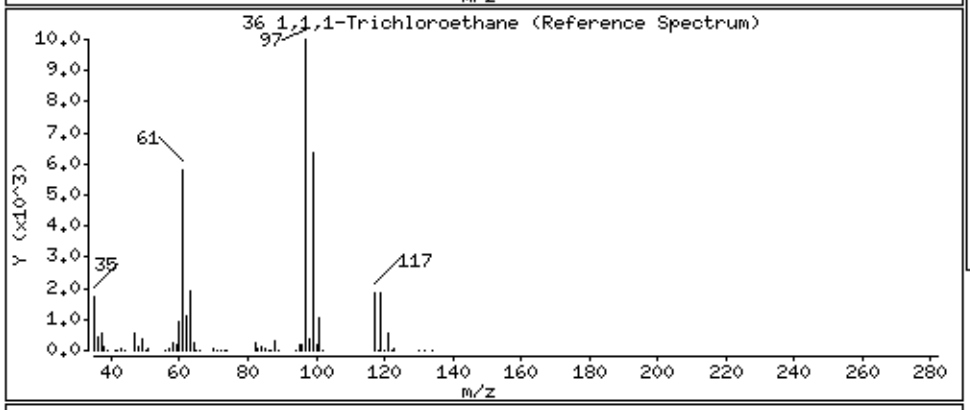
Column diameter: 0.53

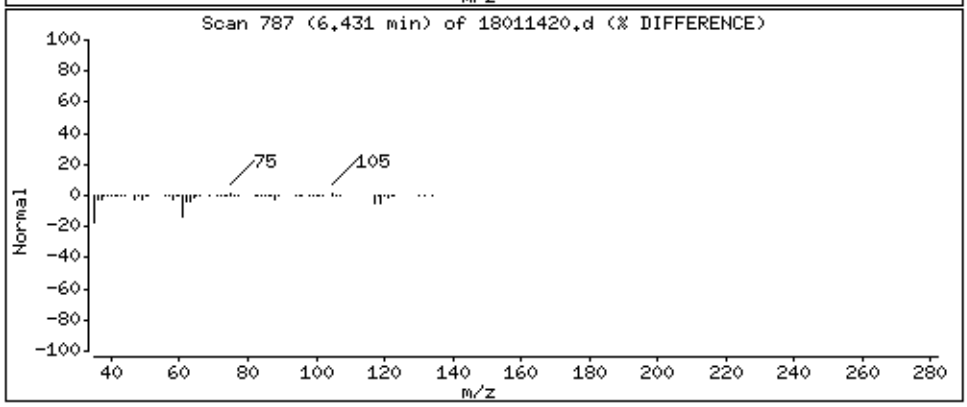
36 1,1,1-Trichloroethane

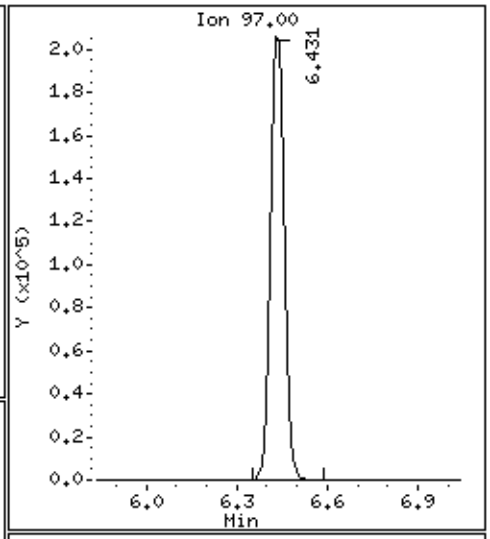
Concentration: 114.62 NG

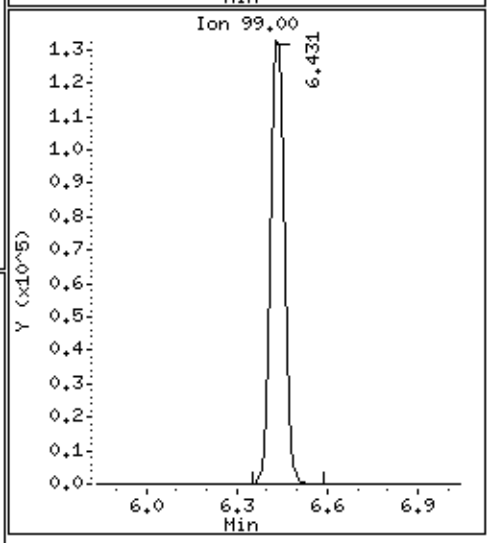












Data File: /chem/msd18.i/14Jan2016.b/18011420.d

Date : 14-JAN-2016 21:40

Client ID:

Instrument: msd18.i

Sample Info: 20ml #2516-203, 1.0ul 2595-246-50

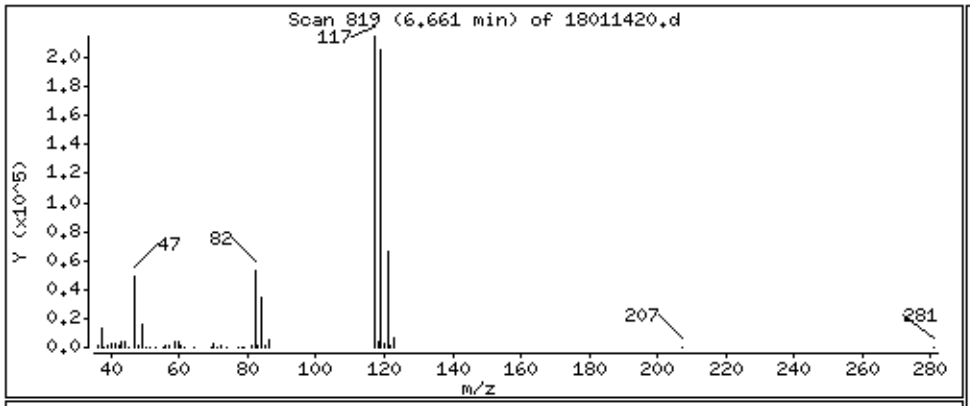
Operator: db

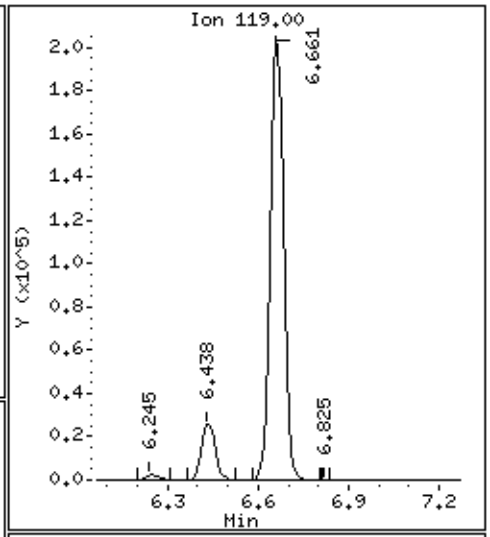
Column phase: RTx-624

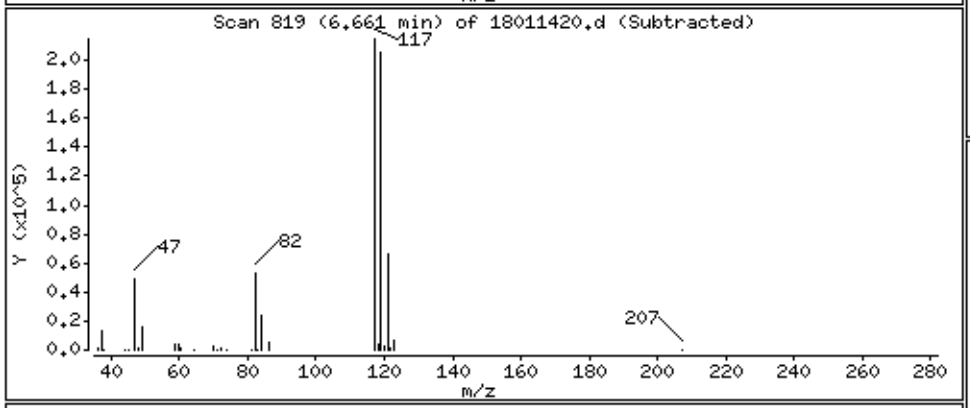
Column diameter: 0.53

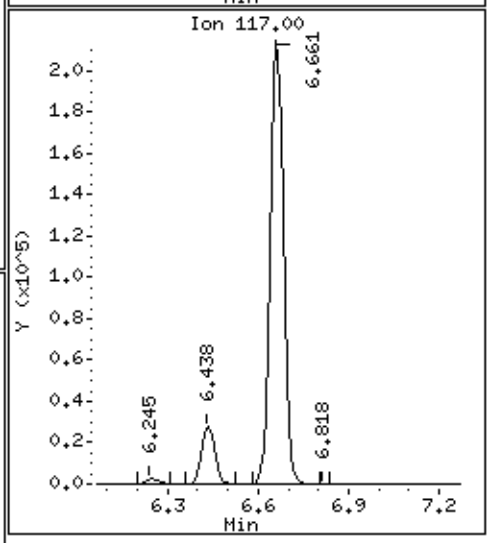
38 Carbon Tetrachloride

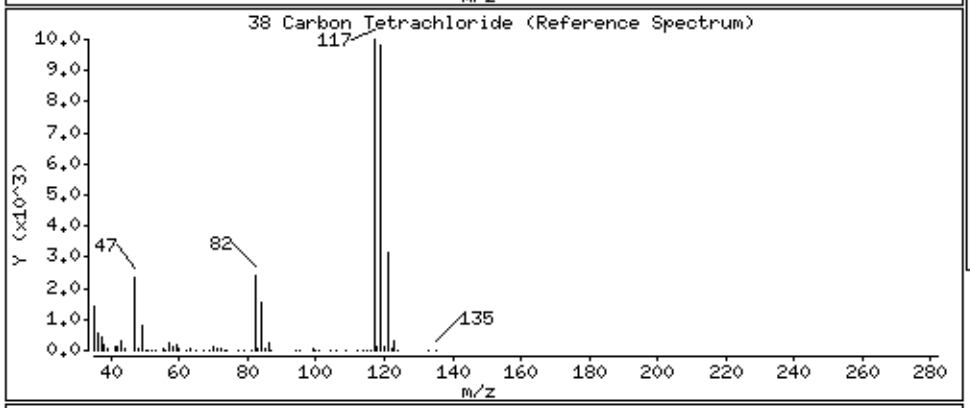
Concentration: 129.63 NG

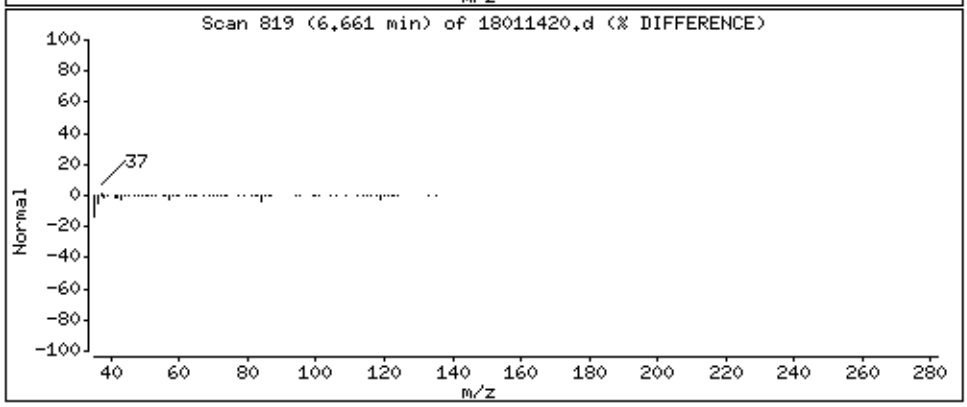












Data File: /chem/msd18.i/14Jan2016.b/18011420.d

Date : 14-JAN-2016 21:40

Client ID:

Instrument: msd18.i

Sample Info: 20ml #2516-203, 1.0ul 2595-246-50

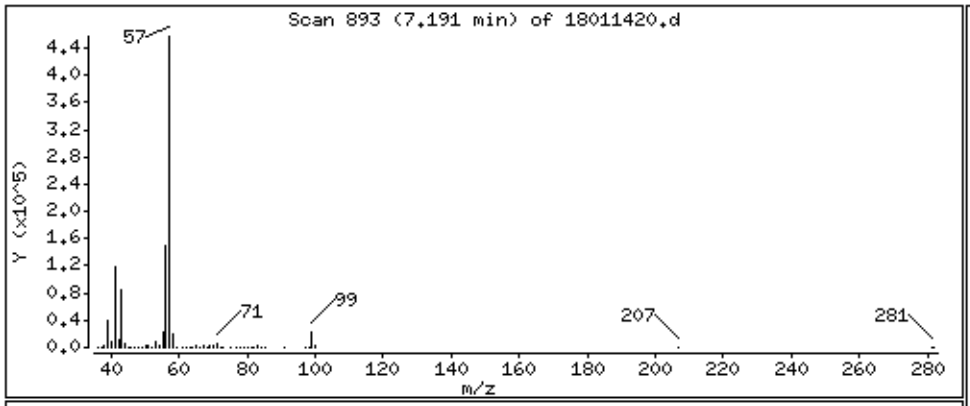
Operator: db

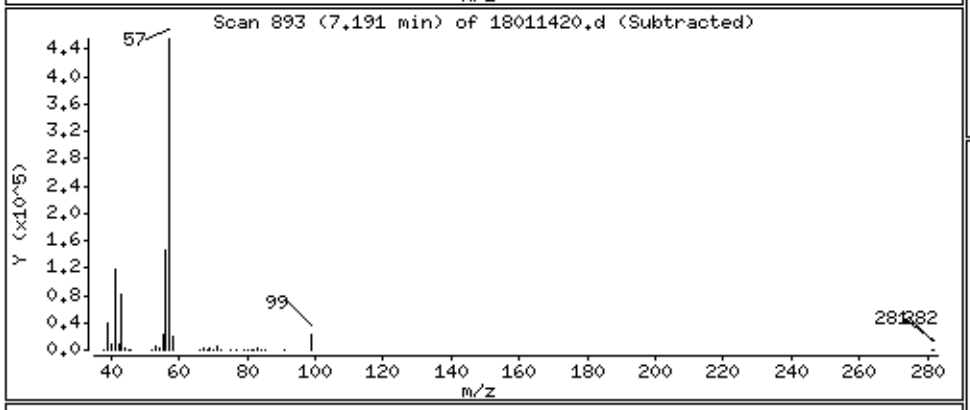
Column phase: RTx-624

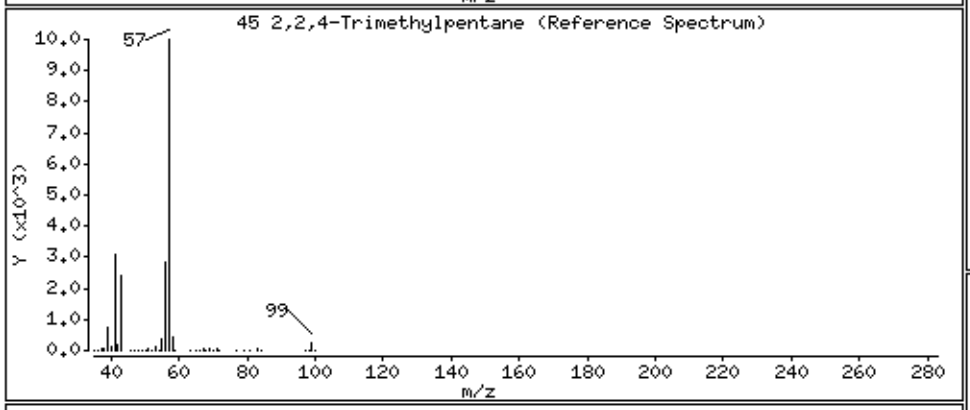
Column diameter: 0.53

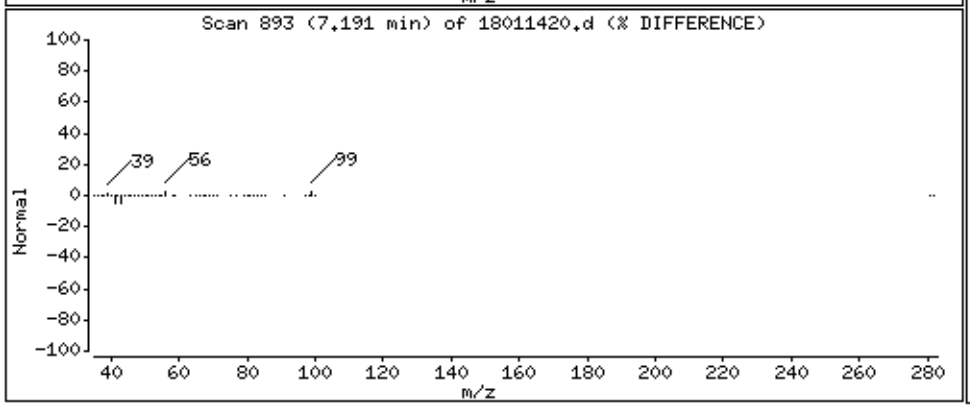
45 2,2,4-Trimethylpentane

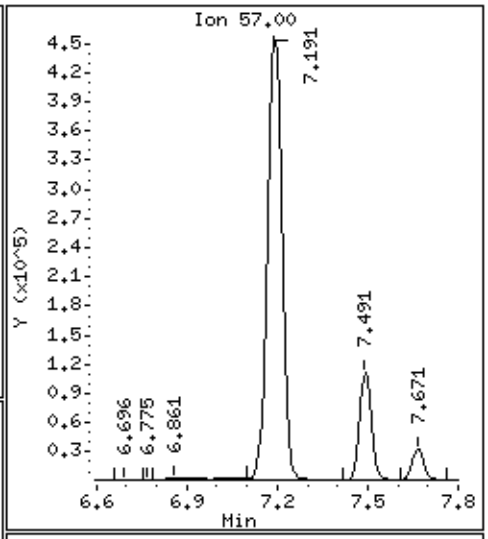
Concentration: 88.314 NG

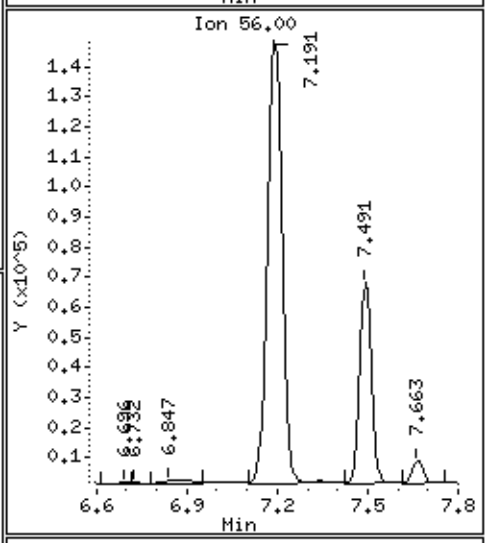


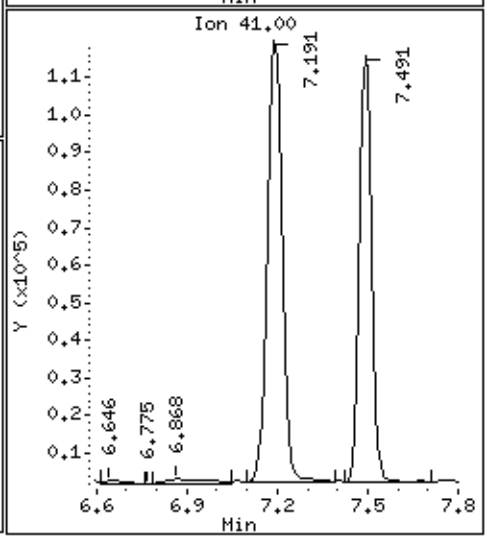












Data File: /chem/msd18.i/14Jan2016.b/18011420.d

Date : 14-JAN-2016 21:40

Client ID:

Instrument: msd18.i

Sample Info: 20ml #2516-203, 1.0ul 2595-246-50

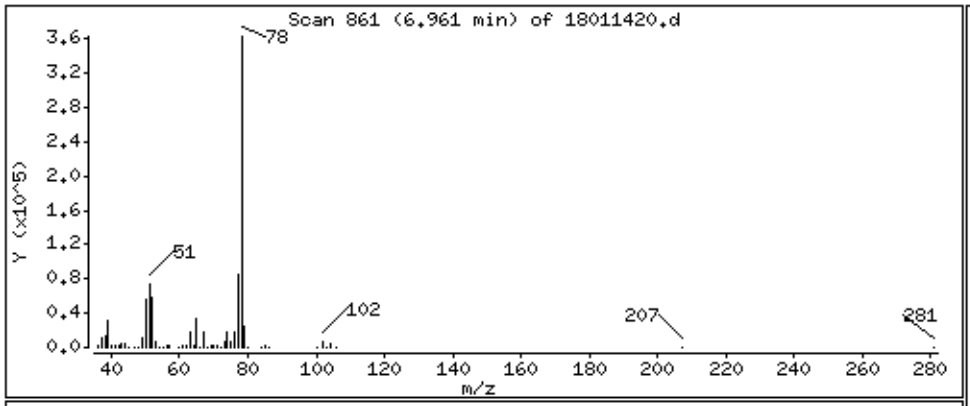
Operator: db

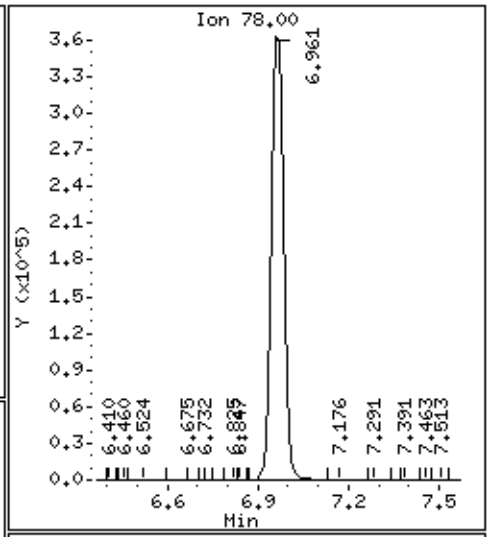
Column phase: RTx-624

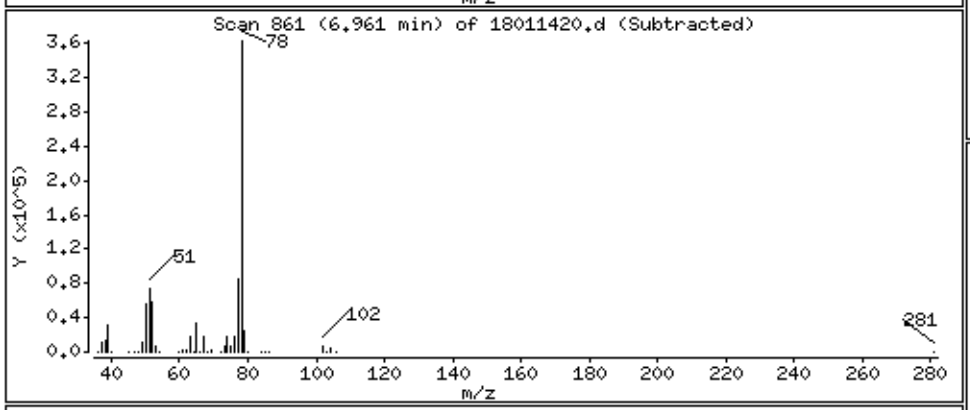
Column diameter: 0.53

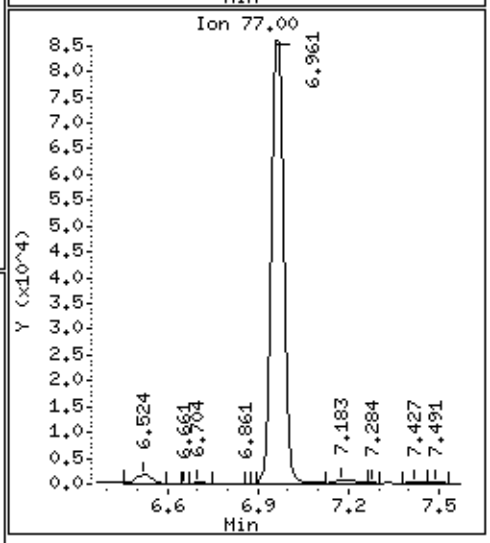
41 Benzene

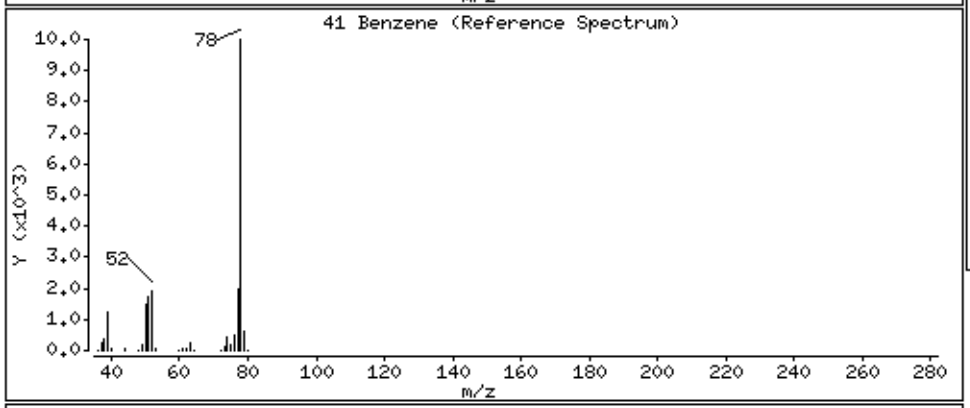
Concentration: 57.493 NG

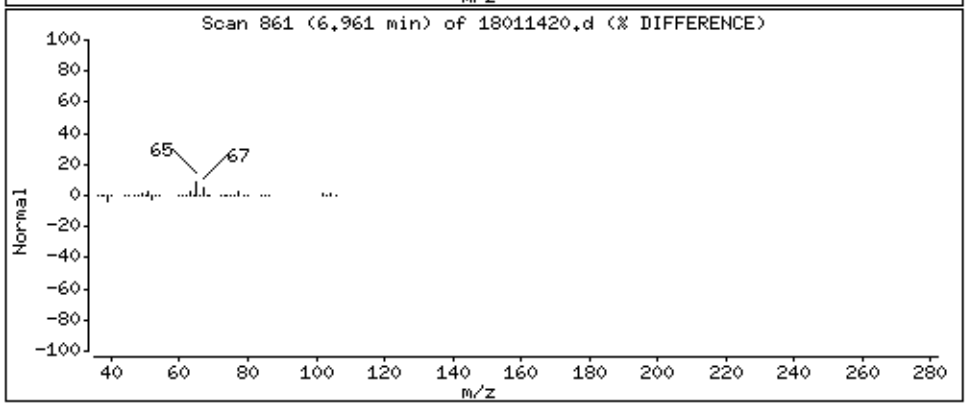












Data File: /chem/msd18.i/14Jan2016.b/18011420.d

Date : 14-JAN-2016 21:40

Client ID:

Instrument: msd18.i

Sample Info: 20ml #2516-203, 1.0ul 2595-246-50

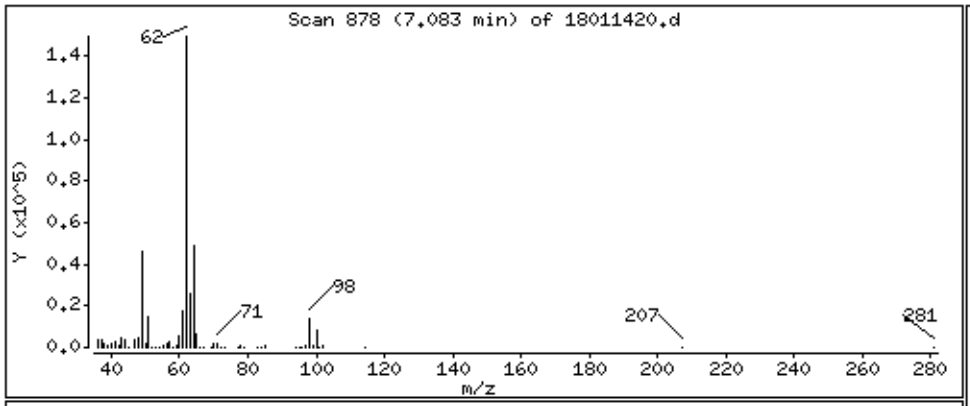
Operator: db

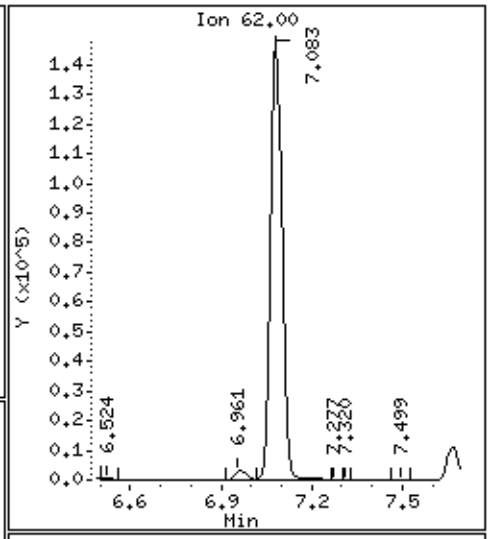
Column phase: RTx-624

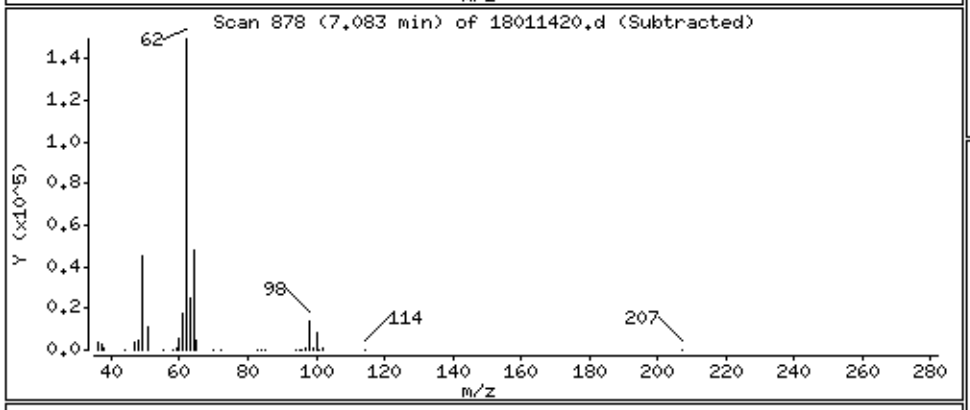
Column diameter: 0.53

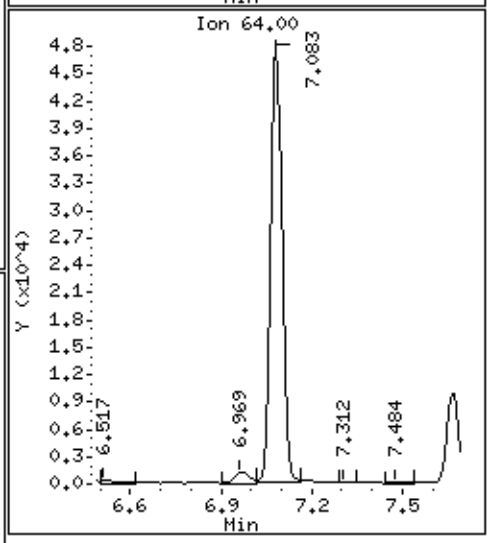
43 1,2-Dichloroethane

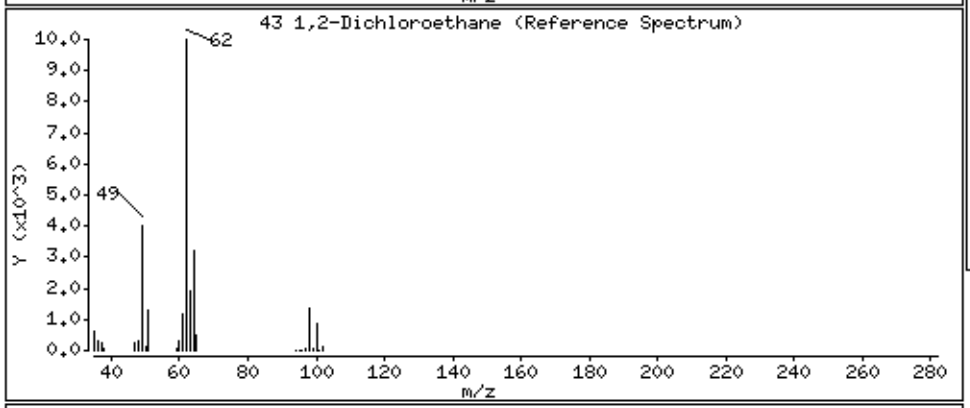
Concentration: 84.384 NG

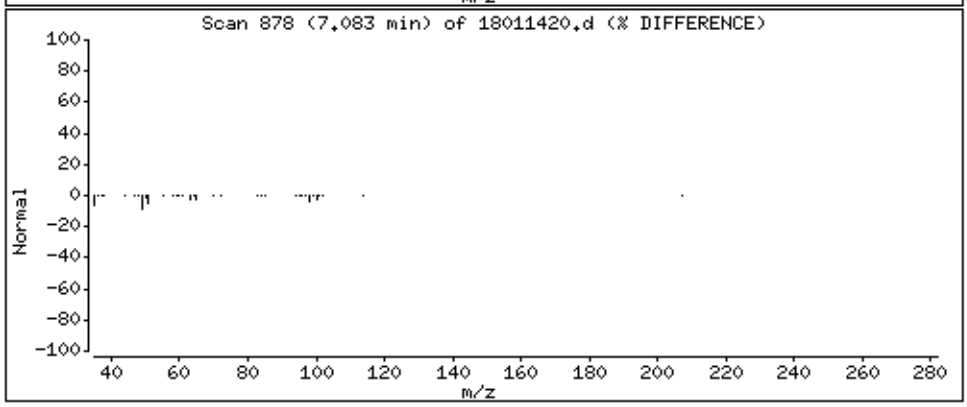












Data File: /chem/msd18.i/14Jan2016.b/18011420.d

Date : 14-JAN-2016 21:40

Client ID:

Instrument: msd18.i

Sample Info: 20ml #2516-203, 1.0ul 2595-246-50

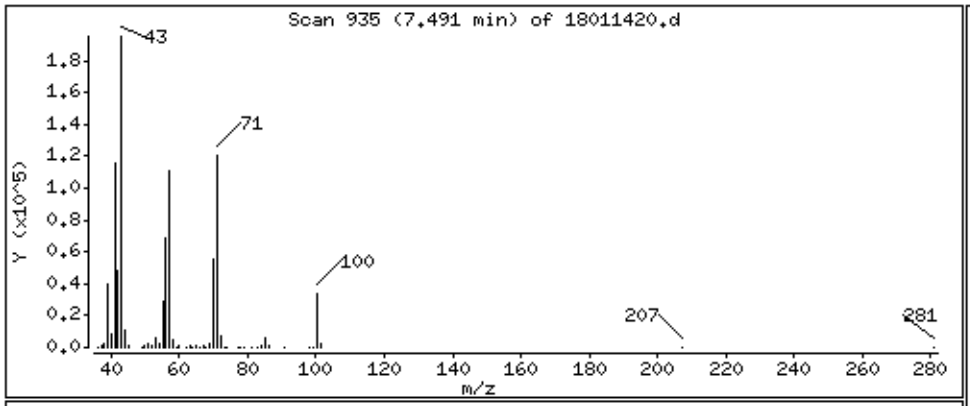
Operator: db

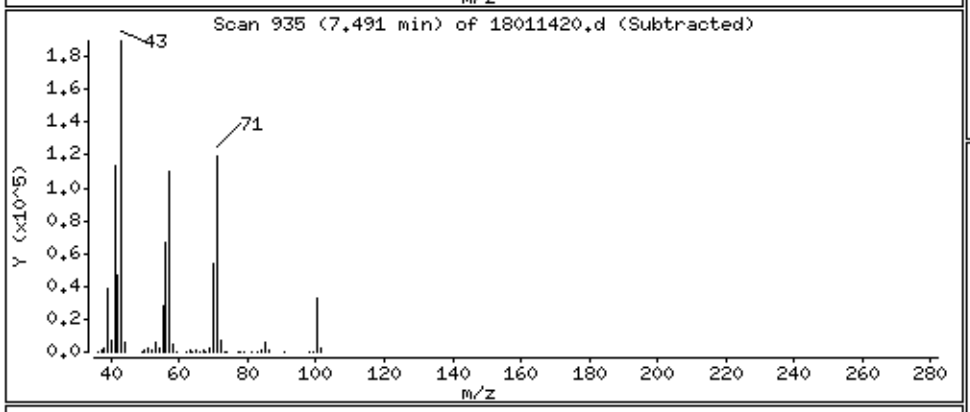
Column phase: RTx-624

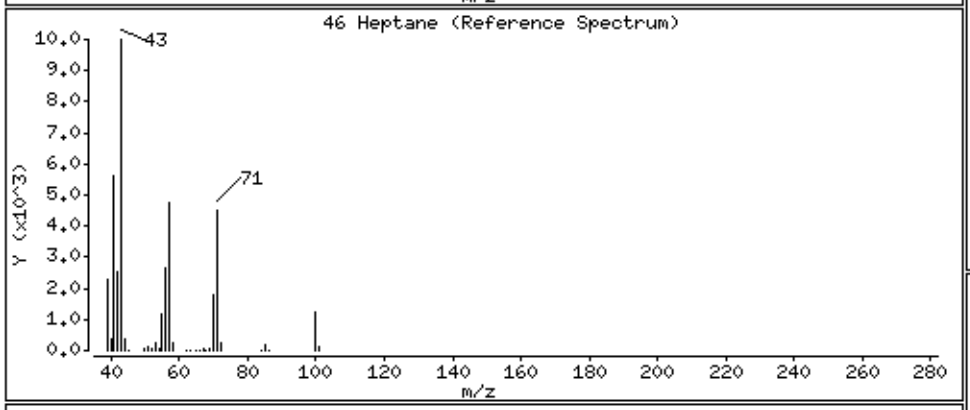
Column diameter: 0.53

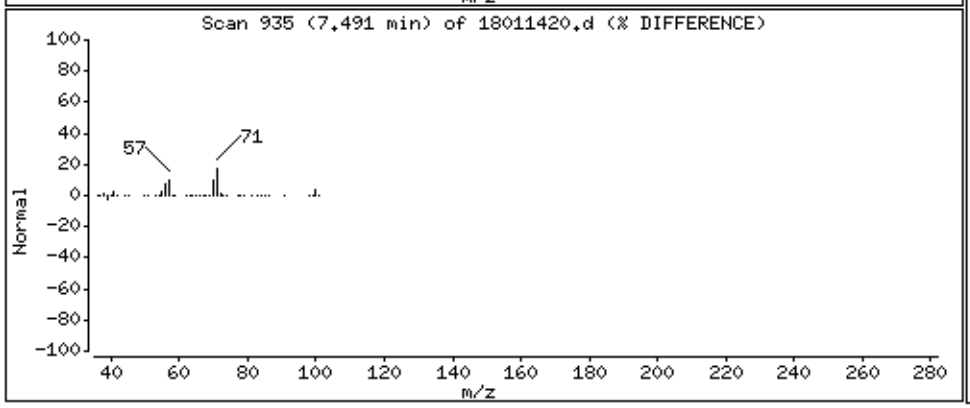
46 Heptane

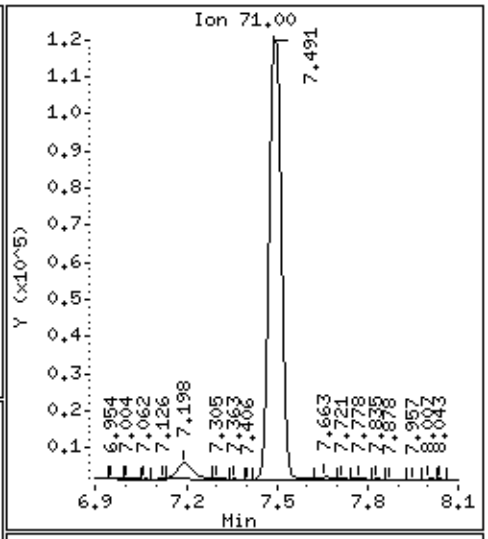
Concentration: 82.994 NG

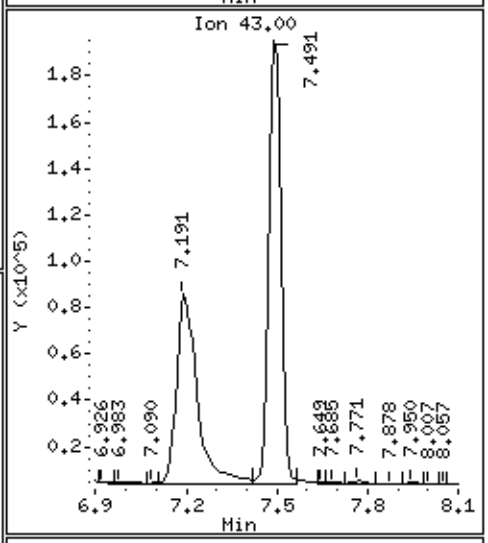


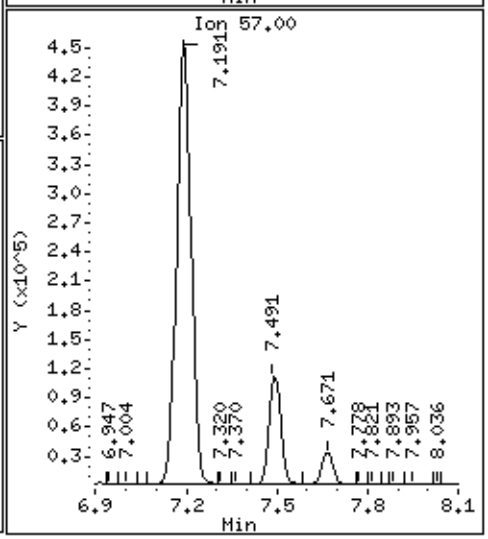












Data File: /chem/msd18.i/14Jan2016.b/18011420.d

Date : 14-JAN-2016 21:40

Client ID:

Instrument: msd18.i

Sample Info: 20ml #2516-203, 1.0ul 2595-246-50

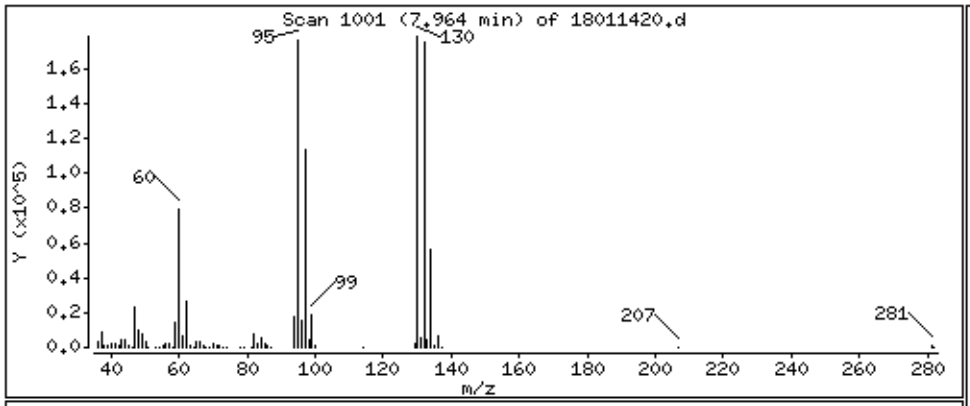
Operator: db

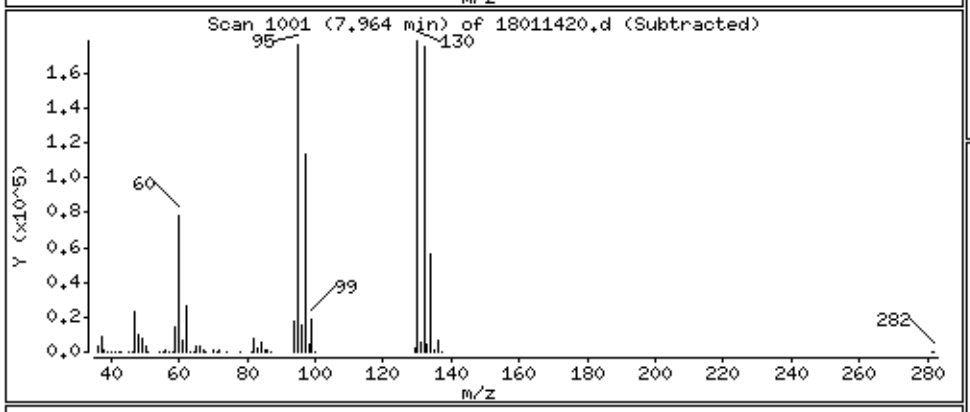
Column phase: RTx-624

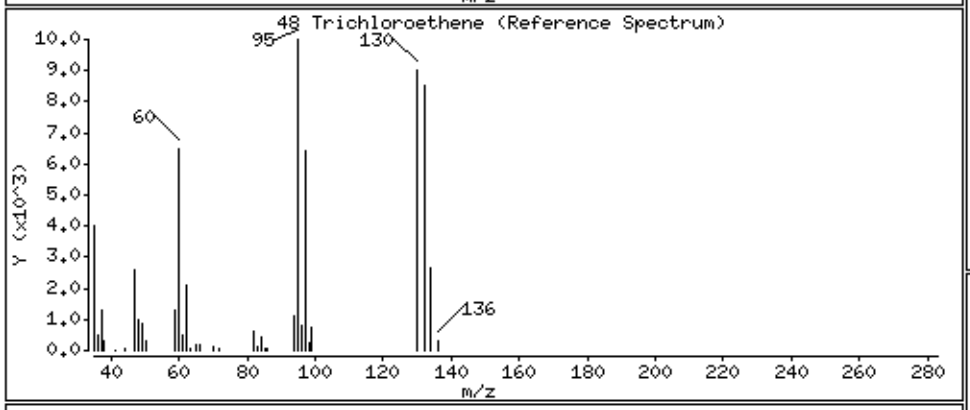
Column diameter: 0.53

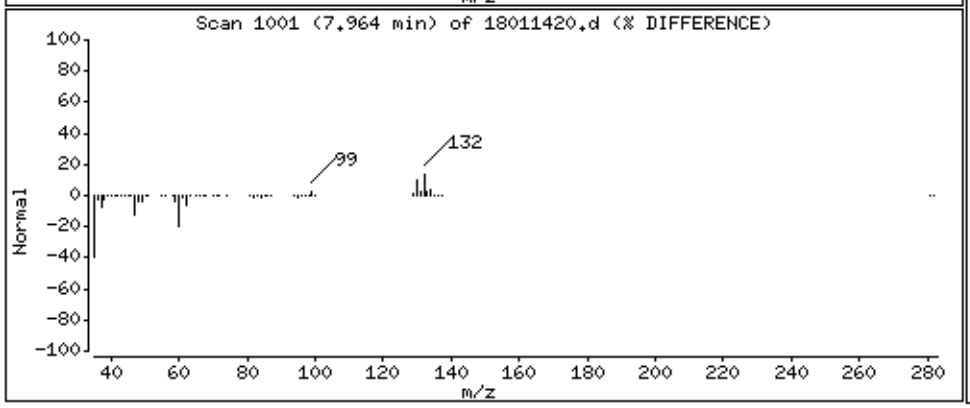
48 Trichloroethene

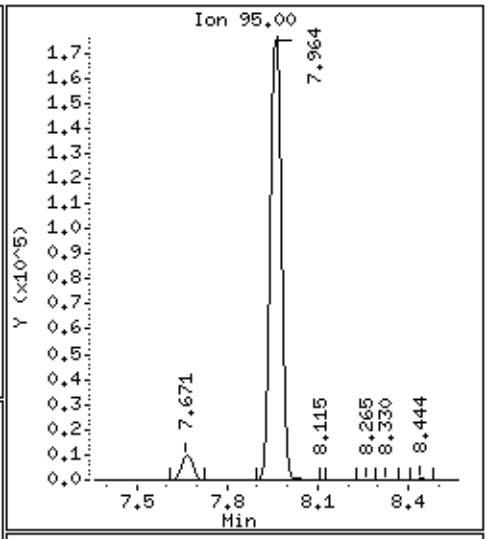
Concentration: 116.28 NG

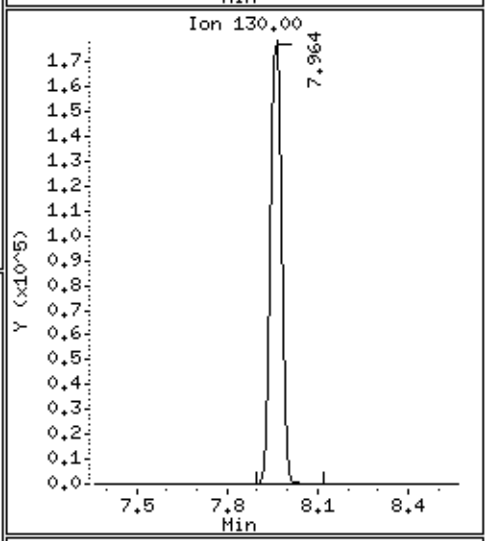


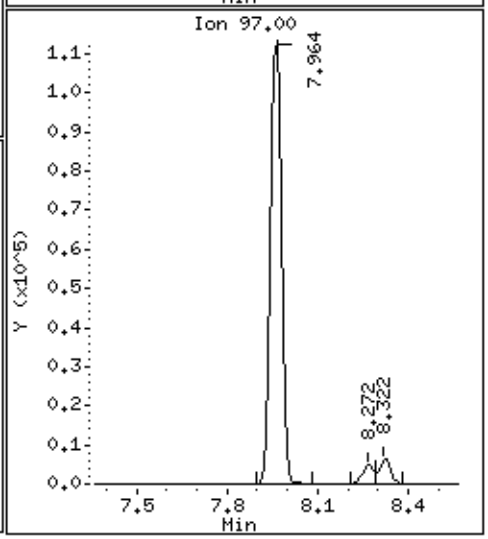












Data File: /chem/msd18.i/14Jan2016.b/18011420.d

Date : 14-JAN-2016 21:40

Client ID:

Instrument: msd18.i

Sample Info: 20ml #2516-203, 1.0ul 2595-246-50

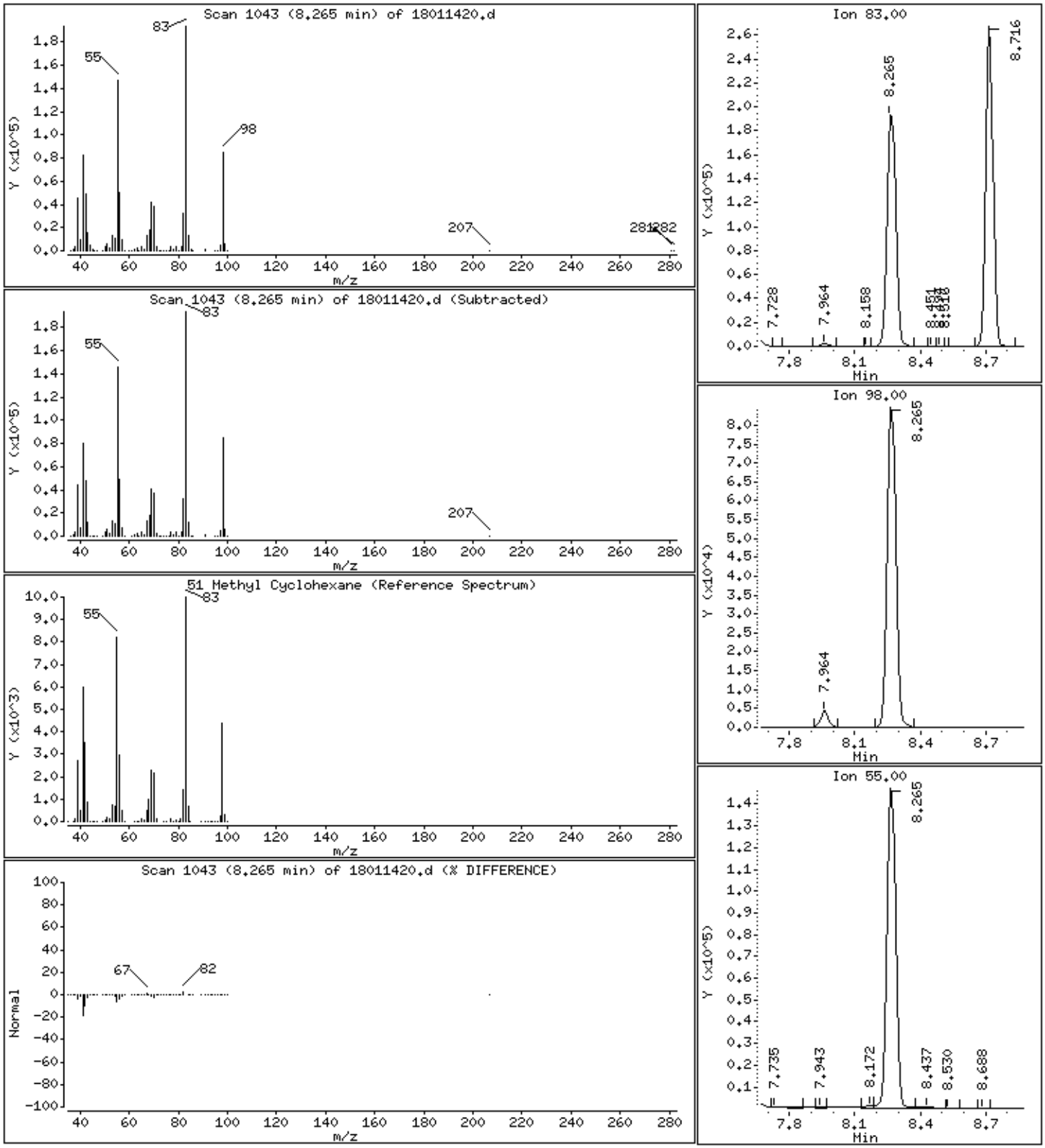
Operator: db

Column phase: RTx-624

Column diameter: 0.53

51 Methyl Cyclohexane

Concentration: 82.163 NG



Data File: /chem/msd18.i/14Jan2016.b/18011420.d

Date : 14-JAN-2016 21:40

Client ID:

Instrument: msd18.i

Sample Info: 20ml #2516-203, 1.0ul 2595-246-50

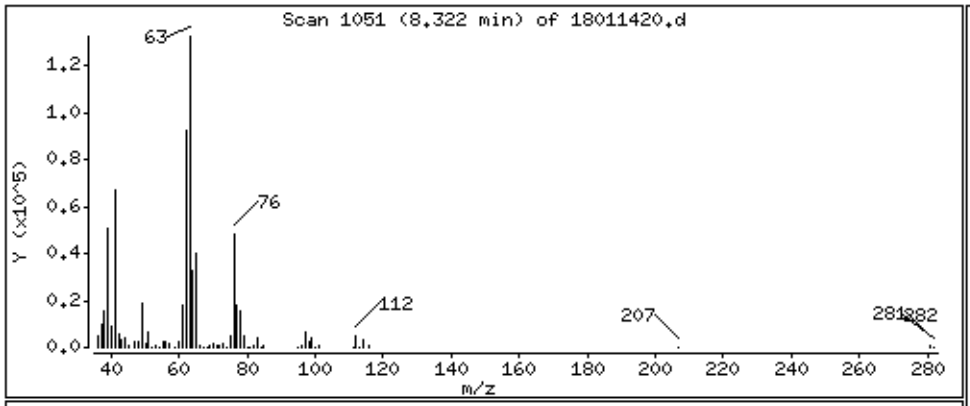
Operator: db

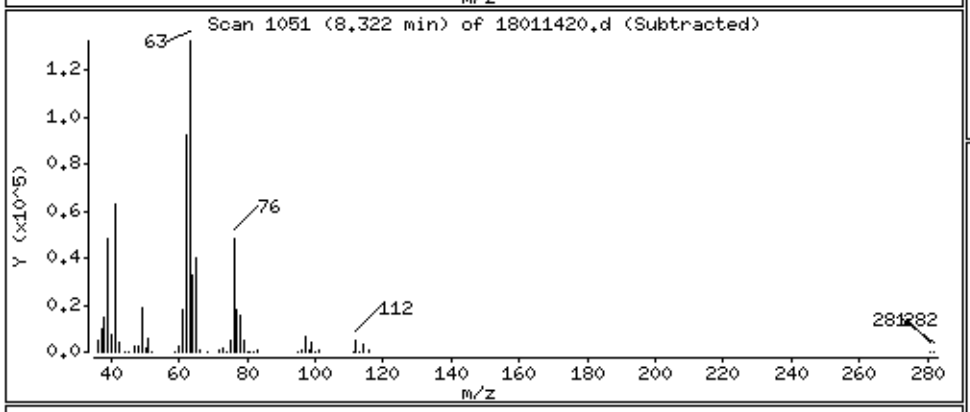
Column phase: RTx-624

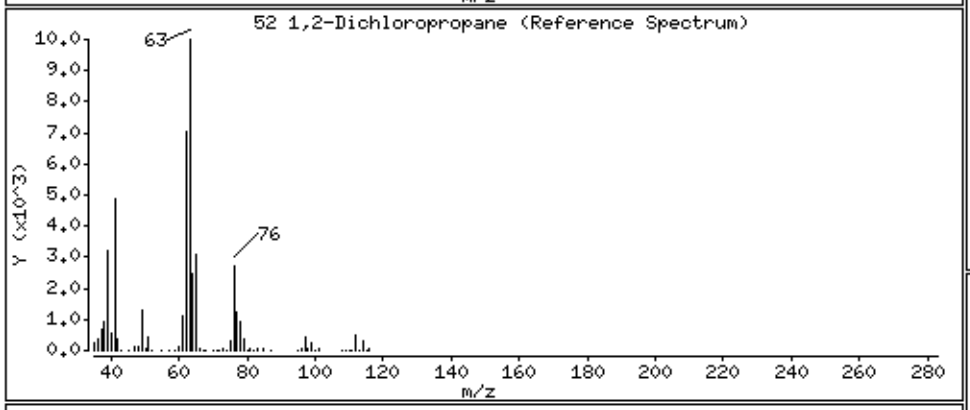
Column diameter: 0.53

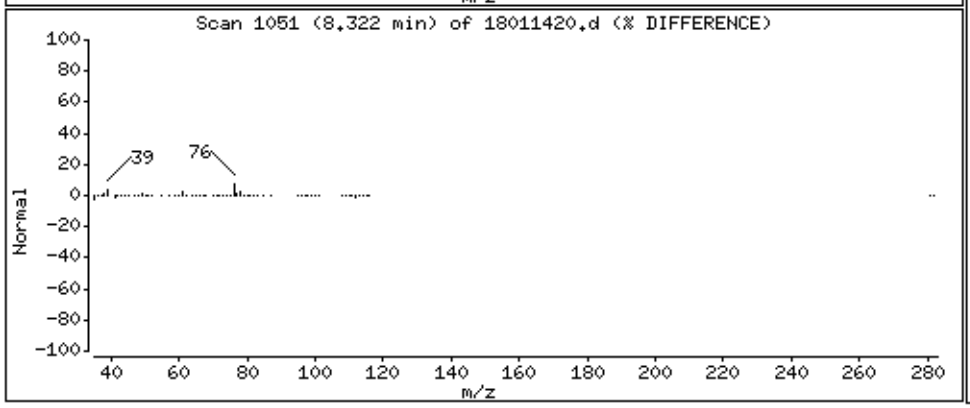
52 1,2-Dichloropropane

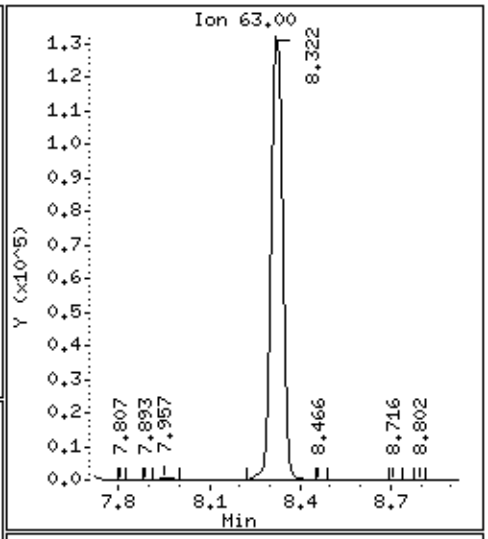
Concentration: 96.662 NG

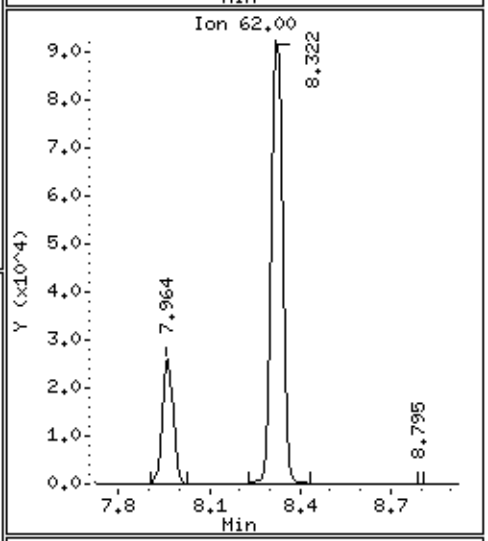


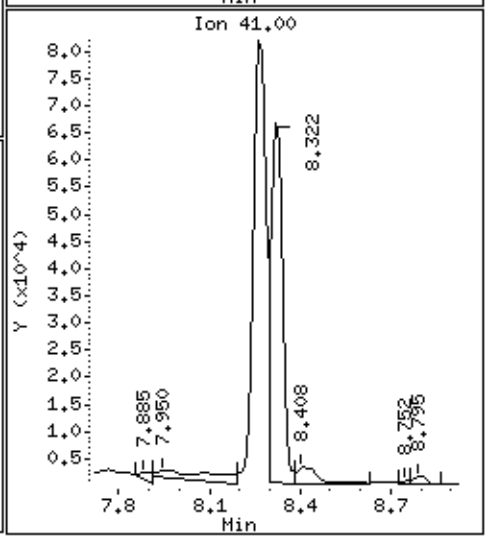












Data File: /chem/msd18.i/14Jan2016.b/18011420.d

Date : 14-JAN-2016 21:40

Client ID:

Instrument: msd18.i

Sample Info: 20ml #2516-203, 1.0ul 2595-246-50

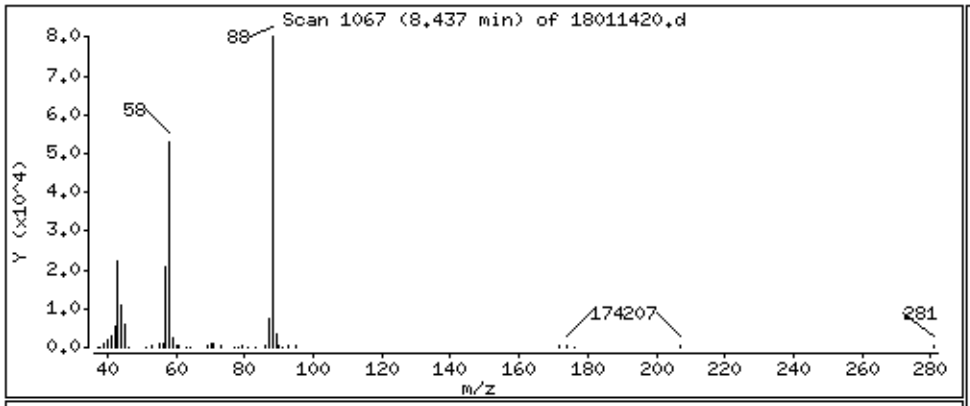
Operator: db

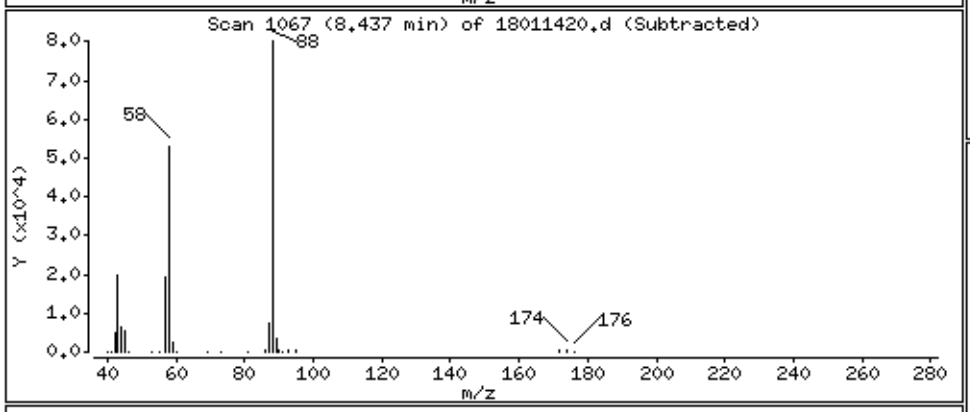
Column phase: RTx-624

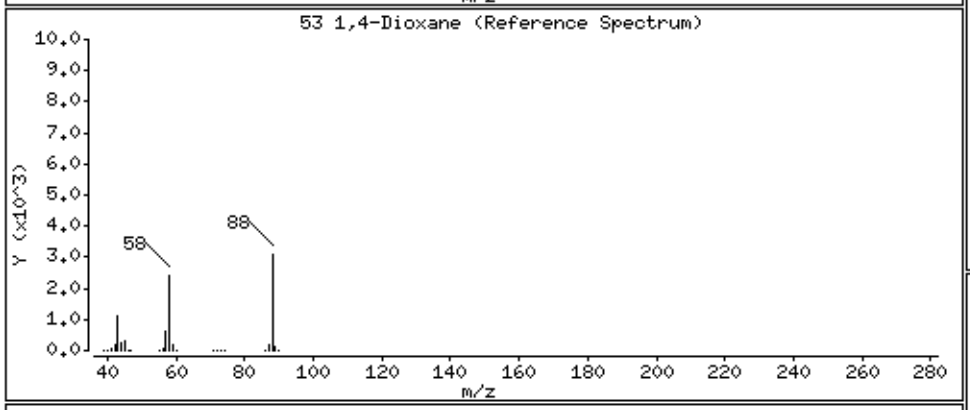
Column diameter: 0.53

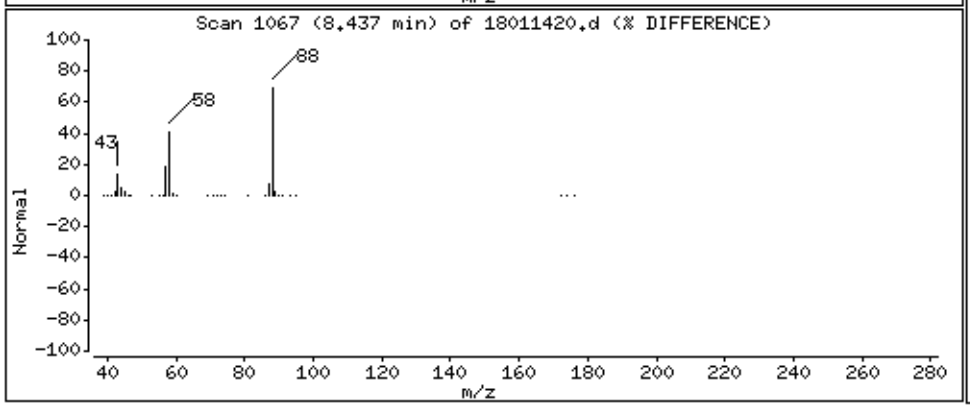
53 1,4-Dioxane

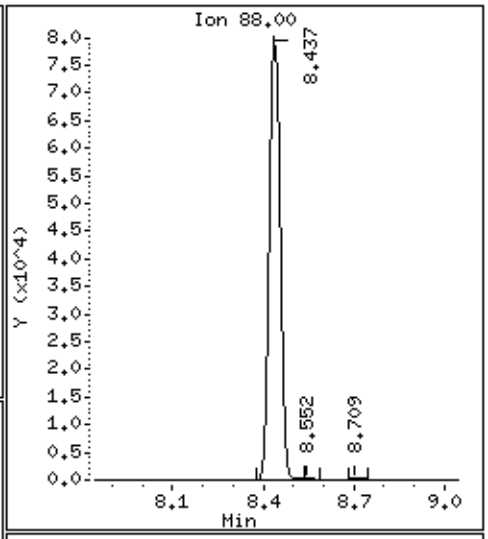
Concentration: 68.307 NG

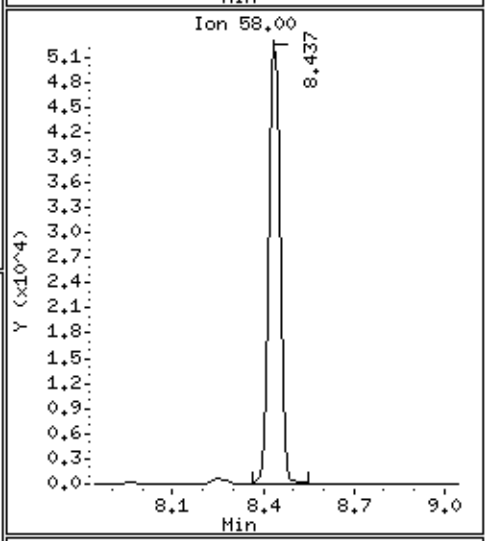


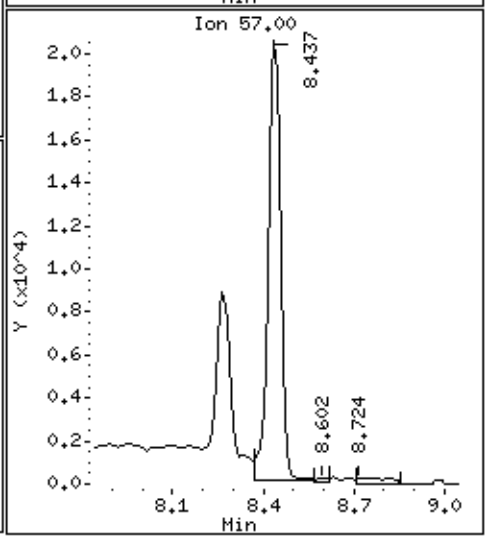












Data File: /chem/msd18.i/14Jan2016.b/18011420.d

Date : 14-JAN-2016 21:40

Client ID:

Instrument: msd18.i

Sample Info: 20ml #2516-203, 1.0ul 2595-246-50

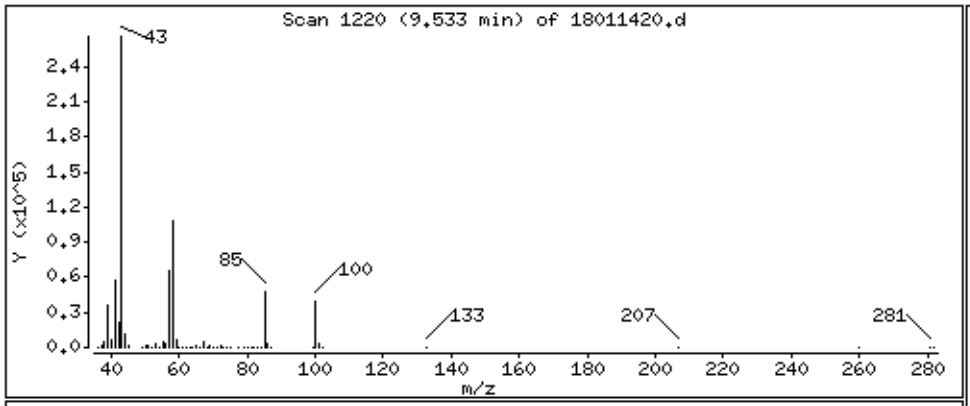
Operator: db

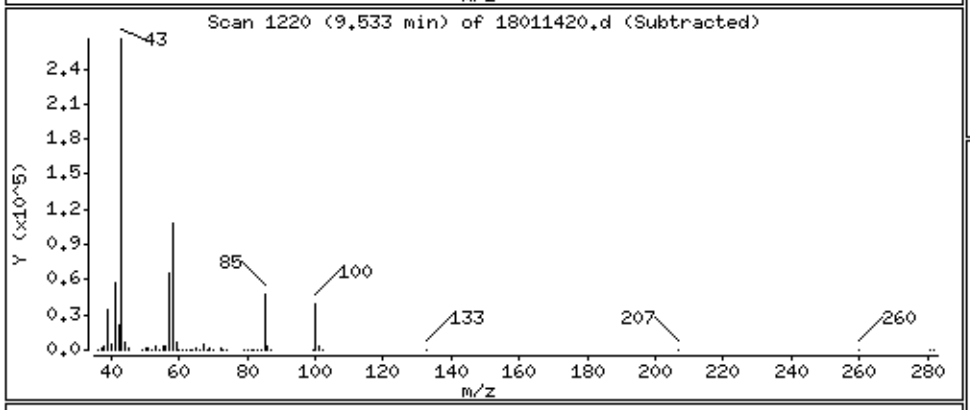
Column phase: RTx-624

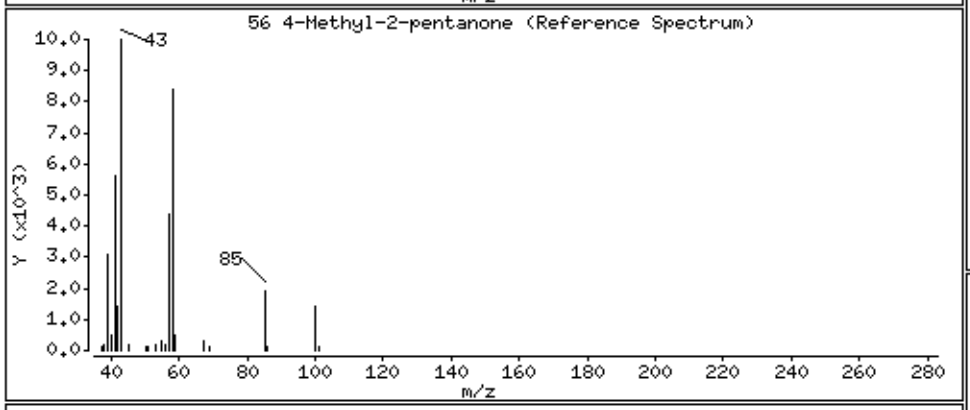
Column diameter: 0.53

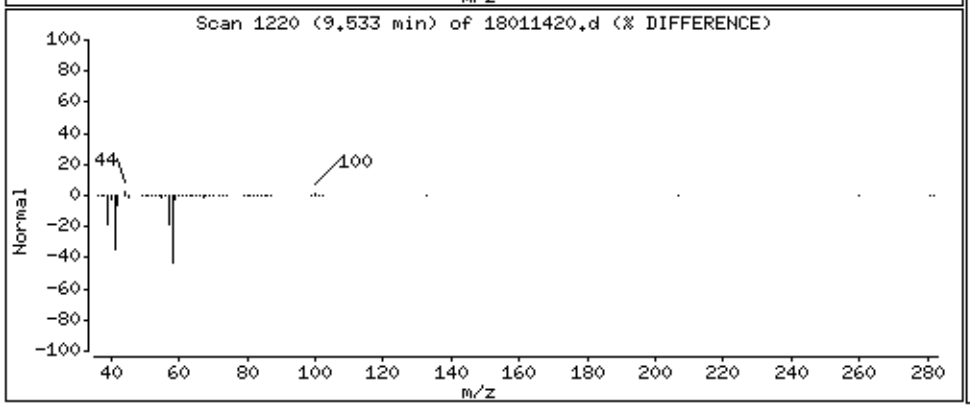
56 4-Methyl-2-pentanone

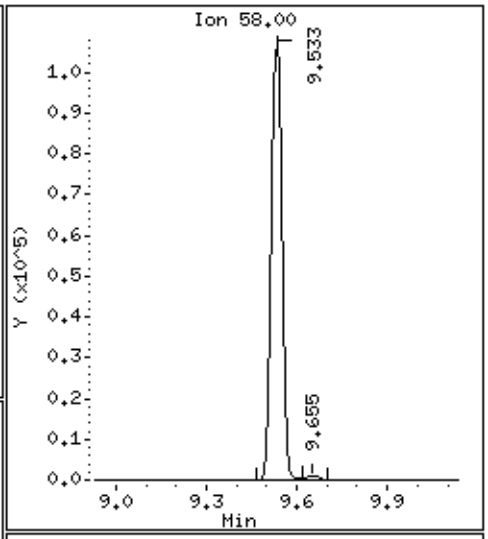
Concentration: 85.881 NG

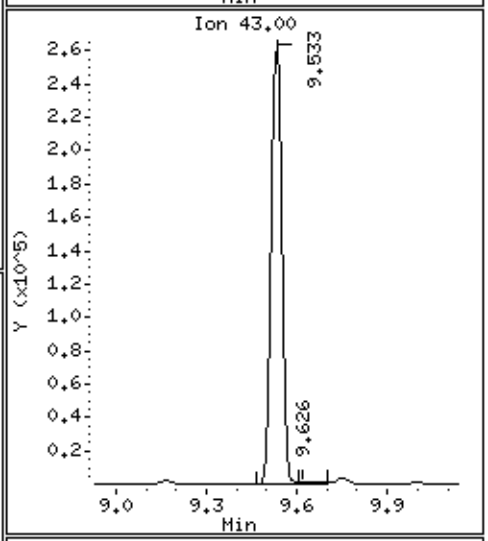


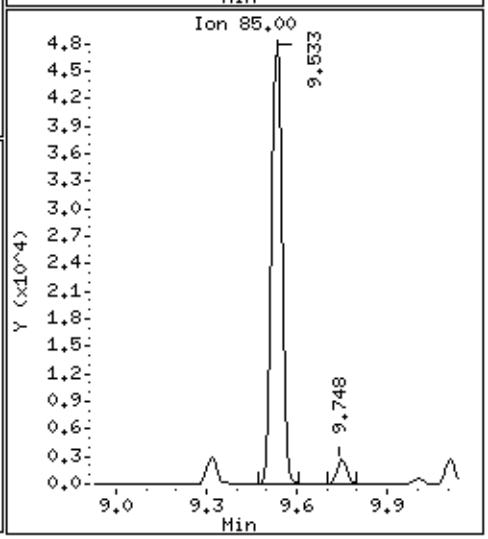












Data File: /chem/msd18.i/14Jan2016.b/18011420.d

Date : 14-JAN-2016 21:40

Client ID:

Instrument: msd18.i

Sample Info: 20ml #2516-203, 1.0ul 2595-246-50

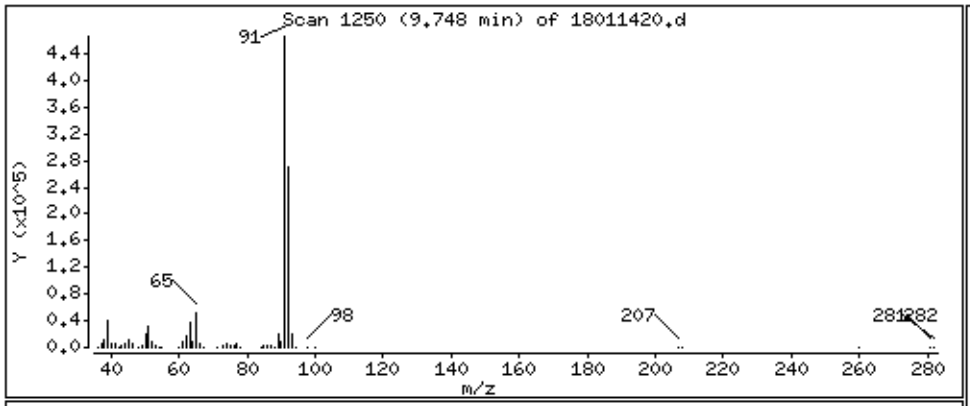
Operator: db

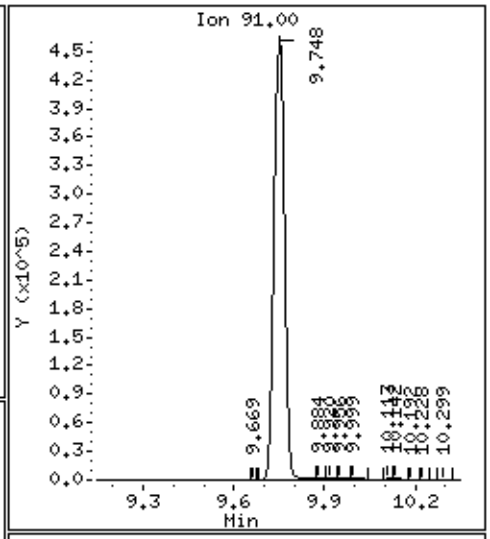
Column phase: RTx-624

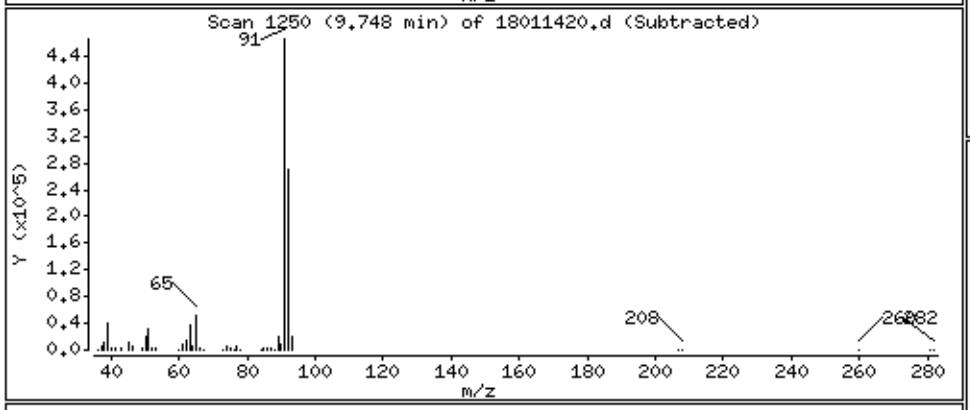
Column diameter: 0.53

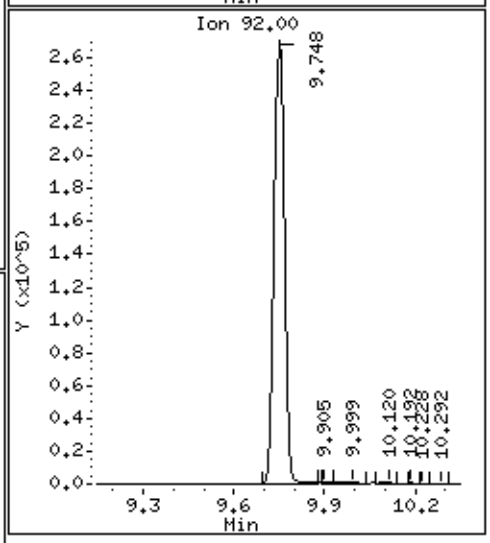
58 Toluene

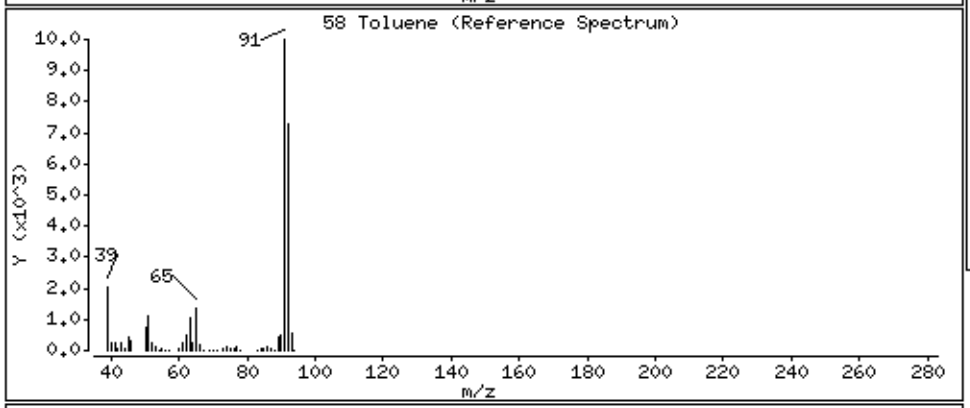
Concentration: 72.044 NG

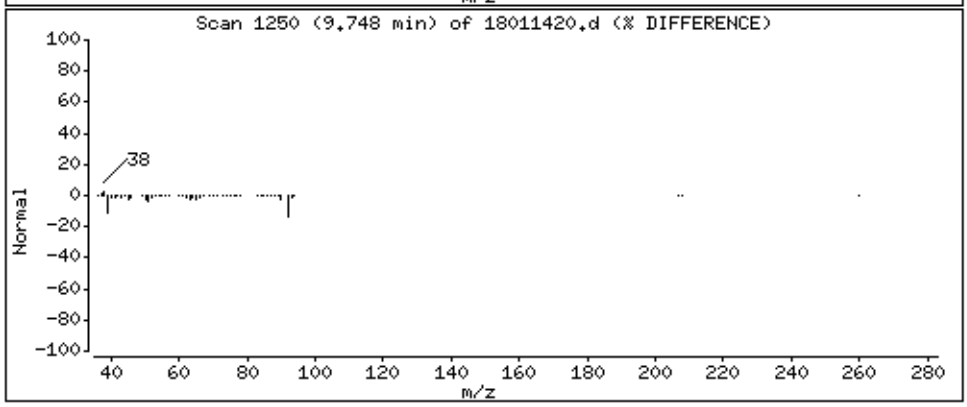












Data File: /chem/msd18.i/14Jan2016.b/18011420.d

Date : 14-JAN-2016 21:40

Client ID:

Instrument: msd18.i

Sample Info: 20ml #2516-203, 1.0ul 2595-246-50

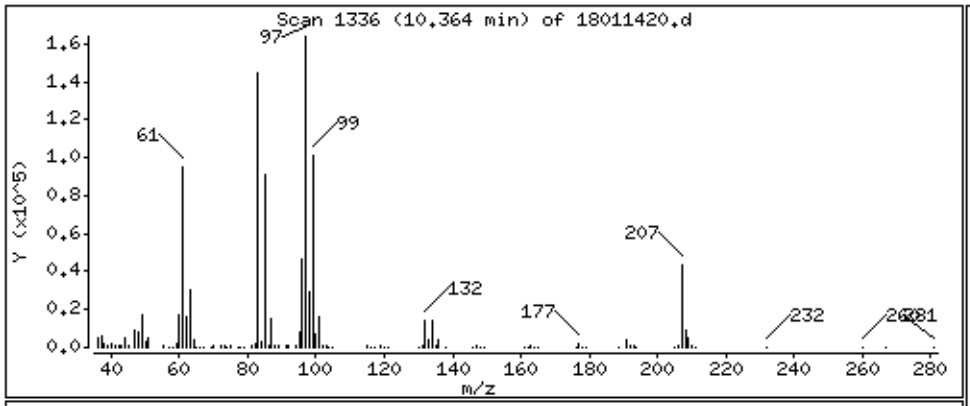
Operator: db

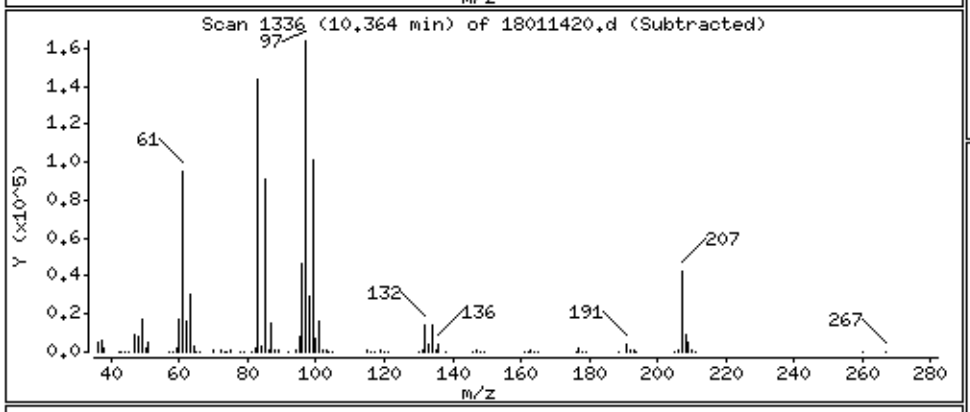
Column phase: RTx-624

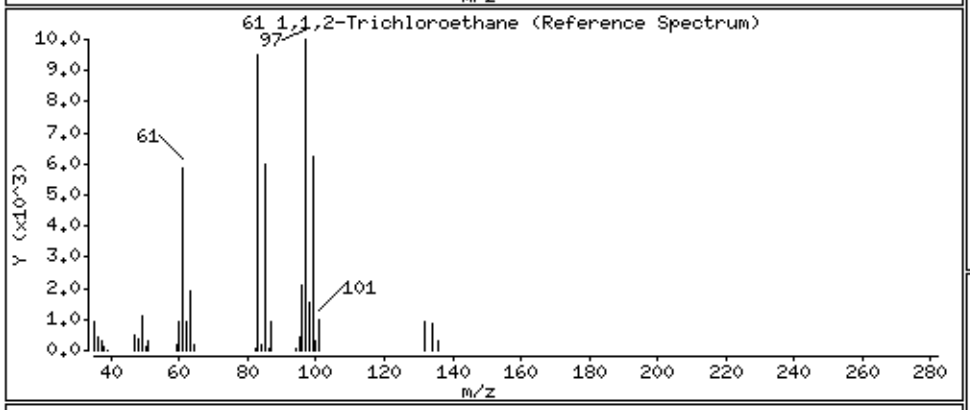
Column diameter: 0.53

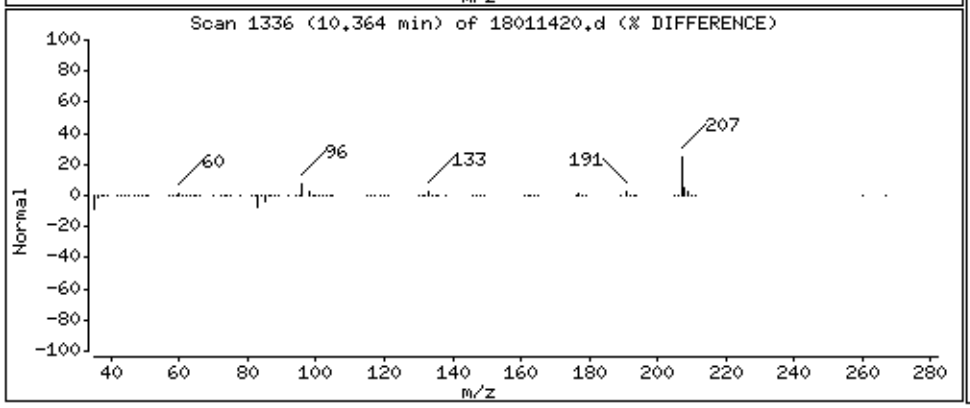
61 1,1,2-Trichloroethane

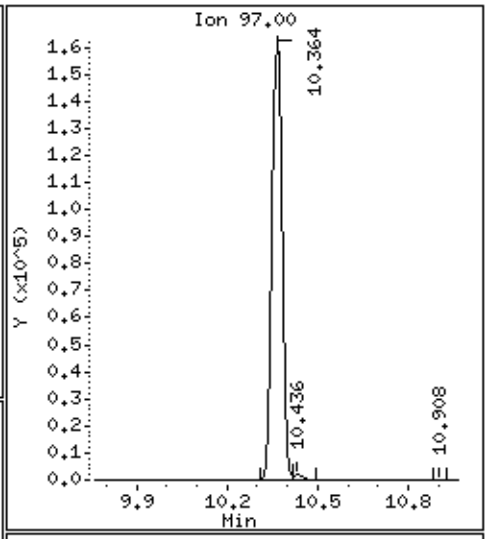
Concentration: 105.33 NG

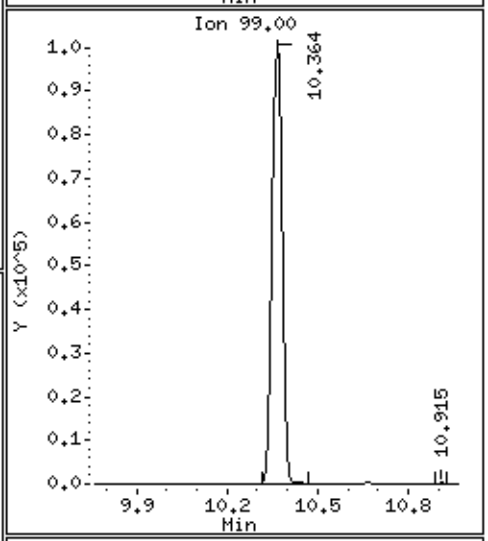


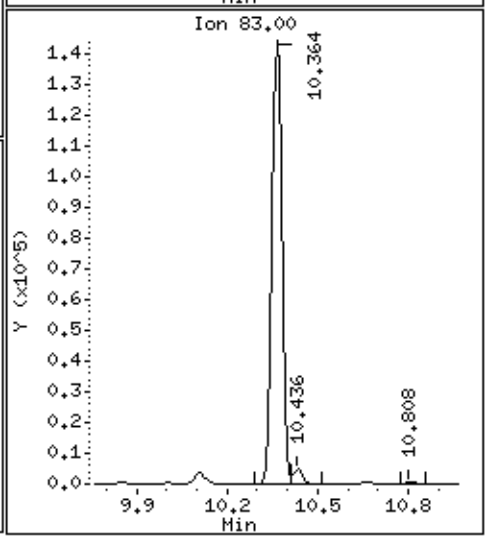












Data File: /chem/msd18.i/14Jan2016.b/18011420.d

Date : 14-JAN-2016 21:40

Client ID:

Instrument: msd18.i

Sample Info: 20ml #2516-203, 1.0ul 2595-246-50

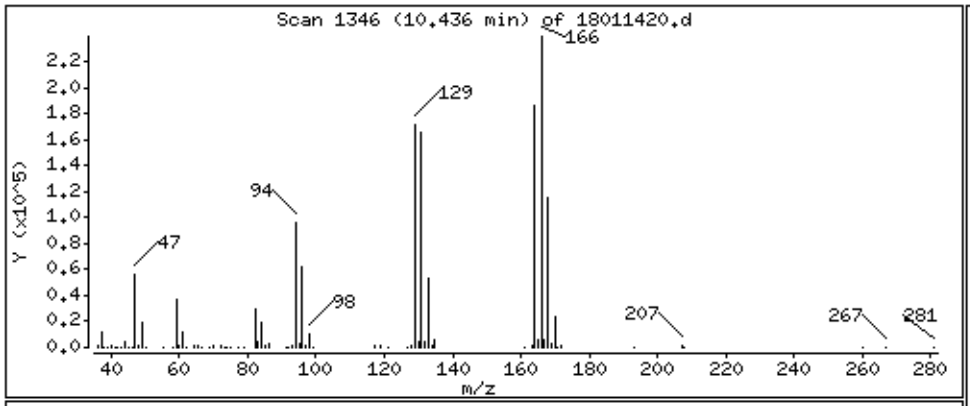
Operator: db

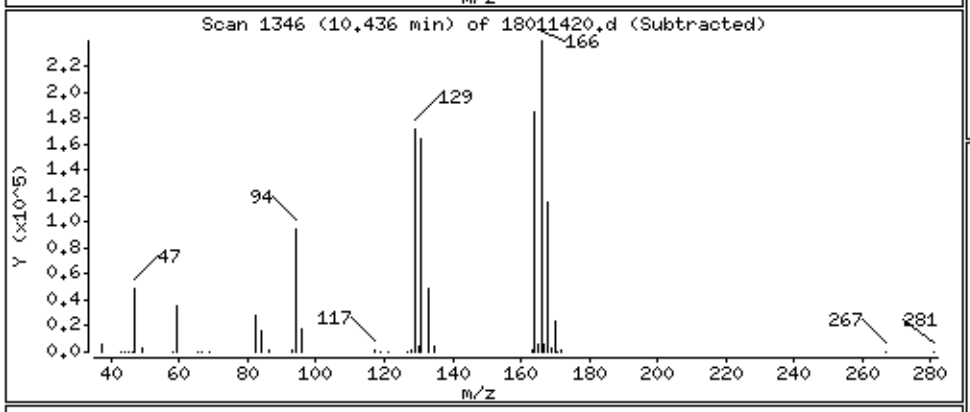
Column phase: RTx-624

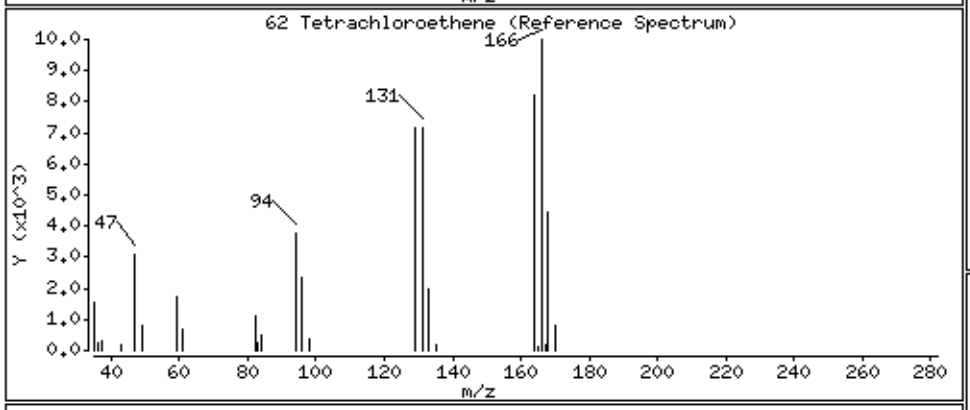
Column diameter: 0.53

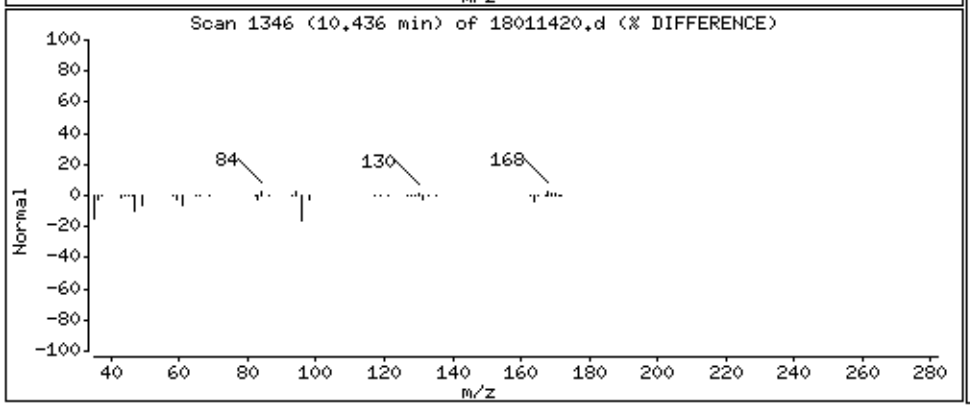
62 Tetrachloroethene

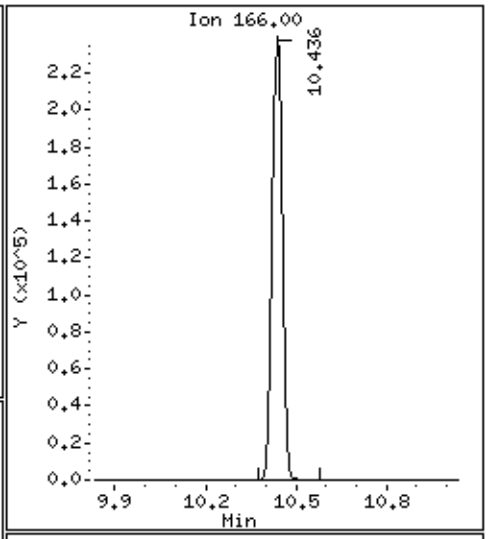
Concentration: 133.70 NG

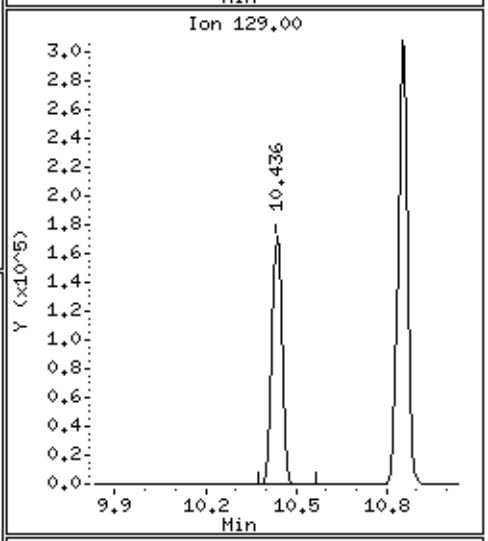


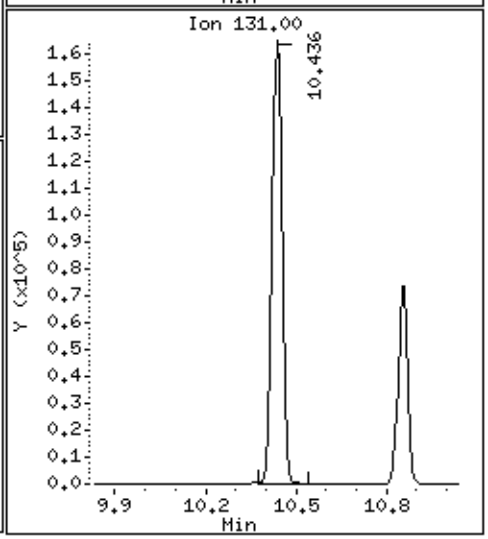












Data File: /chem/msd18.i/14Jan2016.b/18011420.d

Date : 14-JAN-2016 21:40

Client ID:

Instrument: msd18.i

Sample Info: 20ml #2516-203, 1.0ul 2595-246-50

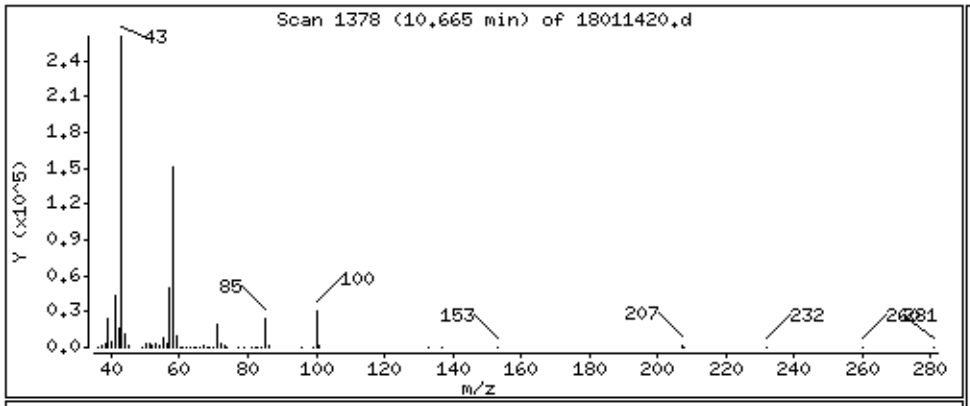
Operator: db

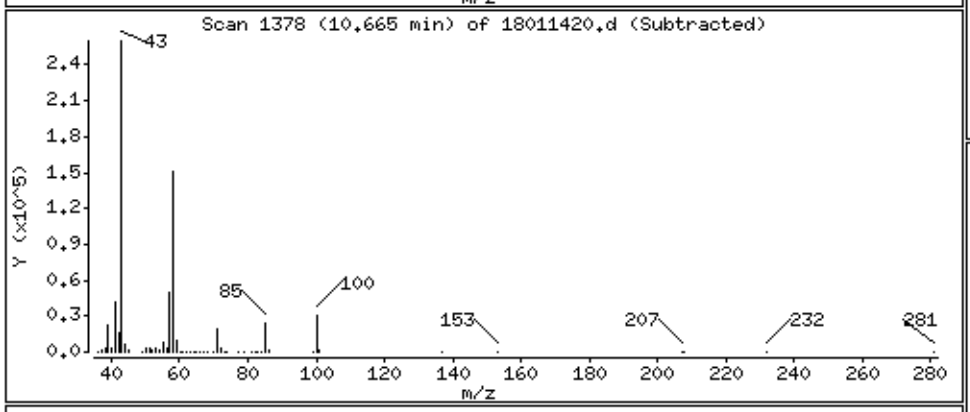
Column phase: RTx-624

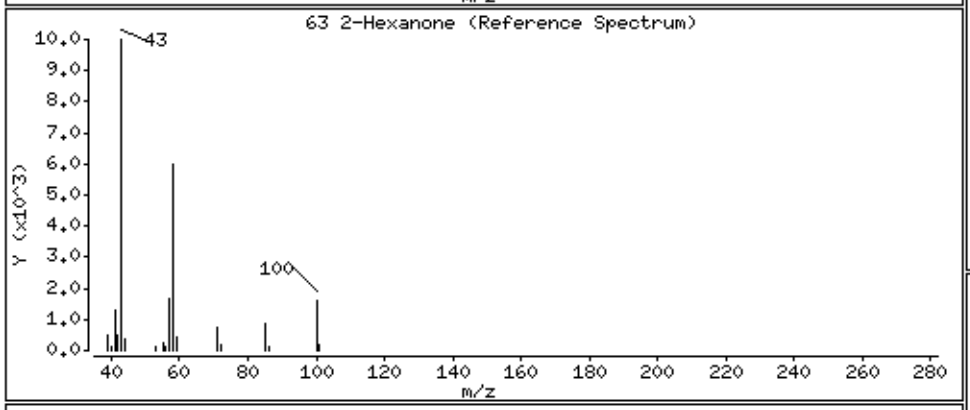
Column diameter: 0.53

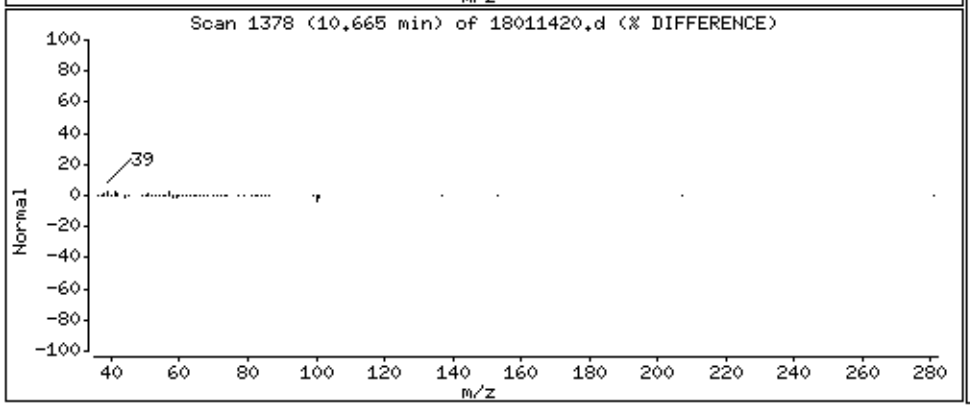
63 2-Hexanone

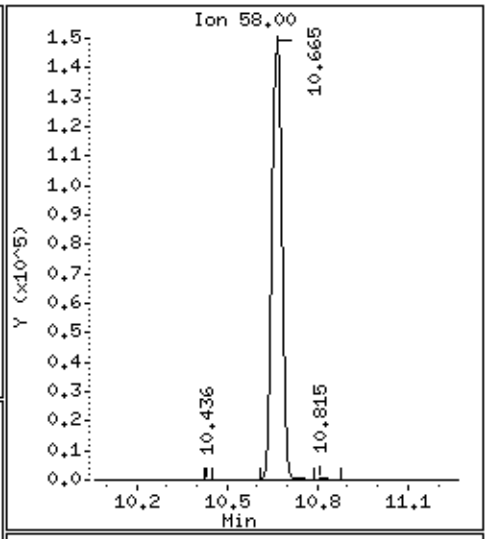
Concentration: 81.424 NG

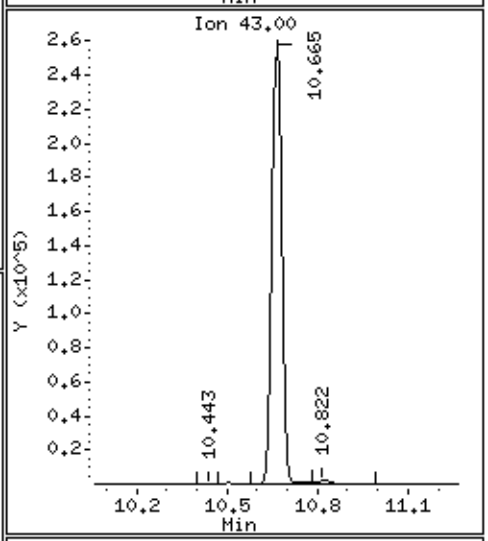


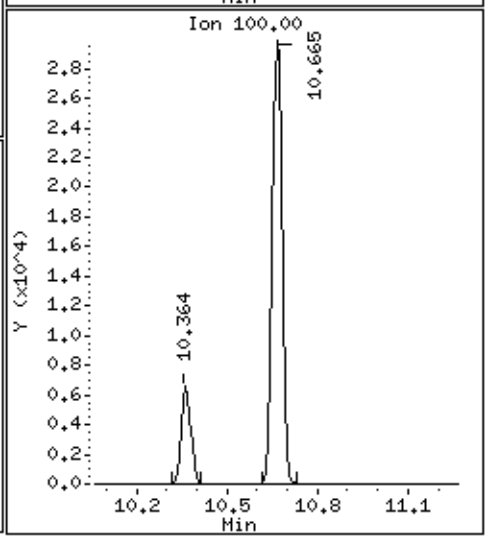












Data File: /chem/msd18.i/14Jan2016.b/18011420.d

Date : 14-JAN-2016 21:40

Client ID:

Instrument: msd18.i

Sample Info: 20ml #2516-203, 1.0ul 2595-246-50

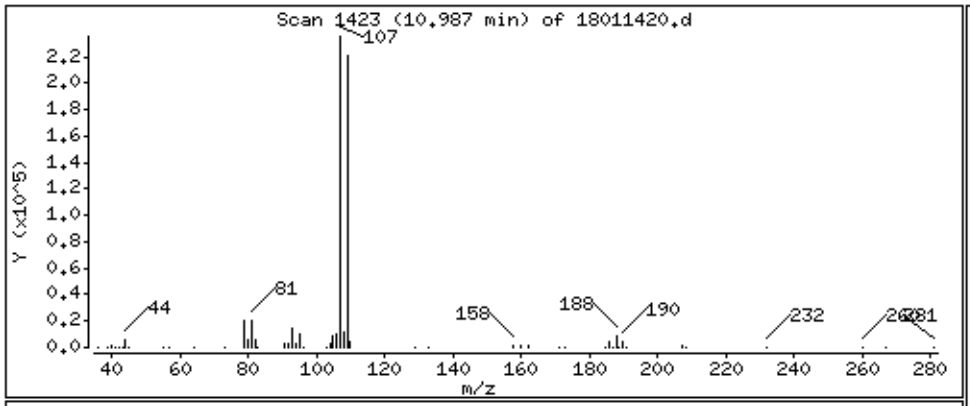
Operator: db

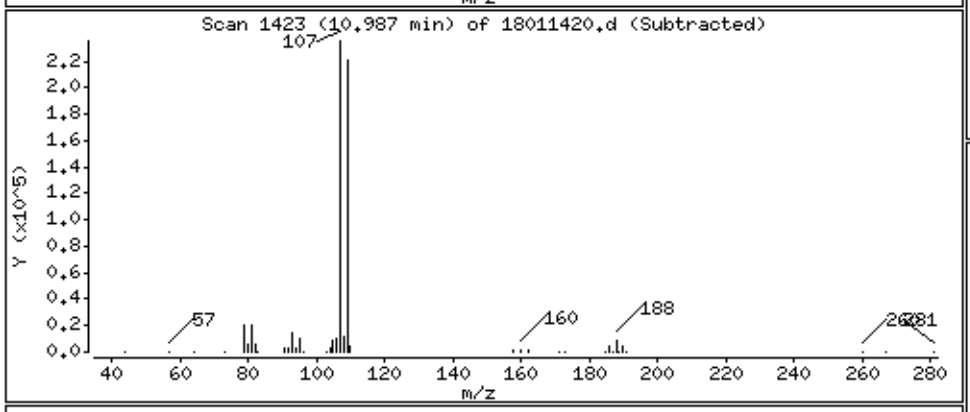
Column phase: RTx-624

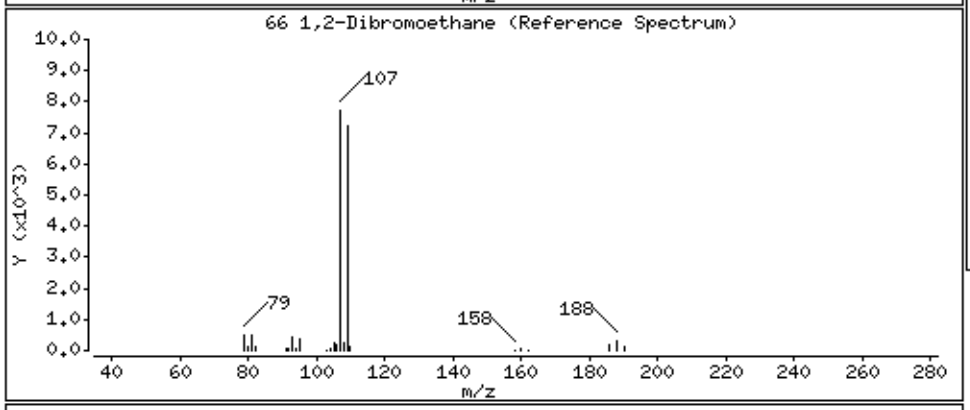
Column diameter: 0.53

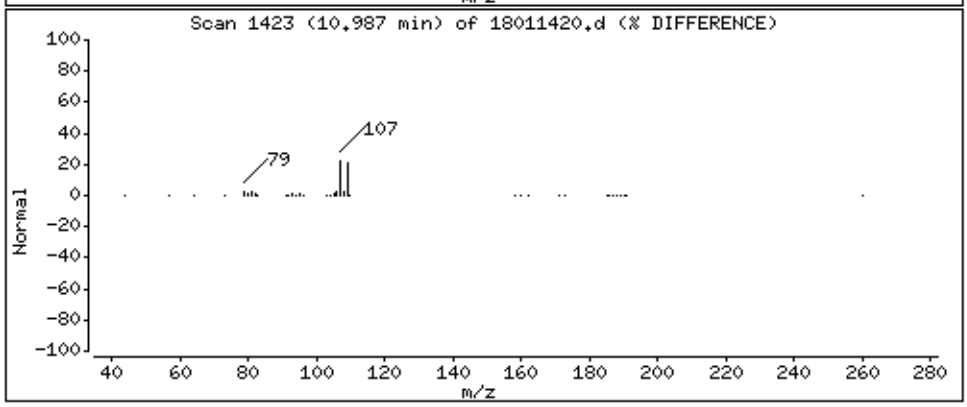
66 1,2-Dibromoethane

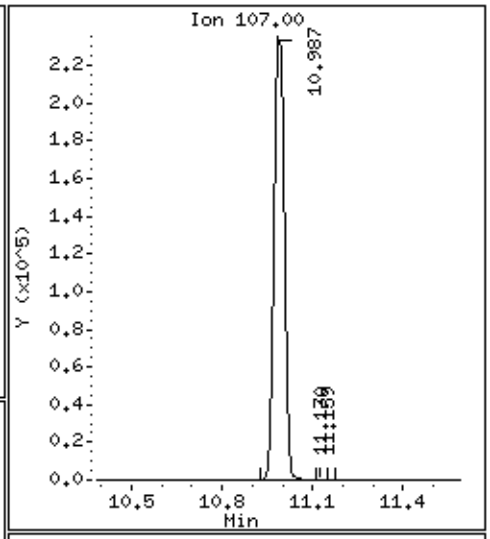
Concentration: 153.68 NG

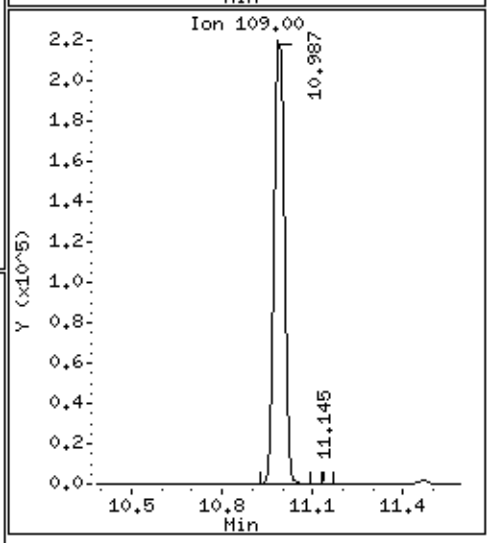












Data File: /chem/msd18.i/14Jan2016.b/18011420.d

Date : 14-JAN-2016 21:40

Client ID:

Instrument: msd18.i

Sample Info: 20ml #2516-203, 1.0ul 2595-246-50

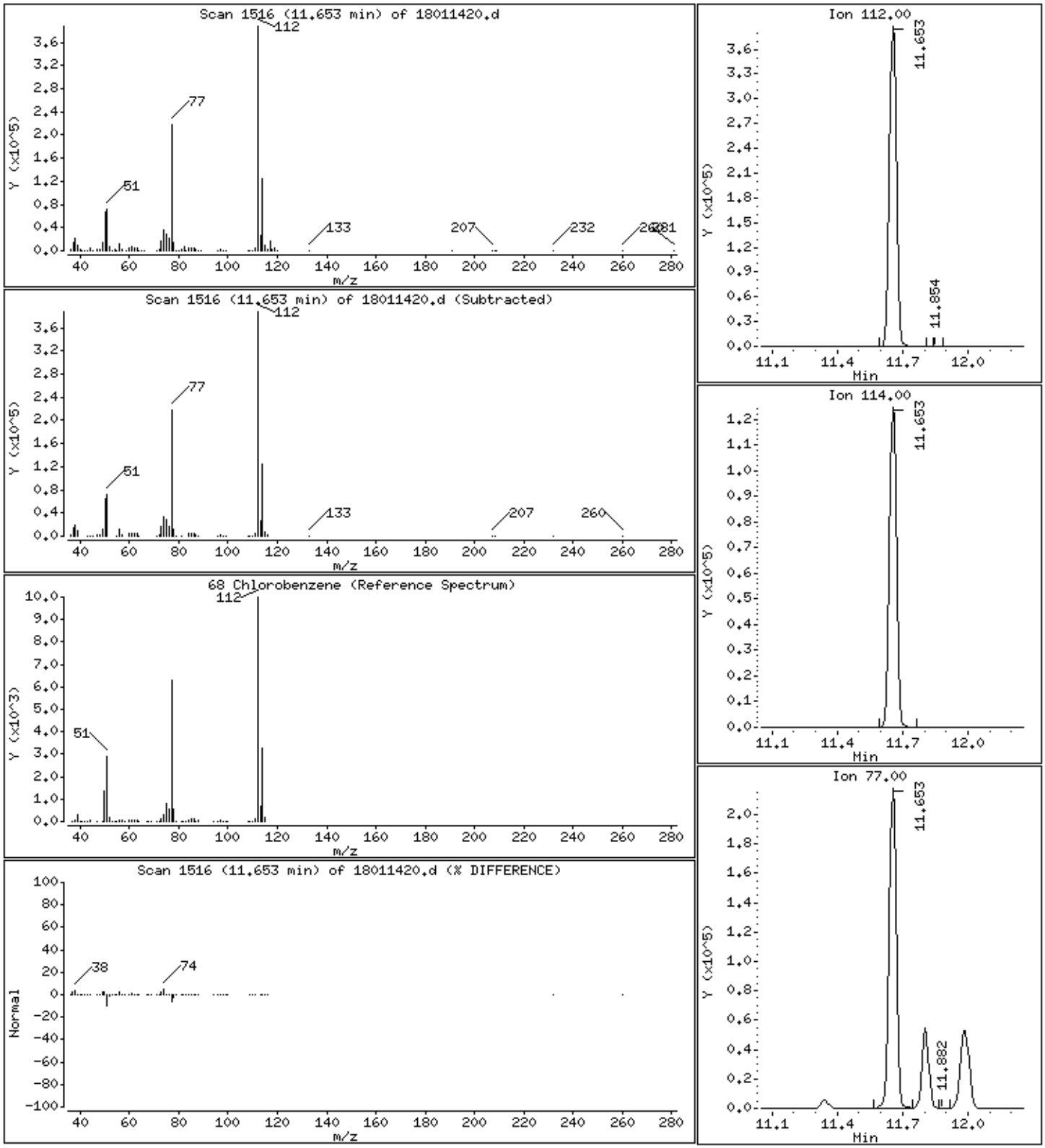
Operator: db

Column phase: RTx-624

Column diameter: 0.53

68 Chlorobenzene

Concentration: 91.677 NG



Data File: /chem/msd18.i/14Jan2016.b/18011420.d

Date : 14-JAN-2016 21:40

Client ID:

Instrument: msd18.i

Sample Info: 20ml #2516-203, 1.0ul 2595-246-50

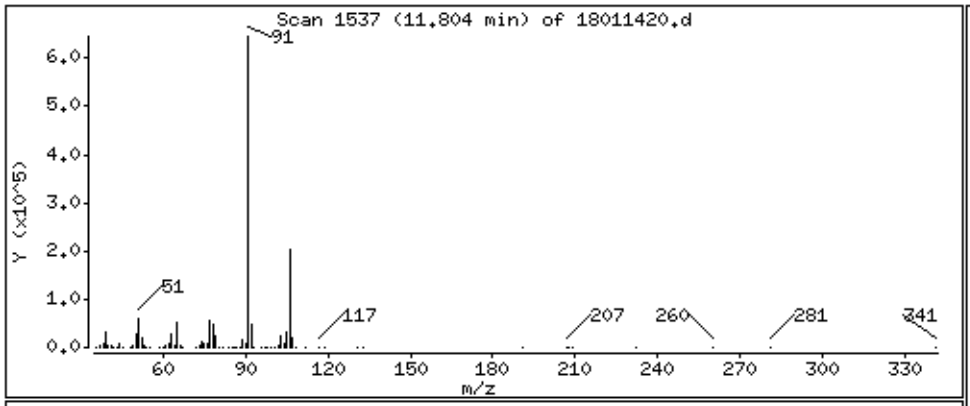
Operator: db

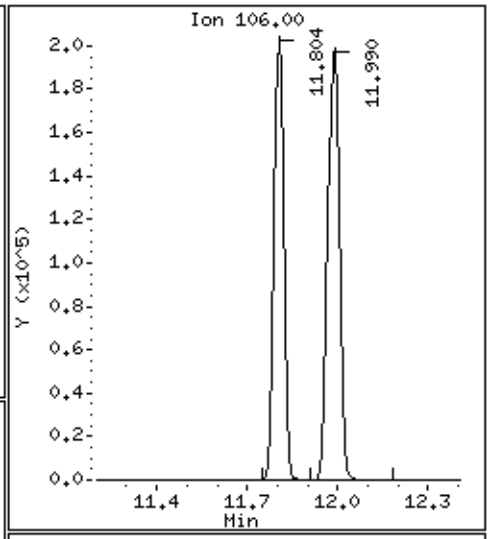
Column phase: RTx-624

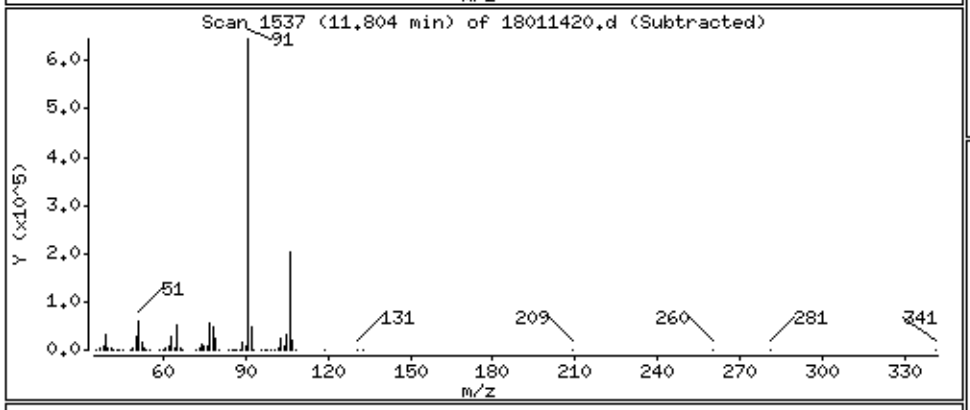
Column diameter: 0.53

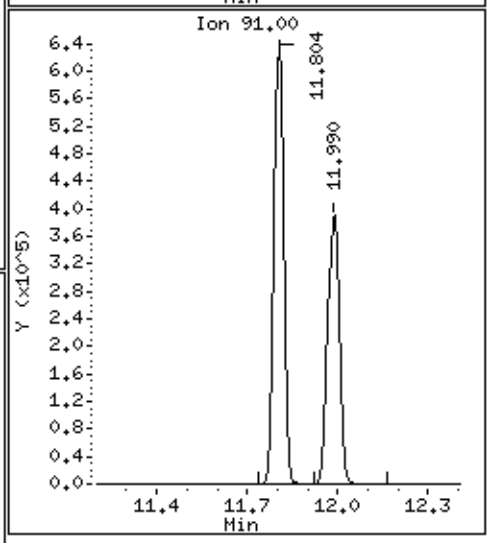
69 Ethyl Benzene

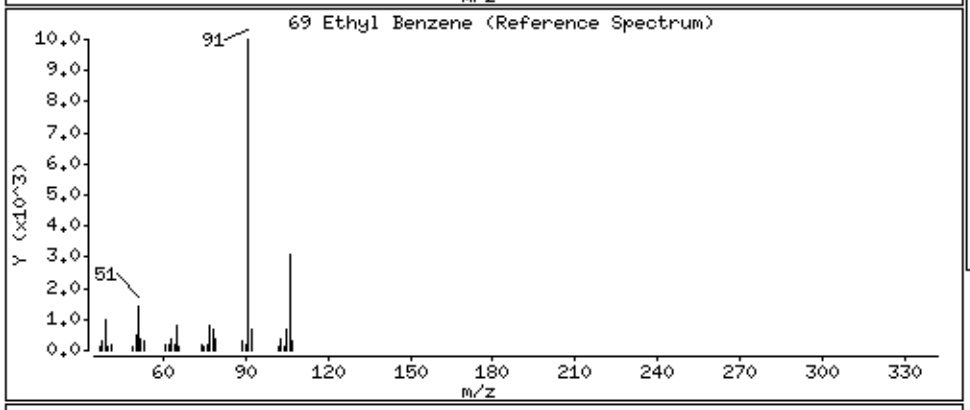
Concentration: 85.878 NG

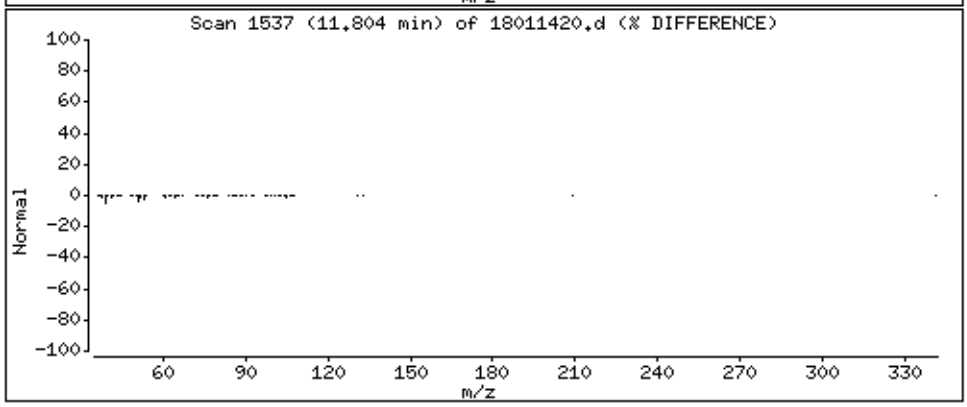












Data File: /chem/msd18.i/14Jan2016.b/18011420.d

Date : 14-JAN-2016 21:40

Client ID:

Instrument: msd18.i

Sample Info: 20ml #2516-203, 1.0ul 2595-246-50

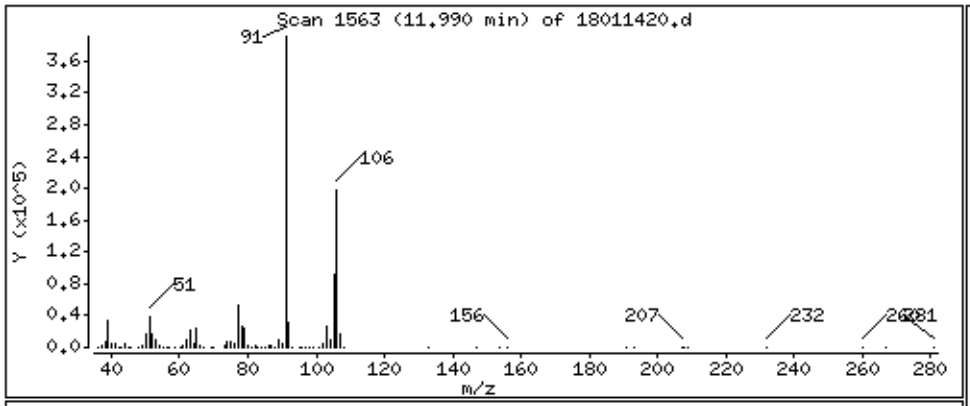
Operator: db

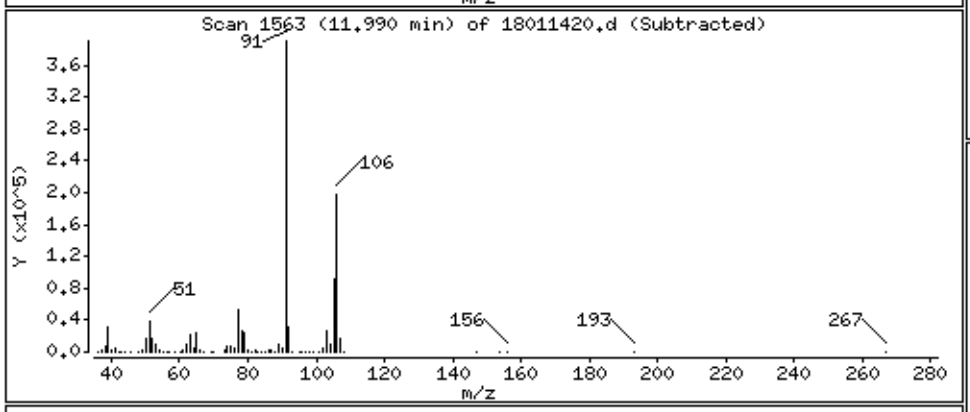
Column phase: RTx-624

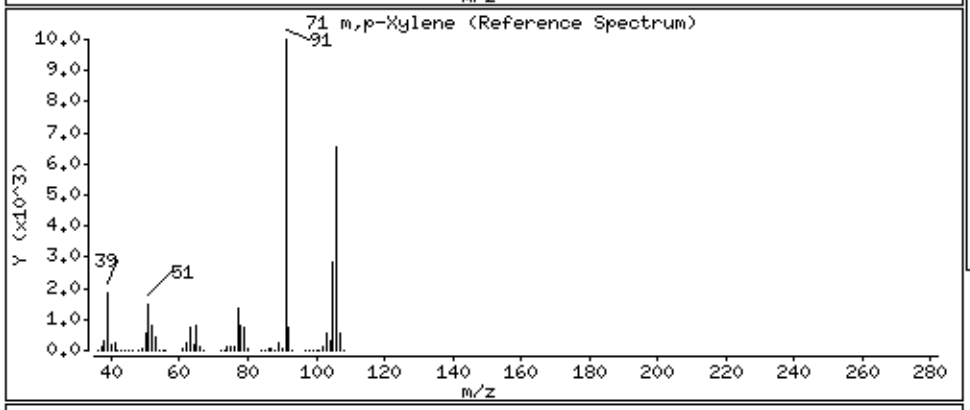
Column diameter: 0.53

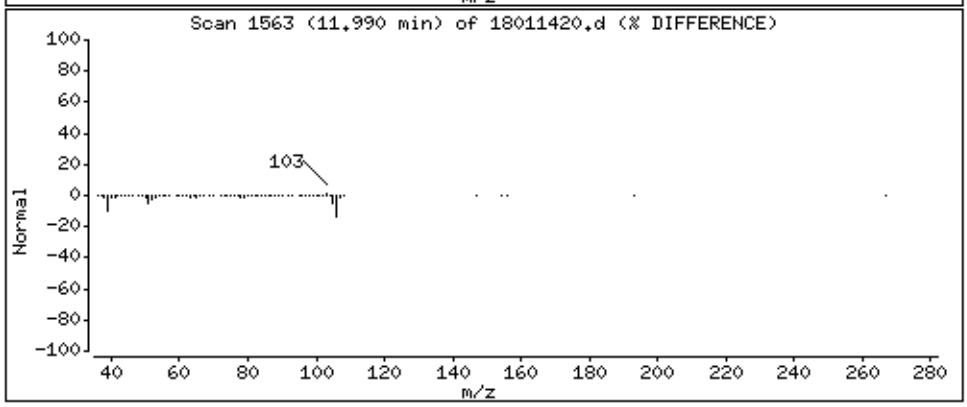
71 m,p-Xylene

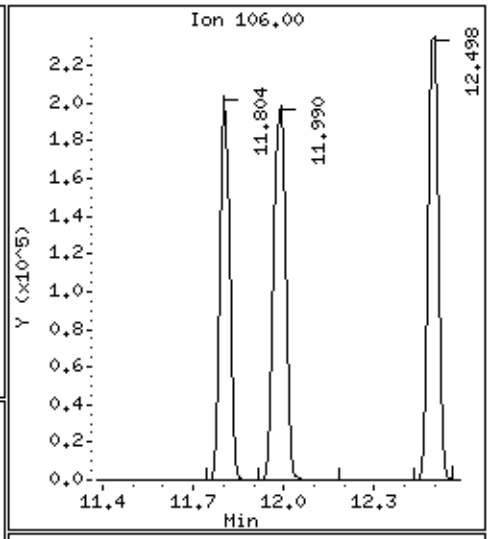
Concentration: 85.630 NG

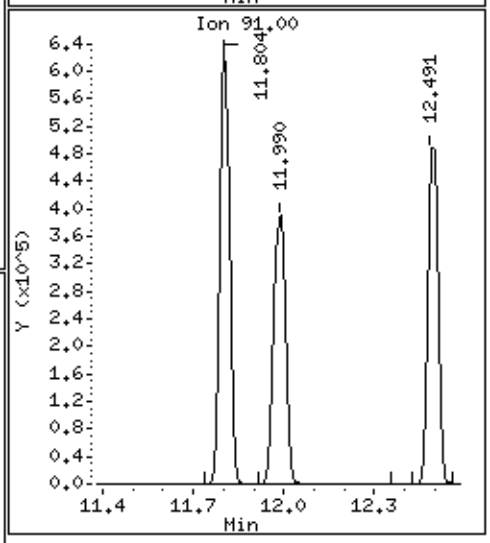












Data File: /chem/msd18.i/14Jan2016.b/18011420.d

Date : 14-JAN-2016 21:40

Client ID:

Instrument: msd18.i

Sample Info: 20ml #2516-203, 1.0ul 2595-246-50

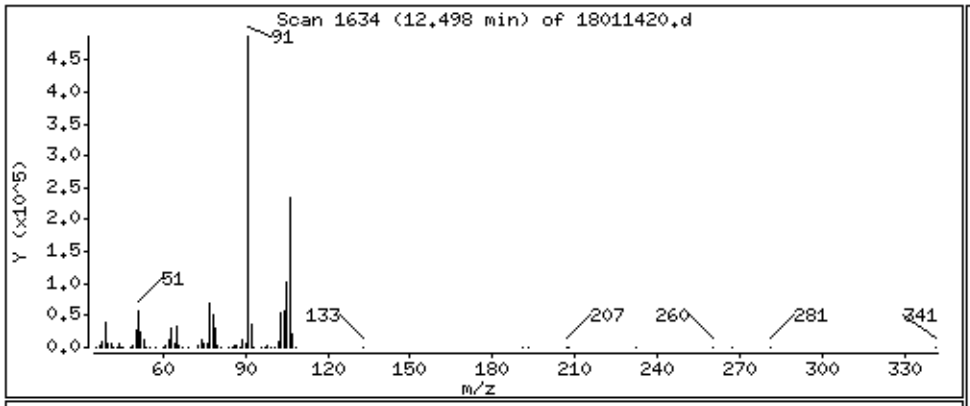
Operator: db

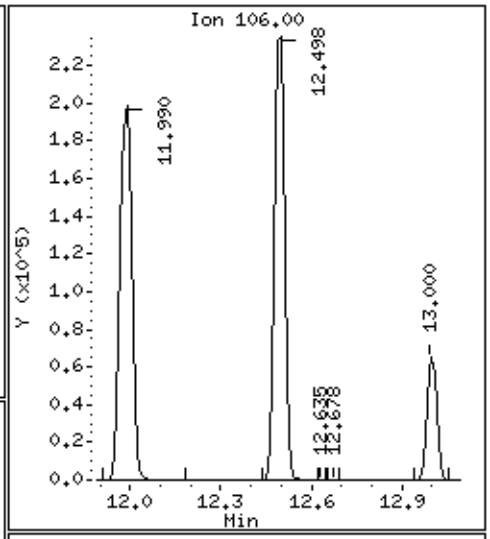
Column phase: RTx-624

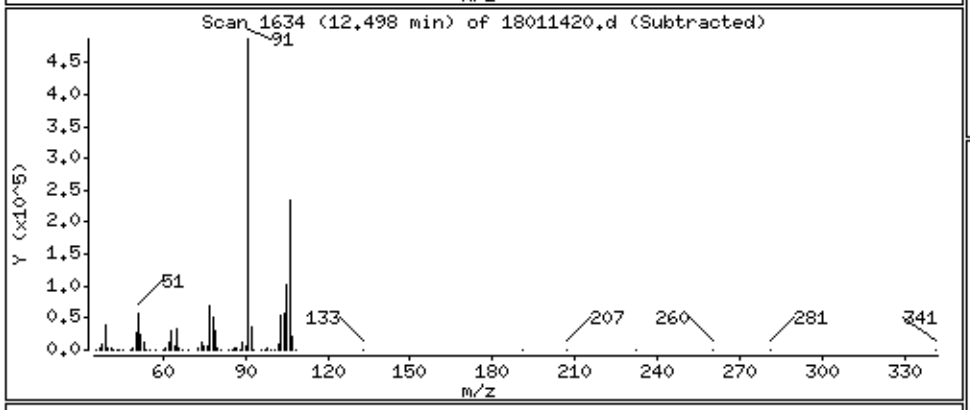
Column diameter: 0.53

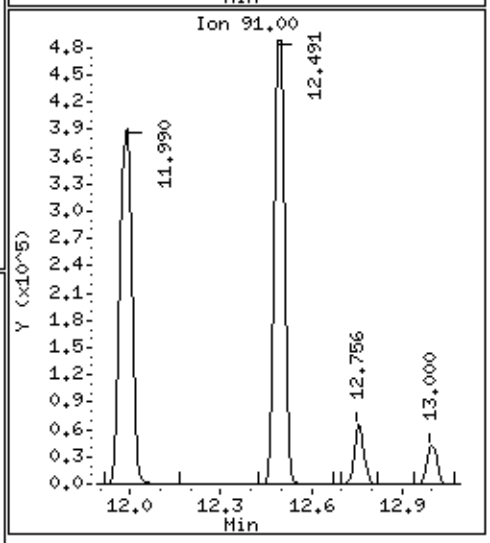
74 o-Xylene

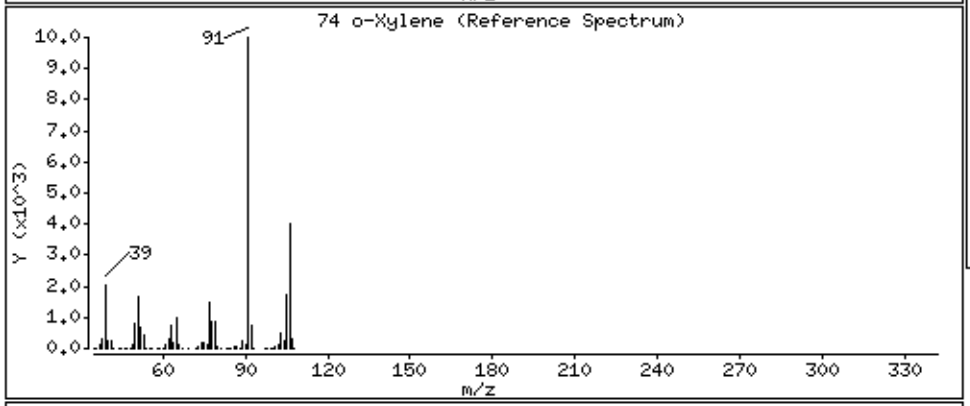
Concentration: 80.966 NG

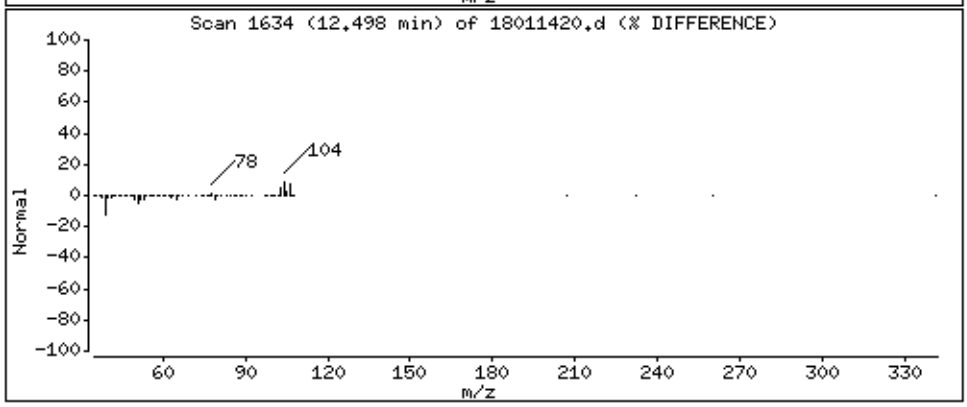












Data File: /chem/msd18.i/14Jan2016.b/18011420.d

Date : 14-JAN-2016 21:40

Client ID:

Instrument: msd18.i

Sample Info: 20ml #2516-203, 1.0ul 2595-246-50

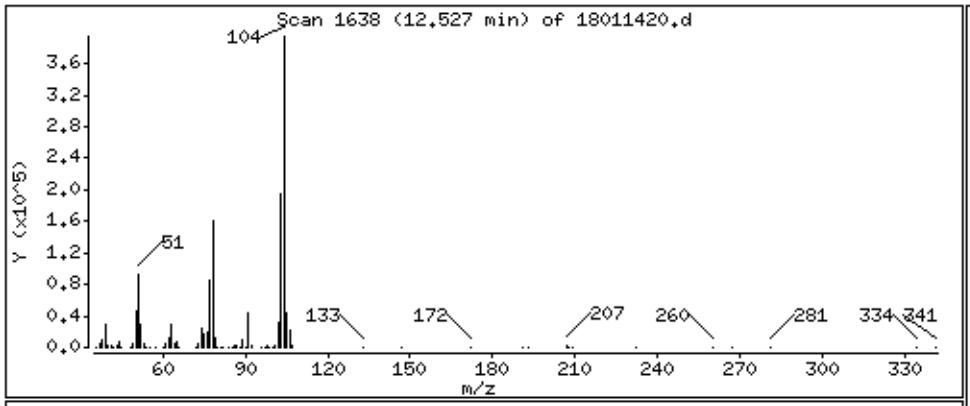
Operator: db

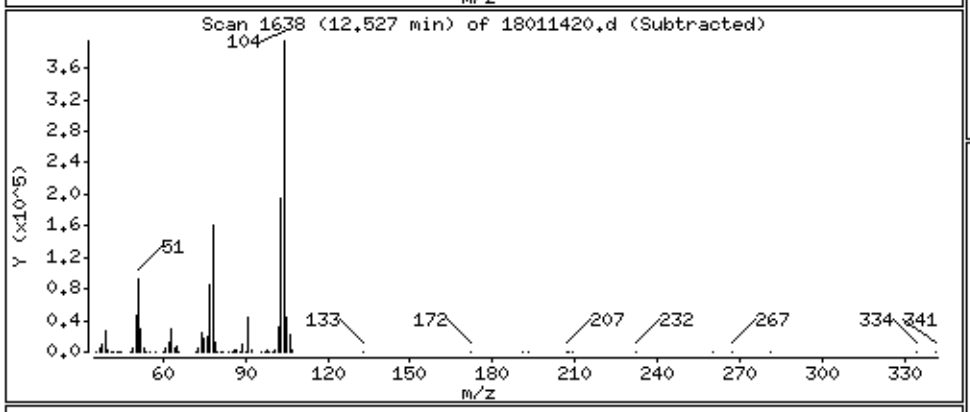
Column phase: RTx-624

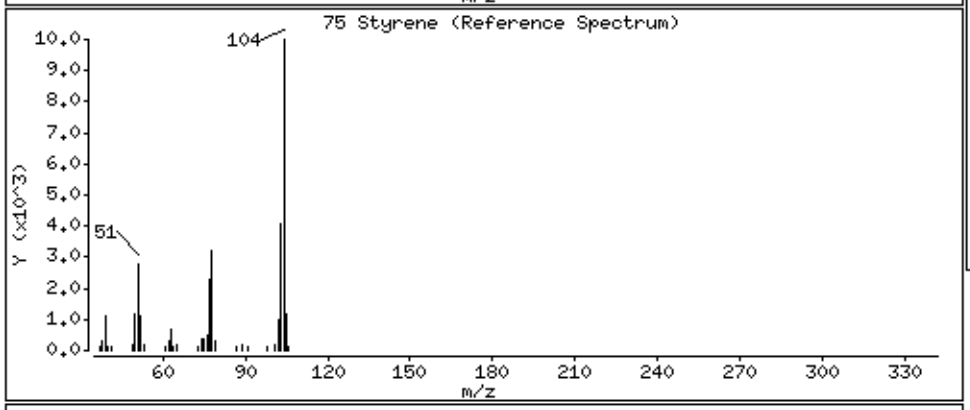
Column diameter: 0.53

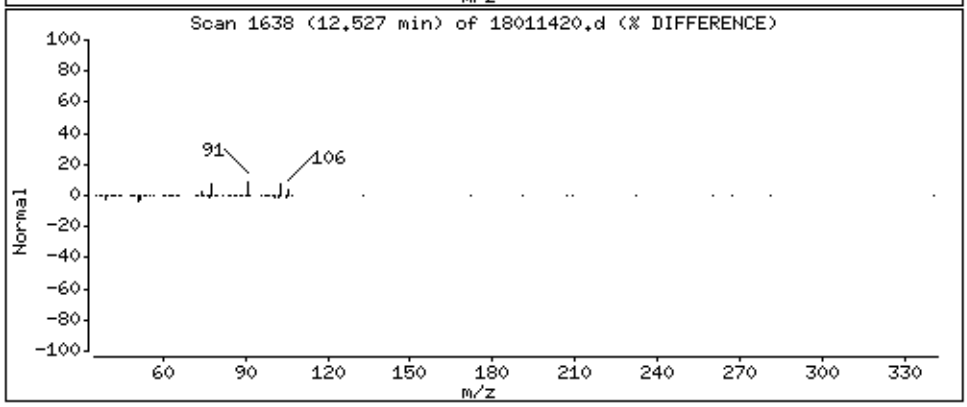
75 Styrene

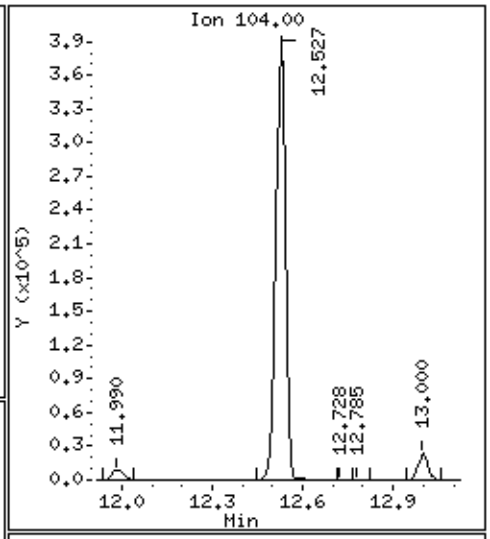
Concentration: 74.704 NG

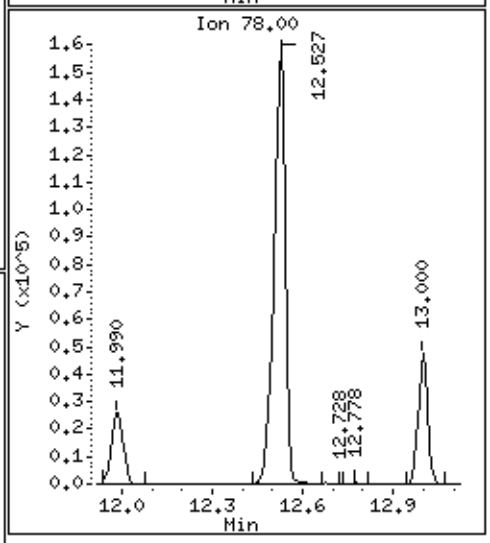












Data File: /chem/msd18.i/14Jan2016.b/18011420.d

Date : 14-JAN-2016 21:40

Client ID:

Instrument: msd18.i

Sample Info: 20ml #2516-203, 1.0ul 2595-246-50

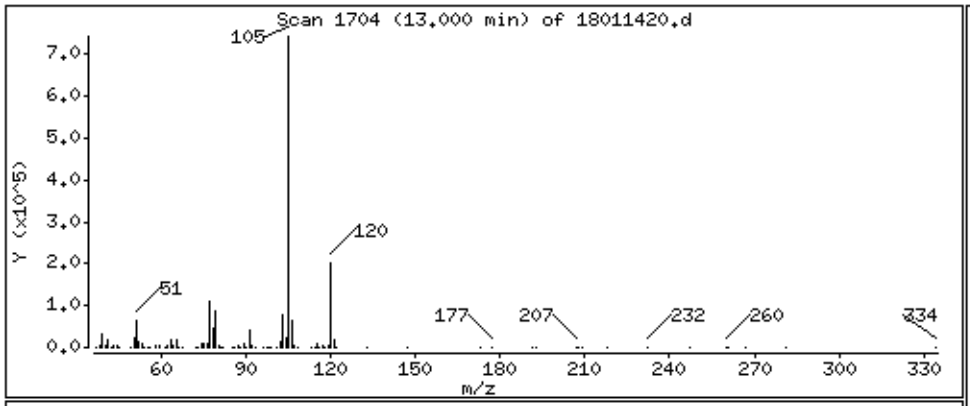
Operator: db

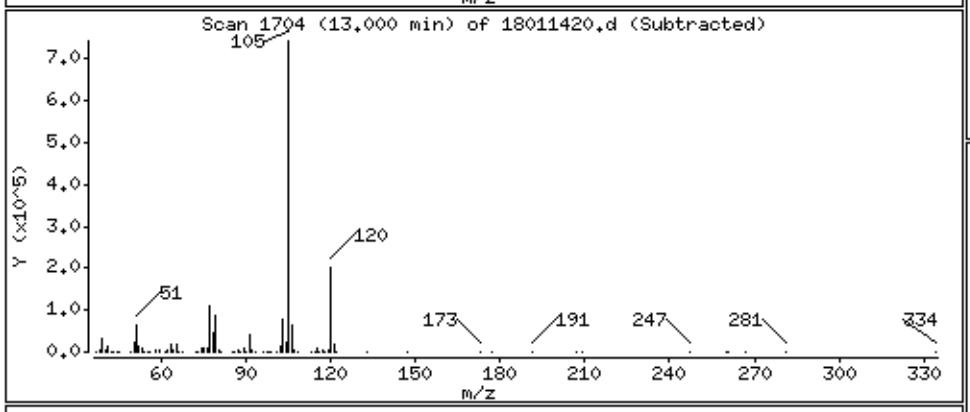
Column phase: RTx-624

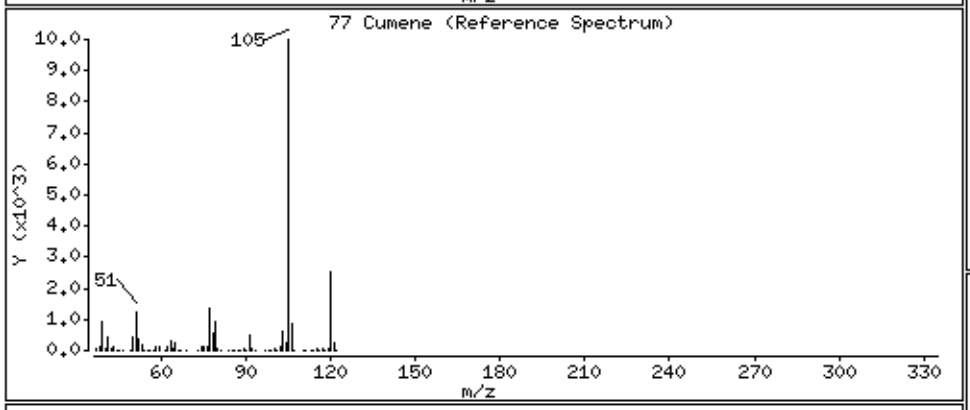
Column diameter: 0.53

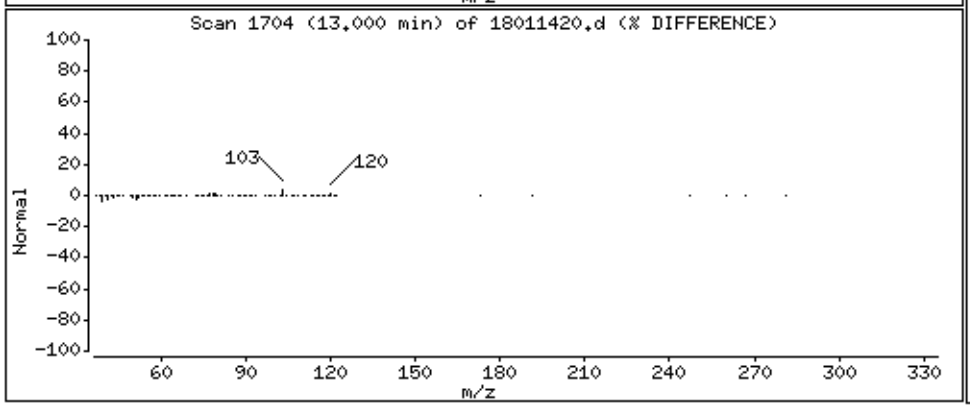
77 Cumene

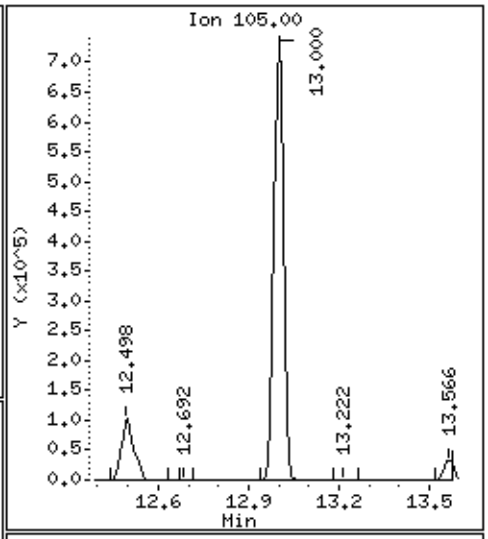
Concentration: 92.701 NG

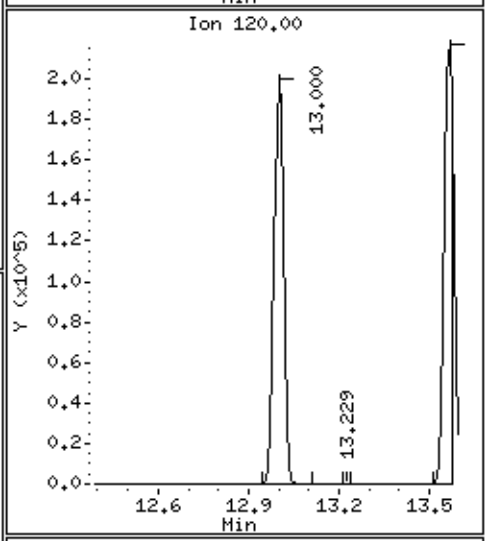


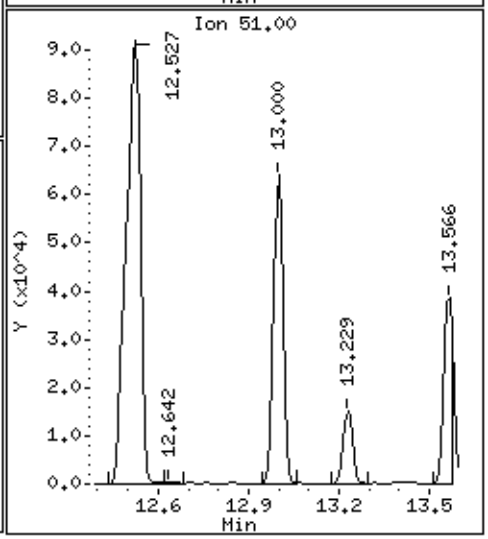












Data File: /chem/msd18.i/14Jan2016.b/18011420.d

Date : 14-JAN-2016 21:40

Client ID:

Instrument: msd18.i

Sample Info: 20ml #2516-203, 1.0ul 2595-246-50

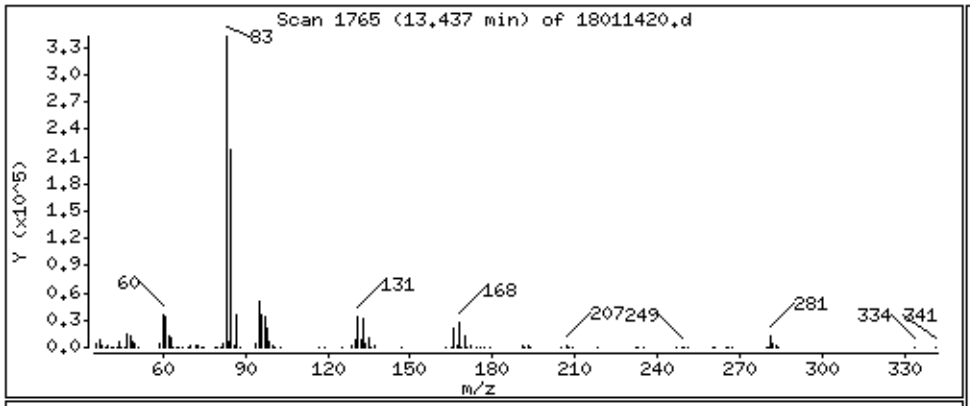
Operator: db

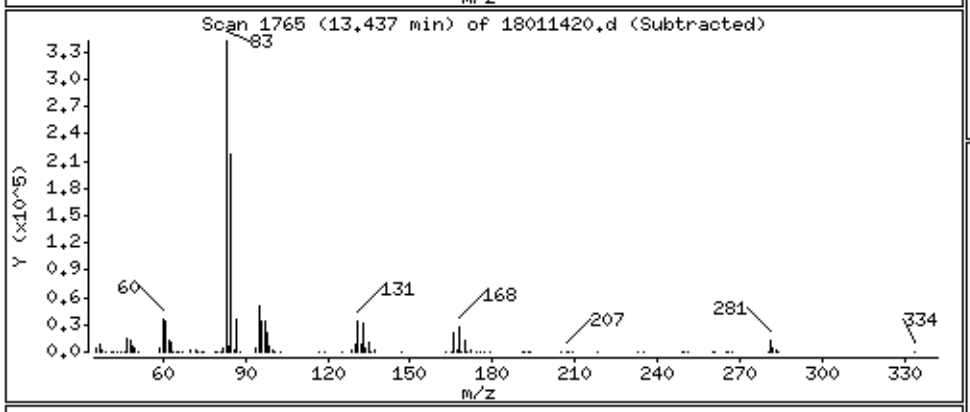
Column phase: RTx-624

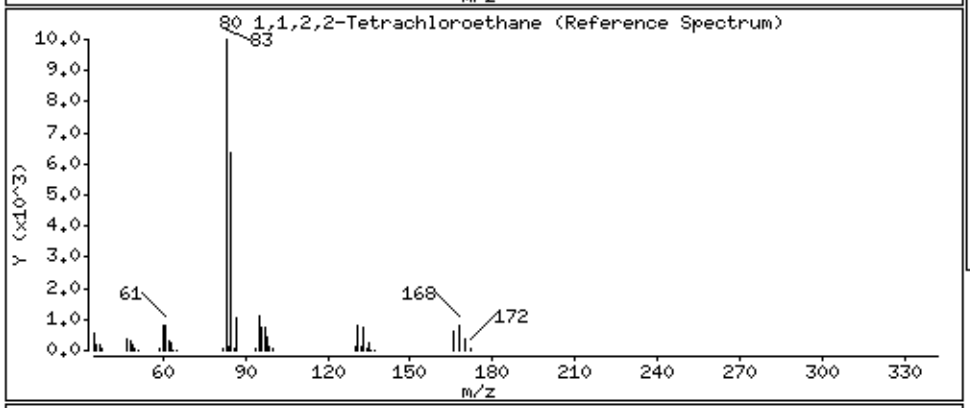
Column diameter: 0.53

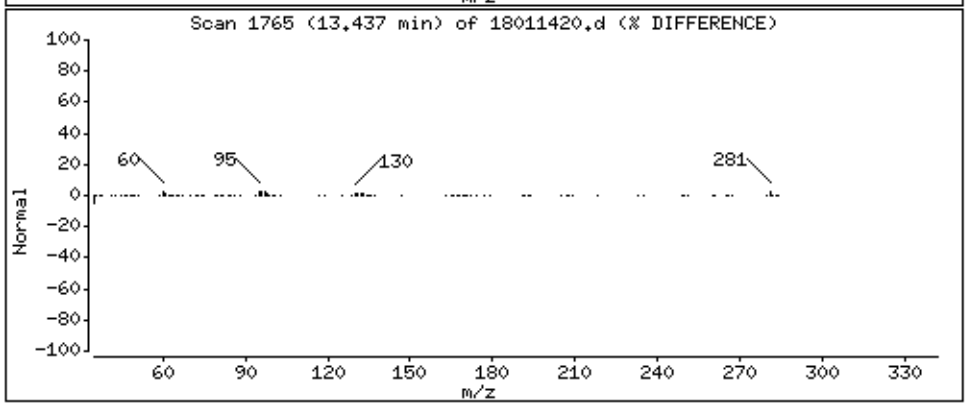
80 1,1,2,2-Tetrachloroethane

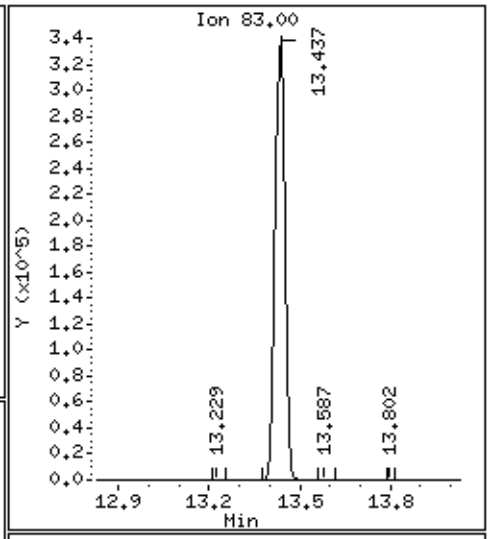
Concentration: 131.18 NG

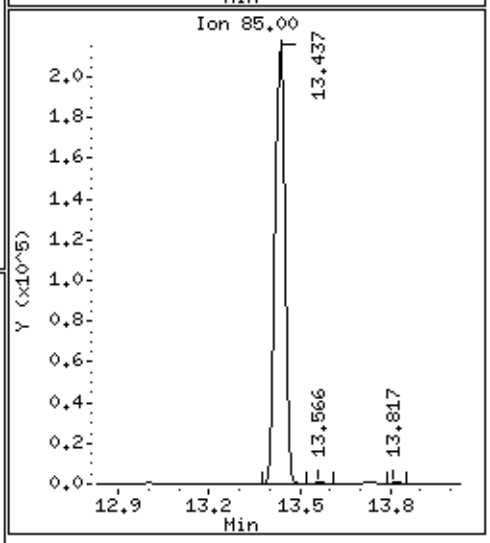












Data File: /chem/msd18.i/14Jan2016.b/18011420.d

Date : 14-JAN-2016 21:40

Client ID:

Instrument: msd18.i

Sample Info: 20ml #2516-203, 1.0ul 2595-246-50

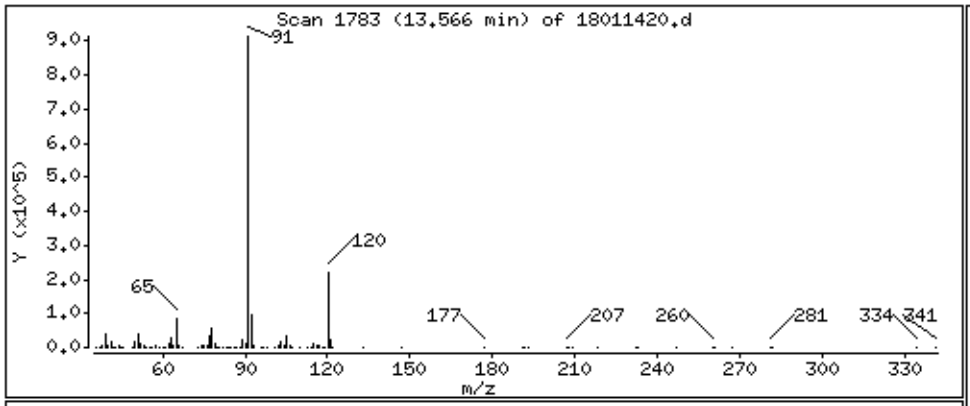
Operator: db

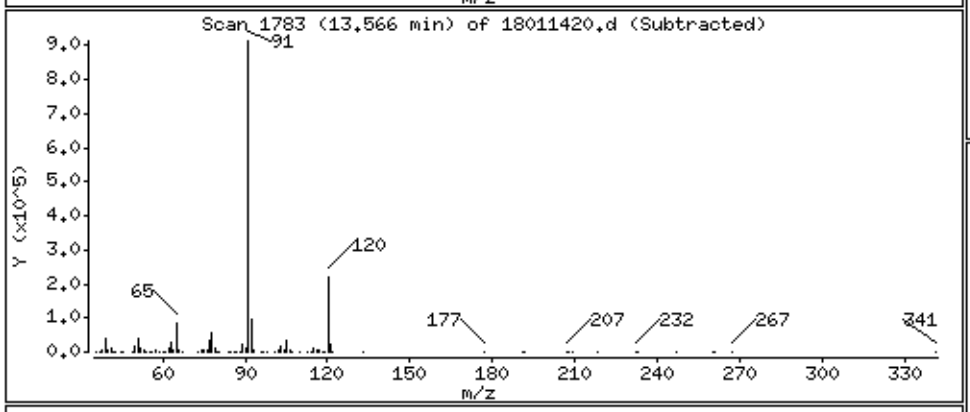
Column phase: RTx-624

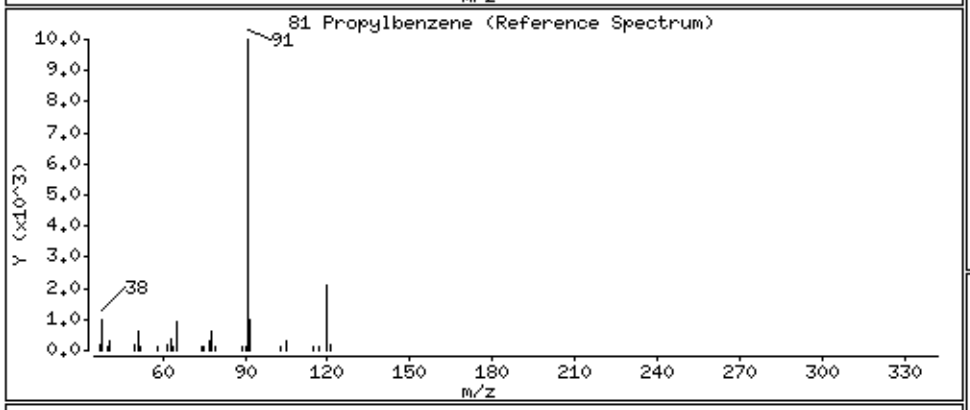
Column diameter: 0.53

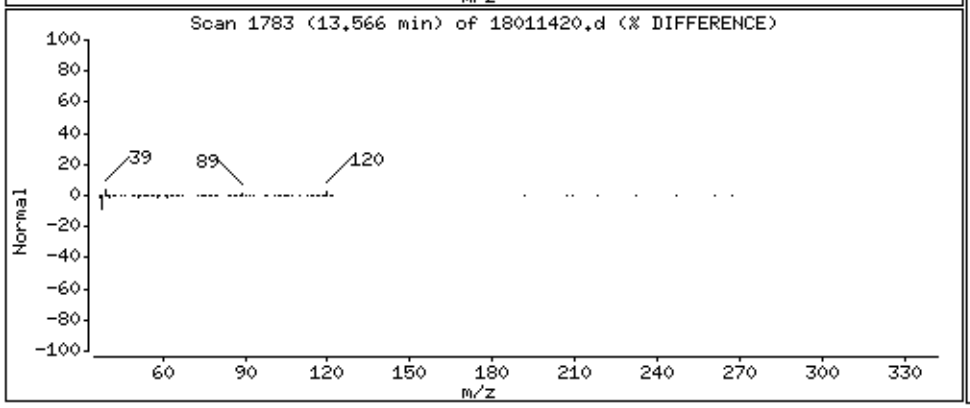
81 Propylbenzene

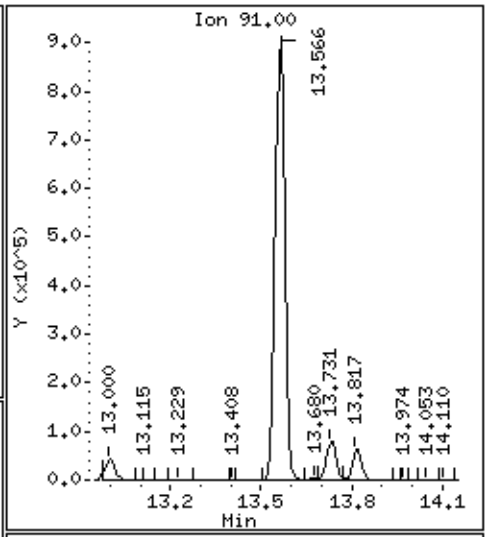
Concentration: 105.50 NG

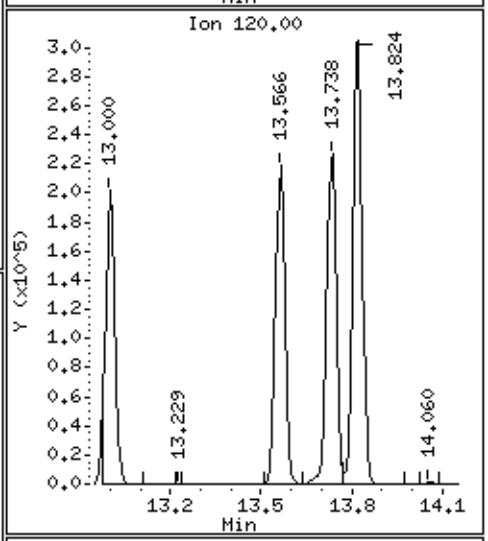


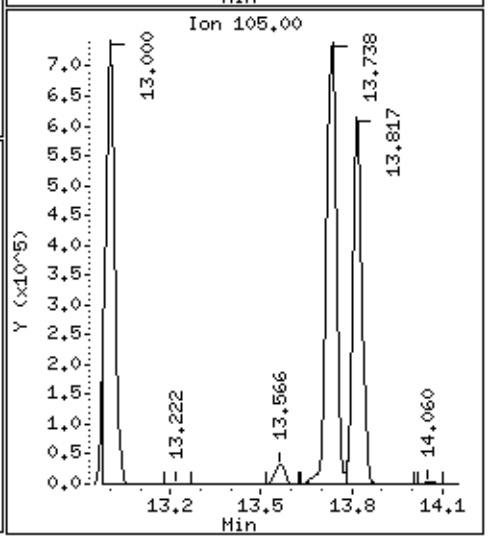












Data File: /chem/msd18.i/14Jan2016.b/18011420.d

Date : 14-JAN-2016 21:40

Client ID:

Instrument: msd18.i

Sample Info: 20ml #2516-203, 1.0ul 2595-246-50

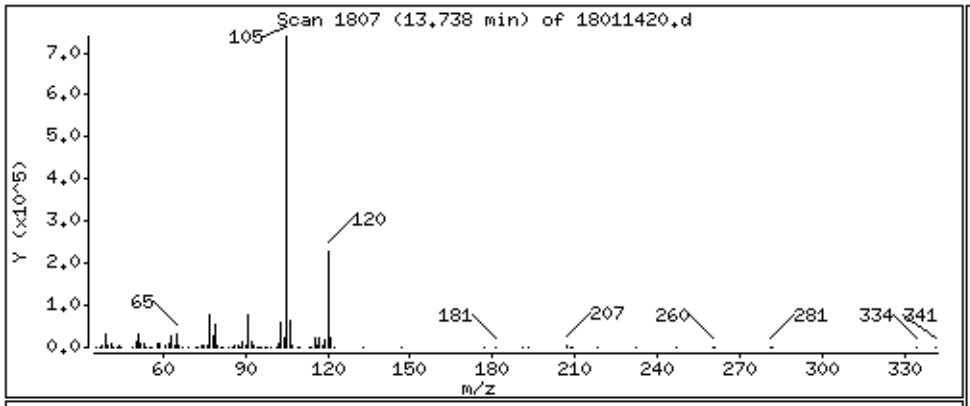
Operator: db

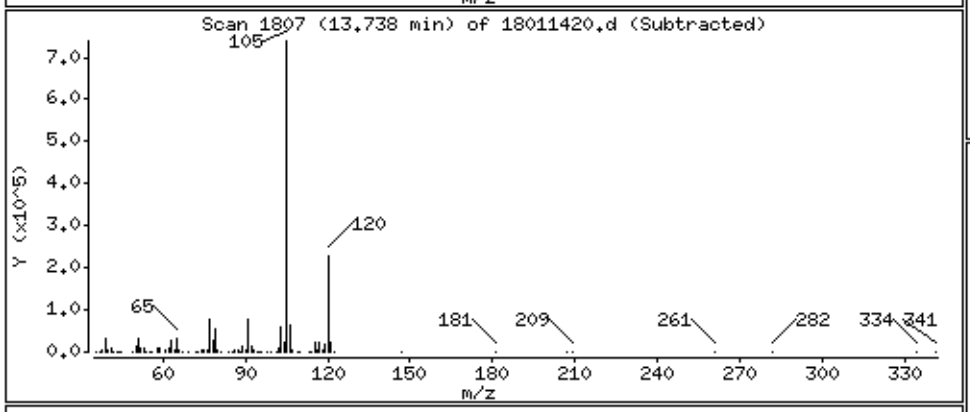
Column phase: RTx-624

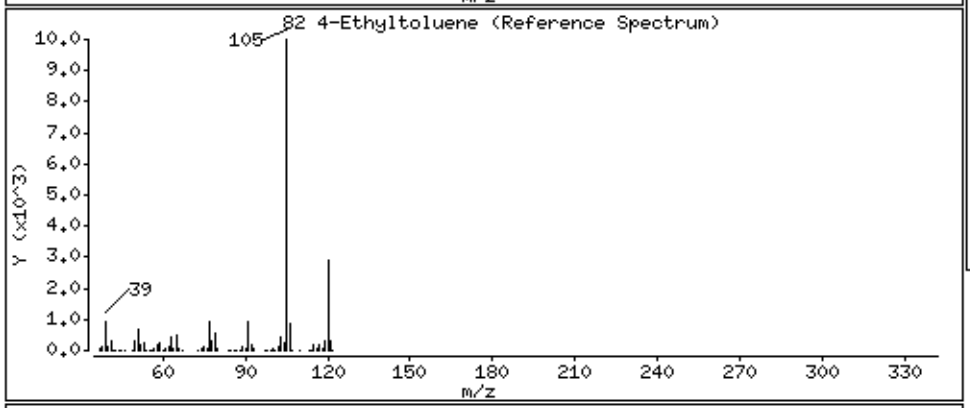
Column diameter: 0.53

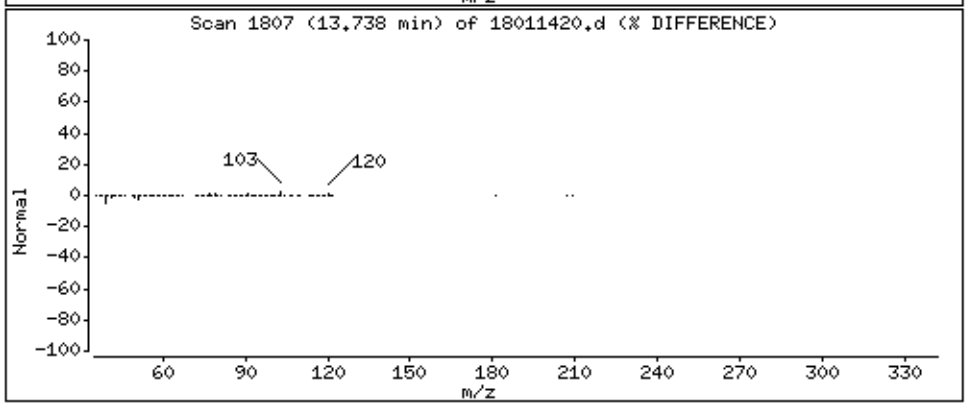
82 4-Ethyltoluene

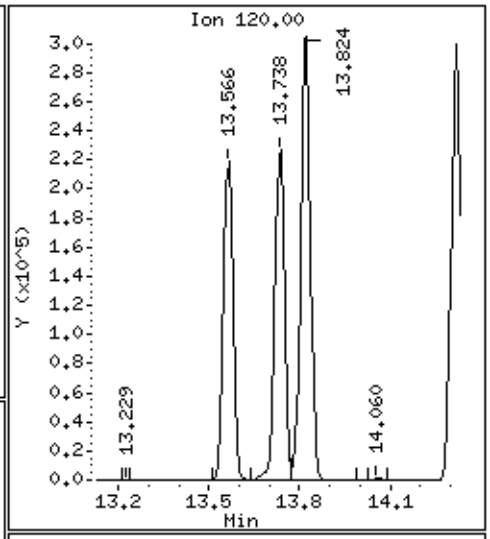
Concentration: 110.31 NG

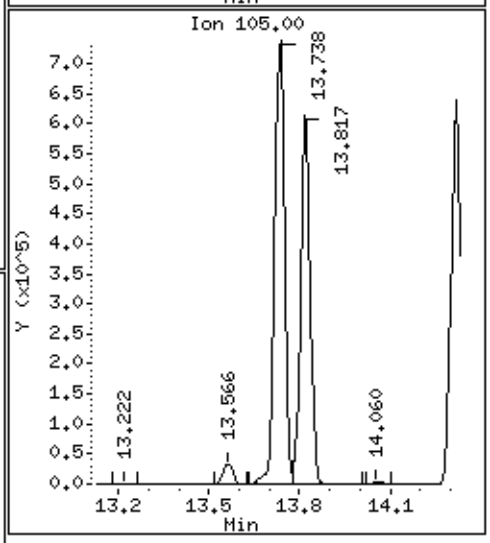












Data File: /chem/msd18.i/14Jan2016.b/18011420.d

Date : 14-JAN-2016 21:40

Client ID:

Instrument: msd18.i

Sample Info: 20ml #2516-203, 1.0ul 2595-246-50

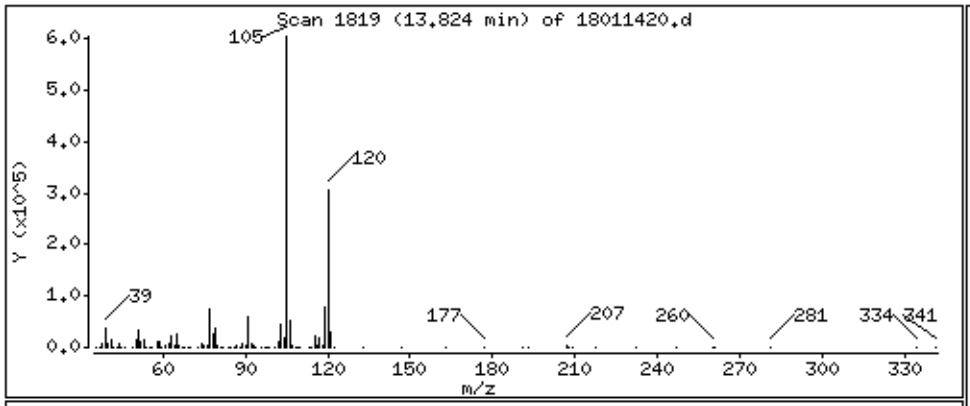
Operator: db

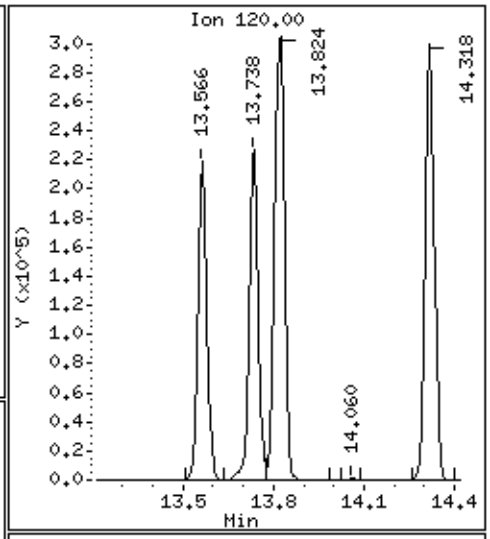
Column phase: RTx-624

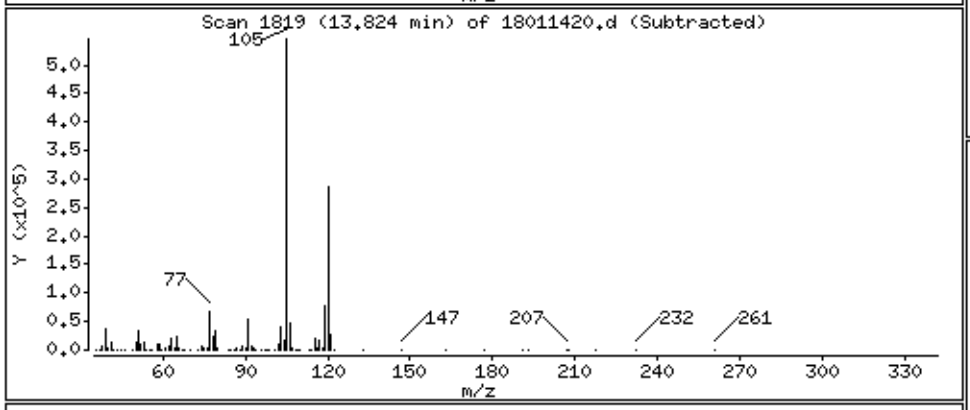
Column diameter: 0.53

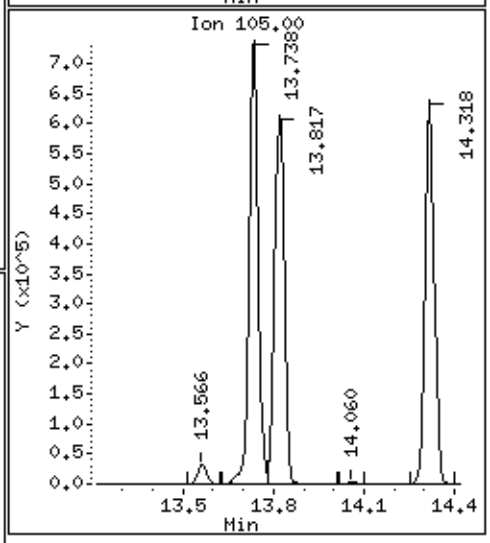
83 1,3,5-Trimethylbenzene

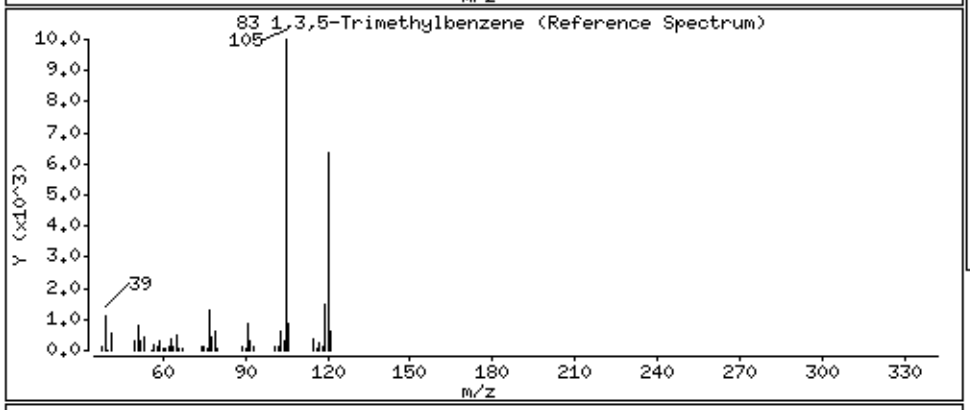
Concentration: 107.20 NG

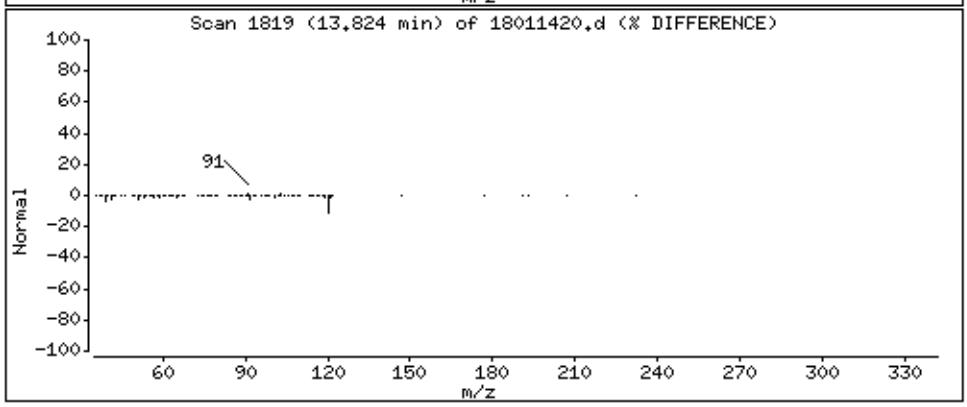












Data File: /chem/msd18.i/14Jan2016.b/18011420.d

Date : 14-JAN-2016 21:40

Client ID:

Instrument: msd18.i

Sample Info: 20ml #2516-203, 1.0ul 2595-246-50

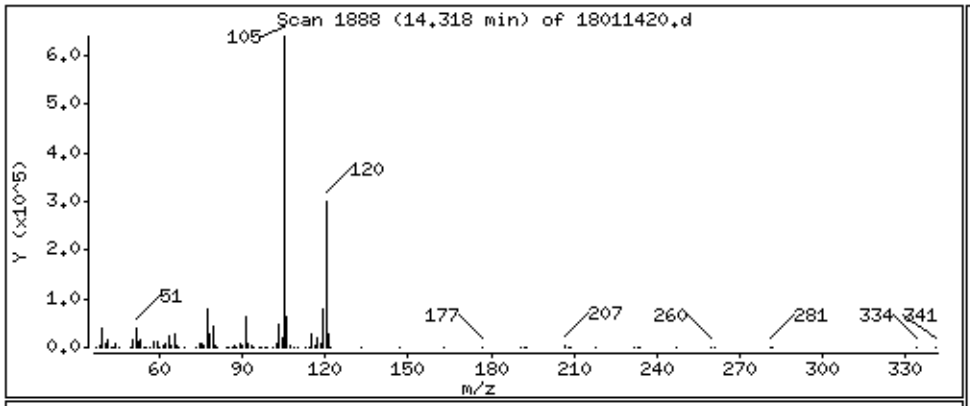
Operator: db

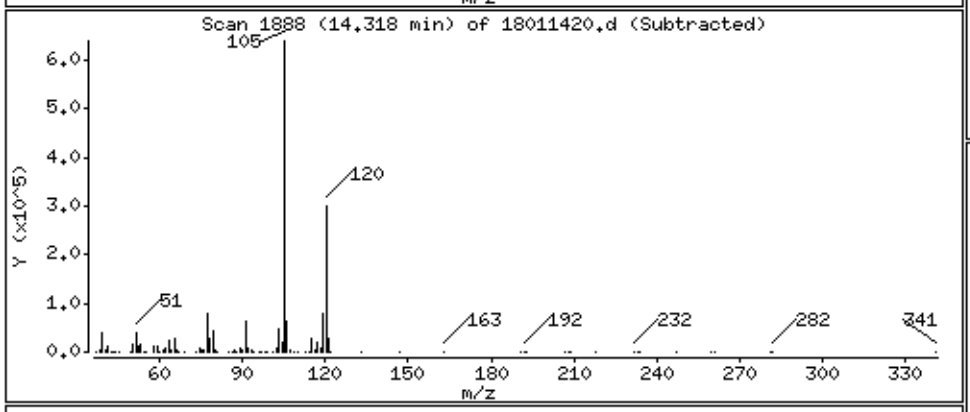
Column phase: RTx-624

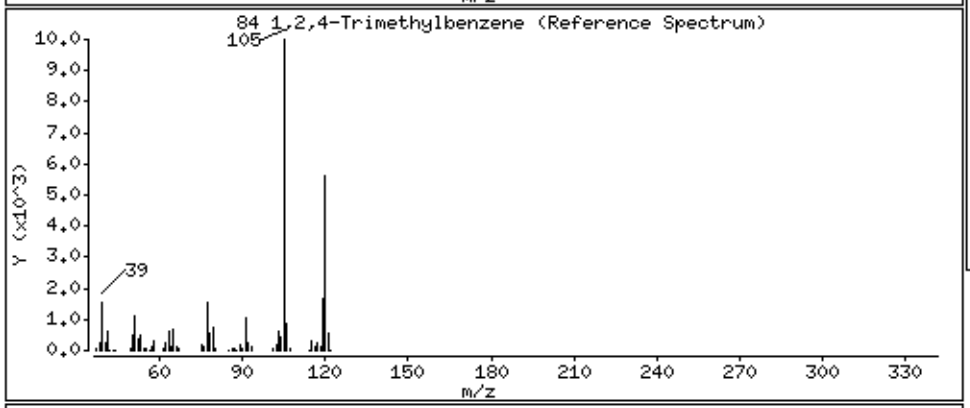
Column diameter: 0.53

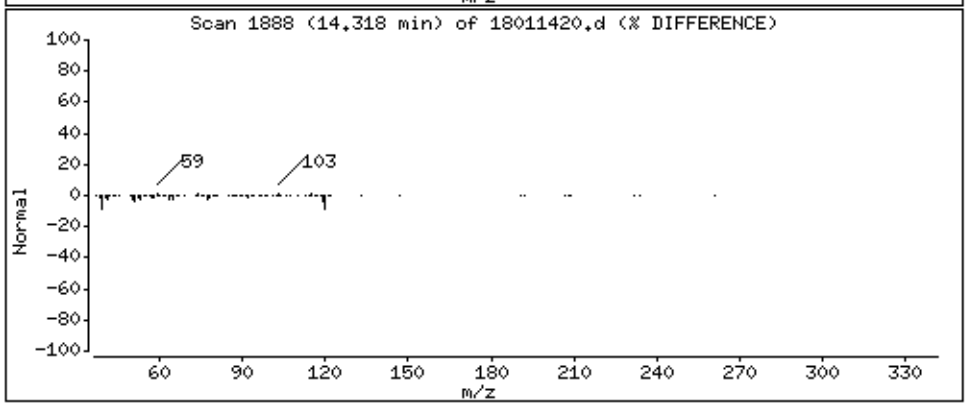
84 1,2,4-Trimethylbenzene

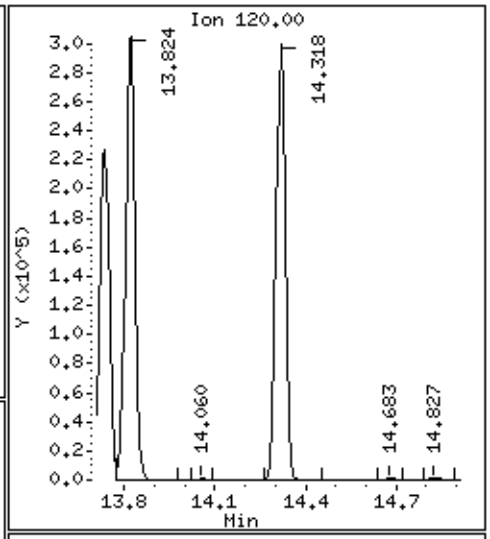
Concentration: 104.04 NG

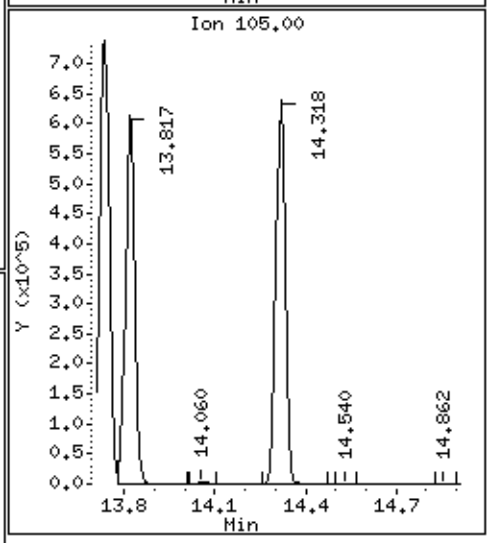












Data File: /chem/msd18.i/14Jan2016.b/18011420.d

Date : 14-JAN-2016 21:40

Client ID:

Instrument: msd18.i

Sample Info: 20ml #2516-203, 1.0ul 2595-246-50

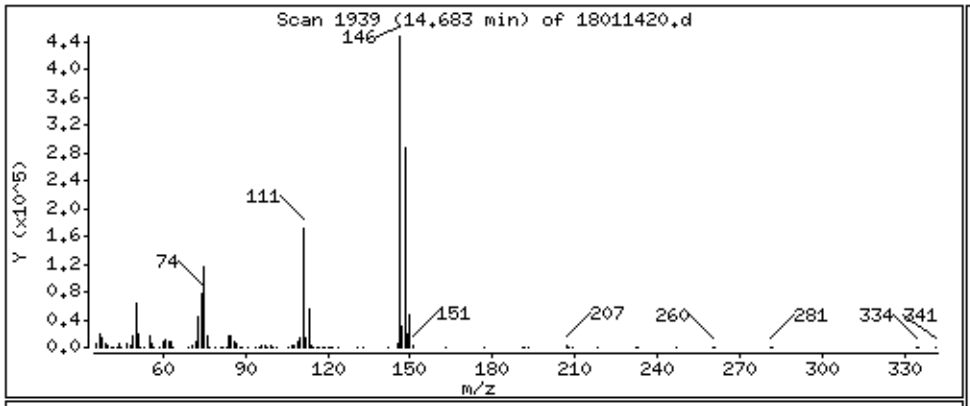
Operator: db

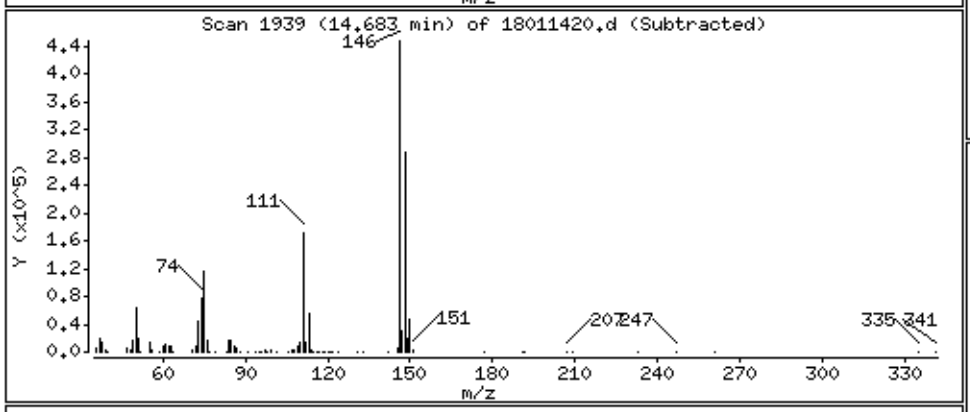
Column phase: RTx-624

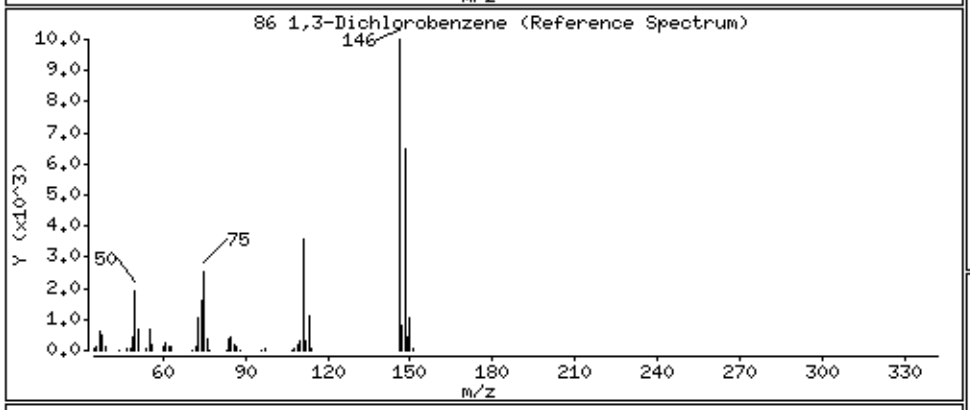
Column diameter: 0.53

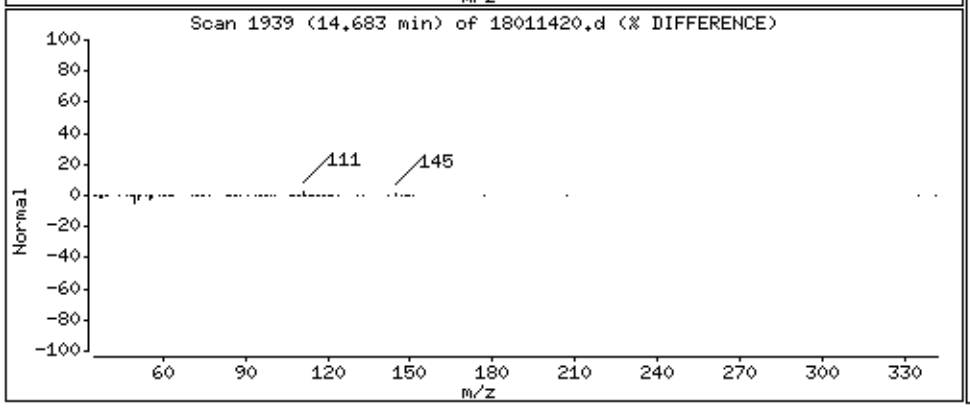
86 1,3-Dichlorobenzene

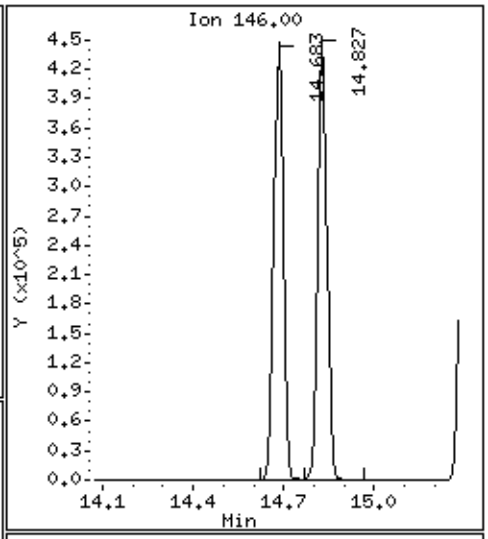
Concentration: 126.74 NG

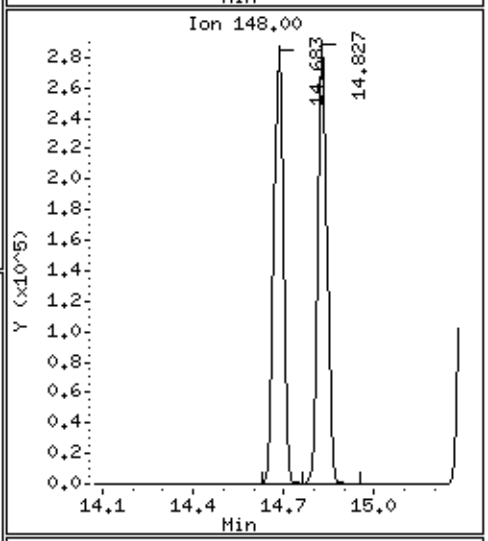


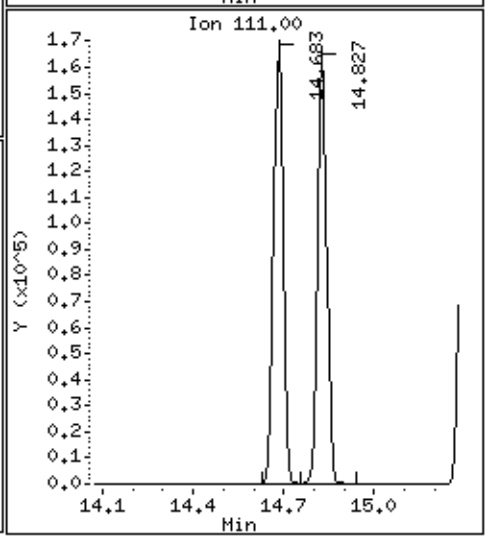












Data File: /chem/msd18.i/14Jan2016.b/18011420.d

Date : 14-JAN-2016 21:40

Client ID:

Instrument: msd18.i

Sample Info: 20ml #2516-203, 1.0ul 2595-246-50

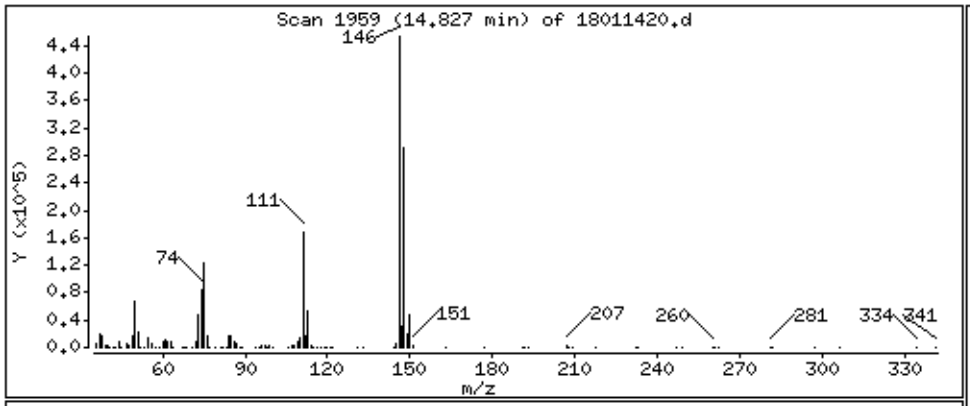
Operator: db

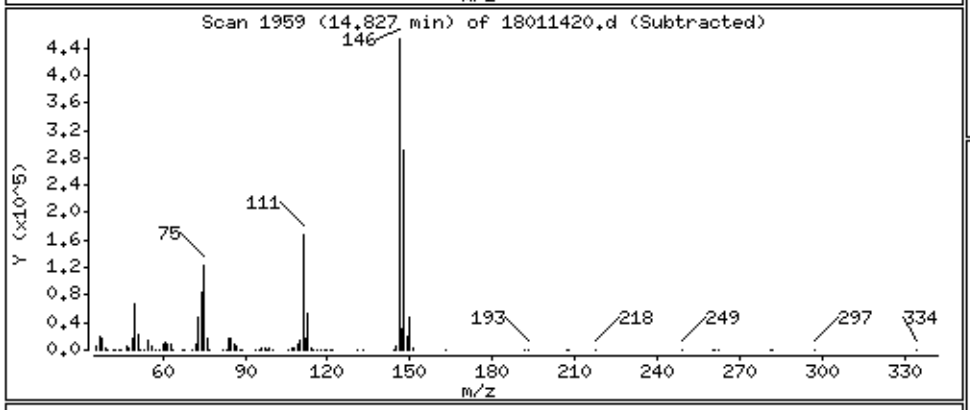
Column phase: RTx-624

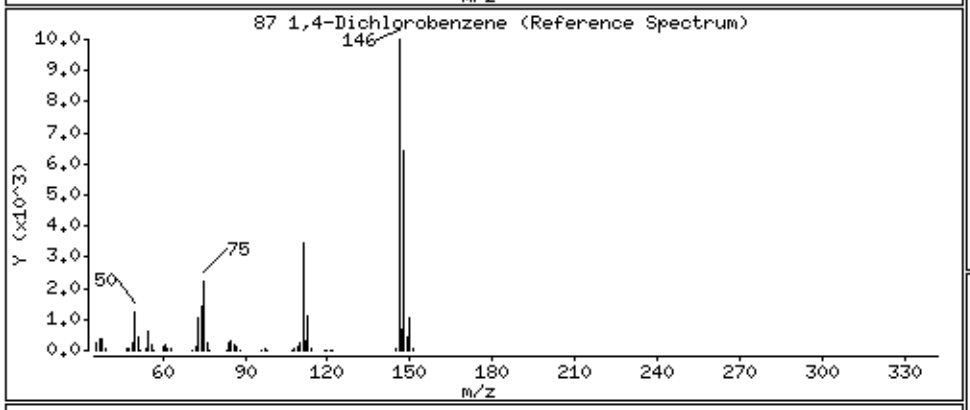
Column diameter: 0.53

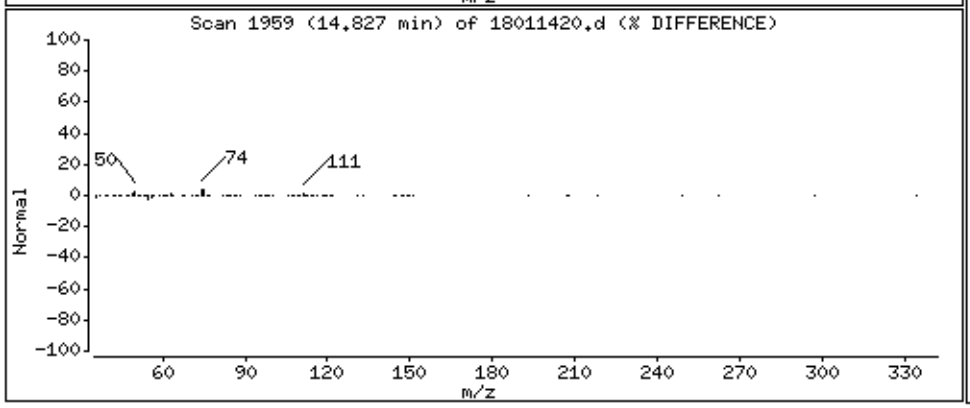
87 1,4-Dichlorobenzene

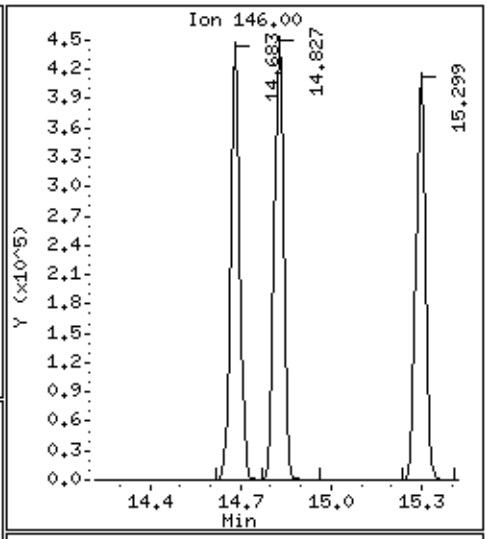
Concentration: 126.21 NG

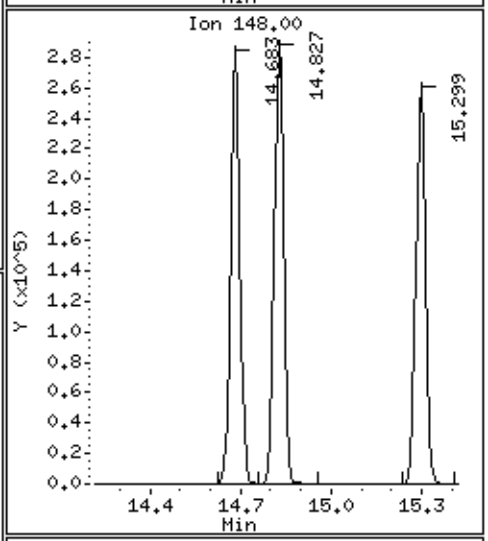


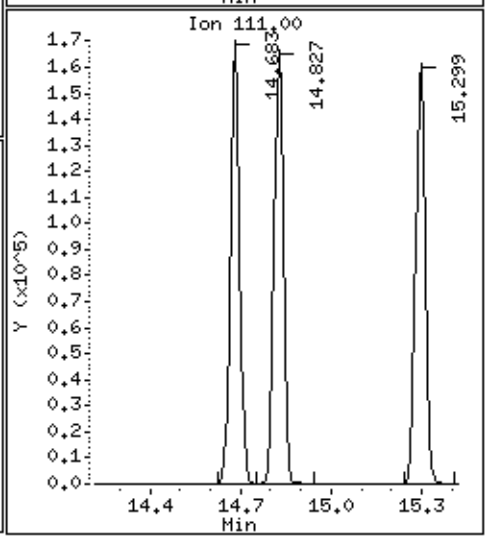












Data File: /chem/msd18.i/14Jan2016.b/18011420.d

Date : 14-JAN-2016 21:40

Client ID:

Instrument: msd18.i

Sample Info: 20ml #2516-203, 1.0ul 2595-246-50

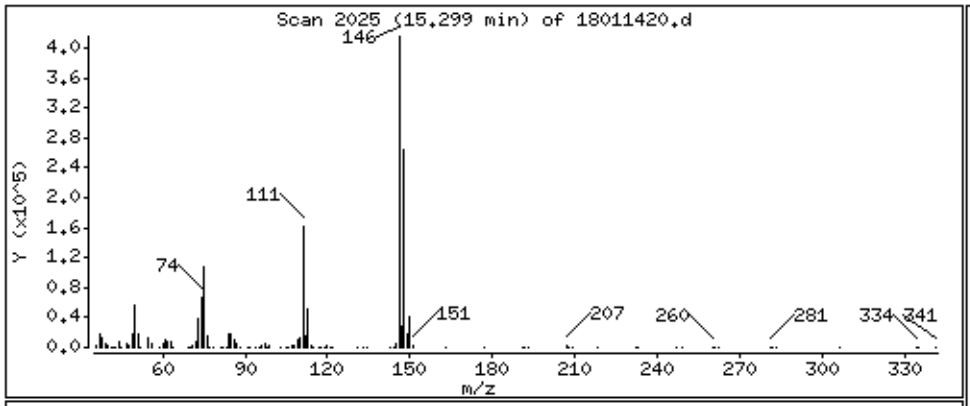
Operator: db

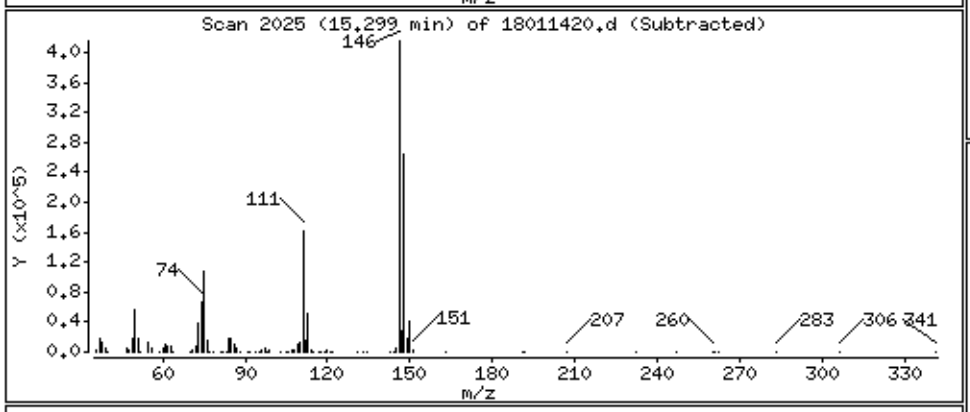
Column phase: RTx-624

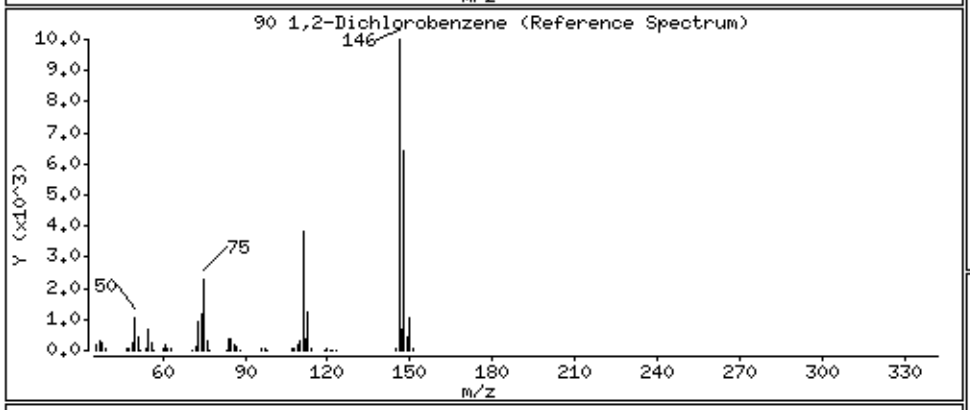
Column diameter: 0.53

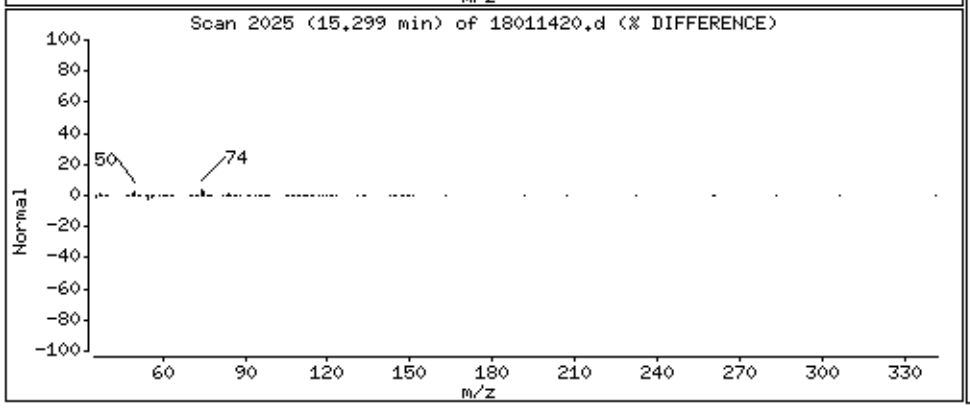
90 1,2-Dichlorobenzene

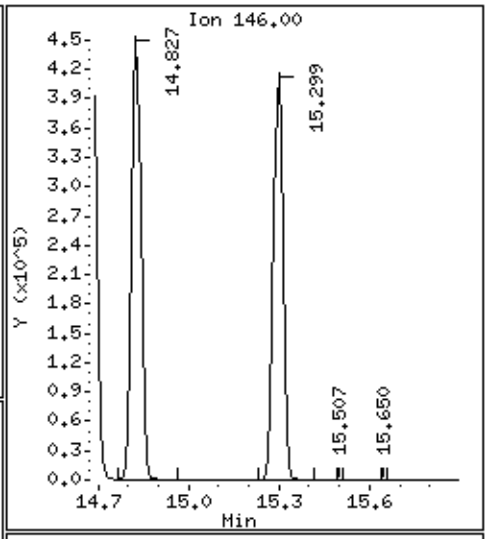
Concentration: 124.42 NG

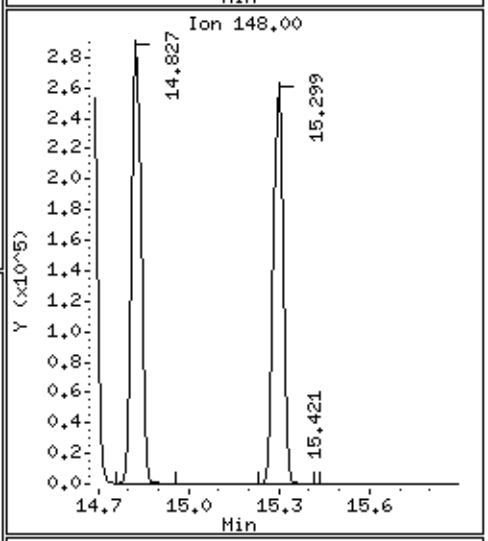


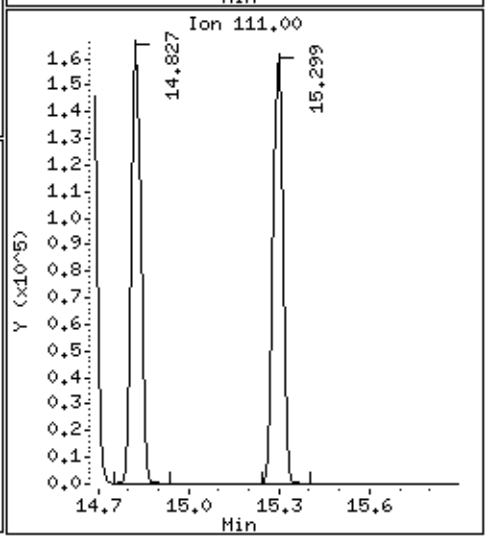












Data File: /chem/msd18.i/14Jan2016.b/18011420.d

Date : 14-JAN-2016 21:40

Client ID:

Instrument: msd18.i

Sample Info: 20ml #2516-203, 1.0ul 2595-246-50

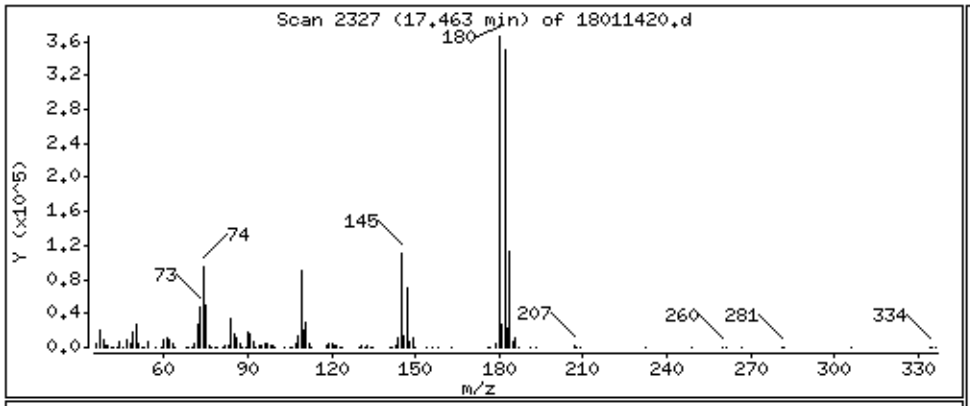
Operator: db

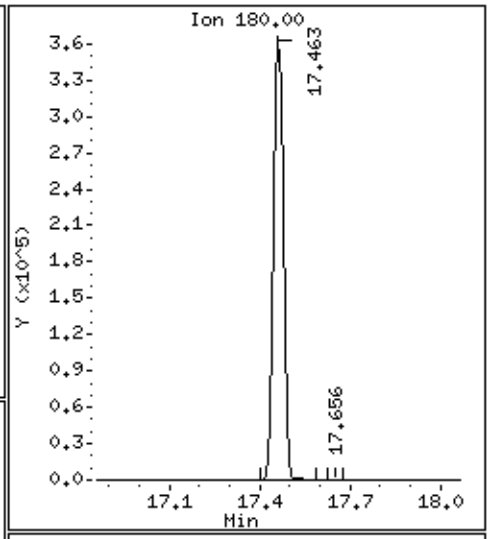
Column phase: RTx-624

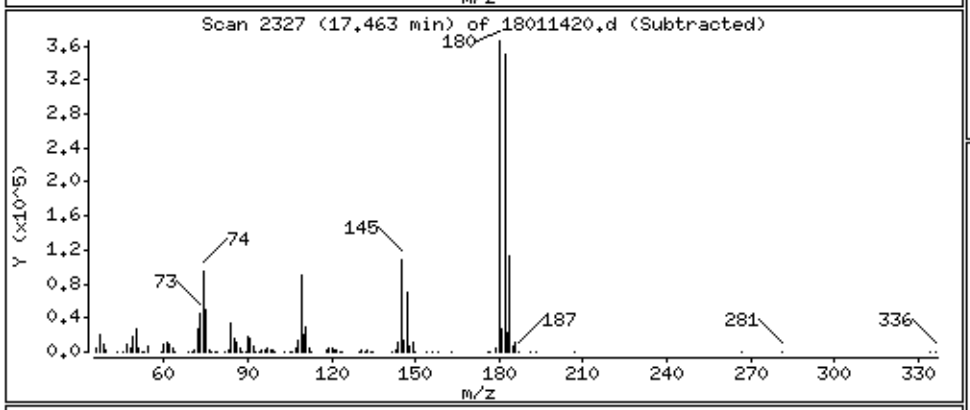
Column diameter: 0.53

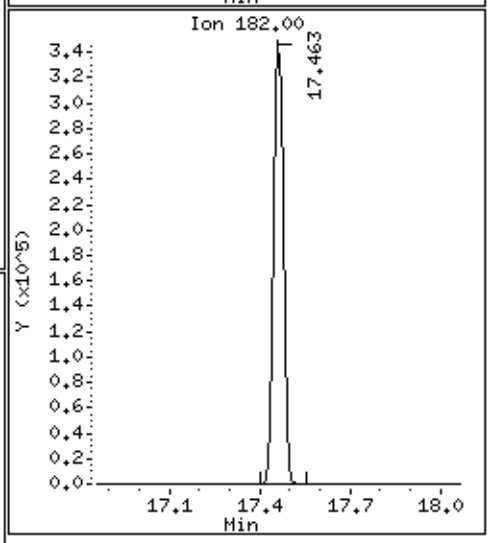
95 1,2,4-Trichlorobenzene

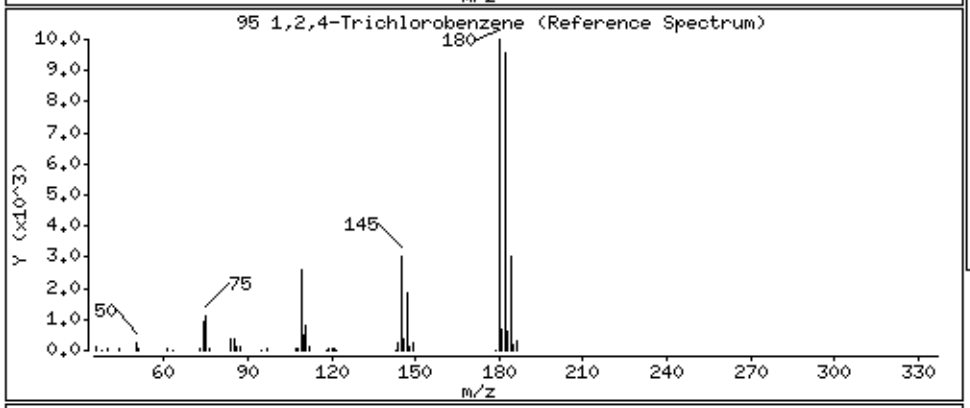
Concentration: 151.73 NG

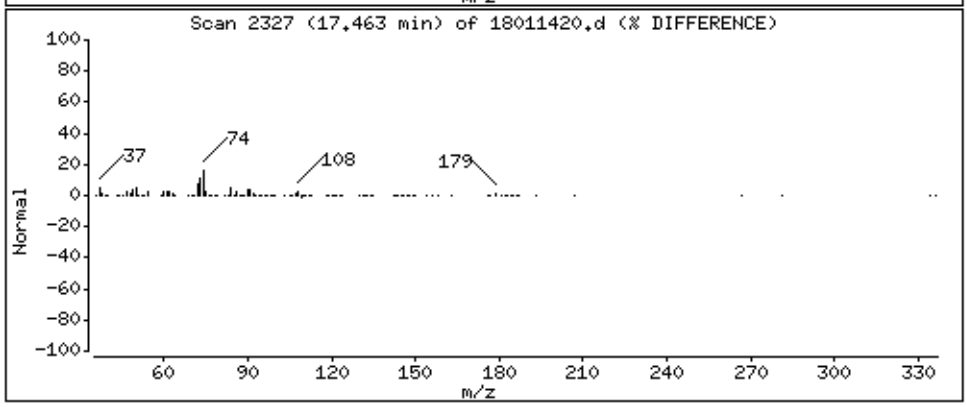












Data File: /chem/msd18.i/14Jan2016.b/18011420.d

Date : 14-JAN-2016 21:40

Client ID:

Instrument: msd18.i

Sample Info: 20ml #2516-203, 1.0ul 2595-246-50

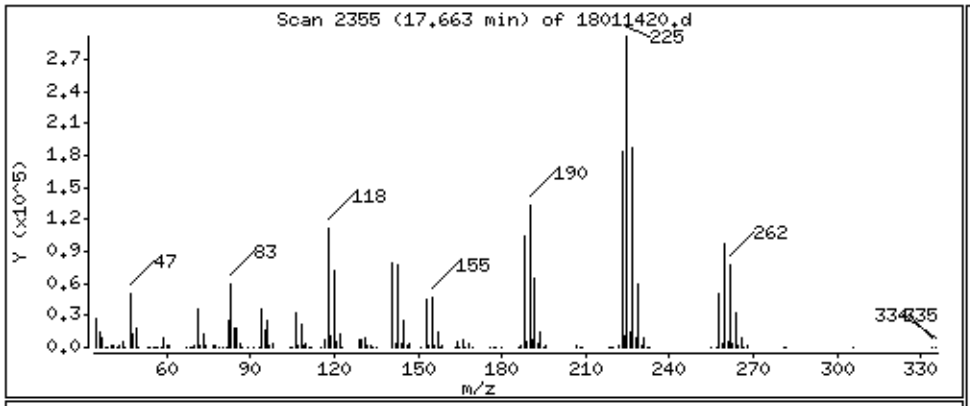
Operator: db

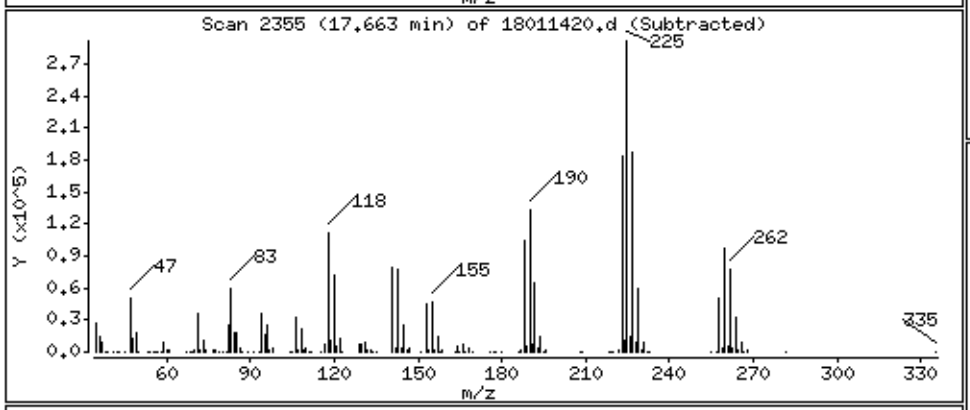
Column phase: RTx-624

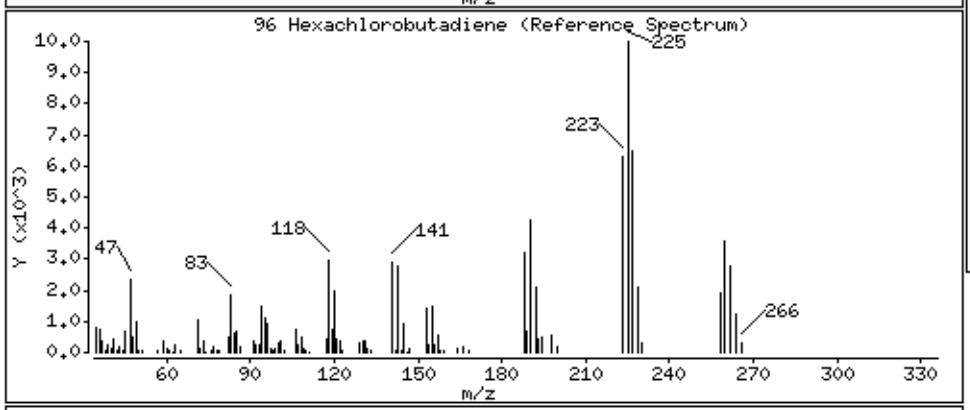
Column diameter: 0.53

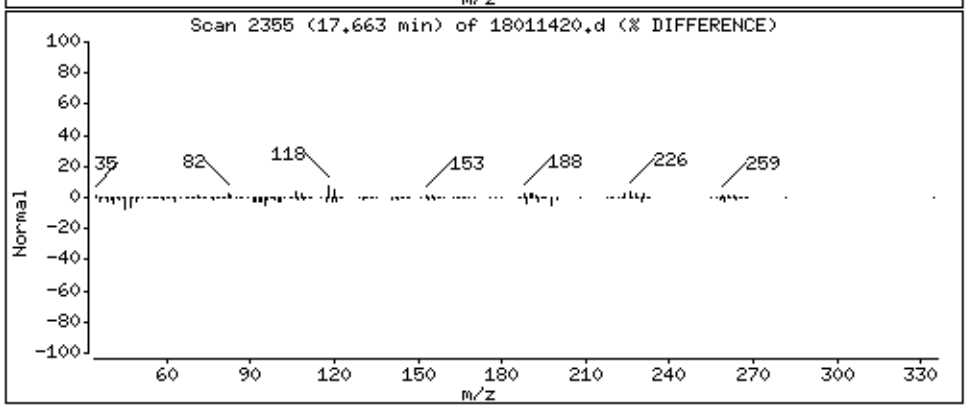
96 Hexachlorobutadiene

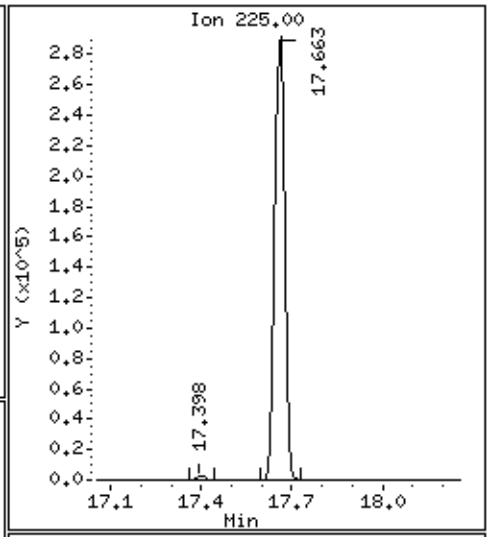
Concentration: 200.07 NG

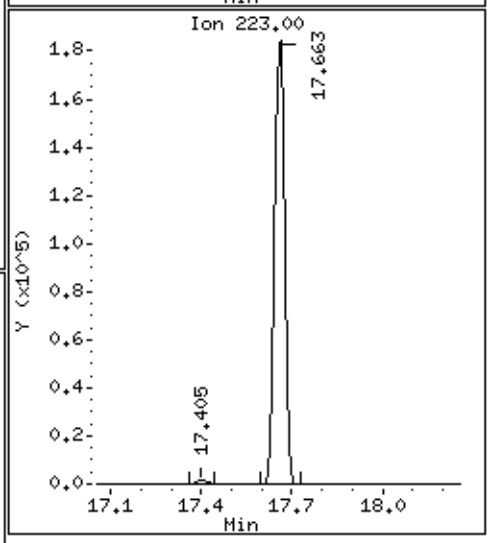












Data File: /chem/msd18.i/14Jan2016.b/18011420.d

Date : 14-JAN-2016 21:40

Client ID:

Instrument: msd18.i

Sample Info: 20ml #2516-203, 1.0ul 2595-246-50

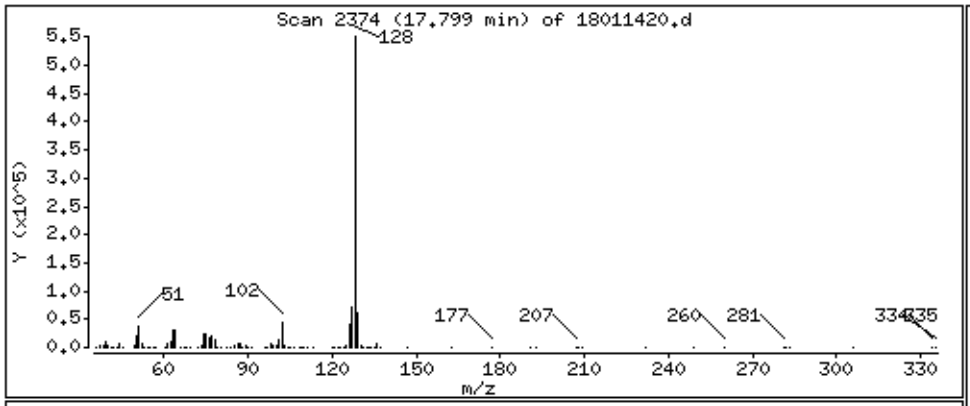
Operator: db

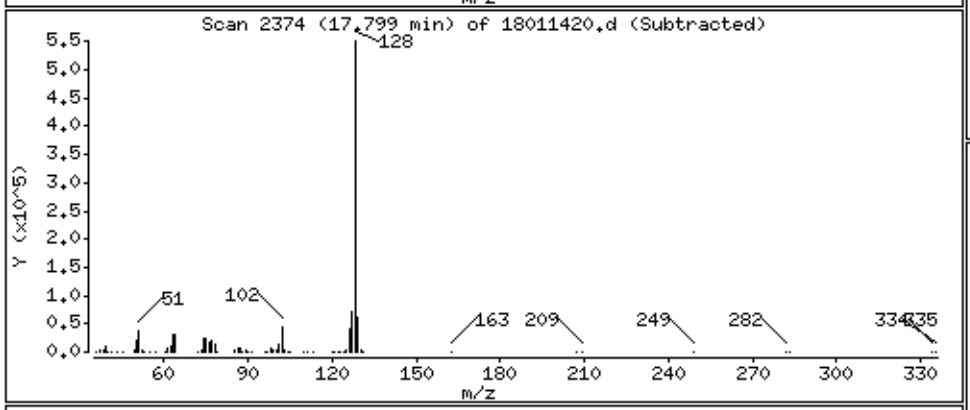
Column phase: RTx-624

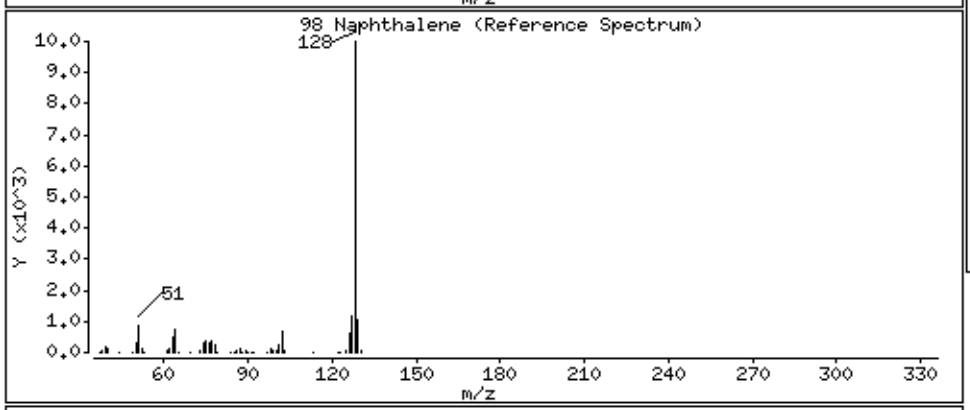
Column diameter: 0.53

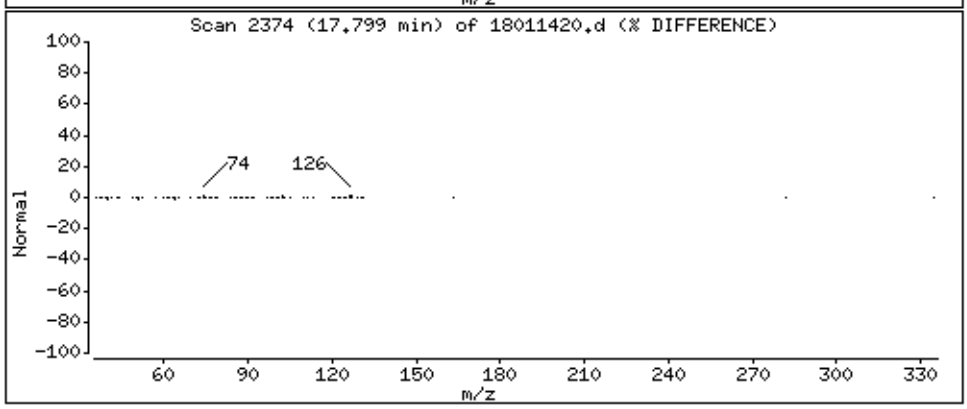
98 Naphthalene

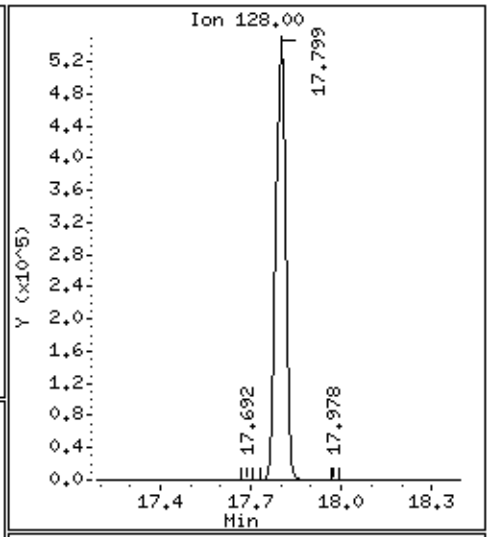
Concentration: 53.187 NG

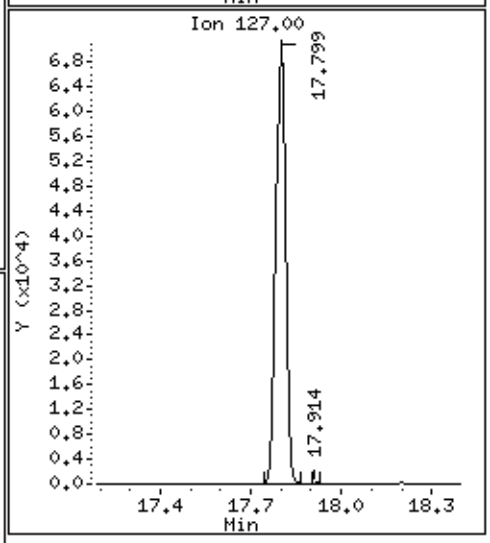












Data File: /chem/msd18.i/14Jan2016.b/18011420.d

Date : 14-JAN-2016 21:40

Client ID:

Instrument: msd18.i

Sample Info: 20ml #2516-203, 1.0ul 2595-246-50

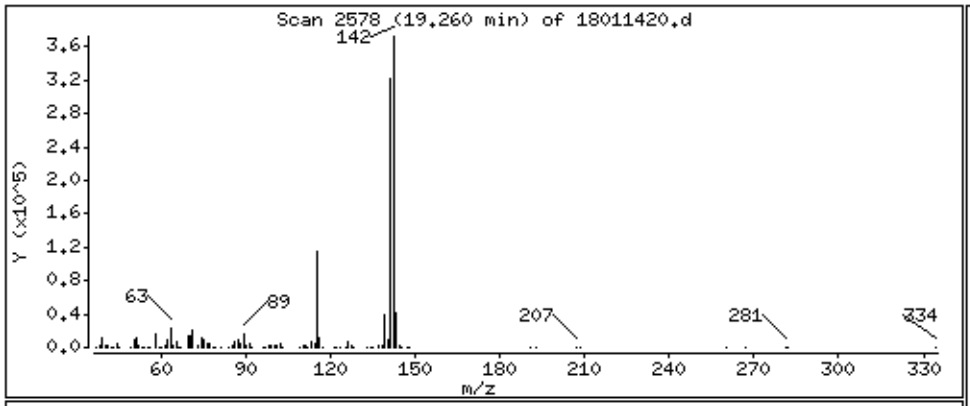
Operator: db

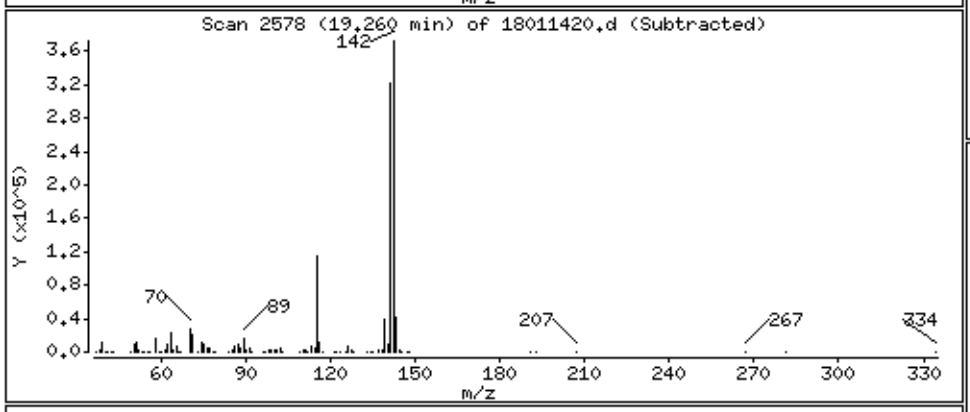
Column phase: RTx-624

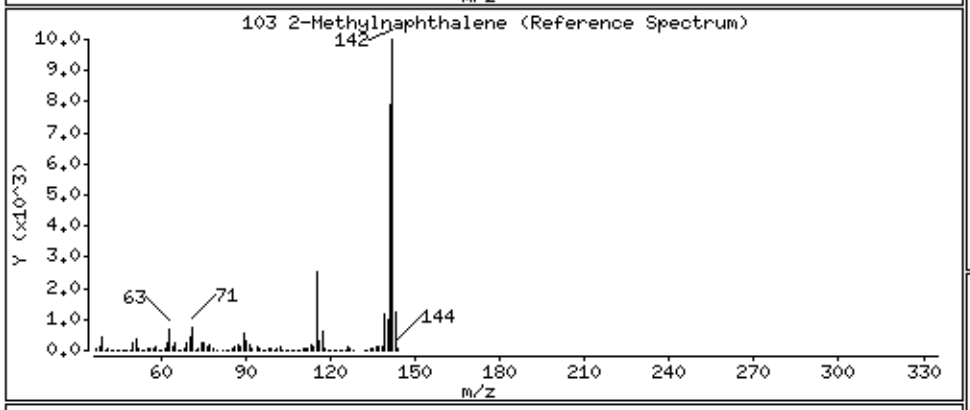
Column diameter: 0.53

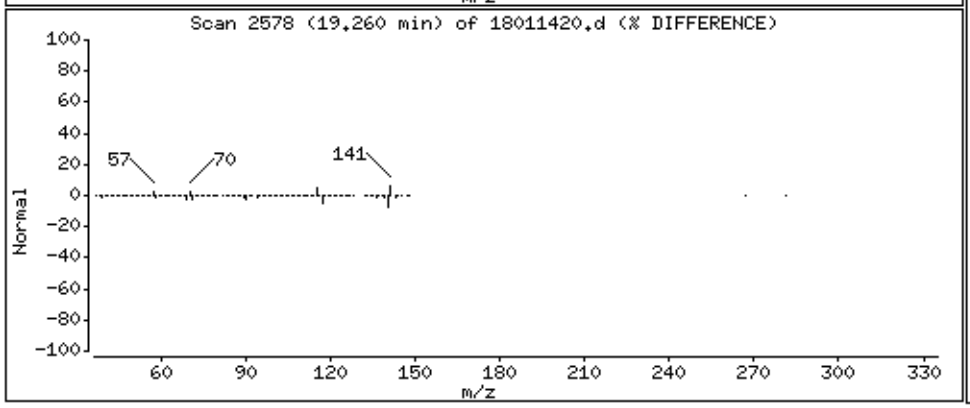
103 2-Methylnaphthalene

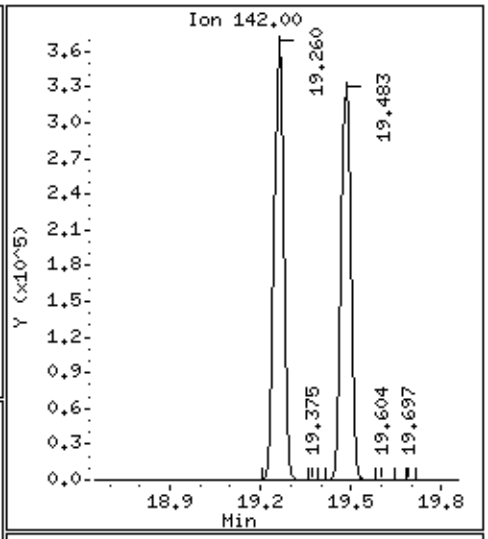
Concentration: 55.946 NG

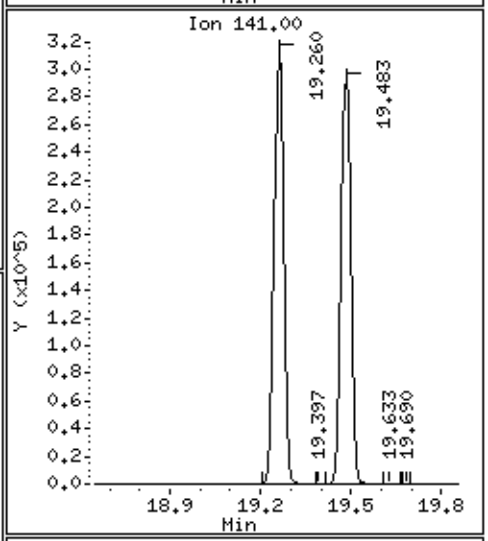


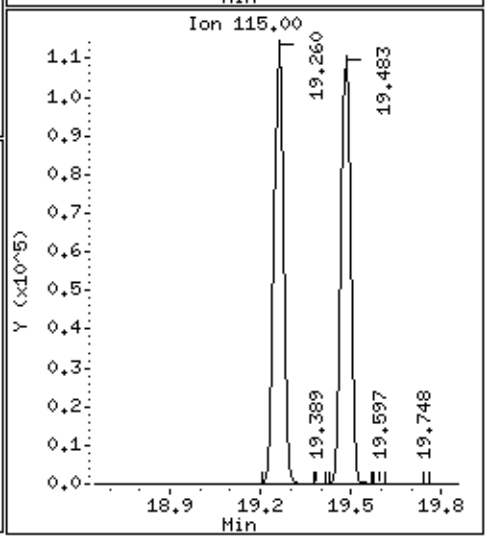












Data File: /chem/msd18.i/14Jan2016.b/18011420.d

Date : 14-JAN-2016 21:40

Client ID:

Instrument: msd18.i

Sample Info: 20ml #2516-203, 1.0ul 2595-246-50

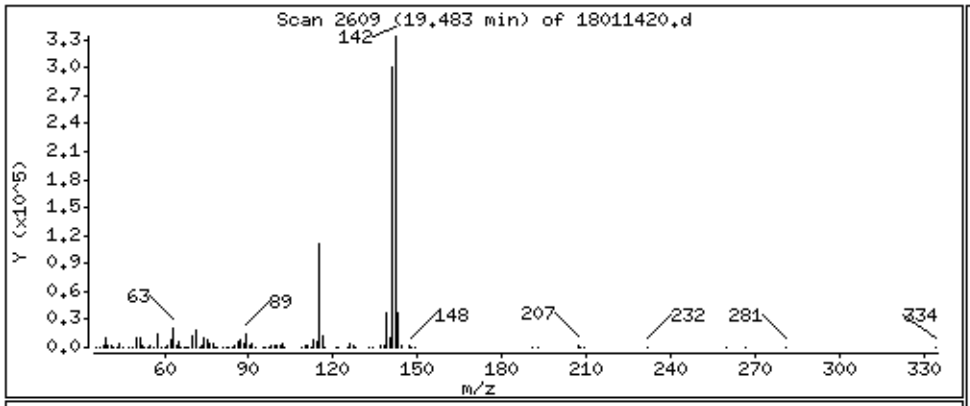
Operator: db

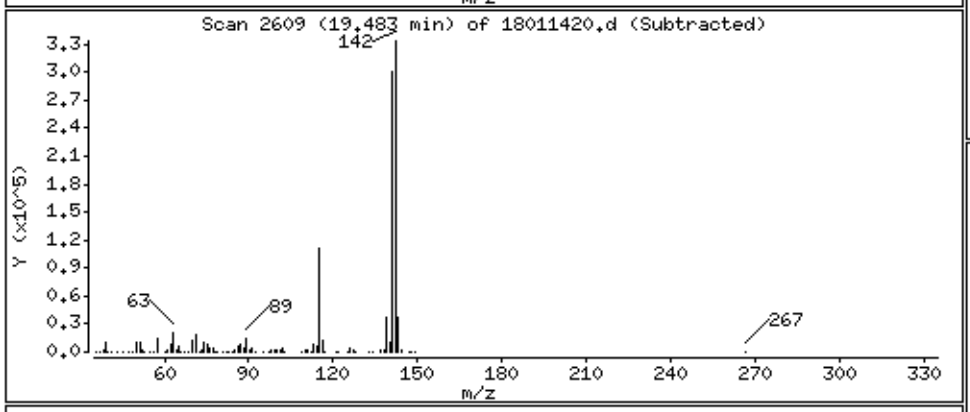
Column phase: RTx-624

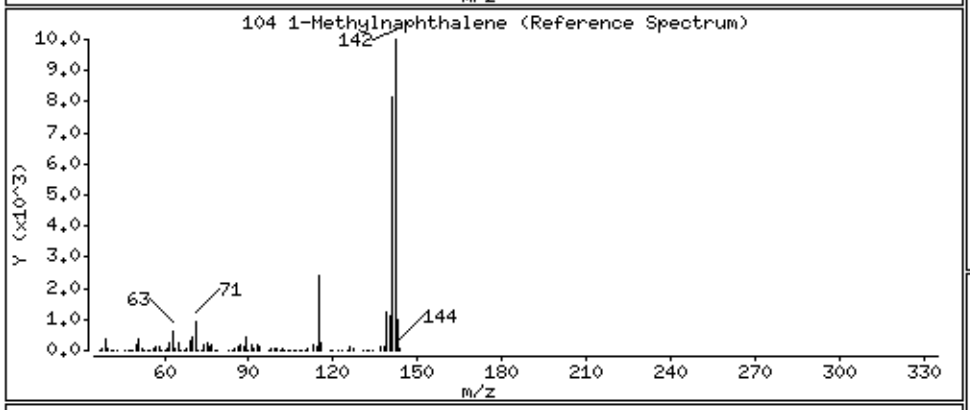
Column diameter: 0.53

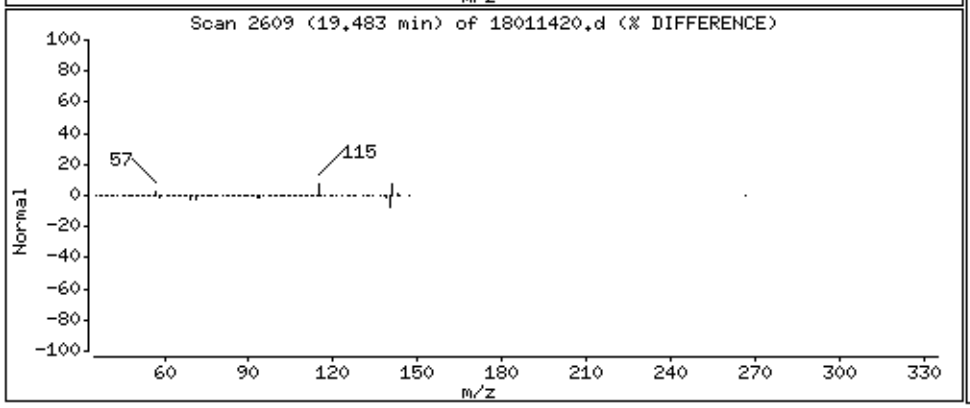
104 1-Methylnaphthalene

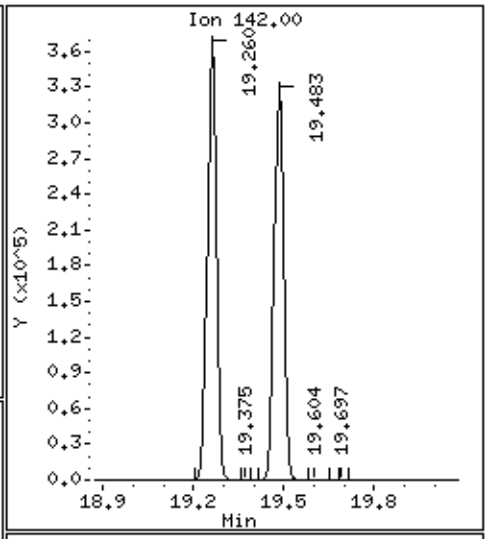
Concentration: 55.208 NG

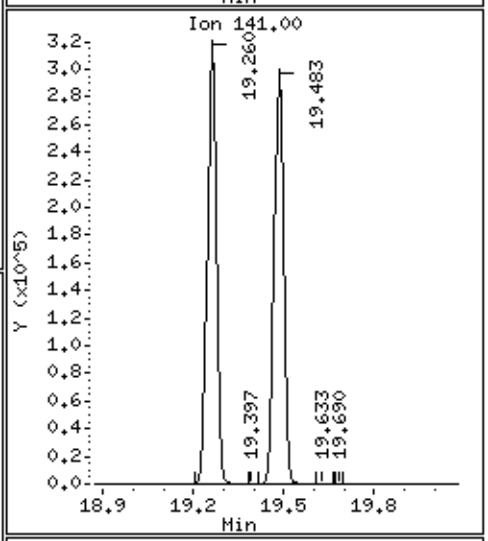


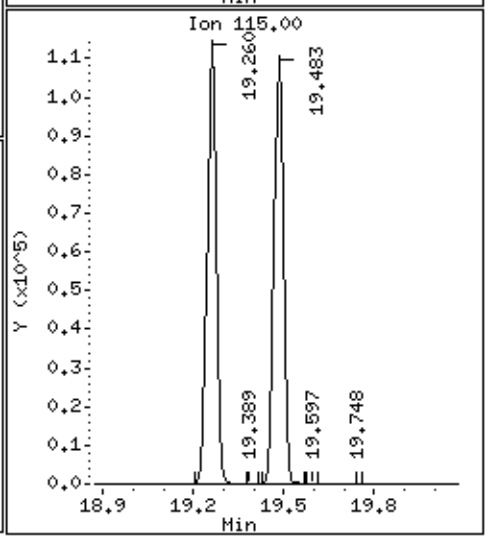












Data File: /chem/msd18.i/14Jan2016.b/18011420.d

Date : 14-JAN-2016 21:40

Client ID:

Instrument: msd18.i

Sample Info: 20ml #2516-203, 1.0ul 2595-246-50

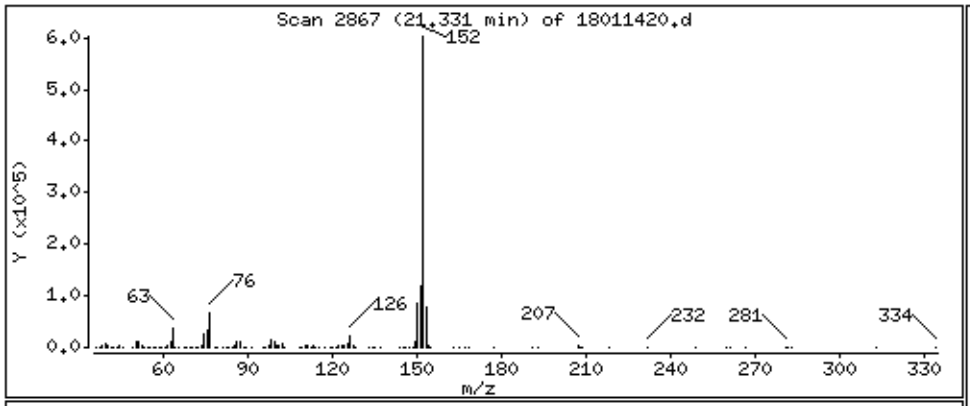
Operator: db

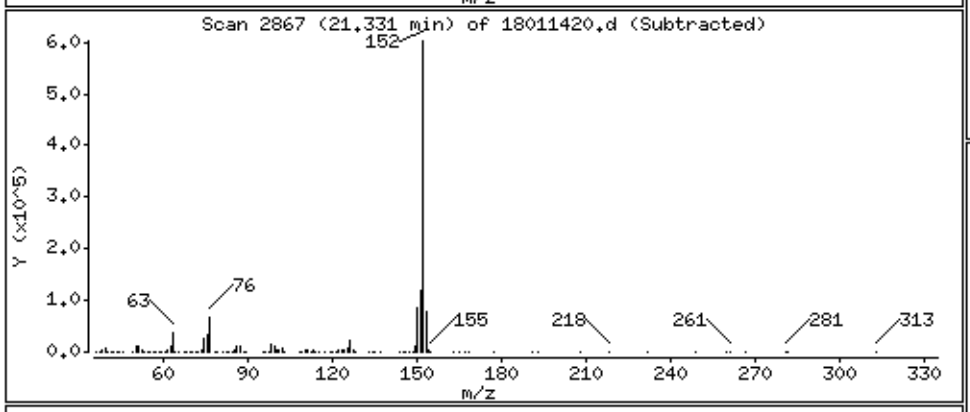
Column phase: RTx-624

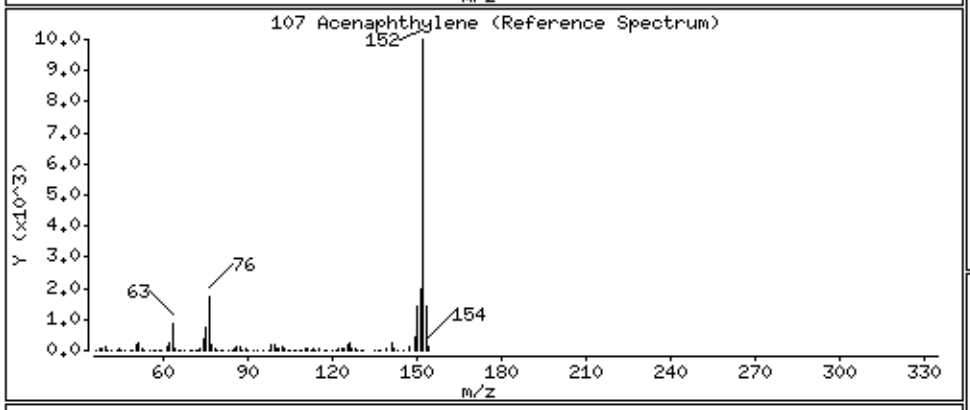
Column diameter: 0.53

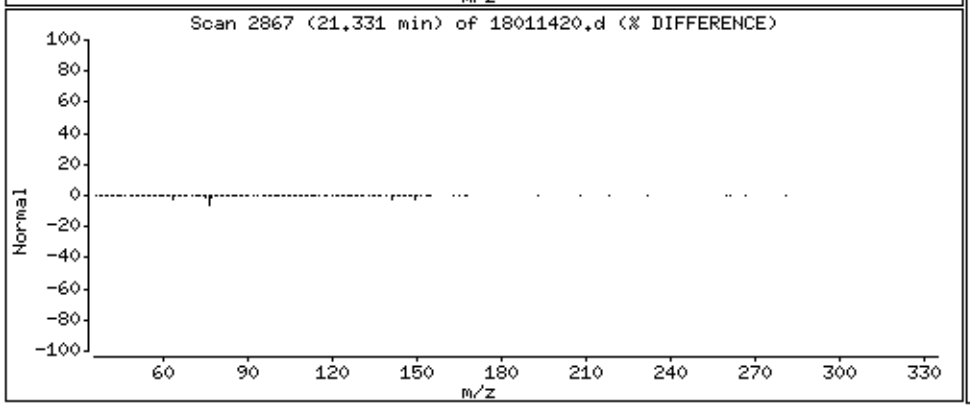
107 Acenaphthylene

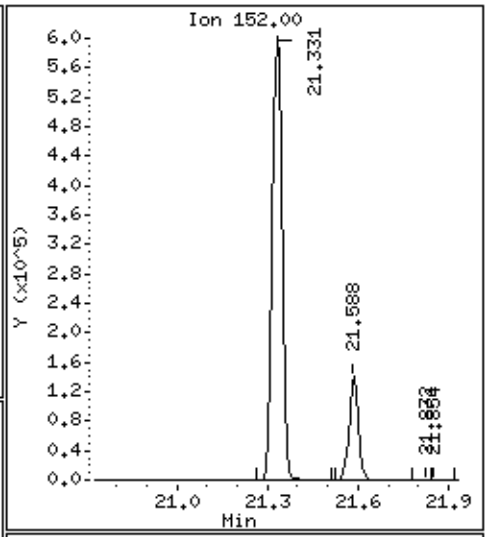
Concentration: 53.231 NG

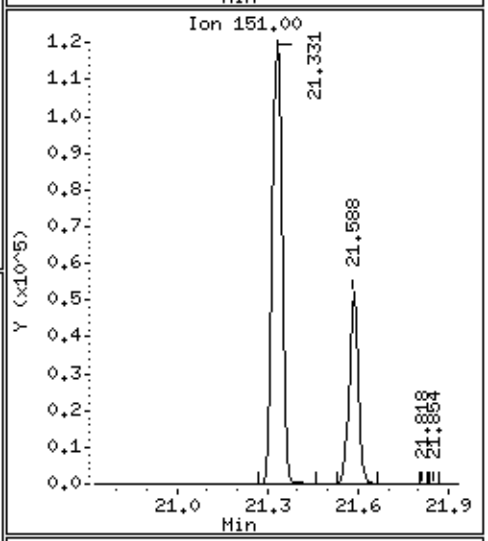


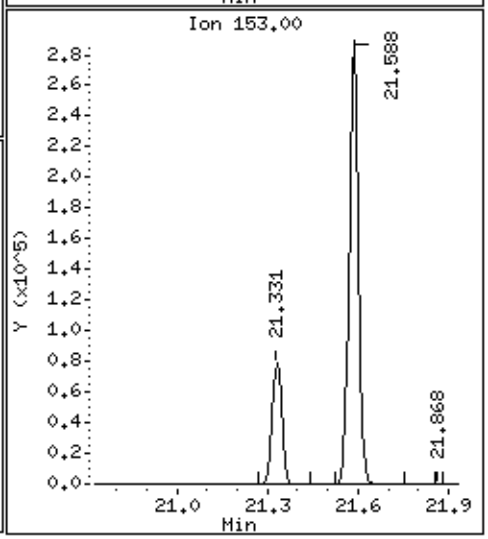












Data File: /chem/msd18.i/14Jan2016.b/18011420.d

Date : 14-JAN-2016 21:40

Client ID:

Instrument: msd18.i

Sample Info: 20ml #2516-203, 1.0ul 2595-246-50

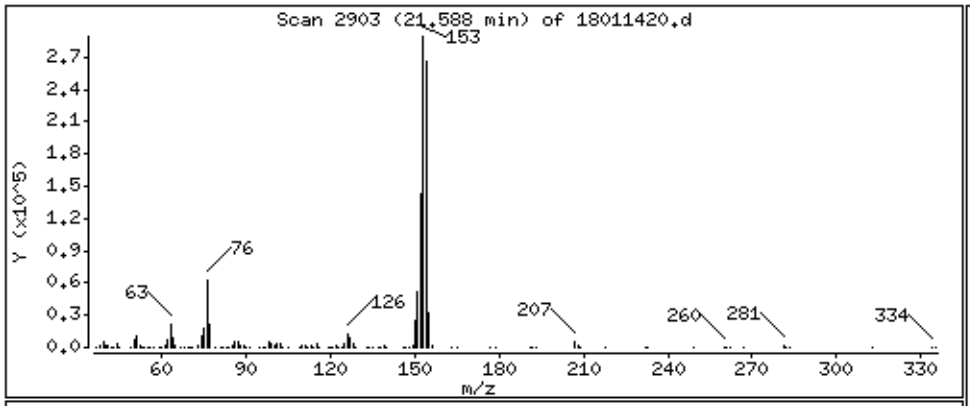
Operator: db

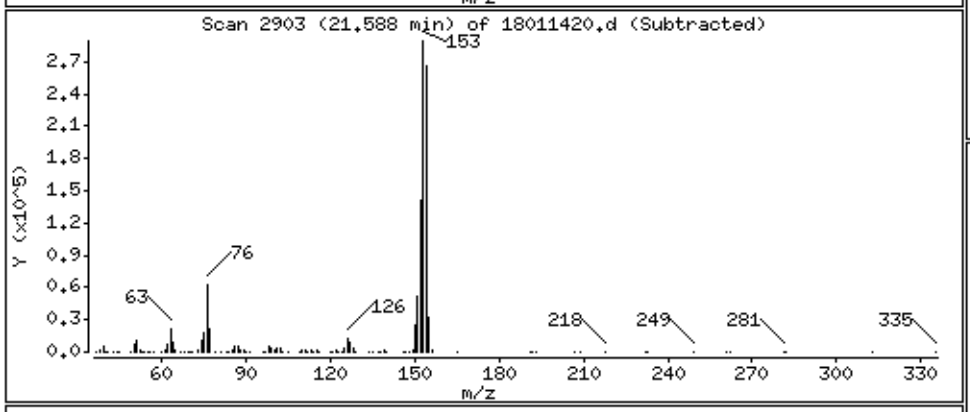
Column phase: RTx-624

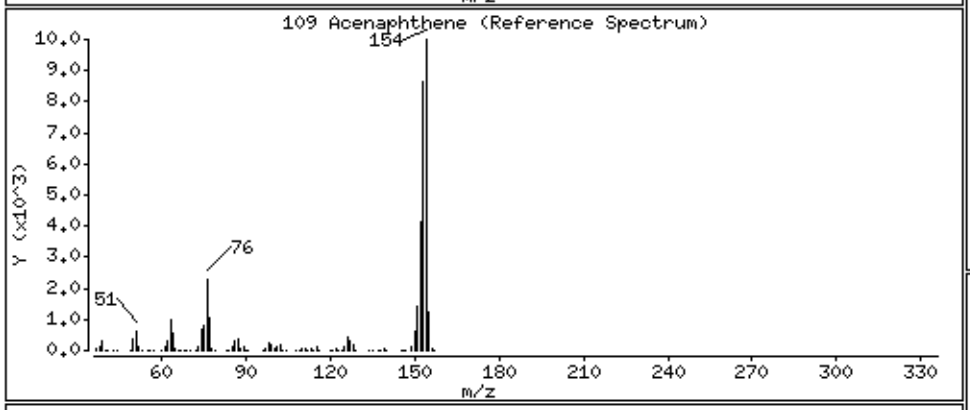
Column diameter: 0.53

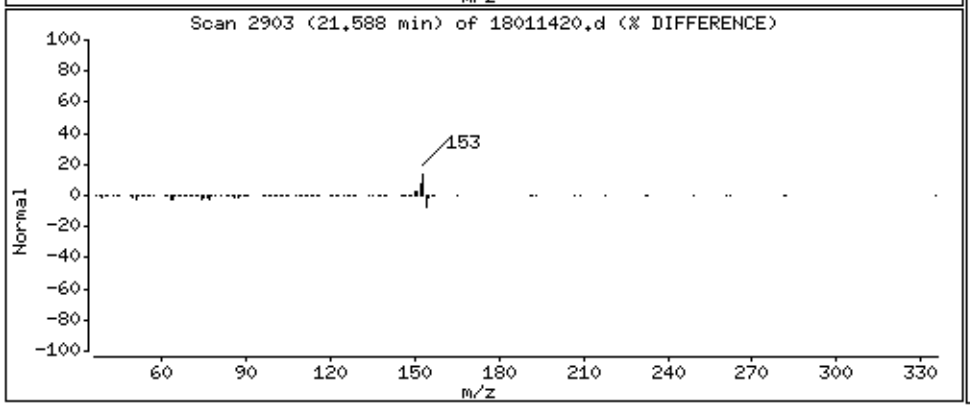
109 Acenaphthene

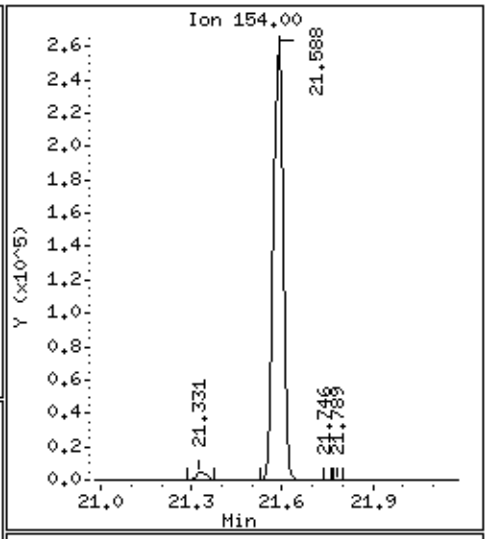
Concentration: 46.587 NG

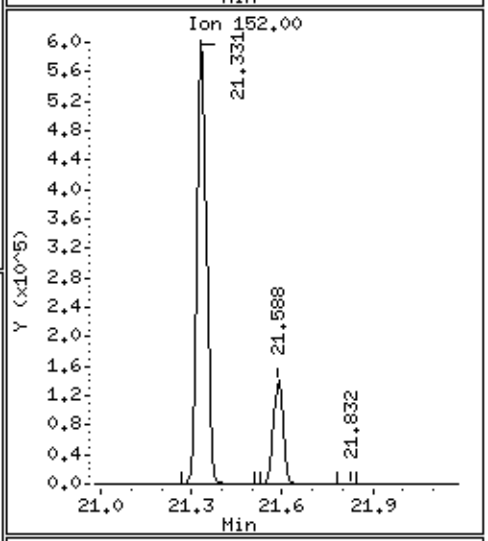


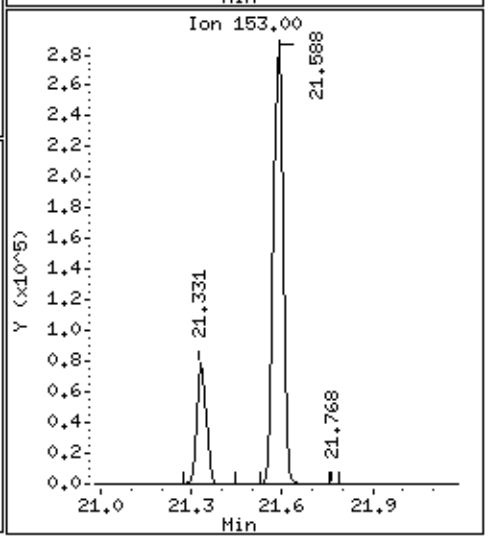












Data File: /chem/msd18.i/14Jan2016.b/18011420.d

Date : 14-JAN-2016 21:40

Client ID:

Instrument: msd18.i

Sample Info: 20ml #2516-203, 1.0ul 2595-246-50

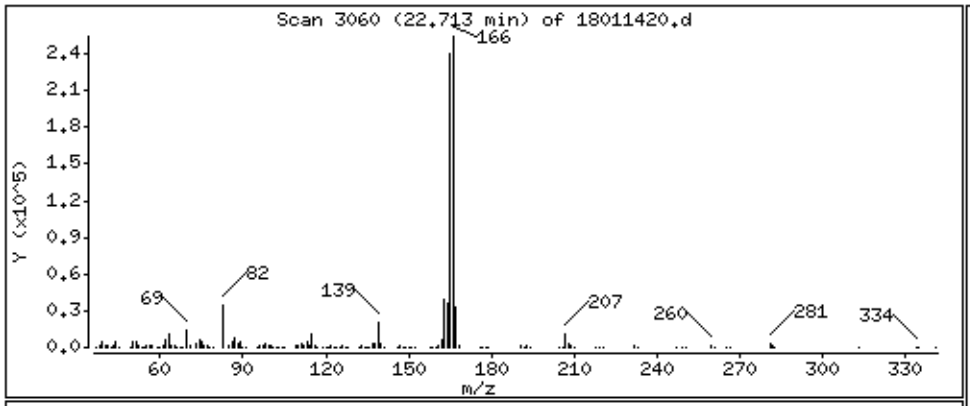
Operator: db

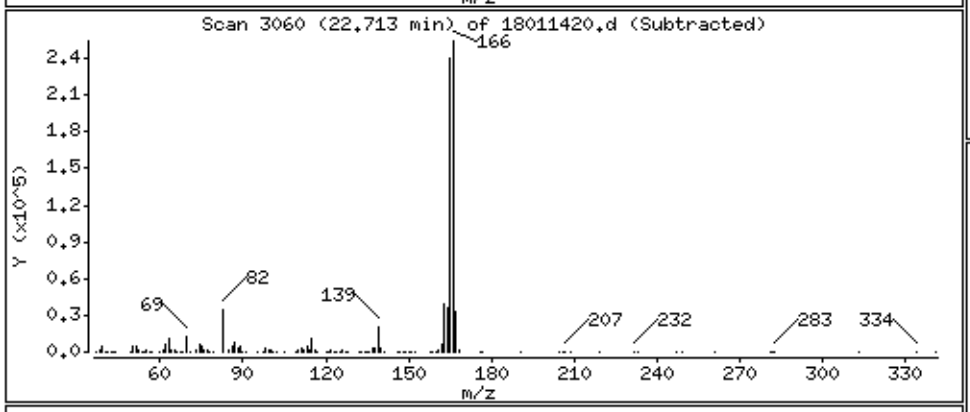
Column phase: RTx-624

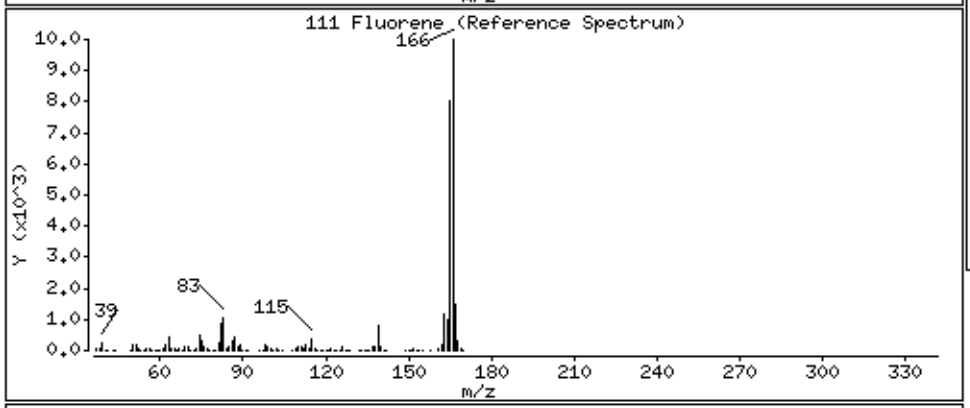
Column diameter: 0.53

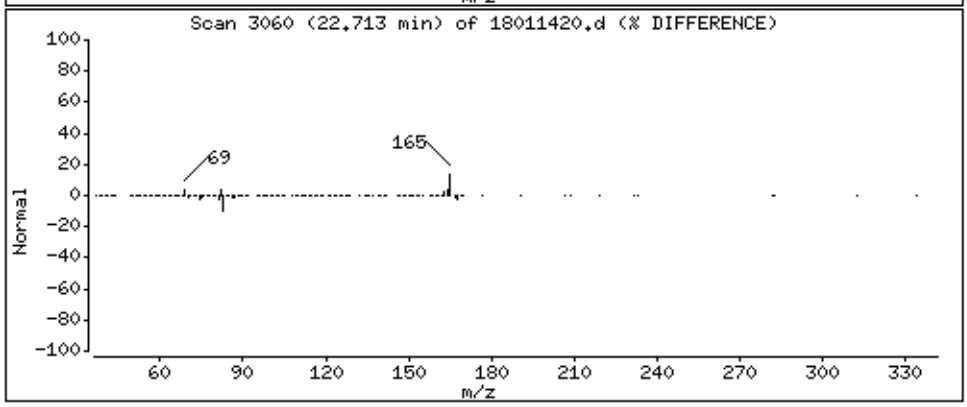
111 Fluorene

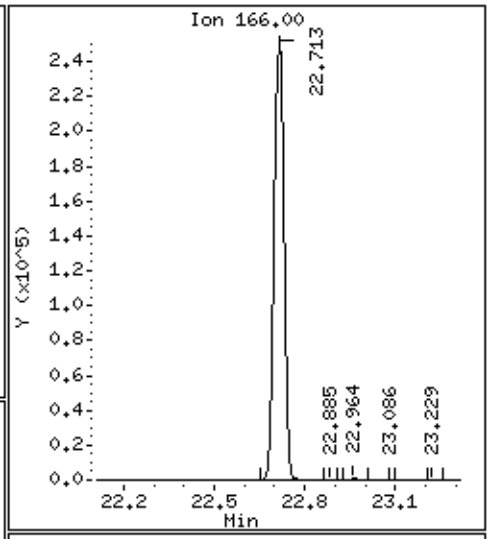
Concentration: 41.612 NG

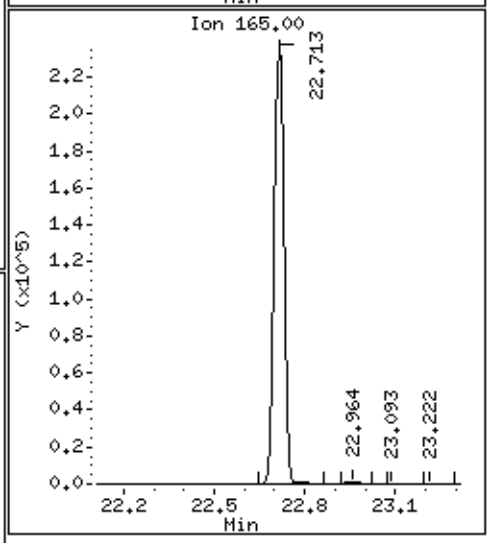












Data File: /chem/msd18.i/14Jan2016.b/18011420.d

Date : 14-JAN-2016 21:40

Client ID:

Instrument: msd18.i

Sample Info: 20ml #2516-203, 1.0ul 2595-246-50

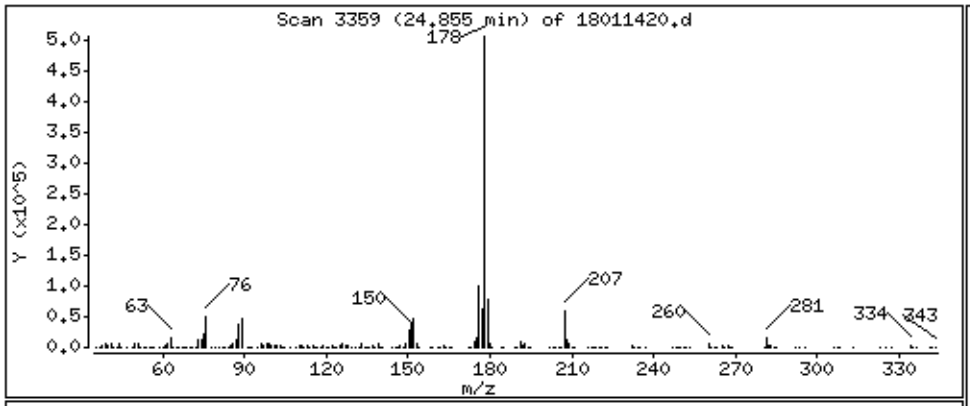
Operator: db

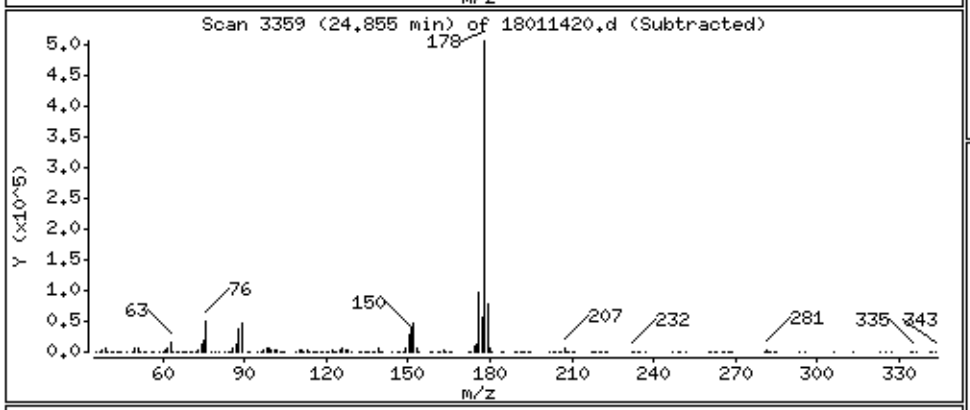
Column phase: RTx-624

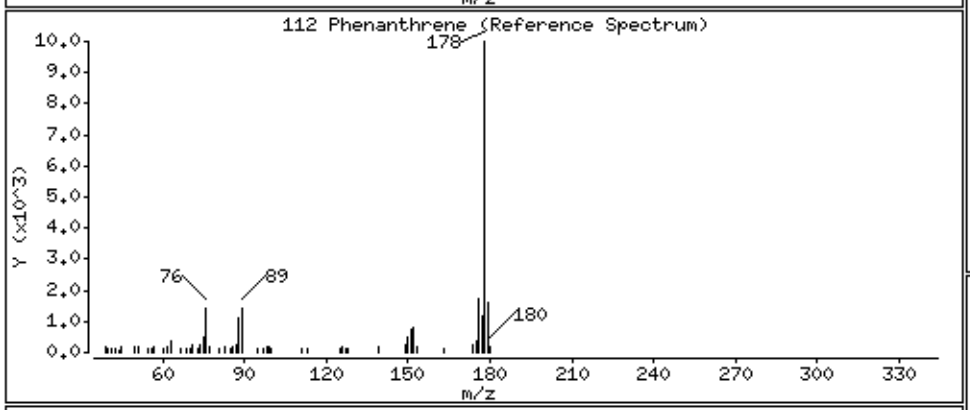
Column diameter: 0.53

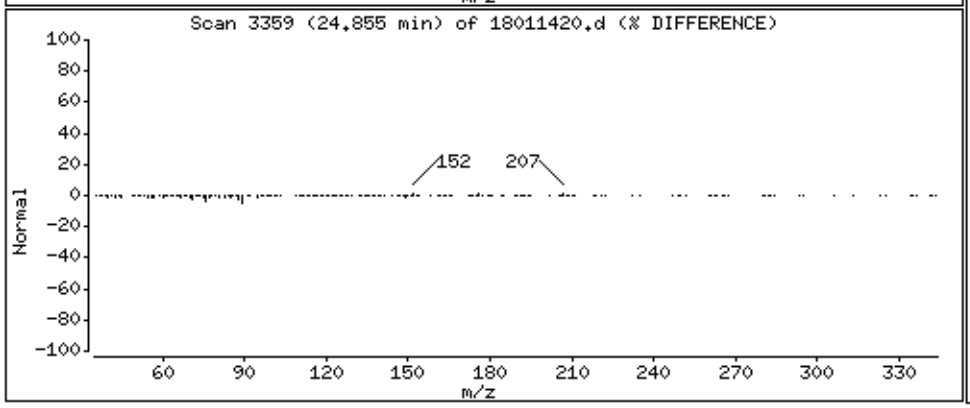
112 Phenanthrene

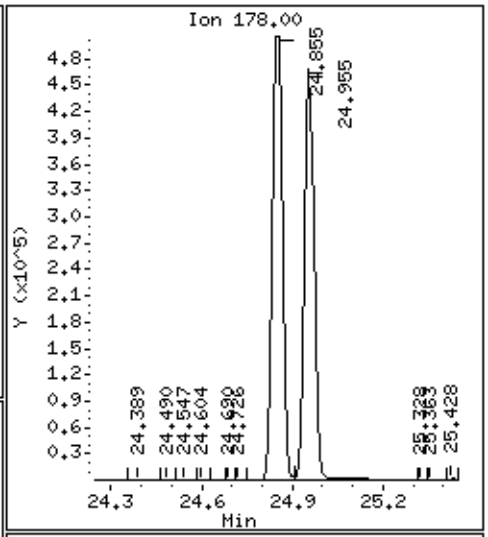
Concentration: 52.727 NG

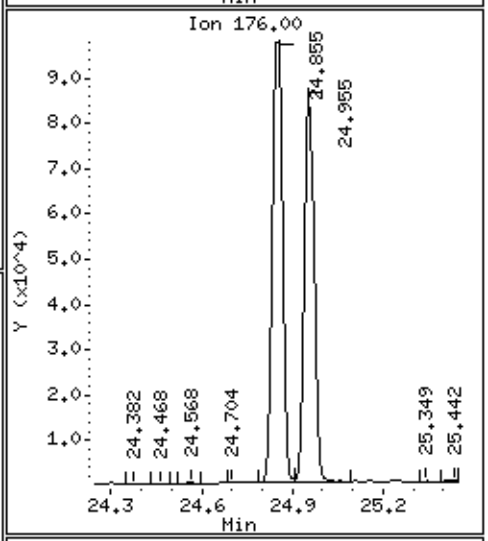


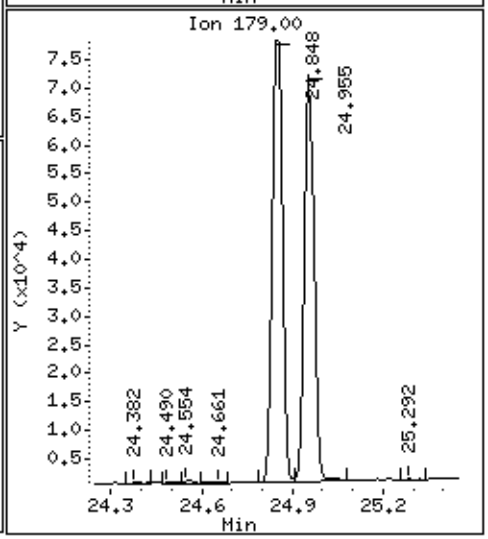












Data File: /chem/msd18.i/14Jan2016.b/18011420.d

Date : 14-JAN-2016 21:40

Client ID:

Instrument: msd18.i

Sample Info: 20ml #2516-203, 1.0ul 2595-246-50

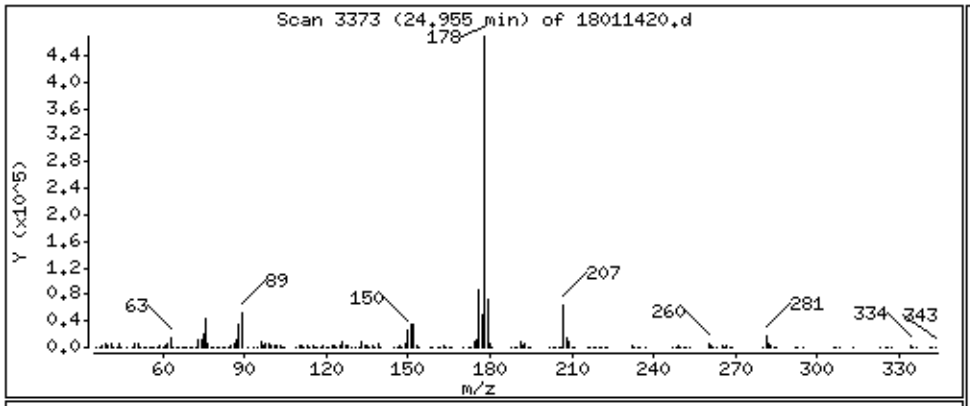
Operator: db

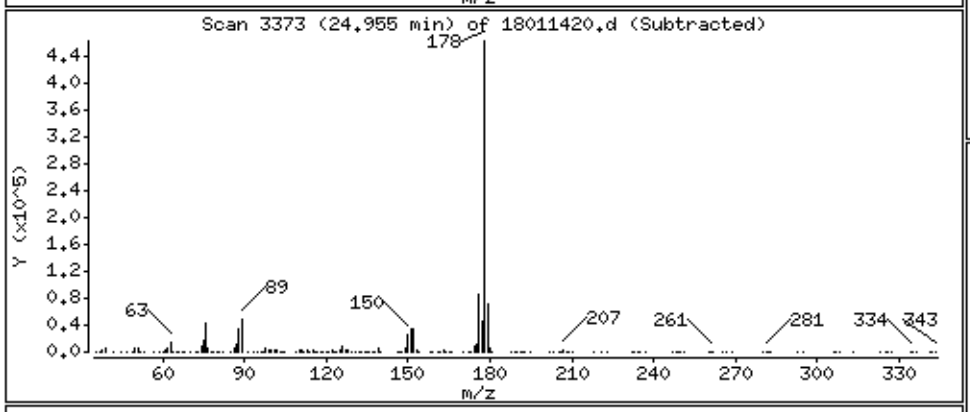
Column phase: RTx-624

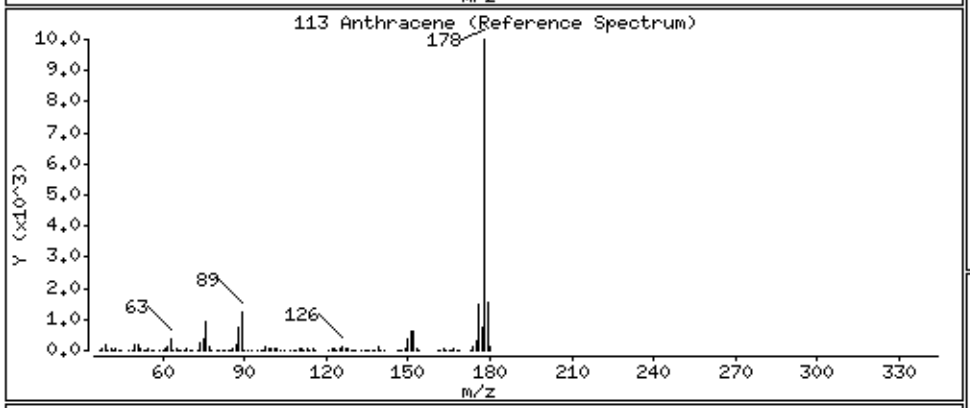
Column diameter: 0.53

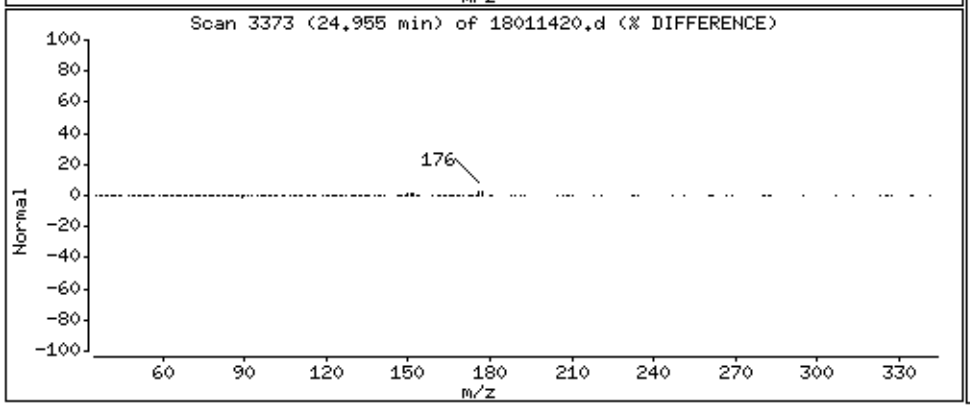
113 Anthracene

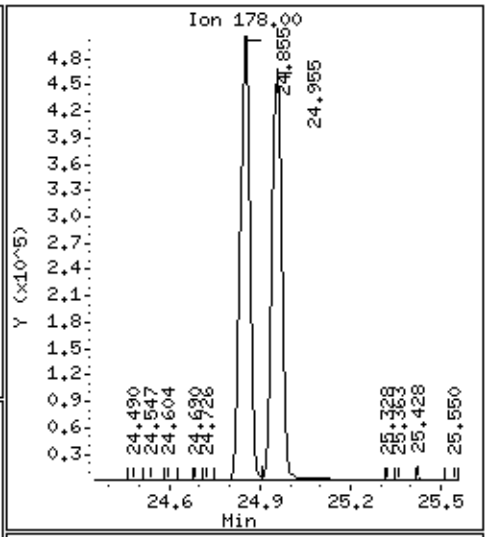
Concentration: 52.194 NG

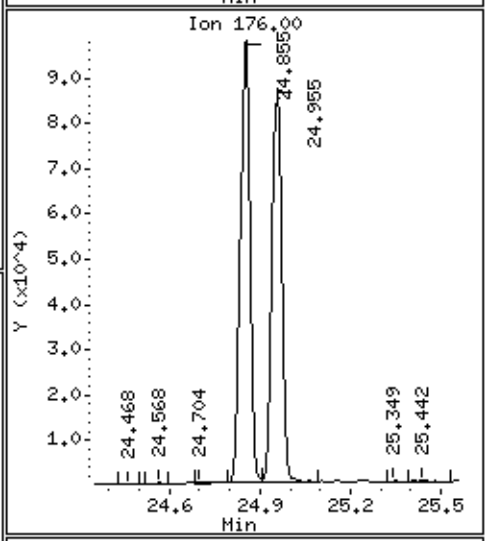


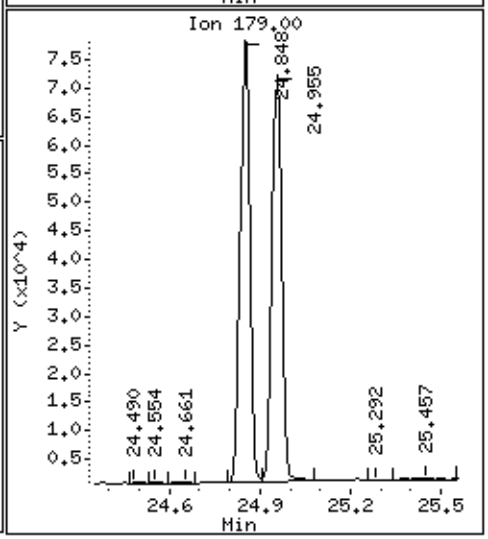












Data File: /chem/msd18.i/14Jan2016.b/18011420.d

Date : 14-JAN-2016 21:40

Client ID:

Instrument: msd18.i

Sample Info: 20ml #2516-203, 1.0ul 2595-246-50

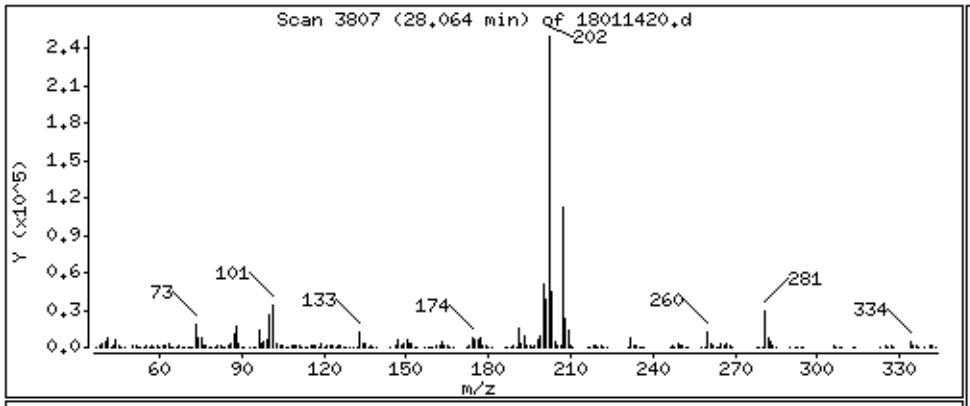
Operator: db

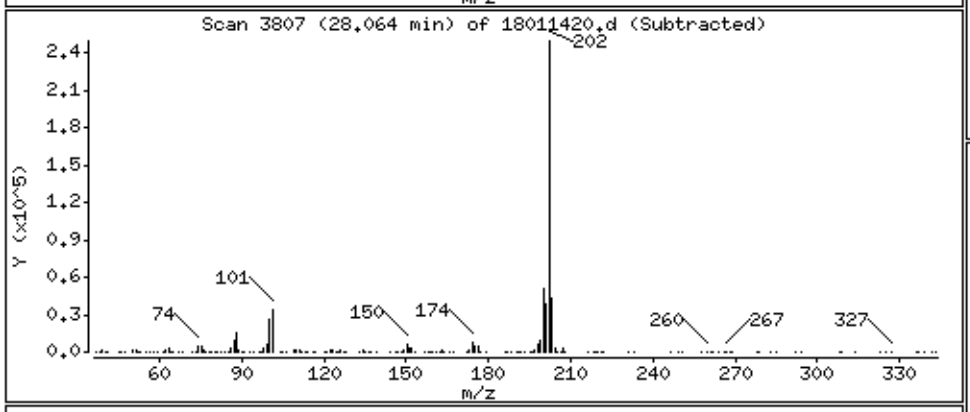
Column phase: RTx-624

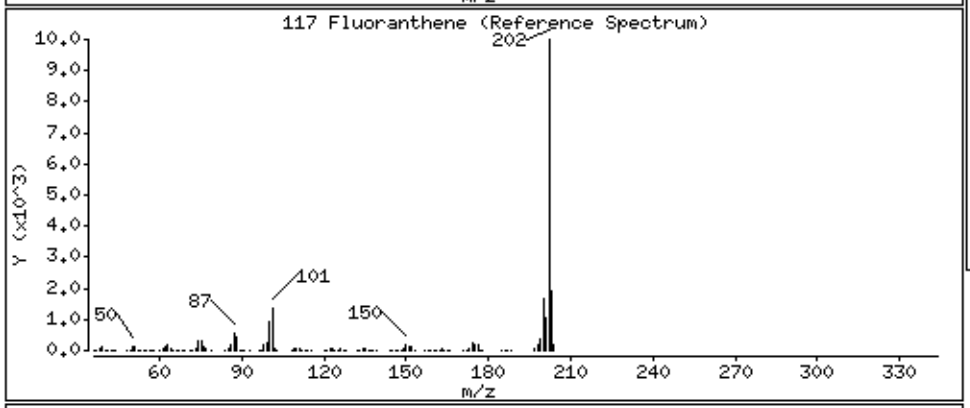
Column diameter: 0.53

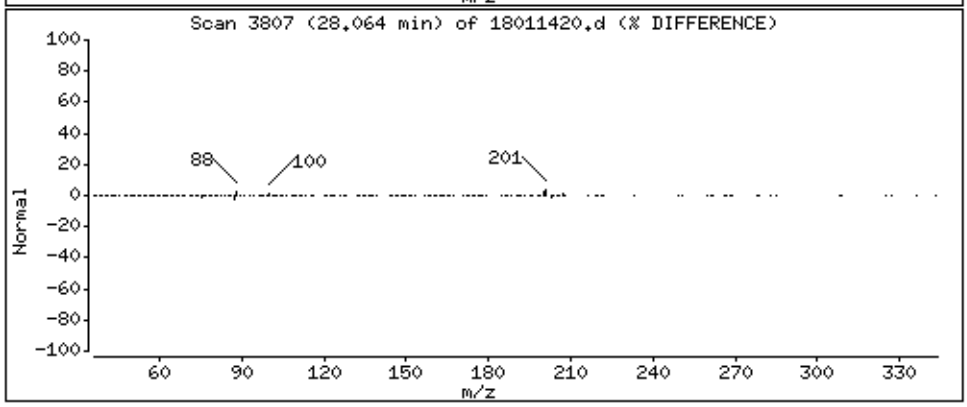
117 Fluoranthene

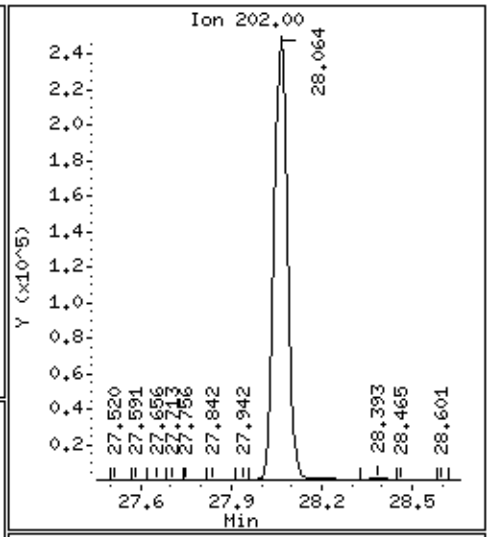
Concentration: 46.330 NG

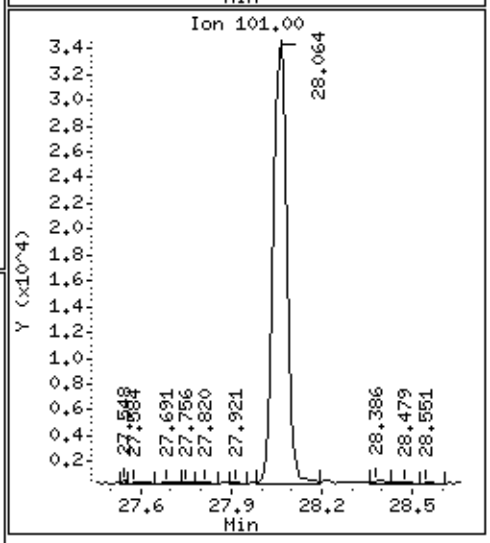












Data File: /chem/msd18.i/14Jan2016.b/18011420.d

Date : 14-JAN-2016 21:40

Client ID:

Instrument: msd18.i

Sample Info: 20ml #2516-203, 1.0ul 2595-246-50

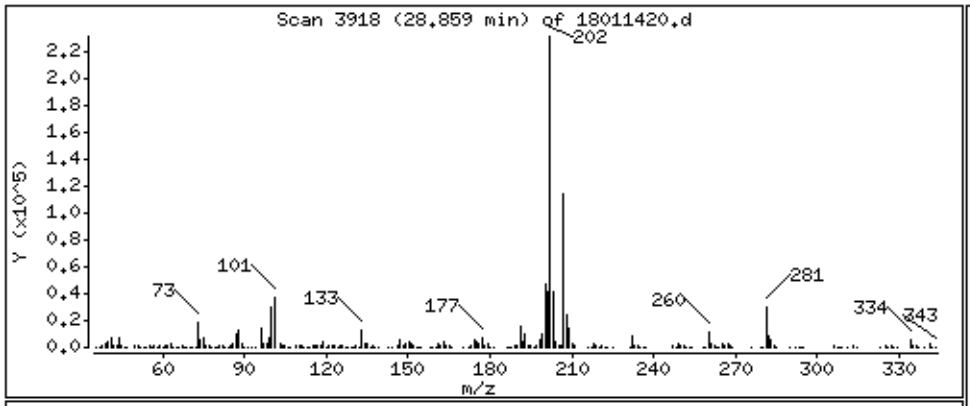
Operator: db

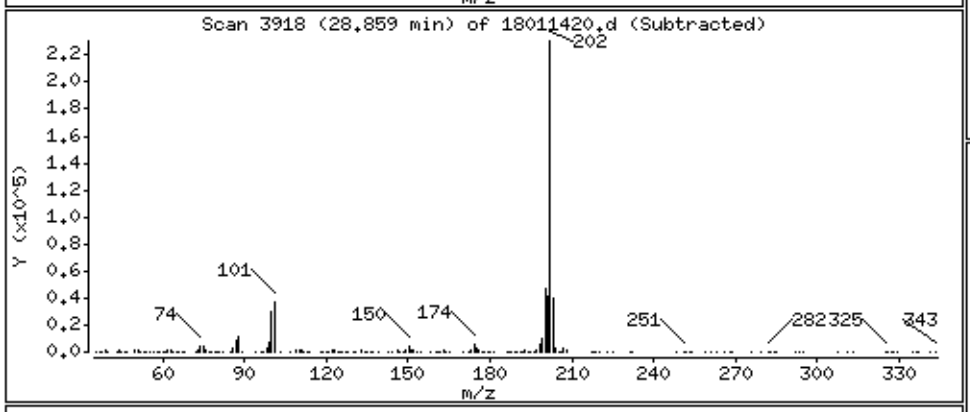
Column phase: RTx-624

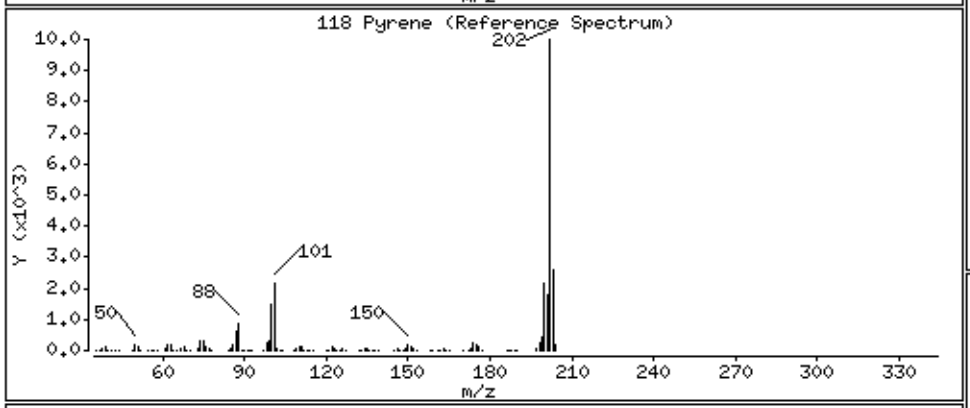
Column diameter: 0.53

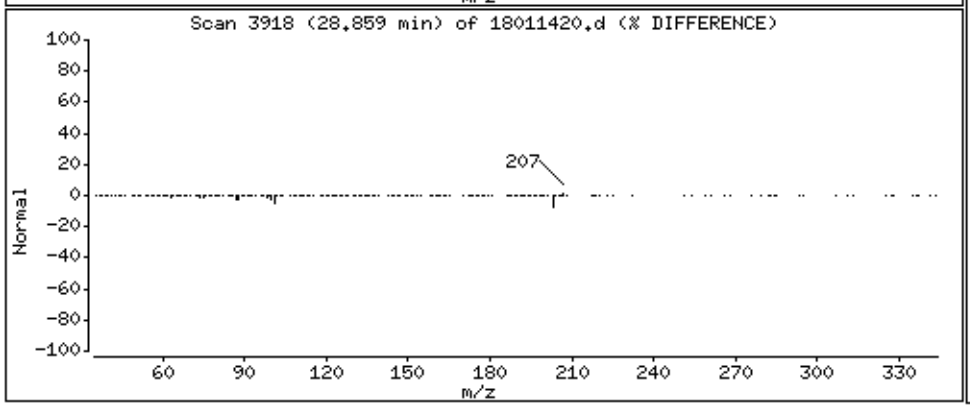
118 Pyrene

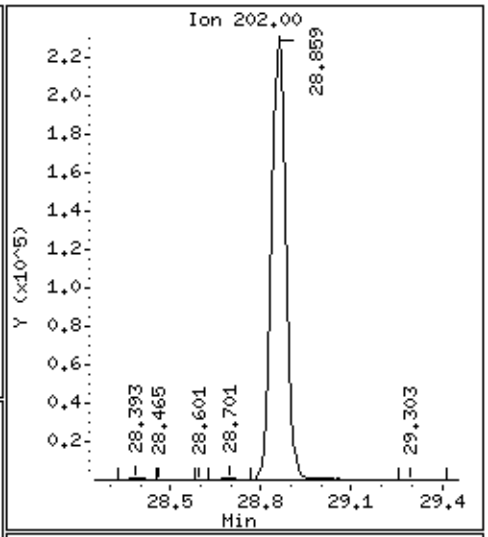
Concentration: 44.918 NG

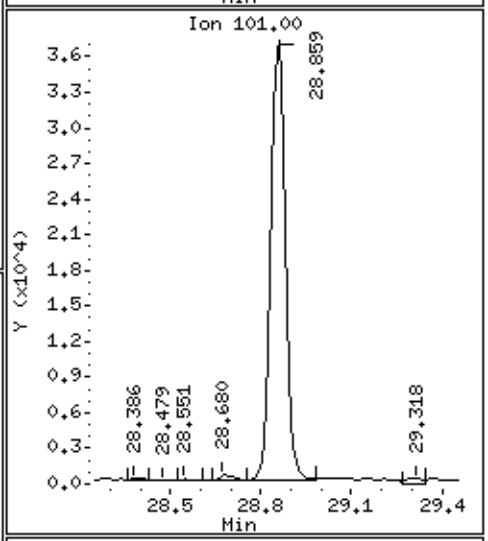


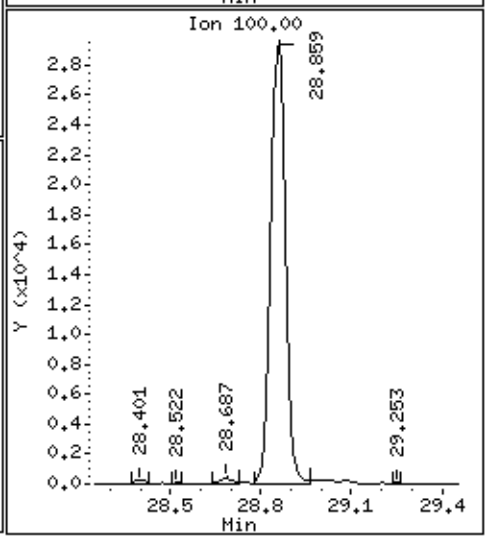












Eurofins Air Toxics Inc.

EPA Method TO-17 GC/MS

Data file : /chem/msd18.i/14Jan2016.b/18011408.d
Lab Smp Id: ICAL Client Smp ID: Level 1
Inj Date : 14-JAN-2016 13:56
Operator : db Inst ID: msd18.i
Smp Info : 1.0ml #2516-212, 1.0ul 2744-31-1
Misc Info : e. 7/5/16
Comment :
Method : /chem/msd18.i/14Jan2016.b/186z0114vi.m
Meth Date : 18-Jan-2016 15:00 lantonic Quant Type: ISTD
Cal Date : 14-JAN-2016 13:56 Cal File: 18011408.d
Als bottle: 2 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: VOC+naphs_noSS.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO
* 32 Bromochloromethane					CAS #: 74-97-5		
6.044	6.044 (1.000)	130	258459	26.0000		80.00- 120.00	100.00
6.044	6.044 (1.000)	128	199697			47.81- 107.81	77.26
6.037	6.037 (1.000)	49	340540			99.93- 159.93	131.76
* 47 1,4-Difluorobenzene					CAS #: 540-36-3		
7.663	7.663 (1.000)	114	912476	23.0000		80.00- 120.00	100.00
7.663	7.663 (1.000)	88	139186			0.00- 45.51	15.25
* 67 Chlorobenzene-d5					CAS #: 3114-55-4		
11.610	11.610 (1.000)	117	813477	24.0000		80.00- 120.00	100.00
11.610	11.610 (1.000)	82	431754			23.87- 83.87	53.08
* 79 Bromofluorobenzene					CAS #: 460-00-4		
13.229	13.229 (1.000)	174	576146	36.0000		80.00- 120.00	100.00
13.229	13.229 (1.000)	95	624694			78.78- 138.78	108.43
13.229	13.229 (1.000)	176	554615			67.05- 127.05	96.26
4 Freon 114					CAS #: 76-14-2		
1.453	1.453 (0.240)	135	44771	6.99000	7.347	80.00- 120.00	100.00(a)

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO
4 Freon 114 (continued)							
1.453	1.453 (0.240)	137	14423			1.93- 61.93	32.22
6 Vinyl Chloride					CAS #: 75-01-4		
1.632	1.632 (0.270)	62	23261	2.56000	2.750	80.00- 120.00	100.00
1.625	1.625 (0.269)	64	26456			15.41- 75.41	113.74
7 1,3-Butadiene					CAS #: 106-99-0		
1.646	1.646 (0.272)	54	18431	2.21000	2.433	80.00- 120.00	100.00
1.646	1.646 (0.272)	39	28883			104.89- 164.89	156.71
10 Isopentane					CAS #: 78-78-4		
2.105	2.105 (0.348)	57	18841	2.95000	3.230	80.00- 120.00	100.00(a)
2.105	2.105 (0.348)	43	26019			112.49- 172.49	138.10
11 Trichlorofluoromethane/Fr11					CAS #: 75-69-4		
2.291	2.291 (0.379)	101	51502	5.62000	5.805	80.00- 120.00	100.00(a)
2.291	2.291 (0.379)	103	32853			34.96- 94.96	63.79
15 Freon 113					CAS #: 76-13-1		
2.886	2.886 (0.477)	151	32339	7.66000	7.777	80.00- 120.00	100.00
2.893	2.893 (0.479)	153	20770			34.01- 94.01	64.23
2.886	2.886 (0.477)	101	43686			98.52- 158.52	135.09
14 1,1-Dichloroethene					CAS #: 75-35-4		
2.864	2.864 (0.474)	98	13197	3.97000	4.135	80.00- 120.00	100.00
2.864	2.864 (0.474)	96	24112			130.53- 190.53	182.71
2.871	2.871 (0.475)	61	37316			241.31- 301.31	282.76
18 Carbon Disulfide					CAS #: 75-15-0		
3.115	3.115 (0.515)	76	86503	3.11000	3.624	80.00- 120.00	100.00(a)
17 2-Propanol					CAS #: 67-63-0		
3.115	3.115 (0.515)	45	71747	2.46000	4.923	80.00- 120.00	100.00(a)
3.115	3.115 (0.515)	43	13969			0.00- 48.48	19.47
3.122	3.122 (0.516)	59	2996			0.00- 34.02	4.18
21 Methylene Chloride					CAS #: 75-09-2		
3.537	3.537 (0.585)	49	63971	3.47000	9.228	80.00- 120.00	100.00(a)
3.537	3.537 (0.585)	84	49351			46.74- 106.74	77.15
3.537	3.537 (0.585)	51	22187			1.74- 61.74	34.68
24 trans-1,2-Dichloroethene					CAS #: 156-60-5		
3.953	3.953 (0.654)	98	12736	3.96000	4.119	80.00- 120.00	100.00
3.953	3.953 (0.654)	61	28810			203.10- 263.10	226.21
3.953	3.953 (0.654)	96	20314			127.09- 187.09	159.50

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO
23 MTBE					CAS #: 1634-04-4		
3.938	3.938 (0.652)	73	55724	3.61000	3.720	80.00- 120.00	100.00(a)
3.946	3.946 (0.653)	57	22079			0.00- 53.10	39.62
3.938	3.938 (0.652)	41	16938			0.00- 50.25	30.40
25 Hexane					CAS #: 110-54-3		
4.426	4.426 (0.732)	57	32577	3.52000	3.996	80.00- 120.00	100.00(a)
4.426	4.426 (0.732)	43	20191			31.56- 91.56	61.98
4.426	4.426 (0.732)	86	4790			0.00- 44.94	14.70
26 1,1-Dichloroethane					CAS #: 75-34-3		
4.705	4.705 (0.778)	63	35020	4.05000	4.143	80.00- 120.00	100.00
4.705	4.705 (0.778)	65	12210			1.52- 61.52	34.87
29 cis-1,2-Dichloroethene					CAS #: 156-59-2		
5.672	5.672 (0.938)	98	11641	3.96000	4.016	80.00- 120.00	100.00
5.672	5.672 (0.938)	96	22148			127.88- 187.88	190.26
5.665	5.665 (0.937)	61	24895			179.74- 239.74	213.86
35 Chloroform					CAS #: 67-66-3		
6.245	6.245 (1.033)	83	34009	4.88000	4.919	80.00- 120.00	100.00
6.245	6.245 (1.033)	85	23301			34.57- 94.57	68.51
37 Cyclohexane					CAS #: 110-82-7		
6.517	6.517 (0.850)	84	25970	3.44000	3.796	80.00- 120.00	100.00(a)
6.517	6.517 (0.850)	56	32314			92.60- 152.60	124.43
6.524	6.524 (0.851)	41	23115			35.57- 95.57	89.01
36 1,1,1-Trichloroethane					CAS #: 71-55-6		
6.431	6.431 (0.839)	97	33299	5.46000	5.446	80.00- 120.00	100.00
6.431	6.431 (0.839)	99	21589			34.22- 94.22	64.83
38 Carbon Tetrachloride					CAS #: 56-23-5		
6.660	6.660 (0.869)	119	32148	6.29000	6.276	80.00- 120.00	100.00(a)
6.660	6.660 (0.869)	117	32481			74.59- 134.59	101.04
45 2,2,4-Trimethylpentane					CAS #: 540-84-1		
7.191	7.191 (0.938)	57	79200	4.67000	4.746	80.00- 120.00	100.00(a)
7.191	7.191 (0.938)	56	26196			2.36- 62.36	33.08
7.191	7.191 (0.938)	41	24911			0.00- 55.73	31.45
41 Benzene					CAS #: 71-43-2		
6.961	6.961 (0.908)	78	159317	3.19000	10.070	80.00- 120.00	100.00
6.961	6.961 (0.908)	77	38291			0.00- 53.82	24.03
43 1,2-Dichloroethane					CAS #: 107-06-2		
7.076	7.076 (0.923)	62	20012	4.05000	4.049	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO
43 1,2-Dichloroethane (continued)							
7.083	7.083 (0.924)	64	6830			2.51- 62.51	34.13
46 Heptane					CAS #: 142-82-5		
7.491	7.491 (0.978)	71	17144	4.10000	4.198	80.00- 120.00	100.00(a)
7.484	7.484 (0.977)	43	40012			132.26- 192.26	233.39
7.491	7.491 (0.978)	57	16187			60.63- 120.63	94.42
48 Trichloroethene					CAS #: 79-01-6		
7.957	7.957 (1.038)	95	21932	5.37000	5.296	80.00- 120.00	100.00(a)
7.957	7.957 (1.038)	130	22288			73.40- 133.40	101.62
7.957	7.957 (1.038)	97	13851			35.04- 95.04	63.15
51 Methyl Cyclohexane					CAS #: 108-87-2		
8.265	8.265 (1.079)	83	27587	4.02000	4.037	80.00- 120.00	100.00(a)
8.265	8.265 (1.079)	98	12351			15.23- 75.23	44.77
8.265	8.265 (1.079)	55	23811			45.63- 105.63	86.31
52 1,2-Dichloropropane					CAS #: 78-87-5		
8.322	8.322 (1.086)	63	16916	4.62000	4.590	80.00- 120.00	100.00(a)
8.322	8.322 (1.086)	62	11841			38.55- 98.55	70.00
8.322	8.322 (1.086)	41	17912			21.51- 81.51	105.89
53 1,4-Dioxane					CAS #: 123-91-1		
8.437	8.437 (1.101)	88	10682	3.60000	3.621	80.00- 120.00	100.00(a)
8.437	8.437 (1.101)	58	8917			36.73- 96.73	83.48
8.444	8.444 (1.102)	57	15556			2.93- 62.93	145.63
56 4-Methyl-2-pentanone					CAS #: 108-10-1		
9.533	9.533 (1.244)	58	12406	4.10000	4.016	80.00- 120.00	100.00(a)
9.526	9.526 (1.243)	43	29911			210.10- 270.10	241.10
9.533	9.533 (1.244)	85	5701			14.24- 74.24	45.95
58 Toluene					CAS #: 108-88-3		
9.748	9.748 (0.840)	91	67747	3.77000	4.675	80.00- 120.00	100.00(a)
9.748	9.748 (0.840)	92	37870			27.36- 87.36	55.90
61 1,1,2-Trichloroethane					CAS #: 79-00-5		
10.364	10.364 (1.352)	97	21336	5.46000	5.797	80.00- 120.00	100.00
10.364	10.364 (1.352)	99	10712			31.64- 91.64	50.21
10.364	10.364 (1.352)	83	15725			56.72- 116.72	73.70
62 Tetrachloroethene					CAS #: 127-18-4		
10.435	10.435 (0.899)	166	27728	6.78000	6.814	80.00- 120.00	100.00
10.435	10.435 (0.899)	129	19182			40.21- 100.21	69.18
10.435	10.435 (0.899)	131	18948			37.97- 97.97	68.34

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO
63 2-Hexanone					CAS #: 591-78-6		
10.665	10.665 (0.919)	58	15488	4.10000	3.937	80.00- 120.00	100.00(a)
10.665	10.665 (0.919)	43	27933			138.90- 198.90	180.35
10.665	10.665 (0.919)	100	3418			0.00- 50.74	22.07
66 1,2-Dibromoethane					CAS #: 106-93-4		
10.987	10.987 (0.946)	107	25034	7.68000	7.462	80.00- 120.00	100.00(a)
10.987	10.987 (0.946)	109	23126			63.94- 123.94	92.38
68 Chlorobenzene					CAS #: 108-90-7		
11.653	11.653 (1.004)	112	42979	4.60000	4.595	80.00- 120.00	100.00(a)
11.653	11.653 (1.004)	114	13940			2.24- 62.24	32.43
11.646	11.646 (1.003)	77	31513			25.99- 85.99	73.32
69 Ethyl Benzene					CAS #: 100-41-4		
11.796	11.796 (1.016)	106	21562	4.34000	4.262	80.00- 120.00	100.00(a)
11.796	11.796 (1.016)	91	67611			279.23- 339.23	313.57
71 m,p-Xylene					CAS #: 108-38-3		
11.983	11.983 (1.032)	106	28434	4.34000	4.476	80.00- 120.00	100.00(a)
11.983	11.983 (1.032)	91	55438			163.71- 223.71	194.97
74 o-Xylene					CAS #: 95-47-6		
12.491	12.491 (0.944)	106	25195	4.34000	4.222	80.00- 120.00	100.00(a)
12.491	12.491 (0.944)	91	53202			176.46- 236.46	211.16
75 Styrene					CAS #: 100-42-5		
12.520	12.520 (0.946)	104	43465	4.26000	3.533	80.00- 120.00	100.00(a)
12.520	12.520 (0.946)	78	20461			17.37- 77.37	47.07
77 Cumene					CAS #: 98-82-8		
12.993	12.993 (0.982)	105	78607	4.92000	4.932	80.00- 120.00	100.00(a)
12.993	12.993 (0.982)	120	21703			0.00- 57.05	27.61
12.993	12.993 (0.982)	51	7299			0.00- 38.51	9.29
80 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
13.430	13.430 (1.015)	83	37121	6.87000	6.978	80.00- 120.00	100.00
13.430	13.430 (1.015)	85	24273			33.93- 93.93	65.39
81 Propylbenzene					CAS #: 103-65-1		
13.559	13.559 (1.025)	91	88268	4.92000	4.760	80.00- 120.00	100.00(a)
13.559	13.559 (1.025)	120	21526			0.00- 53.66	24.39
13.559	13.559 (1.025)	105	3680			0.00- 33.72	4.17
82 4-Ethyltoluene					CAS #: 622-96-8		
13.730	13.730 (1.038)	120	9180	4.92000	2.719	80.00- 120.00	100.00(a)

```
                                          AMOUNTS
                                       CAL-AMT   ON-COL
   RT   EXP RT (REL RT)  MASS  RESPONSE (   ng)  (   ng)   TARGET RANGE    RATIO
   ==   ====== ========  ====  ======== =======  =======   ============    =====

   82 4-Ethyltoluene (continued)
 13.730  13.730 (1.038)   105     30828                   299.89- 359.89   335.82
-------------------------------------------------------------------------------
   83 1,3,5-Trimethylbenzene                        CAS #: 108-67-8
 13.824  13.824 (1.045)   120     17005 4.92000    3.329  80.00- 120.00   100.00(a)
 13.816  13.816 (1.044)   105     35555                   166.45- 226.45   209.09
-------------------------------------------------------------------------------
   84 1,2,4-Trimethylbenzene                        CAS #: 95-63-6
 14.318  14.318 (1.082)   120     29475 4.92000    4.819  80.00- 120.00   100.00(a)
 14.311  14.311 (1.082)   105     68472                   185.90- 245.90   232.31
-------------------------------------------------------------------------------
   86 1,3-Dichlorobenzene                           CAS #: 541-73-1
 14.676  14.676 (1.109)   146     43601 6.01000    5.829  80.00- 120.00   100.00(a)
 14.676  14.676 (1.109)   148     26883                    33.73-  93.73    61.66
 14.676  14.676 (1.109)   111     16754                     8.03-  68.03    38.43
-------------------------------------------------------------------------------
   87 1,4-Dichlorobenzene                           CAS #: 106-46-7
 14.826  14.826 (1.121)   146     44146 6.01000    5.832  80.00- 120.00   100.00(a)
 14.826  14.826 (1.121)   148     27555                    33.15-  93.15    62.42
 14.826  14.826 (1.121)   111     15647                     6.74-  66.74    35.44
-------------------------------------------------------------------------------
   90 1,2-Dichlorobenzene                           CAS #: 95-50-1
 15.292  15.292 (1.156)   146     42825 6.01000    5.909  80.00- 120.00   100.00(a)
 15.292  15.292 (1.156)   148     26165                    33.98-  93.98    61.10
 15.292  15.292 (1.156)   111     16404                     9.89-  69.89    38.30
-------------------------------------------------------------------------------
   95 1,2,4-Trichlorobenzene                        CAS #: 120-82-1
 17.455  17.455 (1.319)   180     32982 7.42000    6.089  80.00- 120.00   100.00(a)
 17.462  17.462 (1.320)   182     31129                    66.29- 126.29    94.38
-------------------------------------------------------------------------------
   96 Hexachlorobutadiene                           CAS #: 87-68-3
 17.656  17.656 (1.335)   225     30489 10.7000    9.751  80.00- 120.00   100.00(a)
 17.656  17.656 (1.335)   223     19038                    33.08-  93.08    62.44
-------------------------------------------------------------------------------
   98 Naphthalene                                   CAS #: 91-20-3
 17.792  17.792 (1.345)   128     27091 1.00000    1.101  80.00- 120.00   100.00
 17.792  17.792 (1.345)   127      3770                     0.00-  43.03    13.92
-------------------------------------------------------------------------------
  103 2-Methylnaphthalene                           CAS #: 91-57-6
 19.260  19.260 (1.456)   142     13995 1.00000   0.9867  80.00- 120.00   100.00(a)
 19.260  19.260 (1.456)   141     11675                    56.76- 116.76    83.42
 19.260  19.260 (1.456)   115      4397                     1.56-  61.56    31.42
-------------------------------------------------------------------------------
  104 1-Methylnaphthalene                           CAS #: 90-12-0
 19.482  19.482 (1.473)   142     12220 1.00000   0.9631  80.00- 120.00   100.00(a)
 19.482  19.482 (1.473)   141     10915                    59.80- 119.80    89.32
```

RT	EXP RT	(REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO
104 1-Methylnaphthalene (continued)								
19.482	19.482	(1.473)	115	4595			3.48- 63.48	37.60

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Report Date: 18-Jan-2016 15:00

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd18.i
Lab File ID: 18011408.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: db
Method File: /chem/msd18.i/14Jan2016.b/186z0114vi.m
Misc Info: e. 7/5/16

Calibration Date: 14-JAN-2016
Calibration Time: 16:31
Client Smp ID: Level 1
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
32 Bromochloromethan	260347	156208	364486	258459	-0.73
47 1,4-Difluorobenze	915705	549423	1281987	912476	-0.35
67 Chlorobenzene-d5	838049	502829	1173269	813477	-2.93
79 Bromofluorobenzen	602381	361429	843333	576146	-4.36

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
32 Bromochloromethan	6.05	5.72	6.38	6.04	-0.12
47 1,4-Difluorobenze	7.67	7.34	8.00	7.66	-0.10
67 Chlorobenzene-d5	11.60	11.27	11.93	11.61	0.06
79 Bromofluorobenzen	13.22	12.89	13.55	13.23	0.05

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msd18.i/14Jan2016.b/18011408.d

Date : 14-JAN-2016 13:56

Client ID: Level 1

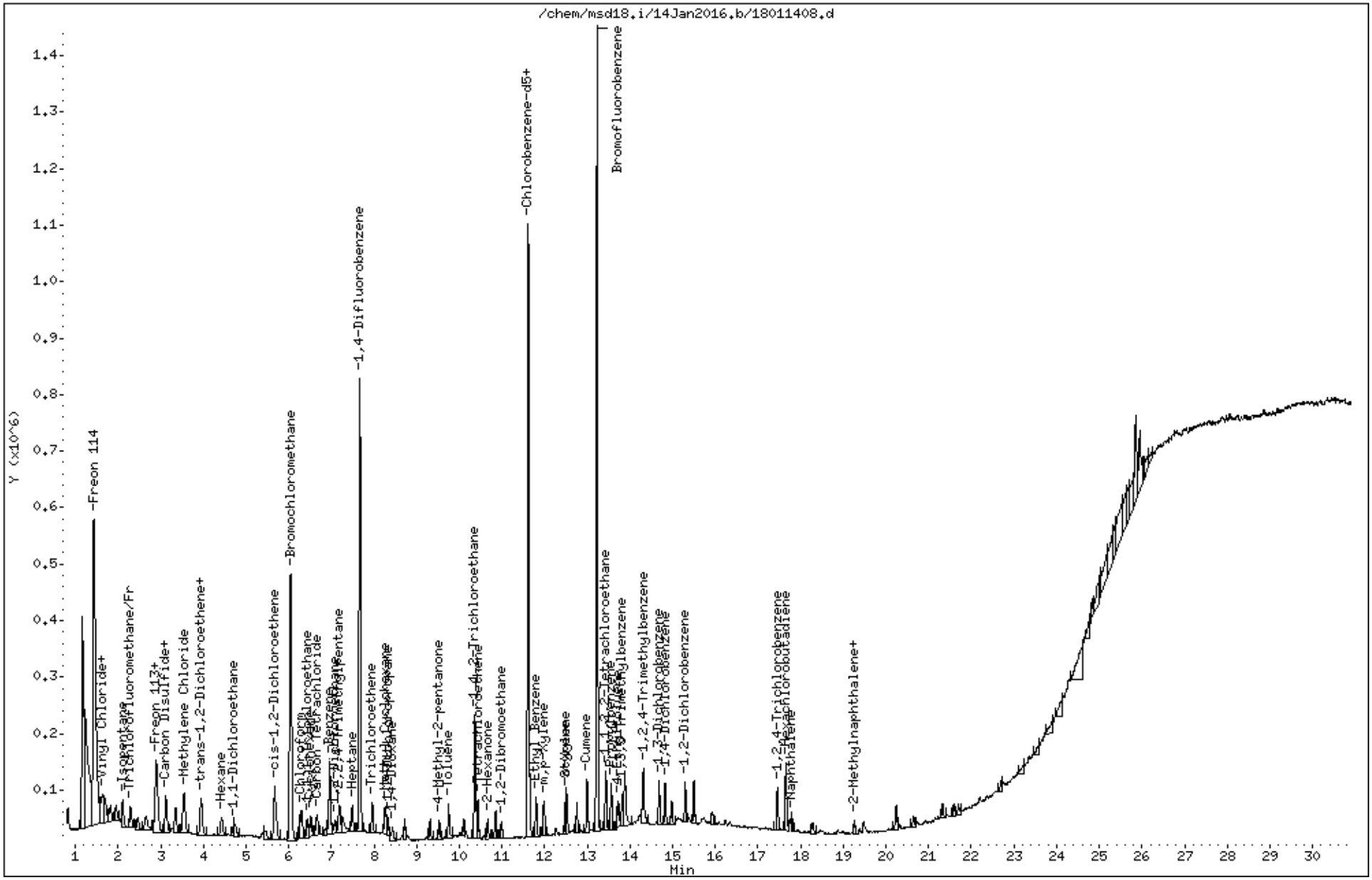
Sample Info: 1.0ml #2516-212, 1.0ul 2744-31-1

Column phase: RTx-624

Instrument: msd18.i

Operator: db

Column diameter: 0.53



Eurofins Air Toxics Inc.

EPA Method TO-17 GC/MS

Data file : /chem/msd18.i/14Jan2016.b/18011409.d
Lab Smp Id: ICAL Client Smp ID: Level 2
Inj Date : 14-JAN-2016 14:35
Operator : db Inst ID: msd18.i
Smp Info : 2.0ml #2516-212, 1.0ul 2749-31-5
Misc Info : 1.0ul 2744-22-1, e. 6/15/16
Comment :
Method : /chem/msd18.i/14Jan2016.b/186z0114vi.m
Meth Date : 18-Jan-2016 15:00 lantonic Quant Type: ISTD
Cal Date : 14-JAN-2016 14:35 Cal File: 18011409.d
Als bottle: 3 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: VOC+PAH_ICAL.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO
* 32 Bromochloromethane					CAS #: 74-97-5		
6.052	6.052 (1.000)	130	243323	26.0000		80.00- 120.00	100.00
6.052	6.052 (1.000)	128	190390			47.81- 107.81	78.25
6.045	6.045 (1.000)	49	321055			99.93- 159.93	131.95
* 47 1,4-Difluorobenzene					CAS #: 540-36-3		
7.671	7.671 (1.000)	114	881818	23.0000		80.00- 120.00	100.00
7.671	7.671 (1.000)	88	133120			0.00- 45.51	15.10
* 67 Chlorobenzene-d5					CAS #: 3114-55-4		
11.610	11.610 (1.000)	117	805331	24.0000		80.00- 120.00	100.00
11.610	11.610 (1.000)	82	432519			23.87- 83.87	53.71
* 79 Bromofluorobenzene					CAS #: 460-00-4		
13.222	13.222 (1.000)	174	579388	36.0000		80.00- 120.00	100.00
13.222	13.222 (1.000)	95	626696			78.78- 138.78	108.17
13.222	13.222 (1.000)	176	558550			67.05- 127.05	96.40
$ 39 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
6.969	6.969 (0.908)	65	4295	1.00000	0.9696	80.00- 120.00	100.00

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                                          AMOUNTS
                                       CAL-AMT   ON-COL
   RT   EXP RT (REL RT)  MASS  RESPONSE (   ng)  (   ng)   TARGET RANGE    RATIO
   ==   ====== ========  ====  ======== =======  =======   ============    =====

$  39 1,2-Dichloroethane-d4 (continued)
  6.969   6.969 (0.908)    67      2820                    25.86-  85.86    65.66
-------------------------------------------------------------------------------
$  57 Toluene-d8                                  CAS #: 2037-26-5
  9.655   9.655 (0.832)    98     11382 1.00000   0.8943  80.00- 120.00   100.00
  9.655   9.655 (0.832)    70      1537                    0.00-  40.57    13.50
  9.655   9.655 (0.832)   100      7901                   34.56-  94.56    69.42
-------------------------------------------------------------------------------
$  97 Naphthalene-d8                              CAS #: 1146-65-2
 17.749  17.749 (1.342)   136     23678 1.00000   0.9780  80.00- 120.00   100.00
 17.749  17.749 (1.342)   108      2357                    0.00-  39.05     9.95
-------------------------------------------------------------------------------
    4 Freon 114                                   CAS #: 76-14-2
  1.460   1.460 (0.241)   135     78491 14.0000   13.786  80.00- 120.00   100.00(a)
  1.460   1.460 (0.241)   137     25479                    1.93-  61.93    32.46
-------------------------------------------------------------------------------
    6 Vinyl Chloride                              CAS #: 75-01-4
  1.646   1.646 (0.272)    62     38817 5.11000    4.950  80.00- 120.00   100.00
  1.639   1.639 (0.271)    64     31741                   15.41-  75.41    81.77
-------------------------------------------------------------------------------
    7 1,3-Butadiene                               CAS #: 106-99-0
  1.646   1.646 (0.272)    54     30220 4.42000    4.296  80.00- 120.00   100.00
  1.646   1.646 (0.272)    39     45706                  104.89- 164.89   151.24
-------------------------------------------------------------------------------
    9 Chloroethane                                CAS #: 75-00-3
  2.048   2.048 (0.338)    64     22014 5.28000    5.698  80.00- 120.00   100.00(a)
  2.048   2.048 (0.338)    66      6393                    1.74-  61.74    29.04
  2.048   2.048 (0.338)    49      4605                    0.00-  57.57    20.92
-------------------------------------------------------------------------------
   10 Isopentane                                  CAS #: 78-78-4
  2.112   2.112 (0.349)    57     31798 5.90000    5.845  80.00- 120.00   100.00(a)
  2.112   2.112 (0.349)    43     43284                  112.49- 172.49   136.12
-------------------------------------------------------------------------------
   11 Trichlorofluoromethane/Fr11                 CAS #: 75-69-4
  2.291   2.291 (0.379)   101     87285 11.2000   10.689  80.00- 120.00   100.00(a)
  2.291   2.291 (0.379)   103     58576                   34.96-  94.96    67.11
-------------------------------------------------------------------------------
   15 Freon 113                                   CAS #: 76-13-1
  2.893   2.893 (0.478)   151     60304 15.3000   15.370  80.00- 120.00   100.00
  2.893   2.893 (0.478)   153     37727                   34.01-  94.01    62.56
  2.893   2.893 (0.478)   101     76116                   98.52- 158.52   126.22
-------------------------------------------------------------------------------
   14 1,1-Dichloroethene                          CAS #: 75-35-4
  2.871   2.871 (0.474)    98     23036 7.93000    7.752  80.00- 120.00   100.00
  2.871   2.871 (0.474)    96     40280                  130.53- 190.53   174.86
  2.871   2.871 (0.474)    61     63978                  241.31- 301.31   277.73
-------------------------------------------------------------------------------
```

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO
18 Carbon Disulfide					CAS #: 75-15-0		
3.122	3.122 (0.516)	76	130909	6.23000	5.954	80.00- 120.00	100.00(a)
24 trans-1,2-Dichloroethene					CAS #: 156-60-5		
3.953	3.953 (0.653)	98	21488	7.93000	7.556	80.00- 120.00	100.00
3.953	3.953 (0.653)	61	51273			203.10- 263.10	238.61
3.953	3.953 (0.653)	96	35789			127.09- 187.09	166.55
23 MTBE					CAS #: 1634-04-4		
3.946	3.946 (0.652)	73	103063	7.21000	7.275	80.00- 120.00	100.00(a)
3.946	3.946 (0.652)	57	35451			0.00- 53.10	34.40
3.946	3.946 (0.652)	41	27659			0.00- 50.25	26.84
25 Hexane					CAS #: 110-54-3		
4.433	4.433 (0.732)	57	60130	7.05000	7.421	80.00- 120.00	100.00(a)
4.433	4.433 (0.732)	43	36874			31.56- 91.56	61.32
4.433	4.433 (0.732)	86	8876			0.00- 44.94	14.76
26 1,1-Dichloroethane					CAS #: 75-34-3		
4.712	4.712 (0.779)	63	62014	8.10000	7.892	80.00- 120.00	100.00
4.712	4.712 (0.779)	65	22201			1.52- 61.52	35.80
29 cis-1,2-Dichloroethene					CAS #: 156-59-2		
5.672	5.672 (0.937)	98	21413	7.93000	7.874	80.00- 120.00	100.00
5.672	5.672 (0.937)	96	35847			127.88- 187.88	167.41
5.672	5.672 (0.937)	61	46521			179.74- 239.74	217.26
35 Chloroform					CAS #: 67-66-3		
6.245	6.245 (1.032)	83	62631	9.77000	9.671	80.00- 120.00	100.00
6.252	6.252 (1.033)	85	41291			34.57- 94.57	65.93
37 Cyclohexane					CAS #: 110-82-7		
6.525	6.525 (0.851)	84	42707	6.88000	6.594	80.00- 120.00	100.00(a)
6.525	6.525 (0.851)	56	55448			92.60- 152.60	129.83
6.525	6.525 (0.851)	41	33753			35.57- 95.57	79.03
36 1,1,1-Trichloroethane					CAS #: 71-55-6		
6.439	6.439 (0.839)	97	62195	10.9000	10.648	80.00- 120.00	100.00
6.439	6.439 (0.839)	99	40057			34.22- 94.22	64.41
38 Carbon Tetrachloride					CAS #: 56-23-5		
6.661	6.661 (0.868)	119	59446	12.6000	12.199	80.00- 120.00	100.00
6.661	6.661 (0.868)	117	61686			74.59- 134.59	103.77
45 2,2,4-Trimethylpentane					CAS #: 540-84-1		
7.191	7.191 (0.937)	57	144564	9.34000	9.086	80.00- 120.00	100.00(a)

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO
45 2,2,4-Trimethylpentane (continued)							
7.191	7.191 (0.937)	56	46754			2.36- 62.36	32.34
7.191	7.191 (0.937)	41	43595			0.00- 55.73	30.16
41 Benzene					CAS #: 71-43-2		
6.962	6.962 (0.908)	78	191713	6.39000	8.466	80.00- 120.00	100.00
6.962	6.962 (0.908)	77	46084			0.00- 53.82	24.04
43 1,2-Dichloroethane					CAS #: 107-06-2		
7.083	7.083 (0.923)	62	37570	8.09000	7.939	80.00- 120.00	100.00
7.083	7.083 (0.923)	64	13244			2.51- 62.51	35.25
46 Heptane					CAS #: 142-82-5		
7.492	7.492 (0.977)	71	34885	8.20000	8.508	80.00- 120.00	100.00
7.492	7.492 (0.977)	43	76122			132.26- 192.26	218.21
7.492	7.492 (0.977)	57	30459			60.63- 120.63	87.31
48 Trichloroethene					CAS #: 79-01-6		
7.957	7.957 (1.037)	95	38311	10.8000	9.949	80.00- 120.00	100.00
7.957	7.957 (1.037)	130	39562			73.40- 133.40	103.27
7.964	7.964 (1.038)	97	25145			35.04- 95.04	65.63
51 Methyl Cyclohexane					CAS #: 108-87-2		
8.265	8.265 (1.077)	83	51957	8.03000	7.921	80.00- 120.00	100.00(a)
8.265	8.265 (1.077)	98	23207			15.23- 75.23	44.67
8.265	8.265 (1.077)	55	42071			45.63- 105.63	80.97
52 1,2-Dichloropropane					CAS #: 78-87-5		
8.322	8.322 (1.085)	63	33241	9.24000	9.301	80.00- 120.00	100.00
8.322	8.322 (1.085)	62	22702			38.55- 98.55	68.30
8.322	8.322 (1.085)	41	22496			21.51- 81.51	67.68
53 1,4-Dioxane					CAS #: 123-91-1		
8.437	8.437 (1.100)	88	21675	7.21000	7.467	80.00- 120.00	100.00(a)
8.437	8.437 (1.100)	58	17527			36.73- 96.73	80.86
8.444	8.444 (1.101)	57	33387			2.93- 62.93	154.03
56 4-Methyl-2-pentanone					CAS #: 108-10-1		
9.533	9.533 (1.243)	58	23199	8.19000	7.906	80.00- 120.00	100.00(a)
9.533	9.533 (1.243)	43	56736			210.10- 270.10	244.56
9.533	9.533 (1.243)	85	10318			14.24- 74.24	44.48
58 Toluene					CAS #: 108-88-3		
9.748	9.748 (0.840)	91	112612	7.54000	7.692	80.00- 120.00	100.00
9.748	9.748 (0.840)	92	66646			27.36- 87.36	59.18

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO
61 1,1,2-Trichloroethane					CAS #: 79-00-5		
10.364	10.364 (1.351)	97	49124	10.9000	12.682	80.00- 120.00	100.00
10.364	10.364 (1.351)	99	22478			31.64- 91.64	45.76
10.364	10.364 (1.351)	83	32645			56.72- 116.72	66.45
62 Tetrachloroethene					CAS #: 127-18-4		
10.436	10.436 (0.899)	166	53159	13.6000	13.328	80.00- 120.00	100.00
10.436	10.436 (0.899)	129	38202			40.21- 100.21	71.86
10.436	10.436 (0.899)	131	35501			37.97- 97.97	66.78
63 2-Hexanone					CAS #: 591-78-6		
10.665	10.665 (0.919)	58	32402	8.19000	8.276	80.00- 120.00	100.00
10.665	10.665 (0.919)	43	56948			138.90- 198.90	175.75
10.665	10.665 (0.919)	100	6960			0.00- 50.74	21.48
66 1,2-Dibromoethane					CAS #: 106-93-4		
10.987	10.987 (0.946)	107	53238	15.4000	15.813	80.00- 120.00	100.00
10.987	10.987 (0.946)	109	50210			63.94- 123.94	94.31
68 Chlorobenzene					CAS #: 108-90-7		
11.653	11.653 (1.004)	112	82630	9.21000	9.017	80.00- 120.00	100.00
11.653	11.653 (1.004)	114	27102			2.24- 62.24	32.80
11.646	11.646 (1.003)	77	53119			25.99- 85.99	64.29
69 Ethyl Benzene					CAS #: 100-41-4		
11.797	11.797 (1.016)	106	43183	8.68000	8.642	80.00- 120.00	100.00
11.797	11.797 (1.016)	91	133362			279.23- 339.23	308.83
71 m,p-Xylene					CAS #: 108-38-3		
11.976	11.976 (1.031)	106	53157	8.68000	8.564	80.00- 120.00	100.00(a)
11.976	11.976 (1.031)	91	103985			163.71- 223.71	195.62
74 o-Xylene					CAS #: 95-47-6		
12.484	12.484 (0.944)	106	49325	8.68000	8.367	80.00- 120.00	100.00(a)
12.484	12.484 (0.944)	91	105066			176.46- 236.46	213.01
75 Styrene					CAS #: 100-42-5		
12.513	12.513 (0.946)	104	82329	8.52000	7.178	80.00- 120.00	100.00(a)
12.513	12.513 (0.946)	78	39708			17.37- 77.37	48.23
77 Cumene					CAS #: 98-82-8		
12.986	12.986 (0.982)	105	156717	9.83000	9.795	80.00- 120.00	100.00(a)
12.993	12.993 (0.983)	120	42657			0.00- 57.05	27.22
12.986	12.986 (0.982)	51	14770			0.00- 38.51	9.42
80 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
13.423	13.423 (1.015)	83	78749	13.7000	14.364	80.00- 120.00	100.00

```
                                          AMOUNTS
                                       CAL-AMT   ON-COL
   RT   EXP RT (REL RT)  MASS  RESPONSE (   ng)  (   ng)   TARGET RANGE    RATIO
   ==   ====== ========  ====  ======== =======  =======   ============    =====

   80 1,1,2,2-Tetrachloroethane (continued)
 13.423  13.423 (1.015)    85     50978                    33.93-  93.93    64.73
-------------------------------------------------------------------------------
   81 Propylbenzene                                CAS #: 103-65-1
 13.552  13.552 (1.025)    91    192747 9.83000   10.162  80.00- 120.00   100.00
 13.552  13.552 (1.025)   120     44410                     0.00-  53.66    23.04
 13.552  13.552 (1.025)   105      7876                     0.00-  33.72     4.09
-------------------------------------------------------------------------------
   82 4-Ethyltoluene                               CAS #: 622-96-8
 13.723  13.723 (1.038)   120     46313 9.83000   12.079  80.00- 120.00   100.00
 13.723  13.723 (1.038)   105    151805                  299.89- 359.89   327.78
-------------------------------------------------------------------------------
   83 1,3,5-Trimethylbenzene                       CAS #: 108-67-8
 13.809  13.809 (1.044)   120     64254 9.83000   11.468  80.00- 120.00   100.00
 13.809  13.809 (1.044)   105    127589                  166.45- 226.45   198.57
-------------------------------------------------------------------------------
   84 1,2,4-Trimethylbenzene                       CAS #: 95-63-6
 14.311  14.311 (1.082)   120     56354 9.83000    9.375  80.00- 120.00   100.00(a)
 14.311  14.311 (1.082)   105    128803                  185.90- 245.90   228.56
-------------------------------------------------------------------------------
   86 1,3-Dichlorobenzene                          CAS #: 541-73-1
 14.676  14.676 (1.110)   146     85915 12.0000   11.608  80.00- 120.00   100.00
 14.676  14.676 (1.110)   148     56314                    33.73-  93.73    65.55
 14.676  14.676 (1.110)   111     34156                     8.03-  68.03    39.76
-------------------------------------------------------------------------------
   87 1,4-Dichlorobenzene                          CAS #: 106-46-7
 14.819  14.819 (1.121)   146     87438 12.0000   11.652  80.00- 120.00   100.00
 14.819  14.819 (1.121)   148     56857                    33.15-  93.15    65.03
 14.819  14.819 (1.121)   111     31436                     6.74-  66.74    35.95
-------------------------------------------------------------------------------
   90 1,2-Dichlorobenzene                          CAS #: 95-50-1
 15.292  15.292 (1.157)   146     82387 12.0000   11.527  80.00- 120.00   100.00
 15.292  15.292 (1.157)   148     53606                    33.98-  93.98    65.07
 15.292  15.292 (1.157)   111     32599                     9.89-  69.89    39.57
-------------------------------------------------------------------------------
   95 1,2,4-Trichlorobenzene                       CAS #: 120-82-1
 17.455  17.455 (1.320)   180     63738 14.8000   13.070  80.00- 120.00   100.00(a)
 17.455  17.455 (1.320)   182     60205                    66.29- 126.29    94.46
-------------------------------------------------------------------------------
   96 Hexachlorobutadiene                          CAS #: 87-68-3
 17.656  17.656 (1.335)   225     57911 21.3000   19.754  80.00- 120.00   100.00(a)
 17.656  17.656 (1.335)   223     35722                    33.08-  93.08    61.68
-------------------------------------------------------------------------------
   98 Naphthalene                                  CAS #: 91-20-3
 17.792  17.792 (1.346)   128    114288 5.00000    4.739  80.00- 120.00   100.00
 17.792  17.792 (1.346)   127     14207                     0.00-  43.03    12.43
-------------------------------------------------------------------------------
```

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO
103 2-Methylnaphthalene					CAS #: 91-57-6		
19.253	19.253 (1.456)	142	70694	5.00000	4.971	80.00- 120.00	100.00
19.253	19.253 (1.456)	141	61019			56.76- 116.76	86.31
19.253	19.253 (1.456)	115	22434			1.56- 61.56	31.73
104 1-Methylnaphthalene					CAS #: 90-12-0		
19.475	19.475 (1.473)	142	65871	5.00000	5.107	80.00- 120.00	100.00
19.475	19.475 (1.473)	141	60407			59.80- 119.80	91.70
19.475	19.475 (1.473)	115	21879			3.48- 63.48	33.21
107 Acenaphthylene					CAS #: 208-96-8		
21.331	21.331 (1.613)	152	142177	5.00000	5.301	80.00- 120.00	100.00
21.331	21.331 (1.613)	151	28490			0.00- 49.75	20.04
21.324	21.324 (1.613)	153	18421			0.00- 43.01	12.96
109 Acenaphthene					CAS #: 83-32-9		
21.581	21.581 (1.632)	154	41846	5.00000	4.147	80.00- 120.00	100.00(a)
21.581	21.581 (1.632)	152	23268			26.17- 86.17	55.60
21.581	21.581 (1.632)	153	45275			78.75- 138.75	108.19
111 Fluorene					CAS #: 86-73-7		
22.713	22.713 (1.718)	166	30233	5.00000	3.320	80.00- 120.00	100.00(a)
22.713	22.713 (1.718)	165	29861			65.26- 125.26	98.77
112 Phenanthrene					CAS #: 85-01-8		
24.848	24.848 (1.879)	178	69769	5.00000	3.857	80.00- 120.00	100.00(a)
24.848	24.848 (1.879)	176	14699			0.00- 49.34	21.07
24.848	24.848 (1.879)	179	11103			0.00- 45.21	15.91
113 Anthracene					CAS #: 120-12-7		
24.955	24.955 (1.887)	178	48707	5.00000	3.277	80.00- 120.00	100.00(a)
24.948	24.948 (1.887)	176	9707			0.00- 48.82	19.93
24.955	24.955 (1.887)	179	8109			0.00- 44.74	16.65
117 Fluoranthene					CAS #: 206-44-0		
28.057	28.057 (2.122)	202	32722	5.00000	2.006	80.00- 120.00	100.00(a)
28.057	28.057 (2.122)	101	4896			0.00- 43.29	14.96
118 Pyrene					CAS #: 129-00-0		
28.852	28.852 (2.182)	202	33814	5.00000	1.991	80.00- 120.00	100.00(a)
28.852	28.852 (2.182)	101	5711			0.00- 45.23	16.89
28.852	28.852 (2.182)	100	5487			0.00- 42.66	16.23

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Report Date: 18-Jan-2016 15:00

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd18.i
Lab File ID: 18011409.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: db
Method File: /chem/msd18.i/14Jan2016.b/186z0114vi.m
Misc Info: 1.0ul 2744-22-1, e. 6/15/16

Calibration Date: 14-JAN-2016
Calibration Time: 16:31
Client Smp ID: Level 2
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
32 Bromochloromethan	260347	156208	364486	243323	-6.54
47 1,4-Difluorobenze	915705	549423	1281987	881818	-3.70
67 Chlorobenzene-d5	838049	502829	1173269	805331	-3.90
79 Bromofluorobenzen	602381	361429	843333	579388	-3.82

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
32 Bromochloromethan	6.05	5.72	6.38	6.05	0.00
47 1,4-Difluorobenze	7.67	7.34	8.00	7.67	0.00
67 Chlorobenzene-d5	11.60	11.27	11.93	11.61	0.06
79 Bromofluorobenzen	13.22	12.89	13.55	13.22	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msd18.i/14Jan2016.b/18011409.d

Date : 14-JAN-2016 14:35

Client ID: Level 2

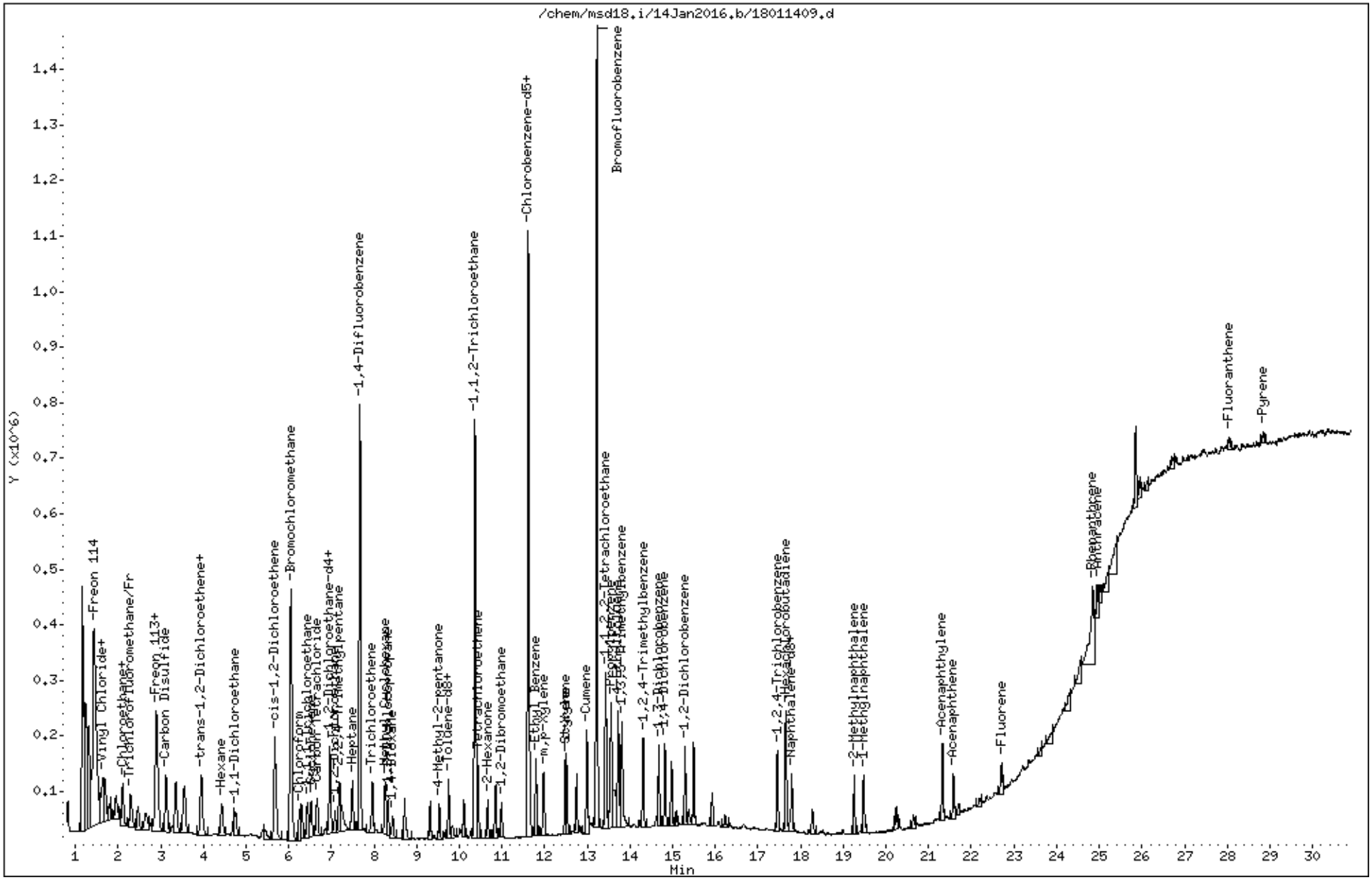
Sample Info: 2.0ml #2516-212, 1.0ul 2749-31-5

Column phase: RTx-624

Instrument: msd18.i

Operator: db

Column diameter: 0.53



Eurofins Air Toxics Inc.

EPA Method TO-17 GC/MS

Data file : /chem/msd18.i/14Jan2016.b/18011410.d
Lab Smp Id: ICAL Client Smp ID: Level 3
Inj Date : 14-JAN-2016 15:13
Operator : db Inst ID: msd18.i
Smp Info : 3.0ml #2516-212, 1.0ul 2744-31-10
Misc Info : 1.0ul 2744-22-5
Comment :
Method : /chem/msd18.i/14Jan2016.b/186z0114vi.m
Meth Date : 18-Jan-2016 15:00 lantonic Quant Type: ISTD
Cal Date : 14-JAN-2016 15:13 Cal File: 18011410.d
Als bottle: 4 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: VOC+PAH_ICAL.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO
* 32 Bromochloromethane					CAS #: 74-97-5		
6.052	6.052 (1.000)	130	249484	26.0000		80.00- 120.00	100.00
6.052	6.052 (1.000)	128	194385			47.81- 107.81	77.91
6.052	6.052 (1.000)	49	323637			99.93- 159.93	129.72
* 47 1,4-Difluorobenzene					CAS #: 540-36-3		
7.663	7.663 (1.000)	114	895474	23.0000		80.00- 120.00	100.00
7.663	7.663 (1.000)	88	135134			0.00- 45.51	15.09
* 67 Chlorobenzene-d5					CAS #: 3114-55-4		
11.610	11.610 (1.000)	117	811214	24.0000		80.00- 120.00	100.00
11.610	11.610 (1.000)	82	433990			23.87- 83.87	53.50
* 79 Bromofluorobenzene					CAS #: 460-00-4		
13.229	13.229 (1.000)	174	569449	36.0000		80.00- 120.00	100.00
13.229	13.229 (1.000)	95	620817			78.78- 138.78	109.02
13.229	13.229 (1.000)	176	552862			67.05- 127.05	97.09
$ 39 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
6.969	6.969 (0.909)	65	21342	5.00000	4.827	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO
$ 39 1,2-Dichloroethane-d4 (continued)							
6.969	6.969 (0.909)	67	12243			25.86- 85.86	57.37
$ 57 Toluene-d8					CAS #: 2037-26-5		
9.655	9.655 (0.832)	98	62775	5.00000	4.931	80.00- 120.00	100.00
9.655	9.655 (0.832)	70	6687			0.00- 40.57	10.65
9.655	9.655 (0.832)	100	41359			34.56- 94.56	65.88
$ 97 Naphthalene-d8					CAS #: 1146-65-2		
17.756	17.756 (1.342)	136	112306	5.00000	4.810	80.00- 120.00	100.00
17.749	17.749 (1.342)	108	10308			0.00- 39.05	9.18
4 Freon 114					CAS #: 76-14-2		
1.460	1.460 (0.241)	135	115863	21.0000	20.124	80.00- 120.00	100.00
1.467	1.467 (0.242)	137	37056			1.93- 61.93	31.98
6 Vinyl Chloride					CAS #: 75-01-4		
1.646	1.646 (0.272)	62	58210	7.67000	7.343	80.00- 120.00	100.00
1.646	1.646 (0.272)	64	38980			15.41- 75.41	66.96
7 1,3-Butadiene					CAS #: 106-99-0		
1.646	1.646 (0.272)	54	44648	6.64000	6.297	80.00- 120.00	100.00
1.646	1.646 (0.272)	39	61619			104.89- 164.89	138.01
9 Chloroethane					CAS #: 75-00-3		
2.055	2.055 (0.340)	64	30301	7.92000	7.737	80.00- 120.00	100.00(a)
2.055	2.055 (0.340)	66	9062			1.74- 61.74	29.91
2.055	2.055 (0.340)	49	7224			0.00- 57.57	23.84
10 Isopentane					CAS #: 78-78-4		
2.112	2.112 (0.349)	57	47737	8.85000	8.653	80.00- 120.00	100.00
2.105	2.105 (0.348)	43	63378			112.49- 172.49	132.76
11 Trichlorofluoromethane/Fr11					CAS #: 75-69-4		
2.291	2.291 (0.379)	101	131445	16.9000	15.983	80.00- 120.00	100.00
2.291	2.291 (0.379)	103	84212			34.96- 94.96	64.07
15 Freon 113					CAS #: 76-13-1		
2.893	2.893 (0.478)	151	87276	23.0000	22.007	80.00- 120.00	100.00
2.893	2.893 (0.478)	153	55038			34.01- 94.01	63.06
2.893	2.893 (0.478)	101	112593			98.52- 158.52	129.01
14 1,1-Dichloroethene					CAS #: 75-35-4		
2.871	2.871 (0.474)	98	33374	11.9000	11.176	80.00- 120.00	100.00
2.871	2.871 (0.474)	96	57283			130.53- 190.53	171.64
2.871	2.871 (0.474)	61	92959			241.31- 301.31	278.54

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO
18 Carbon Disulfide					CAS #: 75-15-0		
3.122	3.122 (0.516)	76	174378	9.34000	8.083	80.00- 120.00	100.00
17 2-Propanol					CAS #: 67-63-0		
3.122	3.122 (0.516)	45	153053	7.37000	8.787	80.00- 120.00	100.00(a)
3.122	3.122 (0.516)	43	28047			0.00- 48.48	18.33
3.122	3.122 (0.516)	59	6375			0.00- 34.02	4.17
21 Methylene Chloride					CAS #: 75-09-2		
3.545	3.545 (0.586)	49	99611	10.4000	12.245	80.00- 120.00	100.00(a)
3.552	3.552 (0.587)	84	77673			46.74- 106.74	77.98
3.545	3.545 (0.586)	51	32016			1.74- 61.74	32.14
24 trans-1,2-Dichloroethene					CAS #: 156-60-5		
3.960	3.960 (0.654)	98	33019	11.9000	11.463	80.00- 120.00	100.00
3.953	3.953 (0.653)	61	80059			203.10- 263.10	242.46
3.953	3.953 (0.653)	96	52718			127.09- 187.09	159.66
23 MTBE					CAS #: 1634-04-4		
3.946	3.946 (0.652)	73	145676	10.8000	10.211	80.00- 120.00	100.00(a)
3.946	3.946 (0.652)	57	35878			0.00- 53.10	24.63
3.946	3.946 (0.652)	41	30270			0.00- 50.25	20.78
25 Hexane					CAS #: 110-54-3		
4.433	4.433 (0.732)	57	80537	10.6000	9.979	80.00- 120.00	100.00(a)
4.433	4.433 (0.732)	43	51978			31.56- 91.56	64.54
4.433	4.433 (0.732)	86	11446			0.00- 44.94	14.21
26 1,1-Dichloroethane					CAS #: 75-34-3		
4.712	4.712 (0.779)	63	92951	12.1000	11.673	80.00- 120.00	100.00
4.712	4.712 (0.779)	65	30486			1.52- 61.52	32.80
29 cis-1,2-Dichloroethene					CAS #: 156-59-2		
5.672	5.672 (0.937)	98	30369	11.9000	11.128	80.00- 120.00	100.00
5.672	5.672 (0.937)	96	50068			127.88- 187.88	164.87
5.672	5.672 (0.937)	61	67698			179.74- 239.74	222.92
35 Chloroform					CAS #: 67-66-3		
6.252	6.252 (1.033)	83	94136	14.6000	14.280	80.00- 120.00	100.00
6.252	6.252 (1.033)	85	59880			34.57- 94.57	63.61
37 Cyclohexane					CAS #: 110-82-7		
6.524	6.524 (0.851)	84	59060	10.3000	9.277	80.00- 120.00	100.00
6.524	6.524 (0.851)	56	73794			92.60- 152.60	124.95
6.524	6.524 (0.851)	41	46168			35.57- 95.57	78.17

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO
36 1,1,1-Trichloroethane					CAS #: 71-55-6		
6.438	6.438 (0.840)	97	90467	16.4000	15.523	80.00- 120.00	100.00
6.438	6.438 (0.840)	99	58461			34.22- 94.22	64.62
38 Carbon Tetrachloride					CAS #: 56-23-5		
6.661	6.661 (0.869)	119	87243	18.9000	17.932	80.00- 120.00	100.00
6.661	6.661 (0.869)	117	90706			74.59- 134.59	103.97
45 2,2,4-Trimethylpentane					CAS #: 540-84-1		
7.191	7.191 (0.938)	57	212126	14.0000	13.337	80.00- 120.00	100.00
7.191	7.191 (0.938)	56	71297			2.36- 62.36	33.61
7.191	7.191 (0.938)	41	59698			0.00- 55.73	28.14
41 Benzene					CAS #: 71-43-2		
6.961	6.961 (0.908)	78	180188	9.58000	8.342	80.00- 120.00	100.00
6.961	6.961 (0.908)	77	42258			0.00- 53.82	23.45
43 1,2-Dichloroethane					CAS #: 107-06-2		
7.083	7.083 (0.924)	62	53515	12.1000	11.362	80.00- 120.00	100.00
7.083	7.083 (0.924)	64	19659			2.51- 62.51	36.74
46 Heptane					CAS #: 142-82-5		
7.491	7.491 (0.978)	71	45459	12.3000	11.343	80.00- 120.00	100.00
7.491	7.491 (0.978)	43	88642			132.26- 192.26	194.99
7.491	7.491 (0.978)	57	42006			60.63- 120.63	92.40
48 Trichloroethene					CAS #: 79-01-6		
7.957	7.957 (1.038)	95	56823	16.1000	14.895	80.00- 120.00	100.00
7.957	7.957 (1.038)	130	59093			73.40- 133.40	103.99
7.957	7.957 (1.038)	97	36291			35.04- 95.04	63.87
51 Methyl Cyclohexane					CAS #: 108-87-2		
8.265	8.265 (1.079)	83	76510	12.0000	11.611	80.00- 120.00	100.00
8.265	8.265 (1.079)	98	33495			15.23- 75.23	43.78
8.265	8.265 (1.079)	55	60406			45.63- 105.63	78.95
52 1,2-Dichloropropane					CAS #: 78-87-5		
8.322	8.322 (1.086)	63	46711	13.9000	13.114	80.00- 120.00	100.00
8.322	8.322 (1.086)	62	33351			38.55- 98.55	71.40
8.322	8.322 (1.086)	41	30279			21.51- 81.51	64.82
53 1,4-Dioxane					CAS #: 123-91-1		
8.437	8.437 (1.101)	88	30485	10.8000	10.453	80.00- 120.00	100.00(a)
8.437	8.437 (1.101)	58	22015			36.73- 96.73	72.22
8.444	8.444 (1.102)	57	31941			2.93- 62.93	104.78

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO
56 4-Methyl-2-pentanone					CAS #: 108-10-1		
9.533	9.533 (1.244)	58	34654	12.3000	11.790	80.00- 120.00	100.00
9.533	9.533 (1.244)	43	83938			210.10- 270.10	242.22
9.533	9.533 (1.244)	85	15534			14.24- 74.24	44.83
58 Toluene					CAS #: 108-88-3		
9.748	9.748 (0.840)	91	162845	11.3000	11.127	80.00- 120.00	100.00
9.748	9.748 (0.840)	92	91575			27.36- 87.36	56.23
61 1,1,2-Trichloroethane					CAS #: 79-00-5		
10.364	10.364 (1.352)	97	52955	16.4000	14.093	80.00- 120.00	100.00
10.364	10.364 (1.352)	99	32424			31.64- 91.64	61.23
10.364	10.364 (1.352)	83	45859			56.72- 116.72	86.60
62 Tetrachloroethene					CAS #: 127-18-4		
10.435	10.435 (0.899)	166	77930	20.4000	19.638	80.00- 120.00	100.00
10.435	10.435 (0.899)	129	55637			40.21- 100.21	71.39
10.435	10.435 (0.899)	131	53124			37.97- 97.97	68.17
63 2-Hexanone					CAS #: 591-78-6		
10.665	10.665 (0.919)	58	47863	12.3000	12.177	80.00- 120.00	100.00
10.665	10.665 (0.919)	43	79462			138.90- 198.90	166.02
10.665	10.665 (0.919)	100	9930			0.00- 50.74	20.75
66 1,2-Dibromoethane					CAS #: 106-93-4		
10.987	10.987 (0.946)	107	76740	23.0000	22.720	80.00- 120.00	100.00
10.987	10.987 (0.946)	109	72260			63.94- 123.94	94.16
68 Chlorobenzene					CAS #: 108-90-7		
11.653	11.653 (1.004)	112	121869	13.8000	13.347	80.00- 120.00	100.00
11.653	11.653 (1.004)	114	38238			2.24- 62.24	31.38
11.653	11.653 (1.004)	77	75815			25.99- 85.99	62.21
69 Ethyl Benzene					CAS #: 100-41-4		
11.796	11.796 (1.016)	106	61952	13.0000	12.474	80.00- 120.00	100.00
11.796	11.796 (1.016)	91	194889			279.23- 339.23	314.58
71 m,p-Xylene					CAS #: 108-38-3		
11.983	11.983 (1.032)	106	76587	13.0000	12.490	80.00- 120.00	100.00
11.983	11.983 (1.032)	91	153195			163.71- 223.71	200.03
74 o-Xylene					CAS #: 95-47-6		
12.491	12.491 (0.944)	106	79013	13.0000	13.472	80.00- 120.00	100.00
12.491	12.491 (0.944)	91	167259			176.46- 236.46	211.69
75 Styrene					CAS #: 100-42-5		
12.527	12.527 (0.947)	104	114083	12.8000	10.679	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO
75 Styrene (continued)							
12.527	12.527 (0.947)	78	65054			17.37- 77.37	57.02
77 Cumene					CAS #: 98-82-8		
13.000	13.000 (0.983)	105	232576	14.8000	14.793	80.00- 120.00	100.00
13.000	13.000 (0.983)	120	62480			0.00- 57.05	26.86
12.993	12.993 (0.982)	51	22204			0.00- 38.51	9.55
80 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
13.430	13.430 (1.015)	83	119436	20.6000	21.752	80.00- 120.00	100.00
13.430	13.430 (1.015)	85	77036			33.93- 93.93	64.50
81 Propylbenzene					CAS #: 103-65-1		
13.559	13.559 (1.025)	91	280140	14.8000	14.970	80.00- 120.00	100.00
13.559	13.559 (1.025)	120	65647			0.00- 53.66	23.43
13.559	13.559 (1.025)	105	10508			0.00- 33.72	3.75
82 4-Ethyltoluene					CAS #: 622-96-8		
13.731	13.731 (1.038)	120	70554	14.8000	17.559	80.00- 120.00	100.00
13.731	13.731 (1.038)	105	231401			299.89- 359.89	327.98
83 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
13.816	13.816 (1.044)	120	96161	14.8000	16.710	80.00- 120.00	100.00
13.816	13.816 (1.044)	105	193570			166.45- 226.45	201.30
84 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
14.311	14.311 (1.082)	120	88231	14.8000	14.900	80.00- 120.00	100.00(a)
14.311	14.311 (1.082)	105	194602			185.90- 245.90	220.56
86 1,3-Dichlorobenzene					CAS #: 541-73-1		
14.676	14.676 (1.109)	146	136295	18.0000	18.547	80.00- 120.00	100.00
14.676	14.676 (1.109)	148	87283			33.73- 93.73	64.04
14.676	14.676 (1.109)	111	53232			8.03- 68.03	39.06
87 1,4-Dichlorobenzene					CAS #: 106-46-7		
14.826	14.826 (1.121)	146	134912	18.0000	18.218	80.00- 120.00	100.00
14.826	14.826 (1.121)	148	88481			33.15- 93.15	65.58
14.819	14.819 (1.120)	111	50926			6.74- 66.74	37.75
90 1,2-Dichlorobenzene					CAS #: 95-50-1		
15.292	15.292 (1.156)	146	131084	18.0000	18.491	80.00- 120.00	100.00
15.292	15.292 (1.156)	148	83205			33.98- 93.98	63.47
15.292	15.292 (1.156)	111	52699			9.89- 69.89	40.20
95 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
17.455	17.455 (1.319)	180	101331	22.3000	21.514	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO
95 1,2,4-Trichlorobenzene (continued)							
17.455	17.455 (1.319)	182	98756			66.29- 126.29	97.46
96 Hexachlorobutadiene					CAS #: 87-68-3		
17.656	17.656 (1.335)	225	93521	32.0000	32.304	80.00- 120.00	100.00
17.656	17.656 (1.335)	223	58785			33.08- 93.08	62.86
98 Naphthalene					CAS #: 91-20-3		
17.792	17.792 (1.345)	128	226721	10.0000	9.671	80.00- 120.00	100.00
17.792	17.792 (1.345)	127	29146			0.00- 43.03	12.86
103 2-Methylnaphthalene					CAS #: 91-57-6		
19.253	19.253 (1.455)	142	145310	10.0000	10.294	80.00- 120.00	100.00
19.253	19.253 (1.455)	141	126518			56.76- 116.76	87.07
19.253	19.253 (1.455)	115	46007			1.56- 61.56	31.66
104 1-Methylnaphthalene					CAS #: 90-12-0		
19.475	19.475 (1.472)	142	134783	10.0000	10.467	80.00- 120.00	100.00
19.475	19.475 (1.472)	141	119693			59.80- 119.80	88.80
19.475	19.475 (1.472)	115	43767			3.48- 63.48	32.47
107 Acenaphthylene					CAS #: 208-96-8		
21.331	21.331 (1.612)	152	242224	10.0000	9.444	80.00- 120.00	100.00
21.331	21.331 (1.612)	151	47629			0.00- 49.75	19.66
21.331	21.331 (1.612)	153	31086			0.00- 43.01	12.83
109 Acenaphthene					CAS #: 83-32-9		
21.581	21.581 (1.631)	154	139501	10.0000	12.387	80.00- 120.00	100.00
21.581	21.581 (1.631)	152	74851			26.17- 86.17	53.66
21.581	21.581 (1.631)	153	150678			78.75- 138.75	108.01
111 Fluorene					CAS #: 86-73-7		
22.706	22.706 (1.716)	166	160093	10.0000	14.164	80.00- 120.00	100.00
22.706	22.706 (1.716)	165	149898			65.26- 125.26	93.63
112 Phenanthrene					CAS #: 85-01-8		
24.848	24.848 (1.878)	178	242000	10.0000	12.149	80.00- 120.00	100.00
24.848	24.848 (1.878)	176	46862			0.00- 49.34	19.36
24.848	24.848 (1.878)	179	38393			0.00- 45.21	15.86
113 Anthracene					CAS #: 120-12-7		
24.948	24.948 (1.886)	178	217869	10.0000	12.816	80.00- 120.00	100.00
24.948	24.948 (1.886)	176	40942			0.00- 48.82	18.79
24.948	24.948 (1.886)	179	32020			0.00- 44.74	14.70
117 Fluoranthene					CAS #: 206-44-0		
28.057	28.057 (2.121)	202	177129	10.0000	10.498	80.00- 120.00	100.00

RT	EXP RT	(REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO
117 Fluoranthene (continued)								
28.057	28.057	(2.121)	101	23917			0.00- 43.29	13.50
118 Pyrene						CAS #: 129-00-0		
28.852	28.852	(2.181)	202	178725	10.0000	10.343	80.00- 120.00	100.00
28.852	28.852	(2.181)	101	28666			0.00- 45.23	16.04
28.852	28.852	(2.181)	100	24998			0.00- 42.66	13.99

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Report Date: 18-Jan-2016 15:00

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd18.i
Lab File ID: 18011410.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: db
Method File: /chem/msd18.i/14Jan2016.b/186z0114vi.m
Misc Info: 1.0ul 2744-22-5

Calibration Date: 14-JAN-2016
Calibration Time: 16:31
Client Smp ID: Level 3
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
32 Bromochloromethan	260347	156208	364486	249484	-4.17
47 1,4-Difluorobenze	915705	549423	1281987	895474	-2.21
67 Chlorobenzene-d5	838049	502829	1173269	811214	-3.20
79 Bromofluorobenzen	602381	361429	843333	569449	-5.47

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
32 Bromochloromethan	6.05	5.72	6.38	6.05	0.00
47 1,4-Difluorobenze	7.67	7.34	8.00	7.66	-0.09
67 Chlorobenzene-d5	11.60	11.27	11.93	11.61	0.06
79 Bromofluorobenzen	13.22	12.89	13.55	13.23	0.05

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msd18.i/14Jan2016.b/18011410.d

Date : 14-JAN-2016 15:13

Client ID: Level 3

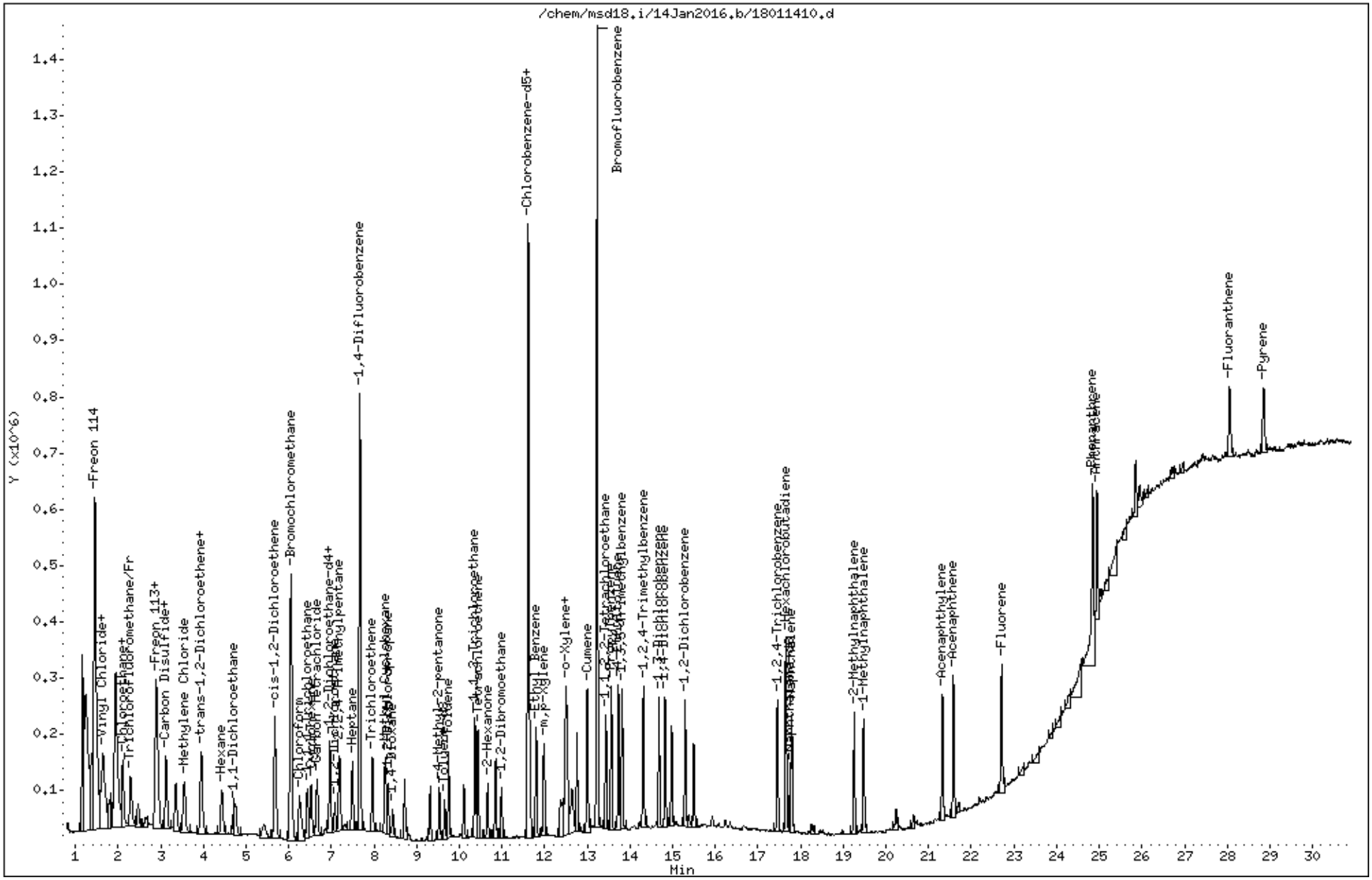
Sample Info: 3.0ml #2516-212, 1.0ul 2744-31-10

Column phase: RTx-624

Instrument: msd18.i

Operator: db

Column diameter: 0.53



Eurofins Air Toxics Inc.

EPA Method TO-17 GC/MS

Data file : /chem/msd18.i/14Jan2016.b/18011411.d
Lab Smp Id: ICAL Client Smp ID: Level 4
Inj Date : 14-JAN-2016 15:52
Operator : db Inst ID: msd18.i
Smp Info : 6.0ml #2516-212, 1.0ul 2744-31-25
Misc Info : 1.0ul 2744-22-10
Comment :
Method : /chem/msd18.i/14Jan2016.b/186z0114vi.m
Meth Date : 18-Jan-2016 15:00 lantonic Quant Type: ISTD
Cal Date : 14-JAN-2016 15:52 Cal File: 18011411.d
Als bottle: 5 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: VOC+PAH_ICAL.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO
* 32 Bromochloromethane					CAS #: 74-97-5		
6.052	6.052 (1.000)	130	256465	26.0000		80.00- 120.00	100.00
6.052	6.052 (1.000)	128	199009			47.81- 107.81	77.60
6.045	6.045 (1.000)	49	332837			99.93- 159.93	129.78
* 47 1,4-Difluorobenzene					CAS #: 540-36-3		
7.664	7.664 (1.000)	114	899311	23.0000		80.00- 120.00	100.00
7.664	7.664 (1.000)	88	139514			0.00- 45.51	15.51
* 67 Chlorobenzene-d5					CAS #: 3114-55-4		
11.603	11.603 (1.000)	117	824007	24.0000		80.00- 120.00	100.00
11.603	11.603 (1.000)	82	440935			23.87- 83.87	53.51
* 79 Bromofluorobenzene					CAS #: 460-00-4		
13.222	13.222 (1.000)	174	567394	36.0000		80.00- 120.00	100.00
13.222	13.222 (1.000)	95	619514			78.78- 138.78	109.19
13.222	13.222 (1.000)	176	550708			67.05- 127.05	97.06
$ 39 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
6.969	6.969 (0.909)	65	39824	10.0000	9.206	80.00- 120.00	100.00

RT	EXP RT	(REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO
$ 39 1,2-Dichloroethane-d4 (continued)								
6.969	6.969	(0.909)	67	22758			25.86- 85.86	57.15
$ 57 Toluene-d8						CAS #: 2037-26-5		
9.655	9.655	(0.832)	98	126661	10.0000	9.845	80.00- 120.00	100.00
9.655	9.655	(0.832)	70	13962			0.00- 40.57	11.02
9.655	9.655	(0.832)	100	81343			34.56- 94.56	64.22
$ 97 Naphthalene-d8						CAS #: 1146-65-2		
17.749	17.749	(1.342)	136	211348	10.0000	9.297	80.00- 120.00	100.00
17.749	17.749	(1.342)	108	19786			0.00- 39.05	9.36
4 Freon 114						CAS #: 76-14-2		
1.453	1.453	(0.240)	135	240706	41.9000	40.910	80.00- 120.00	100.00
1.453	1.453	(0.240)	137	78120			1.93- 61.93	32.45
6 Vinyl Chloride						CAS #: 75-01-4		
1.625	1.625	(0.268)	62	125322	15.3000	15.363	80.00- 120.00	100.00
1.625	1.625	(0.268)	64	57441			15.41- 75.41	45.83
7 1,3-Butadiene						CAS #: 106-99-0		
1.646	1.646	(0.272)	54	90045	13.3000	12.532	80.00- 120.00	100.00
1.646	1.646	(0.272)	39	144252			104.89- 164.89	160.20
9 Chloroethane						CAS #: 75-00-3		
2.040	2.040	(0.337)	64	61746	15.8000	15.450	80.00- 120.00	100.00(a)
2.033	2.033	(0.336)	66	19815			1.74- 61.74	32.09
2.040	2.040	(0.337)	49	16557			0.00- 57.57	26.81
10 Isopentane						CAS #: 78-78-4		
2.105	2.105	(0.348)	57	100783	17.7000	17.754	80.00- 120.00	100.00
2.105	2.105	(0.348)	43	142418			112.49- 172.49	141.31
11 Trichlorofluoromethane/Fr11						CAS #: 75-69-4		
2.291	2.291	(0.379)	101	281753	33.7000	33.401	80.00- 120.00	100.00
2.291	2.291	(0.379)	103	185079			34.96- 94.96	65.69
15 Freon 113						CAS #: 76-13-1		
2.893	2.893	(0.478)	151	186132	46.0000	45.725	80.00- 120.00	100.00
2.893	2.893	(0.478)	153	119527			34.01- 94.01	64.22
2.893	2.893	(0.478)	101	240054			98.52- 158.52	128.97
14 1,1-Dichloroethene						CAS #: 75-35-4		
2.871	2.871	(0.474)	98	71123	23.8000	23.293	80.00- 120.00	100.00
2.871	2.871	(0.474)	96	116521			130.53- 190.53	163.83
2.871	2.871	(0.474)	61	197246			241.31- 301.31	277.33

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO
18 Carbon Disulfide					CAS #: 75-15-0		
3.122	3.122 (0.516)	76	383115	18.7000	17.542	80.00- 120.00	100.00
17 2-Propanol					CAS #: 67-63-0		
3.122	3.122 (0.516)	45	282383	14.7000	15.397	80.00- 120.00	100.00(a)
3.122	3.122 (0.516)	43	51391			0.00- 48.48	18.20
3.122	3.122 (0.516)	59	11580			0.00- 34.02	4.10
21 Methylene Chloride					CAS #: 75-09-2		
3.545	3.545 (0.586)	49	170477	20.8000	20.522	80.00- 120.00	100.00(a)
3.545	3.545 (0.586)	84	132265			46.74- 106.74	77.59
3.545	3.545 (0.586)	51	53841			1.74- 61.74	31.58
24 trans-1,2-Dichloroethene					CAS #: 156-60-5		
3.953	3.953 (0.653)	98	70095	23.8000	23.698	80.00- 120.00	100.00
3.953	3.953 (0.653)	61	164720			203.10- 263.10	235.00
3.953	3.953 (0.653)	96	111004			127.09- 187.09	158.36
23 MTBE					CAS #: 1634-04-4		
3.946	3.946 (0.652)	73	306084	21.6000	21.013	80.00- 120.00	100.00(a)
3.946	3.946 (0.652)	57	70198			0.00- 53.10	22.93
3.946	3.946 (0.652)	41	62266			0.00- 50.25	20.34
25 Hexane					CAS #: 110-54-3		
4.433	4.433 (0.732)	57	175158	21.1000	21.109	80.00- 120.00	100.00(a)
4.433	4.433 (0.732)	43	106383			31.56- 91.56	60.74
4.433	4.433 (0.732)	86	26197			0.00- 44.94	14.96
26 1,1-Dichloroethane					CAS #: 75-34-3		
4.712	4.712 (0.779)	63	200818	24.3000	24.486	80.00- 120.00	100.00
4.712	4.712 (0.779)	65	63888			1.52- 61.52	31.81
29 cis-1,2-Dichloroethene					CAS #: 156-59-2		
5.672	5.672 (0.937)	98	67620	23.8000	24.042	80.00- 120.00	100.00
5.672	5.672 (0.937)	96	106992			127.88- 187.88	158.23
5.672	5.672 (0.937)	61	142934			179.74- 239.74	211.38
28 2-Butanone					CAS #: 78-93-3		
5.672	5.672 (0.937)	72	88646	17.7000	20.921	80.00- 120.00	100.00(a)
5.672	5.672 (0.937)	43	337787			351.97- 411.97	381.05
5.672	5.672 (0.937)	57	29893			2.17- 62.17	33.72
35 Chloroform					CAS #: 67-66-3		
6.252	6.252 (1.033)	83	199974	29.3000	29.467	80.00- 120.00	100.00
6.252	6.252 (1.033)	85	130998			34.57- 94.57	65.51

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO
37 Cyclohexane					CAS #: 110-82-7		
6.525	6.525 (0.851)	84	123257	20.7000	19.547	80.00- 120.00	100.00
6.525	6.525 (0.851)	56	149264			92.60- 152.60	121.10
6.525	6.525 (0.851)	41	99016			35.57- 95.57	80.33
36 1,1,1-Trichloroethane					CAS #: 71-55-6		
6.439	6.439 (0.840)	97	192997	32.7000	32.920	80.00- 120.00	100.00
6.439	6.439 (0.840)	99	124567			34.22- 94.22	64.54
38 Carbon Tetrachloride					CAS #: 56-23-5		
6.661	6.661 (0.869)	119	184890	37.8000	37.832	80.00- 120.00	100.00
6.661	6.661 (0.869)	117	193479			74.59- 134.59	104.65
45 2,2,4-Trimethylpentane					CAS #: 540-84-1		
7.191	7.191 (0.938)	57	816427	28.0000	43.869	80.00- 120.00	100.00
7.191	7.191 (0.938)	56	261930			2.36- 62.36	32.08
7.191	7.191 (0.938)	41	213297			0.00- 55.73	26.13
41 Benzene					CAS #: 71-43-2		
6.962	6.962 (0.908)	78	319396	19.2000	15.635	80.00- 120.00	100.00
6.962	6.962 (0.908)	77	76478			0.00- 53.82	23.94
43 1,2-Dichloroethane					CAS #: 107-06-2		
7.083	7.083 (0.924)	62	117670	24.3000	24.759	80.00- 120.00	100.00
7.083	7.083 (0.924)	64	38947			2.51- 62.51	33.10
46 Heptane					CAS #: 142-82-5		
7.492	7.492 (0.978)	71	98951	24.6000	24.588	80.00- 120.00	100.00
7.492	7.492 (0.978)	43	170187			132.26- 192.26	171.99
7.492	7.492 (0.978)	57	86916			60.63- 120.63	87.84
48 Trichloroethene					CAS #: 79-01-6		
7.957	7.957 (1.038)	95	129993	32.2000	33.568	80.00- 120.00	100.00
7.957	7.957 (1.038)	130	133790			73.40- 133.40	102.92
7.957	7.957 (1.038)	97	84471			35.04- 95.04	64.98
51 Methyl Cyclohexane					CAS #: 108-87-2		
8.265	8.265 (1.079)	83	161094	24.1000	24.294	80.00- 120.00	100.00
8.265	8.265 (1.079)	98	72650			15.23- 75.23	45.10
8.265	8.265 (1.079)	55	124525			45.63- 105.63	77.30
52 1,2-Dichloropropane					CAS #: 78-87-5		
8.322	8.322 (1.086)	63	101070	27.7000	28.141	80.00- 120.00	100.00
8.322	8.322 (1.086)	62	69165			38.55- 98.55	68.43
8.322	8.322 (1.086)	41	40884			21.51- 81.51	40.45

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO
53 1,4-Dioxane					CAS #: 123-91-1		
8.437	8.437 (1.101)	88	63303	21.6000	21.610	80.00- 120.00	100.00
8.437	8.437 (1.101)	58	47156			36.73- 96.73	74.49
8.444	8.444 (1.102)	57	59044			2.93- 62.93	93.27
56 4-Methyl-2-pentanone					CAS #: 108-10-1		
9.533	9.533 (1.244)	58	76232	24.6000	25.571	80.00- 120.00	100.00
9.533	9.533 (1.244)	43	180701			210.10- 270.10	237.04
9.533	9.533 (1.244)	85	32988			14.24- 74.24	43.27
58 Toluene					CAS #: 108-88-3		
9.748	9.748 (0.840)	91	352174	22.6000	23.408	80.00- 120.00	100.00
9.748	9.748 (0.840)	92	197284			27.36- 87.36	56.02
61 1,1,2-Trichloroethane					CAS #: 79-00-5		
10.364	10.364 (1.352)	97	113372	32.7000	30.540	80.00- 120.00	100.00
10.364	10.364 (1.352)	99	69571			31.64- 91.64	61.37
10.364	10.364 (1.352)	83	99626			56.72- 116.72	87.88
62 Tetrachloroethene					CAS #: 127-18-4		
10.436	10.436 (0.899)	166	167866	40.7000	41.452	80.00- 120.00	100.00
10.436	10.436 (0.899)	129	118033			40.21- 100.21	70.31
10.436	10.436 (0.899)	131	114195			37.97- 97.97	68.03
63 2-Hexanone					CAS #: 591-78-6		
10.665	10.665 (0.919)	58	98676	24.6000	24.692	80.00- 120.00	100.00
10.665	10.665 (0.919)	43	168296			138.90- 198.90	170.55
10.665	10.665 (0.919)	100	20660			0.00- 50.74	20.94
66 1,2-Dibromoethane					CAS #: 106-93-4		
10.987	10.987 (0.947)	107	154190	46.1000	45.169	80.00- 120.00	100.00
10.987	10.987 (0.947)	109	146718			63.94- 123.94	95.15
68 Chlorobenzene					CAS #: 108-90-7		
11.646	11.646 (1.004)	112	258761	27.6000	27.839	80.00- 120.00	100.00
11.646	11.646 (1.004)	114	83198			2.24- 62.24	32.15
11.646	11.646 (1.004)	77	150353			25.99- 85.99	58.10
69 Ethyl Benzene					CAS #: 100-41-4		
11.797	11.797 (1.017)	106	134020	26.1000	26.471	80.00- 120.00	100.00
11.797	11.797 (1.017)	91	414020			279.23- 339.23	308.92
71 m,p-Xylene					CAS #: 108-38-3		
11.976	11.976 (1.032)	106	166185	26.1000	26.534	80.00- 120.00	100.00
11.976	11.976 (1.032)	91	328919			163.71- 223.71	197.92

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO
74 o-Xylene					CAS #: 95-47-6		
12.484	12.484 (0.944)	106	278878	26.1000	40.940	80.00- 120.00	100.00
12.484	12.484 (0.944)	91	595641			176.46- 236.46	213.58
75 Styrene					CAS #: 100-42-5		
12.520	12.520 (0.947)	104	449951	25.6000	37.400	80.00- 120.00	100.00
12.520	12.520 (0.947)	78	231476			17.37- 77.37	51.44
77 Cumene					CAS #: 98-82-8		
12.993	12.993 (0.983)	105	506608	29.5000	31.728	80.00- 120.00	100.00
12.993	12.993 (0.983)	120	136800			0.00- 57.05	27.00
12.993	12.993 (0.983)	51	46908			0.00- 38.51	9.26
80 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
13.430	13.430 (1.016)	83	235831	41.2000	42.711	80.00- 120.00	100.00
13.430	13.430 (1.016)	85	149934			33.93- 93.93	63.58
81 Propylbenzene					CAS #: 103-65-1		
13.559	13.559 (1.025)	91	585134	29.5000	30.986	80.00- 120.00	100.00
13.559	13.559 (1.025)	120	139240			0.00- 53.66	23.80
13.559	13.559 (1.025)	105	22053			0.00- 33.72	3.77
82 4-Ethyltoluene					CAS #: 622-96-8		
13.723	13.723 (1.038)	120	146365	29.5000	34.889	80.00- 120.00	100.00
13.723	13.723 (1.038)	105	480854			299.89- 359.89	328.53
83 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
13.809	13.809 (1.044)	120	201716	29.5000	33.876	80.00- 120.00	100.00
13.809	13.809 (1.044)	105	399977			166.45- 226.45	198.29
84 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
14.311	14.311 (1.082)	120	183384	29.5000	30.752	80.00- 120.00	100.00
14.311	14.311 (1.082)	105	406879			185.90- 245.90	221.87
86 1,3-Dichlorobenzene					CAS #: 541-73-1		
14.676	14.676 (1.110)	146	285753	36.1000	38.404	80.00- 120.00	100.00
14.676	14.676 (1.110)	148	185298			33.73- 93.73	64.85
14.676	14.676 (1.110)	111	109809			8.03- 68.03	38.43
87 1,4-Dichlorobenzene					CAS #: 106-46-7		
14.819	14.819 (1.121)	146	287419	36.1000	38.347	80.00- 120.00	100.00
14.819	14.819 (1.121)	148	182836			33.15- 93.15	63.61
14.819	14.819 (1.121)	111	106691			6.74- 66.74	37.12
90 1,2-Dichlorobenzene					CAS #: 95-50-1		
15.292	15.292 (1.157)	146	277866	36.1000	38.644	80.00- 120.00	100.00

RT	EXP RT	(REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO
90 1,2-Dichlorobenzene (continued)								
15.292	15.292	(1.157)	148	178619			33.98- 93.98	64.28
15.292	15.292	(1.157)	111	110903			9.89- 69.89	39.91
95 1,2,4-Trichlorobenzene						CAS #: 120-82-1		
17.455	17.455	(1.320)	180	256923	44.5000	51.765	80.00- 120.00	100.00
17.455	17.455	(1.320)	182	247203			66.29- 126.29	96.22
96 Hexachlorobutadiene						CAS #: 87-68-3		
17.656	17.656	(1.335)	225	228839	64.0000	74.849	80.00- 120.00	100.00
17.656	17.656	(1.335)	223	143991			33.08- 93.08	62.92
98 Naphthalene						CAS #: 91-20-3		
17.792	17.792	(1.346)	128	548124	25.0000	23.757	80.00- 120.00	100.00
17.792	17.792	(1.346)	127	72377			0.00- 43.03	13.20
103 2-Methylnaphthalene						CAS #: 91-57-6		
19.253	19.253	(1.456)	142	353986	25.0000	25.133	80.00- 120.00	100.00
19.253	19.253	(1.456)	141	310570			56.76- 116.76	87.74
19.253	19.253	(1.456)	115	111098			1.56- 61.56	31.38
104 1-Methylnaphthalene						CAS #: 90-12-0		
19.475	19.475	(1.473)	142	325039	25.0000	25.266	80.00- 120.00	100.00
19.475	19.475	(1.473)	141	294019			59.80- 119.80	90.46
19.475	19.475	(1.473)	115	108855			3.48- 63.48	33.49
107 Acenaphthylene						CAS #: 208-96-8		
21.324	21.324	(1.613)	152	614023	25.0000	24.264	80.00- 120.00	100.00
21.324	21.324	(1.613)	151	123148			0.00- 49.75	20.06
21.324	21.324	(1.613)	153	80007			0.00- 43.01	13.03
109 Acenaphthene						CAS #: 83-32-9		
21.581	21.581	(1.632)	154	311034	25.0000	26.984	80.00- 120.00	100.00
21.581	21.581	(1.632)	152	161828			26.17- 86.17	52.03
21.581	21.581	(1.632)	153	333670			78.75- 138.75	107.28
111 Fluorene						CAS #: 86-73-7		
22.706	22.706	(1.717)	166	317527	25.0000	27.322	80.00- 120.00	100.00
22.706	22.706	(1.717)	165	292366			65.26- 125.26	92.08
112 Phenanthrene						CAS #: 85-01-8		
24.848	24.848	(1.879)	178	540630	25.0000	26.643	80.00- 120.00	100.00
24.848	24.848	(1.879)	176	104441			0.00- 49.34	19.32
24.848	24.848	(1.879)	179	82504			0.00- 45.21	15.26
113 Anthracene						CAS #: 120-12-7		
24.948	24.948	(1.887)	178	492995	25.0000	27.957	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO
113 Anthracene (continued)							
24.948	24.948 (1.887)	176	92541			0.00- 48.82	18.77
24.948	24.948 (1.887)	179	75637			0.00- 44.74	15.34
117 Fluoranthene					CAS #: 206-44-0		
28.057	28.057 (2.122)	202	461886	25.0000	26.596	80.00- 120.00	100.00
28.057	28.057 (2.122)	101	63541			0.00- 43.29	13.76
118 Pyrene					CAS #: 129-00-0		
28.852	28.852 (2.182)	202	476338	25.0000	26.716	80.00- 120.00	100.00
28.845	28.845 (2.182)	101	72801			0.00- 45.23	15.28
28.845	28.845 (2.182)	100	60248			0.00- 42.66	12.65

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Report Date: 18-Jan-2016 15:00

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd18.i
Lab File ID: 18011411.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: db
Method File: /chem/msd18.i/14Jan2016.b/186z0114vi.m
Misc Info: 1.0ul 2744-22-10

Calibration Date: 14-JAN-2016
Calibration Time: 16:31
Client Smp ID: Level 4
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
32 Bromochloromethan	260347	156208	364486	256465	-1.49
47 1,4-Difluorobenze	915705	549423	1281987	899311	-1.79
67 Chlorobenzene-d5	838049	502829	1173269	824007	-1.68
79 Bromofluorobenzen	602381	361429	843333	567394	-5.81

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
32 Bromochloromethan	6.05	5.72	6.38	6.05	0.00
47 1,4-Difluorobenze	7.67	7.34	8.00	7.66	-0.09
67 Chlorobenzene-d5	11.60	11.27	11.93	11.60	0.00
79 Bromofluorobenzen	13.22	12.89	13.55	13.22	0.00

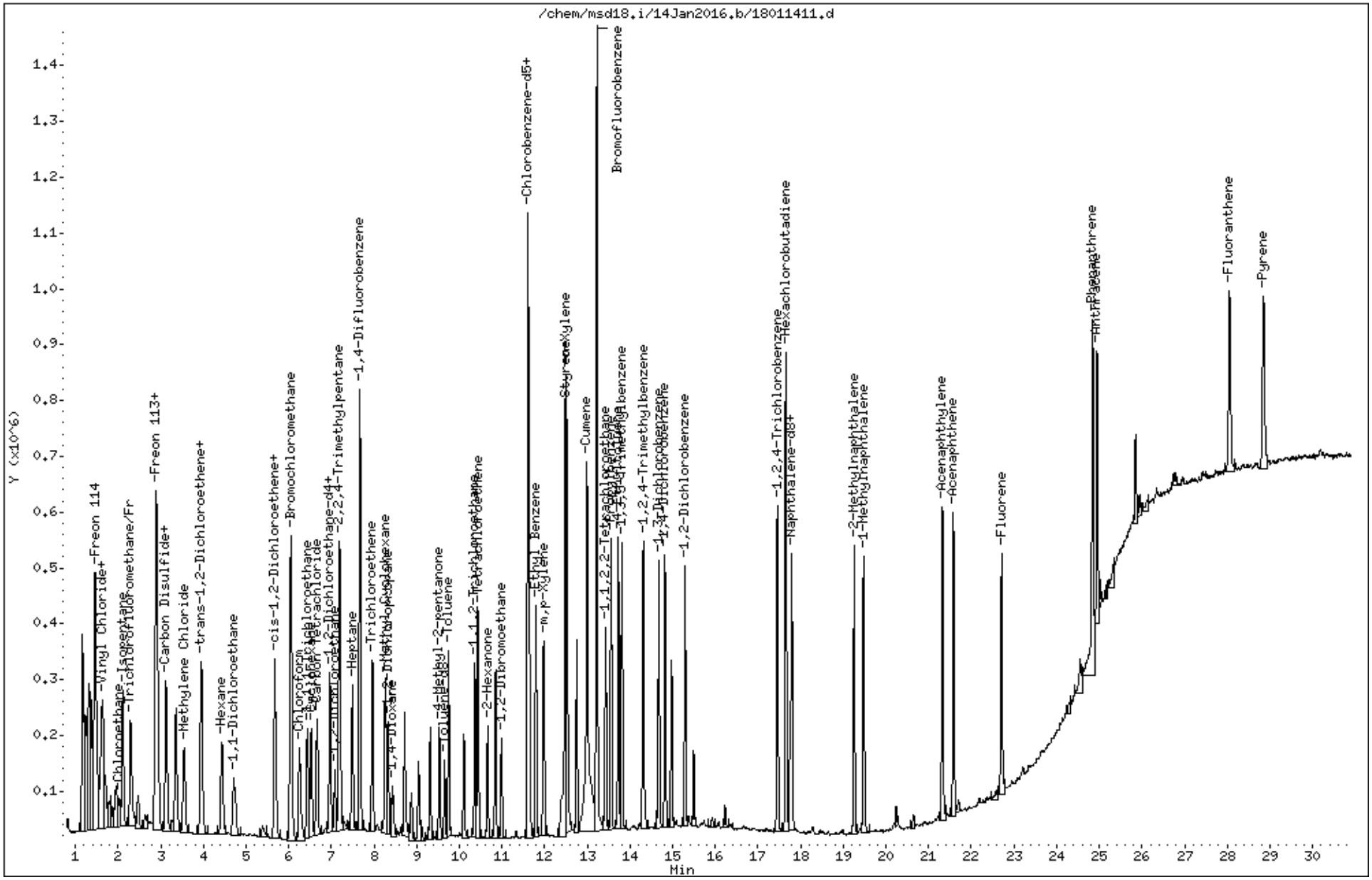
AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msd18.i/14Jan2016.b/18011411.d
Date : 14-JAN-2016 15:52
Client ID: Level 4
Sample Info: 6.0ml #2516-212, 1.0ul 2744-31-25

Column phase: RTx-624

Instrument: msd18.i

Operator: db
Column diameter: 0.53



Eurofins Air Toxics Inc.

EPA Method TO-17 GC/MS

Data file : /chem/msd18.i/14Jan2016.b/18011412.d
Lab Smp Id: ICAL Client Smp ID: Level 5
Inj Date : 14-JAN-2016 16:31
Operator : db Inst ID: msd18.i
Smp Info : 20ml #2516-212, 1.0ul 2744-31-50
Misc Info : 1.0ul 2744-22-25
Comment :
Method : /chem/msd18.i/14Jan2016.b/186z0114vi.m
Meth Date : 18-Jan-2016 15:00 lantonic Quant Type: ISTD
Cal Date : 14-JAN-2016 16:31 Cal File: 18011412.d
Als bottle: 6 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: VOC+PAH_ICAL.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO
* 32 Bromochloromethane					CAS #: 74-97-5		
6.052	6.052 (1.000)	130	260347	26.0000		80.00- 120.00	100.00
6.052	6.052 (1.000)	128	202575			47.81- 107.81	77.81
6.045	6.045 (1.000)	49	338262			99.93- 159.93	129.93
* 47 1,4-Difluorobenzene					CAS #: 540-36-3		
7.671	7.671 (1.000)	114	915705	23.0000		80.00- 120.00	100.00
7.663	7.663 (1.000)	88	142060			0.00- 45.51	15.51
* 67 Chlorobenzene-d5					CAS #: 3114-55-4		
11.603	11.603 (1.000)	117	838049	24.0000		80.00- 120.00	100.00
11.603	11.603 (1.000)	82	451432			23.87- 83.87	53.87
* 79 Bromofluorobenzene					CAS #: 460-00-4		
13.222	13.222 (1.000)	174	602381	36.0000		80.00- 120.00	100.00
13.222	13.222 (1.000)	95	655252			78.78- 138.78	108.78
13.222	13.222 (1.000)	176	584589			67.05- 127.05	97.05
$ 39 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
6.969	6.969 (0.908)	65	118500	25.0000	25.000	80.00- 120.00	100.00

RT	EXP RT	(REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO
$ 39 1,2-Dichloroethane-d4 (continued)								
6.969	6.969	(0.908)	67	66197			25.86- 85.86	55.86
$ 57 Toluene-d8						CAS #: 2037-26-5		
9.655	9.655	(0.832)	98	366085	25.0000	25.000	80.00- 120.00	100.00
9.655	9.655	(0.832)	70	38704			0.00- 40.57	10.57
9.655	9.655	(0.832)	100	236334			34.56- 94.56	64.56
$ 97 Naphthalene-d8						CAS #: 1146-65-2		
17.749	17.749	(1.342)	136	643055	25.0000	25.000	80.00- 120.00	100.00
17.749	17.749	(1.342)	108	58182			0.00- 39.05	9.05
4 Freon 114						CAS #: 76-14-2		
1.460	1.460	(0.241)	135	815441	140.000	140.00	80.00- 120.00	100.00
1.460	1.460	(0.241)	137	260397			1.93- 61.93	31.93
6 Vinyl Chloride						CAS #: 75-01-4		
1.625	1.625	(0.268)	62	403172	51.1000	51.100	80.00- 120.00	100.00
1.625	1.625	(0.268)	64	183097			15.41- 75.41	45.41
7 1,3-Butadiene						CAS #: 106-99-0		
1.646	1.646	(0.272)	54	303355	44.2000	44.200	80.00- 120.00	100.00
1.646	1.646	(0.272)	39	409199			104.89- 164.89	134.89
9 Chloroethane						CAS #: 75-00-3		
2.040	2.040	(0.337)	64	201018	52.8000	52.800	80.00- 120.00	100.00
2.040	2.040	(0.337)	66	63801			1.74- 61.74	31.74
2.040	2.040	(0.337)	49	55412			0.00- 57.57	27.57
10 Isopentane						CAS #: 78-78-4		
2.112	2.112	(0.349)	57	346638	59.0000	59.000	80.00- 120.00	100.00
2.105	2.105	(0.348)	43	493922			112.49- 172.49	142.49
11 Trichlorofluoromethane/Fr11						CAS #: 75-69-4		
2.291	2.291	(0.379)	101	967918	112.000	112.00	80.00- 120.00	100.00
2.291	2.291	(0.379)	103	628760			34.96- 94.96	64.96
15 Freon 113						CAS #: 76-13-1		
2.893	2.893	(0.478)	151	631027	153.000	153.00	80.00- 120.00	100.00
2.893	2.893	(0.478)	153	403934			34.01- 94.01	64.01
2.893	2.893	(0.478)	101	810973			98.52- 158.52	128.52
14 1,1-Dichloroethene						CAS #: 75-35-4		
2.871	2.871	(0.474)	98	244353	79.3000	79.300	80.00- 120.00	100.00
2.871	2.871	(0.474)	96	392249			130.53- 190.53	160.53
2.871	2.871	(0.474)	61	662953			241.31- 301.31	271.31

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO
18 Carbon Disulfide					CAS #: 75-15-0		
3.122	3.122 (0.516)	76	1250253	62.3000	62.300	80.00- 120.00	100.00
17 2-Propanol					CAS #: 67-63-0		
3.122	3.122 (0.516)	45	722305	49.2000	49.200	80.00- 120.00	100.00
3.122	3.122 (0.516)	43	133493			0.00- 48.48	18.48
3.122	3.122 (0.516)	59	29058			0.00- 34.02	4.02
21 Methylene Chloride					CAS #: 75-09-2		
3.545	3.545 (0.586)	49	485287	69.5000	69.500	80.00- 120.00	100.00
3.545	3.545 (0.586)	84	372400			46.74- 106.74	76.74
3.545	3.545 (0.586)	51	154040			1.74- 61.74	31.74
24 trans-1,2-Dichloroethene					CAS #: 156-60-5		
3.960	3.960 (0.654)	98	237029	79.3000	79.300	80.00- 120.00	100.00
3.960	3.960 (0.654)	61	552523			203.10- 263.10	233.10
3.960	3.960 (0.654)	96	372345			127.09- 187.09	157.09
23 MTBE					CAS #: 1634-04-4		
3.946	3.946 (0.652)	73	1054831	72.1000	72.100	80.00- 120.00	100.00
3.946	3.946 (0.652)	57	243691			0.00- 53.10	23.10
3.946	3.946 (0.652)	41	213572			0.00- 50.25	20.25
25 Hexane					CAS #: 110-54-3		
4.433	4.433 (0.732)	57	578979	70.5000	70.500	80.00- 120.00	100.00
4.433	4.433 (0.732)	43	356404			31.56- 91.56	61.56
4.433	4.433 (0.732)	86	86480			0.00- 44.94	14.94
26 1,1-Dichloroethane					CAS #: 75-34-3		
4.712	4.712 (0.779)	63	673882	81.0000	81.000	80.00- 120.00	100.00
4.712	4.712 (0.779)	65	212422			1.52- 61.52	31.52
29 cis-1,2-Dichloroethene					CAS #: 156-59-2		
5.672	5.672 (0.937)	98	228248	79.3000	79.300	80.00- 120.00	100.00
5.672	5.672 (0.937)	96	360351			127.88- 187.88	157.88
5.672	5.672 (0.937)	61	478720			179.74- 239.74	209.74
28 2-Butanone					CAS #: 78-93-3		
5.672	5.672 (0.937)	72	207597	59.0000	59.000	80.00- 120.00	100.00
5.672	5.672 (0.937)	43	792956			351.97- 411.97	381.97
5.672	5.672 (0.937)	57	66789			2.17- 62.17	32.17
35 Chloroform					CAS #: 67-66-3		
6.252	6.252 (1.033)	83	675047	97.7000	97.700	80.00- 120.00	100.00
6.252	6.252 (1.033)	85	435905			34.57- 94.57	64.57

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO
37 Cyclohexane					CAS #: 110-82-7		
6.525	6.525 (0.851)	84	423424	68.8000	68.800	80.00- 120.00	100.00
6.525	6.525 (0.851)	56	519097			92.60- 152.60	122.60
6.525	6.525 (0.851)	41	277650			35.57- 95.57	65.57
36 1,1,1-Trichloroethane					CAS #: 71-55-6		
6.439	6.439 (0.839)	97	670532	109.000	109.00	80.00- 120.00	100.00
6.439	6.439 (0.839)	99	430602			34.22- 94.22	64.22
38 Carbon Tetrachloride					CAS #: 56-23-5		
6.661	6.661 (0.868)	119	649149	126.000	126.00	80.00- 120.00	100.00
6.661	6.661 (0.868)	117	678927			74.59- 134.59	104.59
45 2,2,4-Trimethylpentane					CAS #: 540-84-1		
7.191	7.191 (0.937)	57	1538570	93.4000	93.400	80.00- 120.00	100.00
7.191	7.191 (0.937)	56	497926			2.36- 62.36	32.36
7.191	7.191 (0.937)	41	395916			0.00- 55.73	25.73
41 Benzene					CAS #: 71-43-2		
6.969	6.969 (0.908)	78	1014550	63.9000	63.900	80.00- 120.00	100.00
6.969	6.969 (0.908)	77	241686			0.00- 53.82	23.82
43 1,2-Dichloroethane					CAS #: 107-06-2		
7.083	7.083 (0.923)	62	401403	80.9000	80.900	80.00- 120.00	100.00
7.083	7.083 (0.923)	64	130483			2.51- 62.51	32.51
46 Heptane					CAS #: 142-82-5		
7.492	7.492 (0.977)	71	336026	82.0000	82.000	80.00- 120.00	100.00
7.492	7.492 (0.977)	43	545221			132.26- 192.26	162.26
7.492	7.492 (0.977)	57	304542			60.63- 120.63	90.63
48 Trichloroethene					CAS #: 79-01-6		
7.957	7.957 (1.037)	95	455039	108.000	108.00	80.00- 120.00	100.00
7.957	7.957 (1.037)	130	470511			73.40- 133.40	103.40
7.957	7.957 (1.037)	97	295961			35.04- 95.04	65.04
51 Methyl Cyclohexane					CAS #: 108-87-2		
8.265	8.265 (1.077)	83	548303	80.3000	80.300	80.00- 120.00	100.00
8.265	8.265 (1.077)	98	248018			15.23- 75.23	45.23
8.265	8.265 (1.077)	55	414697			45.63- 105.63	75.63
52 1,2-Dichloropropane					CAS #: 78-87-5		
8.322	8.322 (1.085)	63	344015	92.4000	92.400	80.00- 120.00	100.00
8.322	8.322 (1.085)	62	235812			38.55- 98.55	68.55
8.322	8.322 (1.085)	41	177205			21.51- 81.51	51.51

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO
53 1,4-Dioxane					CAS #: 123-91-1		
8.437	8.437 (1.100)	88	212231	72.1000	72.100	80.00- 120.00	100.00
8.437	8.437 (1.100)	58	141627			36.73- 96.73	66.73
8.437	8.437 (1.100)	57	69898			2.93- 62.93	32.93
56 4-Methyl-2-pentanone					CAS #: 108-10-1		
9.533	9.533 (1.243)	58	259064	81.9000	81.900	80.00- 120.00	100.00
9.533	9.533 (1.243)	43	622014			210.10- 270.10	240.10
9.533	9.533 (1.243)	85	114599			14.24- 74.24	44.24
58 Toluene					CAS #: 108-88-3		
9.748	9.748 (0.840)	91	1125600	75.4000	75.400	80.00- 120.00	100.00
9.748	9.748 (0.840)	92	645607			27.36- 87.36	57.36
61 1,1,2-Trichloroethane					CAS #: 79-00-5		
10.364	10.364 (1.351)	97	377781	109.000	109.00	80.00- 120.00	100.00
10.364	10.364 (1.351)	99	232850			31.64- 91.64	61.64
10.364	10.364 (1.351)	83	327604			56.72- 116.72	86.72
62 Tetrachloroethene					CAS #: 127-18-4		
10.436	10.436 (0.899)	166	567288	136.000	136.00	80.00- 120.00	100.00
10.436	10.436 (0.899)	129	398265			40.21- 100.21	70.21
10.436	10.436 (0.899)	131	385586			37.97- 97.97	67.97
63 2-Hexanone					CAS #: 591-78-6		
10.665	10.665 (0.919)	58	345095	81.9000	81.900	80.00- 120.00	100.00
10.665	10.665 (0.919)	43	582853			138.90- 198.90	168.90
10.665	10.665 (0.919)	100	71559			0.00- 50.74	20.74
66 1,2-Dibromoethane					CAS #: 106-93-4		
10.987	10.987 (0.947)	107	547428	154.000	154.00	80.00- 120.00	100.00
10.987	10.987 (0.947)	109	514280			63.94- 123.94	93.94
68 Chlorobenzene					CAS #: 108-90-7		
11.646	11.646 (1.004)	112	888416	92.1000	92.100	80.00- 120.00	100.00
11.646	11.646 (1.004)	114	286417			2.24- 62.24	32.24
11.646	11.646 (1.004)	77	497436			25.99- 85.99	55.99
69 Ethyl Benzene					CAS #: 100-41-4		
11.797	11.797 (1.017)	106	460471	86.8000	86.800	80.00- 120.00	100.00
11.797	11.797 (1.017)	91	1423932			279.23- 339.23	309.23
71 m,p-Xylene					CAS #: 108-38-3		
11.976	11.976 (1.032)	106	568098	86.8000	86.800	80.00- 120.00	100.00
11.976	11.976 (1.032)	91	1100466			163.71- 223.71	193.71

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO
74 o-Xylene					CAS #: 95-47-6		
12.484	12.484 (0.944)	106	556264	86.8000	86.800	80.00- 120.00	100.00
12.484	12.484 (0.944)	91	1148454			176.46- 236.46	206.46
75 Styrene					CAS #: 100-42-5		
12.520	12.520 (0.947)	104	1283175	85.2000	85.200	80.00- 120.00	100.00
12.520	12.520 (0.947)	78	607874			17.37- 77.37	47.37
77 Cumene					CAS #: 98-82-8		
12.993	12.993 (0.983)	105	1634061	98.3000	98.300	80.00- 120.00	100.00
12.993	12.993 (0.983)	120	441938			0.00- 57.05	27.05
12.993	12.993 (0.983)	51	139110			0.00- 38.51	8.51
80 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
13.430	13.430 (1.016)	83	749970	137.000	137.00	80.00- 120.00	100.00
13.430	13.430 (1.016)	85	479425			33.93- 93.93	63.93
81 Propylbenzene					CAS #: 103-65-1		
13.559	13.559 (1.025)	91	1967648	98.3000	98.300	80.00- 120.00	100.00
13.559	13.559 (1.025)	120	465570			0.00- 53.66	23.66
13.559	13.559 (1.025)	105	73100			0.00- 33.72	3.72
82 4-Ethyltoluene					CAS #: 622-96-8		
13.731	13.731 (1.038)	120	502305	98.3000	98.300	80.00- 120.00	100.00
13.723	13.723 (1.038)	105	1657037			299.89- 359.89	329.89
83 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
13.817	13.817 (1.045)	120	694628	98.3000	98.300	80.00- 120.00	100.00
13.809	13.809 (1.044)	105	1364609			166.45- 226.45	196.45
84 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
14.311	14.311 (1.082)	120	641445	98.3000	98.300	80.00- 120.00	100.00
14.311	14.311 (1.082)	105	1384883			185.90- 245.90	215.90
86 1,3-Dichlorobenzene					CAS #: 541-73-1		
14.676	14.676 (1.110)	146	966681	120.000	120.00	80.00- 120.00	100.00
14.676	14.676 (1.110)	148	616022			33.73- 93.73	63.73
14.676	14.676 (1.110)	111	367618			8.03- 68.03	38.03
87 1,4-Dichlorobenzene					CAS #: 106-46-7		
14.819	14.819 (1.121)	146	978004	120.000	120.00	80.00- 120.00	100.00
14.819	14.819 (1.121)	148	617615			33.15- 93.15	63.15
14.819	14.819 (1.121)	111	359320			6.74- 66.74	36.74
90 1,2-Dichlorobenzene					CAS #: 95-50-1		
15.292	15.292 (1.157)	146	924589	120.000	120.00	80.00- 120.00	100.00

RT	EXP RT	(REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO
90 1,2-Dichlorobenzene (continued)								
15.292	15.292	(1.157)	148	591595			33.98- 93.98	63.98
15.292	15.292	(1.157)	111	368836			9.89- 69.89	39.89
95 1,2,4-Trichlorobenzene						CAS #: 120-82-1		
17.455	17.455	(1.320)	180	838151	148.000	148.00	80.00- 120.00	100.00
17.455	17.455	(1.320)	182	807042			66.29- 126.29	96.29
96 Hexachlorobutadiene						CAS #: 87-68-3		
17.656	17.656	(1.335)	225	696304	213.000	213.00	80.00- 120.00	100.00
17.656	17.656	(1.335)	223	439195			33.08- 93.08	63.08
98 Naphthalene						CAS #: 91-20-3		
17.792	17.792	(1.346)	128	1156238	50.0000	50.000	80.00- 120.00	100.00
17.792	17.792	(1.346)	127	150611			0.00- 43.03	13.03
103 2-Methylnaphthalene						CAS #: 91-57-6		
19.253	19.253	(1.456)	142	751387	50.0000	50.000	80.00- 120.00	100.00
19.253	19.253	(1.456)	141	651895			56.76- 116.76	86.76
19.253	19.253	(1.456)	115	237125			1.56- 61.56	31.56
104 1-Methylnaphthalene						CAS #: 90-12-0		
19.475	19.475	(1.473)	142	687746	50.0000	50.000	80.00- 120.00	100.00
19.475	19.475	(1.473)	141	617588			59.80- 119.80	89.80
19.475	19.475	(1.473)	115	230226			3.48- 63.48	33.48
107 Acenaphthylene						CAS #: 208-96-8		
21.324	21.324	(1.613)	152	1310152	50.0000	50.000	80.00- 120.00	100.00
21.324	21.324	(1.613)	151	258736			0.00- 49.75	19.75
21.324	21.324	(1.613)	153	170414			0.00- 43.01	13.01
109 Acenaphthene						CAS #: 83-32-9		
21.581	21.581	(1.632)	154	614107	50.0000	50.000	80.00- 120.00	100.00
21.581	21.581	(1.632)	152	344922			26.17- 86.17	56.17
21.581	21.581	(1.632)	153	667843			78.75- 138.75	108.75
111 Fluorene						CAS #: 86-73-7		
22.713	22.713	(1.718)	166	632371	50.0000	50.000	80.00- 120.00	100.00
22.713	22.713	(1.718)	165	602408			65.26- 125.26	95.26
112 Phenanthrene						CAS #: 85-01-8		
24.848	24.848	(1.879)	178	1155345	50.0000	50.000	80.00- 120.00	100.00
24.848	24.848	(1.879)	176	223487			0.00- 49.34	19.34
24.848	24.848	(1.879)	179	175732			0.00- 45.21	15.21
113 Anthracene						CAS #: 120-12-7		
24.948	24.948	(1.887)	178	1038741	50.0000	50.000	80.00- 120.00	100.00

RT	EXP RT	(REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO
113 Anthracene (continued)								
24.948	24.948	(1.887)	176	195527			0.00- 48.82	18.82
24.948	24.948	(1.887)	179	153060			0.00- 44.74	14.74
117 Fluoranthene						CAS #: 206-44-0		
28.057	28.057	(2.122)	202	847994	50.0000	50.000	80.00- 120.00	100.00
28.057	28.057	(2.122)	101	112678			0.00- 43.29	13.29
118 Pyrene						CAS #: 129-00-0		
28.852	28.852	(2.182)	202	882664	50.0000	50.000	80.00- 120.00	100.00
28.852	28.852	(2.182)	101	134442			0.00- 45.23	15.23
28.852	28.852	(2.182)	100	111751			0.00- 42.66	12.66

Report Date: 18-Jan-2016 15:00

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd18.i
Lab File ID: 18011412.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: db
Method File: /chem/msd18.i/14Jan2016.b/186z0114vi.m
Misc Info: 1.0ul 2744-22-25

Calibration Date: 14-JAN-2016
Calibration Time: 16:31
Client Smp ID: Level 5
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
32 Bromochloromethan	260347	156208	364486	260347	0.00
47 1,4-Difluorobenze	915705	549423	1281987	915705	0.00
67 Chlorobenzene-d5	838049	502829	1173269	838049	0.00
79 Bromofluorobenzen	602381	361429	843333	602381	0.00

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
32 Bromochloromethan	6.05	5.72	6.38	6.05	0.00
47 1,4-Difluorobenze	7.67	7.34	8.00	7.67	0.00
67 Chlorobenzene-d5	11.60	11.27	11.93	11.60	0.00
79 Bromofluorobenzen	13.22	12.89	13.55	13.22	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msd18.i/14Jan2016.b/18011412.d

Date : 14-JAN-2016 16:31

Client ID: Level 5

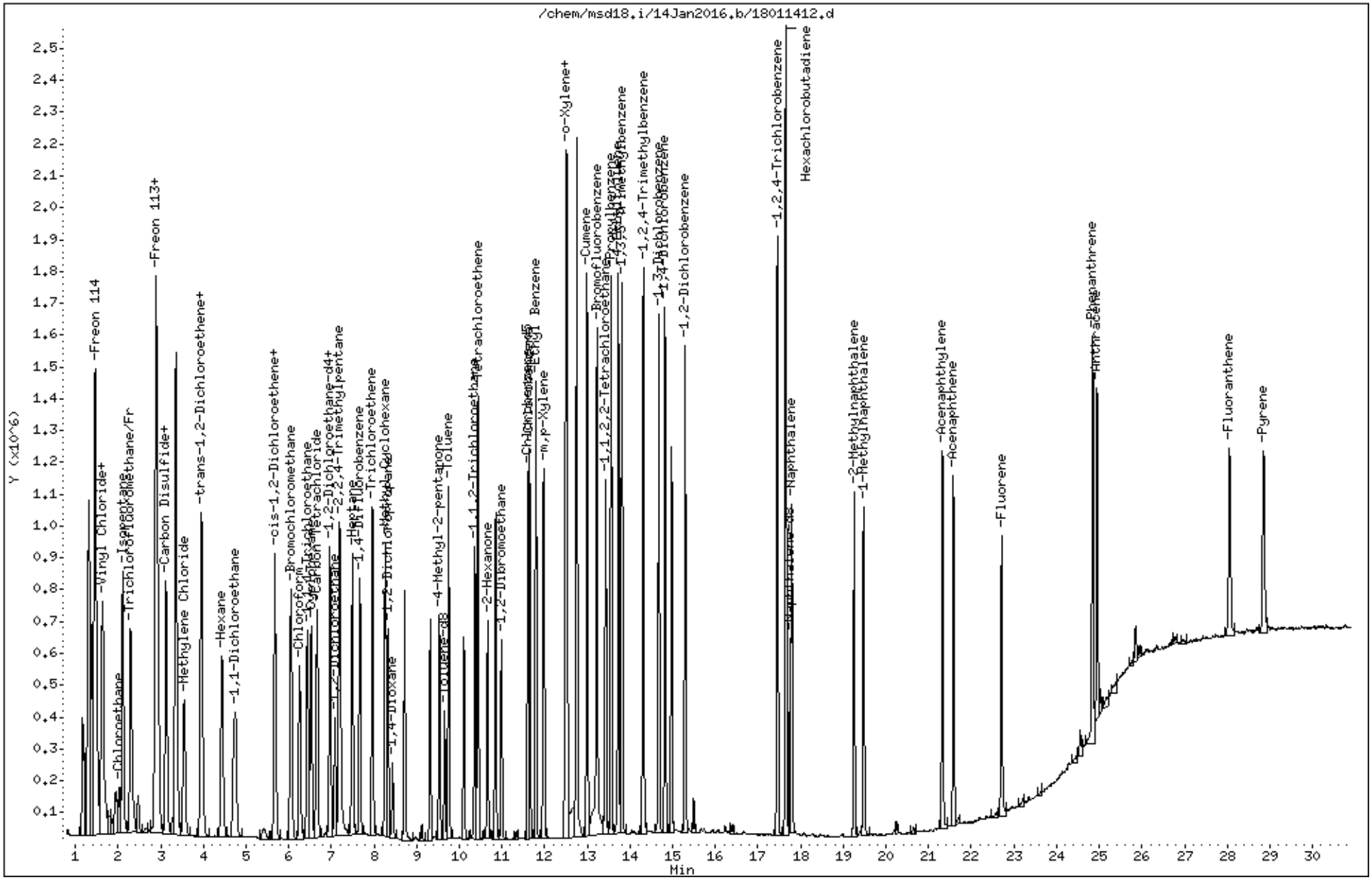
Sample Info: 20ml #2516-212, 1.0ul 2744-31-50

Column phase: RTx-624

Instrument: msd18.i

Operator: db

Column diameter: 0.53



Eurofins Air Toxics Inc.

EPA Method TO-17 GC/MS

Data file : /chem/msd18.i/14Jan2016.b/18011413.d
Lab Smp Id: ICAL Client Smp ID: Level 6
Inj Date : 14-JAN-2016 17:10
Operator : db Inst ID: msd18.i
Smp Info : 50ml #2516-212, 1.0ul 2744-31-100
Misc Info : 1.0ul 2744-22-50
Comment :
Method : /chem/msd18.i/14Jan2016.b/186z0114vi.m
Meth Date : 18-Jan-2016 15:00 lantonic Quant Type: ISTD
Cal Date : 14-JAN-2016 17:10 Cal File: 18011413.d
Als bottle: 7 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: VOC+PAH_ICAL.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO
* 32 Bromochloromethane					CAS #: 74-97-5		
6.052	6.052 (1.000)	130	272479	26.0000		80.00- 120.00	100.00
6.052	6.052 (1.000)	128	212881			47.81- 107.81	78.13
6.045	6.045 (1.000)	49	359307			99.93- 159.93	131.87
* 47 1,4-Difluorobenzene					CAS #: 540-36-3		
7.671	7.671 (1.000)	114	957054	23.0000		80.00- 120.00	100.00
7.663	7.663 (1.000)	88	147990			0.00- 45.51	15.46
* 67 Chlorobenzene-d5					CAS #: 3114-55-4		
11.610	11.610 (1.000)	117	874311	24.0000		80.00- 120.00	100.00
11.610	11.610 (1.000)	82	474817			23.87- 83.87	54.31
* 79 Bromofluorobenzene					CAS #: 460-00-4		
13.229	13.229 (1.000)	174	619522	36.0000		80.00- 120.00	100.00
13.229	13.229 (1.000)	95	661781			78.78- 138.78	106.82
13.229	13.229 (1.000)	176	602243			67.05- 127.05	97.21
$ 39 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
6.969	6.969 (0.908)	65	224640	50.0000	49.030	80.00- 120.00	100.00

RT	EXP RT	(REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO
$ 39 1,2-Dichloroethane-d4 (continued)								
6.969	6.969	(0.908)	67	121477			25.86- 85.86	54.08
$ 57 Toluene-d8						CAS #: 2037-26-5		
9.655	9.655	(0.832)	98	676966	50.0000	49.672	80.00- 120.00	100.00
9.655	9.655	(0.832)	70	72254			0.00- 40.57	10.67
9.655	9.655	(0.832)	100	439338			34.56- 94.56	64.90
$ 97 Naphthalene-d8						CAS #: 1146-65-2		
17.756	17.756	(1.342)	136	1206796	50.0000	48.889	80.00- 120.00	100.00
17.756	17.756	(1.342)	108	110905			0.00- 39.05	9.19
4 Freon 114						CAS #: 76-14-2		
1.460	1.460	(0.241)	135	2075109	350.000	334.83	80.00- 120.00	100.00
1.460	1.460	(0.241)	137	666661			1.93- 61.93	32.13
6 Vinyl Chloride						CAS #: 75-01-4		
1.625	1.625	(0.268)	62	1054122	128.000	122.64	80.00- 120.00	100.00
1.625	1.625	(0.268)	64	428532			15.41- 75.41	40.65
7 1,3-Butadiene						CAS #: 106-99-0		
1.646	1.646	(0.272)	54	778564	111.000	103.39	80.00- 120.00	100.00
1.646	1.646	(0.272)	39	1091403			104.89- 164.89	140.18
9 Chloroethane						CAS #: 75-00-3		
2.040	2.040	(0.337)	64	486459	132.000	117.68	80.00- 120.00	100.00
2.040	2.040	(0.337)	66	156366			1.74- 61.74	32.14
2.040	2.040	(0.337)	49	137034			0.00- 57.57	28.17
10 Isopentane						CAS #: 78-78-4		
2.112	2.112	(0.349)	57	819880	148.000	138.19	80.00- 120.00	100.00
2.112	2.112	(0.349)	43	1186026			112.49- 172.49	144.66
11 Trichlorofluoromethane/Fr11						CAS #: 75-69-4		
2.291	2.291	(0.379)	101	2480241	281.000	277.45	80.00- 120.00	100.00
2.291	2.291	(0.379)	103	1609021			34.96- 94.96	64.87
15 Freon 113						CAS #: 76-13-1		
2.893	2.893	(0.478)	151	1641709	383.000	380.16	80.00- 120.00	100.00
2.893	2.893	(0.478)	153	1058789			34.01- 94.01	64.49
2.893	2.893	(0.478)	101	2119550			98.52- 158.52	129.11
14 1,1-Dichloroethene						CAS #: 75-35-4		
2.871	2.871	(0.474)	98	652425	198.000	200.59	80.00- 120.00	100.00
2.871	2.871	(0.474)	96	1037118			130.53- 190.53	158.96
2.871	2.871	(0.474)	61	1764035			241.31- 301.31	270.38

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO
18 Carbon Disulfide					CAS #: 75-15-0		
3.122	3.122 (0.516)	76	3041955	156.000	134.68	80.00- 120.00	100.00
17 2-Propanol					CAS #: 67-63-0		
3.122	3.122 (0.516)	45	1763624	123.000	96.910	80.00- 120.00	100.00
3.122	3.122 (0.516)	43	318400			0.00- 48.48	18.05
3.122	3.122 (0.516)	59	70789			0.00- 34.02	4.01
21 Methylene Chloride					CAS #: 75-09-2		
3.545	3.545 (0.586)	49	1165190	174.000	140.50	80.00- 120.00	100.00
3.545	3.545 (0.586)	84	901088			46.74- 106.74	77.33
3.545	3.545 (0.586)	51	357814			1.74- 61.74	30.71
24 trans-1,2-Dichloroethene					CAS #: 156-60-5		
3.960	3.960 (0.654)	98	614083	198.000	195.84	80.00- 120.00	100.00
3.960	3.960 (0.654)	61	1446383			203.10- 263.10	235.54
3.960	3.960 (0.654)	96	968646			127.09- 187.09	157.74
23 MTBE					CAS #: 1634-04-4		
3.946	3.946 (0.652)	73	2399640	180.000	158.72	80.00- 120.00	100.00
3.946	3.946 (0.652)	57	546507			0.00- 53.10	22.77
3.946	3.946 (0.652)	41	486710			0.00- 50.25	20.28
25 Hexane					CAS #: 110-54-3		
4.433	4.433 (0.732)	57	1486480	176.000	170.04	80.00- 120.00	100.00
4.433	4.433 (0.732)	43	916913			31.56- 91.56	61.68
4.433	4.433 (0.732)	86	220214			0.00- 44.94	14.81
26 1,1-Dichloroethane					CAS #: 75-34-3		
4.712	4.712 (0.779)	63	1723425	202.000	198.48	80.00- 120.00	100.00
4.712	4.712 (0.779)	65	547923			1.52- 61.52	31.79
29 cis-1,2-Dichloroethene					CAS #: 156-59-2		
5.672	5.672 (0.937)	98	597064	198.000	199.50	80.00- 120.00	100.00
5.672	5.672 (0.937)	96	946117			127.88- 187.88	158.46
5.672	5.672 (0.937)	61	1257438			179.74- 239.74	210.60
28 2-Butanone					CAS #: 78-93-3		
5.672	5.672 (0.937)	72	470860	147.000	115.72	80.00- 120.00	100.00
5.672	5.672 (0.937)	43	1787874			351.97- 411.97	379.70
5.672	5.672 (0.937)	57	146860			2.17- 62.17	31.19
35 Chloroform					CAS #: 67-66-3		
6.252	6.252 (1.033)	83	1744285	244.000	242.27	80.00- 120.00	100.00
6.252	6.252 (1.033)	85	1128906			34.57- 94.57	64.72

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO
37 Cyclohexane					CAS #: 110-82-7		
6.525	6.525 (0.851)	84	1091743	172.000	164.17	80.00- 120.00	100.00
6.525	6.525 (0.851)	56	1320965			92.60- 152.60	121.00
6.525	6.525 (0.851)	41	710459			35.57- 95.57	65.08
36 1,1,1-Trichloroethane					CAS #: 71-55-6		
6.439	6.439 (0.839)	97	1694362	273.000	271.81	80.00- 120.00	100.00
6.439	6.439 (0.839)	99	1089168			34.22- 94.22	64.28
38 Carbon Tetrachloride					CAS #: 56-23-5		
6.661	6.661 (0.868)	119	1685006	315.000	322.45	80.00- 120.00	100.00
6.661	6.661 (0.868)	117	1755035			74.59- 134.59	104.16
45 2,2,4-Trimethylpentane					CAS #: 540-84-1		
7.191	7.191 (0.937)	57	3995162	234.000	206.47	80.00- 120.00	100.00
7.191	7.191 (0.937)	56	1299412			2.36- 62.36	32.52
7.191	7.191 (0.937)	41	1024314			0.00- 55.73	25.64
41 Benzene					CAS #: 71-43-2		
6.969	6.969 (0.908)	78	2612218	160.000	126.45	80.00- 120.00	100.00
6.969	6.969 (0.908)	77	619462			0.00- 53.82	23.71
43 1,2-Dichloroethane					CAS #: 107-06-2		
7.083	7.083 (0.923)	62	1044508	202.000	205.75	80.00- 120.00	100.00
7.083	7.083 (0.923)	64	340460			2.51- 62.51	32.60
46 Heptane					CAS #: 142-82-5		
7.492	7.492 (0.977)	71	876890	205.000	204.80	80.00- 120.00	100.00
7.492	7.492 (0.977)	43	1384262			132.26- 192.26	157.86
7.492	7.492 (0.977)	57	790954			60.63- 120.63	90.20
48 Trichloroethene					CAS #: 79-01-6		
7.957	7.957 (1.037)	95	1088938	269.000	265.02	80.00- 120.00	100.00
7.957	7.957 (1.037)	130	1116505			73.40- 133.40	102.53
7.957	7.957 (1.037)	97	704007			35.04- 95.04	64.65
51 Methyl Cyclohexane					CAS #: 108-87-2		
8.265	8.265 (1.077)	83	1463694	201.000	206.32	80.00- 120.00	100.00
8.265	8.265 (1.077)	98	650901			15.23- 75.23	44.47
8.265	8.265 (1.077)	55	1101819			45.63- 105.63	75.28
52 1,2-Dichloropropane					CAS #: 78-87-5		
8.322	8.322 (1.085)	63	889374	231.000	232.41	80.00- 120.00	100.00
8.322	8.322 (1.085)	62	612904			38.55- 98.55	68.91
8.322	8.322 (1.085)	41	465379			21.51- 81.51	52.33

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO
53 1,4-Dioxane					CAS #: 123-91-1		
8.437	8.437 (1.100)	88	561197	180.000	180.02	80.00- 120.00	100.00
8.437	8.437 (1.100)	58	370698			36.73- 96.73	66.05
8.437	8.437 (1.100)	57	139319			2.93- 62.93	24.83
56 4-Methyl-2-pentanone					CAS #: 108-10-1		
9.533	9.533 (1.243)	58	689369	205.000	215.14	80.00- 120.00	100.00
9.533	9.533 (1.243)	43	1657161			210.10- 270.10	240.39
9.533	9.533 (1.243)	85	302244			14.24- 74.24	43.84
58 Toluene					CAS #: 108-88-3		
9.748	9.748 (0.840)	91	2922867	188.000	184.05	80.00- 120.00	100.00
9.748	9.748 (0.840)	92	1685983			27.36- 87.36	57.68
61 1,1,2-Trichloroethane					CAS #: 79-00-5		
10.364	10.364 (1.351)	97	980283	273.000	251.96	80.00- 120.00	100.00
10.364	10.364 (1.351)	99	612787			31.64- 91.64	62.51
10.364	10.364 (1.351)	83	867211			56.72- 116.72	88.47
62 Tetrachloroethene					CAS #: 127-18-4		
10.436	10.436 (0.899)	166	1476348	339.000	342.81	80.00- 120.00	100.00
10.436	10.436 (0.899)	129	1043529			40.21- 100.21	70.68
10.436	10.436 (0.899)	131	1006590			37.97- 97.97	68.18
63 2-Hexanone					CAS #: 591-78-6		
10.665	10.665 (0.919)	58	886563	205.000	208.39	80.00- 120.00	100.00
10.665	10.665 (0.919)	43	1516762			138.90- 198.90	171.08
10.665	10.665 (0.919)	100	183156			0.00- 50.74	20.66
66 1,2-Dibromoethane					CAS #: 106-93-4		
10.987	10.987 (0.946)	107	1450917	384.000	397.72	80.00- 120.00	100.00
10.987	10.987 (0.946)	109	1371278			63.94- 123.94	94.51
68 Chlorobenzene					CAS #: 108-90-7		
11.653	11.653 (1.004)	112	2322436	230.000	234.55	80.00- 120.00	100.00
11.653	11.653 (1.004)	114	749888			2.24- 62.24	32.29
11.653	11.653 (1.004)	77	1280536			25.99- 85.99	55.14
69 Ethyl Benzene					CAS #: 100-41-4		
11.797	11.797 (1.016)	106	1196121	217.000	221.70	80.00- 120.00	100.00
11.797	11.797 (1.016)	91	3719740			279.23- 339.23	310.98
71 m,p-Xylene					CAS #: 108-38-3		
11.983	11.983 (1.032)	106	1478787	217.000	221.40	80.00- 120.00	100.00
11.983	11.983 (1.032)	91	2899502			163.71- 223.71	196.07

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO
74 o-Xylene					CAS #: 95-47-6		
12.491	12.491 (0.944)	106	1407348	217.000	193.34	80.00- 120.00	100.00
12.491	12.491 (0.944)	91	2904195			176.46- 236.46	206.36
75 Styrene					CAS #: 100-42-5		
12.520	12.520 (0.946)	104	2375748	213.000	185.52	80.00- 120.00	100.00
12.520	12.520 (0.946)	78	1120316			17.37- 77.37	47.16
77 Cumene					CAS #: 98-82-8		
13.000	13.000 (0.983)	105	7286150	246.000	374.32	80.00- 120.00	100.00
13.000	13.000 (0.983)	120	1957653			0.00- 57.05	26.87
13.000	13.000 (0.983)	51	622232			0.00- 38.51	8.54
80 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
13.430	13.430 (1.015)	83	2242772	343.000	366.84	80.00- 120.00	100.00
13.430	13.430 (1.015)	85	1444511			33.93- 93.93	64.41
81 Propylbenzene					CAS #: 103-65-1		
13.559	13.559 (1.025)	91	5128923	246.000	248.29	80.00- 120.00	100.00
13.559	13.559 (1.025)	120	1223839			0.00- 53.66	23.86
13.559	13.559 (1.025)	105	188051			0.00- 33.72	3.67
82 4-Ethyltoluene					CAS #: 622-96-8		
13.731	13.731 (1.038)	120	1326564	246.000	281.29	80.00- 120.00	100.00
13.731	13.731 (1.038)	105	4313368			299.89- 359.89	325.15
83 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
13.817	13.817 (1.044)	120	1808432	246.000	272.22	80.00- 120.00	100.00
13.817	13.817 (1.044)	105	3626416			166.45- 226.45	200.53
84 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
14.311	14.311 (1.082)	120	1692838	246.000	257.55	80.00- 120.00	100.00
14.311	14.311 (1.082)	105	3651112			185.90- 245.90	215.68
86 1,3-Dichlorobenzene					CAS #: 541-73-1		
14.676	14.676 (1.109)	146	2569881	301.000	313.66	80.00- 120.00	100.00
14.676	14.676 (1.109)	148	1656125			33.73- 93.73	64.44
14.676	14.676 (1.109)	111	979543			8.03- 68.03	38.12
87 1,4-Dichlorobenzene					CAS #: 106-46-7		
14.819	14.819 (1.120)	146	2588919	301.000	313.68	80.00- 120.00	100.00
14.827	14.827 (1.121)	148	1657173			33.15- 93.15	64.01
14.819	14.819 (1.120)	111	951538			6.74- 66.74	36.75
90 1,2-Dichlorobenzene					CAS #: 95-50-1		
15.292	15.292 (1.156)	146	2477145	301.000	313.01	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO
90 1,2-Dichlorobenzene (continued)							
15.292	15.292 (1.156)	148	1585220			33.98- 93.98	63.99
15.292	15.292 (1.156)	111	978067			9.89- 69.89	39.48
95 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
17.455	17.455 (1.319)	180	2128334	371.000	388.19	80.00- 120.00	100.00
17.455	17.455 (1.319)	182	2047021			66.29- 126.29	96.18
96 Hexachlorobutadiene					CAS #: 87-68-3		
17.656	17.656 (1.335)	225	1794336	533.000	536.60	80.00- 120.00	100.00
17.656	17.656 (1.335)	223	1139974			33.08- 93.08	63.53
98 Naphthalene					CAS #: 91-20-3		
17.792	17.792 (1.345)	128	2506677	100.000	99.586	80.00- 120.00	100.00
17.792	17.792 (1.345)	127	325543			0.00- 43.03	12.99
103 2-Methylnaphthalene					CAS #: 91-57-6		
19.253	19.253 (1.455)	142	1649742	100.000	105.99	80.00- 120.00	100.00
19.253	19.253 (1.455)	141	1430408			56.76- 116.76	86.70
19.253	19.253 (1.455)	115	519465			1.56- 61.56	31.49
104 1-Methylnaphthalene					CAS #: 90-12-0		
19.475	19.475 (1.472)	142	1529514	100.000	107.30	80.00- 120.00	100.00
19.475	19.475 (1.472)	141	1387058			59.80- 119.80	90.69
19.475	19.475 (1.472)	115	497062			3.48- 63.48	32.50
107 Acenaphthylene					CAS #: 208-96-8		
21.331	21.331 (1.612)	152	2591728	100.000	94.976	80.00- 120.00	100.00
21.331	21.331 (1.612)	151	521669			0.00- 49.75	20.13
21.331	21.331 (1.612)	153	334619			0.00- 43.01	12.91
109 Acenaphthene					CAS #: 83-32-9		
21.581	21.581 (1.631)	154	1595422	100.000	120.32	80.00- 120.00	100.00
21.581	21.581 (1.631)	152	881364			26.17- 86.17	55.24
21.581	21.581 (1.631)	153	1746250			78.75- 138.75	109.45
111 Fluorene					CAS #: 86-73-7		
22.713	22.713 (1.717)	166	1871513	100.000	134.69	80.00- 120.00	100.00
22.713	22.713 (1.717)	165	1751136			65.26- 125.26	93.57
112 Phenanthrene					CAS #: 85-01-8		
24.848	24.848 (1.878)	178	2717721	100.000	117.34	80.00- 120.00	100.00
24.848	24.848 (1.878)	176	529307			0.00- 49.34	19.48
24.848	24.848 (1.878)	179	411061			0.00- 45.21	15.13
113 Anthracene					CAS #: 120-12-7		
24.955	24.955 (1.886)	178	2722393	100.000	130.58	80.00- 120.00	100.00

RT	EXP RT	(REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO
113 Anthracene (continued)								
24.948	24.948	(1.886)	176	518320			0.00- 48.82	19.04
24.948	24.948	(1.886)	179	418326			0.00- 44.74	15.37
117 Fluoranthene						CAS #: 206-44-0		
28.057	28.057	(2.121)	202	2111266	100.000	108.27	80.00- 120.00	100.00
28.057	28.057	(2.121)	101	284001			0.00- 43.29	13.45
118 Pyrene						CAS #: 129-00-0		
28.852	28.852	(2.181)	202	2206782	100.000	109.69	80.00- 120.00	100.00
28.852	28.852	(2.181)	101	345311			0.00- 45.23	15.65
28.852	28.852	(2.181)	100	281192			0.00- 42.66	12.74

Report Date: 18-Jan-2016 15:00

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd18.i
Lab File ID: 18011413.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: db
Method File: /chem/msd18.i/14Jan2016.b/186z0114vi.m
Misc Info: 1.0ul 2744-22-50

Calibration Date: 14-JAN-2016
Calibration Time: 16:31
Client Smp ID: Level 6
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
32 Bromochloromethan	260347	156208	364486	272479	4.66
47 1,4-Difluorobenze	915705	549423	1281987	957054	4.52
67 Chlorobenzene-d5	838049	502829	1173269	874311	4.33
79 Bromofluorobenzen	602381	361429	843333	619522	2.85

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
32 Bromochloromethan	6.05	5.72	6.38	6.05	0.00
47 1,4-Difluorobenze	7.67	7.34	8.00	7.67	0.00
67 Chlorobenzene-d5	11.60	11.27	11.93	11.61	0.06
79 Bromofluorobenzen	13.22	12.89	13.55	13.23	0.05

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msd18.i/14Jan2016.b/18011413.d

Date : 14-JAN-2016 17:10

Client ID: Level 6

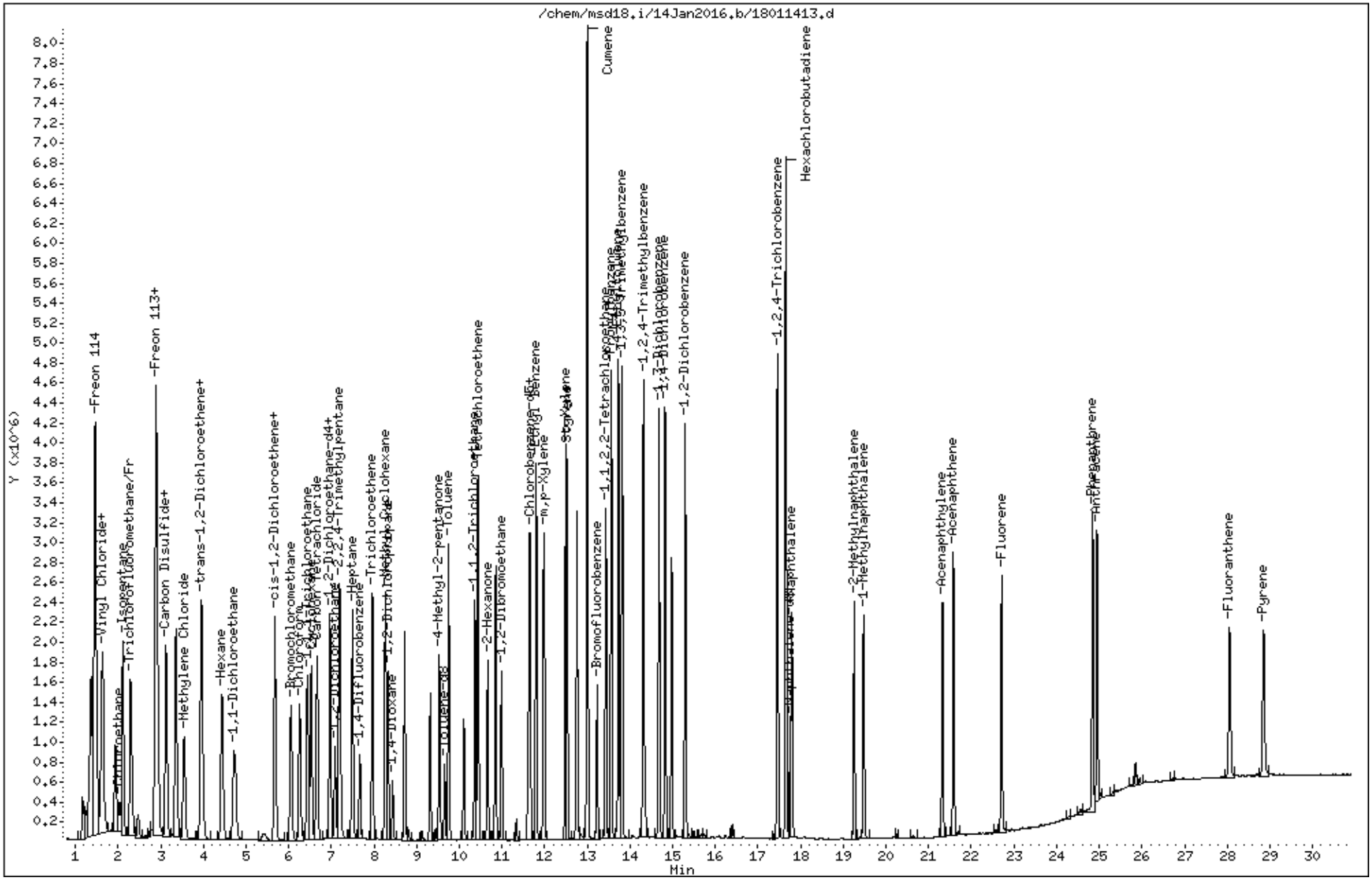
Sample Info: 50ml #2516-212, 1.0ul 2744-31-100

Column phase: RTx-624

Instrument: msd18.i

Operator: db

Column diameter: 0.53



Eurofins Air Toxics Inc.

EPA Method TO-17 GC/MS

Data file : /chem/msd18.i/14Jan2016.b/18011414.d
Lab Smp Id: ICAL Client Smp ID: Level 7
Inj Date : 14-JAN-2016 17:49
Operator : db Inst ID: msd18.i
Smp Info : 100ml #2516-212, 1.0ul 2744-31-250
Misc Info : 1.0ul 2744-22-100
Comment :
Method : /chem/msd18.i/14Jan2016.b/186z0114vi.m
Meth Date : 18-Jan-2016 15:00 lantonic Quant Type: ISTD
Cal Date : 14-JAN-2016 17:49 Cal File: 18011414.d
Als bottle: 8 Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: VOC+PAH_ICAL.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO
* 32 Bromochloromethane					CAS #: 74-97-5		
6.052	6.052 (1.000)	130	296444	26.0000		80.00- 120.00	100.00
6.052	6.052 (1.000)	128	226596			47.81- 107.81	76.44
6.044	6.044 (1.000)	49	385399			99.93- 159.93	130.01
* 47 1,4-Difluorobenzene					CAS #: 540-36-3		
7.670	7.670 (1.000)	114	996165	23.0000		80.00- 120.00	100.00
7.670	7.670 (1.000)	88	152835			0.00- 45.51	15.34
* 67 Chlorobenzene-d5					CAS #: 3114-55-4		
11.610	11.610 (1.000)	117	875195	24.0000		80.00- 120.00	100.00
11.610	11.610 (1.000)	82	472762			23.87- 83.87	54.02
* 79 Bromofluorobenzene					CAS #: 460-00-4		
13.222	13.222 (1.000)	174	645548	36.0000		80.00- 120.00	100.00
13.222	13.222 (1.000)	95	690082			78.78- 138.78	106.90
13.222	13.222 (1.000)	176	627162			67.05- 127.05	97.15
$ 39 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
6.976	6.976 (0.909)	65	432424	100.000	92.107	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO
$ 39 1,2-Dichloroethane-d4 (continued)							
6.976	6.976 (0.909)	67	233603			25.86- 85.86	54.02
$ 57 Toluene-d8					CAS #: 2037-26-5		
9.655	9.655 (0.832)	98	1300412	100.000	96.069	80.00- 120.00	100.00
9.655	9.655 (0.832)	70	139320			0.00- 40.57	10.71
9.655	9.655 (0.832)	100	845281			34.56- 94.56	65.00
$ 97 Naphthalene-d8					CAS #: 1146-65-2		
17.756	17.756 (1.343)	136	2295074	100.000	90.860	80.00- 120.00	100.00
17.756	17.756 (1.343)	108	206090			0.00- 39.05	8.98
4 Freon 114					CAS #: 76-14-2		
1.460	1.460 (0.241)	135	4320764	699.000	648.53	80.00- 120.00	100.00
1.460	1.460 (0.241)	137	1387669			1.93- 61.93	32.12
6 Vinyl Chloride					CAS #: 75-01-4		
1.625	1.625 (0.268)	62	2236727	256.000	241.46	80.00- 120.00	100.00
1.625	1.625 (0.268)	64	857520			15.41- 75.41	38.34
7 1,3-Butadiene					CAS #: 106-99-0		
1.646	1.646 (0.272)	54	1646079	221.000	203.56	80.00- 120.00	100.00
1.646	1.646 (0.272)	39	1973678			104.89- 164.89	119.90
9 Chloroethane					CAS #: 75-00-3		
2.040	2.040 (0.337)	64	1053767	264.000	238.78	80.00- 120.00	100.00
2.040	2.040 (0.337)	66	334576			1.74- 61.74	31.75
2.040	2.040 (0.337)	49	289303			0.00- 57.57	27.45
10 Isopentane					CAS #: 78-78-4		
2.112	2.112 (0.349)	57	1919531	295.000	296.98	80.00- 120.00	100.00
2.112	2.112 (0.349)	43	2730533			112.49- 172.49	142.25
11 Trichlorofluoromethane/Fr11					CAS #: 75-69-4		
2.298	2.298 (0.380)	101	5221173	562.000	540.30	80.00- 120.00	100.00
2.298	2.298 (0.380)	103	3366622			34.96- 94.96	64.48
15 Freon 113					CAS #: 76-13-1		
2.900	2.900 (0.479)	151	3571918	766.000	761.07	80.00- 120.00	100.00
2.900	2.900 (0.479)	153	2294314			34.01- 94.01	64.23
2.893	2.893 (0.478)	101	4615123			98.52- 158.52	129.21
14 1,1-Dichloroethene					CAS #: 75-35-4		
2.871	2.871 (0.474)	98	1460383	397.000	410.38	80.00- 120.00	100.00
2.871	2.871 (0.474)	96	2313912			130.53- 190.53	158.45
2.871	2.871 (0.474)	61	3900089			241.31- 301.31	267.06

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO
18 Carbon Disulfide					CAS #: 75-15-0		
3.122	3.122 (0.516)	76	6358116	311.000	265.12	80.00- 120.00	100.00
17 2-Propanol					CAS #: 67-63-0		
3.122	3.122 (0.516)	45	3647787	246.000	193.98	80.00- 120.00	100.00
3.122	3.122 (0.516)	43	664812			0.00- 48.48	18.23
3.122	3.122 (0.516)	59	144199			0.00- 34.02	3.95
21 Methylene Chloride					CAS #: 75-09-2		
3.545	3.545 (0.586)	49	2372709	347.000	276.36	80.00- 120.00	100.00
3.545	3.545 (0.586)	84	1860251			46.74- 106.74	78.40
3.545	3.545 (0.586)	51	741091			1.74- 61.74	31.23
24 trans-1,2-Dichloroethene					CAS #: 156-60-5		
3.967	3.967 (0.656)	98	1300579	396.000	383.28	80.00- 120.00	100.00
3.960	3.960 (0.654)	61	3047743			203.10- 263.10	234.34
3.967	3.967 (0.656)	96	2057658			127.09- 187.09	158.21
23 MTBE					CAS #: 1634-04-4		
3.946	3.946 (0.652)	73	3878543	361.000	248.10	80.00- 120.00	100.00
3.946	3.946 (0.652)	57	890198			0.00- 53.10	22.95
3.946	3.946 (0.652)	41	787199			0.00- 50.25	20.30
25 Hexane					CAS #: 110-54-3		
4.440	4.440 (0.734)	57	3148602	352.000	334.37	80.00- 120.00	100.00
4.440	4.440 (0.734)	43	1936513			31.56- 91.56	61.50
4.440	4.440 (0.734)	86	469202			0.00- 44.94	14.90
26 1,1-Dichloroethane					CAS #: 75-34-3		
4.712	4.712 (0.779)	63	3594973	405.000	383.86	80.00- 120.00	100.00
4.719	4.719 (0.780)	65	1148401			1.52- 61.52	31.94
29 cis-1,2-Dichloroethene					CAS #: 156-59-2		
5.679	5.679 (0.938)	98	1287920	396.000	395.62	80.00- 120.00	100.00
5.679	5.679 (0.938)	96	2018734			127.88- 187.88	156.74
5.672	5.672 (0.937)	61	2656729			179.74- 239.74	206.28
28 2-Butanone					CAS #: 78-93-3		
5.672	5.672 (0.937)	72	955105	295.000	231.29	80.00- 120.00	100.00
5.672	5.672 (0.937)	43	3637153			351.97- 411.97	380.81
5.672	5.672 (0.937)	57	301726			2.17- 62.17	31.59
35 Chloroform					CAS #: 67-66-3		
6.259	6.259 (1.034)	83	3700297	488.000	474.56	80.00- 120.00	100.00
6.259	6.259 (1.034)	85	2401432			34.57- 94.57	64.90

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO
37 Cyclohexane					CAS #: 110-82-7		
6.532	6.532 (0.852)	84	2307465	344.000	334.84	80.00- 120.00	100.00
6.524	6.524 (0.851)	56	2764678			92.60- 152.60	119.81
6.524	6.524 (0.851)	41	1480590			35.57- 95.57	64.17
36 1,1,1-Trichloroethane					CAS #: 71-55-6		
6.438	6.438 (0.839)	97	3454891	546.000	534.36	80.00- 120.00	100.00
6.438	6.438 (0.839)	99	2222900			34.22- 94.22	64.34
38 Carbon Tetrachloride					CAS #: 56-23-5		
6.668	6.668 (0.869)	119	3530171	629.000	646.09	80.00- 120.00	100.00
6.668	6.668 (0.869)	117	3671849			74.59- 134.59	104.01
45 2,2,4-Trimethylpentane					CAS #: 540-84-1		
7.198	7.198 (0.938)	57	8524235	467.000	428.97	80.00- 120.00	100.00
7.198	7.198 (0.938)	56	2768837			2.36- 62.36	32.48
7.198	7.198 (0.938)	41	2183756			0.00- 55.73	25.62
41 Benzene					CAS #: 71-43-2		
6.969	6.969 (0.908)	78	5392208	319.000	260.05	80.00- 120.00	100.00
6.969	6.969 (0.908)	77	1276993			0.00- 53.82	23.68
43 1,2-Dichloroethane					CAS #: 107-06-2		
7.090	7.090 (0.924)	62	2211911	405.000	416.60	80.00- 120.00	100.00
7.090	7.090 (0.924)	64	723095			2.51- 62.51	32.69
46 Heptane					CAS #: 142-82-5		
7.499	7.499 (0.978)	71	1877490	410.000	419.36	80.00- 120.00	100.00
7.491	7.491 (0.977)	43	2916456			132.26- 192.26	155.34
7.499	7.499 (0.978)	57	1686115			60.63- 120.63	89.81
48 Trichloroethene					CAS #: 79-01-6		
7.964	7.964 (1.038)	95	2361744	537.000	549.99	80.00- 120.00	100.00
7.964	7.964 (1.038)	130	2403652			73.40- 133.40	101.77
7.964	7.964 (1.038)	97	1532906			35.04- 95.04	64.91
51 Methyl Cyclohexane					CAS #: 108-87-2		
8.272	8.272 (1.078)	83	3140566	402.000	421.81	80.00- 120.00	100.00
8.272	8.272 (1.078)	98	1388906			15.23- 75.23	44.22
8.265	8.265 (1.077)	55	2362632			45.63- 105.63	75.23
52 1,2-Dichloropropane					CAS #: 78-87-5		
8.322	8.322 (1.085)	63	1873974	462.000	469.24	80.00- 120.00	100.00
8.322	8.322 (1.085)	62	1298661			38.55- 98.55	69.30
8.322	8.322 (1.085)	41	914197			21.51- 81.51	48.78

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO
53 1,4-Dioxane					CAS #: 123-91-1		
8.437	8.437 (1.100)	88	1197372	360.000	367.69	80.00- 120.00	100.00
8.437	8.437 (1.100)	58	786837			36.73- 96.73	65.71
8.437	8.437 (1.100)	57	281023			2.93- 62.93	23.47
56 4-Methyl-2-pentanone					CAS #: 108-10-1		
9.533	9.533 (1.243)	58	1447331	410.000	430.36	80.00- 120.00	100.00
9.533	9.533 (1.243)	43	3509371			210.10- 270.10	242.47
9.533	9.533 (1.243)	85	635172			14.24- 74.24	43.89
58 Toluene					CAS #: 108-88-3		
9.748	9.748 (0.840)	91	6256875	377.000	390.73	80.00- 120.00	100.00
9.748	9.748 (0.840)	92	3644689			27.36- 87.36	58.25
61 1,1,2-Trichloroethane					CAS #: 79-00-5		
10.364	10.364 (1.351)	97	2077126	546.000	517.40	80.00- 120.00	100.00
10.364	10.364 (1.351)	99	1303004			31.64- 91.64	62.73
10.364	10.364 (1.351)	83	1845599			56.72- 116.72	88.85
62 Tetrachloroethene					CAS #: 127-18-4		
10.435	10.435 (0.899)	166	3189869	678.000	730.42	80.00- 120.00	100.00
10.435	10.435 (0.899)	129	2279813			40.21- 100.21	71.47
10.435	10.435 (0.899)	131	2202392			37.97- 97.97	69.04
63 2-Hexanone					CAS #: 591-78-6		
10.665	10.665 (0.919)	58	1849587	410.000	430.67	80.00- 120.00	100.00
10.665	10.665 (0.919)	43	3167581			138.90- 198.90	171.26
10.665	10.665 (0.919)	100	377517			0.00- 50.74	20.41
66 1,2-Dibromoethane					CAS #: 106-93-4		
10.987	10.987 (0.946)	107	2934650	768.000	798.34	80.00- 120.00	100.00
10.987	10.987 (0.946)	109	2740364			63.94- 123.94	93.38
68 Chlorobenzene					CAS #: 108-90-7		
11.653	11.653 (1.004)	112	4827706	460.000	483.02	80.00- 120.00	100.00
11.653	11.653 (1.004)	114	1561658			2.24- 62.24	32.35
11.653	11.653 (1.004)	77	2702662			25.99- 85.99	55.98
69 Ethyl Benzene					CAS #: 100-41-4		
11.796	11.796 (1.016)	106	2576396	434.000	470.38	80.00- 120.00	100.00
11.796	11.796 (1.016)	91	8016453			279.23- 339.23	311.15
71 m,p-Xylene					CAS #: 108-38-3		
11.983	11.983 (1.032)	106	3123535	434.000	461.29	80.00- 120.00	100.00
11.983	11.983 (1.032)	91	6122310			163.71- 223.71	196.01

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                                          AMOUNTS
                                       CAL-AMT   ON-COL
   RT   EXP RT (REL RT)  MASS  RESPONSE (   ng)  (   ng)   TARGET RANGE    RATIO
   ==   ====== ========  ====  ======== =======  =======   ============    =====

   74 o-Xylene                                          CAS #: 95-47-6
 12.491  12.491 (0.945)   106   2987411 434.000   399.14  80.00- 120.00   100.00
 12.484  12.484 (0.944)    91   6236037                  176.46- 236.46   208.74
-------------------------------------------------------------------------------
   75 Styrene                                           CAS #: 100-42-5
 12.520  12.520 (0.947)   104   5144474 426.000   390.84  80.00- 120.00   100.00
 12.520  12.520 (0.947)    78   2470194                   17.37-  77.37    48.02
-------------------------------------------------------------------------------
   77 Cumene                                            CAS #: 98-82-8
 12.993  12.993 (0.983)   105   9204086 492.000   458.88  80.00- 120.00   100.00
 12.993  12.993 (0.983)   120   2528107                    0.00-  57.05    27.47
 12.993  12.993 (0.983)    51    824436                    0.00-  38.51     8.96
-------------------------------------------------------------------------------
   80 1,1,2,2-Tetrachloroethane                         CAS #: 79-34-5
 13.430  13.430 (1.016)    83   4675824 687.000   726.87  80.00- 120.00   100.00
 13.430  13.430 (1.016)    85   3005923                   33.93-  93.93    64.29
-------------------------------------------------------------------------------
   81 Propylbenzene                                     CAS #: 103-65-1
 13.559  13.559 (1.025)    91  10726288 492.000   497.40  80.00- 120.00   100.00
 13.559  13.559 (1.025)   120   2594314                    0.00-  53.66    24.19
 13.559  13.559 (1.025)   105    400465                    0.00-  33.72     3.73
-------------------------------------------------------------------------------
   82 4-Ethyltoluene                                    CAS #: 622-96-8
 13.730  13.730 (1.038)   120   2833886 492.000   562.85  80.00- 120.00   100.00
 13.730  13.730 (1.038)   105   9203725                  299.89- 359.89   324.77
-------------------------------------------------------------------------------
   83 1,3,5-Trimethylbenzene                            CAS #: 108-67-8
 13.816  13.816 (1.045)   120   3904221 492.000   552.45  80.00- 120.00   100.00
 13.816  13.816 (1.045)   105   7753521                  166.45- 226.45   198.59
-------------------------------------------------------------------------------
   84 1,2,4-Trimethylbenzene                            CAS #: 95-63-6
 14.311  14.311 (1.082)   120   3612725 492.000   522.10  80.00- 120.00   100.00
 14.311  14.311 (1.082)   105   7786036                  185.90- 245.90   215.52
-------------------------------------------------------------------------------
   86 1,3-Dichlorobenzene                               CAS #: 541-73-1
 14.676  14.676 (1.110)   146   5514771 601.000   639.12  80.00- 120.00   100.00
 14.676  14.676 (1.110)   148   3551470                   33.73-  93.73    64.40
 14.676  14.676 (1.110)   111   2110035                    8.03-  68.03    38.26
-------------------------------------------------------------------------------
   87 1,4-Dichlorobenzene                               CAS #: 106-46-7
 14.819  14.819 (1.121)   146   5559692 601.000   639.56  80.00- 120.00   100.00
 14.819  14.819 (1.121)   148   3557896                   33.15-  93.15    63.99
 14.819  14.819 (1.121)   111   2047854                    6.74-  66.74    36.83
-------------------------------------------------------------------------------
   90 1,2-Dichlorobenzene                               CAS #: 95-50-1
 15.292  15.292 (1.157)   146   5271489 601.000   633.48  80.00- 120.00   100.00
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                                          AMOUNTS
                                       CAL-AMT   ON-COL
   RT   EXP RT (REL RT)  MASS  RESPONSE (   ng)  (   ng)   TARGET RANGE    RATIO
   ==   ====== ========  ====  ======== =======  =======   ============    =====

   90 1,2-Dichlorobenzene (continued)
 15.292  15.292 (1.157)   148   3372379                    33.98-  93.98    63.97
 15.292  15.292 (1.157)   111   2075448                     9.89-  69.89    39.37
-------------------------------------------------------------------------------
   95 1,2,4-Trichlorobenzene                        CAS #: 120-82-1
 17.455  17.455 (1.320)   180   4655748 742.000   801.80  80.00- 120.00   100.00
 17.455  17.455 (1.320)   182   4443917                    66.29- 126.29    95.45
-------------------------------------------------------------------------------
   96 Hexachlorobutadiene                           CAS #: 87-68-3
 17.656  17.656 (1.335)   225   4133212 1070.00   1165.1  80.00- 120.00   100.00
 17.656  17.656 (1.335)   223   2630145                    33.08-  93.08    63.63
-------------------------------------------------------------------------------
   98 Naphthalene                                   CAS #: 91-20-3
 17.792  17.792 (1.346)   128   6285710 250.000   241.08  80.00- 120.00   100.00
 17.792  17.792 (1.346)   127    826565                     0.00-  43.03    13.15
-------------------------------------------------------------------------------
  103 2-Methylnaphthalene                           CAS #: 91-57-6
 19.253  19.253 (1.456)   142   4224479 250.000   258.92  80.00- 120.00   100.00(A)
 19.253  19.253 (1.456)   141   3672571                    56.76- 116.76    86.94
 19.253  19.253 (1.456)   115   1309366                     1.56-  61.56    30.99
-------------------------------------------------------------------------------
  104 1-Methylnaphthalene                           CAS #: 90-12-0
 19.475  19.475 (1.473)   142   3889615 250.000   260.10  80.00- 120.00   100.00(A)
 19.475  19.475 (1.473)   141   3525475                    59.80- 119.80    90.64
 19.475  19.475 (1.473)   115   1286191                     3.48-  63.48    33.07
-------------------------------------------------------------------------------
  107 Acenaphthylene                                CAS #: 208-96-8
 21.331  21.331 (1.613)   152   6941367 250.000   245.08  80.00- 120.00   100.00
 21.331  21.331 (1.613)   151   1420918                     0.00-  49.75    20.47
 21.331  21.331 (1.613)   153    915609                     0.00-  43.01    13.19
-------------------------------------------------------------------------------
  109 Acenaphthene                                  CAS #: 83-32-9
 21.581  21.581 (1.632)   154   3980422 250.000   280.96  80.00- 120.00   100.00(A)
 21.581  21.581 (1.632)   152   2153124                    26.17-  86.17    54.09
 21.581  21.581 (1.632)   153   4310223                    78.75- 138.75   108.29
-------------------------------------------------------------------------------
  111 Fluorene                                      CAS #: 86-73-7
 22.713  22.713 (1.718)   166   4449518 250.000   296.01  80.00- 120.00   100.00(A)
 22.713  22.713 (1.718)   165   4173316                    65.26- 125.26    93.79
-------------------------------------------------------------------------------
  112 Phenanthrene                                  CAS #: 85-01-8
 24.848  24.848 (1.879)   178   6654884 250.000   271.10  80.00- 120.00   100.00(A)
 24.848  24.848 (1.879)   176   1300139                     0.00-  49.34    19.54
 24.848  24.848 (1.879)   179   1026780                     0.00-  45.21    15.43
-------------------------------------------------------------------------------
  113 Anthracene                                    CAS #: 120-12-7
 24.955  24.955 (1.887)   178   6393649 250.000   285.87  80.00- 120.00   100.00(A)
```

RT	EXP RT	(REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO
113 Anthracene (continued)								
24.955	24.955	(1.887)	176	1205968			0.00- 48.82	18.86
24.955	24.955	(1.887)	179	982399			0.00- 44.74	15.37
117 Fluoranthene						CAS #: 206-44-0		
28.057	28.057	(2.122)	202	3407387	250.000	179.52	80.00- 120.00	100.00
28.057	28.057	(2.122)	101	456640			0.00- 43.29	13.40
118 Pyrene						CAS #: 129-00-0		
28.852	28.852	(2.182)	202	3531776	250.000	180.23	80.00- 120.00	100.00
28.852	28.852	(2.182)	101	553281			0.00- 45.23	15.67
28.852	28.852	(2.182)	100	446761			0.00- 42.66	12.65

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.

Report Date: 18-Jan-2016 15:00

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd18.i
Lab File ID: 18011414.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: db
Method File: /chem/msd18.i/14Jan2016.b/186z0114vi.m
Misc Info: 1.0ul 2744-22-100

Calibration Date: 14-JAN-2016
Calibration Time: 16:31
Client Smp ID: Level 7
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
32 Bromochloromethan	260347	156208	364486	296444	13.86
47 1,4-Difluorobenze	915705	549423	1281987	996165	8.79
67 Chlorobenzene-d5	838049	502829	1173269	875195	4.43
79 Bromofluorobenzen	602381	361429	843333	645548	7.17

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
32 Bromochloromethan	6.05	5.72	6.38	6.05	0.00
47 1,4-Difluorobenze	7.67	7.34	8.00	7.67	0.00
67 Chlorobenzene-d5	11.60	11.27	11.93	11.61	0.06
79 Bromofluorobenzen	13.22	12.89	13.55	13.22	0.00

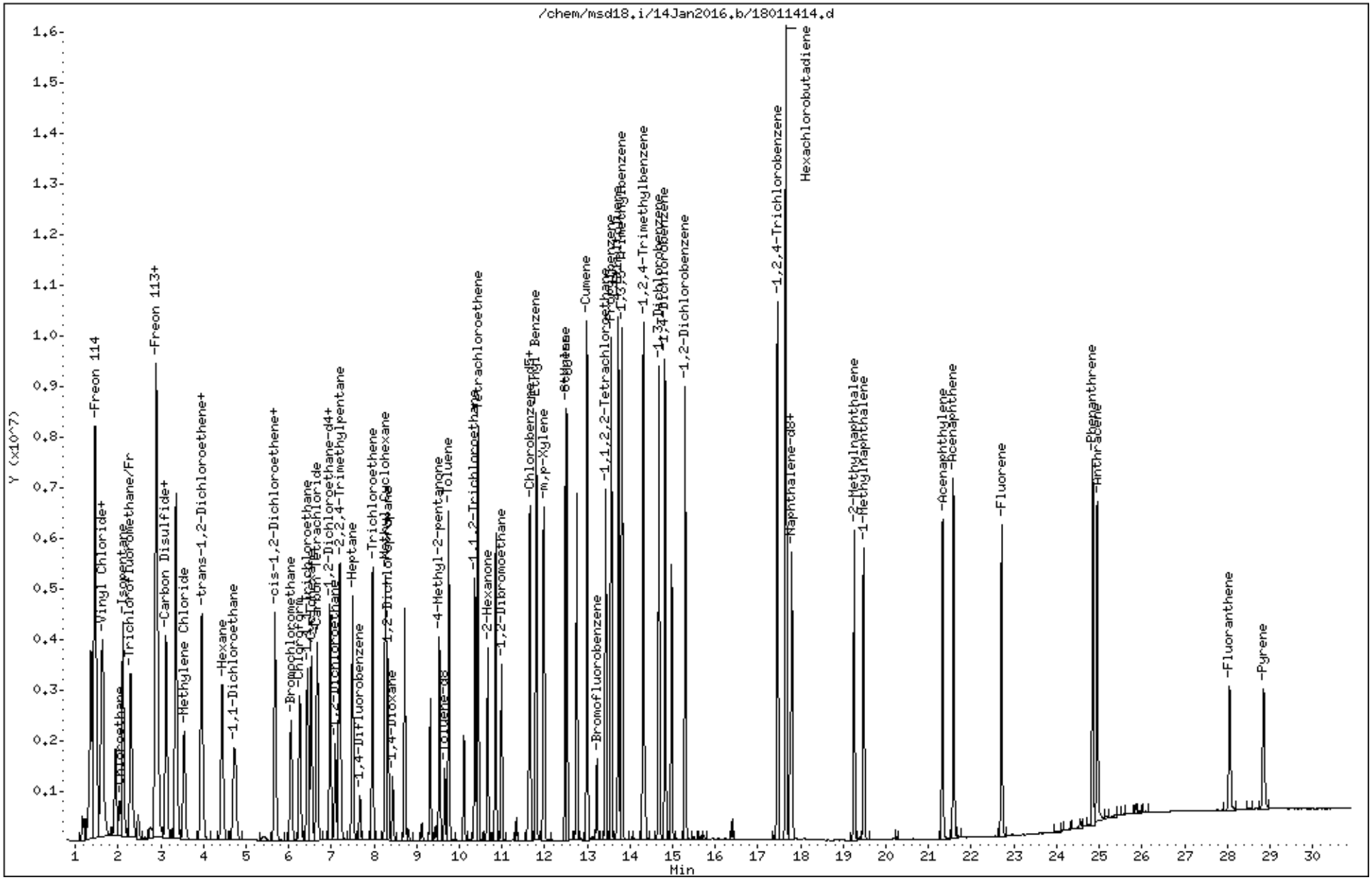
AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msd18.i/14Jan2016.b/18011414.d
Date : 14-JAN-2016 17:49
Client ID: Level 7
Sample Info: 100ml #2516-212, 1.0ul 2744-31-250

Column phase: RTx-624

Instrument: msd18.i

Operator: db
Column diameter: 0.53



Eurofins Air Toxics Inc.

EPA Method TO-17 GC/MS

Data file : /chem/msd18.i/14Jan2016.b/18011415.d
Lab Smp Id: ICAL Client Smp ID: Level 8
Inj Date : 14-JAN-2016 18:27
Operator : db Inst ID: msd18.i
Smp Info : 200ml #2516-212
Misc Info : 1000ppbv, e. 3/31/16
Comment :
Method : /chem/msd18.i/14Jan2016.b/186z0114vi.m
Meth Date : 18-Jan-2016 15:00 lantonic Quant Type: ISTD
Cal Date : 14-JAN-2016 18:27 Cal File: 18011415.d
Als bottle: 9 Calibration Sample, Level: 8
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: VOC_ICALnoSS.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO
* 32 Bromochloromethane					CAS #: 74-97-5		
6.052	6.052 (1.000)	130	302801	26.0000		80.00- 120.00	100.00
6.052	6.052 (1.000)	128	237426			47.81- 107.81	78.41
6.045	6.045 (1.000)	49	398511			99.93- 159.93	131.61
* 47 1,4-Difluorobenzene					CAS #: 540-36-3		
7.671	7.671 (1.000)	114	1025035	23.0000		80.00- 120.00	100.00
7.671	7.671 (1.000)	88	160142			0.00- 45.51	15.62
* 67 Chlorobenzene-d5					CAS #: 3114-55-4		
11.610	11.610 (1.000)	117	888626	24.0000		80.00- 120.00	100.00
11.610	11.610 (1.000)	82	479108			23.87- 83.87	53.92
* 79 Bromofluorobenzene					CAS #: 460-00-4		
13.222	13.222 (1.000)	174	659396	36.0000		80.00- 120.00	100.00
13.222	13.222 (1.000)	95	697138			78.78- 138.78	105.72
13.222	13.222 (1.000)	176	639793			67.05- 127.05	97.03
4 Freon 114					CAS #: 76-14-2		
1.453	1.453 (0.240)	135	8620310	1400.00	1282.0	80.00- 120.00	100.00(A)

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO
4 Freon 114 (continued)							
1.453	1.453 (0.240)	137	2789148			1.93- 61.93	32.36
6 Vinyl Chloride					CAS #: 75-01-4		
1.618	1.618 (0.267)	62	4515811	511.000	481.23	80.00- 120.00	100.00(A)
1.618	1.618 (0.267)	64	1499142			15.41- 75.41	33.20
7 1,3-Butadiene					CAS #: 106-99-0		
1.646	1.646 (0.272)	54	3346164	442.000	409.38	80.00- 120.00	100.00(A)
1.646	1.646 (0.272)	39	4521343			104.89- 164.89	135.12
9 Chloroethane					CAS #: 75-00-3		
2.033	2.033 (0.336)	64	2025236	528.000	459.06	80.00- 120.00	100.00
2.033	2.033 (0.336)	66	650750			1.74- 61.74	32.13
2.033	2.033 (0.336)	49	561974			0.00- 57.57	27.75
10 Isopentane					CAS #: 78-78-4		
2.119	2.119 (0.350)	57	3323718	590.000	514.22	80.00- 120.00	100.00(A)
2.119	2.119 (0.350)	43	4736241			112.49- 172.49	142.50
11 Trichlorofluoromethane/Fr11					CAS #: 75-69-4		
2.298	2.298 (0.380)	101	10322107	1120.00	1054.5	80.00- 120.00	100.00(A)
2.298	2.298 (0.380)	103	6675647			34.96- 94.96	64.67
15 Freon 113					CAS #: 76-13-1		
2.907	2.907 (0.480)	151	7101744	1530.00	1487.3	80.00- 120.00	100.00(A)
2.907	2.907 (0.480)	153	4577255			34.01- 94.01	64.45
2.907	2.907 (0.480)	101	9193856			98.52- 158.52	129.46
14 1,1-Dichloroethene					CAS #: 75-35-4		
2.871	2.871 (0.474)	98	2791420	793.000	770.98	80.00- 120.00	100.00(A)
2.871	2.871 (0.474)	96	4390177			130.53- 190.53	157.27
2.871	2.871 (0.474)	61	7355125			241.31- 301.31	263.49
18 Carbon Disulfide					CAS #: 75-15-0		
3.122	3.122 (0.516)	76	12514190	623.000	522.61	80.00- 120.00	100.00(A)
17 2-Propanol					CAS #: 67-63-0		
3.122	3.122 (0.516)	45	6790758	492.000	370.93	80.00- 120.00	100.00(A)
3.122	3.122 (0.516)	43	1255992			0.00- 48.48	18.50
3.122	3.122 (0.516)	59	279774			0.00- 34.02	4.12
21 Methylene Chloride					CAS #: 75-09-2		
3.545	3.545 (0.586)	49	4574053	695.000	544.20	80.00- 120.00	100.00(A)
3.545	3.545 (0.586)	84	3568435			46.74- 106.74	78.01
3.545	3.545 (0.586)	51	1424634			1.74- 61.74	31.15

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO
23 MTBE					CAS #: 1634-04-4		
3.946	3.946 (0.652)	73	10512903	721.000	665.58	80.00- 120.00	100.00(A)
3.946	3.946 (0.652)	57	2409942			0.00- 53.10	22.92
3.946	3.946 (0.652)	41	2108916			0.00- 50.25	20.06
24 trans-1,2-Dichloroethene					CAS #: 156-60-5		
3.967	3.967 (0.656)	98	2659341	793.000	770.37	80.00- 120.00	100.00(A)
3.967	3.967 (0.656)	61	6185966			203.10- 263.10	232.61
3.967	3.967 (0.656)	96	4186840			127.09- 187.09	157.44
25 Hexane					CAS #: 110-54-3		
4.440	4.440 (0.734)	57	6248207	705.000	656.98	80.00- 120.00	100.00(A)
4.440	4.440 (0.734)	43	3828701			31.56- 91.56	61.28
4.440	4.440 (0.734)	86	935004			0.00- 44.94	14.96
26 1,1-Dichloroethane					CAS #: 75-34-3		
4.719	4.719 (0.780)	63	7196285	810.000	759.03	80.00- 120.00	100.00(A)
4.719	4.719 (0.780)	65	2300717			1.52- 61.52	31.97
29 cis-1,2-Dichloroethene					CAS #: 156-59-2		
5.679	5.679 (0.938)	98	2598040	793.000	782.74	80.00- 120.00	100.00(A)
5.679	5.679 (0.938)	96	4052134			127.88- 187.88	155.97
5.679	5.679 (0.938)	61	5366744			179.74- 239.74	206.57
28 2-Butanone					CAS #: 78-93-3		
5.679	5.679 (0.938)	72	1882928	590.000	469.24	80.00- 120.00	100.00(A)
5.679	5.679 (0.938)	43	7155906			351.97- 411.97	380.04
5.679	5.679 (0.938)	57	588730			2.17- 62.17	31.27
35 Chloroform					CAS #: 67-66-3		
6.259	6.259 (1.034)	83	7494151	977.000	945.30	80.00- 120.00	100.00(A)
6.259	6.259 (1.034)	85	4848731			34.57- 94.57	64.70
37 Cyclohexane					CAS #: 110-82-7		
6.532	6.532 (0.852)	84	4695939	688.000	665.36	80.00- 120.00	100.00(A)
6.532	6.532 (0.852)	56	5626210			92.60- 152.60	119.81
6.532	6.532 (0.852)	41	3021727			35.57- 95.57	64.35
36 1,1,1-Trichloroethane					CAS #: 71-55-6		
6.438	6.438 (0.839)	97	7522786	1091.00	1125.6	80.00- 120.00	100.00(A)
6.438	6.438 (0.839)	99	4855388			34.22- 94.22	64.54
38 Carbon Tetrachloride					CAS #: 56-23-5		
6.668	6.668 (0.869)	119	7425215	1260.00	1312.8	80.00- 120.00	100.00(A)
6.668	6.668 (0.869)	117	7725855			74.59- 134.59	104.05

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO
45 2,2,4-Trimethylpentane					CAS #: 540-84-1		
7.198	7.198 (0.938)	57	17094591	934.000	847.15	80.00- 120.00	100.00(A)
7.198	7.198 (0.938)	56	5623993			2.36- 62.36	32.90
7.198	7.198 (0.938)	41	4502495			0.00- 55.73	26.34
41 Benzene					CAS #: 71-43-2		
6.969	6.969 (0.908)	78	10879722	639.000	525.07	80.00- 120.00	100.00(A)
6.969	6.969 (0.908)	77	2604151			0.00- 53.82	23.94
43 1,2-Dichloroethane					CAS #: 107-06-2		
7.090	7.090 (0.924)	62	4503008	809.000	822.30	80.00- 120.00	100.00(A)
7.090	7.090 (0.924)	64	1471379			2.51- 62.51	32.68
46 Heptane					CAS #: 142-82-5		
7.499	7.499 (0.978)	71	3932182	820.000	848.59	80.00- 120.00	100.00(A)
7.499	7.499 (0.978)	43	6104830			132.26- 192.26	155.25
7.499	7.499 (0.978)	57	3527705			60.63- 120.63	89.71
48 Trichloroethene					CAS #: 79-01-6		
7.964	7.964 (1.038)	95	5093605	1080.00	1143.1	80.00- 120.00	100.00(A)
7.964	7.964 (1.038)	130	5056696			73.40- 133.40	99.28
7.964	7.964 (1.038)	97	3296632			35.04- 95.04	64.72
51 Methyl Cyclohexane					CAS #: 108-87-2		
8.272	8.272 (1.078)	83	6603001	803.000	854.04	80.00- 120.00	100.00(A)
8.272	8.272 (1.078)	98	2928836			15.23- 75.23	44.36
8.272	8.272 (1.078)	55	5000746			45.63- 105.63	75.73
52 1,2-Dichloropropane					CAS #: 78-87-5		
8.322	8.322 (1.085)	63	4097596	924.000	987.37	80.00- 120.00	100.00(A)
8.322	8.322 (1.085)	62	2856011			38.55- 98.55	69.70
8.322	8.322 (1.085)	41	2068912			21.51- 81.51	50.49
53 1,4-Dioxane					CAS #: 123-91-1		
8.444	8.444 (1.101)	88	2472756	721.000	735.79	80.00- 120.00	100.00(A)
8.444	8.444 (1.101)	58	1641849			36.73- 96.73	66.40
8.444	8.444 (1.101)	57	561439			2.93- 62.93	22.70
56 4-Methyl-2-pentanone					CAS #: 108-10-1		
9.533	9.533 (1.243)	58	3145260	819.000	896.59	80.00- 120.00	100.00(A)
9.533	9.533 (1.243)	43	7521588			210.10- 270.10	239.14
9.533	9.533 (1.243)	85	1383543			14.24- 74.24	43.99
58 Toluene					CAS #: 108-88-3		
9.748	9.748 (0.840)	91	13013022	754.000	793.39	80.00- 120.00	100.00(A)
9.748	9.748 (0.840)	92	7655041			27.36- 87.36	58.83

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                                          AMOUNTS
                                       CAL-AMT   ON-COL
   RT   EXP RT (REL RT)  MASS  RESPONSE (   ng)  (   ng)   TARGET RANGE    RATIO
   ==   ====== ========  ====  ======== =======  =======   ============    =====

   61 1,1,2-Trichloroethane                          CAS #: 79-00-5
 10.364  10.364 (1.351)    97   4412213 1090.00   1070.8  80.00- 120.00   100.00(A)
 10.364  10.364 (1.351)    99   2758127                   31.64-  91.64    62.51
 10.364  10.364 (1.351)    83   3932604                   56.72- 116.72    89.13
-------------------------------------------------------------------------------
   62 Tetrachloroethene                              CAS #: 127-18-4
 10.435  10.435 (0.899)   166   6774511 1360.00   1504.6  80.00- 120.00   100.00(A)
 10.435  10.435 (0.899)   129   4953434                   40.21- 100.21    73.12
 10.435  10.435 (0.899)   131   4778651                   37.97-  97.97    70.54
-------------------------------------------------------------------------------
   63 2-Hexanone                                     CAS #: 591-78-6
 10.665  10.665 (0.919)    58   3934352 819.000   890.93  80.00- 120.00   100.00(A)
 10.665  10.665 (0.919)    43   6734185                  138.90- 198.90   171.16
 10.672  10.672 (0.919)   100    798142                    0.00-  50.74    20.29
-------------------------------------------------------------------------------
   66 1,2-Dibromoethane                              CAS #: 106-93-4
 10.987  10.987 (0.946)   107   6424721 1540.00   1696.4  80.00- 120.00   100.00(A)
 10.987  10.987 (0.946)   109   6018565                   63.94- 123.94    93.68
-------------------------------------------------------------------------------
   68 Chlorobenzene                                  CAS #: 108-90-7
 11.653  11.653 (1.004)   112  10085875 921.000   984.12  80.00- 120.00   100.00(A)
 11.653  11.653 (1.004)   114   3313201                    2.24-  62.24    32.85
 11.653  11.653 (1.004)    77   5802407                   25.99-  85.99    57.53
-------------------------------------------------------------------------------
   69 Ethyl Benzene                                  CAS #: 100-41-4
 11.804  11.804 (1.017)   106   5478298 868.000   968.73  80.00- 120.00   100.00(A)
 11.804  11.804 (1.017)    91  16655874                  279.23- 339.23   304.03
-------------------------------------------------------------------------------
   71 m,p-Xylene                                     CAS #: 108-38-3
 11.983  11.983 (1.032)   106   6788973 868.000   968.42  80.00- 120.00   100.00(A)
 11.983  11.983 (1.032)    91  13393093                  163.71- 223.71   197.28
-------------------------------------------------------------------------------
   74 o-Xylene                                       CAS #: 95-47-6
 12.491  12.491 (0.945)   106   6542778 868.000   857.31  80.00- 120.00   100.00(A)
 12.491  12.491 (0.945)    91  13451092                  176.46- 236.46   205.59
-------------------------------------------------------------------------------
   75 Styrene                                        CAS #: 100-42-5
 12.520  12.520 (0.947)   104  11317857 852.000   843.06  80.00- 120.00   100.00(A)
 12.520  12.520 (0.947)    78   5595034                   17.37-  77.37    49.44
-------------------------------------------------------------------------------
   77 Cumene                                         CAS #: 98-82-8
 12.993  12.993 (0.983)   105  19045661 983.000   935.96  80.00- 120.00   100.00(A)
 12.993  12.993 (0.983)   120   5489533                    0.00-  57.05    28.82
 12.993  12.993 (0.983)    51   1839347                    0.00-  38.51     9.66
-------------------------------------------------------------------------------
   80 1,1,2,2-Tetrachloroethane                      CAS #: 79-34-5
 13.430  13.430 (1.016)    83  10203802 1370.00   1527.4  80.00- 120.00   100.00(A)
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                                          AMOUNTS
                                       CAL-AMT   ON-COL
   RT   EXP RT (REL RT)  MASS  RESPONSE (   ng)  (   ng)   TARGET RANGE    RATIO
   ==   ====== ========  ====  ======== =======  =======   ============    =====

   80 1,1,2,2-Tetrachloroethane (continued)
 13.430  13.430 (1.016)    85   6606934                    33.93-  93.93    64.75
-------------------------------------------------------------------------------
   81 Propylbenzene                                CAS #: 103-65-1
 13.551  13.551 (1.025)    91  20790083 983.000   948.56  80.00- 120.00   100.00(A)
 13.559  13.559 (1.025)   120   5615139                     0.00-  53.66    27.01
 13.559  13.559 (1.025)   105    889540                     0.00-  33.72     4.28
-------------------------------------------------------------------------------
   82 4-Ethyltoluene                               CAS #: 622-96-8
 13.731  13.731 (1.038)   120   6263723 983.000   1182.6  80.00- 120.00   100.00(A)
 13.731  13.731 (1.038)   105  19140352                  299.89- 359.89   305.57
-------------------------------------------------------------------------------
   83 1,3,5-Trimethylbenzene                       CAS #: 108-67-8
 13.816  13.816 (1.045)   120   8602791 983.000   1160.9  80.00- 120.00   100.00(A)
 13.816  13.816 (1.045)   105  16883746                  166.45- 226.45   196.26
-------------------------------------------------------------------------------
   84 1,2,4-Trimethylbenzene                       CAS #: 95-63-6
 14.311  14.311 (1.082)   120   7901985 983.000   1099.1  80.00- 120.00   100.00(A)
 14.311  14.311 (1.082)   105  16699393                  185.90- 245.90   211.33
-------------------------------------------------------------------------------
   86 1,3-Dichlorobenzene                          CAS #: 541-73-1
 14.676  14.676 (1.110)   146  11836957 1200.00   1323.3  80.00- 120.00   100.00(A)
 14.676  14.676 (1.110)   148   7673252                    33.73-  93.73    64.82
 14.676  14.676 (1.110)   111   4700101                     8.03-  68.03    39.71
-------------------------------------------------------------------------------
   87 1,4-Dichlorobenzene                          CAS #: 106-46-7
 14.819  14.819 (1.121)   146  11874425 1200.00   1318.4  80.00- 120.00   100.00(A)
 14.819  14.819 (1.121)   148   7693925                    33.15-  93.15    64.79
 14.819  14.819 (1.121)   111   4533479                     6.74-  66.74    38.18
-------------------------------------------------------------------------------
   90 1,2-Dichlorobenzene                          CAS #: 95-50-1
 15.292  15.292 (1.157)   146  11330694 1200.00   1314.8  80.00- 120.00   100.00(A)
 15.292  15.292 (1.157)   148   7264303                    33.98-  93.98    64.11
 15.292  15.292 (1.157)   111   4578390                     9.89-  69.89    40.41
-------------------------------------------------------------------------------
   95 1,2,4-Trichlorobenzene                       CAS #: 120-82-1
 17.463  17.463 (1.321)   180  10683704 1480.00   1747.1  80.00- 120.00   100.00(A)
 17.463  17.463 (1.321)   182  10093886                    66.29- 126.29    94.48
-------------------------------------------------------------------------------
   96 Hexachlorobutadiene                          CAS #: 87-68-3
 17.656  17.656 (1.335)   225  10845623 2130.00   2829.3  80.00- 120.00   100.00(A)
 17.656  17.656 (1.335)   223   7021713                    33.08-  93.08    64.74
-------------------------------------------------------------------------------
```

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.

Report Date: 18-Jan-2016 15:00

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd18.i
Lab File ID: 18011415.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: db
Method File: /chem/msd18.i/14Jan2016.b/186z0114vi.m
Misc Info: 1000ppbv, e. 3/31/16

Calibration Date: 14-JAN-2016
Calibration Time: 16:31
Client Smp ID: Level 8
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
32 Bromochloromethan	260347	156208	364486	302801	16.31
47 1,4-Difluorobenze	915705	549423	1281987	1025035	11.94
67 Chlorobenzene-d5	838049	502829	1173269	888626	6.04
79 Bromofluorobenzen	602381	361429	843333	659396	9.46

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
32 Bromochloromethan	6.05	5.72	6.38	6.05	0.00
47 1,4-Difluorobenze	7.67	7.34	8.00	7.67	0.00
67 Chlorobenzene-d5	11.60	11.27	11.93	11.61	0.06
79 Bromofluorobenzen	13.22	12.89	13.55	13.22	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msd18.i/14Jan2016.b/18011415.d

Date : 14-JAN-2016 18:27

Client ID: Level 8

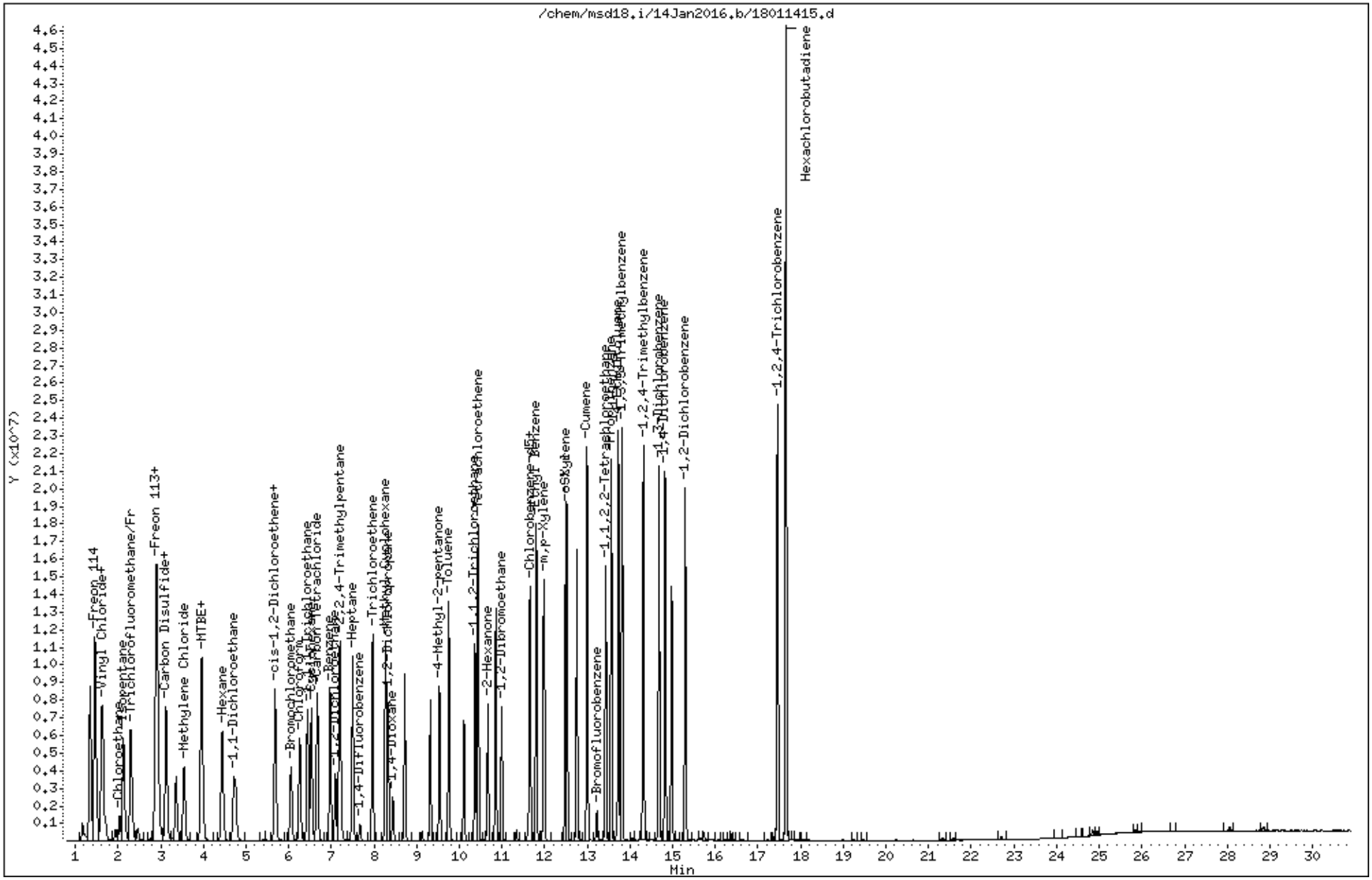
Sample Info: 200ml #2516-212

Column phase: RTx-624

Instrument: msd18.i

Operator: db

Column diameter: 0.53



Eurofins Air Toxics Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 20-NOV-2015 19:11
End Cal Date : 21-NOV-2015 00:39
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msd11.i/20nov15.b/115z1120vi.m
Cal Date : 23-Nov-2015 12:19 lantonic
Curve Type : Average

Calibration File Names:
Level 1: /chem/msd11.i/20nov15.b/11112003.d
Level 2: /chem/msd11.i/20nov15.b/11112004.d
Level 3: /chem/msd11.i/20nov15.b/11112005.d
Level 4: /chem/msd11.i/20nov15.b/11112006.d
Level 5: /chem/msd11.i/20nov15.b/11112007.d
Level 6: /chem/msd11.i/20nov15.b/11112008.d
Level 7: /chem/msd11.i/20nov15.b/11112009.d
Level 8: /chem/msd11.i/20nov15.b/11112010.d

Compound	1.000 Level 1 / 250.000 Level 7	5.000 Level 2 / 500.000 Level 8	10.000 Level 3	25.000 Level 4	50.000 Level 5	100.000 Level 6	___ RRF	% RSD
1 Propylene	+++++ / +++++	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	+++++
2 Dichlorodifluoromethane/Fr12	+++++ / +++++	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	+++++
3 Freon 114	0.56680 / 0.54487	0.54877 / 0.55840	0.53699	0.61294	0.55232	0.55431	0.55942	4.178
4 Chloromethane	+++++ / +++++	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	+++++
5 Butane	+++++ / +++++	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	+++++
6 Vinyl Chloride	0.64891 / 0.57745	0.45635 / 0.58855	0.54632	0.64555	0.58210	0.59365	0.57986	10.457
7 1,3-Butadiene	0.64224 / 0.47159	0.53704 / 0.46347	0.44112	0.47232	0.45454	0.46939	0.49396	13.405

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Cal Date : 23-Nov-2015 12:19 lantonic
Curve Type : Average

Compound	1.000 Level 1 / 250.000 Level 7	5.000 Level 2 / 500.000 Level 8	10.000 Level 3	25.000 Level 4	50.000 Level 5	100.000 Level 6	RRF	% RSD
8 Bromomethane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
9 Chloroethane	+++++	0.30918	0.30640	0.31227	0.24907	0.26801		
	0.24680	0.26186					0.27909	10.463
10 Isopentane	0.56001	0.56570	0.39995	0.43063	0.36284	0.38298		
	0.37477	0.37750					0.43180	19.321
11 Trichlorofluoromethane/Fr11	0.72030	0.70496	0.66237	0.74047	0.72266	0.73621		
	0.70712	0.72750					0.71520	3.455
12 Vinyl Bromide	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
13 Ethanol	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
14 1,1-Dichloroethene	0.31345	0.31801	0.27121	0.28275	0.26714	0.26744		
	0.27345	0.27079					0.28303	7.346
15 Freon 113	0.41193	0.40457	0.37601	0.41295	0.40391	0.41836		
	0.41458	0.42318					0.40819	3.554
16 Acetone	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
17 Freon123a	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++

Eurofins Air Toxics Inc.

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Cal Date : 23-Nov-2015 12:19 lantonic
Curve Type : Average

Compound	1.000 Level 1 / 250.000 Level 7	5.000 Level 2 / 500.000 Level 8	10.000 Level 3	25.000 Level 4	50.000 Level 5	100.000 Level 6	RRF	% RSD
18 Carbon Disulfide	2.06630	1.75161	2.06591	1.84860	1.50115	1.47591		
	1.42965	1.41969					1.69485	16.297
19 2-Propanol	+++++	+++++	1.34516	1.31297	1.04637	1.08061		
	1.03866	0.95380					1.12960	14.197
20 Pentane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
21 3-Chloropropene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
22 Methylene Chloride	+++++	+++++	0.96204	0.76499	0.59146	0.56545		
	0.53512	0.53559					0.65911	26.011
23 Acrolein	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
24 tert-Butyl-Alcohol	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
25 trans-1,2-Dichloroethene	+++++	0.29531	0.25114	0.26034	0.26057	0.26741		
	0.26350	0.26897					0.26675	5.200
26 MTBE	0.94470	0.81301	1.05178	1.22705	1.07999	1.10217		
	1.03637	1.06308					1.03977	11.595
27 Acrylonitrile	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++

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Compound	1.000 Level 1 / 250.000 Level 7	5.000 Level 2 / 500.000 Level 8	10.000 Level 3	25.000 Level 4	50.000 Level 5	100.000 Level 6	RRF	% RSD
28 Hexane	0.75811	0.69912	0.67187	0.73142	0.65797	0.68207		
	0.65893	0.67075					0.69128	5.238
29 1,1-Dichloroethane	0.71171	0.62812	0.62632	0.76457	0.70971	0.71253		
	0.69695	0.71128					0.69515	6.682
30 Isopropyl ether	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
31 Vinyl Acetate	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
32 Chloroprene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
33 1-Propanol	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
34 2,2-Dichloropropane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
35 t-Butylethyl Ether	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
36 Ethyl Acetate	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
37 cis-1,2-Dichloroethene	0.30717	0.28130	0.26328	0.29782	0.29349	0.29963		
	0.28673	0.29983					0.29116	4.765

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Compound	1.000 Level 1 250.000 Level 7	5.000 Level 2 500.000 Level 8	10.000 Level 3	25.000 Level 4	50.000 Level 5	100.000 Level 6	RRF	% RSD
38 2-Butanone	0.28023 0.24343	0.24689 0.26481	0.23455	0.28008	0.23868	0.25673	0.25568	7.004
39 2-Chloroethyl vinyl ether	+++++ +++++	+++++ +++++	+++++	+++++	+++++	+++++	+++++	+++++
41 1,1-Dichloropropene	+++++ +++++	+++++ +++++	+++++	+++++	+++++	+++++	+++++	+++++
42 Tetrahydrofuran	+++++ +++++	+++++ +++++	+++++	+++++	+++++	+++++	+++++	+++++
43 Octane	+++++ +++++	+++++ +++++	+++++	+++++	+++++	+++++	+++++	+++++
44 Chloroform	0.72914 0.68244	0.71649 0.71585	0.62385	0.72421	0.70772	0.70878	0.70106	4.880
45 1,1,1-Trichloroethane	0.11585 0.14078	0.10448 0.15655	0.12614	0.14313	0.13852	0.14067	0.13326	12.561
46 Cyclohexane	0.15084 0.14356	0.15831 0.15636	0.13821	0.14354	0.14213	0.13988	0.14661	5.184
47 Carbon Tetrachloride	0.10401 0.12885	0.10026 0.14459	0.10620	0.11578	0.12256	0.13061	0.11911	12.885
48 Benzene	+++++ 0.37264	0.42152 0.39087	0.35872	0.43100	0.35626	0.35817	0.38417	8.141

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50 1,2-Dichloroethane	0.11704	0.13361	0.11353	0.12895	0.12892	0.13091		
	0.13417	0.14787					0.12938	8.206
51 2,2,4-Trimethylpentane	0.41767	0.42682	0.40692	0.44248	0.41635	0.42147		
	0.43341	0.45619					0.42766	3.711
52 tert-amyl-Methyl Ether	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
53 Heptane	0.10913	0.10427	0.09433	0.09739	0.10005	0.10074		
	0.10232	0.10959					0.10223	5.211
55 Decane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
56 Trichloroethene	0.14466	0.11549	0.12443	0.13091	0.10547	0.11040		
	0.11278	0.11497					0.11989	10.681
57 Dodecane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
58 Methyl Cyclohexane	0.19791	0.18982	0.17051	0.18263	0.18592	0.18859		
	0.18824	0.20450					0.18852	5.346
59 1,2-Dichloropropane	0.11006	0.08957	0.10231	0.10868	0.10787	0.10916		
	0.10752	0.11812					0.10666	7.654
60 1,4-Dioxane	0.12535	0.07982	0.08082	0.09273	0.08374	0.08427		
	0.08060	0.08544					0.08910	17.070

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Compound	1.000 Level 1 / 250.000 Level 7	5.000 Level 2 / 500.000 Level 8	10.000 Level 3	25.000 Level 4	50.000 Level 5	100.000 Level 6	RRF	% RSD
61 Undecane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
62 Bromodichloromethane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
63 1,3-Dichloropropane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
64 cis-1,3-Dichloropropene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
65 4-Methyl-2-pentanone	0.08123	0.09015	0.08889	0.09414	0.09738	0.09598		
	0.09218	0.09974					0.09246	6.287
67 Toluene	0.47978	0.47105	0.43143	0.47048	0.44203	0.44791		
	0.45145	0.48225					0.45955	4.092
68 1,1,1,2-Tetrachloroethane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
69 trans-1,3-Dichloropropene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
70 1,1,2-Trichloroethane	0.11114	0.09653	0.08894	0.10057	0.09601	0.09818		
	0.09577	0.10728					0.09930	7.069
71 Tetrachloroethene	0.13707	0.12615	0.11521	0.12871	0.13289	0.13468		
	0.13952	0.15527					0.13369	8.649

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Compound	1.000 Level 1 / 250.000 Level 7	5.000 Level 2 / 500.000 Level 8	10.000 Level 3	25.000 Level 4	50.000 Level 5	100.000 Level 6	RRF	% RSD
72 2-Hexanone	0.11827 0.13176	0.11774 0.13851	0.10588	0.11904	0.13932	0.13577	0.12579	9.706
73 Dibromochloromethane	+++++ +++++	+++++ +++++	+++++	+++++	+++++	+++++	+++++	+++++
74 1,2-Dibromoethane	0.11184 0.10763	0.09987 0.13281	0.09563	0.09660	0.11939	0.11952	0.11041	11.834
75 Bromobenzene	+++++ +++++	+++++ +++++	+++++	+++++	+++++	+++++	+++++	+++++
76 1,2,3-Trichloropropane	+++++ +++++	+++++ +++++	+++++	+++++	+++++	+++++	+++++	+++++
77 2-Chlorotoluene	+++++ +++++	+++++ +++++	+++++	+++++	+++++	+++++	+++++	+++++
78 4-Chlorotoluene	+++++ +++++	+++++ +++++	+++++	+++++	+++++	+++++	+++++	+++++
80 tert-Butylbenzene	+++++ +++++	+++++ +++++	+++++	+++++	+++++	+++++	+++++	+++++
81 Chlorobenzene	0.32579 0.30932	0.29751 0.33928	0.29002	0.30920	0.31417	0.31689	0.31277	4.933
82 Ethyl Benzene	0.15886 0.16309	0.15073 0.18165	0.14435	0.15970	0.16697	0.16598	0.16142	6.942

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83 sec-Butylbenzene	+++++ +++++	+++++ +++++	+++++	+++++	+++++	+++++	+++++	+++++
84 m,p-Xylene	0.20806 0.19623	0.20607 0.21706	0.17938	0.21095	0.20522	0.20151	0.20306	5.604
85 p-Cymene	+++++ +++++	+++++ +++++	+++++	+++++	+++++	+++++	+++++	+++++
86 1,2,3-Trimethylbenzene	+++++ +++++	+++++ +++++	+++++	+++++	+++++	+++++	+++++	+++++
87 Butylbenzene	+++++ +++++	+++++ +++++	+++++	+++++	+++++	+++++	+++++	+++++
88 o-Xylene	0.40230 0.39152	0.38762 0.45377	0.38830	0.42544	0.40769	0.41013	0.40835	5.484
89 Styrene	0.62188 0.64305	0.61236 0.74927	0.59192	0.66691	0.66232	0.67063	0.65229	7.399
90 Bromoform	+++++ +++++	+++++ +++++	+++++	+++++	+++++	+++++	+++++	+++++
91 Cumene	1.01271 0.99655	1.02127 1.16657	0.94886	1.02622	1.03778	1.05923	1.03365	6.069
93 1,2-Dibromo-3-Chloropropane	+++++ +++++	+++++ +++++	+++++	+++++	+++++	+++++	+++++	+++++

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94 1,1,2,2-Tetrachloroethane	0.32035 0.37000	0.34420 0.44153	0.25050	0.28043	0.39290	0.39291	0.34910	18.151
95 1,3,5-Trichlorobenzene	+++++ +++++	+++++ +++++	+++++	+++++	+++++	+++++	+++++	+++++
96 Propylbenzene	1.16116 1.14238	1.13662 1.35162	1.10223	1.21561	1.21148	1.23234	1.19418	6.528
97 4-Ethyltoluene	0.31209 0.30234	0.31722 0.36944	0.29485	0.33159	0.32368	0.32787	0.32239	7.057
98 1,3,5-Trimethylbenzene	0.43352 0.41510	0.42532 0.50881	0.39069	0.44920	0.44851	0.45048	0.44021	7.827
99 1,2,3-Trichlorobenzene	+++++ +++++	+++++ +++++	+++++	+++++	+++++	+++++	+++++	+++++
100 1,2,4-Trimethylbenzene	0.40556 0.38317	0.38065 0.47393	0.38862	0.43416	0.41832	0.43211	0.41456	7.693
101 1,3-Dichlorobenzene	0.49491 0.49214	0.48635 0.59984	0.48525	0.54219	0.52295	0.54985	0.52169	7.766
102 1,4-Dichlorobenzene	0.48952 0.48459	0.46134 0.59848	0.45821	0.54190	0.51456	0.54930	0.51224	9.475
103 Phenol	+++++ +++++	+++++ +++++	+++++	+++++	+++++	+++++	+++++	+++++

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Compound	1.000 Level 1 / 250.000 Level 7	5.000 Level 2 / 500.000 Level 8	10.000 Level 3	25.000 Level 4	50.000 Level 5	100.000 Level 6	RRF	% RSD
217 2-Methylphenol	+++++ / +++++	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	+++++
218 3-Methylphenol/4-Methylphenol	+++++ / +++++	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	+++++
104 alpha-Chlorotoluene	+++++ / +++++	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	+++++
105 1,2-Dichlorobenzene	0.46848 / 0.45484	0.47787 / 0.56508	0.47347	0.54179	0.50499	0.51765	0.50052	7.754
106 1,2,4-Trichlorobenzene	0.25326 / 0.28159	0.29393 / 0.40678	0.33533	0.42634	0.37400	0.39873	0.34624	18.682
107 Hexachlorobutadiene	0.15799 / 0.15018	0.15566 / 0.24312	0.21215	0.23524	0.21459	0.22408	0.19913	19.215
109 Naphthalene	1.95047 / 1.33666	1.38005 / +++++	1.29508	1.51447	1.20097	1.23858	1.41661	18.119
110 2-Methylnaphthalene	1.21383 / 0.88572	0.88797 / +++++	0.85586	0.81836	0.84481	0.82532	0.90455	15.367
111 1-Methylnaphthalene	1.31032 / 0.81235	0.91407 / +++++	0.81543	0.77609	0.79145	0.77276	0.88464	21.894
112 Acenaphthylene	+++++ / 1.56176	1.45380 / +++++	1.39679	1.44062	1.38156	1.31379	1.42472	5.858

Eurofins Air Toxics Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 20-NOV-2015 19:11
End Cal Date : 21-NOV-2015 00:39
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msd11.i/20nov15.b/115z1120vi.m
Cal Date : 23-Nov-2015 12:19 lantonic
Curve Type : Average

Compound	1.000 Level 1 / 250.000 Level 7	5.000 Level 2 / 500.000 Level 8	10.000 Level 3	25.000 Level 4	50.000 Level 5	100.000 Level 6	RRF	% RSD	
113 Acenaphthene	+++++	0.72695	0.60628	0.55303	0.75038	0.72055			
	0.69406	+++++					0.67521	11.552	
114 Fluorene	+++++	0.96404	0.44189	0.37380	0.89191	0.73869			
	0.60085	+++++					0.66853	35.710	<-
115 Phenanthrene	+++++	+++++	2.38444	1.41746	1.67176	1.58235			
	1.43102	+++++					1.69741	23.478	
116 Anthracene	+++++	+++++	2.33645	1.38039	1.73992	1.72710			
	1.69190	+++++					1.77515	19.542	
117 Fluoranthene	+++++	+++++	1.73675	1.43278	2.27106	1.53268			
	1.06700	+++++					1.60805	27.554	
118 Pyrene	+++++	+++++	1.96173	1.54367	2.43090	1.73210			
	1.09998	+++++					1.75368	28.136	
$ 49 1,2-Dichloroethane-d4	+++++	0.11241	0.07789	0.09569	0.09383	0.09731			
	0.09746	+++++					0.09576	11.490	
$ 66 Toluene-d8	+++++	0.40380	0.34032	0.39476	0.37093	0.38608			
	0.37712	+++++					0.37883	5.877	
$ 108 Naphthalene-d8	+++++	1.42605	1.08315	1.40234	1.20837	1.27649			
	1.34833	+++++					1.29079	10.051	

Calibration History

Method : /chem/msd11.i/20nov15.b/115z1120vi.m
Start Cal Date: 20-NOV-2015 19:11
End Cal Date : 21-NOV-2015 00:39

Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 1 , Cal Amount: 1.00000		
20-NOV-2015 19:11	VOC+naphsnoSS	/chem/msd11.i/20nov15.b/11112003.d

Injection Date	Sublist	Calibration File
Cal Level: 2 , Cal Amount: 5.00000		
20-NOV-2015 19:59	VOC+PAH_ICAL	/chem/msd11.i/20nov15.b/11112004.d

Injection Date	Sublist	Calibration File
Cal Level: 3 , Cal Amount: 10.00000		
20-NOV-2015 20:46	VOC+PAH_ICAL	/chem/msd11.i/20nov15.b/11112005.d

Injection Date	Sublist	Calibration File
Cal Level: 4 , Cal Amount: 25.00000		
20-NOV-2015 21:33	VOC+PAH_ICAL	/chem/msd11.i/20nov15.b/11112006.d

Injection Date	Sublist	Calibration File
Cal Level: 5 , Cal Amount: 50.00000		
20-NOV-2015 22:19	VOC+PAH_ICAL	/chem/msd11.i/20nov15.b/11112007.d

Injection Date	Sublist	Calibration File
Cal Level: 6 , Cal Amount: 100.00000		
20-NOV-2015 23:06	VOC+PAH_ICAL	/chem/msd11.i/20nov15.b/11112008.d

Injection Date	Sublist	Calibration File
Cal Level: 7 , Cal Amount: 250.00000		
20-NOV-2015 23:53	VOC+PAH_ICAL	/chem/msd11.i/20nov15.b/11112009.d

Injection Date	Sublist	Calibration File
Cal Level: 8 , Cal Amount: 500.00000		

```
|21-NOV-2015 00:39 |VOC_ICALnoSS     |/chem/msd11.i/20nov15.b/11112010.d      |
+------------------+-----------------+----------------------------------------+


Continuing Calibration
Ccal Level Mode: GLOBAL LEVEL 5
+------------------+-----------------+----------------------------------------+
| Ccal Level: 5 , Ccal Amount: 50.000                                          |
+==============================================================================+
|20-NOV-2015 22:19 |VOC+PAH_ICAL     |/chem/msd11.i/20nov15.b/11112007.d      |
+------------------+-----------------+----------------------------------------+
| Ccal Level: 5 , Ccal Amount: 50.000                                          |
+==============================================================================+
|20-NOV-2015 22:19 |VOC+PAH_ICAL     |/chem/msd11.i/20nov15.b/11112007a.d     |
+------------------+-----------------+----------------------------------------+
```

Eurofins Air Toxics Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 20-NOV-2015 19:11
End Cal Date : 21-NOV-2015 00:39
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msd11.i/20nov15.b/115z1120vi.m
Cal Date : 23-Nov-2015 12:13 lantonic
Curve Type : Average

Calibration File Names:
Level 1: /chem/msd11.i/20nov15.b/11112003.d
Level 2: /chem/msd11.i/20nov15.b/11112004.d
Level 3: /chem/msd11.i/20nov15.b/11112005.d
Level 4: /chem/msd11.i/20nov15.b/11112006.d
Level 5: /chem/msd11.i/20nov15.b/11112007.d
Level 6: /chem/msd11.i/20nov15.b/11112008.d
Level 7: /chem/msd11.i/20nov15.b/11112009.d
Level 8: /chem/msd11.i/20nov15.b/11112010.d

LA 11/23/15
TAR 11-24-15

Compound	1.000 Level 1 / 250.000 Level 7	5.000 Level 2 / 500.000 Level 8	10.000 Level 3	25.000 Level 4	50.000 Level 5	100.000 Level 6	RRF	% RSD
3 Freon 114	0.56680	0.54877	0.53699	0.61294	0.55232	0.55431		
	0.54487	0.55840					0.55942	4.178
6 Vinyl Chloride	0.64891	0.45635	0.54632	0.64555	0.58210	0.59365		
	0.57745	0.58855					0.57986	10.457
7 1,3-Butadiene	0.64224	0.53704	0.44112	0.47232	0.45454	0.46939		
	0.47159	0.46347					0.49396	13.405
9 Chloroethane	+++++	0.30918	0.30640	0.31227	0.24907	0.26801		
	0.24680	0.26186					0.27909	10.463
10 Isopentane	0.56001	0.56570	0.39995	0.43063	0.36284	0.38298		
	0.37477	0.37750					0.43180	19.321
11 Trichlorofluoromethane/Fr11	0.72030	0.70496	0.66237	0.74047	0.72266	0.73621		
	0.70712	0.72750					0.71520	3.455
15 Freon 113	0.41193	0.40457	0.37601	0.41295	0.40391	0.41836		
	0.41458	0.42318					0.40819	3.554

Initial Calibration Narrative

An 8 point calibration curve was performed on instrument MSD-18 using VI sorbent media on November 20, 2015 for VOC and PAH compounds.

- The VOC compounds were spiked onto the VI tubes using the ATIS using Supelco's technique.
- The PAH compounds were spiked directly onto the tube.
- ICAL name: 115z1120vi.m
- Units: in ng
- Markes Unity Method: VI.mth
- Chemstation Method: TO17+PAH.m
- ICV file: ~~18111120.d~~ 11112015 GA 12/10/15
  - Acenaphthylene recovered at 133%
  - Fluorene recovered at 59%
  - Pyene recovered at 57%.
- Fluorene had a 36%RSD.
- **The RL for trans-1,2-TCE was raised from 4.0ng to 8.0ng due to poor peak shape at the lowest Level 1.**
- **Due to unacceptable desorption efficiencies, Fluoranthene and Pyrene will be used for qualitative purposes only.**
- MDL: 11/23/15

RL for VC must be raised from 2.6 to 5.1ng due to MDL study.

Eurofin Air Toxics Run Log for MSD-11 Method TO17
BFB verification of 176/174 Ratio: (87760/92096) x100% = 95.29%
Standard ID 2299-835 Exp. date 3/10/16
Bromochloromethane 61766 File ID: 11112015
1,4-Difluorobenzene 242319
Chlorobenzene-d5 224302
Bromofluorobenzene 161670
Verification CCV IS vs ICAL mid-point (-40%) Initial: LA
Calculation Check for Compound benzene :

ngs of compound = (Area of compound / Area of IS) * (Concentration of IS / RRF) = (204284 / 190680) * (23.0 / 0.38417) = 64.141ng

Method: 1152112OVI.m ~~1151~~ 1152112OVI.m LA 11/23/15

Data Directory: C:\msdchem\1\data\20NOV15.B\

Use	SampleName		Tube pos.	Injection Time	Init.
1) ✓	11112001.D Comments ;BFB;BFB	2299-835, 36ng (3/10/16)	1	20 Nov 2015 17:37	LA
2) ✓	11112002.D Comments ;System Blank	2299-835, 36ng (3/10/16)	1	20 Nov 2015 18:24	
3) ✓	11112003.D Comments ;VI VOC+naphs ICAL, no surr, L	2516-201 (12/10/15);2595-	11	20 Nov 2015 19:11	
4) ✓	11112004.D Comments ;VI VOC+PAH ICAL, L2	2516-201 (12/10/15);2595-	12	20 Nov 2015 19:59	
5) ✓	11112005.D Comments ;VI VOC+PAH ICAL, L3	2516-201 (12/10/15);2595-	13	20 Nov 2015 20:46	
6) ✓	11112006.D Comments ;VI VOC+PAH ICAL, L4	2516-201 (12/10/15);2595-	14	20 Nov 2015 21:33	
7) ✓	11112007.D Comments ;VI VOC+PAH ICAL, L5	2516-201 (12/10/15);2595-	15	20 Nov 2015 22:19	
8) ✓	11112008.D Comments ;VI VOC+PAH ICAL, L6	2516-201 (12/10/15);2595-	16	20 Nov 2015 23:06	
9) ✓	11112009.D Comments ;VI VOC+PAH ICAL, L7	2516-201 (12/10/15);2595-	17	20 Nov 2015 23:53	
10) ✓	11112010.D Comments ;VI VOC ICAL, no surr, L8	2516-201 (12/10/15)	18	21 Nov 2015 00:39	
11) ✓	11112011.D Comments ;Blank		11	21 Nov 2015 1:25	
12) ✓	11112012.D Comments ;DE PAH 100ng	fails for Phenanthrene + 3 heavies	16	21 Nov 2015 2:11	
13) ✓	11112013.D Comments ;DE PAH 250ng		17	21 Nov 2015 2:57	
14) ✓	11112014.D Comments ;DE VOC 100ng		18	21 Nov 2015 3:43	
15) ✓	11112015.D Comments ~~Blank~~/LCS LA 11/23/15	alenaphthene, Fluorene + Pyrene out. 2516-203 (2/17/16);2595-2	19	21 Nov 2015 4:28	
16) ✓	11112016.D Comments ~~Blank/LCS~~ BLK. LA 11/23/15	~~2516-203 (2/17/16);2595-2~~ LA 11/23/15	20	21 Nov 2015 5:14	
17) ✓	11112017.D Comments VI Diesel ICAL 1000	2595-242-1000, 1.0uL (1/7	21	21 Nov 2015 6	

of ppbv to ng based on amount spiked onto TO-17 tube

Mass (ng) = Amount (ppbv) * (MW/24.45)* Vol spiked (mL) * (1L/1000 mL)

Enter working standard #1 concentration (ppbv):			200							
Enter working standard #2 concentration (ppbv):			1000							
Working Standard (Enter 1 or 2)		2	2	2	2	2	2	2	2	2
Volume spiked (mL) =>		0.5	1	2	3	6	20	50	100	200
Compound	**MW**	**Level 0**	**Level 1**	**Level 2**	**Level 3**	**Level 4**	**Level 5**	**Level 6**	**Level 7**	**Level 8**
Propylene	42.08	0.86	1.72	3.44	5.16	10.3	34.4	86.1	172	344
Freon 12	120.92	2.47	4.95	9.89	14.84	29.7	98.9	247.3	495	989
Freon 114	170.93	3.50	6.99	13.98	20.97	41.9	139.8	349.6	699	1398
Chloromethane	50.49	1.03	2.07	4.13	6.20	12.4	41.3	103.3	207	413
Butane	58.12	1.19	2.38	4.75	7.13	14.3	47.5	118.9	238	475
Vinyl Chloride	62.5	1.28	2.56	5.11	7.67	15.3	51.1	127.8	256	511
1,3-Butadiene	54.09	1.11	2.21	4.42	6.64	13.3	44.2	110.6	221	442
Bromomethane	94.95	1.94	3.88	7.77	11.65	23.3	77.7	194.2	388	777
Chloroethane	64.52	1.32	2.64	5.28	7.92	15.8	52.8	131.9	264	528
Isopentane	72.15	1.48	2.95	5.90	8.85	17.7	59.0	147.5	295	590
Freon 11	137.37	2.81	5.62	11.24	16.86	33.7	112.4	280.9	562	1124
Ethanol	46.07	0.94	1.88	3.77	5.65	11.3	37.7	94.2	188	377
1,1-Dichloroethene	96.95	1.98	3.97	7.93	11.90	23.8	79.3	198.3	397	793
Freon 113	187.39	3.83	7.66	15.33	22.99	46.0	153.3	383.2	766	1533
Carbon disulfide	76.14	1.56	3.11	6.23	9.34	18.7	62.3	155.7	311	623
Acetone	58.08	1.19	2.38	4.75	7.13	14.3	47.5	118.8	238	475
3-Chloropropene	76.53	1.57	3.13	6.26	9.39	18.8	62.6	156.5	313	626
2-Propanol	60.09	1.23	2.46	4.92	7.37	14.7	49.2	122.9	246	492
Methylene Chloride	84.94	1.74	3.47	6.95	10.42	20.8	69.5	173.7	347	695
trans-1,2-Dichloroethene	96.94	1.98	3.96	7.93	11.89	23.8	79.3	198.2	396	793
MTBE	88.15	1.80	3.61	7.21	10.82	21.6	72.1	180.3	361	721
tert-Butyl alcohol	74.12	1.52	3.03	6.06	9.09	18.2	60.6	151.6	303	606
Hexane	86.17	1.76	3.52	7.05	10.57	21.1	70.5	176.2	352	705
1,1-dichloroethane	98.97	2.02	4.05	8.10	12.14	24.3	81.0	202.4	405	810
Isopropyl ether	102.18	2.09	4.18	8.36	12.54	25.1	83.6	209.0	418	836
Vinyl acetate	86.09	1.76	3.52	7.04	10.56	21.1	70.4	176.1	352	704
t-butylethyl ether	102.17	2.09	4.18	8.36	12.54	25.1	83.6	208.9	418	836
cis-1,2-Dichloroethene	96.94	1.98	3.96	7.93	11.89	23.8	79.3	198.2	396	793
2-butanone	72.1	1.47	2.95	5.90	8.85	17.7	59.0	147.4	295	590
Tetrahydrofuran	72.1	1.47	2.95	5.90	8.85	17.7	59.0	147.4	295	590

Chloroform	119.39	2.44	4.88	9.77	14.65	29.3	97.7	244.2	488	977
Cyclohexane	84.16	1.72	3.44	6.88	10.33	20.7	68.8	172.1	344	688
1,1,1-Trichloroethane	133.42	2.73	5.46	10.91	16.37	32.7	109.1	272.8	546	1091
Carbon tetrachloride	153.84	3.15	6.29	12.58	18.88	37.8	125.8	314.6	629	1258
2,2,4-Trimethylpentane	114.23	2.34	4.67	9.34	14.02	28.0	93.4	233.6	467	934
Benzene	78.11	1.60	3.19	6.39	9.58	19.2	63.9	159.7	319	639
tert-amyl-methyl ether	102.18	2.09	4.18	8.36	12.54	25.1	83.6	209.0	418	836
1,2-Dichloroethane	98.96	2.02	4.05	8.09	12.14	24.3	80.9	202.4	405	809
Heptane	100.2	2.05	4.10	8.20	12.29	24.6	82.0	204.9	410	820
Trichloroethene	131.4	2.69	5.37	10.75	16.12	32.2	107.5	268.7	537	1075
Methylcyclohexane	98.19	2.01	4.02	8.03	12.05	24.1	80.3	200.8	402	803
1,2-Dichloropropane	112.99	2.31	4.62	9.24	13.86	27.7	92.4	231.1	462	924
1,4-Dioxane	88.11	1.80	3.60	7.21	10.81	21.6	72.1	180.2	360	721
Bromodichloromethane	163.83	3.35	6.70	13.40	20.10	40.2	134.0	335.0	670	1340
cis-1,3-Dichloropropene	110.97	2.27	4.54	9.08	13.62	27.2	90.8	226.9	454	908
4-Methyl-2-pentanone	100.16	2.05	4.10	8.19	12.29	24.6	81.9	204.8	410	819
Toluene	92.13	1.88	3.77	7.54	11.30	22.6	75.4	188.4	377	754
trans-1,3-Dichloropropene	110.97	2.27	4.54	9.08	13.62	27.2	90.8	226.9	454	908
1,1,2-Trichloroethane	133.42	2.73	5.46	10.91	16.37	32.7	109.1	272.8	546	1091
Tetrachloroethene	165.85	3.39	6.78	13.57	20.35	40.7	135.7	339.2	678	1357
2-Hexanone	100.16	2.05	4.10	8.19	12.29	24.6	81.9	204.8	410	819
Dibromochloromethane	208.29	4.26	8.52	17.04	25.56	51.1	170.4	426.0	852	1704
1,2-Dibromoethane	187.861	3.84	7.68	15.37	23.05	46.1	153.7	384.2	768	1537
Chlorobenzene	112.56	2.30	4.60	9.21	13.81	27.6	92.1	230.2	460	921
ethyl benzene	106.16	2.17	4.34	8.68	13.03	26.1	86.8	217.1	434	868
m,p-Xylene	106.17	2.17	4.34	8.68	13.03	26.1	86.8	217.1	434	868
o-Xylene	106.17	2.17	4.34	8.68	13.03	26.1	86.8	217.1	434	868
Styrene	104.14	2.13	4.26	8.52	12.78	25.6	85.2	213.0	426	852
Bromoform	252.77	5.17	10.34	20.68	31.01	62.0	206.8	516.9	1034	2068
cumene	120.19	2.46	4.92	9.83	14.75	29.5	98.3	245.8	492	983
1,1,2,2-Tetrachloroethane	167.86	3.43	6.87	13.73	20.60	41.2	137.3	343.3	687	1373
Propylbenzene	120.2	2.46	4.92	9.83	14.75	29.5	98.3	245.8	492	983
4-Ethyltoluene	120.2	2.46	4.92	9.83	14.75	29.5	98.3	245.8	492	983
1,3,5-Trimethylbenzene	120.2	2.46	4.92	9.83	14.75	29.5	98.3	245.8	492	983
1,2,4-Trimethylbenzene	120.2	2.46	4.92	9.83	14.75	29.5	98.3	245.8	492	983
1,3-Dichlorobenzene	147.01	3.01	6.01	12.03	18.04	36.1	120.3	300.6	601	1203
1,4-Dichlorobenzene	147.01	3.01	6.01	12.03	18.04	36.1	120.3	300.6	601	1203
alpha-Chlorotoluene	126.58	2.59	5.18	10.35	15.53	31.1	103.5	258.9	518	1035
1,2-Dichlorobenzene	147.01	3.01	6.01	12.03	18.04	36.1	120.3	300.6	601	1203
1,2,4-Trichlorobenzene	181.46	3.71	7.42	14.84	22.27	44.5	148.4	371.1	742	1484

Hexachlorobutadiene	260.76	5.33	10.67	21.33	32.00	64.0	213.3	533.3	1067	2133
Naphthalene	128	0.26	0.52	1.05	1.57	3.14	10.47	26.18	52.35	104.70

Compound	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6	Level 7	Level 8
Naphthalene	0.50	1.0	5.0	10	50	25	100	250
2-Methylnaphthalene	0.50	1.0	5.0	10	50	25	100	250
1-Methylnaphthalene	0.50	1.0	5.0	10	50	25	100	250
Acenaphthylene	0.50	1.0	5.0	10	50	25	100	250
Acenaphthene	0.50	1.0	5.0	10	50	25	100	250
Fluorene	0.50	1.0	5.0	10	50	25	100	250
Phenanthrene	0.50	1.0	5.0	10	50	25	100	250
Anthracene	0.50	1.0	5.0	10	50	25	100	250
Fluoranthene	0.50	1.0	5.0	10	50	25	100	250
Pyrene	0.50	1.0	5.0	10	50	25	100	250

CA 11/23/15

Mass (ng) = Amount (ppbv) * (MW/24.45)* Vol spiked (mL) * (1L/1000 mL)

Enter IS/Surr standard concentration (ppbv): 1000

Enter spike volume (mL): 5

Internal Standards/Surrogates	MW	Mass (ng)
Bromofluorobenzene	174.998	36
Bromochloromethane	129.39	26
1,4-Difluorobenzene	114.0928	23
Chlorobenzene-d5	117.56	24

Field Surrogates	Mass (ng)
1,2-Dichloroethane-d4	25
Toluene-d8	25
Naphthalene-d8	25

Eurofins Air Toxics Inc.

EPA Method TO-17 GC/MS

Data file : /chem/msd11.i/20nov15.b/11112015.d
Lab Smp Id: LCS Client Smp ID: LCS
Inj Date : 21-NOV-2015 04:28
Operator : LA Inst ID: msd11.i
Smp Info : ;VI VOC+PAH ICV;LCS
Misc Info : 2516-203 (2/17/16);2595-246-50 (1/21/16)
Comment :
Method : /chem/msd11.i/20nov15.b/115z1120vi.m
Meth Date : 23-Nov-2015 10:03 lantonic Quant Type: ISTD
Cal Date : 21-NOV-2015 00:39 Cal File: 11112010.d
Als bottle: 19 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: VOC+PAH_ICAL.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (ng)	FINAL (NG)	TARGET RANGE	RATIO
* 40 Bromochloromethane					CAS #: 74-97-5		
6.803	6.796 (1.000)	130	51336	26.0000		80.00- 120.00	100.00
6.803	6.796 (1.000)	128	39622			49.46- 109.46	77.18
6.796	6.796 (1.000)	49	66667			96.52- 156.52	129.86
* 54 1,4-Difluorobenzene					CAS #: 540-36-3		
8.200	8.193 (1.000)	114	190680	23.0000		80.00- 120.00	100.00
8.200	8.193 (1.000)	88	26242			0.00- 44.32	13.76
* 79 Chlorobenzene-d5					CAS #: 3114-55-4		
11.588	11.595 (1.000)	117	182558	24.0000		80.00- 120.00	100.00
11.588	11.595 (1.000)	82	88000			20.08- 80.08	48.20
* 92 Bromofluorobenzene					CAS #: 460-00-4		
13.042	13.049 (1.000)	174	126109	36.0000		80.00- 120.00	100.00
13.042	13.049 (1.000)	95	130288			68.42- 128.42	103.31
13.042	13.049 (1.000)	176	124108			64.69- 124.69	98.41
$ 49 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
7.598	7.598 (0.927)	65	18665	23.5097	23.510	80.00- 120.00	100.00

RT	EXP RT	(REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (ng)	FINAL (NG)	TARGET RANGE	RATIO
$ 49 1,2-Dichloroethane-d4 (continued)								
7.598	7.598	(0.927)	67	9697			25.09- 85.09	51.95
$ 66 Toluene-d8						CAS #: 2037-26-5		
9.890	9.890	(0.853)	98	64353	22.3321	22.332	80.00- 120.00	100.00
9.890	9.890	(0.853)	70	6638			0.00- 41.37	10.31
9.890	9.890	(0.853)	100	42047			33.98- 93.98	65.34
$ 108 Naphthalene-d8						CAS #: 1146-65-2		
17.254	17.254	(1.323)	136	108199	23.9290	23.929	80.00- 120.00	100.00
17.254	17.254	(1.323)	108	8578			0.00- 38.36	7.93
3 Freon 114						CAS #: 76-14-2		
1.867	1.868	(0.274)	135	164202	148.658	148.66	80.00- 120.00	100.00
1.867	1.861	(0.274)	137	52834			2.94- 62.94	32.18
6 Vinyl Chloride						CAS #: 75-01-4		
2.061	2.061	(0.303)	62	60981	53.2624	53.262	80.00- 120.00	100.00
2.054	2.061	(0.302)	64	21006			1.67- 61.67	34.45
7 1,3-Butadiene						CAS #: 106-99-0		
2.097	2.097	(0.308)	54	40205	41.2229	41.223	80.00- 120.00	100.00
2.097	2.097	(0.308)	39	51367			88.98- 148.98	127.76
9 Chloroethane						CAS #: 75-00-3		
2.569	2.570	(0.378)	64	28966	52.5657	52.566	80.00- 120.00	100.00
2.569	2.570	(0.378)	66	9185			2.82- 62.82	31.71
2.562	2.570	(0.377)	49	8196			1.12- 61.12	28.30
10 Isopentane						CAS #: 78-78-4		
2.670	2.670	(0.392)	57	47576	55.8032	55.803	80.00- 120.00	100.00
2.670	2.670	(0.392)	43	73536			125.87- 185.87	154.57
11 Trichlorofluoromethane/Fr11						CAS #: 75-69-4		
2.892	2.892	(0.425)	101	163497	115.780	115.78	80.00- 120.00	100.00
2.892	2.892	(0.425)	103	106856			34.96- 94.96	65.36
15 Freon 113						CAS #: 76-13-1		
3.637	3.637	(0.535)	151	119454	148.216	148.22	80.00- 120.00	100.00
3.630	3.637	(0.534)	153	77777			35.10- 95.10	65.11
3.630	3.630	(0.534)	101	137683			84.04- 144.04	115.26
14 1,1-Dichloroethene						CAS #: 75-35-4		
3.601	3.601	(0.529)	98	42895	76.7586	76.758	80.00- 120.00	100.00
3.594	3.601	(0.528)	96	67756			126.05- 186.05	157.96
3.601	3.601	(0.529)	61	111531			223.83- 283.83	260.01

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (ng)	FINAL (NG)	TARGET RANGE	RATIO
18 Carbon Disulfide					CAS #: 75-15-0		
3.909	3.909 (0.575)	76	168916	50.4766	50.476	80.00- 120.00	100.00
19 2-Propanol					CAS #: 67-63-0		
3.873	3.873 (0.569)	45	109507	49.0987	49.099	80.00- 120.00	100.00
3.880	3.866 (0.570)	43	19907			0.00- 50.22	18.18
3.873	3.888 (0.569)	59	2786			0.00- 33.71	2.54
22 Methylene Chloride					CAS #: 75-09-2		
4.396	4.396 (0.646)	49	84011	64.5551	64.555	80.00- 120.00	100.00
4.396	4.396 (0.646)	84	57734			41.05- 101.05	68.72
4.403	4.403 (0.647)	51	25854			0.46- 60.46	30.77
25 trans-1,2-Dichloroethene					CAS #: 156-60-5		
4.890	4.898 (0.719)	98	35391	67.1963	67.196	80.00- 120.00	100.00
4.890	4.898 (0.719)	61	79308			190.70- 250.70	224.09
4.890	4.891 (0.719)	96	55146			126.37- 186.37	155.82
26 MTBE					CAS #: 1634-04-4		
4.883	4.891 (0.718)	73	157122	76.5335	76.533	80.00- 120.00	100.00
4.876	4.883 (0.717)	57	38080			0.00- 53.50	24.24
4.883	4.891 (0.718)	41	40522			0.00- 54.24	25.79
28 Hexane					CAS #: 110-54-3		
5.392	5.385 (0.793)	57	95119	69.6890	69.689	80.00- 120.00	100.00
5.385	5.392 (0.792)	43	65417			37.71- 97.71	68.77
5.377	5.392 (0.790)	86	14638			0.00- 45.83	15.39
29 1,1-Dichloroethane					CAS #: 75-34-3		
5.607	5.607 (0.824)	63	115396	84.0745	84.074	80.00- 120.00	100.00
5.607	5.607 (0.824)	65	36286			1.45- 61.45	31.44
37 cis-1,2-Dichloroethene					CAS #: 156-59-2		
6.473	6.466 (0.952)	98	49582	86.2479	86.248	80.00- 120.00	100.00
6.466	6.466 (0.950)	96	77592			126.86- 186.86	156.49
6.466	6.466 (0.950)	61	101563			171.58- 231.58	204.84
38 2-Butanone					CAS #: 78-93-3		
6.452	6.452 (0.948)	72	22568	44.7049	44.705	80.00- 120.00	100.00(a)
6.452	6.452 (0.948)	43	102893			419.83- 479.83	455.92
6.452	6.452 (0.948)	57	8345			2.35- 62.35	36.98
44 Chloroform					CAS #: 67-66-3		
6.968	6.961 (1.024)	83	125153	90.4144	90.414	80.00- 120.00	100.00
6.968	6.961 (1.024)	85	85882			35.12- 95.12	68.62

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (ng)	FINAL (NG)	TARGET RANGE	RATIO
46 Cyclohexane					CAS #: 110-82-7		
7.254	7.254 (0.885)	84	86008	70.7640	70.764	80.00- 120.00	100.00
7.254	7.247 (0.885)	56	106905			91.54- 151.54	124.30
7.254	7.254 (0.885)	41	68153			46.84- 106.84	79.24
45 1,1,1-Trichloroethane					CAS #: 71-55-6		
7.161	7.154 (0.873)	97	127962	115.821	115.82	80.00- 120.00	100.00
7.161	7.154 (0.873)	99	85226			35.10- 95.10	66.60
47 Carbon Tetrachloride					CAS #: 56-23-5		
7.369	7.362 (0.899)	119	134404	136.113	136.11	80.00- 120.00	100.00
7.369	7.362 (0.899)	117	141169			73.73- 133.73	105.03
51 2,2,4-Trimethylpentane					CAS #: 540-84-1		
7.813	7.806 (0.953)	57	343707	96.9411	96.941	80.00- 120.00	100.00
7.813	7.806 (0.953)	56	115183			1.98- 61.98	33.51
7.813	7.806 (0.953)	41	108138			0.94- 60.94	31.46
48 Benzene					CAS #: 71-43-2		
7.619	7.612 (0.929)	78	204284	64.1411	64.141	80.00- 120.00	100.00
7.619	7.612 (0.929)	77	48301			0.00- 53.25	23.64
50 1,2-Dichloroethane					CAS #: 107-06-2		
7.698	7.691 (0.939)	62	89485	83.4295	83.430	80.00- 120.00	100.00
7.698	7.691 (0.939)	64	27765			1.81- 61.81	31.03
53 Heptane					CAS #: 142-82-5		
8.056	8.057 (0.983)	71	69937	82.5218	82.522	80.00- 120.00	100.00
8.064	8.057 (0.983)	43	139908			156.82- 216.82	200.05
8.064	8.057 (0.983)	57	71244			66.52- 126.52	101.87
56 Trichloroethene					CAS #: 79-01-6		
8.457	8.458 (1.031)	95	101084	101.701	101.70	80.00- 120.00	100.00
8.457	8.458 (1.031)	130	111873			82.18- 142.18	110.67
8.457	8.458 (1.031)	97	64977			35.46- 95.46	64.28
58 Methyl Cyclohexane					CAS #: 108-87-2		
8.737	8.730 (1.066)	83	126881	81.1843	81.184	80.00- 120.00	100.00
8.737	8.737 (1.066)	98	59562			16.90- 76.90	46.94
8.737	8.730 (1.066)	55	108090			52.37- 112.37	85.19
59 1,2-Dichloropropane					CAS #: 78-87-5		
8.758	8.751 (1.068)	63	84956	96.0740	96.074	80.00- 120.00	100.00
8.758	8.751 (1.068)	62	59869			38.03- 98.03	70.47
8.744	8.744 (1.066)	41	118719			105.71- 165.71	139.74

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (ng)	FINAL (NG)	TARGET RANGE	RATIO
60 1,4-Dioxane					CAS #: 123-91-1		
8.851	8.844 (1.079)	88	47443	64.2293	64.229	80.00- 120.00	100.00
8.851	8.844 (1.079)	58	33488			37.98- 97.98	70.59
8.844	8.844 (1.079)	57	12806			0.00- 54.83	26.99
65 4-Methyl-2-pentanone					CAS #: 108-10-1		
9.754	9.754 (1.190)	58	68025	88.7416	88.742	80.00- 120.00	100.00
9.754	9.754 (1.190)	43	208258			254.63- 314.63	306.15
9.754	9.754 (1.190)	85	26552			8.74- 68.74	39.03
67 Toluene					CAS #: 108-88-3		
9.969	9.969 (0.860)	91	263940	75.5064	75.506	80.00- 120.00	100.00
9.969	9.969 (0.860)	92	150281			29.25- 89.25	56.94
70 1,1,2-Trichloroethane					CAS #: 79-00-5		
10.477	10.470 (1.278)	97	89977	109.291	109.29	80.00- 120.00	100.00
10.477	10.470 (1.278)	99	56590			34.29- 94.29	62.89
10.477	10.470 (1.278)	83	77117			57.72- 117.72	85.71
71 Tetrachloroethene					CAS #: 127-18-4		
10.571	10.564 (0.912)	166	137497	135.210	135.21	80.00- 120.00	100.00
10.571	10.564 (0.912)	129	100372			41.79- 101.79	73.00
10.571	10.564 (0.912)	131	97053			38.31- 98.31	70.59
72 2-Hexanone					CAS #: 591-78-6		
10.728	10.721 (0.926)	58	86626	90.5358	90.536	80.00- 120.00	100.00
10.728	10.721 (0.926)	43	183506			181.80- 241.80	211.84
10.728	10.721 (0.926)	100	14703			0.00- 47.51	16.97
74 1,2-Dibromoethane					CAS #: 106-93-4		
11.036	11.036 (0.952)	107	135342	161.149	161.15	80.00- 120.00	100.00
11.036	11.036 (0.952)	109	126948			64.64- 124.64	93.80
81 Chlorobenzene					CAS #: 108-90-7		
11.624	11.631 (1.003)	112	219021	92.0593	92.059	80.00- 120.00	100.00
11.624	11.631 (1.003)	114	67932			1.81- 61.81	31.02
11.624	11.631 (1.003)	77	110876			21.76- 81.76	50.62
82 Ethyl Benzene					CAS #: 100-41-4		
11.752	11.760 (1.014)	106	109377	89.0813	89.081	80.00- 120.00	100.00
11.752	11.760 (1.014)	91	323016			263.98- 323.98	295.32
84 m,p-Xylene					CAS #: 108-38-3		
11.910	11.925 (1.028)	106	134340	86.9738	86.974	80.00- 120.00	100.00
11.917	11.925 (1.028)	91	245444			152.73- 212.73	182.70

RT	EXP RT	(REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (ng)	FINAL (NG)	TARGET RANGE	RATIO
88 o-Xylene						CAS #: 95-47-6		
12.376	12.383	(0.949)	106	128385	89.7518	89.752	80.00- 120.00	100.00
12.376	12.383	(0.949)	91	244161			163.65- 223.65	190.18
89 Styrene						CAS #: 100-42-5		
12.397	12.412	(0.951)	104	196956	86.1952	86.195	80.00- 120.00	100.00
12.397	12.412	(0.951)	78	88176			15.61- 75.61	44.77
91 Cumene						CAS #: 98-82-8		
12.834	12.841	(0.984)	105	369676	102.095	102.09	80.00- 120.00	100.00
12.834	12.841	(0.984)	120	104991			0.00- 59.10	28.40
12.834	12.841	(0.984)	51	37586			0.00- 40.54	10.17
94 1,1,2,2-Tetrachloroethane						CAS #: 79-34-5		
13.207	13.214	(1.013)	83	183067	149.697	149.70	80.00- 120.00	100.00
13.207	13.214	(1.013)	85	119109			35.82- 95.82	65.06
96 Propylbenzene						CAS #: 103-65-1		
13.350	13.357	(1.024)	91	426069	101.851	101.85	80.00- 120.00	100.00
13.350	13.357	(1.024)	120	109437			0.00- 54.66	25.69
13.350	13.357	(1.024)	105	16043			0.00- 33.61	3.77
97 4-Ethyltoluene						CAS #: 622-96-8		
13.507	13.515	(1.036)	120	115205	102.012	102.01	80.00- 120.00	100.00
13.507	13.508	(1.036)	105	348113			275.29- 335.29	302.17
98 1,3,5-Trimethylbenzene						CAS #: 108-67-8		
13.586	13.586	(1.042)	120	157666	102.244	102.24	80.00- 120.00	100.00
13.586	13.586	(1.042)	105	291966			157.79- 217.79	185.18
100 1,2,4-Trimethylbenzene						CAS #: 95-63-6		
14.037	14.045	(1.076)	120	146645	100.979	100.98	80.00- 120.00	100.00
14.037	14.045	(1.076)	105	298175			169.74- 229.74	203.33
101 1,3-Dichlorobenzene						CAS #: 541-73-1		
14.374	14.382	(1.102)	146	222145	121.558	121.56	80.00- 120.00	100.00
14.374	14.382	(1.102)	148	143029			34.32- 94.32	64.39
14.374	14.382	(1.102)	111	80345			5.94- 65.94	36.17
102 1,4-Dichlorobenzene						CAS #: 106-46-7		
14.510	14.518	(1.113)	146	222218	123.841	123.84	80.00- 120.00	100.00
14.510	14.518	(1.113)	148	140009			35.48- 95.48	63.01
14.510	14.510	(1.113)	111	77481			5.70- 65.70	34.87
105 1,2-Dichlorobenzene						CAS #: 95-50-1		
14.940	14.947	(1.146)	146	214127	122.126	122.12	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (ng)	FINAL (NG)	TARGET RANGE	RATIO
105 1,2-Dichlorobenzene (continued)							
14.940	14.947 (1.146)	148	135752			34.02- 94.02	63.40
14.940	14.940 (1.146)	111	79877			7.12- 67.12	37.30
106 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
16.974	16.975 (1.302)	180	190018	156.664	156.66	80.00- 120.00	100.00
16.974	16.975 (1.302)	182	180697			65.50- 125.50	95.09
107 Hexachlorobutadiene					CAS #: 87-68-3		
17.168	17.175 (1.316)	225	149697	214.605	214.60	80.00- 120.00	100.00
17.175	17.175 (1.317)	223	93287			32.38- 92.38	62.32
109 Naphthalene					CAS #: 91-20-3		
17.290	17.290 (1.326)	128	287900	58.0160	58.016	80.00- 120.00	100.00
17.290	17.290 (1.326)	127	36977			0.00- 43.21	12.84
110 2-Methylnaphthalene					CAS #: 91-57-6		
18.736	18.737 (1.437)	142	193143	60.9540	60.954	80.00- 120.00	100.00
18.736	18.737 (1.437)	141	170231			56.85- 116.85	88.14
18.736	18.737 (1.437)	115	56174			0.00- 59.61	29.08
111 1-Methylnaphthalene					CAS #: 90-12-0		
18.958	18.959 (1.454)	142	179994	58.0831	58.083	80.00- 120.00	100.00
18.958	18.959 (1.454)	141	159301			58.28- 118.28	88.50
18.958	18.966 (1.454)	115	54645			1.09- 61.09	30.36
112 Acenaphthylene					CAS #: 208-96-8		
20.835	20.835 (1.598)	152	332130	66.5480	66.548	80.00- 120.00	100.00(R)
20.835	20.835 (1.598)	151	66158			0.00- 50.51	19.92
20.835	20.835 (1.598)	153	43071			0.00- 43.07	12.97
113 Acenaphthene					CAS #: 83-32-9		
21.100	21.100 (1.618)	154	123520	52.2222	52.222	80.00- 120.00	100.00
21.100	21.100 (1.618)	152	67627			23.06- 83.06	54.75
21.100	21.100 (1.618)	153	135504			82.31- 142.31	109.70
114 Fluorene					CAS #: 86-73-7		
22.261	22.268 (1.707)	166	68780	29.3695	29.370	80.00- 120.00	100.00(R)
22.268	22.268 (1.707)	165	64199			65.30- 125.30	93.34
115 Phenanthrene					CAS #: 85-01-8		
24.488	24.489 (1.878)	178	281298	47.3083	47.308	80.00- 120.00	100.00
24.488	24.489 (1.878)	176	53852			0.00- 48.40	19.14
24.488	24.489 (1.878)	179	44172			0.00- 44.95	15.70
116 Anthracene					CAS #: 120-12-7		
24.610	24.610 (1.887)	178	246975	39.7167	39.717	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (ng)	FINAL (NG)	TARGET RANGE	RATIO
116 Anthracene (continued)							
24.610	24.610 (1.887)	176	45234			0.00- 47.65	18.32
24.603	24.603 (1.886)	179	38048			0.00- 43.56	15.41
117 Fluoranthene					CAS #: 206-44-0		
28.407	28.407 (2.178)	202	169547	30.0986	30.098	80.00- 120.00	100.00
28.407	28.400 (2.178)	101	22600			0.00- 42.31	13.33
118 Pyrene					CAS #: 129-00-0		
29.459	29.460 (2.259)	202	174295	28.3721	28.372	80.00- 120.00	100.00(R)
29.467	29.453 (2.259)	101	17990			0.00- 44.28	10.32
29.467	29.460 (2.259)	100	23010			0.00- 41.66	13.20

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
R - Spike/Surrogate failed recovery limits.

Report Date: 23-Nov-2015 10:05

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd11.i
Lab File ID: 11112015.d
Lab Smp Id: LCS
Analysis Type: VOA
Quant Type: ISTD
Operator: LA
Method File: /chem/msd11.i/20nov15.b/115z1120vi.m
Misc Info: 2516-203 (2/17/16);2595-246-50 (1/21/16)

Calibration Date: 20-NOV-2015
Calibration Time: 22:19
Client Smp ID: LCS
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
40 Bromochloromethan	61766	37060	86472	51336	-16.89
54 1,4-Difluorobenze	242319	145391	339247	190680	-21.31
79 Chlorobenzene-d5	224302	134581	314023	182558	-18.61
92 Bromofluorobenzen	161670	97002	226338	126109	-22.00

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
40 Bromochloromethan	6.80	6.47	7.13	6.80	0.10
54 1,4-Difluorobenze	8.19	7.86	8.52	8.20	0.08
79 Chlorobenzene-d5	11.60	11.27	11.93	11.59	-0.06
92 Bromofluorobenzen	13.05	12.72	13.38	13.04	-0.06

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Report Date: 23-Nov-2015 10:05

Eurofins Air Toxics Inc.

RECOVERY REPORT

Client Name:
Client SDG: 20nov15
Sample Matrix: GAS
Fraction: VOA
Lab Smp Id: LCS
Client Smp ID: LCS
Level: LOW
Operator: LA
Data Type: MS DATA
SampleType: LCS
SpikeList File: VOC+PAHlcs50.spk
Quant Type: ISTD
Sublist File: VOC+PAH_ICAL.sub
Method File: /chem/msd11.i/20nov15.b/115z1120vi.m
Misc Info: 2516-203 (2/17/16);2595-246-50 (1/21/16)

SPIKE COMPOUND	CONC ADDED NG	CONC RECOVERED NG	% RECOVERED	LIMITS
3 Freon 114	139.80	148.66	106.34	70-130
6 Vinyl Chloride	51.100	53.262	104.23	70-130
7 1,3-Butadiene	44.200	41.223	93.26	70-130
9 Chloroethane	52.800	52.566	99.56	70-130
10 Isopentane	59.000	55.803	94.58	70-130
11 Trichlorofluoromet	112.40	115.78	103.01	70-130
14 1,1-Dichloroethene	79.300	76.758	96.80	70-130
15 Freon 113	153.30	148.22	96.68	70-130
18 Carbon Disulfide	62.300	50.476	81.02	70-130
19 2-Propanol	49.200	49.099	99.79	70-130
22 Methylene Chloride	69.500	64.555	92.89	70-130
25 trans-1,2-Dichloro	79.300	67.196	84.74	70-130
26 MTBE	72.100	76.533	106.15	70-130
28 Hexane	70.500	69.689	98.85	70-130
29 1,1-Dichloroethane	81.000	84.074	103.80	70-130
37 cis-1,2-Dichloroet	79.300	86.248	108.76	70-130
38 2-Butanone	59.000	44.705	75.77	70-130
44 Chloroform	97.700	90.414	92.54	70-130
45 1,1,1-Trichloroeth	109.10	115.82	106.16	70-130
46 Cyclohexane	68.800	70.764	102.85	70-130
47 Carbon Tetrachlori	125.80	136.11	108.20	70-130
48 Benzene	63.900	64.141	100.38	70-130
50 1,2-Dichloroethane	80.900	83.430	103.13	70-130
51 2,2,4-Trimethylpen	93.400	96.941	103.79	70-130
53 Heptane	82.000	82.522	100.64	70-130
56 Trichloroethene	107.50	101.70	94.61	70-130
58 Methyl Cyclohexane	80.300	81.184	101.10	70-130
59 1,2-Dichloropropan	92.400	96.074	103.98	70-130
60 1,4-Dioxane	72.100	64.229	89.08	70-130
65 4-Methyl-2-pentano	81.900	88.742	108.35	70-130
67 Toluene	75.400	75.506	100.14	70-130
70 1,1,2-Trichloroeth	109.10	109.29	100.18	70-130
71 Tetrachloroethene	135.70	135.21	99.64	70-130

SPIKE COMPOUND	CONC ADDED NG	CONC RECOVERED NG	% RECOVERED	LIMITS
72 2-Hexanone	81.900	90.536	110.54	70-130
74 1,2-Dibromoethane	153.70	161.15	104.85	70-130
81 Chlorobenzene	92.100	92.059	99.96	70-130
82 Ethyl Benzene	86.800	89.081	102.63	70-130
84 m,p-Xylene	86.800	86.974	100.20	70-130
88 o-Xylene	86.800	89.752	103.40	70-130
89 Styrene	85.200	86.195	101.17	70-130
91 Cumene	98.300	102.09	103.86	70-130
94 1,1,2,2-Tetrachlor	137.30	149.70	109.03	70-130
96 Propylbenzene	98.300	101.85	103.61	70-130
97 4-Ethyltoluene	98.300	102.01	103.78	70-130
98 1,3,5-Trimethylben	98.300	102.24	104.01	70-130
100 1,2,4-Trimethylben	98.300	100.98	102.73	70-130
101 1,3-Dichlorobenzen	120.30	121.56	101.05	70-130
102 1,4-Dichlorobenzen	120.30	123.84	102.94	70-130
105 1,2-Dichlorobenzen	120.30	122.12	101.52	70-130
106 1,2,4-Trichloroben	148.40	156.66	105.57	70-130
107 Hexachlorobutadien	213.30	214.60	100.61	70-130
109 Naphthalene	50.000	58.016	116.03	70-130
110 2-Methylnaphthalen	50.000	60.954	121.91	70-130
111 1-Methylnaphthalen	50.000	58.083	116.17	70-130
112 Acenaphthylene	50.000	66.548	133.10*	70-130
113 Acenaphthene	50.000	52.222	104.44	70-130
114 Fluorene	50.000	29.370	58.74*	60-140
115 Phenanthrene	50.000	47.308	94.62	60-140
116 Anthracene	50.000	39.717	79.43	60-140
117 Fluoranthene	50.000	30.098	60.20	60-140
118 Pyrene	50.000	28.372	56.74*	60-140

SURROGATE COMPOUND	AMOUNT ADDED ng	AMOUNT RECOVERED ng	% RECOVERED	LIMITS
$ 49 1,2-Dichloroethane	25.000	23.510	94.04	50-150
$ 66 Toluene-d8	25.000	22.332	89.33	50-150
$ 108 Naphthalene-d8	25.000	23.929	95.72	50-150

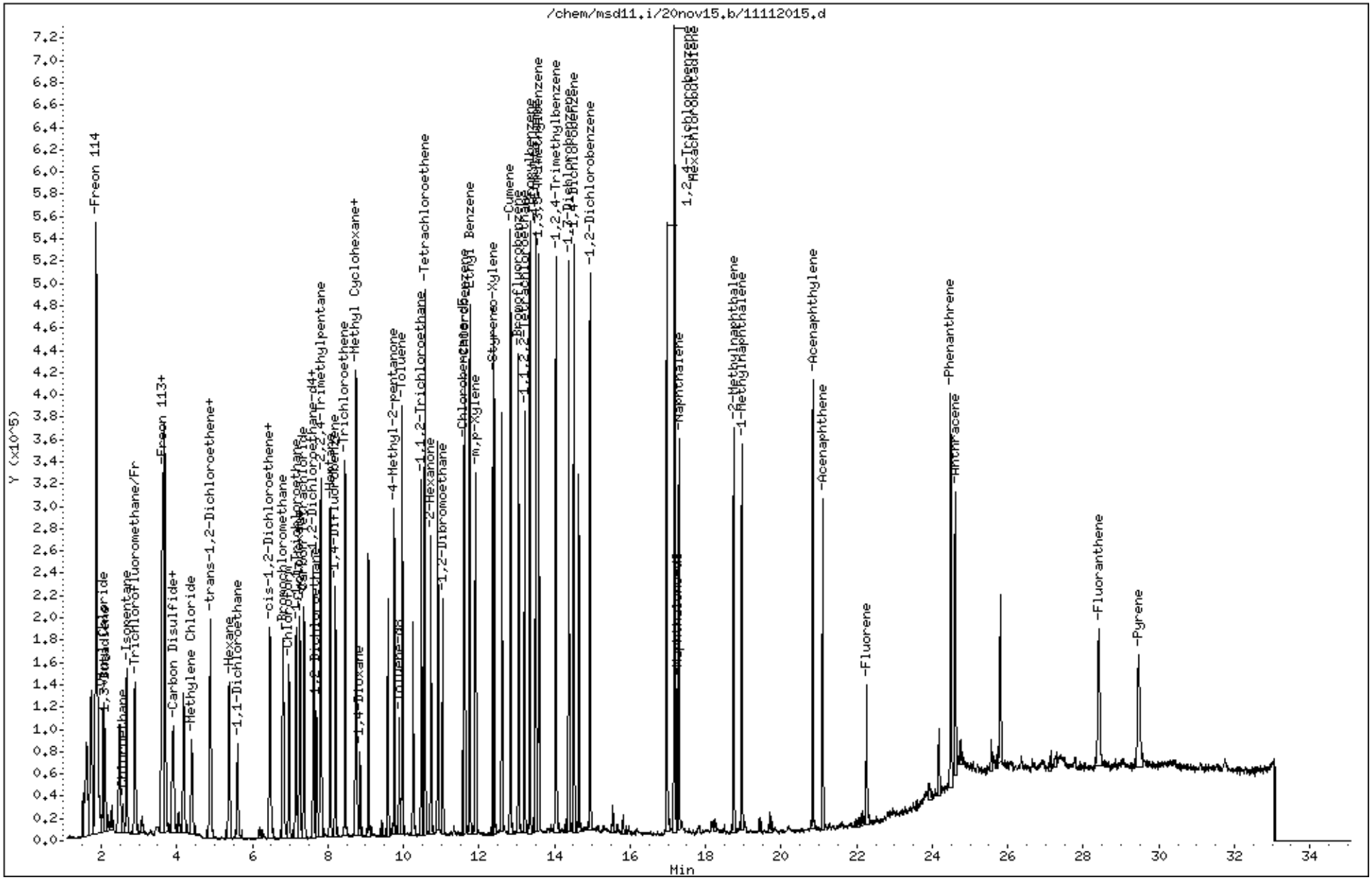
Data File: /chem/msd11.i/20nov15.b/11112015.d
Date : 21-NOV-2015 04:28
Client ID: LCS
Sample Info: ;VI VOC+PAH ICV;LCS

Instrument: msd11.i

Operator: LA

Column phase: RTx-624

Column diameter: 0.53



Data File: /chem/msd11.i/20nov15.b/11112015.d

Date : 21-NOV-2015 04:28

Client ID: LCS

Instrument: msd11.i

Sample Info: ;VI VOC+PAH ICV;LCS

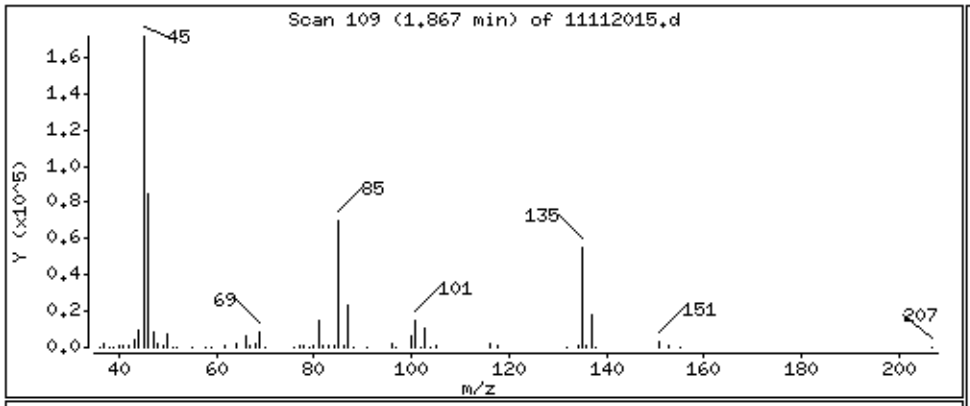
Operator: LA

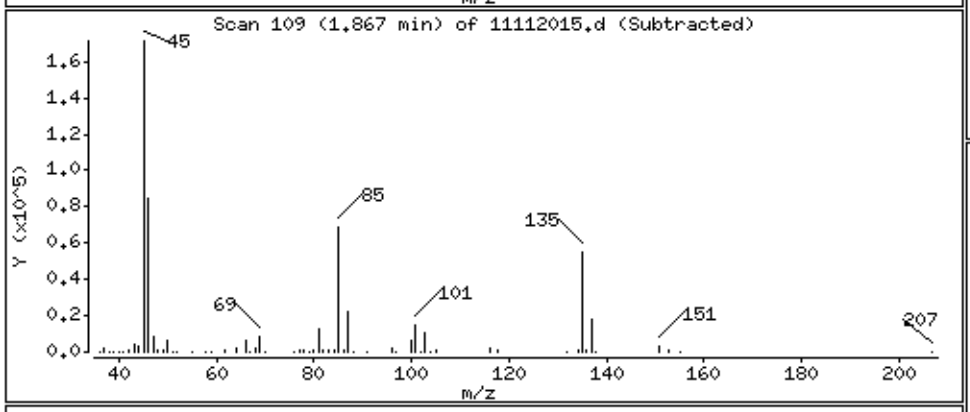
Column phase: RTx-624

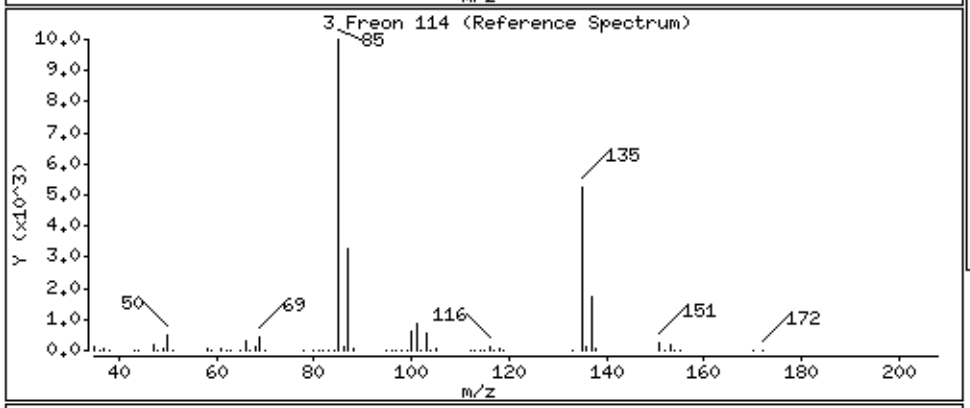
Column diameter: 0.53

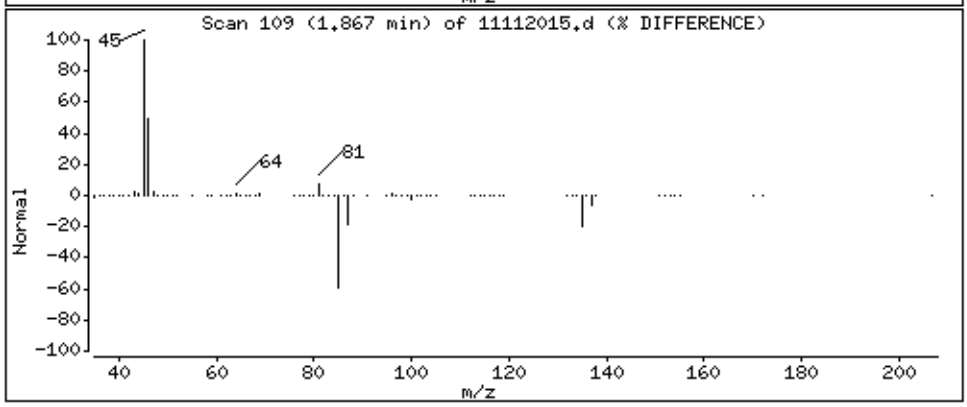
3 Freon 114

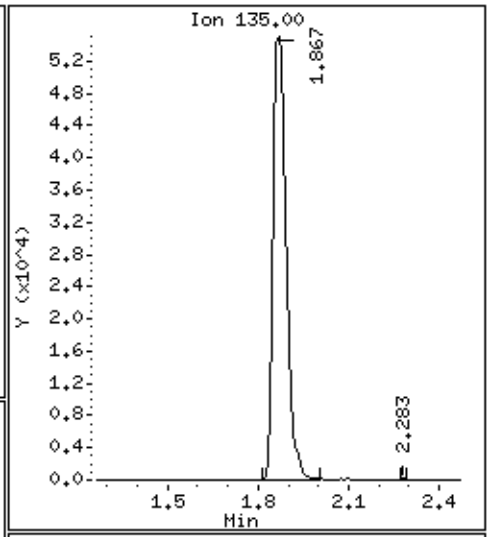
Concentration: 148.66 NG

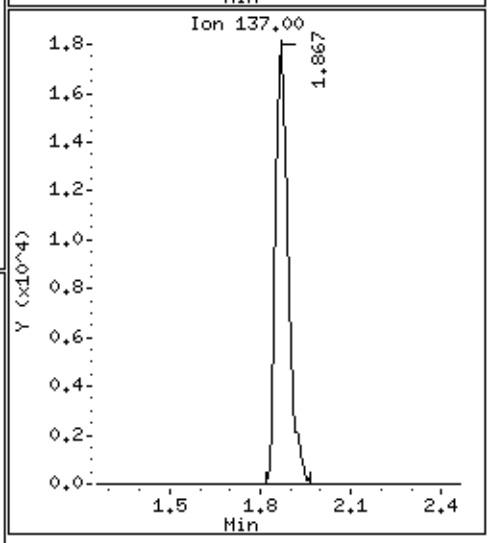












Data File: /chem/msd11.i/20nov15.b/11112015.d

Date : 21-NOV-2015 04:28

Client ID: LCS

Instrument: msd11.i

Sample Info: ;VI VOC+PAH ICV;LCS

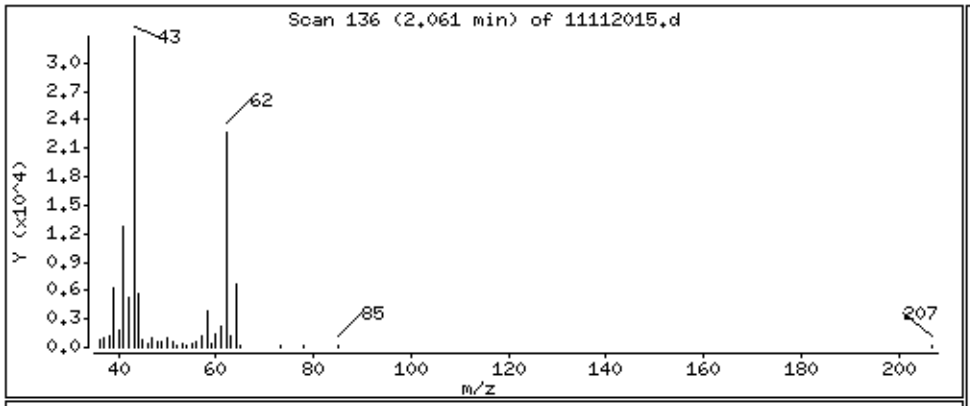
Operator: LA

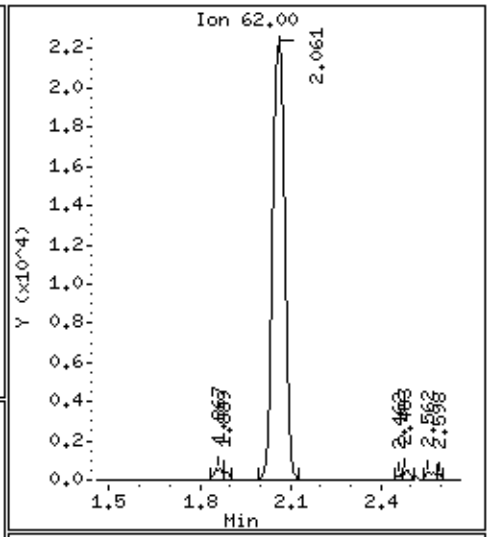
Column phase: RTx-624

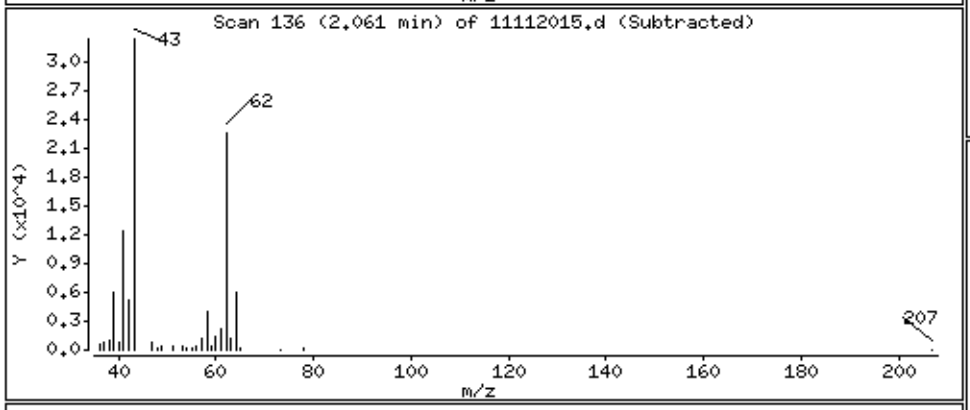
Column diameter: 0.53

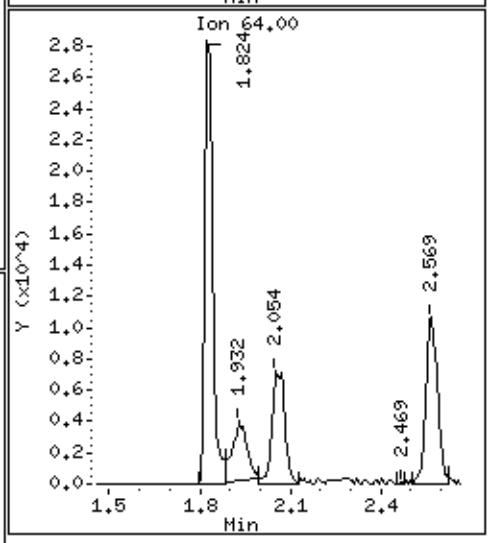
6 Vinyl Chloride

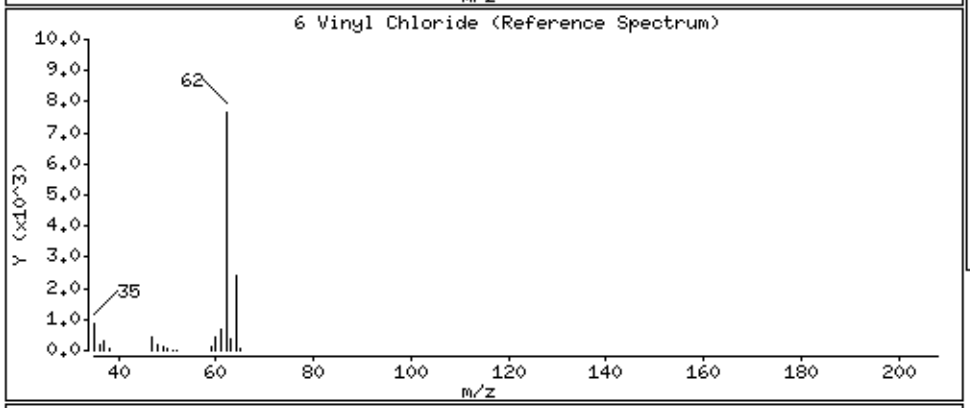
Concentration: 53.262 NG

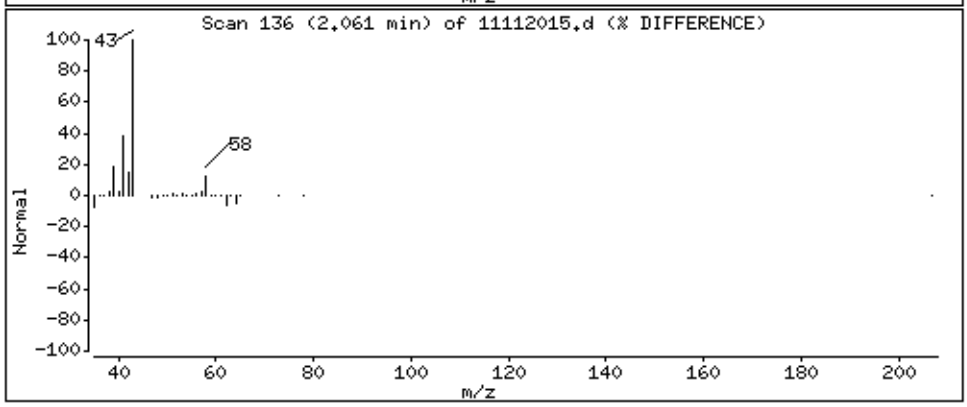












Data File: /chem/msd11.i/20nov15.b/11112015.d

Date : 21-NOV-2015 04:28

Client ID: LCS

Instrument: msd11.i

Sample Info: ;VI VOC+PAH ICV;LCS

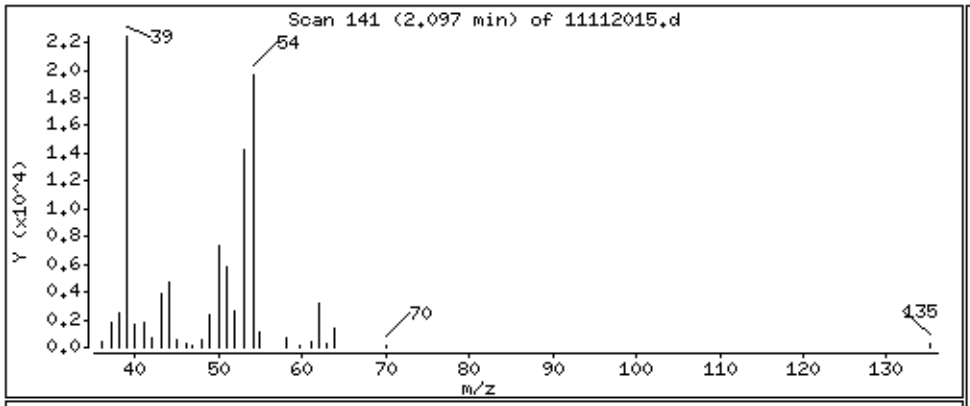
Operator: LA

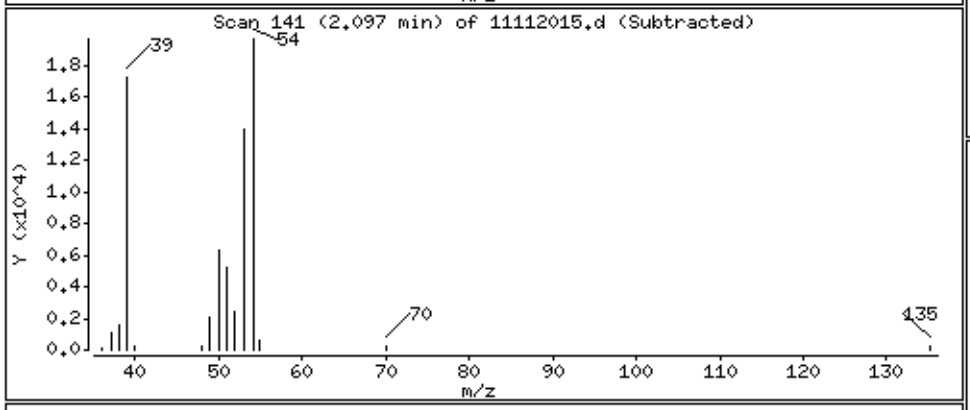
Column phase: RTx-624

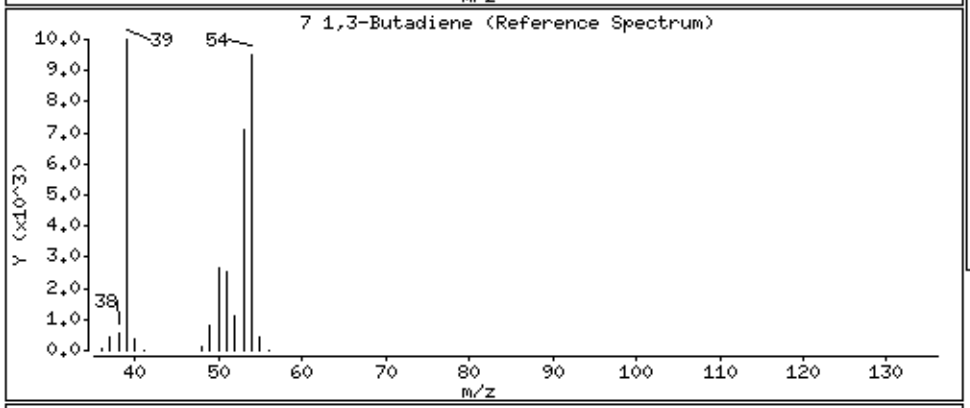
Column diameter: 0.53

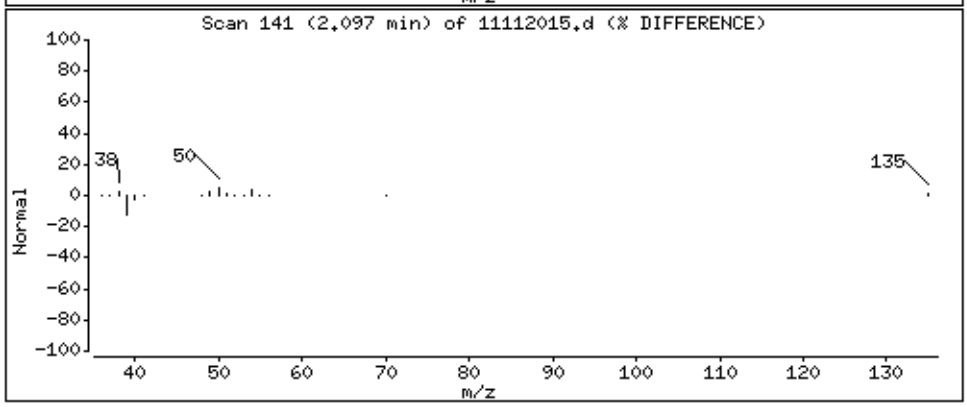
7 1,3-Butadiene

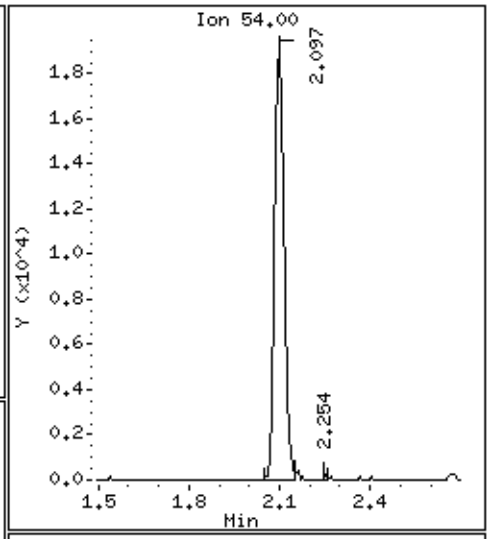
Concentration: 41.223 NG

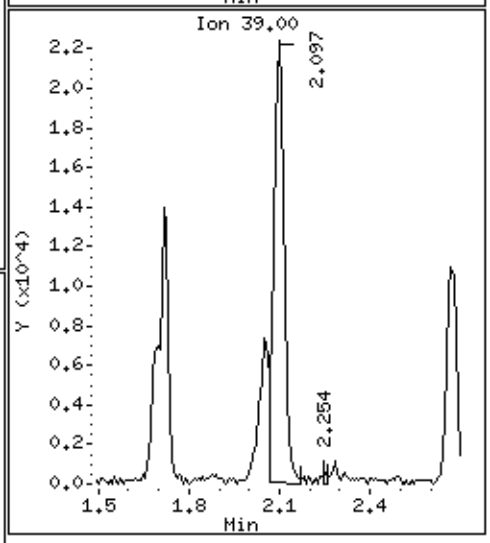












Data File: /chem/msd11.i/20nov15.b/11112015.d

Date : 21-NOV-2015 04:28

Client ID: LCS

Instrument: msd11.i

Sample Info: ;VI VOC+PAH ICV;LCS

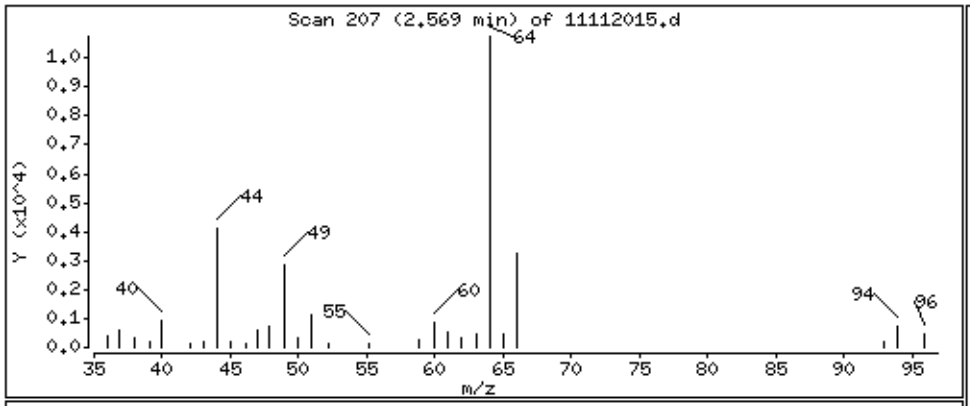
Operator: LA

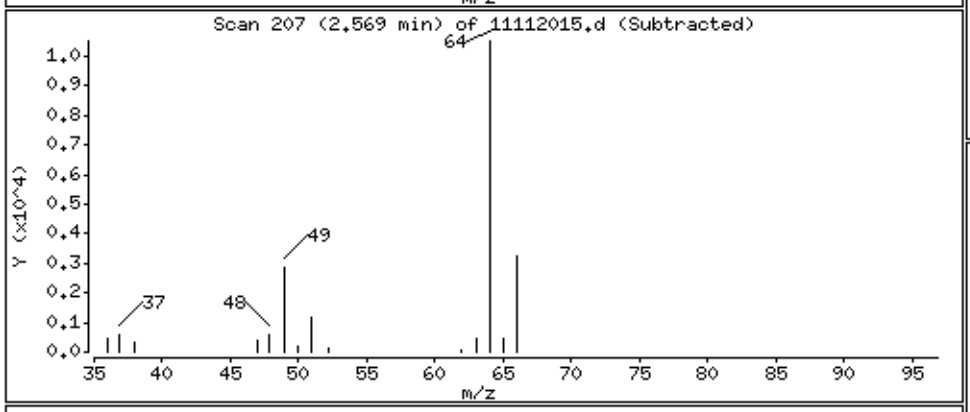
Column phase: RTx-624

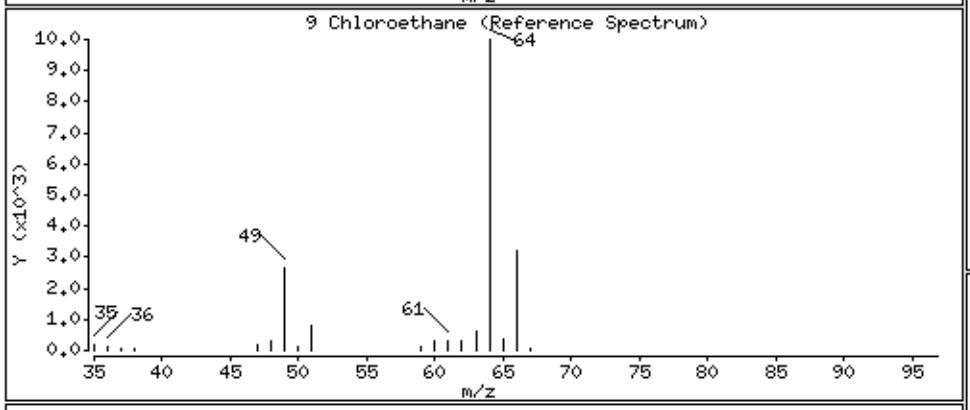
Column diameter: 0.53

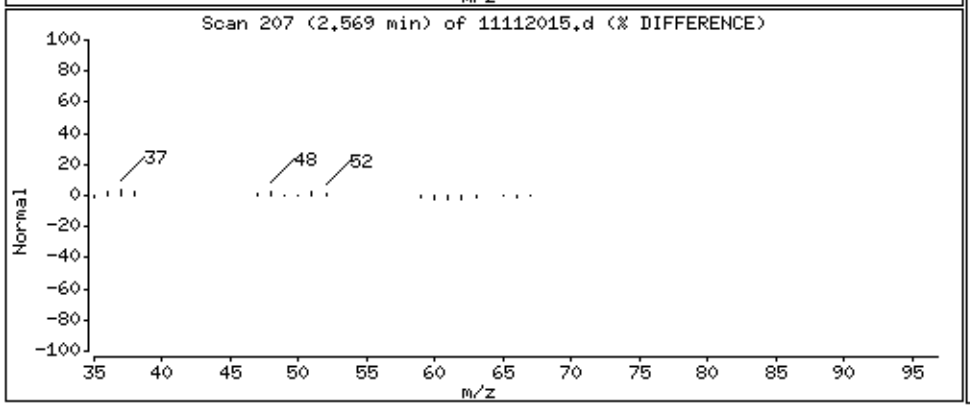
9 Chloroethane

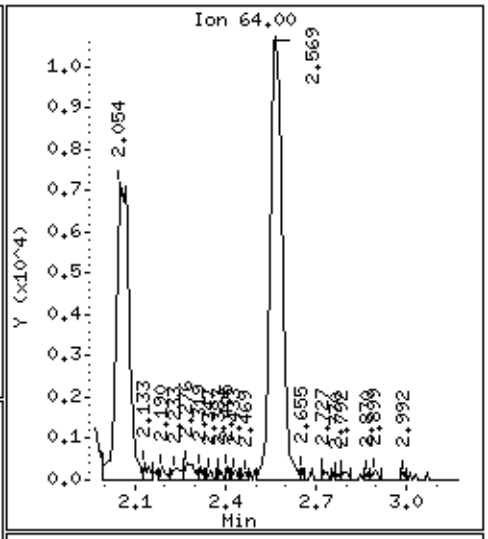
Concentration: 52.566 NG

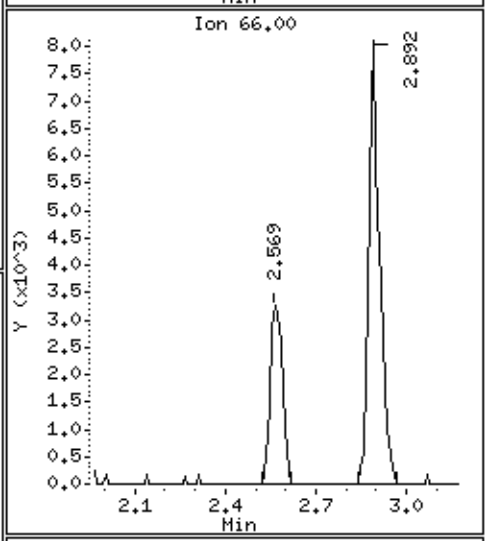


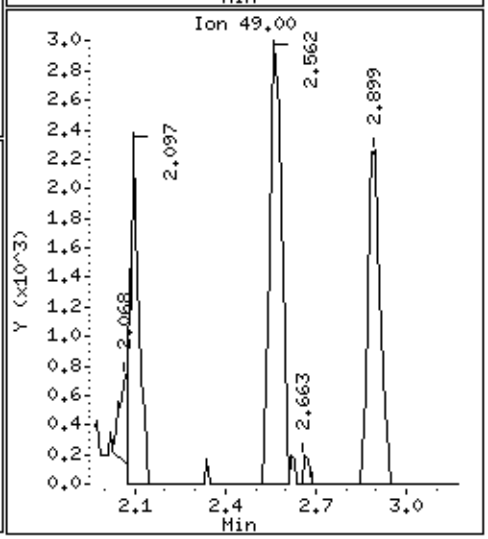












Data File: /chem/msd11.i/20nov15.b/11112015.d

Date : 21-NOV-2015 04:28

Client ID: LCS

Instrument: msd11.i

Sample Info: ;VI VOC+PAH ICV;LCS

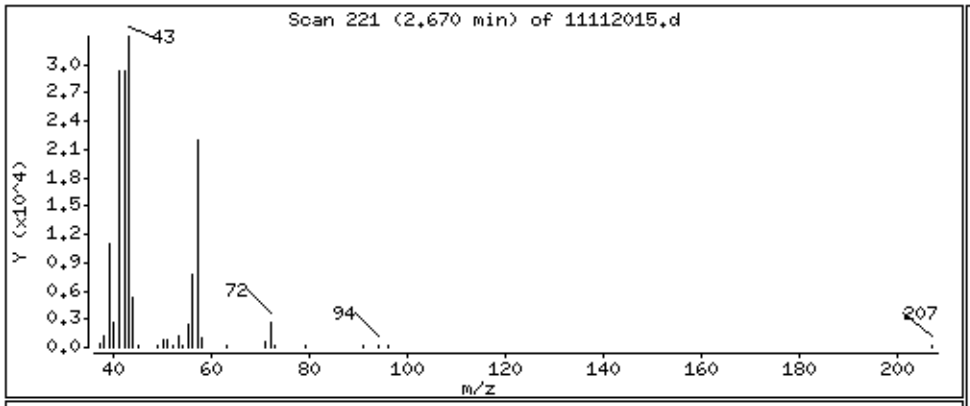
Operator: LA

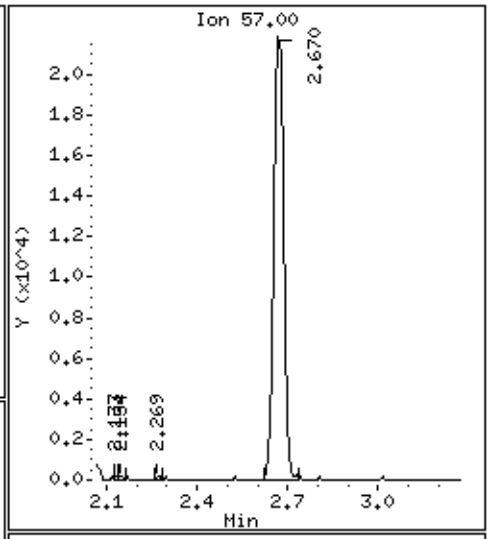
Column phase: RTx-624

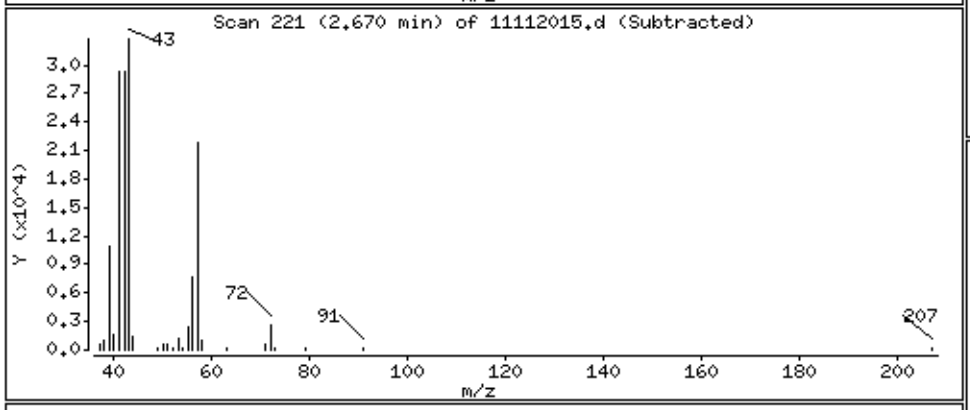
Column diameter: 0.53

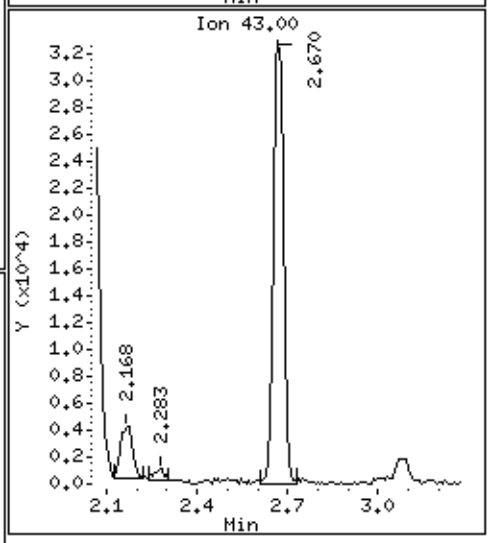
10 Isopentane

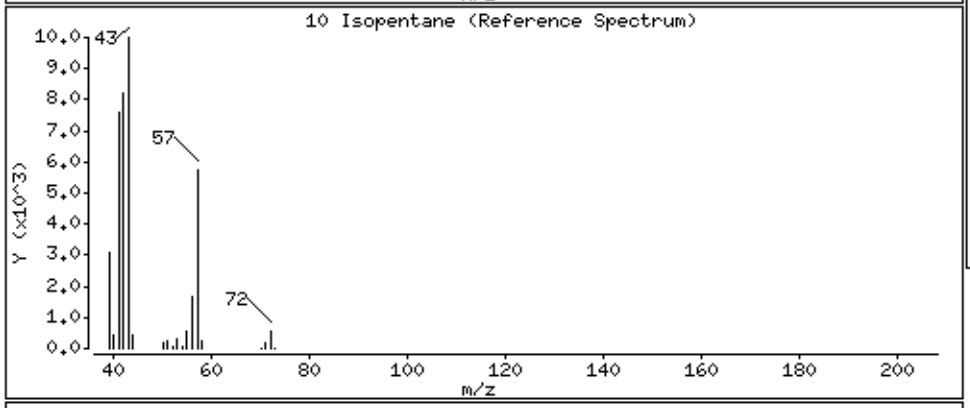
Concentration: 55.803 NG

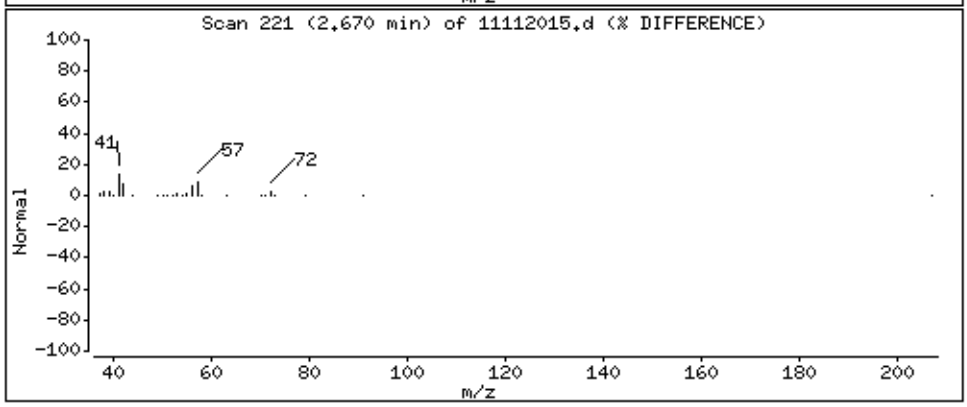












Data File: /chem/msd11.i/20nov15.b/11112015.d

Date : 21-NOV-2015 04:28

Client ID: LCS

Instrument: msd11.i

Sample Info: ;VI VOC+PAH ICV;LCS

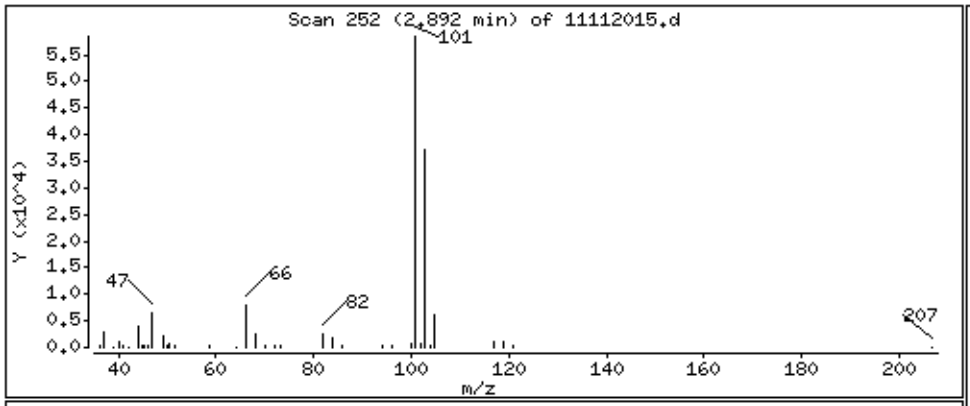
Operator: LA

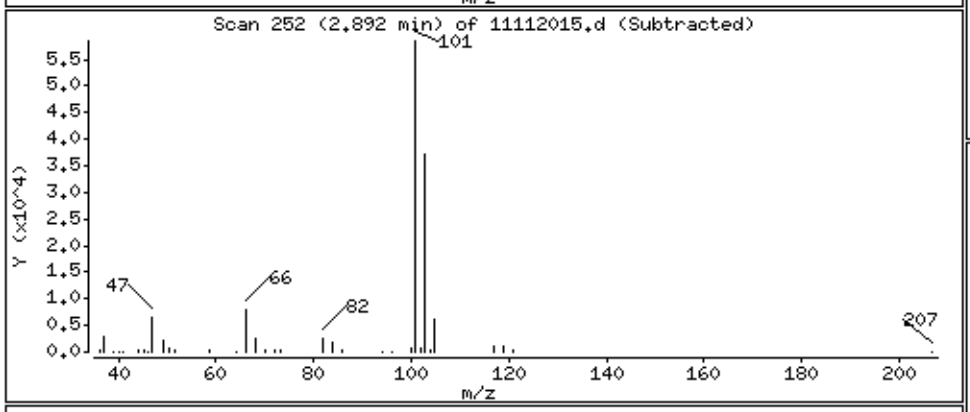
Column phase: RTx-624

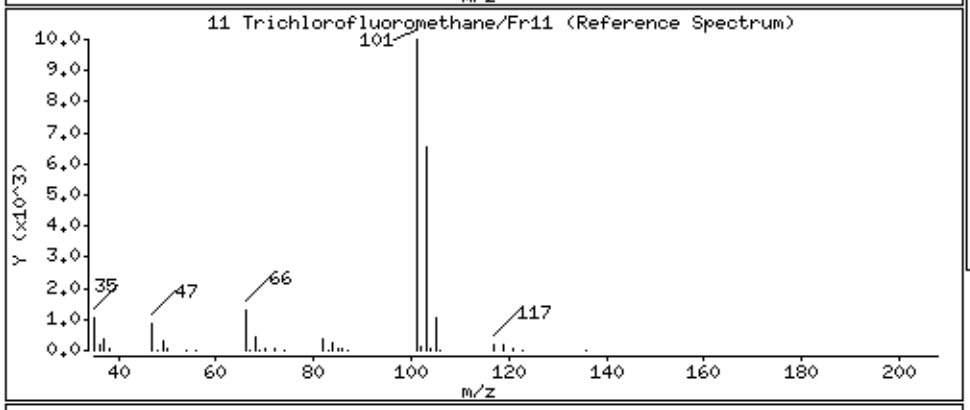
Column diameter: 0.53

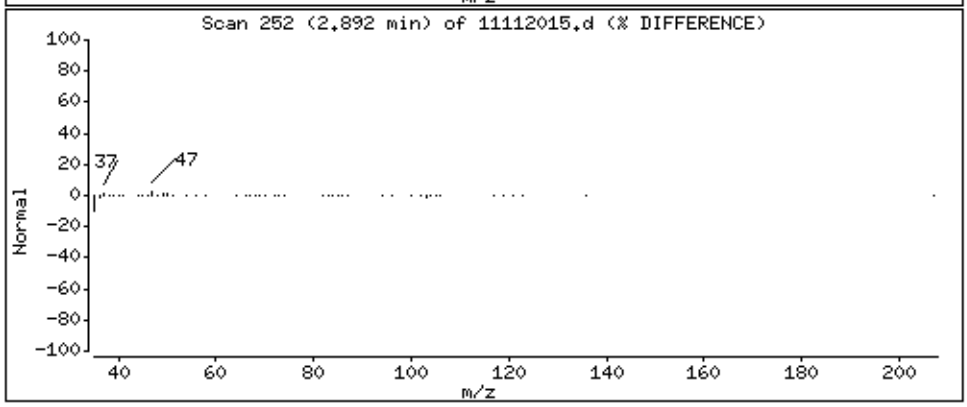
11 Trichlorofluoromethane/Fr11

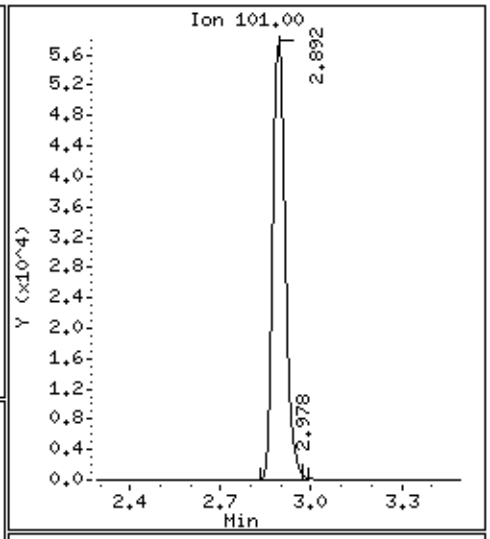
Concentration: 115.78 NG

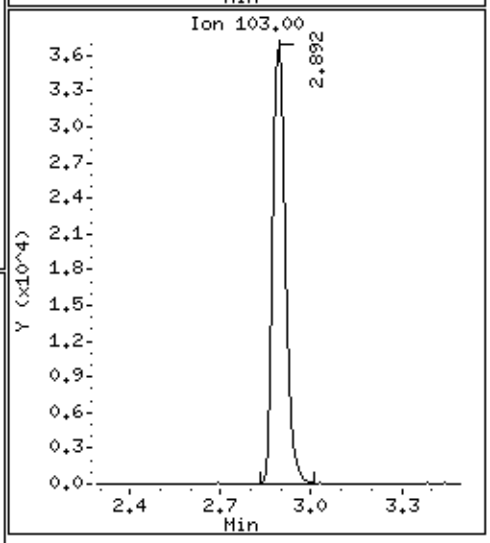












Data File: /chem/msd11.i/20nov15.b/11112015.d

Date : 21-NOV-2015 04:28

Client ID: LCS

Instrument: msd11.i

Sample Info: ;VI VOC+PAH ICV;LCS

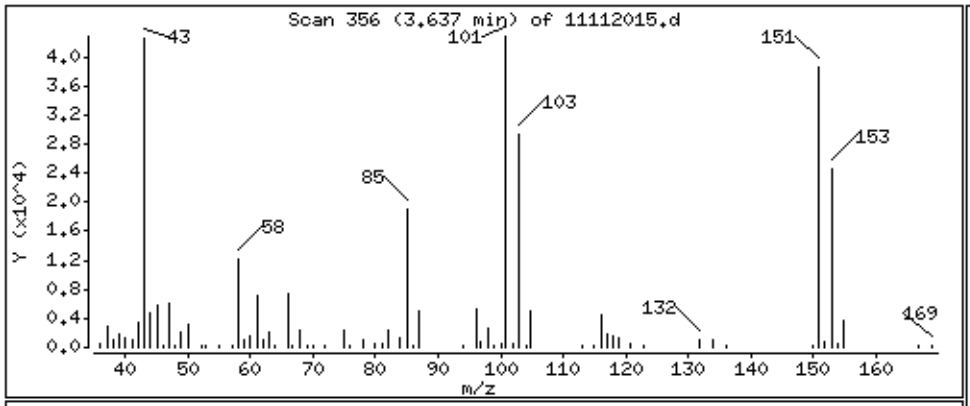
Operator: LA

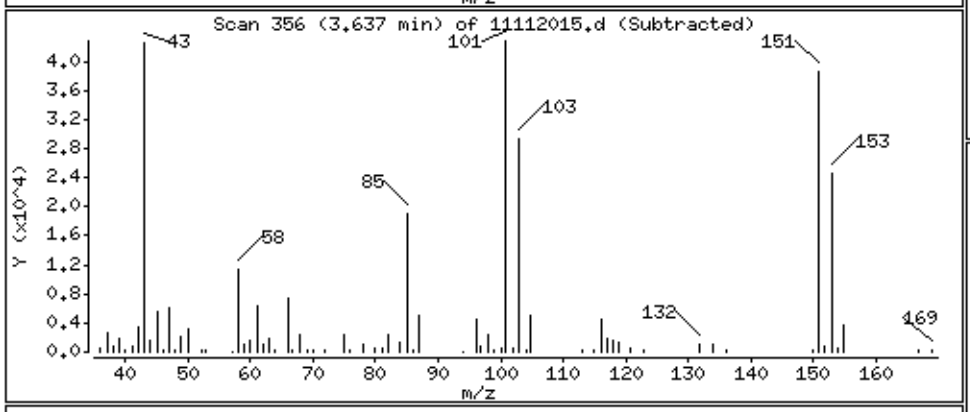
Column phase: RTx-624

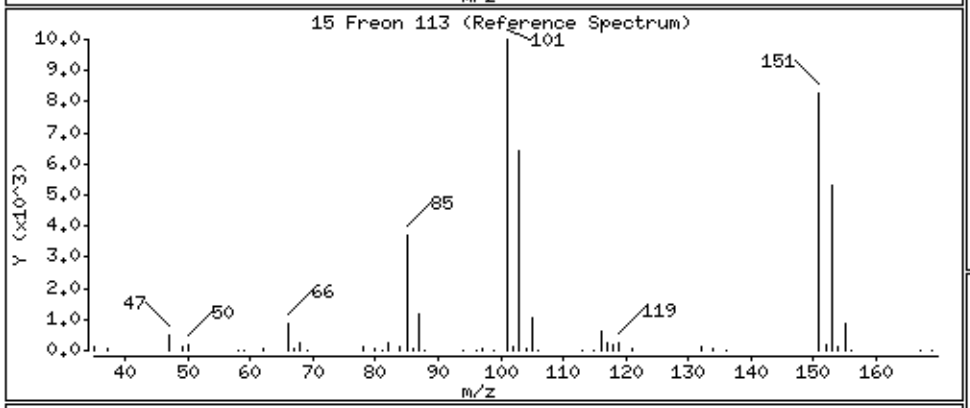
Column diameter: 0.53

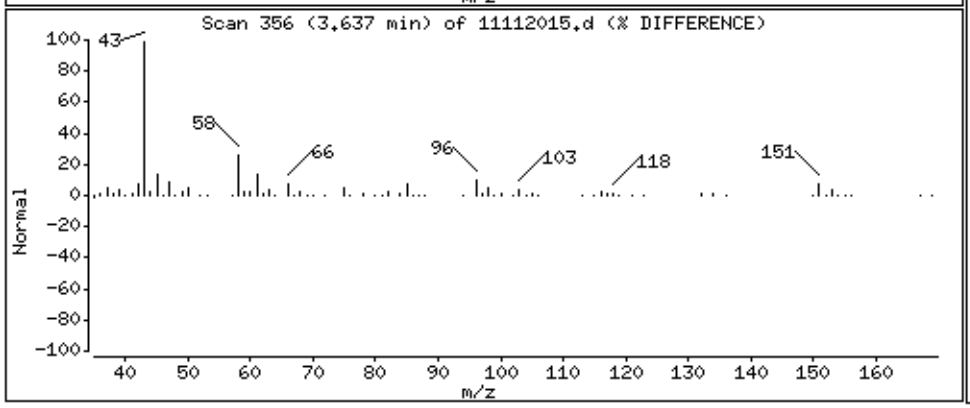
15 Freon 113

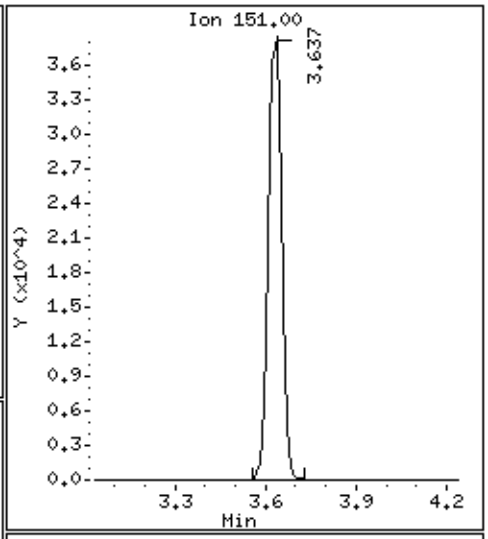
Concentration: 148.22 NG

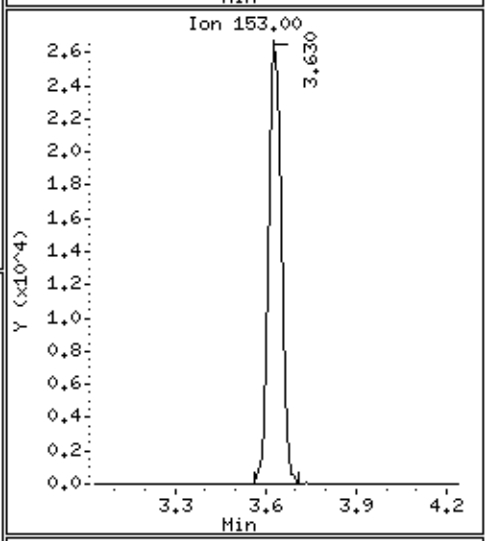


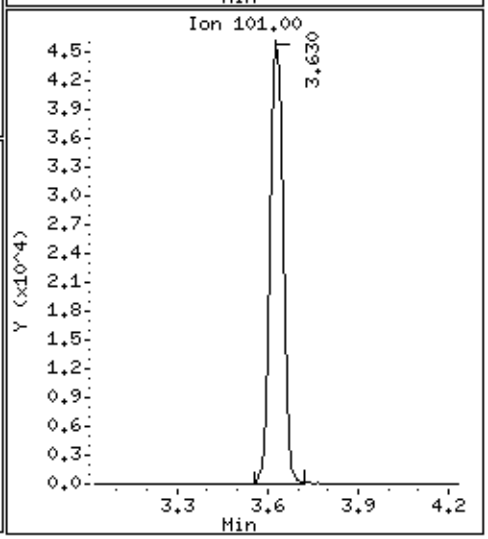












Data File: /chem/msd11.i/20nov15.b/11112015.d

Date : 21-NOV-2015 04:28

Client ID: LCS

Instrument: msd11.i

Sample Info: ;VI VOC+PAH ICV;LCS

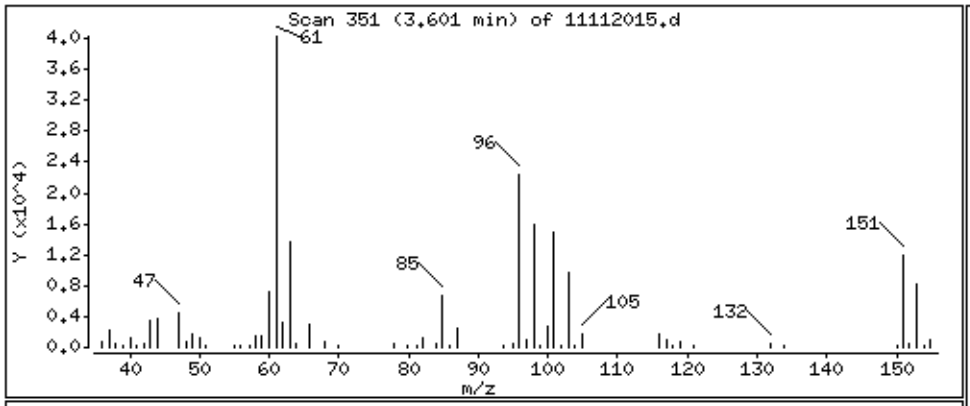
Operator: LA

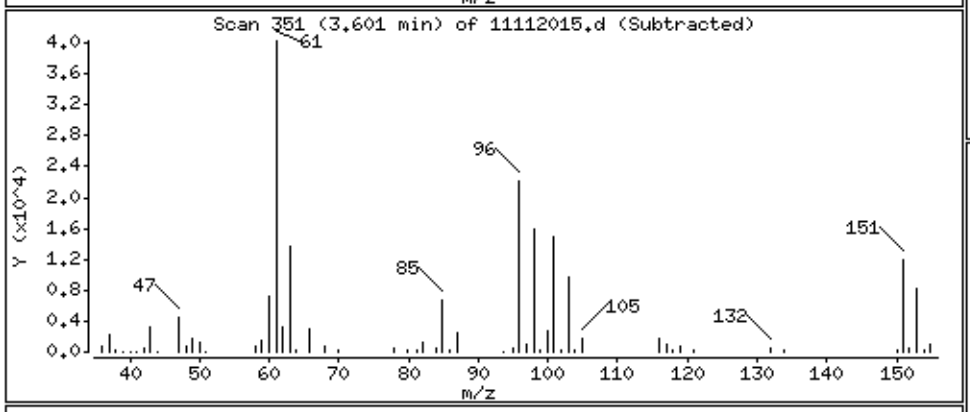
Column phase: RTx-624

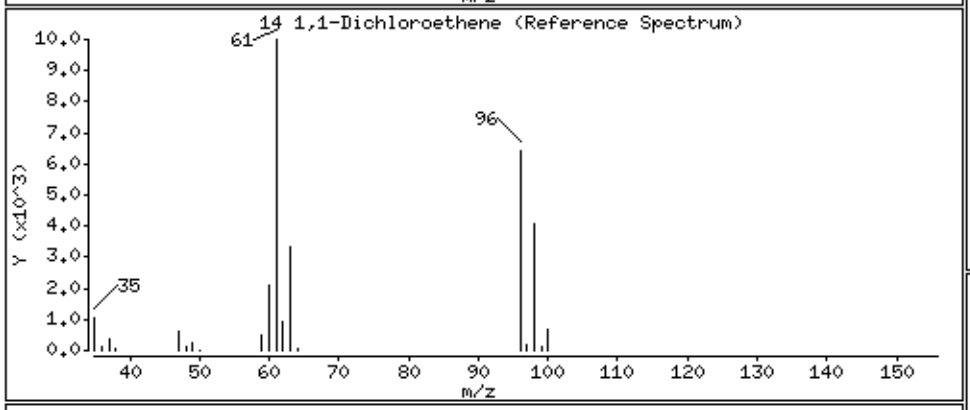
Column diameter: 0.53

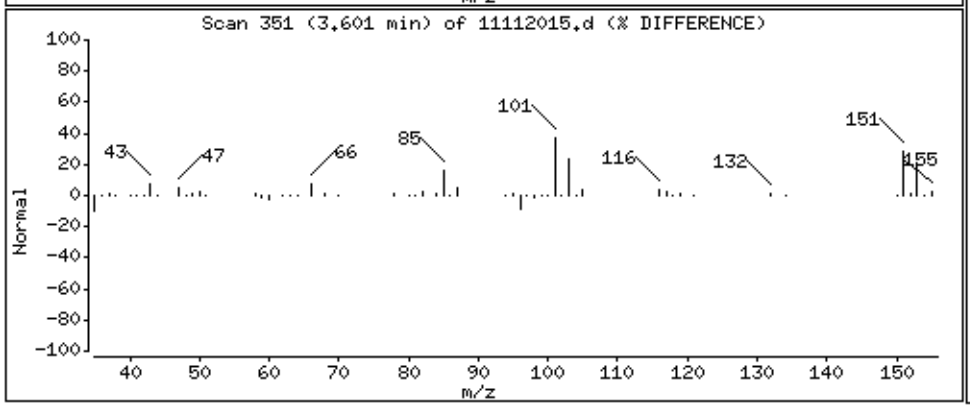
14 1,1-Dichloroethene

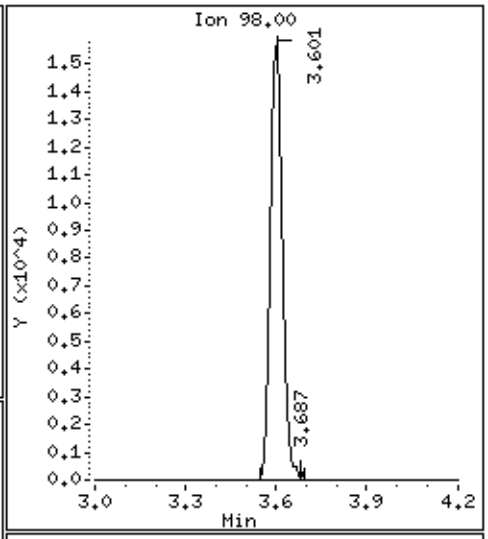
Concentration: 76.758 NG

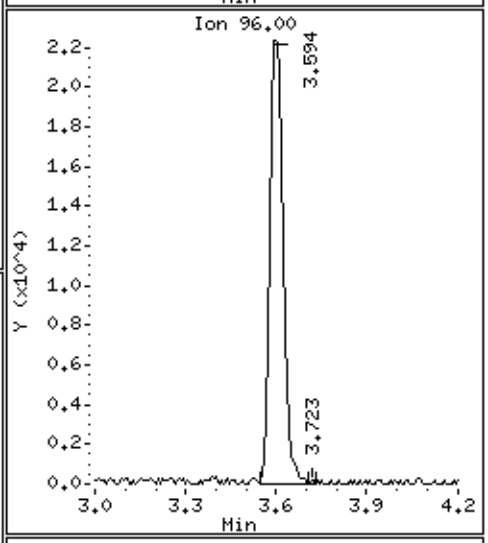


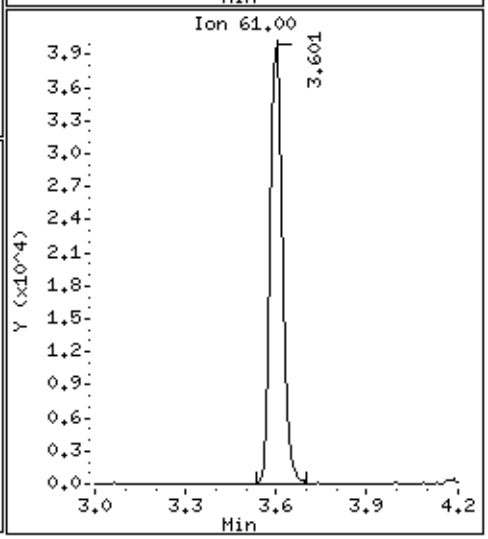












Data File: /chem/msd11.i/20nov15.b/11112015.d

Date : 21-NOV-2015 04:28

Client ID: LCS

Instrument: msd11.i

Sample Info: ;VI VOC+PAH ICV;LCS

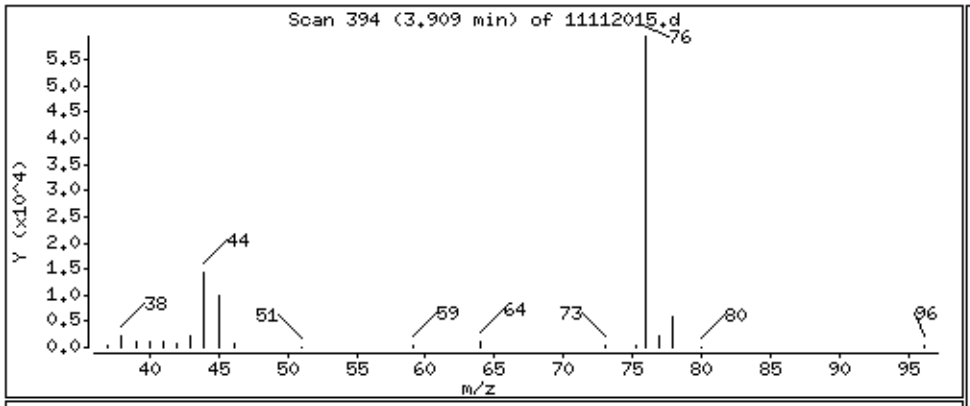
Operator: LA

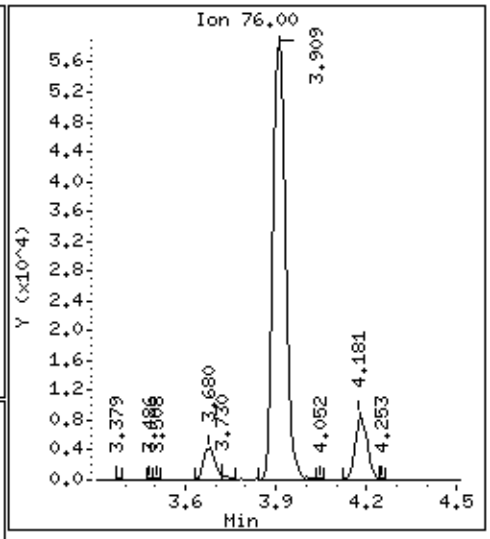
Column phase: RTx-624

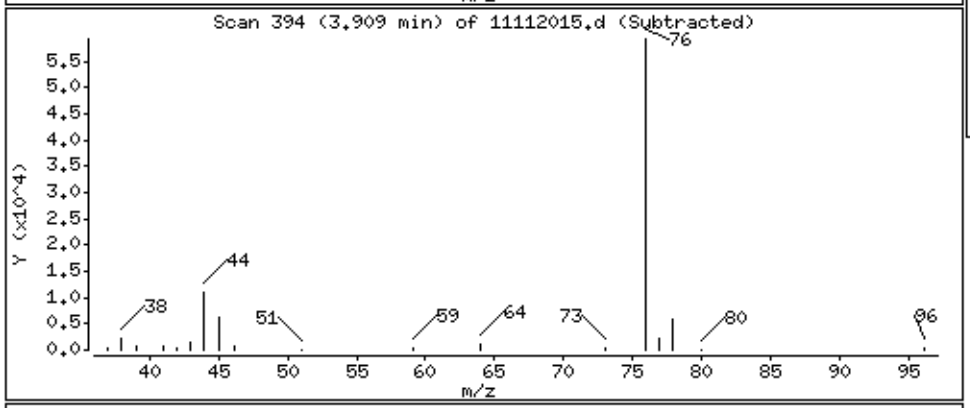
Column diameter: 0.53

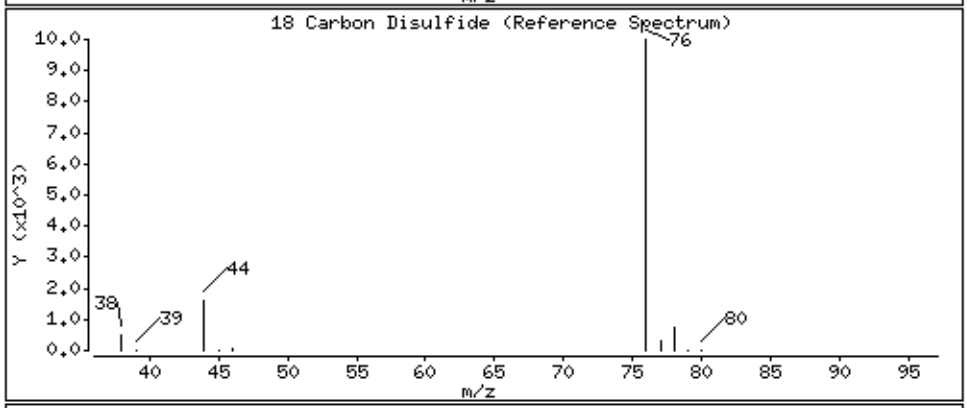
18 Carbon Disulfide

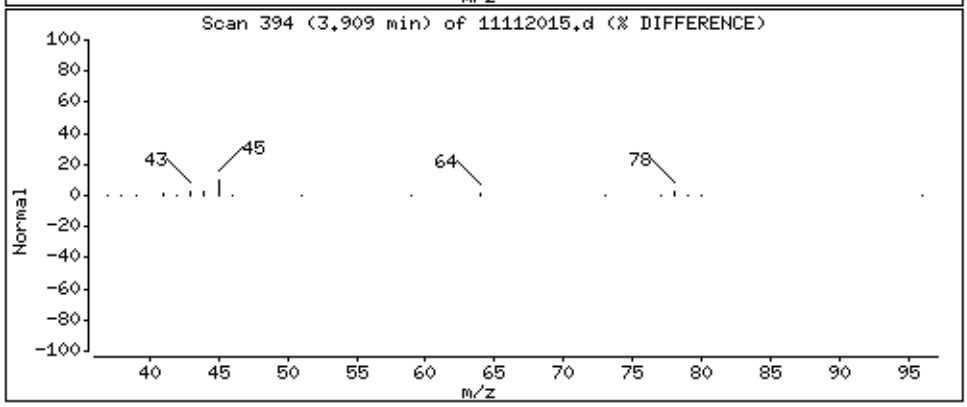
Concentration: 50.476 NG











Data File: /chem/msd11.i/20nov15.b/11112015.d

Date : 21-NOV-2015 04:28

Client ID: LCS

Instrument: msd11.i

Sample Info: ;VI VOC+PAH ICV;LCS

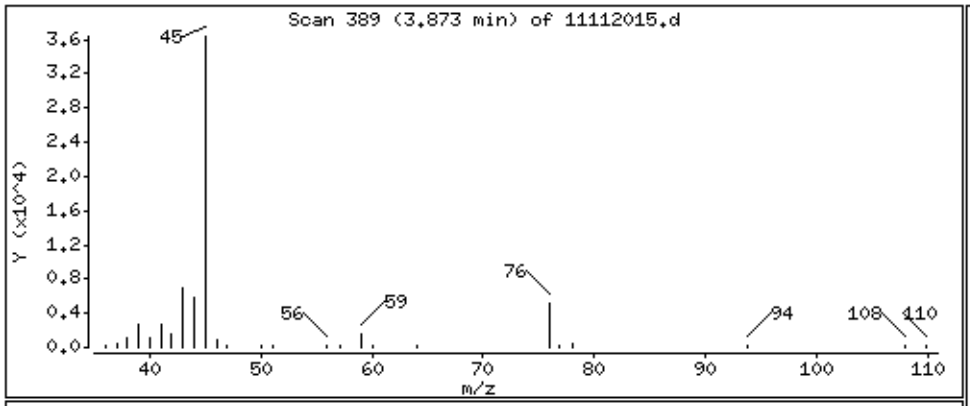
Operator: LA

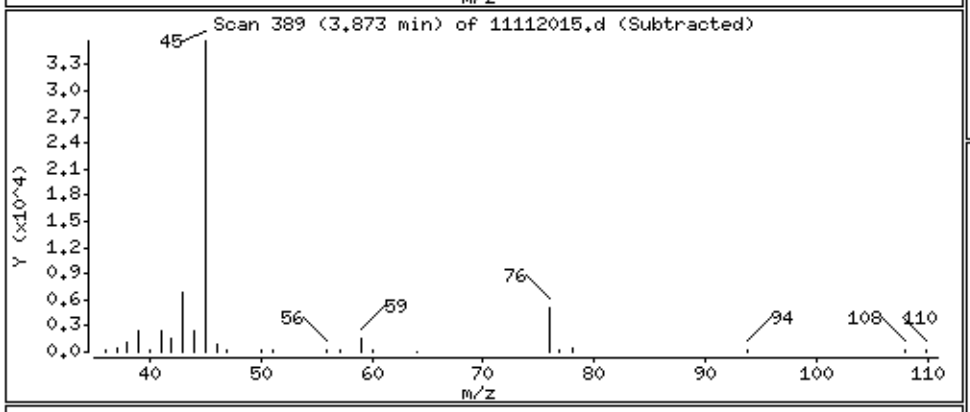
Column phase: RTx-624

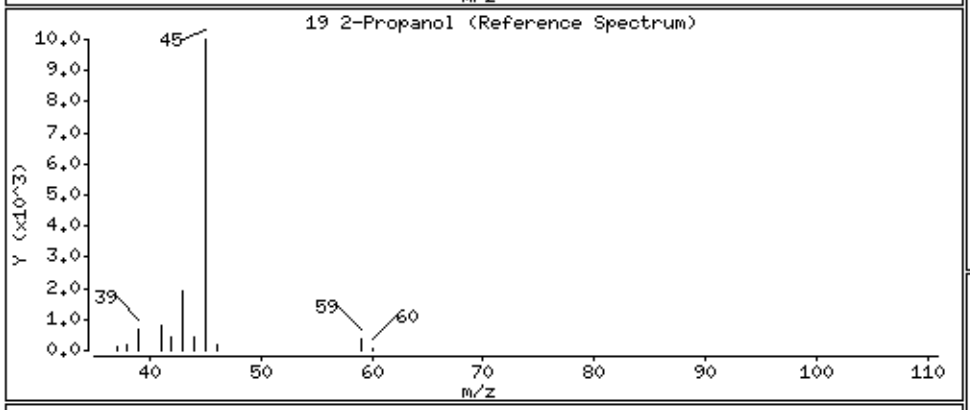
Column diameter: 0.53

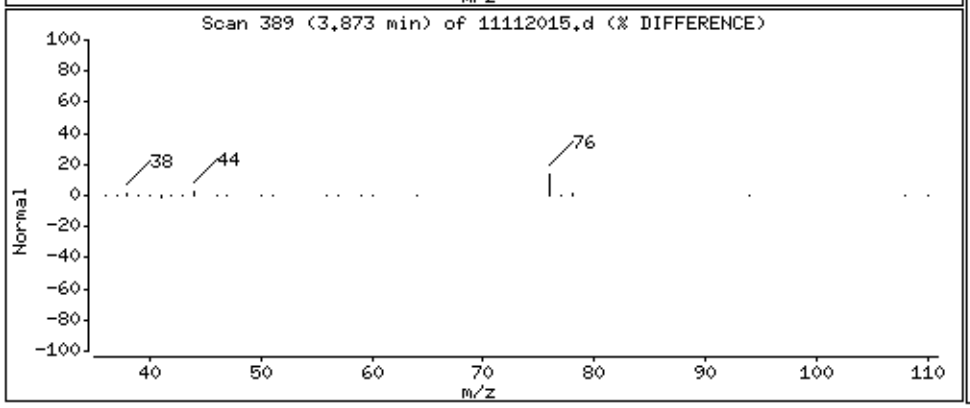
19 2-Propanol

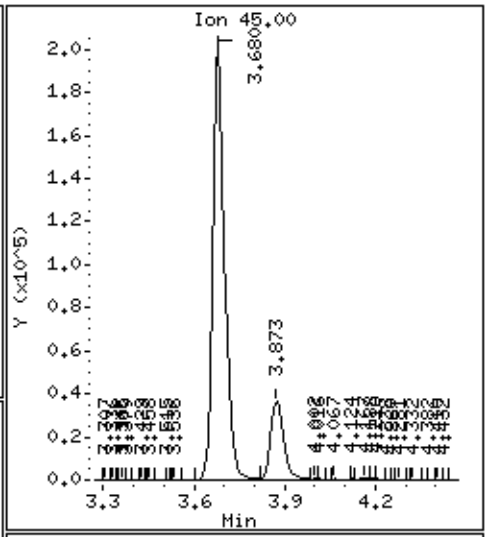
Concentration: 49.099 NG

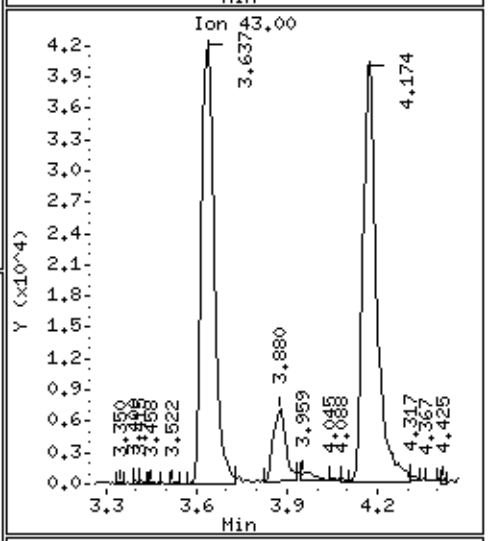


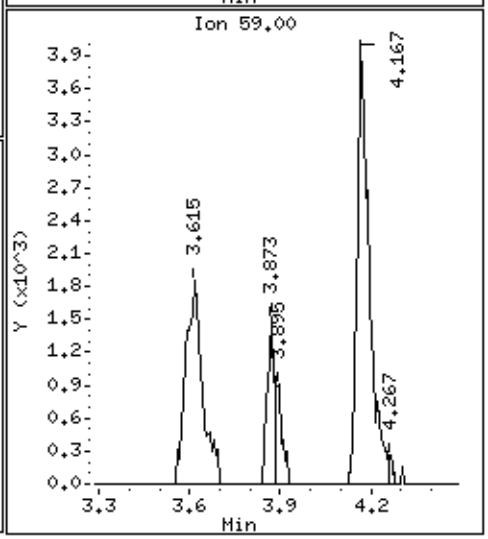












Data File: /chem/msd11.i/20nov15.b/11112015.d

Date : 21-NOV-2015 04:28

Client ID: LCS

Instrument: msd11.i

Sample Info: ;VI VOC+PAH ICV;LCS

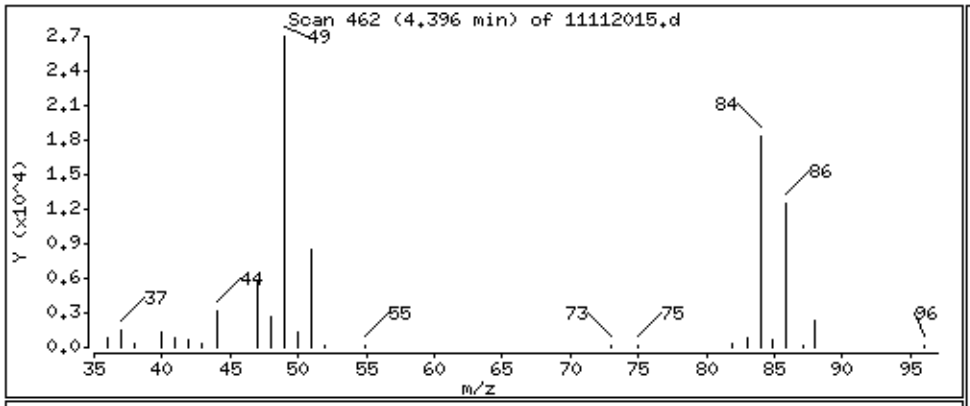
Operator: LA

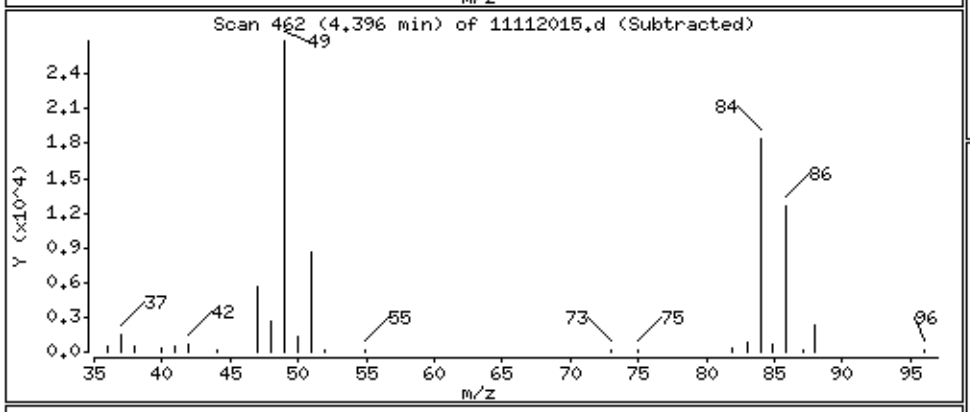
Column phase: RTx-624

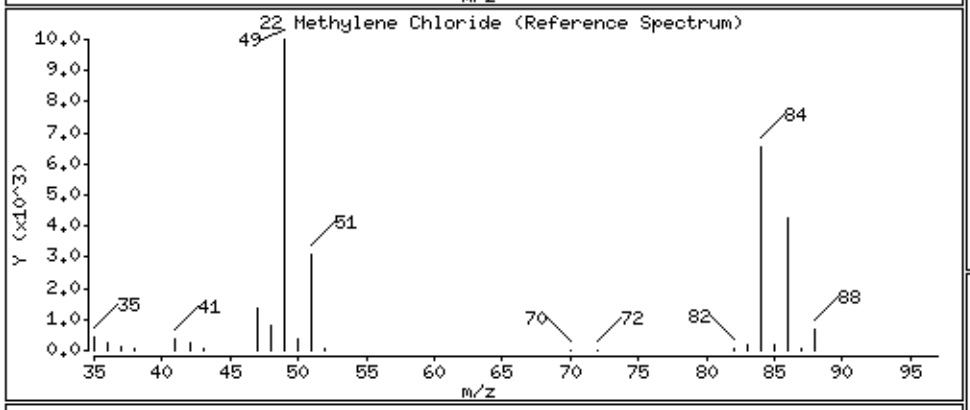
Column diameter: 0.53

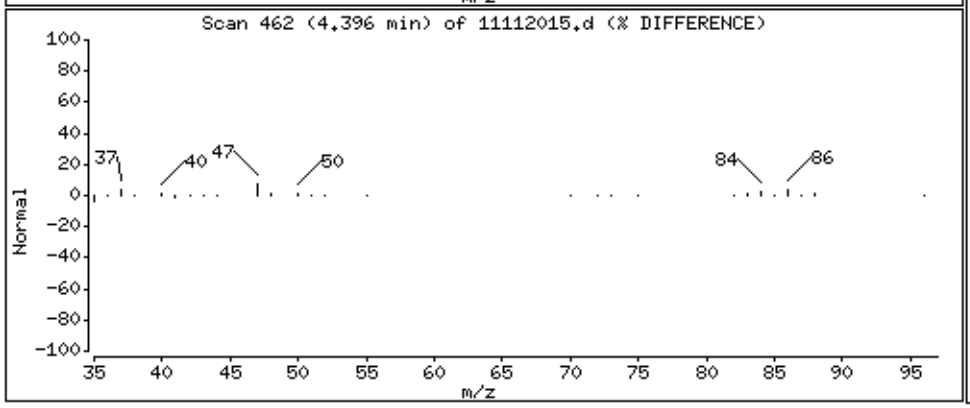
22 Methylene Chloride

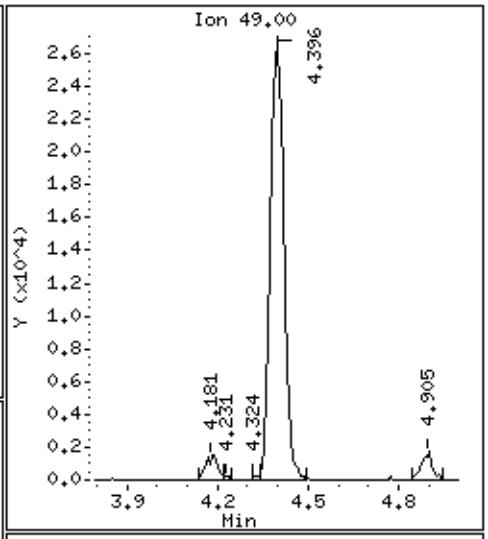
Concentration: 64.555 NG

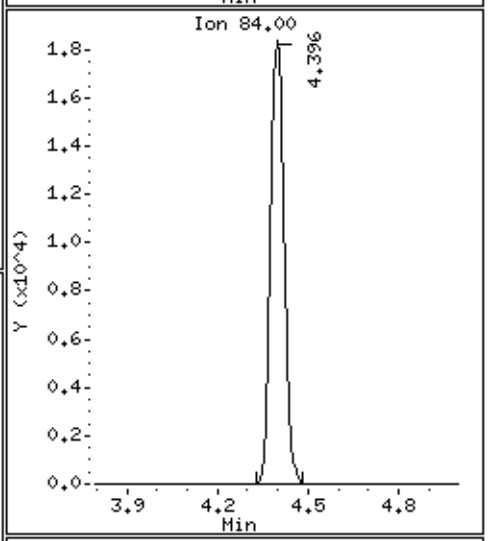


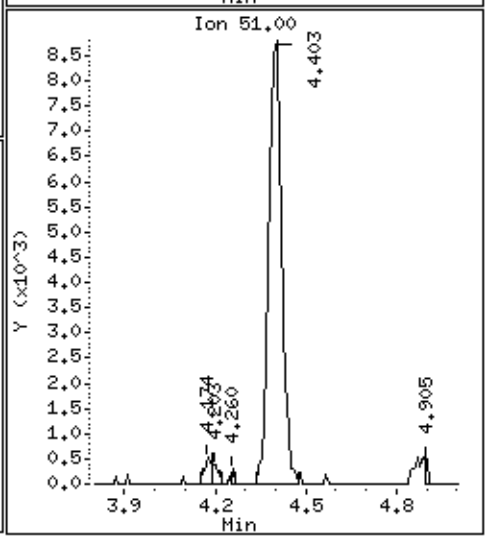












Data File: /chem/msd11.i/20nov15.b/11112015.d

Date : 21-NOV-2015 04:28

Client ID: LCS

Instrument: msd11.i

Sample Info: ;VI VOC+PAH ICV;LCS

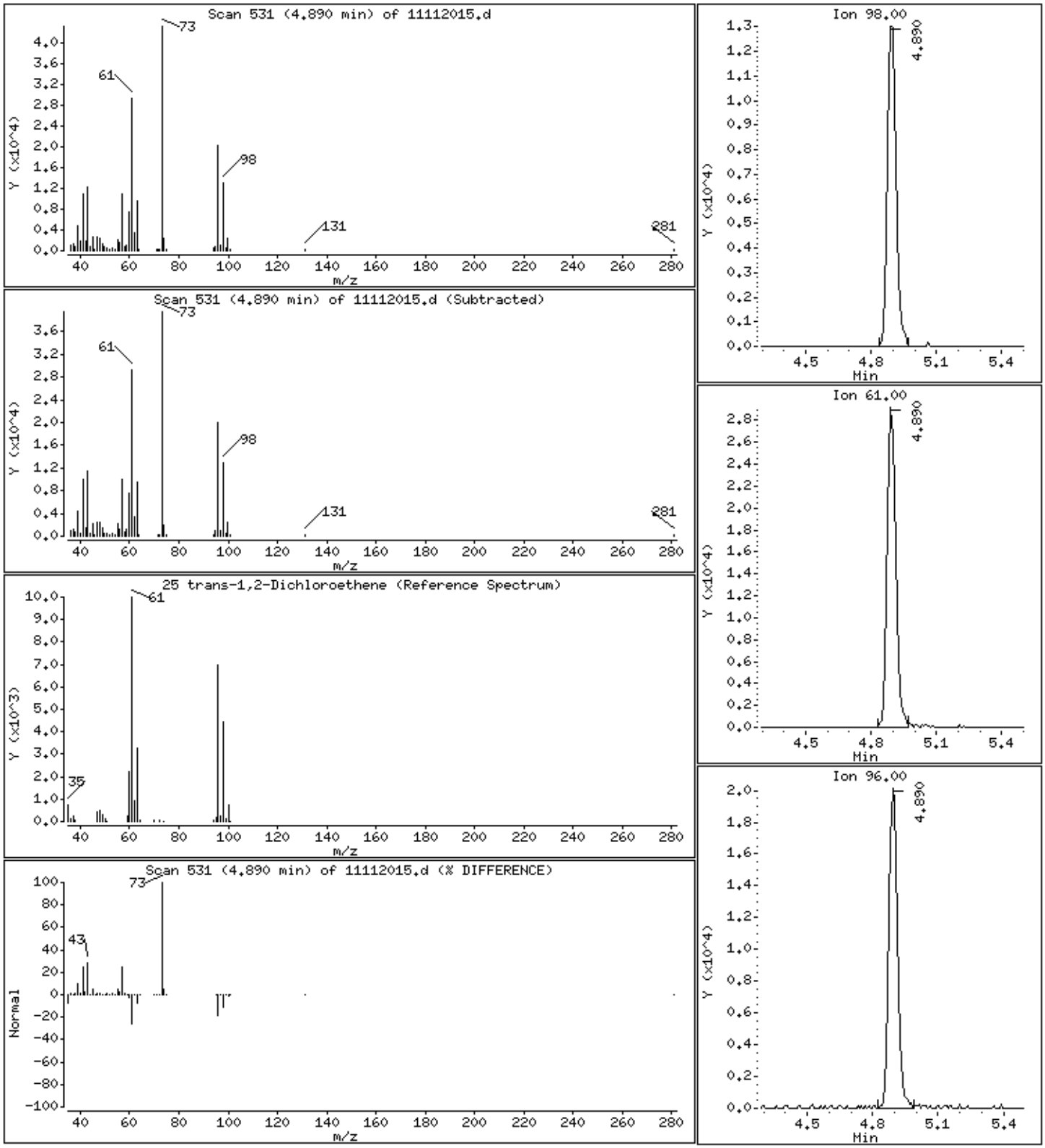
Operator: LA

Column phase: RTx-624

Column diameter: 0.53

25 trans-1,2-Dichloroethene

Concentration: 67.196 NG



Data File: /chem/msd11.i/20nov15.b/11112015.d

Date : 21-NOV-2015 04:28

Client ID: LCS

Instrument: msd11.i

Sample Info: ;VI VOC+PAH ICV;LCS

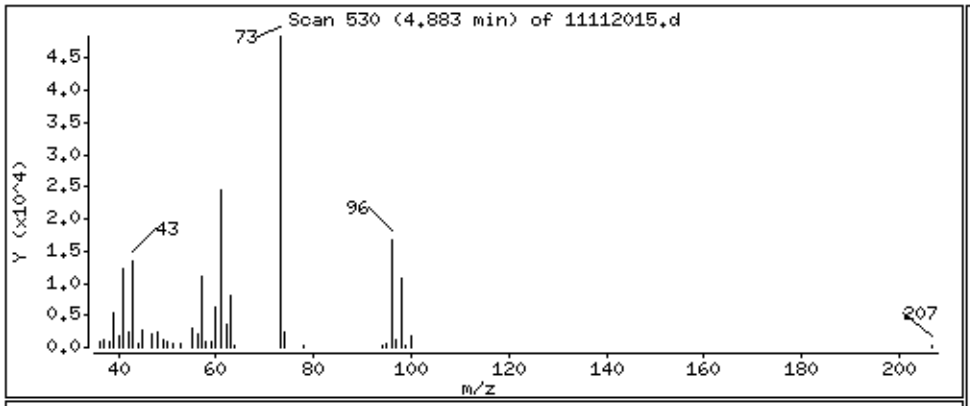
Operator: LA

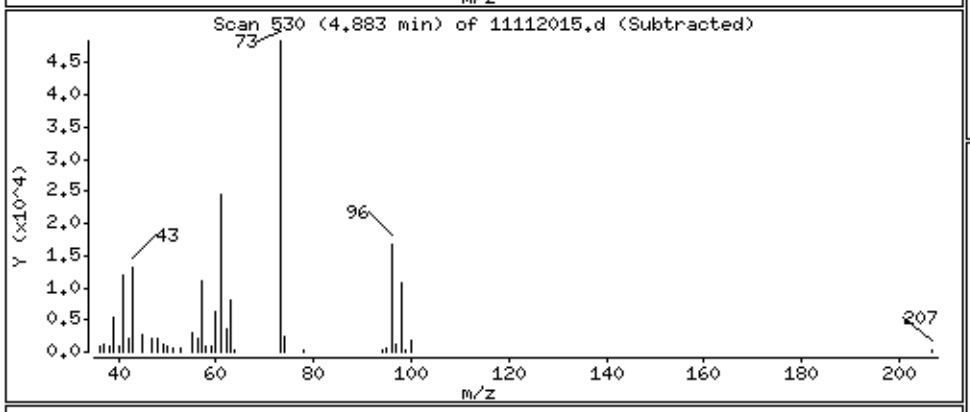
Column phase: RTx-624

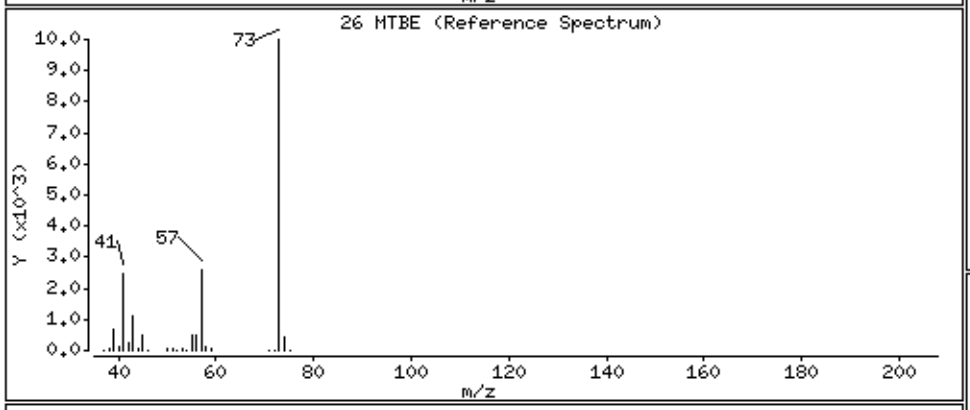
Column diameter: 0.53

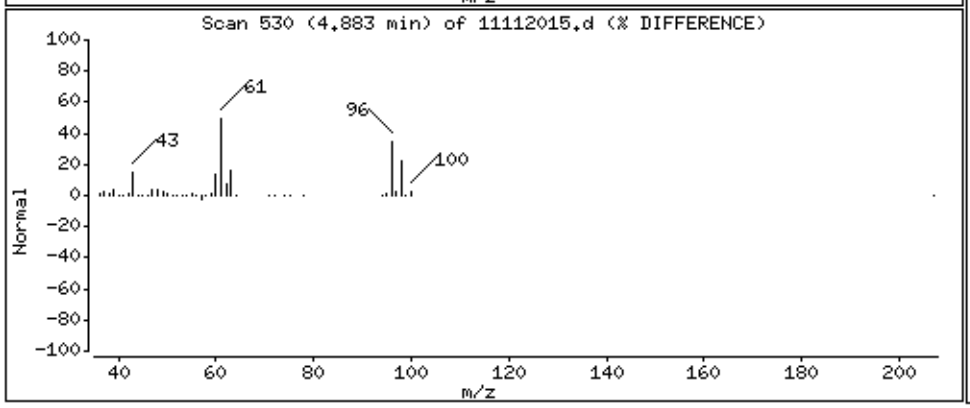
26 MTBE

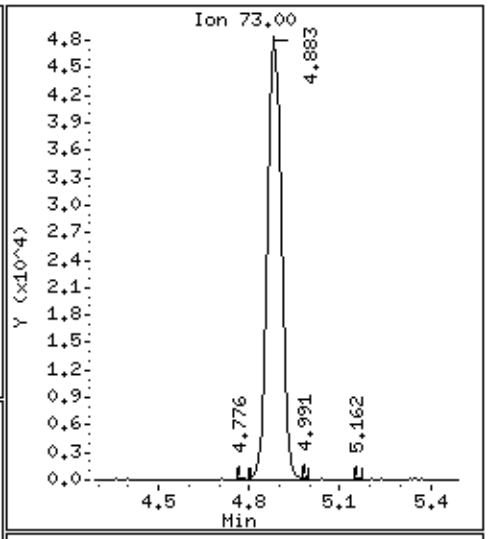
Concentration: 76.533 NG

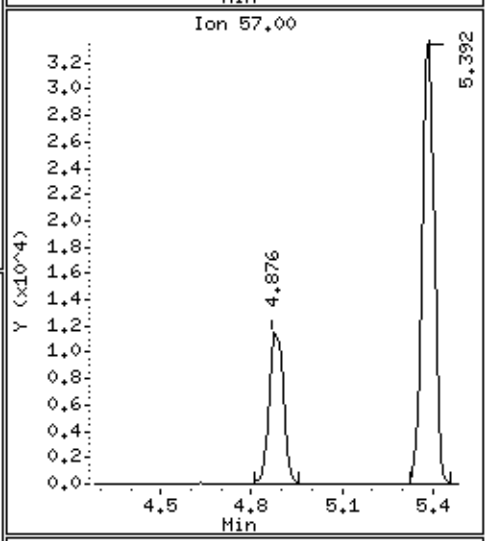


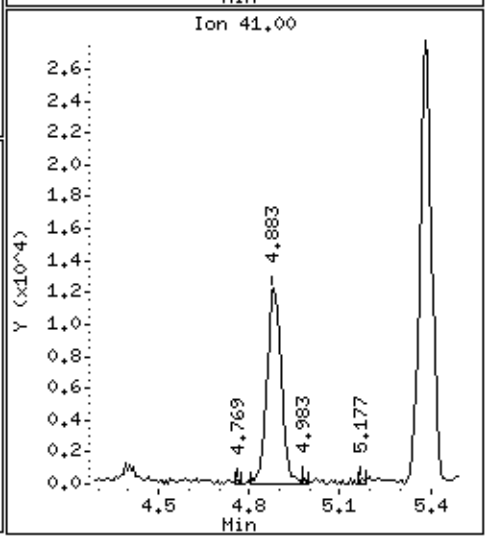












Data File: /chem/msd11.i/20nov15.b/11112015.d

Date : 21-NOV-2015 04:28

Client ID: LCS

Instrument: msd11.i

Sample Info: ;VI VOC+PAH ICV;LCS

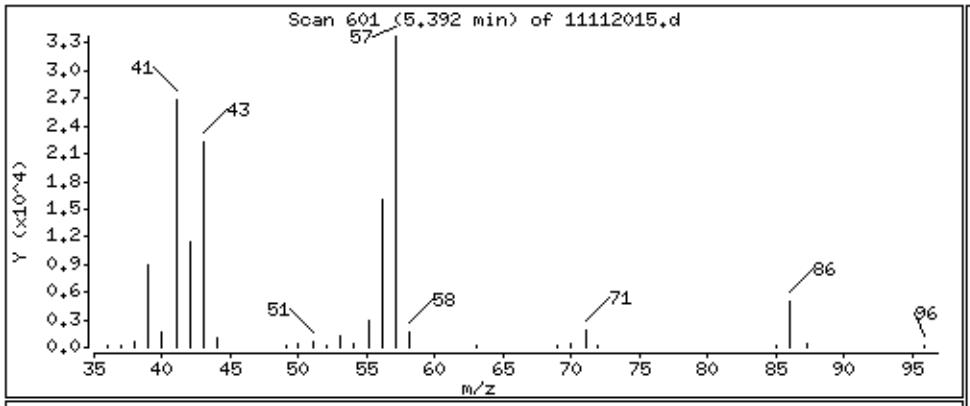
Operator: LA

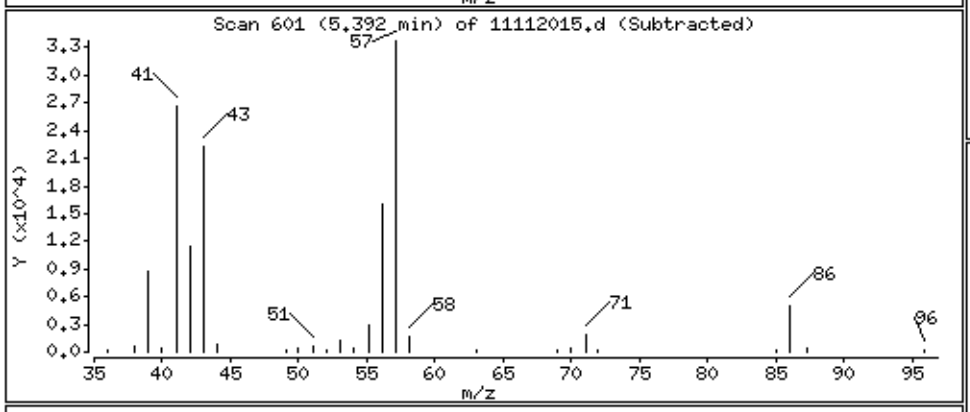
Column phase: RTx-624

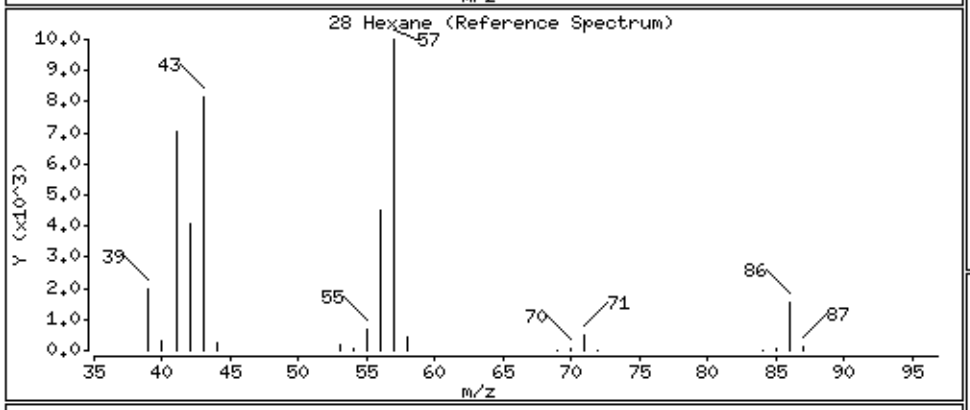
Column diameter: 0.53

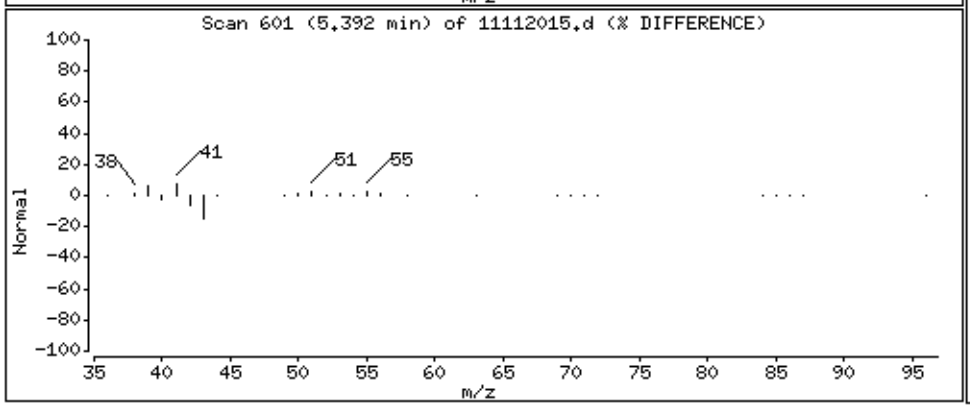
28 Hexane

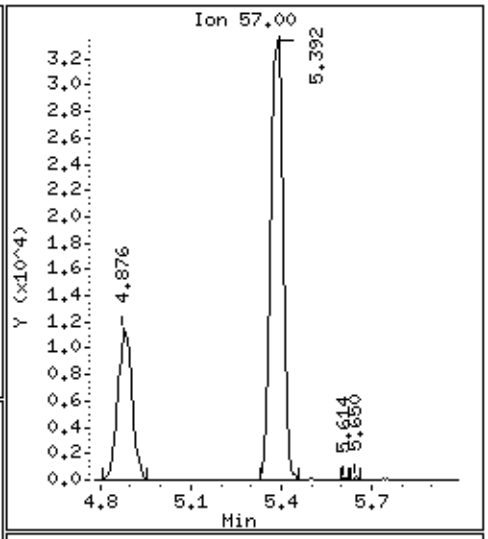
Concentration: 69.689 NG

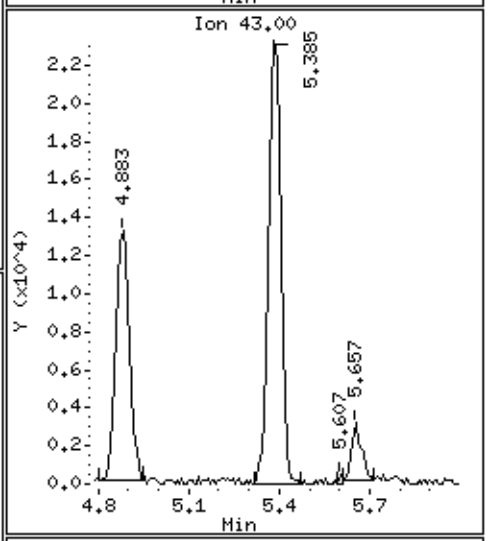


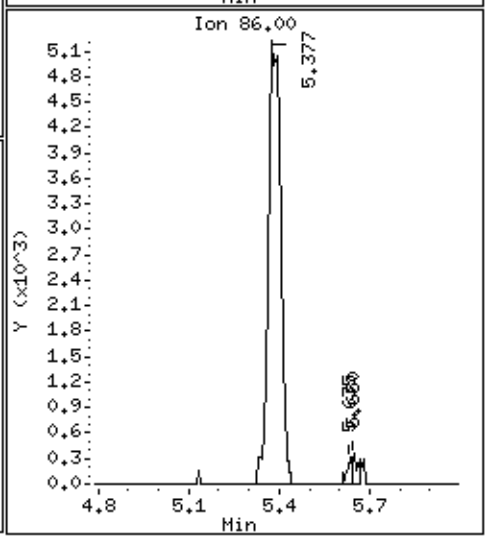












Data File: /chem/msd11.i/20nov15.b/11112015.d

Date : 21-NOV-2015 04:28

Client ID: LCS

Instrument: msd11.i

Sample Info: ;VI VOC+PAH ICV;LCS

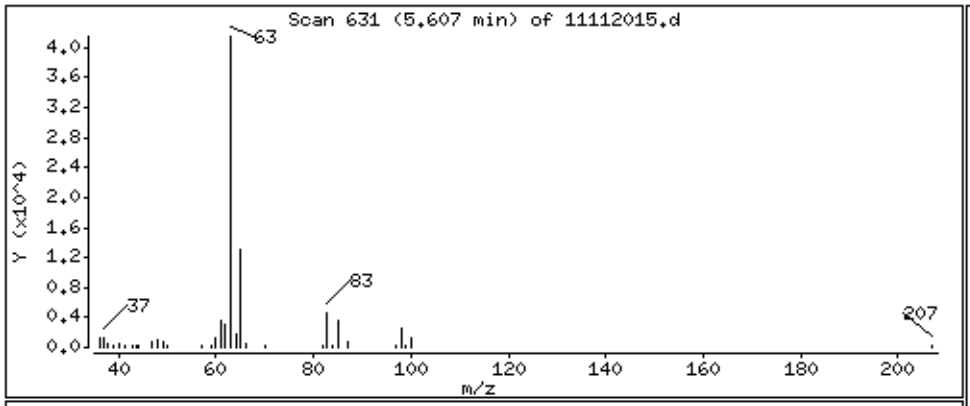
Operator: LA

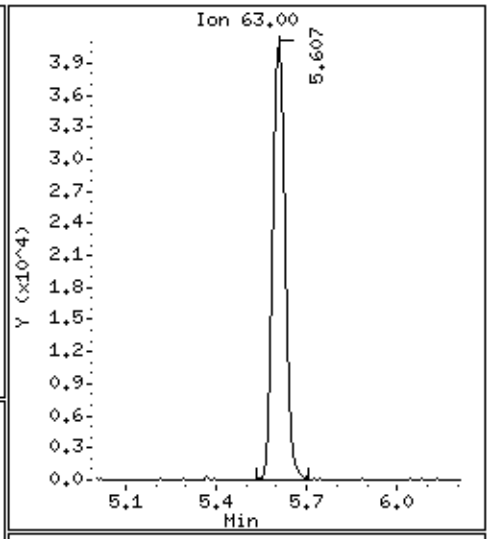
Column phase: RTx-624

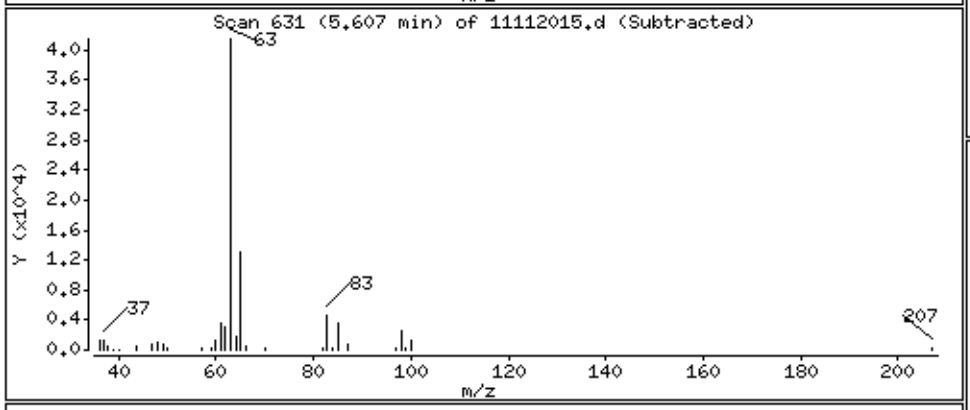
Column diameter: 0.53

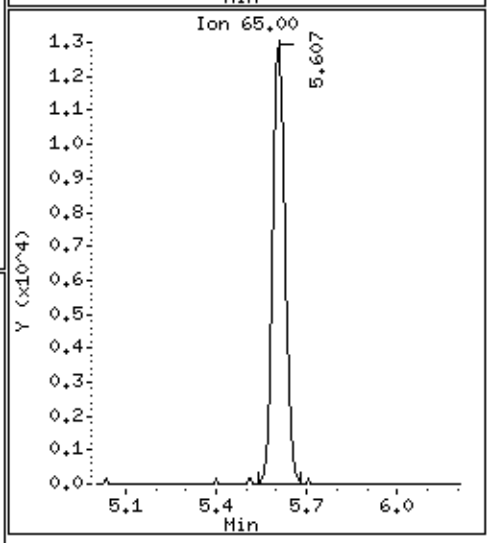
29 1,1-Dichloroethane

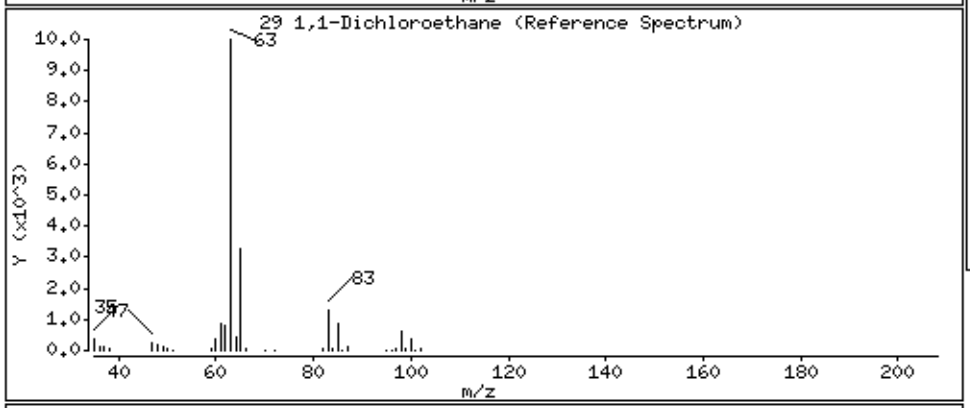
Concentration: 84.074 NG

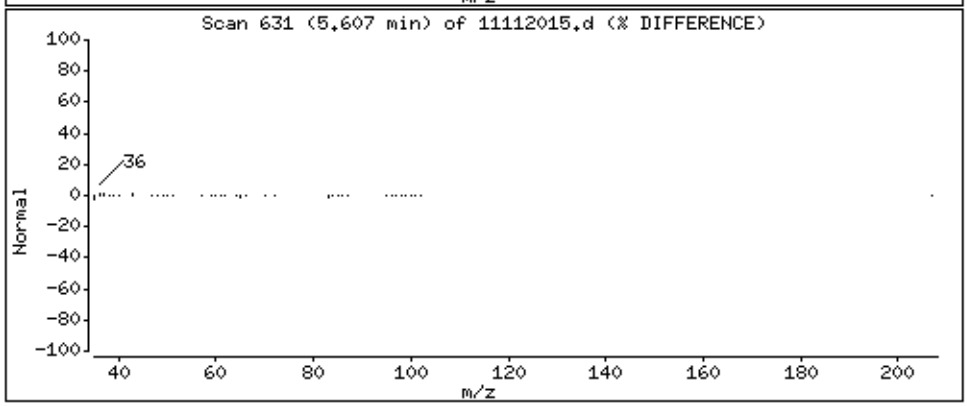












Data File: /chem/msd11.i/20nov15.b/11112015.d

Date : 21-NOV-2015 04:28

Client ID: LCS

Instrument: msd11.i

Sample Info: ;VI VOC+PAH ICV;LCS

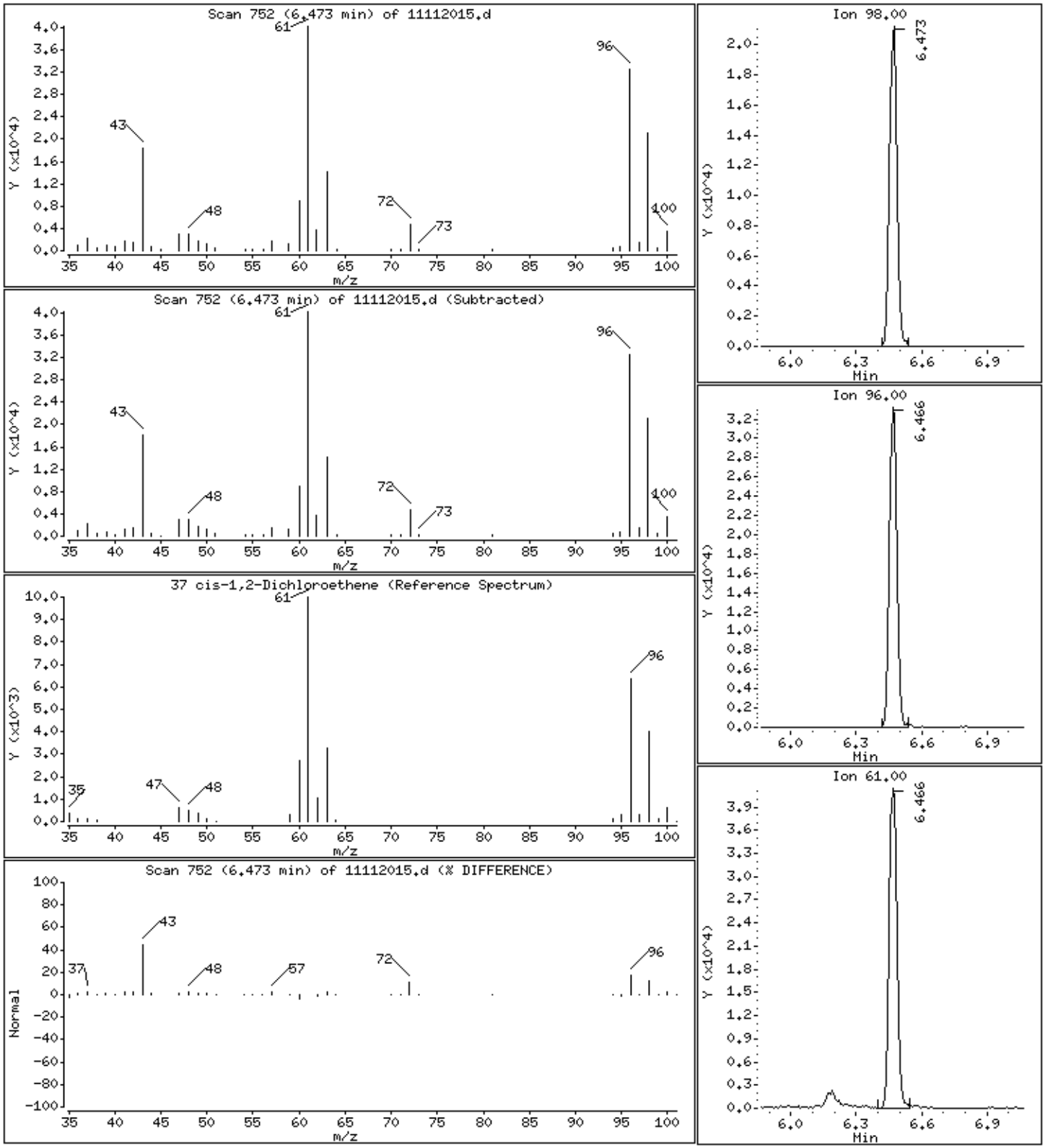
Operator: LA

Column phase: RTx-624

Column diameter: 0.53

37 cis-1,2-Dichloroethene

Concentration: 86.248 NG



Data File: /chem/msd11.i/20nov15.b/11112015.d

Date : 21-NOV-2015 04:28

Client ID: LCS

Instrument: msd11.i

Sample Info: ;VI VOC+PAH ICV;LCS

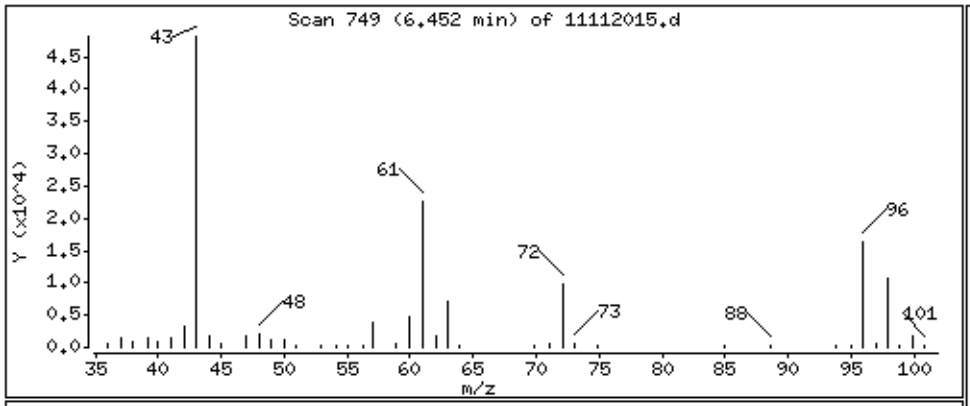
Operator: LA

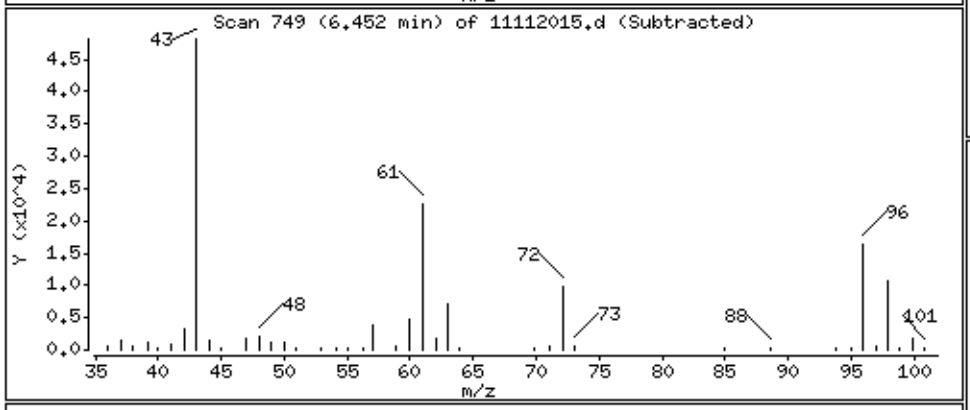
Column phase: RTx-624

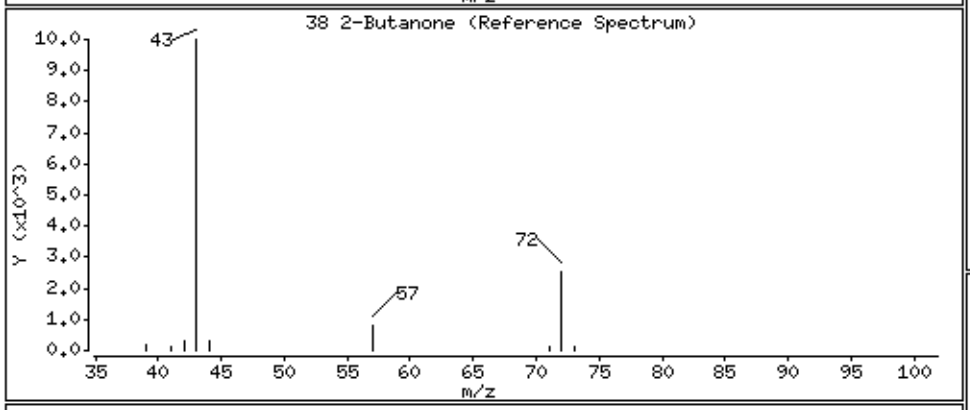
Column diameter: 0.53

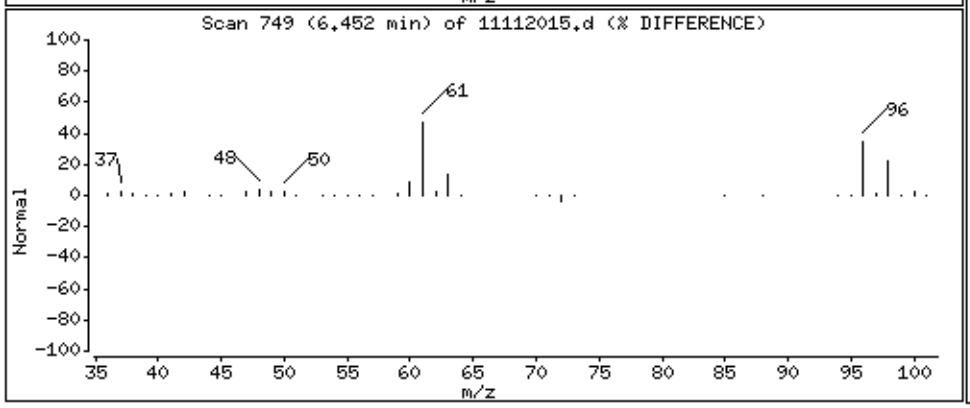
38 2-Butanone

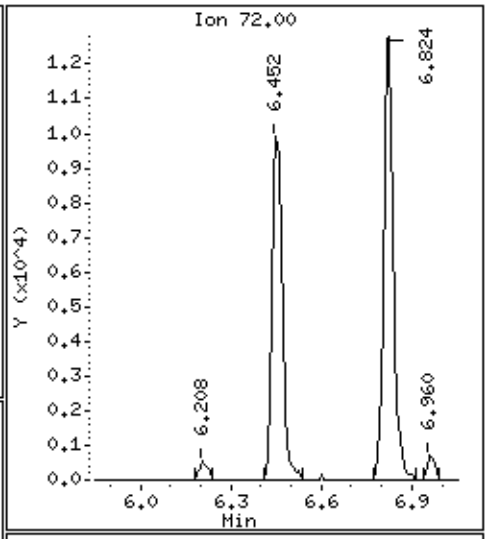
Concentration: 44.705 NG

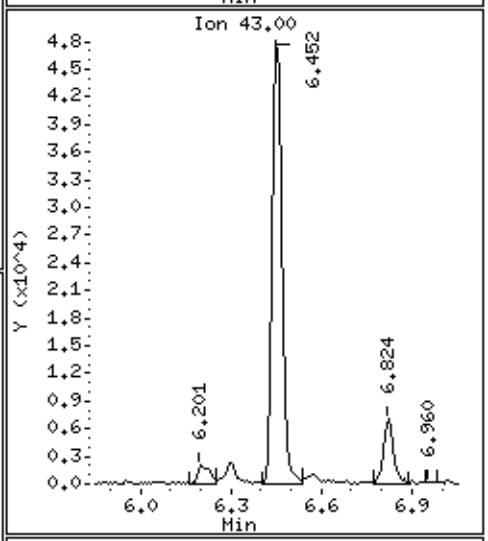


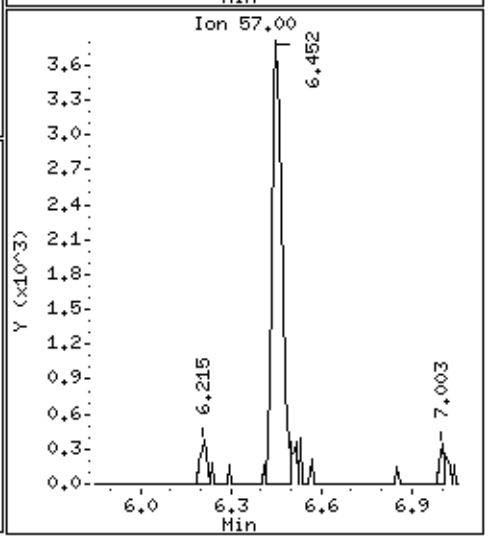












Data File: /chem/msd11.i/20nov15.b/11112015.d

Date : 21-NOV-2015 04:28

Client ID: LCS

Instrument: msd11.i

Sample Info: ;VI VOC+PAH ICV;LCS

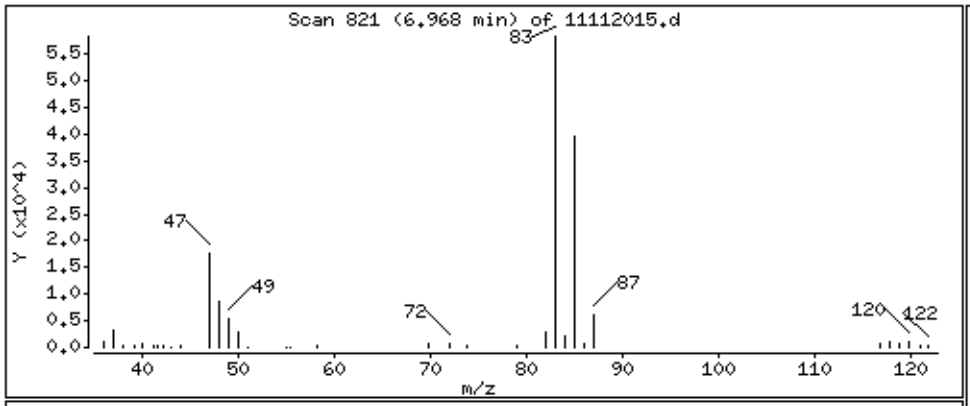
Operator: LA

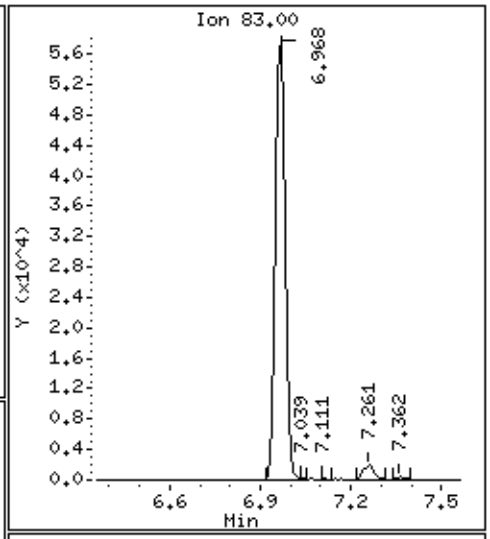
Column phase: RTx-624

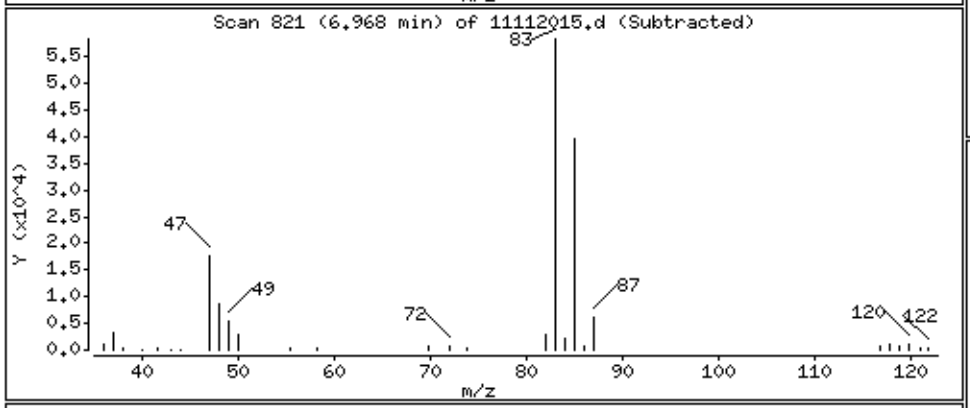
Column diameter: 0.53

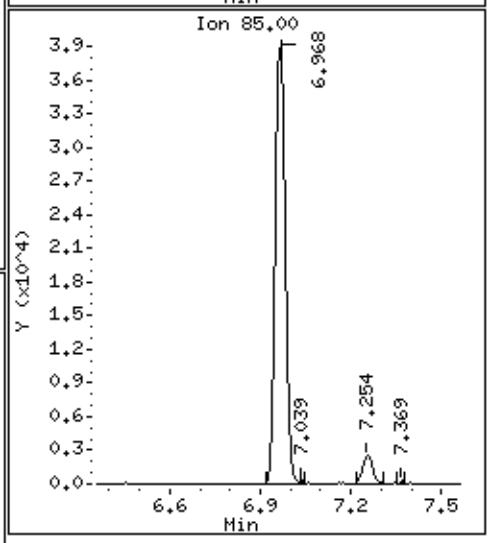
44 Chloroform

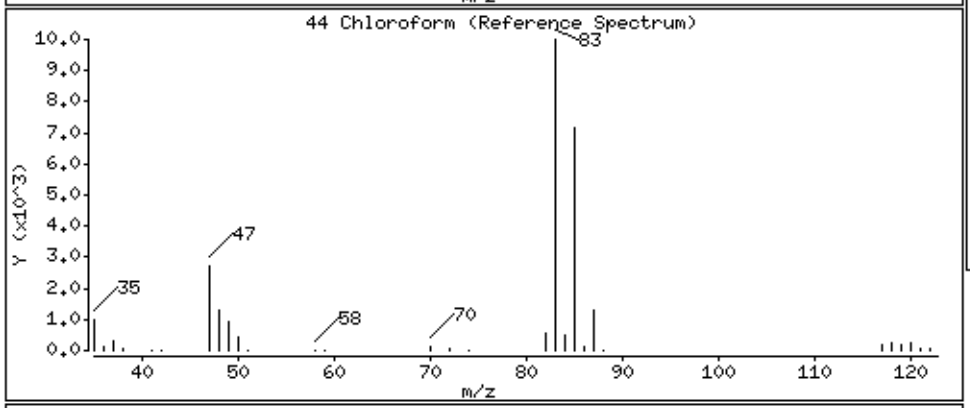
Concentration: 90.414 NG

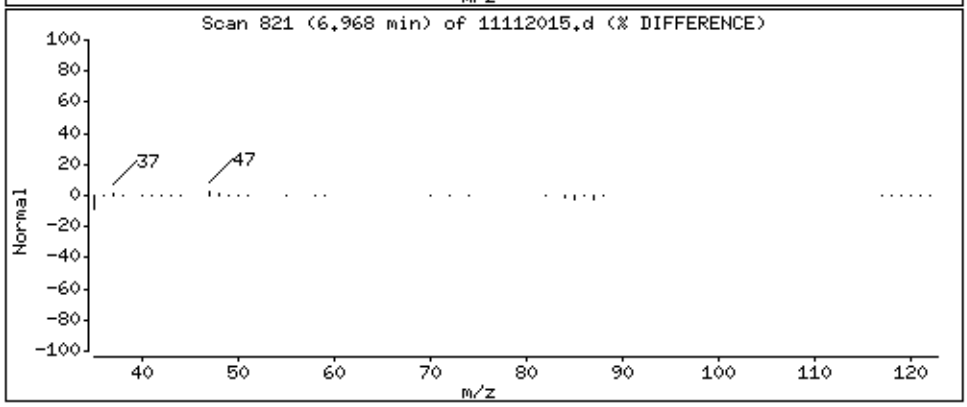












Data File: /chem/msd11.i/20nov15.b/11112015.d

Date : 21-NOV-2015 04:28

Client ID: LCS

Instrument: msd11.i

Sample Info: ;VI VOC+PAH ICV;LCS

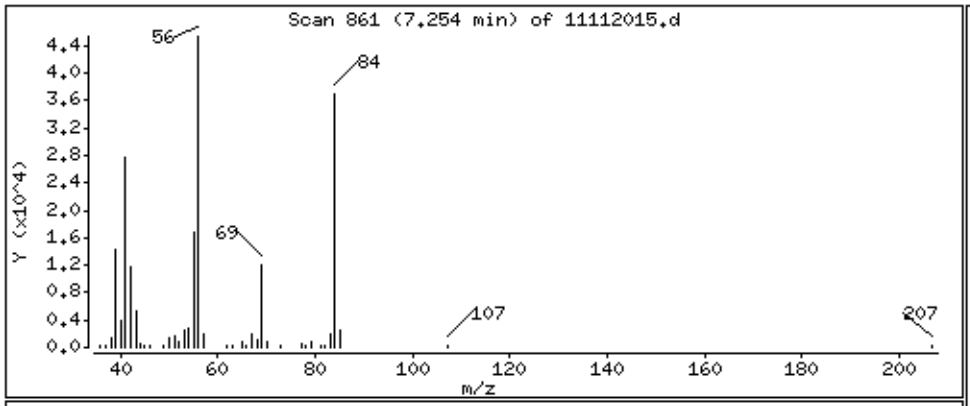
Operator: LA

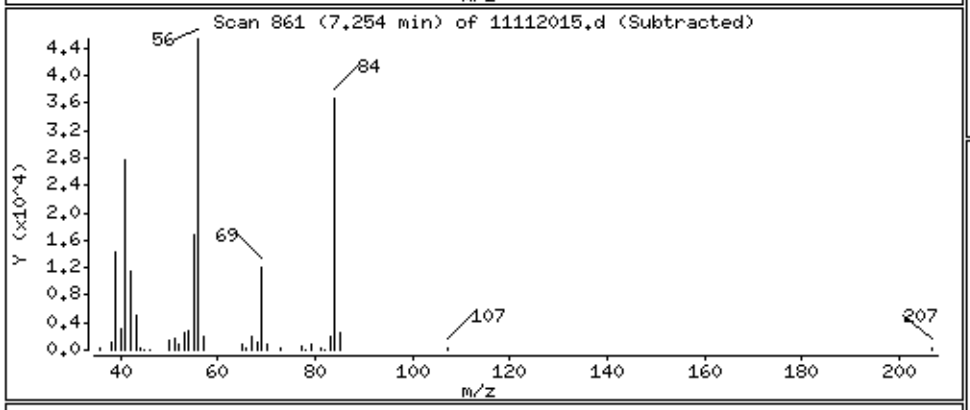
Column phase: RTx-624

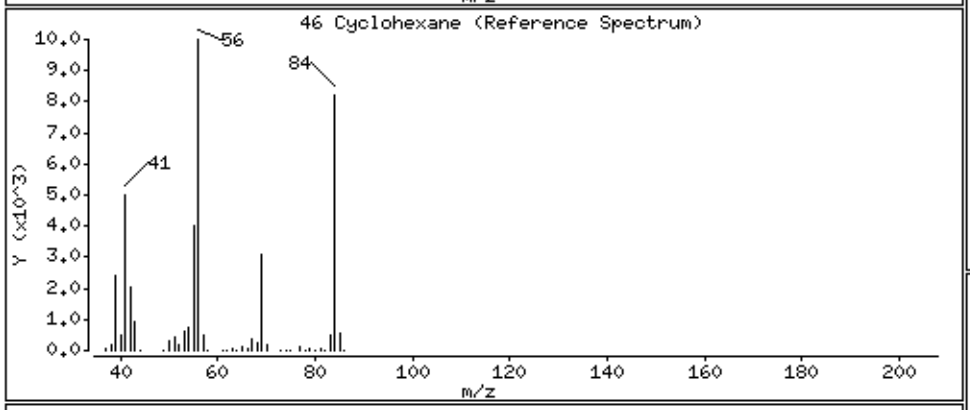
Column diameter: 0.53

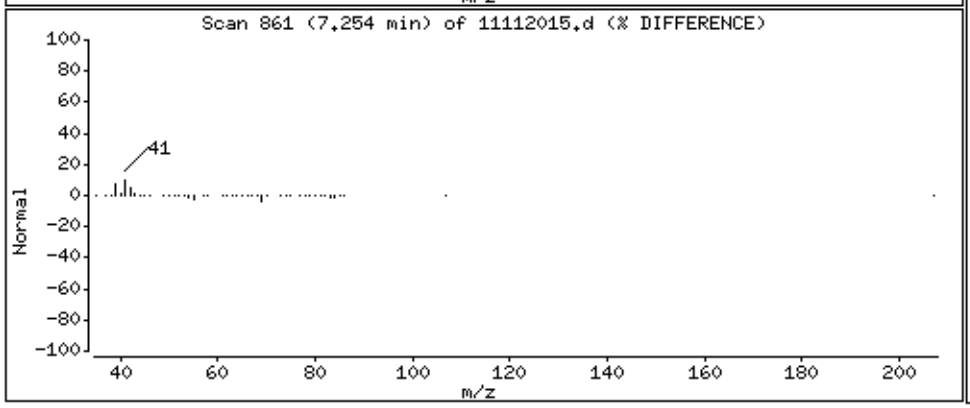
46 Cyclohexane

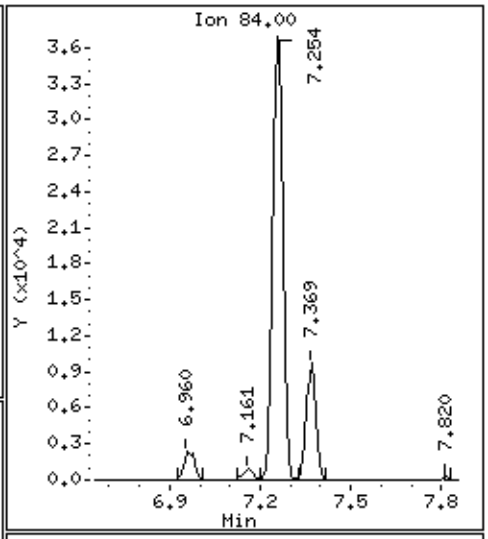
Concentration: 70.764 NG

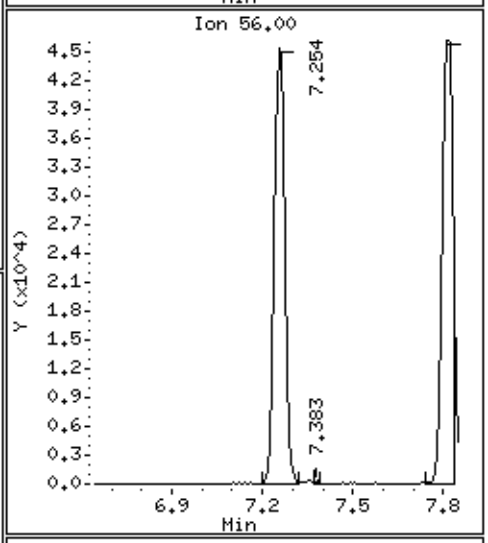


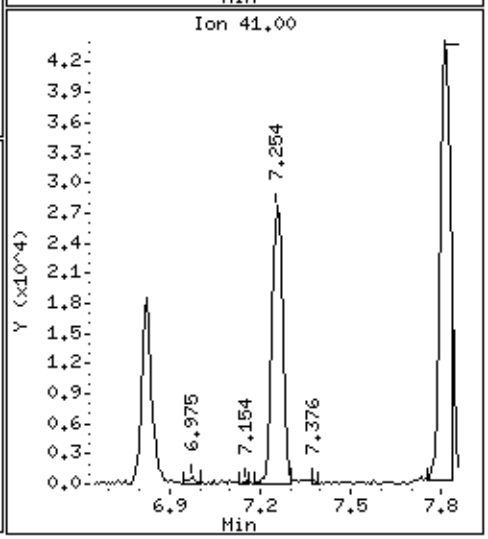












Data File: /chem/msd11.i/20nov15.b/11112015.d

Date : 21-NOV-2015 04:28

Client ID: LCS

Instrument: msd11.i

Sample Info: ;VI VOC+PAH ICV;LCS

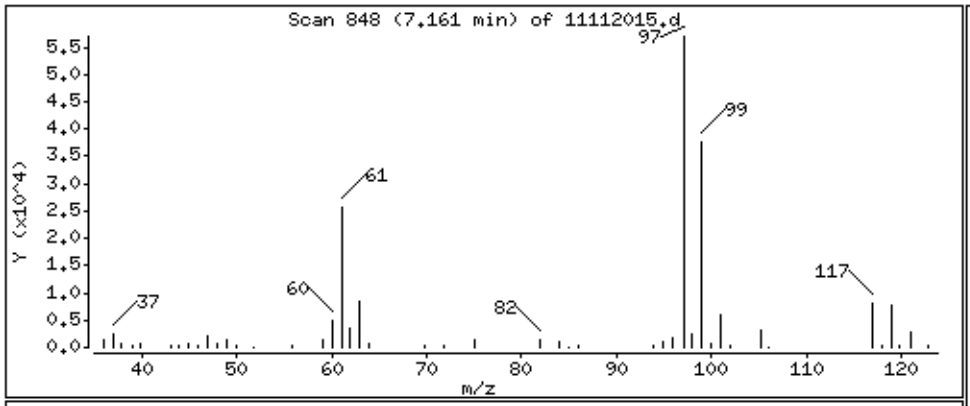
Operator: LA

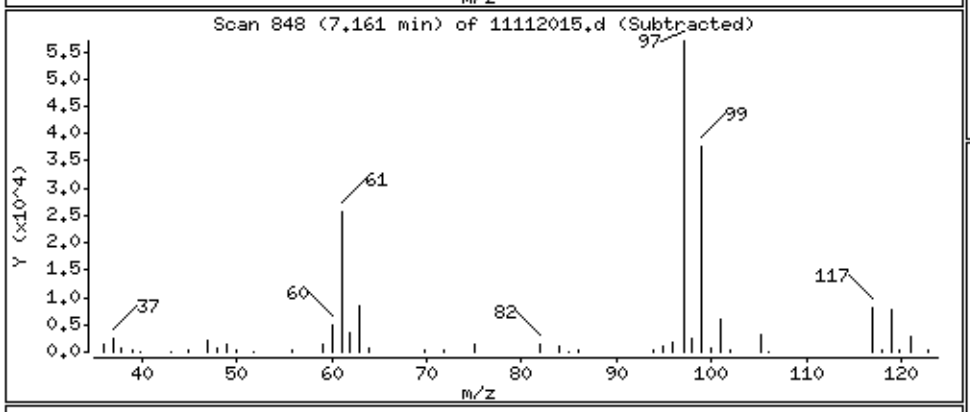
Column phase: RTx-624

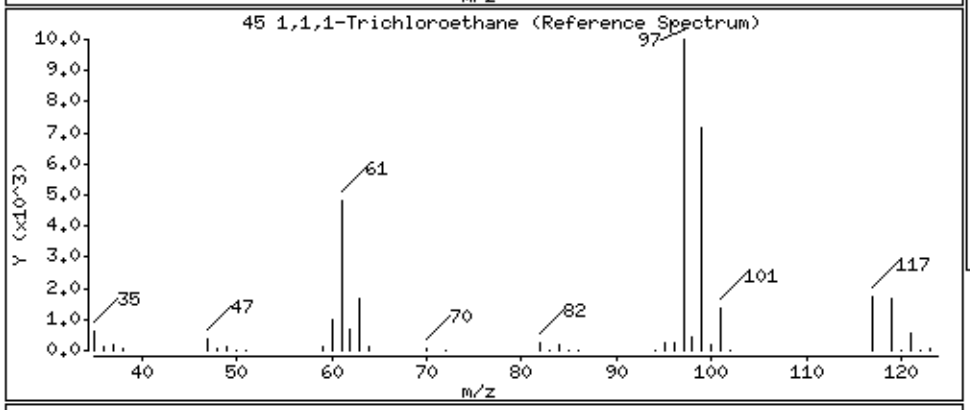
Column diameter: 0.53

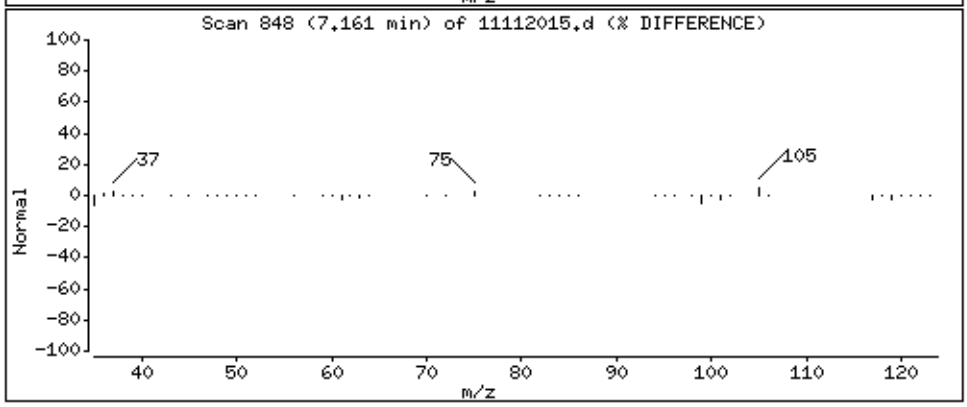
45 1,1,1-Trichloroethane

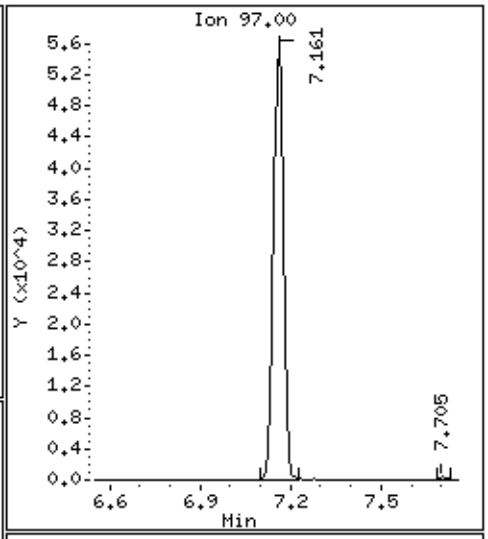
Concentration: 115.82 NG

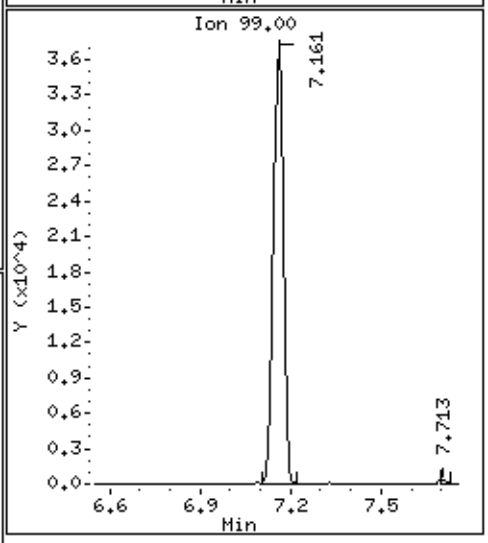












Data File: /chem/msd11.i/20nov15.b/11112015.d

Date : 21-NOV-2015 04:28

Client ID: LCS

Instrument: msd11.i

Sample Info: ;VI VOC+PAH ICV;LCS

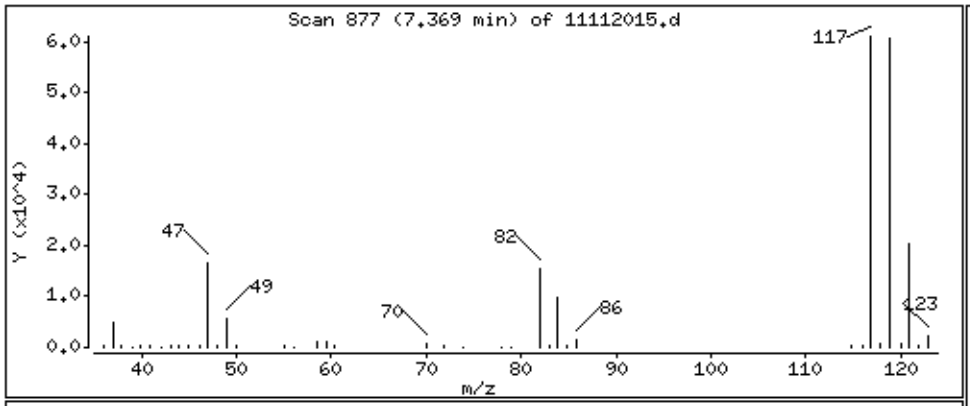
Operator: LA

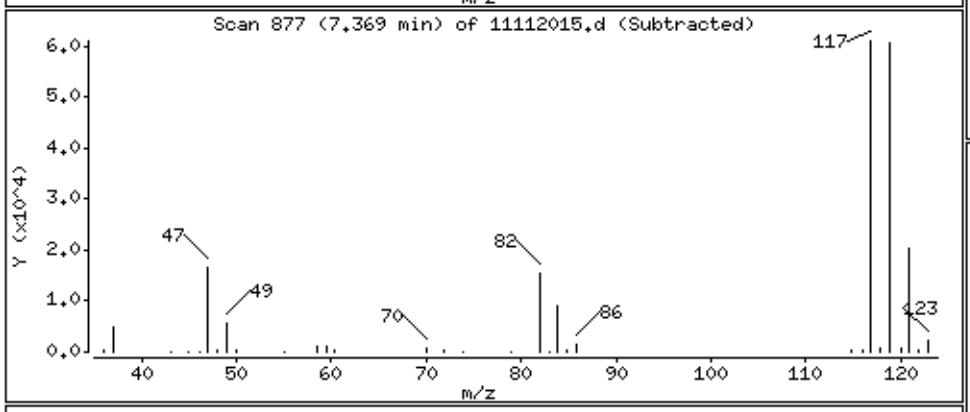
Column phase: RTx-624

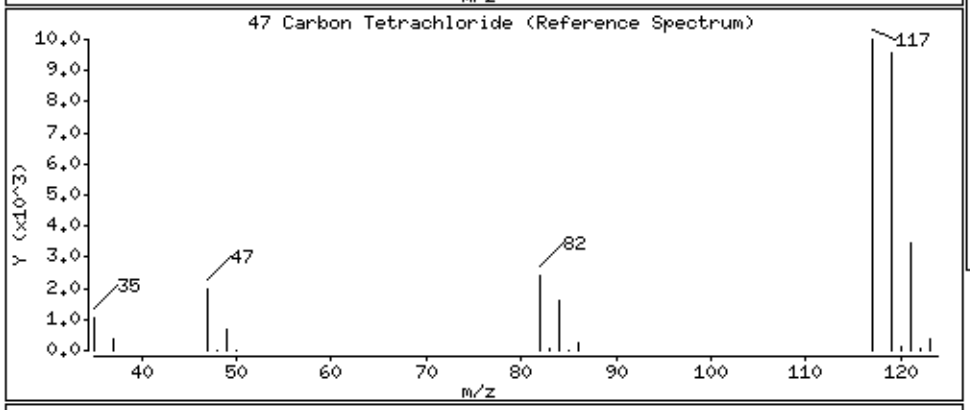
Column diameter: 0.53

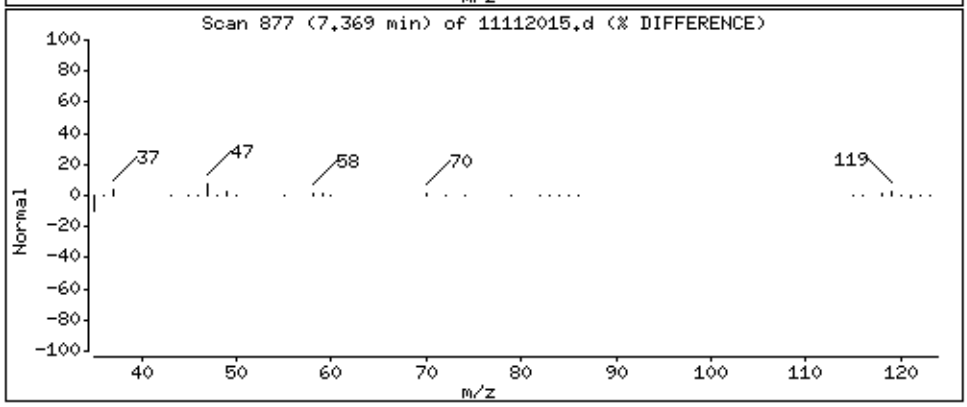
47 Carbon Tetrachloride

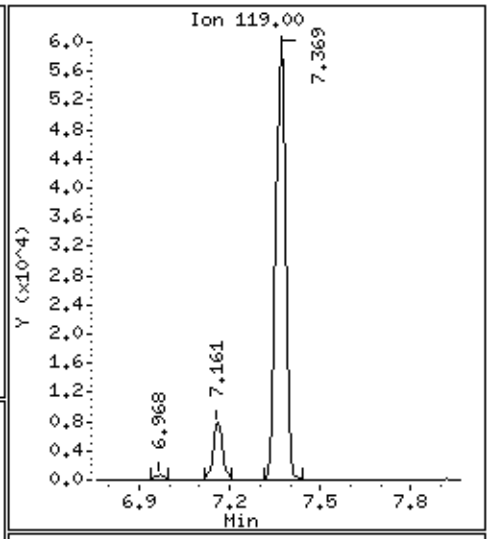
Concentration: 136.11 NG

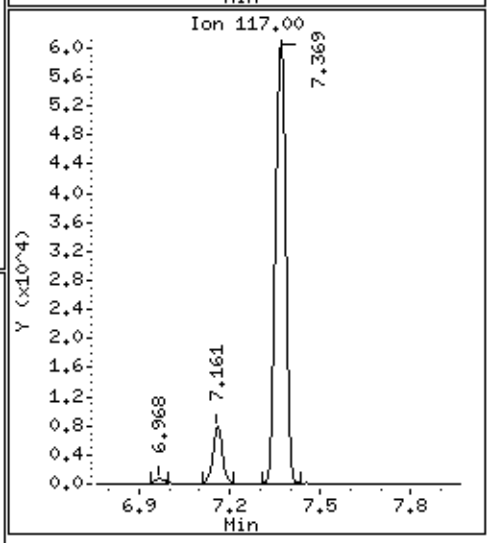












Data File: /chem/msd11.i/20nov15.b/11112015.d

Date : 21-NOV-2015 04:28

Client ID: LCS

Instrument: msd11.i

Sample Info: ;VI VOC+PAH ICV;LCS

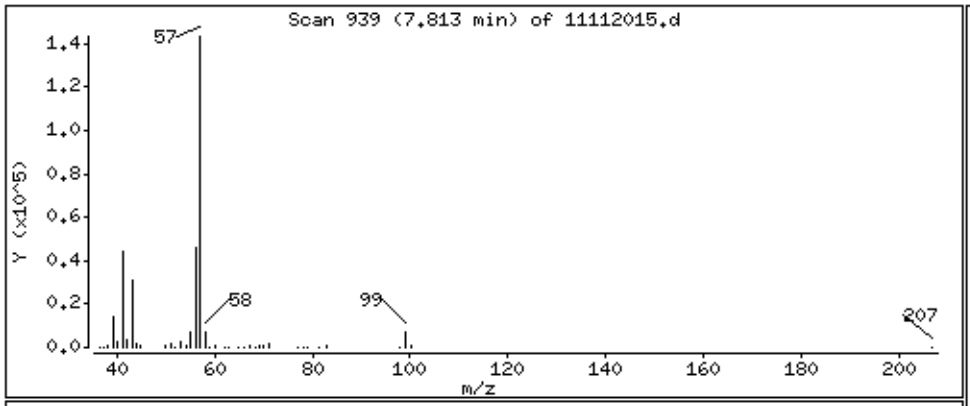
Operator: LA

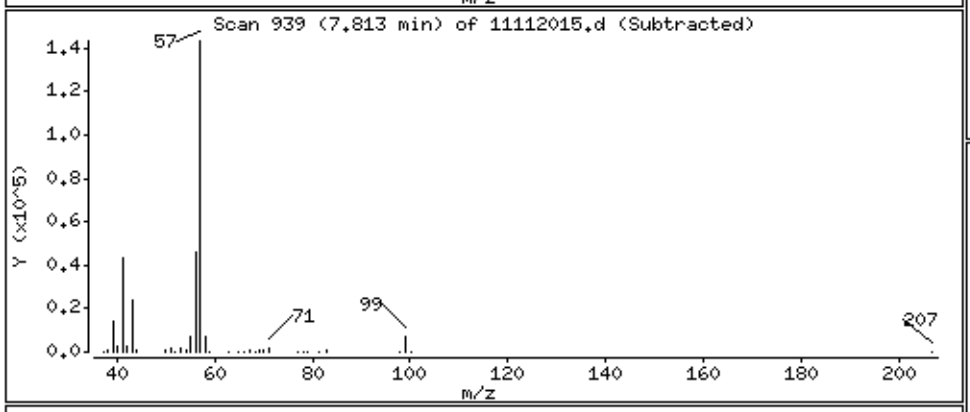
Column phase: RTx-624

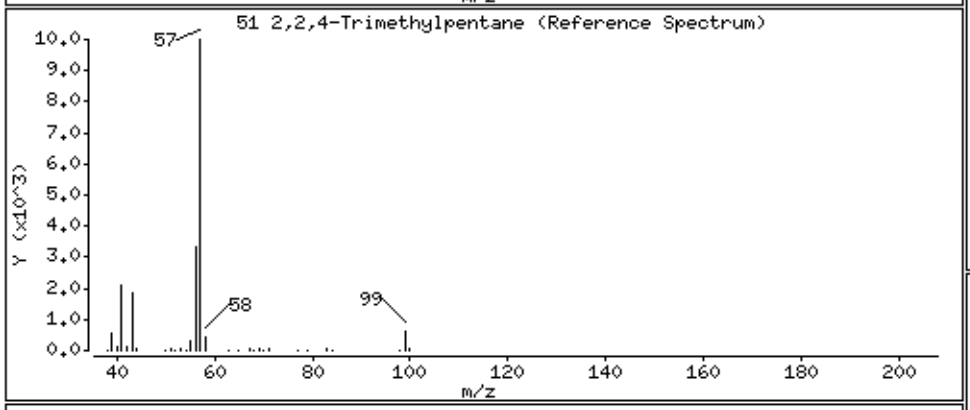
Column diameter: 0.53

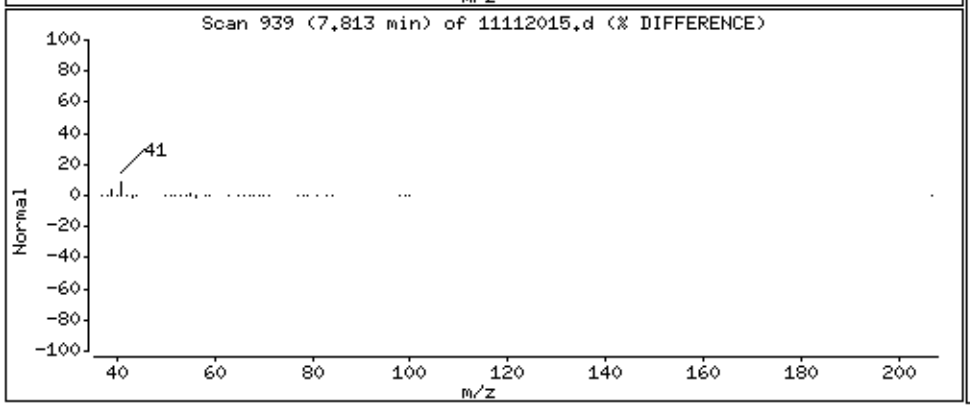
51 2,2,4-Trimethylpentane

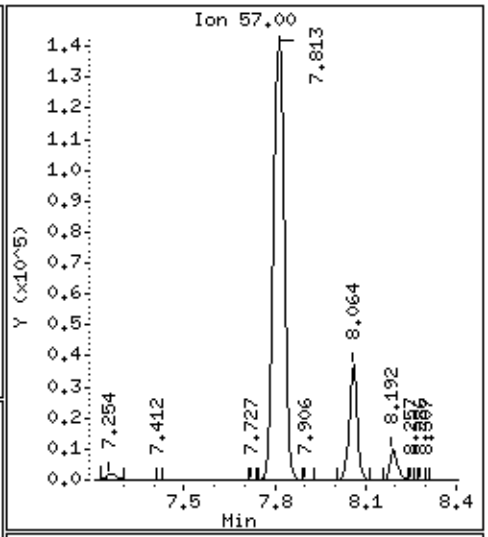
Concentration: 96.941 NG

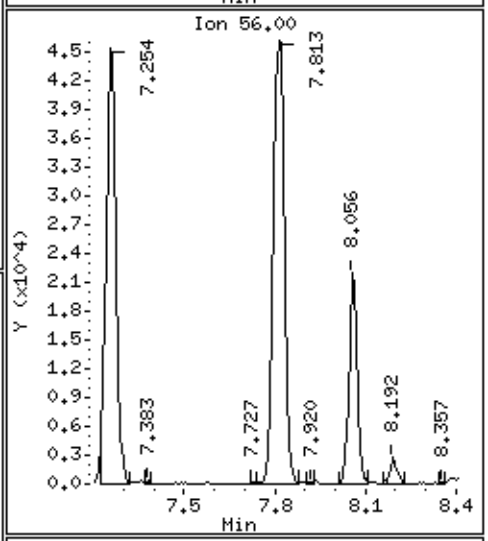


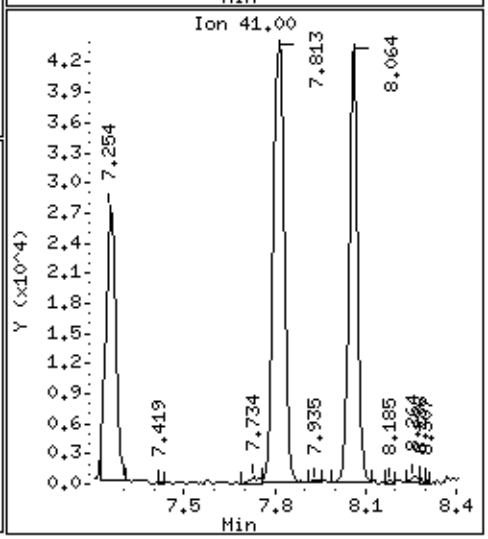












Data File: /chem/msd11.i/20nov15.b/11112015.d

Date : 21-NOV-2015 04:28

Client ID: LCS

Instrument: msd11.i

Sample Info: ;VI VOC+PAH ICV;LCS

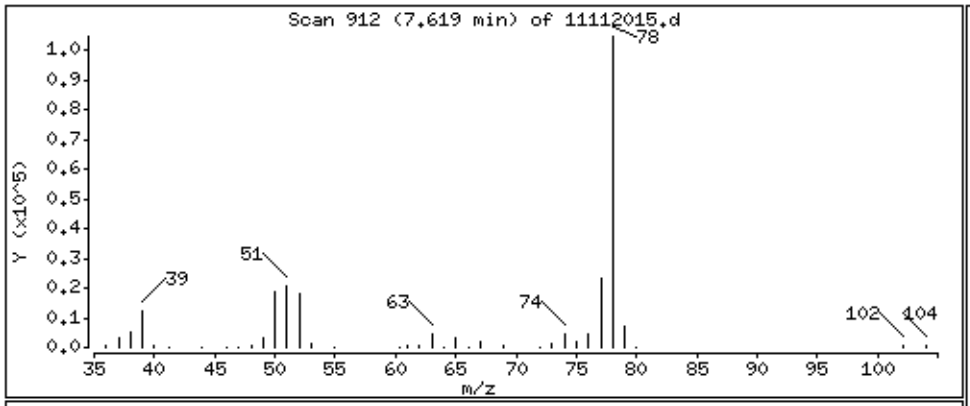
Operator: LA

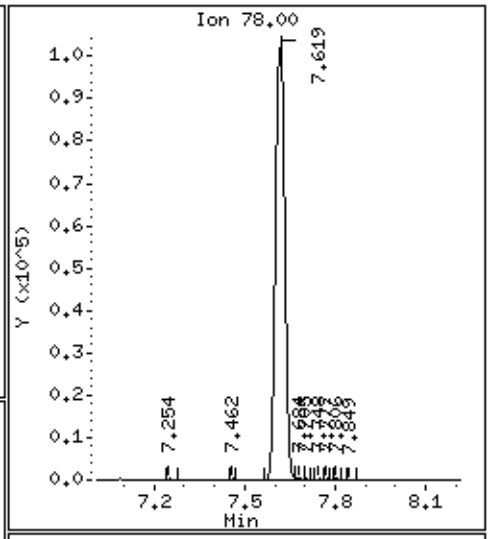
Column phase: RTx-624

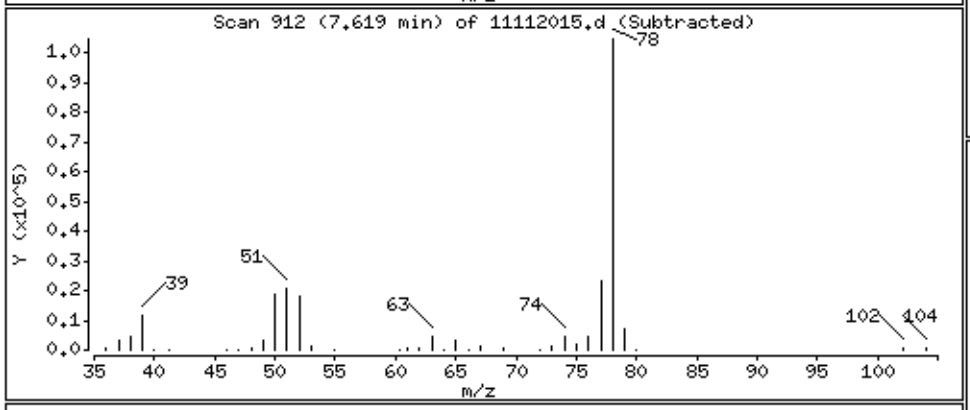
Column diameter: 0.53

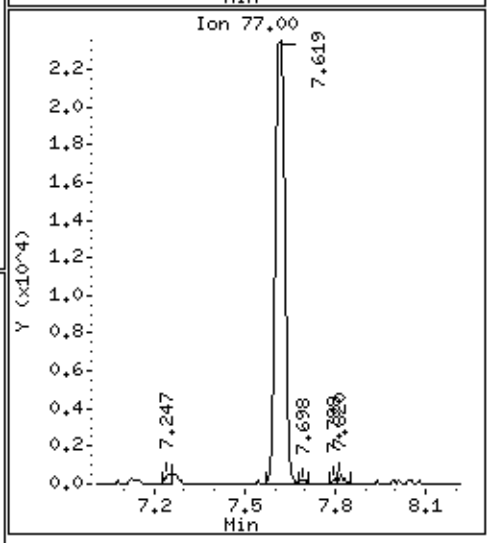
48 Benzene

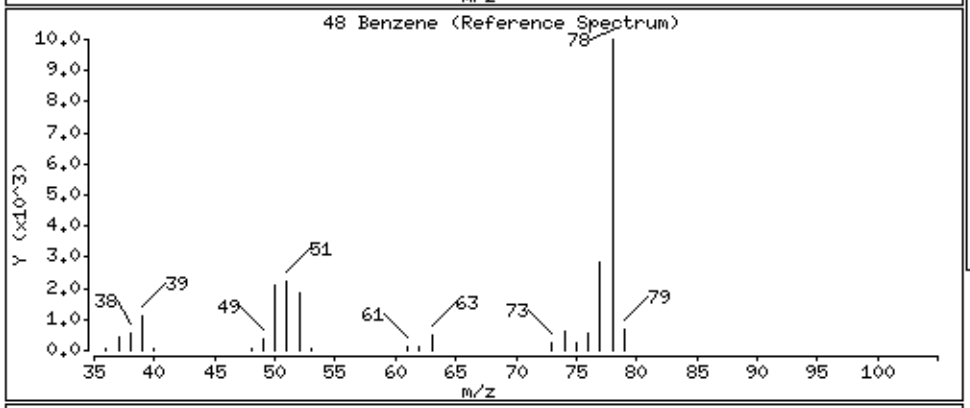
Concentration: 64.141 NG

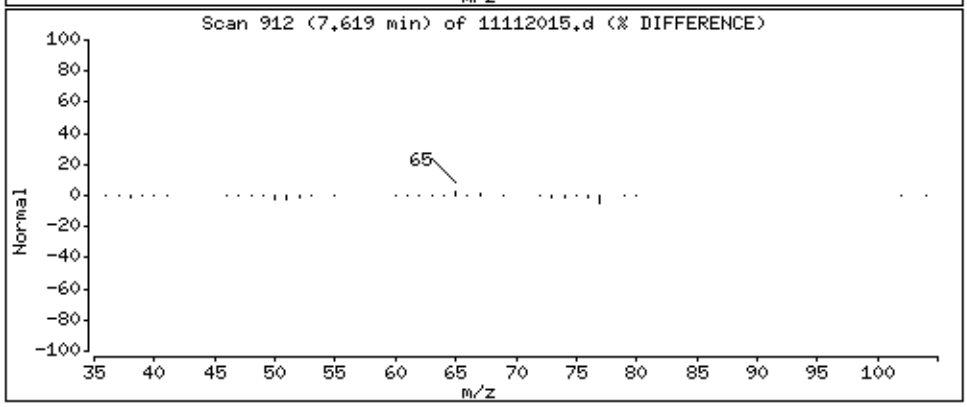












Data File: /chem/msd11.i/20nov15.b/11112015.d

Date : 21-NOV-2015 04:28

Client ID: LCS

Instrument: msd11.i

Sample Info: ;VI VOC+PAH ICV;LCS

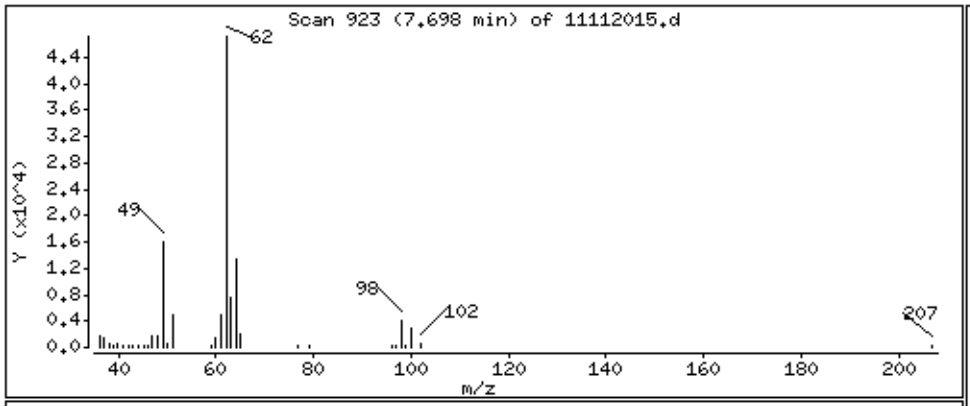
Operator: LA

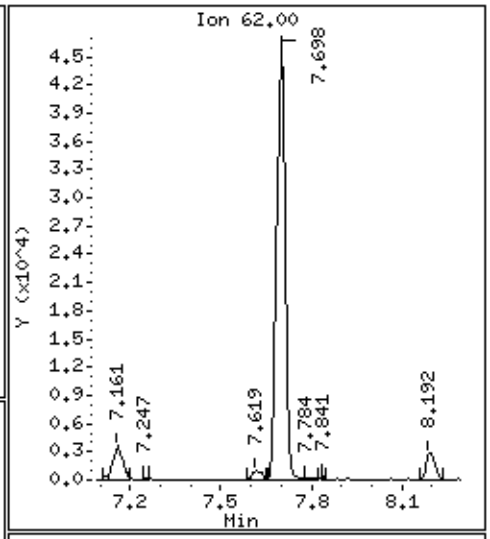
Column phase: RTx-624

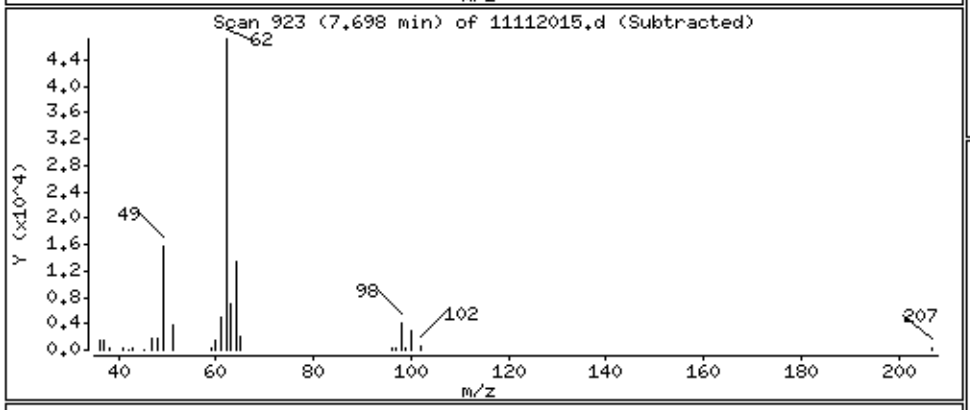
Column diameter: 0.53

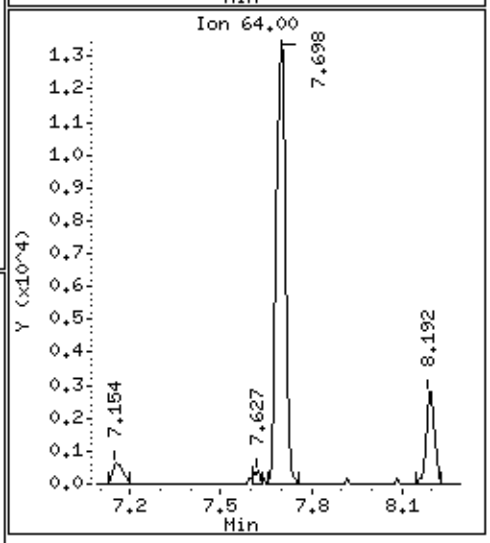
50 1,2-Dichloroethane

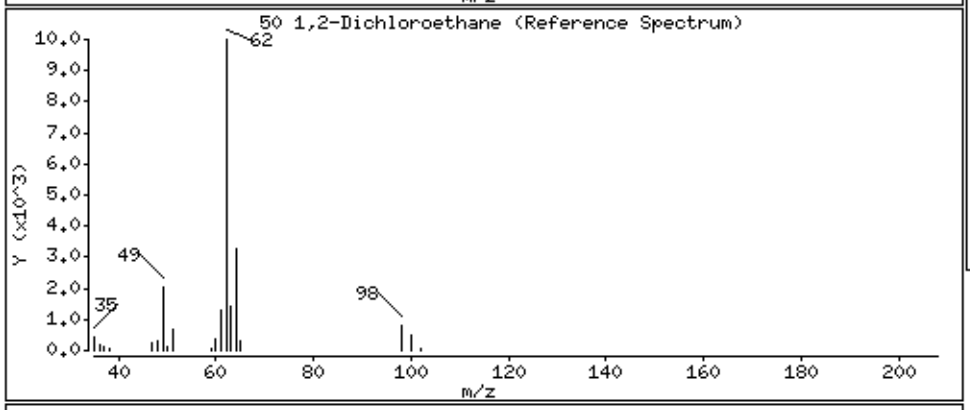
Concentration: 83.430 NG

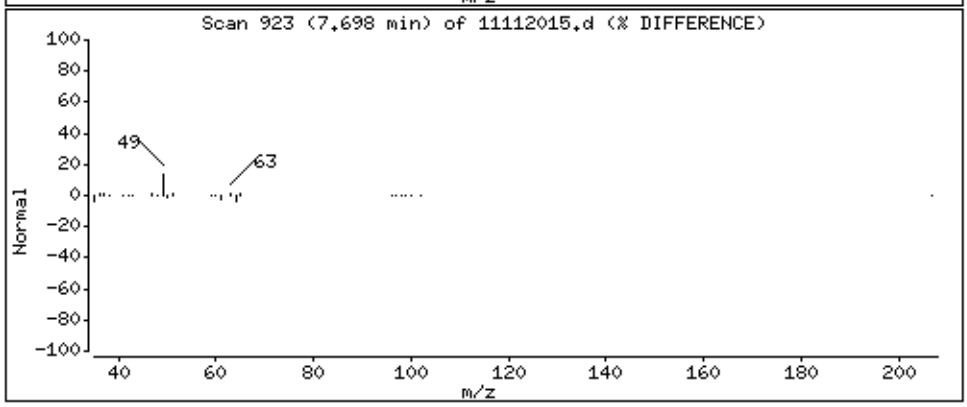












Data File: /chem/msd11.i/20nov15.b/11112015.d

Date : 21-NOV-2015 04:28

Client ID: LCS

Instrument: msd11.i

Sample Info: ;VI VOC+PAH ICV;LCS

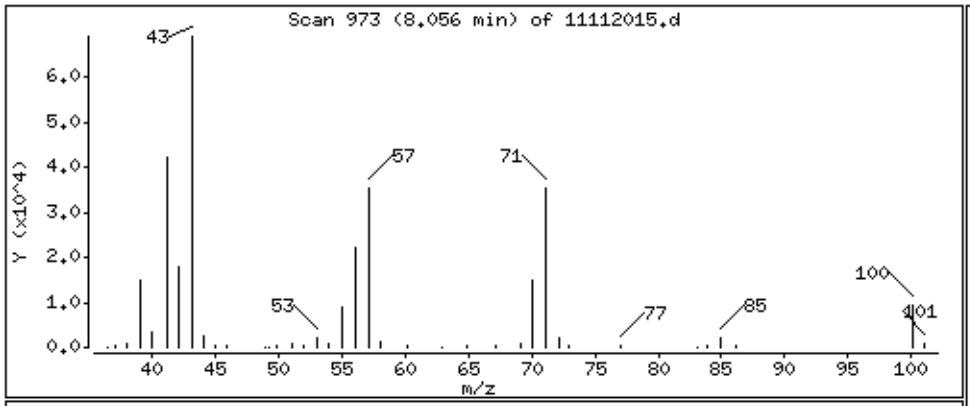
Operator: LA

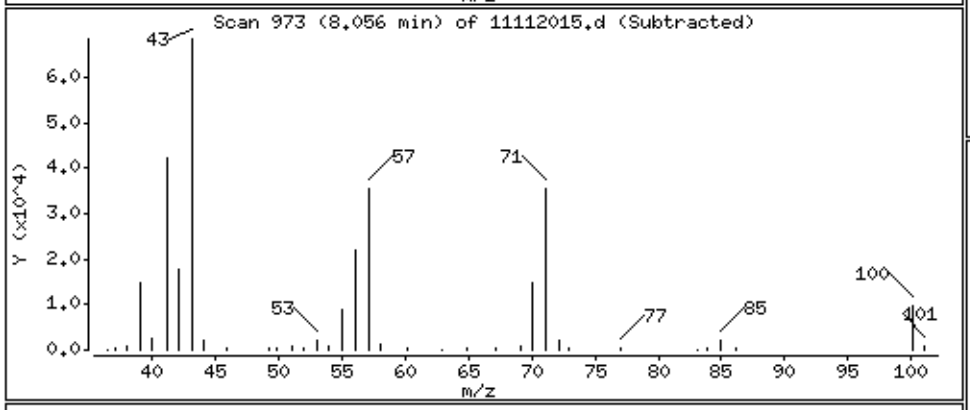
Column phase: RTx-624

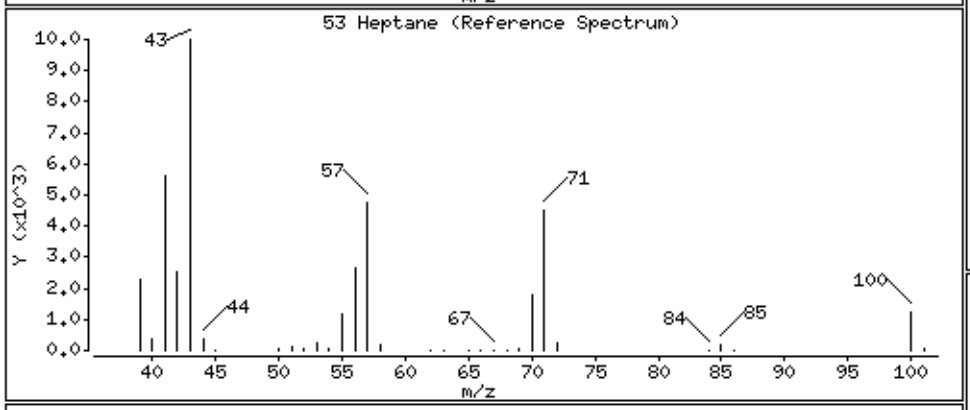
Column diameter: 0.53

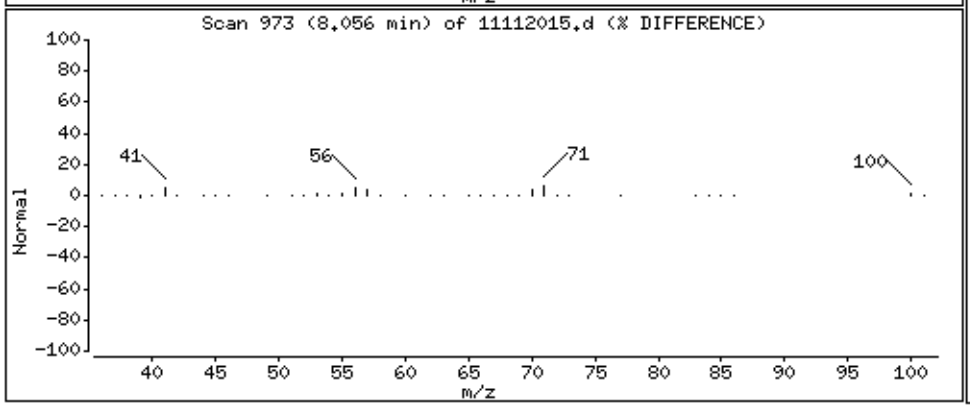
53 Heptane

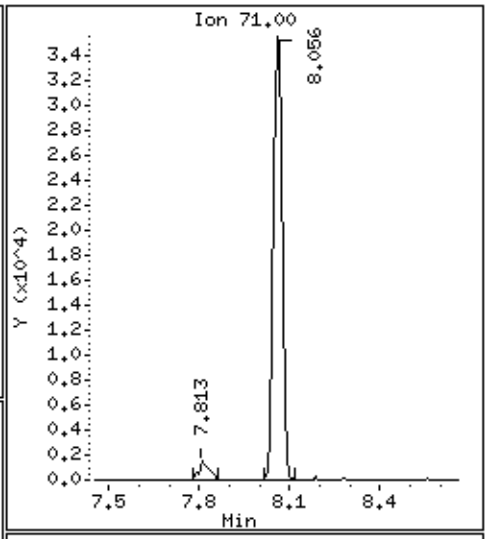
Concentration: 82.522 NG

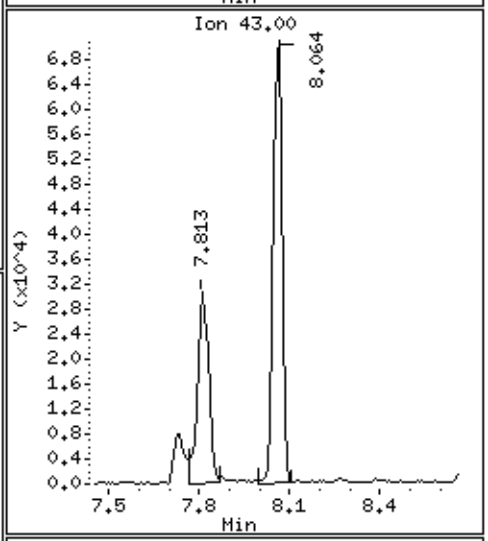


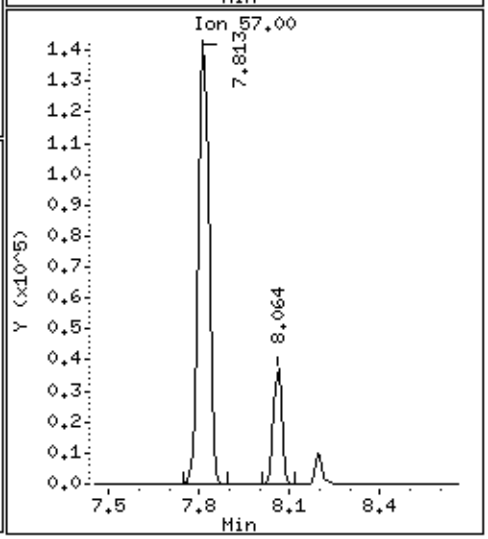












Data File: /chem/msd11.i/20nov15.b/11112015.d

Date : 21-NOV-2015 04:28

Client ID: LCS

Instrument: msd11.i

Sample Info: ;VI VOC+PAH ICV;LCS

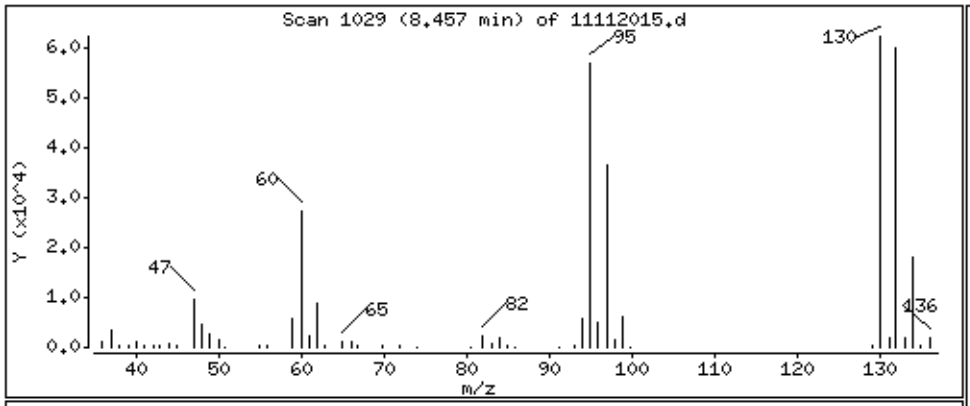
Operator: LA

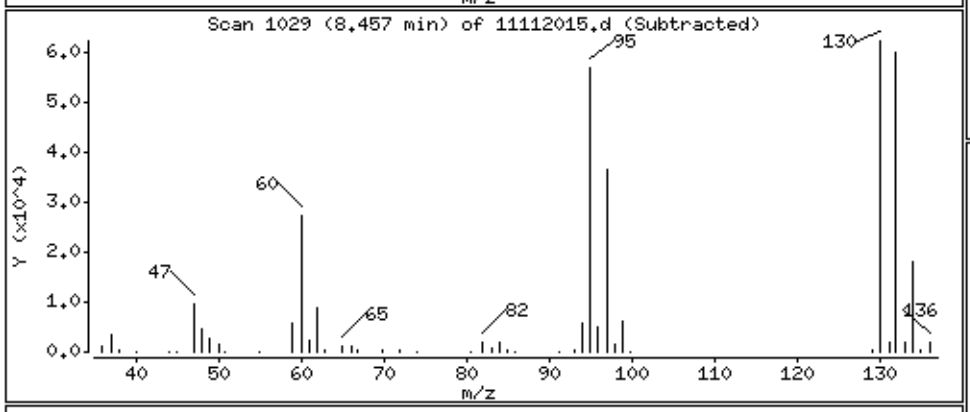
Column phase: RTx-624

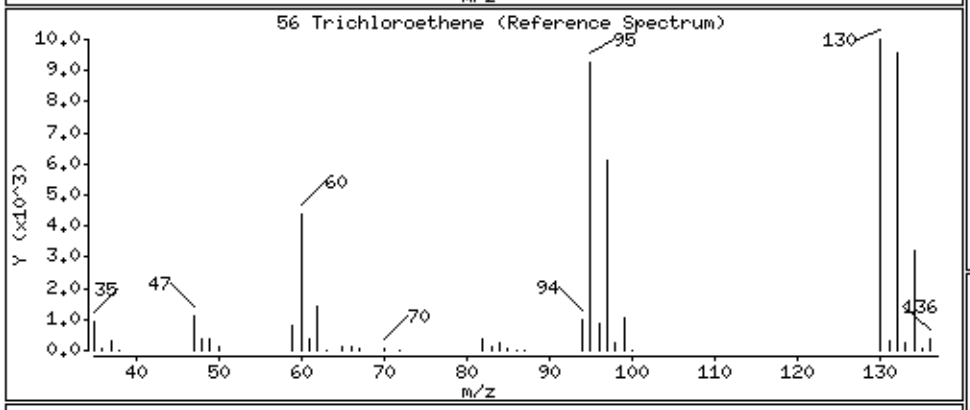
Column diameter: 0.53

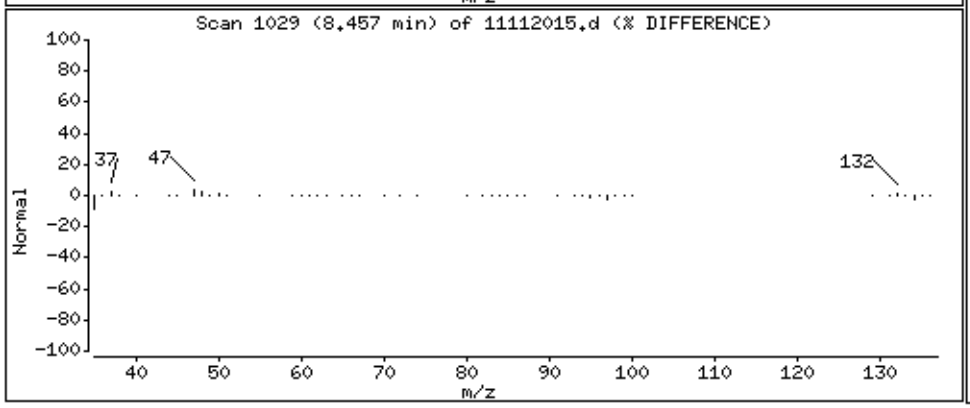
56 Trichloroethene

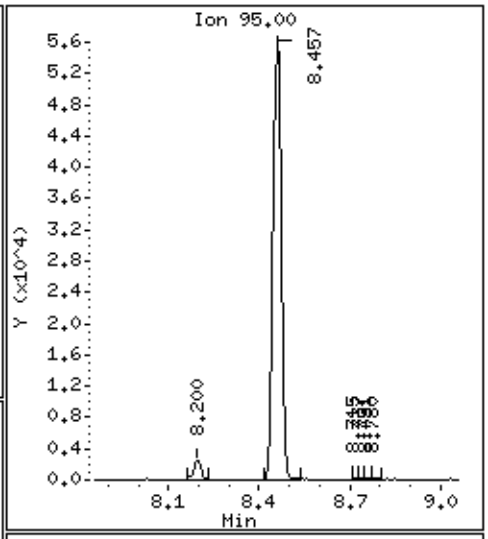
Concentration: 101.70 NG

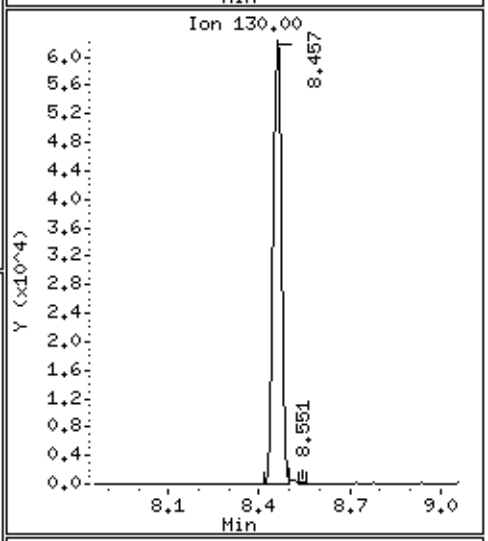


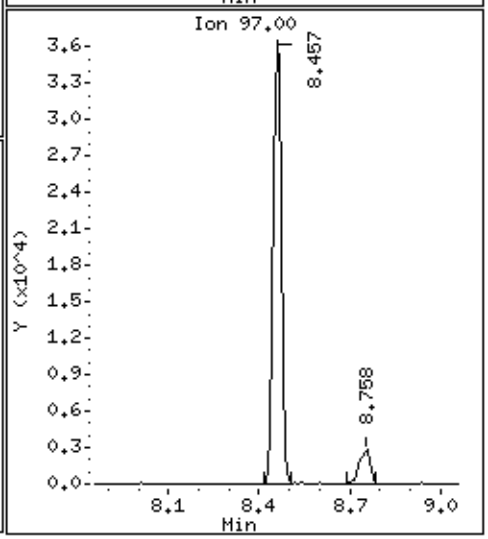












Data File: /chem/msd11.i/20nov15.b/11112015.d

Date : 21-NOV-2015 04:28

Client ID: LCS

Instrument: msd11.i

Sample Info: ;VI VOC+PAH ICV;LCS

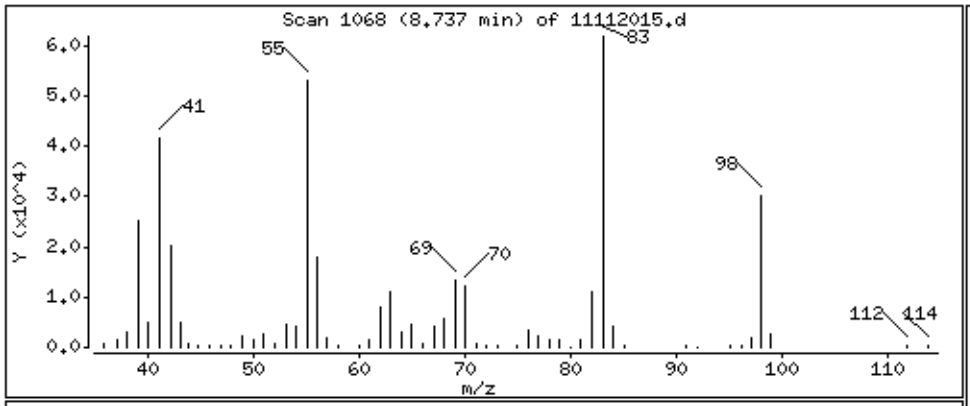
Operator: LA

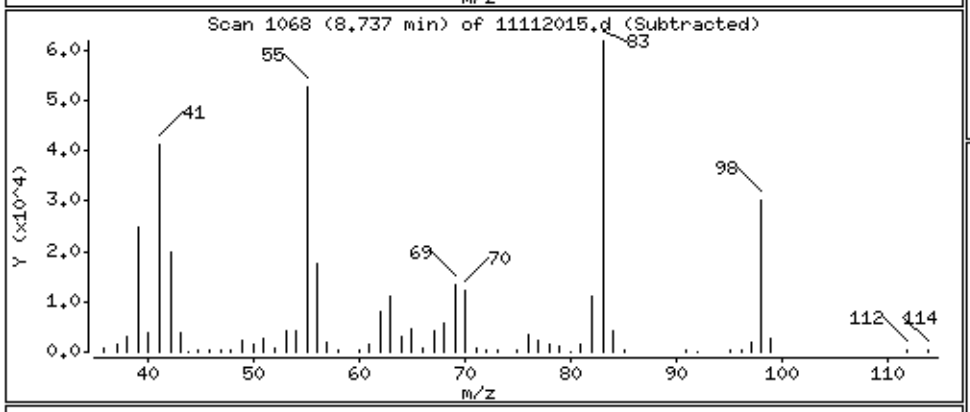
Column phase: RTx-624

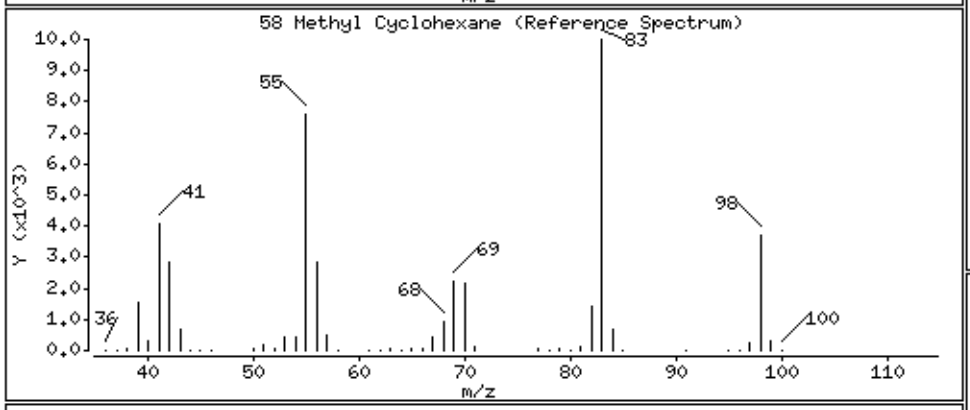
Column diameter: 0.53

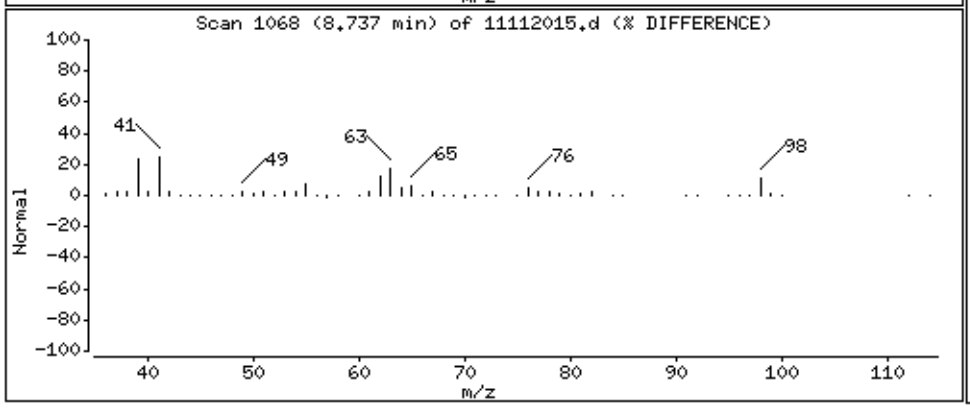
58 Methyl Cyclohexane

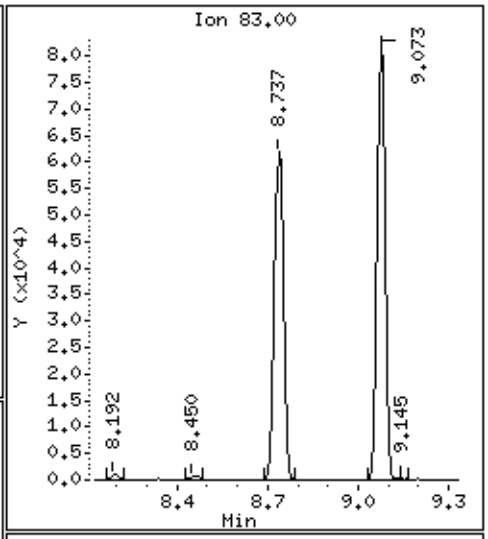
Concentration: 81.184 NG

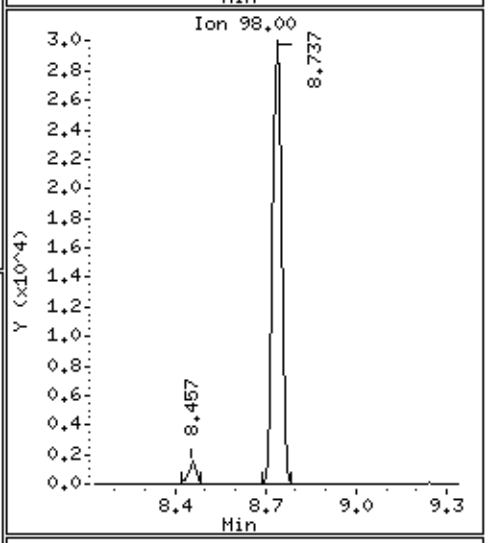


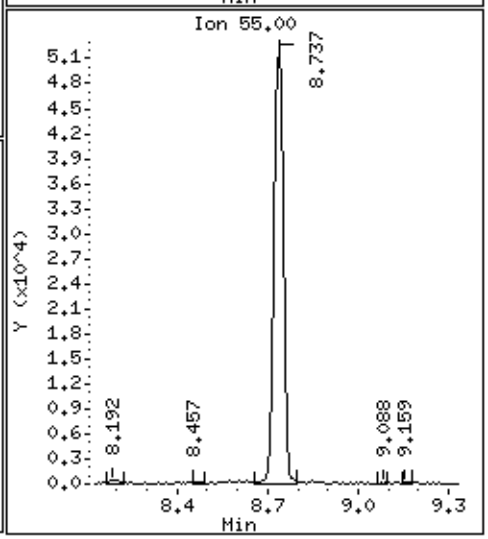












Data File: /chem/msd11.i/20nov15.b/11112015.d

Date : 21-NOV-2015 04:28

Client ID: LCS

Instrument: msd11.i

Sample Info: ;VI VOC+PAH ICV;LCS

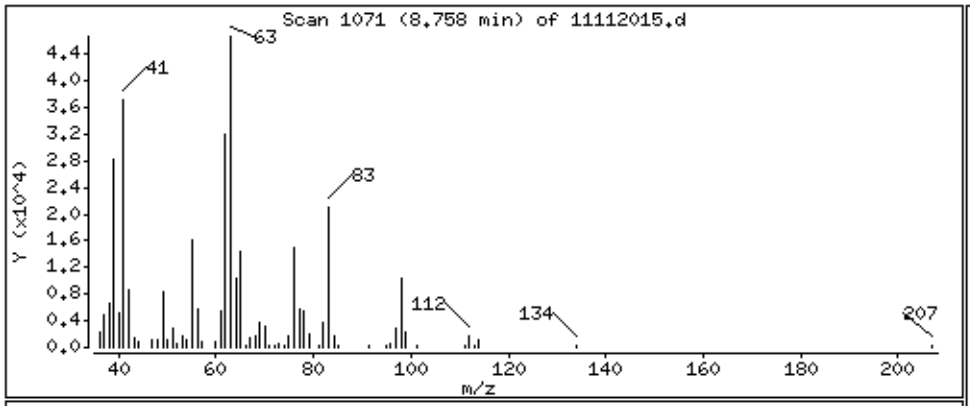
Operator: LA

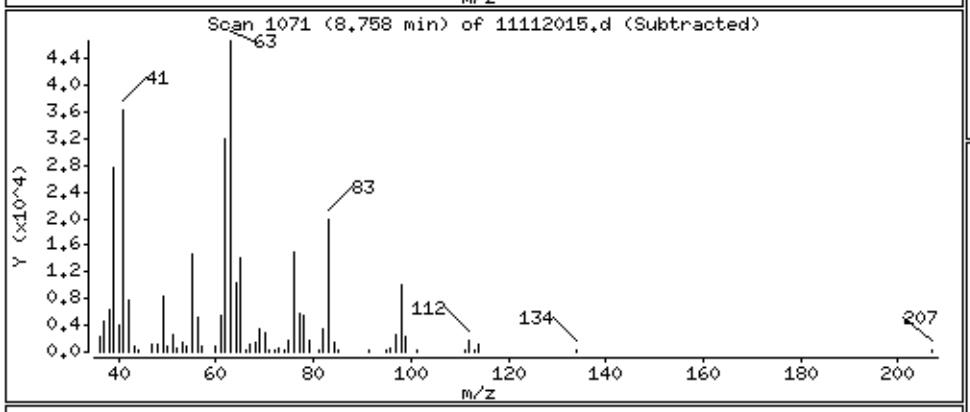
Column phase: RTx-624

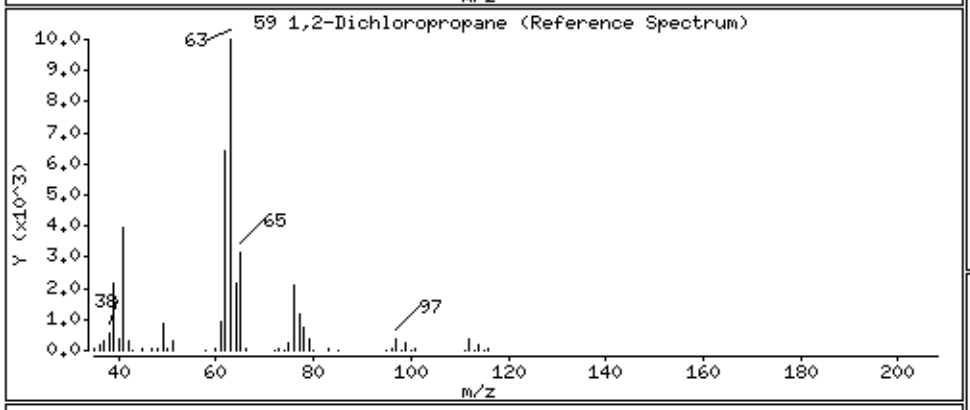
Column diameter: 0.53

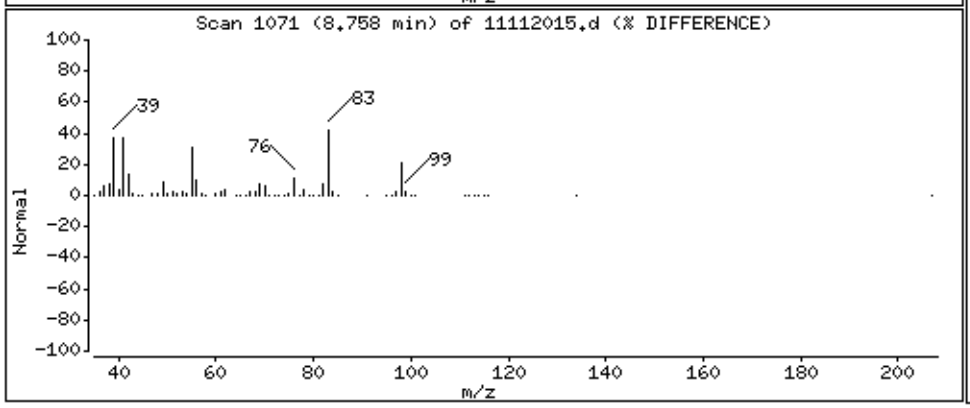
59 1,2-Dichloropropane

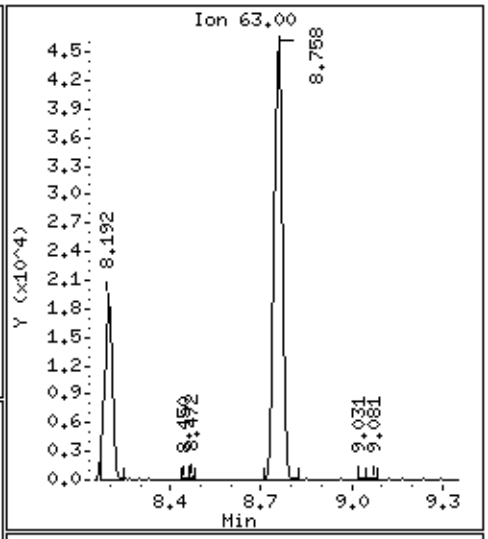
Concentration: 96.074 NG

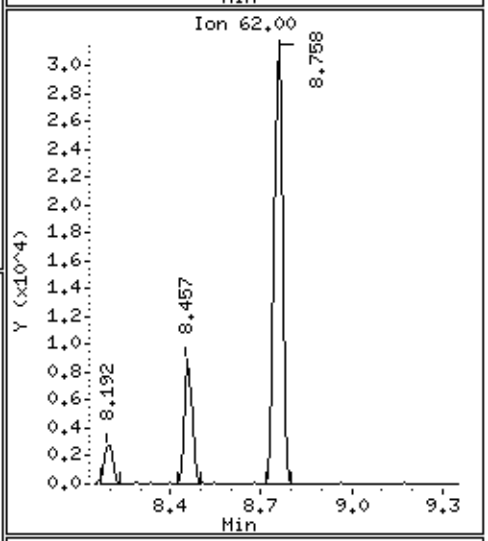


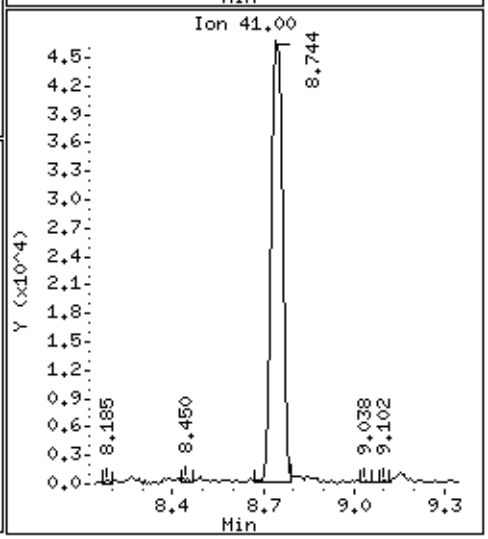












Data File: /chem/msd11.i/20nov15.b/11112015.d

Date : 21-NOV-2015 04:28

Client ID: LCS

Instrument: msd11.i

Sample Info: ;VI VOC+PAH ICV;LCS

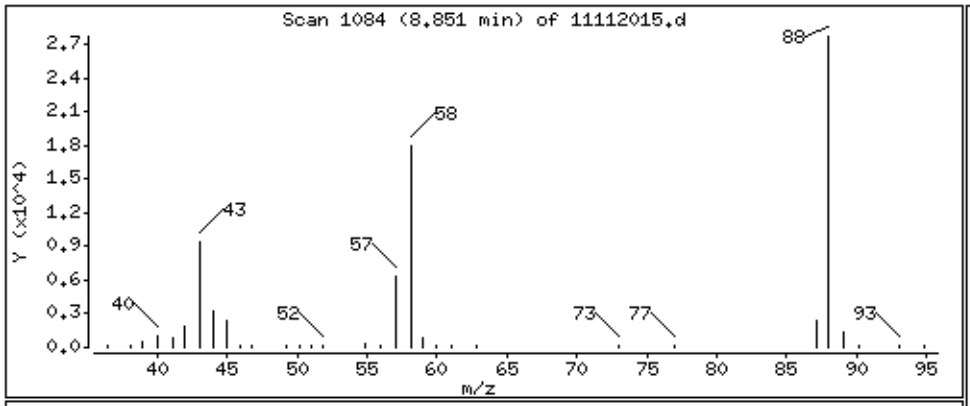
Operator: LA

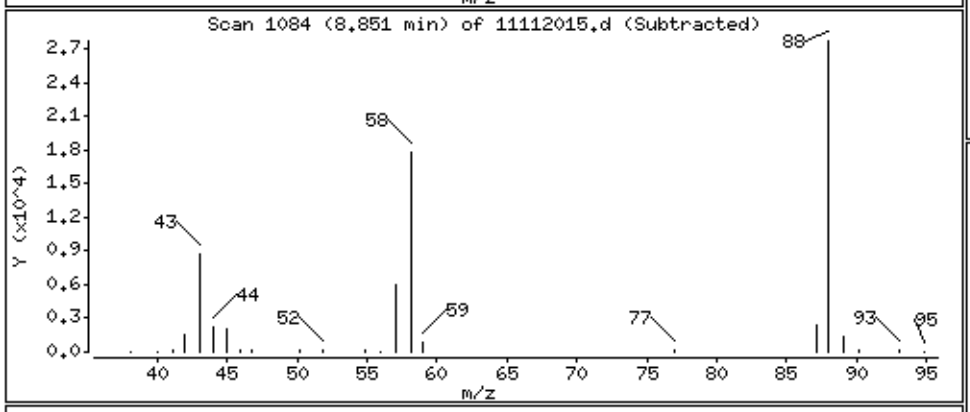
Column phase: RTx-624

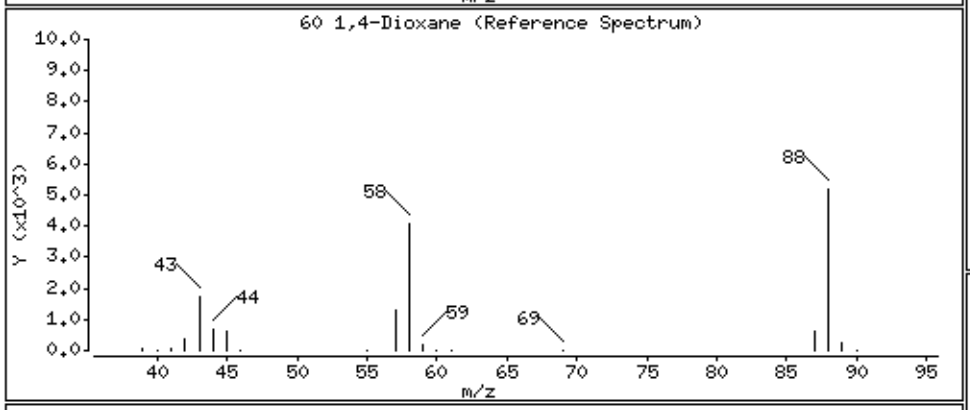
Column diameter: 0.53

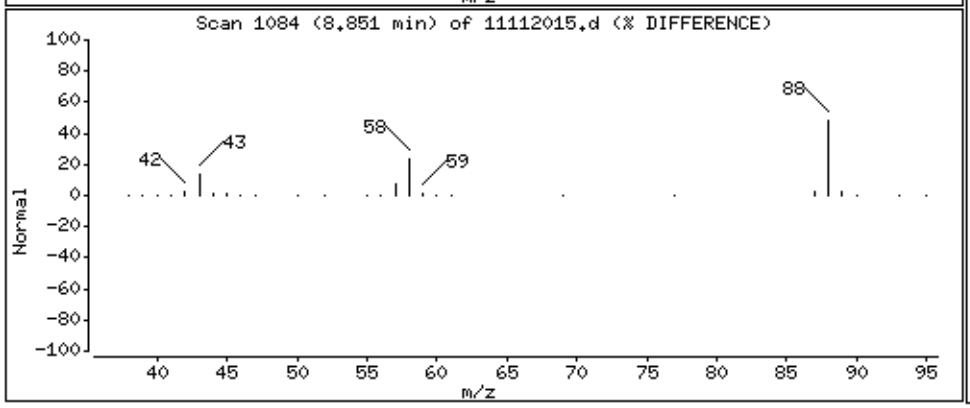
60 1,4-Dioxane

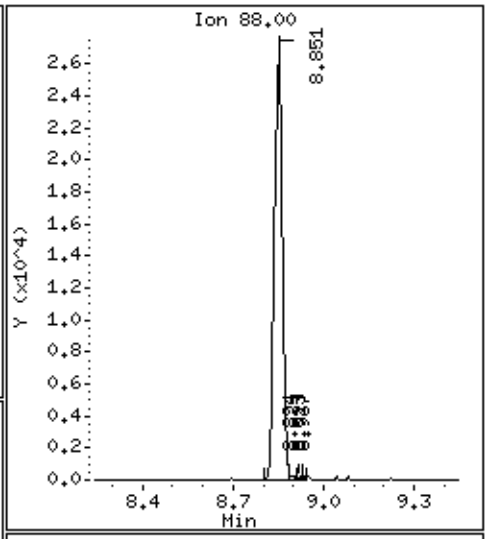
Concentration: 64.229 NG

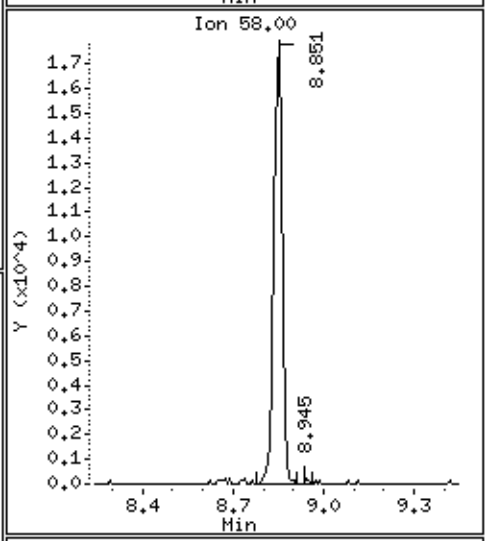


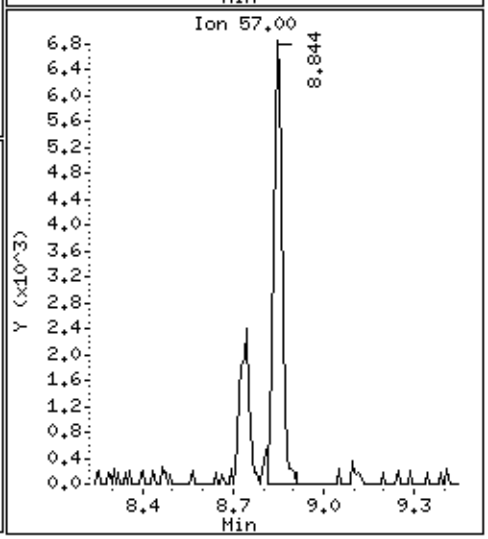












Data File: /chem/msd11.i/20nov15.b/11112015.d

Date : 21-NOV-2015 04:28

Client ID: LCS

Instrument: msd11.i

Sample Info: ;VI VOC+PAH ICV;LCS

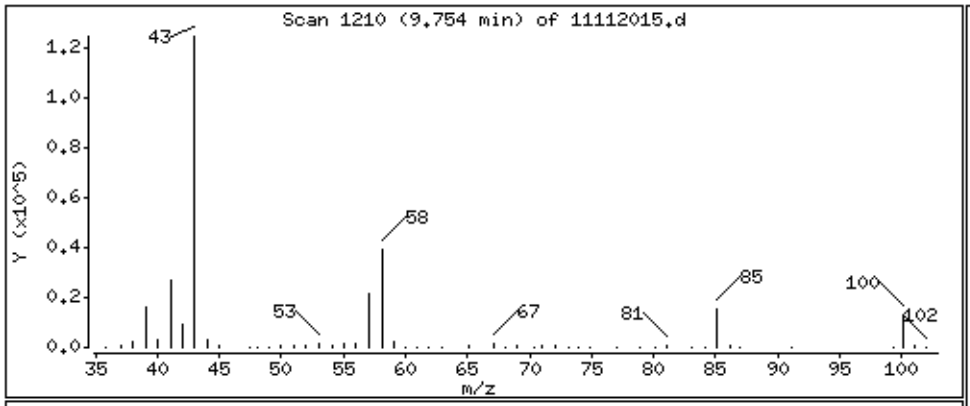
Operator: LA

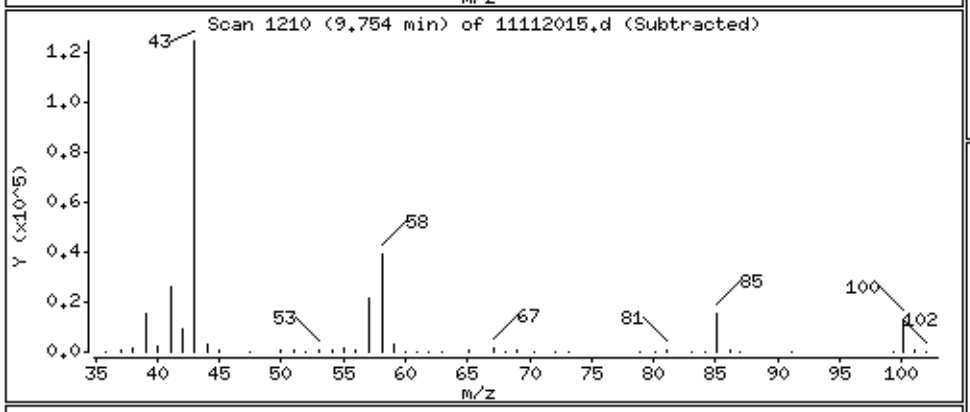
Column phase: RTx-624

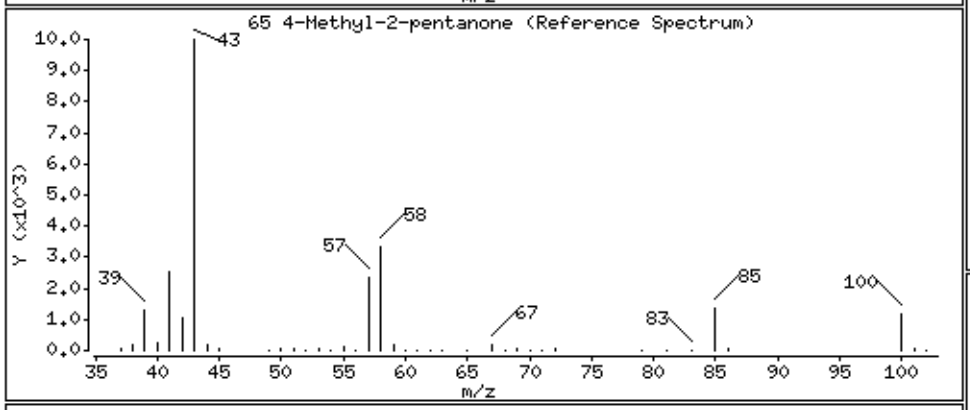
Column diameter: 0.53

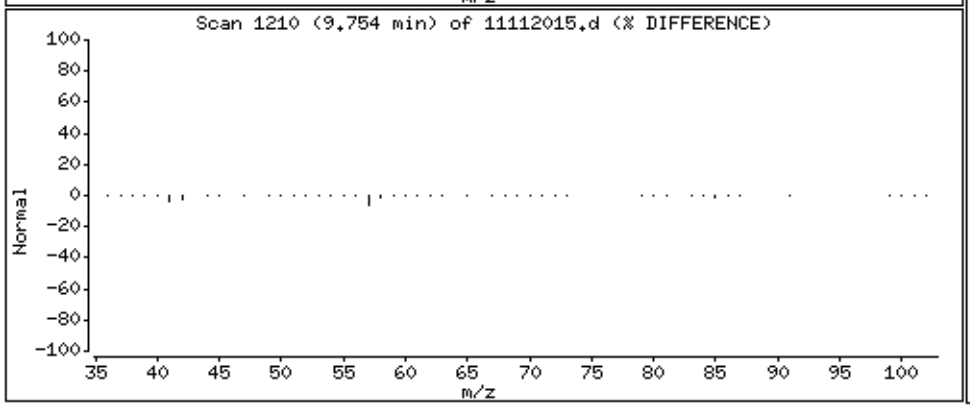
65 4-Methyl-2-pentanone

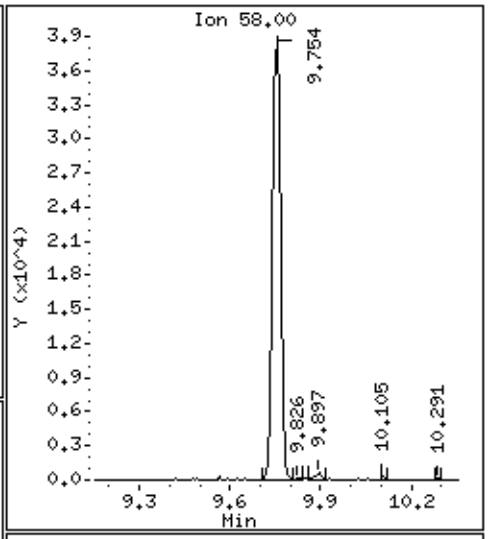
Concentration: 88.742 NG

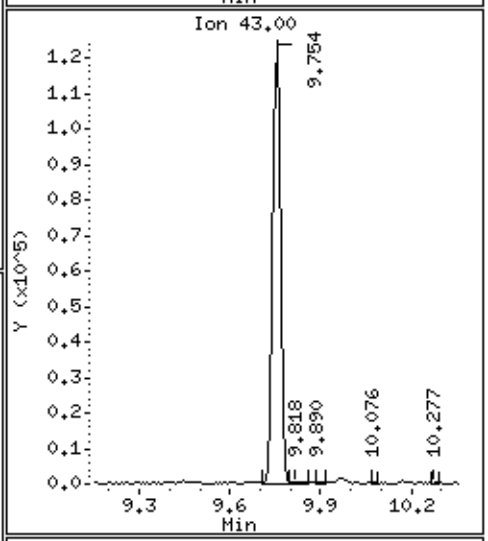


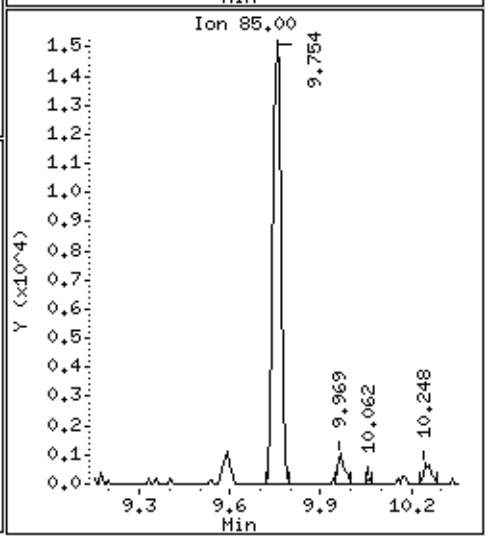












Data File: /chem/msd11.i/20nov15.b/11112015.d

Date : 21-NOV-2015 04:28

Client ID: LCS

Instrument: msd11.i

Sample Info: ;VI VOC+PAH ICV;LCS

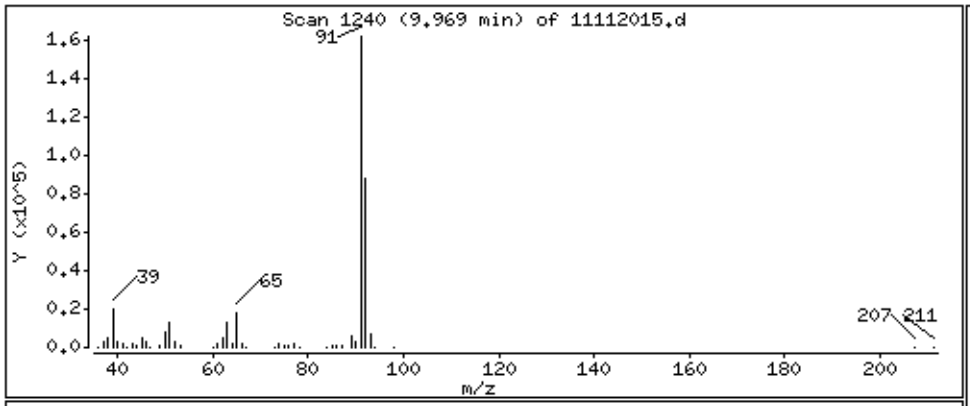
Operator: LA

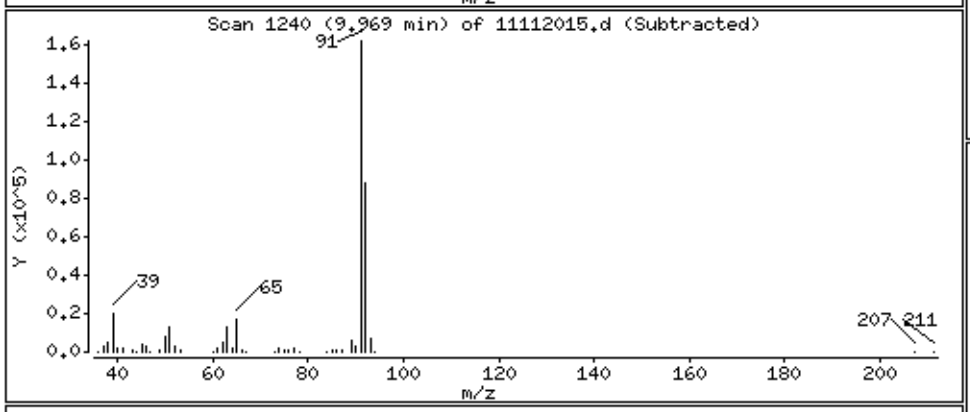
Column phase: RTx-624

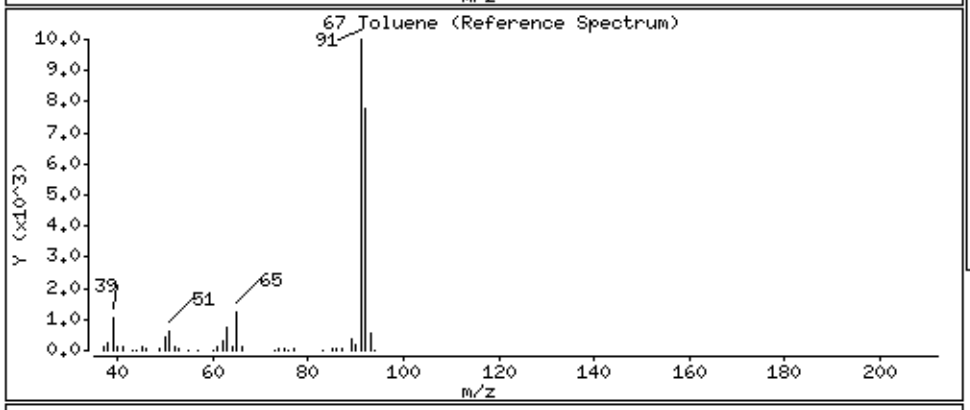
Column diameter: 0.53

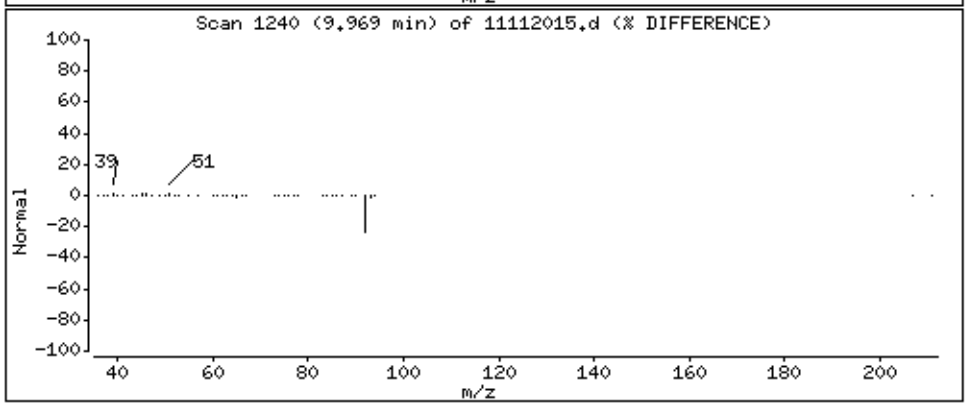
67 Toluene

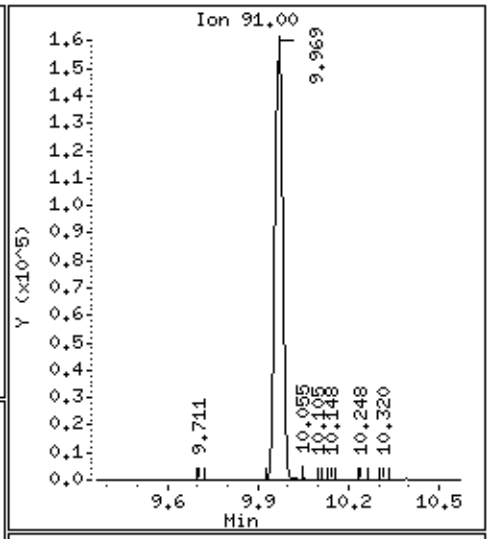
Concentration: 75.506 NG

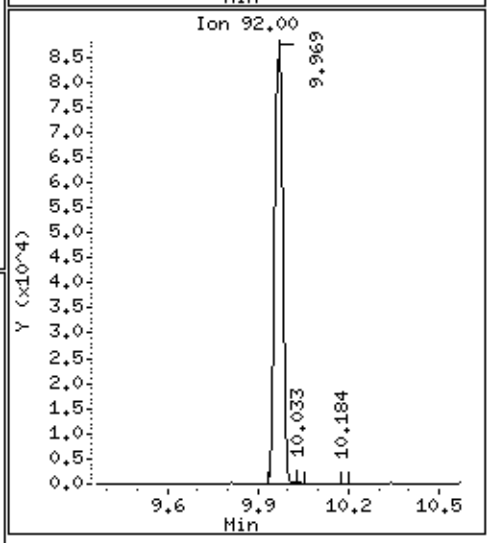












Data File: /chem/msd11.i/20nov15.b/11112015.d

Date : 21-NOV-2015 04:28

Client ID: LCS

Instrument: msd11.i

Sample Info: ;VI VOC+PAH ICV;LCS

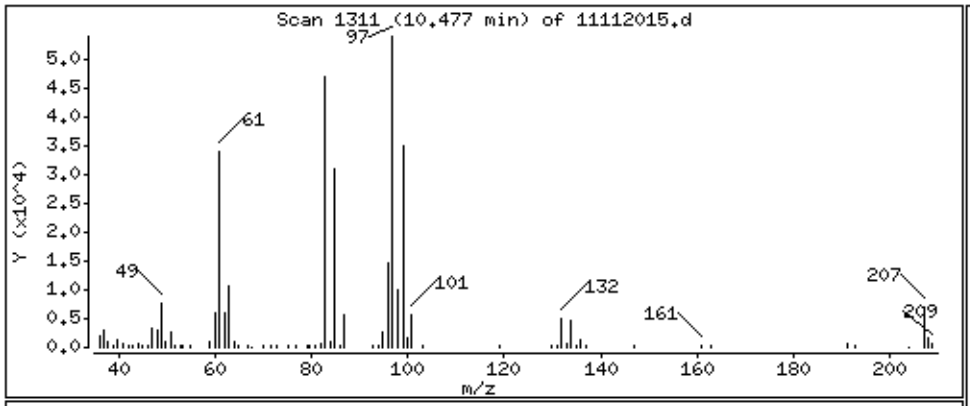
Operator: LA

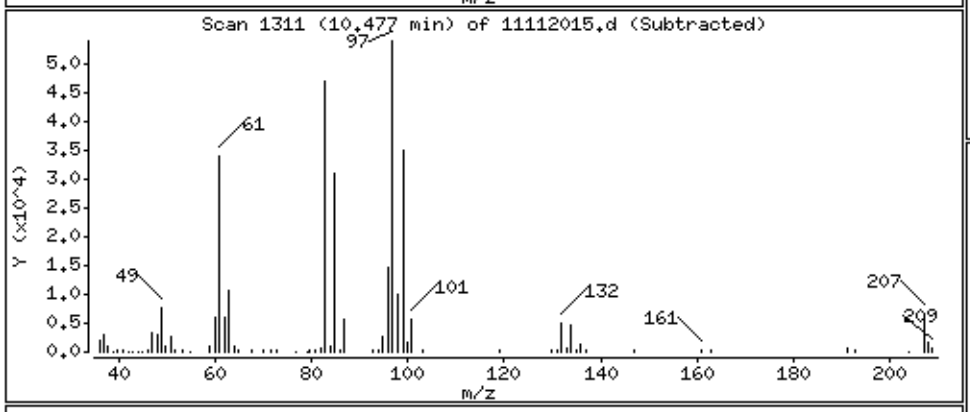
Column phase: RTx-624

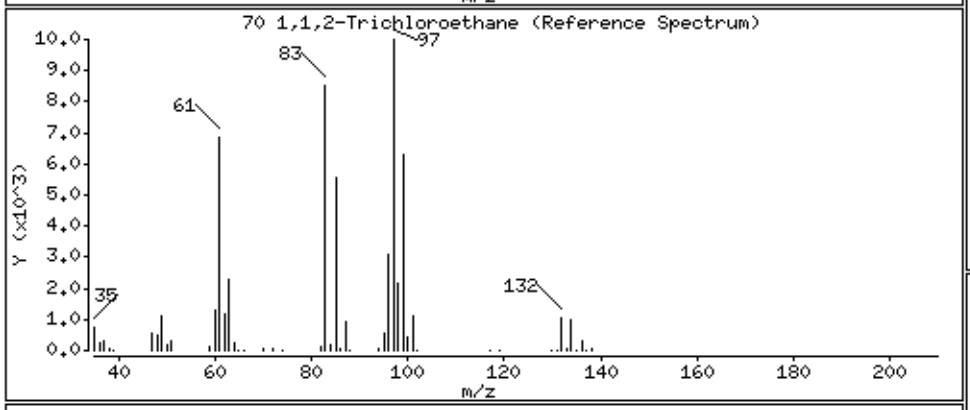
Column diameter: 0.53

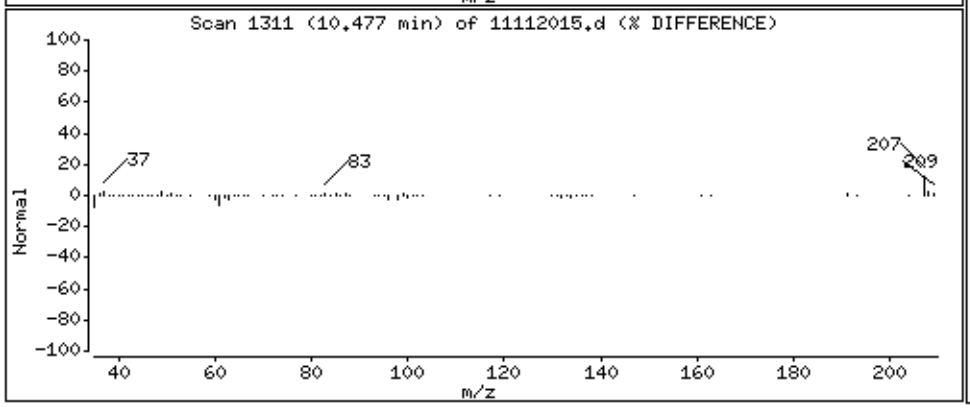
70 1,1,2-Trichloroethane

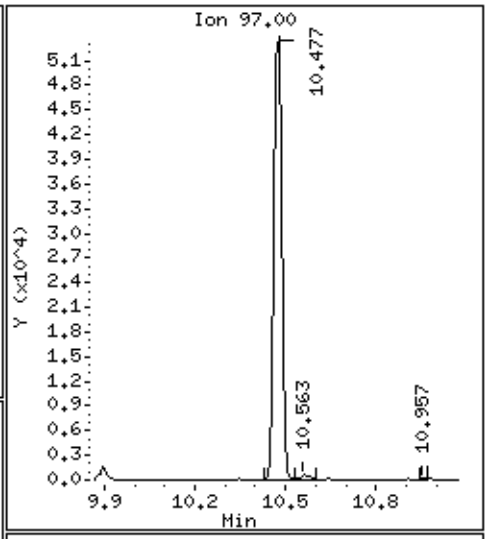
Concentration: 109.29 NG

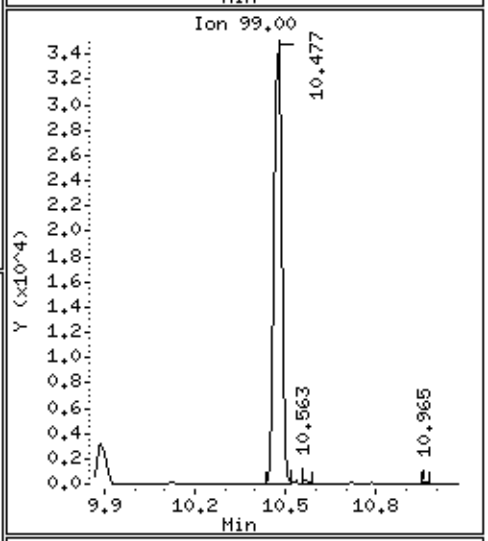


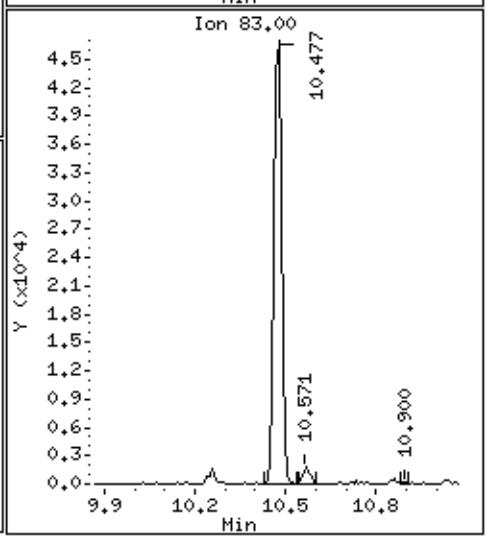












Data File: /chem/msd11.i/20nov15.b/11112015.d

Date : 21-NOV-2015 04:28

Client ID: LCS

Instrument: msd11.i

Sample Info: ;VI VOC+PAH ICV;LCS

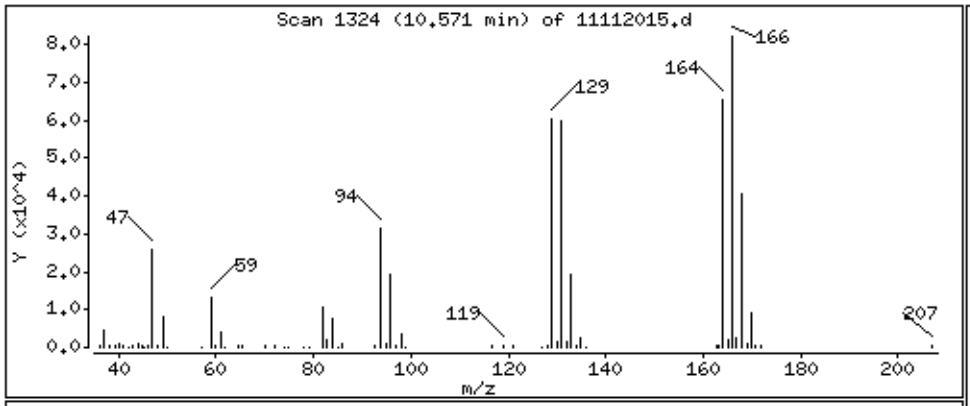
Operator: LA

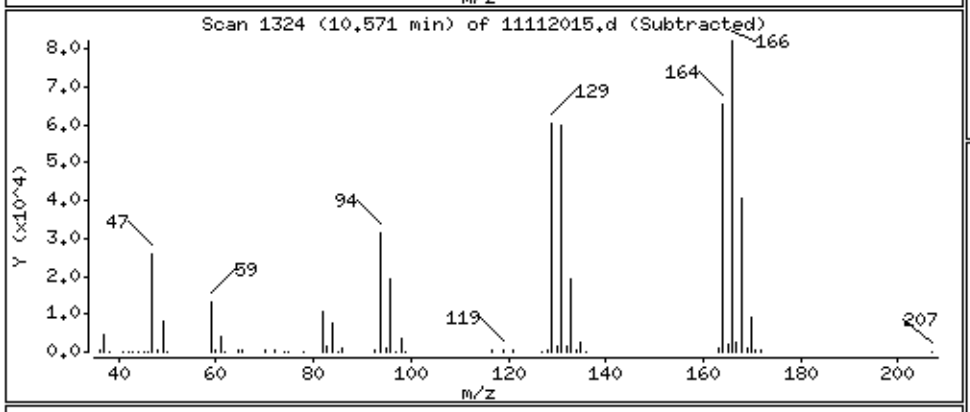
Column phase: RTx-624

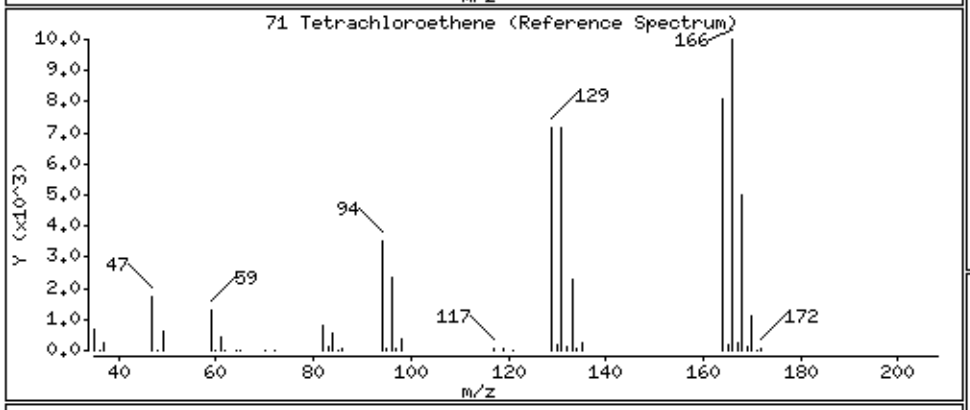
Column diameter: 0.53

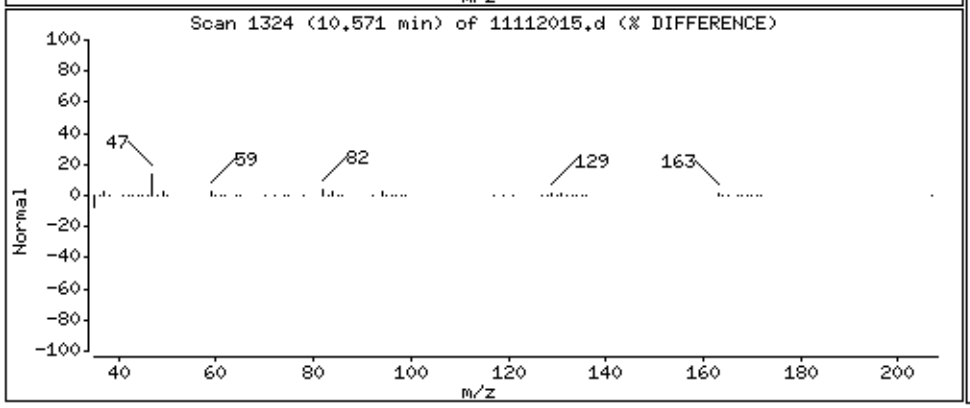
71 Tetrachloroethene

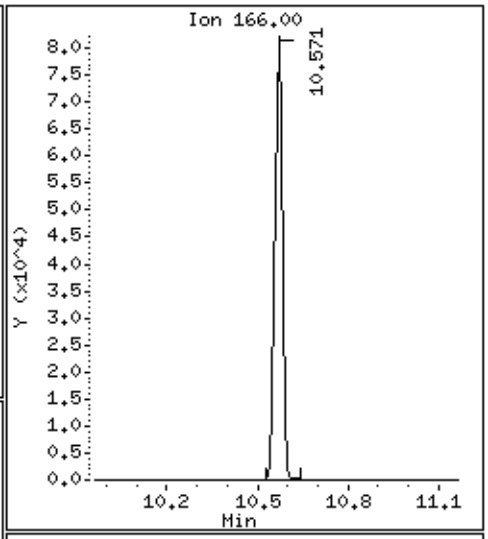
Concentration: 135.21 NG

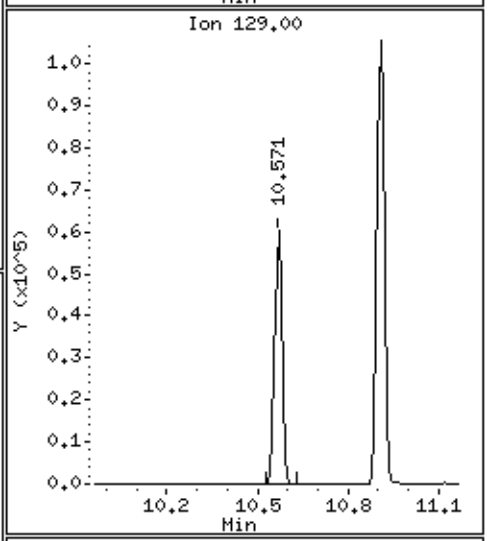


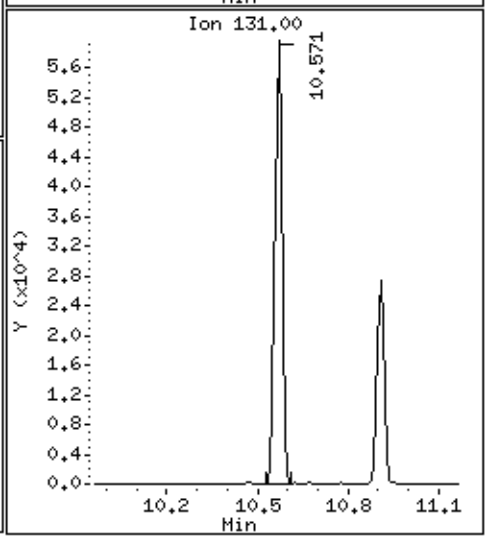












Data File: /chem/msd11.i/20nov15.b/11112015.d

Date : 21-NOV-2015 04:28

Client ID: LCS

Instrument: msd11.i

Sample Info: ;VI VOC+PAH ICV;LCS

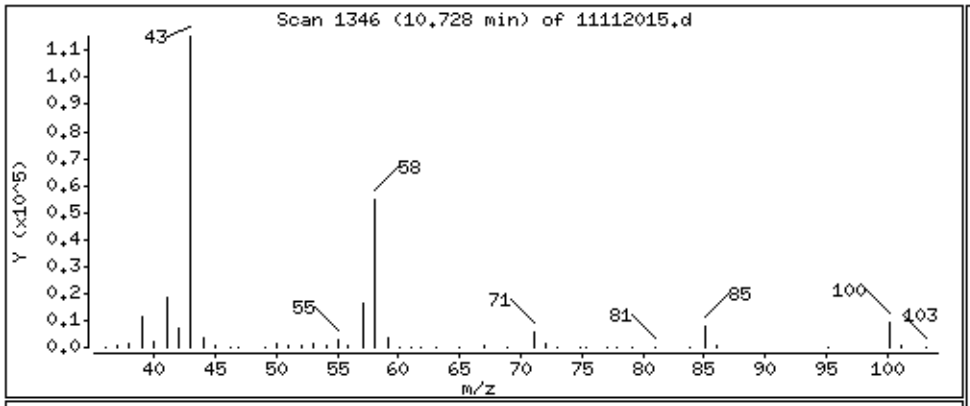
Operator: LA

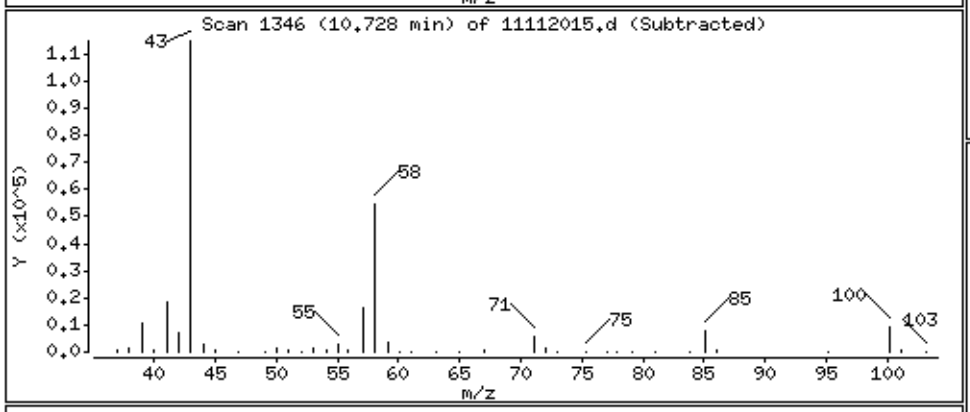
Column phase: RTx-624

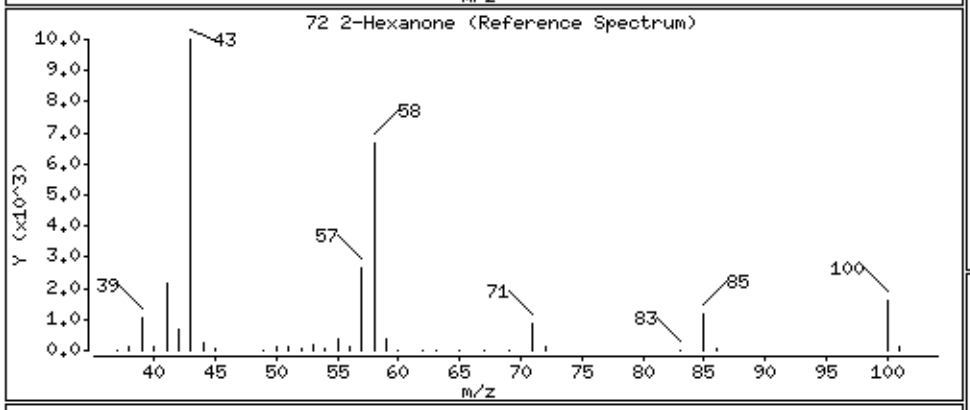
Column diameter: 0.53

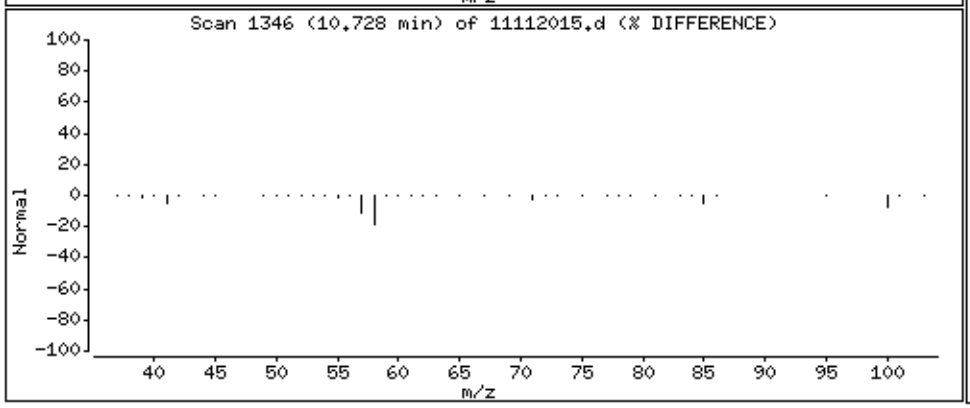
72 2-Hexanone

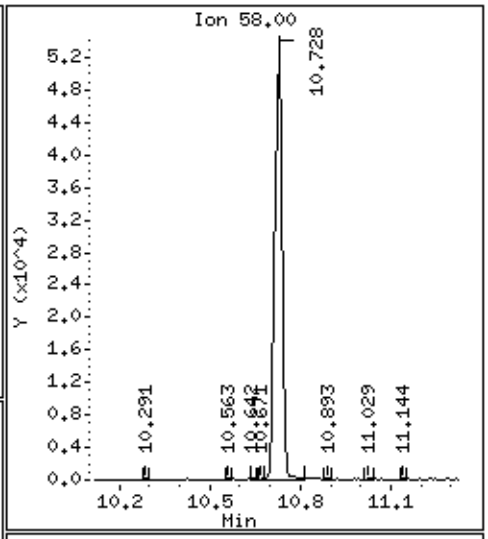
Concentration: 90.536 NG

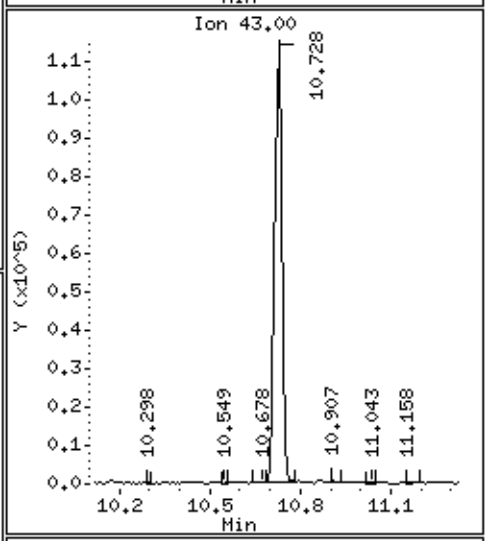


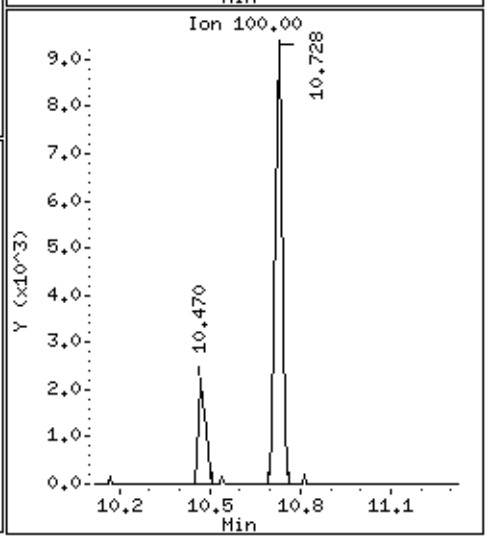












Data File: /chem/msd11.i/20nov15.b/11112015.d

Date : 21-NOV-2015 04:28

Client ID: LCS

Instrument: msd11.i

Sample Info: ;VI VOC+PAH ICV;LCS

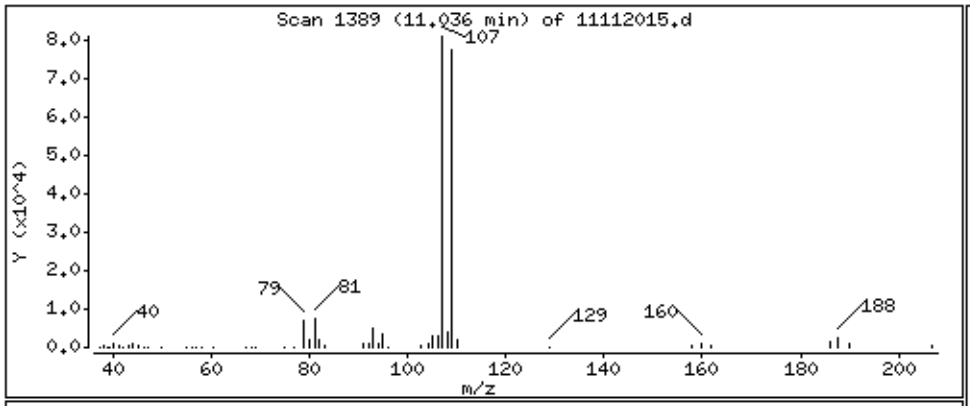
Operator: LA

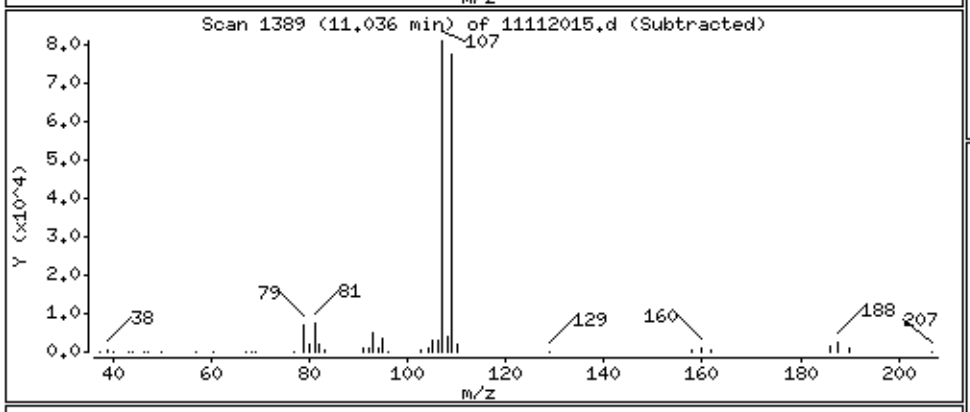
Column phase: RTx-624

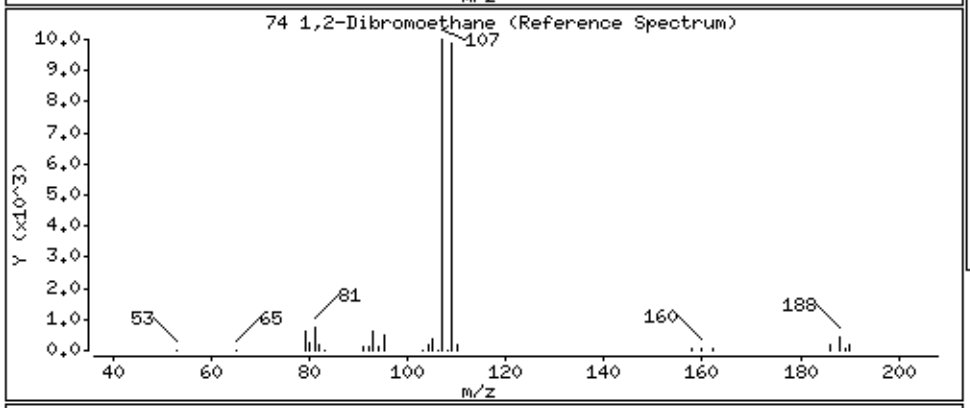
Column diameter: 0.53

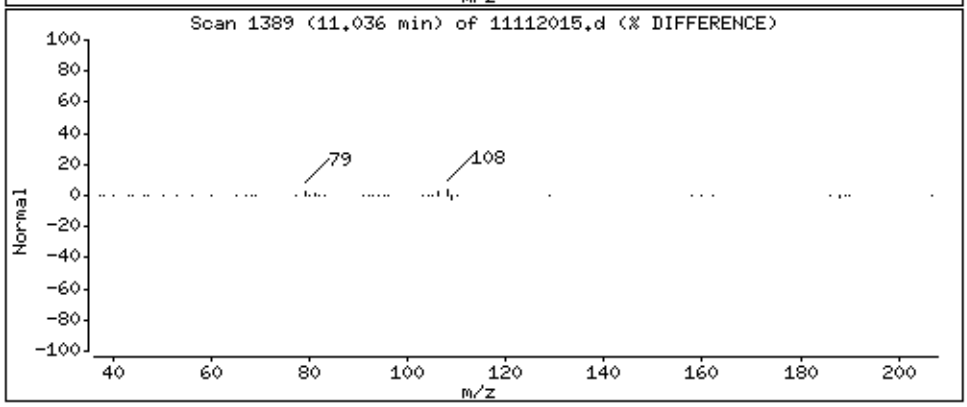
74 1,2-Dibromoethane

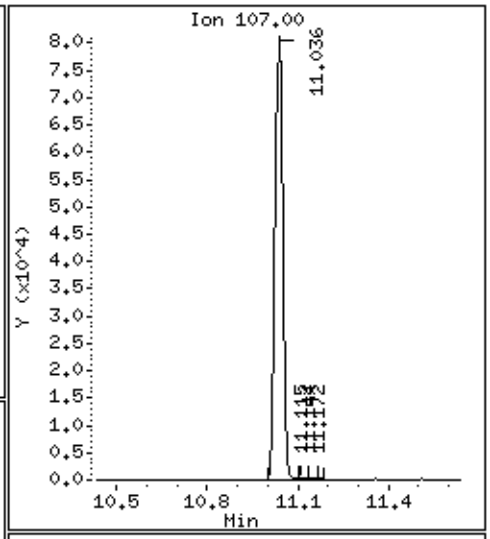
Concentration: 161.15 NG

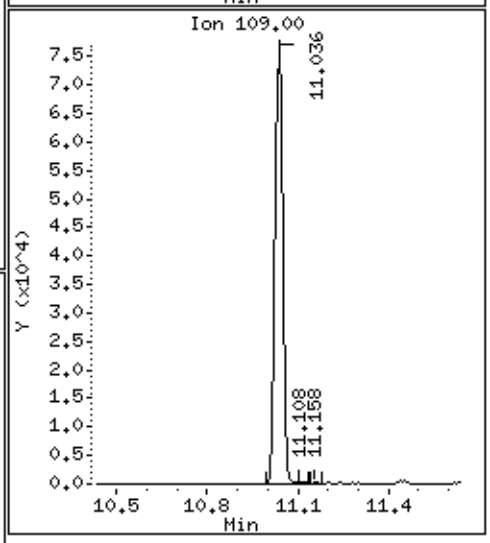












Data File: /chem/msd11.i/20nov15.b/11112015.d

Date : 21-NOV-2015 04:28

Client ID: LCS

Instrument: msd11.i

Sample Info: ;VI VOC+PAH ICV;LCS

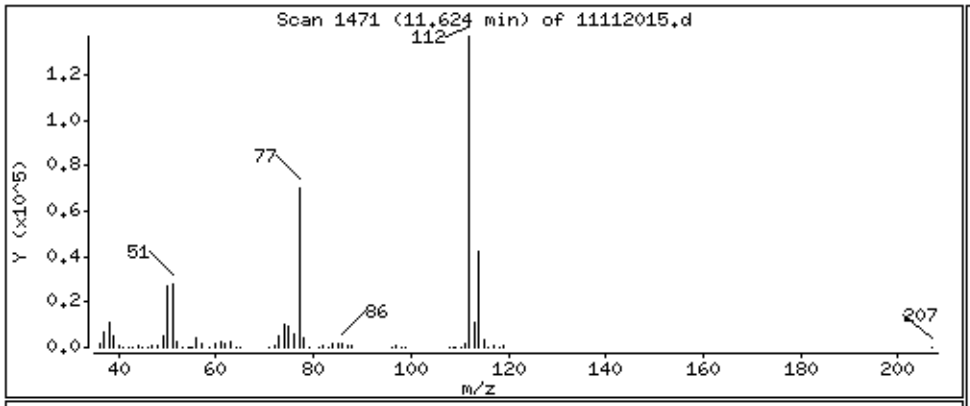
Operator: LA

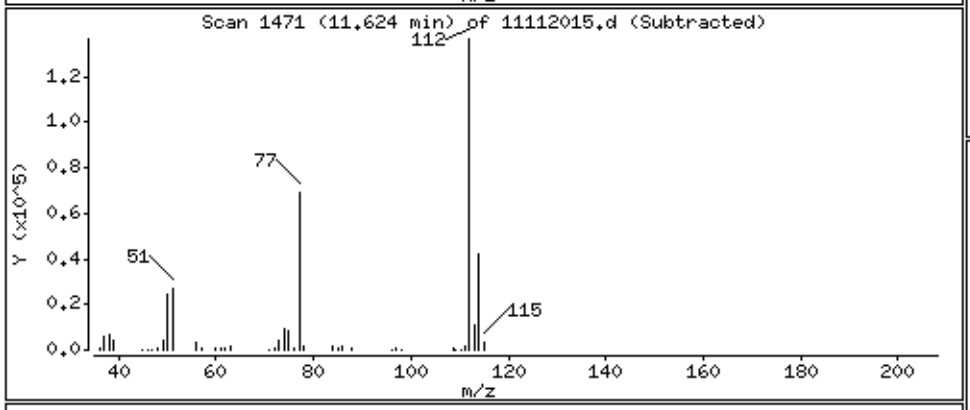
Column phase: RTx-624

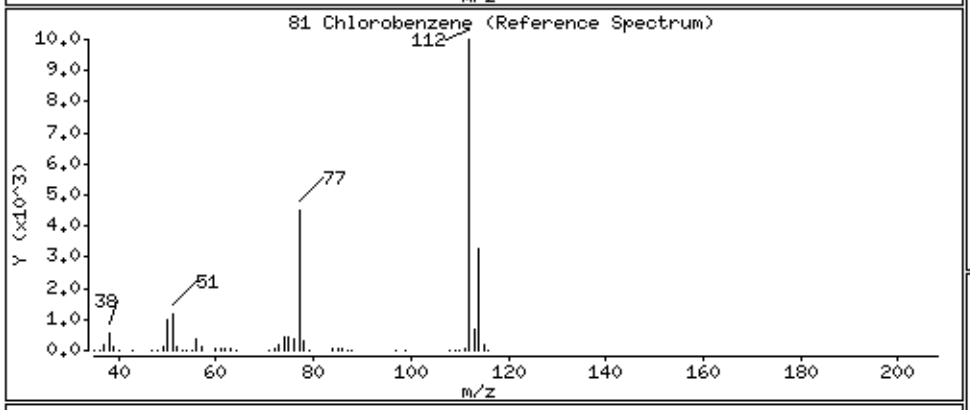
Column diameter: 0.53

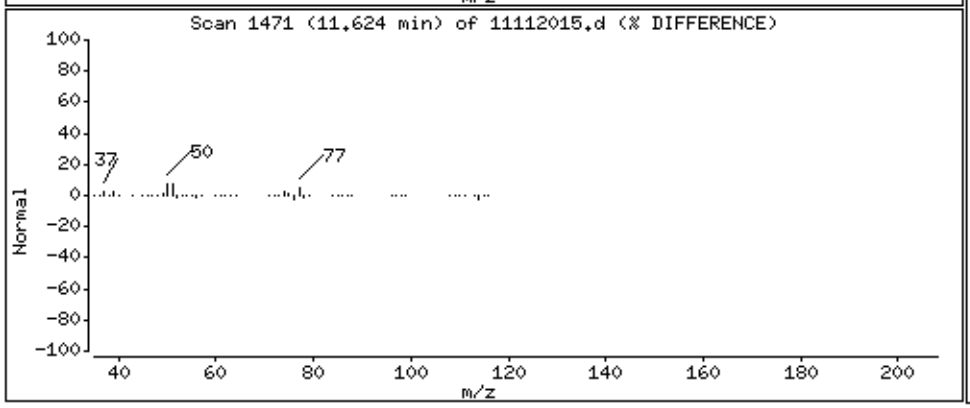
81 Chlorobenzene

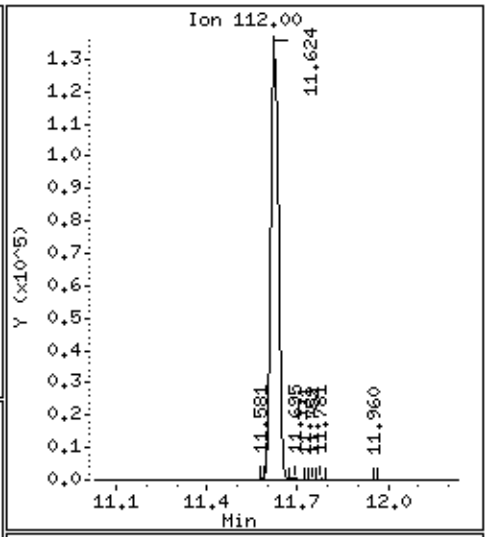
Concentration: 92.059 NG

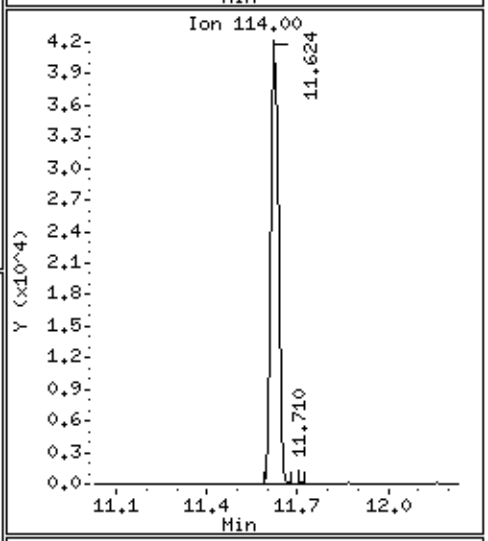


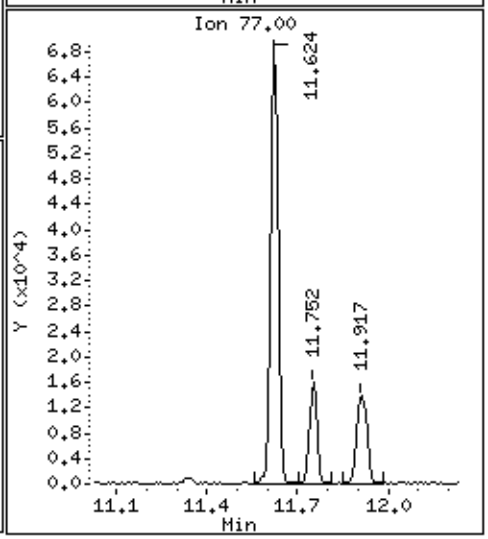












Data File: /chem/msd11.i/20nov15.b/11112015.d

Date : 21-NOV-2015 04:28

Client ID: LCS

Instrument: msd11.i

Sample Info: ;VI VOC+PAH ICV;LCS

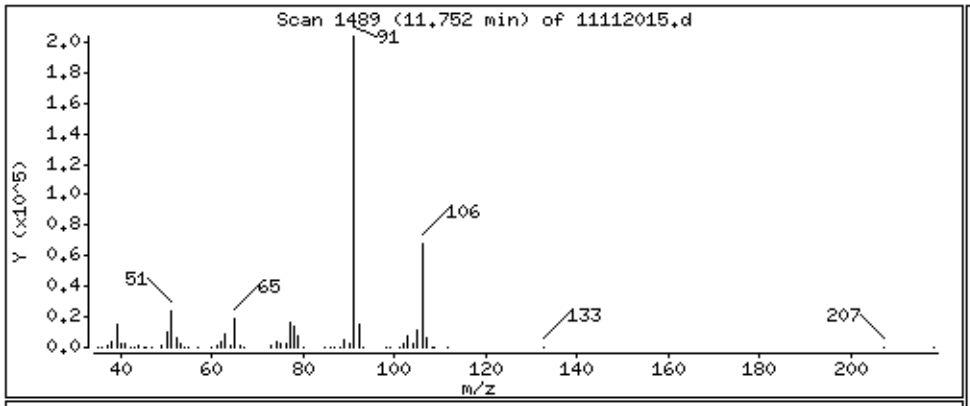
Operator: LA

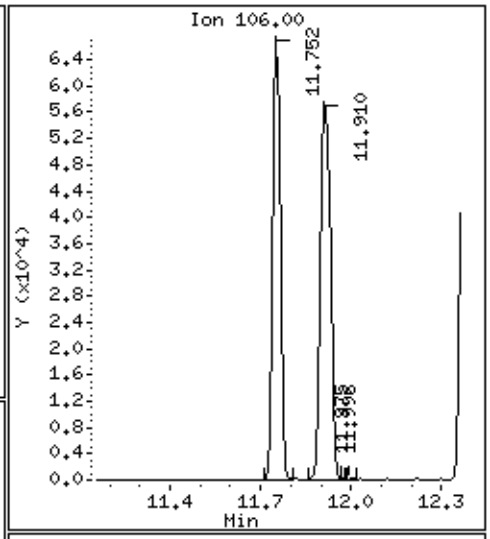
Column phase: RTx-624

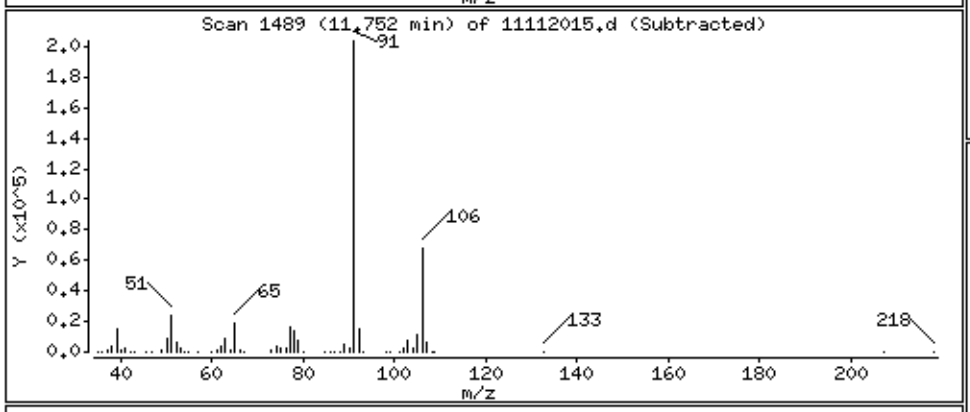
Column diameter: 0.53

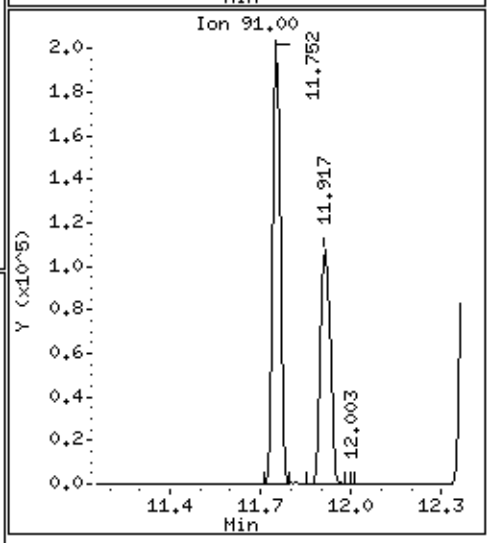
82 Ethyl Benzene

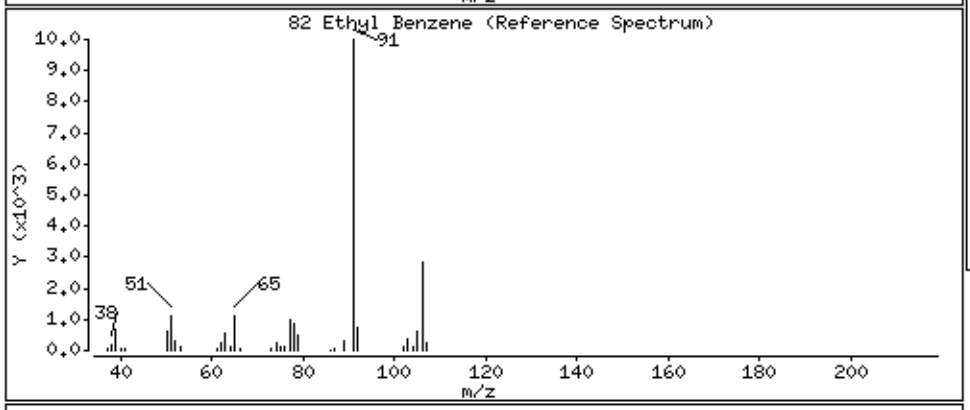
Concentration: 89.081 NG

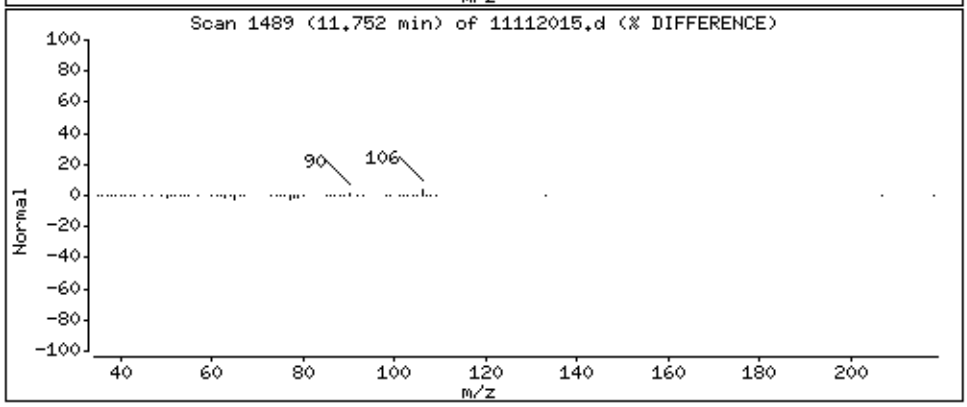












Data File: /chem/msd11.i/20nov15.b/11112015.d

Date : 21-NOV-2015 04:28

Client ID: LCS

Instrument: msd11.i

Sample Info: ;VI VOC+PAH ICV;LCS

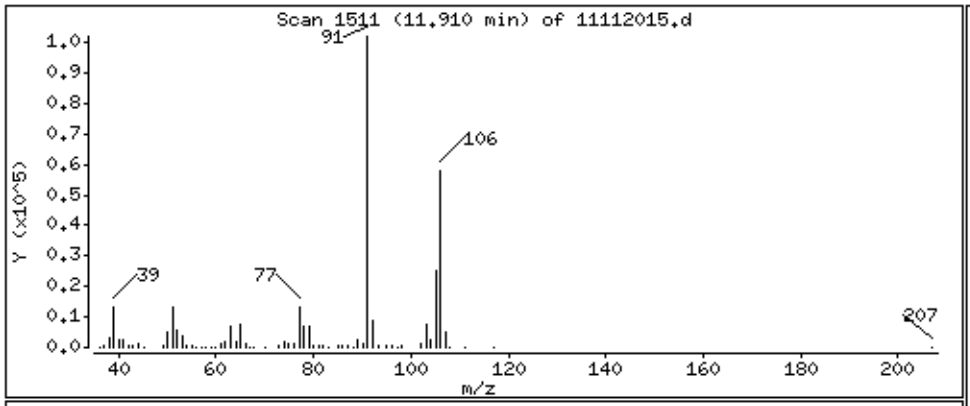
Operator: LA

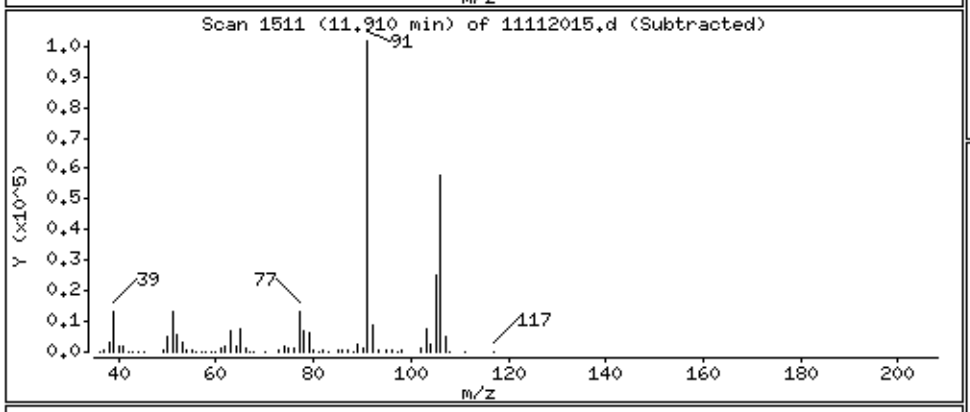
Column phase: RTx-624

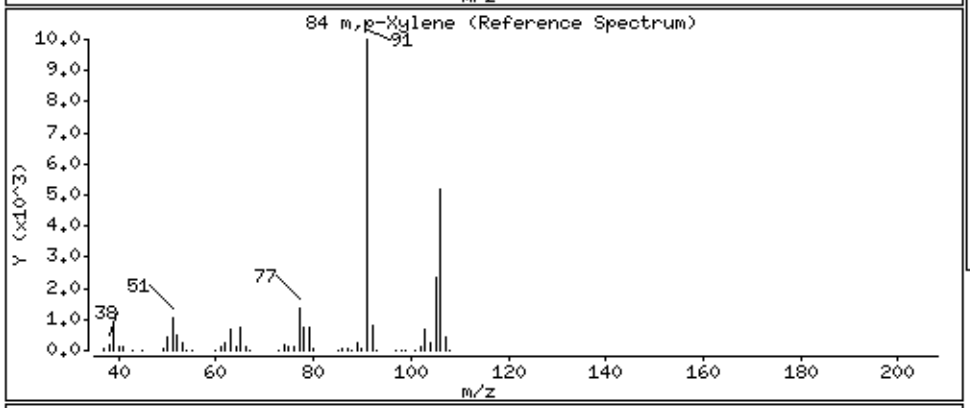
Column diameter: 0.53

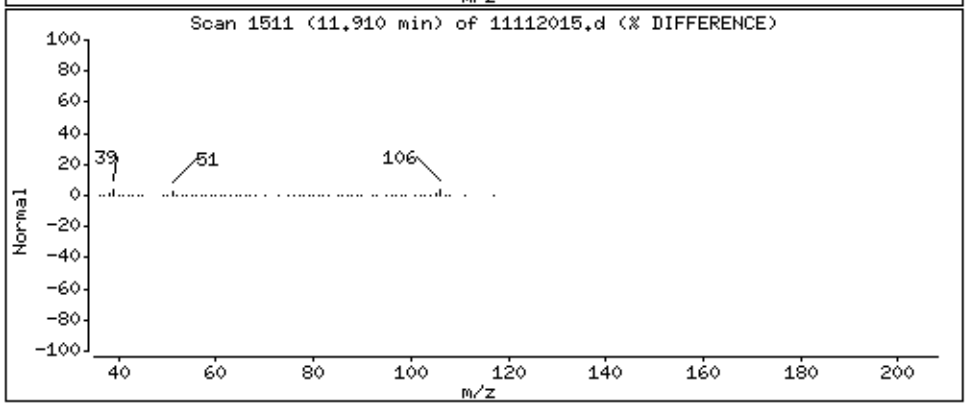
84 m,p-Xylene

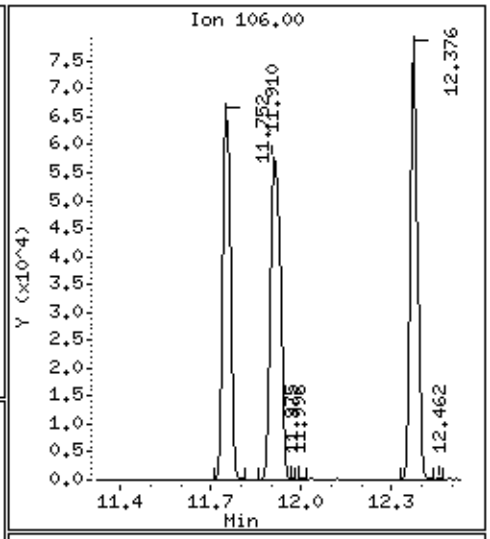
Concentration: 86.974 NG

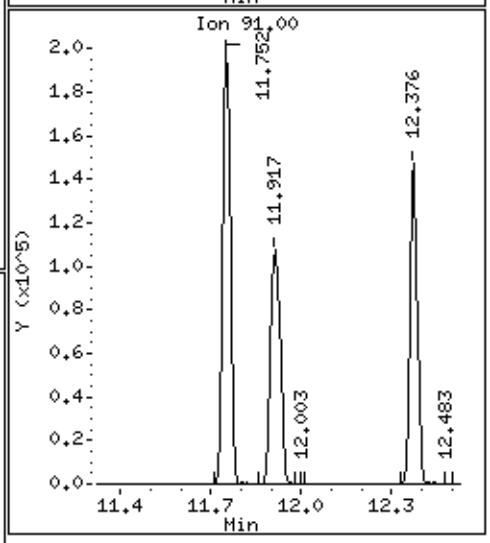












Data File: /chem/msd11.i/20nov15.b/11112015.d

Date : 21-NOV-2015 04:28

Client ID: LCS

Instrument: msd11.i

Sample Info: ;VI VOC+PAH ICV;LCS

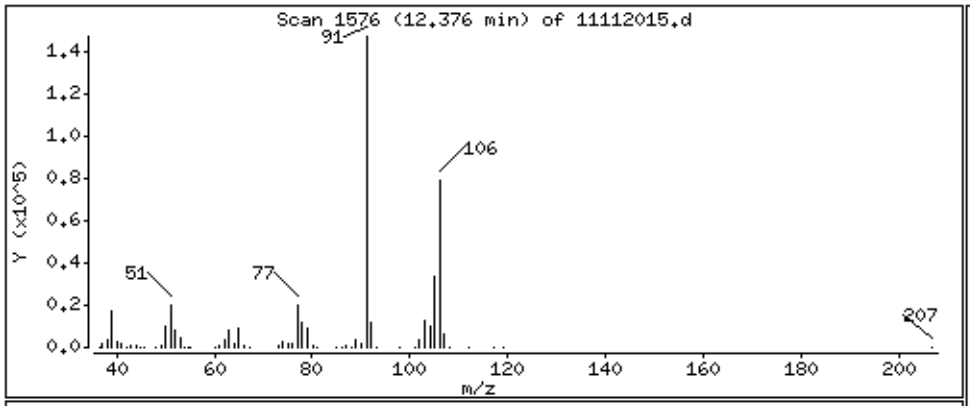
Operator: LA

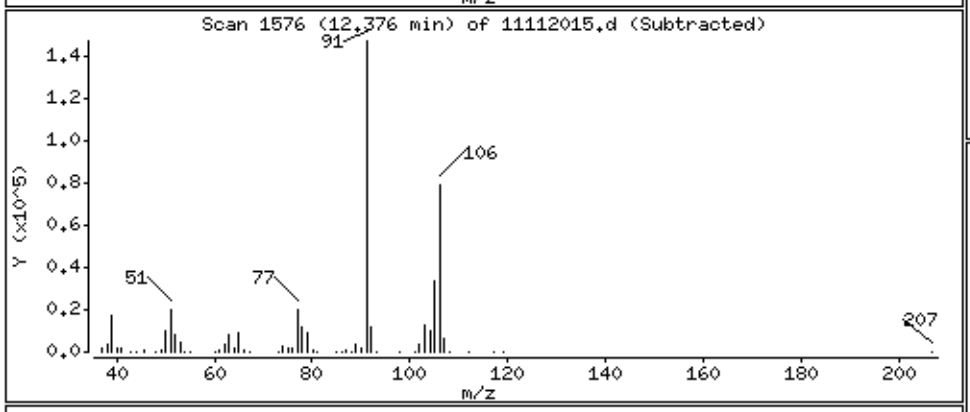
Column phase: RTx-624

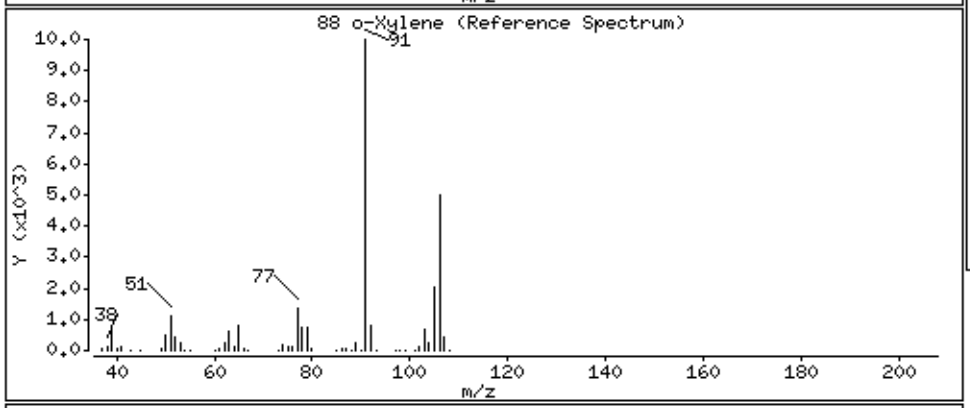
Column diameter: 0.53

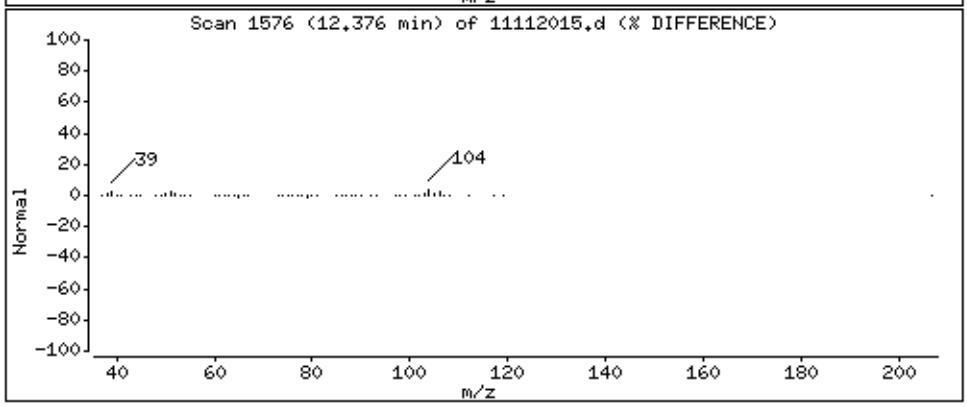
88 o-Xylene

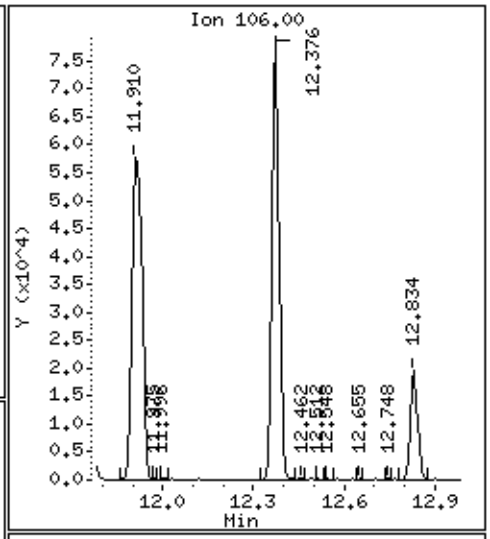
Concentration: 89.752 NG

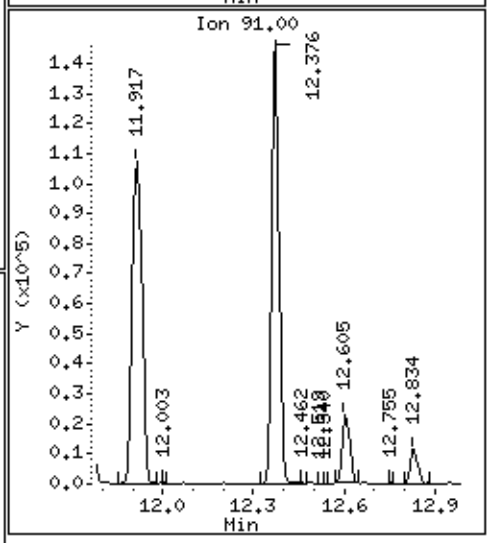












Data File: /chem/msd11.i/20nov15.b/11112015.d

Date : 21-NOV-2015 04:28

Client ID: LCS

Instrument: msd11.i

Sample Info: ;VI VOC+PAH ICV;LCS

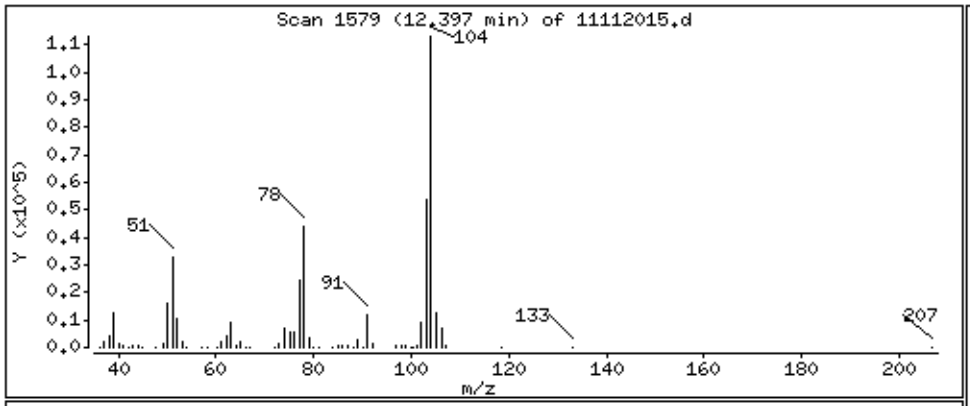
Operator: LA

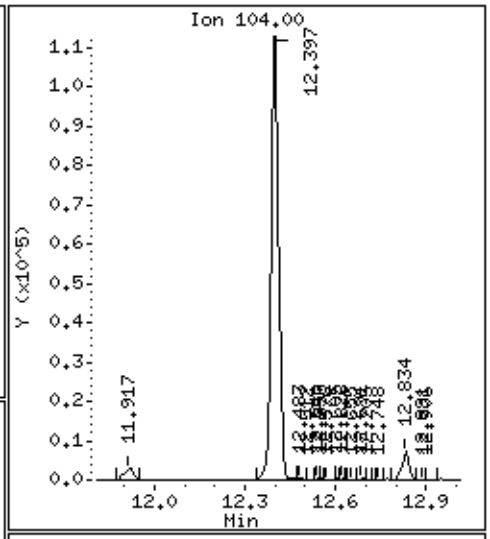
Column phase: RTx-624

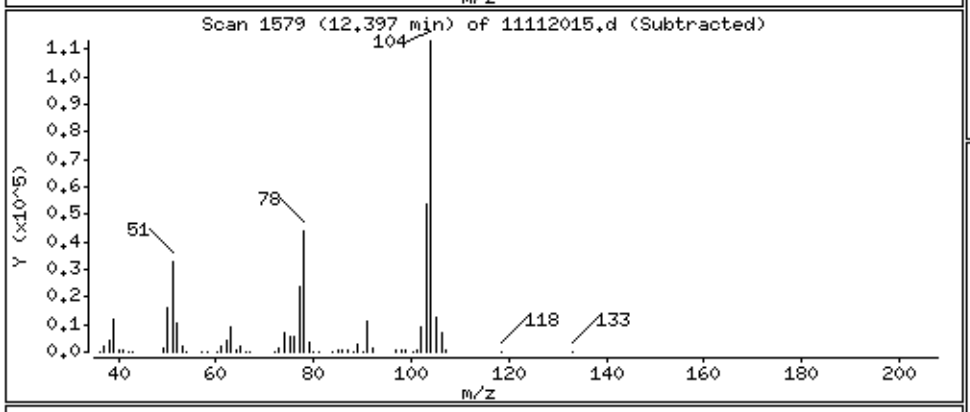
Column diameter: 0.53

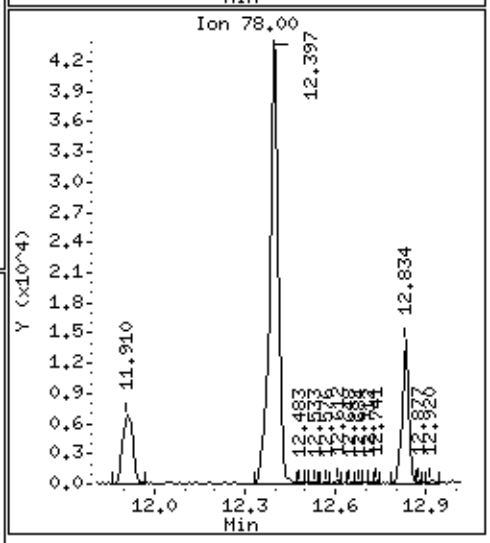
89 Styrene

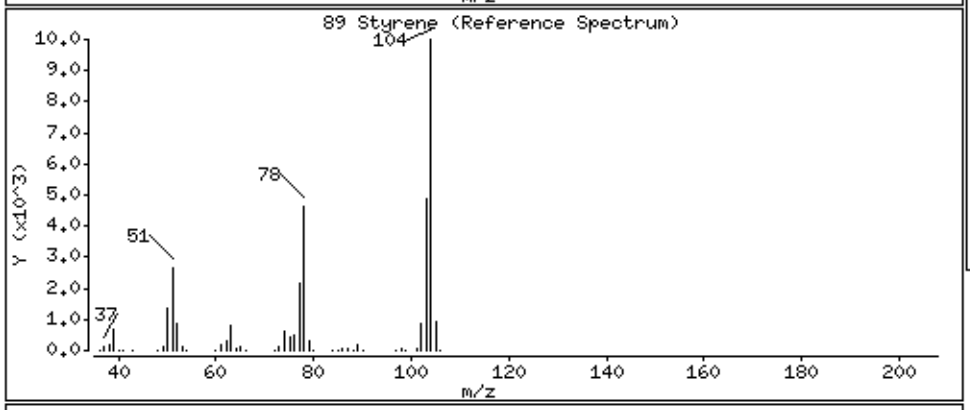
Concentration: 86.195 NG

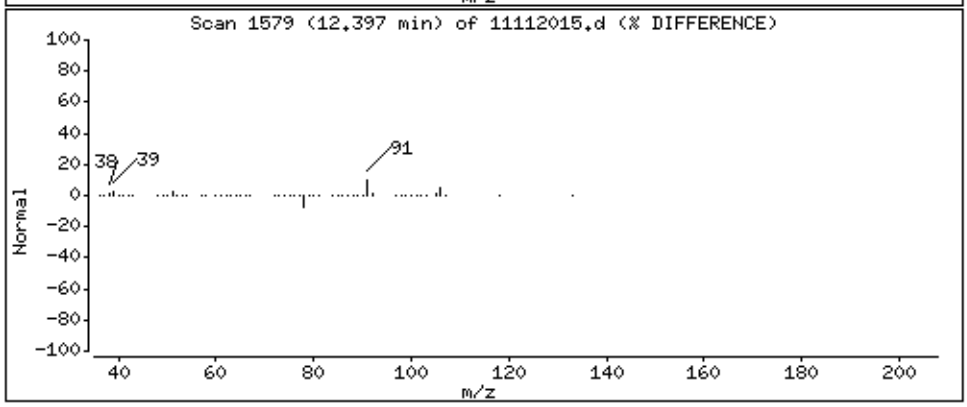












Data File: /chem/msd11.i/20nov15.b/11112015.d

Date : 21-NOV-2015 04:28

Client ID: LCS

Instrument: msd11.i

Sample Info: ;VI VOC+PAH ICV;LCS

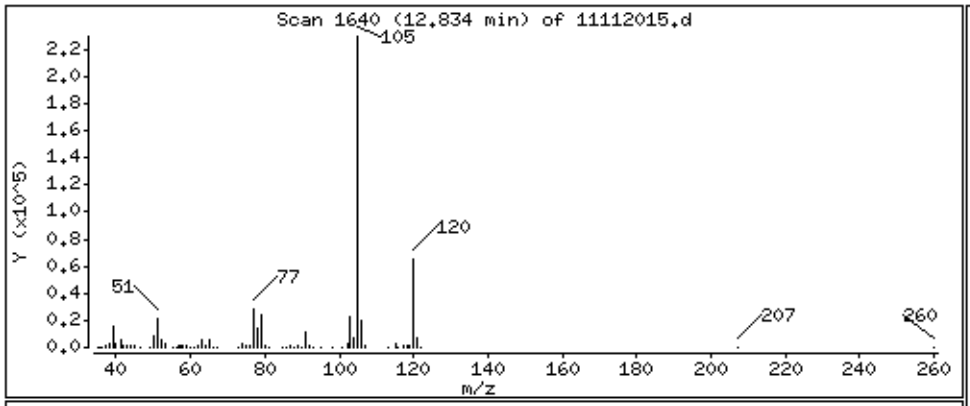
Operator: LA

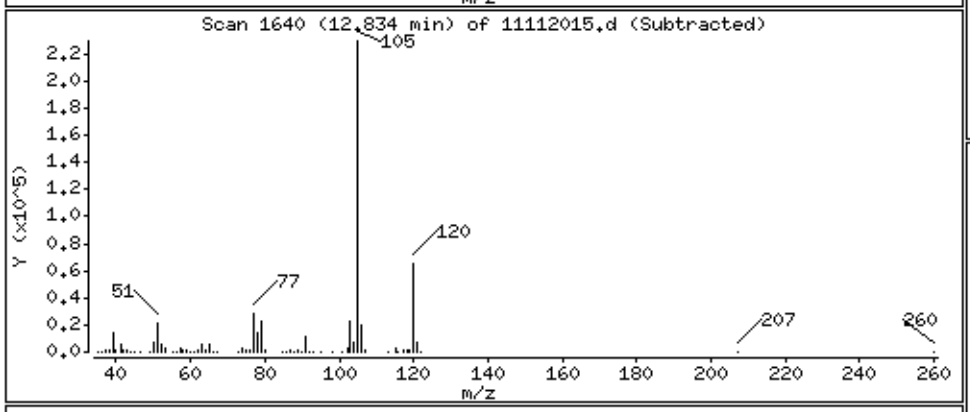
Column phase: RTx-624

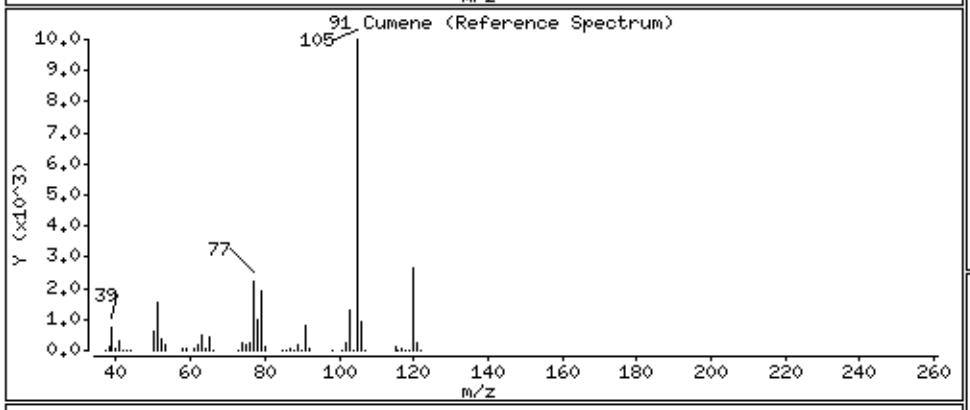
Column diameter: 0.53

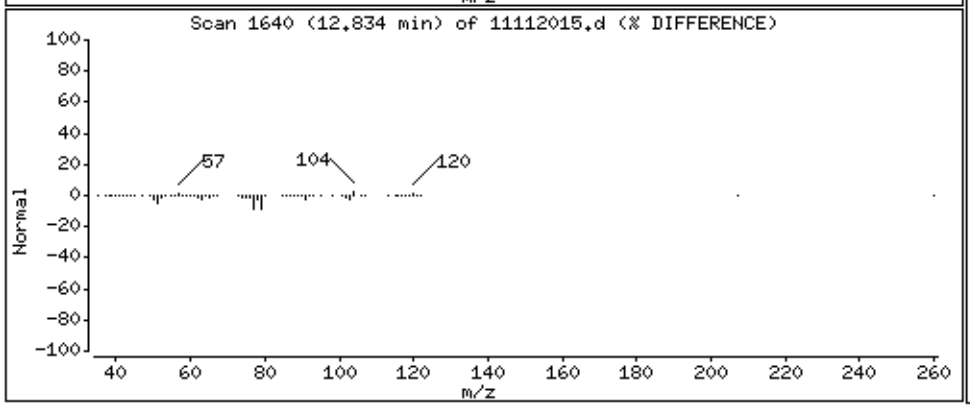
91 Cumene

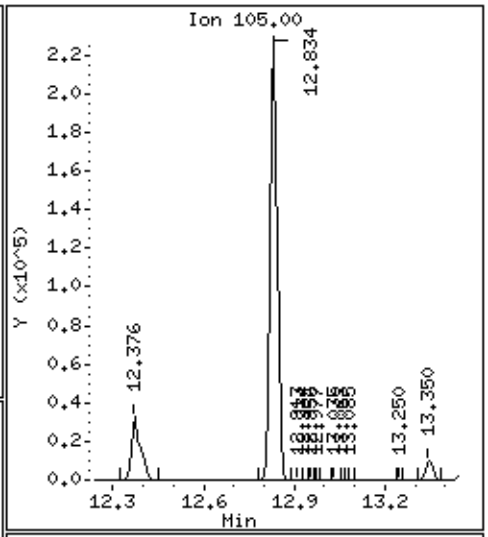
Concentration: 102.09 NG

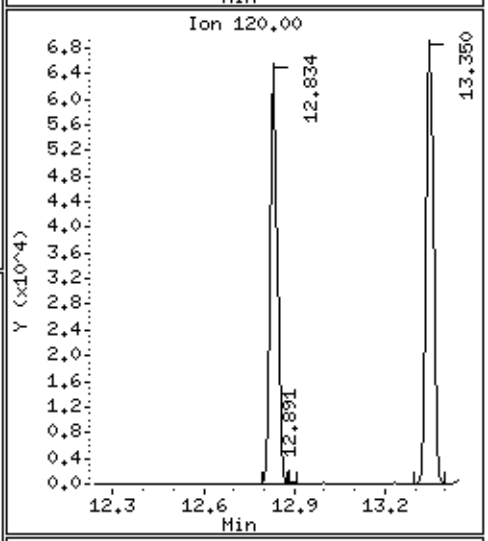


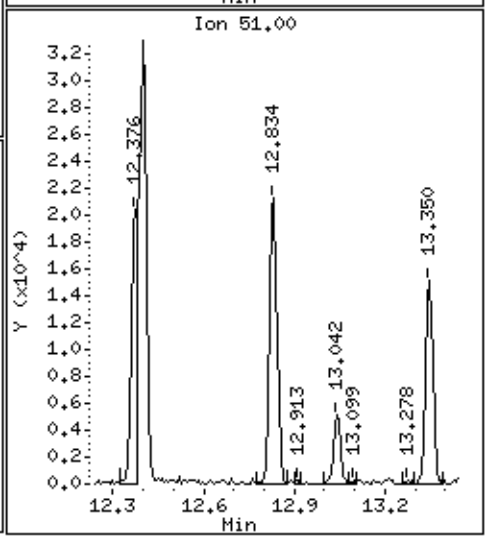












Data File: /chem/msd11.i/20nov15.b/11112015.d

Date : 21-NOV-2015 04:28

Client ID: LCS

Instrument: msd11.i

Sample Info: ;VI VOC+PAH ICV;LCS

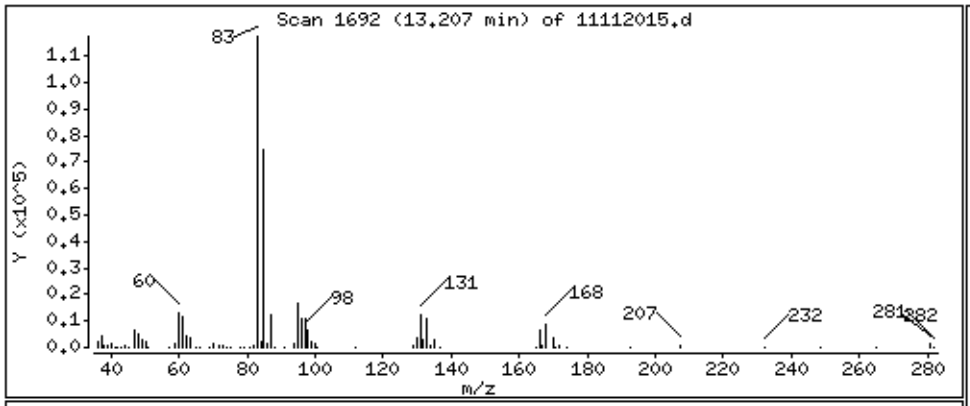
Operator: LA

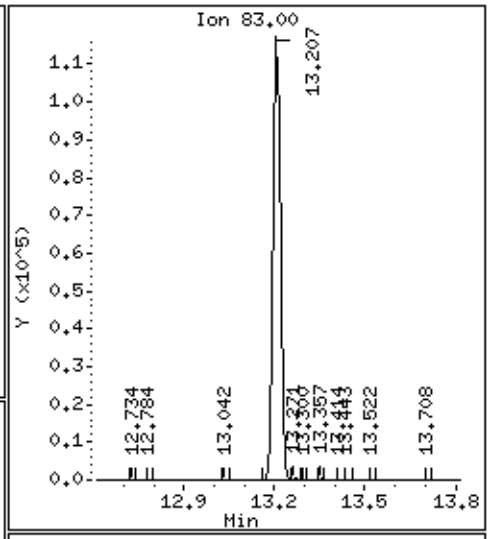
Column phase: RTx-624

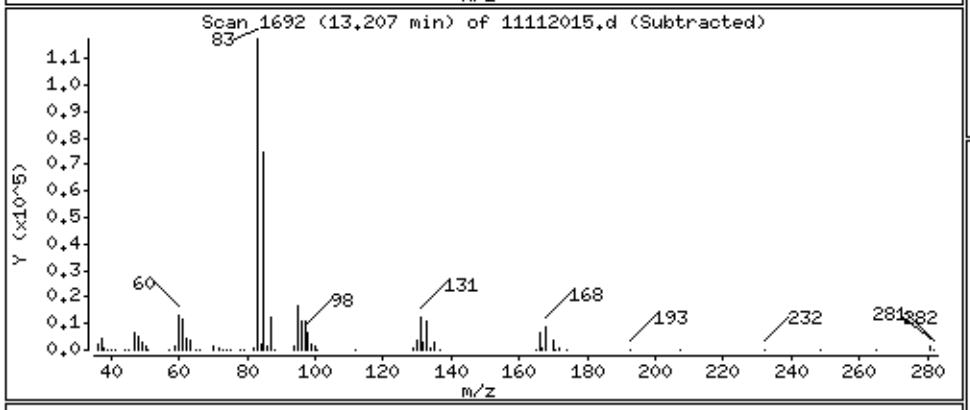
Column diameter: 0.53

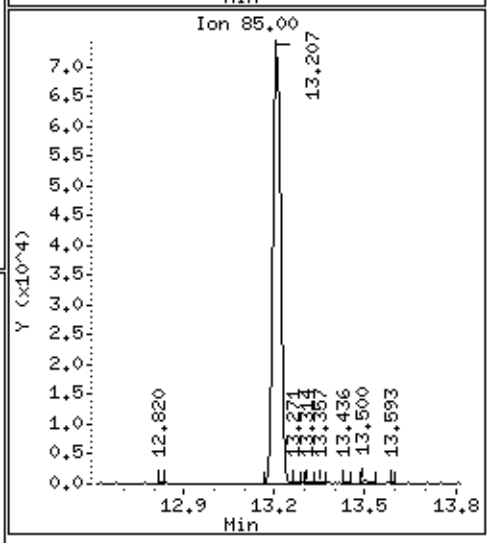
94 1,1,2,2-Tetrachloroethane

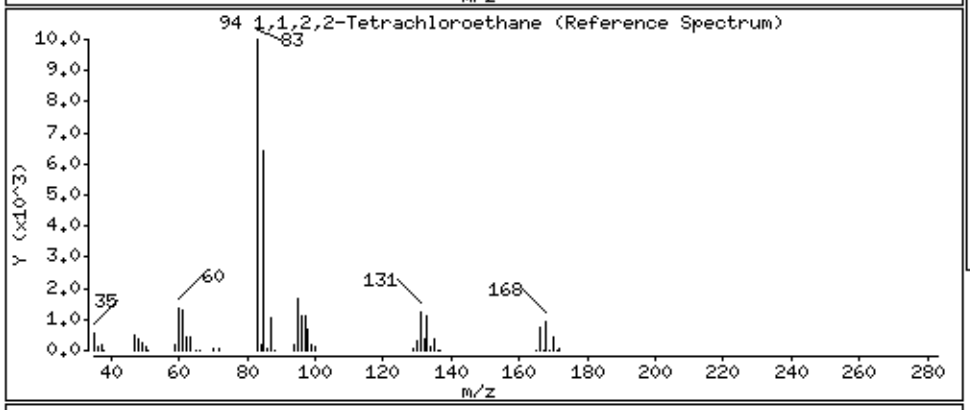
Concentration: 149.70 NG

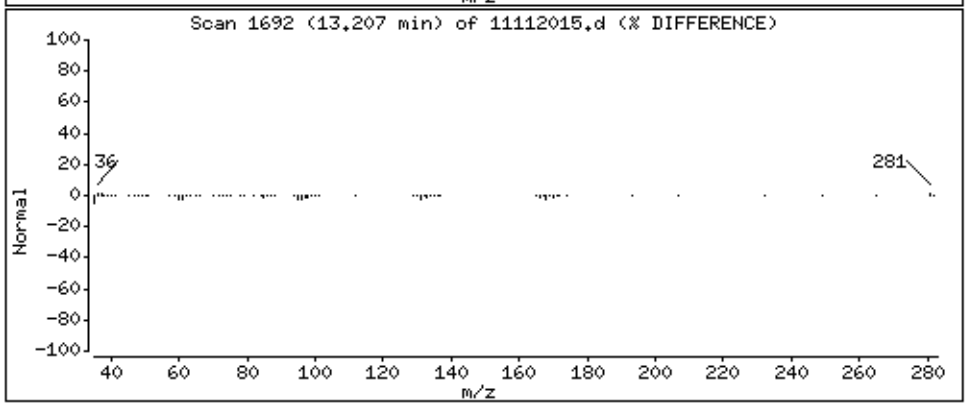












Data File: /chem/msd11.i/20nov15.b/11112015.d

Date : 21-NOV-2015 04:28

Client ID: LCS

Instrument: msd11.i

Sample Info: ;VI VOC+PAH ICV;LCS

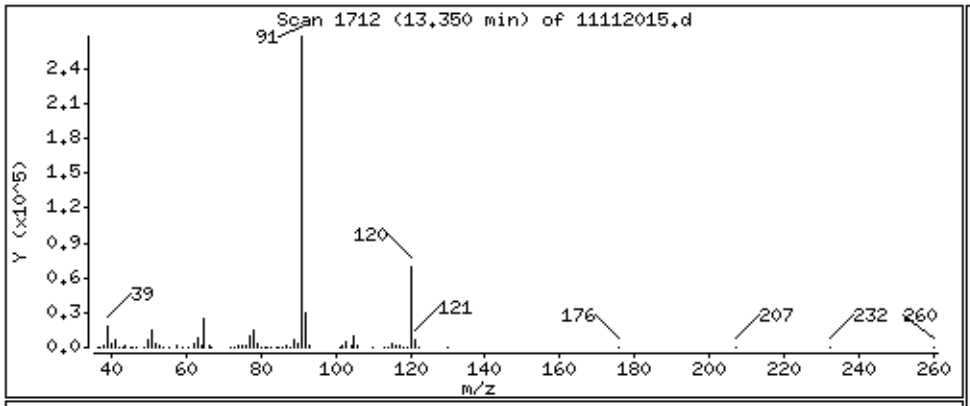
Operator: LA

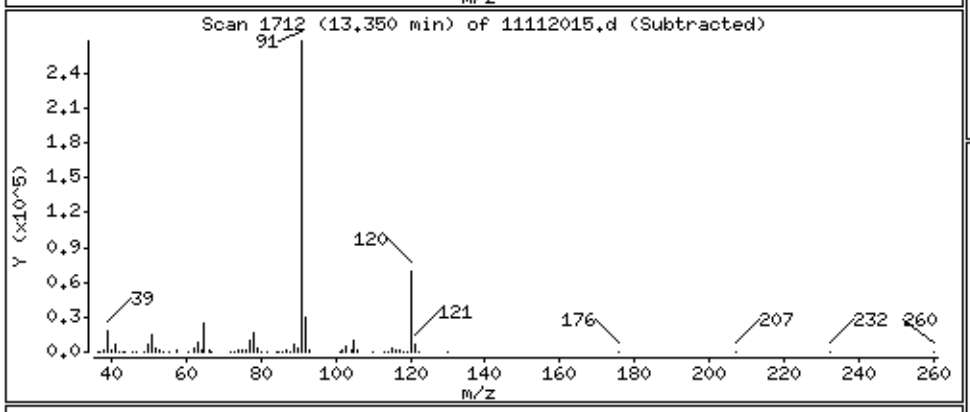
Column phase: RTx-624

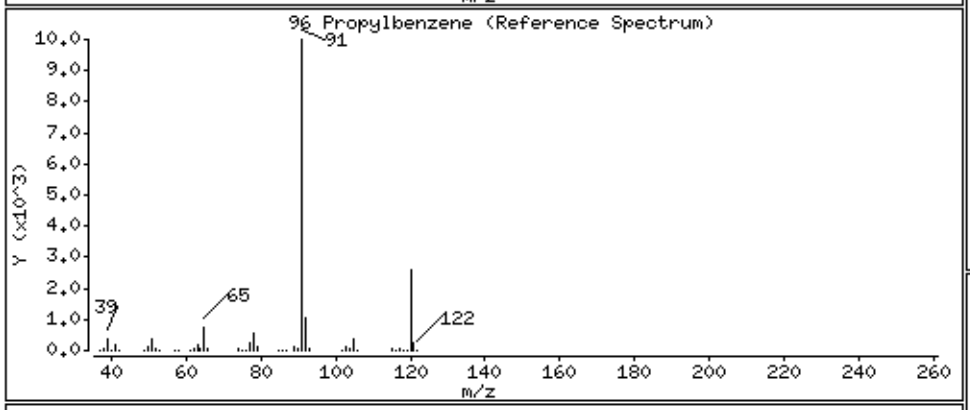
Column diameter: 0.53

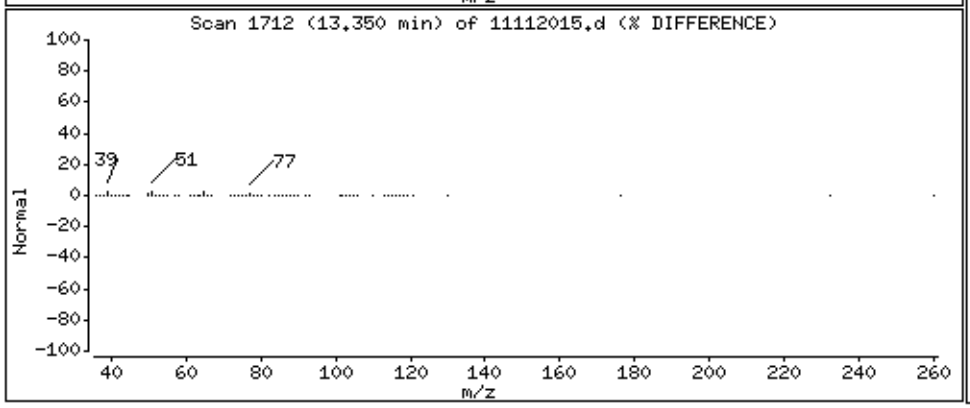
96 Propylbenzene

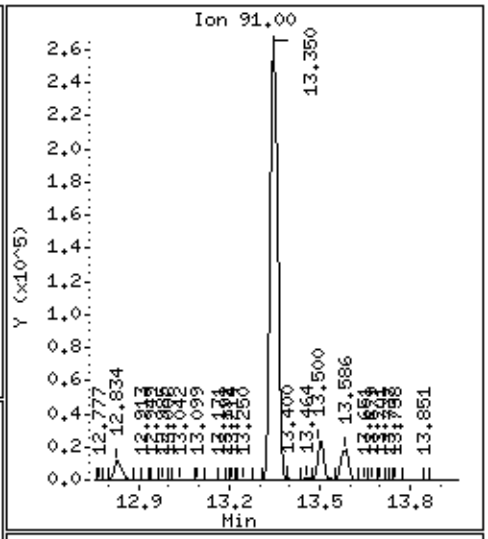
Concentration: 101.85 NG

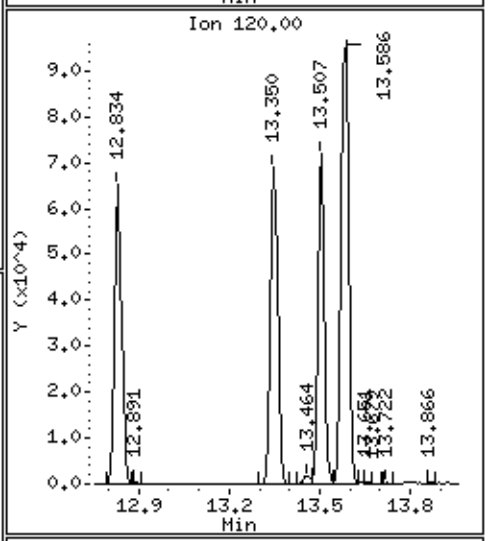


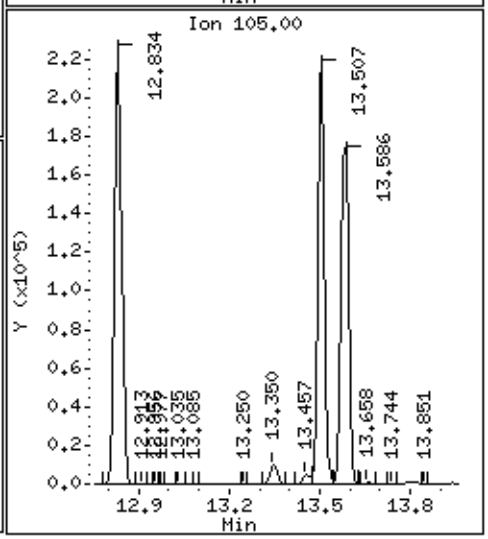












Data File: /chem/msd11.i/20nov15.b/11112015.d

Date : 21-NOV-2015 04:28

Client ID: LCS

Instrument: msd11.i

Sample Info: ;VI VOC+PAH ICV;LCS

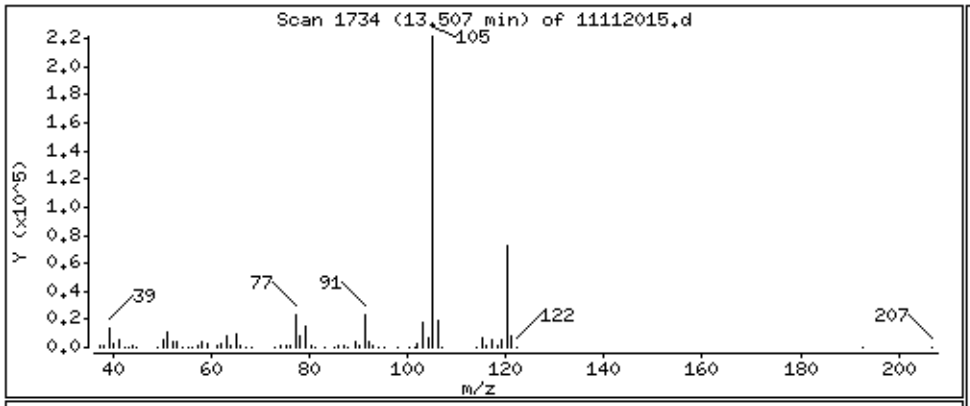
Operator: LA

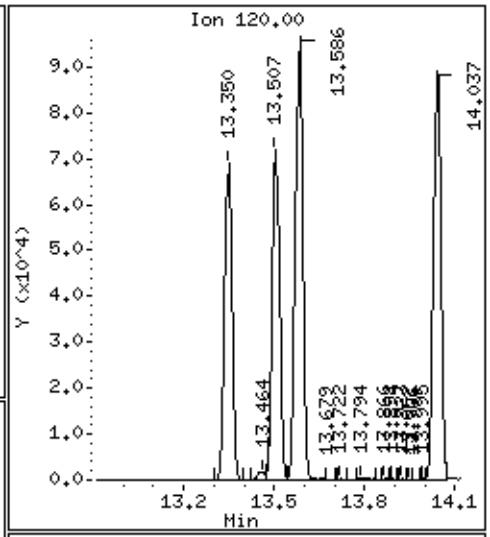
Column phase: RTx-624

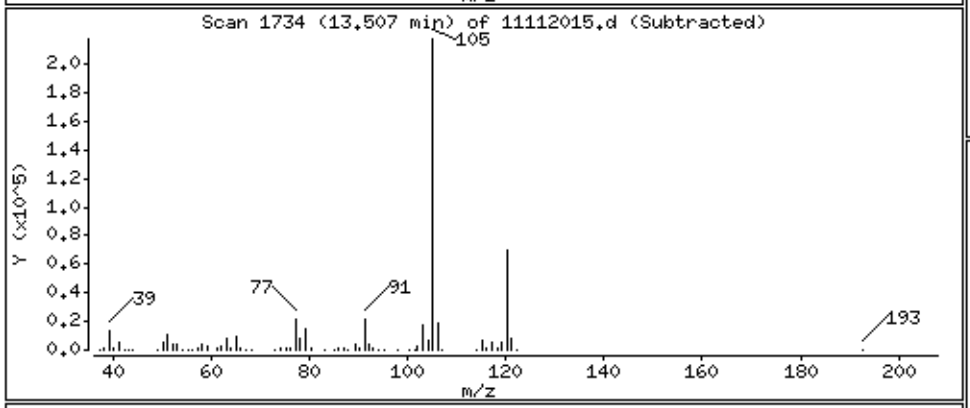
Column diameter: 0.53

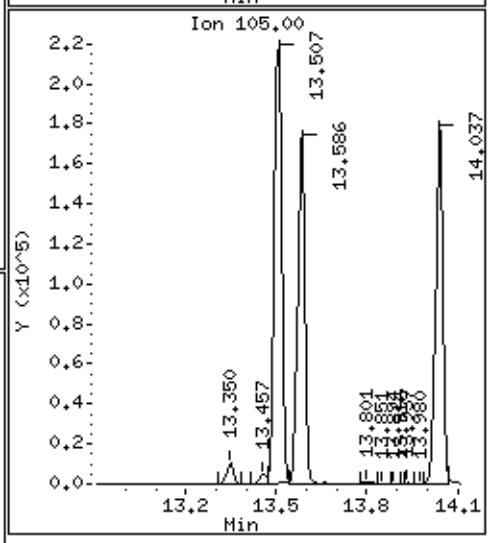
97 4-Ethyltoluene

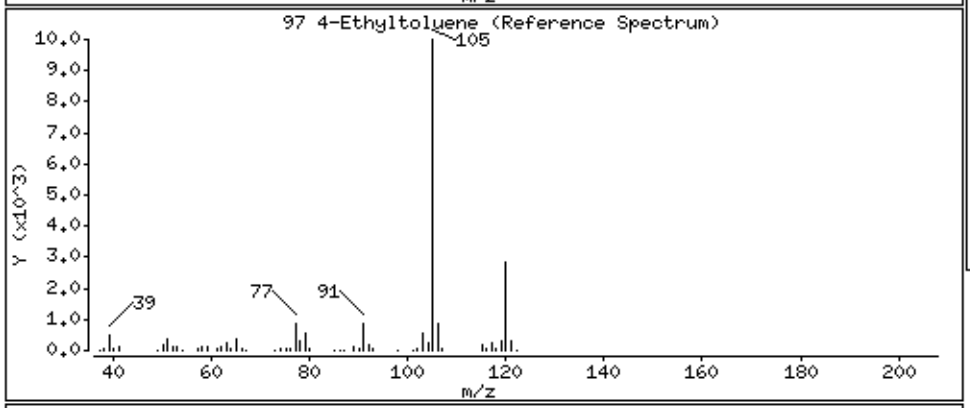
Concentration: 102.01 NG

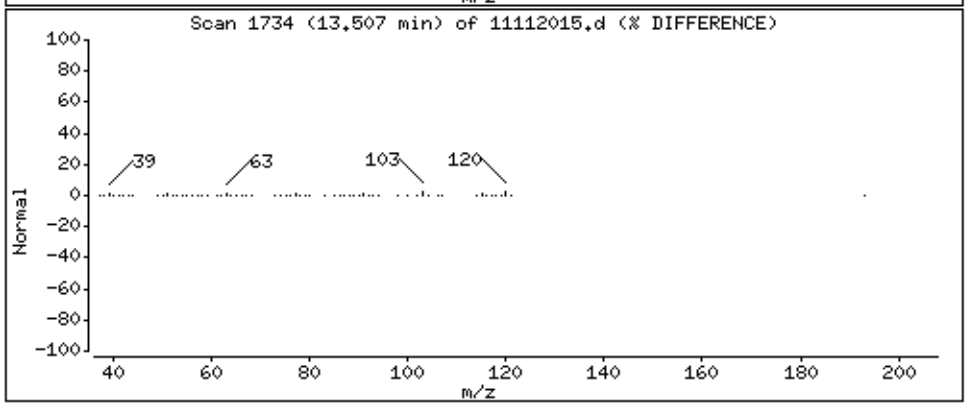












Data File: /chem/msd11.i/20nov15.b/11112015.d

Date : 21-NOV-2015 04:28

Client ID: LCS

Instrument: msd11.i

Sample Info: ;VI VOC+PAH ICV;LCS

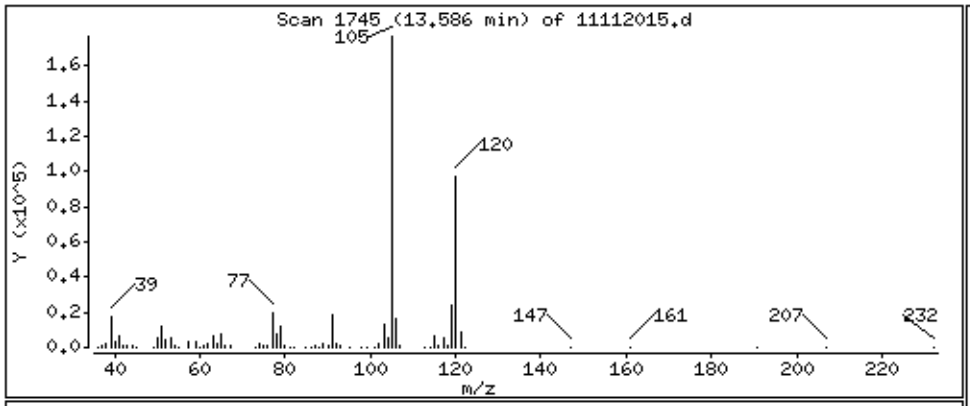
Operator: LA

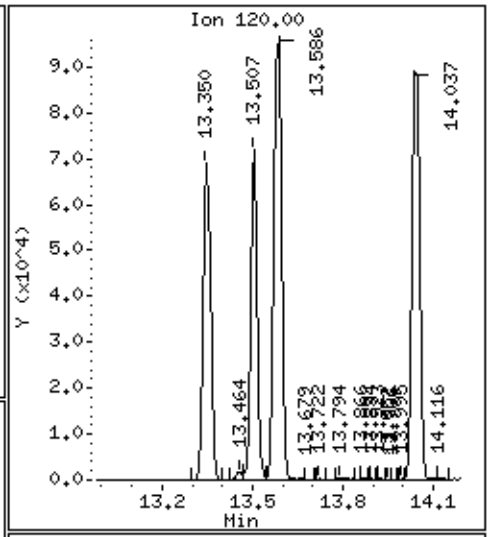
Column phase: RTx-624

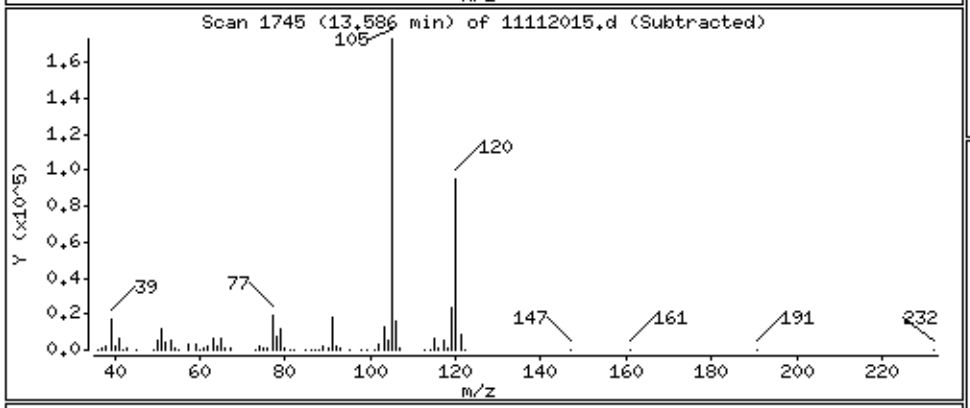
Column diameter: 0.53

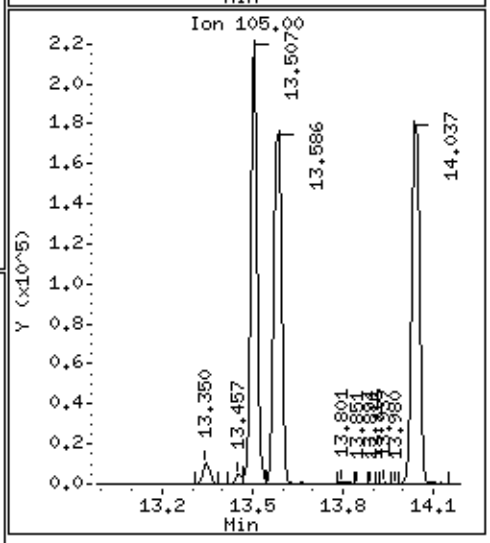
98 1,3,5-Trimethylbenzene

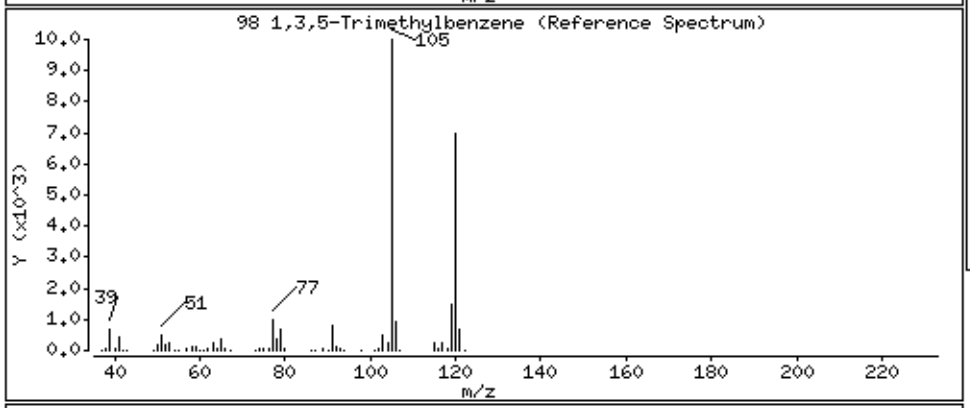
Concentration: 102.24 NG

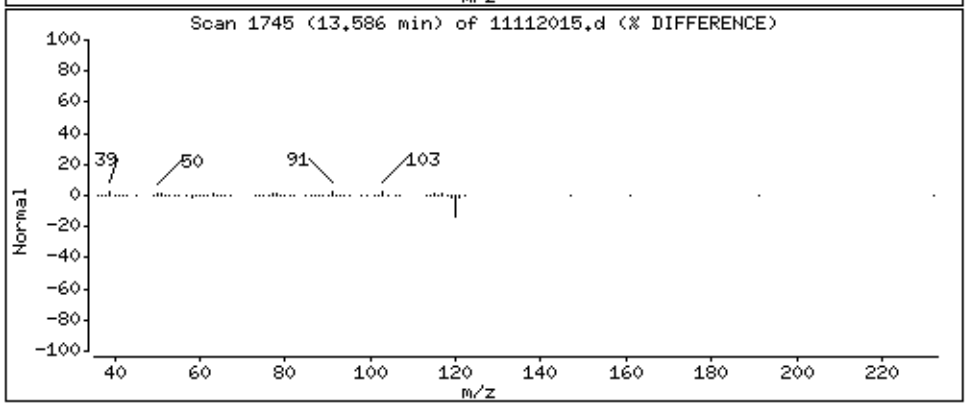












Data File: /chem/msd11.i/20nov15.b/11112015.d

Date : 21-NOV-2015 04:28

Client ID: LCS

Instrument: msd11.i

Sample Info: ;VI VOC+PAH ICV;LCS

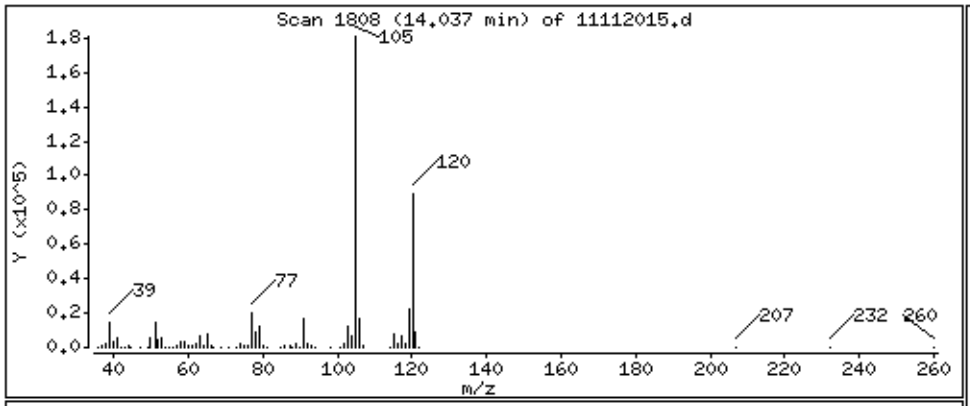
Operator: LA

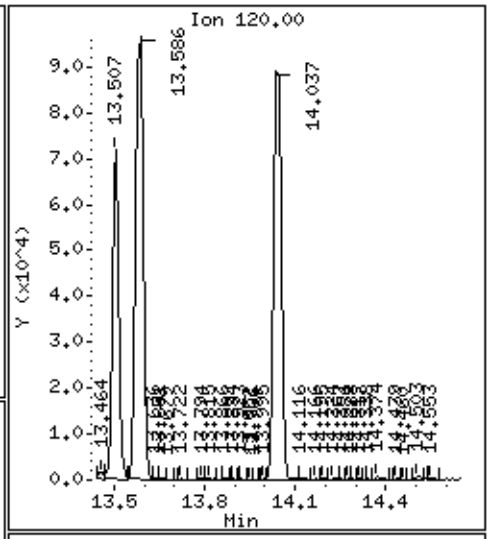
Column phase: RTx-624

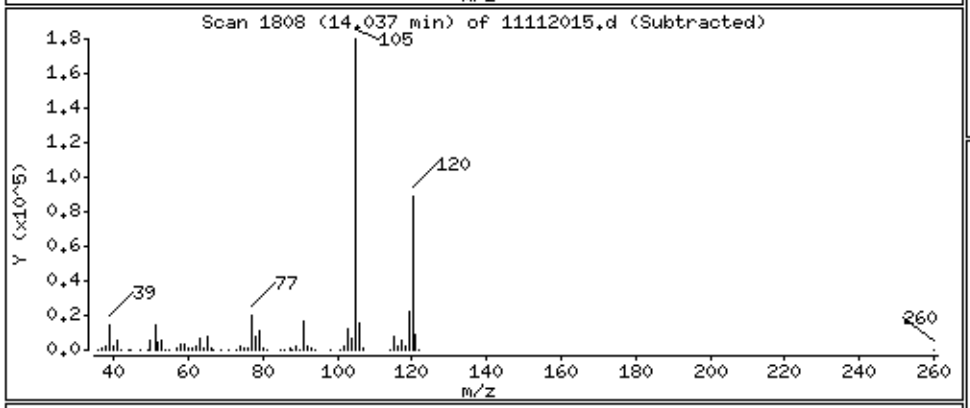
Column diameter: 0.53

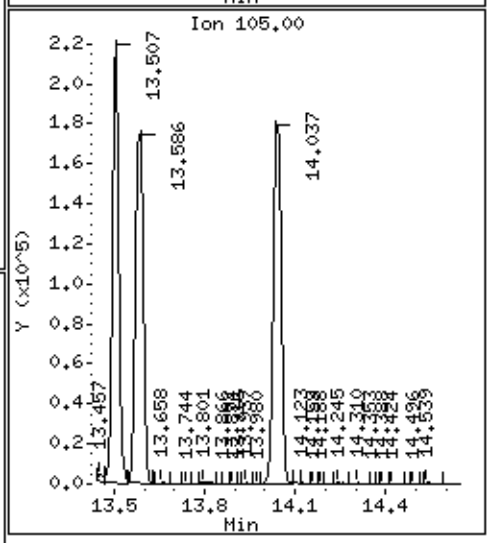
100 1,2,4-Trimethylbenzene

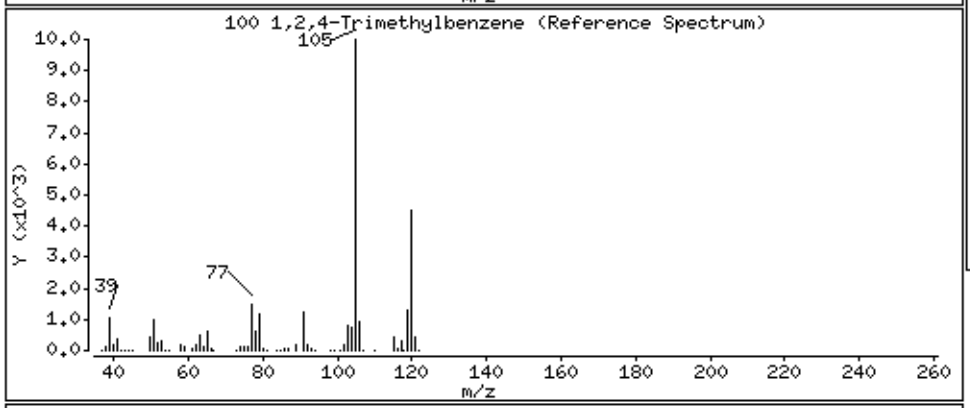
Concentration: 100.98 NG

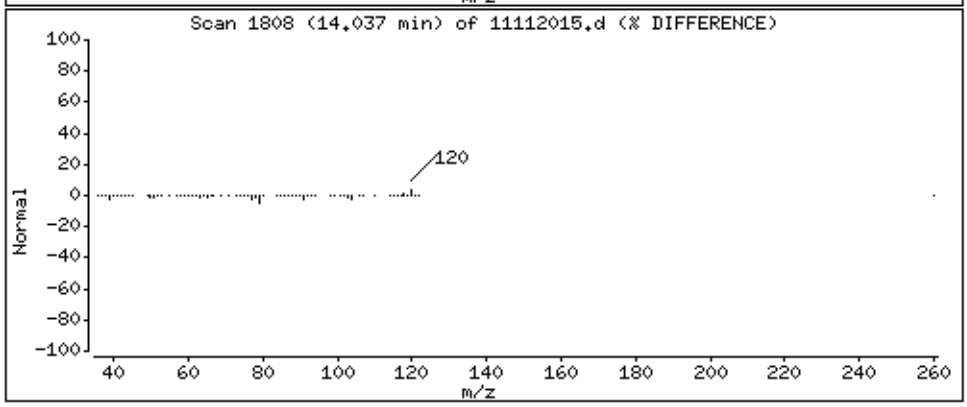












Data File: /chem/msd11.i/20nov15.b/11112015.d

Date : 21-NOV-2015 04:28

Client ID: LCS

Instrument: msd11.i

Sample Info: ;VI VOC+PAH ICV;LCS

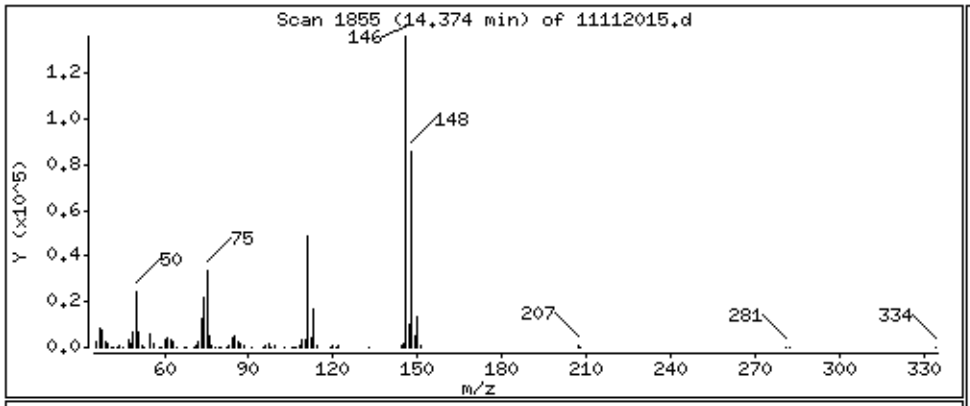
Operator: LA

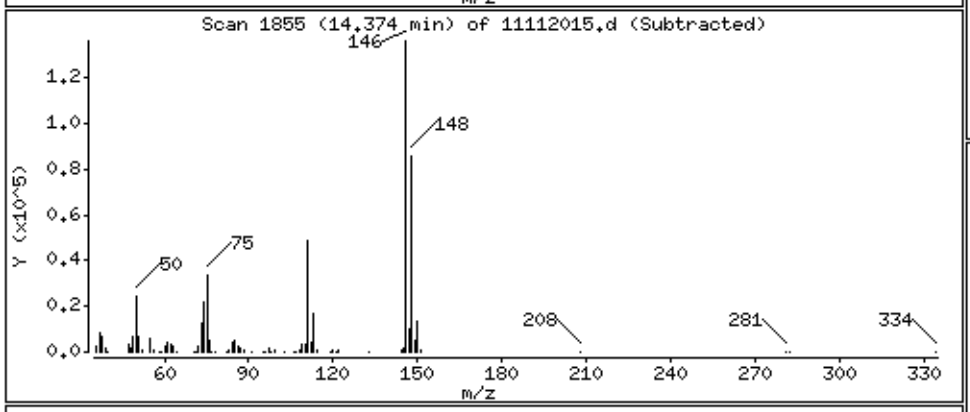
Column phase: RTx-624

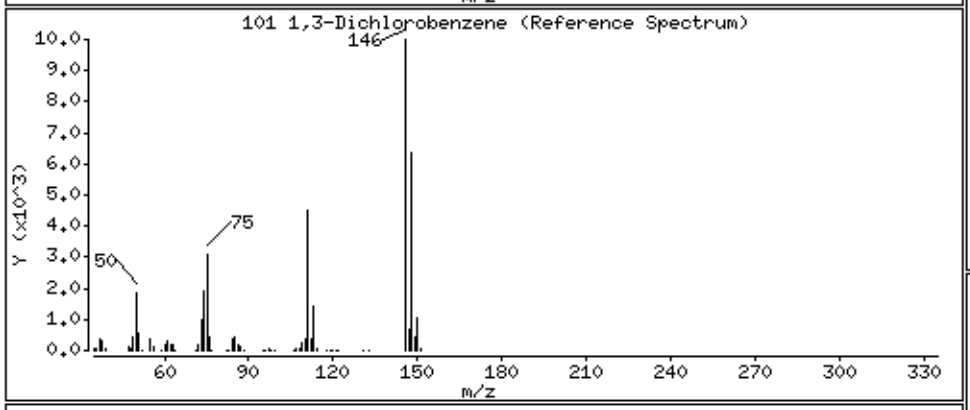
Column diameter: 0.53

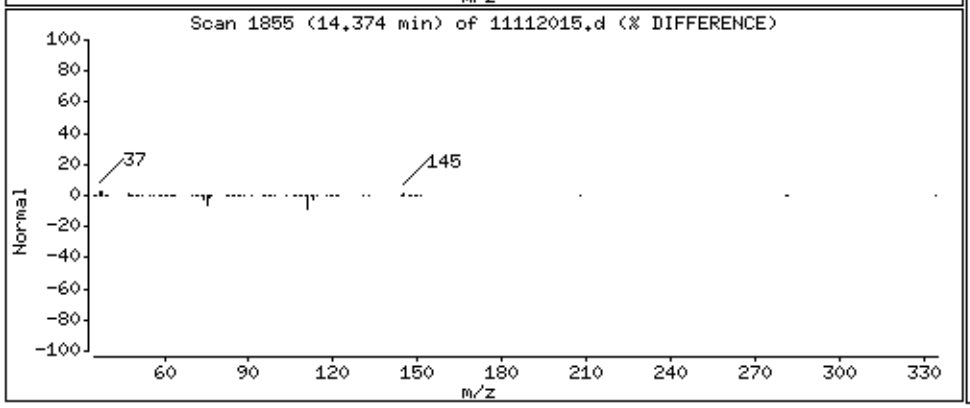
101 1,3-Dichlorobenzene

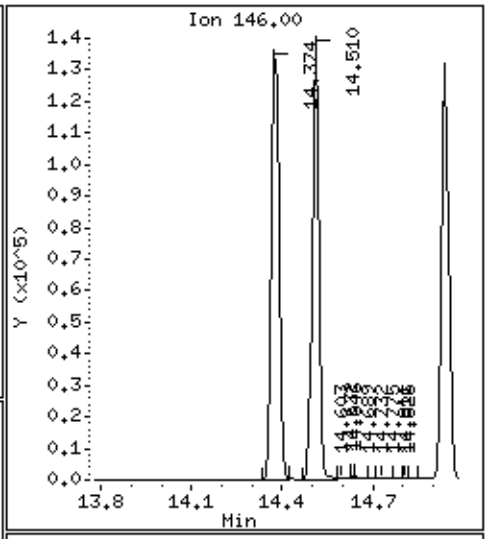
Concentration: 121.56 NG

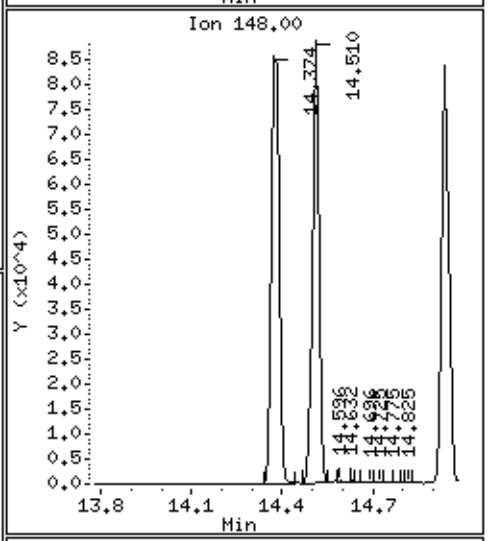


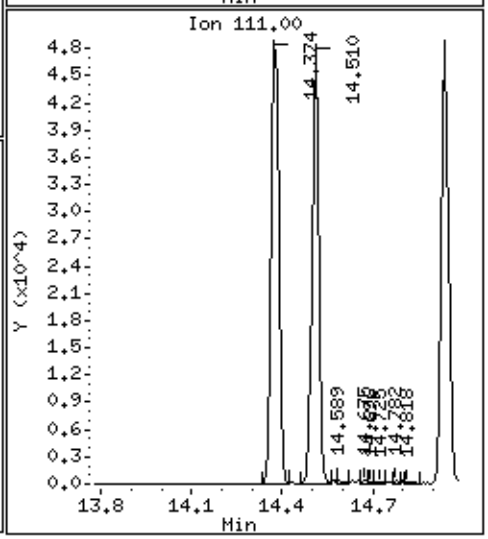












Data File: /chem/msd11.i/20nov15.b/11112015.d

Date : 21-NOV-2015 04:28

Client ID: LCS

Instrument: msd11.i

Sample Info: ;VI VOC+PAH ICV;LCS

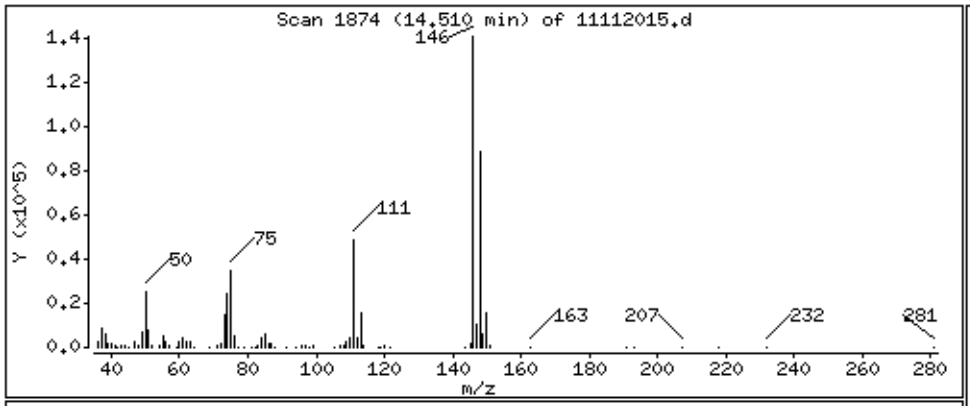
Operator: LA

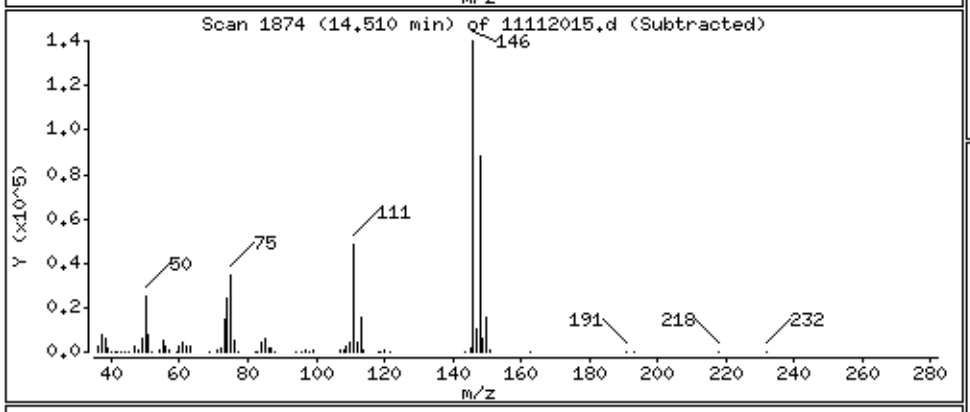
Column phase: RTx-624

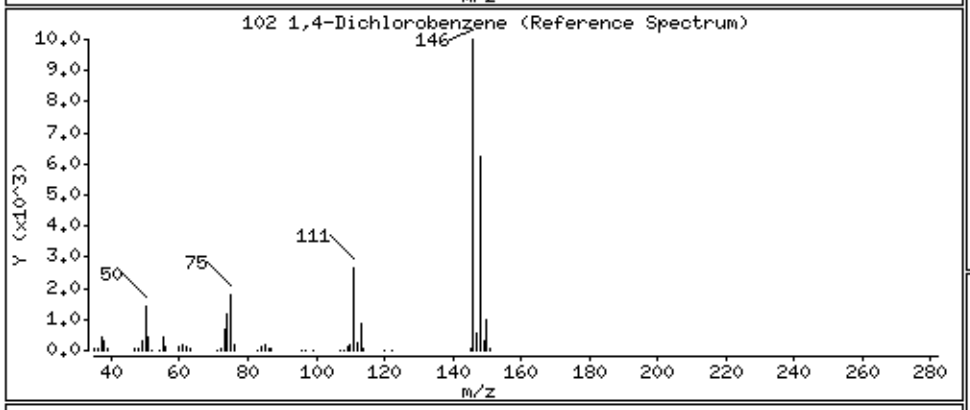
Column diameter: 0.53

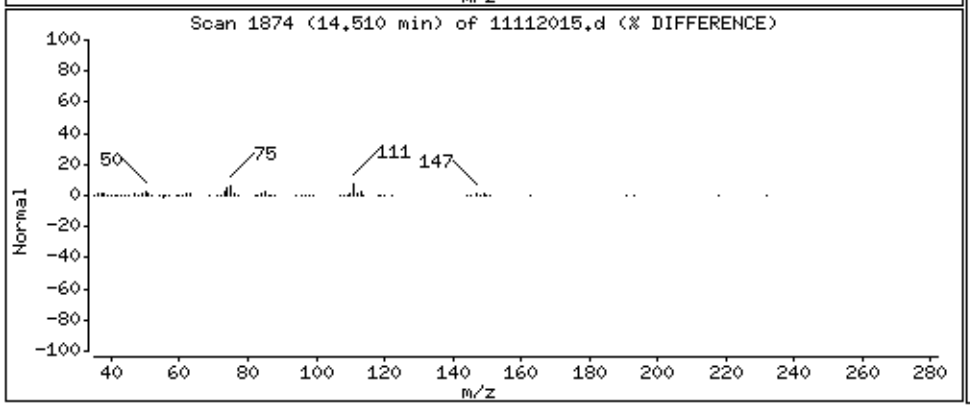
102 1,4-Dichlorobenzene

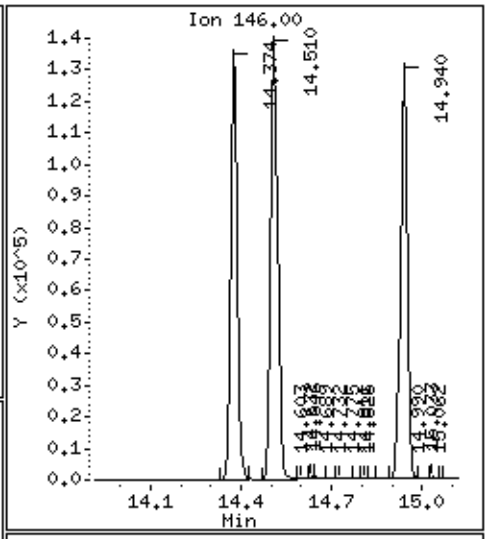
Concentration: 123.84 NG

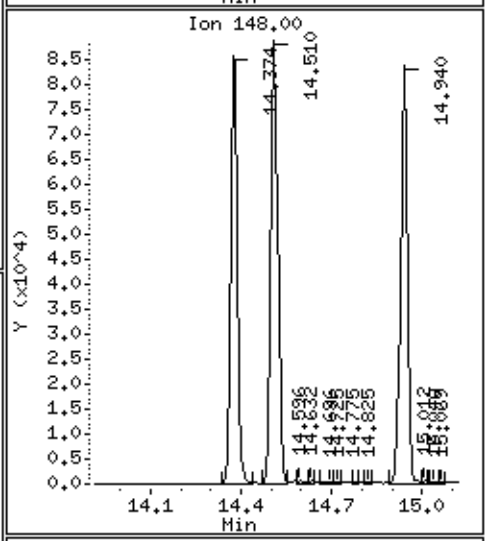


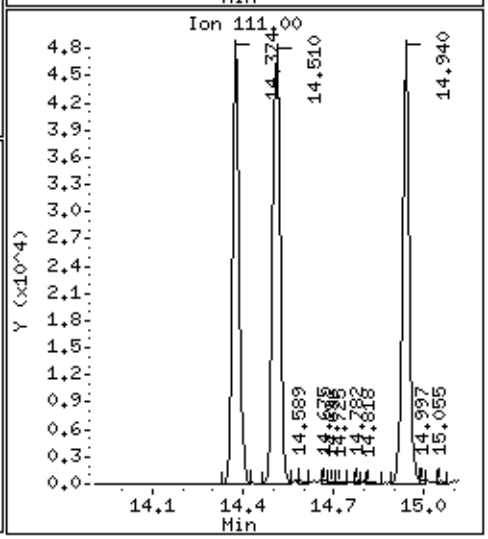












Data File: /chem/msd11.i/20nov15.b/11112015.d

Date : 21-NOV-2015 04:28

Client ID: LCS

Instrument: msd11.i

Sample Info: ;VI VOC+PAH ICV;LCS

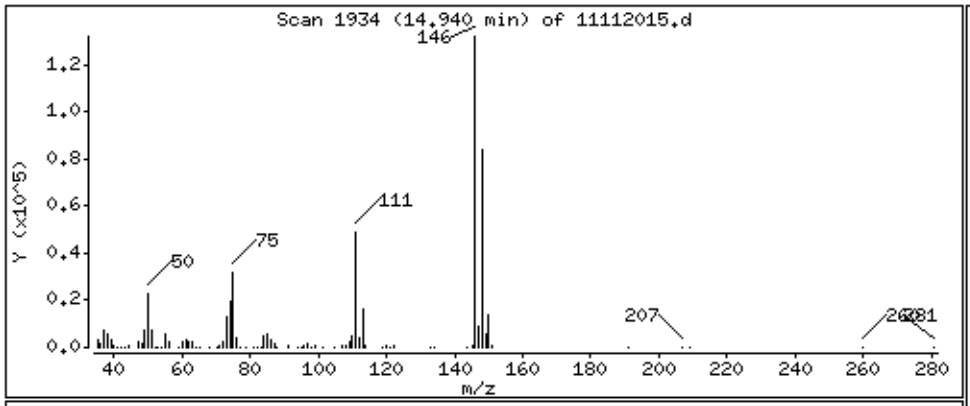
Operator: LA

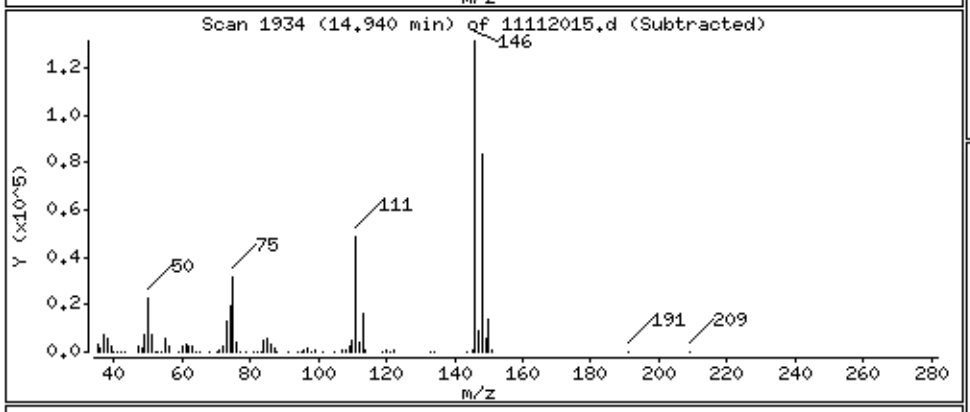
Column phase: RTx-624

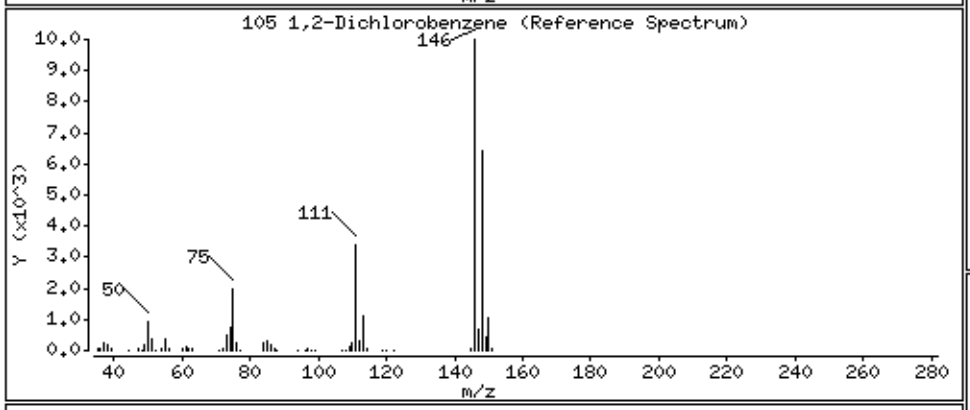
Column diameter: 0.53

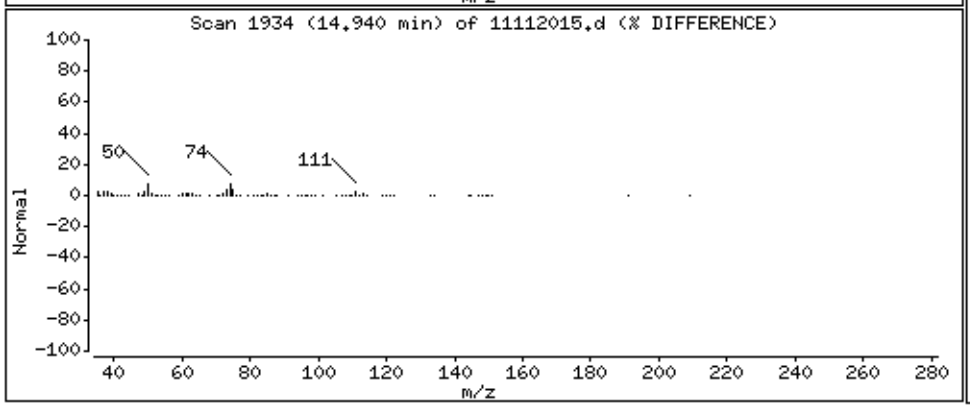
105 1,2-Dichlorobenzene

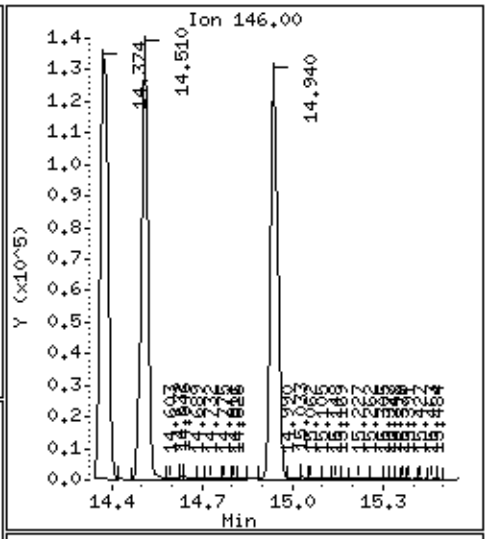
Concentration: 122.12 NG

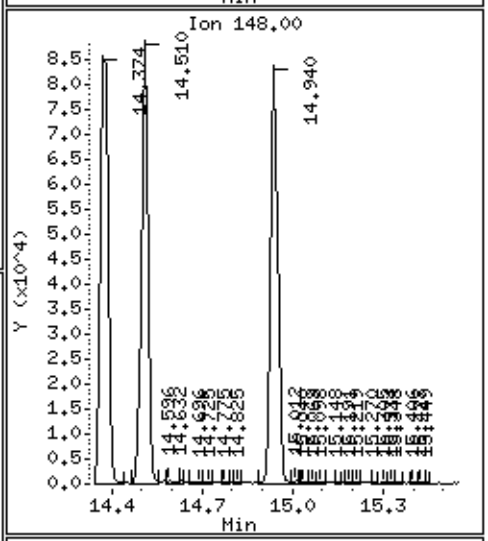


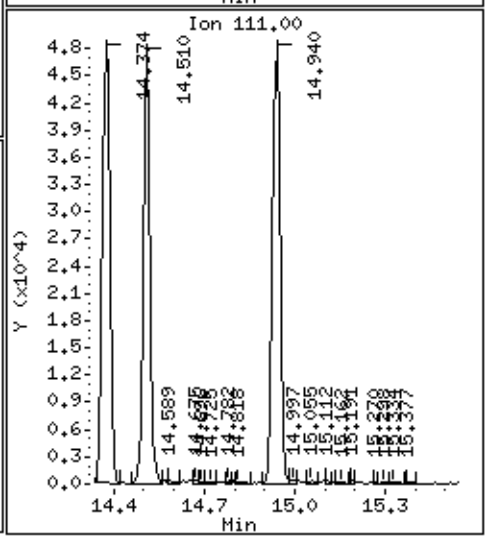












Data File: /chem/msd11.i/20nov15.b/11112015.d

Date : 21-NOV-2015 04:28

Client ID: LCS

Instrument: msd11.i

Sample Info: ;VI VOC+PAH ICV;LCS

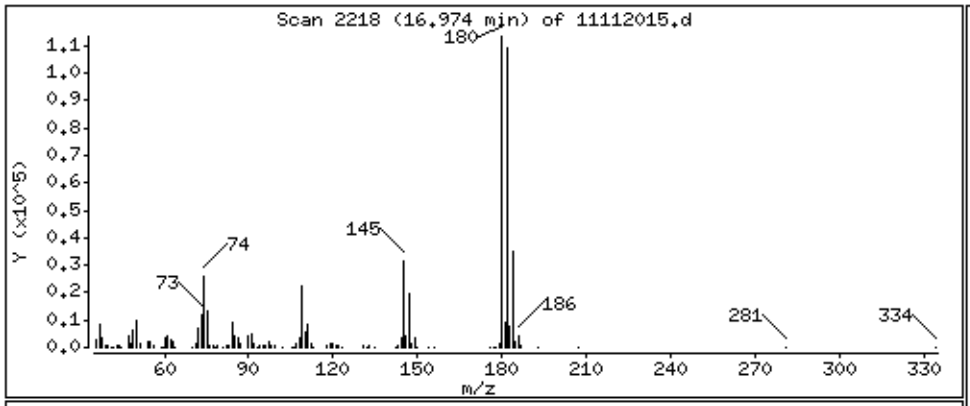
Operator: LA

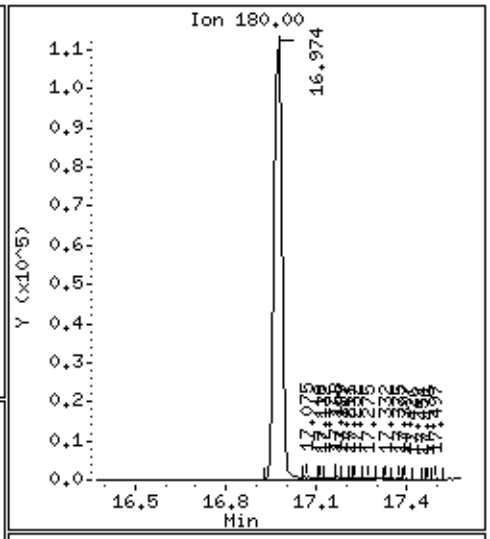
Column phase: RTx-624

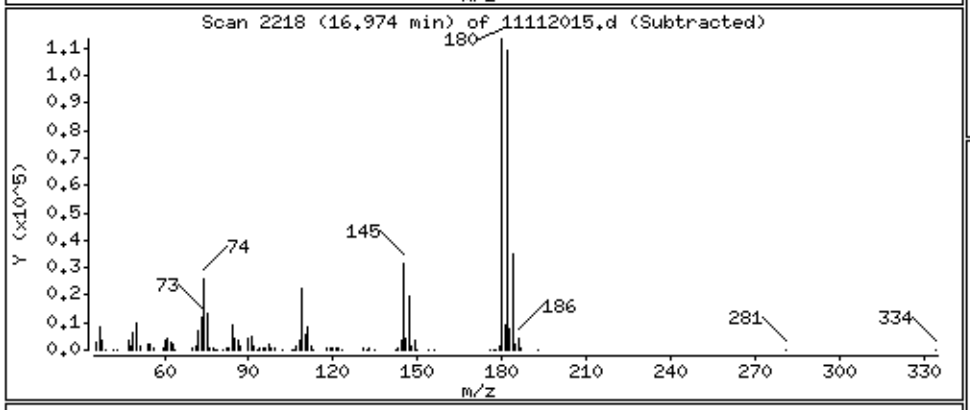
Column diameter: 0.53

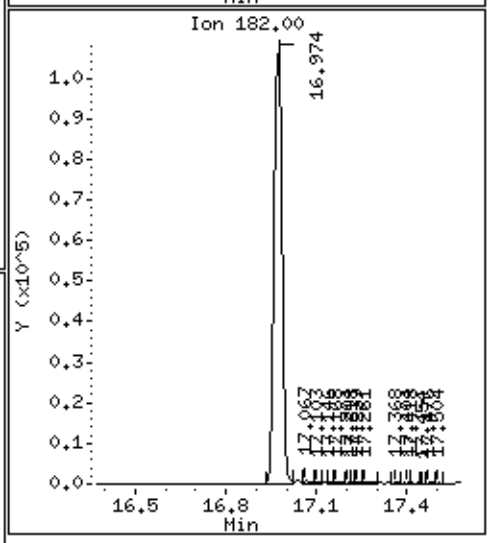
106 1,2,4-Trichlorobenzene

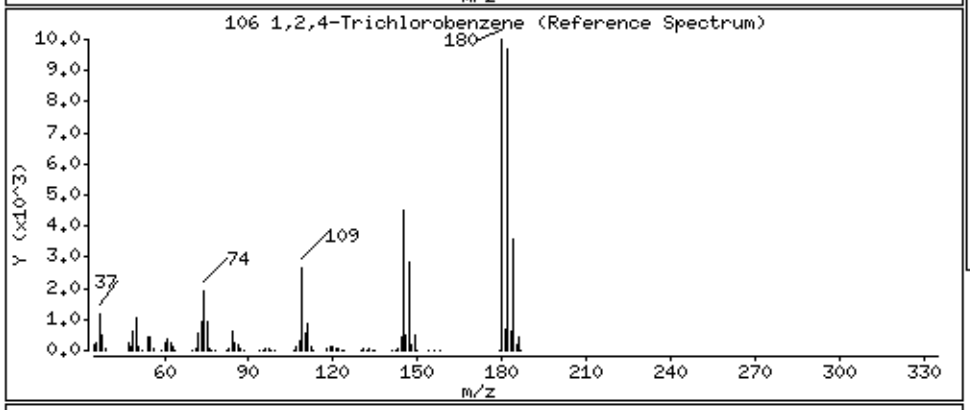
Concentration: 156.66 NG

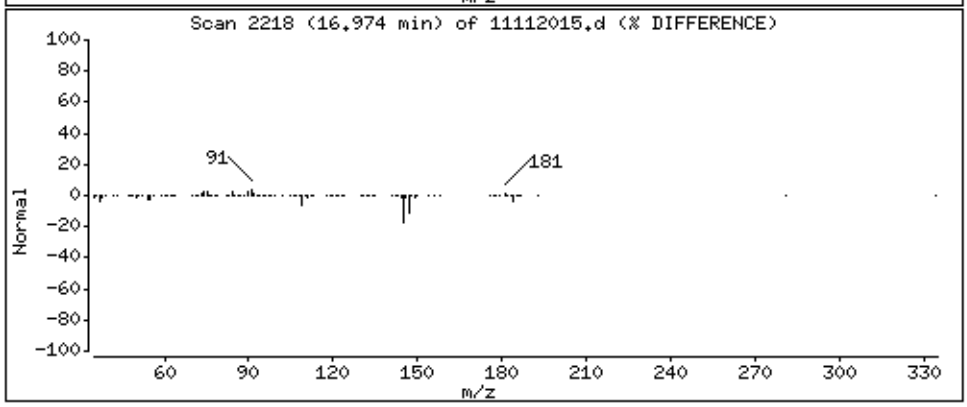












Data File: /chem/msd11.i/20nov15.b/11112015.d

Date : 21-NOV-2015 04:28

Client ID: LCS

Instrument: msd11.i

Sample Info: ;VI VOC+PAH ICV;LCS

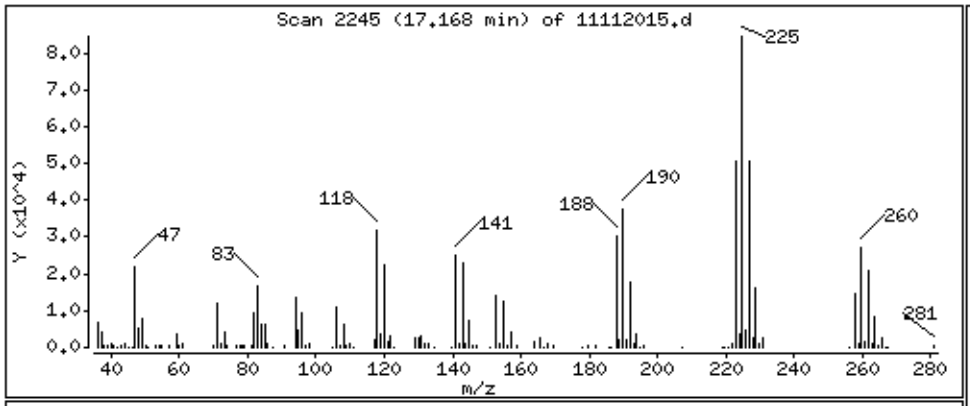
Operator: LA

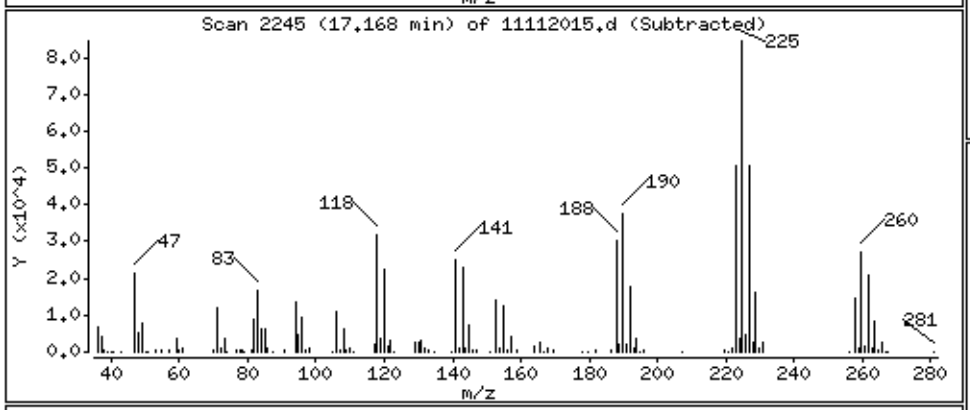
Column phase: RTx-624

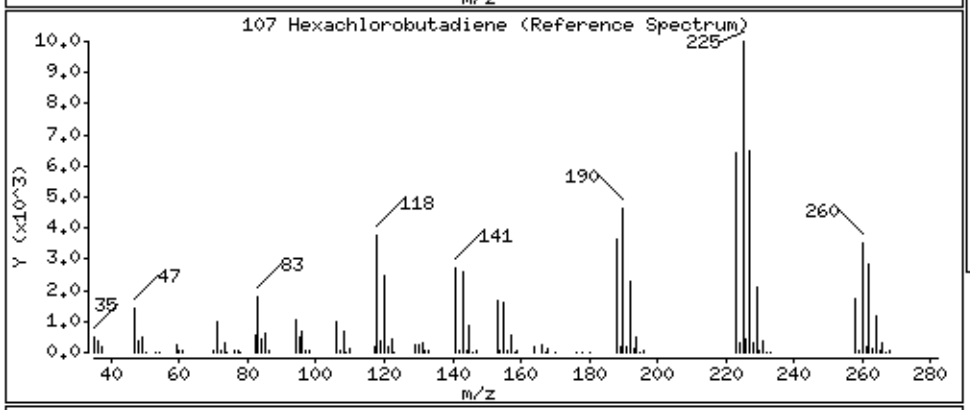
Column diameter: 0.53

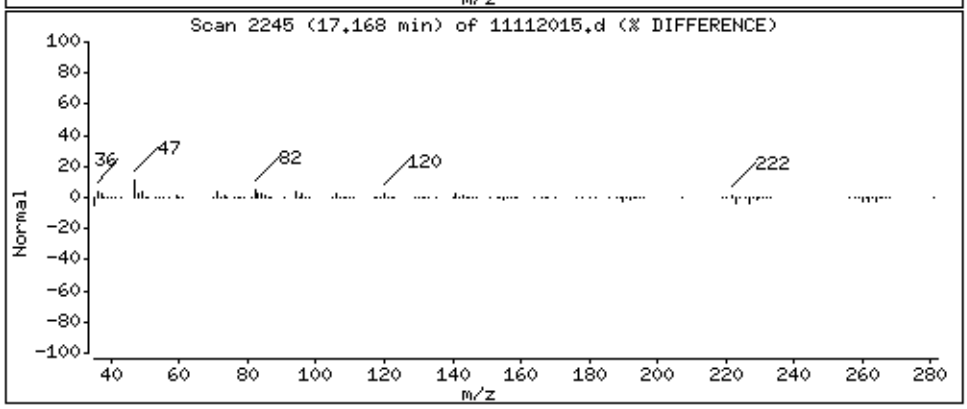
107 Hexachlorobutadiene

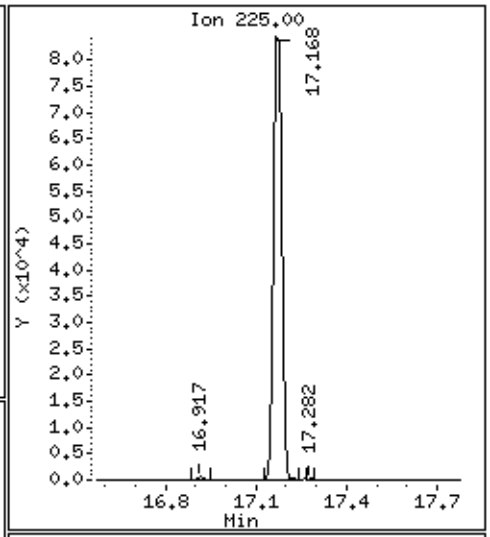
Concentration: 214.60 NG

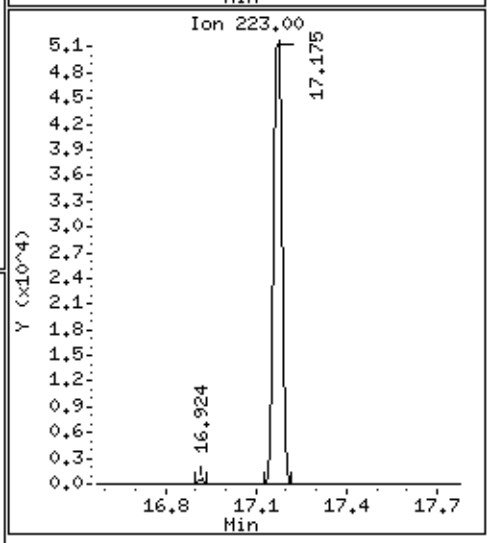












Data File: /chem/msd11.i/20nov15.b/11112015.d

Date : 21-NOV-2015 04:28

Client ID: LCS

Instrument: msd11.i

Sample Info: ;VI VOC+PAH ICV;LCS

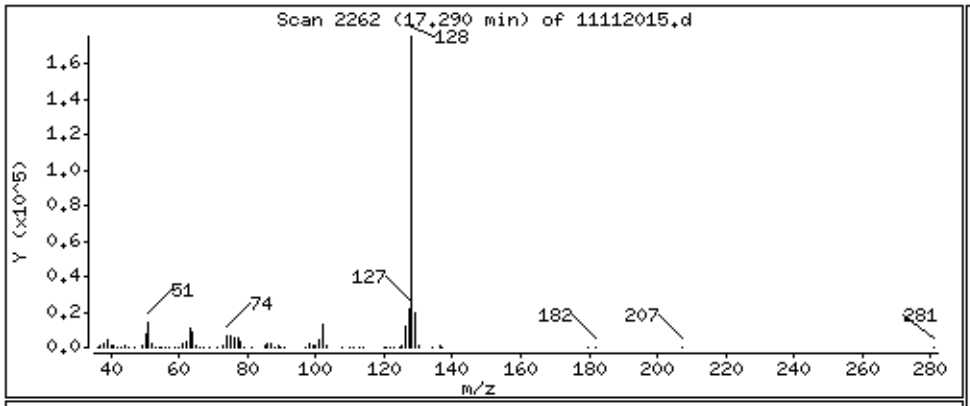
Operator: LA

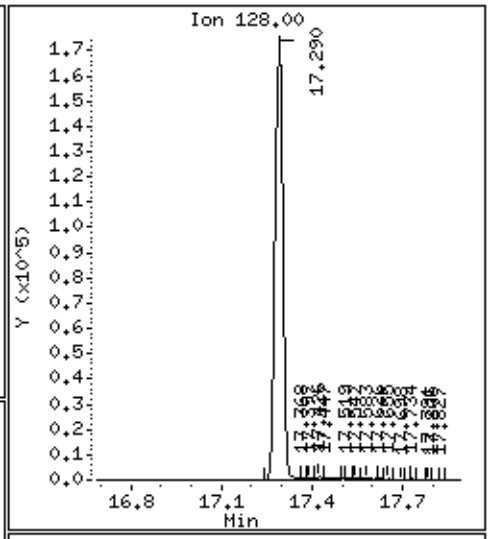
Column phase: RTx-624

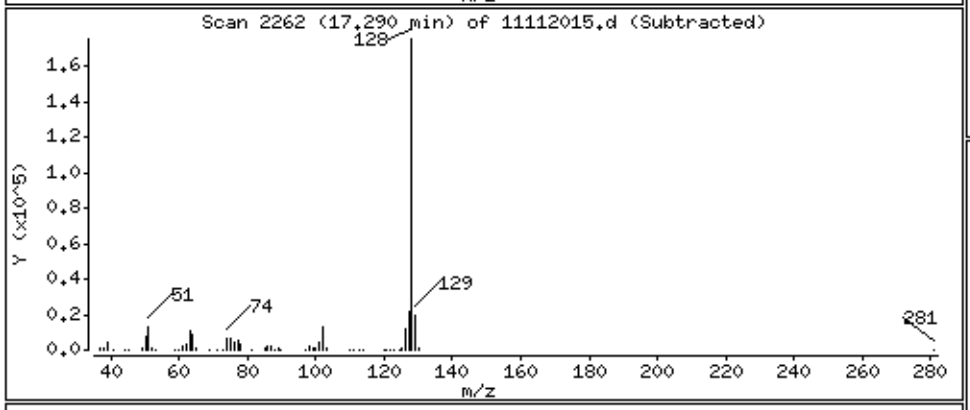
Column diameter: 0.53

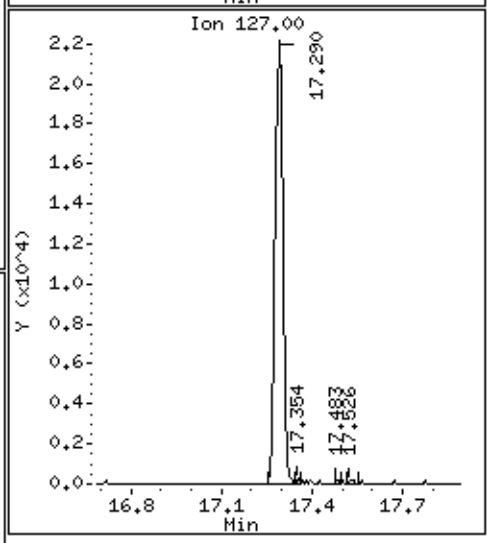
109 Naphthalene

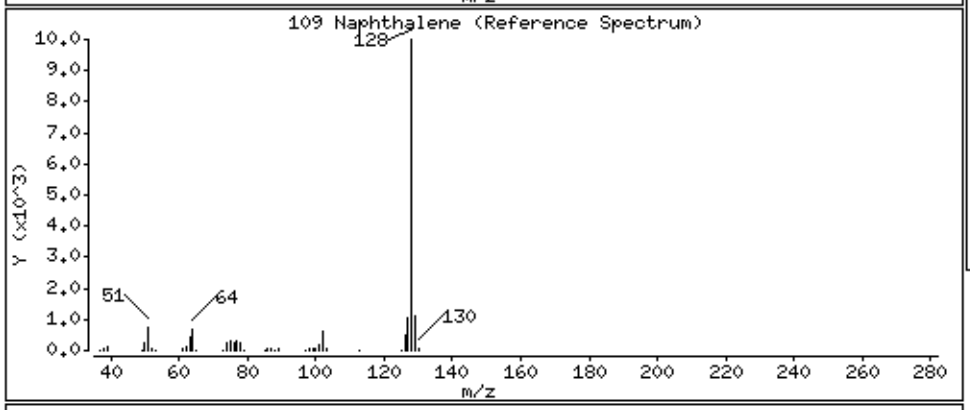
Concentration: 58.016 NG

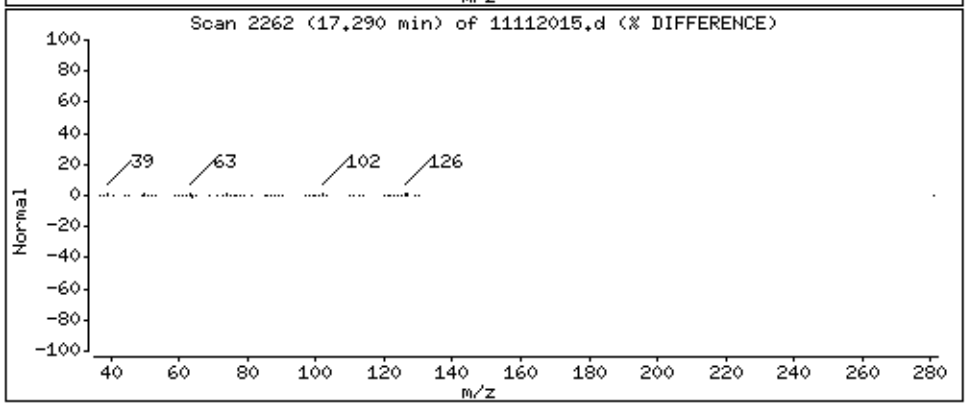












Data File: /chem/msd11.i/20nov15.b/11112015.d

Date : 21-NOV-2015 04:28

Client ID: LCS

Instrument: msd11.i

Sample Info: ;VI VOC+PAH ICV;LCS

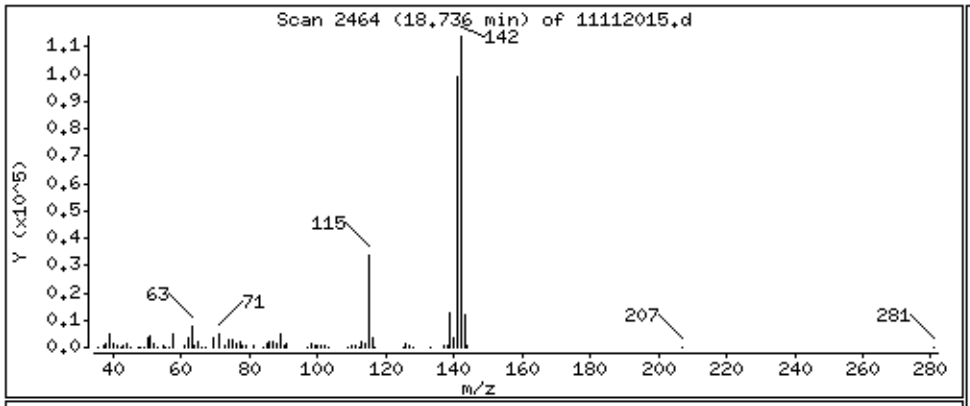
Operator: LA

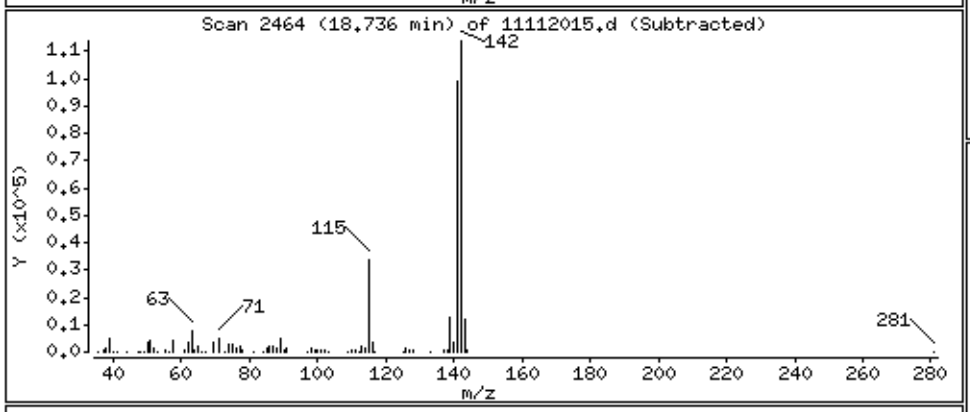
Column phase: RTx-624

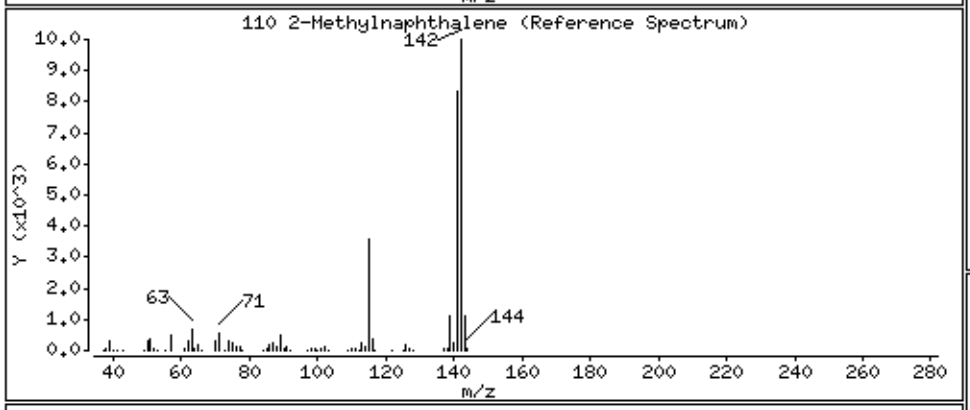
Column diameter: 0.53

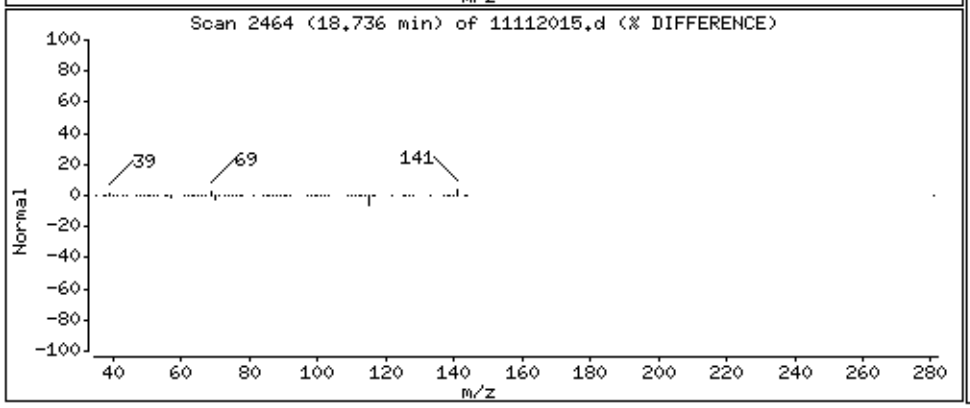
110 2-Methylnaphthalene

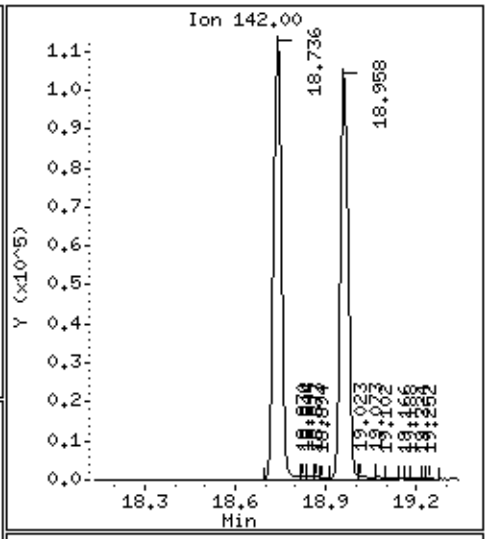
Concentration: 60.954 NG

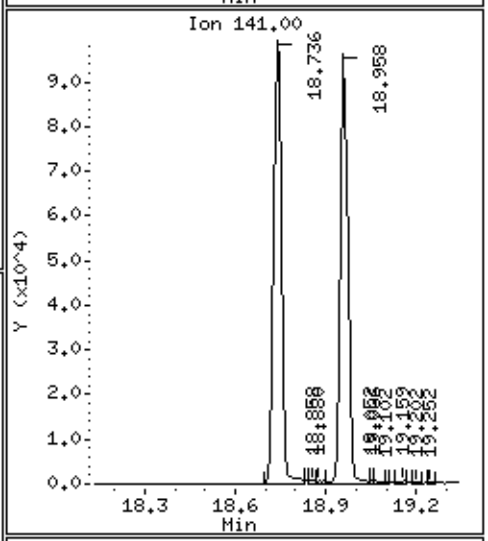


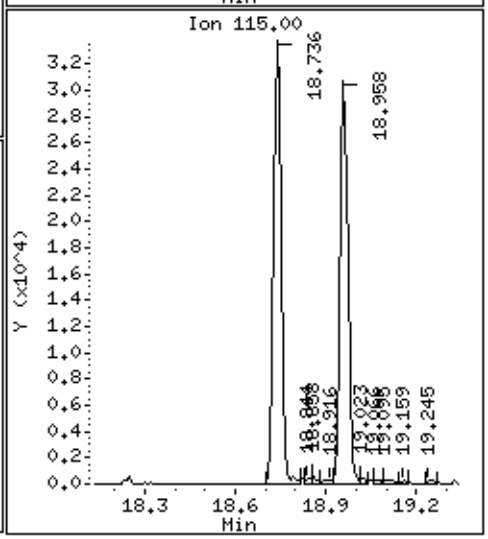












Data File: /chem/msd11.i/20nov15.b/11112015.d

Date : 21-NOV-2015 04:28

Client ID: LCS

Instrument: msd11.i

Sample Info: ;VI VOC+PAH ICV;LCS

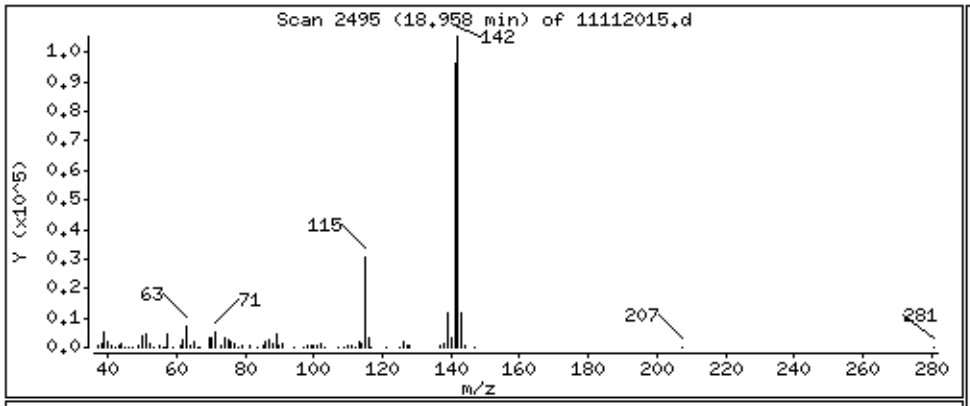
Operator: LA

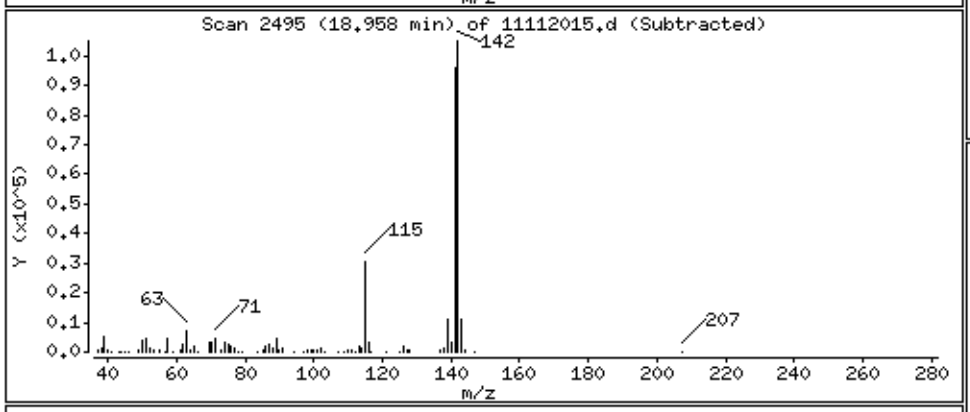
Column phase: RTx-624

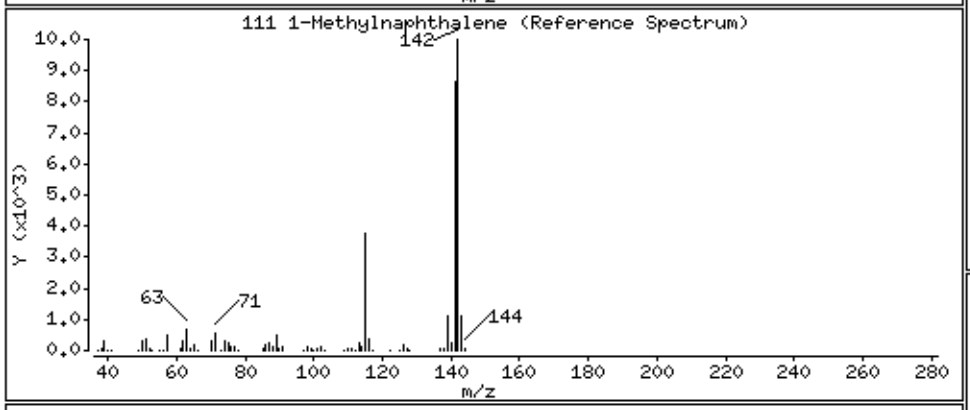
Column diameter: 0.53

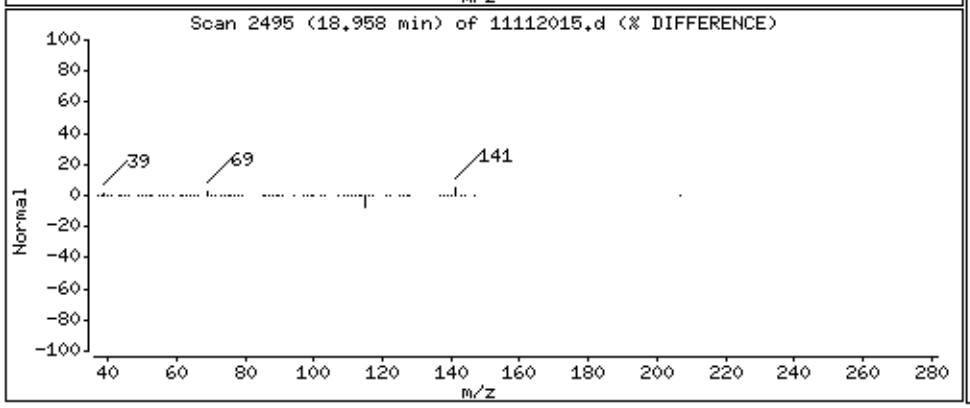
111 1-Methylnaphthalene

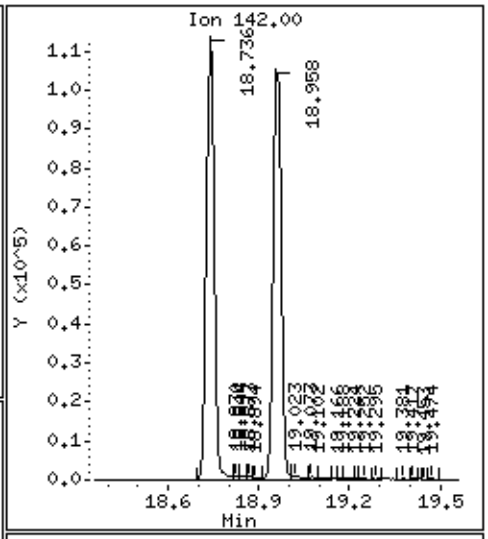
Concentration: 58.083 NG

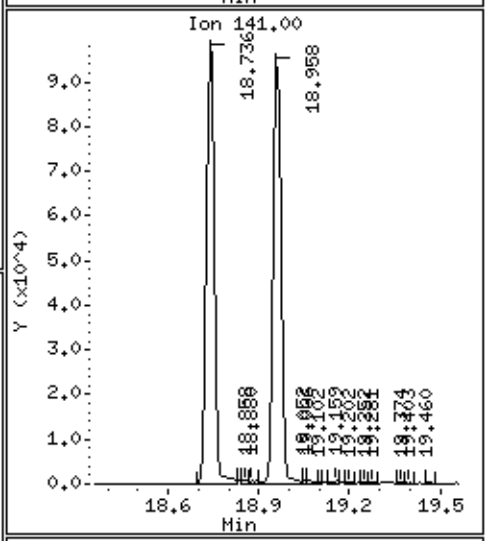


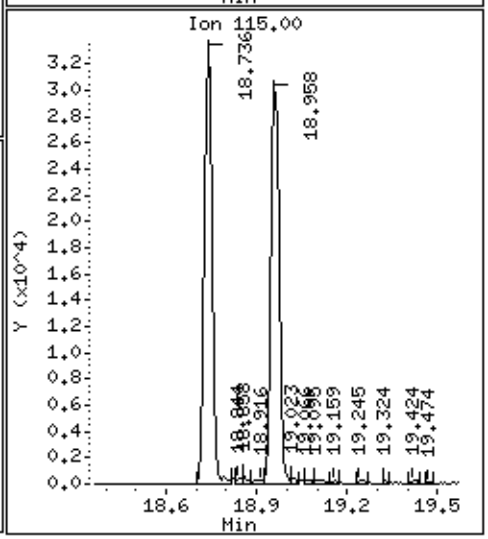












Data File: /chem/msd11.i/20nov15.b/11112015.d

Date : 21-NOV-2015 04:28

Client ID: LCS

Instrument: msd11.i

Sample Info: ;VI VOC+PAH ICV;LCS

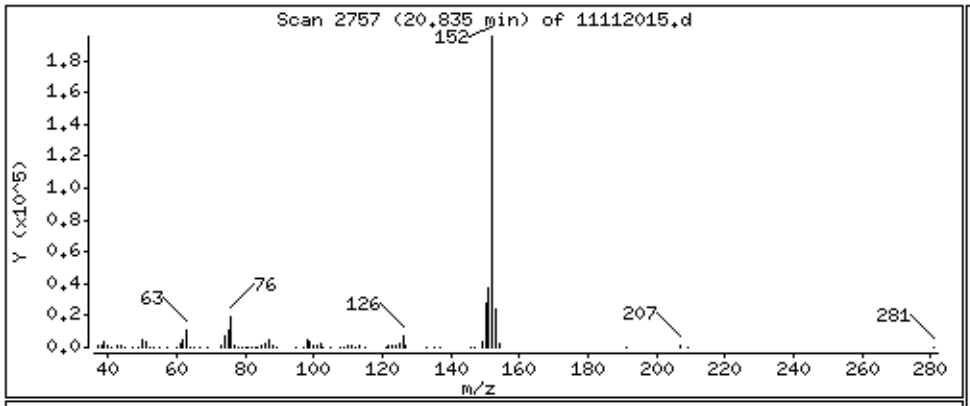
Operator: LA

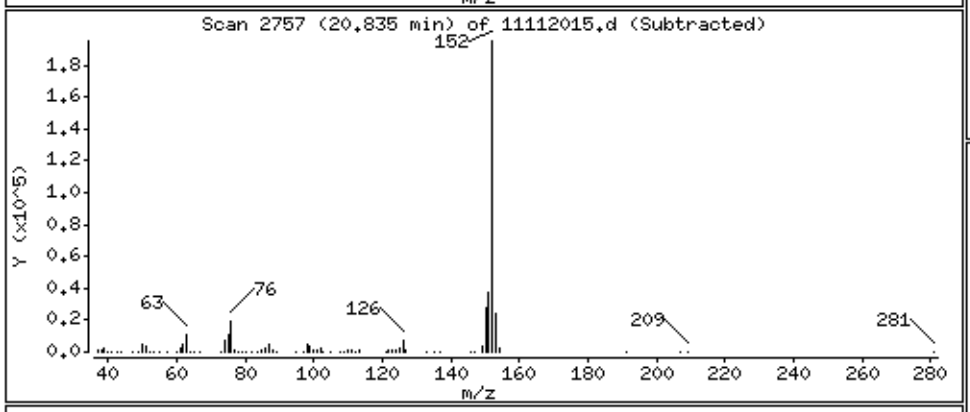
Column phase: RTx-624

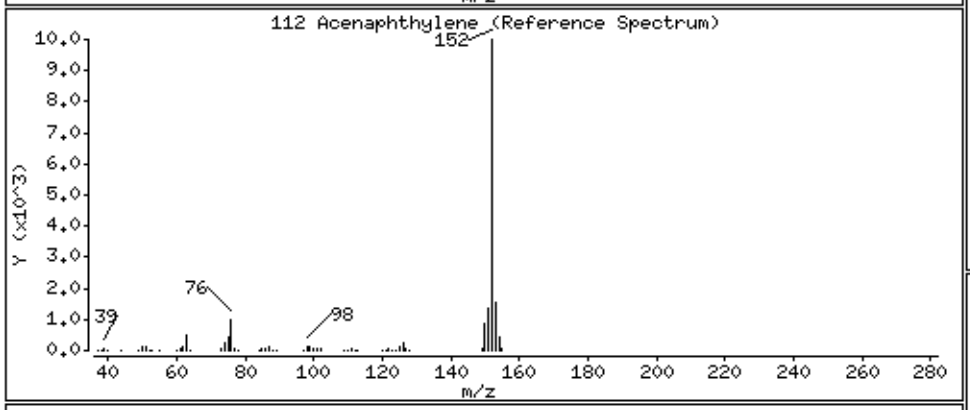
Column diameter: 0.53

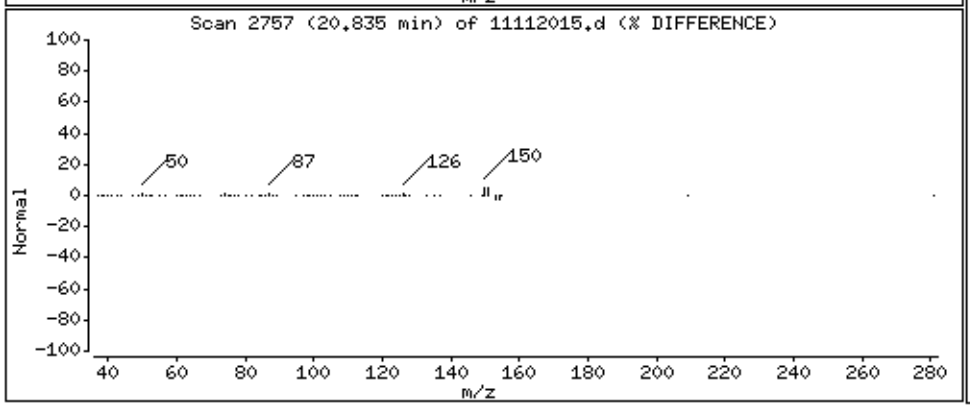
112 Acenaphthylene

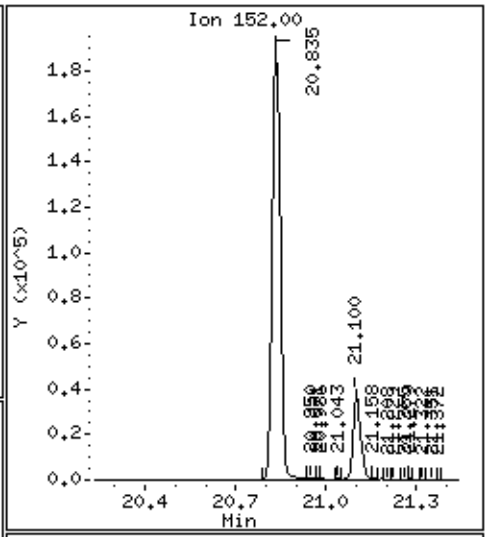
Concentration: 66.548 NG

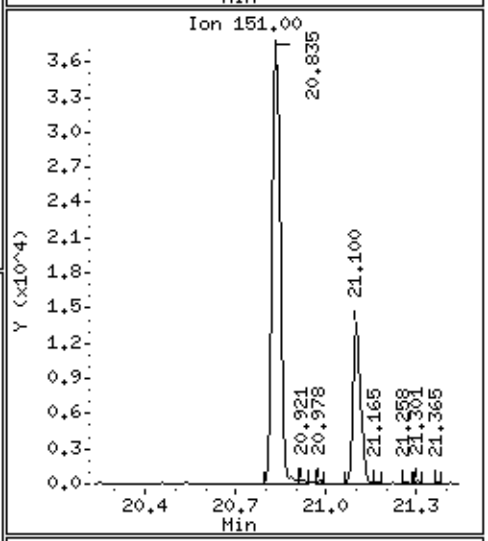


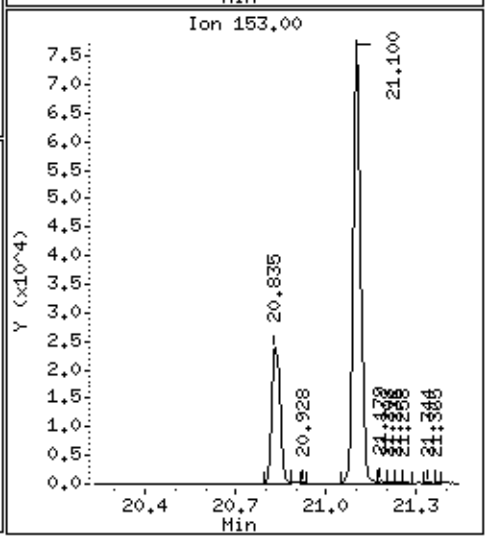












Data File: /chem/msd11.i/20nov15.b/11112015.d

Date : 21-NOV-2015 04:28

Client ID: LCS

Instrument: msd11.i

Sample Info: ;VI VOC+PAH ICV;LCS

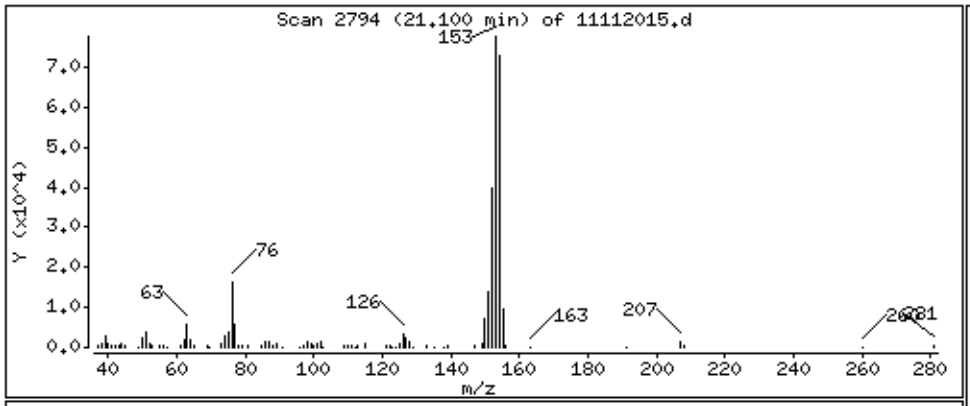
Operator: LA

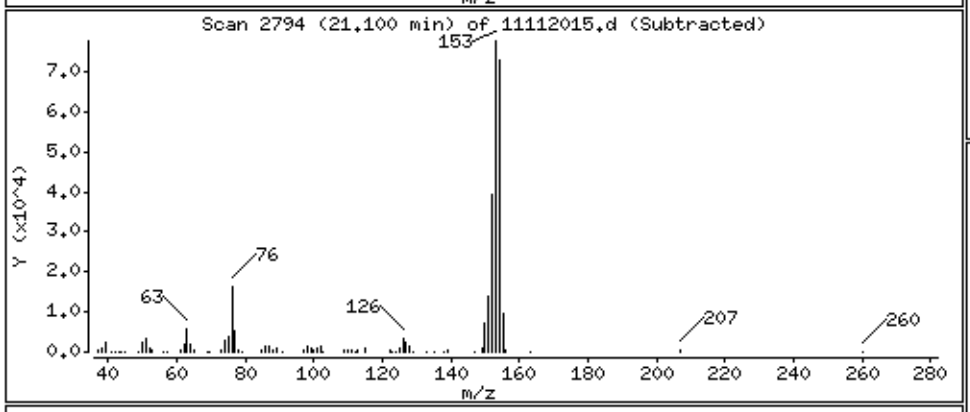
Column phase: RTx-624

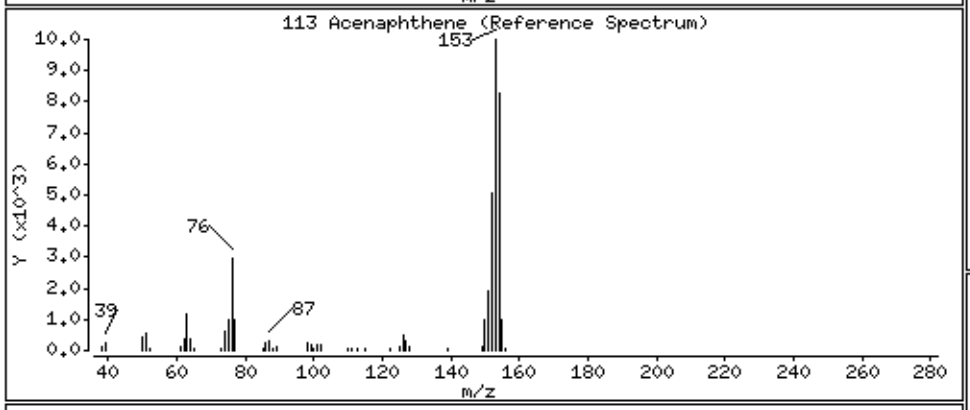
Column diameter: 0.53

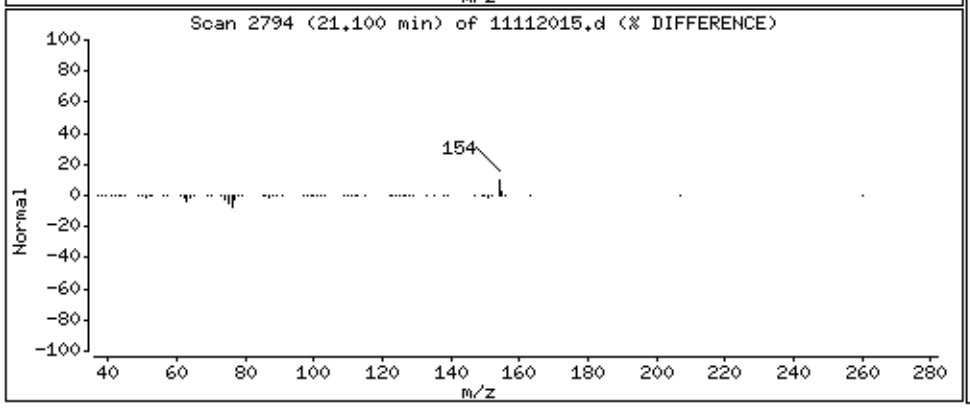
113 Acenaphthene

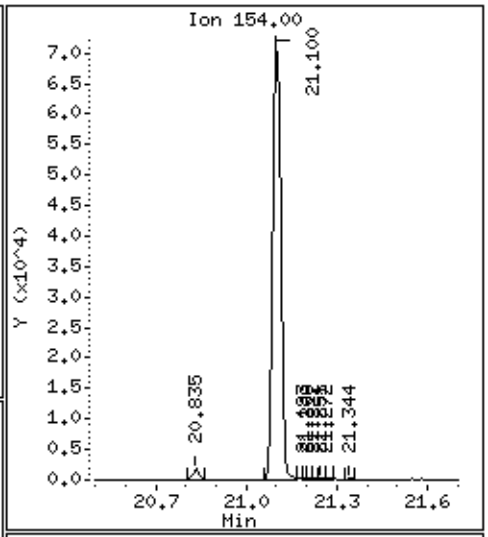
Concentration: 52.222 NG

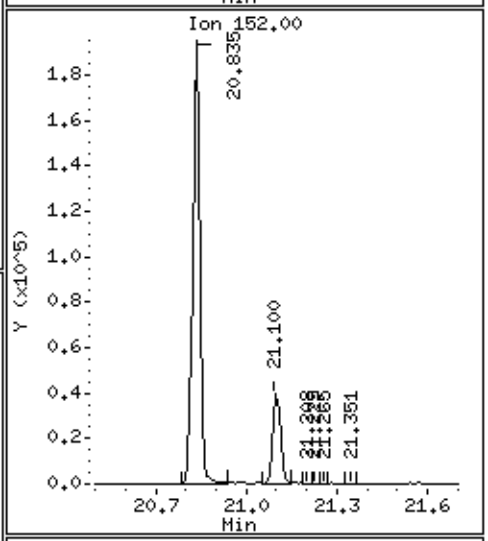


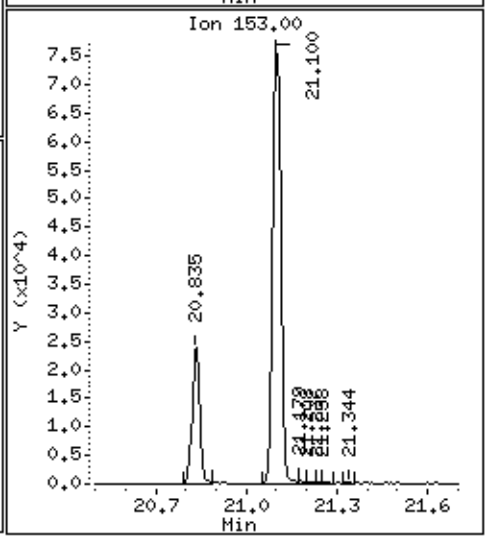












Data File: /chem/msd11.i/20nov15.b/11112015.d

Date : 21-NOV-2015 04:28

Client ID: LCS

Instrument: msd11.i

Sample Info: ;VI VOC+PAH ICV;LCS

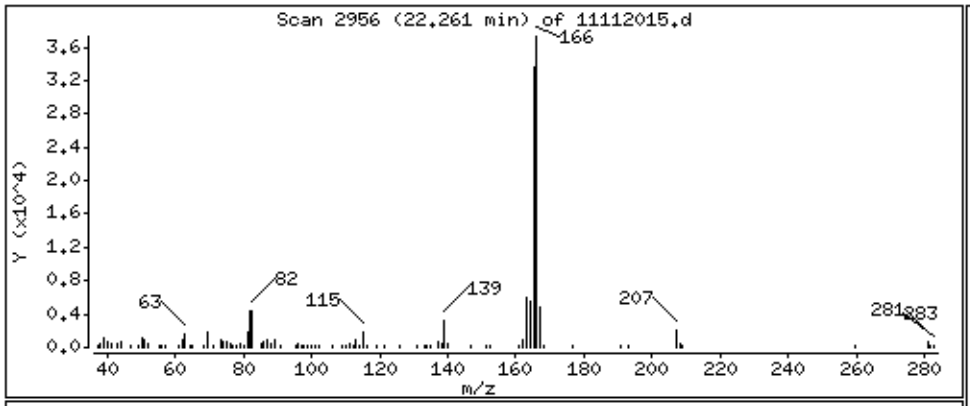
Operator: LA

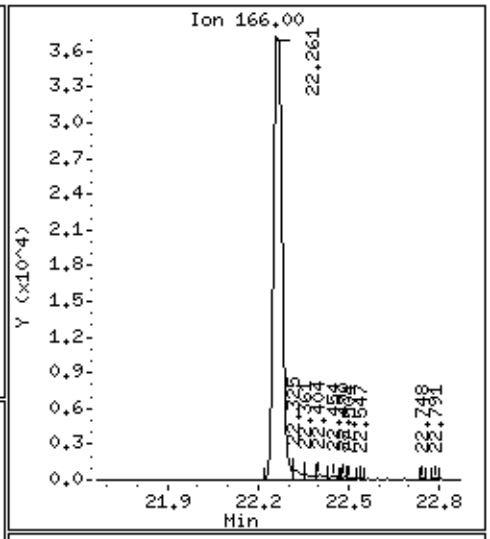
Column phase: RTx-624

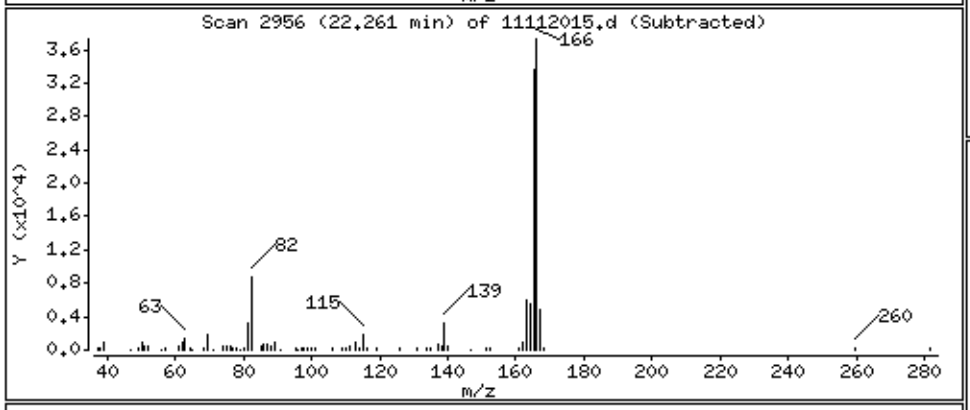
Column diameter: 0.53

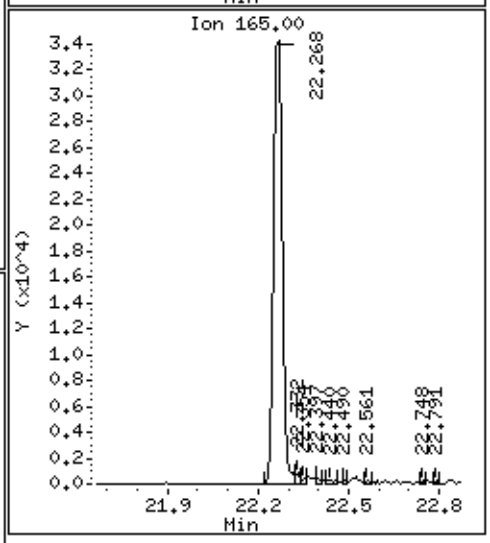
114 Fluorene

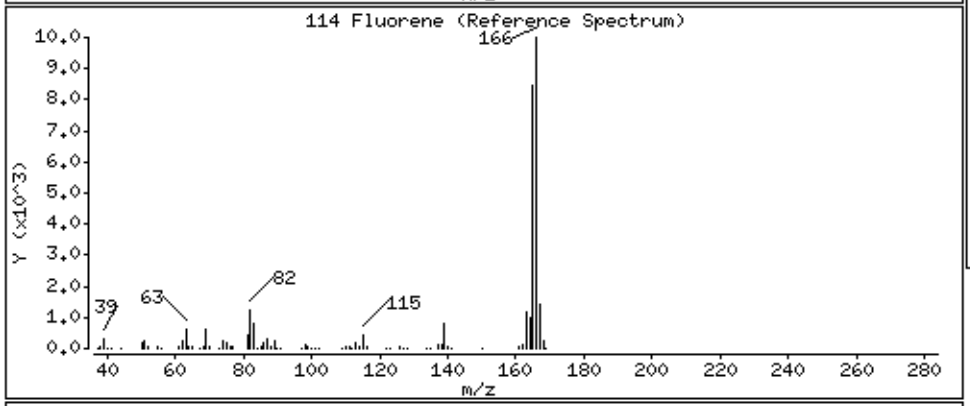
Concentration: 29.370 NG

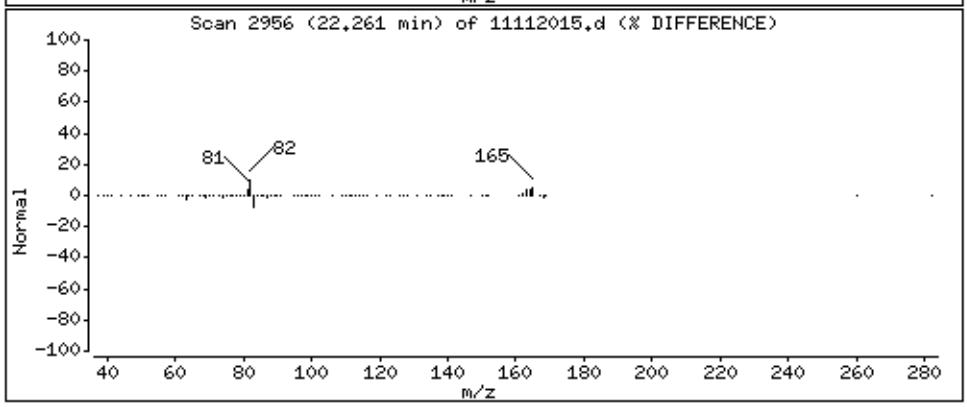












Data File: /chem/msd11.i/20nov15.b/11112015.d

Date : 21-NOV-2015 04:28

Client ID: LCS

Instrument: msd11.i

Sample Info: ;VI VOC+PAH ICV;LCS

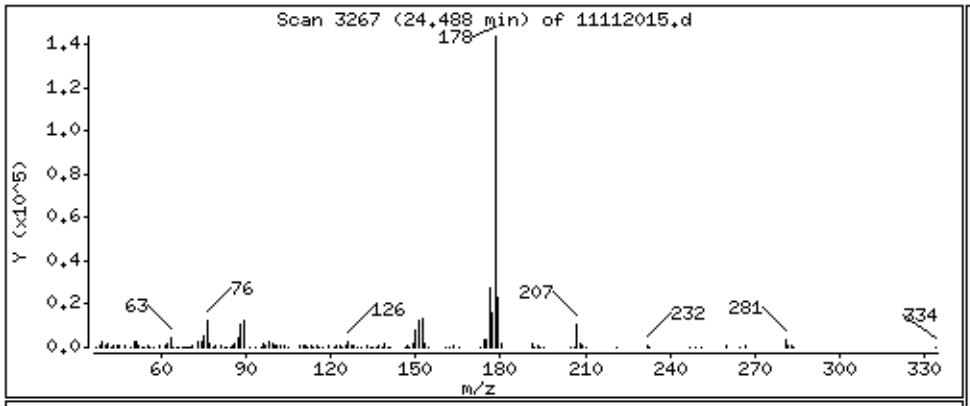
Operator: LA

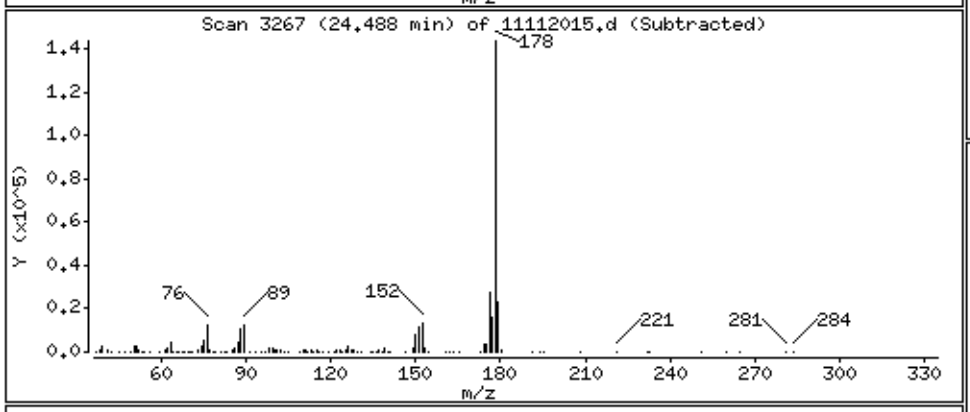
Column phase: RTx-624

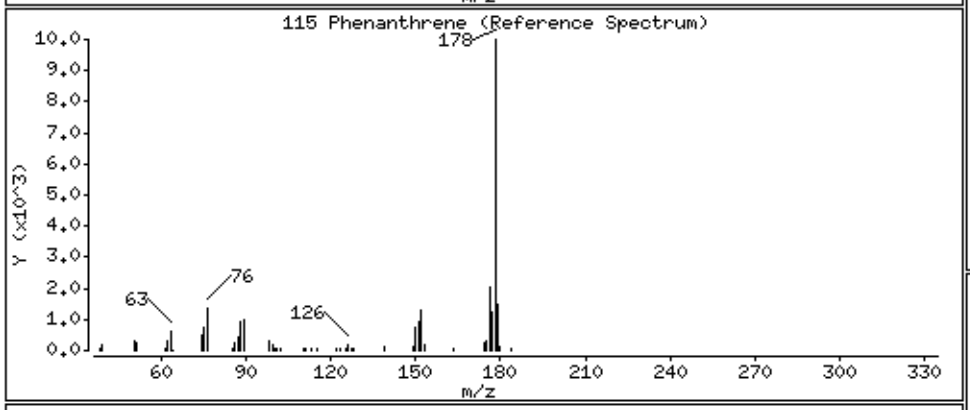
Column diameter: 0.53

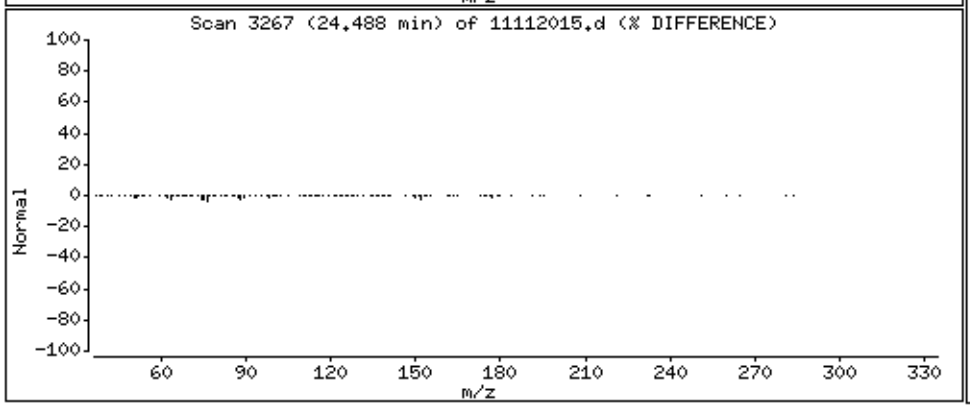
115 Phenanthrene

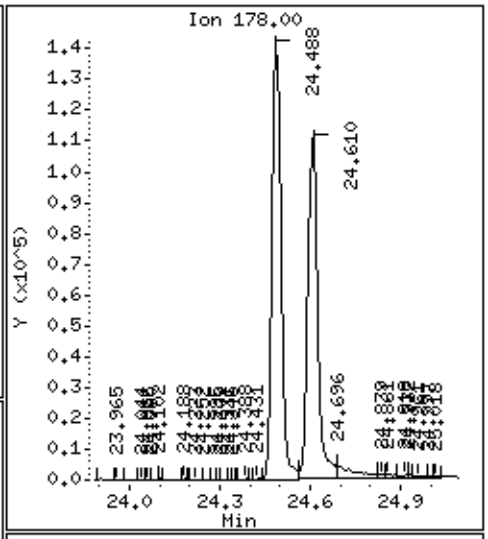
Concentration: 47.308 NG

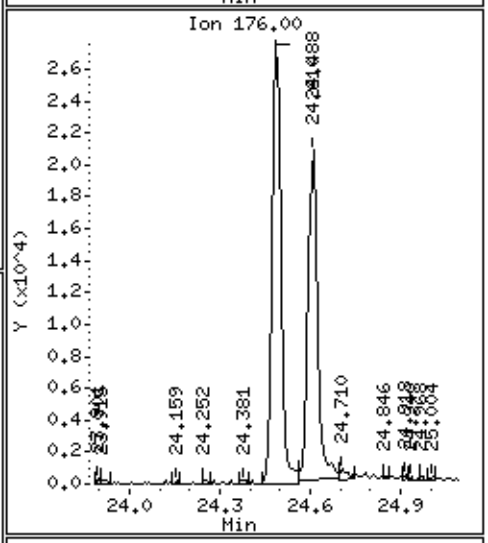


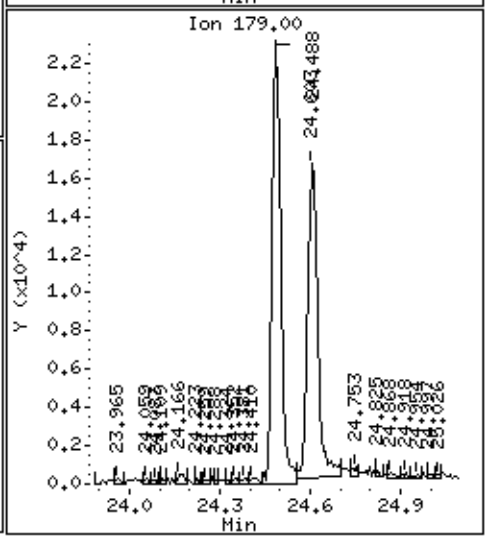












Data File: /chem/msd11.i/20nov15.b/11112015.d

Date : 21-NOV-2015 04:28

Client ID: LCS

Instrument: msd11.i

Sample Info: ;VI VOC+PAH ICV;LCS

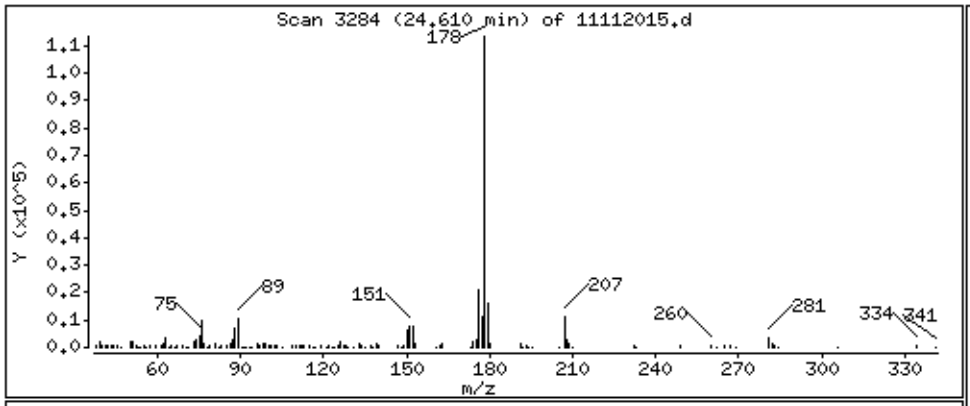
Operator: LA

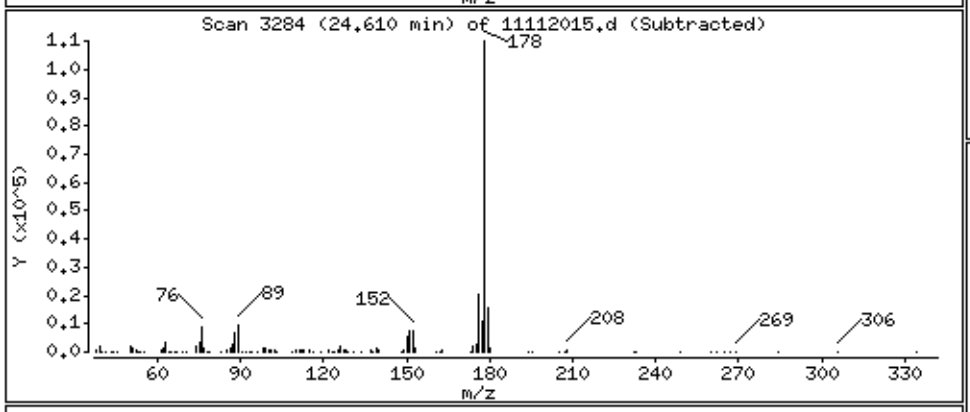
Column phase: RTx-624

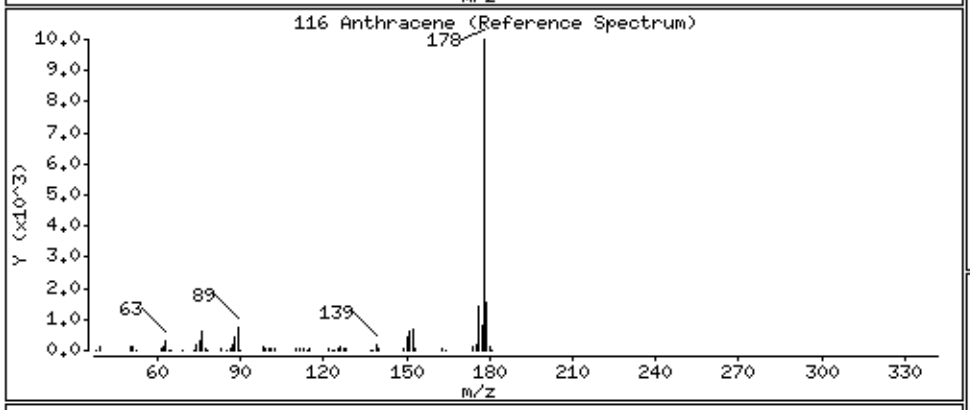
Column diameter: 0.53

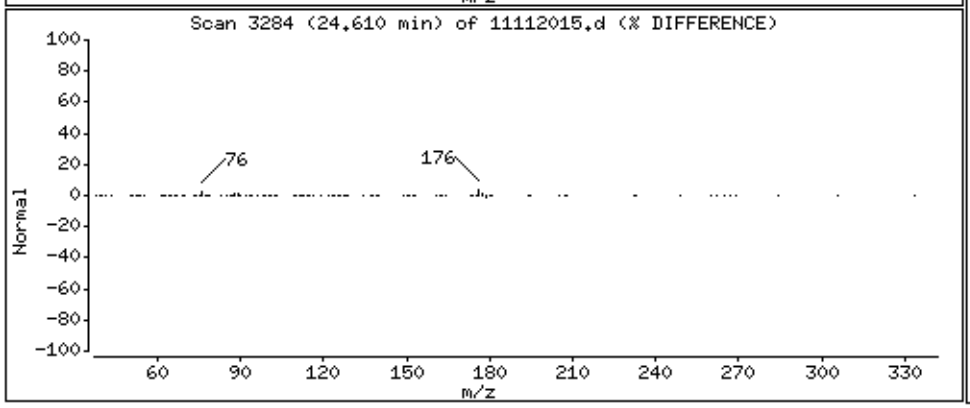
116 Anthracene

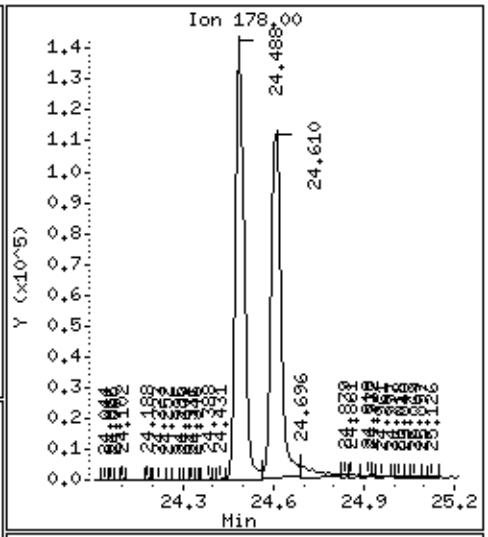
Concentration: 39.717 NG

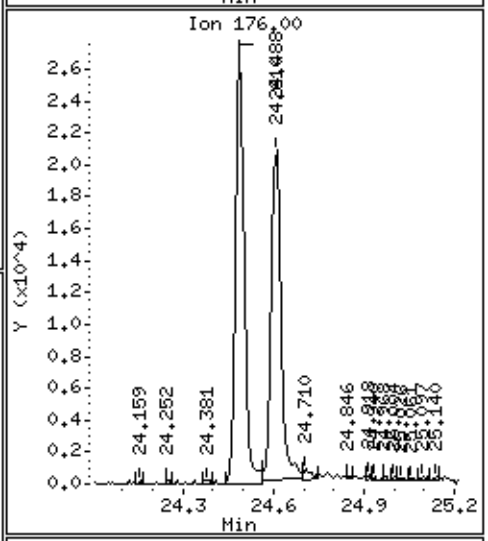


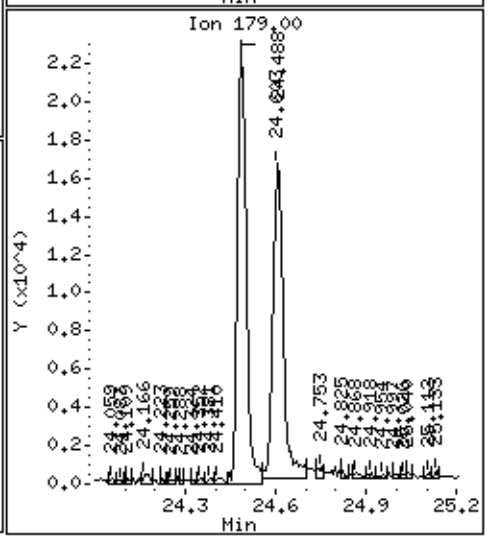












Data File: /chem/msd11.i/20nov15.b/11112015.d

Date : 21-NOV-2015 04:28

Client ID: LCS

Instrument: msd11.i

Sample Info: ;VI VOC+PAH ICV;LCS

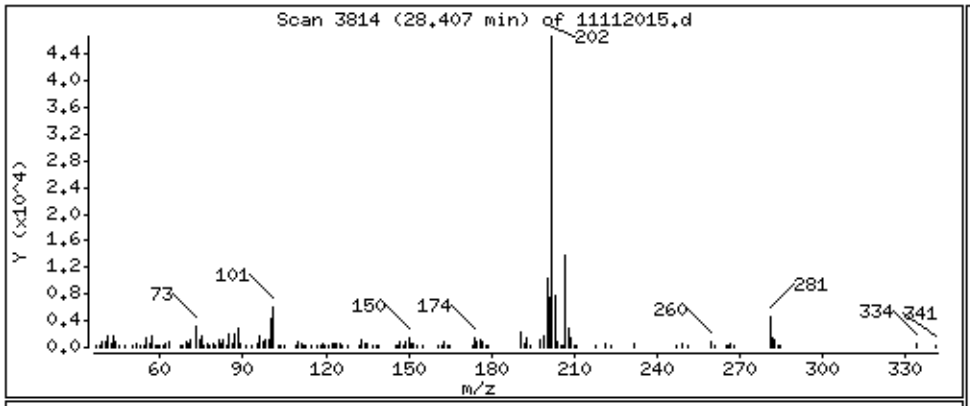
Operator: LA

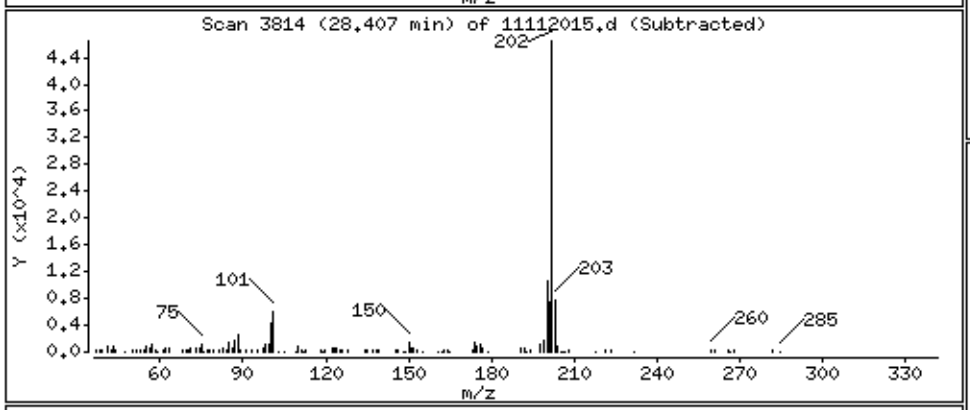
Column phase: RTx-624

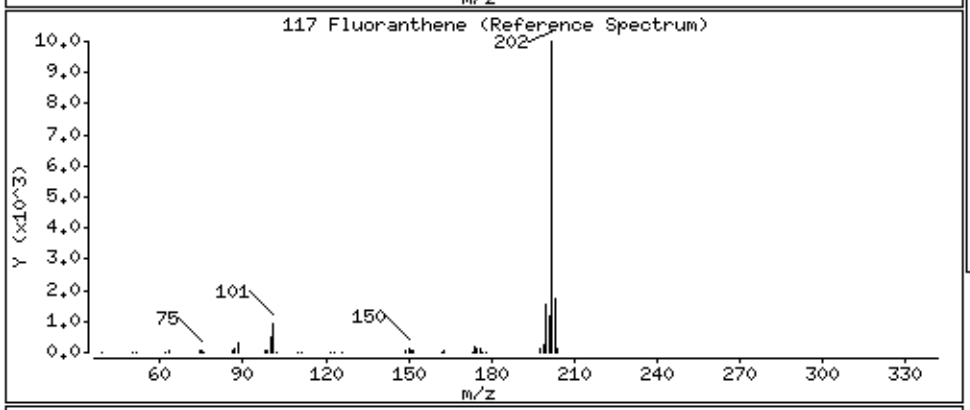
Column diameter: 0.53

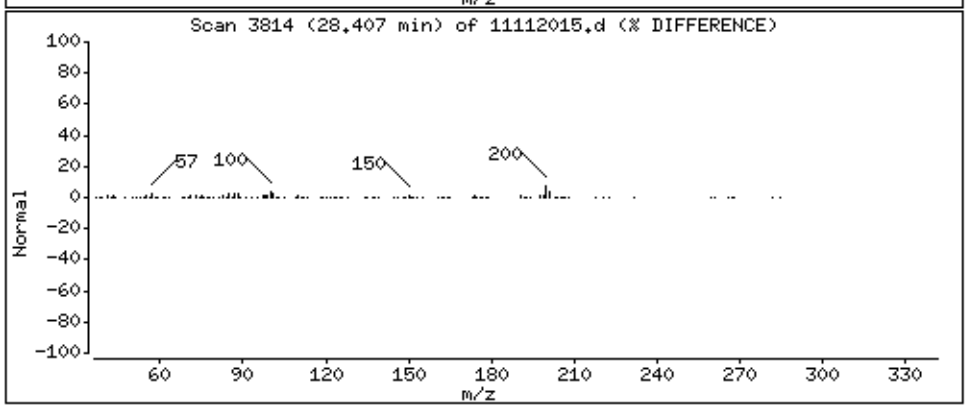
117 Fluoranthene

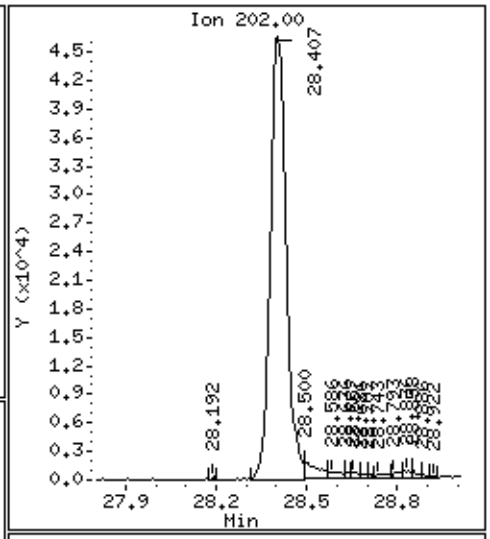
Concentration: 30.098 NG

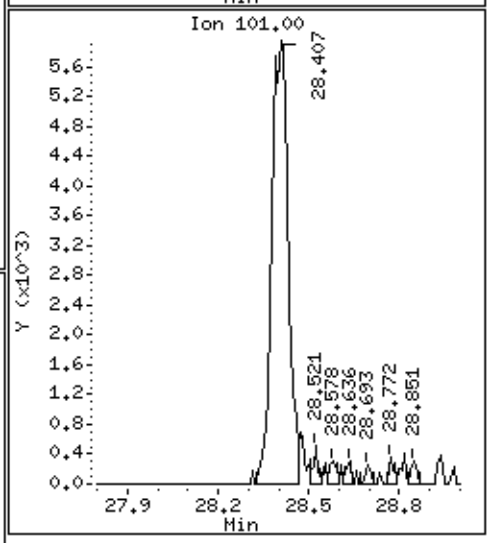












Data File: /chem/msd11.i/20nov15.b/11112015.d

Date : 21-NOV-2015 04:28

Client ID: LCS

Instrument: msd11.i

Sample Info: ;VI VOC+PAH ICV;LCS

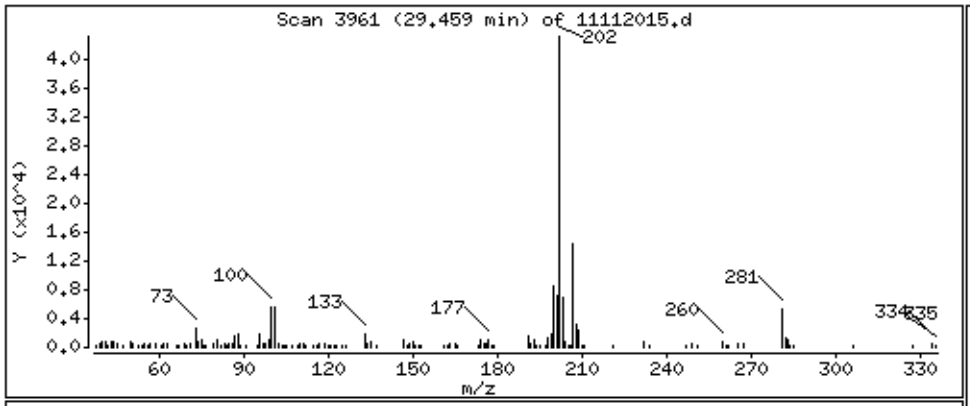
Operator: LA

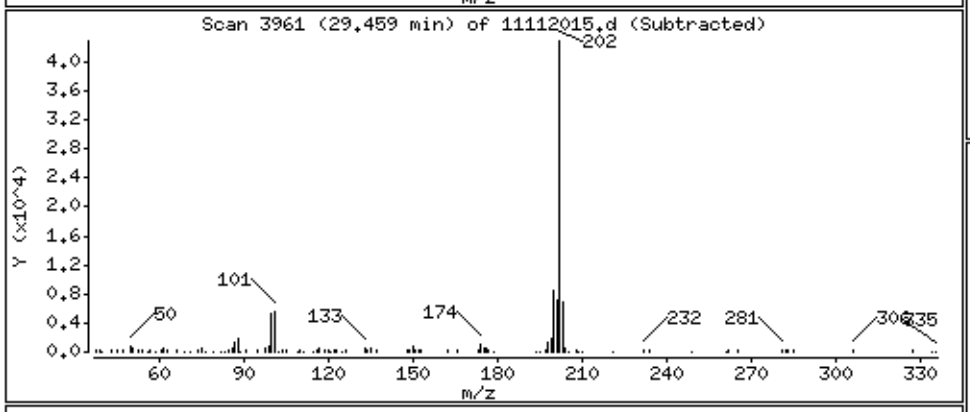
Column phase: RTx-624

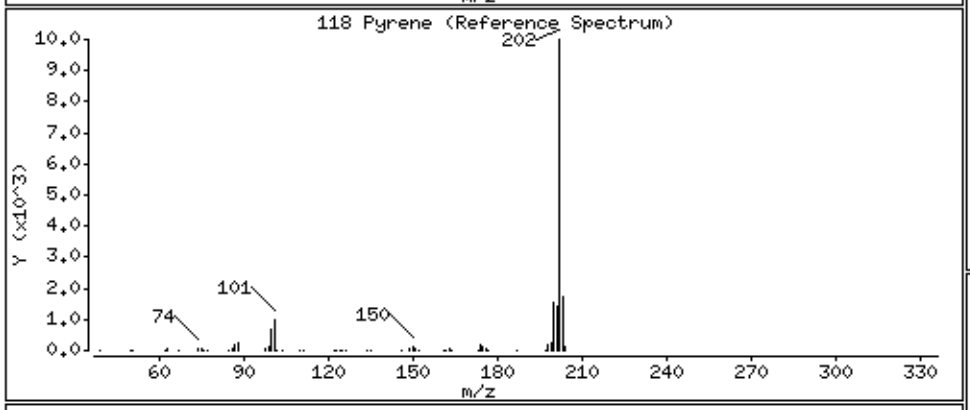
Column diameter: 0.53

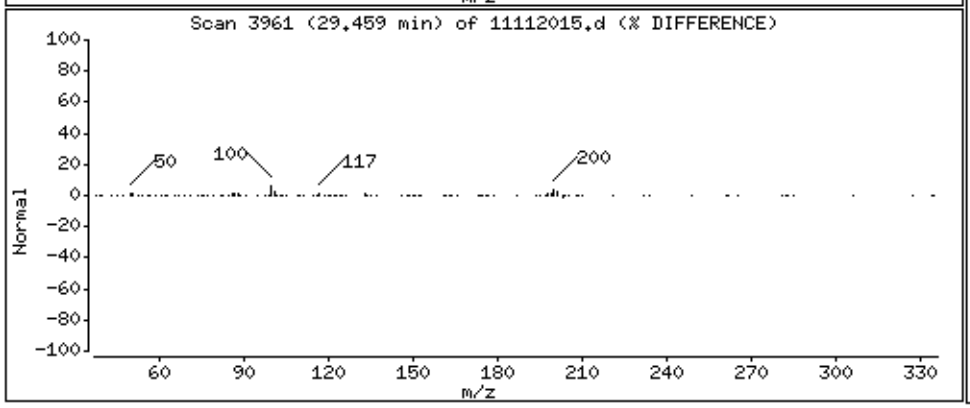
118 Pyrene

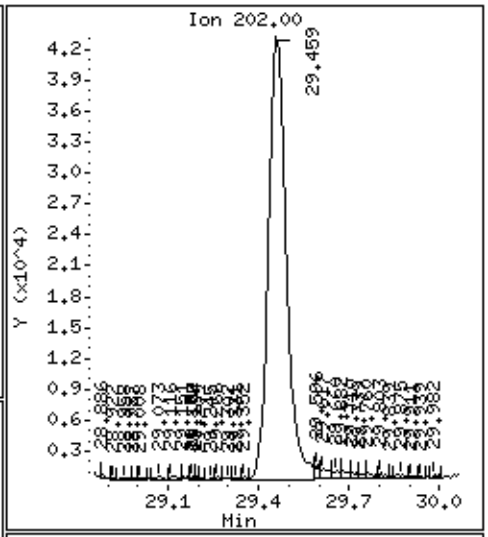
Concentration: 28.372 NG

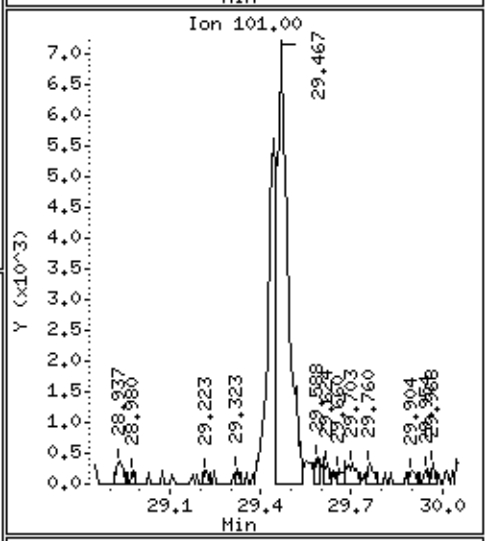


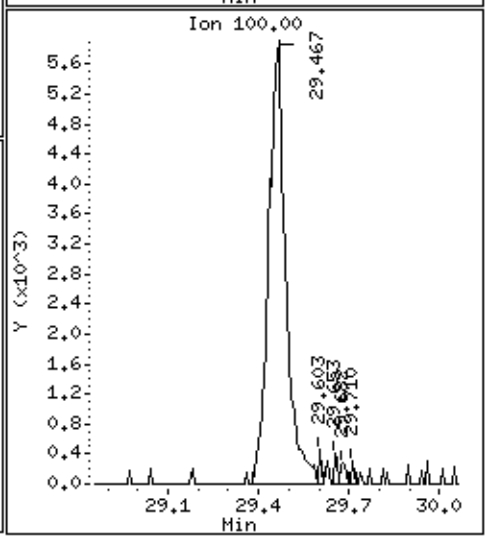












Eurofins Air Toxics Inc.

EPA Method TO-17 GC/MS

Data file : /chem/msd11.i/20nov15.b/11112003.d
Lab Smp Id: VI VOC+naphs ICAL,
Inj Date : 20-NOV-2015 19:11
Operator : LA Inst ID: msd11.i
Smp Info : ;VI VOC+naphs ICAL, no surr, L1
Misc Info : 2516-201 (12/10/15);2595-248-1.0 (1/29/16)
Comment :
Method : /chem/msd11.i/20nov15.b/115z1120vi.m
Meth Date : 23-Nov-2015 10:01 lantonic Quant Type: ISTD
Cal Date : 20-NOV-2015 19:11 Cal File: 11112003.d
Als bottle: 11 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: VOC+naphsnoSS.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO
* 40 Bromochloromethane					CAS #: 74-97-5		
6.803	6.803 (1.000)	130	59443	26.0000		80.00- 120.00	100.00
6.803	6.803 (1.000)	128	46269			49.46- 109.46	77.84
6.803	6.803 (1.000)	49	73097			96.52- 156.52	122.97
* 54 1,4-Difluorobenzene					CAS #: 540-36-3		
8.192	8.192 (1.000)	114	234311	23.0000		80.00- 120.00	100.00
8.192	8.192 (1.000)	88	34288			0.00- 44.32	14.63
* 79 Chlorobenzene-d5					CAS #: 3114-55-4		
11.588	11.588 (1.000)	117	214115	24.0000		80.00- 120.00	100.00
11.588	11.588 (1.000)	82	102707			20.08- 80.08	47.97
* 92 Bromofluorobenzene					CAS #: 460-00-4		
13.049	13.049 (1.000)	174	149982	36.0000		80.00- 120.00	100.00
13.049	13.049 (1.000)	95	153268			68.42- 128.42	102.19
13.049	13.049 (1.000)	176	144829			64.69- 124.69	96.56
3 Freon 114					CAS #: 76-14-2		
1.860	1.860 (0.273)	135	9058	6.99000	7.082	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO
3 Freon 114 (continued)							
1.867	1.867 (0.274)	137	2778			2.94- 62.94	30.67
6 Vinyl Chloride					CAS #: 75-01-4		
2.061	2.061 (0.303)	62	3798	2.56000	2.865	80.00- 120.00	100.00
2.061	2.061 (0.303)	64	1712			1.67- 61.67	45.08
7 1,3-Butadiene					CAS #: 106-99-0		
2.097	2.097 (0.308)	54	3245	2.21000	2.873	80.00- 120.00	100.00
2.104	2.104 (0.309)	39	2911			88.98- 148.98	89.71
9 Chloroethane					CAS #: 75-00-3		
2.569	2.569 (0.378)	64	2295	2.64000	3.597	80.00- 120.00	100.00
2.577	2.577 (0.379)	66	331			2.82- 62.82	14.42
2.584	2.584 (0.380)	49	181			1.12- 61.12	7.89
10 Isopentane					CAS #: 78-78-4		
2.663	2.663 (0.391)	57	3777	2.95000	3.826	80.00- 120.00	100.00
2.677	2.677 (0.393)	43	5946			125.87- 185.87	157.43
11 Trichlorofluoromethane/Fr11					CAS #: 75-69-4		
2.899	2.899 (0.426)	101	9255	5.62000	5.660	80.00- 120.00	100.00
2.899	2.899 (0.426)	103	3656			34.96- 94.96	39.50
15 Freon 113					CAS #: 76-13-1		
3.637	3.637 (0.535)	151	7214	7.66000	7.730	80.00- 120.00	100.00
3.630	3.630 (0.534)	153	4517			35.10- 95.10	62.61
3.622	3.622 (0.532)	101	8273			84.04- 144.04	114.68
14 1,1-Dichloroethene					CAS #: 75-35-4		
3.594	3.594 (0.528)	98	2845	3.97000	4.397	80.00- 120.00	100.00
3.601	3.601 (0.529)	96	4094			126.05- 186.05	143.90
3.594	3.594 (0.528)	61	6662			223.83- 283.83	234.17
18 Carbon Disulfide					CAS #: 75-15-0		
3.916	3.916 (0.576)	76	14692	3.11000	3.792	80.00- 120.00	100.00
19 2-Propanol					CAS #: 67-63-0		
3.887	3.887 (0.571)	45	7881	2.46000	3.052	80.00- 120.00	100.00
3.880	3.880 (0.570)	43	666			0.00- 50.22	8.45
3.651	3.651 (0.537)	59	393			0.00- 33.71	4.99
22 Methylene Chloride					CAS #: 75-09-2		
4.403	4.403 (0.647)	49	7087	3.47000	4.703	80.00- 120.00	100.00
4.403	4.403 (0.647)	84	4741			41.05- 101.05	66.90
4.389	4.389 (0.645)	51	2399			0.46- 60.46	33.85

RT	EXP RT	(REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO
26 MTBE						CAS #: 1634-04-4		
4.883	4.883	(0.718)	73	7797	3.61000	3.280	80.00- 120.00	100.00
4.876	4.876	(0.717)	57	2048			0.00- 53.50	26.27
4.897	4.897	(0.720)	41	2922			0.00- 54.24	37.48
28 Hexane						CAS #: 110-54-3		
5.385	5.385	(0.792)	57	6101	3.52000	3.860	80.00- 120.00	100.00
5.392	5.392	(0.793)	43	4308			37.71- 97.71	70.61
5.385	5.385	(0.792)	86	1031			0.00- 45.83	16.90
29 1,1-Dichloroethane						CAS #: 75-34-3		
5.607	5.607	(0.824)	63	6590	4.05000	4.146	80.00- 120.00	100.00
5.614	5.614	(0.825)	65	2412			1.45- 61.45	36.60
37 cis-1,2-Dichloroethene						CAS #: 156-59-2		
6.466	6.466	(0.950)	98	2781	3.96000	4.178	80.00- 120.00	100.00
6.466	6.466	(0.950)	96	4545			126.86- 186.86	163.43
6.473	6.473	(0.952)	61	5661			171.58- 231.58	203.56
38 2-Butanone						CAS #: 78-93-3		
6.459	6.459	(0.949)	72	1890	2.95000	3.233	80.00- 120.00	100.00
6.459	6.459	(0.949)	43	10074			419.83- 479.83	533.02
6.459	6.459	(0.949)	57	522			2.35- 62.35	27.62
44 Chloroform						CAS #: 67-66-3		
6.960	6.960	(1.023)	83	8135	4.88000	5.075	80.00- 120.00	100.00
6.960	6.960	(1.023)	85	5414			35.12- 95.12	66.55
46 Cyclohexane						CAS #: 110-82-7		
7.254	7.254	(0.885)	84	5286	3.44000	3.539	80.00- 120.00	100.00
7.254	7.254	(0.885)	56	6732			91.54- 151.54	127.36
7.261	7.261	(0.886)	41	5311			46.84- 106.84	100.47
45 1,1,1-Trichloroethane						CAS #: 71-55-6		
7.161	7.161	(0.874)	97	6444	5.46000	4.746	80.00- 120.00	100.00
7.161	7.161	(0.874)	99	3863			35.10- 95.10	59.95
47 Carbon Tetrachloride						CAS #: 56-23-5		
7.362	7.362	(0.899)	119	6665	6.29000	5.493	80.00- 120.00	100.00
7.369	7.369	(0.899)	117	6427			73.73- 133.73	96.43
51 2,2,4-Trimethylpentane						CAS #: 540-84-1		
7.813	7.813	(0.954)	57	19871	4.67000	4.561	80.00- 120.00	100.00
7.806	7.806	(0.953)	56	7228			1.98- 61.98	36.37
7.813	7.813	(0.954)	41	7250			0.94- 60.94	36.49

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO
48 Benzene					CAS #: 71-43-2		
7.612	7.612 (0.929)	78	28952	3.19000	7.398	80.00- 120.00	100.00
7.612	7.612 (0.929)	77	7069			0.00- 53.25	24.42
50 1,2-Dichloroethane					CAS #: 107-06-2		
7.698	7.698 (0.940)	62	4829	4.05000	3.664	80.00- 120.00	100.00
7.698	7.698 (0.940)	64	2094			1.81- 61.81	43.36
53 Heptane					CAS #: 142-82-5		
8.056	8.056 (0.983)	71	4558	4.10000	4.377	80.00- 120.00	100.00
8.056	8.056 (0.983)	43	9259			156.82- 216.82	203.14
8.056	8.056 (0.983)	57	4584			66.52- 126.52	100.57
56 Trichloroethene					CAS #: 79-01-6		
8.457	8.457 (1.032)	95	7914	5.37000	6.480	80.00- 120.00	100.00
8.457	8.457 (1.032)	130	7415			82.18- 142.18	93.69
8.457	8.457 (1.032)	97	4880			35.46- 95.46	61.66
58 Methyl Cyclohexane					CAS #: 108-87-2		
8.730	8.730 (1.066)	83	8105	4.02000	4.220	80.00- 120.00	100.00
8.737	8.737 (1.066)	98	4133			16.90- 76.90	50.99
8.737	8.737 (1.066)	55	7280			52.37- 112.37	89.82
59 1,2-Dichloropropane					CAS #: 78-87-5		
8.758	8.758 (1.069)	63	5180	4.62000	4.767	80.00- 120.00	100.00
8.751	8.751 (1.068)	62	3595			38.03- 98.03	69.40
8.744	8.744 (1.067)	41	6500			105.71- 165.71	125.48
60 1,4-Dioxane					CAS #: 123-91-1		
8.844	8.844 (1.080)	88	4597	3.60000	5.065	80.00- 120.00	100.00
8.844	8.844 (1.080)	58	3619			37.98- 97.98	78.73
8.844	8.844 (1.080)	57	2206			0.00- 54.83	47.99
65 4-Methyl-2-pentanone					CAS #: 108-10-1		
9.754	9.754 (1.191)	58	3393	4.10000	3.602	80.00- 120.00	100.00
9.754	9.754 (1.191)	43	11309			254.63- 314.63	333.30
9.754	9.754 (1.191)	85	1541			8.74- 68.74	45.42
67 Toluene					CAS #: 108-88-3		
9.969	9.969 (0.860)	91	16137	3.77000	3.936	80.00- 120.00	100.00
9.969	9.969 (0.860)	92	9764			29.25- 89.25	60.51
70 1,1,2-Trichloroethane					CAS #: 79-00-5		
10.470	10.470 (1.278)	97	6182	5.46000	6.111	80.00- 120.00	100.00
10.477	10.477 (1.279)	99	3534			34.29- 94.29	57.17
10.477	10.477 (1.279)	83	4847			57.72- 117.72	78.41

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO
71 Tetrachloroethene					CAS #: 127-18-4		
10.571	10.571 (0.912)	166	8291	6.78000	6.951	80.00- 120.00	100.00
10.571	10.571 (0.912)	129	5755			41.79- 101.79	69.41
10.571	10.571 (0.912)	131	5379			38.31- 98.31	64.88
72 2-Hexanone					CAS #: 591-78-6		
10.728	10.728 (0.926)	58	4326	4.10000	3.855	80.00- 120.00	100.00
10.735	10.735 (0.926)	43	8994			181.80- 241.80	207.91
10.735	10.735 (0.926)	100	698			0.00- 47.51	16.13
74 1,2-Dibromoethane					CAS #: 106-93-4		
11.036	11.036 (0.952)	107	7663	7.68000	7.779	80.00- 120.00	100.00
11.036	11.036 (0.952)	109	7180			64.64- 124.64	93.70
81 Chlorobenzene					CAS #: 108-90-7		
11.624	11.624 (1.003)	112	13370	4.60000	4.791	80.00- 120.00	100.00
11.624	11.624 (1.003)	114	4446			1.81- 61.81	33.25
11.624	11.624 (1.003)	77	8425			21.76- 81.76	63.01
82 Ethyl Benzene					CAS #: 100-41-4		
11.760	11.760 (1.015)	106	6151	4.34000	4.271	80.00- 120.00	100.00
11.752	11.752 (1.014)	91	18506			263.98- 323.98	300.86
84 m,p-Xylene					CAS #: 108-38-3		
11.917	11.917 (1.028)	106	8056	4.34000	4.447	80.00- 120.00	100.00
11.917	11.917 (1.028)	91	16360			152.73- 212.73	203.08
88 o-Xylene					CAS #: 95-47-6		
12.376	12.376 (0.948)	106	7274	4.34000	4.276	80.00- 120.00	100.00
12.376	12.376 (0.948)	91	14270			163.65- 223.65	196.18
89 Styrene					CAS #: 100-42-5		
12.404	12.404 (0.951)	104	11037	4.26000	4.061	80.00- 120.00	100.00
12.404	12.404 (0.951)	78	5340			15.61- 75.61	48.38
91 Cumene					CAS #: 98-82-8		
12.834	12.834 (0.984)	105	20758	4.92000	4.820	80.00- 120.00	100.00
12.834	12.834 (0.984)	120	6077			0.00- 59.10	29.28
12.834	12.834 (0.984)	51	2809			0.00- 40.54	13.53
94 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
13.214	13.214 (1.013)	83	9169	6.87000	6.304	80.00- 120.00	100.00
13.207	13.207 (1.012)	85	5777			35.82- 95.82	63.01
96 Propylbenzene					CAS #: 103-65-1		
13.350	13.350 (1.023)	91	23801	4.92000	4.784	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO
96 Propylbenzene (continued)							
13.343	13.343 (1.022)	120	6183			0.00- 54.66	25.98
13.357	13.357 (1.024)	105	1226			0.00- 33.61	5.15
97 4-Ethyltoluene					CAS #: 622-96-8		
13.507	13.507 (1.035)	120	6397	4.92000	4.763	80.00- 120.00	100.00
13.507	13.507 (1.035)	105	20027			275.29- 335.29	313.07
98 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
13.586	13.586 (1.041)	120	8886	4.92000	4.845	80.00- 120.00	100.00
13.586	13.586 (1.041)	105	16456			157.79- 217.79	185.19
100 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
14.045	14.045 (1.076)	120	8313	4.92000	4.813	80.00- 120.00	100.00
14.045	14.045 (1.076)	105	19734			169.74- 229.74	237.39
101 1,3-Dichlorobenzene					CAS #: 541-73-1		
14.381	14.381 (1.102)	146	12392	6.01000	5.702	80.00- 120.00	100.00
14.381	14.381 (1.102)	148	7721			34.32- 94.32	62.31
14.381	14.381 (1.102)	111	3982			5.94- 65.94	32.13
102 1,4-Dichlorobenzene					CAS #: 106-46-7		
14.517	14.517 (1.113)	146	12257	6.01000	5.743	80.00- 120.00	100.00
14.517	14.517 (1.113)	148	7706			35.48- 95.48	62.87
14.517	14.517 (1.113)	111	4166			5.70- 65.70	33.99
105 1,2-Dichlorobenzene					CAS #: 95-50-1		
14.940	14.940 (1.145)	146	11730	6.01000	5.625	80.00- 120.00	100.00
14.947	14.947 (1.145)	148	7200			34.02- 94.02	61.38
14.940	14.940 (1.145)	111	4386			7.12- 67.12	37.39
106 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
16.974	16.974 (1.301)	180	7829	7.42000	5.427	80.00- 120.00	100.00
16.974	16.974 (1.301)	182	7645			65.50- 125.50	97.65
107 Hexachlorobutadiene					CAS #: 87-68-3		
17.168	17.168 (1.316)	225	7043	10.7000	8.490	80.00- 120.00	100.00
17.175	17.175 (1.316)	223	4615			32.38- 92.38	65.53
109 Naphthalene					CAS #: 91-20-3		
17.304	17.304 (1.326)	128	8126	1.00000	1.377	80.00- 120.00	100.00
17.297	17.297 (1.326)	127	1172			0.00- 43.21	14.42
110 2-Methylnaphthalene					CAS #: 91-57-6		
18.751	18.751 (1.437)	142	5057	1.00000	1.342	80.00- 120.00	100.00
18.744	18.744 (1.436)	141	4376			56.85- 116.85	86.53

RT	EXP RT	(REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO
110 2-Methylnaphthalene (continued)								
18.751	18.751	(1.437)	115	1856			0.00- 59.61	36.70
111 1-Methylnaphthalene						CAS #: 90-12-0		
18.973	18.973	(1.454)	142	5459	1.00000	1.481	80.00- 120.00	100.00
18.966	18.966	(1.453)	141	4441			58.28- 118.28	81.35
18.966	18.966	(1.453)	115	1656			1.09- 61.09	30.34

Report Date: 23-Nov-2015 10:01

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd11.i
Lab File ID: 11112003.d
Lab Smp Id: VI VOC+naphs ICAL,
Analysis Type: VOA
Quant Type: ISTD
Operator: LA
Method File: /chem/msd11.i/20nov15.b/115z1120vi.m
Misc Info: 2516-201 (12/10/15);2595-248-1.0 (1/29/16)

Calibration Date: 20-NOV-2015
Calibration Time: 22:19

Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
40 Bromochloromethan	61766	37060	86472	59443	-3.76
54 1,4-Difluorobenze	242319	145391	339247	234311	-3.30
79 Chlorobenzene-d5	224302	134581	314023	214115	-4.54
92 Bromofluorobenzen	161670	97002	226338	149982	-7.23

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
40 Bromochloromethan	6.80	6.47	7.13	6.80	0.10
54 1,4-Difluorobenze	8.19	7.86	8.52	8.19	0.00
79 Chlorobenzene-d5	11.60	11.27	11.93	11.59	-0.06
92 Bromofluorobenzen	13.05	12.72	13.38	13.05	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msd11.i/20nov15.b/11112003.d

Date : 20-NOV-2015 19:11

Client ID:

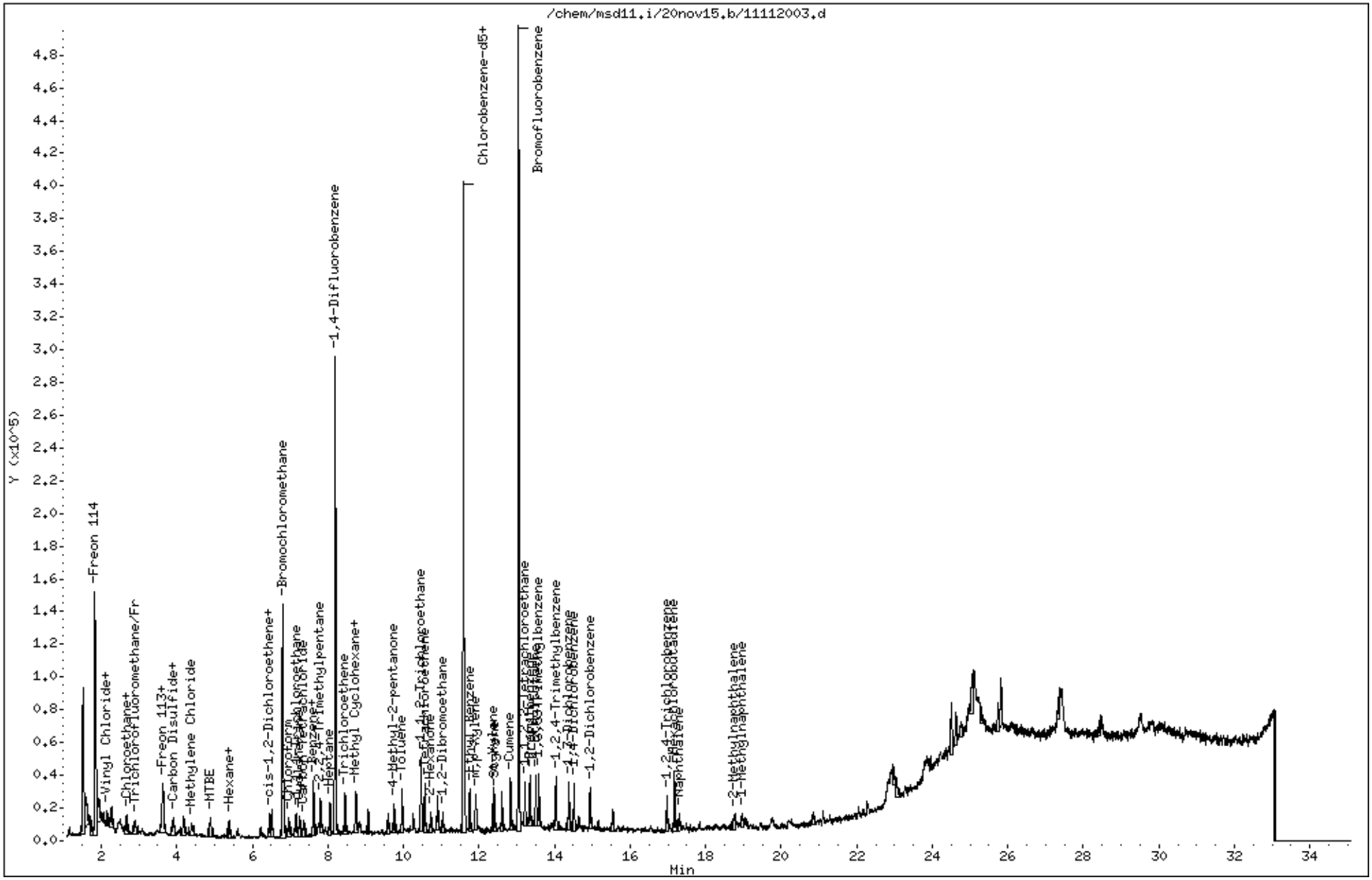
Sample Info: ;VI VOC+naphs ICAL, no surr, L1

Column phase: RTx-624

Instrument: msd11.i

Operator: LA

Column diameter: 0.53



Eurofins Air Toxics Inc.

EPA Method TO-17 GC/MS

Data file : /chem/msd11.i/20nov15.b/11112004.d
Lab Smp Id: VI VOC+PAH ICAL, L2
Inj Date : 20-NOV-2015 19:59
Operator : LA Inst ID: msd11.i
Smp Info : ;VI VOC+PAH ICAL, L2
Misc Info : 2516-201 (12/10/15);2595-248-5.0 (1/29/16)
Comment :
Method : /chem/msd11.i/20nov15.b/115z1120vi.m
Meth Date : 23-Nov-2015 10:01 lantonic Quant Type: ISTD
Cal Date : 20-NOV-2015 19:59 Cal File: 11112004.d
Als bottle: 12 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: VOC+PAH_ICAL.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO
* 40 Bromochloromethane					CAS #: 74-97-5		
6.803	6.803 (1.000)	130	55457	26.0000		80.00- 120.00	100.00
6.803	6.803 (1.000)	128	42565			49.46- 109.46	76.75
6.803	6.803 (1.000)	49	69950			96.52- 156.52	126.13
* 54 1,4-Difluorobenzene					CAS #: 540-36-3		
8.193	8.193 (1.000)	114	223440	23.0000		80.00- 120.00	100.00
8.193	8.193 (1.000)	88	30909			0.00- 44.32	13.83
* 79 Chlorobenzene-d5					CAS #: 3114-55-4		
11.588	11.588 (1.000)	117	202795	24.0000		80.00- 120.00	100.00
11.588	11.588 (1.000)	82	100827			20.08- 80.08	49.72
* 92 Bromofluorobenzene					CAS #: 460-00-4		
13.049	13.049 (1.000)	174	139602	36.0000		80.00- 120.00	100.00
13.049	13.049 (1.000)	95	138882			68.42- 128.42	99.48
13.049	13.049 (1.000)	176	133383			64.69- 124.69	95.55
$ 49 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
7.598	7.598 (0.927)	65	2184	2.00000	2.348	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO
$ 49 1,2-Dichloroethane-d4 (continued)							
7.598	7.598 (0.927)	67	1022			25.09- 85.09	46.79
$ 66 Toluene-d8					CAS #: 2037-26-5		
9.890	9.890 (0.853)	98	6824	2.00000	2.132	80.00- 120.00	100.00
9.890	9.890 (0.853)	70	763			0.00- 41.37	11.18
9.890	9.890 (0.853)	100	4018			33.98- 93.98	58.88
$ 108 Naphthalene-d8					CAS #: 1146-65-2		
17.254	17.254 (1.322)	136	11060	2.00000	2.210	80.00- 120.00	100.00
17.254	17.254 (1.322)	108	789			0.00- 38.36	7.13
3 Freon 114					CAS #: 76-14-2		
1.853	1.853 (0.272)	135	16387	14.0000	13.733	80.00- 120.00	100.00(a)
1.868	1.868 (0.275)	137	5573			2.94- 62.94	34.01
6 Vinyl Chloride					CAS #: 75-01-4		
2.047	2.047 (0.301)	62	4974	5.11000	4.022	80.00- 120.00	100.00
2.068	2.068 (0.304)	64	1338			1.67- 61.67	26.90
7 1,3-Butadiene					CAS #: 106-99-0		
2.104	2.104 (0.309)	54	5063	4.42000	4.805	80.00- 120.00	100.00
2.097	2.097 (0.308)	39	6253			88.98- 148.98	123.50
9 Chloroethane					CAS #: 75-00-3		
2.555	2.555 (0.376)	64	3482	5.28000	5.849	80.00- 120.00	100.00(a)
2.563	2.563 (0.377)	66	329			2.82- 62.82	9.45
2.548	2.548 (0.375)	49	276			1.12- 61.12	7.93
10 Isopentane					CAS #: 78-78-4		
2.670	2.670 (0.392)	57	7119	5.90000	7.730	80.00- 120.00	100.00
2.670	2.670 (0.392)	43	11454			125.87- 185.87	160.89
11 Trichlorofluoromethane/Fr11					CAS #: 75-69-4		
2.892	2.892 (0.425)	101	16841	11.2000	11.040	80.00- 120.00	100.00
2.892	2.892 (0.425)	103	10790			34.96- 94.96	64.07
15 Freon 113					CAS #: 76-13-1		
3.630	3.630 (0.534)	151	13203	15.3000	15.165	80.00- 120.00	100.00
3.637	3.637 (0.535)	153	7680			35.10- 95.10	58.17
3.637	3.637 (0.535)	101	14255			84.04- 144.04	107.97
14 1,1-Dichloroethene					CAS #: 75-35-4		
3.601	3.601 (0.529)	98	5379	7.93000	8.910	80.00- 120.00	100.00
3.601	3.601 (0.529)	96	9335			126.05- 186.05	173.55
3.594	3.594 (0.528)	61	6689			223.83- 283.83	124.35

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                                          AMOUNTS
                                       CAL-AMT   ON-COL
   RT   EXP RT (REL RT)  MASS  RESPONSE (   ng)  (   ng)   TARGET RANGE    RATIO
   ==   ====== ========  ====  ======== =======  =======   ============    =====

   18 Carbon Disulfide                                CAS #: 75-15-0
  3.916   3.916 (0.576)    76     23276 6.23000    6.439  80.00- 120.00   100.00
-------------------------------------------------------------------------------
   19 2-Propanol                                      CAS #: 67-63-0
  3.881   3.881 (0.570)    45     14144 4.92000    5.870  80.00- 120.00   100.00(a)
  3.881   3.881 (0.570)    43      2366                     0.00-  50.22    16.73
  3.881   3.881 (0.570)    59       242                     0.00-  33.71     1.71
-------------------------------------------------------------------------------
   22 Methylene Chloride                              CAS #: 75-09-2
  4.403   4.403 (0.647)    49     10340 6.95000    7.355  80.00- 120.00   100.00(a)
  4.411   4.411 (0.648)    84      4205                    41.05- 101.05    40.67
  4.389   4.389 (0.645)    51      3127                     0.46-  60.46    30.24
-------------------------------------------------------------------------------
   25 trans-1,2-Dichloroethene                        CAS #: 156-60-5
  4.898   4.898 (0.720)    98      4995 7.93000    8.779  80.00- 120.00   100.00
  4.898   4.898 (0.720)    61      9983                   190.70- 250.70   199.86
  4.891   4.891 (0.719)    96      7562                   126.37- 186.37   151.39
-------------------------------------------------------------------------------
   26 MTBE                                            CAS #: 1634-04-4
  4.891   4.891 (0.719)    73     12503 7.21000    5.638  80.00- 120.00   100.00(a)
  4.898   4.898 (0.720)    57      1988                     0.00-  53.50    15.90
  4.883   4.883 (0.718)    41      1903                     0.00-  54.24    15.22
-------------------------------------------------------------------------------
   28 Hexane                                          CAS #: 110-54-3
  5.385   5.385 (0.792)    57     10513 7.05000    7.130  80.00- 120.00   100.00(a)
  5.385   5.385 (0.792)    43      7766                    37.71-  97.71    73.87
  5.385   5.385 (0.792)    86      1528                     0.00-  45.83    14.53
-------------------------------------------------------------------------------
   29 1,1-Dichloroethane                              CAS #: 75-34-3
  5.607   5.607 (0.824)    63     10852 8.10000    7.319  80.00- 120.00   100.00
  5.607   5.607 (0.824)    65      3575                     1.45-  61.45    32.94
-------------------------------------------------------------------------------
   37 cis-1,2-Dichloroethene                          CAS #: 156-59-2
  6.474   6.474 (0.952)    98      4758 7.93000    7.662  80.00- 120.00   100.00
  6.466   6.466 (0.950)    96      8090                   126.86- 186.86   170.03
  6.474   6.474 (0.952)    61     11718                   171.58- 231.58   246.28
-------------------------------------------------------------------------------
   38 2-Butanone                                      CAS #: 78-93-3
  6.459   6.459 (0.949)    72      3107 5.90000    5.697  80.00- 120.00   100.00(a)
  6.459   6.459 (0.949)    43     14764                   419.83- 479.83   475.19
  6.466   6.466 (0.950)    57      1331                     2.35-  62.35    42.84
-------------------------------------------------------------------------------
   44 Chloroform                                      CAS #: 67-66-3
  6.968   6.968 (1.024)    83     14931 9.77000    9.985  80.00- 120.00   100.00
  6.968   6.968 (1.024)    85      9372                    35.12-  95.12    62.77
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RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO
46 Cyclohexane					CAS #: 110-82-7		
7.254	7.254 (0.885)	84	10581	6.88000	7.429	80.00- 120.00	100.00
7.254	7.254 (0.885)	56	12197			91.54- 151.54	115.27
7.254	7.254 (0.885)	41	9041			46.84- 106.84	85.45
45 1,1,1-Trichloroethane					CAS #: 71-55-6		
7.154	7.154 (0.873)	97	11063	10.9000	8.545	80.00- 120.00	100.00
7.154	7.154 (0.873)	99	7539			35.10- 95.10	68.15
47 Carbon Tetrachloride					CAS #: 56-23-5		
7.369	7.369 (0.899)	119	12273	12.6000	10.607	80.00- 120.00	100.00
7.369	7.369 (0.899)	117	12143			73.73- 133.73	98.94
51 2,2,4-Trimethylpentane					CAS #: 540-84-1		
7.813	7.813 (0.954)	57	38728	9.34000	9.322	80.00- 120.00	100.00(a)
7.813	7.813 (0.954)	56	12900			1.98- 61.98	33.31
7.813	7.813 (0.954)	41	13615			0.94- 60.94	35.16
48 Benzene					CAS #: 71-43-2		
7.612	7.612 (0.929)	78	26167	6.39000	7.011	80.00- 120.00	100.00
7.612	7.612 (0.929)	77	6611			0.00- 53.25	25.26
50 1,2-Dichloroethane					CAS #: 107-06-2		
7.698	7.698 (0.940)	62	10501	8.09000	8.355	80.00- 120.00	100.00
7.691	7.691 (0.939)	64	3503			1.81- 61.81	33.36
53 Heptane					CAS #: 142-82-5		
8.057	8.057 (0.983)	71	8306	8.20000	8.364	80.00- 120.00	100.00
8.057	8.057 (0.983)	43	16587			156.82- 216.82	199.70
8.057	8.057 (0.983)	57	8466			66.52- 126.52	101.93
56 Trichloroethene					CAS #: 79-01-6		
8.458	8.458 (1.032)	95	12117	10.8000	10.404	80.00- 120.00	100.00
8.458	8.458 (1.032)	130	12906			82.18- 142.18	106.51
8.458	8.458 (1.032)	97	8431			35.46- 95.46	69.58
58 Methyl Cyclohexane					CAS #: 108-87-2		
8.737	8.737 (1.066)	83	14808	8.03000	8.086	80.00- 120.00	100.00
8.737	8.737 (1.066)	98	7005			16.90- 76.90	47.31
8.737	8.737 (1.066)	55	12520			52.37- 112.37	84.55
59 1,2-Dichloropropane					CAS #: 78-87-5		
8.751	8.751 (1.068)	63	8040	9.24000	7.759	80.00- 120.00	100.00
8.759	8.759 (1.069)	62	5534			38.03- 98.03	68.83
8.744	8.744 (1.067)	41	11583			105.71- 165.71	144.07

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO
60 1,4-Dioxane					CAS #: 123-91-1		
8.845	8.845 (1.080)	88	5591	7.21000	6.459	80.00- 120.00	100.00(a)
8.845	8.845 (1.080)	58	5148			37.98- 97.98	92.08
8.837	8.837 (1.079)	57	1253			0.00- 54.83	22.41
65 4-Methyl-2-pentanone					CAS #: 108-10-1		
9.754	9.754 (1.191)	58	7173	8.19000	7.986	80.00- 120.00	100.00(a)
9.754	9.754 (1.191)	43	21438			254.63- 314.63	298.87
9.754	9.754 (1.191)	85	2872			8.74- 68.74	40.04
67 Toluene					CAS #: 108-88-3		
9.969	9.969 (0.860)	91	30011	7.54000	7.729	80.00- 120.00	100.00
9.969	9.969 (0.860)	92	16315			29.25- 89.25	54.36
70 1,1,2-Trichloroethane					CAS #: 79-00-5		
10.478	10.478 (1.279)	97	10222	10.9000	10.596	80.00- 120.00	100.00
10.478	10.478 (1.279)	99	6306			34.29- 94.29	61.69
10.478	10.478 (1.279)	83	8004			57.72- 117.72	78.30
71 Tetrachloroethene					CAS #: 127-18-4		
10.571	10.571 (0.912)	166	14497	13.6000	12.833	80.00- 120.00	100.00
10.564	10.564 (0.912)	129	11115			41.79- 101.79	76.67
10.571	10.571 (0.912)	131	10478			38.31- 98.31	72.28
72 2-Hexanone					CAS #: 591-78-6		
10.728	10.728 (0.926)	58	8148	8.19000	7.666	80.00- 120.00	100.00(a)
10.728	10.728 (0.926)	43	18805			181.80- 241.80	230.79
10.728	10.728 (0.926)	100	1776			0.00- 47.51	21.80
74 1,2-Dibromoethane					CAS #: 106-93-4		
11.036	11.036 (0.952)	107	12996	15.4000	13.930	80.00- 120.00	100.00
11.036	11.036 (0.952)	109	13072			64.64- 124.64	100.58
81 Chlorobenzene					CAS #: 108-90-7		
11.624	11.624 (1.003)	112	23153	9.21000	8.760	80.00- 120.00	100.00
11.624	11.624 (1.003)	114	7693			1.81- 61.81	33.23
11.624	11.624 (1.003)	77	12653			21.76- 81.76	54.65
82 Ethyl Benzene					CAS #: 100-41-4		
11.760	11.760 (1.015)	106	11055	8.68000	8.105	80.00- 120.00	100.00
11.753	11.753 (1.014)	91	34435			263.98- 323.98	311.49
84 m,p-Xylene					CAS #: 108-38-3		
11.917	11.917 (1.028)	106	15114	8.68000	8.808	80.00- 120.00	100.00
11.925	11.925 (1.029)	91	28257			152.73- 212.73	186.96

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                                          AMOUNTS
                                       CAL-AMT   ON-COL
   RT   EXP RT (REL RT)  MASS  RESPONSE (   ng)  (   ng)   TARGET RANGE    RATIO
   ==   ====== ========  ====  ======== =======  =======   ============    =====

   88 o-Xylene                                          CAS #: 95-47-6
 12.376  12.376 (0.948)   106     13047 8.68000    8.239  80.00- 120.00   100.00(a)
 12.376  12.376 (0.948)    91     25906                  163.65- 223.65   198.56
-------------------------------------------------------------------------------
   89 Styrene                                           CAS #: 100-42-5
 12.405  12.405 (0.951)   104     20232 8.52000    7.998  80.00- 120.00   100.00(a)
 12.405  12.405 (0.951)    78      9342                   15.61-  75.61    46.17
-------------------------------------------------------------------------------
   91 Cumene                                            CAS #: 98-82-8
 12.834  12.834 (0.984)   105     38930 9.83000    9.712  80.00- 120.00   100.00(a)
 12.834  12.834 (0.984)   120     11714                    0.00-  59.10    30.09
 12.834  12.834 (0.984)    51      5108                    0.00-  40.54    13.12
-------------------------------------------------------------------------------
   94 1,1,2,2-Tetrachloroethane                         CAS #: 79-34-5
 13.214  13.214 (1.013)    83     18286 13.7000   13.508  80.00- 120.00   100.00
 13.207  13.207 (1.012)    85     11532                   35.82-  95.82    63.06
-------------------------------------------------------------------------------
   96 Propylbenzene                                     CAS #: 103-65-1
 13.350  13.350 (1.023)    91     43327 9.83000    9.356  80.00- 120.00   100.00(a)
 13.350  13.350 (1.023)   120     10854                    0.00-  54.66    25.05
 13.350  13.350 (1.023)   105      1628                    0.00-  33.61     3.76
-------------------------------------------------------------------------------
   97 4-Ethyltoluene                                    CAS #: 622-96-8
 13.508  13.508 (1.035)   120     12092 9.83000    9.672  80.00- 120.00   100.00(a)
 13.508  13.508 (1.035)   105     35621                  275.29- 335.29   294.58
-------------------------------------------------------------------------------
   98 1,3,5-Trimethylbenzene                            CAS #: 108-67-8
 13.586  13.586 (1.041)   120     16213 9.83000    9.498  80.00- 120.00   100.00(a)
 13.586  13.586 (1.041)   105     29982                  157.79- 217.79   184.93
-------------------------------------------------------------------------------
  100 1,2,4-Trimethylbenzene                            CAS #: 95-63-6
 14.045  14.045 (1.076)   120     14510 9.83000    9.026  80.00- 120.00   100.00(a)
 14.045  14.045 (1.076)   105     30542                  169.74- 229.74   210.49
-------------------------------------------------------------------------------
  101 1,3-Dichlorobenzene                               CAS #: 541-73-1
 14.382  14.382 (1.102)   146     22632 12.0000   11.187  80.00- 120.00   100.00
 14.382  14.382 (1.102)   148     13045                   34.32-  94.32    57.64
 14.382  14.382 (1.102)   111      7827                    5.94-  65.94    34.58
-------------------------------------------------------------------------------
  102 1,4-Dichlorobenzene                               CAS #: 106-46-7
 14.510  14.510 (1.112)   146     21468 12.0000   10.808  80.00- 120.00   100.00
 14.510  14.510 (1.112)   148     13887                   35.48-  95.48    64.69
 14.510  14.510 (1.112)   111      7921                    5.70-  65.70    36.90
-------------------------------------------------------------------------------
  105 1,2-Dichlorobenzene                               CAS #: 95-50-1
 14.947  14.947 (1.145)   146     22237 12.0000   11.457  80.00- 120.00   100.00
```

RT	EXP RT	(REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO
105 1,2-Dichlorobenzene (continued)								
14.940	14.940	(1.145)	148	14571			34.02- 94.02	65.53
14.940	14.940	(1.145)	111	7809			7.12- 67.12	35.12
106 1,2,4-Trichlorobenzene						CAS #: 120-82-1		
16.975	16.975	(1.301)	180	16869	14.8000	12.564	80.00- 120.00	100.00(a)
16.975	16.975	(1.301)	182	14931			65.50- 125.50	88.51
107 Hexachlorobutadiene						CAS #: 87-68-3		
17.175	17.175	(1.316)	225	12857	21.3000	16.650	80.00- 120.00	100.00(a)
17.175	17.175	(1.316)	223	7972			32.38- 92.38	62.01
109 Naphthalene						CAS #: 91-20-3		
17.290	17.290	(1.325)	128	26758	5.00000	4.871	80.00- 120.00	100.00
17.297	17.297	(1.325)	127	3354			0.00- 43.21	12.53
110 2-Methylnaphthalene						CAS #: 91-57-6		
18.744	18.744	(1.436)	142	17217	5.00000	4.908	80.00- 120.00	100.00
18.744	18.744	(1.436)	141	15368			56.85- 116.85	89.26
18.744	18.744	(1.436)	115	5116			0.00- 59.61	29.71
111 1-Methylnaphthalene						CAS #: 90-12-0		
18.966	18.966	(1.453)	142	17723	5.00000	5.166	80.00- 120.00	100.00
18.966	18.966	(1.453)	141	14959			58.28- 118.28	84.40
18.966	18.966	(1.453)	115	5226			1.09- 61.09	29.49
112 Acenaphthylene						CAS #: 208-96-8		
20.835	20.835	(1.597)	152	28188	5.00000	5.102	80.00- 120.00	100.00
20.843	20.843	(1.597)	151	6121			0.00- 50.51	21.71
20.843	20.843	(1.597)	153	4110			0.00- 43.07	14.58
113 Acenaphthene						CAS #: 83-32-9		
21.100	21.100	(1.617)	154	14095	5.00000	5.383	80.00- 120.00	100.00
21.100	21.100	(1.617)	152	8866			23.06- 83.06	62.90
21.108	21.108	(1.618)	153	15917			82.31- 142.31	112.93
114 Fluorene						CAS #: 86-73-7		
22.268	22.268	(1.706)	166	18692	5.00000	7.210	80.00- 120.00	100.00
22.268	22.268	(1.706)	165	18027			65.30- 125.30	96.44
115 Phenanthrene						CAS #: 85-01-8		
24.496	24.496	(1.877)	178	62266	5.00000	9.460	80.00- 120.00	100.00
24.489	24.489	(1.877)	176	12146			0.00- 48.40	19.51
24.489	24.489	(1.877)	179	8666			0.00- 44.95	13.92
116 Anthracene						CAS #: 120-12-7		
24.610	24.610	(1.886)	178	70745	5.00000	10.277	80.00- 120.00	100.00

RT	EXP RT	(REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO
116 Anthracene (continued)								
24.618	24.618	(1.887)	176	11679			0.00- 47.65	16.51
24.618	24.618	(1.887)	179	10882			0.00- 43.56	15.38
117 Fluoranthene						CAS #: 206-44-0		
28.428	28.428	(2.179)	202	80544	5.00000	12.916	80.00- 120.00	100.00
28.421	28.421	(2.178)	101	11075			0.00- 42.31	13.75
118 Pyrene						CAS #: 129-00-0		
29.481	29.481	(2.259)	202	85541	5.00000	12.579	80.00- 120.00	100.00
29.481	29.481	(2.259)	101	6234			0.00- 44.28	7.29
29.467	29.467	(2.258)	100	9054			0.00- 41.66	10.58

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Report Date: 23-Nov-2015 10:01

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd11.i
Lab File ID: 11112004.d
Lab Smp Id: VI VOC+PAH ICAL, L2
Analysis Type: VOA
Quant Type: ISTD
Operator: LA
Method File: /chem/msd11.i/20nov15.b/115z1120vi.m
Misc Info: 2516-201 (12/10/15);2595-248-5.0 (1/29/16)

Calibration Date: 20-NOV-2015
Calibration Time: 22:19
Level: LOW
Sample Type: AIR

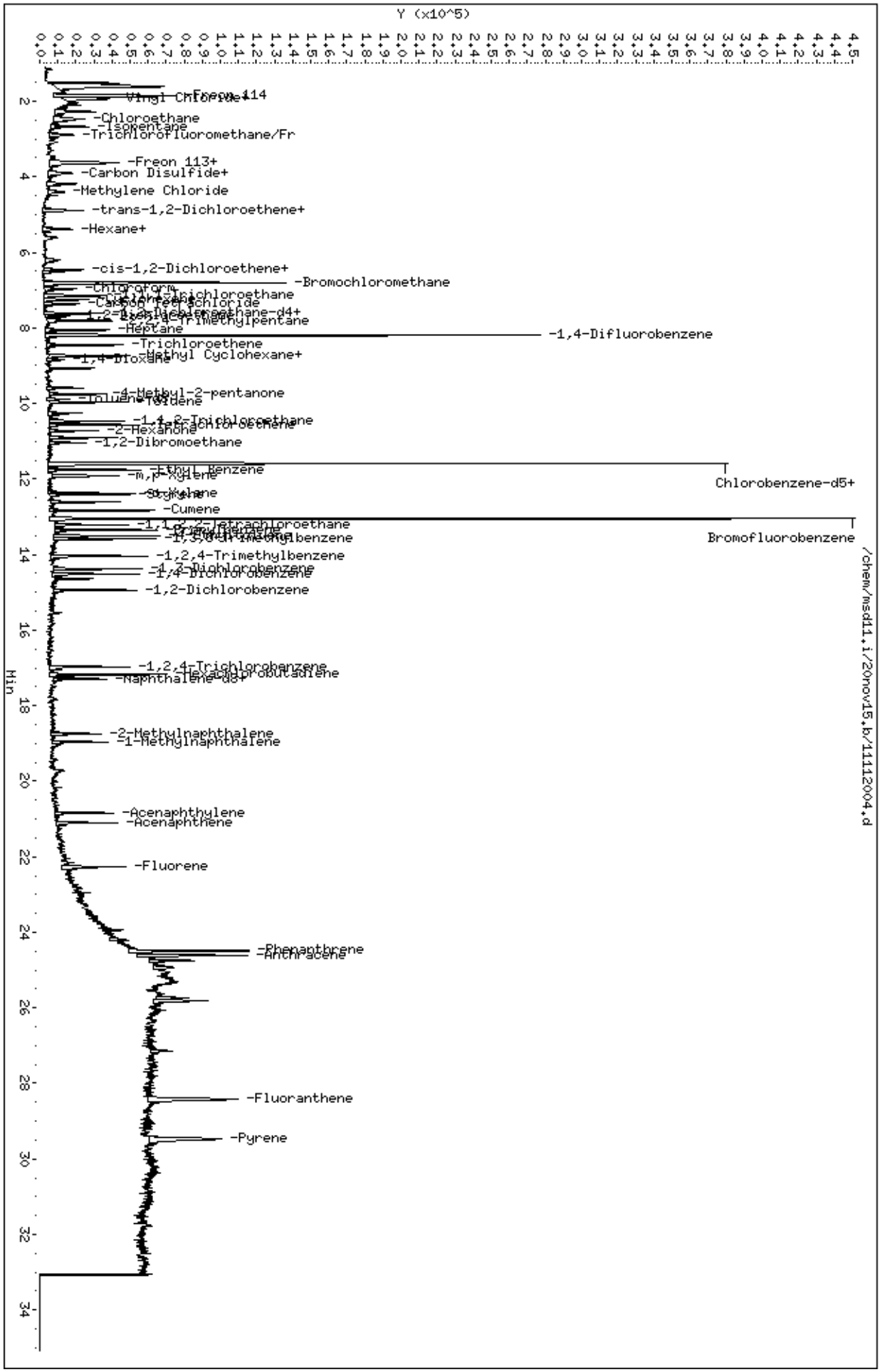
COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
40 Bromochloromethan	61766	37060	86472	55457	-10.21
54 1,4-Difluorobenze	242319	145391	339247	223440	-7.79
79 Chlorobenzene-d5	224302	134581	314023	202795	-9.59
92 Bromofluorobenzen	161670	97002	226338	139602	-13.65

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
40 Bromochloromethan	6.80	6.47	7.13	6.80	0.11
54 1,4-Difluorobenze	8.19	7.86	8.52	8.19	0.00
79 Chlorobenzene-d5	11.60	11.27	11.93	11.59	-0.06
92 Bromofluorobenzen	13.05	12.72	13.38	13.05	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msd11.i/20nov15.b/11112004.d
Date : 20-NOV-2015 19:59
Client ID:
Sample Info: ;VI VOC+PAH ICAL, L2
Column phase: RTx-624

Instrument: msd11.i
Operator: LA
Column diameter: 0.53



Page 1

Eurofins Air Toxics Inc.

EPA Method TO-17 GC/MS

Data file : /chem/msd11.i/20nov15.b/11112005.d
Lab Smp Id: VI VOC+PAH ICAL, L3
Inj Date : 20-NOV-2015 20:46
Operator : LA Inst ID: msd11.i
Smp Info : ;VI VOC+PAH ICAL, L3
Misc Info : 2516-201 (12/10/15);2595-248-10 (1/29/16)
Comment :
Method : /chem/msd11.i/20nov15.b/115z1120vi.m
Meth Date : 23-Nov-2015 10:01 lantonic Quant Type: ISTD
Cal Date : 20-NOV-2015 20:46 Cal File: 11112005.d
Als bottle: 13 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: VOC+PAH_ICAL.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO
* 40 Bromochloromethane					CAS #: 74-97-5		
6.803	6.803 (1.000)	130	52381	26.0000		80.00- 120.00	100.00
6.803	6.803 (1.000)	128	41197			49.46- 109.46	78.65
6.803	6.803 (1.000)	49	68530			96.52- 156.52	130.83
* 54 1,4-Difluorobenzene					CAS #: 540-36-3		
8.200	8.200 (1.000)	114	207347	23.0000		80.00- 120.00	100.00
8.200	8.200 (1.000)	88	29471			0.00- 44.32	14.21
* 79 Chlorobenzene-d5					CAS #: 3114-55-4		
11.588	11.588 (1.000)	117	193750	24.0000		80.00- 120.00	100.00
11.588	11.588 (1.000)	82	94607			20.08- 80.08	48.83
* 92 Bromofluorobenzene					CAS #: 460-00-4		
13.042	13.042 (1.000)	174	128199	36.0000		80.00- 120.00	100.00
13.042	13.042 (1.000)	95	129376			68.42- 128.42	100.92
13.042	13.042 (1.000)	176	127495			64.69- 124.69	99.45
$ 49 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
7.598	7.598 (0.927)	65	3511	5.00000	4.067	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO
$ 49 1,2-Dichloroethane-d4 (continued)							
7.605	7.605 (0.927)	67	2086			25.09- 85.09	59.41
$ 66 Toluene-d8					CAS #: 2037-26-5		
9.890	9.890 (0.853)	98	13737	5.00000	4.492	80.00- 120.00	100.00
9.890	9.890 (0.853)	70	1285			0.00- 41.37	9.35
9.897	9.897 (0.854)	100	8814			33.98- 93.98	64.16
$ 108 Naphthalene-d8					CAS #: 1146-65-2		
17.254	17.254 (1.323)	136	19286	5.00000	4.196	80.00- 120.00	100.00
17.254	17.254 (1.323)	108	1753			0.00- 38.36	9.09
3 Freon 114					CAS #: 76-14-2		
1.875	1.875 (0.276)	135	22719	21.0000	20.158	80.00- 120.00	100.00
1.868	1.868 (0.275)	137	7087			2.94- 62.94	31.19
6 Vinyl Chloride					CAS #: 75-01-4		
2.061	2.061 (0.303)	62	8442	7.67000	7.226	80.00- 120.00	100.00
2.068	2.068 (0.304)	64	3962			1.67- 61.67	46.93
7 1,3-Butadiene					CAS #: 106-99-0		
2.097	2.097 (0.308)	54	5901	6.64000	5.930	80.00- 120.00	100.00
2.097	2.097 (0.308)	39	7897			88.98- 148.98	133.82
9 Chloroethane					CAS #: 75-00-3		
2.562	2.562 (0.377)	64	4889	7.92000	8.695	80.00- 120.00	100.00(a)
2.570	2.570 (0.378)	66	1380			2.82- 62.82	28.23
2.570	2.570 (0.378)	49	1441			1.12- 61.12	29.47
10 Isopentane					CAS #: 78-78-4		
2.677	2.677 (0.394)	57	7131	8.85000	8.197	80.00- 120.00	100.00
2.670	2.670 (0.392)	43	10990			125.87- 185.87	154.12
11 Trichlorofluoromethane/Fr11					CAS #: 75-69-4		
2.892	2.892 (0.425)	101	22552	16.9000	15.652	80.00- 120.00	100.00
2.885	2.885 (0.424)	103	14304			34.96- 94.96	63.43
15 Freon 113					CAS #: 76-13-1		
3.630	3.630 (0.534)	151	17423	23.0000	21.187	80.00- 120.00	100.00
3.630	3.630 (0.534)	153	10846			35.10- 95.10	62.25
3.630	3.630 (0.534)	101	20302			84.04- 144.04	116.52
14 1,1-Dichloroethene					CAS #: 75-35-4		
3.608	3.608 (0.530)	98	6502	11.9000	11.403	80.00- 120.00	100.00
3.601	3.601 (0.529)	96	9565			126.05- 186.05	147.11
3.601	3.601 (0.529)	61	15321			223.83- 283.83	235.64

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO
18 Carbon Disulfide					CAS #: 75-15-0		
3.916	3.916 (0.576)	76	38874	9.34000	11.385	80.00- 120.00	100.00
19 2-Propanol					CAS #: 67-63-0		
3.873	3.873 (0.569)	45	19973	7.37000	8.776	80.00- 120.00	100.00(a)
3.880	3.880 (0.570)	43	4064			0.00- 50.22	20.35
3.880	3.880 (0.570)	59	663			0.00- 33.71	3.32
22 Methylene Chloride					CAS #: 75-09-2		
4.396	4.396 (0.646)	49	20157	10.4000	15.180	80.00- 120.00	100.00(a)
4.396	4.396 (0.646)	84	13830			41.05- 101.05	68.61
4.396	4.396 (0.646)	51	6291			0.46- 60.46	31.21
25 trans-1,2-Dichloroethene					CAS #: 156-60-5		
4.898	4.898 (0.720)	98	6021	11.9000	11.204	80.00- 120.00	100.00
4.898	4.898 (0.720)	61	12932			190.70- 250.70	214.78
4.898	4.898 (0.720)	96	9625			126.37- 186.37	159.86
26 MTBE					CAS #: 1634-04-4		
4.883	4.883 (0.718)	73	22885	10.8000	10.925	80.00- 120.00	100.00(a)
4.883	4.883 (0.718)	57	3644			0.00- 53.50	15.92
4.890	4.890 (0.719)	41	4643			0.00- 54.24	20.29
28 Hexane					CAS #: 110-54-3		
5.385	5.385 (0.792)	57	14348	10.6000	10.302	80.00- 120.00	100.00(a)
5.378	5.378 (0.790)	43	9823			37.71- 97.71	68.46
5.392	5.392 (0.793)	86	1455			0.00- 45.83	10.14
29 1,1-Dichloroethane					CAS #: 75-34-3		
5.607	5.607 (0.824)	63	15268	12.1000	10.902	80.00- 120.00	100.00
5.607	5.607 (0.824)	65	5306			1.45- 61.45	34.75
37 cis-1,2-Dichloroethene					CAS #: 156-59-2		
6.466	6.466 (0.950)	98	6312	11.9000	10.761	80.00- 120.00	100.00
6.466	6.466 (0.950)	96	10745			126.86- 186.86	170.23
6.473	6.473 (0.952)	61	13654			171.58- 231.58	216.32
38 2-Butanone					CAS #: 78-93-3		
6.452	6.452 (0.948)	72	4182	8.85000	8.119	80.00- 120.00	100.00(a)
6.459	6.459 (0.949)	43	17701			419.83- 479.83	423.27
6.459	6.459 (0.949)	57	1453			2.35- 62.35	34.74
44 Chloroform					CAS #: 67-66-3		
6.968	6.968 (1.024)	83	18350	14.6000	12.992	80.00- 120.00	100.00
6.968	6.968 (1.024)	85	11670			35.12- 95.12	63.60

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO
46 Cyclohexane					CAS #: 110-82-7		
7.261	7.261 (0.886)	84	12834	10.3000	9.710	80.00- 120.00	100.00
7.254	7.254 (0.885)	56	15463			91.54- 151.54	120.48
7.254	7.254 (0.885)	41	11589			46.84- 106.84	90.30
45 1,1,1-Trichloroethane					CAS #: 71-55-6		
7.161	7.161 (0.873)	97	18649	16.4000	15.523	80.00- 120.00	100.00
7.161	7.161 (0.873)	99	11794			35.10- 95.10	63.24
47 Carbon Tetrachloride					CAS #: 56-23-5		
7.376	7.376 (0.900)	119	18095	18.9000	16.852	80.00- 120.00	100.00
7.369	7.369 (0.899)	117	18568			73.73- 133.73	102.61
51 2,2,4-Trimethylpentane					CAS #: 540-84-1		
7.813	7.813 (0.953)	57	51358	14.0000	13.321	80.00- 120.00	100.00
7.813	7.813 (0.953)	56	16602			1.98- 61.98	32.33
7.813	7.813 (0.953)	41	17480			0.94- 60.94	34.04
48 Benzene					CAS #: 71-43-2		
7.620	7.620 (0.929)	78	30981	9.58000	8.946	80.00- 120.00	100.00
7.620	7.620 (0.929)	77	7688			0.00- 53.25	24.82
50 1,2-Dichloroethane					CAS #: 107-06-2		
7.698	7.698 (0.939)	62	12384	12.1000	10.618	80.00- 120.00	100.00
7.706	7.706 (0.940)	64	4313			1.81- 61.81	34.83
53 Heptane					CAS #: 142-82-5		
8.064	8.064 (0.983)	71	10460	12.3000	11.350	80.00- 120.00	100.00
8.056	8.056 (0.983)	43	21475			156.82- 216.82	205.31
8.056	8.056 (0.983)	57	9959			66.52- 126.52	95.21
56 Trichloroethene					CAS #: 79-01-6		
8.458	8.458 (1.031)	95	18060	16.1000	16.710	80.00- 120.00	100.00
8.465	8.465 (1.032)	130	20484			82.18- 142.18	113.42
8.458	8.458 (1.031)	97	12045			35.46- 95.46	66.69
58 Methyl Cyclohexane					CAS #: 108-87-2		
8.737	8.737 (1.066)	83	18446	12.0000	10.854	80.00- 120.00	100.00
8.744	8.744 (1.066)	98	8370			16.90- 76.90	45.38
8.737	8.737 (1.066)	55	15242			52.37- 112.37	82.63
59 1,2-Dichloropropane					CAS #: 78-87-5		
8.751	8.751 (1.067)	63	12821	13.9000	13.333	80.00- 120.00	100.00
8.751	8.751 (1.067)	62	8906			38.03- 98.03	69.46
8.737	8.737 (1.066)	41	17577			105.71- 165.71	137.10

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO
60 1,4-Dioxane					CAS #: 123-91-1		
8.852	8.852 (1.079)	88	7869	10.8000	9.797	80.00- 120.00	100.00(a)
8.844	8.844 (1.079)	58	5375			37.98- 97.98	68.31
8.852	8.852 (1.079)	57	2352			0.00- 54.83	29.89
65 4-Methyl-2-pentanone					CAS #: 108-10-1		
9.754	9.754 (1.190)	58	9857	12.3000	11.825	80.00- 120.00	100.00
9.754	9.754 (1.190)	43	28852			254.63- 314.63	292.71
9.754	9.754 (1.190)	85	4274			8.74- 68.74	43.36
67 Toluene					CAS #: 108-88-3		
9.969	9.969 (0.860)	91	39357	11.3000	10.609	80.00- 120.00	100.00
9.969	9.969 (0.860)	92	22033			29.25- 89.25	55.98
70 1,1,2-Trichloroethane					CAS #: 79-00-5		
10.478	10.478 (1.278)	97	13150	16.4000	14.689	80.00- 120.00	100.00
10.478	10.478 (1.278)	99	8058			34.29- 94.29	61.28
10.478	10.478 (1.278)	83	11460			57.72- 117.72	87.15
71 Tetrachloroethene					CAS #: 127-18-4		
10.571	10.571 (0.912)	166	18974	20.4000	17.580	80.00- 120.00	100.00
10.571	10.571 (0.912)	129	14416			41.79- 101.79	75.98
10.571	10.571 (0.912)	131	14254			38.31- 98.31	75.12
72 2-Hexanone					CAS #: 591-78-6		
10.728	10.728 (0.926)	58	10514	12.3000	10.354	80.00- 120.00	100.00
10.728	10.728 (0.926)	43	24533			181.80- 241.80	233.34
10.728	10.728 (0.926)	100	1978			0.00- 47.51	18.81
74 1,2-Dibromoethane					CAS #: 106-93-4		
11.036	11.036 (0.952)	107	17757	23.0000	19.922	80.00- 120.00	100.00
11.036	11.036 (0.952)	109	16503			64.64- 124.64	92.94
81 Chlorobenzene					CAS #: 108-90-7		
11.624	11.624 (1.003)	112	32310	13.8000	12.796	80.00- 120.00	100.00
11.624	11.624 (1.003)	114	10643			1.81- 61.81	32.94
11.624	11.624 (1.003)	77	17116			21.76- 81.76	52.97
82 Ethyl Benzene					CAS #: 100-41-4		
11.760	11.760 (1.015)	106	15149	13.0000	11.625	80.00- 120.00	100.00
11.753	11.753 (1.014)	91	45634			263.98- 323.98	301.23
84 m,p-Xylene					CAS #: 108-38-3		
11.910	11.910 (1.028)	106	18826	13.0000	11.484	80.00- 120.00	100.00
11.910	11.910 (1.028)	91	35413			152.73- 212.73	188.11

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                                          AMOUNTS
                                       CAL-AMT   ON-COL
   RT   EXP RT (REL RT)  MASS  RESPONSE (   ng)  (   ng)   TARGET RANGE    RATIO
   ==   ====== ========  ====  ======== =======  =======   ============    =====

   88 o-Xylene                                          CAS #: 95-47-6
 12.376  12.376 (0.949)   106     17976 13.0000   12.362  80.00- 120.00   100.00
 12.369  12.369 (0.948)    91     34553                  163.65- 223.65   192.22
-------------------------------------------------------------------------------
   89 Styrene                                           CAS #: 100-42-5
 12.397  12.397 (0.951)   104     26981 12.8000   11.615  80.00- 120.00   100.00
 12.397  12.397 (0.951)    78     12508                   15.61-  75.61    46.36
-------------------------------------------------------------------------------
   91 Cumene                                            CAS #: 98-82-8
 12.834  12.834 (0.984)   105     50009 14.8000   13.586  80.00- 120.00   100.00
 12.834  12.834 (0.984)   120     14758                    0.00-  59.10    29.51
 12.827  12.827 (0.984)    51      5752                    0.00-  40.54    11.50
-------------------------------------------------------------------------------
   94 1,1,2,2-Tetrachloroethane                         CAS #: 79-34-5
 13.207  13.207 (1.013)    83     18376 20.6000   14.781  80.00- 120.00   100.00
 13.207  13.207 (1.013)    85     12919                   35.82-  95.82    70.30
-------------------------------------------------------------------------------
   96 Propylbenzene                                     CAS #: 103-65-1
 13.350  13.350 (1.024)    91     58092 14.8000   13.660  80.00- 120.00   100.00
 13.343  13.343 (1.023)   120     15046                    0.00-  54.66    25.90
 13.350  13.350 (1.024)   105      2170                    0.00-  33.61     3.74
-------------------------------------------------------------------------------
   97 4-Ethyltoluene                                    CAS #: 622-96-8
 13.508  13.508 (1.036)   120     15540 14.8000   13.536  80.00- 120.00   100.00
 13.500  13.500 (1.035)   105     47276                  275.29- 335.29   304.22
-------------------------------------------------------------------------------
   98 1,3,5-Trimethylbenzene                            CAS #: 108-67-8
 13.586  13.586 (1.042)   120     20591 14.8000   13.135  80.00- 120.00   100.00
 13.579  13.579 (1.041)   105     42692                  157.79- 217.79   207.33
-------------------------------------------------------------------------------
  100 1,2,4-Trimethylbenzene                            CAS #: 95-63-6
 14.038  14.038 (1.076)   120     20482 14.8000   13.874  80.00- 120.00   100.00(a)
 14.038  14.038 (1.076)   105     43401                  169.74- 229.74   211.90
-------------------------------------------------------------------------------
  101 1,3-Dichlorobenzene                               CAS #: 541-73-1
 14.381  14.381 (1.103)   146     31104 18.0000   16.743  80.00- 120.00   100.00
 14.381  14.381 (1.103)   148     20044                   34.32-  94.32    64.44
 14.374  14.374 (1.102)   111     11263                    5.94-  65.94    36.21
-------------------------------------------------------------------------------
  102 1,4-Dichlorobenzene                               CAS #: 106-46-7
 14.510  14.510 (1.113)   146     29371 18.0000   16.101  80.00- 120.00   100.00
 14.510  14.510 (1.113)   148     20335                   35.48-  95.48    69.23
 14.510  14.510 (1.113)   111     10700                    5.70-  65.70    36.43
-------------------------------------------------------------------------------
  105 1,2-Dichlorobenzene                               CAS #: 95-50-1
 14.940  14.940 (1.146)   146     30349 18.0000   17.027  80.00- 120.00   100.00
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RT	EXP RT	(REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO
105 1,2-Dichlorobenzene (continued)								
14.940	14.940	(1.146)	148	19216			34.02- 94.02	63.32
14.940	14.940	(1.146)	111	11356			7.12- 67.12	37.42
106 1,2,4-Trichlorobenzene						CAS #: 120-82-1		
16.974	16.974	(1.302)	180	26629	22.3000	21.597	80.00- 120.00	100.00
16.974	16.974	(1.302)	182	27346			65.50- 125.50	102.69
107 Hexachlorobutadiene						CAS #: 87-68-3		
17.175	17.175	(1.317)	225	24176	32.0000	34.094	80.00- 120.00	100.00
17.168	17.168	(1.316)	223	14866			32.38- 92.38	61.49
109 Naphthalene						CAS #: 91-20-3		
17.297	17.297	(1.326)	128	46119	10.0000	9.142	80.00- 120.00	100.00
17.290	17.290	(1.326)	127	5702			0.00- 43.21	12.36
110 2-Methylnaphthalene						CAS #: 91-57-6		
18.744	18.744	(1.437)	142	30478	10.0000	9.462	80.00- 120.00	100.00
18.744	18.744	(1.437)	141	23266			56.85- 116.85	76.34
18.737	18.737	(1.437)	115	9226			0.00- 59.61	30.27
111 1-Methylnaphthalene						CAS #: 90-12-0		
18.959	18.959	(1.454)	142	29038	10.0000	9.218	80.00- 120.00	100.00
18.959	18.959	(1.454)	141	25557			58.28- 118.28	88.01
18.959	18.959	(1.454)	115	8628			1.09- 61.09	29.71
112 Acenaphthylene						CAS #: 208-96-8		
20.835	20.835	(1.598)	152	49741	10.0000	9.804	80.00- 120.00	100.00
20.835	20.835	(1.598)	151	10769			0.00- 50.51	21.65
20.835	20.835	(1.598)	153	6502			0.00- 43.07	13.07
113 Acenaphthene						CAS #: 83-32-9		
21.100	21.100	(1.618)	154	21590	10.0000	8.979	80.00- 120.00	100.00
21.108	21.108	(1.618)	152	12943			23.06- 83.06	59.95
21.100	21.100	(1.618)	153	23989			82.31- 142.31	111.11
114 Fluorene						CAS #: 86-73-7		
22.268	22.268	(1.707)	166	15736	10.0000	6.610	80.00- 120.00	100.00
22.268	22.268	(1.707)	165	15072			65.30- 125.30	95.78
115 Phenanthrene						CAS #: 85-01-8		
24.496	24.496	(1.878)	178	84912	10.0000	14.048	80.00- 120.00	100.00
24.496	24.496	(1.878)	176	17480			0.00- 48.40	20.59
24.489	24.489	(1.878)	179	13981			0.00- 44.95	16.47
116 Anthracene						CAS #: 120-12-7		
24.610	24.610	(1.887)	178	83203	10.0000	13.162	80.00- 120.00	100.00

RT	EXP RT	(REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO
116 Anthracene (continued)								
24.617	24.617	(1.888)	176	15659			0.00- 47.65	18.82
24.603	24.603	(1.886)	179	11888			0.00- 43.56	14.29
117 Fluoranthene						CAS #: 206-44-0		
28.421	28.421	(2.179)	202	61847	10.0000	10.800	80.00- 120.00	100.00
28.407	28.407	(2.178)	101	9017			0.00- 42.31	14.58
118 Pyrene						CAS #: 129-00-0		
29.467	29.467	(2.259)	202	69859	10.0000	11.186	80.00- 120.00	100.00
29.460	29.460	(2.259)	101	8415			0.00- 44.28	12.05
29.467	29.467	(2.259)	100	8138			0.00- 41.66	11.65

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Report Date: 23-Nov-2015 10:01

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd11.i
Lab File ID: 11112005.d
Lab Smp Id: VI VOC+PAH ICAL, L3
Analysis Type: VOA
Quant Type: ISTD
Operator: LA
Method File: /chem/msd11.i/20nov15.b/115z1120vi.m
Misc Info: 2516-201 (12/10/15);2595-248-10 (1/29/16)

Calibration Date: 20-NOV-2015
Calibration Time: 22:19
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
40 Bromochloromethan	61766	37060	86472	52381	-15.19
54 1,4-Difluorobenze	242319	145391	339247	207347	-14.43
79 Chlorobenzene-d5	224302	134581	314023	193750	-13.62
92 Bromofluorobenzen	161670	97002	226338	128199	-20.70

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
40 Bromochloromethan	6.80	6.47	7.13	6.80	0.10
54 1,4-Difluorobenze	8.19	7.86	8.52	8.20	0.09
79 Chlorobenzene-d5	11.60	11.27	11.93	11.59	-0.06
92 Bromofluorobenzen	13.05	12.72	13.38	13.04	-0.06

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msd11.i/20nov15.b/11112005.d

Page 1

Date : 20-NOV-2015 20:46

Client ID:

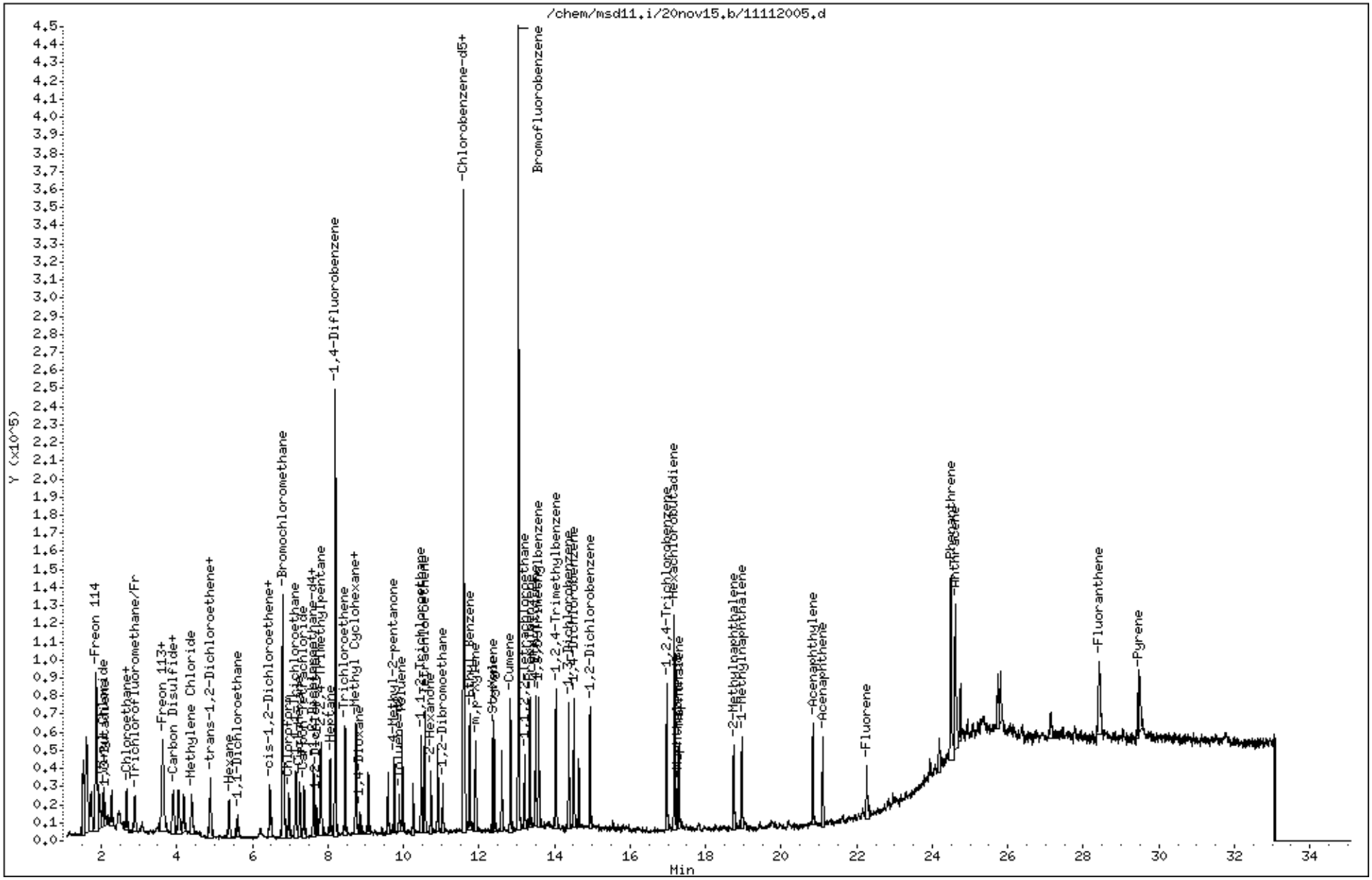
Instrument: msd11.i

Sample Info: ;VI VOC+PAH ICAL, L3

Operator: LA

Column phase: RTx-624

Column diameter: 0.53



Eurofins Air Toxics Inc.

EPA Method TO-17 GC/MS

Data file : /chem/msd11.i/20nov15.b/11112006.d
Lab Smp Id: VI VOC+PAH ICAL, L4
Inj Date : 20-NOV-2015 21:33
Operator : LA Inst ID: msd11.i
Smp Info : ;VI VOC+PAH ICAL, L4
Misc Info : 2516-201 (12/10/15);2595-248-25 (1/29/16)
Comment :
Method : /chem/msd11.i/20nov15.b/115z1120vi.m
Meth Date : 23-Nov-2015 10:01 lantonic Quant Type: ISTD
Cal Date : 20-NOV-2015 21:33 Cal File: 11112006.d
Als bottle: 14 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: VOC+PAH_ICAL.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO
* 40 Bromochloromethane					CAS #: 74-97-5		
6.796	6.796 (1.000)	130	50942	26.0000		80.00- 120.00	100.00
6.796	6.796 (1.000)	128	40147			49.46- 109.46	78.81
6.796	6.796 (1.000)	49	67592			96.52- 156.52	132.68
* 54 1,4-Difluorobenzene					CAS #: 540-36-3		
8.193	8.193 (1.000)	114	203106	23.0000		80.00- 120.00	100.00
8.193	8.193 (1.000)	88	28456			0.00- 44.32	14.01
* 79 Chlorobenzene-d5					CAS #: 3114-55-4		
11.595	11.595 (1.000)	117	188412	24.0000		80.00- 120.00	100.00
11.595	11.595 (1.000)	82	91219			20.08- 80.08	48.41
* 92 Bromofluorobenzene					CAS #: 460-00-4		
13.056	13.056 (1.000)	174	127184	36.0000		80.00- 120.00	100.00
13.056	13.056 (1.000)	95	129560			68.42- 128.42	101.87
13.056	13.056 (1.000)	176	126995			64.69- 124.69	99.85
$ 49 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
7.598	7.598 (0.927)	65	8450	10.0000	9.992	80.00- 120.00	100.00

RT	EXP RT	(REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO
$ 49 1,2-Dichloroethane-d4 (continued)								
7.591	7.591	(0.927)	67	4927			25.09- 85.09	58.31
$ 66 Toluene-d8						CAS #: 2037-26-5		
9.890	9.890	(0.853)	98	30991	10.0000	10.420	80.00- 120.00	100.00
9.890	9.890	(0.853)	70	3649			0.00- 41.37	11.77
9.890	9.890	(0.853)	100	18934			33.98- 93.98	61.10
$ 108 Naphthalene-d8						CAS #: 1146-65-2		
17.254	17.254	(1.321)	136	49543	10.0000	10.864	80.00- 120.00	100.00
17.254	17.254	(1.321)	108	4186			0.00- 38.36	8.45
3 Freon 114						CAS #: 76-14-2		
1.868	1.868	(0.275)	135	50319	41.9000	45.908	80.00- 120.00	100.00
1.860	1.860	(0.274)	137	15489			2.94- 62.94	30.78
6 Vinyl Chloride						CAS #: 75-01-4		
2.054	2.054	(0.302)	62	19352	15.3000	17.033	80.00- 120.00	100.00
2.054	2.054	(0.302)	64	8031			1.67- 61.67	41.50
7 1,3-Butadiene						CAS #: 106-99-0		
2.097	2.097	(0.309)	54	12308	13.3000	12.717	80.00- 120.00	100.00
2.097	2.097	(0.309)	39	15268			88.98- 148.98	124.05
9 Chloroethane						CAS #: 75-00-3		
2.570	2.570	(0.378)	64	9667	15.8000	17.679	80.00- 120.00	100.00
2.555	2.555	(0.376)	66	2706			2.82- 62.82	27.99
2.570	2.570	(0.378)	49	2832			1.12- 61.12	29.30
10 Isopentane						CAS #: 78-78-4		
2.670	2.670	(0.393)	57	14934	17.7000	17.652	80.00- 120.00	100.00
2.670	2.670	(0.393)	43	23466			125.87- 185.87	157.13
11 Trichlorofluoromethane/Fr11						CAS #: 75-69-4		
2.892	2.892	(0.426)	101	48892	33.7000	34.891	80.00- 120.00	100.00
2.885	2.885	(0.424)	103	32162			34.96- 94.96	65.78
15 Freon 113						CAS #: 76-13-1		
3.630	3.630	(0.534)	151	37218	46.0000	46.536	80.00- 120.00	100.00
3.630	3.630	(0.534)	153	24292			35.10- 95.10	65.27
3.637	3.637	(0.535)	101	44292			84.04- 144.04	119.01
14 1,1-Dichloroethene						CAS #: 75-35-4		
3.608	3.608	(0.531)	98	13185	23.8000	23.776	80.00- 120.00	100.00
3.594	3.594	(0.529)	96	20737			126.05- 186.05	157.28
3.594	3.594	(0.529)	61	34279			223.83- 283.83	259.98

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO
18 Carbon Disulfide					CAS #: 75-15-0		
3.909	3.909 (0.575)	76	67731	18.7000	20.396	80.00- 120.00	100.00
19 2-Propanol					CAS #: 67-63-0		
3.873	3.873 (0.570)	45	37816	14.7000	17.086	80.00- 120.00	100.00(a)
3.888	3.888 (0.572)	43	8313			0.00- 50.22	21.98
3.888	3.888 (0.572)	59	942			0.00- 33.71	2.49
22 Methylene Chloride					CAS #: 75-09-2		
4.396	4.396 (0.647)	49	31176	20.8000	24.141	80.00- 120.00	100.00
4.403	4.403 (0.648)	84	21859			41.05- 101.05	70.11
4.403	4.403 (0.648)	51	9527			0.46- 60.46	30.56
25 trans-1,2-Dichloroethene					CAS #: 156-60-5		
4.905	4.905 (0.722)	98	12140	23.8000	23.228	80.00- 120.00	100.00
4.890	4.890 (0.720)	61	28706			190.70- 250.70	236.46
4.898	4.898 (0.721)	96	20371			126.37- 186.37	167.80
26 MTBE					CAS #: 1634-04-4		
4.883	4.883 (0.719)	73	51930	21.6000	25.490	80.00- 120.00	100.00
4.898	4.898 (0.721)	57	12861			0.00- 53.50	24.77
4.883	4.883 (0.719)	41	13767			0.00- 54.24	26.51
28 Hexane					CAS #: 110-54-3		
5.385	5.385 (0.792)	57	30238	21.1000	22.325	80.00- 120.00	100.00(a)
5.385	5.385 (0.792)	43	20709			37.71- 97.71	68.49
5.392	5.392 (0.793)	86	4326			0.00- 45.83	14.31
29 1,1-Dichloroethane					CAS #: 75-34-3		
5.607	5.607 (0.825)	63	36402	24.3000	26.727	80.00- 120.00	100.00
5.614	5.614 (0.826)	65	11869			1.45- 61.45	32.61
37 cis-1,2-Dichloroethene					CAS #: 156-59-2		
6.466	6.466 (0.952)	98	13888	23.8000	24.345	80.00- 120.00	100.00
6.459	6.459 (0.950)	96	20989			126.86- 186.86	151.13
6.466	6.466 (0.952)	61	30924			171.58- 231.58	222.67
38 2-Butanone					CAS #: 78-93-3		
6.452	6.452 (0.949)	72	9713	17.7000	19.389	80.00- 120.00	100.00(a)
6.452	6.452 (0.949)	43	44644			419.83- 479.83	459.63
6.452	6.452 (0.949)	57	3178			2.35- 62.35	32.72
44 Chloroform					CAS #: 67-66-3		
6.960	6.960 (1.024)	83	41575	29.3000	30.267	80.00- 120.00	100.00
6.953	6.953 (1.023)	85	26966			35.12- 95.12	64.86

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO
46 Cyclohexane					CAS #: 110-82-7		
7.254	7.254 (0.885)	84	26239	20.7000	20.268	80.00- 120.00	100.00
7.254	7.254 (0.885)	56	33399			91.54- 151.54	127.29
7.247	7.247 (0.885)	41	22441			46.84- 106.84	85.53
45 1,1,1-Trichloroethane					CAS #: 71-55-6		
7.154	7.154 (0.873)	97	41332	32.7000	35.122	80.00- 120.00	100.00
7.154	7.154 (0.873)	99	26320			35.10- 95.10	63.68
47 Carbon Tetrachloride					CAS #: 56-23-5		
7.362	7.362 (0.899)	119	38647	37.8000	36.744	80.00- 120.00	100.00
7.362	7.362 (0.899)	117	41387			73.73- 133.73	107.09
51 2,2,4-Trimethylpentane					CAS #: 540-84-1		
7.806	7.806 (0.953)	57	109407	28.0000	28.970	80.00- 120.00	100.00
7.806	7.806 (0.953)	56	34098			1.98- 61.98	31.17
7.806	7.806 (0.953)	41	33745			0.94- 60.94	30.84
48 Benzene					CAS #: 71-43-2		
7.612	7.612 (0.929)	78	73076	19.2000	21.541	80.00- 120.00	100.00
7.612	7.612 (0.929)	77	15488			0.00- 53.25	21.19
50 1,2-Dichloroethane					CAS #: 107-06-2		
7.691	7.691 (0.939)	62	27671	24.3000	24.220	80.00- 120.00	100.00
7.698	7.698 (0.940)	64	8879			1.81- 61.81	32.09
53 Heptane					CAS #: 142-82-5		
8.056	8.056 (0.983)	71	21156	24.6000	23.436	80.00- 120.00	100.00
8.056	8.056 (0.983)	43	44145			156.82- 216.82	208.66
8.056	8.056 (0.983)	57	21734			66.52- 126.52	102.73
56 Trichloroethene					CAS #: 79-01-6		
8.450	8.450 (1.031)	95	37224	32.2000	35.160	80.00- 120.00	100.00
8.458	8.458 (1.032)	130	42002			82.18- 142.18	112.84
8.458	8.458 (1.032)	97	24811			35.46- 95.46	66.65
58 Methyl Cyclohexane					CAS #: 108-87-2		
8.737	8.737 (1.066)	83	38868	24.1000	23.348	80.00- 120.00	100.00
8.730	8.730 (1.066)	98	17537			16.90- 76.90	45.12
8.730	8.730 (1.066)	55	32820			52.37- 112.37	84.44
59 1,2-Dichloropropane					CAS #: 78-87-5		
8.751	8.751 (1.068)	63	26584	27.7000	28.224	80.00- 120.00	100.00
8.751	8.751 (1.068)	62	18873			38.03- 98.03	70.99
8.737	8.737 (1.066)	41	38437			105.71- 165.71	144.59

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO
60 1,4-Dioxane					CAS #: 123-91-1		
8.844	8.844 (1.080)	88	17687	21.6000	22.480	80.00- 120.00	100.00
8.844	8.844 (1.080)	58	12895			37.98- 97.98	72.91
8.837	8.837 (1.079)	57	4592			0.00- 54.83	25.96
65 4-Methyl-2-pentanone					CAS #: 108-10-1		
9.754	9.754 (1.191)	58	20450	24.6000	25.046	80.00- 120.00	100.00
9.754	9.754 (1.191)	43	61456			254.63- 314.63	300.52
9.747	9.747 (1.190)	85	7763			8.74- 68.74	37.96
67 Toluene					CAS #: 108-88-3		
9.969	9.969 (0.860)	91	83474	22.6000	23.138	80.00- 120.00	100.00
9.969	9.969 (0.860)	92	48497			29.25- 89.25	58.10
70 1,1,2-Trichloroethane					CAS #: 79-00-5		
10.470	10.470 (1.278)	97	29042	32.7000	33.118	80.00- 120.00	100.00
10.470	10.470 (1.278)	99	16942			34.29- 94.29	58.34
10.470	10.470 (1.278)	83	23751			57.72- 117.72	81.78
71 Tetrachloroethene					CAS #: 127-18-4		
10.571	10.571 (0.912)	166	41125	40.7000	39.184	80.00- 120.00	100.00
10.563	10.563 (0.911)	129	30468			41.79- 101.79	74.09
10.563	10.563 (0.911)	131	29332			38.31- 98.31	71.32
72 2-Hexanone					CAS #: 591-78-6		
10.721	10.721 (0.925)	58	22990	24.6000	23.281	80.00- 120.00	100.00
10.728	10.728 (0.925)	43	48873			181.80- 241.80	212.58
10.728	10.728 (0.925)	100	4255			0.00- 47.51	18.51
74 1,2-Dibromoethane					CAS #: 106-93-4		
11.036	11.036 (0.952)	107	34962	46.1000	40.335	80.00- 120.00	100.00
11.043	11.043 (0.952)	109	34130			64.64- 124.64	97.62
81 Chlorobenzene					CAS #: 108-90-7		
11.631	11.631 (1.003)	112	66995	27.6000	27.284	80.00- 120.00	100.00
11.638	11.638 (1.004)	114	21731			1.81- 61.81	32.44
11.631	11.631 (1.003)	77	34376			21.76- 81.76	51.31
82 Ethyl Benzene					CAS #: 100-41-4		
11.767	11.767 (1.015)	106	32723	26.1000	25.823	80.00- 120.00	100.00
11.767	11.767 (1.015)	91	97772			263.98- 323.98	298.79
84 m,p-Xylene					CAS #: 108-38-3		
11.932	11.932 (1.029)	106	43223	26.1000	27.114	80.00- 120.00	100.00
11.924	11.924 (1.028)	91	81381			152.73- 212.73	188.28

RT	EXP RT	(REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO
88 o-Xylene						CAS #: 95-47-6		
12.383	12.383	(0.948)	106	39229	26.1000	27.192	80.00- 120.00	100.00
12.383	12.383	(0.948)	91	77460			163.65- 223.65	197.46
89 Styrene						CAS #: 100-42-5		
12.412	12.412	(0.951)	104	60317	25.6000	26.174	80.00- 120.00	100.00
12.412	12.412	(0.951)	78	26444			15.61- 75.61	43.84
91 Cumene						CAS #: 98-82-8		
12.841	12.841	(0.984)	105	106953	29.5000	29.288	80.00- 120.00	100.00
12.841	12.841	(0.984)	120	30163			0.00- 59.10	28.20
12.841	12.841	(0.984)	51	12294			0.00- 40.54	11.49
94 1,1,2,2-Tetrachloroethane						CAS #: 79-34-5		
13.221	13.221	(1.013)	83	40818	41.2000	33.096	80.00- 120.00	100.00
13.214	13.214	(1.012)	85	28894			35.82- 95.82	70.79
96 Propylbenzene						CAS #: 103-65-1		
13.357	13.357	(1.023)	91	126691	29.5000	30.029	80.00- 120.00	100.00
13.357	13.357	(1.023)	120	30853			0.00- 54.66	24.35
13.350	13.350	(1.022)	105	4642			0.00- 33.61	3.66
97 4-Ethyltoluene						CAS #: 622-96-8		
13.515	13.515	(1.035)	120	34558	29.5000	30.342	80.00- 120.00	100.00
13.515	13.515	(1.035)	105	100575			275.29- 335.29	291.03
98 1,3,5-Trimethylbenzene						CAS #: 108-67-8		
13.593	13.593	(1.041)	120	46816	29.5000	30.103	80.00- 120.00	100.00
13.593	13.593	(1.041)	105	88393			157.79- 217.79	188.81
100 1,2,4-Trimethylbenzene						CAS #: 95-63-6		
14.045	14.045	(1.076)	120	45248	29.5000	30.894	80.00- 120.00	100.00
14.052	14.052	(1.076)	105	97631			169.74- 229.74	215.77
101 1,3-Dichlorobenzene						CAS #: 541-73-1		
14.381	14.381	(1.101)	146	69150	36.1000	37.519	80.00- 120.00	100.00
14.381	14.381	(1.101)	148	44758			34.32- 94.32	64.73
14.381	14.381	(1.101)	111	24828			5.94- 65.94	35.90
102 1,4-Dichlorobenzene						CAS #: 106-46-7		
14.517	14.517	(1.112)	146	69113	36.1000	38.191	80.00- 120.00	100.00
14.517	14.517	(1.112)	148	43950			35.48- 95.48	63.59
14.517	14.517	(1.112)	111	24616			5.70- 65.70	35.62
105 1,2-Dichlorobenzene						CAS #: 95-50-1		
14.947	14.947	(1.145)	146	69098	36.1000	39.076	80.00- 120.00	100.00

RT	EXP RT	(REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO
105 1,2-Dichlorobenzene (continued)								
14.947	14.947	(1.145)	148	43738			34.02- 94.02	63.30
14.947	14.947	(1.145)	111	25220			7.12- 67.12	36.50
106 1,2,4-Trichlorobenzene						CAS #: 120-82-1		
16.974	16.974	(1.300)	180	67026	44.5000	54.794	80.00- 120.00	100.00
16.974	16.974	(1.300)	182	62322			65.50- 125.50	92.98
107 Hexachlorobutadiene						CAS #: 87-68-3		
17.175	17.175	(1.315)	225	53188	64.0000	75.606	80.00- 120.00	100.00
17.175	17.175	(1.315)	223	33433			32.38- 92.38	62.86
109 Naphthalene						CAS #: 91-20-3		
17.297	17.297	(1.325)	128	133761	25.0000	26.727	80.00- 120.00	100.00
17.290	17.290	(1.324)	127	16881			0.00- 43.21	12.62
110 2-Methylnaphthalene						CAS #: 91-57-6		
18.744	18.744	(1.436)	142	72279	25.0000	22.618	80.00- 120.00	100.00
18.744	18.744	(1.436)	141	61879			56.85- 116.85	85.61
18.737	18.737	(1.435)	115	21904			0.00- 59.61	30.30
111 1-Methylnaphthalene						CAS #: 90-12-0		
18.966	18.966	(1.453)	142	68546	25.0000	21.932	80.00- 120.00	100.00
18.959	18.959	(1.452)	141	59150			58.28- 118.28	86.29
18.959	18.959	(1.452)	115	21786			1.09- 61.09	31.78
112 Acenaphthylene						CAS #: 208-96-8		
20.835	20.835	(1.596)	152	127239	25.0000	25.279	80.00- 120.00	100.00
20.835	20.835	(1.596)	151	26462			0.00- 50.51	20.80
20.835	20.835	(1.596)	153	16277			0.00- 43.07	12.79
113 Acenaphthene						CAS #: 83-32-9		
21.100	21.100	(1.616)	154	48845	25.0000	20.476	80.00- 120.00	100.00
21.107	21.107	(1.617)	152	27066			23.06- 83.06	55.41
21.100	21.100	(1.616)	153	54463			82.31- 142.31	111.50
114 Fluorene						CAS #: 86-73-7		
22.261	22.261	(1.705)	166	33015	25.0000	13.978	80.00- 120.00	100.00(H)
22.261	22.261	(1.705)	165	31347			65.30- 125.30	94.95
115 Phenanthrene						CAS #: 85-01-8		
24.488	24.488	(1.876)	178	125193	25.0000	20.877	80.00- 120.00	100.00
24.488	24.488	(1.876)	176	24099			0.00- 48.40	19.25
24.481	24.481	(1.875)	179	22271			0.00- 44.95	17.79
116 Anthracene						CAS #: 120-12-7		
24.603	24.603	(1.884)	178	121919	25.0000	19.440	80.00- 120.00	100.00

RT	EXP RT	(REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO
116 Anthracene (continued)								
24.610	24.610	(1.885)	176	22493			0.00- 47.65	18.45
24.603	24.603	(1.884)	179	18027			0.00- 43.56	14.79
117 Fluoranthene						CAS #: 206-44-0		
28.399	28.399	(2.175)	202	126546	25.0000	22.275	80.00- 120.00	100.00
28.407	28.407	(2.176)	101	17318			0.00- 42.31	13.69
118 Pyrene						CAS #: 129-00-0		
29.467	29.467	(2.257)	202	136340	25.0000	22.006	80.00- 120.00	100.00
29.467	29.467	(2.257)	101	17786			0.00- 44.28	13.05
29.467	29.467	(2.257)	100	17842			0.00- 41.66	13.09

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).
H - Operator selected an alternate compound hit.

Report Date: 23-Nov-2015 10:01

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd11.i
Lab File ID: 11112006.d
Lab Smp Id: VI VOC+PAH ICAL, L4
Analysis Type: VOA
Quant Type: ISTD
Operator: LA
Method File: /chem/msd11.i/20nov15.b/115z1120vi.m
Misc Info: 2516-201 (12/10/15);2595-248-25 (1/29/16)

Calibration Date: 20-NOV-2015
Calibration Time: 22:19
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
40 Bromochloromethan	61766	37060	86472	50942	-17.52
54 1,4-Difluorobenze	242319	145391	339247	203106	-16.18
79 Chlorobenzene-d5	224302	134581	314023	188412	-16.00
92 Bromofluorobenzen	161670	97002	226338	127184	-21.33

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
40 Bromochloromethan	6.80	6.47	7.13	6.80	0.00
54 1,4-Difluorobenze	8.19	7.86	8.52	8.19	0.00
79 Chlorobenzene-d5	11.60	11.27	11.93	11.59	0.00
92 Bromofluorobenzen	13.05	12.72	13.38	13.06	0.05

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

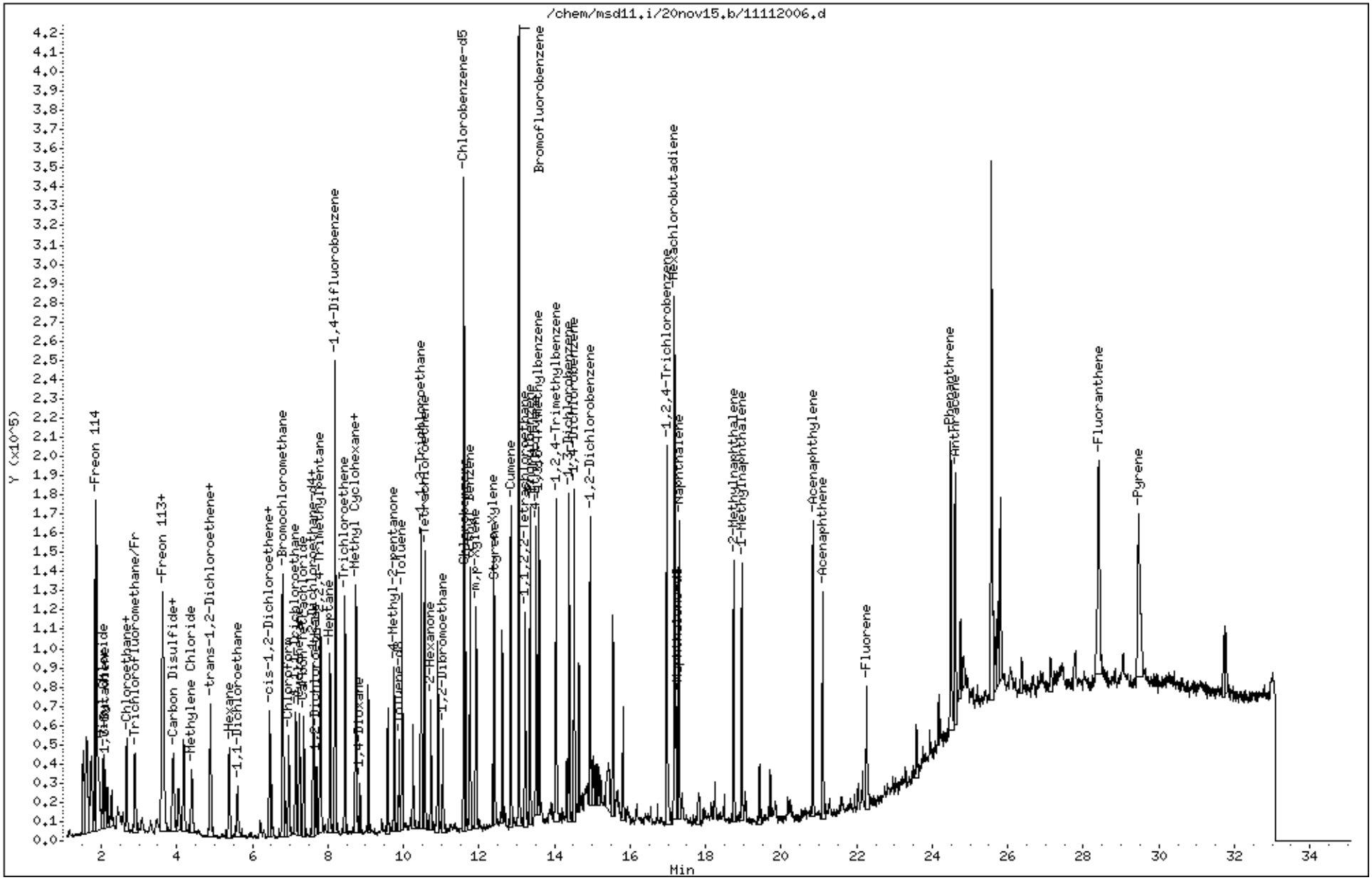
Data File: /chem/msd11.i/20nov15.b/11112006.d
Date : 20-NOV-2015 21:33
Client ID:
Sample Info: ;VI VOC+PAH ICAL, L4

Instrument: msd11.i

Operator: LA

Column phase: RTx-624

Column diameter: 0.53



Eurofins Air Toxics Inc.

EPA Method TO-17 GC/MS

Data file : /chem/msd11.i/20nov15.b/11112007.d
Lab Smp Id: VI VOC+PAH ICAL, L5
Inj Date : 20-NOV-2015 22:19
Operator : LA Inst ID: msd11.i
Smp Info : ;VI VOC+PAH ICAL, L5
Misc Info : 2516-201 (12/10/15);2595-248-50 (1/29/16)
Comment :
Method : /chem/msd11.i/20nov15.b/115z1120vi.m
Meth Date : 23-Nov-2015 12:13 lantonic Quant Type: ISTD
Cal Date : 20-NOV-2015 22:19 Cal File: 11112007.d
Als bottle: 15 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: VOC+PAH_ICAL.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO
* 40 Bromochloromethane					CAS #: 74-97-5		
6.796	6.796 (1.000)	130	61766	26.0000		80.00- 120.00	100.00
6.796	6.796 (1.000)	128	49078			49.46- 109.46	79.46
6.796	6.796 (1.000)	49	78147			96.52- 156.52	126.52
* 54 1,4-Difluorobenzene					CAS #: 540-36-3		
8.193	8.193 (1.000)	114	242319	23.0000		80.00- 120.00	100.00
8.193	8.193 (1.000)	88	34690			0.00- 44.32	14.32
* 79 Chlorobenzene-d5					CAS #: 3114-55-4		
11.595	11.595 (1.000)	117	224302	24.0000		80.00- 120.00	100.00
11.595	11.595 (1.000)	82	112321			20.08- 80.08	50.08
* 92 Bromofluorobenzene					CAS #: 460-00-4		
13.049	13.049 (1.000)	174	161670	36.0000		80.00- 120.00	100.00
13.049	13.049 (1.000)	95	159114			68.42- 128.42	98.42
13.049	13.049 (1.000)	176	153087			64.69- 124.69	94.69
$ 49 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
7.598	7.598 (0.927)	65	24715	25.0000	24.496	80.00- 120.00	100.00

RT	EXP RT	(REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO
$ 49 1,2-Dichloroethane-d4 (continued)								
7.598	7.598	(0.927)	67	13615			25.09- 85.09	55.09
$ 66 Toluene-d8						CAS #: 2037-26-5		
9.890	9.890	(0.853)	98	86666	25.0000	24.478	80.00- 120.00	100.00
9.890	9.890	(0.853)	70	9852			0.00- 41.37	11.37
9.890	9.890	(0.853)	100	55451			33.98- 93.98	63.98
$ 108 Naphthalene-d8						CAS #: 1146-65-2		
17.254	17.254	(1.322)	136	135665	25.0000	23.404	80.00- 120.00	100.00
17.254	17.254	(1.322)	108	11348			0.00- 38.36	8.36
3 Freon 114						CAS #: 76-14-2		
1.868	1.868	(0.275)	135	183695	140.000	138.22	80.00- 120.00	100.00
1.861	1.861	(0.274)	137	60516			2.94- 62.94	32.94
6 Vinyl Chloride						CAS #: 75-01-4		
2.061	2.061	(0.303)	62	70664	51.1000	51.298	80.00- 120.00	100.00
2.061	2.061	(0.303)	64	22377			1.67- 61.67	31.67
7 1,3-Butadiene						CAS #: 106-99-0		
2.097	2.097	(0.309)	54	47728	44.2000	40.673	80.00- 120.00	100.00
2.097	2.097	(0.309)	39	56789			88.98- 148.98	118.98
9 Chloroethane						CAS #: 75-00-3		
2.570	2.570	(0.378)	64	31241	52.8000	47.121	80.00- 120.00	100.00
2.570	2.570	(0.378)	66	10253			2.82- 62.82	32.82
2.570	2.570	(0.378)	49	9723			1.12- 61.12	31.12
10 Isopentane						CAS #: 78-78-4		
2.670	2.670	(0.393)	57	50856	59.0000	49.578	80.00- 120.00	100.00
2.670	2.670	(0.393)	43	79267			125.87- 185.87	155.87
11 Trichlorofluoromethane/Fr11						CAS #: 75-69-4		
2.892	2.892	(0.426)	101	192277	112.000	113.17	80.00- 120.00	100.00
2.892	2.892	(0.426)	103	124907			34.96- 94.96	64.96
15 Freon 113						CAS #: 76-13-1		
3.637	3.637	(0.535)	151	146809	153.000	151.40	80.00- 120.00	100.00
3.637	3.637	(0.535)	153	95571			35.10- 95.10	65.10
3.630	3.630	(0.534)	101	167420			84.04- 144.04	114.04
14 1,1-Dichloroethene						CAS #: 75-35-4		
3.601	3.601	(0.530)	98	50326	79.3000	74.849	80.00- 120.00	100.00
3.601	3.601	(0.530)	96	78535			126.05- 186.05	156.05
3.601	3.601	(0.530)	61	127741			223.83- 283.83	253.83

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO
18 Carbon Disulfide					CAS #: 75-15-0		
3.909	3.909 (0.575)	76	222171	62.3000	55.180	80.00- 120.00	100.00
19 2-Propanol					CAS #: 67-63-0		
3.873	3.873 (0.570)	45	122300	49.2000	45.575	80.00- 120.00	100.00(a)
3.866	3.866 (0.569)	43	24733			0.00- 50.22	20.22
3.888	3.888 (0.572)	59	4534			0.00- 33.71	3.71
22 Methylene Chloride					CAS #: 75-09-2		
4.396	4.396 (0.647)	49	97653	69.5000	62.367	80.00- 120.00	100.00
4.396	4.396 (0.647)	84	69383			41.05- 101.05	71.05
4.403	4.403 (0.648)	51	29747			0.46- 60.46	30.46
25 trans-1,2-Dichloroethene					CAS #: 156-60-5		
4.898	4.898 (0.721)	98	49087	79.3000	77.462	80.00- 120.00	100.00
4.898	4.898 (0.721)	61	108337			190.70- 250.70	220.70
4.891	4.891 (0.720)	96	76757			126.37- 186.37	156.37
26 MTBE					CAS #: 1634-04-4		
4.891	4.891 (0.720)	73	184982	72.1000	74.889	80.00- 120.00	100.00
4.883	4.883 (0.719)	57	43466			0.00- 53.50	23.50
4.891	4.891 (0.720)	41	44846			0.00- 54.24	24.24
28 Hexane					CAS #: 110-54-3		
5.385	5.385 (0.792)	57	110198	70.5000	67.103	80.00- 120.00	100.00
5.392	5.392 (0.793)	43	74612			37.71- 97.71	67.71
5.392	5.392 (0.793)	86	17447			0.00- 45.83	15.83
29 1,1-Dichloroethane					CAS #: 75-34-3		
5.607	5.607 (0.825)	63	136566	81.0000	82.697	80.00- 120.00	100.00
5.607	5.607 (0.825)	65	42956			1.45- 61.45	31.45
37 cis-1,2-Dichloroethene					CAS #: 156-59-2		
6.466	6.466 (0.952)	98	55289	79.3000	79.935	80.00- 120.00	100.00
6.466	6.466 (0.952)	96	86725			126.86- 186.86	156.86
6.466	6.466 (0.952)	61	111450			171.58- 231.58	201.58
38 2-Butanone					CAS #: 78-93-3		
6.452	6.452 (0.949)	72	33454	59.0000	55.078	80.00- 120.00	100.00(a)
6.452	6.452 (0.949)	43	150487			419.83- 479.83	449.83
6.452	6.452 (0.949)	57	10823			2.35- 62.35	32.35
44 Chloroform					CAS #: 67-66-3		
6.961	6.961 (1.024)	83	164260	97.7000	98.628	80.00- 120.00	100.00
6.961	6.961 (1.024)	85	106969			35.12- 95.12	65.12

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO
46 Cyclohexane					CAS #: 110-82-7		
7.254	7.254 (0.885)	84	103025	68.8000	66.701	80.00- 120.00	100.00
7.247	7.247 (0.885)	56	125220			91.54- 151.54	121.54
7.254	7.254 (0.885)	41	79163			46.84- 106.84	76.84
45 1,1,1-Trichloroethane					CAS #: 71-55-6		
7.154	7.154 (0.873)	97	159079	109.000	113.30	80.00- 120.00	100.00
7.154	7.154 (0.873)	99	103556			35.10- 95.10	65.10
47 Carbon Tetrachloride					CAS #: 56-23-5		
7.362	7.362 (0.899)	119	162693	126.000	129.65	80.00- 120.00	100.00
7.362	7.362 (0.899)	117	168756			73.73- 133.73	103.73
51 2,2,4-Trimethylpentane					CAS #: 540-84-1		
7.806	7.806 (0.953)	57	409703	93.4000	90.930	80.00- 120.00	100.00
7.806	7.806 (0.953)	56	131031			1.98- 61.98	31.98
7.806	7.806 (0.953)	41	126764			0.94- 60.94	30.94
48 Benzene					CAS #: 71-43-2		
7.612	7.612 (0.929)	78	239840	63.9000	59.257	80.00- 120.00	100.00
7.612	7.612 (0.929)	77	55761			0.00- 53.25	23.25
50 1,2-Dichloroethane					CAS #: 107-06-2		
7.691	7.691 (0.939)	62	109884	80.9000	80.616	80.00- 120.00	100.00
7.691	7.691 (0.939)	64	34956			1.81- 61.81	31.81
53 Heptane					CAS #: 142-82-5		
8.057	8.057 (0.983)	71	86433	82.0000	80.252	80.00- 120.00	100.00
8.057	8.057 (0.983)	43	161470			156.82- 216.82	186.82
8.057	8.057 (0.983)	57	83423			66.52- 126.52	96.52
56 Trichloroethene					CAS #: 79-01-6		
8.458	8.458 (1.032)	95	120010	108.000	95.012	80.00- 120.00	100.00
8.458	8.458 (1.032)	130	134623			82.18- 142.18	112.18
8.458	8.458 (1.032)	97	78553			35.46- 95.46	65.46
58 Methyl Cyclohexane					CAS #: 108-87-2		
8.730	8.730 (1.066)	83	157293	80.3000	79.196	80.00- 120.00	100.00
8.737	8.737 (1.066)	98	73769			16.90- 76.90	46.90
8.730	8.730 (1.066)	55	129570			52.37- 112.37	82.37
59 1,2-Dichloropropane					CAS #: 78-87-5		
8.751	8.751 (1.068)	63	105012	92.4000	93.448	80.00- 120.00	100.00
8.751	8.751 (1.068)	62	71441			38.03- 98.03	68.03
8.744	8.744 (1.067)	41	142507			105.71- 165.71	135.71

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO
60 1,4-Dioxane					CAS #: 123-91-1		
8.844	8.844 (1.080)	88	63614	72.1000	67.769	80.00- 120.00	100.00
8.844	8.844 (1.080)	58	43244			37.98- 97.98	67.98
8.844	8.844 (1.080)	57	15798			0.00- 54.83	24.83
65 4-Methyl-2-pentanone					CAS #: 108-10-1		
9.754	9.754 (1.191)	58	84022	81.9000	86.252	80.00- 120.00	100.00
9.754	9.754 (1.191)	43	239153			254.63- 314.63	284.63
9.754	9.754 (1.191)	85	32551			8.74- 68.74	38.74
67 Toluene					CAS #: 108-88-3		
9.969	9.969 (0.860)	91	311491	75.4000	72.526	80.00- 120.00	100.00
9.969	9.969 (0.860)	92	184565			29.25- 89.25	59.25
70 1,1,2-Trichloroethane					CAS #: 79-00-5		
10.470	10.470 (1.278)	97	110259	109.000	105.39	80.00- 120.00	100.00
10.470	10.470 (1.278)	99	70890			34.29- 94.29	64.29
10.470	10.470 (1.278)	83	96724			57.72- 117.72	87.72
71 Tetrachloroethene					CAS #: 127-18-4		
10.564	10.564 (0.911)	166	168914	136.000	135.19	80.00- 120.00	100.00
10.564	10.564 (0.911)	129	121269			41.79- 101.79	71.79
10.564	10.564 (0.911)	131	115385			38.31- 98.31	68.31
72 2-Hexanone					CAS #: 591-78-6		
10.721	10.721 (0.925)	58	106642	81.9000	90.713	80.00- 120.00	100.00
10.721	10.721 (0.925)	43	225863			181.80- 241.80	211.80
10.721	10.721 (0.925)	100	18670			0.00- 47.51	17.51
74 1,2-Dibromoethane					CAS #: 106-93-4		
11.036	11.036 (0.952)	107	171837	154.000	166.52	80.00- 120.00	100.00
11.036	11.036 (0.952)	109	162626			64.64- 124.64	94.64
81 Chlorobenzene					CAS #: 108-90-7		
11.631	11.631 (1.003)	112	270426	92.1000	92.512	80.00- 120.00	100.00
11.631	11.631 (1.003)	114	86016			1.81- 61.81	31.81
11.631	11.631 (1.003)	77	139964			21.76- 81.76	51.76
82 Ethyl Benzene					CAS #: 100-41-4		
11.760	11.760 (1.014)	106	135454	86.8000	89.788	80.00- 120.00	100.00
11.760	11.760 (1.014)	91	398212			263.98- 323.98	293.98
84 m,p-Xylene					CAS #: 108-38-3		
11.925	11.925 (1.028)	106	166479	86.8000	87.722	80.00- 120.00	100.00
11.925	11.925 (1.028)	91	304211			152.73- 212.73	182.73

RT	EXP RT	(REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO
88 o-Xylene						CAS #: 95-47-6		
12.383	12.383	(0.949)	106	158919	86.8000	86.660	80.00- 120.00	100.00
12.383	12.383	(0.949)	91	307742			163.65- 223.65	193.65
89 Styrene						CAS #: 100-42-5		
12.412	12.412	(0.951)	104	253416	85.2000	86.510	80.00- 120.00	100.00
12.412	12.412	(0.951)	78	115576			15.61- 75.61	45.61
91 Cumene						CAS #: 98-82-8		
12.841	12.841	(0.984)	105	458127	98.3000	98.693	80.00- 120.00	100.00
12.841	12.841	(0.984)	120	133303			0.00- 59.10	29.10
12.841	12.841	(0.984)	51	48266			0.00- 40.54	10.54
94 1,1,2,2-Tetrachloroethane						CAS #: 79-34-5		
13.214	13.214	(1.013)	83	241729	137.000	154.19	80.00- 120.00	100.00
13.214	13.214	(1.013)	85	159107			35.82- 95.82	65.82
96 Propylbenzene						CAS #: 103-65-1		
13.357	13.357	(1.024)	91	534805	98.3000	99.724	80.00- 120.00	100.00
13.357	13.357	(1.024)	120	131887			0.00- 54.66	24.66
13.357	13.357	(1.024)	105	19308			0.00- 33.61	3.61
97 4-Ethyltoluene						CAS #: 622-96-8		
13.515	13.515	(1.036)	120	142889	98.3000	98.695	80.00- 120.00	100.00
13.508	13.508	(1.035)	105	436220			275.29- 335.29	305.29
98 1,3,5-Trimethylbenzene						CAS #: 108-67-8		
13.586	13.586	(1.041)	120	197995	98.3000	100.15	80.00- 120.00	100.00
13.586	13.586	(1.041)	105	371814			157.79- 217.79	187.79
100 1,2,4-Trimethylbenzene						CAS #: 95-63-6		
14.045	14.045	(1.076)	120	184667	98.3000	99.190	80.00- 120.00	100.00
14.045	14.045	(1.076)	105	368853			169.74- 229.74	199.74
101 1,3-Dichlorobenzene						CAS #: 541-73-1		
14.382	14.382	(1.102)	146	281816	120.000	120.29	80.00- 120.00	100.00
14.382	14.382	(1.102)	148	181261			34.32- 94.32	64.32
14.382	14.382	(1.102)	111	101294			5.94- 65.94	35.94
102 1,4-Dichlorobenzene						CAS #: 106-46-7		
14.518	14.518	(1.113)	146	277296	120.000	120.54	80.00- 120.00	100.00
14.518	14.518	(1.113)	148	181564			35.48- 95.48	65.48
14.510	14.510	(1.112)	111	99007			5.70- 65.70	35.70
105 1,2-Dichlorobenzene						CAS #: 95-50-1		
14.947	14.947	(1.145)	146	272140	120.000	121.07	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO
105 1,2-Dichlorobenzene (continued)							
14.947	14.947 (1.145)	148	174211			34.02- 94.02	64.02
14.940	14.940 (1.145)	111	101028			7.12- 67.12	37.12
106 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
16.975	16.975 (1.301)	180	248578	148.000	159.86	80.00- 120.00	100.00
16.975	16.975 (1.301)	182	237382			65.50- 125.50	95.50
107 Hexachlorobutadiene					CAS #: 87-68-3		
17.175	17.175 (1.316)	225	205261	213.000	229.54	80.00- 120.00	100.00
17.175	17.175 (1.316)	223	128049			32.38- 92.38	62.38
109 Naphthalene					CAS #: 91-20-3		
17.290	17.290 (1.325)	128	269667	50.0000	42.389	80.00- 120.00	100.00
17.290	17.290 (1.325)	127	35611			0.00- 43.21	13.21
110 2-Methylnaphthalene					CAS #: 91-57-6		
18.737	18.737 (1.436)	142	189694	50.0000	46.697	80.00- 120.00	100.00
18.737	18.737 (1.436)	141	164741			56.85- 116.85	86.85
18.737	18.737 (1.436)	115	56169			0.00- 59.61	29.61
111 1-Methylnaphthalene					CAS #: 90-12-0		
18.959	18.959 (1.453)	142	177713	50.0000	44.733	80.00- 120.00	100.00
18.959	18.959 (1.453)	141	156892			58.28- 118.28	88.28
18.966	18.966 (1.453)	115	55245			1.09- 61.09	31.09
112 Acenaphthylene					CAS #: 208-96-8		
20.835	20.835 (1.597)	152	310218	50.0000	48.485	80.00- 120.00	100.00
20.835	20.835 (1.597)	151	63635			0.00- 50.51	20.51
20.835	20.835 (1.597)	153	40554			0.00- 43.07	13.07
113 Acenaphthene					CAS #: 83-32-9		
21.100	21.100 (1.617)	154	168492	50.0000	55.567	80.00- 120.00	100.00
21.100	21.100 (1.617)	152	89398			23.06- 83.06	53.06
21.100	21.100 (1.617)	153	189232			82.31- 142.31	112.31
114 Fluorene					CAS #: 86-73-7		
22.268	22.268 (1.706)	166	200271	50.0000	66.707	80.00- 120.00	100.00
22.268	22.268 (1.706)	165	190857			65.30- 125.30	95.30
115 Phenanthrene					CAS #: 85-01-8		
24.489	24.489 (1.877)	178	375380	50.0000	49.244	80.00- 120.00	100.00
24.489	24.489 (1.877)	176	69086			0.00- 48.40	18.40
24.489	24.489 (1.877)	179	56123			0.00- 44.95	14.95
116 Anthracene					CAS #: 120-12-7		
24.610	24.610 (1.886)	178	390684	50.0000	49.008	80.00- 120.00	100.00

RT	EXP RT	(REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO
116 Anthracene (continued)								
24.610	24.610	(1.886)	176	68970			0.00- 47.65	17.65
24.603	24.603	(1.885)	179	52995			0.00- 43.56	13.56
117 Fluoranthene						CAS #: 206-44-0		
28.407	28.407	(2.177)	202	509948	50.0000	70.615	80.00- 120.00	100.00
28.400	28.400	(2.176)	101	62776			0.00- 42.31	12.31
118 Pyrene						CAS #: 129-00-0		
29.460	29.460	(2.258)	202	545839	50.0000	69.309	80.00- 120.00	100.00
29.453	29.453	(2.257)	101	77927			0.00- 44.28	14.28
29.460	29.460	(2.258)	100	63660			0.00- 41.66	11.66

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd11.i
Lab File ID: 11112007.d
Lab Smp Id: VI VOC+PAH ICAL, L5
Analysis Type: VOA
Quant Type: ISTD
Operator: LA
Method File: /chem/msd11.i/20nov15.b/115z1120vi.m
Misc Info: 2516-201 (12/10/15);2595-248-50 (1/29/16)

Calibration Date: 20-NOV-2015
Calibration Time: 22:19
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
40 Bromochloromethan	61766	37060	86472	61766	0.00
54 1,4-Difluorobenze	242319	145391	339247	242319	0.00
79 Chlorobenzene-d5	224302	134581	314023	224302	0.00
92 Bromofluorobenzen	161670	97002	226338	161670	0.00

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
40 Bromochloromethan	6.80	6.47	7.13	6.80	0.00
54 1,4-Difluorobenze	8.19	7.86	8.52	8.19	0.00
79 Chlorobenzene-d5	11.60	11.27	11.93	11.60	0.00
92 Bromofluorobenzen	13.05	12.72	13.38	13.05	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msd11.i/20nov15.b/11112007.d

Date : 20-NOV-2015 22:19

Client ID:

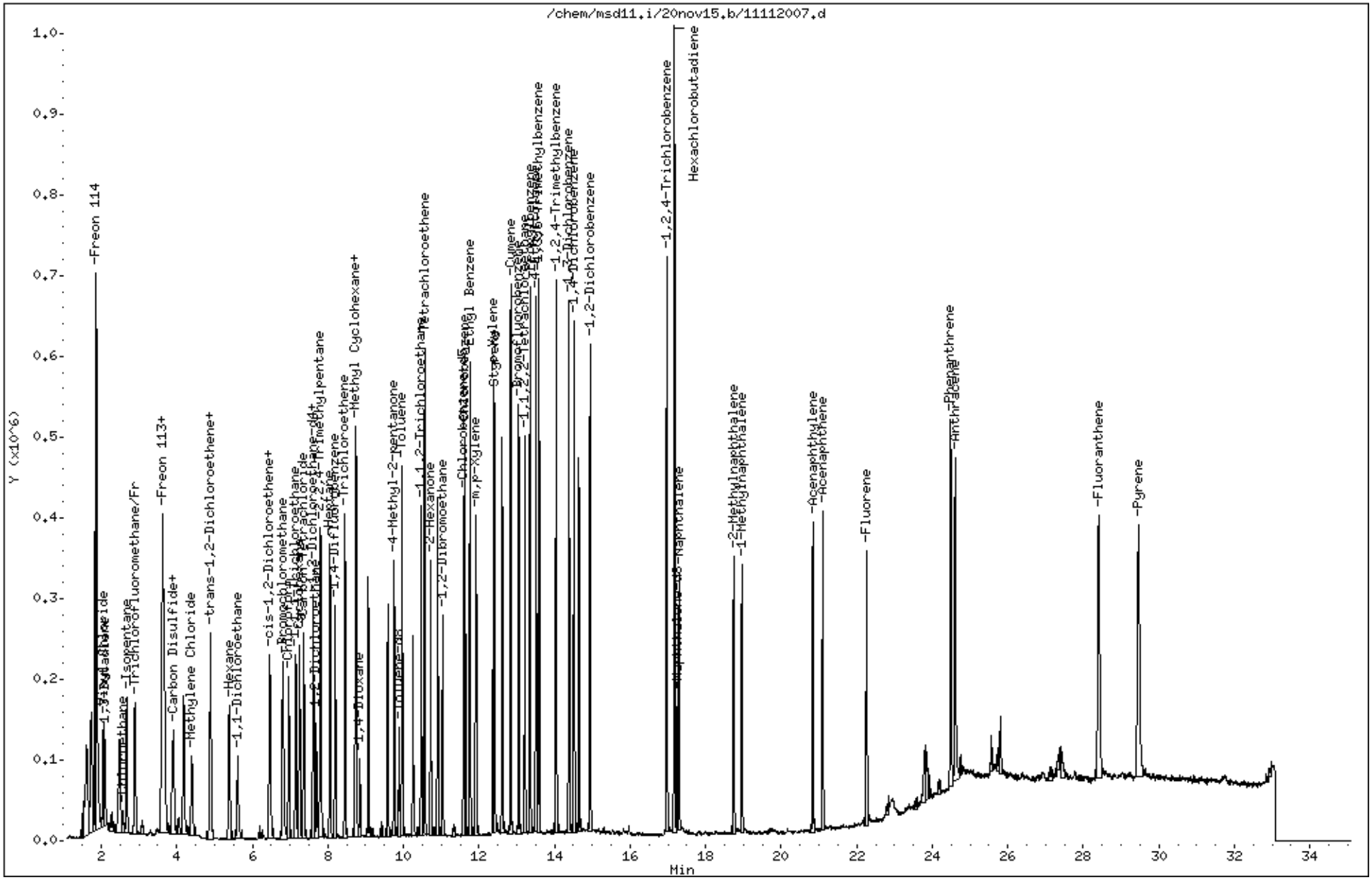
Sample Info: ;VI VOC+PAH ICAL, L5

Column phase: RTx-624

Instrument: msd11.i

Operator: LA

Column diameter: 0.53



Eurofins Air Toxics Inc.

EPA Method TO-17 GC/MS

Data file : /chem/msd11.i/20nov15.b/11112008.d
Lab Smp Id: VI VOC+PAH ICAL, L6
Inj Date : 20-NOV-2015 23:06
Operator : LA Inst ID: msd11.i
Smp Info : ;VI VOC+PAH ICAL, L6
Misc Info : 2516-201 (12/10/15);2595-248-100 (1/29/16)
Comment :
Method : /chem/msd11.i/20nov15.b/115z1120vi.m
Meth Date : 23-Nov-2015 10:01 lantonic Quant Type: ISTD
Cal Date : 20-NOV-2015 23:06 Cal File: 11112008.d
Als bottle: 16 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: VOC+PAH_ICAL.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO
* 40 Bromochloromethane					CAS #: 74-97-5		
6.796	6.796 (1.000)	130	60534	26.0000		80.00- 120.00	100.00
6.796	6.796 (1.000)	128	48296			49.46- 109.46	79.78
6.796	6.796 (1.000)	49	76994			96.52- 156.52	127.19
* 54 1,4-Difluorobenzene					CAS #: 540-36-3		
8.193	8.193 (1.000)	114	237757	23.0000		80.00- 120.00	100.00
8.193	8.193 (1.000)	88	33427			0.00- 44.32	14.06
* 79 Chlorobenzene-d5					CAS #: 3114-55-4		
11.595	11.595 (1.000)	117	221131	24.0000		80.00- 120.00	100.00
11.595	11.595 (1.000)	82	108398			20.08- 80.08	49.02
* 92 Bromofluorobenzene					CAS #: 460-00-4		
13.049	13.049 (1.000)	174	160938	36.0000		80.00- 120.00	100.00
13.049	13.049 (1.000)	95	157819			68.42- 128.42	98.06
13.049	13.049 (1.000)	176	155251			64.69- 124.69	96.47
$ 49 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
7.598	7.598 (0.927)	65	50295	50.0000	50.806	80.00- 120.00	100.00

RT	EXP RT	(REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO
$ 49 1,2-Dichloroethane-d4 (continued)								
7.591	7.591	(0.927)	67	27516			25.09- 85.09	54.71
$ 66 Toluene-d8						CAS #: 2037-26-5		
9.890	9.890	(0.853)	98	177864	50.0000	50.956	80.00- 120.00	100.00
9.890	9.890	(0.853)	70	17368			0.00- 41.37	9.76
9.890	9.890	(0.853)	100	111111			33.98- 93.98	62.47
$ 108 Naphthalene-d8						CAS #: 1146-65-2		
17.254	17.254	(1.322)	136	285328	50.0000	49.446	80.00- 120.00	100.00
17.254	17.254	(1.322)	108	23924			0.00- 38.36	8.38
3 Freon 114						CAS #: 76-14-2		
1.868	1.868	(0.275)	135	451694	350.000	346.80	80.00- 120.00	100.00
1.868	1.868	(0.275)	137	146299			2.94- 62.94	32.39
6 Vinyl Chloride						CAS #: 75-01-4		
2.061	2.061	(0.303)	62	176916	128.000	131.04	80.00- 120.00	100.00
2.061	2.061	(0.303)	64	56526			1.67- 61.67	31.95
7 1,3-Butadiene						CAS #: 106-99-0		
2.097	2.097	(0.309)	54	121305	111.000	105.48	80.00- 120.00	100.00
2.097	2.097	(0.309)	39	142703			88.98- 148.98	117.64
9 Chloroethane						CAS #: 75-00-3		
2.570	2.570	(0.378)	64	82366	132.000	126.76	80.00- 120.00	100.00
2.570	2.570	(0.378)	66	25641			2.82- 62.82	31.13
2.570	2.570	(0.378)	49	24401			1.12- 61.12	29.63
10 Isopentane						CAS #: 78-78-4		
2.677	2.677	(0.394)	57	131968	148.000	131.27	80.00- 120.00	100.00
2.670	2.670	(0.393)	43	199839			125.87- 185.87	151.43
11 Trichlorofluoromethane/Fr11						CAS #: 75-69-4		
2.892	2.892	(0.426)	101	481653	281.000	289.26	80.00- 120.00	100.00
2.892	2.892	(0.426)	103	312980			34.96- 94.96	64.98
15 Freon 113						CAS #: 76-13-1		
3.637	3.637	(0.535)	151	373059	383.000	392.55	80.00- 120.00	100.00
3.630	3.630	(0.534)	153	241410			35.10- 95.10	64.71
3.630	3.630	(0.534)	101	415667			84.04- 144.04	111.42
14 1,1-Dichloroethene						CAS #: 75-35-4		
3.601	3.601	(0.530)	98	123288	198.000	187.10	80.00- 120.00	100.00
3.601	3.601	(0.530)	96	195440			126.05- 186.05	158.52
3.601	3.601	(0.530)	61	320730			223.83- 283.83	260.15

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO
18 Carbon Disulfide					CAS #: 75-15-0		
3.909	3.909 (0.575)	76	536055	156.000	135.85	80.00- 120.00	100.00
19 2-Propanol					CAS #: 67-63-0		
3.873	3.873 (0.570)	45	309456	123.000	117.66	80.00- 120.00	100.00
3.866	3.866 (0.569)	43	60907			0.00- 50.22	19.68
3.881	3.881 (0.571)	59	11598			0.00- 33.71	3.75
22 Methylene Chloride					CAS #: 75-09-2		
4.403	4.403 (0.648)	49	229071	174.000	149.28	80.00- 120.00	100.00
4.396	4.396 (0.647)	84	166010			41.05- 101.05	72.47
4.403	4.403 (0.648)	51	70147			0.46- 60.46	30.62
25 trans-1,2-Dichloroethene					CAS #: 156-60-5		
4.898	4.898 (0.721)	98	123271	198.000	198.49	80.00- 120.00	100.00
4.898	4.898 (0.721)	61	269571			190.70- 250.70	218.68
4.898	4.898 (0.721)	96	190170			126.37- 186.37	154.27
26 MTBE					CAS #: 1634-04-4		
4.891	4.891 (0.720)	73	461901	180.000	190.80	80.00- 120.00	100.00
4.891	4.891 (0.720)	57	108612			0.00- 53.50	23.51
4.891	4.891 (0.720)	41	107959			0.00- 54.24	23.37
28 Hexane					CAS #: 110-54-3		
5.385	5.385 (0.792)	57	279489	176.000	173.65	80.00- 120.00	100.00
5.385	5.385 (0.792)	43	187279			37.71- 97.71	67.01
5.385	5.385 (0.792)	86	43794			0.00- 45.83	15.67
29 1,1-Dichloroethane					CAS #: 75-34-3		
5.614	5.614 (0.826)	63	335107	202.000	207.05	80.00- 120.00	100.00
5.607	5.607 (0.825)	65	107358			1.45- 61.45	32.04
37 cis-1,2-Dichloroethene					CAS #: 156-59-2		
6.466	6.466 (0.952)	98	138128	198.000	203.76	80.00- 120.00	100.00
6.466	6.466 (0.952)	96	214700			126.86- 186.86	155.44
6.466	6.466 (0.952)	61	281256			171.58- 231.58	203.62
38 2-Butanone					CAS #: 78-93-3		
6.452	6.452 (0.949)	72	87866	147.000	147.61	80.00- 120.00	100.00
6.445	6.445 (0.948)	43	392712			419.83- 479.83	446.94
6.445	6.445 (0.948)	57	30072			2.35- 62.35	34.22
44 Chloroform					CAS #: 67-66-3		
6.961	6.961 (1.024)	83	402651	244.000	246.69	80.00- 120.00	100.00
6.961	6.961 (1.024)	85	261879			35.12- 95.12	65.04

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO
46 Cyclohexane					CAS #: 110-82-7		
7.254	7.254 (0.885)	84	248714	172.000	164.11	80.00- 120.00	100.00
7.254	7.254 (0.885)	56	302310			91.54- 151.54	121.55
7.247	7.247 (0.885)	41	192259			46.84- 106.84	77.30
45 1,1,1-Trichloroethane					CAS #: 71-55-6		
7.154	7.154 (0.873)	97	396977	273.000	288.17	80.00- 120.00	100.00
7.154	7.154 (0.873)	99	255909			35.10- 95.10	64.46
47 Carbon Tetrachloride					CAS #: 56-23-5		
7.362	7.362 (0.899)	119	425282	315.000	345.41	80.00- 120.00	100.00
7.362	7.362 (0.899)	117	441206			73.73- 133.73	103.74
51 2,2,4-Trimethylpentane					CAS #: 540-84-1		
7.806	7.806 (0.953)	57	1019493	234.000	230.61	80.00- 120.00	100.00
7.806	7.806 (0.953)	56	332263			1.98- 61.98	32.59
7.806	7.806 (0.953)	41	313394			0.94- 60.94	30.74
48 Benzene					CAS #: 71-43-2		
7.612	7.612 (0.929)	78	592392	160.000	149.17	80.00- 120.00	100.00
7.612	7.612 (0.929)	77	138350			0.00- 53.25	23.35
50 1,2-Dichloroethane					CAS #: 107-06-2		
7.691	7.691 (0.939)	62	273365	202.000	204.40	80.00- 120.00	100.00
7.691	7.691 (0.939)	64	86831			1.81- 61.81	31.76
53 Heptane					CAS #: 142-82-5		
8.057	8.057 (0.983)	71	213481	205.000	202.02	80.00- 120.00	100.00
8.057	8.057 (0.983)	43	408276			156.82- 216.82	191.25
8.057	8.057 (0.983)	57	206611			66.52- 126.52	96.78
56 Trichloroethene					CAS #: 79-01-6		
8.458	8.458 (1.032)	95	306980	269.000	247.70	80.00- 120.00	100.00
8.458	8.458 (1.032)	130	343944			82.18- 142.18	112.04
8.458	8.458 (1.032)	97	200665			35.46- 95.46	65.37
58 Methyl Cyclohexane					CAS #: 108-87-2		
8.737	8.737 (1.066)	83	391844	201.000	201.08	80.00- 120.00	100.00
8.737	8.737 (1.066)	98	180698			16.90- 76.90	46.11
8.730	8.730 (1.066)	55	320602			52.37- 112.37	81.82
59 1,2-Dichloropropane					CAS #: 78-87-5		
8.751	8.751 (1.068)	63	260675	231.000	236.42	80.00- 120.00	100.00
8.751	8.751 (1.068)	62	186558			38.03- 98.03	71.57
8.744	8.744 (1.067)	41	362399			105.71- 165.71	139.02

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO
60 1,4-Dioxane					CAS #: 123-91-1		
8.845	8.845 (1.080)	88	156802	180.000	170.25	80.00- 120.00	100.00
8.845	8.845 (1.080)	58	109095			37.98- 97.98	69.58
8.845	8.845 (1.080)	57	38585			0.00- 54.83	24.61
65 4-Methyl-2-pentanone					CAS #: 108-10-1		
9.754	9.754 (1.191)	58	203401	205.000	212.80	80.00- 120.00	100.00
9.754	9.754 (1.191)	43	589921			254.63- 314.63	290.03
9.754	9.754 (1.191)	85	81135			8.74- 68.74	39.89
67 Toluene					CAS #: 108-88-3		
9.969	9.969 (0.860)	91	775874	188.000	183.24	80.00- 120.00	100.00
9.969	9.969 (0.860)	92	447649			29.25- 89.25	57.70
70 1,1,2-Trichloroethane					CAS #: 79-00-5		
10.471	10.471 (1.278)	97	277059	273.000	269.90	80.00- 120.00	100.00
10.471	10.471 (1.278)	99	176627			34.29- 94.29	63.75
10.471	10.471 (1.278)	83	239781			57.72- 117.72	86.55
71 Tetrachloroethene					CAS #: 127-18-4		
10.564	10.564 (0.911)	166	420673	339.000	341.52	80.00- 120.00	100.00
10.564	10.564 (0.911)	129	302470			41.79- 101.79	71.90
10.564	10.564 (0.911)	131	294802			38.31- 98.31	70.08
72 2-Hexanone					CAS #: 591-78-6		
10.721	10.721 (0.925)	58	256452	205.000	221.27	80.00- 120.00	100.00
10.721	10.721 (0.925)	43	550880			181.80- 241.80	214.81
10.721	10.721 (0.925)	100	45549			0.00- 47.51	17.76
74 1,2-Dibromoethane					CAS #: 106-93-4		
11.036	11.036 (0.952)	107	422857	384.000	415.66	80.00- 120.00	100.00
11.036	11.036 (0.952)	109	402390			64.64- 124.64	95.16
81 Chlorobenzene					CAS #: 108-90-7		
11.631	11.631 (1.003)	112	671541	230.000	233.03	80.00- 120.00	100.00
11.631	11.631 (1.003)	114	217474			1.81- 61.81	32.38
11.631	11.631 (1.003)	77	343058			21.76- 81.76	51.09
82 Ethyl Benzene					CAS #: 100-41-4		
11.760	11.760 (1.014)	106	331850	217.000	223.13	80.00- 120.00	100.00
11.760	11.760 (1.014)	91	984449			263.98- 323.98	296.65
84 m,p-Xylene					CAS #: 108-38-3		
11.925	11.925 (1.028)	106	402906	217.000	215.35	80.00- 120.00	100.00
11.925	11.925 (1.028)	91	757029			152.73- 212.73	187.89

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                                          AMOUNTS
                                       CAL-AMT   ON-COL
   RT   EXP RT (REL RT)  MASS  RESPONSE (   ng)  (   ng)   TARGET RANGE    RATIO
   ==   ====== ========  ====  ======== =======  =======   ============    =====

   88 o-Xylene                                          CAS #: 95-47-6
 12.383  12.383 (0.949)   106    397868 217.000   217.95  80.00- 120.00   100.00
 12.383  12.383 (0.949)    91    780160                  163.65- 223.65   196.09
-------------------------------------------------------------------------------
   89 Styrene                                           CAS #: 100-42-5
 12.412  12.412 (0.951)   104    638585 213.000   218.99  80.00- 120.00   100.00
 12.405  12.405 (0.951)    78    289469                   15.61-  75.61    45.33
-------------------------------------------------------------------------------
   91 Cumene                                            CAS #: 98-82-8
 12.841  12.841 (0.984)   105   1164878 246.000   252.09  80.00- 120.00   100.00
 12.841  12.841 (0.984)   120    333801                    0.00-  59.10    28.66
 12.841  12.841 (0.984)    51    120613                    0.00-  40.54    10.35
-------------------------------------------------------------------------------
   94 1,1,2,2-Tetrachloroethane                         CAS #: 79-34-5
 13.214  13.214 (1.013)    83    602483 343.000   386.04  80.00- 120.00   100.00
 13.214  13.214 (1.013)    85    398042                   35.82-  95.82    66.07
-------------------------------------------------------------------------------
   96 Propylbenzene                                     CAS #: 103-65-1
 13.357  13.357 (1.024)    91   1355253 246.000   253.86  80.00- 120.00   100.00
 13.357  13.357 (1.024)   120    341629                    0.00-  54.66    25.21
 13.357  13.357 (1.024)   105     50779                    0.00-  33.61     3.75
-------------------------------------------------------------------------------
   97 4-Ethyltoluene                                    CAS #: 622-96-8
 13.515  13.515 (1.036)   120    360577 246.000   250.19  80.00- 120.00   100.00
 13.515  13.515 (1.036)   105   1118028                  275.29- 335.29   310.07
-------------------------------------------------------------------------------
   98 1,3,5-Trimethylbenzene                            CAS #: 108-67-8
 13.586  13.586 (1.041)   120    495416 246.000   251.74  80.00- 120.00   100.00
 13.586  13.586 (1.041)   105    943584                  157.79- 217.79   190.46
-------------------------------------------------------------------------------
  100 1,2,4-Trimethylbenzene                            CAS #: 95-63-6
 14.045  14.045 (1.076)   120    475205 246.000   256.41  80.00- 120.00   100.00
 14.045  14.045 (1.076)   105    966509                  169.74- 229.74   203.39
-------------------------------------------------------------------------------
  101 1,3-Dichlorobenzene                               CAS #: 541-73-1
 14.382  14.382 (1.102)   146    739895 301.000   317.25  80.00- 120.00   100.00
 14.382  14.382 (1.102)   148    474227                   34.32-  94.32    64.09
 14.382  14.382 (1.102)   111    276164                    5.94-  65.94    37.32
-------------------------------------------------------------------------------
  102 1,4-Dichlorobenzene                               CAS #: 106-46-7
 14.518  14.518 (1.113)   146    739151 301.000   322.78  80.00- 120.00   100.00
 14.518  14.518 (1.113)   148    473685                   35.48-  95.48    64.09
 14.510  14.510 (1.112)   111    260273                    5.70-  65.70    35.21
-------------------------------------------------------------------------------
  105 1,2-Dichlorobenzene                               CAS #: 95-50-1
 14.940  14.940 (1.145)   146    696563 301.000   311.30  80.00- 120.00   100.00
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RT	EXP RT	(REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO
105 1,2-Dichlorobenzene (continued)								
14.940	14.940	(1.145)	148	451299			34.02- 94.02	64.79
14.940	14.940	(1.145)	111	266700			7.12- 67.12	38.29
106 1,2,4-Trichlorobenzene						CAS #: 120-82-1		
16.975	16.975	(1.301)	180	661322	371.000	427.24	80.00- 120.00	100.00
16.975	16.975	(1.301)	182	627658			65.50- 125.50	94.91
107 Hexachlorobutadiene						CAS #: 87-68-3		
17.175	17.175	(1.316)	225	533939	533.000	599.80	80.00- 120.00	100.00
17.175	17.175	(1.316)	223	336136			32.38- 92.38	62.95
109 Naphthalene						CAS #: 91-20-3		
17.290	17.290	(1.325)	128	553705	100.000	87.432	80.00- 120.00	100.00
17.290	17.290	(1.325)	127	69499			0.00- 43.21	12.55
110 2-Methylnaphthalene						CAS #: 91-57-6		
18.737	18.737	(1.436)	142	368961	100.000	91.241	80.00- 120.00	100.00
18.744	18.744	(1.436)	141	316776			56.85- 116.85	85.86
18.737	18.737	(1.436)	115	109328			0.00- 59.61	29.63
111 1-Methylnaphthalene						CAS #: 90-12-0		
18.959	18.959	(1.453)	142	345461	100.000	87.353	80.00- 120.00	100.00
18.959	18.959	(1.453)	141	307836			58.28- 118.28	89.11
18.959	18.959	(1.453)	115	107864			1.09- 61.09	31.22
112 Acenaphthylene						CAS #: 208-96-8		
20.835	20.835	(1.597)	152	587328	100.000	92.214	80.00- 120.00	100.00
20.835	20.835	(1.597)	151	117050			0.00- 50.51	19.93
20.835	20.835	(1.597)	153	75562			0.00- 43.07	12.87
113 Acenaphthene						CAS #: 83-32-9		
21.100	21.100	(1.617)	154	322121	100.000	106.71	80.00- 120.00	100.00
21.100	21.100	(1.617)	152	169773			23.06- 83.06	52.70
21.100	21.100	(1.617)	153	351231			82.31- 142.31	109.04
114 Fluorene						CAS #: 86-73-7		
22.268	22.268	(1.706)	166	330232	100.000	110.49	80.00- 120.00	100.00
22.268	22.268	(1.706)	165	312834			65.30- 125.30	94.73
115 Phenanthrene						CAS #: 85-01-8		
24.489	24.489	(1.877)	178	707389	100.000	93.222	80.00- 120.00	100.00
24.489	24.489	(1.877)	176	136444			0.00- 48.40	19.29
24.489	24.489	(1.877)	179	106133			0.00- 44.95	15.00
116 Anthracene						CAS #: 120-12-7		
24.610	24.610	(1.886)	178	772101	100.000	97.293	80.00- 120.00	100.00

RT	EXP RT	(REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO
116 Anthracene (continued)								
24.610	24.610	(1.886)	176	137222			0.00- 47.65	17.77
24.603	24.603	(1.885)	179	115906			0.00- 43.56	15.01
117 Fluoranthene						CAS #: 206-44-0		
28.407	28.407	(2.177)	202	685184	100.000	95.313	80.00- 120.00	100.00
28.400	28.400	(2.176)	101	82944			0.00- 42.31	12.11
118 Pyrene						CAS #: 129-00-0		
29.460	29.460	(2.258)	202	774335	100.000	98.770	80.00- 120.00	100.00
29.460	29.460	(2.258)	101	110100			0.00- 44.28	14.22
29.460	29.460	(2.258)	100	91539			0.00- 41.66	11.82

Report Date: 23-Nov-2015 10:01

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd11.i
Lab File ID: 11112008.d
Lab Smp Id: VI VOC+PAH ICAL, L6
Analysis Type: VOA
Quant Type: ISTD
Operator: LA
Method File: /chem/msd11.i/20nov15.b/115z1120vi.m
Misc Info: 2516-201 (12/10/15);2595-248-100 (1/29/16)

Calibration Date: 20-NOV-2015
Calibration Time: 22:19
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
40 Bromochloromethan	61766	37060	86472	60534	-1.99
54 1,4-Difluorobenze	242319	145391	339247	237757	-1.88
79 Chlorobenzene-d5	224302	134581	314023	221131	-1.41
92 Bromofluorobenzen	161670	97002	226338	160938	-0.45

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
40 Bromochloromethan	6.80	6.47	7.13	6.80	0.00
54 1,4-Difluorobenze	8.19	7.86	8.52	8.19	0.00
79 Chlorobenzene-d5	11.60	11.27	11.93	11.60	0.00
92 Bromofluorobenzen	13.05	12.72	13.38	13.05	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

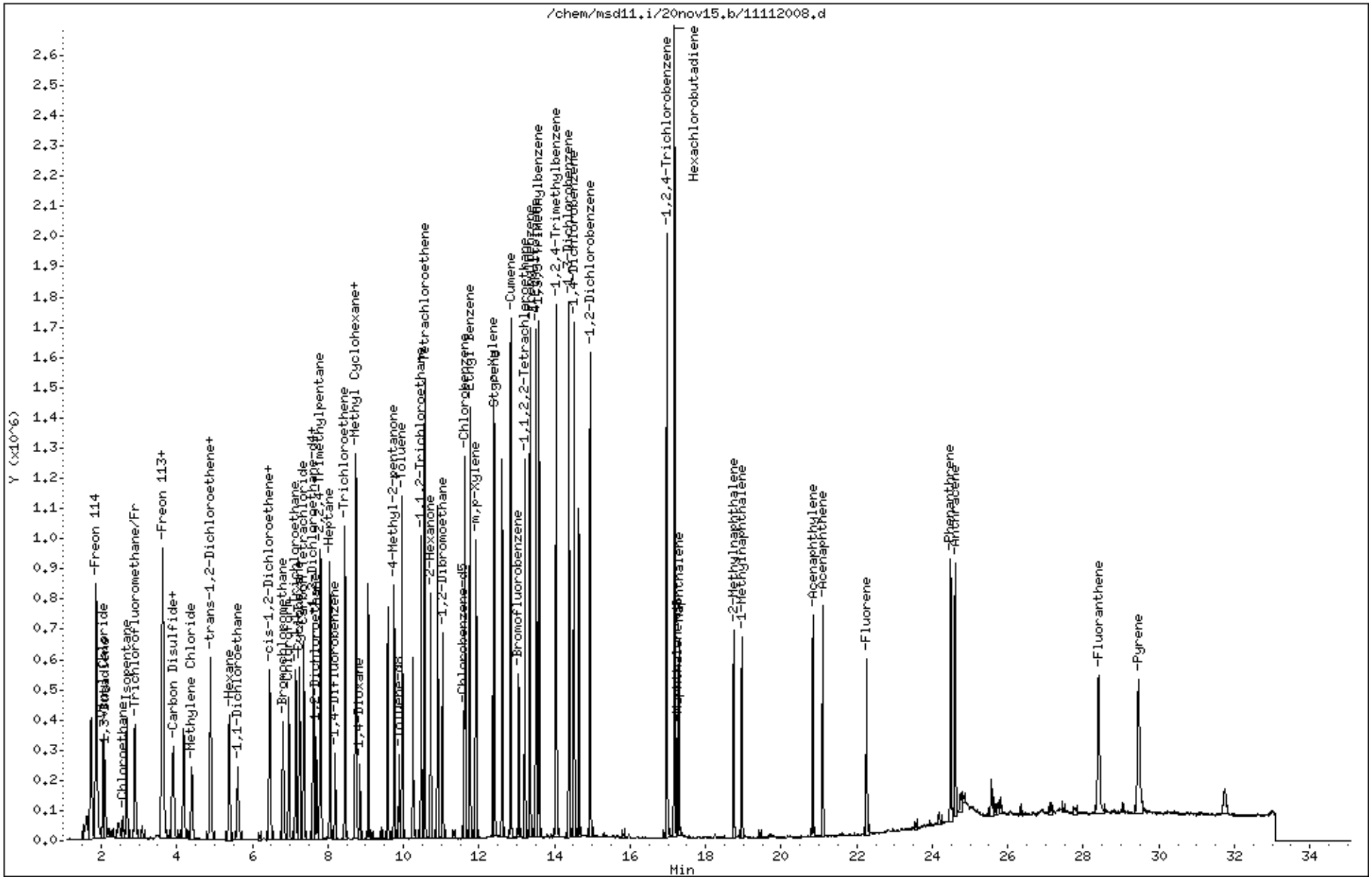
Data File: /chem/msd11.i/20nov15.b/11112008.d
Date : 20-NOV-2015 23:06
Client ID:
Sample Info: ;VI VOC+PAH ICAL, L6

Instrument: msd11.i

Operator: LA

Column phase: RTx-624

Column diameter: 0.53



Eurofins Air Toxics Inc.

EPA Method TO-17 GC/MS

Data file : /chem/msd11.i/20nov15.b/11112009.d
Lab Smp Id: VI VOC+PAH ICAL, L7
Inj Date : 20-NOV-2015 23:53
Operator : LA Inst ID: msd11.i
Smp Info : ;VI VOC+PAH ICAL, L7
Misc Info : 2516-201 (12/10/15);2595-248-250 (1/29/16)
Comment :
Method : /chem/msd11.i/20nov15.b/115z1120vi.m
Meth Date : 23-Nov-2015 10:01 lantonic Quant Type: ISTD
Cal Date : 20-NOV-2015 23:53 Cal File: 11112009.d
Als bottle: 17 Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: VOC+PAH_ICAL.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO
* 40 Bromochloromethane					CAS #: 74-97-5		
6.796	6.796 (1.000)	130	66805	26.0000		80.00- 120.00	100.00
6.796	6.796 (1.000)	128	51885			49.46- 109.46	77.67
6.796	6.796 (1.000)	49	83163			96.52- 156.52	124.49
* 54 1,4-Difluorobenzene					CAS #: 540-36-3		
8.193	8.193 (1.000)	114	253826	23.0000		80.00- 120.00	100.00
8.193	8.193 (1.000)	88	35480			0.00- 44.32	13.98
* 79 Chlorobenzene-d5					CAS #: 3114-55-4		
11.595	11.595 (1.000)	117	232054	24.0000		80.00- 120.00	100.00
11.595	11.595 (1.000)	82	117156			20.08- 80.08	50.49
* 92 Bromofluorobenzene					CAS #: 460-00-4		
13.049	13.049 (1.000)	174	168857	36.0000		80.00- 120.00	100.00
13.049	13.049 (1.000)	95	168810			68.42- 128.42	99.97
13.049	13.049 (1.000)	176	162217			64.69- 124.69	96.07
$ 49 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
7.598	7.598 (0.927)	65	107553	100.000	101.77	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO
$ 49 1,2-Dichloroethane-d4 (continued)							
7.598	7.598 (0.927)	67	57439			25.09- 85.09	53.41
$ 66 Toluene-d8					CAS #: 2037-26-5		
9.890	9.890 (0.853)	98	364630	100.000	99.546	80.00- 120.00	100.00
9.890	9.890 (0.853)	70	37209			0.00- 41.37	10.20
9.890	9.890 (0.853)	100	232052			33.98- 93.98	63.64
$ 108 Naphthalene-d8					CAS #: 1146-65-2		
17.254	17.254 (1.322)	136	632431	100.000	104.46	80.00- 120.00	100.00
17.254	17.254 (1.322)	108	53406			0.00- 38.36	8.44
3 Freon 114					CAS #: 76-14-2		
1.875	1.875 (0.276)	135	978600	699.000	680.81	80.00- 120.00	100.00
1.868	1.868 (0.275)	137	312356			2.94- 62.94	31.92
6 Vinyl Chloride					CAS #: 75-01-4		
2.061	2.061 (0.303)	62	379832	256.000	254.94	80.00- 120.00	100.00
2.061	2.061 (0.303)	64	120395			1.67- 61.67	31.70
7 1,3-Butadiene					CAS #: 106-99-0		
2.097	2.097 (0.309)	54	267787	221.000	210.99	80.00- 120.00	100.00
2.097	2.097 (0.309)	39	312494			88.98- 148.98	116.69
9 Chloroethane					CAS #: 75-00-3		
2.570	2.570 (0.378)	64	167414	264.000	233.46	80.00- 120.00	100.00
2.570	2.570 (0.378)	66	53478			2.82- 62.82	31.94
2.570	2.570 (0.378)	49	49507			1.12- 61.12	29.57
10 Isopentane					CAS #: 78-78-4		
2.677	2.677 (0.394)	57	284071	295.000	256.04	80.00- 120.00	100.00
2.677	2.677 (0.394)	43	424845			125.87- 185.87	149.56
11 Trichlorofluoromethane/Fr11					CAS #: 75-69-4		
2.892	2.892 (0.426)	101	1021093	562.000	555.65	80.00- 120.00	100.00
2.892	2.892 (0.426)	103	668785			34.96- 94.96	65.50
15 Freon 113					CAS #: 76-13-1		
3.637	3.637 (0.535)	151	815970	766.000	778.00	80.00- 120.00	100.00
3.637	3.637 (0.535)	153	525731			35.10- 95.10	64.43
3.637	3.637 (0.535)	101	929472			84.04- 144.04	113.91
14 1,1-Dichloroethene					CAS #: 75-35-4		
3.601	3.601 (0.530)	98	278932	397.000	383.56	80.00- 120.00	100.00
3.601	3.601 (0.530)	96	431305			126.05- 186.05	154.63
3.601	3.601 (0.530)	61	707417			223.83- 283.83	253.62

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO
18 Carbon Disulfide					CAS #: 75-15-0		
3.916	3.916 (0.576)	76	1142423	311.000	262.34	80.00- 120.00	100.00
19 2-Propanol					CAS #: 67-63-0		
3.873	3.873 (0.570)	45	656512	246.000	226.20	80.00- 120.00	100.00
3.873	3.873 (0.570)	43	127907			0.00- 50.22	19.48
3.880	3.880 (0.571)	59	24710			0.00- 33.71	3.76
22 Methylene Chloride					CAS #: 75-09-2		
4.396	4.396 (0.647)	49	477107	347.000	281.72	80.00- 120.00	100.00
4.403	4.403 (0.648)	84	343813			41.05- 101.05	72.06
4.396	4.396 (0.647)	51	143492			0.46- 60.46	30.08
25 trans-1,2-Dichloroethene					CAS #: 156-60-5		
4.898	4.898 (0.721)	98	268106	396.000	391.18	80.00- 120.00	100.00
4.898	4.898 (0.721)	61	588201			190.70- 250.70	219.39
4.898	4.898 (0.721)	96	425343			126.37- 186.37	158.65
26 MTBE					CAS #: 1634-04-4		
4.890	4.890 (0.720)	73	961297	361.000	359.82	80.00- 120.00	100.00
4.890	4.890 (0.720)	57	223541			0.00- 53.50	23.25
4.890	4.890 (0.720)	41	230664			0.00- 54.24	24.00
28 Hexane					CAS #: 110-54-3		
5.392	5.392 (0.793)	57	595961	352.000	335.53	80.00- 120.00	100.00
5.385	5.385 (0.792)	43	385080			37.71- 97.71	64.61
5.392	5.392 (0.793)	86	93088			0.00- 45.83	15.62
29 1,1-Dichloroethane					CAS #: 75-34-3		
5.614	5.614 (0.826)	63	725260	405.000	406.05	80.00- 120.00	100.00
5.614	5.614 (0.826)	65	227616			1.45- 61.45	31.38
37 cis-1,2-Dichloroethene					CAS #: 156-59-2		
6.466	6.466 (0.952)	98	291749	396.000	389.98	80.00- 120.00	100.00
6.466	6.466 (0.952)	96	455204			126.86- 186.86	156.03
6.466	6.466 (0.952)	61	590210			171.58- 231.58	202.30
38 2-Butanone					CAS #: 78-93-3		
6.452	6.452 (0.949)	72	184514	295.000	280.87	80.00- 120.00	100.00
6.452	6.452 (0.949)	43	804877			419.83- 479.83	436.21
6.445	6.445 (0.948)	57	62357			2.35- 62.35	33.80
44 Chloroform					CAS #: 67-66-3		
6.960	6.960 (1.024)	83	855694	488.000	475.04	80.00- 120.00	100.00
6.968	6.968 (1.025)	85	568311			35.12- 95.12	66.42

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO
46 Cyclohexane					CAS #: 110-82-7		
7.254	7.254 (0.885)	84	545003	344.000	336.85	80.00- 120.00	100.00
7.254	7.254 (0.885)	56	656409			91.54- 151.54	120.44
7.254	7.254 (0.885)	41	408634			46.84- 106.84	74.98
45 1,1,1-Trichloroethane					CAS #: 71-55-6		
7.154	7.154 (0.873)	97	848288	546.000	576.79	80.00- 120.00	100.00
7.154	7.154 (0.873)	99	551672			35.10- 95.10	65.03
47 Carbon Tetrachloride					CAS #: 56-23-5		
7.362	7.362 (0.899)	119	894403	629.000	680.44	80.00- 120.00	100.00
7.362	7.362 (0.899)	117	929793			73.73- 133.73	103.96
51 2,2,4-Trimethylpentane					CAS #: 540-84-1		
7.813	7.813 (0.954)	57	2233703	467.000	473.28	80.00- 120.00	100.00
7.806	7.806 (0.953)	56	727933			1.98- 61.98	32.59
7.806	7.806 (0.953)	41	693520			0.94- 60.94	31.05
48 Benzene					CAS #: 71-43-2		
7.612	7.612 (0.929)	78	1311855	319.000	309.43	80.00- 120.00	100.00
7.612	7.612 (0.929)	77	309587			0.00- 53.25	23.60
50 1,2-Dichloroethane					CAS #: 107-06-2		
7.691	7.691 (0.939)	62	599665	405.000	420.00	80.00- 120.00	100.00
7.698	7.698 (0.940)	64	192028			1.81- 61.81	32.02
53 Heptane					CAS #: 142-82-5		
8.056	8.056 (0.983)	71	462972	410.000	410.38	80.00- 120.00	100.00
8.056	8.056 (0.983)	43	873584			156.82- 216.82	188.69
8.056	8.056 (0.983)	57	442928			66.52- 126.52	95.67
56 Trichloroethene					CAS #: 79-01-6		
8.458	8.458 (1.032)	95	668394	537.000	505.18	80.00- 120.00	100.00
8.458	8.458 (1.032)	130	740832			82.18- 142.18	110.84
8.458	8.458 (1.032)	97	431669			35.46- 95.46	64.58
58 Methyl Cyclohexane					CAS #: 108-87-2		
8.737	8.737 (1.066)	83	835121	402.000	401.42	80.00- 120.00	100.00
8.737	8.737 (1.066)	98	379785			16.90- 76.90	45.48
8.737	8.737 (1.066)	55	681151			52.37- 112.37	81.56
59 1,2-Dichloropropane					CAS #: 78-87-5		
8.751	8.751 (1.068)	63	548208	462.000	465.72	80.00- 120.00	100.00
8.751	8.751 (1.068)	62	385903			38.03- 98.03	70.39
8.744	8.744 (1.067)	41	767738			105.71- 165.71	140.05

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO
60 1,4-Dioxane					CAS #: 123-91-1		
8.844	8.844 (1.080)	88	320225	360.000	325.68	80.00- 120.00	100.00
8.844	8.844 (1.080)	58	217291			37.98- 97.98	67.86
8.844	8.844 (1.080)	57	77864			0.00- 54.83	24.32
65 4-Methyl-2-pentanone					CAS #: 108-10-1		
9.754	9.754 (1.191)	58	417091	410.000	408.75	80.00- 120.00	100.00
9.754	9.754 (1.191)	43	1210370			254.63- 314.63	290.19
9.754	9.754 (1.191)	85	165085			8.74- 68.74	39.58
67 Toluene					CAS #: 108-88-3		
9.969	9.969 (0.860)	91	1645608	377.000	370.35	80.00- 120.00	100.00
9.969	9.969 (0.860)	92	949036			29.25- 89.25	57.67
70 1,1,2-Trichloroethane					CAS #: 79-00-5		
10.470	10.470 (1.278)	97	577097	546.000	526.59	80.00- 120.00	100.00
10.470	10.470 (1.278)	99	364125			34.29- 94.29	63.10
10.470	10.470 (1.278)	83	502594			57.72- 117.72	87.09
71 Tetrachloroethene					CAS #: 127-18-4		
10.564	10.564 (0.911)	166	914643	678.000	707.58	80.00- 120.00	100.00
10.564	10.564 (0.911)	129	648068			41.79- 101.79	70.85
10.564	10.564 (0.911)	131	631648			38.31- 98.31	69.06
72 2-Hexanone					CAS #: 591-78-6		
10.721	10.721 (0.925)	58	522350	410.000	429.48	80.00- 120.00	100.00
10.721	10.721 (0.925)	43	1106809			181.80- 241.80	211.89
10.721	10.721 (0.925)	100	95031			0.00- 47.51	18.19
74 1,2-Dibromoethane					CAS #: 106-93-4		
11.036	11.036 (0.952)	107	799204	768.000	748.62	80.00- 120.00	100.00
11.036	11.036 (0.952)	109	768173			64.64- 124.64	96.12
81 Chlorobenzene					CAS #: 108-90-7		
11.631	11.631 (1.003)	112	1375768	460.000	454.92	80.00- 120.00	100.00
11.631	11.631 (1.003)	114	450058			1.81- 61.81	32.71
11.631	11.631 (1.003)	77	705409			21.76- 81.76	51.27
82 Ethyl Benzene					CAS #: 100-41-4		
11.760	11.760 (1.014)	106	684392	434.000	438.51	80.00- 120.00	100.00
11.760	11.760 (1.014)	91	2016855			263.98- 323.98	294.69
84 m,p-Xylene					CAS #: 108-38-3		
11.924	11.924 (1.028)	106	823460	434.000	419.41	80.00- 120.00	100.00
11.924	11.924 (1.028)	91	1527119			152.73- 212.73	185.45

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                                          AMOUNTS
                                       CAL-AMT   ON-COL
   RT   EXP RT (REL RT)  MASS  RESPONSE (   ng)  (   ng)   TARGET RANGE    RATIO
   ==   ====== ========  ====  ======== =======  =======   ============    =====

   88 o-Xylene                                          CAS #: 95-47-6
 12.383  12.383 (0.949)   106    797010 434.000   416.12  80.00- 120.00   100.00
 12.383  12.383 (0.949)    91   1570256                  163.65- 223.65   197.02
-------------------------------------------------------------------------------
   89 Styrene                                           CAS #: 100-42-5
 12.412  12.412 (0.951)   104   1284895 426.000   419.96  80.00- 120.00   100.00
 12.412  12.412 (0.951)    78    581141                   15.61-  75.61    45.23
-------------------------------------------------------------------------------
   91 Cumene                                            CAS #: 98-82-8
 12.841  12.841 (0.984)   105   2299757 492.000   474.34  80.00- 120.00   100.00
 12.841  12.841 (0.984)   120    653604                    0.00-  59.10    28.42
 12.841  12.841 (0.984)    51    239206                    0.00-  40.54    10.40
-------------------------------------------------------------------------------
   94 1,1,2,2-Tetrachloroethane                         CAS #: 79-34-5
 13.214  13.214 (1.013)    83   1192259 687.000   728.12  80.00- 120.00   100.00
 13.214  13.214 (1.013)    85    786724                   35.82-  95.82    65.99
-------------------------------------------------------------------------------
   96 Propylbenzene                                     CAS #: 103-65-1
 13.357  13.357 (1.024)    91   2636282 492.000   470.66  80.00- 120.00   100.00
 13.357  13.357 (1.024)   120    663502                    0.00-  54.66    25.17
 13.357  13.357 (1.024)   105     96066                    0.00-  33.61     3.64
-------------------------------------------------------------------------------
   97 4-Ethyltoluene                                    CAS #: 622-96-8
 13.515  13.515 (1.036)   120    697722 492.000   461.41  80.00- 120.00   100.00
 13.515  13.515 (1.036)   105   2143319                  275.29- 335.29   307.19
-------------------------------------------------------------------------------
   98 1,3,5-Trimethylbenzene                            CAS #: 108-67-8
 13.593  13.593 (1.042)   120    957938 492.000   463.94  80.00- 120.00   100.00
 13.593  13.593 (1.042)   105   1818939                  157.79- 217.79   189.88
-------------------------------------------------------------------------------
  100 1,2,4-Trimethylbenzene                            CAS #: 95-63-6
 14.045  14.045 (1.076)   120    884251 492.000   454.74  80.00- 120.00   100.00
 14.045  14.045 (1.076)   105   1817700                  169.74- 229.74   205.56
-------------------------------------------------------------------------------
  101 1,3-Dichlorobenzene                               CAS #: 541-73-1
 14.381  14.381 (1.102)   146   1387318 601.000   566.96  80.00- 120.00   100.00
 14.381  14.381 (1.102)   148    880624                   34.32-  94.32    63.48
 14.381  14.381 (1.102)   111    502009                    5.94-  65.94    36.19
-------------------------------------------------------------------------------
  102 1,4-Dichlorobenzene                               CAS #: 106-46-7
 14.518  14.518 (1.113)   146   1366033 601.000   568.56  80.00- 120.00   100.00
 14.518  14.518 (1.113)   148    880091                   35.48-  95.48    64.43
 14.518  14.518 (1.113)   111    484014                    5.70-  65.70    35.43
-------------------------------------------------------------------------------
  105 1,2-Dichlorobenzene                               CAS #: 95-50-1
 14.947  14.947 (1.145)   146   1282187 601.000   546.15  80.00- 120.00   100.00
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                                          AMOUNTS
                                       CAL-AMT   ON-COL
   RT   EXP RT (REL RT)  MASS  RESPONSE (   ng)  (   ng)   TARGET RANGE    RATIO
   ==   ====== ========  ====  ======== =======  =======   ============    =====

  105 1,2-Dichlorobenzene (continued)
 14.947  14.947 (1.145)   148    818383                    34.02-  94.02    63.83
 14.940  14.940 (1.145)   111    487546                     7.12-  67.12    38.02
-------------------------------------------------------------------------------
  106 1,2,4-Trichlorobenzene                        CAS #: 120-82-1
 16.974  16.974 (1.301)   180    980019 742.000   603.44  80.00- 120.00   100.00
 16.974  16.974 (1.301)   182    944105                    65.50- 125.50    96.34
-------------------------------------------------------------------------------
  107 Hexachlorobutadiene                           CAS #: 87-68-3
 17.175  17.175 (1.316)   225    753741 1070.00   807.00  80.00- 120.00   100.00
 17.175  17.175 (1.316)   223    476106                    32.38-  92.38    63.17
-------------------------------------------------------------------------------
  109 Naphthalene                                   CAS #: 91-20-3
 17.290  17.290 (1.325)   128   1567390 250.000   235.89  80.00- 120.00   100.00
 17.290  17.290 (1.325)   127    200259                     0.00-  43.21    12.78
-------------------------------------------------------------------------------
  110 2-Methylnaphthalene                           CAS #: 91-57-6
 18.744  18.744 (1.436)   142   1038606 250.000   244.79  80.00- 120.00   100.00
 18.744  18.744 (1.436)   141    895429                    56.85- 116.85    86.21
 18.737  18.737 (1.436)   115    304889                     0.00-  59.61    29.36
-------------------------------------------------------------------------------
  111 1-Methylnaphthalene                           CAS #: 90-12-0
 18.959  18.959 (1.453)   142    952571 250.000   229.57  80.00- 120.00   100.00
 18.959  18.959 (1.453)   141    846681                    58.28- 118.28    88.88
 18.959  18.959 (1.453)   115    287179                     1.09-  61.09    30.15
-------------------------------------------------------------------------------
  112 Acenaphthylene                                CAS #: 208-96-8
 20.835  20.835 (1.597)   152   1831344 250.000   274.05  80.00- 120.00   100.00(A)
 20.835  20.835 (1.597)   151    365785                     0.00-  50.51    19.97
 20.835  20.835 (1.597)   153    244619                     0.00-  43.07    13.36
-------------------------------------------------------------------------------
  113 Acenaphthene                                  CAS #: 83-32-9
 21.100  21.100 (1.617)   154    813872 250.000   256.98  80.00- 120.00   100.00(A)
 21.100  21.100 (1.617)   152    427340                    23.06-  83.06    52.51
 21.100  21.100 (1.617)   153    892282                    82.31- 142.31   109.63
-------------------------------------------------------------------------------
  114 Fluorene                                      CAS #: 86-73-7
 22.268  22.268 (1.706)   166    704568 250.000   224.69  80.00- 120.00   100.00
 22.268  22.268 (1.706)   165    656511                    65.30- 125.30    93.18
-------------------------------------------------------------------------------
  115 Phenanthrene                                  CAS #: 85-01-8
 24.488  24.488 (1.877)   178   1678037 250.000   210.76  80.00- 120.00   100.00
 24.488  24.488 (1.877)   176    318953                     0.00-  48.40    19.01
 24.488  24.488 (1.877)   179    257602                     0.00-  44.95    15.35
-------------------------------------------------------------------------------
  116 Anthracene                                    CAS #: 120-12-7
 24.610  24.610 (1.886)   178   1983958 250.000   238.28  80.00- 120.00   100.00
```

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO
116 Anthracene (continued)							
24.610	24.610 (1.886)	176	367213			0.00- 47.65	18.51
24.610	24.610 (1.886)	179	305047			0.00- 43.56	15.38
117 Fluoranthene					CAS #: 206-44-0		
28.399	28.399 (2.176)	202	1251189	250.000	165.88	80.00- 120.00	100.00
28.399	28.399 (2.176)	101	148838			0.00- 42.31	11.90
118 Pyrene					CAS #: 129-00-0		
29.460	29.460 (2.258)	202	1289853	250.000	156.81	80.00- 120.00	100.00
29.460	29.460 (2.258)	101	181989			0.00- 44.28	14.11
29.452	29.452 (2.257)	100	152290			0.00- 41.66	11.81

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.

Report Date: 23-Nov-2015 10:01

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd11.i
Lab File ID: 11112009.d
Lab Smp Id: VI VOC+PAH ICAL, L7
Analysis Type: VOA
Quant Type: ISTD
Operator: LA
Method File: /chem/msd11.i/20nov15.b/115z1120vi.m
Misc Info: 2516-201 (12/10/15);2595-248-250 (1/29/16)

Calibration Date: 20-NOV-2015
Calibration Time: 22:19
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
40 Bromochloromethan	61766	37060	86472	66805	8.16
54 1,4-Difluorobenze	242319	145391	339247	253826	4.75
79 Chlorobenzene-d5	224302	134581	314023	232054	3.46
92 Bromofluorobenzen	161670	97002	226338	168857	4.45

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
40 Bromochloromethan	6.80	6.47	7.13	6.80	0.00
54 1,4-Difluorobenze	8.19	7.86	8.52	8.19	0.00
79 Chlorobenzene-d5	11.60	11.27	11.93	11.59	0.00
92 Bromofluorobenzen	13.05	12.72	13.38	13.05	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msd11.i/20nov15.b/11112009.d

Page 1

Date : 20-NOV-2015 23:53

Client ID:

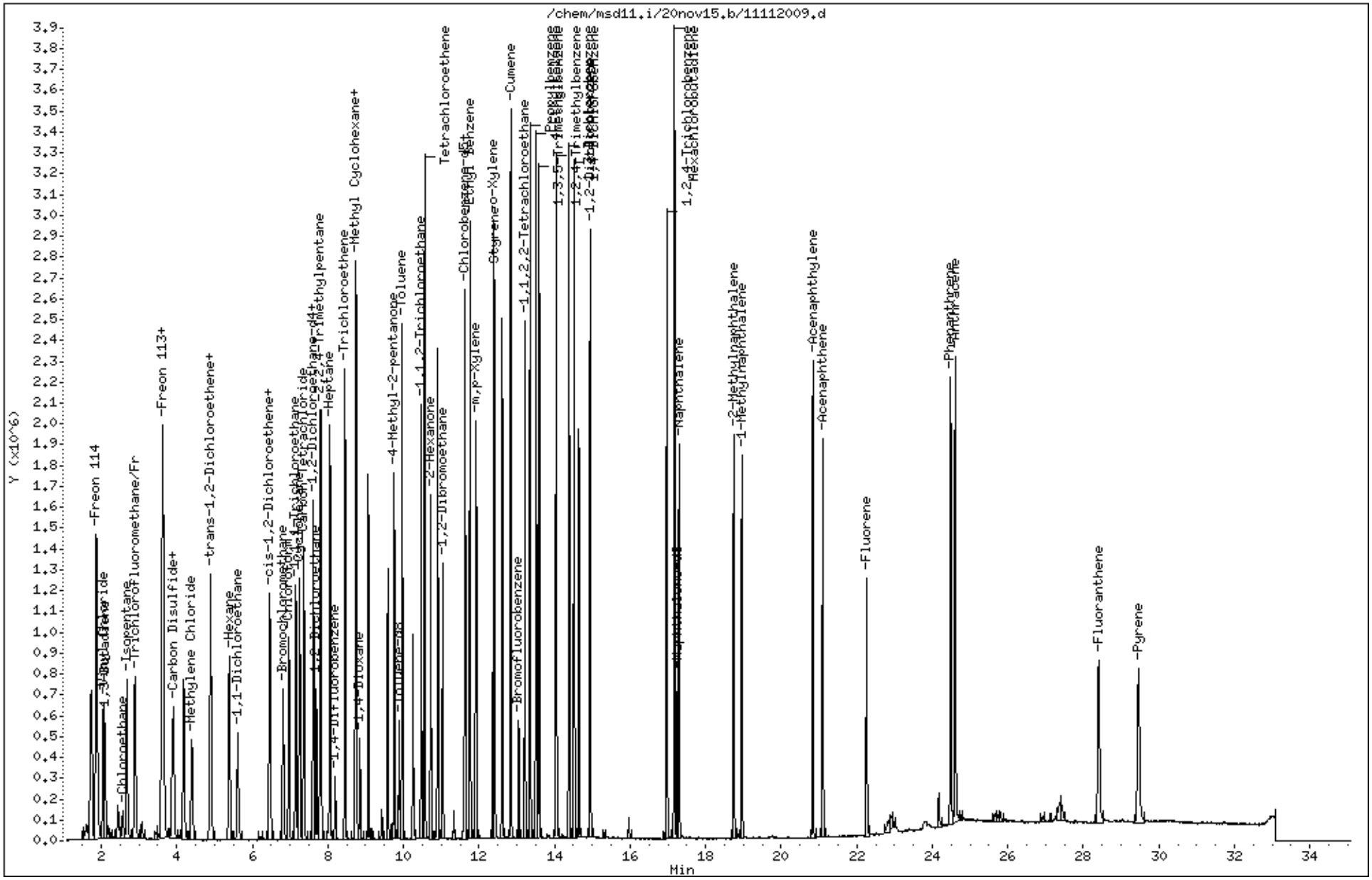
Instrument: msd11.i

Sample Info: ;VI VOC+PAH ICAL, L7

Operator: LA

Column phase: RTx-624

Column diameter: 0.53



Eurofins Air Toxics Inc.

EPA Method TO-17 GC/MS

Data file : /chem/msd11.i/20nov15.b/11112010.d
Lab Smp Id: VI VOC ICAL, no sur
Inj Date : 21-NOV-2015 00:39
Operator : LA Inst ID: msd11.i
Smp Info : ;VI VOC ICAL, no surr, L8
Misc Info : 2516-201 (12/10/15)
Comment :
Method : /chem/msd11.i/20nov15.b/115z1120vi.m
Meth Date : 23-Nov-2015 10:01 lantonic Quant Type: ISTD
Cal Date : 21-NOV-2015 00:39 Cal File: 11112010.d
Als bottle: 18 Calibration Sample, Level: 8
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: VOC_ICALnoSS.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO
* 40 Bromochloromethane					CAS #: 74-97-5		
6.803	6.803 (1.000)	130	67996	26.0000		80.00- 120.00	100.00
6.796	6.796 (1.000)	128	53078			49.46- 109.46	78.06
6.796	6.796 (1.000)	49	86352			96.52- 156.52	127.00
* 54 1,4-Difluorobenzene					CAS #: 540-36-3		
8.193	8.193 (1.000)	114	247709	23.0000		80.00- 120.00	100.00
8.193	8.193 (1.000)	88	36310			0.00- 44.32	14.66
* 79 Chlorobenzene-d5					CAS #: 3114-55-4		
11.595	11.595 (1.000)	117	232764	24.0000		80.00- 120.00	100.00
11.595	11.595 (1.000)	82	118242			20.08- 80.08	50.80
* 92 Bromofluorobenzene					CAS #: 460-00-4		
13.056	13.056 (1.000)	174	168470	36.0000		80.00- 120.00	100.00
13.049	13.049 (1.000)	95	169566			68.42- 128.42	100.65
13.056	13.056 (1.000)	176	164041			64.69- 124.69	97.37
3 Freon 114					CAS #: 76-14-2		
1.860	1.860 (0.273)	135	2044482	1400.00	1397.4	80.00- 120.00	100.00(A)

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO
3 Freon 114 (continued)							
1.860	1.860 (0.273)	137	659411			2.94- 62.94	32.25
6 Vinyl Chloride					CAS #: 75-01-4		
2.054	2.054 (0.302)	62	786523	511.000	518.65	80.00- 120.00	100.00(A)
2.054	2.054 (0.302)	64	251236			1.67- 61.67	31.94
7 1,3-Butadiene					CAS #: 106-99-0		
2.097	2.097 (0.308)	54	535738	442.000	414.71	80.00- 120.00	100.00(A)
2.097	2.097 (0.308)	39	624449			88.98- 148.98	116.56
9 Chloroethane					CAS #: 75-00-3		
2.562	2.562 (0.377)	64	361592	528.000	495.42	80.00- 120.00	100.00
2.562	2.562 (0.377)	66	115769			2.82- 62.82	32.02
2.562	2.562 (0.377)	49	108074			1.12- 61.12	29.89
10 Isopentane					CAS #: 78-78-4		
2.684	2.684 (0.395)	57	582470	590.000	515.80	80.00- 120.00	100.00(A)
2.677	2.677 (0.394)	43	868197			125.87- 185.87	149.05
11 Trichlorofluoromethane/Fr11					CAS #: 75-69-4		
2.892	2.892 (0.425)	101	2130878	1120.00	1139.2	80.00- 120.00	100.00(A)
2.892	2.892 (0.425)	103	1399483			34.96- 94.96	65.68
15 Freon 113					CAS #: 76-13-1		
3.644	3.644 (0.536)	151	1693283	1530.00	1586.2	80.00- 120.00	100.00(A)
3.644	3.644 (0.536)	153	1086527			35.10- 95.10	64.17
3.644	3.644 (0.536)	101	1916828			84.04- 144.04	113.20
14 1,1-Dichloroethene					CAS #: 75-35-4		
3.601	3.601 (0.529)	98	561578	793.000	758.70	80.00- 120.00	100.00(A)
3.601	3.601 (0.529)	96	875447			126.05- 186.05	155.89
3.601	3.601 (0.529)	61	1429169			223.83- 283.83	254.49
18 Carbon Disulfide					CAS #: 75-15-0		
3.909	3.909 (0.575)	76	2313093	623.000	521.86	80.00- 120.00	100.00(A)
19 2-Propanol					CAS #: 67-63-0		
3.873	3.873 (0.569)	45	1227254	492.000	415.43	80.00- 120.00	100.00(A)
3.873	3.873 (0.569)	43	250251			0.00- 50.22	20.39
3.873	3.873 (0.569)	59	46347			0.00- 33.71	3.78
22 Methylene Chloride					CAS #: 75-09-2		
4.396	4.396 (0.646)	49	973488	695.000	564.76	80.00- 120.00	100.00(A)
4.396	4.396 (0.646)	84	708894			41.05- 101.05	72.82
4.396	4.396 (0.646)	51	290395			0.46- 60.46	29.83

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO
26 MTBE					CAS #: 1634-04-4		
4.890	4.890 (0.719)	73	2004525	721.000	737.16	80.00- 120.00	100.00(A)
4.890	4.890 (0.719)	57	462918			0.00- 53.50	23.09
4.890	4.890 (0.719)	41	466547			0.00- 54.24	23.27
25 trans-1,2-Dichloroethene					CAS #: 156-60-5		
4.905	4.905 (0.721)	98	557803	793.000	799.60	80.00- 120.00	100.00(A)
4.898	4.898 (0.720)	61	1228404			190.70- 250.70	220.22
4.898	4.898 (0.720)	96	870392			126.37- 186.37	156.04
28 Hexane					CAS #: 110-54-3		
5.392	5.392 (0.793)	57	1236683	705.000	684.06	80.00- 120.00	100.00(A)
5.392	5.392 (0.793)	43	796887			37.71- 97.71	64.44
5.392	5.392 (0.793)	86	195495			0.00- 45.83	15.81
29 1,1-Dichloroethane					CAS #: 75-34-3		
5.614	5.614 (0.825)	63	1506726	810.000	828.79	80.00- 120.00	100.00(A)
5.614	5.614 (0.825)	65	476770			1.45- 61.45	31.64
37 cis-1,2-Dichloroethene					CAS #: 156-59-2		
6.466	6.466 (0.950)	98	621802	793.000	816.61	80.00- 120.00	100.00(A)
6.466	6.466 (0.950)	96	965296			126.86- 186.86	155.24
6.466	6.466 (0.950)	61	1250644			171.58- 231.58	201.13
38 2-Butanone					CAS #: 78-93-3		
6.459	6.459 (0.949)	72	408603	590.000	611.09	80.00- 120.00	100.00(A)
6.452	6.452 (0.948)	43	1734601			419.83- 479.83	424.52
6.459	6.459 (0.949)	57	134427			2.35- 62.35	32.90
44 Chloroform					CAS #: 67-66-3		
6.968	6.968 (1.024)	83	1829047	977.000	997.61	80.00- 120.00	100.00(A)
6.968	6.968 (1.024)	85	1207731			35.12- 95.12	66.03
46 Cyclohexane					CAS #: 110-82-7		
7.254	7.254 (0.885)	84	1158606	688.000	733.79	80.00- 120.00	100.00(A)
7.254	7.254 (0.885)	56	1397570			91.54- 151.54	120.63
7.254	7.254 (0.885)	41	881789			46.84- 106.84	76.11
45 1,1,1-Trichloroethane					CAS #: 71-55-6		
7.154	7.154 (0.873)	97	1839452	1091.00	1281.6	80.00- 120.00	100.00(A)
7.154	7.154 (0.873)	99	1195228			35.10- 95.10	64.98
47 Carbon Tetrachloride					CAS #: 56-23-5		
7.362	7.362 (0.899)	119	1962053	1260.00	1529.5	80.00- 120.00	100.00(A)
7.362	7.362 (0.899)	117	2040966			73.73- 133.73	104.02

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                                          AMOUNTS
                                       CAL-AMT   ON-COL
   RT   EXP RT (REL RT)  MASS  RESPONSE (   ng)  (   ng)   TARGET RANGE    RATIO
   ==   ====== ========  ====  ======== =======  =======   ============    =====

   51 2,2,4-Trimethylpentane                          CAS #: 540-84-1
  7.806   7.806 (0.953)    57   4588874 934.000   996.30  80.00- 120.00   100.00(A)
  7.813   7.813 (0.954)    56   1498683                     1.98-  61.98    32.66
  7.813   7.813 (0.954)    41   1424518                     0.94-  60.94    31.04
-------------------------------------------------------------------------------
   48 Benzene                                         CAS #: 71-43-2
  7.612   7.612 (0.929)    78   2689940 639.000   650.14  80.00- 120.00   100.00(A)
  7.612   7.612 (0.929)    77    630873                     0.00-  53.25    23.45
-------------------------------------------------------------------------------
   50 1,2-Dichloroethane                              CAS #: 107-06-2
  7.698   7.698 (0.940)    62   1288383 809.000   924.65  80.00- 120.00   100.00(A)
  7.698   7.698 (0.940)    64    410073                     1.81-  61.81    31.83
-------------------------------------------------------------------------------
   53 Heptane                                         CAS #: 142-82-5
  8.056   8.056 (0.983)    71    967819 820.000   879.06  80.00- 120.00   100.00(A)
  8.056   8.056 (0.983)    43   1854105                   156.82- 216.82   191.58
  8.056   8.056 (0.983)    57    929082                    66.52- 126.52    96.00
-------------------------------------------------------------------------------
   56 Trichloroethene                                 CAS #: 79-01-6
  8.458   8.458 (1.032)    95   1337266 1080.00   1035.7  80.00- 120.00   100.00(A)
  8.458   8.458 (1.032)   130   1491474                    82.18- 142.18   111.53
  8.458   8.458 (1.032)    97    871460                    35.46-  95.46    65.17
-------------------------------------------------------------------------------
   58 Methyl Cyclohexane                              CAS #: 108-87-2
  8.737   8.737 (1.066)    83   1768564 803.000   871.08  80.00- 120.00   100.00(A)
  8.737   8.737 (1.066)    98    809104                    16.90-  76.90    45.75
  8.737   8.737 (1.066)    55   1470091                    52.37- 112.37    83.12
-------------------------------------------------------------------------------
   59 1,2-Dichloropropane                             CAS #: 78-87-5
  8.751   8.751 (1.068)    63   1175476 924.000   1023.3  80.00- 120.00   100.00(A)
  8.751   8.751 (1.068)    62    833245                    38.03-  98.03    70.89
  8.744   8.744 (1.067)    41   1639345                   105.71- 165.71   139.46
-------------------------------------------------------------------------------
   60 1,4-Dioxane                                     CAS #: 123-91-1
  8.844   8.844 (1.080)    88    663468 721.000   691.42  80.00- 120.00   100.00(A)
  8.844   8.844 (1.080)    58    452050                    37.98-  97.98    68.13
  8.844   8.844 (1.080)    57    154495                     0.00-  54.83    23.29
-------------------------------------------------------------------------------
   65 4-Methyl-2-pentanone                            CAS #: 108-10-1
  9.754   9.754 (1.191)    58    879764 819.000   883.46  80.00- 120.00   100.00(A)
  9.754   9.754 (1.191)    43   2564329                   254.63- 314.63   291.48
  9.754   9.754 (1.191)    85    351841                     8.74-  68.74    39.99
-------------------------------------------------------------------------------
   67 Toluene                                         CAS #: 108-88-3
  9.969   9.969 (0.860)    91   3526546 754.000   791.25  80.00- 120.00   100.00(A)
  9.969   9.969 (0.860)    92   2039347                    29.25-  89.25    57.83
-------------------------------------------------------------------------------
```

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO
70 1,1,2-Trichloroethane					CAS #: 79-00-5		
10.478	10.478 (1.279)	97	1259441	1090.00	1177.6	80.00- 120.00	100.00(A)
10.478	10.478 (1.279)	99	797746			34.29- 94.29	63.34
10.470	10.470 (1.278)	83	1090121			57.72- 117.72	86.56
71 Tetrachloroethene					CAS #: 127-18-4		
10.571	10.571 (0.912)	166	2048012	1360.00	1579.5	80.00- 120.00	100.00(A)
10.571	10.571 (0.912)	129	1456173			41.79- 101.79	71.10
10.571	10.571 (0.912)	131	1413635			38.31- 98.31	69.02
72 2-Hexanone					CAS #: 591-78-6		
10.728	10.728 (0.925)	58	1100157	819.000	901.80	80.00- 120.00	100.00(A)
10.728	10.728 (0.925)	43	2310411			181.80- 241.80	210.01
10.728	10.728 (0.925)	100	198094			0.00- 47.51	18.01
74 1,2-Dibromoethane					CAS #: 106-93-4		
11.043	11.043 (0.952)	107	1983615	1540.00	1852.4	80.00- 120.00	100.00(A)
11.043	11.043 (0.952)	109	1900688			64.64- 124.64	95.82
81 Chlorobenzene					CAS #: 108-90-7		
11.631	11.631 (1.003)	112	3030563	921.000	999.06	80.00- 120.00	100.00(A)
11.638	11.638 (1.004)	114	986054			1.81- 61.81	32.54
11.631	11.631 (1.003)	77	1532591			21.76- 81.76	50.57
82 Ethyl Benzene					CAS #: 100-41-4		
11.767	11.767 (1.015)	106	1529206	868.000	976.81	80.00- 120.00	100.00(A)
11.767	11.767 (1.015)	91	4541461			263.98- 323.98	296.98
84 m,p-Xylene					CAS #: 108-38-3		
11.932	11.932 (1.029)	106	1827258	868.000	927.83	80.00- 120.00	100.00(A)
11.932	11.932 (1.029)	91	3413110			152.73- 212.73	186.79
88 o-Xylene					CAS #: 95-47-6		
12.383	12.383 (0.948)	106	1843206	868.000	964.55	80.00- 120.00	100.00(A)
12.383	12.383 (0.948)	91	3613101			163.65- 223.65	196.02
89 Styrene					CAS #: 100-42-5		
12.412	12.412 (0.951)	104	2987416	852.000	978.66	80.00- 120.00	100.00(A)
12.412	12.412 (0.951)	78	1345559			15.61- 75.61	45.04
91 Cumene					CAS #: 98-82-8		
12.841	12.841 (0.984)	105	5366416	983.000	1109.4	80.00- 120.00	100.00(A)
12.841	12.841 (0.984)	120	1556862			0.00- 59.10	29.01
12.841	12.841 (0.984)	51	564525			0.00- 40.54	10.52
94 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
13.221	13.221 (1.013)	83	2830762	1370.00	1732.7	80.00- 120.00	100.00(A)

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                                          AMOUNTS
                                       CAL-AMT   ON-COL
   RT   EXP RT (REL RT)  MASS  RESPONSE (   ng)  (   ng)   TARGET RANGE    RATIO
   ==   ====== ========  ====  ======== =======  =======   ============    =====

   94 1,1,2,2-Tetrachloroethane (continued)
 13.221  13.221 (1.013)    85   1866185                    35.82-  95.82    65.93
-------------------------------------------------------------------------------
   96 Propylbenzene                                CAS #: 103-65-1
 13.357  13.357 (1.023)    91   6217694 983.000   1112.6  80.00- 120.00   100.00(A)
 13.357  13.357 (1.023)   120   1563620                     0.00-  54.66    25.15
 13.357  13.357 (1.023)   105    231005                     0.00-  33.61     3.72
-------------------------------------------------------------------------------
   97 4-Ethyltoluene                               CAS #: 622-96-8
 13.515  13.515 (1.035)   120   1699491 983.000   1126.5  80.00- 120.00   100.00(A)
 13.515  13.515 (1.035)   105   5204640                   275.29- 335.29   306.25
-------------------------------------------------------------------------------
   98 1,3,5-Trimethylbenzene                       CAS #: 108-67-8
 13.593  13.593 (1.041)   120   2340631 983.000   1136.2  80.00- 120.00   100.00(A)
 13.593  13.593 (1.041)   105   4437321                   157.79- 217.79   189.58
-------------------------------------------------------------------------------
  100 1,2,4-Trimethylbenzene                       CAS #: 95-63-6
 14.052  14.052 (1.076)   120   2180139 983.000   1123.8  80.00- 120.00   100.00(A)
 14.052  14.052 (1.076)   105   4461426                   169.74- 229.74   204.64
-------------------------------------------------------------------------------
  101 1,3-Dichlorobenzene                          CAS #: 541-73-1
 14.381  14.381 (1.101)   146   3368481 1200.00   1379.8  80.00- 120.00   100.00(A)
 14.381  14.381 (1.101)   148   2173967                    34.32-  94.32    64.54
 14.381  14.381 (1.101)   111   1236636                     5.94-  65.94    36.71
-------------------------------------------------------------------------------
  102 1,4-Dichlorobenzene                          CAS #: 106-46-7
 14.517  14.517 (1.112)   146   3360881 1200.00   1402.0  80.00- 120.00   100.00(A)
 14.517  14.517 (1.112)   148   2162168                    35.48-  95.48    64.33
 14.517  14.517 (1.112)   111   1190371                     5.70-  65.70    35.42
-------------------------------------------------------------------------------
  105 1,2-Dichlorobenzene                          CAS #: 95-50-1
 14.947  14.947 (1.145)   146   3173297 1200.00   1354.8  80.00- 120.00   100.00(A)
 14.947  14.947 (1.145)   148   2032102                    34.02-  94.02    64.04
 14.947  14.947 (1.145)   111   1193599                     7.12-  67.12    37.61
-------------------------------------------------------------------------------
  106 1,2,4-Trichlorobenzene                       CAS #: 120-82-1
 16.974  16.974 (1.300)   180   2817356 1480.00   1738.8  80.00- 120.00   100.00(A)
 16.974  16.974 (1.300)   182   2714856                    65.50- 125.50    96.36
-------------------------------------------------------------------------------
  107 Hexachlorobutadiene                          CAS #: 87-68-3
 17.175  17.175 (1.315)   225   2423364 2130.00   2600.6  80.00- 120.00   100.00(A)
 17.175  17.175 (1.315)   223   1520284                    32.38-  92.38    62.73
-------------------------------------------------------------------------------
```

QC Flag Legend

A - Target compound detected but, quantitated amount
exceeded maximum amount.

Report Date: 23-Nov-2015 10:01

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd11.i
Lab File ID: 11112010.d
Lab Smp Id: VI VOC ICAL, no sur
Analysis Type: VOA
Quant Type: ISTD
Operator: LA
Method File: /chem/msd11.i/20nov15.b/115z1120vi.m
Misc Info: 2516-201 (12/10/15)

Calibration Date: 20-NOV-2015
Calibration Time: 22:19
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
40 Bromochloromethan	61766	37060	86472	67996	10.09
54 1,4-Difluorobenze	242319	145391	339247	247709	2.22
79 Chlorobenzene-d5	224302	134581	314023	232764	3.77
92 Bromofluorobenzen	161670	97002	226338	168470	4.21

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
40 Bromochloromethan	6.80	6.47	7.13	6.80	0.10
54 1,4-Difluorobenze	8.19	7.86	8.52	8.19	0.00
79 Chlorobenzene-d5	11.60	11.27	11.93	11.59	0.00
92 Bromofluorobenzen	13.05	12.72	13.38	13.06	0.05

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msd11.i/20nov15.b/11112010.d

Page 1

Date : 21-NOV-2015 00:39

Client ID:

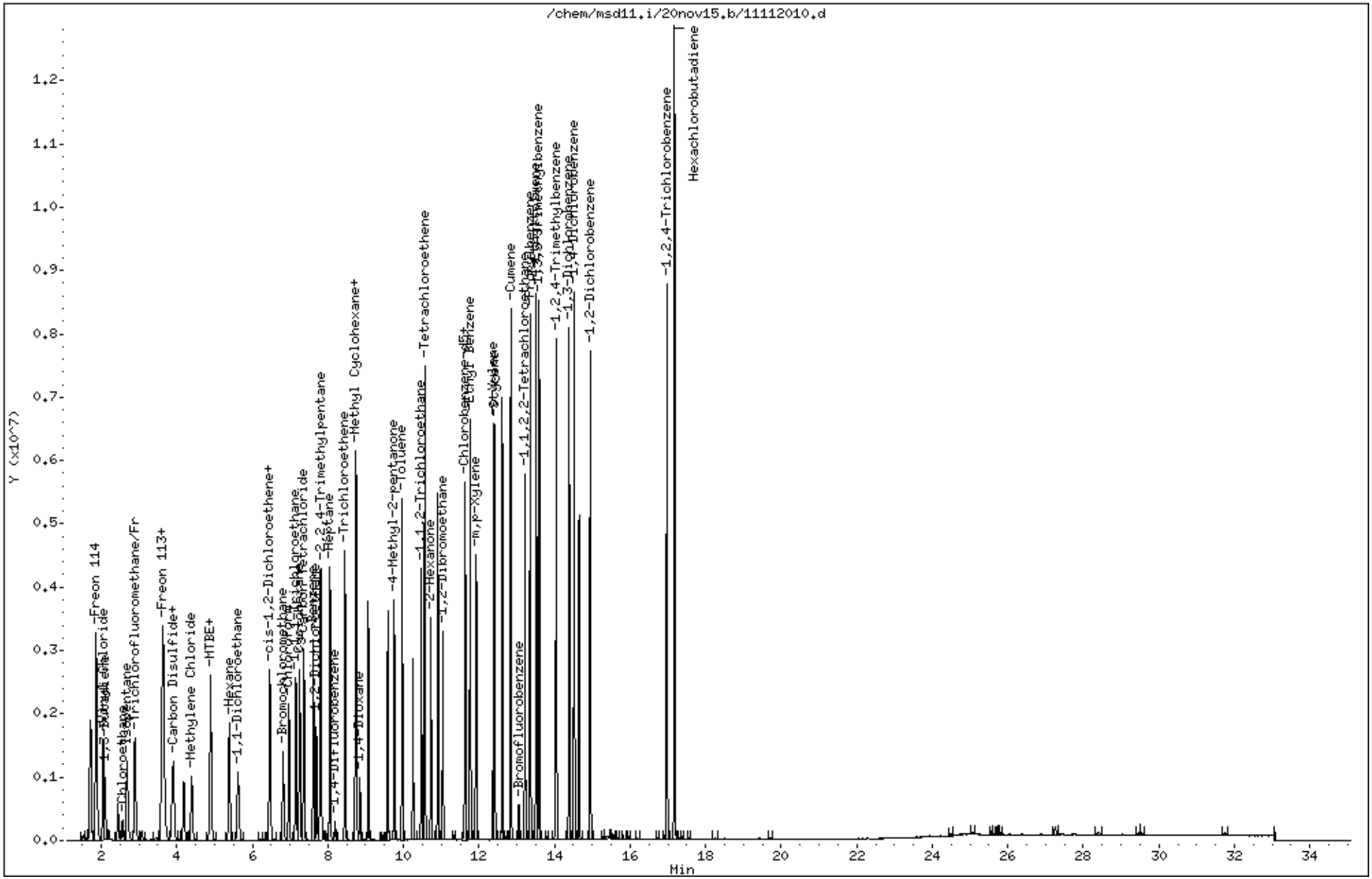
Instrument: msd11.i

Sample Info: ;VI VOC ICAL, no surr, L8

Operator: LA

Column phase: RTx-624

Column diameter: 0.53



MSD-11 VI VOC + naphs MDL L1

Report Date : 30-Nov-2015 12:14

std id: 2516-203-1000 (2nd source)
amt spiked: 1.0 mL

Eurofins Air Toxics Inc.
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msd11.i/23nov15.b/115z1120vi.m
Batch File: /chem/msd11.i/23nov15.b
Inst ID: msd11.i

ID:	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07
FILENAME:	11112307	11112308	11112309	11112310	11112311	11112312	11112314
INJ.DATE:	23-NOV-2015	23-NOV-2015	23-NOV-2015	23-NOV-2015	23-NOV-2015	23-NOV-2015	23-NOV-2015
INJ.TIME:	14:28	15:16	16:04	16:58	17:46	18:34	20:09

Compound units in ng	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	AVG CONC	STD DEV	MDL	RL	amt spk
1 Propylene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
2 Dichlorodifluoromethan	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
3 Freon 114	7.50	6.93	7.65	6.89	7.52	7.24	8.19	7.42	0.45	1.42	14	7.0
4 Chloromethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
5 Butane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
~~6 Vinyl Chloride~~	~~3.13~~	~~2.62~~	~~2.99~~	~~2.93~~	~~3.01~~	~~3.14~~	~~2.64~~	~~2.92~~	~~0.23~~	~~0.67~~	LA 12/3/15	
7 1,3-Butadiene	2.68	2.34	2.43	2.30	3.90	2.73	2.75	2.73	0.55	1.72	2.2	2.2
8 Bromomethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
9 Chloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
10 Isopentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
11 Trichlorofluoromethane	5.50	5.10	5.37	5.27	5.72	4.76	5.53	5.32	0.32	0.99	11	5.6
12 Vinyl Bromide	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
13 Ethanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
14 1,1-Dichloroethene	4.32	3.72	3.91	4.81	3.81	3.28	4.08	3.99	0.48	1.52	4.0	4.0
15 Freon 113	7.19	7.01	6.35	6.67	7.61	5.78	6.82	6.78	0.59	1.86	7.7	7.7
16 Acetone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
17 Freon123a	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		

(surr 1,2-DCA-d4 cannot be used for DoD projects)

Reviewer 1 Lynette Antonucci Date: 11/30/15
Reviewer 2 [illegible] Date: 12/8/15

* raised RL for vinyl chloride ~~for~~ from 2.6ng to 5 ng due to poor peak chromatography at the lowest level @ 2.6ng.

** MDL verification for surr 1,2-DCA-d4 did not meet 3 x instrument noise. can only report to RL of 2.0ng for DoD projects.

- 1,1,2,2-TCA did not have a ratio between 1 and 20 for mean r'cvd conc. vs MDL value.

Eurofins Air Toxics Inc.
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msd11.i/23nov15.b/115z1120vi.m
Batch File: /chem/msd11.i/23nov15.b
Inst ID: msd11.i

Compound Units in ng	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	AVG CONC	STD DEV	MDL	RL	amt spk
18 Carbon Disulfide	4.20	4.54	3.95	4.11	3.84	3.51	3.59	3.96	0.36	1.12	6.2	3.1
19 2-Propanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
20 Pentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
21 3-Chloropropene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
~~22 Methylene Chloride~~	~~5.87~~	~~6.55~~	~~5.44~~	~~4.13~~	~~5.72~~	~~5.72~~	~~4.51~~	~~5.42~~	~~0.83~~	~~2.62~~		
23 Acrolein	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
24 tert-Butyl-Alcohol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
25 trans-1,2-Dichloroethe	3.87	3.69	3.50	3.08	3.51	2.41	2.42	3.21	0.60	1.87	4.0	4.0
26 MTBE	3.89	3.30	3.22	2.65	4.14	2.65	3.96	3.40	0.61	1.93	22	3.6
27 Acrylonitrile	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
28 Hexane	4.01	3.64	3.82	3.48	4.46	3.32	4.01	3.82	0.38	1.20	35	3.5
29 1,1-Dichloroethane	4.39	3.81	3.96	3.40	4.15	3.53	4.14	3.91	0.35	1.12	4.0	4.0
30 Isopropyl ether	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
31 Vinyl Acetate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
32 Chloroprene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
33 1-Propanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
34 2,2-Dichloropropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
35 t-Butylethyl Ether	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
36 Ethyl Acetate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
37 cis-1,2-Dichloroethene	4.72	3.43	4.00	3.57	4.75	3.98	3.94	4.06	0.51	1.61	4.0	4.0
38 2-Butanone	4.09	3.73	4.20	2.95	3.67	2.59	3.43	3.52	0.59	1.84	59	3.0
39 2-Chloroethyl vinyl et	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		

Eurofins Air Toxics Inc.
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msd11.i/23nov15.b/115z1120vi.m
Batch File: /chem/msd11.i/23nov15.b
Inst ID: msd11.i

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	AVG CONC	STD DEV	MDL	RL	amt spk
* 40 Bromochloromethane	26.00	26.00	26.00	26.00	26.00	26.00	26.00	26.00	0.00	0.00		
41 1,1-Dichloropropene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
42 Tetrahydrofuran	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
43 Octane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
44 Chloroform	5.04	4.36	4.18	4.64	4.88	3.76	4.43	4.47	0.43	1.36	4.9	4.9
45 1,1,1-Trichloroethane	5.18	4.58	4.39	4.34	4.47	3.86	5.18	4.57	0.47	1.48	5.4	5.4
46 Cyclohexane	3.22	3.15	2.88	3.12	2.99	2.46	3.58	3.06	0.34	1.08	6.9	3.4
47 Carbon Tetrachloride	6.12	5.53	4.22	4.60	2.54	2.73	4.15	4.27	1.32	4.15	6.3	6.3
48 Benzene	4.36	3.57	4.06	3.67	3.53	3.86	3.60	3.81	0.31	0.97	6.4	3.2
$ 49 1,2-Dichloroethane-d4	1.86	2.07	2.55	1.86	2.29	1.93	2.10	2.09	0.25	0.79	2.0	2.0
50 1,2-Dichloroethane	4.00	3.25	3.21	3.36	3.77	3.14	3.62	3.48	0.33	1.02	4.0	4.0
51 2,2,4-Trimethylpentane	4.87	4.15	4.17	4.23	4.45	3.43	5.01	4.33	0.52	1.65	9.4	4.7
52 tert-amyl-Methyl Ether	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
53 Heptane	4.33	3.92	3.69	4.21	3.73	3.50	4.18	3.94	0.31	0.98	8.2	4.1
* 54 1,4-Difluorobenzene	23.00	23.00	23.00	23.00	23.00	23.00	23.00	23.00	0.00	0.00		
55 Decane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
56 Trichloroethene	5.04	4.34	4.44	4.78	4.73	5.07	5.59	4.86	0.42	1.33	5.4	5.4
57 Dodecane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
58 Methyl Cyclohexane	3.70	3.11	3.27	3.73	3.76	2.45	3.60	3.37	0.48	1.50	8.0	4.0
59 1,2-Dichloropropane	4.39	3.42	3.99	3.67	4.11	3.35	4.48	3.92	0.45	1.41	4.6	4.6
60 1,4-Dioxane	3.86	2.78	2.91	3.08	3.10	2.25	2.94	2.99	0.48	1.51	11	3.6
61 Undecane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
62 Bromodichloromethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
63 1,3-Dichloropropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		

Eurofins Air Toxics Inc.
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msd11.i/23nov15.b/115z1120vi.m
Batch File: /chem/msd11.i/23nov15.b
Inst ID: msd11.i

	Compound units in ng	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	AVG CONC	STD DEV	MDL	RL	amt spk
	64 cis-1,3-Dichloropropen	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
	65 4-Methyl-2-pentanone	4.35	4.36	4.01	4.05	4.02	3.38	4.87	4.15	0.45	1.43	8.2	4.1
$	66 Toluene-d8	2.23	2.27	2.27	2.07	2.03	1.99	2.07	2.13	0.12	0.38	2.0	2.0
	67 Toluene	3.59	3.31	3.04	3.58	3.53	2.43	3.92	3.34	0.48	1.52	7.5	3.8
	68 1,1,1,2-Tetrachloroeth	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
	69 trans-1,3-Dichloroprop	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
	70 1,1,2-Trichloroethane	5.36	4.53	4.47	4.17	5.45	4.14	4.71	4.69	0.53	1.66	5.4	5.4
	71 Tetrachloroethene	6.35	4.88	5.23	5.17	5.33	4.33	5.99	5.33	0.67	2.11	6.8	6.8
	72 2-Hexanone	4.50	4.41	3.78	4.28	2.91	2.88	3.79	3.79	0.68	2.13	8.2	4.1
	73 Dibromochloromethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
	74 1,2-Dibromoethane	7.05	6.55	5.82	6.51	5.34	4.23	6.63	6.02	0.97	3.05	7.7	7.7
	75 Bromobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
	76 1,2,3-Trichloropropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
	77 2-Chlorotoluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
	78 4-Chlorotoluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
*	79 Chlorobenzene-d5	24.00	24.00	24.00	24.00	24.00	24.00	24.00	24.00	0.00	0.00		
	80 tert-Butylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
	81 Chlorobenzene	4.16	3.58	3.48	3.52	3.96	2.79	3.81	3.61	0.44	1.38	4.6	4.6
	82 Ethyl Benzene	4.34	3.32	3.25	3.34	3.89	2.48	3.81	3.49	0.60	1.87	4.3	4.3
	83 sec-Butylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
	84 m,p-Xylene	3.78	3.58	3.06	3.77	3.41	2.61	4.44	3.52	0.58	1.83	8.7	4.3
	85 p-Cymene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
	86 1,2,3-Trimethylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		

Eurofins Air Toxics Inc.
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msd11.i/23nov15.b/115z1120vi.m
Batch File: /chem/msd11.i/23nov15.b
Inst ID: msd11.i

Compound units in ng	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	AVG CONC	STD DEV	MDL	RL	amt SPK
87 Butylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
88 o-Xylene	4.73	3.45	3.08	3.45	3.90	2.68	4.14	3.63	0.69	2.15	8.7	4.3
89 Styrene	4.08	3.40	3.54	3.29	3.20	2.51	3.62	3.38	0.48	1.51	8.5	4.2
90 Bromoform	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
91 Cumene	5.00	3.98	4.04	3.91	4.36	2.96	4.63	4.13	0.65	2.03	9.8	4.9
											LA 12/14/15	
* 92 Bromofluorobenzene	36.00	36.00	36.00	36.00	36.00	36.00	36.00	36.00	0.00	0.00	~~2.1~~	
93 1,2-Dibromo-3-Chloropr	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
+ 94 1,1,2,2-Tetrachloroeth	6.86	5.72	5.21	6.19	5.20	1.51	3.45	4.88	1.82	5.73	6.9	6.9
95 1,3,5-Trichlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
96 Propylbenzene	5.06	4.04	3.97	4.28	4.79	3.01	4.42	4.22	0.66	2.08	9.8	4.9
97 4-Ethyltoluene	4.68	3.83	3.72	3.69	4.01	2.84	4.21	3.85	0.56	1.77	9.8	4.9
98 1,3,5-Trimethylbenzene	4.84	3.85	3.87	4.04	4.21	2.88	4.38	4.01	0.60	1.90	9.8	4.9
99 1,2,3-Trichlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
100 1,2,4-Trimethylbenzene	4.43	3.82	3.63	3.92	4.04	2.70	4.91	3.92	0.69	2.17	29	4.9
101 1,3-Dichlorobenzene	5.54	4.66	4.87	4.79	5.06	2.87	5.37	4.74	0.88	2.77	6.0	6.0
102 1,4-Dichlorobenzene	5.63	4.75	4.74	4.58	5.31	3.33	4.80	4.73	0.72	2.27	6.0	6.0
103 Phenol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
217 2-Methylphenol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
218 3-Methylphenol/4-Methy	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
104 alpha-Chlorotoluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
105 1,2-Dichlorobenzene	5.63	4.65	4.79	4.90	5.59	3.29	5.02	4.84	0.78	2.46	6.0	6.0
106 1,2,4-Trichlorobenzene	6.93	4.95	5.77	5.48	7.57	3.91	5.67	5.75	1.21	3.81	15	7.4
107 Hexachlorobutadiene	10.16	7.81	8.19	8.74	8.90	7.01	8.09	8.41	0.99	3.11	21	11
$ 108 Naphthalene-d8	2.30	2.00	2.52	2.12	2.07	2.19	2.08	2.18	0.18	0.56	2.0	2.0

Eurofins Air Toxics Inc.
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msd11.i/23nov15.b/115z1120vi.m
Batch File: /chem/msd11.i/23nov15.b
Inst ID: msd11.i

Compound units in ng	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	AVG CONC	STD DEV	MDL	RL	amt spk
109 Naphthalene	1.28	1.05	1.17	1.06	0.98	1.05	1.21	1.11	0.11	0.34	1.0	1.0
110 2-Methylnaphthalene	1.22	1.10	1.37	0.98	1.07	1.06	1.07	1.12	0.13	0.41	1.0	1.0
111 1-Methylnaphthalene	1.07	1.10	1.06	0.98	0.93	1.15	1.20	1.07	0.09	0.29	1.0	1.0
112 Acenaphthylene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
113 Acenaphthene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
114 Fluorene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
115 Phenanthrene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
116 Anthracene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
117 Fluoranthene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
118 Pyrene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		

MSD-11 VI VOC MDL L2 } - chloroethane, - isopentane, - meCl2 — - vinyl chloride, - IPA

Report Date : 03-Dec-2015 15:57

0549 of 0912

Eurofins Air Toxics Inc.
METHOD DETECTION LIMIT SUMMARY REPORT

VOC < std id: 2516-203-1000 (2nd source), amt spiked: 2.0mL

Method File: /chem/msd11.i/23nov15.b/115z1120vi.m
Batch File: /chem/msd11.i/23nov15.b
Inst ID: msd11.i

naphs < std id: 2595-246-1.0 (1st source), amt spk: 1.0 uL

ID:	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08
FILENAME:	11112317	11112318	11112319	11112320	11112321	11112322	11112323	11112324
INJ.DATE:	23-NOV-2015	23-NOV-2015	24-NOV-2015	24-NOV-2015	24-NOV-2015	24-NOV-2015	24-NOV-2015	24-NOV-2015
INJ.TIME:	22:31	23:18	00:05	00:51	01:38	02:25	03:11	03:58

Compound units in ng	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	AVG CONC	STD DEV	MDL	RL	amt spk
1 Propylene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
2 Dichlorodifluoromethan	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
3 Freon 114	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
4 Chloromethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
5 Butane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
6 Vinyl Chloride *	5.96	5.92	6.12	5.45	5.48	5.29	6.16	5.77	5.77	0.33	0.98	5.1	5.1
7 1,3-Butadiene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
8 Bromomethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
9 Chloroethane	6.41	7.11	5.99	6.88	6.60	6.28	8.29	6.59	6.77	0.70	2.11	16	5.3
10 Isopentane	6.45	5.85	5.43	5.96	5.78	5.70	6.34	5.69	5.90	0.34	1.03	5.9	5.9
11 Trichlorofluoromethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
12 Vinyl Bromide	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
13 Ethanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
14 1,1-Dichloroethene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
15 Freon 113	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
16 Acetone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
17 Freon123a	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		

(chloroethane cannot be used for DoD projects.)

Reviewer 1 [signature] Date: 12/3/15
Reviewer 2 [signature] Date: 12/8/15

* vinyl chloride RL was raised to 5.1ng due to poor peak shape at the original RL of 2.6ng.

** MDL verification for Chloroethane did not meet 3X instrument noise. Can only report to RL for DoD projects.

Eurofins Air Toxics Inc.
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msd11.i/23nov15.b/115z1120vi.m
Batch File: /chem/msd11.i/23nov15.b
Inst ID: msd11.i

Compound units in ng	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	AVG CONC	STD DEV	MDL	RL	amt spk
18 Carbon Disulfide	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
19 2-Propanol	5.52	5.81	5.28	5.45	5.49	4.96	4.57	4.39	5.18	0.50	1.49	49	4.9
20 Pentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
21 3-Chloropropene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
22 Methylene Chloride	8.63	8.87	8.93	7.92	11.14	10.71	7.73	6.34	8.78	1.57	4.70	21	7.0
23 Acrolein	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
24 tert-Butyl-Alcohol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
25 trans-1,2-Dichloroethe	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
26 MTBE	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
27 Acrylonitrile	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
28 Hexane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
29 1,1-Dichloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
30 Isopropyl ether	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
31 Vinyl Acetate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
32 Chloroprene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
33 1-Propanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
34 2,2-Dichloropropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
35 t-Butylethyl Ether	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
36 Ethyl Acetate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
37 cis-1,2-Dichloroethene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
38 2-Butanone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
39 2-Chloroethyl vinyl et	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		

Eurofins Air Toxics Inc.
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msd11.i/23nov15.b/115z1120vi.m
Batch File: /chem/msd11.i/23nov15.b
Inst ID: msd11.i

Compound units in ng	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	AVG CONC	STD DEV	MDL	RL	spk amt
* 40 Bromochloromethane	26.00	26.00	26.00	26.00	26.00	26.00	26.00	26.00	26.00	0.00	0.00		
41 1,1-Dichloropropene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
42 Tetrahydrofuran	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
43 Octane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
44 Chloroform	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
45 1,1,1-Trichloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
46 Cyclohexane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
47 Carbon Tetrachloride	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
48 Benzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
$ 49 1,2-Dichloroethane-d4	6.24	4.86	5.65	5.53	5.45	5.72	5.09	5.58	5.52	0.42	1.25	—	5.0
50 1,2-Dichloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
51 2,2,4-Trimethylpentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
52 tert-amyl-Methyl Ether	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
53 Heptane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
* 54 1,4-Difluorobenzene	23.00	23.00	23.00	23.00	23.00	23.00	23.00	23.00	23.00	0.00	0.00		
55 Decane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
56 Trichloroethene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
57 Dodecane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
58 Methyl Cyclohexane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
59 1,2-Dichloropropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
60 1,4-Dioxane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
61 Undecane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
62 Bromodichloromethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
63 1,3-Dichloropropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		

Eurofins Air Toxics Inc.
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msd11.i/23nov15.b/115z1120vi.m
Batch File: /chem/msd11.i/23nov15.b
Inst ID: msd11.i

	Compound units in ng	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	AVG CONC	STD DEV	MDL	RL	spk amt
	64 cis-1,3-Dichloropropen	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
	65 4-Methyl-2-pentanone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
$	66 Toluene-d8	6.40	5.34	5.38	5.29	5.39	5.05	4.85	5.27	5.37	0.45	1.36	—	5.0
	67 Toluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
	68 1,1,1,2-Tetrachloroeth	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
	69 trans-1,3-Dichloroprop	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
	70 1,1,2-Trichloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
	71 Tetrachloroethene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
	72 2-Hexanone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
	73 Dibromochloromethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
	74 1,2-Dibromoethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
	75 Bromobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
	76 1,2,3-Trichloropropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
	77 2-Chlorotoluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
	78 4-Chlorotoluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
*	79 Chlorobenzene-d5	24.00	24.00	24.00	24.00	24.00	24.00	24.00	24.00	24.00	0.00	0.00		
	80 tert-Butylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
	81 Chlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
	82 Ethyl Benzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
	83 sec-Butylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
	84 m,p-Xylene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
	85 p-Cymene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
	86 1,2,3-Trimethylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		

Eurofins Air Toxics Inc.
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msd11.i/23nov15.b/115z1120vi.m
Batch File: /chem/msd11.i/23nov15.b
Inst ID: msd11.i

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	AVG CONC	STD DEV	MDL	RL	spk amt
87 Butylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
88 o-Xylene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
89 Styrene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
90 Bromoform	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
91 Cumene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
* 92 Bromofluorobenzene	36.00	36.00	36.00	36.00	36.00	36.00	36.00	36.00	36.00	0.00	0.00		
93 1,2-Dibromo-3-Chloropr	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
94 1,1,2,2-Tetrachloroeth	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
95 1,3,5-Trichlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
96 Propylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
97 4-Ethyltoluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
98 1,3,5-Trimethylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
99 1,2,3-Trichlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
100 1,2,4-Trimethylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
101 1,3-Dichlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
102 1,4-Dichlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
103 Phenol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
217 2-Methylphenol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
218 3-Methylphenol/4-Methy	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
104 alpha-Chlorotoluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
105 1,2-Dichlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
106 1,2,4-Trichlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
107 Hexachlorobutadiene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
$ 108 Naphthalene-d8	6.20	5.54	5.39	5.34	5.39	5.49	5.03	5.75	5.52	0.34	1.02	—	5.0

Eurofins Air Toxics Inc.
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msd11.i/23nov15.b/115z1120vi.m
Batch File: /chem/msd11.i/23nov15.b
Inst ID: msd11.i

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	AVG CONC	STD DEV	MDL
109 Naphthalene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
110 2-Methylnaphthalene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
111 1-Methylnaphthalene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
112 Acenaphthylene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
113 Acenaphthene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
114 Fluorene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
115 Phenanthrene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
116 Anthracene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
117 Fluoranthene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
118 Pyrene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

MSD-18 VI Naph, 2-MN, 1-MN MDL @1.0ng

Report Date : 23-Jul-2015 09:16

Eurofins Air Toxics Inc.
METHOD DETECTION LIMIT SUMMARY REPORT

spike id: 2595-246-1.0
amt spiked: 1.0ng
RL = 1.0ng

Method File: /chem/msd18.i/21Jul2015.b/185z0706via.m
Batch File: /chem/msd18.i/21Jul2015.b
Inst ID: msd18.i

ID:	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08
FILENAME:	18072109	18072110	18072111	18072112	18072113	18072114	18072115	18072116
INJ.DATE:	21-JUL-2015	21-JUL-2015	21-JUL-2015	21-JUL-2015	21-JUL-2015	21-JUL-2015	21-JUL-2015	21-JUL-2015
INJ.TIME:	18:10	18:52	19:34	20:15	20:57	21:38	22:20	23:01

Compound units in ng	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	AVG CONC	STD DEV	MDL
1 Propylene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
2 Dichlorodifluoromethan	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
3 Freon 114	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
4 Chloromethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
7 Butane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
9 Vinyl Chloride	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
10 1,3-Butadiene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
17 Bromomethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
18 Chloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
19 Isopentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
20 Trichlorofluoromethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
21 Vinyl Bromide	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
22 Ethanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
25 1,1-Dichloroethene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
26 Freon 113	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
27 Acetone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
28 Freon123a	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

Reviewer 1 Lynette Antonucelli Date: 7/23/15
Reviewer 2 [illegible] Date: 8-11-15

* MDL-1 was double-spiked w/ field surrogates (inadvertantly)

Eurofins Air Toxics Inc.
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msd18.i/21Jul2015.b/185z0706via.m
Batch File: /chem/msd18.i/21Jul2015.b
Inst ID: msd18.i

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	AVG CONC	STD DEV	MDL
105 Butylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
106 o-Xylene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
107 Styrene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
108 Bromoform	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
109 Cumene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
* 110 Bromofluorobenzene	36.00	36.00	36.00	36.00	36.00	36.00	36.00	36.00	36.00	0.00	0.00
111 1,2-Dibromo-3-Chloropr	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
112 1,1,2,2-Tetrachloroeth	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
113 1,3,5-Trichlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
114 Propylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
115 4-Ethyltoluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
116 1,3,5-Trimethylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
117 1,2,3-Trichlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
118 1,2,4-Trimethylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
119 1,3-Dichlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
120 1,4-Dichlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
121 alpha-Chlorotoluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
122 1,2-Dichlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
123 1,2,4-Trichlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
124 Hexachlorobutadiene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
$ 125 Naphthalene-d8	18.33	17.86	19.42	18.77	18.84	19.09	18.72	18.95	18.87	0.64	1.92
126 Naphthalene	0.79	0.83	1.22	1.11	0.83	0.83	0.81	0.89	0.91	0.16	0.48
127 2-Methylnaphthalene	0.66	0.62	0.96	0.62	0.77	0.74	0.76	0.77	0.74	0.11	0.33
128 1-Methylnaphthalene	0.72	0.78	0.90	0.79	0.81	0.88	0.86	0.80	0.82	0.06	0.18

TAR 8-11-15

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Client Sample ID: CCV
Lab ID#: 1602029-23A
EPA METHOD TO-17

File Name:	**18020303**	**Date of Extraction: NA**	**Date of Collection: NA**
Dil. Factor:	**1.00**		**Date of Analysis: 2/3/16 11:04 AM**

Compound	**%Recovery**
Naphthalene	114

Air Sample Volume(L): 1.00
Container Type: NA - Not Applicable

Surrogates	**%Recovery**	**Method Limits**
Naphthalene-d8	99	50-150

Eurofins Air Toxics Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: msd18.i Injection Date: 03-FEB-2016 11:04
Lab File ID: 18020303.d Init. Cal. Date(s): 14-JAN-2016 14-JAN-2016
Analysis Type: AIR Init. Cal. Times: 13:56 18:27
Lab Sample ID: VI VOC+PAH CCV Quant Type: ISTD
Method: /chem/msd18.i/03Feb2016.b/186z0114vi.m

COMPOUND	RRF / AMOUNT	RF25	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
$ 39 1,2-Dichloroethane-d4	0.10840	0.10848	0.010	-0.07370	30.00000	Averaged	
$ 57 Toluene-d8	0.37120	0.37809	0.010	-1.85816	30.00000	Averaged	
$ 97 Naphthalene-d8	1.40863	1.39058	0.010	1.28165	30.00000	Averaged	
4 Freon 114	0.57738	0.50155	0.010	13.13357	30.00000	Averaged	
6 Vinyl Chloride	0.80574	0.99901	0.010	-23.98632	30.00000	Averaged	
7 1,3-Butadiene	0.70183	0.87694	0.010	-24.94995	30.00000	Averaged	
9 Chloroethane	0.37881	0.46226	0.010	-22.02811	30.00000	Averaged	
10 Isopentane	0.55500	0.68618	0.010	-23.63523	30.00000	Averaged	
11 Trichlorofluoromethane/Fr11	0.84053	0.90365	0.010	-7.50966	30.00000	Averaged	
15 Freon 113	0.41000	0.36428	0.010	11.14974	30.00000	Averaged	
14 1,1-Dichloroethene	0.31088	0.33578	0.010	-8.00980	30.00000	Averaged	
18 Carbon Disulfide	2.05608	2.28514	0.010	-11.14057	30.00000	Averaged	
17 2-Propanol	1.57195	1.98622	0.010	-26.35380	30.00000	Averaged	
21 Methylene Chloride	0.72170	0.92491	0.010	-28.15711	30.00000	Averaged	
24 trans-1,2-Dichloroethene	0.29641	0.32076	0.010	-8.21603	30.00000	Averaged	
23 MTBE	1.35624	1.56018	0.010	-15.03669	30.00000	Averaged	
25 Hexane	0.81662	1.07991	0.010	-32.24226	30.00000	Averaged	<-
26 1,1-Dichloroethane	0.81408	1.01925	0.010	-25.20316	30.00000	Averaged	
29 cis-1,2-Dichloroethene	0.28500	0.32582	0.010	-14.32294	30.00000	Averaged	
28 2-Butanone	0.34455	0.42914	0.010	-24.55085	30.00000	Averaged	
35 Chloroform	0.68072	0.84934	0.010	-24.77117	30.00000	Averaged	
37 Cyclohexane	0.15836	0.17323	0.010	-9.38994	30.00000	Averaged	
36 1,1,1-Trichloroethane	0.14996	0.16504	0.010	-10.05960	30.00000	Averaged	
38 Carbon Tetrachloride	0.12691	0.12481	0.010	1.66021	30.00000	Averaged	
45 2,2,4-Trimethylpentane	0.45278	0.55349	0.010	-22.24167	30.00000	Averaged	
41 Benzene	0.46493	0.47114	0.010	-1.33560	30.00000	Averaged	
43 1,2-Dichloroethane	0.12288	0.15160	0.010	-23.37876	30.00000	Averaged	
46 Heptane	0.10397	0.12705	0.010	-22.19884	30.00000	Averaged	
48 Trichloroethene	0.09998	0.11915	0.010	-19.17741	30.00000	Averaged	
51 Methyl Cyclohexane	0.17348	0.20867	0.010	-20.28182	30.00000	Averaged	
52 1,2-Dichloropropane	0.09312	0.12717	0.010	-36.56851	30.00000	Averaged	<-
53 1,4-Dioxane	0.07541	0.08849	0.010	-17.34174	30.00000	Averaged	
56 4-Methyl-2-pentanone	0.07871	0.11456	0.010	-45.54220	30.00000	Averaged	<-
58 Toluene	0.44298	0.51799	0.010	-16.93370	30.00000	Averaged	
61 1,1,2-Trichloroethane	0.09246	0.09982	0.010	-7.96211	30.00000	Averaged	

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CONTINUING CALIBRATION COMPOUNDS

Instrument ID: msd18.i Injection Date: 03-FEB-2016 11:04
Lab File ID: 18020303.d Init. Cal. Date(s): 14-JAN-2016 14-JAN-2016
Analysis Type: AIR Init. Cal. Times: 13:56 18:27
Lab Sample ID: VI VOC+PAH CCV Quant Type: ISTD
Method: /chem/msd18.i/03Feb2016.b/186z0114vi.m

COMPOUND	RRF / AMOUNT	RF25	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
62 Tetrachloroethene	0.12161	0.10647	0.010	12.44939	30.00000	Averaged	
63 2-Hexanone	0.11927	0.17949	0.010	-50.49221	30.00000	Averaged	<-
66 1,2-Dibromoethane	0.10229	0.10720	0.010	-4.80441	30.00000	Averaged	
68 Chlorobenzene	0.27679	0.30120	0.010	-8.81684	30.00000	Averaged	
69 Ethyl Benzene	0.15273	0.16736	0.010	-9.57655	30.00000	Averaged	
71 m,p-Xylene	0.18934	0.20468	0.010	-8.10519	30.00000	Averaged	
74 o-Xylene	0.41666	0.52430	0.010	-25.83421	30.00000	Averaged	
75 Styrene	0.73293	0.90112	0.010	-22.94745	30.00000	Averaged	
77 Cumene	1.11095	1.49629	0.010	-34.68624	30.00000	Averaged	<-
80 1,1,2,2-Tetrachloroethane	0.36472	0.61992	0.010	-69.97027	30.00000	Averaged	<-
81 Propylbenzene	1.19659	1.87886	0.010	-57.01766	30.00000	Averaged	<-
82 4-Ethyltoluene	0.28917	0.38940	0.010	-34.66386	30.00000	Averaged	<-
83 1,3,5-Trimethylbenzene	0.40457	0.53668	0.010	-32.65646	30.00000	Averaged	<-
84 1,2,4-Trimethylbenzene	0.39251	0.48144	0.010	-22.65644	30.00000	Averaged	
86 1,3-Dichlorobenzene	0.48836	0.55505	0.010	-13.65481	30.00000	Averaged	
87 1,4-Dichlorobenzene	0.49171	0.55326	0.010	-12.51630	30.00000	Averaged	
90 1,2-Dichlorobenzene	0.47049	0.52061	0.010	-10.65241	30.00000	Averaged	
95 1,2,4-Trichlorobenzene	0.33386	0.31498	0.010	5.65559	30.00000	Averaged	
96 Hexachlorobutadiene	0.20928	0.17704	0.010	15.40667	30.00000	Averaged	
98 Naphthalene	1.45402	1.66429	0.010	-14.46139	30.00000	Averaged	
103 2-Methylnaphthalene	0.90987	0.99358	0.010	-9.20017	30.00000	Averaged	
104 1-Methylnaphthalene	0.83394	0.90583	0.010	-8.62061	30.00000	Averaged	
107 Acenaphthylene	1.57948	1.97666	0.010	-25.14670	30.00000	Averaged	
109 Acenaphthene	0.79005	0.59544	0.010	24.63312	30.00000	Averaged	
111 Fluorene	0.83826	0.51346	0.010	38.74672	30.00000	Averaged	<-
112 Phenanthrene	1.36894	1.15310	0.010	15.76690	30.00000	Averaged	
113 Anthracene	1.24726	1.05332	0.010	15.54876	30.00000	Averaged	
117 Fluoranthene	1.05850	0.63679	0.010	39.84055	30.00000	Averaged	<-
118 Pyrene	1.09279	0.63085	0.010	42.27206	30.00000	Averaged	<-

Eurofins Air Toxics Inc.

EPA Method TO-17 GC/MS

Data file : /chem/msd18.i/03Feb2016.b/18020303.d
Lab Smp Id: VI VOC+PAH CCV Client Smp ID: CCV
Inj Date : 03-FEB-2016 11:04
Operator : LA Inst ID: msd18.i
Smp Info : ;VI VOC+PAH CCV;CCV
Misc Info : 2516-212(3/31/16),2744-31-50(7/5/16)
Comment :
Method : /chem/msd18.i/03Feb2016.b/186z0114vi.m
Meth Date : 03-Feb-2016 11:54 lantonic Quant Type: ISTD
Cal Date : 14-JAN-2016 18:27 Cal File: 18011415.d
Als bottle: 2 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: VOC+PAH_ICAL.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO
* 32 Bromochloromethane					CAS #: 74-97-5		
6.030	6.030 (1.000)	130	191362	26.0000		80.00- 120.00	100.00
6.030	6.030 (1.000)	128	151759			47.81- 107.81	79.30
6.030	6.030 (1.000)	49	357544			99.93- 159.93	186.84
* 47 1,4-Difluorobenzene					CAS #: 540-36-3		
7.649	7.649 (1.000)	114	725728	23.0000		80.00- 120.00	100.00
7.649	7.649 (1.000)	88	121268			0.00- 45.51	16.71
* 67 Chlorobenzene-d5					CAS #: 3114-55-4		
11.589	11.589 (1.000)	117	632720	24.0000		80.00- 120.00	100.00
11.589	11.589 (1.000)	82	397705			23.87- 83.87	62.86
* 79 Bromofluorobenzene					CAS #: 460-00-4		
13.200	13.200 (1.000)	174	345554	36.0000		80.00- 120.00	100.00
13.200	13.200 (1.000)	95	484866			78.78- 138.78	140.32
13.200	13.200 (1.000)	176	332056			67.05- 127.05	96.09
$ 39 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
6.947	6.947 (0.908)	65	85569	25.0000	25.018	80.00- 120.00	100.00

```
                                          AMOUNTS
                                       CAL-AMT   ON-COL
   RT   EXP RT (REL RT)  MASS  RESPONSE (   ng)  (   ng)   TARGET RANGE    RATIO
   ==   ====== ========  ====  ======== =======  =======   ============    =====

$  39 1,2-Dichloroethane-d4 (continued)
  6.947   6.947 (0.908)    67     46559                    25.86-  85.86    54.41
-------------------------------------------------------------------------------
$  57 Toluene-d8                                  CAS #: 2037-26-5
  9.640   9.640 (0.832)    98    249194 25.0000   25.464  80.00- 120.00   100.00
  9.640   9.640 (0.832)    70     30337                     0.00-  40.57    12.17
  9.640   9.640 (0.832)   100    157532                    34.56-  94.56    63.22
-------------------------------------------------------------------------------
$  97 Naphthalene-d8                              CAS #: 1146-65-2
 17.728  17.728 (1.343)   136    333694 25.0000   24.680  80.00- 120.00   100.00
 17.728  17.728 (1.343)   108     32764                     0.00-  39.05     9.82
-------------------------------------------------------------------------------
    4 Freon 114                                   CAS #: 76-14-2
  1.453   1.453 (0.241)   135    516802 140.000   121.61  80.00- 120.00   100.00
  1.453   1.453 (0.241)   137    164258                     1.93-  61.93    31.78
-------------------------------------------------------------------------------
    6 Vinyl Chloride                              CAS #: 75-01-4
  1.625   1.625 (0.269)    62    375727 51.1000   63.357  80.00- 120.00   100.00
  1.625   1.625 (0.269)    64    140606                    15.41-  75.41    37.42
-------------------------------------------------------------------------------
    7 1,3-Butadiene                               CAS #: 106-99-0
  1.646   1.646 (0.273)    54    285281 44.2000   55.228  80.00- 120.00   100.00
  1.646   1.646 (0.273)    39    417984                   104.89- 164.89   146.52
-------------------------------------------------------------------------------
    9 Chloroethane                                CAS #: 75-00-3
  2.033   2.033 (0.337)    64    179640 52.8000   64.431  80.00- 120.00   100.00
  2.033   2.033 (0.337)    66     58030                     1.74-  61.74    32.30
  2.033   2.033 (0.337)    49     52545                     0.00-  57.57    29.25
-------------------------------------------------------------------------------
   10 Isopentane                                  CAS #: 78-78-4
  2.105   2.105 (0.349)    57    297970 59.0000   72.945  80.00- 120.00   100.00
  2.105   2.105 (0.349)    43    478378                   112.49- 172.49   160.55
-------------------------------------------------------------------------------
   11 Trichlorofluoromethane/Fr11                 CAS #: 75-69-4
  2.291   2.291 (0.380)   101    744904 112.000   120.41  80.00- 120.00   100.00
  2.291   2.291 (0.380)   103    477390                    34.96-  94.96    64.09
-------------------------------------------------------------------------------
   15 Freon 113                                   CAS #: 76-13-1
  2.886   2.886 (0.479)   151    410215 153.000   135.94  80.00- 120.00   100.00
  2.886   2.886 (0.479)   153    261999                    34.01-  94.01    63.87
  2.886   2.886 (0.479)   101    629509                    98.52- 158.52   153.46
-------------------------------------------------------------------------------
   14 1,1-Dichloroethene                          CAS #: 75-35-4
  2.864   2.864 (0.475)    98    195981 79.3000   85.652  80.00- 120.00   100.00
  2.864   2.864 (0.475)    96    312159                   130.53- 190.53   159.28
  2.864   2.864 (0.475)    61    606124                   241.31- 301.31   309.28
-------------------------------------------------------------------------------
```

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO
18 Carbon Disulfide					CAS #: 75-15-0		
3.115	3.115 (0.517)	76	1047814	62.3000	69.240	80.00- 120.00	100.00
17 2-Propanol					CAS #: 67-63-0		
3.108	3.108 (0.515)	45	719241	49.2000	62.166	80.00- 120.00	100.00
3.108	3.108 (0.515)	43	124519			0.00- 48.48	17.31
3.108	3.108 (0.515)	59	28023			0.00- 34.02	3.90
21 Methylene Chloride					CAS #: 75-09-2		
3.530	3.530 (0.585)	49	473115	69.5000	89.069	80.00- 120.00	100.00
3.530	3.530 (0.585)	84	315121			46.74- 106.74	66.61
3.530	3.530 (0.585)	51	147532			1.74- 61.74	31.18
24 trans-1,2-Dichloroethene					CAS #: 156-60-5		
3.946	3.946 (0.654)	98	187213	79.3000	85.815	80.00- 120.00	100.00
3.939	3.939 (0.653)	61	505423			203.10- 263.10	269.97
3.946	3.946 (0.654)	96	300541			127.09- 187.09	160.53
23 MTBE					CAS #: 1634-04-4		
3.931	3.931 (0.652)	73	827929	72.1000	82.941	80.00- 120.00	100.00
3.931	3.931 (0.652)	57	206152			0.00- 53.10	24.90
3.931	3.931 (0.652)	41	199495			0.00- 50.25	24.10
25 Hexane					CAS #: 110-54-3		
4.419	4.419 (0.733)	57	560353	70.5000	93.231	80.00- 120.00	100.00
4.426	4.426 (0.734)	43	382073			31.56- 91.56	68.18
4.426	4.426 (0.734)	86	71466			0.00- 44.94	12.75
26 1,1-Dichloroethane					CAS #: 75-34-3		
4.698	4.698 (0.779)	63	607644	81.0000	101.41	80.00- 120.00	100.00
4.698	4.698 (0.779)	65	193464			1.52- 61.52	31.84
29 cis-1,2-Dichloroethene					CAS #: 156-59-2		
5.658	5.658 (0.938)	98	190165	79.3000	90.658	80.00- 120.00	100.00
5.658	5.658 (0.938)	96	301369			127.88- 187.88	158.48
5.658	5.658 (0.938)	61	460509			179.74- 239.74	242.16
28 2-Butanone					CAS #: 78-93-3		
5.651	5.651 (0.937)	72	186352	59.0000	73.485	80.00- 120.00	100.00
5.643	5.643 (0.936)	43	857148			351.97- 411.97	459.96
5.643	5.643 (0.936)	57	65658			2.17- 62.17	35.23
35 Chloroform					CAS #: 67-66-3		
6.231	6.231 (1.033)	83	610742	97.7000	121.90	80.00- 120.00	100.00
6.231	6.231 (1.033)	85	392638			34.57- 94.57	64.29

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO
37 Cyclohexane					CAS #: 110-82-7		
6.510	6.510 (0.851)	84	376067	68.8000	75.260	80.00- 120.00	100.00
6.510	6.510 (0.851)	56	528439			92.60- 152.60	140.52
6.510	6.510 (0.851)	41	311662			35.57- 95.57	82.87
36 1,1,1-Trichloroethane					CAS #: 71-55-6		
6.417	6.417 (0.839)	97	567636	109.000	119.96	80.00- 120.00	100.00
6.417	6.417 (0.839)	99	365583			34.22- 94.22	64.40
38 Carbon Tetrachloride					CAS #: 56-23-5		
6.653	6.653 (0.870)	119	496196	126.000	123.91	80.00- 120.00	100.00
6.646	6.646 (0.869)	117	520014			74.59- 134.59	104.80
45 2,2,4-Trimethylpentane					CAS #: 540-84-1		
7.176	7.176 (0.938)	57	1631179	93.4000	114.17	80.00- 120.00	100.00
7.176	7.176 (0.938)	56	533998			2.36- 62.36	32.74
7.176	7.176 (0.938)	41	434277			0.00- 55.73	26.62
41 Benzene					CAS #: 71-43-2		
6.947	6.947 (0.908)	78	949948	63.9000	64.753	80.00- 120.00	100.00
6.947	6.947 (0.908)	77	223286			0.00- 53.82	23.51
43 1,2-Dichloroethane					CAS #: 107-06-2		
7.062	7.062 (0.923)	62	386989	80.9000	99.813	80.00- 120.00	100.00
7.062	7.062 (0.923)	64	126104			2.51- 62.51	32.59
46 Heptane					CAS #: 142-82-5		
7.477	7.477 (0.978)	71	328738	82.0000	100.20	80.00- 120.00	100.00
7.477	7.477 (0.978)	43	629541			132.26- 192.26	191.50
7.477	7.477 (0.978)	57	319716			60.63- 120.63	97.26
48 Trichloroethene					CAS #: 79-01-6		
7.943	7.943 (1.038)	95	406052	108.000	128.71	80.00- 120.00	100.00
7.943	7.943 (1.038)	130	353888			73.40- 133.40	87.15
7.943	7.943 (1.038)	97	259666			35.04- 95.04	63.95
51 Methyl Cyclohexane					CAS #: 108-87-2		
8.251	8.251 (1.079)	83	528705	80.3000	96.586	80.00- 120.00	100.00
8.251	8.251 (1.079)	98	216124			15.23- 75.23	40.88
8.251	8.251 (1.079)	55	468740			45.63- 105.63	88.66
52 1,2-Dichloropropane					CAS #: 78-87-5		
8.301	8.301 (1.085)	63	370772	92.4000	126.19	80.00- 120.00	100.00
8.301	8.301 (1.085)	62	260369			38.55- 98.55	70.22
8.301	8.301 (1.085)	41	216138			21.51- 81.51	58.29

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO
53 1,4-Dioxane					CAS #: 123-91-1		
8.416	8.416 (1.100)	88	201303	72.1000	84.603	80.00- 120.00	100.00
8.416	8.416 (1.100)	58	156057			36.73- 96.73	77.52
8.416	8.416 (1.100)	57	71747			2.93- 62.93	35.64
56 4-Methyl-2-pentanone					CAS #: 108-10-1		
9.511	9.511 (1.243)	58	296053	81.9000	119.20	80.00- 120.00	100.00
9.511	9.511 (1.243)	43	812800			210.10- 270.10	274.55
9.511	9.511 (1.243)	85	107600			14.24- 74.24	36.35
58 Toluene					CAS #: 108-88-3		
9.726	9.726 (0.839)	91	1029658	75.4000	88.168	80.00- 120.00	100.00
9.726	9.726 (0.839)	92	596481			27.36- 87.36	57.93
61 1,1,2-Trichloroethane					CAS #: 79-00-5		
10.342	10.342 (1.352)	97	343310	109.000	117.68	80.00- 120.00	100.00
10.342	10.342 (1.352)	99	214295			31.64- 91.64	62.42
10.342	10.342 (1.352)	83	323587			56.72- 116.72	94.26
62 Tetrachloroethene					CAS #: 127-18-4		
10.421	10.421 (0.899)	166	381726	136.000	119.07	80.00- 120.00	100.00
10.421	10.421 (0.899)	129	300782			40.21- 100.21	78.80
10.421	10.421 (0.899)	131	292263			37.97- 97.97	76.56
63 2-Hexanone					CAS #: 591-78-6		
10.643	10.643 (0.918)	58	387543	81.9000	123.25	80.00- 120.00	100.00
10.643	10.643 (0.918)	43	754142			138.90- 198.90	194.60
10.643	10.643 (0.918)	100	60692			0.00- 50.74	15.66
66 1,2-Dibromoethane					CAS #: 106-93-4		
10.966	10.966 (0.946)	107	435234	154.000	161.40	80.00- 120.00	100.00
10.966	10.966 (0.946)	109	409190			63.94- 123.94	94.02
68 Chlorobenzene					CAS #: 108-90-7		
11.625	11.625 (1.003)	112	731329	92.1000	100.22	80.00- 120.00	100.00
11.625	11.625 (1.003)	114	232080			2.24- 62.24	31.73
11.625	11.625 (1.003)	77	487782			25.99- 85.99	66.70
69 Ethyl Benzene					CAS #: 100-41-4		
11.775	11.775 (1.016)	106	382975	86.8000	95.112	80.00- 120.00	100.00
11.775	11.775 (1.016)	91	1299854			279.23- 339.23	339.41
71 m,p-Xylene					CAS #: 108-38-3		
11.954	11.954 (1.032)	106	468382	86.8000	93.835	80.00- 120.00	100.00
11.954	11.954 (1.032)	91	989266			163.71- 223.71	211.21

RT	EXP RT	(REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO
74 o-Xylene						CAS #: 95-47-6		
12.463	12.463	(0.944)	106	436828	86.8000	109.22	80.00- 120.00	100.00
12.463	12.463	(0.944)	91	975257			176.46- 236.46	223.26
75 Styrene						CAS #: 100-42-5		
12.499	12.499	(0.947)	104	736948	85.2000	104.75	80.00- 120.00	100.00
12.499	12.499	(0.947)	78	390678			17.37- 77.37	53.01
77 Cumene						CAS #: 98-82-8		
12.971	12.971	(0.983)	105	1411832	98.3000	132.40	80.00- 120.00	100.00
12.971	12.971	(0.983)	120	350268			0.00- 57.05	24.81
12.971	12.971	(0.983)	51	172463			0.00- 38.51	12.22
80 1,1,2,2-Tetrachloroethane						CAS #: 79-34-5		
13.401	13.401	(1.015)	83	815213	137.000	232.86	80.00- 120.00	100.00
13.408	13.408	(1.016)	85	516524			33.93- 93.93	63.36
81 Propylbenzene						CAS #: 103-65-1		
13.537	13.537	(1.026)	91	1772805	98.3000	154.35	80.00- 120.00	100.00
13.537	13.537	(1.026)	120	355962			0.00- 53.66	20.08
13.537	13.537	(1.026)	105	58521			0.00- 33.72	3.30
82 4-Ethyltoluene						CAS #: 622-96-8		
13.709	13.709	(1.039)	120	367423	98.3000	132.37	80.00- 120.00	100.00
13.709	13.709	(1.039)	105	1301314			299.89- 359.89	354.17
83 1,3,5-Trimethylbenzene						CAS #: 108-67-8		
13.795	13.795	(1.045)	120	506389	98.3000	130.40	80.00- 120.00	100.00
13.788	13.788	(1.044)	105	1071669			166.45- 226.45	211.63
84 1,2,4-Trimethylbenzene						CAS #: 95-63-6		
14.289	14.289	(1.082)	120	454260	98.3000	120.57	80.00- 120.00	100.00
14.289	14.289	(1.082)	105	1063883			185.90- 245.90	234.20
86 1,3-Dichlorobenzene						CAS #: 541-73-1		
14.655	14.655	(1.110)	146	639327	120.000	136.38	80.00- 120.00	100.00
14.655	14.655	(1.110)	148	409457			33.73- 93.73	64.04
14.655	14.655	(1.110)	111	269912			8.03- 68.03	42.22
87 1,4-Dichlorobenzene						CAS #: 106-46-7		
14.798	14.798	(1.121)	146	637266	120.000	135.02	80.00- 120.00	100.00
14.798	14.798	(1.121)	148	406330			33.15- 93.15	63.76
14.798	14.798	(1.121)	111	260317			6.74- 66.74	40.85
90 1,2-Dichlorobenzene						CAS #: 95-50-1		
15.271	15.271	(1.157)	146	599660	120.000	132.78	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO
90 1,2-Dichlorobenzene (continued)							
15.271	15.271 (1.157)	148	383246			33.98- 93.98	63.91
15.271	15.271 (1.157)	111	264576			9.89- 69.89	44.12
95 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
17.434	17.434 (1.321)	180	447458	148.000	139.63	80.00- 120.00	100.00
17.434	17.434 (1.321)	182	428835			66.29- 126.29	95.84
96 Hexachlorobutadiene					CAS #: 87-68-3		
17.634	17.634 (1.336)	225	361955	213.000	180.18	80.00- 120.00	100.00
17.634	17.634 (1.336)	223	230992			33.08- 93.08	63.82
98 Naphthalene					CAS #: 91-20-3		
17.771	17.771 (1.346)	128	798754	50.0000	57.231	80.00- 120.00	100.00
17.771	17.771 (1.346)	127	108752			0.00- 43.03	13.62
103 2-Methylnaphthalene					CAS #: 91-57-6		
19.232	19.232 (1.457)	142	476854	50.0000	54.600	80.00- 120.00	100.00
19.232	19.232 (1.457)	141	428435			56.76- 116.76	89.85
19.232	19.232 (1.457)	115	166965			1.56- 61.56	35.01
104 1-Methylnaphthalene					CAS #: 90-12-0		
19.454	19.454 (1.474)	142	434742	50.0000	54.310	80.00- 120.00	100.00
19.454	19.454 (1.474)	141	406800			59.80- 119.80	93.57
19.454	19.454 (1.474)	115	161927			3.48- 63.48	37.25
107 Acenaphthylene					CAS #: 208-96-8		
21.302	21.302 (1.614)	152	948672	50.0000	62.573	80.00- 120.00	100.00
21.302	21.302 (1.614)	151	198372			0.00- 49.75	20.91
21.302	21.302 (1.614)	153	123744			0.00- 43.01	13.04
109 Acenaphthene					CAS #: 83-32-9		
21.560	21.560 (1.633)	154	285771	50.0000	37.683	80.00- 120.00	100.00
21.560	21.560 (1.633)	152	171467			26.17- 86.17	60.00
21.560	21.560 (1.633)	153	320832			78.75- 138.75	112.27
111 Fluorene					CAS #: 86-73-7		
22.684	22.684 (1.718)	166	246428	50.0000	30.627	80.00- 120.00	100.00
22.684	22.684 (1.718)	165	238378			65.26- 125.26	96.73
112 Phenanthrene					CAS #: 85-01-8		
24.819	24.819 (1.880)	178	553415	50.0000	42.116	80.00- 120.00	100.00
24.819	24.819 (1.880)	176	110196			0.00- 49.34	19.91
24.819	24.819 (1.880)	179	84389			0.00- 45.21	15.25
113 Anthracene					CAS #: 120-12-7		
24.927	24.927 (1.888)	178	505528	50.0000	42.226	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO
113 Anthracene (continued)							
24.927	24.927 (1.888)	176	95598			0.00- 48.82	18.91
24.927	24.927 (1.888)	179	74306			0.00- 44.74	14.70
117 Fluoranthene					CAS #: 206-44-0		
28.014	28.014 (2.122)	202	305617	50.0000	30.080	80.00- 120.00	100.00
28.007	28.007 (2.122)	101	58389			0.00- 43.29	19.11
118 Pyrene					CAS #: 129-00-0		
28.802	28.802 (2.182)	202	302766	50.0000	28.864	80.00- 120.00	100.00
28.802	28.802 (2.182)	101	70390			0.00- 45.23	23.25
28.802	28.802 (2.182)	100	55608			0.00- 42.66	18.37

Report Date: 03-Feb-2016 11:54

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd18.i
Lab File ID: 18020303.d
Lab Smp Id: VI VOC+PAH CCV
Analysis Type: VOA
Quant Type: ISTD
Operator: LA
Method File: /chem/msd18.i/03Feb2016.b/186z0114vi.m
Misc Info: 2516-212(3/31/16),2744-31-50(7/5/16)

Calibration Date: 03-FEB-2016
Calibration Time: 11:04
Client Smp ID: CCV
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
32 Bromochloromethan	191362	114817	267907	191362	0.00
47 1,4-Difluorobenze	725728	435437	1016019	725728	0.00
67 Chlorobenzene-d5	632720	379632	885808	632720	0.00
79 Bromofluorobenzen	345554	207332	483776	345554	0.00

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
32 Bromochloromethan	6.03	5.70	6.36	6.03	0.00
47 1,4-Difluorobenze	7.65	7.32	7.98	7.65	0.00
67 Chlorobenzene-d5	11.59	11.26	11.92	11.59	0.00
79 Bromofluorobenzen	13.20	12.87	13.53	13.20	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msd18.i/03Feb2016.b/18020303.d

Date : 03-FEB-2016 11:04

Client ID: CCV

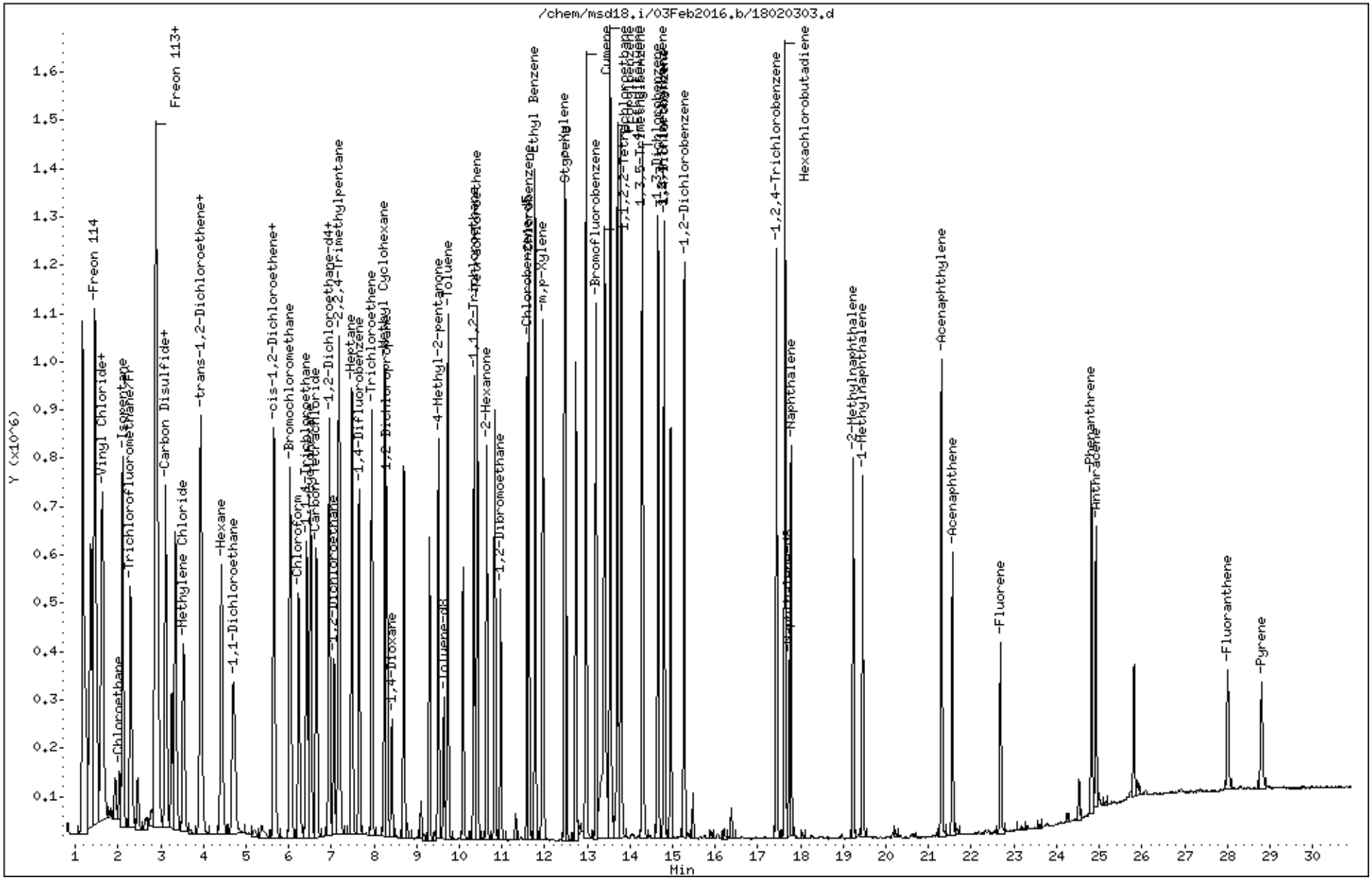
Sample Info: ;VI VOC+PAH CCV;CCV

Column phase: RTx-624

Instrument: msd18.i

Operator: LA

Column diameter: 0.53



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Client Sample ID: CCV
Lab ID#: 1602029-23B
EPA METHOD TO-17

File Name:	**11020404**	**Date of Extraction: NA**	**Date of Collection: NA**
Dil. Factor:	**1.00**		**Date of Analysis: 2/4/16 12:29 PM**

Compound	%Recovery
Freon 114	99
Vinyl Chloride	108
1,3-Butadiene	107
Isopentane	91
Freon 11	103
1,1-Dichloroethene	108
Methylene Chloride	96
Freon 113	103
trans-1,2-Dichloroethene	105
1,1-Dichloroethane	105
cis-1,2-Dichloroethene	107
Hexane	103
Chloroform	102
1,2-Dichloroethane	99
1,1,1-Trichloroethane	92
Benzene	96
Carbon Tetrachloride	102
Cyclohexane	100
1,2-Dichloropropane	88
Trichloroethene	87
1,4-Dioxane	90
2,2,4-Trimethylpentane	96
Heptane	97
Methylcyclohexane	94
1,1,2-Trichloroethane	98
4-Methyl-2-pentanone	102
Toluene	97
2-Hexanone	110
Tetrachloroethene	103
Chlorobenzene	104
Ethyl Benzene	105
m,p-Xylene	92
o-Xylene	99
Styrene	104
1,1,2,2-Tetrachloroethane	112
Cumene	102
Propylbenzene	105
4-Ethyltoluene	106
1,3,5-Trimethylbenzene	108
1,2,4-Trimethylbenzene	106
1,3-Dichlorobenzene	108
1,4-Dichlorobenzene	109

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Client Sample ID: CCV
Lab ID#: 1602029-23B
EPA METHOD TO-17

File Name:	**11020404**	**Date of Extraction: NA**	**Date of Collection: NA**
Dil. Factor:	**1.00**		**Date of Analysis: 2/4/16 12:29 PM**

Compound	%Recovery
1,2-Dichlorobenzene	108
1,2,4-Trichlorobenzene	118
Hexachlorobutadiene	112
Naphthalene	106

Air Sample Volume(L): 1.00
m,p-Xylene was reported from file #11020826, analyzed on 2/9/16 with a dilution factor of 4.00.

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	94	50-150
Toluene-d8	101	50-150
Naphthalene-d8	110	50-150

Eurofins Air Toxics Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: msd11.i Injection Date: 04-FEB-2016 12:29
Lab File ID: 11020404.d Init. Cal. Date(s): 20-NOV-2015 21-NOV-2015
Analysis Type: AIR Init. Cal. Times: 19:11 00:39
Lab Sample ID: VI VOC+PAH CCV Quant Type: ISTD
Method: /chem/msd11.i/04feb16.b/115z1120vi.m

COMPOUND	RRF / AMOUNT	RF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
$ 49 1,2-Dichloroethane-d4	0.09576	0.09000	0.010	6.01815	30.00000	Averaged
$ 66 Toluene-d8	0.37883	0.38119	0.010	-0.62091	30.00000	Averaged
$ 108 Naphthalene-d8	1.29079	1.41995	0.010	-10.00652	30.00000	Averaged
3 Freon 114	0.55942	0.55218	0.010	1.29489	30.00000	Averaged
6 Vinyl Chloride	0.57986	0.62787	0.010	-8.27901	30.00000	Averaged
7 1,3-Butadiene	0.49396	0.52696	0.010	-6.67969	30.00000	Averaged
9 Chloroethane	0.27909	0.26468	0.010	5.16219	30.00000	Averaged
10 Isopentane	0.43180	0.39125	0.010	9.39003	30.00000	Averaged
11 Trichlorofluoromethane/Fr11	0.71520	0.73643	0.010	-2.96914	30.00000	Averaged
15 Freon 113	0.40819	0.42223	0.010	-3.44053	30.00000	Averaged
14 1,1-Dichloroethene	0.28303	0.30503	0.010	-7.77370	30.00000	Averaged
18 Carbon Disulfide	1.69485	1.70345	0.010	-0.50698	30.00000	Averaged
19 2-Propanol	1.12960	1.21152	0.010	-7.25274	30.00000	Averaged
22 Methylene Chloride	0.65911	0.63340	0.010	3.90089	30.00000	Averaged
25 trans-1,2-Dichloroethene	0.26675	0.27916	0.010	-4.65296	30.00000	Averaged
26 MTBE	1.03977	0.91814	0.010	11.69787	30.00000	Averaged
28 Hexane	0.69128	0.71259	0.010	-3.08254	30.00000	Averaged
29 1,1-Dichloroethane	0.69515	0.73174	0.010	-5.26332	30.00000	Averaged
37 cis-1,2-Dichloroethene	0.29116	0.31174	0.010	-7.06982	30.00000	Averaged
38 2-Butanone	0.25568	0.26051	0.010	-1.89201	30.00000	Averaged
44 Chloroform	0.70106	0.71923	0.010	-2.59137	30.00000	Averaged
46 Cyclohexane	0.14661	0.14596	0.010	0.43906	30.00000	Averaged
45 1,1,1-Trichloroethane	0.13326	0.12312	0.010	7.61163	30.00000	Averaged
47 Carbon Tetrachloride	0.11911	0.12140	0.010	-1.92879	30.00000	Averaged
51 2,2,4-Trimethylpentane	0.42766	0.41217	0.010	3.62323	30.00000	Averaged
48 Benzene	0.38417	0.36954	0.010	3.80743	30.00000	Averaged
50 1,2-Dichloroethane	0.12938	0.12769	0.010	1.30496	30.00000	Averaged
53 Heptane	0.10223	0.09922	0.010	2.94256	30.00000	Averaged
56 Trichloroethene	0.11989	0.10458	0.010	12.77254	30.00000	Averaged
58 Methyl Cyclohexane	0.18852	0.17797	0.010	5.59222	30.00000	Averaged
59 1,2-Dichloropropane	0.10666	0.09394	0.010	11.93030	30.00000	Averaged
60 1,4-Dioxane	0.08910	0.07983	0.010	10.40171	30.00000	Averaged
65 4-Methyl-2-pentanone	0.09246	0.09417	0.010	-1.85177	30.00000	Averaged
67 Toluene	0.45955	0.44708	0.010	2.71381	30.00000	Averaged
70 1,1,2-Trichloroethane	0.09930	0.09690	0.010	2.42376	30.00000	Averaged

Eurofins Air Toxics Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: msd11.i Injection Date: 04-FEB-2016 12:29
Lab File ID: 11020404.d Init. Cal. Date(s): 20-NOV-2015 21-NOV-2015
Analysis Type: AIR Init. Cal. Times: 19:11 00:39
Lab Sample ID: VI VOC+PAH CCV Quant Type: ISTD
Method: /chem/msd11.i/04feb16.b/115z1120vi.m

COMPOUND	RRF / AMOUNT	RF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
71 Tetrachloroethene	0.13369	0.13771	0.010	-3.00800	30.00000	Averaged
72 2-Hexanone	0.12579	0.13835	0.010	-9.98667	30.00000	Averaged
74 1,2-Dibromoethane	0.11041	0.11477	0.010	-3.94404	30.00000	Averaged
81 Chlorobenzene	0.31277	0.32386	0.010	-3.54561	30.00000	Averaged
82 Ethyl Benzene	0.16142	0.17007	0.010	-5.36110	30.00000	Averaged
84 m,p-Xylene	0.20306	0.20811	0.010	-2.48427	30.00000	Averaged
88 o-Xylene	0.40835	0.40421	0.010	1.01332	30.00000	Averaged
89 Styrene	0.65229	0.67846	0.010	-4.01162	30.00000	Averaged
91 Cumene	1.03365	1.05475	0.010	-2.04142	30.00000	Averaged
94 1,1,2,2-Tetrachloroethane	0.34910	0.39120	0.010	-12.05991	30.00000	Averaged
96 Propylbenzene	1.19418	1.24929	0.010	-4.61481	30.00000	Averaged
97 4-Ethyltoluene	0.32239	0.34089	0.010	-5.74130	30.00000	Averaged
98 1,3,5-Trimethylbenzene	0.44021	0.47598	0.010	-8.12576	30.00000	Averaged
100 1,2,4-Trimethylbenzene	0.41456	0.43794	0.010	-5.63927	30.00000	Averaged
101 1,3-Dichlorobenzene	0.52169	0.56192	0.010	-7.71155	30.00000	Averaged
102 1,4-Dichlorobenzene	0.51224	0.55673	0.010	-8.68566	30.00000	Averaged
105 1,2-Dichlorobenzene	0.50052	0.54117	0.010	-8.12241	30.00000	Averaged
106 1,2,4-Trichlorobenzene	0.34624	0.40859	0.010	-18.00616	30.00000	Averaged
107 Hexachlorobutadiene	0.19913	0.22372	0.010	-12.35203	30.00000	Averaged
109 Naphthalene	1.41661	1.49467	0.010	-5.51001	30.00000	Averaged
110 2-Methylnaphthalene	0.90455	0.96982	0.010	-7.21528	30.00000	Averaged
111 1-Methylnaphthalene	0.88464	0.89992	0.010	-1.72753	30.00000	Averaged
112 Acenaphthylene	1.42472	1.52558	0.010	-7.07920	30.00000	Averaged
113 Acenaphthene	0.67521	0.81727	0.010	-21.04023	30.00000	Averaged
114 Fluorene	0.66853	0.67638	0.010	-1.17426	30.00000	Averaged
115 Phenanthrene	1.69741	1.71232	0.010	-0.87870	30.00000	Averaged
116 Anthracene	1.77515	1.78491	0.010	-0.54954	30.00000	Averaged
117 Fluoranthene	1.60805	2.05834	0.010	-28.00166	30.00000	Averaged
118 Pyrene	1.75368	2.27456	0.010	-29.70244	30.00000	Averaged

Eurofins Air Toxics Inc.

EPA Method TO-17 GC/MS

Data file : /chem/msd11.i/04feb16.b/11020404.d
Lab Smp Id: VI VOC+PAH CCV Client Smp ID: CCV
Inj Date : 04-FEB-2016 12:29
Operator : LA Inst ID: msd11.i
Smp Info : ;VI VOC+PAH CCV;CCV
Misc Info : 2516-218(5/3/16),2744-31-50(7/5/16)
Comment :
Method : /chem/msd11.i/04feb16.b/115z1120vi.m
Meth Date : 04-Feb-2016 13:17 lantonic Quant Type: ISTD
Cal Date : 21-NOV-2015 00:39 Cal File: 11112010.d
Als bottle: 2 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: VOC+PAH_ICAL.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO
* 40 Bromochloromethane					CAS #: 74-97-5		
6.946	6.946 (1.000)	130	65872	26.0000		80.00- 120.00	100.00
6.946	6.946 (1.000)	128	51038			49.46- 109.46	77.48
6.946	6.946 (1.000)	49	83198			96.52- 156.52	126.30
* 54 1,4-Difluorobenzene					CAS #: 540-36-3		
8.329	8.329 (1.000)	114	263308	23.0000		80.00- 120.00	100.00
8.322	8.322 (1.000)	88	35033			0.00- 44.32	13.31
* 79 Chlorobenzene-d5					CAS #: 3114-55-4		
11.645	11.645 (1.000)	117	242803	24.0000		80.00- 120.00	100.00
11.645	11.645 (1.000)	82	113312			20.08- 80.08	46.67
* 92 Bromofluorobenzene					CAS #: 460-00-4		
13.071	13.071 (1.000)	174	175852	36.0000		80.00- 120.00	100.00
13.071	13.071 (1.000)	95	168577			68.42- 128.42	95.86
13.071	13.071 (1.000)	176	170303			64.69- 124.69	96.84
$ 49 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
7.734	7.734 (0.929)	65	25758	25.0000	23.495	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO
$ 49 1,2-Dichloroethane-d4 (continued)							
7.727	7.727 (0.928)	67	13268			25.09- 85.09	51.51
$ 66 Toluene-d8					CAS #: 2037-26-5		
9.998	9.998 (0.859)	98	96409	25.0000	25.155	80.00- 120.00	100.00
9.991	9.991 (0.858)	70	9152			0.00- 41.37	9.49
9.991	9.991 (0.858)	100	61617			33.98- 93.98	63.91
$ 108 Naphthalene-d8					CAS #: 1146-65-2		
17.232	17.232 (1.318)	136	173404	25.0000	27.502	80.00- 120.00	100.00
17.232	17.232 (1.318)	108	14048			0.00- 38.36	8.10
3 Freon 114					CAS #: 76-14-2		
1.954	1.954 (0.281)	135	195857	140.000	138.19	80.00- 120.00	100.00
1.954	1.954 (0.281)	137	63084			2.94- 62.94	32.21
6 Vinyl Chloride					CAS #: 75-01-4		
2.169	2.169 (0.312)	62	81286	51.1000	55.330	80.00- 120.00	100.00
2.176	2.176 (0.313)	64	26945			1.67- 61.67	33.15
7 1,3-Butadiene					CAS #: 106-99-0		
2.197	2.197 (0.316)	54	59010	44.2000	47.152	80.00- 120.00	100.00
2.197	2.197 (0.316)	39	70129			88.98- 148.98	118.84
9 Chloroethane					CAS #: 75-00-3		
2.691	2.691 (0.387)	64	35406	52.8000	50.074	80.00- 120.00	100.00
2.691	2.691 (0.387)	66	10971			2.82- 62.82	30.99
2.684	2.684 (0.386)	49	11178			1.12- 61.12	31.57
10 Isopentane					CAS #: 78-78-4		
2.792	2.792 (0.402)	57	58484	59.0000	53.460	80.00- 120.00	100.00
2.792	2.792 (0.402)	43	91917			125.87- 185.87	157.17
11 Trichlorofluoromethane/Fr11					CAS #: 75-69-4		
3.021	3.021 (0.435)	101	208968	112.000	115.32	80.00- 120.00	100.00
3.028	3.028 (0.436)	103	136285			34.96- 94.96	65.22
15 Freon 113					CAS #: 76-13-1		
3.795	3.795 (0.546)	151	163670	153.000	158.26	80.00- 120.00	100.00
3.787	3.787 (0.545)	153	104129			35.10- 95.10	63.62
3.795	3.795 (0.546)	101	190802			84.04- 144.04	116.58
14 1,1-Dichloroethene					CAS #: 75-35-4		
3.759	3.759 (0.541)	98	61284	79.3000	85.464	80.00- 120.00	100.00
3.759	3.759 (0.541)	96	97934			126.05- 186.05	159.81
3.759	3.759 (0.541)	61	149198			223.83- 283.83	243.45

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO
18 Carbon Disulfide					CAS #: 75-15-0		
4.081	4.081 (0.588)	76	268872	62.3000	62.616	80.00- 120.00	100.00
19 2-Propanol					CAS #: 67-63-0		
4.031	4.031 (0.580)	45	151017	49.2000	52.768	80.00- 120.00	100.00
4.031	4.031 (0.580)	43	27146			0.00- 50.22	17.98
4.024	4.024 (0.579)	59	2413			0.00- 33.71	1.60
22 Methylene Chloride					CAS #: 75-09-2		
4.583	4.583 (0.660)	49	111529	69.5000	66.789	80.00- 120.00	100.00
4.583	4.583 (0.660)	84	83447			41.05- 101.05	74.82
4.583	4.583 (0.660)	51	34445			0.46- 60.46	30.88
25 trans-1,2-Dichloroethene					CAS #: 156-60-5		
5.077	5.077 (0.731)	98	56085	79.3000	82.990	80.00- 120.00	100.00
5.070	5.070 (0.730)	61	120765			190.70- 250.70	215.32
5.077	5.077 (0.731)	96	86816			126.37- 186.37	154.79
26 MTBE					CAS #: 1634-04-4		
5.062	5.062 (0.729)	73	167715	72.1000	63.666	80.00- 120.00	100.00
5.062	5.062 (0.729)	57	38777			0.00- 53.50	23.12
5.070	5.070 (0.730)	41	39703			0.00- 54.24	23.67
28 Hexane					CAS #: 110-54-3		
5.564	5.564 (0.801)	57	127279	70.5000	72.673	80.00- 120.00	100.00
5.564	5.564 (0.801)	43	85672			37.71- 97.71	67.31
5.564	5.564 (0.801)	86	20135			0.00- 45.83	15.82
29 1,1-Dichloroethane					CAS #: 75-34-3		
5.779	5.779 (0.832)	63	150165	81.0000	85.263	80.00- 120.00	100.00
5.779	5.779 (0.832)	65	47598			1.45- 61.45	31.70
37 cis-1,2-Dichloroethene					CAS #: 156-59-2		
6.624	6.624 (0.954)	98	62632	79.3000	84.906	80.00- 120.00	100.00
6.624	6.624 (0.954)	96	97385			126.86- 186.86	155.49
6.617	6.617 (0.953)	61	123988			171.58- 231.58	197.96
38 2-Butanone					CAS #: 78-93-3		
6.595	6.595 (0.949)	72	38941	59.0000	60.116	80.00- 120.00	100.00
6.602	6.602 (0.950)	43	177506			419.83- 479.83	455.83
6.602	6.602 (0.950)	57	12229			2.35- 62.35	31.40
44 Chloroform					CAS #: 67-66-3		
7.111	7.111 (1.024)	83	178028	97.7000	100.23	80.00- 120.00	100.00
7.104	7.104 (1.023)	85	117841			35.12- 95.12	66.19

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO
46 Cyclohexane					CAS #: 110-82-7		
7.405	7.405 (0.889)	84	114964	68.8000	68.498	80.00- 120.00	100.00
7.405	7.405 (0.889)	56	136869			91.54- 151.54	119.05
7.405	7.405 (0.889)	41	85655			46.84- 106.84	74.51
45 1,1,1-Trichloroethane					CAS #: 71-55-6		
7.304	7.304 (0.877)	97	153637	109.000	100.70	80.00- 120.00	100.00
7.304	7.304 (0.877)	99	102458			35.10- 95.10	66.69
47 Carbon Tetrachloride					CAS #: 56-23-5		
7.512	7.512 (0.902)	119	175121	126.000	128.43	80.00- 120.00	100.00
7.512	7.512 (0.902)	117	179196			73.73- 133.73	102.33
51 2,2,4-Trimethylpentane					CAS #: 540-84-1		
7.956	7.956 (0.955)	57	440716	93.4000	90.016	80.00- 120.00	100.00
7.956	7.956 (0.955)	56	147028			1.98- 61.98	33.36
7.956	7.956 (0.955)	41	131778			0.94- 60.94	29.90
48 Benzene					CAS #: 71-43-2		
7.756	7.756 (0.931)	78	270333	63.9000	61.467	80.00- 120.00	100.00
7.756	7.756 (0.931)	77	64839			0.00- 53.25	23.98
50 1,2-Dichloroethane					CAS #: 107-06-2		
7.835	7.835 (0.941)	62	118259	80.9000	79.844	80.00- 120.00	100.00
7.827	7.827 (0.940)	64	37693			1.81- 61.81	31.87
53 Heptane					CAS #: 142-82-5		
8.200	8.200 (0.985)	71	93141	82.0000	79.587	80.00- 120.00	100.00
8.193	8.193 (0.984)	43	173254			156.82- 216.82	186.01
8.193	8.193 (0.984)	57	89029			66.52- 126.52	95.59
56 Trichloroethene					CAS #: 79-01-6		
8.587	8.587 (1.031)	95	129298	108.000	94.206	80.00- 120.00	100.00
8.587	8.587 (1.031)	130	149850			82.18- 142.18	115.90
8.587	8.587 (1.031)	97	82543			35.46- 95.46	63.84
58 Methyl Cyclohexane					CAS #: 108-87-2		
8.873	8.873 (1.065)	83	163609	80.3000	75.809	80.00- 120.00	100.00
8.866	8.866 (1.064)	98	80997			16.90- 76.90	49.51
8.866	8.866 (1.064)	55	139299			52.37- 112.37	85.14
59 1,2-Dichloropropane					CAS #: 78-87-5		
8.880	8.880 (1.066)	63	99368	92.4000	81.376	80.00- 120.00	100.00
8.880	8.880 (1.066)	62	70329			38.03- 98.03	70.78
8.873	8.873 (1.065)	41	148104			105.71- 165.71	149.05

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO
60 1,4-Dioxane					CAS #: 123-91-1		
8.973	8.973 (1.077)	88	65892	72.1000	64.600	80.00- 120.00	100.00
8.966	8.966 (1.077)	58	44712			37.98- 97.98	67.86
8.966	8.966 (1.077)	57	20435			0.00- 54.83	31.01
65 4-Methyl-2-pentanone					CAS #: 108-10-1		
9.854	9.854 (1.183)	58	88298	81.9000	83.416	80.00- 120.00	100.00
9.854	9.854 (1.183)	43	259320			254.63- 314.63	293.69
9.854	9.854 (1.183)	85	33792			8.74- 68.74	38.27
67 Toluene					CAS #: 108-88-3		
10.069	10.069 (0.865)	91	341034	75.4000	73.354	80.00- 120.00	100.00
10.069	10.069 (0.865)	92	202049			29.25- 89.25	59.25
70 1,1,2-Trichloroethane					CAS #: 79-00-5		
10.556	10.556 (1.267)	97	120914	109.000	106.36	80.00- 120.00	100.00
10.556	10.556 (1.267)	99	75386			34.29- 94.29	62.35
10.556	10.556 (1.267)	83	100456			57.72- 117.72	83.08
71 Tetrachloroethene					CAS #: 127-18-4		
10.657	10.657 (0.915)	166	189473	136.000	140.09	80.00- 120.00	100.00
10.657	10.657 (0.915)	129	137160			41.79- 101.79	72.39
10.657	10.657 (0.915)	131	131885			38.31- 98.31	69.61
72 2-Hexanone					CAS #: 591-78-6		
10.793	10.793 (0.927)	58	114632	81.9000	90.079	80.00- 120.00	100.00
10.800	10.800 (0.927)	43	242874			181.80- 241.80	211.87
10.800	10.800 (0.927)	100	21309			0.00- 47.51	18.59
74 1,2-Dibromoethane					CAS #: 106-93-4		
11.108	11.108 (0.954)	107	178805	154.000	160.07	80.00- 120.00	100.00
11.108	11.108 (0.954)	109	175918			64.64- 124.64	98.39
81 Chlorobenzene					CAS #: 108-90-7		
11.681	11.681 (1.003)	112	301761	92.1000	95.366	80.00- 120.00	100.00
11.681	11.681 (1.003)	114	98174			1.81- 61.81	32.53
11.681	11.681 (1.003)	77	143242			21.76- 81.76	47.47
82 Ethyl Benzene					CAS #: 100-41-4		
11.810	11.810 (1.014)	106	149346	86.8000	91.453	80.00- 120.00	100.00
11.810	11.810 (1.014)	91	425099			263.98- 323.98	284.64
84 m,p-Xylene					CAS #: 108-38-3		
11.968	11.968 (1.028)	106	182746	86.8000	88.956	80.00- 120.00	100.00
11.968	11.968 (1.028)	91	326400			152.73- 212.73	178.61

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                                          AMOUNTS
                                       CAL-AMT   ON-COL
   RT   EXP RT (REL RT)  MASS  RESPONSE (   ng)  (   ng)   TARGET RANGE    RATIO
   ==   ====== ========  ====  ======== =======  =======   ============    =====

   88 o-Xylene                                          CAS #: 95-47-6
 12.412  12.412 (0.950)   106    171384 86.8000   85.920  80.00- 120.00   100.00
 12.412  12.412 (0.950)    91    329845                  163.65- 223.65   192.46
-------------------------------------------------------------------------------
   89 Styrene                                           CAS #: 100-42-5
 12.440  12.440 (0.952)   104    282364 85.2000   88.618  80.00- 120.00   100.00
 12.440  12.440 (0.952)    78    118746                   15.61-  75.61    42.05
-------------------------------------------------------------------------------
   91 Cumene                                            CAS #: 98-82-8
 12.863  12.863 (0.984)   105    506465 98.3000   100.31  80.00- 120.00   100.00
 12.863  12.863 (0.984)   120    148893                    0.00-  59.10    29.40
 12.856  12.856 (0.984)    51     51748                    0.00-  40.54    10.22
-------------------------------------------------------------------------------
   94 1,1,2,2-Tetrachloroethane                         CAS #: 79-34-5
 13.221  13.221 (1.012)    83    261800 137.000   153.52  80.00- 120.00   100.00
 13.221  13.221 (1.012)    85    174372                   35.82-  95.82    66.61
-------------------------------------------------------------------------------
   96 Propylbenzene                                     CAS #: 103-65-1
 13.364  13.364 (1.022)    91    599878 98.3000   102.84  80.00- 120.00   100.00
 13.364  13.364 (1.022)   120    155489                    0.00-  54.66    25.92
 13.364  13.364 (1.022)   105     23781                    0.00-  33.61     3.96
-------------------------------------------------------------------------------
   97 4-Ethyltoluene                                    CAS #: 622-96-8
 13.522  13.522 (1.035)   120    163689 98.3000   103.94  80.00- 120.00   100.00
 13.522  13.522 (1.035)   105    496362                  275.29- 335.29   303.23
-------------------------------------------------------------------------------
   98 1,3,5-Trimethylbenzene                            CAS #: 108-67-8
 13.601  13.601 (1.041)   120    228552 98.3000   106.29  80.00- 120.00   100.00
 13.601  13.601 (1.041)   105    423255                  157.79- 217.79   185.19
-------------------------------------------------------------------------------
  100 1,2,4-Trimethylbenzene                            CAS #: 95-63-6
 14.052  14.052 (1.075)   120    210289 98.3000   103.84  80.00- 120.00   100.00
 14.052  14.052 (1.075)   105    424580                  169.74- 229.74   201.90
-------------------------------------------------------------------------------
  101 1,3-Dichlorobenzene                               CAS #: 541-73-1
 14.382  14.382 (1.100)   146    329381 120.000   129.25  80.00- 120.00   100.00
 14.382  14.382 (1.100)   148    211619                   34.32-  94.32    64.25
 14.382  14.382 (1.100)   111    116026                    5.94-  65.94    35.23
-------------------------------------------------------------------------------
  102 1,4-Dichlorobenzene                               CAS #: 106-46-7
 14.510  14.510 (1.110)   146    326341 120.000   130.42  80.00- 120.00   100.00
 14.510  14.510 (1.110)   148    210093                   35.48-  95.48    64.38
 14.510  14.510 (1.110)   111    110236                    5.70-  65.70    33.78
-------------------------------------------------------------------------------
  105 1,2-Dichlorobenzene                               CAS #: 95-50-1
 14.940  14.940 (1.143)   146    317223 120.000   129.75  80.00- 120.00   100.00
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RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO
105 1,2-Dichlorobenzene (continued)							
14.940	14.940 (1.143)	148	203601			34.02- 94.02	64.18
14.933	14.933 (1.142)	111	116425			7.12- 67.12	36.70
106 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
16.953	16.953 (1.297)	180	295389	148.000	174.65	80.00- 120.00	100.00
16.953	16.953 (1.297)	182	286168			65.50- 125.50	96.88
107 Hexachlorobutadiene					CAS #: 87-68-3		
17.154	17.154 (1.312)	225	232774	213.000	239.31	80.00- 120.00	100.00
17.154	17.154 (1.312)	223	142809			32.38- 92.38	61.35
109 Naphthalene					CAS #: 91-20-3		
17.268	17.268 (1.321)	128	365057	50.0000	52.755	80.00- 120.00	100.00
17.268	17.268 (1.321)	127	45361			0.00- 43.21	12.43
110 2-Methylnaphthalene					CAS #: 91-57-6		
18.708	18.708 (1.431)	142	236868	50.0000	53.608	80.00- 120.00	100.00
18.708	18.708 (1.431)	141	205923			56.85- 116.85	86.94
18.708	18.708 (1.431)	115	70595			0.00- 59.61	29.80
111 1-Methylnaphthalene					CAS #: 90-12-0		
18.930	18.930 (1.448)	142	219796	50.0000	50.864	80.00- 120.00	100.00
18.930	18.930 (1.448)	141	197653			58.28- 118.28	89.93
18.930	18.930 (1.448)	115	67204			1.09- 61.09	30.58
112 Acenaphthylene					CAS #: 208-96-8		
20.800	20.800 (1.591)	152	372607	50.0000	53.540	80.00- 120.00	100.00
20.800	20.800 (1.591)	151	72738			0.00- 50.51	19.52
20.800	20.800 (1.591)	153	48660			0.00- 43.07	13.06
113 Acenaphthene					CAS #: 83-32-9		
21.065	21.065 (1.612)	154	199611	50.0000	60.520	80.00- 120.00	100.00
21.065	21.065 (1.612)	152	108750			23.06- 83.06	54.48
21.065	21.065 (1.612)	153	227565			82.31- 142.31	114.00
114 Fluorene					CAS #: 86-73-7		
22.225	22.225 (1.700)	166	165199	50.0000	50.587	80.00- 120.00	100.00
22.225	22.225 (1.700)	165	155083			65.30- 125.30	93.88
115 Phenanthrene					CAS #: 85-01-8		
24.438	24.438 (1.870)	178	418217	50.0000	50.439	80.00- 120.00	100.00
24.438	24.438 (1.870)	176	80884			0.00- 48.40	19.34
24.438	24.438 (1.870)	179	65322			0.00- 44.95	15.62
116 Anthracene					CAS #: 120-12-7		
24.560	24.560 (1.879)	178	435945	50.0000	50.275	80.00- 120.00	100.00

RT	EXP RT	(REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO
116 Anthracene (continued)								
24.560	24.560	(1.879)	176	78405			0.00- 47.65	17.99
24.560	24.560	(1.879)	179	64634			0.00- 43.56	14.83
117 Fluoranthene						CAS #: 206-44-0		
28.321	28.321	(2.167)	202	502727	50.0000	64.001	80.00- 120.00	100.00
28.314	28.314	(2.166)	101	65707			0.00- 42.31	13.07
118 Pyrene						CAS #: 129-00-0		
29.359	29.359	(2.246)	202	555538	50.0000	64.851	80.00- 120.00	100.00
29.352	29.352	(2.246)	101	88535			0.00- 44.28	15.94
29.359	29.359	(2.246)	100	72714			0.00- 41.66	13.09

Report Date: 04-Feb-2016 13:17

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd11.i
Lab File ID: 11020404.d
Lab Smp Id: VI VOC+PAH CCV
Analysis Type: VOA
Quant Type: ISTD
Operator: LA
Method File: /chem/msd11.i/04feb16.b/115z1120vi.m
Misc Info: 2516-218(5/3/16),2744-31-50(7/5/16)

Calibration Date: 04-FEB-2016
Calibration Time: 12:29
Client Smp ID: CCV
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
40 Bromochloromethan	65872	39523	92221	65872	0.00
54 1,4-Difluorobenze	263308	157985	368631	263308	0.00
79 Chlorobenzene-d5	242803	145682	339924	242803	0.00
92 Bromofluorobenzen	175852	105511	246193	175852	0.00

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
40 Bromochloromethan	6.95	6.62	7.28	6.95	0.00
54 1,4-Difluorobenze	8.33	8.00	8.66	8.33	0.00
79 Chlorobenzene-d5	11.65	11.32	11.98	11.65	0.00
92 Bromofluorobenzen	13.07	12.74	13.40	13.07	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msd11.i/04feb16.b/11020404.d

Date : 04-FEB-2016 12:29

Client ID: CCV

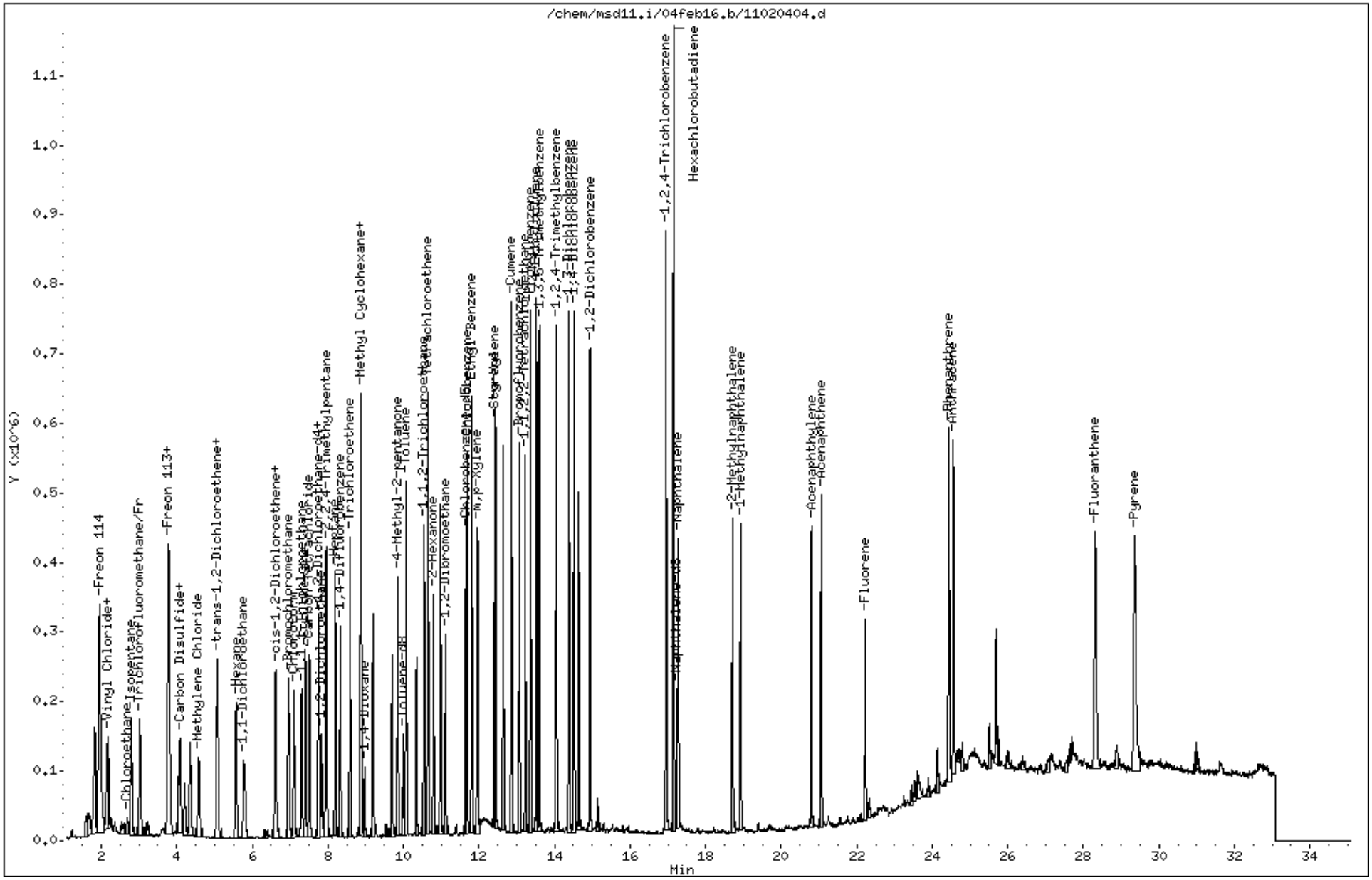
Sample Info: ;VI VOC+PAH CCV;CCV

Column phase: RTx-624

Instrument: msd11.i

Operator: LA

Column diameter: 0.53



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Client Sample ID: LCS
Lab ID#: 1602029-24A
EPA METHOD TO-17

File Name:	**18020304**	**Date of Extraction: NA**	**Date of Collection: NA**
Dil. Factor:	**1.00**		**Date of Analysis: 2/3/16 11:43 AM**

Compound	**%Recovery**	**Method Limits**
Naphthalene	110	70-130

Air Sample Volume(L): 1.00
Container Type: NA - Not Applicable

Surrogates	**%Recovery**	**Method Limits**
Naphthalene-d8	102	50-150

Report Date: 03-Feb-2016 12:30

Eurofins Air Toxics Inc.

RECOVERY REPORT

Client Name:
Client SDG: 03Feb2016
Sample Matrix: GAS
Fraction: VOA
Lab Smp Id: VI VOC+PAH LCS
Client Smp ID: LCS
Level: LOW
Operator: LA
Data Type: MS DATA
SampleType: LCS
SpikeList File: VOC+PAHlcs50.spk
Quant Type: ISTD
Sublist File: VOC+PAH_ICAL.sub
Method File: /chem/msd18.i/03Feb2016.b/186z0114vi.m
Misc Info: 2516-203(2/17/16),2744-32-50(7/20/16)

SPIKE COMPOUND	CONC ADDED NG	CONC RECOVERED NG	% RECOVERED	LIMITS
4 Freon 114	139.80	124.29	88.90	70-130
6 Vinyl Chloride	51.100	63.734	124.72	70-130
7 1,3-Butadiene	44.200	53.130	120.20	70-130
9 Chloroethane	52.800	69.520	131.67*	70-130
10 Isopentane	59.000	72.760	123.32	70-130
11 Trichlorofluoromet	112.40	121.12	107.75	70-130
14 1,1-Dichloroethene	79.300	81.068	102.23	70-130
15 Freon 113	153.30	133.41	87.02	70-130
18 Carbon Disulfide	62.300	58.823	94.42	70-130
17 2-Propanol	49.200	60.136	122.23	70-130
21 Methylene Chloride	69.500	85.231	122.63	70-130
24 trans-1,2-Dichloro	79.300	72.264	91.13	70-130
23 MTBE	72.100	87.144	120.87	70-130
25 Hexane	70.500	90.692	128.64	70-130
26 1,1-Dichloroethane	81.000	99.427	122.75	70-130
29 cis-1,2-Dichloroet	79.300	97.326	122.73	70-130
28 2-Butanone	59.000	71.882	121.83	70-130
35 Chloroform	97.700	117.17	119.93	70-130
36 1,1,1-Trichloroeth	109.10	118.60	108.71	70-130
37 Cyclohexane	68.800	73.979	107.53	70-130
38 Carbon Tetrachlori	125.80	127.52	101.36	70-130
41 Benzene	63.900	62.930	98.48	70-130
43 1,2-Dichloroethane	80.900	98.710	122.02	70-130
45 2,2,4-Trimethylpen	93.400	111.01	118.86	70-130
46 Heptane	82.000	97.840	119.32	70-130
48 Trichloroethene	107.50	116.01	107.92	70-130
51 Methyl Cyclohexane	80.300	92.744	115.50	70-130
52 1,2-Dichloropropan	92.400	124.02	134.22*	70-130
53 1,4-Dioxane	72.100	77.642	107.69	70-130
56 4-Methyl-2-pentano	81.900	114.76	140.13*	70-130
58 Toluene	75.400	85.658	113.61	70-130
61 1,1,2-Trichloroeth	109.10	110.82	101.58	70-130
62 Tetrachloroethene	135.70	115.94	85.44	70-130

SPIKE COMPOUND	CONC ADDED NG	CONC RECOVERED NG	% RECOVERED	LIMITS
63 2-Hexanone	81.900	116.80	142.61*	70-130
66 1,2-Dibromoethane	153.70	176.60	114.90	70-130
68 Chlorobenzene	92.100	94.002	102.06	70-130
69 Ethyl Benzene	86.800	89.902	103.57	70-130
71 m,p-Xylene	86.800	89.704	103.35	70-130
74 o-Xylene	86.800	105.27	121.28	70-130
75 Styrene	85.200	100.77	118.28	70-130
77 Cumene	98.300	120.36	122.44	70-130
80 1,1,2,2-Tetrachlor	137.30	212.26	154.59*	70-130
81 Propylbenzene	98.300	144.86	147.36*	70-130
82 4-Ethyltoluene	98.300	129.88	132.13*	70-130
83 1,3,5-Trimethylben	98.300	127.17	129.37	70-130
84 1,2,4-Trimethylben	98.300	117.97	120.01	70-130
86 1,3-Dichlorobenzen	120.30	132.91	110.49	70-130
87 1,4-Dichlorobenzen	120.30	131.74	109.51	70-130
90 1,2-Dichlorobenzen	120.30	128.69	106.98	70-130
95 1,2,4-Trichloroben	148.40	142.46	96.00	70-130
96 Hexachlorobutadien	213.30	181.12	84.91	70-130
98 Naphthalene	50.000	54.848	109.70	70-130
103 2-Methylnaphthalen	50.000	55.385	110.77	70-130
104 1-Methylnaphthalen	50.000	56.813	113.63	70-130
107 Acenaphthylene	50.000	54.862	109.72	70-130
109 Acenaphthene	50.000	54.092	108.18	70-130
111 Fluorene	50.000	48.938	97.88	60-140
112 Phenanthrene	50.000	52.226	104.45	60-140
113 Anthracene	50.000	56.211	112.42	60-140
117 Fluoranthene	50.000	36.635	73.27	60-140
118 Pyrene	50.000	34.859	69.72	60-140

SURROGATE COMPOUND	CONC ADDED NG	CONC RECOVERED NG	% RECOVERED	LIMITS
$ 39 1,2-Dichloroethane	25.000	26.361	105.44	50-150
$ 57 Toluene-d8	25.000	26.229	104.92	50-150
$ 97 Naphthalene-d8	25.000	25.558	102.23	50-150

Eurofins Air Toxics Inc.

EPA Method TO-17 GC/MS

Data file : /chem/msd18.i/03Feb2016.b/18020304.d
Lab Smp Id: VI VOC+PAH LCS Client Smp ID: LCS
Inj Date : 03-FEB-2016 11:43
Operator : LA Inst ID: msd18.i
Smp Info : ;VI VOC+PAH LCS;LCS
Misc Info : 2516-203(2/17/16),2744-32-50(7/20/16)
Comment :
Method : /chem/msd18.i/03Feb2016.b/186z0114vi.m
Meth Date : 03-Feb-2016 11:54 lantonic Quant Type: ISTD
Cal Date : 14-JAN-2016 18:27 Cal File: 18011415.d
Als bottle: 3 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: VOC+PAH_ICAL.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (ng)	FINAL (NG)	TARGET RANGE	RATIO
* 32 Bromochloromethane					CAS #: 74-97-5		
6.030	6.030 (1.000)	130	204305	26.0000		80.00- 120.00	100.00
6.030	6.030 (1.000)	128	160670			47.81- 107.81	78.64
6.030	6.030 (1.000)	49	380312			99.93- 159.93	186.15
* 47 1,4-Difluorobenzene					CAS #: 540-36-3		
7.649	7.649 (1.000)	114	774781	23.0000		80.00- 120.00	100.00
7.649	7.649 (1.000)	88	128993			0.00- 45.51	16.65
* 67 Chlorobenzene-d5					CAS #: 3114-55-4		
11.596	11.589 (1.000)	117	666483	24.0000		80.00- 120.00	100.00
11.596	11.589 (1.000)	82	423458			23.87- 83.87	63.54
* 79 Bromofluorobenzene					CAS #: 460-00-4		
13.208	13.200 (1.000)	174	371236	36.0000		80.00- 120.00	100.00
13.208	13.200 (1.000)	95	517572			78.78- 138.78	139.42
13.208	13.200 (1.000)	176	354612			67.05- 127.05	95.52
$ 39 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
6.947	6.947 (0.908)	65	96255	26.3609	26.361	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (ng)	FINAL (NG)	TARGET RANGE	RATIO
$ 39 1,2-Dichloroethane-d4 (continued)							
6.947	6.947 (0.908)	67	52400			25.86- 85.86	54.44
$ 57 Toluene-d8					CAS #: 2037-26-5		
9.640	9.640 (0.831)	98	270371	26.2289	26.229	80.00- 120.00	100.00
9.640	9.640 (0.831)	70	32409			0.00- 40.57	11.99
9.640	9.640 (0.831)	100	169605			34.56- 94.56	62.73
$ 97 Naphthalene-d8					CAS #: 1146-65-2		
17.728	17.728 (1.342)	136	371248	25.5575	25.558	80.00- 120.00	100.00
17.728	17.728 (1.342)	108	36604			0.00- 39.05	9.86
4 Freon 114					CAS #: 76-14-2		
1.453	1.453 (0.241)	135	563888	124.287	124.29	80.00- 120.00	100.00
1.453	1.453 (0.241)	137	179630			1.93- 61.93	31.86
6 Vinyl Chloride					CAS #: 75-01-4		
1.625	1.625 (0.269)	62	403528	63.7344	63.734	80.00- 120.00	100.00
1.625	1.625 (0.269)	64	150993			15.41- 75.41	37.42
7 1,3-Butadiene					CAS #: 106-99-0		
1.646	1.646 (0.273)	54	293005	53.1299	53.130	80.00- 120.00	100.00
1.646	1.646 (0.273)	39	407935			104.89- 164.89	139.22
9 Chloroethane					CAS #: 75-00-3		
2.033	2.033 (0.337)	64	206939	69.5203	69.520	80.00- 120.00	100.00(R)
2.033	2.033 (0.337)	66	63328			1.74- 61.74	30.60
2.033	2.033 (0.337)	49	59151			0.00- 57.57	28.58
10 Isopentane					CAS #: 78-78-4		
2.105	2.105 (0.349)	57	317318	72.7604	72.760	80.00- 120.00	100.00
2.105	2.105 (0.349)	43	508101			112.49- 172.49	160.12
11 Trichlorofluoromethane/Fr11					CAS #: 75-69-4		
2.291	2.291 (0.380)	101	799940	121.116	121.12	80.00- 120.00	100.00
2.291	2.291 (0.380)	103	514436			34.96- 94.96	64.31
15 Freon 113					CAS #: 76-13-1		
2.886	2.886 (0.479)	151	429795	133.407	133.41	80.00- 120.00	100.00
2.886	2.886 (0.479)	153	272769			34.01- 94.01	63.47
2.886	2.886 (0.479)	101	654434			98.52- 158.52	152.27
14 1,1-Dichloroethene					CAS #: 75-35-4		
2.864	2.864 (0.475)	98	198038	81.0679	81.068	80.00- 120.00	100.00
2.864	2.864 (0.475)	96	322985			130.53- 190.53	163.09
2.864	2.864 (0.475)	61	627941			241.31- 301.31	317.08

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (ng)	FINAL (NG)	TARGET RANGE	RATIO
18 Carbon Disulfide					CAS #: 75-15-0		
3.115	3.115 (0.517)	76	950374	58.8232	58.823	80.00- 120.00	100.00
17 2-Propanol					CAS #: 67-63-0		
3.108	3.108 (0.515)	45	742806	60.1356	60.136	80.00- 120.00	100.00
3.108	3.108 (0.515)	43	129862			0.00- 48.48	17.48
3.108	3.108 (0.515)	59	27934			0.00- 34.02	3.76
21 Methylene Chloride					CAS #: 75-09-2		
3.530	3.530 (0.585)	49	483348	85.2310	85.231	80.00- 120.00	100.00
3.530	3.530 (0.585)	84	317194			46.74- 106.74	65.62
3.530	3.530 (0.585)	51	151660			1.74- 61.74	31.38
24 trans-1,2-Dichloroethene					CAS #: 156-60-5		
3.946	3.946 (0.654)	98	168312	72.2638	72.264	80.00- 120.00	100.00
3.946	3.939 (0.654)	61	454331			203.10- 263.10	269.93
3.946	3.946 (0.654)	96	269674			127.09- 187.09	160.22
23 MTBE					CAS #: 1634-04-4		
3.931	3.931 (0.652)	73	928717	87.1444	87.144	80.00- 120.00	100.00
3.931	3.931 (0.652)	57	234242			0.00- 53.10	25.22
3.931	3.931 (0.652)	41	221986			0.00- 50.25	23.90
25 Hexane					CAS #: 110-54-3		
4.426	4.419 (0.734)	57	581963	90.6924	90.692	80.00- 120.00	100.00
4.426	4.426 (0.734)	43	396192			31.56- 91.56	68.08
4.419	4.426 (0.733)	86	73197			0.00- 44.94	12.58
26 1,1-Dichloroethane					CAS #: 75-34-3		
4.698	4.698 (0.779)	63	636026	99.4267	99.427	80.00- 120.00	100.00
4.698	4.698 (0.779)	65	204320			1.52- 61.52	32.12
29 cis-1,2-Dichloroethene					CAS #: 156-59-2		
5.658	5.658 (0.938)	98	217959	97.3256	97.326	80.00- 120.00	100.00
5.658	5.658 (0.938)	96	343910			127.88- 187.88	157.79
5.658	5.658 (0.938)	61	523134			179.74- 239.74	240.01
28 2-Butanone					CAS #: 78-93-3		
5.651	5.651 (0.937)	72	194617	71.8826	71.882	80.00- 120.00	100.00
5.643	5.643 (0.936)	43	895461			351.97- 411.97	460.11
5.643	5.643 (0.936)	57	68228			2.17- 62.17	35.06
35 Chloroform					CAS #: 67-66-3		
6.231	6.231 (1.033)	83	626744	117.171	117.17	80.00- 120.00	100.00
6.231	6.231 (1.033)	85	407991			34.57- 94.57	65.10

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (ng)	FINAL (NG)	TARGET RANGE	RATIO
37 Cyclohexane					CAS #: 110-82-7		
6.510	6.510 (0.851)	84	394650	73.9789	73.979	80.00- 120.00	100.00
6.510	6.510 (0.851)	56	552501			92.60- 152.60	140.00
6.510	6.510 (0.851)	41	322164			35.57- 95.57	81.63
36 1,1,1-Trichloroethane					CAS #: 71-55-6		
6.417	6.417 (0.839)	97	599118	118.602	118.60	80.00- 120.00	100.00
6.417	6.417 (0.839)	99	382393			34.22- 94.22	63.83
38 Carbon Tetrachloride					CAS #: 56-23-5		
6.646	6.653 (0.869)	119	545155	127.515	127.52	80.00- 120.00	100.00
6.646	6.646 (0.869)	117	565268			74.59- 134.59	103.69
45 2,2,4-Trimethylpentane					CAS #: 540-84-1		
7.176	7.176 (0.938)	57	1693228	111.013	111.01	80.00- 120.00	100.00
7.176	7.176 (0.938)	56	556187			2.36- 62.36	32.85
7.176	7.176 (0.938)	41	451903			0.00- 55.73	26.69
41 Benzene					CAS #: 71-43-2		
6.947	6.947 (0.908)	78	985602	62.9303	62.930	80.00- 120.00	100.00
6.947	6.947 (0.908)	77	230629			0.00- 53.82	23.40
43 1,2-Dichloroethane					CAS #: 107-06-2		
7.062	7.062 (0.923)	62	408580	98.7102	98.710	80.00- 120.00	100.00
7.062	7.062 (0.923)	64	131697			2.51- 62.51	32.23
46 Heptane					CAS #: 142-82-5		
7.477	7.477 (0.978)	71	342680	97.8399	97.840	80.00- 120.00	100.00
7.477	7.477 (0.978)	43	661382			132.26- 192.26	193.00
7.477	7.477 (0.978)	57	335067			60.63- 120.63	97.78
48 Trichloroethene					CAS #: 79-01-6		
7.943	7.943 (1.038)	95	390721	116.011	116.01	80.00- 120.00	100.00
7.943	7.943 (1.038)	130	338966			73.40- 133.40	86.75
7.943	7.943 (1.038)	97	248335			35.04- 95.04	63.56
51 Methyl Cyclohexane					CAS #: 108-87-2		
8.251	8.251 (1.079)	83	541986	92.7440	92.744	80.00- 120.00	100.00
8.251	8.251 (1.079)	98	225281			15.23- 75.23	41.57
8.251	8.251 (1.079)	55	481656			45.63- 105.63	88.87
52 1,2-Dichloropropane					CAS #: 78-87-5		
8.301	8.301 (1.085)	63	389034	124.022	124.02	80.00- 120.00	100.00(R)
8.301	8.301 (1.085)	62	272295			38.55- 98.55	69.99
8.301	8.301 (1.085)	41	223525			21.51- 81.51	57.46

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (ng)	FINAL (NG)	TARGET RANGE	RATIO
53 1,4-Dioxane					CAS #: 123-91-1		
8.416	8.416 (1.100)	88	197227	77.6424	77.642	80.00- 120.00	100.00
8.416	8.416 (1.100)	58	156095			36.73- 96.73	79.14
8.416	8.416 (1.100)	57	73680			2.93- 62.93	37.36
56 4-Methyl-2-pentanone					CAS #: 108-10-1		
9.512	9.511 (1.243)	58	304303	114.764	114.76	80.00- 120.00	100.00(R)
9.504	9.511 (1.243)	43	836383			210.10- 270.10	274.85
9.512	9.511 (1.243)	85	110599			14.24- 74.24	36.35
58 Toluene					CAS #: 108-88-3		
9.726	9.726 (0.839)	91	1053728	85.6582	85.658	80.00- 120.00	100.00
9.726	9.726 (0.839)	92	601045			27.36- 87.36	57.04
61 1,1,2-Trichloroethane					CAS #: 79-00-5		
10.342	10.342 (1.352)	97	345152	110.820	110.82	80.00- 120.00	100.00
10.342	10.342 (1.352)	99	212951			31.64- 91.64	61.70
10.342	10.342 (1.352)	83	328607			56.72- 116.72	95.21
62 Tetrachloroethene					CAS #: 127-18-4		
10.421	10.421 (0.899)	166	391537	115.942	115.94	80.00- 120.00	100.00
10.421	10.421 (0.899)	129	309479			40.21- 100.21	79.04
10.421	10.421 (0.899)	131	298167			37.97- 97.97	76.15
63 2-Hexanone					CAS #: 591-78-6		
10.643	10.643 (0.918)	58	386841	116.797	116.80	80.00- 120.00	100.00(R)
10.643	10.643 (0.918)	43	752613			138.90- 198.90	194.55
10.643	10.643 (0.918)	100	61834			0.00- 50.74	15.98
66 1,2-Dibromoethane					CAS #: 106-93-4		
10.966	10.966 (0.946)	107	501627	176.596	176.60	80.00- 120.00	100.00
10.966	10.966 (0.946)	109	464132			63.94- 123.94	92.53
68 Chlorobenzene					CAS #: 108-90-7		
11.632	11.625 (1.003)	112	722554	94.0017	94.002	80.00- 120.00	100.00
11.632	11.625 (1.003)	114	229279			2.24- 62.24	31.73
11.632	11.625 (1.003)	77	480703			25.99- 85.99	66.53
69 Ethyl Benzene					CAS #: 100-41-4		
11.782	11.775 (1.016)	106	381312	89.9020	89.902	80.00- 120.00	100.00
11.782	11.775 (1.016)	91	1299929			279.23- 339.23	340.91
71 m,p-Xylene					CAS #: 108-38-3		
11.961	11.954 (1.032)	106	471651	89.7036	89.704	80.00- 120.00	100.00
11.961	11.954 (1.032)	91	999655			163.71- 223.71	211.95

RT	EXP RT	(REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (ng)	FINAL (NG)	TARGET RANGE	RATIO
74 o-Xylene						CAS #: 95-47-6		
12.470	12.463	(0.944)	106	452309	105.271	105.27	80.00- 120.00	100.00
12.470	12.463	(0.944)	91	1009555			176.46- 236.46	223.20
75 Styrene						CAS #: 100-42-5		
12.506	12.499	(0.947)	104	761639	100.771	100.77	80.00- 120.00	100.00
12.506	12.499	(0.947)	78	398403			17.37- 77.37	52.31
77 Cumene						CAS #: 98-82-8		
12.979	12.971	(0.983)	105	1378820	120.356	120.36	80.00- 120.00	100.00
12.979	12.971	(0.983)	120	344703			0.00- 57.05	25.00
12.971	12.971	(0.982)	51	169518			0.00- 38.51	12.29
80 1,1,2,2-Tetrachloroethane						CAS #: 79-34-5		
13.408	13.401	(1.015)	83	798320	212.258	212.26	80.00- 120.00	100.00(R)
13.408	13.408	(1.015)	85	507013			33.93- 93.93	63.51
81 Propylbenzene						CAS #: 103-65-1		
13.537	13.537	(1.025)	91	1787472	144.859	144.86	80.00- 120.00	100.00(R)
13.537	13.537	(1.025)	120	367188			0.00- 53.66	20.54
13.537	13.537	(1.025)	105	59866			0.00- 33.72	3.35
82 4-Ethyltoluene						CAS #: 622-96-8		
13.709	13.709	(1.038)	120	387302	129.883	129.88	80.00- 120.00	100.00(R)
13.709	13.709	(1.038)	105	1367244			299.89- 359.89	353.02
83 1,3,5-Trimethylbenzene						CAS #: 108-67-8		
13.795	13.795	(1.044)	120	530540	127.169	127.17	80.00- 120.00	100.00
13.795	13.788	(1.044)	105	1132246			166.45- 226.45	213.41
84 1,2,4-Trimethylbenzene						CAS #: 95-63-6		
14.289	14.289	(1.082)	120	477509	117.974	117.97	80.00- 120.00	100.00
14.289	14.289	(1.082)	105	1119931			185.90- 245.90	234.54
86 1,3-Dichlorobenzene						CAS #: 541-73-1		
14.655	14.655	(1.110)	146	669361	132.914	132.91	80.00- 120.00	100.00
14.655	14.655	(1.110)	148	425394			33.73- 93.73	63.55
14.655	14.655	(1.110)	111	282414			8.03- 68.03	42.19
87 1,4-Dichlorobenzene						CAS #: 106-46-7		
14.805	14.798	(1.121)	146	668020	131.744	131.74	80.00- 120.00	100.00
14.805	14.798	(1.121)	148	424633			33.15- 93.15	63.57
14.798	14.798	(1.120)	111	272659			6.74- 66.74	40.82
90 1,2-Dichlorobenzene						CAS #: 95-50-1		
15.271	15.271	(1.156)	146	624384	128.693	128.69	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (ng)	FINAL (NG)	TARGET RANGE	RATIO
90 1,2-Dichlorobenzene (continued)							
15.271	15.271 (1.156)	148	399996			33.98- 93.98	64.06
15.271	15.271 (1.156)	111	274551			9.89- 69.89	43.97
95 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
17.434	17.434 (1.320)	180	490469	142.463	142.46	80.00- 120.00	100.00
17.434	17.434 (1.320)	182	462929			66.29- 126.29	94.38
96 Hexachlorobutadiene					CAS #: 87-68-3		
17.635	17.634 (1.335)	225	390871	181.117	181.12	80.00- 120.00	100.00
17.635	17.634 (1.335)	223	247149			33.08- 93.08	63.23
98 Naphthalene					CAS #: 91-20-3		
17.771	17.771 (1.345)	128	822395	54.8481	54.848	80.00- 120.00	100.00
17.771	17.771 (1.345)	127	107931			0.00- 43.03	13.12
103 2-Methylnaphthalene					CAS #: 91-57-6		
19.232	19.232 (1.456)	142	519661	55.3851	55.385	80.00- 120.00	100.00
19.232	19.232 (1.456)	141	463110			56.76- 116.76	89.12
19.232	19.232 (1.456)	115	181478			1.56- 61.56	34.92
104 1-Methylnaphthalene					CAS #: 90-12-0		
19.454	19.454 (1.473)	142	488573	56.8127	56.813	80.00- 120.00	100.00
19.454	19.454 (1.473)	141	445623			59.80- 119.80	91.21
19.454	19.454 (1.473)	115	174912			3.48- 63.48	35.80
107 Acenaphthylene					CAS #: 208-96-8		
21.302	21.302 (1.613)	152	893573	54.8616	54.862	80.00- 120.00	100.00
21.302	21.302 (1.613)	151	186906			0.00- 49.75	20.92
21.302	21.302 (1.613)	153	115445			0.00- 43.01	12.92
109 Acenaphthene					CAS #: 83-32-9		
21.560	21.560 (1.632)	154	440690	54.0916	54.092	80.00- 120.00	100.00
21.560	21.560 (1.632)	152	253697			26.17- 86.17	57.57
21.560	21.560 (1.632)	153	491310			78.75- 138.75	111.49
111 Fluorene					CAS #: 86-73-7		
22.685	22.684 (1.718)	166	423035	48.9384	48.938	80.00- 120.00	100.00
22.685	22.684 (1.718)	165	410628			65.26- 125.26	97.07
112 Phenanthrene					CAS #: 85-01-8		
24.819	24.819 (1.879)	178	737253	52.2257	52.226	80.00- 120.00	100.00
24.819	24.819 (1.879)	176	145489			0.00- 49.34	19.73
24.819	24.819 (1.879)	179	111001			0.00- 45.21	15.06
113 Anthracene					CAS #: 120-12-7		
24.927	24.927 (1.887)	178	722974	56.2107	56.211	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (ng)	FINAL (NG)	TARGET RANGE	RATIO
113 Anthracene (continued)							
24.927	24.927 (1.887)	176	135577			0.00- 48.82	18.75
24.927	24.927 (1.887)	179	104360			0.00- 44.74	14.43
117 Fluoranthene					CAS #: 206-44-0		
28.014	28.014 (2.121)	202	399889	36.6354	36.635	80.00- 120.00	100.00
28.014	28.007 (2.121)	101	77582			0.00- 43.29	19.40
118 Pyrene					CAS #: 129-00-0		
28.809	28.802 (2.181)	202	392828	34.8592	34.859	80.00- 120.00	100.00
28.802	28.802 (2.181)	101	87330			0.00- 45.23	22.23
28.802	28.802 (2.181)	100	71080			0.00- 42.66	18.09

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

Report Date: 03-Feb-2016 12:30

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd18.i
Lab File ID: 18020304.d
Lab Smp Id: VI VOC+PAH LCS
Analysis Type: VOA
Quant Type: ISTD
Operator: LA
Method File: /chem/msd18.i/03Feb2016.b/186z0114vi.m
Misc Info: 2516-203(2/17/16),2744-32-50(7/20/16)

Calibration Date: 03-FEB-2016
Calibration Time: 11:04
Client Smp ID: LCS
Level: LOW
Sample Type: AIR

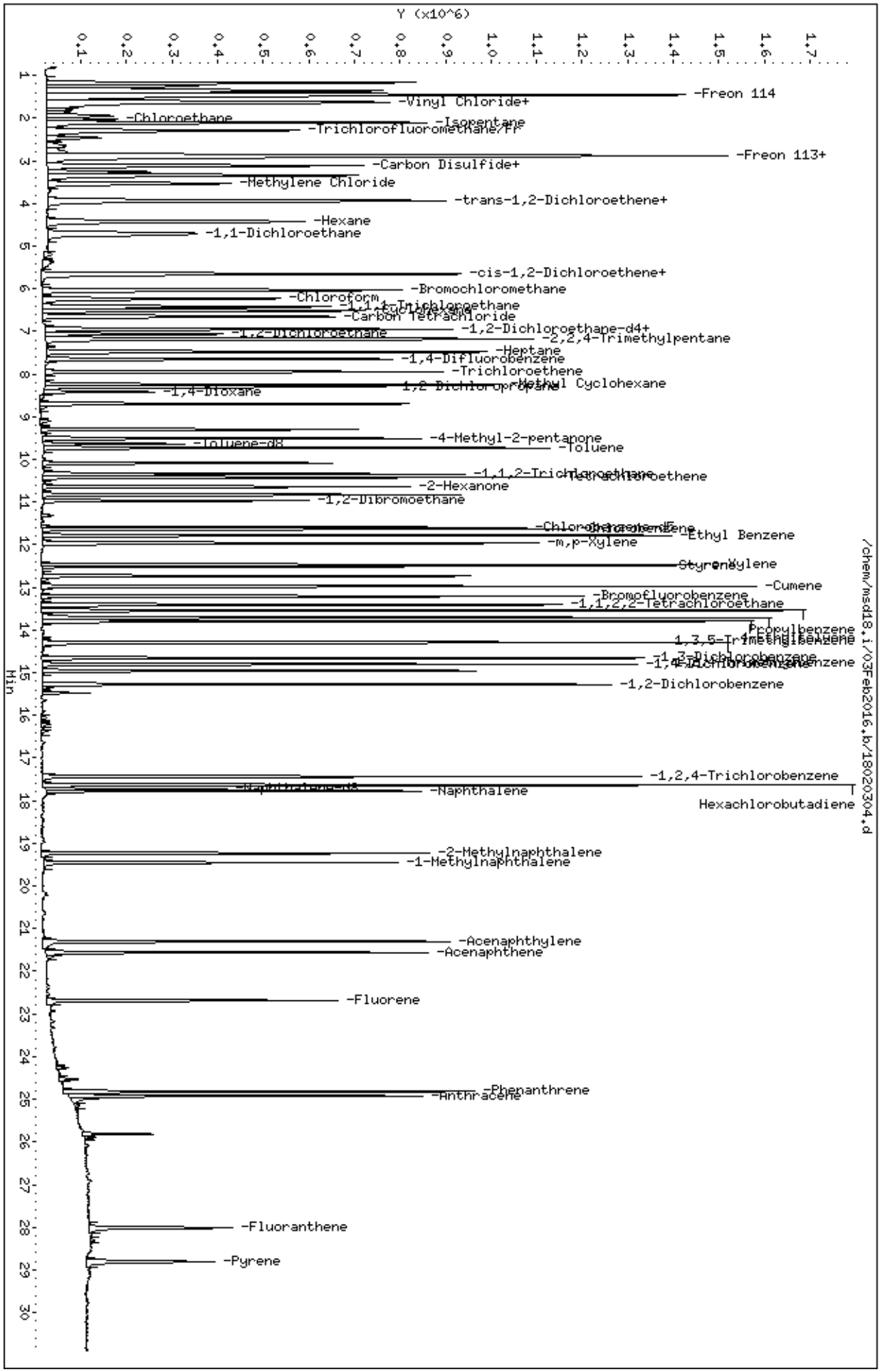
COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
32 Bromochloromethan	191362	114817	267907	204305	6.76
47 1,4-Difluorobenze	725728	435437	1016019	774781	6.76
67 Chlorobenzene-d5	632720	379632	885808	666483	5.34
79 Bromofluorobenzen	345554	207332	483776	371236	7.43

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
32 Bromochloromethan	6.03	5.70	6.36	6.03	0.00
47 1,4-Difluorobenze	7.65	7.32	7.98	7.65	0.00
67 Chlorobenzene-d5	11.59	11.26	11.92	11.60	0.06
79 Bromofluorobenzen	13.20	12.87	13.53	13.21	0.05

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msd18.i/03Feb2016.b/18020304.d
Date : 03-FEB-2016 11:43
Client ID: LCS
Sample Info: ;VI VOC+PAH LCS;LCS
Column phase: RTx-624

Instrument: msd18.i
Operator: LA
Column diameter: 0.53



Data File: /chem/msd18.i/03Feb2016.b/18020304.d

Date : 03-FEB-2016 11:43

Client ID: LCS

Instrument: msd18.i

Sample Info: ;VI VOC+PAH LCS;LCS

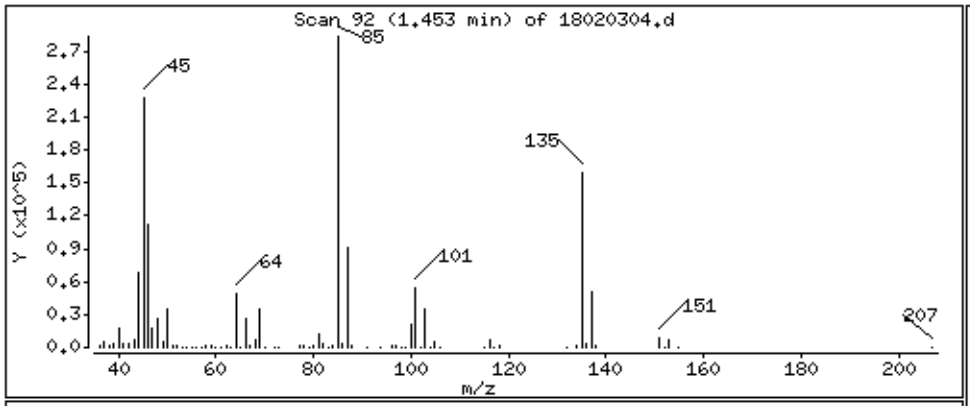
Operator: LA

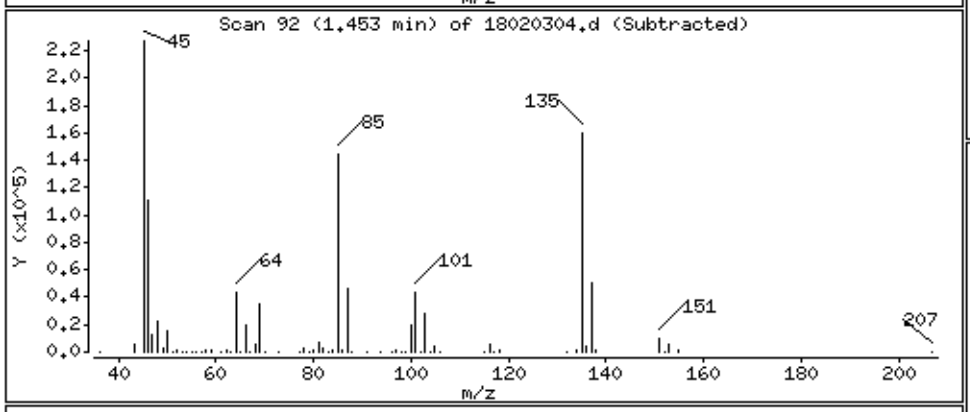
Column phase: RTx-624

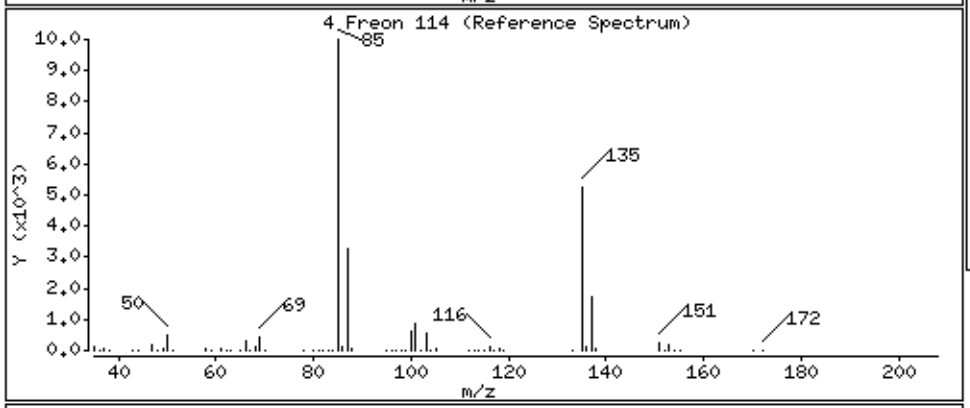
Column diameter: 0.53

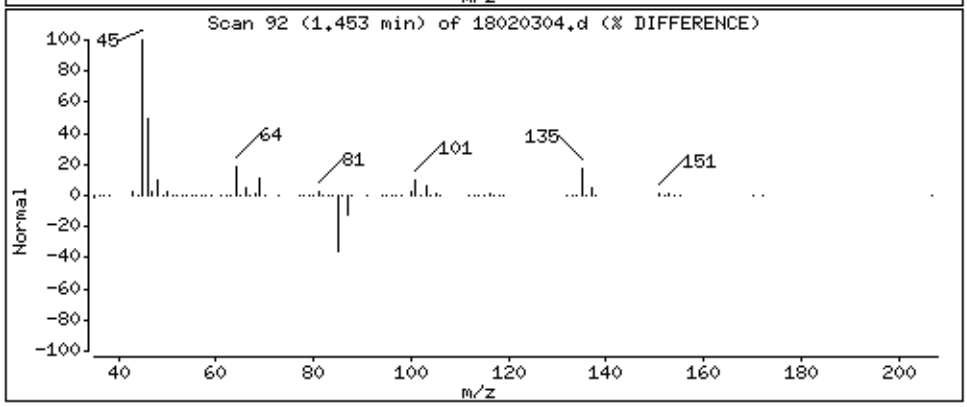
4 Freon 114

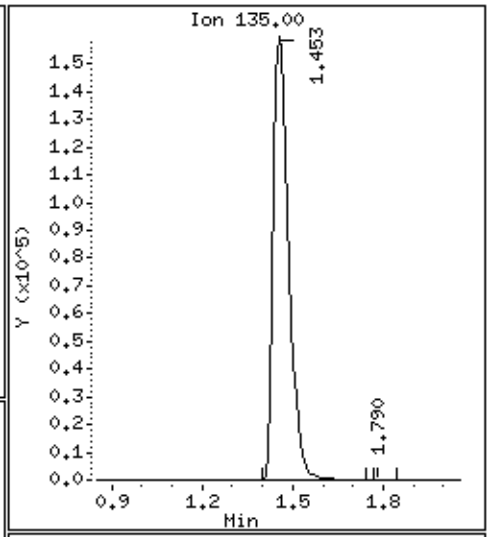
Concentration: 124.29 NG

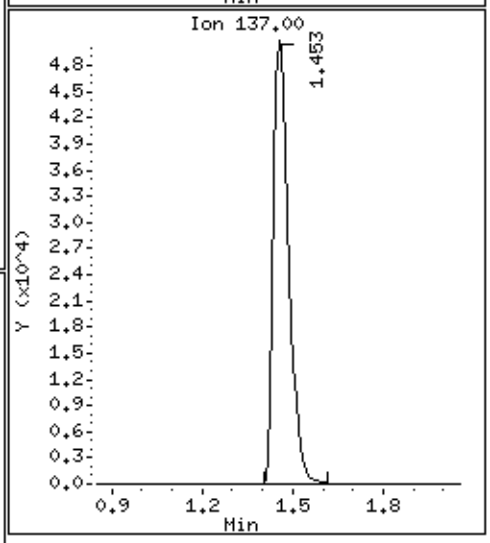












Data File: /chem/msd18.i/03Feb2016.b/18020304.d

Date : 03-FEB-2016 11:43

Client ID: LCS

Instrument: msd18.i

Sample Info: ;VI VOC+PAH LCS;LCS

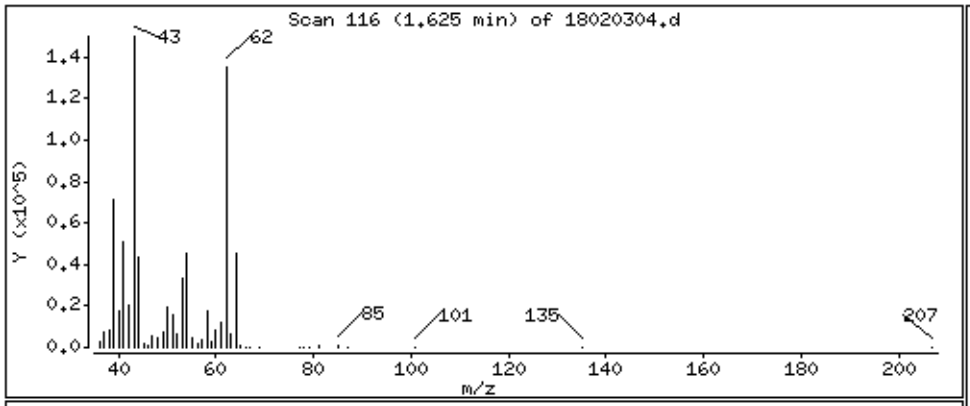
Operator: LA

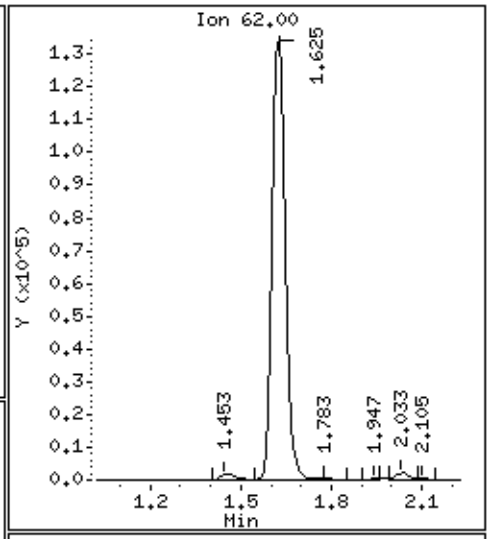
Column phase: RTx-624

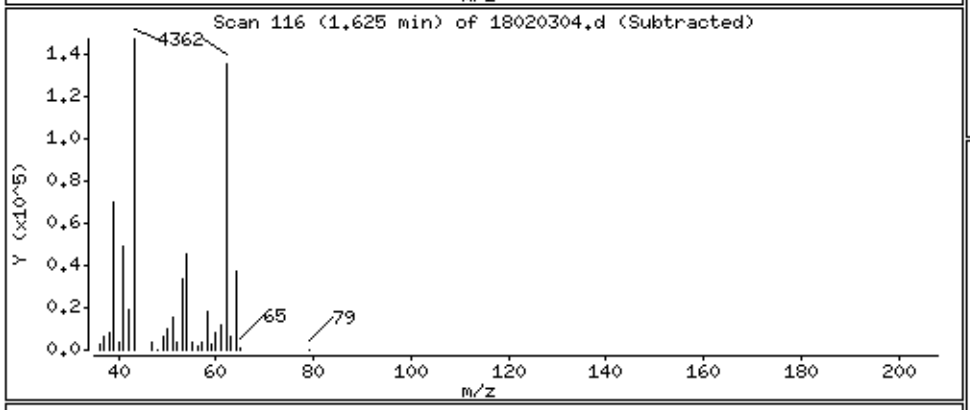
Column diameter: 0.53

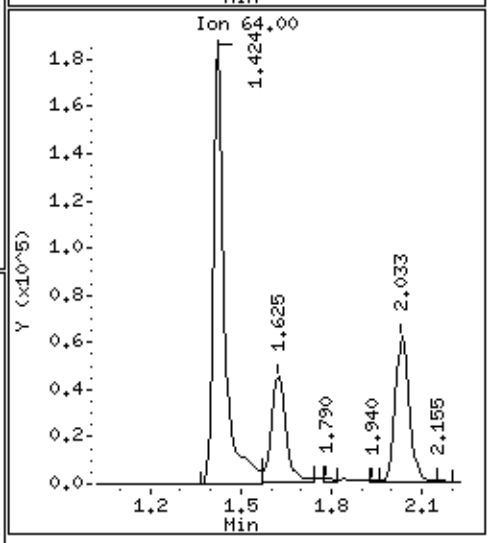
6 Vinyl Chloride

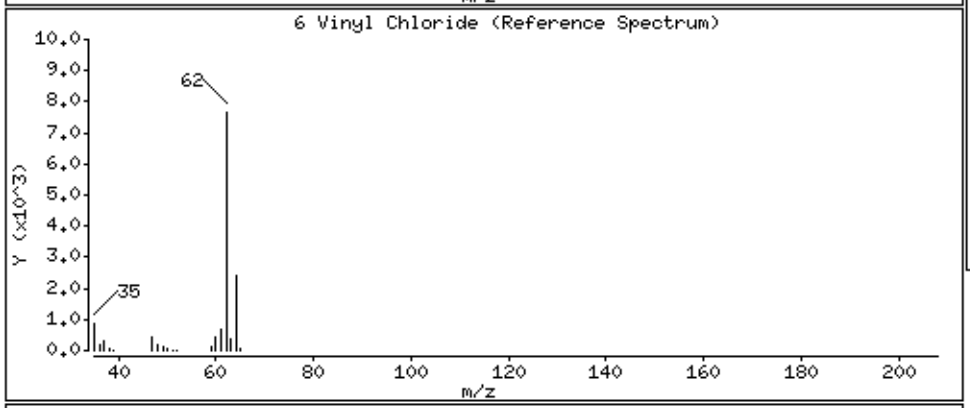
Concentration: 63.734 NG

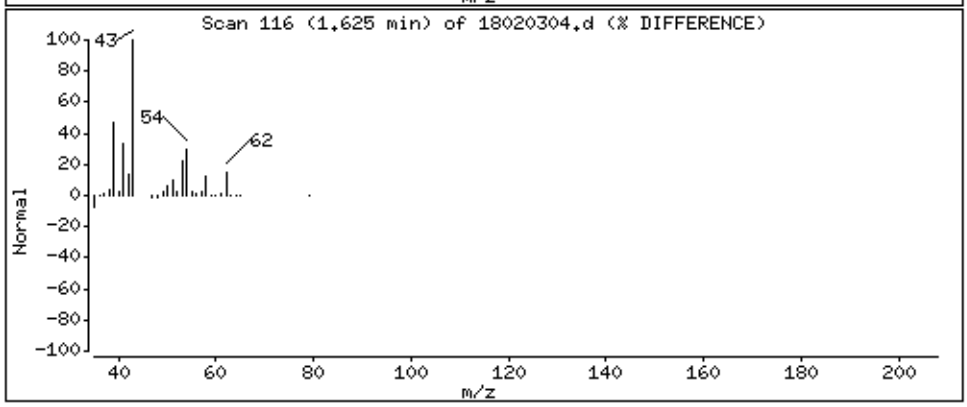












Data File: /chem/msd18.i/03Feb2016.b/18020304.d

Date : 03-FEB-2016 11:43

Client ID: LCS

Instrument: msd18.i

Sample Info: ;VI VOC+PAH LCS;LCS

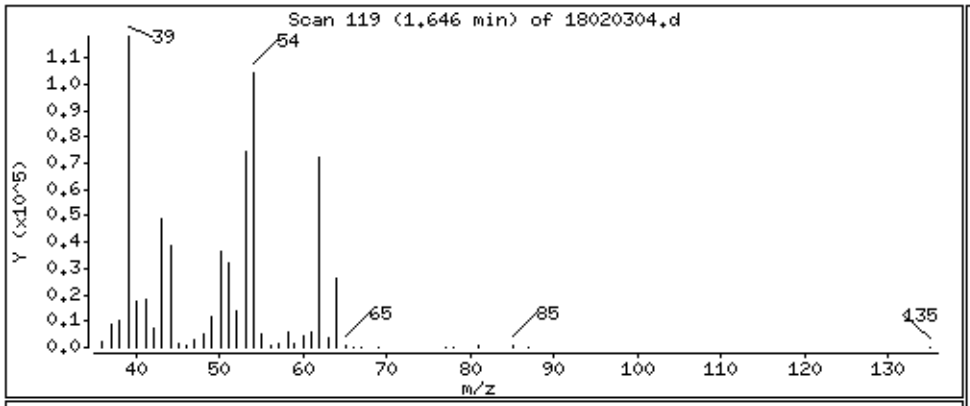
Operator: LA

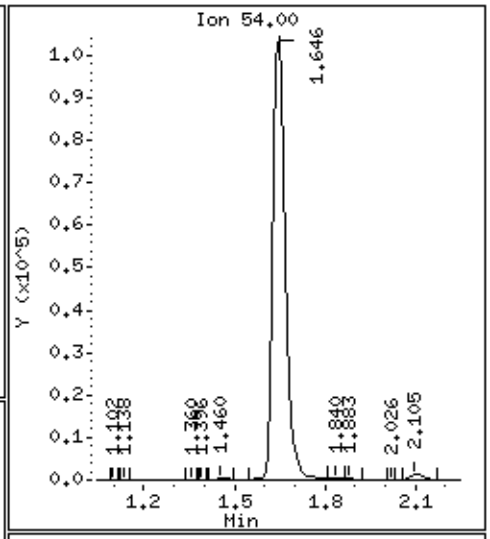
Column phase: RTx-624

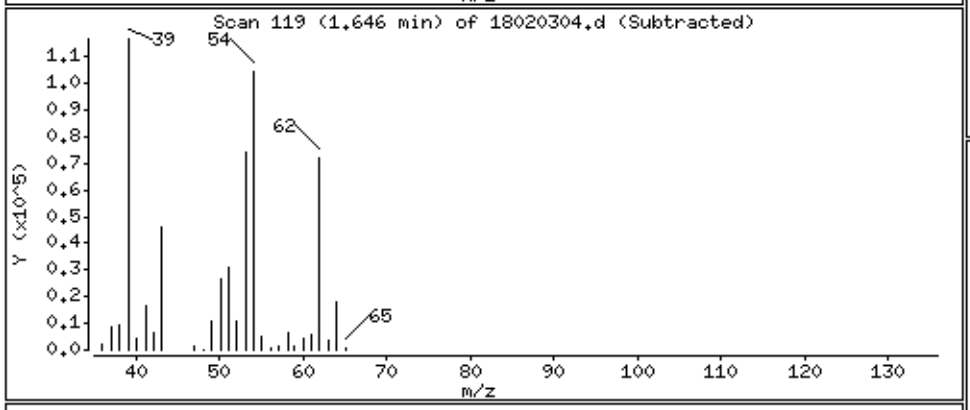
Column diameter: 0.53

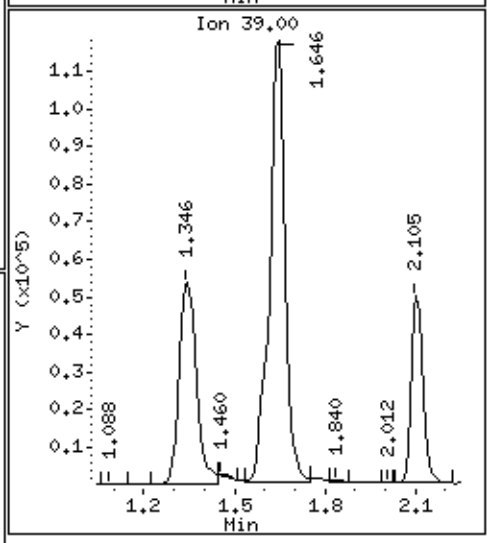
7 1,3-Butadiene

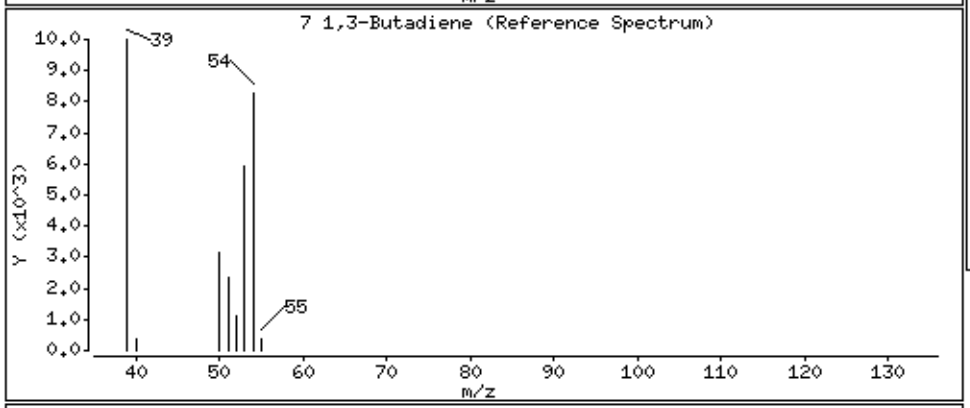
Concentration: 53.130 NG

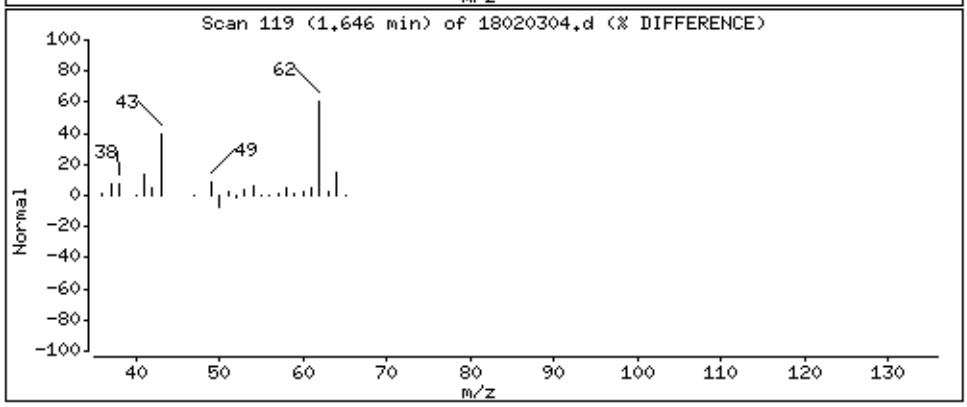












Data File: /chem/msd18.i/03Feb2016.b/18020304.d

Date : 03-FEB-2016 11:43

Client ID: LCS

Instrument: msd18.i

Sample Info: ;VI VOC+PAH LCS;LCS

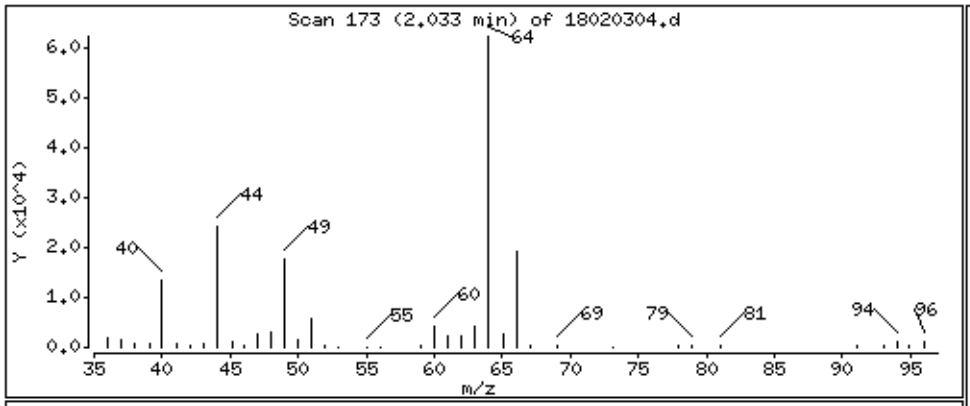
Operator: LA

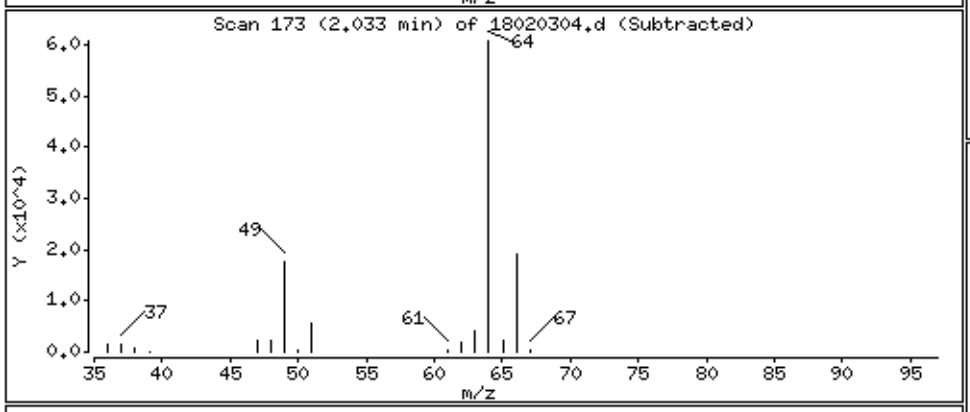
Column phase: RTx-624

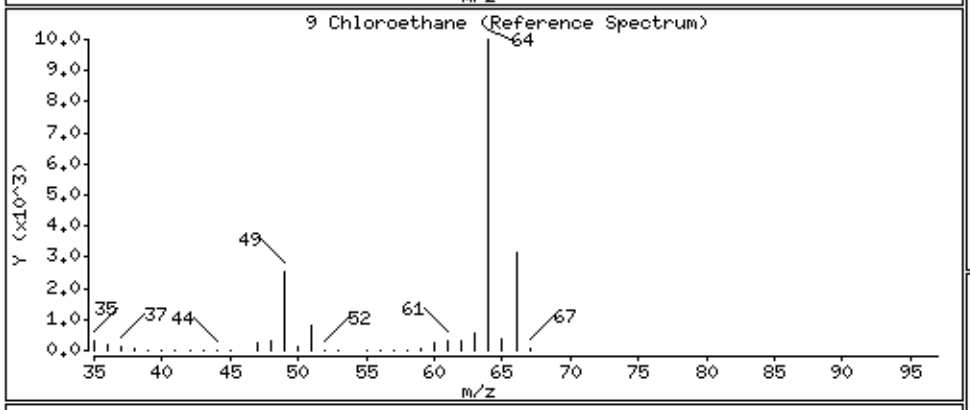
Column diameter: 0.53

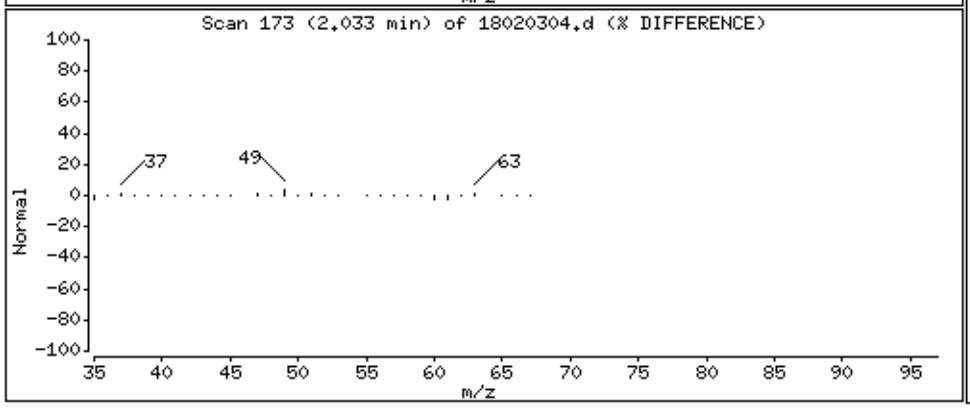
9 Chloroethane

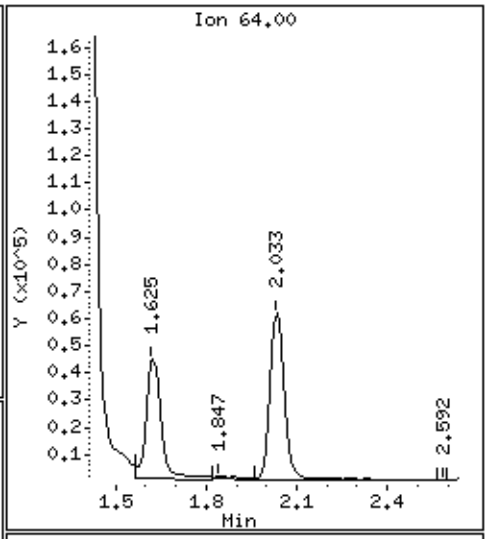
Concentration: 69.520 NG

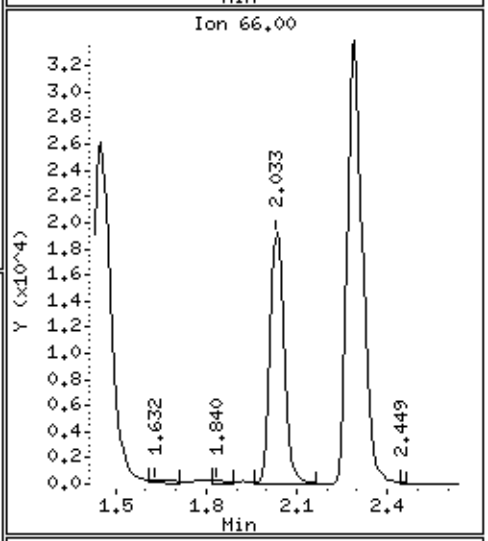


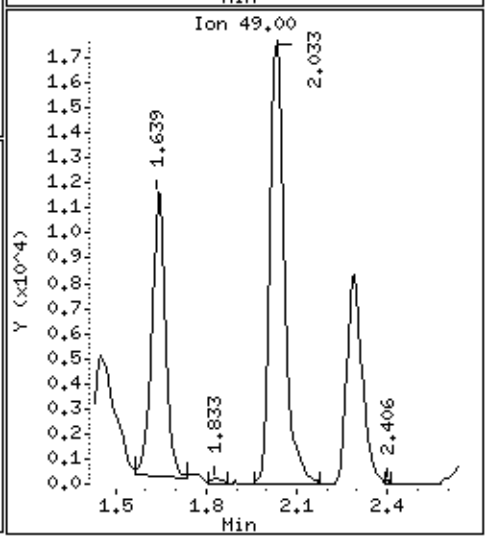












Data File: /chem/msd18.i/03Feb2016.b/18020304.d

Date : 03-FEB-2016 11:43

Client ID: LCS

Instrument: msd18.i

Sample Info: ;VI VOC+PAH LCS;LCS

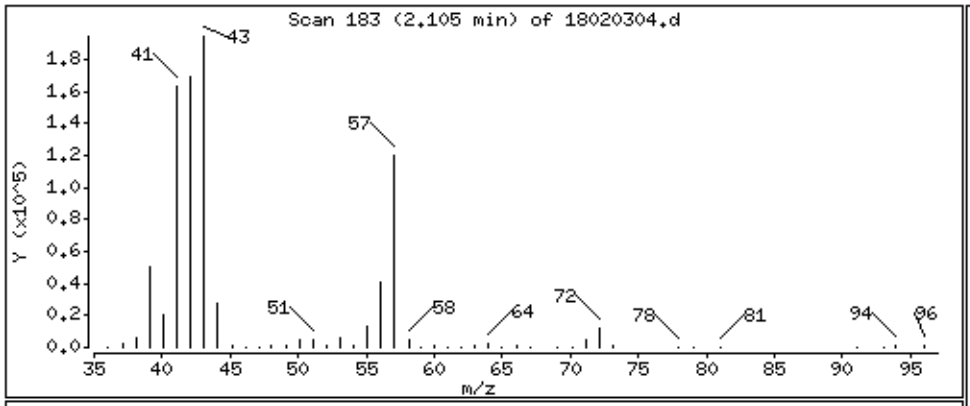
Operator: LA

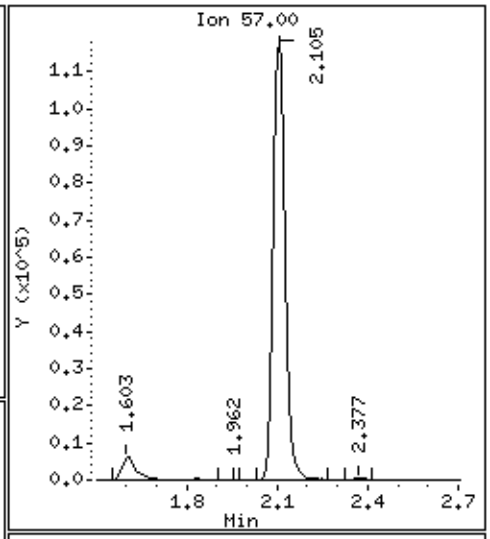
Column phase: RTx-624

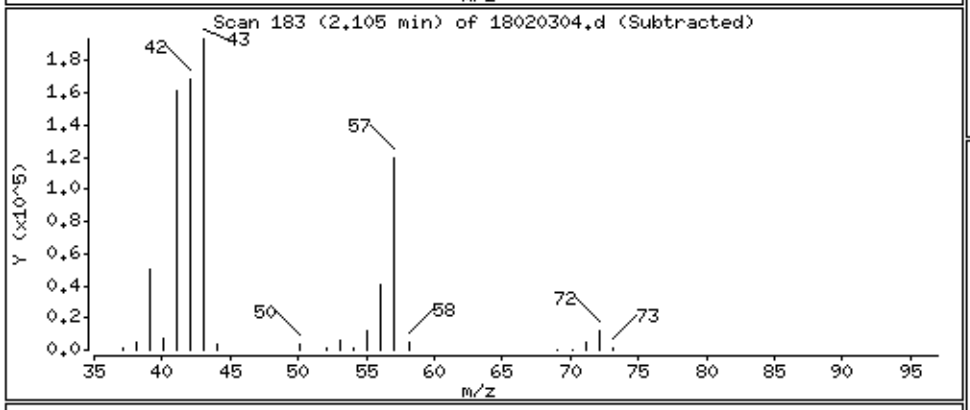
Column diameter: 0.53

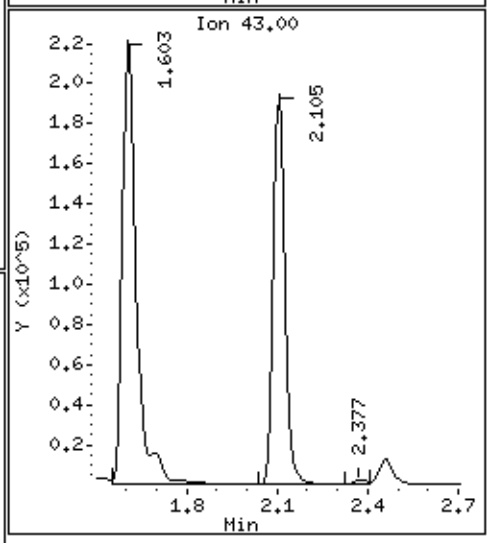
10 Isopentane

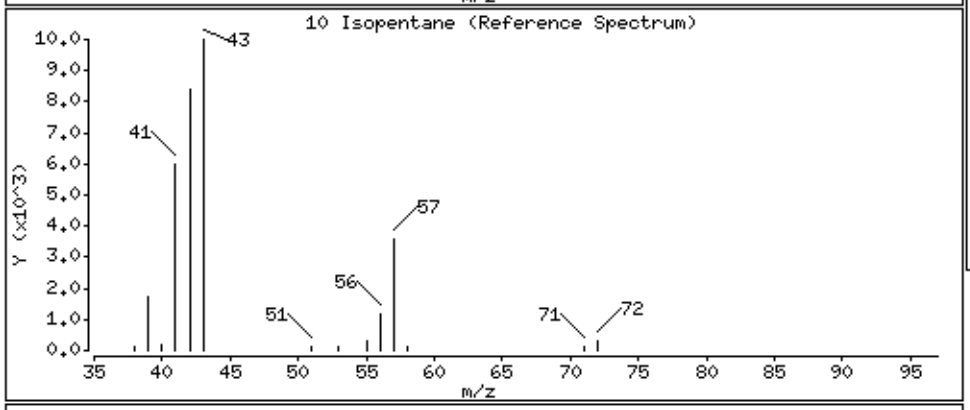
Concentration: 72.760 NG

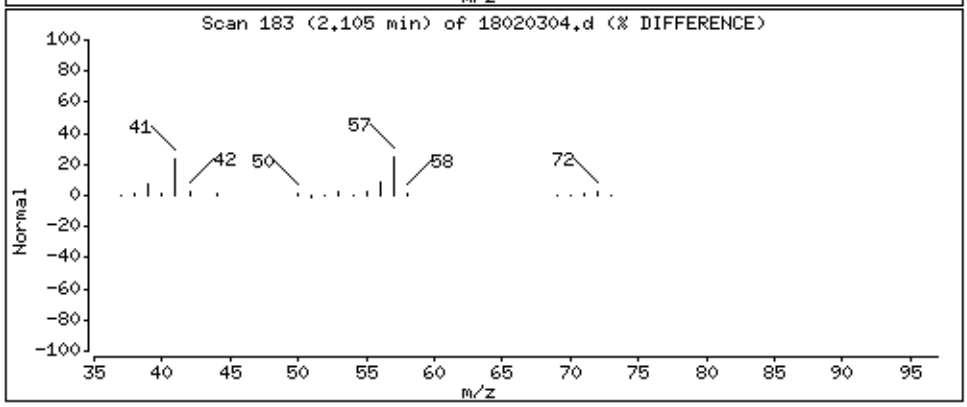












Data File: /chem/msd18.i/03Feb2016.b/18020304.d

Date : 03-FEB-2016 11:43

Client ID: LCS

Instrument: msd18.i

Sample Info: ;VI VOC+PAH LCS;LCS

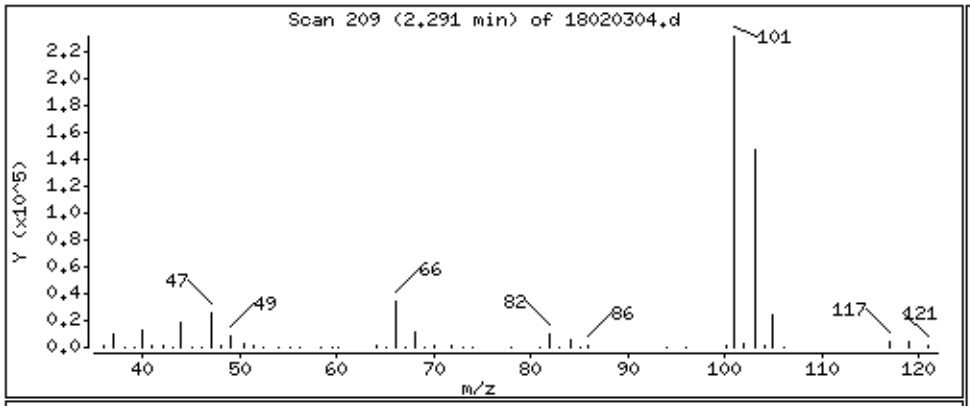
Operator: LA

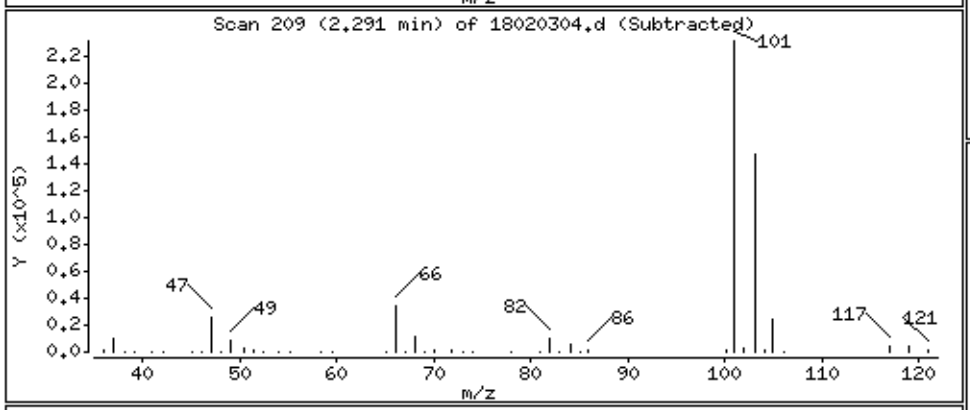
Column phase: RTx-624

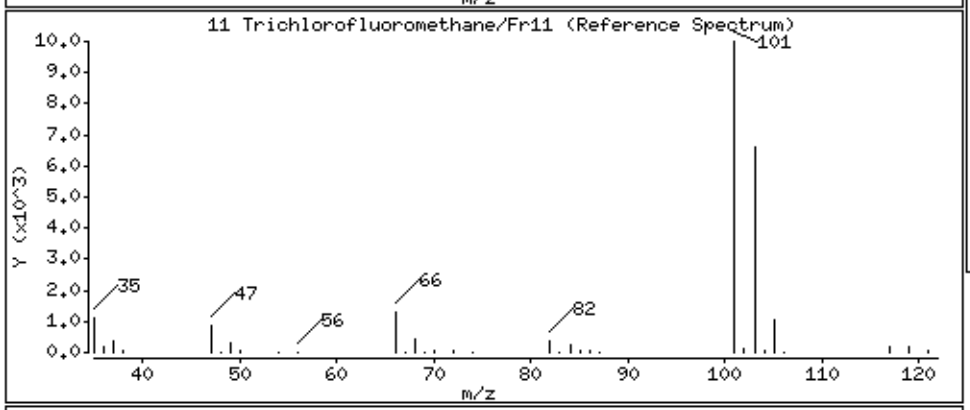
Column diameter: 0.53

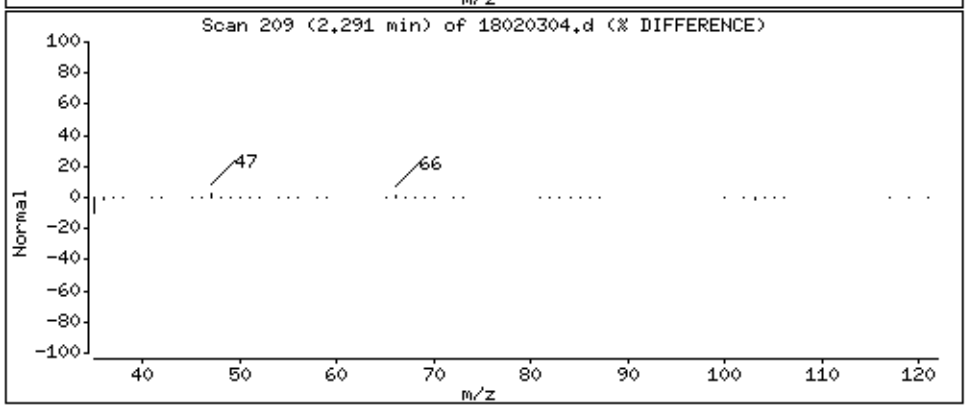
11 Trichlorofluoromethane/Fr11

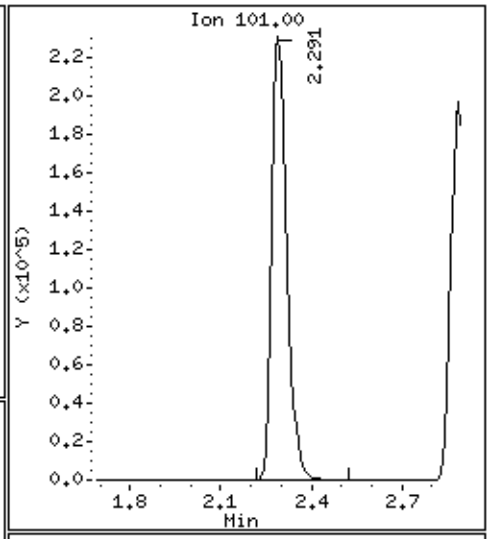
Concentration: 121.12 NG

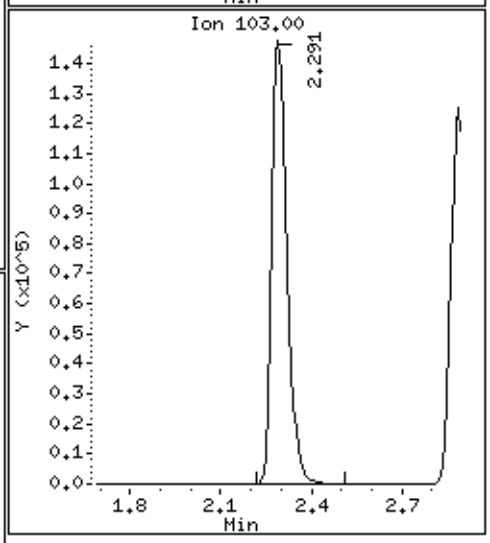












Data File: /chem/msd18.i/03Feb2016.b/18020304.d

Date : 03-FEB-2016 11:43

Client ID: LCS

Instrument: msd18.i

Sample Info: ;VI VOC+PAH LCS;LCS

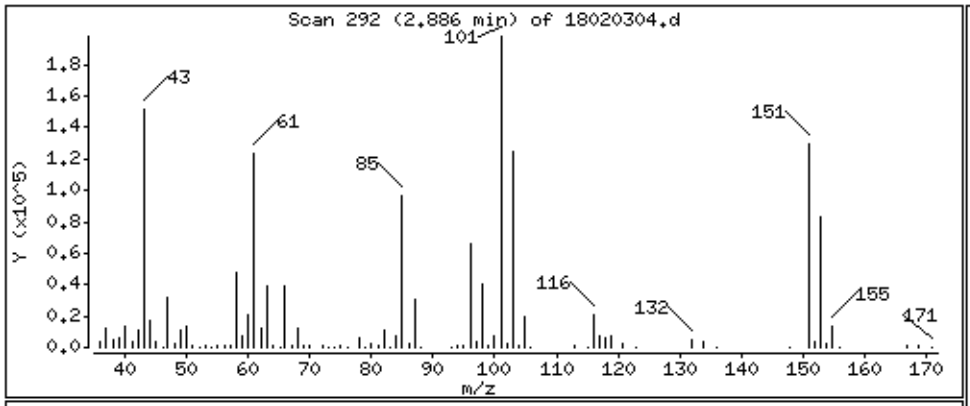
Operator: LA

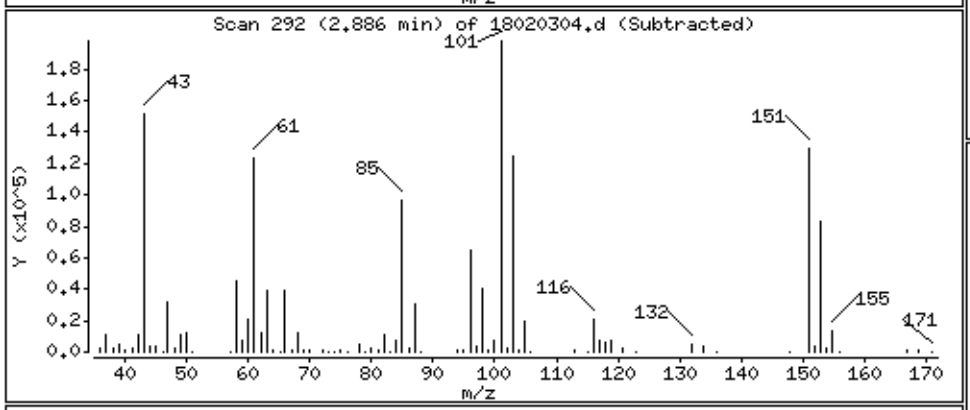
Column phase: RTx-624

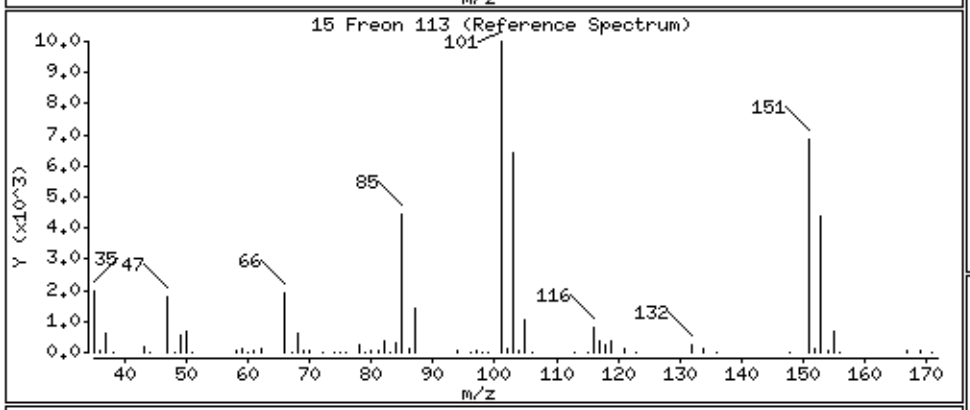
Column diameter: 0.53

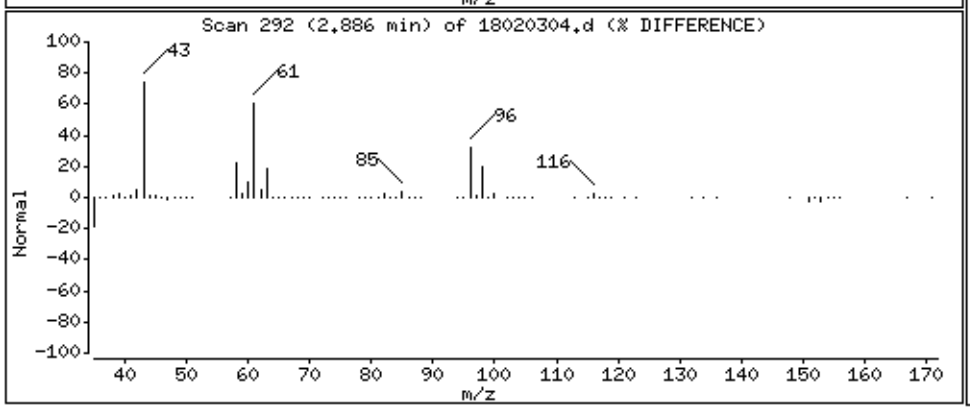
15 Freon 113

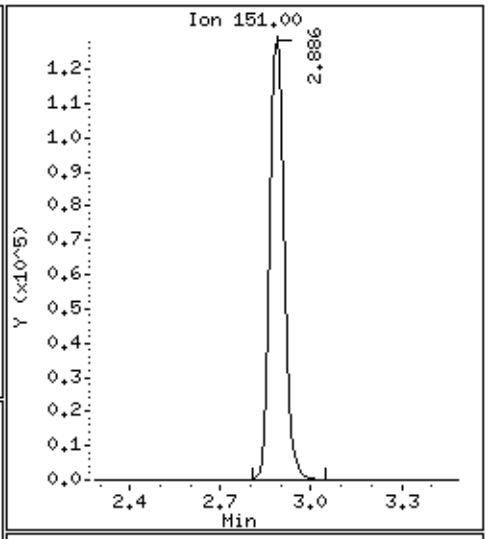
Concentration: 133.41 NG

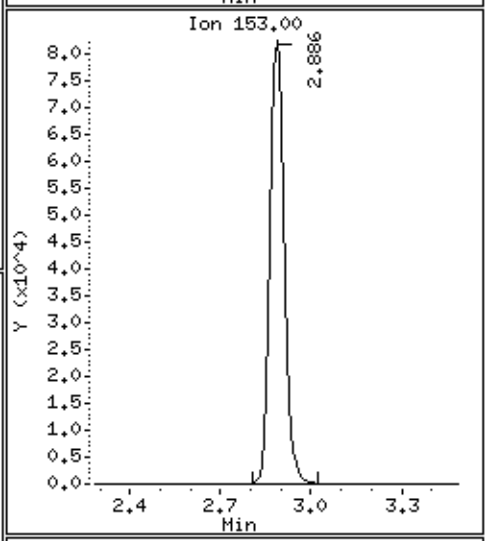


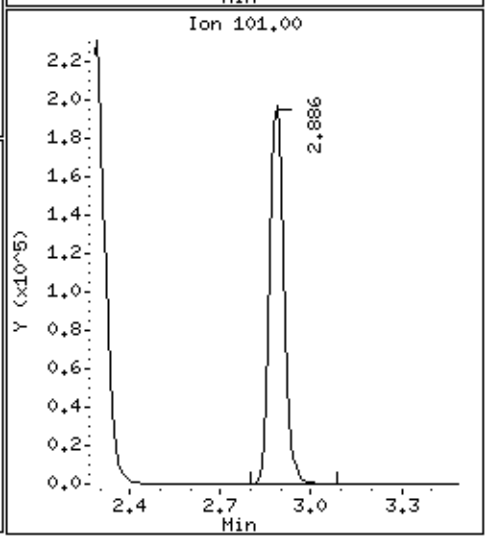












Data File: /chem/msd18.i/03Feb2016.b/18020304.d

Date : 03-FEB-2016 11:43

Client ID: LCS

Instrument: msd18.i

Sample Info: ;VI VOC+PAH LCS;LCS

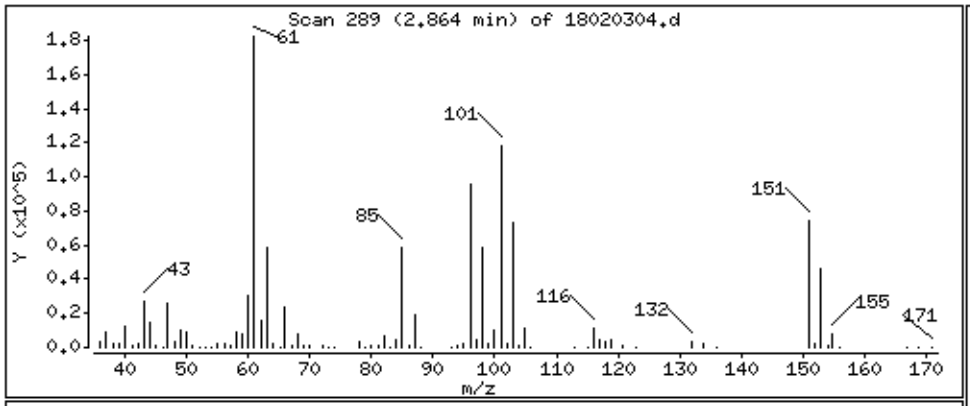
Operator: LA

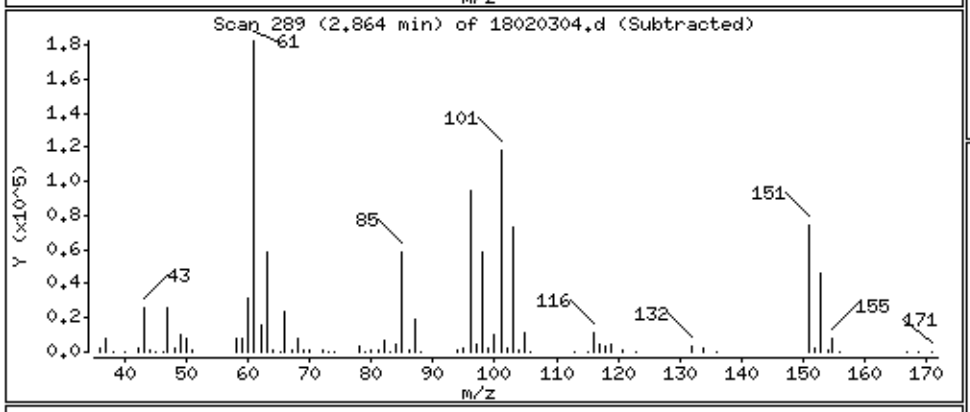
Column phase: RTx-624

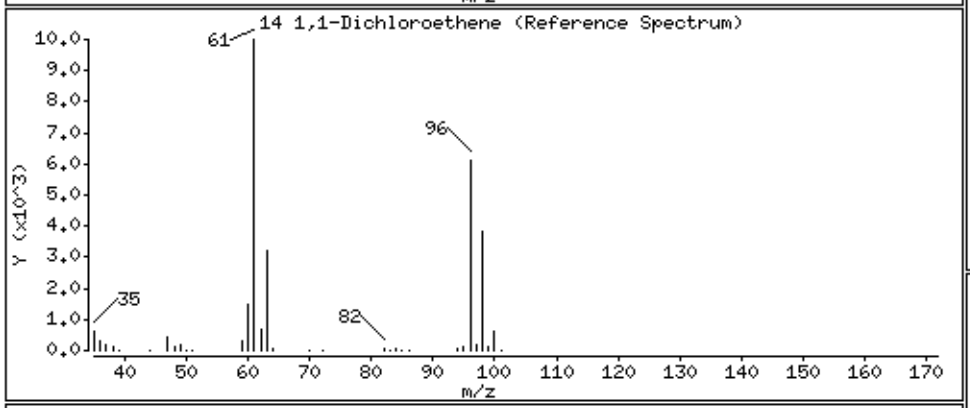
Column diameter: 0.53

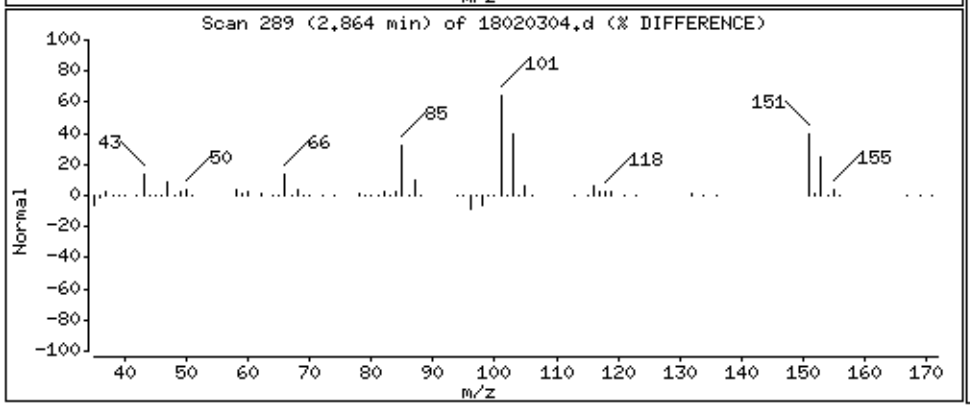
14 1,1-Dichloroethene

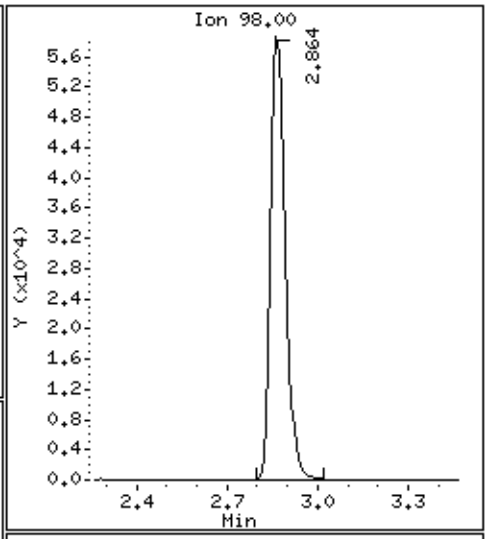
Concentration: 81.068 NG

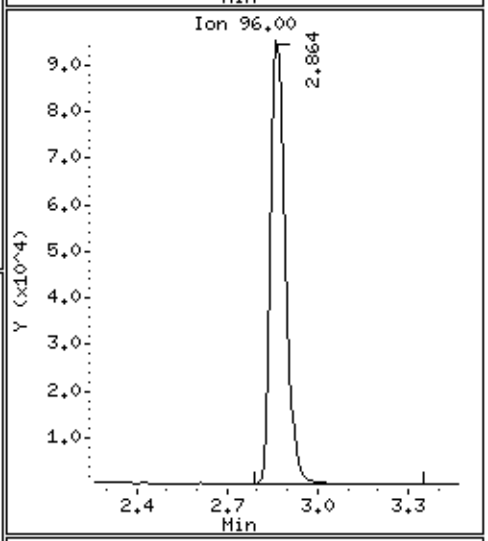


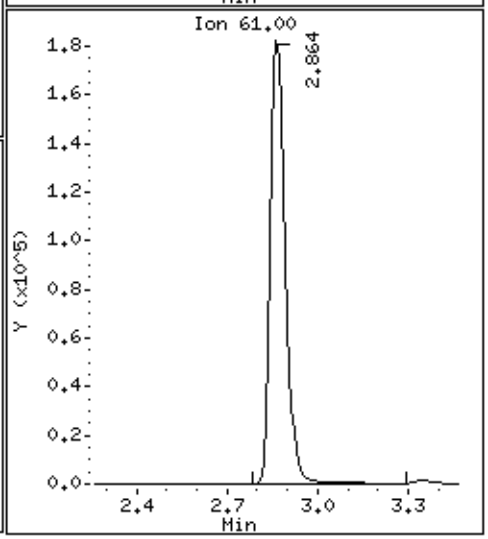












Data File: /chem/msd18.i/03Feb2016.b/18020304.d

Date : 03-FEB-2016 11:43

Client ID: LCS

Instrument: msd18.i

Sample Info: ;VI VOC+PAH LCS;LCS

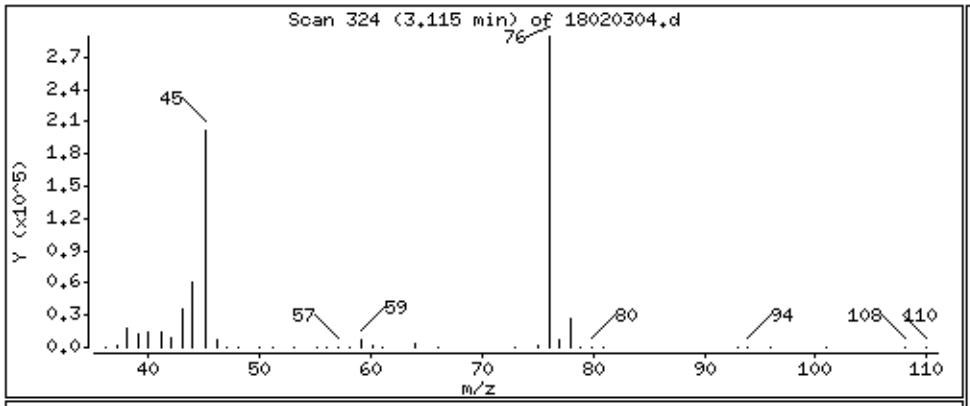
Operator: LA

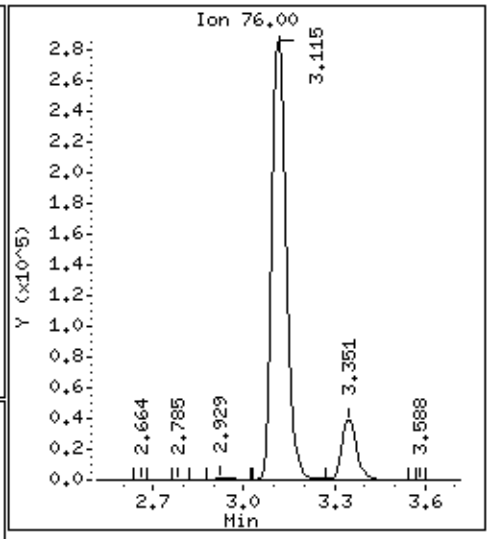
Column phase: RTx-624

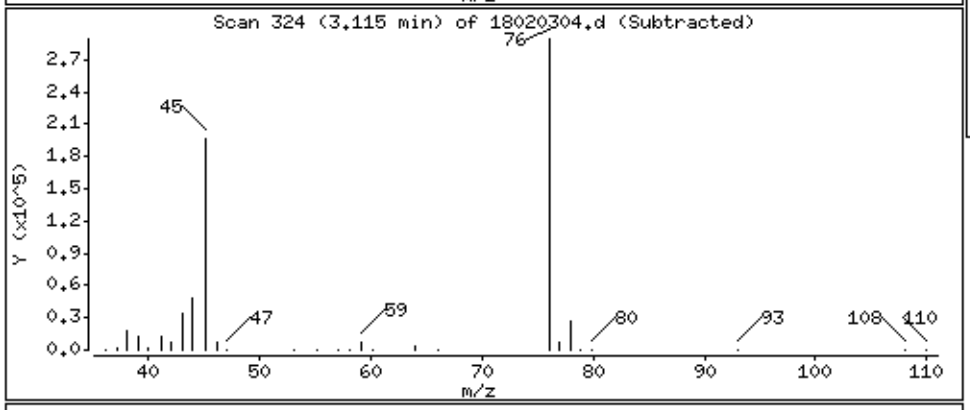
Column diameter: 0.53

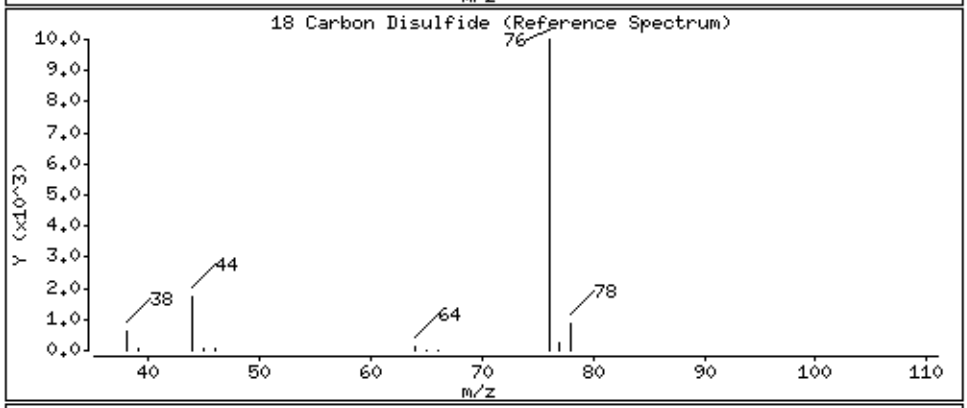
18 Carbon Disulfide

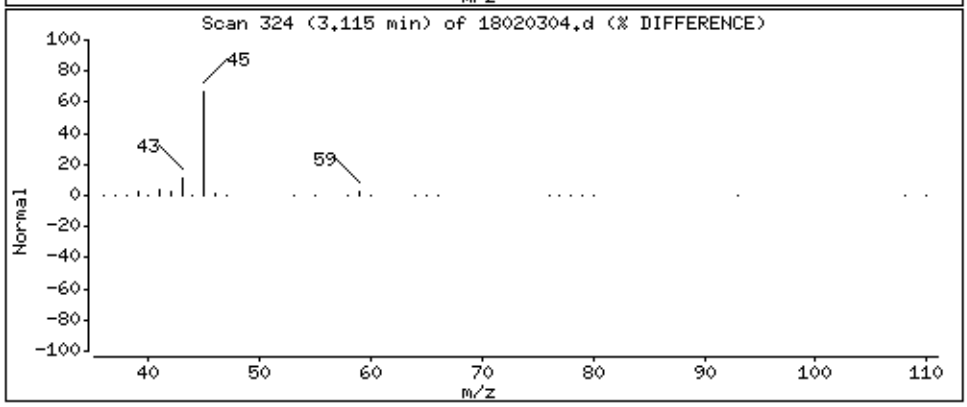
Concentration: 58.823 NG











Data File: /chem/msd18.i/03Feb2016.b/18020304.d

Date : 03-FEB-2016 11:43

Client ID: LCS

Instrument: msd18.i

Sample Info: ;VI VOC+PAH LCS;LCS

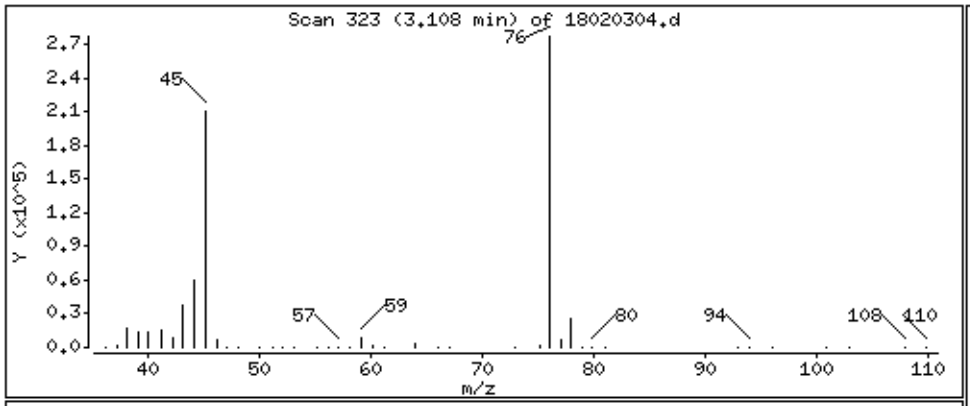
Operator: LA

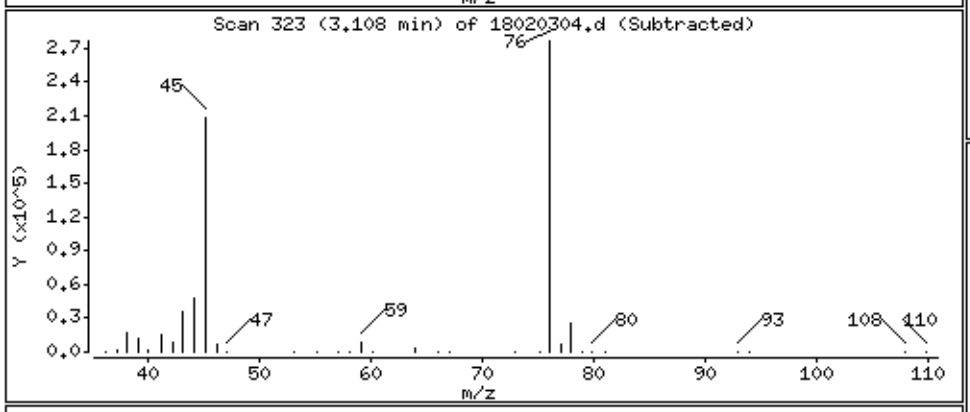
Column phase: RTx-624

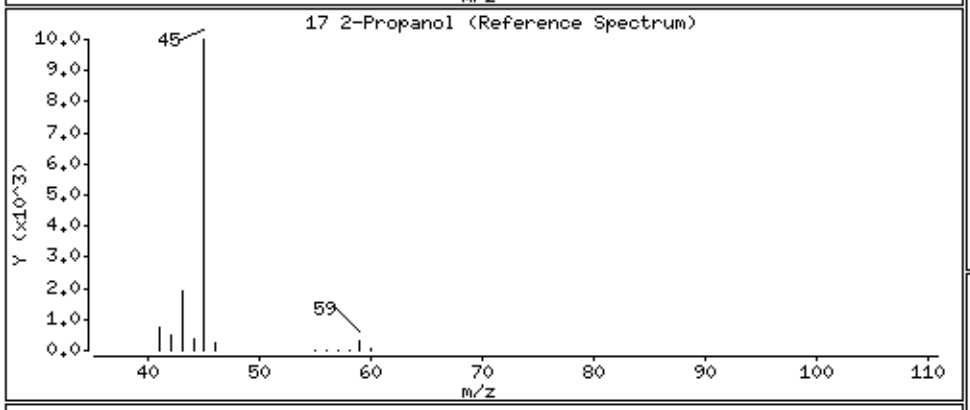
Column diameter: 0.53

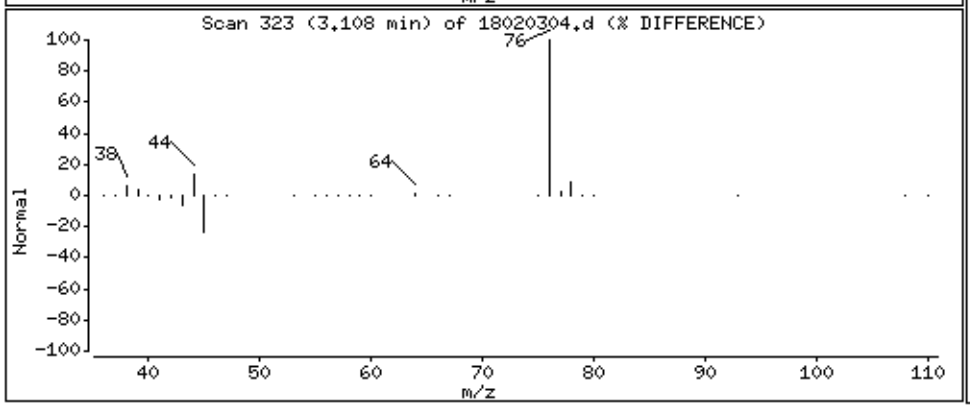
17 2-Propanol

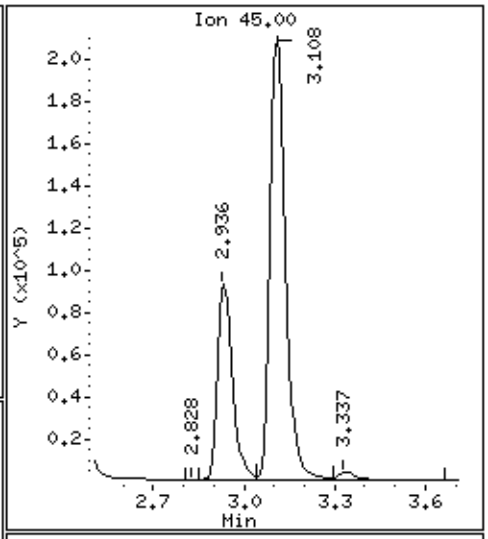
Concentration: 60.136 NG

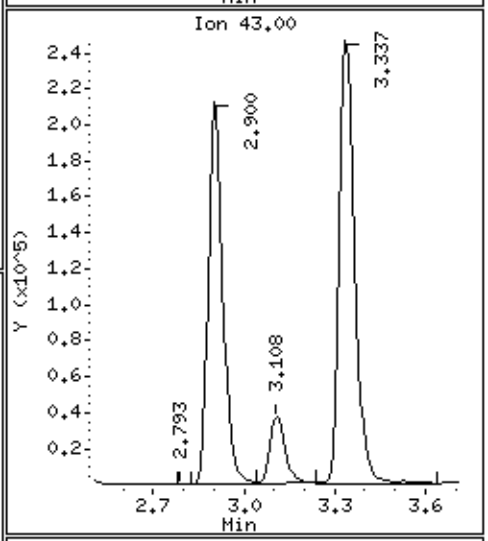


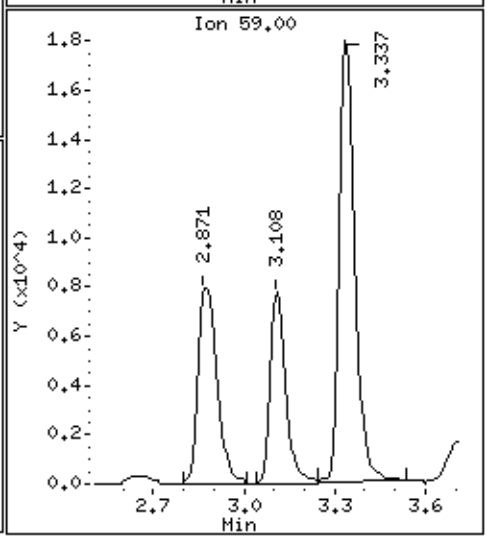












Data File: /chem/msd18.i/03Feb2016.b/18020304.d

Date : 03-FEB-2016 11:43

Client ID: LCS

Instrument: msd18.i

Sample Info: ;VI VOC+PAH LCS;LCS

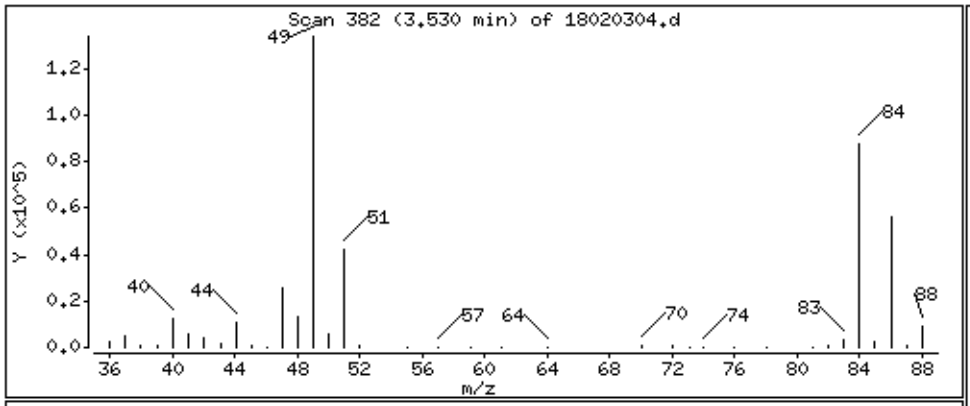
Operator: LA

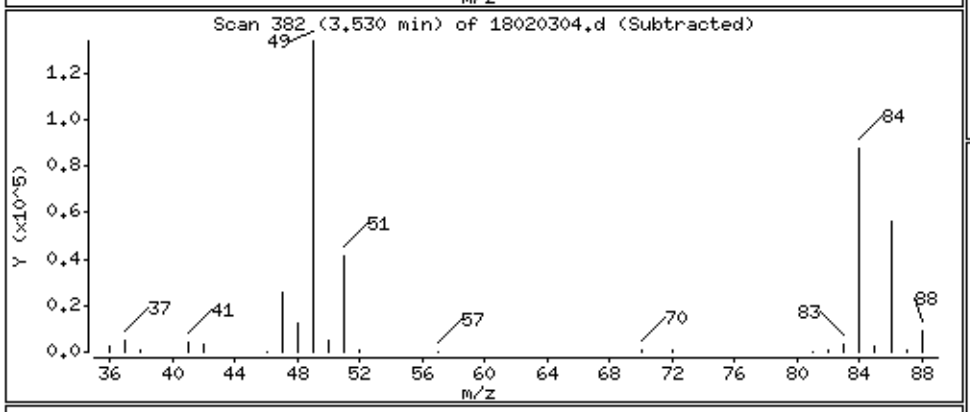
Column phase: RTx-624

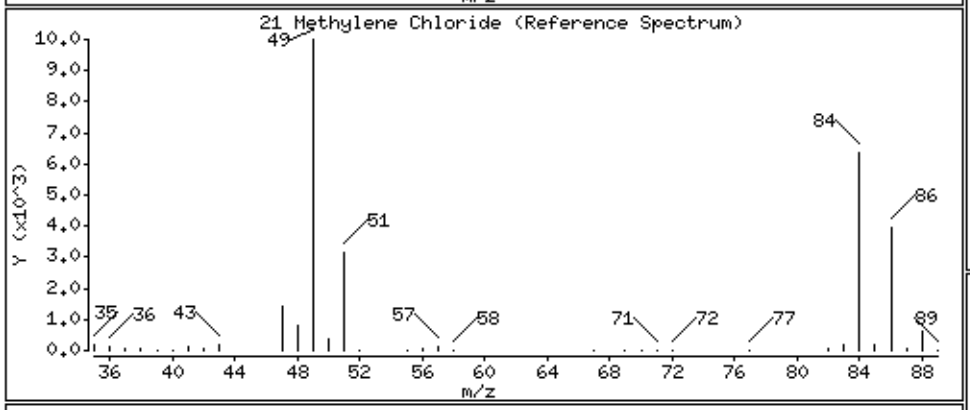
Column diameter: 0.53

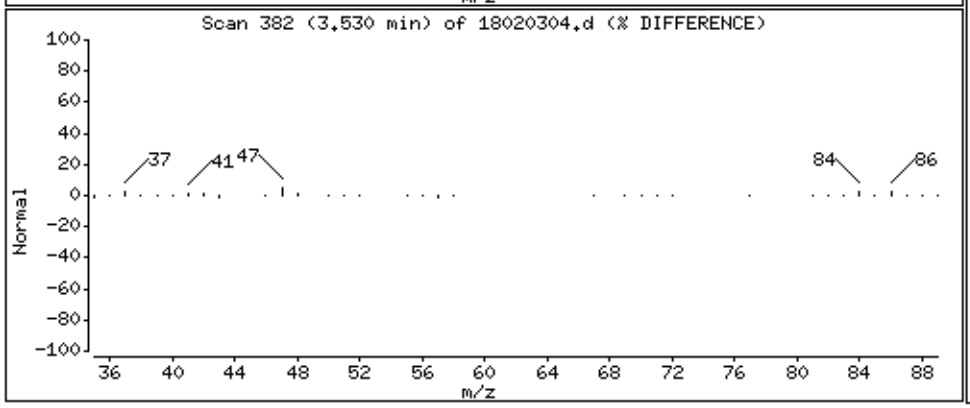
21 Methylene Chloride

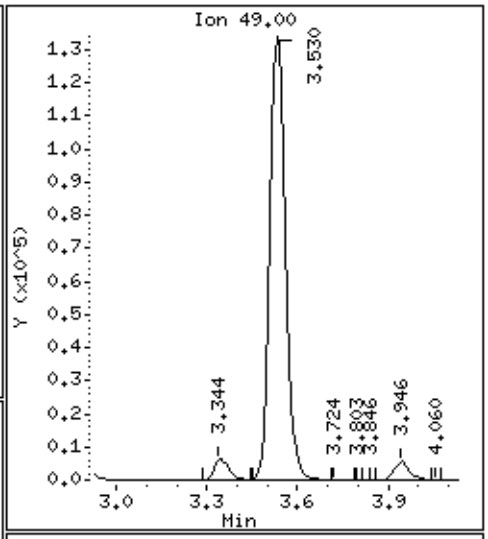
Concentration: 85.231 NG

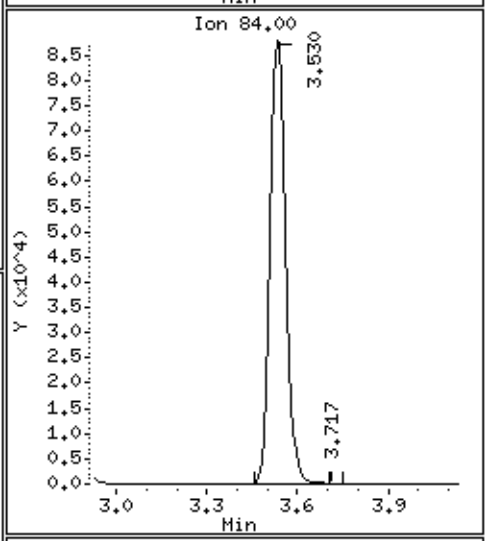


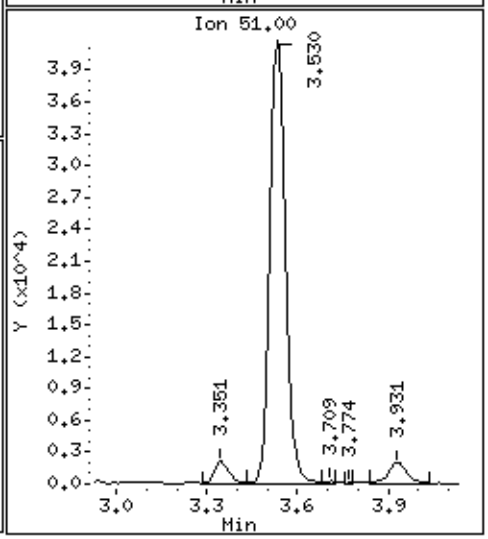












Data File: /chem/msd18.i/03Feb2016.b/18020304.d

Date : 03-FEB-2016 11:43

Client ID: LCS

Instrument: msd18.i

Sample Info: ;VI VOC+PAH LCS;LCS

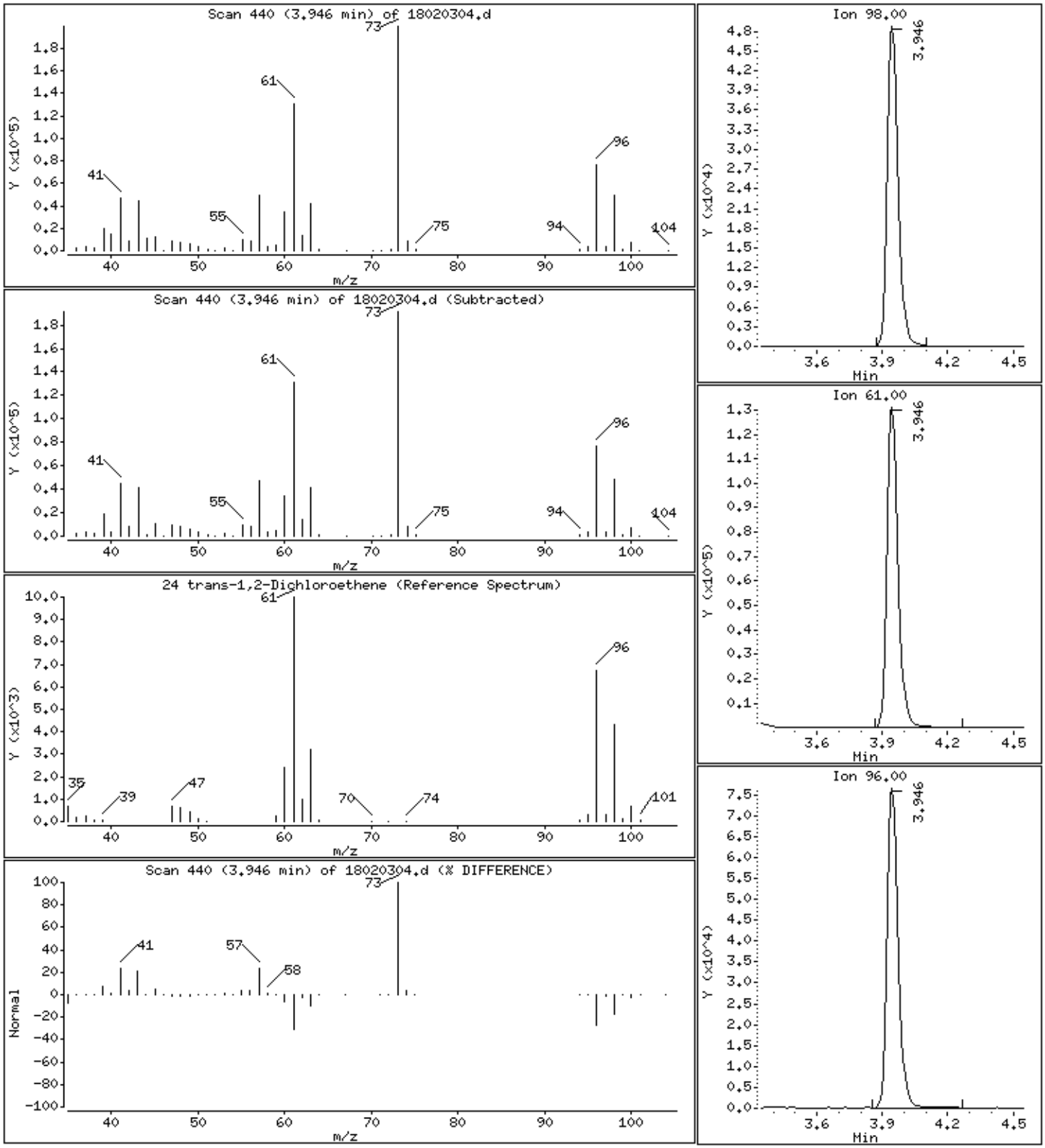
Operator: LA

Column phase: RTx-624

Column diameter: 0.53

24 trans-1,2-Dichloroethene

Concentration: 72.264 NG



Data File: /chem/msd18.i/03Feb2016.b/18020304.d

Date : 03-FEB-2016 11:43

Client ID: LCS

Instrument: msd18.i

Sample Info: ;VI VOC+PAH LCS;LCS

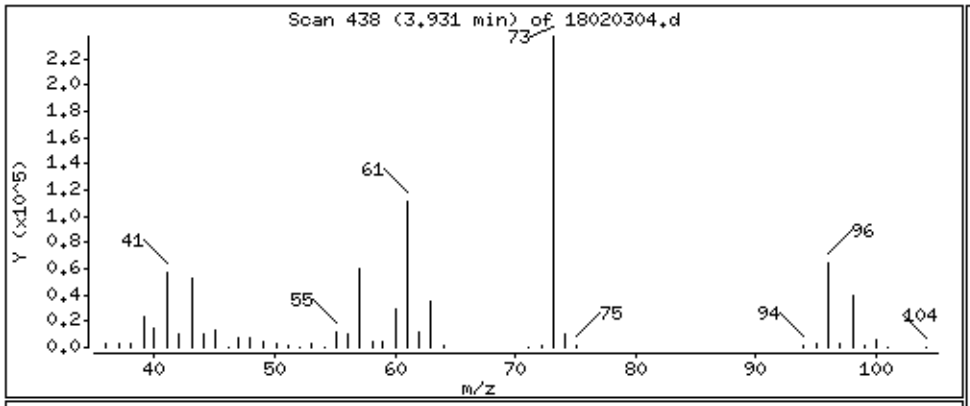
Operator: LA

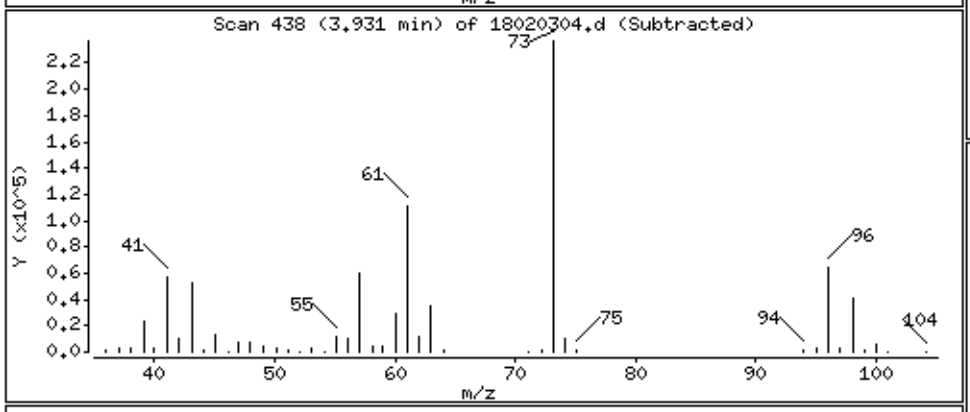
Column phase: RTx-624

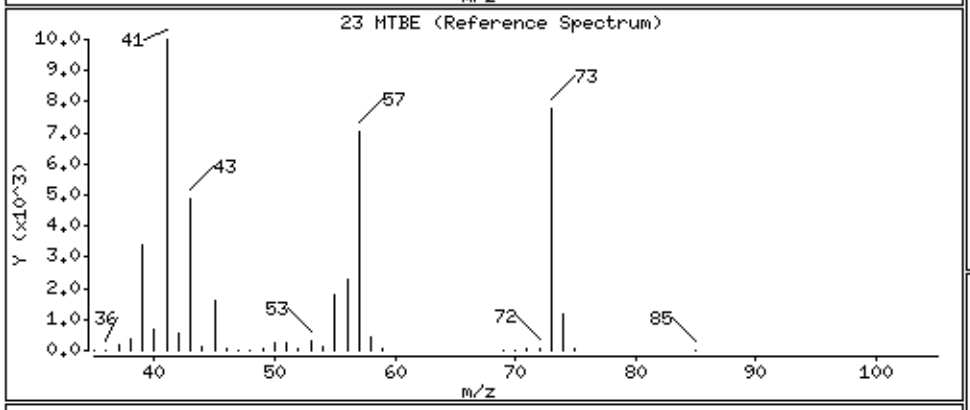
Column diameter: 0.53

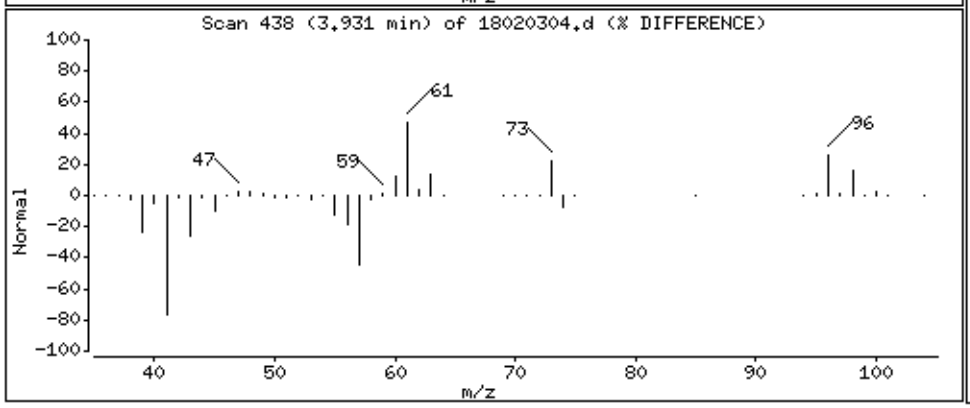
23 MTBE

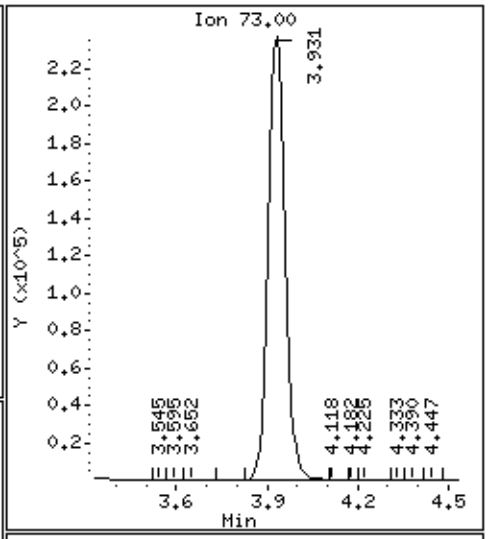
Concentration: 87.144 NG

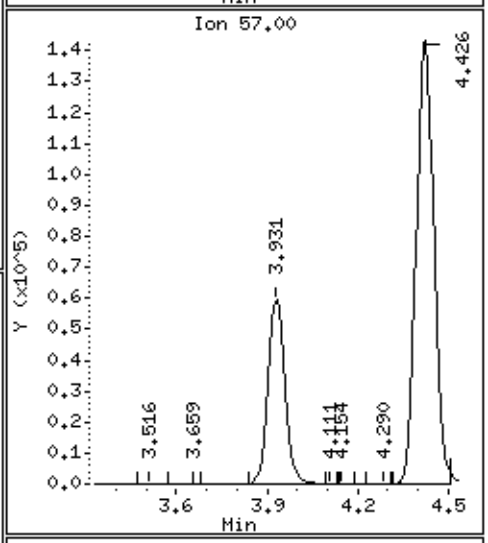


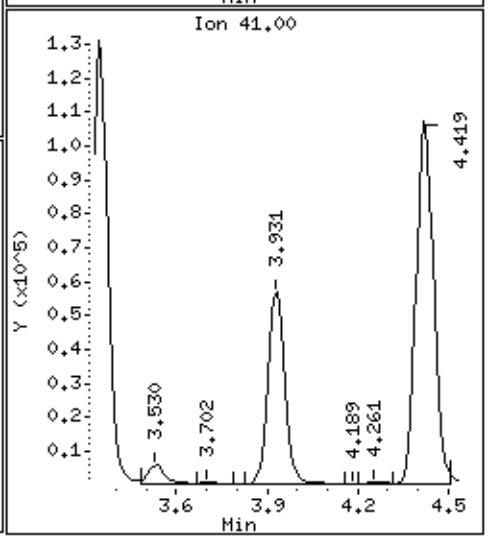












Data File: /chem/msd18.i/03Feb2016.b/18020304.d

Date : 03-FEB-2016 11:43

Client ID: LCS

Instrument: msd18.i

Sample Info: ;VI VOC+PAH LCS;LCS

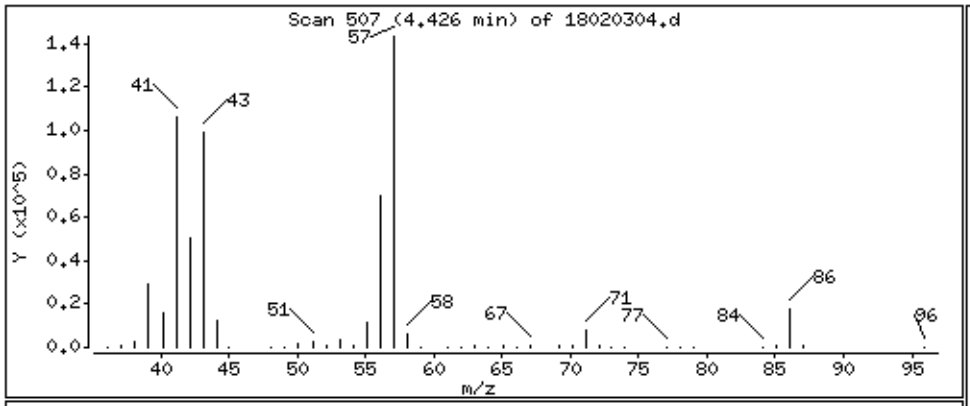
Operator: LA

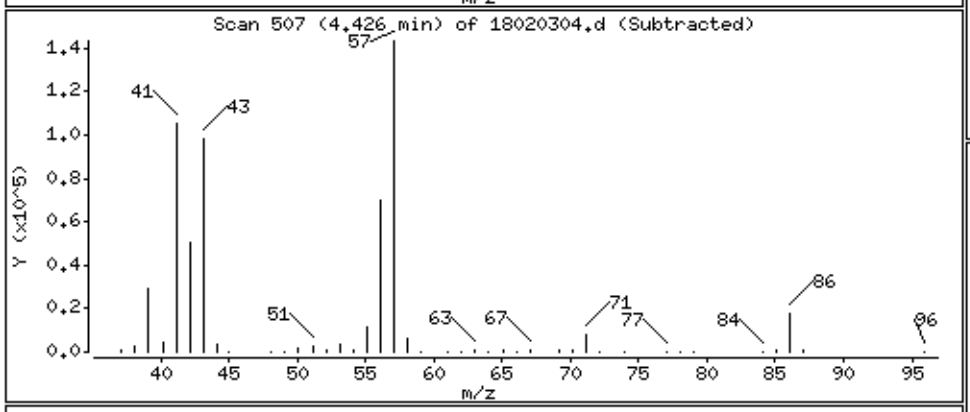
Column phase: RTx-624

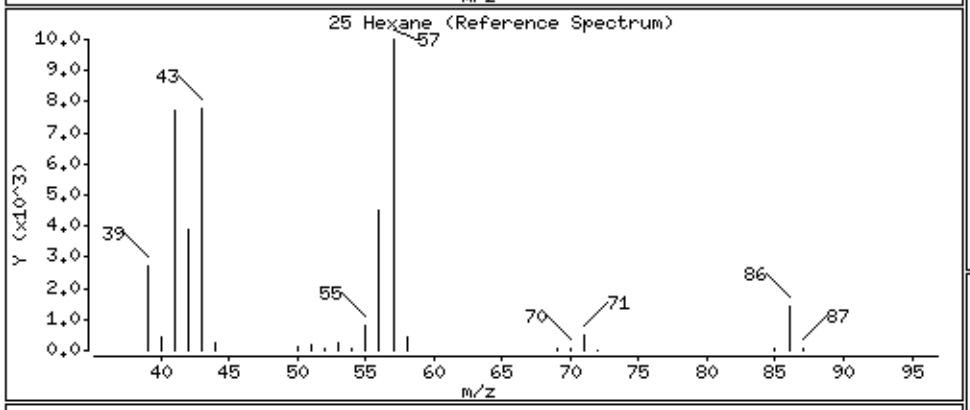
Column diameter: 0.53

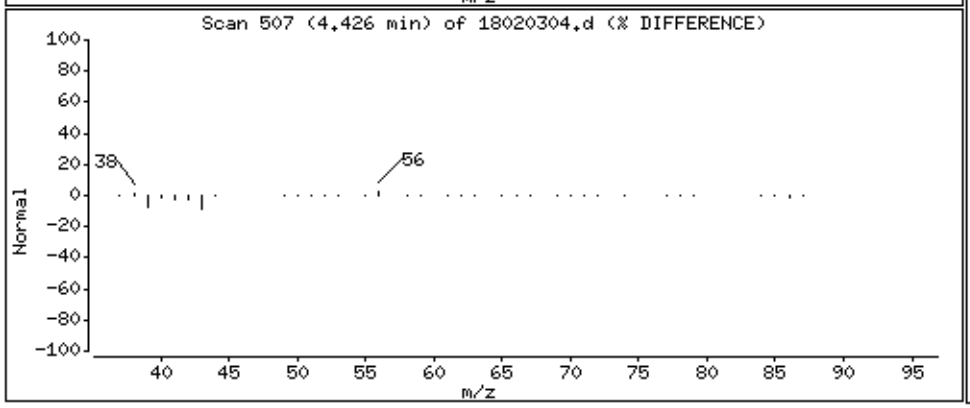
25 Hexane

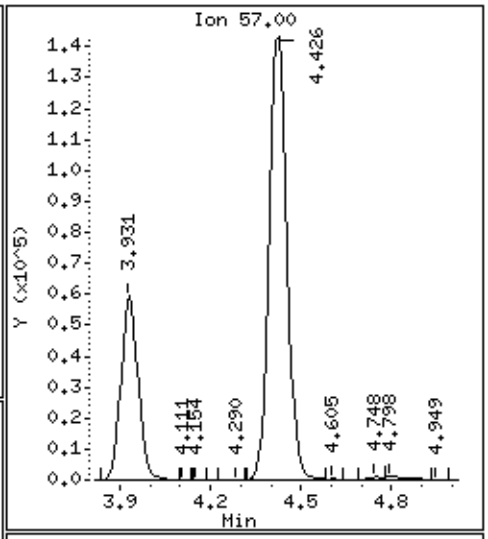
Concentration: 90.692 NG

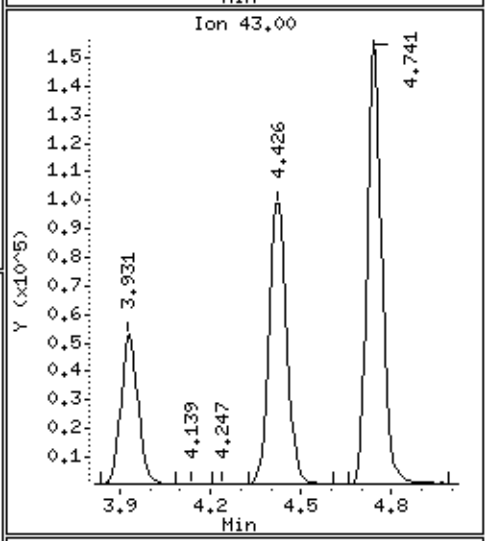


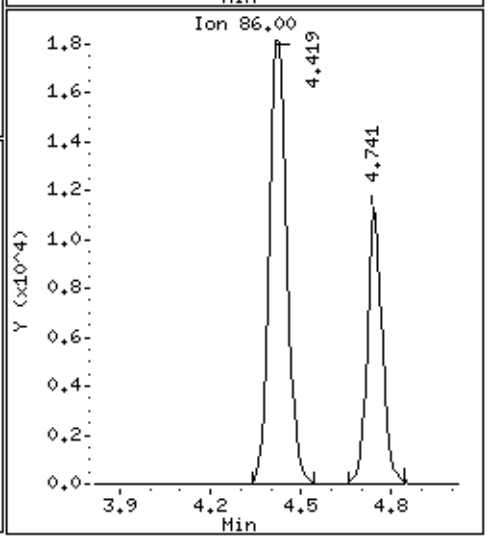












Data File: /chem/msd18.i/03Feb2016.b/18020304.d

Date : 03-FEB-2016 11:43

Client ID: LCS

Instrument: msd18.i

Sample Info: ;VI VOC+PAH LCS;LCS

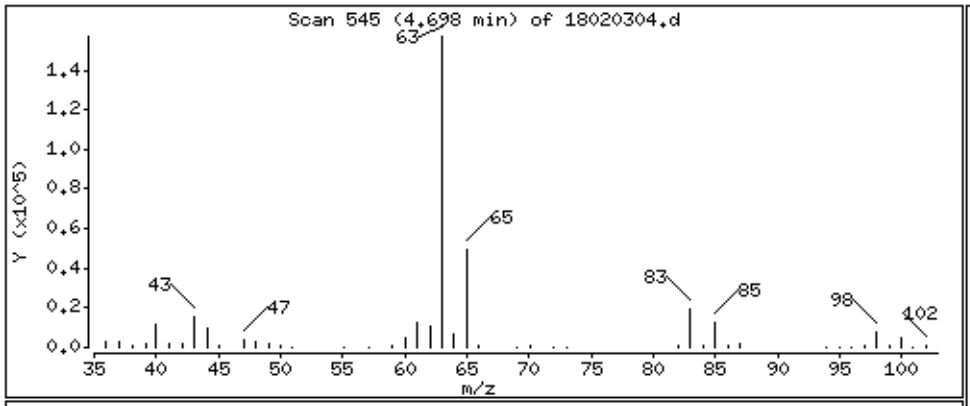
Operator: LA

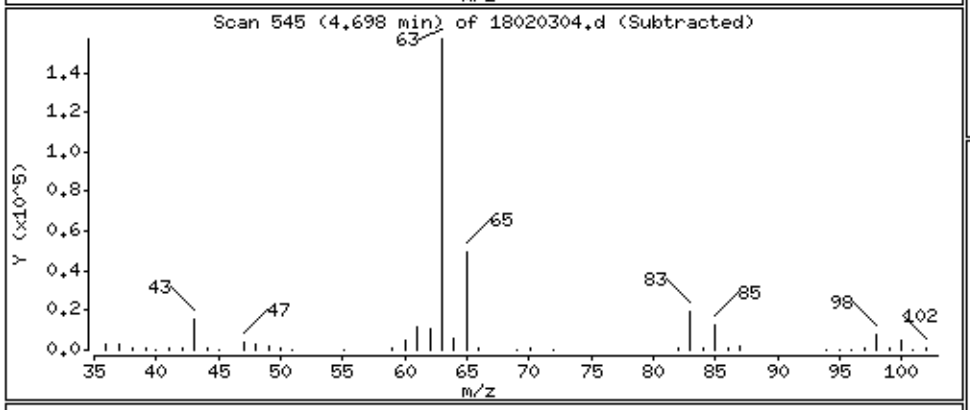
Column phase: RTx-624

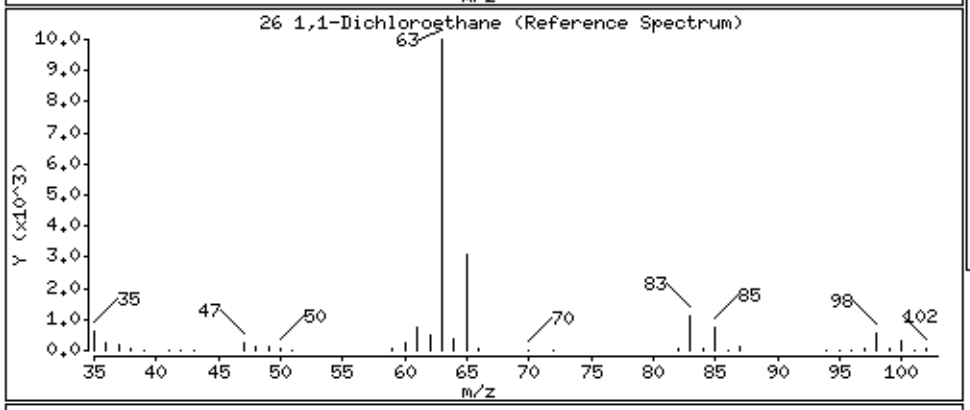
Column diameter: 0.53

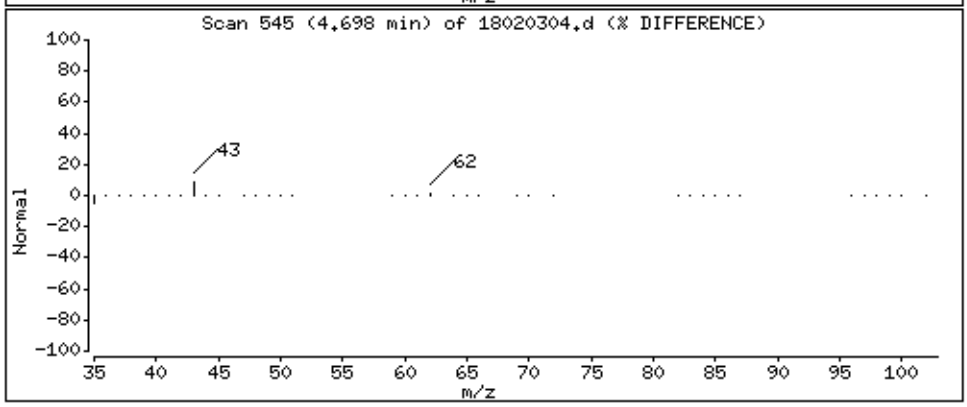
26 1,1-Dichloroethane

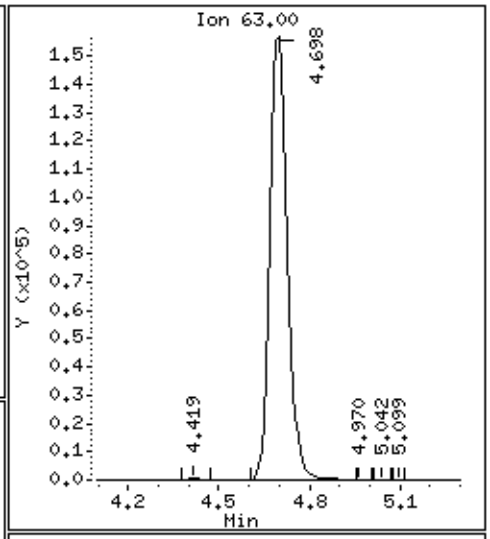
Concentration: 99.427 NG

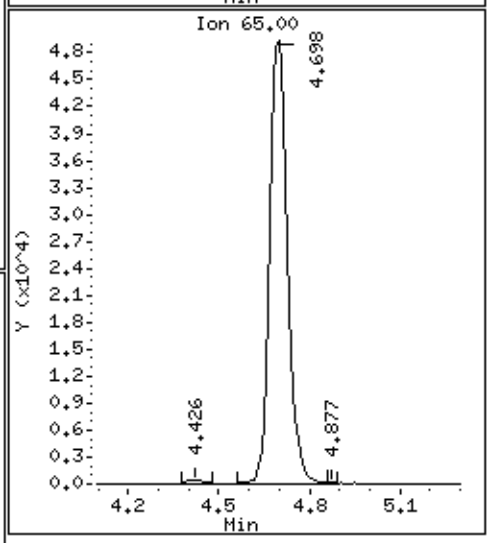












Data File: /chem/msd18.i/03Feb2016.b/18020304.d

Date : 03-FEB-2016 11:43

Client ID: LCS

Instrument: msd18.i

Sample Info: ;VI VOC+PAH LCS;LCS

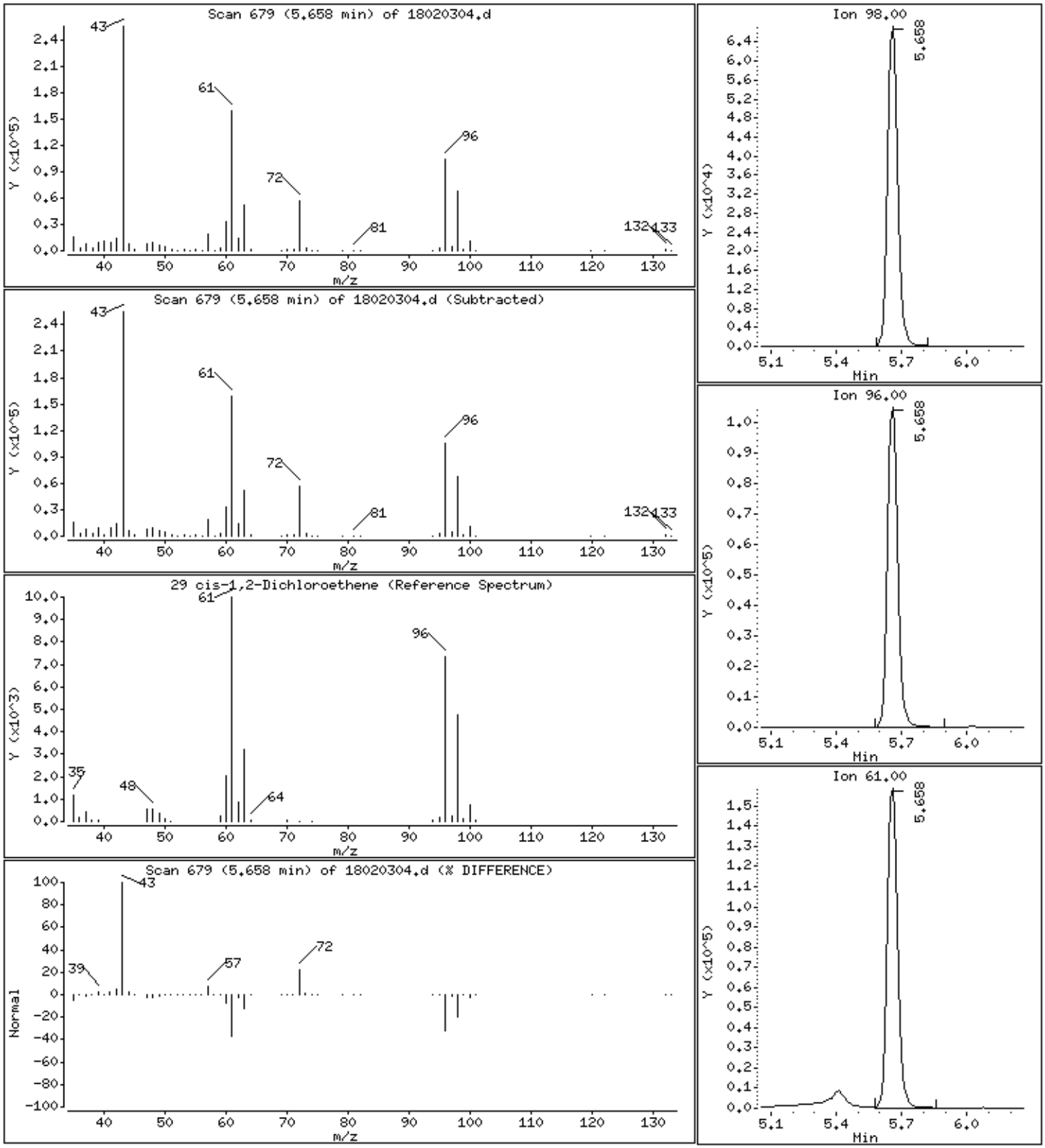
Operator: LA

Column phase: RTx-624

Column diameter: 0.53

29 cis-1,2-Dichloroethene

Concentration: 97.326 NG



Data File: /chem/msd18.i/03Feb2016.b/18020304.d

Date : 03-FEB-2016 11:43

Client ID: LCS

Instrument: msd18.i

Sample Info: ;VI VOC+PAH LCS;LCS

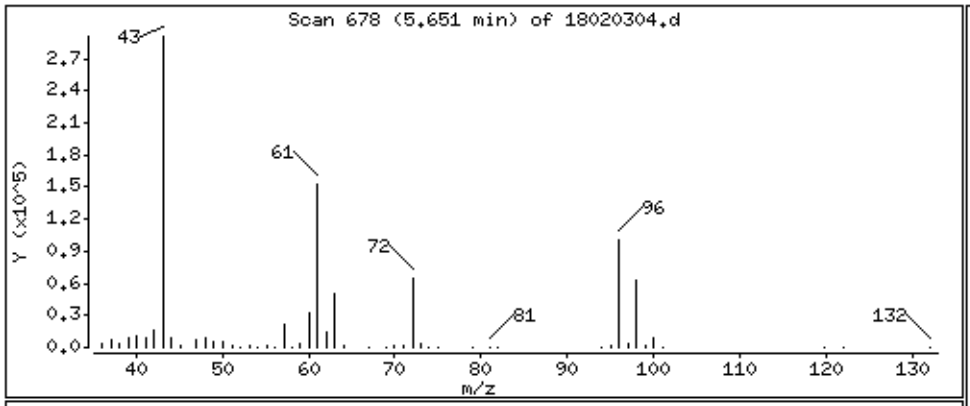
Operator: LA

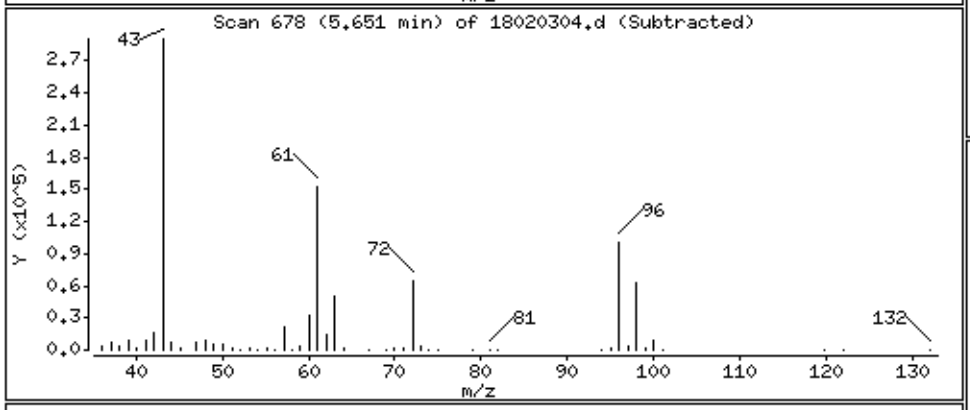
Column phase: RTx-624

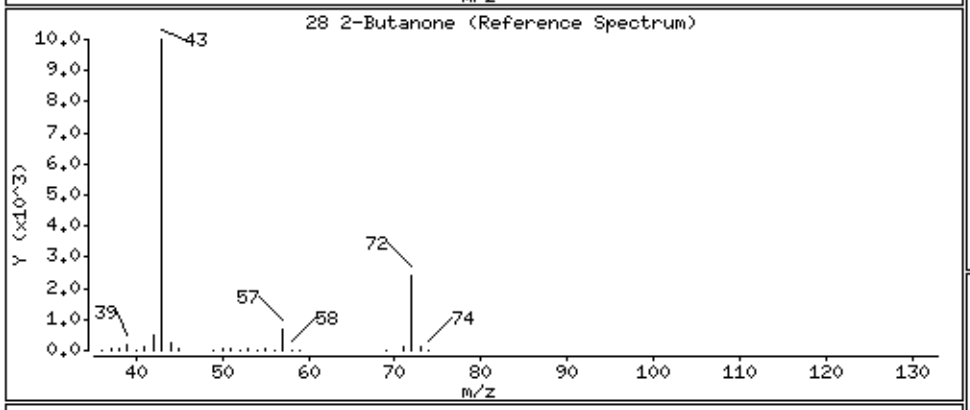
Column diameter: 0.53

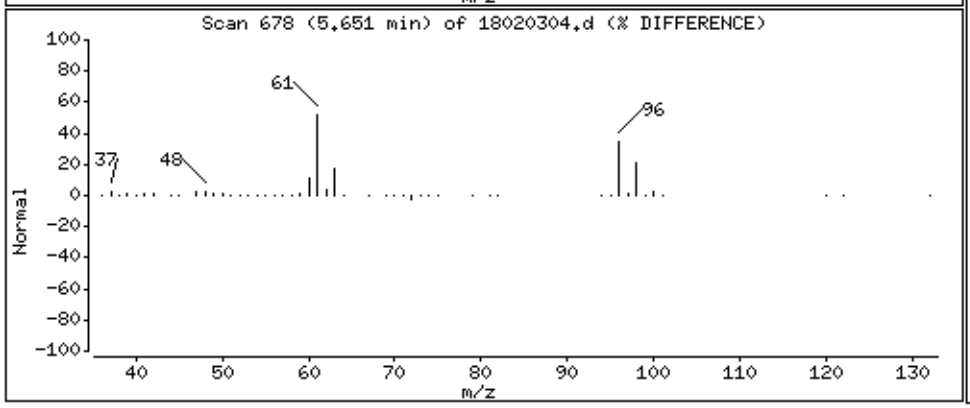
28 2-Butanone

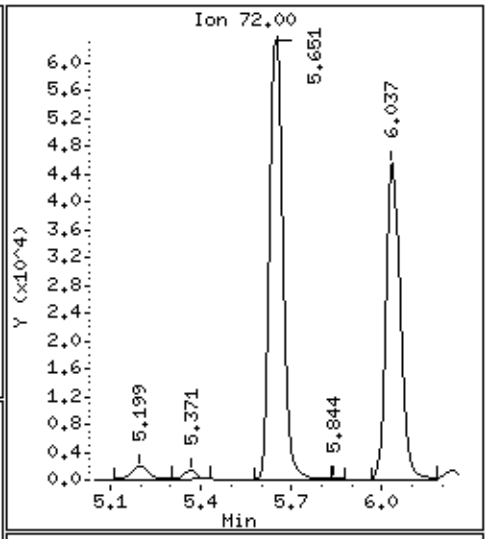
Concentration: 71.882 NG

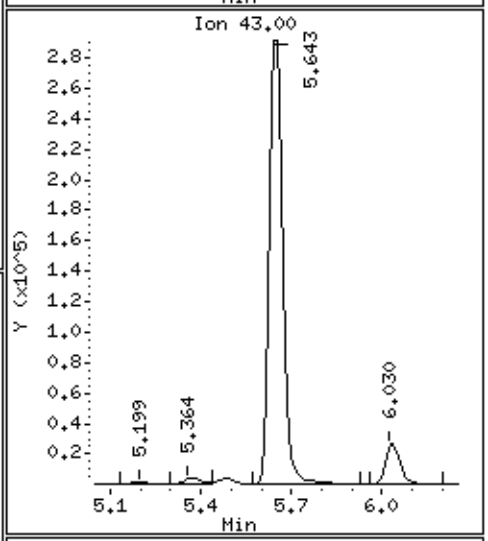


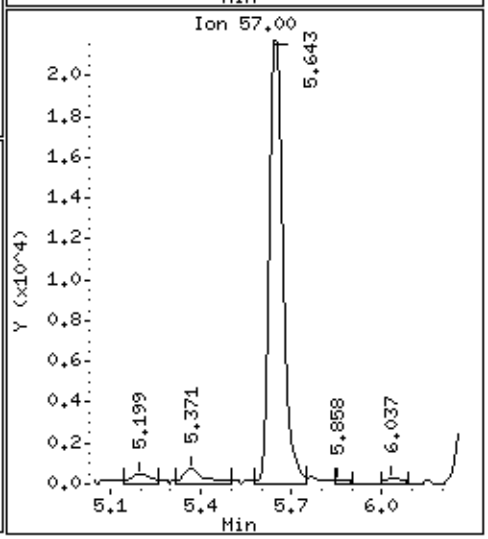












Data File: /chem/msd18.i/03Feb2016.b/18020304.d

Date : 03-FEB-2016 11:43

Client ID: LCS

Instrument: msd18.i

Sample Info: ;VI VOC+PAH LCS;LCS

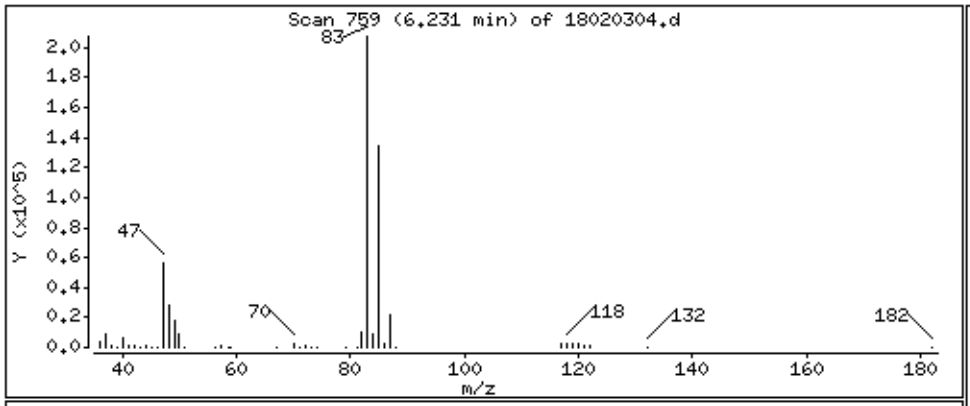
Operator: LA

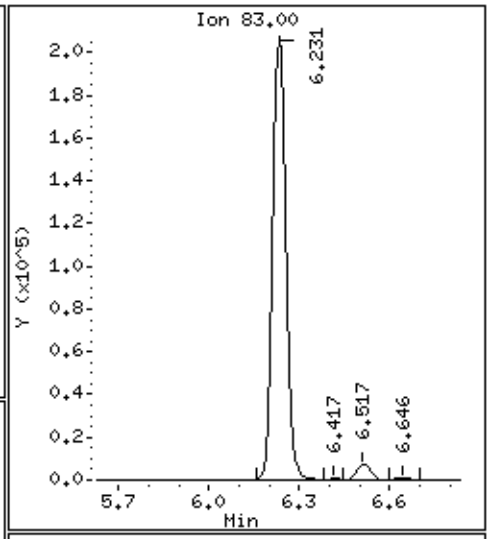
Column phase: RTx-624

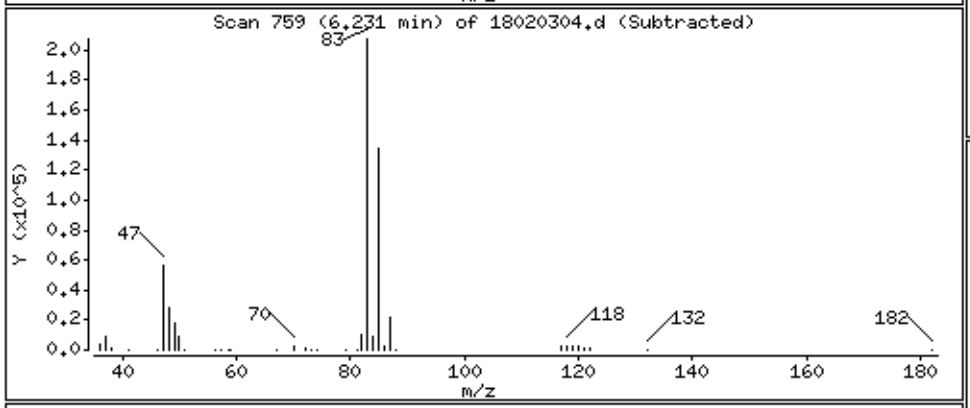
Column diameter: 0.53

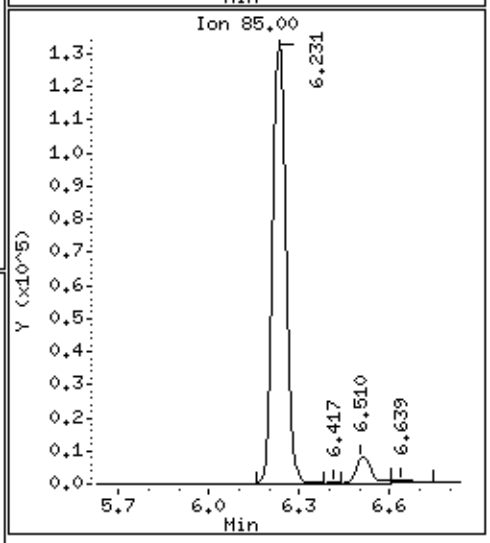
35 Chloroform

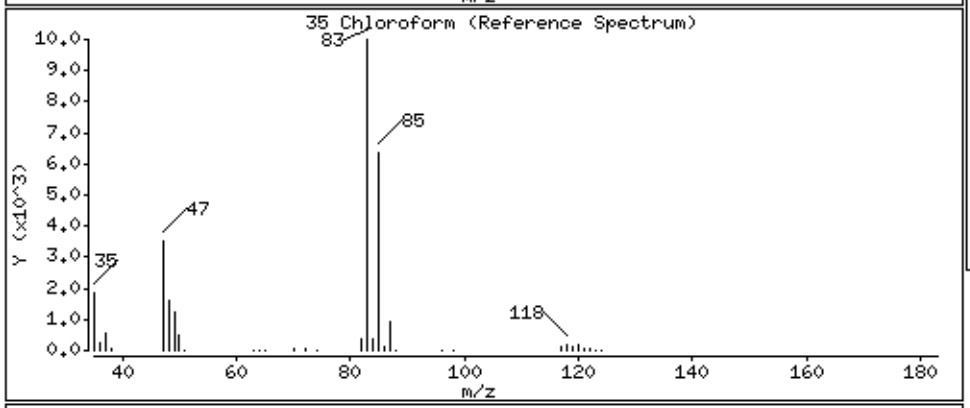
Concentration: 117.17 NG

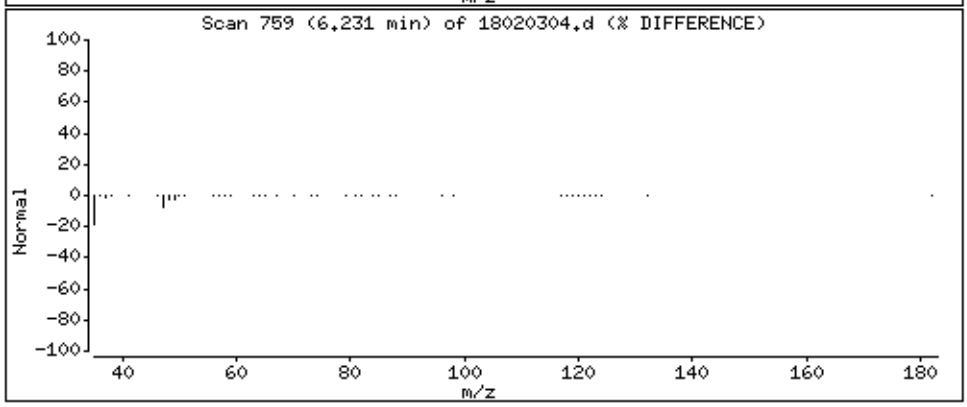












Data File: /chem/msd18.i/03Feb2016.b/18020304.d

Date : 03-FEB-2016 11:43

Client ID: LCS

Instrument: msd18.i

Sample Info: ;VI VOC+PAH LCS;LCS

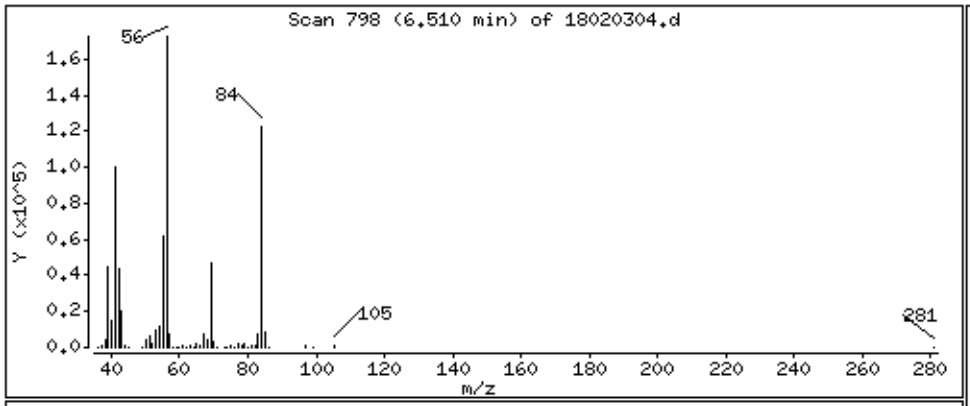
Operator: LA

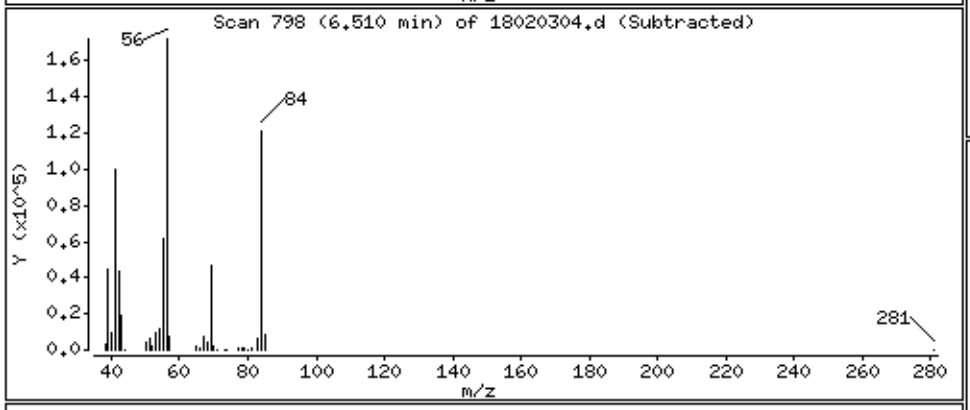
Column phase: RTx-624

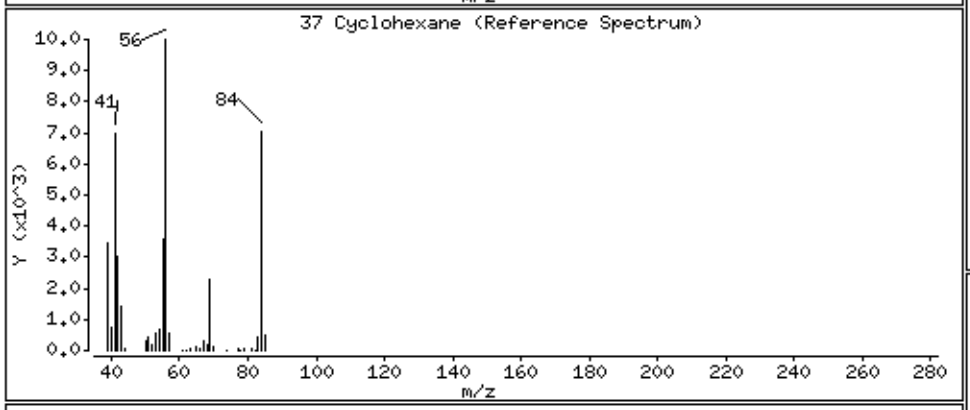
Column diameter: 0.53

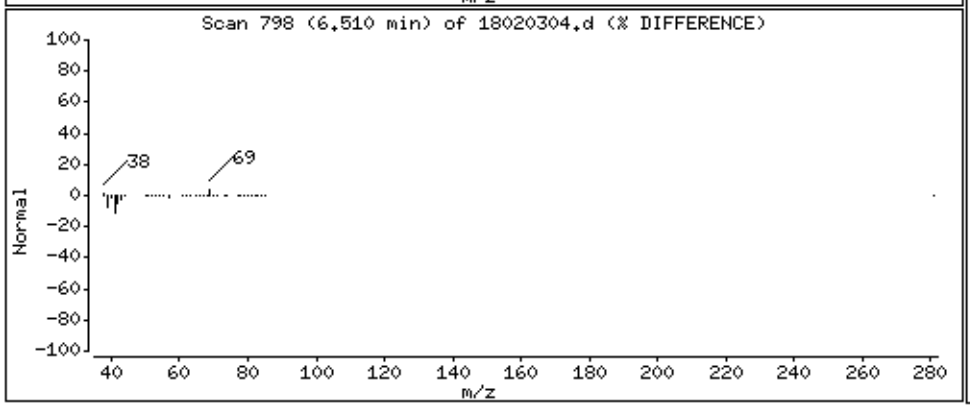
37 Cyclohexane

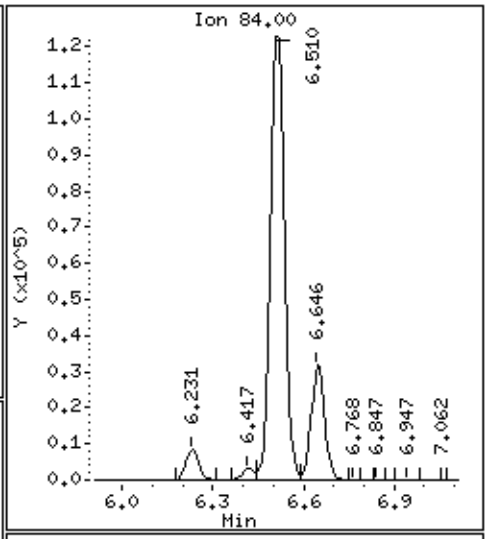
Concentration: 73.979 NG

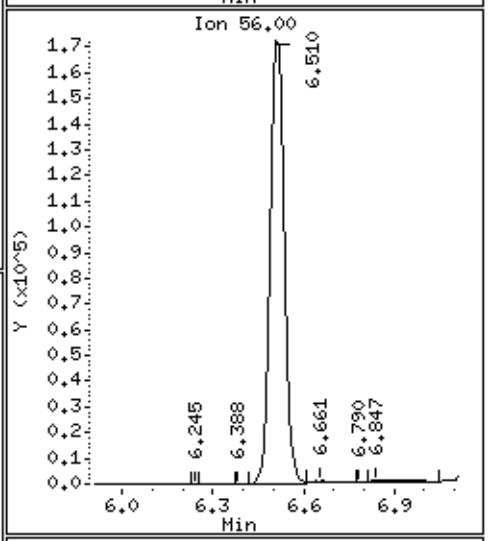


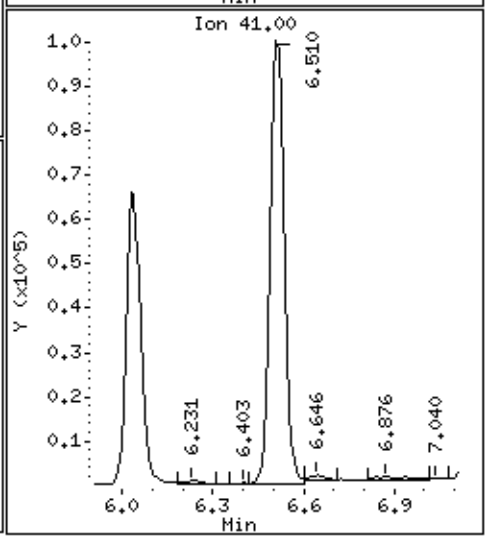












Data File: /chem/msd18.i/03Feb2016.b/18020304.d

Date : 03-FEB-2016 11:43

Client ID: LCS

Instrument: msd18.i

Sample Info: ;VI VOC+PAH LCS;LCS

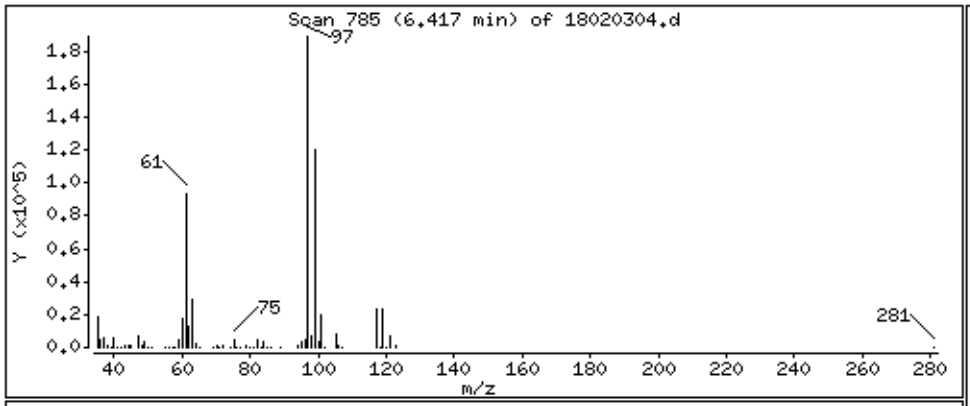
Operator: LA

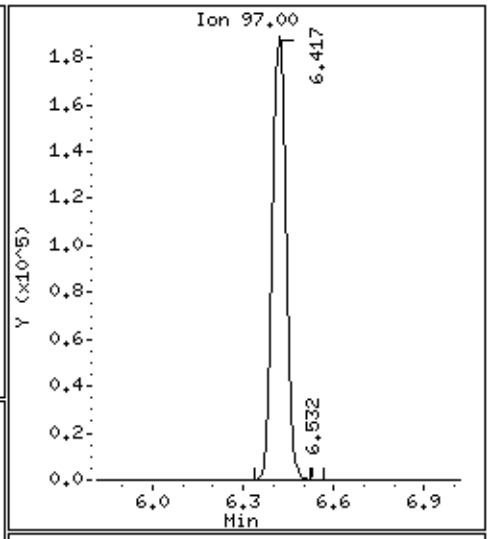
Column phase: RTx-624

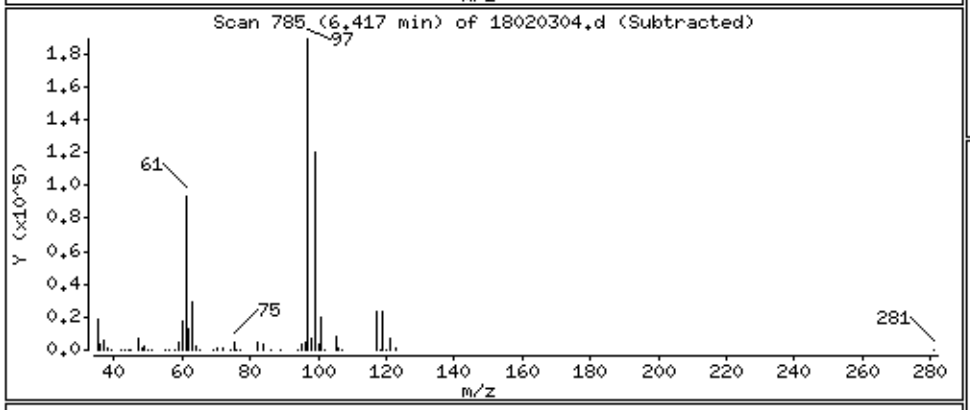
Column diameter: 0.53

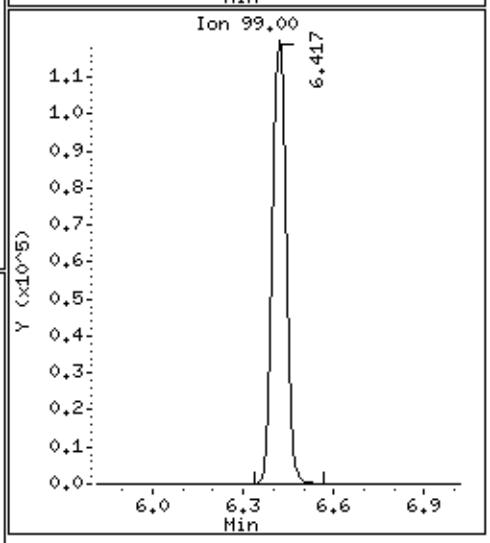
36 1,1,1-Trichloroethane

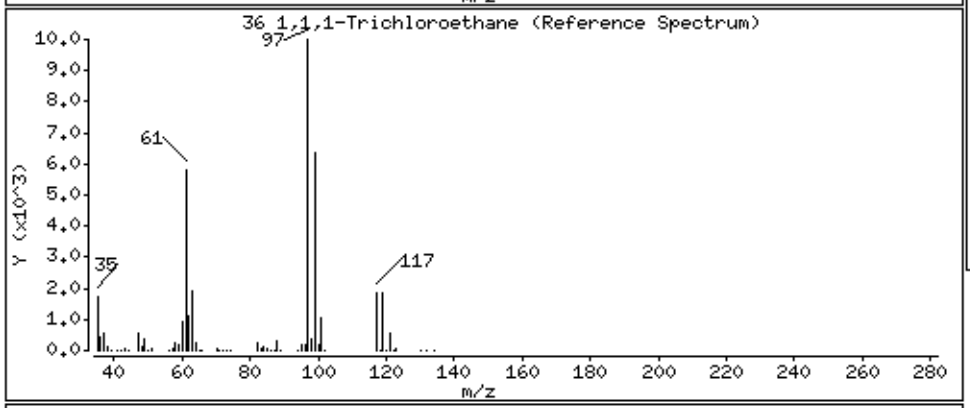
Concentration: 118.60 NG

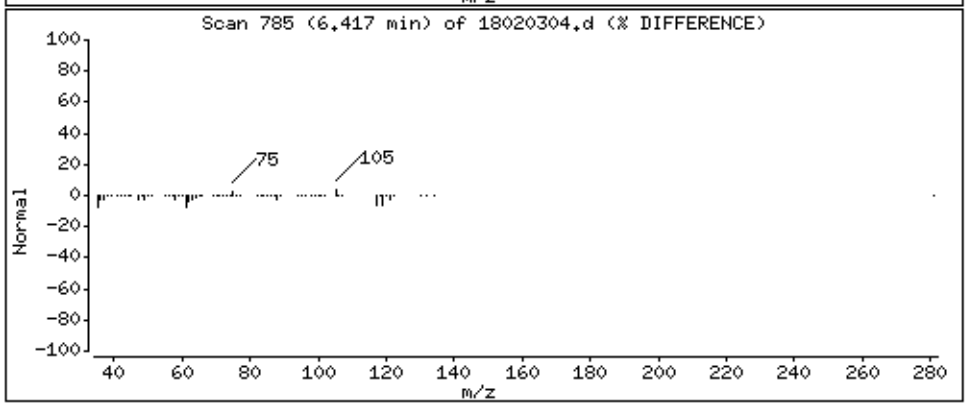












Data File: /chem/msd18.i/03Feb2016.b/18020304.d

Date : 03-FEB-2016 11:43

Client ID: LCS

Instrument: msd18.i

Sample Info: ;VI VOC+PAH LCS;LCS

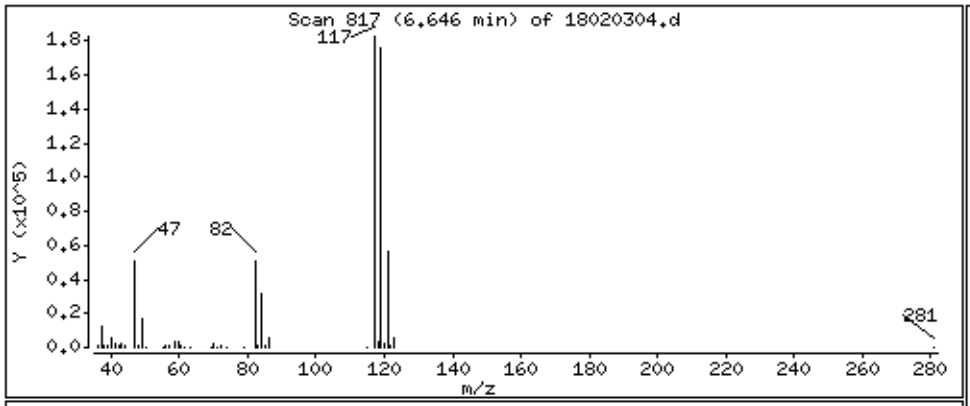
Operator: LA

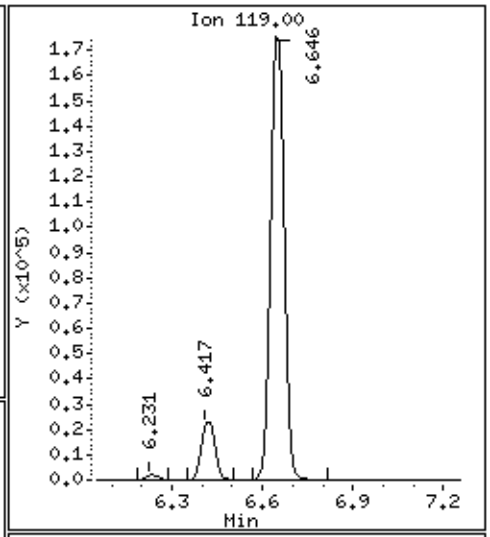
Column phase: RTx-624

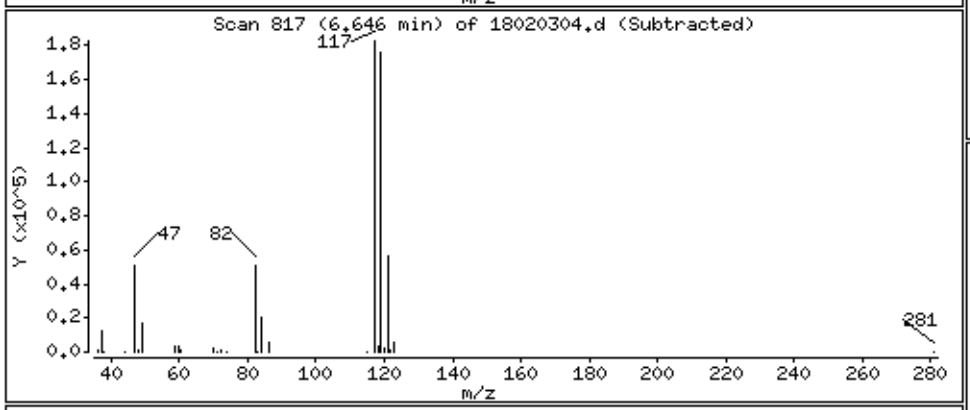
Column diameter: 0.53

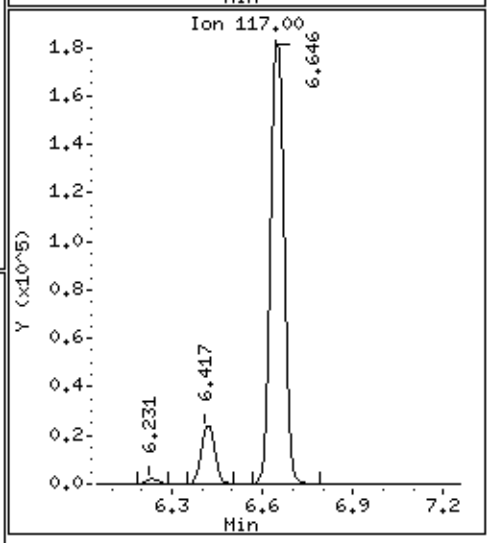
38 Carbon Tetrachloride

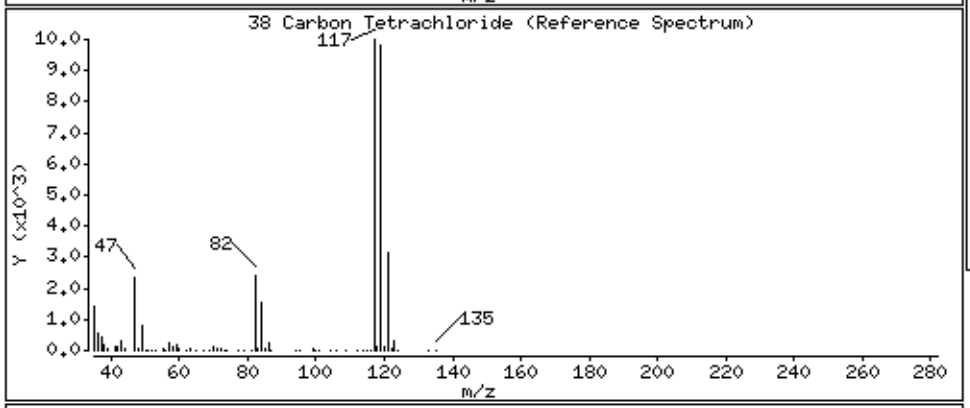
Concentration: 127.52 NG

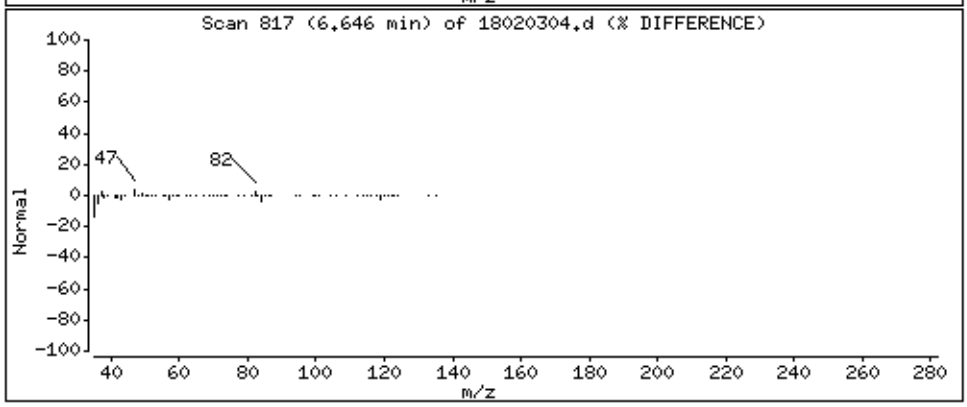












Data File: /chem/msd18.i/03Feb2016.b/18020304.d

Date : 03-FEB-2016 11:43

Client ID: LCS

Instrument: msd18.i

Sample Info: ;VI VOC+PAH LCS;LCS

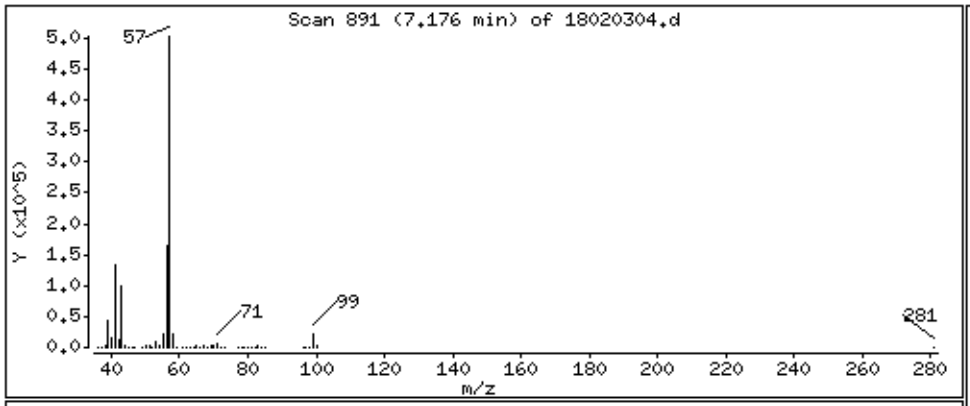
Operator: LA

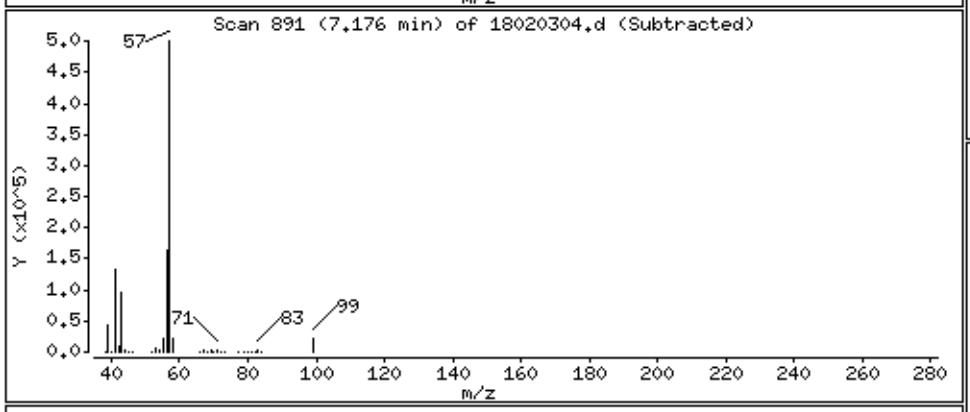
Column phase: RTx-624

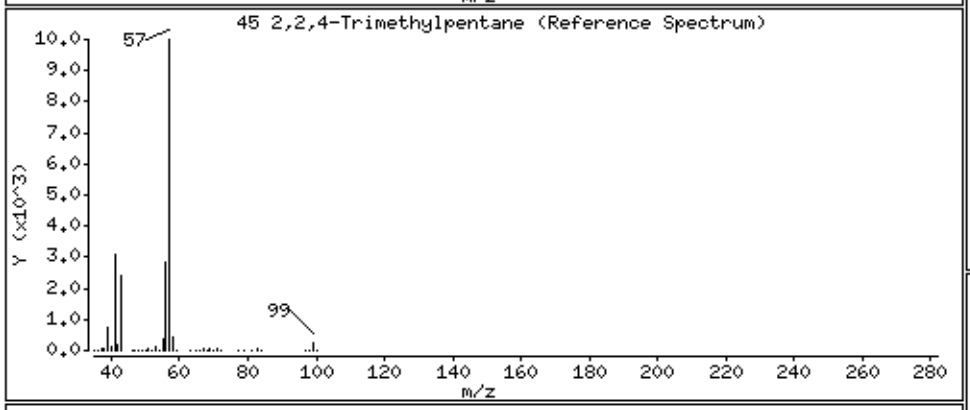
Column diameter: 0.53

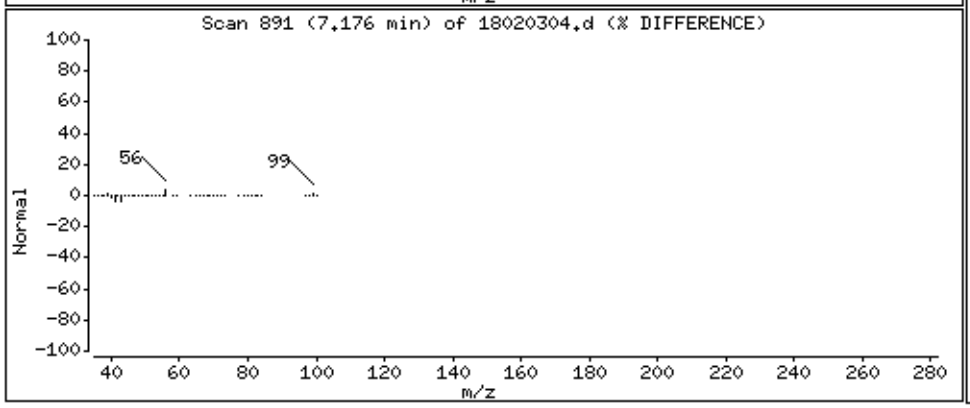
45 2,2,4-Trimethylpentane

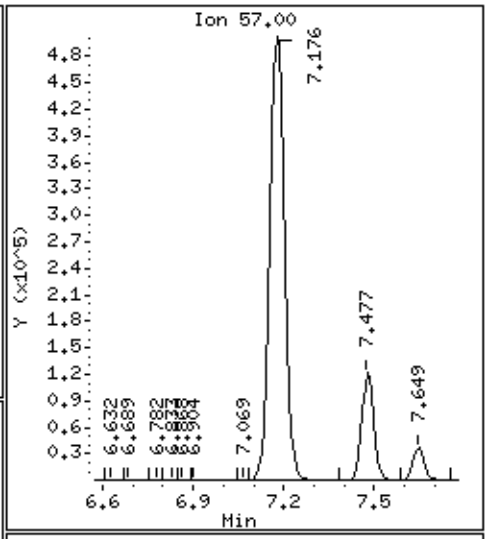
Concentration: 111.01 NG

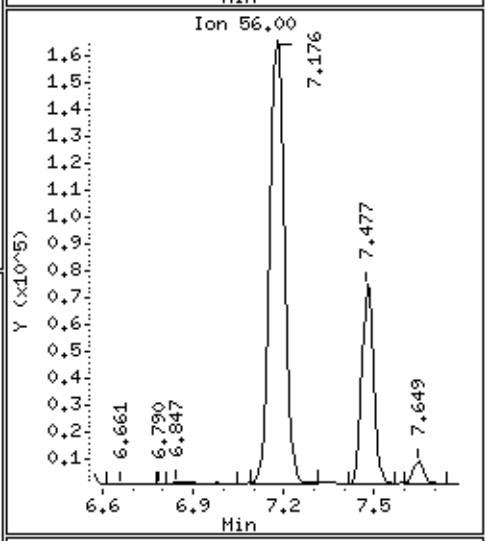


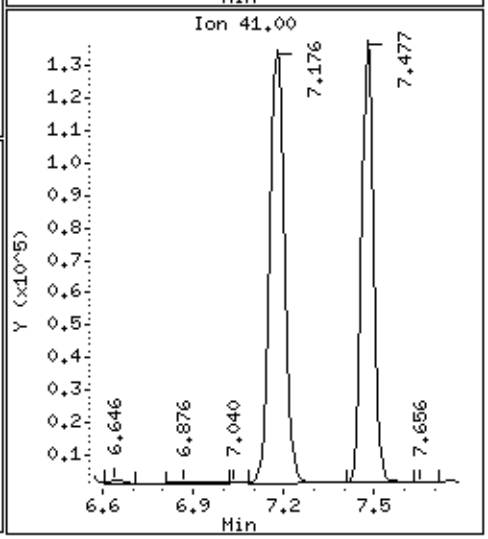












Data File: /chem/msd18.i/03Feb2016.b/18020304.d

Date : 03-FEB-2016 11:43

Client ID: LCS

Instrument: msd18.i

Sample Info: ;VI VOC+PAH LCS;LCS

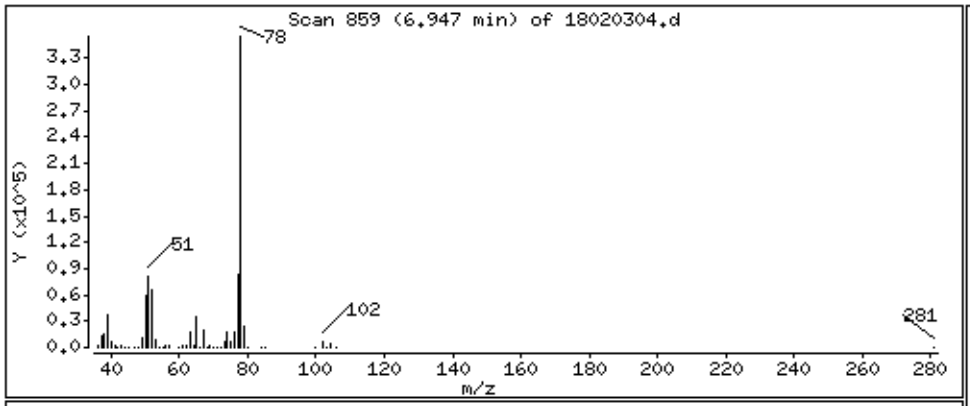
Operator: LA

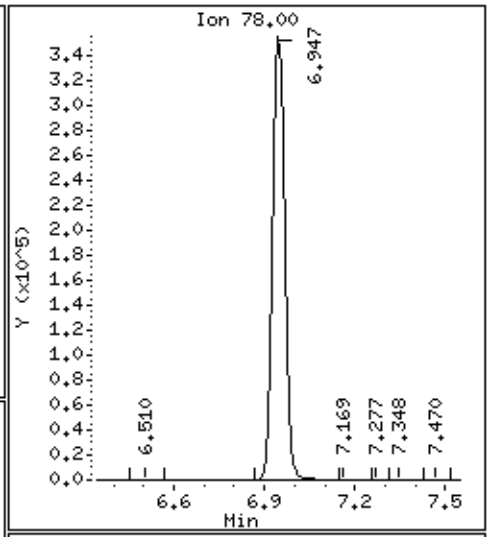
Column phase: RTx-624

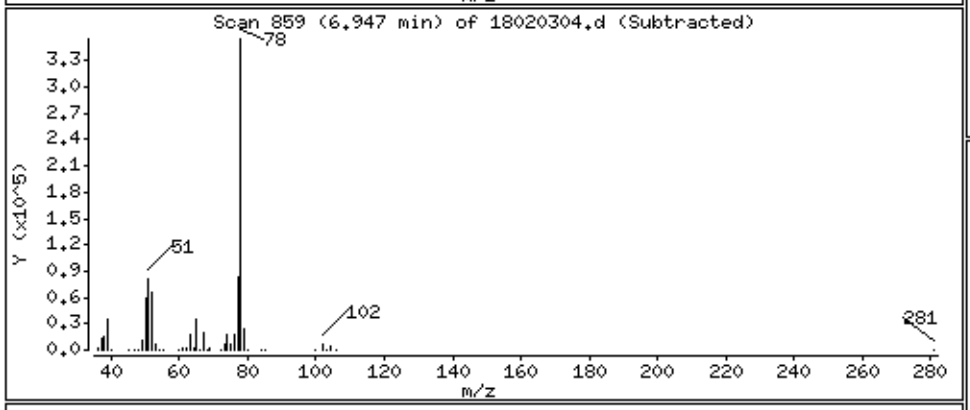
Column diameter: 0.53

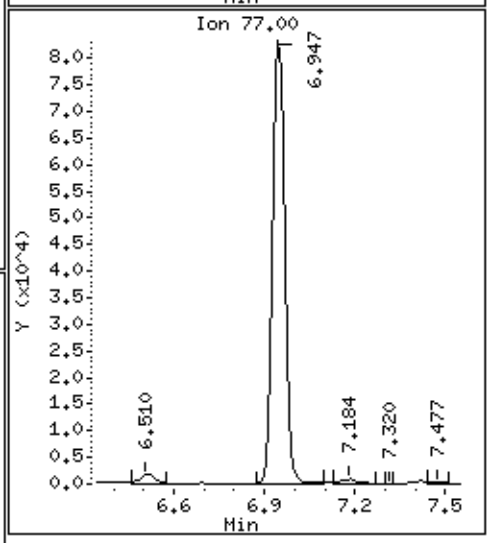
41 Benzene

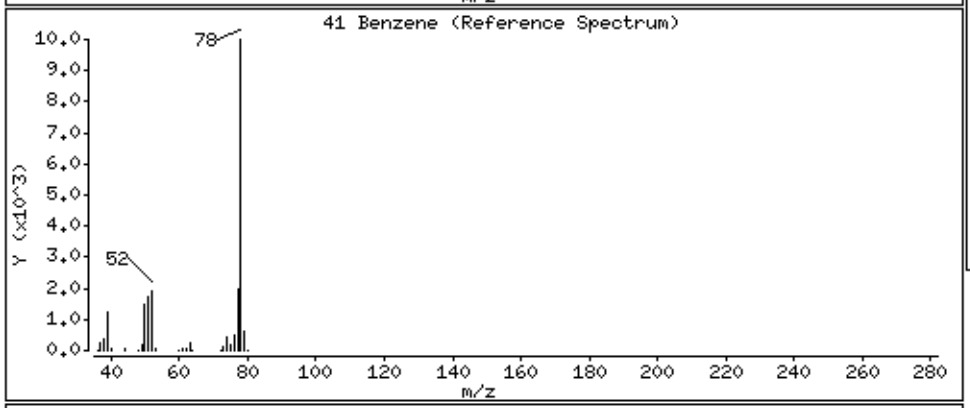
Concentration: 62.930 NG

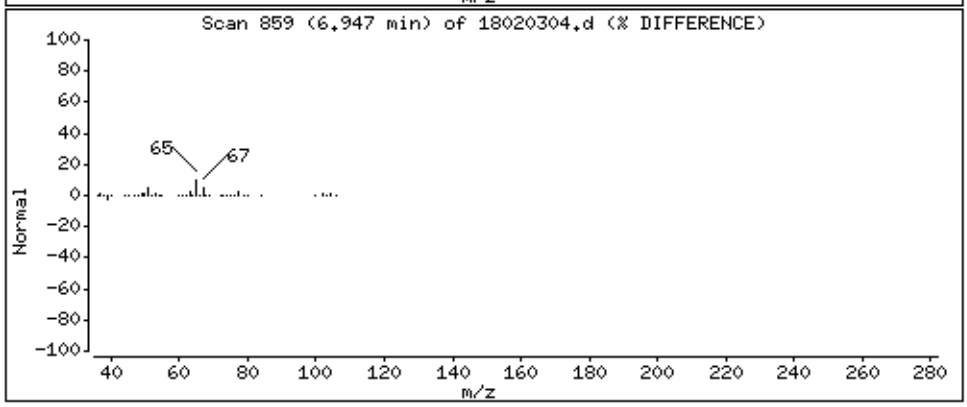












Data File: /chem/msd18.i/03Feb2016.b/18020304.d

Date : 03-FEB-2016 11:43

Client ID: LCS

Instrument: msd18.i

Sample Info: ;VI VOC+PAH LCS;LCS

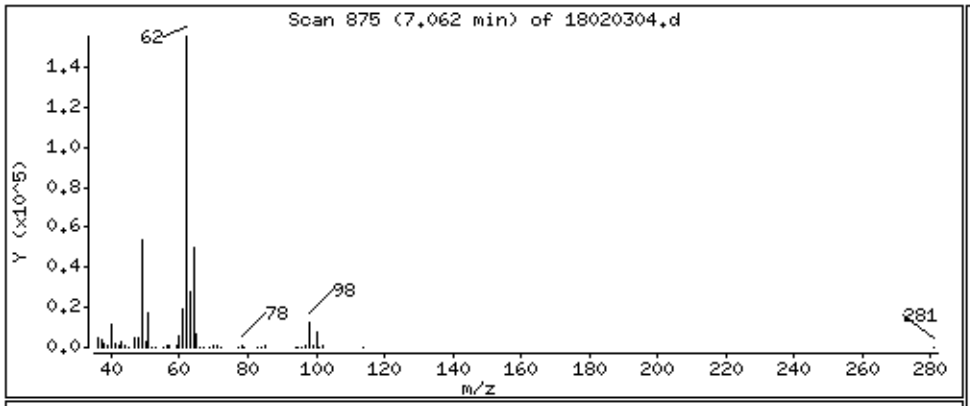
Operator: LA

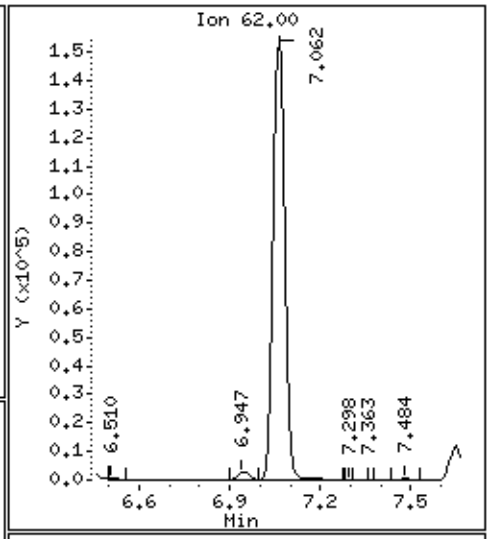
Column phase: RTx-624

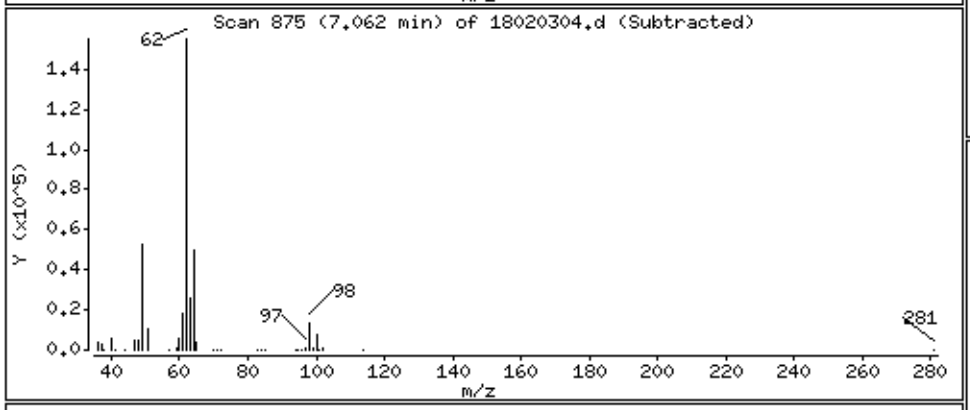
Column diameter: 0.53

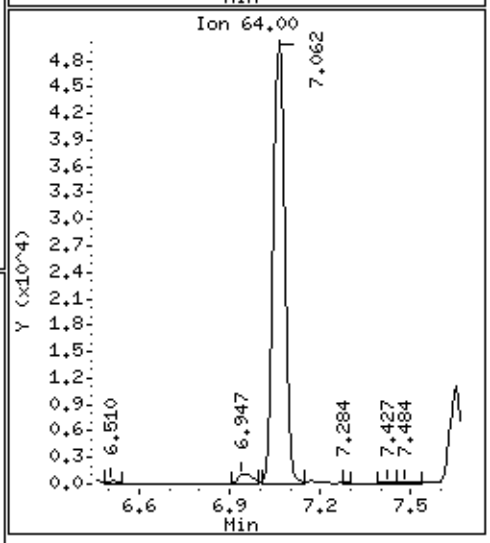
43 1,2-Dichloroethane

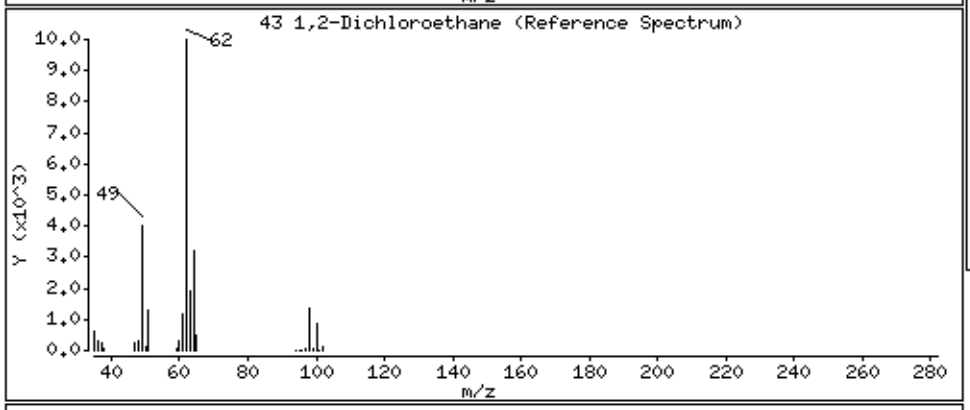
Concentration: 98.710 NG

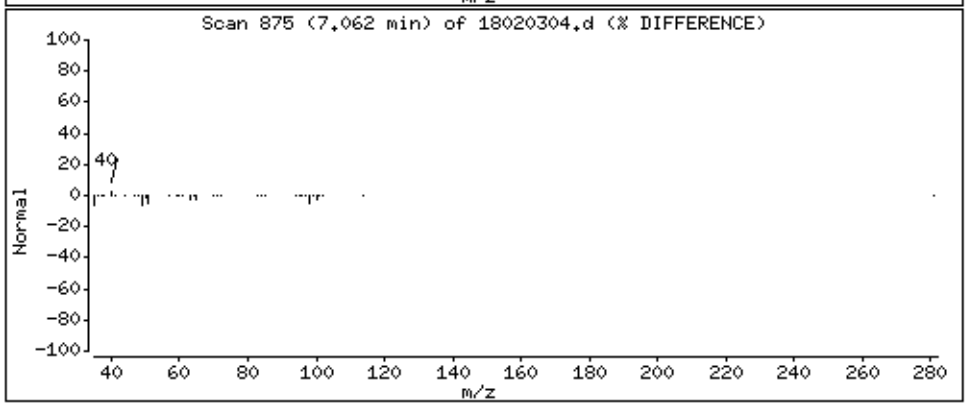












Data File: /chem/msd18.i/03Feb2016.b/18020304.d

Date : 03-FEB-2016 11:43

Client ID: LCS

Instrument: msd18.i

Sample Info: ;VI VOC+PAH LCS;LCS

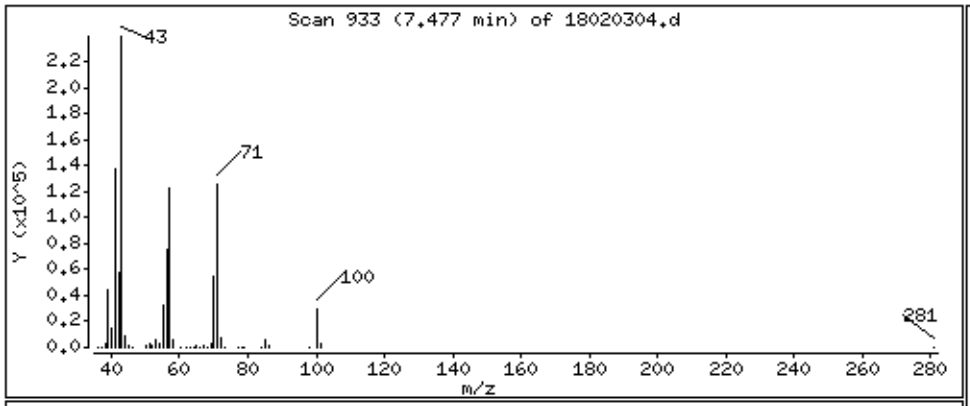
Operator: LA

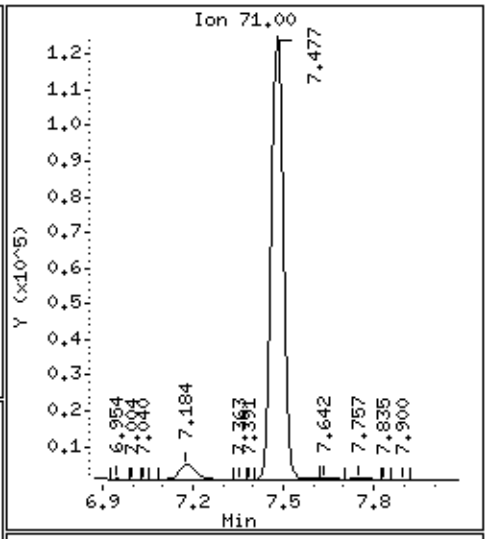
Column phase: RTx-624

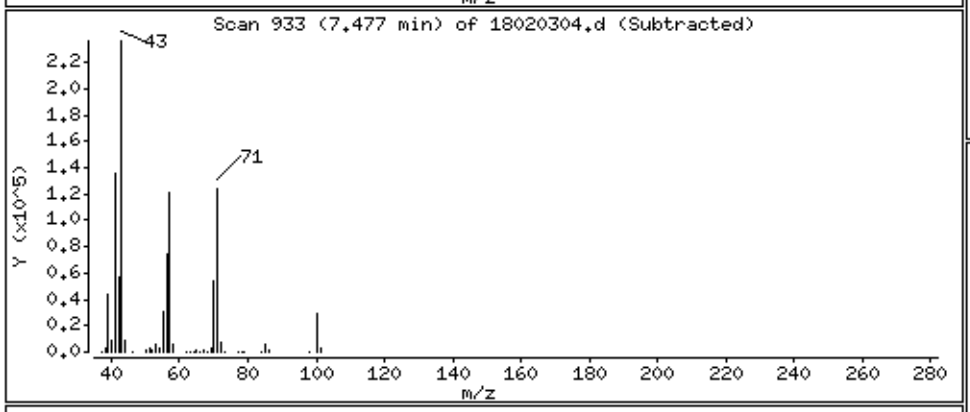
Column diameter: 0.53

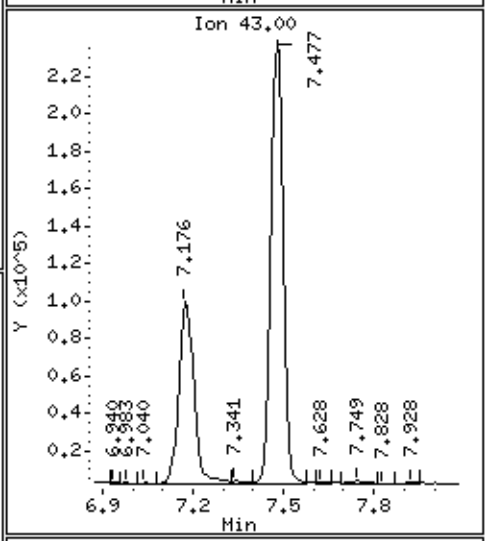
46 Heptane

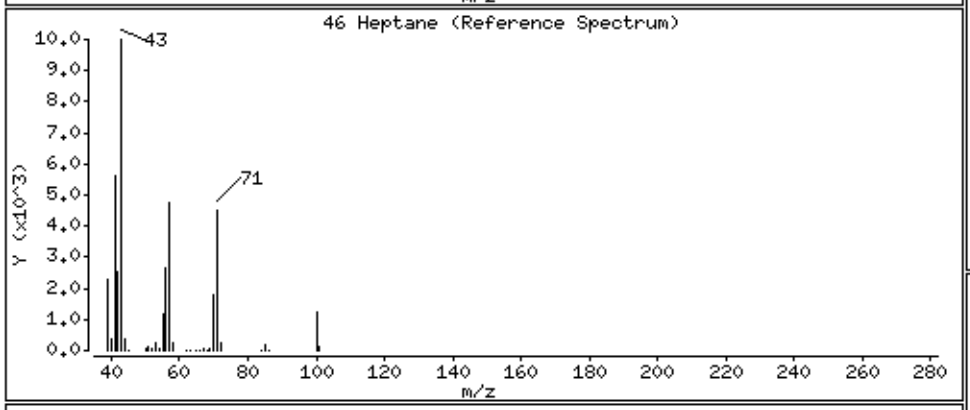
Concentration: 97.840 NG

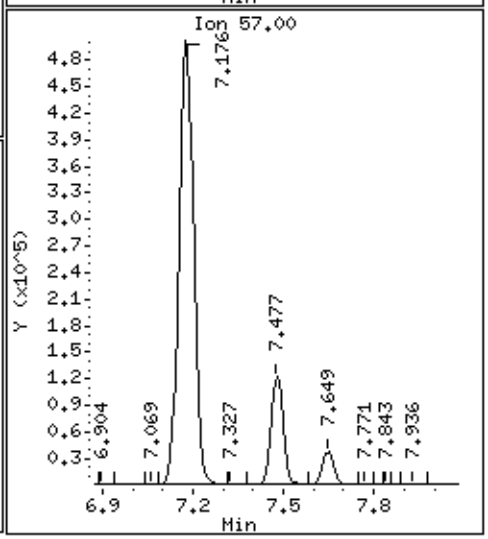


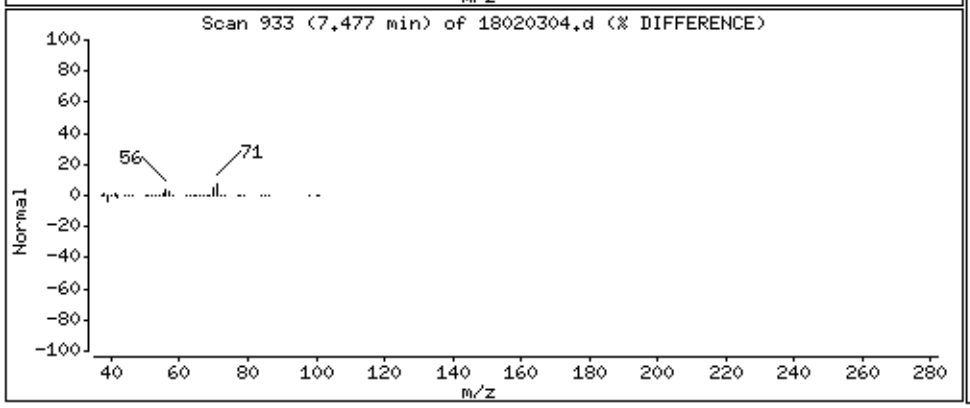












Data File: /chem/msd18.i/03Feb2016.b/18020304.d

Date : 03-FEB-2016 11:43

Client ID: LCS

Instrument: msd18.i

Sample Info: ;VI VOC+PAH LCS;LCS

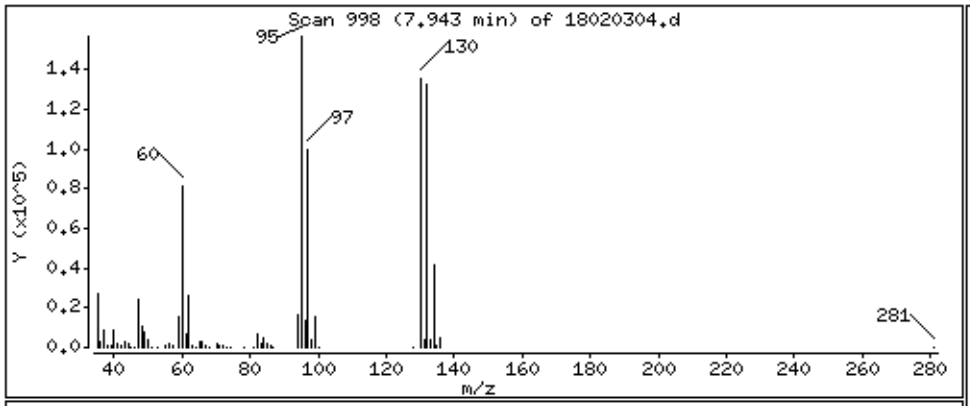
Operator: LA

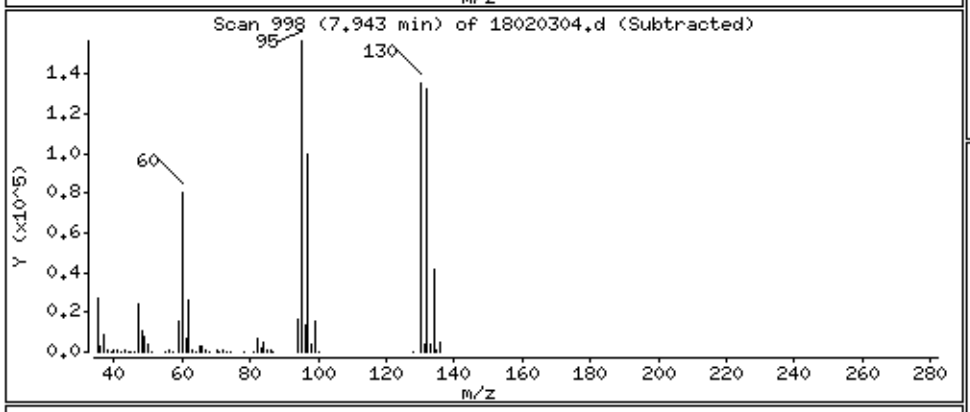
Column phase: RTx-624

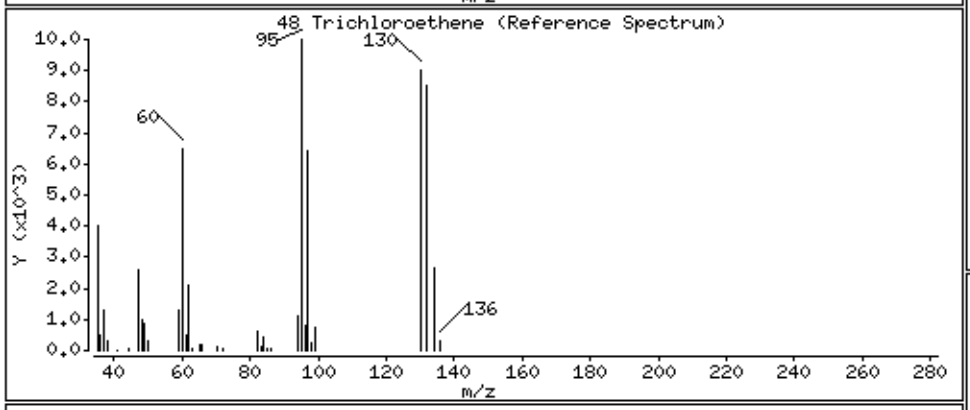
Column diameter: 0.53

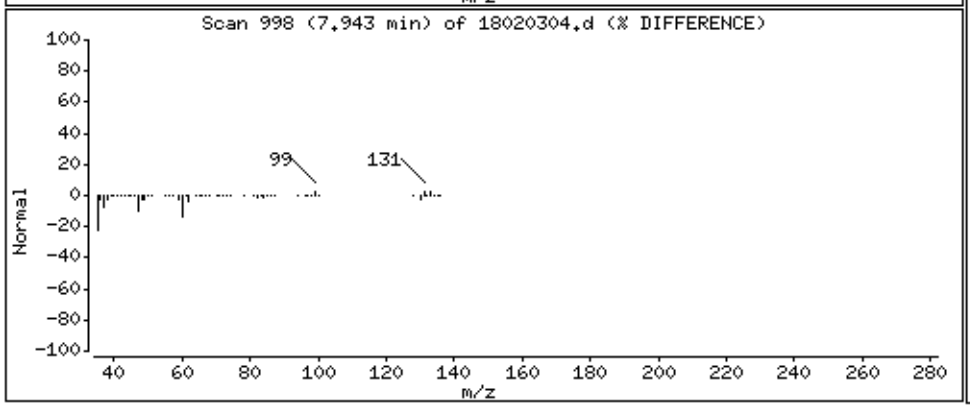
48 Trichloroethene

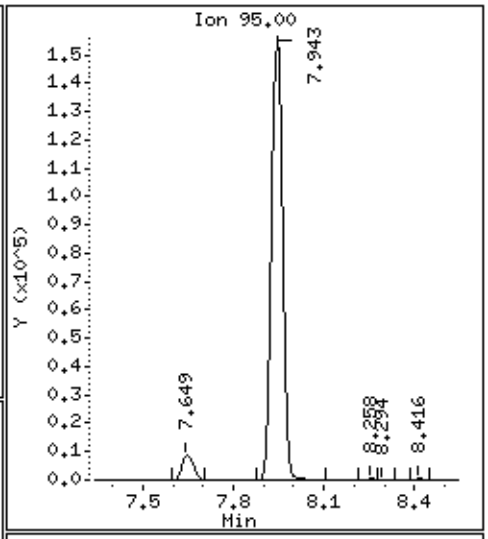
Concentration: 116.01 NG

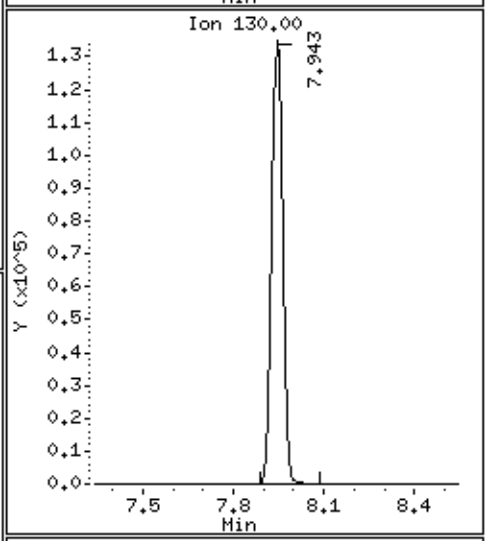


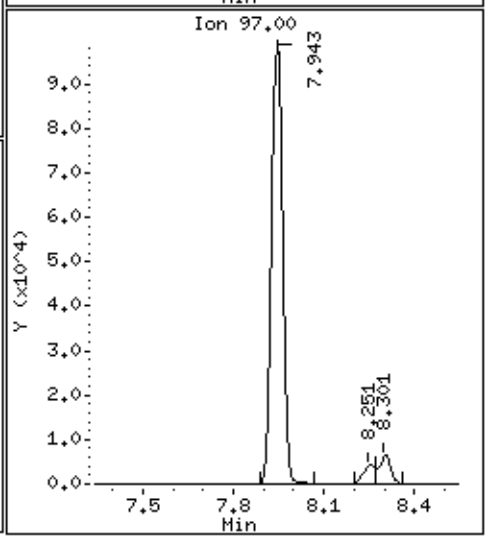












Data File: /chem/msd18.i/03Feb2016.b/18020304.d

Date : 03-FEB-2016 11:43

Client ID: LCS

Instrument: msd18.i

Sample Info: ;VI VOC+PAH LCS;LCS

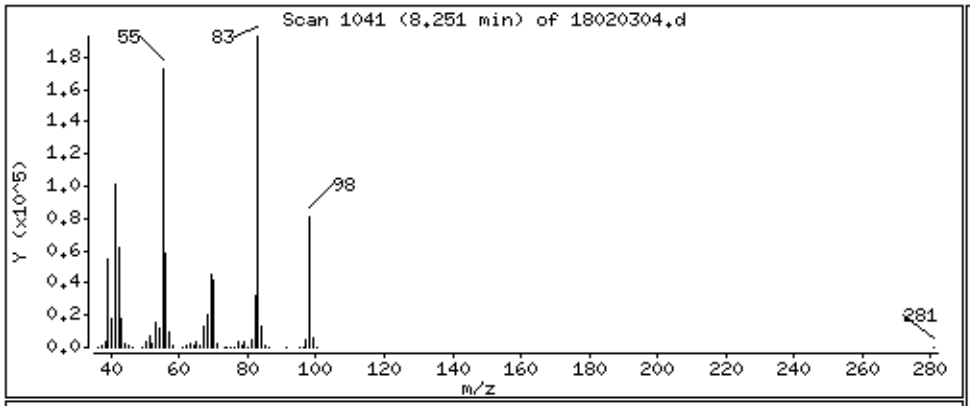
Operator: LA

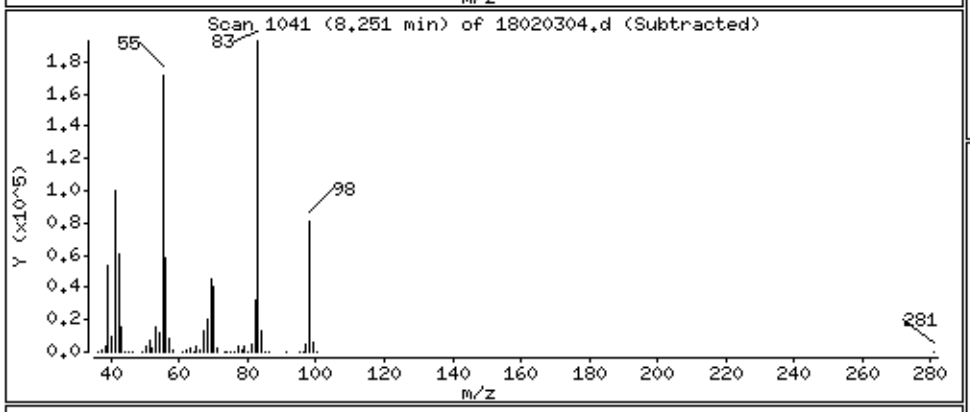
Column phase: RTx-624

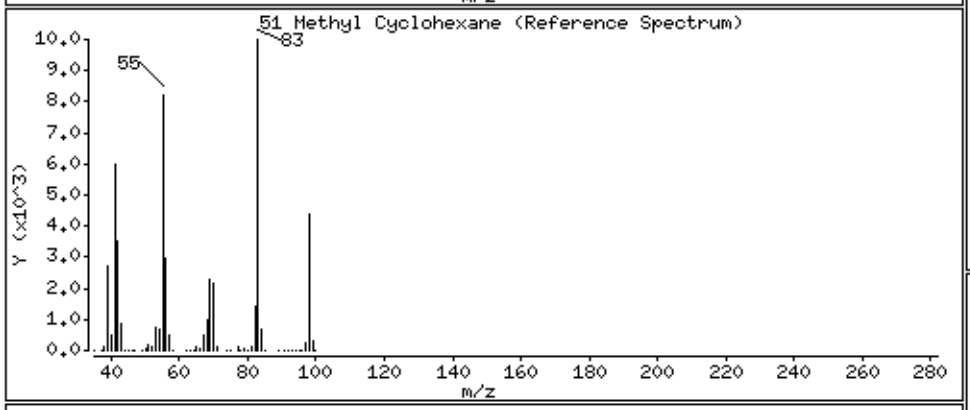
Column diameter: 0.53

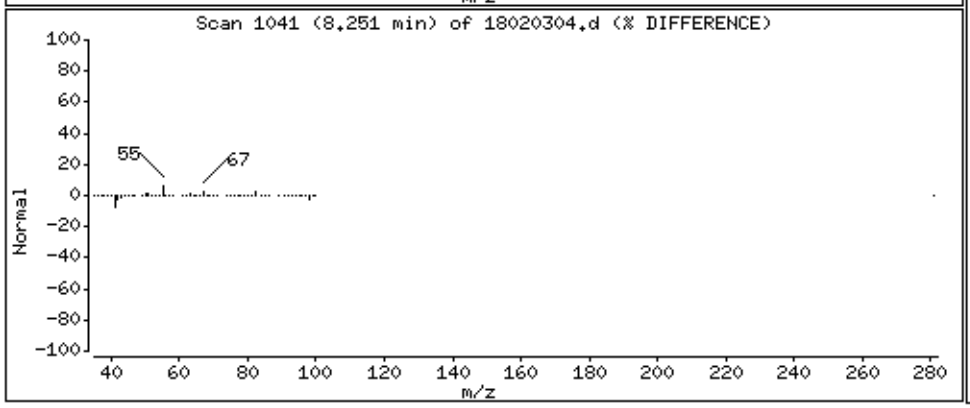
51 Methyl Cyclohexane

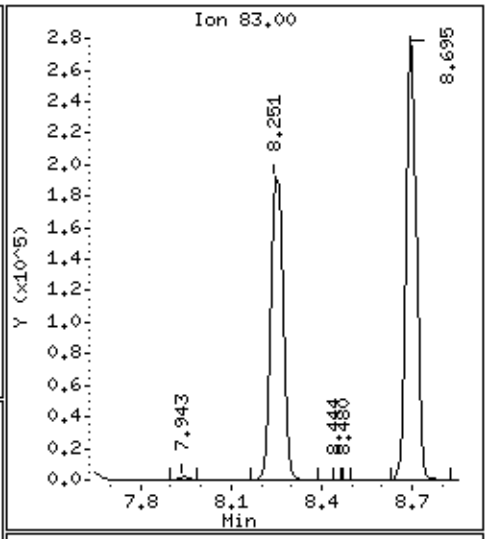
Concentration: 92.744 NG

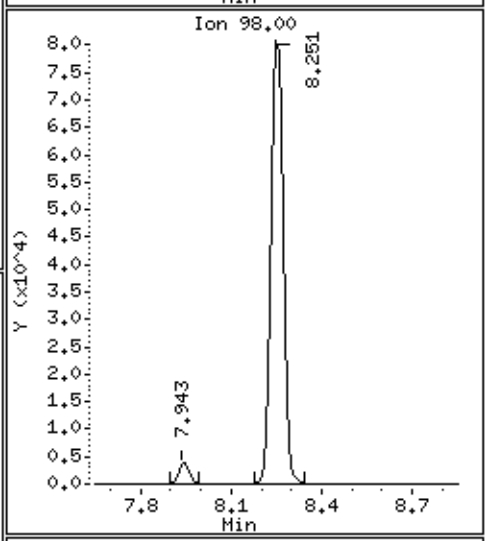


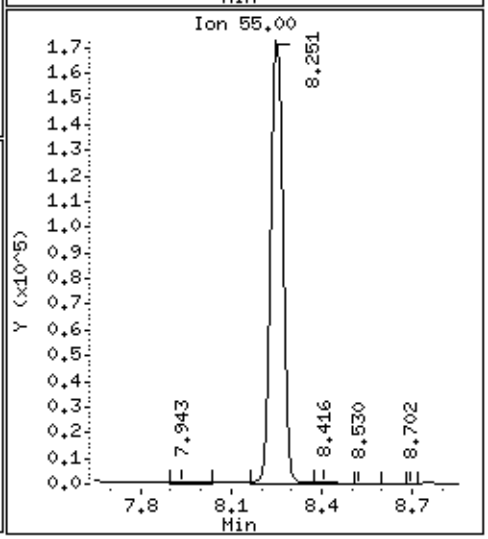












Data File: /chem/msd18.i/03Feb2016.b/18020304.d

Date : 03-FEB-2016 11:43

Client ID: LCS

Instrument: msd18.i

Sample Info: ;VI VOC+PAH LCS;LCS

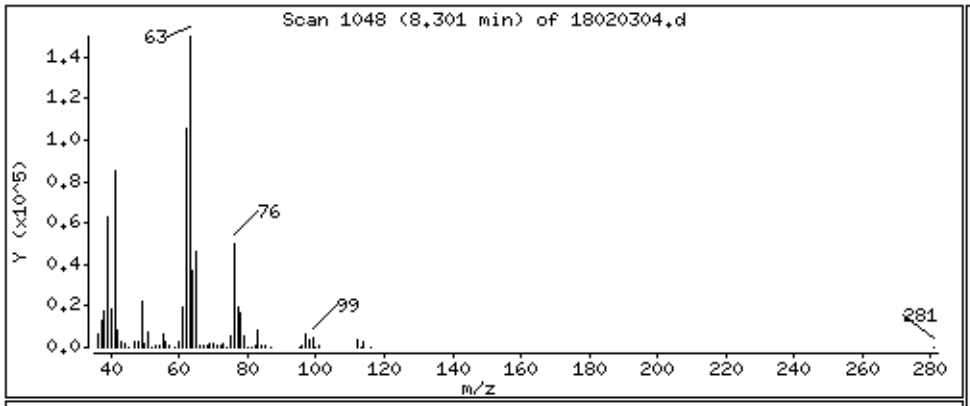
Operator: LA

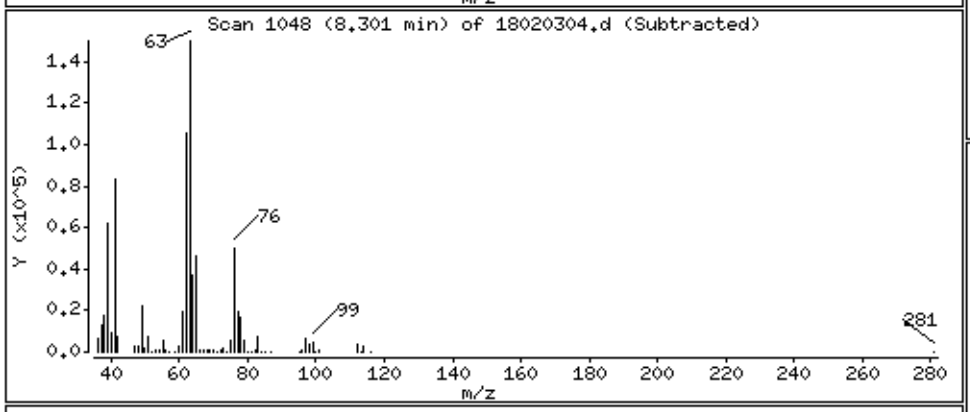
Column phase: RTx-624

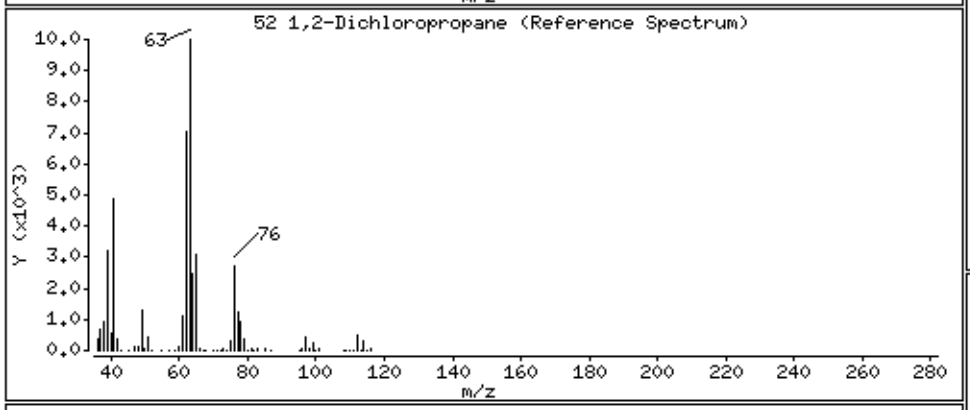
Column diameter: 0.53

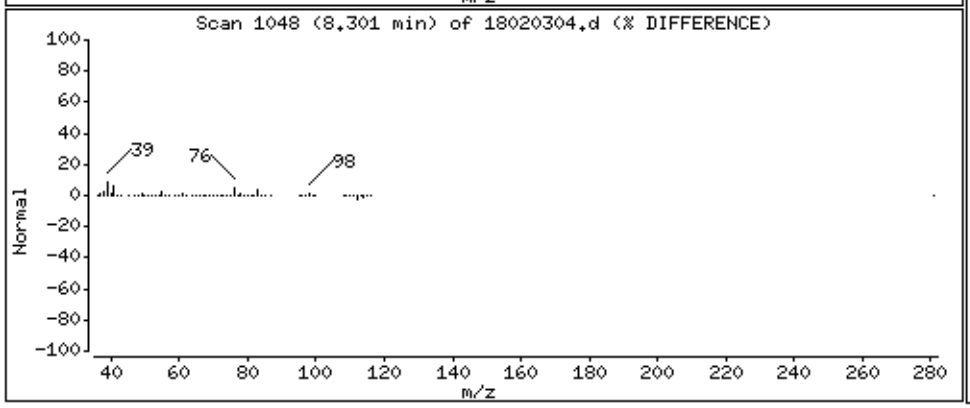
52 1,2-Dichloropropane

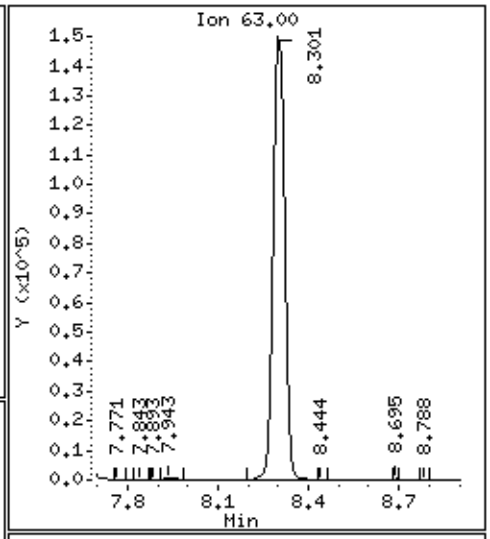
Concentration: 124.02 NG

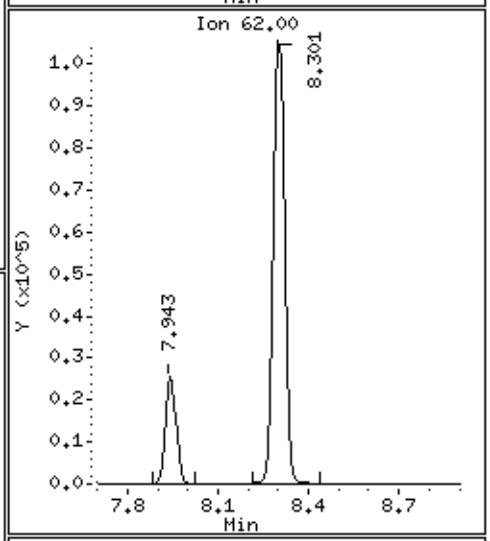


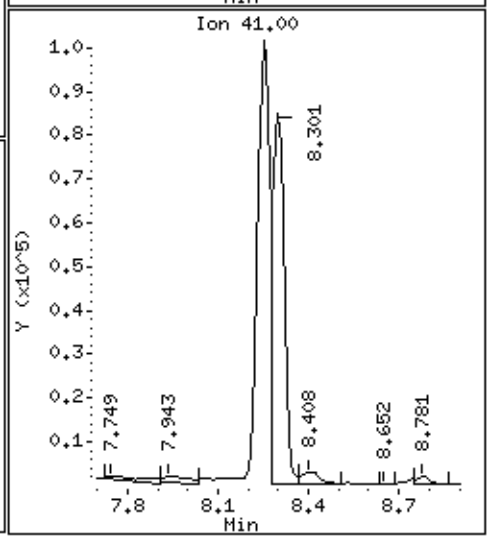












Data File: /chem/msd18.i/03Feb2016.b/18020304.d

Date : 03-FEB-2016 11:43

Client ID: LCS

Instrument: msd18.i

Sample Info: ;VI VOC+PAH LCS;LCS

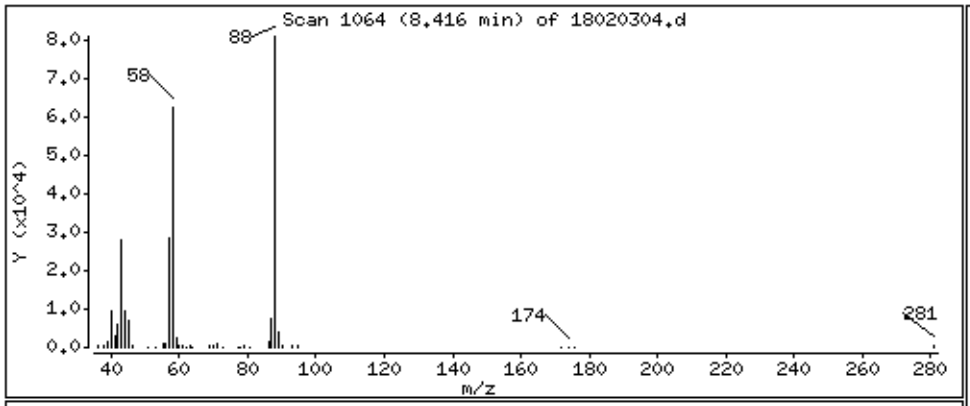
Operator: LA

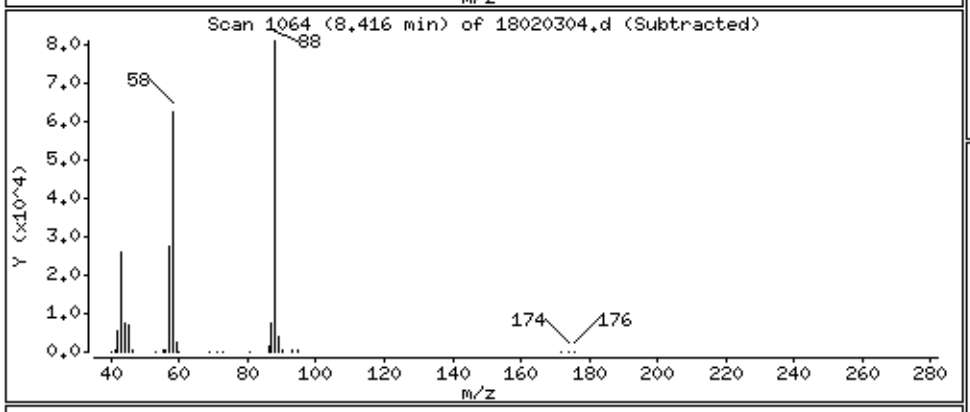
Column phase: RTx-624

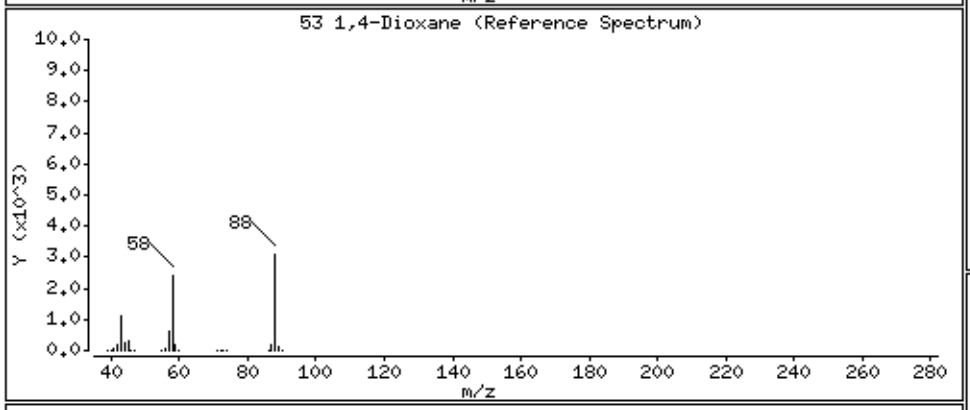
Column diameter: 0.53

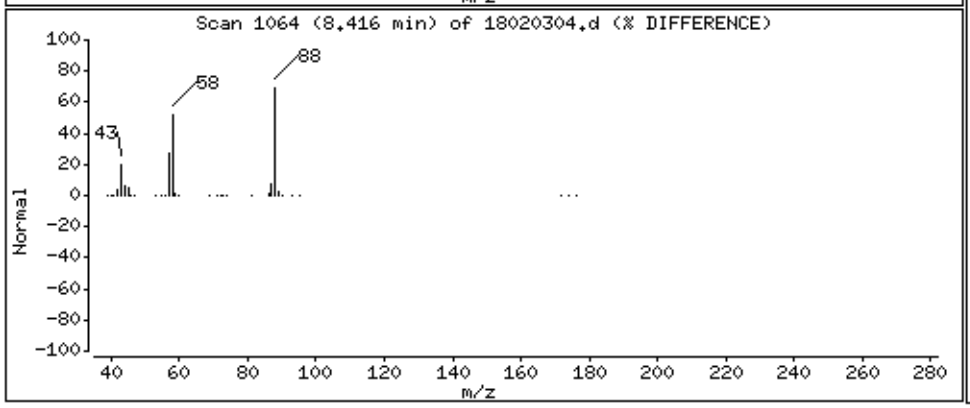
53 1,4-Dioxane

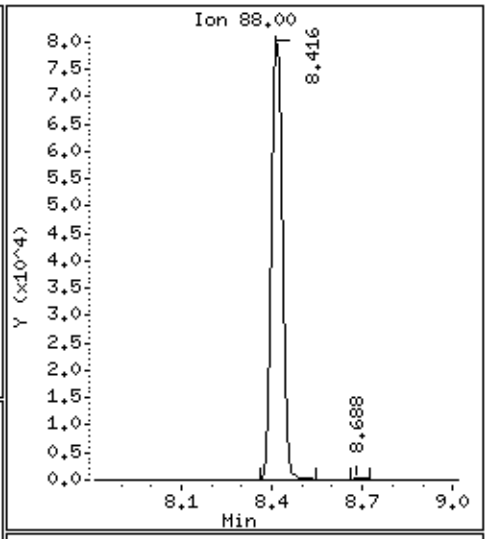
Concentration: 77.642 NG

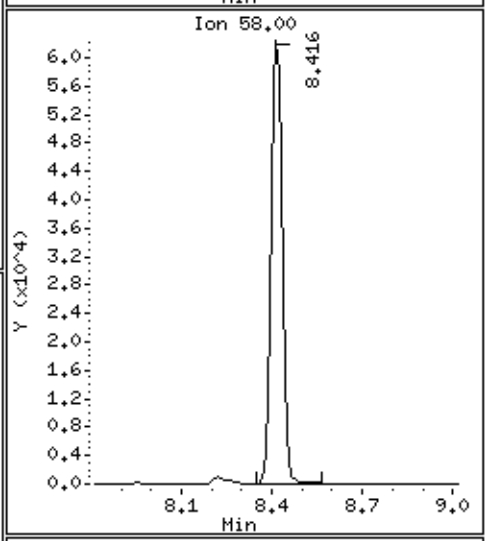


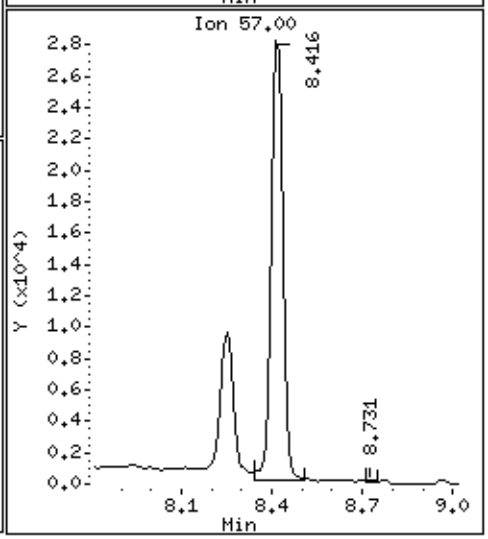












Data File: /chem/msd18.i/03Feb2016.b/18020304.d

Date : 03-FEB-2016 11:43

Client ID: LCS

Instrument: msd18.i

Sample Info: ;VI VOC+PAH LCS;LCS

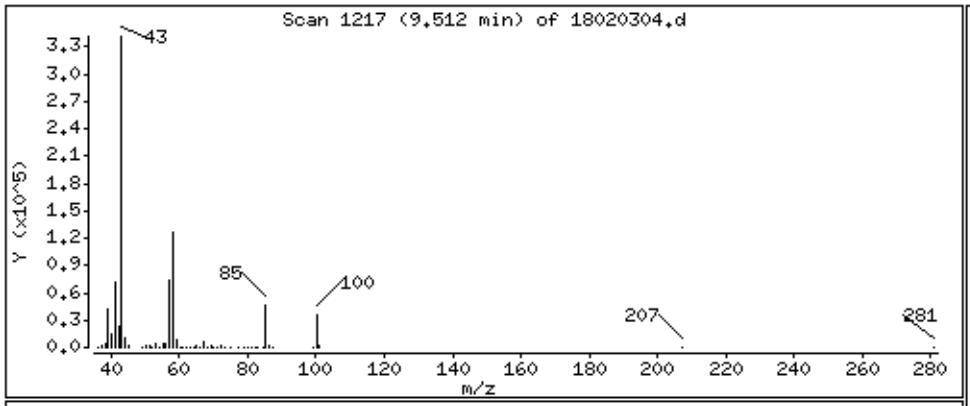
Operator: LA

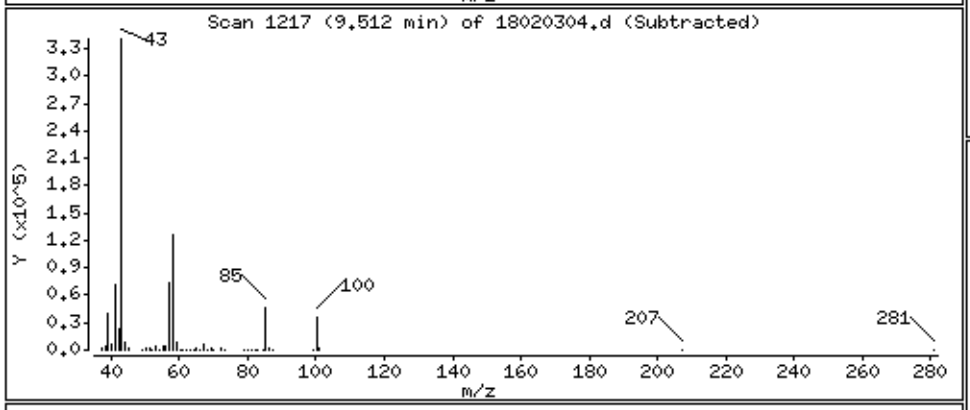
Column phase: RTx-624

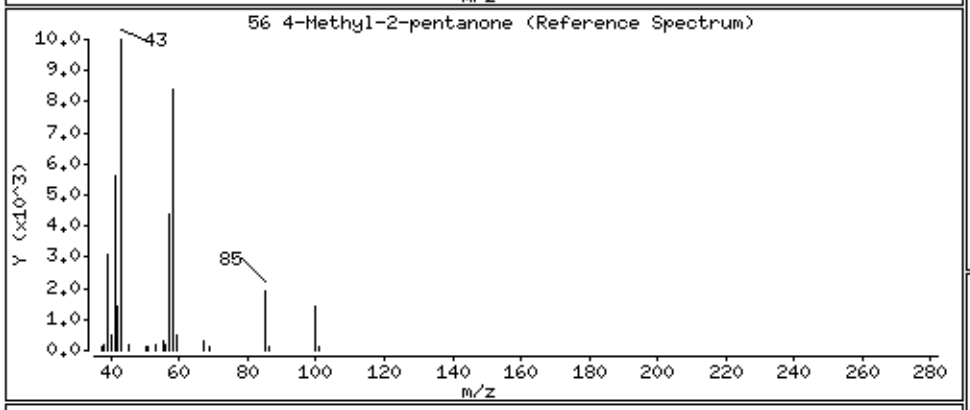
Column diameter: 0.53

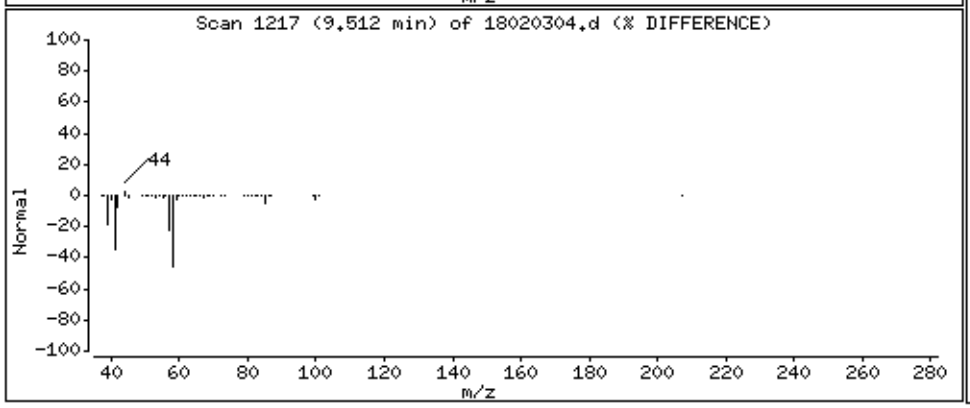
56 4-Methyl-2-pentanone

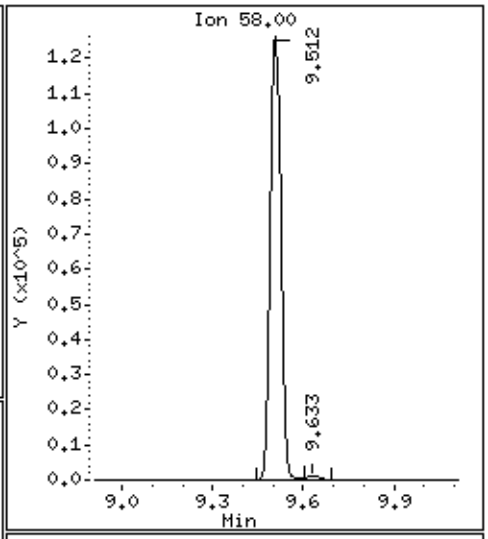
Concentration: 114.76 NG

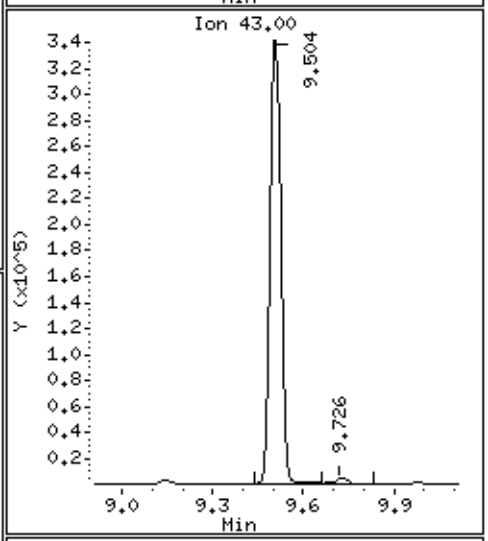


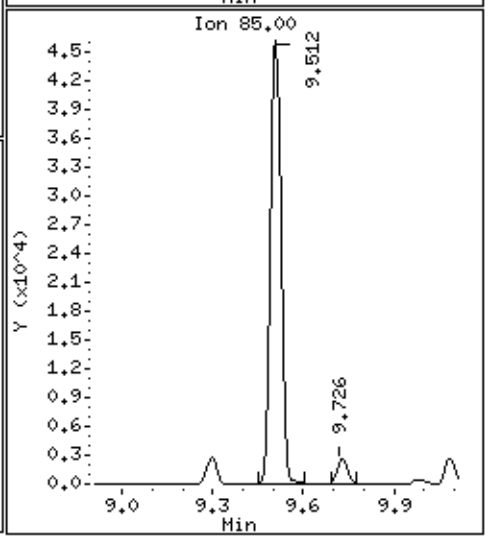












Data File: /chem/msd18.i/03Feb2016.b/18020304.d

Date : 03-FEB-2016 11:43

Client ID: LCS

Instrument: msd18.i

Sample Info: ;VI VOC+PAH LCS;LCS

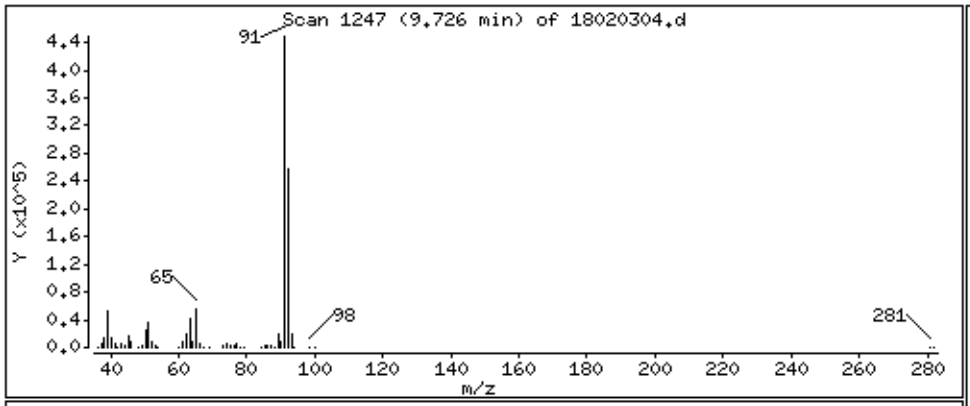
Operator: LA

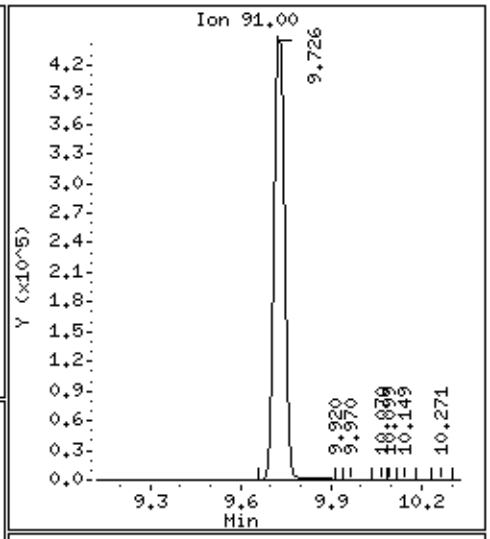
Column phase: RTx-624

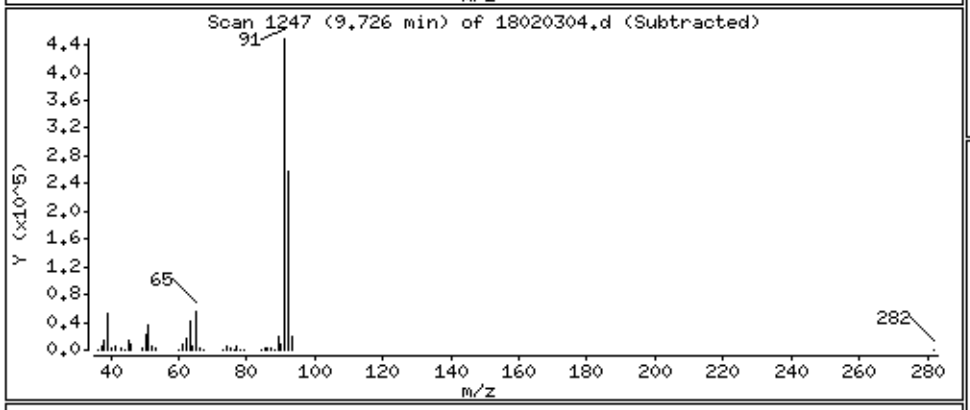
Column diameter: 0.53

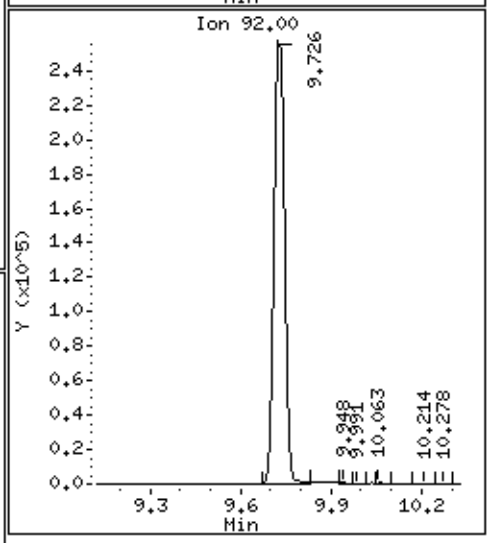
58 Toluene

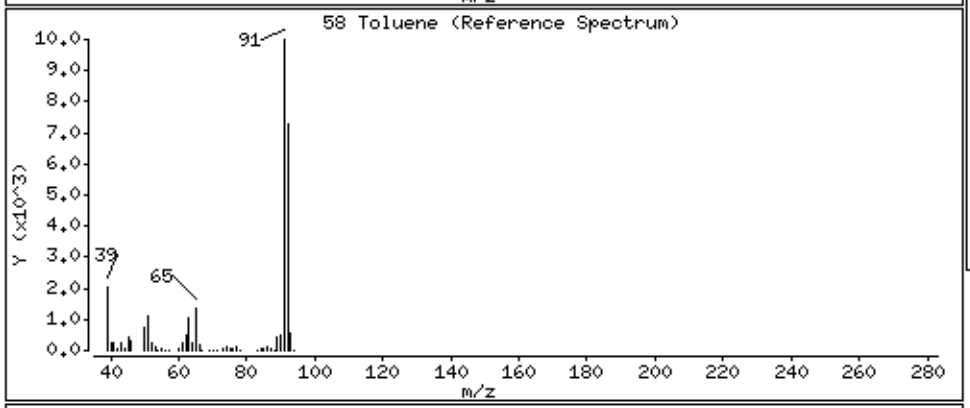
Concentration: 85.658 NG

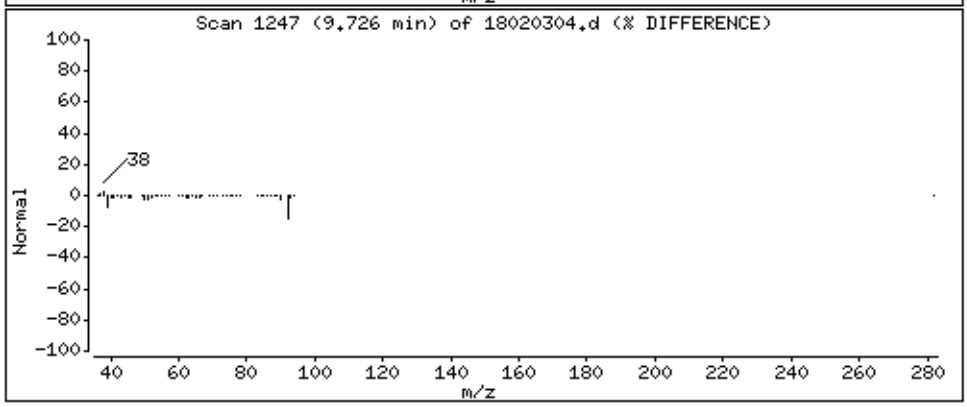












Data File: /chem/msd18.i/03Feb2016.b/18020304.d

Date : 03-FEB-2016 11:43

Client ID: LCS

Instrument: msd18.i

Sample Info: ;VI VOC+PAH LCS;LCS

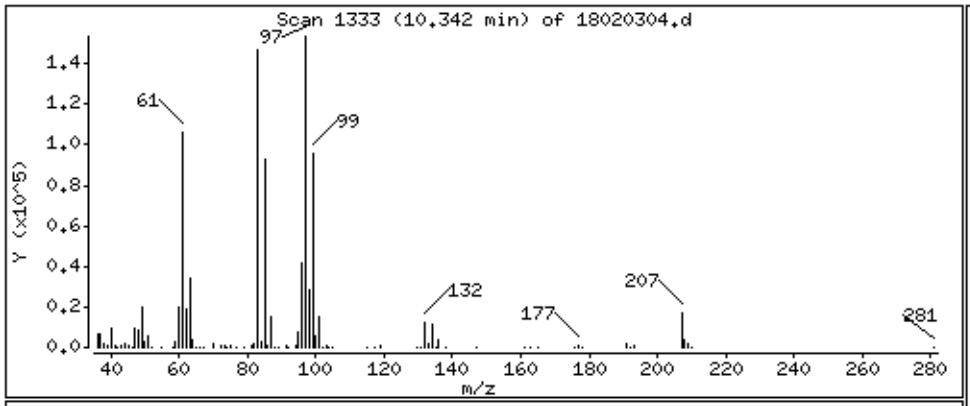
Operator: LA

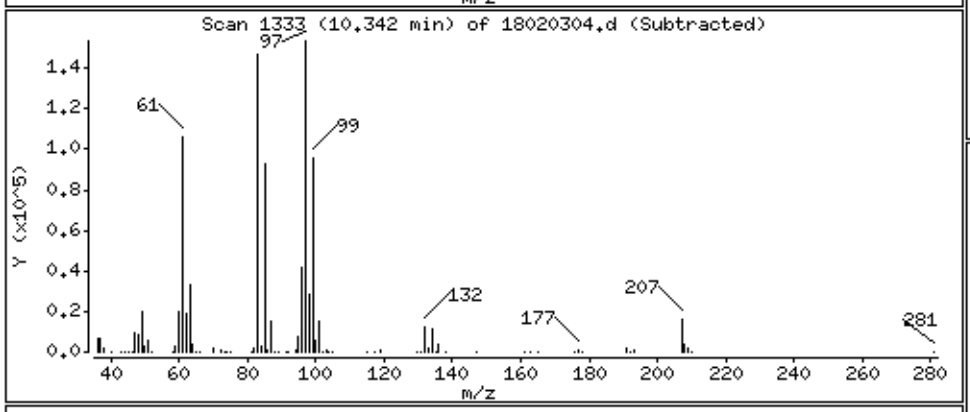
Column phase: RTx-624

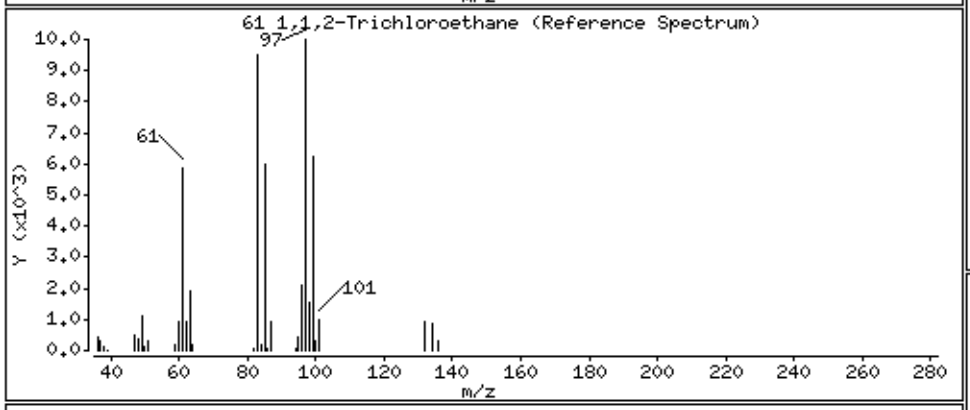
Column diameter: 0.53

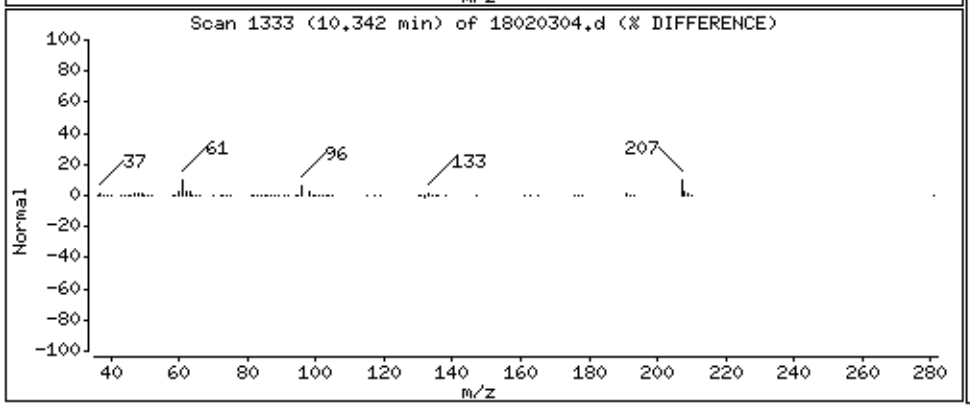
61 1,1,2-Trichloroethane

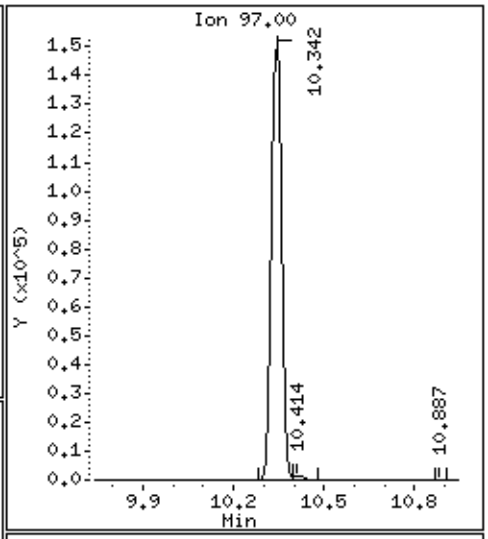
Concentration: 110.82 NG

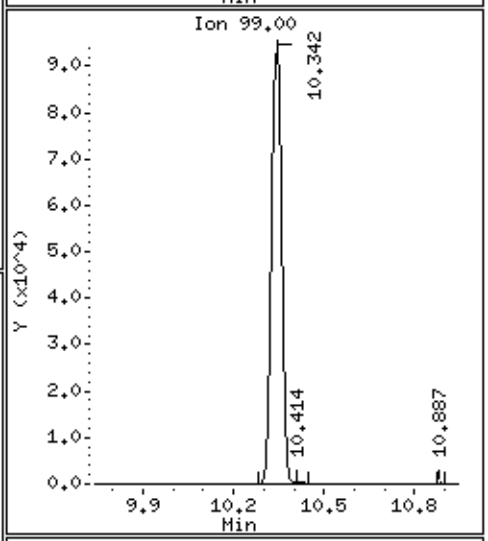


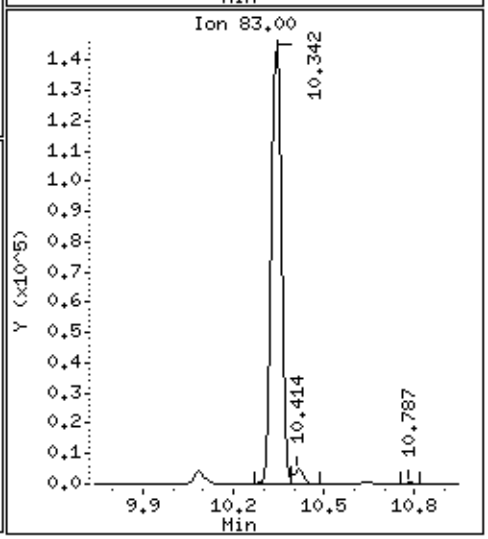












Data File: /chem/msd18.i/03Feb2016.b/18020304.d

Date : 03-FEB-2016 11:43

Client ID: LCS

Instrument: msd18.i

Sample Info: ;VI VOC+PAH LCS;LCS

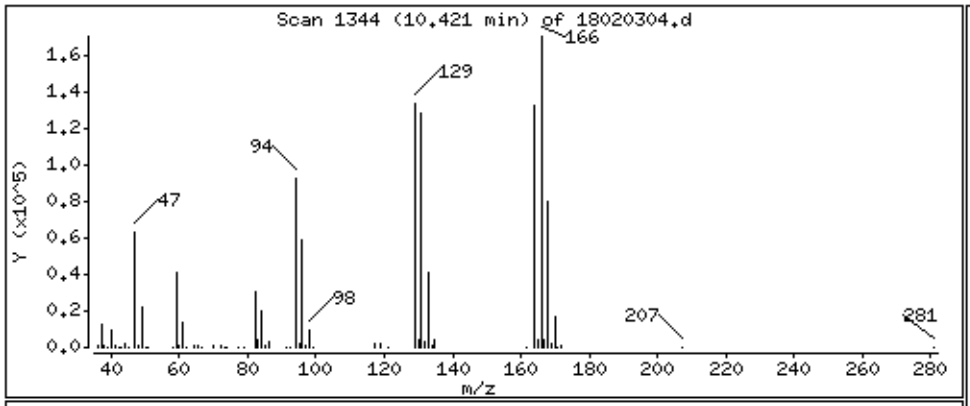
Operator: LA

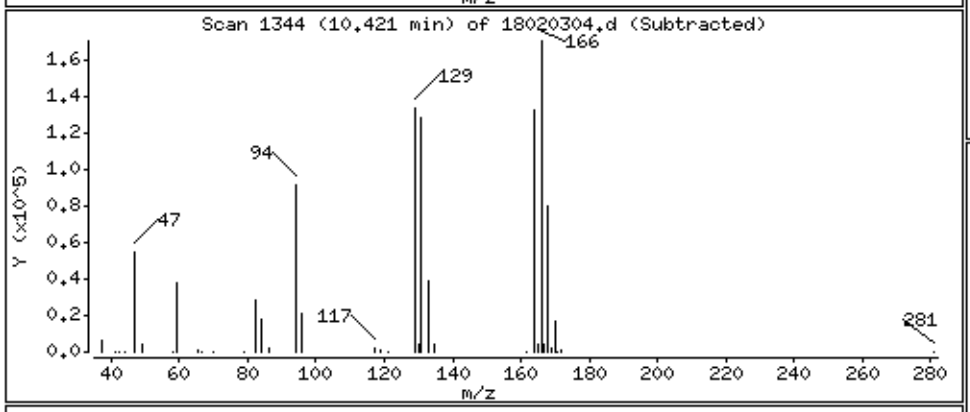
Column phase: RTx-624

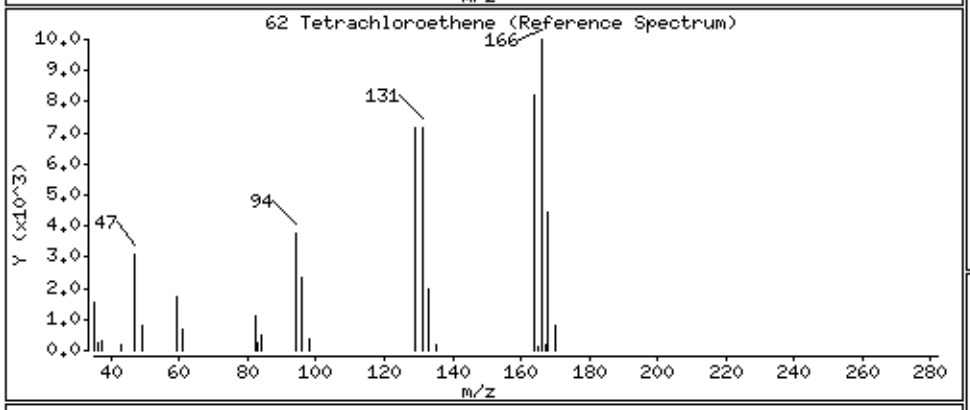
Column diameter: 0.53

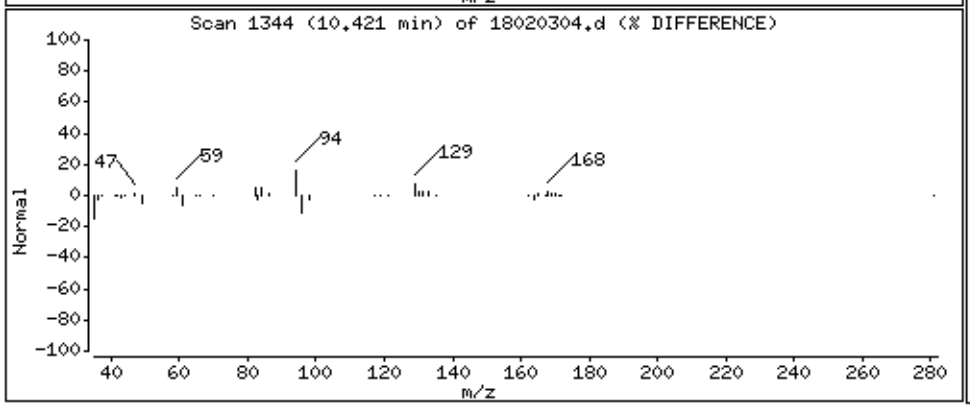
62 Tetrachloroethene

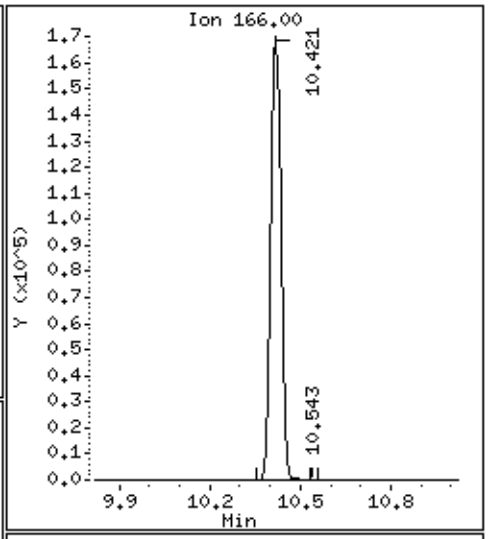
Concentration: 115.94 NG

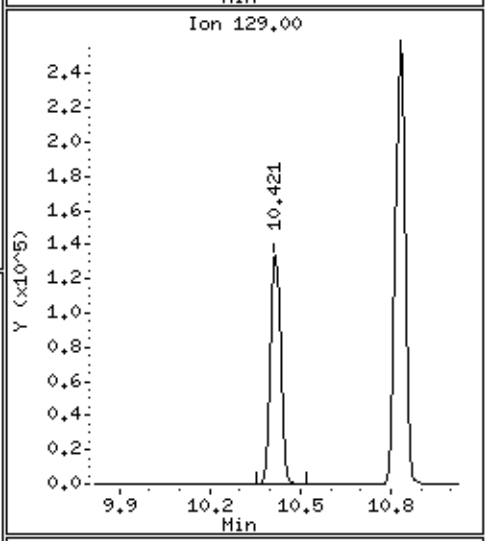


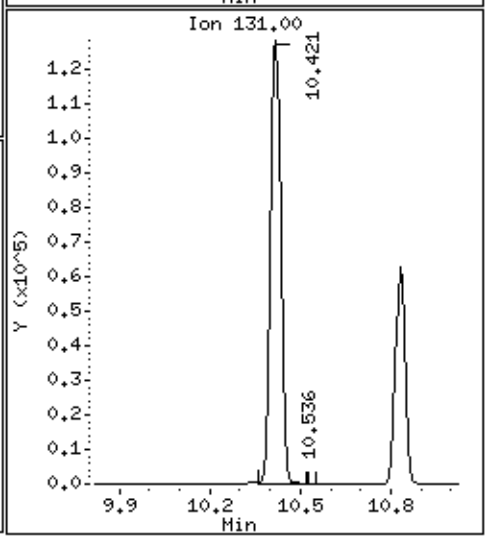












Data File: /chem/msd18.i/03Feb2016.b/18020304.d

Date : 03-FEB-2016 11:43

Client ID: LCS

Instrument: msd18.i

Sample Info: ;VI VOC+PAH LCS;LCS

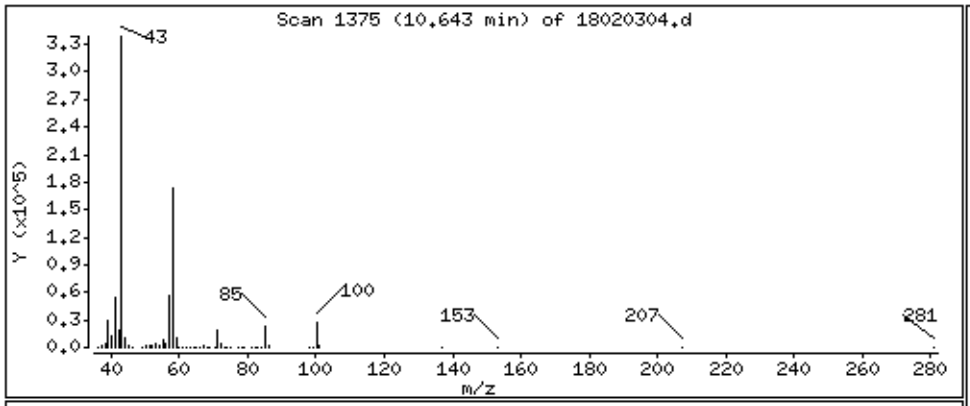
Operator: LA

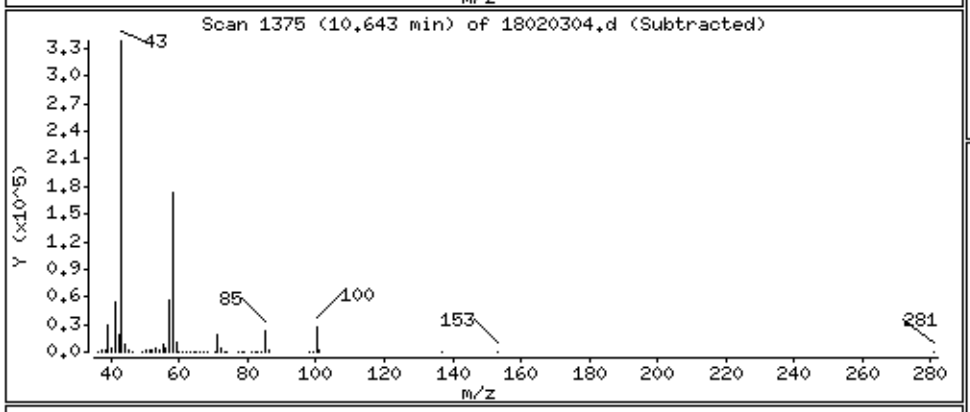
Column phase: RTx-624

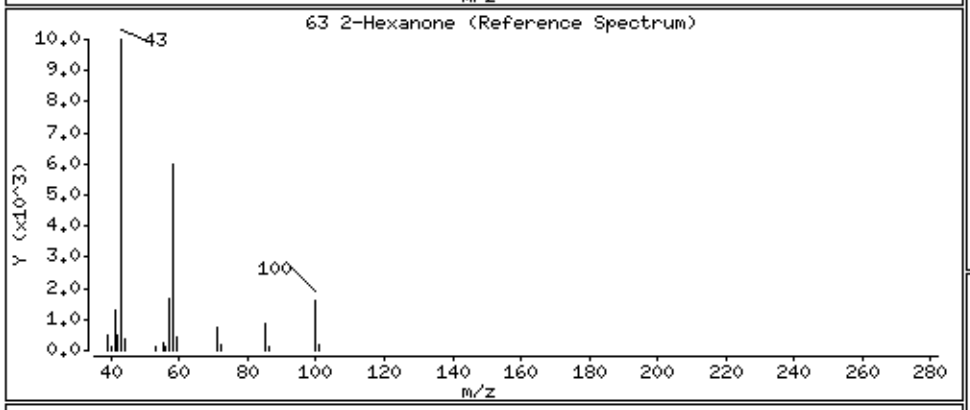
Column diameter: 0.53

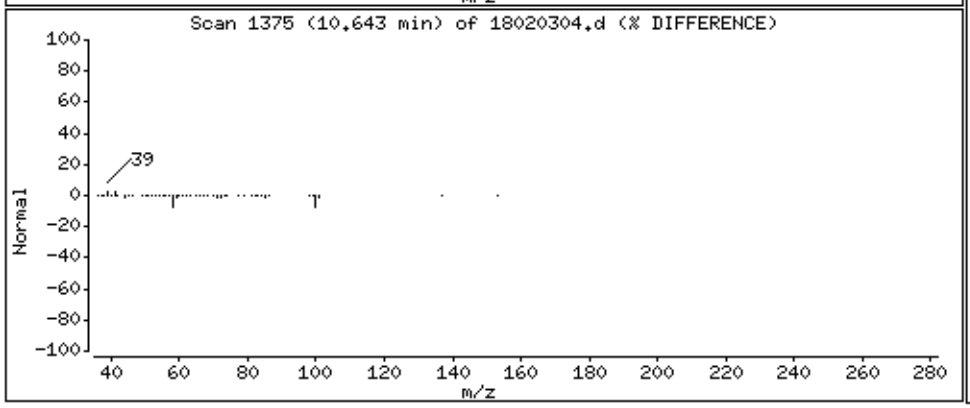
63 2-Hexanone

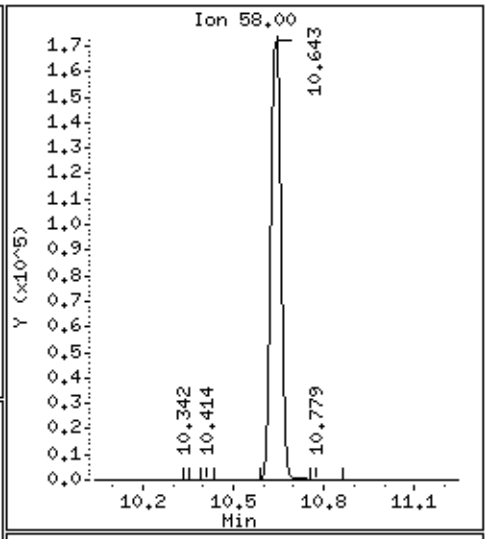
Concentration: 116.80 NG

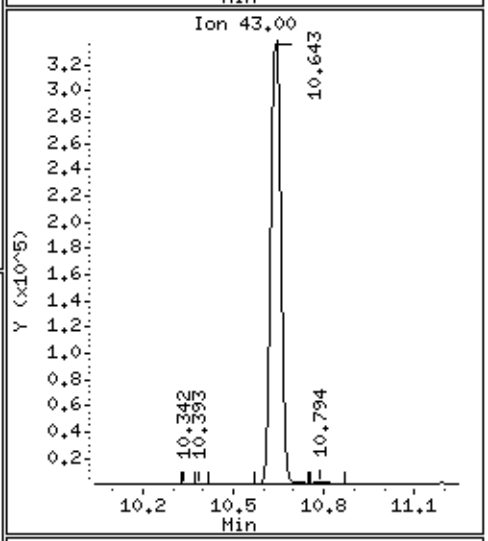


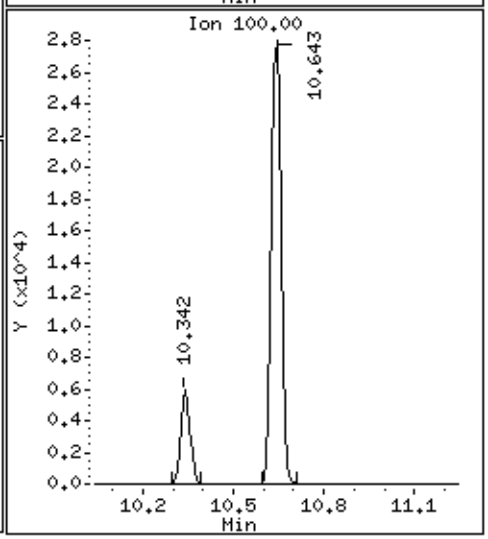












Data File: /chem/msd18.i/03Feb2016.b/18020304.d

Date : 03-FEB-2016 11:43

Client ID: LCS

Instrument: msd18.i

Sample Info: ;VI VOC+PAH LCS;LCS

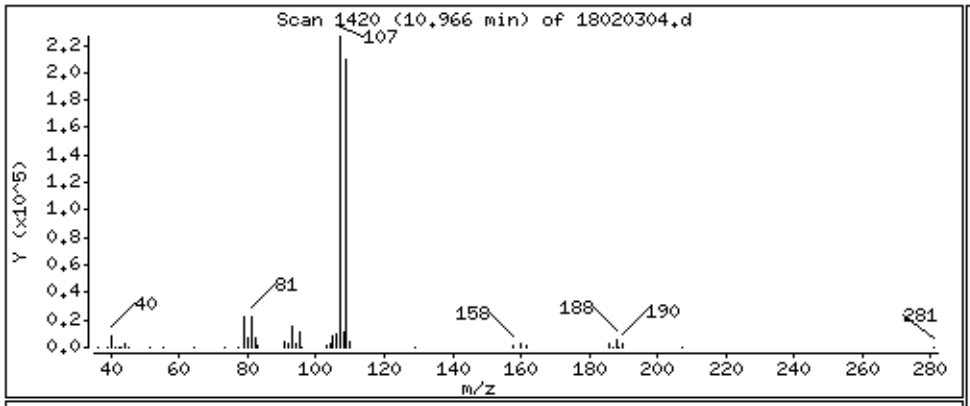
Operator: LA

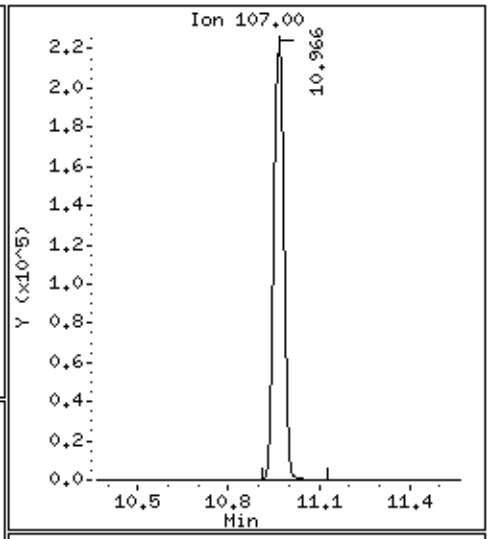
Column phase: RTx-624

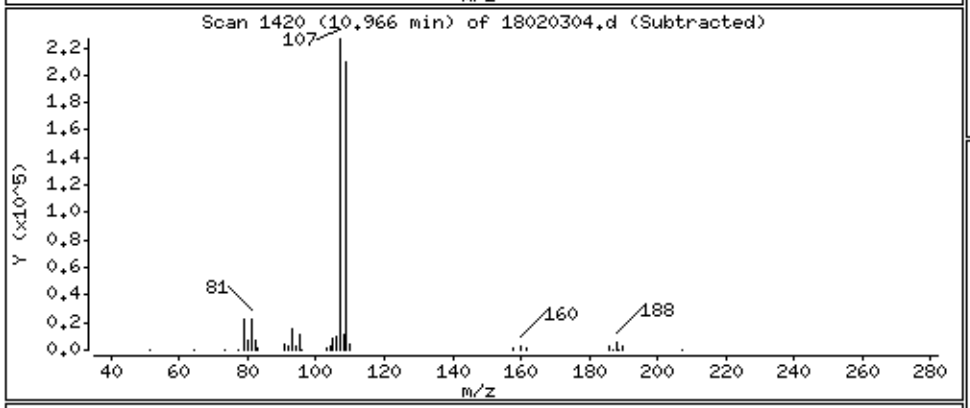
Column diameter: 0.53

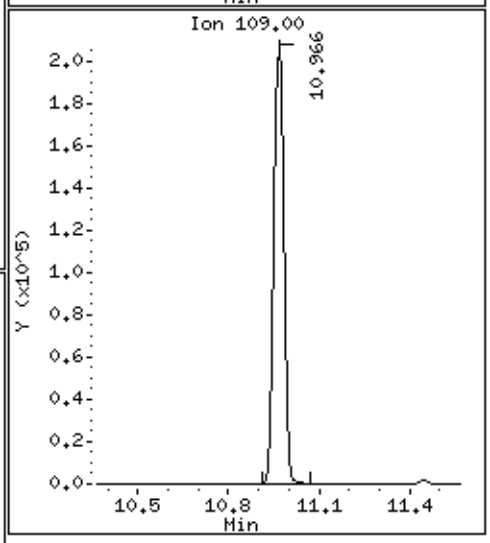
66 1,2-Dibromoethane

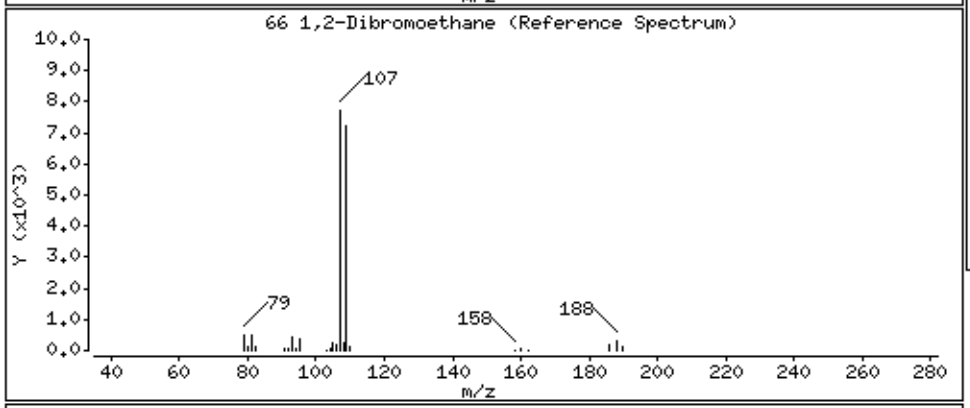
Concentration: 176.60 NG

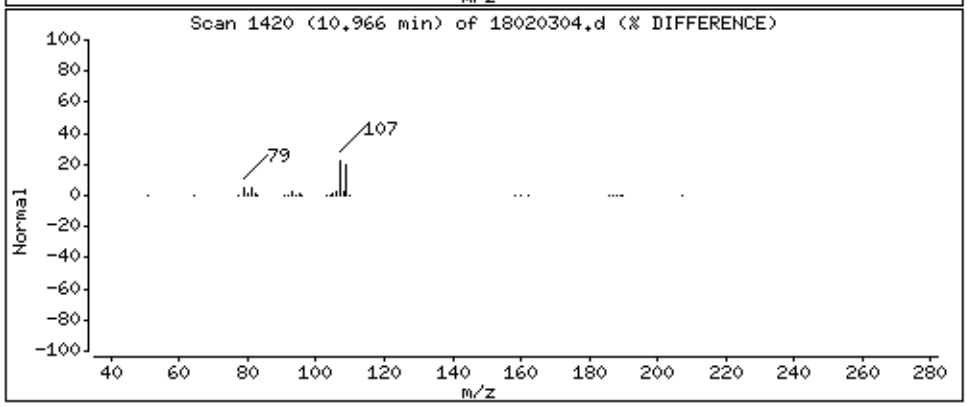












Data File: /chem/msd18.i/03Feb2016.b/18020304.d

Date : 03-FEB-2016 11:43

Client ID: LCS

Instrument: msd18.i

Sample Info: ;VI VOC+PAH LCS;LCS

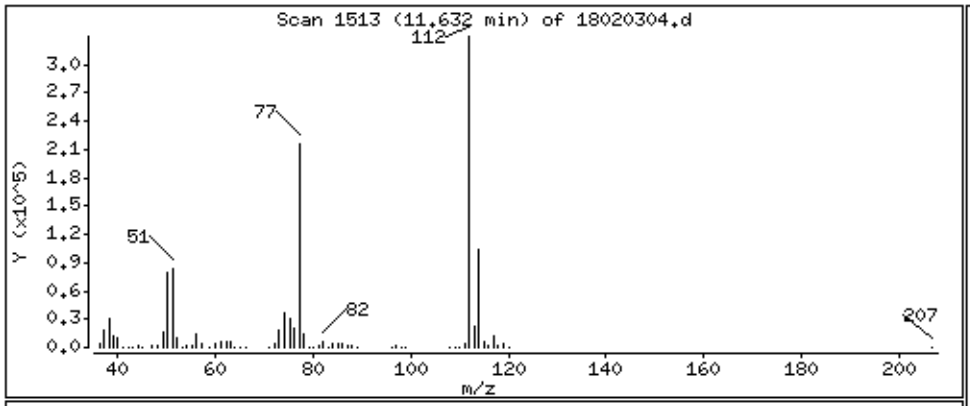
Operator: LA

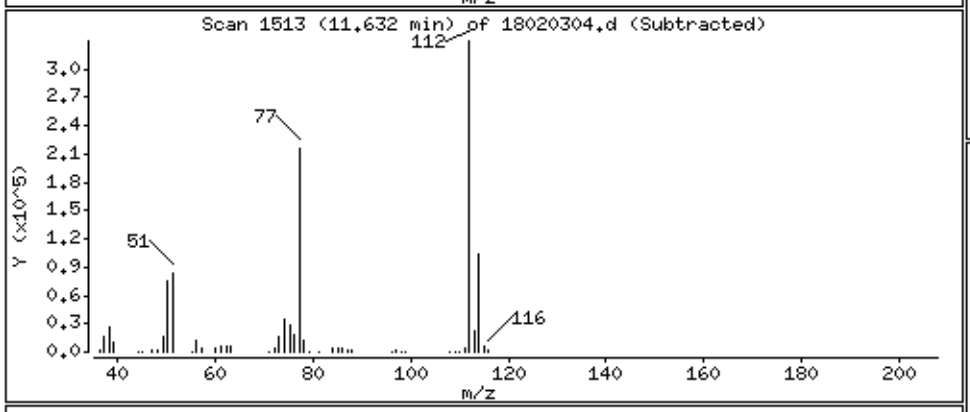
Column phase: RTx-624

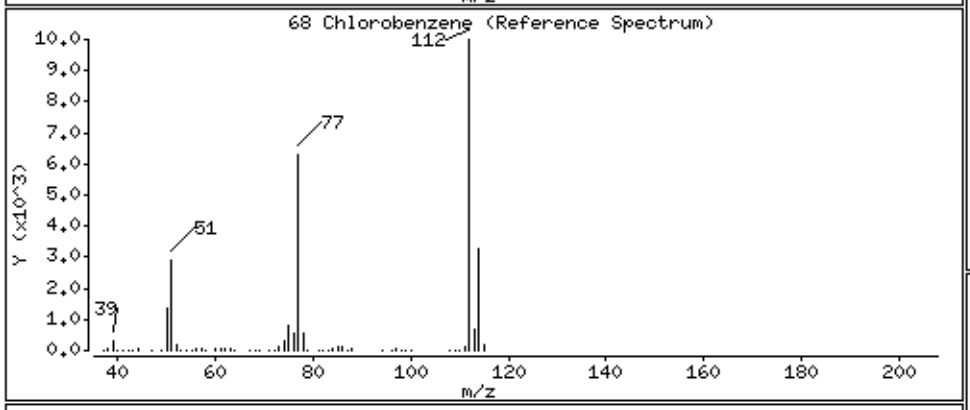
Column diameter: 0.53

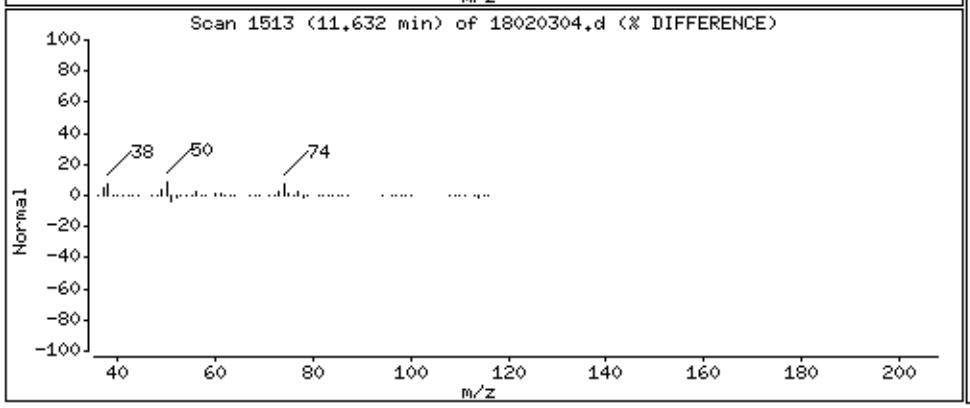
68 Chlorobenzene

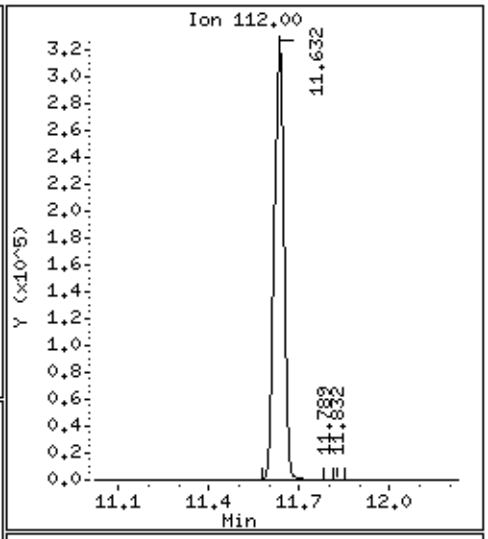
Concentration: 94.002 NG

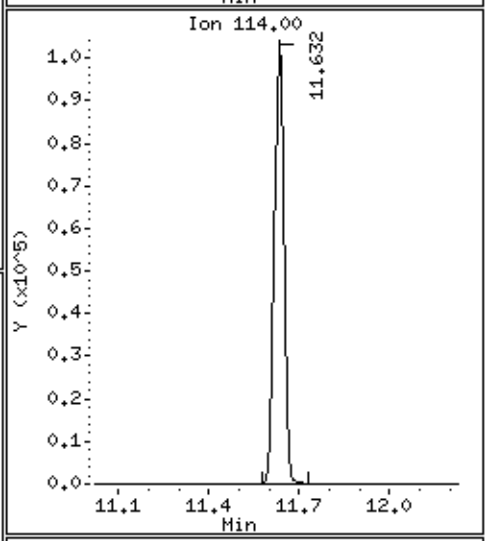


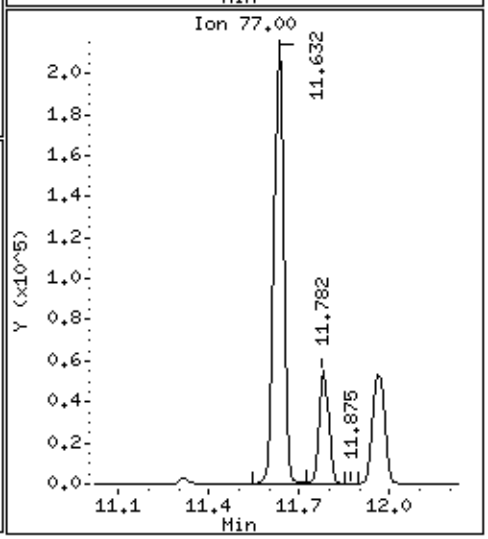












Data File: /chem/msd18.i/03Feb2016.b/18020304.d

Date : 03-FEB-2016 11:43

Client ID: LCS

Instrument: msd18.i

Sample Info: ;VI VOC+PAH LCS;LCS

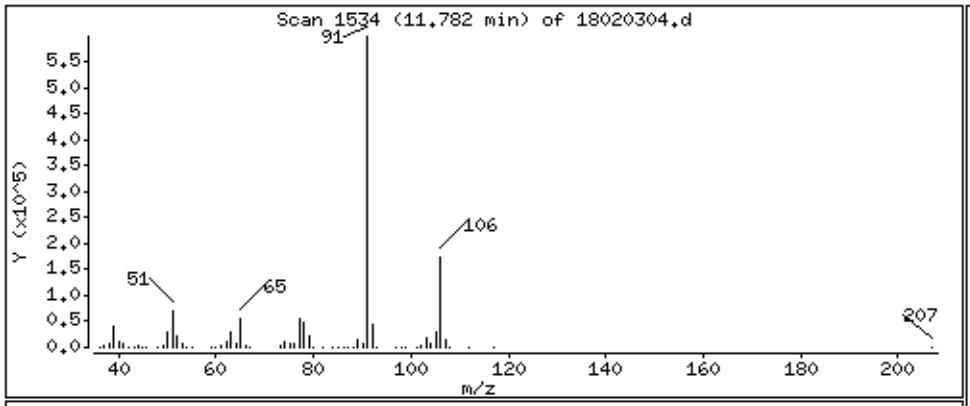
Operator: LA

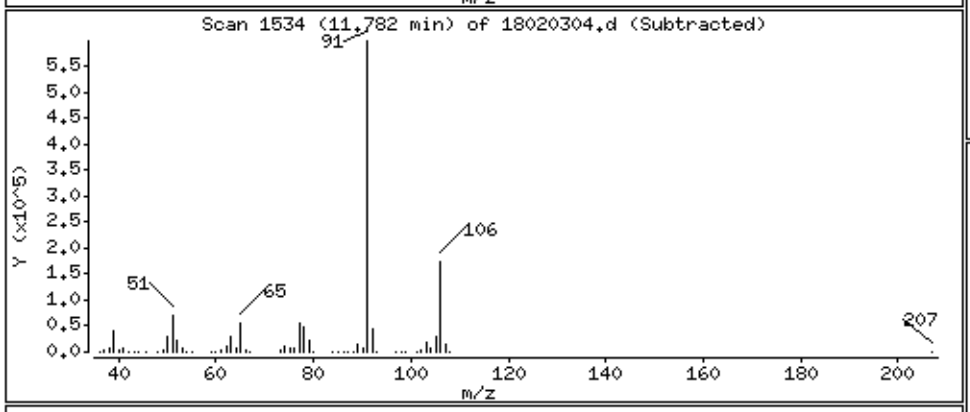
Column phase: RTx-624

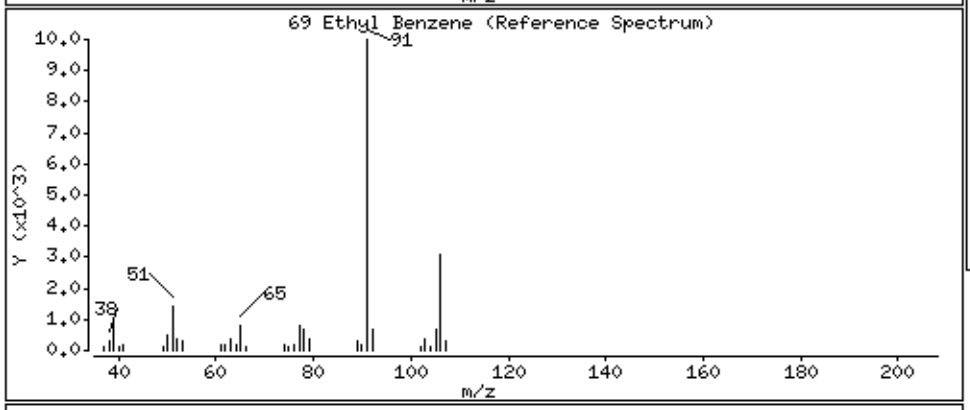
Column diameter: 0.53

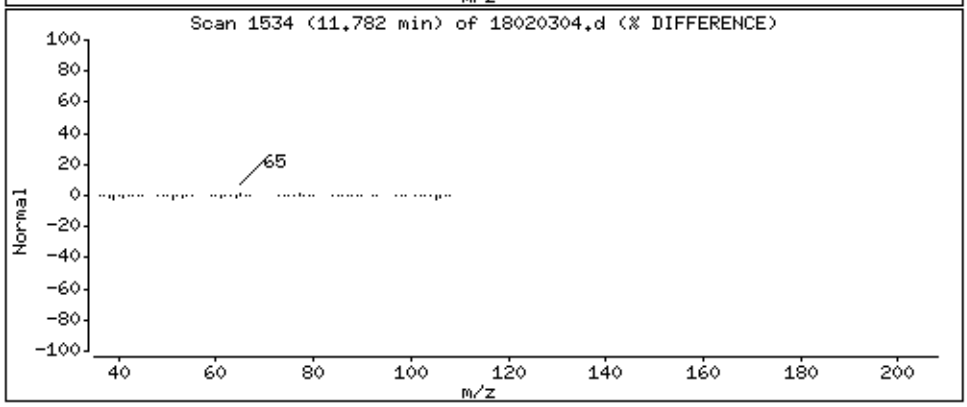
69 Ethyl Benzene

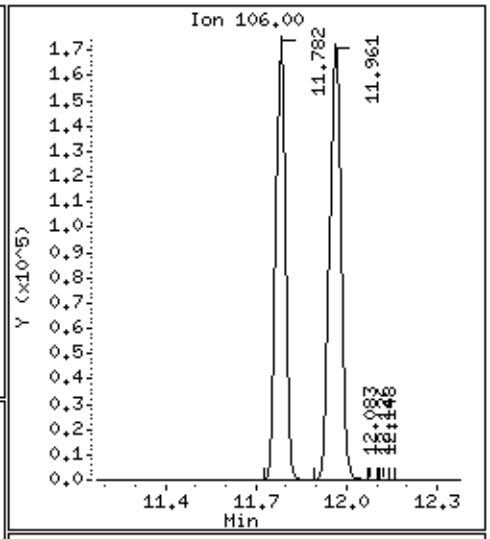
Concentration: 89.902 NG

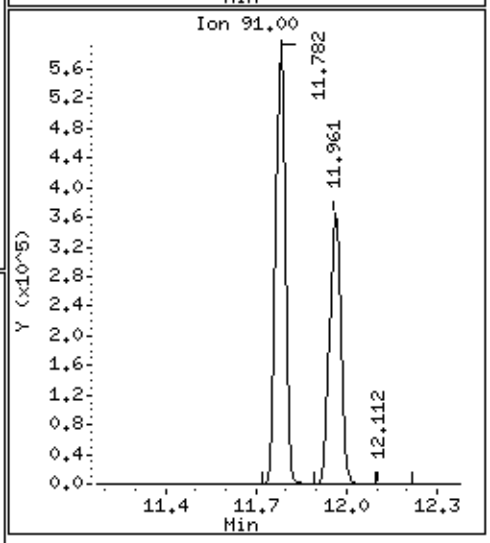












Data File: /chem/msd18.i/03Feb2016.b/18020304.d

Date : 03-FEB-2016 11:43

Client ID: LCS

Instrument: msd18.i

Sample Info: ;VI VOC+PAH LCS;LCS

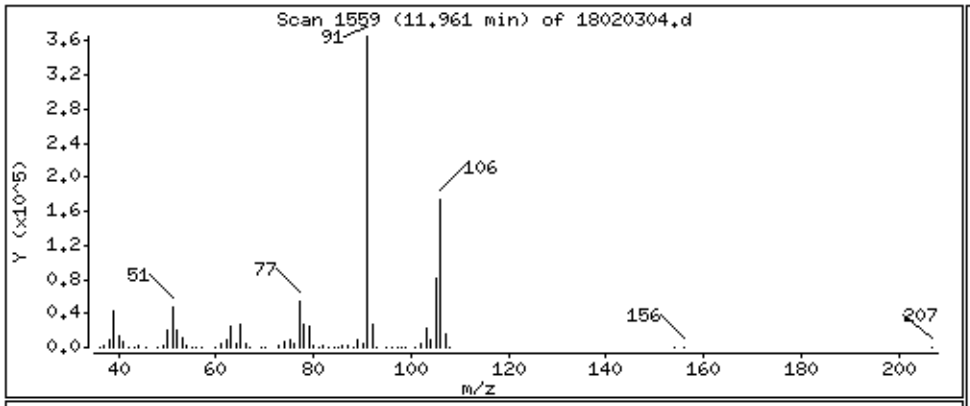
Operator: LA

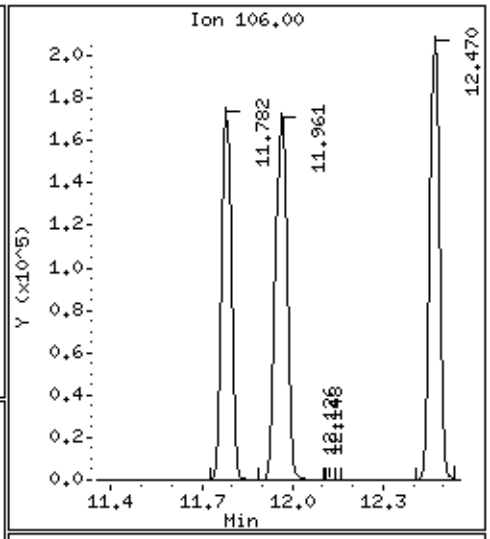
Column phase: RTx-624

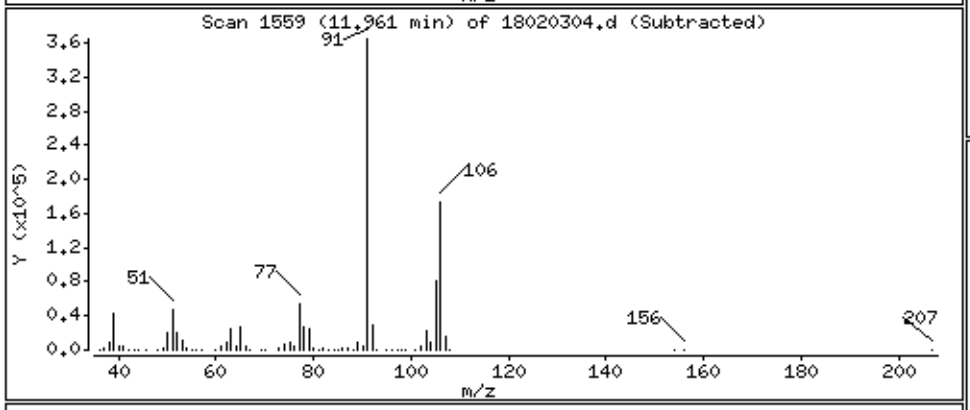
Column diameter: 0.53

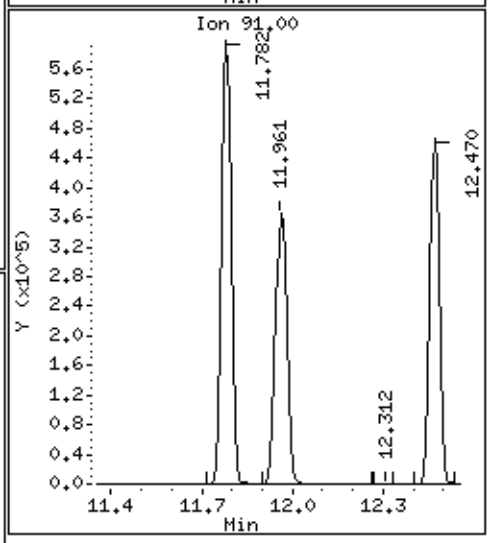
71 m,p-Xylene

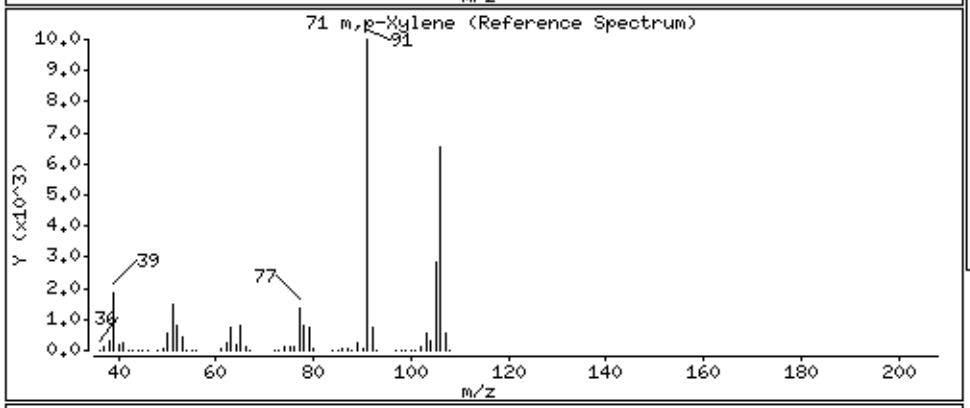
Concentration: 89.704 NG

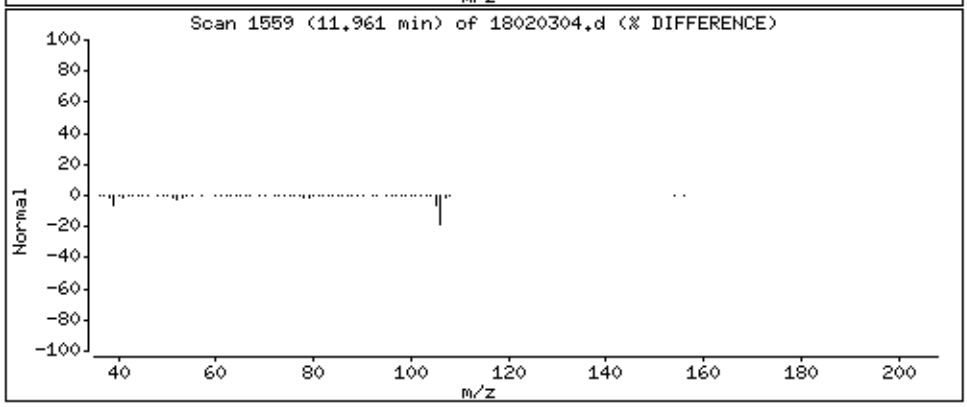












Data File: /chem/msd18.i/03Feb2016.b/18020304.d

Date : 03-FEB-2016 11:43

Client ID: LCS

Instrument: msd18.i

Sample Info: ;VI VOC+PAH LCS;LCS

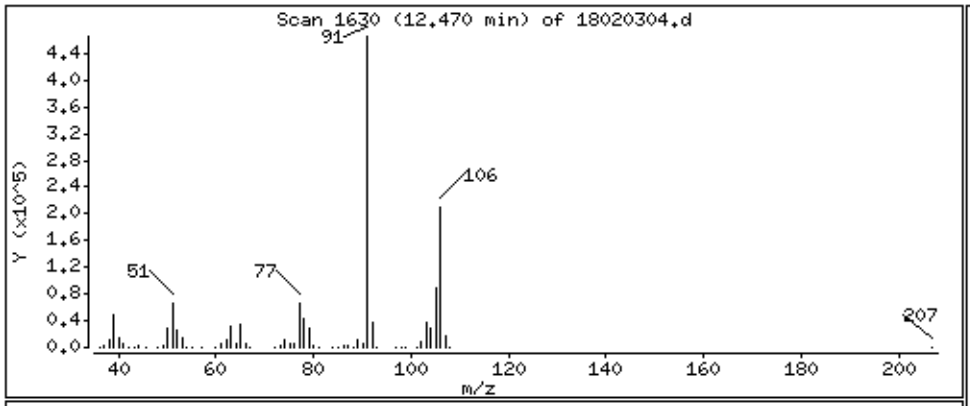
Operator: LA

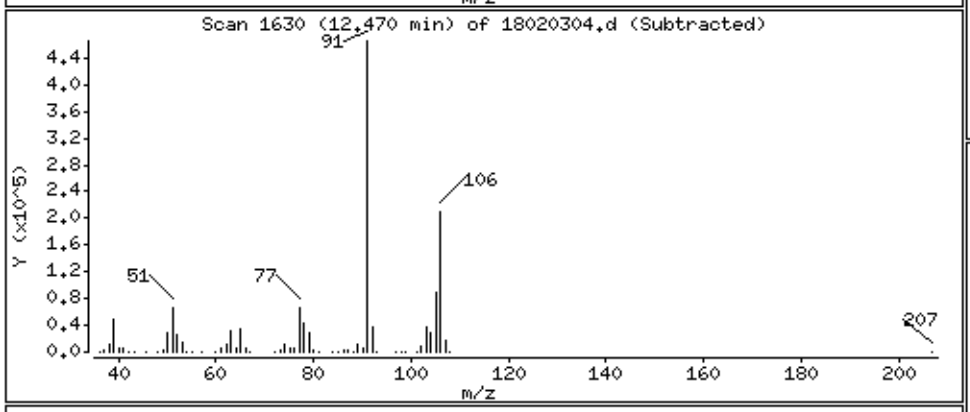
Column phase: RTx-624

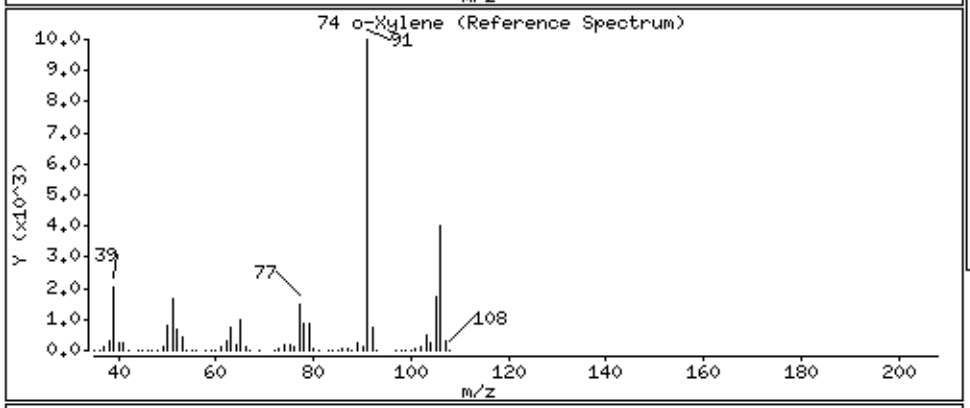
Column diameter: 0.53

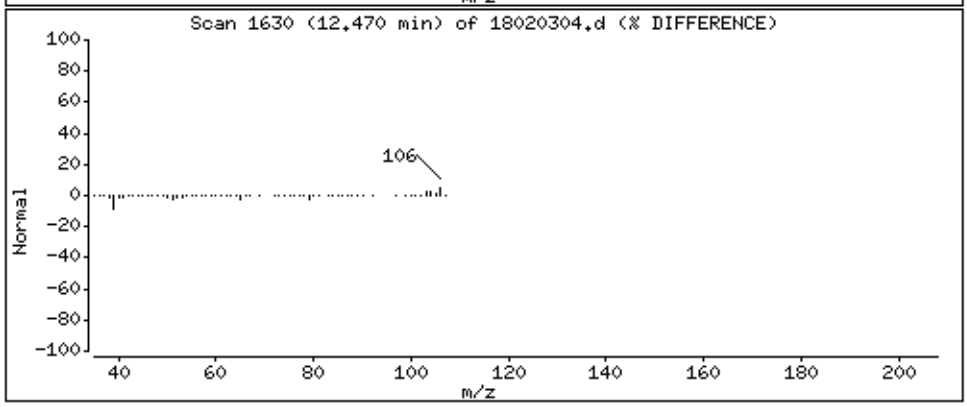
74 o-Xylene

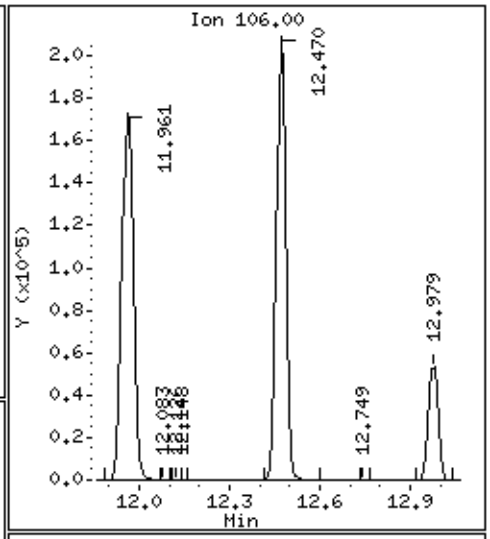
Concentration: 105.27 NG

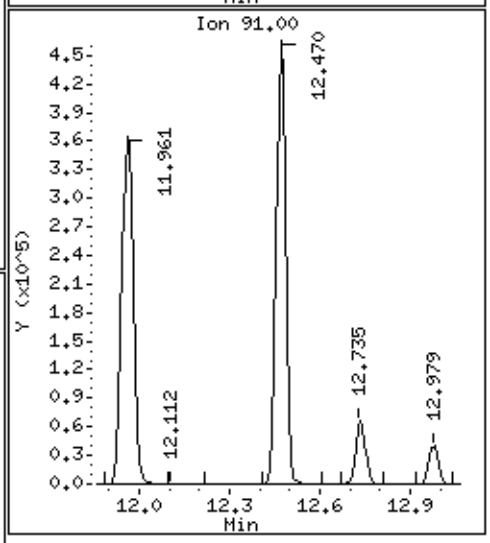












Data File: /chem/msd18.i/03Feb2016.b/18020304.d

Date : 03-FEB-2016 11:43

Client ID: LCS

Instrument: msd18.i

Sample Info: ;VI VOC+PAH LCS;LCS

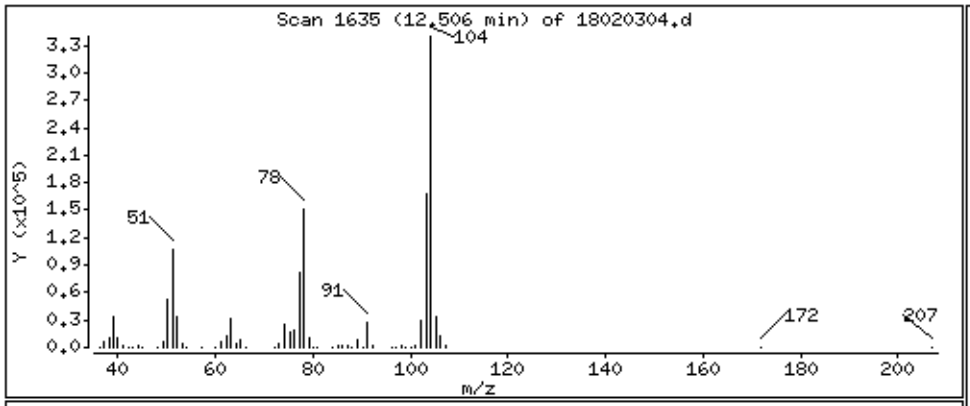
Operator: LA

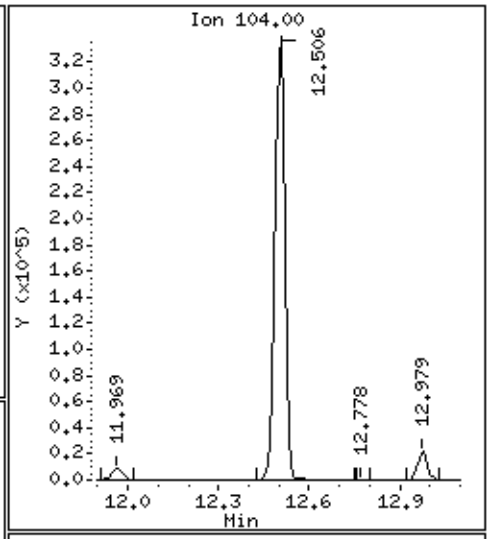
Column phase: RTx-624

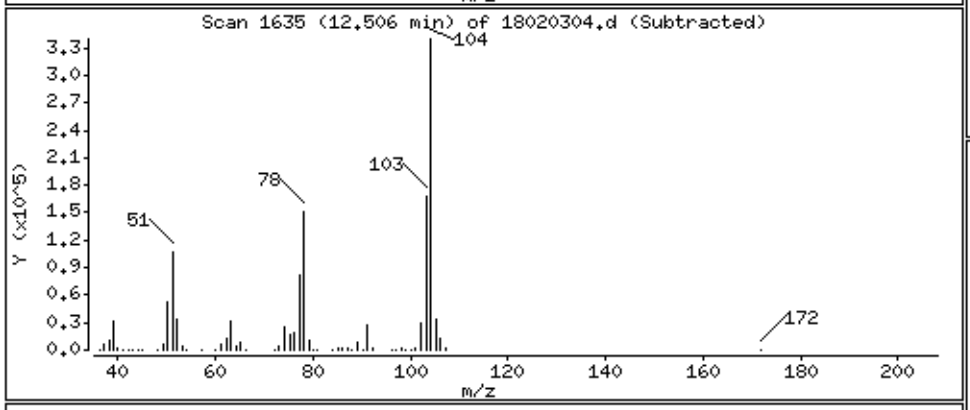
Column diameter: 0.53

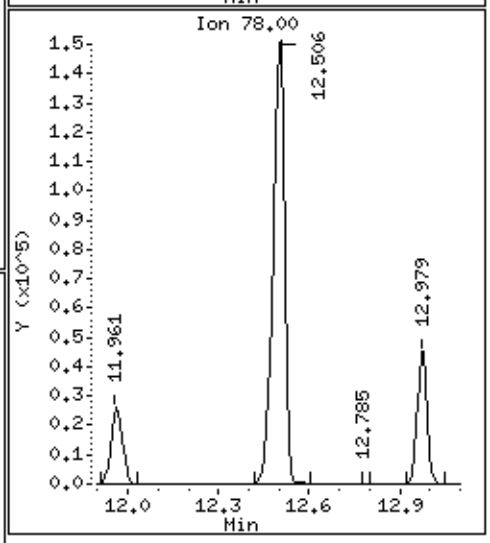
75 Styrene

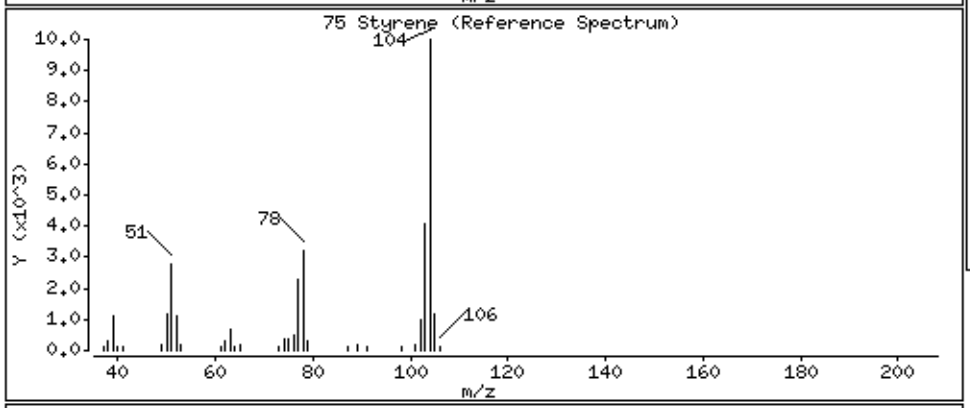
Concentration: 100.77 NG

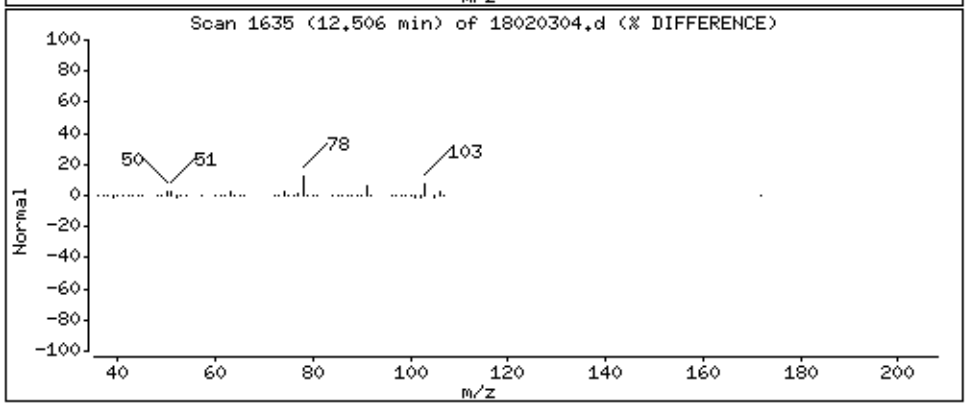












Data File: /chem/msd18.i/03Feb2016.b/18020304.d

Date : 03-FEB-2016 11:43

Client ID: LCS

Instrument: msd18.i

Sample Info: ;VI VOC+PAH LCS;LCS

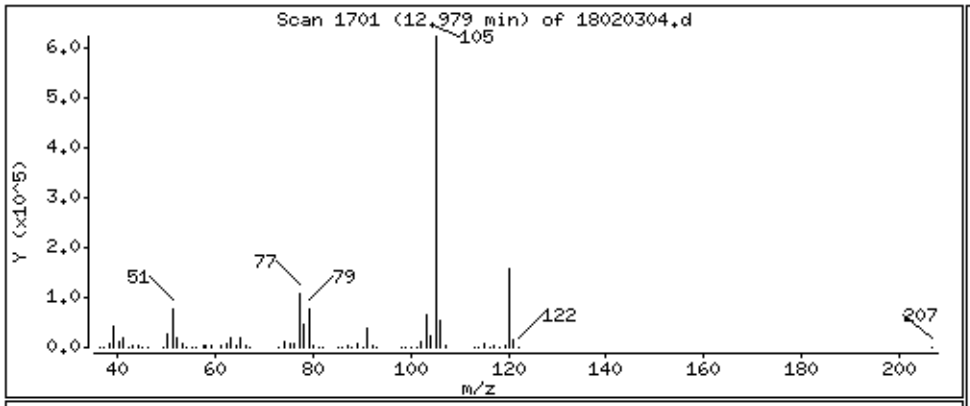
Operator: LA

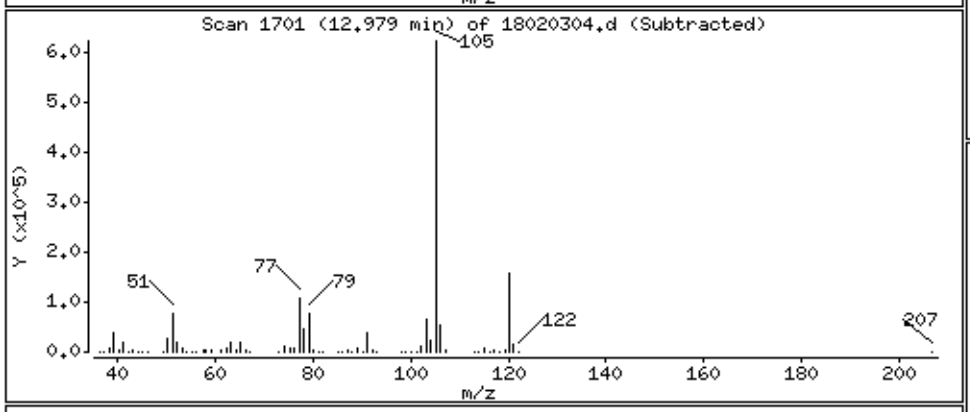
Column phase: RTx-624

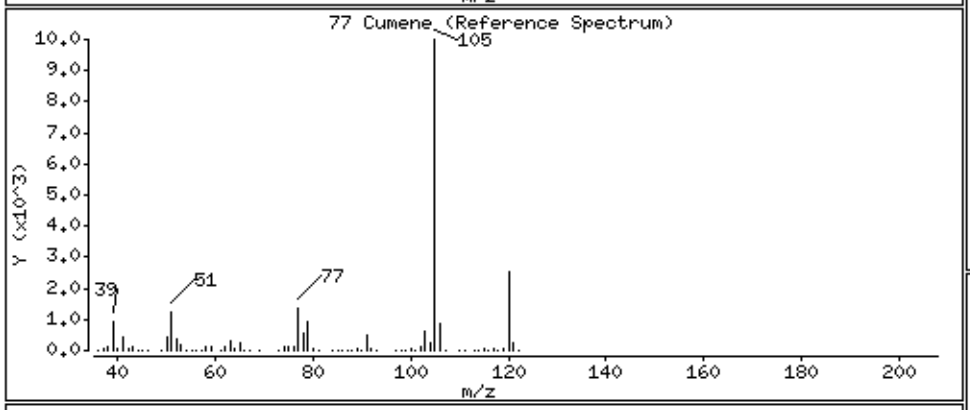
Column diameter: 0.53

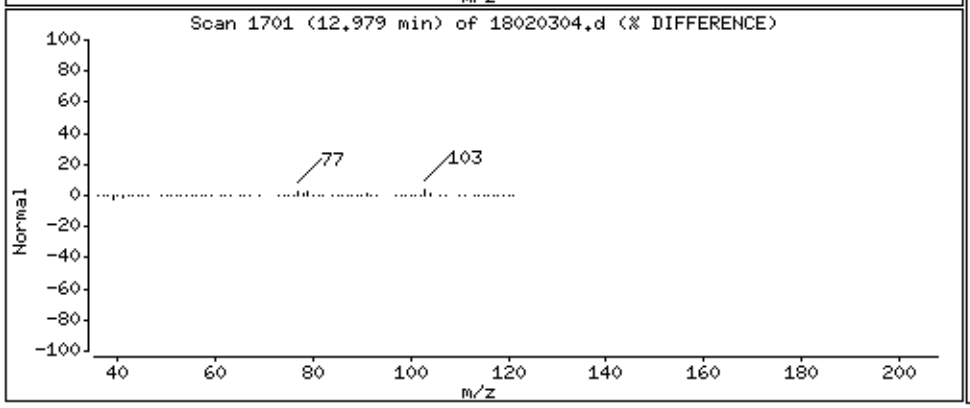
77 Cumene

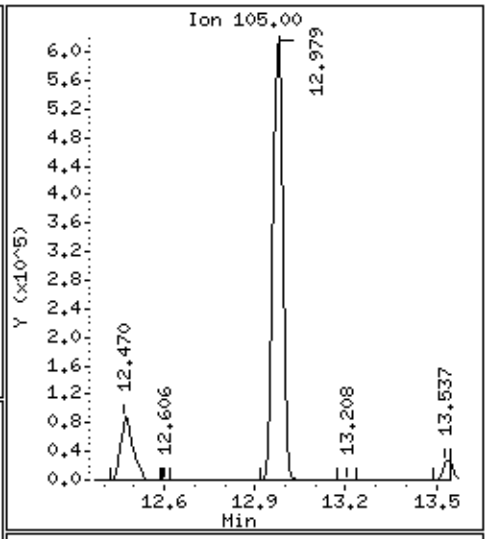
Concentration: 120.36 NG

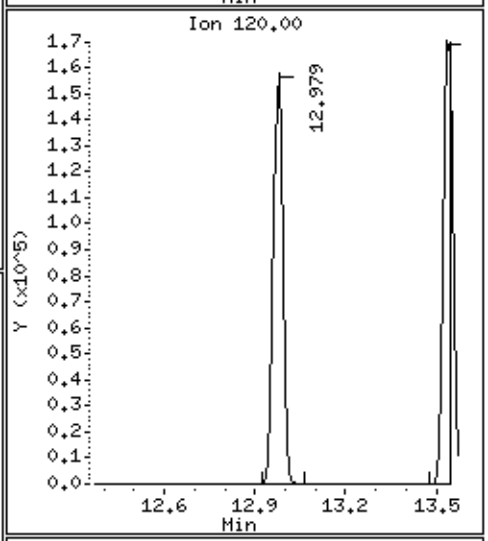


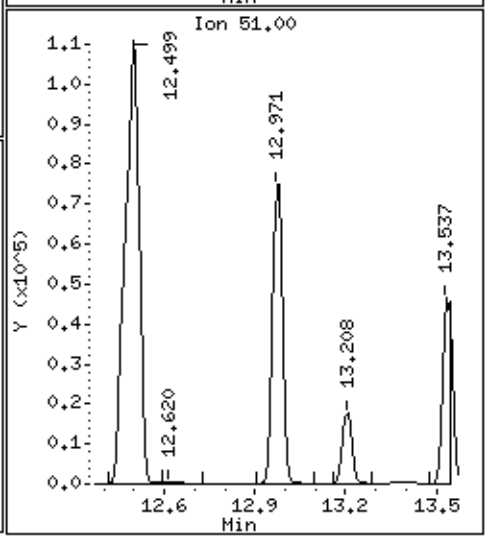












Data File: /chem/msd18.i/03Feb2016.b/18020304.d

Date : 03-FEB-2016 11:43

Client ID: LCS

Instrument: msd18.i

Sample Info: ;VI VOC+PAH LCS;LCS

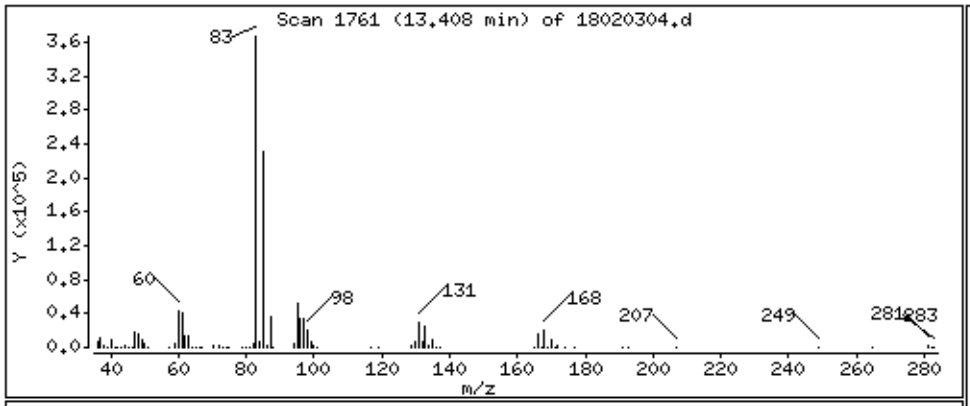
Operator: LA

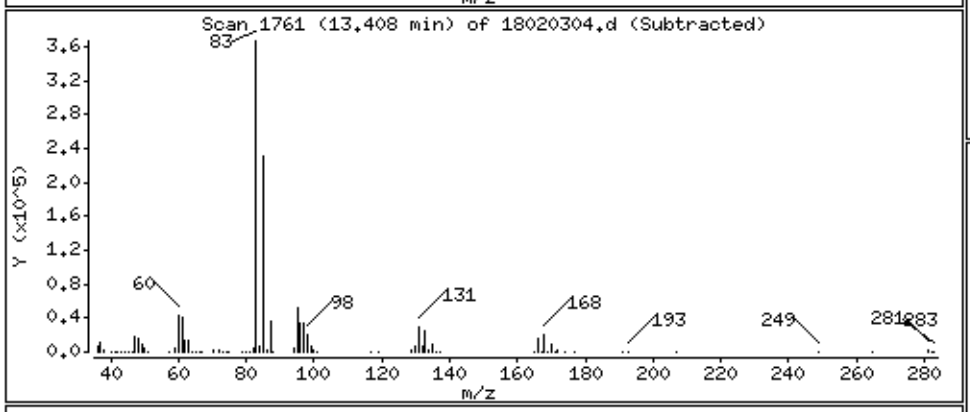
Column phase: RTx-624

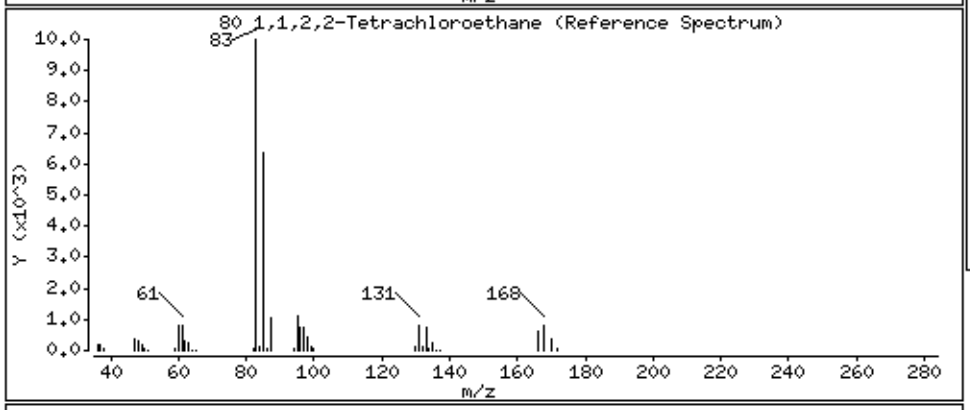
Column diameter: 0.53

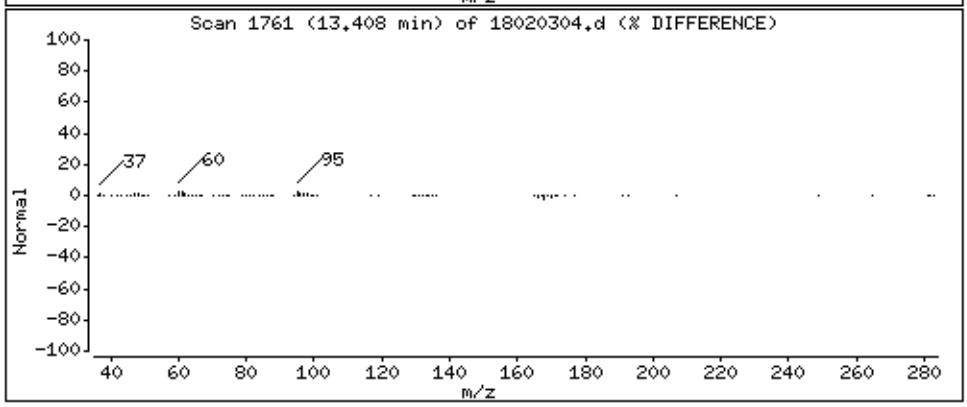
80 1,1,2,2-Tetrachloroethane

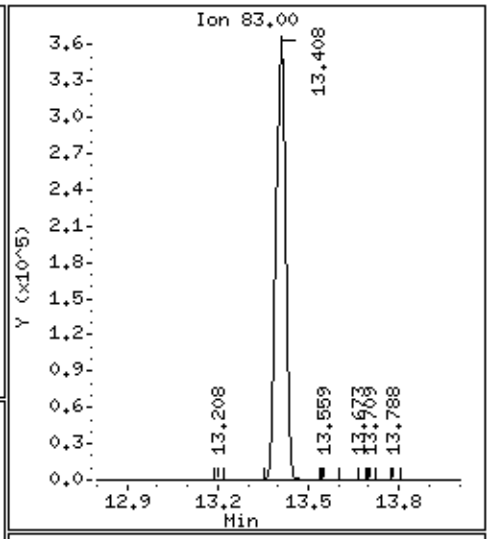
Concentration: 212.26 NG

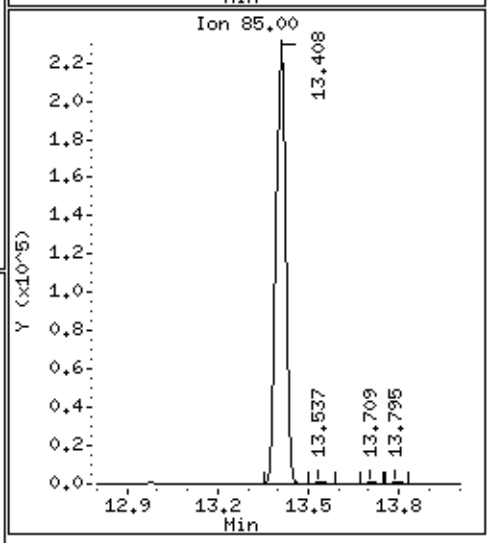












Data File: /chem/msd18.i/03Feb2016.b/18020304.d

Date : 03-FEB-2016 11:43

Client ID: LCS

Instrument: msd18.i

Sample Info: ;VI VOC+PAH LCS;LCS

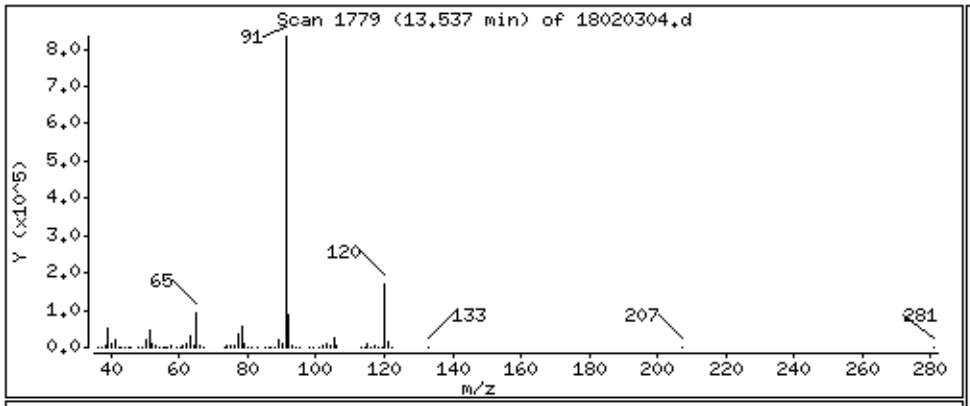
Operator: LA

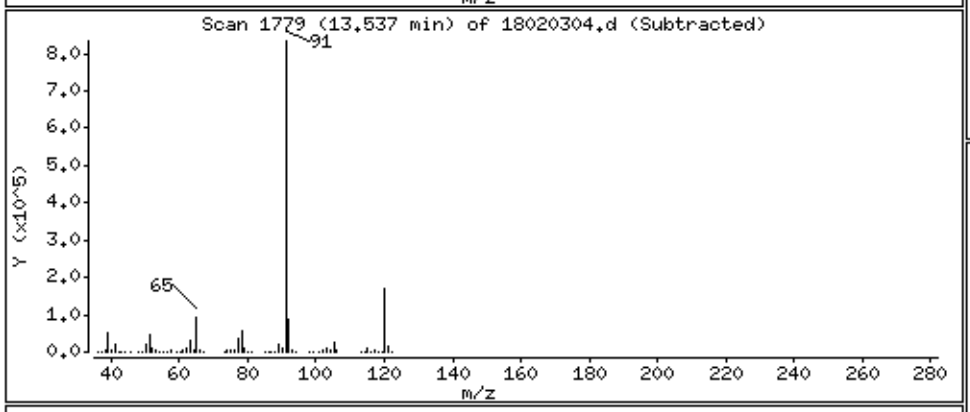
Column phase: RTx-624

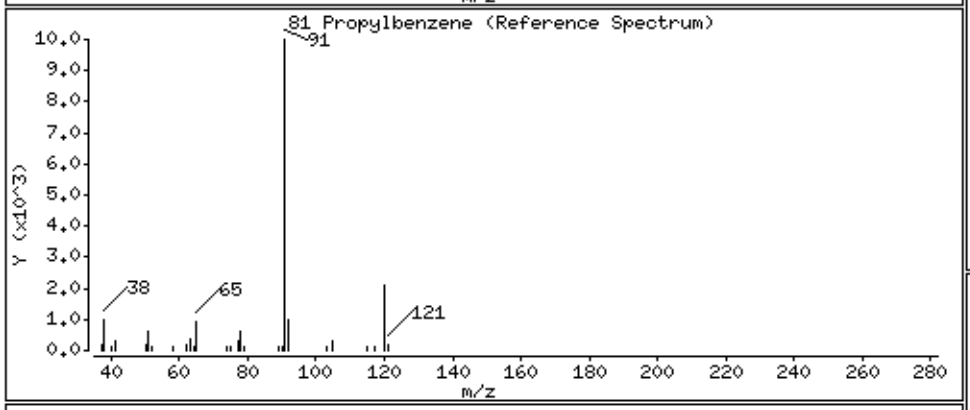
Column diameter: 0.53

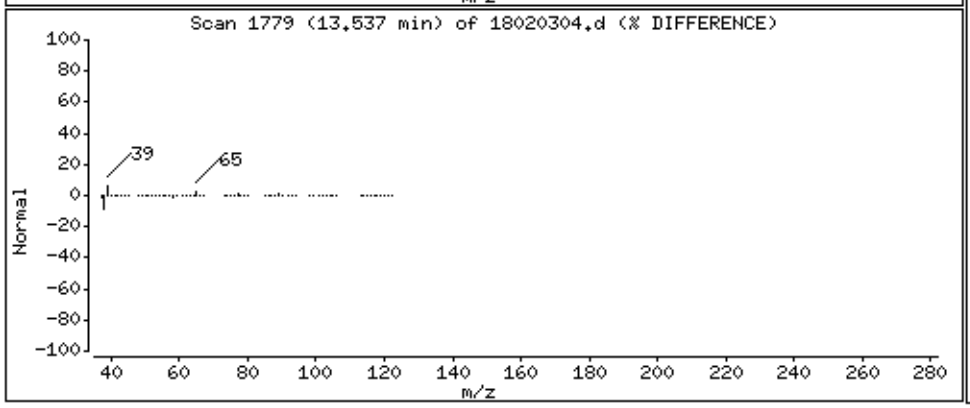
81 Propylbenzene

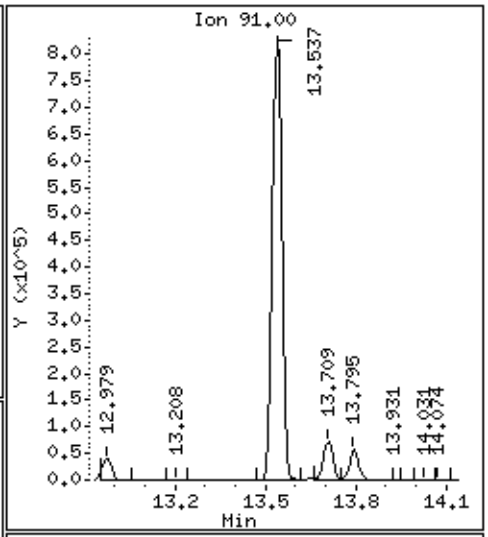
Concentration: 144.86 NG

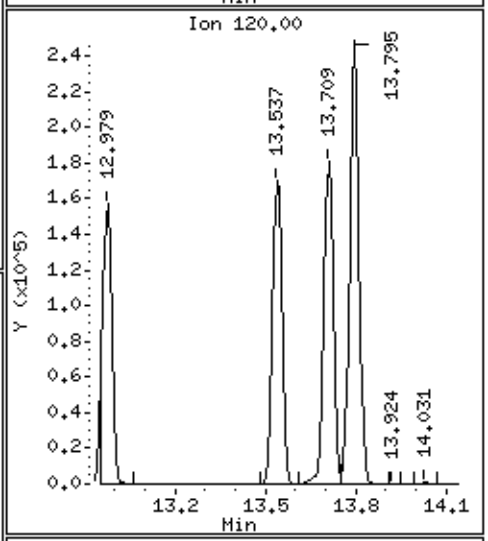


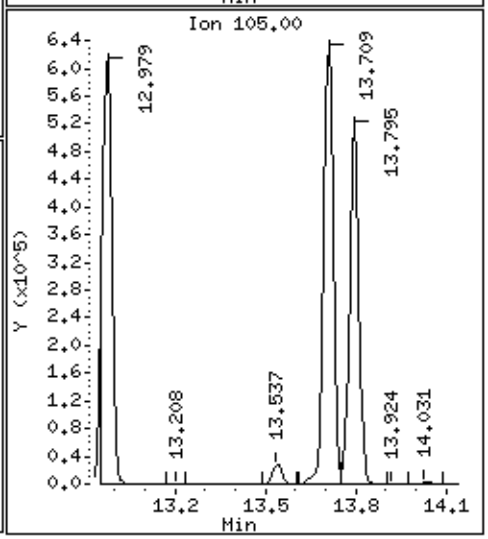












Data File: /chem/msd18.i/03Feb2016.b/18020304.d

Date : 03-FEB-2016 11:43

Client ID: LCS

Instrument: msd18.i

Sample Info: ;VI VOC+PAH LCS;LCS

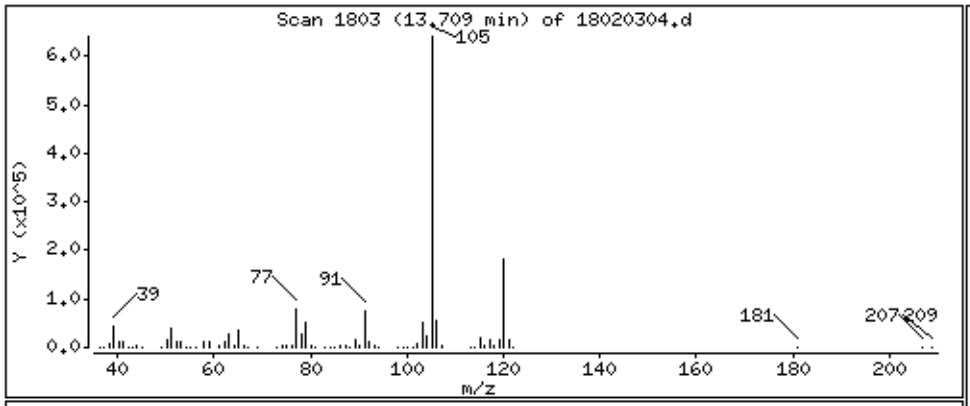
Operator: LA

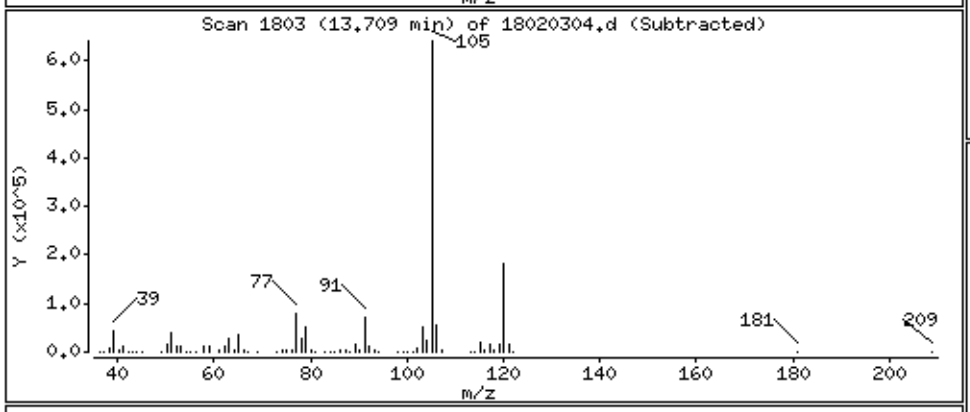
Column phase: RTx-624

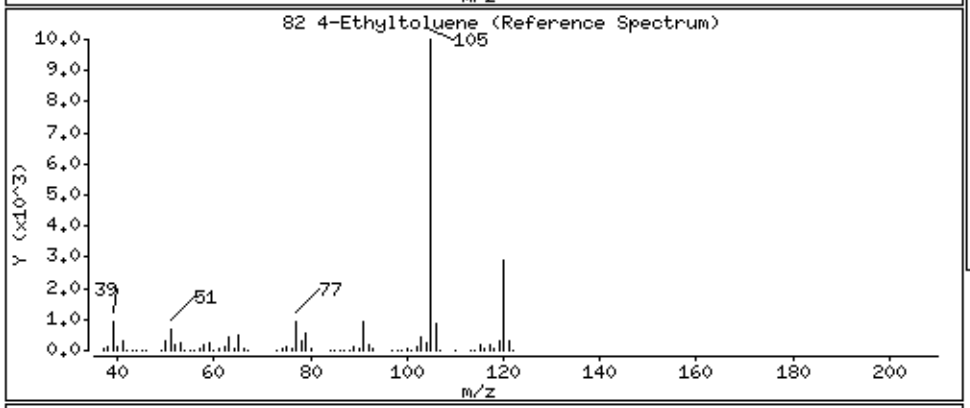
Column diameter: 0.53

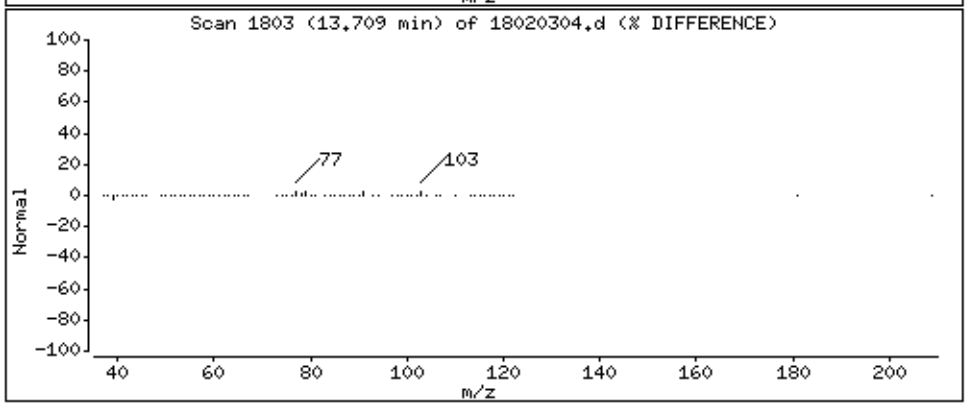
82 4-Ethyltoluene

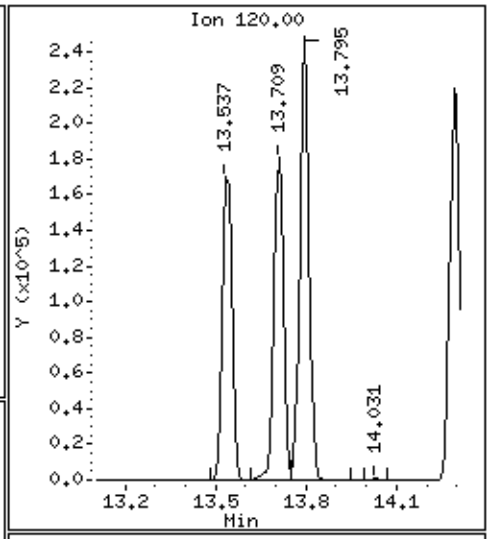
Concentration: 129.88 NG

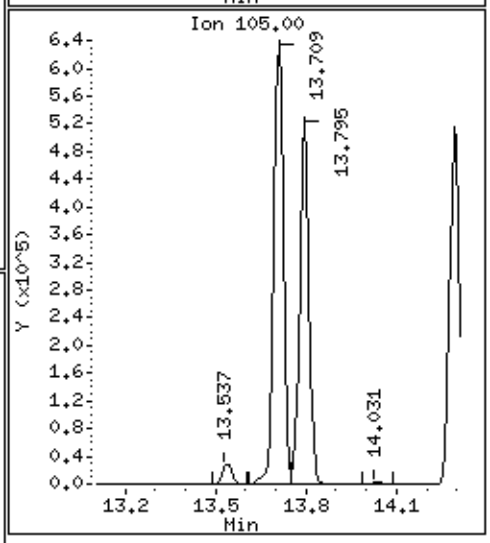












Data File: /chem/msd18.i/03Feb2016.b/18020304.d

Date : 03-FEB-2016 11:43

Client ID: LCS

Instrument: msd18.i

Sample Info: ;VI VOC+PAH LCS;LCS

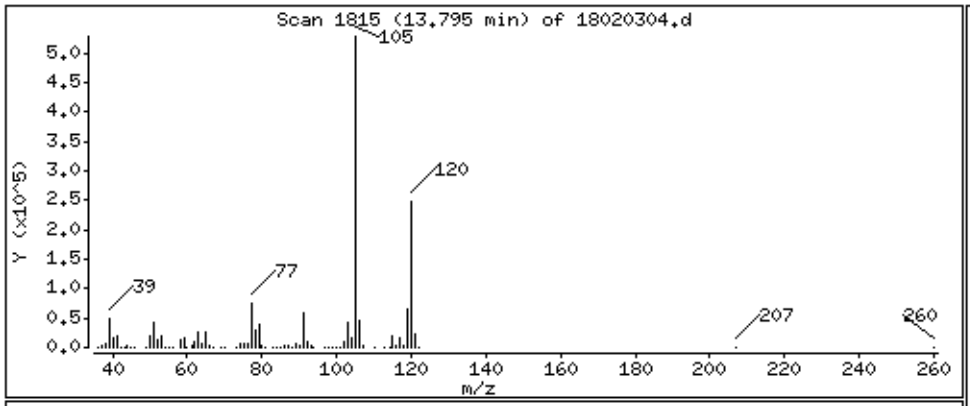
Operator: LA

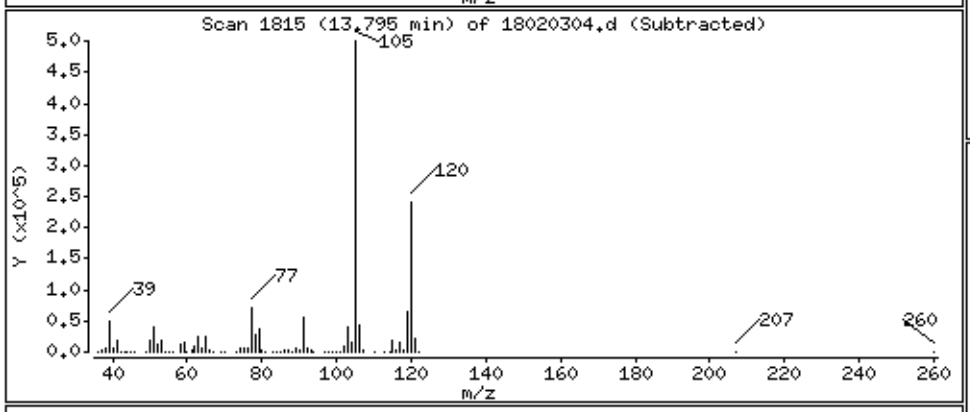
Column phase: RTx-624

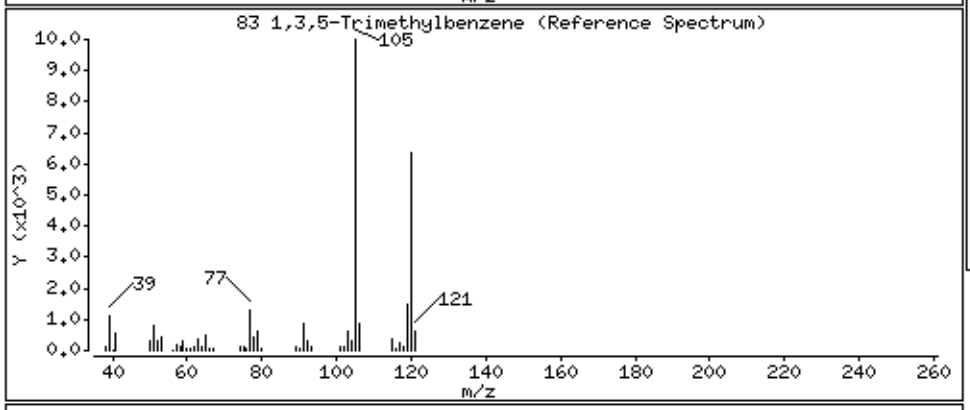
Column diameter: 0.53

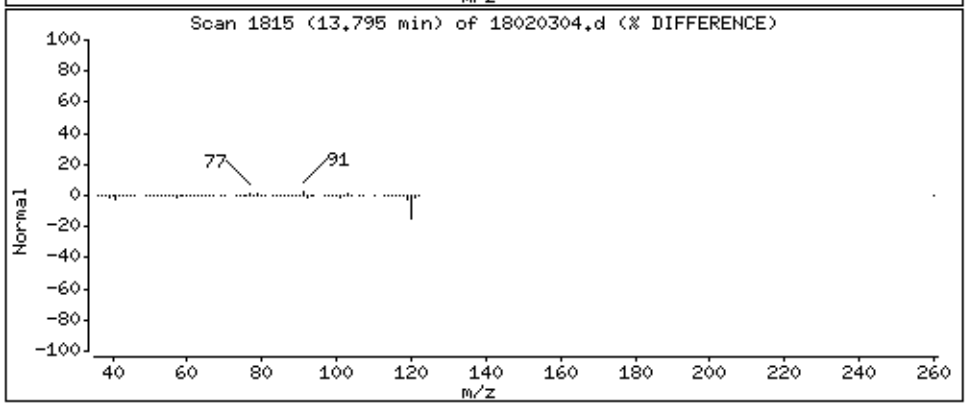
83 1,3,5-Trimethylbenzene

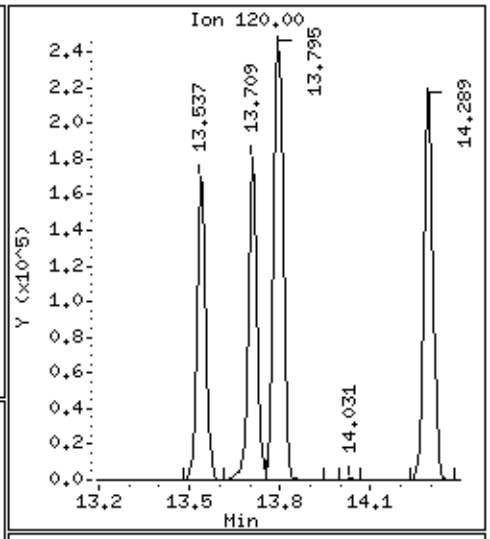
Concentration: 127.17 NG

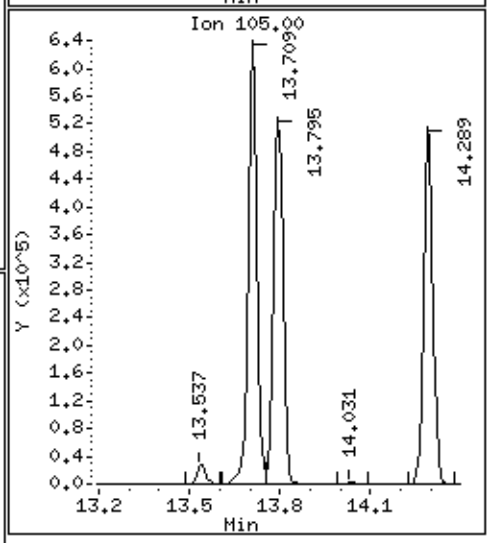












Data File: /chem/msd18.i/03Feb2016.b/18020304.d

Date : 03-FEB-2016 11:43

Client ID: LCS

Instrument: msd18.i

Sample Info: ;VI VOC+PAH LCS;LCS

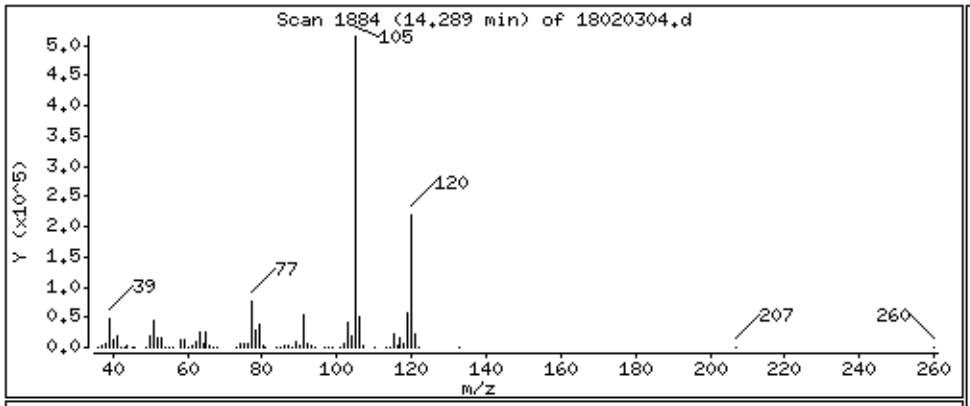
Operator: LA

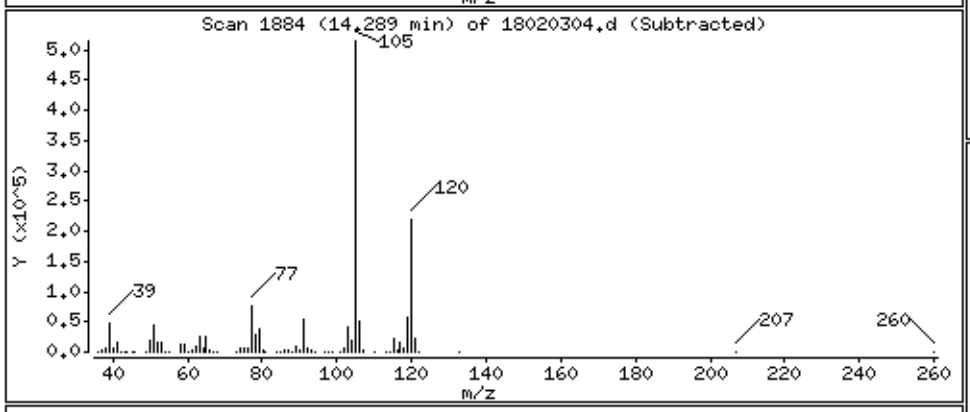
Column phase: RTx-624

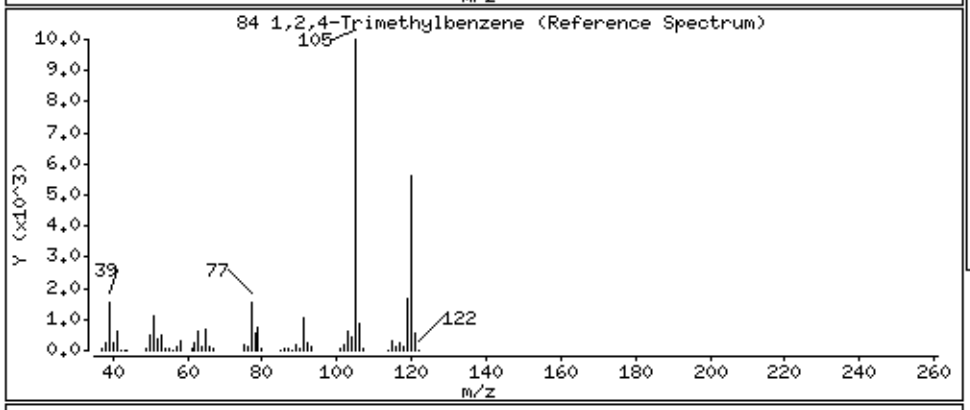
Column diameter: 0.53

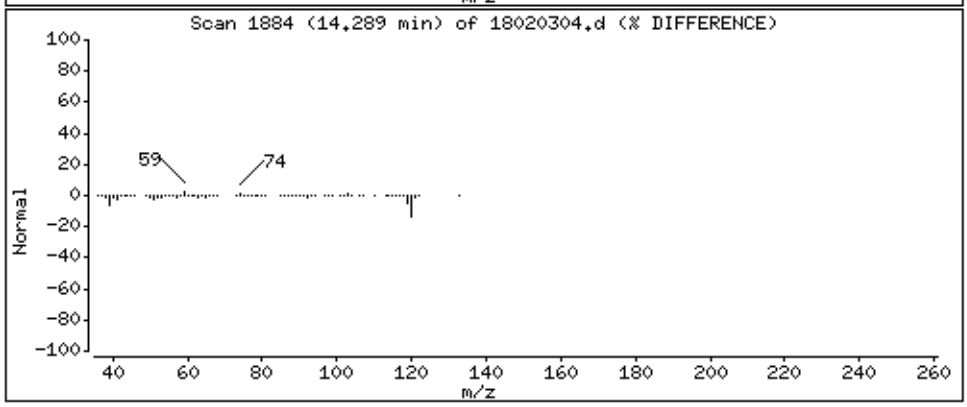
84 1,2,4-Trimethylbenzene

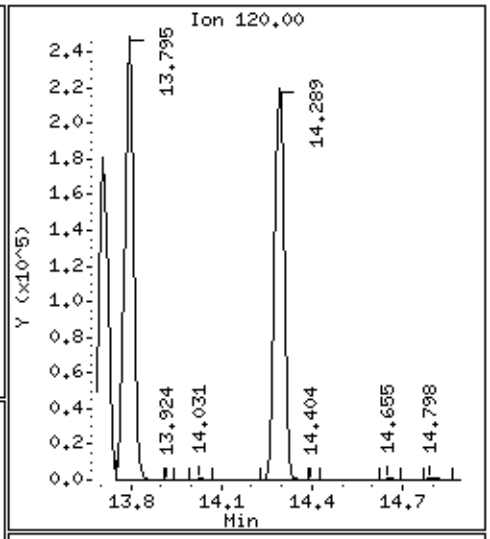
Concentration: 117.97 NG

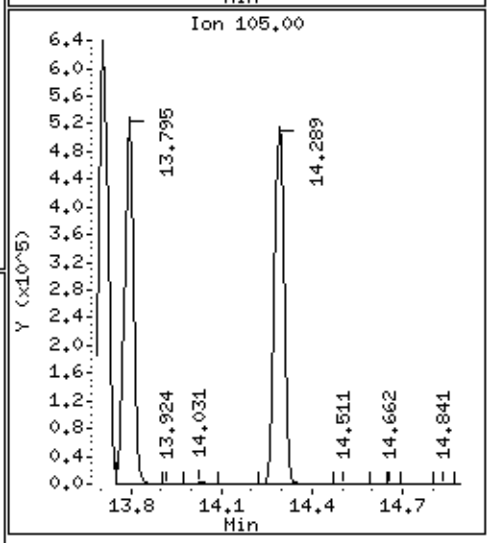












Data File: /chem/msd18.i/03Feb2016.b/18020304.d

Date : 03-FEB-2016 11:43

Client ID: LCS

Instrument: msd18.i

Sample Info: ;VI VOC+PAH LCS;LCS

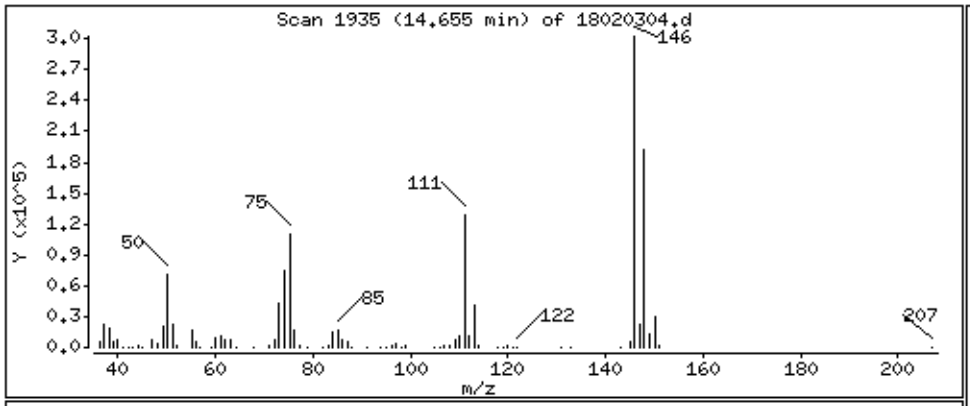
Operator: LA

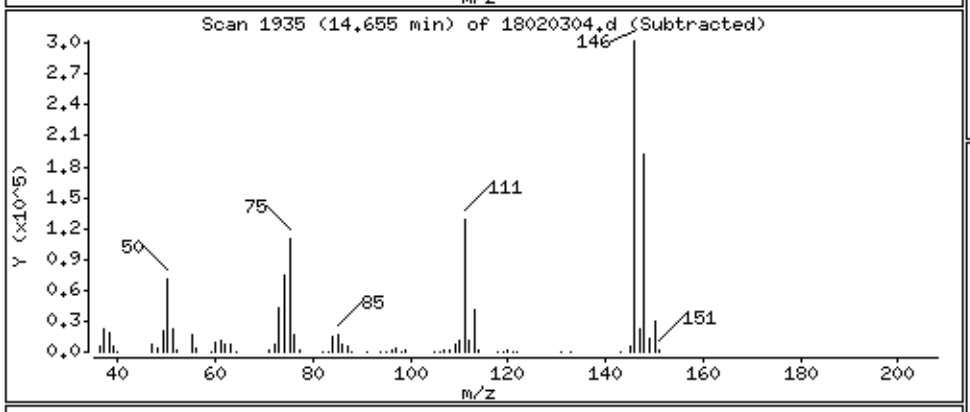
Column phase: RTx-624

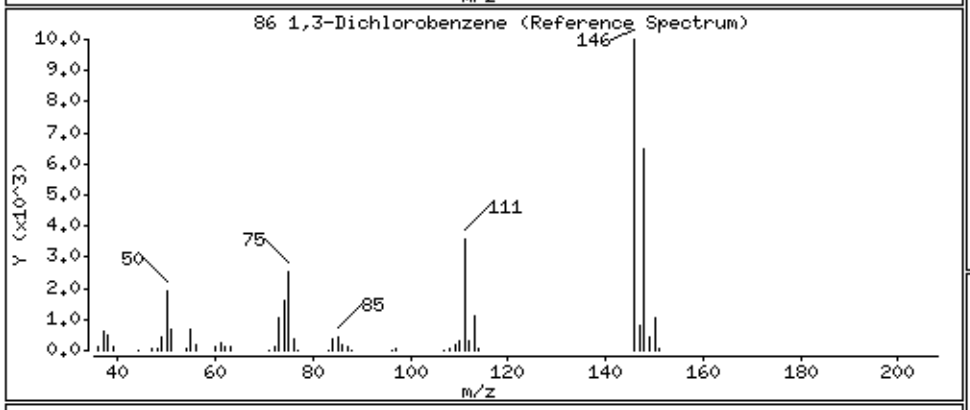
Column diameter: 0.53

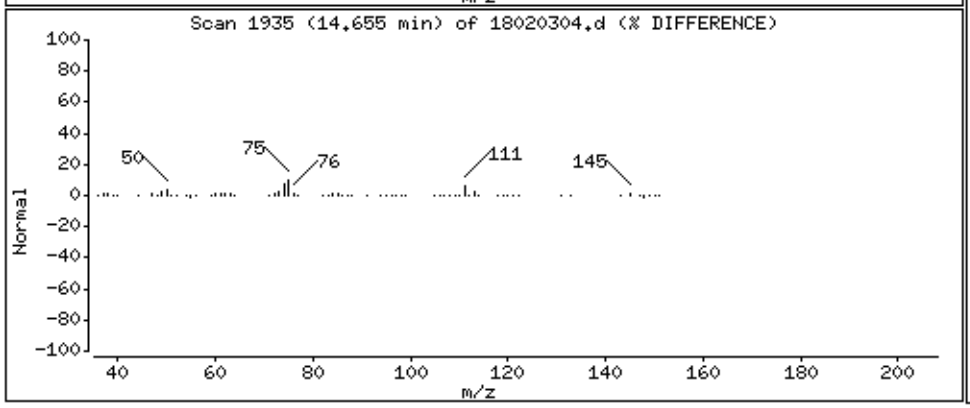
86 1,3-Dichlorobenzene

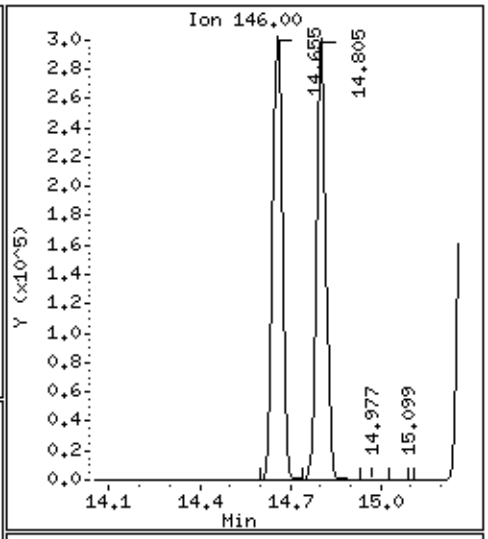
Concentration: 132.91 NG

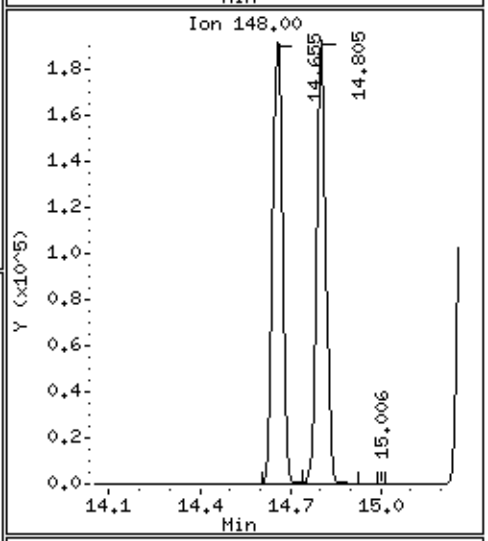


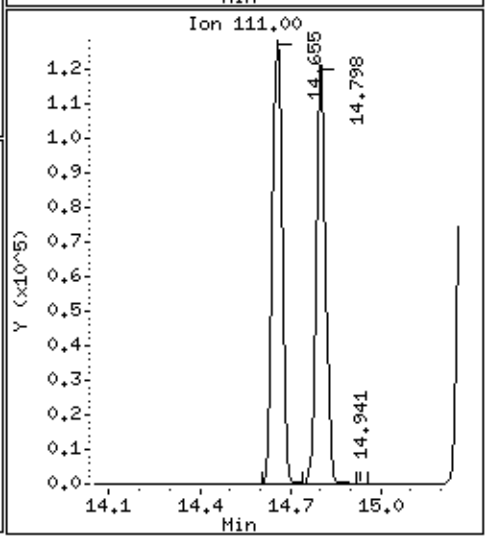












Data File: /chem/msd18.i/03Feb2016.b/18020304.d

Date : 03-FEB-2016 11:43

Client ID: LCS

Instrument: msd18.i

Sample Info: ;VI VOC+PAH LCS;LCS

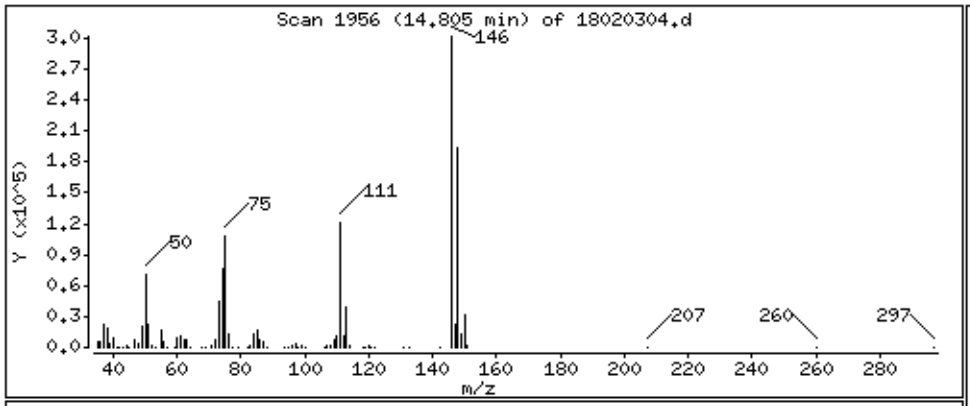
Operator: LA

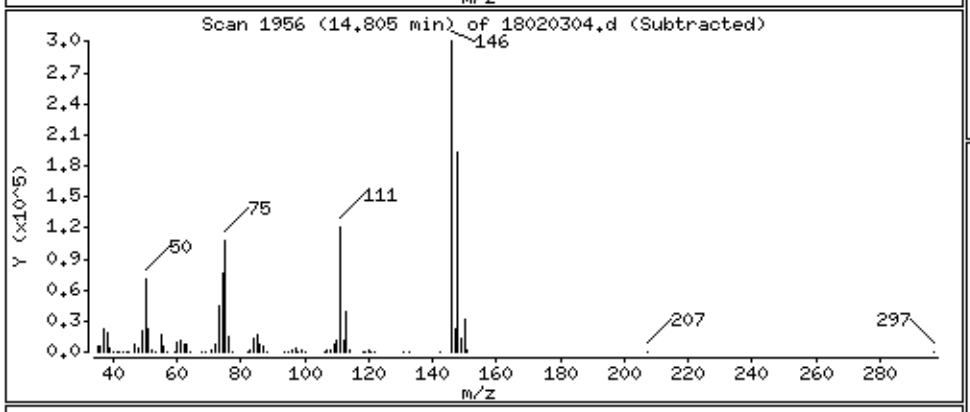
Column phase: RTx-624

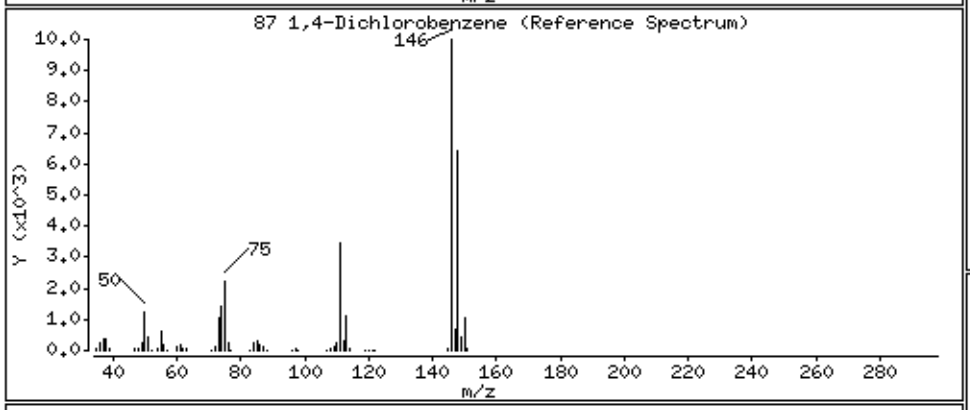
Column diameter: 0.53

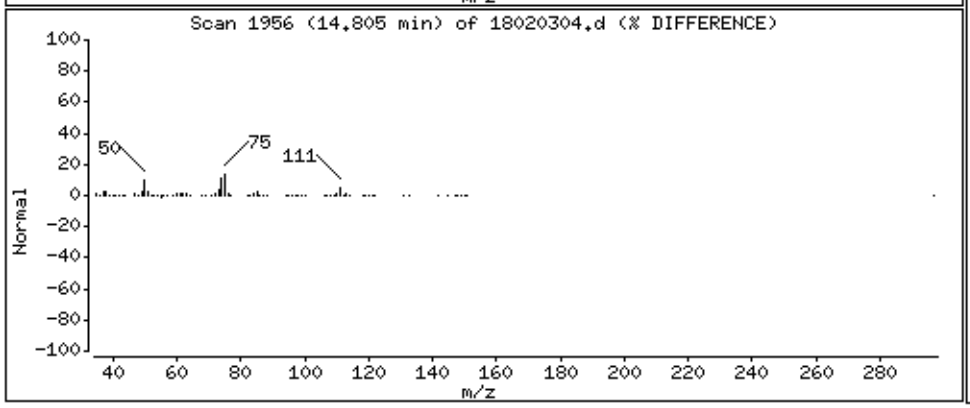
87 1,4-Dichlorobenzene

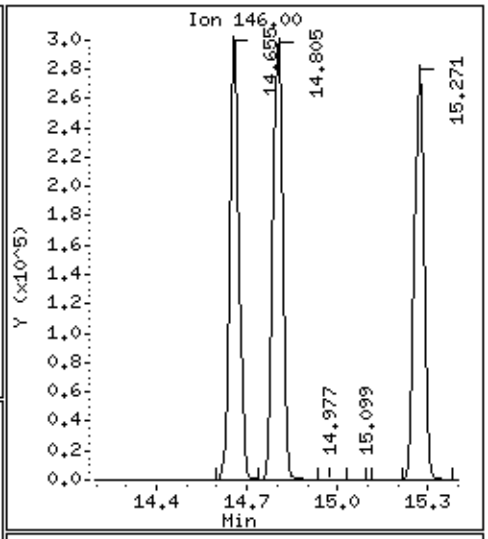
Concentration: 131.74 NG

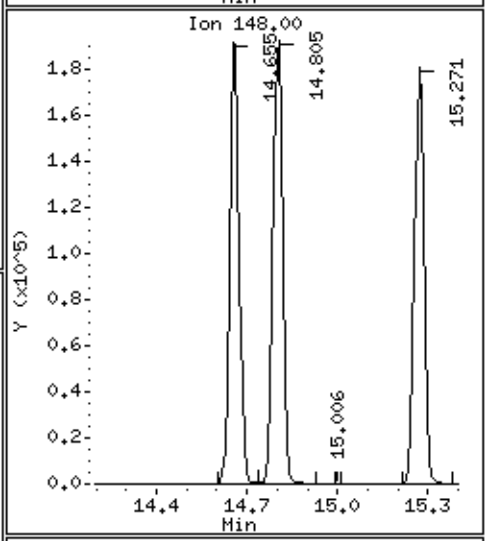


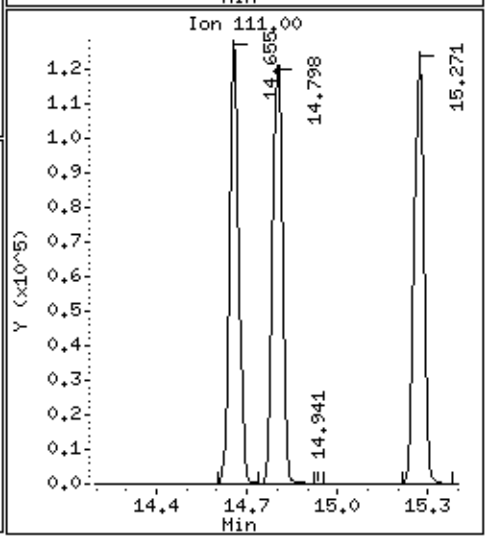












Data File: /chem/msd18.i/03Feb2016.b/18020304.d

Date : 03-FEB-2016 11:43

Client ID: LCS

Instrument: msd18.i

Sample Info: ;VI VOC+PAH LCS;LCS

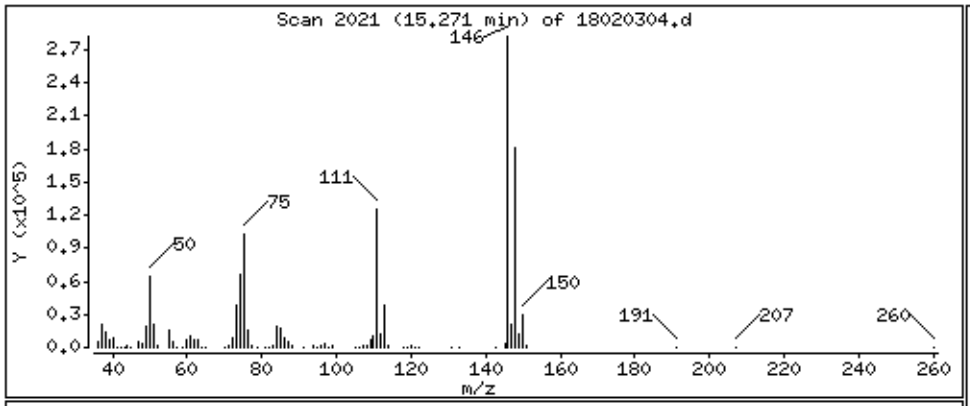
Operator: LA

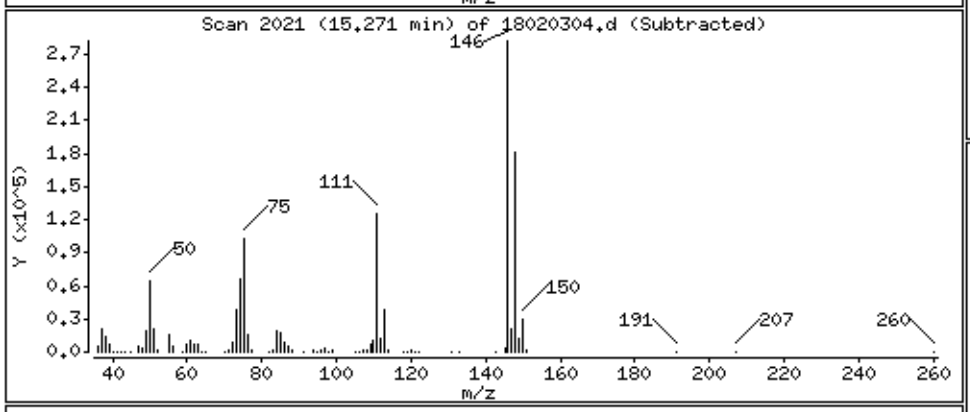
Column phase: RTx-624

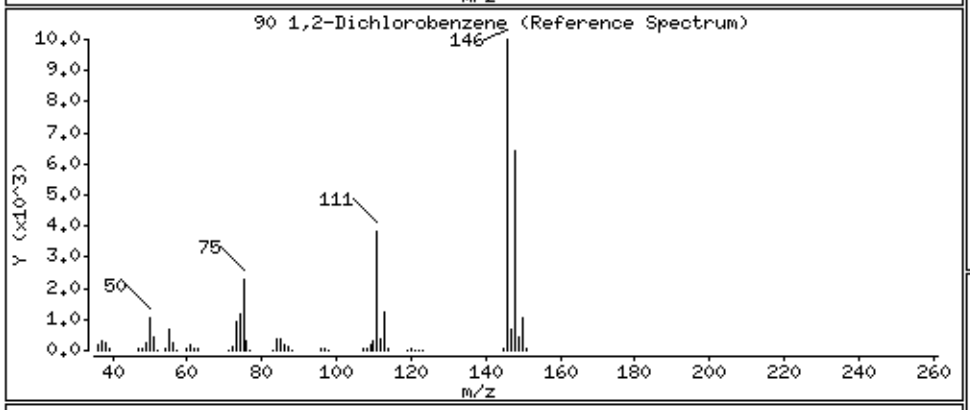
Column diameter: 0.53

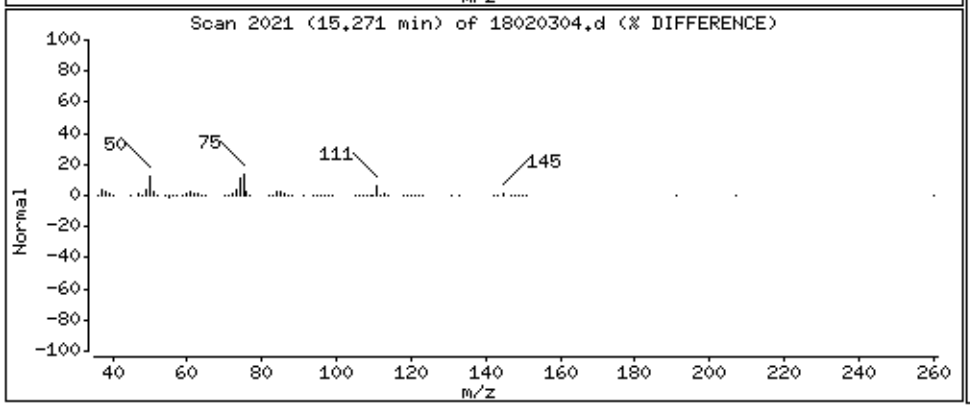
90 1,2-Dichlorobenzene

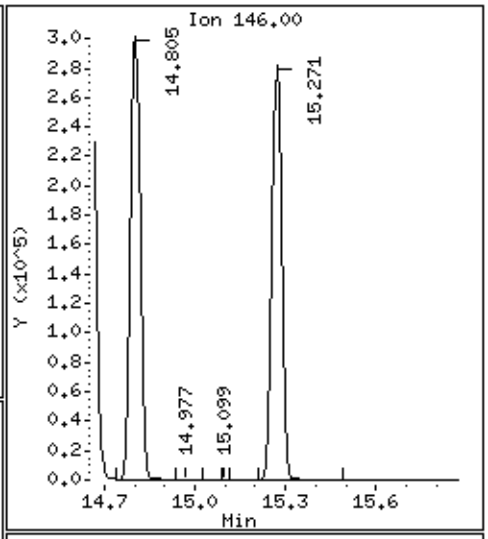
Concentration: 128.69 NG

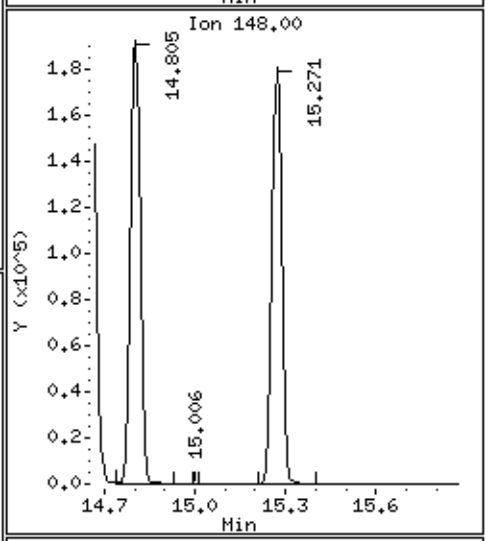


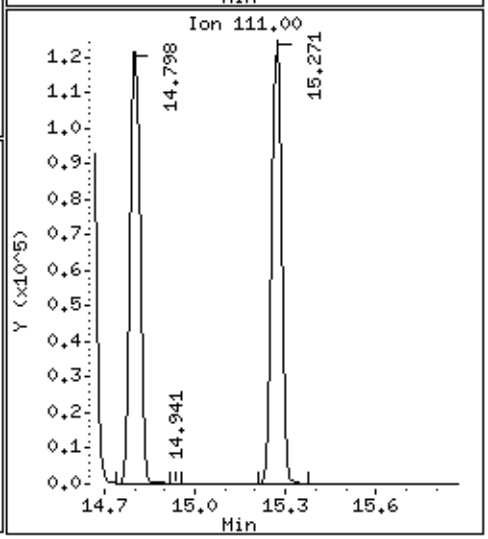












Data File: /chem/msd18.i/03Feb2016.b/18020304.d

Date : 03-FEB-2016 11:43

Client ID: LCS

Instrument: msd18.i

Sample Info: ;VI VOC+PAH LCS;LCS

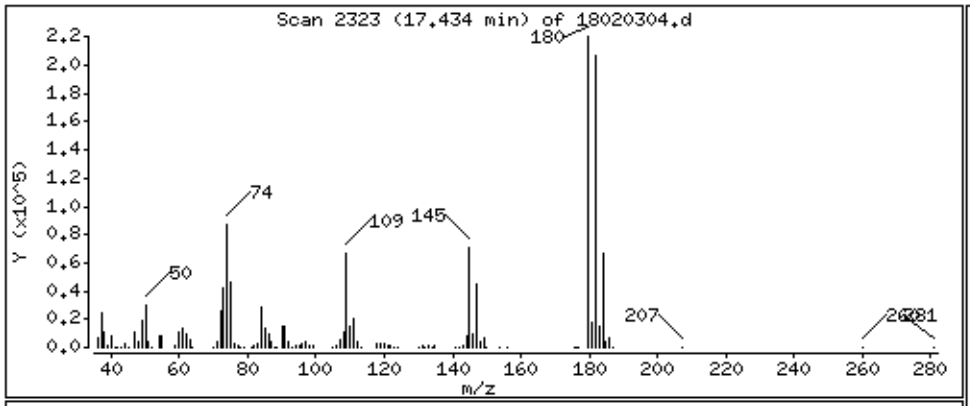
Operator: LA

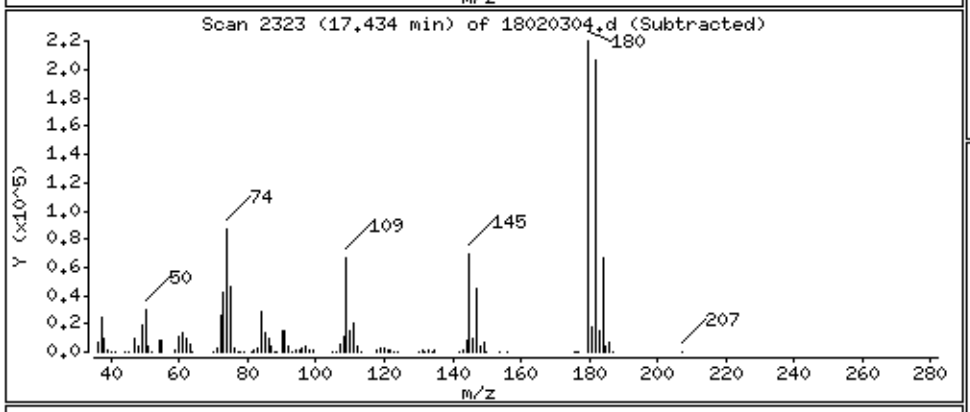
Column phase: RTx-624

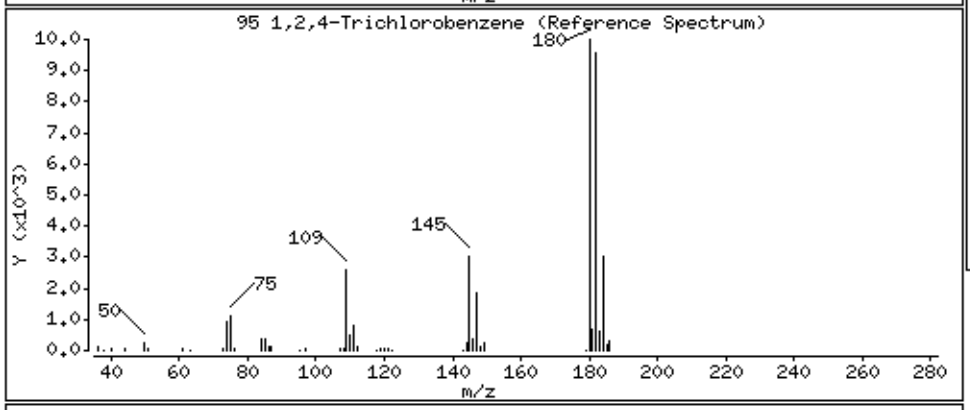
Column diameter: 0.53

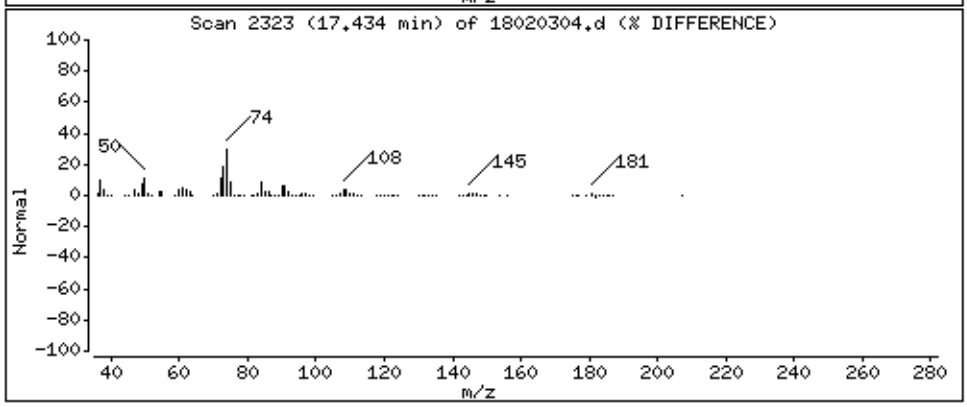
95 1,2,4-Trichlorobenzene

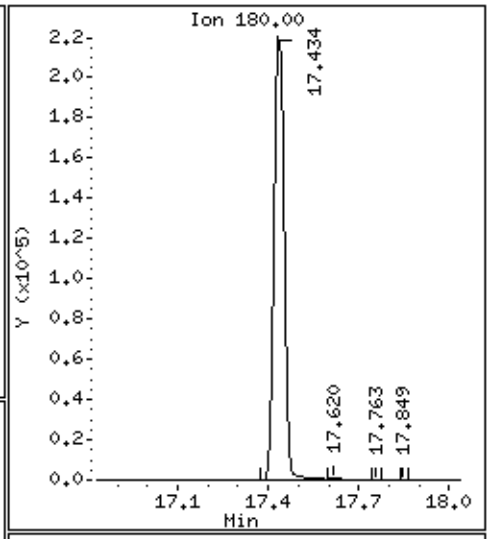
Concentration: 142.46 NG

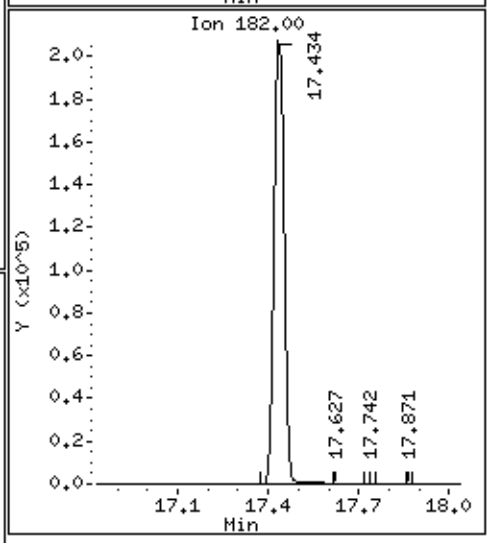












Data File: /chem/msd18.i/03Feb2016.b/18020304.d

Date : 03-FEB-2016 11:43

Client ID: LCS

Instrument: msd18.i

Sample Info: ;VI VOC+PAH LCS;LCS

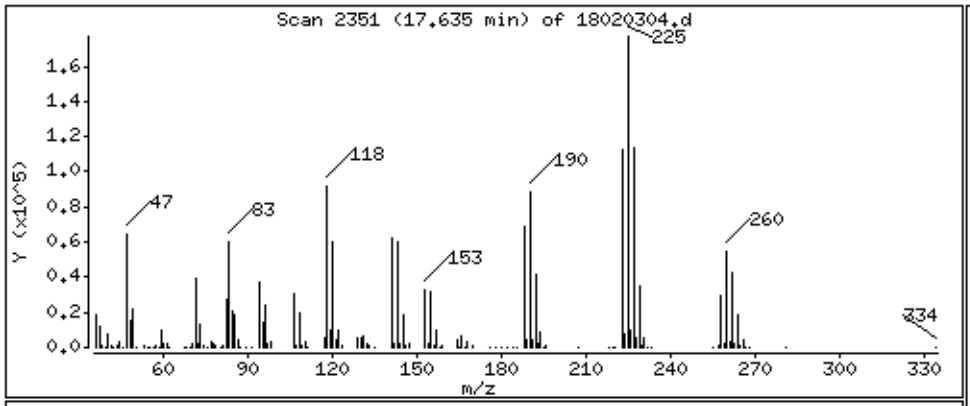
Operator: LA

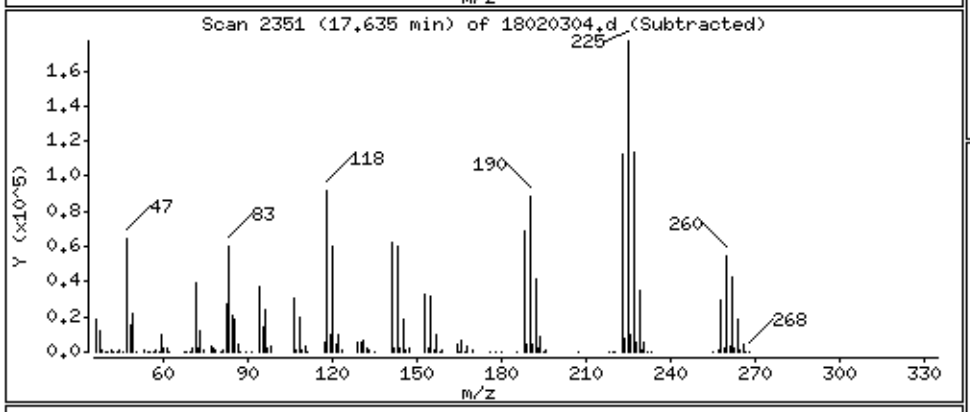
Column phase: RTx-624

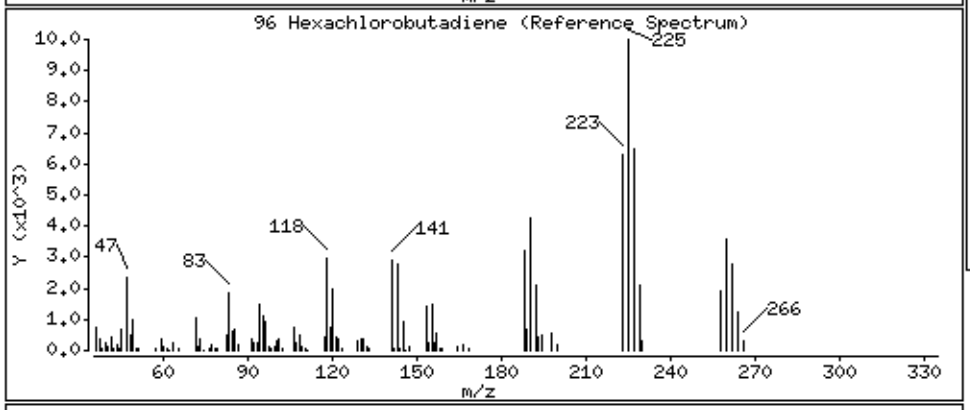
Column diameter: 0.53

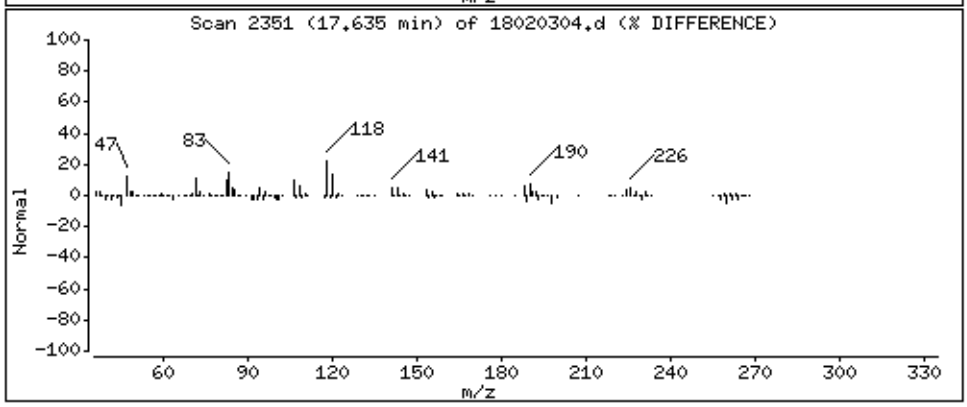
96 Hexachlorobutadiene

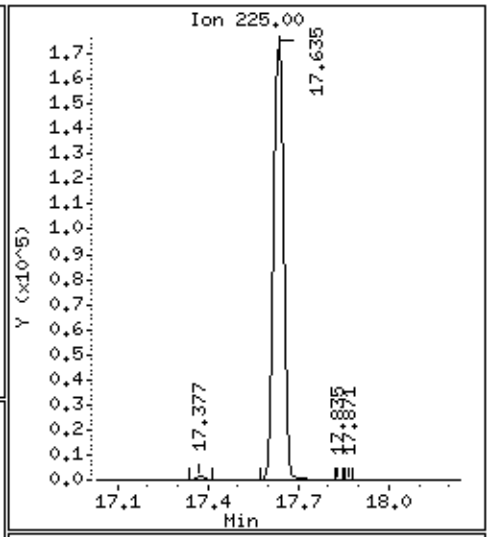
Concentration: 181.12 NG

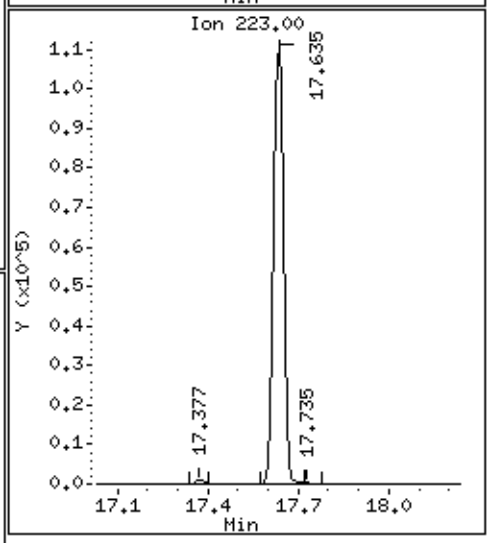












Data File: /chem/msd18.i/03Feb2016.b/18020304.d

Date : 03-FEB-2016 11:43

Client ID: LCS

Instrument: msd18.i

Sample Info: ;VI VOC+PAH LCS;LCS

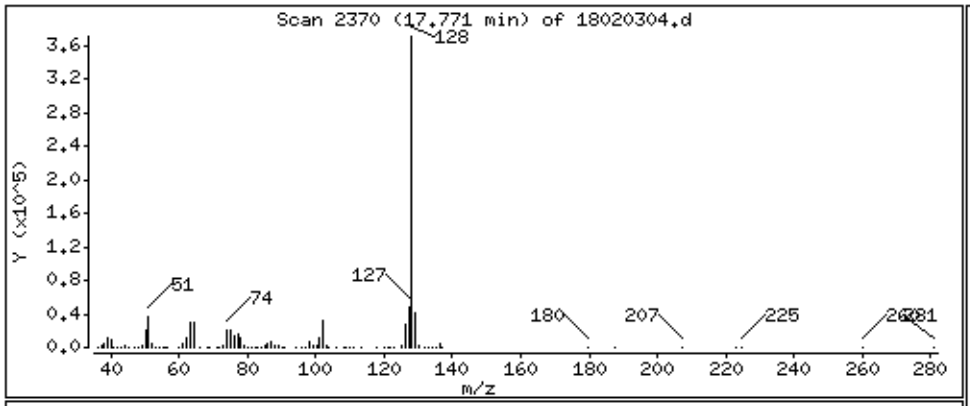
Operator: LA

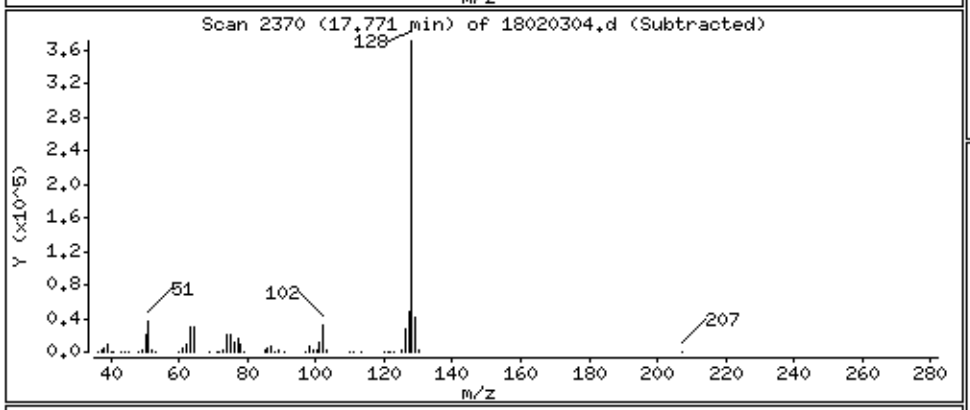
Column phase: RTx-624

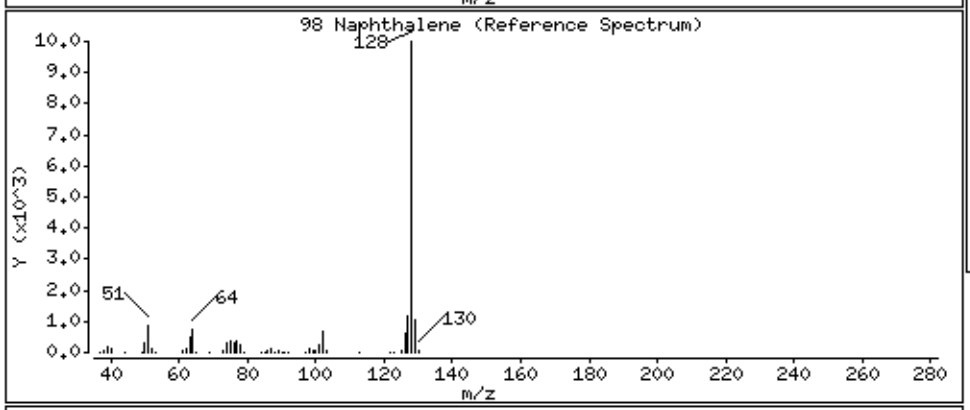
Column diameter: 0.53

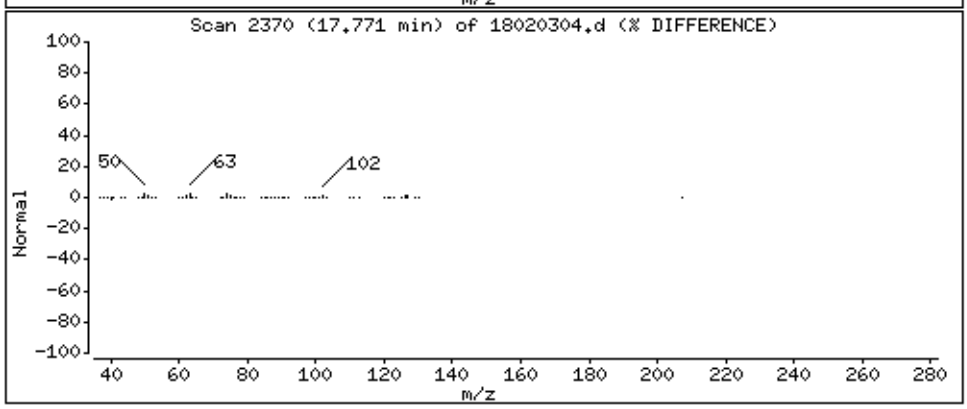
98 Naphthalene

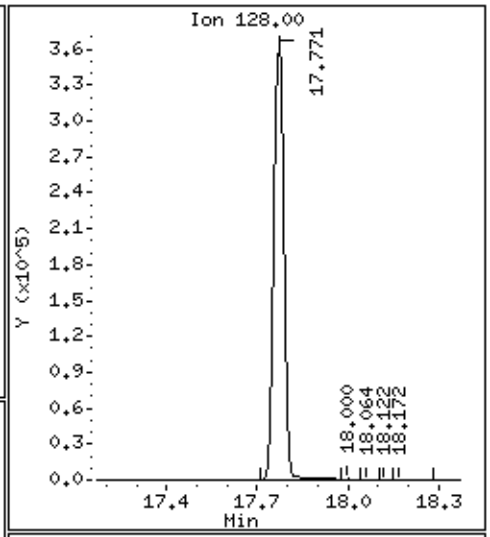
Concentration: 54.848 NG

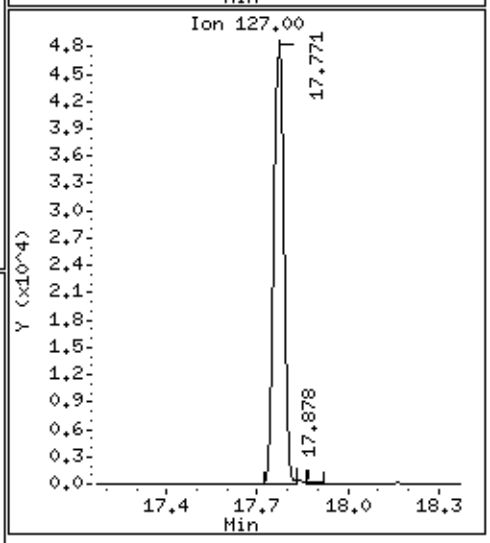












Data File: /chem/msd18.i/03Feb2016.b/18020304.d

Date : 03-FEB-2016 11:43

Client ID: LCS

Instrument: msd18.i

Sample Info: ;VI VOC+PAH LCS;LCS

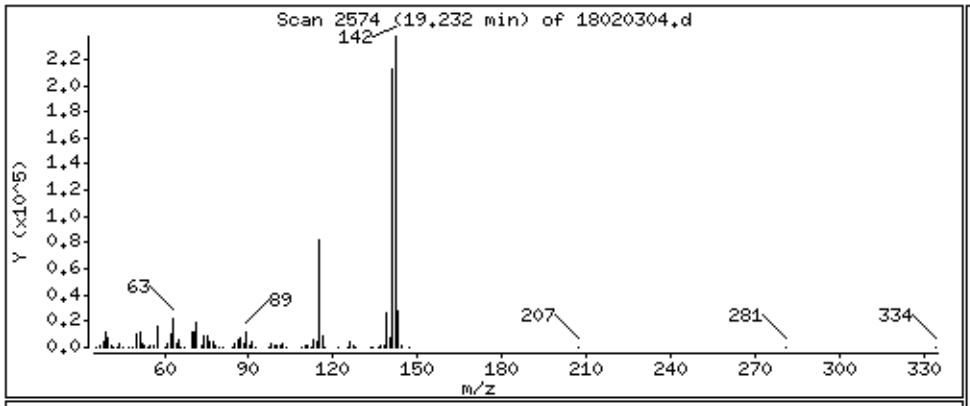
Operator: LA

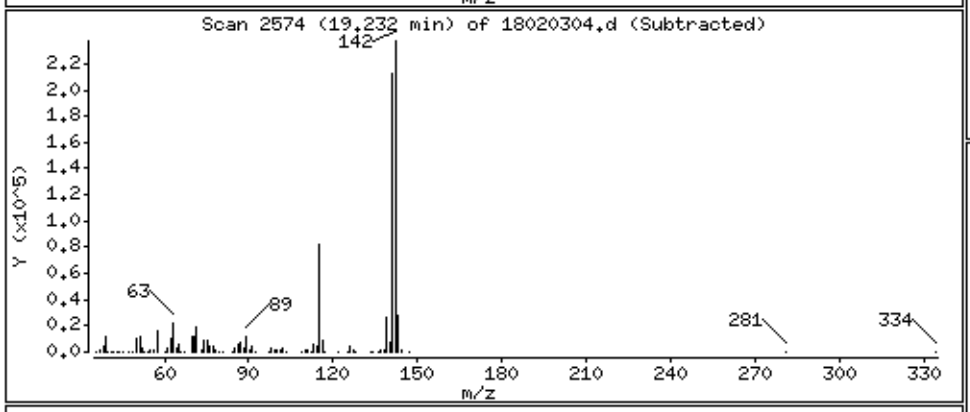
Column phase: RTx-624

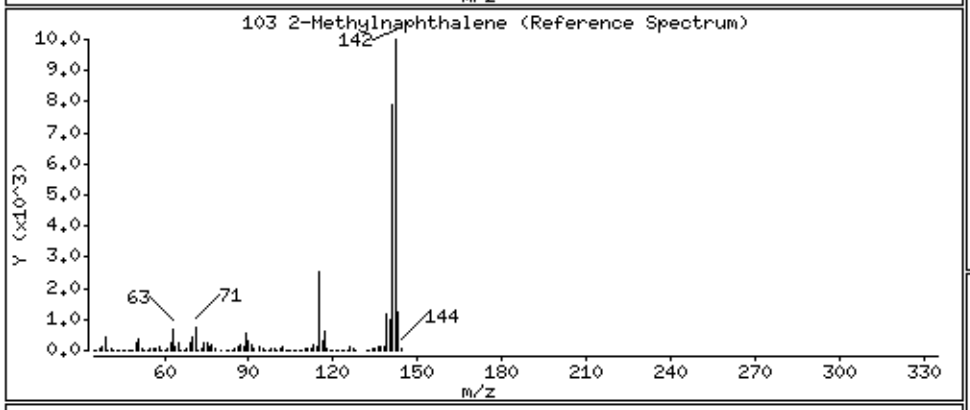
Column diameter: 0.53

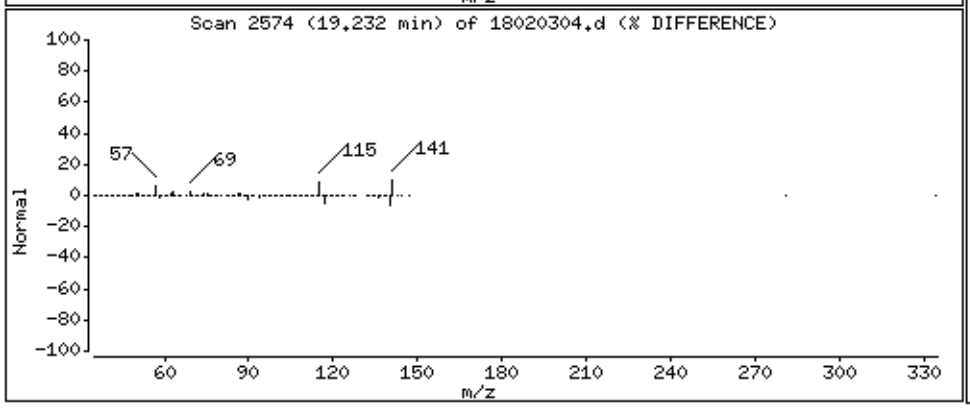
103 2-Methylnaphthalene

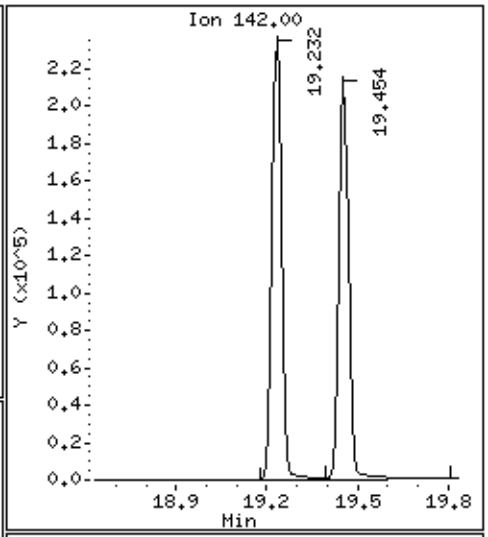
Concentration: 55.385 NG

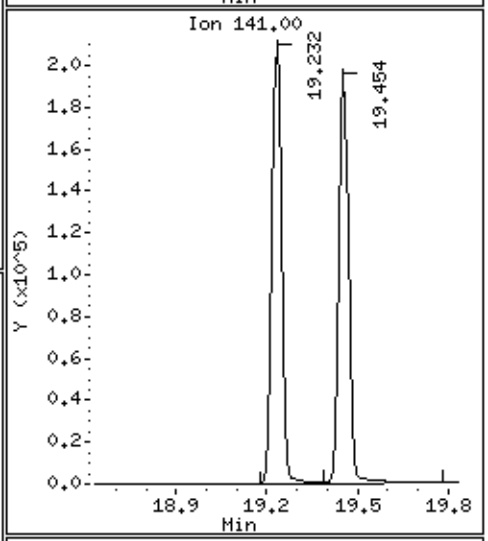


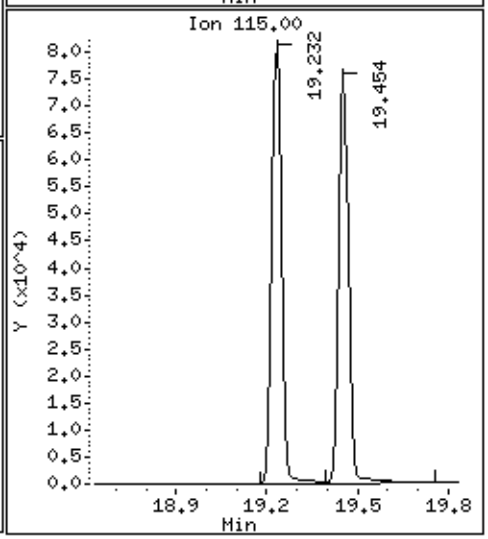












Data File: /chem/msd18.i/03Feb2016.b/18020304.d

Date : 03-FEB-2016 11:43

Client ID: LCS

Instrument: msd18.i

Sample Info: ;VI VOC+PAH LCS;LCS

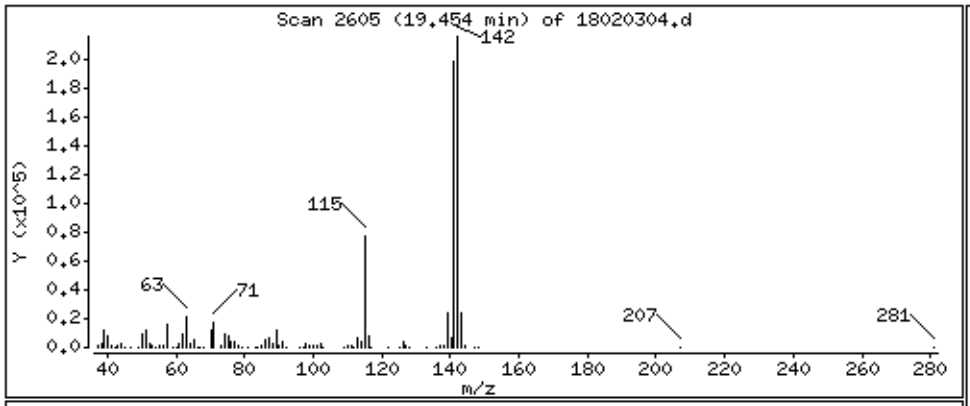
Operator: LA

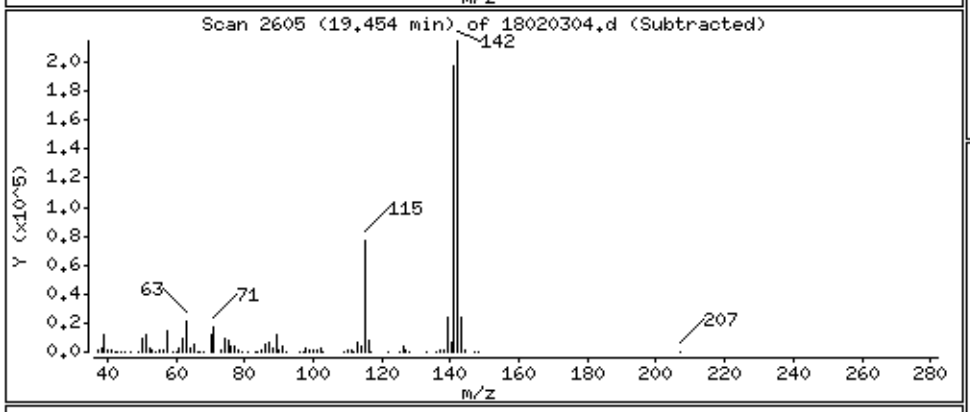
Column phase: RTx-624

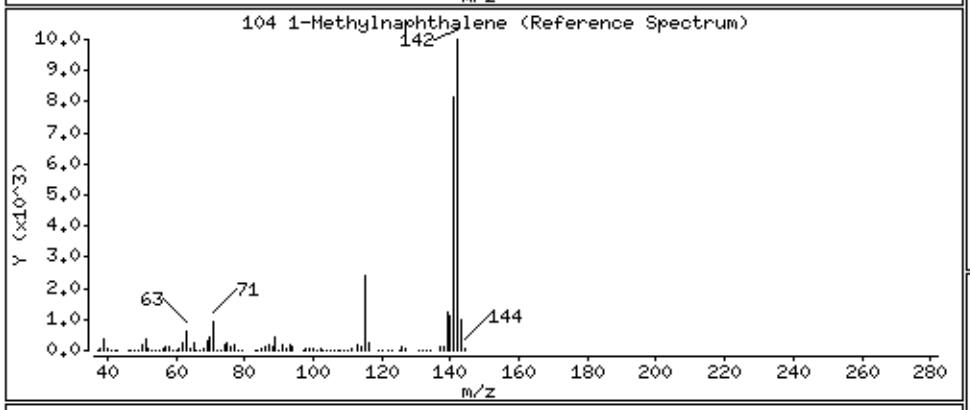
Column diameter: 0.53

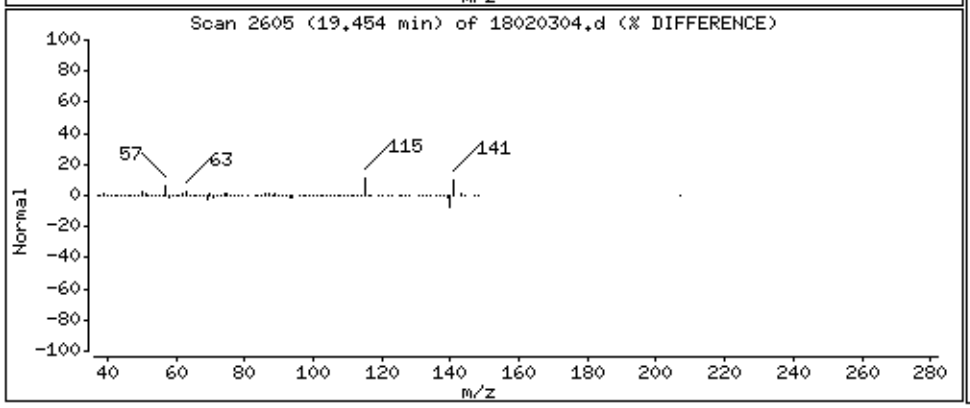
104 1-Methylnaphthalene

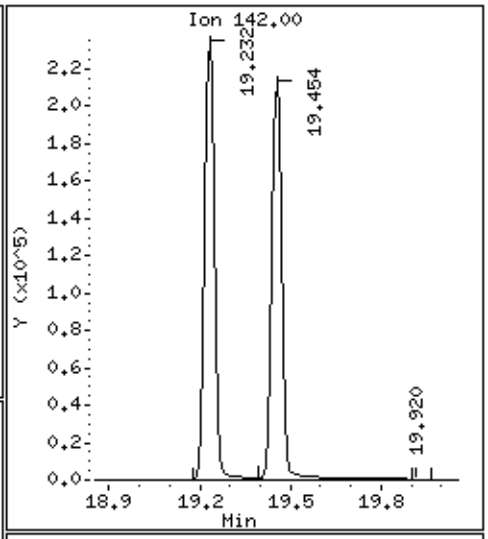
Concentration: 56.813 NG

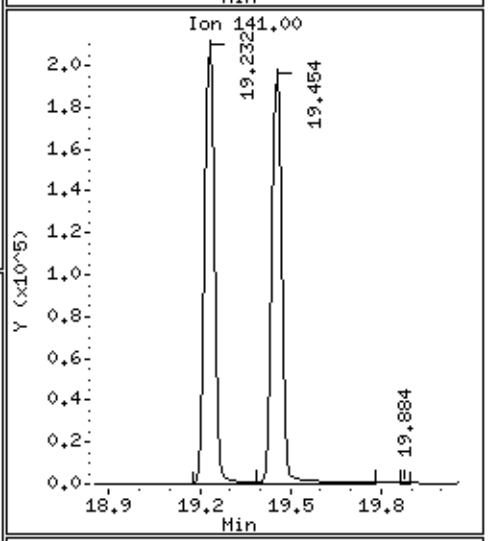


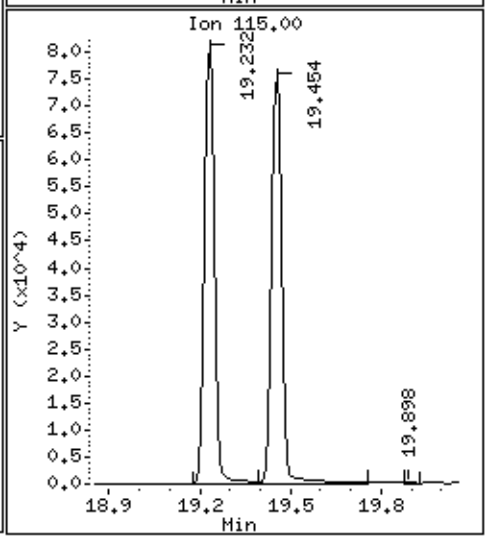












Data File: /chem/msd18.i/03Feb2016.b/18020304.d

Date : 03-FEB-2016 11:43

Client ID: LCS

Instrument: msd18.i

Sample Info: ;VI VOC+PAH LCS;LCS

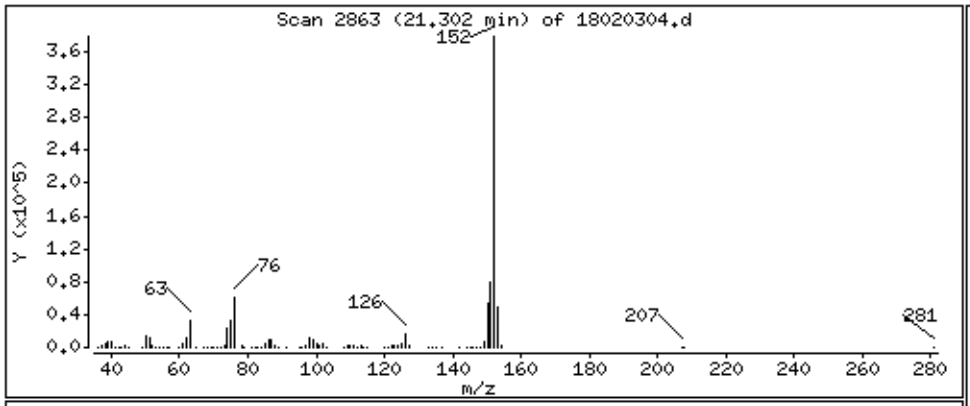
Operator: LA

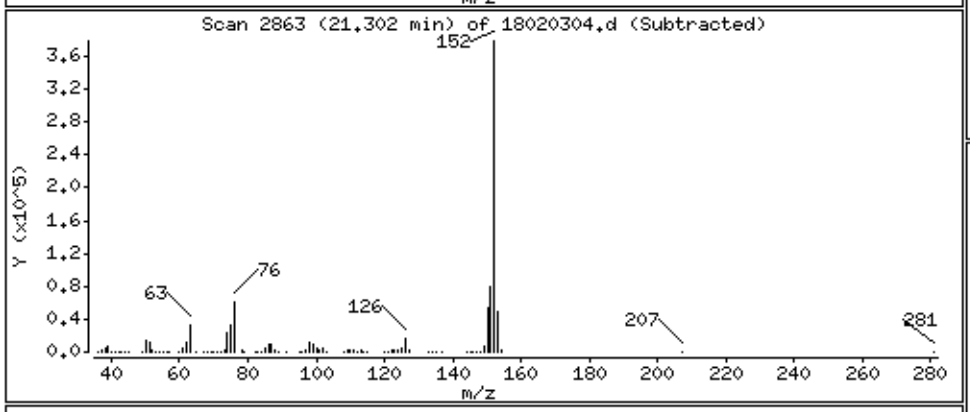
Column phase: RTx-624

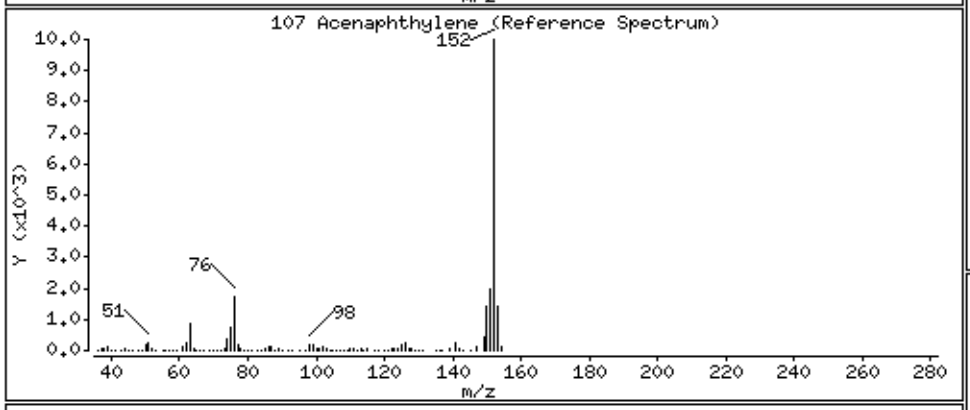
Column diameter: 0.53

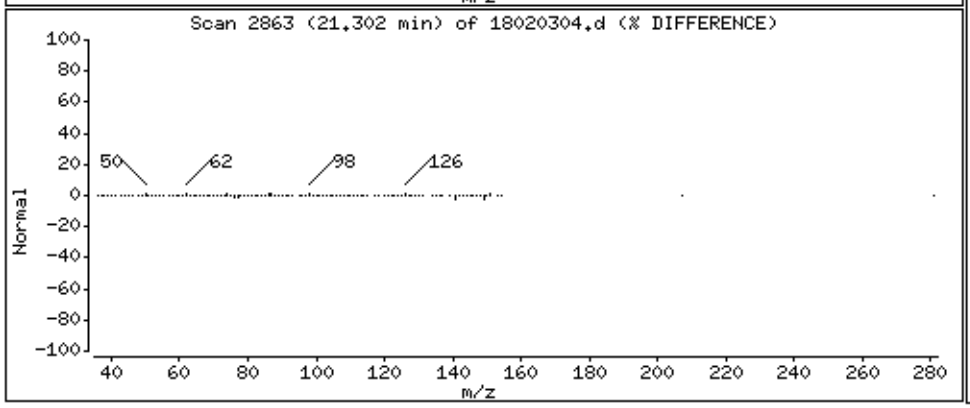
107 Acenaphthylene

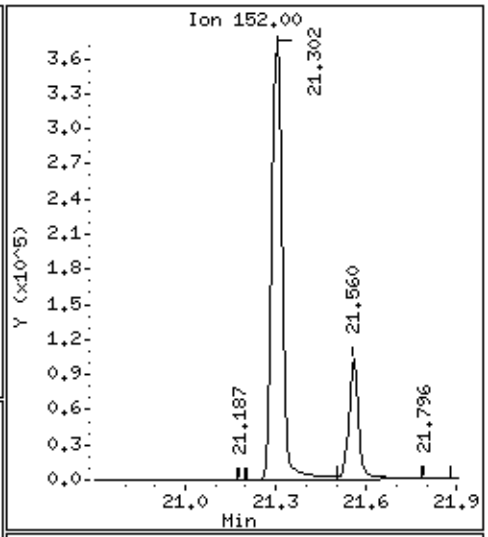
Concentration: 54.862 NG

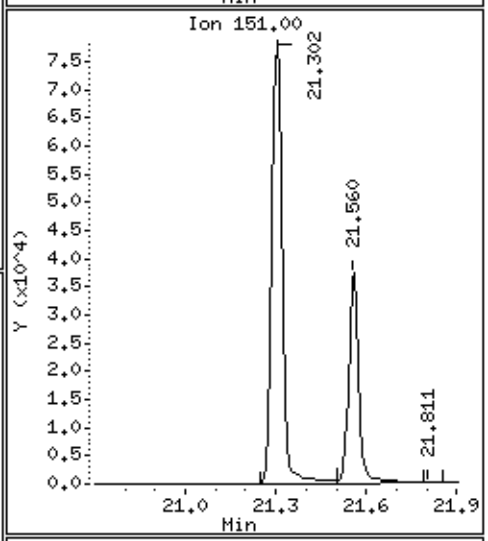


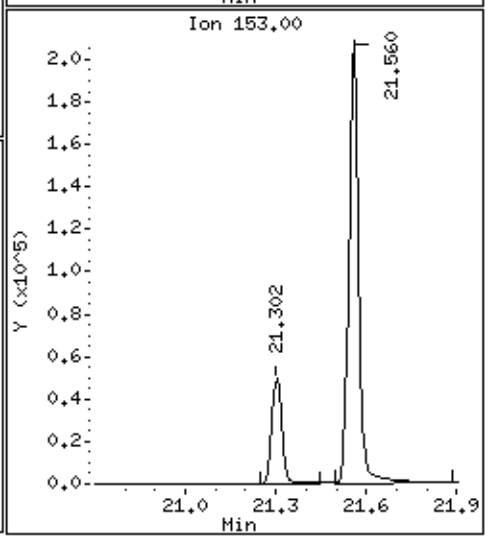












Data File: /chem/msd18.i/03Feb2016.b/18020304.d

Date : 03-FEB-2016 11:43

Client ID: LCS

Instrument: msd18.i

Sample Info: ;VI VOC+PAH LCS;LCS

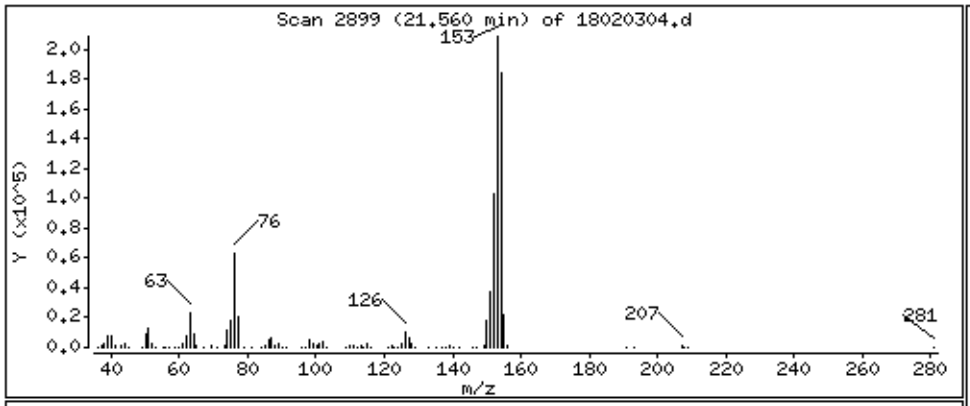
Operator: LA

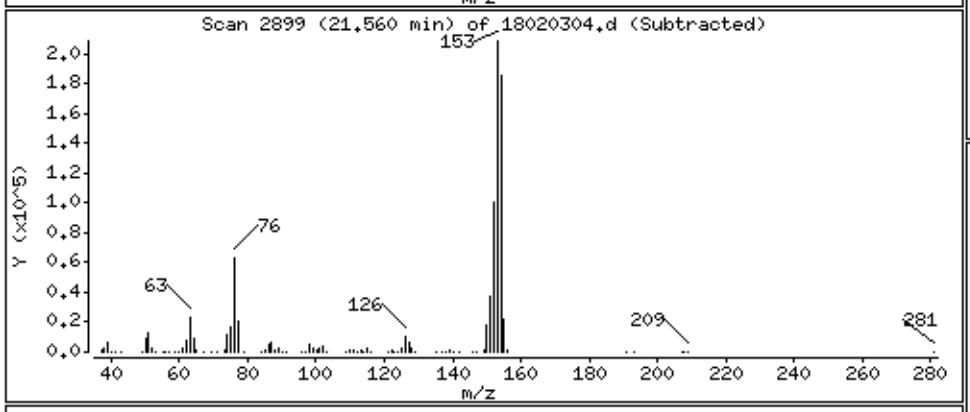
Column phase: RTx-624

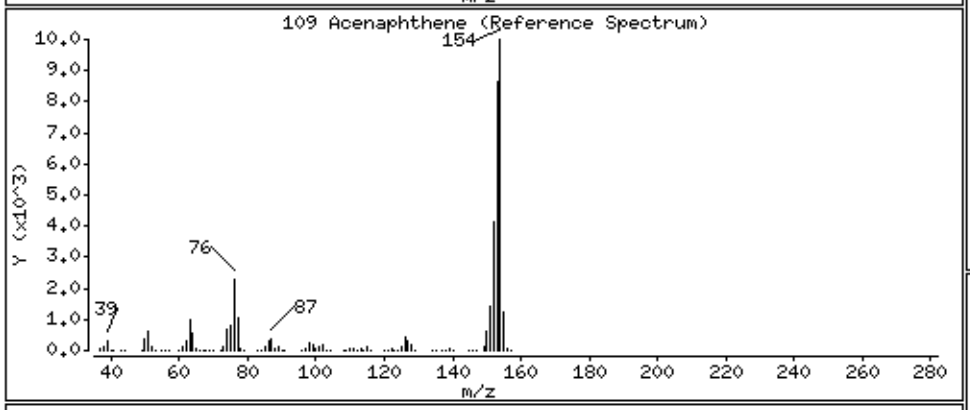
Column diameter: 0.53

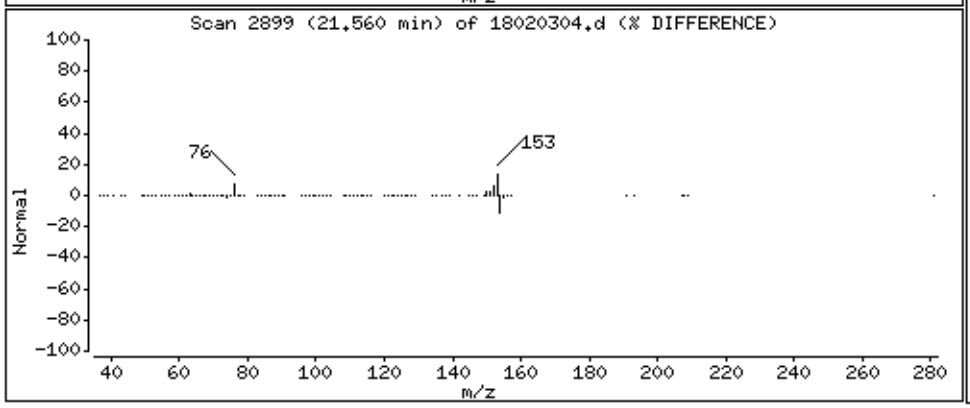
109 Acenaphthene

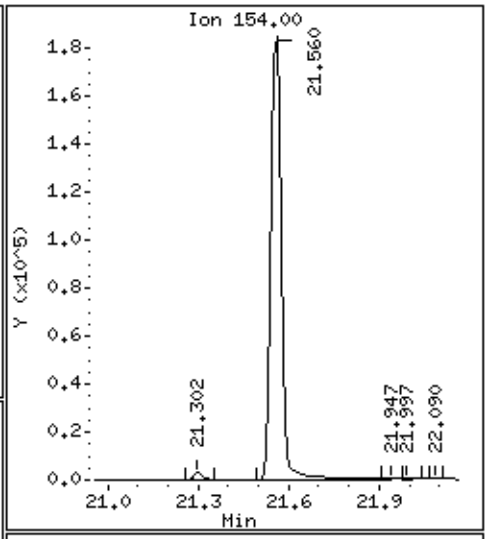
Concentration: 54.092 NG

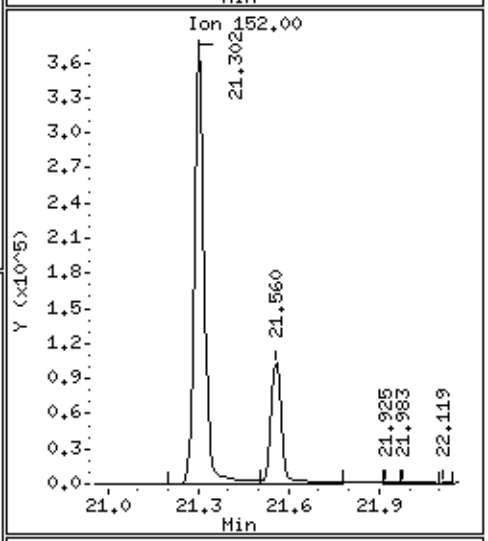


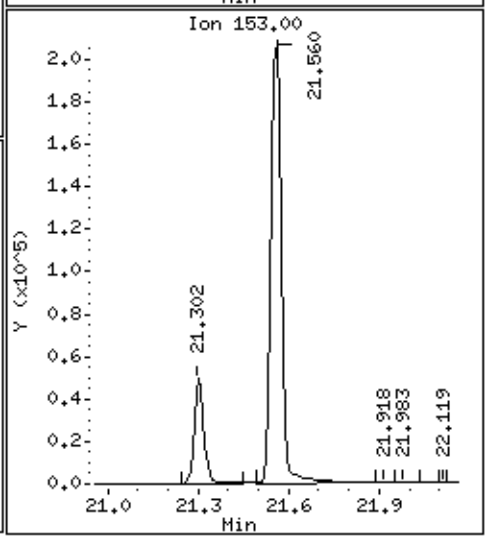












Data File: /chem/msd18.i/03Feb2016.b/18020304.d

Date : 03-FEB-2016 11:43

Client ID: LCS

Instrument: msd18.i

Sample Info: ;VI VOC+PAH LCS;LCS

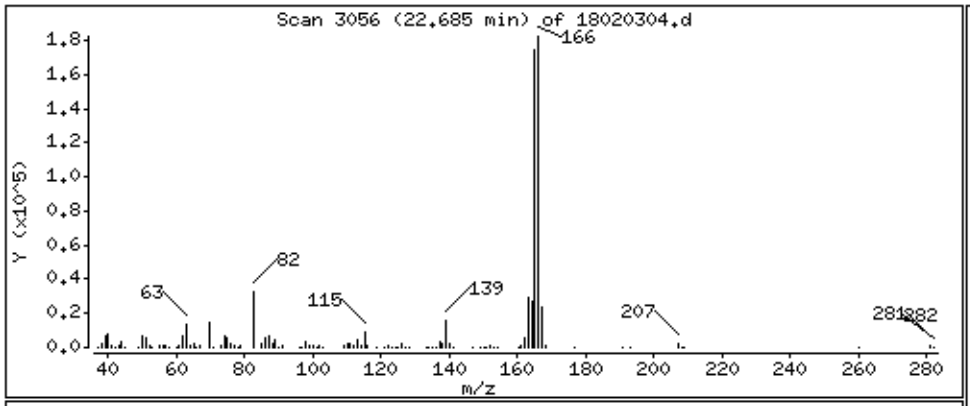
Operator: LA

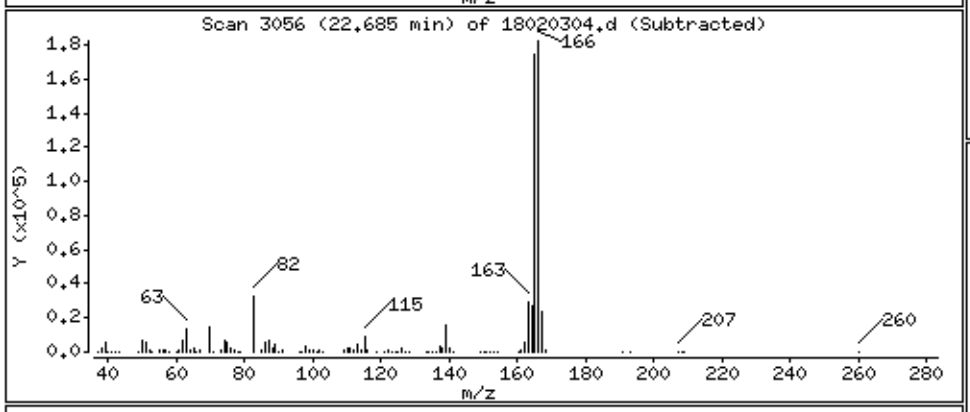
Column phase: RTx-624

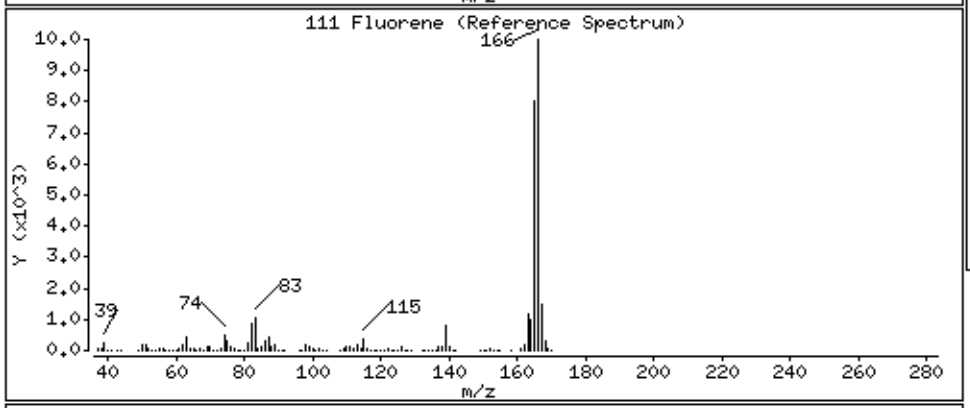
Column diameter: 0.53

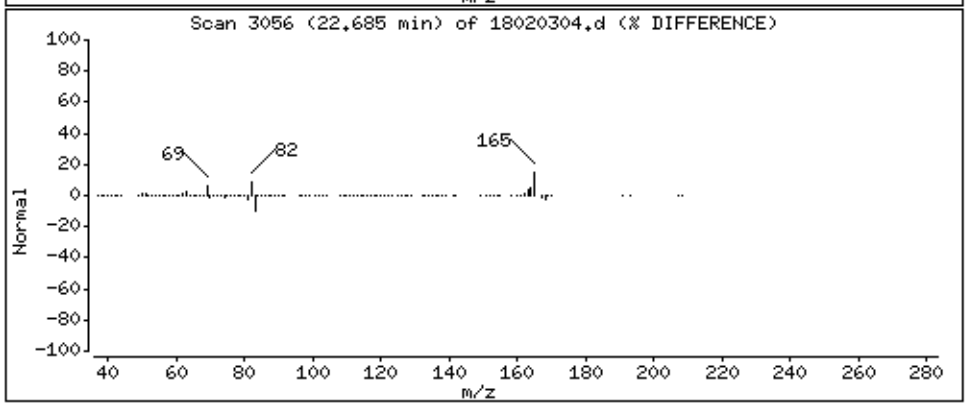
111 Fluorene

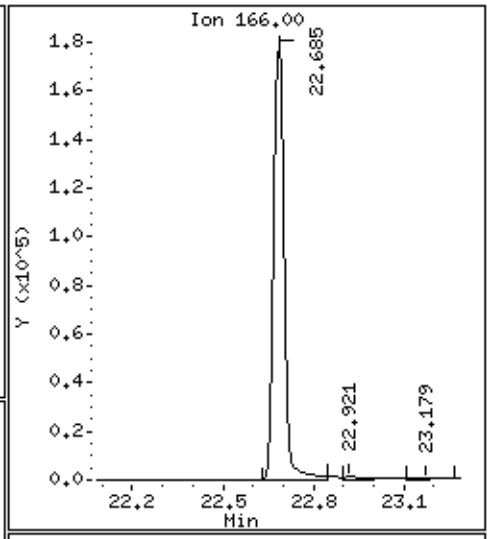
Concentration: 48.938 NG

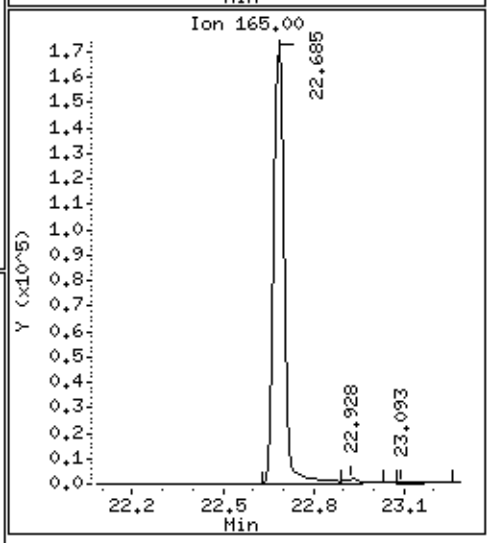












Data File: /chem/msd18.i/03Feb2016.b/18020304.d

Date : 03-FEB-2016 11:43

Client ID: LCS

Instrument: msd18.i

Sample Info: ;VI VOC+PAH LCS;LCS

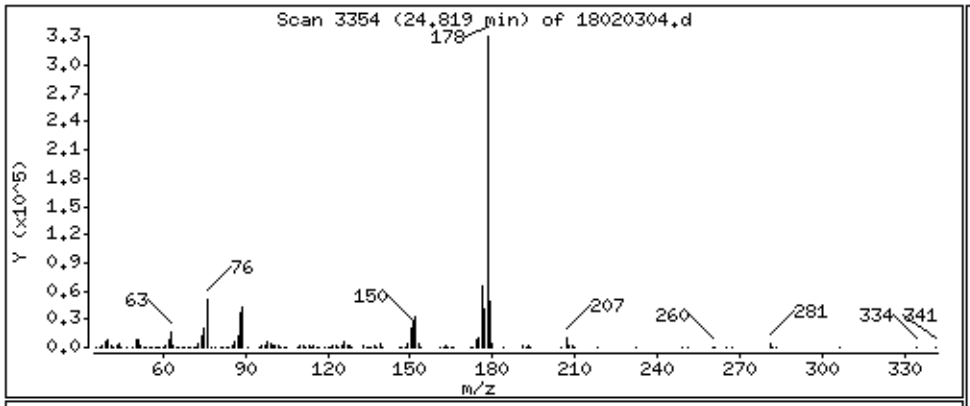
Operator: LA

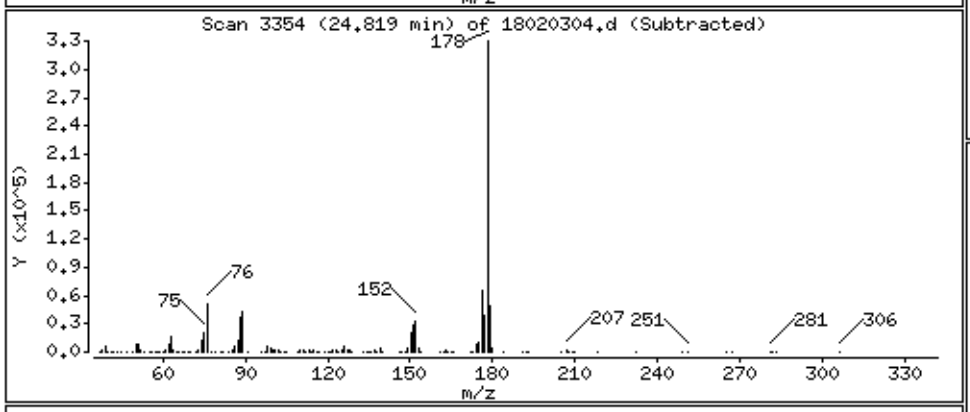
Column phase: RTx-624

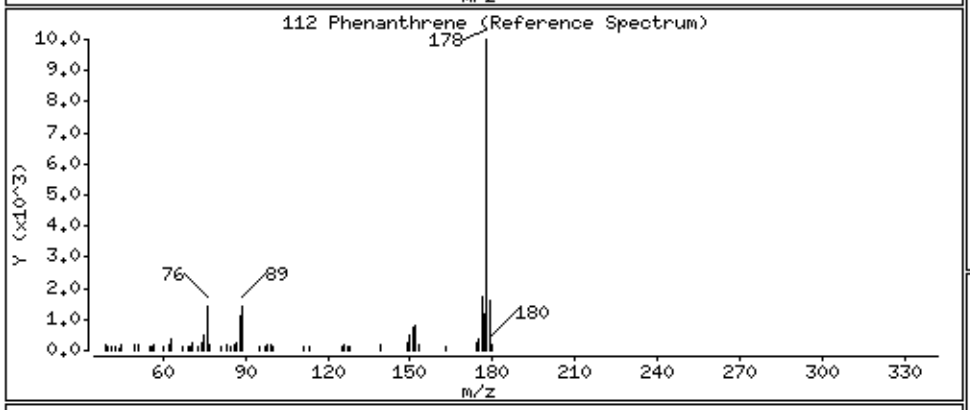
Column diameter: 0.53

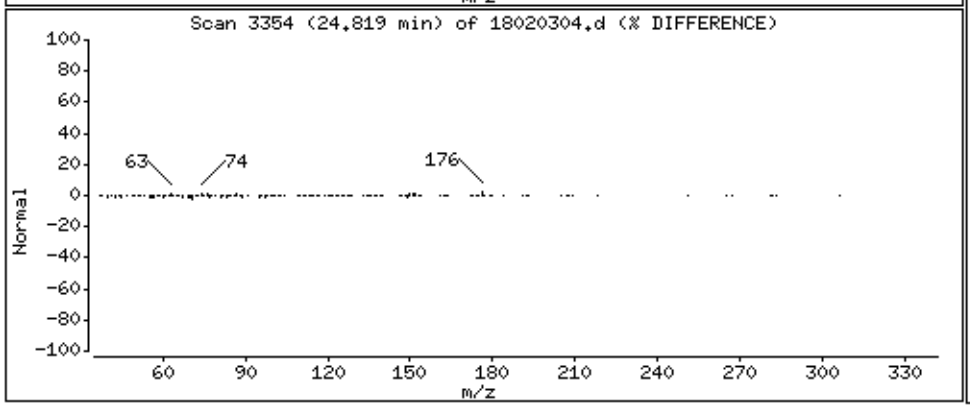
112 Phenanthrene

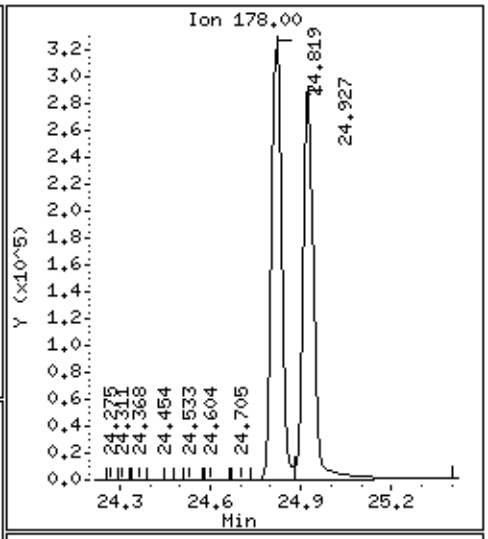
Concentration: 52.226 NG

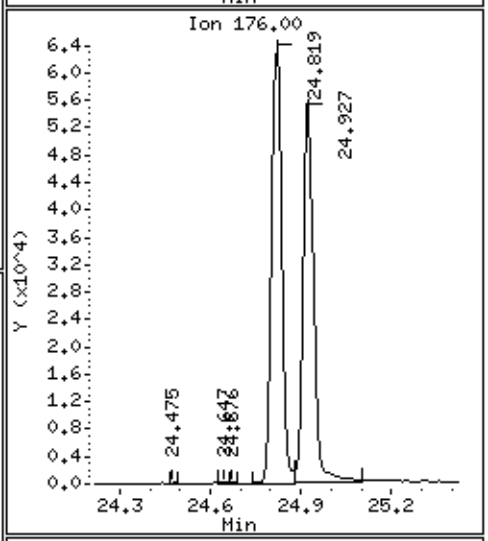


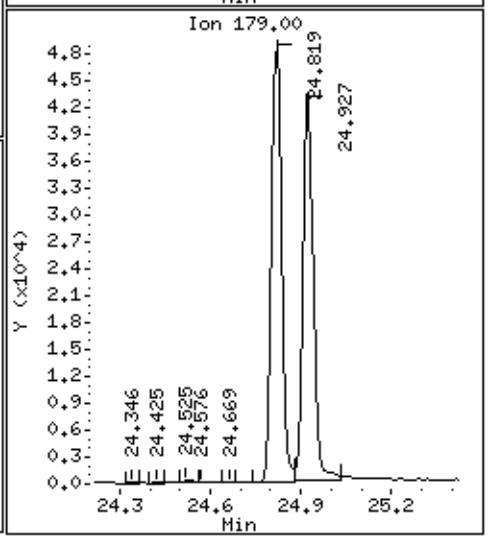












Data File: /chem/msd18.i/03Feb2016.b/18020304.d

Date : 03-FEB-2016 11:43

Client ID: LCS

Instrument: msd18.i

Sample Info: ;VI VOC+PAH LCS;LCS

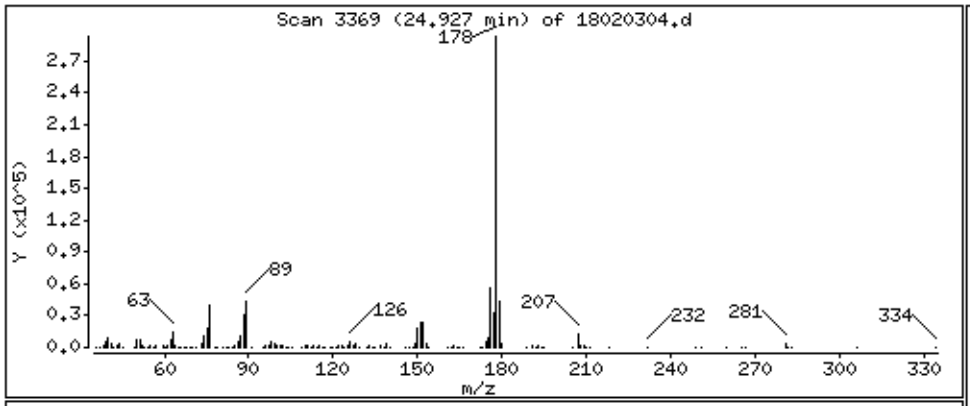
Operator: LA

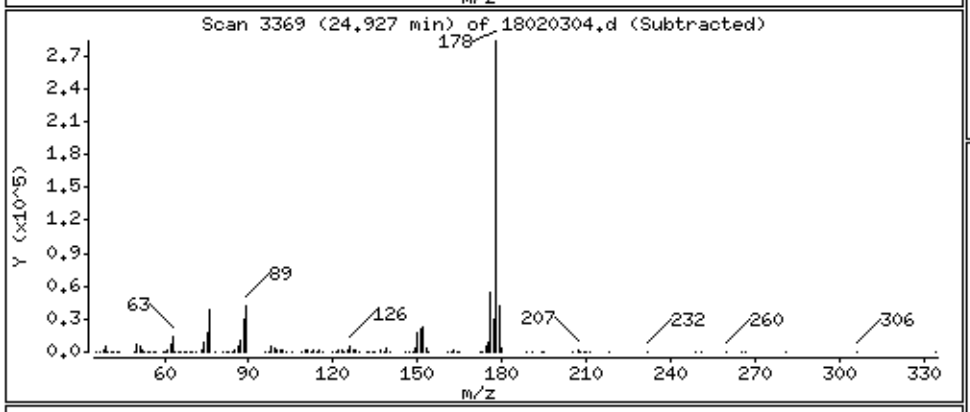
Column phase: RTx-624

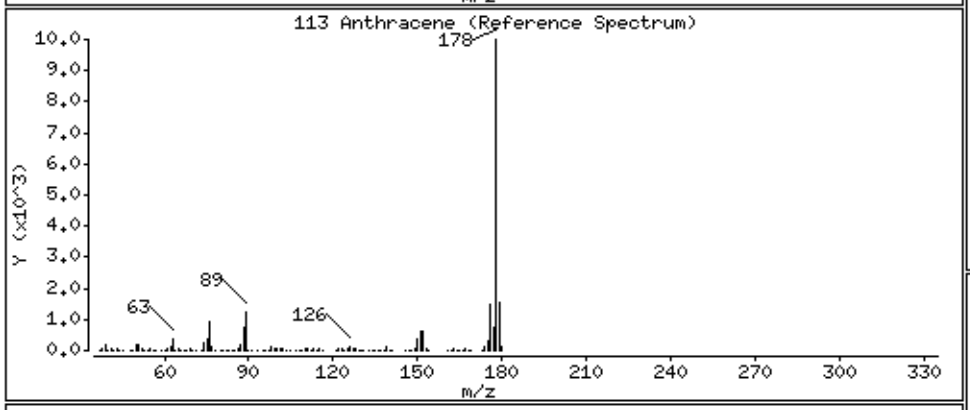
Column diameter: 0.53

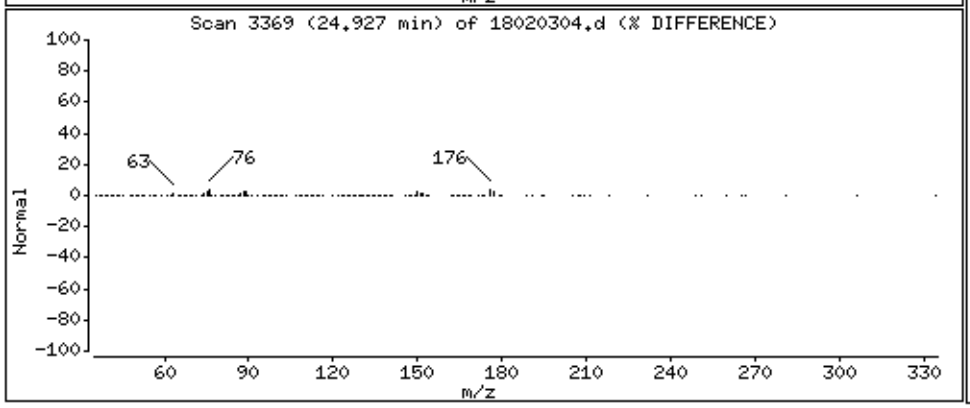
113 Anthracene

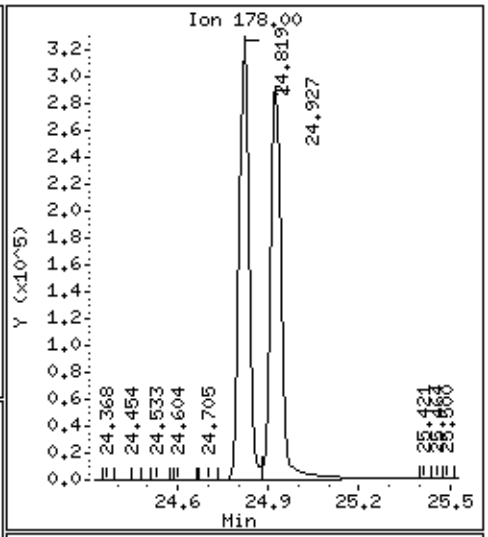
Concentration: 56.211 NG

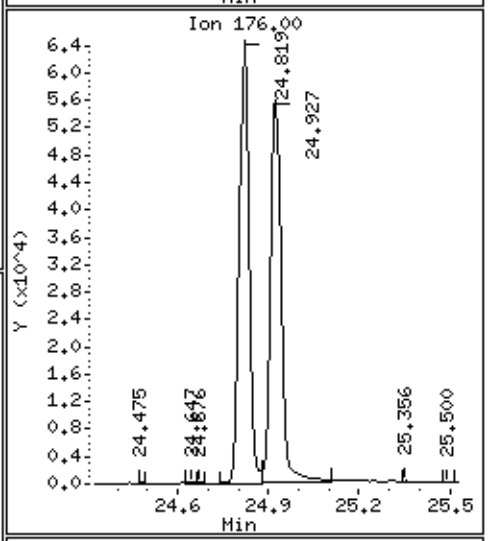


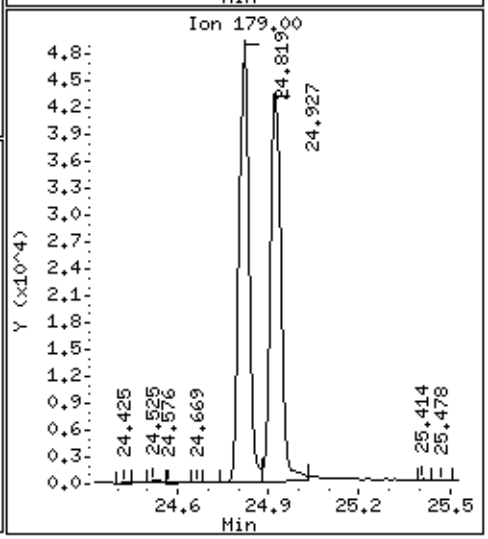












Data File: /chem/msd18.i/03Feb2016.b/18020304.d

Date : 03-FEB-2016 11:43

Client ID: LCS

Instrument: msd18.i

Sample Info: ;VI VOC+PAH LCS;LCS

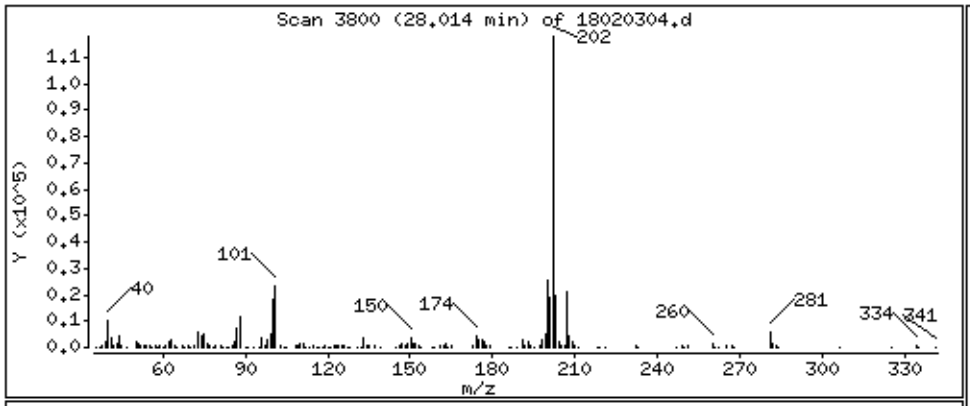
Operator: LA

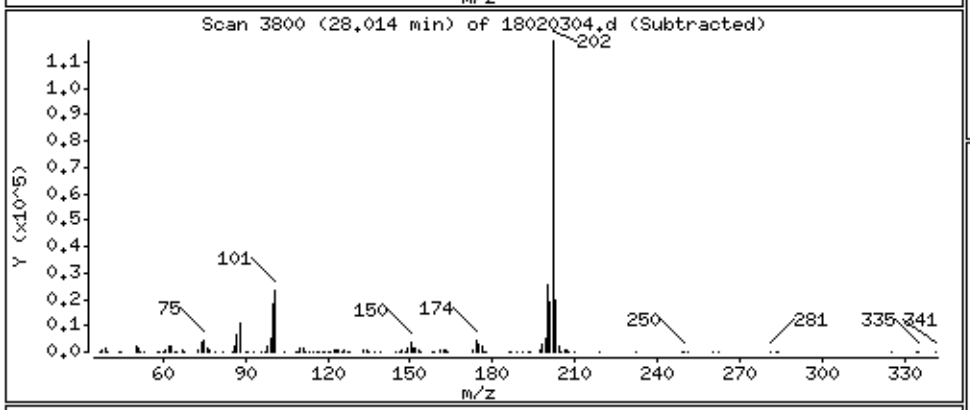
Column phase: RTx-624

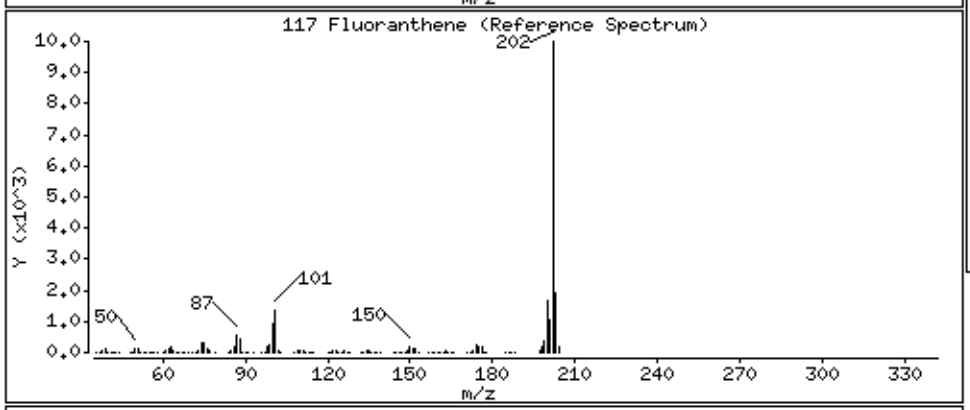
Column diameter: 0.53

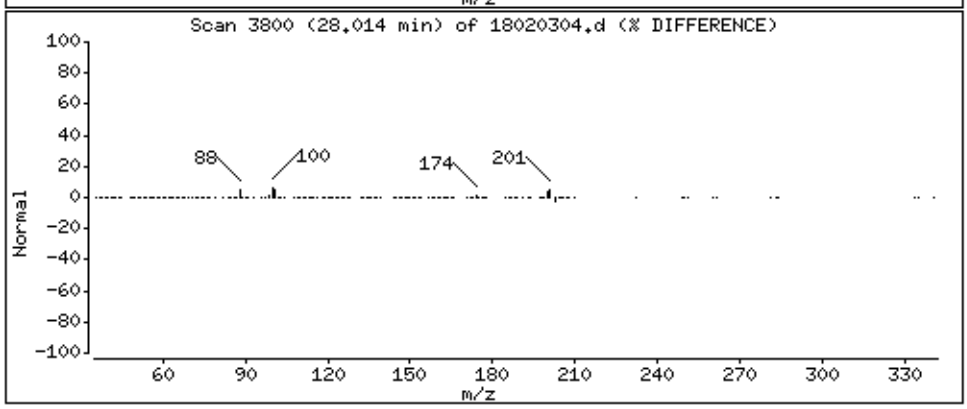
117 Fluoranthene

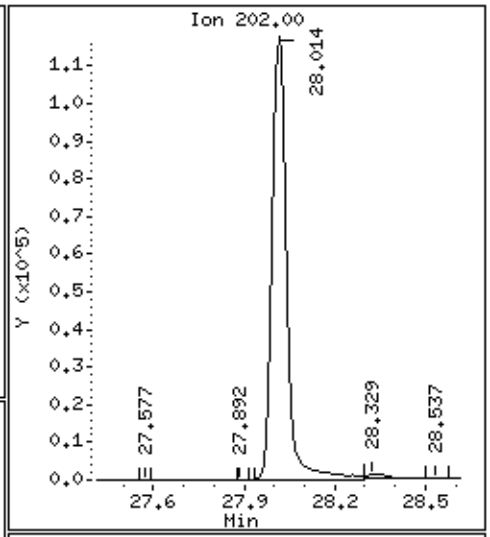
Concentration: 36.635 NG

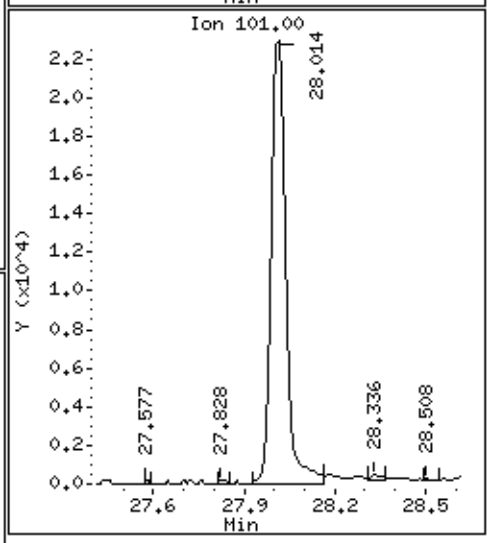












Data File: /chem/msd18.i/03Feb2016.b/18020304.d

Date : 03-FEB-2016 11:43

Client ID: LCS

Instrument: msd18.i

Sample Info: ;VI VOC+PAH LCS;LCS

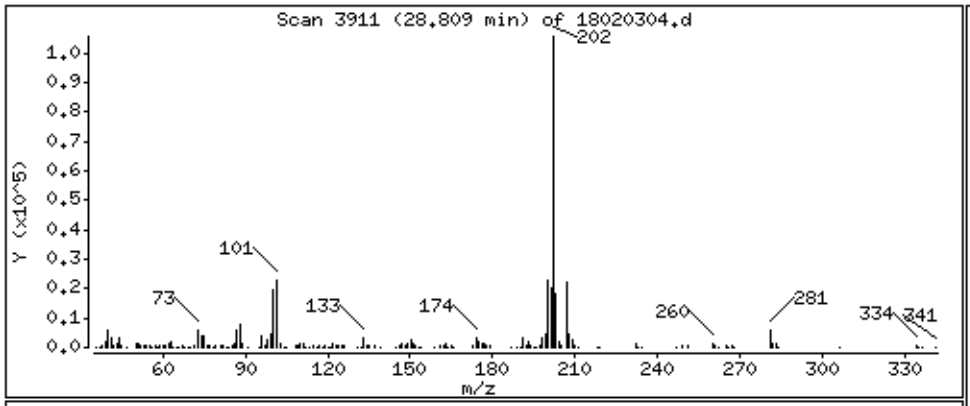
Operator: LA

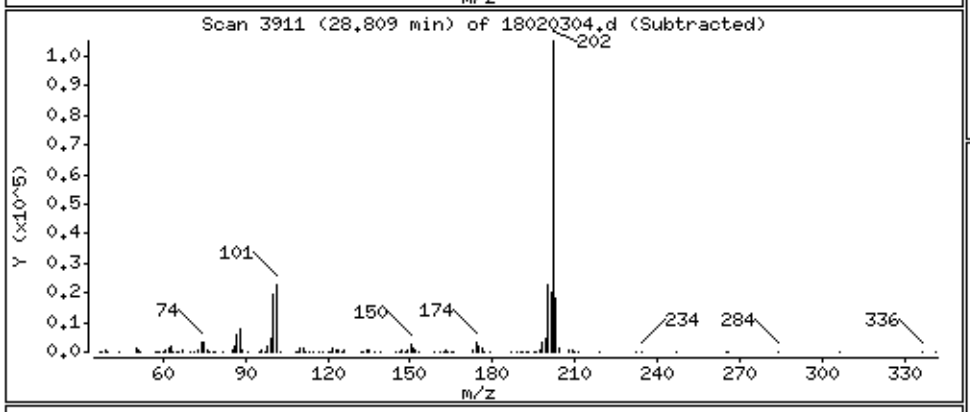
Column phase: RTx-624

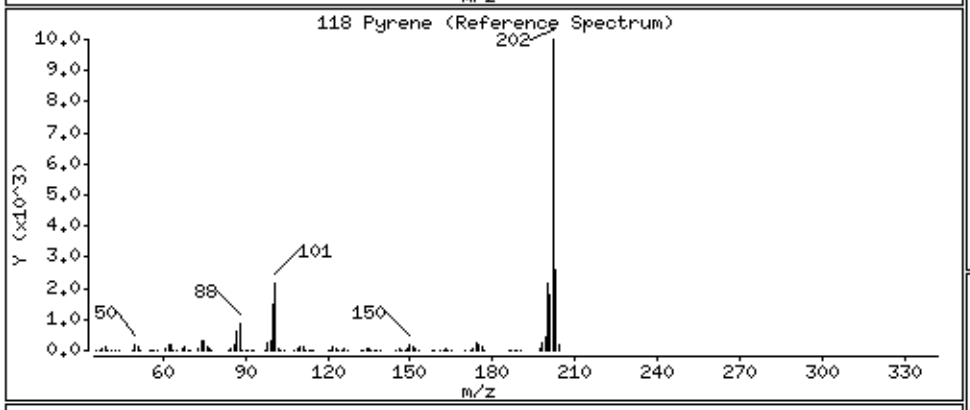
Column diameter: 0.53

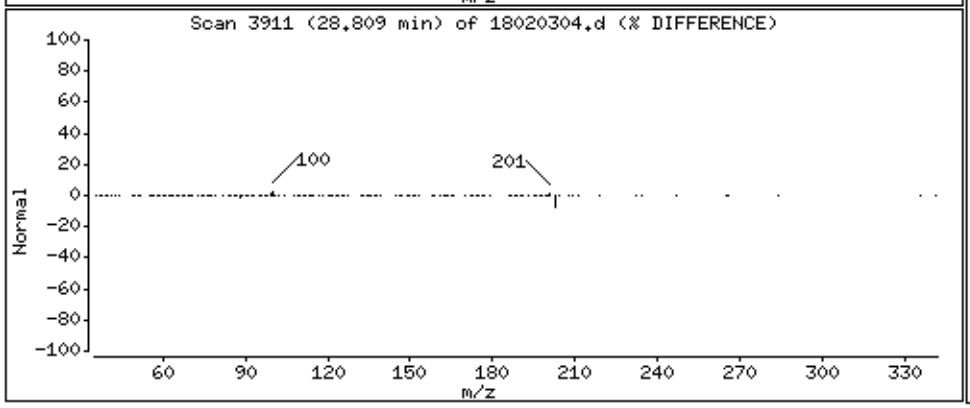
118 Pyrene

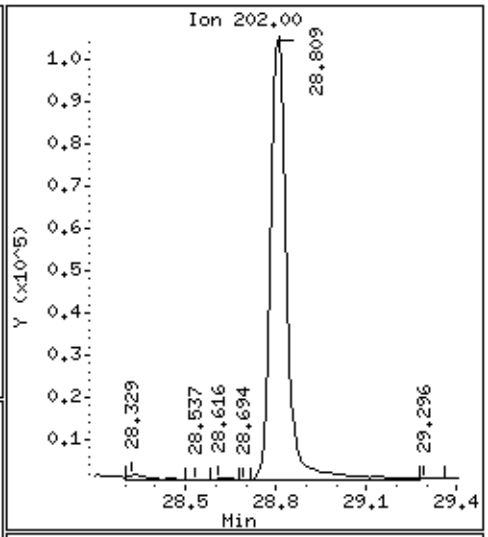
Concentration: 34.859 NG

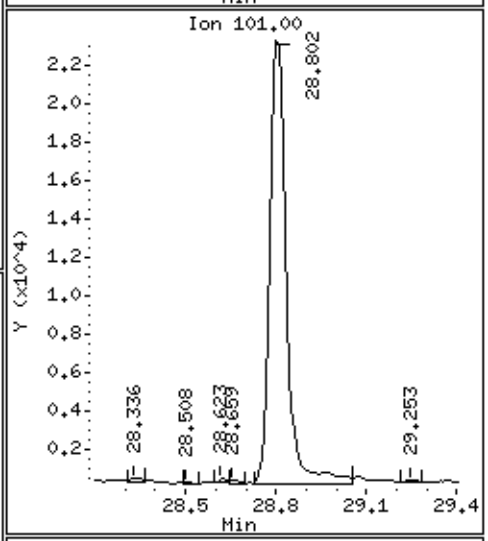


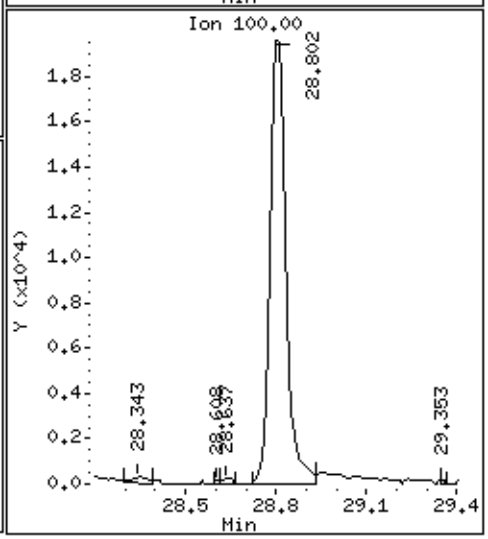












eurofins | Air Toxics

Client Sample ID: LCSD
Lab ID#: 1602029-24AA
EPA METHOD TO-17

File Name:	**18020305**	**Date of Extraction: NA**	**Date of Collection: NA**
Dil. Factor:	**1.00**		**Date of Analysis: 2/3/16 12:21 PM**

Compound	**%Recovery**	**Method Limits**
Naphthalene	109	70-130

Air Sample Volume(L): 1.00
Container Type: NA - Not Applicable

Surrogates	**%Recovery**	**Method Limits**
Naphthalene-d8	100	50-150

Report Date: 03-Feb-2016 13:32

Eurofins Air Toxics Inc.

RECOVERY REPORT

Client Name:
Client SDG: 03Feb2016
Sample Matrix: GAS
Fraction: VOA
Lab Smp Id: VI VOC+PAH LCDS
Client Smp ID: LCSD
Level: LOW
Operator: LA
Data Type: MS DATA
SampleType: LCSD
SpikeList File: VOC+PAHlcs50.spk
Quant Type: ISTD
Sublist File: VOC+PAH_ICAL.sub
Method File: /chem/msd18.i/03Feb2016.b/186z0114vi.m
Misc Info: 2516-203(2/17/16),2744-32-50(7/20/16)

SPIKE COMPOUND	CONC ADDED NG	CONC RECOVERED NG	% RECOVERED	LIMITS
4 Freon 114	139.80	128.03	91.58	70-130
6 Vinyl Chloride	51.100	65.746	128.66	70-130
7 1,3-Butadiene	44.200	53.934	122.02	70-130
9 Chloroethane	52.800	67.728	128.27	70-130
10 Isopentane	59.000	73.504	124.58	70-130
11 Trichlorofluoromet	112.40	120.37	107.09	70-130
14 1,1-Dichloroethene	79.300	82.330	103.82	70-130
15 Freon 113	153.30	133.28	86.94	70-130
18 Carbon Disulfide	62.300	59.795	95.98	70-130
17 2-Propanol	49.200	58.372	118.64	70-130
21 Methylene Chloride	69.500	86.226	124.07	70-130
24 trans-1,2-Dichloro	79.300	72.878	91.90	70-130
23 MTBE	72.100	87.803	121.78	70-130
25 Hexane	70.500	91.497	129.78	70-130
26 1,1-Dichloroethane	81.000	99.428	122.75	70-130
29 cis-1,2-Dichloroet	79.300	98.958	124.79	70-130
28 2-Butanone	59.000	73.239	124.13	70-130
35 Chloroform	97.700	119.18	121.99	70-130
36 1,1,1-Trichloroeth	109.10	118.16	108.31	70-130
37 Cyclohexane	68.800	74.830	108.76	70-130
38 Carbon Tetrachlori	125.80	126.19	100.31	70-130
41 Benzene	63.900	64.474	100.90	70-130
43 1,2-Dichloroethane	80.900	98.334	121.55	70-130
45 2,2,4-Trimethylpen	93.400	111.07	118.92	70-130
46 Heptane	82.000	99.280	121.07	70-130
48 Trichloroethene	107.50	115.08	107.05	70-130
51 Methyl Cyclohexane	80.300	92.808	115.58	70-130
52 1,2-Dichloropropan	92.400	123.93	134.12*	70-130
53 1,4-Dioxane	72.100	77.702	107.77	70-130
56 4-Methyl-2-pentano	81.900	111.96	136.71*	70-130
58 Toluene	75.400	87.618	116.20	70-130
61 1,1,2-Trichloroeth	109.10	110.12	100.94	70-130
62 Tetrachloroethene	135.70	113.58	83.70	70-130

SPIKE COMPOUND	CONC ADDED NG	CONC RECOVERED NG	% RECOVERED	LIMITS
63 2-Hexanone	81.900	114.04	139.24*	70-130
66 1,2-Dibromoethane	153.70	172.50	112.23	70-130
68 Chlorobenzene	92.100	92.590	100.53	70-130
69 Ethyl Benzene	86.800	90.165	103.88	70-130
71 m,p-Xylene	86.800	89.768	103.42	70-130
74 o-Xylene	86.800	105.01	120.98	70-130
75 Styrene	85.200	97.893	114.90	70-130
77 Cumene	98.300	121.75	123.86	70-130
80 1,1,2,2-Tetrachlor	137.30	207.52	151.15*	70-130
81 Propylbenzene	98.300	144.62	147.13*	70-130
82 4-Ethyltoluene	98.300	130.15	132.41*	70-130
83 1,3,5-Trimethylben	98.300	126.52	128.71	70-130
84 1,2,4-Trimethylben	98.300	118.72	120.77	70-130
86 1,3-Dichlorobenzen	120.30	133.11	110.65	70-130
87 1,4-Dichlorobenzen	120.30	132.96	110.52	70-130
90 1,2-Dichlorobenzen	120.30	129.42	107.58	70-130
95 1,2,4-Trichloroben	148.40	140.70	94.81	70-130
96 Hexachlorobutadien	213.30	181.57	85.12	70-130
98 Naphthalene	50.000	54.402	108.80	70-130
103 2-Methylnaphthalen	50.000	52.804	105.61	70-130
104 1-Methylnaphthalen	50.000	53.234	106.47	70-130
107 Acenaphthylene	50.000	48.566	97.13	70-130
109 Acenaphthene	50.000	45.092	90.18	70-130
111 Fluorene	50.000	38.973	77.95	60-140
112 Phenanthrene	50.000	43.396	86.79	60-140
113 Anthracene	50.000	45.206	90.41	60-140
117 Fluoranthene	50.000	37.726	75.45	60-140
118 Pyrene	50.000	36.479	72.96	60-140

SURROGATE COMPOUND	CONC ADDED NG	CONC RECOVERED NG	% RECOVERED	LIMITS
$ 39 1,2-Dichloroethane	25.000	25.157	100.63	50-150
$ 57 Toluene-d8	25.000	25.947	103.79	50-150
$ 97 Naphthalene-d8	25.000	24.995	99.98	50-150

Eurofins Air Toxics Inc.

EPA Method TO-17 GC/MS

Data file : /chem/msd18.i/03Feb2016.b/18020305.d
Lab Smp Id: VI VOC+PAH LCDS Client Smp ID: LCSD
Inj Date : 03-FEB-2016 12:21
Operator : LA Inst ID: msd18.i
Smp Info : ;VI VOC+PAH LCDS;LCSD
Misc Info : 2516-203(2/17/16),2744-32-50(7/20/16)
Comment :
Method : /chem/msd18.i/03Feb2016.b/186z0114vi.m
Meth Date : 03-Feb-2016 11:54 lantonic Quant Type: ISTD
Cal Date : 14-JAN-2016 18:27 Cal File: 18011415.d
Als bottle: 3 QC Sample: LCSD
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: VOC+PAH_ICAL.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (ng)	FINAL (NG)	TARGET RANGE	RATIO
* 32 Bromochloromethane					CAS #: 74-97-5		
6.045	6.030 (1.000)	130	164111	26.0000		80.00- 120.00	100.00
6.045	6.030 (1.000)	128	128592			47.81- 107.81	78.36
6.045	6.030 (1.000)	49	307318			99.93- 159.93	187.26
* 47 1,4-Difluorobenzene					CAS #: 540-36-3		
7.664	7.649 (1.000)	114	631579	23.0000		80.00- 120.00	100.00
7.664	7.649 (1.000)	88	105928			0.00- 45.51	16.77
* 67 Chlorobenzene-d5					CAS #: 3114-55-4		
11.603	11.589 (1.000)	117	547286	24.0000		80.00- 120.00	100.00
11.603	11.589 (1.000)	82	342651			23.87- 83.87	62.61
* 79 Bromofluorobenzene					CAS #: 460-00-4		
13.215	13.200 (1.000)	174	302941	36.0000		80.00- 120.00	100.00
13.215	13.200 (1.000)	95	427414			78.78- 138.78	141.09
13.215	13.200 (1.000)	176	292344			67.05- 127.05	96.50
$ 39 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
6.962	6.947 (0.908)	65	74881	25.1572	25.157	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (ng)	FINAL (NG)	TARGET RANGE	RATIO
$ 39 1,2-Dichloroethane-d4 (continued)							
6.962	6.947 (0.908)	67	42127			25.86- 85.86	56.26
$ 57 Toluene-d8					CAS #: 2037-26-5		
9.648	9.640 (0.831)	98	219628	25.9468	25.947	80.00- 120.00	100.00
9.648	9.640 (0.831)	70	27371			0.00- 40.57	12.46
9.648	9.640 (0.831)	100	136635			34.56- 94.56	62.21
$ 97 Naphthalene-d8					CAS #: 1146-65-2		
17.735	17.728 (1.342)	136	296279	24.9947	24.995	80.00- 120.00	100.00
17.735	17.728 (1.342)	108	29451			0.00- 39.05	9.94
4 Freon 114					CAS #: 76-14-2		
1.482	1.453 (0.245)	135	466600	128.032	128.03	80.00- 120.00	100.00
1.482	1.453 (0.245)	137	148707			1.93- 61.93	31.87
6 Vinyl Chloride					CAS #: 75-01-4		
1.646	1.625 (0.272)	62	334373	65.7462	65.746	80.00- 120.00	100.00
1.646	1.625 (0.272)	64	123532			15.41- 75.41	36.94
7 1,3-Butadiene					CAS #: 106-99-0		
1.675	1.646 (0.277)	54	238927	53.9346	53.934	80.00- 120.00	100.00
1.668	1.646 (0.276)	39	337112			104.89- 164.89	141.09
9 Chloroethane					CAS #: 75-00-3		
2.055	2.033 (0.340)	64	161943	67.7284	67.728	80.00- 120.00	100.00
2.055	2.033 (0.340)	66	49861			1.74- 61.74	30.79
2.055	2.033 (0.340)	49	46480			0.00- 57.57	28.70
10 Isopentane					CAS #: 78-78-4		
2.134	2.105 (0.353)	57	257496	73.5039	73.504	80.00- 120.00	100.00
2.134	2.105 (0.353)	43	408522			112.49- 172.49	158.65
11 Trichlorofluoromethane/Fr11					CAS #: 75-69-4		
2.320	2.291 (0.384)	101	638625	120.373	120.37	80.00- 120.00	100.00
2.320	2.291 (0.384)	103	407635			34.96- 94.96	63.83
15 Freon 113					CAS #: 76-13-1		
2.914	2.886 (0.482)	151	344902	133.276	133.28	80.00- 120.00	100.00
2.914	2.886 (0.482)	153	221375			34.01- 94.01	64.18
2.914	2.886 (0.482)	101	526265			98.52- 158.52	152.58
14 1,1-Dichloroethene					CAS #: 75-35-4		
2.893	2.864 (0.479)	98	161555	82.3302	82.330	80.00- 120.00	100.00
2.893	2.864 (0.479)	96	260637			130.53- 190.53	161.33
2.893	2.864 (0.479)	61	502541			241.31- 301.31	311.06

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (ng)	FINAL (NG)	TARGET RANGE	RATIO
18 Carbon Disulfide					CAS #: 75-15-0		
3.144	3.115 (0.520)	76	776022	59.7954	59.795	80.00- 120.00	100.00
17 2-Propanol					CAS #: 67-63-0		
3.136	3.108 (0.519)	45	579177	58.3723	58.372	80.00- 120.00	100.00
3.136	3.108 (0.519)	43	102678			0.00- 48.48	17.73
3.136	3.108 (0.519)	59	21815			0.00- 34.02	3.77
21 Methylene Chloride					CAS #: 75-09-2		
3.559	3.530 (0.589)	49	392790	86.2261	86.226	80.00- 120.00	100.00
3.559	3.530 (0.589)	84	258355			46.74- 106.74	65.77
3.559	3.530 (0.589)	51	123393			1.74- 61.74	31.41
24 trans-1,2-Dichloroethene					CAS #: 156-60-5		
3.974	3.946 (0.658)	98	136348	72.8778	72.878	80.00- 120.00	100.00
3.974	3.939 (0.658)	61	367803			203.10- 263.10	269.75
3.974	3.946 (0.658)	96	219580			127.09- 187.09	161.04
23 MTBE					CAS #: 1634-04-4		
3.960	3.931 (0.655)	73	751647	87.8032	87.803	80.00- 120.00	100.00
3.960	3.931 (0.655)	57	188401			0.00- 53.10	25.07
3.960	3.931 (0.655)	41	180062			0.00- 50.25	23.96
25 Hexane					CAS #: 110-54-3		
4.454	4.419 (0.737)	57	471620	91.4970	91.497	80.00- 120.00	100.00
4.454	4.426 (0.737)	43	320865			31.56- 91.56	68.03
4.454	4.426 (0.737)	86	59590			0.00- 44.94	12.64
26 1,1-Dichloroethane					CAS #: 75-34-3		
4.719	4.698 (0.781)	63	510903	99.4276	99.428	80.00- 120.00	100.00
4.719	4.698 (0.781)	65	163219			1.52- 61.52	31.95
29 cis-1,2-Dichloroethene					CAS #: 156-59-2		
5.679	5.658 (0.940)	98	178015	98.9578	98.958	80.00- 120.00	100.00
5.679	5.658 (0.940)	96	280688			127.88- 187.88	157.68
5.679	5.658 (0.940)	61	423406			179.74- 239.74	237.85
28 2-Butanone					CAS #: 78-93-3		
5.665	5.651 (0.937)	72	159280	73.2391	73.239	80.00- 120.00	100.00
5.665	5.643 (0.937)	43	730540			351.97- 411.97	458.65
5.665	5.643 (0.937)	57	57999			2.17- 62.17	36.41
35 Chloroform					CAS #: 67-66-3		
6.245	6.231 (1.033)	83	512075	119.180	119.18	80.00- 120.00	100.00
6.252	6.231 (1.034)	85	330580			34.57- 94.57	64.56

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (ng)	FINAL (NG)	TARGET RANGE	RATIO
37 Cyclohexane					CAS #: 110-82-7		
6.532	6.510 (0.852)	84	325407	74.8297	74.830	80.00- 120.00	100.00
6.532	6.510 (0.852)	56	469595			92.60- 152.60	144.31
6.532	6.510 (0.852)	41	294739			35.57- 95.57	90.58
36 1,1,1-Trichloroethane					CAS #: 71-55-6		
6.431	6.417 (0.839)	97	486584	118.165	118.16	80.00- 120.00	100.00
6.431	6.417 (0.839)	99	311046			34.22- 94.22	63.92
38 Carbon Tetrachloride					CAS #: 56-23-5		
6.668	6.653 (0.870)	119	439768	126.188	126.19	80.00- 120.00	100.00
6.661	6.646 (0.869)	117	460111			74.59- 134.59	104.63
45 2,2,4-Trimethylpentane					CAS #: 540-84-1		
7.191	7.176 (0.938)	57	1380948	111.068	111.07	80.00- 120.00	100.00
7.191	7.176 (0.938)	56	456547			2.36- 62.36	33.06
7.191	7.176 (0.938)	41	371674			0.00- 55.73	26.91
41 Benzene					CAS #: 71-43-2		
6.962	6.947 (0.908)	78	823144	64.4740	64.474	80.00- 120.00	100.00
6.962	6.947 (0.908)	77	192149			0.00- 53.82	23.34
43 1,2-Dichloroethane					CAS #: 107-06-2		
7.076	7.062 (0.923)	62	331795	98.3345	98.334	80.00- 120.00	100.00
7.076	7.062 (0.923)	64	108123			2.51- 62.51	32.59
46 Heptane					CAS #: 142-82-5		
7.492	7.477 (0.978)	71	283454	99.2795	99.280	80.00- 120.00	100.00
7.492	7.477 (0.978)	43	550152			132.26- 192.26	194.09
7.492	7.477 (0.978)	57	278983			60.63- 120.63	98.42
48 Trichloroethene					CAS #: 79-01-6		
7.957	7.943 (1.038)	95	315960	115.084	115.08	80.00- 120.00	100.00
7.957	7.943 (1.038)	130	279710			73.40- 133.40	88.53
7.957	7.943 (1.038)	97	204364			35.04- 95.04	64.68
51 Methyl Cyclohexane					CAS #: 108-87-2		
8.265	8.251 (1.079)	83	442114	92.8076	92.808	80.00- 120.00	100.00
8.265	8.251 (1.079)	98	182627			15.23- 75.23	41.31
8.265	8.251 (1.079)	55	390798			45.63- 105.63	88.39
52 1,2-Dichloropropane					CAS #: 78-87-5		
8.315	8.301 (1.085)	63	316884	123.926	123.93	80.00- 120.00	100.00(R)
8.315	8.301 (1.085)	62	219632			38.55- 98.55	69.31
8.315	8.301 (1.085)	41	173841			21.51- 81.51	54.86

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (ng)	FINAL (NG)	TARGET RANGE	RATIO
53 1,4-Dioxane					CAS #: 123-91-1		
8.430	8.416 (1.100)	88	160897	77.7018	77.702	80.00- 120.00	100.00
8.430	8.416 (1.100)	58	128964			36.73- 96.73	80.15
8.430	8.416 (1.100)	57	63656			2.93- 62.93	39.56
56 4-Methyl-2-pentanone					CAS #: 108-10-1		
9.519	9.511 (1.242)	58	242007	111.964	111.96	80.00- 120.00	100.00(R)
9.519	9.511 (1.242)	43	666859			210.10- 270.10	275.55
9.519	9.511 (1.242)	85	89291			14.24- 74.24	36.90
58 Toluene					CAS #: 108-88-3		
9.741	9.726 (0.839)	91	885070	87.6178	87.618	80.00- 120.00	100.00
9.741	9.726 (0.839)	92	504436			27.36- 87.36	56.99
61 1,1,2-Trichloroethane					CAS #: 79-00-5		
10.350	10.342 (1.351)	97	279585	110.121	110.12	80.00- 120.00	100.00
10.350	10.342 (1.351)	99	174345			31.64- 91.64	62.36
10.350	10.342 (1.351)	83	268471			56.72- 116.72	96.02
62 Tetrachloroethene					CAS #: 127-18-4		
10.428	10.421 (0.899)	166	314953	113.577	113.58	80.00- 120.00	100.00
10.428	10.421 (0.899)	129	250504			40.21- 100.21	79.54
10.428	10.421 (0.899)	131	243053			37.97- 97.97	77.17
63 2-Hexanone					CAS #: 591-78-6		
10.651	10.643 (0.918)	58	310159	114.041	114.04	80.00- 120.00	100.00(R)
10.651	10.643 (0.918)	43	594874			138.90- 198.90	191.80
10.651	10.643 (0.918)	100	48433			0.00- 50.74	15.62
66 1,2-Dibromoethane					CAS #: 106-93-4		
10.980	10.966 (0.946)	107	402359	172.499	172.50	80.00- 120.00	100.00
10.980	10.966 (0.946)	109	375697			63.94- 123.94	93.37
68 Chlorobenzene					CAS #: 108-90-7		
11.646	11.625 (1.004)	112	584416	92.5895	92.590	80.00- 120.00	100.00
11.646	11.625 (1.004)	114	186630			2.24- 62.24	31.93
11.639	11.625 (1.003)	77	395881			25.99- 85.99	67.74
69 Ethyl Benzene					CAS #: 100-41-4		
11.789	11.775 (1.016)	106	314032	90.1648	90.165	80.00- 120.00	100.00
11.789	11.775 (1.016)	91	1050796			279.23- 339.23	334.61
71 m,p-Xylene					CAS #: 108-38-3		
11.976	11.954 (1.032)	106	387576	89.7678	89.768	80.00- 120.00	100.00
11.976	11.954 (1.032)	91	819880			163.71- 223.71	211.54

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                                        CONCENTRATIONS
                                        ON-COL    FINAL
   RT   EXP RT (REL RT)  MASS  RESPONSE (   ng)  (   NG)   TARGET RANGE    RATIO
   ==   ====== ========  ====  ======== =======  =======   ============    =====

   74 o-Xylene                                          CAS #: 95-47-6
 12.477  12.463 (0.944)   106    368185 105.010   105.01  80.00- 120.00   100.00
 12.477  12.463 (0.944)    91    821084                  176.46- 236.46   223.01
-------------------------------------------------------------------------------
   75 Styrene                                           CAS #: 100-42-5
 12.513  12.499 (0.947)   104    603770 97.8931   97.893  80.00- 120.00   100.00
 12.513  12.499 (0.947)    78    320404                   17.37-  77.37    53.07
-------------------------------------------------------------------------------
   77 Cumene                                            CAS #: 98-82-8
 12.986  12.971 (0.983)   105   1138203 121.751   121.75  80.00- 120.00   100.00
 12.986  12.971 (0.983)   120    283156                    0.00-  57.05    24.88
 12.986  12.971 (0.983)    51    135801                    0.00-  38.51    11.93
-------------------------------------------------------------------------------
   80 1,1,2,2-Tetrachloroethane                         CAS #: 79-34-5
 13.415  13.401 (1.015)    83    636919 207.522   207.52  80.00- 120.00   100.00(R)
 13.415  13.408 (1.015)    85    403666                   33.93-  93.93    63.38
-------------------------------------------------------------------------------
   81 Propylbenzene                                     CAS #: 103-65-1
 13.552  13.537 (1.025)    91   1456272 144.624   144.62  80.00- 120.00   100.00(R)
 13.552  13.537 (1.025)   120    297188                    0.00-  53.66    20.41
 13.552  13.537 (1.025)   105     48862                    0.00-  33.72     3.36
-------------------------------------------------------------------------------
   82 4-Ethyltoluene                                    CAS #: 622-96-8
 13.716  13.709 (1.038)   120    316711 130.155   130.15  80.00- 120.00   100.00(R)
 13.716  13.709 (1.038)   105   1111504                  299.89- 359.89   350.95
-------------------------------------------------------------------------------
   83 1,3,5-Trimethylbenzene                            CAS #: 108-67-8
 13.802  13.795 (1.044)   120    430747 126.525   126.52  80.00- 120.00   100.00
 13.802  13.788 (1.044)   105    925003                  166.45- 226.45   214.74
-------------------------------------------------------------------------------
   84 1,2,4-Trimethylbenzene                            CAS #: 95-63-6
 14.297  14.289 (1.082)   120    392128 118.720   118.72  80.00- 120.00   100.00
 14.297  14.289 (1.082)   105    930611                  185.90- 245.90   237.32
-------------------------------------------------------------------------------
   86 1,3-Dichlorobenzene                               CAS #: 541-73-1
 14.662  14.655 (1.109)   146    547017 133.108   133.11  80.00- 120.00   100.00
 14.662  14.655 (1.109)   148    349593                   33.73-  93.73    63.91
 14.662  14.655 (1.109)   111    232649                    8.03-  68.03    42.53
-------------------------------------------------------------------------------
   87 1,4-Dichlorobenzene                               CAS #: 106-46-7
 14.805  14.798 (1.120)   146    550142 132.956   132.96  80.00- 120.00   100.00
 14.805  14.798 (1.120)   148    348739                   33.15-  93.15    63.39
 14.805  14.798 (1.120)   111    223747                    6.74-  66.74    40.67
-------------------------------------------------------------------------------
   90 1,2-Dichlorobenzene                               CAS #: 95-50-1
 15.278  15.271 (1.156)   146    512408 129.423   129.42  80.00- 120.00   100.00
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RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (ng)	FINAL (NG)	TARGET RANGE	RATIO
90 1,2-Dichlorobenzene (continued)							
15.278	15.271 (1.156)	148	327420			33.98- 93.98	63.90
15.278	15.271 (1.156)	111	223459			9.89- 69.89	43.61
95 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
17.441	17.434 (1.320)	180	395288	140.701	140.70	80.00- 120.00	100.00
17.441	17.434 (1.320)	182	377052			66.29- 126.29	95.39
96 Hexachlorobutadiene					CAS #: 87-68-3		
17.635	17.634 (1.334)	225	319759	181.569	181.57	80.00- 120.00	100.00
17.635	17.634 (1.334)	223	200397			33.08- 93.08	62.67
98 Naphthalene					CAS #: 91-20-3		
17.771	17.771 (1.345)	128	665639	54.4017	54.402	80.00- 120.00	100.00
17.771	17.771 (1.345)	127	87033			0.00- 43.03	13.08
103 2-Methylnaphthalene					CAS #: 91-57-6		
19.232	19.232 (1.455)	142	404298	52.8041	52.804	80.00- 120.00	100.00
19.232	19.232 (1.455)	141	358023			56.76- 116.76	88.55
19.232	19.232 (1.455)	115	140803			1.56- 61.56	34.83
104 1-Methylnaphthalene					CAS #: 90-12-0		
19.454	19.454 (1.472)	142	373582	53.2346	53.234	80.00- 120.00	100.00
19.454	19.454 (1.472)	141	343747			59.80- 119.80	92.01
19.454	19.454 (1.472)	115	135644			3.48- 63.48	36.31
107 Acenaphthylene					CAS #: 208-96-8		
21.302	21.302 (1.612)	152	645513	48.5664	48.566	80.00- 120.00	100.00
21.302	21.302 (1.612)	151	134358			0.00- 49.75	20.81
21.302	21.302 (1.612)	153	82547			0.00- 43.01	12.79
109 Acenaphthene					CAS #: 83-32-9		
21.560	21.560 (1.631)	154	299785	45.0919	45.092	80.00- 120.00	100.00
21.560	21.560 (1.631)	152	171084			26.17- 86.17	57.07
21.560	21.560 (1.631)	153	339895			78.75- 138.75	113.38
111 Fluorene					CAS #: 86-73-7		
22.685	22.684 (1.717)	166	274917	38.9734	38.973	80.00- 120.00	100.00
22.685	22.684 (1.717)	165	267278			65.26- 125.26	97.22
112 Phenanthrene					CAS #: 85-01-8		
24.819	24.819 (1.878)	178	499914	43.3966	43.396	80.00- 120.00	100.00
24.819	24.819 (1.878)	176	100606			0.00- 49.34	20.12
24.819	24.819 (1.878)	179	77339			0.00- 45.21	15.47
113 Anthracene					CAS #: 120-12-7		
24.927	24.927 (1.886)	178	474464	45.2057	45.206	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (ng)	FINAL (NG)	TARGET RANGE	RATIO
113 Anthracene (continued)							
24.927	24.927 (1.886)	176	92896			0.00- 48.82	19.58
24.927	24.927 (1.886)	179	70643			0.00- 44.74	14.89
117 Fluoranthene					CAS #: 206-44-0		
28.014	28.014 (2.120)	202	336035	37.7258	37.726	80.00- 120.00	100.00
28.014	28.007 (2.120)	101	66722			0.00- 43.29	19.86
118 Pyrene					CAS #: 129-00-0		
28.802	28.802 (2.179)	202	335457	36.4791	36.479	80.00- 120.00	100.00
28.802	28.802 (2.179)	101	76533			0.00- 45.23	22.81
28.802	28.802 (2.179)	100	62188			0.00- 42.66	18.54

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

Report Date: 03-Feb-2016 13:32

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd18.i
Lab File ID: 18020305.d
Lab Smp Id: VI VOC+PAH LCDS
Analysis Type: VOA
Quant Type: ISTD
Operator: LA
Method File: /chem/msd18.i/03Feb2016.b/186z0114vi.m
Misc Info: 2516-203(2/17/16),2744-32-50(7/20/16)

Calibration Date: 03-FEB-2016
Calibration Time: 11:04
Client Smp ID: LCSD
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
32 Bromochloromethan	191362	114817	267907	164111	-14.24
47 1,4-Difluorobenze	725728	435437	1016019	631579	-12.97
67 Chlorobenzene-d5	632720	379632	885808	547286	-13.50
79 Bromofluorobenzen	345554	207332	483776	302941	-12.33

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
32 Bromochloromethan	6.03	5.70	6.36	6.04	0.24
47 1,4-Difluorobenze	7.65	7.32	7.98	7.66	0.19
67 Chlorobenzene-d5	11.59	11.26	11.92	11.60	0.12
79 Bromofluorobenzen	13.20	12.87	13.53	13.21	0.11

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msd18.i/03Feb2016.b/18020305.d

Date : 03-FEB-2016 12:21

Client ID: LCSD

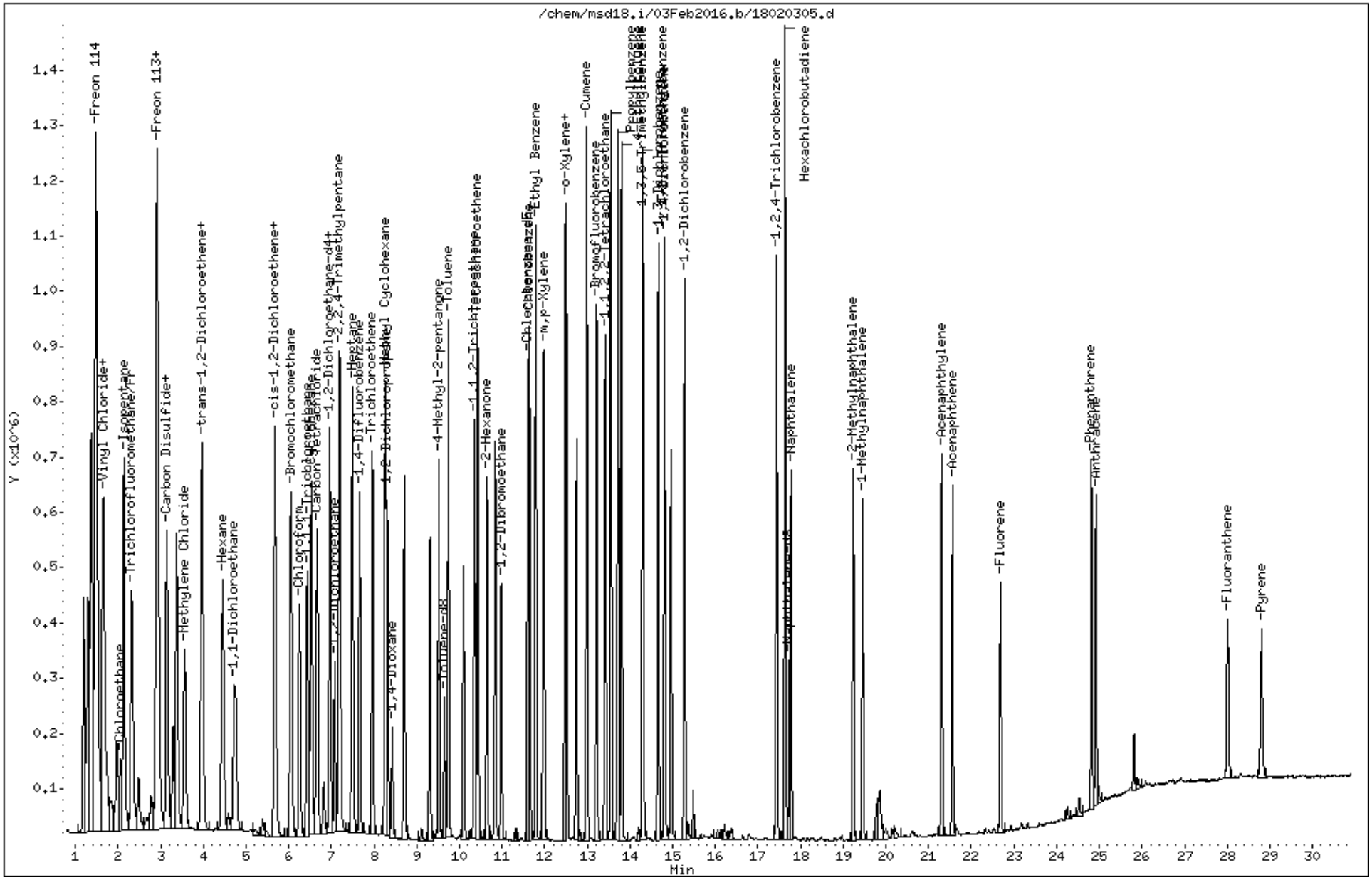
Sample Info: ;VI VOC+PAH LCDS;LCSD

Column phase: RTx-624

Instrument: msd18.i

Operator: LA

Column diameter: 0.53



Data File: /chem/msd18.i/03Feb2016.b/18020305.d

Date : 03-FEB-2016 12:21

Client ID: LCSD

Instrument: msd18.i

Sample Info: ;VI VOC+PAH LCDS;LCSD

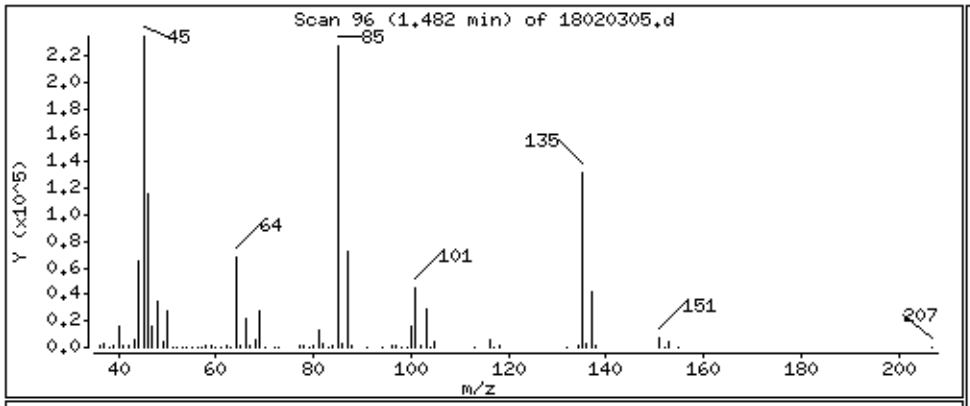
Operator: LA

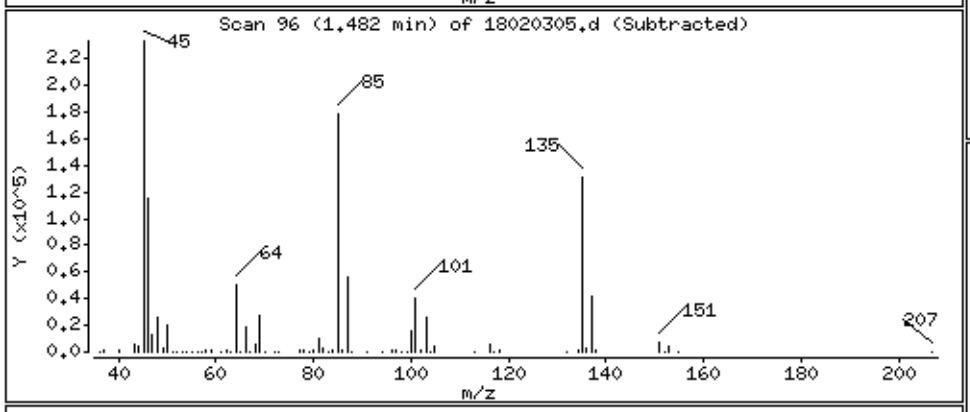
Column phase: RTx-624

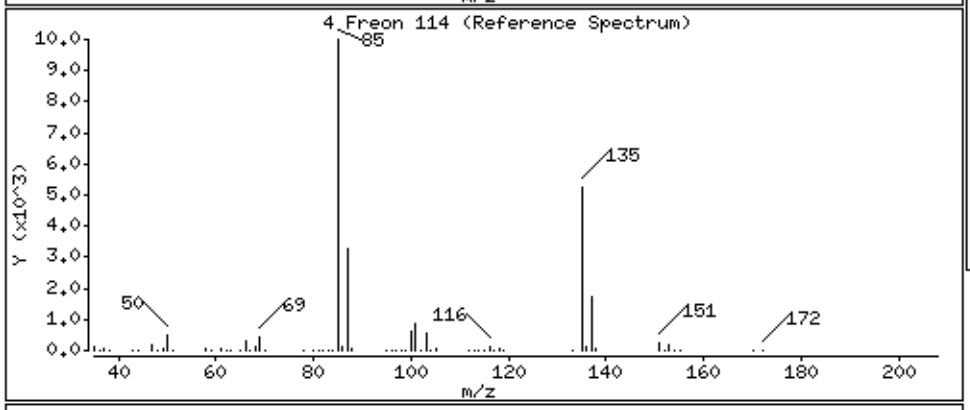
Column diameter: 0.53

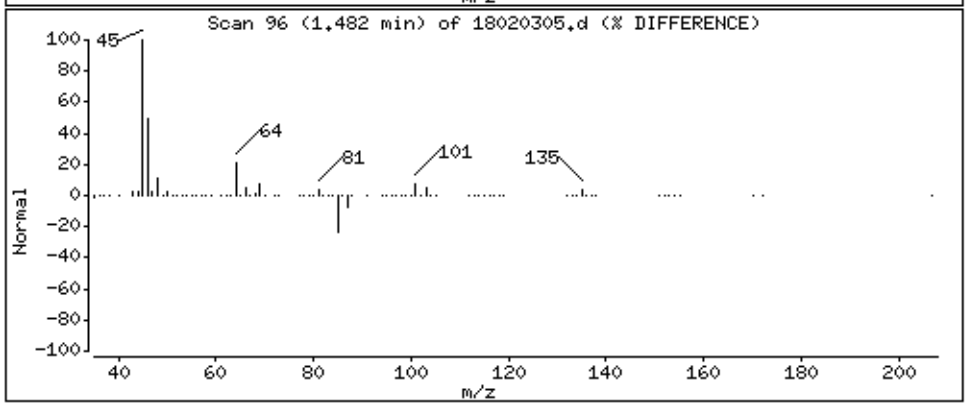
4 Freon 114

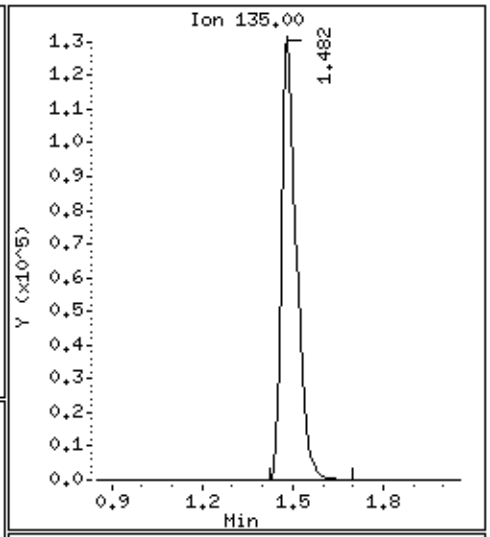
Concentration: 128.03 NG

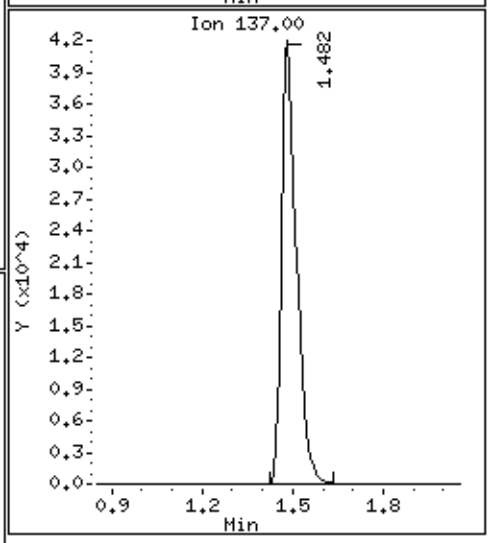












Data File: /chem/msd18.i/03Feb2016.b/18020305.d

Date : 03-FEB-2016 12:21

Client ID: LCSD

Instrument: msd18.i

Sample Info: ;VI VOC+PAH LCDS;LCSD

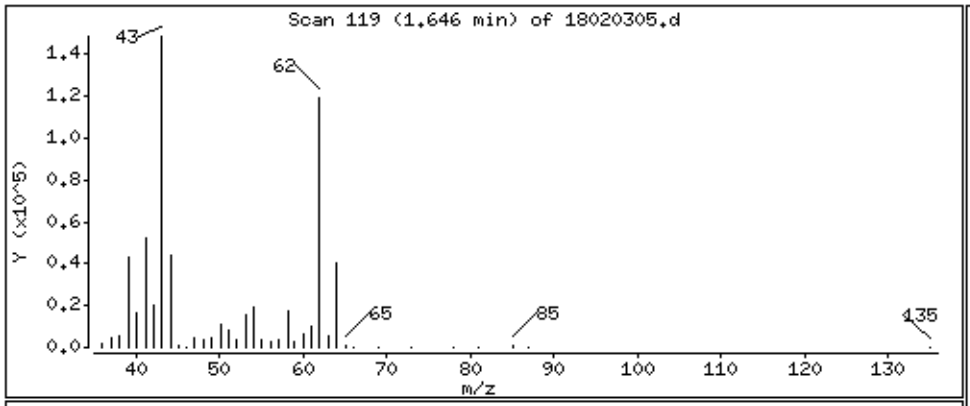
Operator: LA

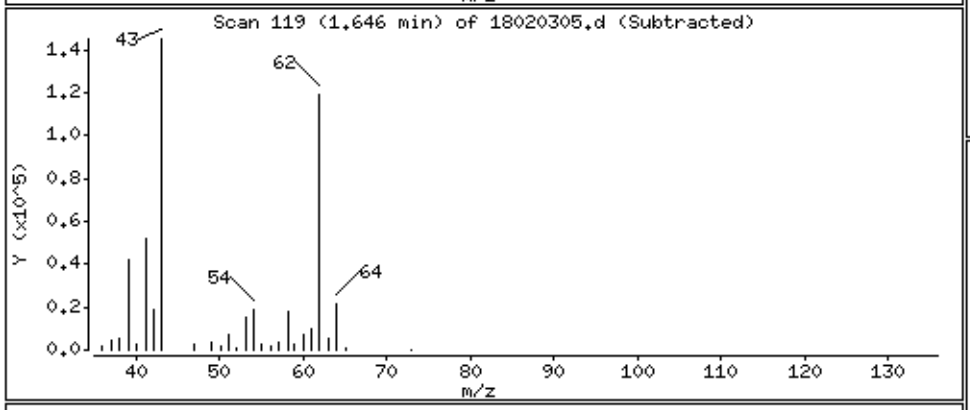
Column phase: RTx-624

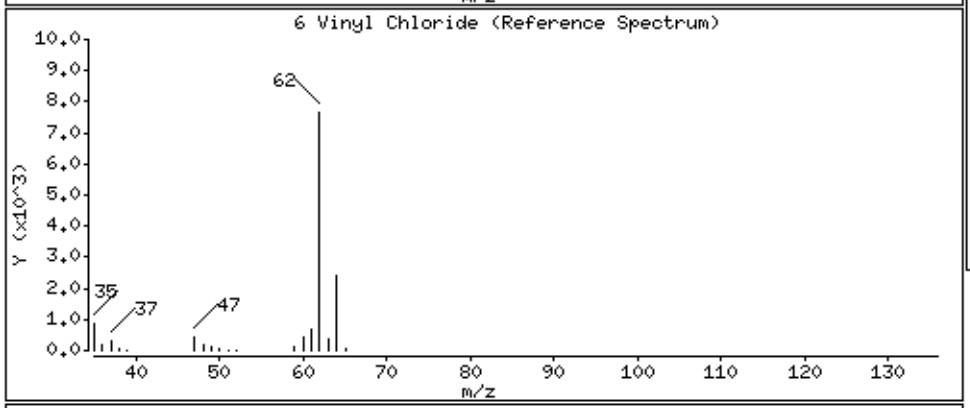
Column diameter: 0.53

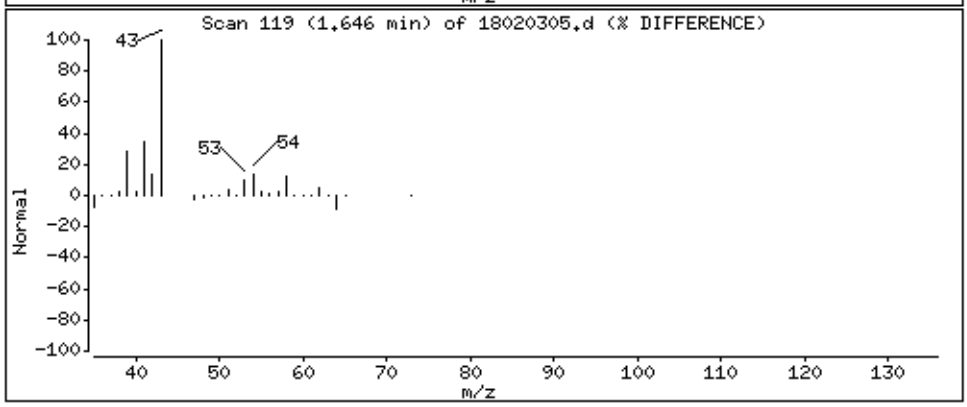
6 Vinyl Chloride

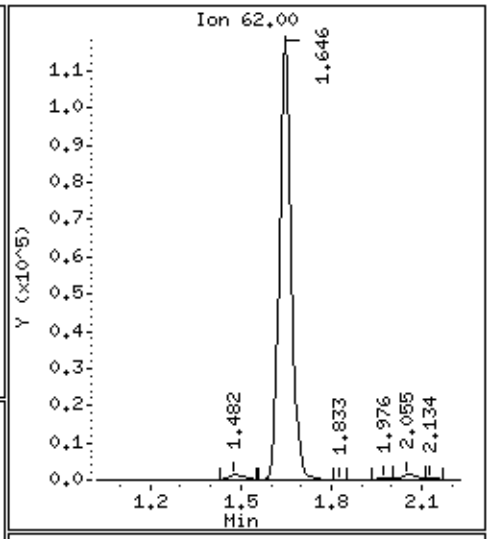
Concentration: 65.746 NG

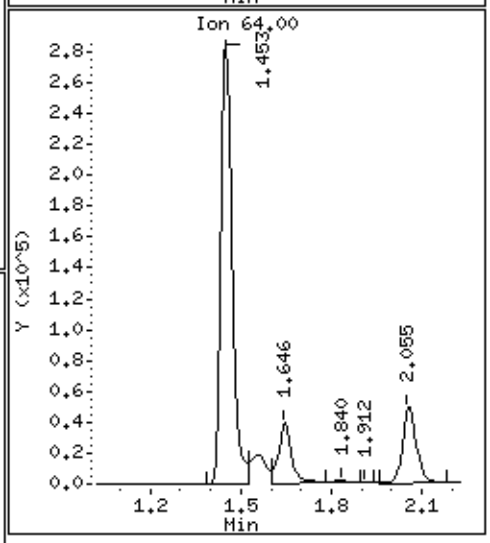












Data File: /chem/msd18.i/03Feb2016.b/18020305.d

Date : 03-FEB-2016 12:21

Client ID: LCSD

Instrument: msd18.i

Sample Info: ;VI VOC+PAH LCDS;LCSD

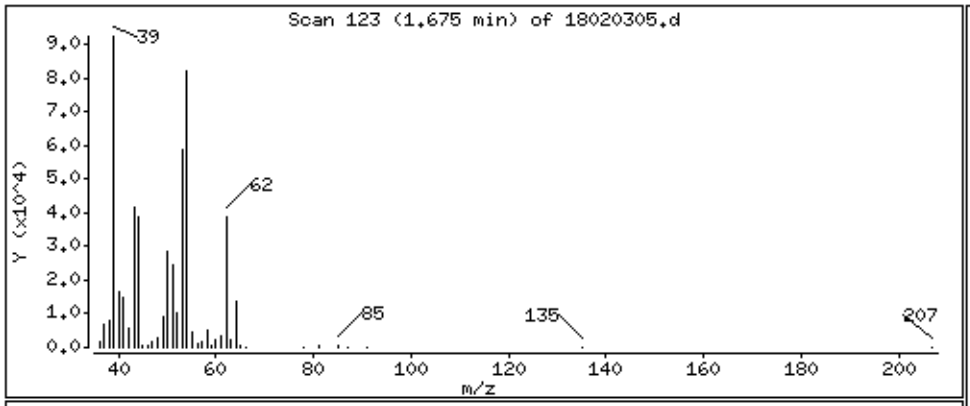
Operator: LA

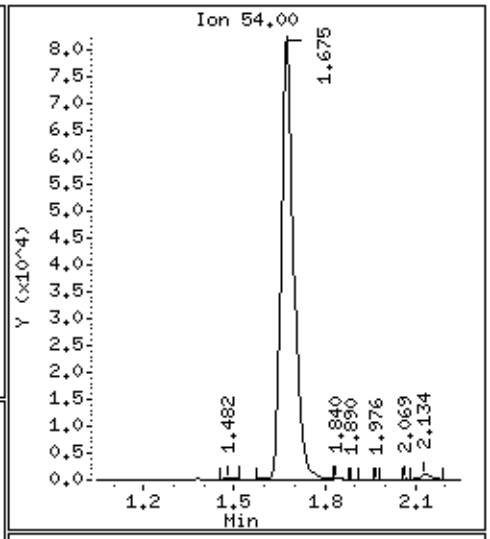
Column phase: RTx-624

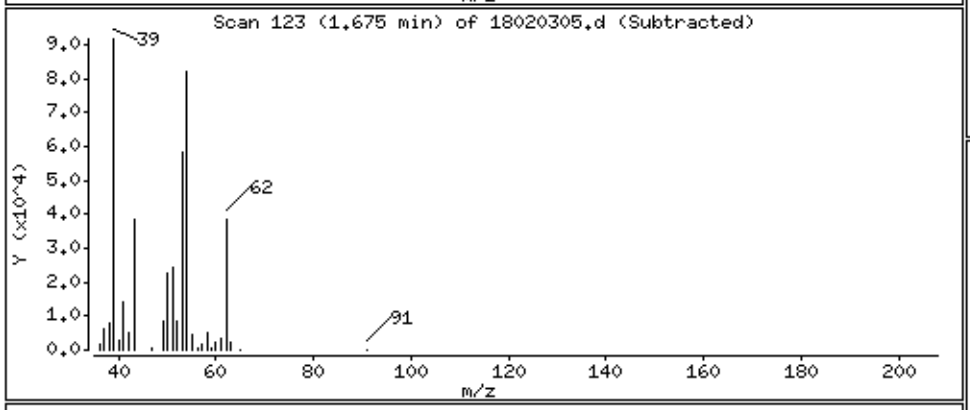
Column diameter: 0.53

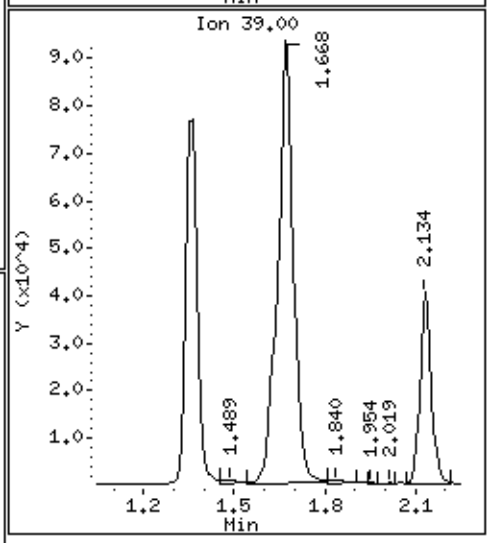
7 1,3-Butadiene

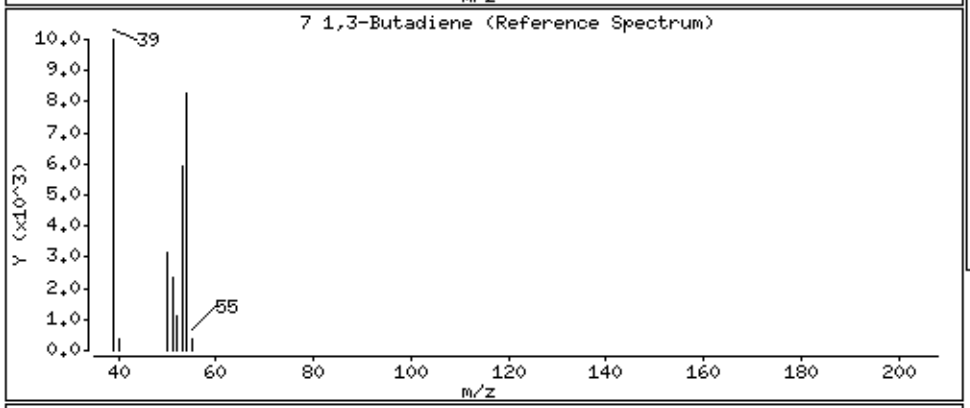
Concentration: 53.934 NG

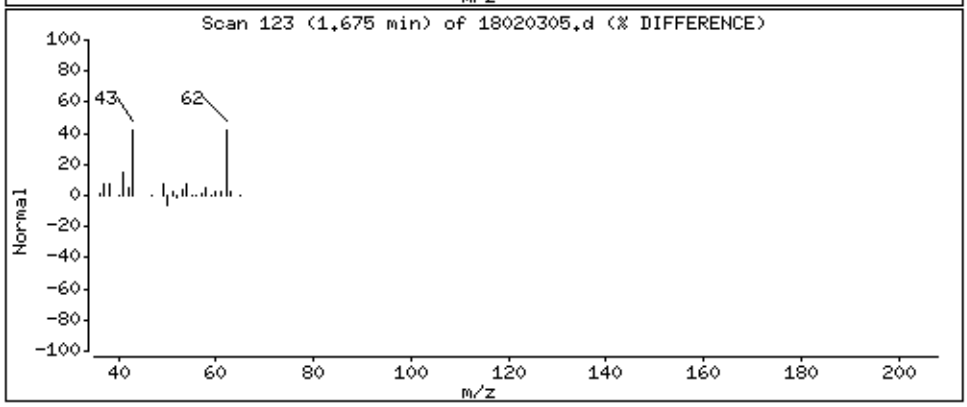












Data File: /chem/msd18.i/03Feb2016.b/18020305.d

Date : 03-FEB-2016 12:21

Client ID: LCSD

Instrument: msd18.i

Sample Info: ;VI VOC+PAH LCDS;LCSD

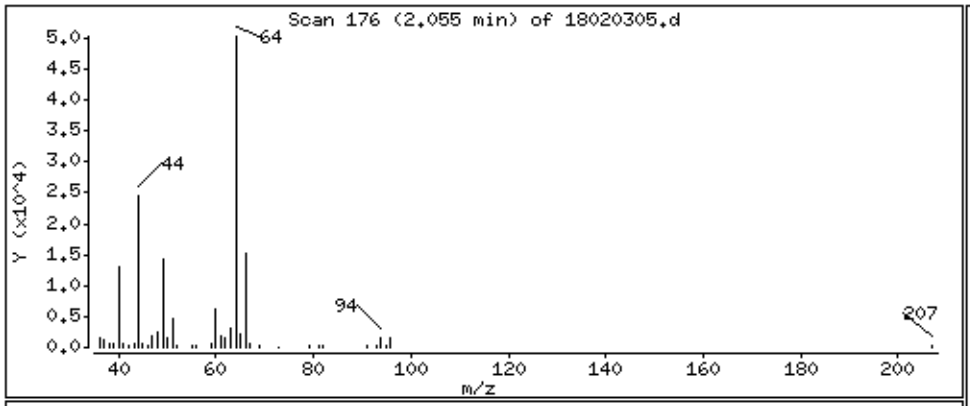
Operator: LA

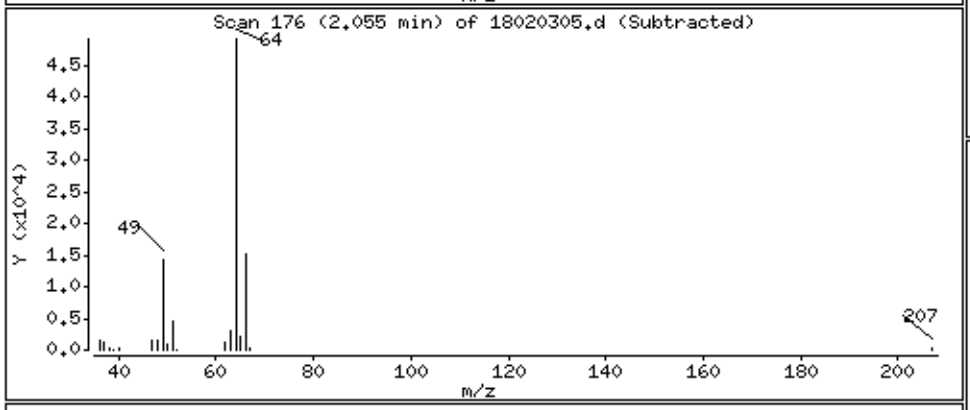
Column phase: RTx-624

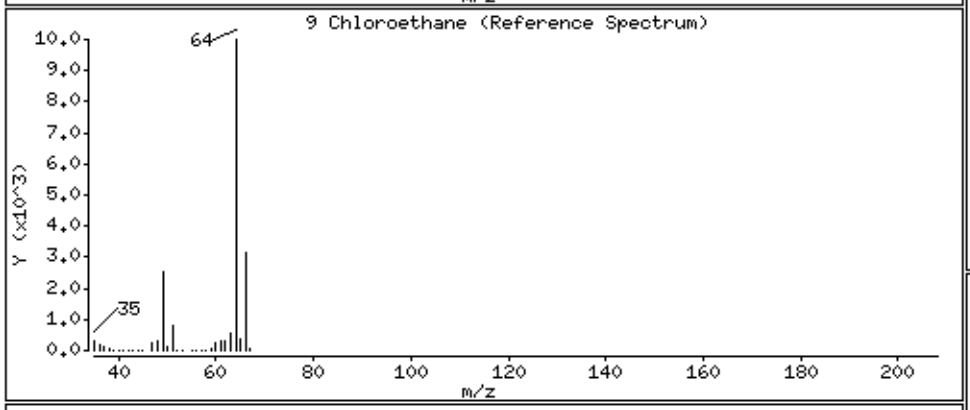
Column diameter: 0.53

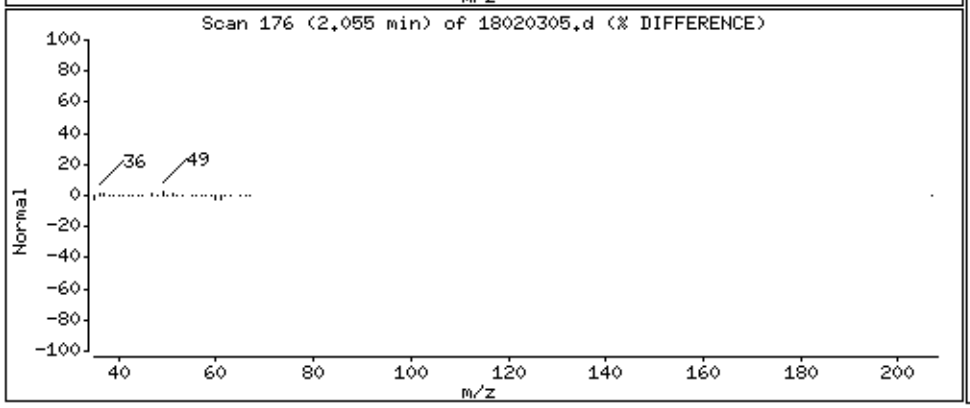
9 Chloroethane

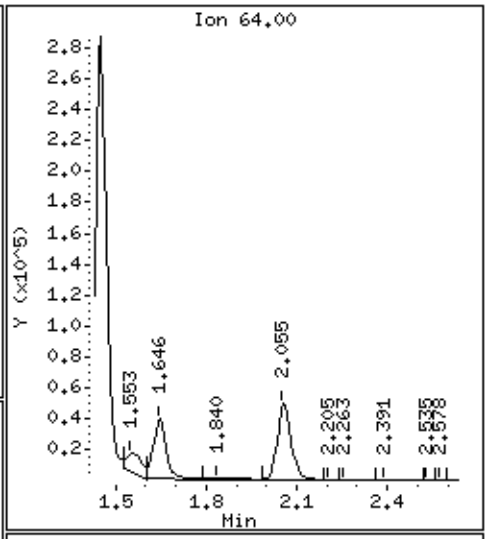
Concentration: 67.728 NG

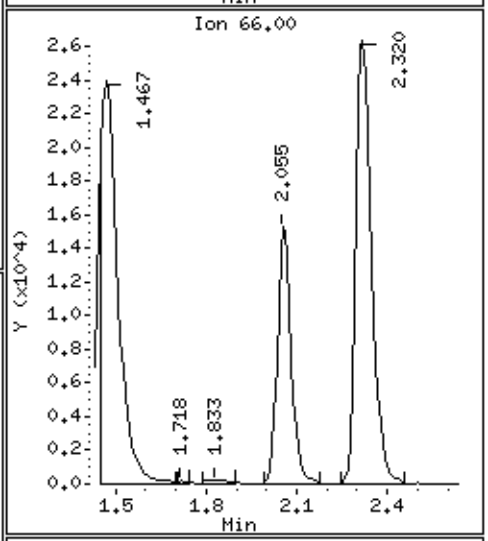


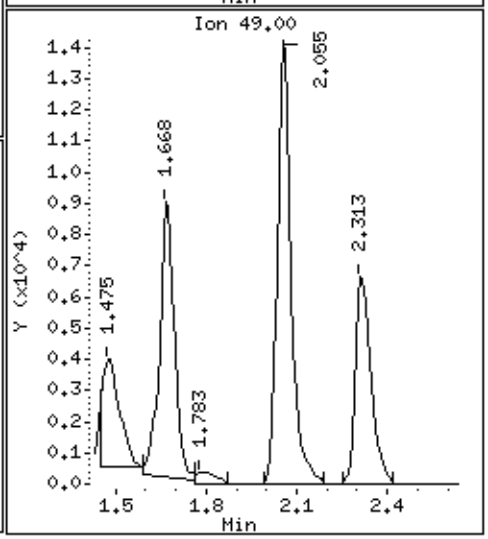












Data File: /chem/msd18.i/03Feb2016.b/18020305.d

Date : 03-FEB-2016 12:21

Client ID: LCSD

Instrument: msd18.i

Sample Info: ;VI VOC+PAH LCDS;LCSD

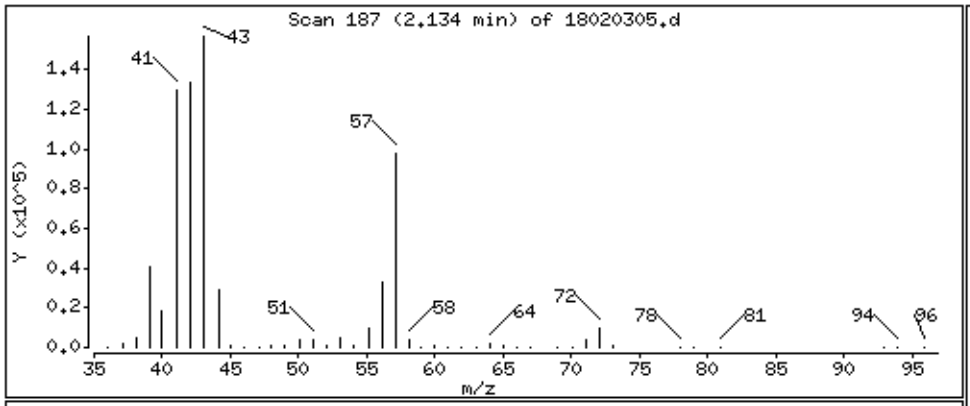
Operator: LA

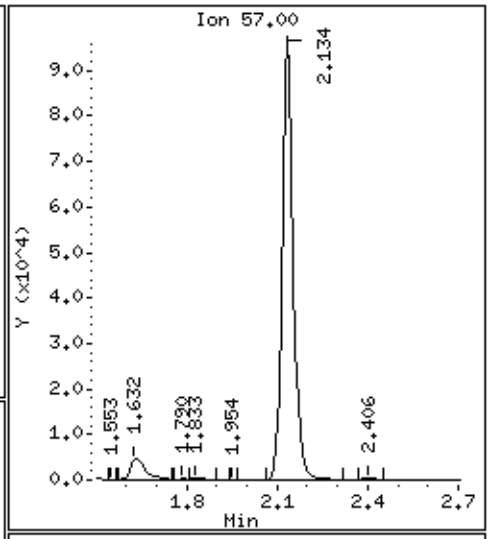
Column phase: RTx-624

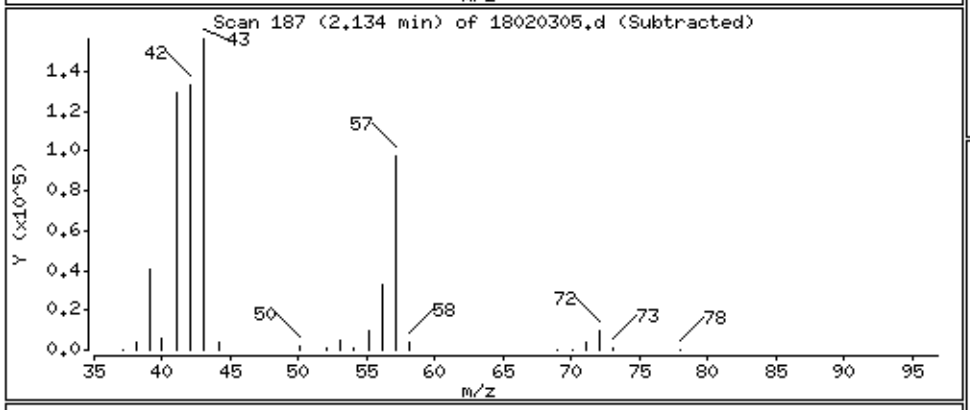
Column diameter: 0.53

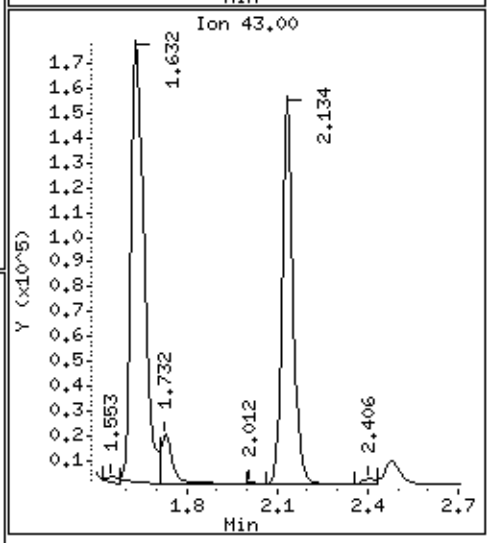
10 Isopentane

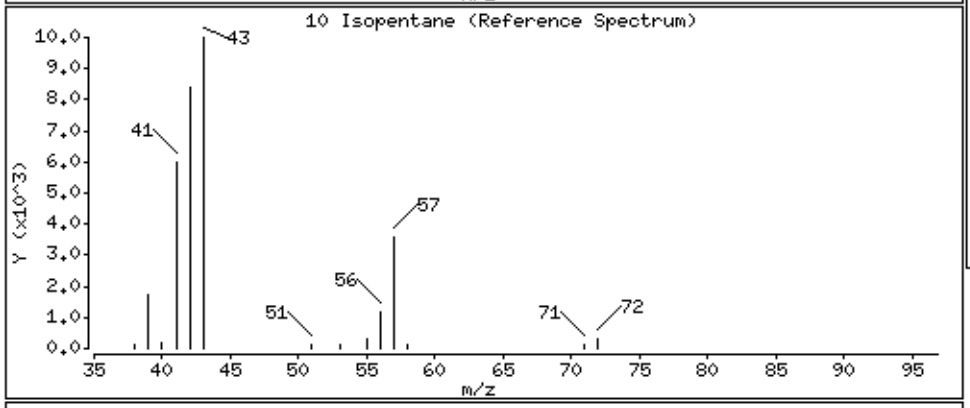
Concentration: 73.504 NG

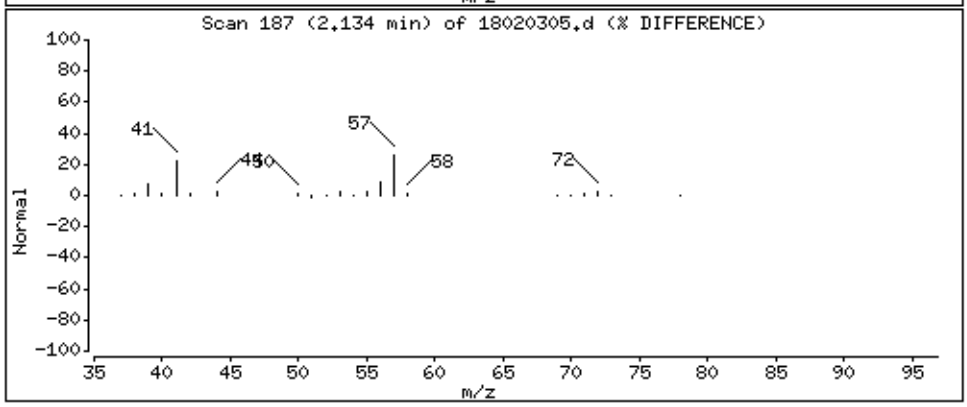












Data File: /chem/msd18.i/03Feb2016.b/18020305.d

Date : 03-FEB-2016 12:21

Client ID: LCSD

Instrument: msd18.i

Sample Info: ;VI VOC+PAH LCDS;LCSD

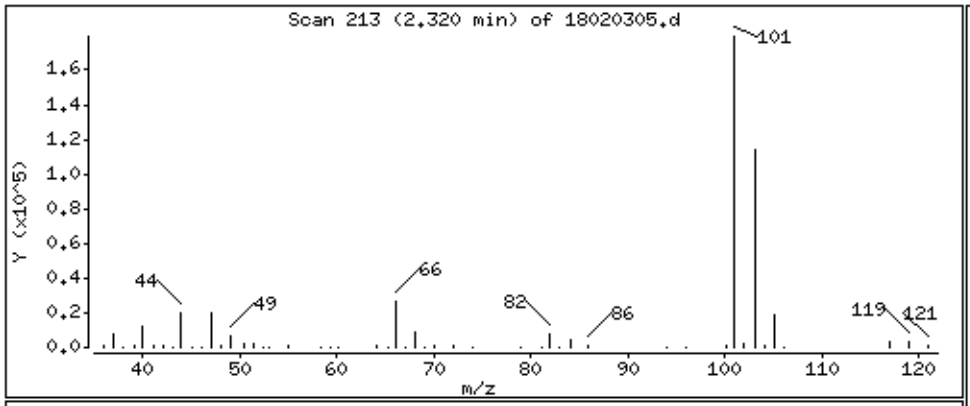
Operator: LA

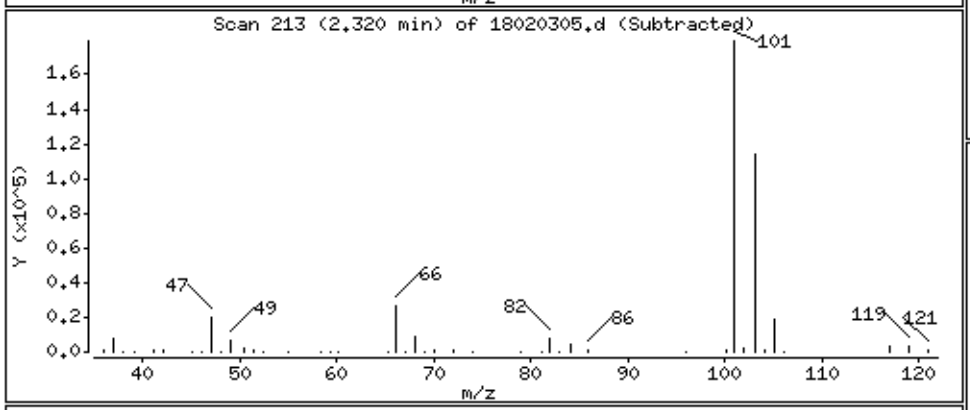
Column phase: RTx-624

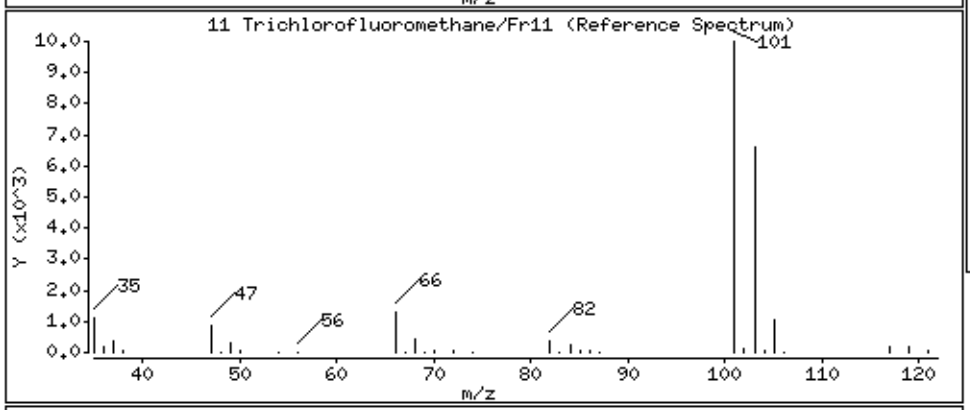
Column diameter: 0.53

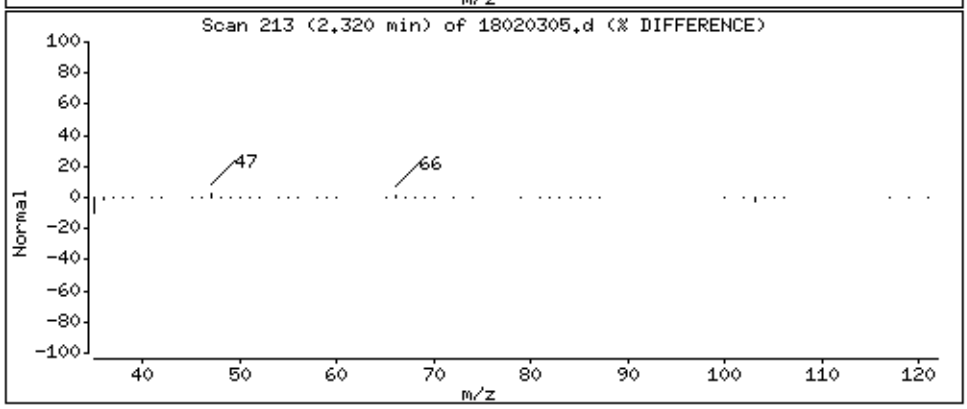
11 Trichlorofluoromethane/Fr11

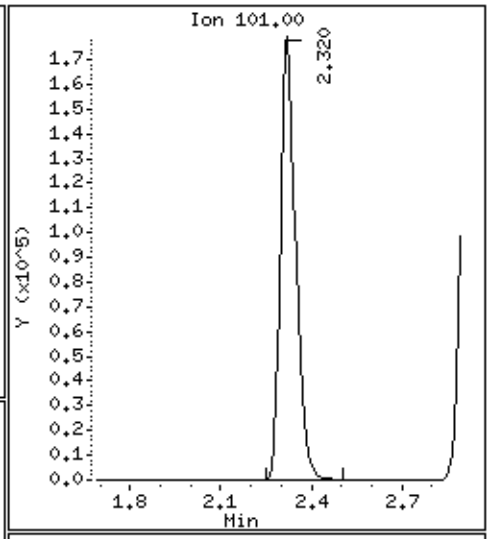
Concentration: 120.37 NG

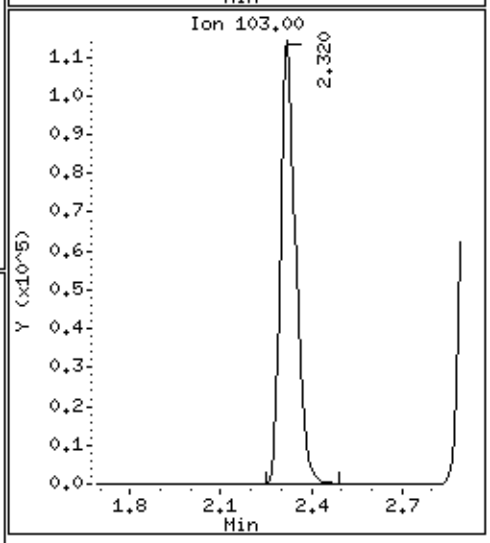












Data File: /chem/msd18.i/03Feb2016.b/18020305.d

Date : 03-FEB-2016 12:21

Client ID: LCSD

Instrument: msd18.i

Sample Info: ;VI VOC+PAH LCDS;LCSD

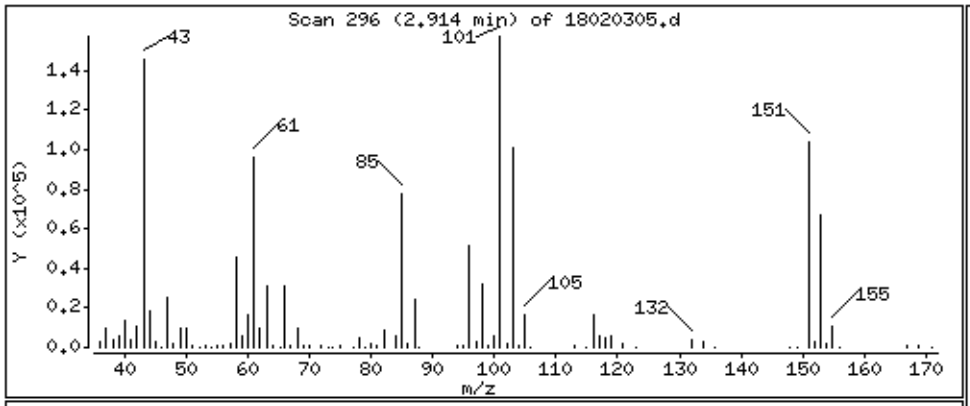
Operator: LA

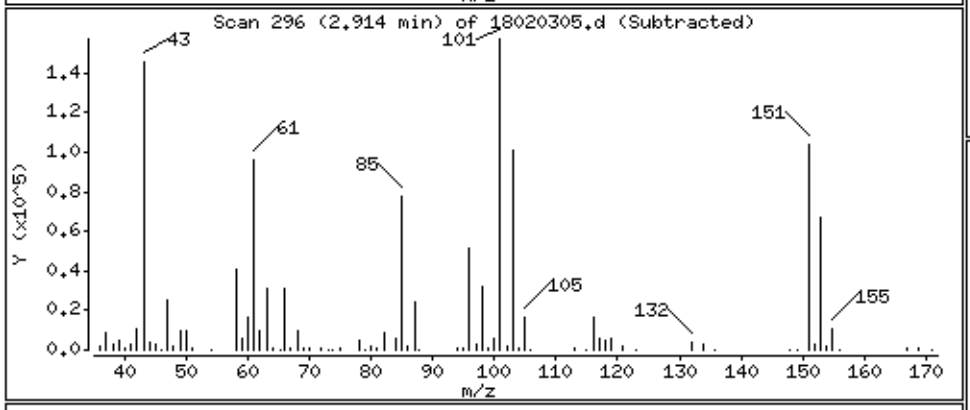
Column phase: RTx-624

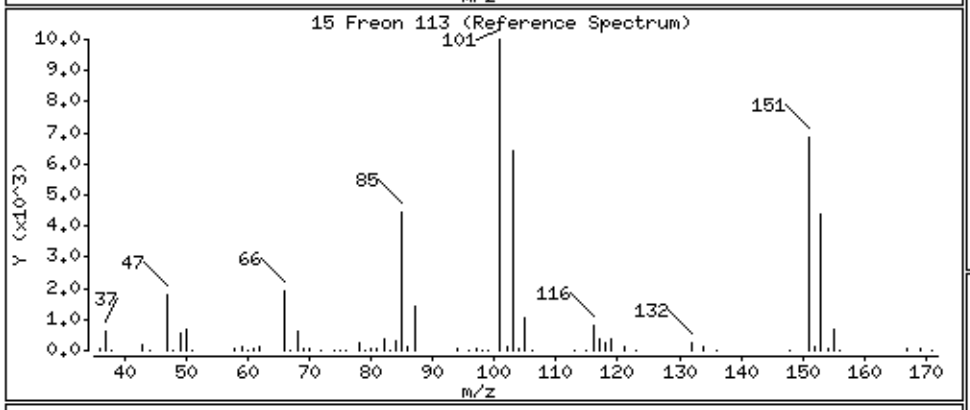
Column diameter: 0.53

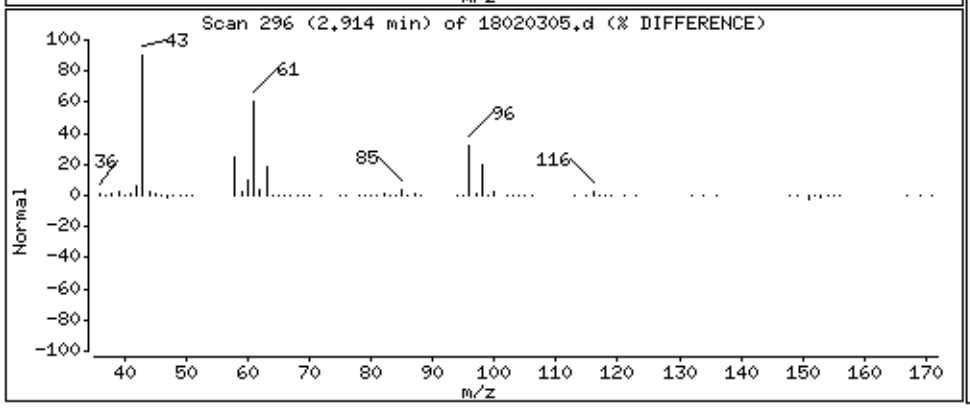
15 Freon 113

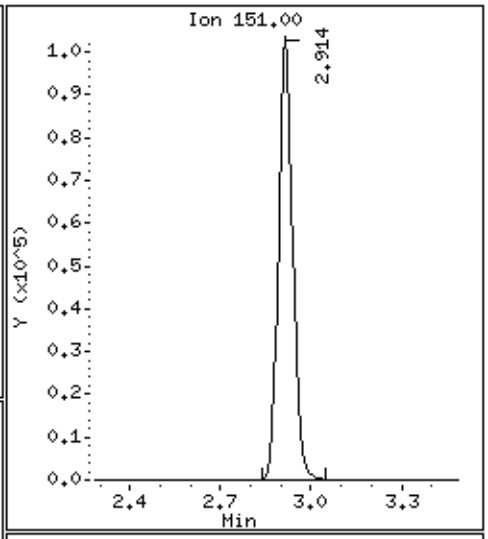
Concentration: 133.28 NG

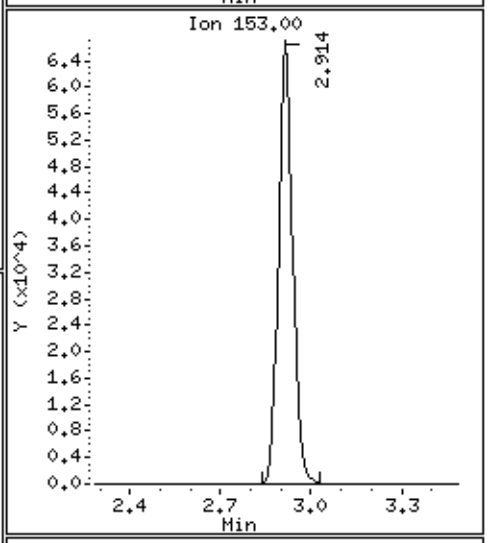


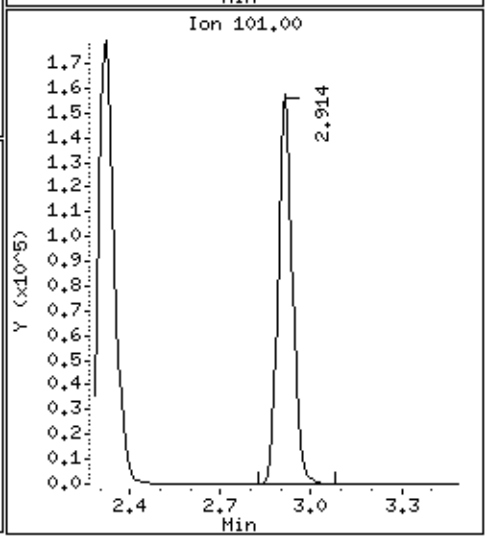












Data File: /chem/msd18.i/03Feb2016.b/18020305.d

Date : 03-FEB-2016 12:21

Client ID: LCSD

Instrument: msd18.i

Sample Info: ;VI VOC+PAH LCDS;LCSD

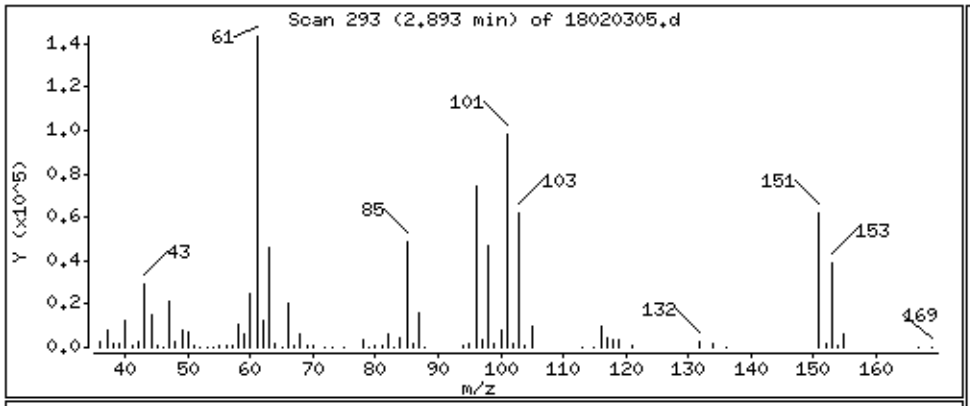
Operator: LA

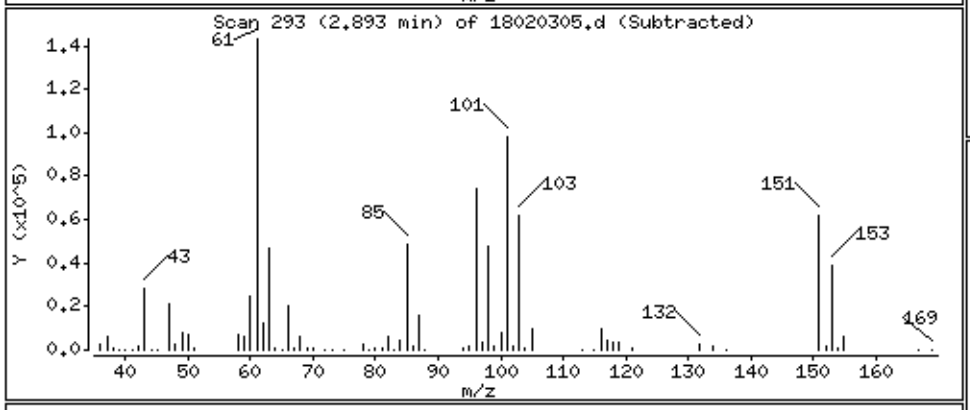
Column phase: RTx-624

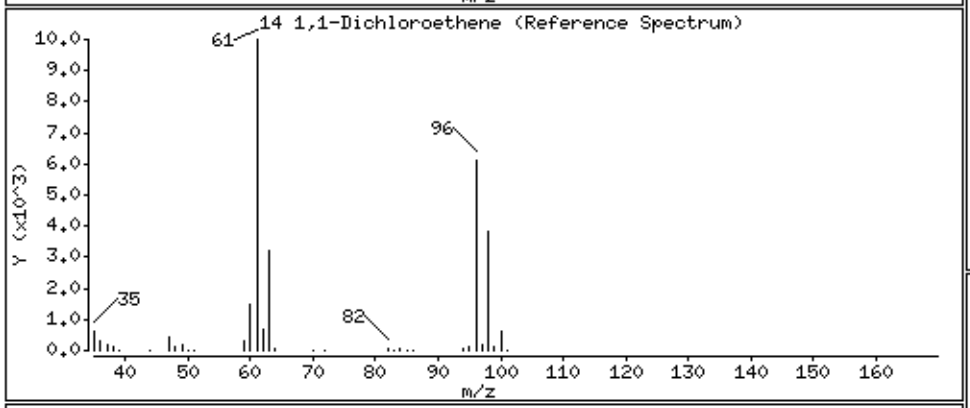
Column diameter: 0.53

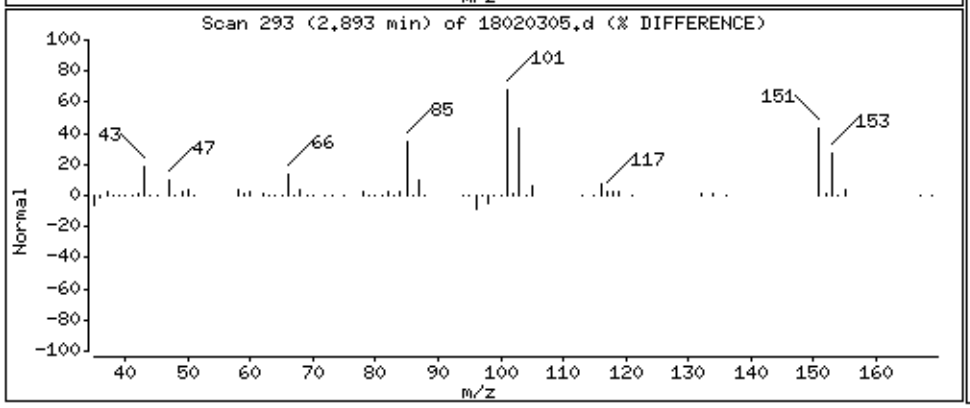
14 1,1-Dichloroethene

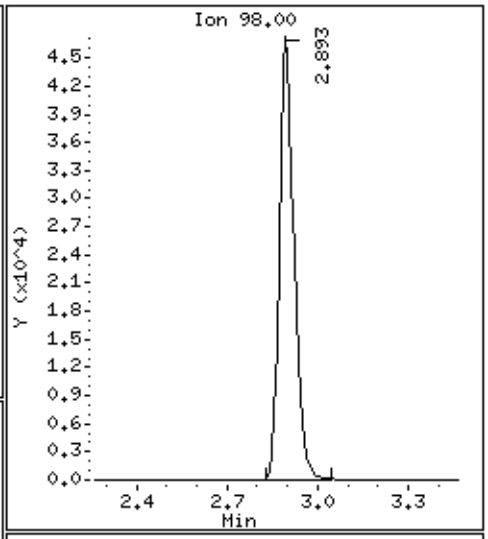
Concentration: 82.330 NG

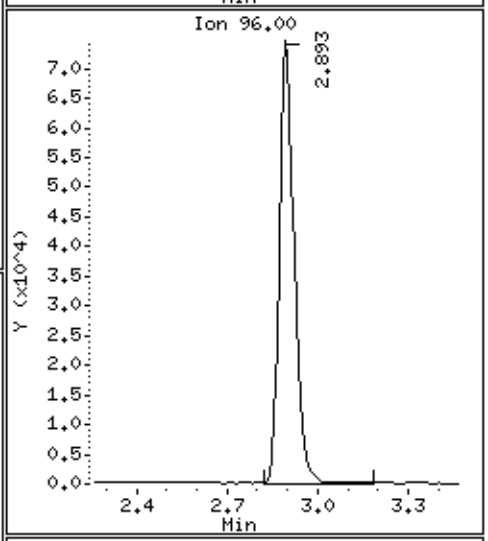


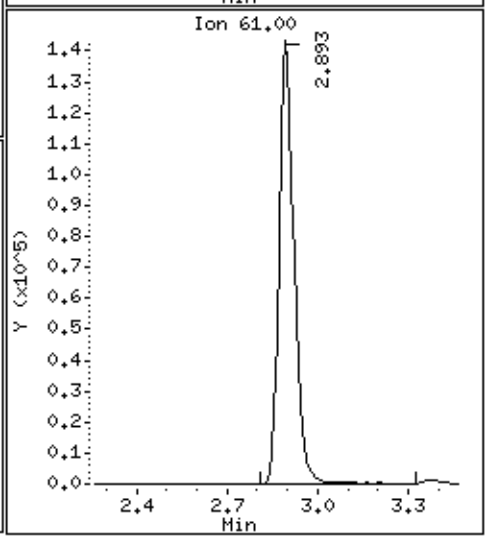












Data File: /chem/msd18.i/03Feb2016.b/18020305.d

Date : 03-FEB-2016 12:21

Client ID: LCSD

Instrument: msd18.i

Sample Info: ;VI VOC+PAH LCDS;LCSD

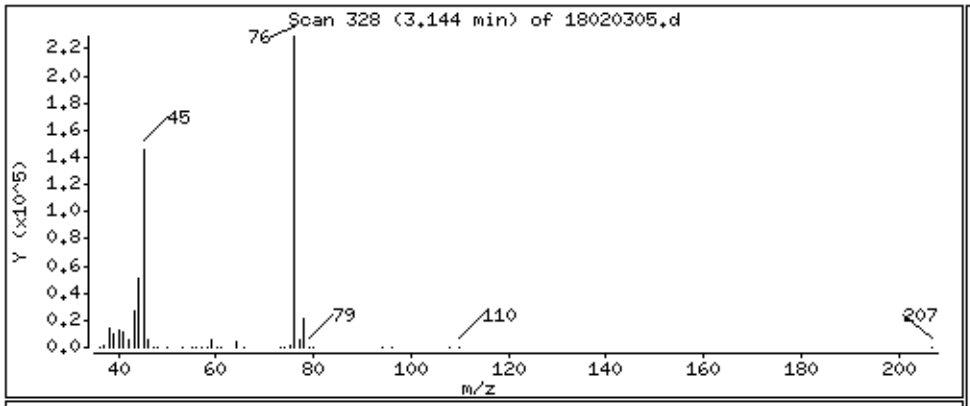
Operator: LA

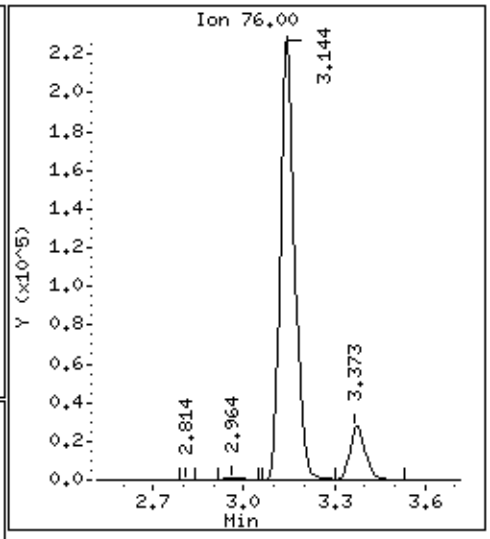
Column phase: RTx-624

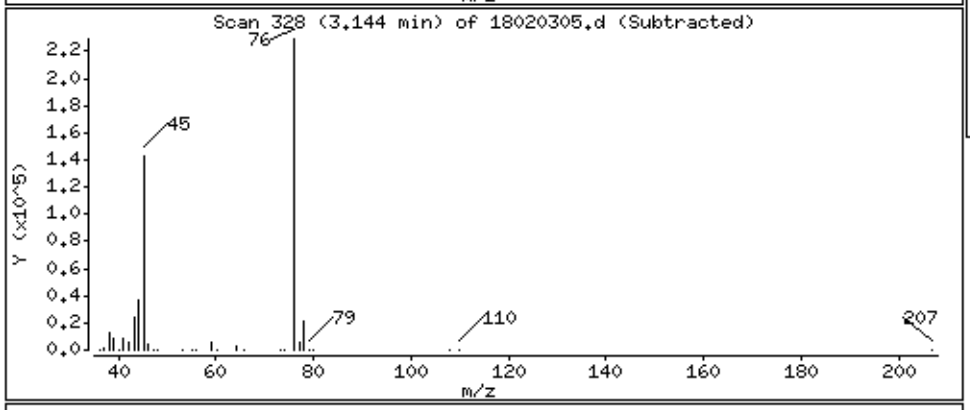
Column diameter: 0.53

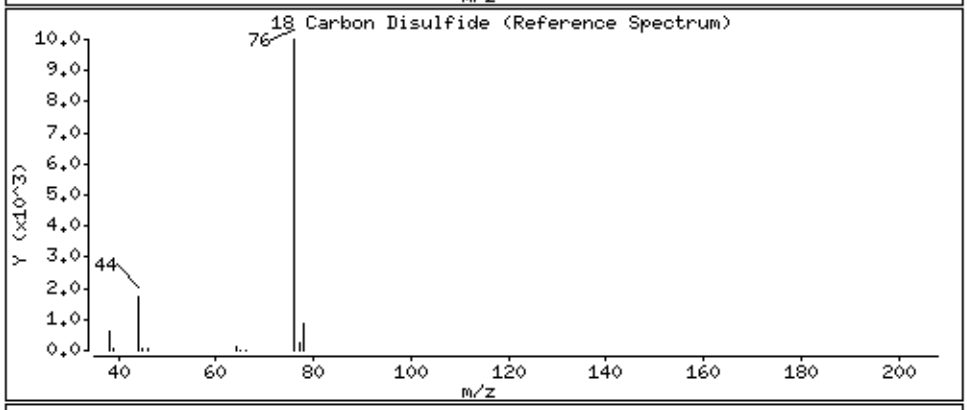
18 Carbon Disulfide

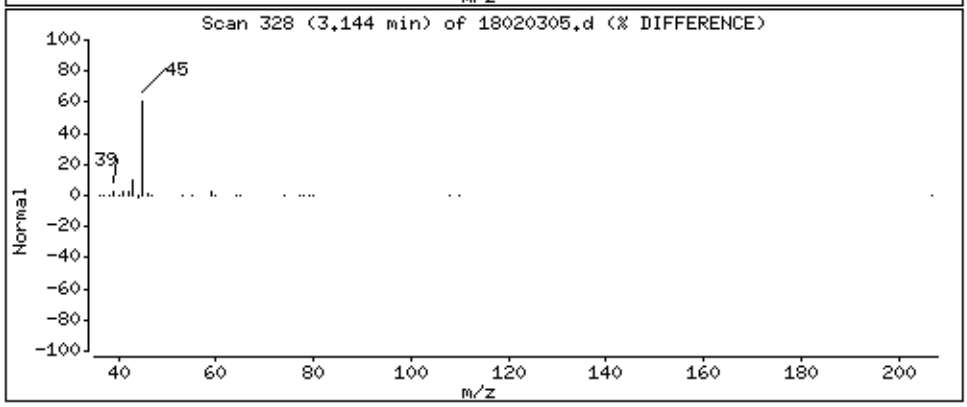
Concentration: 59.795 NG











Data File: /chem/msd18.i/03Feb2016.b/18020305.d

Date : 03-FEB-2016 12:21

Client ID: LCSD

Instrument: msd18.i

Sample Info: ;VI VOC+PAH LCDS;LCSD

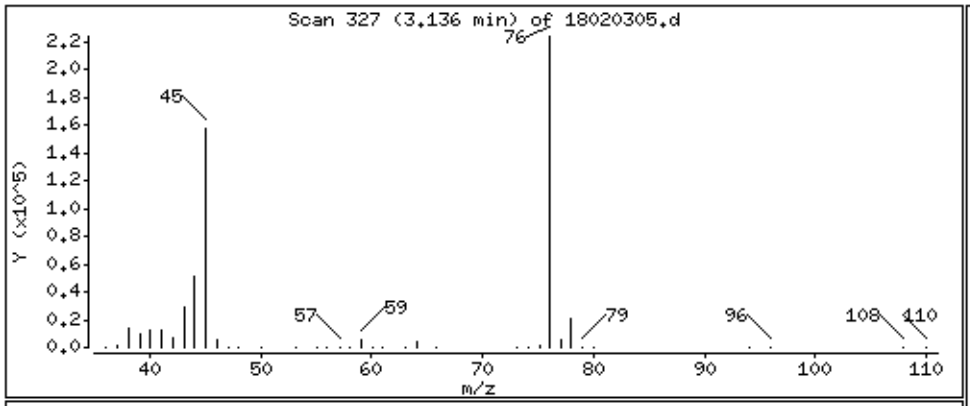
Operator: LA

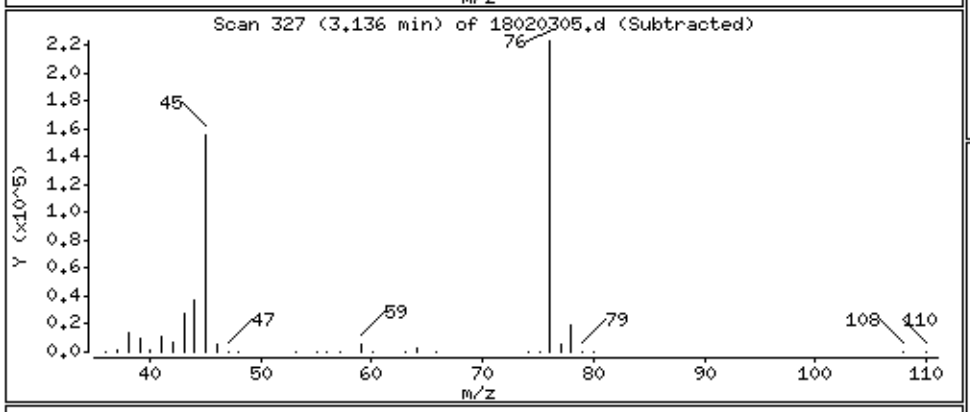
Column phase: RTx-624

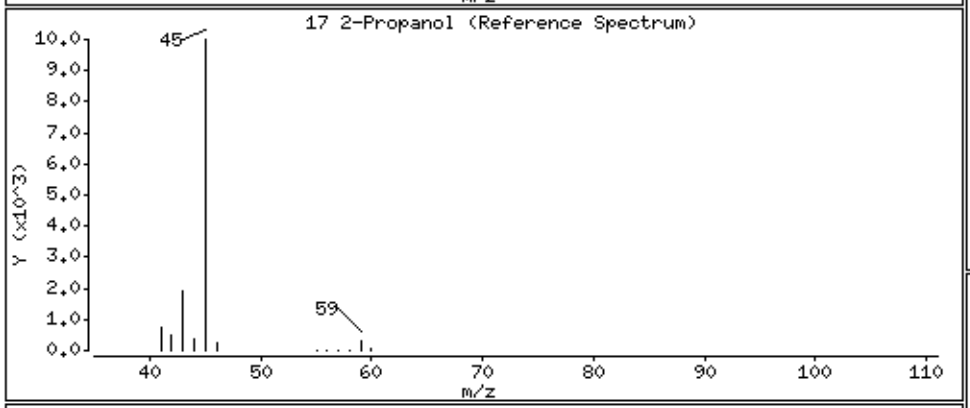
Column diameter: 0.53

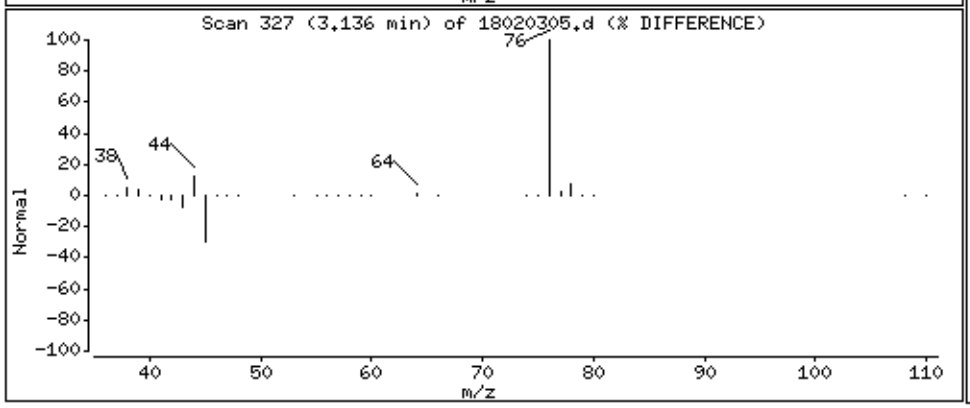
17 2-Propanol

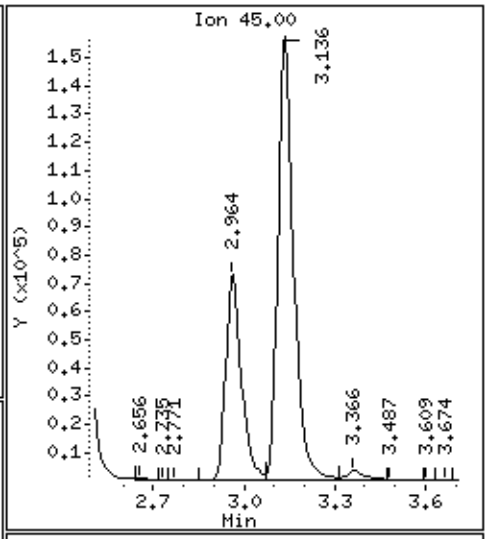
Concentration: 58.372 NG

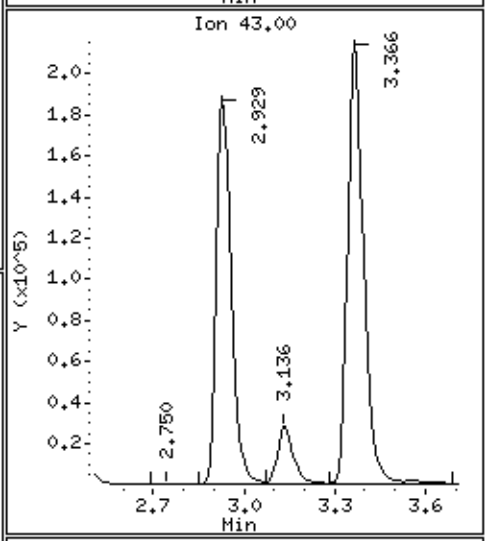


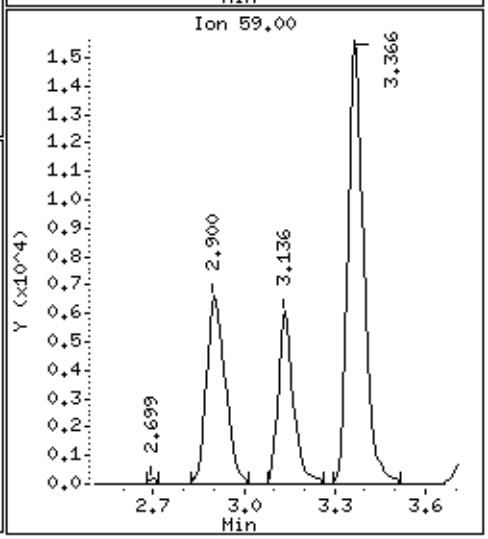












Data File: /chem/msd18.i/03Feb2016.b/18020305.d

Date : 03-FEB-2016 12:21

Client ID: LCSD

Instrument: msd18.i

Sample Info: ;VI VOC+PAH LCDS;LCSD

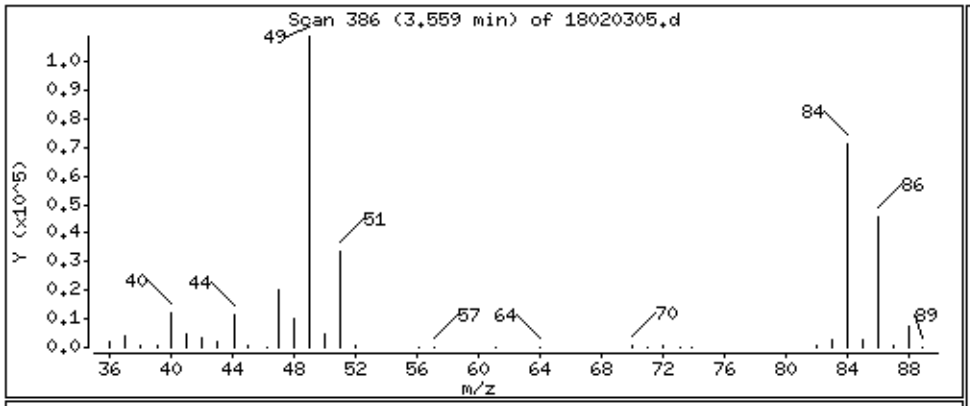
Operator: LA

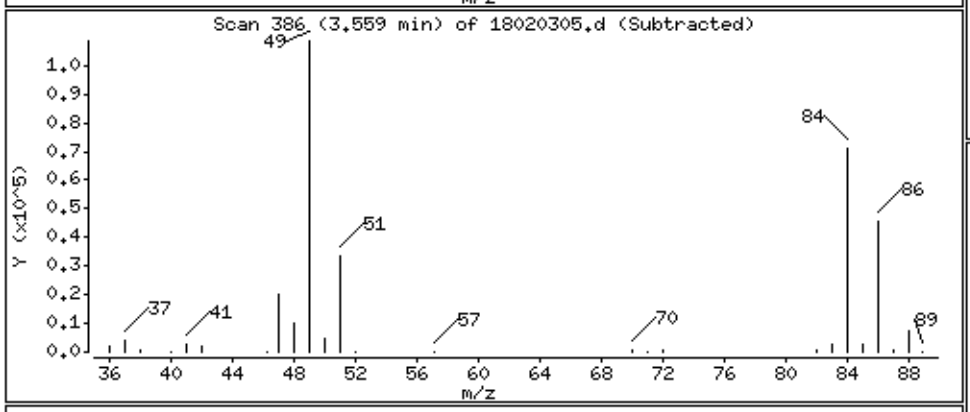
Column phase: RTx-624

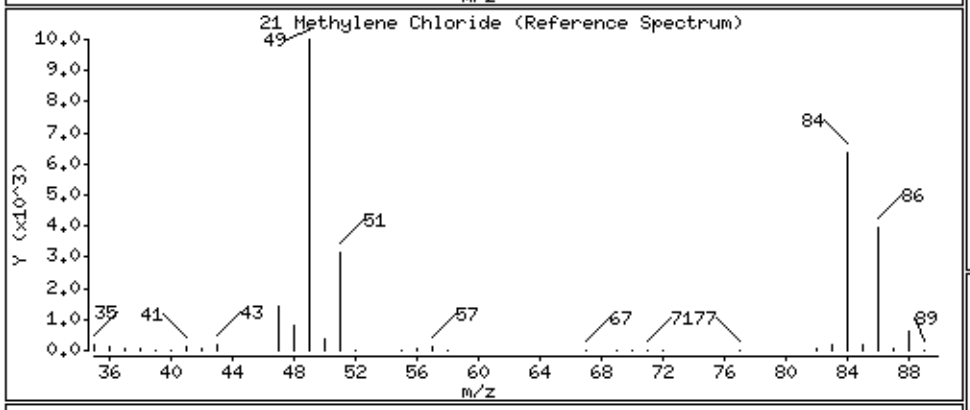
Column diameter: 0.53

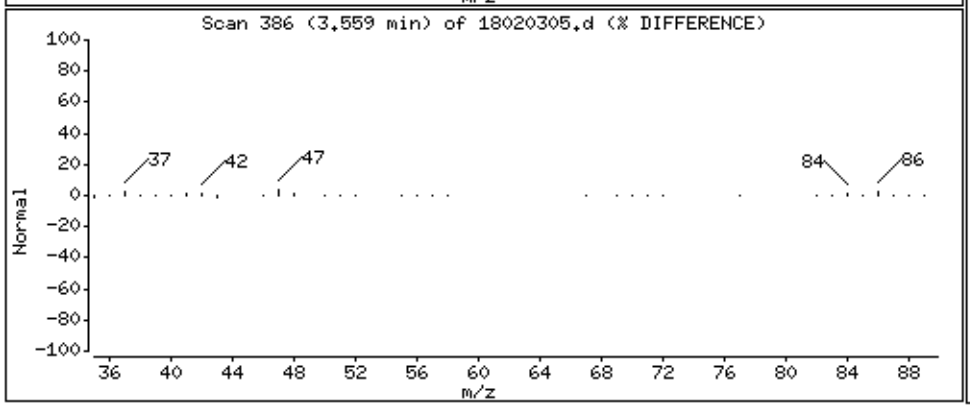
21 Methylene Chloride

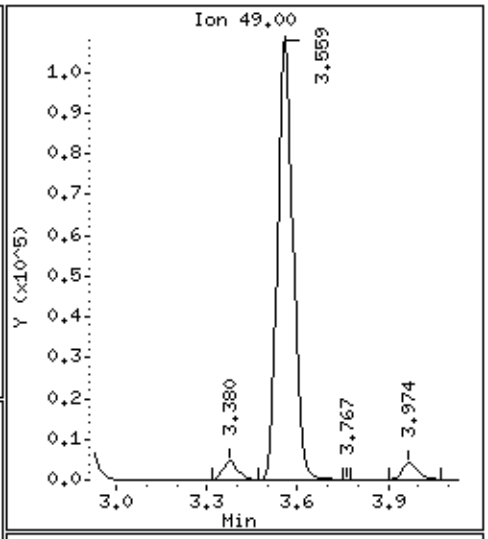
Concentration: 86.226 NG

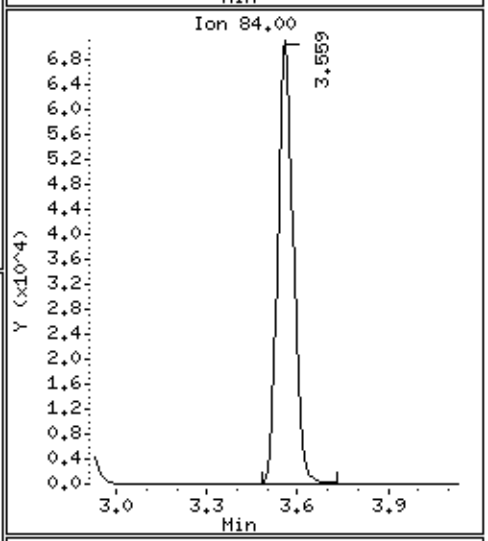


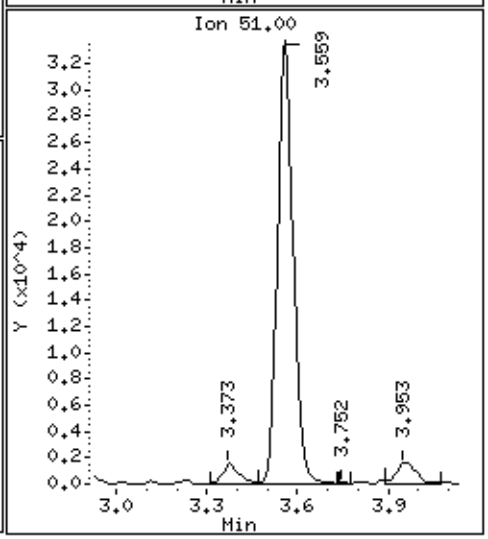












Data File: /chem/msd18.i/03Feb2016.b/18020305.d

Date : 03-FEB-2016 12:21

Client ID: LCSD

Instrument: msd18.i

Sample Info: ;VI VOC+PAH LCDS;LCSD

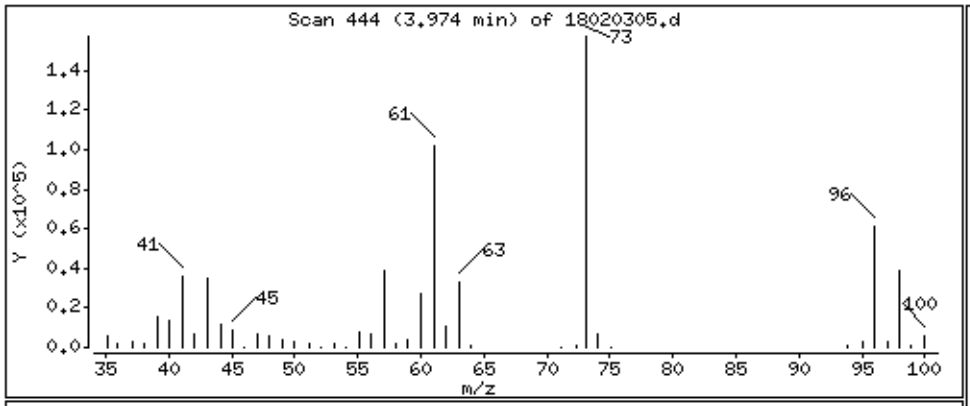
Operator: LA

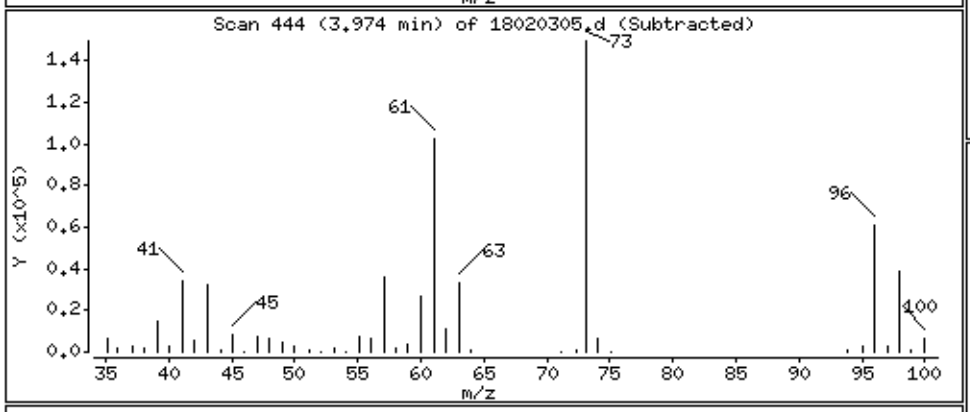
Column phase: RTx-624

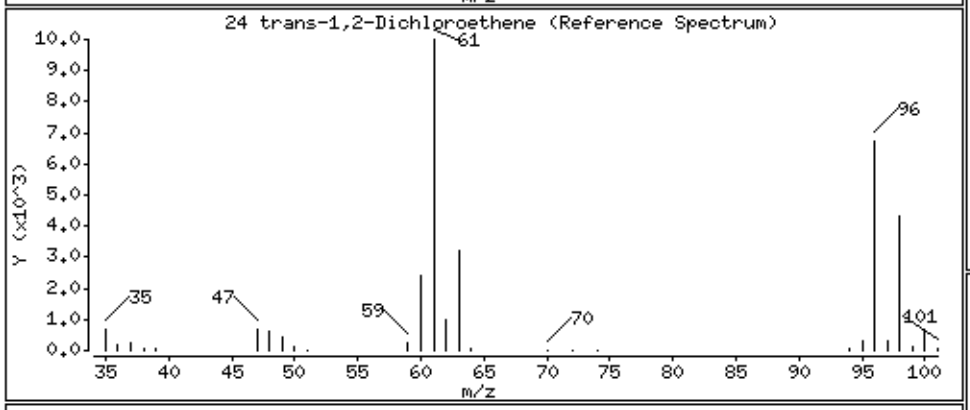
Column diameter: 0.53

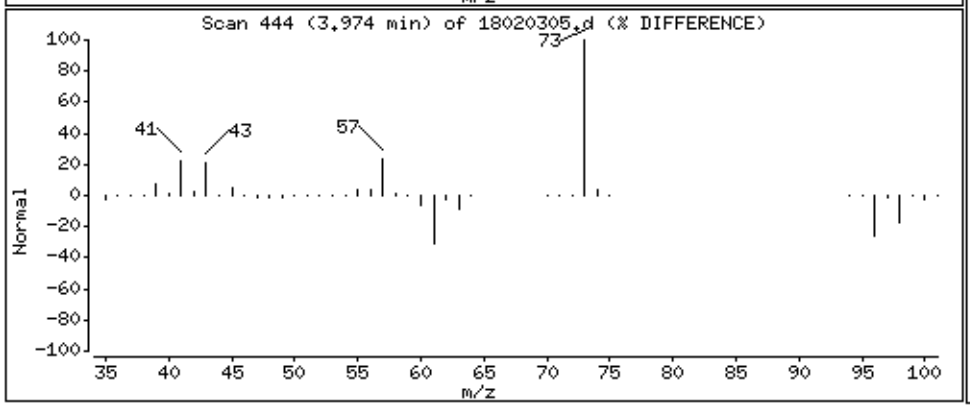
24 trans-1,2-Dichloroethene

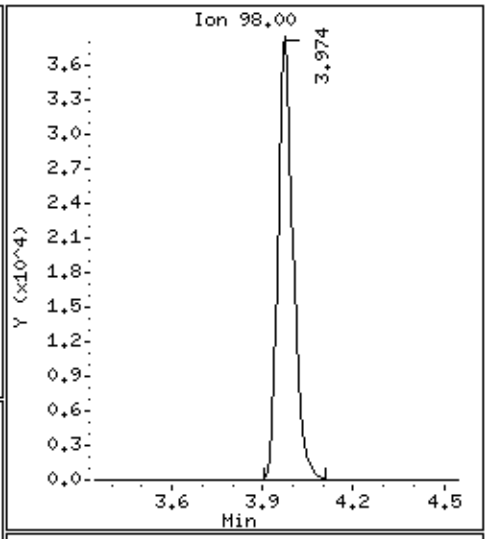
Concentration: 72.878 NG

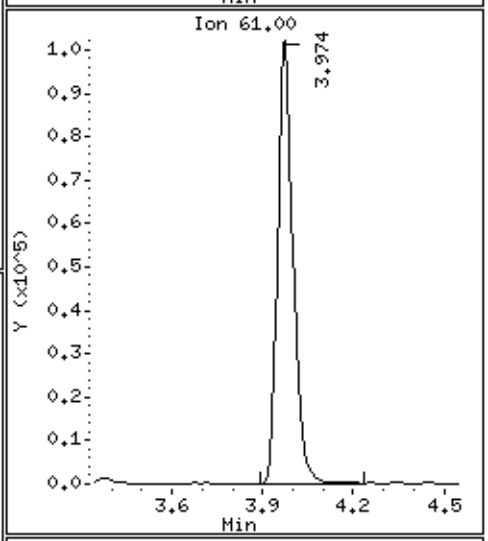


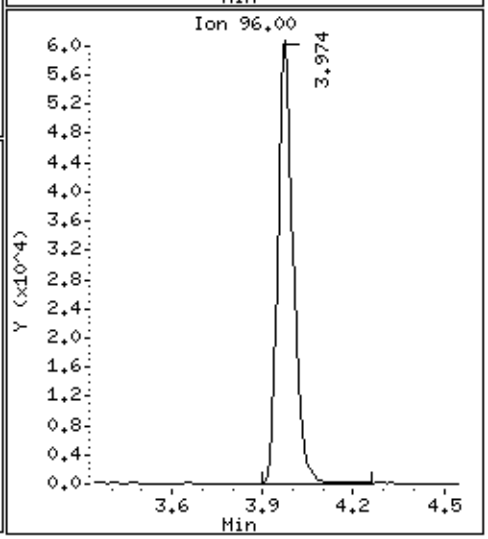












Data File: /chem/msd18.i/03Feb2016.b/18020305.d

Date : 03-FEB-2016 12:21

Client ID: LCSD

Instrument: msd18.i

Sample Info: ;VI VOC+PAH LCDS;LCSD

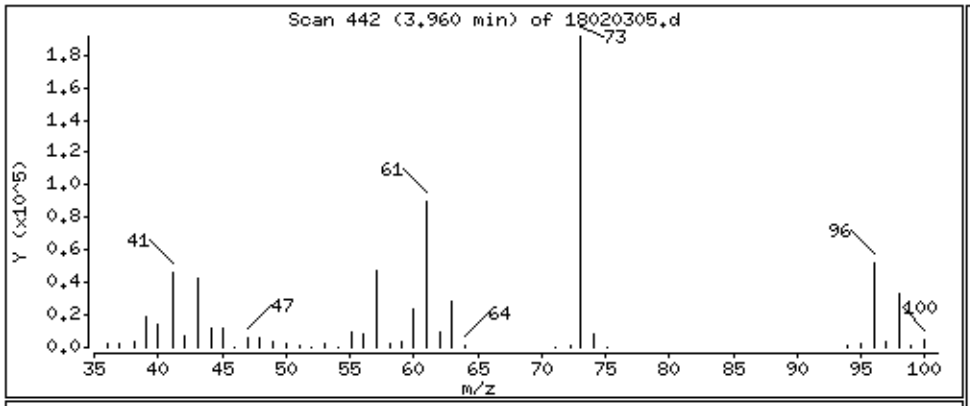
Operator: LA

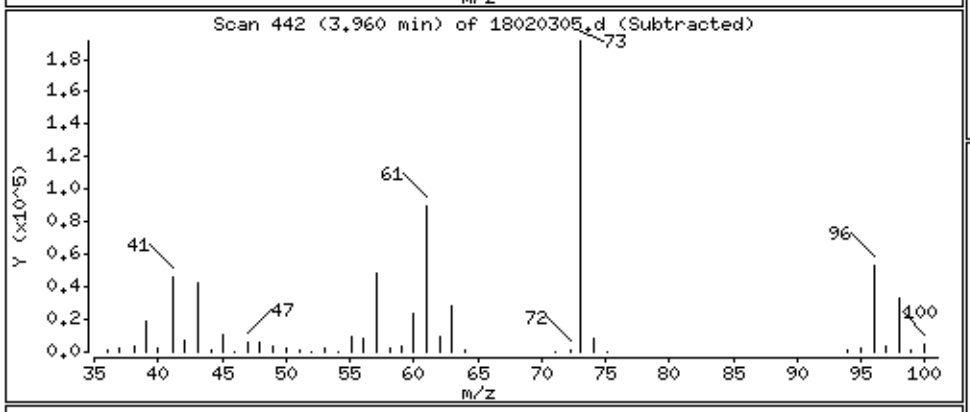
Column phase: RTx-624

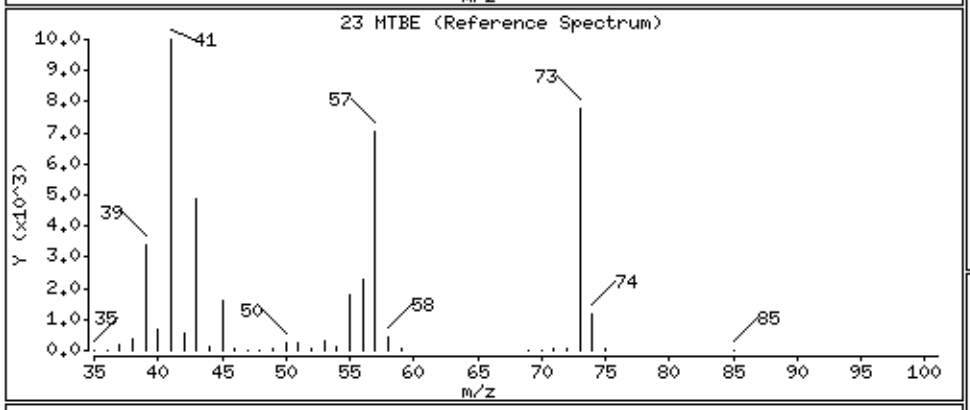
Column diameter: 0.53

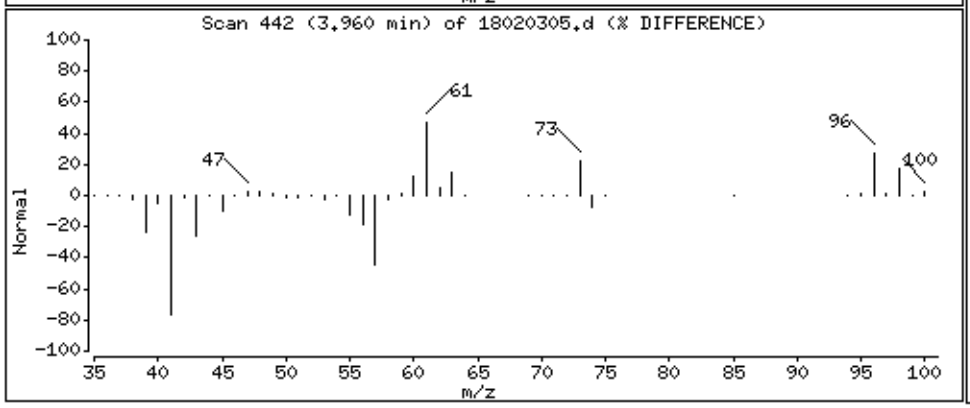
23 MTBE

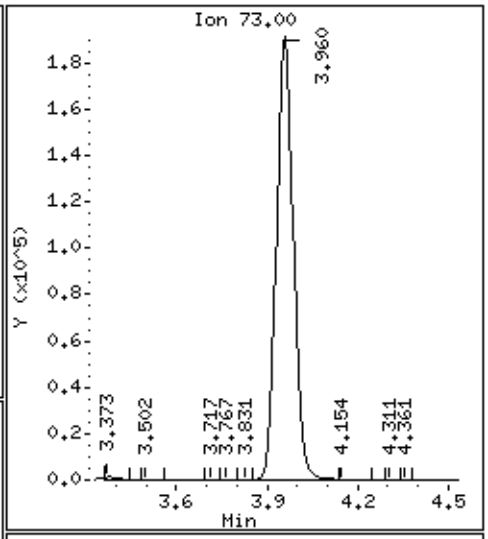
Concentration: 87.803 NG

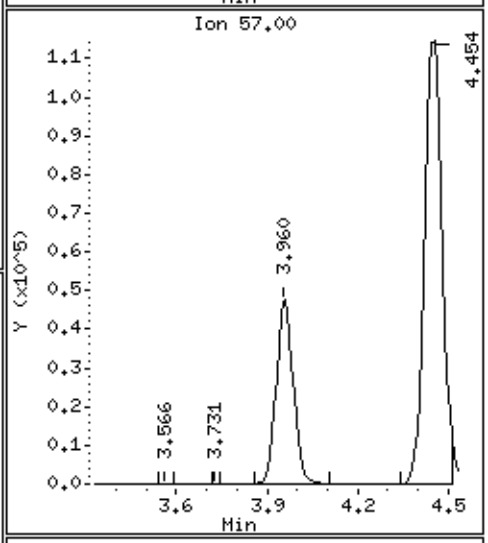


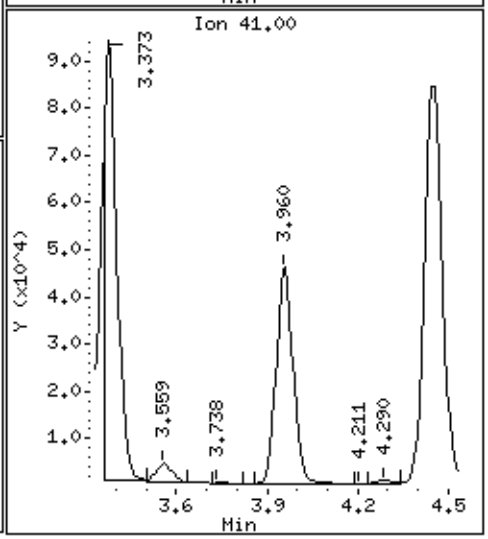












Data File: /chem/msd18.i/03Feb2016.b/18020305.d

Date : 03-FEB-2016 12:21

Client ID: LCSD

Instrument: msd18.i

Sample Info: ;VI VOC+PAH LCDS;LCSD

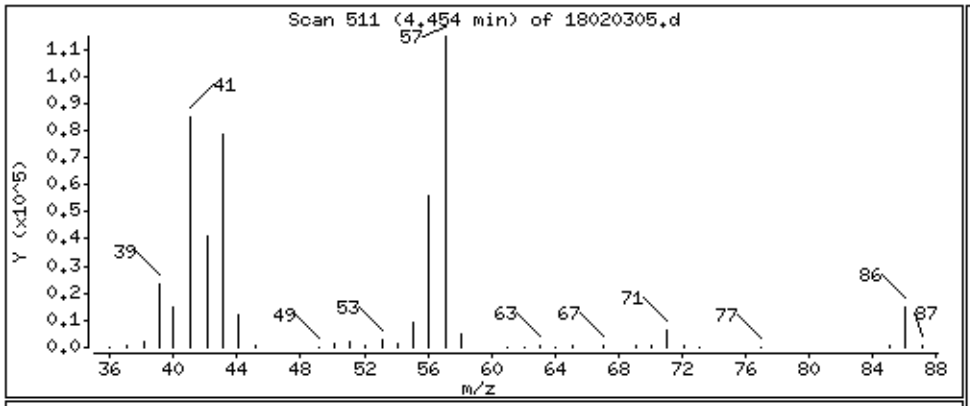
Operator: LA

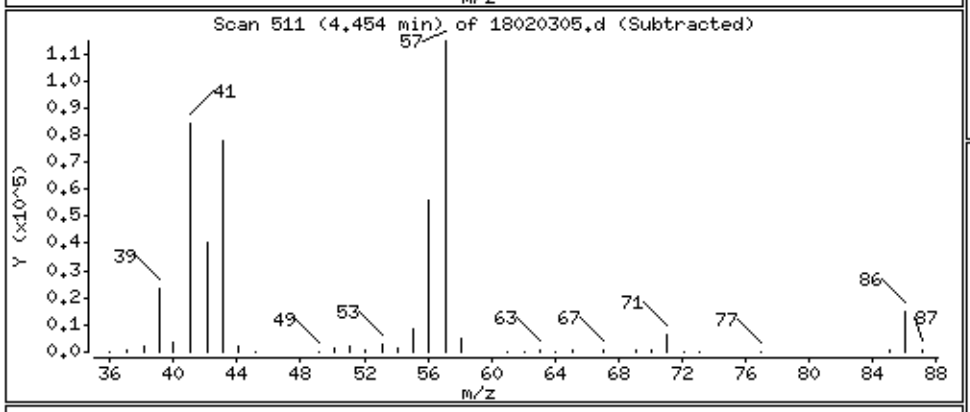
Column phase: RTx-624

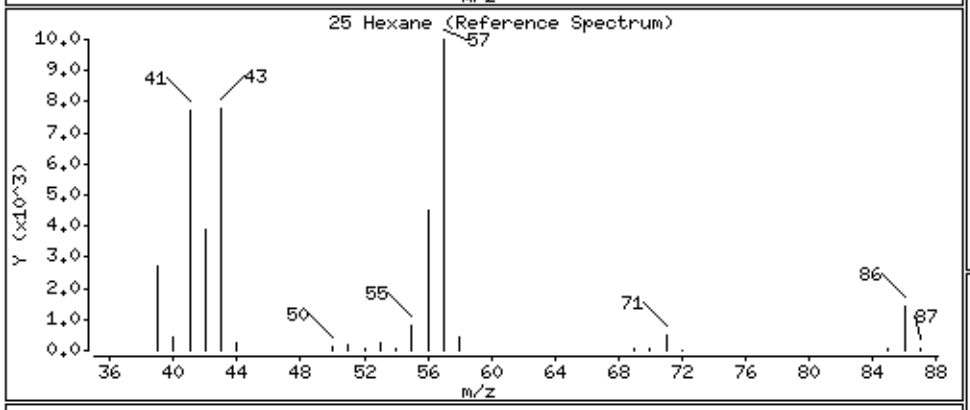
Column diameter: 0.53

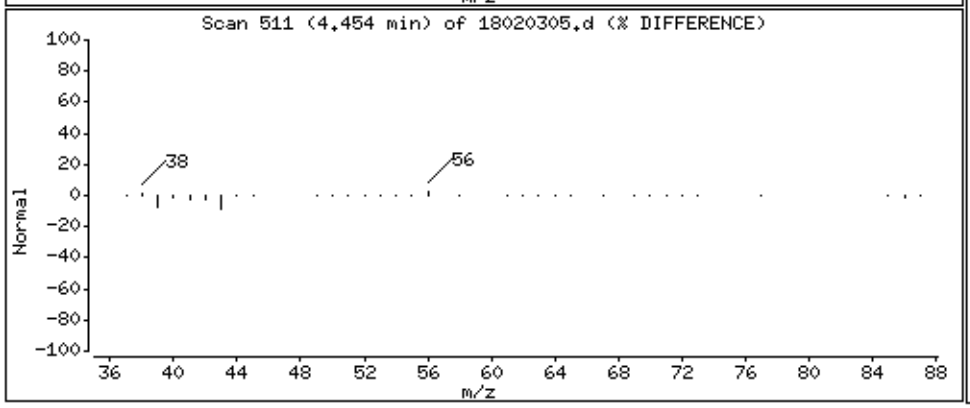
25 Hexane

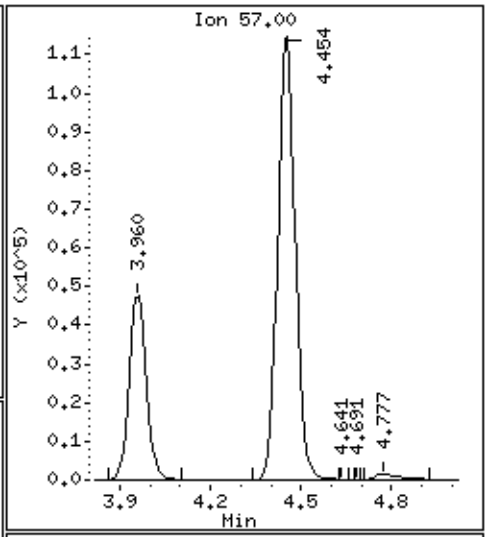
Concentration: 91.497 NG

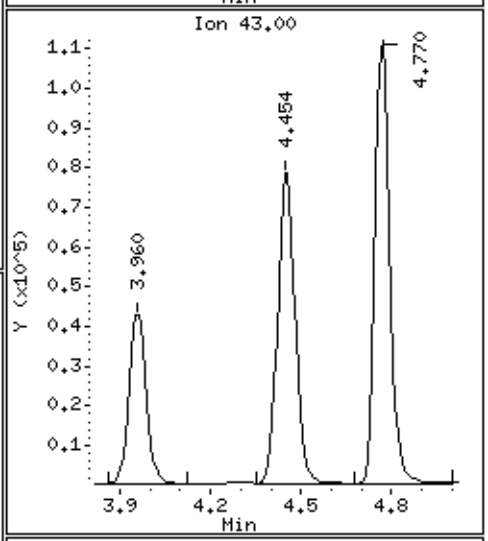


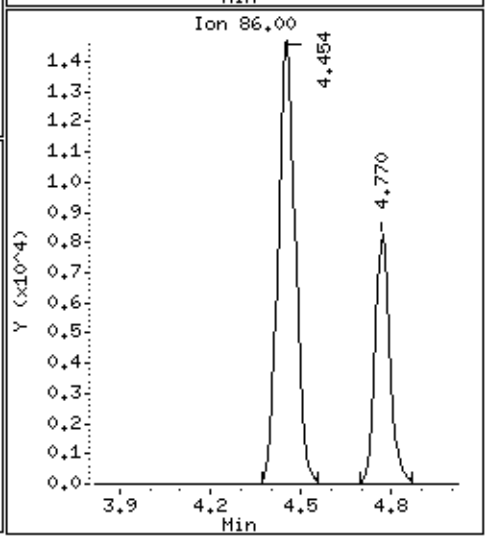












Data File: /chem/msd18.i/03Feb2016.b/18020305.d

Date : 03-FEB-2016 12:21

Client ID: LCSD

Instrument: msd18.i

Sample Info: ;VI VOC+PAH LCDS;LCSD

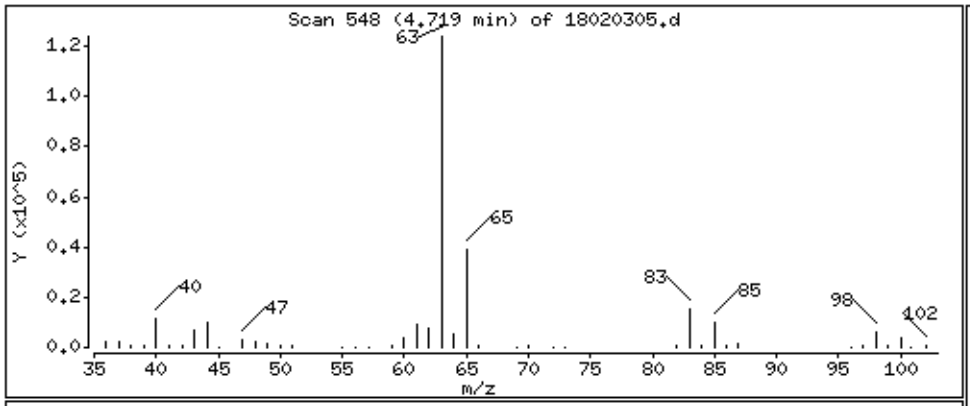
Operator: LA

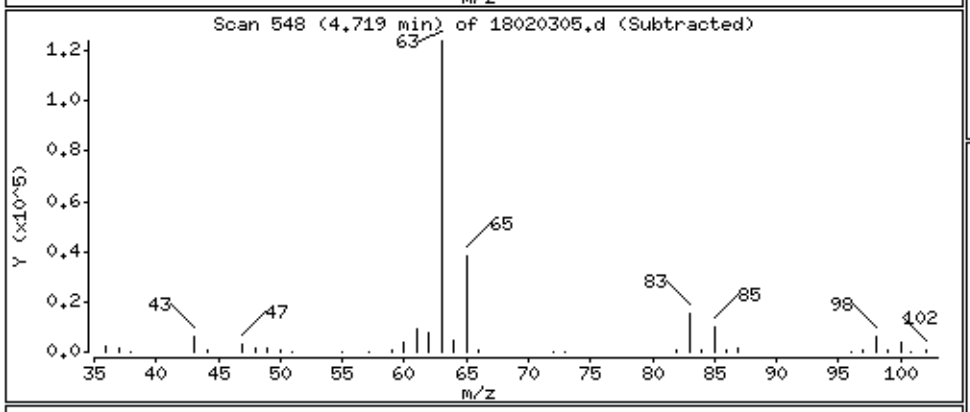
Column phase: RTx-624

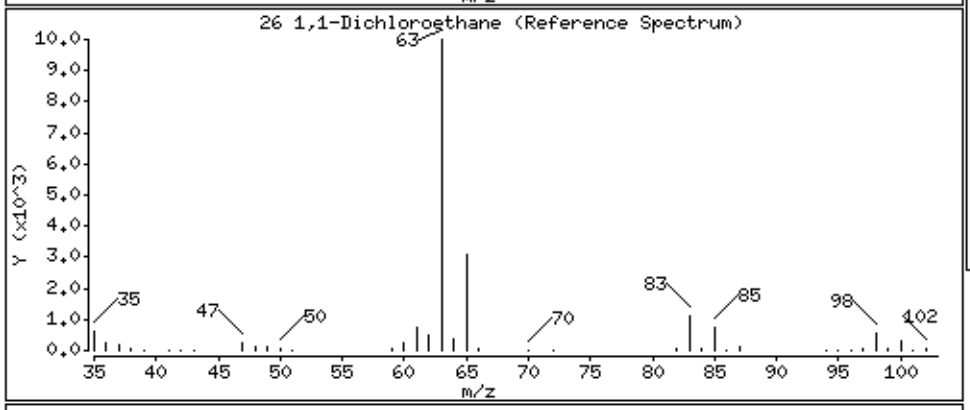
Column diameter: 0.53

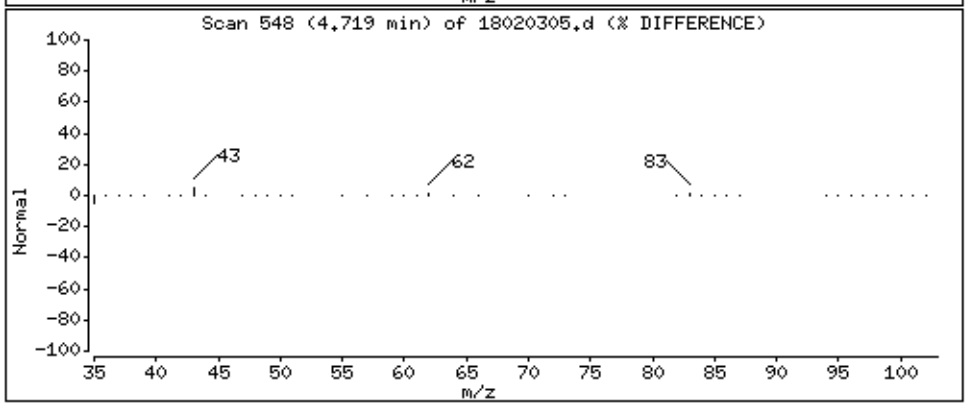
26 1,1-Dichloroethane

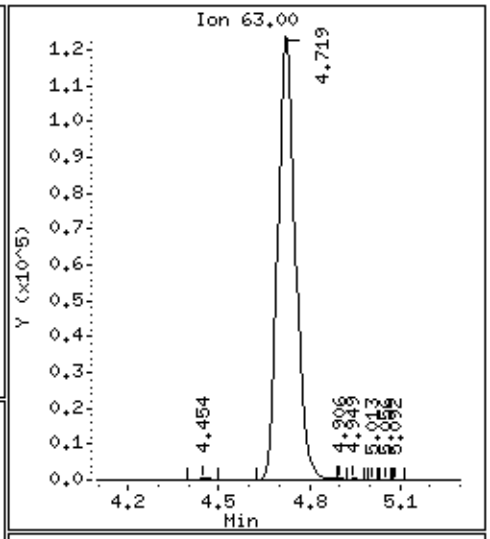
Concentration: 99.428 NG

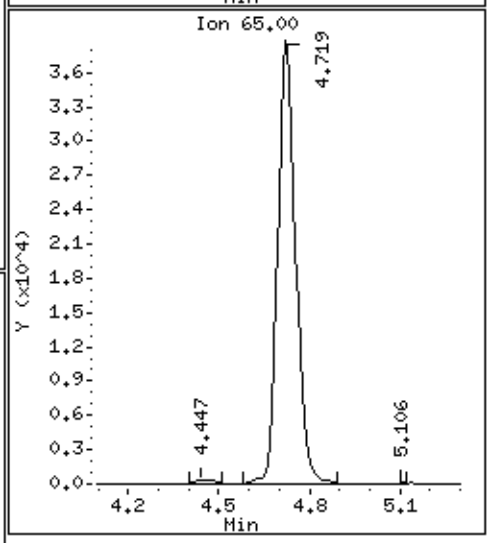












Data File: /chem/msd18.i/03Feb2016.b/18020305.d

Date : 03-FEB-2016 12:21

Client ID: LCSD

Instrument: msd18.i

Sample Info: ;VI VOC+PAH LCDS;LCSD

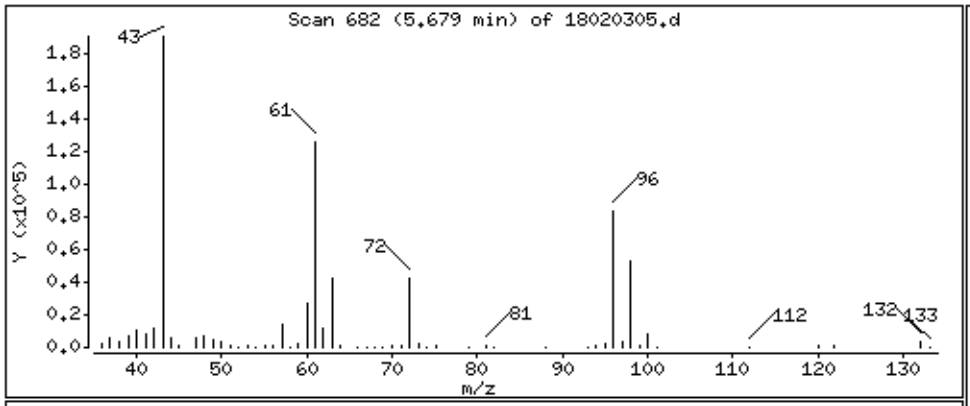
Operator: LA

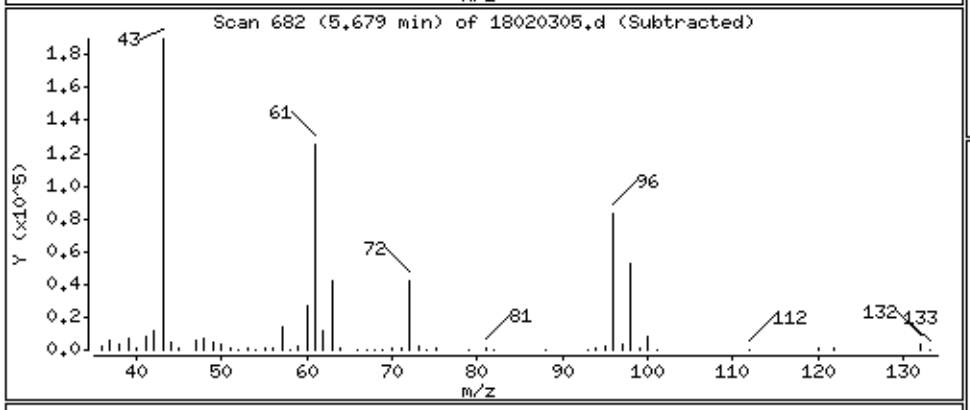
Column phase: RTx-624

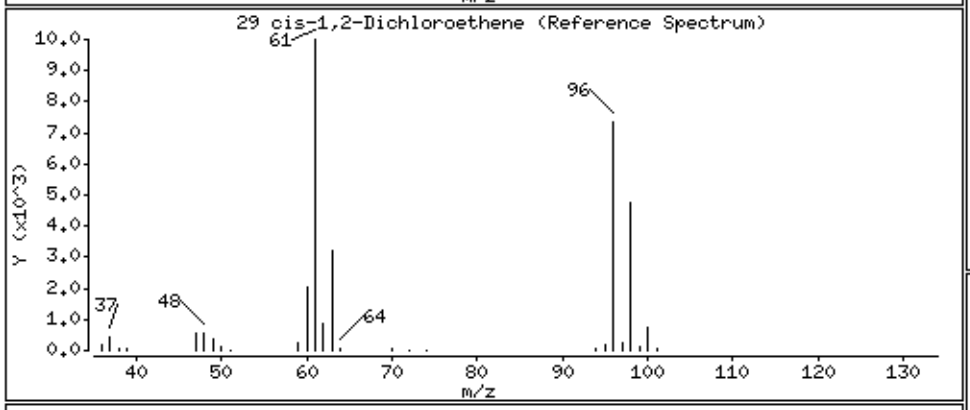
Column diameter: 0.53

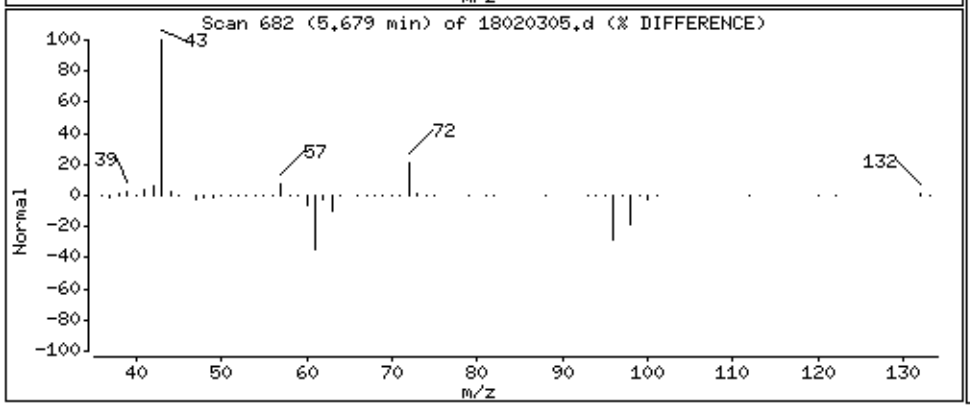
29 cis-1,2-Dichloroethene

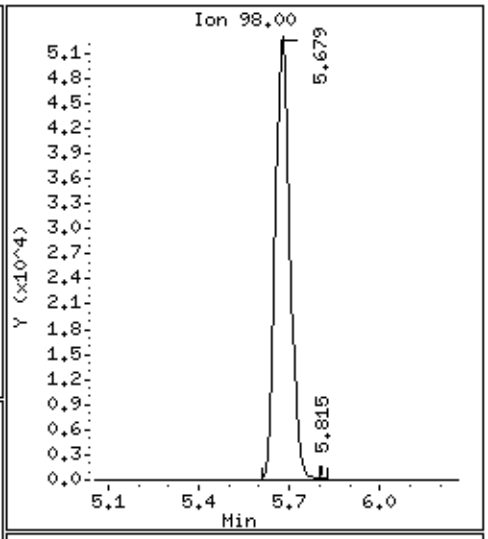
Concentration: 98.958 NG

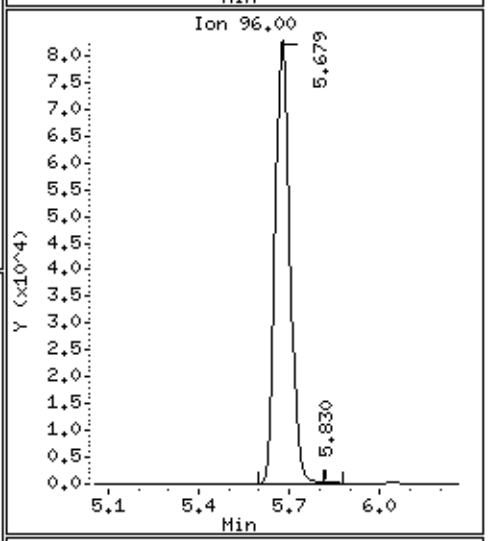


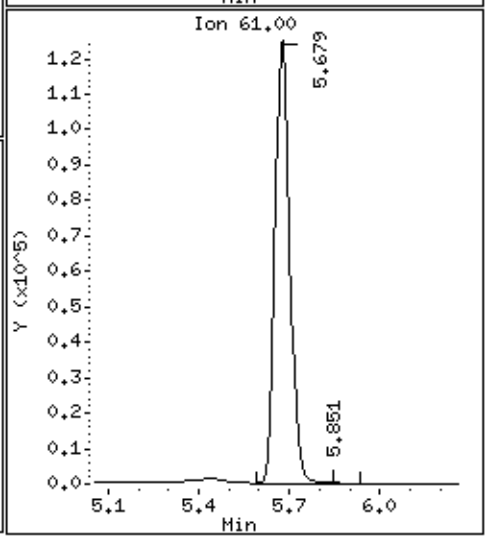












Data File: /chem/msd18.i/03Feb2016.b/18020305.d

Date : 03-FEB-2016 12:21

Client ID: LCSD

Instrument: msd18.i

Sample Info: ;VI VOC+PAH LCDS;LCSD

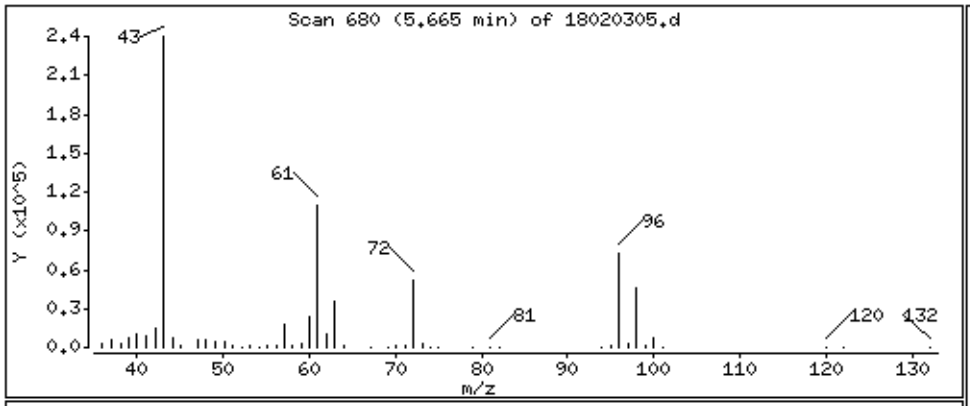
Operator: LA

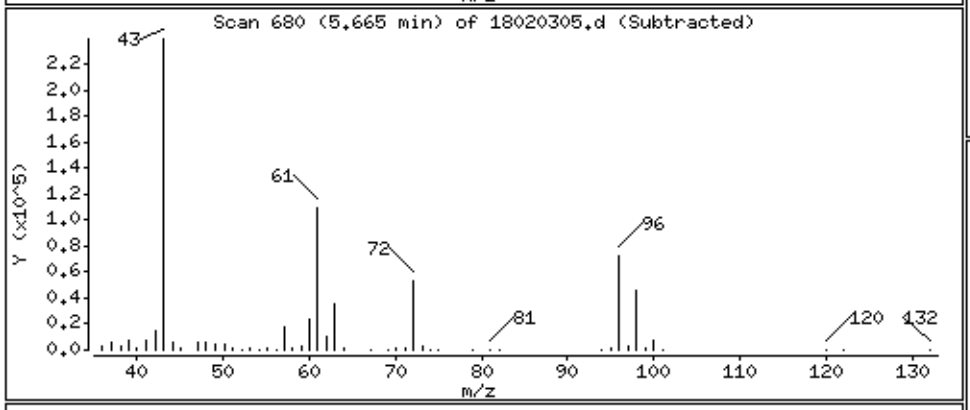
Column phase: RTx-624

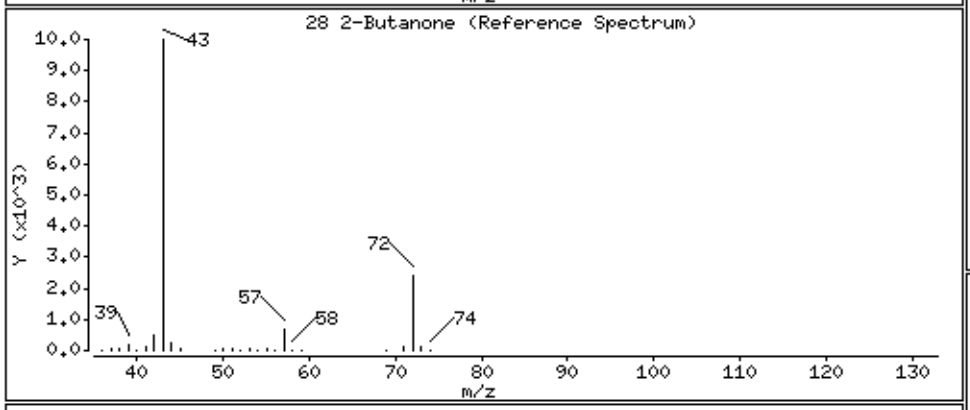
Column diameter: 0.53

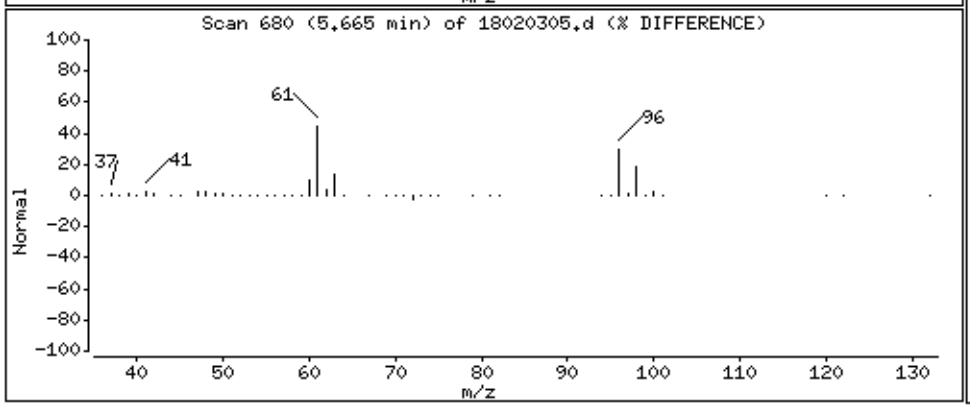
28 2-Butanone

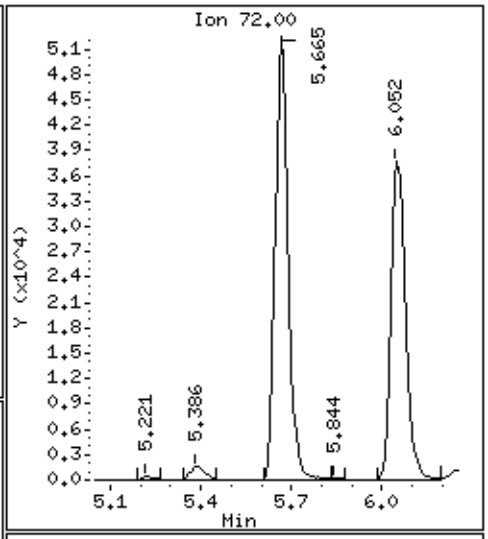
Concentration: 73.239 NG

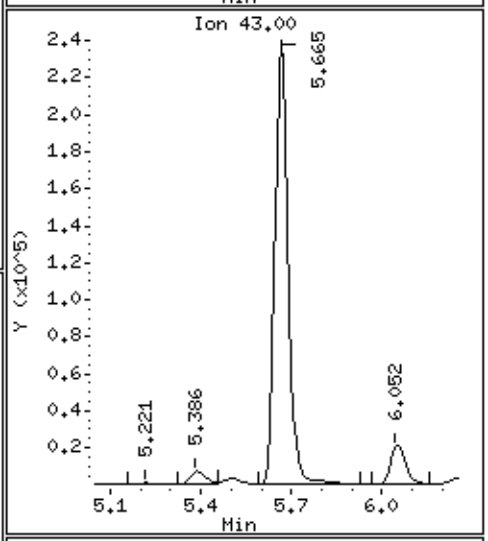


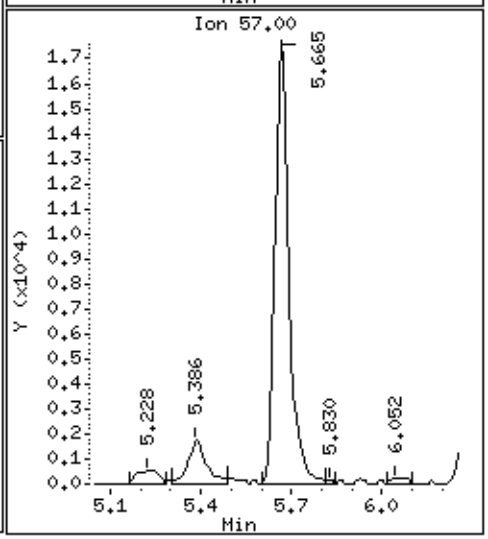












Data File: /chem/msd18.i/03Feb2016.b/18020305.d

Date : 03-FEB-2016 12:21

Client ID: LCSD

Instrument: msd18.i

Sample Info: ;VI VOC+PAH LCDS;LCSD

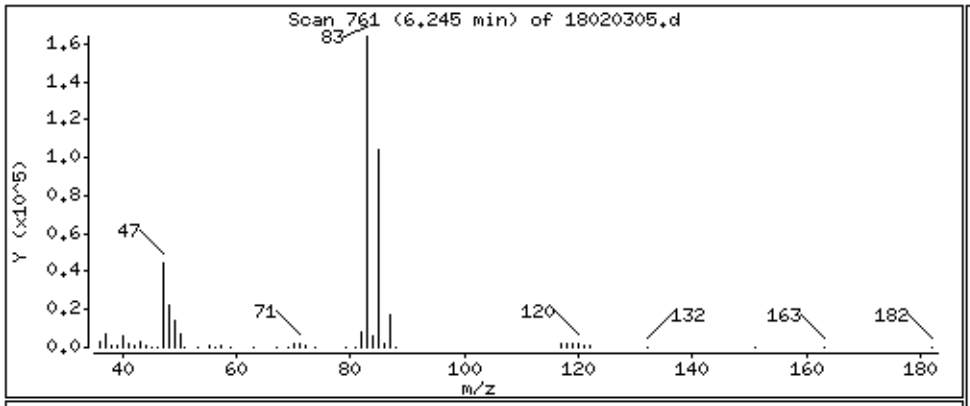
Operator: LA

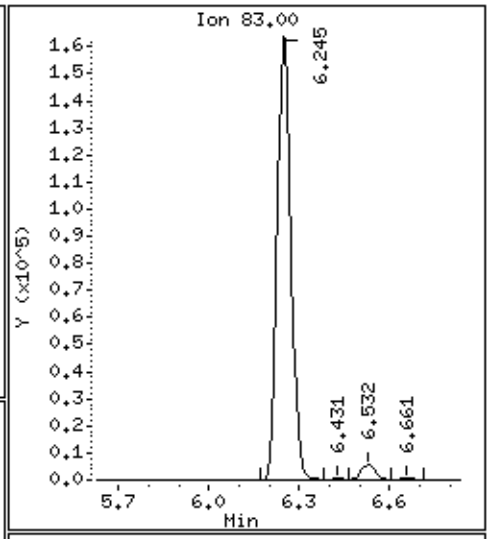
Column phase: RTx-624

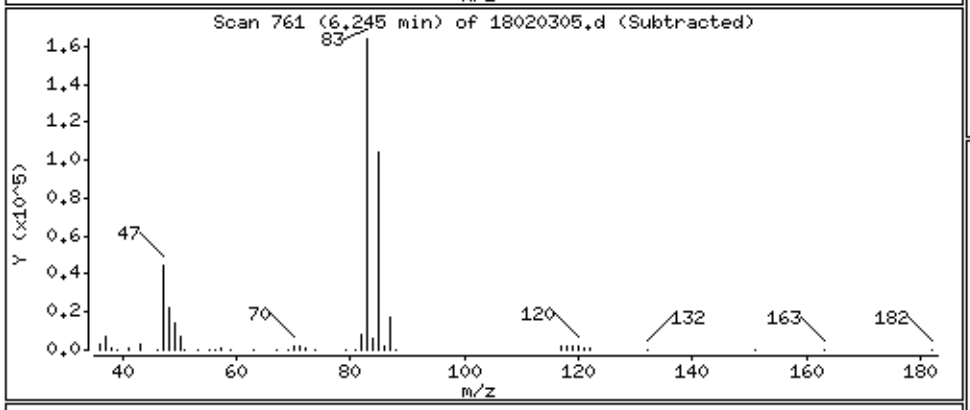
Column diameter: 0.53

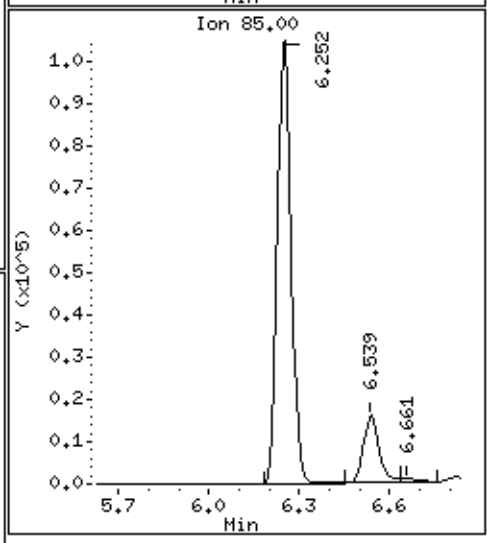
35 Chloroform

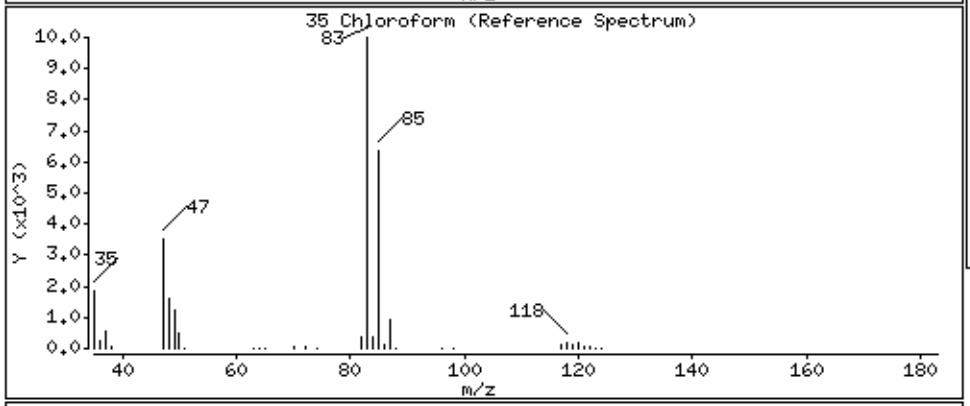
Concentration: 119.18 NG

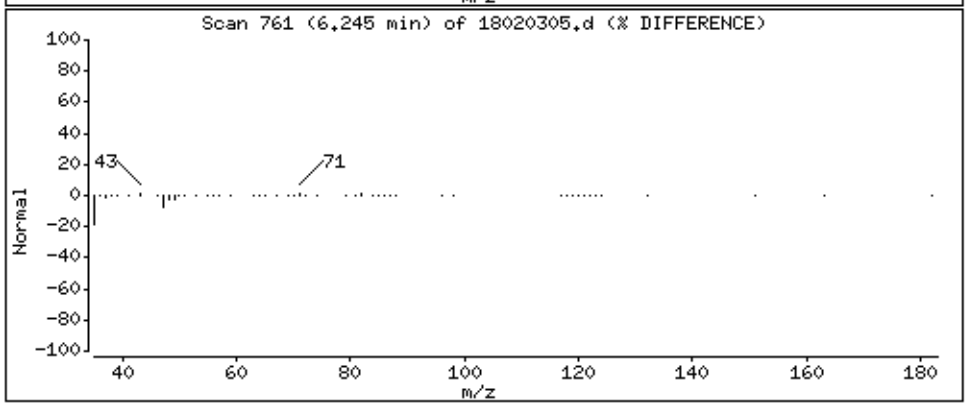












Data File: /chem/msd18.i/03Feb2016.b/18020305.d

Date : 03-FEB-2016 12:21

Client ID: LCSD

Instrument: msd18.i

Sample Info: ;VI VOC+PAH LCDS;LCSD

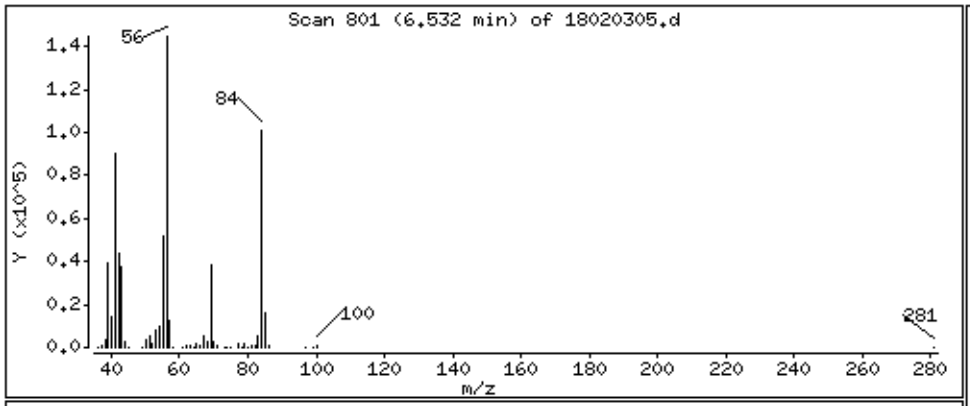
Operator: LA

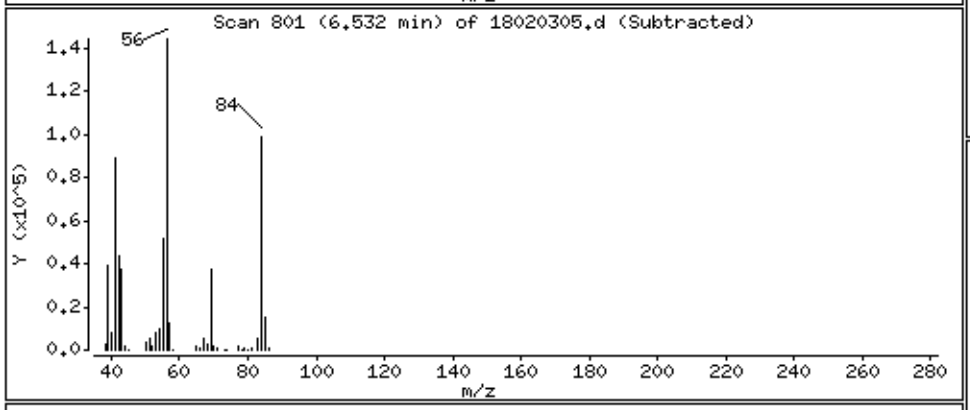
Column phase: RTx-624

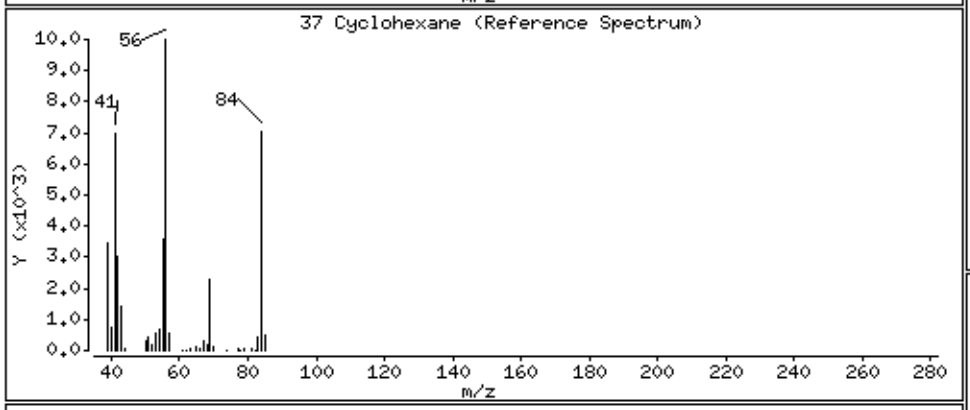
Column diameter: 0.53

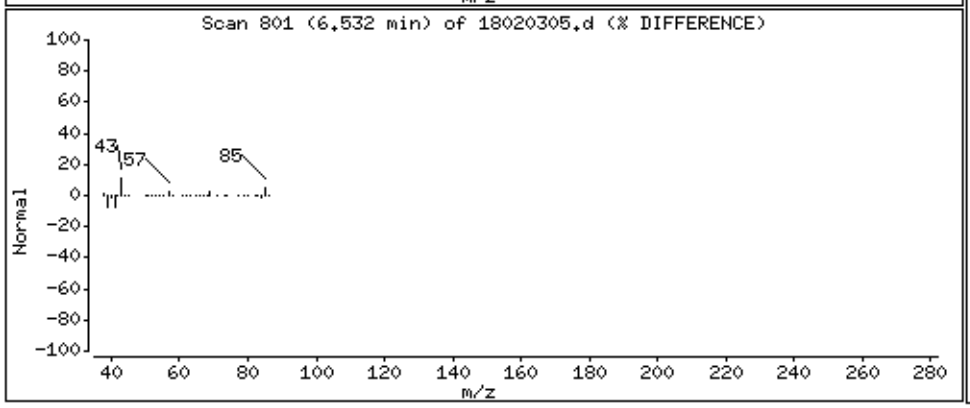
37 Cyclohexane

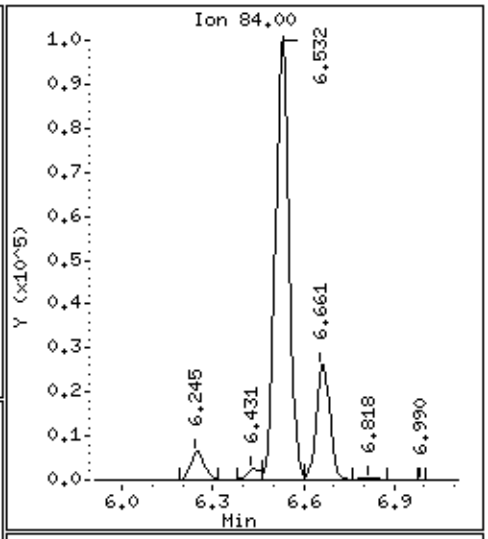
Concentration: 74.830 NG

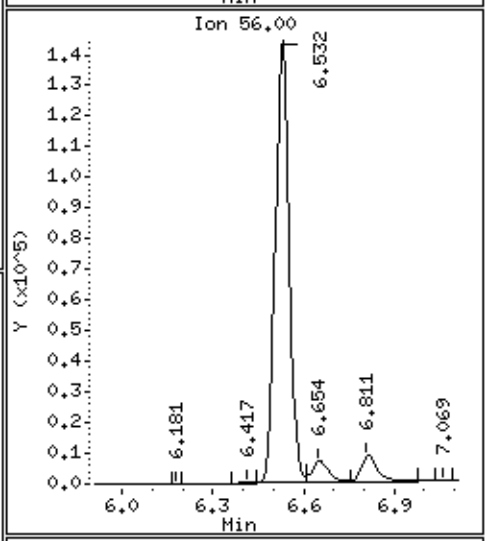


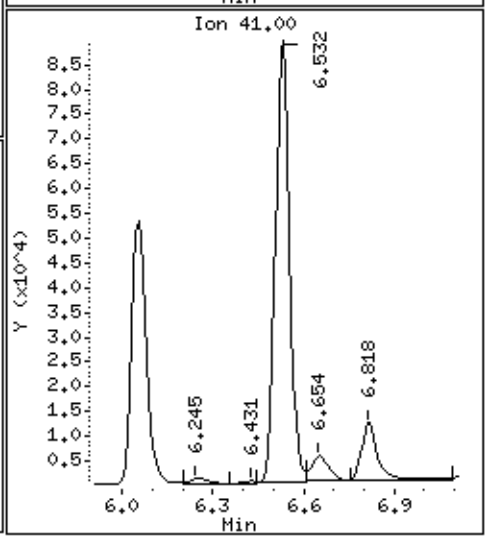












Data File: /chem/msd18.i/03Feb2016.b/18020305.d

Date : 03-FEB-2016 12:21

Client ID: LCSD

Instrument: msd18.i

Sample Info: ;VI VOC+PAH LCDS;LCSD

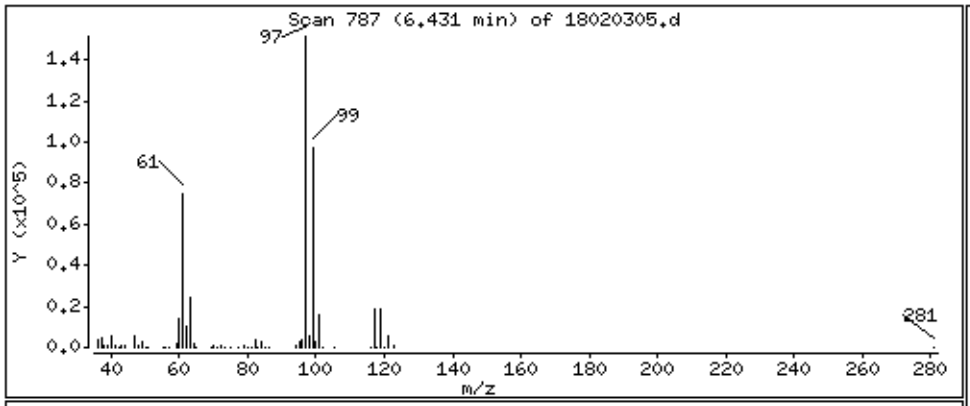
Operator: LA

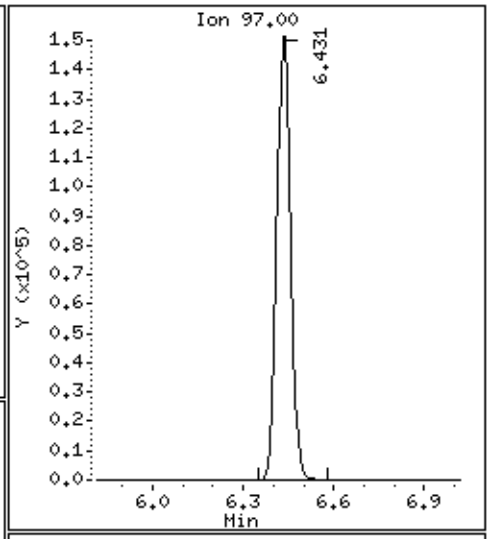
Column phase: RTx-624

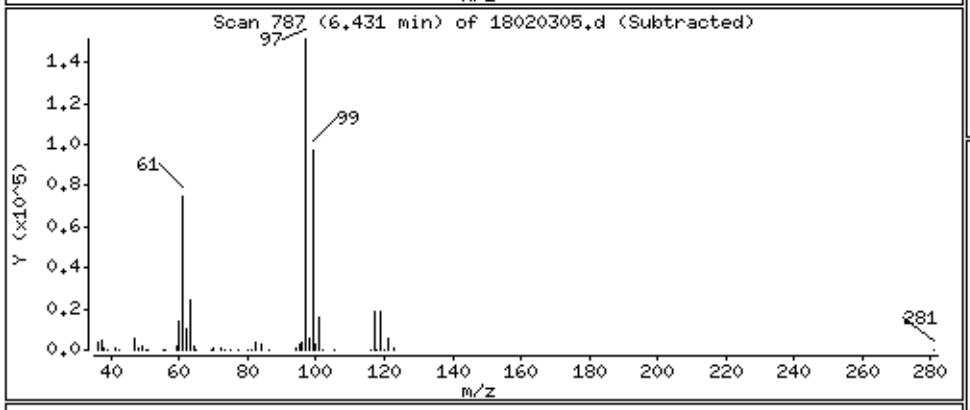
Column diameter: 0.53

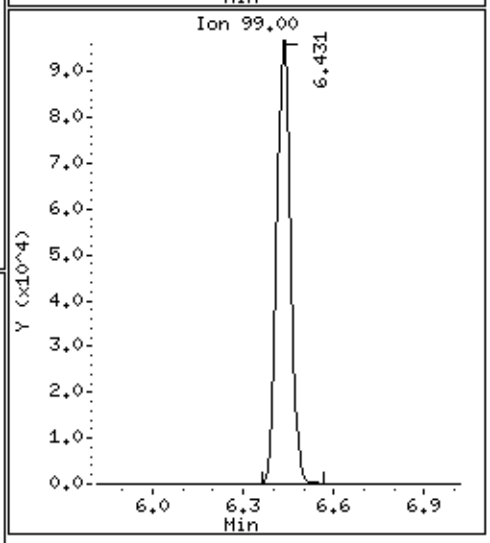
36 1,1,1-Trichloroethane

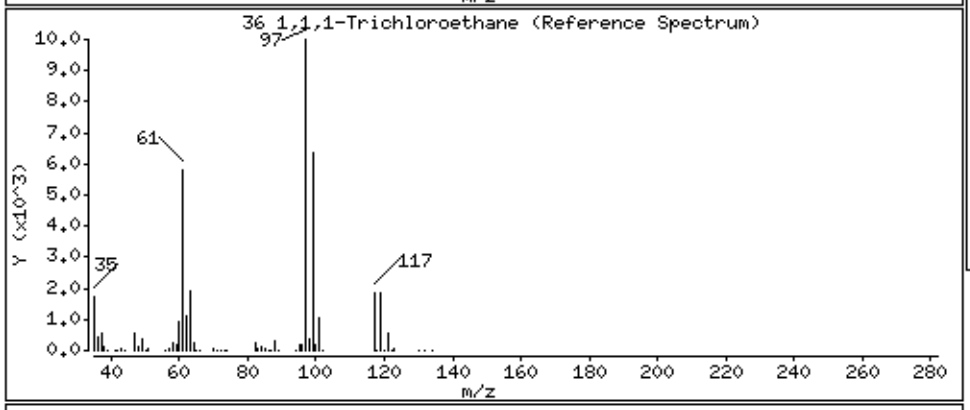
Concentration: 118.16 NG

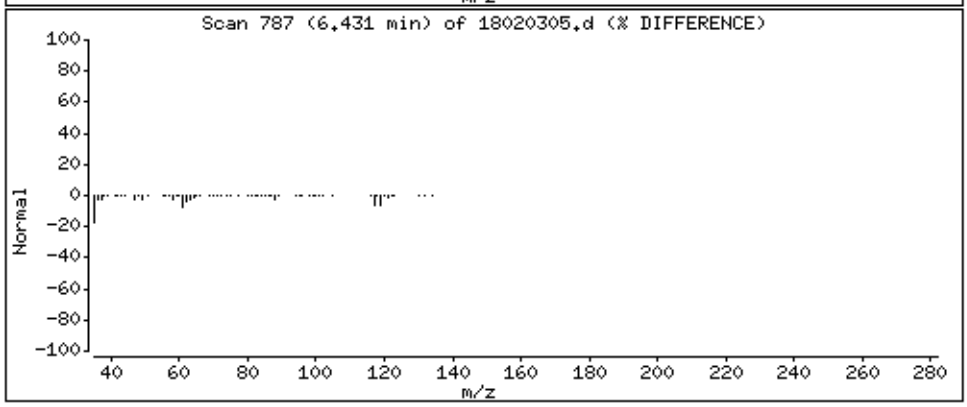












Data File: /chem/msd18.i/03Feb2016.b/18020305.d

Date : 03-FEB-2016 12:21

Client ID: LCSD

Instrument: msd18.i

Sample Info: ;VI VOC+PAH LCDS;LCSD

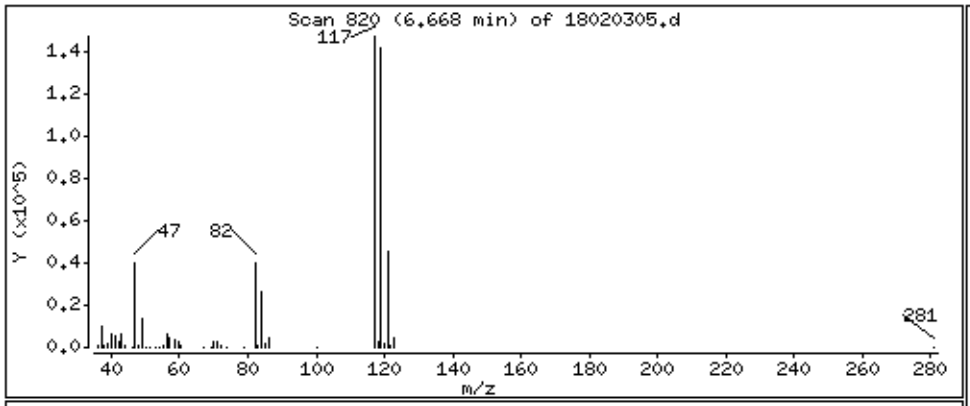
Operator: LA

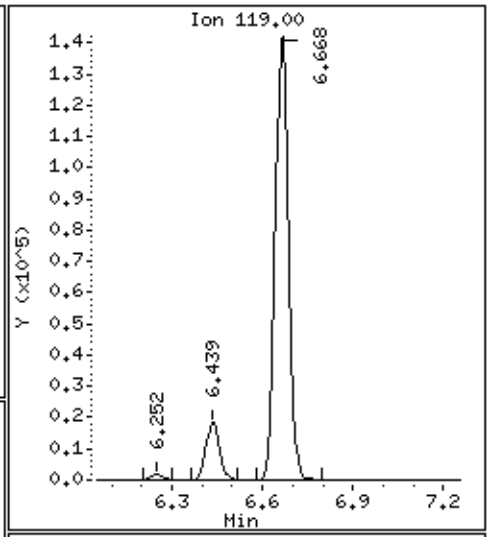
Column phase: RTx-624

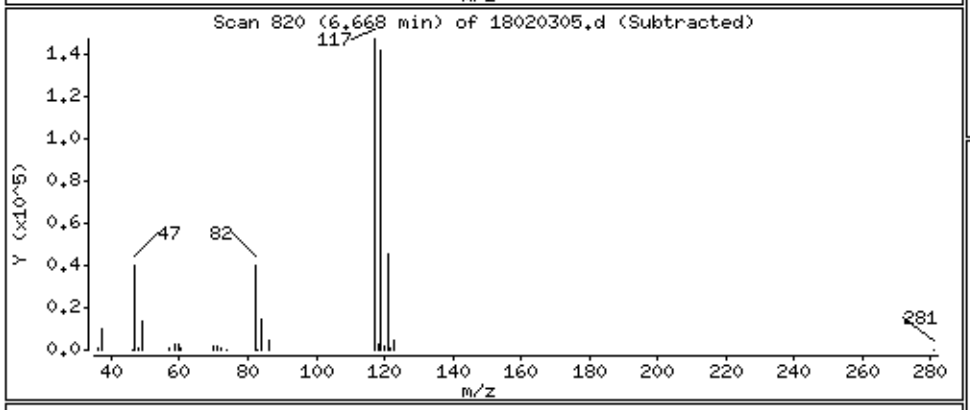
Column diameter: 0.53

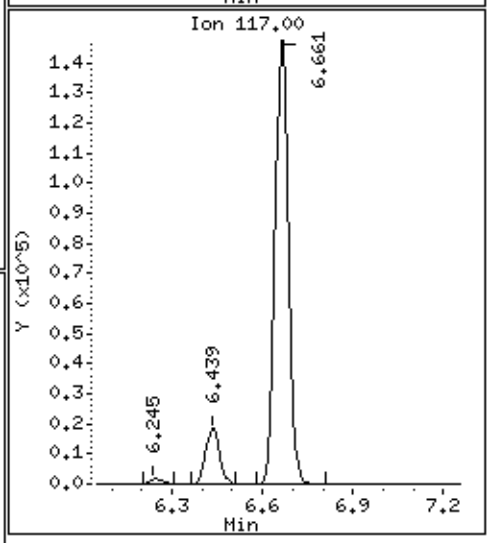
38 Carbon Tetrachloride

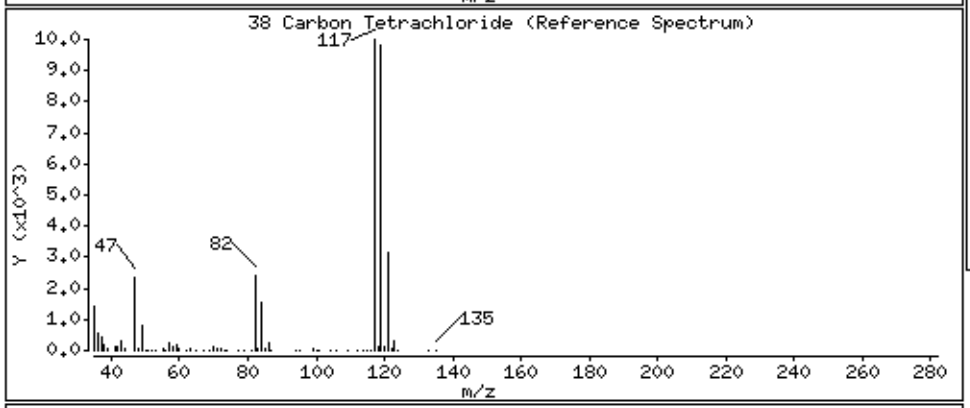
Concentration: 126.19 NG

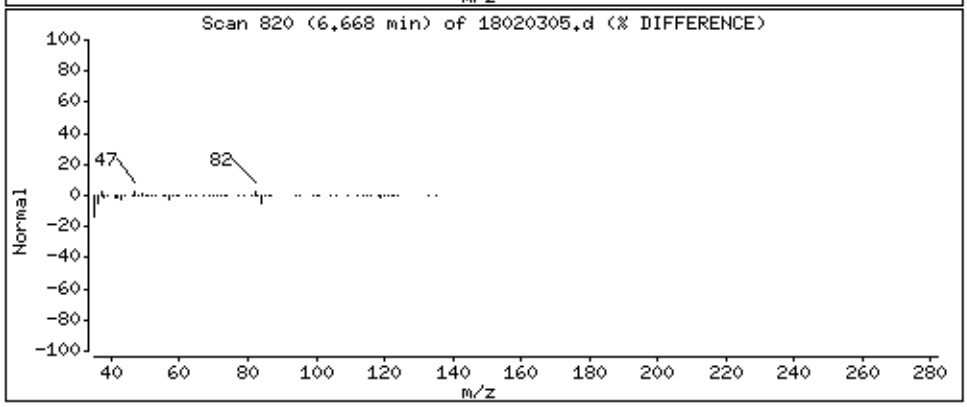












Data File: /chem/msd18.i/03Feb2016.b/18020305.d

Date : 03-FEB-2016 12:21

Client ID: LCSD

Instrument: msd18.i

Sample Info: ;VI VOC+PAH LCDS;LCSD

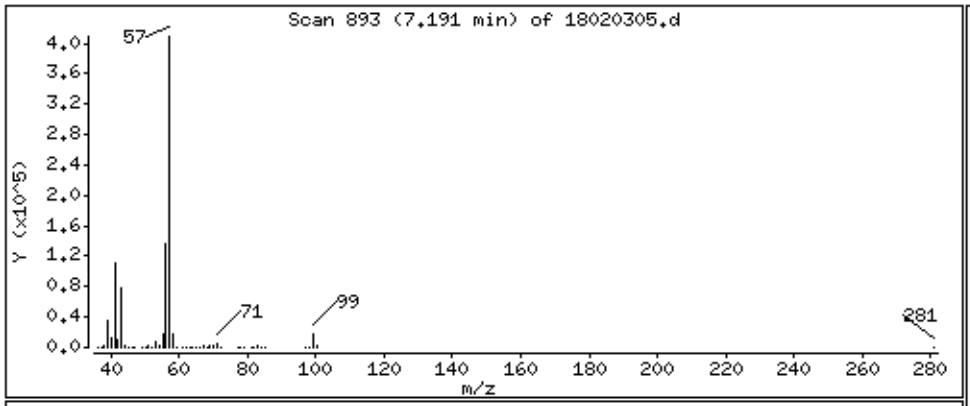
Operator: LA

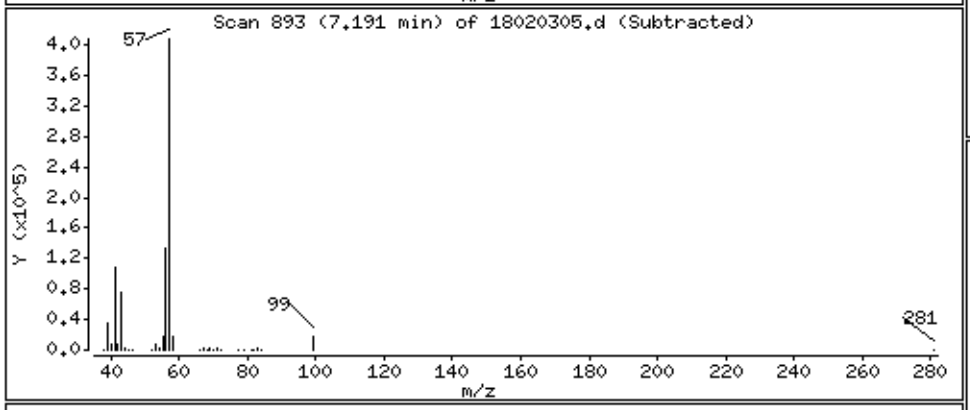
Column phase: RTx-624

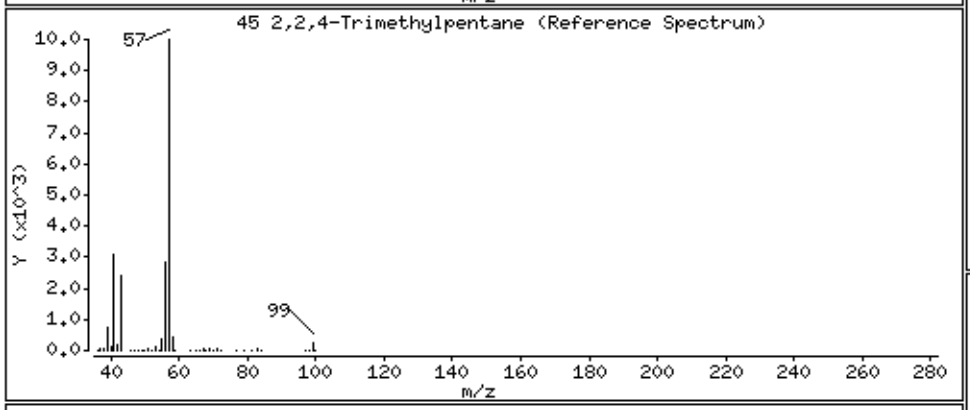
Column diameter: 0.53

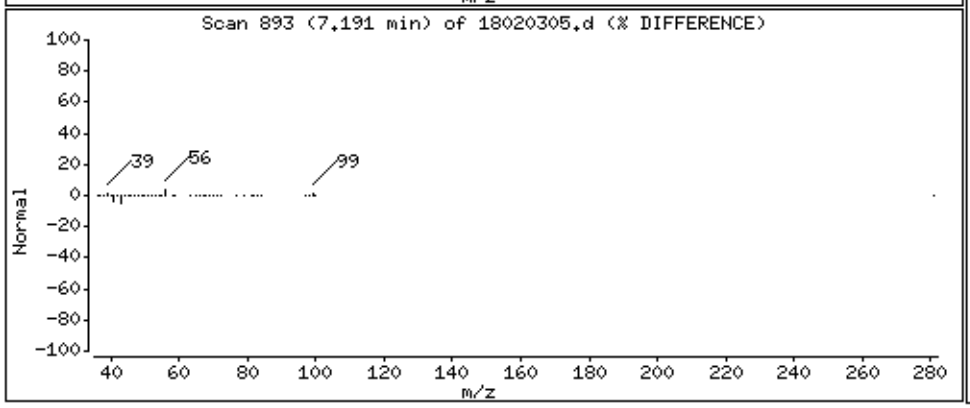
45 2,2,4-Trimethylpentane

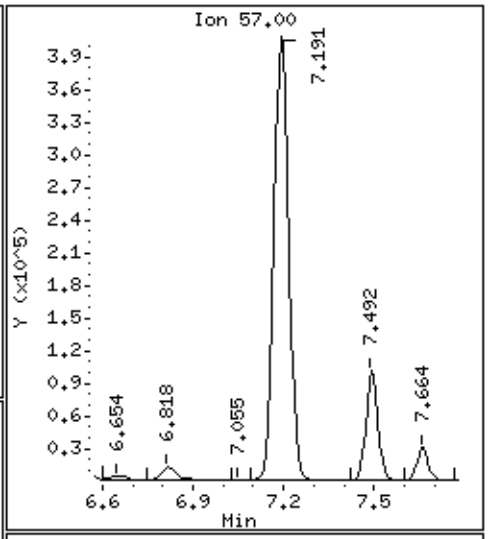
Concentration: 111.07 NG

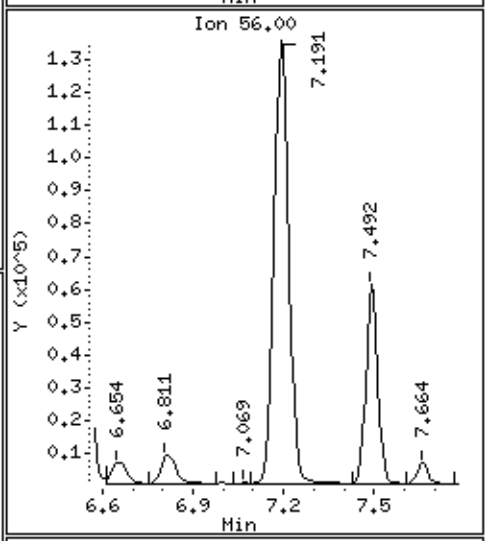


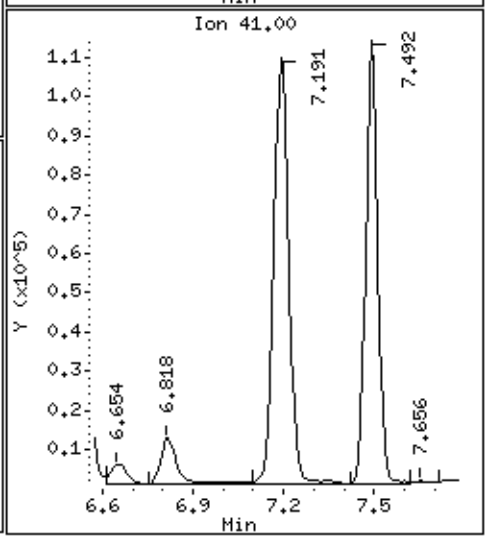












Data File: /chem/msd18.i/03Feb2016.b/18020305.d

Date : 03-FEB-2016 12:21

Client ID: LCSD

Instrument: msd18.i

Sample Info: ;VI VOC+PAH LCDS;LCSD

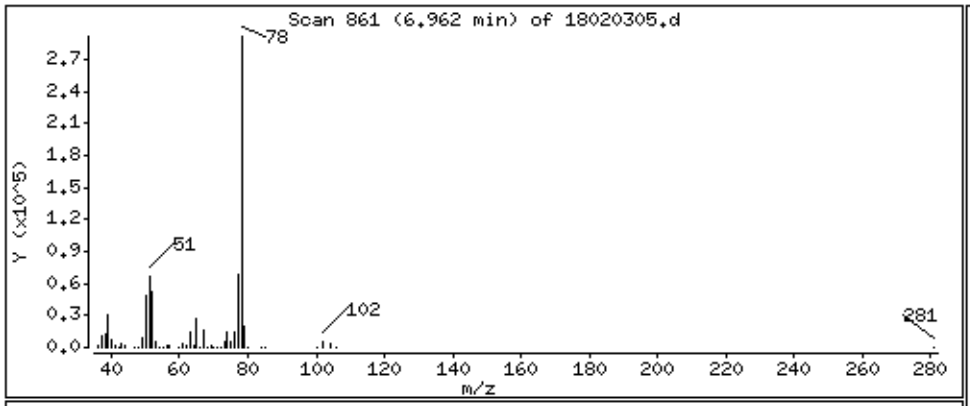
Operator: LA

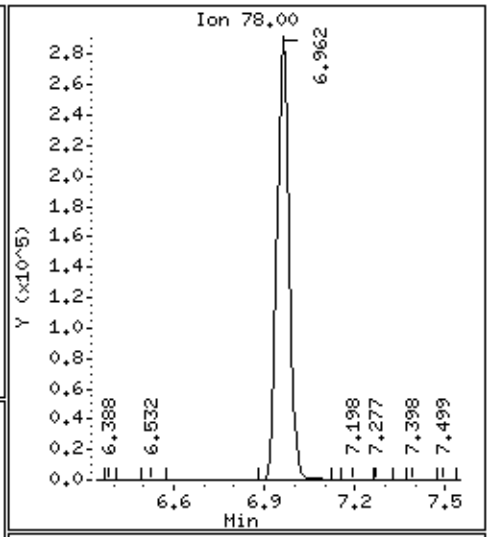
Column phase: RTx-624

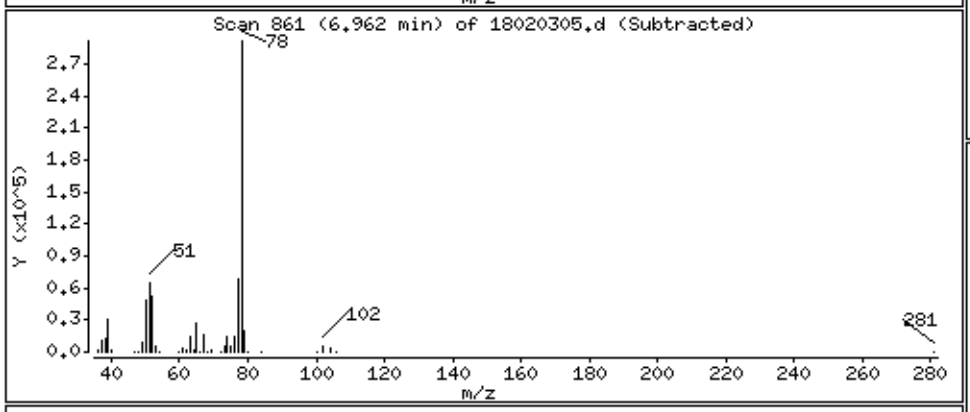
Column diameter: 0.53

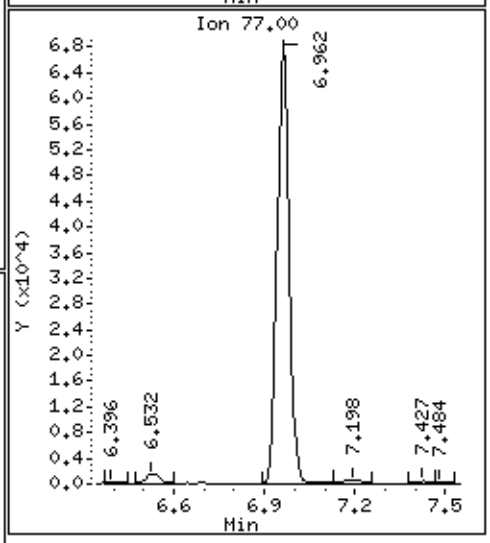
41 Benzene

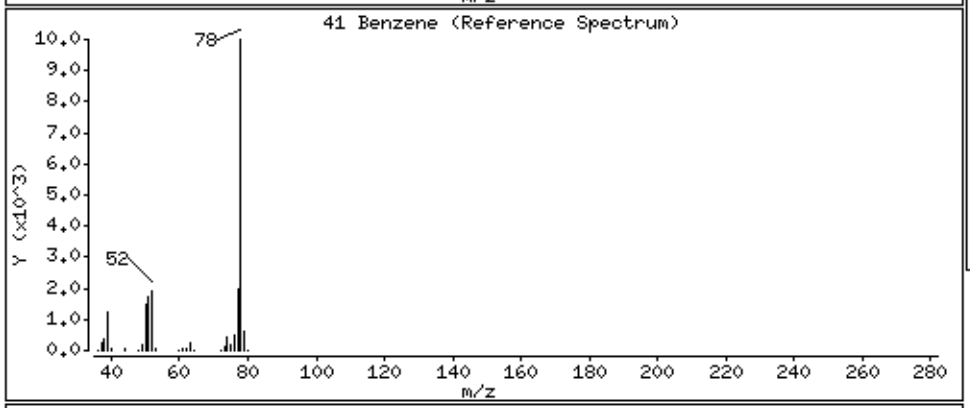
Concentration: 64.474 NG

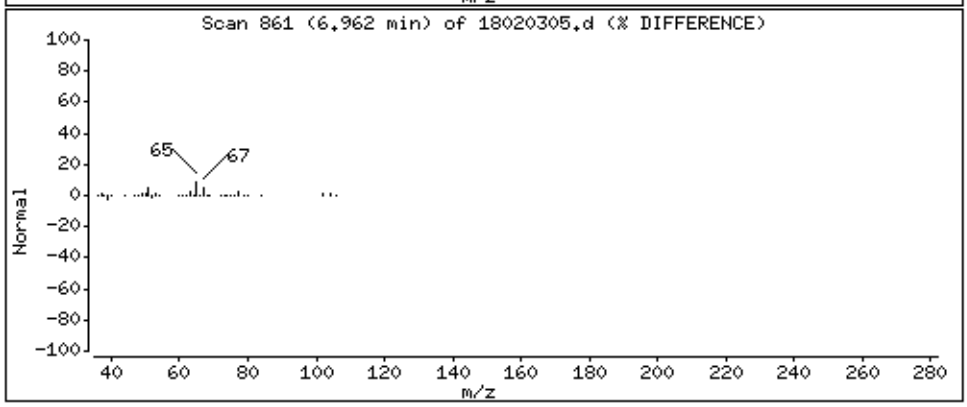












Data File: /chem/msd18.i/03Feb2016.b/18020305.d

Date : 03-FEB-2016 12:21

Client ID: LCSD

Instrument: msd18.i

Sample Info: ;VI VOC+PAH LCDS;LCSD

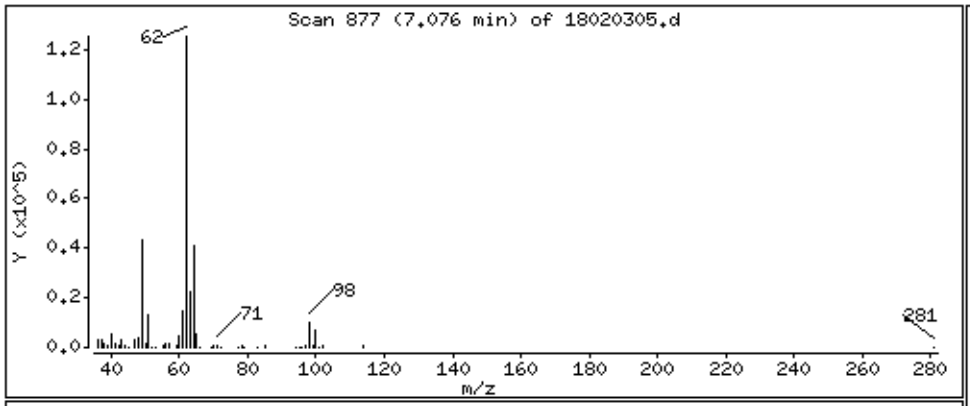
Operator: LA

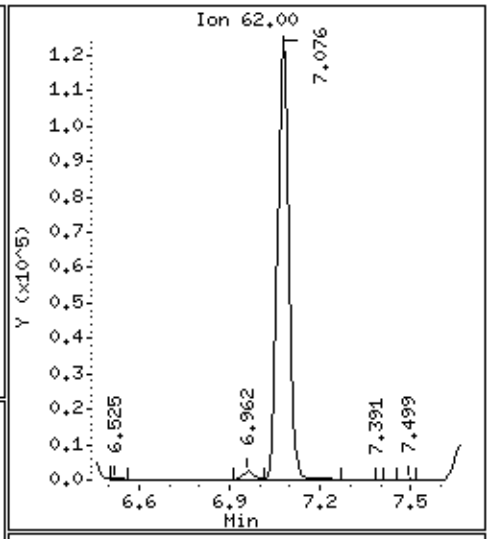
Column phase: RTx-624

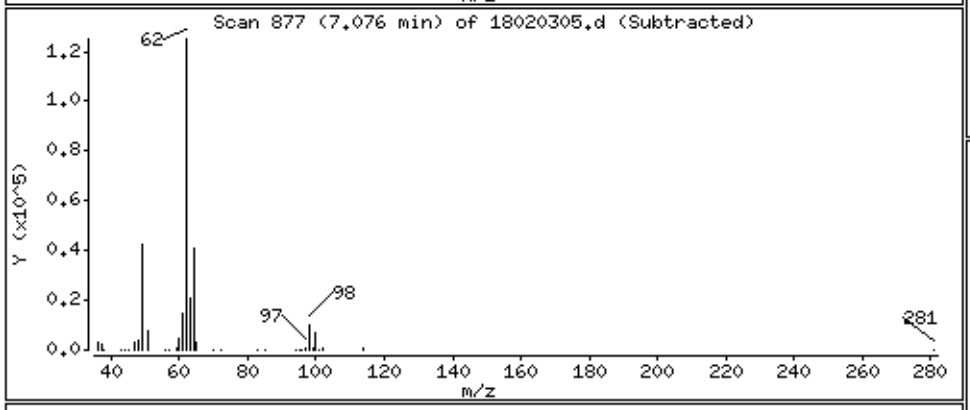
Column diameter: 0.53

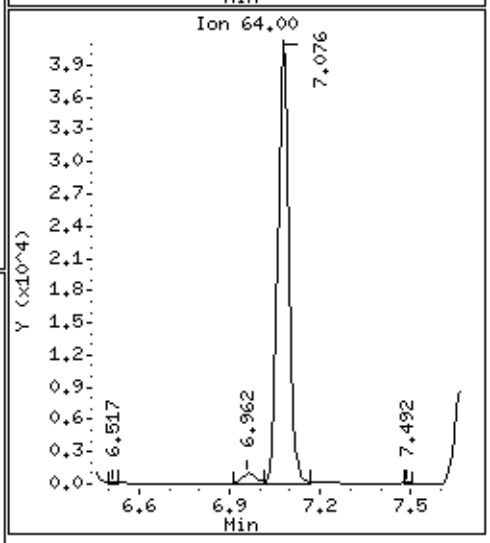
43 1,2-Dichloroethane

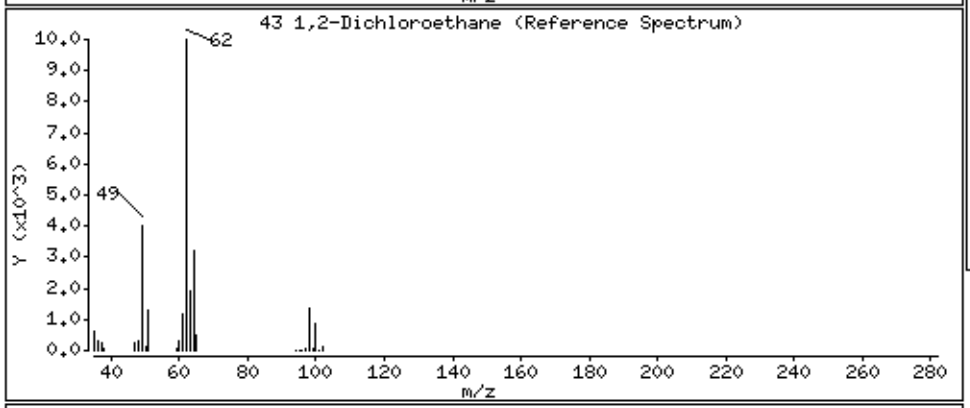
Concentration: 98.334 NG

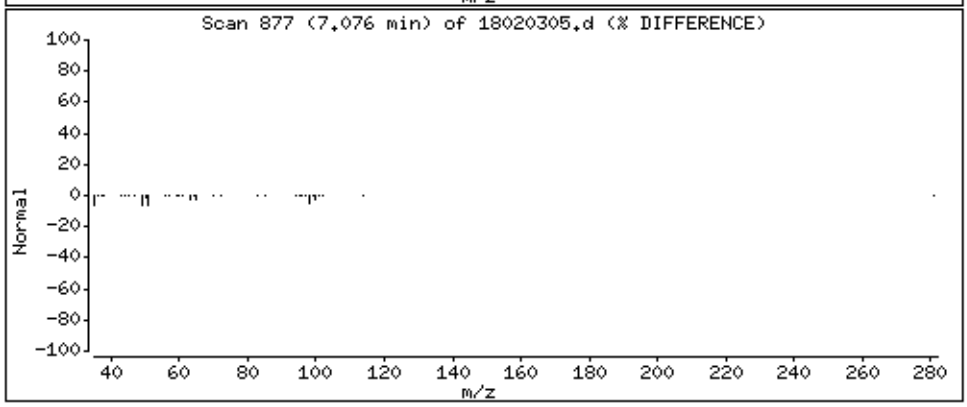












Data File: /chem/msd18.i/03Feb2016.b/18020305.d

Date : 03-FEB-2016 12:21

Client ID: LCSD

Instrument: msd18.i

Sample Info: ;VI VOC+PAH LCDS;LCSD

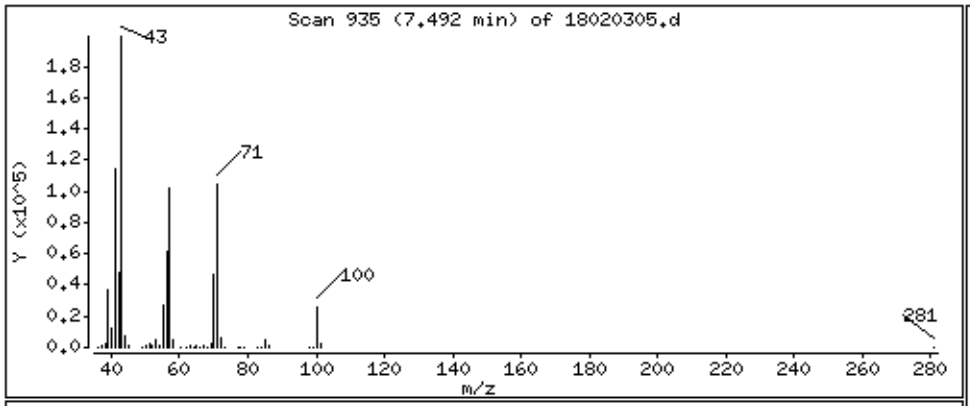
Operator: LA

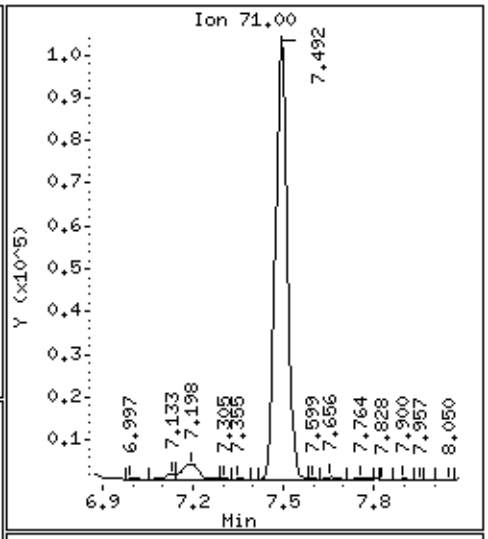
Column phase: RTx-624

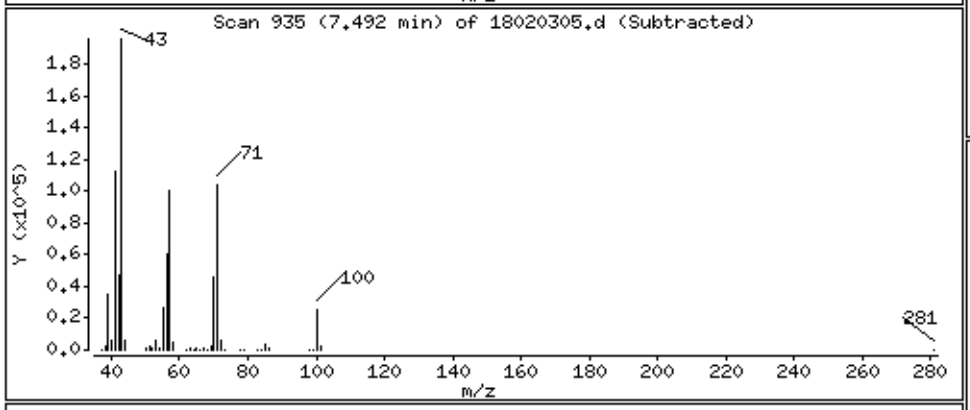
Column diameter: 0.53

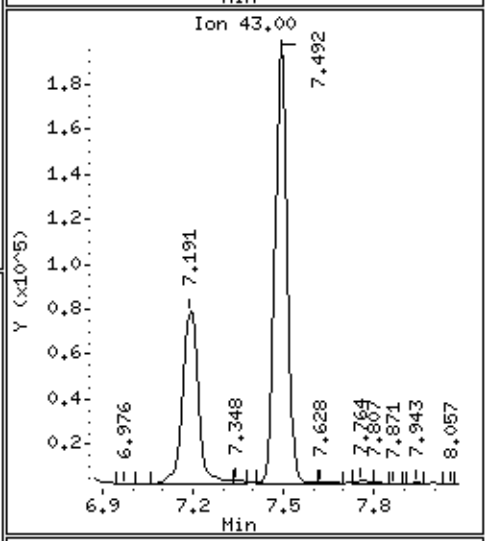
46 Heptane

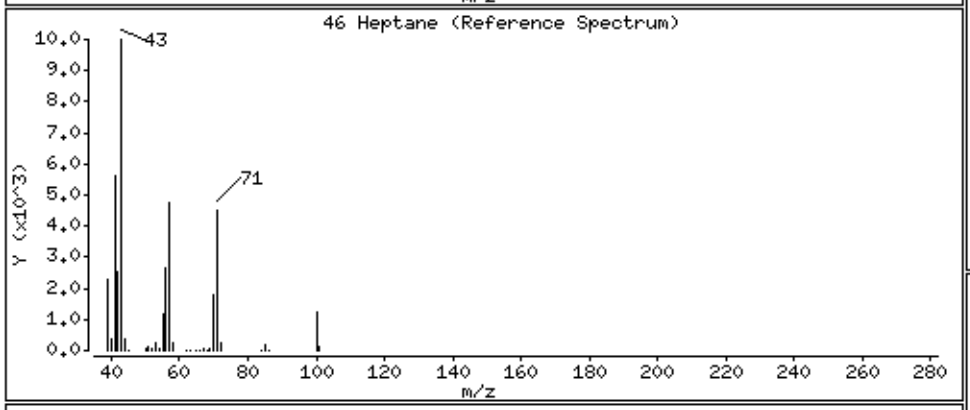
Concentration: 99.280 NG

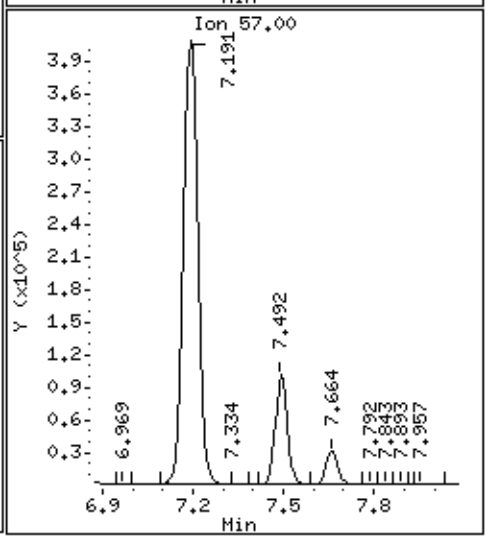


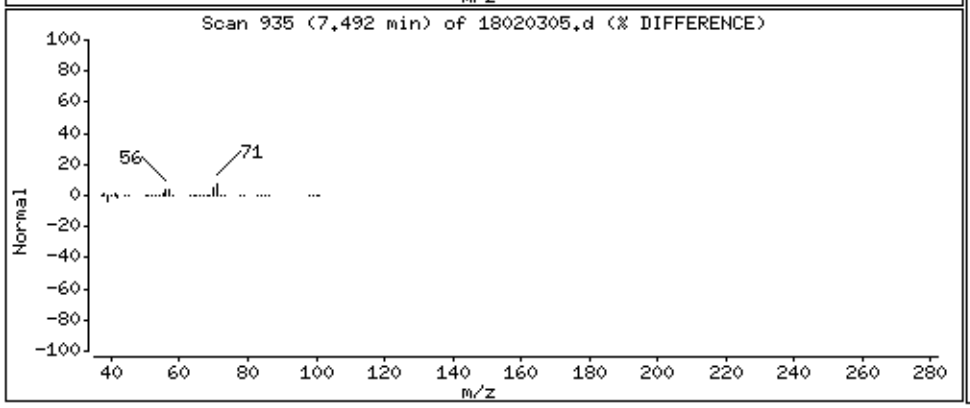












Data File: /chem/msd18.i/03Feb2016.b/18020305.d

Date : 03-FEB-2016 12:21

Client ID: LCSD

Instrument: msd18.i

Sample Info: ;VI VOC+PAH LCDS;LCSD

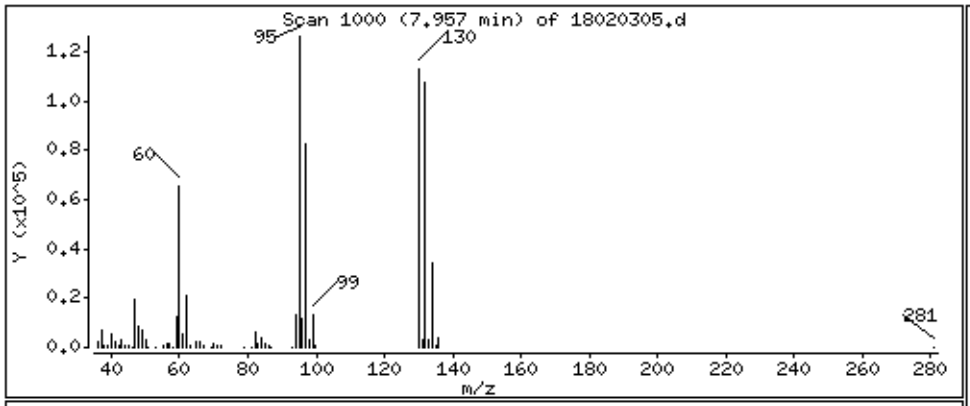
Operator: LA

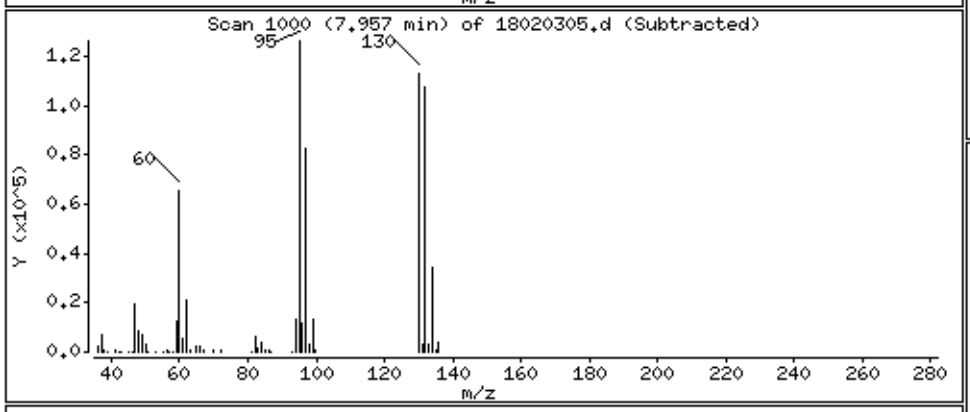
Column phase: RTx-624

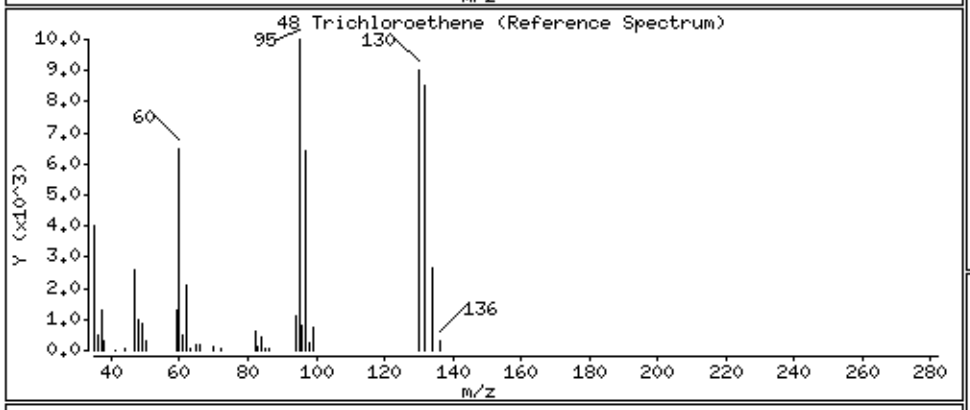
Column diameter: 0.53

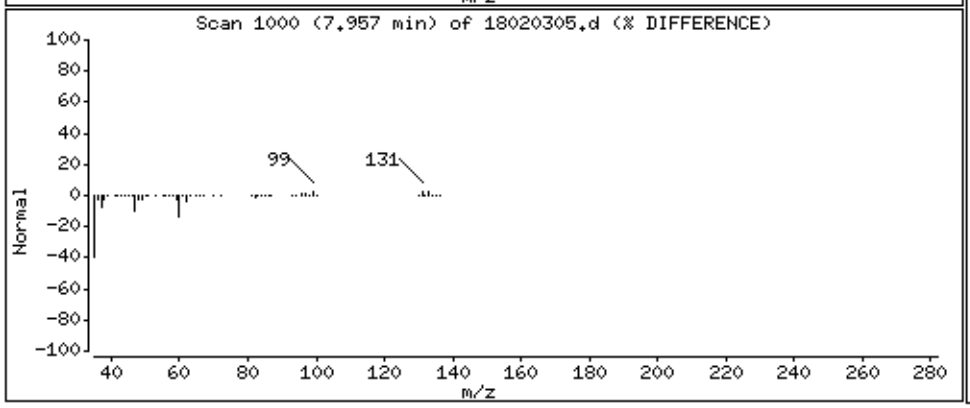
48 Trichloroethene

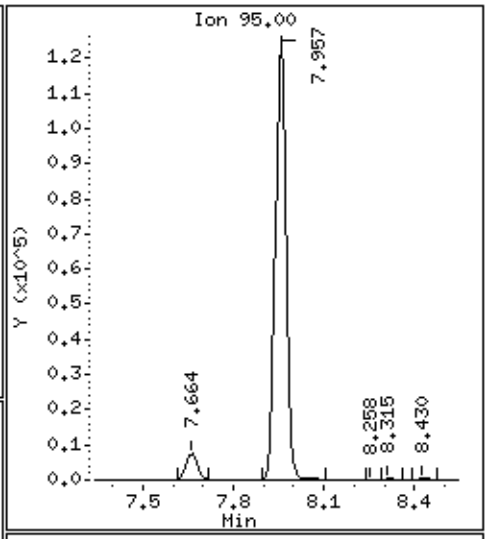
Concentration: 115.08 NG

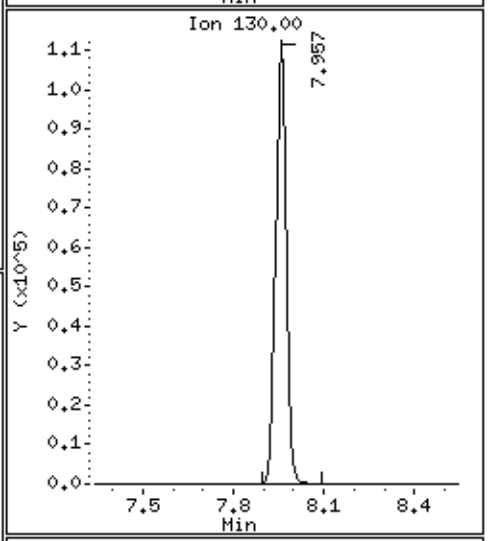


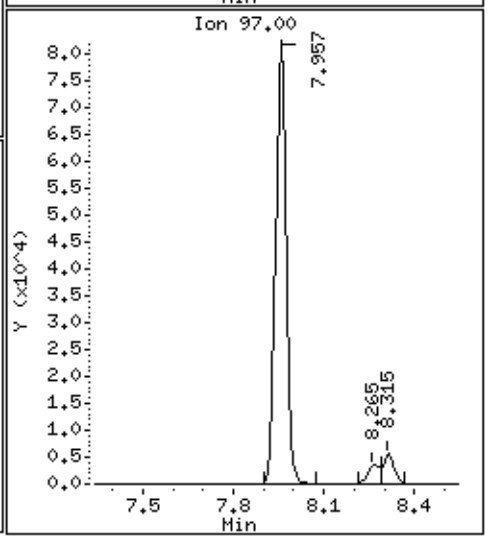












Data File: /chem/msd18.i/03Feb2016.b/18020305.d

Date : 03-FEB-2016 12:21

Client ID: LCSD

Instrument: msd18.i

Sample Info: ;VI VOC+PAH LCDS;LCSD

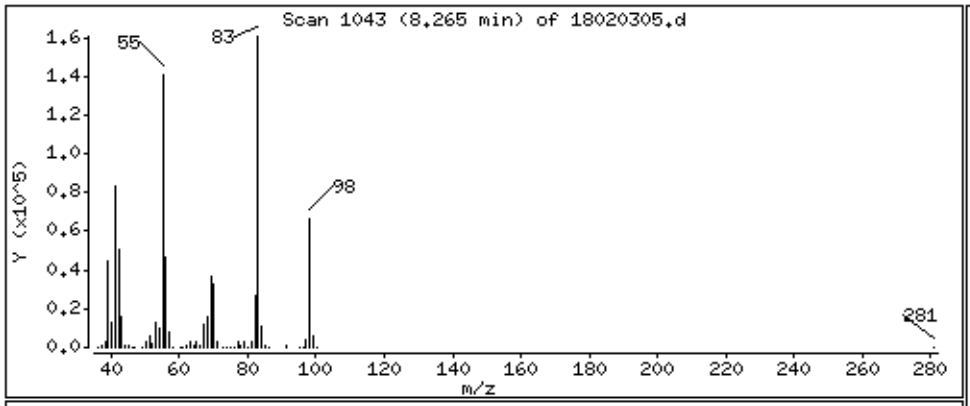
Operator: LA

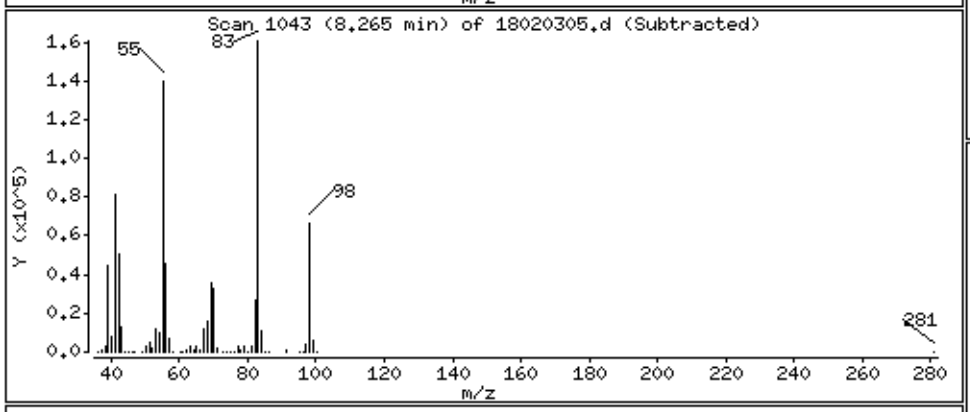
Column phase: RTx-624

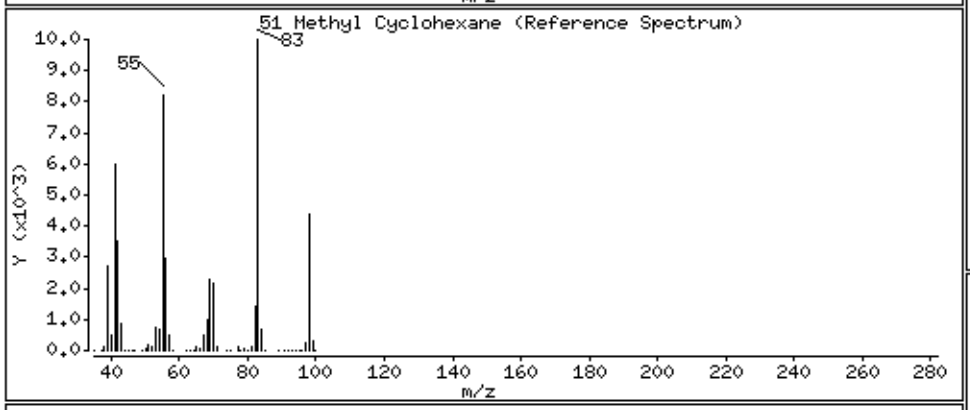
Column diameter: 0.53

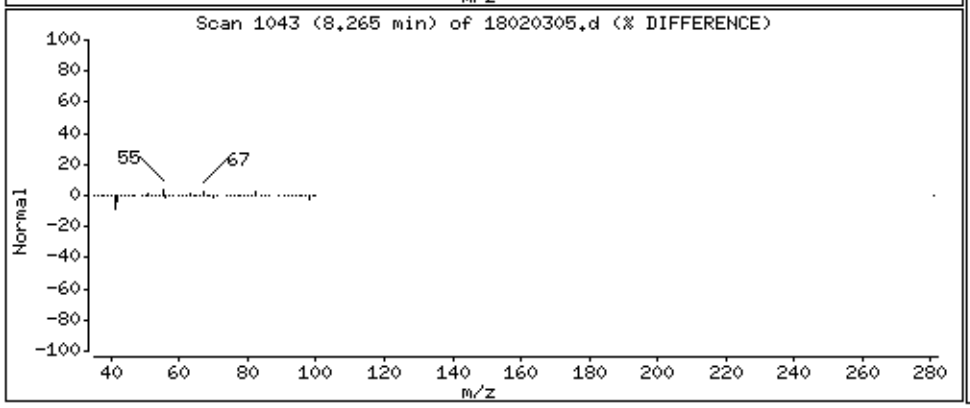
51 Methyl Cyclohexane

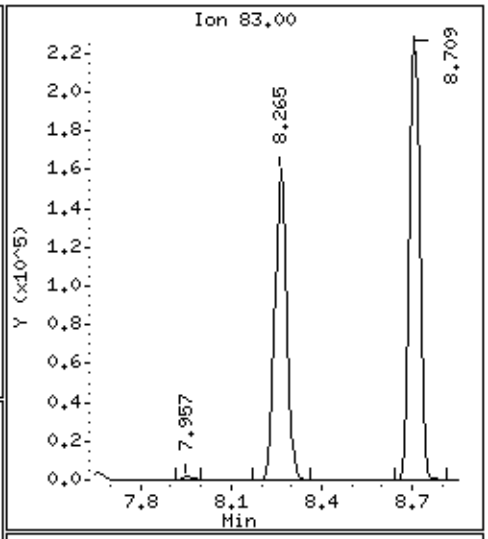
Concentration: 92.808 NG

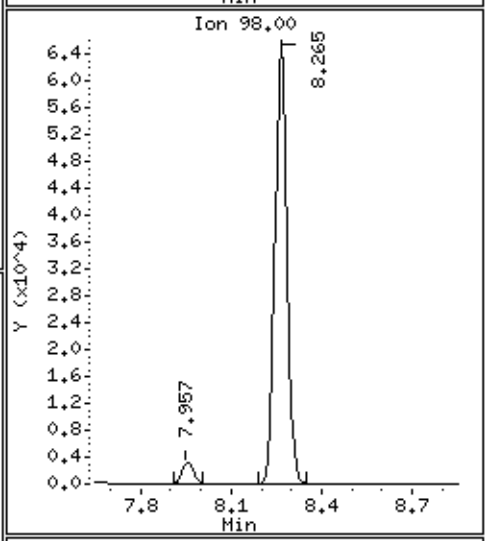


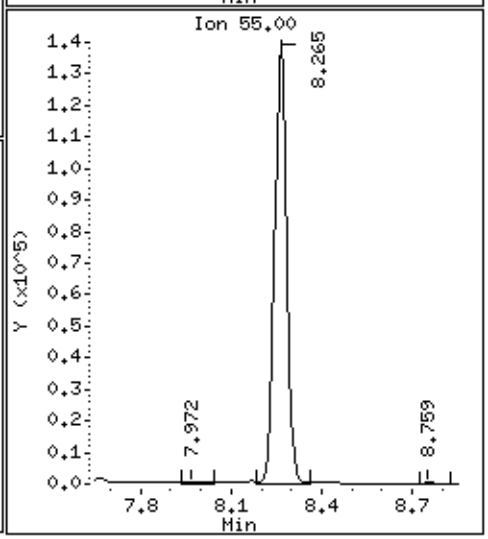












Data File: /chem/msd18.i/03Feb2016.b/18020305.d

Date : 03-FEB-2016 12:21

Client ID: LCSD

Instrument: msd18.i

Sample Info: ;VI VOC+PAH LCDS;LCSD

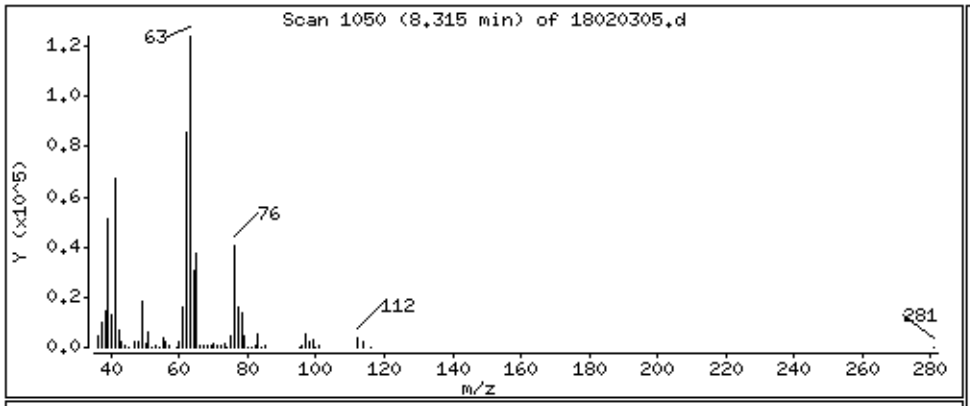
Operator: LA

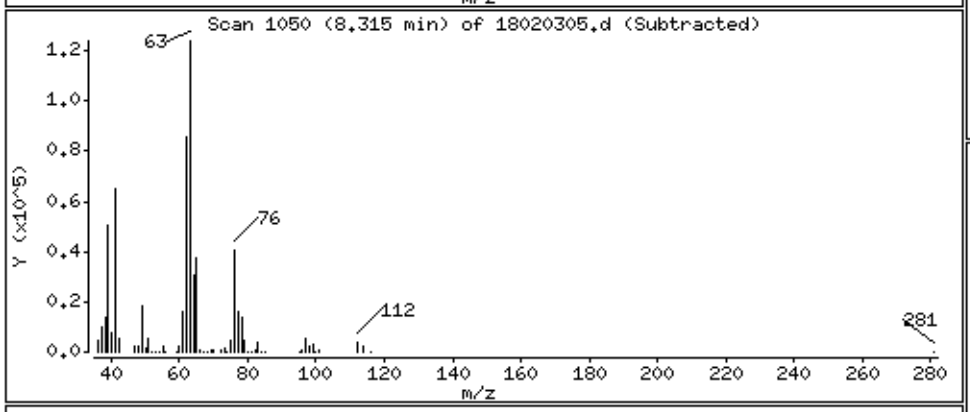
Column phase: RTx-624

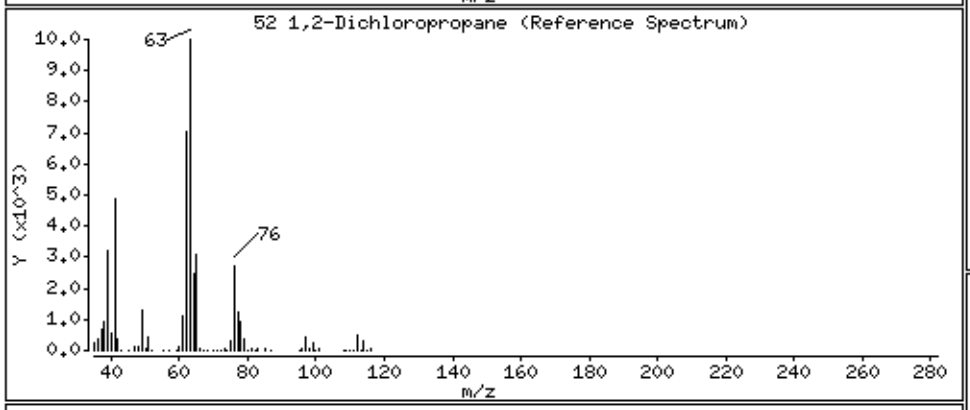
Column diameter: 0.53

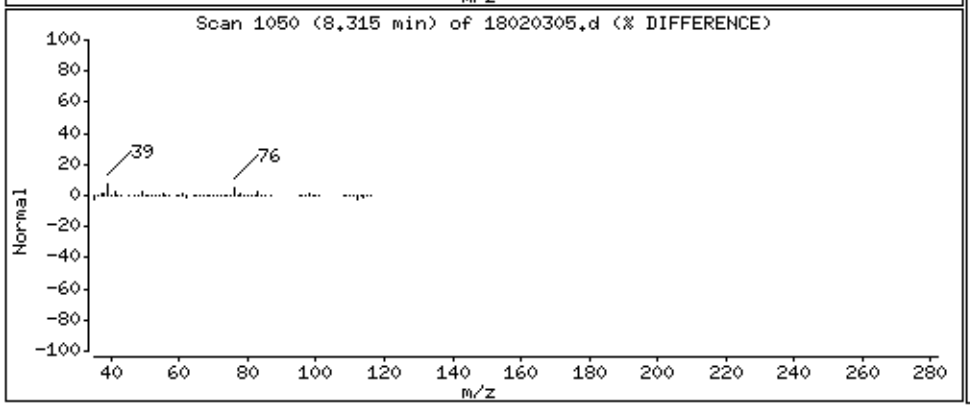
52 1,2-Dichloropropane

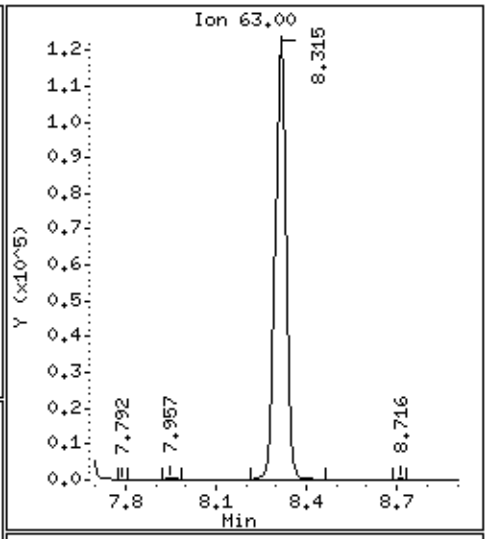
Concentration: 123.93 NG

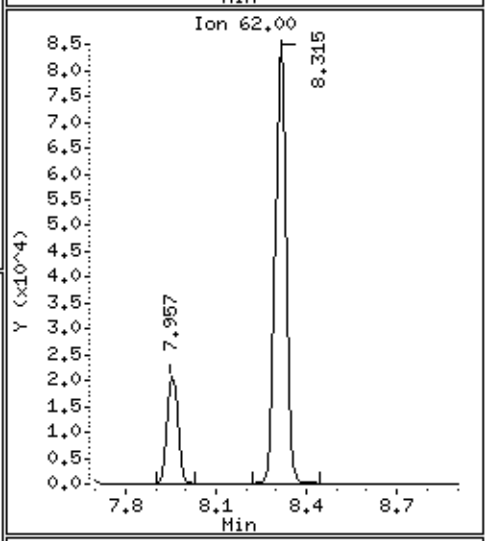


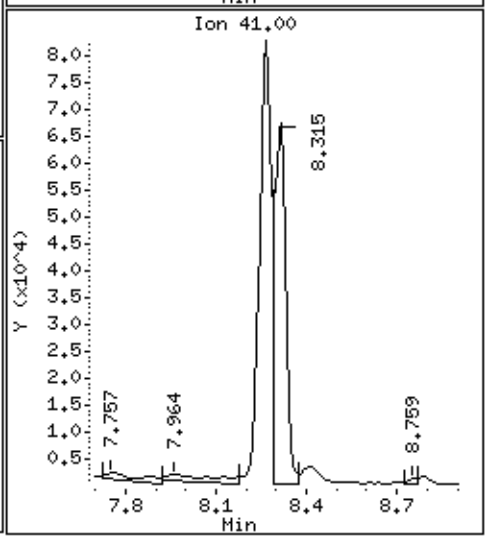












Data File: /chem/msd18.i/03Feb2016.b/18020305.d

Date : 03-FEB-2016 12:21

Client ID: LCSD

Instrument: msd18.i

Sample Info: ;VI VOC+PAH LCDS;LCSD

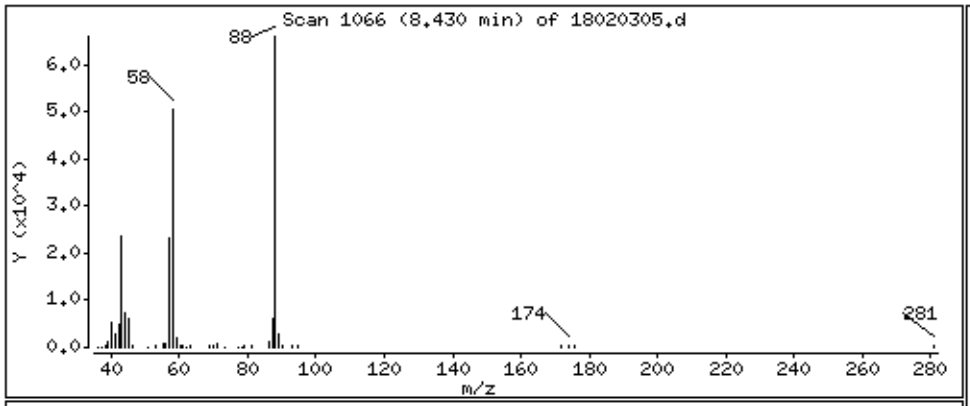
Operator: LA

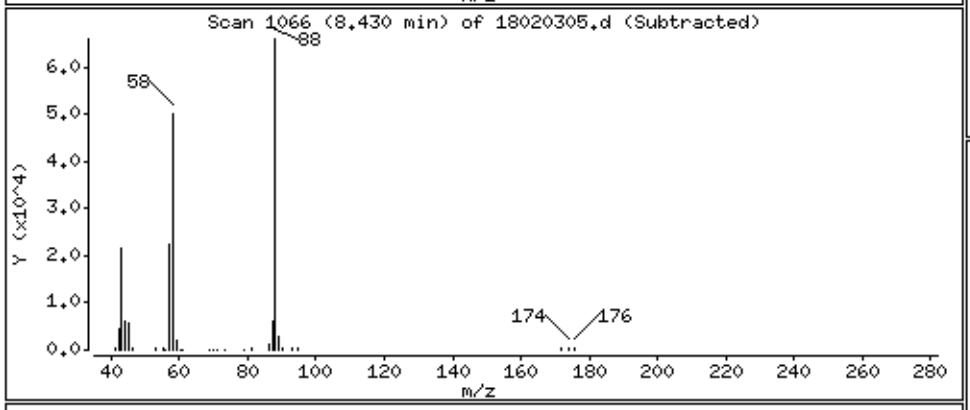
Column phase: RTx-624

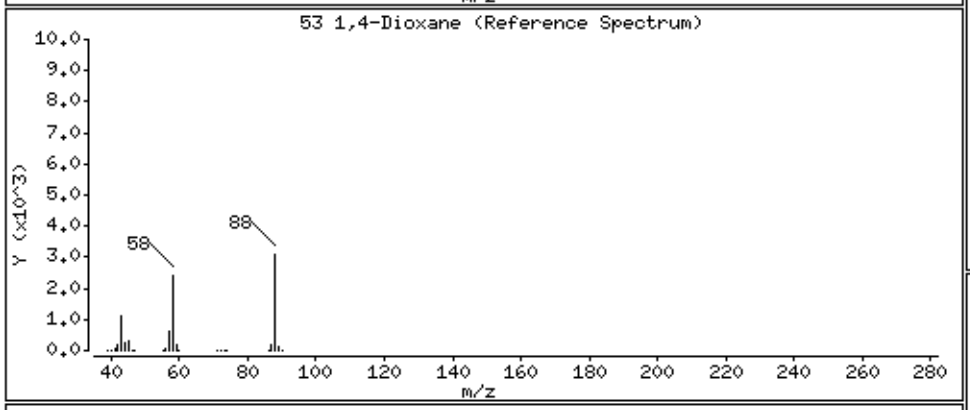
Column diameter: 0.53

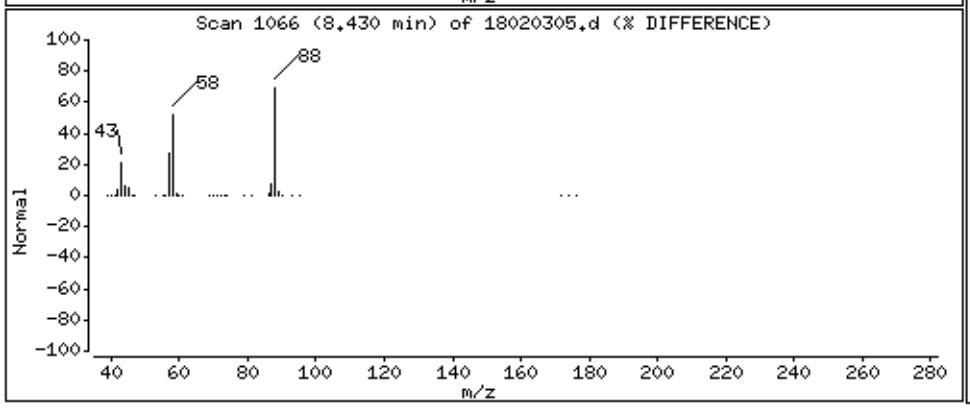
53 1,4-Dioxane

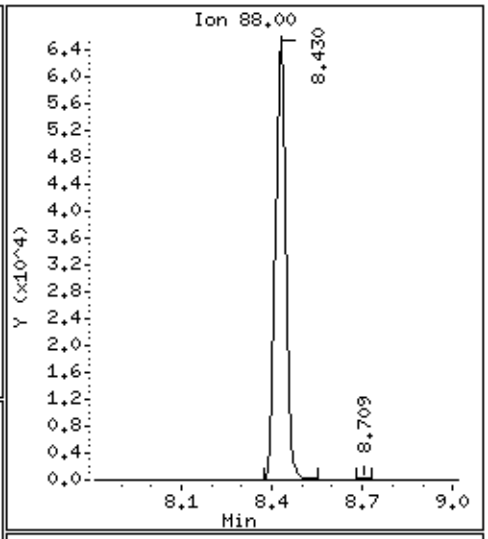
Concentration: 77.702 NG

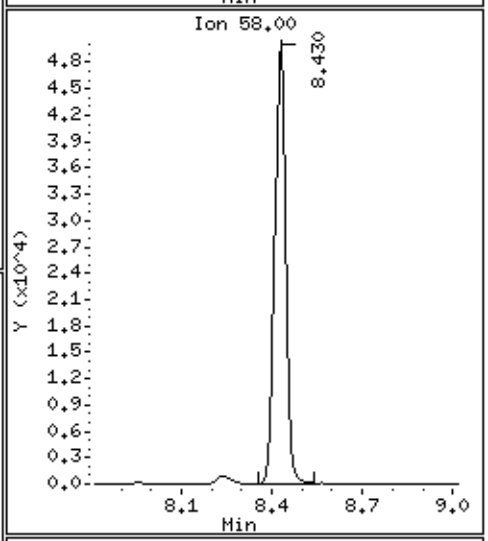


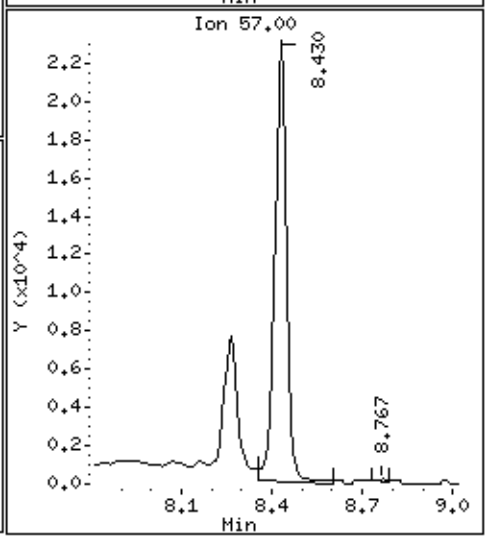












Data File: /chem/msd18.i/03Feb2016.b/18020305.d

Date : 03-FEB-2016 12:21

Client ID: LCSD

Instrument: msd18.i

Sample Info: ;VI VOC+PAH LCDS;LCSD

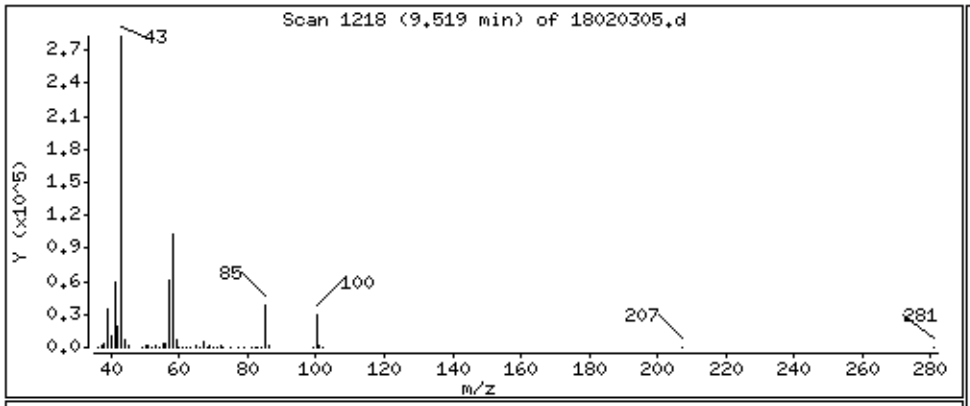
Operator: LA

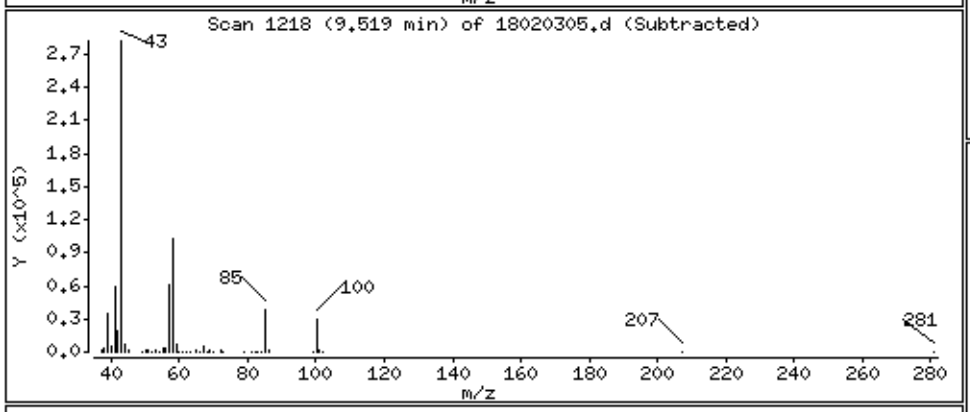
Column phase: RTx-624

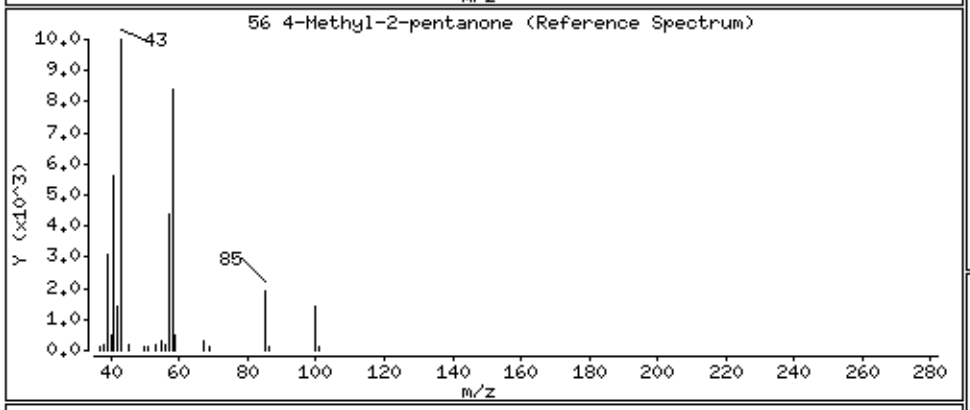
Column diameter: 0.53

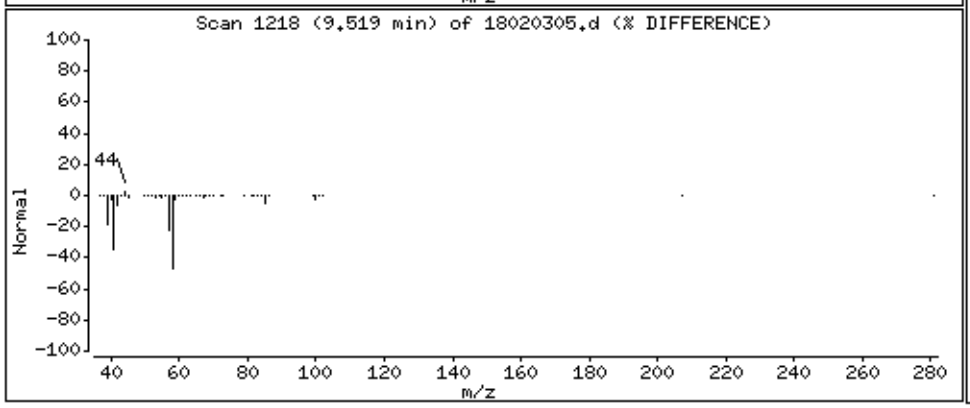
56 4-Methyl-2-pentanone

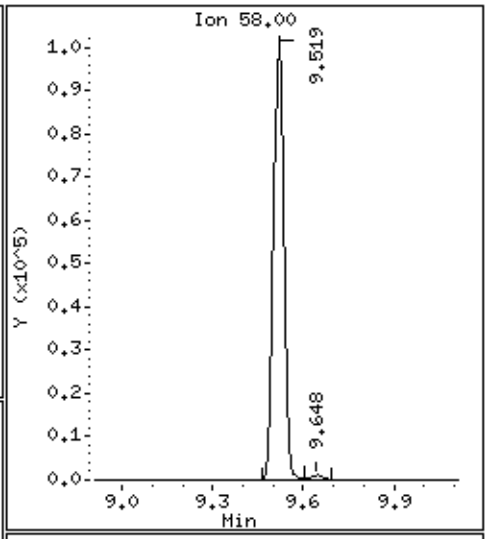
Concentration: 111.96 NG

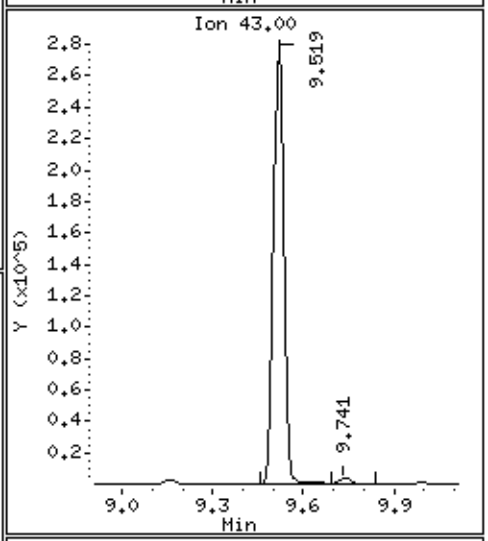


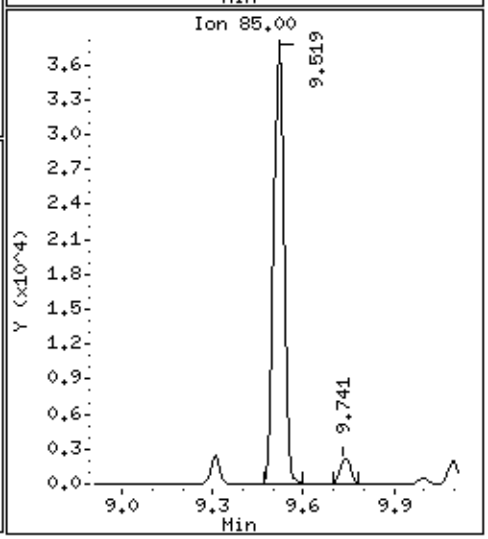












Data File: /chem/msd18.i/03Feb2016.b/18020305.d

Date : 03-FEB-2016 12:21

Client ID: LCSD

Instrument: msd18.i

Sample Info: ;VI VOC+PAH LCDS;LCSD

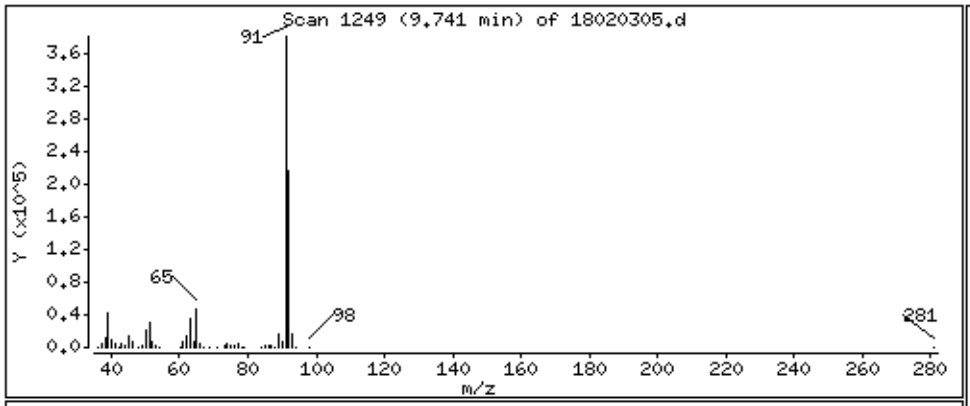
Operator: LA

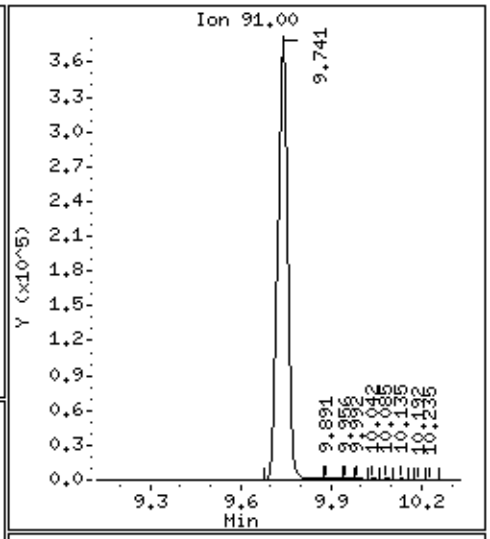
Column phase: RTx-624

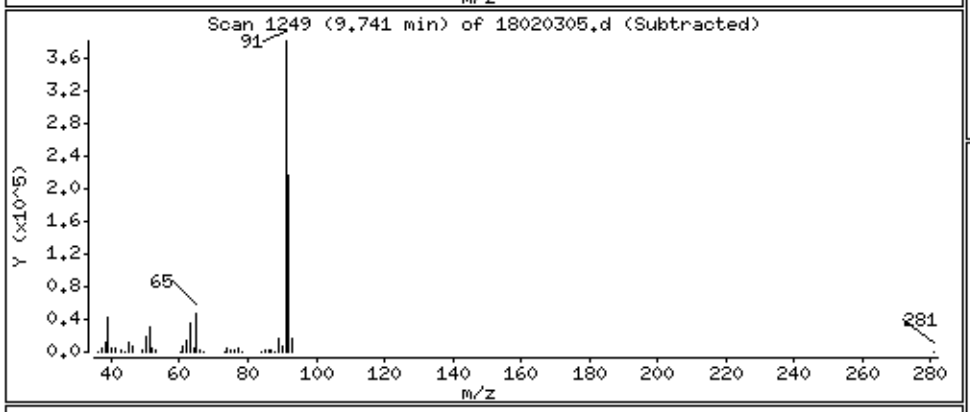
Column diameter: 0.53

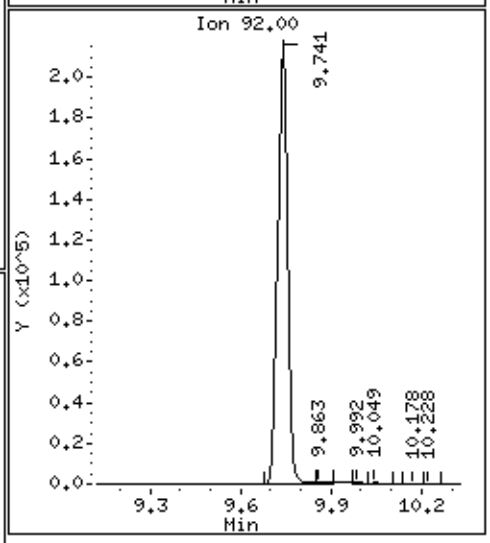
58 Toluene

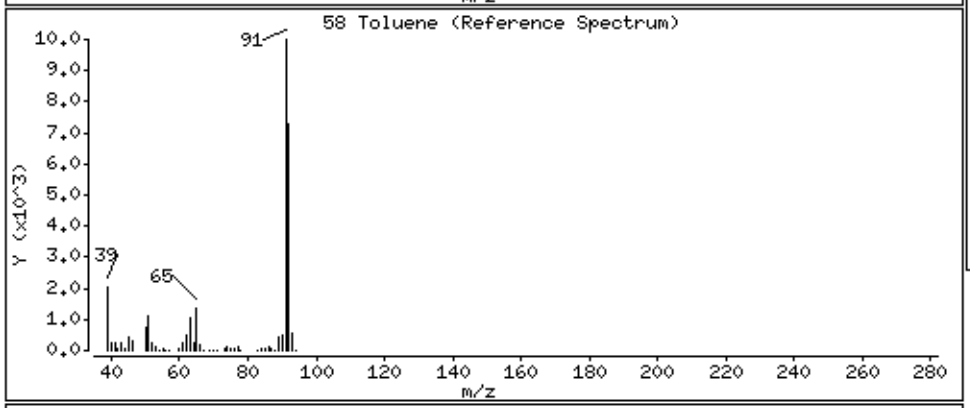
Concentration: 87.618 NG

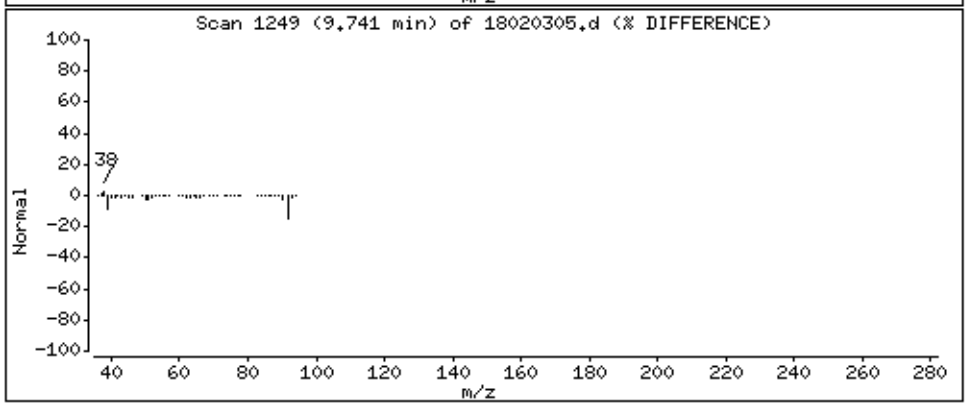












Data File: /chem/msd18.i/03Feb2016.b/18020305.d

Date : 03-FEB-2016 12:21

Client ID: LCSD

Instrument: msd18.i

Sample Info: ;VI VOC+PAH LCDS;LCSD

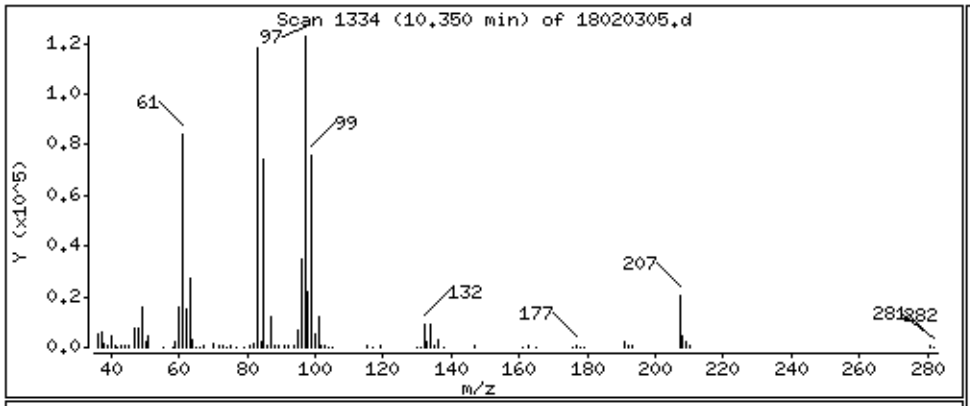
Operator: LA

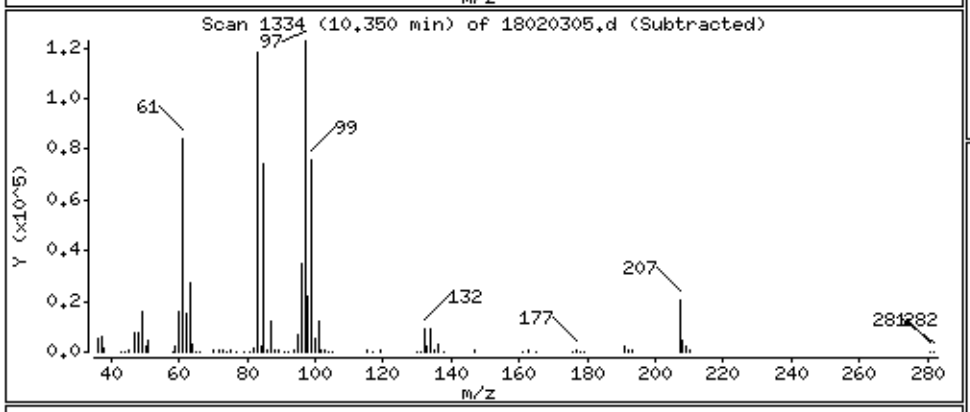
Column phase: RTx-624

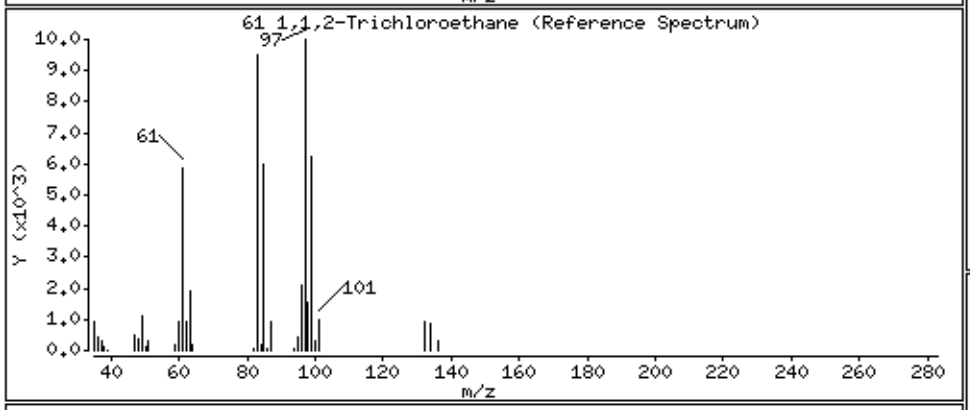
Column diameter: 0.53

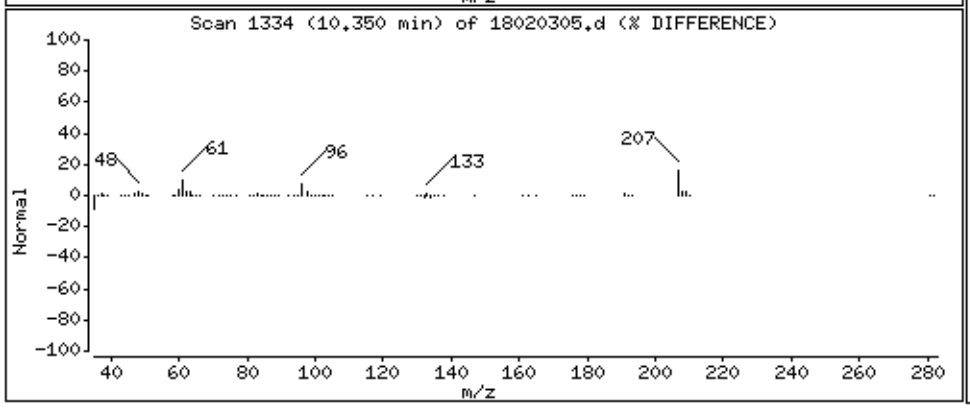
61 1,1,2-Trichloroethane

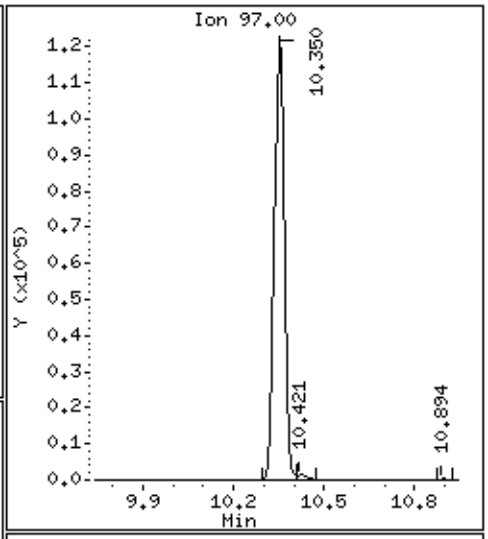
Concentration: 110.12 NG

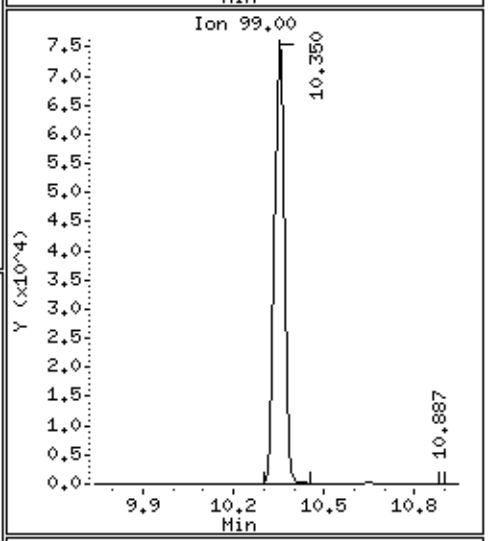


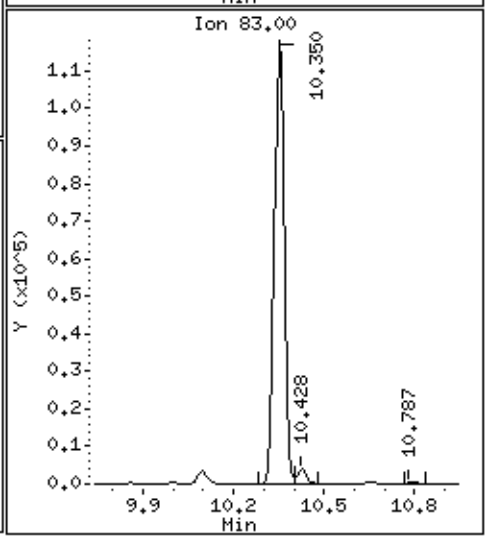












Data File: /chem/msd18.i/03Feb2016.b/18020305.d

Date : 03-FEB-2016 12:21

Client ID: LCSD

Instrument: msd18.i

Sample Info: ;VI VOC+PAH LCDS;LCSD

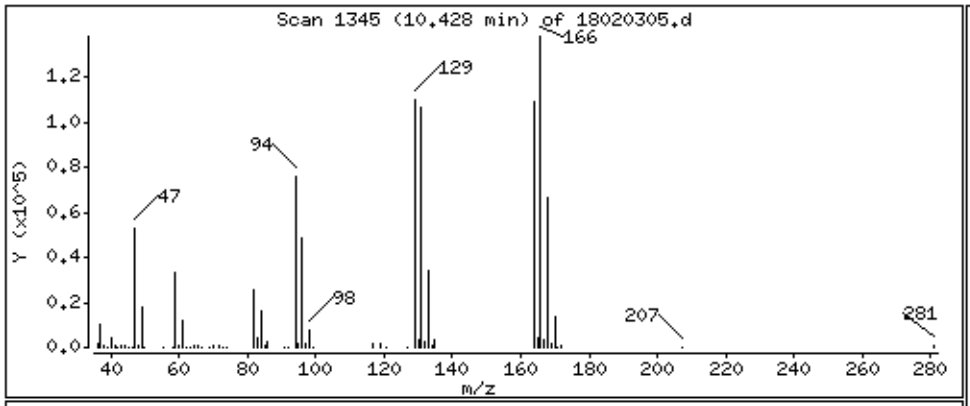
Operator: LA

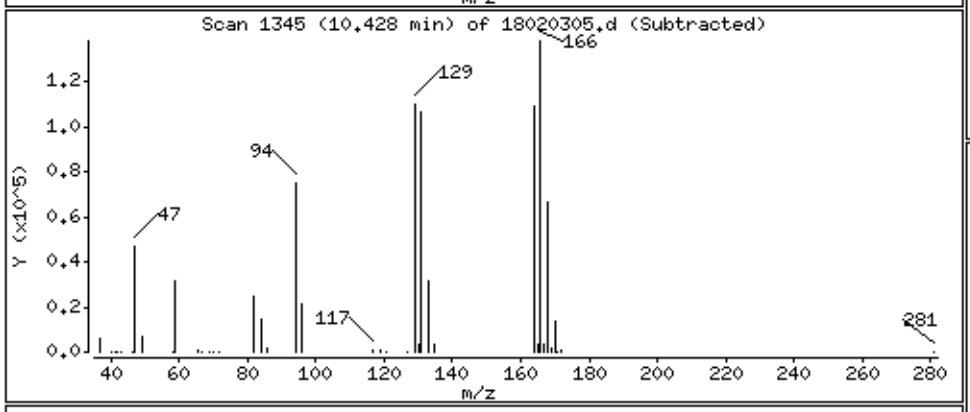
Column phase: RTx-624

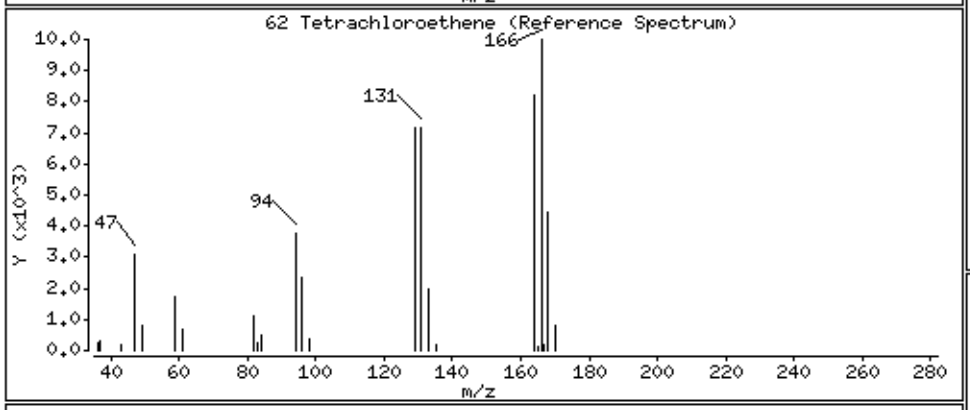
Column diameter: 0.53

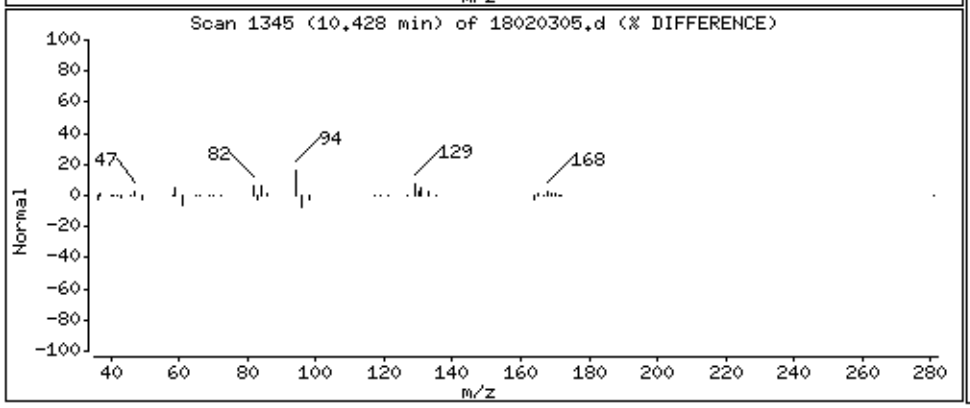
62 Tetrachloroethene

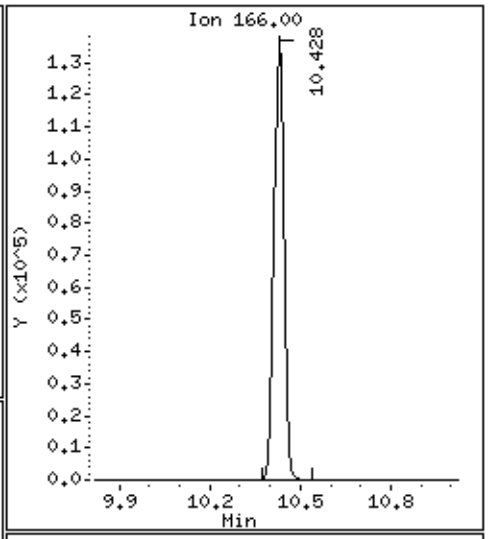
Concentration: 113.58 NG

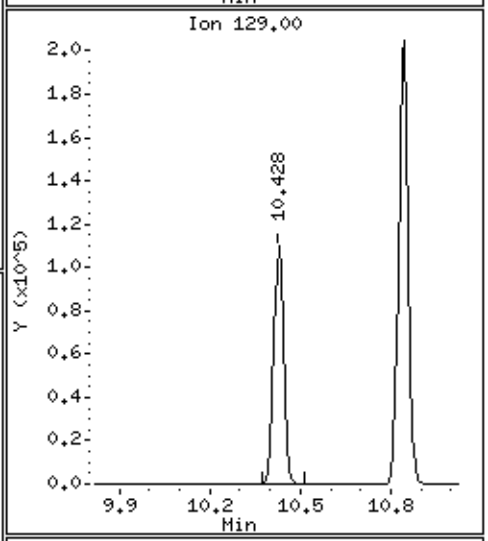


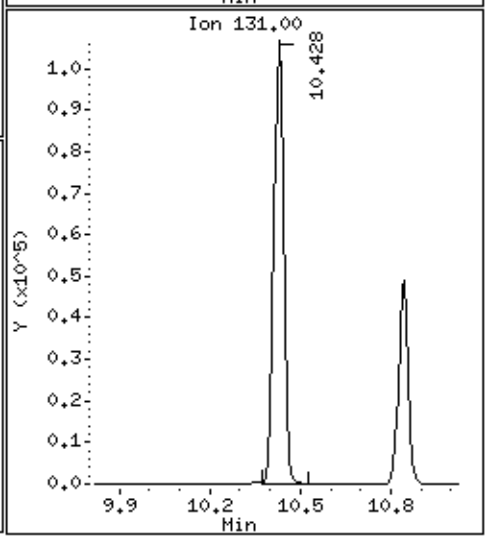












Data File: /chem/msd18.i/03Feb2016.b/18020305.d

Date : 03-FEB-2016 12:21

Client ID: LCSD

Instrument: msd18.i

Sample Info: ;VI VOC+PAH LCDS;LCSD

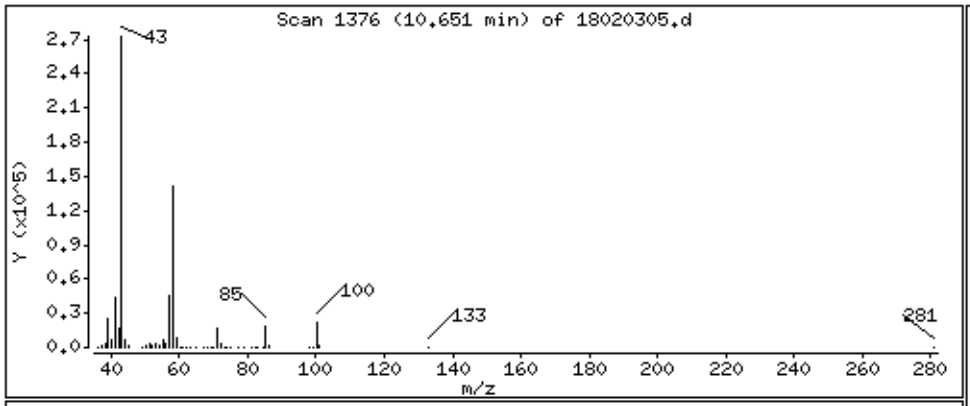
Operator: LA

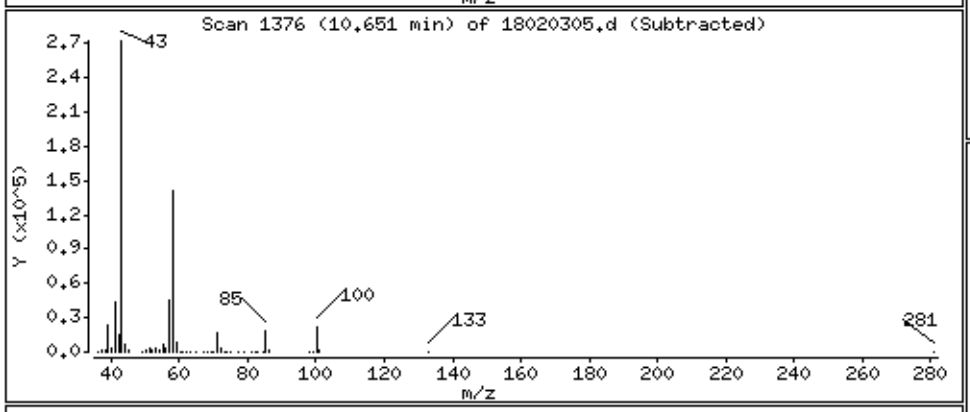
Column phase: RTx-624

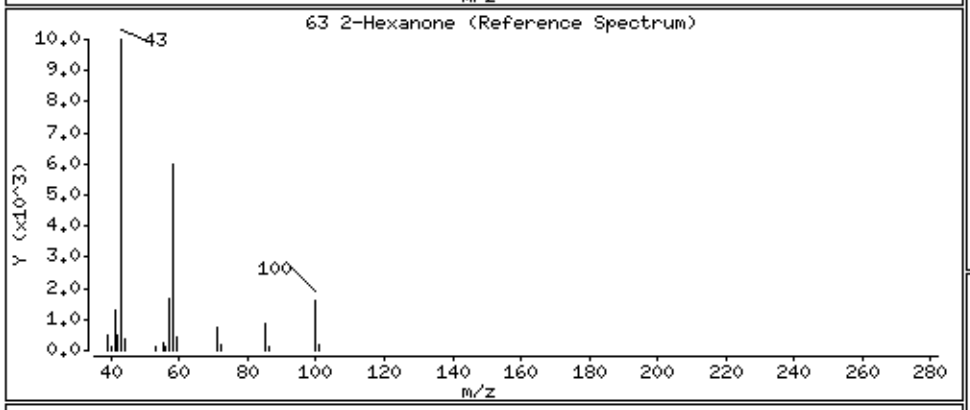
Column diameter: 0.53

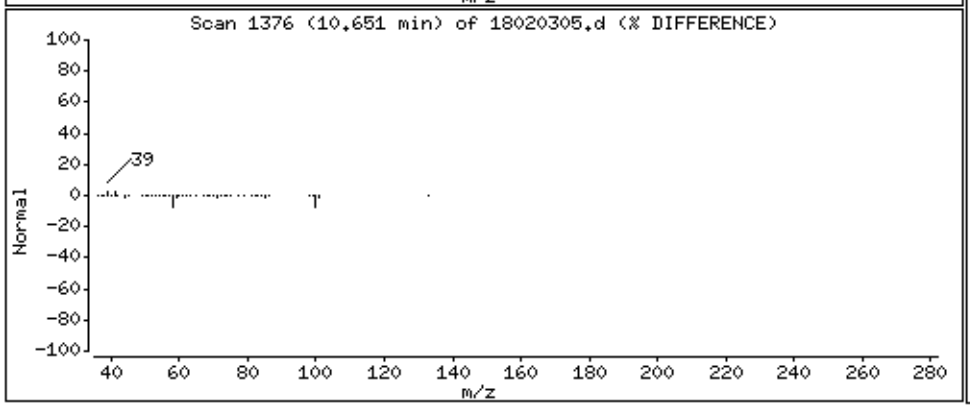
63 2-Hexanone

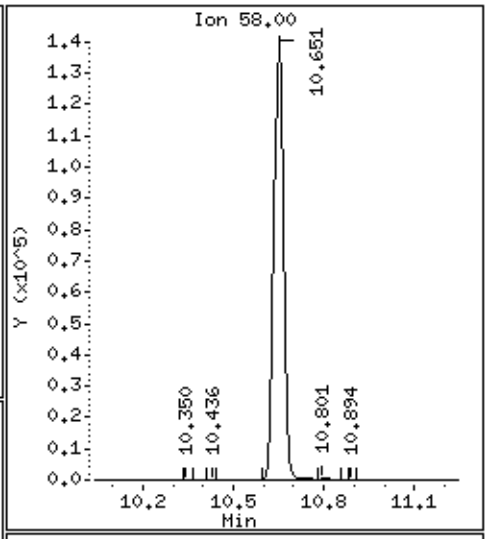
Concentration: 114.04 NG

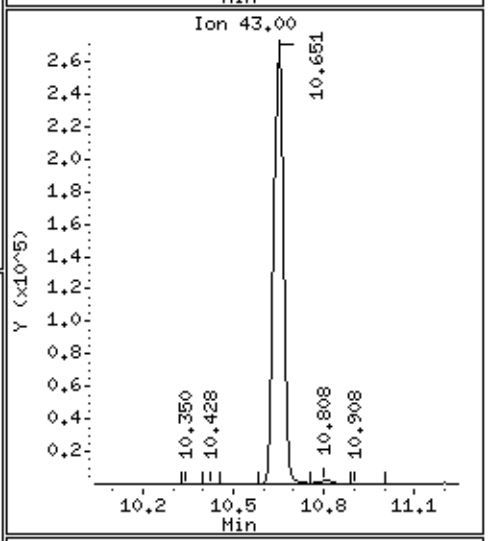


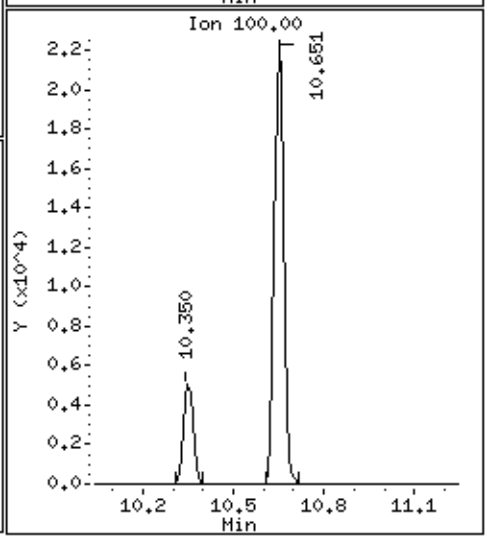












Data File: /chem/msd18.i/03Feb2016.b/18020305.d

Date : 03-FEB-2016 12:21

Client ID: LCSD

Instrument: msd18.i

Sample Info: ;VI VOC+PAH LCDS;LCSD

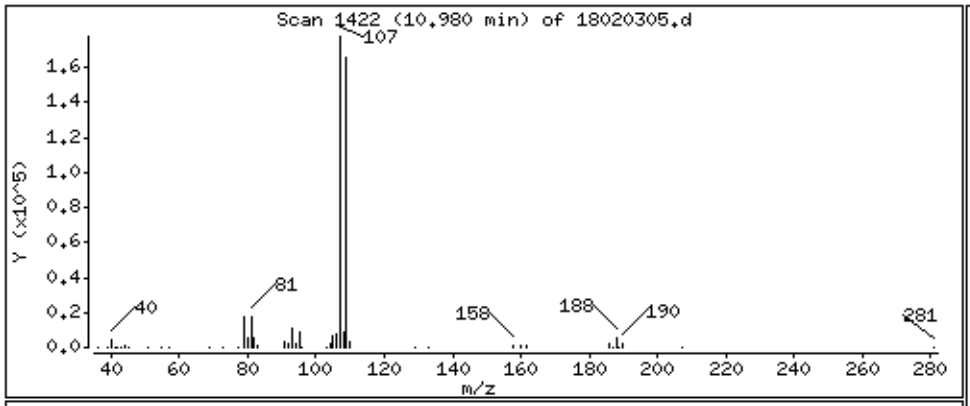
Operator: LA

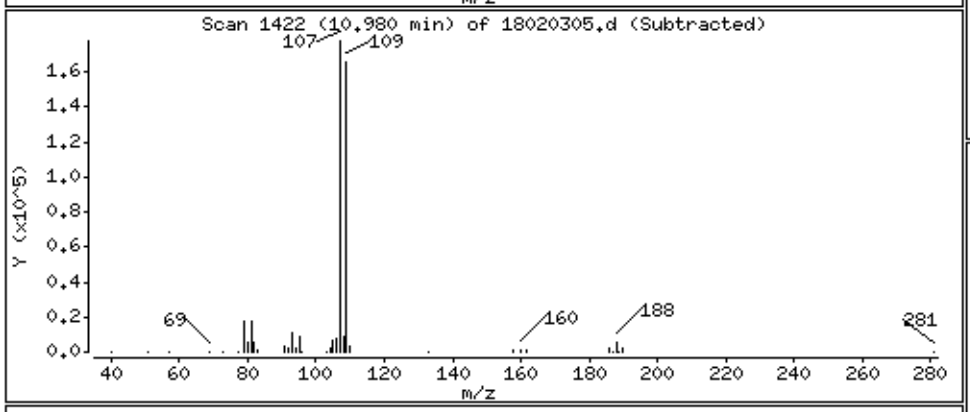
Column phase: RTx-624

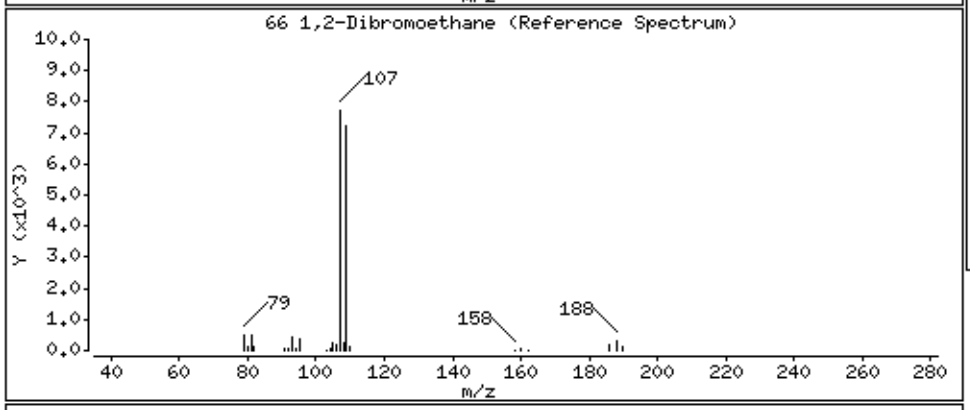
Column diameter: 0.53

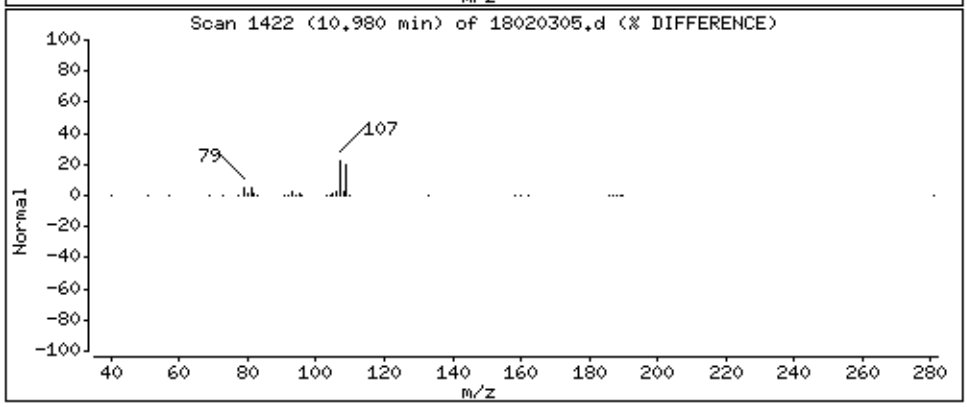
66 1,2-Dibromoethane

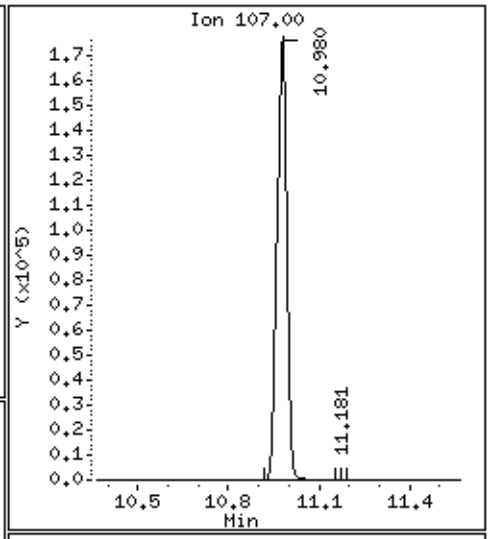
Concentration: 172.50 NG

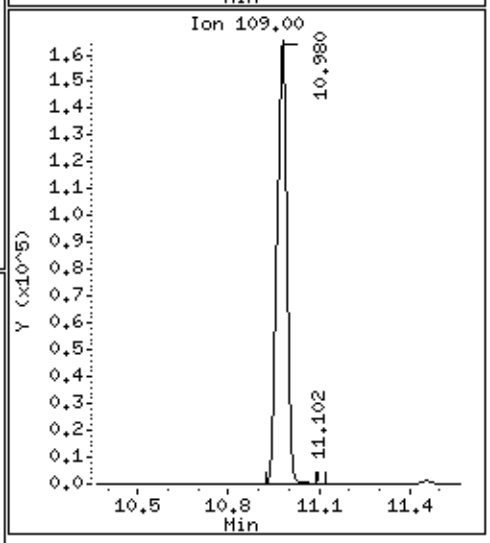












Data File: /chem/msd18.i/03Feb2016.b/18020305.d

Date : 03-FEB-2016 12:21

Client ID: LCSD

Instrument: msd18.i

Sample Info: ;VI VOC+PAH LCDS;LCSD

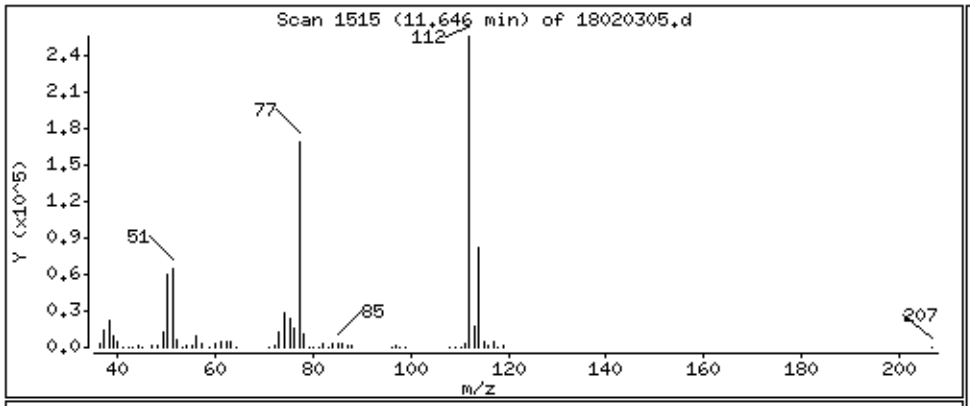
Operator: LA

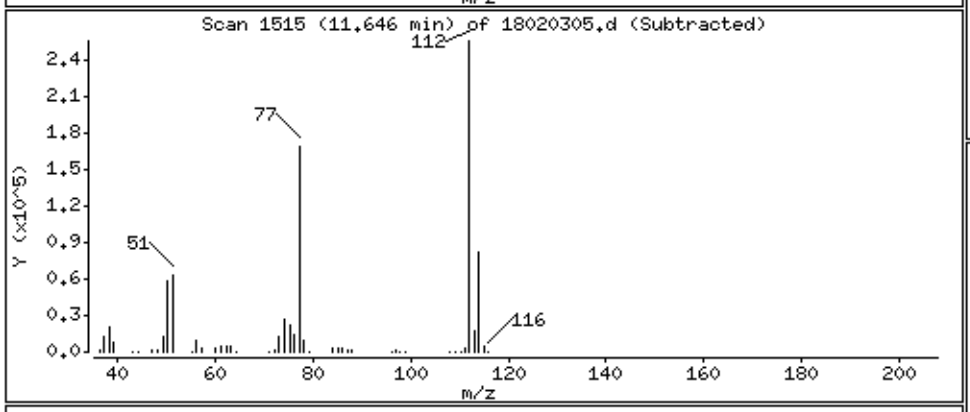
Column phase: RTx-624

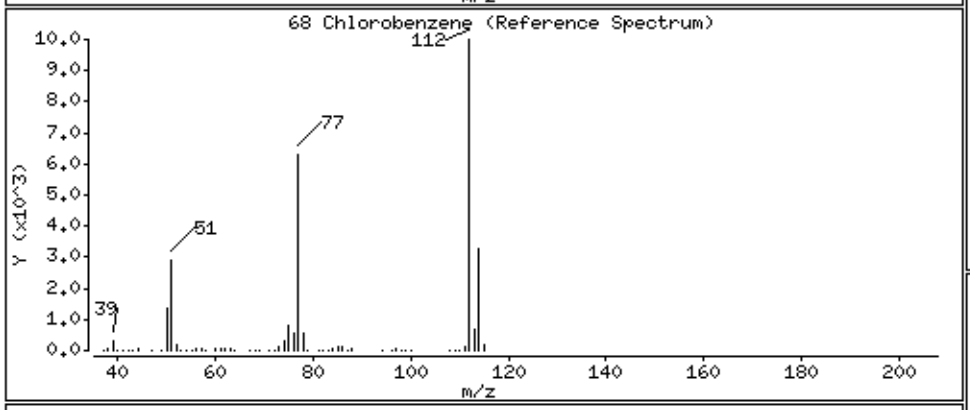
Column diameter: 0.53

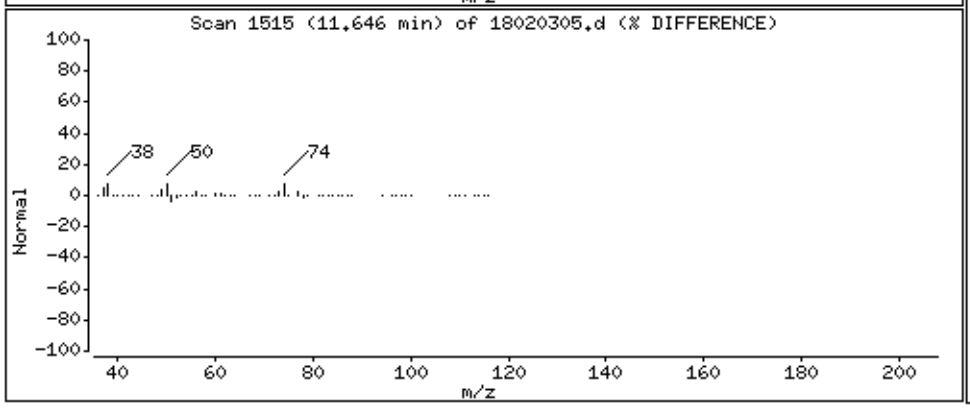
68 Chlorobenzene

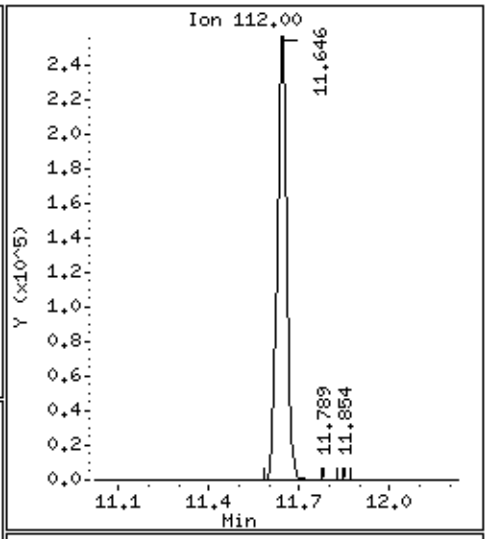
Concentration: 92.590 NG

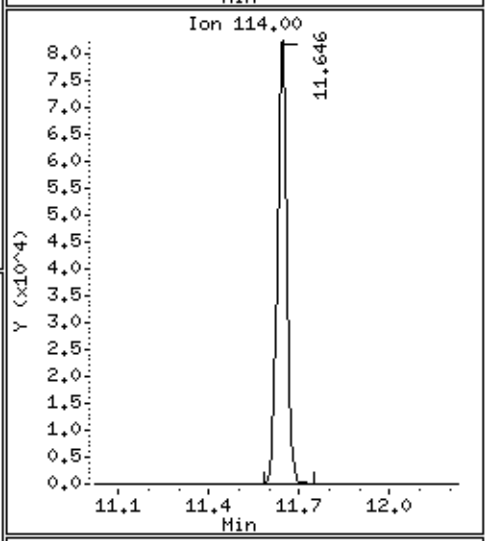


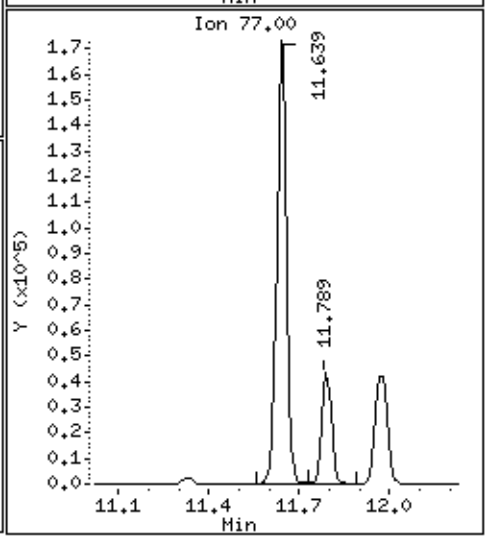












Data File: /chem/msd18.i/03Feb2016.b/18020305.d

Date : 03-FEB-2016 12:21

Client ID: LCSD

Instrument: msd18.i

Sample Info: ;VI VOC+PAH LCDS;LCSD

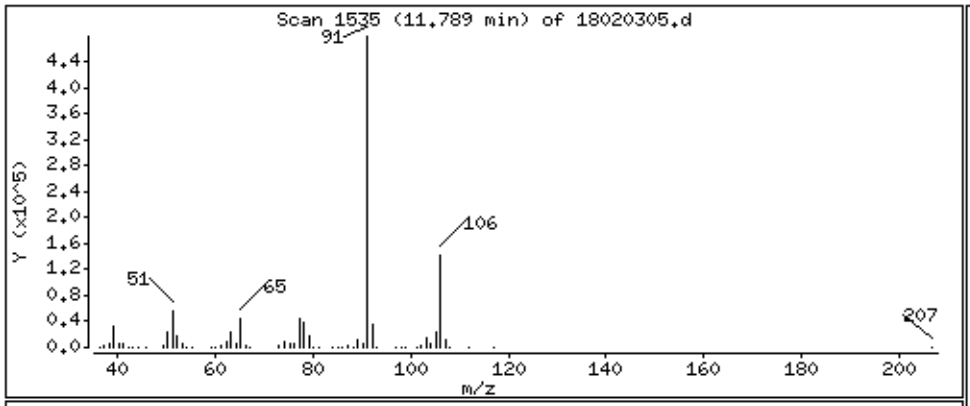
Operator: LA

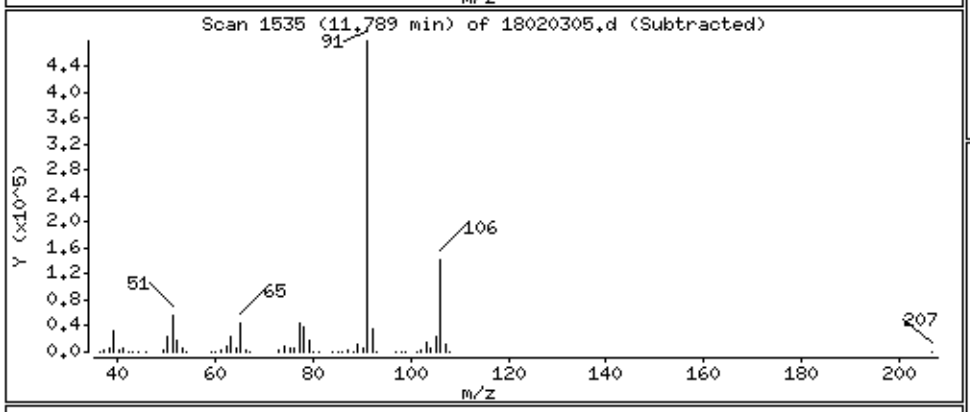
Column phase: RTx-624

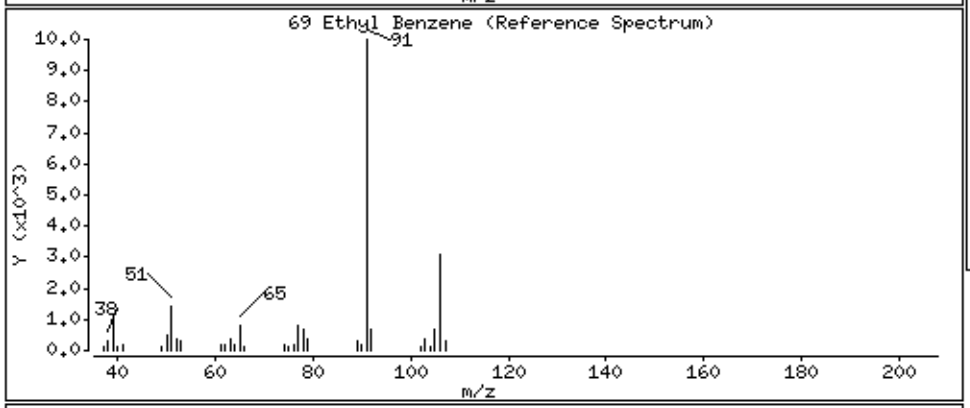
Column diameter: 0.53

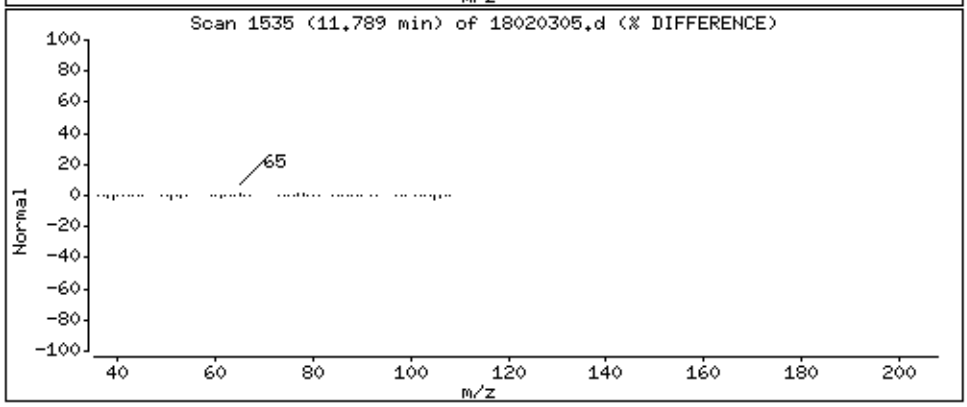
69 Ethyl Benzene

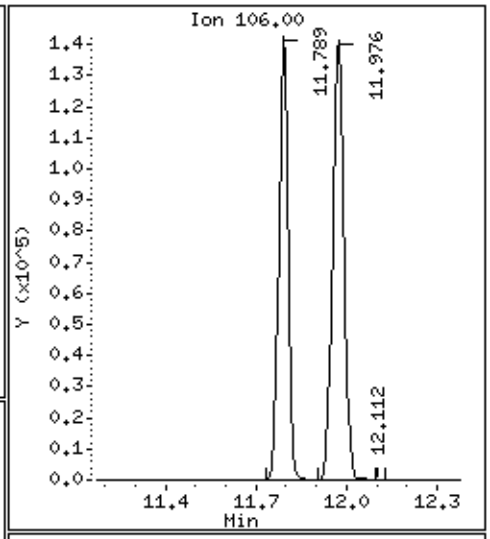
Concentration: 90.165 NG

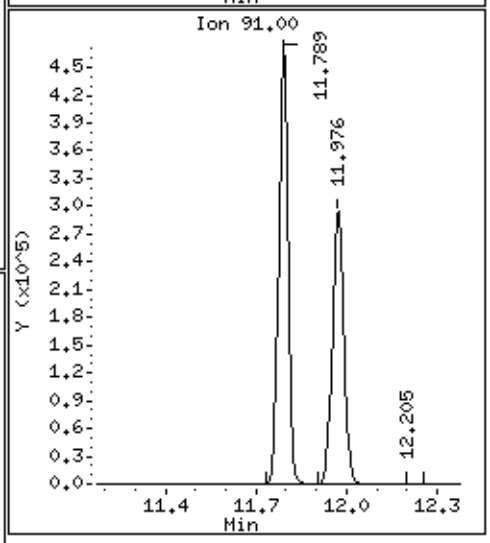












Data File: /chem/msd18.i/03Feb2016.b/18020305.d

Date : 03-FEB-2016 12:21

Client ID: LCSD

Instrument: msd18.i

Sample Info: ;VI VOC+PAH LCDS;LCSD

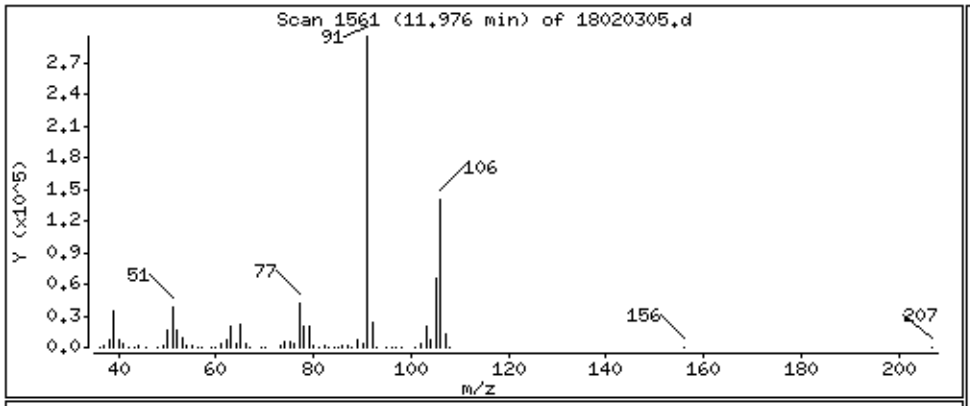
Operator: LA

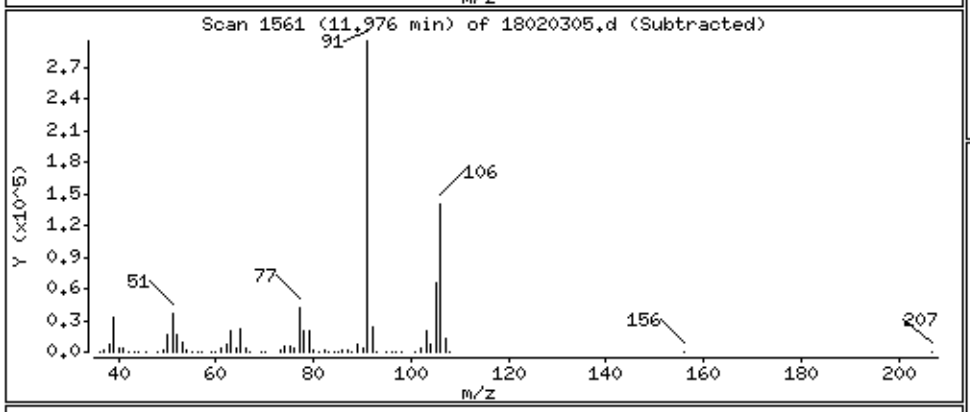
Column phase: RTx-624

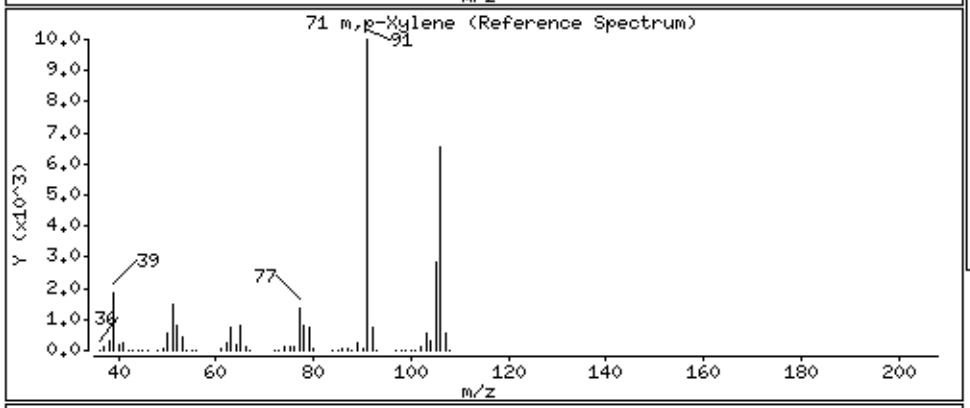
Column diameter: 0.53

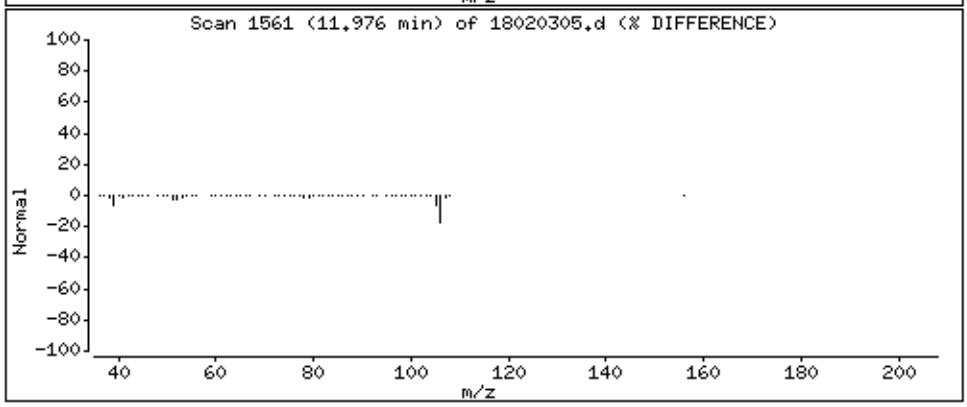
71 m,p-Xylene

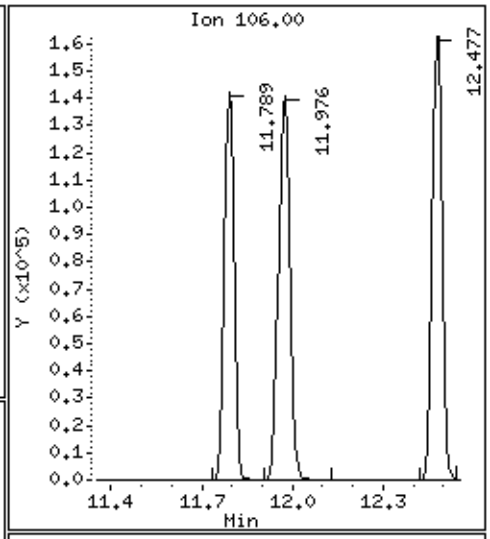
Concentration: 89.768 NG

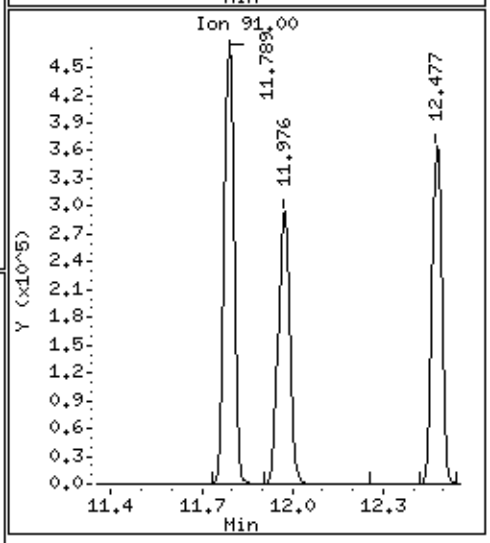












Data File: /chem/msd18.i/03Feb2016.b/18020305.d

Date : 03-FEB-2016 12:21

Client ID: LCSD

Instrument: msd18.i

Sample Info: ;VI VOC+PAH LCDS;LCSD

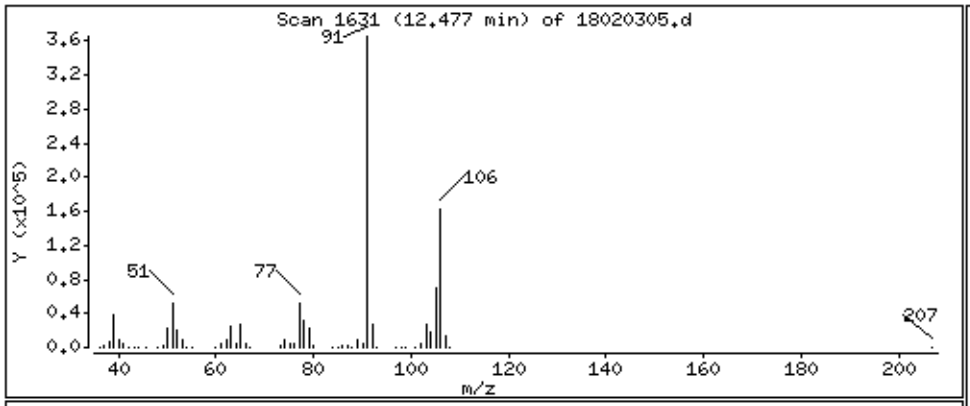
Operator: LA

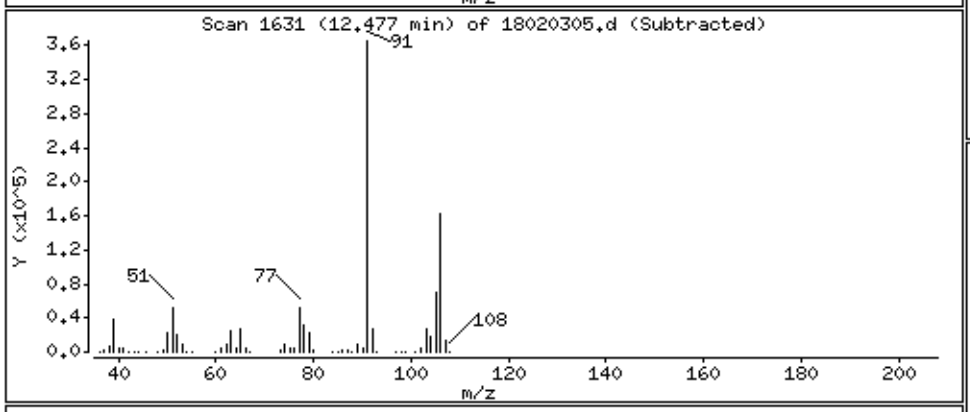
Column phase: RTx-624

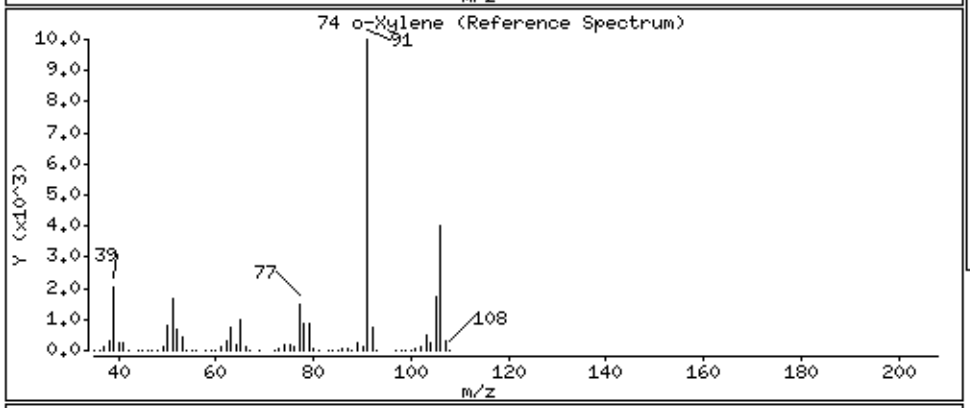
Column diameter: 0.53

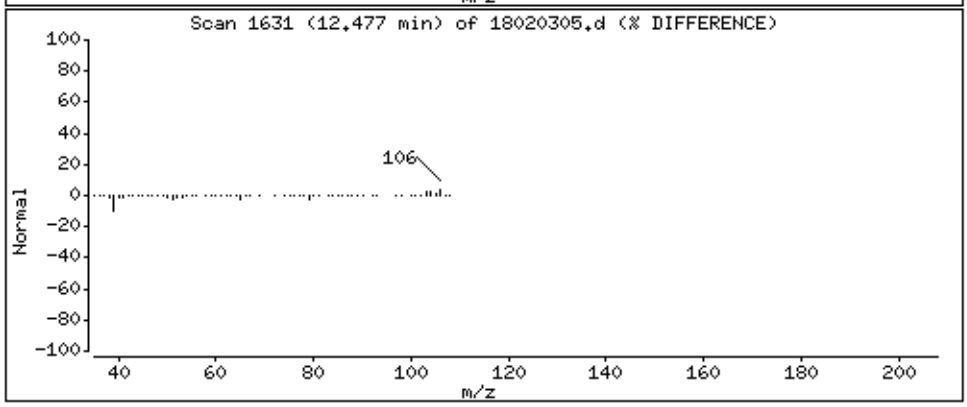
74 o-Xylene

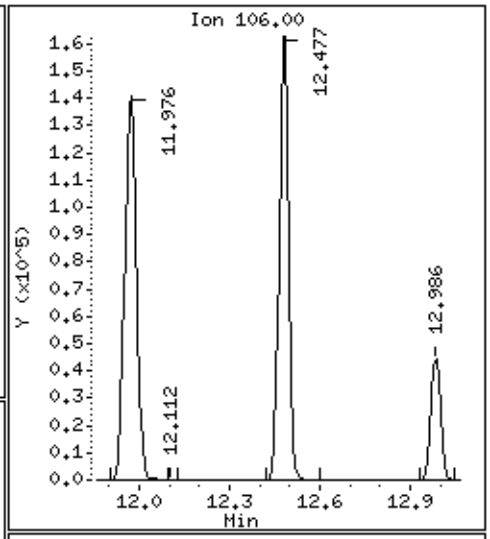
Concentration: 105.01 NG

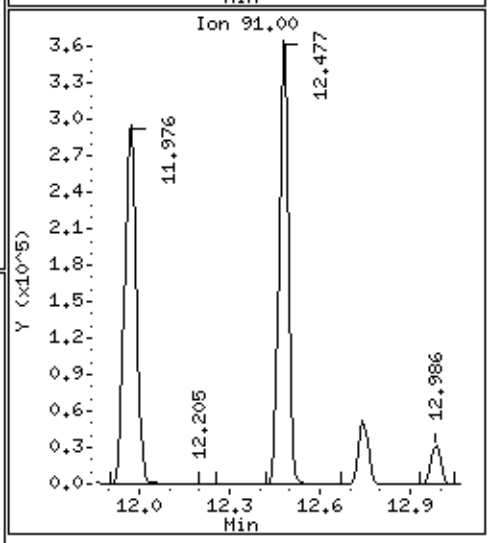












Data File: /chem/msd18.i/03Feb2016.b/18020305.d

Date : 03-FEB-2016 12:21

Client ID: LCSD

Instrument: msd18.i

Sample Info: ;VI VOC+PAH LCDS;LCSD

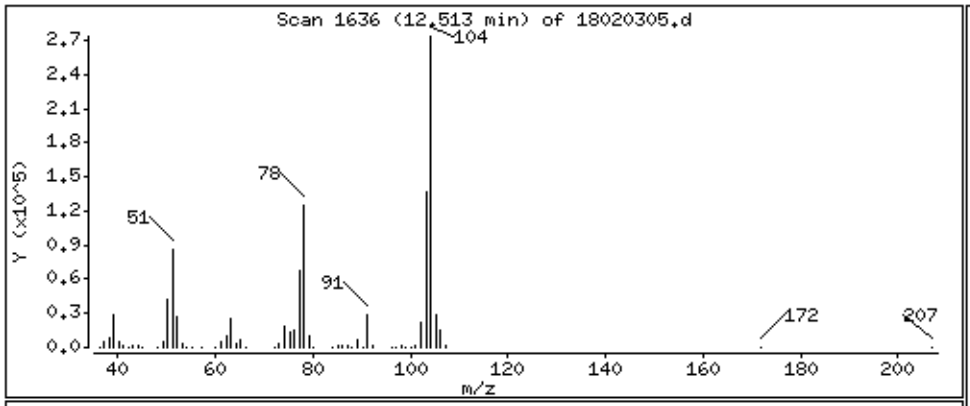
Operator: LA

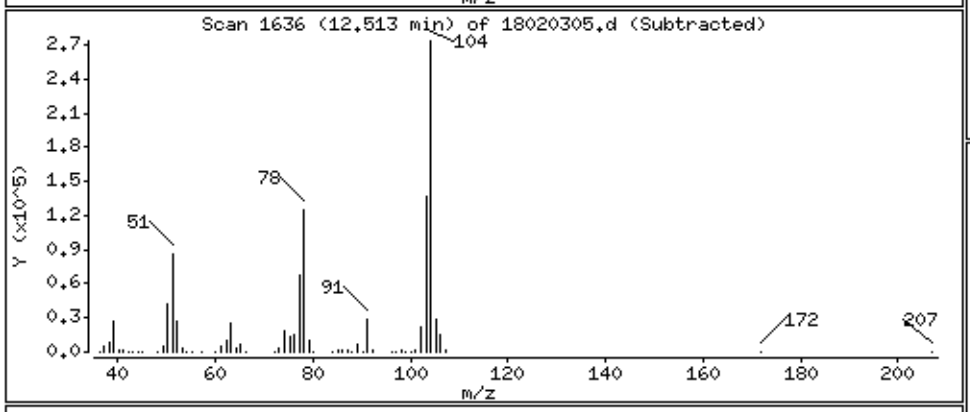
Column phase: RTx-624

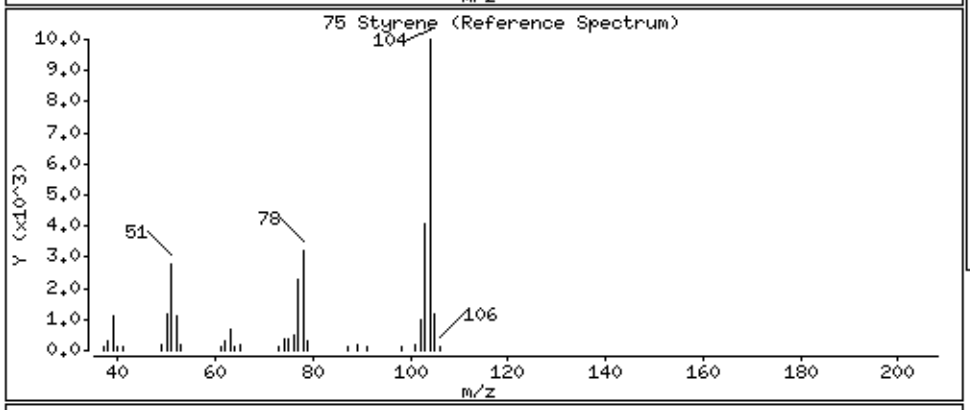
Column diameter: 0.53

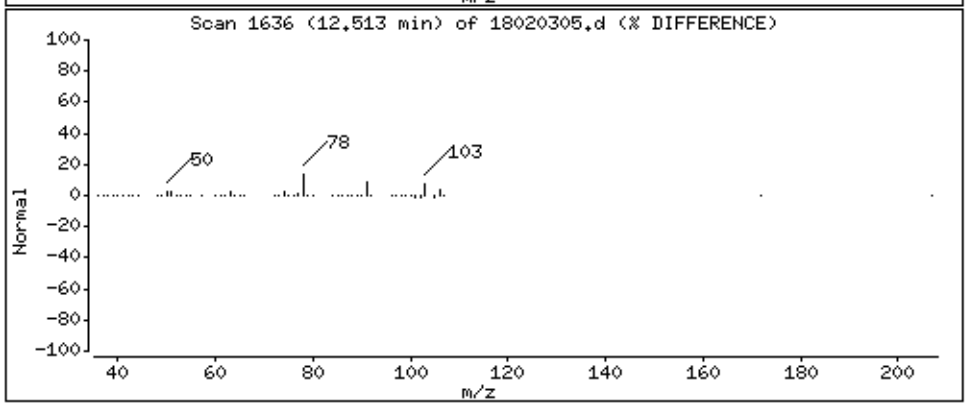
75 Styrene

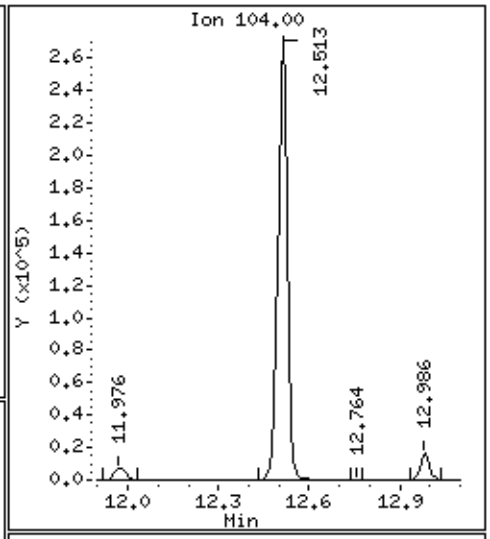
Concentration: 97.893 NG

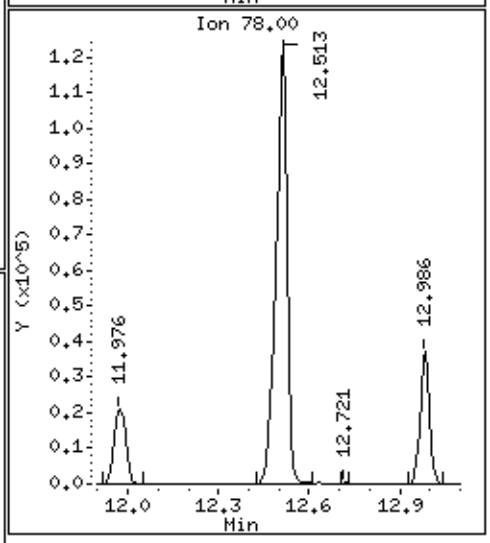












Data File: /chem/msd18.i/03Feb2016.b/18020305.d

Date : 03-FEB-2016 12:21

Client ID: LCSD

Instrument: msd18.i

Sample Info: ;VI VOC+PAH LCDS;LCSD

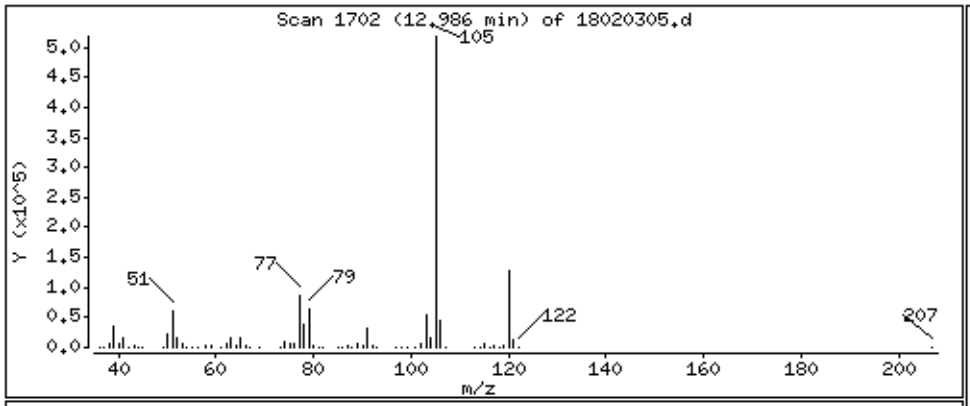
Operator: LA

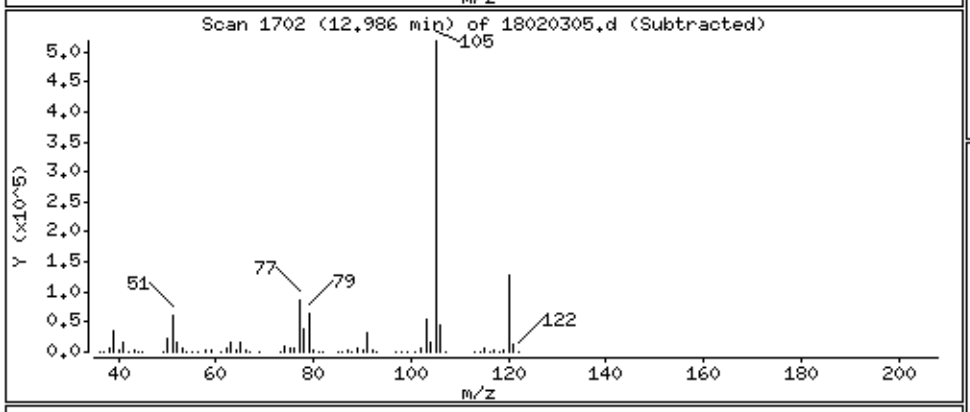
Column phase: RTx-624

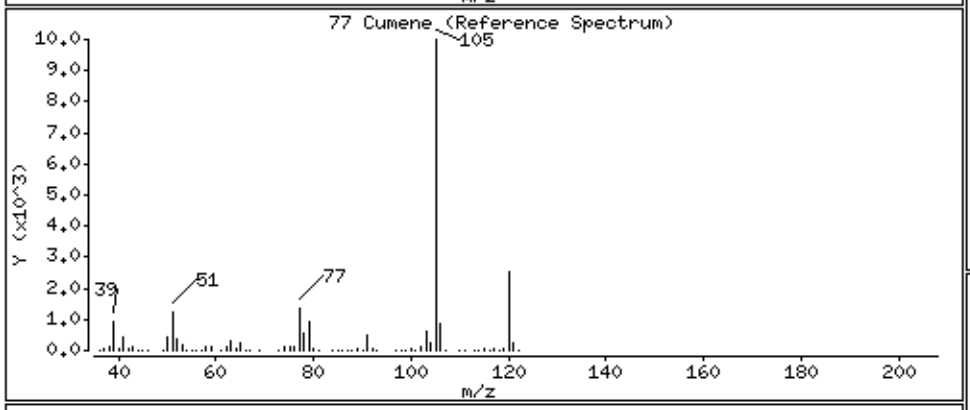
Column diameter: 0.53

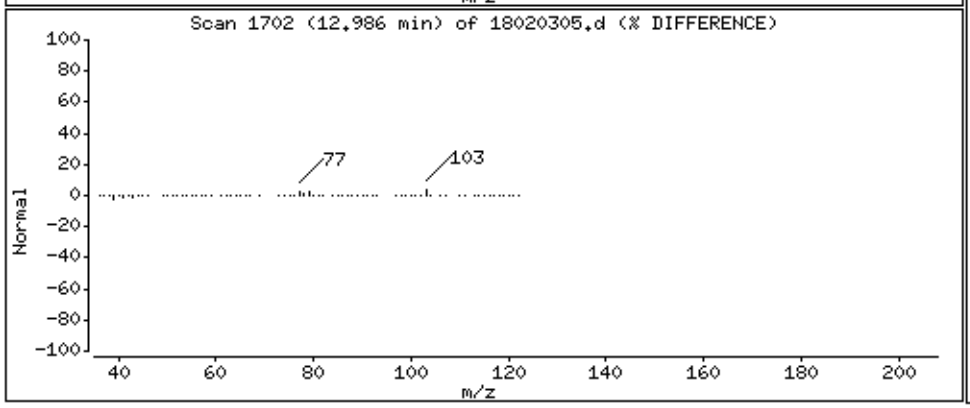
77 Cumene

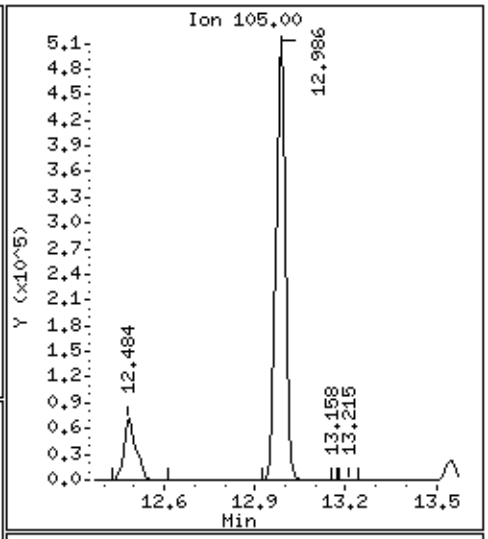
Concentration: 121.75 NG

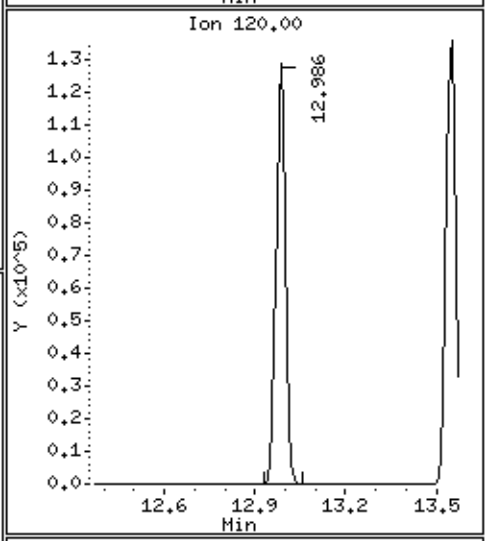


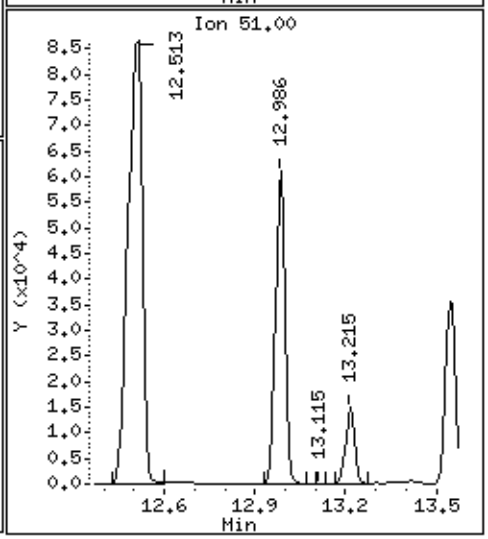












Data File: /chem/msd18.i/03Feb2016.b/18020305.d

Date : 03-FEB-2016 12:21

Client ID: LCSD

Instrument: msd18.i

Sample Info: ;VI VOC+PAH LCDS;LCSD

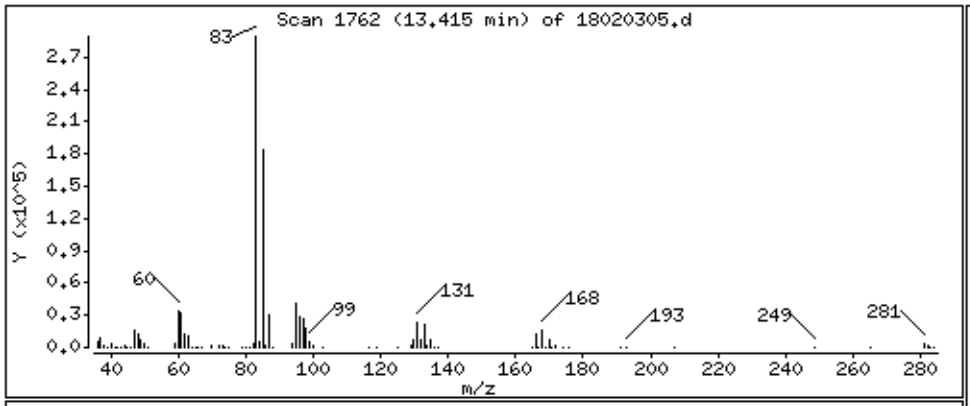
Operator: LA

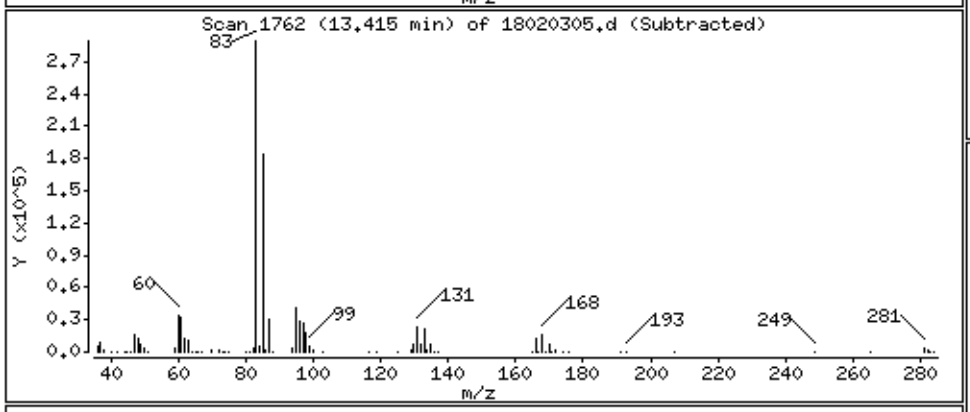
Column phase: RTx-624

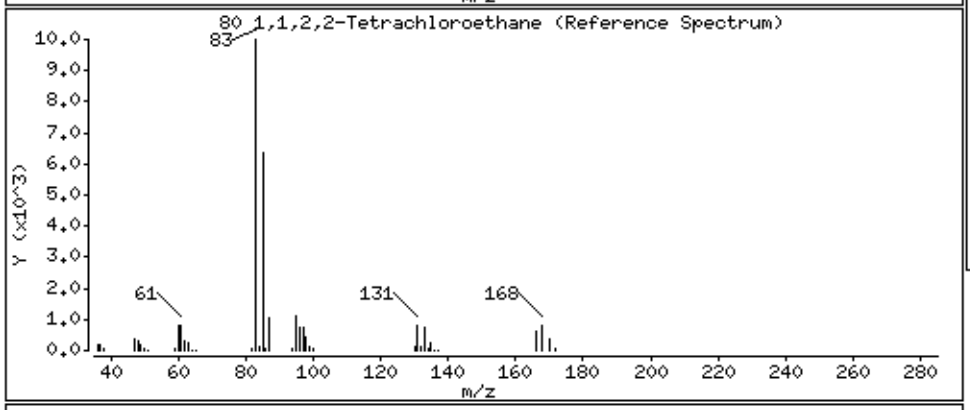
Column diameter: 0.53

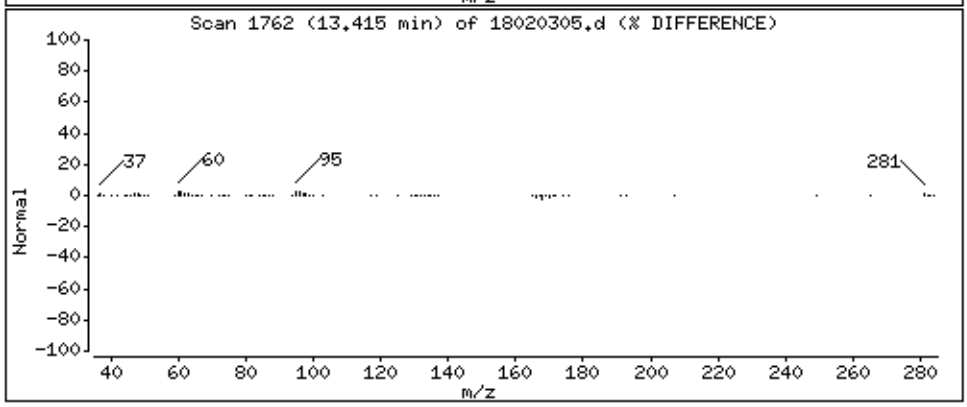
80 1,1,2,2-Tetrachloroethane

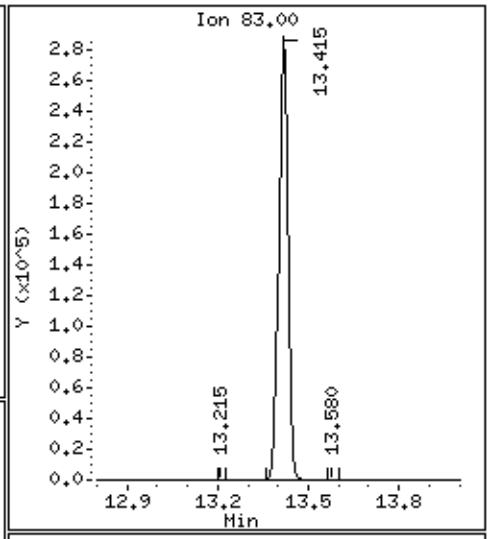
Concentration: 207.52 NG

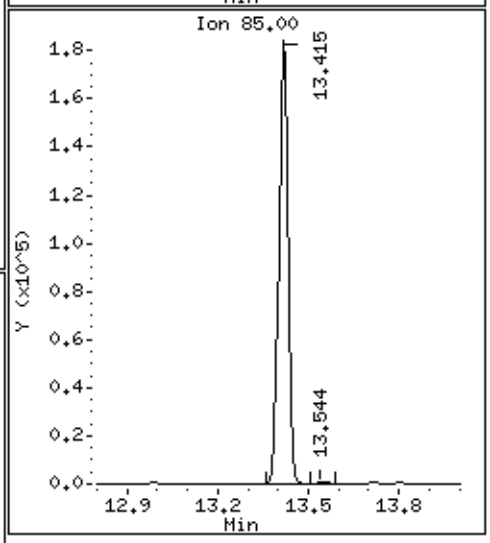












Data File: /chem/msd18.i/03Feb2016.b/18020305.d

Date : 03-FEB-2016 12:21

Client ID: LCSD

Instrument: msd18.i

Sample Info: ;VI VOC+PAH LCDS;LCSD

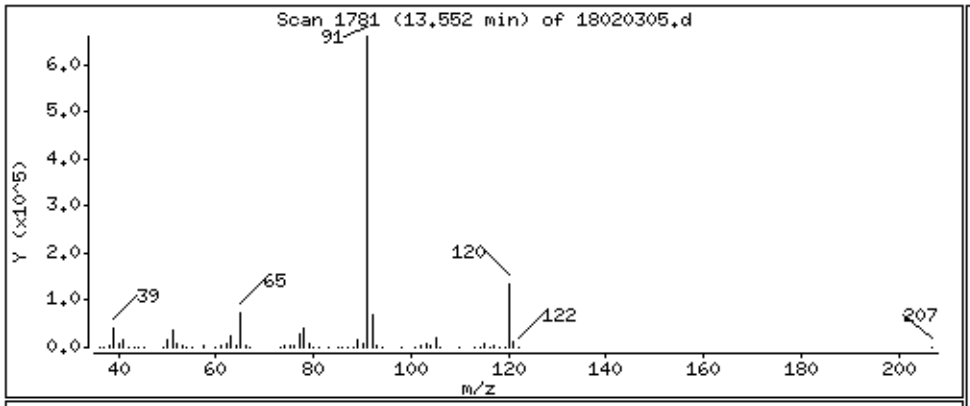
Operator: LA

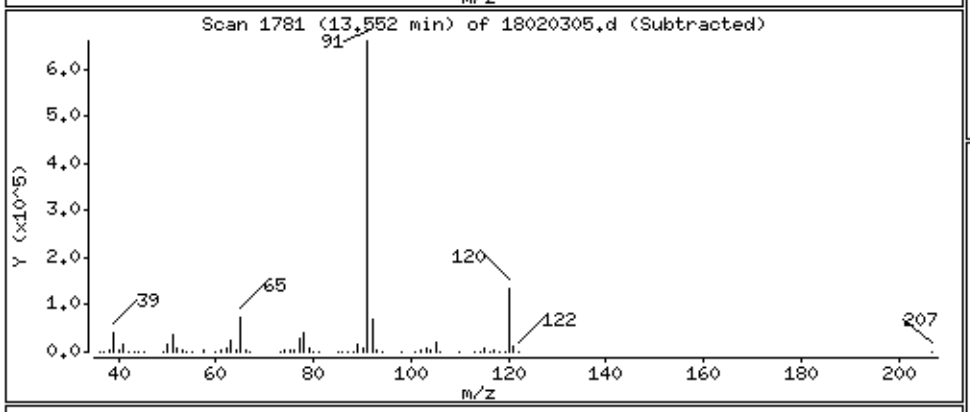
Column phase: RTx-624

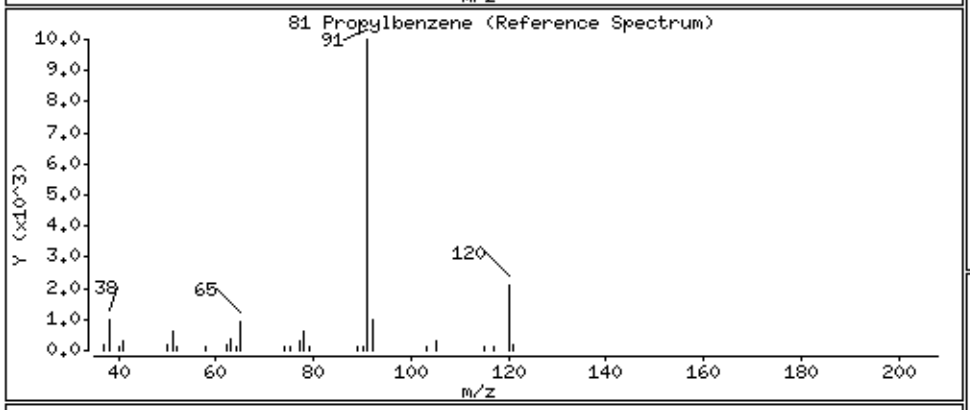
Column diameter: 0.53

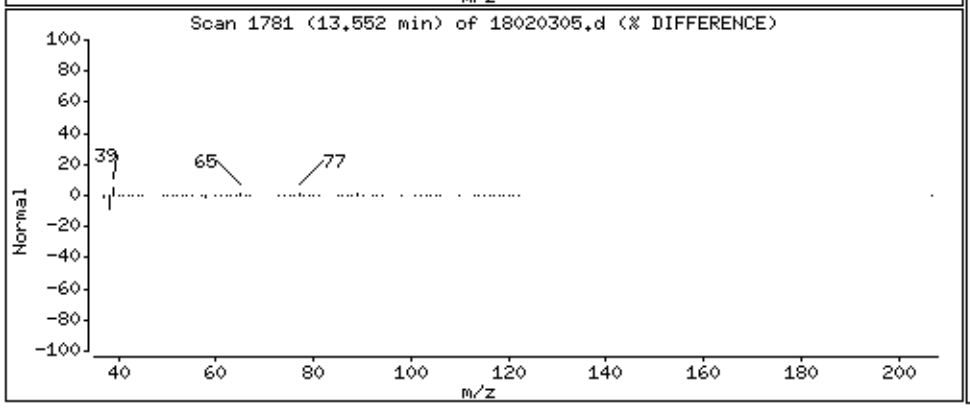
81 Propylbenzene

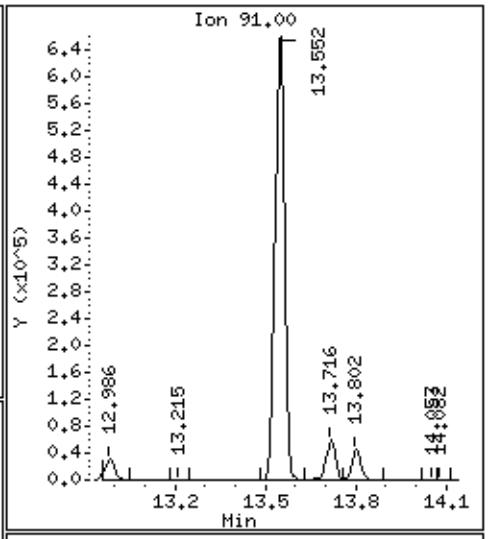
Concentration: 144.62 NG

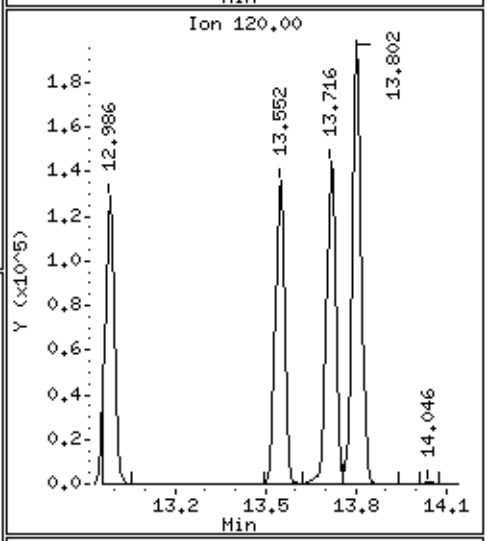


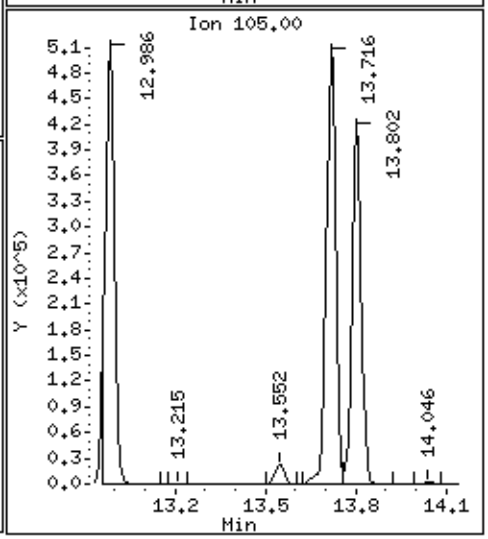












Data File: /chem/msd18.i/03Feb2016.b/18020305.d

Date : 03-FEB-2016 12:21

Client ID: LCSD

Instrument: msd18.i

Sample Info: ;VI VOC+PAH LCDS;LCSD

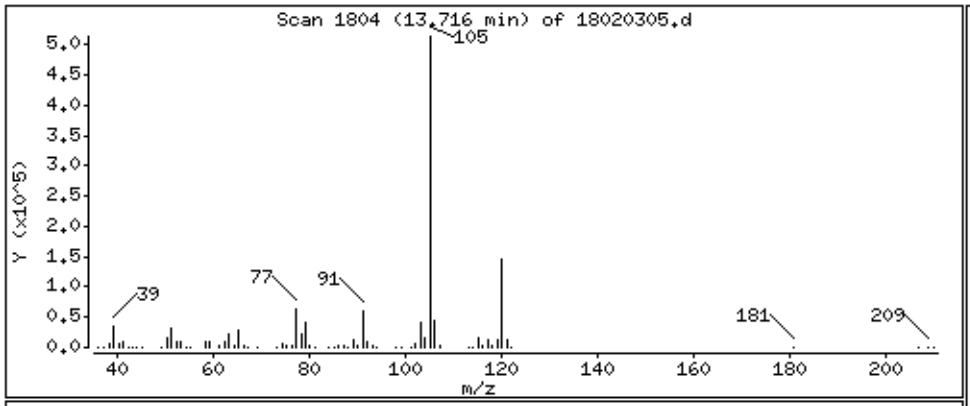
Operator: LA

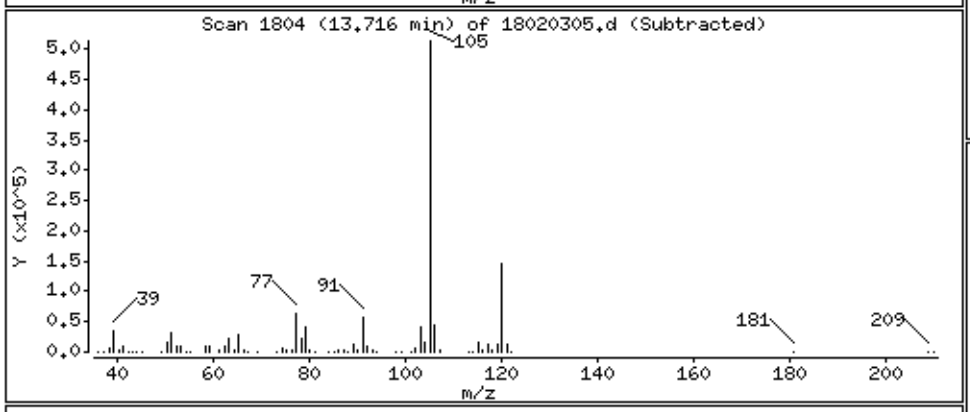
Column phase: RTx-624

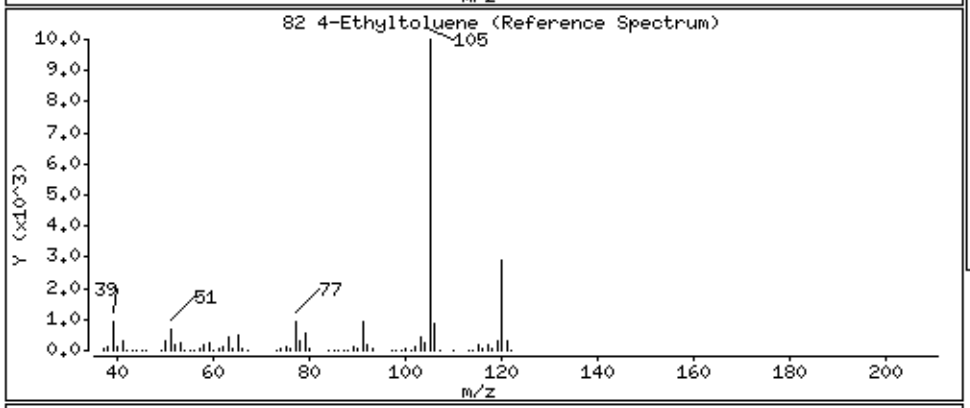
Column diameter: 0.53

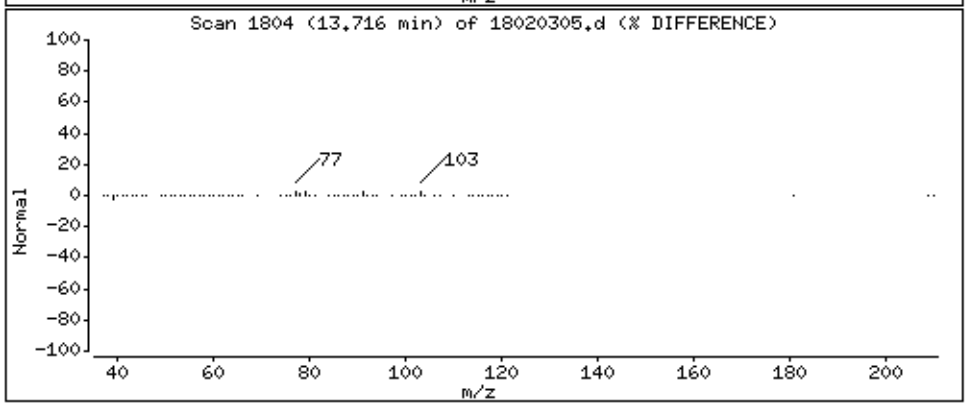
82 4-Ethyltoluene

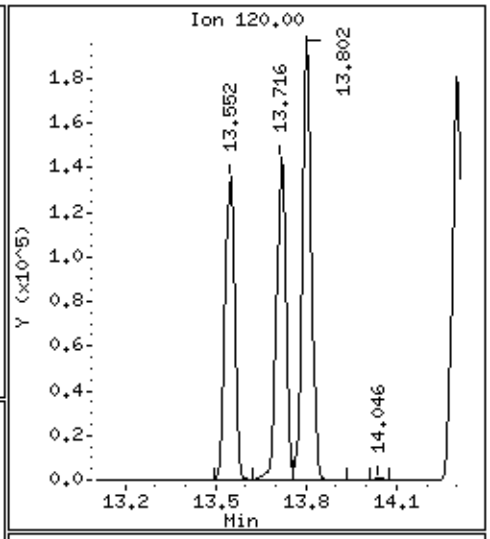
Concentration: 130.15 NG

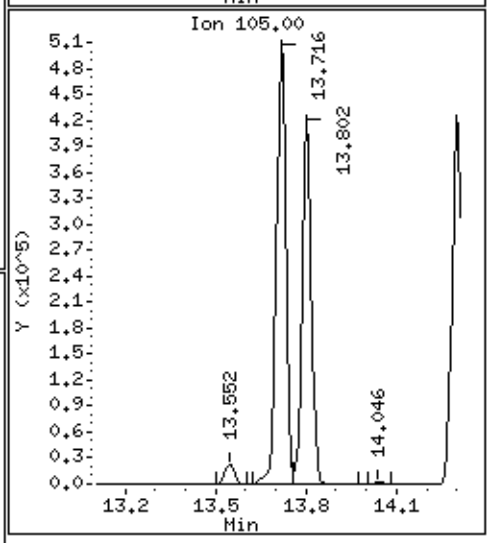












Data File: /chem/msd18.i/03Feb2016.b/18020305.d

Date : 03-FEB-2016 12:21

Client ID: LCSD

Instrument: msd18.i

Sample Info: ;VI VOC+PAH LCDS;LCSD

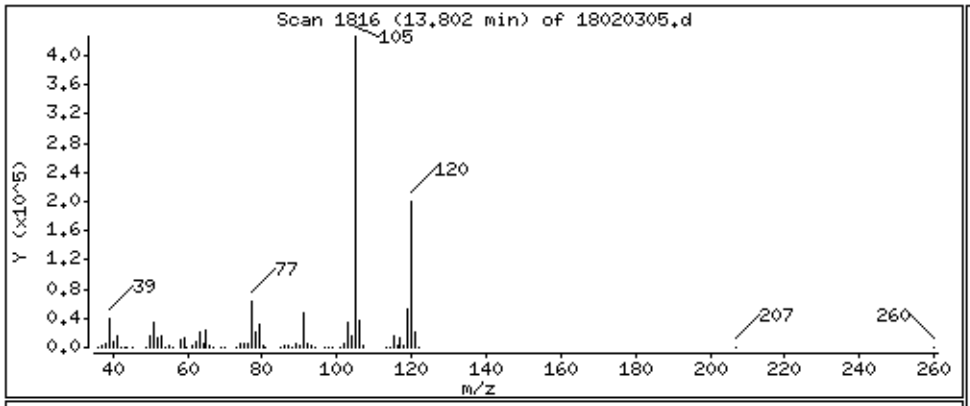
Operator: LA

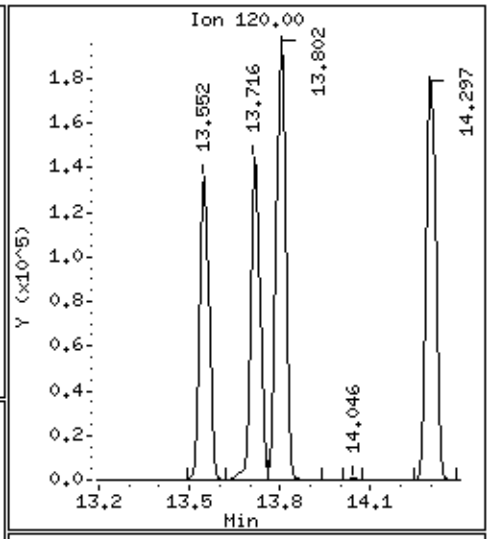
Column phase: RTx-624

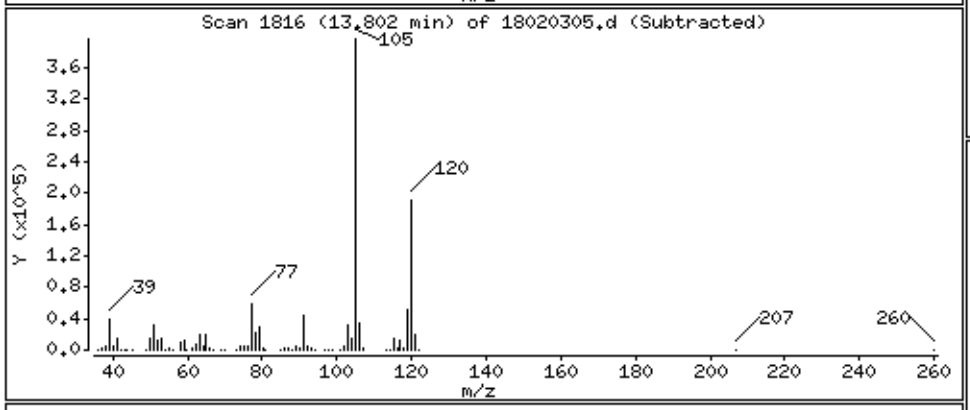
Column diameter: 0.53

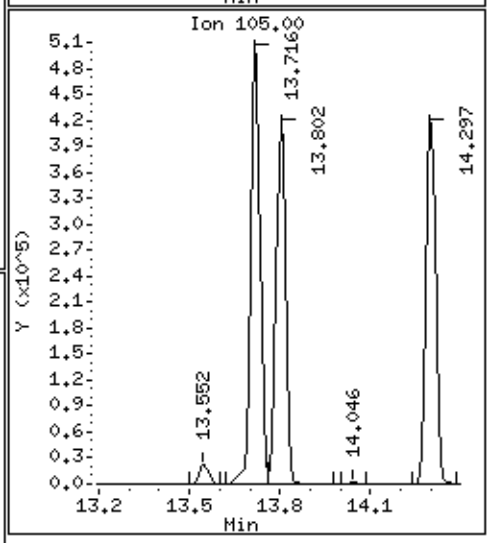
83 1,3,5-Trimethylbenzene

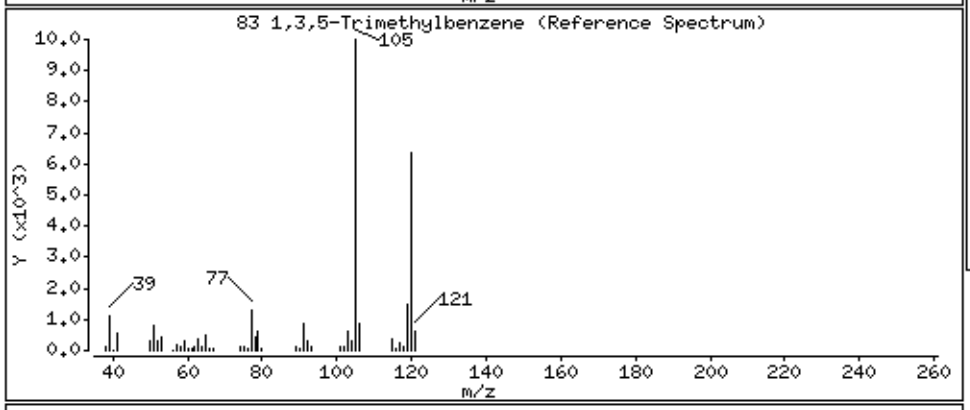
Concentration: 126.52 NG

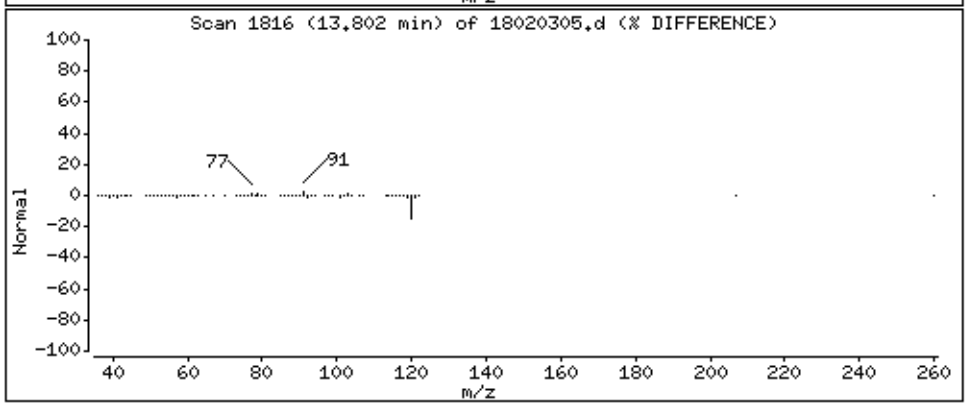












Data File: /chem/msd18.i/03Feb2016.b/18020305.d

Date : 03-FEB-2016 12:21

Client ID: LCSD

Instrument: msd18.i

Sample Info: ;VI VOC+PAH LCDS;LCSD

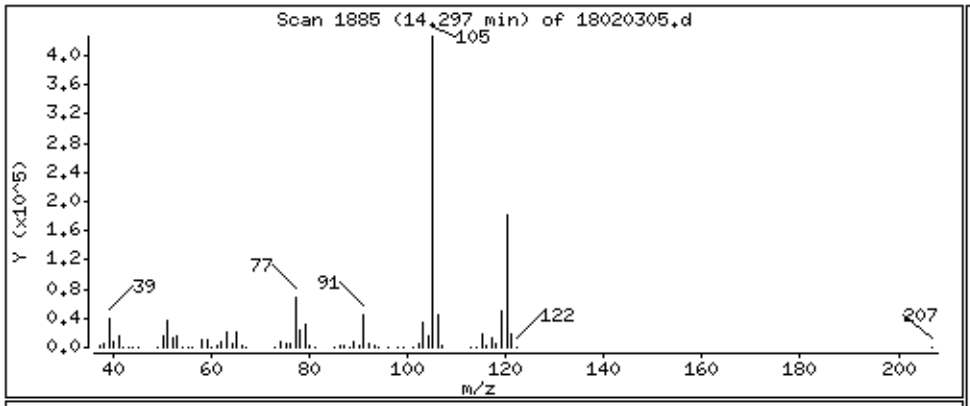
Operator: LA

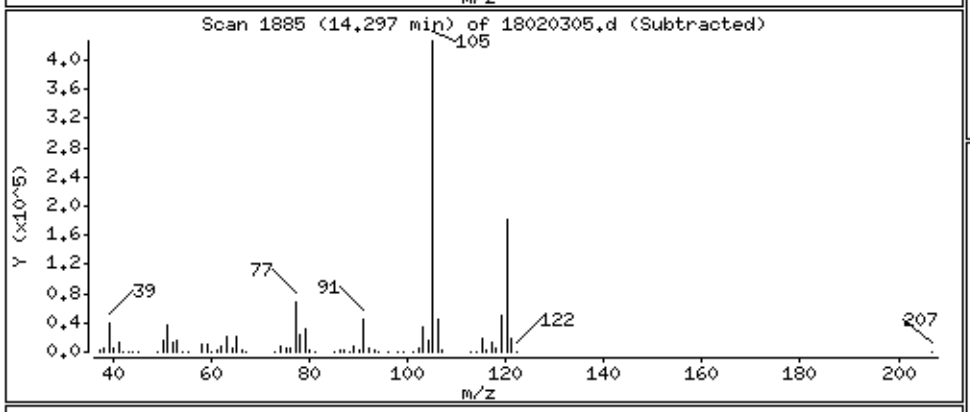
Column phase: RTx-624

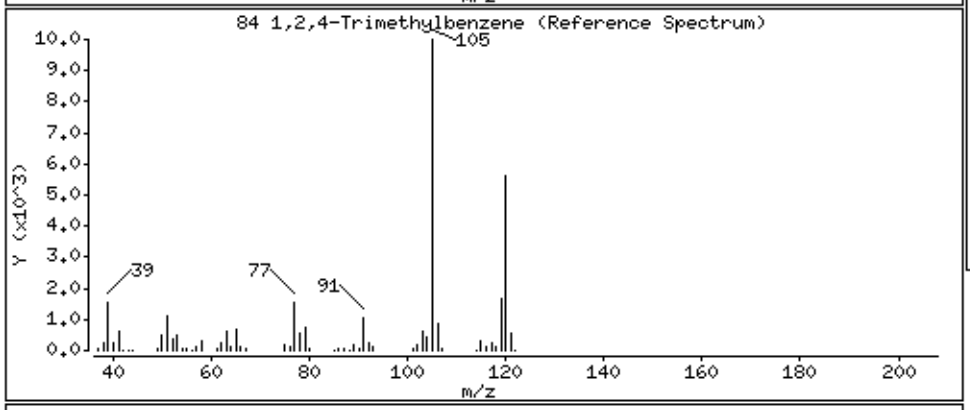
Column diameter: 0.53

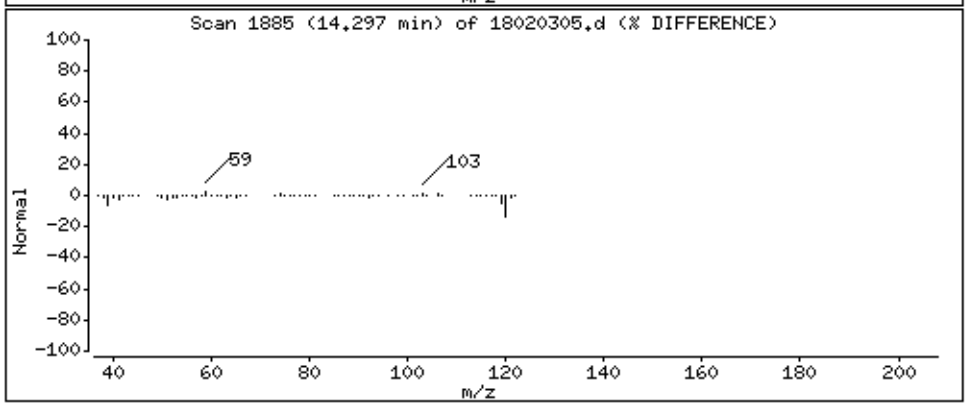
84 1,2,4-Trimethylbenzene

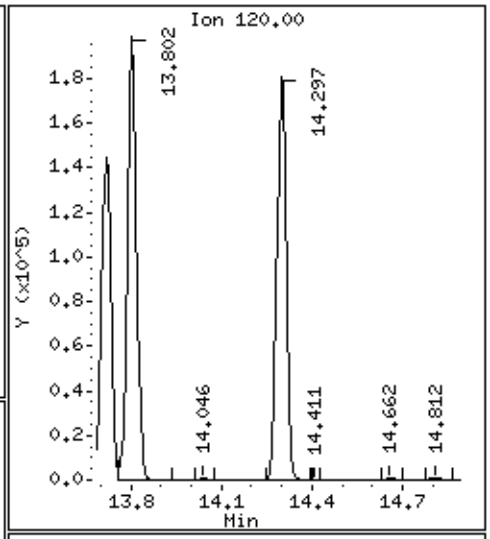
Concentration: 118.72 NG

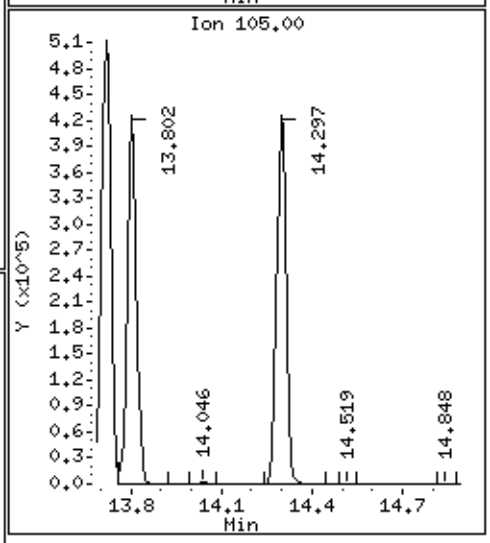












Data File: /chem/msd18.i/03Feb2016.b/18020305.d

Date : 03-FEB-2016 12:21

Client ID: LCSD

Instrument: msd18.i

Sample Info: ;VI VOC+PAH LCDS;LCSD

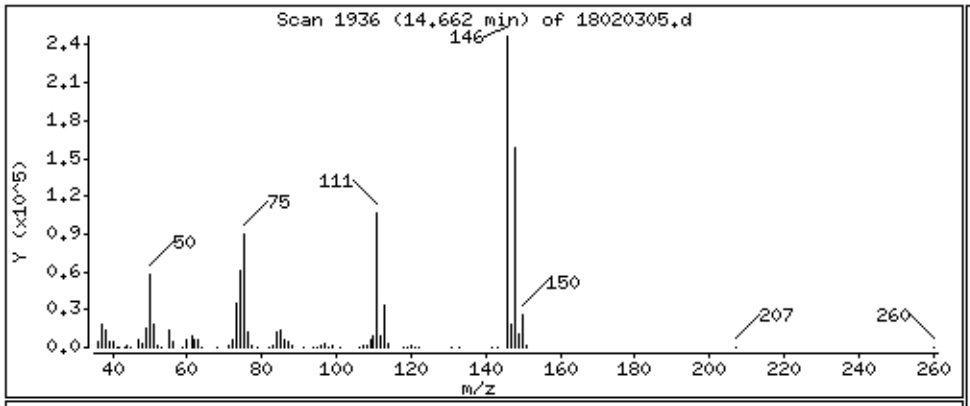
Operator: LA

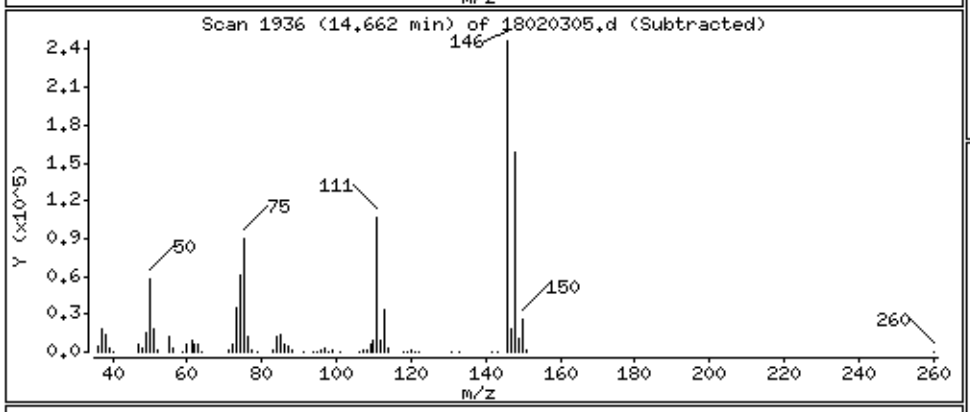
Column phase: RTx-624

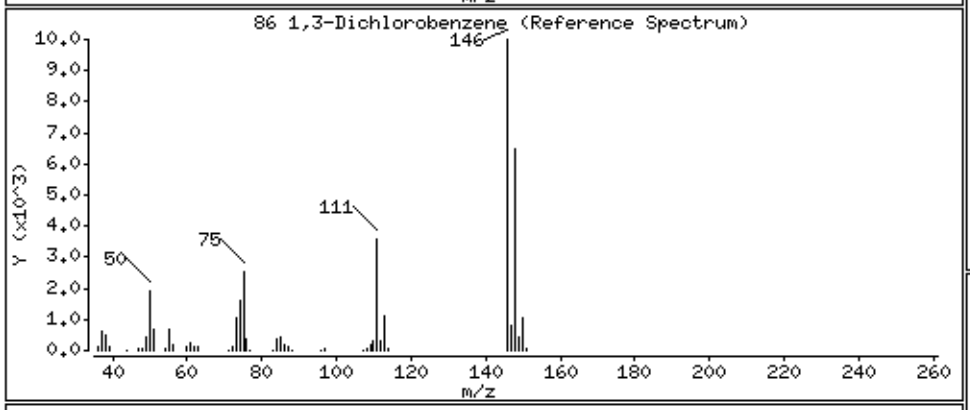
Column diameter: 0.53

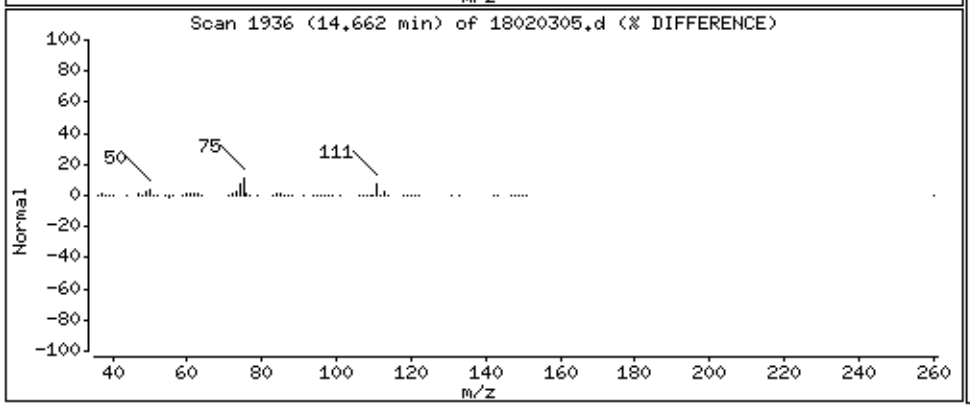
86 1,3-Dichlorobenzene

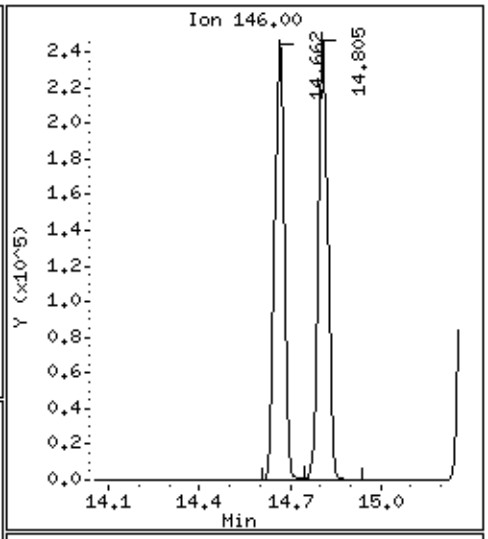
Concentration: 133.11 NG

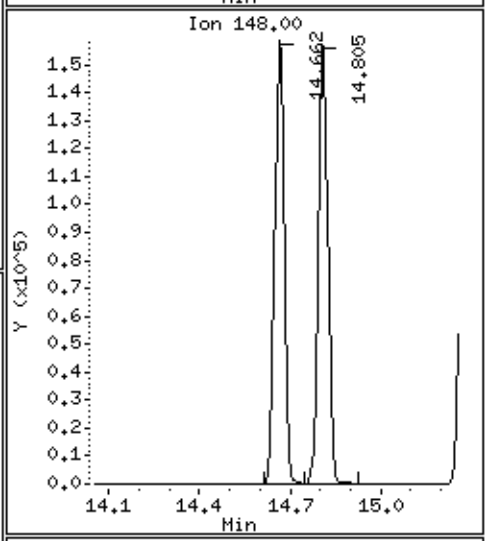


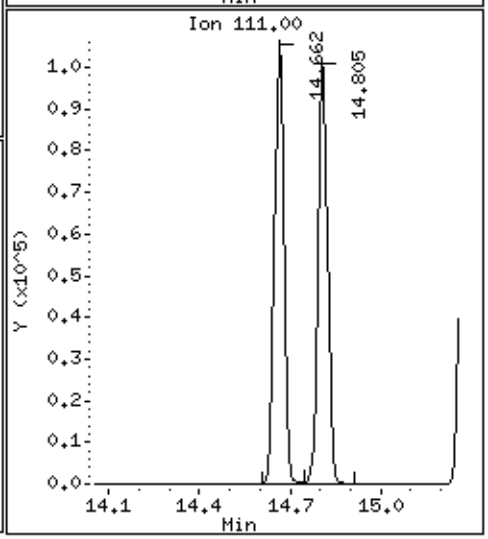












Data File: /chem/msd18.i/03Feb2016.b/18020305.d

Date : 03-FEB-2016 12:21

Client ID: LCSD

Instrument: msd18.i

Sample Info: ;VI VOC+PAH LCDS;LCSD

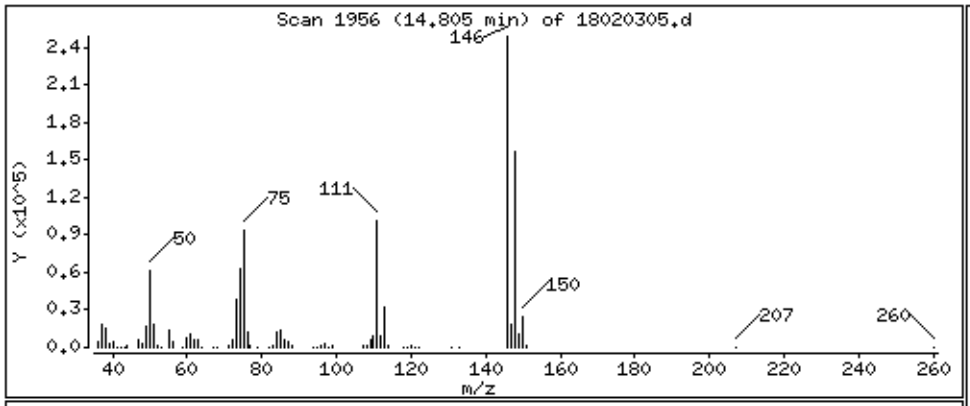
Operator: LA

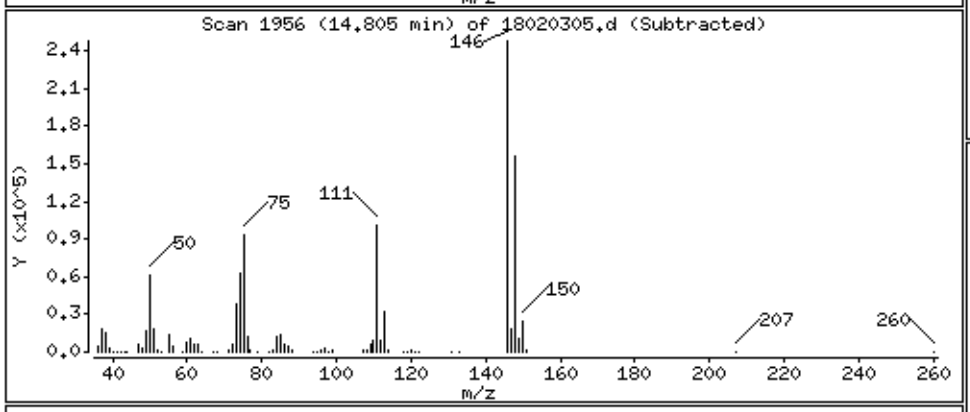
Column phase: RTx-624

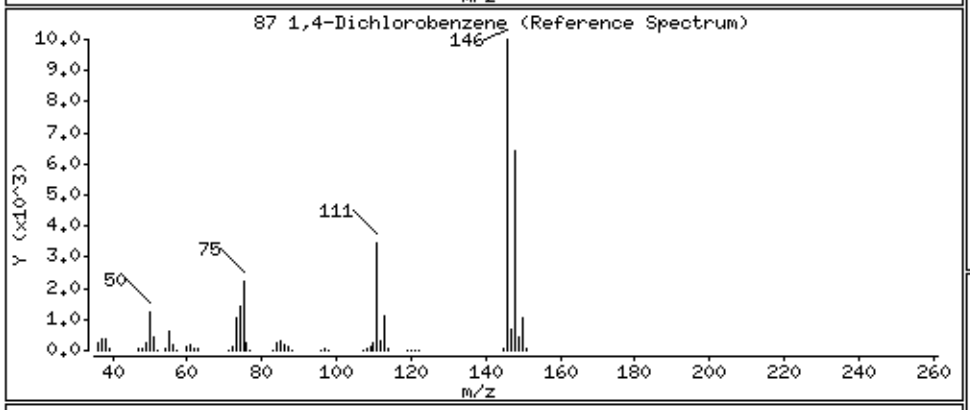
Column diameter: 0.53

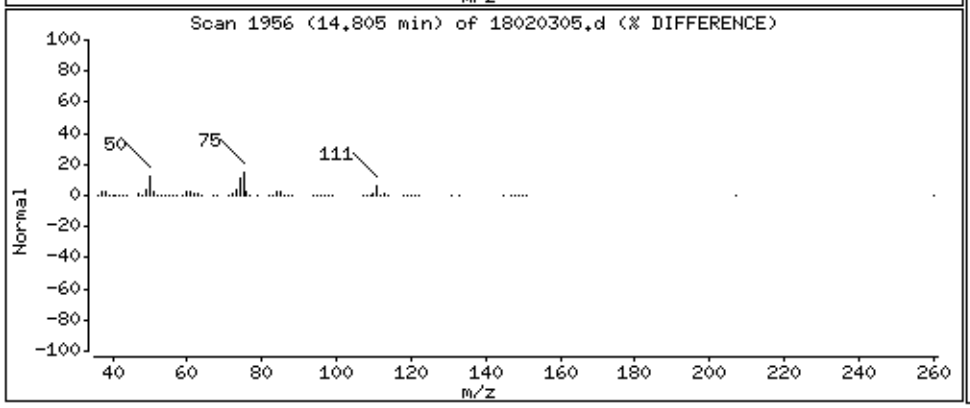
87 1,4-Dichlorobenzene

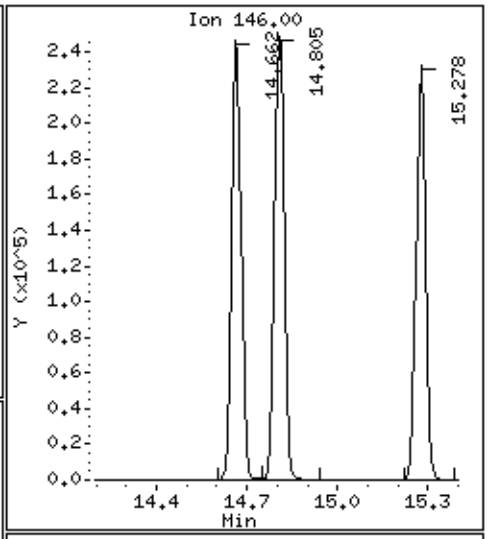
Concentration: 132.96 NG

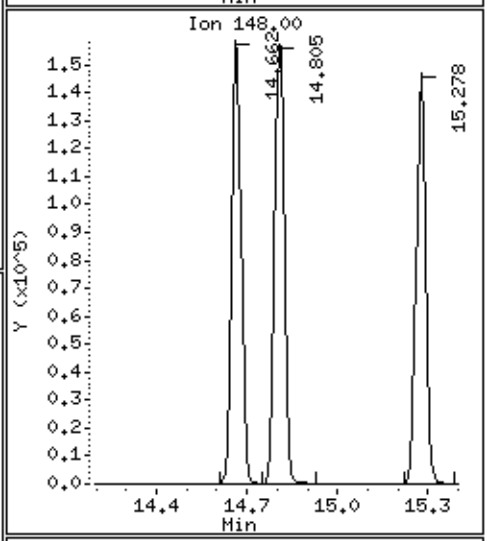


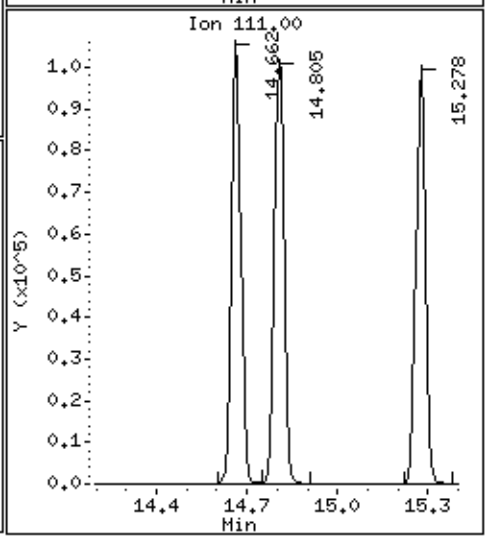












Data File: /chem/msd18.i/03Feb2016.b/18020305.d

Date : 03-FEB-2016 12:21

Client ID: LCSD

Instrument: msd18.i

Sample Info: ;VI VOC+PAH LCDS;LCSD

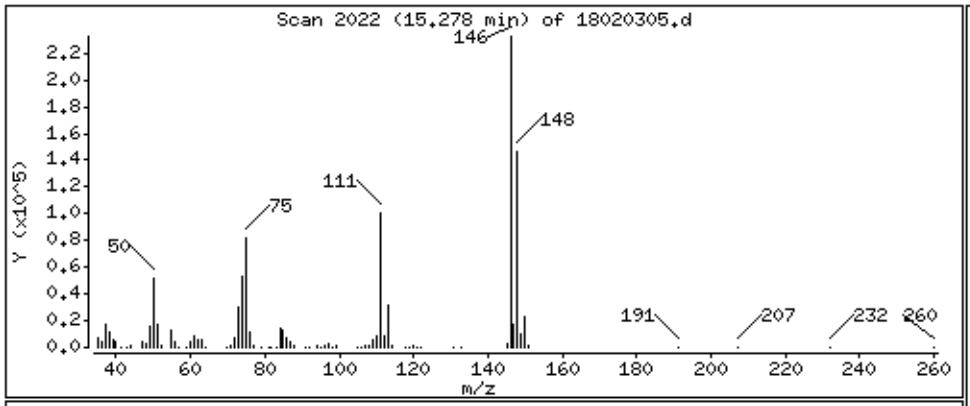
Operator: LA

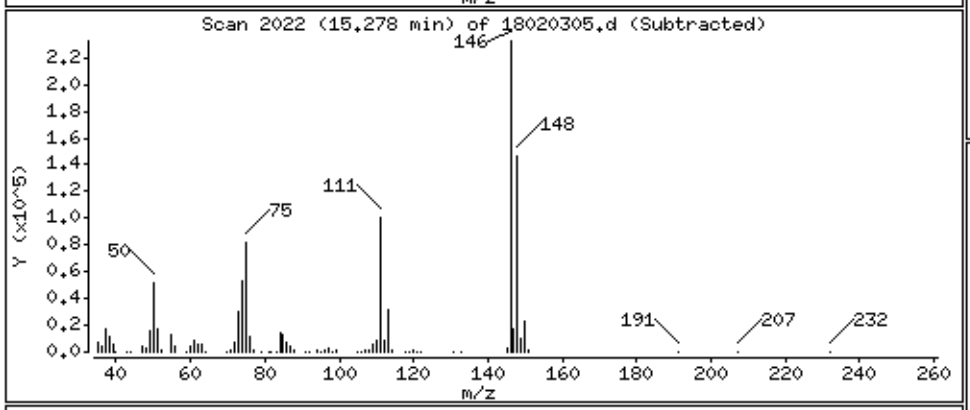
Column phase: RTx-624

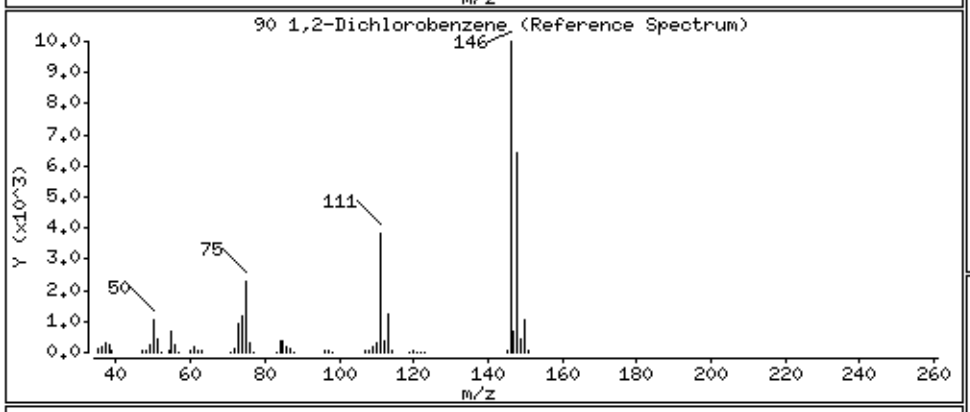
Column diameter: 0.53

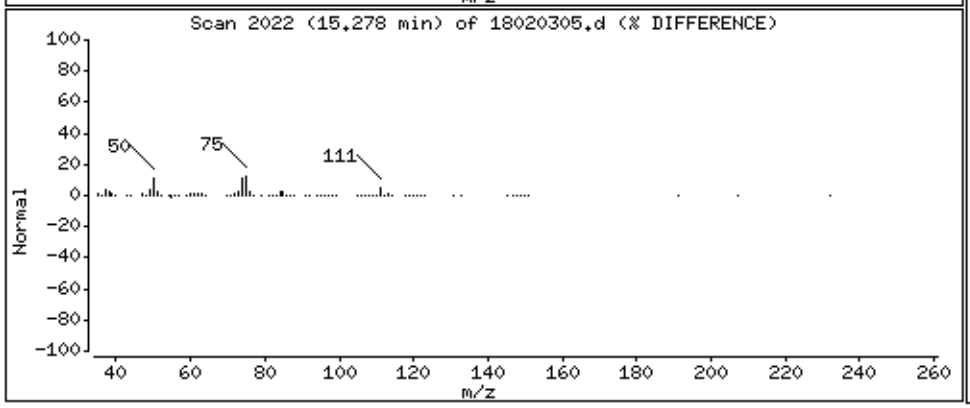
90 1,2-Dichlorobenzene

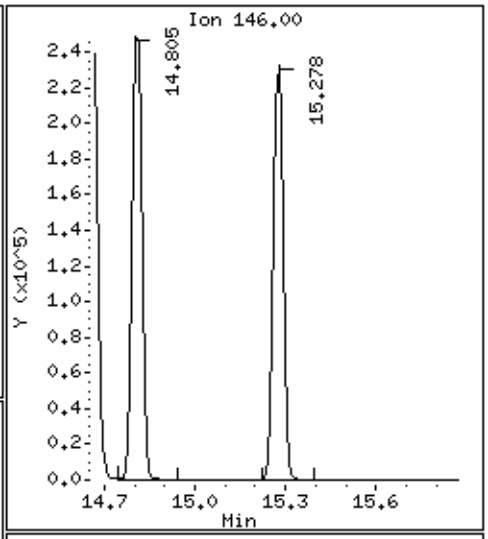
Concentration: 129.42 NG

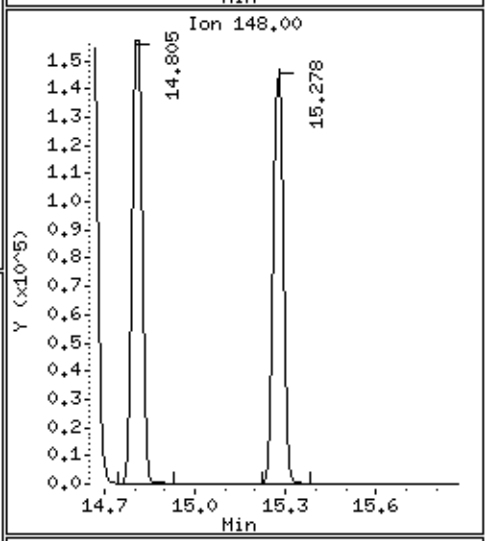


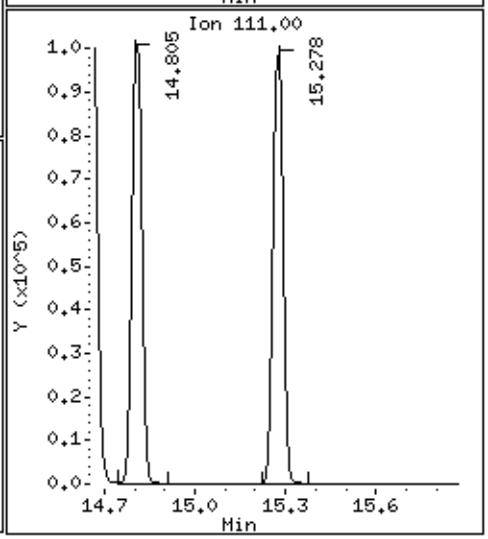












Data File: /chem/msd18.i/03Feb2016.b/18020305.d

Date : 03-FEB-2016 12:21

Client ID: LCSD

Instrument: msd18.i

Sample Info: ;VI VOC+PAH LCDS;LCSD

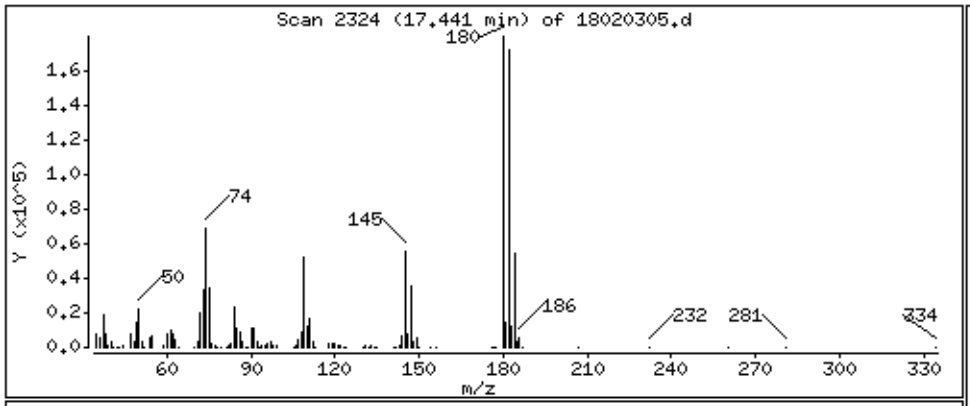
Operator: LA

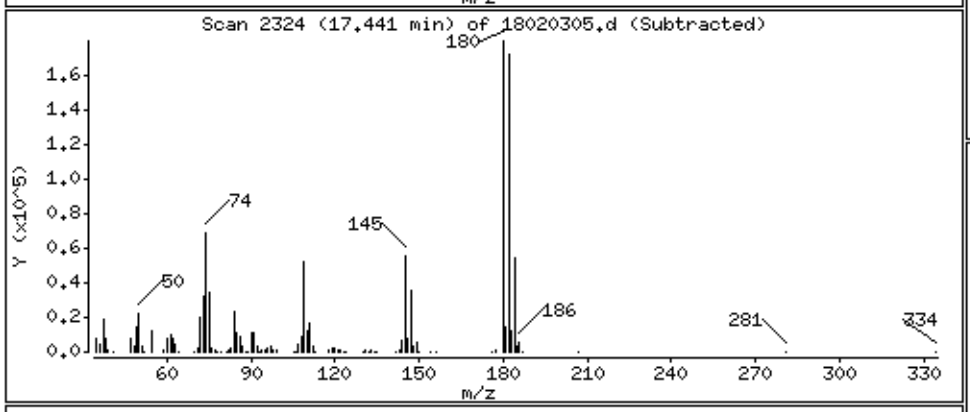
Column phase: RTx-624

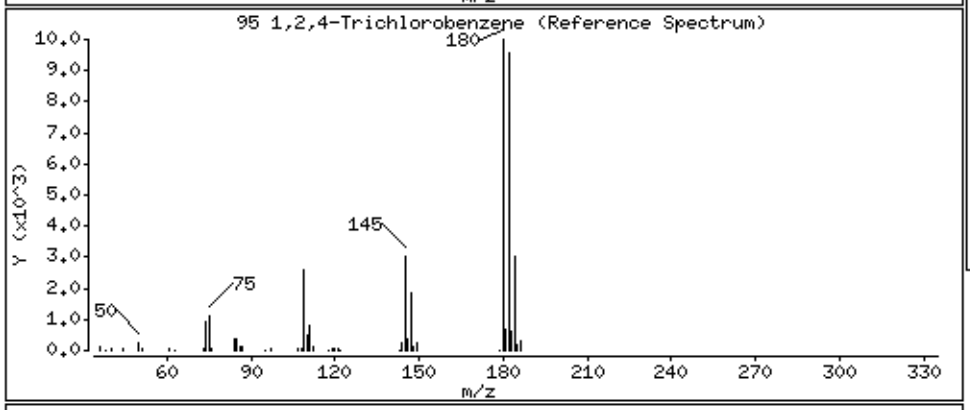
Column diameter: 0.53

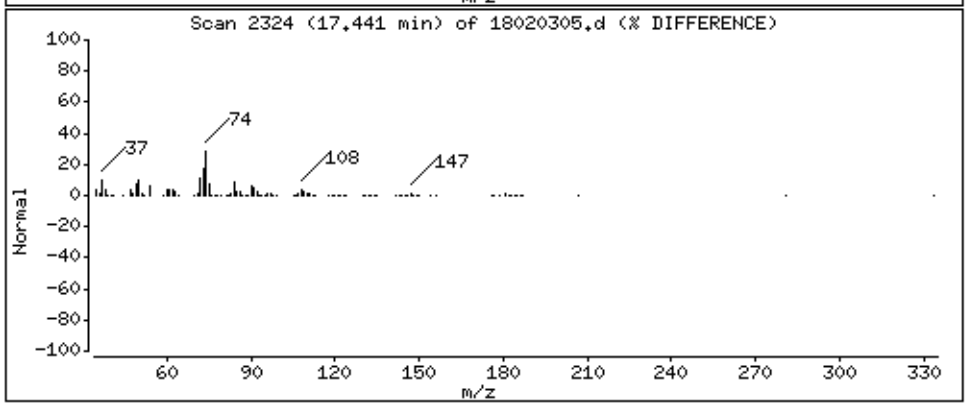
95 1,2,4-Trichlorobenzene

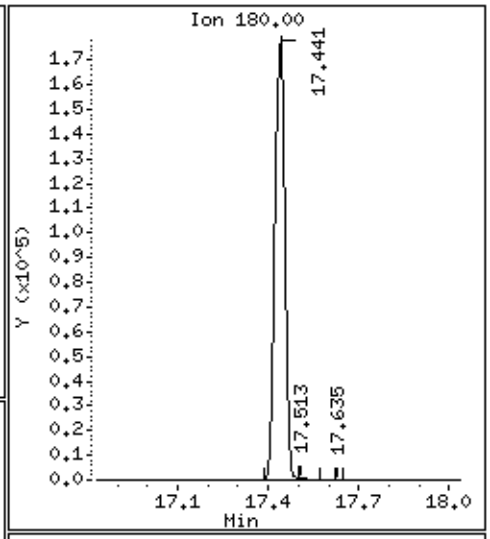
Concentration: 140.70 NG

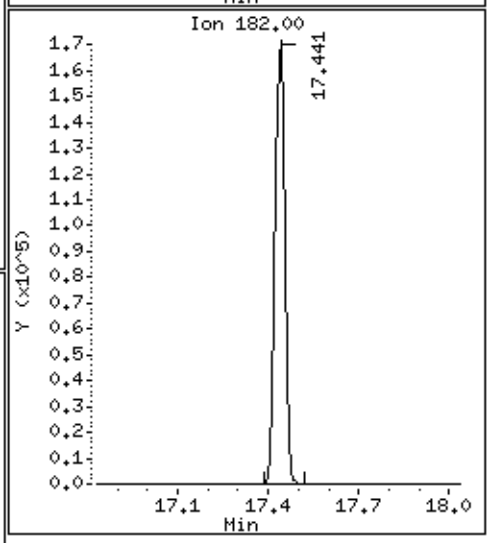












Data File: /chem/msd18.i/03Feb2016.b/18020305.d

Date : 03-FEB-2016 12:21

Client ID: LCSD

Instrument: msd18.i

Sample Info: ;VI VOC+PAH LCDS;LCSD

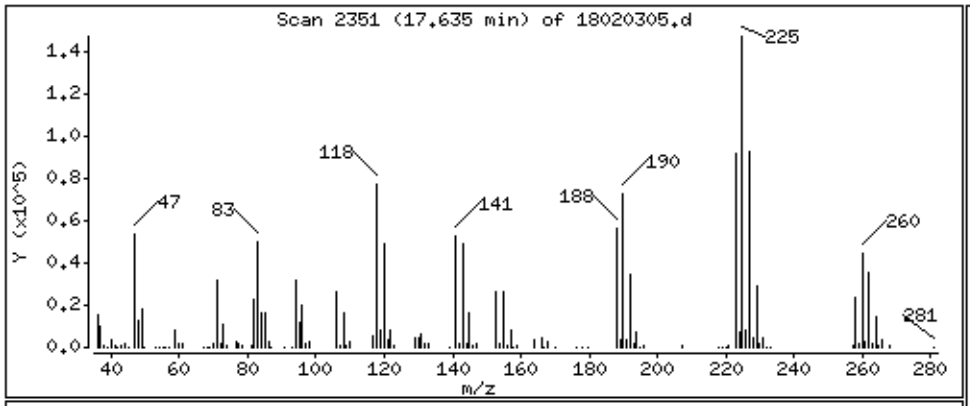
Operator: LA

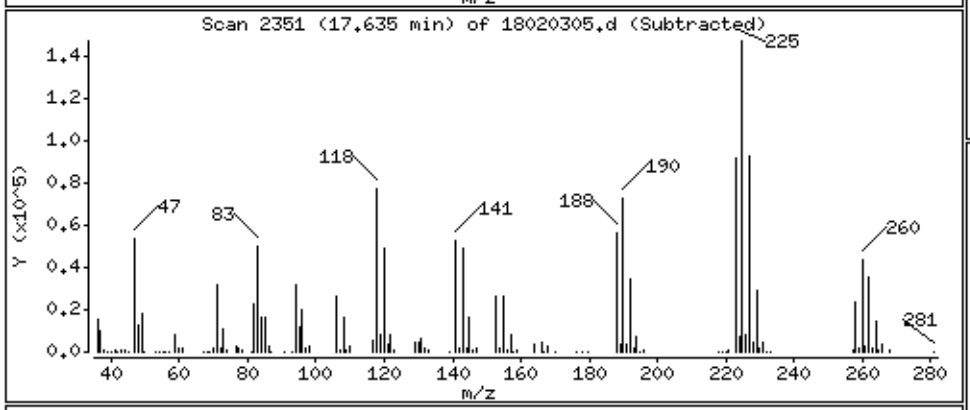
Column phase: RTx-624

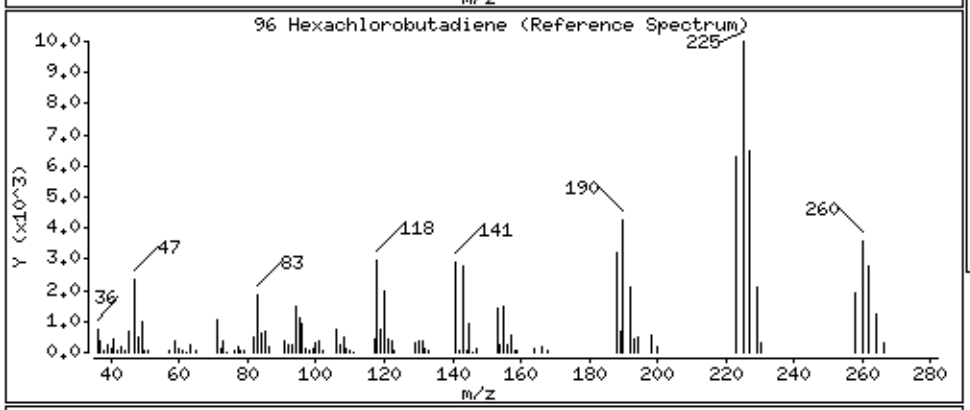
Column diameter: 0.53

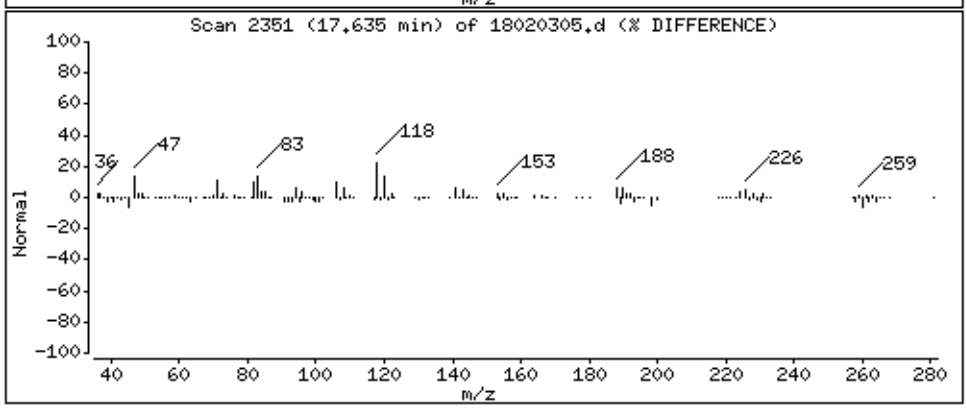
96 Hexachlorobutadiene

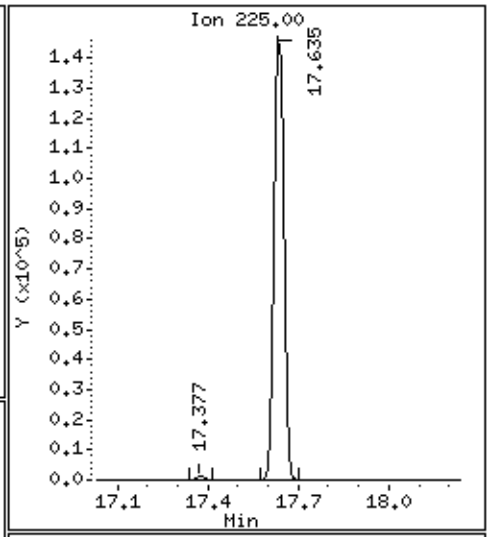
Concentration: 181.57 NG

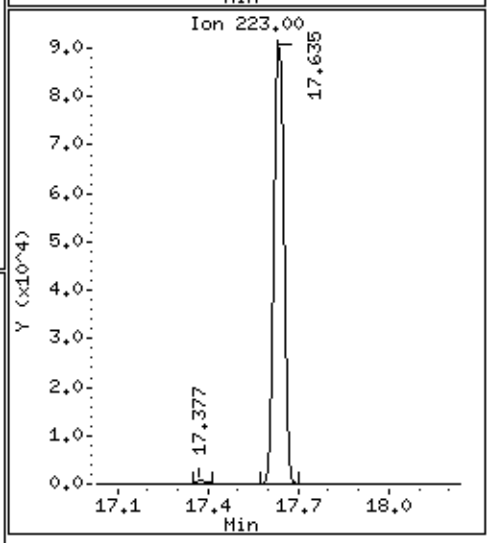












Data File: /chem/msd18.i/03Feb2016.b/18020305.d

Date : 03-FEB-2016 12:21

Client ID: LCSD

Instrument: msd18.i

Sample Info: ;VI VOC+PAH LCDS;LCSD

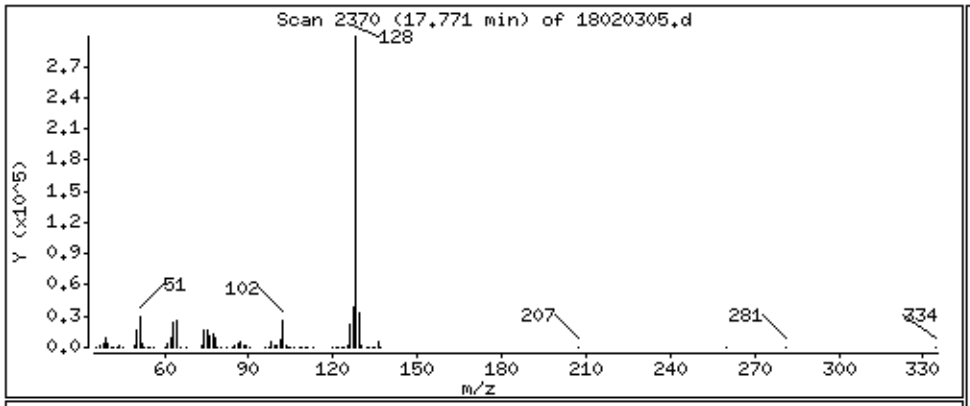
Operator: LA

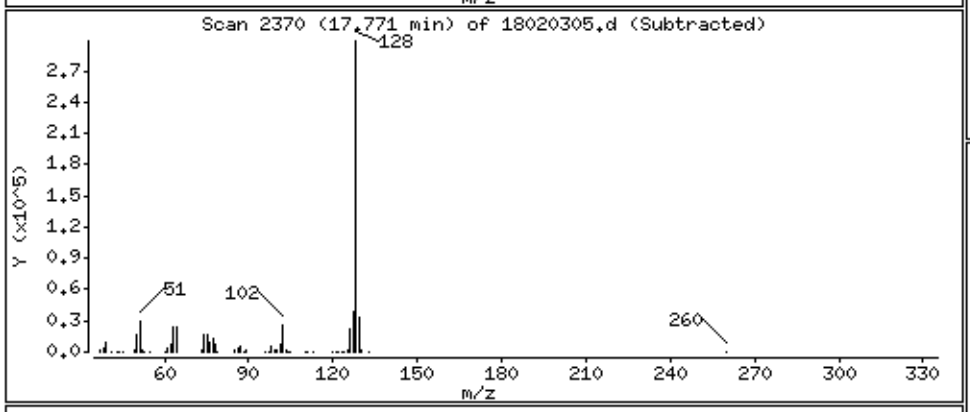
Column phase: RTx-624

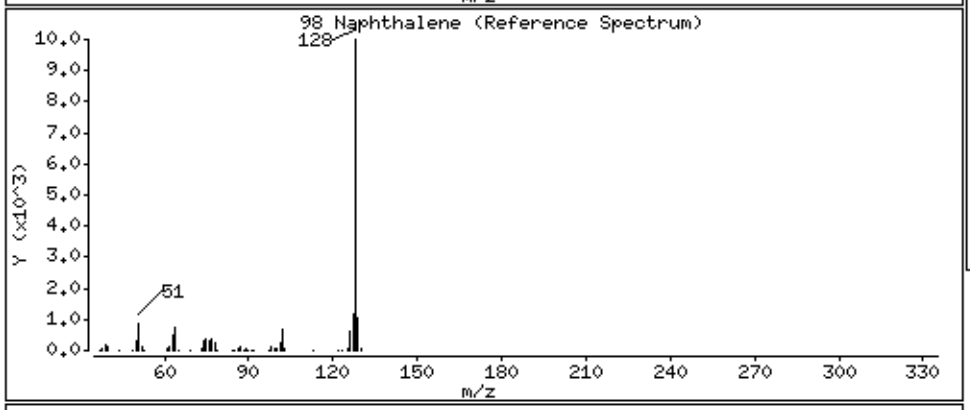
Column diameter: 0.53

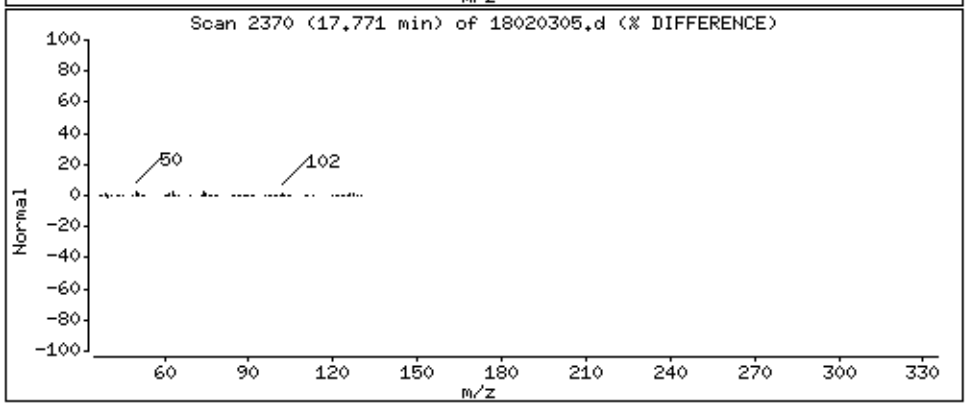
98 Naphthalene

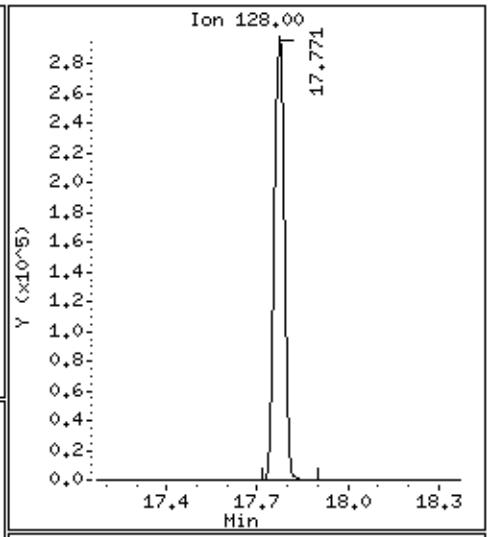
Concentration: 54.402 NG

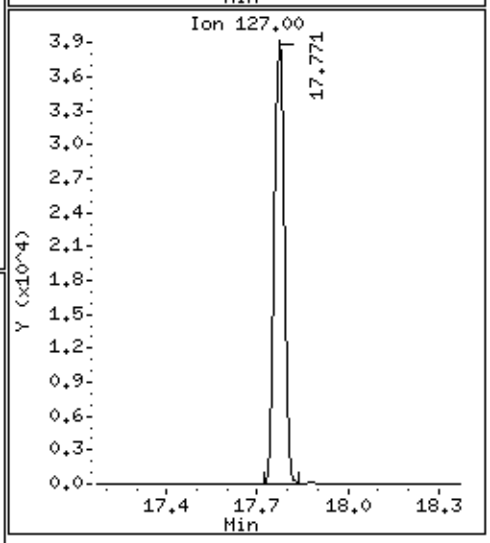












Data File: /chem/msd18.i/03Feb2016.b/18020305.d

Date : 03-FEB-2016 12:21

Client ID: LCSD

Instrument: msd18.i

Sample Info: ;VI VOC+PAH LCDS;LCSD

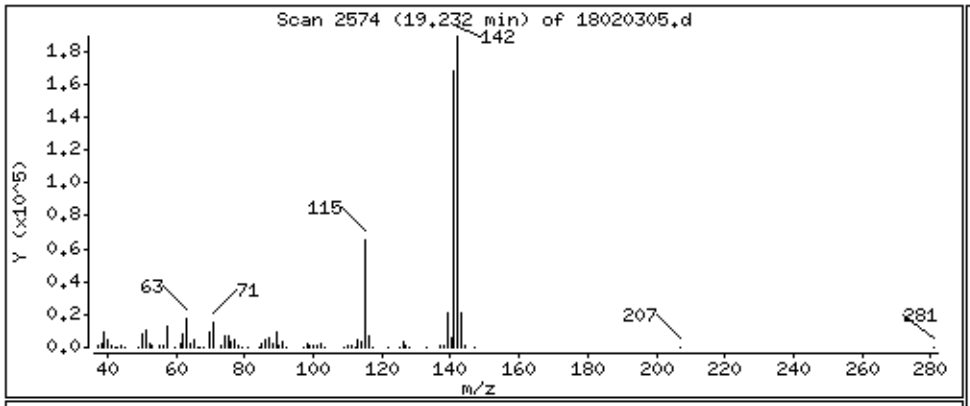
Operator: LA

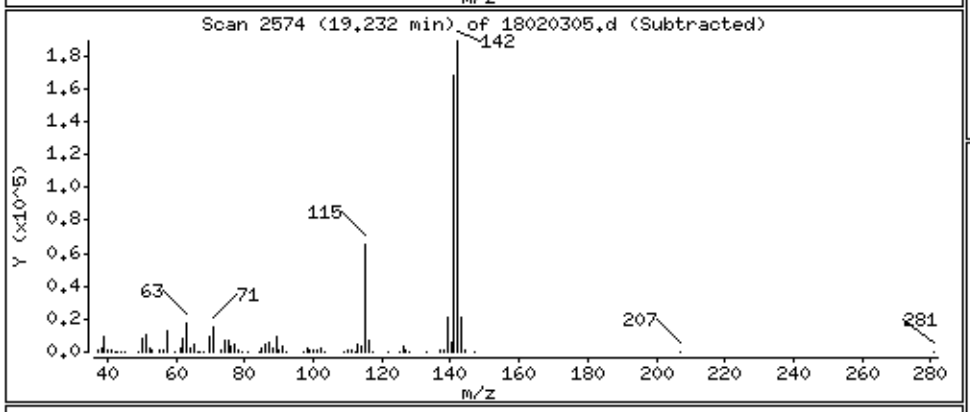
Column phase: RTx-624

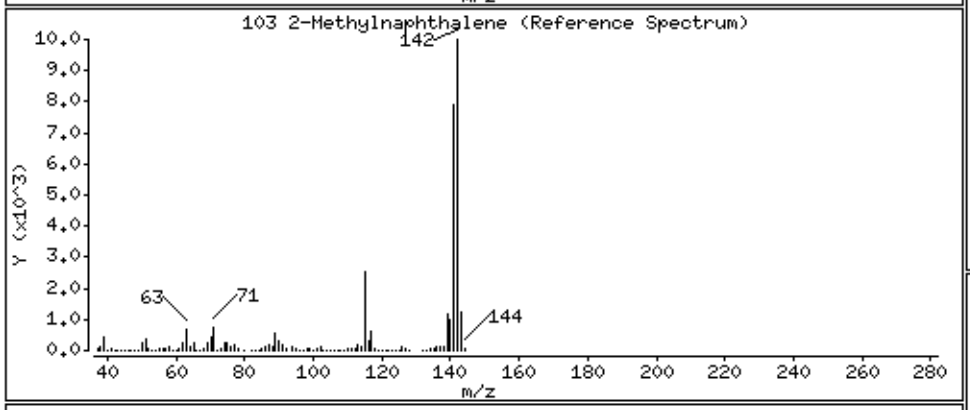
Column diameter: 0.53

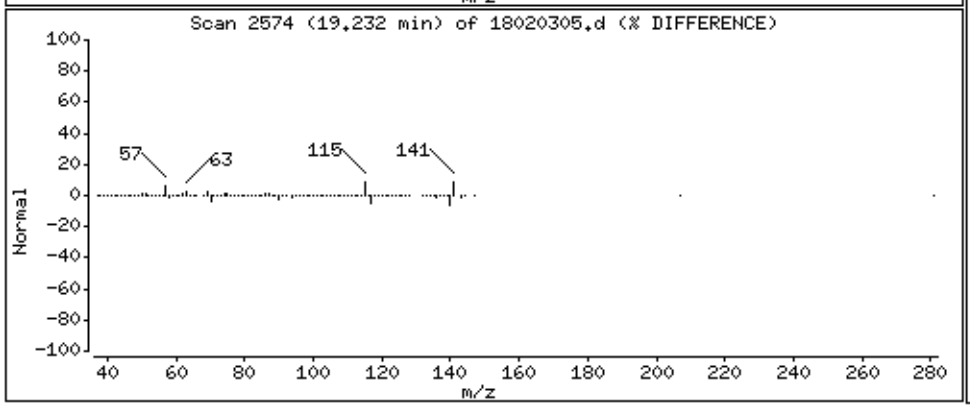
103 2-Methylnaphthalene

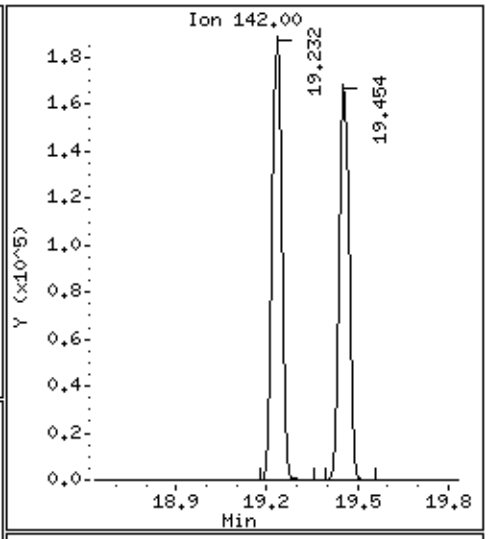
Concentration: 52.804 NG

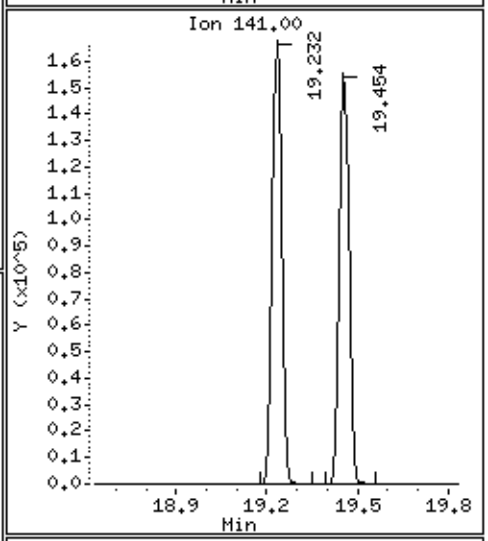


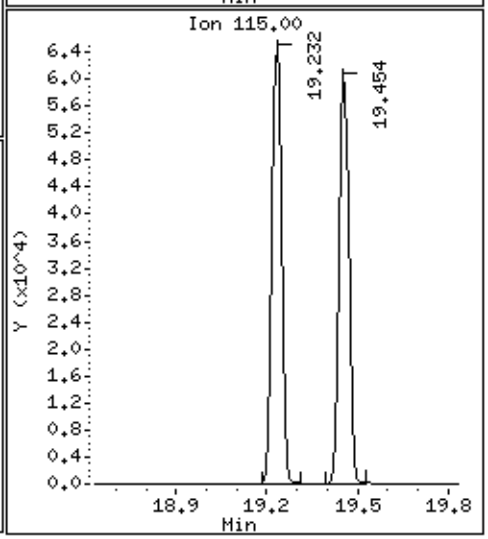












Data File: /chem/msd18.i/03Feb2016.b/18020305.d

Date : 03-FEB-2016 12:21

Client ID: LCSD

Instrument: msd18.i

Sample Info: ;VI VOC+PAH LCDS;LCSD

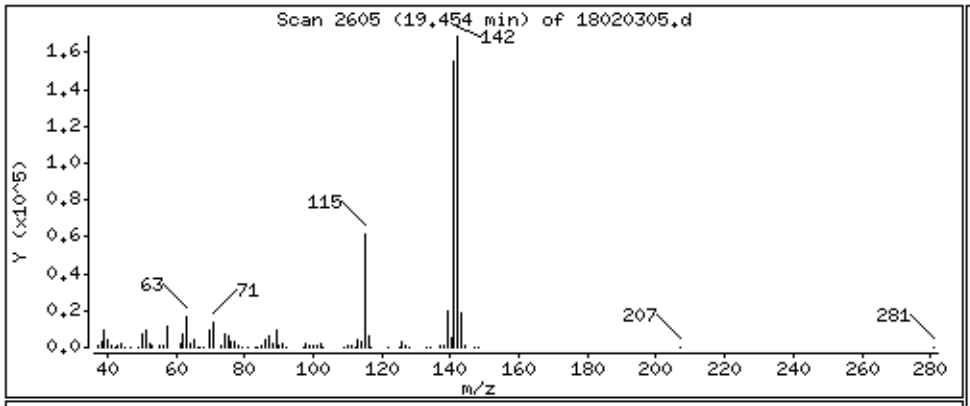
Operator: LA

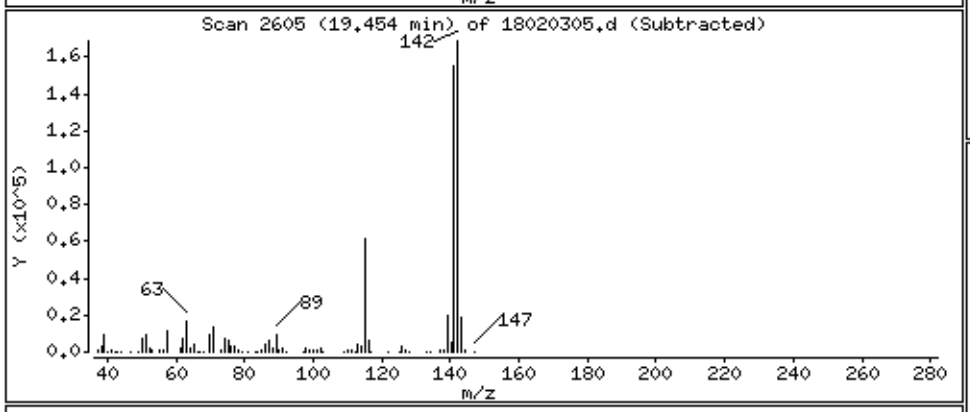
Column phase: RTx-624

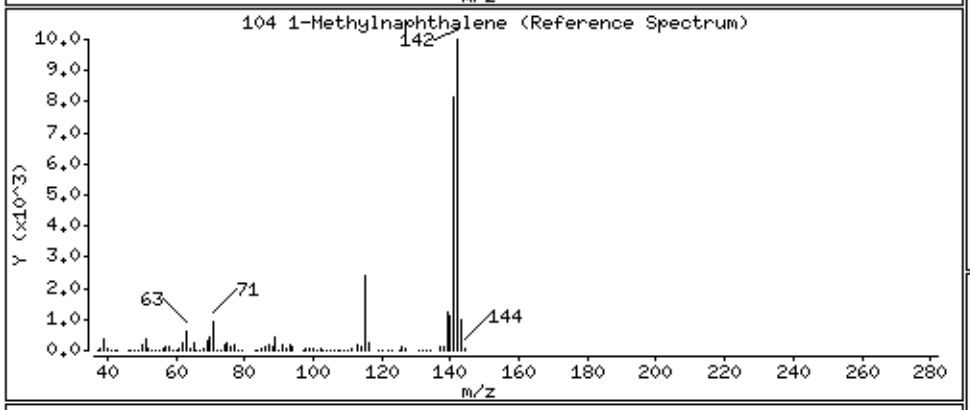
Column diameter: 0.53

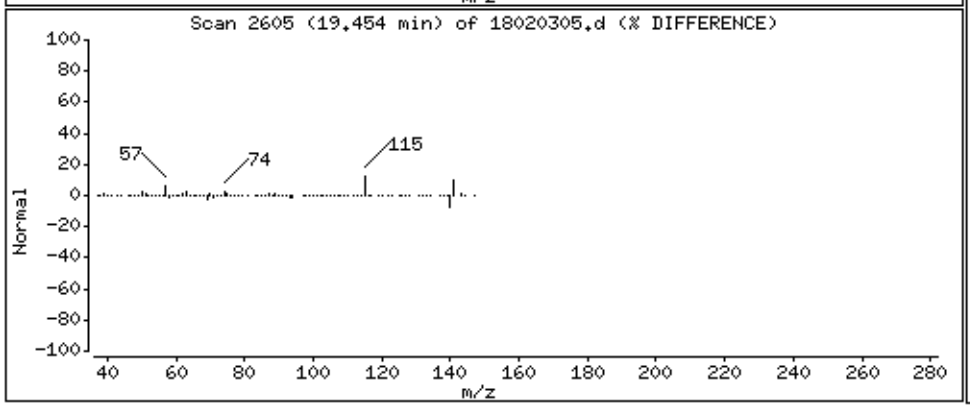
104 1-Methylnaphthalene

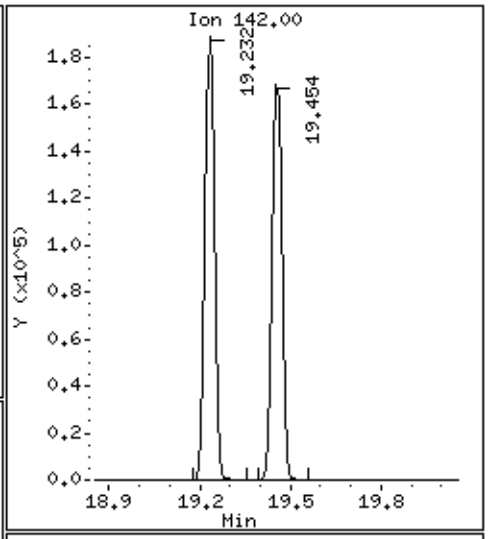
Concentration: 53.234 NG

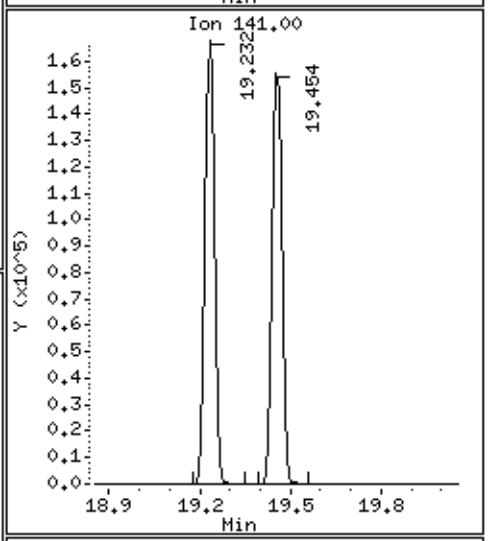


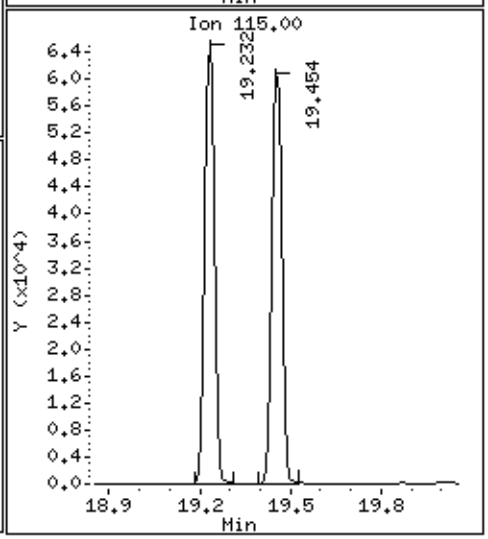












Data File: /chem/msd18.i/03Feb2016.b/18020305.d

Date : 03-FEB-2016 12:21

Client ID: LCSD

Instrument: msd18.i

Sample Info: ;VI VOC+PAH LCDS;LCSD

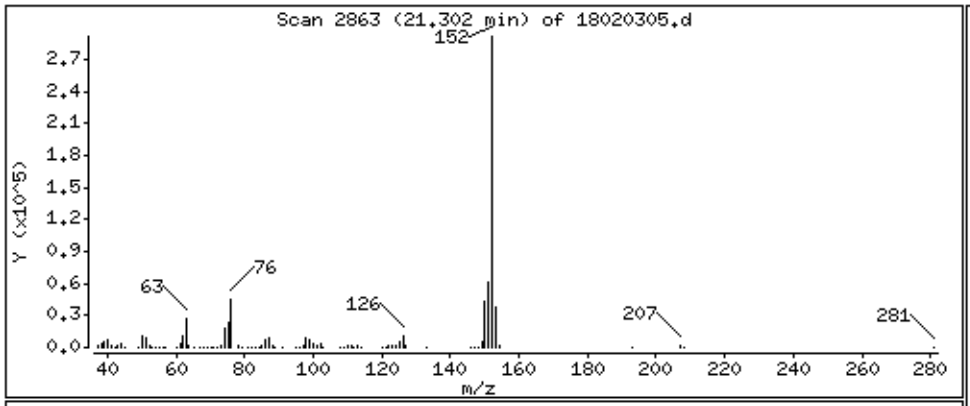
Operator: LA

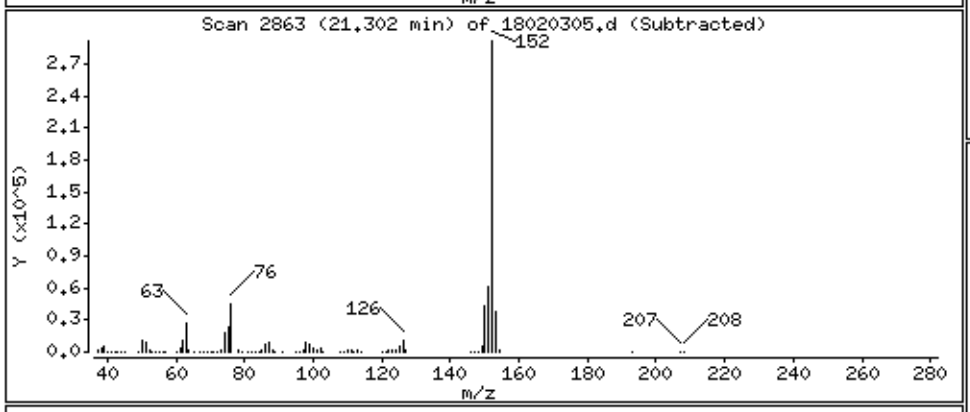
Column phase: RTx-624

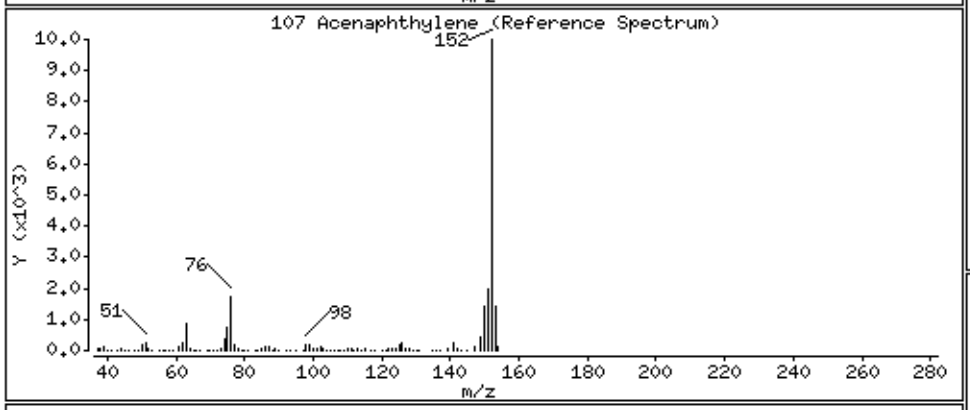
Column diameter: 0.53

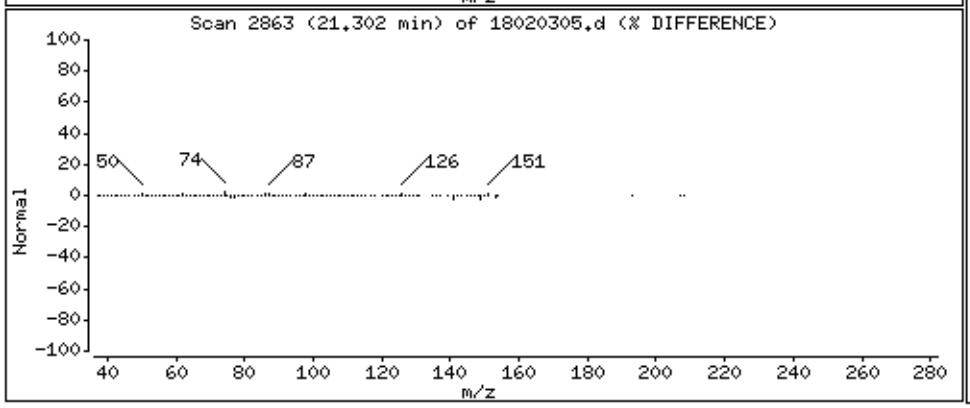
107 Acenaphthylene

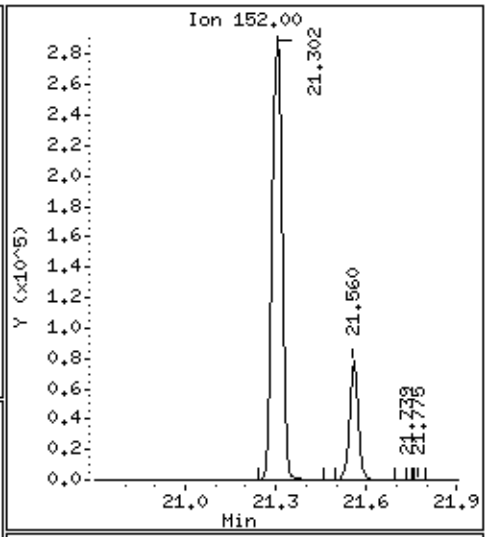
Concentration: 48.566 NG

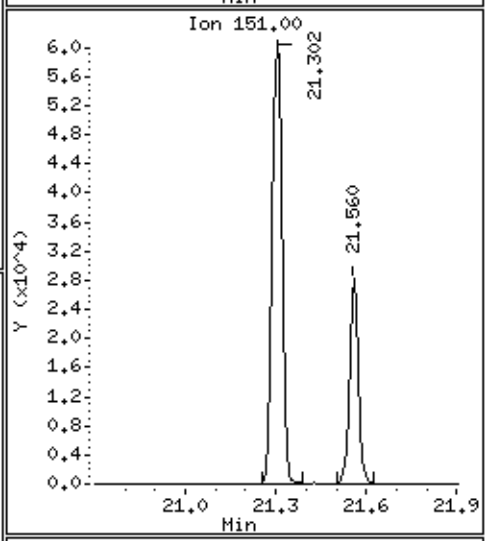


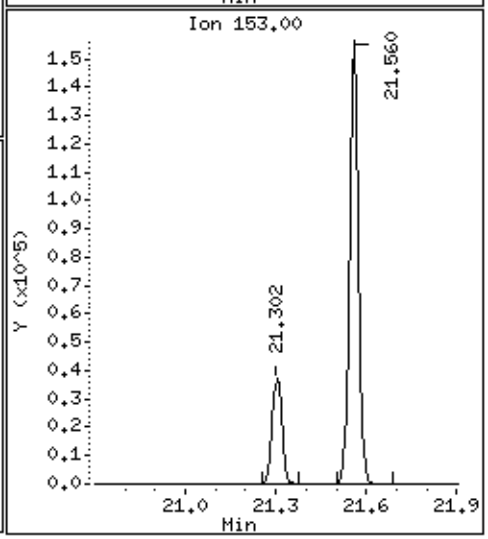












Data File: /chem/msd18.i/03Feb2016.b/18020305.d

Date : 03-FEB-2016 12:21

Client ID: LCSD

Instrument: msd18.i

Sample Info: ;VI VOC+PAH LCDS;LCSD

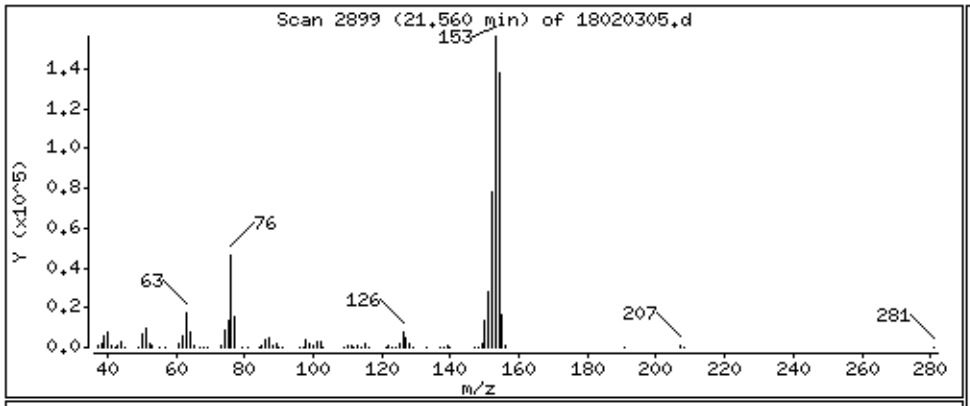
Operator: LA

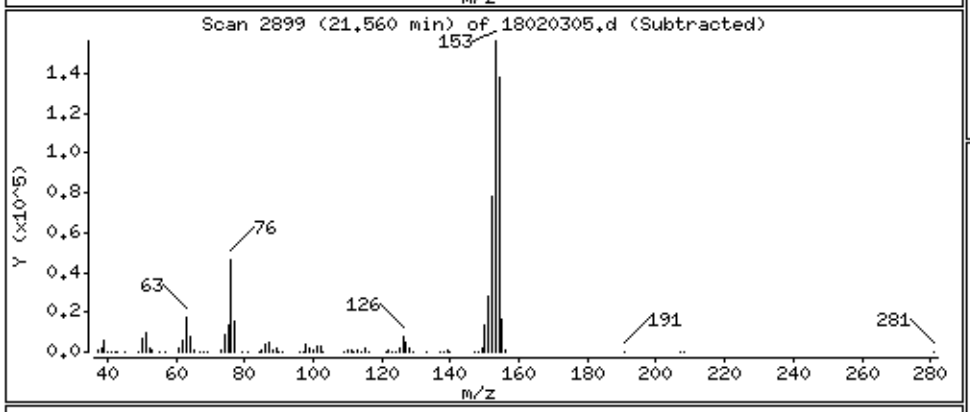
Column phase: RTx-624

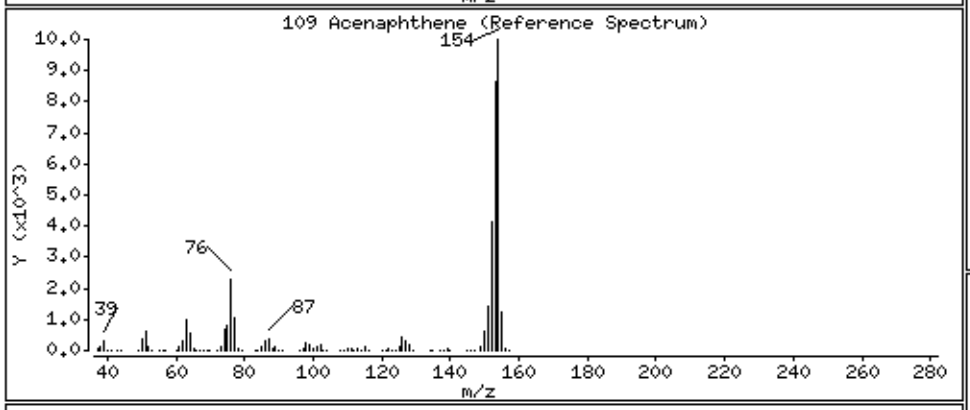
Column diameter: 0.53

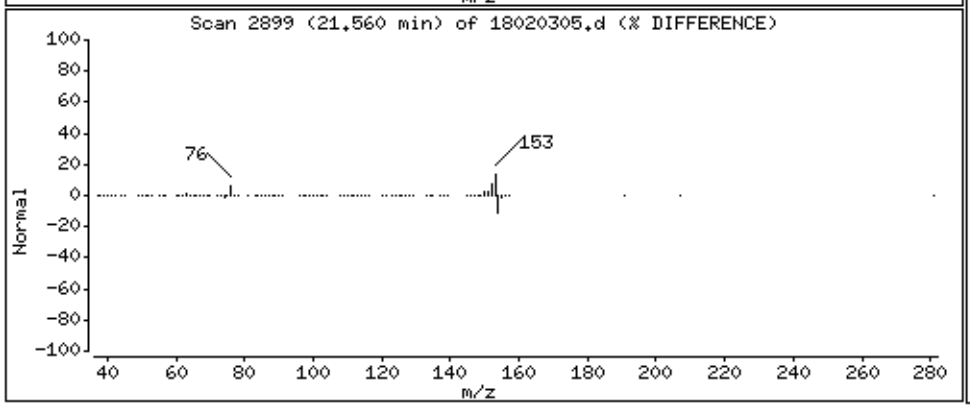
109 Acenaphthene

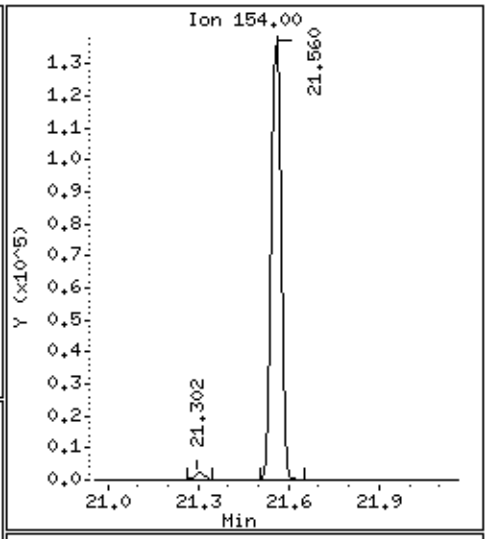
Concentration: 45.092 NG

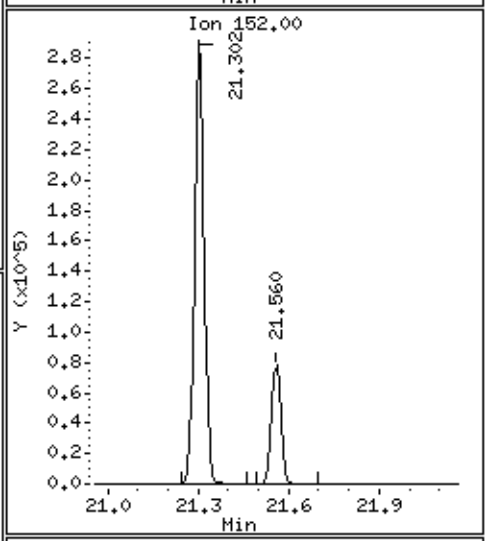


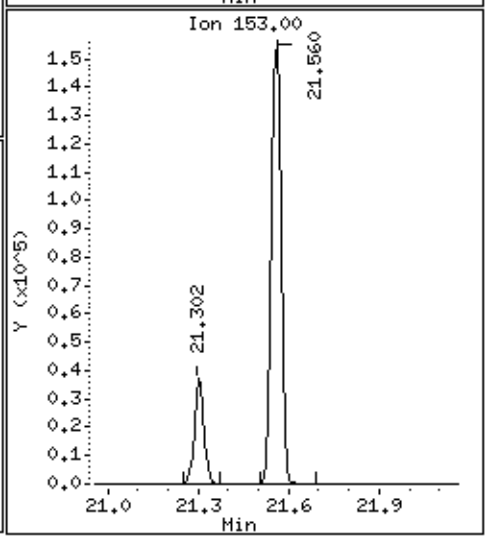












Data File: /chem/msd18.i/03Feb2016.b/18020305.d

Date : 03-FEB-2016 12:21

Client ID: LCSD

Instrument: msd18.i

Sample Info: ;VI VOC+PAH LCDS;LCSD

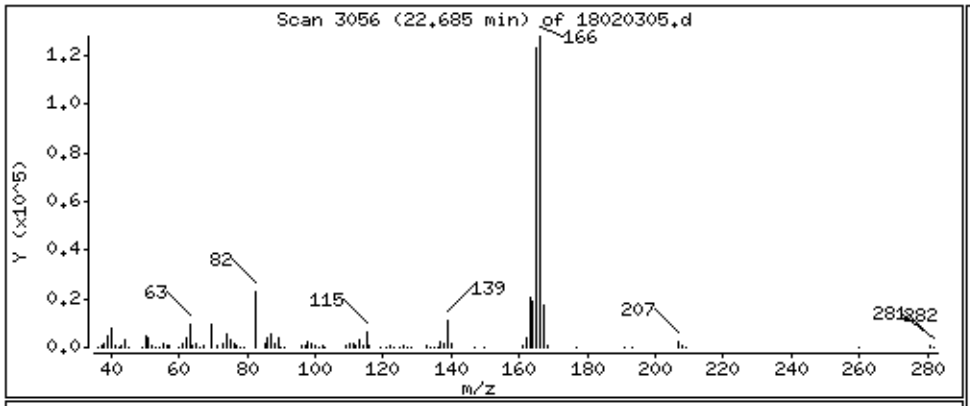
Operator: LA

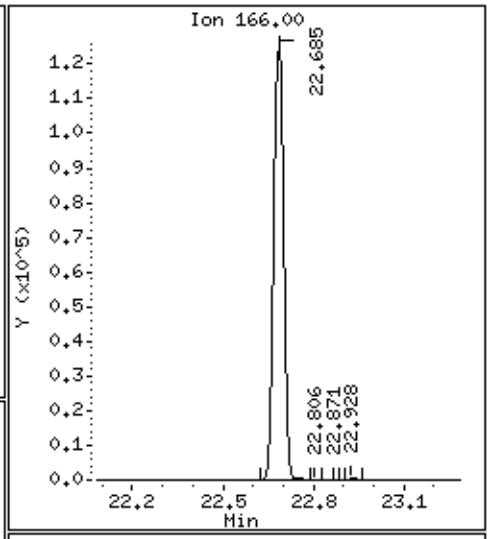
Column phase: RTx-624

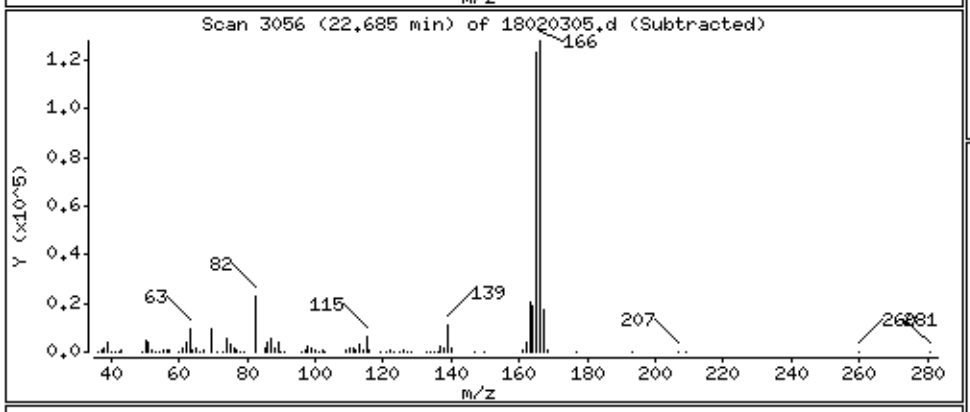
Column diameter: 0.53

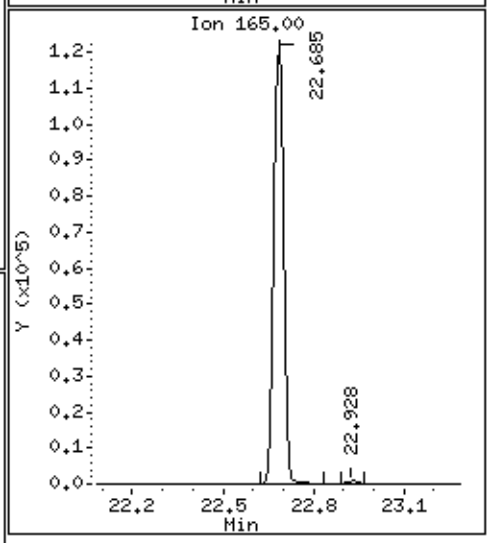
111 Fluorene

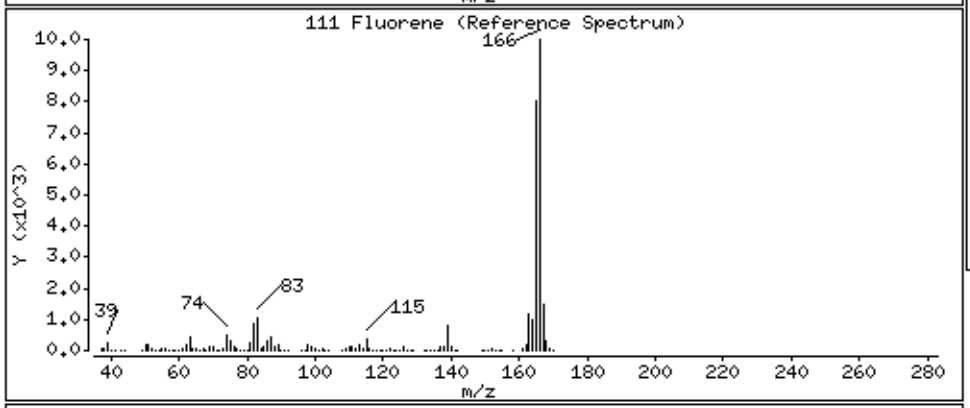
Concentration: 38.973 NG

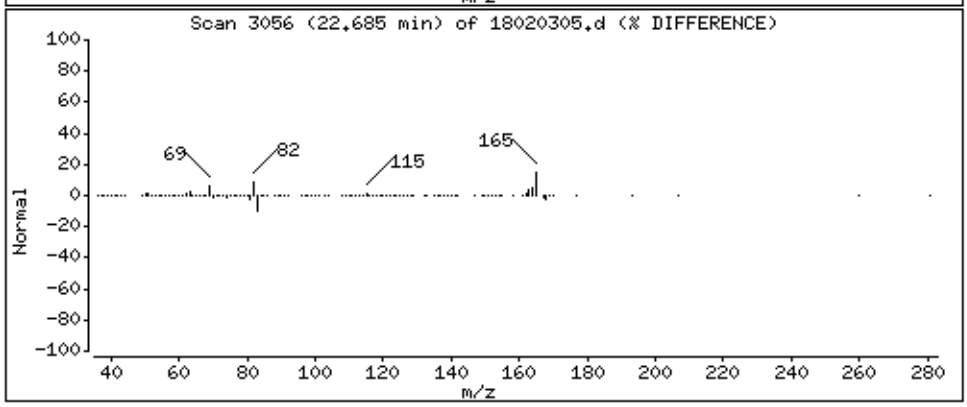












Data File: /chem/msd18.i/03Feb2016.b/18020305.d

Date : 03-FEB-2016 12:21

Client ID: LCSD

Instrument: msd18.i

Sample Info: ;VI VOC+PAH LCDS;LCSD

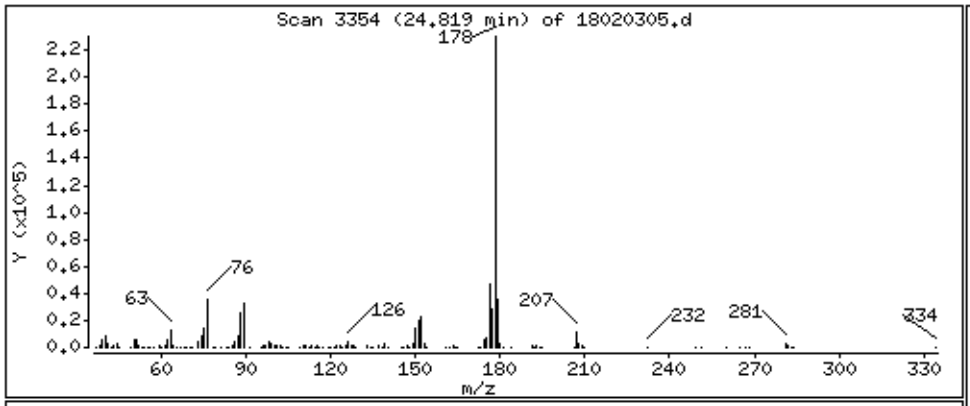
Operator: LA

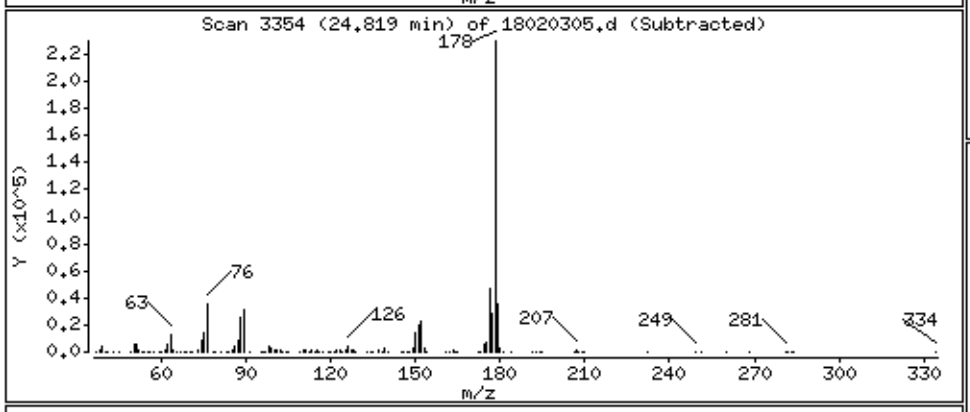
Column phase: RTx-624

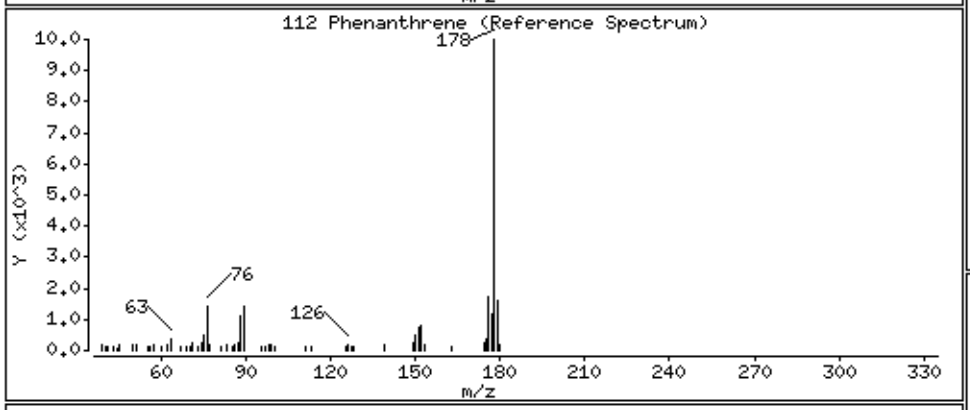
Column diameter: 0.53

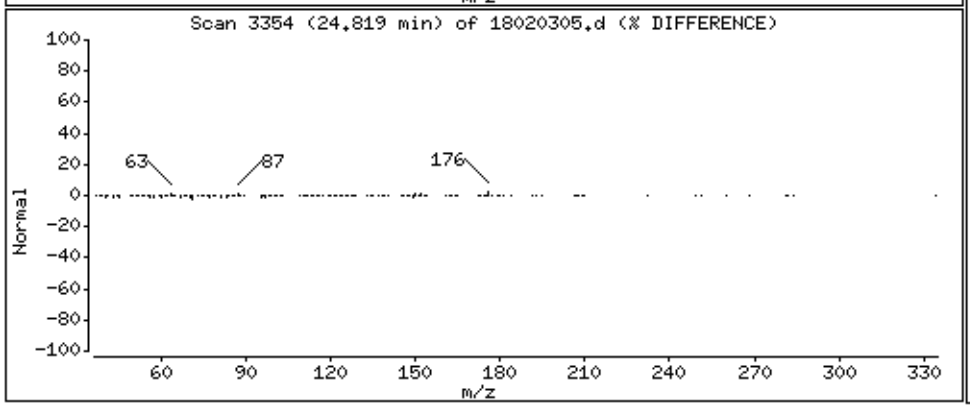
112 Phenanthrene

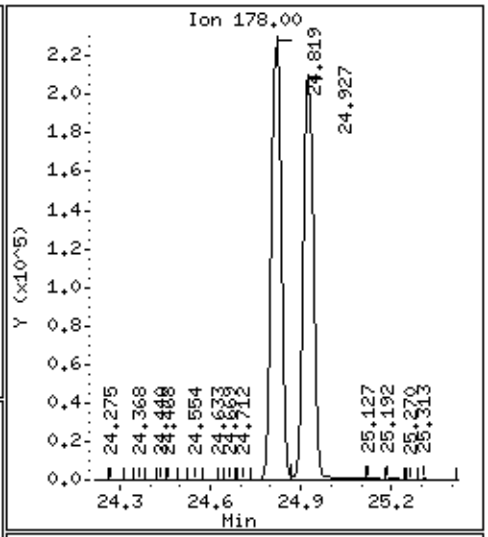
Concentration: 43.396 NG

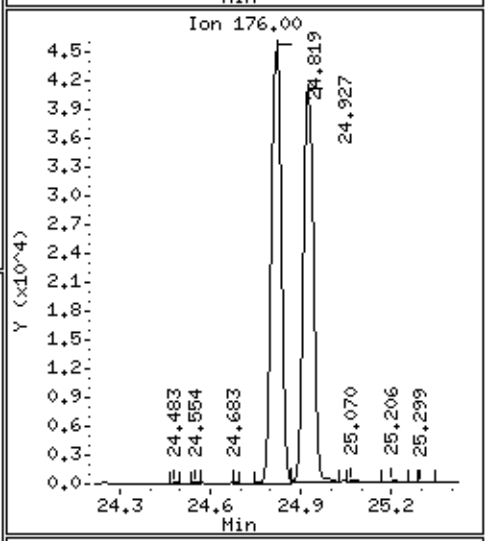


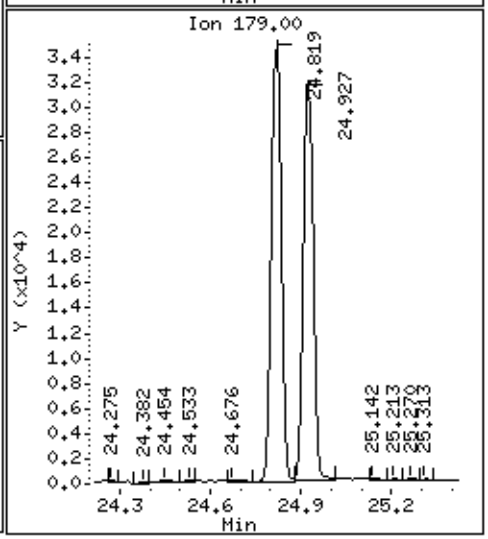












Data File: /chem/msd18.i/03Feb2016.b/18020305.d

Date : 03-FEB-2016 12:21

Client ID: LCSD

Instrument: msd18.i

Sample Info: ;VI VOC+PAH LCDS;LCSD

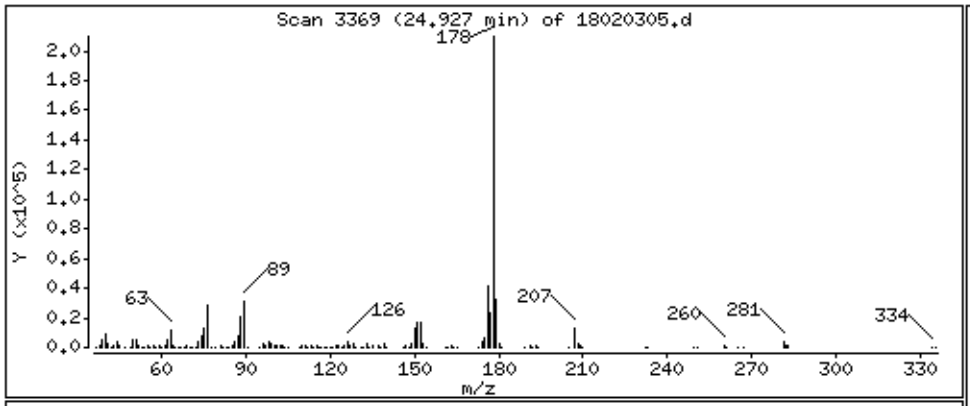
Operator: LA

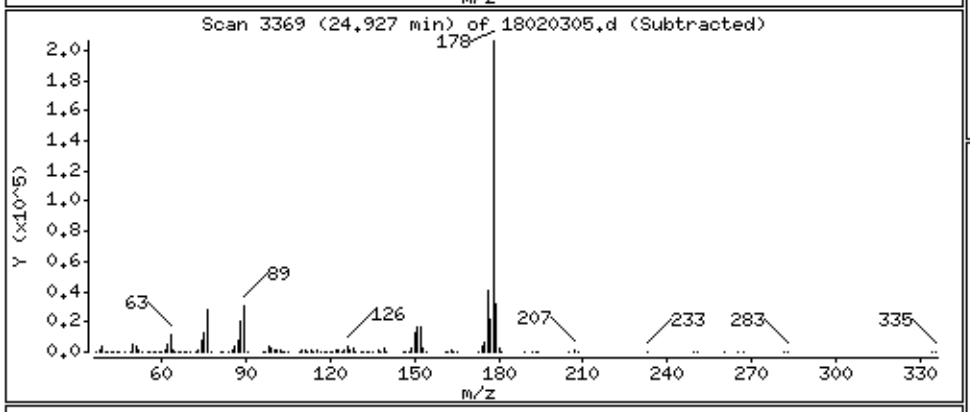
Column phase: RTx-624

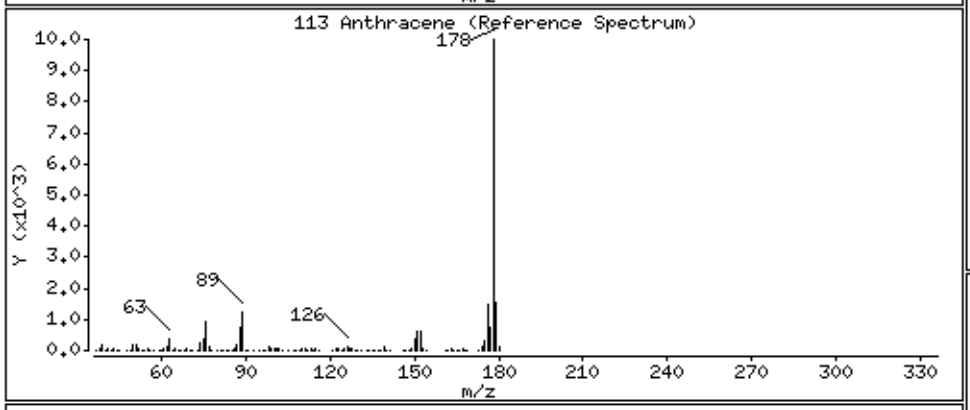
Column diameter: 0.53

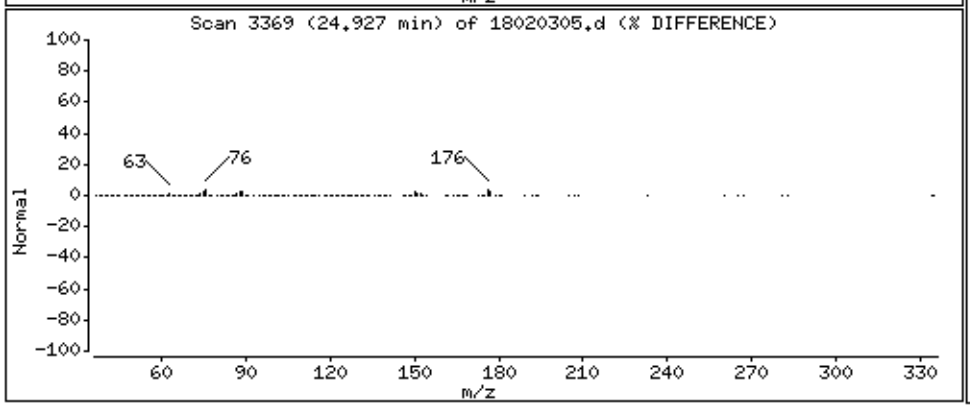
113 Anthracene

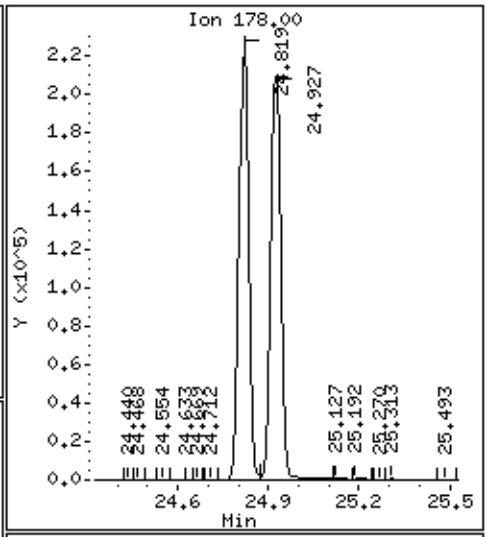
Concentration: 45.206 NG

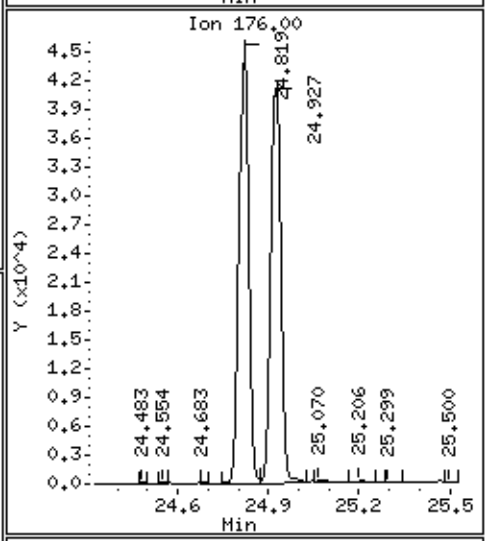


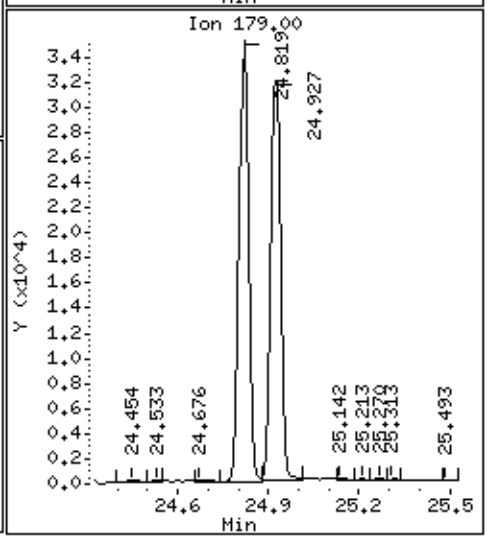












Data File: /chem/msd18.i/03Feb2016.b/18020305.d

Date : 03-FEB-2016 12:21

Client ID: LCSD

Instrument: msd18.i

Sample Info: ;VI VOC+PAH LCDS;LCSD

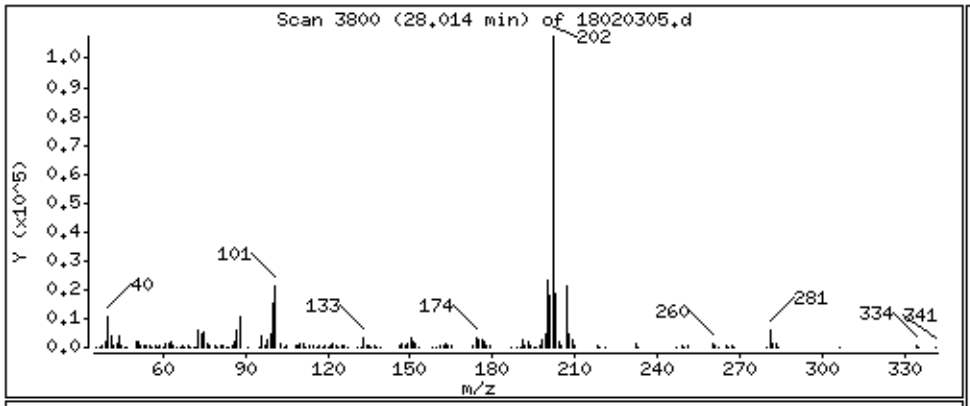
Operator: LA

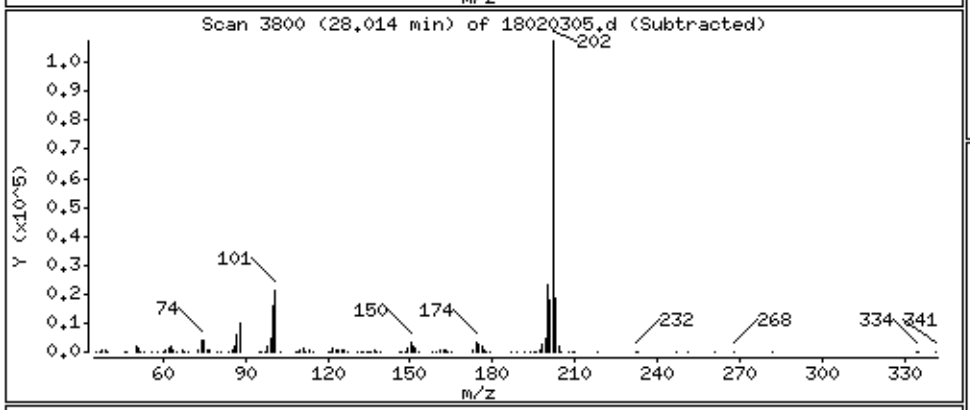
Column phase: RTx-624

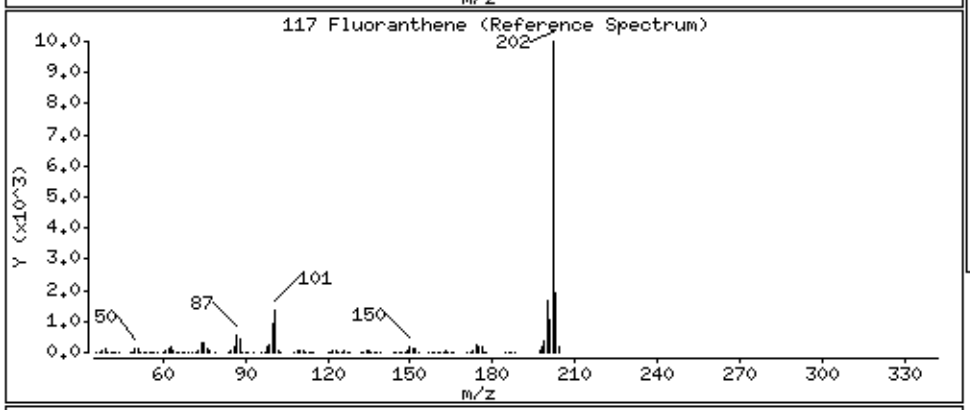
Column diameter: 0.53

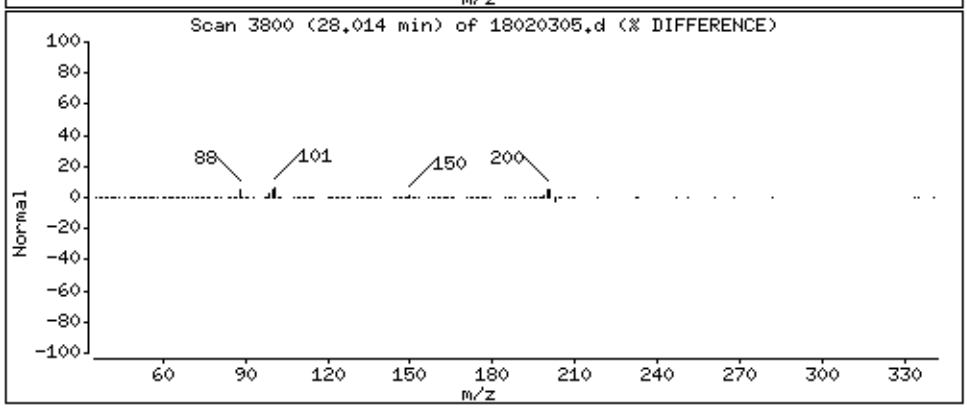
117 Fluoranthene

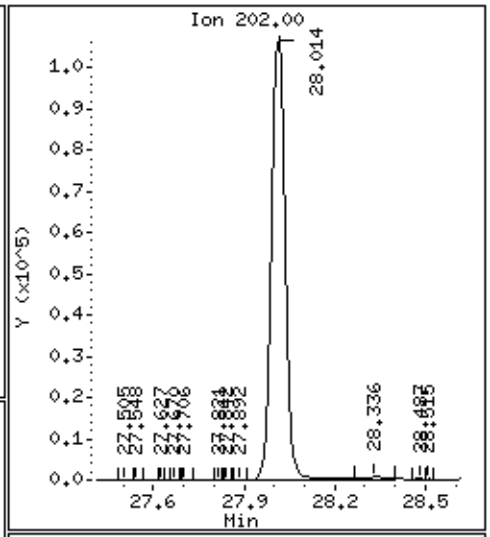
Concentration: 37.726 NG

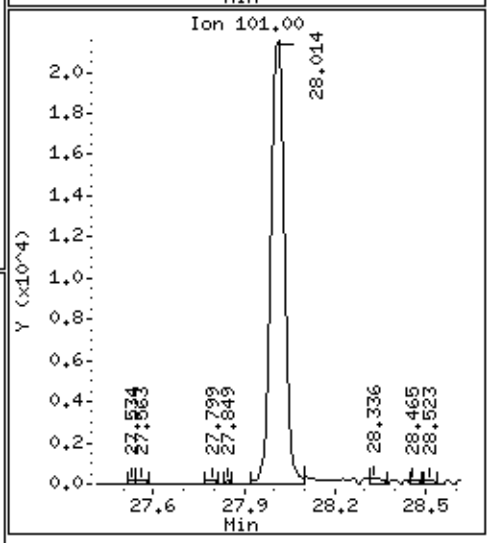












Data File: /chem/msd18.i/03Feb2016.b/18020305.d

Date : 03-FEB-2016 12:21

Client ID: LCSD

Instrument: msd18.i

Sample Info: ;VI VOC+PAH LCDS;LCSD

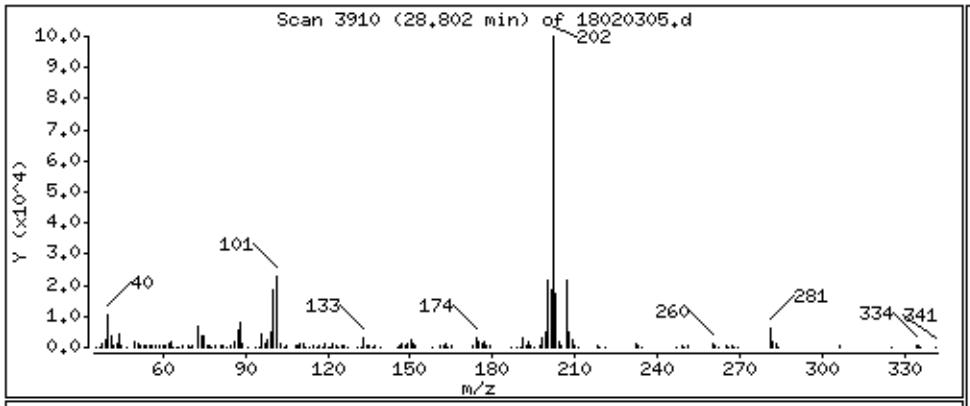
Operator: LA

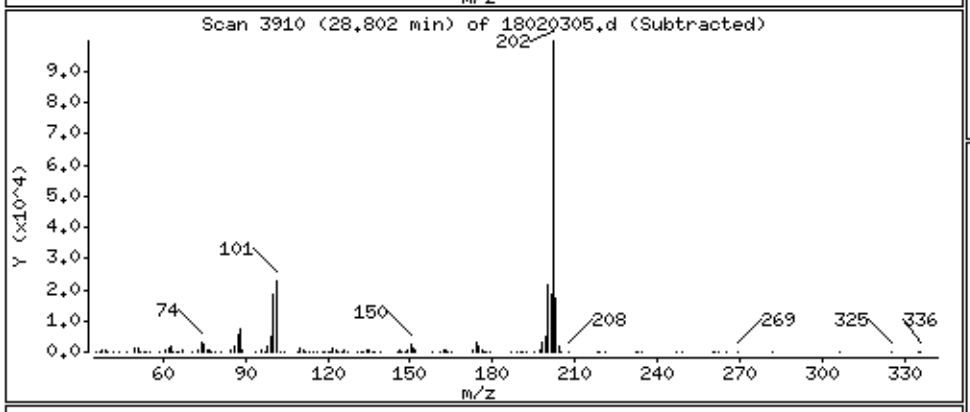
Column phase: RTx-624

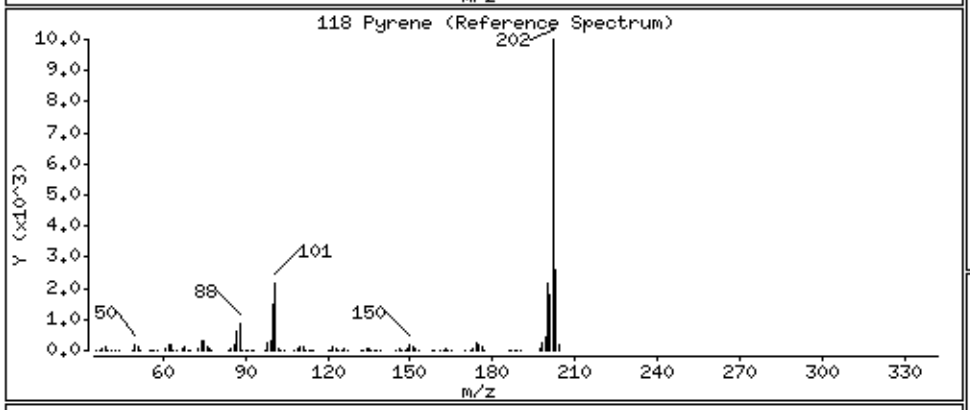
Column diameter: 0.53

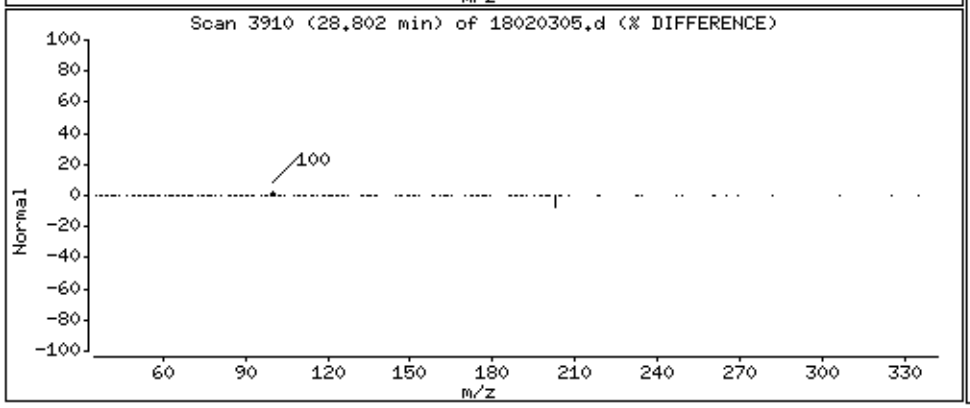
118 Pyrene

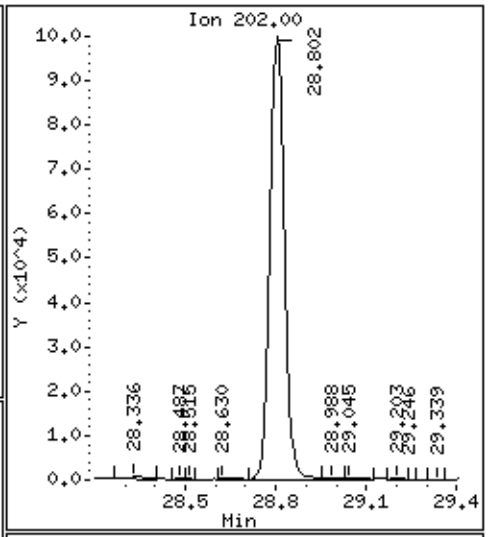
Concentration: 36.479 NG

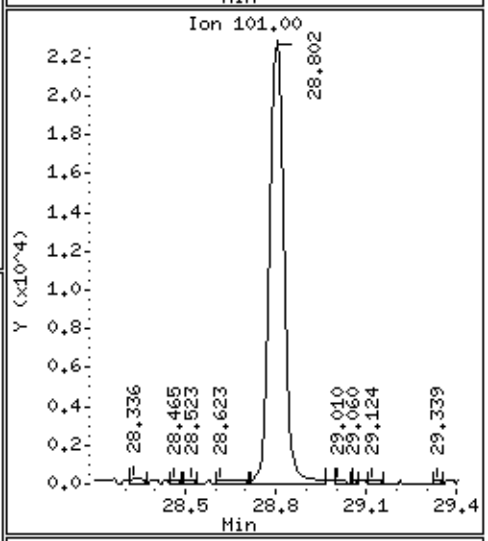


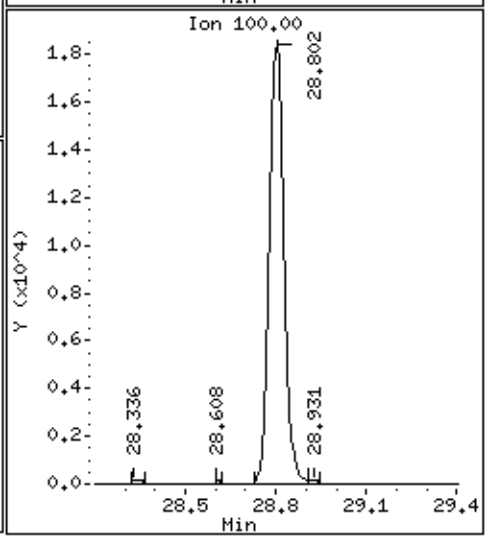












eurofins | Air Toxics

Client Sample ID: LCS
Lab ID#: 1602029-24B
EPA METHOD TO-17

File Name:	**11020402**	**Date of Extraction: NA**	**Date of Collection: NA**
Dil. Factor:	**1.00**		**Date of Analysis: 2/4/16 10:54 AM**

Compound	%Recovery	Method Limits
Freon 114	104	70-130
Vinyl Chloride	113	70-130
1,3-Butadiene	106	70-130
Isopentane	95	70-130
Freon 11	104	70-130
1,1-Dichloroethene	99	70-130
Methylene Chloride	97	70-130
Freon 113	99	70-130
trans-1,2-Dichloroethene	84	70-130
1,1-Dichloroethane	105	70-130
cis-1,2-Dichloroethene	110	70-130
Hexane	101	70-130
Chloroform	98	70-130
1,2-Dichloroethane	101	70-130
1,1,1-Trichloroethane	105	70-130
Benzene	98	70-130
Carbon Tetrachloride	111	70-130
Cyclohexane	99	70-130
1,2-Dichloropropane	92	70-130
Trichloroethene	84	70-130
1,4-Dioxane	90	70-130
2,2,4-Trimethylpentane	96	70-130
Heptane	93	70-130
Methylcyclohexane	96	70-130
1,1,2-Trichloroethane	99	70-130
4-Methyl-2-pentanone	103	70-130
Toluene	93	70-130
2-Hexanone	109	70-130
Tetrachloroethene	97	70-130
Chlorobenzene	97	70-130
Ethyl Benzene	96	70-130
m,p-Xylene	94	70-130
o-Xylene	100	70-130
Styrene	101	70-130
1,1,2,2-Tetrachloroethane	111	70-130
Cumene	100	70-130
Propylbenzene	100	70-130
4-Ethyltoluene	102	70-130
1,3,5-Trimethylbenzene	101	70-130
1,2,4-Trimethylbenzene	99	70-130
1,3-Dichlorobenzene	100	70-130
1,4-Dichlorobenzene	102	70-130

eurofins | Air Toxics

Client Sample ID: LCS
Lab ID#: 1602029-24B
EPA METHOD TO-17

File Name:	**11020402**	**Date of Extraction: NA**	**Date of Collection: NA**
Dil. Factor:	**1.00**		**Date of Analysis: 2/4/16 10:54 AM**

Compound	%Recovery	Method Limits
1,2-Dichlorobenzene	100	70-130
1,2,4-Trichlorobenzene	97	70-130
Hexachlorobutadiene	91	70-130
Naphthalene	105	70-130

Air Sample Volume(L): 1.00
m,p-Xylene was reported from file #11020827, analyzed on 2/9/16 with a dilution factor of 4.00.

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	103	50-150
Toluene-d8	93	50-150
Naphthalene-d8	108	50-150

Report Date: 04-Feb-2016 13:17

Eurofins Air Toxics Inc.

RECOVERY REPORT

Client Name:
Client SDG: 04feb16
Sample Matrix: GAS
Fraction: VOA
Lab Smp Id: VI VOC+PAH LCS
Client Smp ID: LCS
Level: LOW
Operator: LAct
Data Type: MS DATA
SampleType: LCS
SpikeList File: VOC+PAHlcs50.spk
Quant Type: ISTD
Sublist File: VOC+PAH_ICAL.sub
Method File: /chem/msd11.i/04feb16.b/115z1120vi.m
Misc Info: 2516-217(5/3/16),2744-32-50(7/20/16)

SPIKE COMPOUND	CONC ADDED NG	CONC RECOVERED NG	% RECOVERED	LIMITS
3 Freon 114	139.80	145.74	104.25	70-130
6 Vinyl Chloride	51.100	57.712	112.94	70-130
7 1,3-Butadiene	44.200	46.788	105.85	70-130
9 Chloroethane	52.800	52.807	100.01	70-130
10 Isopentane	59.000	56.012	94.94	70-130
11 Trichlorofluoromet	112.40	117.51	104.55	70-130
14 1,1-Dichloroethene	79.300	78.861	99.45	70-130
15 Freon 113	153.30	152.06	99.19	70-130
18 Carbon Disulfide	62.300	56.929	91.38	70-130
19 2-Propanol	49.200	54.141	110.04	70-130
22 Methylene Chloride	69.500	67.587	97.25	70-130
25 trans-1,2-Dichloro	79.300	66.224	83.51	70-130
26 MTBE	72.100	70.736	98.11	70-130
28 Hexane	70.500	71.457	101.36	70-130
29 1,1-Dichloroethane	81.000	85.420	105.46	70-130
37 cis-1,2-Dichloroet	79.300	87.703	110.60	70-130
38 2-Butanone	59.000	70.477	119.45	70-130
44 Chloroform	97.700	95.547	97.80	70-130
45 1,1,1-Trichloroeth	109.10	114.32	104.79	70-130
46 Cyclohexane	68.800	68.258	99.21	70-130
47 Carbon Tetrachlori	125.80	139.72	111.06	70-130
48 Benzene	63.900	62.491	97.80	70-130
50 1,2-Dichloroethane	80.900	81.776	101.08	70-130
51 2,2,4-Trimethylpen	93.400	89.558	95.89	70-130
53 Heptane	82.000	75.937	92.61	70-130
56 Trichloroethene	107.50	89.844	83.58	70-130
58 Methyl Cyclohexane	80.300	77.022	95.92	70-130
59 1,2-Dichloropropan	92.400	85.447	92.47	70-130
60 1,4-Dioxane	72.100	64.580	89.57	70-130
65 4-Methyl-2-pentano	81.900	84.684	103.40	70-130
67 Toluene	75.400	70.414	93.39	70-130
70 1,1,2-Trichloroeth	109.10	108.35	99.31	70-130
71 Tetrachloroethene	135.70	131.56	96.95	70-130

SPIKE COMPOUND	CONC ADDED NG	CONC RECOVERED NG	% RECOVERED	LIMITS
72 2-Hexanone	81.900	89.069	108.75	70-130
74 1,2-Dibromoethane	153.70	162.70	105.85	70-130
81 Chlorobenzene	92.100	89.078	96.72	70-130
82 Ethyl Benzene	86.800	83.444	96.13	70-130
84 m,p-Xylene	86.800	84.568	97.43	70-130
88 o-Xylene	86.800	86.930	100.15	70-130
89 Styrene	85.200	85.926	100.85	70-130
91 Cumene	98.300	98.524	100.23	70-130
94 1,1,2,2-Tetrachlor	137.30	152.74	111.25	70-130
96 Propylbenzene	98.300	98.477	100.18	70-130
97 4-Ethyltoluene	98.300	100.26	101.99	70-130
98 1,3,5-Trimethylben	98.300	99.044	100.76	70-130
100 1,2,4-Trimethylben	98.300	97.407	99.09	70-130
101 1,3-Dichlorobenzen	120.30	120.14	99.87	70-130
102 1,4-Dichlorobenzen	120.30	123.14	102.37	70-130
105 1,2-Dichlorobenzen	120.30	120.91	100.51	70-130
106 1,2,4-Trichloroben	148.40	144.15	97.14	70-130
107 Hexachlorobutadien	213.30	193.32	90.63	70-130
109 Naphthalene	50.000	52.592	105.18	70-130
110 2-Methylnaphthalen	50.000	54.982	109.96	70-130
111 1-Methylnaphthalen	50.000	52.133	104.27	70-130
112 Acenaphthylene	50.000	53.443	106.89	70-130
113 Acenaphthene	50.000	58.942	117.88	70-130
114 Fluorene	50.000	63.828	127.66	60-140
115 Phenanthrene	50.000	46.504	93.01	60-140
116 Anthracene	50.000	45.005	90.01	60-140
117 Fluoranthene	50.000	84.275	168.55*	60-140
118 Pyrene	50.000	90.218	180.44*	60-140

SURROGATE COMPOUND	AMOUNT ADDED ng	AMOUNT RECOVERED ng	% RECOVERED	LIMITS
$ 49 1,2-Dichloroethane	25.000	25.687	102.75	50-150
$ 66 Toluene-d8	25.000	23.363	93.45	50-150
$ 108 Naphthalene-d8	25.000	27.019	108.08	50-150

Eurofins Air Toxics Inc.

EPA Method TO-17 GC/MS

Data file : /chem/msd11.i/04feb16.b/11020402.d
Lab Smp Id: VI VOC+PAH LCS Client Smp ID: LCS
Inj Date : 04-FEB-2016 10:54
Operator : LAct Inst ID: msd11.i
Smp Info : ;VI VOC+PAH LCS;LCS
Misc Info : 2516-217(5/3/16),2744-32-50(7/20/16)
Comment :
Method : /chem/msd11.i/04feb16.b/115z1120vi.m
Meth Date : 04-Feb-2016 13:17 lantonic Quant Type: ISTD
Cal Date : 21-NOV-2015 00:39 Cal File: 11112010.d
Als bottle: 3 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: VOC+PAH_ICAL.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (ng)	FINAL (NG)	TARGET RANGE	RATIO
* 40 Bromochloromethane					CAS #: 74-97-5		
6.946	6.946 (1.000)	130	65795	26.0000		80.00- 120.00	100.00
6.946	6.946 (1.000)	128	51233			49.46- 109.46	77.87
6.946	6.946 (1.000)	49	84778			96.52- 156.52	128.85
* 54 1,4-Difluorobenzene					CAS #: 540-36-3		
8.336	8.329 (1.000)	114	252395	23.0000		80.00- 120.00	100.00
8.336	8.322 (1.000)	88	35619			0.00- 44.32	14.11
* 79 Chlorobenzene-d5					CAS #: 3114-55-4		
11.667	11.645 (1.000)	117	246042	24.0000		80.00- 120.00	100.00
11.667	11.645 (1.000)	82	112579			20.08- 80.08	45.76
* 92 Bromofluorobenzene					CAS #: 460-00-4		
13.078	13.071 (1.000)	174	170698	36.0000		80.00- 120.00	100.00
13.078	13.071 (1.000)	95	169579			68.42- 128.42	99.34
13.078	13.071 (1.000)	176	167251			64.69- 124.69	97.98
$ 49 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
7.741	7.734 (0.929)	65	26993	25.6867	25.687	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (ng)	FINAL (NG)	TARGET RANGE	RATIO
$ 49 1,2-Dichloroethane-d4 (continued)							
7.741	7.727 (0.929)	67	12935			25.09- 85.09	47.92
$ 66 Toluene-d8					CAS #: 2037-26-5		
10.012	9.998 (0.858)	98	90734	23.3628	23.363	80.00- 120.00	100.00
10.019	9.991 (0.859)	70	9445			0.00- 41.37	10.41
10.012	9.991 (0.858)	100	59412			33.98- 93.98	65.48
$ 108 Naphthalene-d8					CAS #: 1146-65-2		
17.232	17.232 (1.318)	136	165371	27.0195	27.019	80.00- 120.00	100.00
17.232	17.232 (1.318)	108	12978			0.00- 38.36	7.85
3 Freon 114					CAS #: 76-14-2		
1.953	1.954 (0.281)	135	206326	145.744	145.74	80.00- 120.00	100.00
1.953	1.954 (0.281)	137	66138			2.94- 62.94	32.06
6 Vinyl Chloride					CAS #: 75-01-4		
2.176	2.169 (0.313)	62	84686	57.7118	57.712	80.00- 120.00	100.00
2.176	2.176 (0.313)	64	28104			1.67- 61.67	33.19
7 1,3-Butadiene					CAS #: 106-99-0		
2.197	2.197 (0.316)	54	58485	46.7878	46.788	80.00- 120.00	100.00
2.197	2.197 (0.316)	39	68904			88.98- 148.98	117.81
9 Chloroethane					CAS #: 75-00-3		
2.691	2.691 (0.387)	64	37295	52.8074	52.807	80.00- 120.00	100.00
2.698	2.691 (0.388)	66	10642			2.82- 62.82	28.54
2.684	2.684 (0.386)	49	11545			1.12- 61.12	30.96
10 Isopentane					CAS #: 78-78-4		
2.799	2.792 (0.403)	57	61204	56.0119	56.012	80.00- 120.00	100.00
2.792	2.792 (0.402)	43	92216			125.87- 185.87	150.67
11 Trichlorofluoromethane/Fr11					CAS #: 75-69-4		
3.028	3.021 (0.436)	101	212686	117.514	117.51	80.00- 120.00	100.00
3.021	3.028 (0.435)	103	138741			34.96- 94.96	65.23
15 Freon 113					CAS #: 76-13-1		
3.794	3.795 (0.546)	151	157069	152.058	152.06	80.00- 120.00	100.00
3.787	3.787 (0.545)	153	101034			35.10- 95.10	64.32
3.794	3.795 (0.546)	101	181946			84.04- 144.04	115.84
14 1,1-Dichloroethene					CAS #: 75-35-4		
3.751	3.759 (0.540)	98	56482	78.8609	78.861	80.00- 120.00	100.00
3.751	3.759 (0.540)	96	90026			126.05- 186.05	159.39
3.751	3.759 (0.540)	61	141744			223.83- 283.83	250.95

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (ng)	FINAL (NG)	TARGET RANGE	RATIO
18 Carbon Disulfide					CAS #: 75-15-0		
4.081	4.081 (0.588)	76	244167	56.9288	56.929	80.00- 120.00	100.00
19 2-Propanol					CAS #: 67-63-0		
4.031	4.031 (0.580)	45	154765	54.1410	54.141	80.00- 120.00	100.00
4.031	4.031 (0.580)	43	31763			0.00- 50.22	20.52
4.024	4.024 (0.579)	59	5644			0.00- 33.71	3.65
22 Methylene Chloride					CAS #: 75-09-2		
4.582	4.583 (0.660)	49	112731	67.5872	67.587	80.00- 120.00	100.00
4.582	4.583 (0.660)	84	78509			41.05- 101.05	69.64
4.582	4.583 (0.660)	51	32503			0.46- 60.46	28.83
25 trans-1,2-Dichloroethene					CAS #: 156-60-5		
5.077	5.077 (0.731)	98	44703	66.2242	66.224	80.00- 120.00	100.00
5.077	5.070 (0.731)	61	100051			190.70- 250.70	223.81
5.077	5.077 (0.731)	96	71972			126.37- 186.37	161.00
26 MTBE					CAS #: 1634-04-4		
5.069	5.062 (0.730)	73	186124	70.7364	70.736	80.00- 120.00	100.00
5.062	5.062 (0.729)	57	45223			0.00- 53.50	24.30
5.069	5.070 (0.730)	41	44437			0.00- 54.24	23.88
28 Hexane					CAS #: 110-54-3		
5.556	5.564 (0.800)	57	125004	71.4573	71.457	80.00- 120.00	100.00
5.564	5.564 (0.801)	43	82299			37.71- 97.71	65.84
5.556	5.564 (0.800)	86	20071			0.00- 45.83	16.06
29 1,1-Dichloroethane					CAS #: 75-34-3		
5.779	5.779 (0.832)	63	150266	85.4202	85.420	80.00- 120.00	100.00
5.779	5.779 (0.832)	65	47105			1.45- 61.45	31.35
37 cis-1,2-Dichloroethene					CAS #: 156-59-2		
6.617	6.624 (0.953)	98	64619	87.7029	87.703	80.00- 120.00	100.00
6.617	6.624 (0.953)	96	101583			126.86- 186.86	157.20
6.617	6.617 (0.953)	61	128194			171.58- 231.58	198.38
38 2-Butanone					CAS #: 78-93-3		
6.595	6.595 (0.949)	72	45599	70.4774	70.477	80.00- 120.00	100.00
6.595	6.602 (0.949)	43	202393			419.83- 479.83	443.85
6.595	6.602 (0.949)	57	15312			2.35- 62.35	33.58
44 Chloroform					CAS #: 67-66-3		
7.111	7.111 (1.024)	83	169510	95.5472	95.547	80.00- 120.00	100.00
7.111	7.104 (1.024)	85	111337			35.12- 95.12	65.68

RT	EXP RT	(REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (ng)	FINAL (NG)	TARGET RANGE	RATIO
46 Cyclohexane						CAS #: 110-82-7		
7.412	7.405	(0.889)	84	109813	68.2580	68.258	80.00- 120.00	100.00
7.412	7.405	(0.889)	56	133313			91.54- 151.54	121.40
7.412	7.405	(0.889)	41	84853			46.84- 106.84	77.27
45 1,1,1-Trichloroethane						CAS #: 71-55-6		
7.311	7.304	(0.877)	97	167186	114.323	114.32	80.00- 120.00	100.00
7.311	7.304	(0.877)	99	110422			35.10- 95.10	66.05
47 Carbon Tetrachloride						CAS #: 56-23-5		
7.519	7.512	(0.902)	119	182618	139.719	139.72	80.00- 120.00	100.00
7.519	7.512	(0.902)	117	194095			73.73- 133.73	106.28
51 2,2,4-Trimethylpentane						CAS #: 540-84-1		
7.963	7.956	(0.955)	57	420301	89.5580	89.558	80.00- 120.00	100.00
7.963	7.956	(0.955)	56	139890			1.98- 61.98	33.28
7.956	7.956	(0.954)	41	129238			0.94- 60.94	30.75
48 Benzene						CAS #: 71-43-2		
7.763	7.756	(0.931)	78	263447	62.4914	62.491	80.00- 120.00	100.00
7.763	7.756	(0.931)	77	63796			0.00- 53.25	24.22
50 1,2-Dichloroethane						CAS #: 107-06-2		
7.841	7.835	(0.941)	62	116100	81.7762	81.776	80.00- 120.00	100.00
7.841	7.827	(0.941)	64	35570			1.81- 61.81	30.64
53 Heptane						CAS #: 142-82-5		
8.207	8.200	(0.985)	71	85186	75.9373	75.937	80.00- 120.00	100.00
8.207	8.193	(0.985)	43	170004			156.82- 216.82	199.57
8.207	8.193	(0.985)	57	83441			66.52- 126.52	97.95
56 Trichloroethene						CAS #: 79-01-6		
8.601	8.587	(1.032)	95	118201	89.8445	89.844	80.00- 120.00	100.00
8.601	8.587	(1.032)	130	140577			82.18- 142.18	118.93
8.601	8.587	(1.032)	97	76284			35.46- 95.46	64.54
58 Methyl Cyclohexane						CAS #: 108-87-2		
8.887	8.873	(1.066)	83	159335	77.0215	77.022	80.00- 120.00	100.00
8.887	8.866	(1.066)	98	74786			16.90- 76.90	46.94
8.880	8.866	(1.065)	55	126371			52.37- 112.37	79.31
59 1,2-Dichloropropane						CAS #: 78-87-5		
8.894	8.880	(1.067)	63	100014	85.4469	85.447	80.00- 120.00	100.00
8.894	8.880	(1.067)	62	70928			38.03- 98.03	70.92
8.887	8.873	(1.066)	41	141190			105.71- 165.71	141.17

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (ng)	FINAL (NG)	TARGET RANGE	RATIO
60 1,4-Dioxane					CAS #: 123-91-1		
8.988	8.973 (1.078)	88	63141	64.5802	64.580	80.00- 120.00	100.00
8.988	8.966 (1.078)	58	44932			37.98- 97.98	71.16
8.980	8.966 (1.077)	57	22563			0.00- 54.83	35.74
65 4-Methyl-2-pentanone					CAS #: 108-10-1		
9.876	9.854 (1.185)	58	85925	84.6842	84.684	80.00- 120.00	100.00
9.876	9.854 (1.185)	43	249647			254.63- 314.63	290.54
9.876	9.854 (1.185)	85	35103			8.74- 68.74	40.85
67 Toluene					CAS #: 108-88-3		
10.091	10.069 (0.865)	91	331735	70.4144	70.414	80.00- 120.00	100.00
10.091	10.069 (0.865)	92	190273			29.25- 89.25	57.36
70 1,1,2-Trichloroethane					CAS #: 79-00-5		
10.578	10.556 (1.269)	97	118071	108.348	108.35	80.00- 120.00	100.00
10.578	10.556 (1.269)	99	74480			34.29- 94.29	63.08
10.578	10.556 (1.269)	83	98601			57.72- 117.72	83.51
71 Tetrachloroethene					CAS #: 127-18-4		
10.678	10.657 (0.915)	166	180314	131.564	131.56	80.00- 120.00	100.00
10.678	10.657 (0.915)	129	130590			41.79- 101.79	72.42
10.678	10.657 (0.915)	131	125332			38.31- 98.31	69.51
72 2-Hexanone					CAS #: 591-78-6		
10.821	10.793 (0.928)	58	114858	89.0688	89.069	80.00- 120.00	100.00
10.821	10.800 (0.928)	43	241119			181.80- 241.80	209.93
10.821	10.800 (0.928)	100	21001			0.00- 47.51	18.28
74 1,2-Dibromoethane					CAS #: 106-93-4		
11.129	11.108 (0.954)	107	184160	162.698	162.70	80.00- 120.00	100.00
11.129	11.108 (0.954)	109	175708			64.64- 124.64	95.41
81 Chlorobenzene					CAS #: 108-90-7		
11.702	11.681 (1.003)	112	285627	89.0785	89.078	80.00- 120.00	100.00
11.702	11.681 (1.003)	114	92174			1.81- 61.81	32.27
11.702	11.681 (1.003)	77	139292			21.76- 81.76	48.77
82 Ethyl Benzene					CAS #: 100-41-4		
11.824	11.810 (1.014)	106	138084	83.4440	83.444	80.00- 120.00	100.00
11.824	11.810 (1.014)	91	405947			263.98- 323.98	293.99
84 m,p-Xylene					CAS #: 108-38-3		
11.982	11.968 (1.027)	106	176047	84.5676	84.568	80.00- 120.00	100.00
11.982	11.968 (1.027)	91	312352			152.73- 212.73	177.42

RT	EXP RT	(REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (ng)	FINAL (NG)	TARGET RANGE	RATIO
88 o-Xylene						CAS #: 95-47-6		
12.426	12.412	(0.950)	106	168314	86.9296	86.930	80.00- 120.00	100.00
12.426	12.412	(0.950)	91	317982			163.65- 223.65	188.92
89 Styrene						CAS #: 100-42-5		
12.454	12.440	(0.952)	104	265762	85.9258	85.926	80.00- 120.00	100.00
12.454	12.440	(0.952)	78	112780			15.61- 75.61	42.44
91 Cumene						CAS #: 98-82-8		
12.870	12.863	(0.984)	105	482882	98.5239	98.524	80.00- 120.00	100.00
12.870	12.863	(0.984)	120	141693			0.00- 59.10	29.34
12.870	12.856	(0.984)	51	48523			0.00- 40.54	10.05
94 1,1,2,2-Tetrachloroethane						CAS #: 79-34-5		
13.235	13.221	(1.012)	83	252841	152.746	152.74	80.00- 120.00	100.00
13.235	13.221	(1.012)	85	164797			35.82- 95.82	65.18
96 Propylbenzene						CAS #: 103-65-1		
13.379	13.364	(1.023)	91	557612	98.4773	98.477	80.00- 120.00	100.00
13.379	13.364	(1.023)	120	144664			0.00- 54.66	25.94
13.379	13.364	(1.023)	105	21894			0.00- 33.61	3.93
97 4-Ethyltoluene						CAS #: 622-96-8		
13.529	13.522	(1.034)	120	153260	100.260	100.26	80.00- 120.00	100.00
13.529	13.522	(1.034)	105	453651			275.29- 335.29	296.00
98 1,3,5-Trimethylbenzene						CAS #: 108-67-8		
13.608	13.601	(1.041)	120	206734	99.0444	99.044	80.00- 120.00	100.00
13.608	13.601	(1.041)	105	391667			157.79- 217.79	189.45
100 1,2,4-Trimethylbenzene						CAS #: 95-63-6		
14.059	14.052	(1.075)	120	191474	97.4074	97.407	80.00- 120.00	100.00
14.059	14.052	(1.075)	105	400847			169.74- 229.74	209.35
101 1,3-Dichlorobenzene						CAS #: 541-73-1		
14.389	14.382	(1.100)	146	297186	120.142	120.14	80.00- 120.00	100.00
14.389	14.382	(1.100)	148	192384			34.32- 94.32	64.74
14.389	14.382	(1.100)	111	105696			5.94- 65.94	35.57
102 1,4-Dichlorobenzene						CAS #: 106-46-7		
14.517	14.510	(1.110)	146	299100	123.145	123.14	80.00- 120.00	100.00
14.517	14.510	(1.110)	148	191697			35.48- 95.48	64.09
14.517	14.510	(1.110)	111	103356			5.70- 65.70	34.56
105 1,2-Dichlorobenzene						CAS #: 95-50-1		
14.940	14.940	(1.142)	146	286962	120.914	120.91	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (ng)	FINAL (NG)	TARGET RANGE	RATIO
105 1,2-Dichlorobenzene (continued)							
14.940	14.940 (1.142)	148	183387			34.02- 94.02	63.91
14.940	14.933 (1.142)	111	108182			7.12- 67.12	37.70
106 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
16.953	16.953 (1.296)	180	236661	144.151	144.15	80.00- 120.00	100.00
16.953	16.953 (1.296)	182	226363			65.50- 125.50	95.65
107 Hexachlorobutadiene					CAS #: 87-68-3		
17.153	17.154 (1.312)	225	182527	193.318	193.32	80.00- 120.00	100.00
17.153	17.154 (1.312)	223	114548			32.38- 92.38	62.76
109 Naphthalene					CAS #: 91-20-3		
17.268	17.268 (1.320)	128	353259	52.5917	52.592	80.00- 120.00	100.00
17.268	17.268 (1.320)	127	46477			0.00- 43.21	13.16
110 2-Methylnaphthalene					CAS #: 91-57-6		
18.708	18.708 (1.431)	142	235820	54.9822	54.982	80.00- 120.00	100.00
18.708	18.708 (1.431)	141	206891			56.85- 116.85	87.73
18.715	18.708 (1.431)	115	68207			0.00- 59.61	28.92
111 1-Methylnaphthalene					CAS #: 90-12-0		
18.930	18.930 (1.447)	142	218677	52.1329	52.133	80.00- 120.00	100.00
18.930	18.930 (1.447)	141	199714			58.28- 118.28	91.33
18.930	18.930 (1.447)	115	66908			1.09- 61.09	30.60
112 Acenaphthylene					CAS #: 208-96-8		
20.799	20.800 (1.590)	152	361034	53.4432	53.443	80.00- 120.00	100.00
20.799	20.800 (1.590)	151	72202			0.00- 50.51	20.00
20.799	20.800 (1.590)	153	48153			0.00- 43.07	13.34
113 Acenaphthene					CAS #: 83-32-9		
21.064	21.065 (1.611)	154	188709	58.9424	58.942	80.00- 120.00	100.00
21.064	21.065 (1.611)	152	97675			23.06- 83.06	51.76
21.064	21.065 (1.611)	153	204844			82.31- 142.31	108.55
114 Fluorene					CAS #: 86-73-7		
22.225	22.225 (1.699)	166	202331	63.8286	63.828	80.00- 120.00	100.00
22.225	22.225 (1.699)	165	189218			65.30- 125.30	93.52
115 Phenanthrene					CAS #: 85-01-8		
24.445	24.438 (1.869)	178	374282	46.5036	46.504	80.00- 120.00	100.00
24.445	24.438 (1.869)	176	69822			0.00- 48.40	18.65
24.445	24.438 (1.869)	179	57104			0.00- 44.95	15.26
116 Anthracene					CAS #: 120-12-7		
24.560	24.560 (1.878)	178	378815	45.0055	45.005	80.00- 120.00	100.00

RT	EXP RT	(REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (ng)	FINAL (NG)	TARGET RANGE	RATIO
116 Anthracene (continued)								
24.567	24.560	(1.879)	176	68781			0.00- 47.65	18.16
24.560	24.560	(1.878)	179	55339			0.00- 43.56	14.61
117 Fluoranthene						CAS #: 206-44-0		
28.321	28.321	(2.166)	202	642580	84.2753	84.275	80.00- 120.00	100.00(R)
28.321	28.314	(2.166)	101	85156			0.00- 42.31	13.25
118 Pyrene						CAS #: 129-00-0		
29.359	29.359	(2.245)	202	750183	90.2176	90.218	80.00- 120.00	100.00(R)
29.359	29.352	(2.245)	101	116922			0.00- 44.28	15.59
29.359	29.359	(2.245)	100	98411			0.00- 41.66	13.12

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

Report Date: 04-Feb-2016 13:17

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd11.i
Lab File ID: 11020402.d
Lab Smp Id: VI VOC+PAH LCS
Analysis Type: VOA
Quant Type: ISTD
Operator: LAct
Method File: /chem/msd11.i/04feb16.b/115z1120vi.m
Misc Info: 2516-217(5/3/16),2744-32-50(7/20/16)

Calibration Date: 04-FEB-2016
Calibration Time: 12:29
Client Smp ID: LCS
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
40 Bromochloromethan	65872	39523	92221	65795	-0.12
54 1,4-Difluorobenze	263308	157985	368631	252395	-4.14
79 Chlorobenzene-d5	242803	145682	339924	246042	1.33
92 Bromofluorobenzen	175852	105511	246193	170698	-2.93

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
40 Bromochloromethan	6.95	6.62	7.28	6.95	0.00
54 1,4-Difluorobenze	8.33	8.00	8.66	8.34	0.08
79 Chlorobenzene-d5	11.65	11.32	11.98	11.67	0.18
92 Bromofluorobenzen	13.07	12.74	13.40	13.08	0.05

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msd11.i/04feb16.b/11020402.d

Date : 04-FEB-2016 10:54

Client ID: LCS

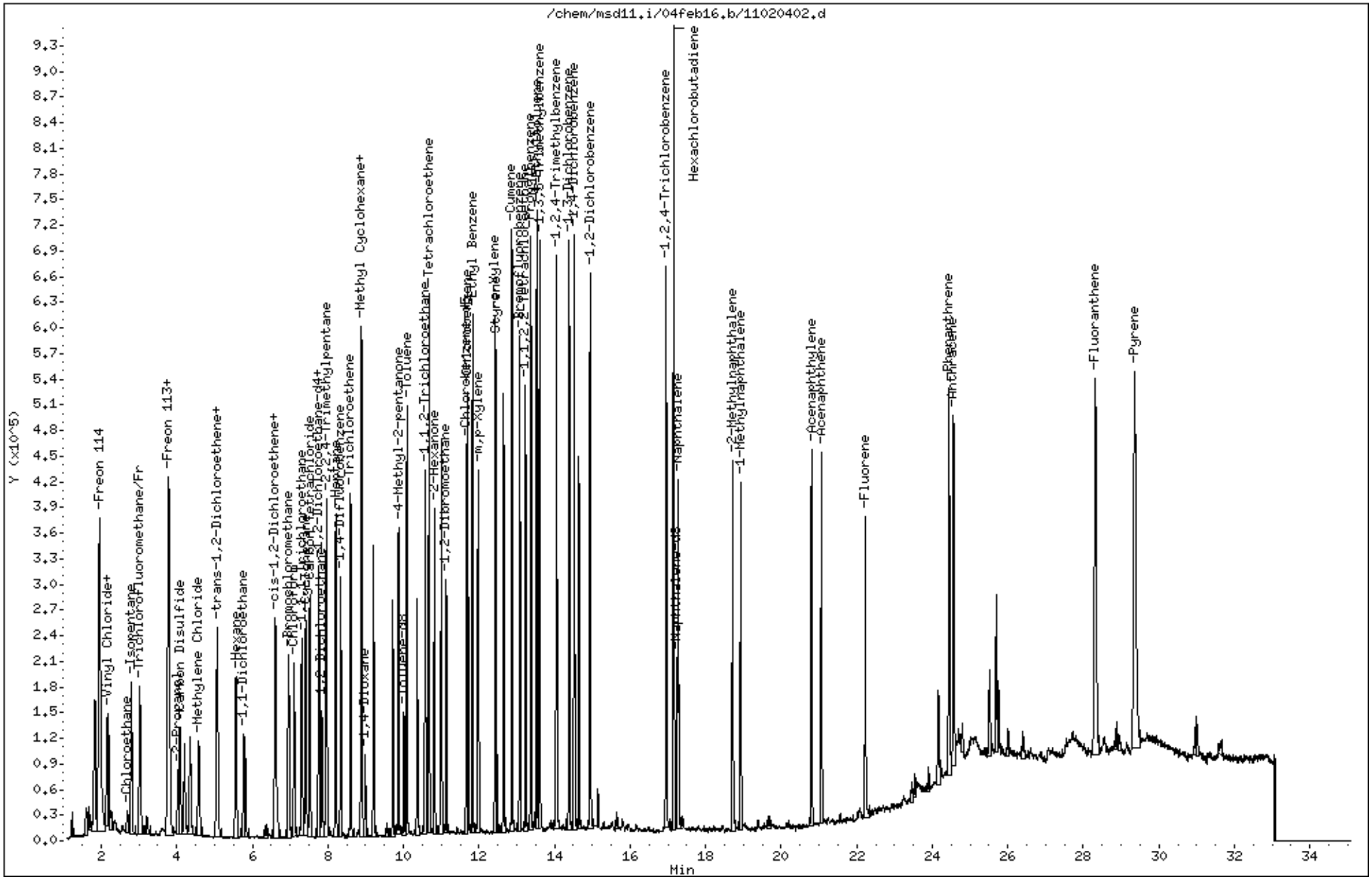
Sample Info: ;VI VOC+PAH LCS;LCS

Column phase: RTx-624

Instrument: msd11.i

Operator: LAct

Column diameter: 0.53



Data File: /chem/msd11.i/04feb16.b/11020402.d

Date : 04-FEB-2016 10:54

Client ID: LCS

Instrument: msd11.i

Sample Info: ;VI VOC+PAH LCS;LCS

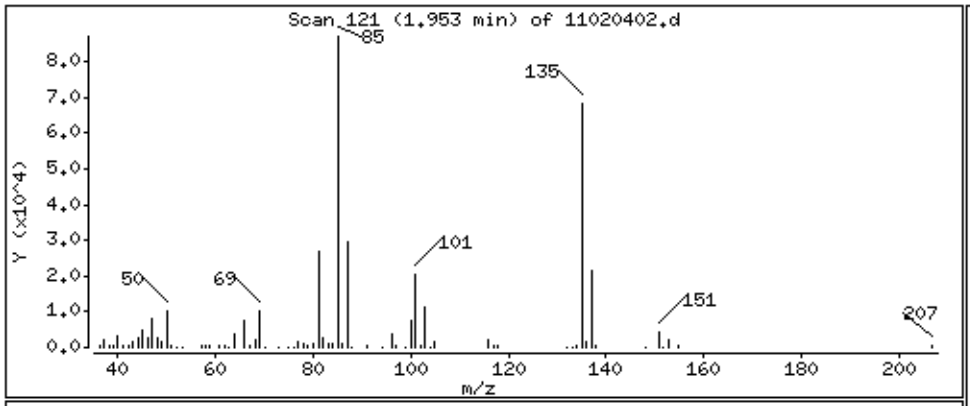
Operator: LAct

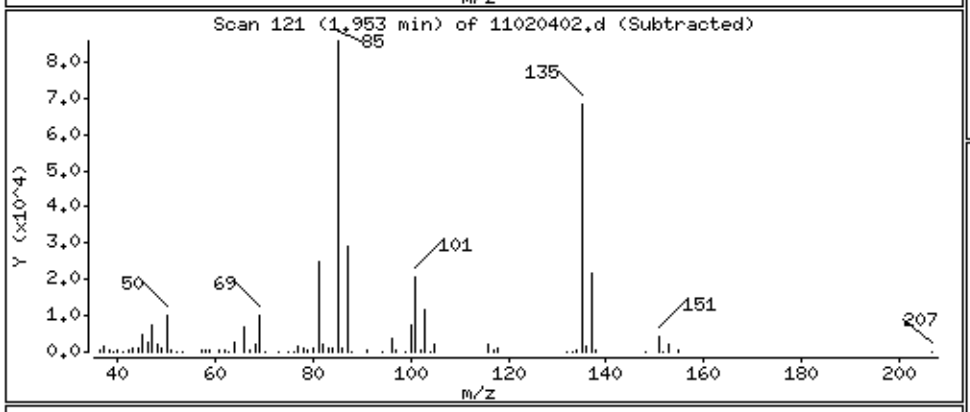
Column phase: RTx-624

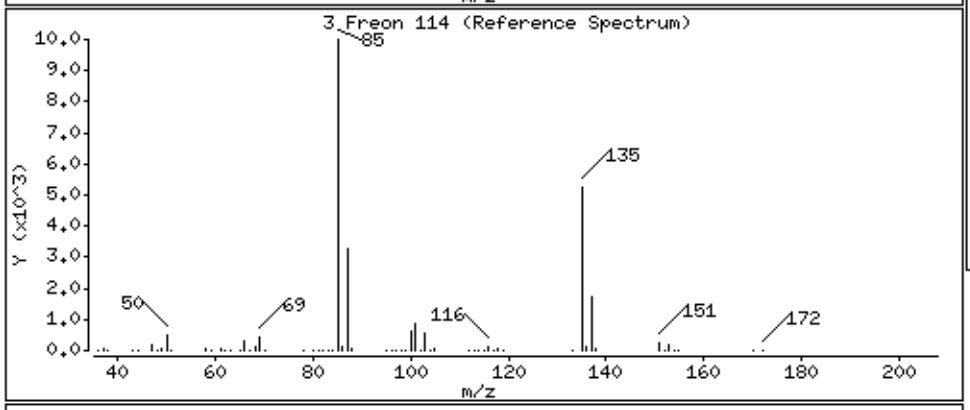
Column diameter: 0.53

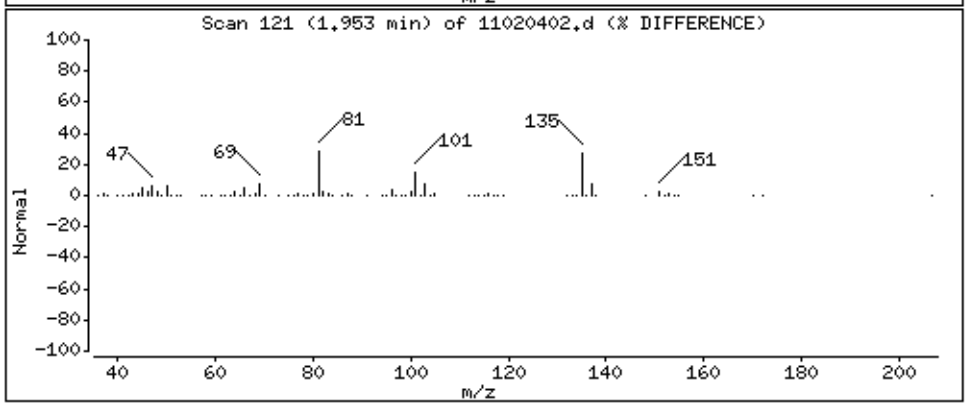
3 Freon 114

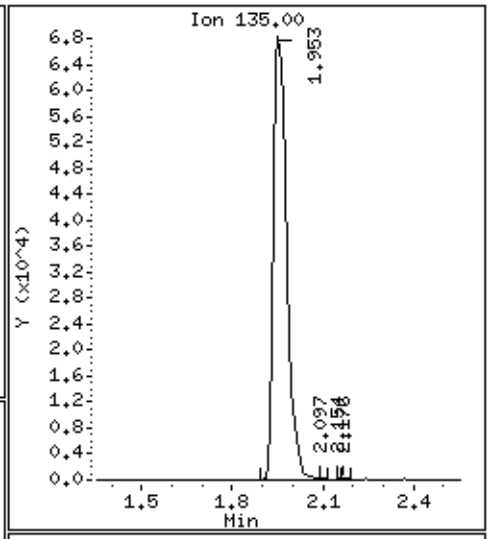
Concentration: 145.74 NG

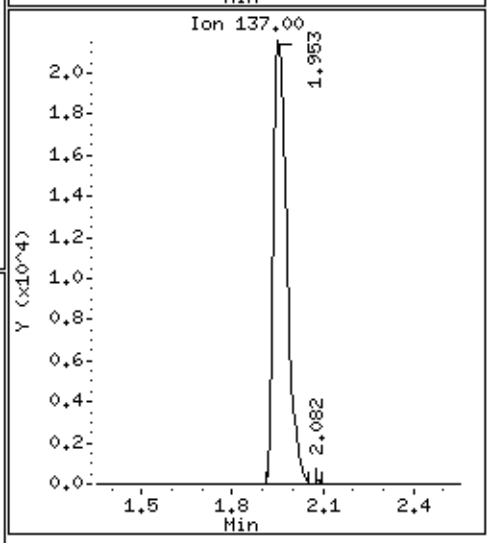












Data File: /chem/msd11.i/04feb16.b/11020402.d

Date : 04-FEB-2016 10:54

Client ID: LCS

Instrument: msd11.i

Sample Info: ;VI VOC+PAH LCS;LCS

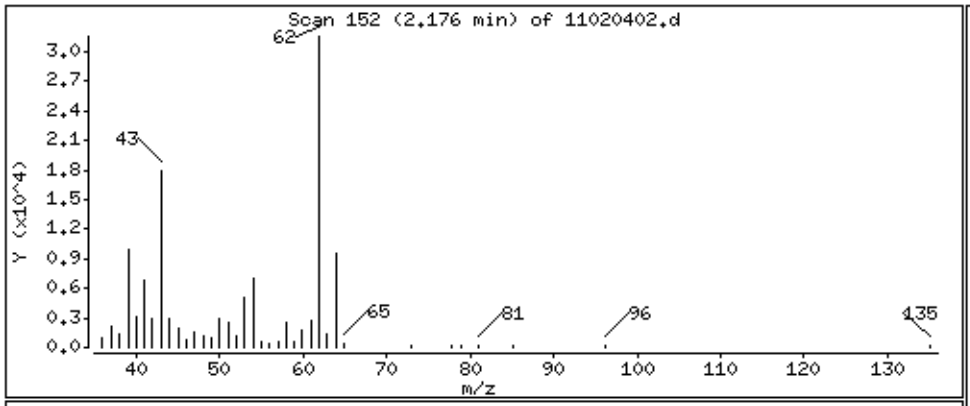
Operator: LAct

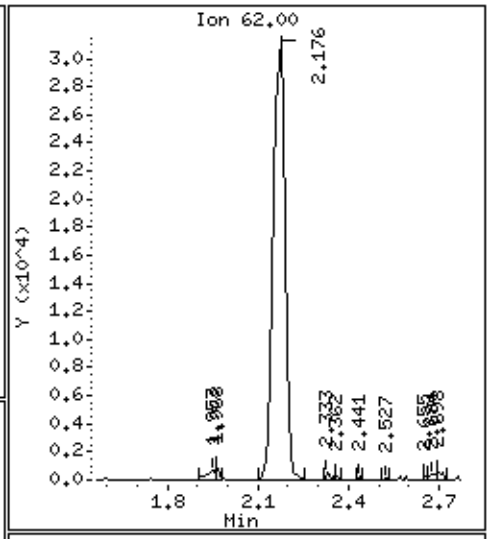
Column phase: RTx-624

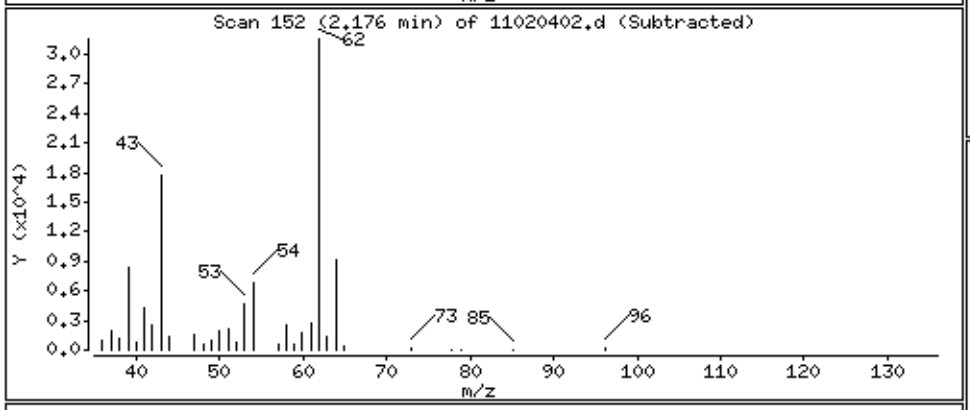
Column diameter: 0.53

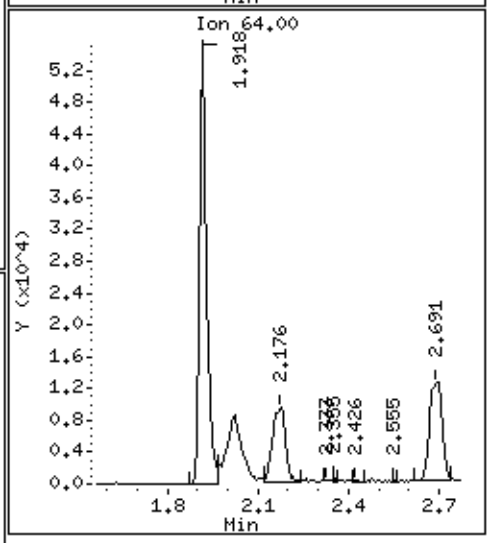
6 Vinyl Chloride

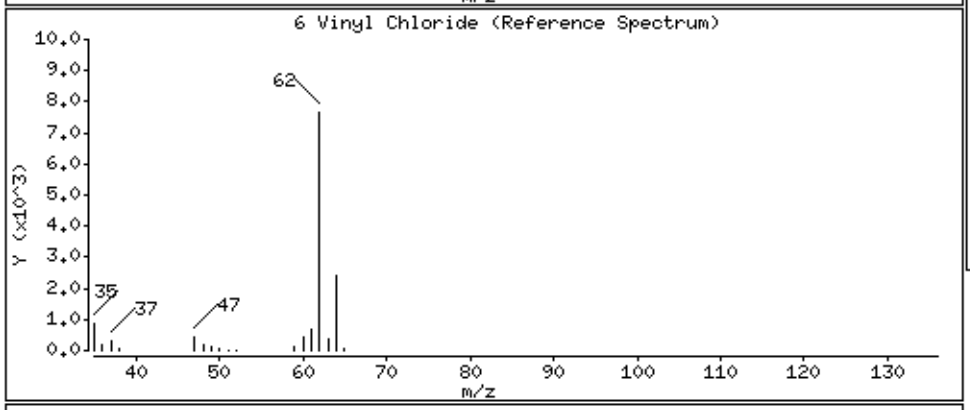
Concentration: 57.712 NG

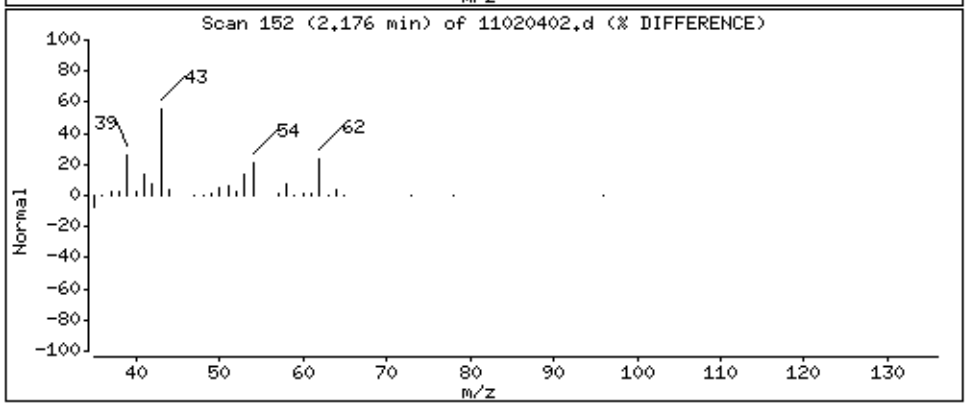












Data File: /chem/msd11.i/04feb16.b/11020402.d

Date : 04-FEB-2016 10:54

Client ID: LCS

Instrument: msd11.i

Sample Info: ;VI VOC+PAH LCS;LCS

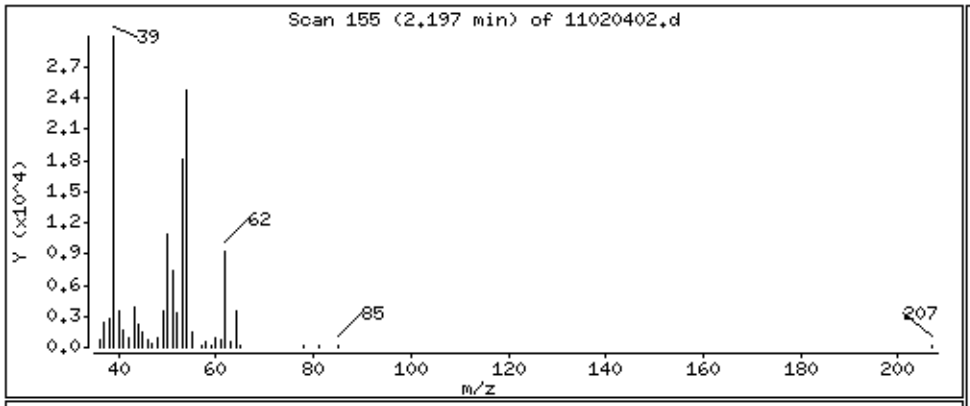
Operator: LAct

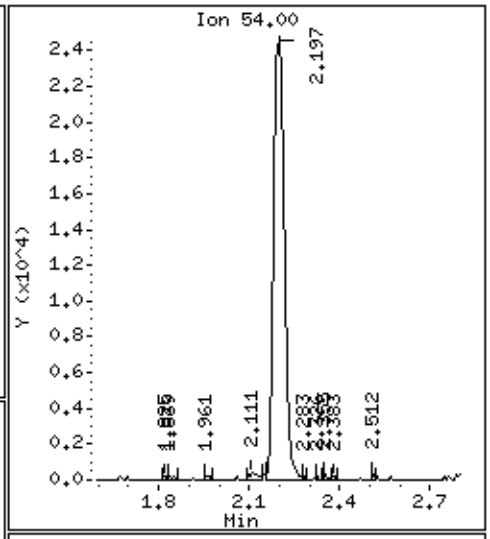
Column phase: RTx-624

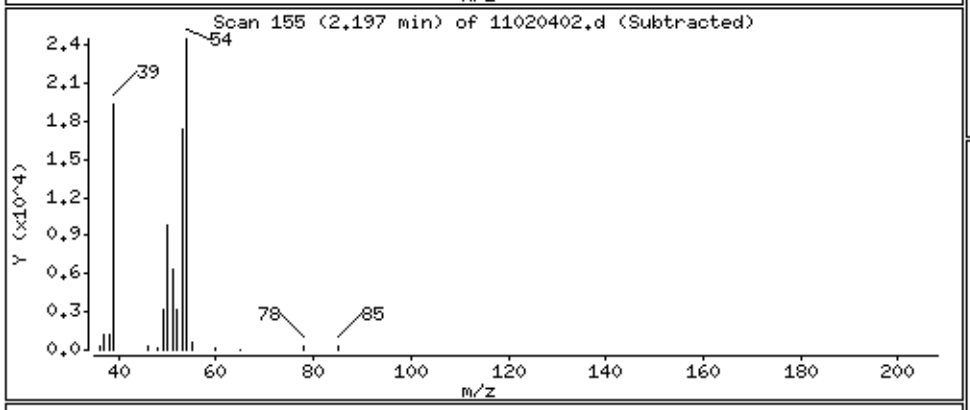
Column diameter: 0.53

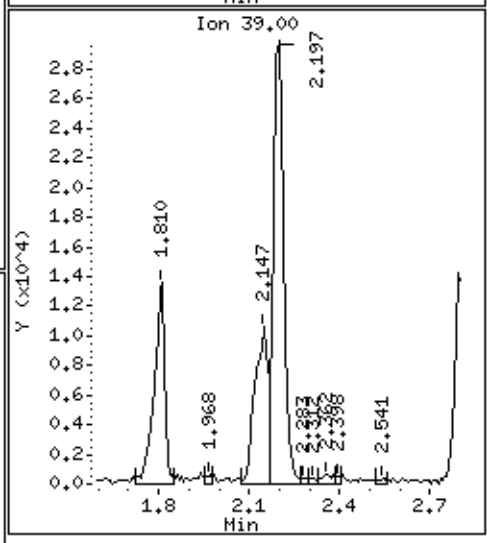
7 1,3-Butadiene

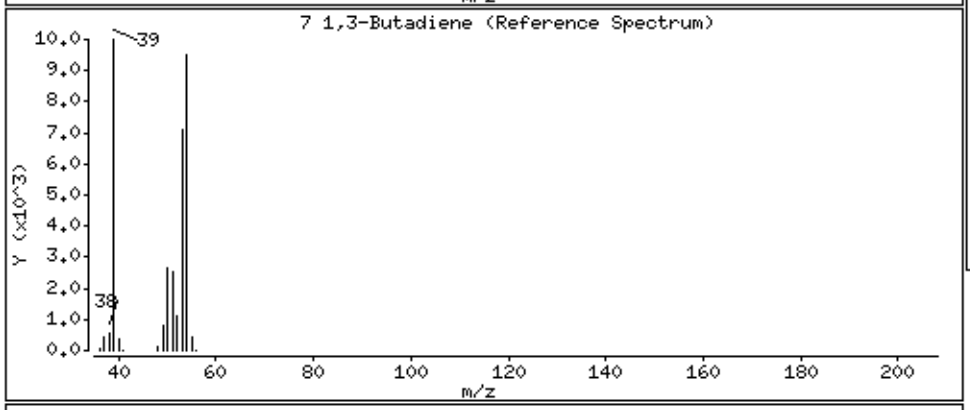
Concentration: 46.788 NG

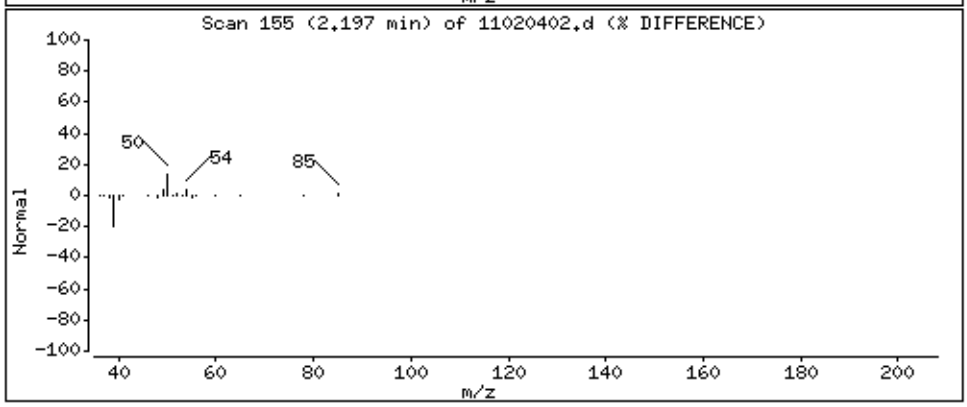












Data File: /chem/msd11.i/04feb16.b/11020402.d

Date : 04-FEB-2016 10:54

Client ID: LCS

Instrument: msd11.i

Sample Info: ;VI VOC+PAH LCS;LCS

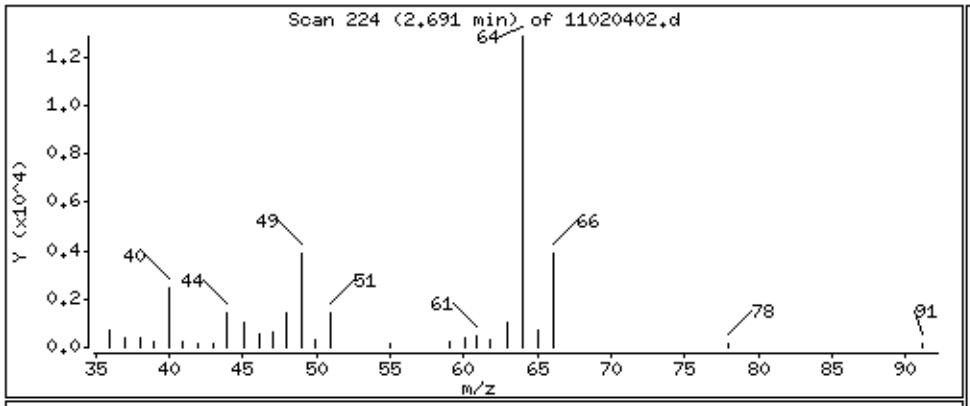
Operator: LAct

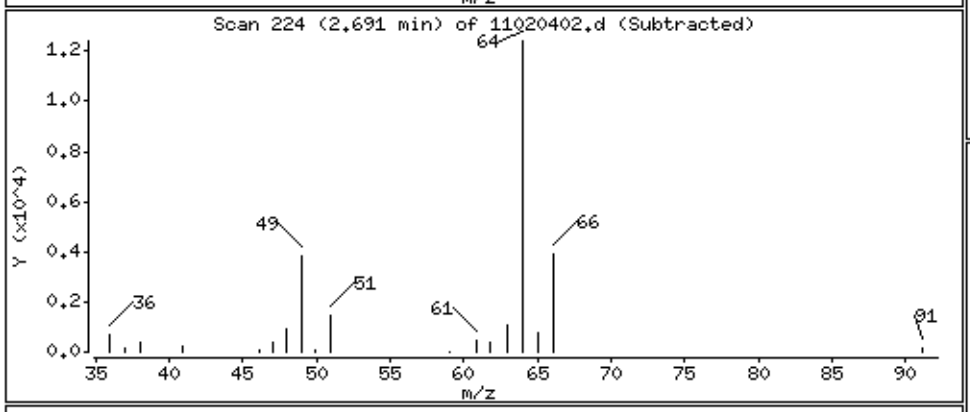
Column phase: RTx-624

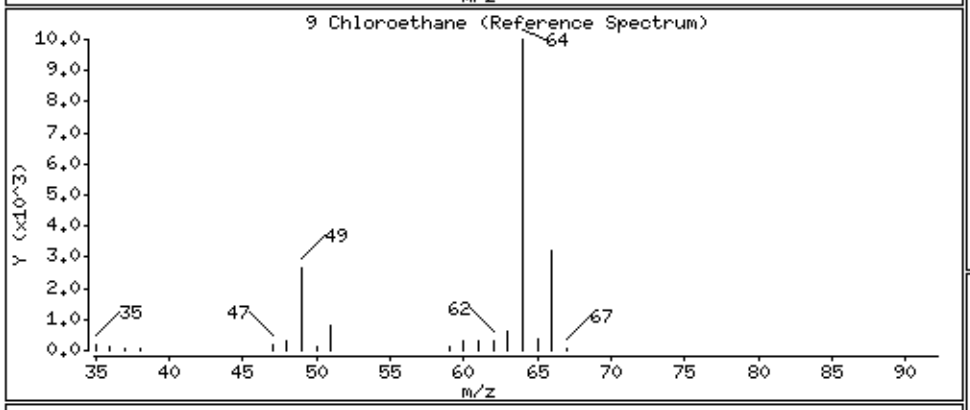
Column diameter: 0.53

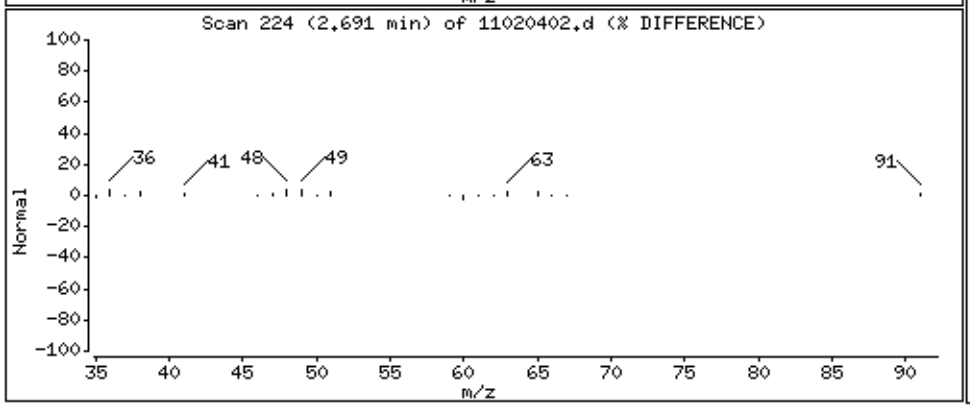
9 Chloroethane

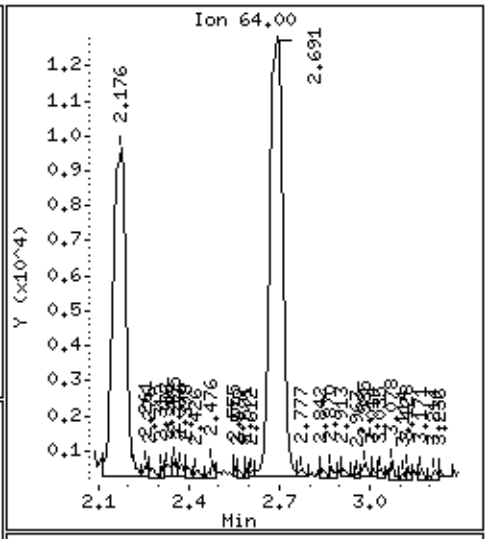
Concentration: 52.807 NG

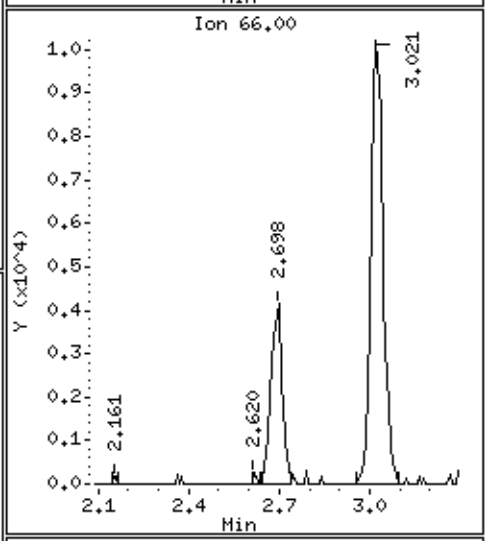


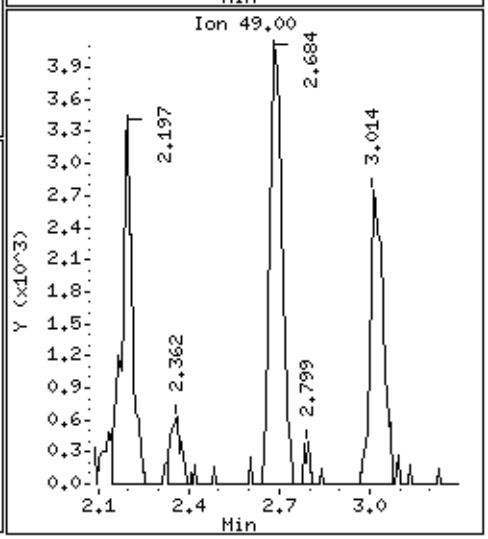












Data File: /chem/msd11.i/04feb16.b/11020402.d

Date : 04-FEB-2016 10:54

Client ID: LCS

Instrument: msd11.i

Sample Info: ;VI VOC+PAH LCS;LCS

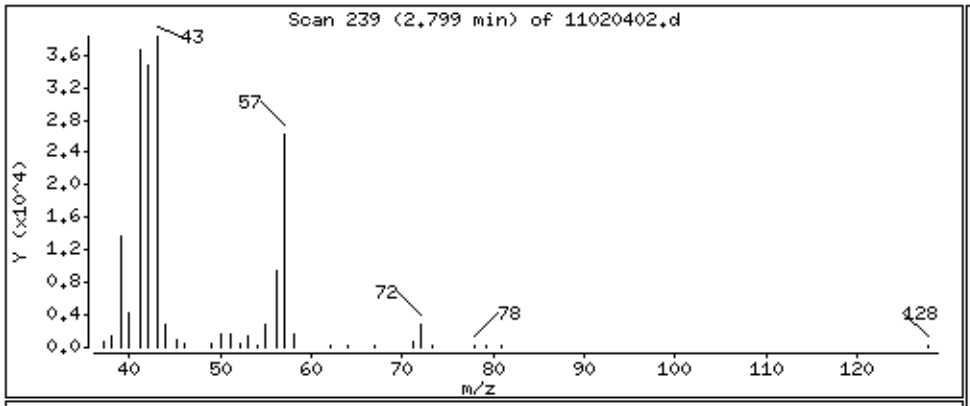
Operator: LAct

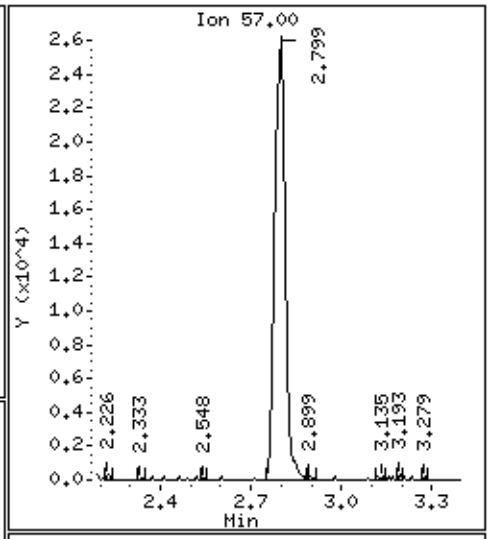
Column phase: RTx-624

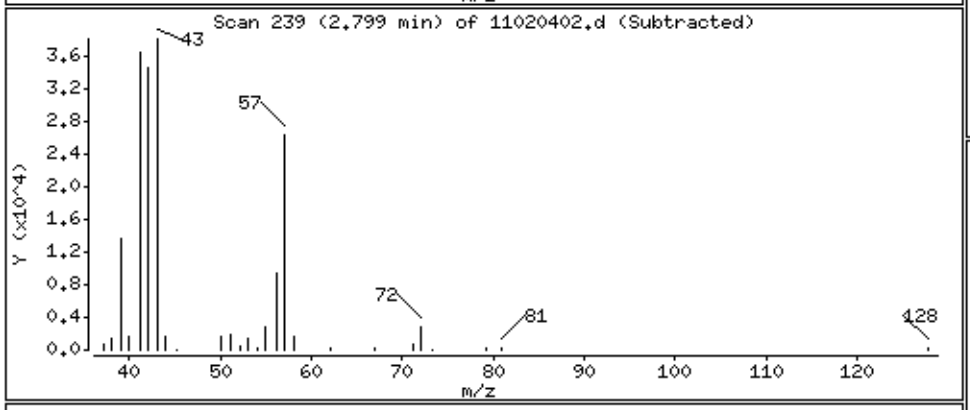
Column diameter: 0.53

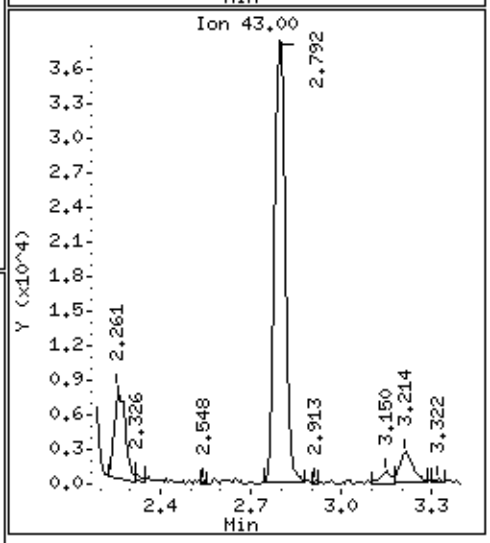
10 Isopentane

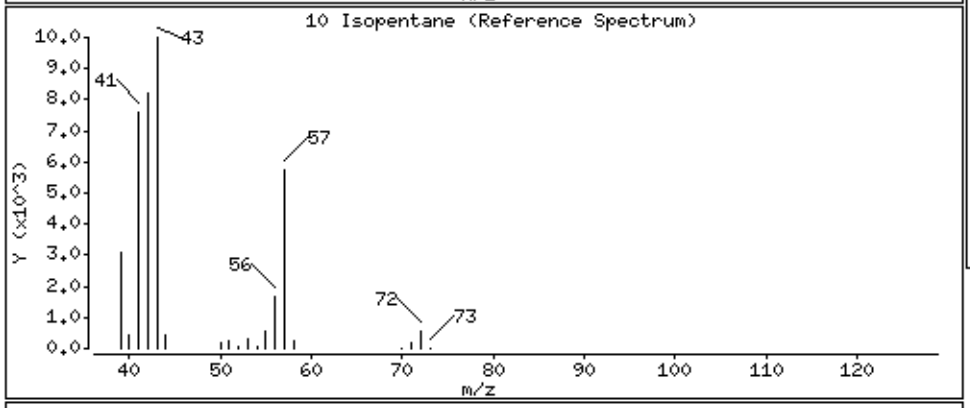
Concentration: 56.012 NG

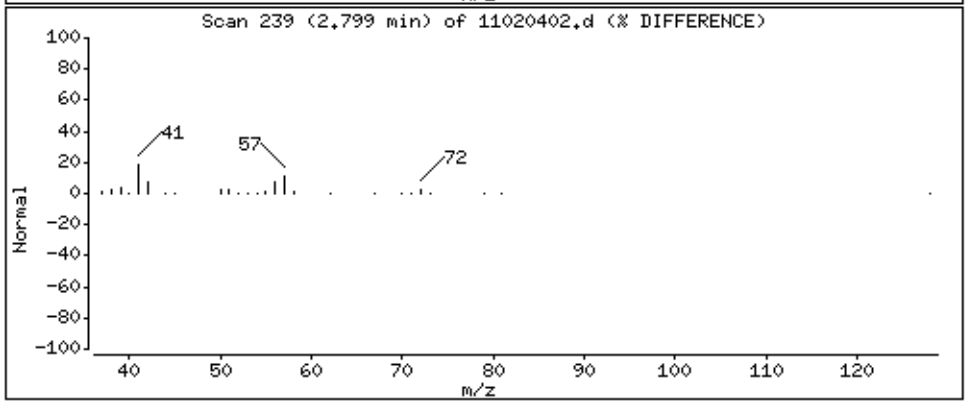












Data File: /chem/msd11.i/04feb16.b/11020402.d

Date : 04-FEB-2016 10:54

Client ID: LCS

Instrument: msd11.i

Sample Info: ;VI VOC+PAH LCS;LCS

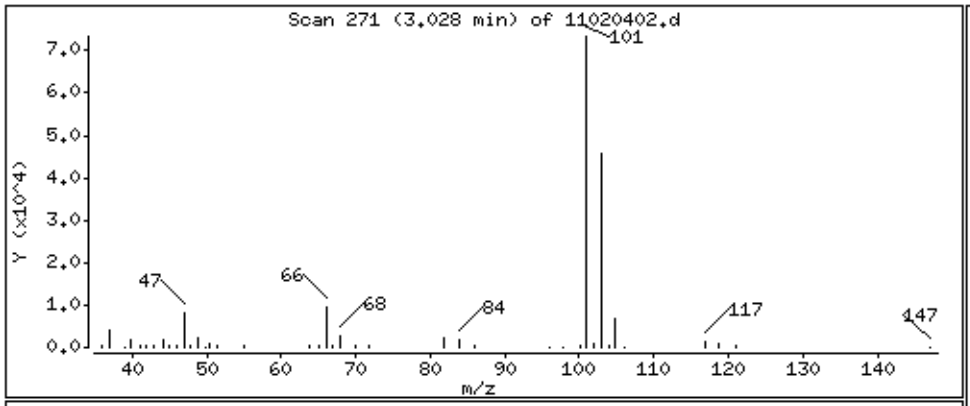
Operator: LAct

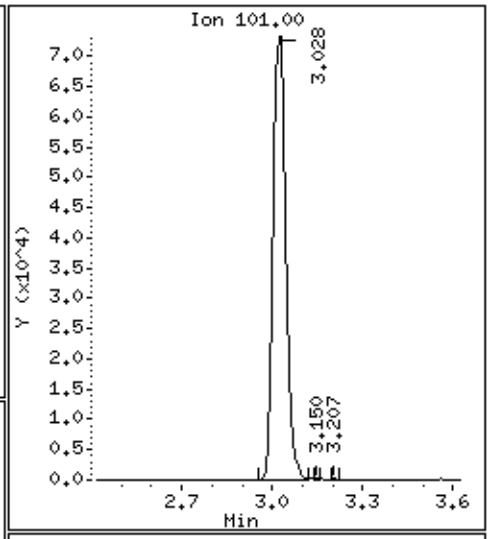
Column phase: RTx-624

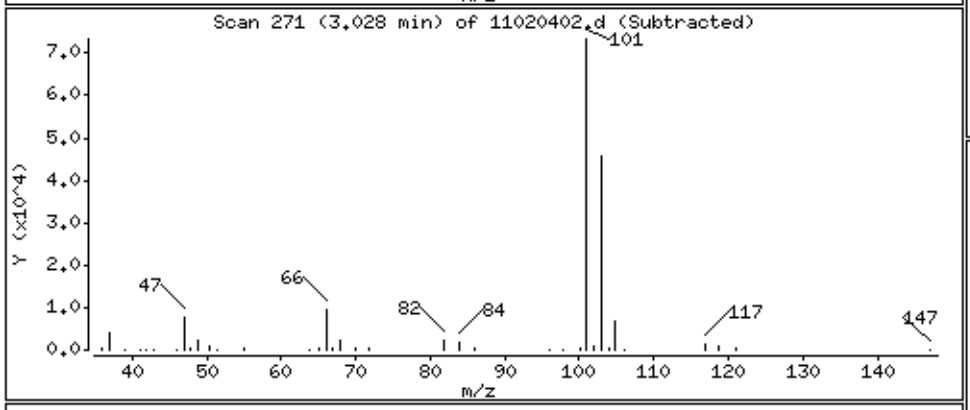
Column diameter: 0.53

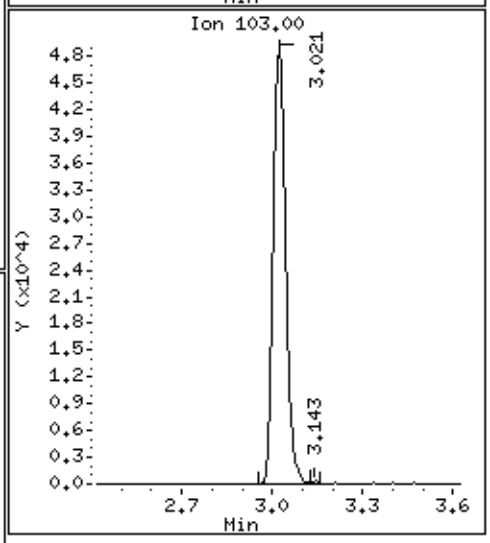
11 Trichlorofluoromethane/Fr11

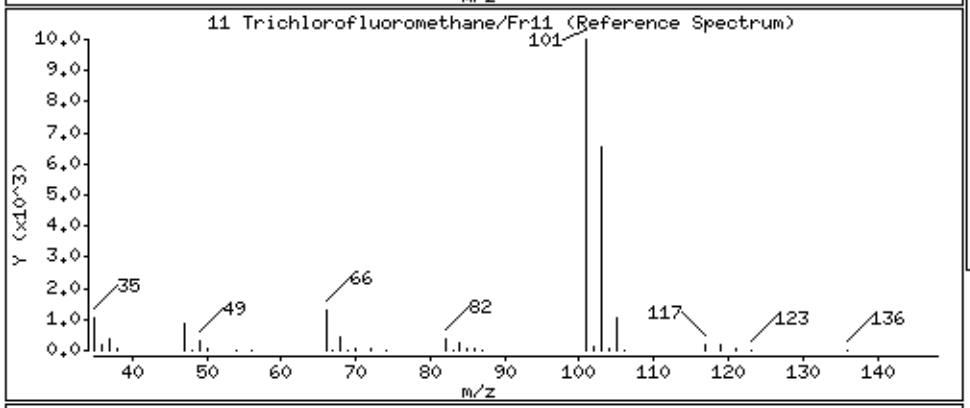
Concentration: 117.51 NG

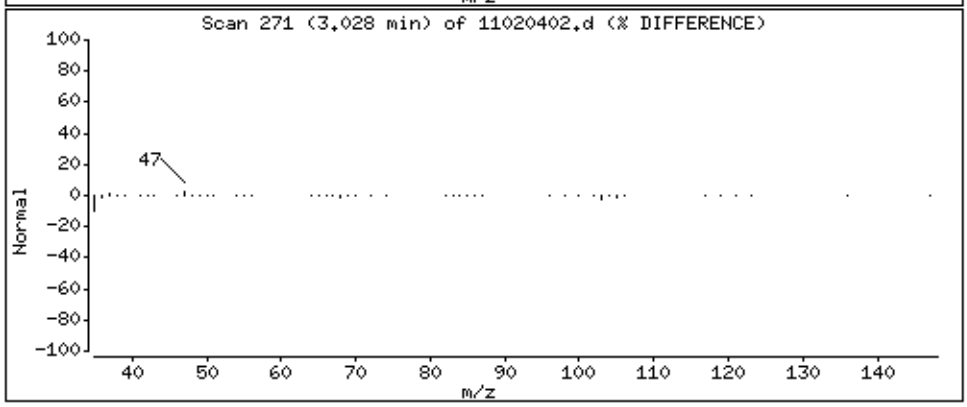












Data File: /chem/msd11.i/04feb16.b/11020402.d

Date : 04-FEB-2016 10:54

Client ID: LCS

Instrument: msd11.i

Sample Info: ;VI VOC+PAH LCS;LCS

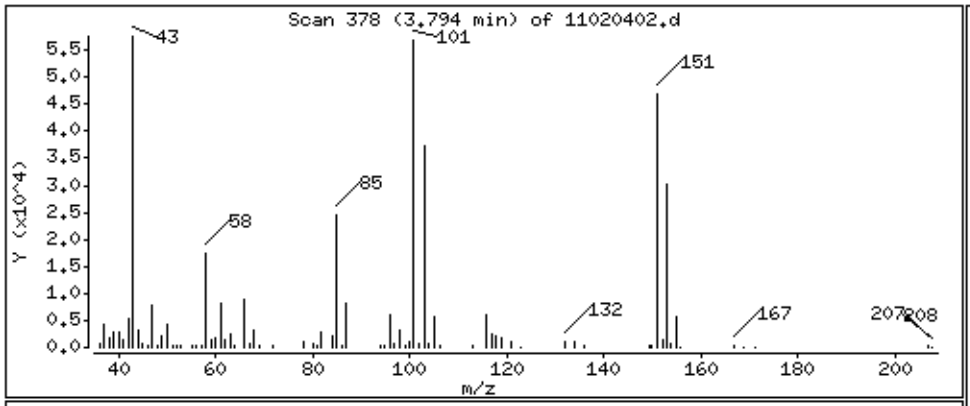
Operator: LAct

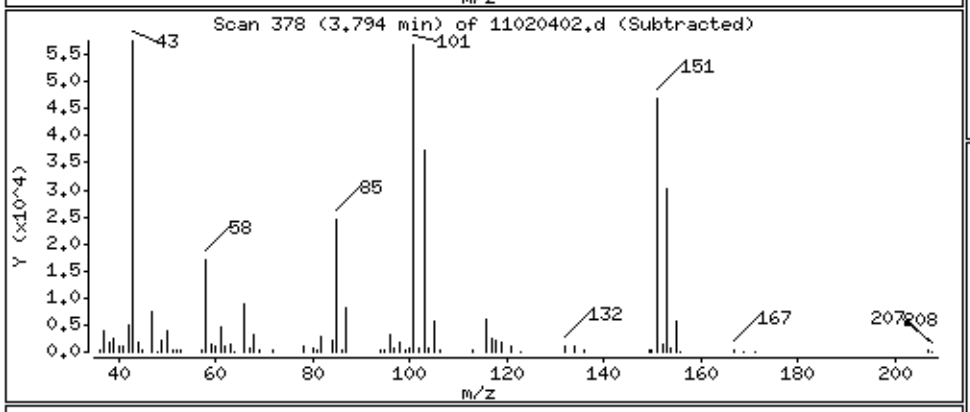
Column phase: RTx-624

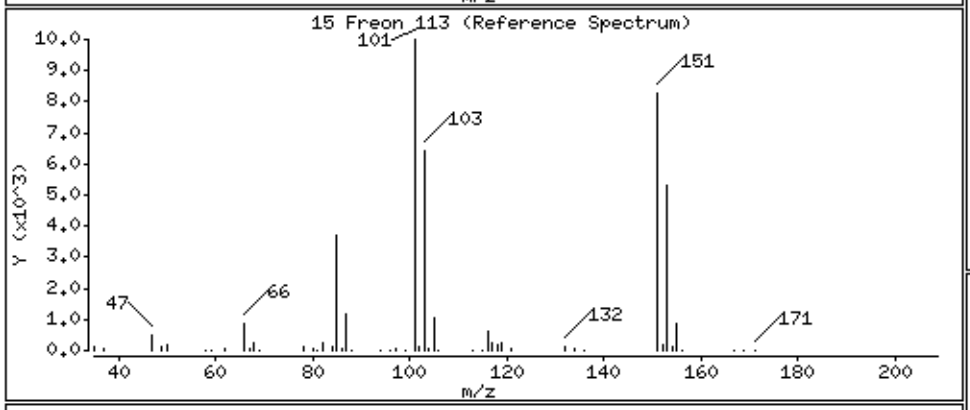
Column diameter: 0.53

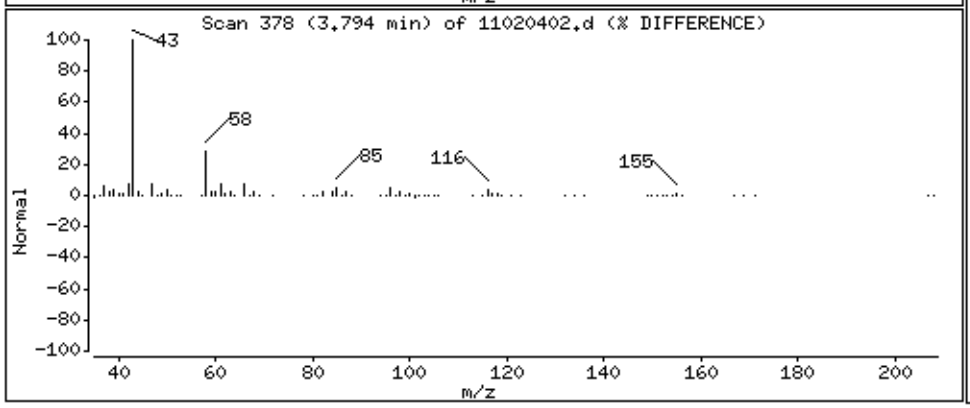
15 Freon 113

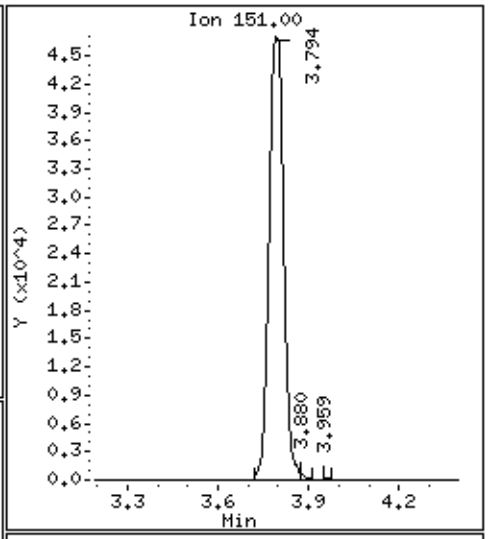
Concentration: 152.06 NG

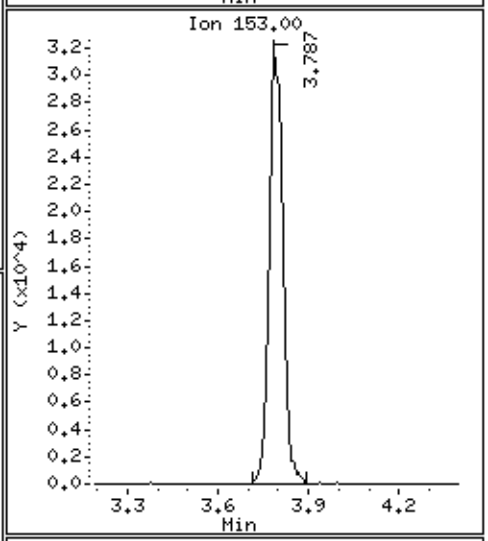


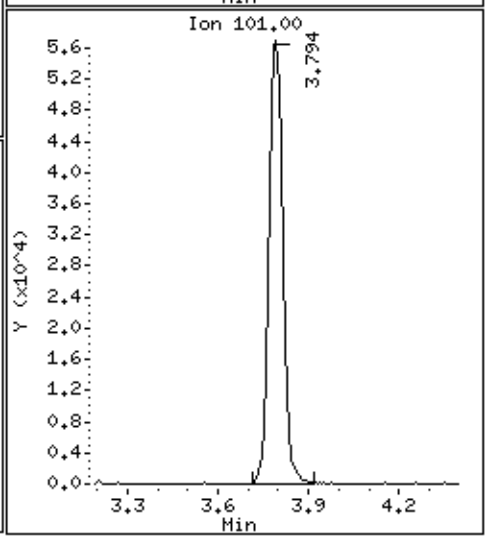












Data File: /chem/msd11.i/04feb16.b/11020402.d

Date : 04-FEB-2016 10:54

Client ID: LCS

Instrument: msd11.i

Sample Info: ;VI VOC+PAH LCS;LCS

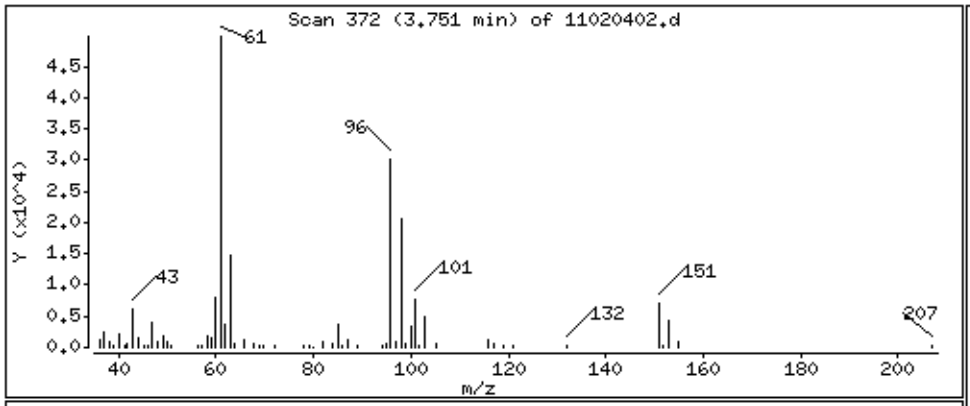
Operator: LAct

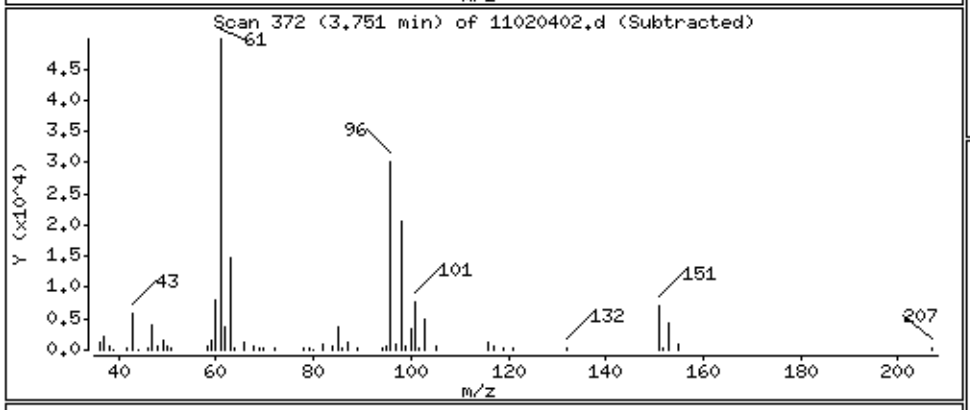
Column phase: RTx-624

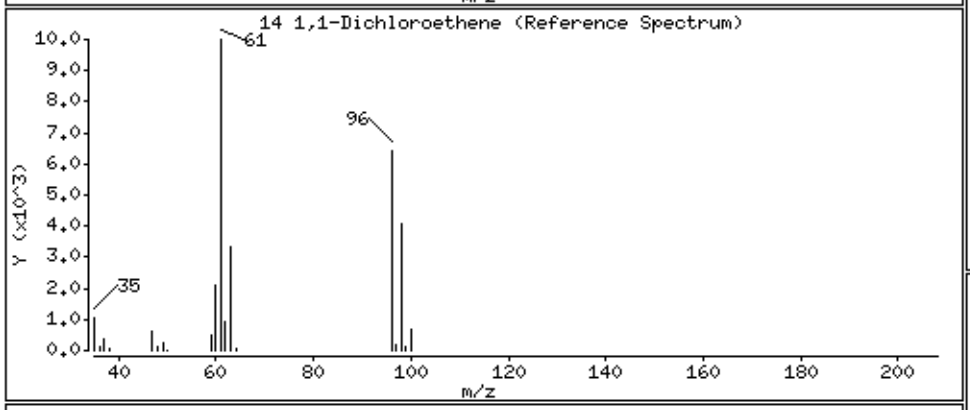
Column diameter: 0.53

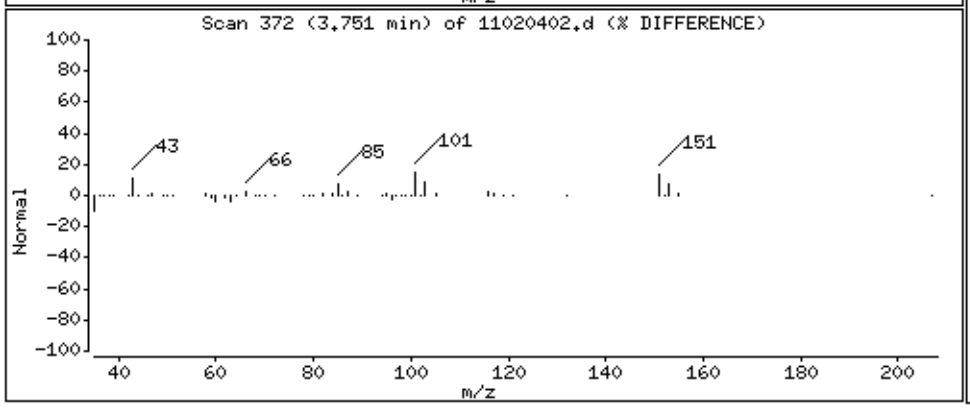
14 1,1-Dichloroethene

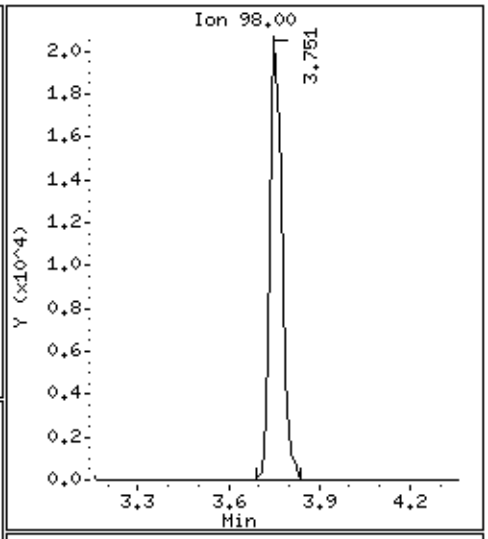
Concentration: 78.861 NG

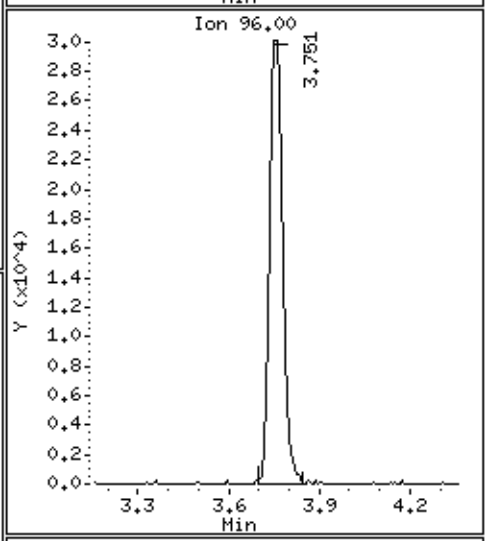


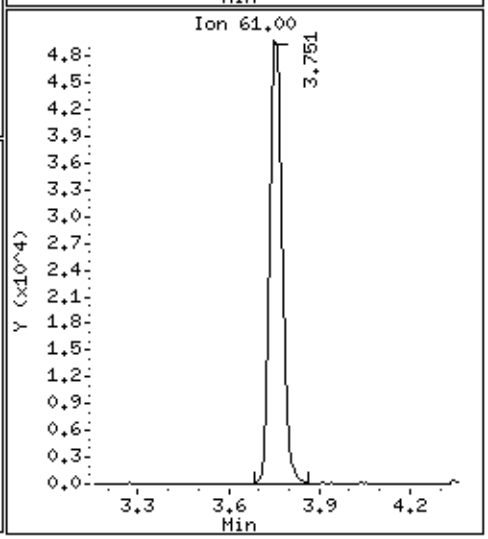












Data File: /chem/msd11.i/04feb16.b/11020402.d

Date : 04-FEB-2016 10:54

Client ID: LCS

Instrument: msd11.i

Sample Info: ;VI VOC+PAH LCS;LCS

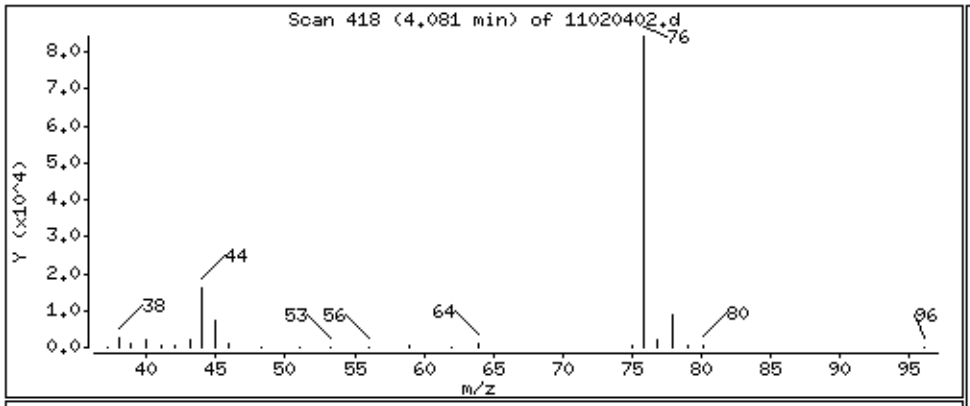
Operator: LAct

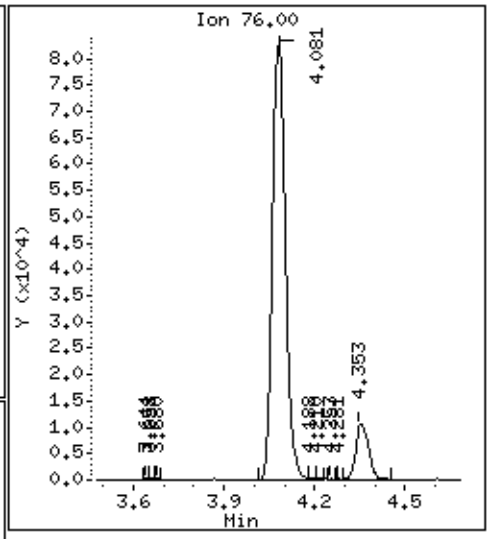
Column phase: RTx-624

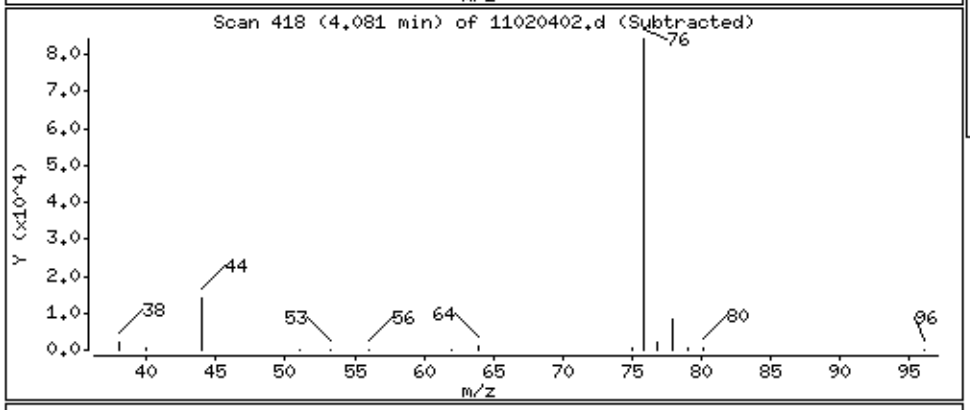
Column diameter: 0.53

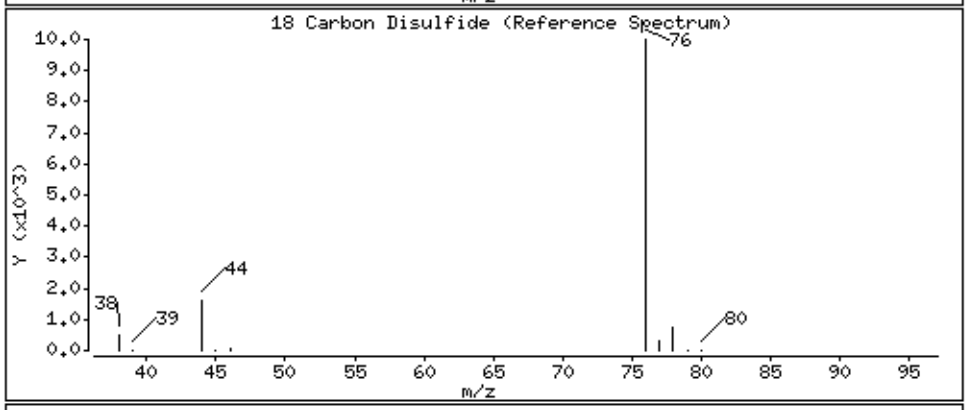
18 Carbon Disulfide

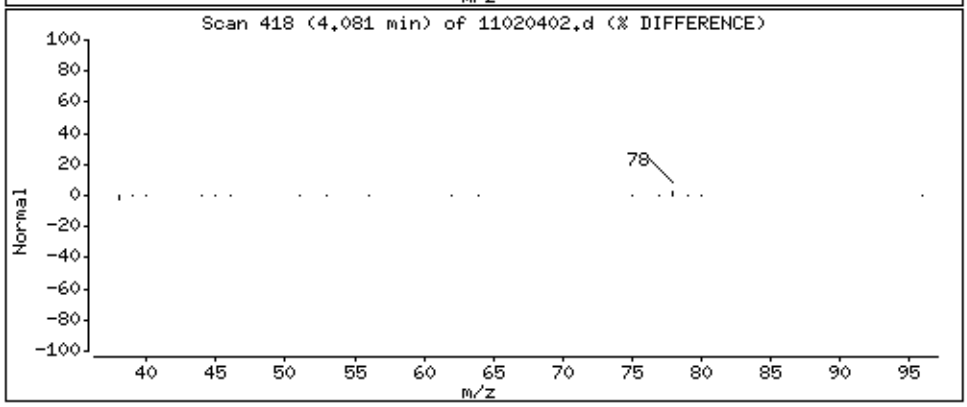
Concentration: 56.929 NG











Data File: /chem/msd11.i/04feb16.b/11020402.d

Date : 04-FEB-2016 10:54

Client ID: LCS

Instrument: msd11.i

Sample Info: ;VI VOC+PAH LCS;LCS

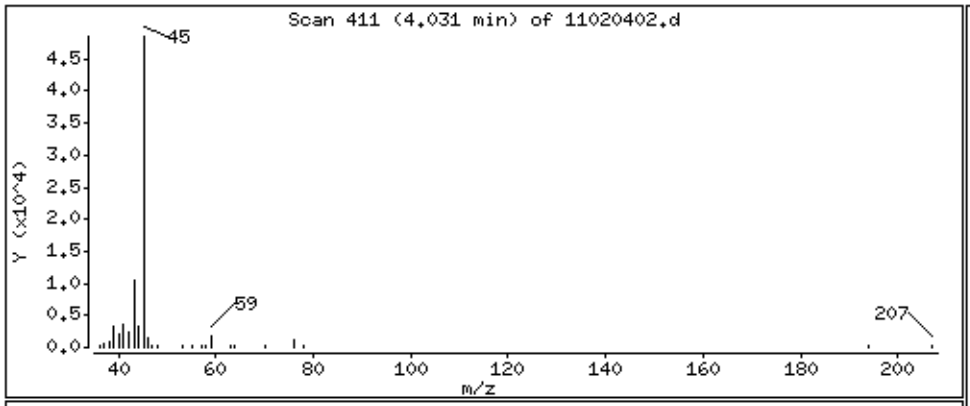
Operator: LAct

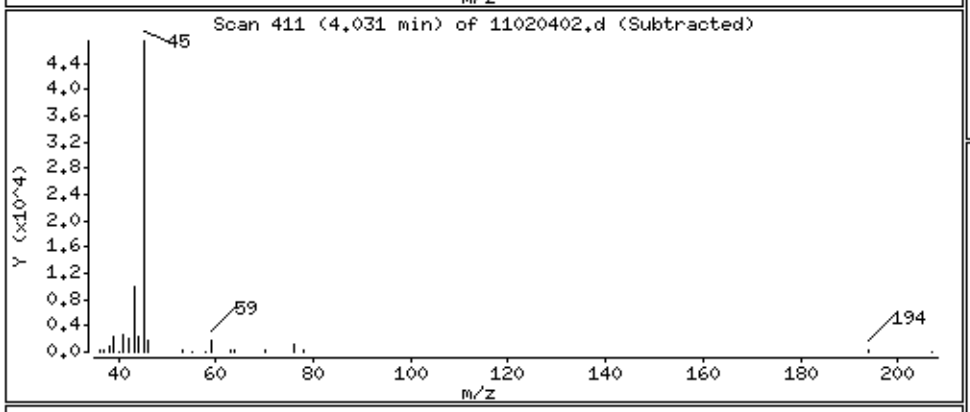
Column phase: RTx-624

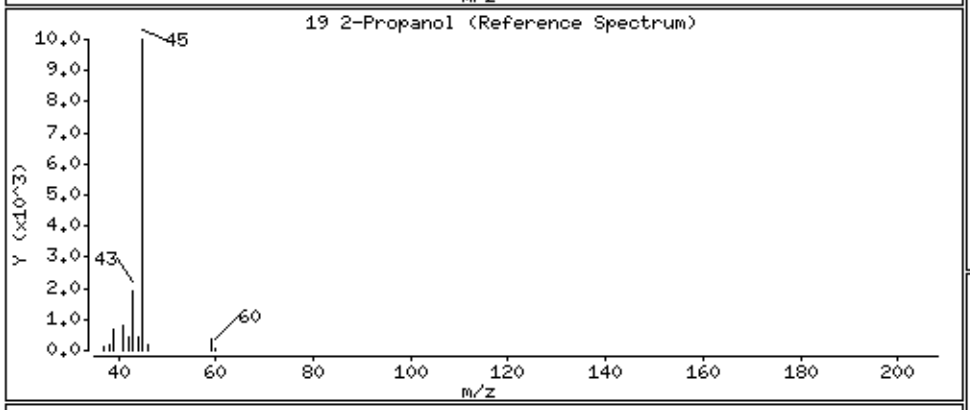
Column diameter: 0.53

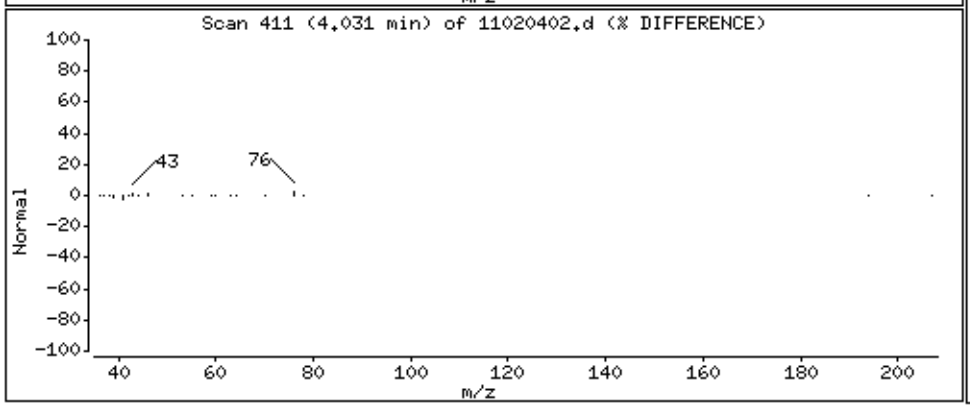
19 2-Propanol

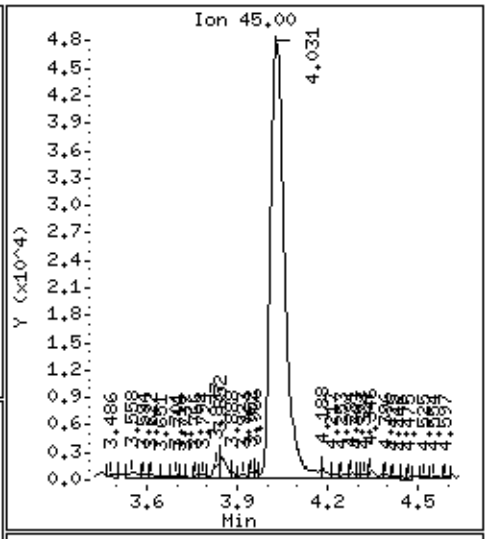
Concentration: 54.141 NG

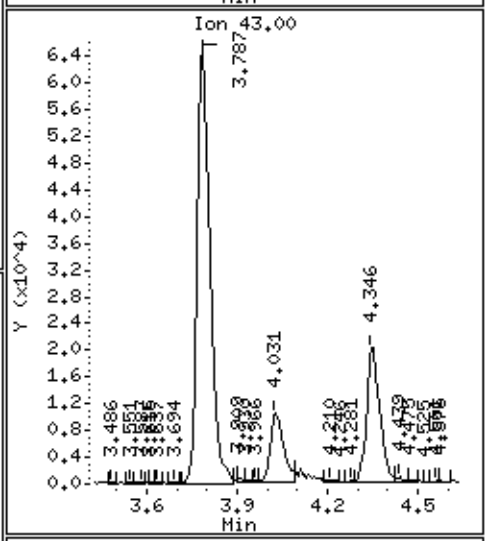


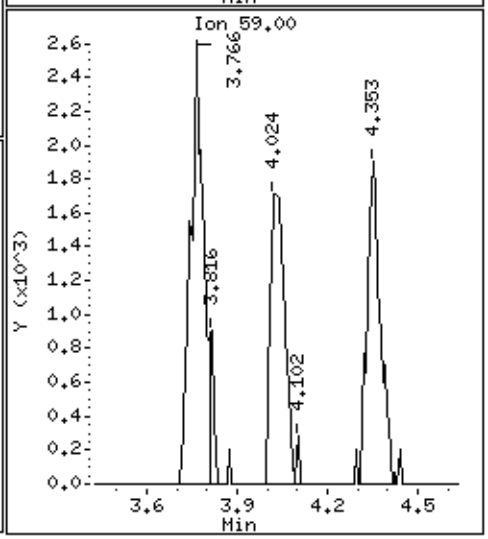












Data File: /chem/msd11.i/04feb16.b/11020402.d

Date : 04-FEB-2016 10:54

Client ID: LCS

Instrument: msd11.i

Sample Info: ;VI VOC+PAH LCS;LCS

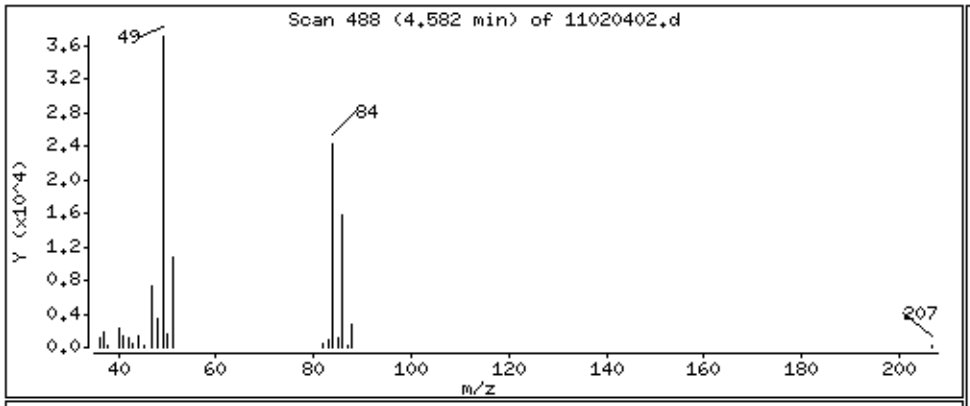
Operator: LAct

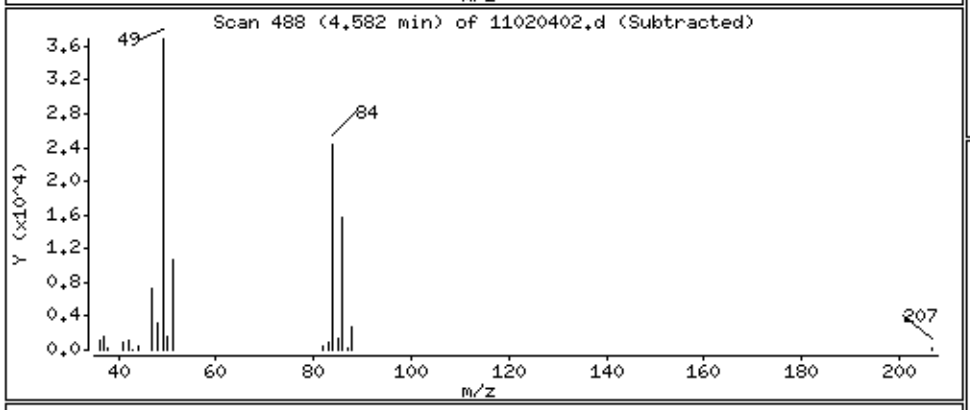
Column phase: RTx-624

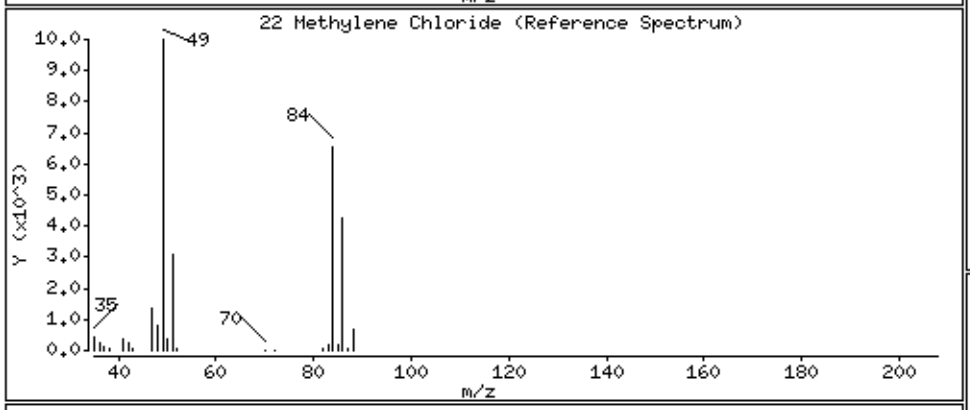
Column diameter: 0.53

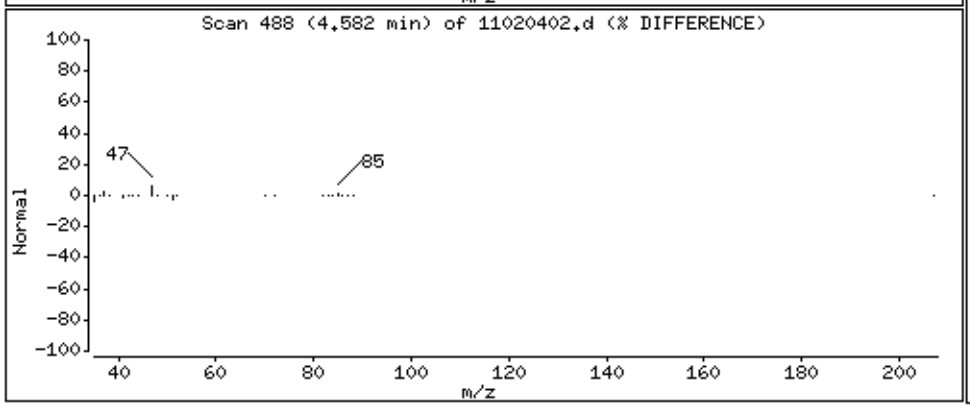
22 Methylene Chloride

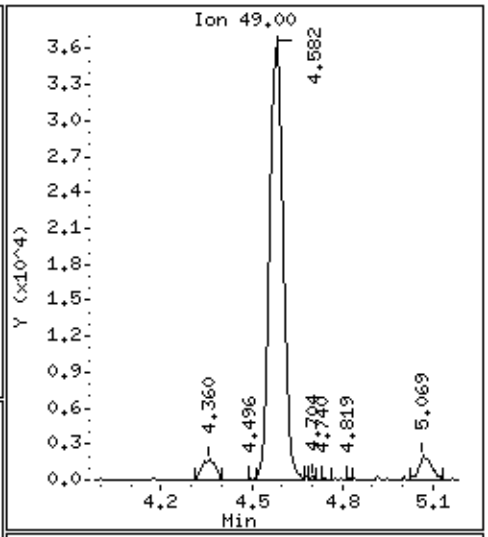
Concentration: 67.587 NG

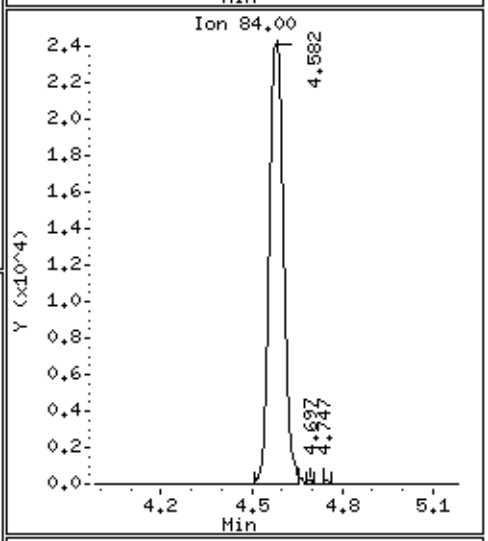


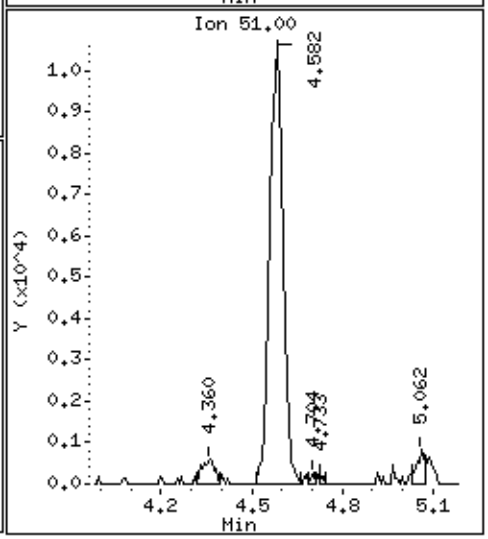












Data File: /chem/msd11.i/04feb16.b/11020402.d

Date : 04-FEB-2016 10:54

Client ID: LCS

Instrument: msd11.i

Sample Info: ;VI VOC+PAH LCS;LCS

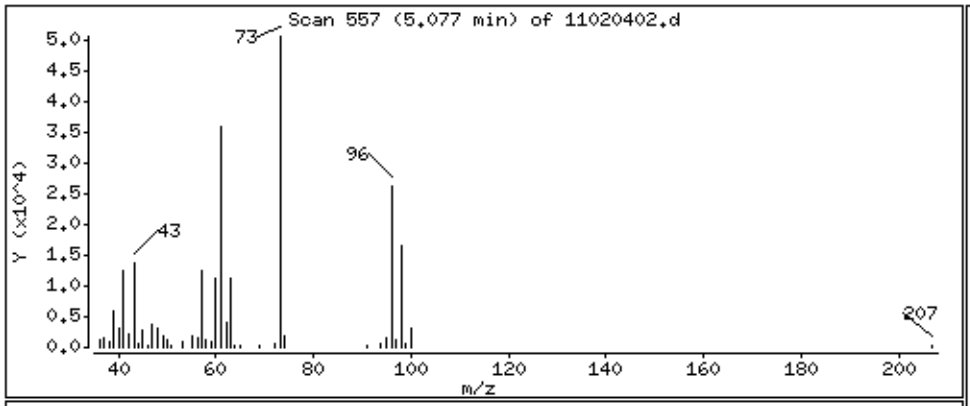
Operator: LAct

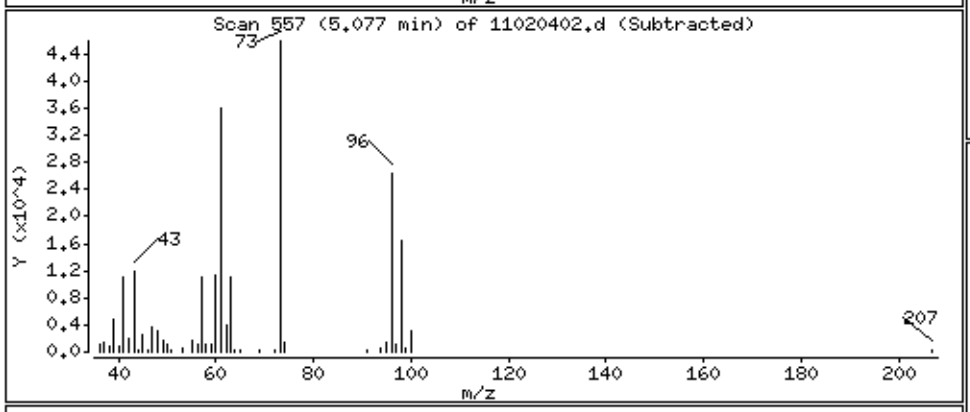
Column phase: RTx-624

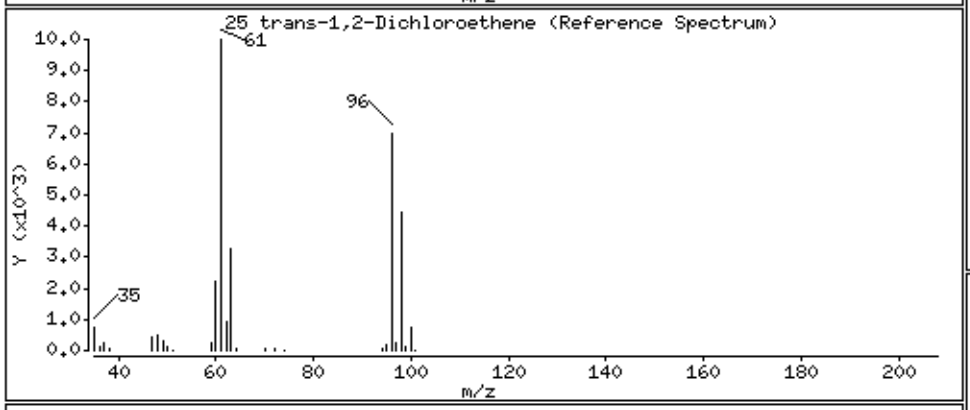
Column diameter: 0.53

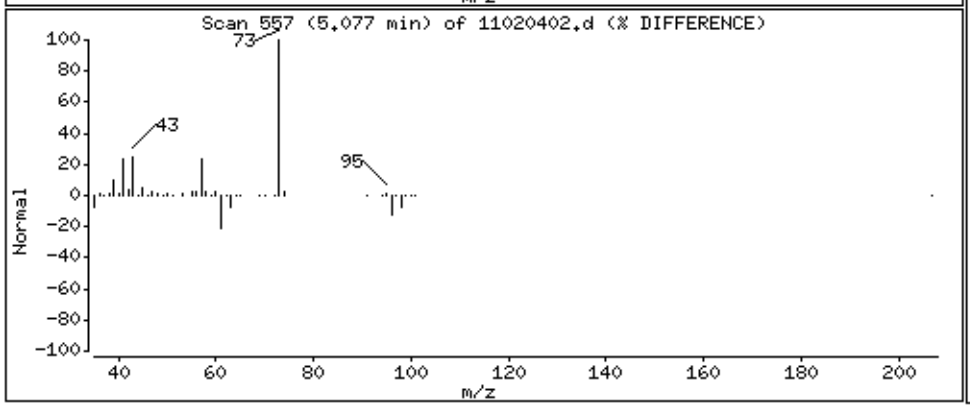
25 trans-1,2-Dichloroethene

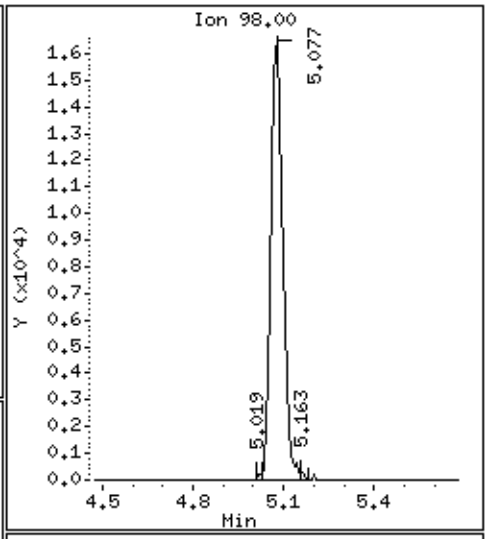
Concentration: 66.224 NG

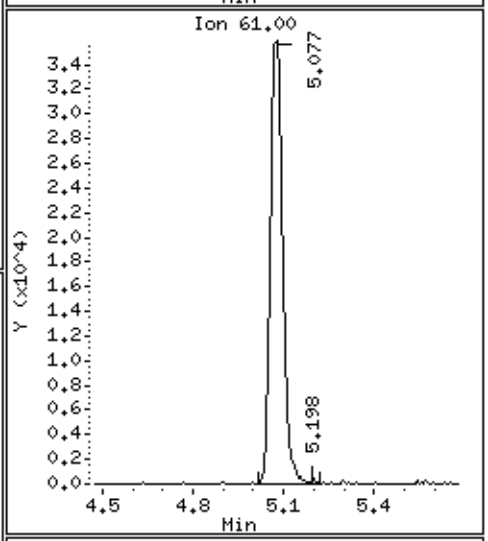


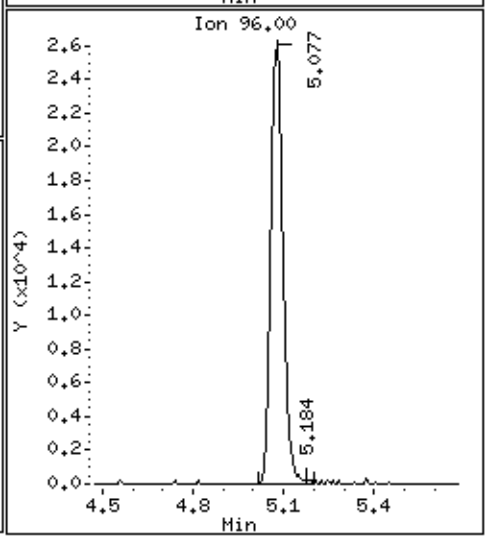












Data File: /chem/msd11.i/04feb16.b/11020402.d

Date : 04-FEB-2016 10:54

Client ID: LCS

Instrument: msd11.i

Sample Info: ;VI VOC+PAH LCS;LCS

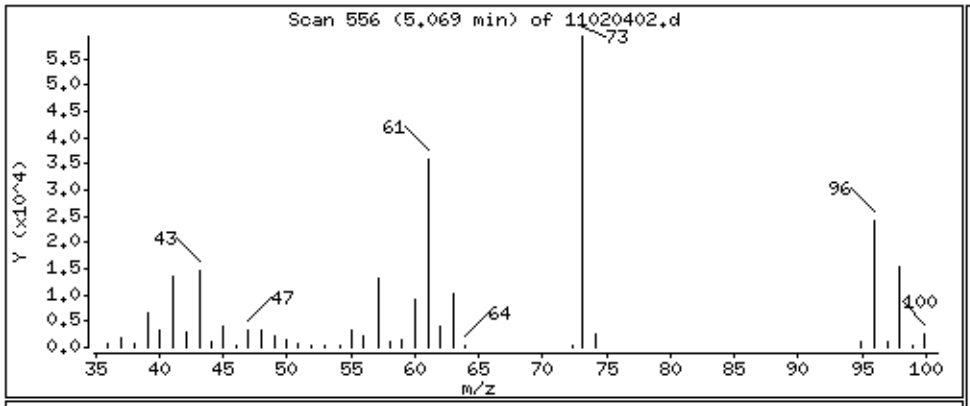
Operator: LAct

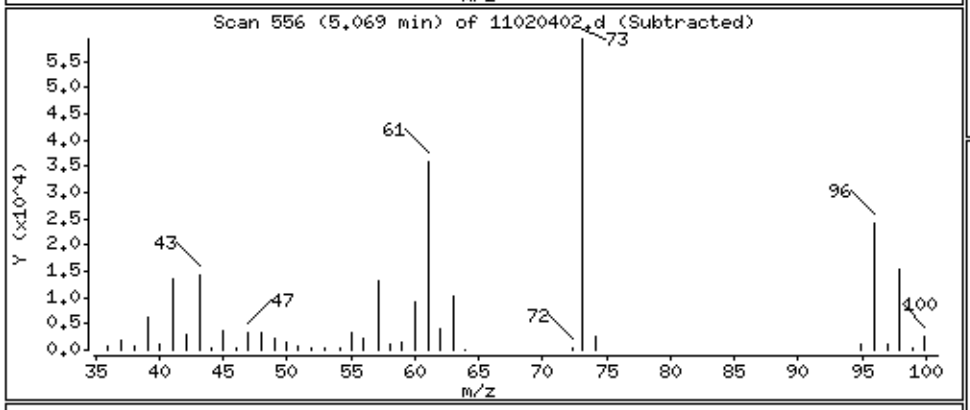
Column phase: RTx-624

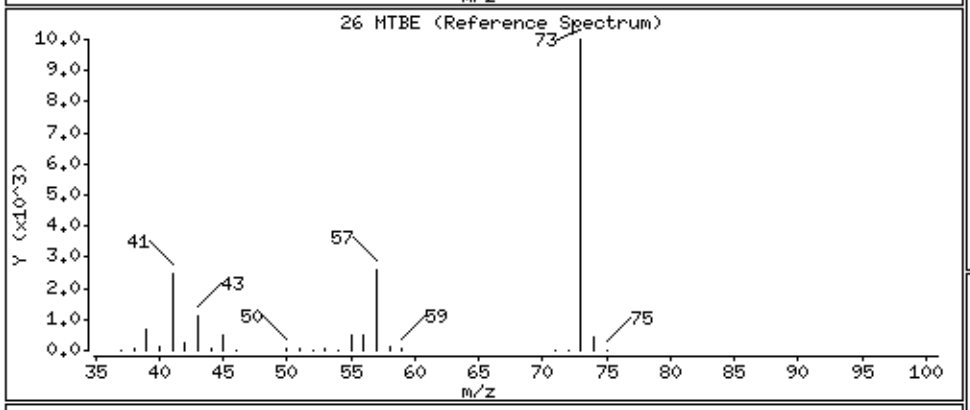
Column diameter: 0.53

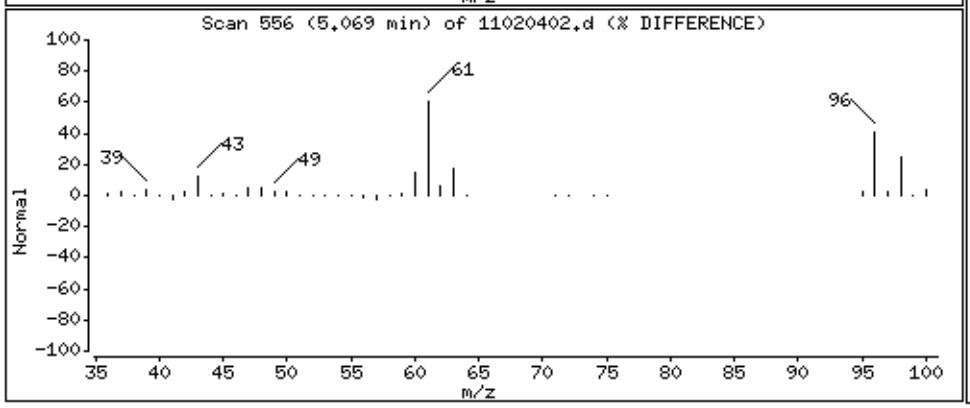
26 MTBE

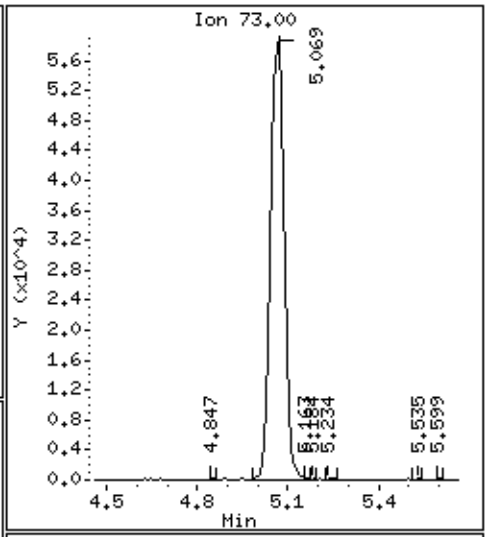
Concentration: 70.736 NG

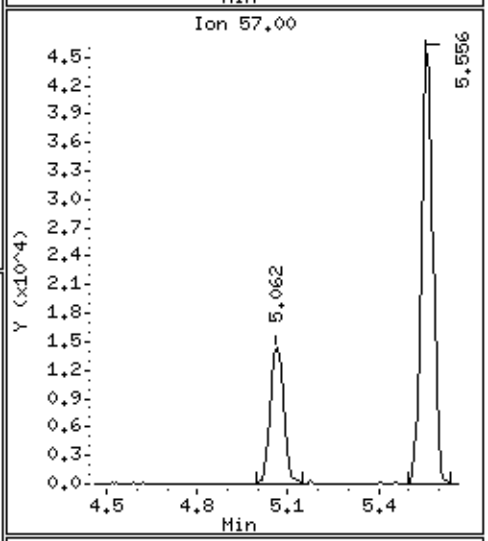


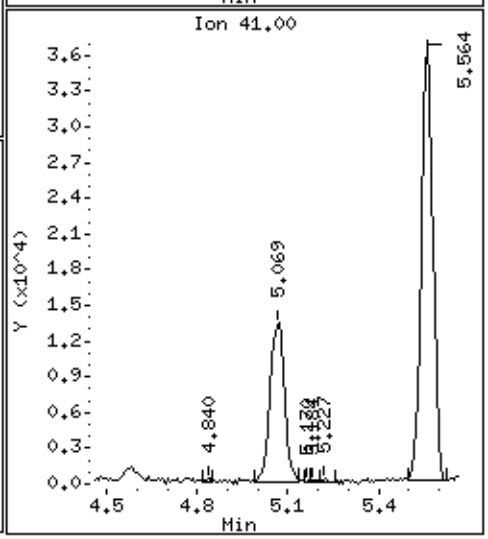












Data File: /chem/msd11.i/04feb16.b/11020402.d

Date : 04-FEB-2016 10:54

Client ID: LCS

Instrument: msd11.i

Sample Info: ;VI VOC+PAH LCS;LCS

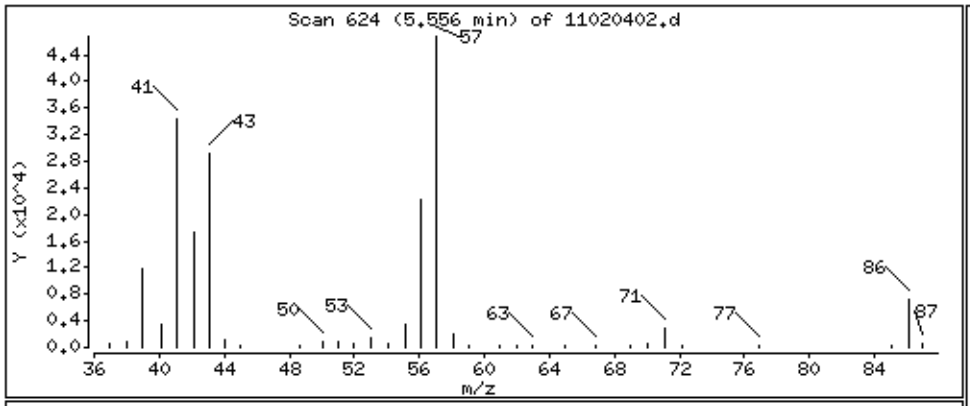
Operator: LAct

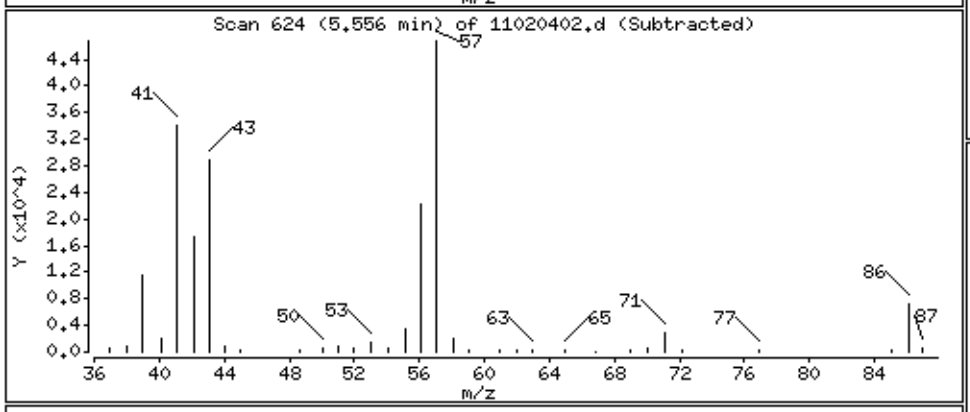
Column phase: RTx-624

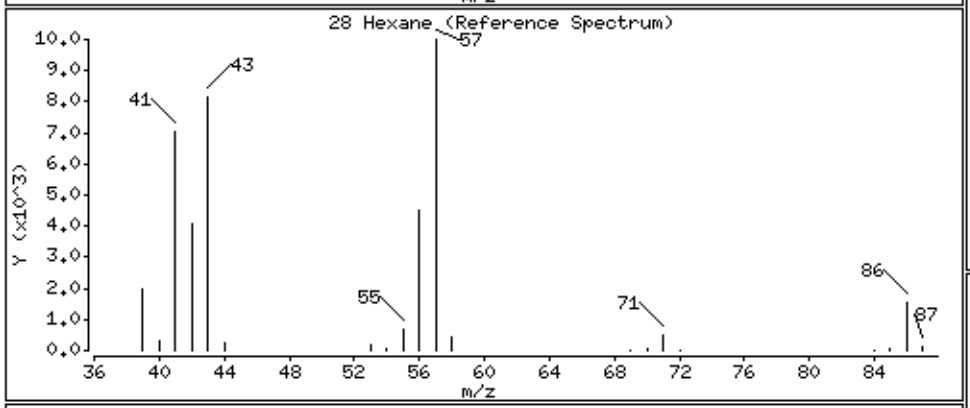
Column diameter: 0.53

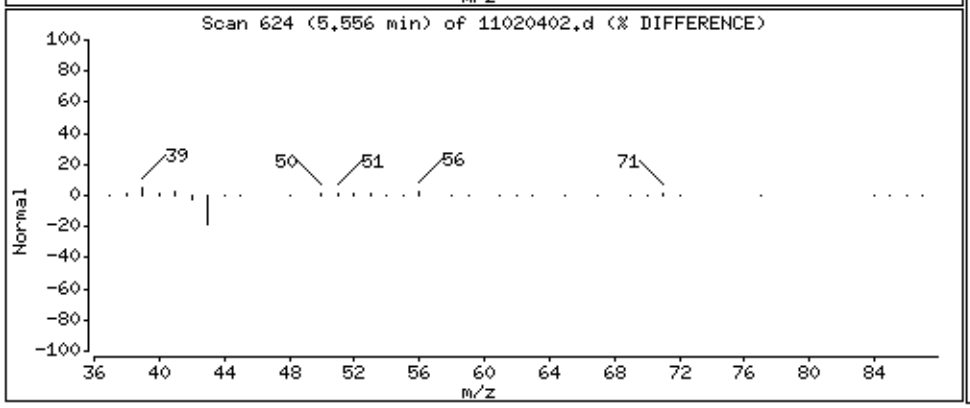
28 Hexane

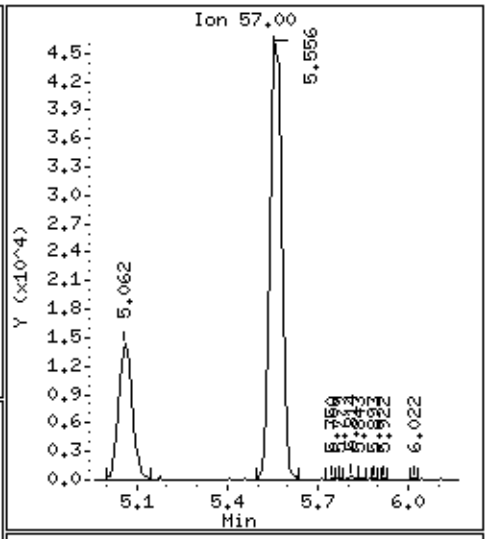
Concentration: 71.457 NG

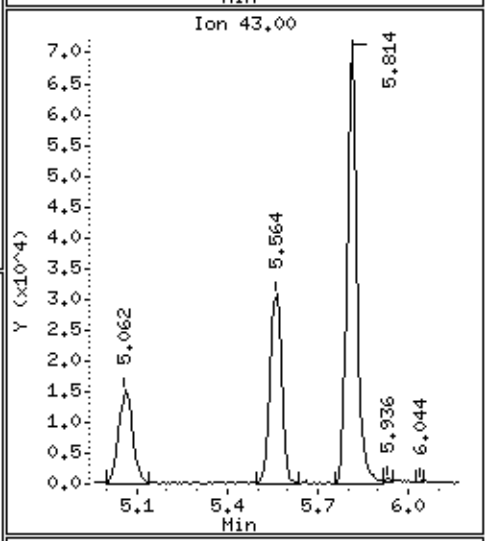


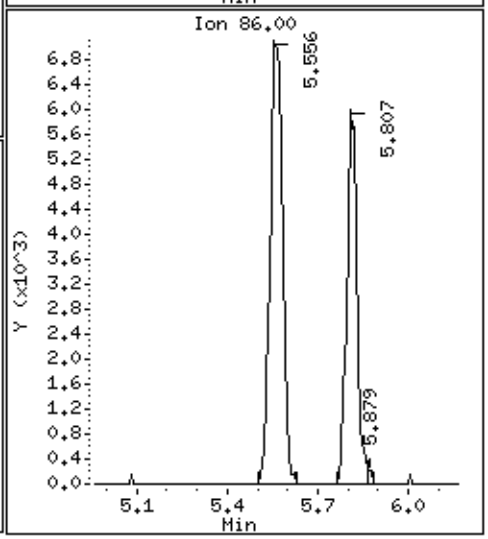












Data File: /chem/msd11.i/04feb16.b/11020402.d

Date : 04-FEB-2016 10:54

Client ID: LCS

Instrument: msd11.i

Sample Info: ;VI VOC+PAH LCS;LCS

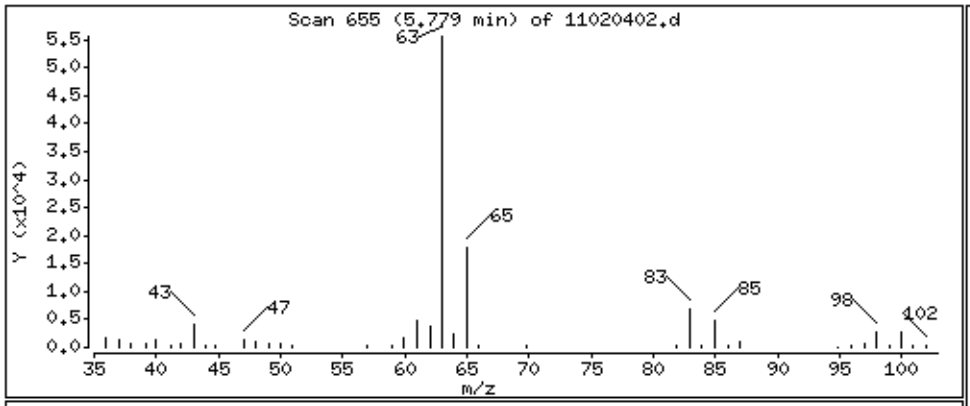
Operator: LAct

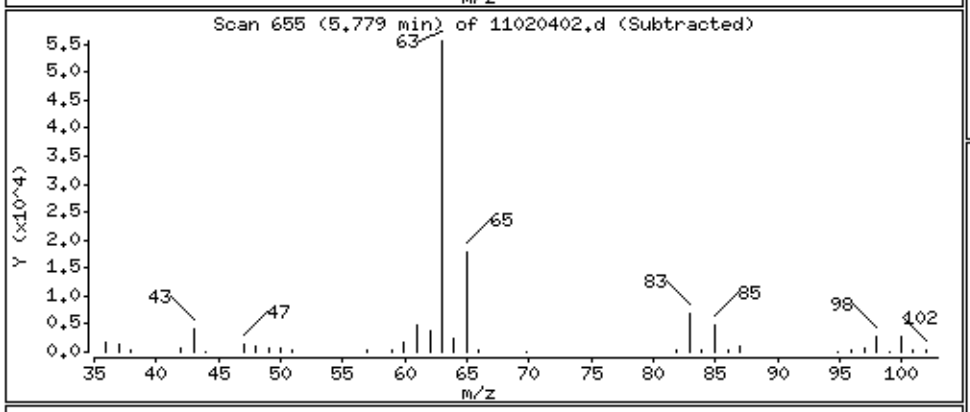
Column phase: RTx-624

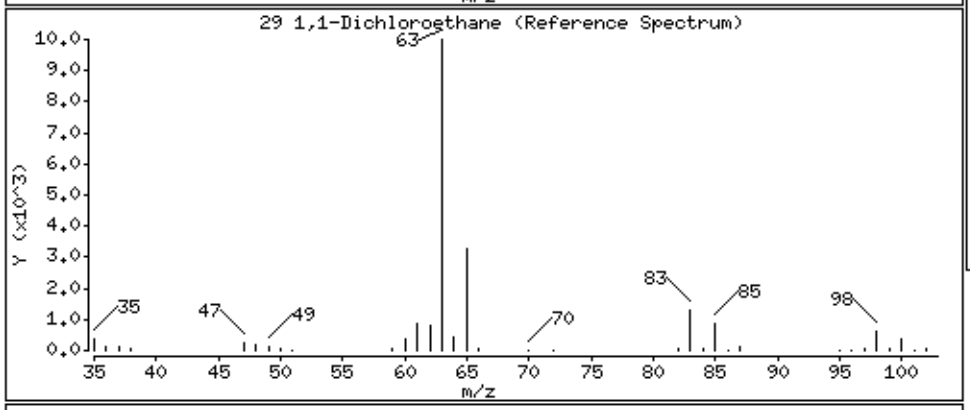
Column diameter: 0.53

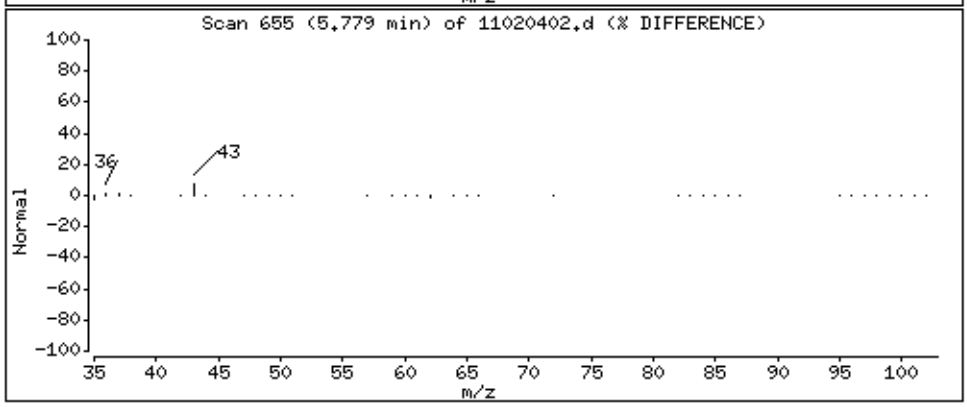
29 1,1-Dichloroethane

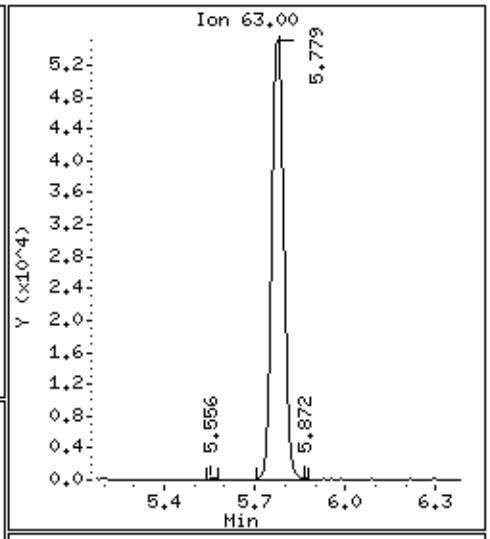
Concentration: 85.420 NG

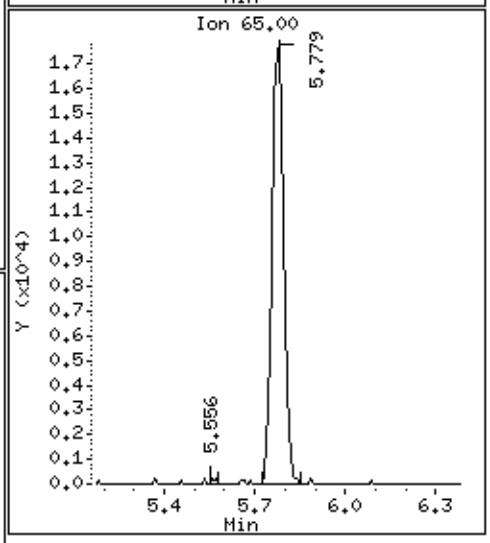












Data File: /chem/msd11.i/04feb16.b/11020402.d

Date : 04-FEB-2016 10:54

Client ID: LCS

Instrument: msd11.i

Sample Info: ;VI VOC+PAH LCS;LCS

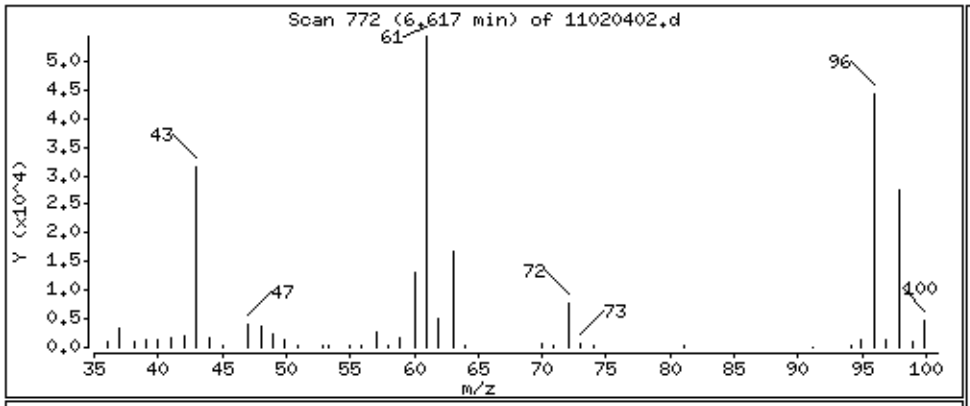
Operator: LAct

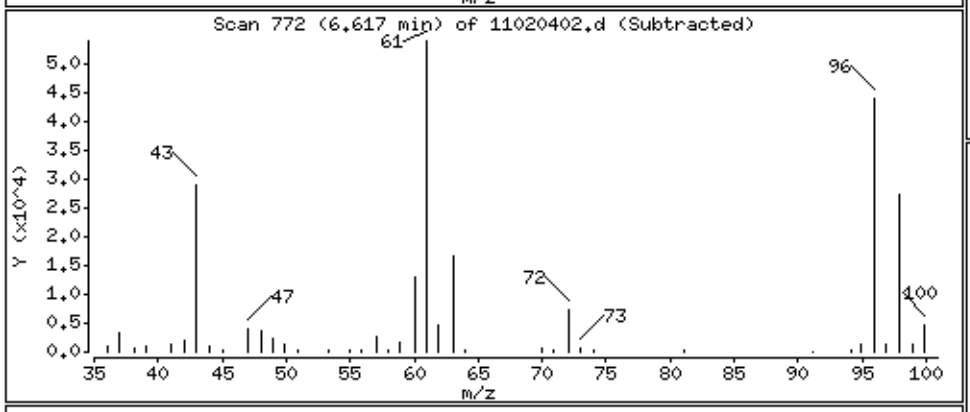
Column phase: RTx-624

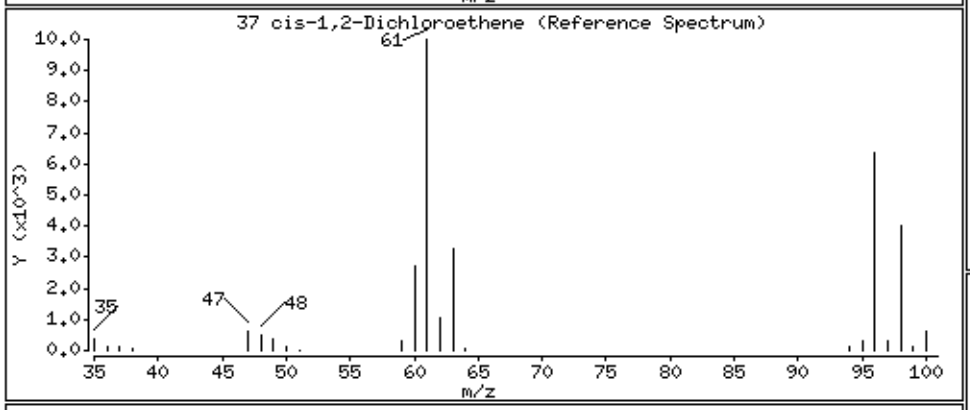
Column diameter: 0.53

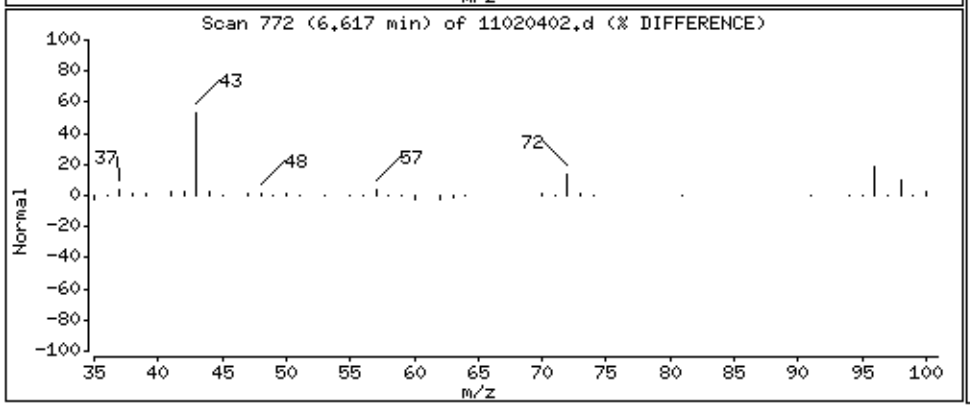
37 cis-1,2-Dichloroethene

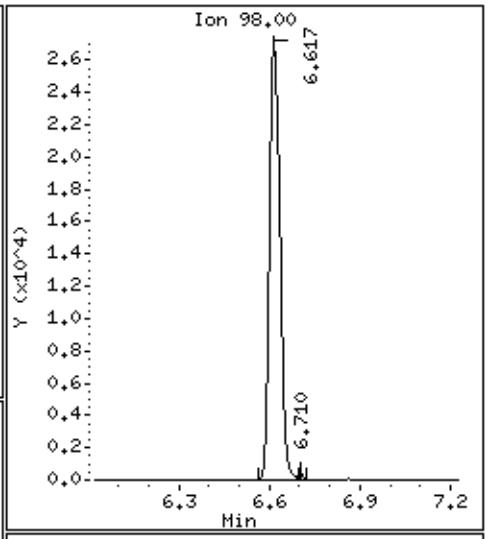
Concentration: 87.703 NG

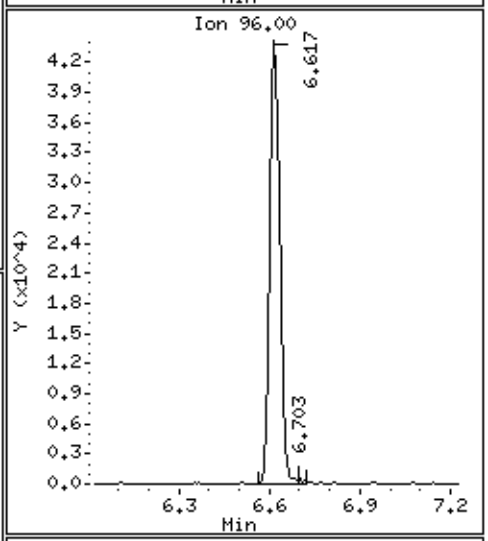


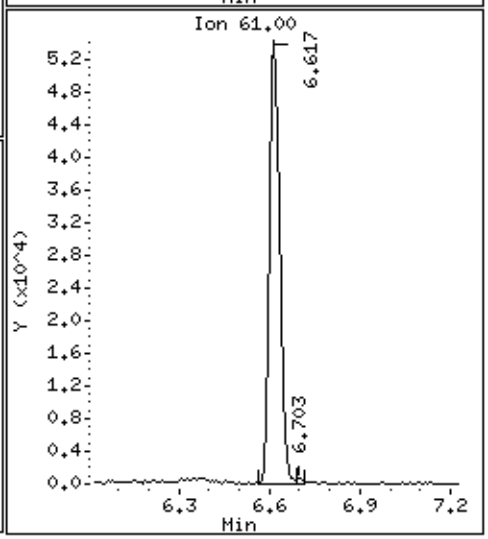












Data File: /chem/msd11.i/04feb16.b/11020402.d

Date : 04-FEB-2016 10:54

Client ID: LCS

Instrument: msd11.i

Sample Info: ;VI VOC+PAH LCS;LCS

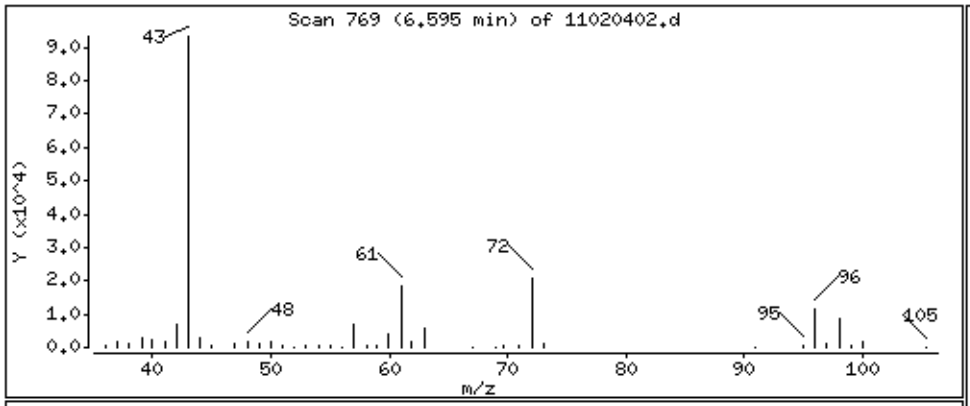
Operator: LAct

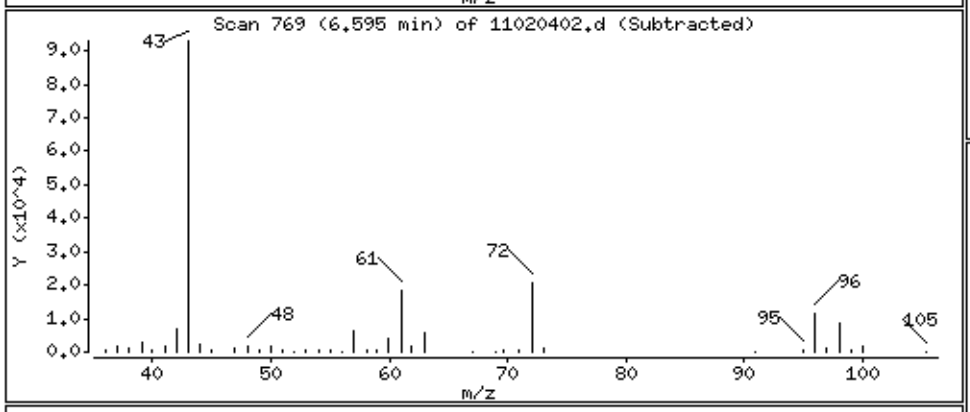
Column phase: RTx-624

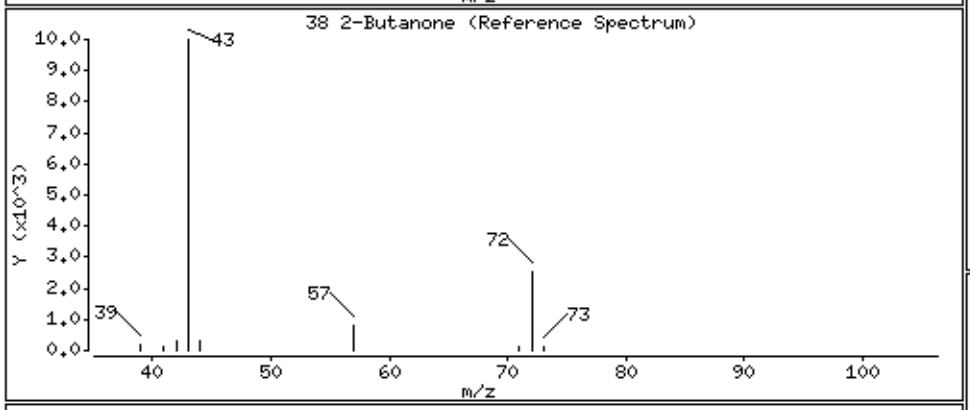
Column diameter: 0.53

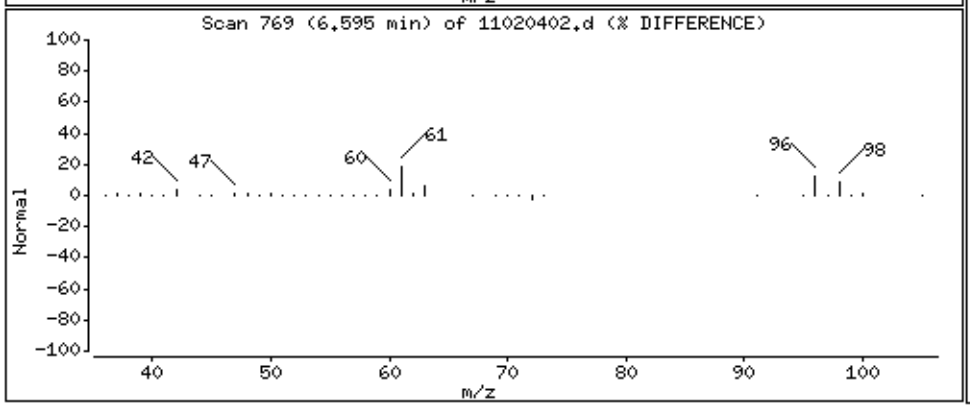
38 2-Butanone

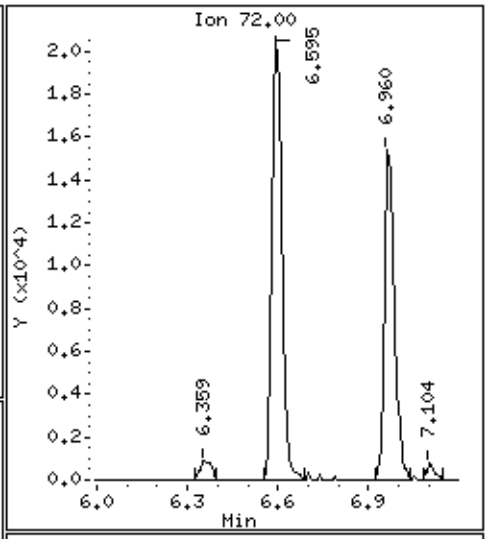
Concentration: 70.477 NG

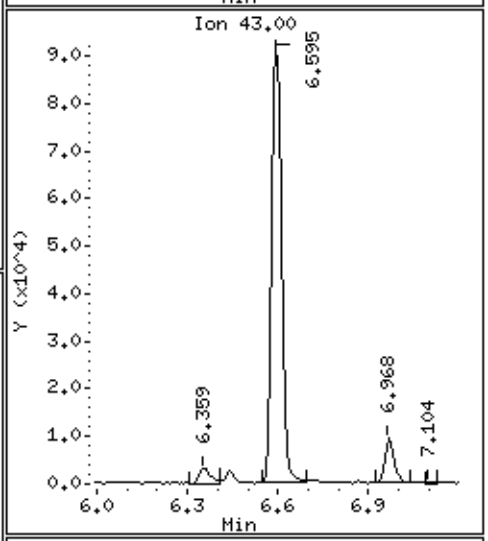


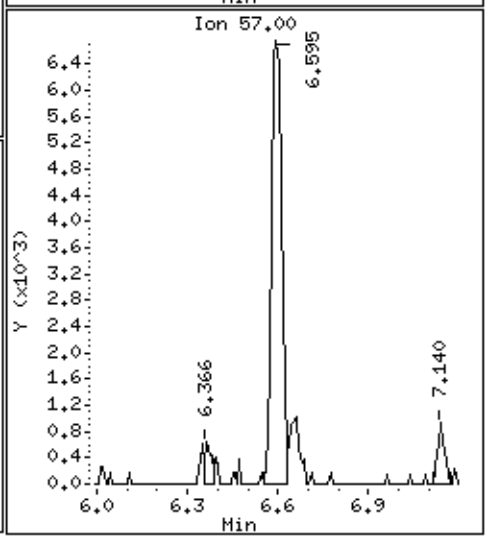












Data File: /chem/msd11.i/04feb16.b/11020402.d

Date : 04-FEB-2016 10:54

Client ID: LCS

Instrument: msd11.i

Sample Info: ;VI VOC+PAH LCS;LCS

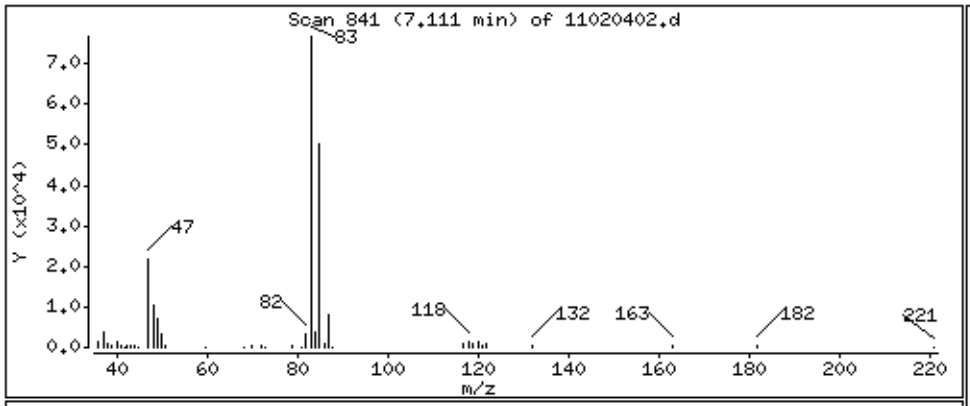
Operator: LAct

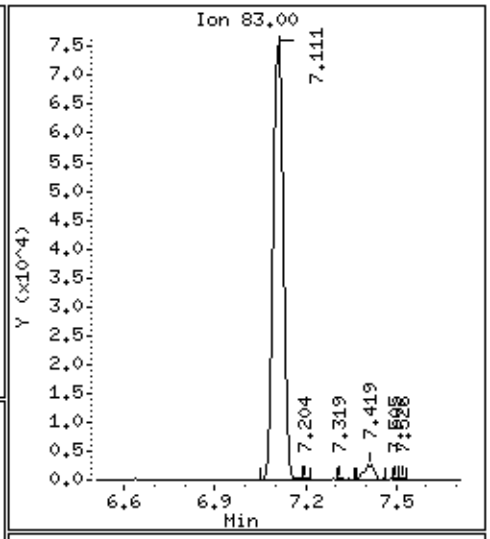
Column phase: RTx-624

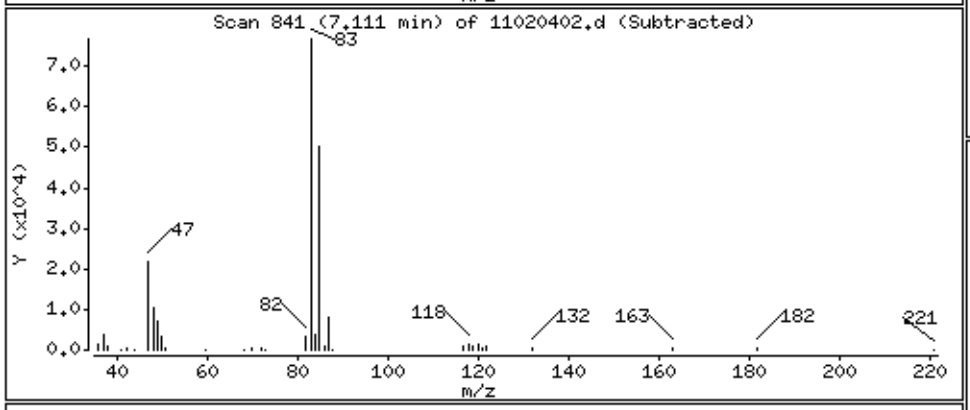
Column diameter: 0.53

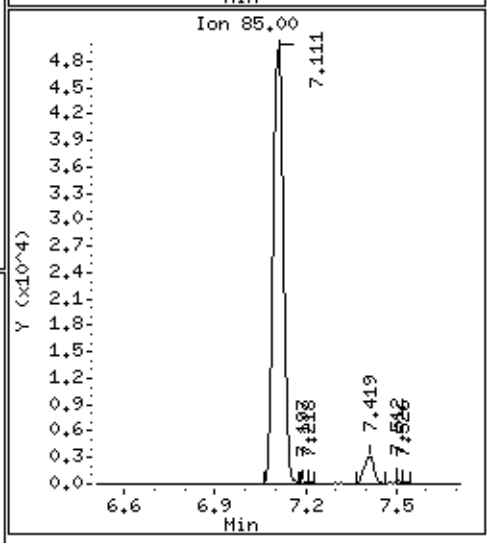
44 Chloroform

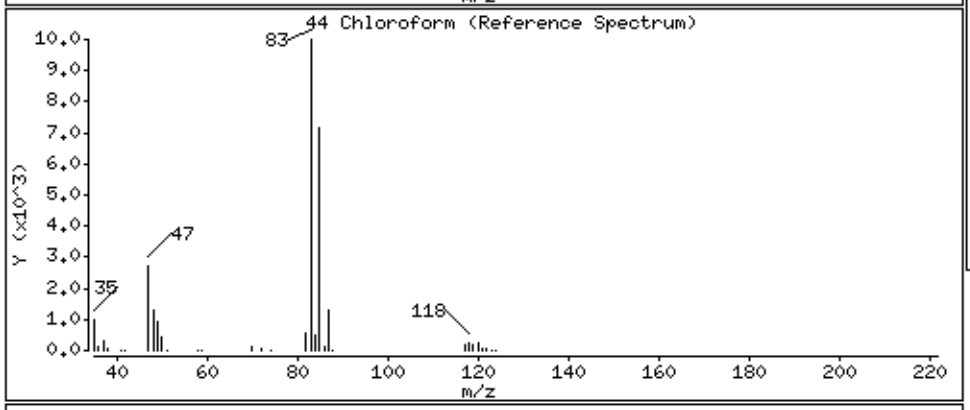
Concentration: 95.547 NG

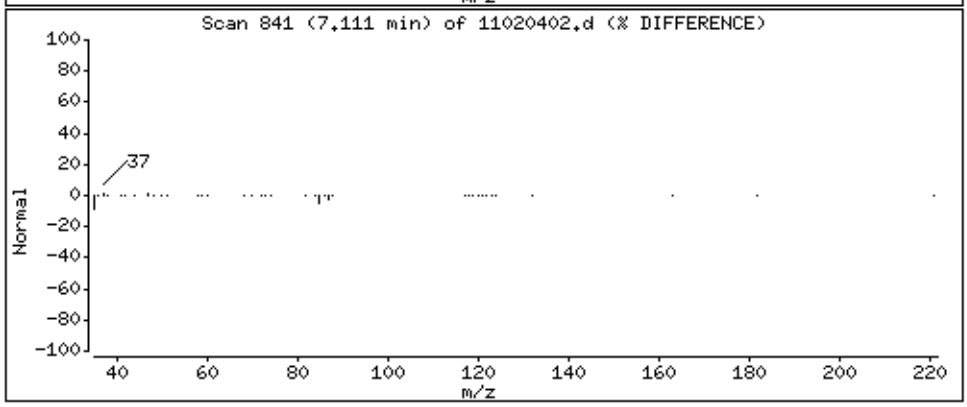












Data File: /chem/msd11.i/04feb16.b/11020402.d

Date : 04-FEB-2016 10:54

Client ID: LCS

Instrument: msd11.i

Sample Info: ;VI VOC+PAH LCS;LCS

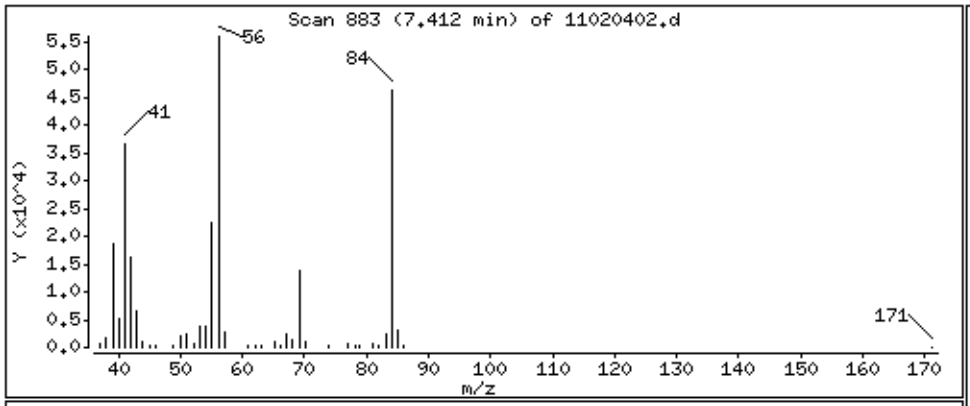
Operator: LAct

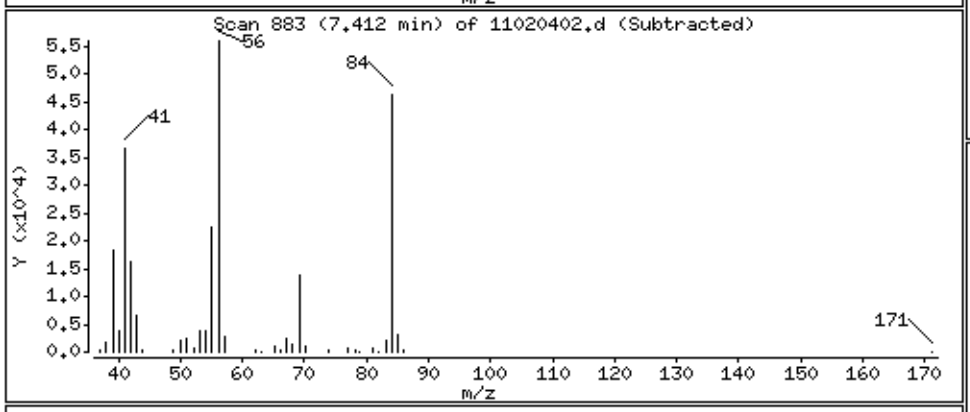
Column phase: RTx-624

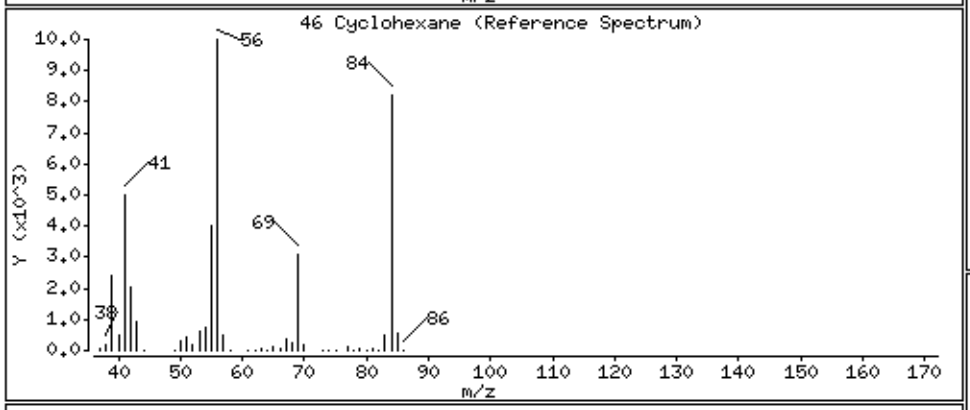
Column diameter: 0.53

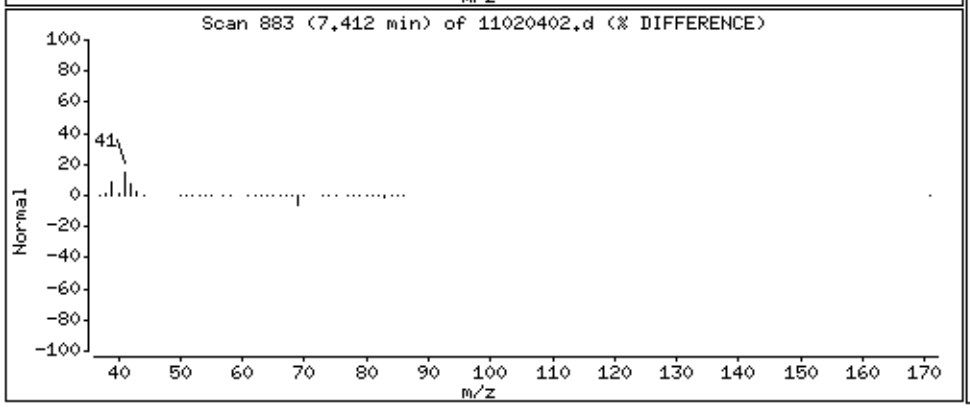
46 Cyclohexane

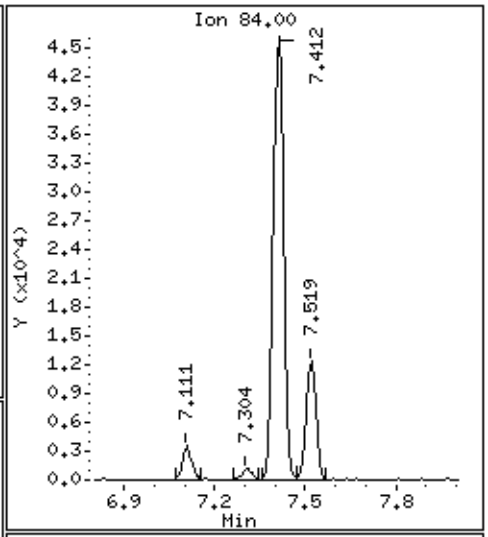
Concentration: 68.258 NG

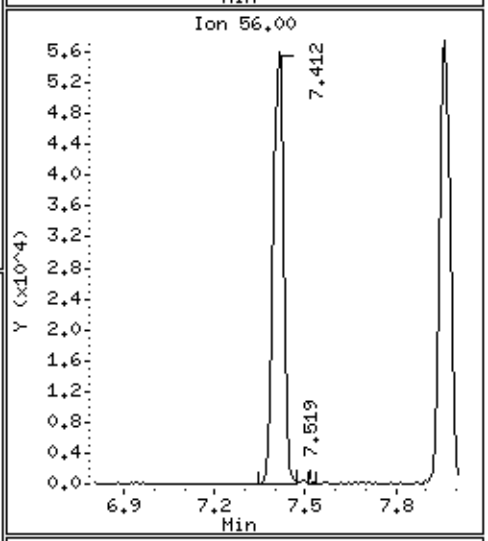


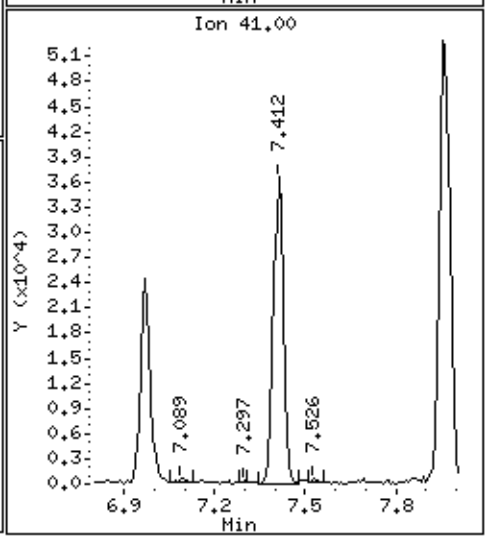












Data File: /chem/msd11.i/04feb16.b/11020402.d

Date : 04-FEB-2016 10:54

Client ID: LCS

Instrument: msd11.i

Sample Info: ;VI VOC+PAH LCS;LCS

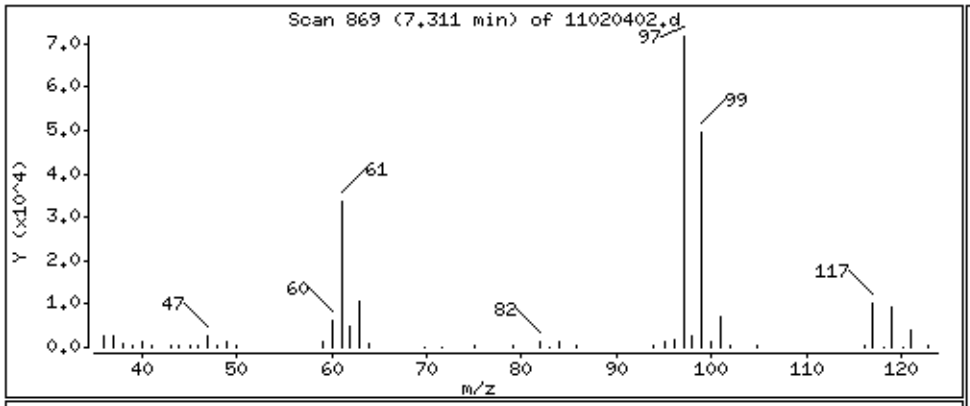
Operator: LAct

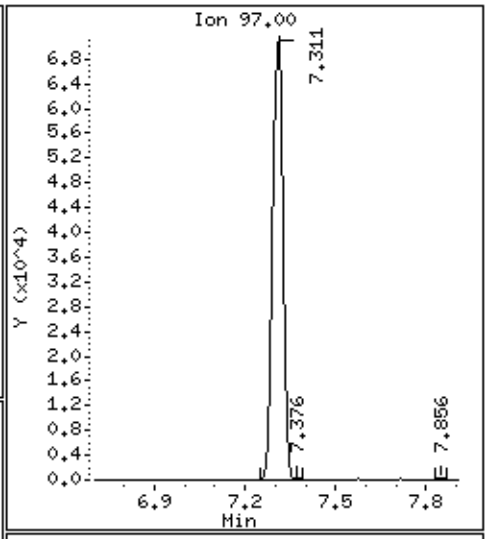
Column phase: RTx-624

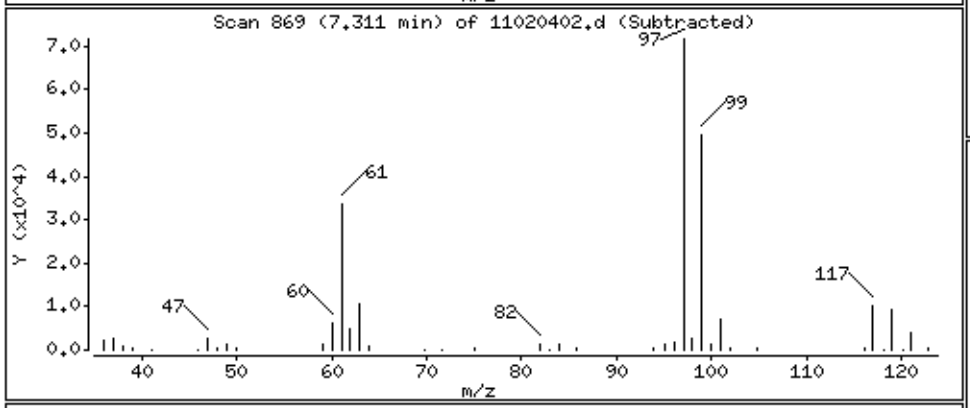
Column diameter: 0.53

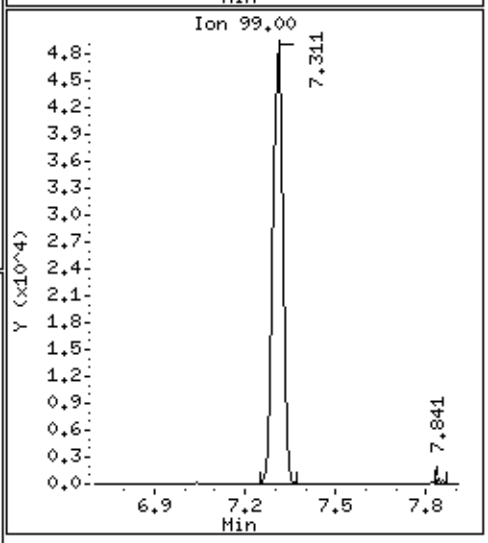
45 1,1,1-Trichloroethane

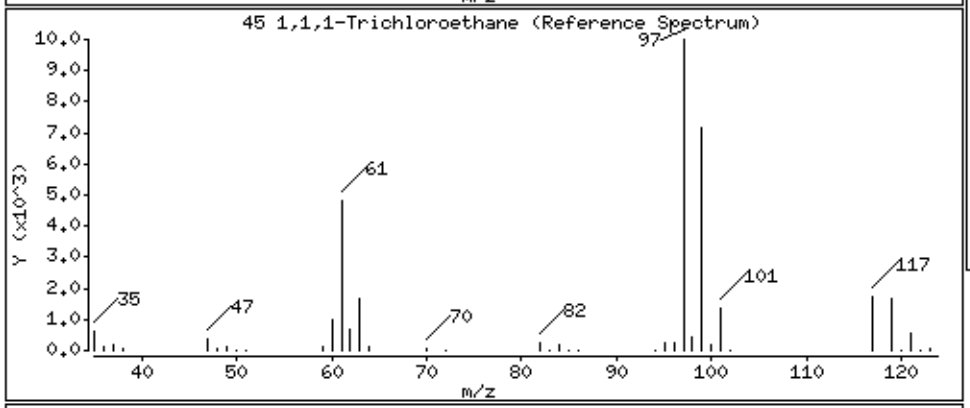
Concentration: 114.32 NG

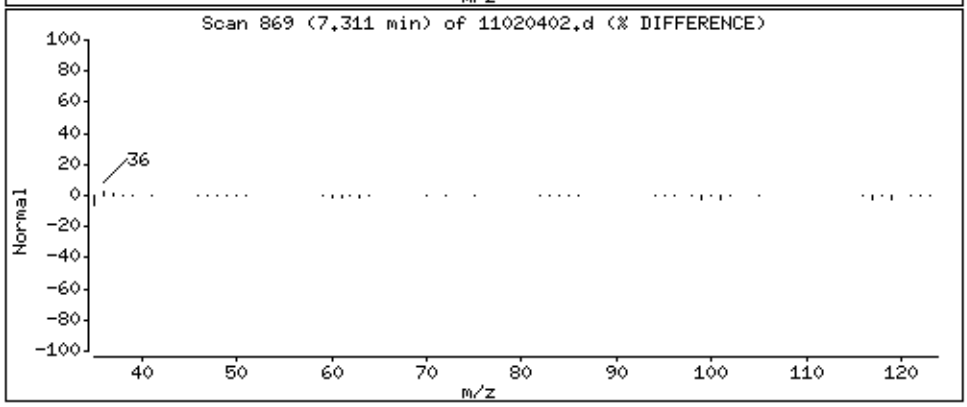












Data File: /chem/msd11.i/04feb16.b/11020402.d

Date : 04-FEB-2016 10:54

Client ID: LCS

Instrument: msd11.i

Sample Info: ;VI VOC+PAH LCS;LCS

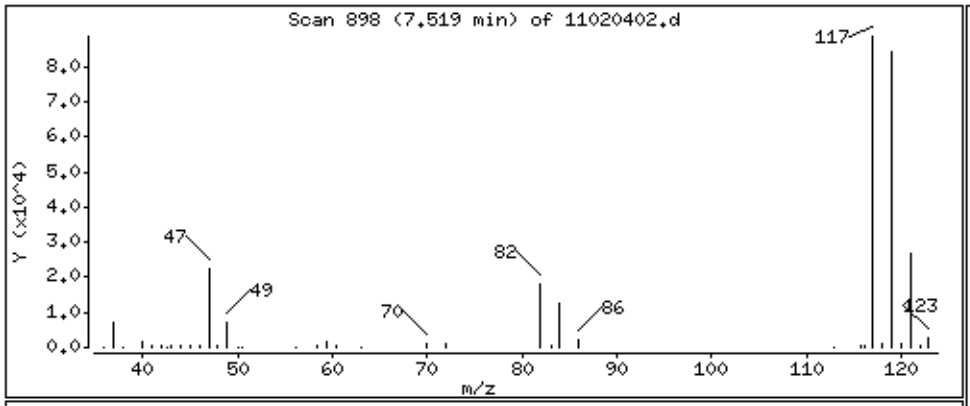
Operator: LAct

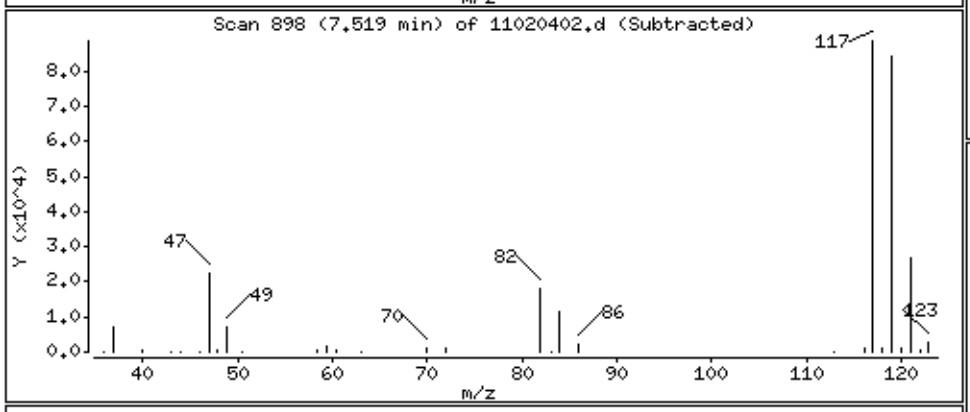
Column phase: RTx-624

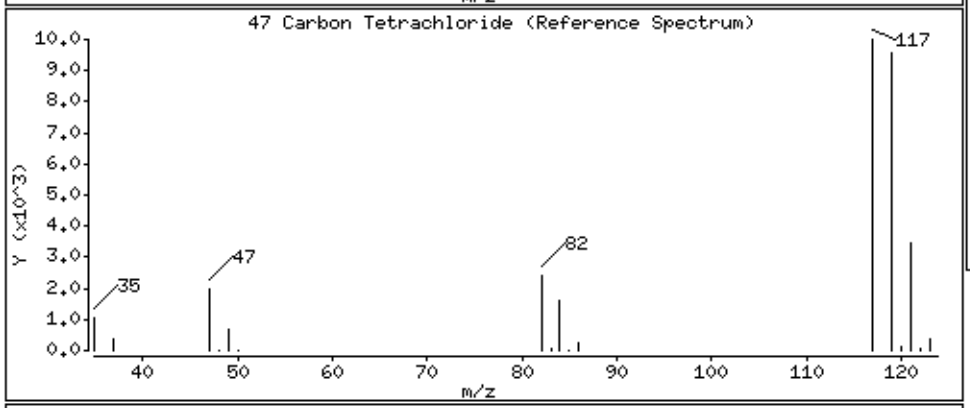
Column diameter: 0.53

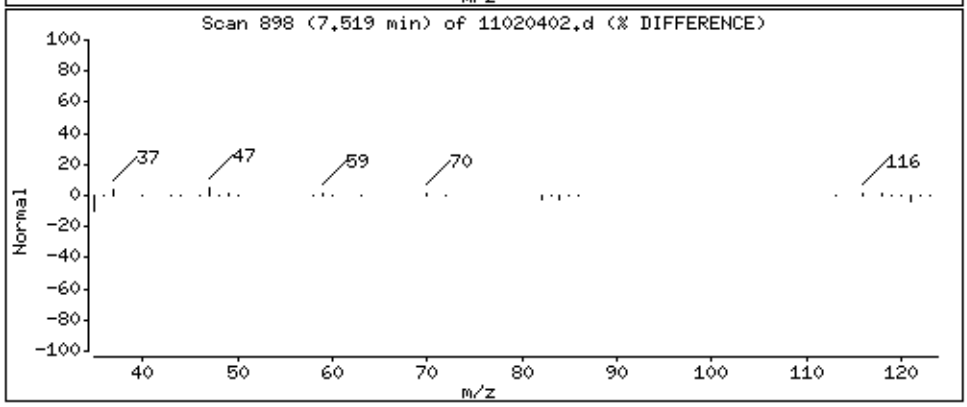
47 Carbon Tetrachloride

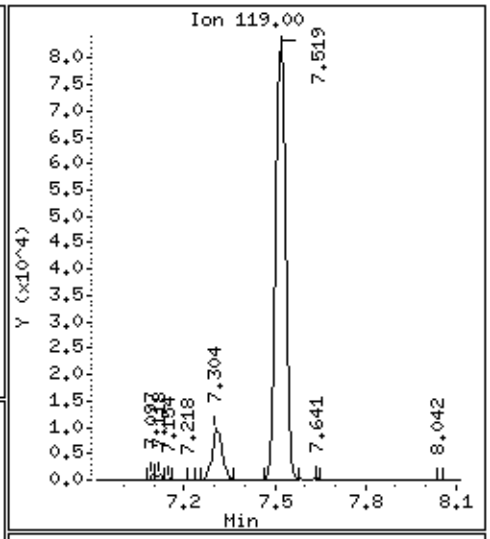
Concentration: 139.72 NG

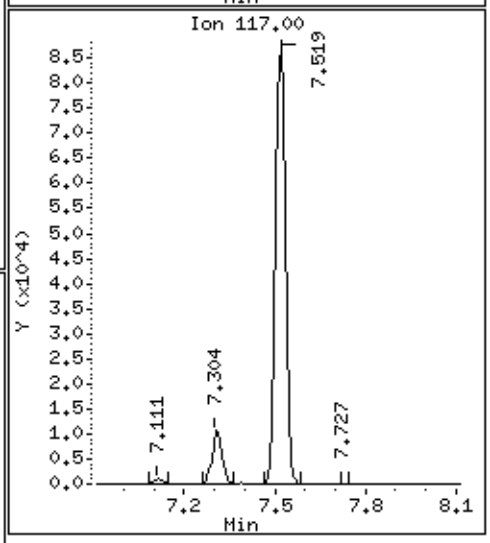












Data File: /chem/msd11.i/04feb16.b/11020402.d

Date : 04-FEB-2016 10:54

Client ID: LCS

Instrument: msd11.i

Sample Info: ;VI VOC+PAH LCS;LCS

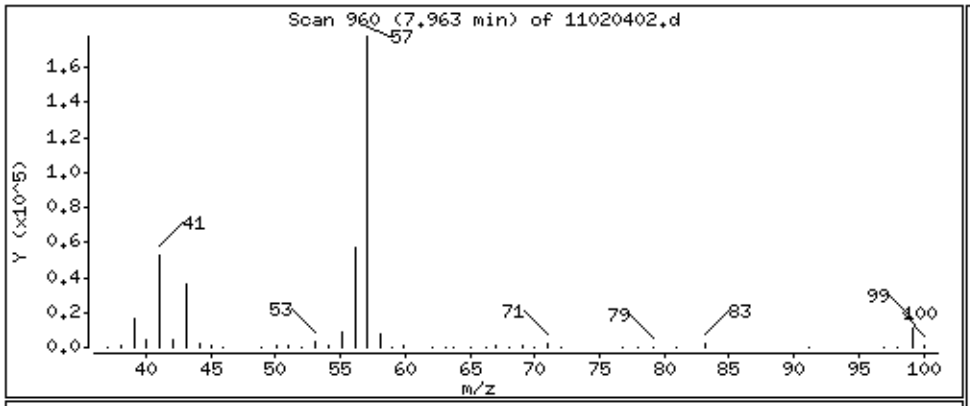
Operator: LAct

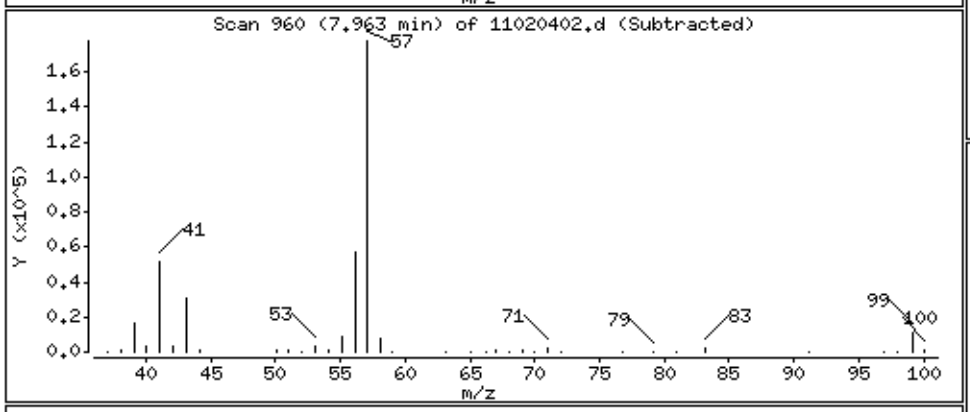
Column phase: RTx-624

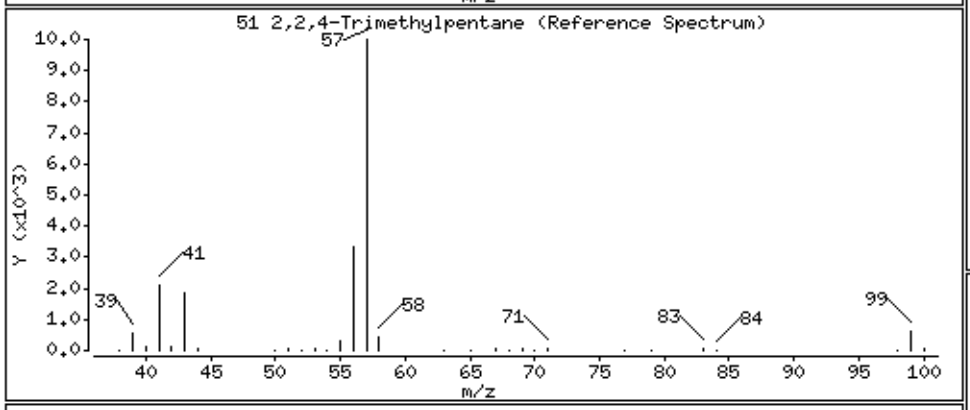
Column diameter: 0.53

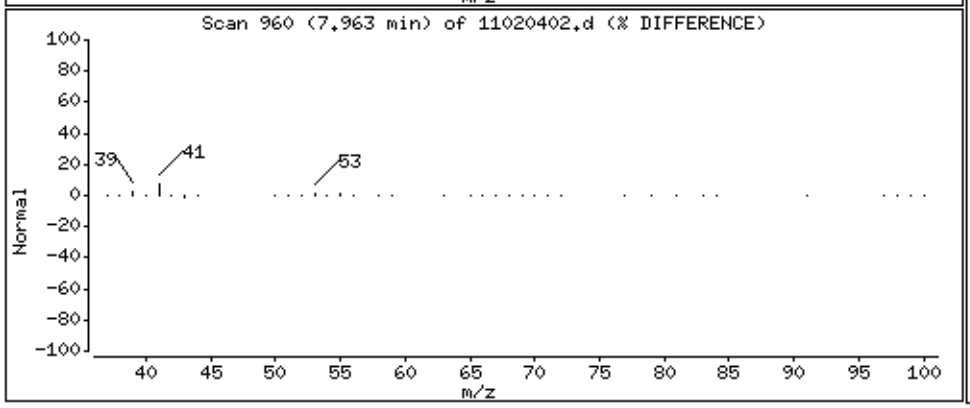
51 2,2,4-Trimethylpentane

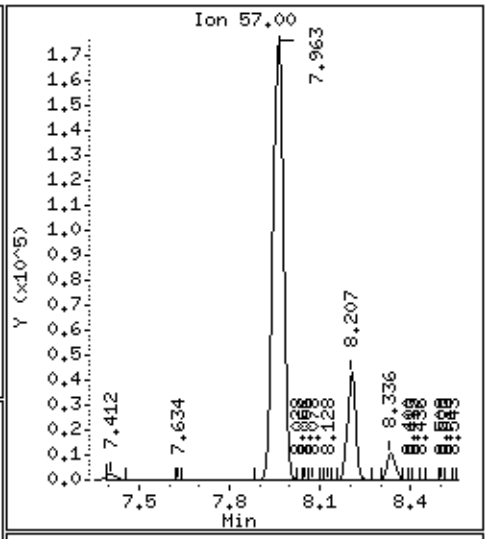
Concentration: 89.558 NG

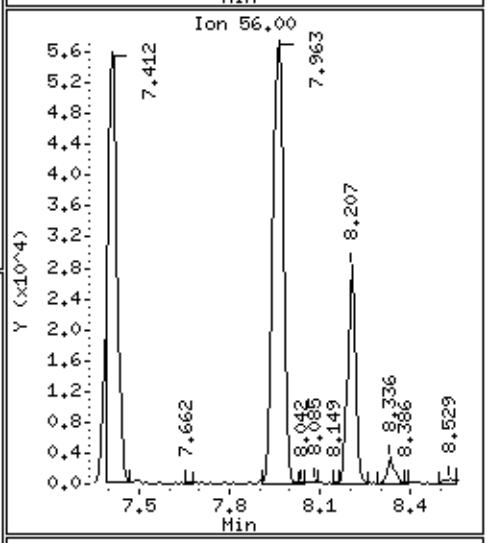


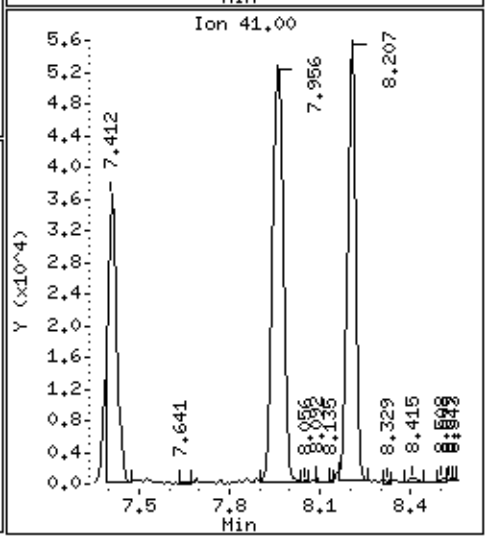












Data File: /chem/msd11.i/04feb16.b/11020402.d

Date : 04-FEB-2016 10:54

Client ID: LCS

Instrument: msd11.i

Sample Info: ;VI VOC+PAH LCS;LCS

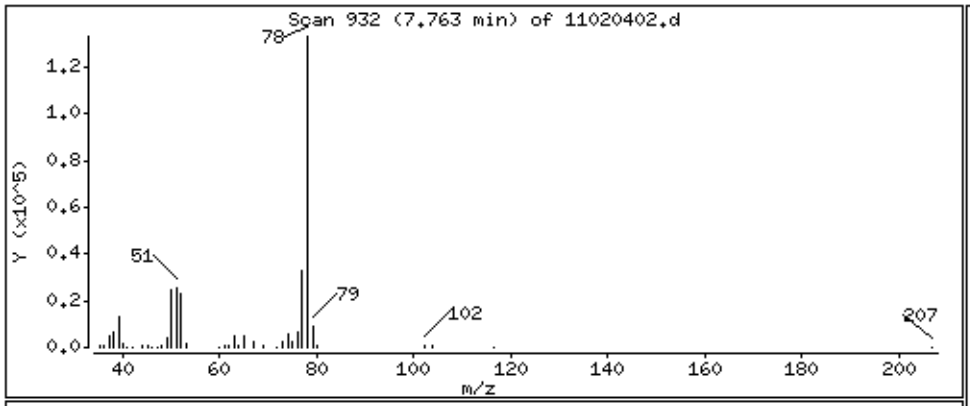
Operator: LAct

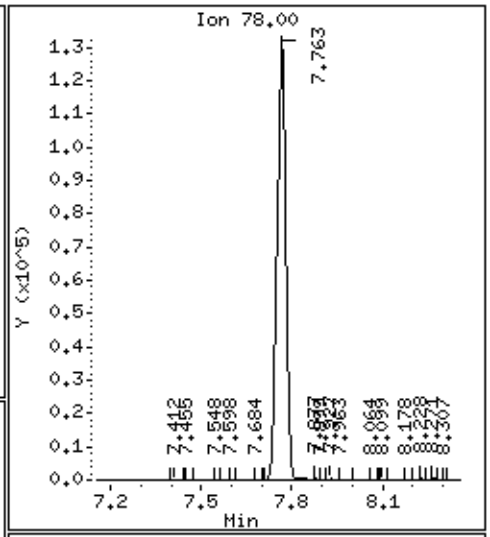
Column phase: RTx-624

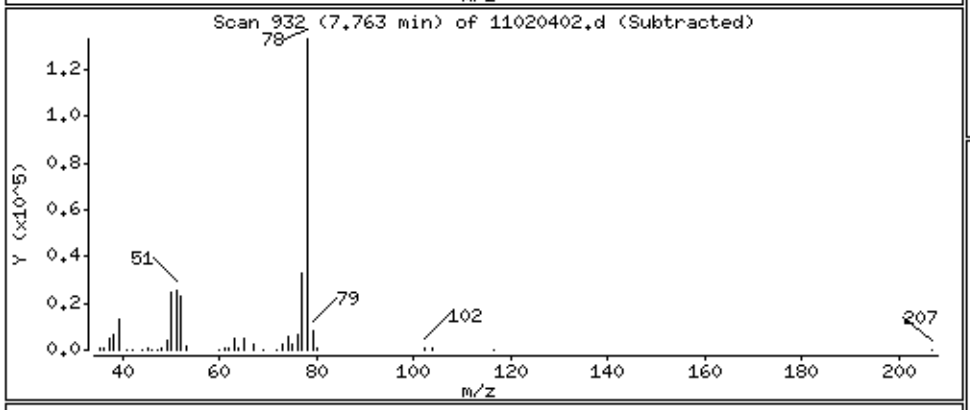
Column diameter: 0.53

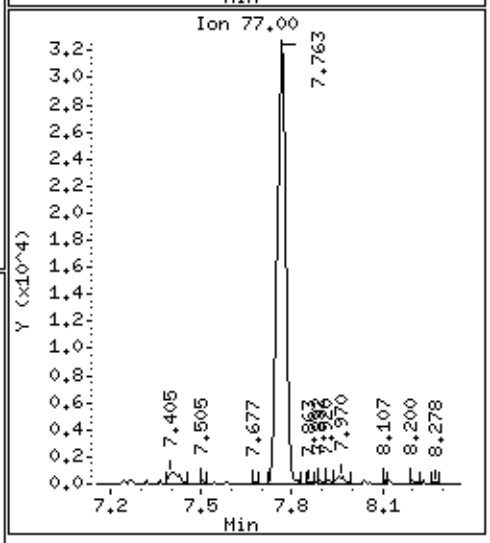
48 Benzene

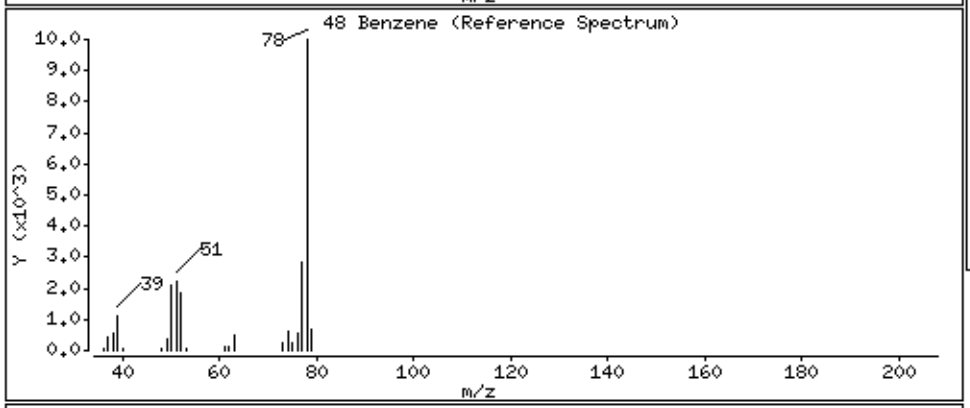
Concentration: 62.491 NG

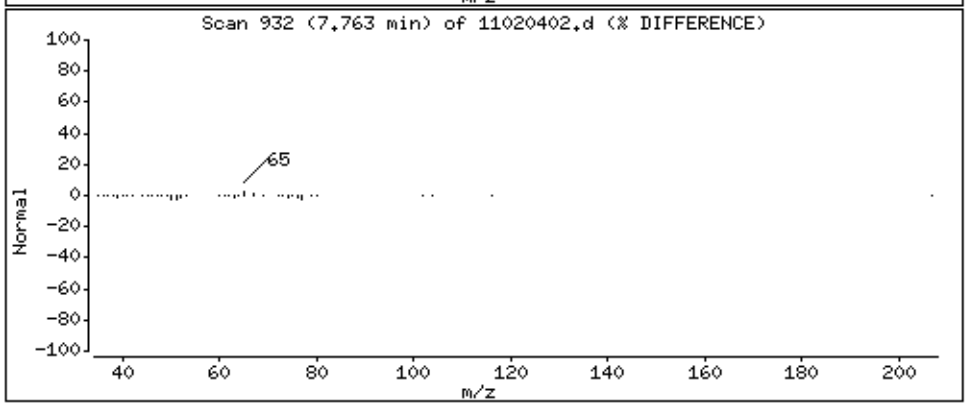












Data File: /chem/msd11.i/04feb16.b/11020402.d

Date : 04-FEB-2016 10:54

Client ID: LCS

Instrument: msd11.i

Sample Info: ;VI VOC+PAH LCS;LCS

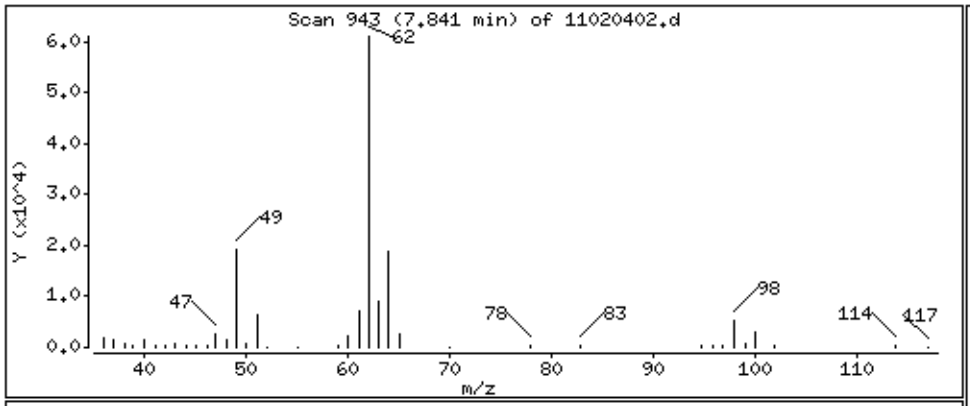
Operator: LAct

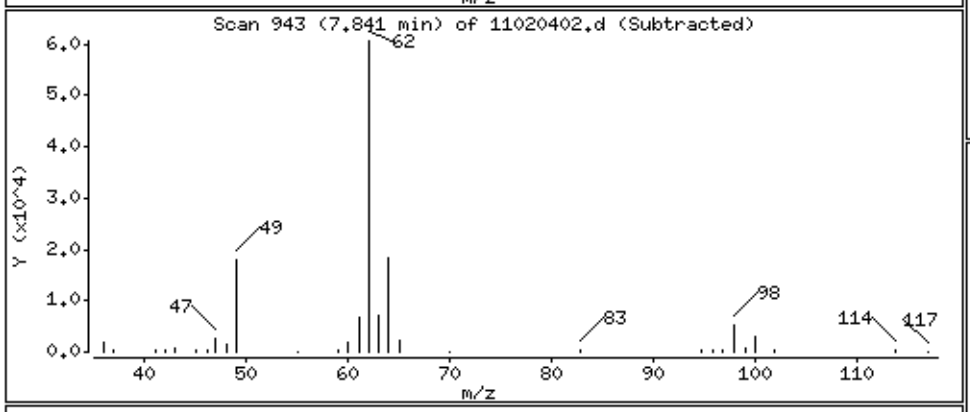
Column phase: RTx-624

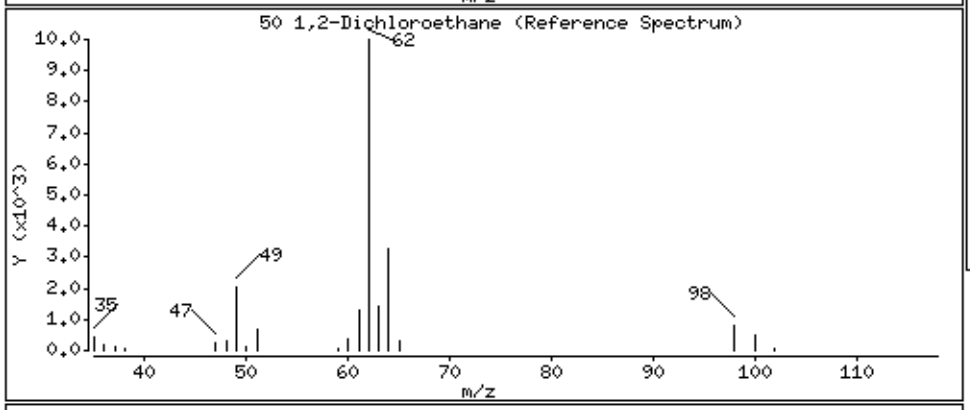
Column diameter: 0.53

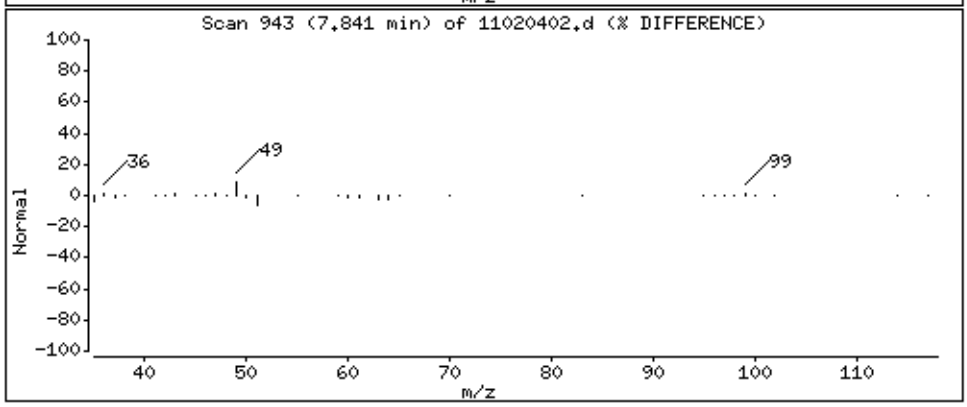
50 1,2-Dichloroethane

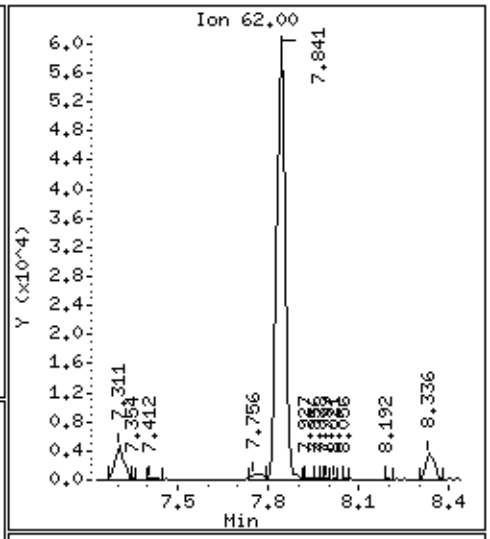
Concentration: 81.776 NG

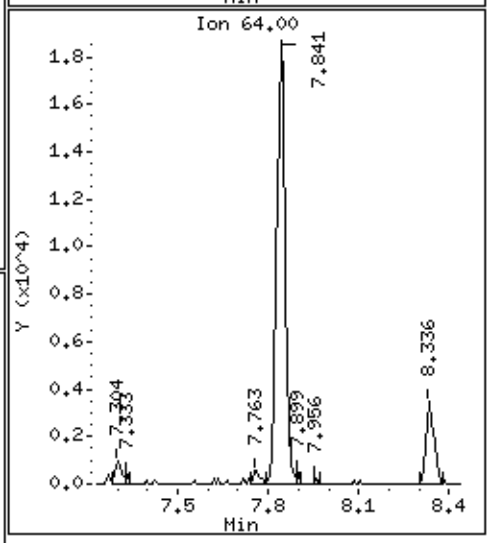












Data File: /chem/msd11.i/04feb16.b/11020402.d

Date : 04-FEB-2016 10:54

Client ID: LCS

Instrument: msd11.i

Sample Info: ;VI VOC+PAH LCS;LCS

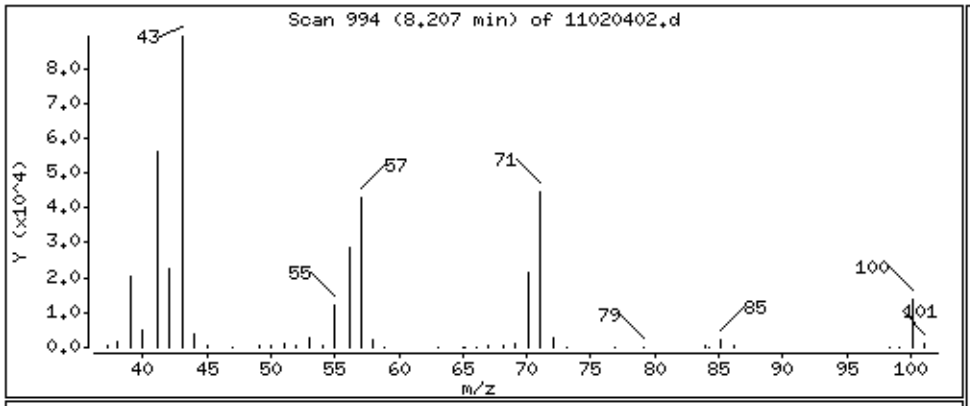
Operator: LAct

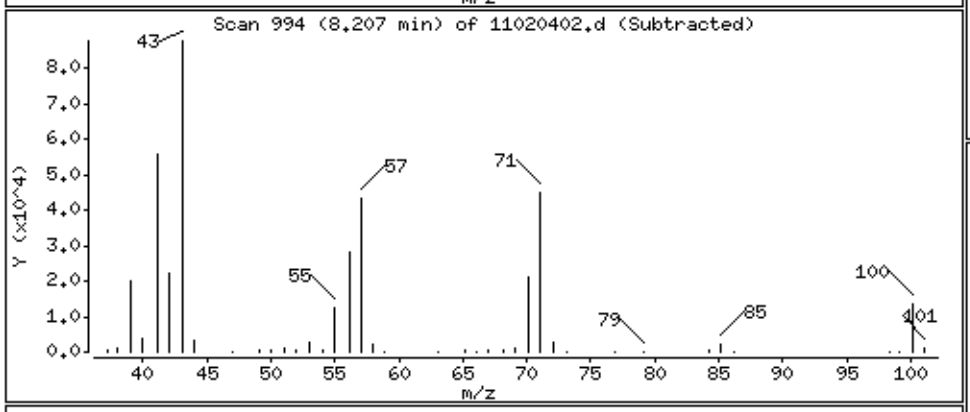
Column phase: RTx-624

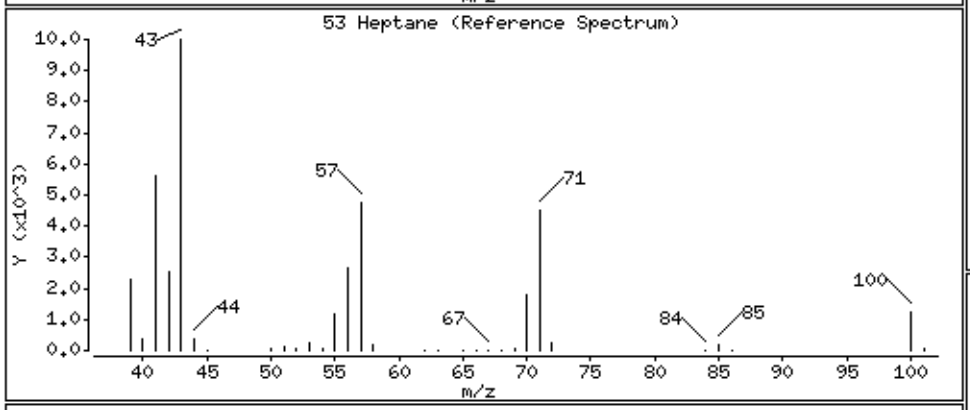
Column diameter: 0.53

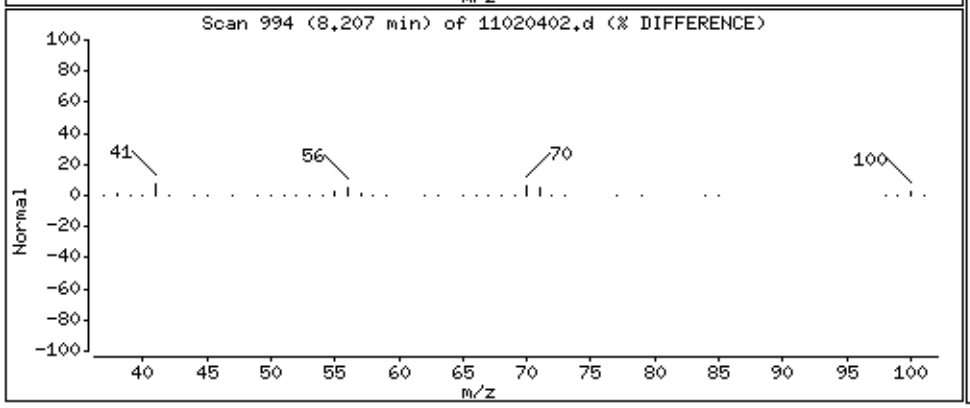
53 Heptane

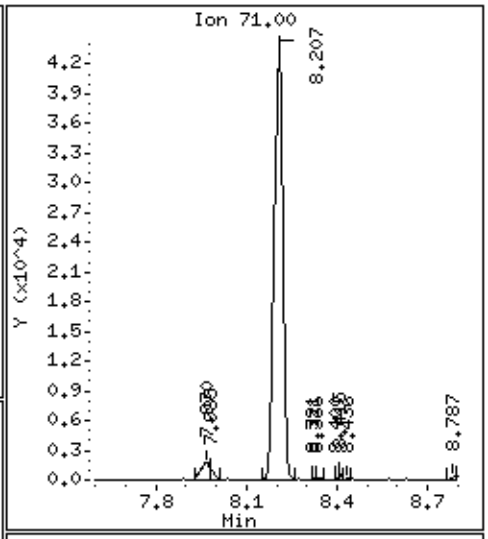
Concentration: 75.937 NG

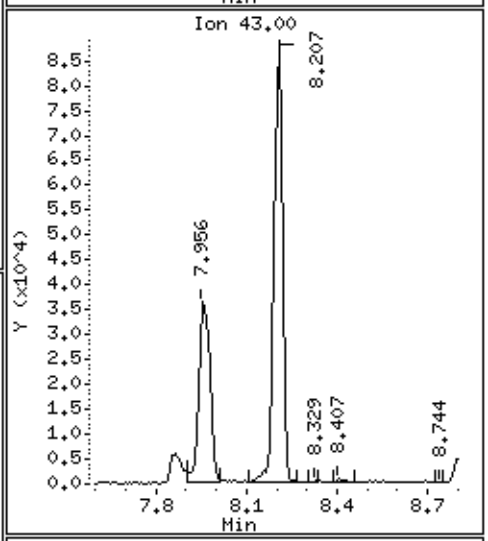


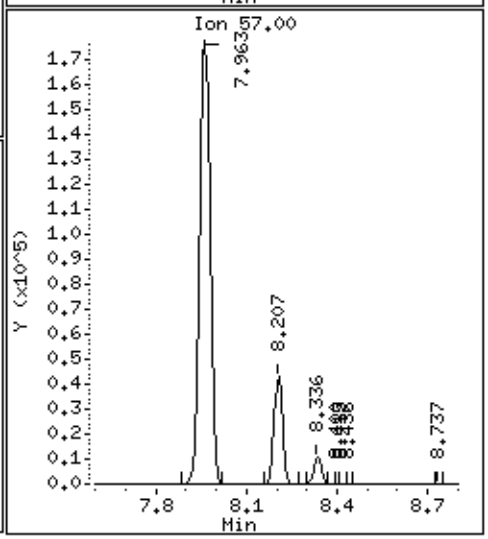












Data File: /chem/msd11.i/04feb16.b/11020402.d

Date : 04-FEB-2016 10:54

Client ID: LCS

Instrument: msd11.i

Sample Info: ;VI VOC+PAH LCS;LCS

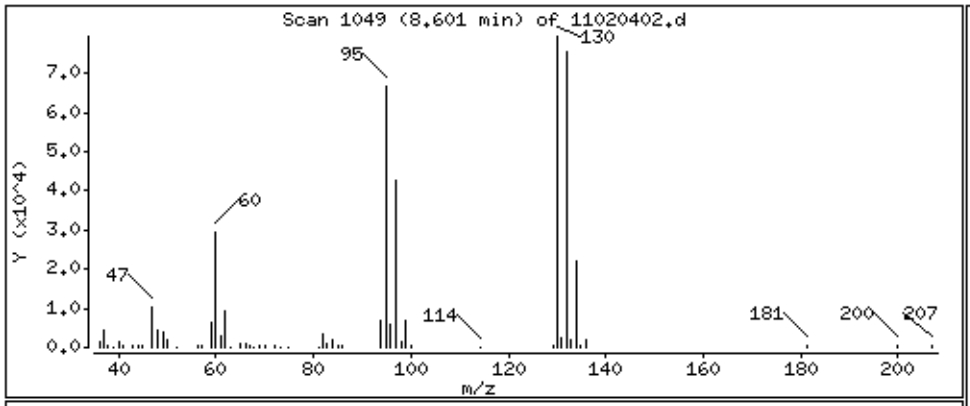
Operator: LAct

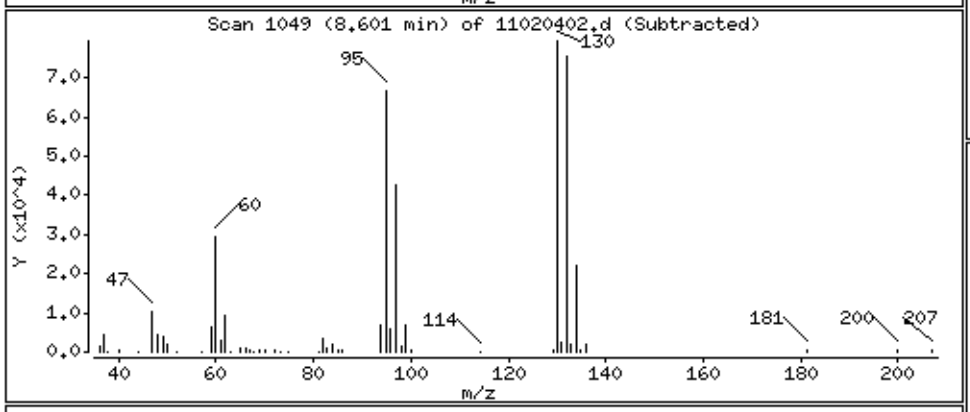
Column phase: RTx-624

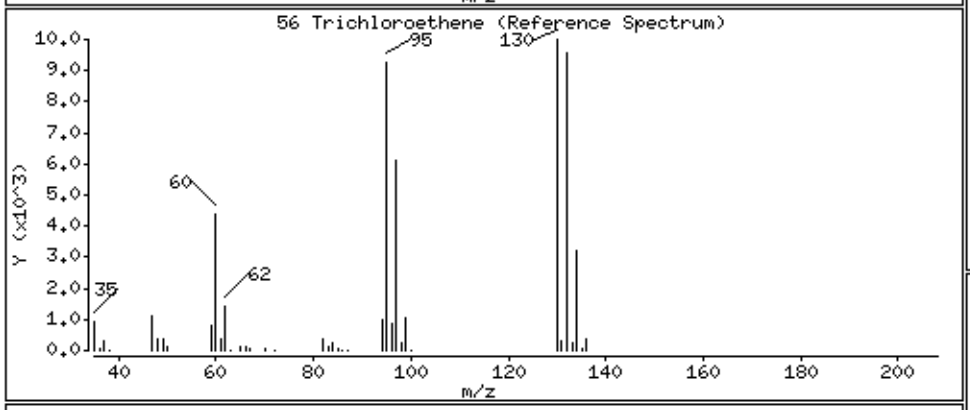
Column diameter: 0.53

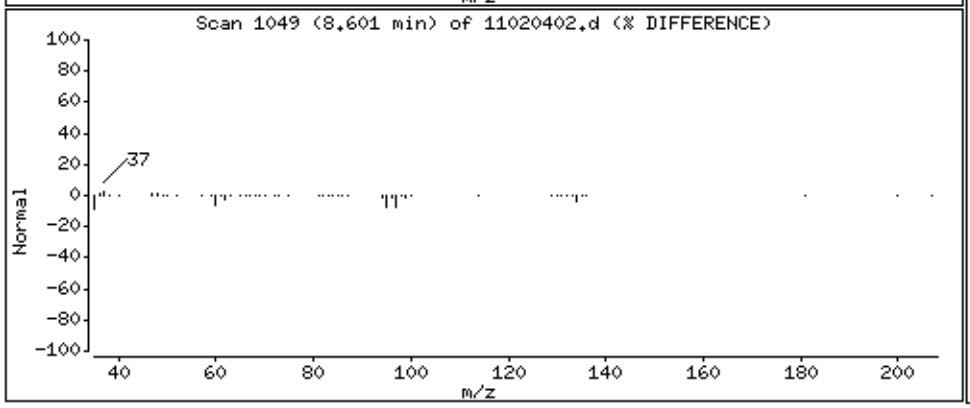
56 Trichloroethene

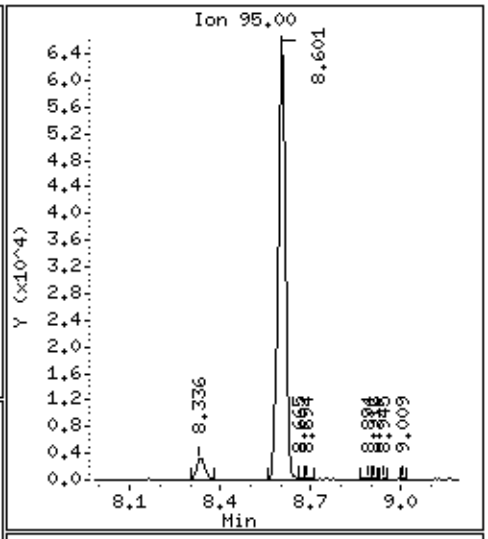
Concentration: 89.844 NG

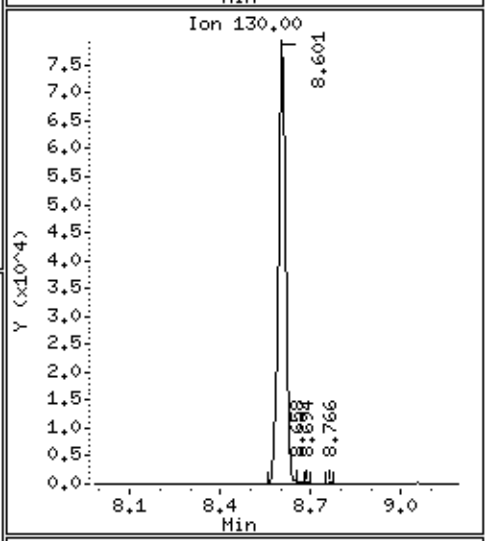


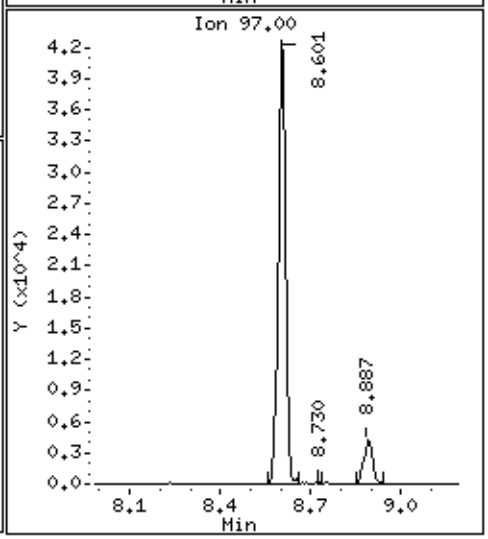












Data File: /chem/msd11.i/04feb16.b/11020402.d

Date : 04-FEB-2016 10:54

Client ID: LCS

Instrument: msd11.i

Sample Info: ;VI VOC+PAH LCS;LCS

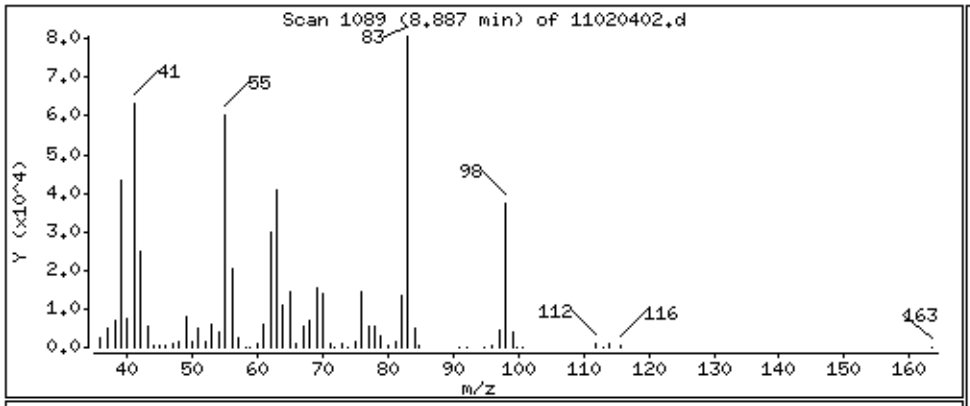
Operator: LAct

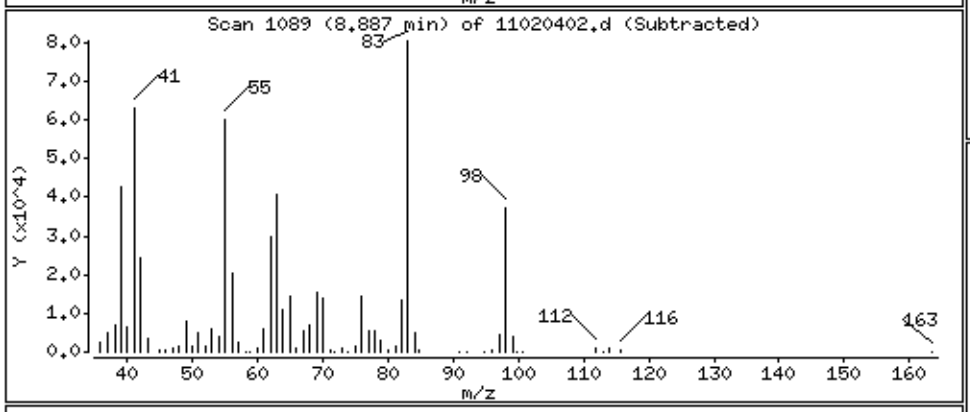
Column phase: RTx-624

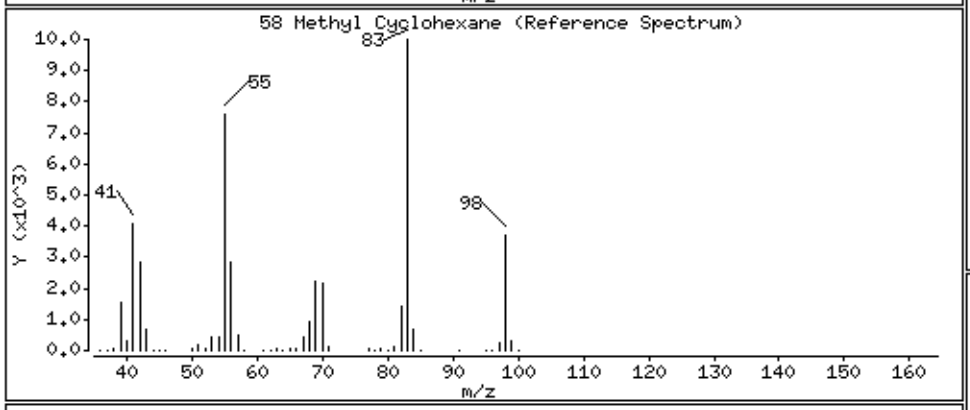
Column diameter: 0.53

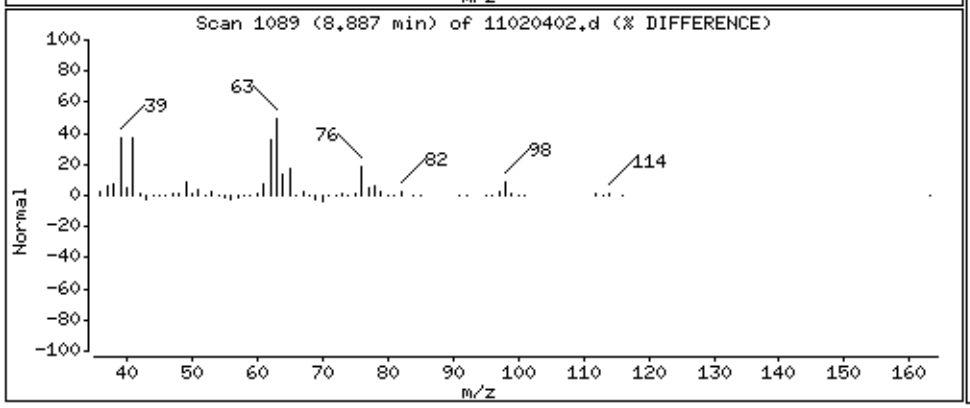
58 Methyl Cyclohexane

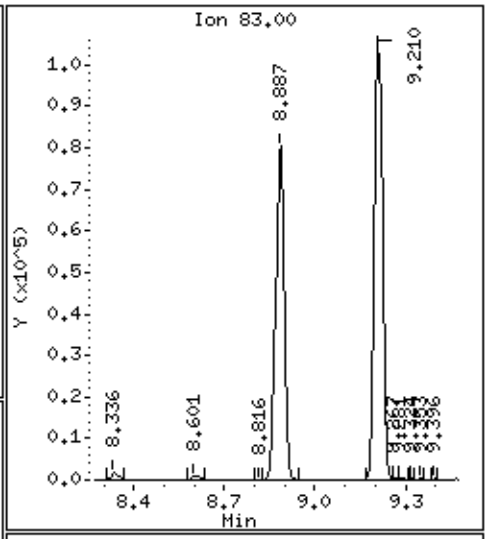
Concentration: 77.022 NG

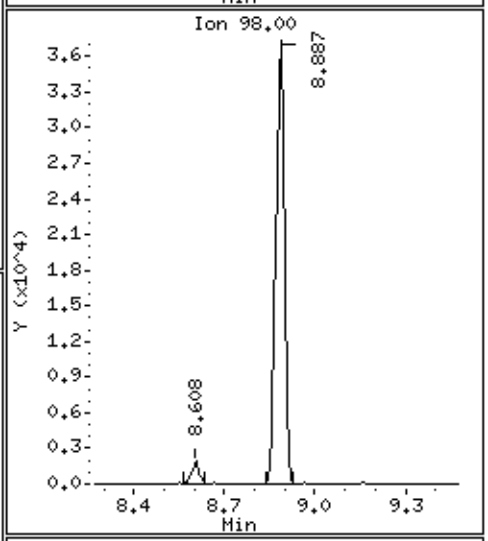


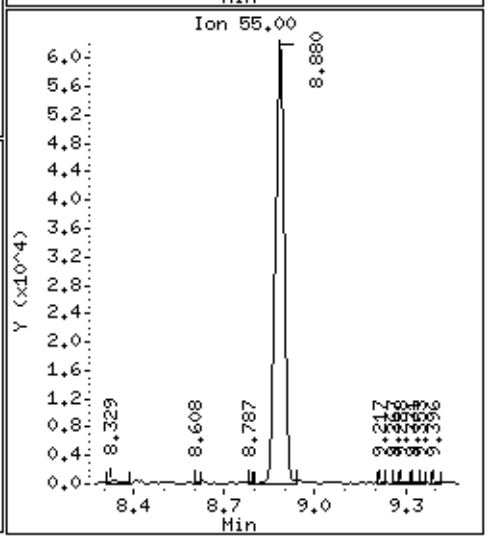












Data File: /chem/msd11.i/04feb16.b/11020402.d

Date : 04-FEB-2016 10:54

Client ID: LCS

Instrument: msd11.i

Sample Info: ;VI VOC+PAH LCS;LCS

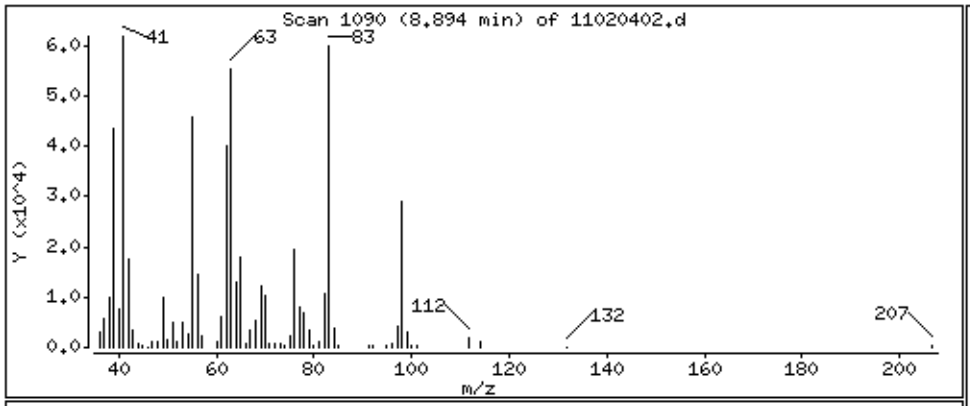
Operator: LAct

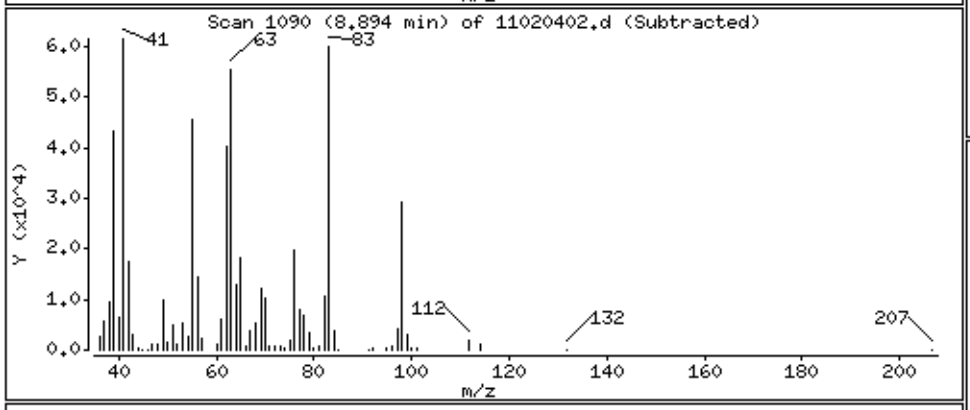
Column phase: RTx-624

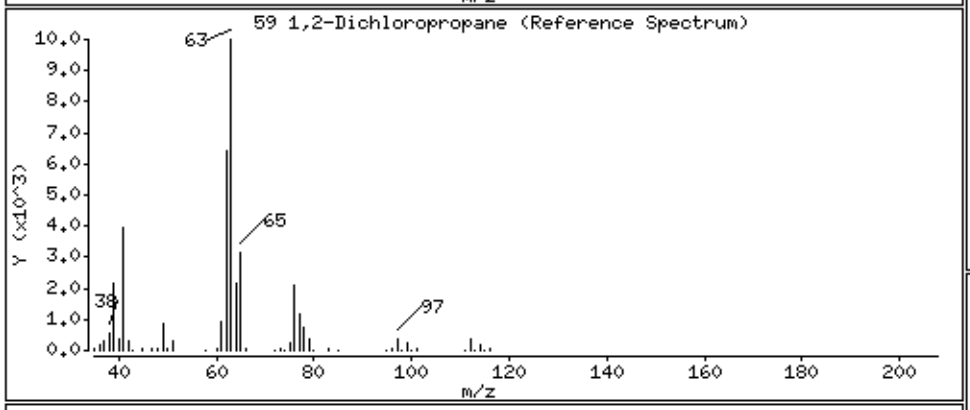
Column diameter: 0.53

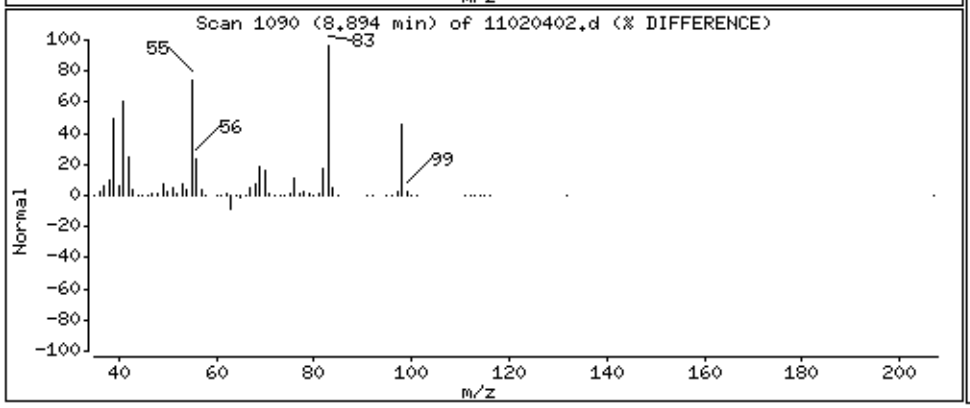
59 1,2-Dichloropropane

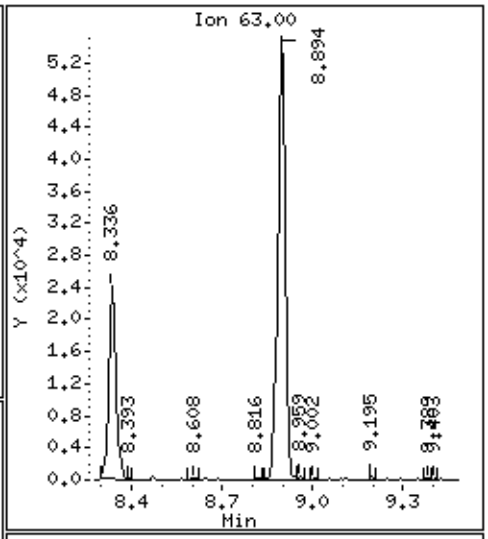
Concentration: 85.447 NG

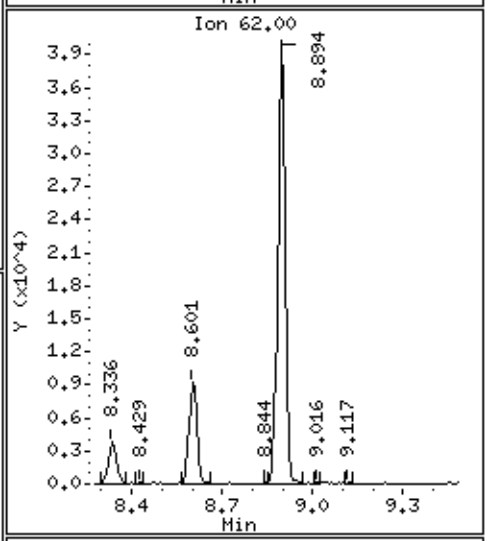


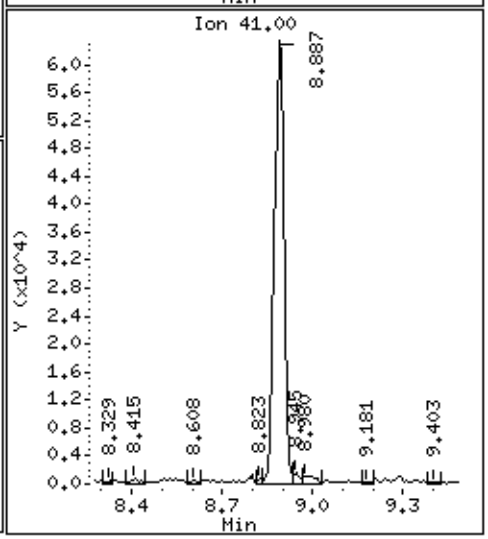












Data File: /chem/msd11.i/04feb16.b/11020402.d

Date : 04-FEB-2016 10:54

Client ID: LCS

Instrument: msd11.i

Sample Info: ;VI VOC+PAH LCS;LCS

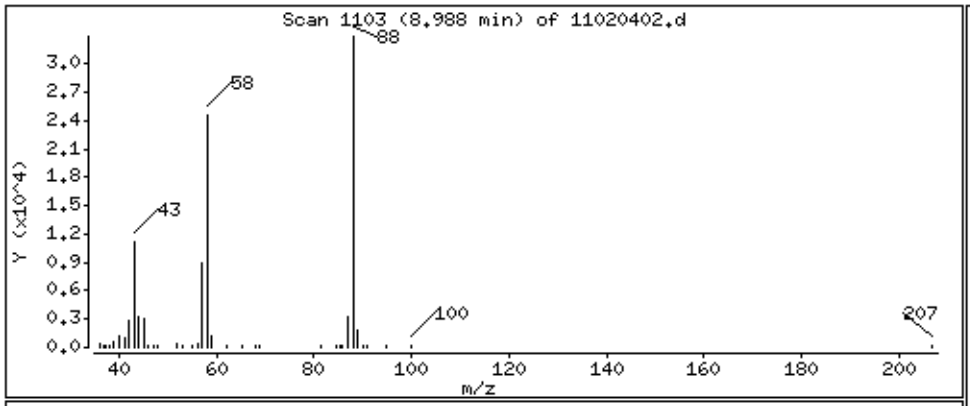
Operator: LAct

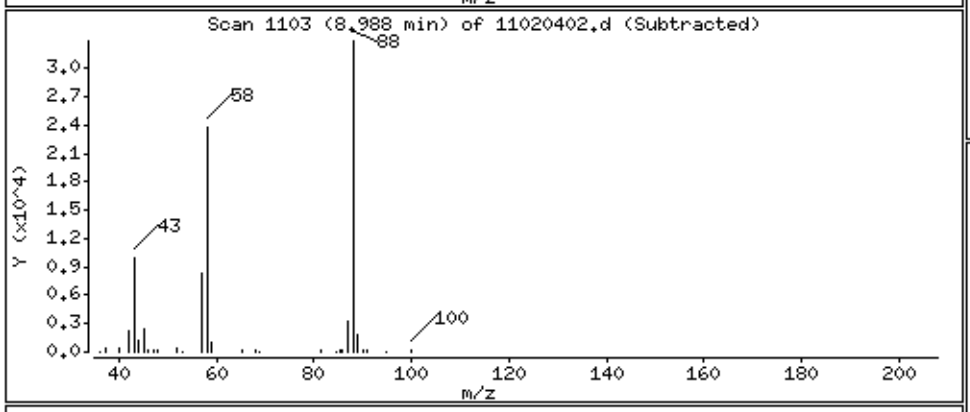
Column phase: RTx-624

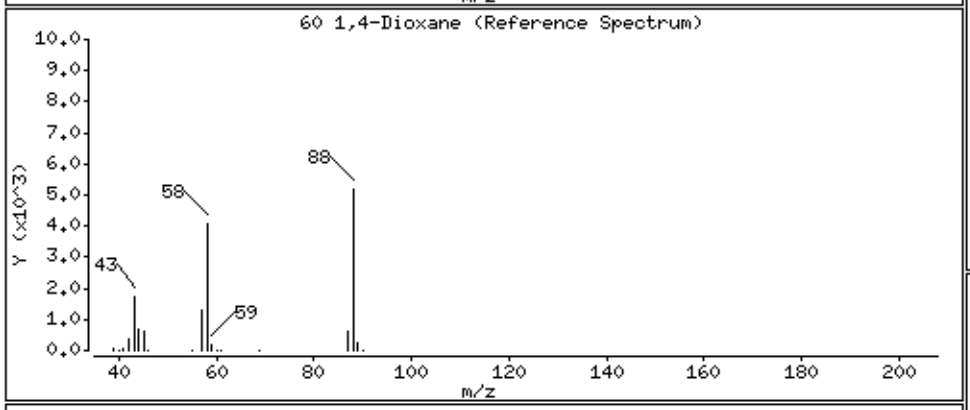
Column diameter: 0.53

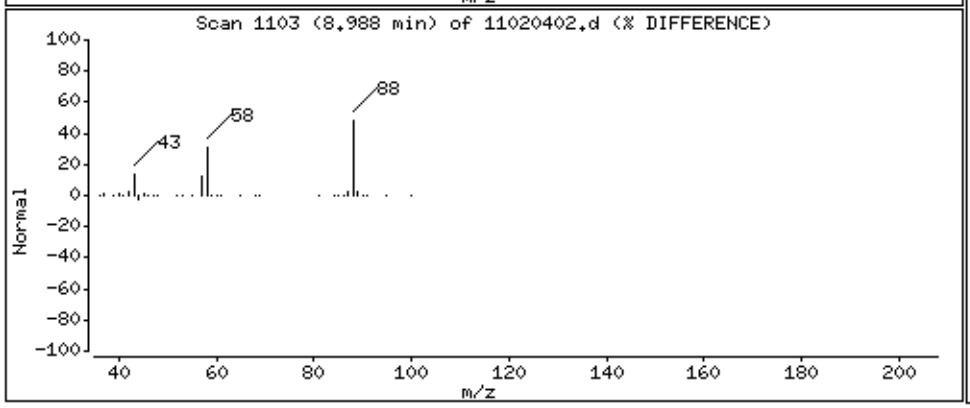
60 1,4-Dioxane

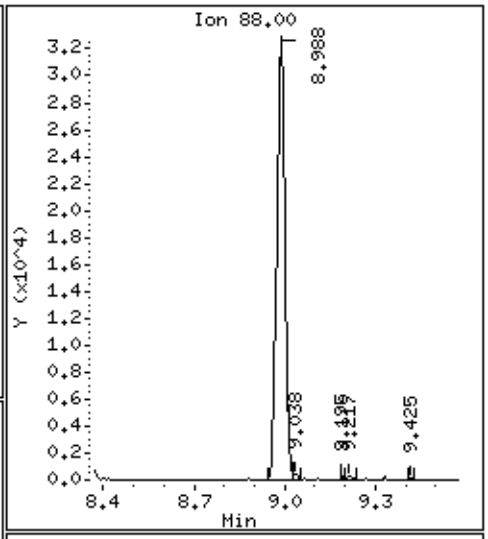
Concentration: 64.580 NG

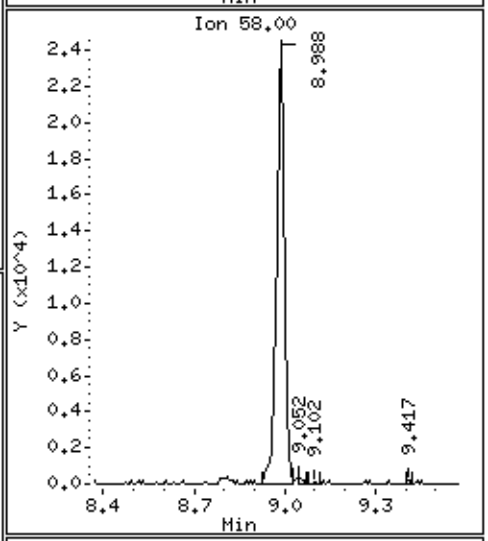


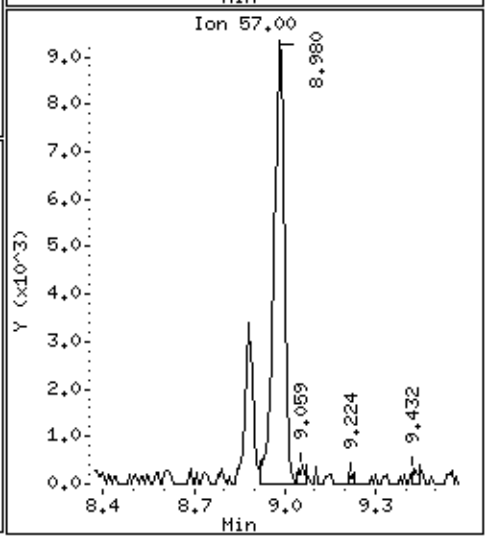












Data File: /chem/msd11.i/04feb16.b/11020402.d

Date : 04-FEB-2016 10:54

Client ID: LCS

Instrument: msd11.i

Sample Info: ;VI VOC+PAH LCS;LCS

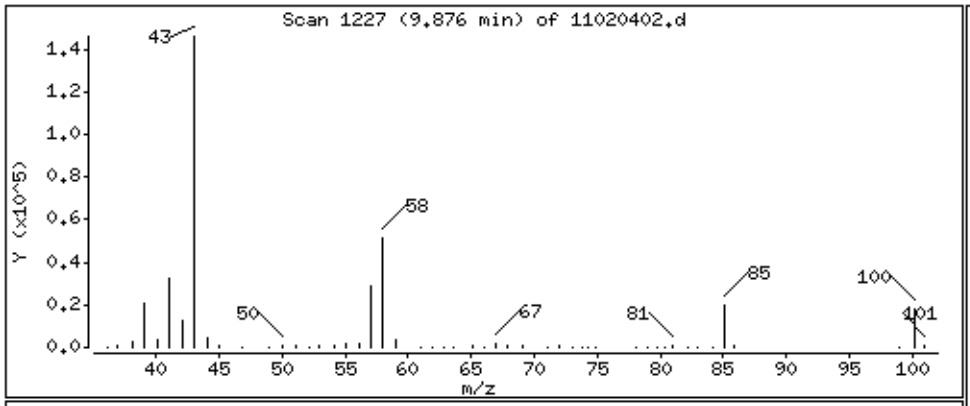
Operator: LAct

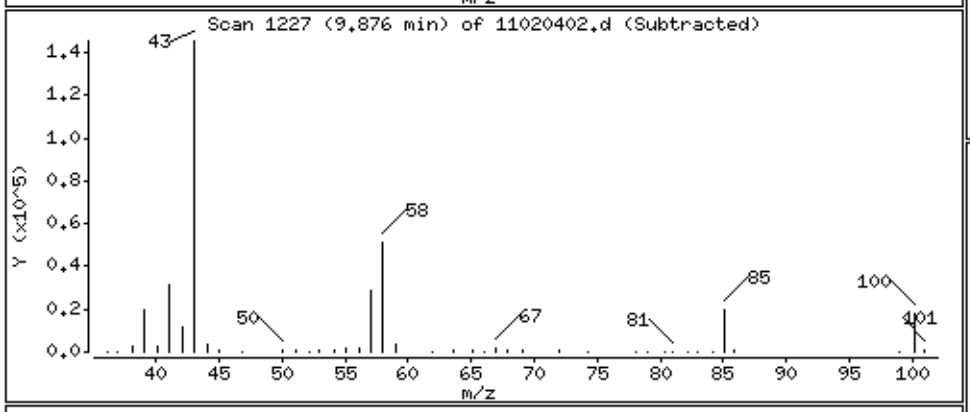
Column phase: RTx-624

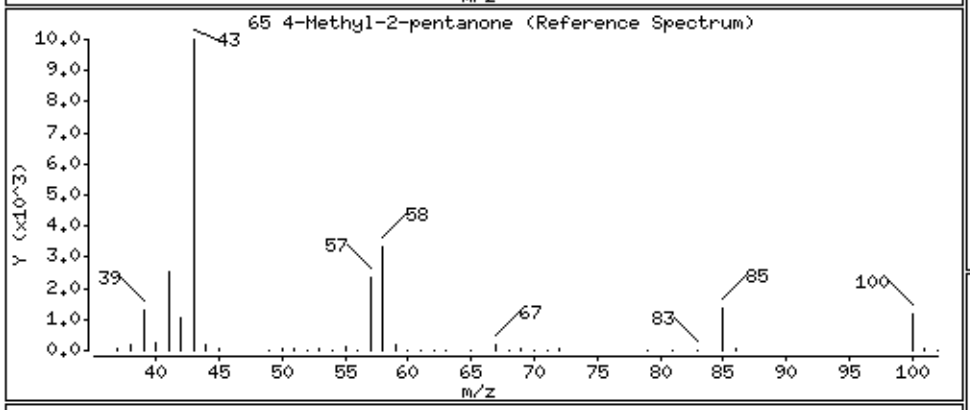
Column diameter: 0.53

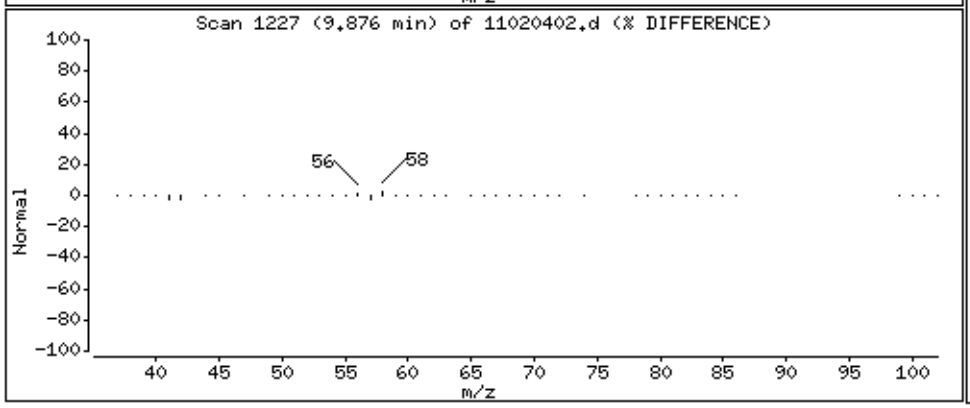
65 4-Methyl-2-pentanone

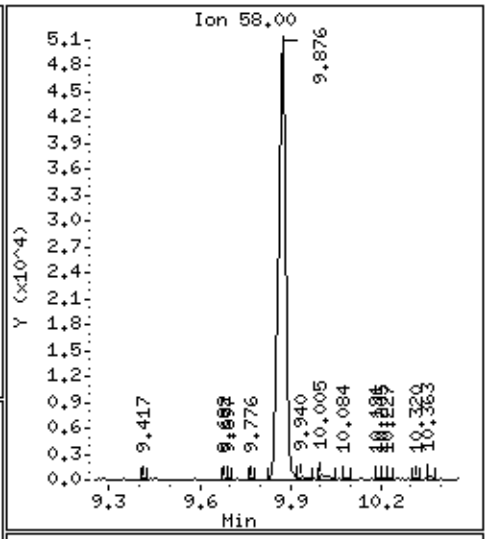
Concentration: 84.684 NG

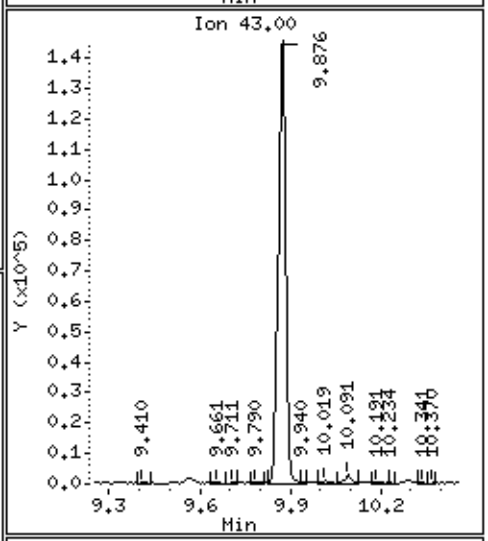


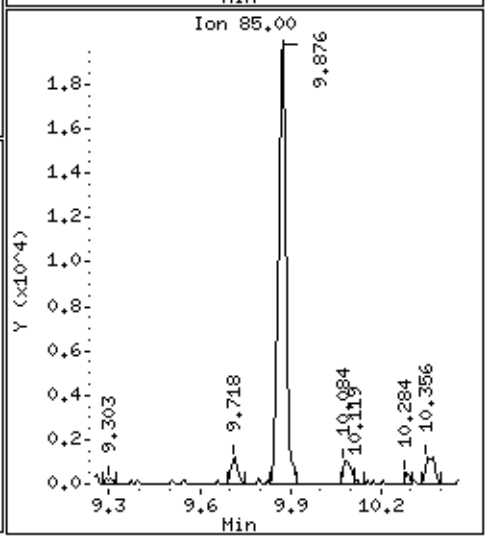












Data File: /chem/msd11.i/04feb16.b/11020402.d

Date : 04-FEB-2016 10:54

Client ID: LCS

Instrument: msd11.i

Sample Info: ;VI VOC+PAH LCS;LCS

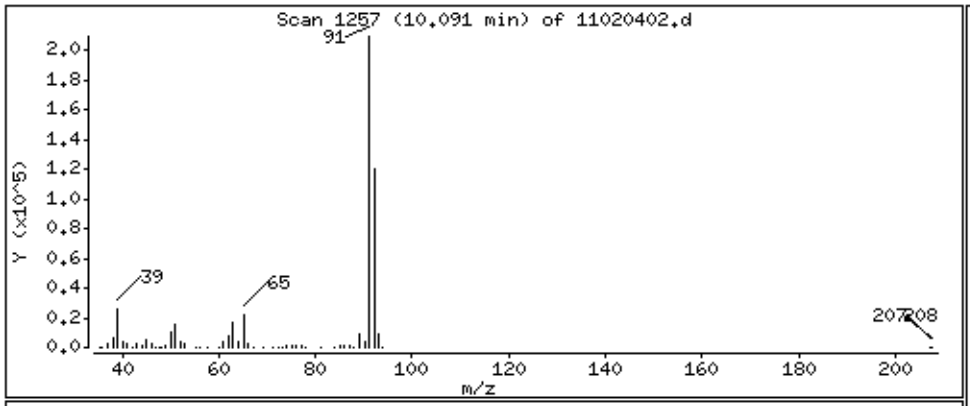
Operator: LAct

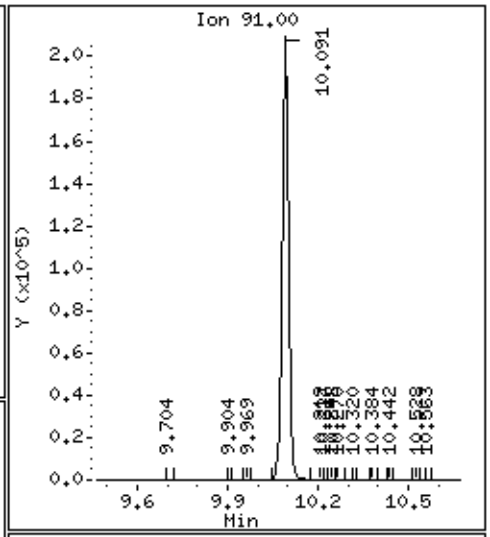
Column phase: RTx-624

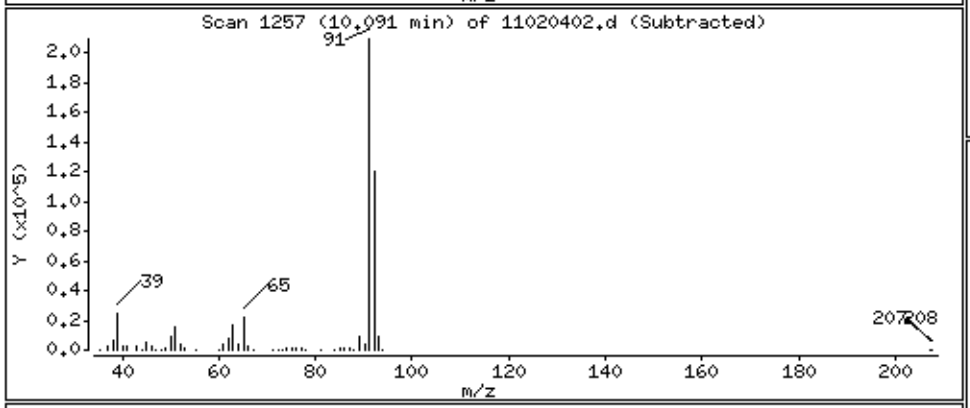
Column diameter: 0.53

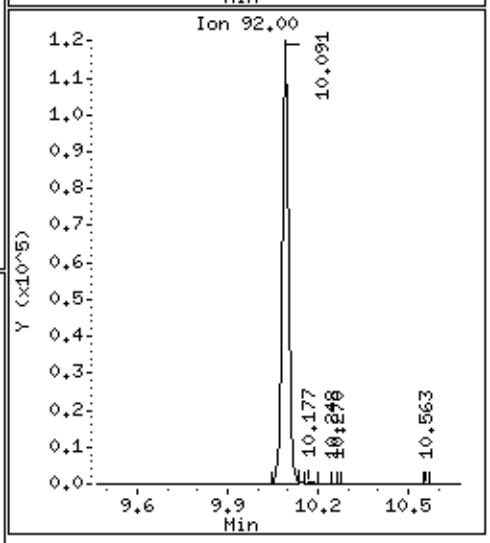
67 Toluene

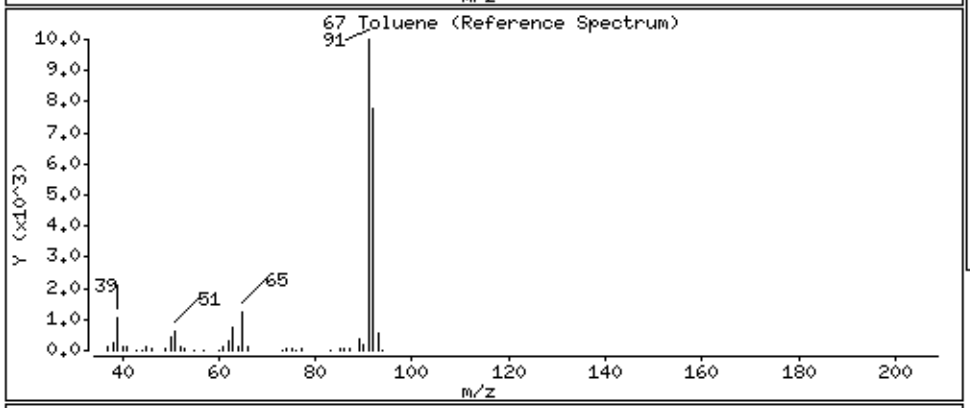
Concentration: 70.414 NG

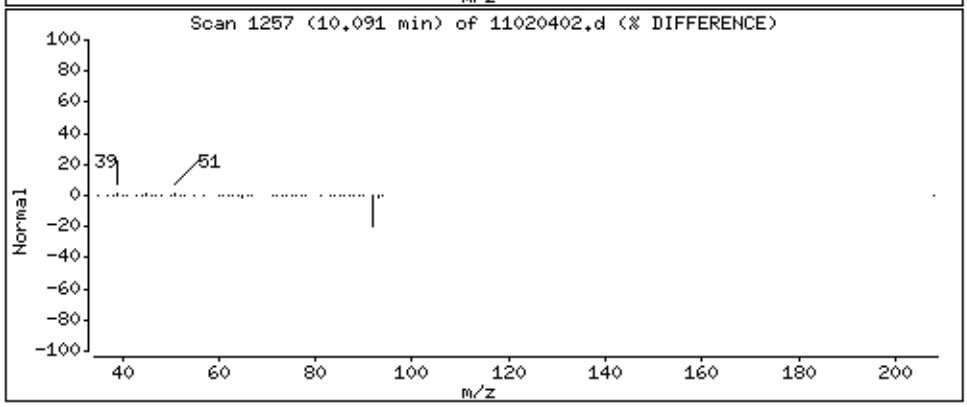












Data File: /chem/msd11.i/04feb16.b/11020402.d

Date : 04-FEB-2016 10:54

Client ID: LCS

Instrument: msd11.i

Sample Info: ;VI VOC+PAH LCS;LCS

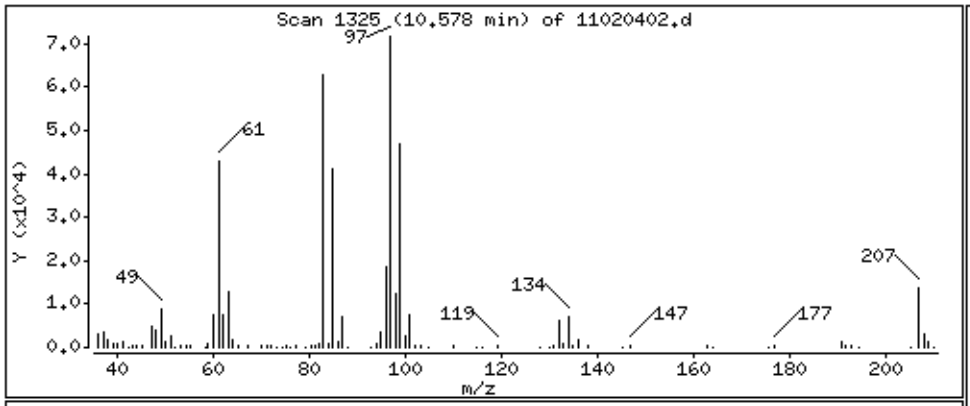
Operator: LAct

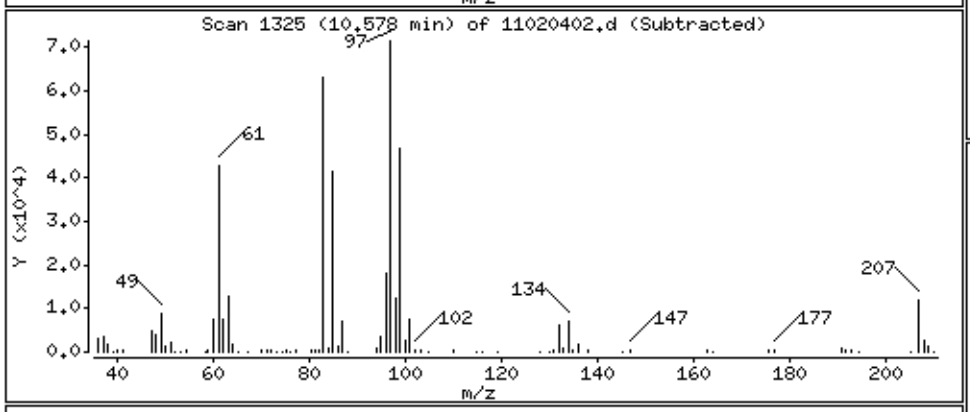
Column phase: RTx-624

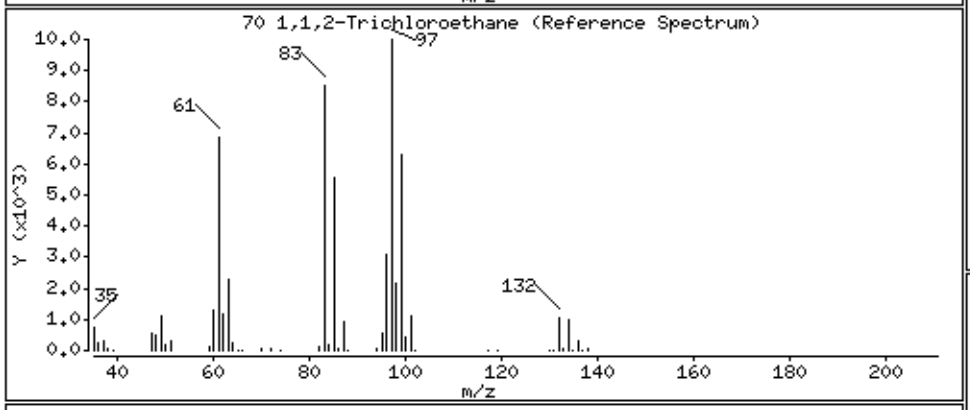
Column diameter: 0.53

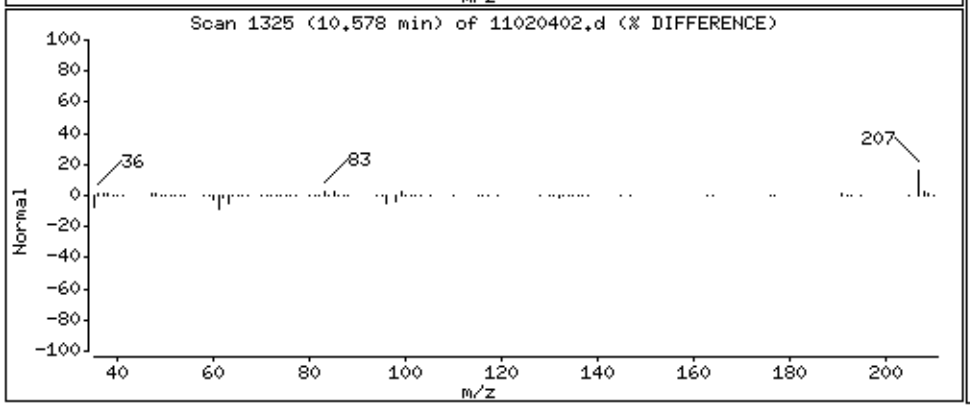
70 1,1,2-Trichloroethane

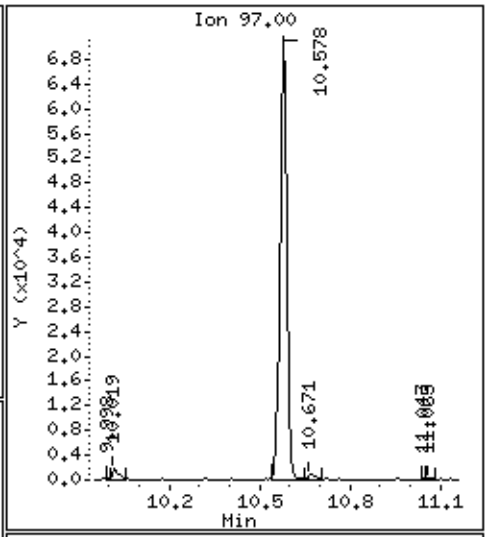
Concentration: 108.35 NG

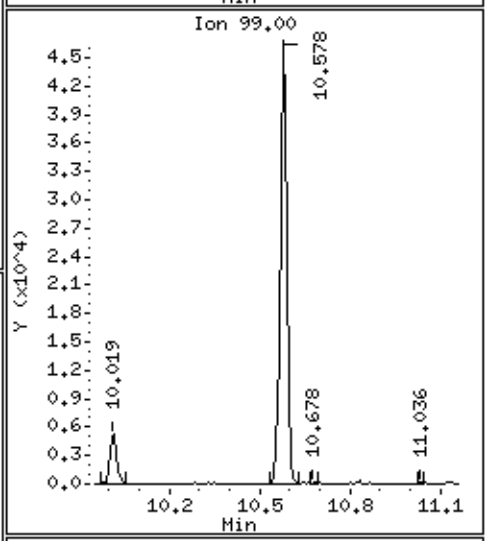


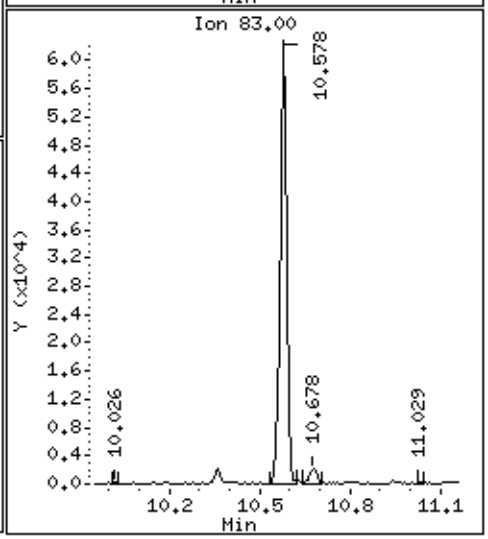












Data File: /chem/msd11.i/04feb16.b/11020402.d

Date : 04-FEB-2016 10:54

Client ID: LCS

Instrument: msd11.i

Sample Info: ;VI VOC+PAH LCS;LCS

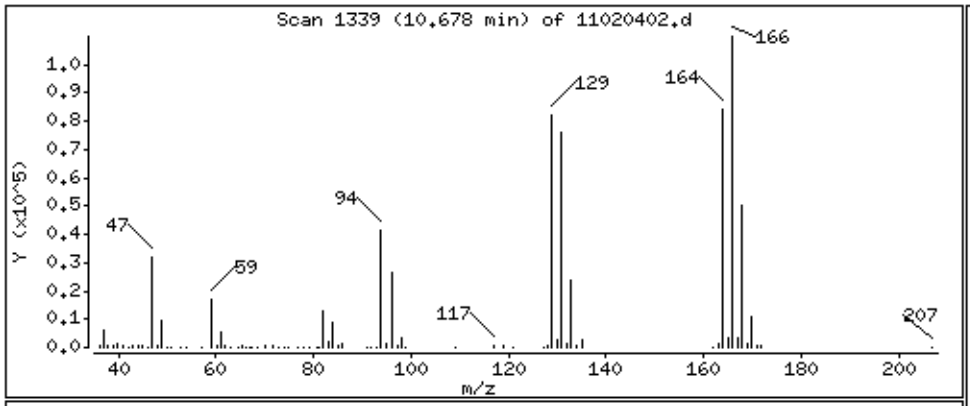
Operator: LAct

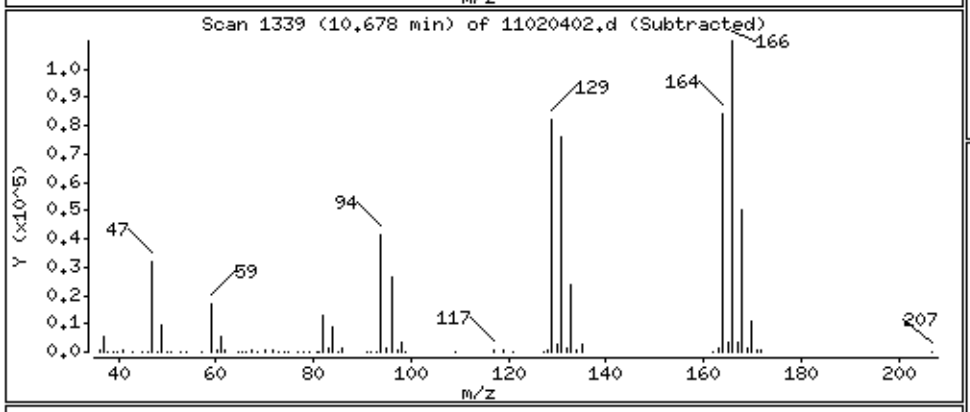
Column phase: RTx-624

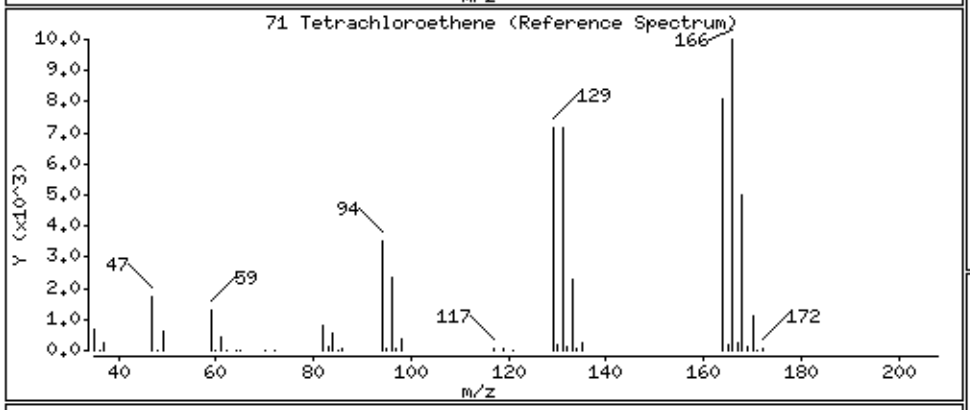
Column diameter: 0.53

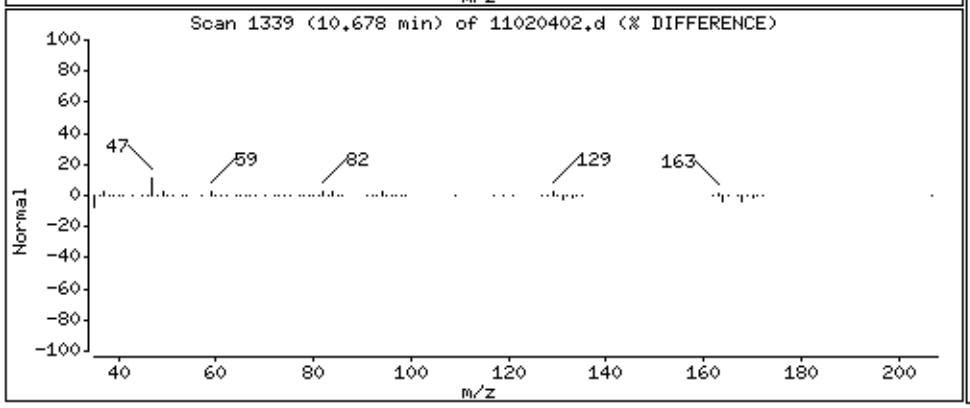
71 Tetrachloroethene

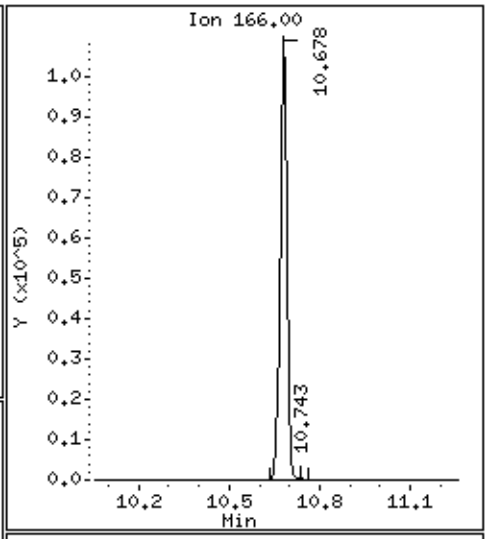
Concentration: 131.56 NG

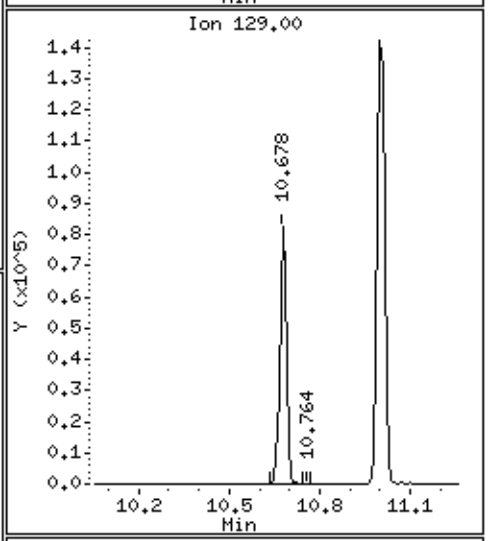


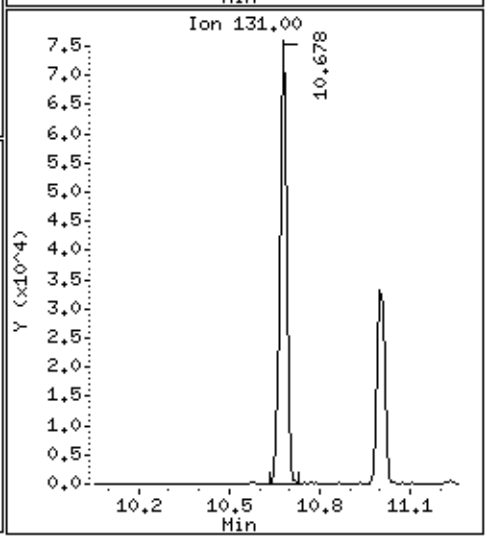












Data File: /chem/msd11.i/04feb16.b/11020402.d

Date : 04-FEB-2016 10:54

Client ID: LCS

Instrument: msd11.i

Sample Info: ;VI VOC+PAH LCS;LCS

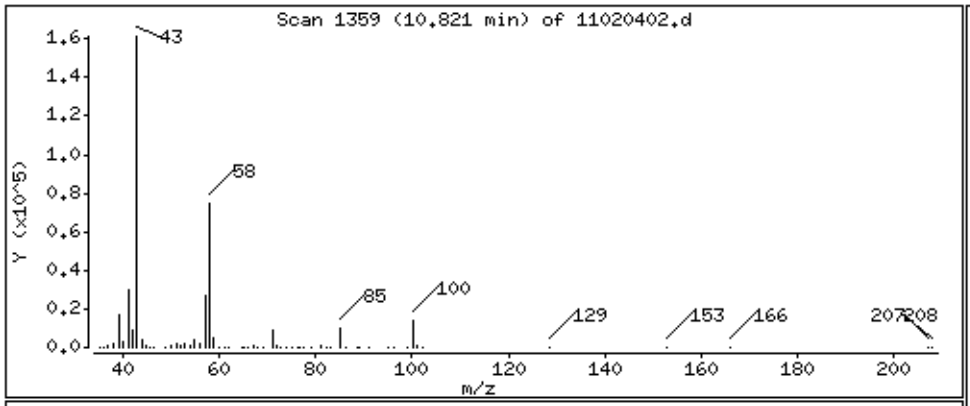
Operator: LAct

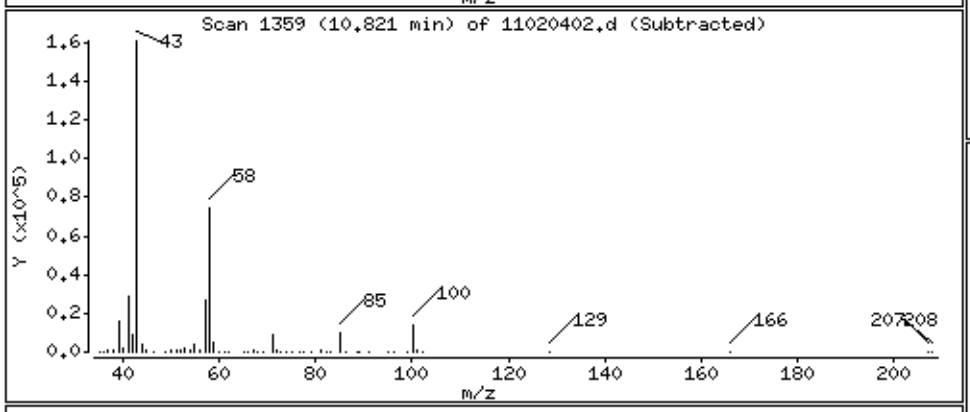
Column phase: RTx-624

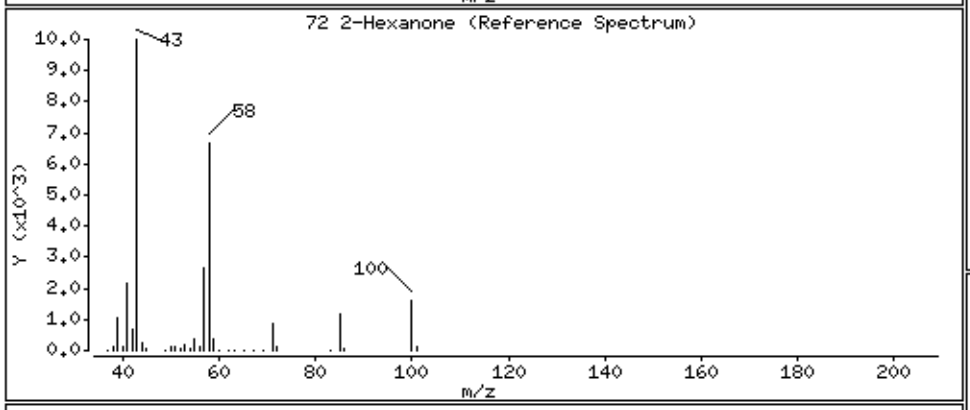
Column diameter: 0.53

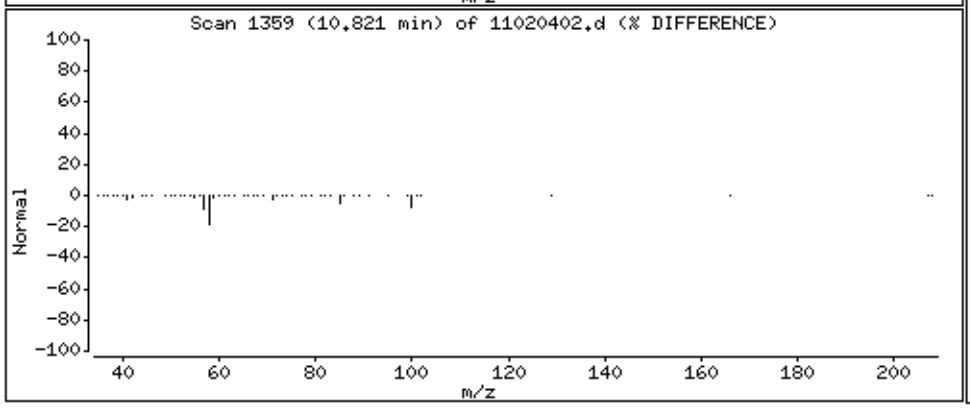
72 2-Hexanone

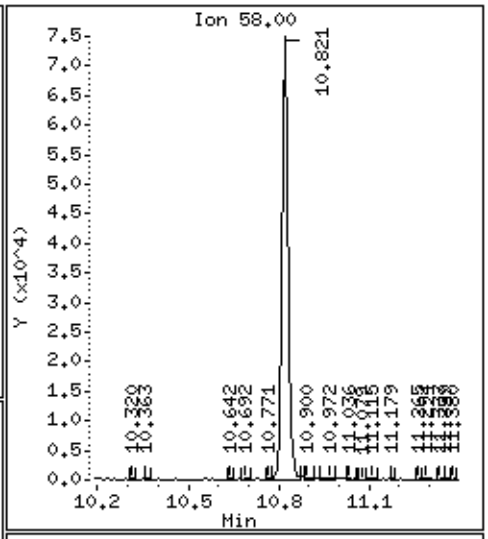
Concentration: 89.069 NG

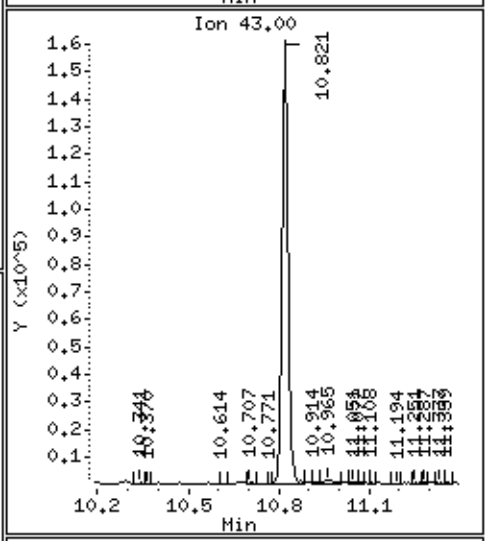


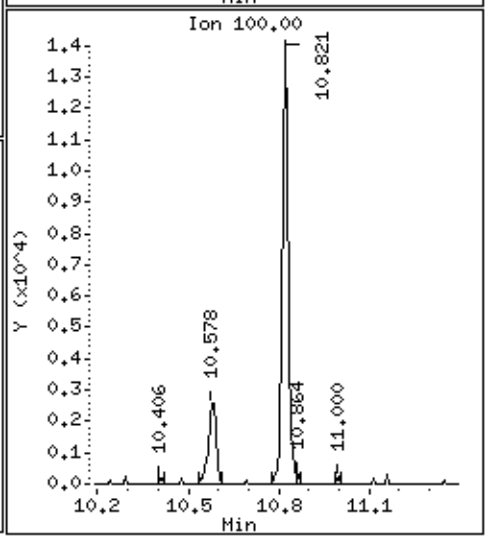












Data File: /chem/msd11.i/04feb16.b/11020402.d

Date : 04-FEB-2016 10:54

Client ID: LCS

Instrument: msd11.i

Sample Info: ;VI VOC+PAH LCS;LCS

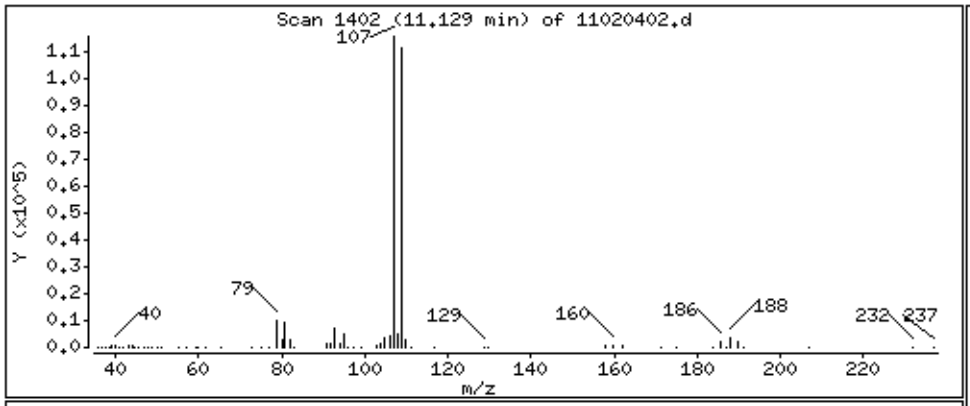
Operator: LAct

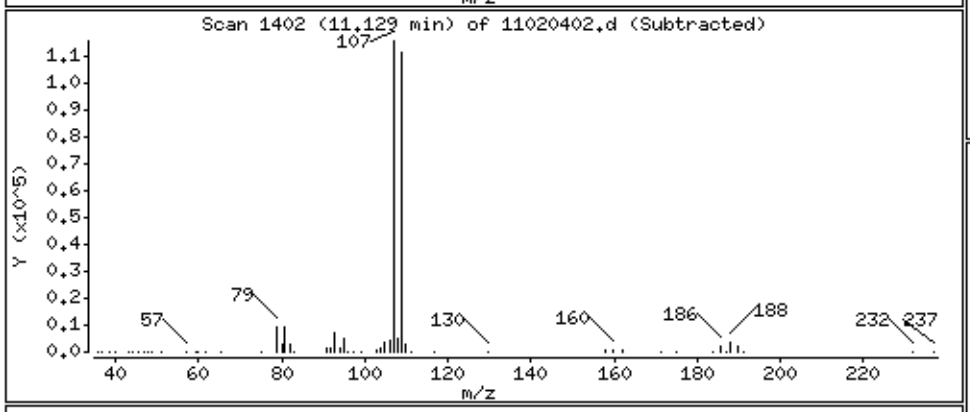
Column phase: RTx-624

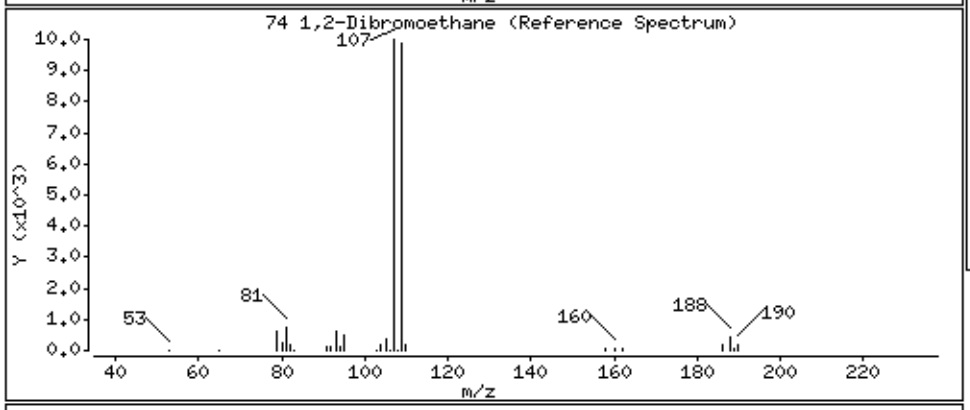
Column diameter: 0.53

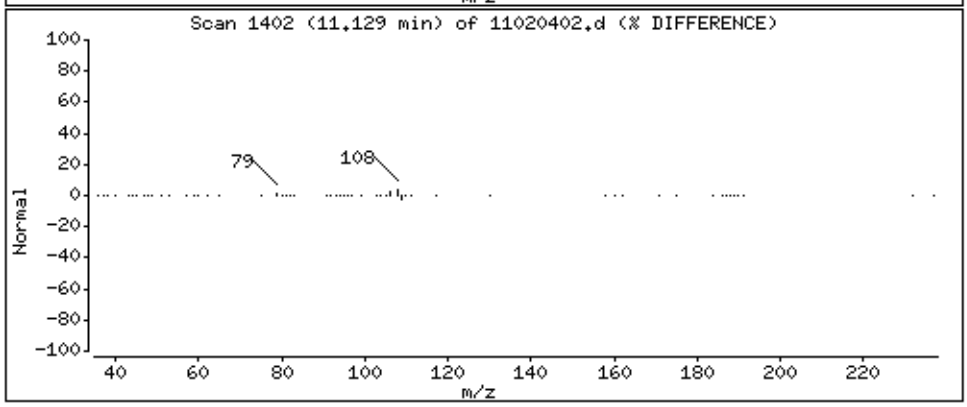
74 1,2-Dibromoethane

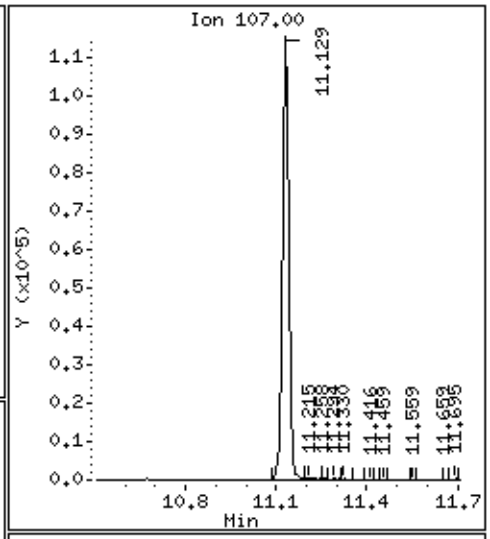
Concentration: 162.70 NG

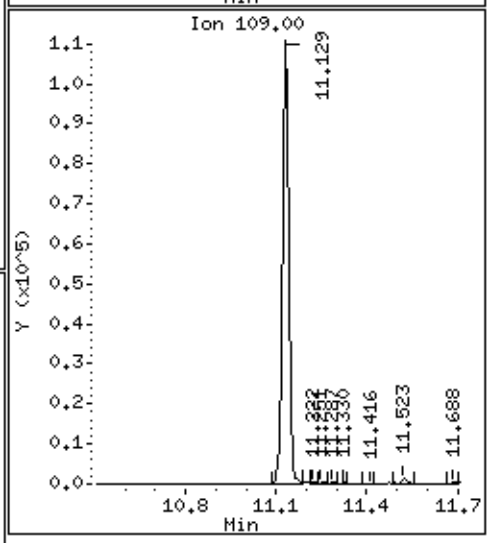












Data File: /chem/msd11.i/04feb16.b/11020402.d

Date : 04-FEB-2016 10:54

Client ID: LCS

Instrument: msd11.i

Sample Info: ;VI VOC+PAH LCS;LCS

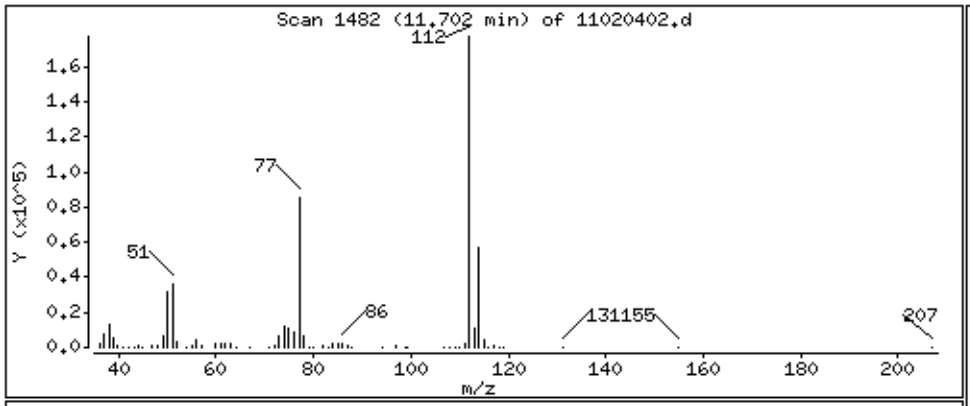
Operator: LAct

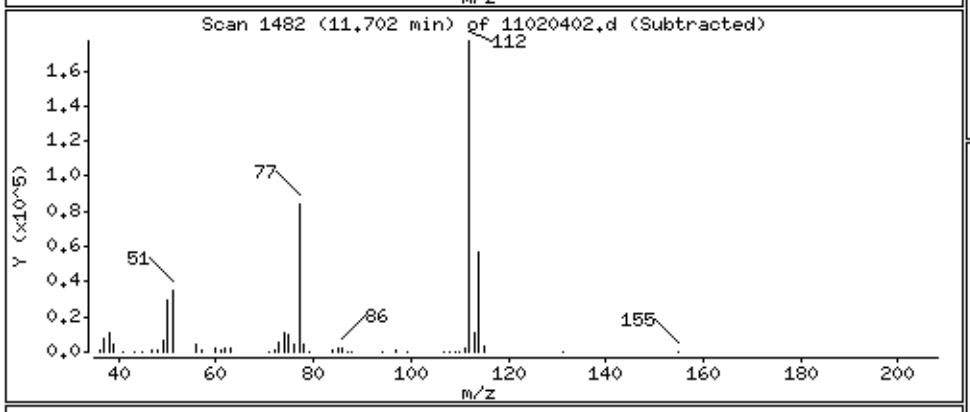
Column phase: RTx-624

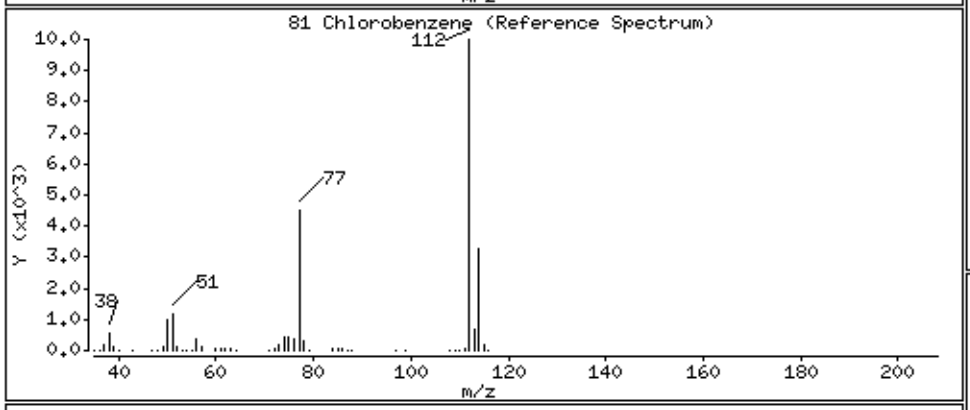
Column diameter: 0.53

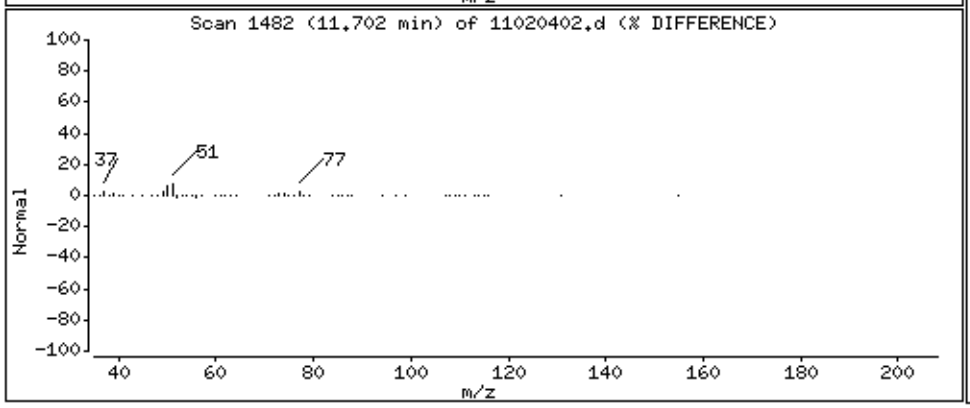
81 Chlorobenzene

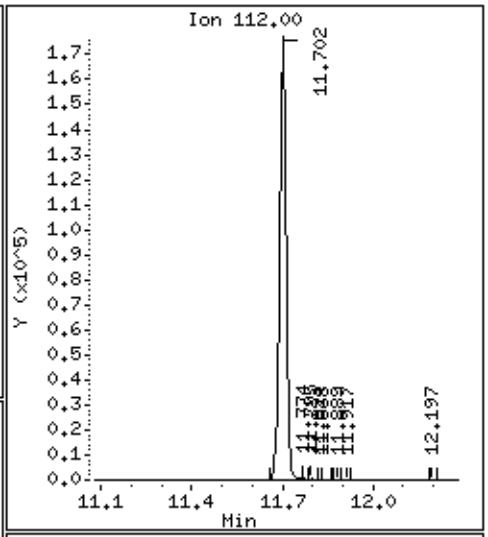
Concentration: 89.078 NG

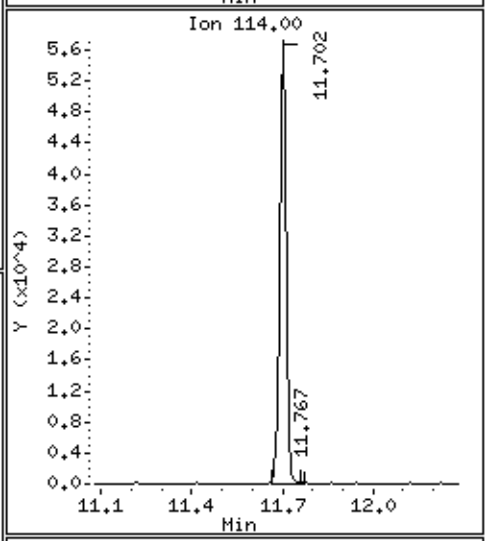


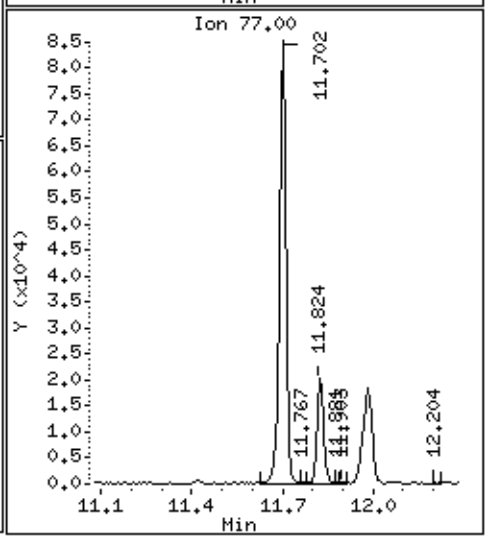












Data File: /chem/msd11.i/04feb16.b/11020402.d

Date : 04-FEB-2016 10:54

Client ID: LCS

Instrument: msd11.i

Sample Info: ;VI VOC+PAH LCS;LCS

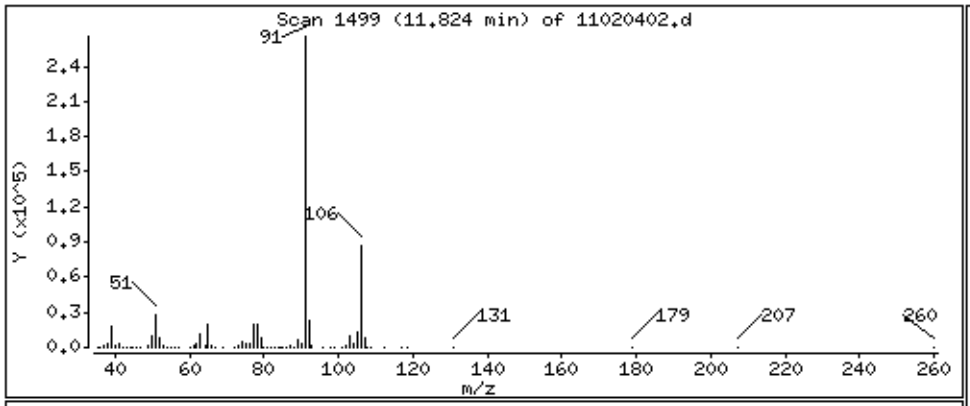
Operator: LAct

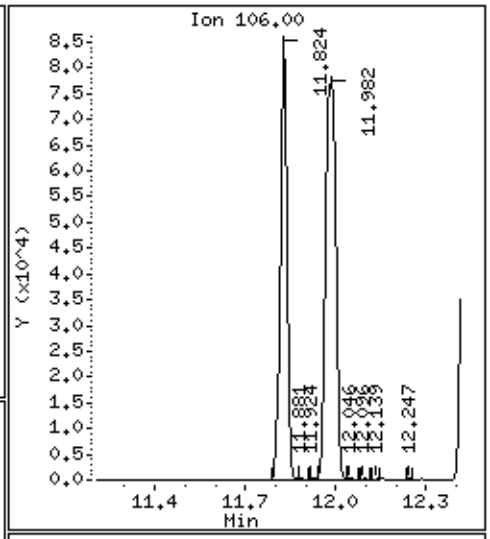
Column phase: RTx-624

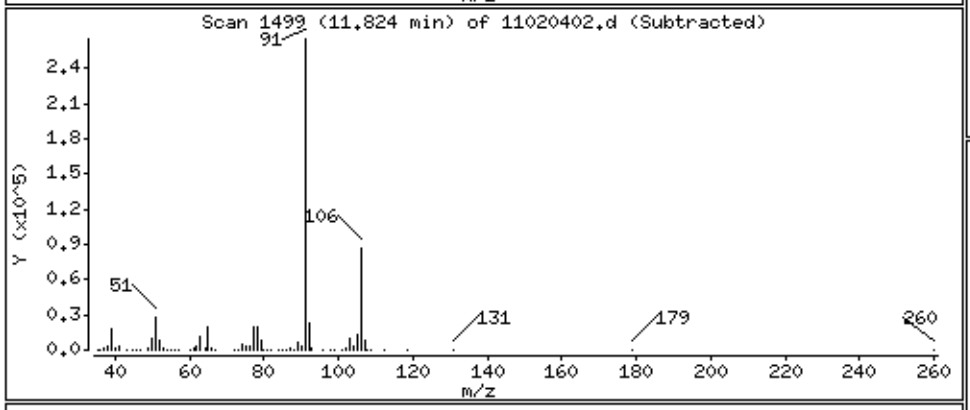
Column diameter: 0.53

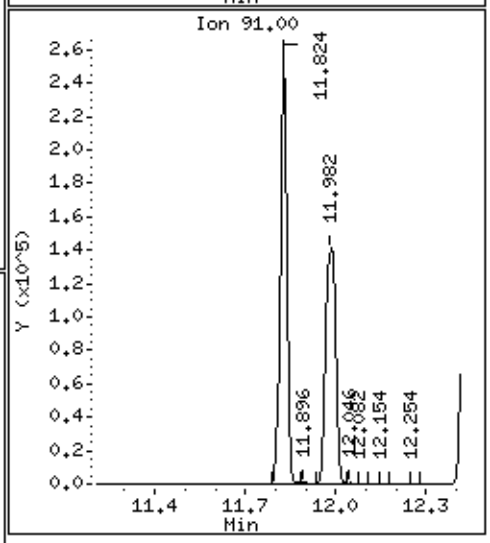
82 Ethyl Benzene

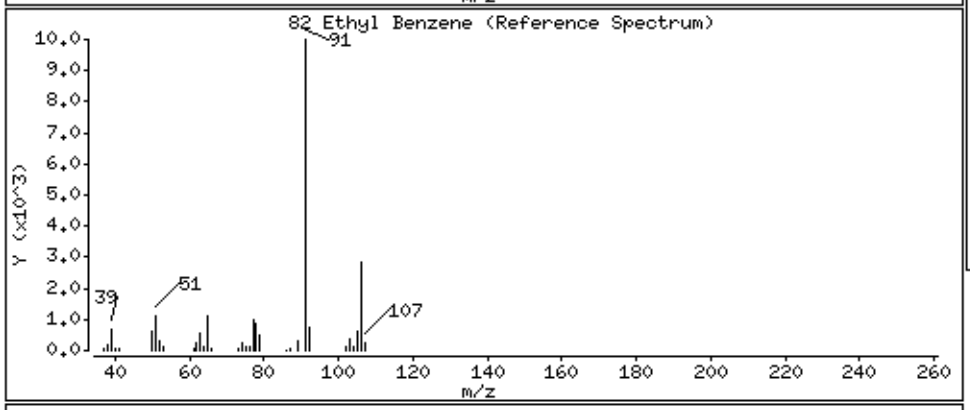
Concentration: 83.444 NG

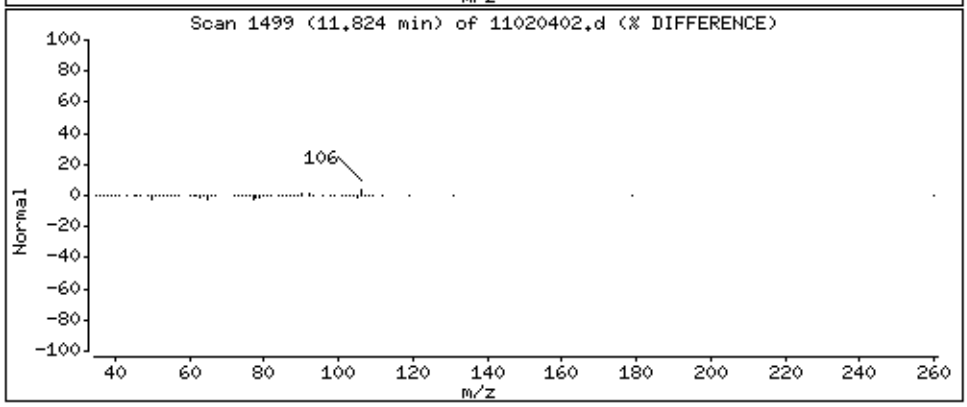












Data File: /chem/msd11.i/04feb16.b/11020402.d

Date : 04-FEB-2016 10:54

Client ID: LCS

Instrument: msd11.i

Sample Info: ;VI VOC+PAH LCS;LCS

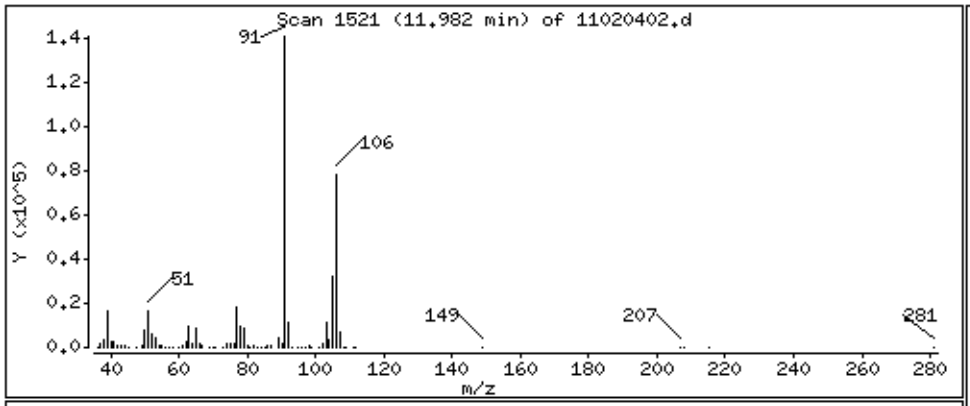
Operator: LAct

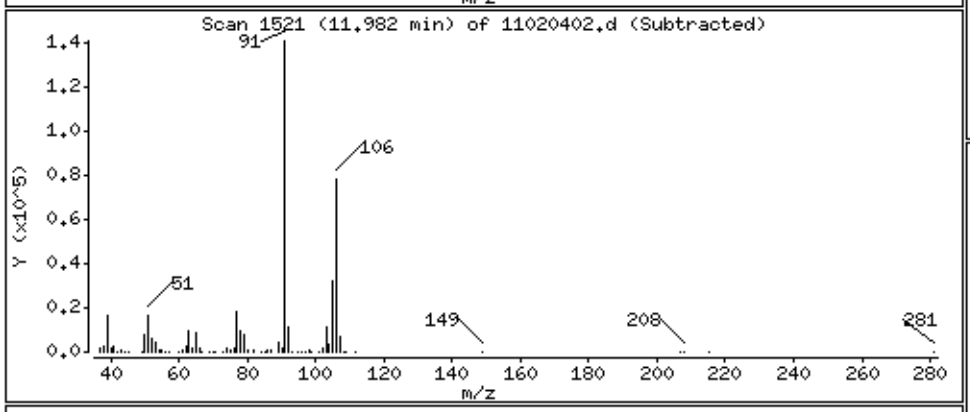
Column phase: RTx-624

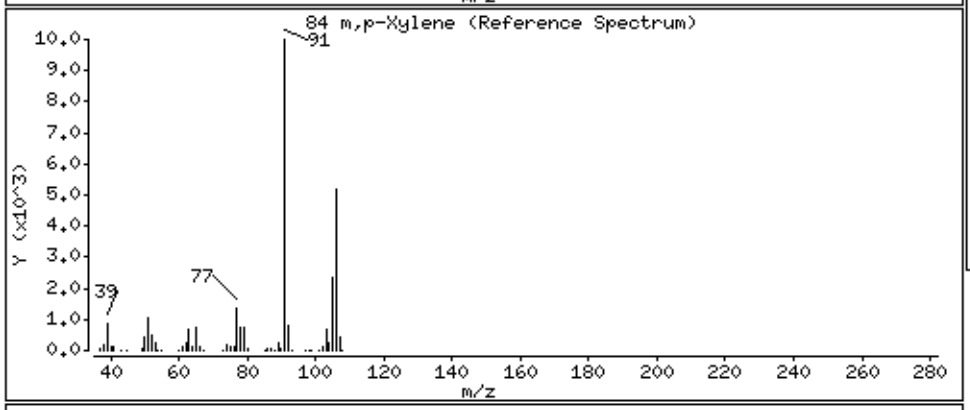
Column diameter: 0.53

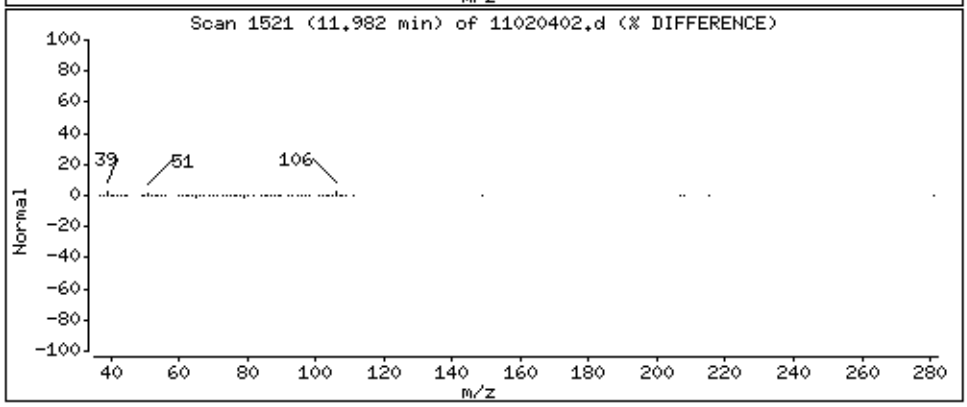
84 m,p-Xylene

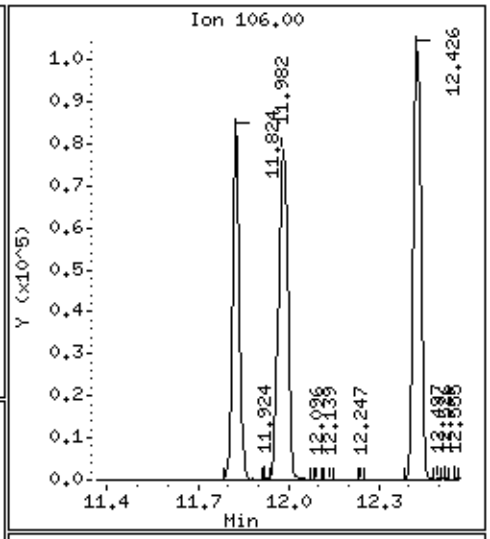
Concentration: 84.568 NG

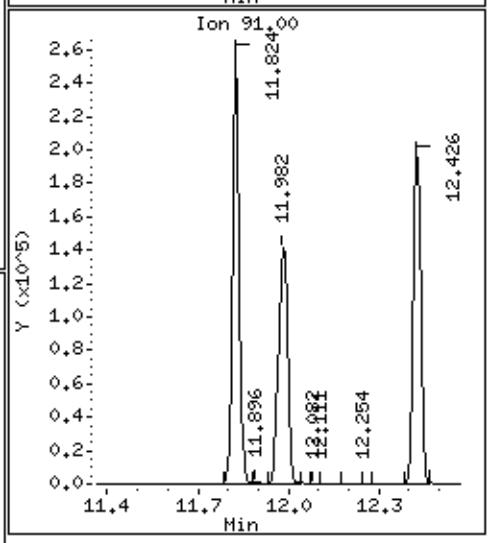












Data File: /chem/msd11.i/04feb16.b/11020402.d

Date : 04-FEB-2016 10:54

Client ID: LCS

Instrument: msd11.i

Sample Info: ;VI VOC+PAH LCS;LCS

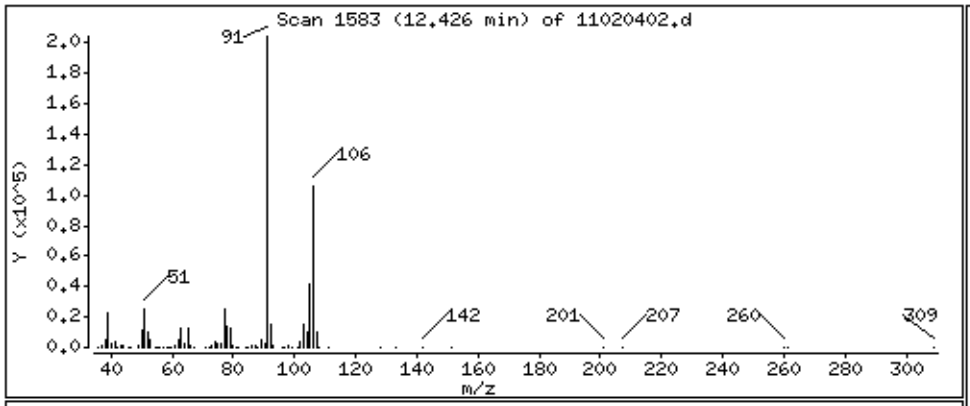
Operator: LAct

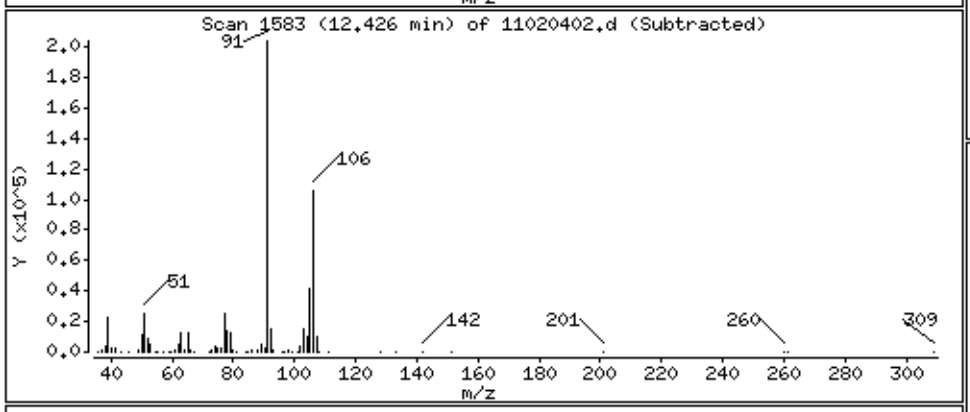
Column phase: RTx-624

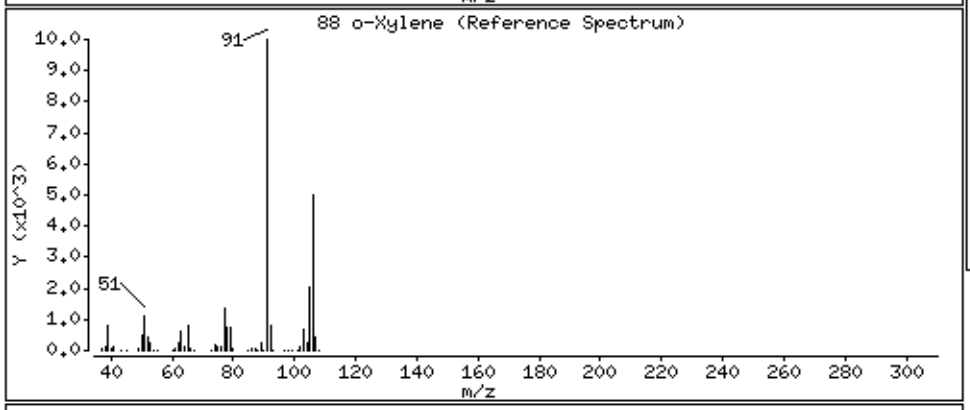
Column diameter: 0.53

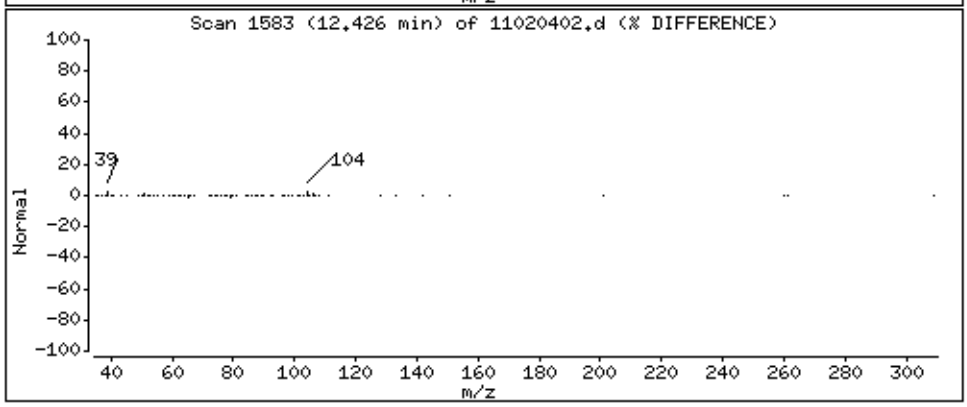
88 o-Xylene

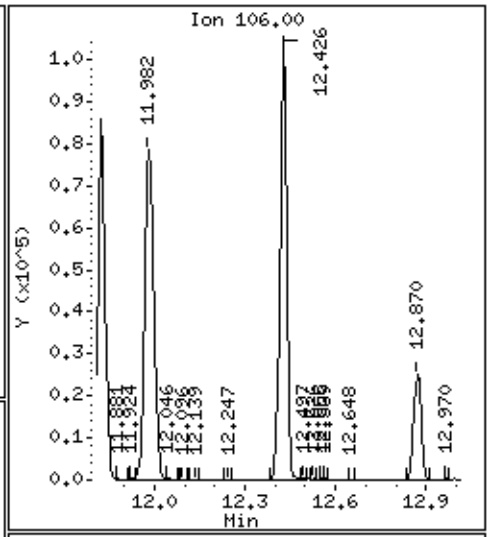
Concentration: 86.930 NG

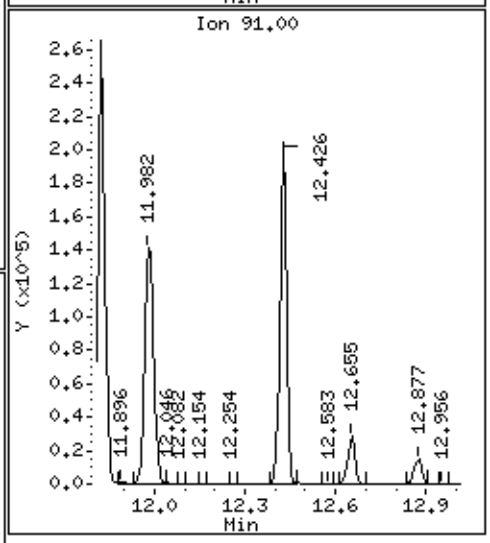












Data File: /chem/msd11.i/04feb16.b/11020402.d

Date : 04-FEB-2016 10:54

Client ID: LCS

Instrument: msd11.i

Sample Info: ;VI VOC+PAH LCS;LCS

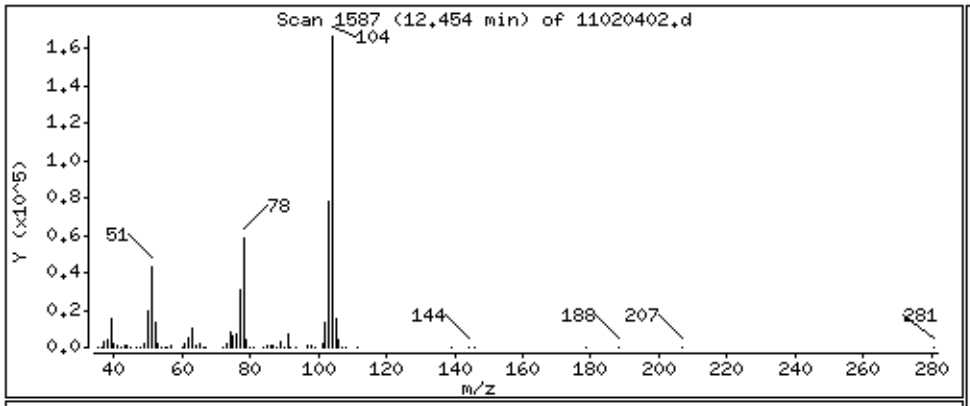
Operator: LAct

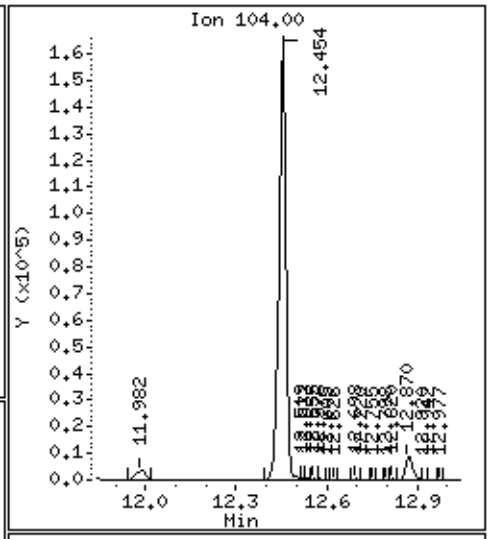
Column phase: RTx-624

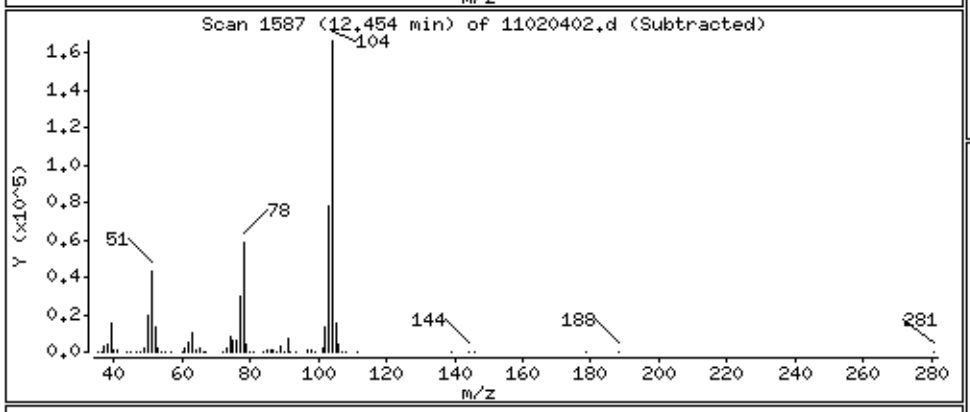
Column diameter: 0.53

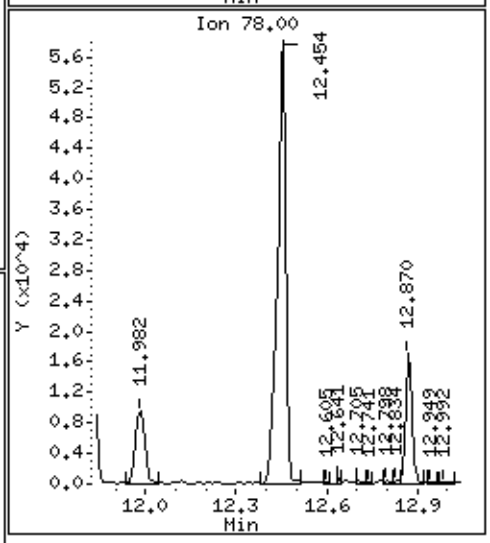
89 Styrene

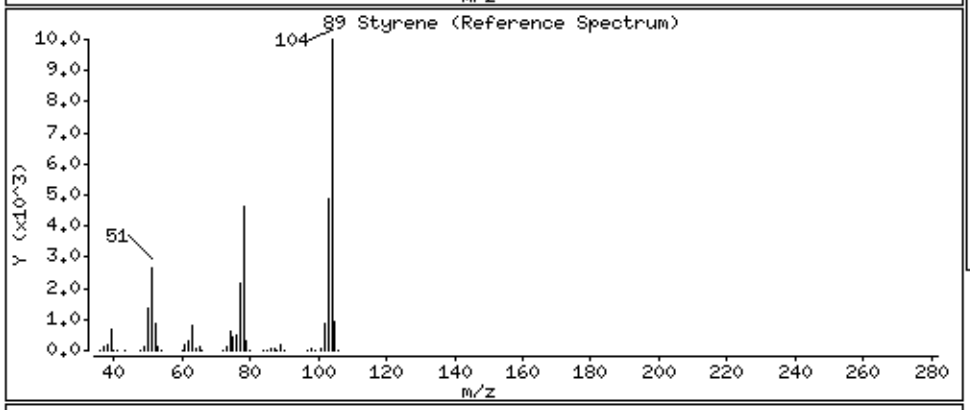
Concentration: 85.926 NG

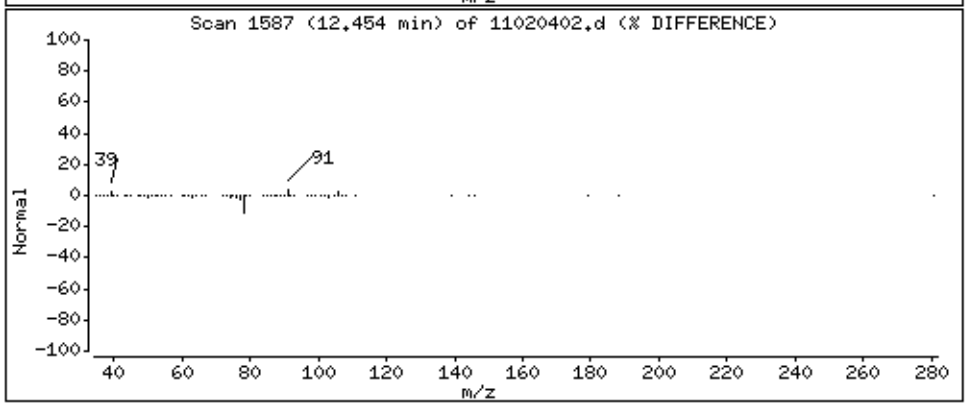












Data File: /chem/msd11.i/04feb16.b/11020402.d

Date : 04-FEB-2016 10:54

Client ID: LCS

Instrument: msd11.i

Sample Info: ;VI VOC+PAH LCS;LCS

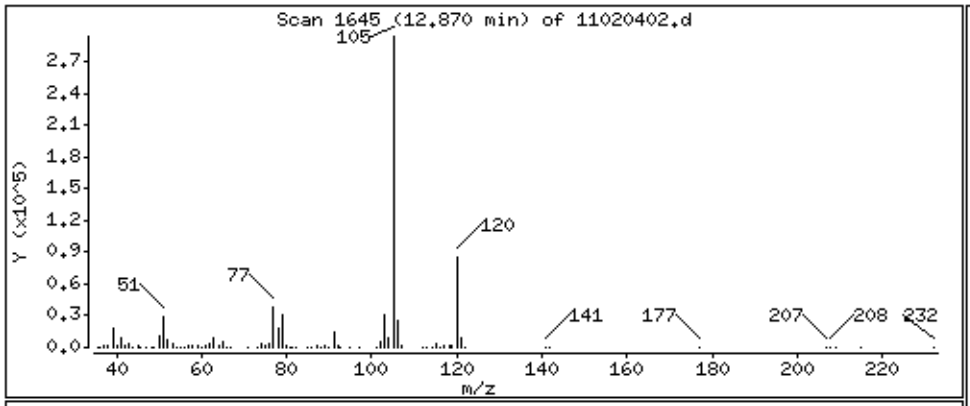
Operator: LAct

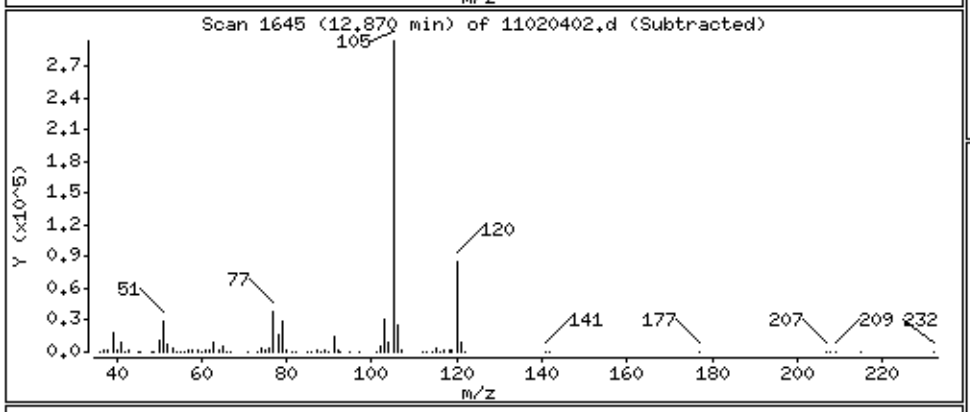
Column phase: RTx-624

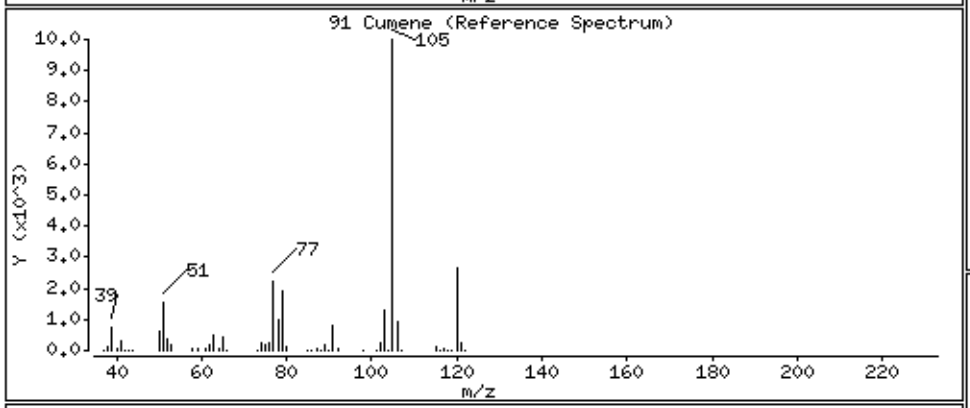
Column diameter: 0.53

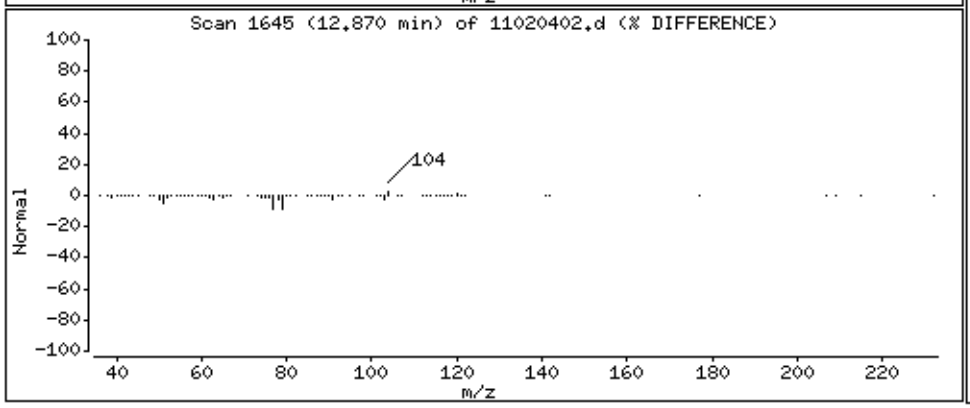
91 Cumene

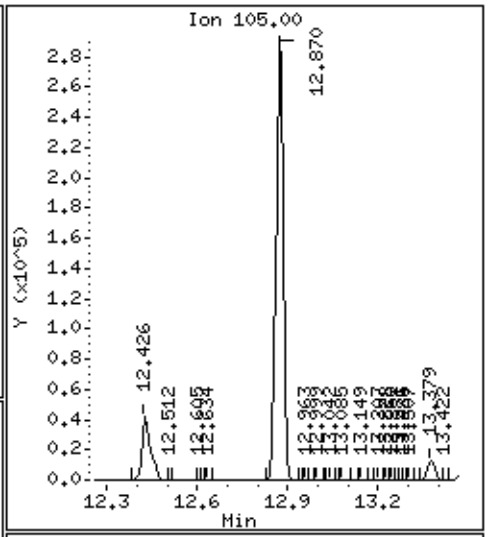
Concentration: 98.524 NG

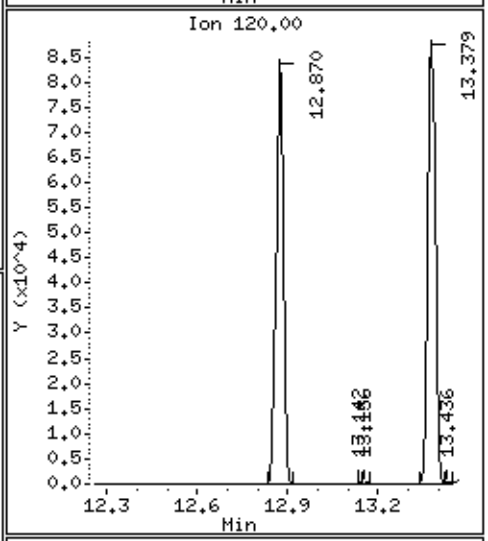


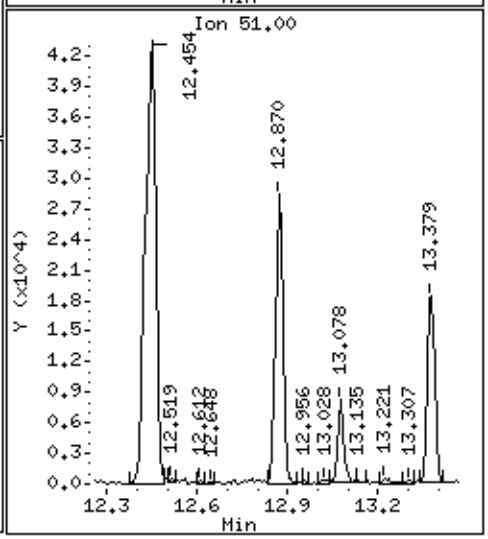












Data File: /chem/msd11.i/04feb16.b/11020402.d

Date : 04-FEB-2016 10:54

Client ID: LCS

Instrument: msd11.i

Sample Info: ;VI VOC+PAH LCS;LCS

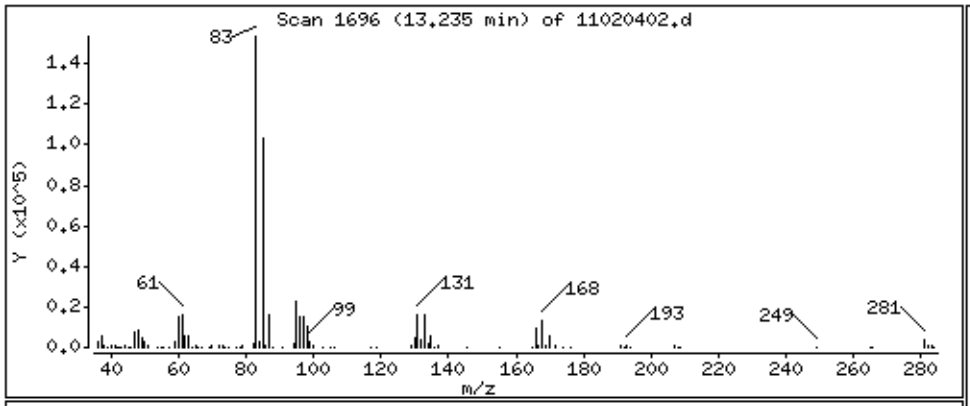
Operator: LAct

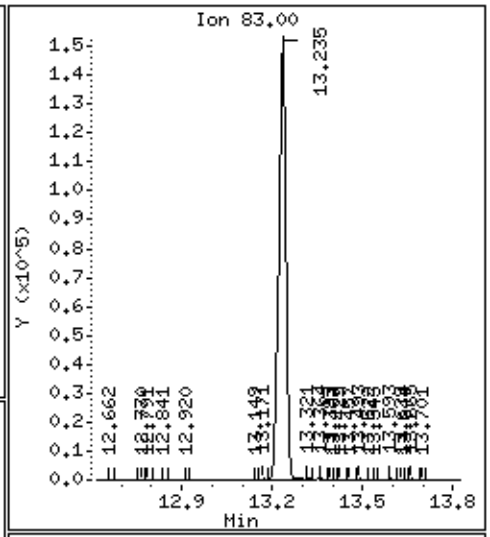
Column phase: RTx-624

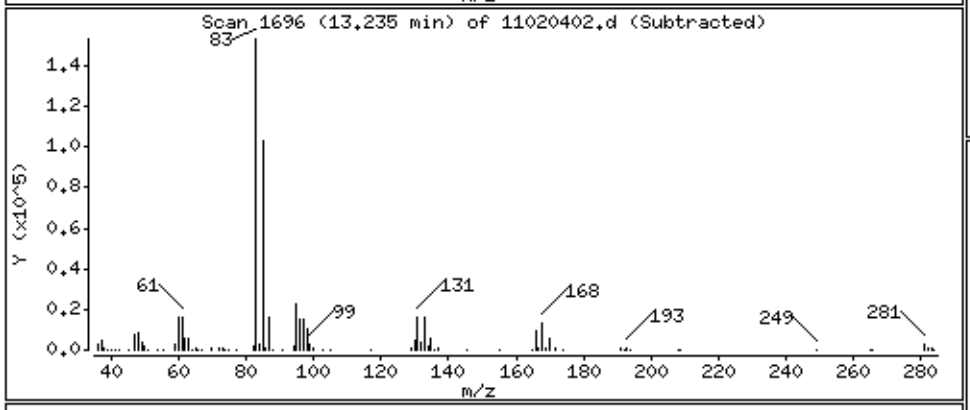
Column diameter: 0.53

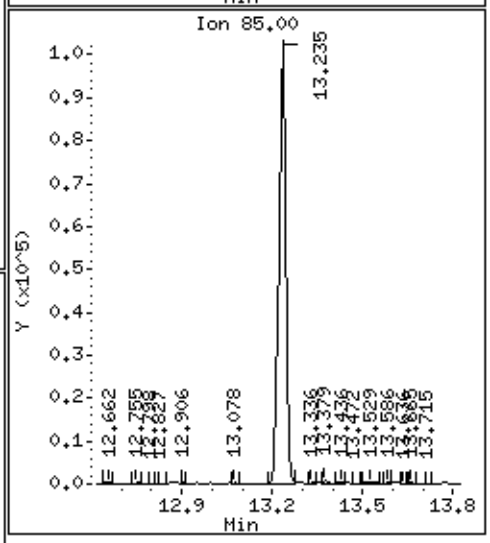
94 1,1,2,2-Tetrachloroethane

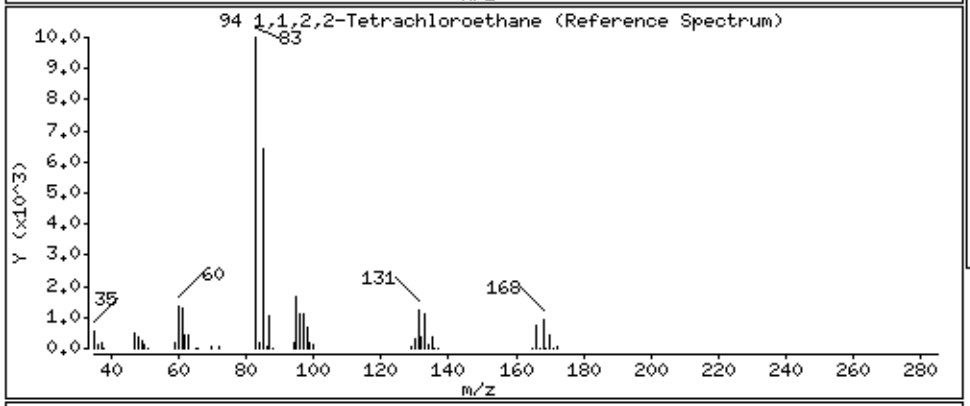
Concentration: 152.74 NG

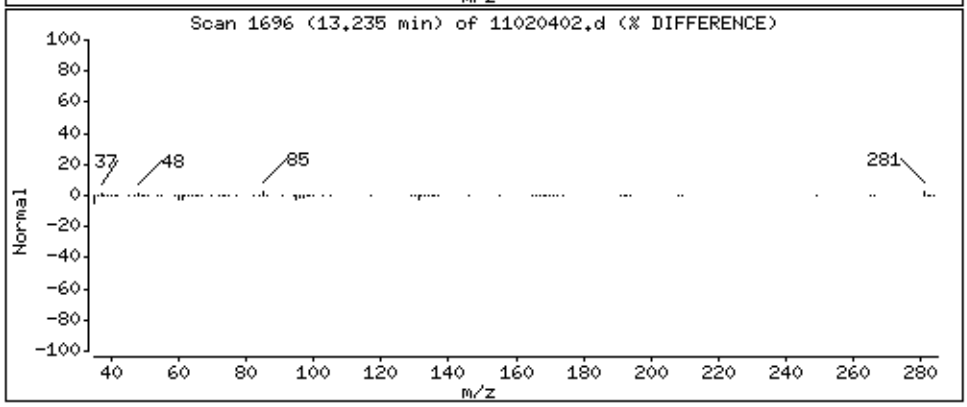












Data File: /chem/msd11.i/04feb16.b/11020402.d

Date : 04-FEB-2016 10:54

Client ID: LCS

Instrument: msd11.i

Sample Info: ;VI VOC+PAH LCS;LCS

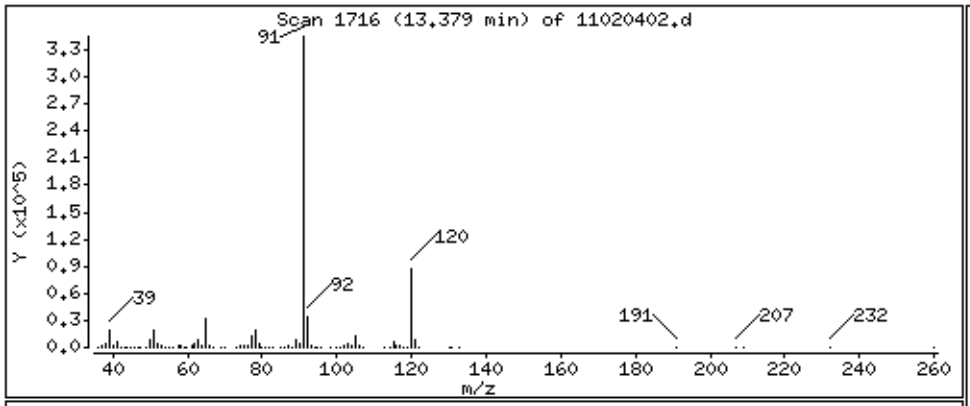
Operator: LAct

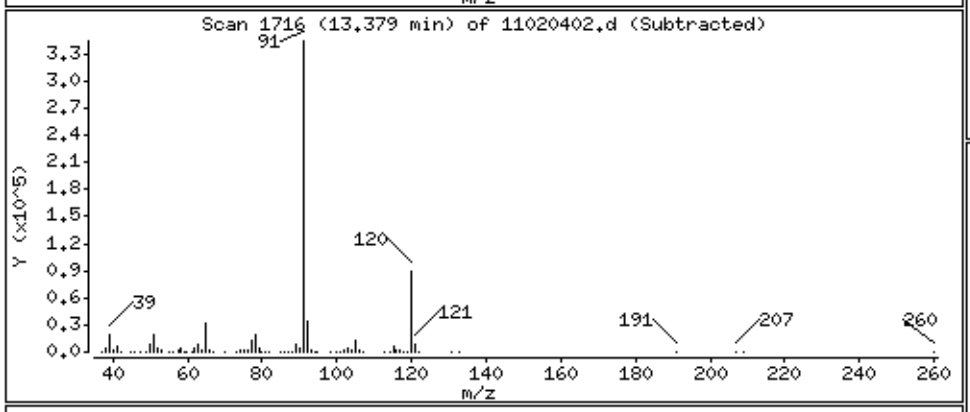
Column phase: RTx-624

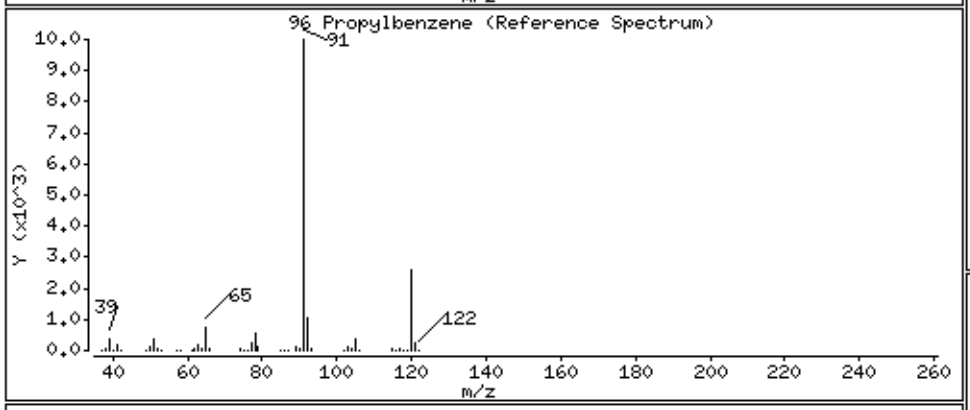
Column diameter: 0.53

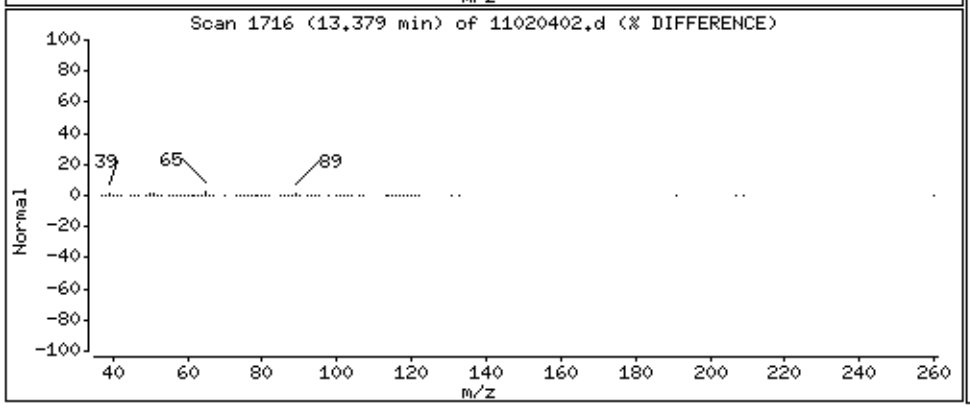
96 Propylbenzene

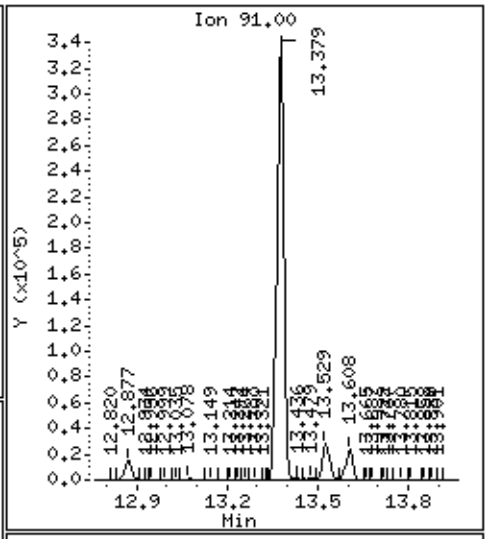
Concentration: 98.477 NG

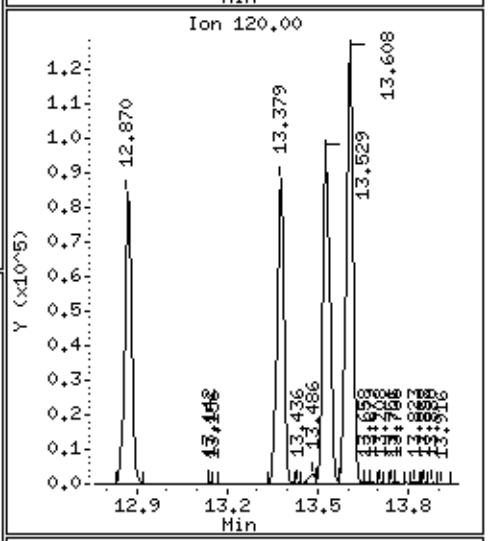


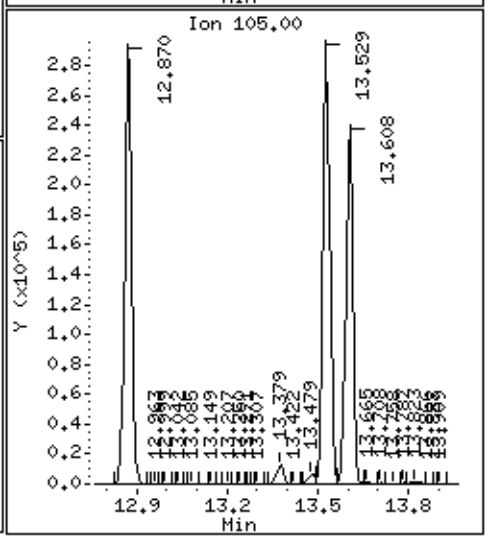












Data File: /chem/msd11.i/04feb16.b/11020402.d

Date : 04-FEB-2016 10:54

Client ID: LCS

Instrument: msd11.i

Sample Info: ;VI VOC+PAH LCS;LCS

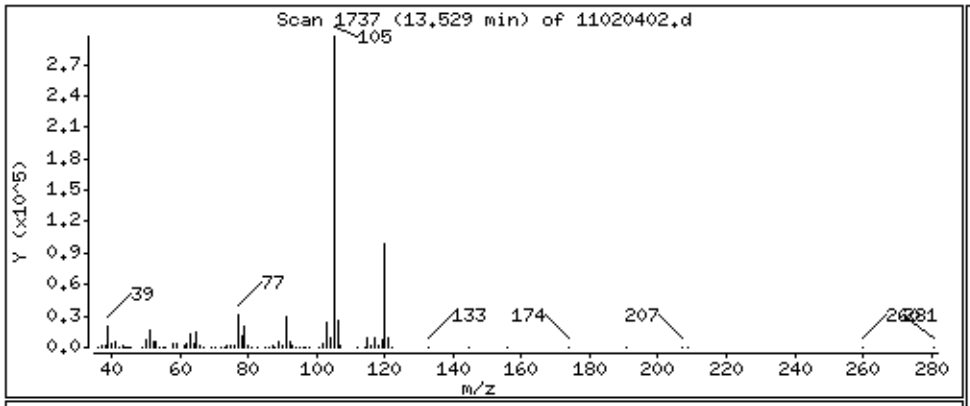
Operator: LAct

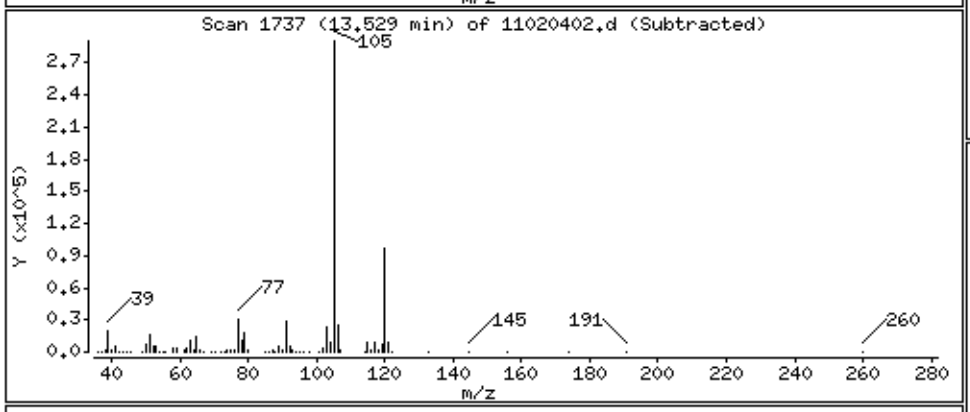
Column phase: RTx-624

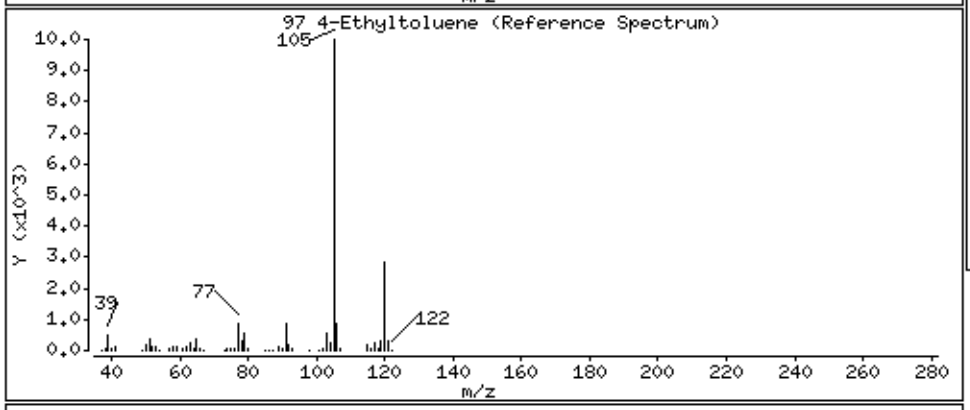
Column diameter: 0.53

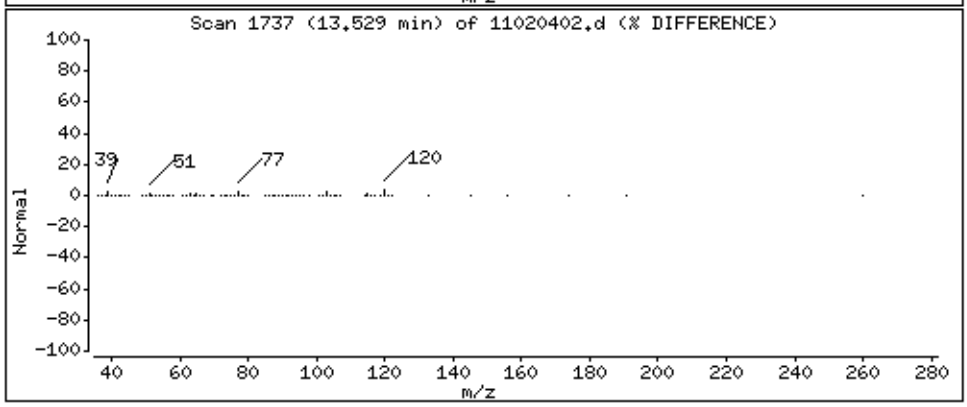
97 4-Ethyltoluene

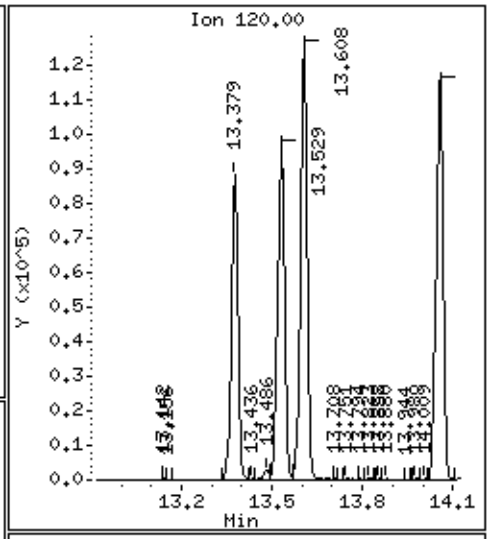
Concentration: 100.26 NG

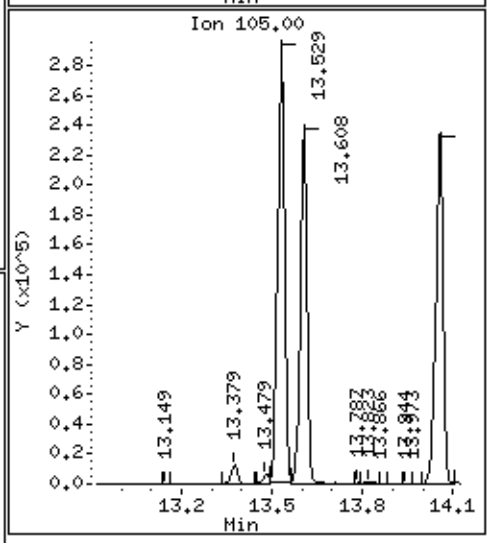












Data File: /chem/msd11.i/04feb16.b/11020402.d

Date : 04-FEB-2016 10:54

Client ID: LCS

Instrument: msd11.i

Sample Info: ;VI VOC+PAH LCS;LCS

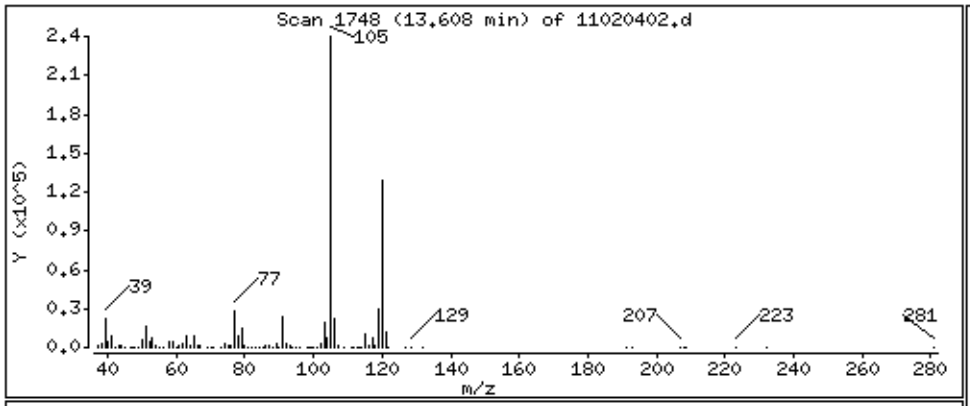
Operator: LAct

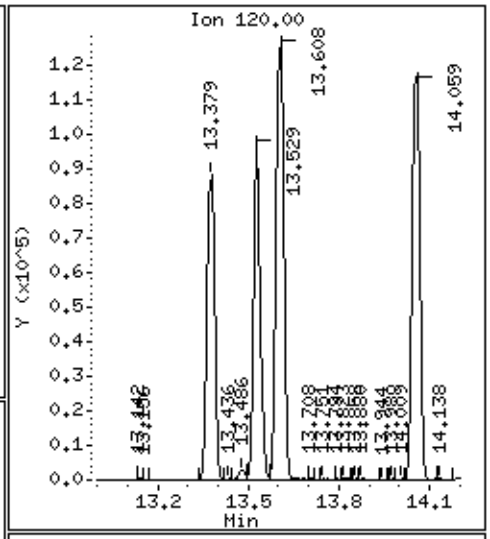
Column phase: RTx-624

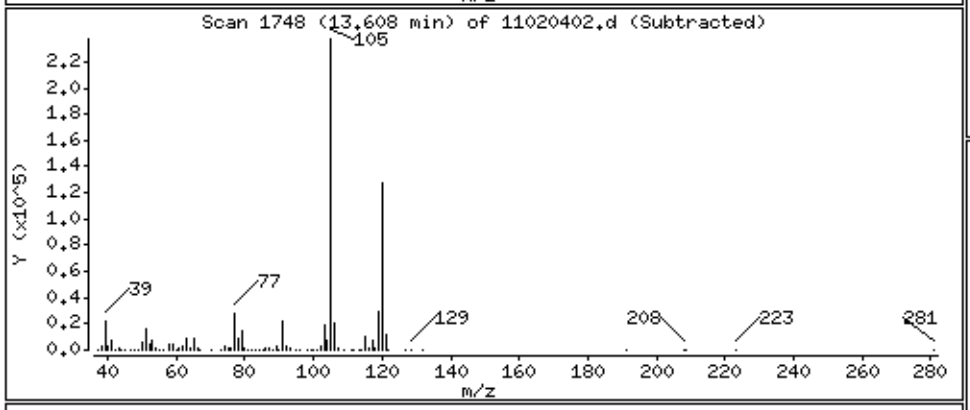
Column diameter: 0.53

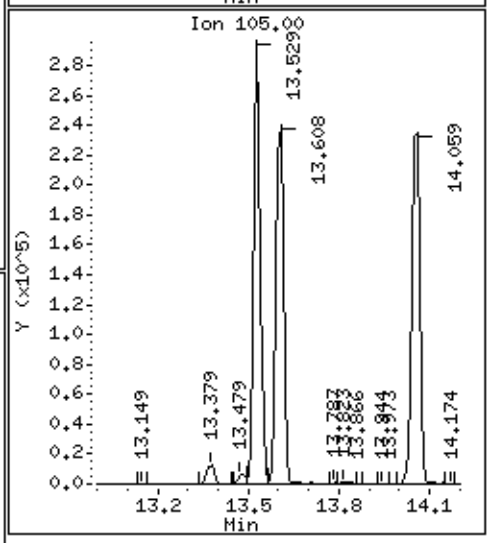
98 1,3,5-Trimethylbenzene

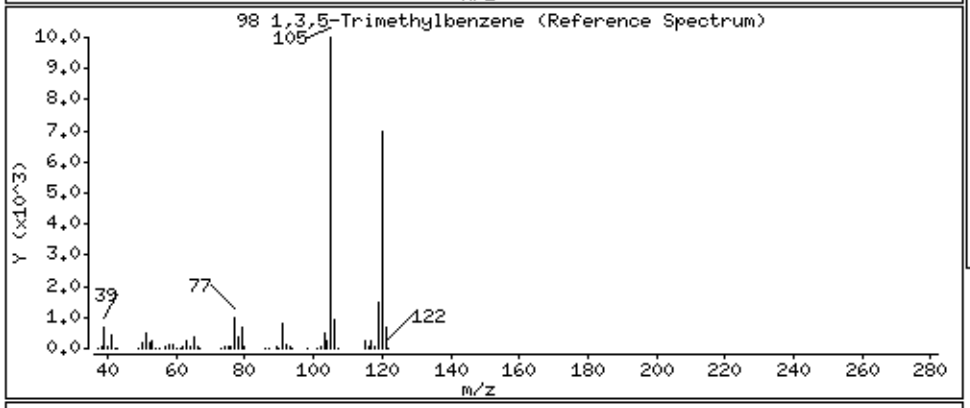
Concentration: 99.044 NG

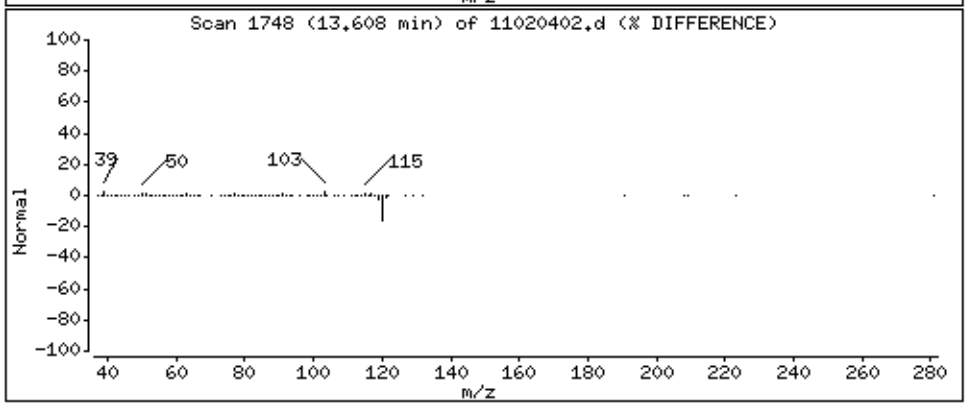












Data File: /chem/msd11.i/04feb16.b/11020402.d

Date : 04-FEB-2016 10:54

Client ID: LCS

Instrument: msd11.i

Sample Info: ;VI VOC+PAH LCS;LCS

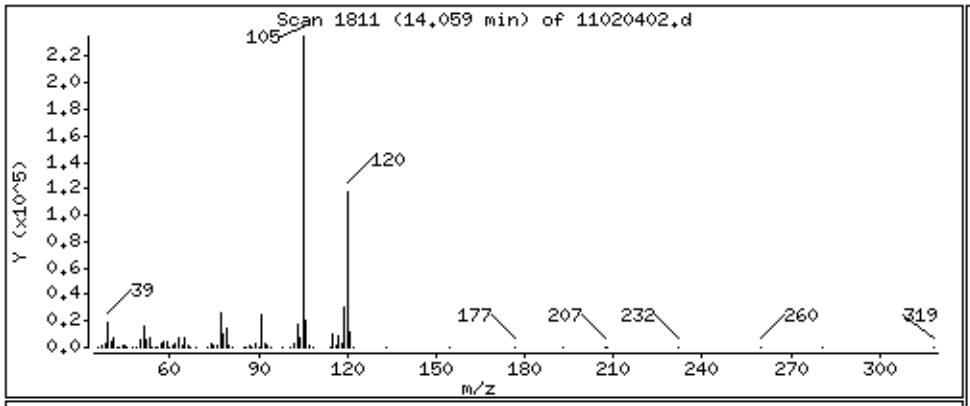
Operator: LAct

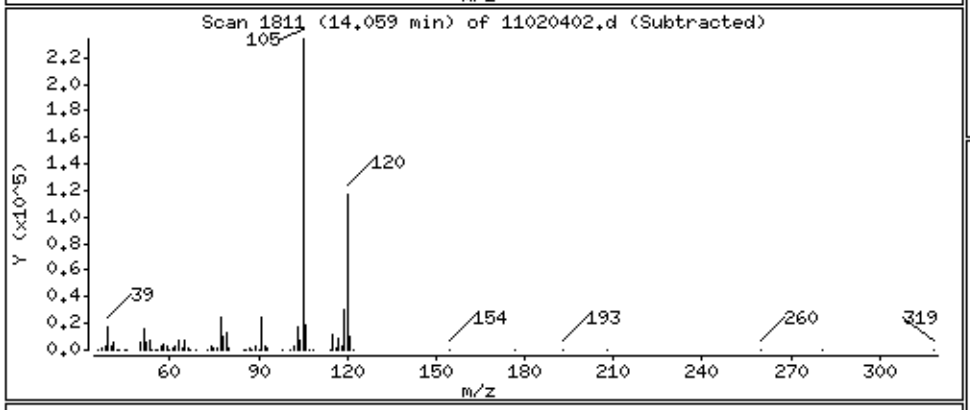
Column phase: RTx-624

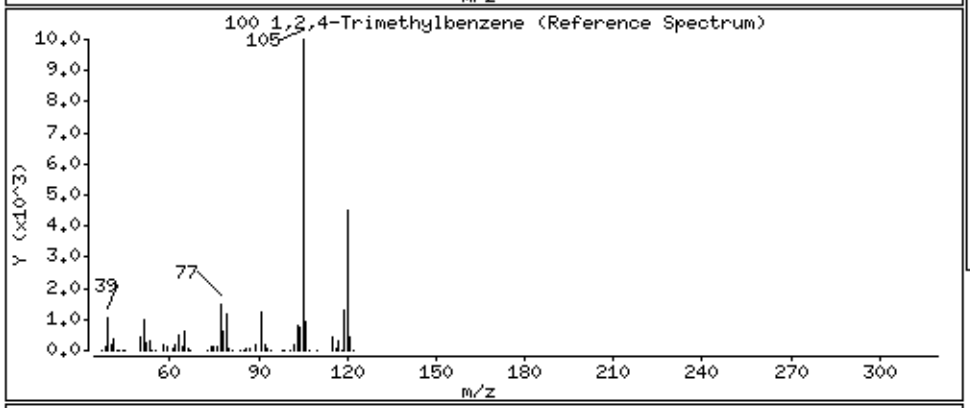
Column diameter: 0.53

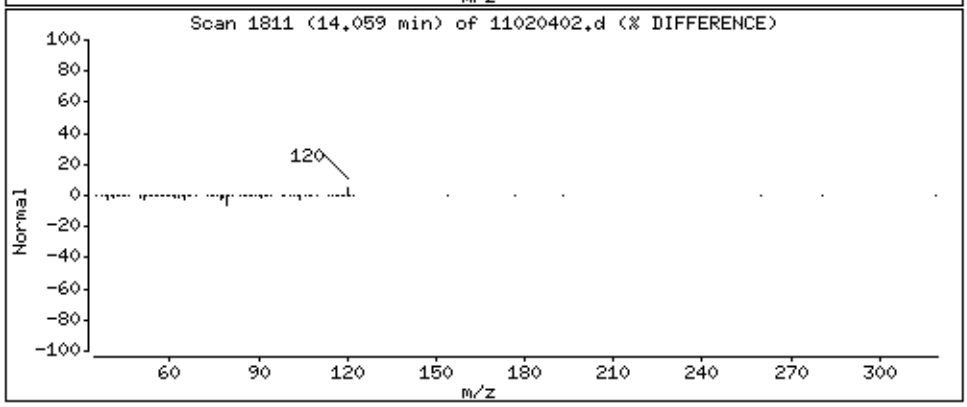
100 1,2,4-Trimethylbenzene

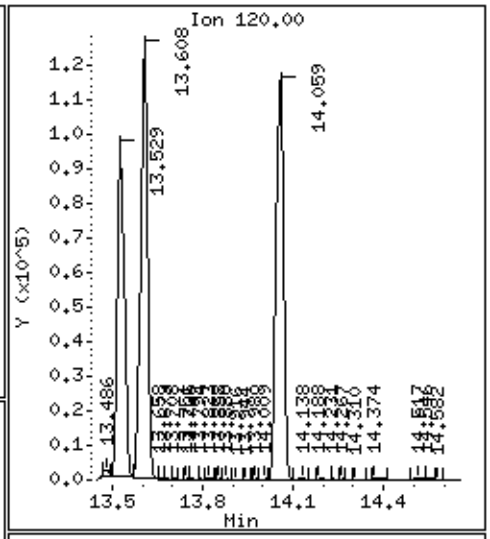
Concentration: 97.407 NG

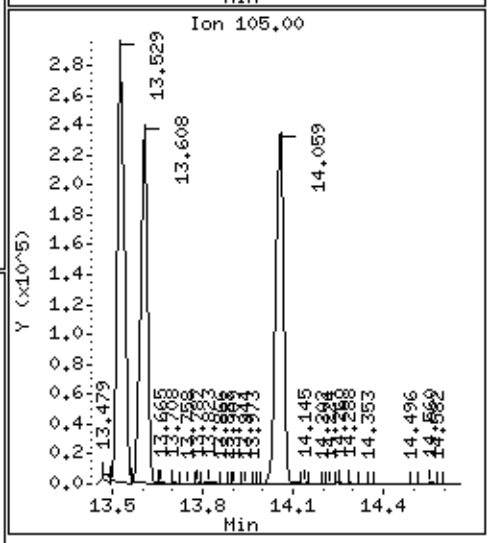












Data File: /chem/msd11.i/04feb16.b/11020402.d

Date : 04-FEB-2016 10:54

Client ID: LCS

Instrument: msd11.i

Sample Info: ;VI VOC+PAH LCS;LCS

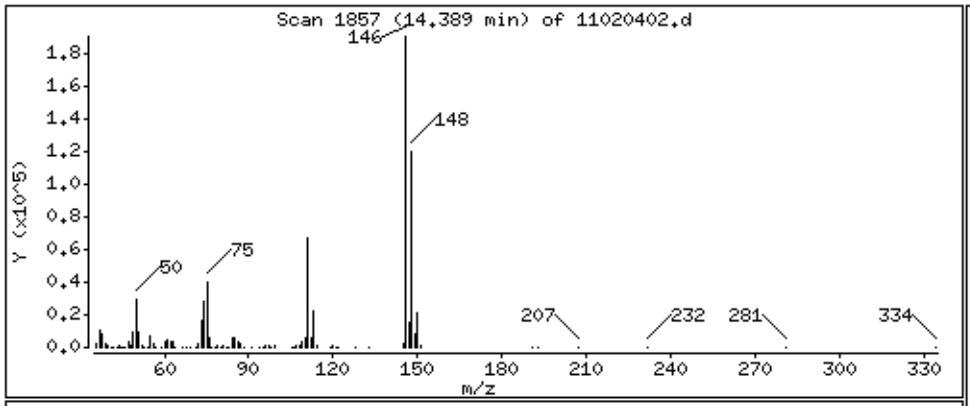
Operator: LAct

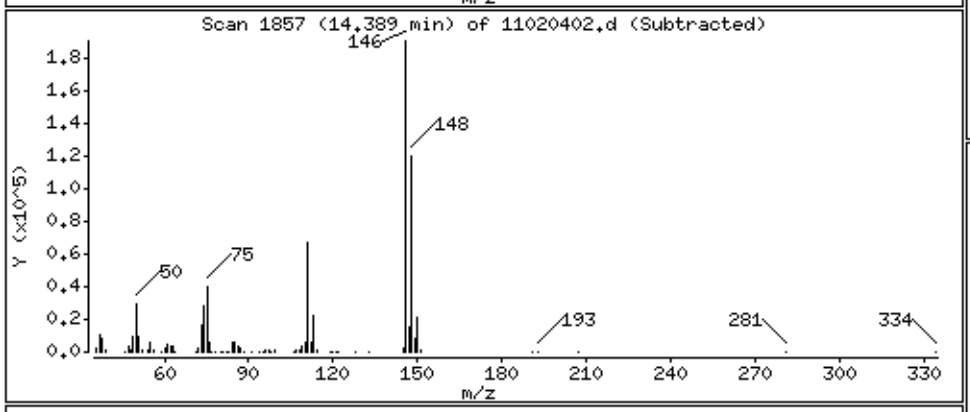
Column phase: RTx-624

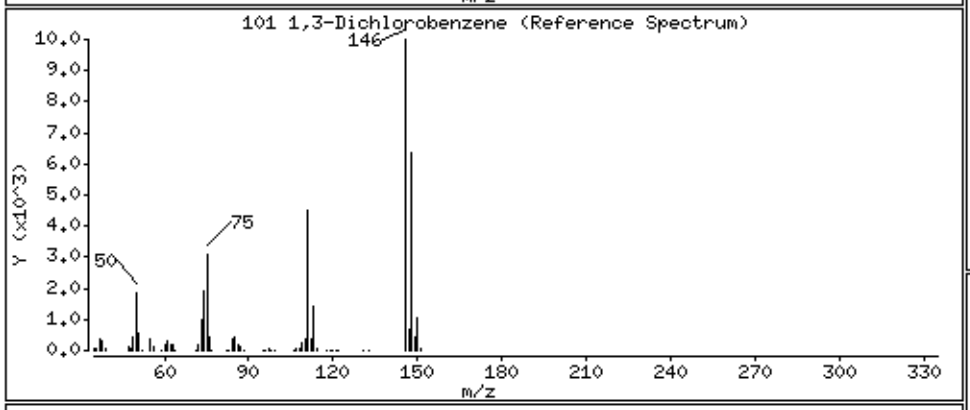
Column diameter: 0.53

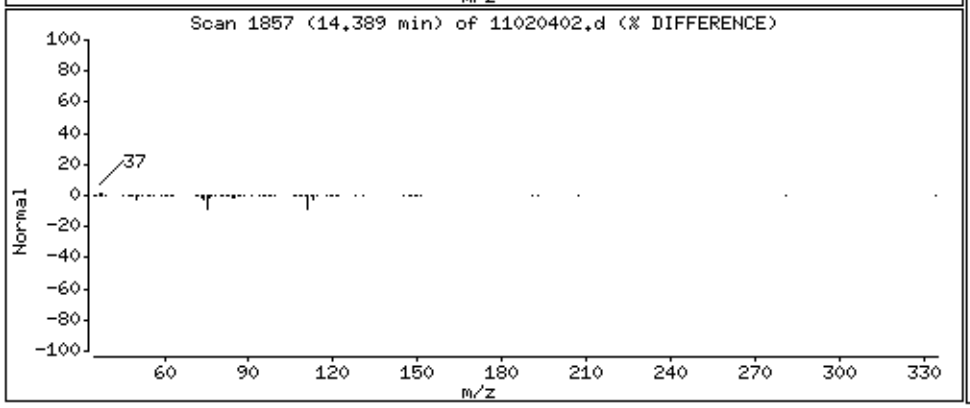
101 1,3-Dichlorobenzene

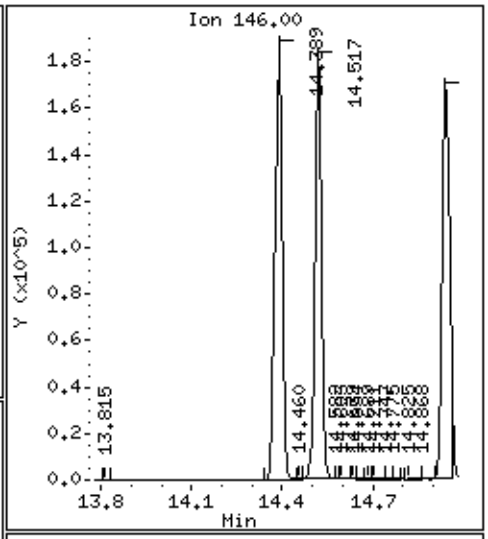
Concentration: 120.14 NG

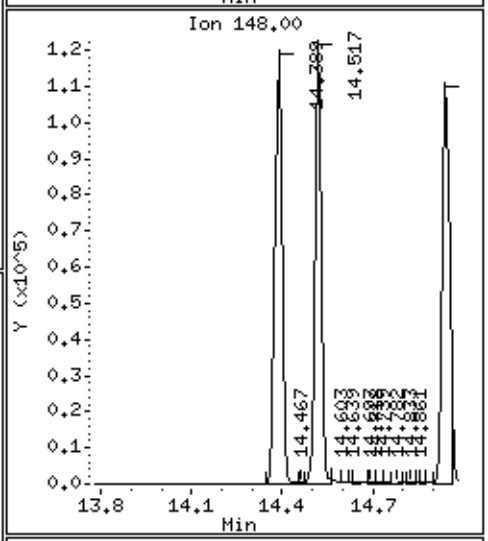


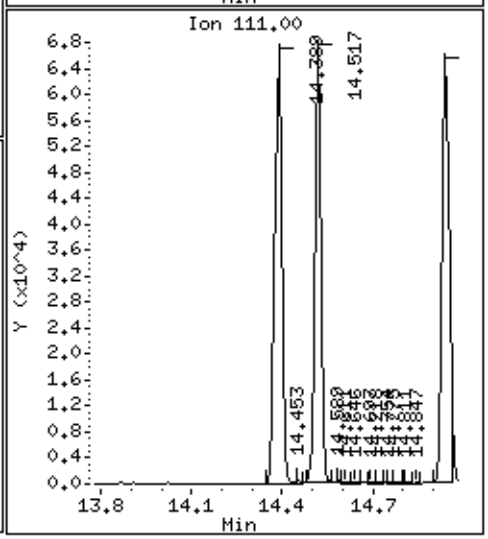












Data File: /chem/msd11.i/04feb16.b/11020402.d

Date : 04-FEB-2016 10:54

Client ID: LCS

Instrument: msd11.i

Sample Info: ;VI VOC+PAH LCS;LCS

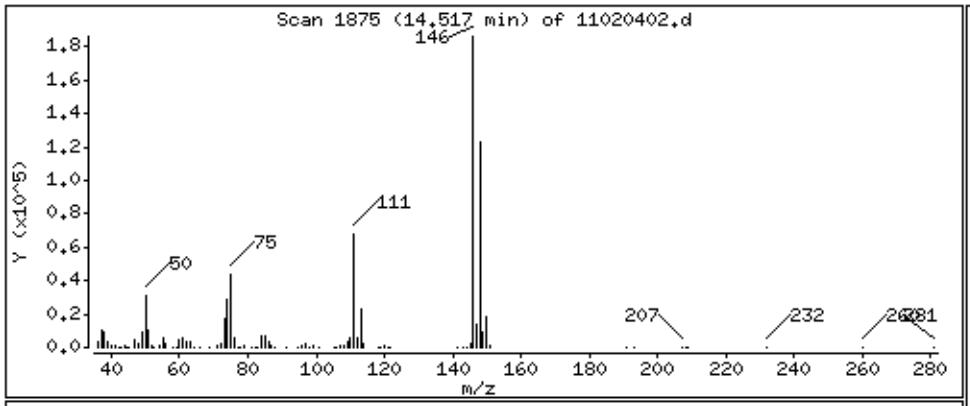
Operator: LAct

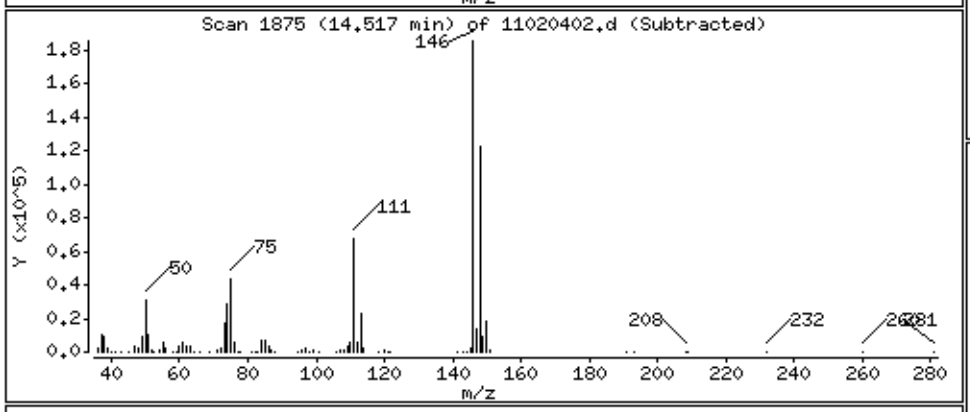
Column phase: RTx-624

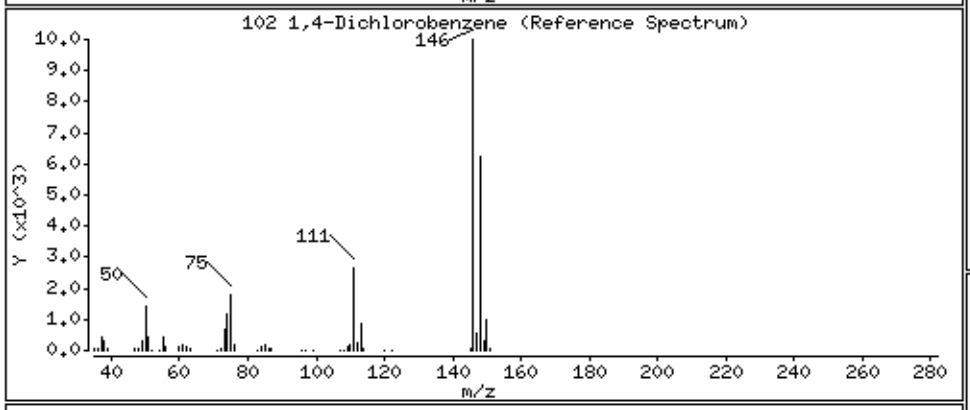
Column diameter: 0.53

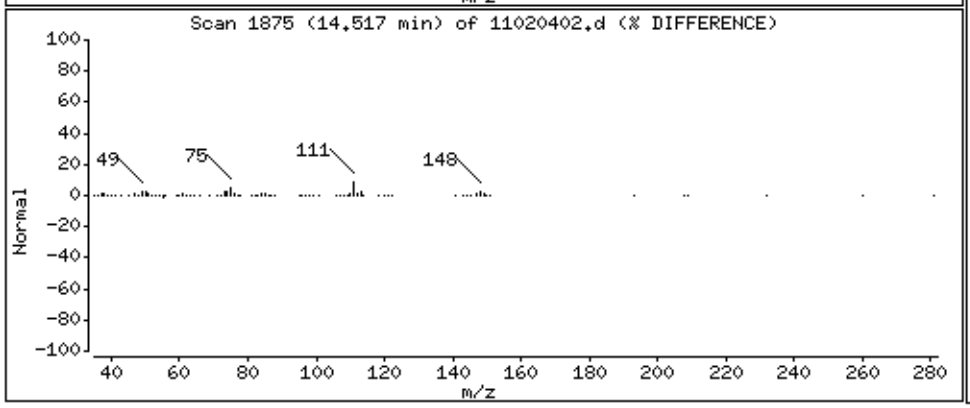
102 1,4-Dichlorobenzene

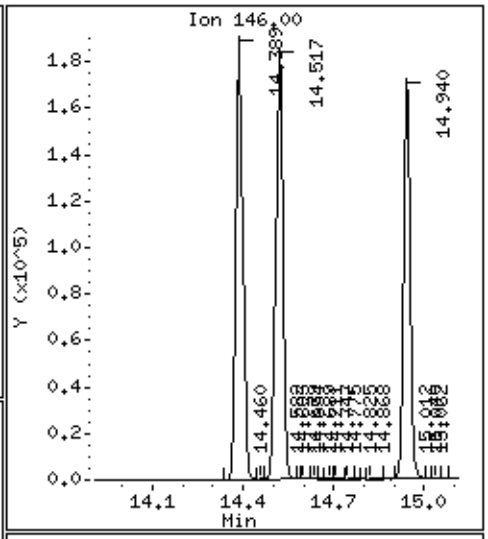
Concentration: 123.14 NG

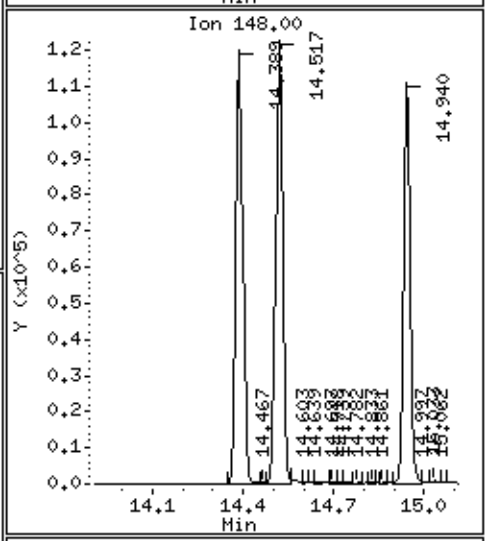


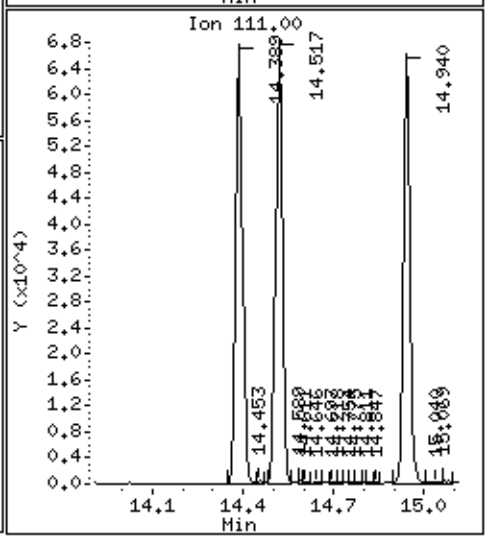












Data File: /chem/msd11.i/04feb16.b/11020402.d

Date : 04-FEB-2016 10:54

Client ID: LCS

Instrument: msd11.i

Sample Info: ;VI VOC+PAH LCS;LCS

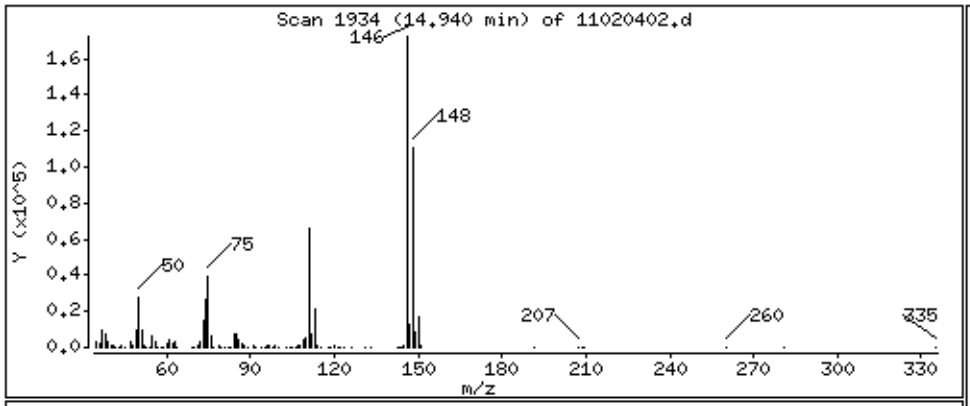
Operator: LAct

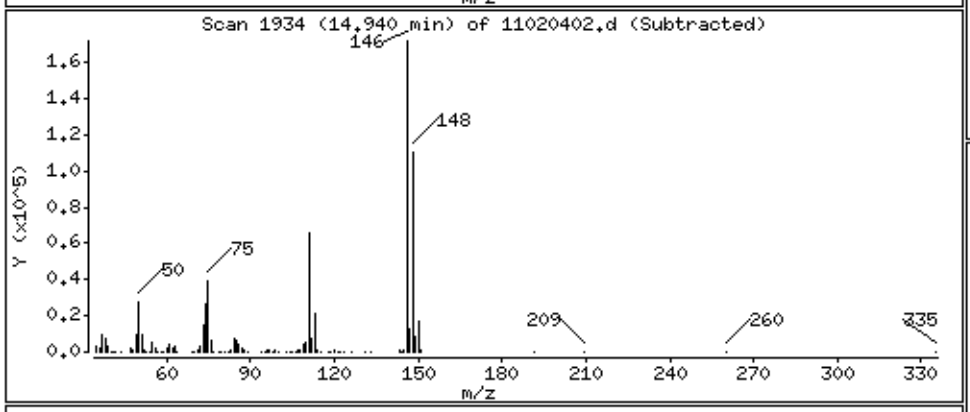
Column phase: RTx-624

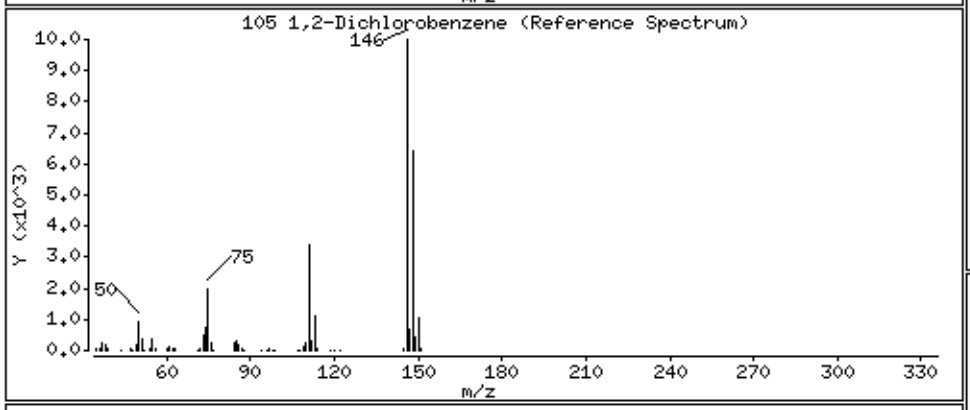
Column diameter: 0.53

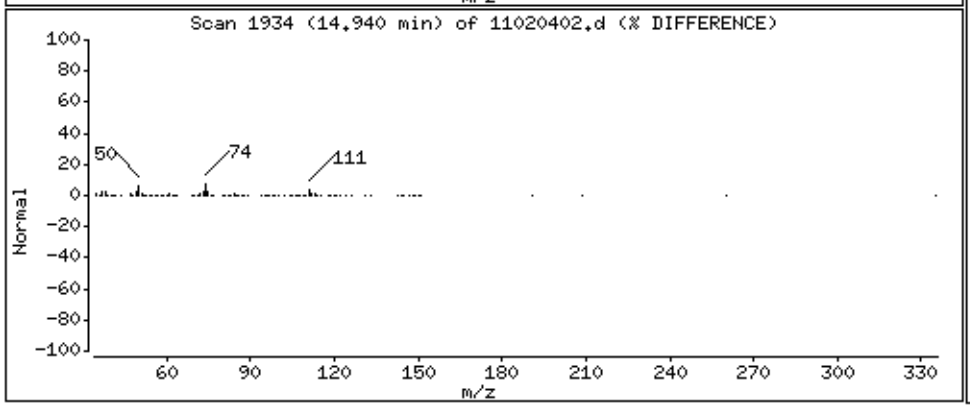
105 1,2-Dichlorobenzene

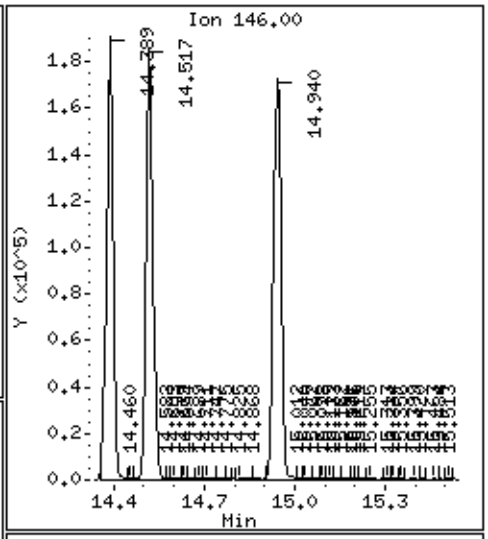
Concentration: 120.91 NG

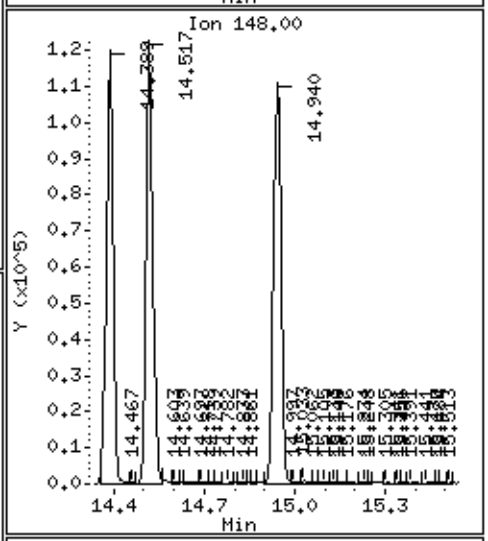


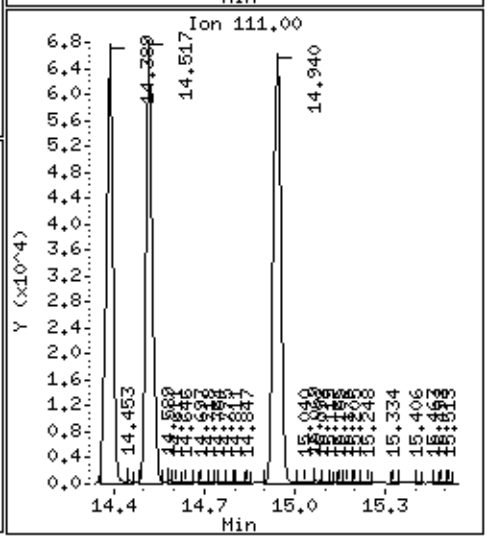












Data File: /chem/msd11.i/04feb16.b/11020402.d

Date : 04-FEB-2016 10:54

Client ID: LCS

Instrument: msd11.i

Sample Info: ;VI VOC+PAH LCS;LCS

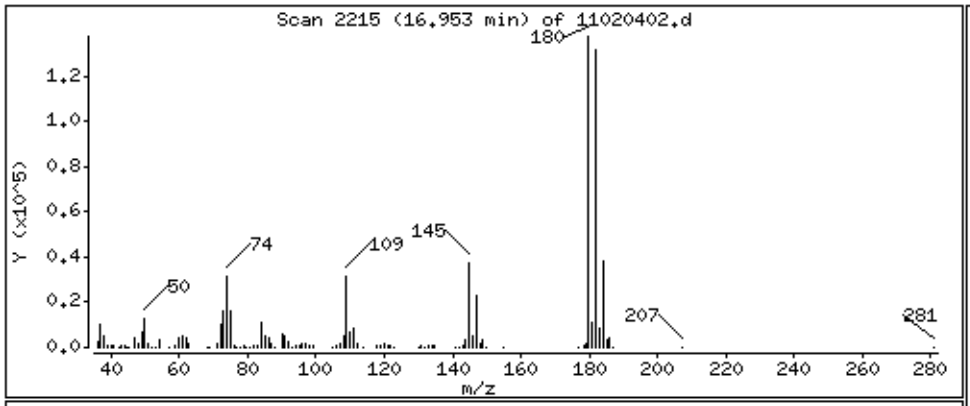
Operator: LAct

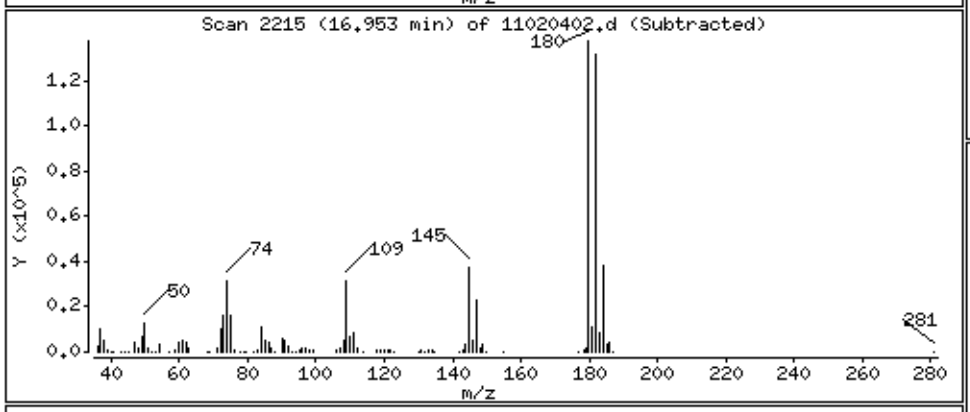
Column phase: RTx-624

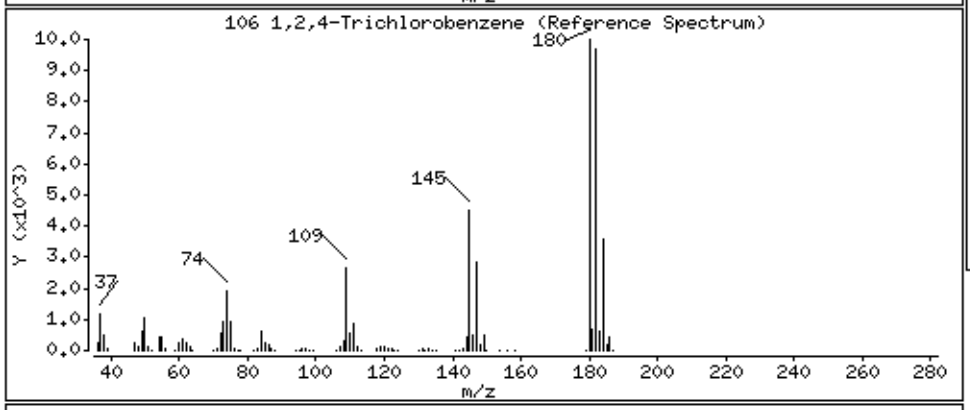
Column diameter: 0.53

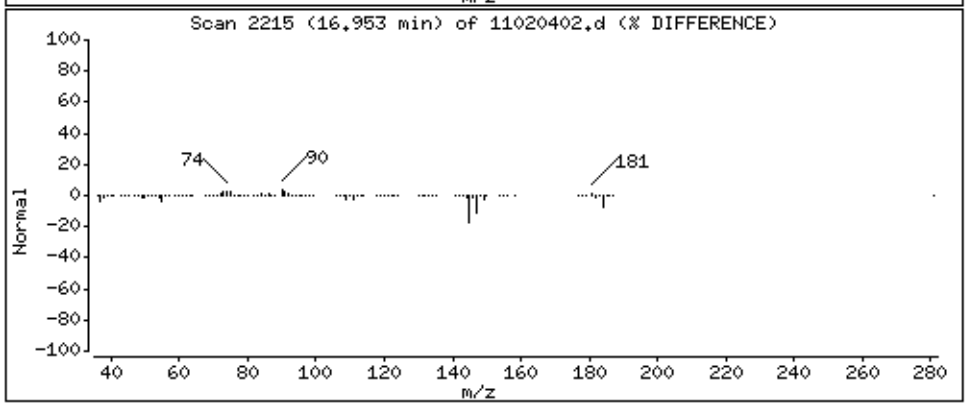
106 1,2,4-Trichlorobenzene

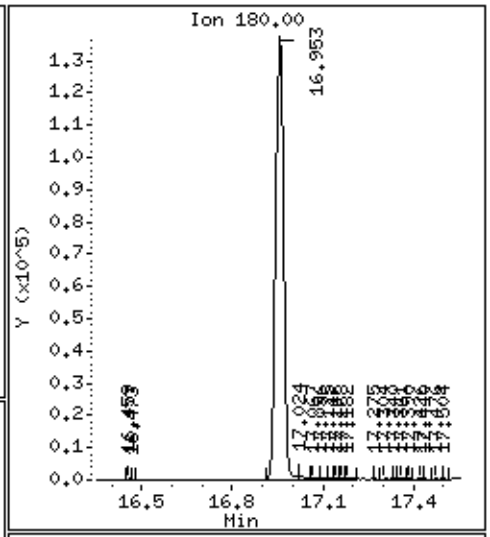
Concentration: 144.15 NG

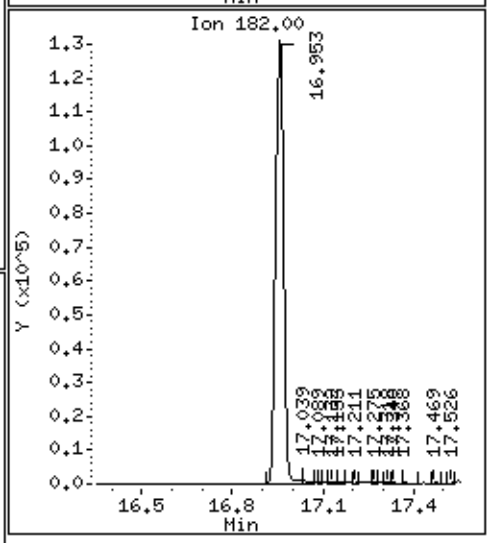












Data File: /chem/msd11.i/04feb16.b/11020402.d

Date : 04-FEB-2016 10:54

Client ID: LCS

Instrument: msd11.i

Sample Info: ;VI VOC+PAH LCS;LCS

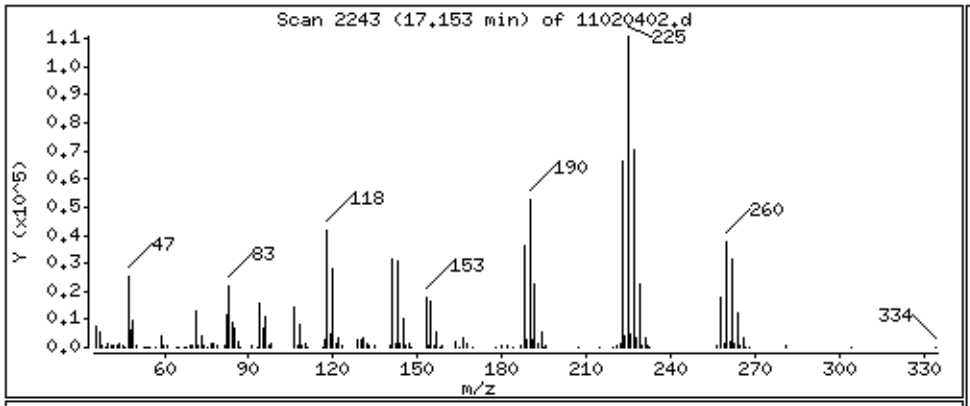
Operator: LAct

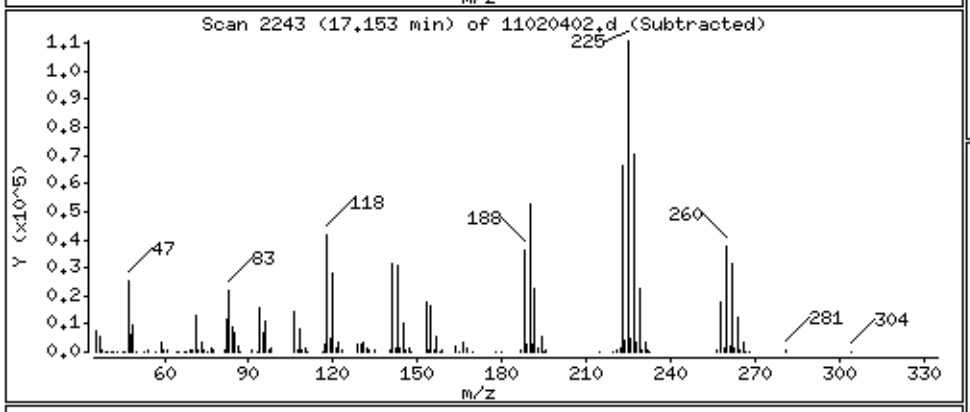
Column phase: RTx-624

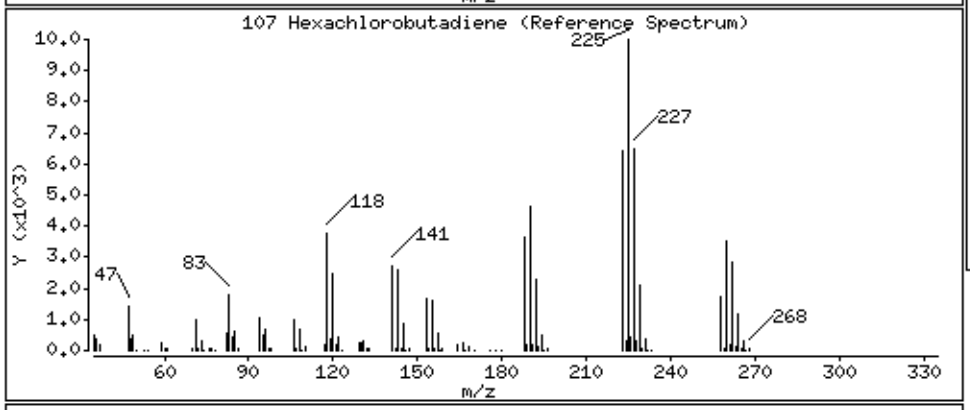
Column diameter: 0.53

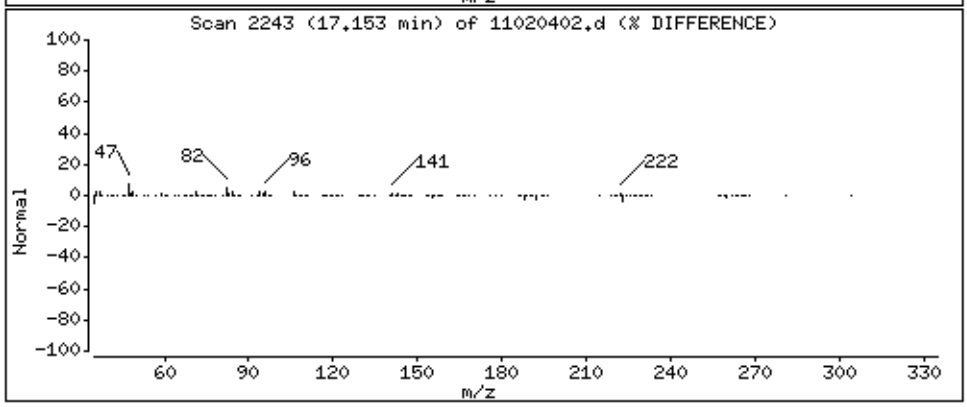
107 Hexachlorobutadiene

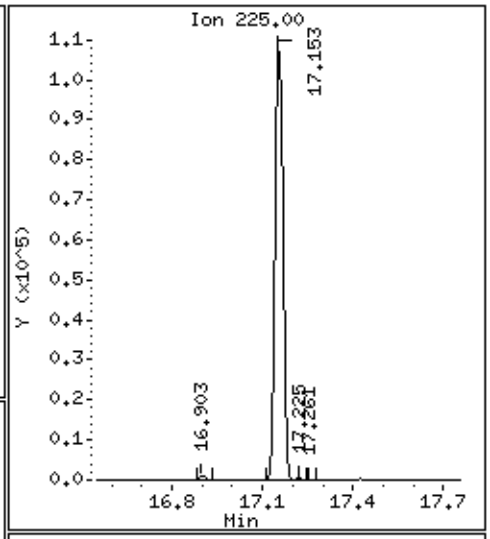
Concentration: 193.32 NG

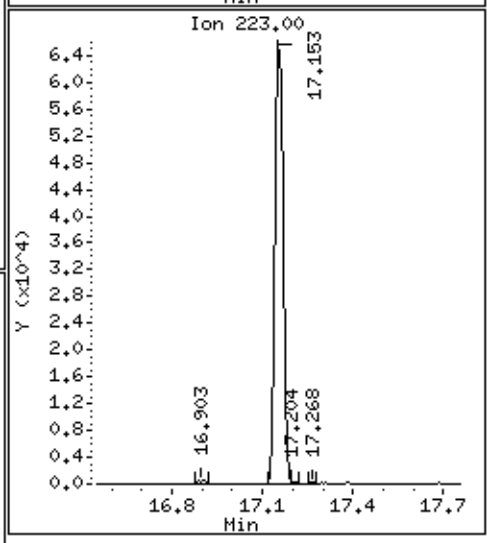












Data File: /chem/msd11.i/04feb16.b/11020402.d

Date : 04-FEB-2016 10:54

Client ID: LCS

Instrument: msd11.i

Sample Info: ;VI VOC+PAH LCS;LCS

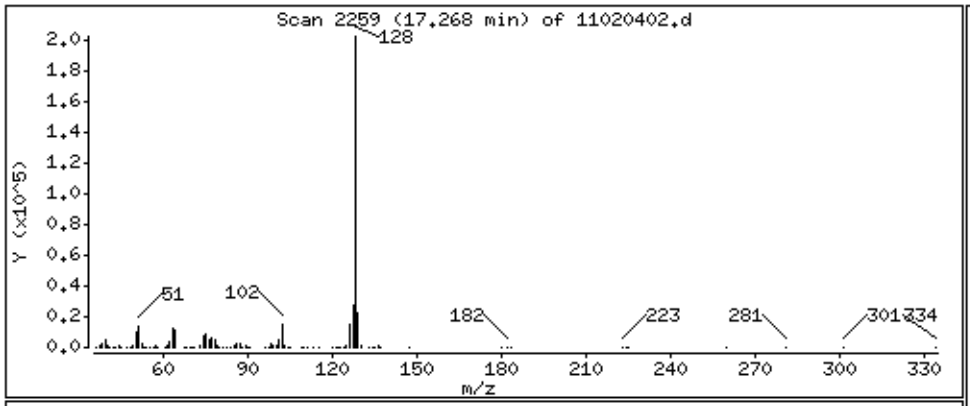
Operator: LAct

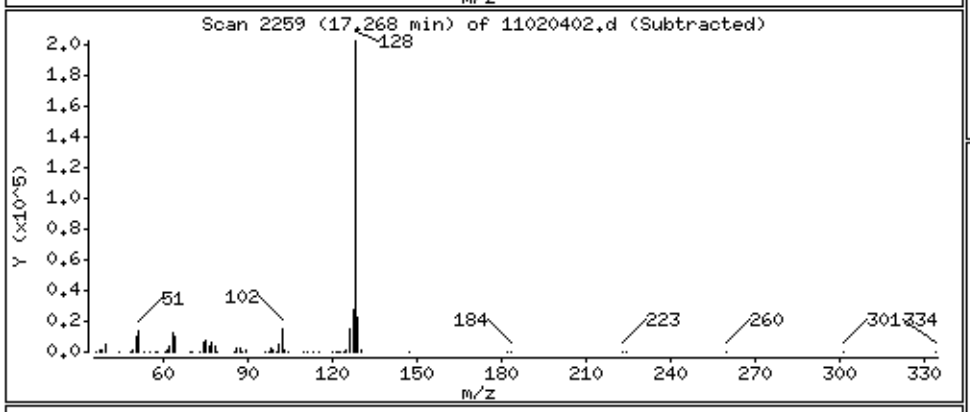
Column phase: RTx-624

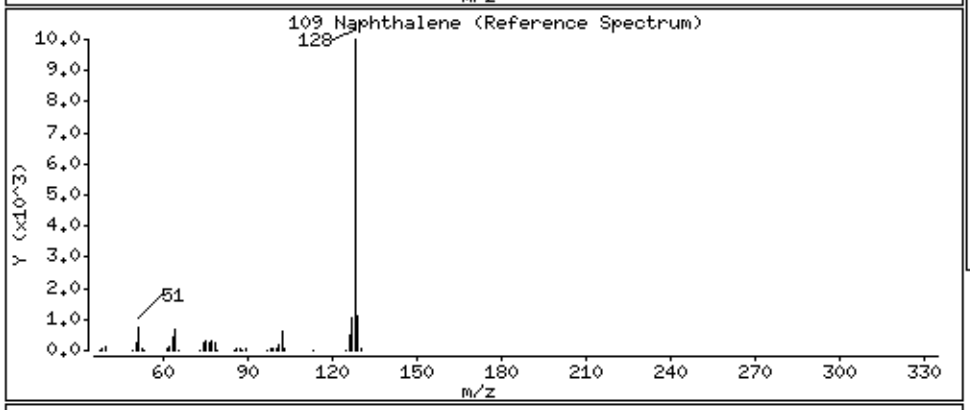
Column diameter: 0.53

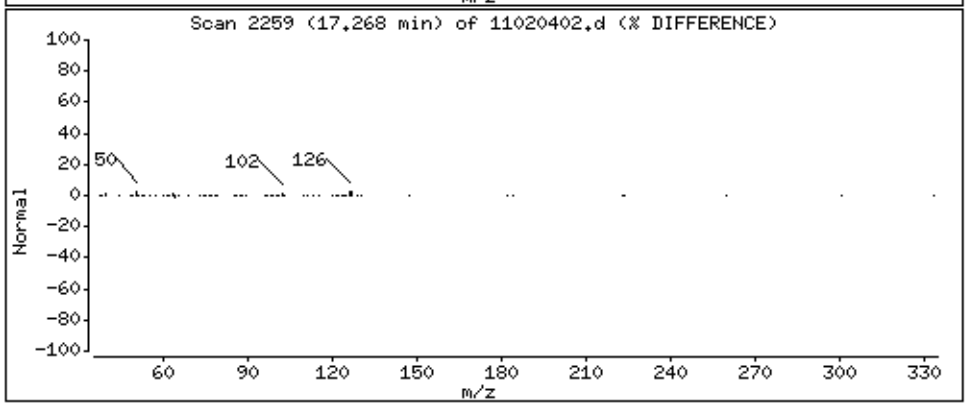
109 Naphthalene

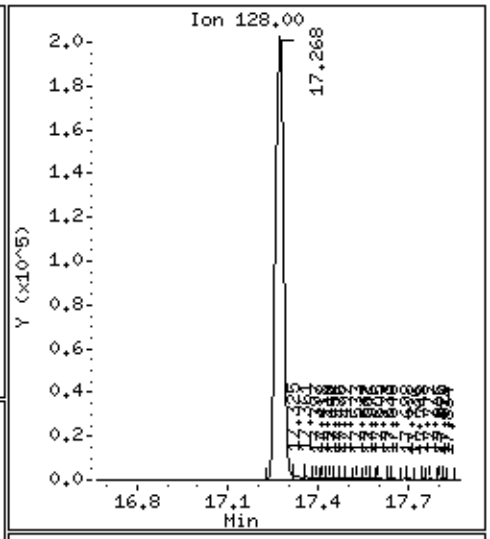
Concentration: 52.592 NG

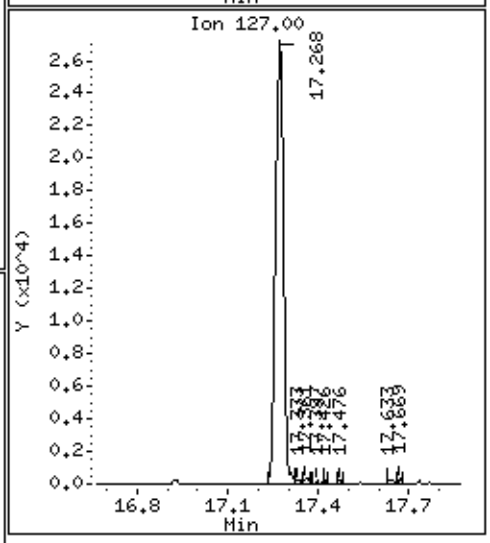












Data File: /chem/msd11.i/04feb16.b/11020402.d

Date : 04-FEB-2016 10:54

Client ID: LCS

Instrument: msd11.i

Sample Info: ;VI VOC+PAH LCS;LCS

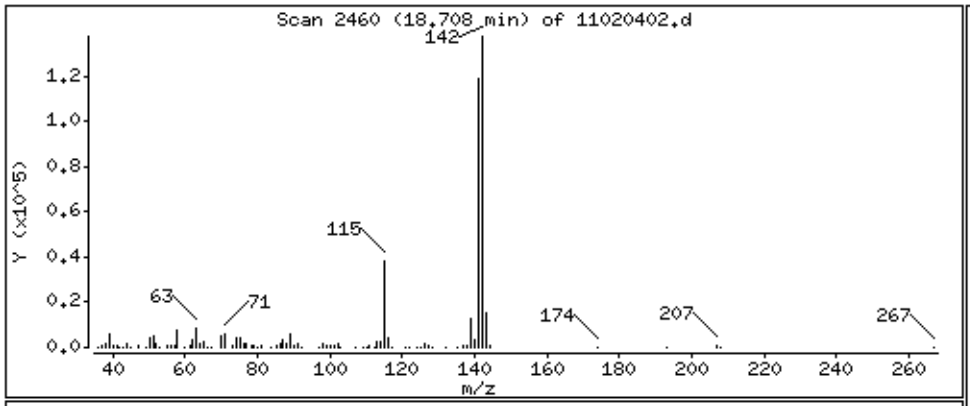
Operator: LAct

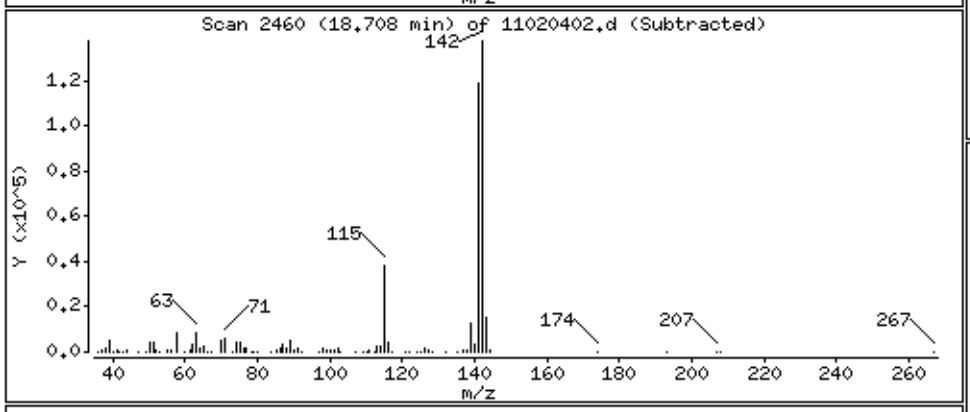
Column phase: RTx-624

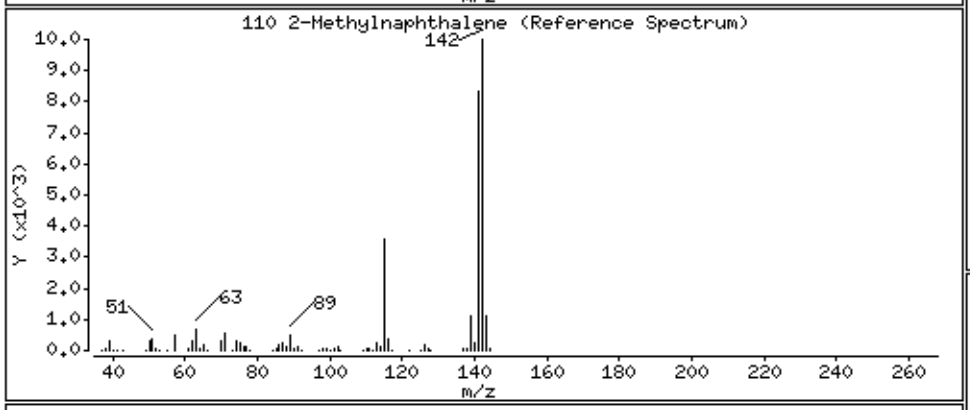
Column diameter: 0.53

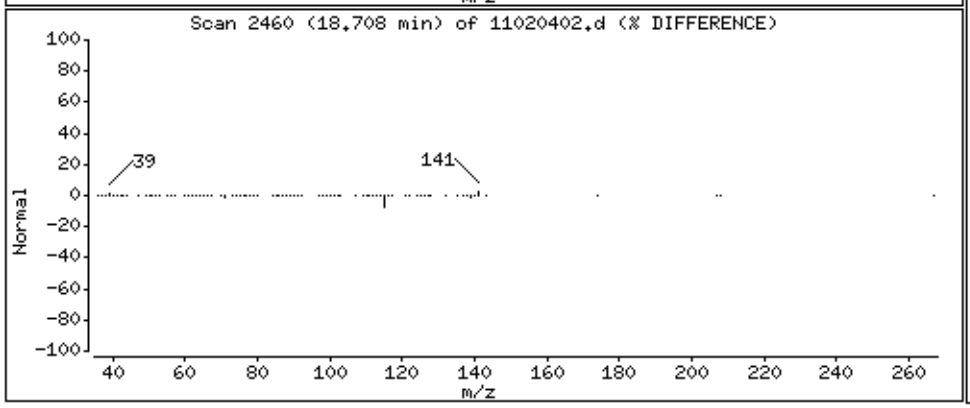
110 2-Methylnaphthalene

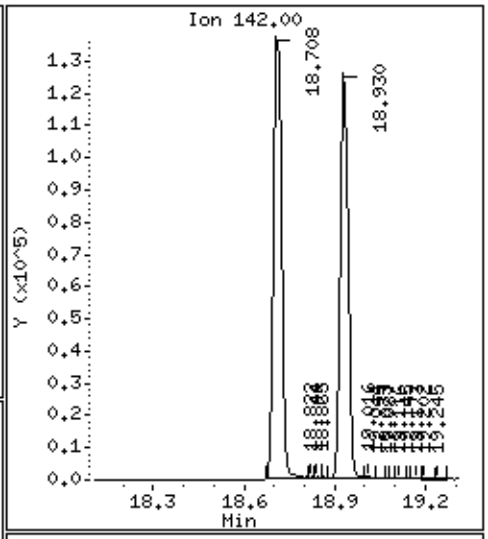
Concentration: 54.982 NG

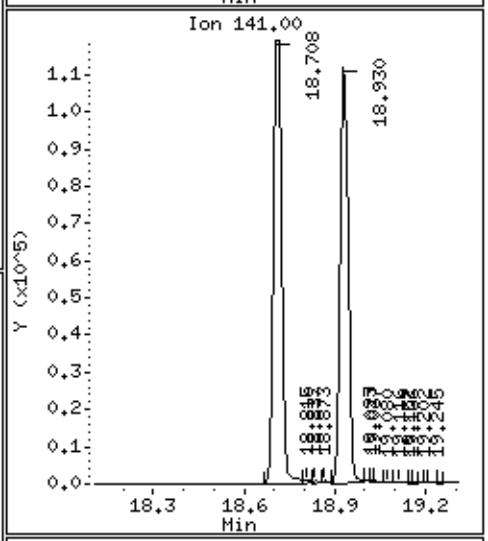


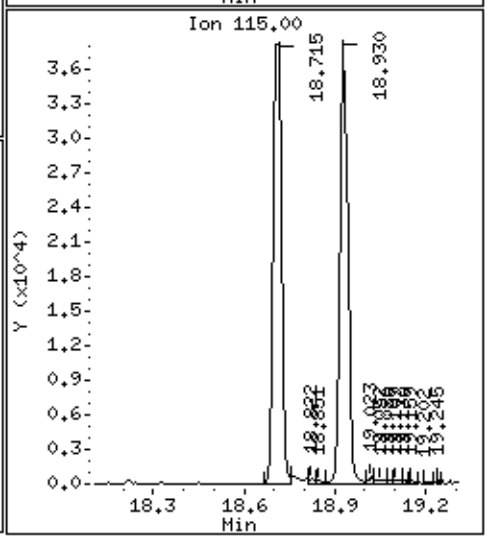












Data File: /chem/msd11.i/04feb16.b/11020402.d

Date : 04-FEB-2016 10:54

Client ID: LCS

Instrument: msd11.i

Sample Info: ;VI VOC+PAH LCS;LCS

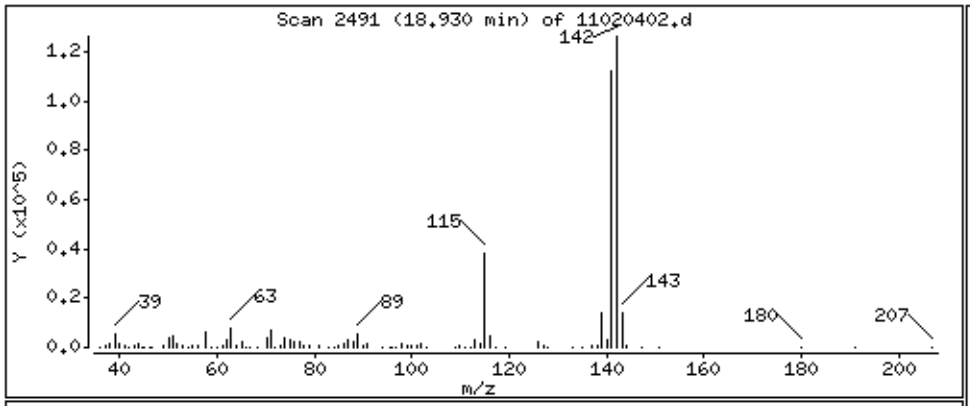
Operator: LAct

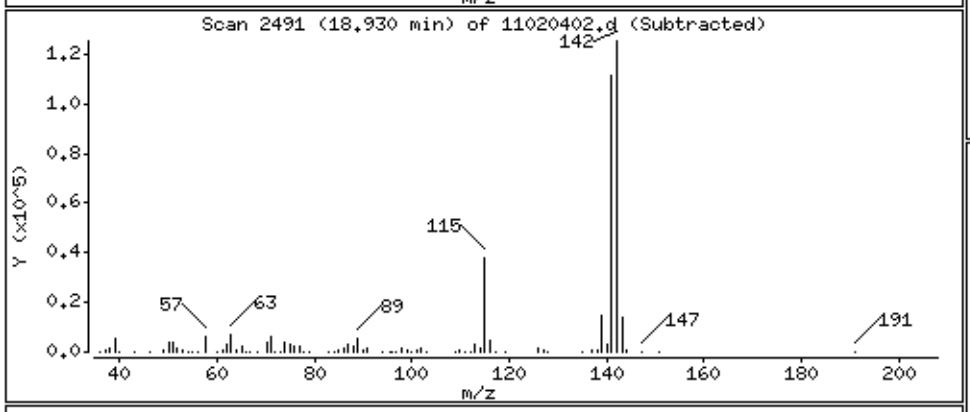
Column phase: RTx-624

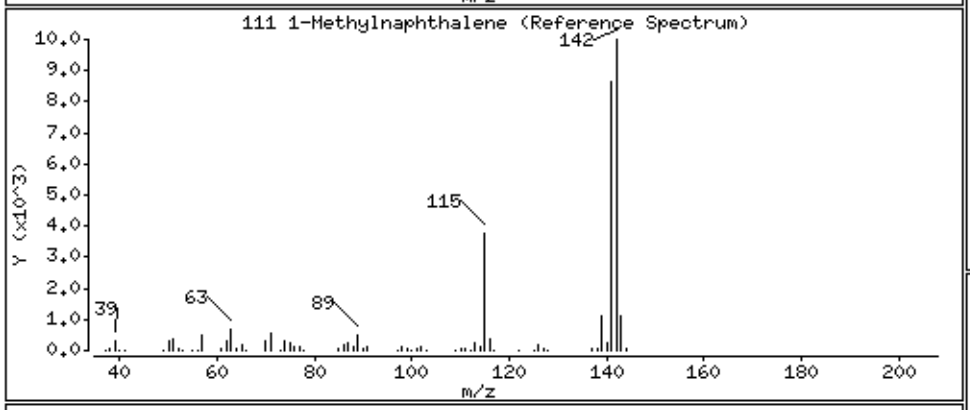
Column diameter: 0.53

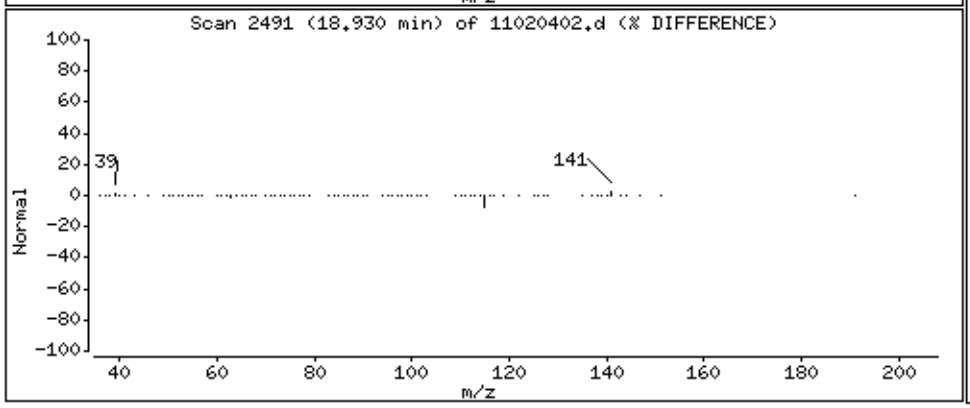
111 1-Methylnaphthalene

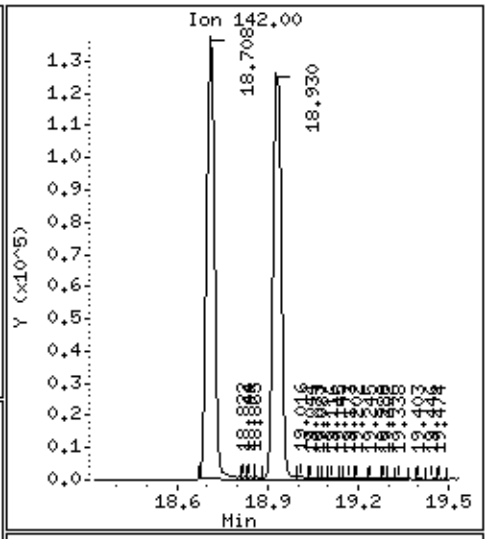
Concentration: 52.133 NG

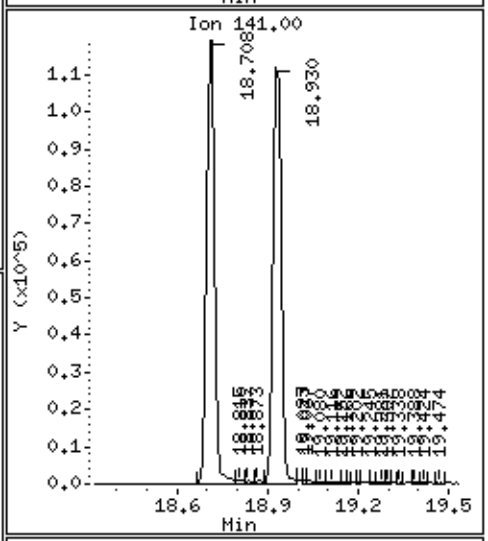


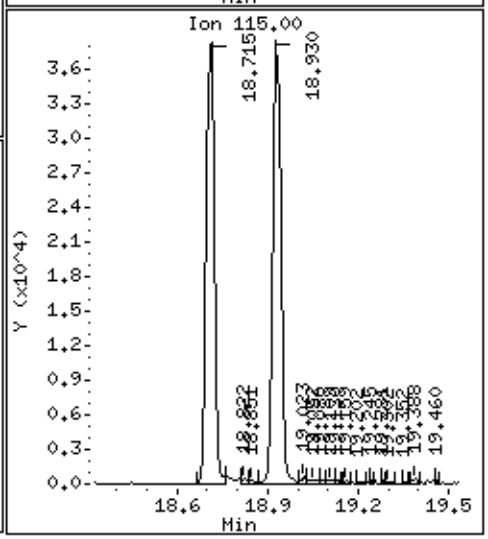












Data File: /chem/msd11.i/04feb16.b/11020402.d

Date : 04-FEB-2016 10:54

Client ID: LCS

Instrument: msd11.i

Sample Info: ;VI VOC+PAH LCS;LCS

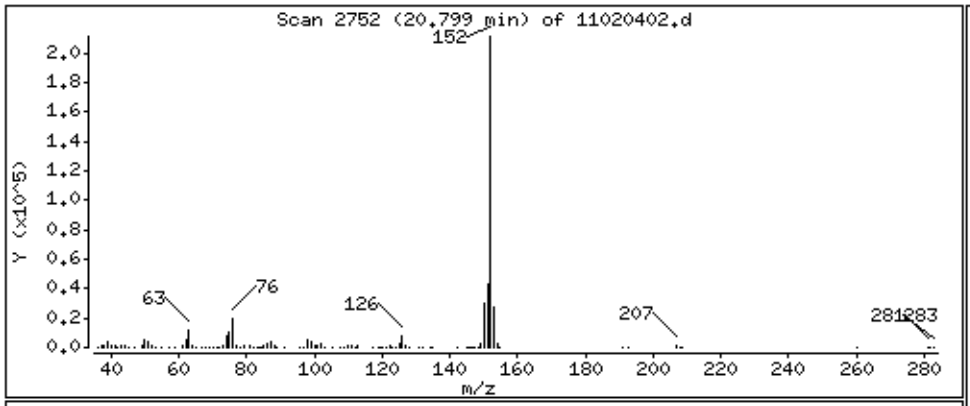
Operator: LAct

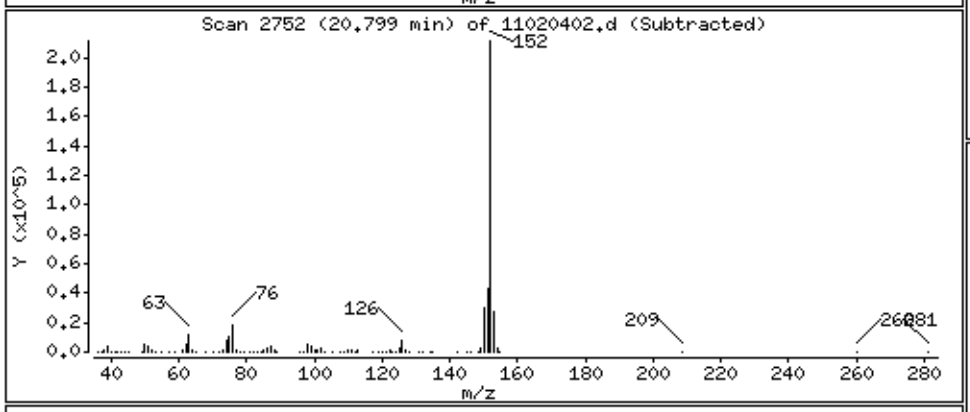
Column phase: RTx-624

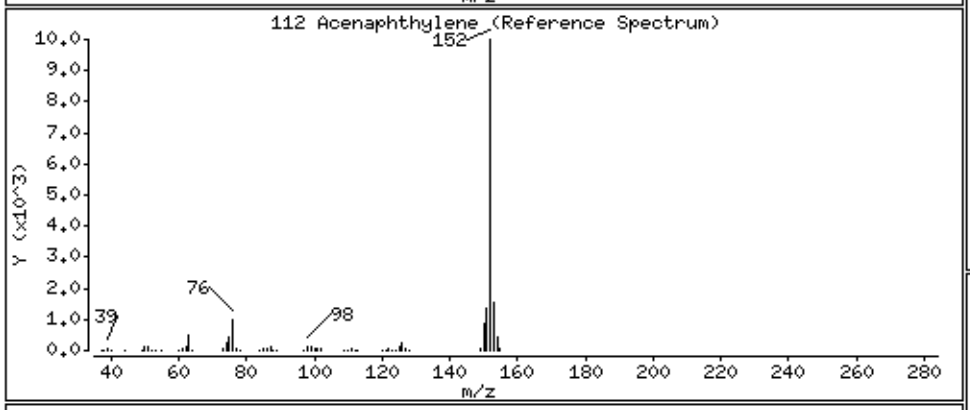
Column diameter: 0.53

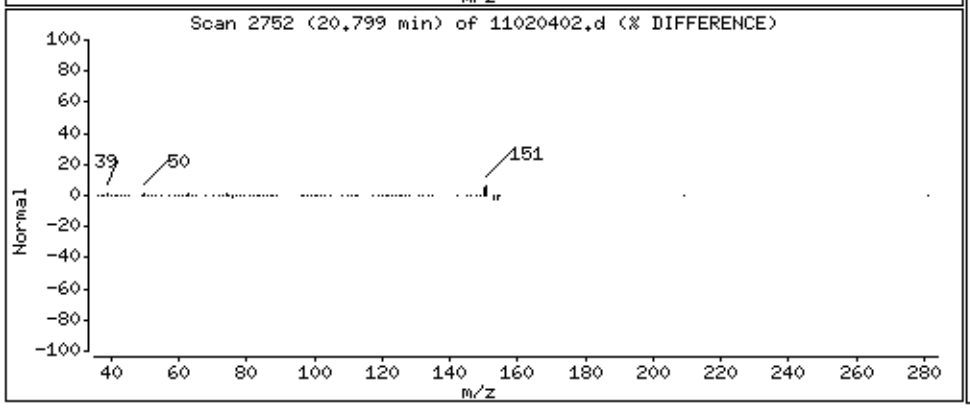
112 Acenaphthylene

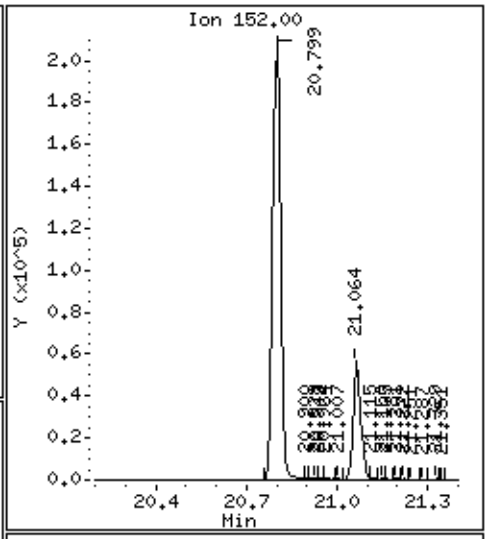
Concentration: 53.443 NG

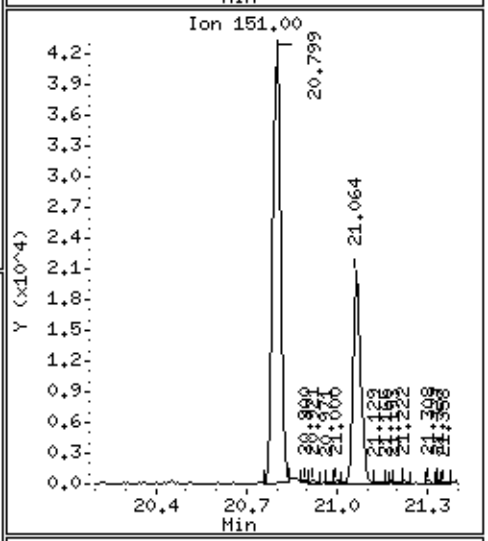


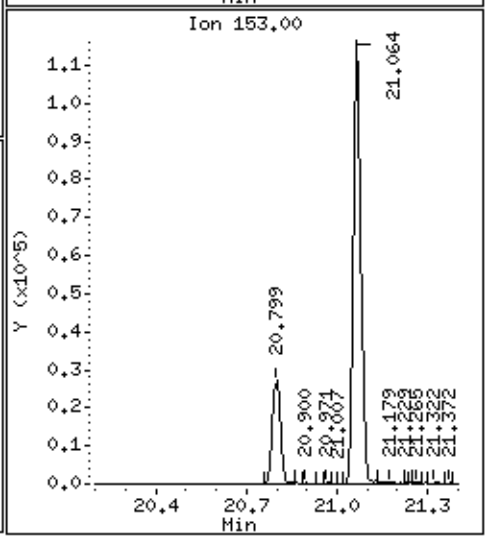












Data File: /chem/msd11.i/04feb16.b/11020402.d

Date : 04-FEB-2016 10:54

Client ID: LCS

Instrument: msd11.i

Sample Info: ;VI VOC+PAH LCS;LCS

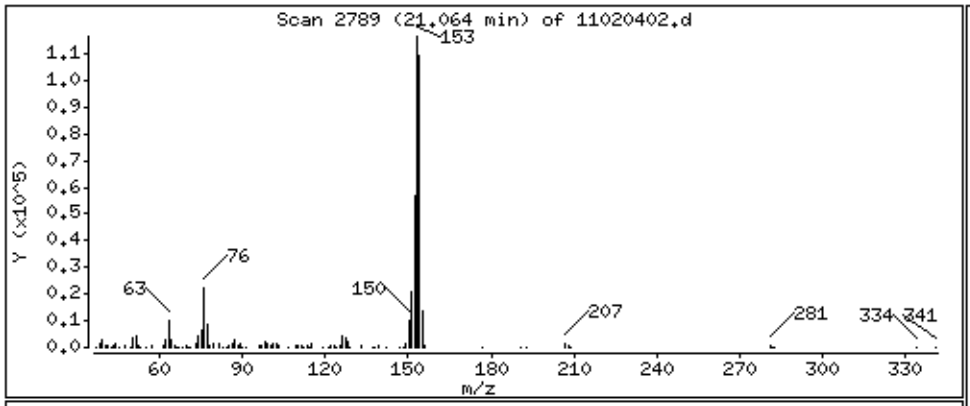
Operator: LAct

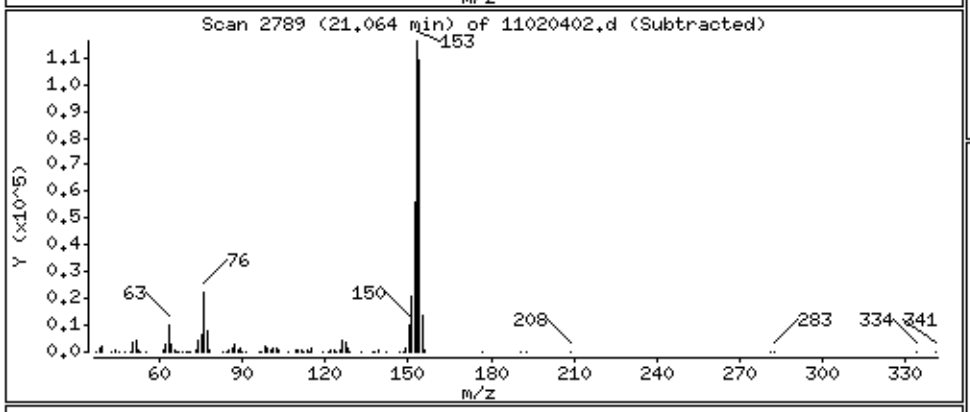
Column phase: RTx-624

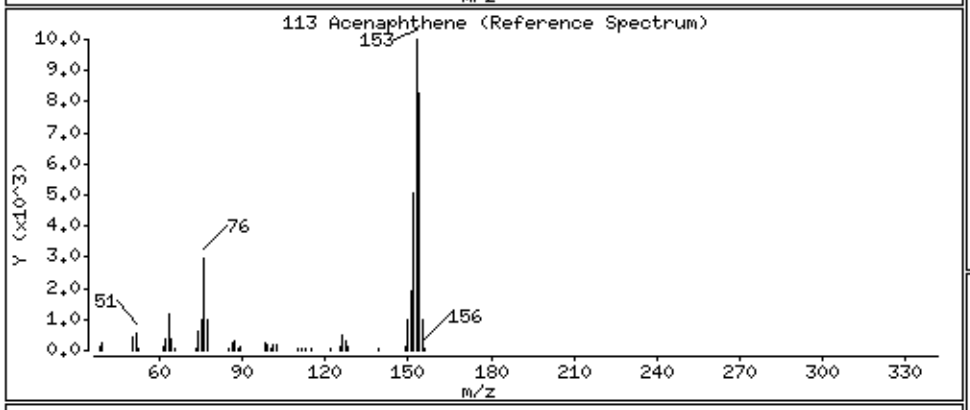
Column diameter: 0.53

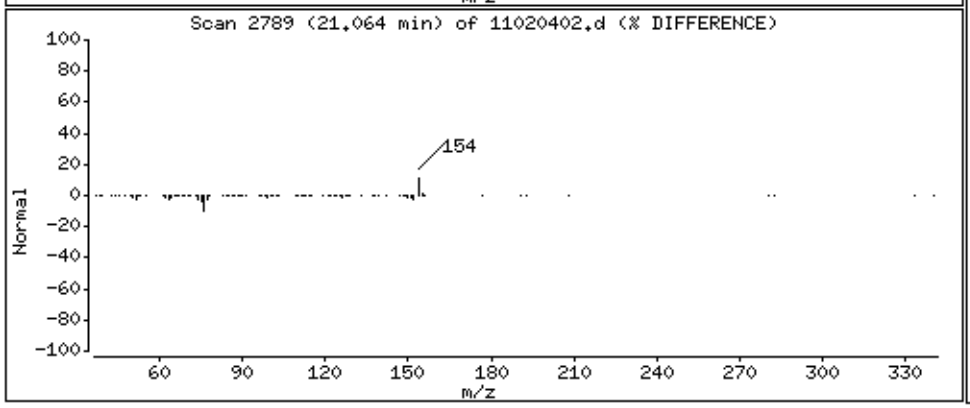
113 Acenaphthene

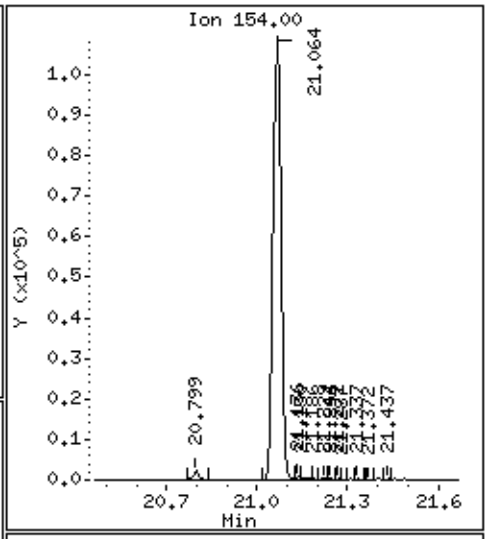
Concentration: 58.942 NG

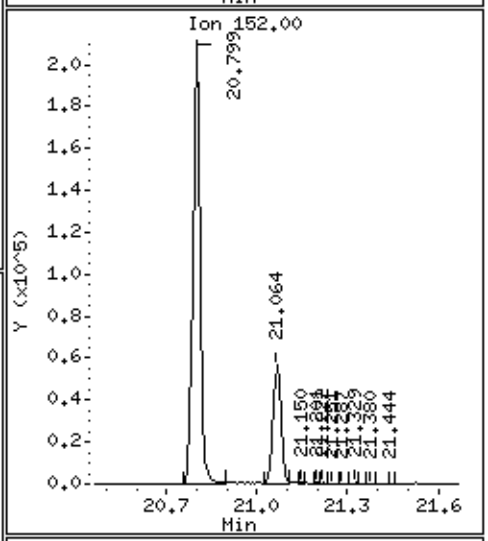


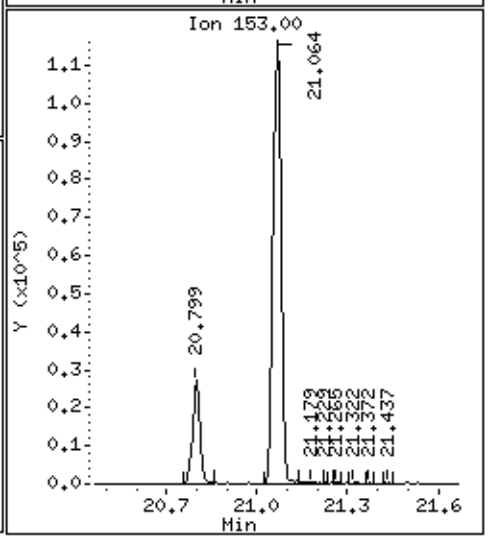












Data File: /chem/msd11.i/04feb16.b/11020402.d

Date : 04-FEB-2016 10:54

Client ID: LCS

Instrument: msd11.i

Sample Info: ;VI VOC+PAH LCS;LCS

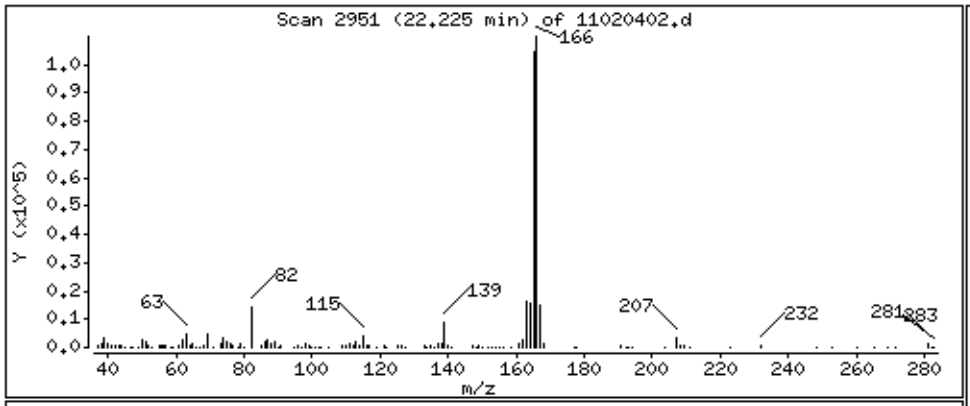
Operator: LAct

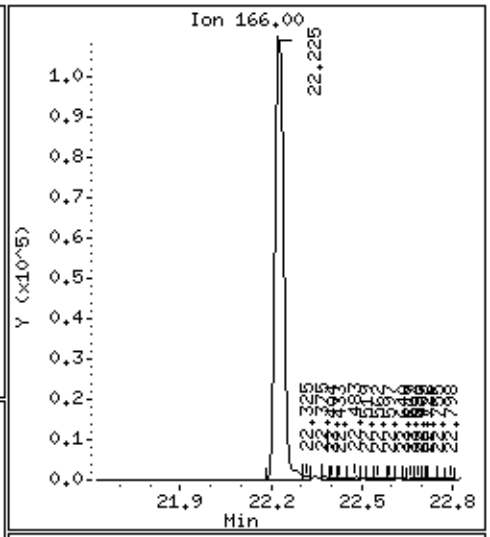
Column phase: RTx-624

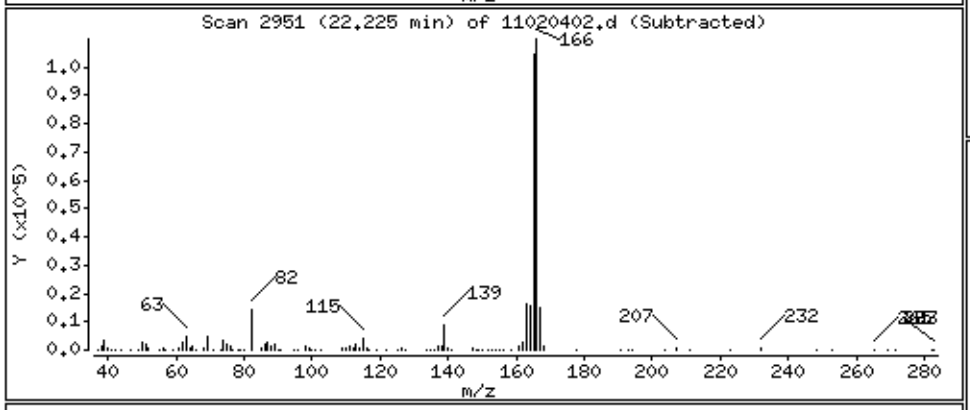
Column diameter: 0.53

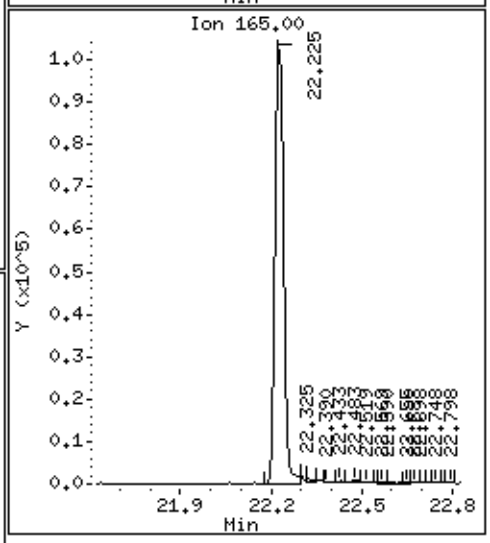
114 Fluorene

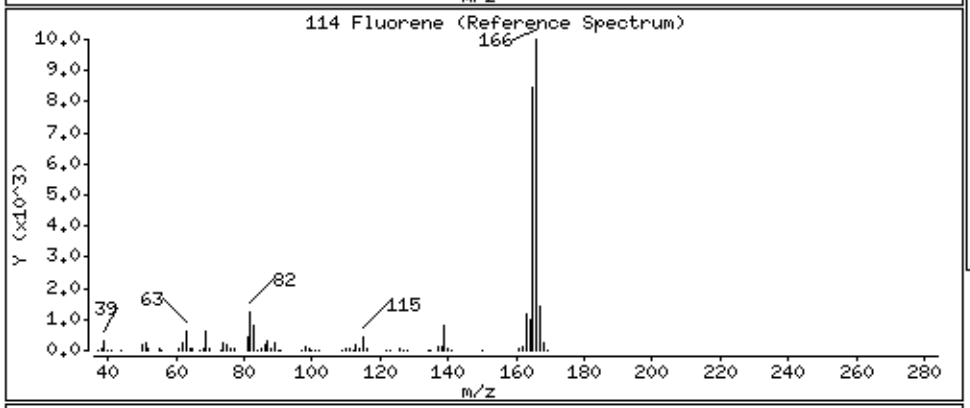
Concentration: 63.828 NG

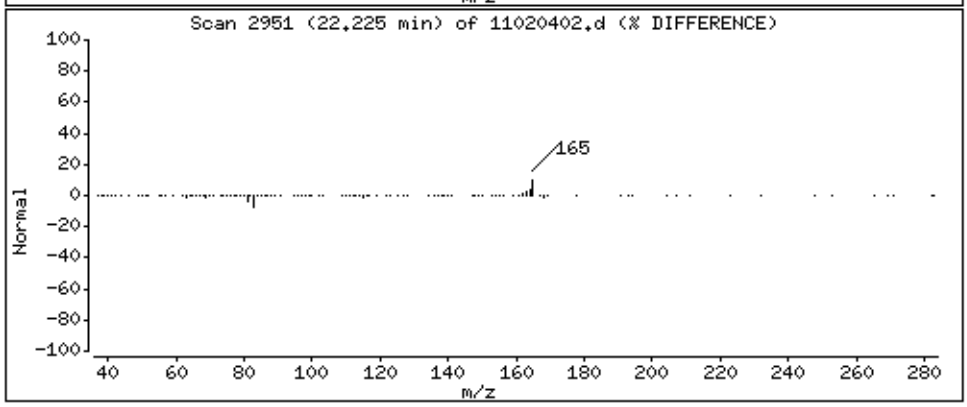












Data File: /chem/msd11.i/04feb16.b/11020402.d

Date : 04-FEB-2016 10:54

Client ID: LCS

Instrument: msd11.i

Sample Info: ;VI VOC+PAH LCS;LCS

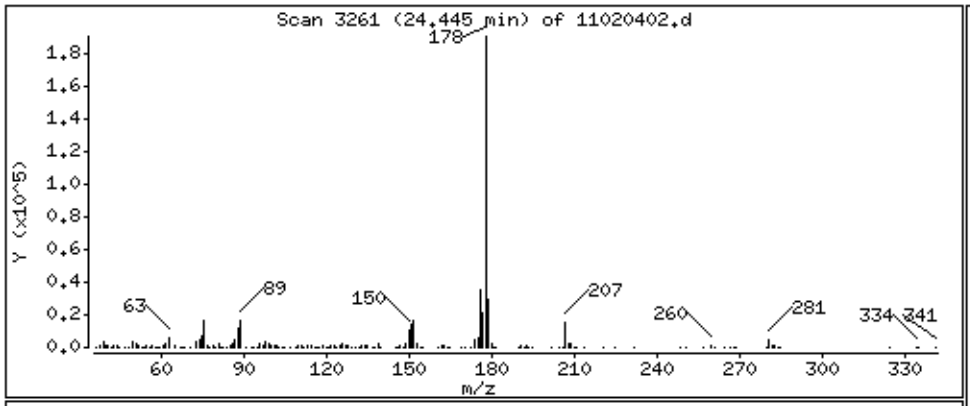
Operator: LAct

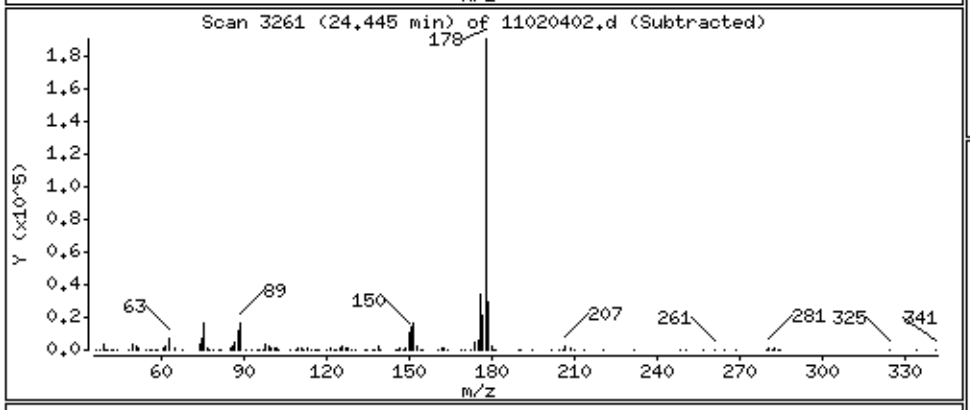
Column phase: RTx-624

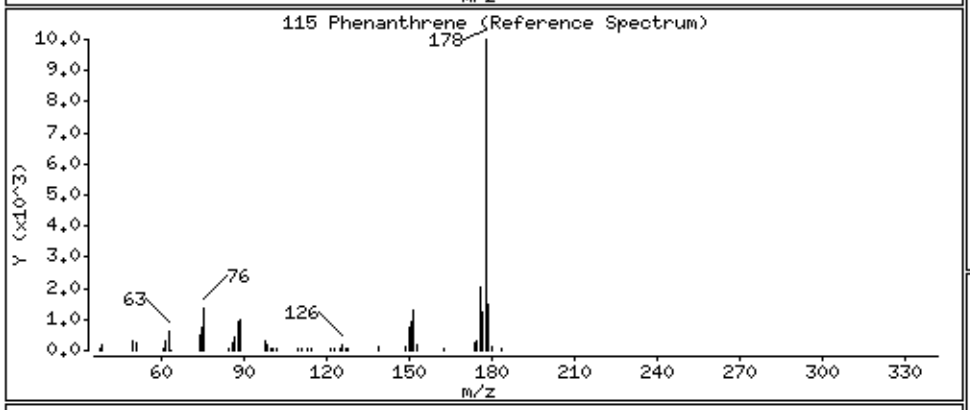
Column diameter: 0.53

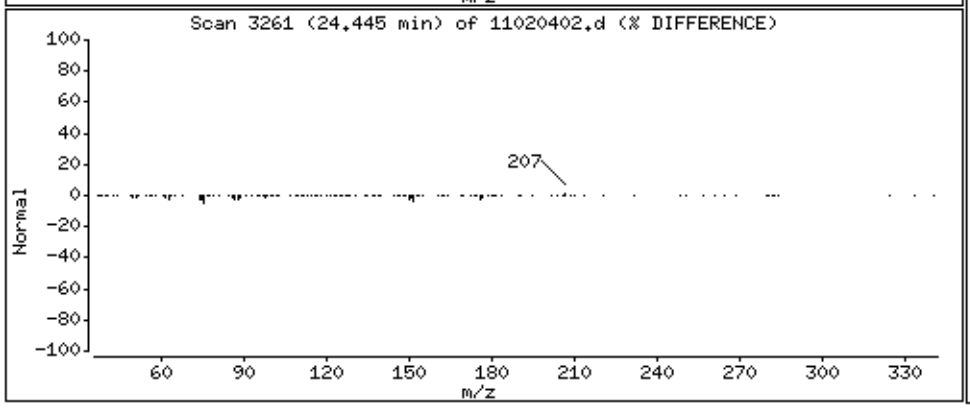
115 Phenanthrene

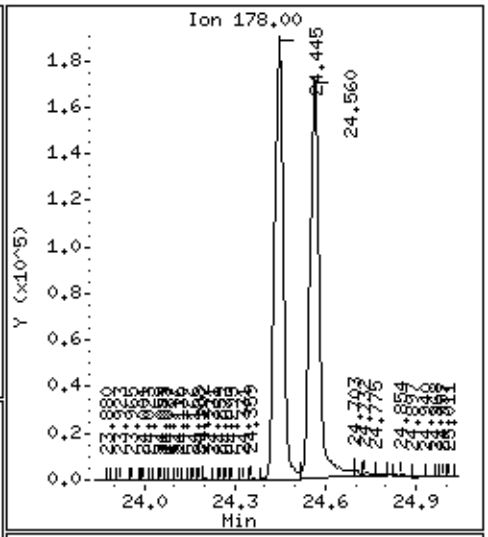
Concentration: 46.504 NG

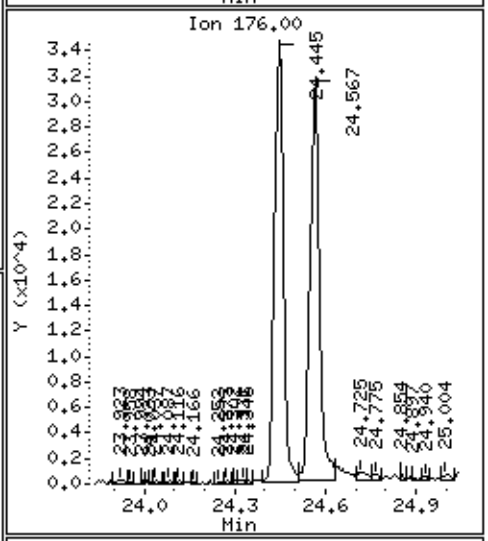


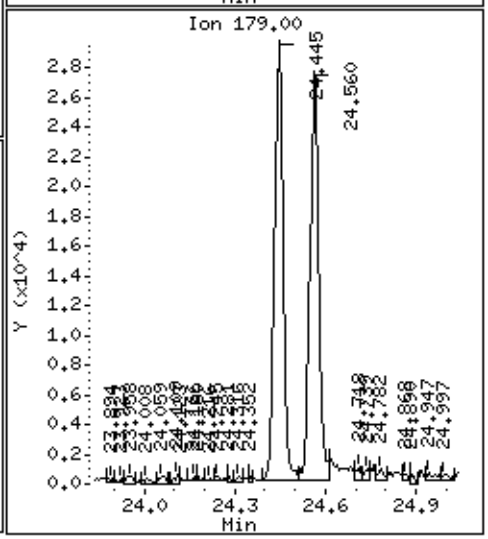












Data File: /chem/msd11.i/04feb16.b/11020402.d

Date : 04-FEB-2016 10:54

Client ID: LCS

Instrument: msd11.i

Sample Info: ;VI VOC+PAH LCS;LCS

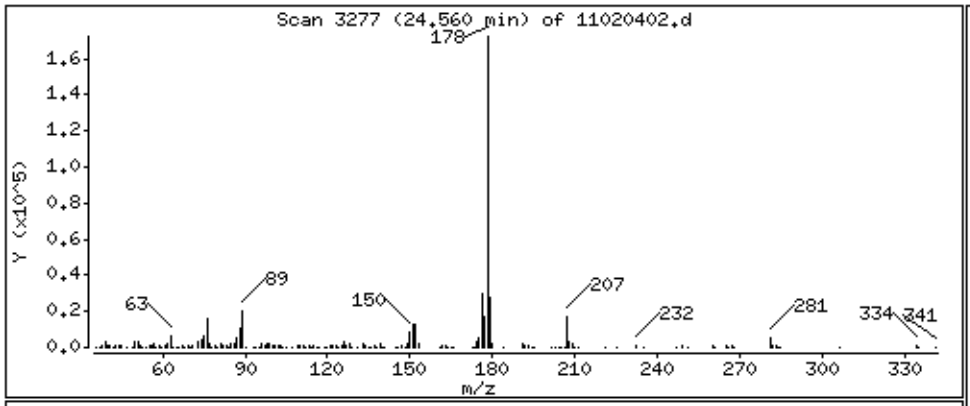
Operator: LAct

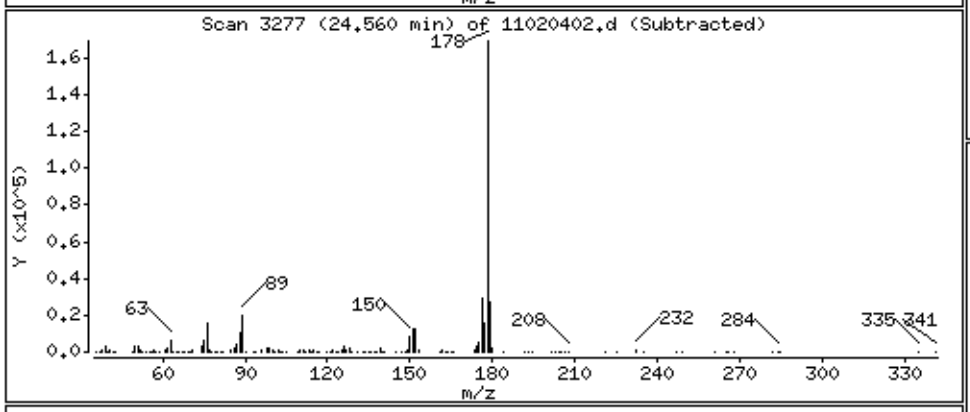
Column phase: RTx-624

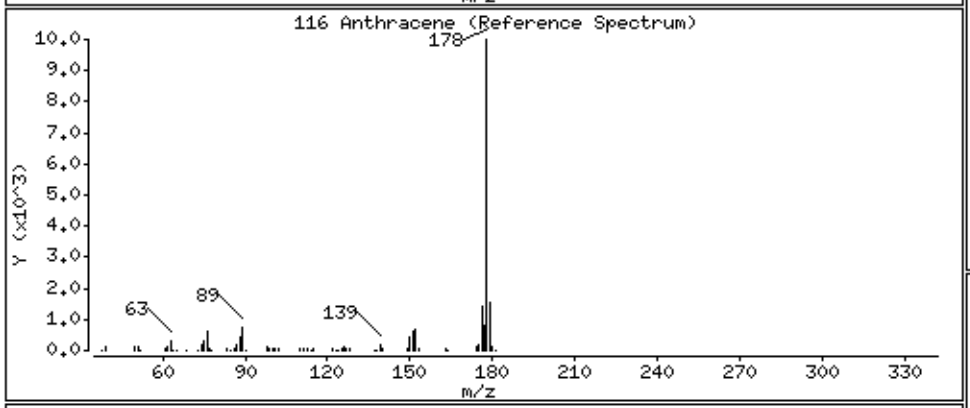
Column diameter: 0.53

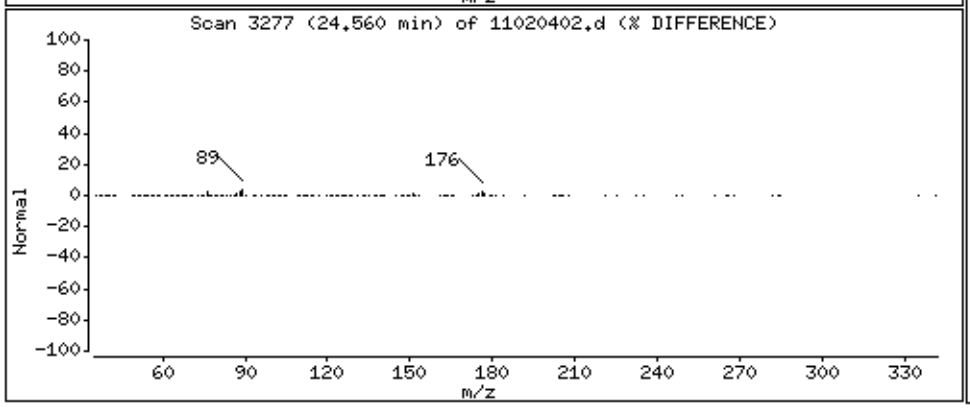
116 Anthracene

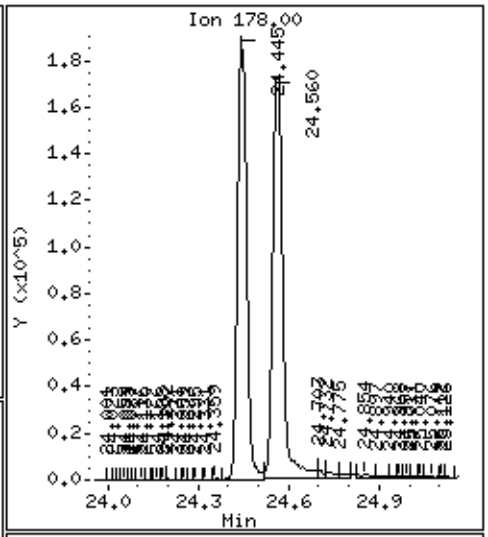
Concentration: 45.005 NG

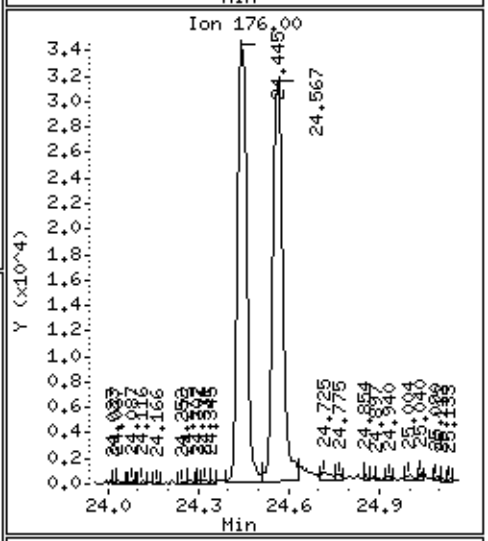


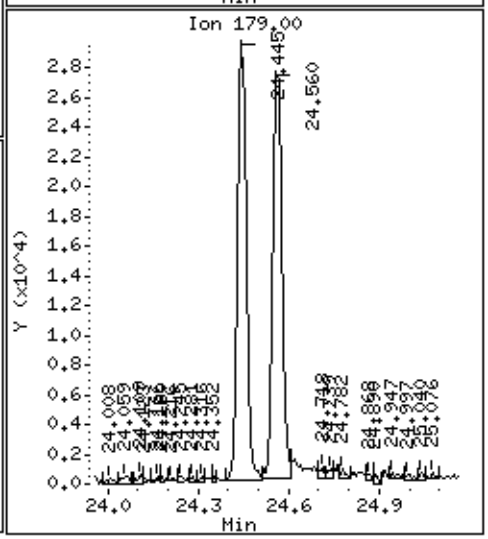












Data File: /chem/msd11.i/04feb16.b/11020402.d

Date : 04-FEB-2016 10:54

Client ID: LCS

Instrument: msd11.i

Sample Info: ;VI VOC+PAH LCS;LCS

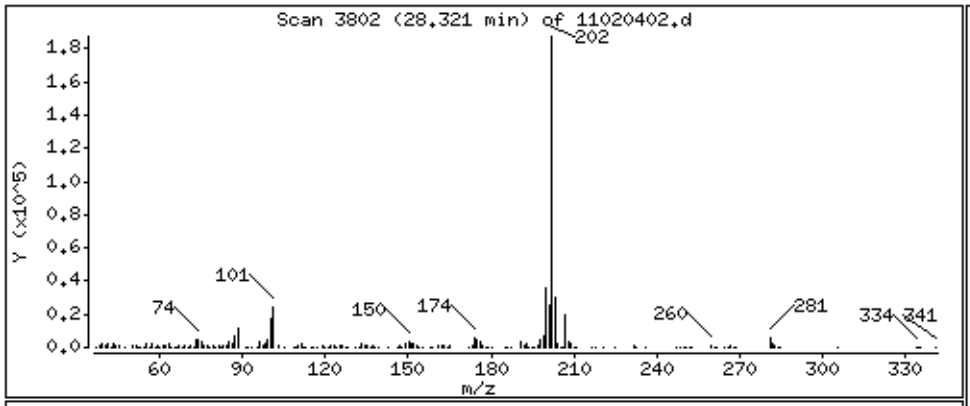
Operator: LAct

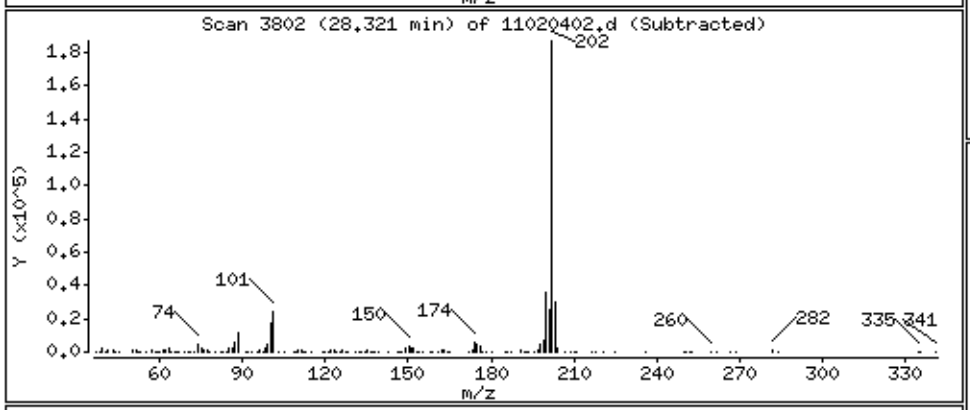
Column phase: RTx-624

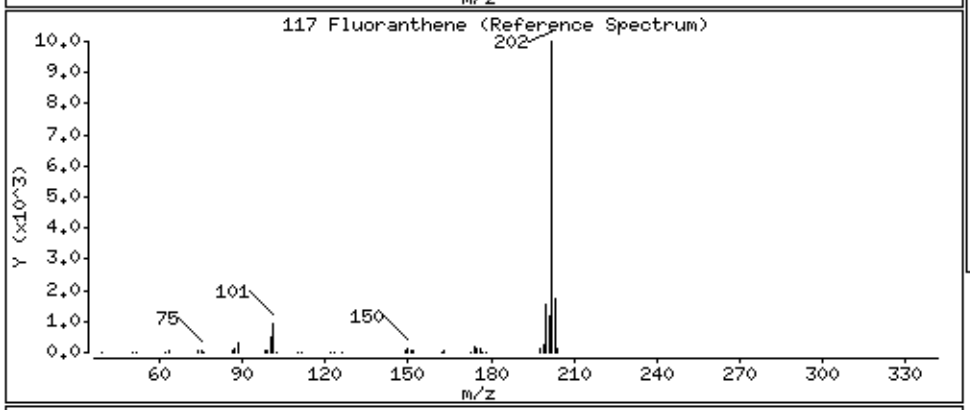
Column diameter: 0.53

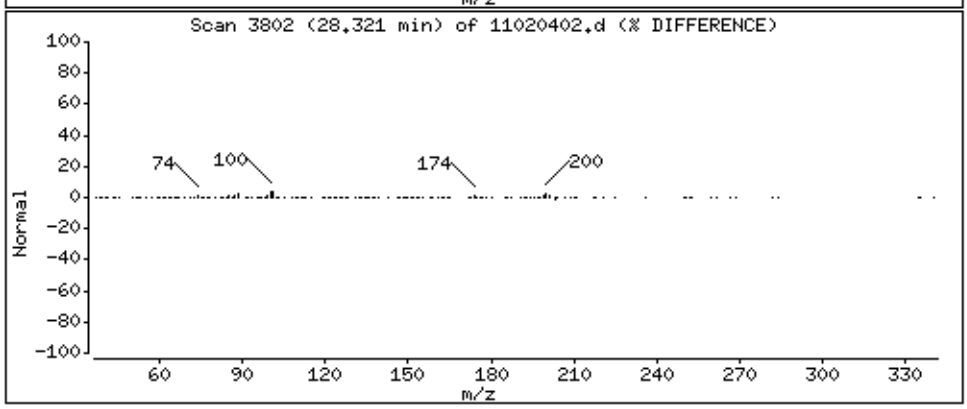
117 Fluoranthene

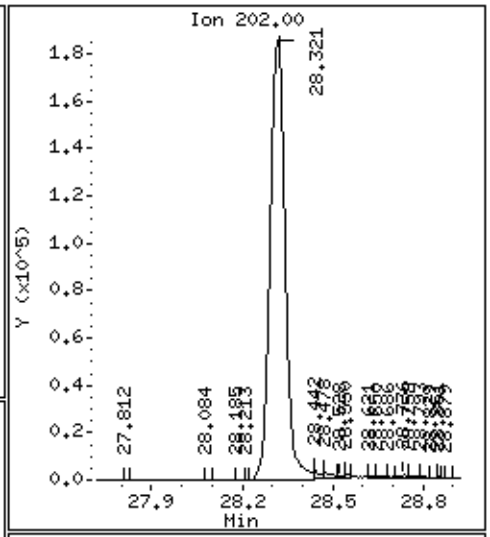
Concentration: 84.275 NG

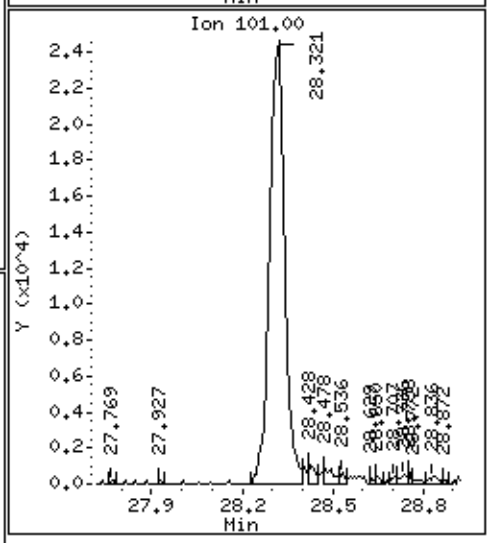












Data File: /chem/msd11.i/04feb16.b/11020402.d

Date : 04-FEB-2016 10:54

Client ID: LCS

Instrument: msd11.i

Sample Info: ;VI VOC+PAH LCS;LCS

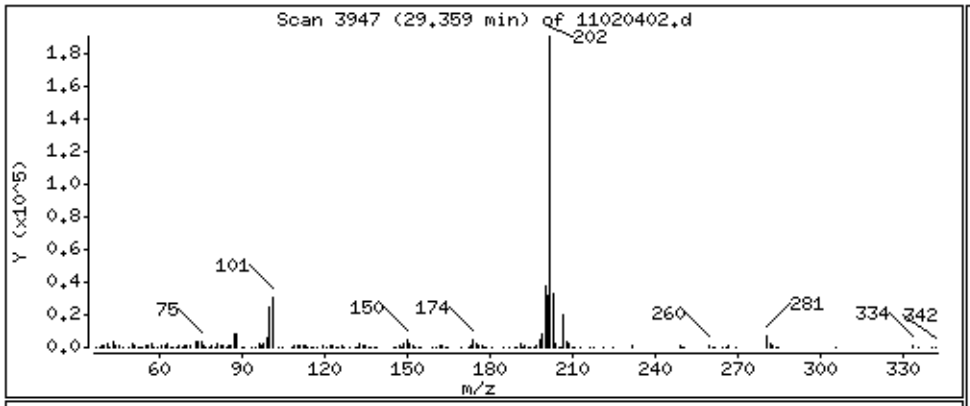
Operator: LAct

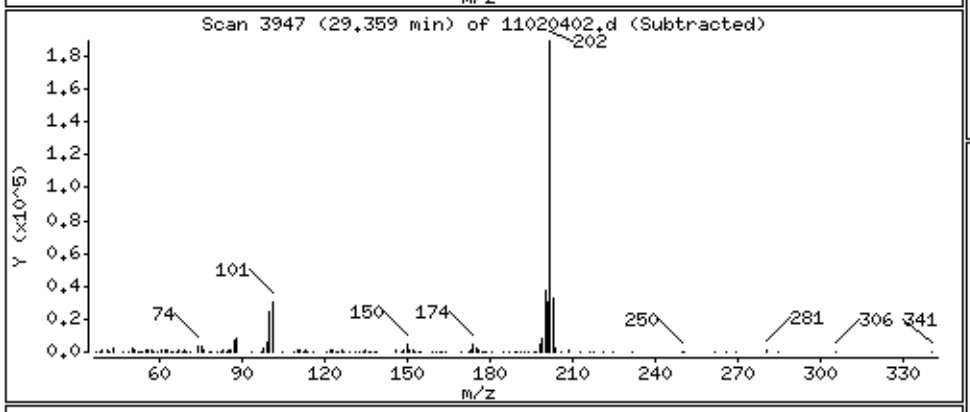
Column phase: RTx-624

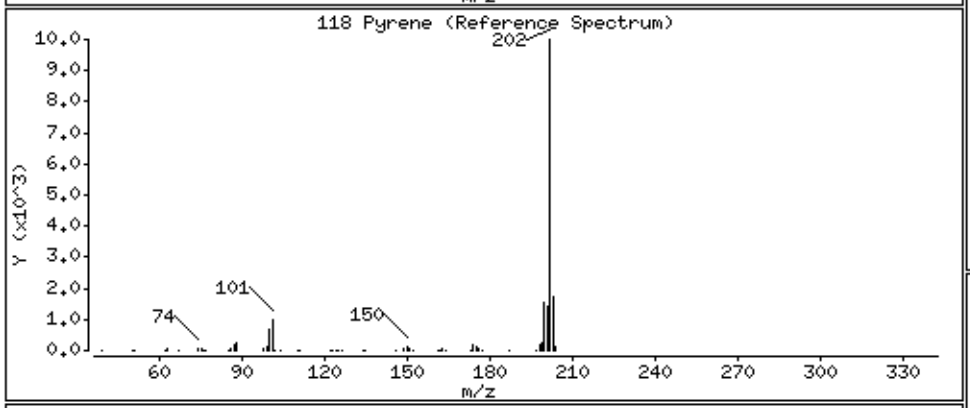
Column diameter: 0.53

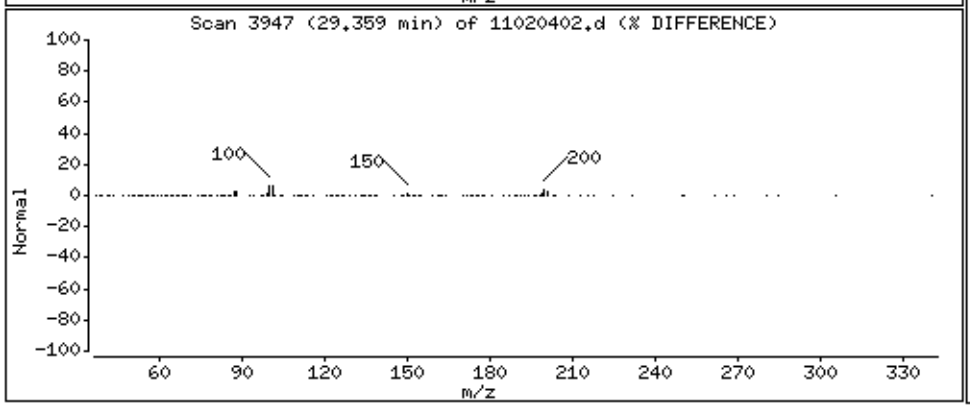
118 Pyrene

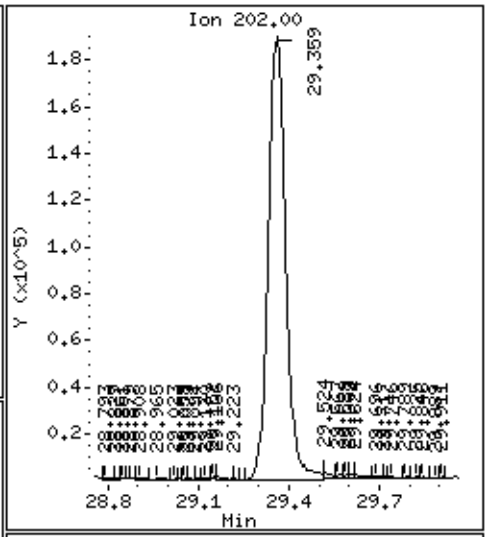
Concentration: 90.218 NG

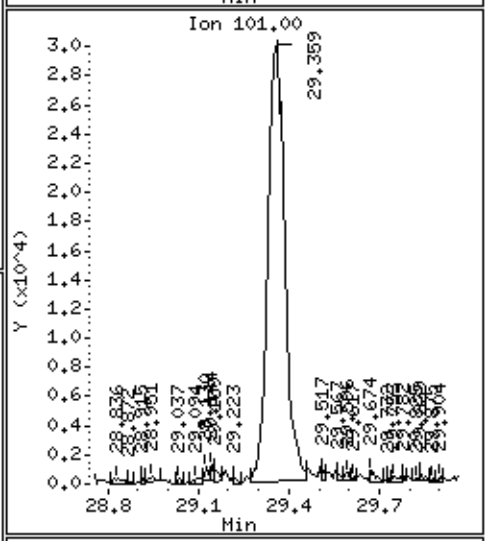


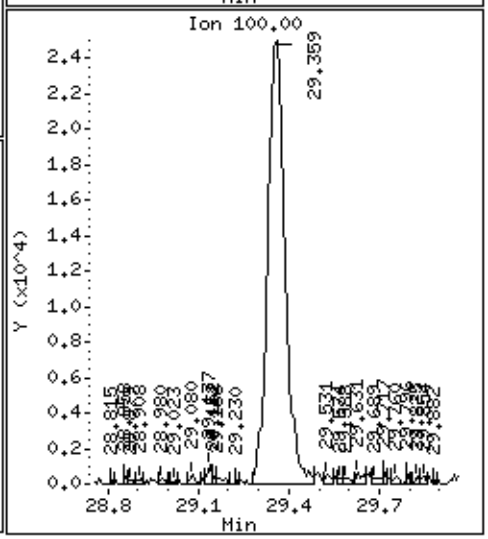












eurofins | Air Toxics

Client Sample ID: LCSD

Lab ID#: 1602029-24BB

EPA METHOD TO-17

File Name:	**11020403**	**Date of Extraction: NA**	**Date of Collection: NA**
Dil. Factor:	**1.00**		**Date of Analysis: 2/4/16 11:41 AM**

Compound	%Recovery	Method Limits
Freon 114	106	70-130
Vinyl Chloride	107	70-130
1,3-Butadiene	105	70-130
Isopentane	100	70-130
Freon 11	104	70-130
1,1-Dichloroethene	101	70-130
Methylene Chloride	96	70-130
Freon 113	102	70-130
trans-1,2-Dichloroethene	84	70-130
1,1-Dichloroethane	101	70-130
cis-1,2-Dichloroethene	112	70-130
Hexane	102	70-130
Chloroform	100	70-130
1,2-Dichloroethane	96	70-130
1,1,1-Trichloroethane	99	70-130
Benzene	100	70-130
Carbon Tetrachloride	106	70-130
Cyclohexane	96	70-130
1,2-Dichloropropane	90	70-130
Trichloroethene	83	70-130
1,4-Dioxane	96	70-130
2,2,4-Trimethylpentane	95	70-130
Heptane	94	70-130
Methylcyclohexane	95	70-130
1,1,2-Trichloroethane	95	70-130
4-Methyl-2-pentanone	98	70-130
Toluene	93	70-130
2-Hexanone	108	70-130
Tetrachloroethene	98	70-130
Chlorobenzene	97	70-130
Ethyl Benzene	97	70-130
m,p-Xylene	93	70-130
o-Xylene	96	70-130
Styrene	100	70-130
1,1,2,2-Tetrachloroethane	108	70-130
Cumene	101	70-130
Propylbenzene	100	70-130
4-Ethyltoluene	99	70-130
1,3,5-Trimethylbenzene	98	70-130
1,2,4-Trimethylbenzene	99	70-130
1,3-Dichlorobenzene	99	70-130
1,4-Dichlorobenzene	101	70-130

eurofins | Air Toxics

Client Sample ID: LCSD

Lab ID#: 1602029-24BB

EPA METHOD TO-17

File Name:	**11020403**	**Date of Extraction: NA**	**Date of Collection: NA**
Dil. Factor:	**1.00**		**Date of Analysis: 2/4/16 11:41 AM**

Compound	%Recovery	Method Limits
1,2-Dichlorobenzene	98	70-130
1,2,4-Trichlorobenzene	96	70-130
Hexachlorobutadiene	88	70-130
Naphthalene	104	70-130

Air Sample Volume(L): 1.00

m,p-Xylene was reported from file #11020828, analyzed on 2/9/16 with a dilution factor of 4.00.

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	90	50-150
Toluene-d8	94	50-150
Naphthalene-d8	104	50-150

Report Date: 04-Feb-2016 13:18

Eurofins Air Toxics Inc.

RECOVERY REPORT

Client Name:
Client SDG: 04feb16
Sample Matrix: GAS
Fraction: VOA
Lab Smp Id: VI VOC+PAH LCSD
Client Smp ID: LCSD
Level: LOW
Operator: LA
Data Type: MS DATA
SampleType: LCSD
SpikeList File: VOC+PAHlcs50.spk
Quant Type: ISTD
Sublist File: VOC+PAH_ICAL.sub
Method File: /chem/msd11.i/04feb16.b/115z1120vi.m
Misc Info: 2516-217(5/3/16),2744-32-50(7/20/16)

SPIKE COMPOUND	CONC ADDED NG	CONC RECOVERED NG	% RECOVERED	LIMITS
3 Freon 114	139.80	147.60	105.58	70-130
6 Vinyl Chloride	51.100	54.640	106.93	70-130
7 1,3-Butadiene	44.200	46.486	105.17	70-130
9 Chloroethane	52.800	51.064	96.71	70-130
10 Isopentane	59.000	58.890	99.81	70-130
11 Trichlorofluoromet	112.40	116.77	103.89	70-130
14 1,1-Dichloroethene	79.300	80.359	101.34	70-130
15 Freon 113	153.30	156.08	101.82	70-130
18 Carbon Disulfide	62.300	56.787	91.15	70-130
19 2-Propanol	49.200	50.080	101.79	70-130
22 Methylene Chloride	69.500	66.571	95.79	70-130
25 trans-1,2-Dichloro	79.300	66.310	83.62	70-130
26 MTBE	72.100	69.745	96.73	70-130
28 Hexane	70.500	71.820	101.87	70-130
29 1,1-Dichloroethane	81.000	81.519	100.64	70-130
37 cis-1,2-Dichloroet	79.300	88.586	111.71	70-130
38 2-Butanone	59.000	73.887	125.23	70-130
44 Chloroform	97.700	97.811	100.11	70-130
45 1,1,1-Trichloroeth	109.10	107.81	98.82	70-130
46 Cyclohexane	68.800	66.033	95.98	70-130
47 Carbon Tetrachlori	125.80	132.76	105.53	70-130
48 Benzene	63.900	64.005	100.16	70-130
50 1,2-Dichloroethane	80.900	77.777	96.14	70-130
51 2,2,4-Trimethylpen	93.400	88.633	94.90	70-130
53 Heptane	82.000	77.167	94.11	70-130
56 Trichloroethene	107.50	89.744	83.48	70-130
58 Methyl Cyclohexane	80.300	76.458	95.22	70-130
59 1,2-Dichloropropan	92.400	83.592	90.47	70-130
60 1,4-Dioxane	72.100	69.011	95.72	70-130
65 4-Methyl-2-pentano	81.900	80.687	98.52	70-130
67 Toluene	75.400	70.301	93.24	70-130
70 1,1,2-Trichloroeth	109.10	103.77	95.12	70-130
71 Tetrachloroethene	135.70	132.57	97.69	70-130

SPIKE COMPOUND	CONC ADDED NG	CONC RECOVERED NG	% RECOVERED	LIMITS
72 2-Hexanone	81.900	88.465	108.02	70-130
74 1,2-Dibromoethane	153.70	162.42	105.67	70-130
81 Chlorobenzene	92.100	89.794	97.50	70-130
82 Ethyl Benzene	86.800	83.906	96.67	70-130
84 m,p-Xylene	86.800	83.952	96.72	70-130
88 o-Xylene	86.800	83.687	96.41	70-130
89 Styrene	85.200	85.207	100.01	70-130
91 Cumene	98.300	99.506	101.23	70-130
94 1,1,2,2-Tetrachlor	137.30	148.41	108.09	70-130
96 Propylbenzene	98.300	97.953	99.65	70-130
97 4-Ethyltoluene	98.300	97.183	98.86	70-130
98 1,3,5-Trimethylben	98.300	96.241	97.91	70-130
100 1,2,4-Trimethylben	98.300	97.002	98.68	70-130
101 1,3-Dichlorobenzen	120.30	119.28	99.15	70-130
102 1,4-Dichlorobenzen	120.30	121.09	100.66	70-130
105 1,2-Dichlorobenzen	120.30	117.88	97.99	70-130
106 1,2,4-Trichloroben	148.40	142.83	96.25	70-130
107 Hexachlorobutadien	213.30	188.36	88.31	70-130
109 Naphthalene	50.000	51.809	103.62	70-130
110 2-Methylnaphthalen	50.000	55.105	110.21	70-130
111 1-Methylnaphthalen	50.000	50.577	101.15	70-130
112 Acenaphthylene	50.000	52.134	104.27	70-130
113 Acenaphthene	50.000	52.070	104.14	70-130
114 Fluorene	50.000	52.685	105.37	60-140
115 Phenanthrene	50.000	0.07792	0.16*	60-140
116 Anthracene	50.000	38.852	77.70	60-140
117 Fluoranthene	50.000	85.531	171.06*	60-140
118 Pyrene	50.000	88.150	176.30*	60-140

SURROGATE COMPOUND	AMOUNT ADDED ng	AMOUNT RECOVERED ng	% RECOVERED	LIMITS
$ 49 1,2-Dichloroethane	25.000	22.603	90.41	50-150
$ 66 Toluene-d8	25.000	23.538	94.15	50-150
$ 108 Naphthalene-d8	25.000	26.004	104.02	50-150

Eurofins Air Toxics Inc.

EPA Method TO-17 GC/MS

Data file : /chem/msd11.i/04feb16.b/11020403.d
Lab Smp Id: VI VOC+PAH LCSD Client Smp ID: LCSD
Inj Date : 04-FEB-2016 11:41
Operator : LA Inst ID: msd11.i
Smp Info : ;VI VOC+PAH LCSD;LCSD
Misc Info : 2516-217(5/3/16),2744-32-50(7/20/16)
Comment :
Method : /chem/msd11.i/04feb16.b/115z1120vi.m
Meth Date : 04-Feb-2016 13:17 lantonic Quant Type: ISTD
Cal Date : 21-NOV-2015 00:39 Cal File: 11112010.d
Als bottle: 3 QC Sample: LCSD
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: VOC+PAH_ICAL.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (ng)	FINAL (NG)	TARGET RANGE	RATIO
* 40 Bromochloromethane					CAS #: 74-97-5		
6.953	6.946 (1.000)	130	47672	26.0000		80.00- 120.00	100.00
6.953	6.946 (1.000)	128	37421			49.46- 109.46	78.50
6.953	6.946 (1.000)	49	61461			96.52- 156.52	128.92
* 54 1,4-Difluorobenzene					CAS #: 540-36-3		
8.329	8.329 (1.000)	114	191967	23.0000		80.00- 120.00	100.00
8.329	8.322 (1.000)	88	27732			0.00- 44.32	14.45
* 79 Chlorobenzene-d5					CAS #: 3114-55-4		
11.638	11.645 (1.000)	117	180090	24.0000		80.00- 120.00	100.00
11.638	11.645 (1.000)	82	83637			20.08- 80.08	46.44
* 92 Bromofluorobenzene					CAS #: 460-00-4		
13.056	13.071 (1.000)	174	127625	36.0000		80.00- 120.00	100.00
13.056	13.071 (1.000)	95	121767			68.42- 128.42	95.41
13.056	13.071 (1.000)	176	124177			64.69- 124.69	97.30
$ 49 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
7.741	7.734 (0.929)	65	18066	22.6030	22.603	80.00- 120.00	100.00

RT	EXP RT	(REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (ng)	FINAL (NG)	TARGET RANGE	RATIO
$ 49 1,2-Dichloroethane-d4 (continued)								
7.741	7.727	(0.929)	67	10404			25.09- 85.09	57.59
$ 66 Toluene-d8						CAS #: 2037-26-5		
9.998	9.998	(0.859)	98	66910	23.5379	23.538	80.00- 120.00	100.00
9.991	9.991	(0.858)	70	6753			0.00- 41.37	10.09
9.998	9.991	(0.859)	100	44341			33.98- 93.98	66.27
$ 108 Naphthalene-d8						CAS #: 1146-65-2		
17.225	17.232	(1.319)	136	118997	26.0044	26.004	80.00- 120.00	100.00
17.225	17.232	(1.319)	108	9520			0.00- 38.36	8.00
3 Freon 114						CAS #: 76-14-2		
1.946	1.954	(0.280)	135	151399	147.600	147.60	80.00- 120.00	100.00
1.954	1.954	(0.281)	137	49341			2.94- 62.94	32.59
6 Vinyl Chloride						CAS #: 75-01-4		
2.147	2.169	(0.309)	62	58094	54.6403	54.640	80.00- 120.00	100.00
2.147	2.176	(0.309)	64	19923			1.67- 61.67	34.29
7 1,3-Butadiene						CAS #: 106-99-0		
2.190	2.197	(0.315)	54	42103	46.4861	46.486	80.00- 120.00	100.00
2.190	2.197	(0.315)	39	48930			88.98- 148.98	116.22
9 Chloroethane						CAS #: 75-00-3		
2.677	2.691	(0.385)	64	26130	51.0638	51.064	80.00- 120.00	100.00
2.670	2.691	(0.384)	66	8745			2.82- 62.82	33.47
2.684	2.684	(0.386)	49	7476			1.12- 61.12	28.61
10 Isopentane						CAS #: 78-78-4		
2.792	2.792	(0.401)	57	46625	58.8906	58.890	80.00- 120.00	100.00
2.792	2.792	(0.401)	43	65529			125.87- 185.87	140.54
11 Trichlorofluoromethane/Fr11						CAS #: 75-69-4		
3.021	3.021	(0.434)	101	153124	116.767	116.77	80.00- 120.00	100.00
3.021	3.028	(0.434)	103	100253			34.96- 94.96	65.47
15 Freon 113						CAS #: 76-13-1		
3.795	3.795	(0.546)	151	116818	156.083	156.08	80.00- 120.00	100.00
3.795	3.787	(0.546)	153	75032			35.10- 95.10	64.23
3.795	3.795	(0.546)	101	132443			84.04- 144.04	113.37
14 1,1-Dichloroethene						CAS #: 75-35-4		
3.759	3.759	(0.541)	98	41702	80.3594	80.359	80.00- 120.00	100.00
3.759	3.759	(0.541)	96	63828			126.05- 186.05	153.06
3.759	3.759	(0.541)	61	103684			223.83- 283.83	248.63

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (ng)	FINAL (NG)	TARGET RANGE	RATIO
18 Carbon Disulfide					CAS #: 75-15-0		
4.081	4.081 (0.587)	76	176474	56.7872	56.787	80.00- 120.00	100.00
19 2-Propanol					CAS #: 67-63-0		
4.038	4.031 (0.581)	45	103725	50.0801	50.080	80.00- 120.00	100.00
4.031	4.031 (0.580)	43	22148			0.00- 50.22	21.35
4.031	4.024 (0.580)	59	4021			0.00- 33.71	3.88
22 Methylene Chloride					CAS #: 75-09-2		
4.575	4.583 (0.658)	49	80452	66.5710	66.571	80.00- 120.00	100.00
4.582	4.583 (0.659)	84	59489			41.05- 101.05	73.94
4.575	4.583 (0.658)	51	25910			0.46- 60.46	32.21
25 trans-1,2-Dichloroethene					CAS #: 156-60-5		
5.077	5.077 (0.730)	98	32432	66.3101	66.310	80.00- 120.00	100.00
5.077	5.070 (0.730)	61	71607			190.70- 250.70	220.79
5.077	5.077 (0.730)	96	53372			126.37- 186.37	164.57
26 MTBE					CAS #: 1634-04-4		
5.062	5.062 (0.728)	73	132968	69.7448	69.745	80.00- 120.00	100.00
5.062	5.062 (0.728)	57	32195			0.00- 53.50	24.21
5.070	5.070 (0.729)	41	31323			0.00- 54.24	23.56
28 Hexane					CAS #: 110-54-3		
5.564	5.564 (0.800)	57	91032	71.8198	71.820	80.00- 120.00	100.00
5.564	5.564 (0.800)	43	62694			37.71- 97.71	68.87
5.564	5.564 (0.800)	86	14785			0.00- 45.83	16.24
29 1,1-Dichloroethane					CAS #: 75-34-3		
5.779	5.779 (0.831)	63	103904	81.5189	81.519	80.00- 120.00	100.00
5.779	5.779 (0.831)	65	32722			1.45- 61.45	31.49
37 cis-1,2-Dichloroethene					CAS #: 156-59-2		
6.624	6.624 (0.953)	98	47292	88.5857	88.586	80.00- 120.00	100.00
6.624	6.624 (0.953)	96	74979			126.86- 186.86	158.55
6.624	6.617 (0.953)	61	95333			171.58- 231.58	201.58
38 2-Butanone					CAS #: 78-93-3		
6.610	6.595 (0.951)	72	34638	73.8868	73.887	80.00- 120.00	100.00
6.602	6.602 (0.950)	43	147857			419.83- 479.83	426.86
6.602	6.602 (0.950)	57	11091			2.35- 62.35	32.02
44 Chloroform					CAS #: 67-66-3		
7.118	7.111 (1.024)	83	125730	97.8107	97.811	80.00- 120.00	100.00
7.118	7.104 (1.024)	85	81280			35.12- 95.12	64.65

RT	EXP RT	(REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (ng)	FINAL (NG)	TARGET RANGE	RATIO
46 Cyclohexane						CAS #: 110-82-7		
7.412	7.405	(0.890)	84	80800	66.0331	66.033	80.00- 120.00	100.00
7.412	7.405	(0.890)	56	100267			91.54- 151.54	124.09
7.419	7.405	(0.891)	41	61359			46.84- 106.84	75.94
45 1,1,1-Trichloroethane						CAS #: 71-55-6		
7.312	7.304	(0.878)	97	119917	107.812	107.81	80.00- 120.00	100.00
7.312	7.304	(0.878)	99	80786			35.10- 95.10	67.37
47 Carbon Tetrachloride						CAS #: 56-23-5		
7.519	7.512	(0.903)	119	131979	132.761	132.76	80.00- 120.00	100.00
7.519	7.512	(0.903)	117	140526			73.73- 133.73	106.48
51 2,2,4-Trimethylpentane						CAS #: 540-84-1		
7.956	7.956	(0.955)	57	316372	88.6328	88.633	80.00- 120.00	100.00
7.956	7.956	(0.955)	56	101344			1.98- 61.98	32.03
7.956	7.956	(0.955)	41	98373			0.94- 60.94	31.09
48 Benzene						CAS #: 71-43-2		
7.763	7.756	(0.932)	78	205226	64.0049	64.005	80.00- 120.00	100.00
7.763	7.756	(0.932)	77	48088			0.00- 53.25	23.43
50 1,2-Dichloroethane						CAS #: 107-06-2		
7.842	7.835	(0.942)	62	83985	77.7773	77.777	80.00- 120.00	100.00
7.842	7.827	(0.942)	64	25799			1.81- 61.81	30.72
53 Heptane						CAS #: 142-82-5		
8.200	8.200	(0.985)	71	65840	77.1674	77.167	80.00- 120.00	100.00
8.200	8.193	(0.985)	43	120400			156.82- 216.82	182.87
8.200	8.193	(0.985)	57	64312			66.52- 126.52	97.68
56 Trichloroethene						CAS #: 79-01-6		
8.594	8.587	(1.032)	95	89802	89.7443	89.744	80.00- 120.00	100.00
8.594	8.587	(1.032)	130	103583			82.18- 142.18	115.35
8.594	8.587	(1.032)	97	58791			35.46- 95.46	65.47
58 Methyl Cyclohexane						CAS #: 108-87-2		
8.873	8.873	(1.065)	83	120301	76.4583	76.458	80.00- 120.00	100.00
8.873	8.866	(1.065)	98	57327			16.90- 76.90	47.65
8.873	8.866	(1.065)	55	95677			52.37- 112.37	79.53
59 1,2-Dichloropropane						CAS #: 78-87-5		
8.880	8.880	(1.066)	63	74417	83.5921	83.592	80.00- 120.00	100.00
8.887	8.880	(1.067)	62	53580			38.03- 98.03	72.00
8.880	8.873	(1.066)	41	103910			105.71- 165.71	139.63

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (ng)	FINAL (NG)	TARGET RANGE	RATIO
60 1,4-Dioxane					CAS #: 123-91-1		
8.973	8.973 (1.077)	88	51319	69.0108	69.011	80.00- 120.00	100.00
8.973	8.966 (1.077)	58	35540			37.98- 97.98	69.25
8.973	8.966 (1.077)	57	17874			0.00- 54.83	34.83
65 4-Methyl-2-pentanone					CAS #: 108-10-1		
9.854	9.854 (1.183)	58	62268	80.6870	80.687	80.00- 120.00	100.00
9.854	9.854 (1.183)	43	180854			254.63- 314.63	290.44
9.854	9.854 (1.183)	85	25769			8.74- 68.74	41.39
67 Toluene					CAS #: 108-88-3		
10.076	10.069 (0.866)	91	242423	70.3014	70.301	80.00- 120.00	100.00
10.069	10.069 (0.865)	92	140112			29.25- 89.25	57.80
70 1,1,2-Trichloroethane					CAS #: 79-00-5		
10.556	10.556 (1.267)	97	86012	103.775	103.77	80.00- 120.00	100.00
10.556	10.556 (1.267)	99	54829			34.29- 94.29	63.75
10.556	10.556 (1.267)	83	73469			57.72- 117.72	85.42
71 Tetrachloroethene					CAS #: 127-18-4		
10.657	10.657 (0.916)	166	132986	132.567	132.57	80.00- 120.00	100.00
10.657	10.657 (0.916)	129	97678			41.79- 101.79	73.45
10.657	10.657 (0.916)	131	92711			38.31- 98.31	69.71
72 2-Hexanone					CAS #: 591-78-6		
10.800	10.793 (0.928)	58	83500	88.4650	88.465	80.00- 120.00	100.00
10.800	10.800 (0.928)	43	175539			181.80- 241.80	210.23
10.800	10.800 (0.928)	100	15798			0.00- 47.51	18.92
74 1,2-Dibromoethane					CAS #: 106-93-4		
11.108	11.108 (0.954)	107	134562	162.416	162.42	80.00- 120.00	100.00
11.108	11.108 (0.954)	109	129074			64.64- 124.64	95.92
81 Chlorobenzene					CAS #: 108-90-7		
11.674	11.681 (1.003)	112	210742	89.7936	89.794	80.00- 120.00	100.00
11.674	11.681 (1.003)	114	68510			1.81- 61.81	32.51
11.674	11.681 (1.003)	77	101050			21.76- 81.76	47.95
82 Ethyl Benzene					CAS #: 100-41-4		
11.803	11.810 (1.014)	106	101629	83.9055	83.906	80.00- 120.00	100.00
11.796	11.810 (1.014)	91	295826			263.98- 323.98	291.08
84 m,p-Xylene					CAS #: 108-38-3		
11.953	11.968 (1.027)	106	127919	83.9518	83.952	80.00- 120.00	100.00
11.953	11.968 (1.027)	91	226554			152.73- 212.73	177.11

RT	EXP RT	(REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (ng)	FINAL (NG)	TARGET RANGE	RATIO
88 o-Xylene						CAS #: 95-47-6		
12.397	12.412	(0.950)	106	121149	83.6874	83.687	80.00- 120.00	100.00
12.397	12.412	(0.950)	91	229318			163.65- 223.65	189.29
89 Styrene						CAS #: 100-42-5		
12.426	12.440	(0.952)	104	197039	85.2070	85.207	80.00- 120.00	100.00
12.426	12.440	(0.952)	78	84738			15.61- 75.61	43.01
91 Cumene						CAS #: 98-82-8		
12.849	12.863	(0.984)	105	364633	99.5058	99.506	80.00- 120.00	100.00
12.849	12.863	(0.984)	120	107746			0.00- 59.10	29.55
12.849	12.856	(0.984)	51	37211			0.00- 40.54	10.21
94 1,1,2,2-Tetrachloroethane						CAS #: 79-34-5		
13.214	13.221	(1.012)	83	183673	148.408	148.41	80.00- 120.00	100.00
13.214	13.221	(1.012)	85	122053			35.82- 95.82	66.45
96 Propylbenzene						CAS #: 103-65-1		
13.357	13.364	(1.023)	91	414690	97.9533	97.953	80.00- 120.00	100.00
13.357	13.364	(1.023)	120	106796			0.00- 54.66	25.75
13.357	13.364	(1.023)	105	15636			0.00- 33.61	3.77
97 4-Ethyltoluene						CAS #: 622-96-8		
13.508	13.522	(1.035)	120	111071	97.1834	97.183	80.00- 120.00	100.00
13.515	13.522	(1.035)	105	333580			275.29- 335.29	300.33
98 1,3,5-Trimethylbenzene						CAS #: 108-67-8		
13.586	13.601	(1.041)	120	150193	96.2409	96.241	80.00- 120.00	100.00
13.586	13.601	(1.041)	105	283049			157.79- 217.79	188.46
100 1,2,4-Trimethylbenzene						CAS #: 95-63-6		
14.038	14.052	(1.075)	120	142563	97.0020	97.002	80.00- 120.00	100.00
14.038	14.052	(1.075)	105	293935			169.74- 229.74	206.18
101 1,3-Dichlorobenzene						CAS #: 541-73-1		
14.374	14.382	(1.101)	146	220608	119.283	119.28	80.00- 120.00	100.00
14.374	14.382	(1.101)	148	145342			34.32- 94.32	65.88
14.374	14.382	(1.101)	111	79189			5.94- 65.94	35.90
102 1,4-Dichlorobenzene						CAS #: 106-46-7		
14.503	14.510	(1.111)	146	219900	121.093	121.09	80.00- 120.00	100.00
14.503	14.510	(1.111)	148	139829			35.48- 95.48	63.59
14.503	14.510	(1.111)	111	75105			5.70- 65.70	34.15
105 1,2-Dichlorobenzene						CAS #: 95-50-1		
14.933	14.940	(1.144)	146	209168	117.880	117.88	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (ng)	FINAL (NG)	TARGET RANGE	RATIO
105 1,2-Dichlorobenzene (continued)							
14.933	14.940 (1.144)	148	134873			34.02- 94.02	64.48
14.926	14.933 (1.143)	111	79394			7.12- 67.12	37.96
106 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
16.953	16.953 (1.298)	180	175326	142.833	142.83	80.00- 120.00	100.00
16.953	16.953 (1.298)	182	166402			65.50- 125.50	94.91
107 Hexachlorobutadiene					CAS #: 87-68-3		
17.146	17.154 (1.313)	225	132971	188.362	188.36	80.00- 120.00	100.00
17.146	17.154 (1.313)	223	84982			32.38- 92.38	63.91
109 Naphthalene					CAS #: 91-20-3		
17.268	17.268 (1.323)	128	260189	51.8088	51.809	80.00- 120.00	100.00
17.268	17.268 (1.323)	127	32870			0.00- 43.21	12.63
110 2-Methylnaphthalene					CAS #: 91-57-6		
18.708	18.708 (1.433)	142	176708	55.1047	55.105	80.00- 120.00	100.00
18.708	18.708 (1.433)	141	148825			56.85- 116.85	84.22
18.708	18.708 (1.433)	115	50217			0.00- 59.61	28.42
111 1-Methylnaphthalene					CAS #: 90-12-0		
18.930	18.930 (1.450)	142	158618	50.5771	50.577	80.00- 120.00	100.00
18.930	18.930 (1.450)	141	142961			58.28- 118.28	90.13
18.930	18.930 (1.450)	115	48791			1.09- 61.09	30.76
112 Acenaphthylene					CAS #: 208-96-8		
20.800	20.800 (1.593)	152	263320	52.1339	52.134	80.00- 120.00	100.00
20.792	20.800 (1.593)	151	53889			0.00- 50.51	20.47
20.800	20.800 (1.593)	153	34013			0.00- 43.07	12.92
113 Acenaphthene					CAS #: 83-32-9		
21.065	21.065 (1.613)	154	124640	52.0697	52.070	80.00- 120.00	100.00
21.065	21.065 (1.613)	152	65241			23.06- 83.06	52.34
21.065	21.065 (1.613)	153	136289			82.31- 142.31	109.35
114 Fluorene					CAS #: 86-73-7		
22.225	22.225 (1.702)	166	124865	52.6847	52.685	80.00- 120.00	100.00
22.225	22.225 (1.702)	165	117987			65.30- 125.30	94.49
115 Phenanthrene					CAS #: 85-01-8		
24.395	24.438 (1.868)	178	468	0.07792	0.07792	80.00- 120.00	100.00(aR)
24.374	24.438 (1.867)	176	281			0.00- 48.40	60.02
24.381	24.438 (1.867)	179	205			0.00- 44.95	43.93
116 Anthracene					CAS #: 120-12-7		
24.560	24.560 (1.881)	178	244503	38.8521	38.852	80.00- 120.00	100.00

RT	EXP RT	(REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (ng)	FINAL (NG)	TARGET RANGE	RATIO
116 Anthracene (continued)								
24.560	24.560	(1.881)	176	42655			0.00- 47.65	17.45
24.560	24.560	(1.881)	179	36671			0.00- 43.56	15.00
117 Fluoranthene						CAS #: 206-44-0		
28.321	28.321	(2.169)	202	487597	85.5315	85.531	80.00- 120.00	100.00(R)
28.321	28.314	(2.169)	101	66643			0.00- 42.31	13.67
118 Pyrene						CAS #: 129-00-0		
29.367	29.359	(2.249)	202	548033	88.1500	88.150	80.00- 120.00	100.00(R)
29.367	29.352	(2.249)	101	84200			0.00- 44.28	15.36
29.359	29.359	(2.249)	100	67218			0.00- 41.66	12.27

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
R - Spike/Surrogate failed recovery limits.

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd11.i
Lab File ID: 11020403.d
Lab Smp Id: VI VOC+PAH LCSD
Analysis Type: VOA
Quant Type: ISTD
Operator: LA
Method File: /chem/msd11.i/04feb16.b/115z1120vi.m
Misc Info: 2516-217(5/3/16),2744-32-50(7/20/16)

Calibration Date: 04-FEB-2016
Calibration Time: 12:29
Client Smp ID: LCSD
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
40 Bromochloromethan	65872	39523	92221	47672	-27.63
54 1,4-Difluorobenze	263308	157985	368631	191967	-27.09
79 Chlorobenzene-d5	242803	145682	339924	180090	-25.83
92 Bromofluorobenzen	175852	105511	246193	127625	-27.42

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
40 Bromochloromethan	6.95	6.62	7.28	6.95	0.10
54 1,4-Difluorobenze	8.33	8.00	8.66	8.33	0.00
79 Chlorobenzene-d5	11.65	11.32	11.98	11.64	-0.06
92 Bromofluorobenzen	13.07	12.74	13.40	13.06	-0.11

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msd11.i/04feb16.b/11020403.d

Date : 04-FEB-2016 11:41

Client ID: LCSD

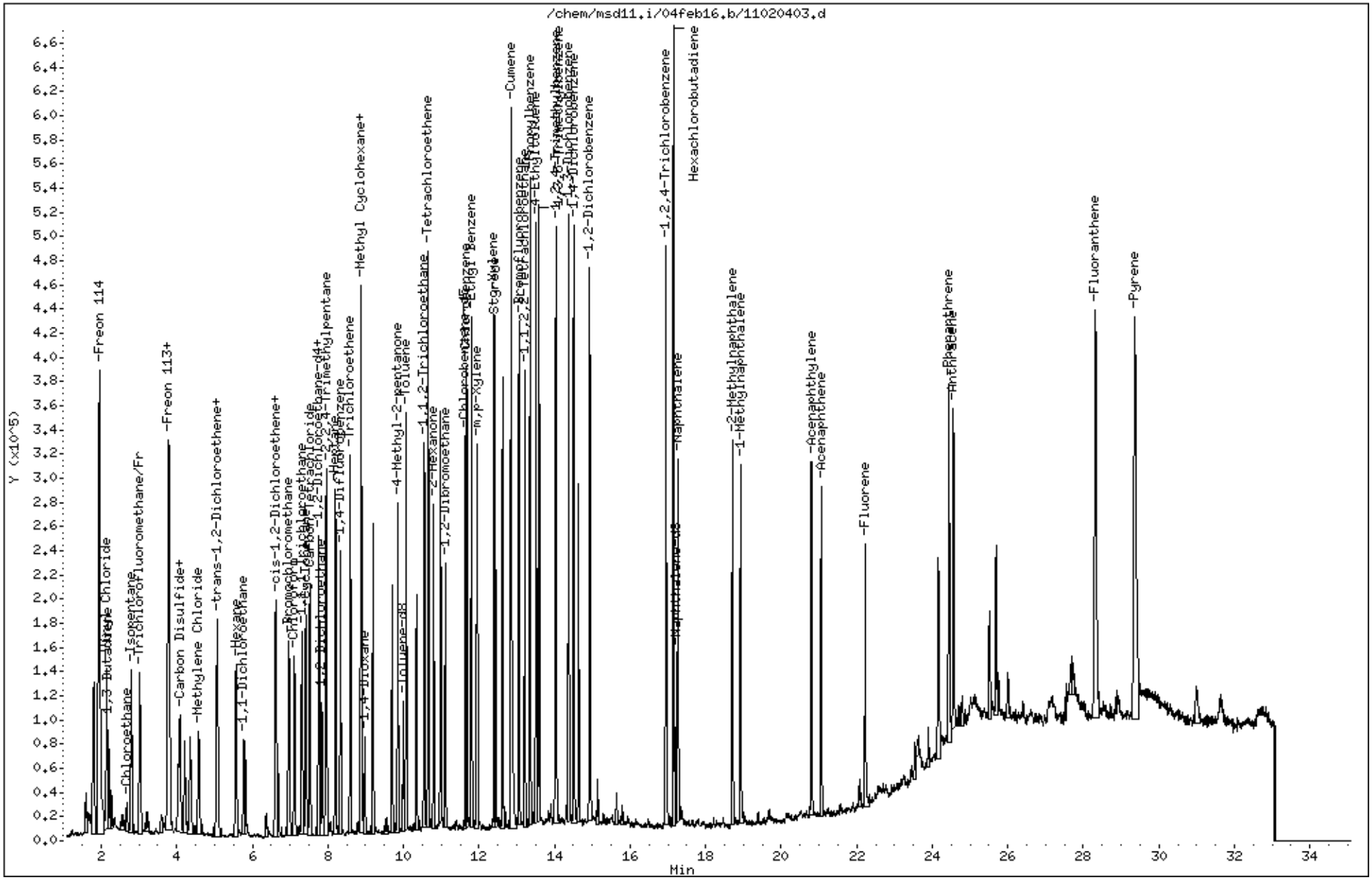
Sample Info: ;VI VOC+PAH LCSD;LCSD

Column phase: RTx-624

Instrument: msd11.i

Operator: LA

Column diameter: 0.53



Data File: /chem/msd11.i/04feb16.b/11020403.d

Date : 04-FEB-2016 11:41

Client ID: LCSD

Instrument: msd11.i

Sample Info: ;VI VOC+PAH LCSD;LCSD

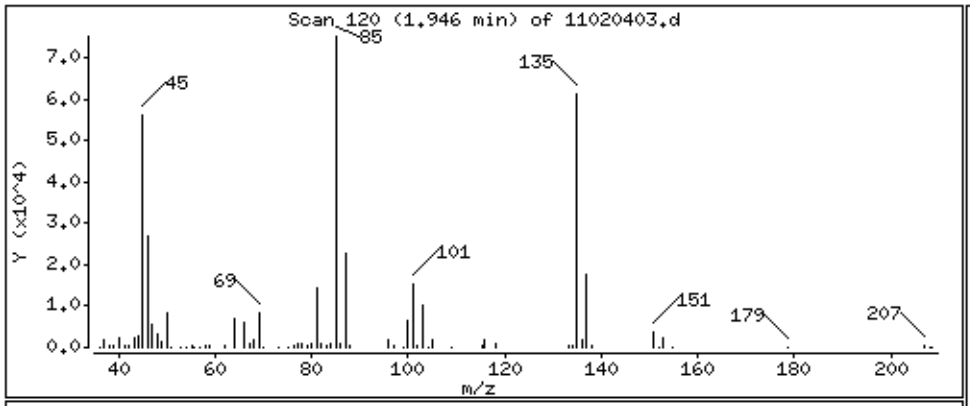
Operator: LA

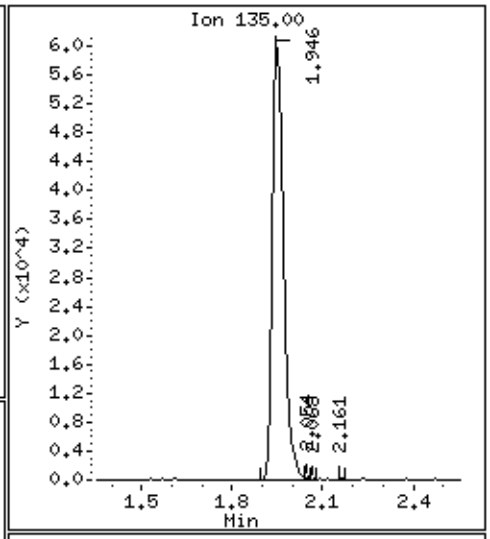
Column phase: RTx-624

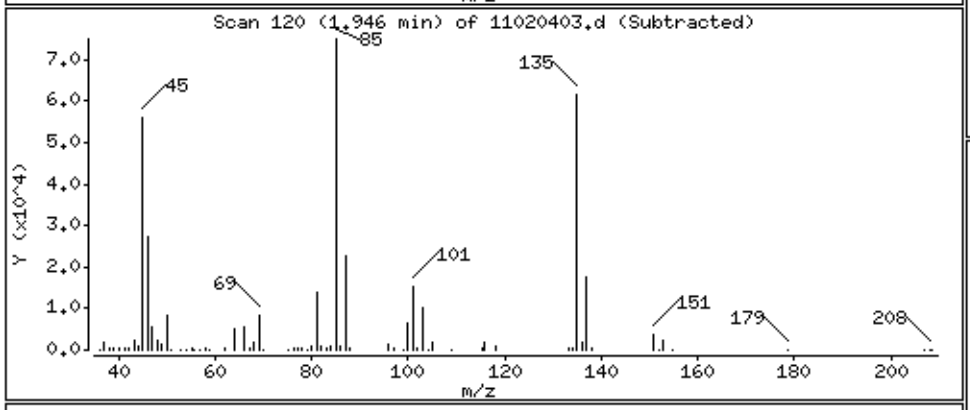
Column diameter: 0.53

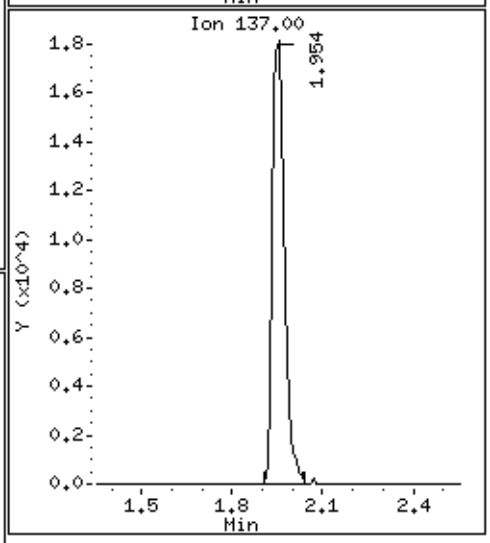
3 Freon 114

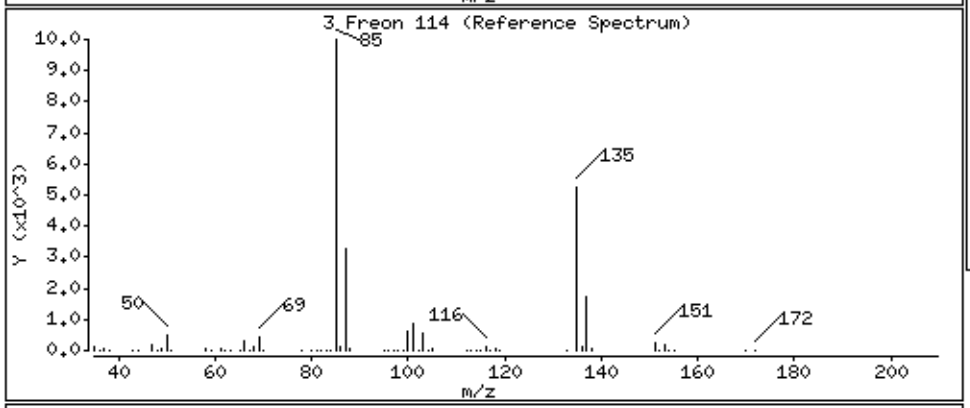
Concentration: 147.60 NG

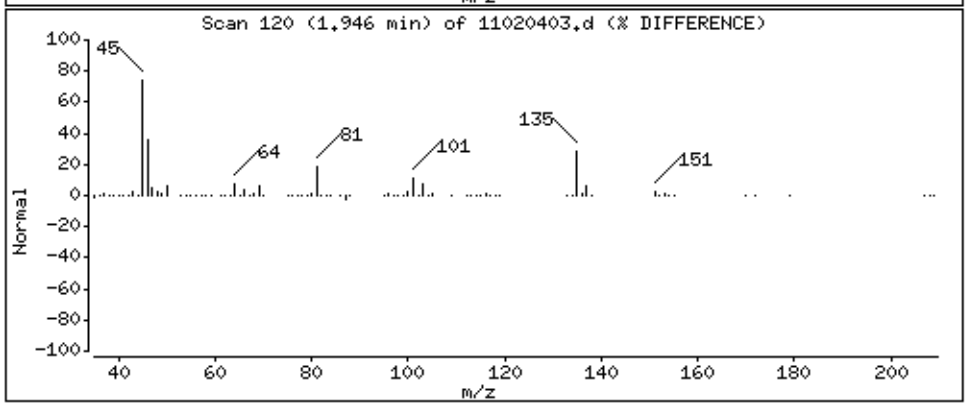












Data File: /chem/msd11.i/04feb16.b/11020403.d

Date : 04-FEB-2016 11:41

Client ID: LCSD

Instrument: msd11.i

Sample Info: ;VI VOC+PAH LCSD;LCSD

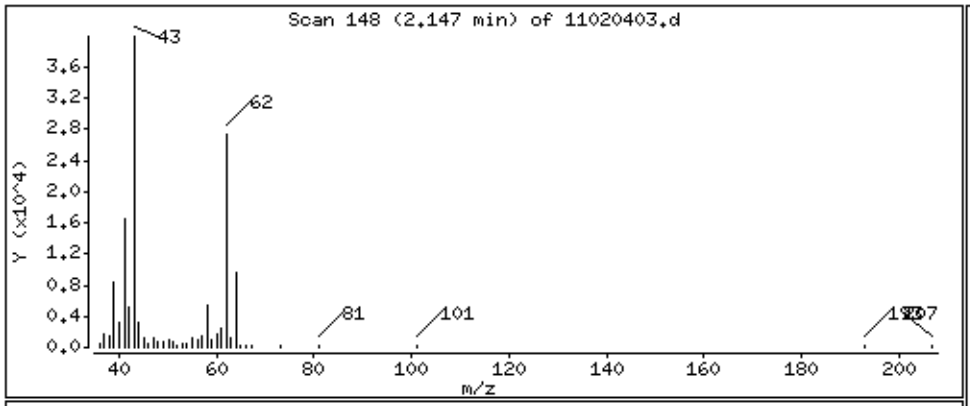
Operator: LA

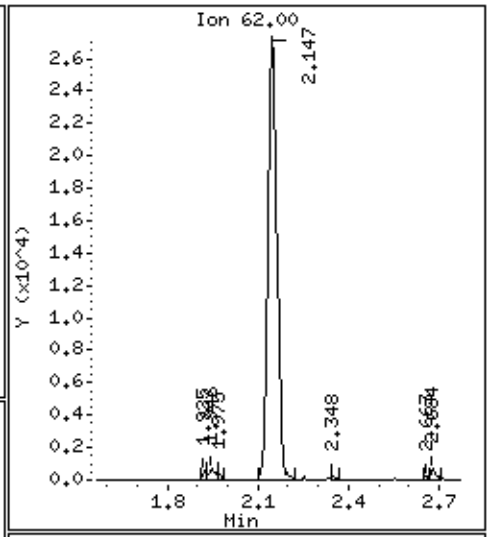
Column phase: RTx-624

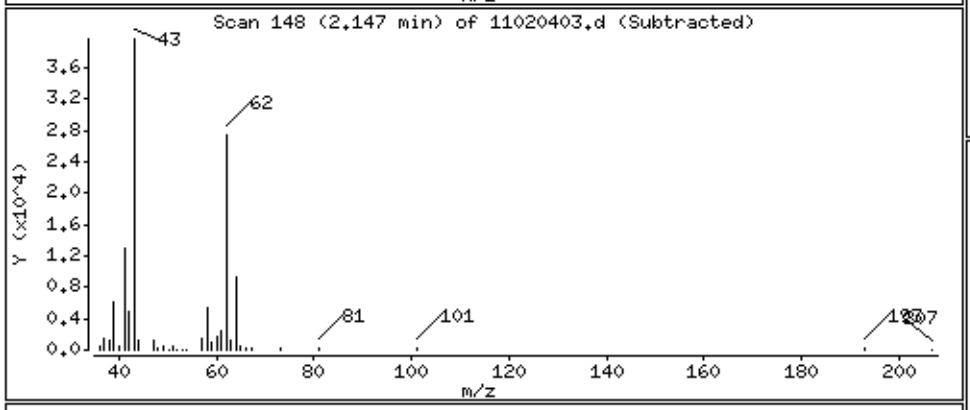
Column diameter: 0.53

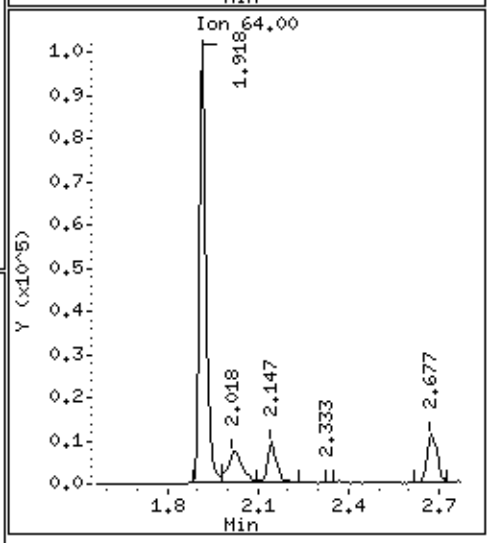
6 Vinyl Chloride

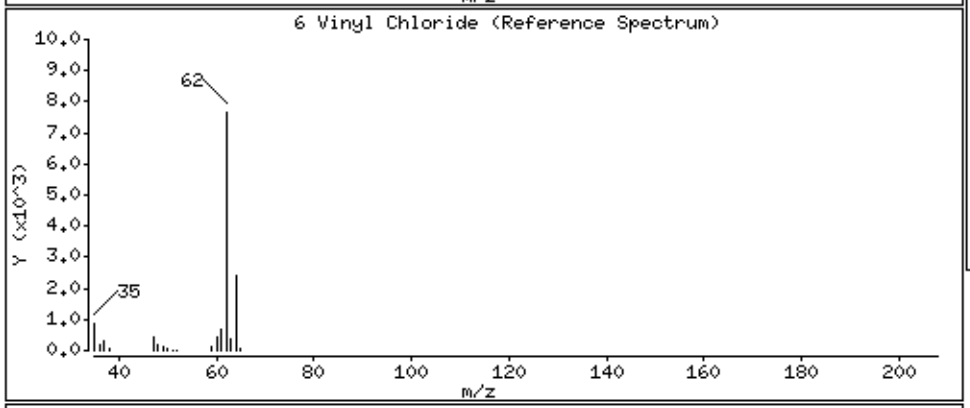
Concentration: 54.640 NG

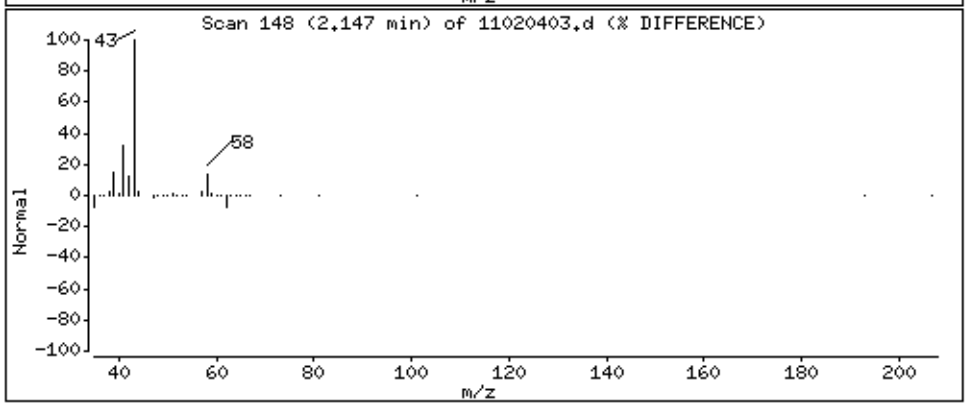












Data File: /chem/msd11.i/04feb16.b/11020403.d

Date : 04-FEB-2016 11:41

Client ID: LCSD

Instrument: msd11.i

Sample Info: ;VI VOC+PAH LCSD;LCSD

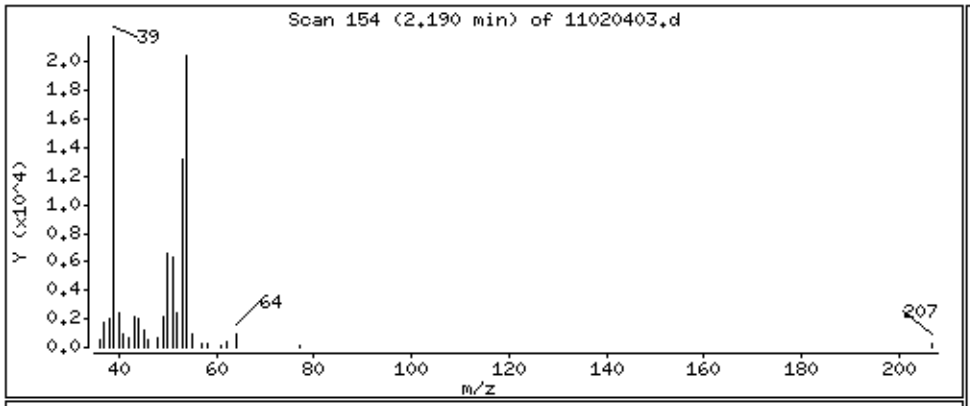
Operator: LA

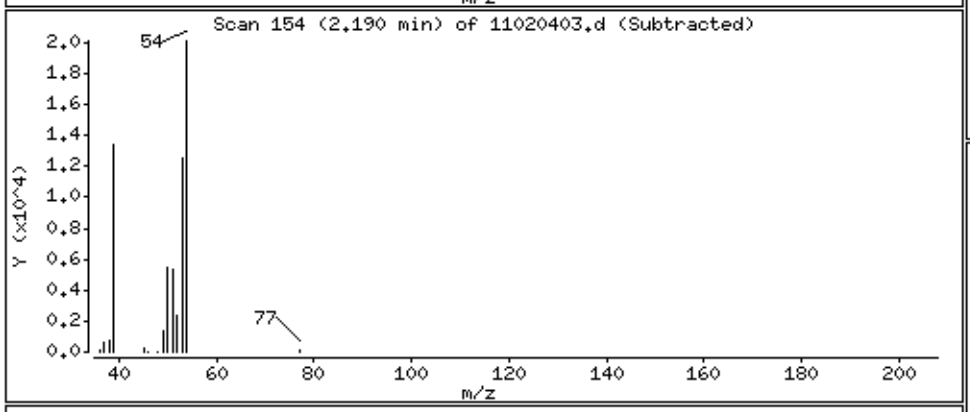
Column phase: RTx-624

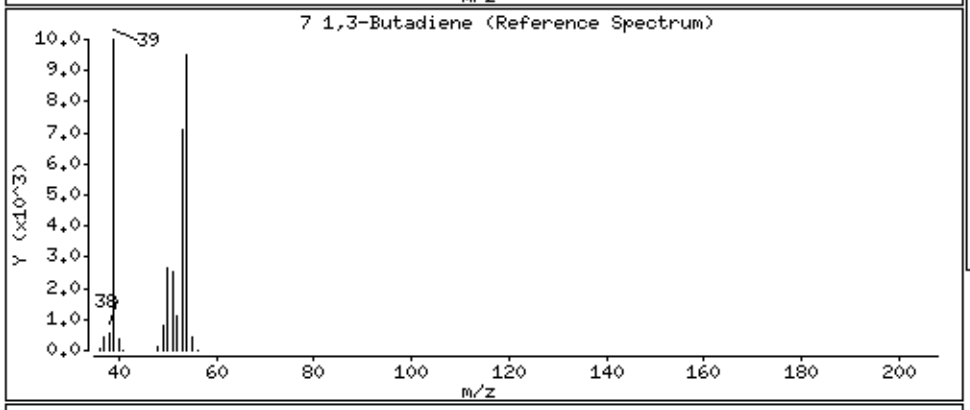
Column diameter: 0.53

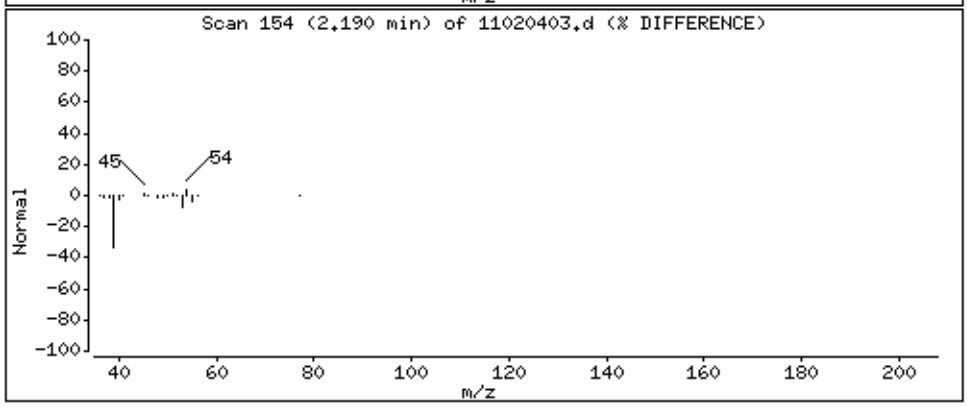
7 1,3-Butadiene

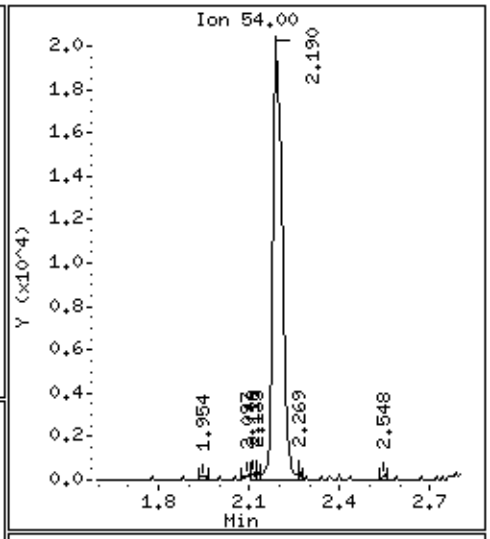
Concentration: 46.486 NG

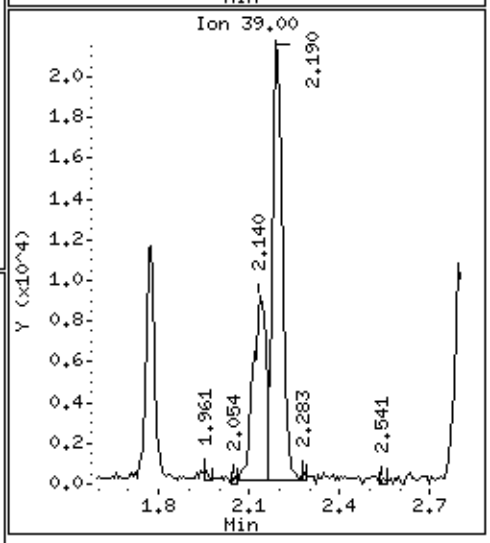












Data File: /chem/msd11.i/04feb16.b/11020403.d

Date : 04-FEB-2016 11:41

Client ID: LCSD

Instrument: msd11.i

Sample Info: ;VI VOC+PAH LCSD;LCSD

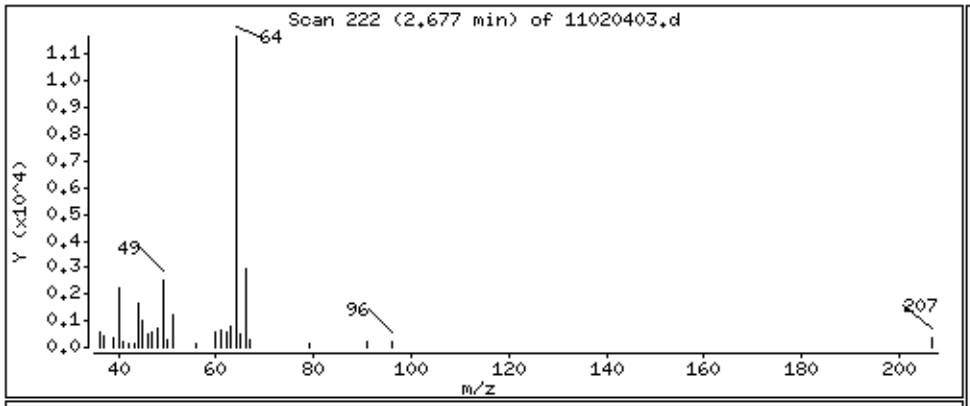
Operator: LA

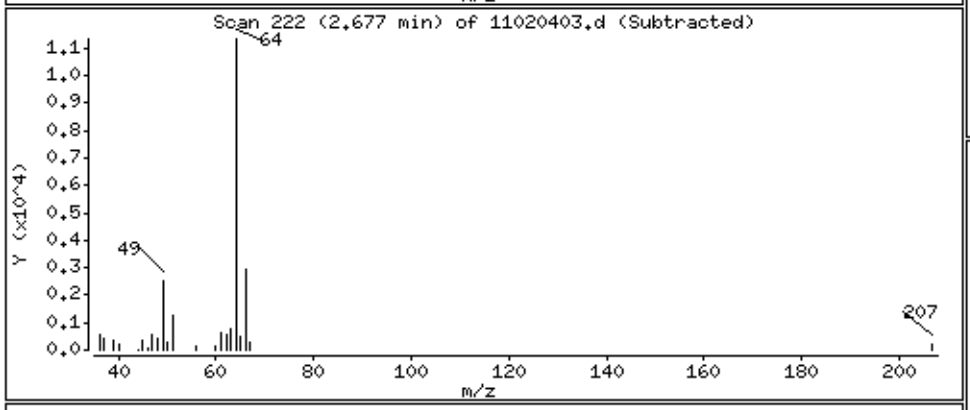
Column phase: RTx-624

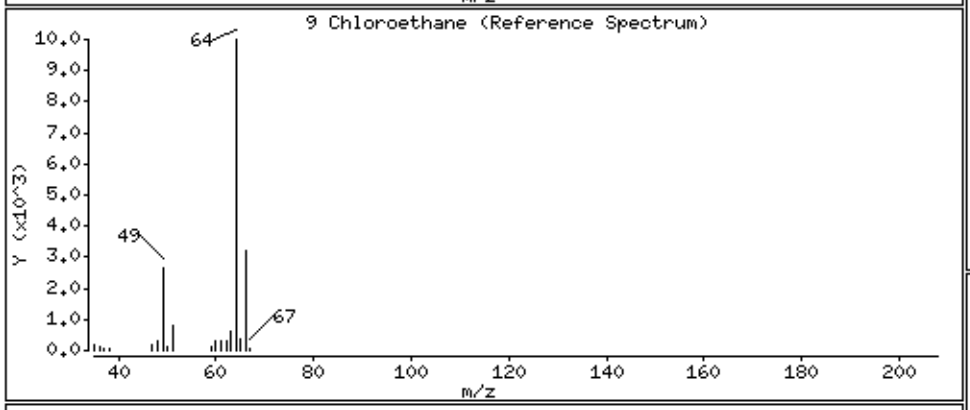
Column diameter: 0.53

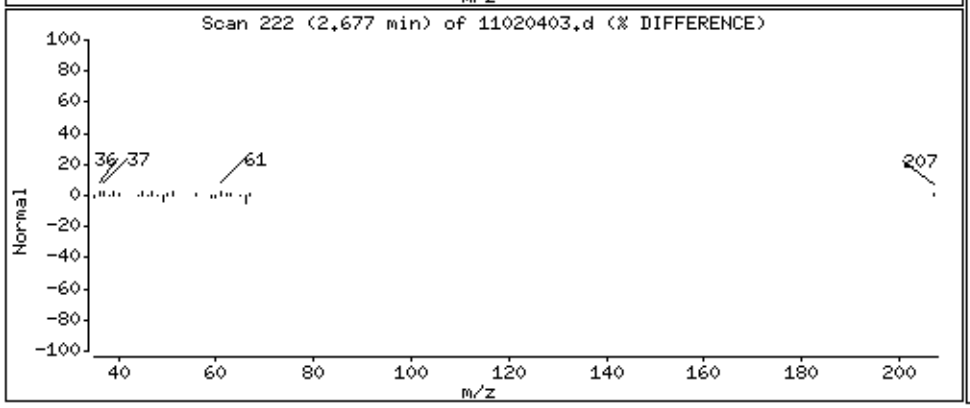
9 Chloroethane

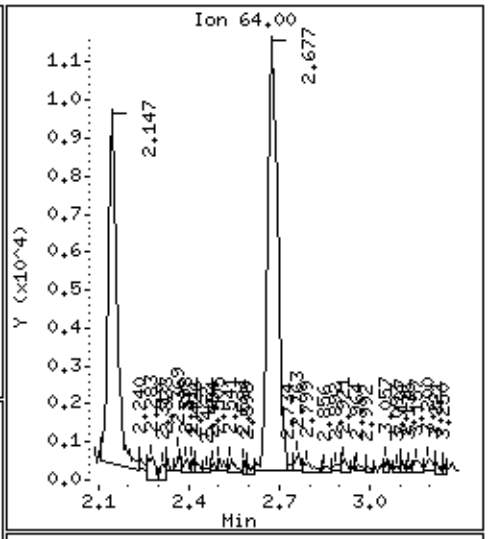
Concentration: 51.064 NG

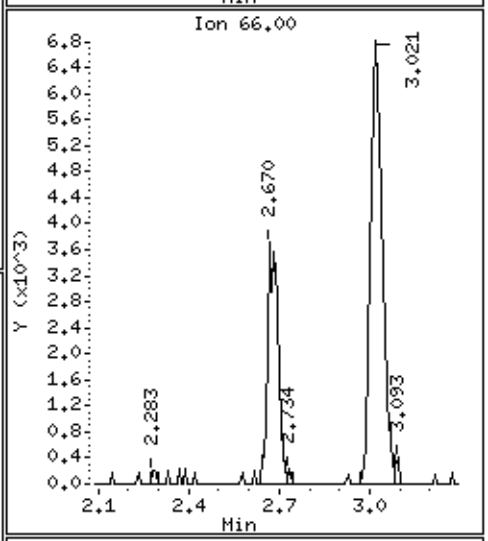


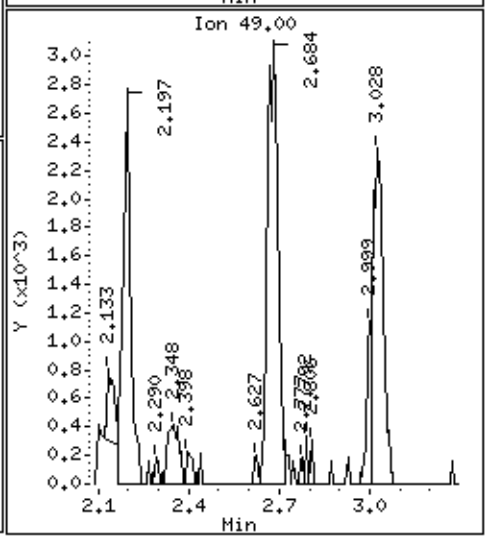












Data File: /chem/msd11.i/04feb16.b/11020403.d

Date : 04-FEB-2016 11:41

Client ID: LCSD

Instrument: msd11.i

Sample Info: ;VI VOC+PAH LCSD;LCSD

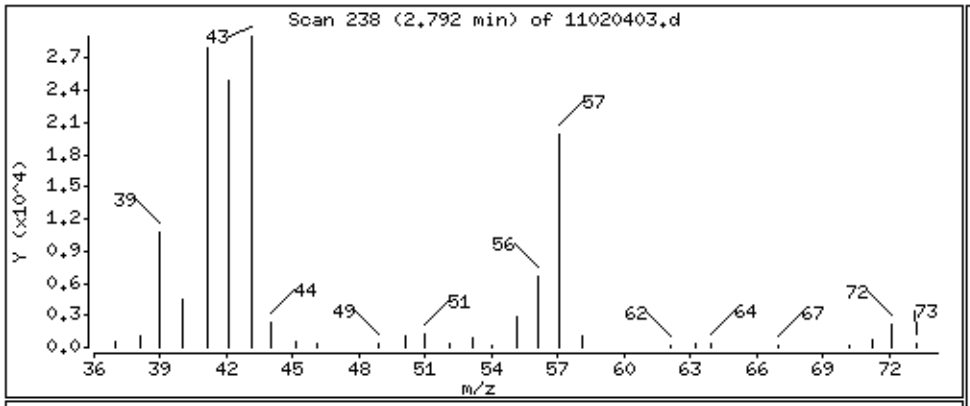
Operator: LA

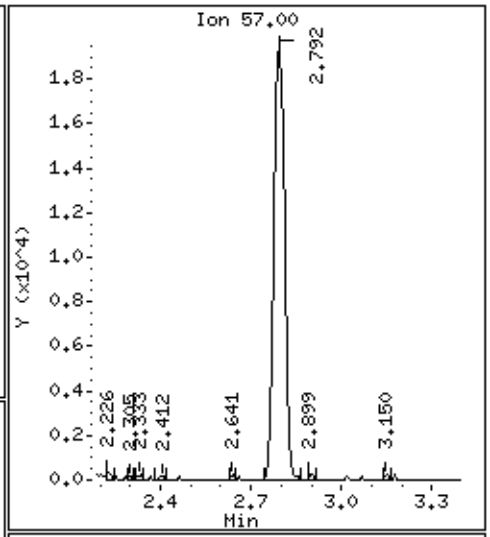
Column phase: RTx-624

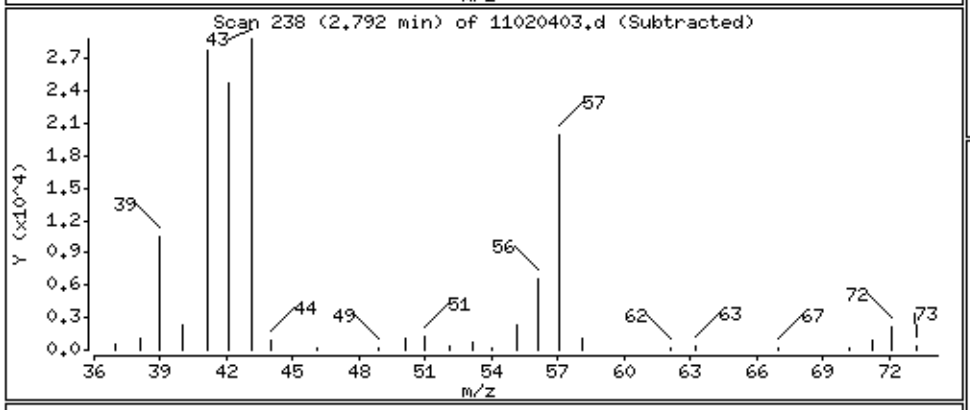
Column diameter: 0.53

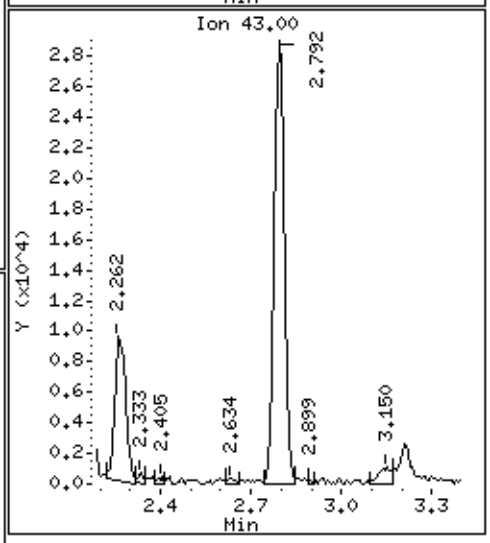
10 Isopentane

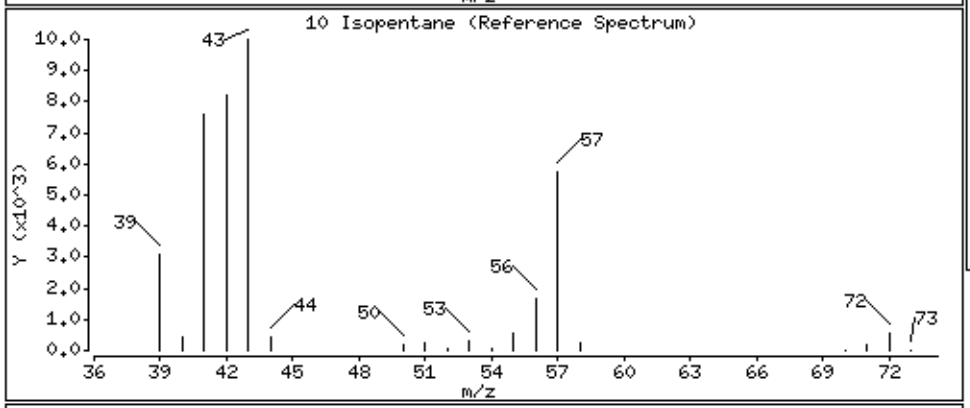
Concentration: 58.890 NG

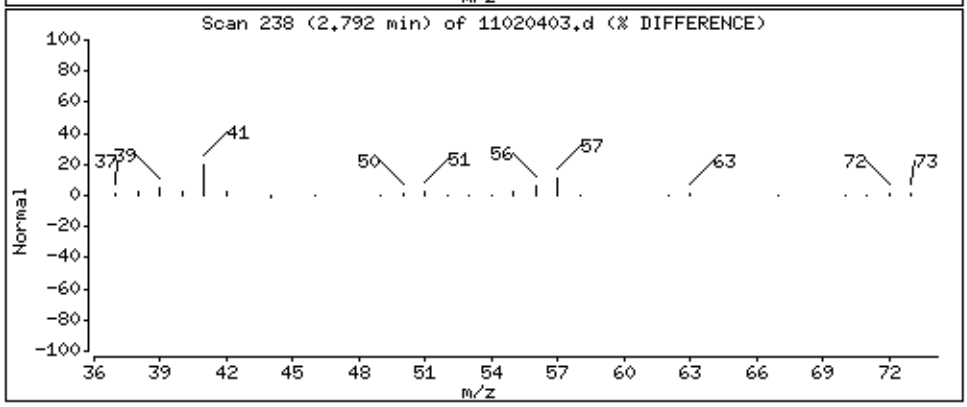












Data File: /chem/msd11.i/04feb16.b/11020403.d

Date : 04-FEB-2016 11:41

Client ID: LCSD

Instrument: msd11.i

Sample Info: ;VI VOC+PAH LCSD;LCSD

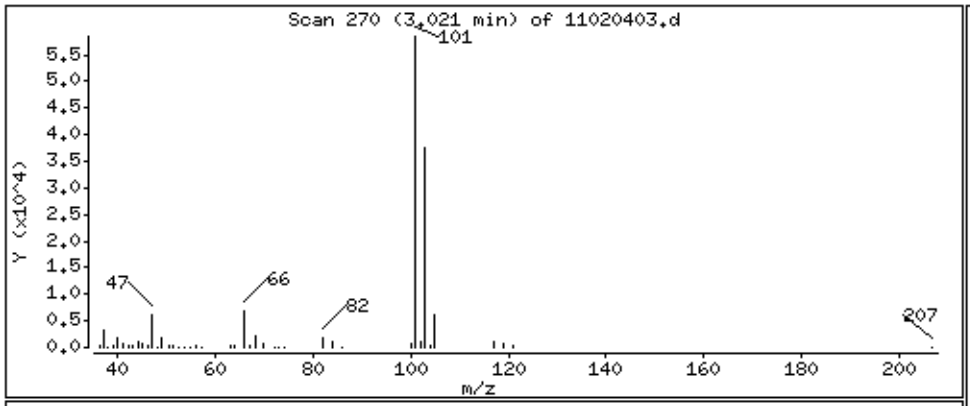
Operator: LA

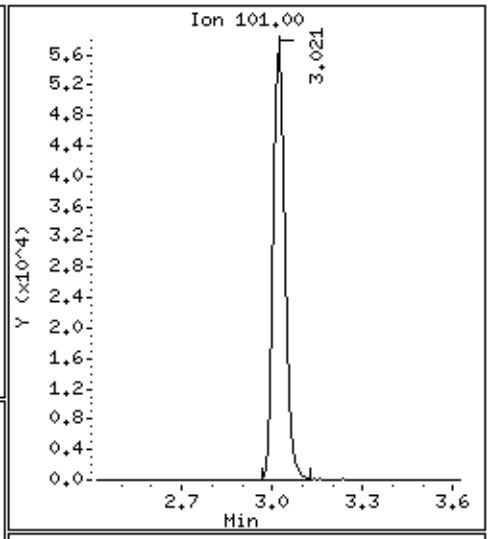
Column phase: RTx-624

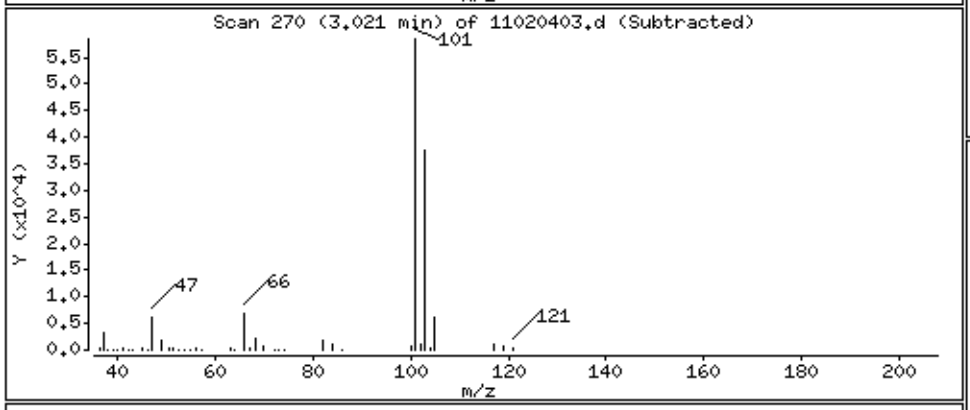
Column diameter: 0.53

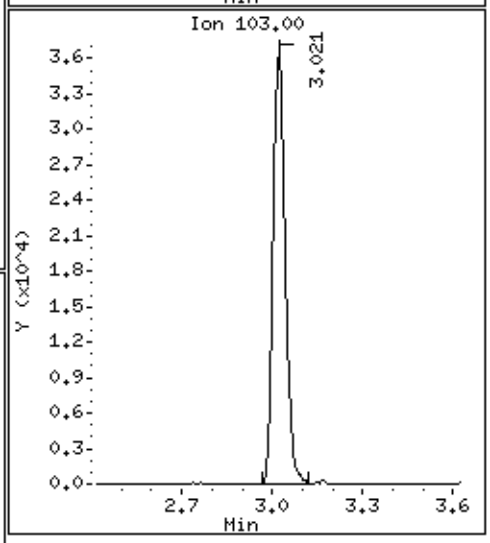
11 Trichlorofluoromethane/Fr11

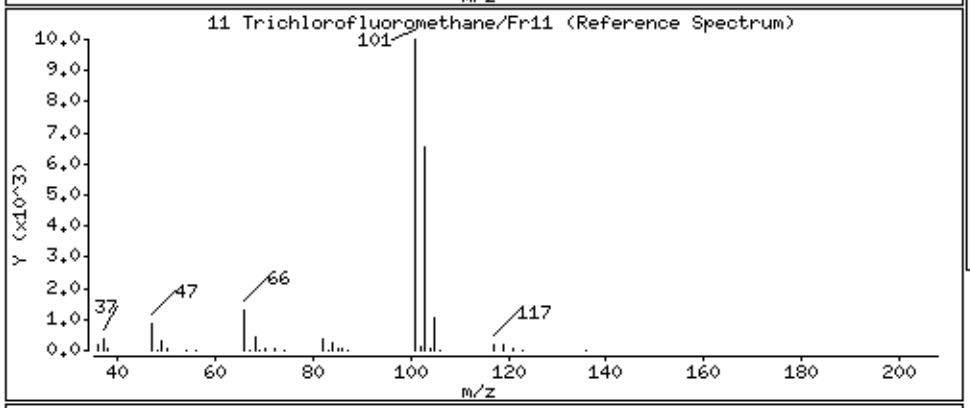
Concentration: 116.77 NG

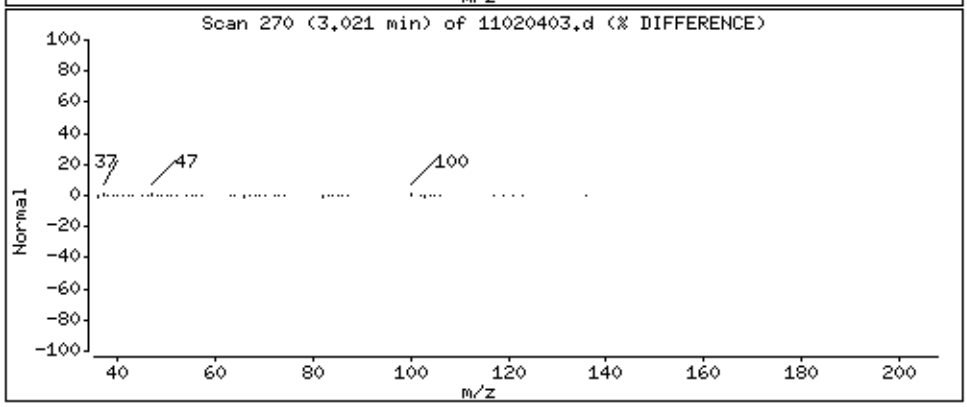












Data File: /chem/msd11.i/04feb16.b/11020403.d

Date : 04-FEB-2016 11:41

Client ID: LCSD

Instrument: msd11.i

Sample Info: ;VI VOC+PAH LCSD;LCSD

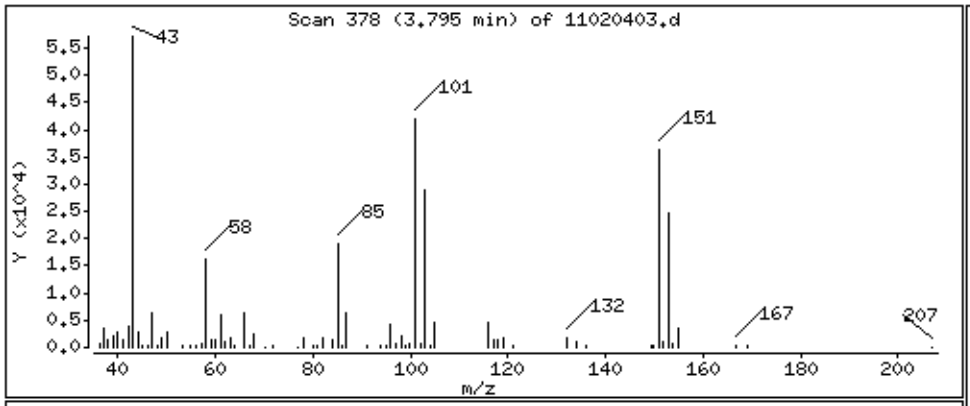
Operator: LA

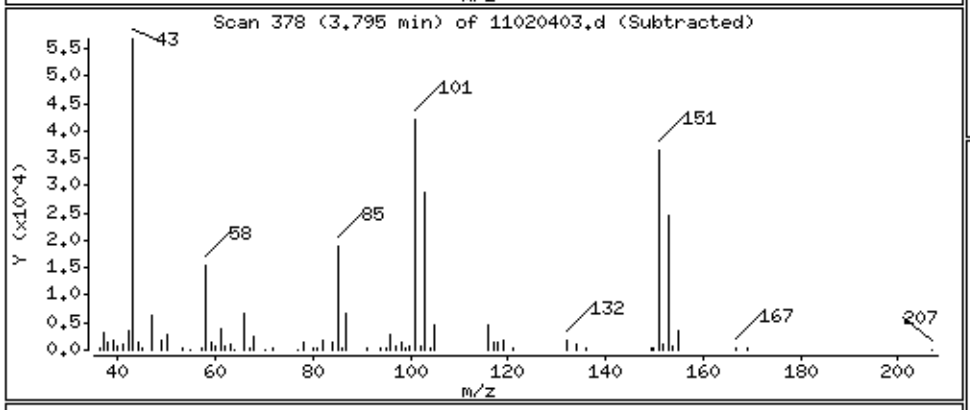
Column phase: RTx-624

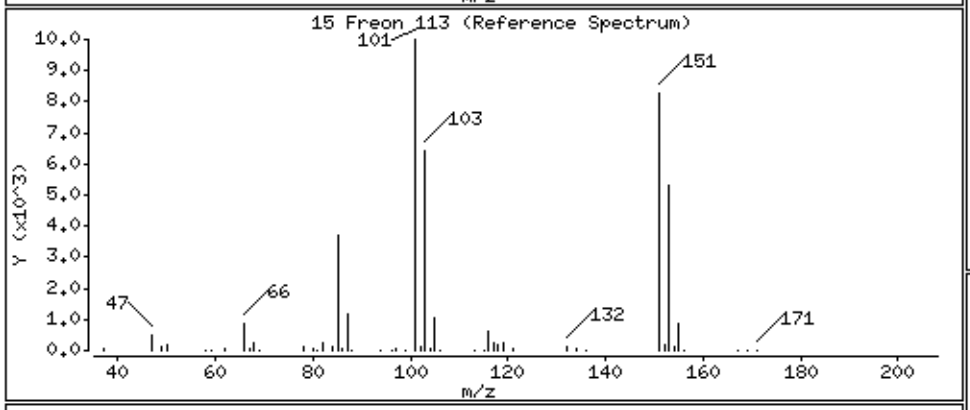
Column diameter: 0.53

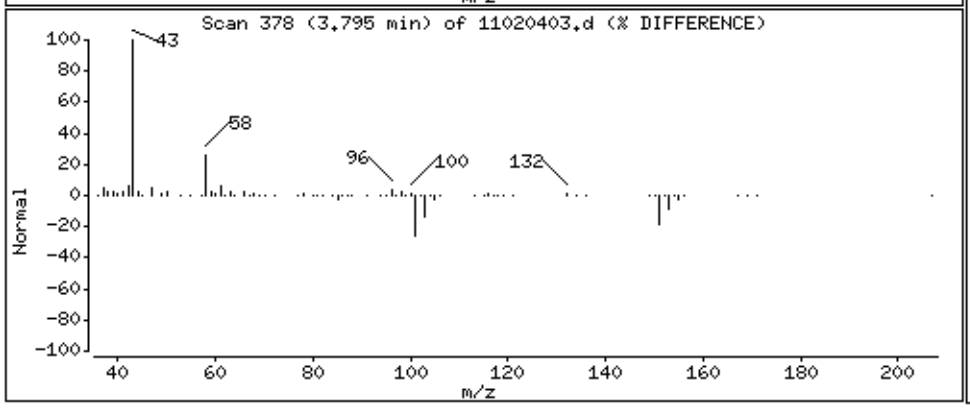
15 Freon 113

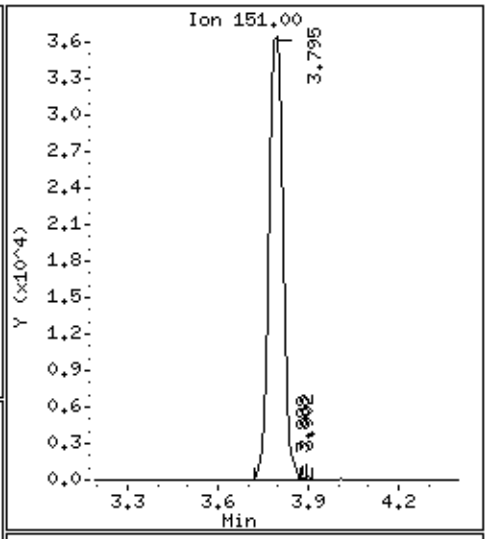
Concentration: 156.08 NG

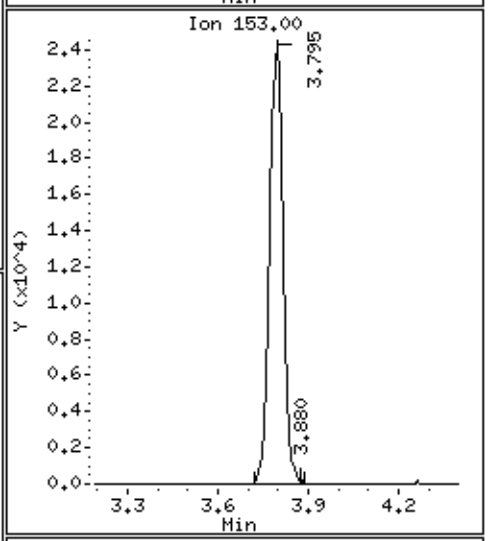


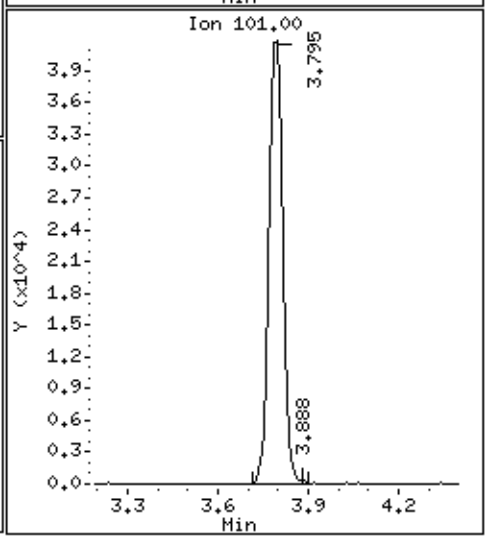












Data File: /chem/msd11.i/04feb16.b/11020403.d

Date : 04-FEB-2016 11:41

Client ID: LCSD

Instrument: msd11.i

Sample Info: ;VI VOC+PAH LCSD;LCSD

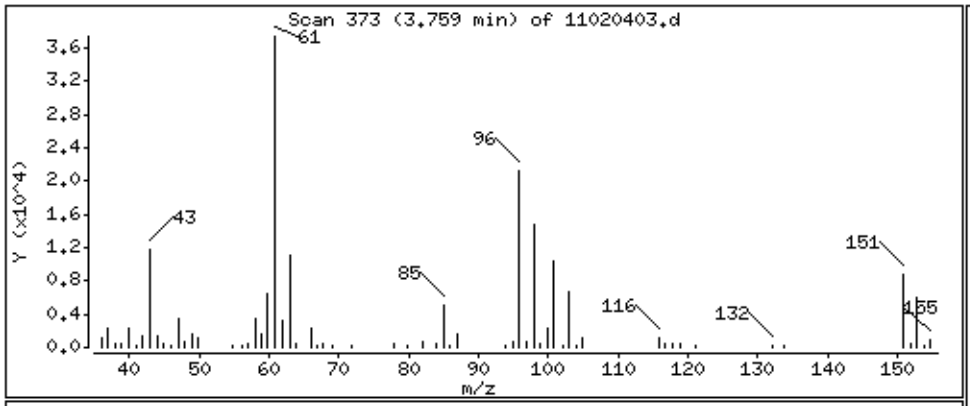
Operator: LA

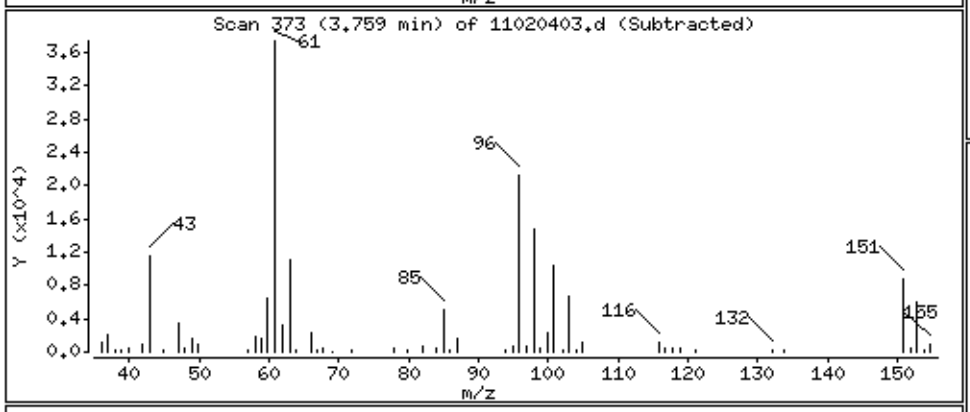
Column phase: RTx-624

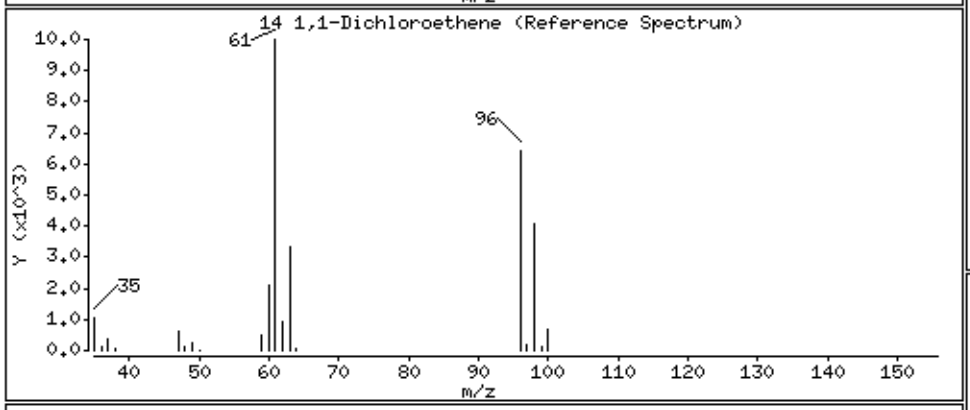
Column diameter: 0.53

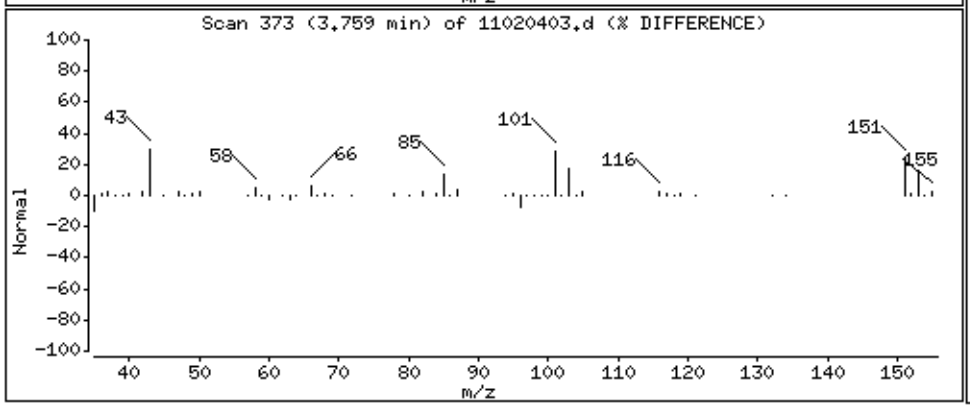
14 1,1-Dichloroethene

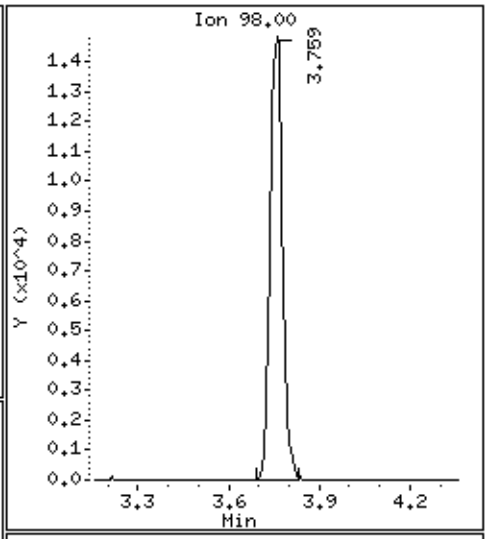
Concentration: 80.359 NG

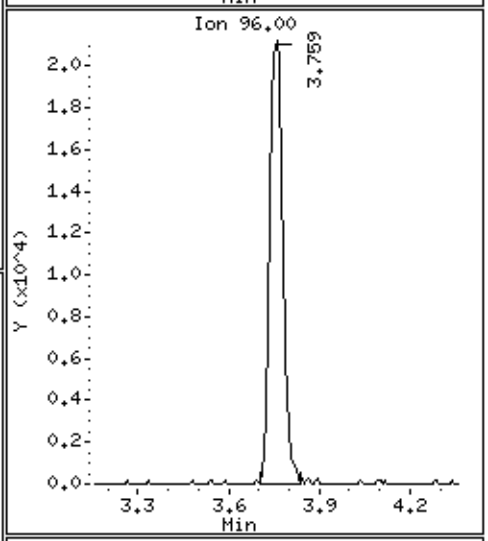


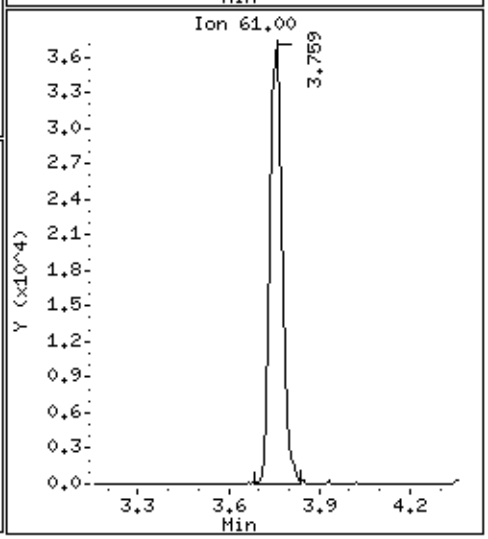












Data File: /chem/msd11.i/04feb16.b/11020403.d

Date : 04-FEB-2016 11:41

Client ID: LCSD

Instrument: msd11.i

Sample Info: ;VI VOC+PAH LCSD;LCSD

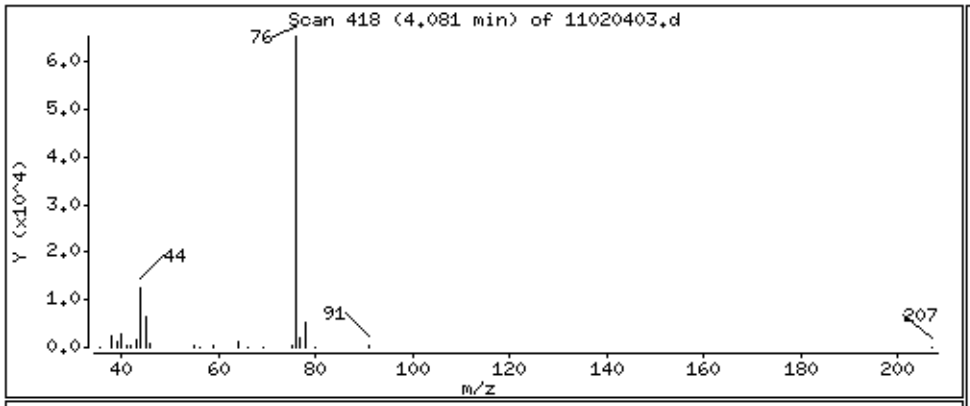
Operator: LA

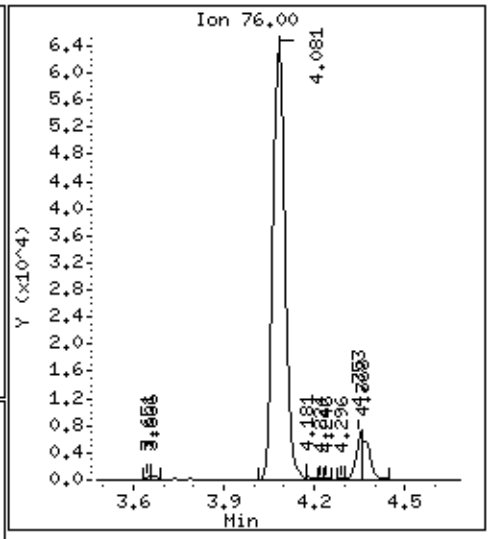
Column phase: RTx-624

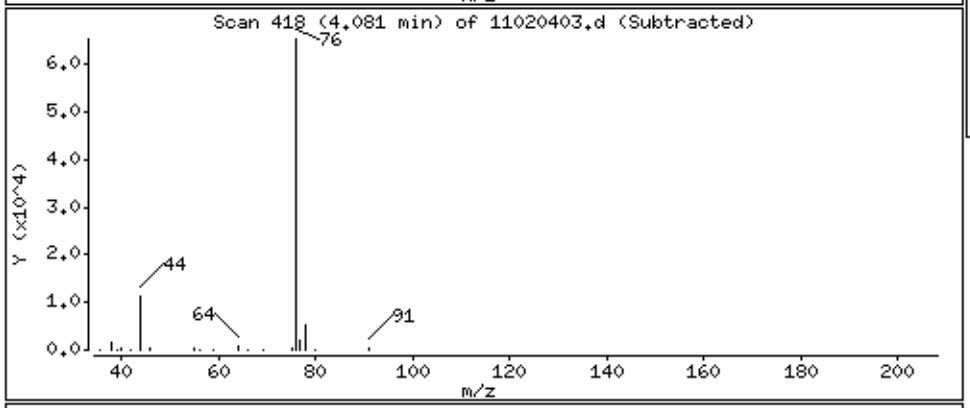
Column diameter: 0.53

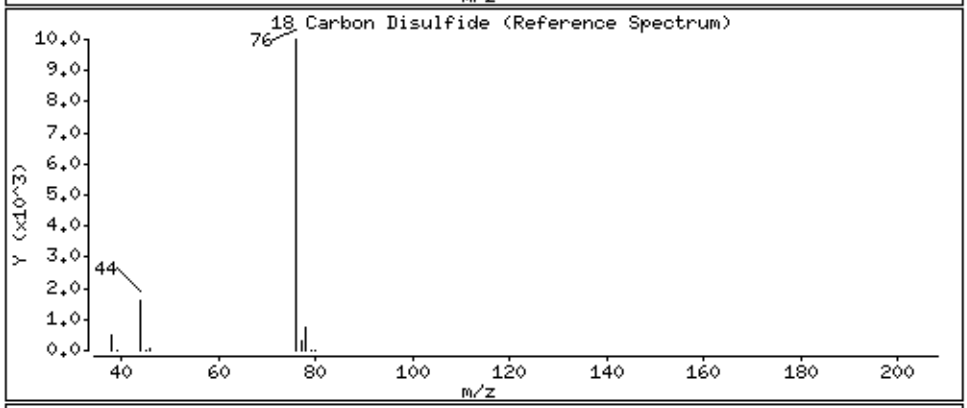
18 Carbon Disulfide

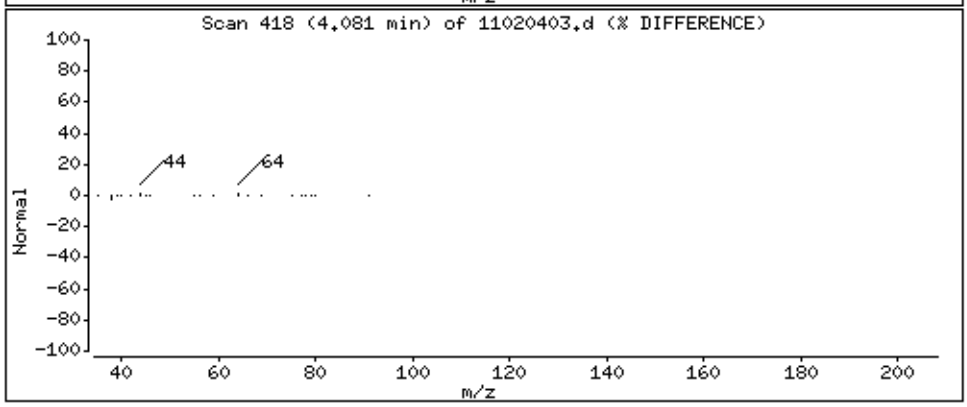
Concentration: 56.787 NG











Data File: /chem/msd11.i/04feb16.b/11020403.d

Date : 04-FEB-2016 11:41

Client ID: LCSD

Instrument: msd11.i

Sample Info: ;VI VOC+PAH LCSD;LCSD

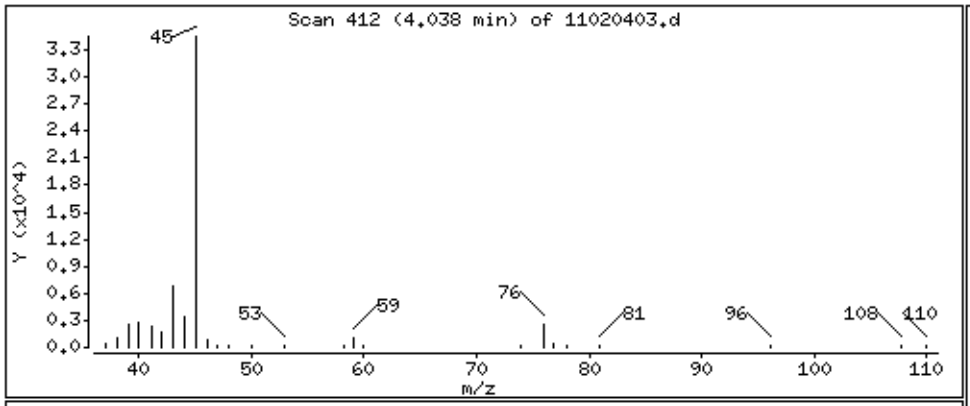
Operator: LA

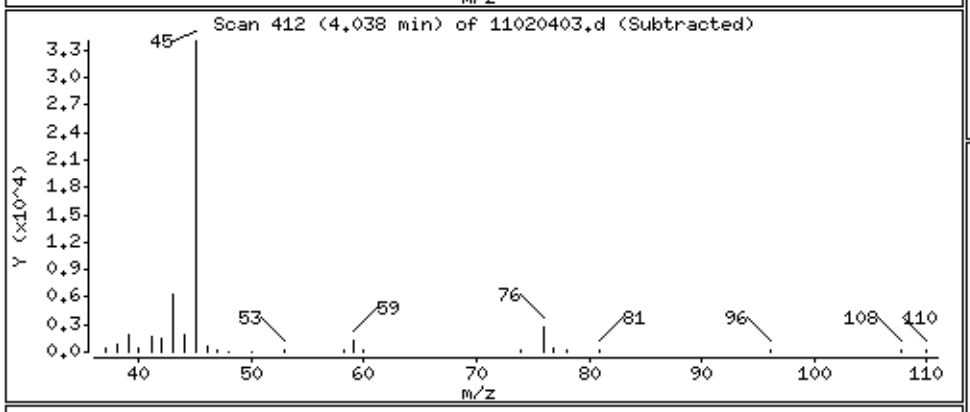
Column phase: RTx-624

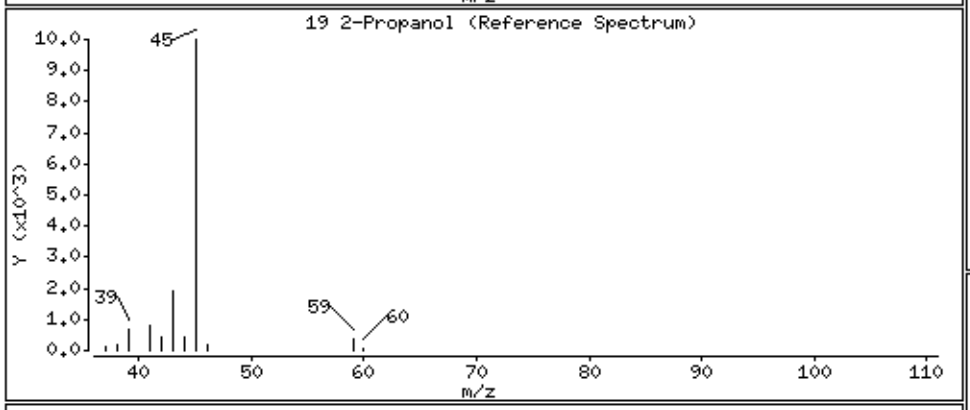
Column diameter: 0.53

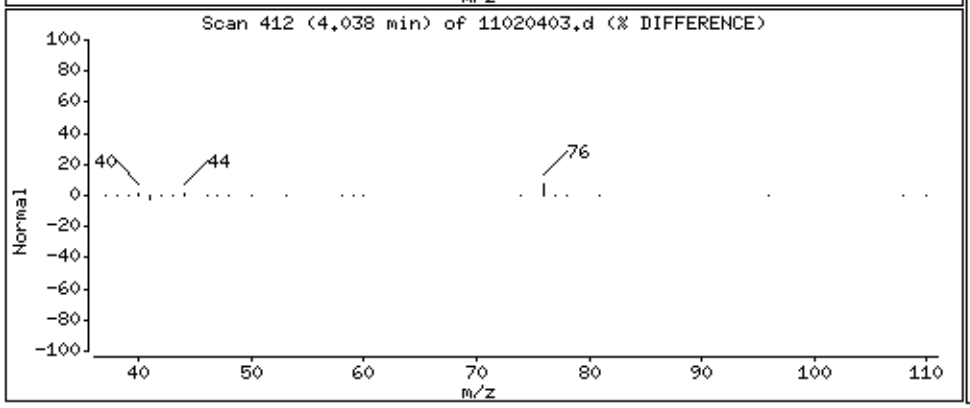
19 2-Propanol

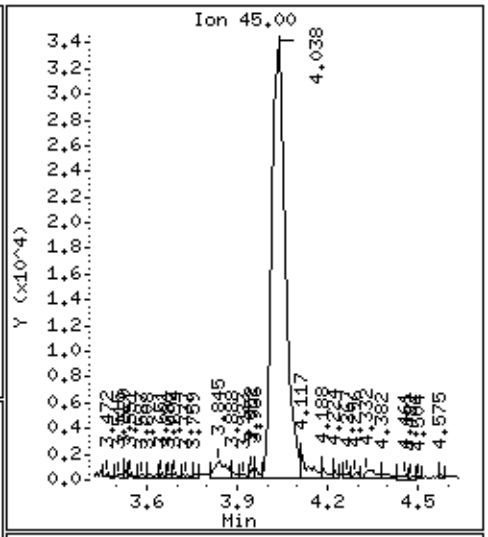
Concentration: 50.080 NG

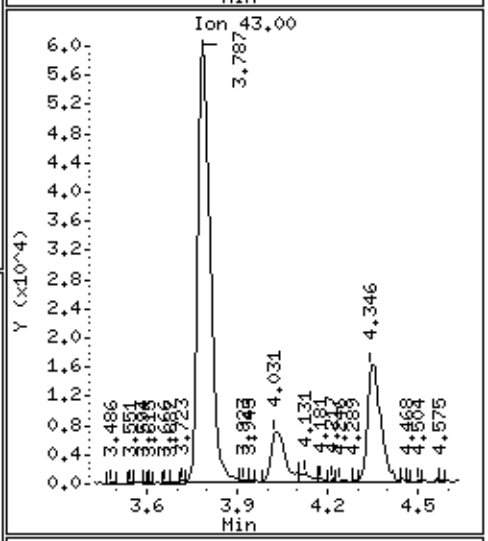


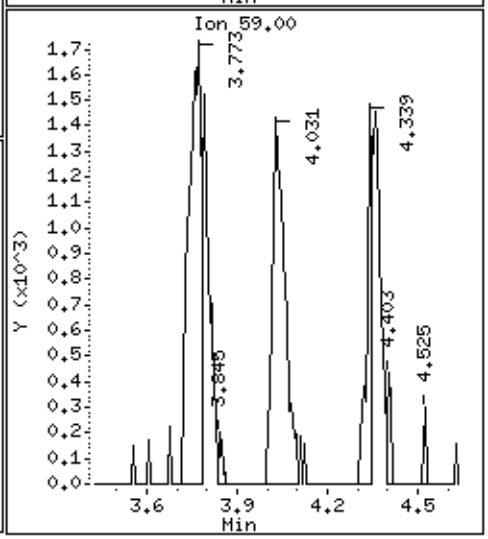












Data File: /chem/msd11.i/04feb16.b/11020403.d

Date : 04-FEB-2016 11:41

Client ID: LCSD

Instrument: msd11.i

Sample Info: ;VI VOC+PAH LCSD;LCSD

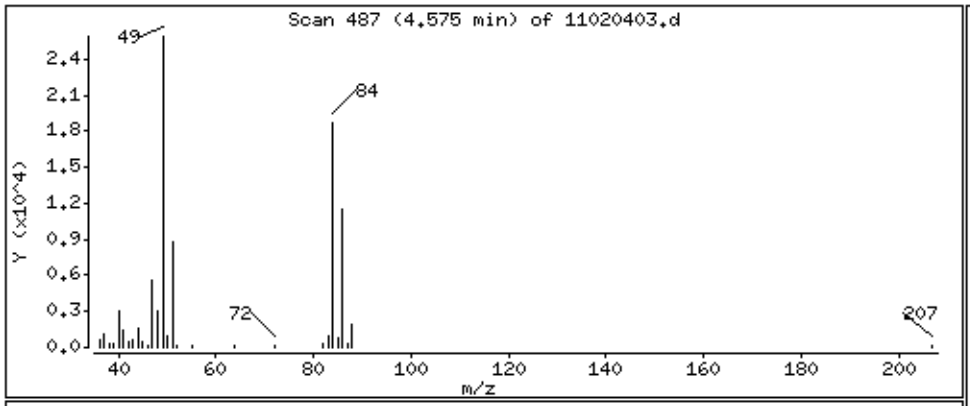
Operator: LA

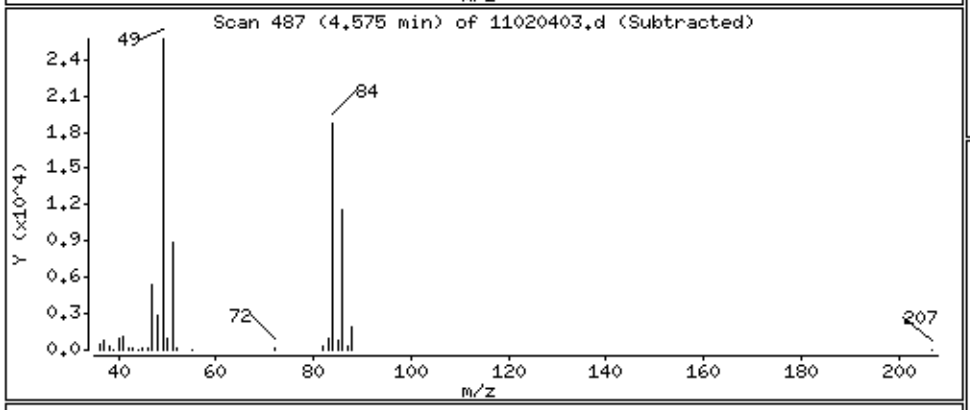
Column phase: RTx-624

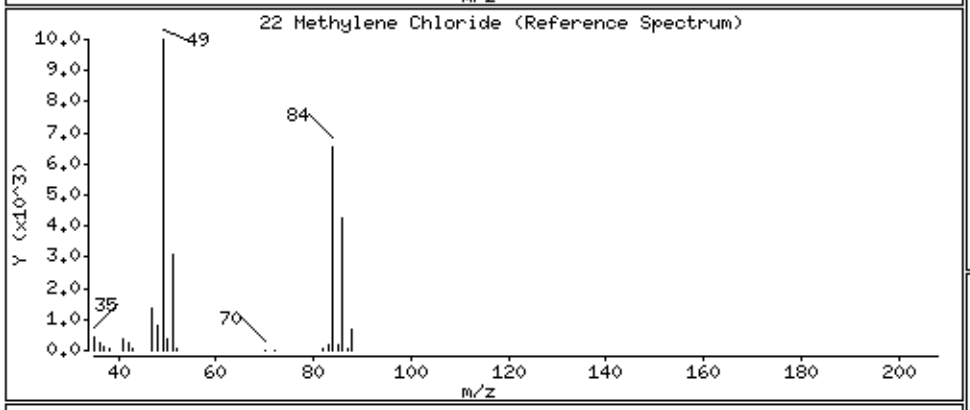
Column diameter: 0.53

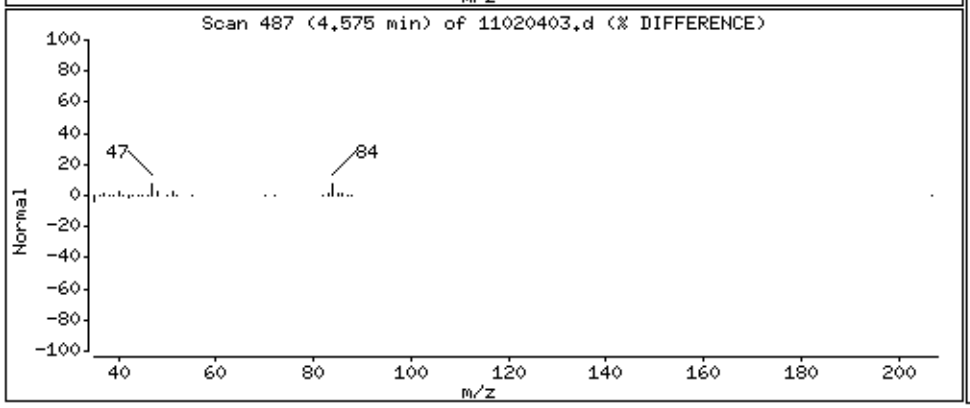
22 Methylene Chloride

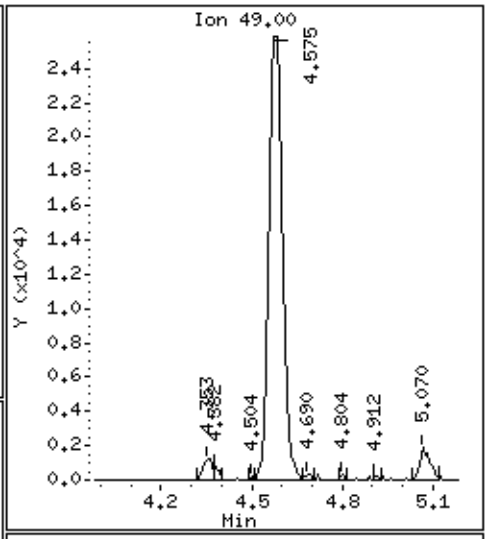
Concentration: 66.571 NG

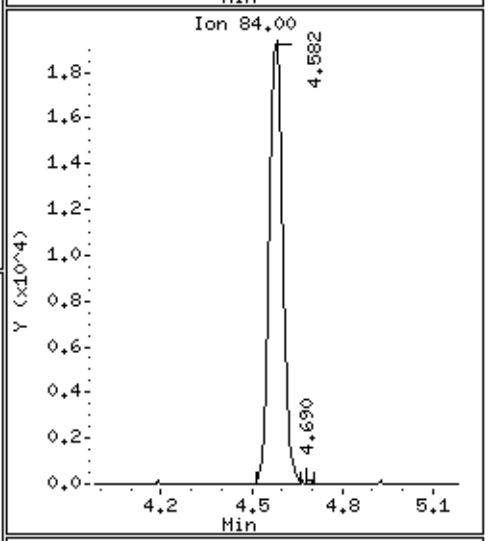


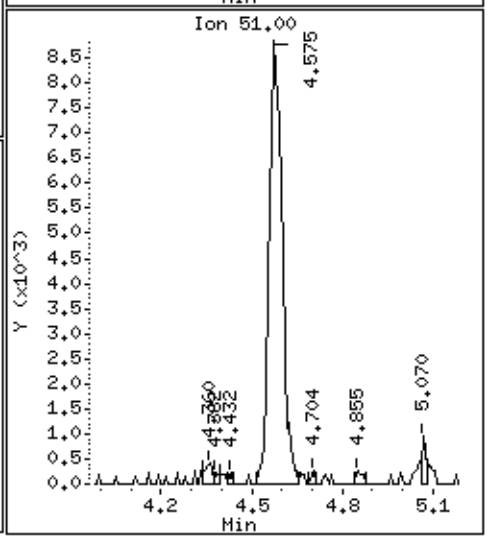












Data File: /chem/msd11.i/04feb16.b/11020403.d

Date : 04-FEB-2016 11:41

Client ID: LCSD

Instrument: msd11.i

Sample Info: ;VI VOC+PAH LCSD;LCSD

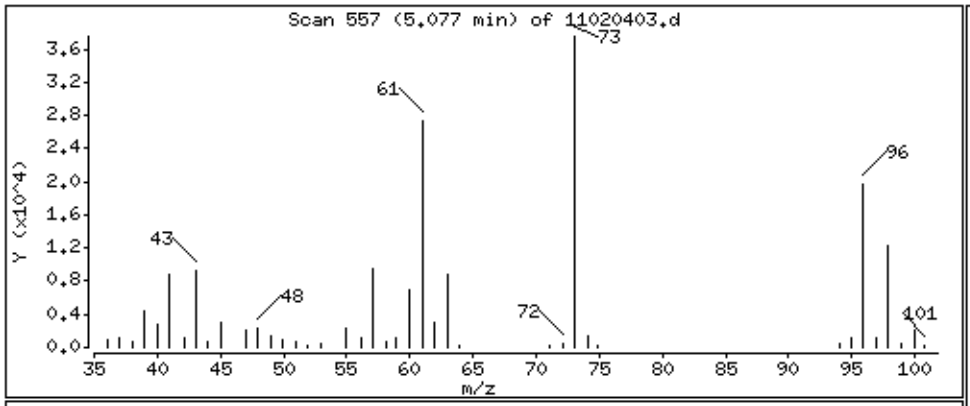
Operator: LA

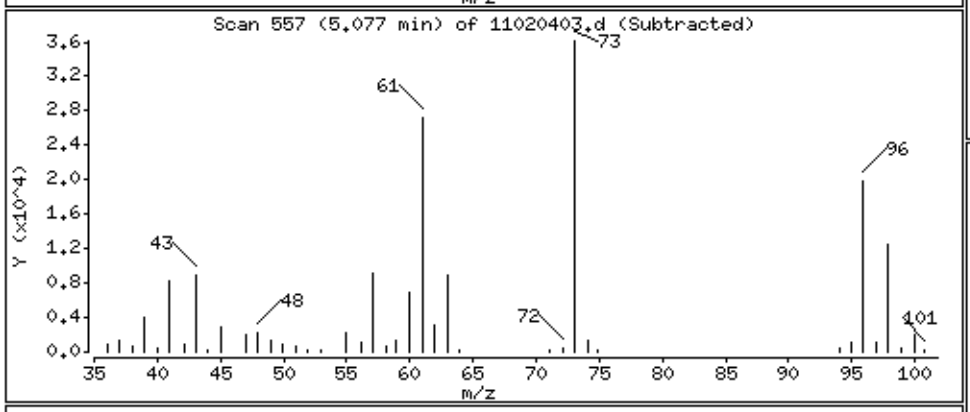
Column phase: RTx-624

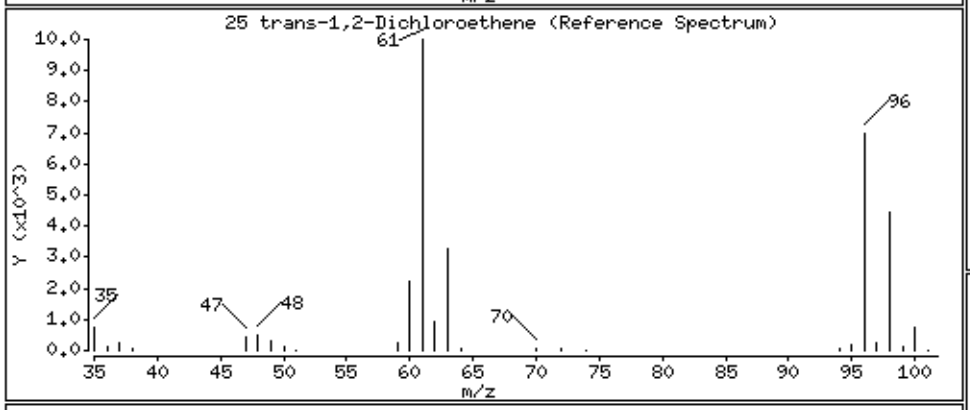
Column diameter: 0.53

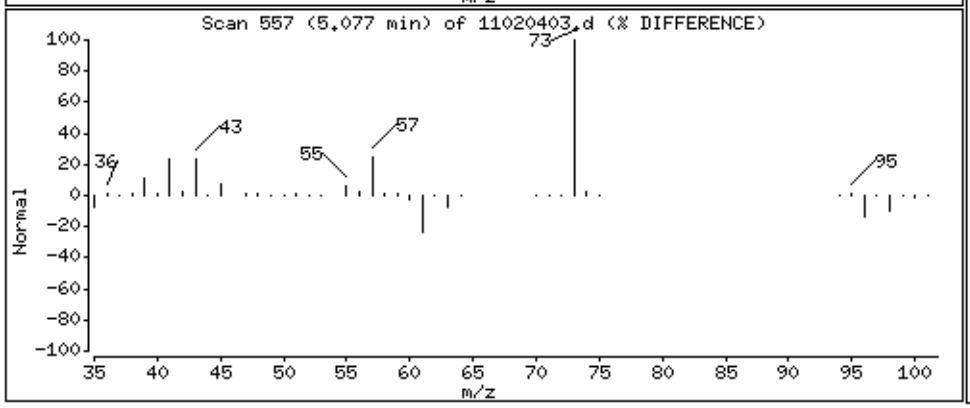
25 trans-1,2-Dichloroethene

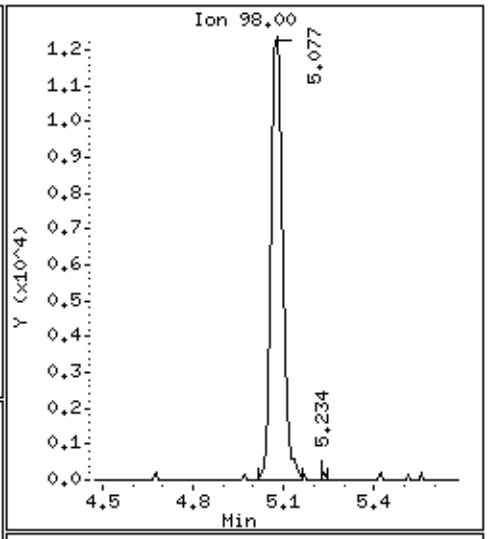
Concentration: 66.310 NG

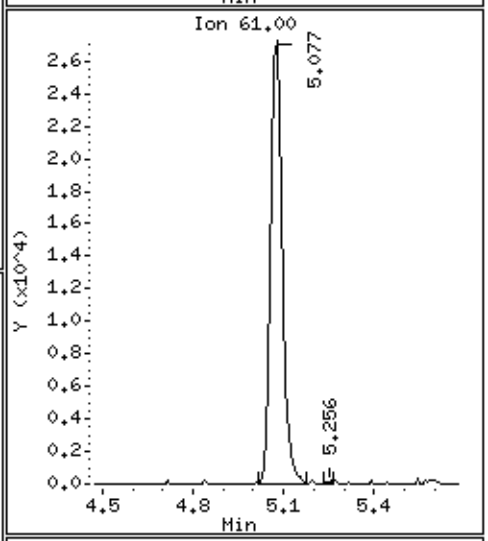


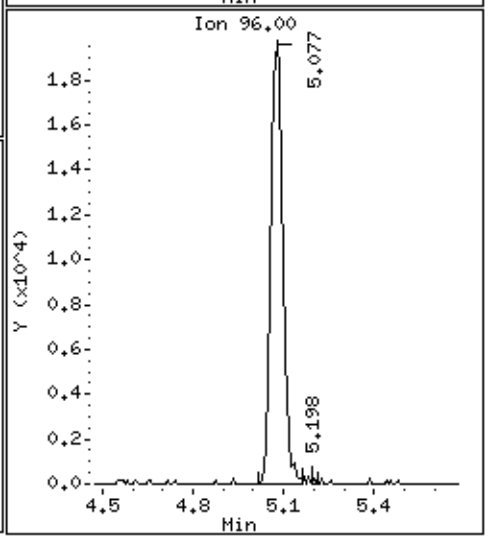












Data File: /chem/msd11.i/04feb16.b/11020403.d

Date : 04-FEB-2016 11:41

Client ID: LCSD

Instrument: msd11.i

Sample Info: ;VI VOC+PAH LCSD;LCSD

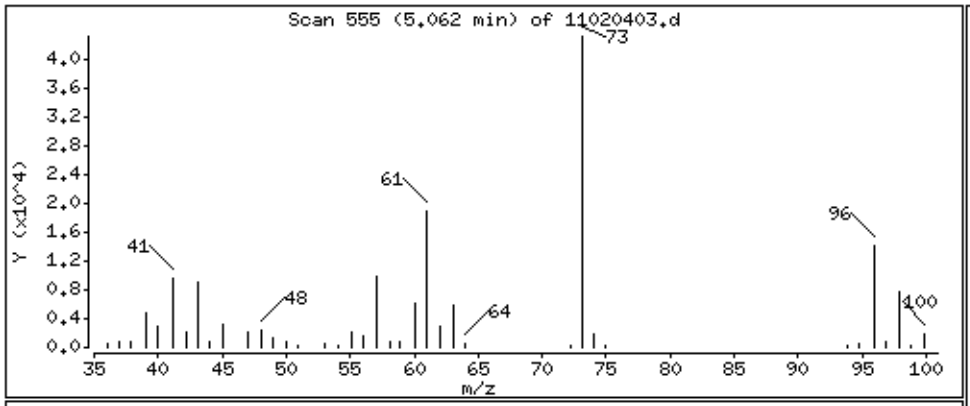
Operator: LA

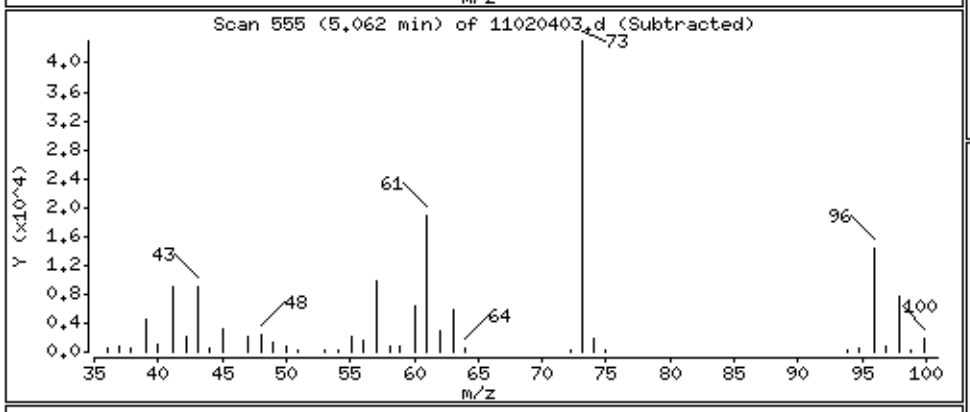
Column phase: RTx-624

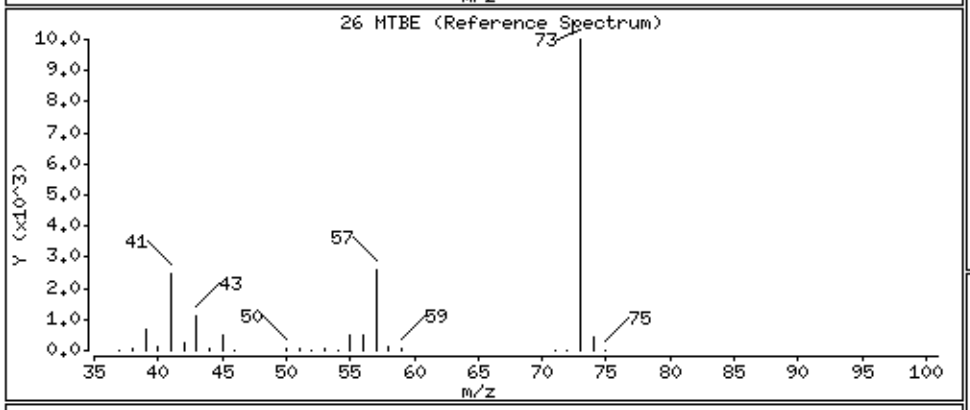
Column diameter: 0.53

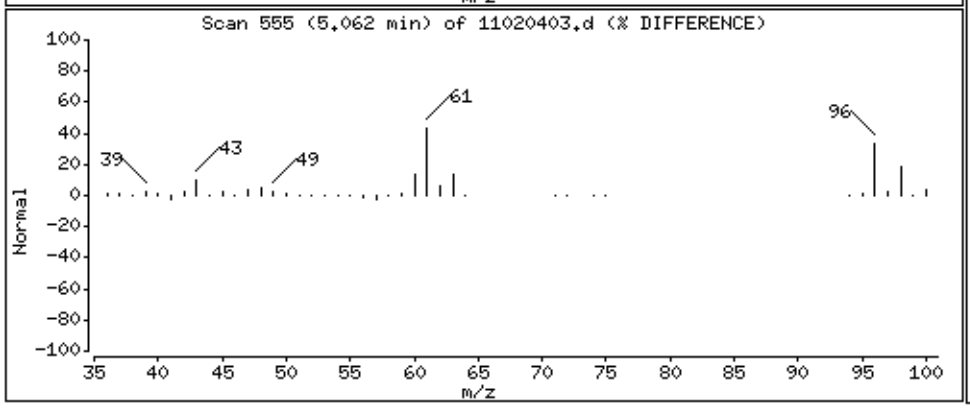
26 MTBE

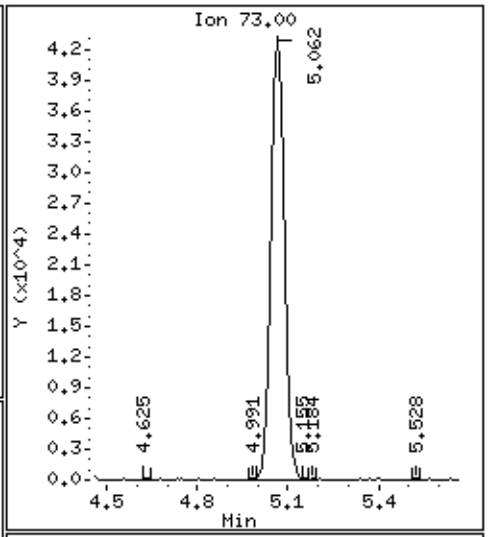
Concentration: 69.745 NG

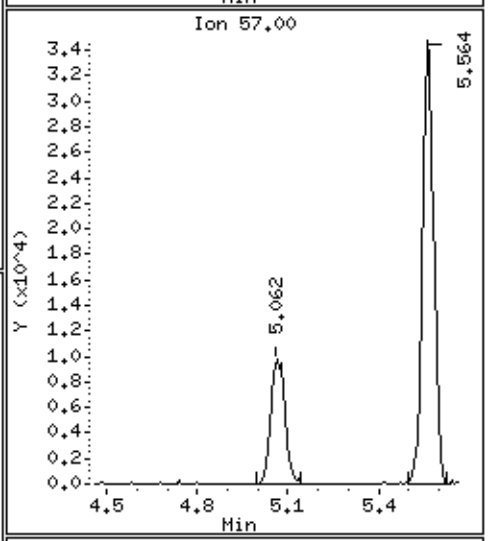


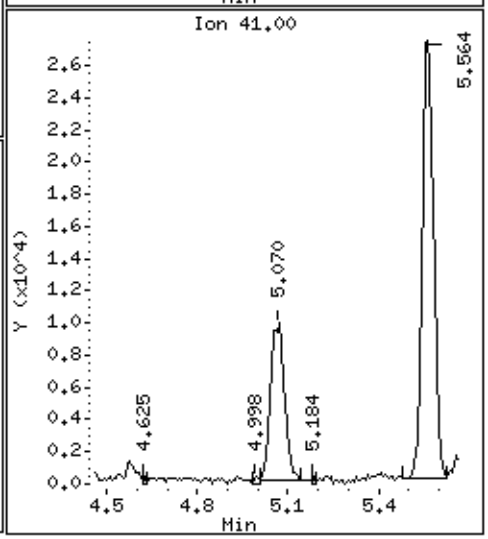












Data File: /chem/msd11.i/04feb16.b/11020403.d

Date : 04-FEB-2016 11:41

Client ID: LCSD

Instrument: msd11.i

Sample Info: ;VI VOC+PAH LCSD;LCSD

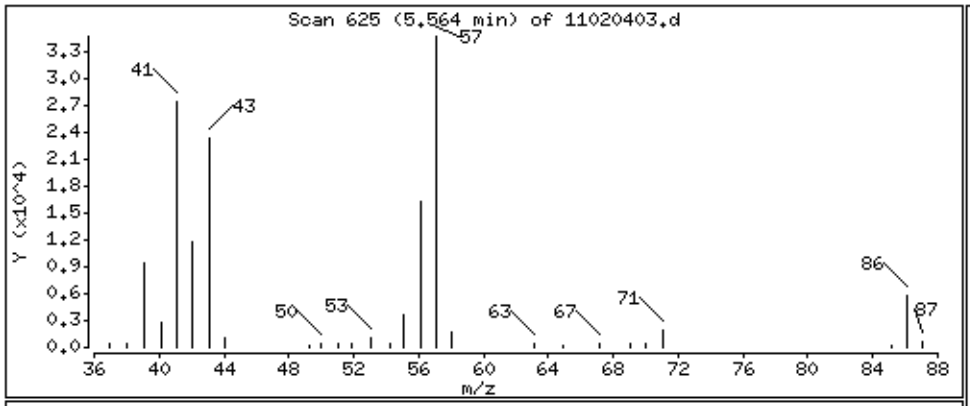
Operator: LA

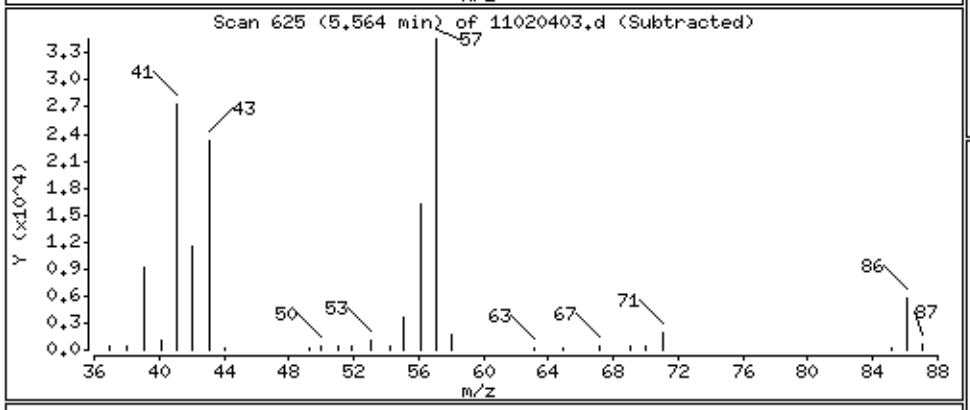
Column phase: RTx-624

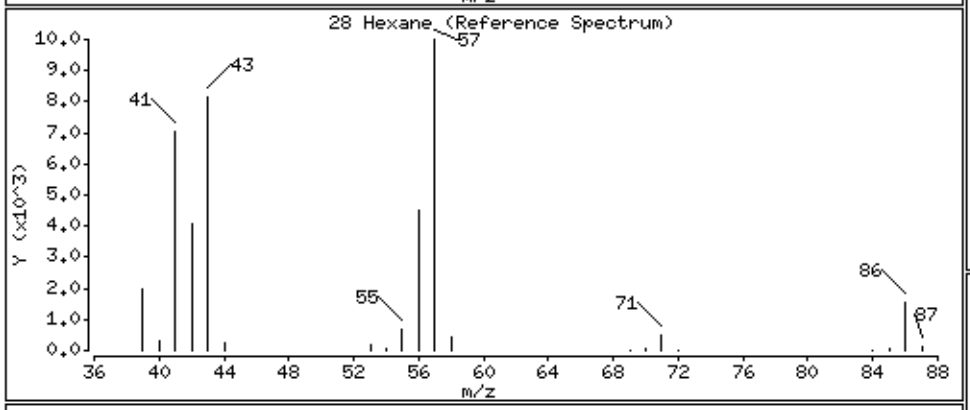
Column diameter: 0.53

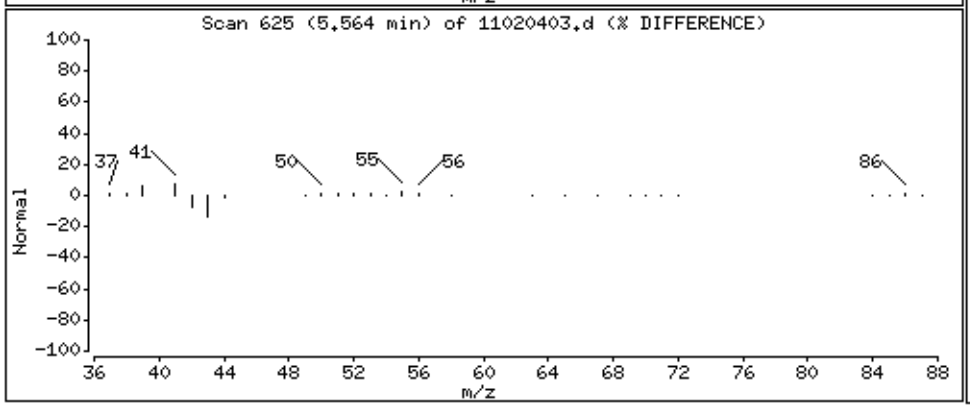
28 Hexane

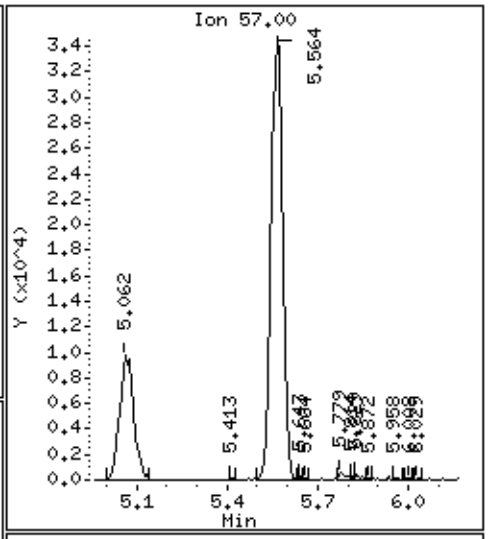
Concentration: 71.820 NG

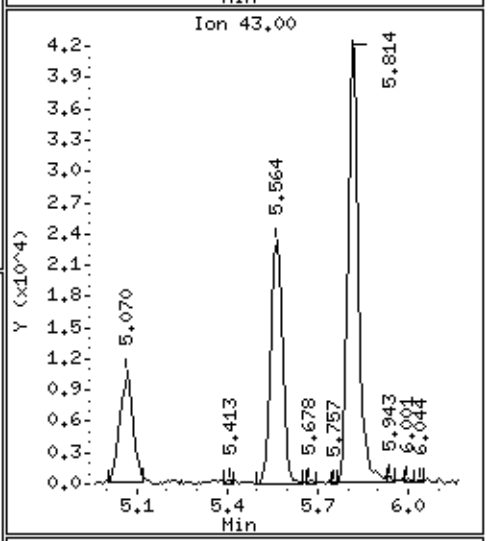


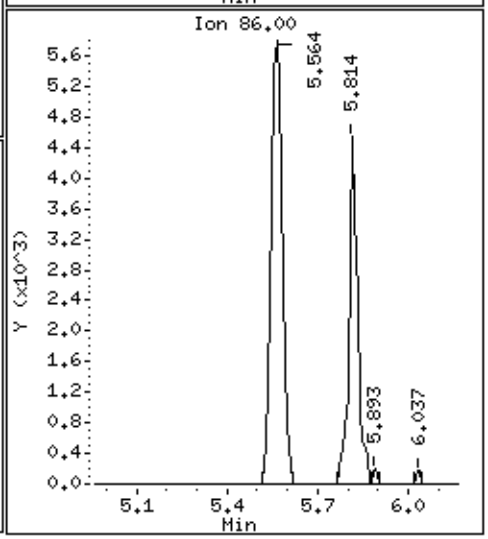












Data File: /chem/msd11.i/04feb16.b/11020403.d

Date : 04-FEB-2016 11:41

Client ID: LCSD

Instrument: msd11.i

Sample Info: ;VI VOC+PAH LCSD;LCSD

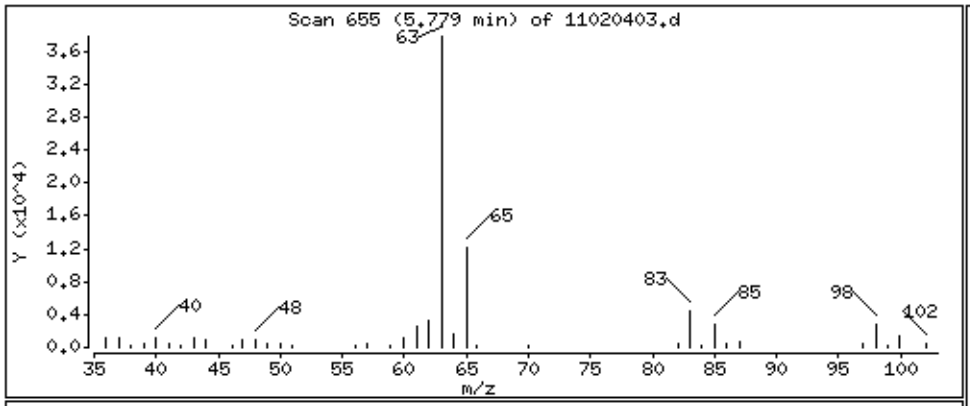
Operator: LA

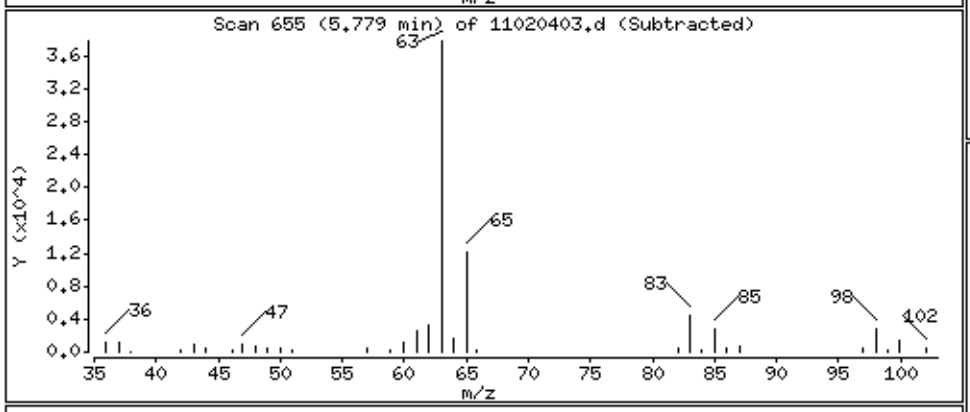
Column phase: RTx-624

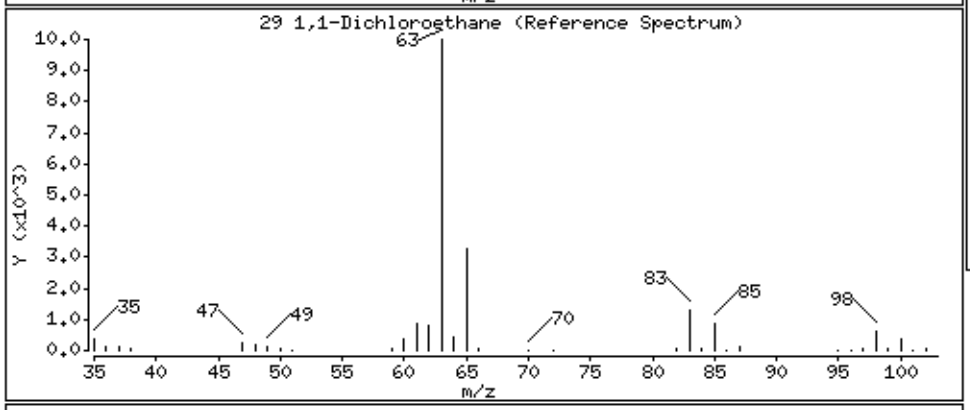
Column diameter: 0.53

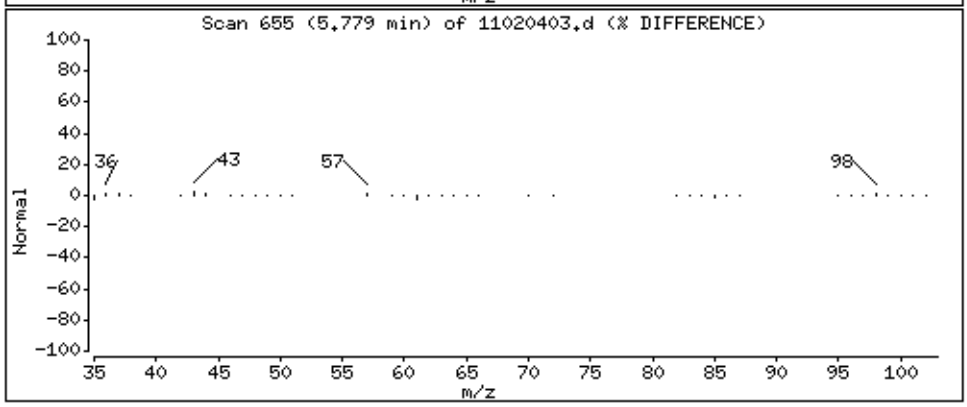
29 1,1-Dichloroethane

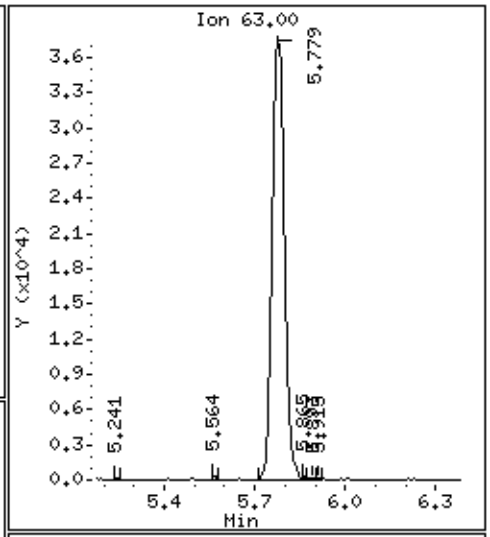
Concentration: 81.519 NG

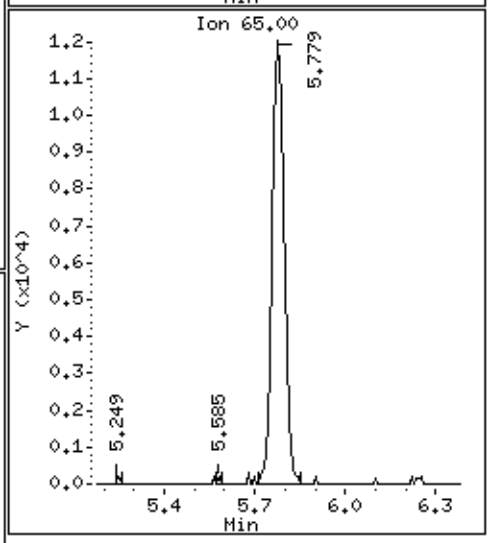












Data File: /chem/msd11.i/04feb16.b/11020403.d

Date : 04-FEB-2016 11:41

Client ID: LCSD

Instrument: msd11.i

Sample Info: ;VI VOC+PAH LCSD;LCSD

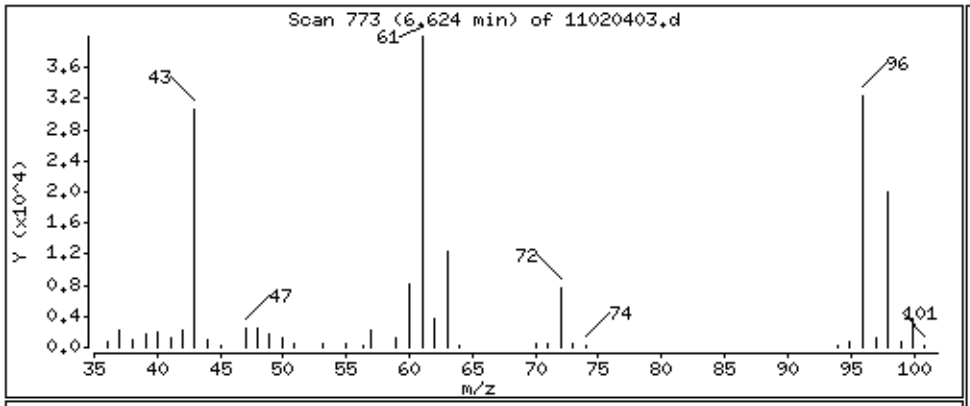
Operator: LA

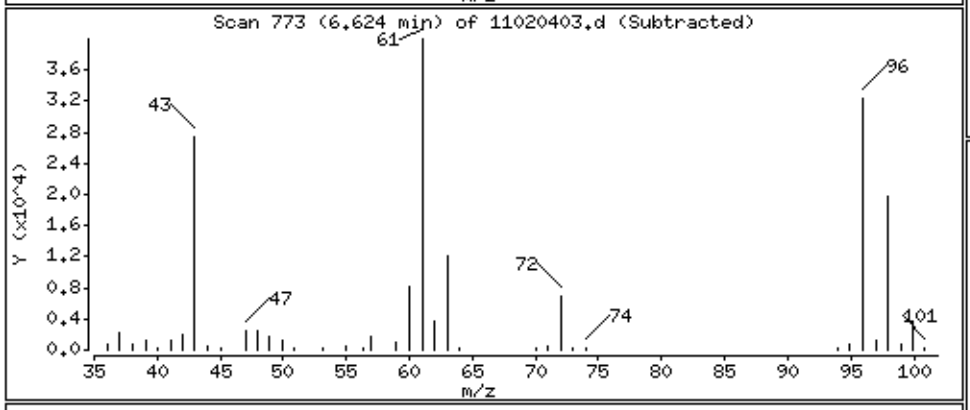
Column phase: RTx-624

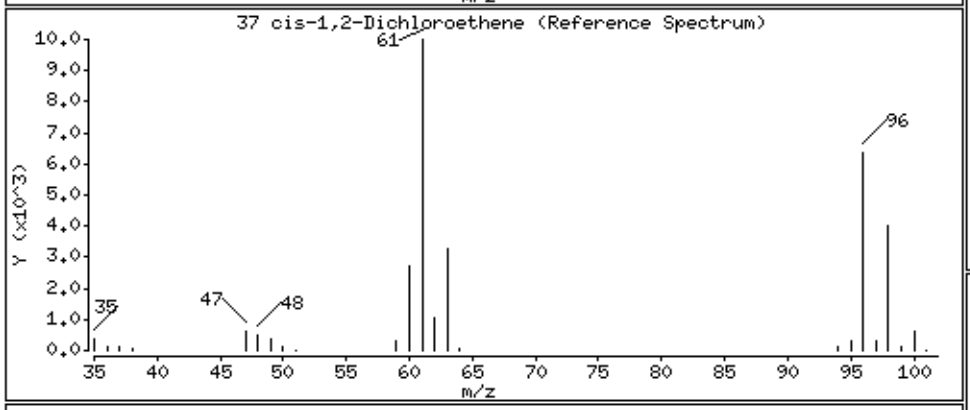
Column diameter: 0.53

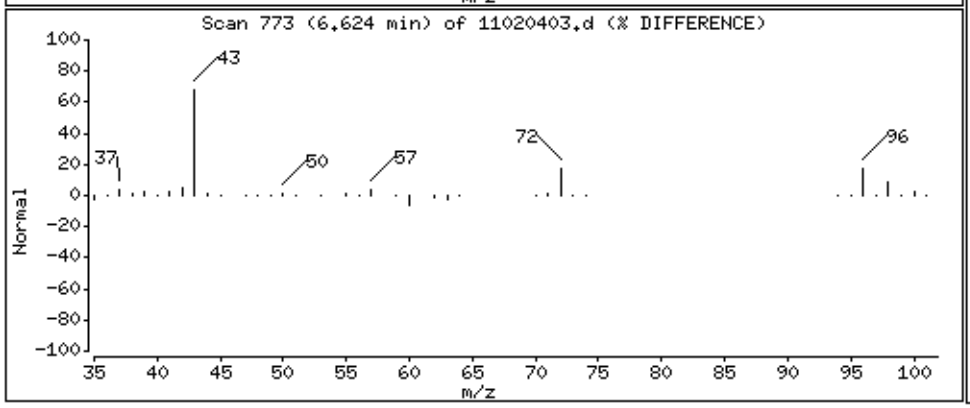
37 cis-1,2-Dichloroethene

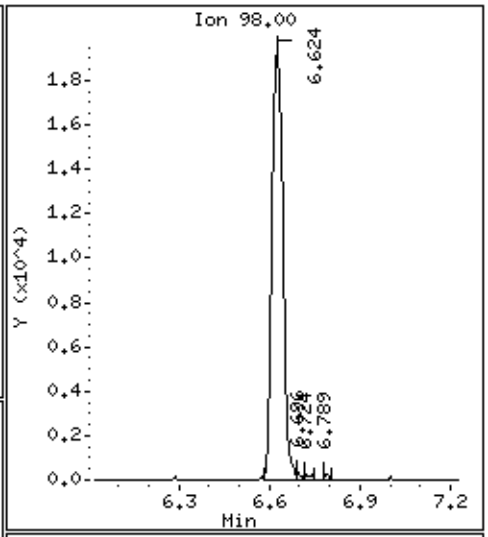
Concentration: 88.586 NG

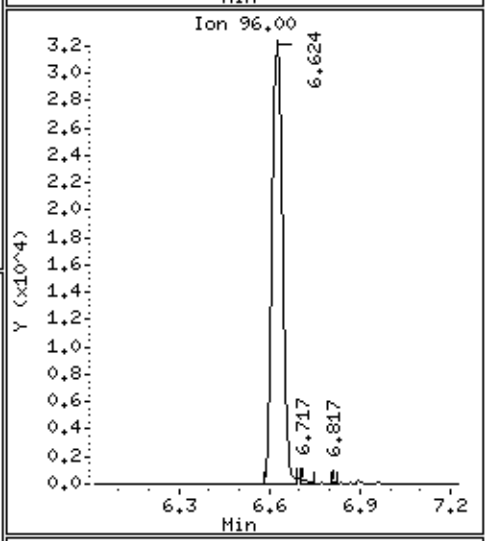


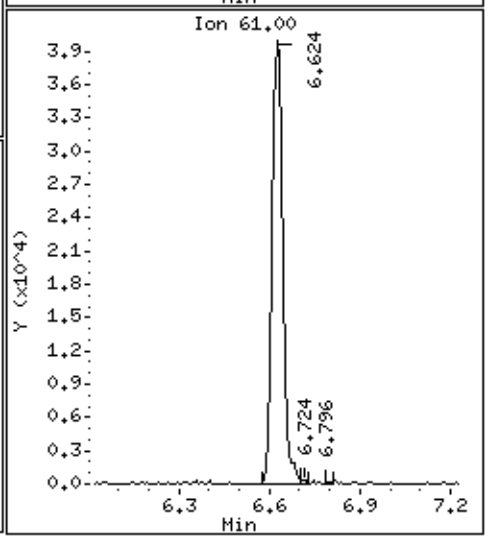












Data File: /chem/msd11.i/04feb16.b/11020403.d

Date : 04-FEB-2016 11:41

Client ID: LCSD

Instrument: msd11.i

Sample Info: ;VI VOC+PAH LCSD;LCSD

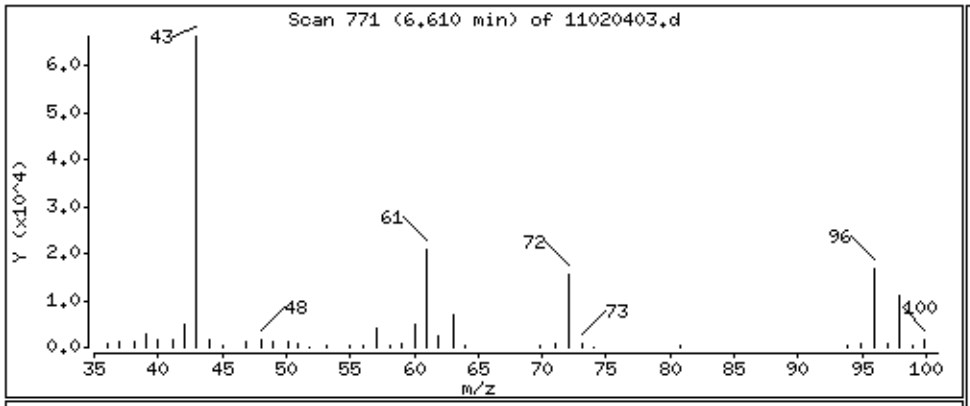
Operator: LA

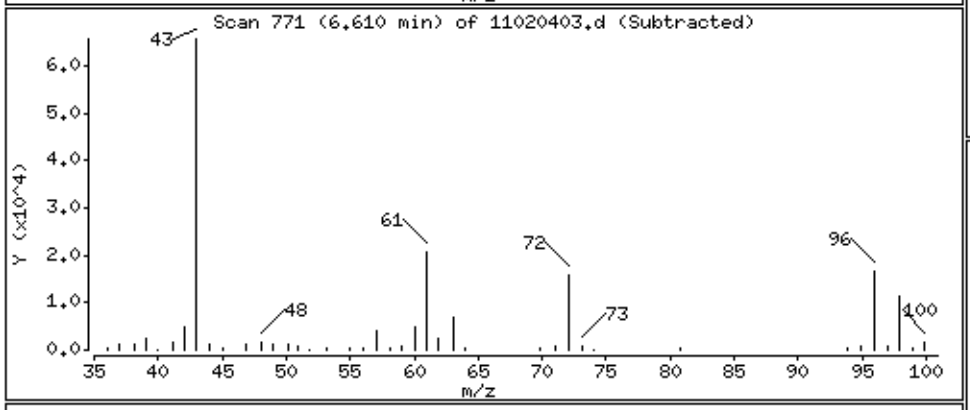
Column phase: RTx-624

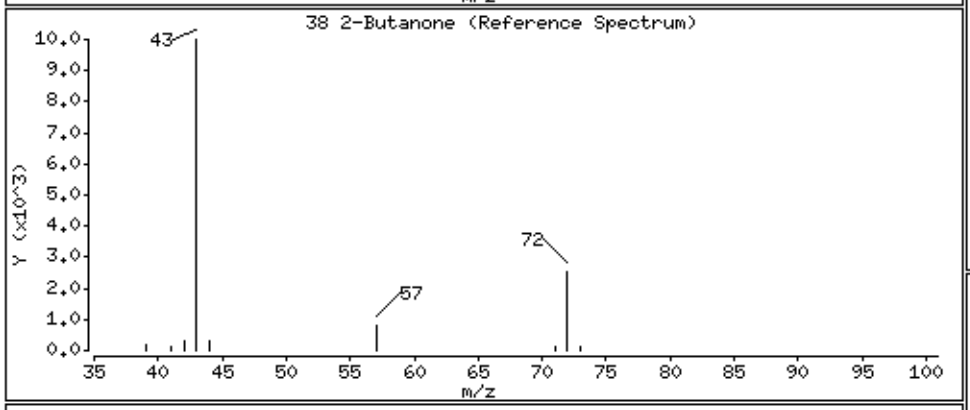
Column diameter: 0.53

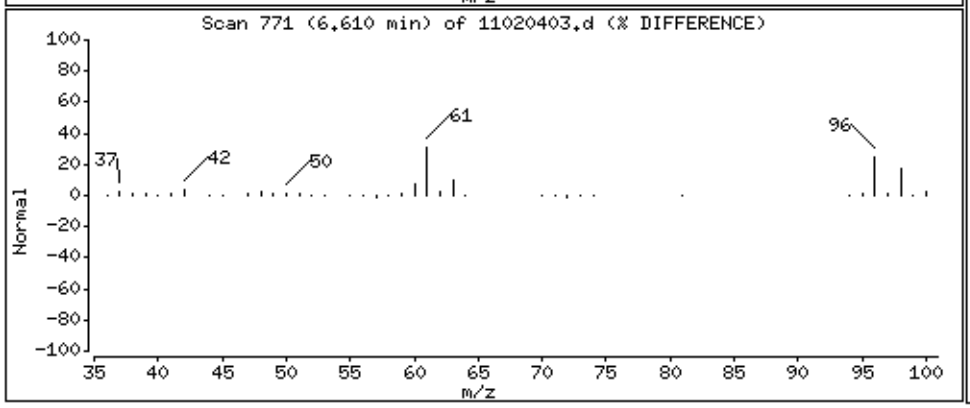
38 2-Butanone

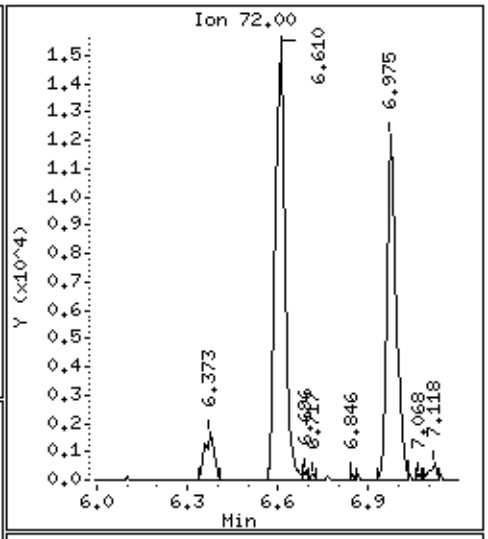
Concentration: 73.887 NG

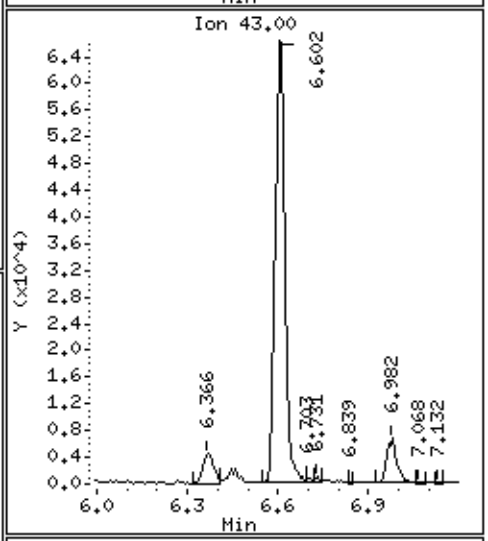


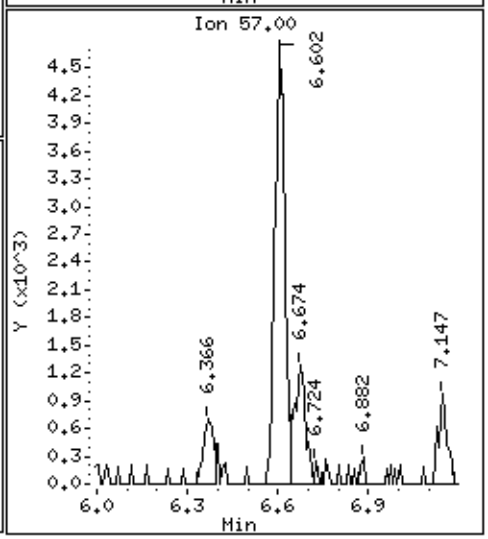












Data File: /chem/msd11.i/04feb16.b/11020403.d

Date : 04-FEB-2016 11:41

Client ID: LCSD

Instrument: msd11.i

Sample Info: ;VI VOC+PAH LCSD;LCSD

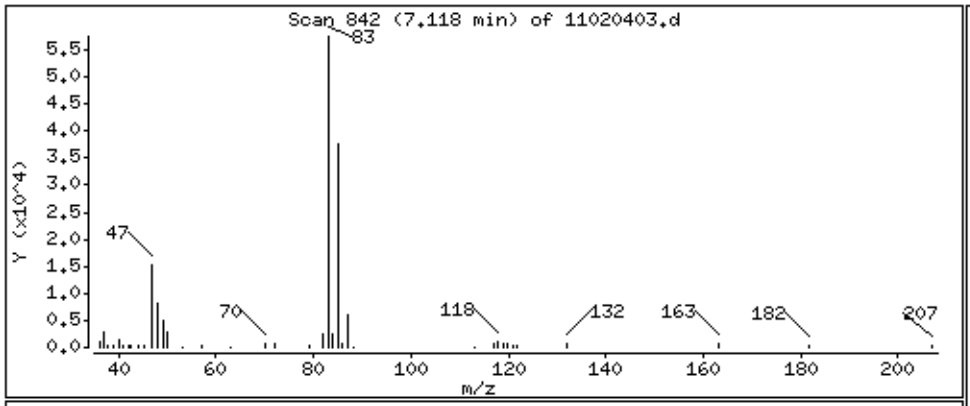
Operator: LA

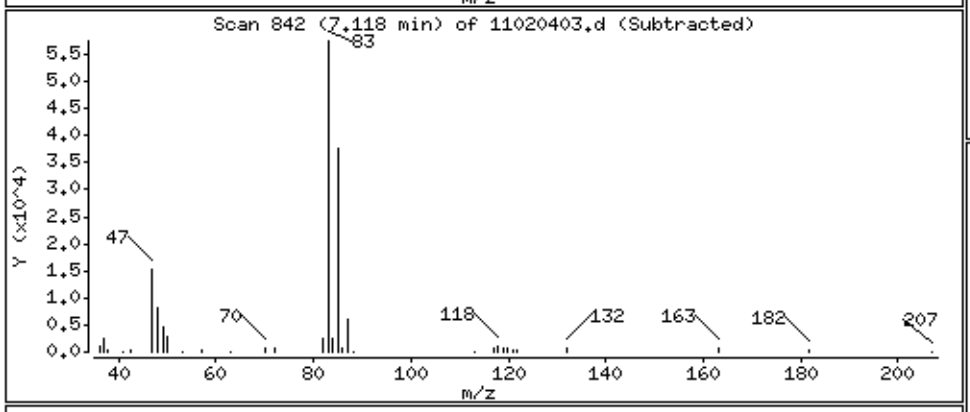
Column phase: RTx-624

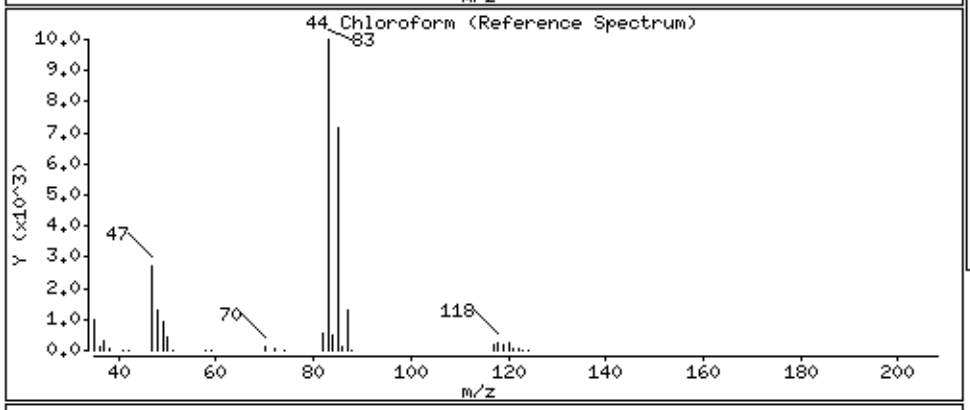
Column diameter: 0.53

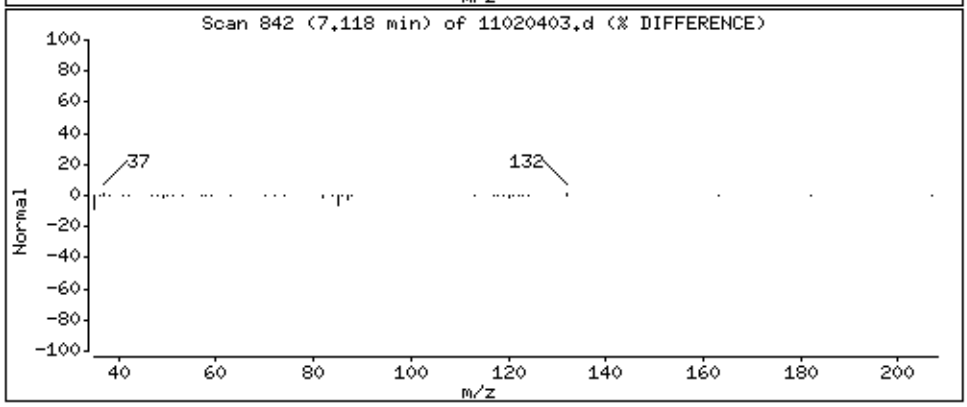
44 Chloroform

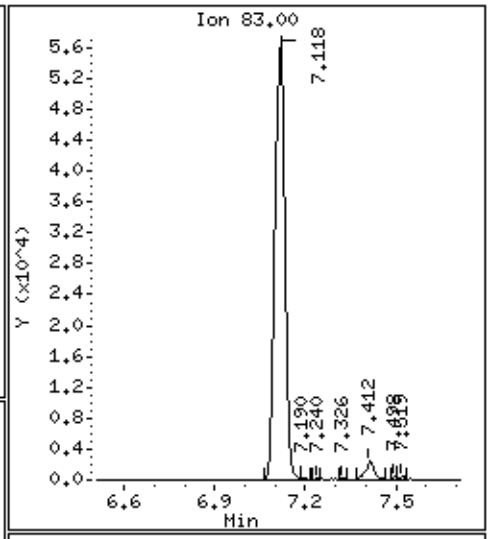
Concentration: 97.811 NG

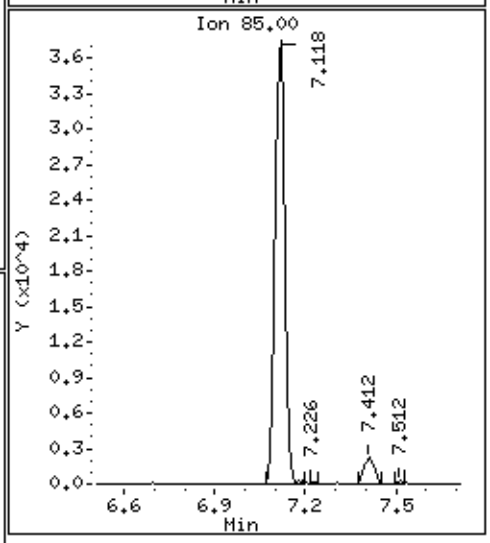












Data File: /chem/msd11.i/04feb16.b/11020403.d

Date : 04-FEB-2016 11:41

Client ID: LCSD

Instrument: msd11.i

Sample Info: ;VI VOC+PAH LCSD;LCSD

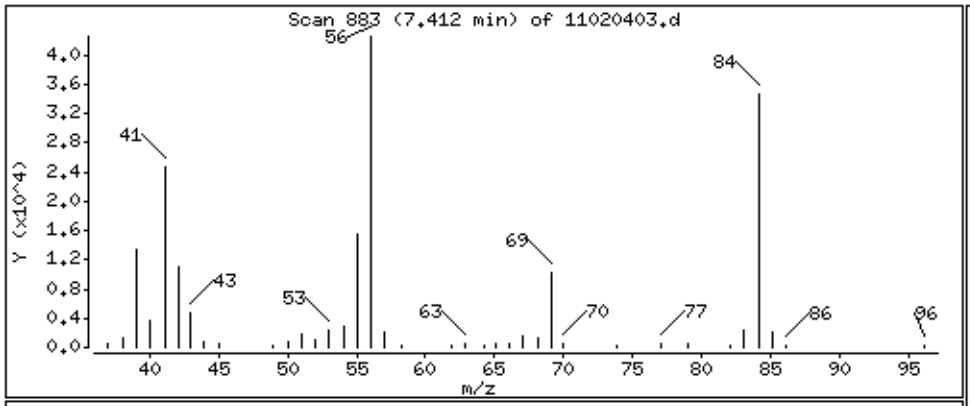
Operator: LA

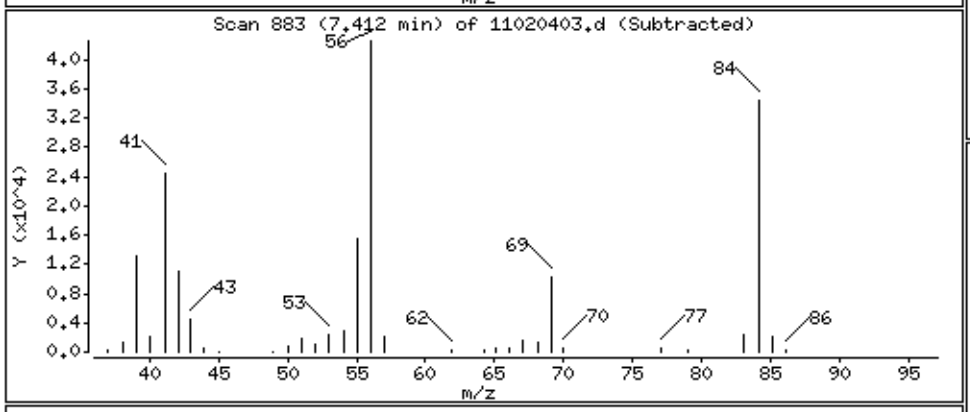
Column phase: RTx-624

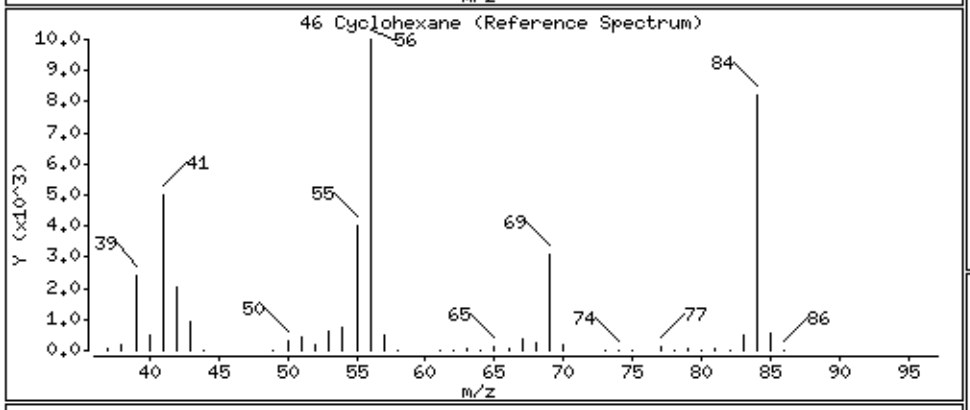
Column diameter: 0.53

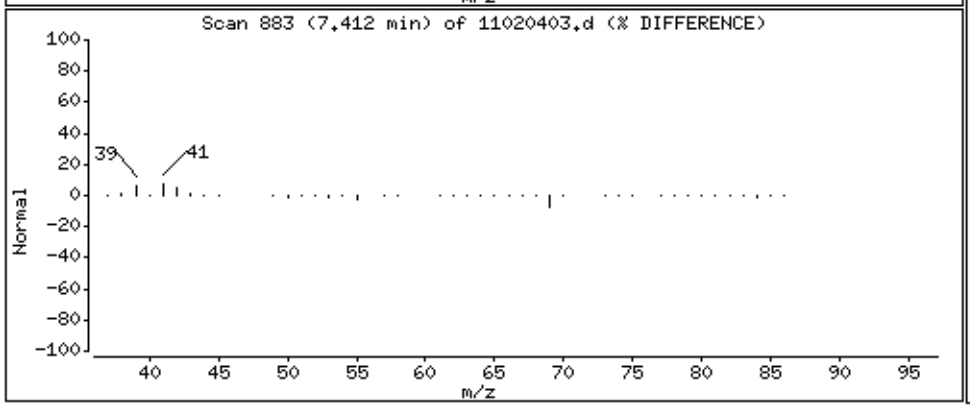
46 Cyclohexane

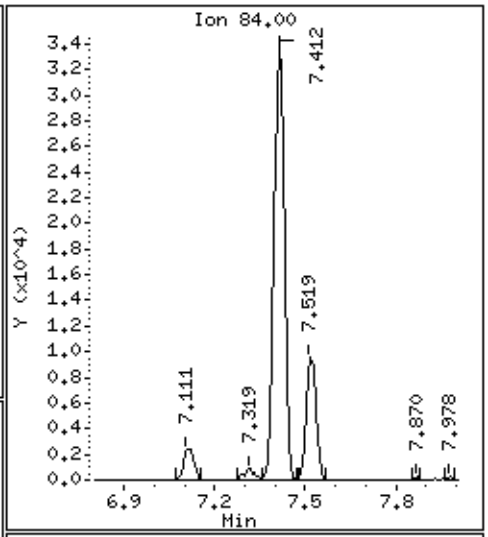
Concentration: 66.033 NG

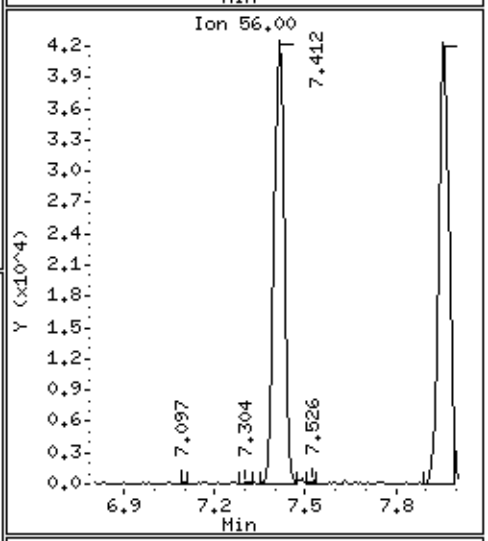


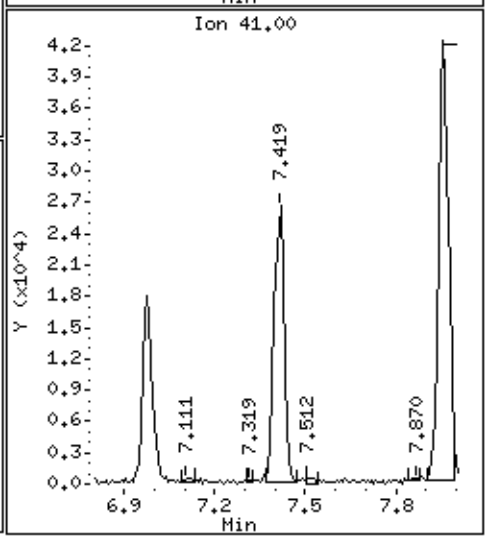












Data File: /chem/msd11.i/04feb16.b/11020403.d

Date : 04-FEB-2016 11:41

Client ID: LCSD

Instrument: msd11.i

Sample Info: ;VI VOC+PAH LCSD;LCSD

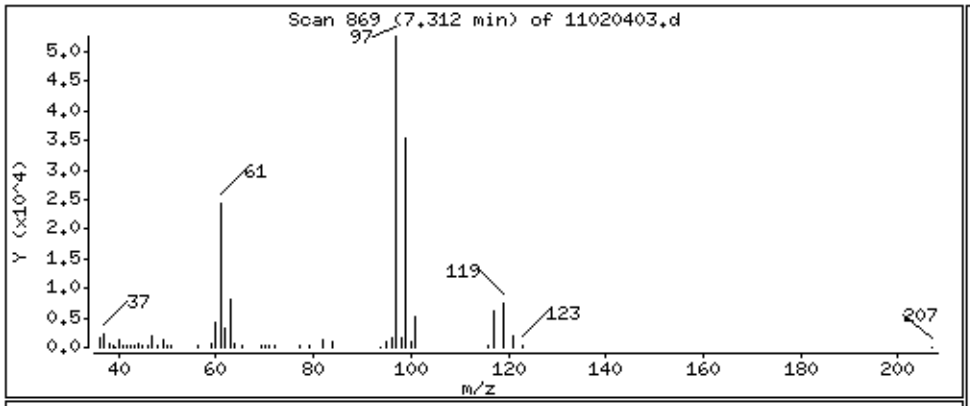
Operator: LA

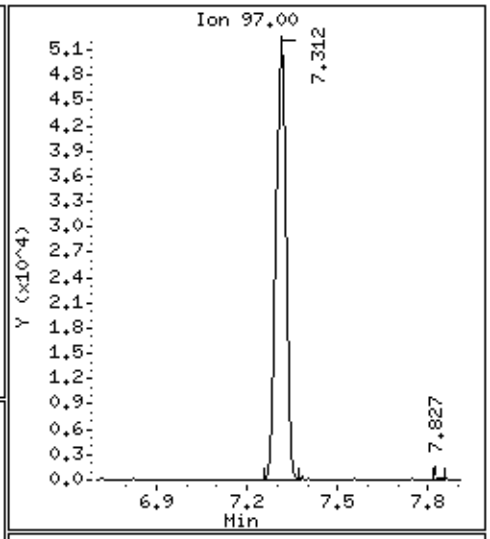
Column phase: RTx-624

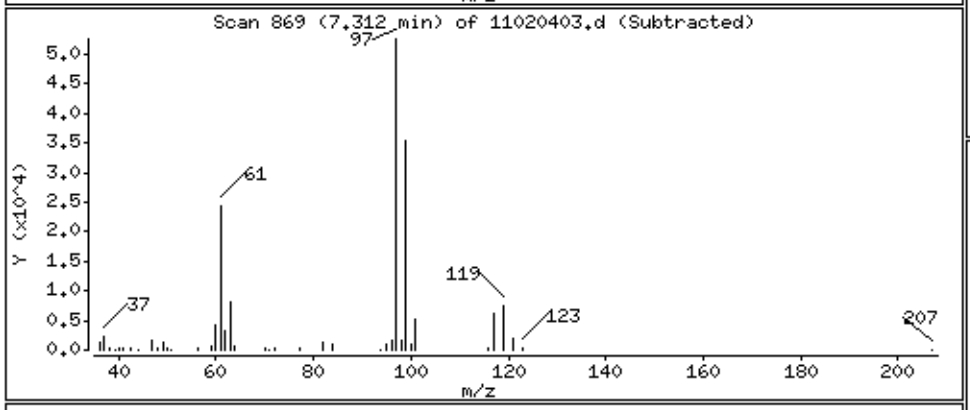
Column diameter: 0.53

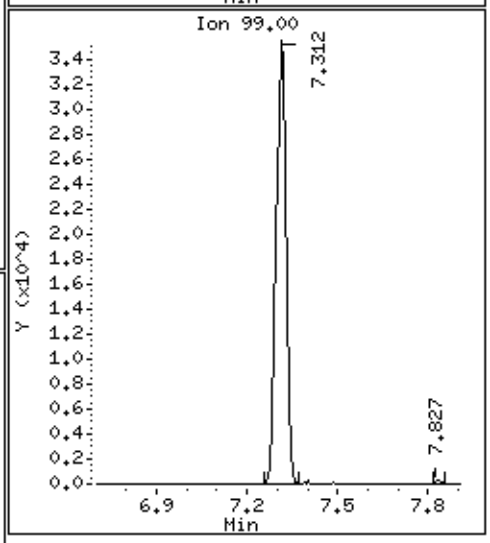
45 1,1,1-Trichloroethane

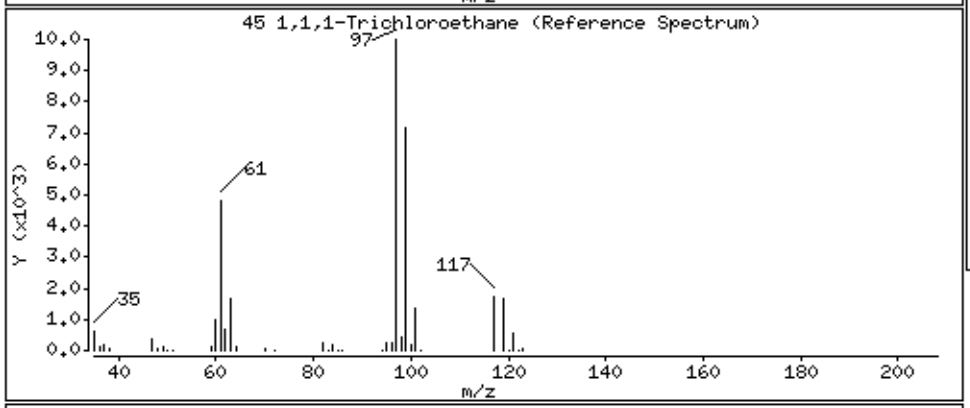
Concentration: 107.81 NG

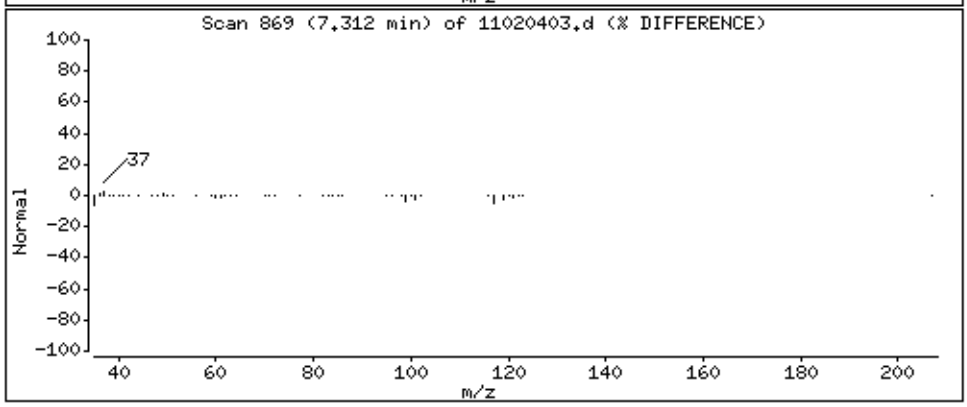












Data File: /chem/msd11.i/04feb16.b/11020403.d

Date : 04-FEB-2016 11:41

Client ID: LCSD

Instrument: msd11.i

Sample Info: ;VI VOC+PAH LCSD;LCSD

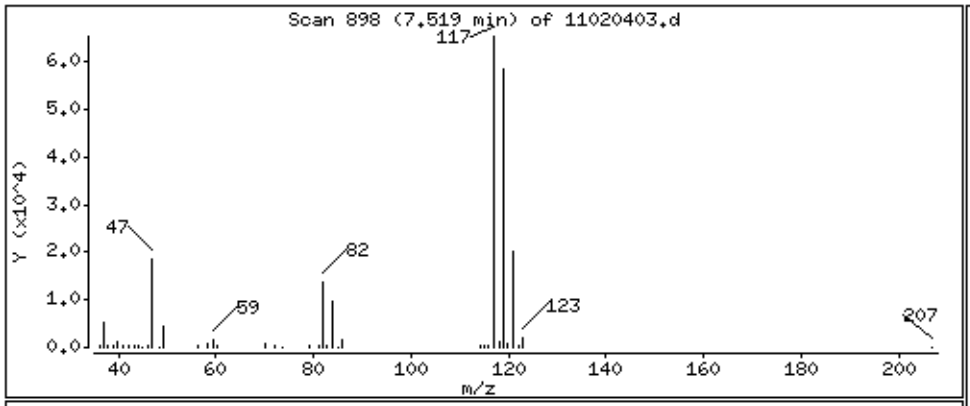
Operator: LA

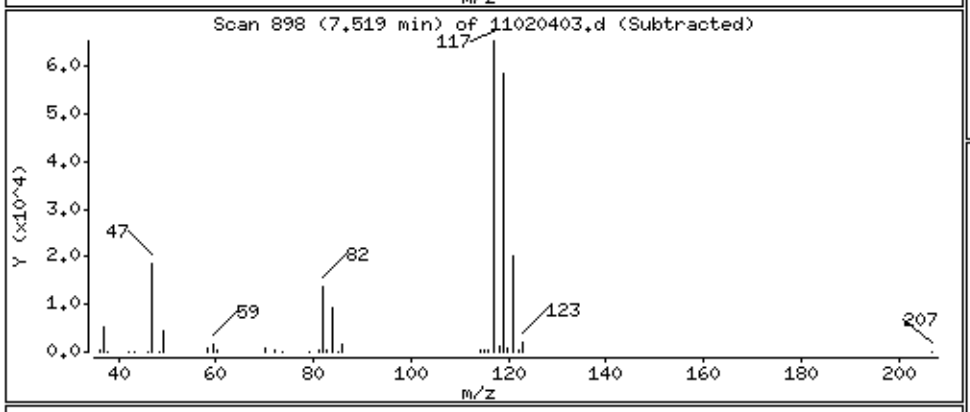
Column phase: RTx-624

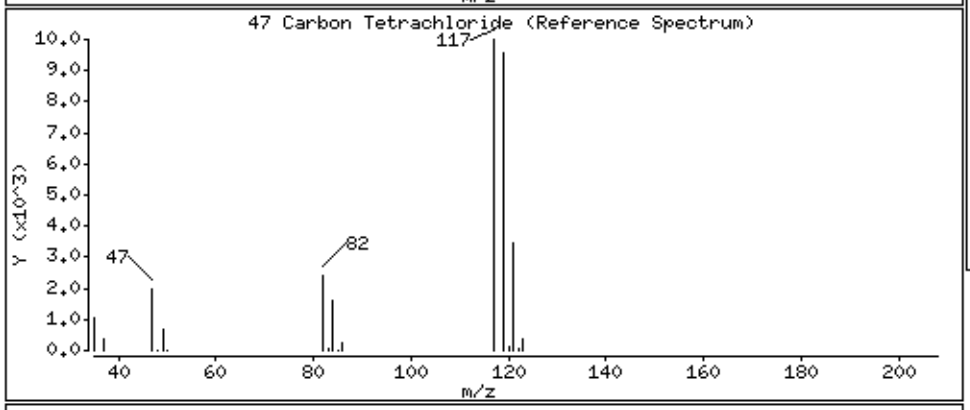
Column diameter: 0.53

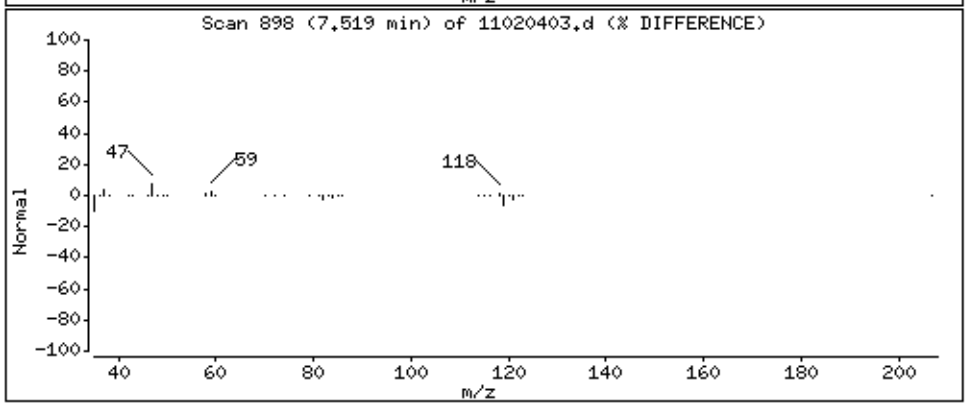
47 Carbon Tetrachloride

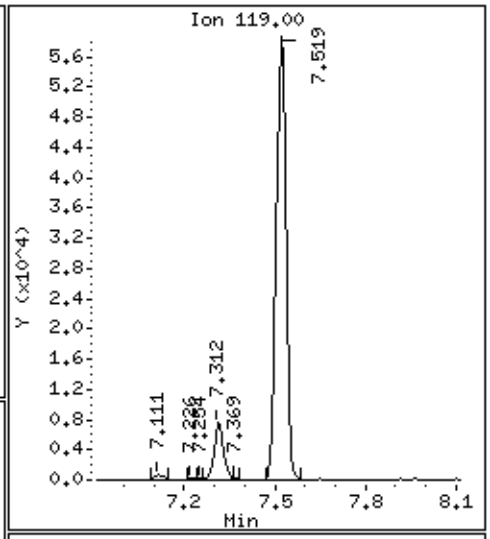
Concentration: 132.76 NG

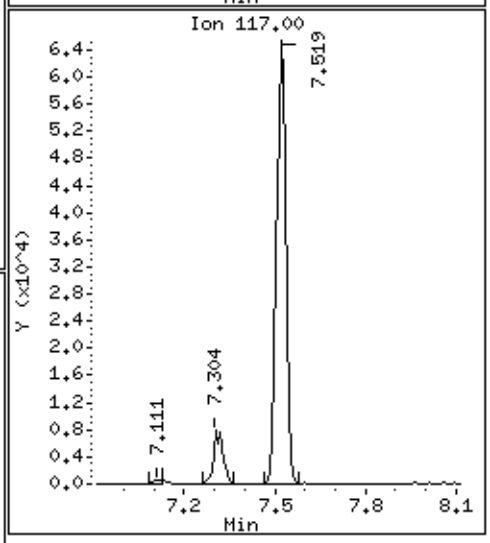












Data File: /chem/msd11.i/04feb16.b/11020403.d

Date : 04-FEB-2016 11:41

Client ID: LCSD

Instrument: msd11.i

Sample Info: ;VI VOC+PAH LCSD;LCSD

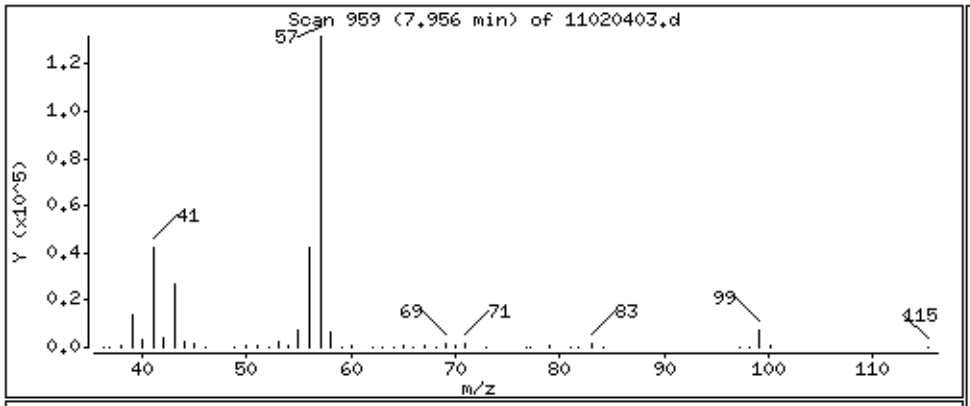
Operator: LA

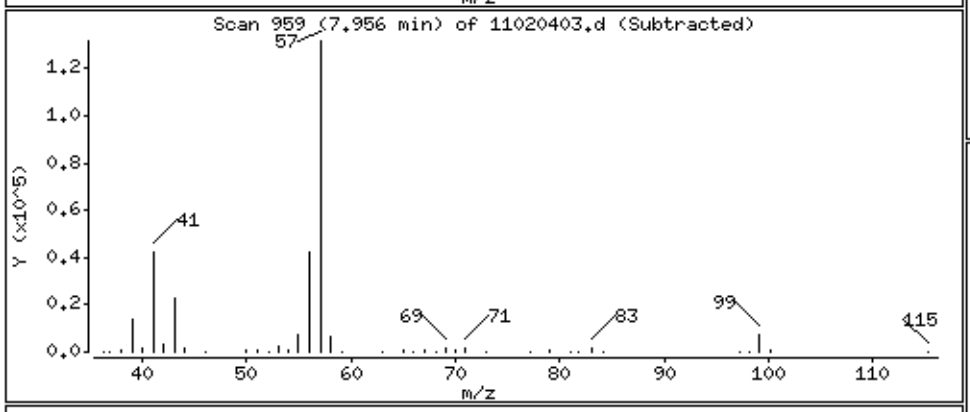
Column phase: RTx-624

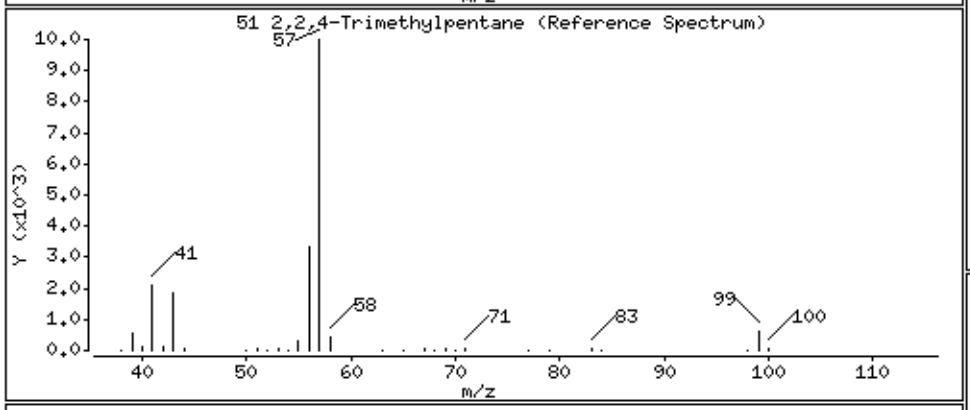
Column diameter: 0.53

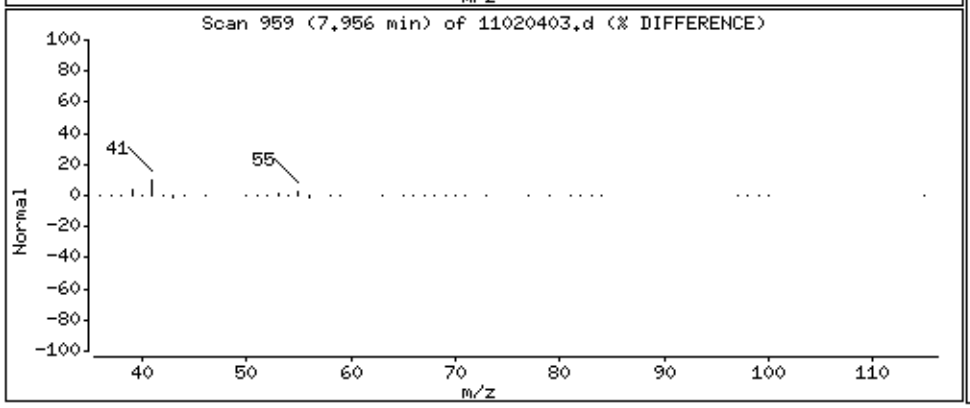
51 2,2,4-Trimethylpentane

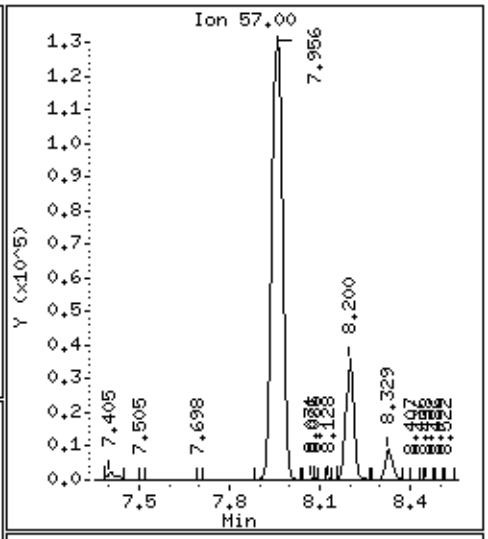
Concentration: 88.633 NG

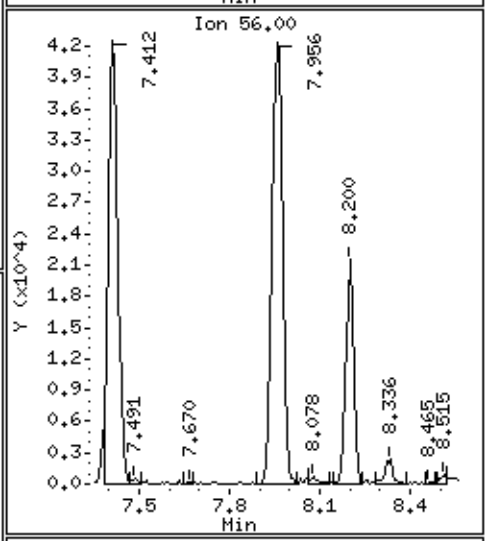


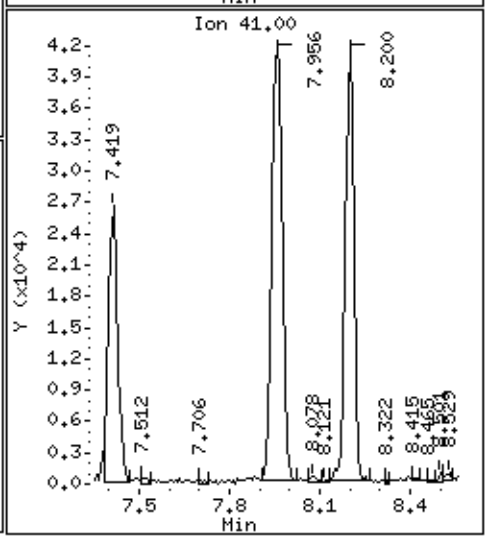












Data File: /chem/msd11.i/04feb16.b/11020403.d

Date : 04-FEB-2016 11:41

Client ID: LCSD

Instrument: msd11.i

Sample Info: ;VI VOC+PAH LCSD;LCSD

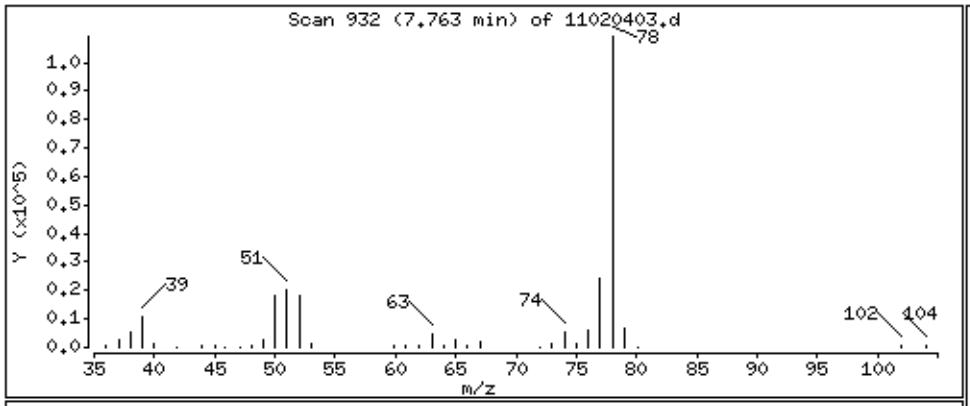
Operator: LA

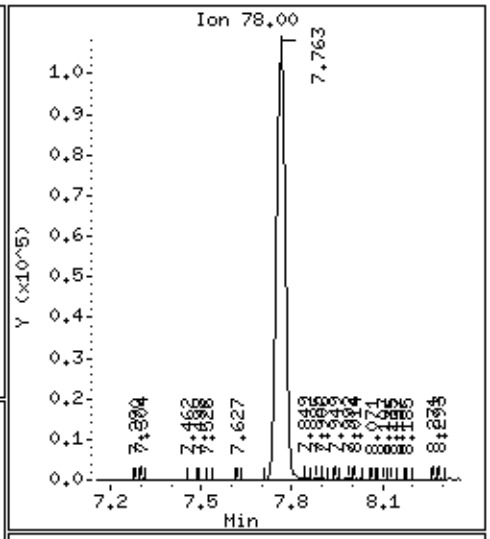
Column phase: RTx-624

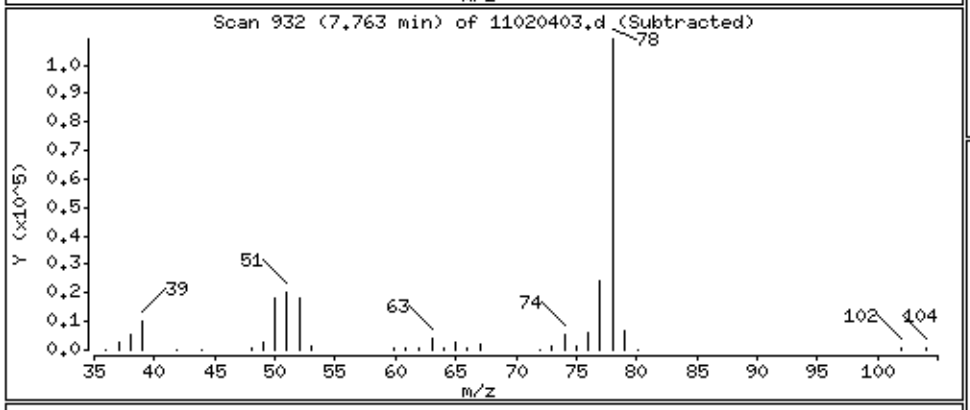
Column diameter: 0.53

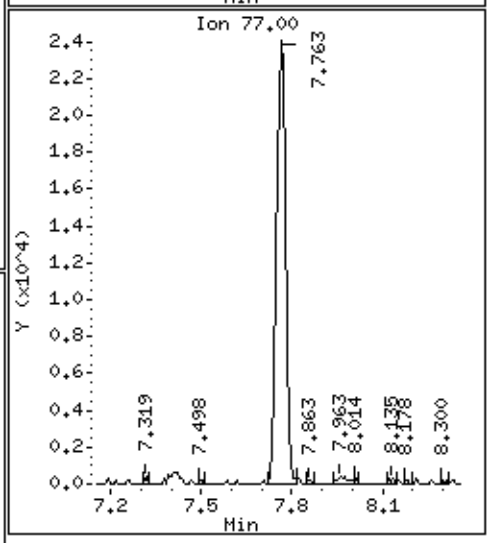
48 Benzene

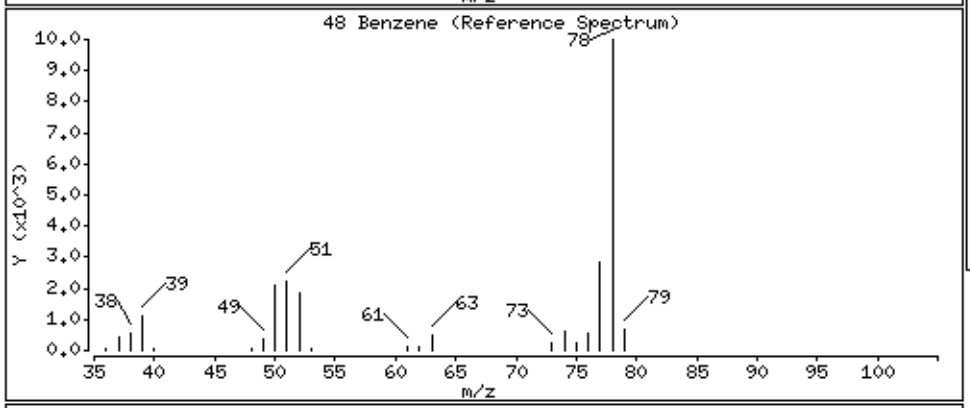
Concentration: 64.005 NG

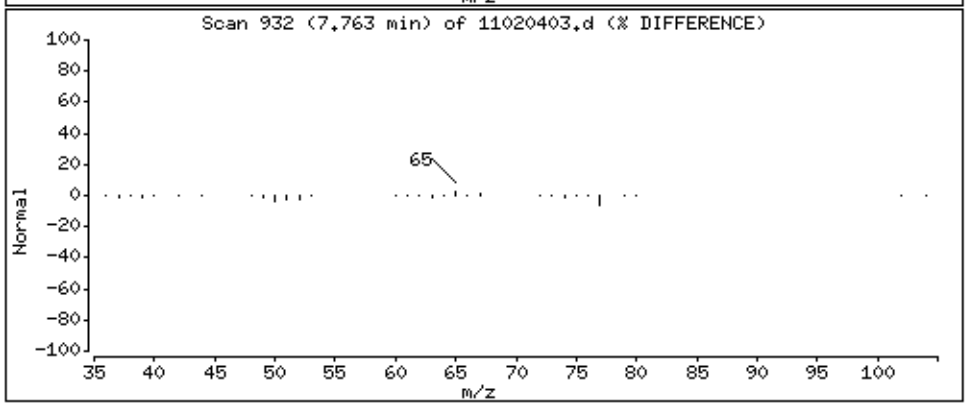












Data File: /chem/msd11.i/04feb16.b/11020403.d

Date : 04-FEB-2016 11:41

Client ID: LCSD

Instrument: msd11.i

Sample Info: ;VI VOC+PAH LCSD;LCSD

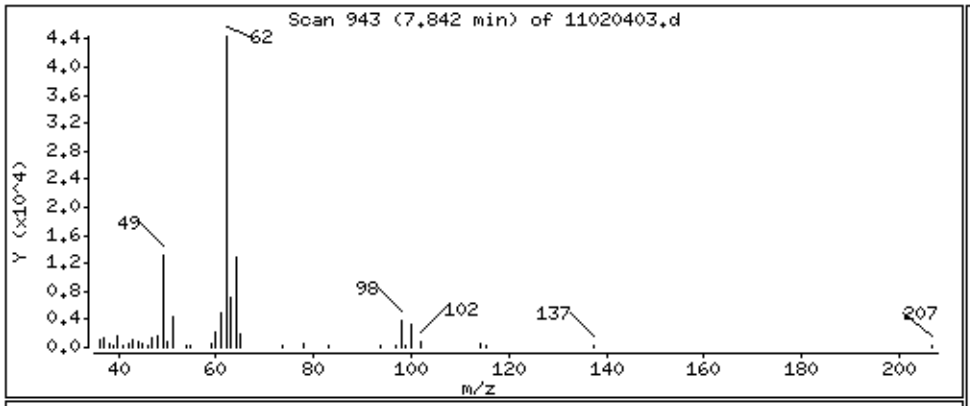
Operator: LA

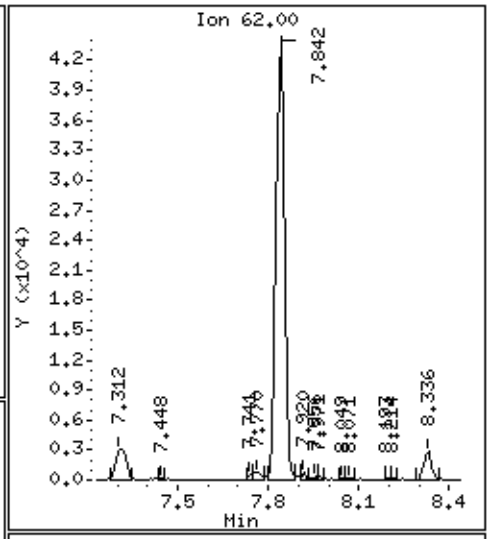
Column phase: RTx-624

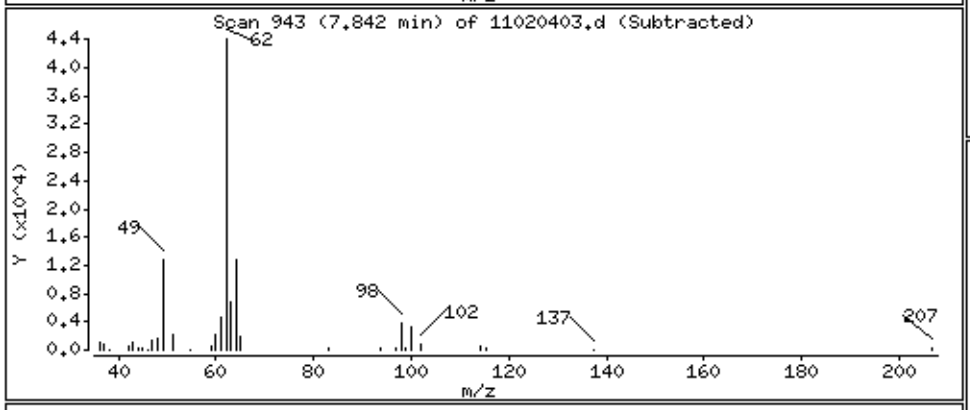
Column diameter: 0.53

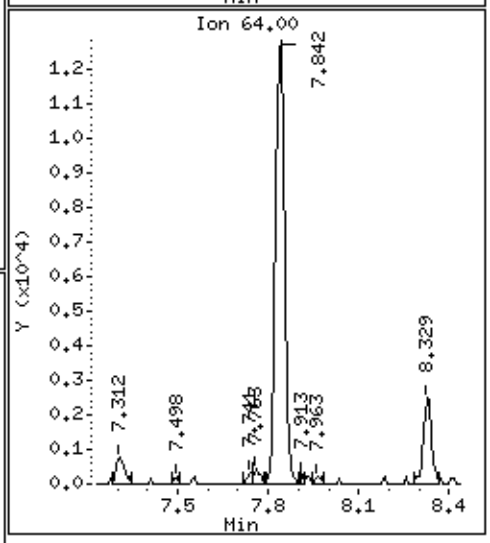
50 1,2-Dichloroethane

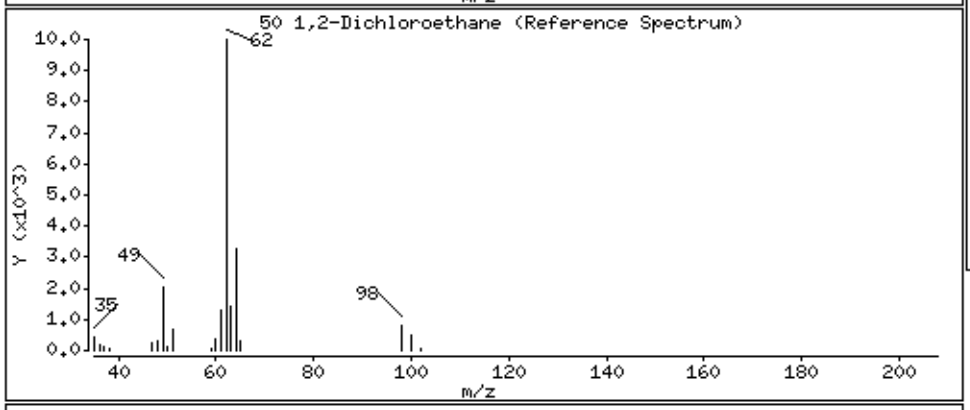
Concentration: 77.777 NG

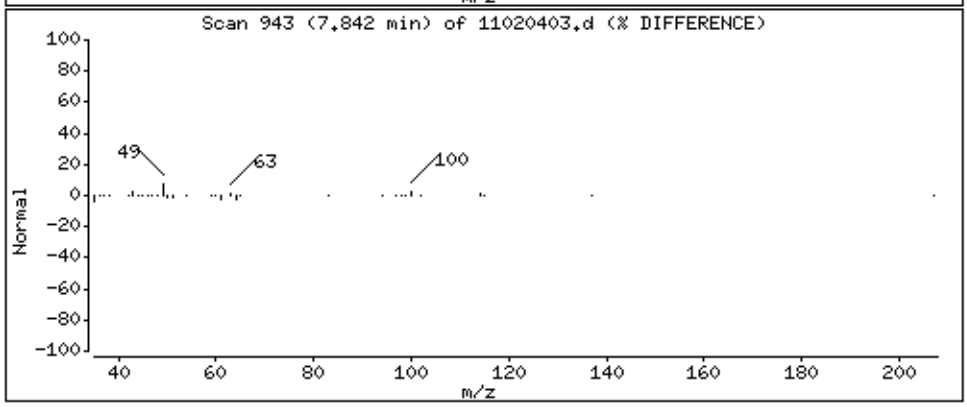












Data File: /chem/msd11.i/04feb16.b/11020403.d

Date : 04-FEB-2016 11:41

Client ID: LCSD

Instrument: msd11.i

Sample Info: ;VI VOC+PAH LCSD;LCSD

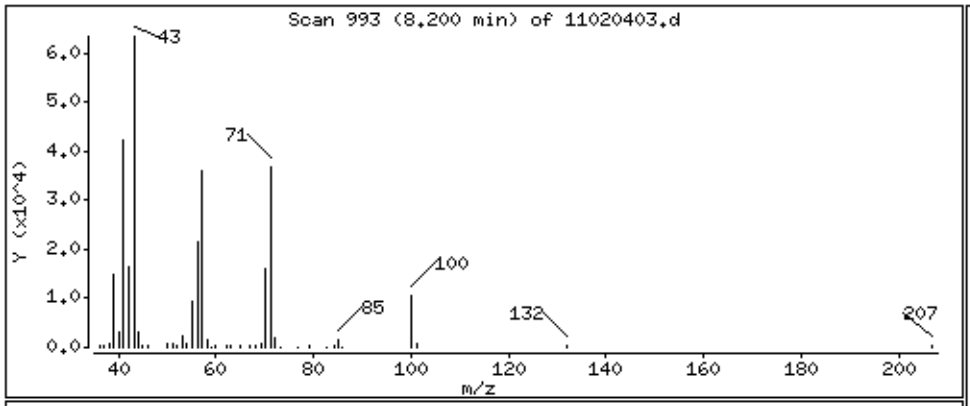
Operator: LA

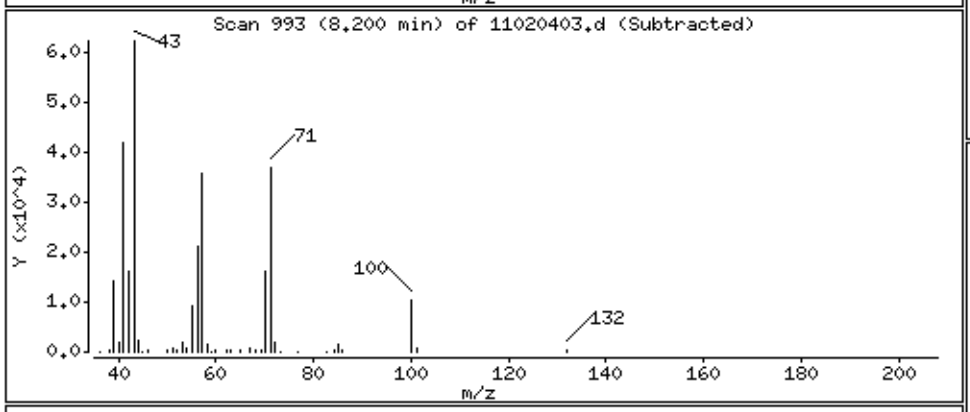
Column phase: RTx-624

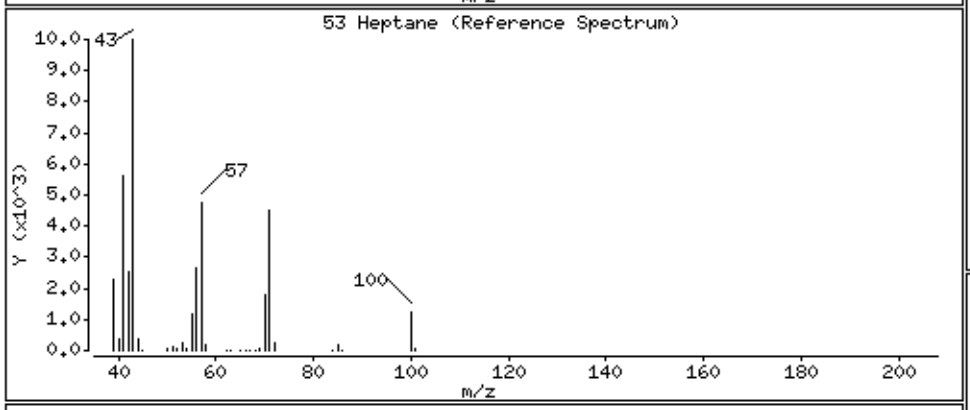
Column diameter: 0.53

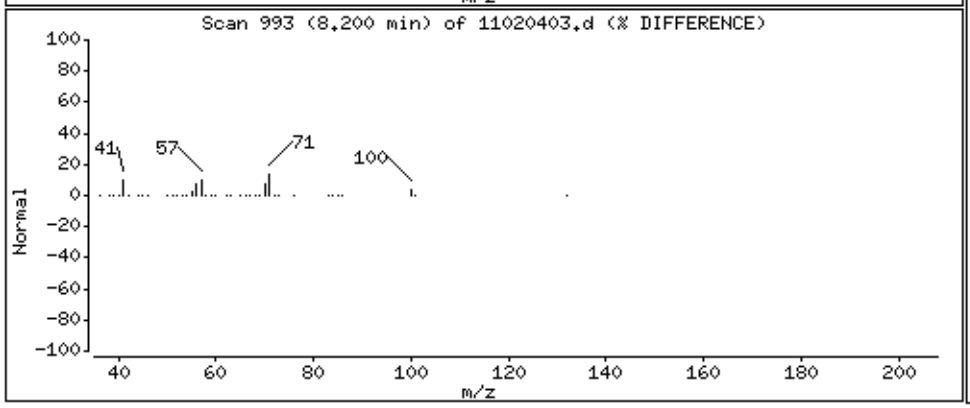
53 Heptane

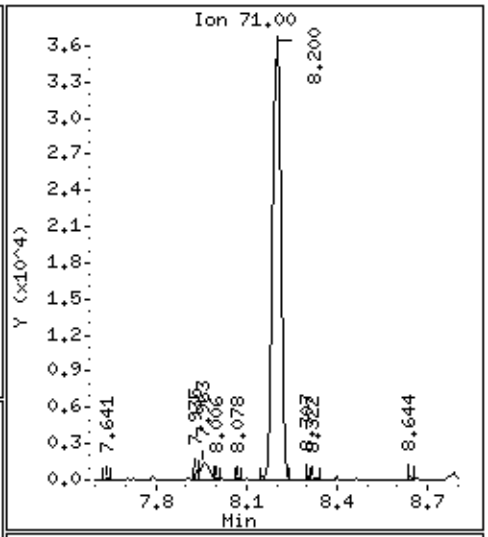
Concentration: 77.167 NG

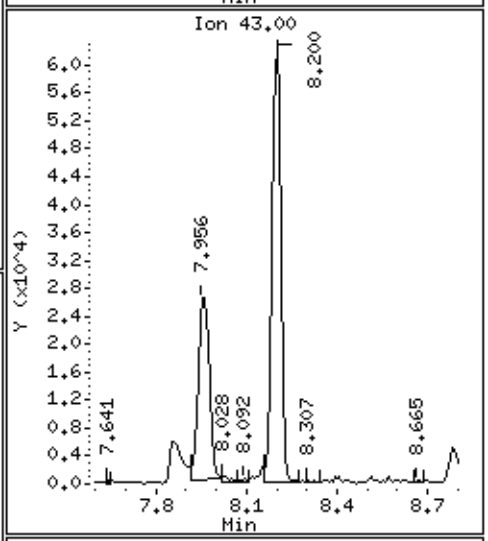


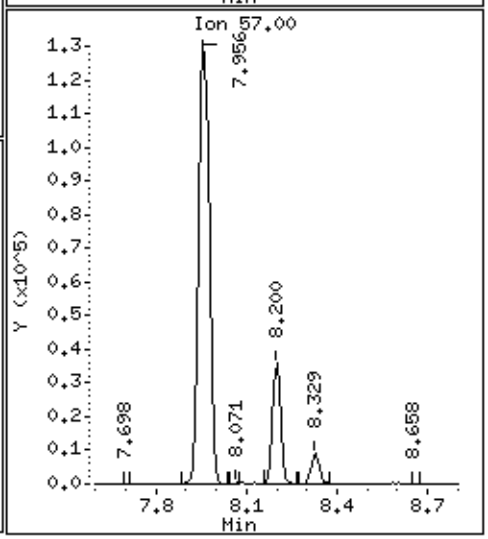












Data File: /chem/msd11.i/04feb16.b/11020403.d

Date : 04-FEB-2016 11:41

Client ID: LCSD

Instrument: msd11.i

Sample Info: ;VI VOC+PAH LCSD;LCSD

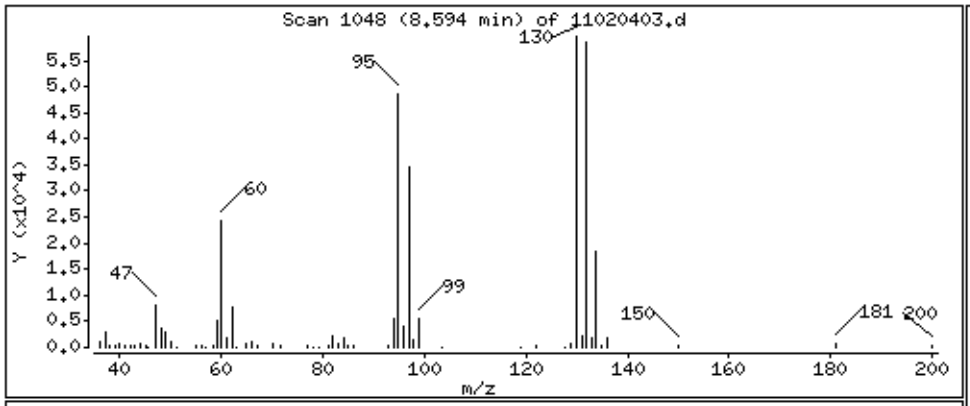
Operator: LA

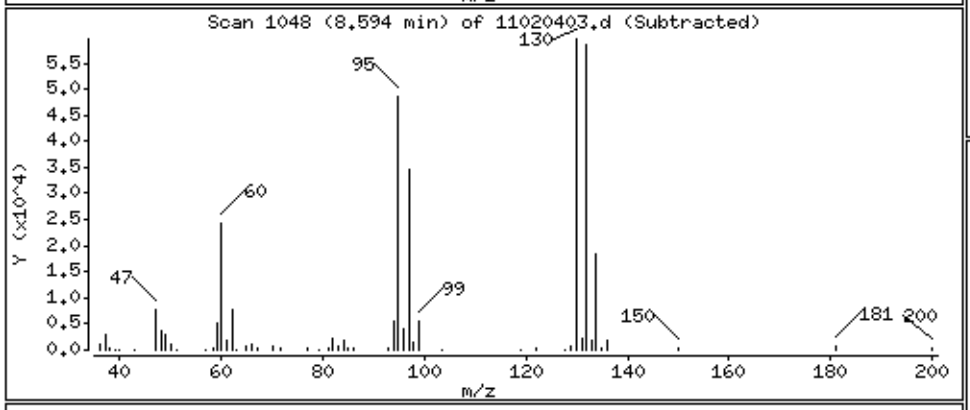
Column phase: RTx-624

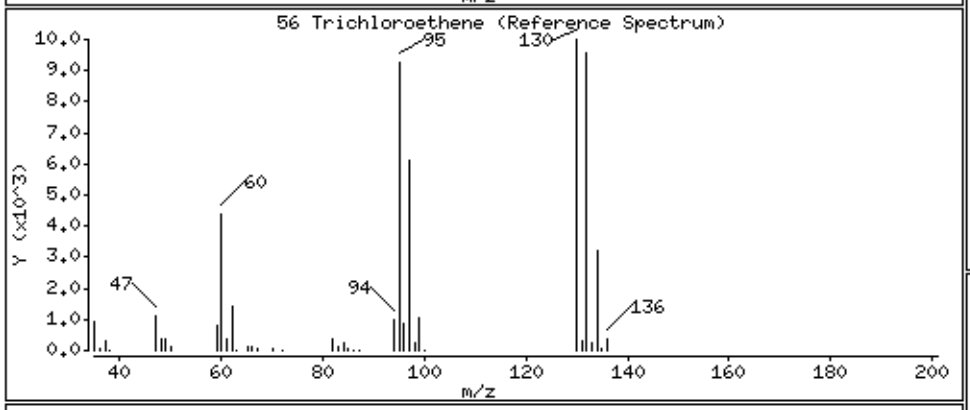
Column diameter: 0.53

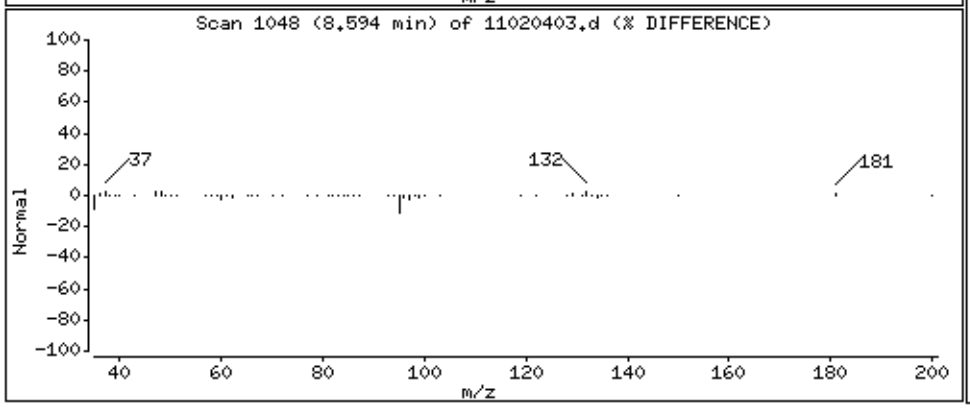
56 Trichloroethene

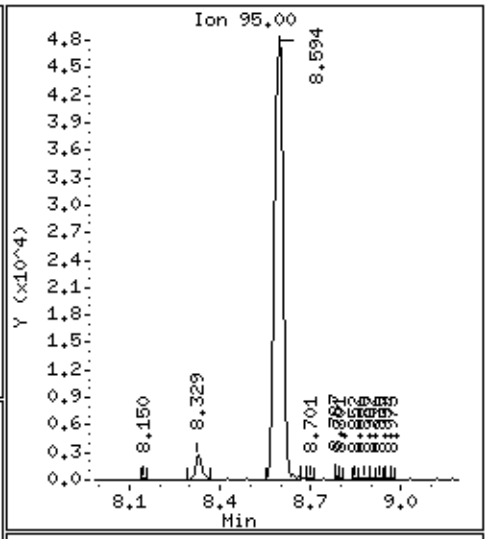
Concentration: 89.744 NG

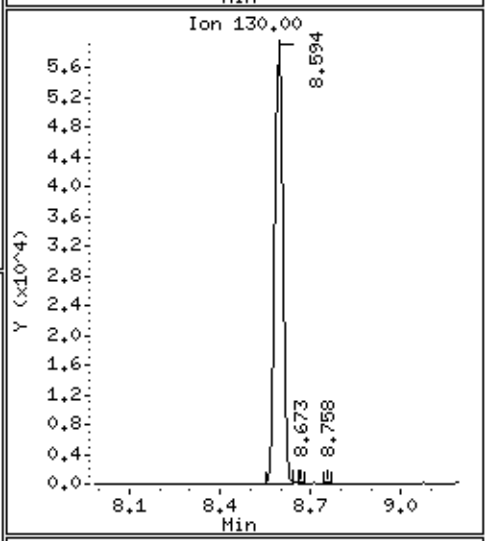


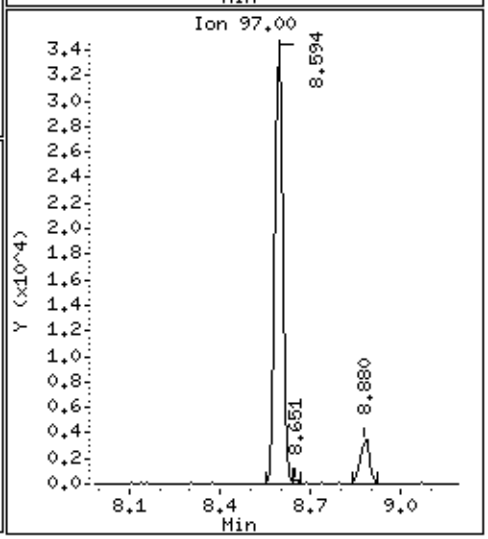












Data File: /chem/msd11.i/04feb16.b/11020403.d

Date : 04-FEB-2016 11:41

Client ID: LCSD

Instrument: msd11.i

Sample Info: ;VI VOC+PAH LCSD;LCSD

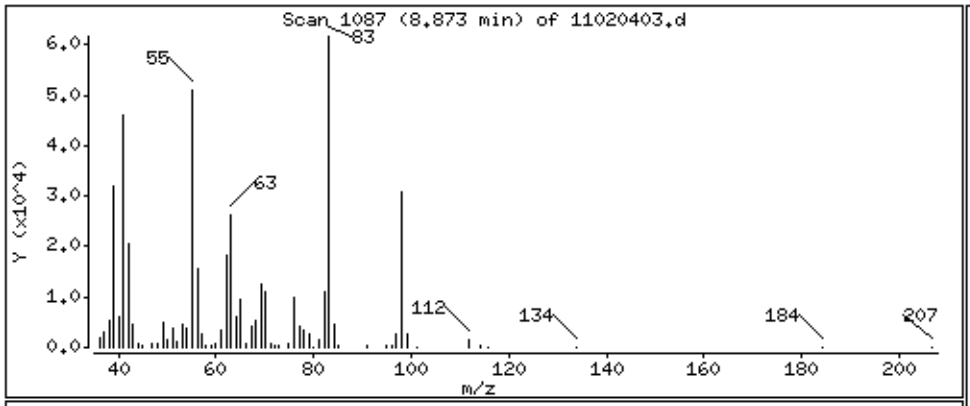
Operator: LA

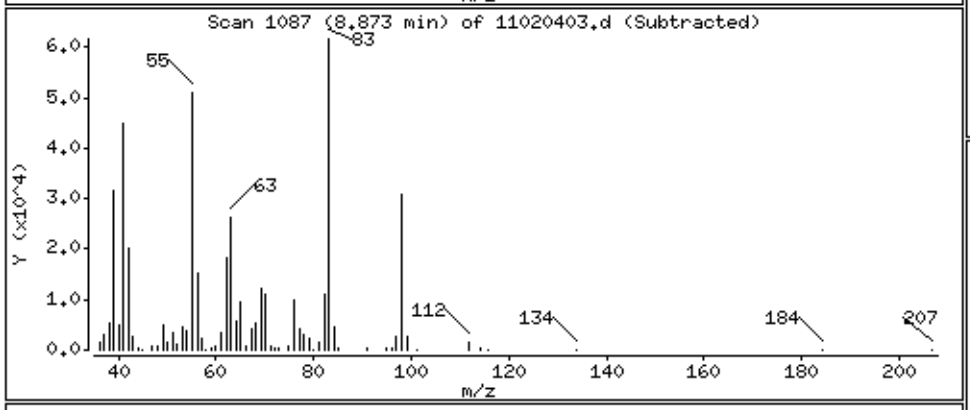
Column phase: RTx-624

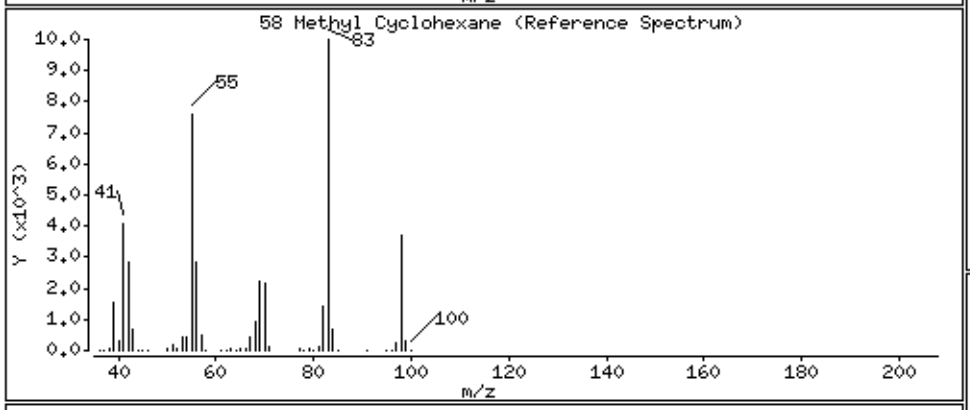
Column diameter: 0.53

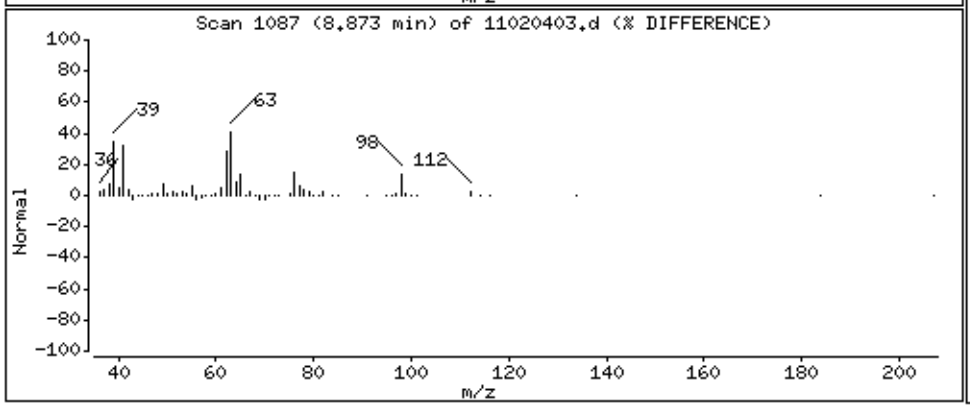
58 Methyl Cyclohexane

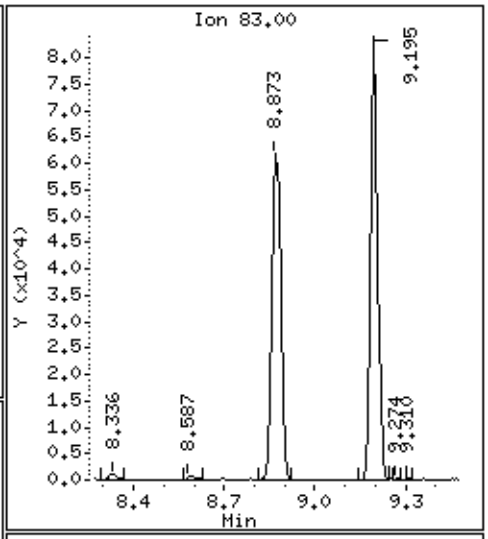
Concentration: 76.458 NG

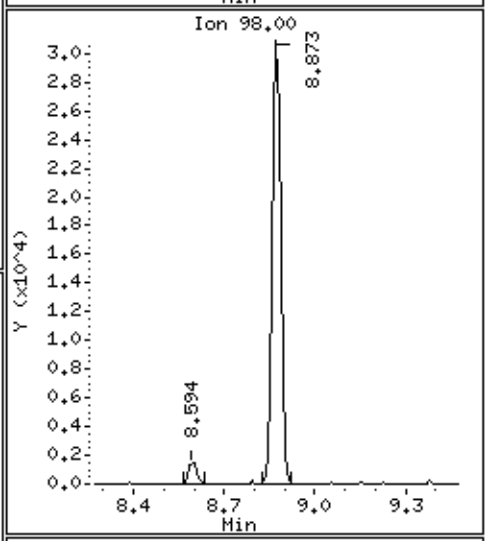


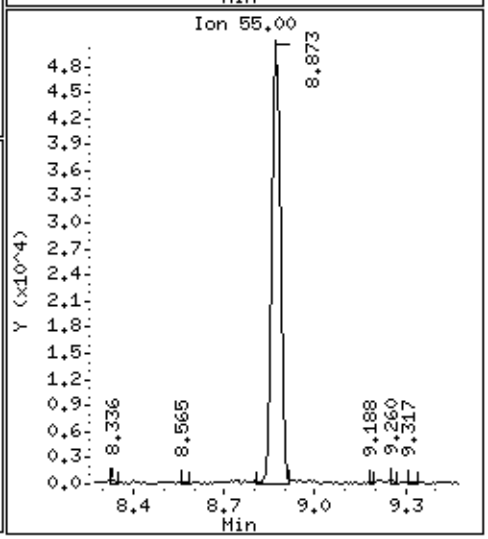












Data File: /chem/msd11.i/04feb16.b/11020403.d

Date : 04-FEB-2016 11:41

Client ID: LCSD

Instrument: msd11.i

Sample Info: ;VI VOC+PAH LCSD;LCSD

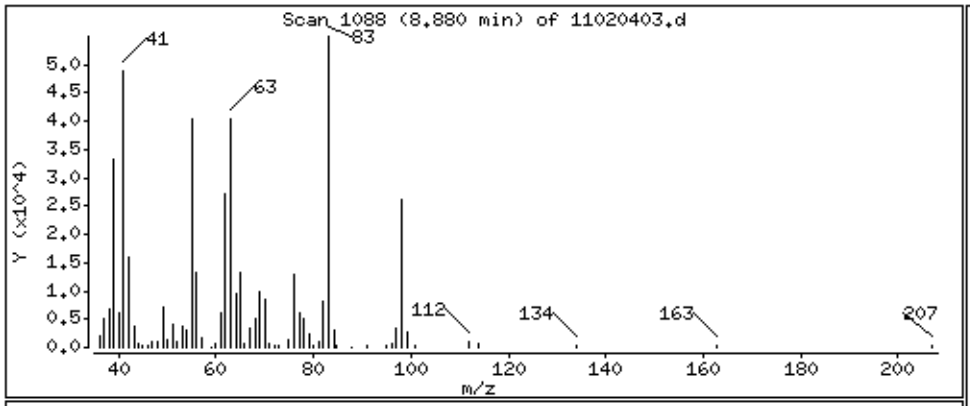
Operator: LA

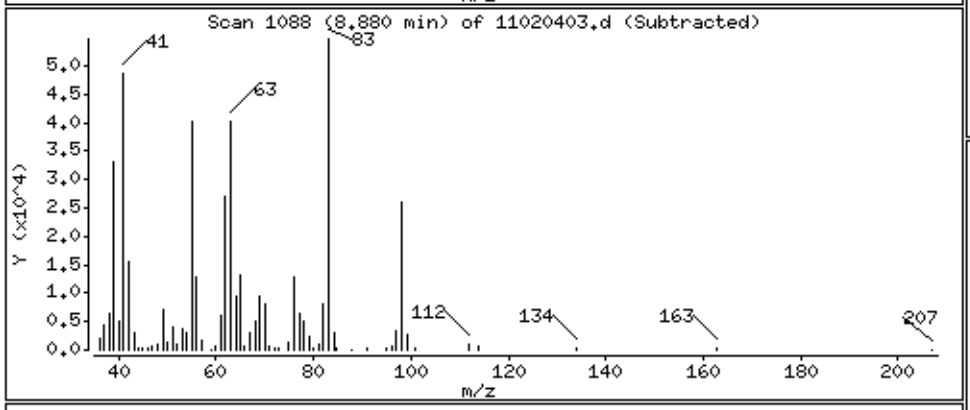
Column phase: RTx-624

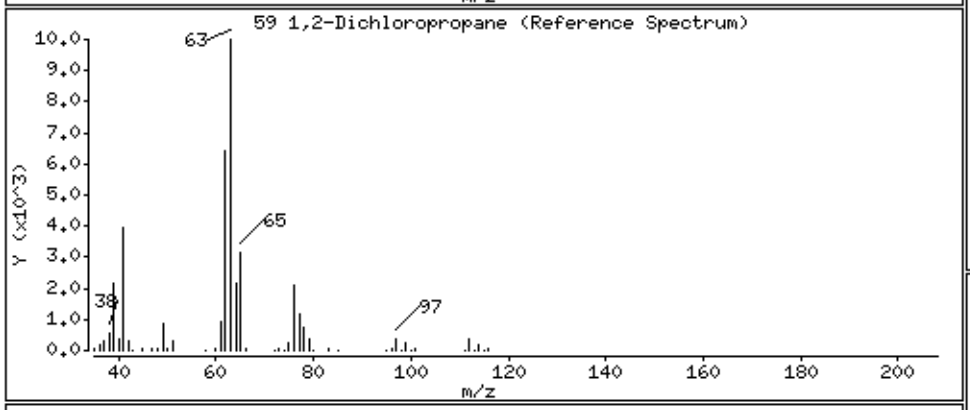
Column diameter: 0.53

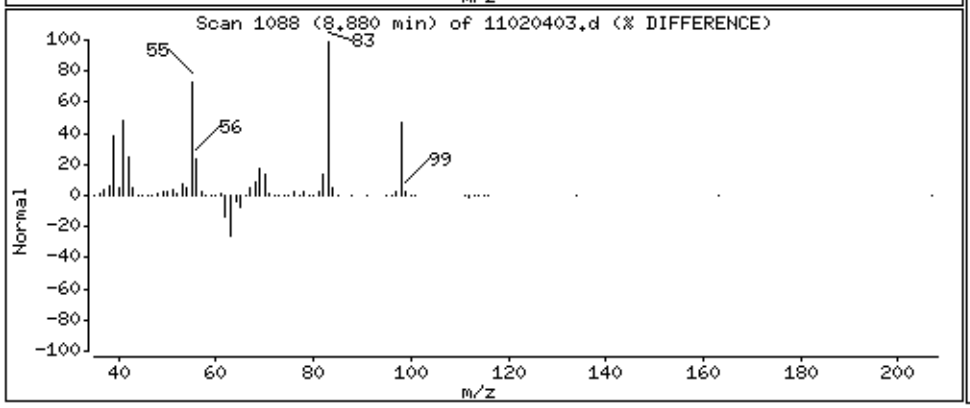
59 1,2-Dichloropropane

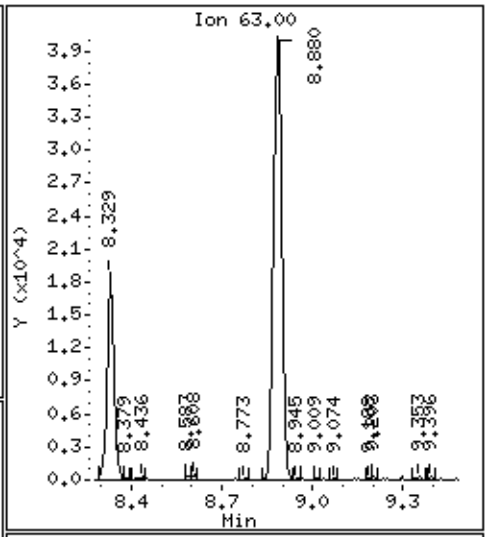
Concentration: 83.592 NG

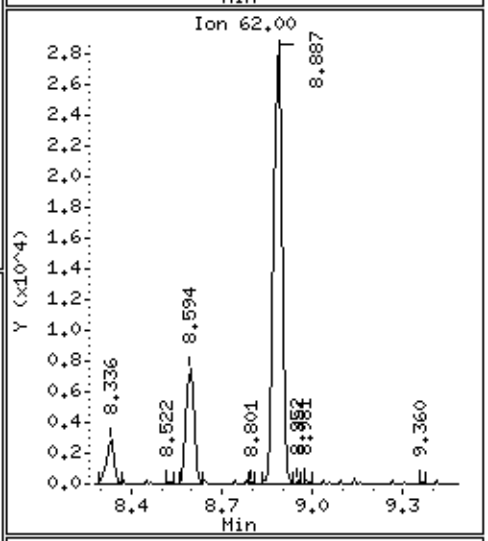


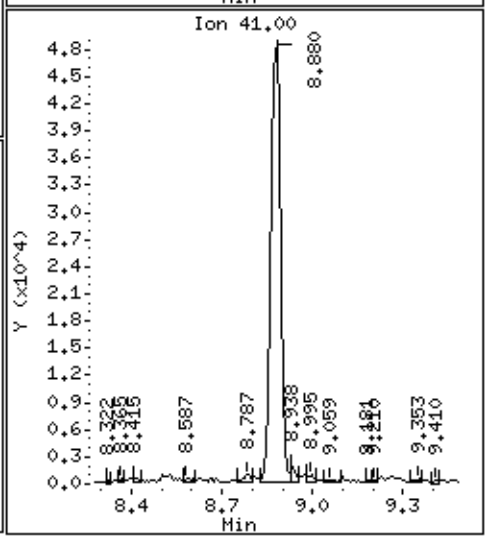












Data File: /chem/msd11.i/04feb16.b/11020403.d

Date : 04-FEB-2016 11:41

Client ID: LCSD

Instrument: msd11.i

Sample Info: ;VI VOC+PAH LCSD;LCSD

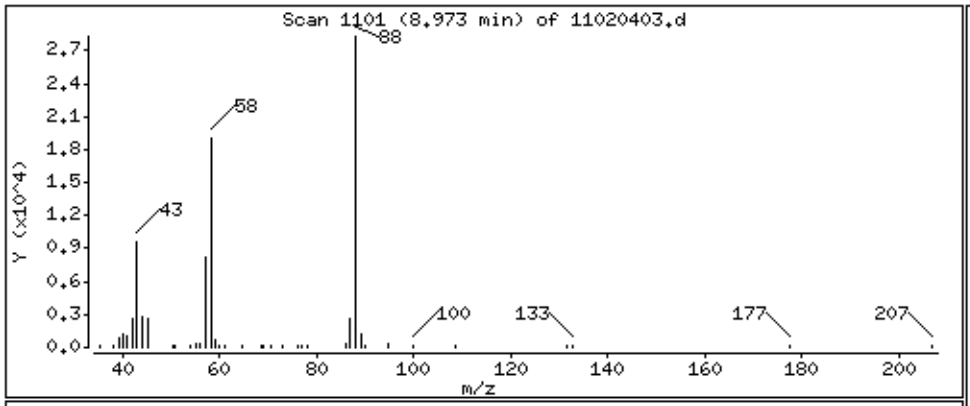
Operator: LA

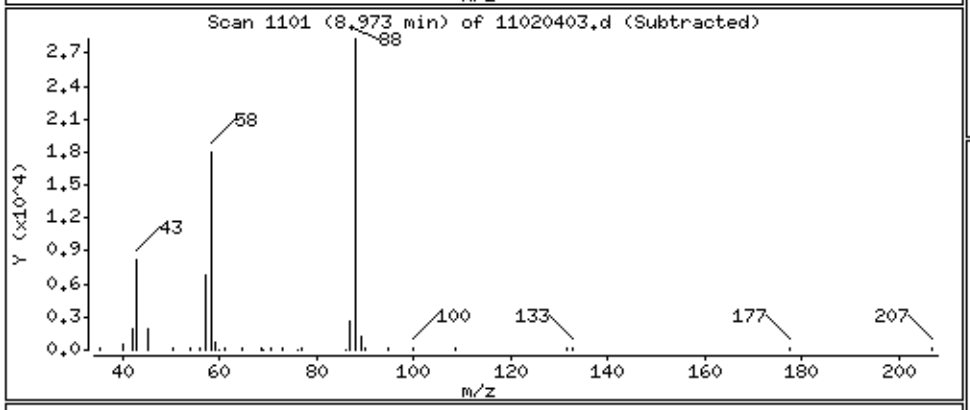
Column phase: RTx-624

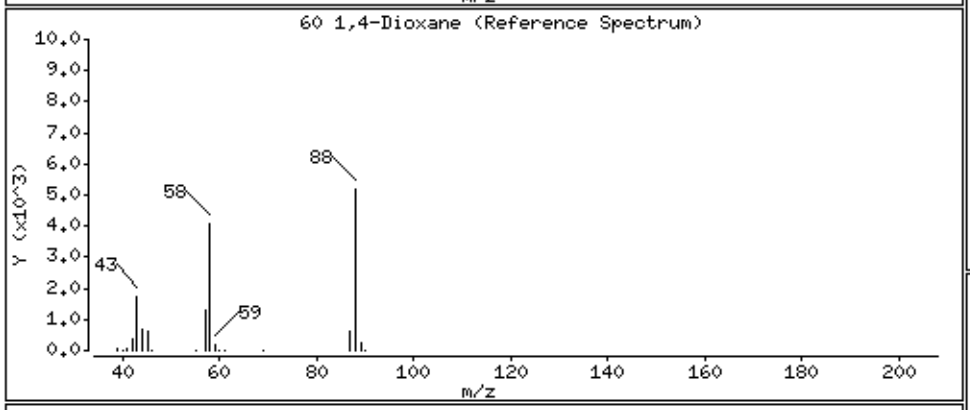
Column diameter: 0.53

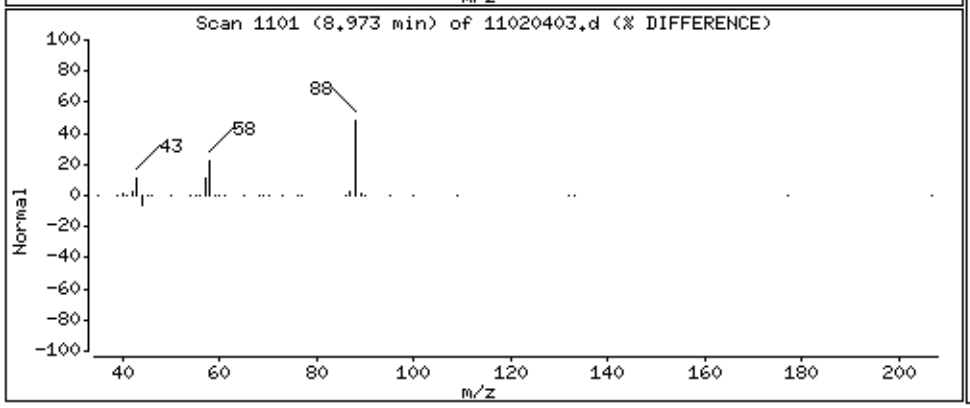
60 1,4-Dioxane

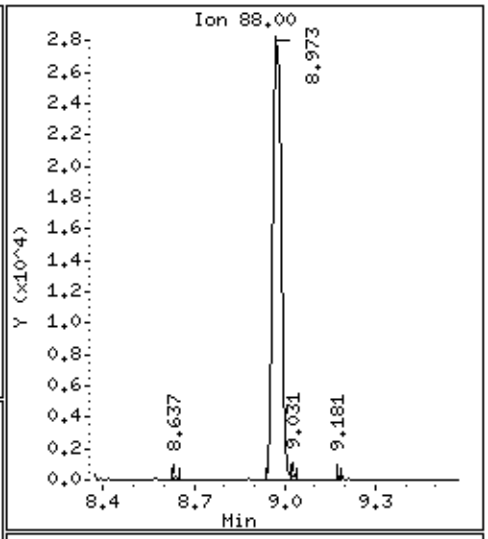
Concentration: 69.011 NG

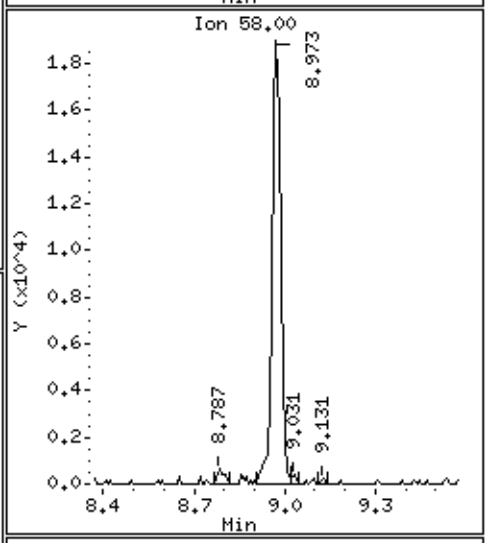


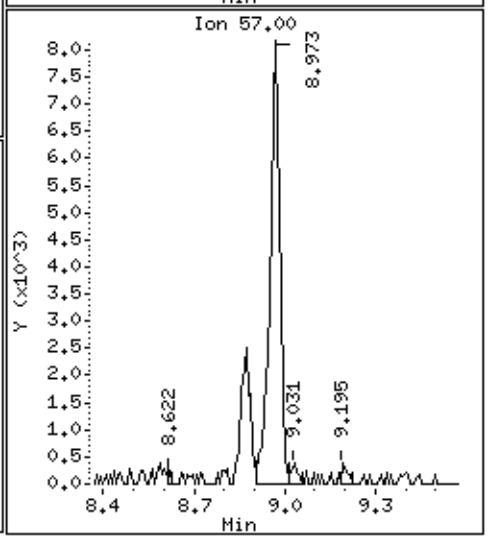












Data File: /chem/msd11.i/04feb16.b/11020403.d

Date : 04-FEB-2016 11:41

Client ID: LCSD

Instrument: msd11.i

Sample Info: ;VI VOC+PAH LCSD;LCSD

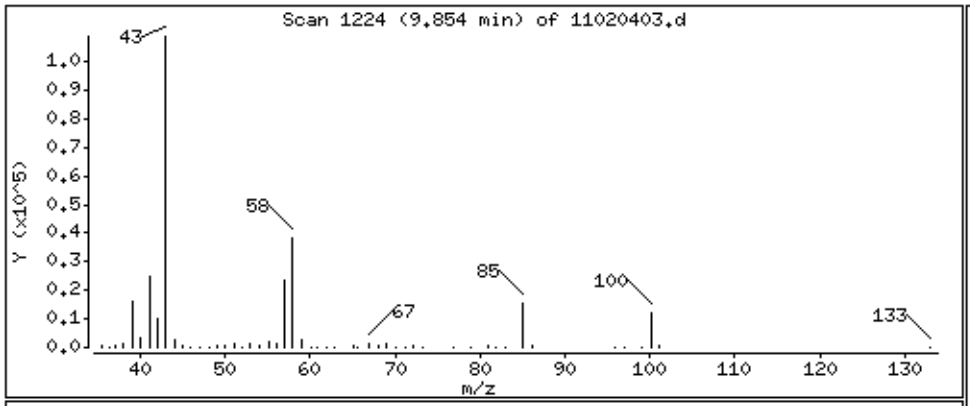
Operator: LA

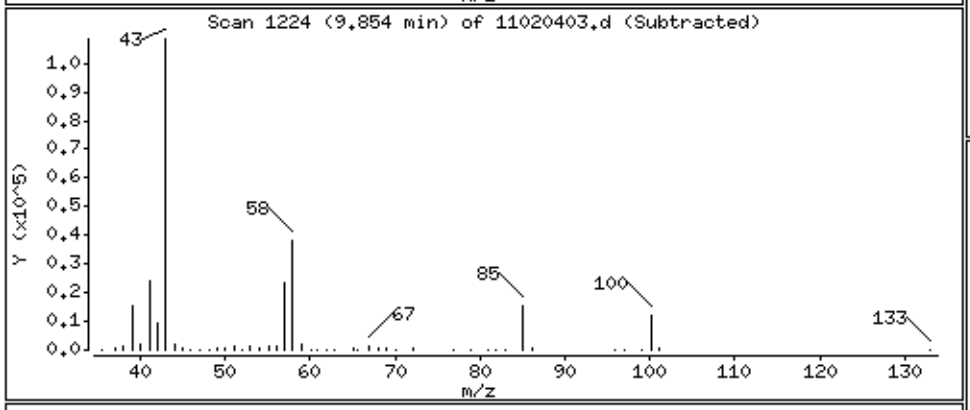
Column phase: RTx-624

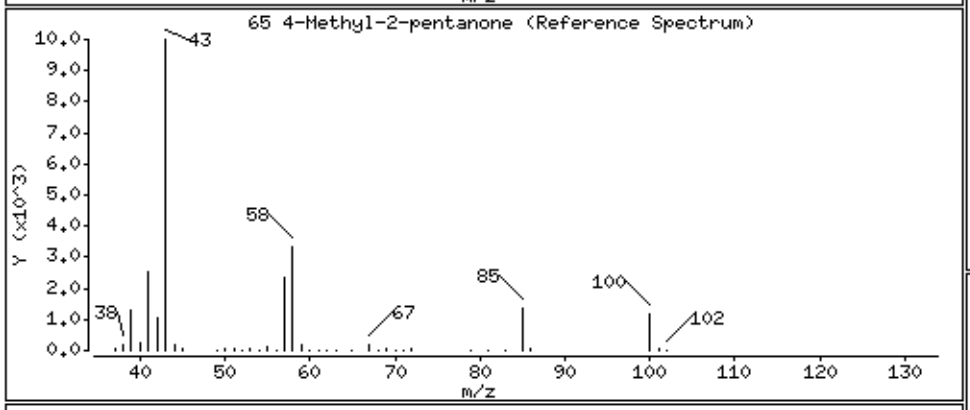
Column diameter: 0.53

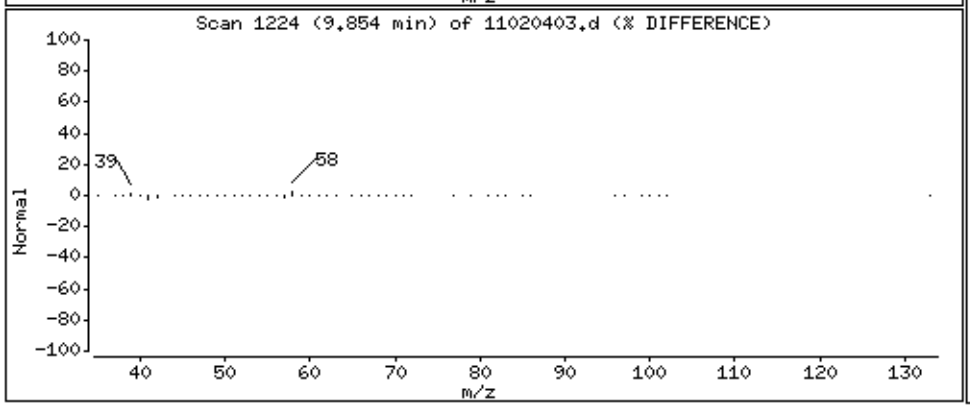
65 4-Methyl-2-pentanone

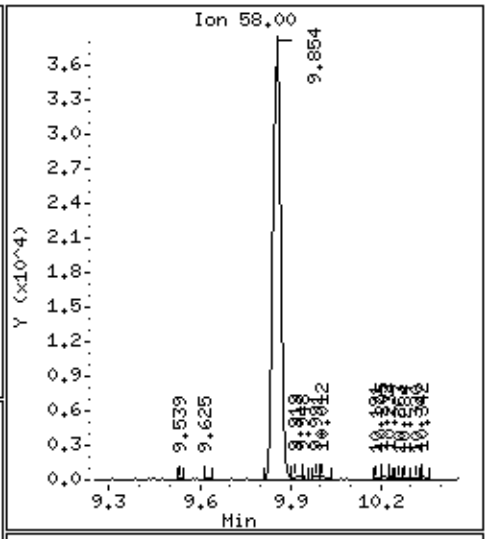
Concentration: 80.687 NG

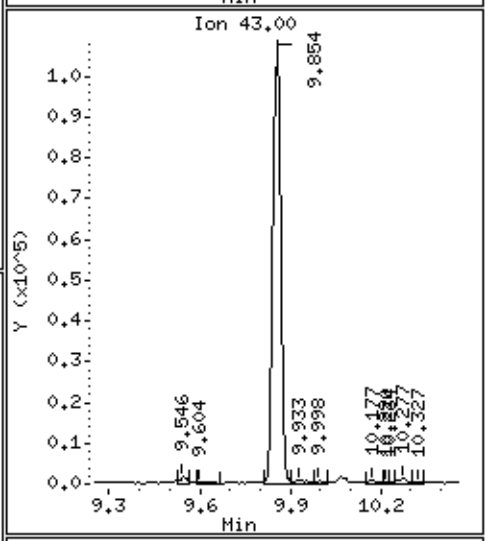


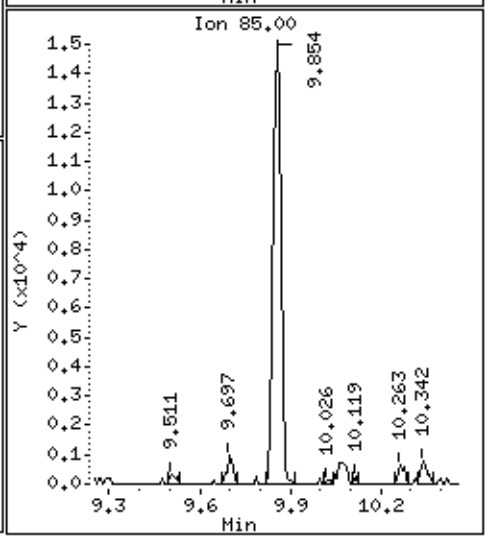












Data File: /chem/msd11.i/04feb16.b/11020403.d

Date : 04-FEB-2016 11:41

Client ID: LCSD

Instrument: msd11.i

Sample Info: ;VI VOC+PAH LCSD;LCSD

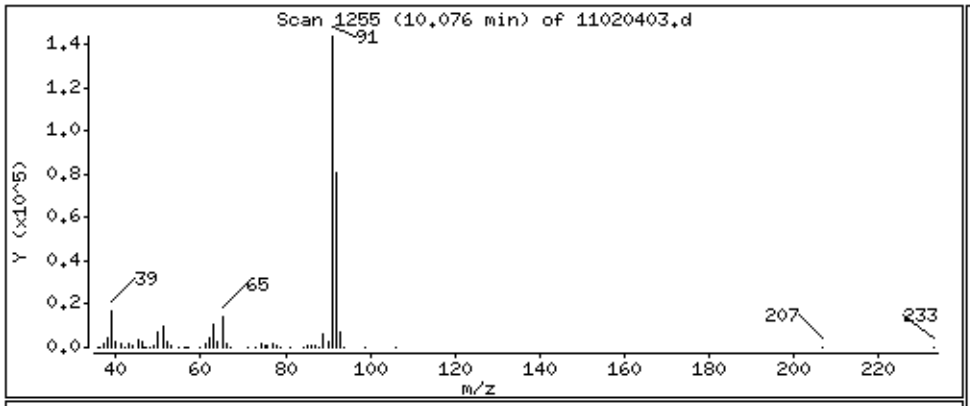
Operator: LA

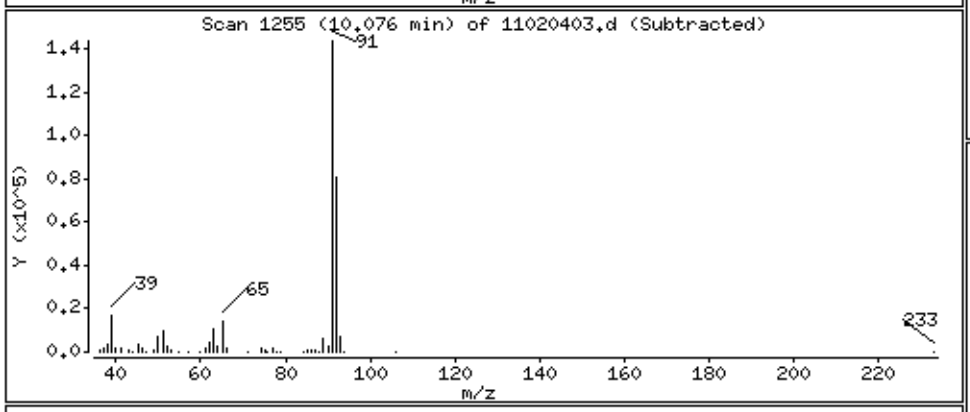
Column phase: RTx-624

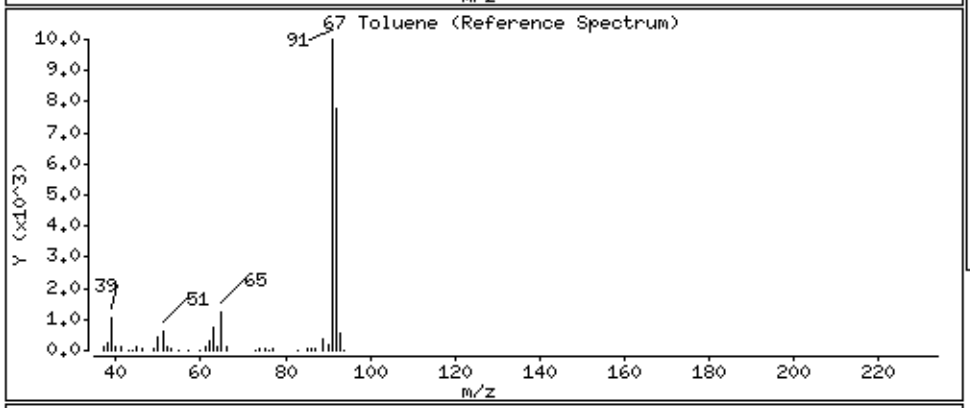
Column diameter: 0.53

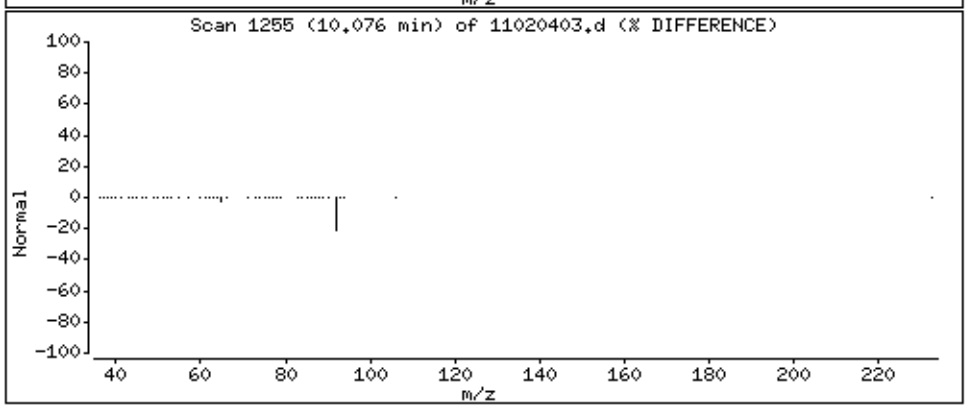
67 Toluene

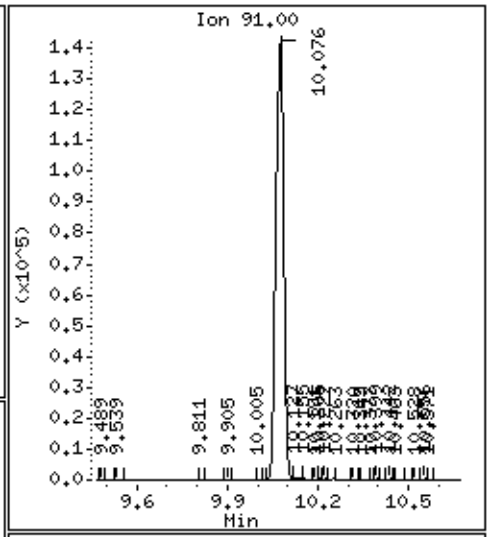
Concentration: 70.301 NG

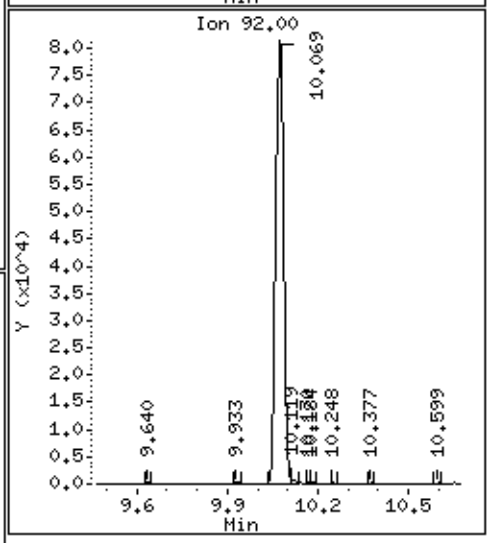












Data File: /chem/msd11.i/04feb16.b/11020403.d

Date : 04-FEB-2016 11:41

Client ID: LCSD

Instrument: msd11.i

Sample Info: ;VI VOC+PAH LCSD;LCSD

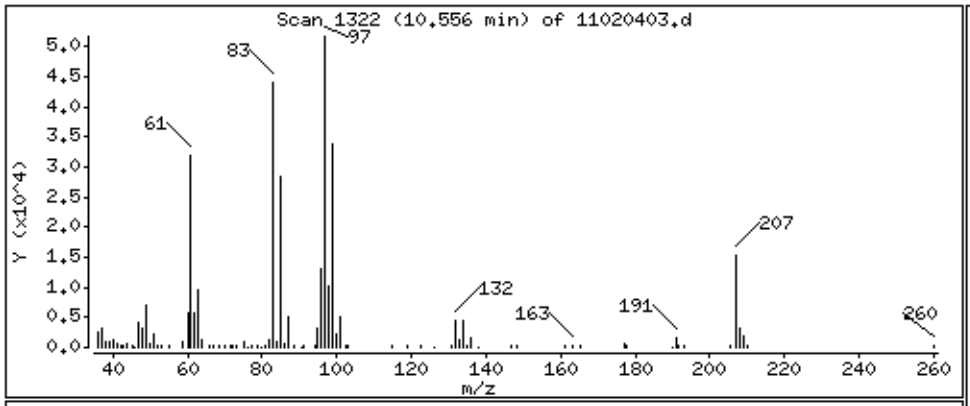
Operator: LA

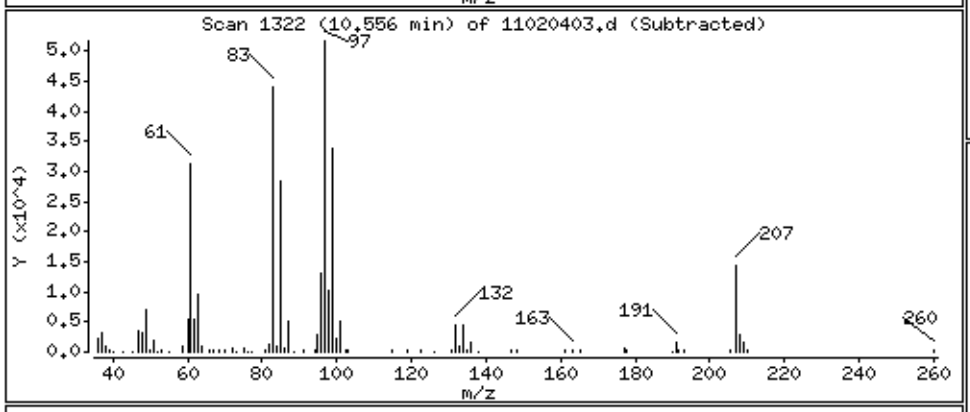
Column phase: RTx-624

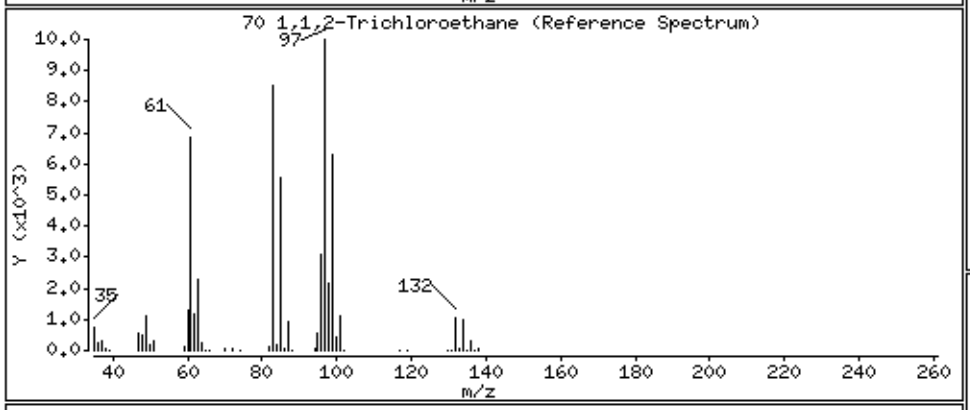
Column diameter: 0.53

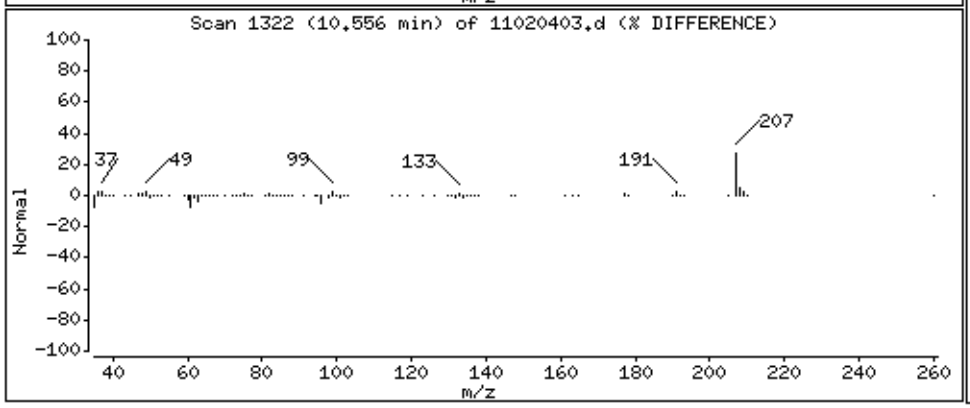
70 1,1,2-Trichloroethane

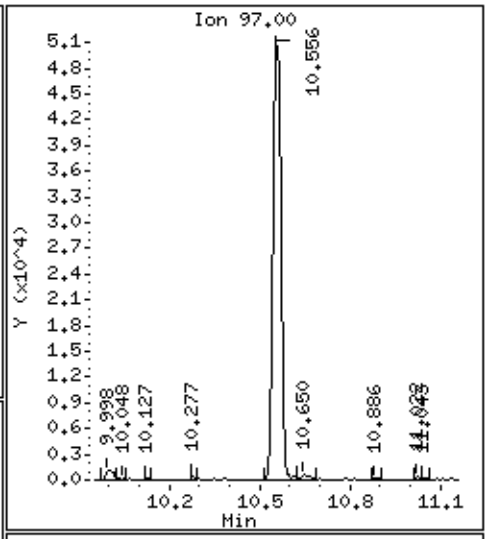
Concentration: 103.77 NG

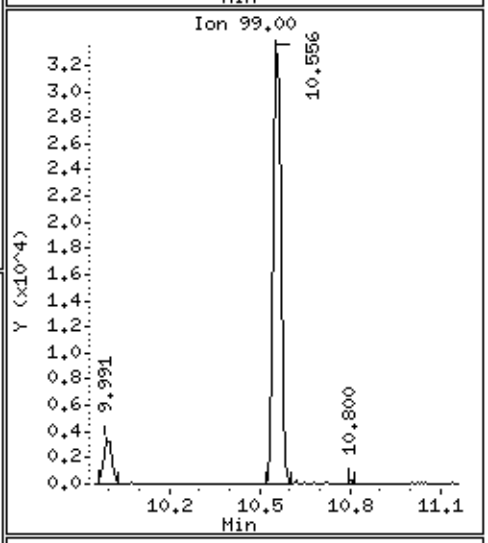


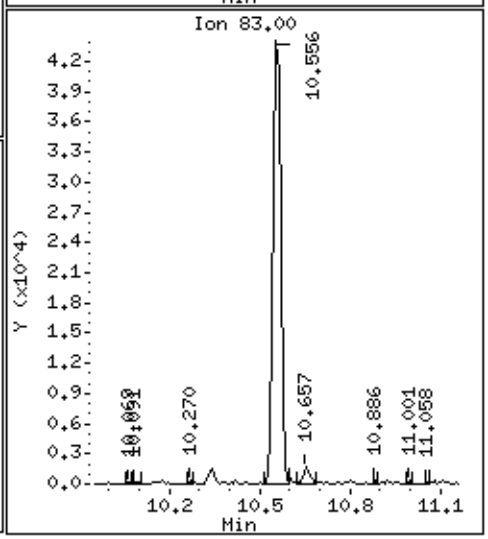












Data File: /chem/msd11.i/04feb16.b/11020403.d

Date : 04-FEB-2016 11:41

Client ID: LCSD

Instrument: msd11.i

Sample Info: ;VI VOC+PAH LCSD;LCSD

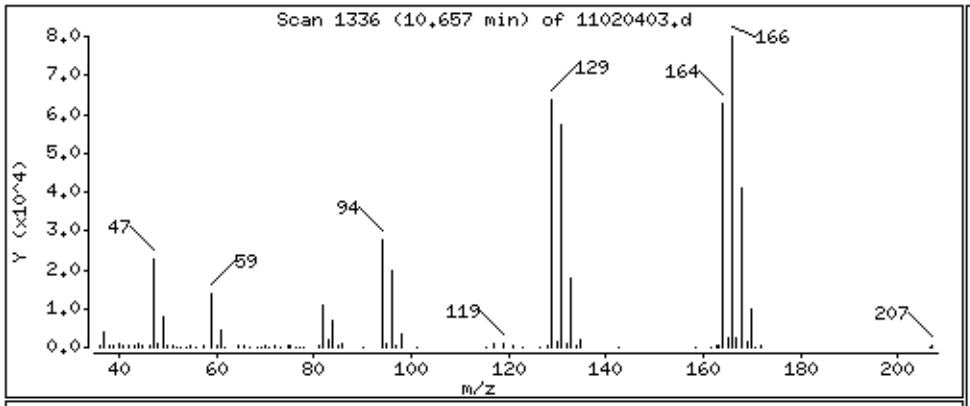
Operator: LA

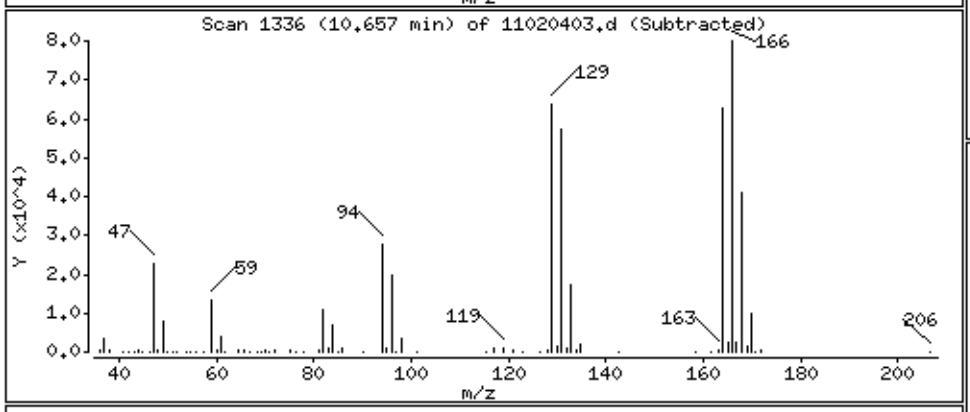
Column phase: RTx-624

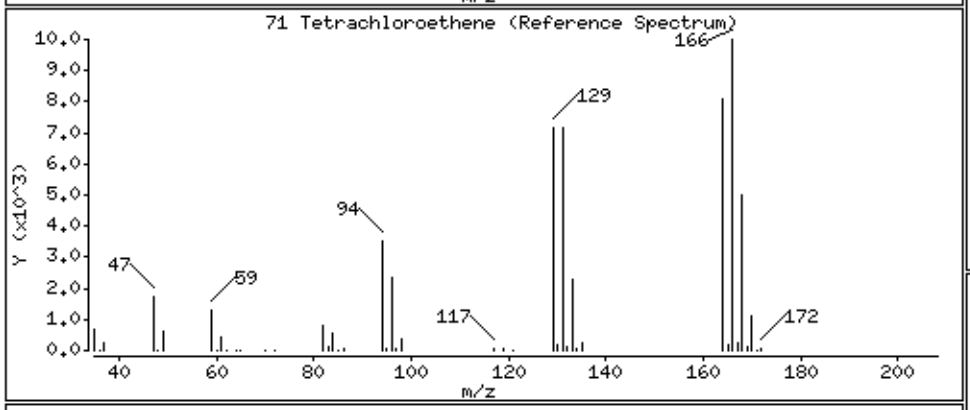
Column diameter: 0.53

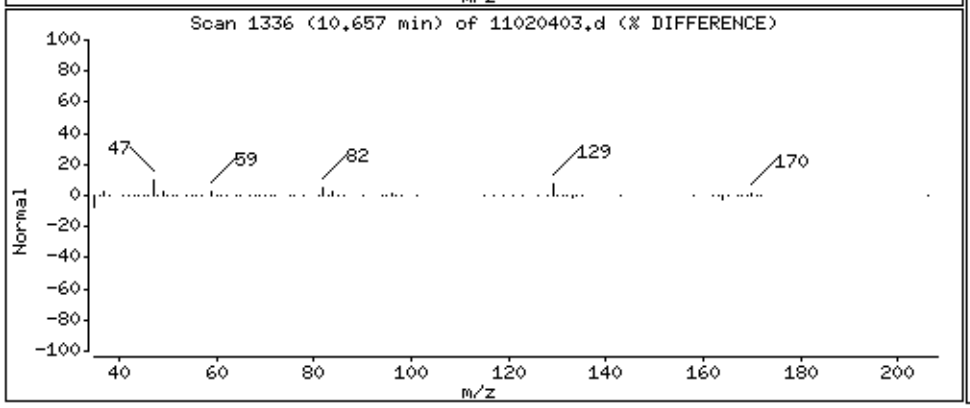
71 Tetrachloroethene

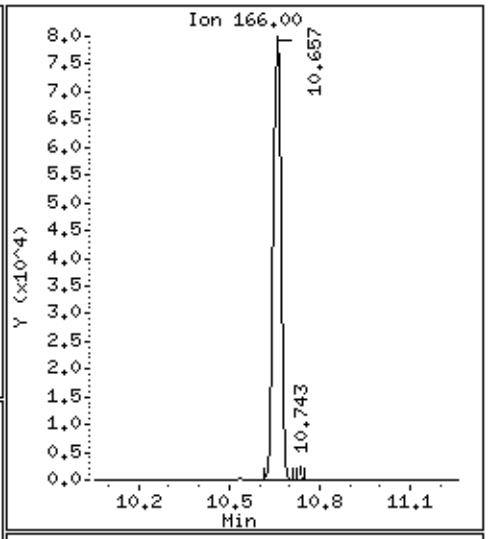
Concentration: 132.57 NG

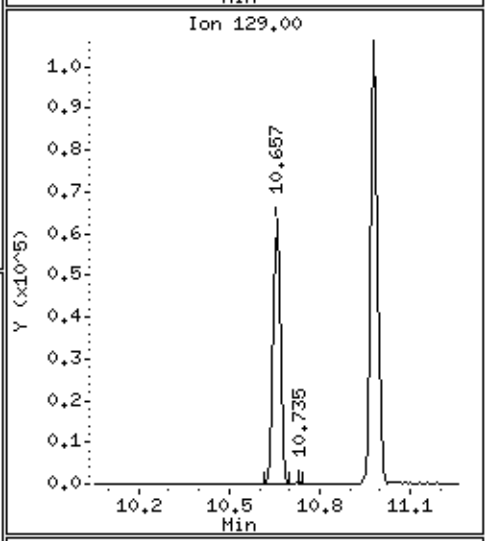


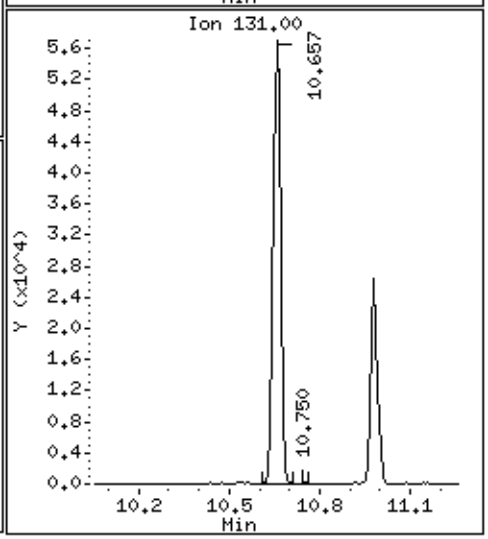












Data File: /chem/msd11.i/04feb16.b/11020403.d

Date : 04-FEB-2016 11:41

Client ID: LCSD

Instrument: msd11.i

Sample Info: ;VI VOC+PAH LCSD;LCSD

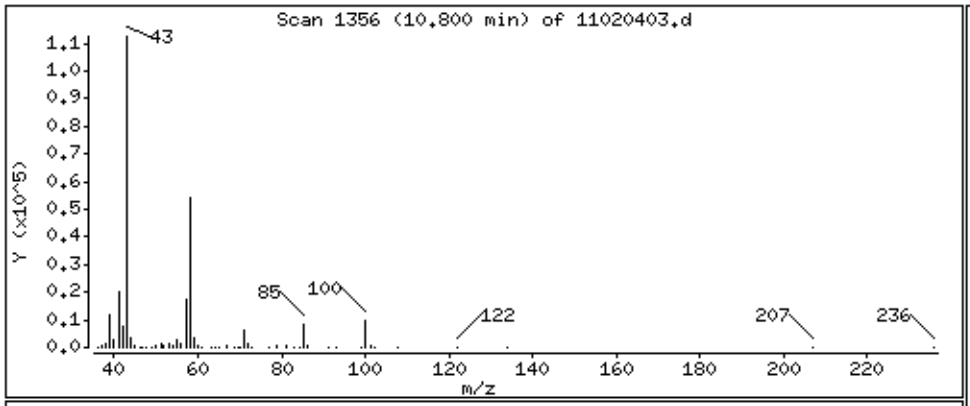
Operator: LA

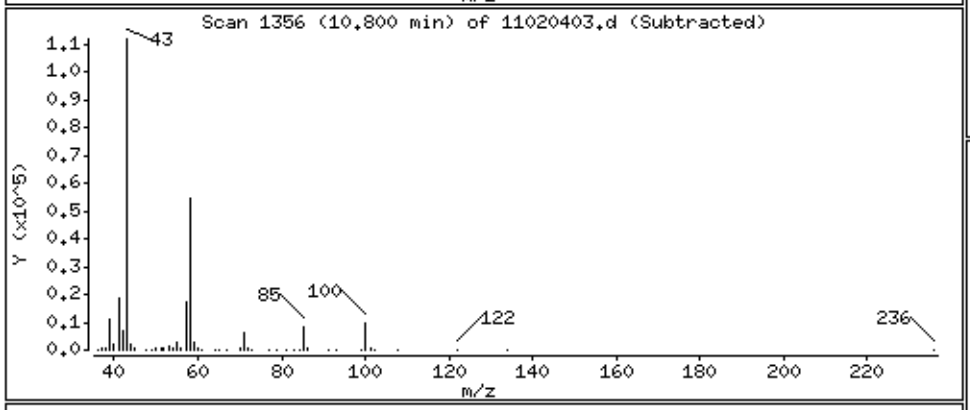
Column phase: RTx-624

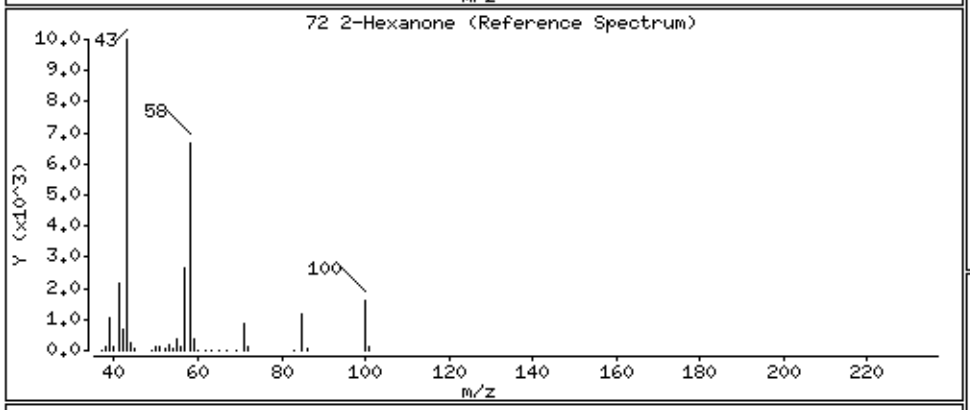
Column diameter: 0.53

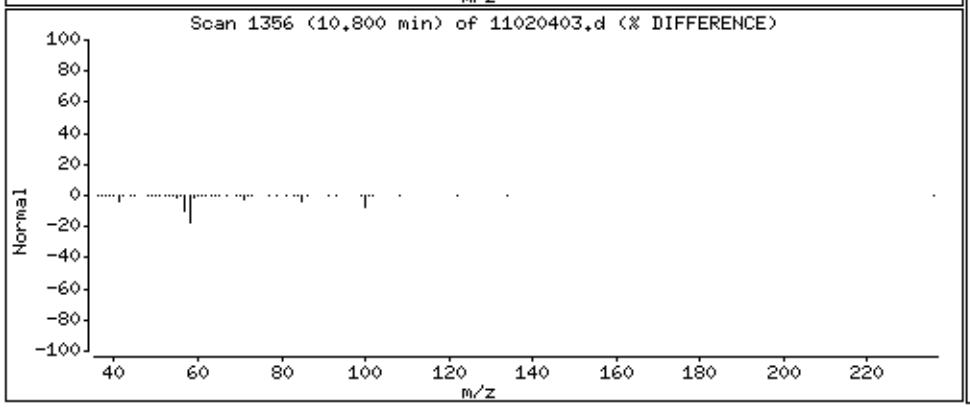
72 2-Hexanone

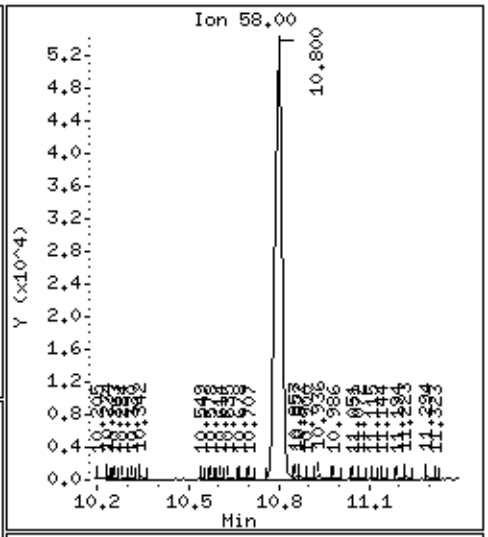
Concentration: 88.465 NG

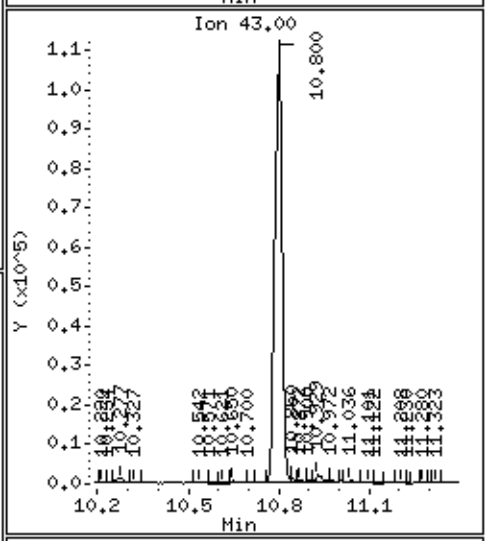


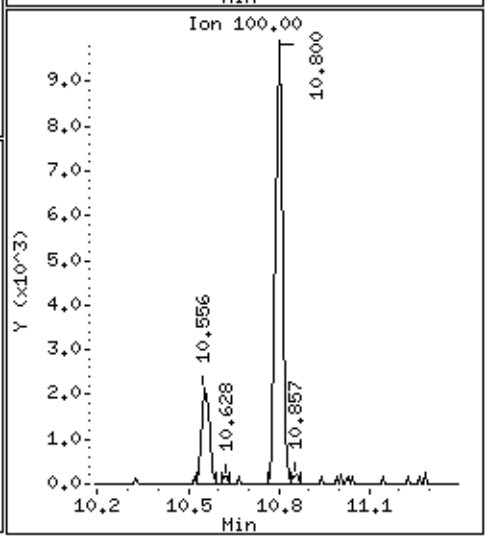












Data File: /chem/msd11.i/04feb16.b/11020403.d

Date : 04-FEB-2016 11:41

Client ID: LCSD

Instrument: msd11.i

Sample Info: ;VI VOC+PAH LCSD;LCSD

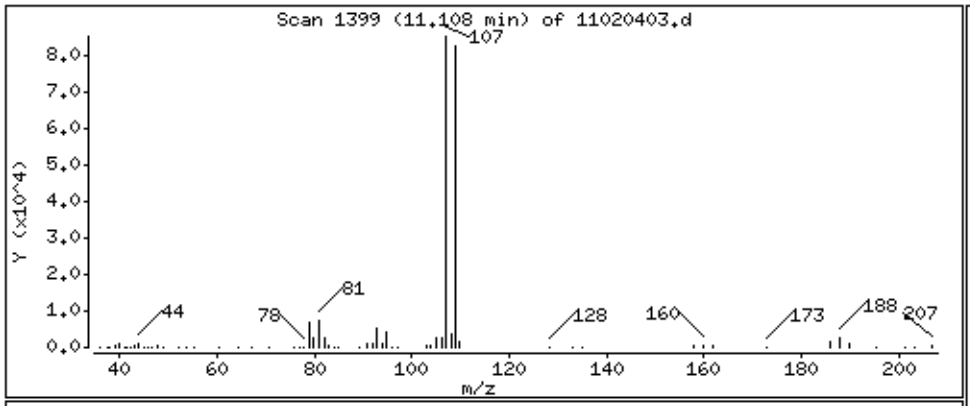
Operator: LA

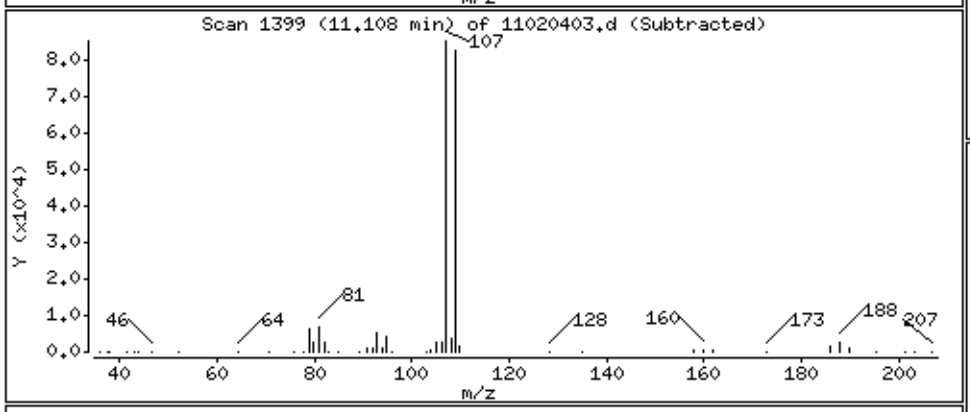
Column phase: RTx-624

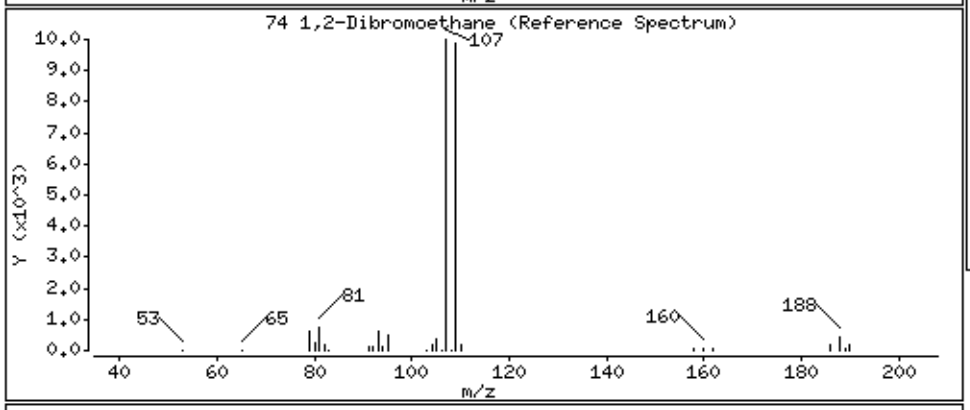
Column diameter: 0.53

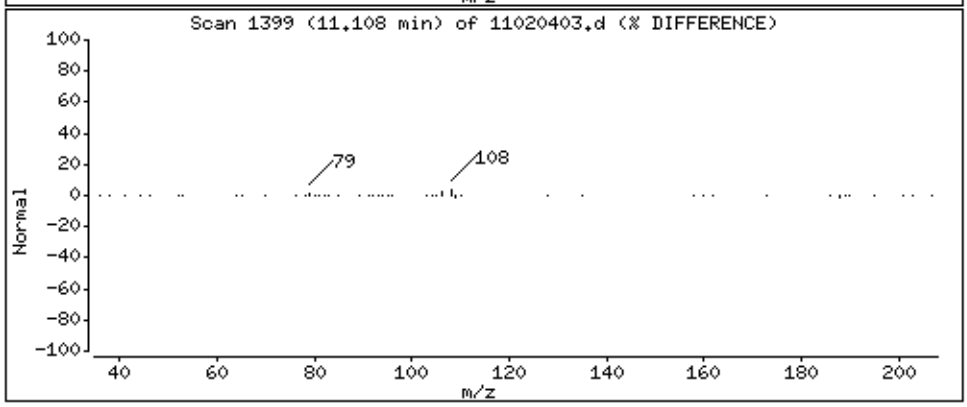
74 1,2-Dibromoethane

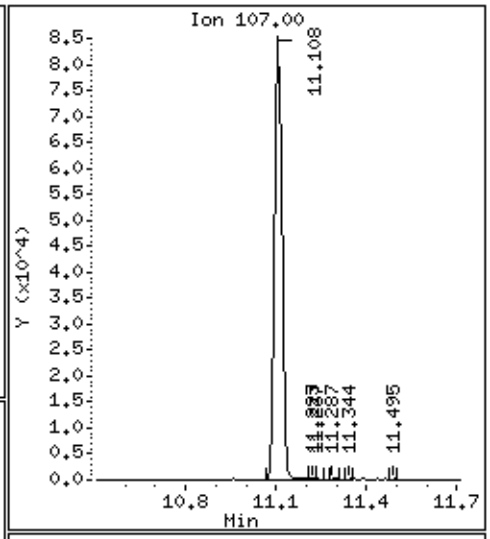
Concentration: 162.42 NG

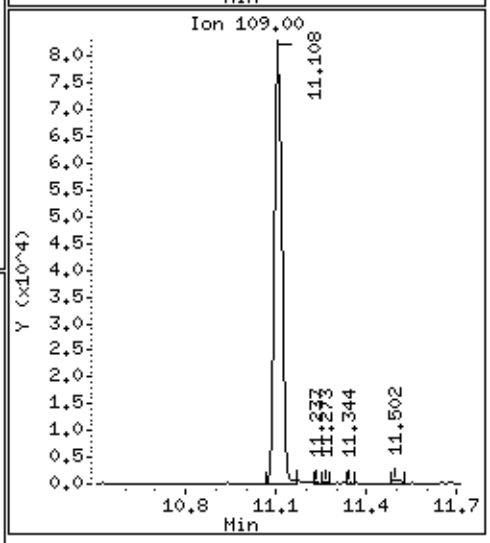












Data File: /chem/msd11.i/04feb16.b/11020403.d

Date : 04-FEB-2016 11:41

Client ID: LCSD

Instrument: msd11.i

Sample Info: ;VI VOC+PAH LCSD;LCSD

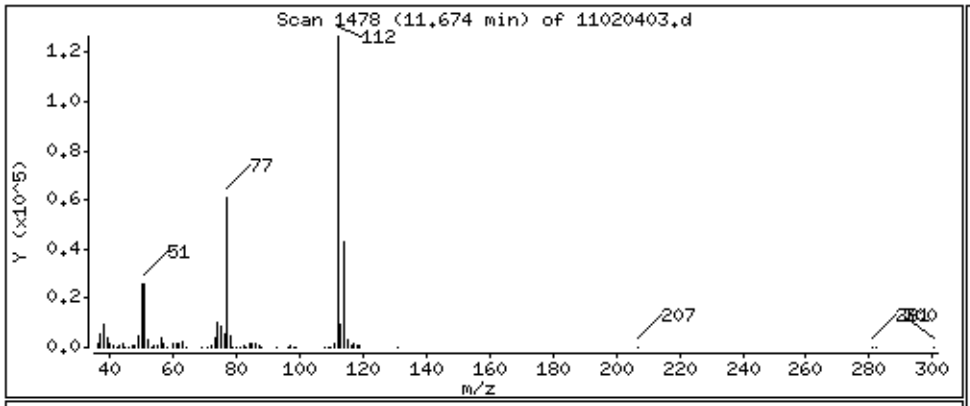
Operator: LA

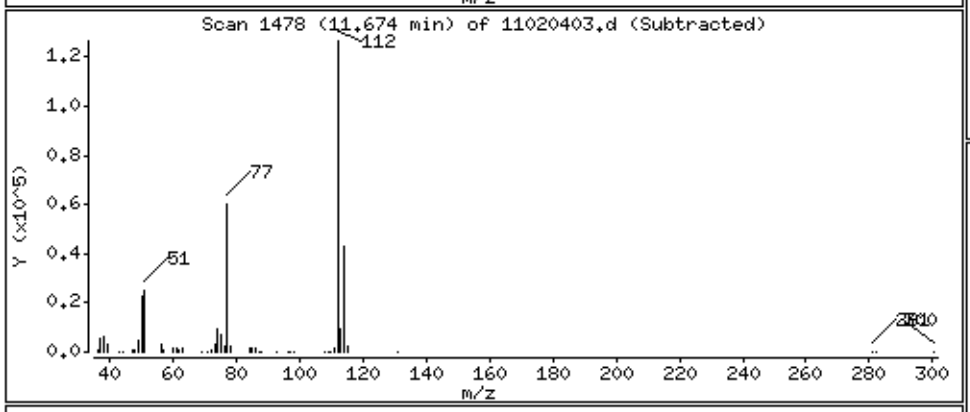
Column phase: RTx-624

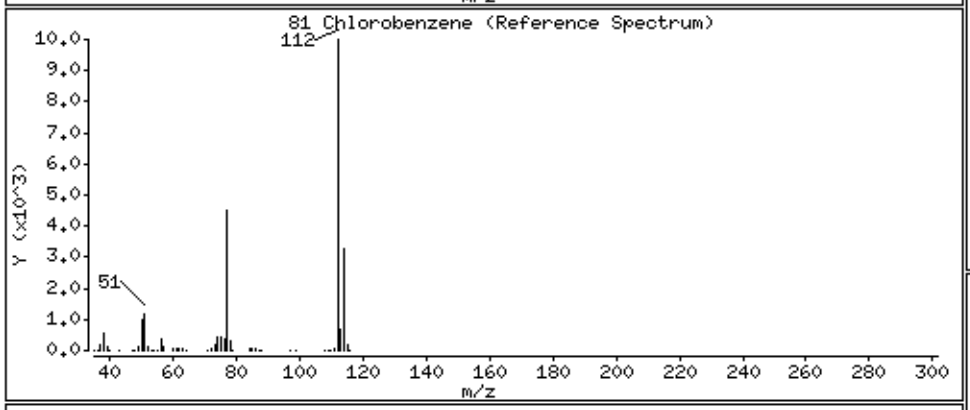
Column diameter: 0.53

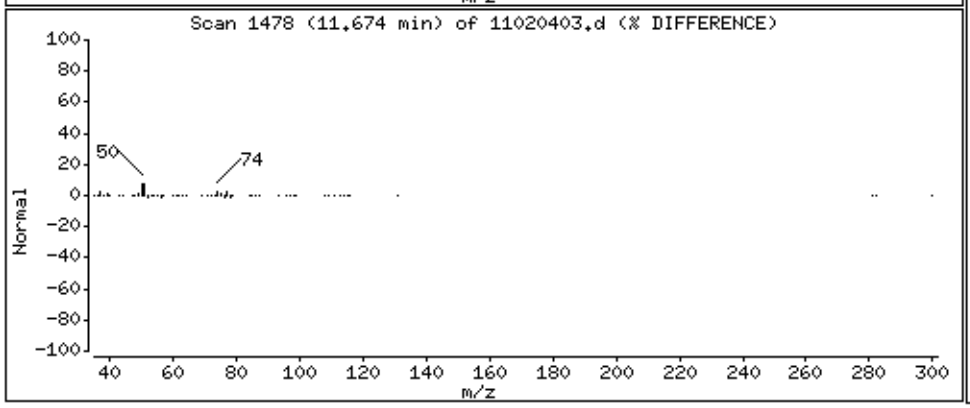
81 Chlorobenzene

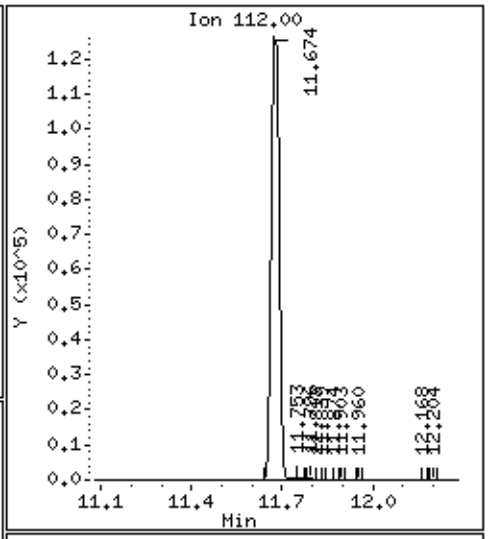
Concentration: 89.794 NG

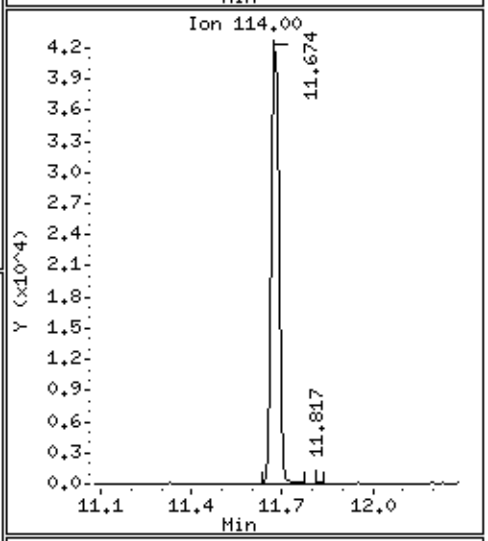


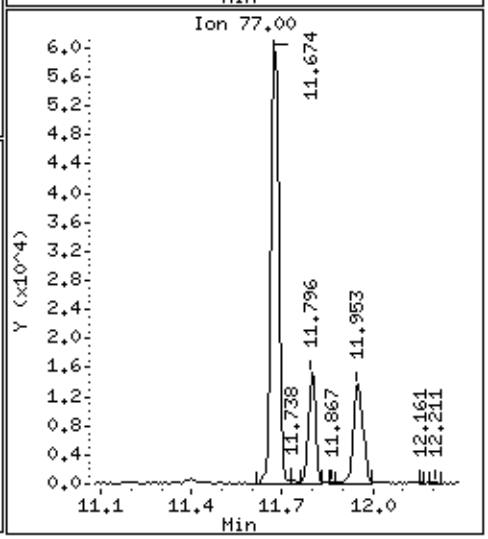












Data File: /chem/msd11.i/04feb16.b/11020403.d

Date : 04-FEB-2016 11:41

Client ID: LCSD

Instrument: msd11.i

Sample Info: ;VI VOC+PAH LCSD;LCSD

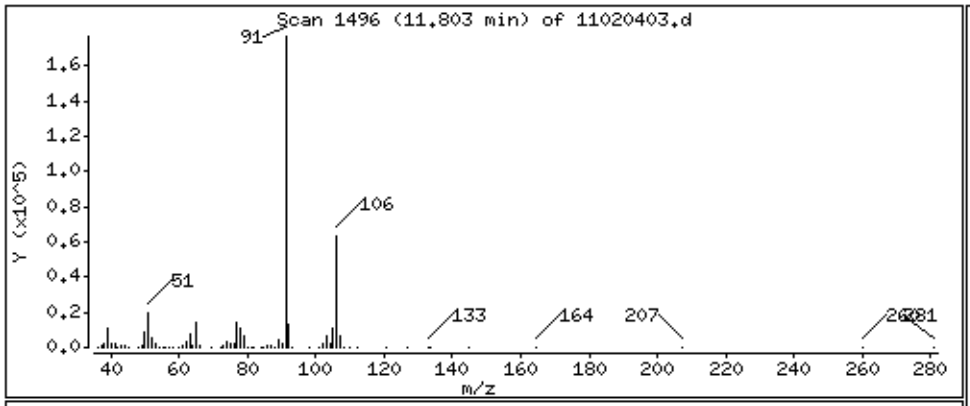
Operator: LA

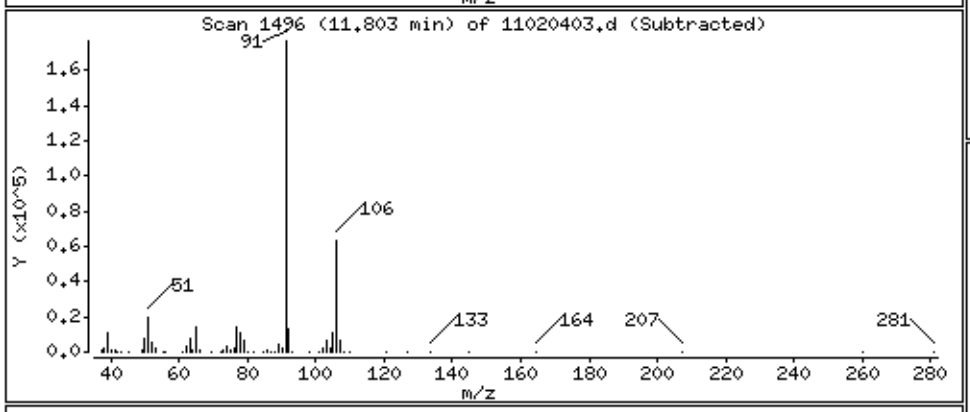
Column phase: RTx-624

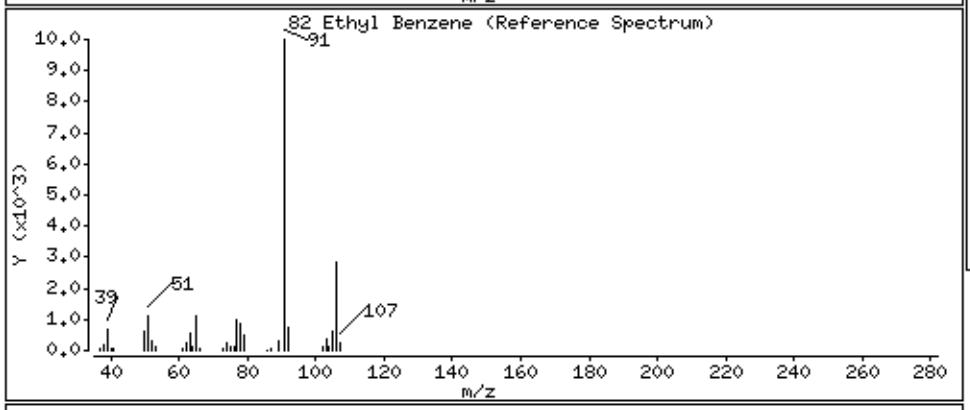
Column diameter: 0.53

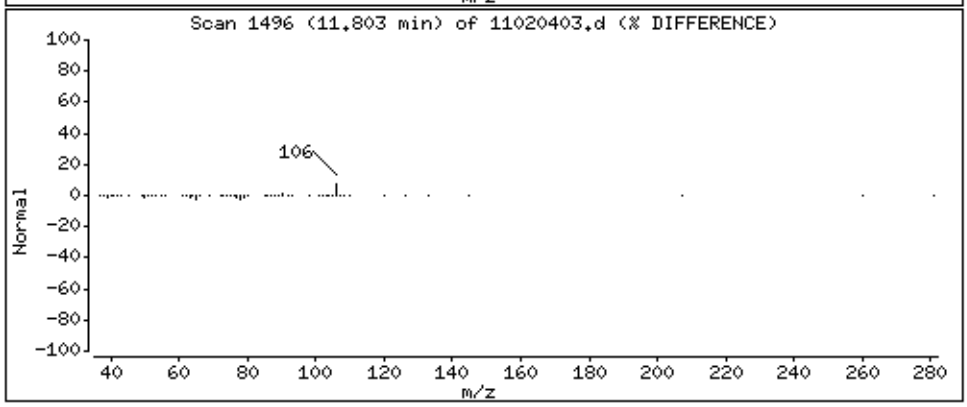
82 Ethyl Benzene

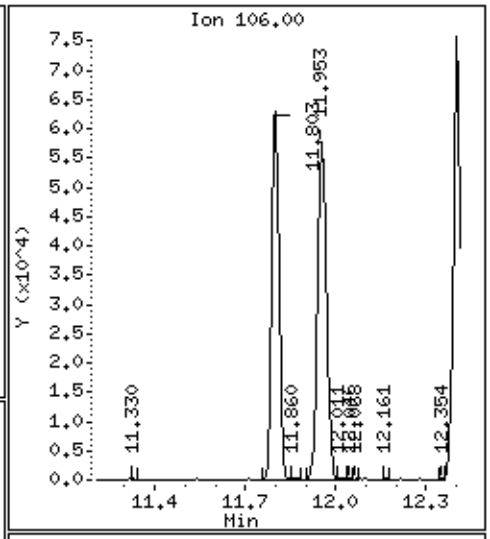
Concentration: 83.906 NG

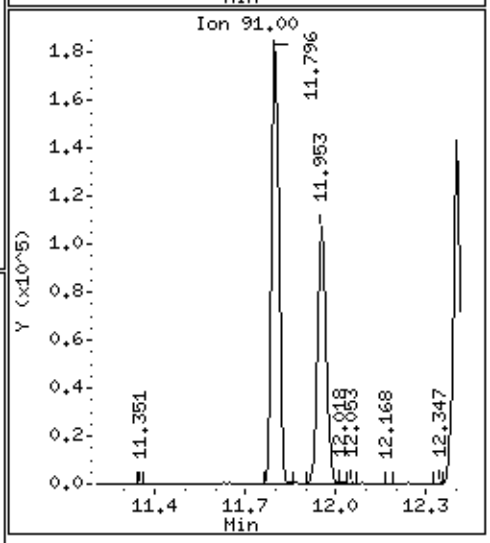












Data File: /chem/msd11.i/04feb16.b/11020403.d

Date : 04-FEB-2016 11:41

Client ID: LCSD

Instrument: msd11.i

Sample Info: ;VI VOC+PAH LCSD;LCSD

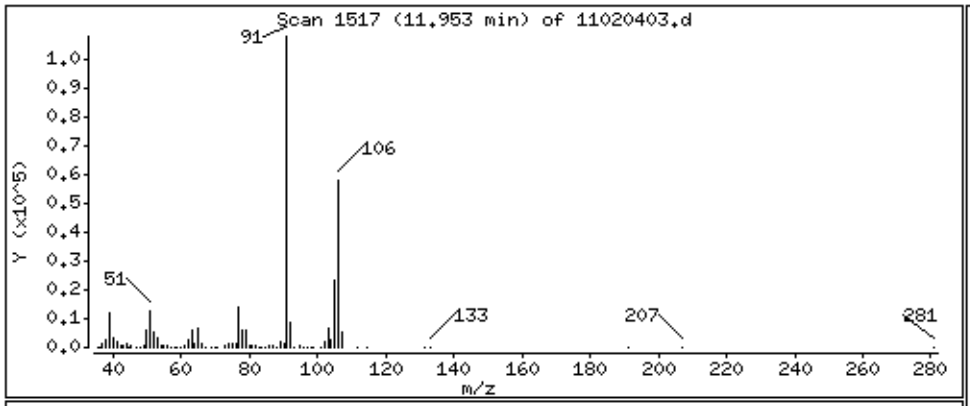
Operator: LA

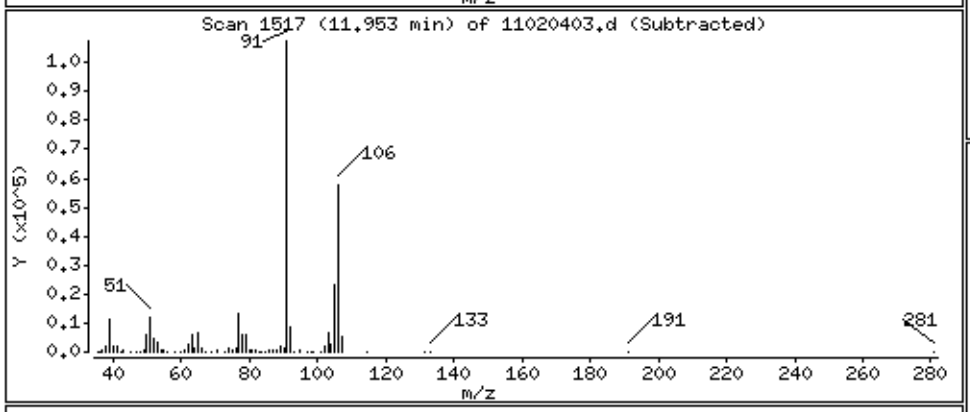
Column phase: RTx-624

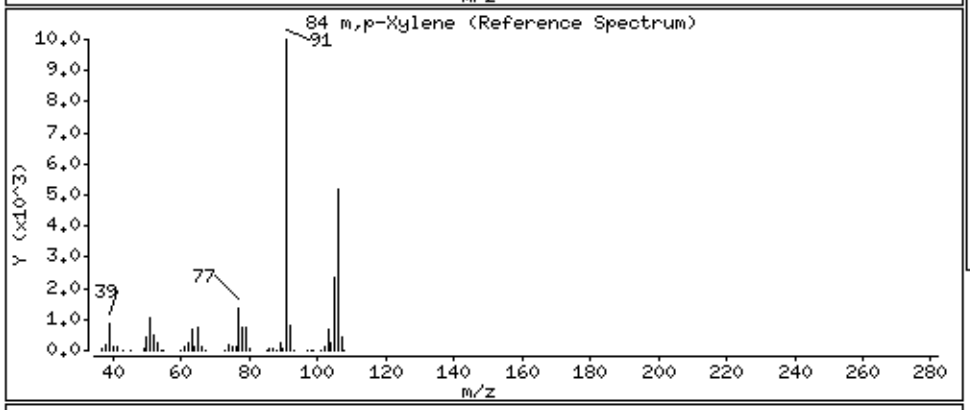
Column diameter: 0.53

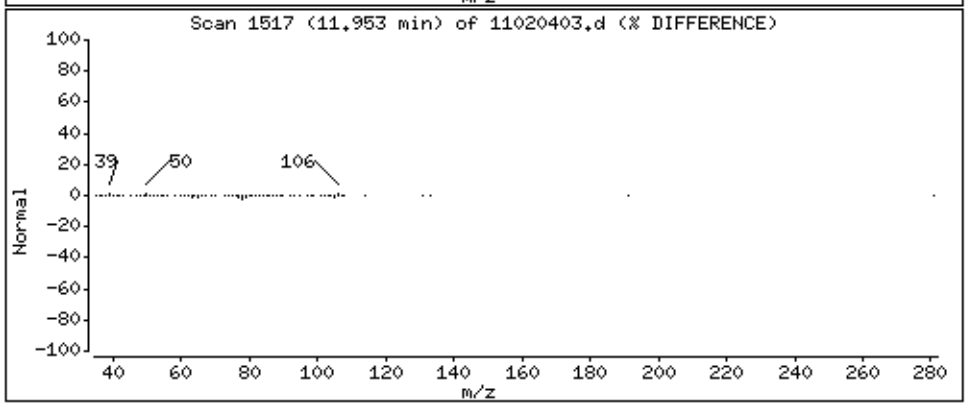
84 m,p-Xylene

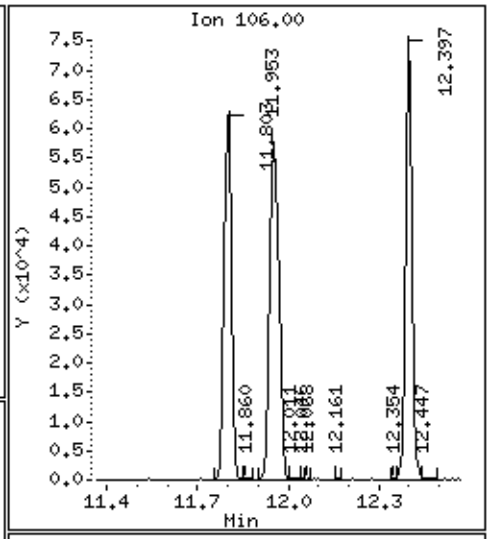
Concentration: 83.952 NG

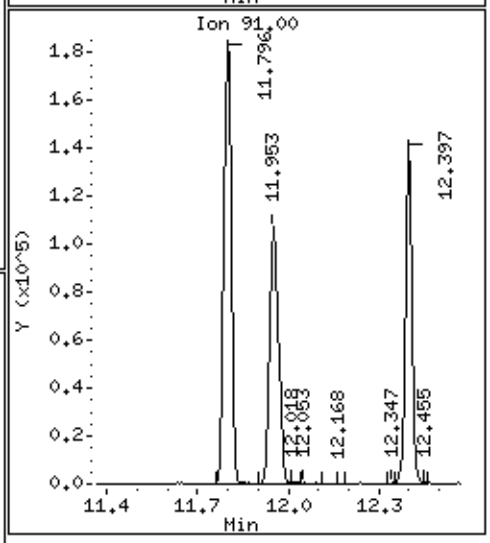












Data File: /chem/msd11.i/04feb16.b/11020403.d

Date : 04-FEB-2016 11:41

Client ID: LCSD

Instrument: msd11.i

Sample Info: ;VI VOC+PAH LCSD;LCSD

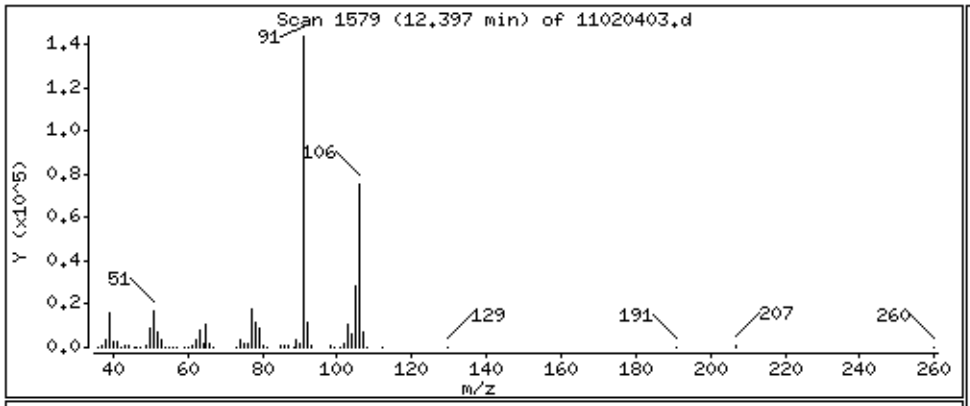
Operator: LA

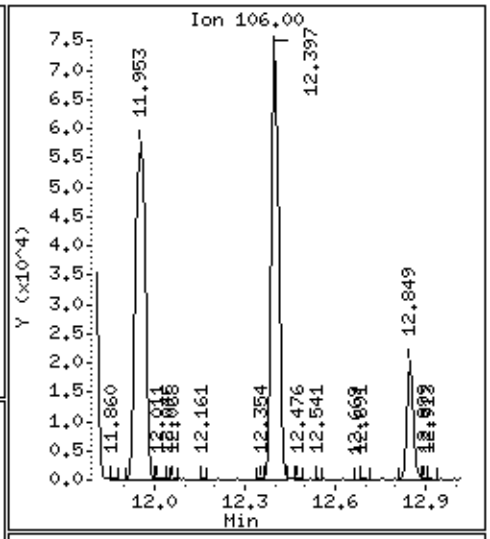
Column phase: RTx-624

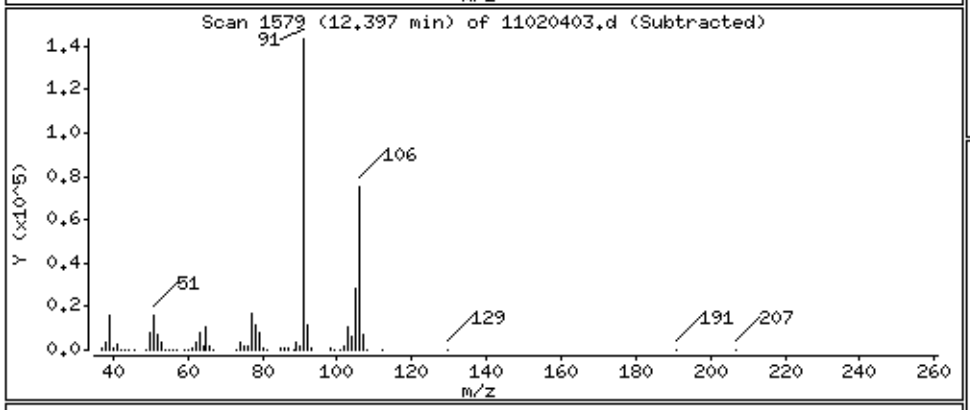
Column diameter: 0.53

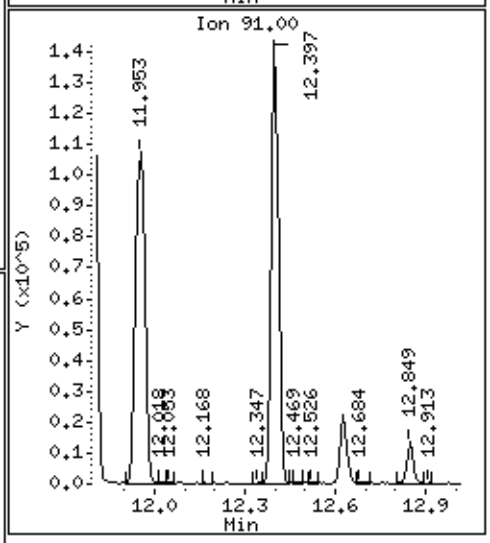
88 o-Xylene

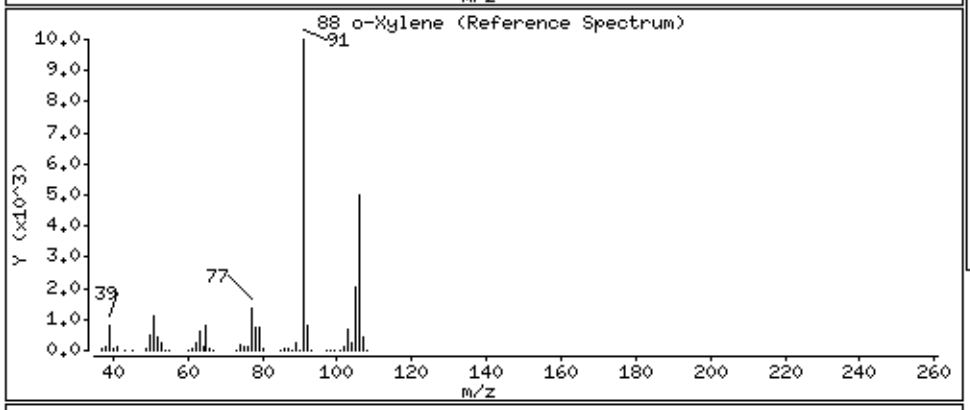
Concentration: 83.687 NG

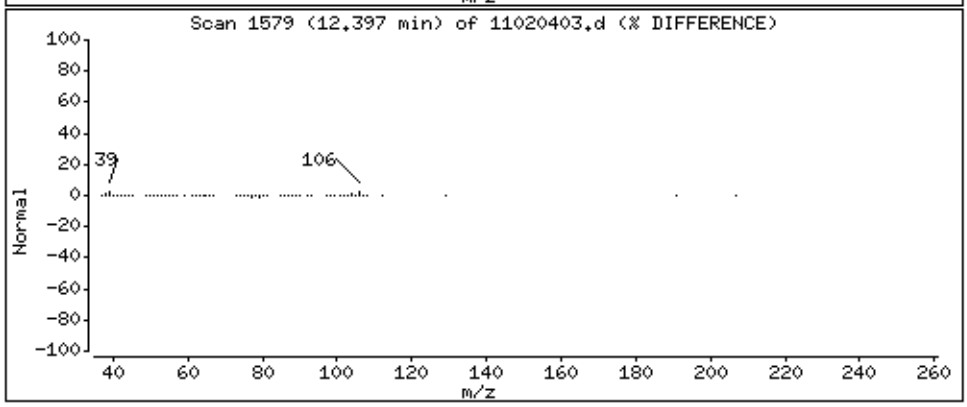












Data File: /chem/msd11.i/04feb16.b/11020403.d

Date : 04-FEB-2016 11:41

Client ID: LCSD

Instrument: msd11.i

Sample Info: ;VI VOC+PAH LCSD;LCSD

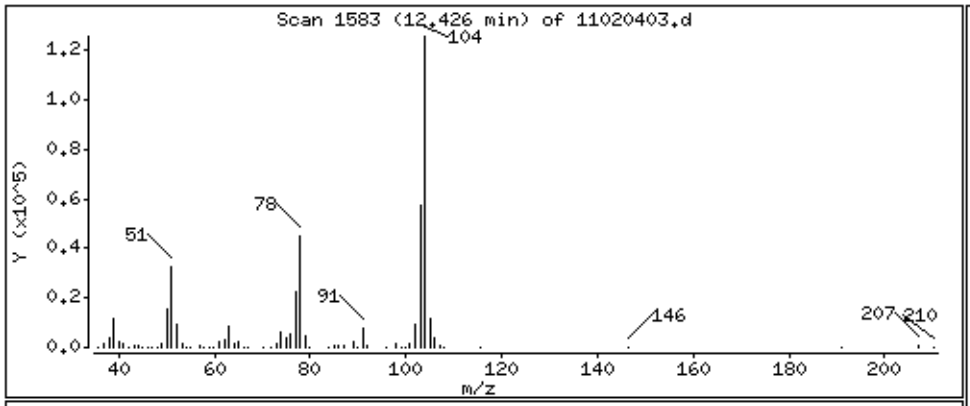
Operator: LA

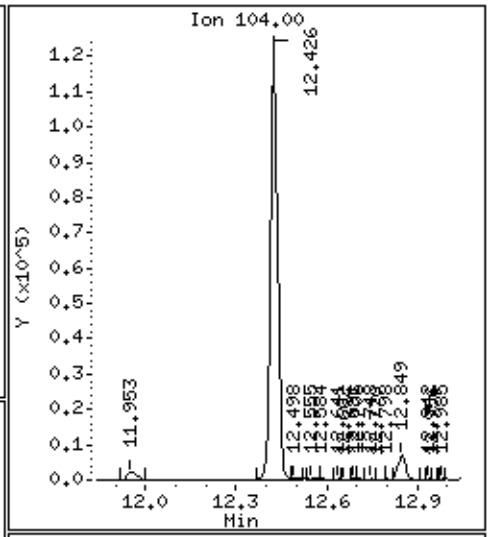
Column phase: RTx-624

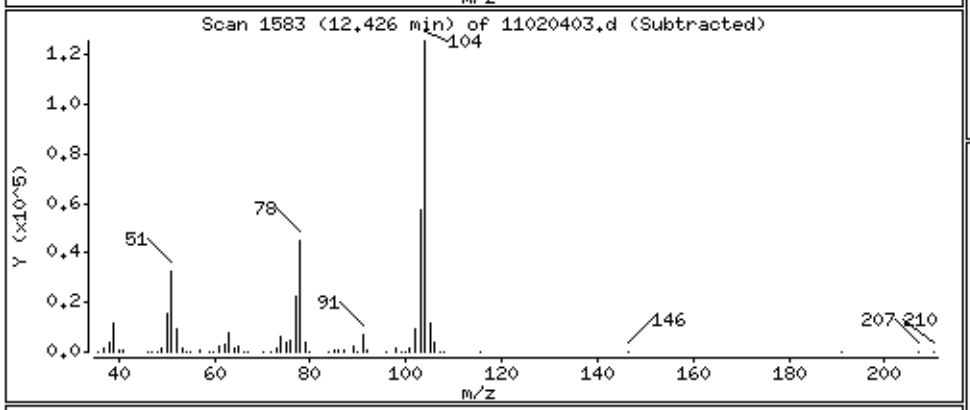
Column diameter: 0.53

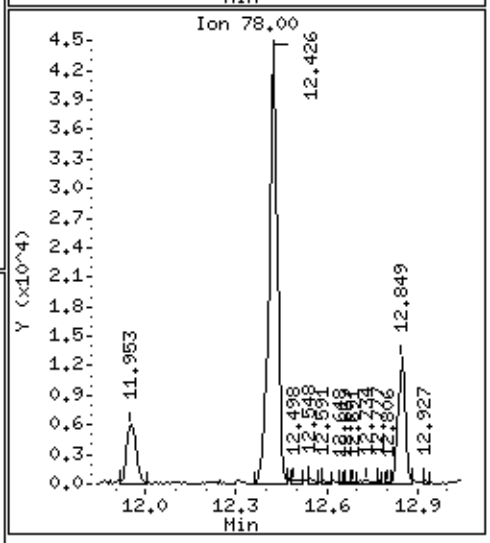
89 Styrene

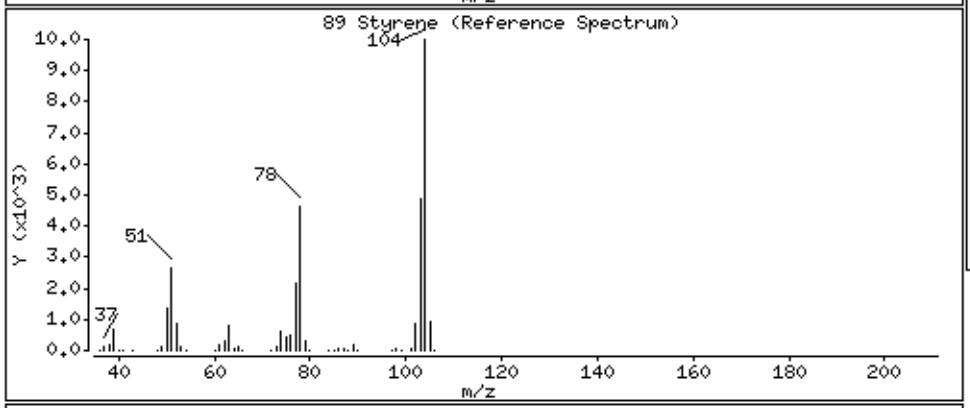
Concentration: 85.207 NG

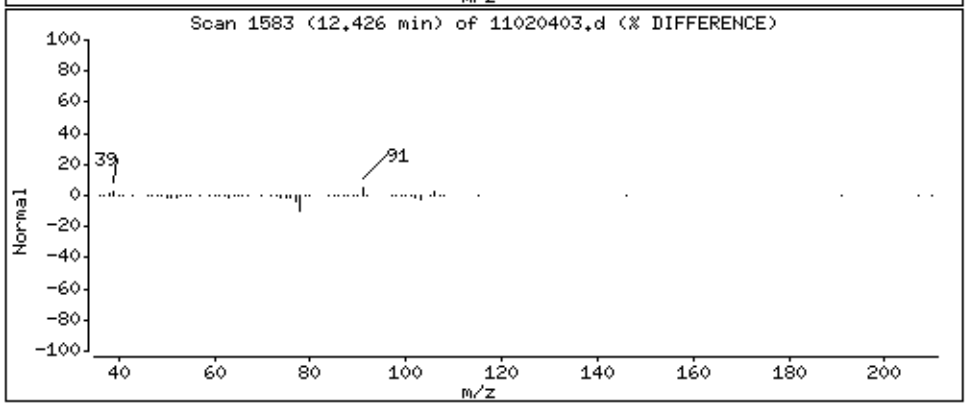












Data File: /chem/msd11.i/04feb16.b/11020403.d

Date : 04-FEB-2016 11:41

Client ID: LCSD

Instrument: msd11.i

Sample Info: ;VI VOC+PAH LCSD;LCSD

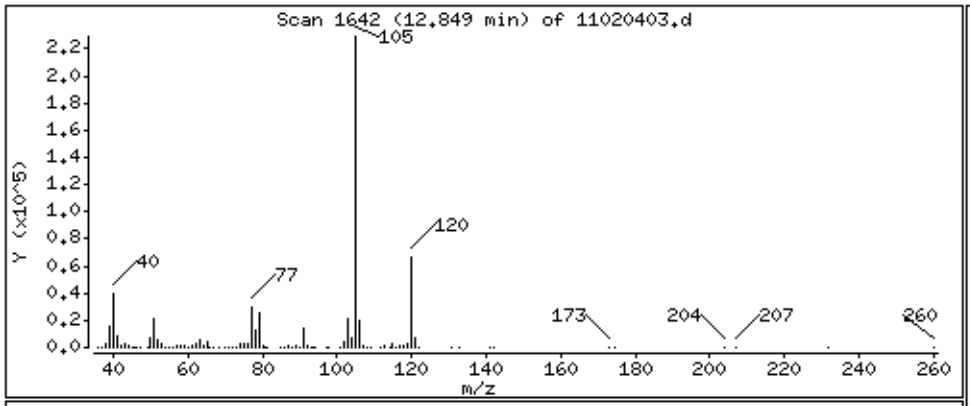
Operator: LA

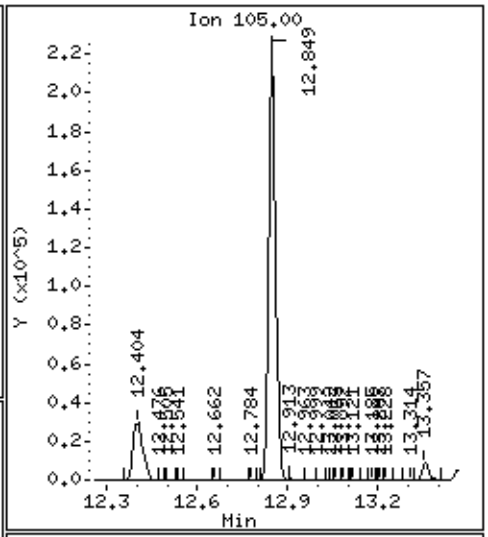
Column phase: RTx-624

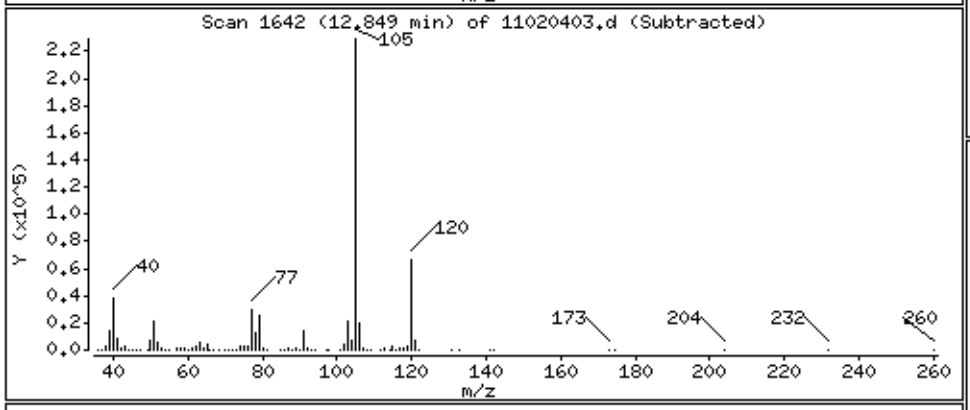
Column diameter: 0.53

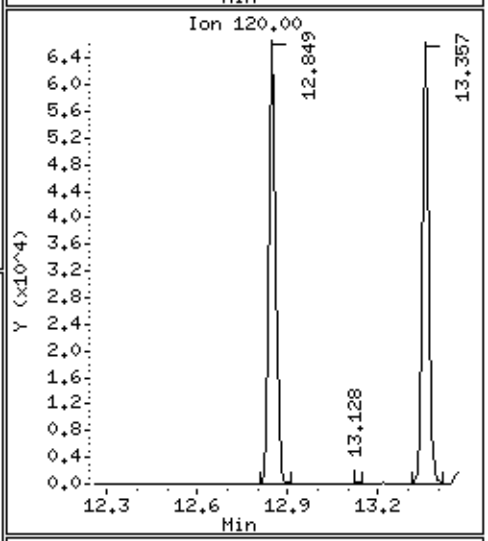
91 Cumene

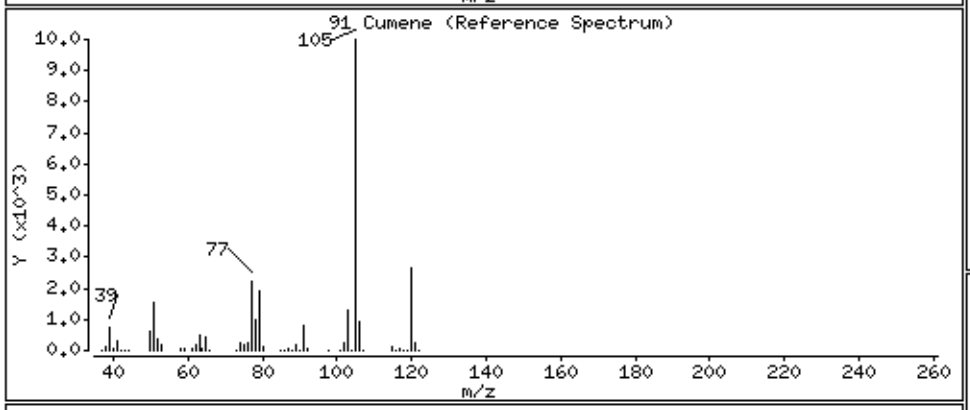
Concentration: 99.506 NG

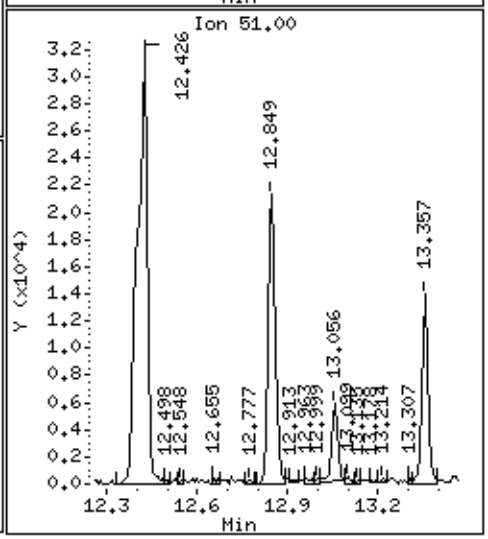


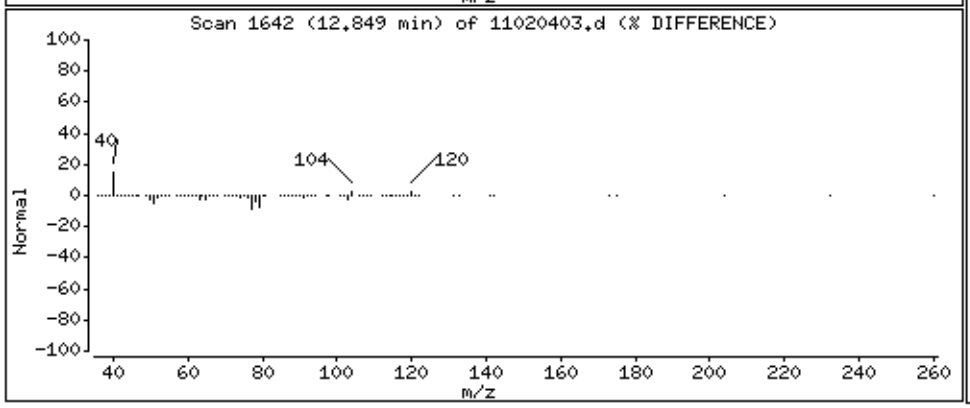












Data File: /chem/msd11.i/04feb16.b/11020403.d

Date : 04-FEB-2016 11:41

Client ID: LCSD

Instrument: msd11.i

Sample Info: ;VI VOC+PAH LCSD;LCSD

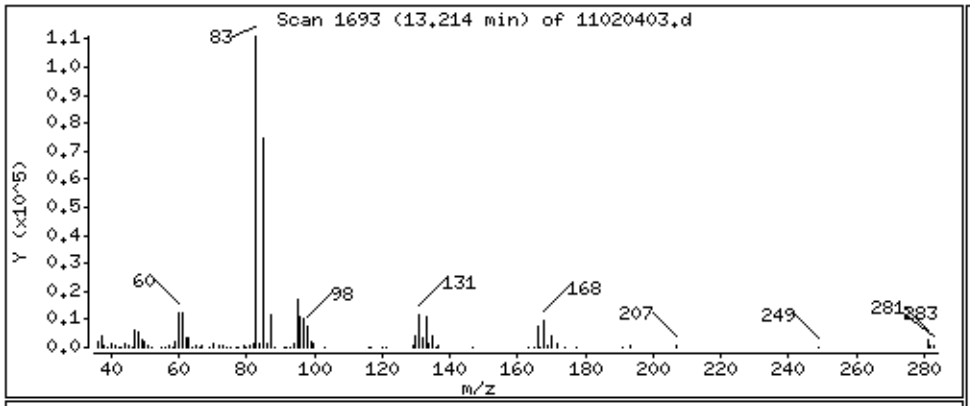
Operator: LA

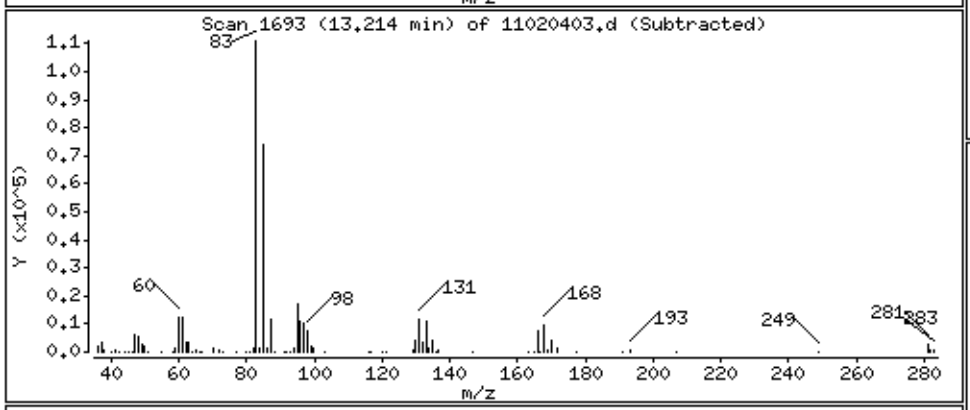
Column phase: RTx-624

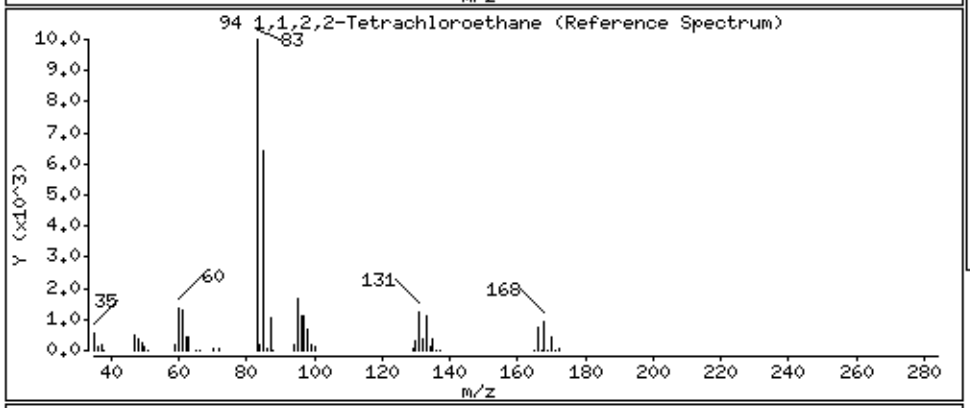
Column diameter: 0.53

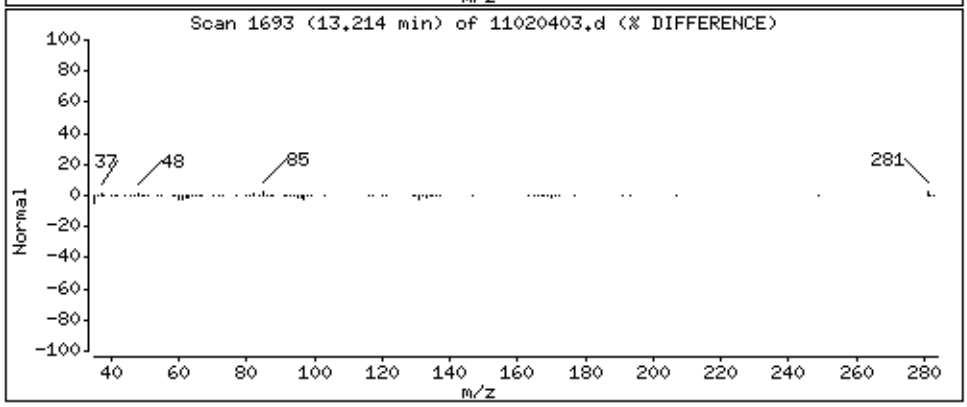
94 1,1,2,2-Tetrachloroethane

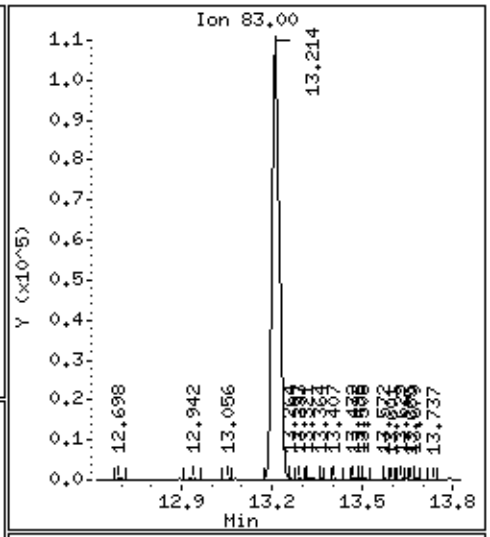
Concentration: 148.41 NG

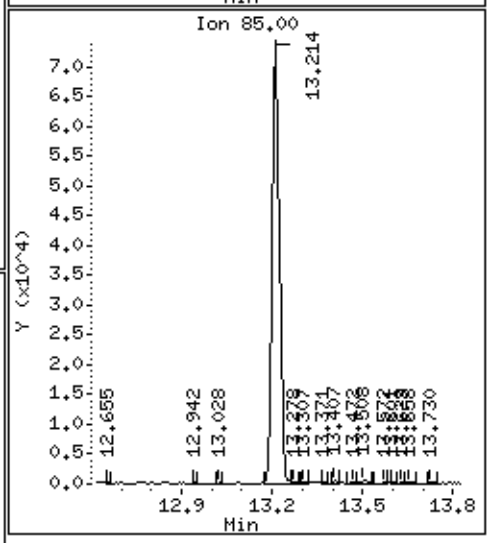












Data File: /chem/msd11.i/04feb16.b/11020403.d

Date : 04-FEB-2016 11:41

Client ID: LCSD

Instrument: msd11.i

Sample Info: ;VI VOC+PAH LCSD;LCSD

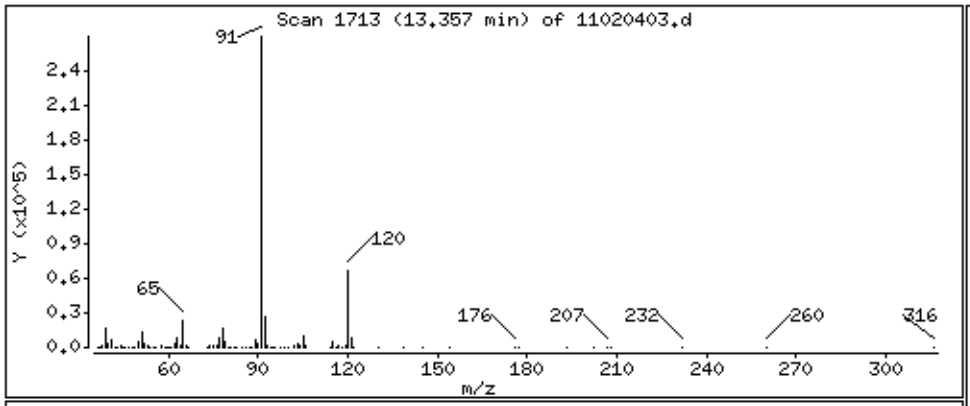
Operator: LA

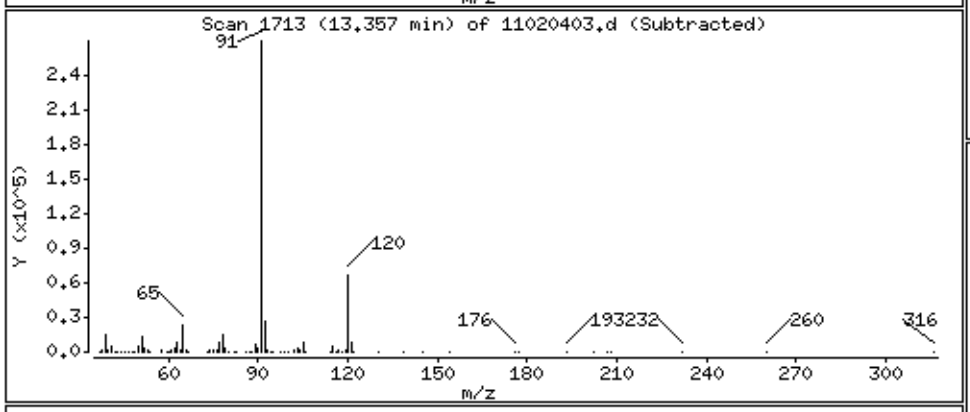
Column phase: RTx-624

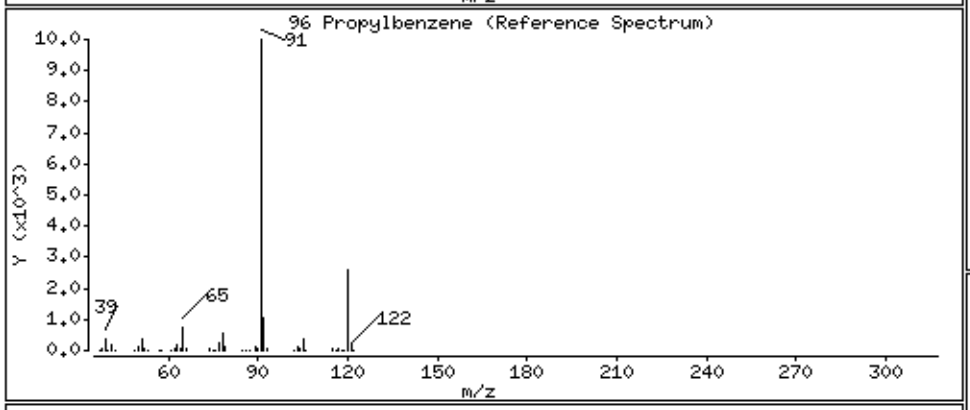
Column diameter: 0.53

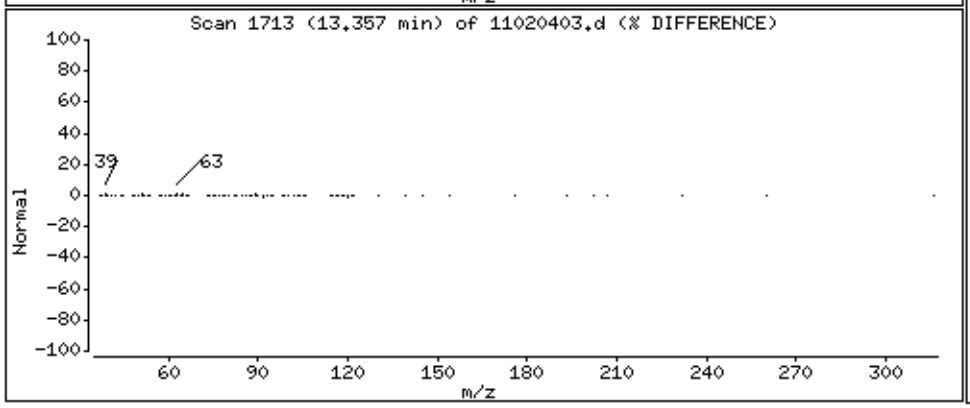
96 Propylbenzene

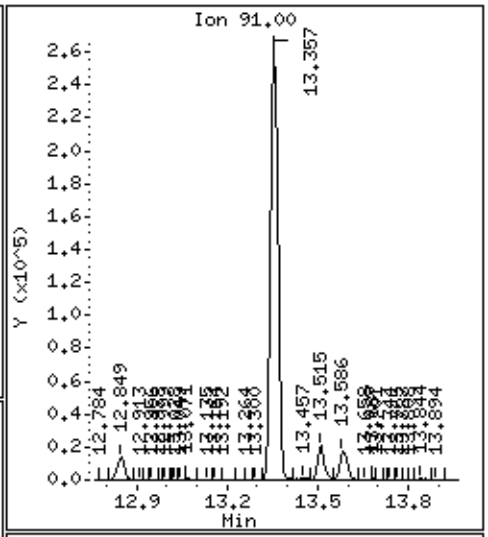
Concentration: 97.953 NG

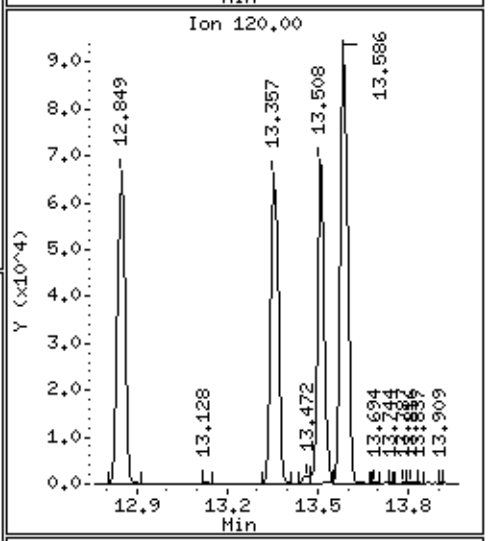


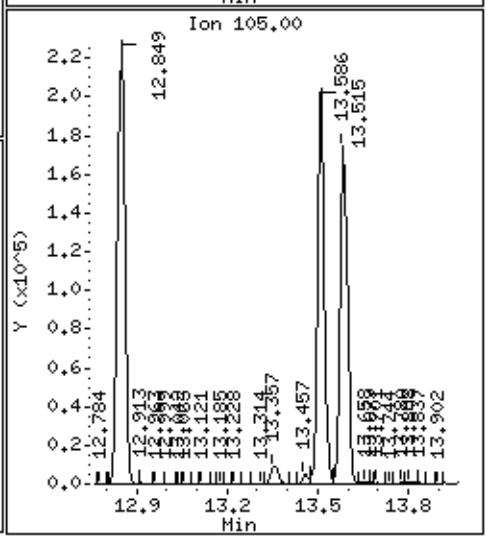












Data File: /chem/msd11.i/04feb16.b/11020403.d

Date : 04-FEB-2016 11:41

Client ID: LCSD

Instrument: msd11.i

Sample Info: ;VI VOC+PAH LCSD;LCSD

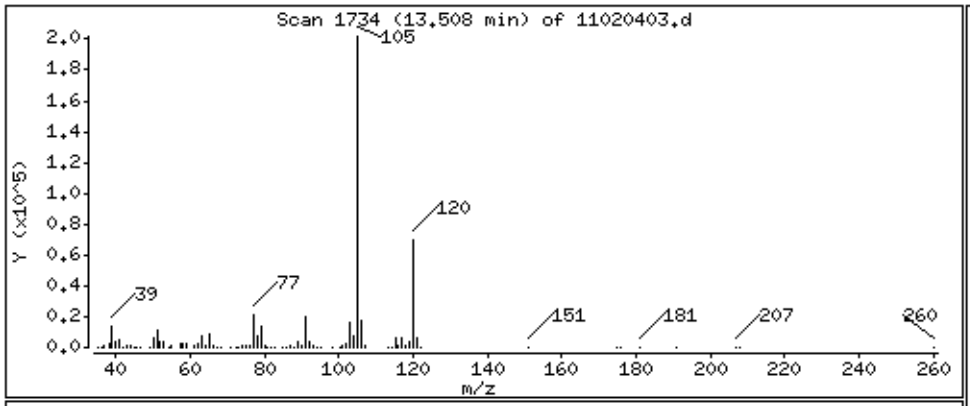
Operator: LA

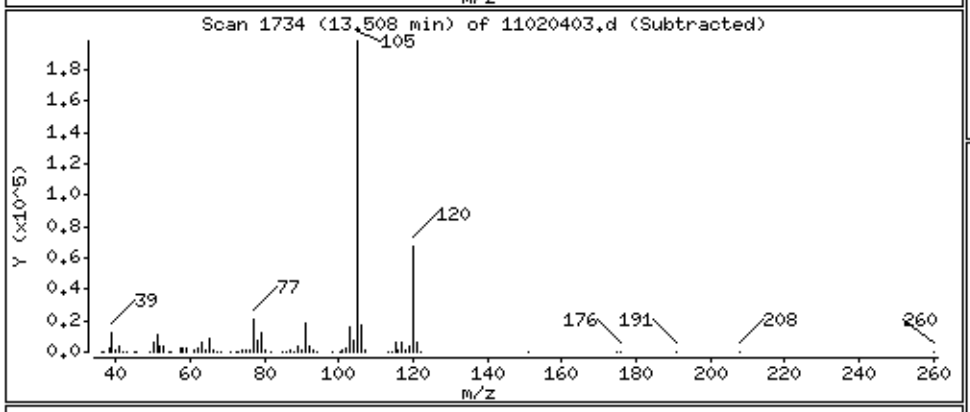
Column phase: RTx-624

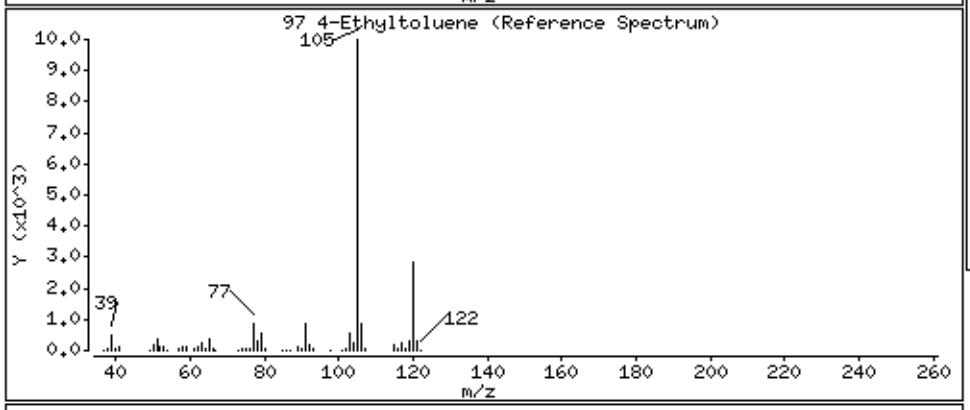
Column diameter: 0.53

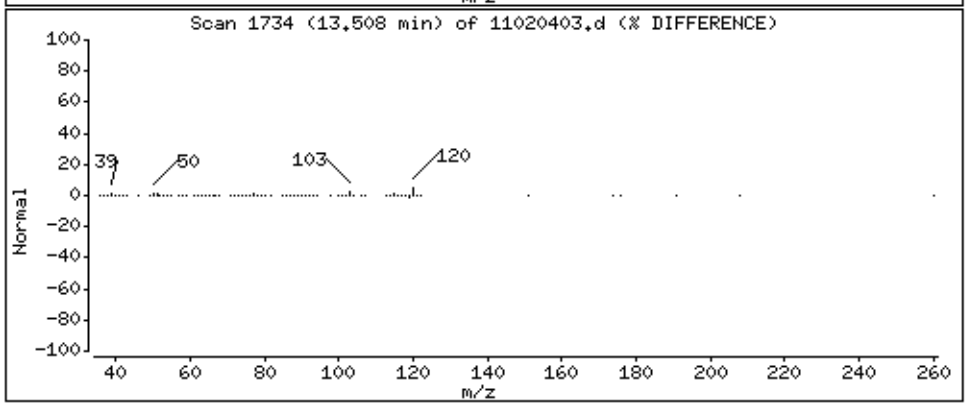
97 4-Ethyltoluene

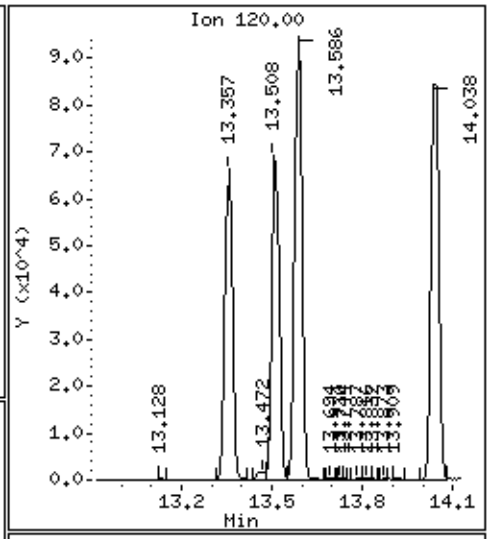
Concentration: 97.183 NG

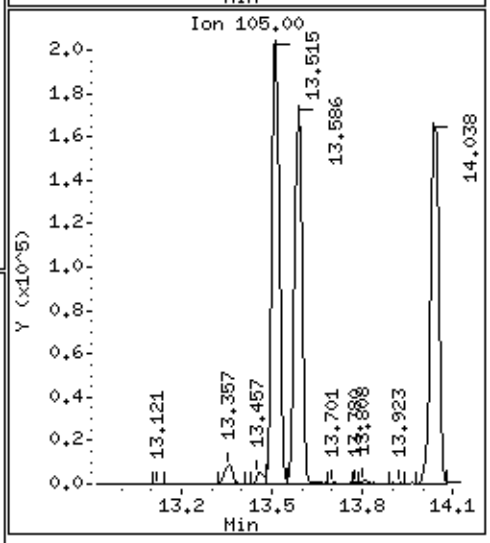












Data File: /chem/msd11.i/04feb16.b/11020403.d

Date : 04-FEB-2016 11:41

Client ID: LCSD

Instrument: msd11.i

Sample Info: ;VI VOC+PAH LCSD;LCSD

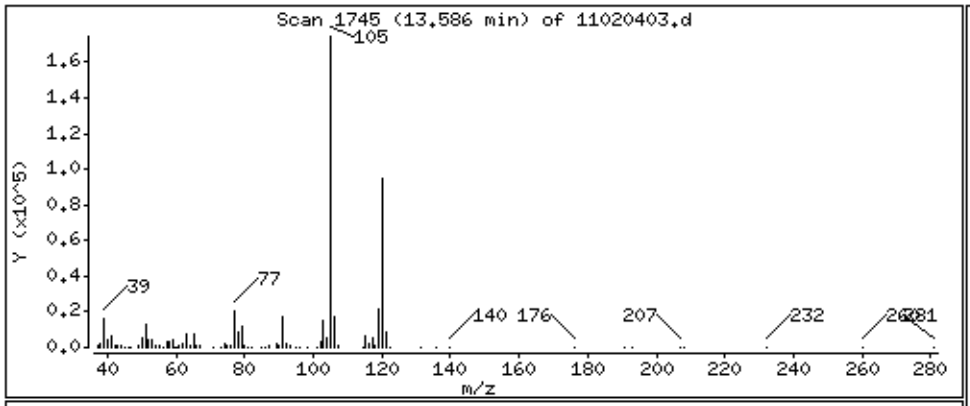
Operator: LA

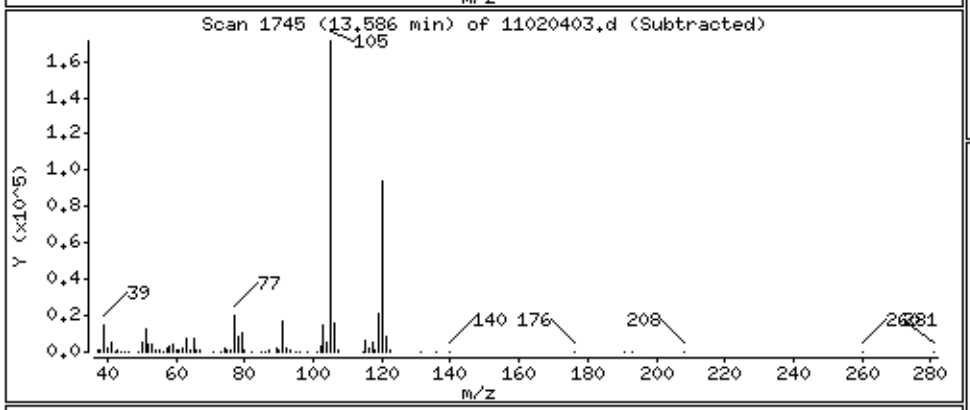
Column phase: RTx-624

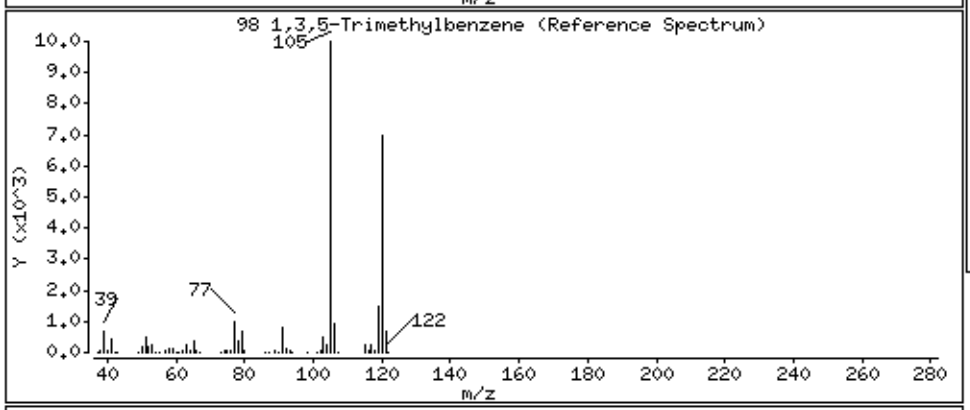
Column diameter: 0.53

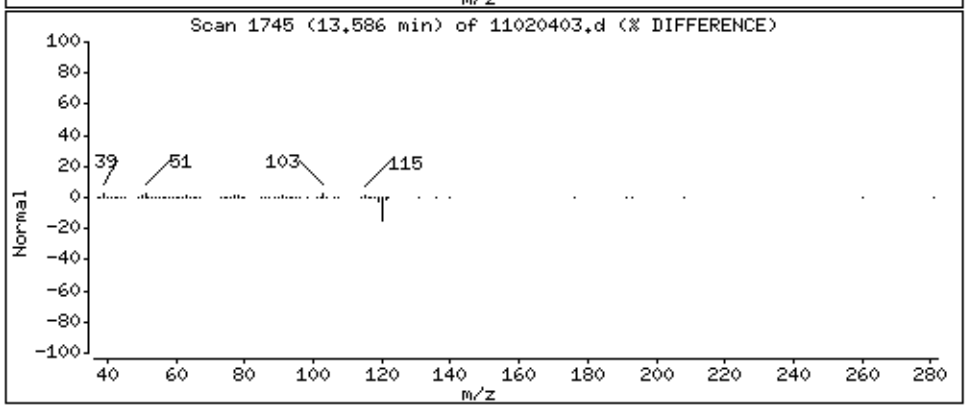
98 1,3,5-Trimethylbenzene

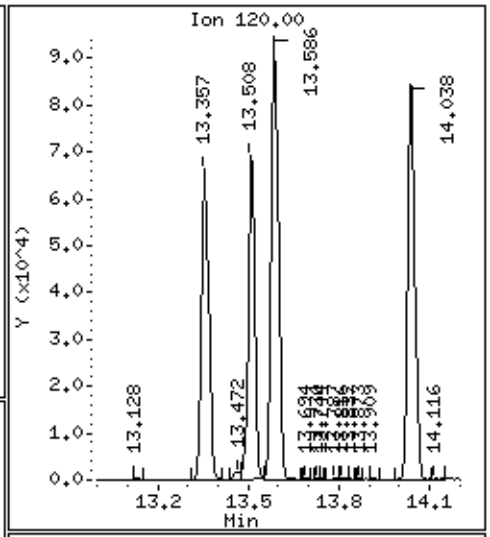
Concentration: 96.241 NG

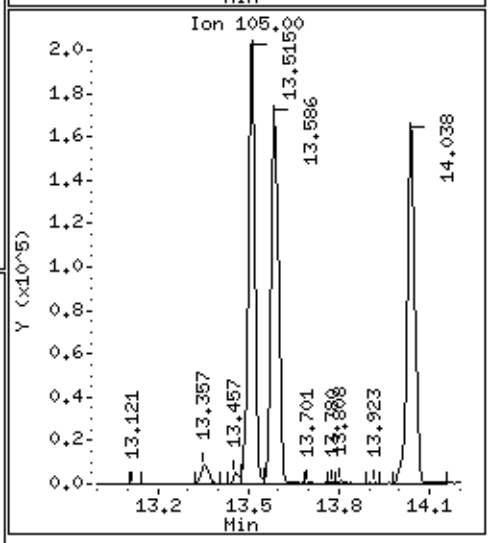












Data File: /chem/msd11.i/04feb16.b/11020403.d

Date : 04-FEB-2016 11:41

Client ID: LCSD

Instrument: msd11.i

Sample Info: ;VI VOC+PAH LCSD;LCSD

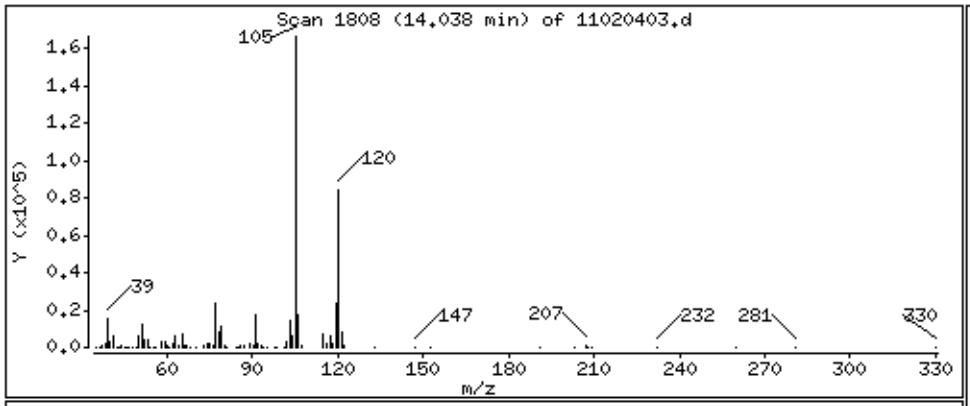
Operator: LA

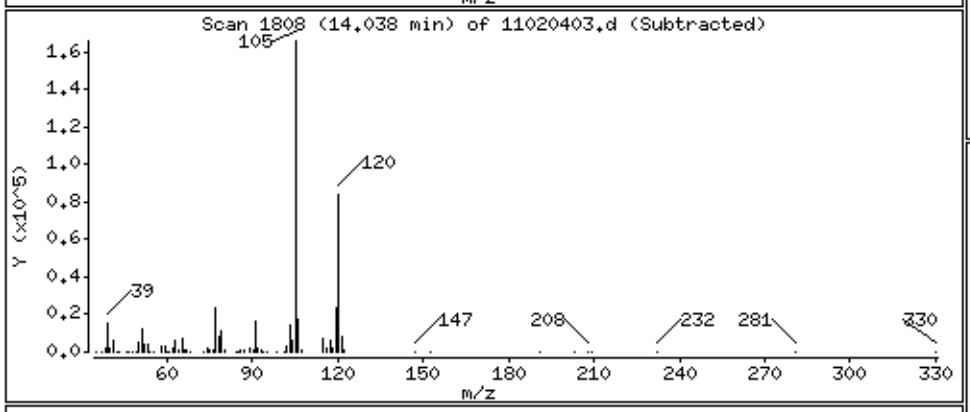
Column phase: RTx-624

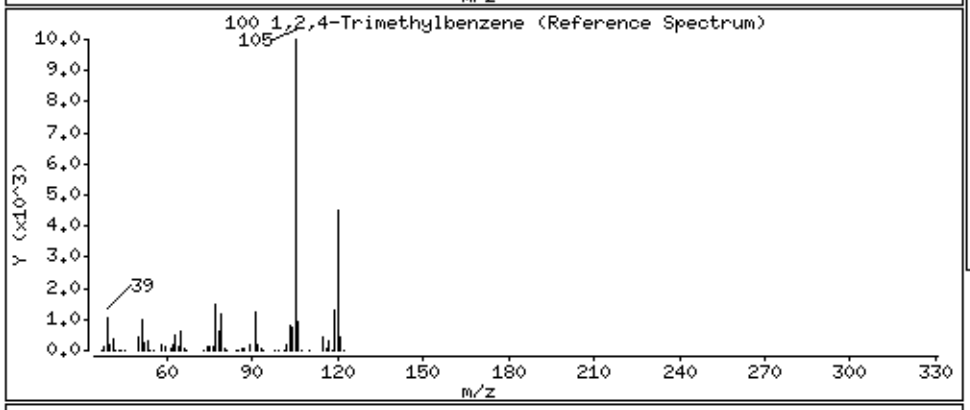
Column diameter: 0.53

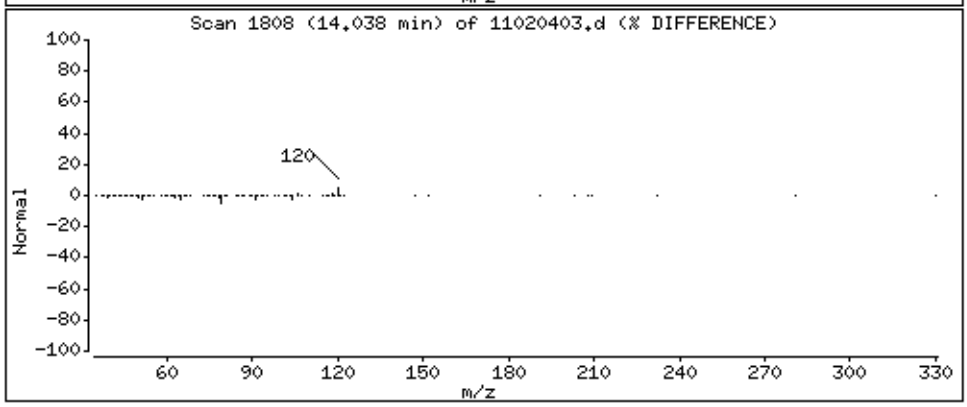
100 1,2,4-Trimethylbenzene

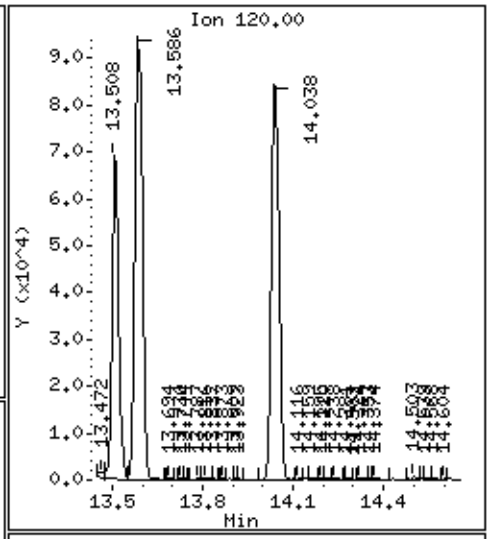
Concentration: 97.002 NG

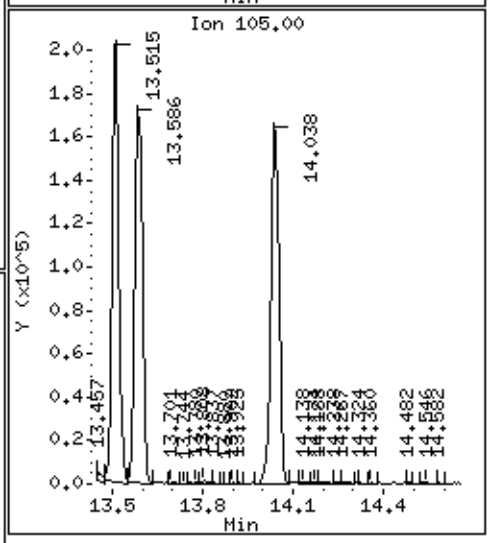












Data File: /chem/msd11.i/04feb16.b/11020403.d

Date : 04-FEB-2016 11:41

Client ID: LCSD

Instrument: msd11.i

Sample Info: ;VI VOC+PAH LCSD;LCSD

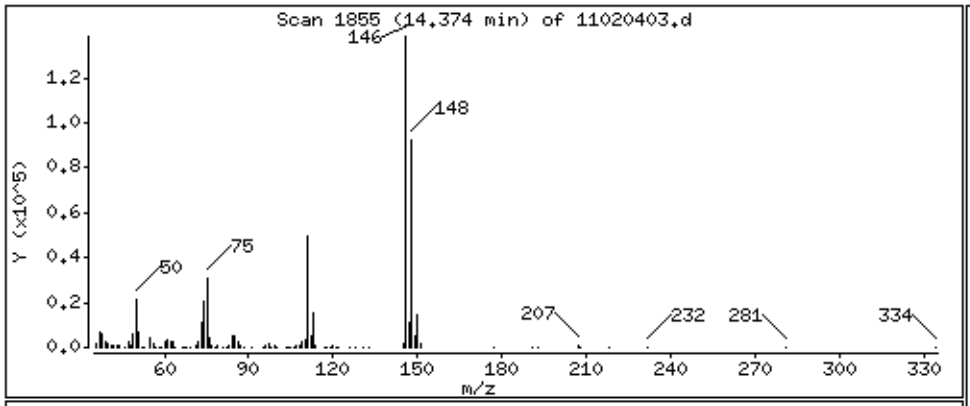
Operator: LA

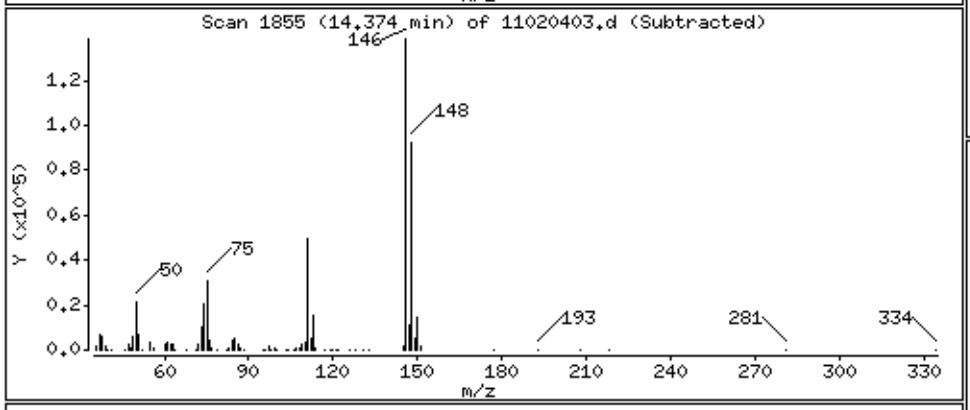
Column phase: RTx-624

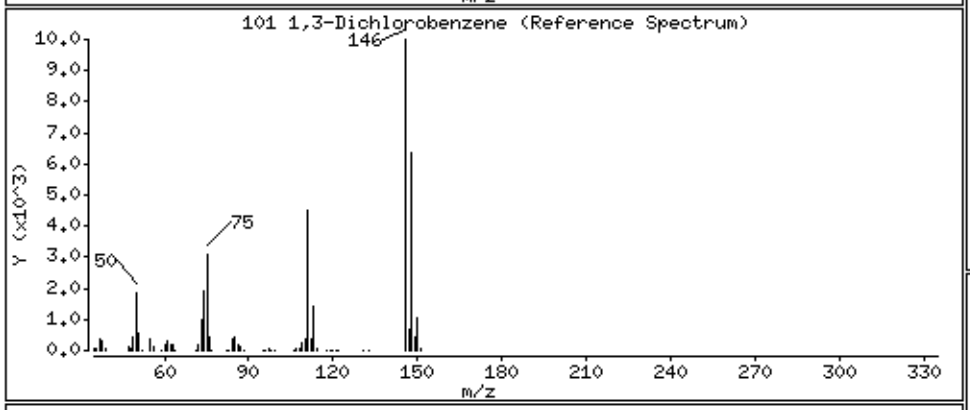
Column diameter: 0.53

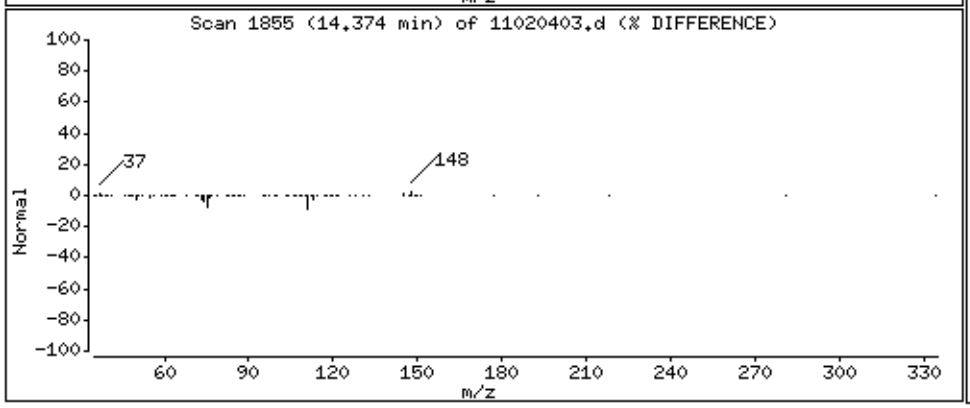
101 1,3-Dichlorobenzene

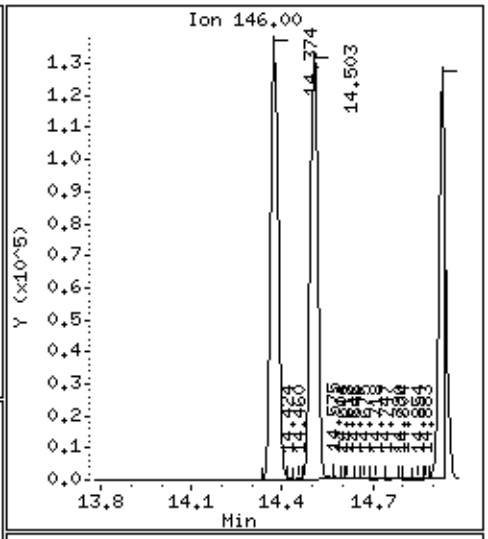
Concentration: 119.28 NG

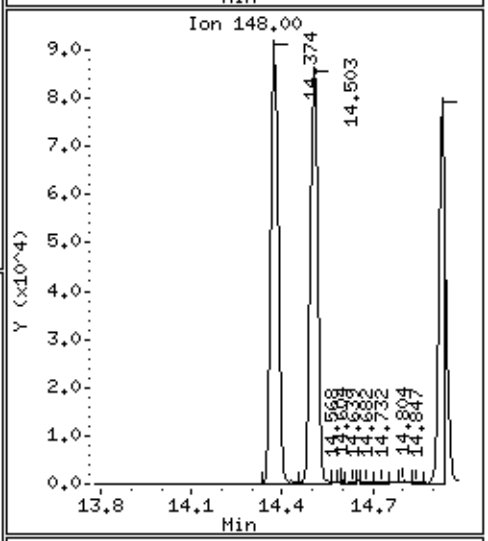


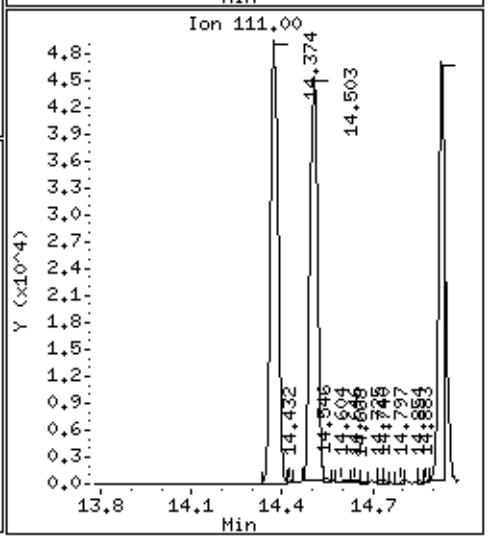












Data File: /chem/msd11.i/04feb16.b/11020403.d

Date : 04-FEB-2016 11:41

Client ID: LCSD

Instrument: msd11.i

Sample Info: ;VI VOC+PAH LCSD;LCSD

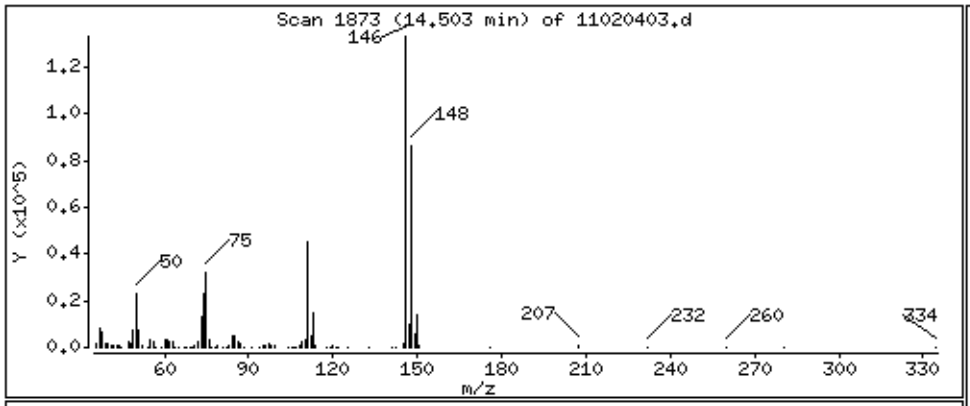
Operator: LA

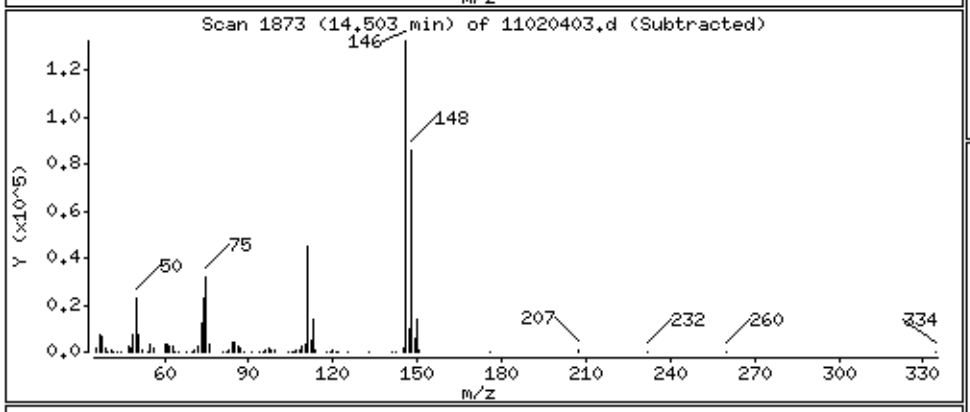
Column phase: RTx-624

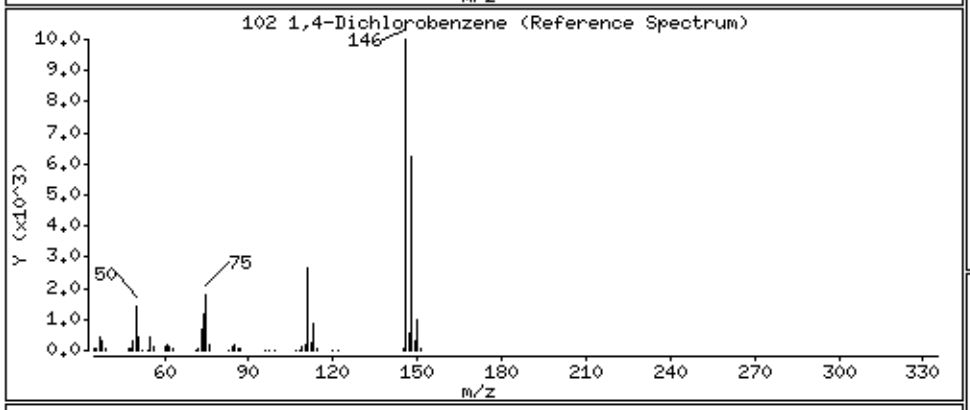
Column diameter: 0.53

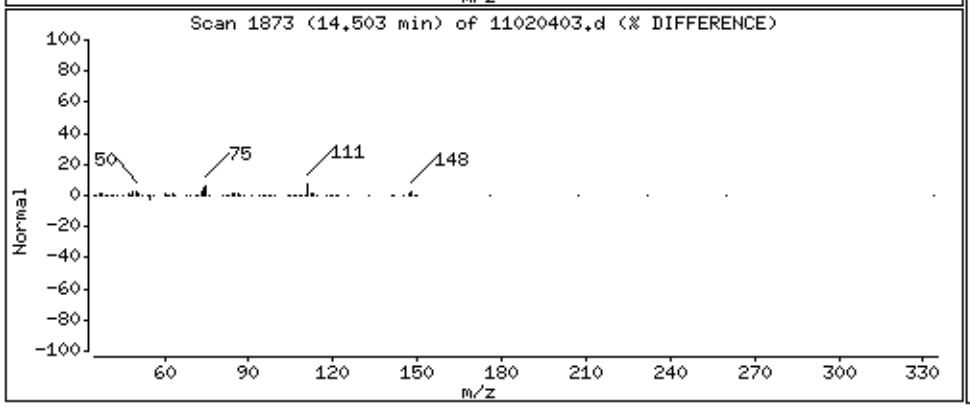
102 1,4-Dichlorobenzene

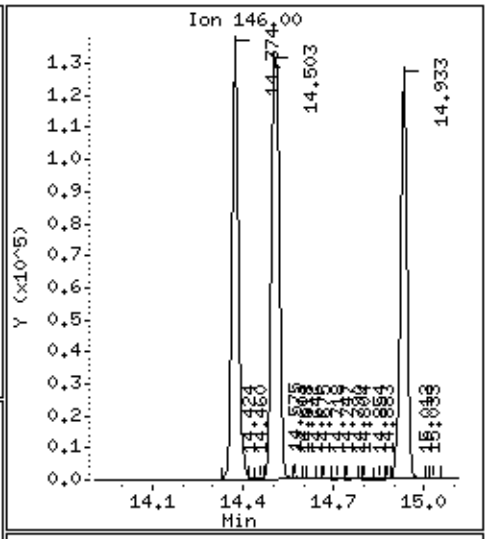
Concentration: 121.09 NG

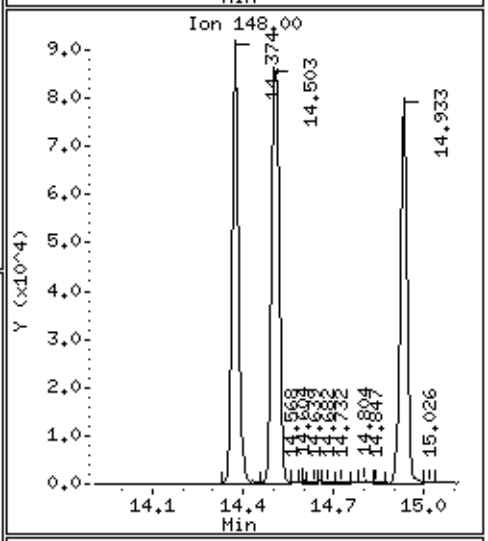


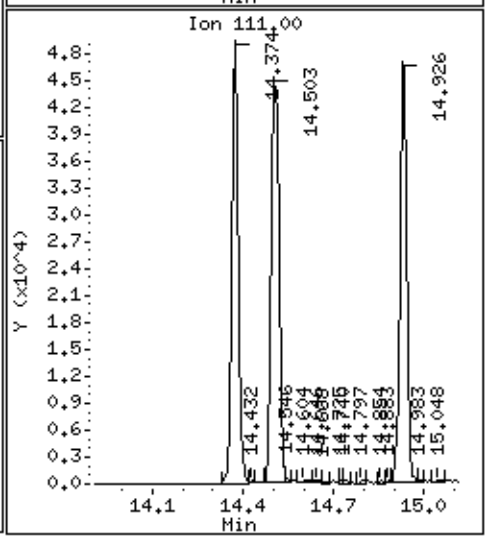












Data File: /chem/msd11.i/04feb16.b/11020403.d

Date : 04-FEB-2016 11:41

Client ID: LCSD

Instrument: msd11.i

Sample Info: ;VI VOC+PAH LCSD;LCSD

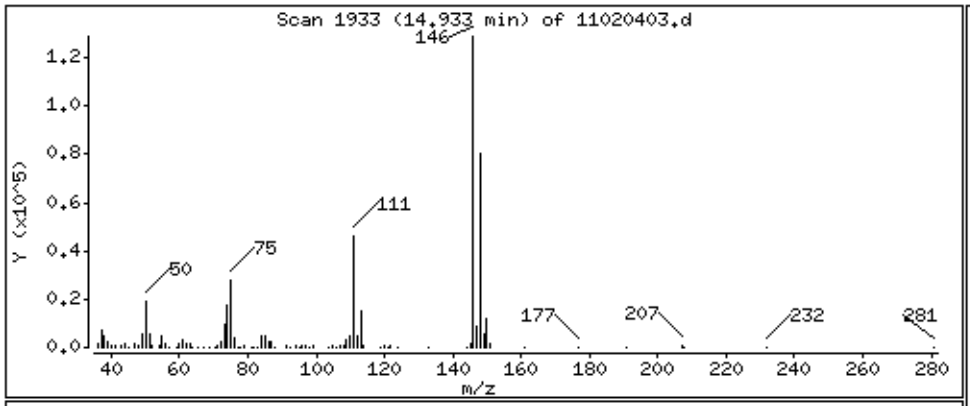
Operator: LA

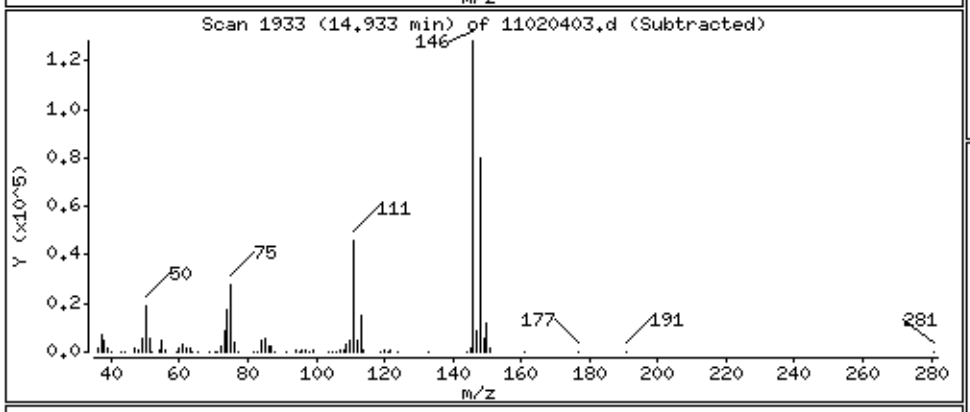
Column phase: RTx-624

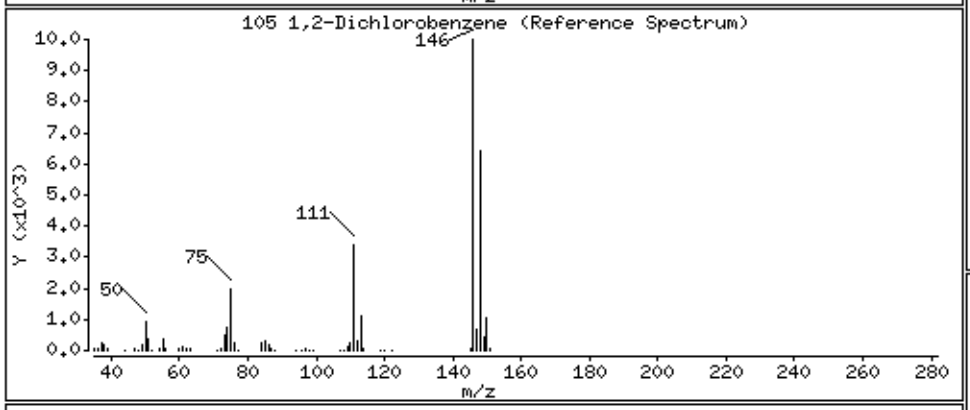
Column diameter: 0.53

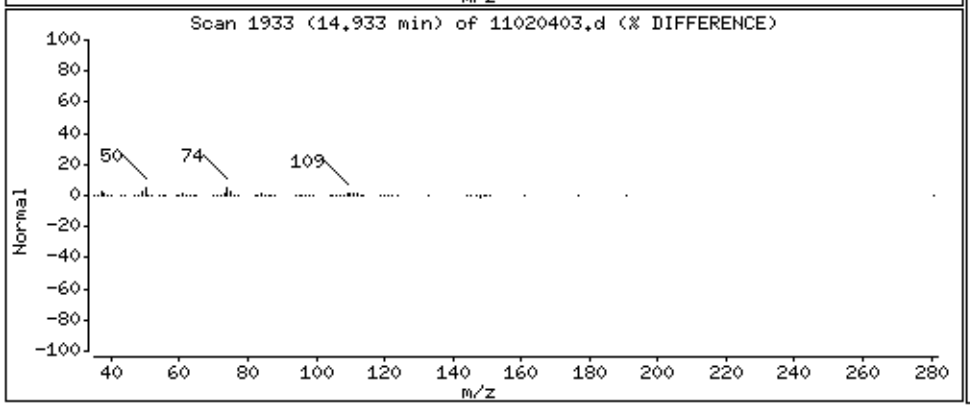
105 1,2-Dichlorobenzene

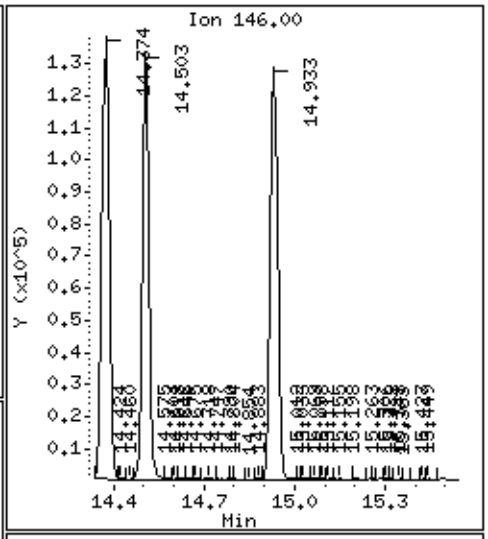
Concentration: 117.88 NG

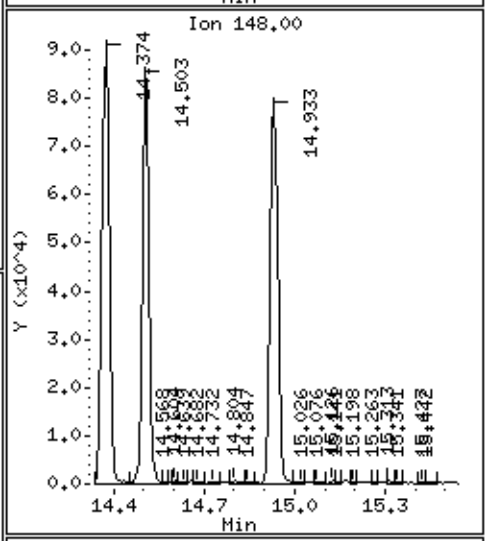


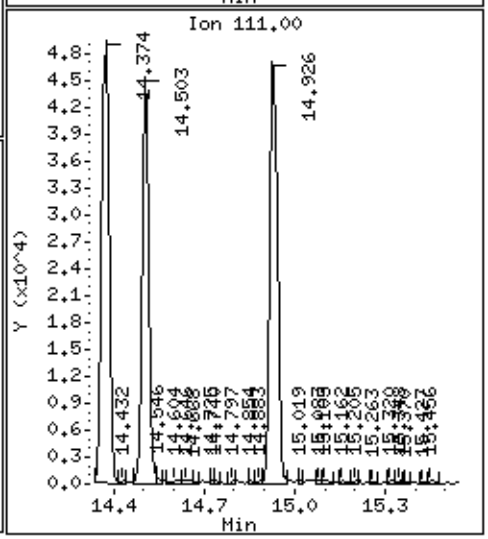












Data File: /chem/msd11.i/04feb16.b/11020403.d

Date : 04-FEB-2016 11:41

Client ID: LCSD

Instrument: msd11.i

Sample Info: ;VI VOC+PAH LCSD;LCSD

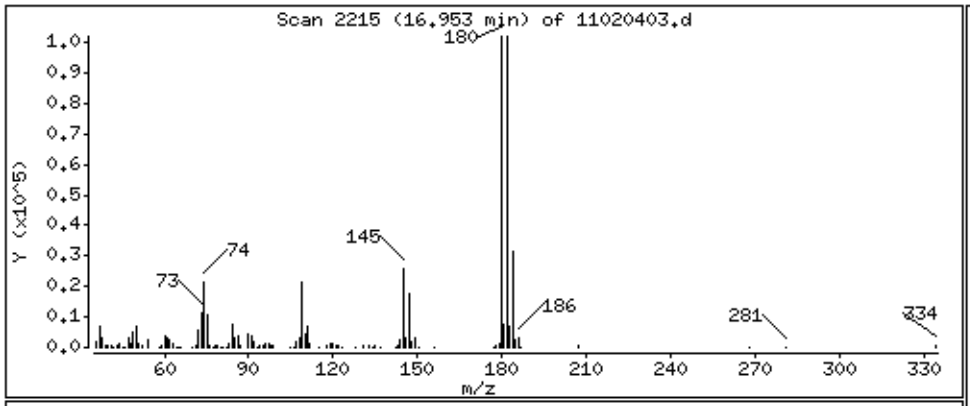
Operator: LA

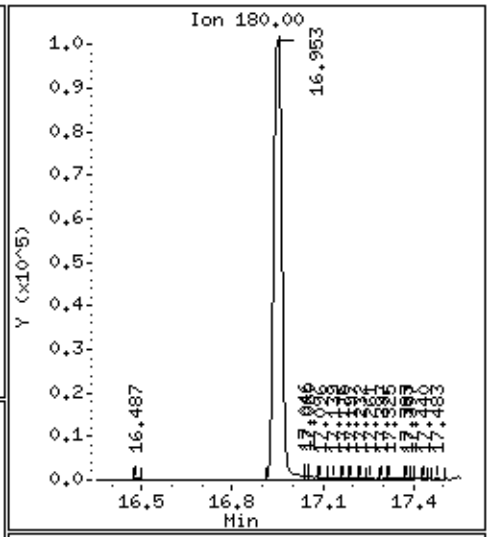
Column phase: RTx-624

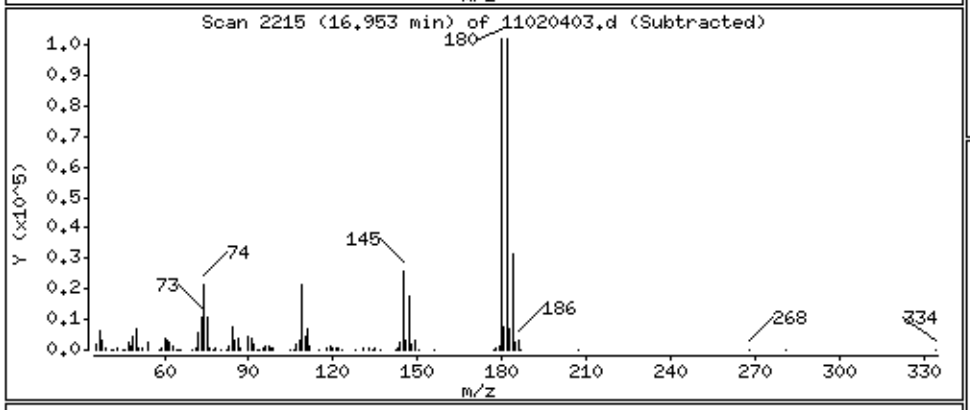
Column diameter: 0.53

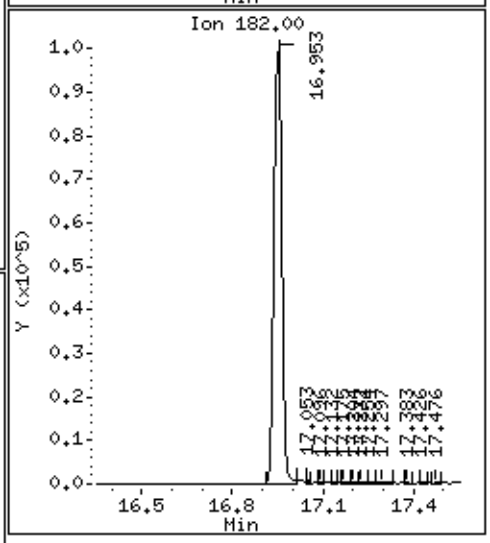
106 1,2,4-Trichlorobenzene

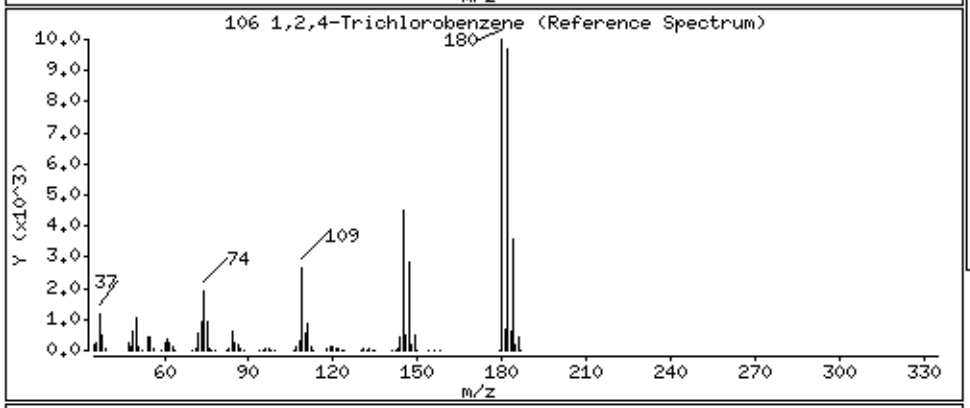
Concentration: 142.83 NG

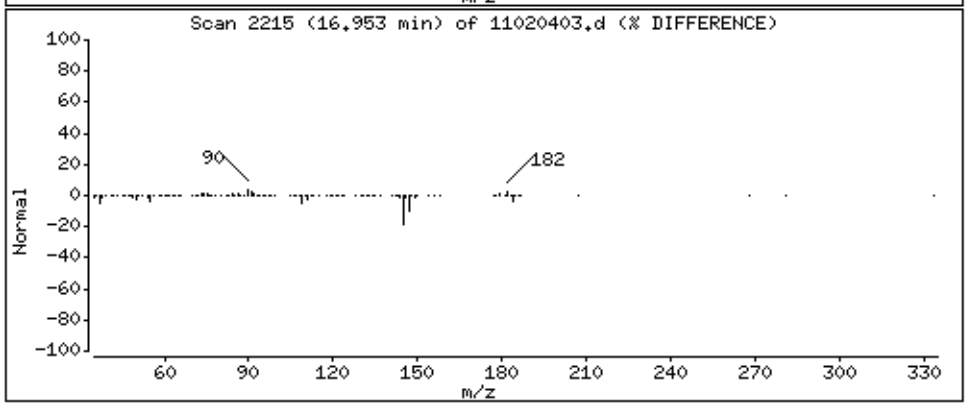












Data File: /chem/msd11.i/04feb16.b/11020403.d

Date : 04-FEB-2016 11:41

Client ID: LCSD

Instrument: msd11.i

Sample Info: ;VI VOC+PAH LCSD;LCSD

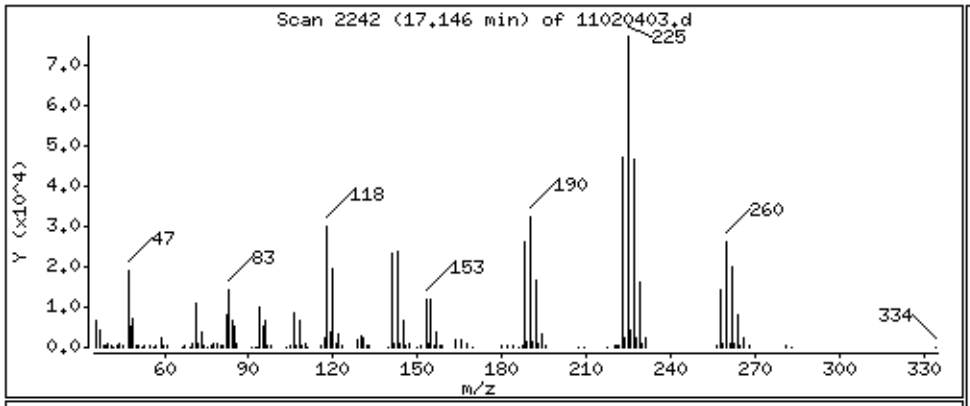
Operator: LA

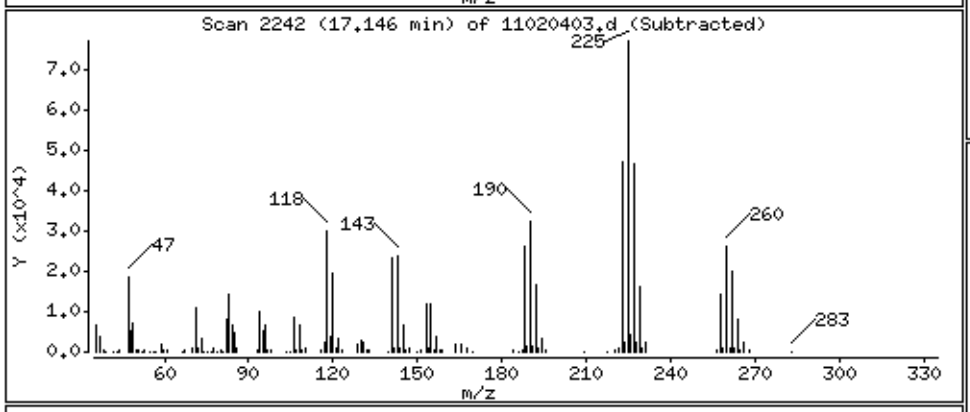
Column phase: RTx-624

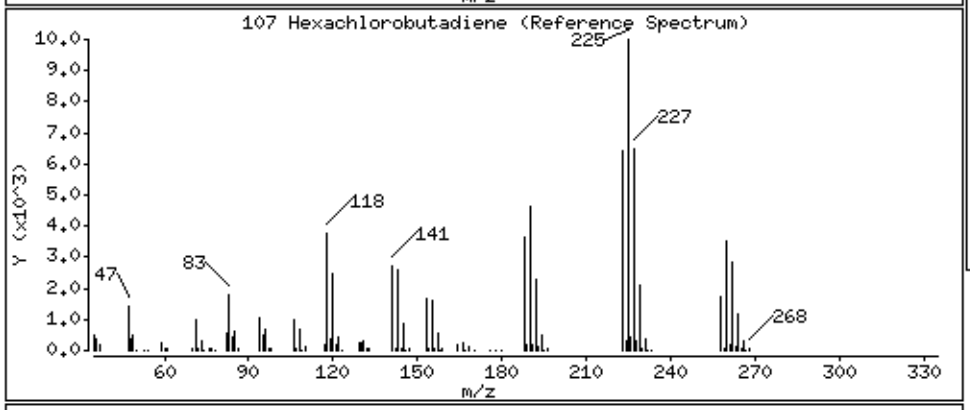
Column diameter: 0.53

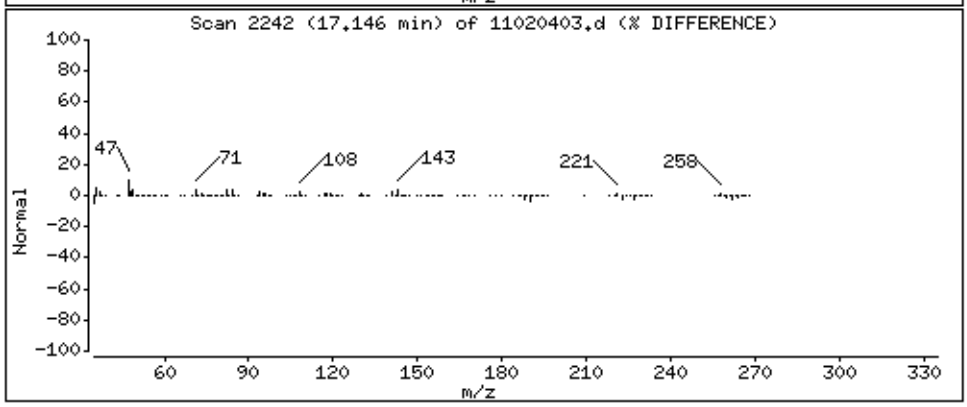
107 Hexachlorobutadiene

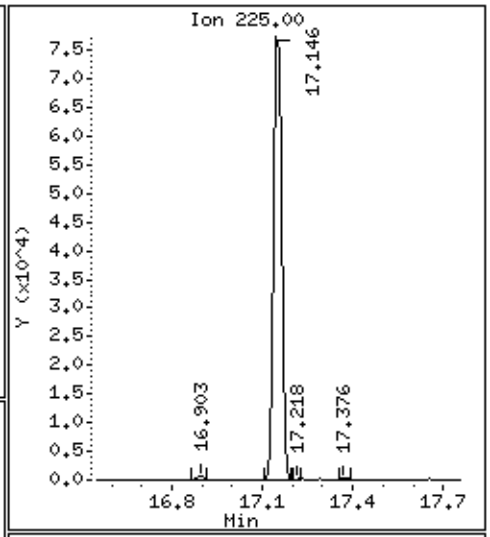
Concentration: 188.36 NG

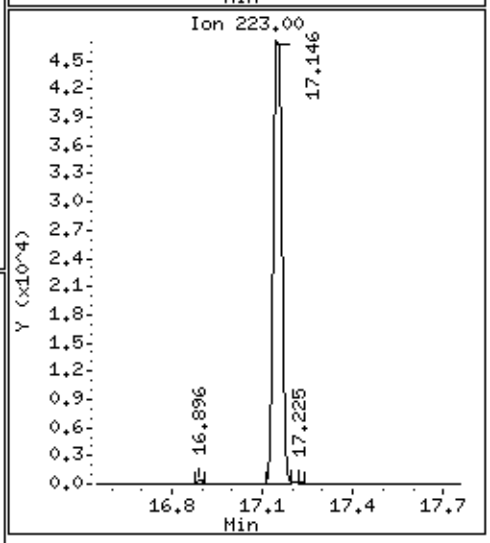












Data File: /chem/msd11.i/04feb16.b/11020403.d

Date : 04-FEB-2016 11:41

Client ID: LCSD

Instrument: msd11.i

Sample Info: ;VI VOC+PAH LCSD;LCSD

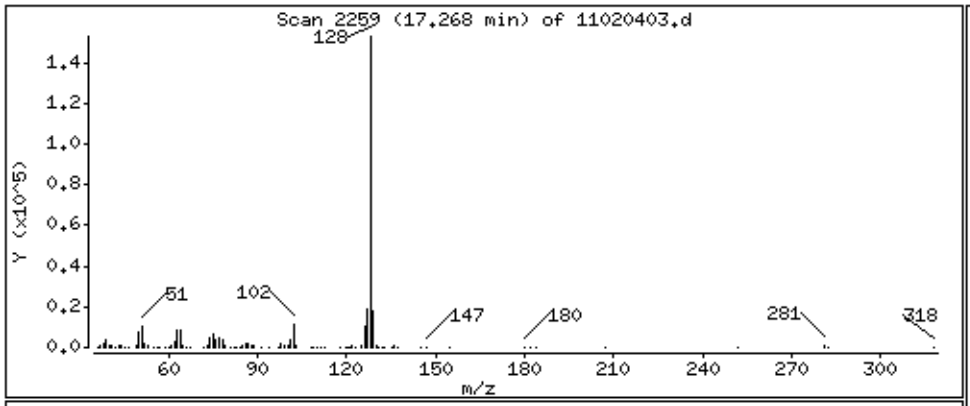
Operator: LA

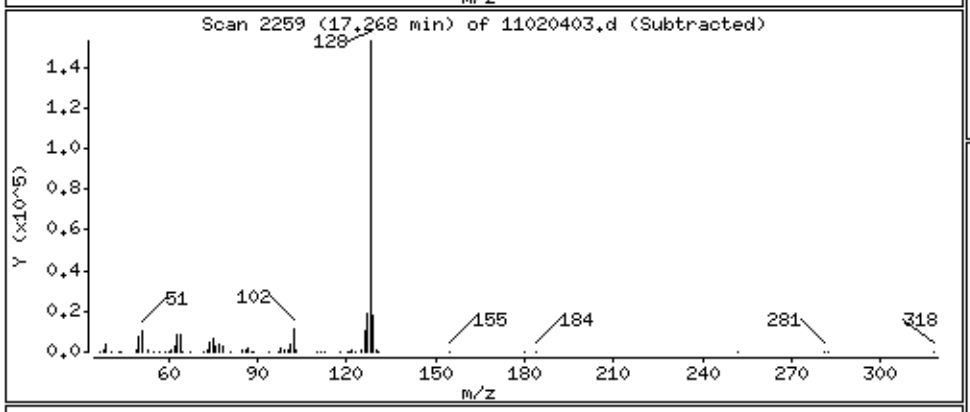
Column phase: RTx-624

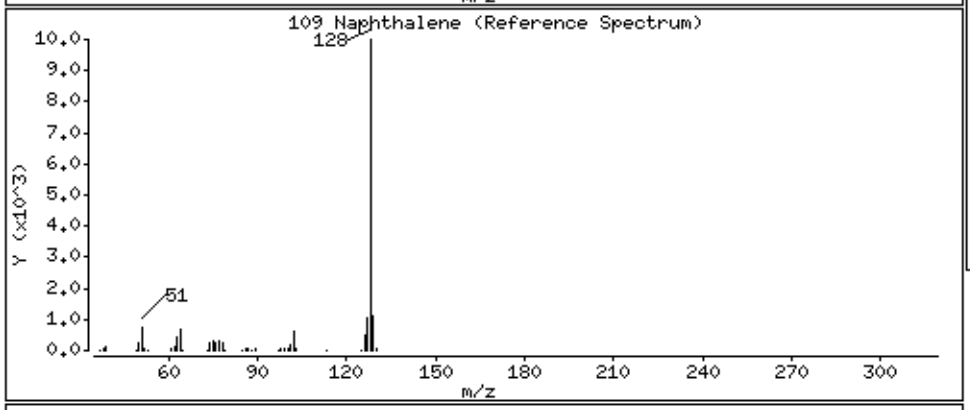
Column diameter: 0.53

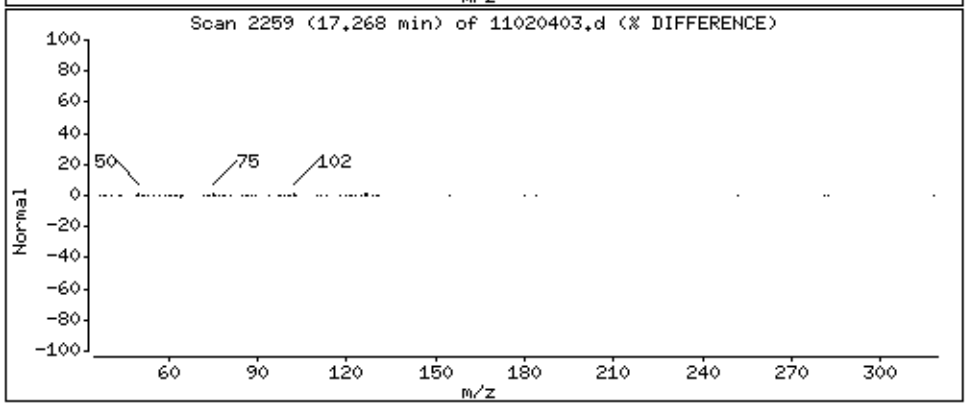
109 Naphthalene

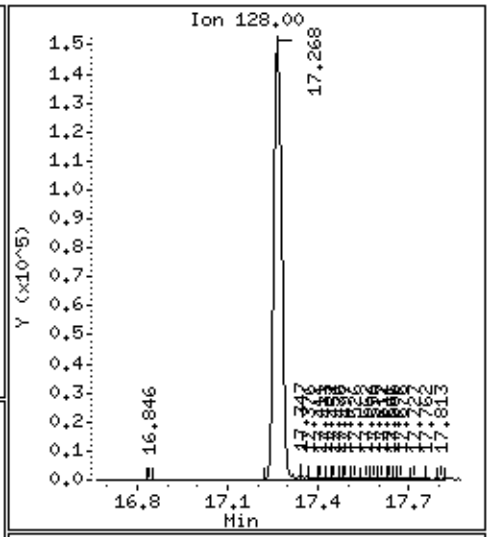
Concentration: 51.809 NG

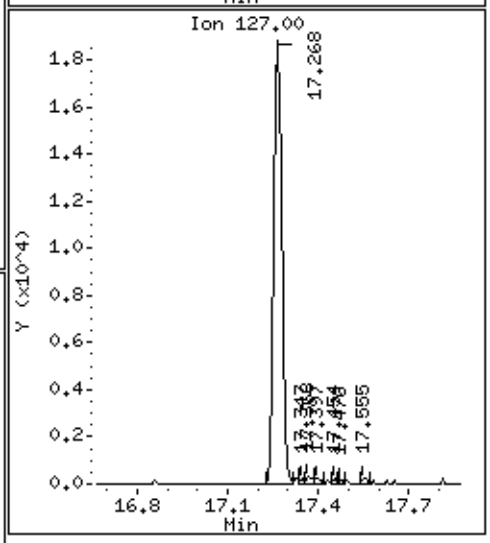












Data File: /chem/msd11.i/04feb16.b/11020403.d

Date : 04-FEB-2016 11:41

Client ID: LCSD

Instrument: msd11.i

Sample Info: ;VI VOC+PAH LCSD;LCSD

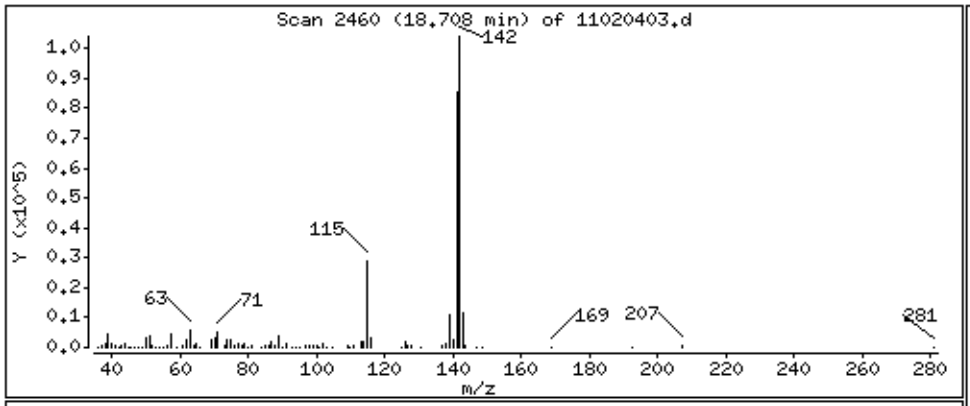
Operator: LA

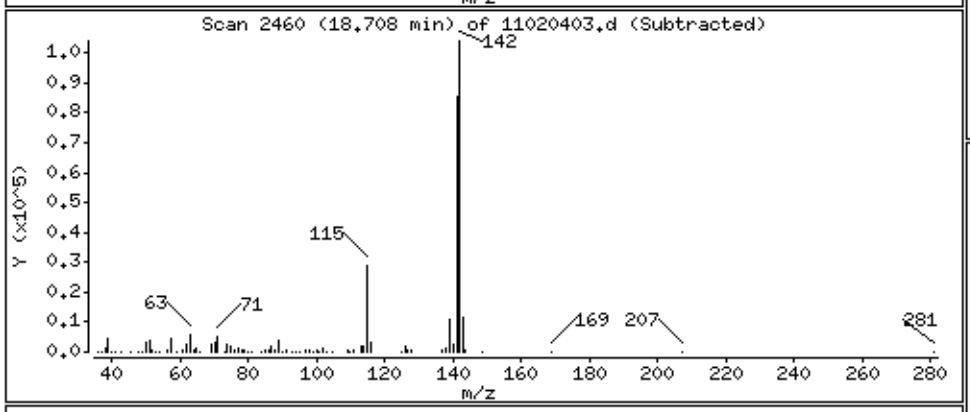
Column phase: RTx-624

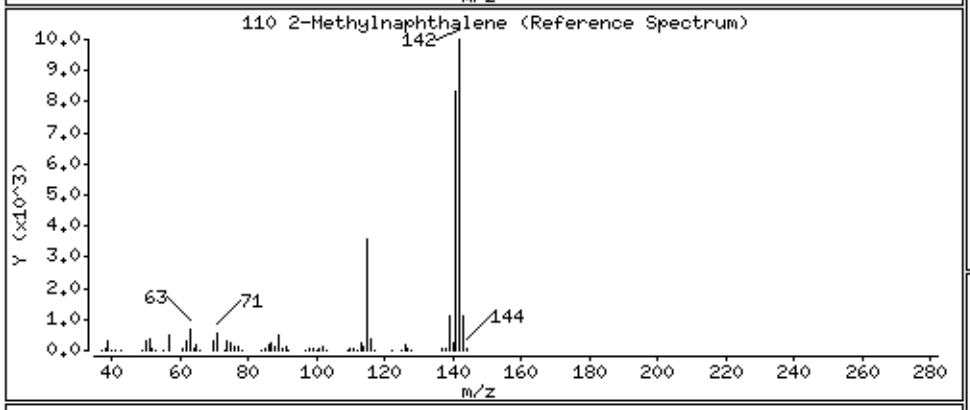
Column diameter: 0.53

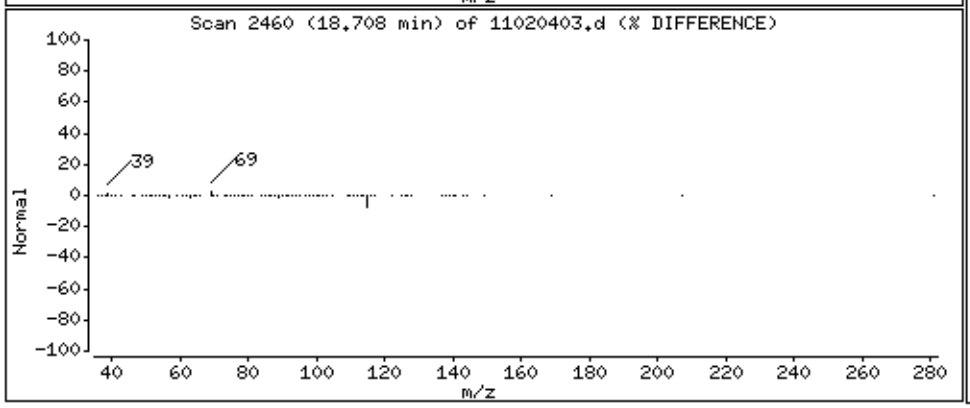
110 2-Methylnaphthalene

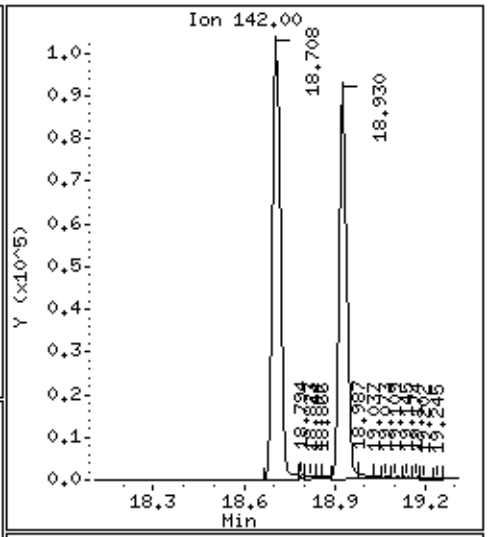
Concentration: 55.105 NG

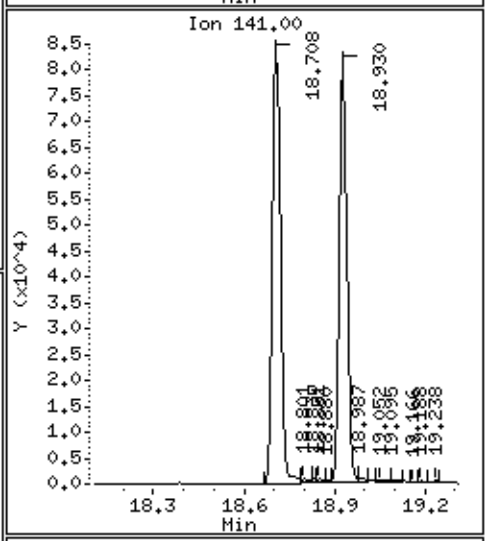


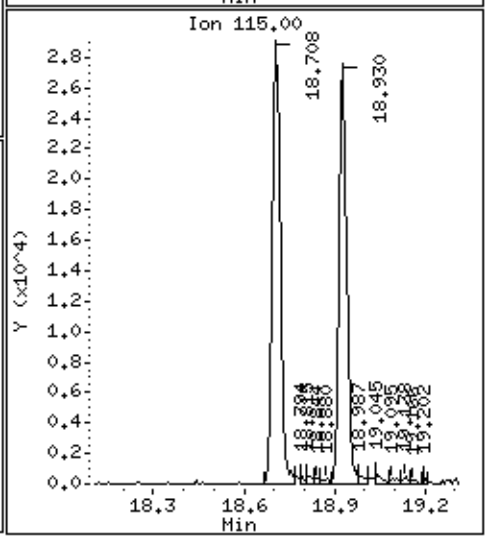












Data File: /chem/msd11.i/04feb16.b/11020403.d

Date : 04-FEB-2016 11:41

Client ID: LCSD

Instrument: msd11.i

Sample Info: ;VI VOC+PAH LCSD;LCSD

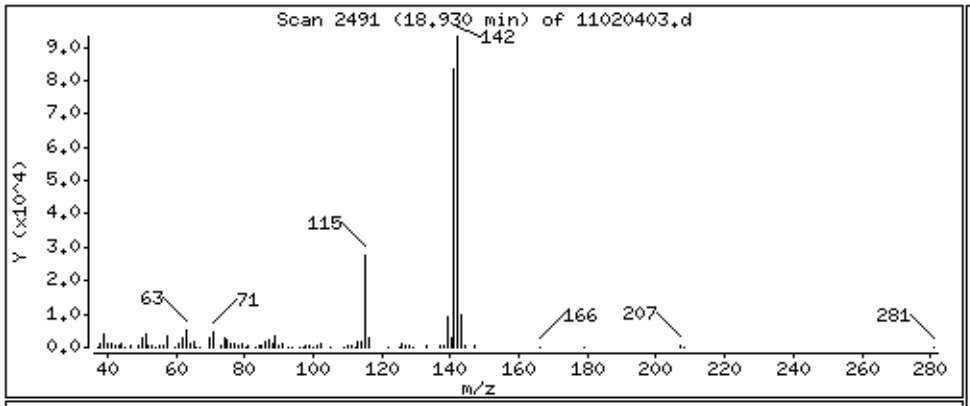
Operator: LA

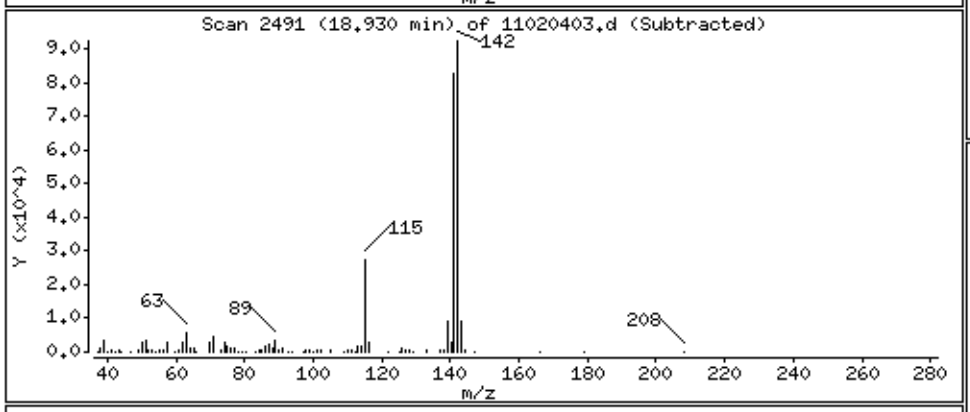
Column phase: RTx-624

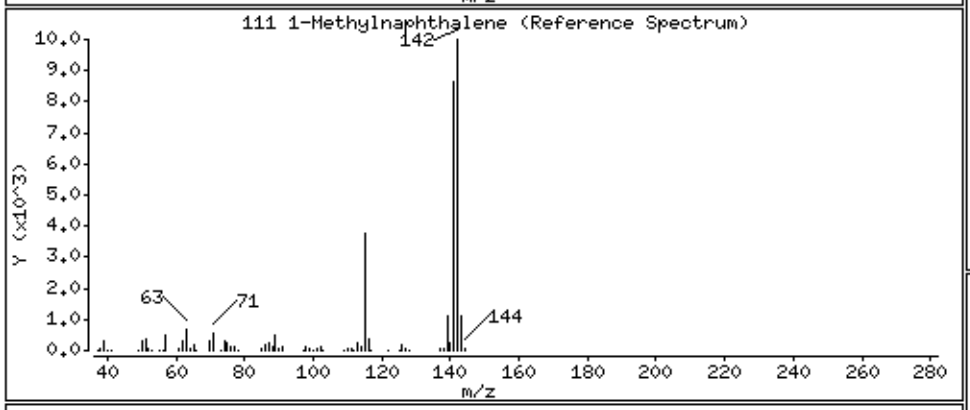
Column diameter: 0.53

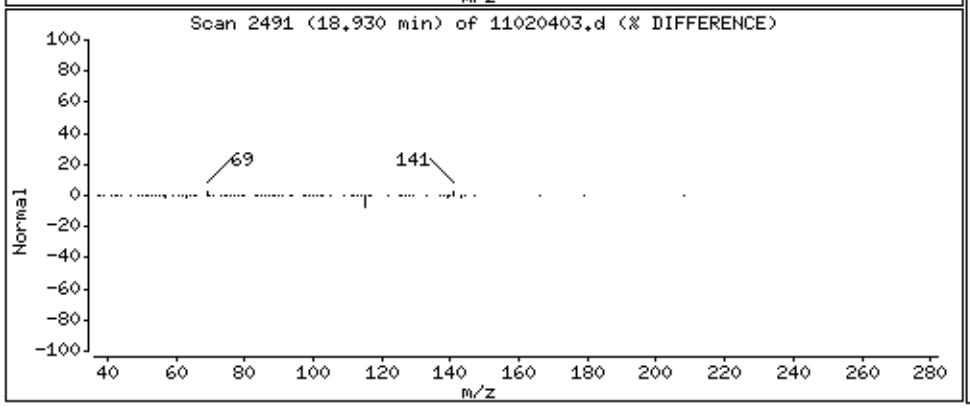
111 1-Methylnaphthalene

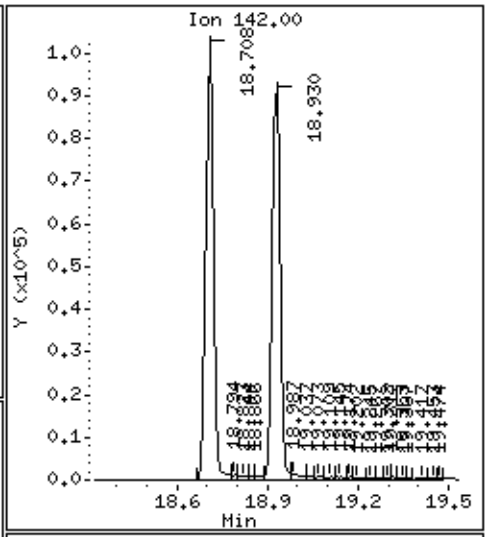
Concentration: 50.577 NG

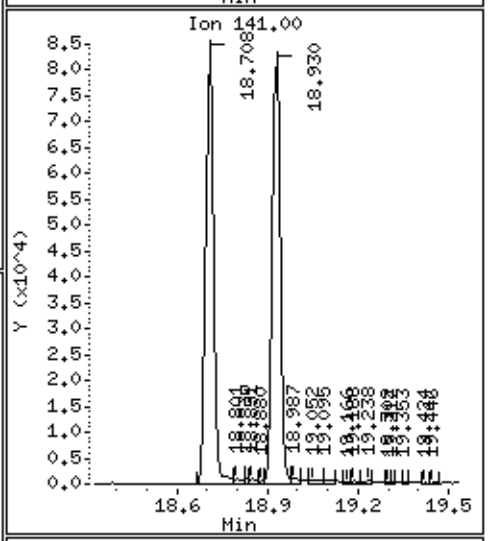


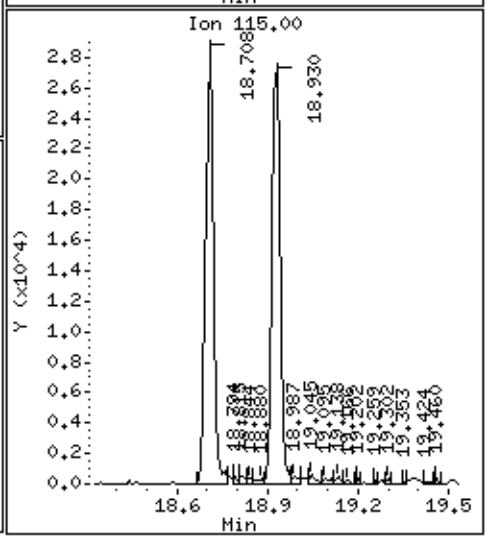












Data File: /chem/msd11.i/04feb16.b/11020403.d

Date : 04-FEB-2016 11:41

Client ID: LCSD

Instrument: msd11.i

Sample Info: ;VI VOC+PAH LCSD;LCSD

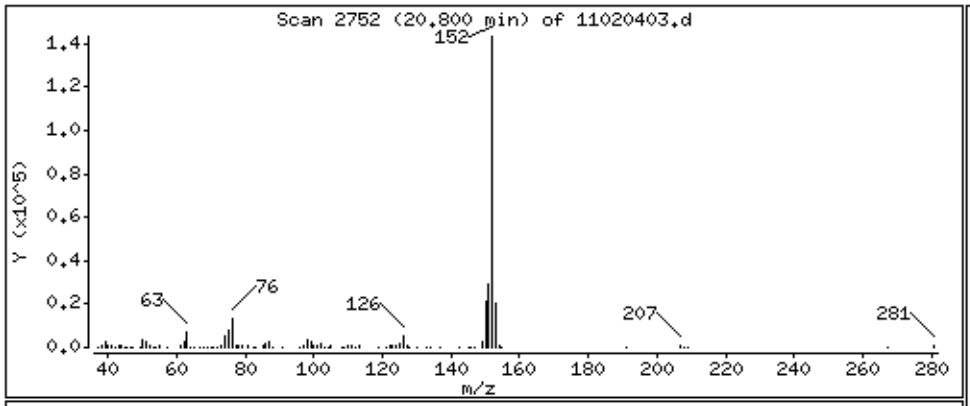
Operator: LA

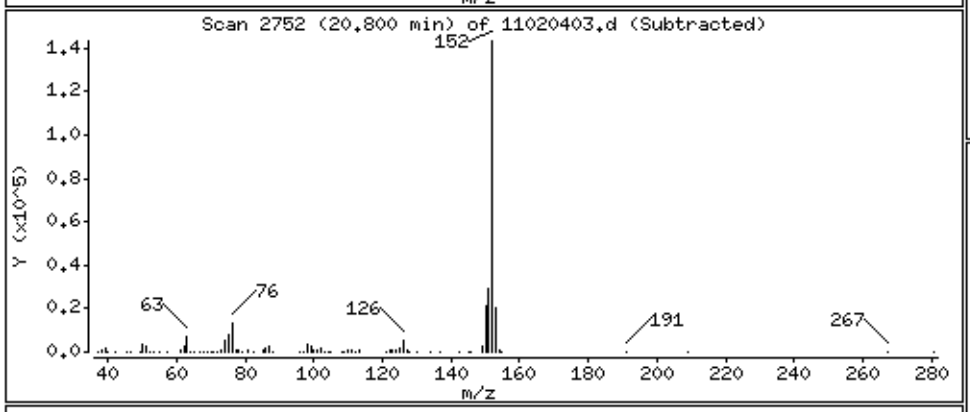
Column phase: RTx-624

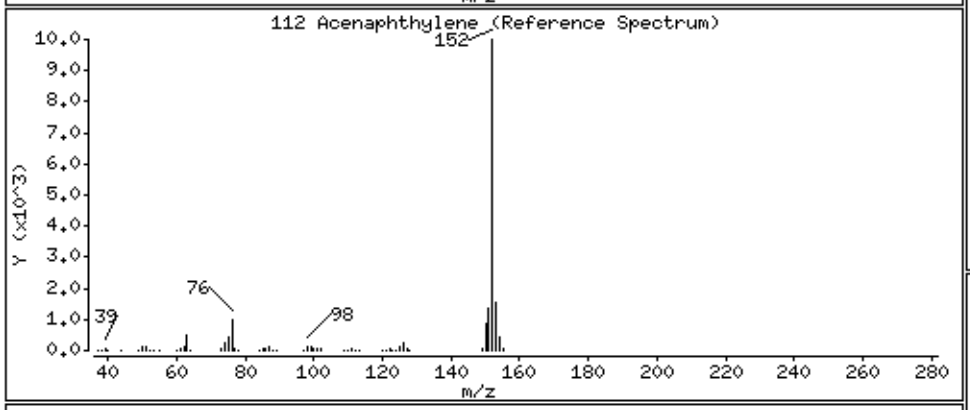
Column diameter: 0.53

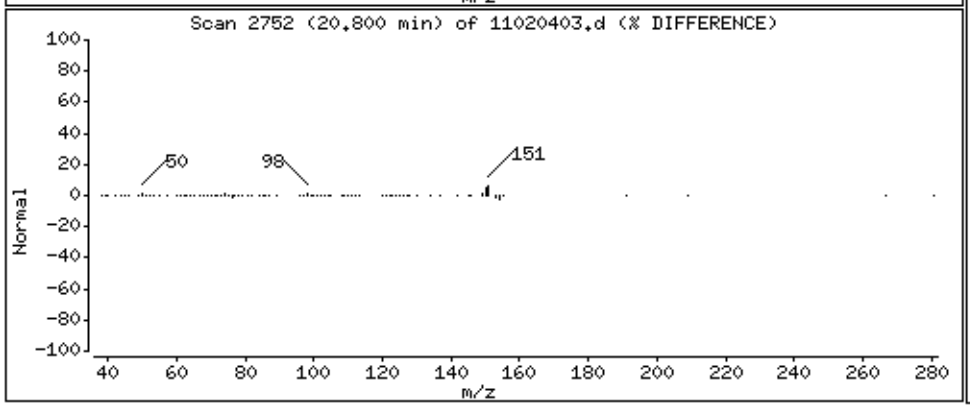
112 Acenaphthylene

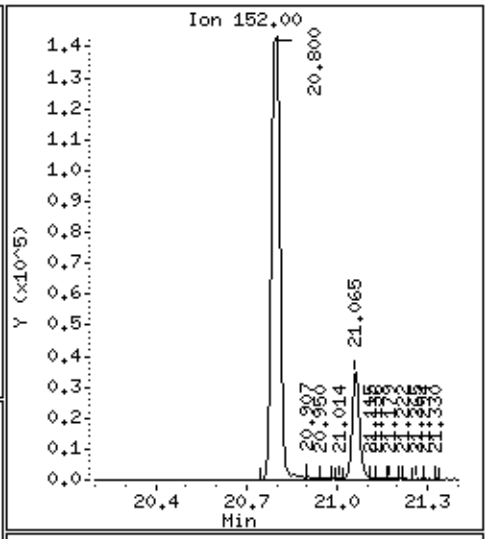
Concentration: 52.134 NG

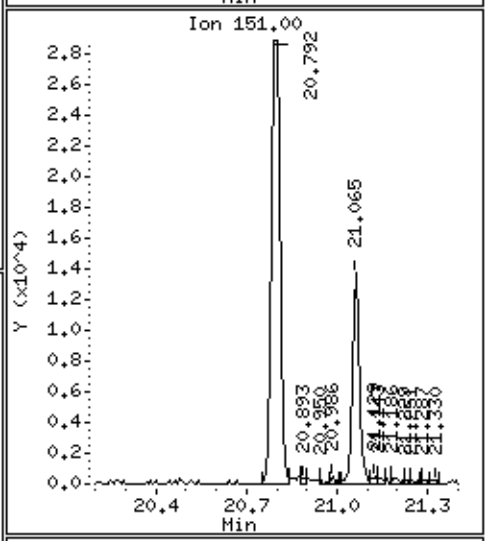


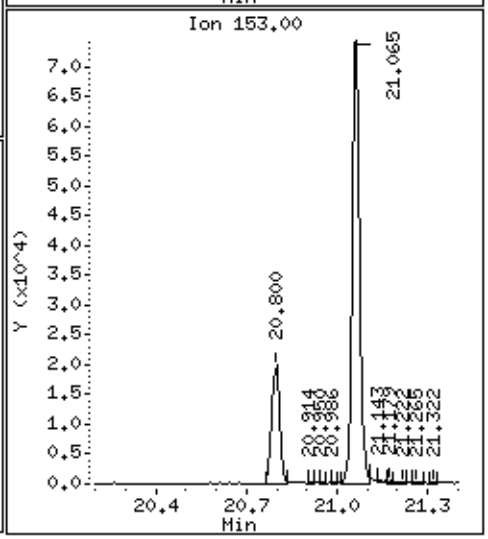












Data File: /chem/msd11.i/04feb16.b/11020403.d

Date : 04-FEB-2016 11:41

Client ID: LCSD

Instrument: msd11.i

Sample Info: ;VI VOC+PAH LCSD;LCSD

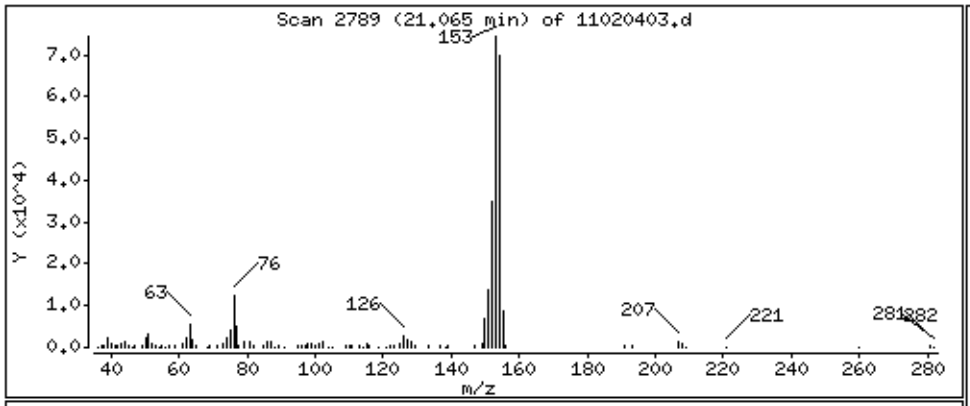
Operator: LA

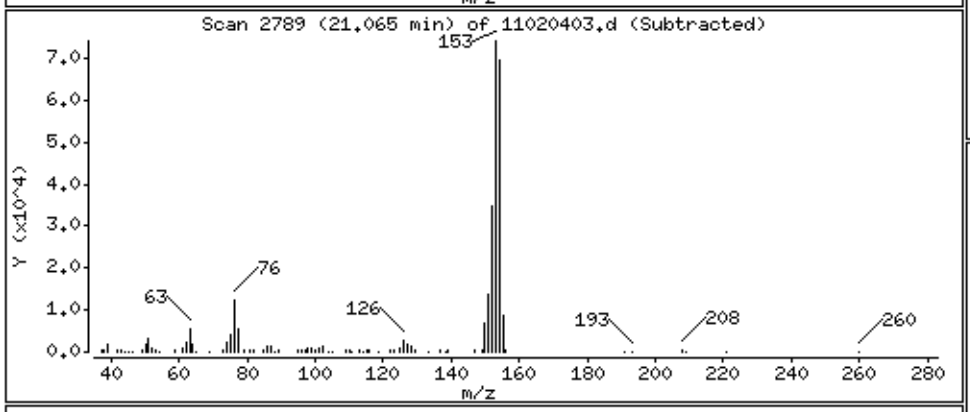
Column phase: RTx-624

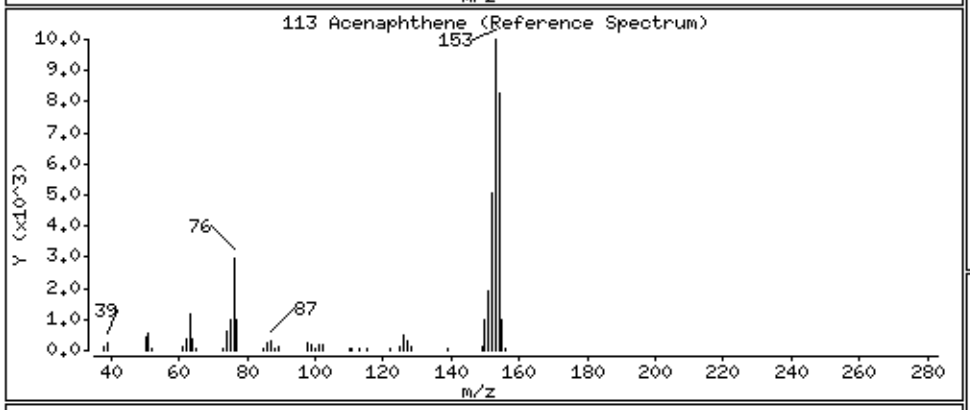
Column diameter: 0.53

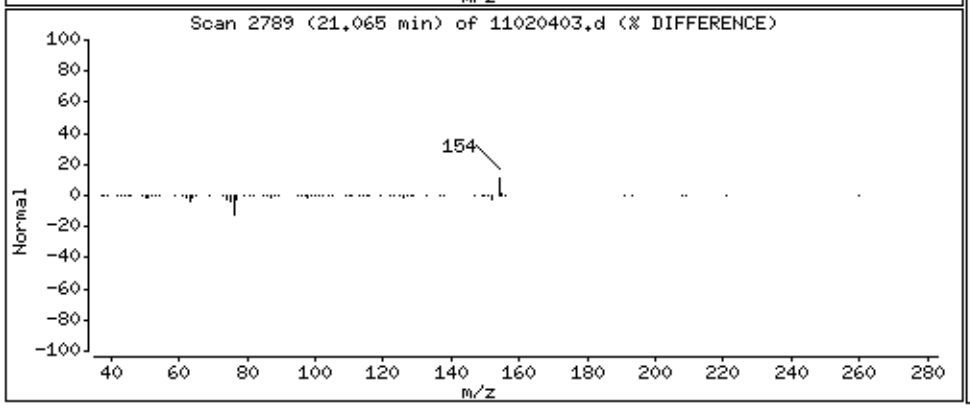
113 Acenaphthene

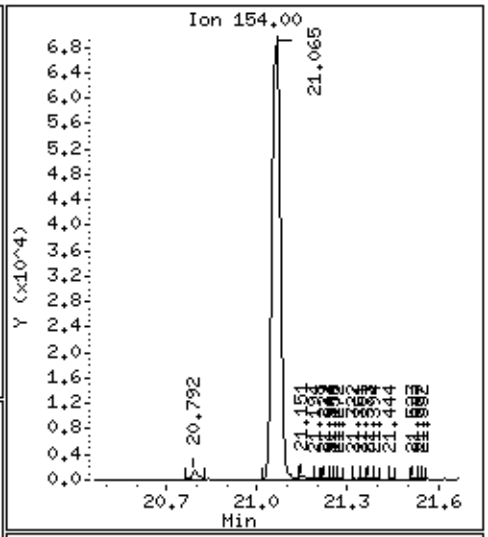
Concentration: 52.070 NG

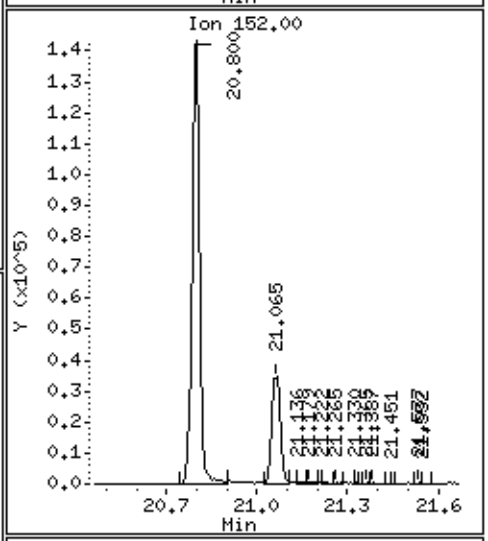


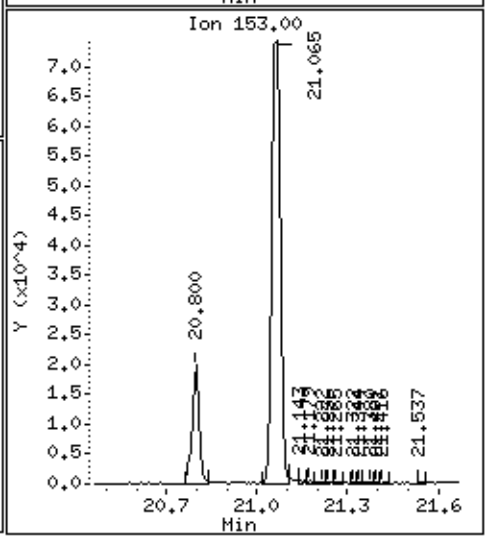












Data File: /chem/msd11.i/04feb16.b/11020403.d

Date : 04-FEB-2016 11:41

Client ID: LCSD

Instrument: msd11.i

Sample Info: ;VI VOC+PAH LCSD;LCSD

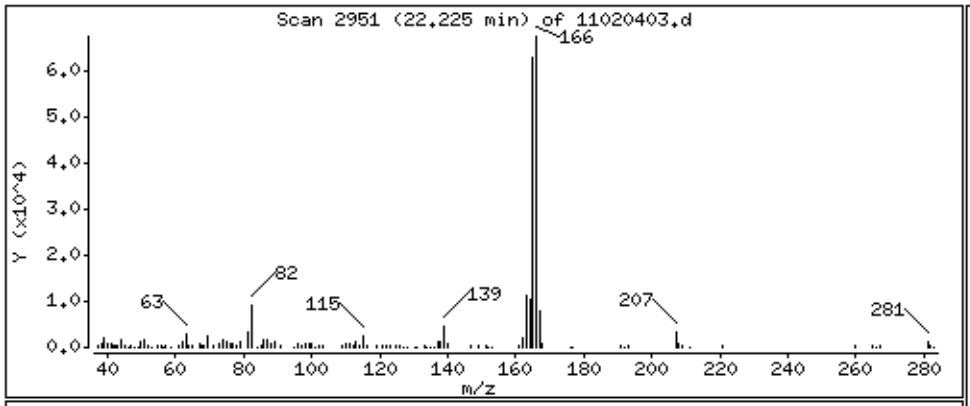
Operator: LA

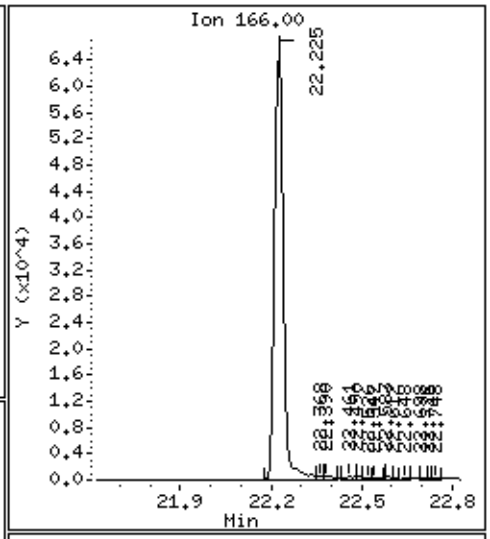
Column phase: RTx-624

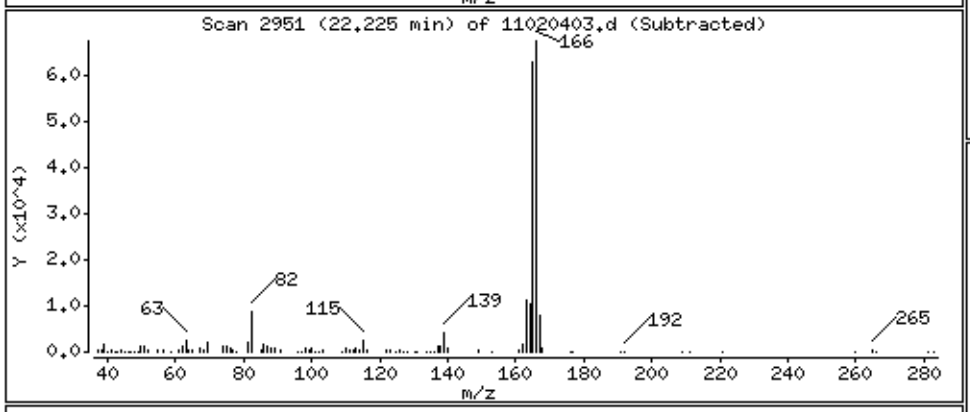
Column diameter: 0.53

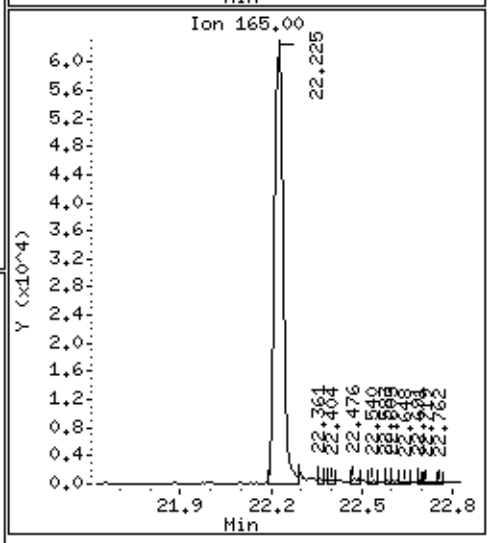
114 Fluorene

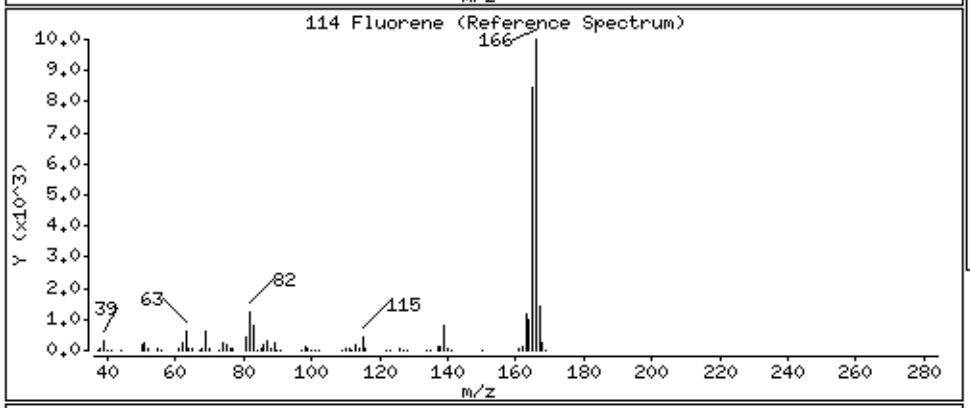
Concentration: 52.685 NG

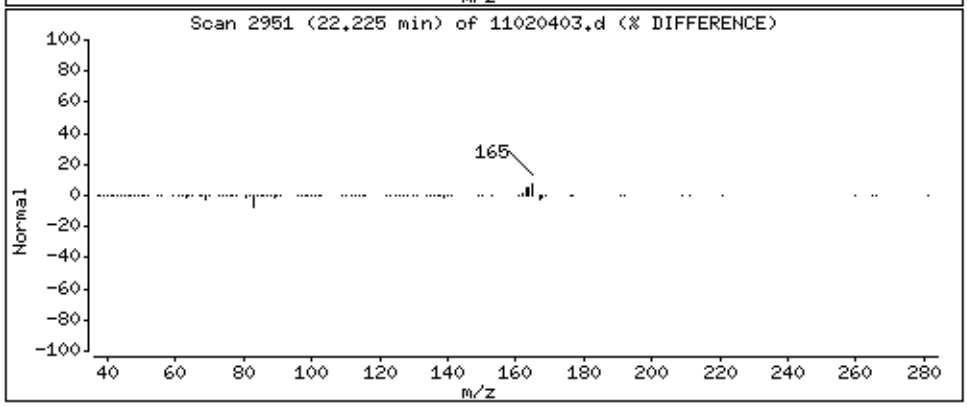












Data File: /chem/msd11.i/04feb16.b/11020403.d

Date : 04-FEB-2016 11:41

Client ID: LCSD

Instrument: msd11.i

Sample Info: ;VI VOC+PAH LCSD;LCSD

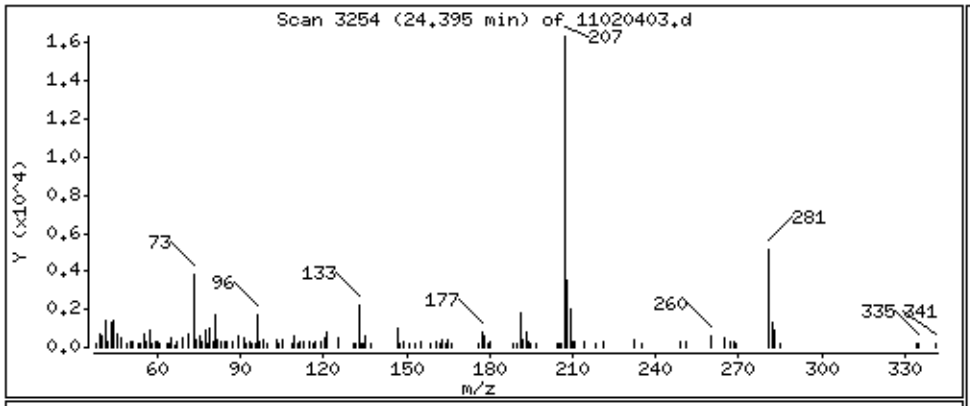
Operator: LA

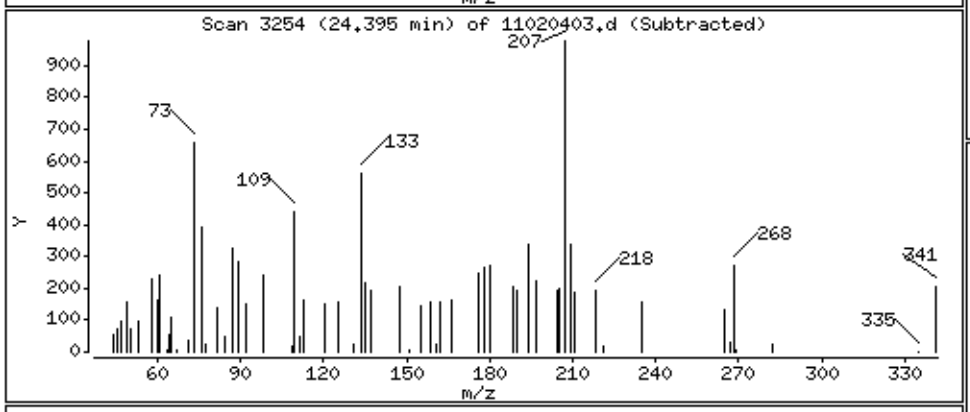
Column phase: RTx-624

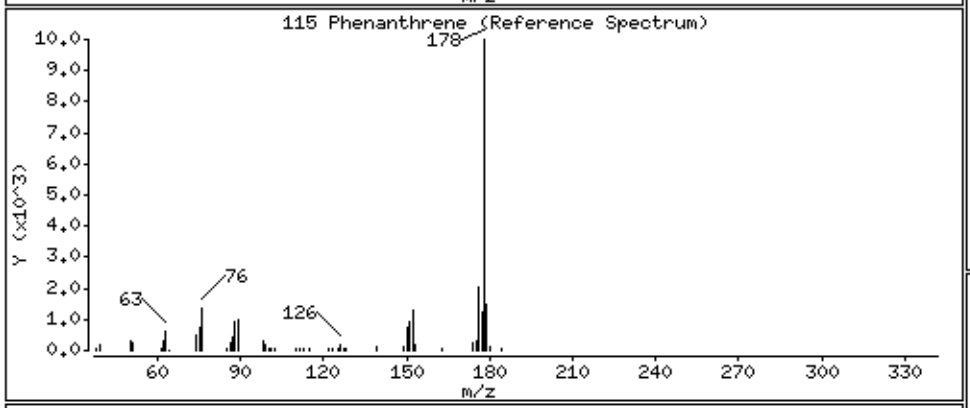
Column diameter: 0.53

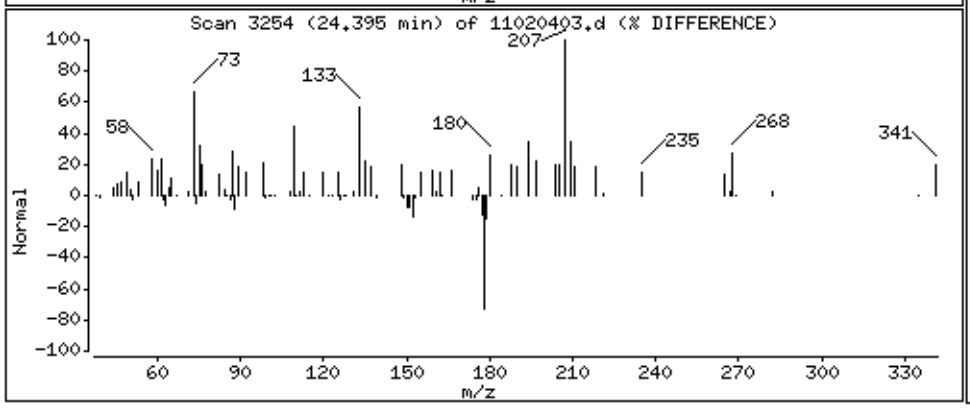
115 Phenanthrene

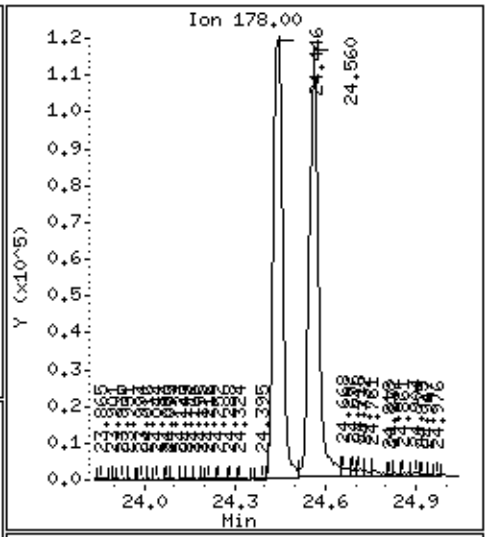
Concentration: 0.07792 NG

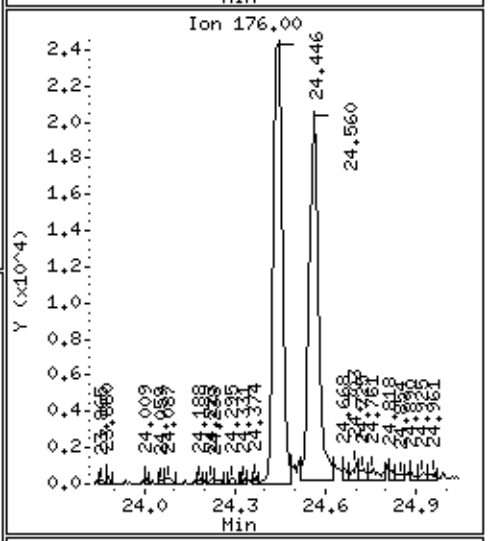


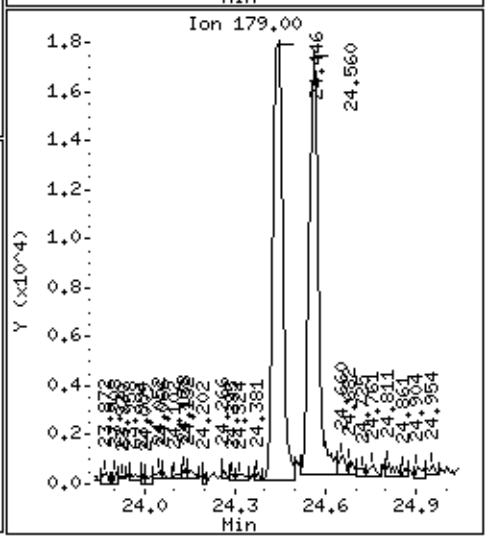












Data File: /chem/msd11.i/04feb16.b/11020403.d

Date : 04-FEB-2016 11:41

Client ID: LCSD

Instrument: msd11.i

Sample Info: ;VI VOC+PAH LCSD;LCSD

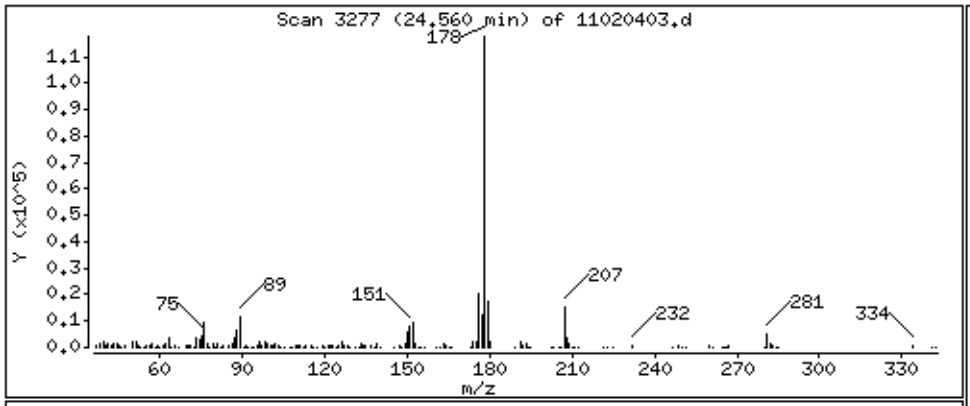
Operator: LA

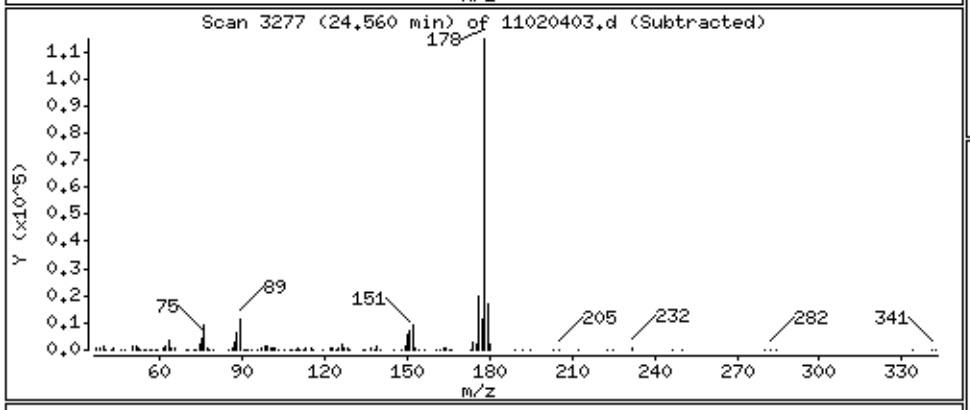
Column phase: RTx-624

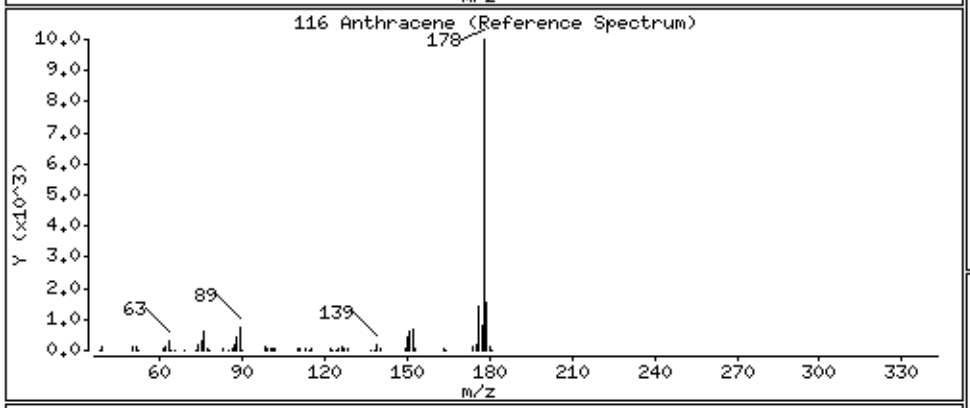
Column diameter: 0.53

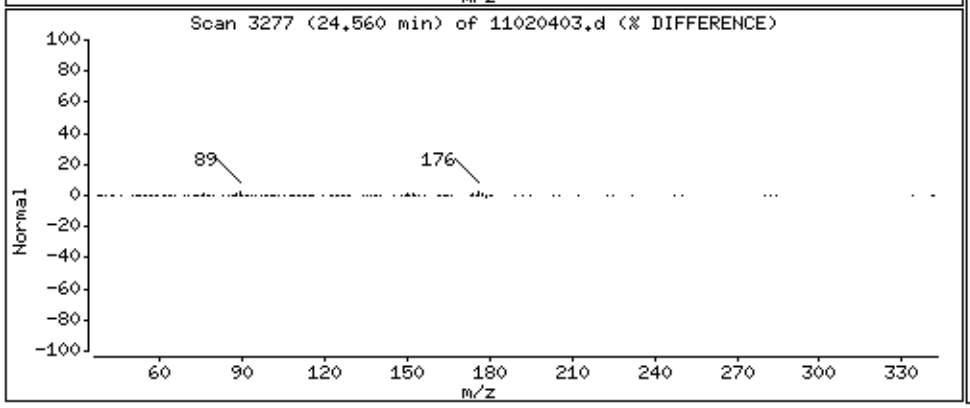
116 Anthracene

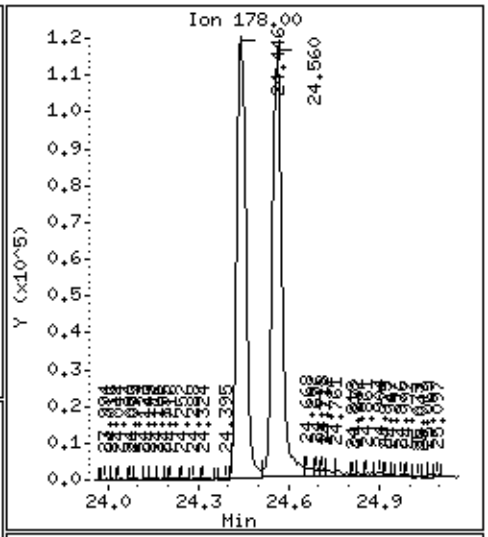
Concentration: 38.852 NG

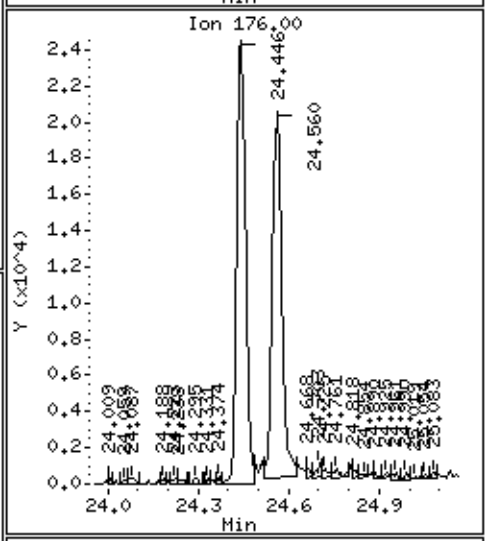


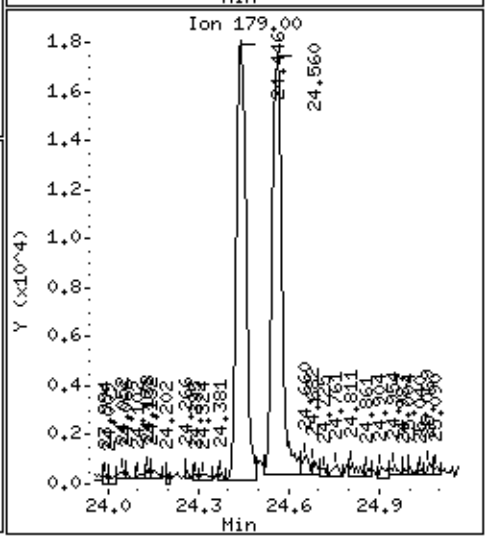












Data File: /chem/msd11.i/04feb16.b/11020403.d

Date : 04-FEB-2016 11:41

Client ID: LCSD

Instrument: msd11.i

Sample Info: ;VI VOC+PAH LCSD;LCSD

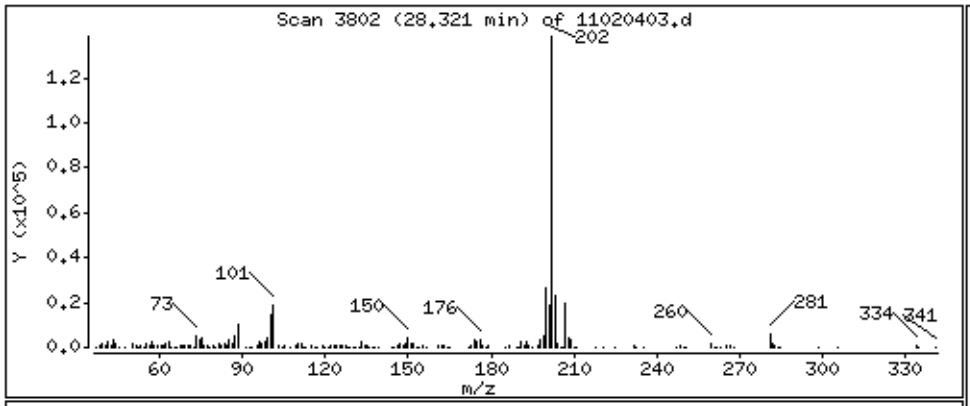
Operator: LA

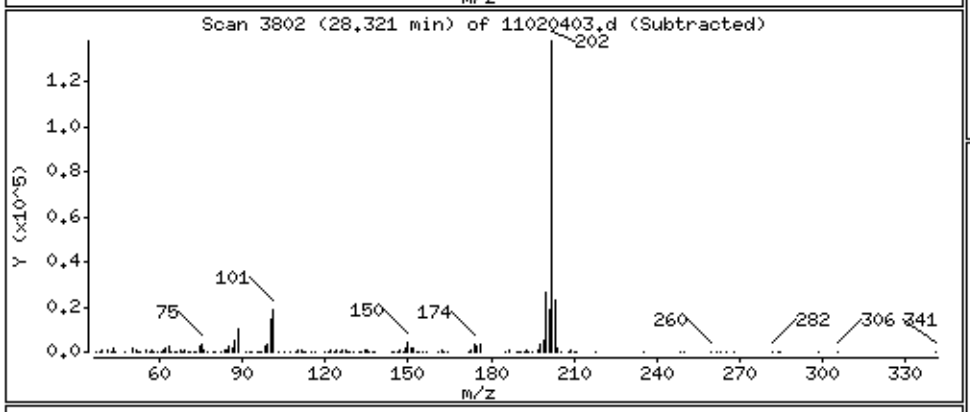
Column phase: RTx-624

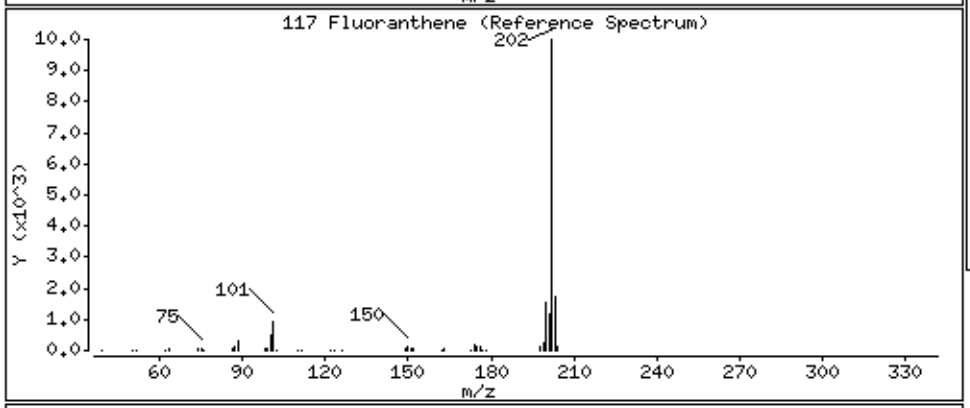
Column diameter: 0.53

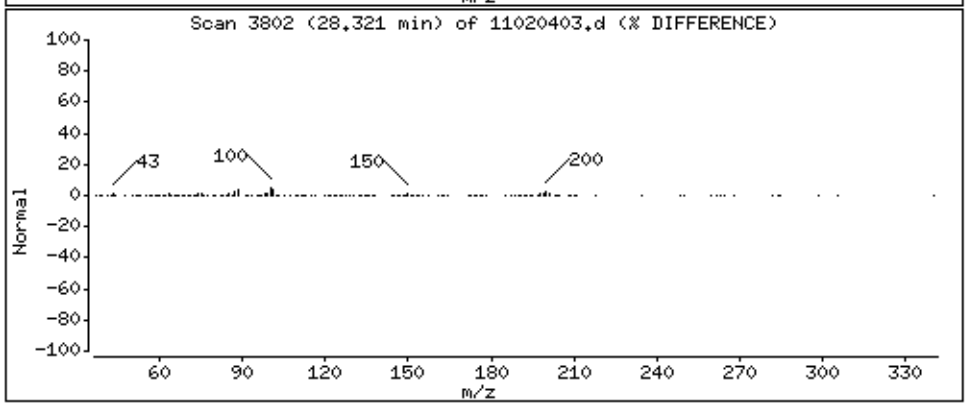
117 Fluoranthene

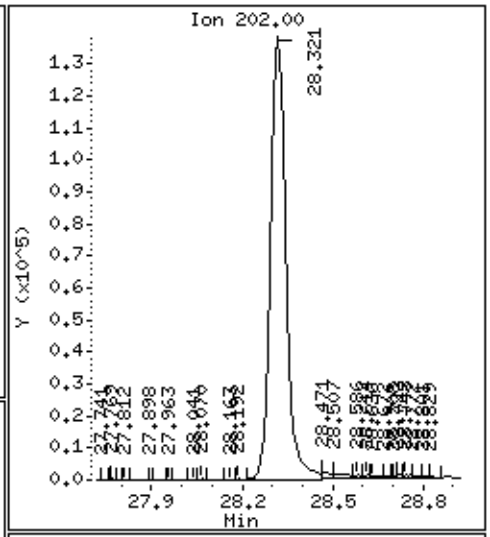
Concentration: 85.531 NG

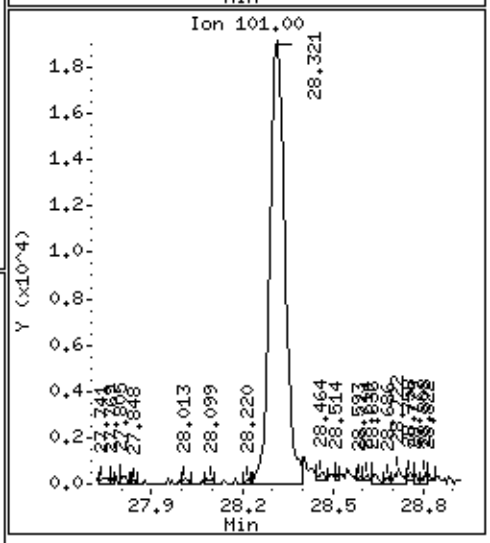












Data File: /chem/msd11.i/04feb16.b/11020403.d

Date : 04-FEB-2016 11:41

Client ID: LCSD

Instrument: msd11.i

Sample Info: ;VI VOC+PAH LCSD;LCSD

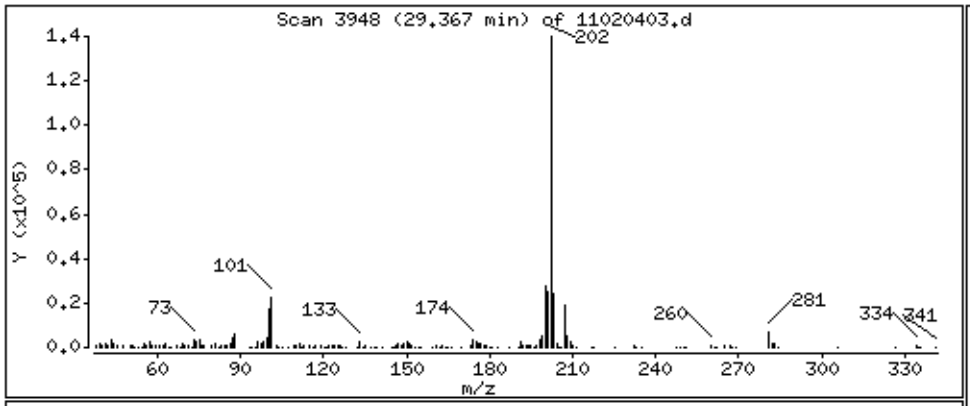
Operator: LA

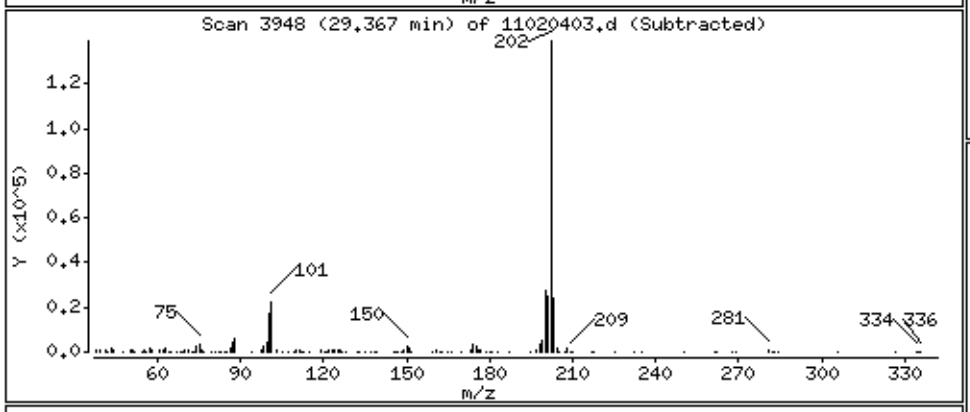
Column phase: RTx-624

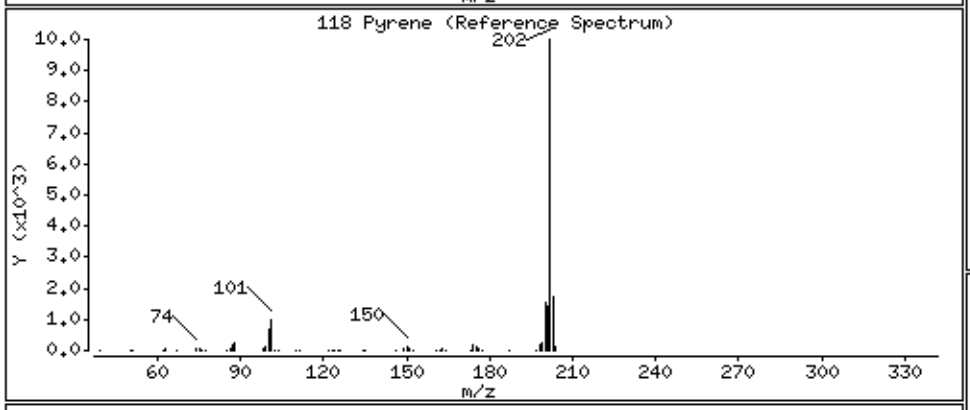
Column diameter: 0.53

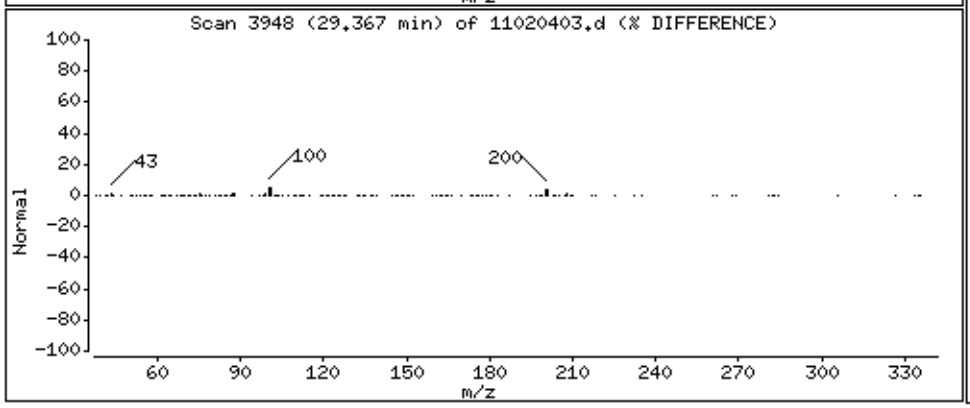
118 Pyrene

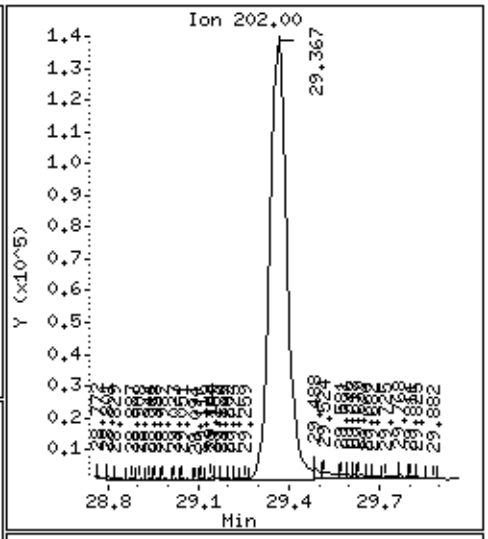
Concentration: 88.150 NG

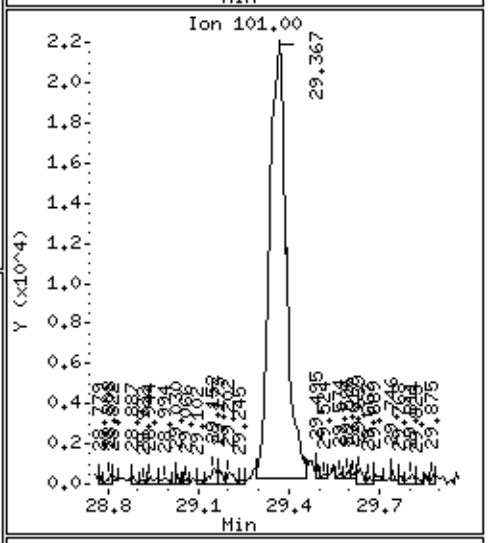


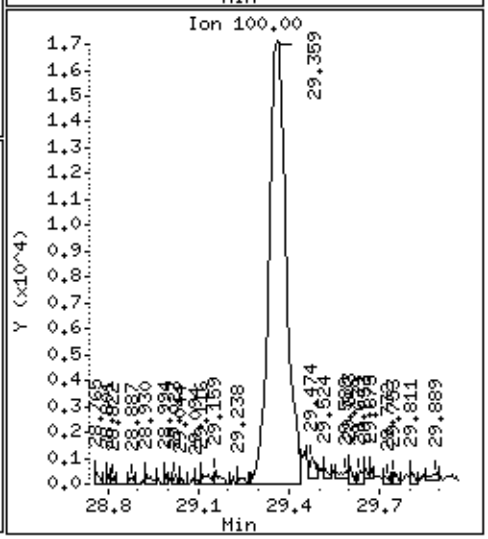












Eurofin Air Toxics Run Log for MSD-18 Method TO17

BFB verification of 176/174 Ratio: (133032/139288) x100% = 95.51%

Standard ID 2299-835 Exp. date 3/10/16

Bromochloromethane 191362 File ID: 18020304

1,4-Difluorobenzene 725728

Chlorobenzene-d5 632720

Bromofluorobenzene 345554

Verification CCV IS vs ICAL mid-point (-40%) Initial: LA

Calculation Check for Compound benzene :

ngs of compound = (Area of compound / Area of IS) * (Concentration of IS / RRF) = (985602 / 774781) * (23.0 / 0.46493) = 62.930 ng

Method: 18020114VI.m

Data Directory: D:\MassHunter\GCMS\1\data\03Feb16.b\

Use	SampleName		Tube pos.	Injection Time	Init.
1) ✓	18020301.D Comments				
;BFB;BFB		2299-835, 36ng (3/10/16)	1	03 Feb 2016 09:47 am	LA
2) ✓	18020302.D Comments				
;BFB;BFB		2299-835, 36ng (3/10/16)	1	03 Feb 2016 10:26 am	
3) ✓	18020303.D Comments	9 VOC's ↑, use for naph ok.			
;VI VOC+PAH CCV;CCV		2516-212(3/31/16),2744-31	2	03 Feb 2016 11:04 am	
4) ✓	18020304.D Comments	6 VOC's ↑, use for naph ok.			
;VI VOC+PAH LCS;LCS		2516-203(2/17/16),2744-32	3	03 Feb 2016 11:43 am	
5) ✓	18020305.D Comments				
;VI VOC+PAH LCDS;LCSD		2516-203(2/17/16),2744-32	3	03 Feb 2016 12:21 pm	
6) ✓	18020306.D Comments				
;Lab Blank;Lab Blank		DP G0145528	4	03 Feb 2016 01:01 pm	
7) X	18020307.D Comments	IS BFB ↑			
;1602029-11A		DP G0130962	11	03 Feb 2016 02:13 pm	
8) ✓	18020308.D Comments				
;1602029-12A		DP G0187158	12	03 Feb 2016 02:52 pm	
9) ✓	18020309.D Comments				
;1602029-11A		DP G0130962, reanalysis	11	03 Feb 2016 03:56 pm	
10) ✓	18020310.D Comments				
;1602029-01A		DP G0137179	21	03 Feb 2016 04:35 pm	
11) ✓	18020311.D Comments				
;1602029-02A		DP G0152248	22	03 Feb 2016 05:13 pm	
12) ✓	18020312.D Comments				
;1602029-03A		DP G0188144	23	03 Feb 2016 05:51 pm	
13) ✓	18020313.D Comments				
;1602029-04A		DP G0132032	24	03 Feb 2016 06:30 pm	
14) ✓	18020314.D Comments				
;1602029-05A		DP G0139959	25	03 Feb 2016 07:08 pm	
15) ✓	18020315.D Comments				
;1602029-06A		DP G0144385	26	03 Feb 2016 07:47 pm	
16) ✓	18020316.D Comments				
;1602029-07A		DP G0143465	27	03 Feb 2016 08:25 pm	
17) ✓	18020317.D Comments				
;1602029-08A		DP G0140124	28	03 Feb 2016 09:03 pm	

Lynette Cantonicalli 2/4/16

18) ✓	18020318.D	Comments				
;1602029-09A		DP G0137189	29	03 Feb 2016	09:41 pm	VA
19) X	18020319.D	Comments	IS BFB ↑			
;1602029-10A		DP G0145581	30	03 Feb 2016	10:20 pm	
20) ✓	18020320.D	Comments				
;1602029-14A		DP G0143780	31	03 Feb 2016	10:58 pm	
21) ✓	18020321.D	Comments				
;1602029-15A		DP G0135686	32	03 Feb 2016	11:36 pm	
22) ✓	18020322.D	Comments				
;1602029-16A		DP G0150385	33	04 Feb 2016	12:15 am	
23) ✓	18020323.D	Comments				
;1602029-17A		DP G0143423	34	04 Feb 2016	12:53 am	
24) ✓	18020324.D	Comments				
;1602029-18A		DP G0143629	35	04 Feb 2016	01:31 am	
25) ✓	18020325.D	Comments				
;1602029-19A		DP G0137246	36	04 Feb 2016	02:09 am	
26) ✓	18020326.D	Comments				
;1602029-20A		DP G0137108	37	04 Feb 2016	02:48 am	
27) X	18020327.D	Comments	IS BFB ↑			
;1602029-21A		DP G0139913	38	04 Feb 2016	03:26 am	
28) ✓	18020328.D	Comments				
;Blank			2	04 Feb 2016	04:04 am	
29) ✓	18020329.D	Comments				
;1602029-10A		DP G0145581, reanalysis	30	04 Feb 2016	09:20 am	
30) ✓	18020330.D	Comments				
;1602029-21A		DP G0139913, reanalysis	38	04 Feb 2016	09:59 am	
31) ✓	18020331.D	Comments				
;Blank			2	04 Feb 2016	10:45 am	

Lynette Antonucci 2/4/16

Eurofin Air Toxics Run Log for MSD-11 Method TO17
BFB verification of 176/174 Ratio: (83821/87552) x100% = 95.74%
Standard ID 2299-835 Exp. date 3/10/16
Bromochloromethane 65872 File ID: 11020401.d
1,4-Difluorobenzene 263308
Chlorobenzene-d5 242803
Bromofluorobenzene 175852
Verification CCV IS vs ICAL mid-point (-40%) Initial: ct
Calculation Check for Compound Vinyl Chloride

ngs of compound = (Area of compound / Area of IS) * (Concentration of IS / RRF) = (81286) * (26.0) / (~~44672~~ 65872) (0.57986) 2/5/16 ct = 55.330

Method: 11521120Vi.m

Data Directory: C:\msdchem\1\data\04FEB16.B\

Use	SampleName		Tube pos.	Injection Time		Init.
1) ✓	11020401.D Comments					
;BFB;BFB		2299-835, 36ng (3/10/16)	1	4 Feb 2016	9:31	ct
2) ✓	11020402.D Comments					
;VI VOC+PAH LCS;LCS		2516-217(5/3/16),2744-32-	3	4 Feb 2016	10:54	
3) ✓	11020403.D Comments					
;VI VOC+PAH LCSD;LCSD		2516-217(5/3/16),2744-32-	3	4 Feb 2016	11:41	
4) ✓	11020404.D Comments					
;VI VOC+PAH CCV;CCV		2516-218(5/3/16),2744-31-	2	4 Feb 2016	12:29	
5) X	11020405.D Comments	Benzene > RL				
;Lab Blank;Lab Blank		DP G0143451	4	4 Feb 2016	13:16	
6) ✓	11020406.D Comments					
;Lab Blank;Lab Blank		DP G0144300	5	4 Feb 2016	14:30	
7) ✓	11020407.D Comments					
;1601378-04A		DP G0132054	14	4 Feb 2016	15:40	
8) ✓	11020408.D Comments					
;1601378-01A		DP G0148954	11	4 Feb 2016	16:27	
9) ✓	11020409.D Comments					
;1601378-02A		DP G0135654	12	4 Feb 2016	17:14	
10) ✓	11020410.D Comments					
;Blank		DP G0135654	2	4 Feb 2016	18:34	
11) X	11020411.D Comments	tube leak				
;1601378-03A		DP G0143617	13	4 Feb 2016	19:19	
12) ✓	11020412.D Comments	CS_2 > RL				
;VI Tube Cert		G0147211	21	4 Feb 2016	20:05	
13) ✓	11020413.D Comments	CS_2 > RL				
;VI Tube Cert		G0143655	22	4 Feb 2016	20:51	
14) ✓	11020414.D Comments	CS_2 > RL				
;VI Tube Cert		G0145589	23	4 Feb 2016	21:37	
15) ✓	11020415.D Comments	CS_2 > RL				
;VI Tube Cert		G0143484	24	4 Feb 2016	22:22	
16) ✓	11020416.D Comments	CS_2 > RL				
;VI Tube Cert		G0145554	25	4 Feb 2016	23:08	
17) ✓	11020417.D Comments	m,p-xylene 8at				
;1602029-13A		DP G0129354	16	4 Feb 2016	23:53	

2/5/16

Eurofin Air Toxics Run Log for MSD-11 Method TO17

BFB verification of 176/174 Ratio: (83392/86645) X100% = 96.25%

Standard ID 2299-835 Exp. date 3/10/16

Bromochloromethane 77523 | File ID: 11020827

1,4-Difluorobenzene 295141 | 59955

Chlorobenzene-d5 287234 | 52458

Bromofluorobenzene 205707 | 36168

Verification CCV IS vs ICAL mid-point (-40%) Initial: UA

Calculation Check for Compound toluene :

ngs of compound = (Area of compound / Area of IS) * (Concentration of IS / RRF) = (34474 / 259903) * (24.0 / 0.45955)

= 69.274ng

Method: 115h1120vi.m / 115z1120vi.m

Data Directory: C:\msdchem\1\data\08Feb16a.B\

Use	SampleName		Tube pos.	Injection Time		Init.
1) ✓	11020821.D Comments					
;BFB/BFB		2299-835, 36ng (3/10/16)	1	9 Feb 2016	1:56	UA
2) ✓	11020822.D Comments					
;VI Diesel 20,000 CCV;CCV		2744-29-10,000,2.0uL(7/1/	2	9 Feb 2016	2:42	
3) ✓	11020823.D Comments					
;VI Diesel 20,000 LCS;LCS		2299-1119-20,000,1.0uL(3/	3	9 Feb 2016	3:27	
4) ✓	11020824.D Comments					
;VI Diesel 20,000 LCSD;LCSD		2299-1119-20,000,1.0uL(3/	3	9 Feb 2016	4:13	
5) ✓	11020825.D Comments					
;VI VOC+PAH CCV;CCV		2516-218-1000,20mL(5/3/16	4	9 Feb 2016	4:59	
6) ✓	11020826.D Comments					
;VI VOC+PAH HS 4:1 CCV;CCV		2516-218-1000,20mL(5/3/16	4	9 Feb 2016	5:45	
7) ✓	11020827.D Comments					
;VI VOC+PAH LCS;LCS		2516-217-1000,20mL(5/3/16	5	9 Feb 2016	6:33	
8) ✓	11020828.D Comments					
;VI VOC+PAH LCSD;LCSD		2516-217-1000,20mL(5/3/16	5	9 Feb 2016	7:20	
✓ UA 2/10/16						
9) X	11020829.D Comments	CS_2 >RL				
;Lab Blank;Lab Blank		DP G0148162	6	9 Feb 2016	8:07	
10) ✓	11020830.D Comments	toluene saturated				
;1601378-02A		reanalysis, HS 4:1,G01356	12	9 Feb 2016	10:38	
11) ✓	11020831.D Comments					
;Blank			1	9 Feb 2016	11:26	
12) ✓	11020832.D Comments	m,p-xylene saturated				
;1602029-13A		reanalysis, HS 4:1,G01293	16	9 Feb 2016	12:13	
13) X	11020833.D Comments	CS_2, m,p-xylene >RL				
;Lab Blank;Lab Blank		DP G0154191	7	9 Feb 2016	13:01	
14) ✓	11020834.D Comments	TPHd >RL				
;Lab Blank;Lab Blank		DP G0145528	8	9 Feb 2016	14:44	
15) ✓	11020835.D Comments					
;1601378-03A		DP G0143617	13	9 Feb 2016	16:31	
16) ✓	11020836.D Comments					
;Blank		G0154191	7	9 Feb 2016	17:44	
17) ✓	11020837.D Comments					
;Blank		G0145528	8	9 Feb 2016	18:30	

Lynette Castanedilli 2/10/16.

Eurofins Air Toxics Inc.

Data file : /chem/msd11.i/20nov15.b/11112001.d
Lab Smp Id: Client Smp ID: BFB
Inj Date : 20-NOV-2015 17:37
Operator : LA Inst ID: msd11.i
Smp Info : ;BFB;BFB
Misc Info : 2299-835, 36ng (3/10/16)
Comment :
Method : /chem/msd11.i/20nov15.b/bfb.m
Meth Date : 03-Mar-2015 10:09 troberts Quant Type: ESTD
Cal Date : 11-OCT-2009 15:24 Cal File: l101104.d
Als bottle: 1 QC Sample: BFB
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.50 Sample Matrix: WATER
Processing Host: eeyore

Concentration Formula: Amt * DF * Uf * Vf * Vi * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	ng unit correction factor
Vf	1.00000	Volumetric correction factor
Vi	1.00000	Injection Volume

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	MASS	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/L)	TARGET RANGE	RATIO
1 bfb						CAS #: 460-00-4		
13.056	13.107	-0.051	95	91853			100.00- 100.00	99.74
13.056	13.107	-0.051	50	19574			8.00- 40.00	21.31
13.056	13.107	-0.051	75	40072			30.00- 66.00	43.63
13.056	13.107	-0.051	96	5859			5.00- 9.00	6.38
13.056	13.107	-0.051	173	1171			0.00- 1.99	1.27
13.056	13.107	-0.051	174	92096			50.00- 120.00	100.26
13.056	13.107	-0.051	175	7170			4.00- 9.00	7.79
13.056	13.107	-0.051	176	87760			93.00- 101.00	95.29
13.056	13.107	-0.051	177	5386			5.00- 9.00	6.14

Data File: /chem/msd11.i/20nov15.b/11112001.d

Date : 20-NOV-2015 17:37

Client ID: BFB

Instrument: msd11.i

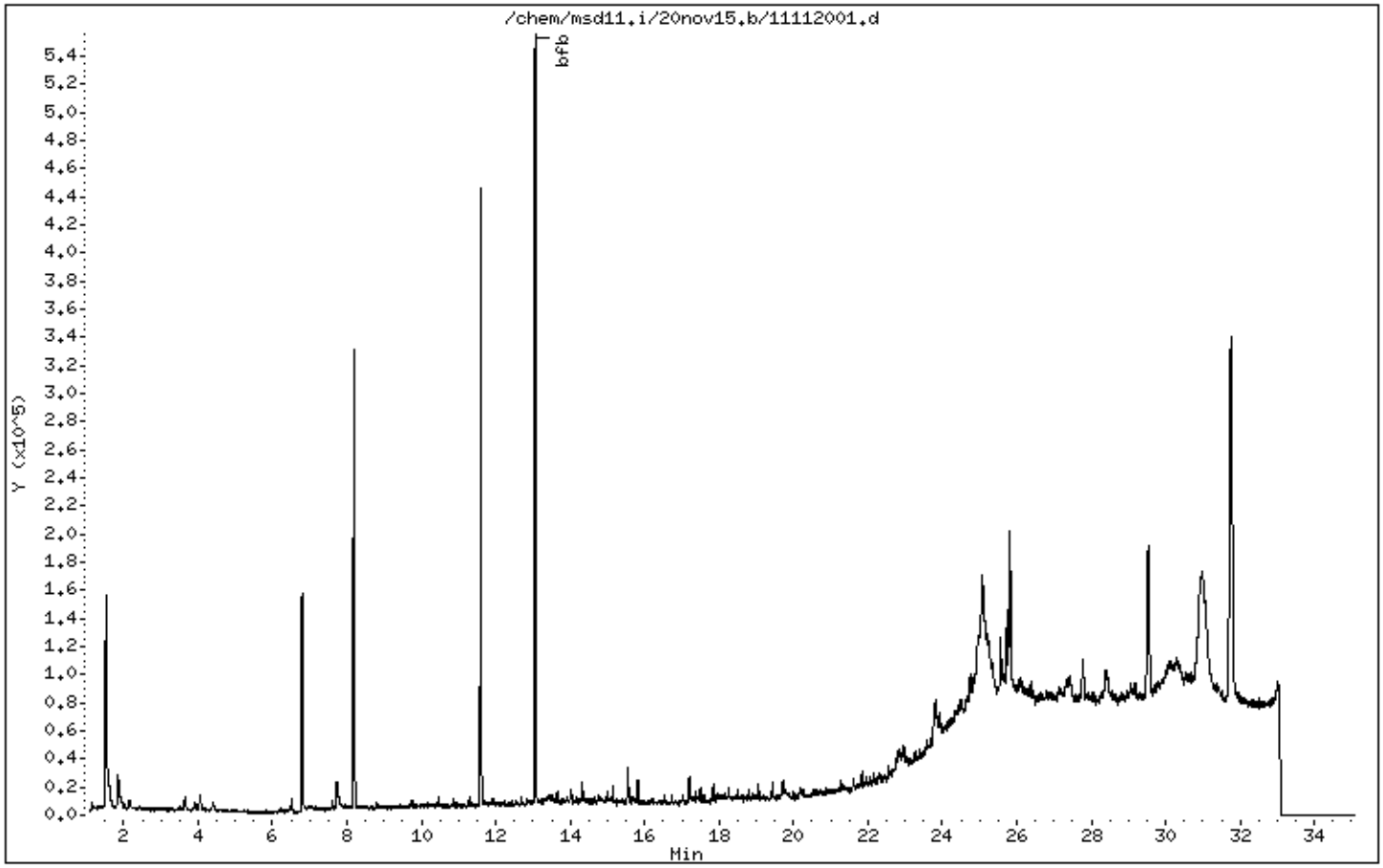
Sample Info: ;BFB;BFB

Volume Injected (uL): 1.0

Operator: LA

Column phase:

Column diameter: 2.00



Data File: /chem/msd11.i/20nov15.b/11112001.d

Date : 20-NOV-2015 17:37

Client ID: BFB

Instrument: msd11.i

Sample Info: ;BFB;BFB

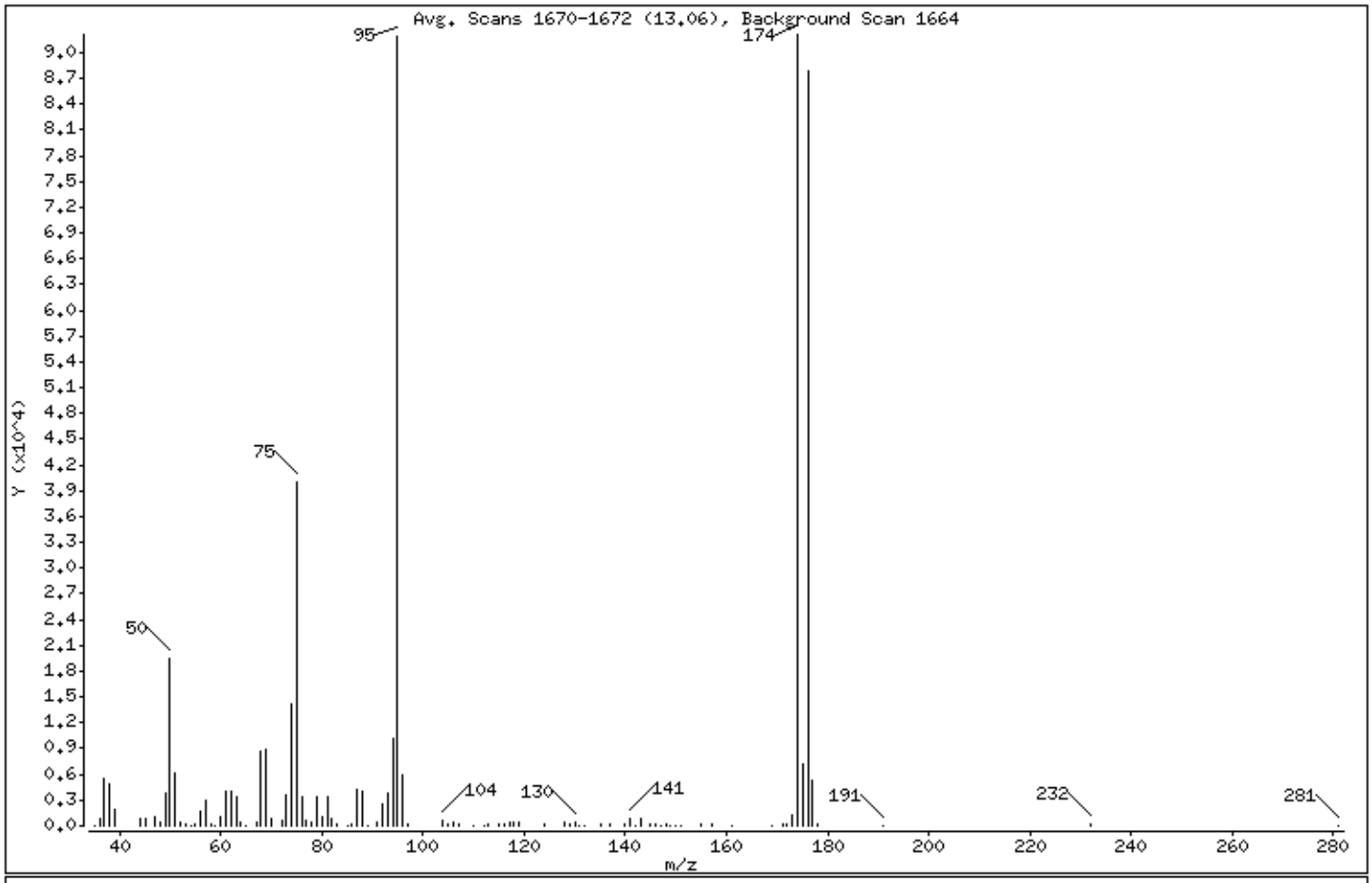
Volume Injected (uL): 1.0

Operator: LA

Column phase:

Column diameter: 2.00

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	8.00 - 40.00% of mass 95	21.31
75	30.00 - 66.00% of mass 95	43.63
96	5.00 - 9.00% of mass 95	6.38
173	Less than 1.99% of mass 174	1.27 (1.27)
174	50.00 - 120.00% of mass 95	100.26
175	4.00 - 9.00% of mass 174	7.81 (7.79)
176	93.00 - 101.00% of mass 174	95.54 (95.29)
177	5.00 - 9.00% of mass 176	5.86 (6.14)

Data File: /chem/msd11.i/20nov15.b/11112001.d

Date : 20-NOV-2015 17:37

Client ID: BFB

Instrument: msd11.i

Sample Info: ;BFB;BFB

Volume Injected (uL): 1.0

Operator: LA

Column phase:

Column diameter: 2.00

Data File: 11112001.d
Spectrum: Avg. Scans 1670-1672 (13.06), Background Scan 1664
Location of Maximum: 174.00
Number of points: 100

m/z	Y	m/z	Y	m/z	Y	m/z	Y
35.00	89	67.00	371	96.00	5859	145.00	120
36.00	772	68.00	8607	97.00	167	146.00	183
37.00	5467	69.00	8953	104.00	535	147.00	74
38.00	4928	70.00	824	105.00	253	148.00	197
39.00	1953	72.00	546	106.00	524	149.00	98
44.00	780	73.00	3565	107.00	133	150.00	59
45.00	925	74.00	14081	110.00	55	151.00	57
47.00	1029	75.00	40072	112.00	87	155.00	261
48.00	459	76.00	3303	113.00	118	157.00	178
49.00	3810	77.00	560	115.00	136	161.00	81
50.00	19568	78.00	466	116.00	304	169.00	53
51.00	6163	79.00	3447	117.00	498	171.00	150
52.00	491	80.00	1155	118.00	334	172.00	309
53.00	114	81.00	3304	119.00	437	173.00	1171
54.00	52	82.00	903	124.00	113	174.00	92096
55.00	191	83.00	260	128.00	343	175.00	7170
56.00	1660	85.00	54	129.00	218	176.00	87760
57.00	2918	86.00	251	130.00	486	177.00	5386
58.00	271	87.00	4308	131.00	56	178.00	144
59.00	59	88.00	4117	132.00	90	191.00	63
60.00	953	89.00	64	135.00	222	232.00	187
61.00	4003	91.00	467	137.00	140	281.00	63
62.00	3954	92.00	2588	140.00	114		
63.00	3396	93.00	3813	141.00	938		
64.00	358	94.00	10235	142.00	79		
65.00	51	95.00	91848	143.00	849		

Eurofins Air Toxics Inc.

Data file : /chem/msd18.i/03Feb2016.b/18020302.d
Lab Smp Id: Client Smp ID: BFB
Inj Date : 03-FEB-2016 10:26
Operator : LA Inst ID: msd18.i
Smp Info : ;BFB;BFB
Misc Info : 2299-835, 36ng (3/10/16)
Comment :
Method : /chem/msd18.i/03Feb2016.b/bfb.m
Meth Date : 22-Jan-2016 16:44 lantonic Quant Type: ESTD
Cal Date : 11-OCT-2009 15:24 Cal File: l101104.d
Als bottle: 1 QC Sample: BFB
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.50 Sample Matrix: WATER
Processing Host: eeyore

Concentration Formula: Amt * DF * Uf * Vf * Vi * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	ng unit correction factor
Vf	1.00000	Volumetric correction factor
Vi	1.00000	Injection Volume

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	MASS	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/L)	TARGET RANGE	RATIO
1 bfb						CAS #: 460-00-4		
13.208	13.222	-0.014	95	196948			100.00- 100.00	100.00
13.208	13.222	-0.014	50	46056			8.00- 40.00	23.38
13.208	13.222	-0.014	75	105856			30.00- 66.00	53.75
13.208	13.222	-0.014	96	13193			5.00- 9.00	6.70
13.208	13.222	-0.014	173	0			0.00- 1.99	0.00
13.208	13.222	-0.014	174	139288			50.00- 120.00	70.72
13.208	13.222	-0.014	175	11266			4.00- 9.00	8.09
13.208	13.222	-0.014	176	133032			93.00- 101.00	95.51
13.208	13.222	-0.014	177	9162			5.00- 9.00	6.89

Data File: /chem/msd18.i/03Feb2016.b/18020302.d

Date : 03-FEB-2016 10:26

Client ID: BFB

Instrument: msd18.i

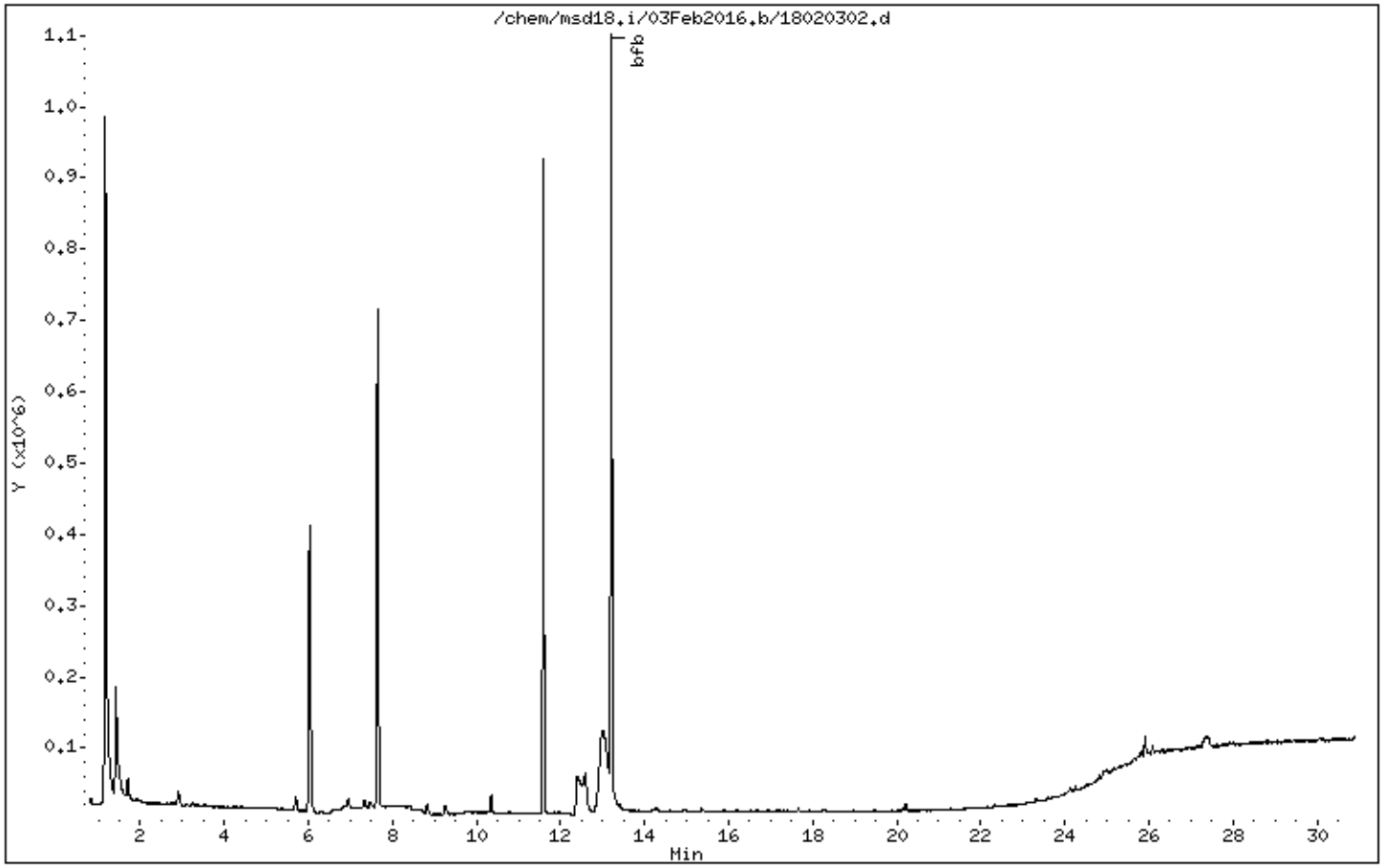
Sample Info: ;BFB;BFB

Volume Injected (uL): 1.0

Operator: LA

Column phase:

Column diameter: 2.00



Data File: /chem/msd18.i/03Feb2016.b/18020302.d

Date : 03-FEB-2016 10:26

Client ID: BFB

Instrument: msd18.i

Sample Info: ;BFB;BFB

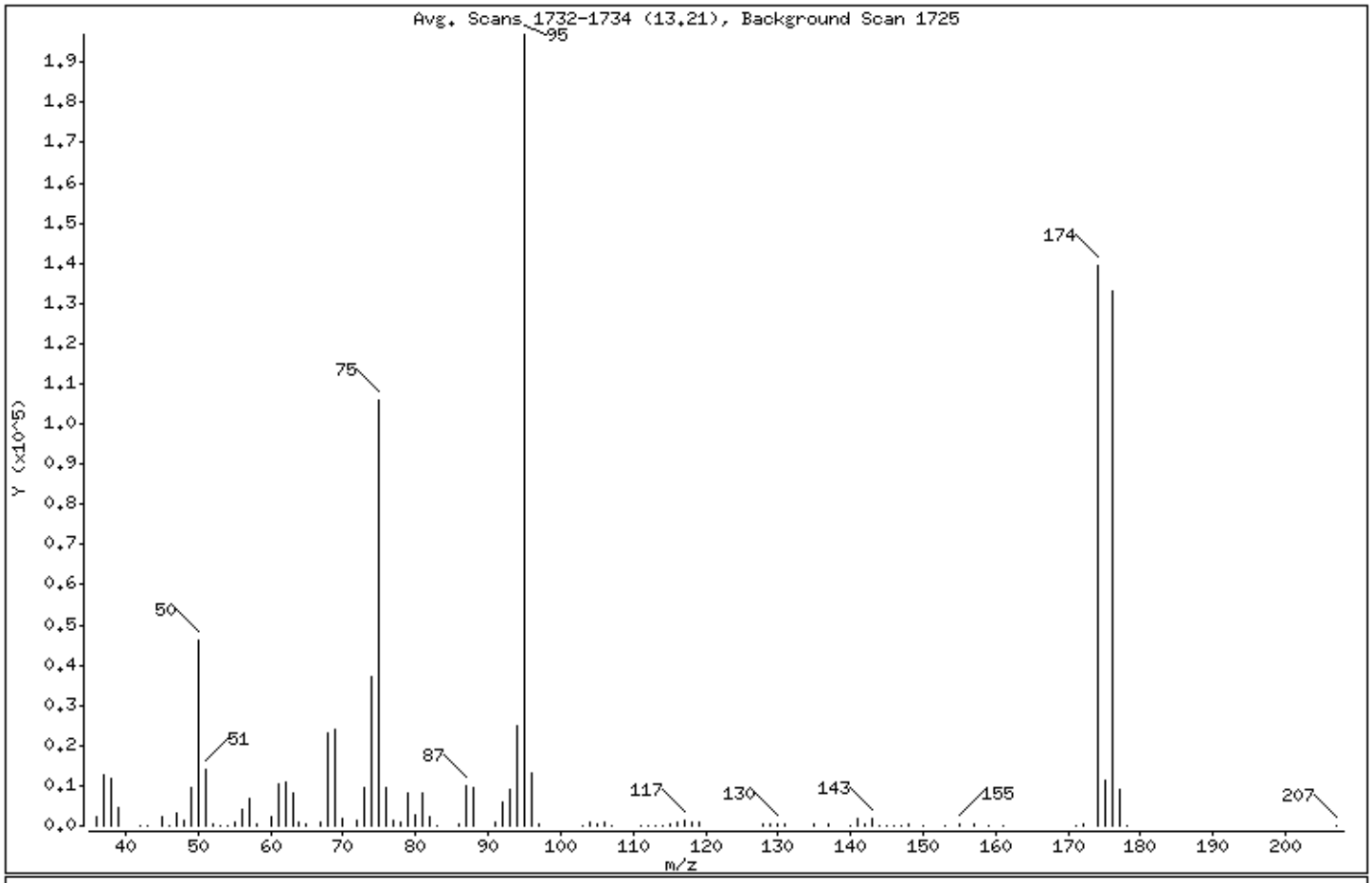
Volume Injected (uL): 1.0

Operator: LA

Column phase:

Column diameter: 2.00

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	8.00 - 40.00% of mass 95	23.38
75	30.00 - 66.00% of mass 95	53.75
96	5.00 - 9.00% of mass 95	6.70
173	Less than 1.99% of mass 174	0.00 (0.00)
174	50.00 - 120.00% of mass 95	70.72
175	4.00 - 9.00% of mass 174	5.72 (8.09)
176	93.00 - 101.00% of mass 174	67.55 (95.51)
177	5.00 - 9.00% of mass 176	4.65 (6.89)

Data File: /chem/msd18.i/03Feb2016.b/18020302.d

Date : 03-FEB-2016 10:26

Client ID: BFB

Instrument: msd18.i

Sample Info: ;BFB;BFB

Volume Injected (uL): 1.0

Operator: LA

Column phase:

Column diameter: 2.00

Data File: 18020302.d
Spectrum: Avg. Scans 1732-1734 (13.21), Background Scan 1725
Location of Maximum: 95.00
Number of points: 95

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	2051	64.00	930	94.00	24976	140.00	116
37.00	12622	65.00	364	95.00	196928	141.00	1839
38.00	11675	67.00	785	96.00	13193	142.00	250
39.00	4572	68.00	23000	97.00	402	143.00	1888
42.00	9	69.00	23904	103.00	124	144.00	181
43.00	92	70.00	1796	104.00	911	145.00	182
45.00	2168	72.00	1269	105.00	281	146.00	223
46.00	223	73.00	9551	106.00	989	147.00	178
47.00	3125	74.00	37000	107.00	207	148.00	499
48.00	1503	75.00	105856	111.00	213	150.00	116
49.00	9390	76.00	9361	112.00	109	153.00	115
50.00	46056	77.00	1340	113.00	167	155.00	402
51.00	14194	78.00	977	114.00	52	157.00	284
52.00	604	79.00	7939	115.00	257	159.00	158
53.00	100	80.00	2502	116.00	686	161.00	185
54.00	50	81.00	8069	117.00	1267	171.00	137
55.00	692	82.00	2134	118.00	798	172.00	489
56.00	4051	83.00	211	119.00	1059	174.00	139264
57.00	6753	86.00	270	128.00	456	175.00	11266
58.00	265	87.00	9745	129.00	331	176.00	132992
60.00	2347	88.00	9336	130.00	496	177.00	9162
61.00	10632	91.00	838	131.00	260	178.00	206
62.00	10838	92.00	5806	135.00	329	207.00	7
63.00	8351	93.00	9100	137.00	329		

Eurofins Air Toxics Inc.

Data file : /chem/msd11.i/04feb16.b/11020401.d
Lab Smp Id: Client Smp ID: BFB
Inj Date : 04-FEB-2016 09:31
Operator : ct Inst ID: msd11.i
Smp Info : ;BFB;BFB
Misc Info : 2299-835, 36ng (3/10/16)
Comment :
Method : /chem/msd11.i/04feb16.b/bfb.m
Meth Date : 30-Dec-2015 08:58 lantonic Quant Type: ESTD
Cal Date : 11-OCT-2009 15:24 Cal File: l101104.d
Als bottle: 1 QC Sample: BFB
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.50 Sample Matrix: WATER
Processing Host: eeyore

Concentration Formula: Amt * DF * Uf * Vf * Vi * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	ng unit correction factor
Vf	1.00000	Volumetric correction factor
Vi	1.00000	Injection Volume

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	MASS	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/L)	TARGET RANGE	RATIO
1 bfb						CAS #: 460-00-4		
13.064	13.042	0.022	95	86109			100.00- 100.00	98.35
13.064	13.042	0.022	50	19248			8.00- 40.00	22.35
13.064	13.042	0.022	75	38408			30.00- 66.00	44.60
13.064	13.042	0.022	96	6138			5.00- 9.00	7.13
13.064	13.042	0.022	173	1220			0.00- 1.99	1.39
13.064	13.042	0.022	174	87552			50.00- 120.00	101.68
13.064	13.042	0.022	175	6697			4.00- 9.00	7.65
13.064	13.042	0.022	176	83821			93.00- 101.00	95.74
13.064	13.042	0.022	177	6034			5.00- 9.00	7.20

Data File: /chem/msd11.i/04feb16.b/11020401.d

Date : 04-FEB-2016 09:31

Client ID: BFB

Instrument: msd11.i

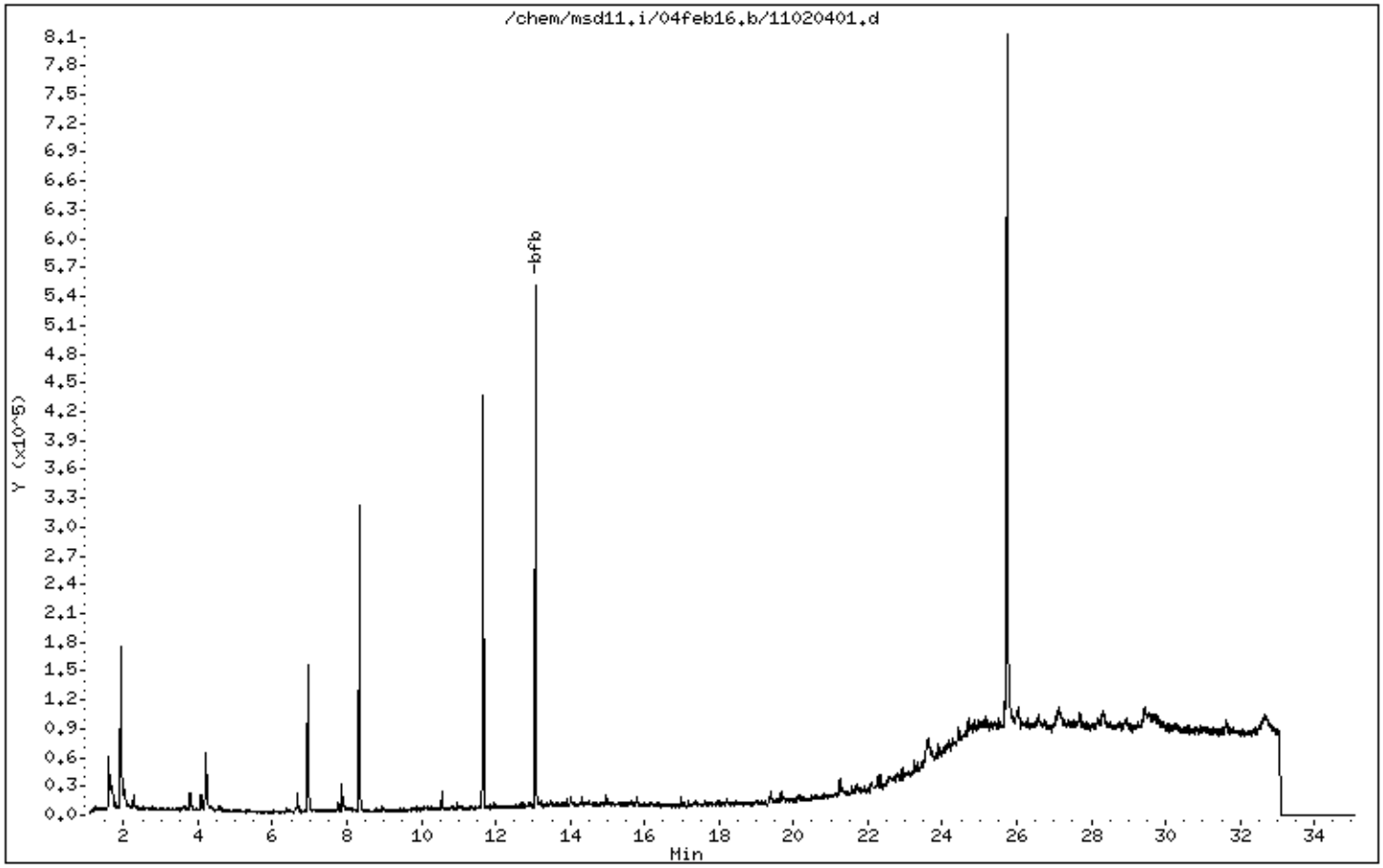
Sample Info: ;BFB;BFB

Volume Injected (uL): 1.0

Operator: ct

Column phase:

Column diameter: 2.00



Data File: /chem/msd11.i/04feb16.b/11020401.d

Date : 04-FEB-2016 09:31

Client ID: BFB

Instrument: msd11.i

Sample Info: ;BFB;BFB

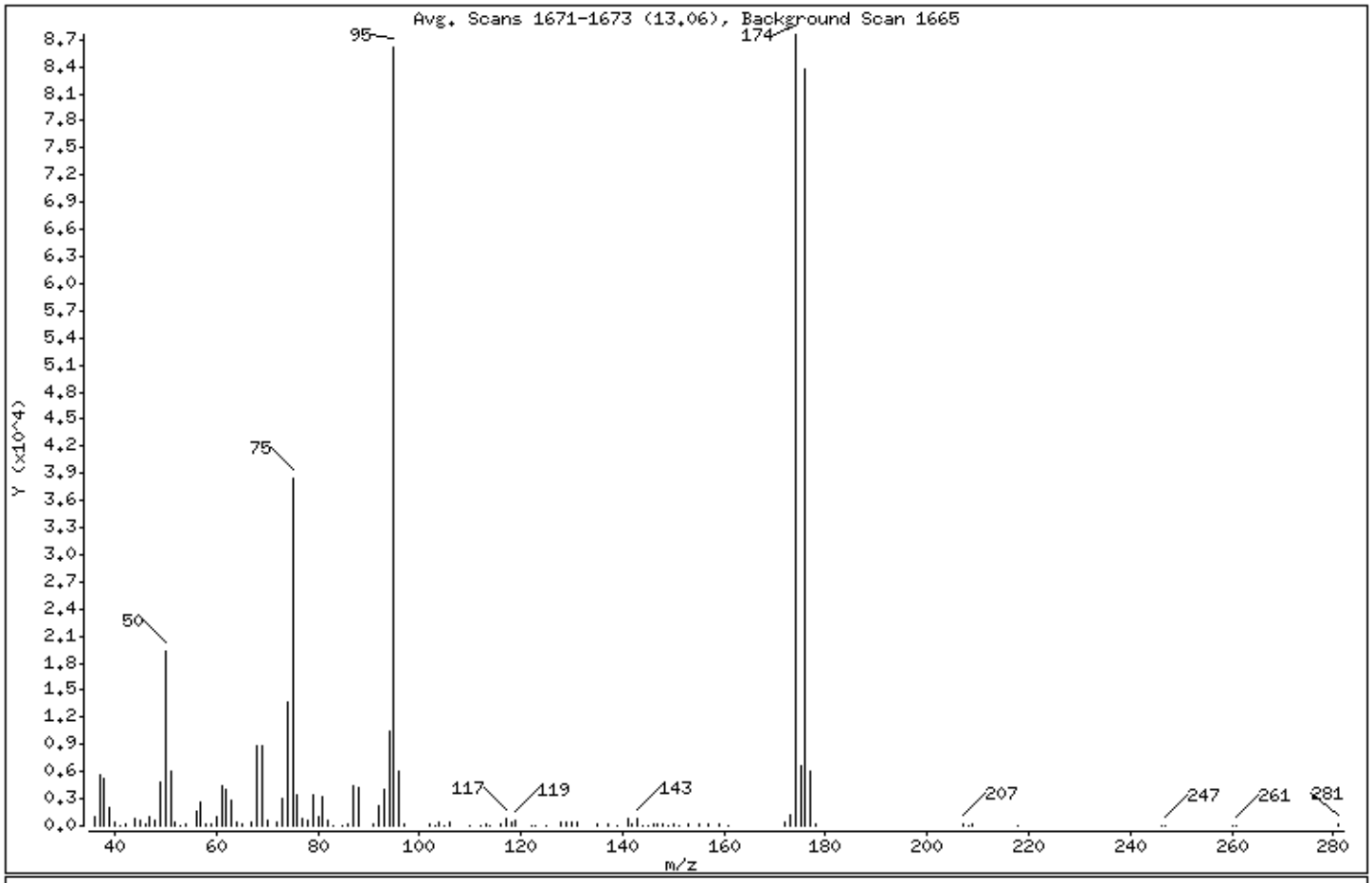
Volume Injected (uL): 1.0

Operator: ct

Column phase:

Column diameter: 2.00

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	8.00 - 40.00% of mass 95	22.35
75	30.00 - 66.00% of mass 95	44.60
96	5.00 - 9.00% of mass 95	7.13
173	Less than 1.99% of mass 174	1.42 (1.39)
174	50.00 - 120.00% of mass 95	101.68
175	4.00 - 9.00% of mass 174	7.78 (7.65)
176	93.00 - 101.00% of mass 174	97.34 (95.74)
177	5.00 - 9.00% of mass 176	7.01 (7.20)

Data File: /chem/msd11.i/04feb16.b/11020401.d

Date : 04-FEB-2016 09:31

Client ID: BFB

Instrument: msd11.i

Sample Info: ;BFB;BFB

Volume Injected (uL): 1.0

Operator: ct

Column phase:

Column diameter: 2.00

Data File: 11020401.d
Spectrum: Avg. Scans 1671-1673 (13.06), Background Scan 1665
Location of Maximum: 174.00
Number of points: 110

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	1072	67.00	444	103.00	89	147.00	140
37.00	5621	68.00	8773	104.00	466	148.00	194
38.00	5232	69.00	8837	105.00	72	149.00	54
39.00	1982	70.00	625	106.00	390	150.00	127
40.00	302	72.00	476	110.00	67	151.00	50
41.00	13	73.00	3048	112.00	68	153.00	122
42.00	161	74.00	13699	113.00	179	155.00	285
44.00	790	75.00	38408	114.00	62	157.00	180
45.00	704	76.00	3487	116.00	123	159.00	112
46.00	269	77.00	830	117.00	713	161.00	51
47.00	1005	78.00	508	118.00	404	172.00	385
48.00	563	79.00	3510	119.00	523	173.00	1220
49.00	4792	80.00	956	122.00	55	174.00	87552
50.00	19248	81.00	3282	123.00	52	175.00	6697
51.00	6005	82.00	654	125.00	52	176.00	83816
52.00	387	83.00	52	128.00	352	177.00	6034
53.00	71	85.00	58	129.00	341	178.00	122
54.00	252	86.00	110	130.00	501	207.00	178
56.00	1703	87.00	4508	131.00	304	208.00	61
57.00	2659	88.00	4313	135.00	206	209.00	173
58.00	256	91.00	247	137.00	170	218.00	62
59.00	193	92.00	2248	139.00	65	246.00	52
60.00	915	93.00	4015	141.00	758	247.00	78
61.00	4449	94.00	10435	142.00	128	260.00	54
62.00	4120	95.00	86104	143.00	849	261.00	56
63.00	2811	96.00	6138	144.00	70	281.00	107
64.00	355	97.00	168	145.00	66		
65.00	185	102.00	119	146.00	164		

Shipping/ Receiving Documents

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Eurofins Air Toxics, Inc. Sample Receipt Confirmation Cover Page

Thank you for choosing Eurofins Air Toxics, Inc. (EATL). We have received your samples and have listed any Sample Receipt Descrepancies below.

In order to expedite analysis and reporting, please review the attached information for accuracy.

For corrections call: **Brian Whittaker at 916-985-1000**

EATL will proceed with the analysis as specified on the Chain of Custody (COC) and Sample Receipt Summary page.

Please note : The Sample Receipt Confirmation, including the total workorder charge, is subject to change upon secondary review. Our aim is to provide a confirmation to you in a timely manner. Sample Receipt Discrepancies, if any, may not include discrepancies regarding sample receipt pressure(s). Additionally, the COC will be provided with the final report.

180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 95630

(916) 985-1000 .FAX (916) 985-1020
Hours 6:30 A.M to 5:30 P.M. PST

TO-17 SAMPLE COLLECTION

Air Toxics LTD.

CHAIN-OF-CUSTODY RECORD

Sample Transportation Notice
Relinquishing signature on this document indicates that sample is being shipped in compliance with all applicable local, State, Federal, national, and international laws, regulations and ordinances of any kind. Air Toxics Limited assumes no liability with respect to the collection, handling or shipping of these samples. Relinquishing signature also indicates agreement to hold harmless, defend, and indemnify Air Toxics Limited against any claim, demand, or action, of any kind, related to the collection, handling, or shipping of samples. D.O.T. Hotline (800) 467-4922.

180 BLUE RAVINE ROAD, SUITE B
FOLSOM, CA 95630
(916) 985-1000 FAX (916) 985-1020

0900 of 0912

Project Manager: Terry Taylor
Collected by: (Print and Sign) Terry Taylor / David Lindstrand
Company: AMAT Email:
Address: 2700 Westchester Ave City: Purchase State: NY Zip: 10591
Phone: 914-251-0400 Fax:

Project Info:
P.O. #:
Project #:
Project Name: BMS VI

Turn Around Time: ☒ Normal ☐ Rush (specify)

Reporting Units: ☐ ppmv ☒ ppbv ☒ µg/m3 ☐ mg/m3

Lab I.D.	Field Sample I.D. (Location)	Engraved or Stamped Tube #	Date of Collection (mm/dd/yy)	Start Time (hr:min)	End Time (hr:min)	Pre-Test Flow Rate	Post-Test Flow Rate	Volume l	Indoor/Outdoor % RH	Indoor/Outdoor Temp	Indoor Air	Outdoor Air	Soil Vapor	Other ( )
01A	B30-1IA013016	60137179	1/30/16	1030	0135	35ml/min	35ml/min	9.3l	82.5	79	☒	☐	☐	☐
02A	B30-2IA013016	60152248	1/30-31/16	1035	0642	35ml/min	36ml/min	12.6l	83	79	☒	☐	☐	☐
03A	B30-3IA013016	60188144	1/30-31/16	1042	1042	35ml/min	35ml/min	14.8	80	80	☒	☐	☐	☐
04A	B30-4IA013016	60132032	1/30-31/16	1042	1042	35ml/min	35ml/min	14.8	79	82	☒	☐	☐	☐
05A	B30-4IAD013016	60139959	1/30-31/16	1042	1042	35ml/min	33ml/min	14.4	79	82	☒	☐	☐	☐
06A	B30-5IA013016	60144385	1/30-31/16	1055	1055	35ml/min	36ml/min	14.9	80	81	☒	☐	☐	☐
07A	B3042AA013016	60143465	1/30/16	1103	1755	35ml/min	36ml/min	14.6l	65	86	☐	☒	☐	☐
08A	B42-1IA013016	60140124	1/30-31/16	1120	1120	35ml/min	36ml/min	14.9	83	87	☒	☐	☐	☐
09A	B42-2IA013016	60137189	1/30-31/16	1108	1108	35ml/min	35ml/min	14.8	61	78	☒	☐	☐	☐
10A	B42-3IA013016	60145581	1/30-31/16	1115	1115	35ml/min	35ml/min	14.8	67	76	☒	☐	☐	☐

Relinquished by: (signature)	Date/Time	Received by: (signature)	Date/Time
David Lindstrand	Feb. 1, 2016 1200	AMEATL	2-2-16 1020
Relinquished by: (signature)	Date/Time	Received by: (signature)	Date/Time
Relinquished by: (signature)	Date/Time	Received by: (signature)	Date/Time

Notes: Naphthalene ONLY. Report to MDL. Sample collection was cycled over Start/End Time

Lab Use Only	Shipper Name	Air Bill #	Temp (°C)	Condition	Custody Seals Intact?	Work Order #
	FedEx		2.8C	Good	Yes No None	1602029

TO-17 SAMPLE COLLECTION

Air Toxics LTD.

CHAIN-OF-CUSTODY RECORD

Sample Transportation Notice
Relinquishing signature on this document indicates that sample is being shipped in compliance with all applicable local, State, Federal, national, and international laws, regulations and ordinances of any kind. Air Toxics Limited assumes no liability with respect to the collection, handling or shipping of these samples. Relinquishing signature also indicates agreement to hold harmless, defend, and indemnify Air Toxics Limited against any claim, demand, or action, of any kind, related to the collection, handling, or shipping of samples. D.O.T. Hotline (800) 467-4922.

180 BLUE RAVINE ROAD, SUITE B
FOLSOM, CA 95630
(916) 985-1000 FAX (916) 985-1020

0901 of 0912

Project Manager: Terry Taylor
Collected by: (Print and Sign) Terry Taylor
Company: AMAI Email:
Address: 2200 Westcher Ave City: Purchase State: NY Zip: 10577
Phone: 914-251-0400 Fax:

Project Info:
P.O. #:
Project #:
Project Name: BMS VI

Turn Around Time: ☒ Normal ☐ Rush (specify)

Reporting Units: ☐ ppmv ☒ ppbv ☒ µg/m3 ☐ mg/m3

Lab I.D.	Field Sample I.D. (Location)	Engraved or Stamped Tube #	Date of Collection (mm/dd/yy)	Start Time (hr:min)	End Time (hr:min)	Pre-Test Flow Rate ml/min	Post-Test Flow Rate ml/min	Volume ml	Indoor/Outdoor % RH	Indoor/Outdoor Temp	Indoor Air	Outdoor Air	Soil Vapor	Other ( )
11A	B3042-FB1IA	60130962	1/31/16	1052	1052	/	/	/	78	82	☒	☐	☐	☐
12A	B3042-FB2SSV	60187158	1/31/16	1059	1059	/	/	/	78	82	☐	☐	☒	☐
13A	B30-1SSV013116	60129354	1/31/16	1224	1227	133	133	400	83	79	☐	☐	☒	☐
14A	B30-2SSV013116	60143780	1/31/16	1242	1245	133	133	400	83	79	☐	☐	☒	☐
15A	B30-3SSV013116	60135686	1/31/16	1301	1304	133	133	400	80	80	☐	☐	☒	☐
16A	B30-4SSV013116	60150385	1/31/16	~~1304~~ 1330	1333	133	133	400	79	82	☐	☐	☒	☐
17A	B30-4DSSV013116	60143423	1/31/16	1325	1328	133	133	400	79	82	☐	☐	☒	☐
18A	B30-5SSV013116	60143629	1/31/16	1352	1355	133	133	400	80	81	☐	☐	☒	☐
19A	B42-1SSV013116	60137246	1/31/16	1641	1644	133	133	400	83	87	☐	☐	☒	☐
20A	B42-2SSV013116	60137108	1/31/16	1625	1628	133	133	400	61	78	☐	☐	☒	☐

Relinquished by: (signature)	Date/Time	Received by: (signature)	Date/Time
[signature]	Feb. 1, 2016 1200	[signature]	2-2-16 1020
Relinquished by: (signature)	Date/Time	Received by: (signature)	Date/Time
Relinquished by: (signature)	Date/Time	Received by: (signature)	Date/Time

Notes: B30-1SSV013116 analyze for full TO-15 compounds. All other samples Naphthalene ONLY. Report to MDL.

Lab Use Only	Shipper Name	Air Bill #	Temp (°C)	Condition	Custody Seals Intact?	Work Order #
	FedEx		2.8°C	Good	Yes No None	1602029

TO-17 SAMPLE COLLECTION

Air Toxics LTD.

CHAIN-OF-CUSTODY RECORD

Sample Transportation Notice
Relinquishing signature on this document indicates that sample is being shipped in compliance with all applicable local, State, Federal, national, and international laws, regulations and ordinances of any kind. Air Toxics Limited assumes no liability with respect to the collection, handling or shipping of these samples. Relinquishing signature also indicates agreement to hold harmless, defend, and indemnify Air Toxics Limited against any claim, demand, or action, of any kind, related to the collection, handling, or shipping of samples. D.O.T. Hotline (800) 467-4922.

180 BLUE RAVINE ROAD, SUITE B
FOLSOM, CA 95630
(916) 985-1000 FAX (916) 985-1020

0902 of 0912

Project Manager: Terry Taylor
Collected by: (Print and Sign) Terry Taylor
Company: AMAI Email:
Address: 2700 Westchester Ave City: Purchase State: NY Zip: 10591
Phone: 914-39-1225 Fax:

Project Info:
P.O. #:
Project #:
Project Name: BMS VI

Turn Around Time: ☒ Normal ☐ Rush (specify)

Reporting Units: ☐ ppmv ☒ ppbv ☒ µg/m3 ☐ mg/m3

Lab I.D.	Field Sample I.D. (Location)	Engraved or Stamped Tube #	Date of Collection (mm/dd/yy)	Start Time (hr:min)	End Time (hr:min)	Pre-Test Flow Rate ml/min	Post-Test Flow Rate ml/min	Volume ml	Indoor/Outdoor % RH	Indoor/Outdoor Temp	Indoor Air	Outdoor Air	Soil Vapor	Other ( )
21A	B42-3SSV013116	60139913	1/31/16	1607	1610	133	133	400	67	76	☐	☐	☒	☐
											☐	☐	☐	☐
											☐	☐	☐	☐
											☐	☐	☐	☐
											☐	☐	☐	☐
											☐	☐	☐	☐
											☐	☐	☐	☐
											☐	☐	☐	☐
											☐	☐	☐	☐
											☐	☐	☐	☐
											☐	☐	☐	☐

Relinquished by: (signature)	Date/Time	Received by: (signature)	Date/Time
[signature]	12:00 Feb. 1, 2016	MHEATL	2-2-16 1020
Relinquished by: (signature)	Date/Time	Received by: (signature)	Date/Time
Relinquished by: (signature)	Date/Time	Received by: (signature)	Date/Time

Notes: Analyze for Naphthalene ONLY. Report to MDL

Lab Use Only	Shipper Name	Air Bill #	Temp (°C)	Condition	Custody Seals Intact?	Work Order #
	FedEX		2.8°C	Good	Yes No (None)	1607029

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SAMPLE RECEIPT SUMMARY

WORKORDER 1602029

Client

Mr. Terry Taylor
Anderson Mulholland &
Associates, Inc.
2700 Westchester Avenue
Suite 417
Purchase, NY 10577
Sales Rep: N/A

Phone

(914) 251-0400

Fax

Date Promised: 02/15/16
Date Completed: 2/12/16
Date Received: 2/2/16
PO#:
Project#: BMS VI

Total $: $ 2,160.00
Logged By: JCW

Fraction	Sample #	Analysis	Collected	Amount$
01A	B30-1IA013016	Modified TO-17 VI	1/31/2016	$100.00
02A	B30-2IA013016	Modified TO-17 VI	1/31/2016	$100.00
03A	B30-3IA013016	Modified TO-17 VI	1/31/2016	$100.00
04A	B30-4IA013016	Modified TO-17 VI	1/31/2016	$100.00
05A	B30-4IAD013016	Modified TO-17 VI	1/31/2016	$100.00
06A	B30-5IA013016	Modified TO-17 VI	1/31/2016	$100.00
07A	B3042AA013016	Modified TO-17 VI	1/30/2016	$100.00
08A	B42-1IA013016	Modified TO-17 VI	1/31/2016	$100.00
09A	B42-2IA013016	Modified TO-17 VI	1/31/2016	$100.00
10A	B42-3IA013016	Modified TO-17 VI	1/31/2016	$100.00
11A	B3042-FB1IA	Modified TO-17 VI	1/31/2016	$100.00
12A	B3042-FB2SSV	Modified TO-17 VI	1/31/2016	$100.00
13A	B30-1SSV013116	Modified TO-17 VI	1/31/2016	$160.00
14A	B30-2SSV013116	Modified TO-17 VI	1/31/2016	$100.00
15A	B30-3SSV013116	Modified TO-17 VI	1/31/2016	$100.00
16A	B30-4SSV013116	Modified TO-17 VI	1/31/2016	$100.00
17A	B30-4DSSV013116	Modified TO-17 VI	1/31/2016	$100.00
18A	B30-5SSV013116	Modified TO-17 VI	1/31/2016	$100.00
19A	B42-1SSV013116	Modified TO-17 VI	1/31/2016	$100.00
20A	B42-2SSV013116	Modified TO-17 VI	1/31/2016	$100.00

Note: Samples received after 3 P.M. PST are considered to be received on the following work day.
Atlas Project Name/Profile#: BMS/19256

BILL TO: Accounts Payable
Anderson Mulholland & Associates, Inc.
2700 Westchester Avenue
Suite 417
Purchase, NY 10577

Analysis Code: Other MS

TERMS: NET 30

Reporting Method: TO-17 VI VOC List + Naph @ 1.0 ng

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SAMPLE RECEIPT SUMMARY Continued

Client

Mr. Terry Taylor
Anderson Mulholland &
Associates, Inc.
2700 Westchester Avenue
Suite 417
Purchase, NY 10577
Sales Rep: N/A

Phone

(914) 251-0400

Fax

Date Promised: 02/15/16
Date Completed: 2/12/16
Date Received: 2/2/16
PO#:
Project#: BMS VI

Total $: $ 2,160.00
Logged By: JCW

Fraction	Sample #	Analysis	Collected	Amount$
21A	B42-3SSV013116	Modified TO-17 VI	1/31/2016	$100.00
22A	Lab Blank	Modified TO-17 VI	NA	$0.00
22B	Lab Blank	Modified TO-17 VI	NA	$0.00
23A	CCV	Modified TO-17 VI	NA	$0.00
23B	CCV	Modified TO-17 VI	NA	$0.00
24A	LCS	Modified TO-17 VI	NA	$0.00
24AA	LCSD	Modified TO-17 VI	NA	$0.00
24B	LCS	Modified TO-17 VI	NA	$0.00
24BB	LCSD	Modified TO-17 VI	NA	$0.00

Note: Samples received after 3 P.M. PST are considered to be received on the following work day.
Atlas Project Name/Profile#: BMS/19256

BILL TO: Accounts Payable
Anderson Mulholland & Associates, Inc.
2700 Westchester Avenue
Suite 417
Purchase, NY 10577

Analysis Code: Other MS

TERMS: NET 30

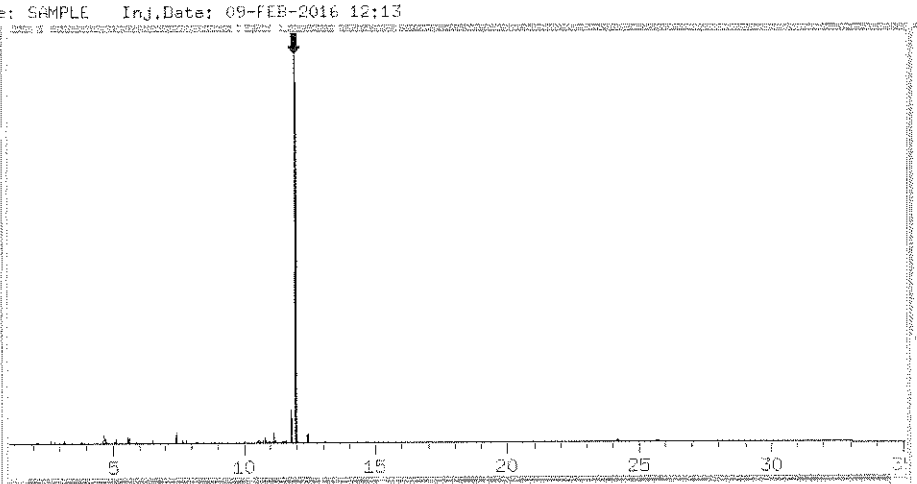
Reporting Method: TO-17 VI VOC List + Naph @ 1.0 ng

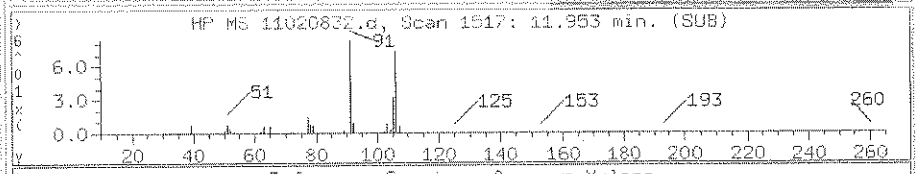
Other Records

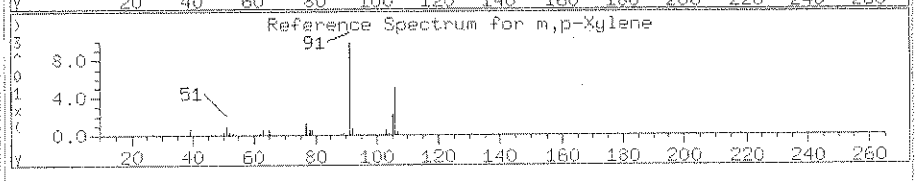
Sample: 1602029-13A Type: SAMPLE Inj.Date: 09-FEB-2016 12:13

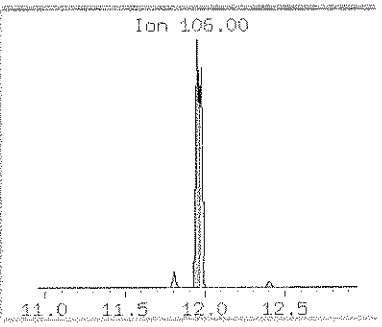
** 79 Chlorobenzene-
* 84 m,p-Xylene
Unk: 1-Propene, 2-
Unk: Cyclopropane,
Unk: Pentane
Unk: Acetone
Unk: Pentane, 2-m
Unk: Pentane, 3-m
Unk: Hexane
Unk: Cyclopentane,
Unk: Cyclohexane
Unk: Hexane, 3-me
Unk: Unknown
Unk: Heptane, 2,4
Unk: Heptane, 2,6
Unk: Cyclohexane,
Unk: Unknown
Unk: Cyclohexene,
Unk: Ethylbenzene
Unk: Bicyclo[3.2.
Unk: p-Xylene
Unk: Benzene, 1,1

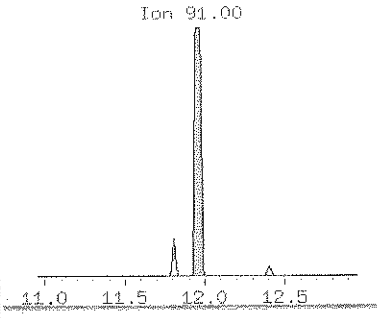
11020829c.d
11020832.d











Hit#	RT(min)	Response	Amount	Conc	Ratio	Flags	Report:
	11.810	2032516			286		
2	11.953	10679657	25679	25679	100	A	
	11.953	22862046			214		
3	11.975	7512689	18064	18064	100	A	
	11.953	22862046			304		
4	12.132	5488	13.196	13.196	100		

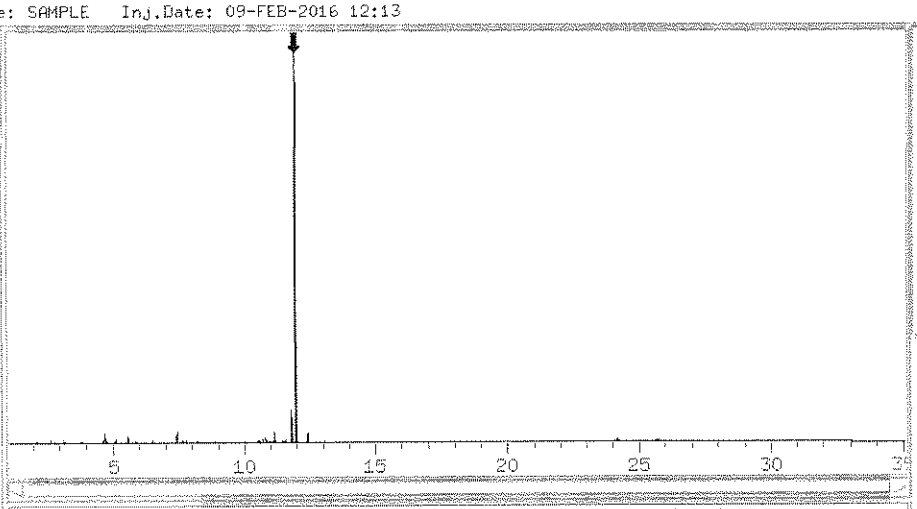
before

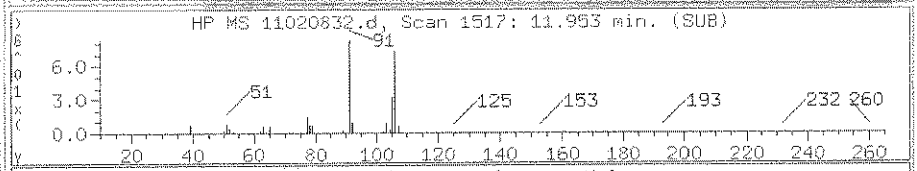
LA 2/12/16

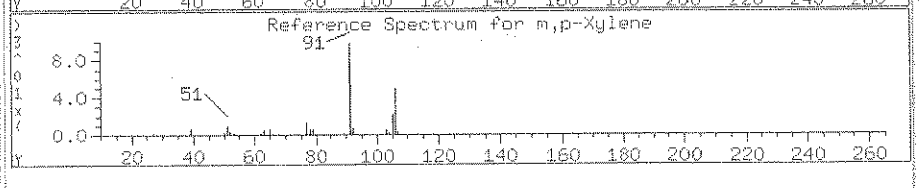
Sample: 1602029-13A Type: SAMPLE Inj.Date: 09-FEB-2016 12:13

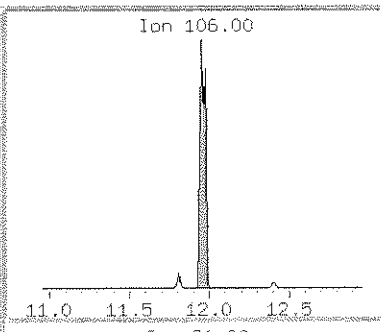
- ** 79 Chlorobenzene-
- *| 84 m,p-Xylene
- Unk; 1-Propene, 2
- Unk; Cyclopropane,
- Unk; Pentane
- Unk; Acetone
- Unk; Pentane, 2-m
- Unk; Pentane, 3-m
- Unk; Hexane
- Unk; Cyclopentane,
- Unk; Cyclohexane
- Unk; Hexane, 3-me
- Unk; Unknown
- Unk; Heptane, 2,4
- Unk; Heptane, 2,6
- Unk; Cyclohexane,
- Unk; Unknown
- Unk; Cyclohexene,
- Unk; Ethylbenzene
- Unk; Bicyclo[3.2.
- Unk; p-Xylene
- Unk; Benzene, 1,1

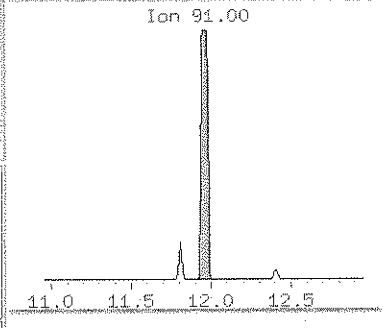
11020829c.d
11020832.d











Hit#	RT(min)	Response	Amount	Conc	Ratio	Flags	Report:
1	11.953	15787664	37961	37961	100	AM	
	11.953	22862046			145		

- Mark m,p-Xylene Undetected.

UA 2/12/16

After

Correct Baseline	
Split Peak	
Merge Peak	✓
Zoom In	
Change Parameter	
System Peak Subtraction	
Peak Misidentified	
Corrected Peak Integration	

Compound Listing

TO-17 VI VOC List + Naph @ 1.0 ng

CAS Number	Compound	Detection Limit ng	Type
76-14-2	Freon 114	14	
75-01-4	Vinyl Chloride	2.6	
591-78-6	2-Hexanone	8.2	
127-18-4	Tetrachloroethene	6.8	
108-90-7	Chlorobenzene	4.6	
100-41-4	Ethyl Benzene	4.3	
108-38-3	m,p-Xylene	8.7	
95-47-6	o-Xylene	8.7	
100-42-5	Styrene	8.5	
79-34-5	1,1,2,2-Tetrachloroethane	6.9	
98-82-8	Cumene	9.8	
103-65-1	Propylbenzene	9.8	
622-96-8	4-Ethyltoluene	9.8	
108-67-8	1,3,5-Trimethylbenzene	9.8	
95-63-6	1,2,4-Trimethylbenzene	29	
541-73-1	1,3-Dichlorobenzene	6.0	
106-46-7	1,4-Dichlorobenzene	6.0	
95-50-1	1,2-Dichlorobenzene	6.0	
120-82-1	1,2,4-Trichlorobenzene	15	
87-68-3	Hexachlorobutadiene	21	
91-20-3	Naphthalene	1.0	
17060-07-0	1,2-Dichloroethane-d4		
2037-26-5	Toluene-d8		
1146-65-2	Naphthalene-d8		
106-99-0	1,3-Butadiene	2.2	
78-78-4	Isopentane	5.9	
75-69-4	Freon 11	11	
75-35-4	1,1-Dichloroethene	4.0	
75-09-2	Methylene Chloride	21	
76-13-1	Freon 113	7.7	
156-60-5	trans-1,2-Dichloroethene	4.0	
75-34-3	1,1-Dichloroethane	4.0	
156-59-2	cis-1,2-Dichloroethene	4.0	
110-54-3	Hexane	35	
67-66-3	Chloroform	4.9	
107-06-2	1,2-Dichloroethane	4.0	
71-55-6	1,1,1-Trichloroethane	5.4	
71-43-2	Benzene	6.4	
56-23-5	Carbon Tetrachloride	6.3	
110-82-7	Cyclohexane	6.9	
78-87-5	1,2-Dichloropropane	4.6	
79-01-6	Trichloroethene	5.4	
123-91-1	1,4-Dioxane	11	
540-84-1	2,2,4-Trimethylpentane	9.4	
142-82-5	Heptane	8.2	
108-87-2	Methylcyclohexane	8.0	

Compound Listing

TO-17 VI VOC List + Naph @ 1.0 ng

CAS Number	Compound	Detection Limit ng	Type
79-00-5	1,1,2-Trichloroethane	5.4	
108-10-1	4-Methyl-2-pentanone	8.2	
108-88-3	Toluene	7.5	

Eurofins Air Toxics, Inc.	Data Review Checklist			Release Date: 11/11/15
Workorder # 1602029	Form F1.27	Revision #12	Revision Date: 11/11/15	Page 1 of 2

S1	S2	S3	S4	D	Section 1 – Spec Out				
					Initials/Instrument/Date	S1: MSD-18 LA 2/3/16	S2: MSD-11 2/12/16	S3:	S4:
✓				■	Project Identification (PID), Project Requirements Table (PRT), Daily QC and ICAL met Criteria				
✓				■	Lumen QC and ICAL evaluation (ref. SOP/Method) report initialed and in folder				
✓				■	Manual Integrations included and approved				
✓					Chain of Custody verified for special comments (add comments below)				
✓				■	Non-standard Target sublist verified (MDL, LOD, RL, control limits, etc.)				

Profile, analyses, reporting, special notes and unusual circumstances:

raised RL for VC + trans-1,2-DCE for MSD-11 sample 13A only.
J-flag to MDL
report m,p-xylene from 4.1 HS spec-out on 2/8/16.

A1	A2	A3	A4	D	Section 2 – Sample Analysis				
					Initials/Date	A1: LA 2/12/16	A2:	A3:	A4:
✓					IS/Surr Recoveries, Dilution Factors, Load Volumes, leg(s) of instrument, Initial/Final Pressures, and Canister #s Verified				
✓					a) Tedlar Bag IDs verified against COC b) Tedlar Bag ID confirmed with loading sequence/leg(s) of instrument				
✓					Manual Integrations/Bag or Can Dilution Forms/Re-pressurization Forms/Bag-Can Transfer Forms present (circle all that apply)				
✓				■	12/24 Hr clock time & Hold Time met for all samples				
✓					Re-analysis of sample(s) has been evaluated for comparability and/or sample(s) has/have been checked for trends (Inf/Eff), field dups/trip blanks.				
✓					All runs have been evaluated for potential carry-over (TPHg/non-Target/over-range compounds/ etc.)				

Analytical and special notes:

13A analyzed @ a 4.1 HS for m,p-xylene -- still saturated.
dup 16A / 17A comparable.

D1	D2	D3	D4	T	3T	Section 3 – Target Data Reduction	Technical Review Needed? Circle one: Yes/No		T:	
						Initials/Instrument/ Date	D1: MSD-11/MSD-18 LA 2/12/16	D2:	D3:	D4:
✓					■	CAR # (if applicable)				
✓					■	Spectra Verified *(documentation of spectral defense included if applicable)*				
✓					■	TICs resemble reference spectra/ TICs between sample dups. are consistent *(if applicable)*				
✓						Lab Narrative is correct				
✓					■	TPH/NMOC calculations complete and included in folder				

Special notes:

A	3T	Section 4- Atlas Data Entry	Lumen verified and included in folder	Circle one: Yes/No
		Initials/Date: LA 2/12/16	3rd Tier: *(needed only for DOD or per client request)*	
✓		Sample Discrepancy Report (SDR) complete and approved *(if applicable)*		
✓		Manually entered results are checked		
✓		At least one result per sample is verified against Target quant sheets		
✓		Appropriate data qualifier flags are applied		
✓		Final Invoice is correct/ Final PDF report, COC and EDD reviewed and correct		

Special Notes:

Note (1) *Please check all the appropriate boxes. Indicate "NA" for any statement that doesn't apply*
Note (2) 3rd Tier Report Reviewer and Write Up Reviewer must be separate individuals for DoD & Client Specific Projects

Workorder # :				**Reason for Reissue:**
W	**T**	**3T**	**Q**	
				Reissue Request form Present
				Client or QA or Lab contact present with reason for reissue
				Review all affected data
				Report header has correct R1, R2 etc
				The Lab Narrative clearly explains the reissue (Date, Reason and whether client requested)
				Date for Reissue in Report Header matches date in Lab Narrative
				Check Project Profile for correct reporting instructions (multiple clients, # hardcopies, etc)
				Corrective Action issued - #
				The reissued workorder has been approved by QA Manager or a Technical Director

Additional Comments:

Write Up (Initials/Date)	**Tech Review** (Initials/Date)	***3rd Tier Review** ** 3rd Tier Report Review is for DoD & Client Specific projects only* (Initials/Date)	**QA Review** (Initials/Date)

Workorder # :				**Reason for Reissue:**
W	**T**	**3T**	**Q**	
				Reissue Request form Present
				Client or QA or Lab contact present with reason for reissue
				Review all affected data
				Report header has correct R1, R2 etc
				The Lab Narrative clearly explains the reissue (Date, Reason and whether client requested)
				Date for Reissue in Report Header matches date in Lab Narrative
				Check Project Profile for correct reporting instructions (multiple clients, # hardcopies, etc)
				Corrective Action issued - #
				The reissued workorder has been approved by QA Manager or a Technical Director

Additional Comments:

Write Up (Initials/Date)	**Tech Review** (Initials/Date)	***3rd Tier Review** ** 3rd Tier Report Review is for DoD & Client Specific projects only* (Initials/Date)	**QA Review** (Initials/Date)

Note (1) *Please check all the appropriate boxes. Indicate "NA" for any statement that doesn't apply*
Note (2) 3rd Tier Report Reviewer and Write Up Reviewer must be separate individuals for DoD & Client Specific Projects

Not Applicable