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Electronic Comprehensive Validation Package (eCVP)

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COMPREHENSIVE VALIDATION PACKAGE

Modified TO-17 VI

INVENTORY SHEET

Work Order #: 1607228B

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Comments:

Completed by:

Vera Belitsky	Vera Belitsky / Document Control	8/3/16
(Signature)	(Print Name & Title)	(Date)

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WORK ORDER #: 1607228B

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 B18 VI BMS
DATE RECEIVED:	07/14/2016	**CONTACT:**	Brian Whittaker
DATE COMPLETED:	07/24/2016		

FRACTION #	NAME	TEST
01A	B18IA-1	Modified TO-17 VI
02A	B18IA-2	Modified TO-17 VI
03A	B18IA-3	Modified TO-17 VI
04A	B18IA-4	Modified TO-17 VI
05A	B18IA-5	Modified TO-17 VI
06A	B18IA-1D	Modified TO-17 VI
08A	B18AA-070816	Modified TO-17 VI
09A	B18SS-1	Modified TO-17 VI
10A	B18SS-2	Modified TO-17 VI
11A	B18SS-1D	Modified TO-17 VI
12A	B18SS-3	Modified TO-17 VI
13A	B18SS-4	Modified TO-17 VI
14A	B18SS-5	Modified TO-17 VI
15A	Field Blank	Modified TO-17 VI
16A	Lab Blank	Modified TO-17 VI
17A	CCV	Modified TO-17 VI
18A	LCS	Modified TO-17 VI
18AA	LCSD	Modified TO-17 VI

CERTIFIED BY: Heidi Hayes

Technical Director

DATE: 07/26/16

Certification numbers: AZ Licensure AZ0775, NJ NELAP - CA016, NY NELAP - 11291,
TX NELAP - T104704434-15-9, UT NELAP CA0093332015-6, VA NELAP - 8113, WA NELAP - C935
Name of Accreditation Body: NELAP/ORELAP (Oregon Environmental Laboratory Accreditation Program)
Accreditation number: CA300005, Effective date: 10/18/2015, Expiration date: 10/17/2016.
Eurofins Air Toxics Inc.. certifies that the test results contained in this report meet all requirements of the NELAC standards

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180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 95630
(916) 985-1000 . (800) 985-5955 . FAX (916) 985-1020

LABORATORY NARRATIVE
Modified EPA Method TO-17 (VI Tubes)
Anderson Mulholland & Associates, Inc.
Workorder# 1607228B

Fourteen TO-17 VI Tube samples were received on July 14, 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

A Temperature Blank was included with the shipment. Temperature was measured and was not within 4±2 °C. Coolant in the form of blue ice was present. Analysis proceeded.

Analytical Notes

Sampling volume was supplied by the client. A sampling volume of 17.6 L was used to convert ng to ug/m3 for sample Field Blank and the associated Lab Blank.

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.

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)	Sample Extract Date Analyzed	Sample Extract Holding Time (Days)	Sample Condition
B18IA-1	1607228B-01A	7/ 9/2016	7/14/2016	NA	11	7/20/2016	NA	Good
B18IA-2	1607228B-02A	7/ 9/2016	7/14/2016	NA	11	7/20/2016	NA	Good
B18IA-3	1607228B-03A	7/ 9/2016	7/14/2016	NA	11	7/20/2016	NA	Good
B18IA-4	1607228B-04A	7/ 9/2016	7/14/2016	NA	11	7/20/2016	NA	Good
B18IA-5	1607228B-05A	7/ 9/2016	7/14/2016	NA	11	7/20/2016	NA	Good
B18IA-1D	1607228B-06A	7/ 9/2016	7/14/2016	NA	11	7/20/2016	NA	Good
B18AA-070816	1607228B-08A	7/11/2016	7/14/2016	NA	9	7/20/2016	NA	Good
B18SS-1	1607228B-09A	7/11/2016	7/14/2016	NA	9	7/20/2016	NA	Good
B18SS-2	1607228B-10A	7/12/2016	7/14/2016	NA	9	7/21/2016	NA	Good
B18SS-1D	1607228B-11A	7/11/2016	7/14/2016	NA	10	7/21/2016	NA	Good
B18SS-3	1607228B-12A	7/11/2016	7/14/2016	NA	10	7/21/2016	NA	Good
B18SS-4	1607228B-13A	7/12/2016	7/14/2016	NA	9	7/21/2016	NA	Good
B18SS-5	1607228B-14A	7/12/2016	7/14/2016	NA	9	7/21/2016	NA	Good
Field Blank	1607228B-15A	7/12/2016	7/14/2016	NA	8	7/20/2016	NA	Good
Lab Blank	1607228B-16A	NA	NA	NA	NA	7/20/2016	NA	Good
CCV	1607228B-17A	NA	NA	NA	NA	7/20/2016	NA	Good
LCS	1607228B-18A	NA	NA	NA	NA	7/20/2016	NA	Good
LCSD	1607228B-18AA	NA	NA	NA	NA	7/20/2016	NA	Good

Sample Results and Raw Data

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Summary of Detected Compounds
EPA METHOD TO-17

Client Sample ID: B18IA-1

Lab ID#: 1607228B-01A

Compound	Rpt. Limit (ppbv)	Rpt. Limit (ug/m3)	Amount (ppbv)	Amount (ug/m3)
Naphthalene	0.017	0.090	0.031	0.16

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Client Sample ID: B18IA-1

Lab ID#: 1607228B-01A

EPA METHOD TO-17

File Name:	**6072011**	**Date of Extraction: NA**	**Date of Collection: 7/9/16 9:57:00 AM**
Dil. Factor:	**1.00**		**Date of Analysis: 7/20/16 07:17 PM**

Compound	**Rpt. Limit (ppbv)**	**Rpt. Limit (ug/m3)**	**Amount (ppbv)**	**Amount (ug/m3)**
Naphthalene	0.017	0.090	0.031	0.16

Air Sample Volume(L): 11.1
Container Type: TO-17 VI Tube

Surrogates	**%Recovery**	**Method Limits**
Naphthalene-d8	105	50-150

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EPA Method TO-17 GC/MS

Data file : /chem/msd6.i/20jul16.b/6072011.d
Lab Smp Id: 1607228B-01A
Inj Date : 20-JUL-2016 19:17
Operator : CT Inst ID: msd6.i
Smp Info : ;1607228-01A
Misc Info : G0151814
Comment :
Method : /chem/msd6.i/20jul16.b/616z0712vi.m
Meth Date : 21-Jul-2016 09:29 U5BT Quant Type: ISTD
Cal Date : 13-JUL-2016 13:38 Cal File: 6071302.d
Als bottle: 22
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: NaphMDL.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
* 92 Bromofluorobenzene						CAS #: 460-00-4		
11.392	11.392	(1.000)	174	440247	36.0000		70.00- 130.00	100.00
11.392	11.392	(1.000)	95	517315			0.00- 30.00	117.51
11.392	11.392	(1.000)	176	428965			0.00- 30.00	97.44
$ 108 Naphthalene-d8						CAS #: 1146-65-2		
15.669	15.669	(1.375)	136	559588	26.3702	26.370	70.00- 130.00	100.00
15.661	15.669	(1.375)	108	50812			0.00- 30.00	9.08
109 Naphthalene						CAS #: 91-20-3		
15.704	15.704	(1.379)	128	42303	1.78722	1.787	70.00- 130.00	100.00
15.704	15.704	(1.379)	127	5686			0.00- 30.00	13.44

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INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd6.i
Lab File ID: 6072011.d
Lab Smp Id: 1607228B-01A
Analysis Type: VOA
Quant Type: ISTD
Operator: CT
Method File: /chem/msd6.i/20jul16.b/616z0712vi.m
Misc Info: G0151814

Calibration Date: 20-JUL-2016
Calibration Time: 11:18

Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
92 Bromofluorobenzen	432321	259393	605249	440247	1.83

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
92 Bromofluorobenzen	11.39	11.06	11.72	11.39	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: 22-Jul-2016 06:25

Eurofins Air Toxics Inc.

RECOVERY REPORT

Client Name: Client SDG: 20jul16
Sample Matrix: GAS Fraction: VOA
Lab Smp Id: 1607228B-01A
Level: LOW Operator: CT
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: VOC+PAHlcs50.spk Quant Type: ISTD
Sublist File: NaphMDL.sub
Method File: /chem/msd6.i/20jul16.b/616z0712vi.m
Misc Info: G0151814

SURROGATE COMPOUND	AMOUNT ADDED ng	AMOUNT RECOVERED ng	% RECOVERED	LIMITS
$ 108 Naphthalene-d8	25.000	26.370	105.48	50-150

Data File: /chem/msd6.i/20jul16.b/6072011.d

Date : 20-JUL-2016 19:17

Client ID:

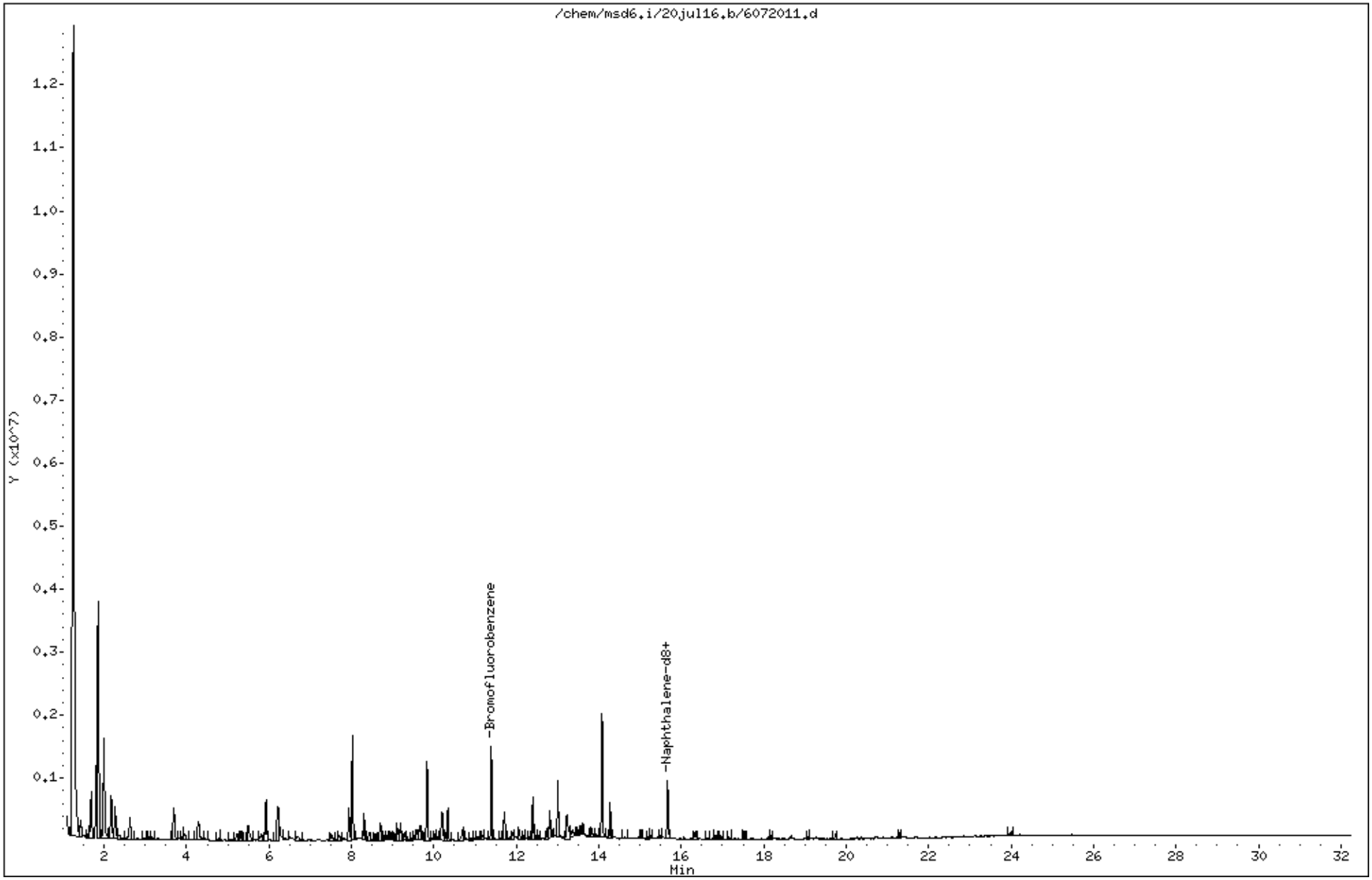
Instrument: msd6.i

Sample Info: :1607228-01A

Operator: CT

Column phase: RTx-624

Column diameter: 0.53



Data File: /chem/msd6.i/20jul16.b/6072011.d

Date : 20-JUL-2016 19:17

Client ID:

Instrument: msd6.i

Sample Info: ;1607228-01A

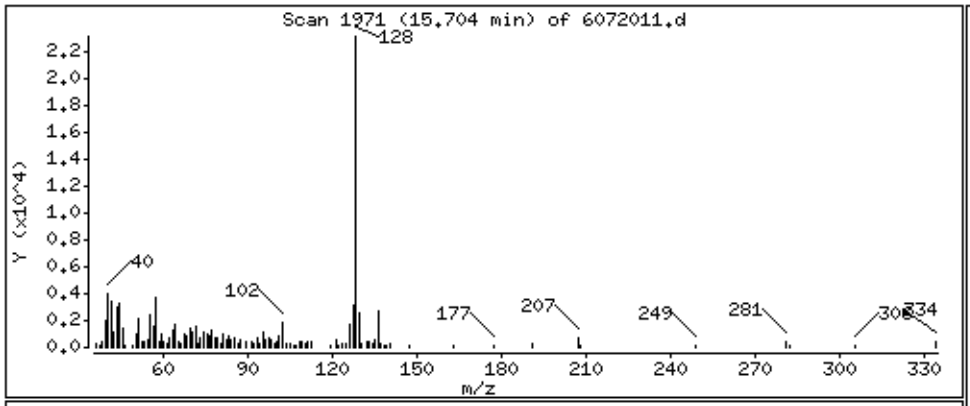
Operator: CT

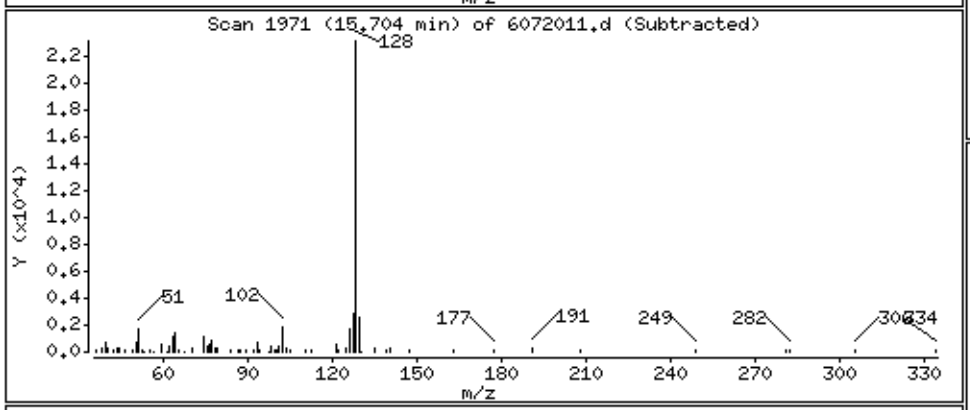
Column phase: RTx-624

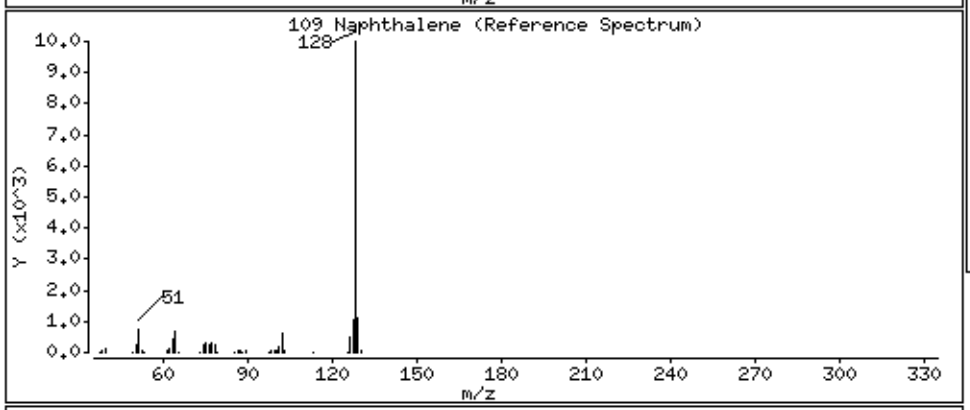
Column diameter: 0.53

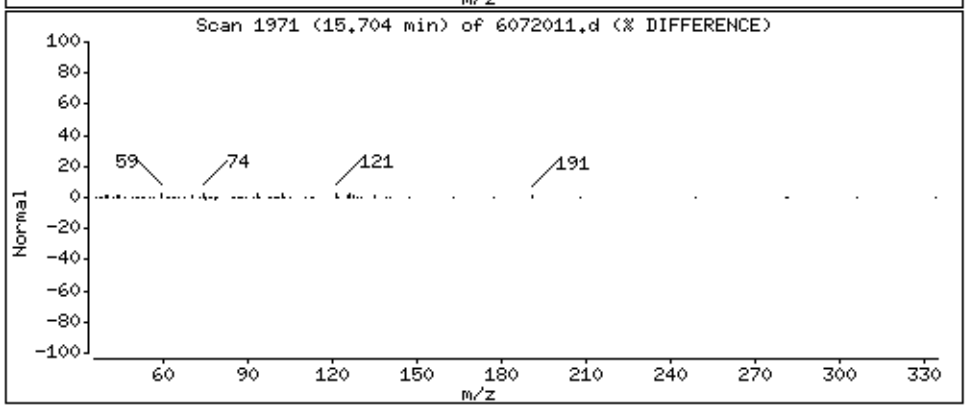
109 Naphthalene

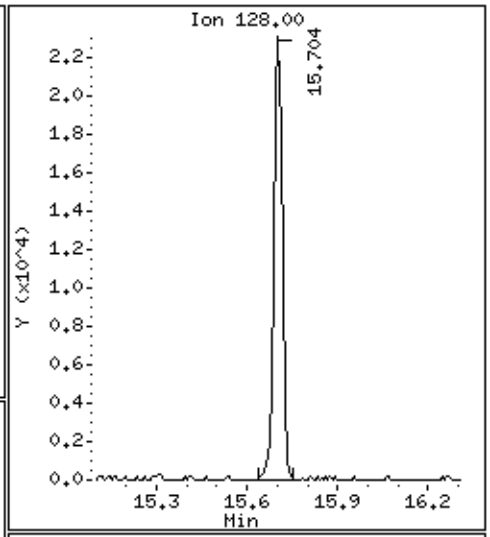
Concentration: 1.787 NG

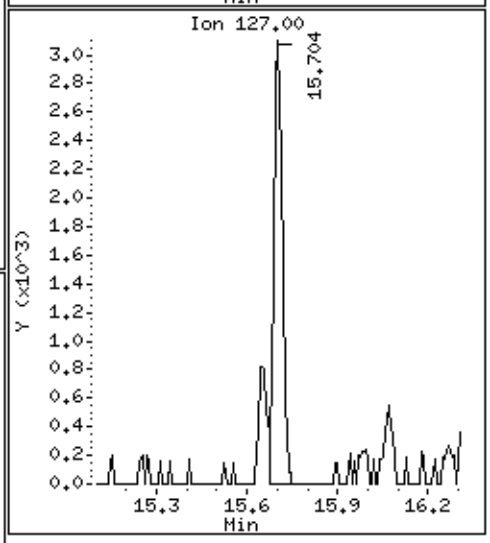












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Summary of Detected Compounds
EPA METHOD TO-17

Client Sample ID: B18IA-2

Lab ID#: 1607228B-02A

Compound	Rpt. Limit (ppbv)	Rpt. Limit (ug/m3)	Amount (ppbv)	Amount (ug/m3)
Naphthalene	0.011	0.060	0.0088 J	0.046 J

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Client Sample ID: B18IA-2

Lab ID#: 1607228B-02A

EPA METHOD TO-17

File Name:	**6072012**	**Date of Extraction: NA**	**Date of Collection: 7/9/16 6:52:00 PM**
Dil. Factor:	**1.00**		**Date of Analysis: 7/20/16 07:57 PM**

Compound	**Rpt. Limit (ppbv)**	**Rpt. Limit (ug/m3)**	**Amount (ppbv)**	**Amount (ug/m3)**
Naphthalene	0.011	0.060	0.0088 J	0.046 J

Air Sample Volume(L): 16.8

J = Estimated value.

Container Type: TO-17 VI Tube

Surrogates	**%Recovery**	**Method Limits**
Naphthalene-d8	104	50-150

Eurofins Air Toxics Inc.

EPA Method TO-17 GC/MS

Data file : /chem/msd6.i/20jul16.b/6072012.d
Lab Smp Id: 1607228B-02A
Inj Date : 20-JUL-2016 19:57
Operator : CT Inst ID: msd6.i
Smp Info : ;1607228-02A
Misc Info : G0151188
Comment :
Method : /chem/msd6.i/20jul16.b/616z0712vi.m
Meth Date : 21-Jul-2016 09:29 U5BT Quant Type: ISTD
Cal Date : 13-JUL-2016 13:38 Cal File: 6071302.d
Als bottle: 23
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: NaphMDL.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
* 92 Bromofluorobenzene					CAS #: 460-00-4		
11.392	11.392 (1.000)	174	476964	36.0000		70.00- 130.00	100.00
11.392	11.392 (1.000)	95	568434			0.00- 30.00	119.18
11.392	11.392 (1.000)	176	464188			0.00- 30.00	97.32
$ 108 Naphthalene-d8					CAS #: 1146-65-2		
15.669	15.669 (1.375)	136	597572	25.9924	25.992	70.00- 130.00	100.00
15.661	15.669 (1.375)	108	54411			0.00- 30.00	9.11
109 Naphthalene					CAS #: 91-20-3		
15.704	15.704 (1.379)	128	19872	0.77492	0.7749	70.00- 130.00	100.00(a)
15.704	15.704 (1.379)	127	2952			0.00- 30.00	14.86

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: msd6.i
Lab File ID: 6072012.d
Lab Smp Id: 1607228B-02A
Analysis Type: VOA
Quant Type: ISTD
Operator: CT
Method File: /chem/msd6.i/20jul16.b/616z0712vi.m
Misc Info: G0151188

Calibration Date: 20-JUL-2016
Calibration Time: 11:18

Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
92 Bromofluorobenzen	432321	259393	605249	476964	10.33

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
92 Bromofluorobenzen	11.39	11.06	11.72	11.39	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: 22-Jul-2016 06:25

Eurofins Air Toxics Inc.

RECOVERY REPORT

Client Name: Client SDG: 20jul16
Sample Matrix: GAS Fraction: VOA
Lab Smp Id: 1607228B-02A
Level: LOW Operator: CT
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: VOC+PAHlcs50.spk Quant Type: ISTD
Sublist File: NaphMDL.sub
Method File: /chem/msd6.i/20jul16.b/616z0712vi.m
Misc Info: G0151188

SURROGATE COMPOUND	AMOUNT ADDED ng	AMOUNT RECOVERED ng	% RECOVERED	LIMITS
$ 108 Naphthalene-d8	25.000	25.992	103.97	50-150

Data File: /chem/msd6.i/20jul16.b/6072012.d

Date : 20-JUL-2016 19:57

Client ID:

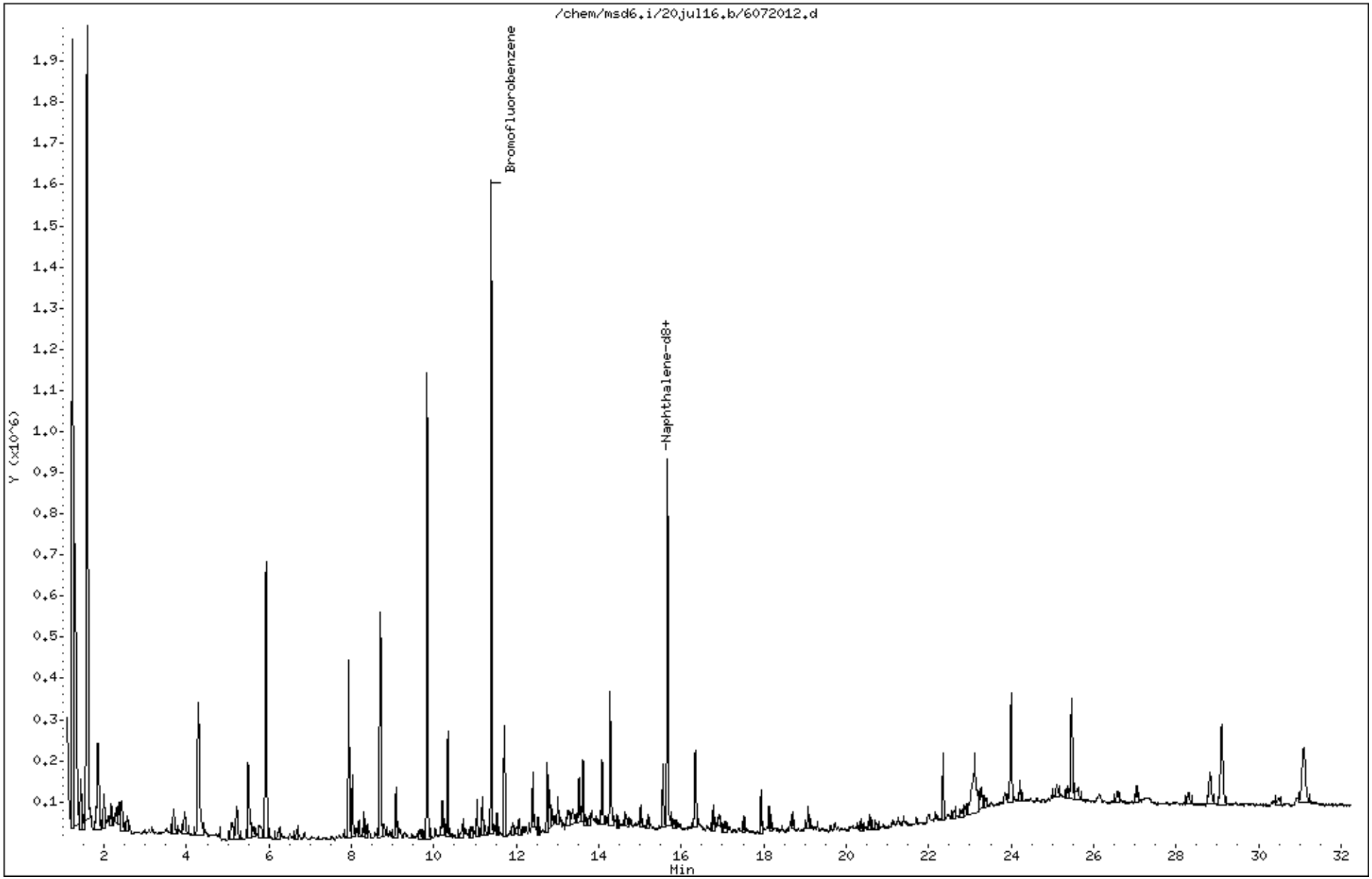
Sample Info: :1607228-02A

Column phase: RTx-624

Instrument: msd6.i

Operator: CT

Column diameter: 0.53



Data File: /chem/msd6.i/20jul16.b/6072012.d

Date : 20-JUL-2016 19:57

Client ID:

Instrument: msd6.i

Sample Info: ;1607228-02A

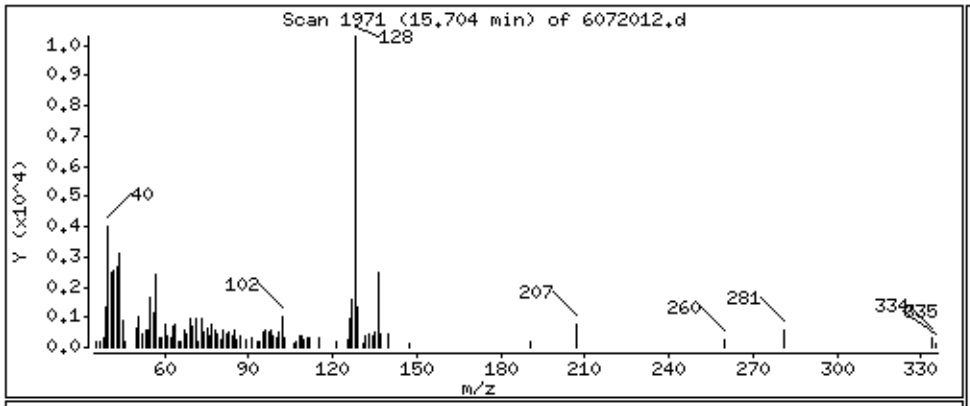
Operator: CT

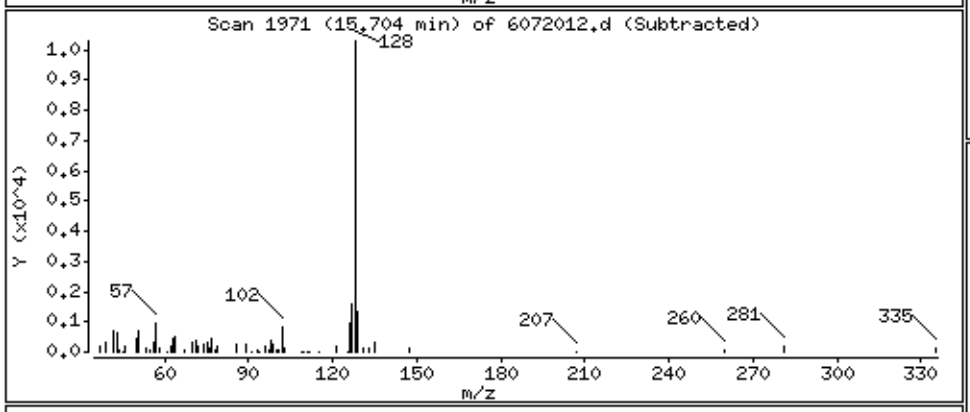
Column phase: RTx-624

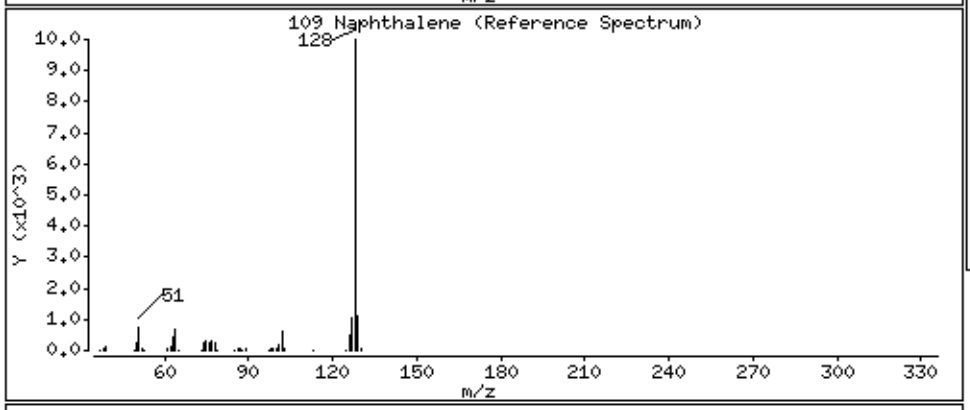
Column diameter: 0.53

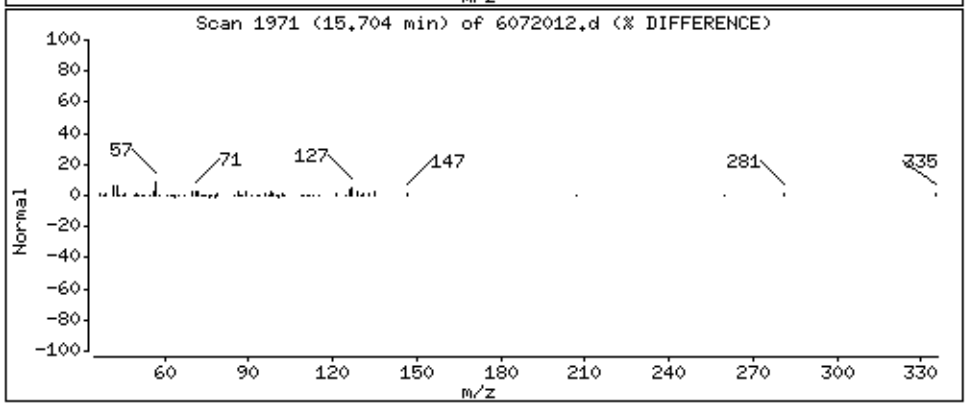
109 Naphthalene

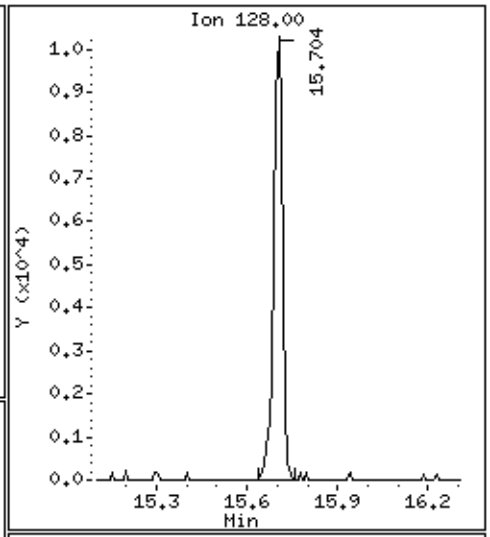
Concentration: 0.7749 NG

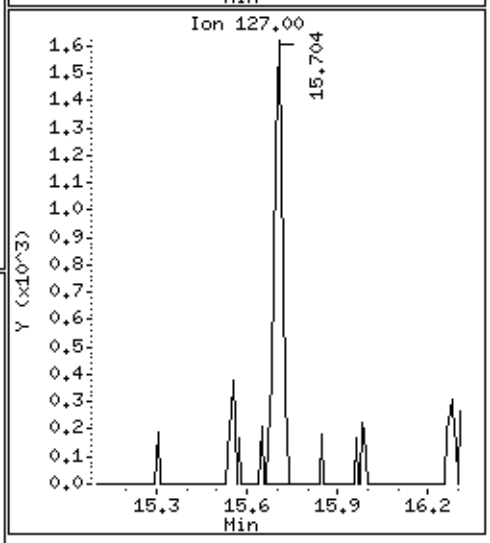












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Summary of Detected Compounds
EPA METHOD TO-17

Client Sample ID: B18IA-3

Lab ID#: 1607228B-03A

Compound	Rpt. Limit (ppbv)	Rpt. Limit (ug/m3)	Amount (ppbv)	Amount (ug/m3)
Naphthalene	0.011	0.056	0.022	0.11

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Client Sample ID: B18IA-3

Lab ID#: 1607228B-03A

EPA METHOD TO-17

File Name:	**6072013**	**Date of Extraction: NA**	**Date of Collection: 7/9/16 6:27:00 PM**
Dil. Factor:	**1.00**		**Date of Analysis: 7/20/16 08:37 PM**

Compound	**Rpt. Limit (ppbv)**	**Rpt. Limit (ug/m3)**	**Amount (ppbv)**	**Amount (ug/m3)**
Naphthalene	0.011	0.056	0.022	0.11

Air Sample Volume(L): 17.8
Container Type: TO-17 VI Tube

Surrogates	**%Recovery**	**Method Limits**
Naphthalene-d8	117	50-150

Eurofins Air Toxics Inc.

EPA Method TO-17 GC/MS

Data file : /chem/msd6.i/20jul16.b/6072013.d
Lab Smp Id: 1607228B-03A
Inj Date : 20-JUL-2016 20:37
Operator : CT Inst ID: msd6.i
Smp Info : ;1607228-03A
Misc Info : G0150090
Comment :
Method : /chem/msd6.i/20jul16.b/616z0712vi.m
Meth Date : 21-Jul-2016 09:29 U5BT Quant Type: ISTD
Cal Date : 13-JUL-2016 13:38 Cal File: 6071302.d
Als bottle: 24
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: NaphMDL.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
* 92 Bromofluorobenzene						CAS #: 460-00-4		
11.392	11.392	(1.000)	174	408126	36.0000		70.00- 130.00	100.00
11.392	11.392	(1.000)	95	475604			0.00- 30.00	116.53
11.392	11.392	(1.000)	176	399488			0.00- 30.00	97.88
$ 108 Naphthalene-d8						CAS #: 1146-65-2		
15.661	15.669	(1.375)	136	573887	29.1725	29.172	70.00- 130.00	100.00
15.661	15.669	(1.375)	108	52859			0.00- 30.00	9.21
109 Naphthalene						CAS #: 91-20-3		
15.704	15.704	(1.379)	128	44086	2.00910	2.009	70.00- 130.00	100.00
15.704	15.704	(1.379)	127	5862			0.00- 30.00	13.30

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd6.i
Lab File ID: 6072013.d
Lab Smp Id: 1607228B-03A
Analysis Type: VOA
Quant Type: ISTD
Operator: CT
Method File: /chem/msd6.i/20jul16.b/616z0712vi.m
Misc Info: G0150090

Calibration Date: 20-JUL-2016
Calibration Time: 11:18

Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
92 Bromofluorobenzen	432321	259393	605249	408126	-5.60

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
92 Bromofluorobenzen	11.39	11.06	11.72	11.39	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: 22-Jul-2016 06:25

Eurofins Air Toxics Inc.

RECOVERY REPORT

Client Name: Client SDG: 20jul16
Sample Matrix: GAS Fraction: VOA
Lab Smp Id: 1607228B-03A
Level: LOW Operator: CT
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: VOC+PAHlcs50.spk Quant Type: ISTD
Sublist File: NaphMDL.sub
Method File: /chem/msd6.i/20jul16.b/616z0712vi.m
Misc Info: G0150090

SURROGATE COMPOUND	AMOUNT ADDED ng	AMOUNT RECOVERED ng	% RECOVERED	LIMITS
$ 108 Naphthalene-d8	25.000	29.172	116.69	50-150

Data File: /chem/msd6.i/20jul16.b/6072013.d

Date : 20-JUL-2016 20:37

Client ID:

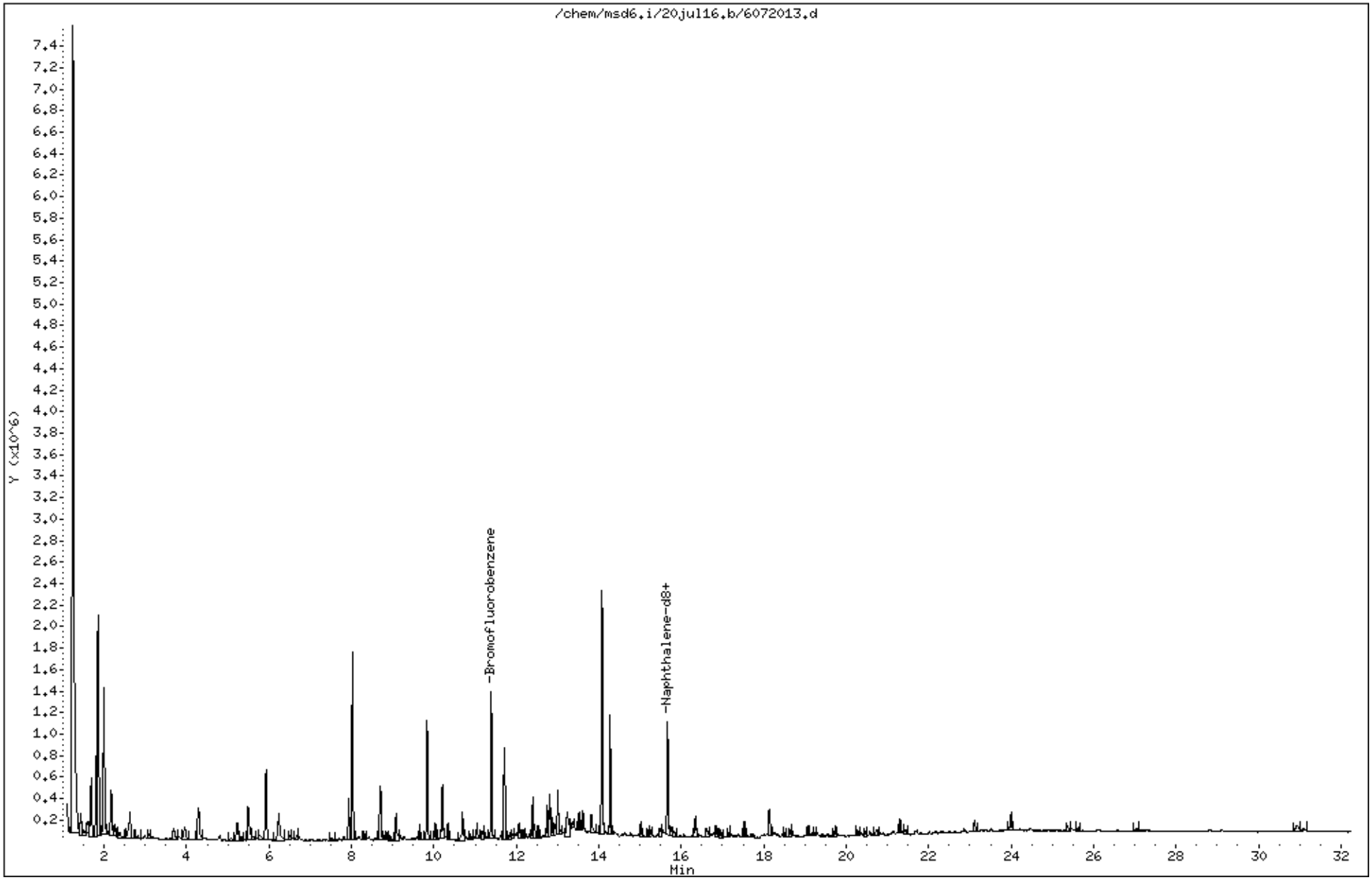
Instrument: msd6.i

Sample Info: ;1607228-03A

Operator: CT

Column phase: RTx-624

Column diameter: 0.53



Data File: /chem/msd6.i/20jul16.b/6072013.d

Date : 20-JUL-2016 20:37

Client ID:

Instrument: msd6.i

Sample Info: ;1607228-03A

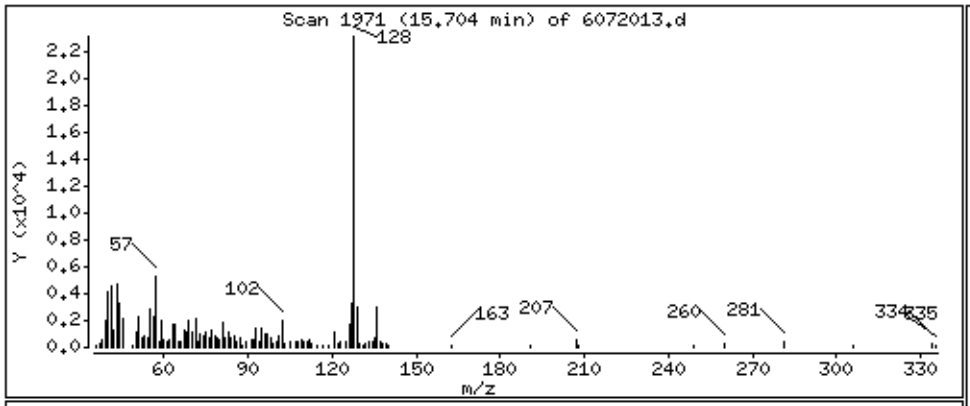
Operator: CT

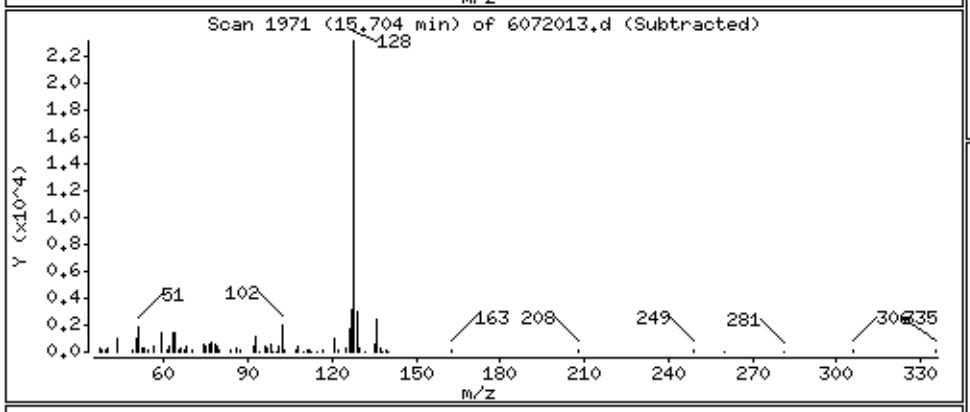
Column phase: RTx-624

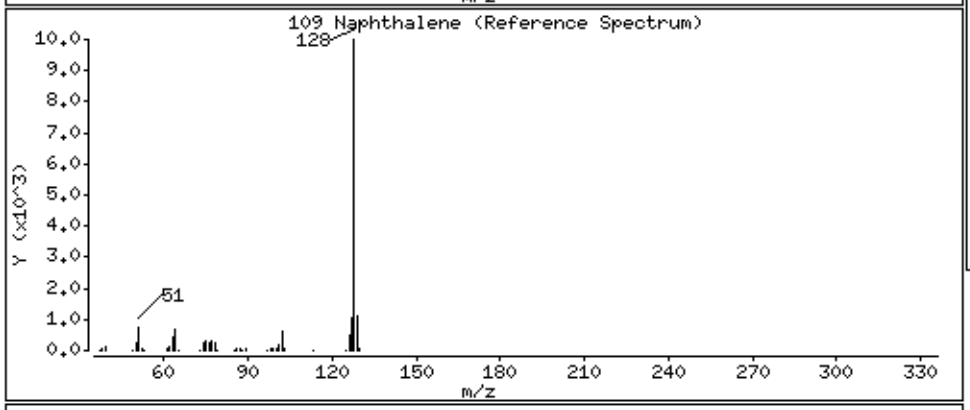
Column diameter: 0.53

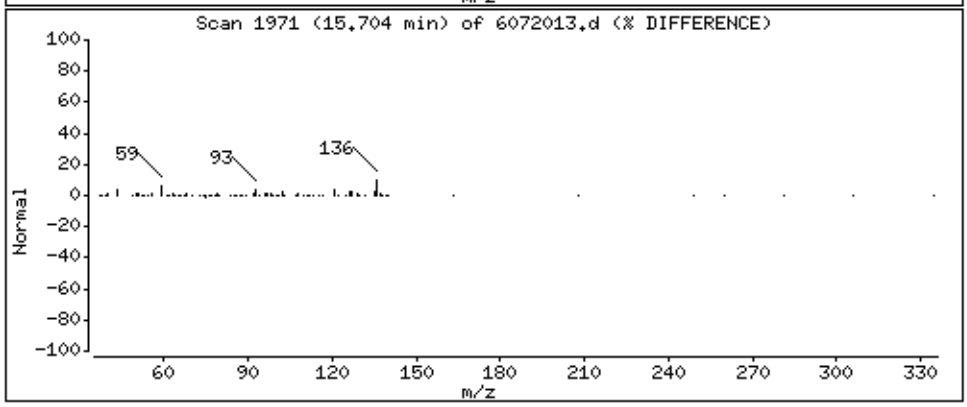
109 Naphthalene

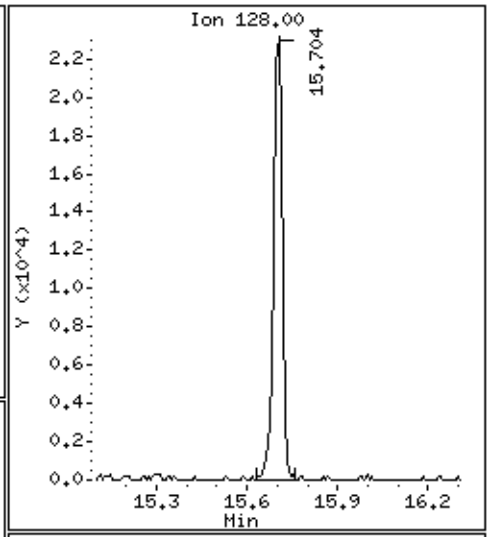
Concentration: 2.009 NG

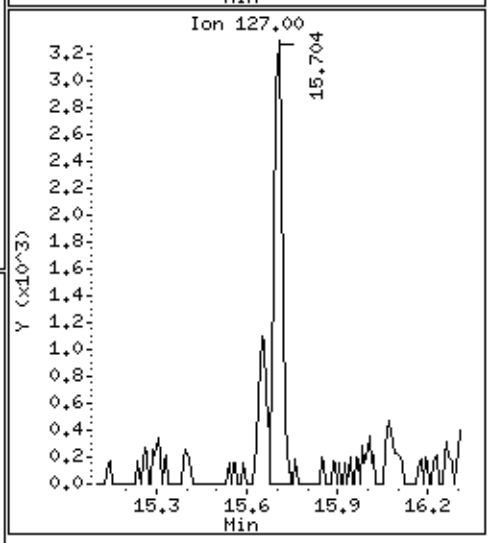












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Summary of Detected Compounds
EPA METHOD TO-17

Client Sample ID: B18IA-4

Lab ID#: 1607228B-04A

Compound	Rpt. Limit (ppbv)	Rpt. Limit (ug/m3)	Amount (ppbv)	Amount (ug/m3)
Naphthalene	0.012	0.062	0.029	0.15

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Client Sample ID: B18IA-4

Lab ID#: 1607228B-04A

EPA METHOD TO-17

File Name:	**6072014**	**Date of Extraction: NA**	**Date of Collection: 7/9/16 6:36:00 PM**
Dil. Factor:	**1.00**		**Date of Analysis: 7/20/16 09:16 PM**

Compound	**Rpt. Limit (ppbv)**	**Rpt. Limit (ug/m3)**	**Amount (ppbv)**	**Amount (ug/m3)**
Naphthalene	0.012	0.062	0.029	0.15

Air Sample Volume(L): 16.1
Container Type: TO-17 VI Tube

Surrogates	**%Recovery**	**Method Limits**
Naphthalene-d8	114	50-150

Eurofins Air Toxics Inc.

EPA Method TO-17 GC/MS

Data file : /chem/msd6.i/20jul16.b/6072014.d
Lab Smp Id: 1607228B-04A
Inj Date : 20-JUL-2016 21:16
Operator : CT Inst ID: msd6.i
Smp Info : ;1607228-04A
Misc Info : G0153639
Comment :
Method : /chem/msd6.i/20jul16.b/616z0712vi.m
Meth Date : 21-Jul-2016 09:29 U5BT Quant Type: ISTD
Cal Date : 13-JUL-2016 13:38 Cal File: 6071302.d
Als bottle: 25
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: NaphMDL.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
* 92 Bromofluorobenzene						CAS #: 460-00-4		
11.392	11.392	(1.000)	174	409260	36.0000		70.00- 130.00	100.00
11.392	11.392	(1.000)	95	481067			0.00- 30.00	117.55
11.392	11.392	(1.000)	176	401362			0.00- 30.00	98.07
$ 108 Naphthalene-d8						CAS #: 1146-65-2		
15.669	15.669	(1.375)	136	562183	28.4983	28.498	70.00- 130.00	100.00
15.661	15.669	(1.375)	108	52406			0.00- 30.00	9.32
109 Naphthalene						CAS #: 91-20-3		
15.704	15.704	(1.379)	128	53168	2.41628	2.416	70.00- 130.00	100.00
15.704	15.704	(1.379)	127	7530			0.00- 30.00	14.16

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd6.i
Lab File ID: 6072014.d
Lab Smp Id: 1607228B-04A
Analysis Type: VOA
Quant Type: ISTD
Operator: CT
Method File: /chem/msd6.i/20jul16.b/616z0712vi.m
Misc Info: G0153639

Calibration Date: 20-JUL-2016
Calibration Time: 11:18

Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
92 Bromofluorobenzen	432321	259393	605249	409260	-5.33

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
92 Bromofluorobenzen	11.39	11.06	11.72	11.39	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: 22-Jul-2016 06:25

Eurofins Air Toxics Inc.

RECOVERY REPORT

Client Name: Client SDG: 20jul16
Sample Matrix: GAS Fraction: VOA
Lab Smp Id: 1607228B-04A
Level: LOW Operator: CT
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: VOC+PAHlcs50.spk Quant Type: ISTD
Sublist File: NaphMDL.sub
Method File: /chem/msd6.i/20jul16.b/616z0712vi.m
Misc Info: G0153639

SURROGATE COMPOUND	AMOUNT ADDED ng	AMOUNT RECOVERED ng	% RECOVERED	LIMITS
$ 108 Naphthalene-d8	25.000	28.498	113.99	50-150

Data File: /chem/msd6.i/20jul16.b/6072014.d

Date : 20-JUL-2016 21:16

Client ID:

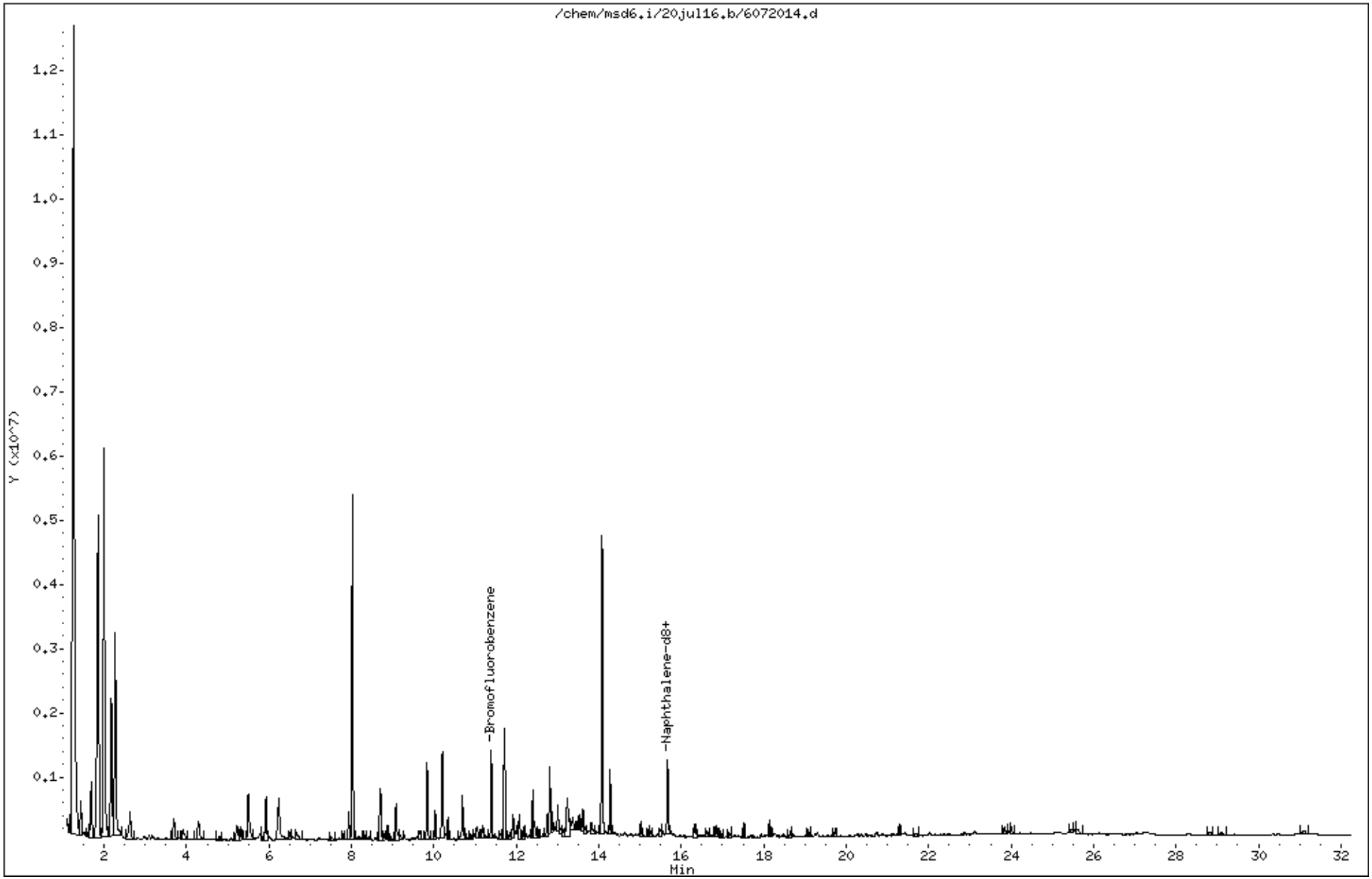
Instrument: msd6.i

Sample Info: ;1607228-04A

Operator: CT

Column phase: RTx-624

Column diameter: 0.53



Data File: /chem/msd6.i/20jul16.b/6072014.d

Date : 20-JUL-2016 21:16

Client ID:

Instrument: msd6.i

Sample Info: ;1607228-04A

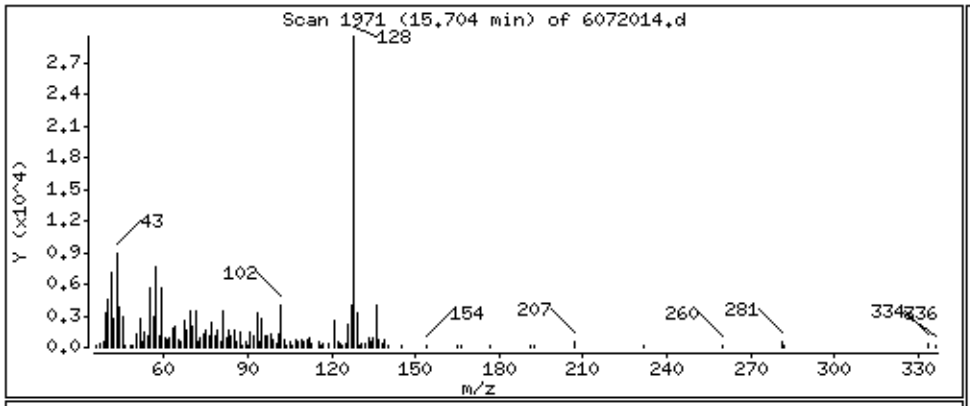
Operator: CT

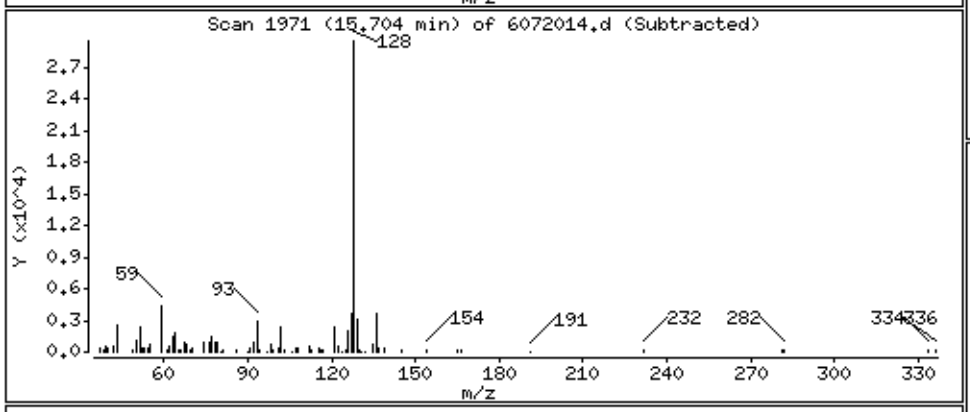
Column phase: RTx-624

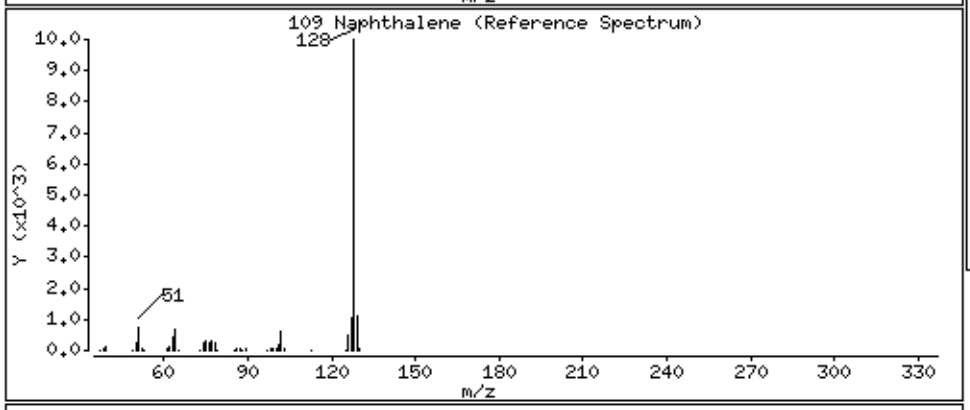
Column diameter: 0.53

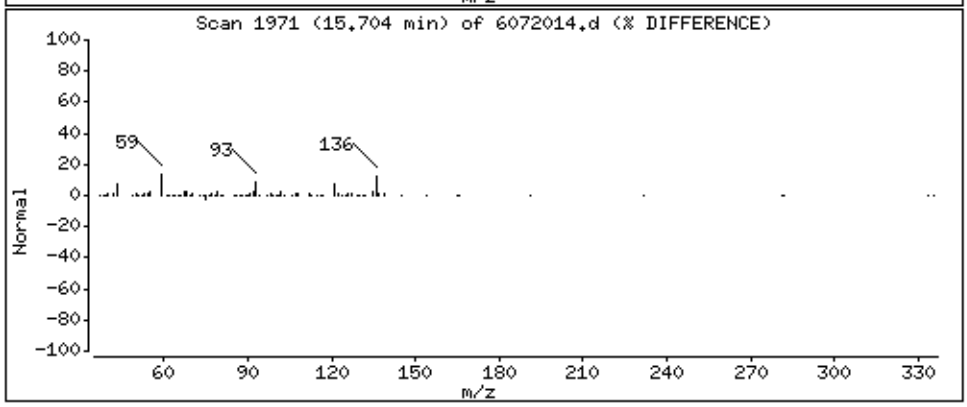
109 Naphthalene

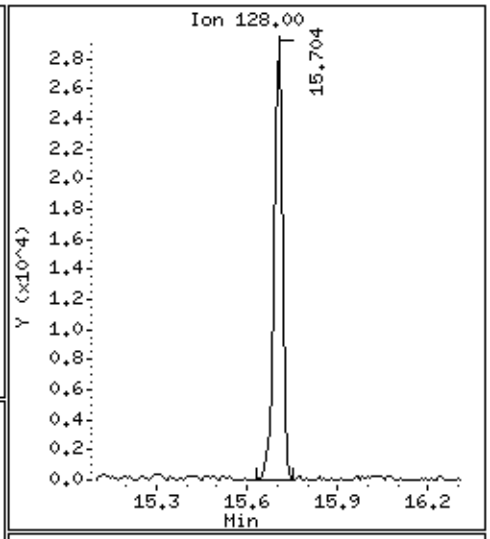
Concentration: 2.416 NG

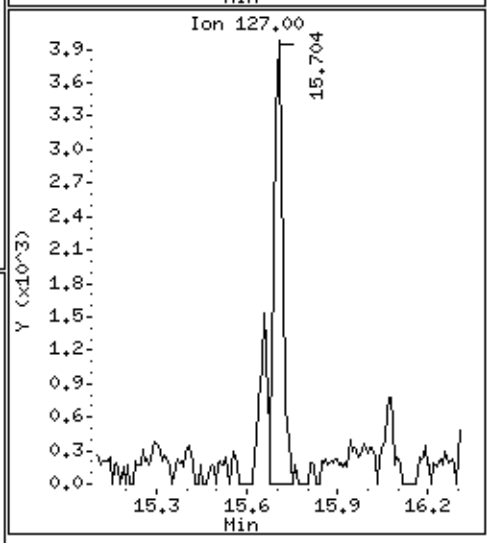












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Summary of Detected Compounds
EPA METHOD TO-17

Client Sample ID: B18IA-5

Lab ID#: 1607228B-05A

Compound	Rpt. Limit (ppbv)	Rpt. Limit (ug/m3)	Amount (ppbv)	Amount (ug/m3)
Naphthalene	0.012	0.060	0.074	0.39

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Client Sample ID: B18IA-5

Lab ID#: 1607228B-05A

EPA METHOD TO-17

File Name:	**6072015**	**Date of Extraction: NA**	**Date of Collection: 7/9/16 6:44:00 PM**
Dil. Factor:	**1.00**		**Date of Analysis: 7/20/16 09:56 PM**

Compound	**Rpt. Limit (ppbv)**	**Rpt. Limit (ug/m3)**	**Amount (ppbv)**	**Amount (ug/m3)**
Naphthalene	0.012	0.060	0.074	0.39

Air Sample Volume(L): 16.6
Container Type: TO-17 VI Tube

Surrogates	**%Recovery**	**Method Limits**
Naphthalene-d8	108	50-150

Eurofins Air Toxics Inc.

EPA Method TO-17 GC/MS

Data file : /chem/msd6.i/20jul16.b/6072015.d
Lab Smp Id: 1607228B-05A
Inj Date : 20-JUL-2016 21:56
Operator : CT Inst ID: msd6.i
Smp Info : ;1607228-05A
Misc Info : G0150877
Comment :
Method : /chem/msd6.i/20jul16.b/616z0712vi.m
Meth Date : 21-Jul-2016 09:29 U5BT Quant Type: ISTD
Cal Date : 13-JUL-2016 13:38 Cal File: 6071302.d
Als bottle: 26
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: NaphMDL.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
* 92 Bromofluorobenzene						CAS #: 460-00-4		
11.392	11.392	(1.000)	174	438365	36.0000		70.00- 130.00	100.00
11.392	11.392	(1.000)	95	520396			0.00- 30.00	118.71
11.392	11.392	(1.000)	176	428683			0.00- 30.00	97.79
$ 108 Naphthalene-d8						CAS #: 1146-65-2		
15.668	15.669	(1.375)	136	572492	27.0941	27.094	70.00- 130.00	100.00
15.661	15.669	(1.375)	108	53543			0.00- 30.00	9.35
109 Naphthalene						CAS #: 91-20-3		
15.704	15.704	(1.379)	128	151190	6.41477	6.415	70.00- 130.00	100.00
15.704	15.704	(1.379)	127	19024			0.00- 30.00	12.58

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd6.i
Lab File ID: 6072015.d
Lab Smp Id: 1607228B-05A
Analysis Type: VOA
Quant Type: ISTD
Operator: CT
Method File: /chem/msd6.i/20jul16.b/616z0712vi.m
Misc Info: G0150877

Calibration Date: 20-JUL-2016
Calibration Time: 11:18

Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
92 Bromofluorobenzen	432321	259393	605249	438365	1.40

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
92 Bromofluorobenzen	11.39	11.06	11.72	11.39	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: 22-Jul-2016 06:25

Eurofins Air Toxics Inc.

RECOVERY REPORT

Client Name:
Client SDG: 20jul16
Sample Matrix: GAS
Fraction: VOA
Lab Smp Id: 1607228B-05A
Level: LOW
Operator: CT
Data Type: MS DATA
SampleType: SAMPLE
SpikeList File: VOC+PAHlcs50.spk
Quant Type: ISTD
Sublist File: NaphMDL.sub
Method File: /chem/msd6.i/20jul16.b/616z0712vi.m
Misc Info: G0150877

SURROGATE COMPOUND	AMOUNT ADDED ng	AMOUNT RECOVERED ng	% RECOVERED	LIMITS
$ 108 Naphthalene-d8	25.000	27.094	108.38	50-150

Data File: /chem/msd6.i/20jul16.b/6072015.d

Date : 20-JUL-2016 21:56

Client ID:

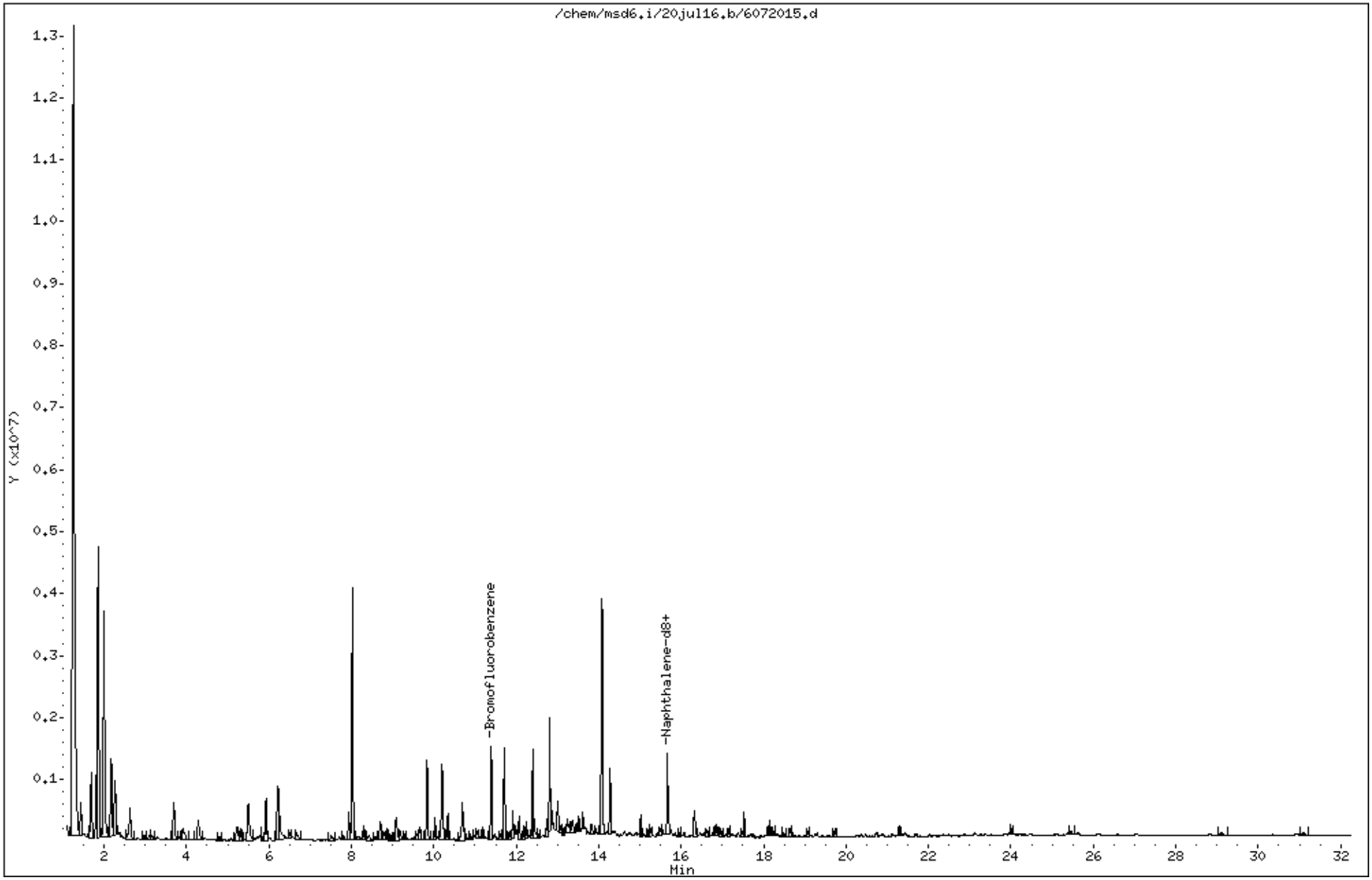
Instrument: msd6.i

Sample Info: ;1607228-05A

Operator: CT

Column phase: RTx-624

Column diameter: 0.53



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Date : 20-JUL-2016 21:56

Client ID:

Instrument: msd6.i

Sample Info: ;1607228-05A

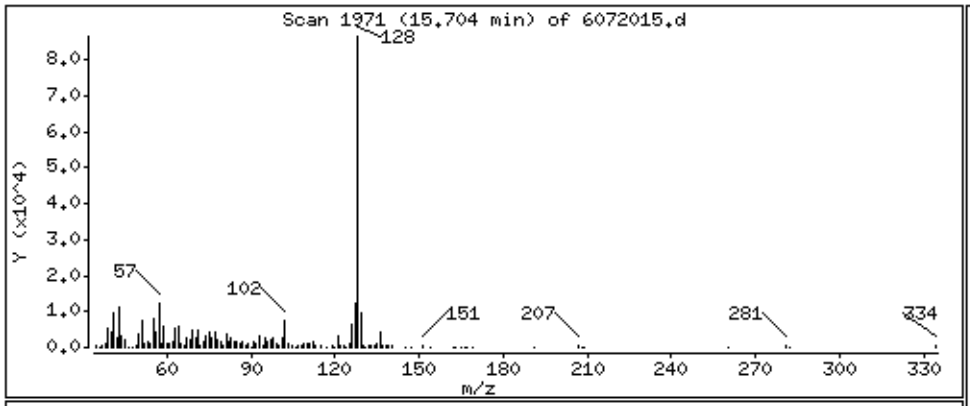
Operator: CT

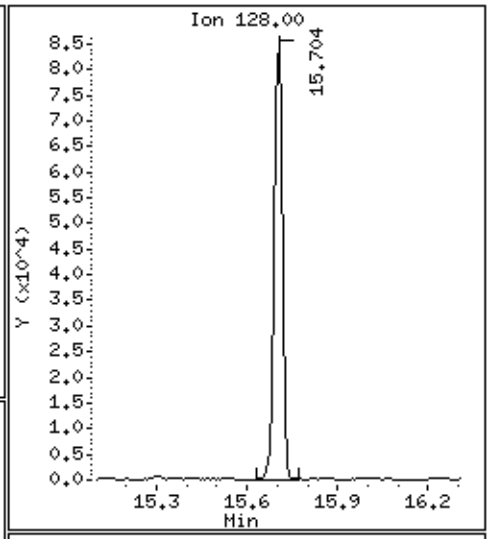
Column phase: RTx-624

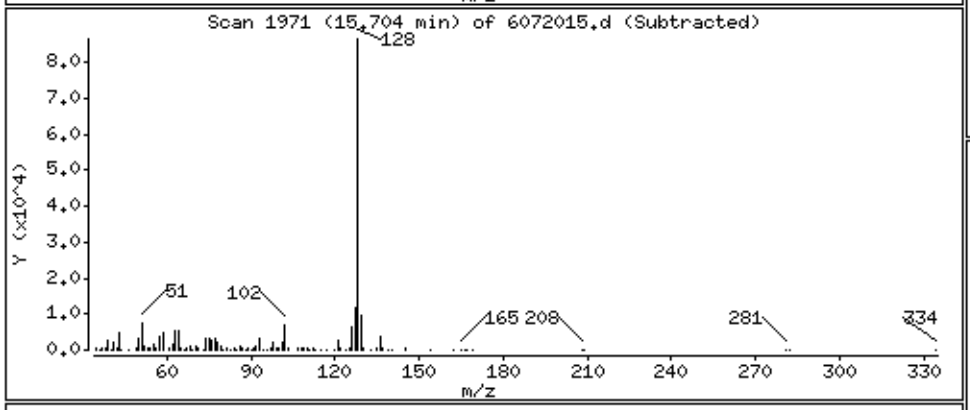
Column diameter: 0.53

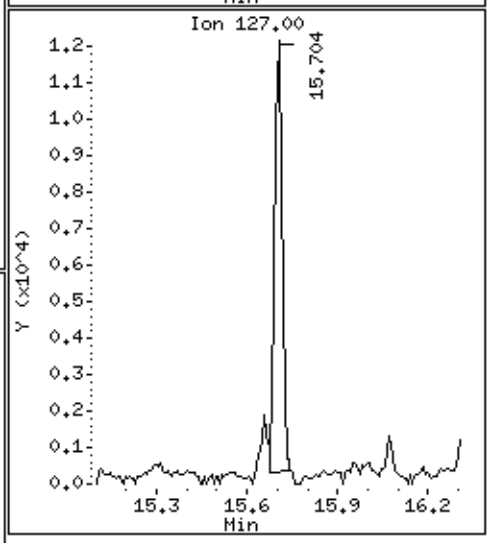
109 Naphthalene

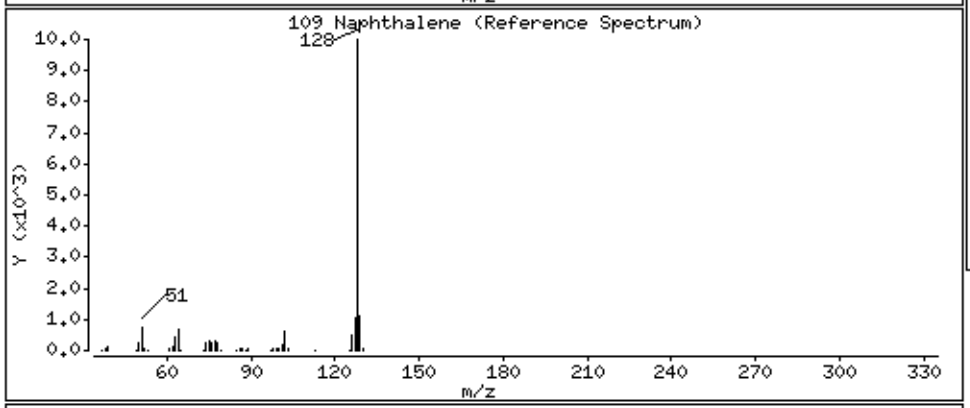
Concentration: 6.415 NG

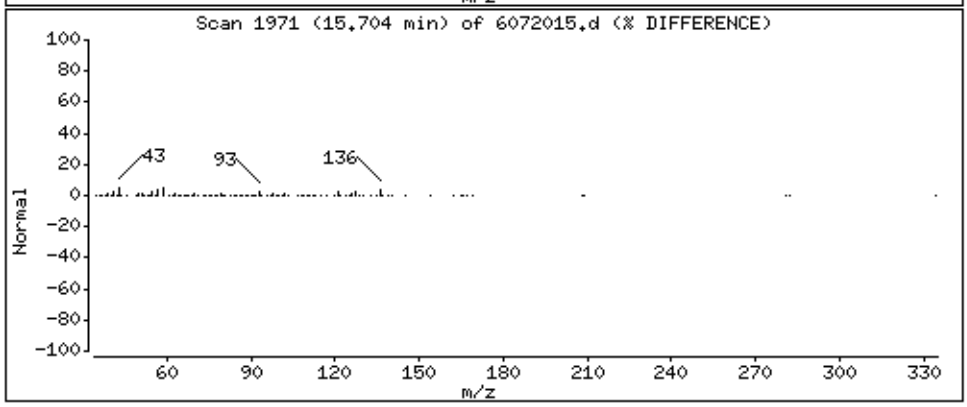












Summary of Detected Compounds
EPA METHOD TO-17

Client Sample ID: B18IA-1D

Lab ID#: 1607228B-06A

No Detections Were Found.

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Client Sample ID: B18IA-1D

Lab ID#: 1607228B-06A

EPA METHOD TO-17

File Name:	**6072016**	**Date of Extraction: NA**	**Date of Collection: 7/9/16 10:51:00 AM**
Dil. Factor:	**1.00**		**Date of Analysis: 7/20/16 10:36 PM**

Compound	**Rpt. Limit (ppbv)**	**Rpt. Limit (ug/m3)**	**Amount (ppbv)**	**Amount (ug/m3)**
Naphthalene	0.017	0.088	Not Detected	Not Detected

Air Sample Volume(L): 11.4
Container Type: TO-17 VI Tube

Surrogates	**%Recovery**	**Method Limits**
Naphthalene-d8	116	50-150

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EPA Method TO-17 GC/MS

Data file : /chem/msd6.i/20jul16.b/6072016.d
Lab Smp Id: 1607228B-06A
Inj Date : 20-JUL-2016 22:36
Operator : CT Inst ID: msd6.i
Smp Info : ;1607228-06A
Misc Info : G0149733
Comment :
Method : /chem/msd6.i/20jul16.b/616z0712vi.m
Meth Date : 21-Jul-2016 09:29 U5BT Quant Type: ISTD
Cal Date : 13-JUL-2016 13:38 Cal File: 6071302.d
Als bottle: 27
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: NaphMDL.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
* 92 Bromofluorobenzene							CAS #: 460-00-4	
11.392	11.392	(1.000)	174	410225	36.0000		70.00- 130.00	100.00
11.392	11.392	(1.000)	95	483642			0.00- 30.00	117.90
11.392	11.392	(1.000)	176	403658			0.00- 30.00	98.40
$ 108 Naphthalene-d8							CAS #: 1146-65-2	
15.668	15.669	(1.375)	136	572241	28.9400	28.940	70.00- 130.00	100.00
15.668	15.669	(1.375)	108	53432			0.00- 30.00	9.34

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd6.i
Lab File ID: 6072016.d
Lab Smp Id: 1607228B-06A
Analysis Type: VOA
Quant Type: ISTD
Operator: CT
Method File: /chem/msd6.i/20jul16.b/616z0712vi.m
Misc Info: G0149733

Calibration Date: 20-JUL-2016
Calibration Time: 11:18

Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
92 Bromofluorobenzen	432321	259393	605249	410225	-5.11

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
92 Bromofluorobenzen	11.39	11.06	11.72	11.39	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: 22-Jul-2016 06:25

Eurofins Air Toxics Inc.

RECOVERY REPORT

Client Name: Client SDG: 20jul16
Sample Matrix: GAS Fraction: VOA
Lab Smp Id: 1607228B-06A
Level: LOW Operator: CT
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: VOC+PAHlcs50.spk Quant Type: ISTD
Sublist File: NaphMDL.sub
Method File: /chem/msd6.i/20jul16.b/616z0712vi.m
Misc Info: G0149733

SURROGATE COMPOUND	AMOUNT ADDED ng	AMOUNT RECOVERED ng	% RECOVERED	LIMITS
$ 108 Naphthalene-d8	25.000	28.940	115.76	50-150

Data File: /chem/msd6.i/20jul16.b/6072016.d

Date : 20-JUL-2016 22:36

Client ID:

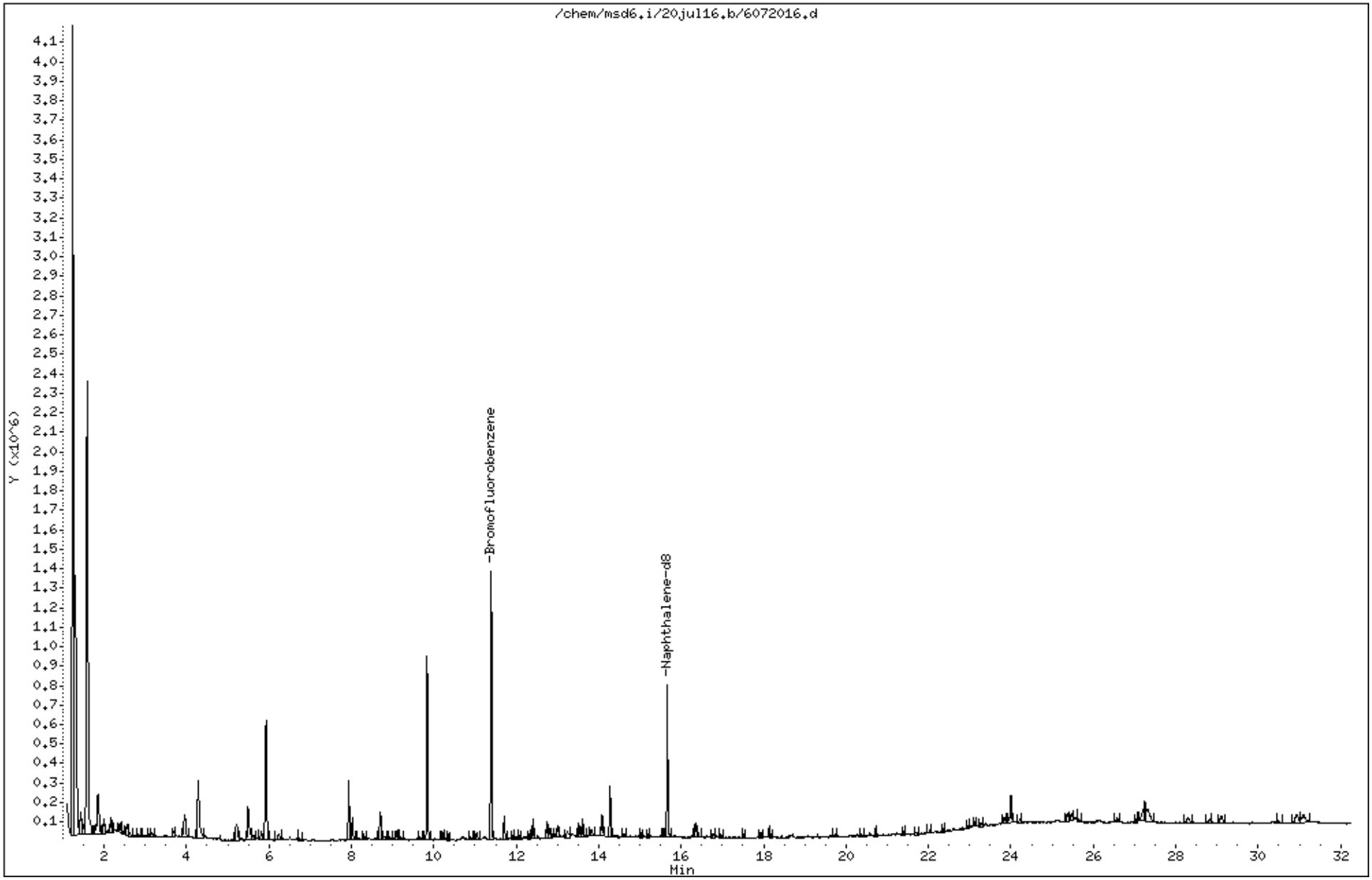
Instrument: msd6.i

Sample Info: ;1607228-06A

Operator: CT

Column phase: RTx-624

Column diameter: 0.53



Summary of Detected Compounds
EPA METHOD TO-17

Client Sample ID: B18AA-070816

Lab ID#: 1607228B-08A

No Detections Were Found.

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Client Sample ID: B18AA-070816

Lab ID#: 1607228B-08A

EPA METHOD TO-17

File Name:	**6072018**	**Date of Extraction: NA**	**Date of Collection: 7/11/16 11:45:00 AM**
Dil. Factor:	**1.00**		**Date of Analysis: 7/20/16 11:15 PM**

Compound	**Rpt. Limit (ppbv)**	**Rpt. Limit (ug/m3)**	**Amount (ppbv)**	**Amount (ug/m3)**
Naphthalene	0.011	0.060	Not Detected	Not Detected

Air Sample Volume(L): 16.8
Container Type: TO-17 VI Tube

Surrogates	**%Recovery**	**Method Limits**
Naphthalene-d8	111	50-150

Eurofins Air Toxics Inc.

EPA Method TO-17 GC/MS

Data file : /chem/msd6.i/20jul16.b/6072018.d
Lab Smp Id: 1607228B-08A
Inj Date : 20-JUL-2016 23:15
Operator : CT Inst ID: msd6.i
Smp Info : ;1607228-08A
Misc Info : G0149726
Comment :
Method : /chem/msd6.i/20jul16.b/616z0712vi.m
Meth Date : 21-Jul-2016 09:29 U5BT Quant Type: ISTD
Cal Date : 13-JUL-2016 13:38 Cal File: 6071302.d
Als bottle: 28
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: NaphMDL.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
* 92 Bromofluorobenzene							CAS #: 460-00-4	
11.392	11.392	(1.000)	174	406273	36.0000		70.00- 130.00	100.00
11.385	11.392	(1.000)	95	472935			0.00- 30.00	116.41
11.392	11.392	(1.000)	176	399871			0.00- 30.00	98.42
$ 108 Naphthalene-d8							CAS #: 1146-65-2	
15.661	15.669	(1.375)	136	544617	27.8109	27.811	70.00- 130.00	100.00
15.661	15.669	(1.375)	108	49342			0.00- 30.00	9.06

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd6.i
Lab File ID: 6072018.d
Lab Smp Id: 1607228B-08A
Analysis Type: VOA
Quant Type: ISTD
Operator: CT
Method File: /chem/msd6.i/20jul16.b/616z0712vi.m
Misc Info: G0149726

Calibration Date: 20-JUL-2016
Calibration Time: 11:18

Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
92 Bromofluorobenzen	432321	259393	605249	406273	-6.03

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
92 Bromofluorobenzen	11.39	11.06	11.72	11.39	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: 22-Jul-2016 06:25

Eurofins Air Toxics Inc.

RECOVERY REPORT

Client Name: Client SDG: 20jul16
Sample Matrix: GAS Fraction: VOA
Lab Smp Id: 1607228B-08A
Level: LOW Operator: CT
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: VOC+PAHlcs50.spk Quant Type: ISTD
Sublist File: NaphMDL.sub
Method File: /chem/msd6.i/20jul16.b/616z0712vi.m
Misc Info: G0149726

SURROGATE COMPOUND	AMOUNT ADDED ng	AMOUNT RECOVERED ng	% RECOVERED	LIMITS
$ 108 Naphthalene-d8	25.000	27.811	111.24	50-150

Data File: /chem/msd6.i/20jul16.b/6072018.d

Date : 20-JUL-2016 23:15

Client ID:

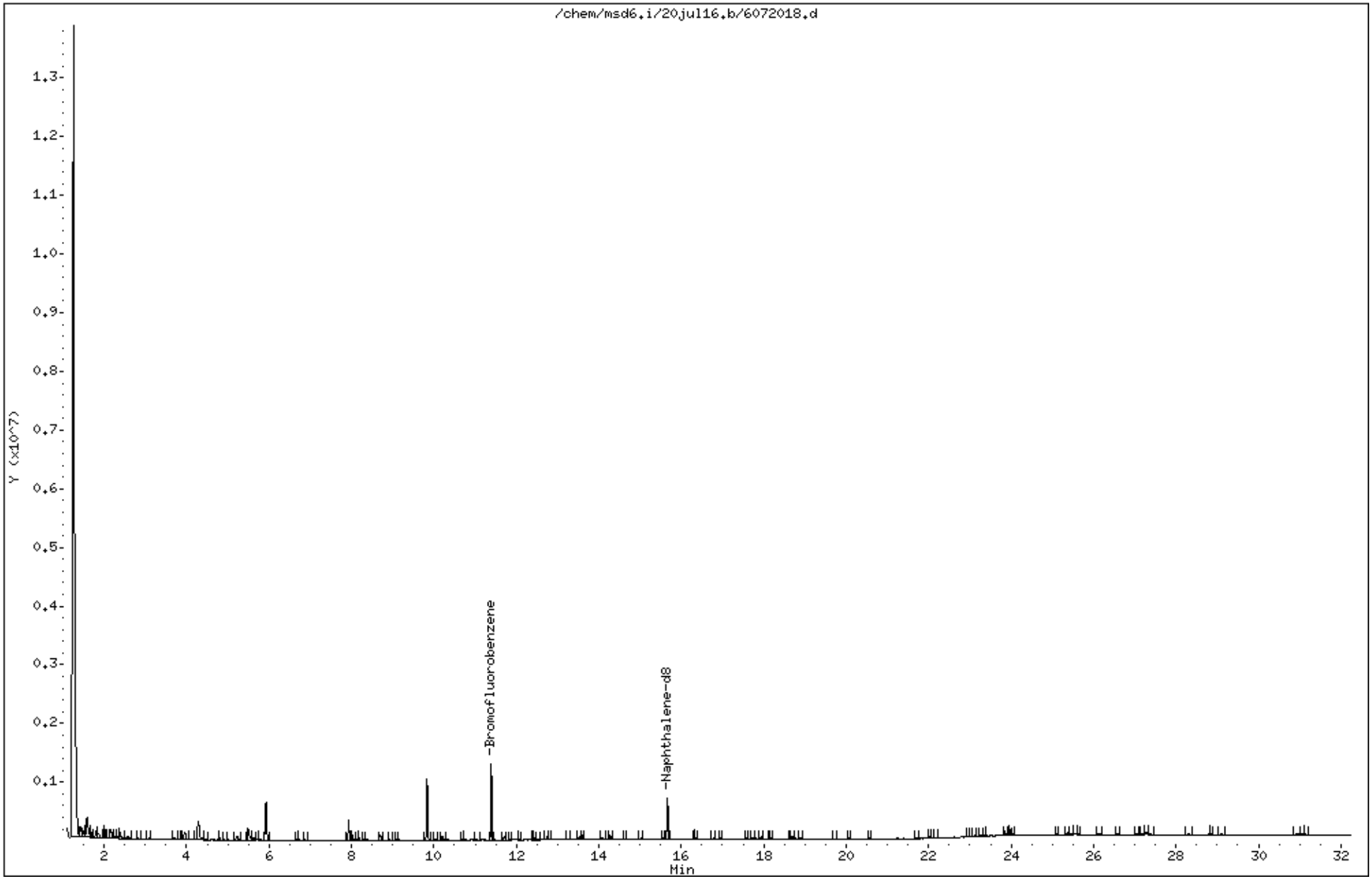
Sample Info: :1607228-08A

Column phase: RTx-624

Instrument: msd6.i

Operator: CT

Column diameter: 0.53



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Summary of Detected Compounds
EPA METHOD TO-17

Client Sample ID: B18SS-1

Lab ID#: 1607228B-09A

Compound	Rpt. Limit (ppbv)	Rpt. Limit (ug/m3)	Amount (ppbv)	Amount (ug/m3)
Naphthalene	0.47	2.5	0.35 J	1.8 J

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Client Sample ID: B18SS-1

Lab ID#: 1607228B-09A

EPA METHOD TO-17

File Name:	**6072019**	**Date of Extraction: NA**	**Date of Collection: 7/11/16 5:49:00 PM**
Dil. Factor:	**1.00**		**Date of Analysis: 7/20/16 11:55 PM**

Compound	**Rpt. Limit (ppbv)**	**Rpt. Limit (ug/m3)**	**Amount (ppbv)**	**Amount (ug/m3)**
Naphthalene	0.47	2.5	0.35 J	1.8 J

Air Sample Volume(L): 0.402

J = Estimated value.

Container Type: TO-17 VI Tube

Surrogates	**%Recovery**	**Method Limits**
Naphthalene-d8	116	50-150

Eurofins Air Toxics Inc.

EPA Method TO-17 GC/MS

Data file : /chem/msd6.i/20jul16.b/6072019.d
Lab Smp Id: 1607228B-09A
Inj Date : 20-JUL-2016 23:55
Operator : CT Inst ID: msd6.i
Smp Info : ;1607228-09A
Misc Info : G0149703
Comment :
Method : /chem/msd6.i/20jul16.b/616z0712vi.m
Meth Date : 21-Jul-2016 09:29 U5BT Quant Type: ISTD
Cal Date : 13-JUL-2016 13:38 Cal File: 6071302.d
Als bottle: 29
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: NaphMDL.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
* 92 Bromofluorobenzene					CAS #: 460-00-4		
11.392	11.392 (1.000)	174	412355	36.0000		70.00- 130.00	100.00
11.392	11.392 (1.000)	95	484303			0.00- 30.00	117.45
11.392	11.392 (1.000)	176	404219			0.00- 30.00	98.03
$ 108 Naphthalene-d8					CAS #: 1146-65-2		
15.661	15.669 (1.375)	136	574853	28.9219	28.922	70.00- 130.00	100.00
15.661	15.669 (1.375)	108	52417			0.00- 30.00	9.12
109 Naphthalene					CAS #: 91-20-3		
15.704	15.704 (1.379)	128	16175	0.72959	0.7296	70.00- 130.00	100.00(a)
15.704	15.704 (1.379)	127	2707			0.00- 30.00	16.74

QC Flag Legend

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

Report Date: 22-Jul-2016 06:25

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd6.i
Lab File ID: 6072019.d
Lab Smp Id: 1607228B-09A
Analysis Type: VOA
Quant Type: ISTD
Operator: CT
Method File: /chem/msd6.i/20jul16.b/616z0712vi.m
Misc Info: G0149703

Calibration Date: 20-JUL-2016
Calibration Time: 11:18

Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
92 Bromofluorobenzen	432321	259393	605249	412355	-4.62

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
92 Bromofluorobenzen	11.39	11.06	11.72	11.39	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: 22-Jul-2016 06:25

Eurofins Air Toxics Inc.

RECOVERY REPORT

Client Name: Client SDG: 20jul16
Sample Matrix: GAS Fraction: VOA
Lab Smp Id: 1607228B-09A
Level: LOW Operator: CT
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: VOC+PAHlcs50.spk Quant Type: ISTD
Sublist File: NaphMDL.sub
Method File: /chem/msd6.i/20jul16.b/616z0712vi.m
Misc Info: G0149703

SURROGATE COMPOUND	AMOUNT ADDED ng	AMOUNT RECOVERED ng	% RECOVERED	LIMITS
$ 108 Naphthalene-d8	25.000	28.922	115.69	50-150

Data File: /chem/msd6.i/20jul16.b/6072019.d

Date : 20-JUL-2016 23:55

Client ID:

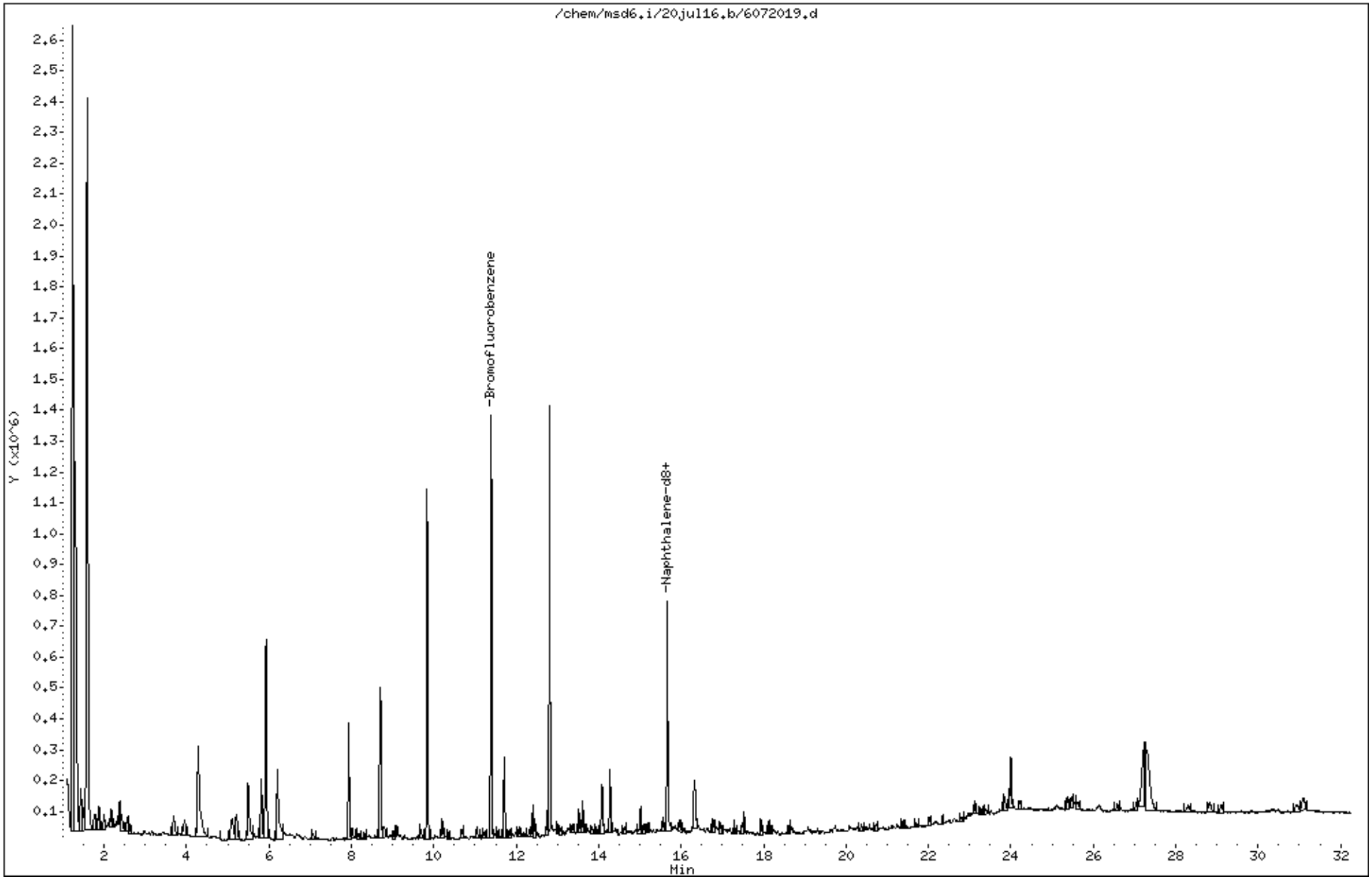
Sample Info: :1607228-09A

Column phase: RTx-624

Instrument: msd6.i

Operator: CT

Column diameter: 0.53



Data File: /chem/msd6.i/20jul16.b/6072019.d

Date : 20-JUL-2016 23:55

Client ID:

Instrument: msd6.i

Sample Info: ;1607228-09A

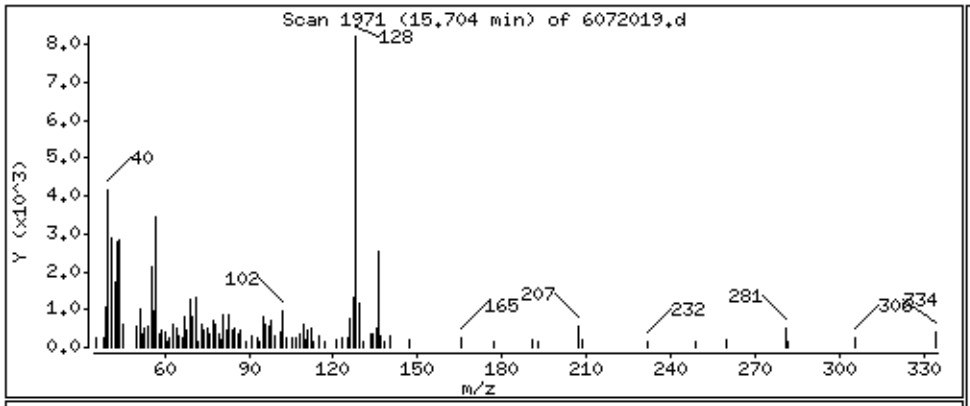
Operator: CT

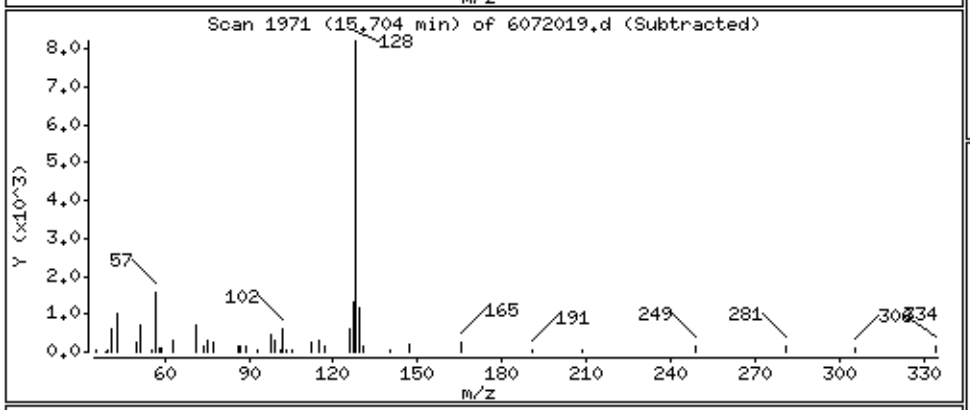
Column phase: RTx-624

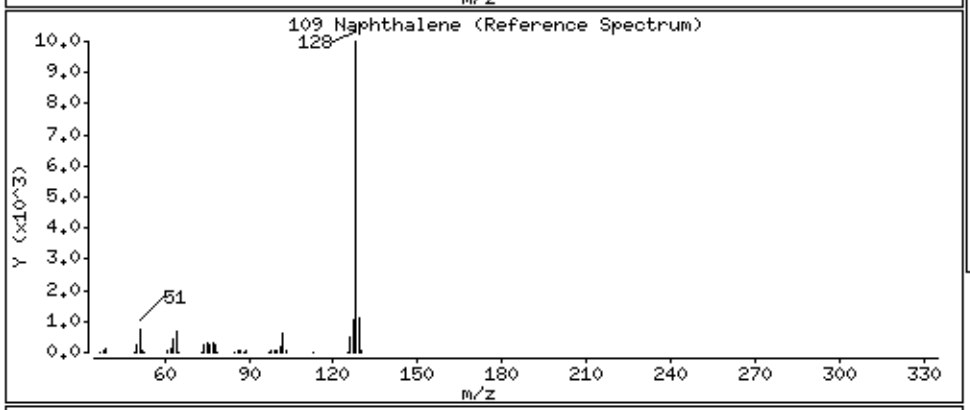
Column diameter: 0.53

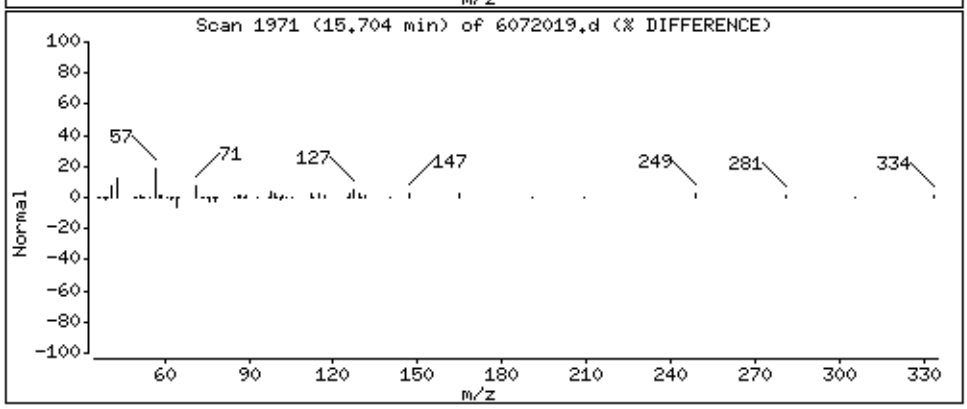
109 Naphthalene

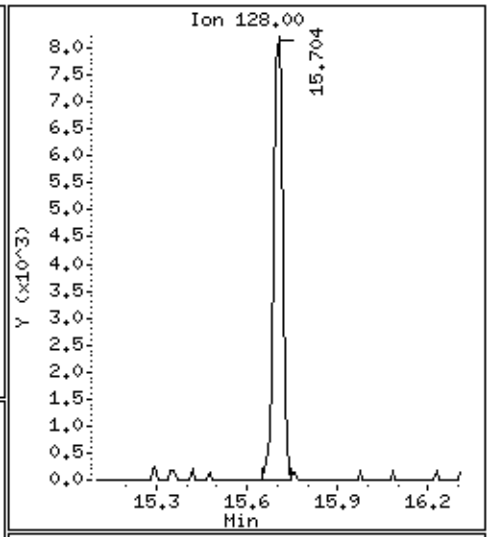
Concentration: 0.7296 NG

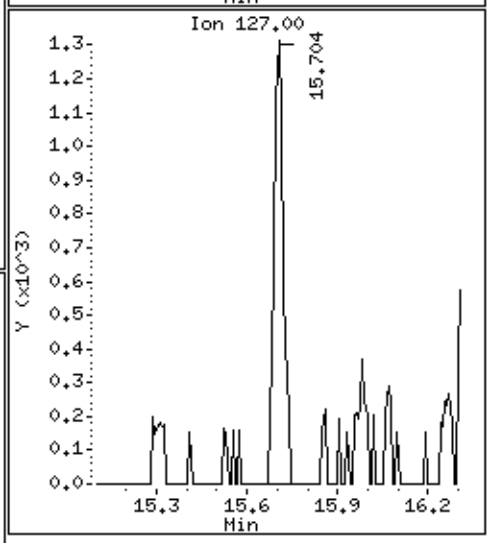












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Summary of Detected Compounds
EPA METHOD TO-17

Client Sample ID: B18SS-2

Lab ID#: 1607228B-10A

Compound	Rpt. Limit (ppbv)	Rpt. Limit (ug/m3)	Amount (ppbv)	Amount (ug/m3)
Naphthalene	0.47	2.5	0.33 J	1.7 J

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Client Sample ID: B18SS-2

Lab ID#: 1607228B-10A

EPA METHOD TO-17

File Name:	**6072020**	**Date of Extraction: NA**	**Date of Collection: 7/12/16 7:41:00 PM**
Dil. Factor:	**1.00**		**Date of Analysis: 7/21/16 12:35 AM**

Compound	**Rpt. Limit (ppbv)**	**Rpt. Limit (ug/m3)**	**Amount (ppbv)**	**Amount (ug/m3)**
Naphthalene	0.47	2.5	0.33 J	1.7 J

Air Sample Volume(L): 0.402

J = Estimated value.

Container Type: TO-17 VI Tube

Surrogates	**%Recovery**	**Method Limits**
Naphthalene-d8	108	50-150

Eurofins Air Toxics Inc.

EPA Method TO-17 GC/MS

Data file : /chem/msd6.i/20jul16.b/6072020.d
Lab Smp Id: 1607228B-10A
Inj Date : 21-JUL-2016 00:35
Operator : CT Inst ID: msd6.i
Smp Info : ;1607228-10A
Misc Info : G0149853
Comment :
Method : /chem/msd6.i/20jul16.b/616z0712vi.m
Meth Date : 21-Jul-2016 09:29 U5BT Quant Type: ISTD
Cal Date : 13-JUL-2016 13:38 Cal File: 6071302.d
Als bottle: 30
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: NaphMDL.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
* 92 Bromofluorobenzene					CAS #: 460-00-4		
11.392	11.392 (1.000)	174	424554	36.0000		70.00- 130.00	100.00
11.392	11.392 (1.000)	95	503044			0.00- 30.00	118.49
11.392	11.392 (1.000)	176	411768			0.00- 30.00	96.99
$ 108 Naphthalene-d8					CAS #: 1146-65-2		
15.661	15.669 (1.375)	136	555118	27.1265	27.126	70.00- 130.00	100.00
15.661	15.669 (1.375)	108	50972			0.00- 30.00	9.18
109 Naphthalene					CAS #: 91-20-3		
15.704	15.704 (1.379)	128	15787	0.69162	0.6916	70.00- 130.00	100.00(a)
15.704	15.704 (1.379)	127	2414			0.00- 30.00	15.29

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: msd6.i
Lab File ID: 6072020.d
Lab Smp Id: 1607228B-10A
Analysis Type: VOA
Quant Type: ISTD
Operator: CT
Method File: /chem/msd6.i/20jul16.b/616z0712vi.m
Misc Info: G0149853

Calibration Date: 20-JUL-2016
Calibration Time: 11:18

Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
92 Bromofluorobenzen	432321	259393	605249	424554	-1.80

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
92 Bromofluorobenzen	11.39	11.06	11.72	11.39	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: 22-Jul-2016 06:25

Eurofins Air Toxics Inc.

RECOVERY REPORT

Client Name: Client SDG: 20jul16
Sample Matrix: GAS Fraction: VOA
Lab Smp Id: 1607228B-10A
Level: LOW Operator: CT
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: VOC+PAHlcs50.spk Quant Type: ISTD
Sublist File: NaphMDL.sub
Method File: /chem/msd6.i/20jul16.b/616z0712vi.m
Misc Info: G0149853

SURROGATE COMPOUND	AMOUNT ADDED ng	AMOUNT RECOVERED ng	% RECOVERED	LIMITS
$ 108 Naphthalene-d8	25.000	27.126	108.51	50-150

Data File: /chem/msd6.i/20jul16.b/6072020.d

Date : 21-JUL-2016 00:35

Client ID:

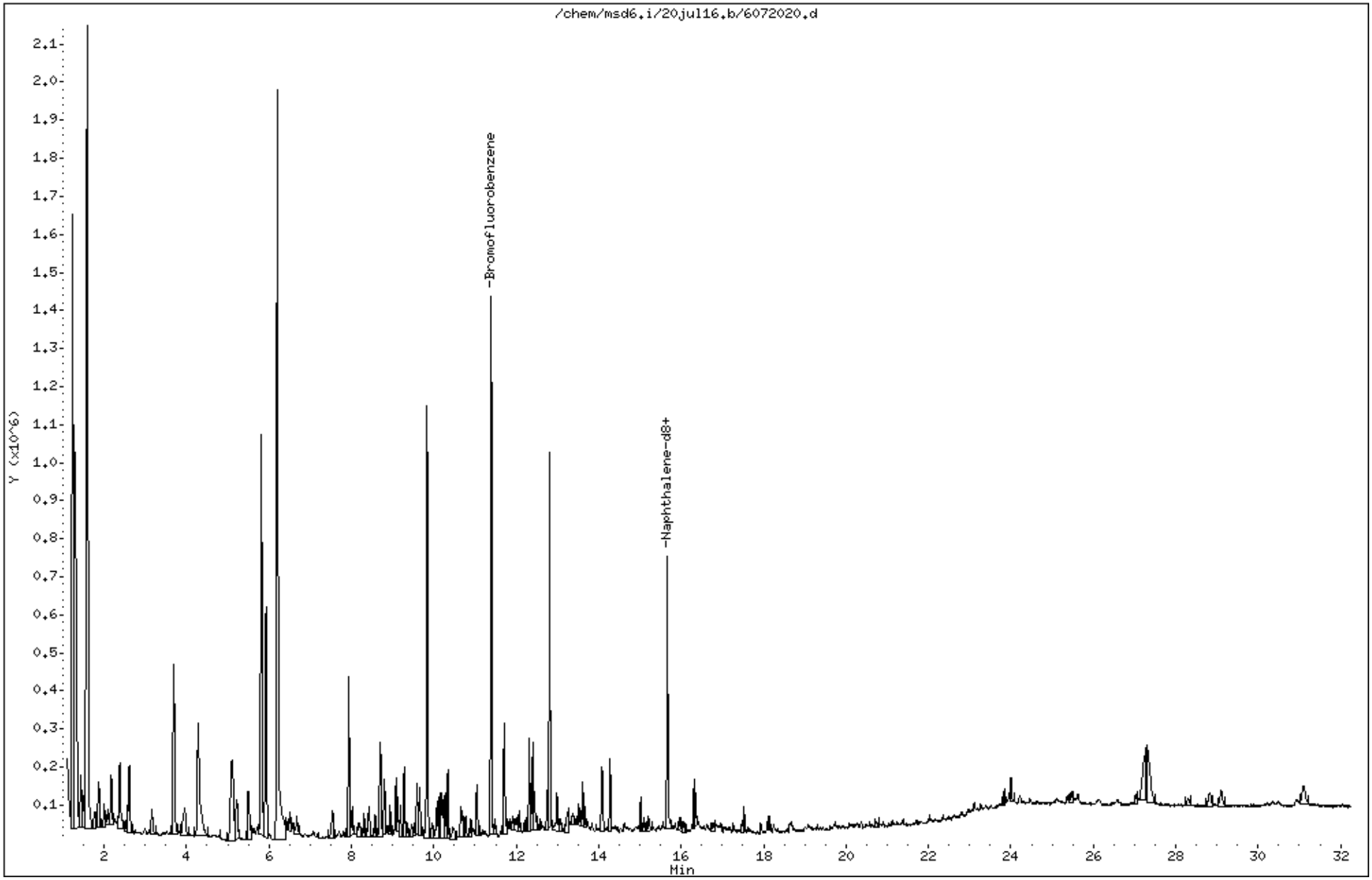
Instrument: msd6.i

Sample Info: ;1607228-10A

Operator: CT

Column phase: RTx-624

Column diameter: 0.53



Data File: /chem/msd6.i/20jul16.b/6072020.d

Date : 21-JUL-2016 00:35

Client ID:

Instrument: msd6.i

Sample Info: ;1607228-10A

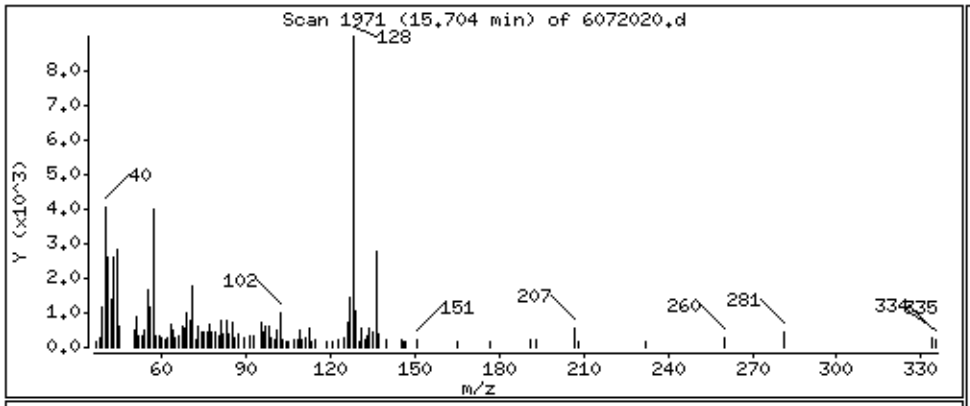
Operator: CT

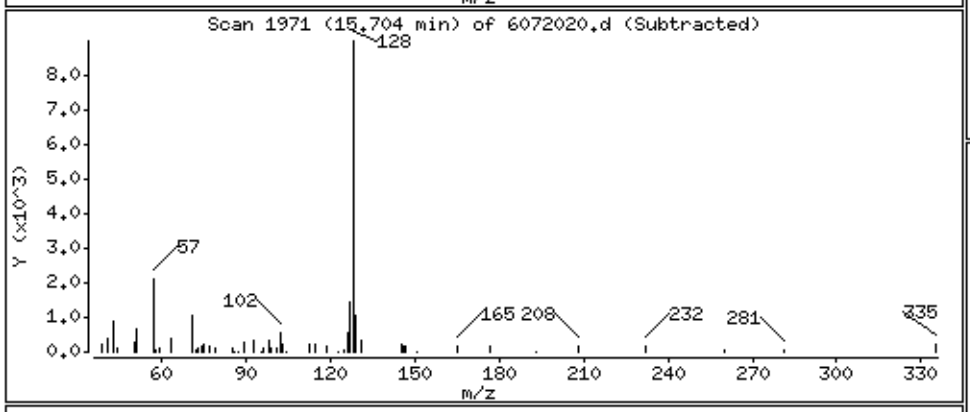
Column phase: RTx-624

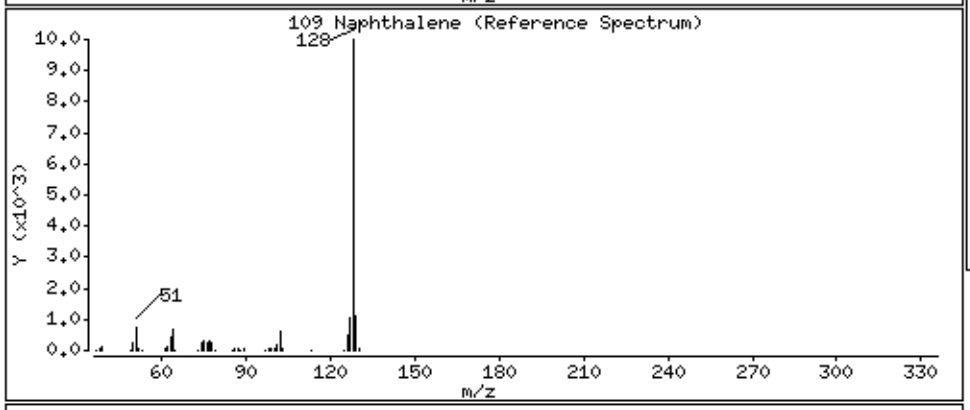
Column diameter: 0.53

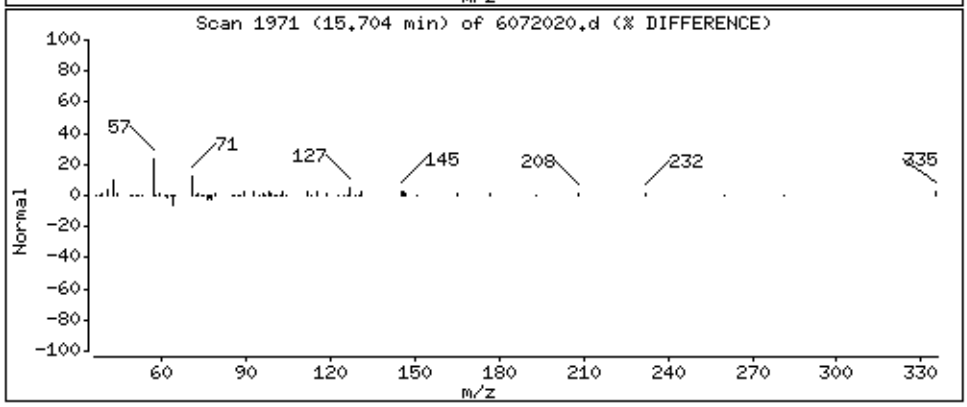
109 Naphthalene

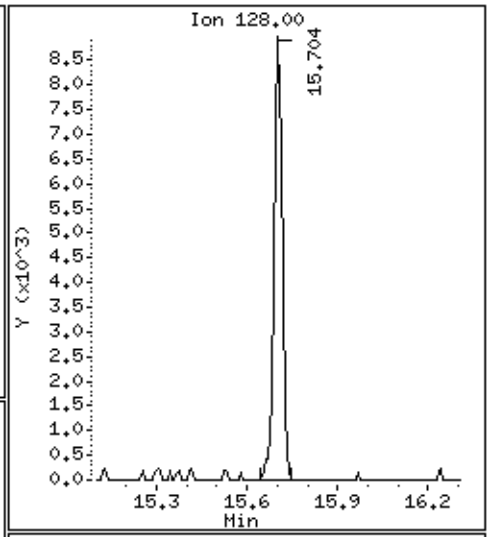
Concentration: 0.6916 NG

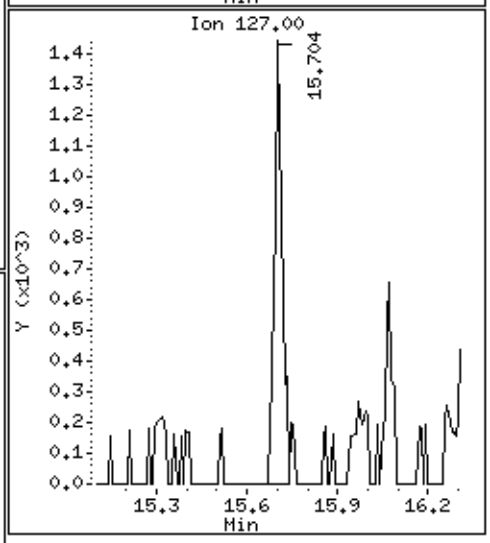












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Summary of Detected Compounds
EPA METHOD TO-17

Client Sample ID: B18SS-1D

Lab ID#: 1607228B-11A

Compound	Rpt. Limit (ppbv)	Rpt. Limit (ug/m3)	Amount (ppbv)	Amount (ug/m3)
Naphthalene	0.47	2.5	0.28 J	1.4 J

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Client Sample ID: B18SS-1D

Lab ID#: 1607228B-11A

EPA METHOD TO-17

File Name:	**6072021**	**Date of Extraction: NA**	**Date of Collection: 7/11/16 5:54:00 PM**
Dil. Factor:	**1.00**		**Date of Analysis: 7/21/16 01:15 AM**

Compound	Rpt. Limit (ppbv)	Rpt. Limit (ug/m3)	Amount (ppbv)	Amount (ug/m3)
Naphthalene	0.47	2.5	0.28 J	1.4 J

Air Sample Volume(L): 0.402

J = Estimated value.

Container Type: TO-17 VI Tube

Surrogates	%Recovery	Method Limits
Naphthalene-d8	114	50-150

Eurofins Air Toxics Inc.

EPA Method TO-17 GC/MS

Data file : /chem/msd6.i/20jul16.b/6072021.d
Lab Smp Id: 1607228B-11A
Inj Date : 21-JUL-2016 01:15
Operator : CT Inst ID: msd6.i
Smp Info : ;1607228-11A
Misc Info : G0152247
Comment :
Method : /chem/msd6.i/20jul16.b/616z0712vi.m
Meth Date : 21-Jul-2016 09:29 U5BT Quant Type: ISTD
Cal Date : 13-JUL-2016 13:38 Cal File: 6071302.d
Als bottle: 31
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: NaphMDL.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
* 92 Bromofluorobenzene							CAS #: 460-00-4	
11.392	11.392	(1.000)	174	414393	36.0000		70.00- 130.00	100.00
11.392	11.392	(1.000)	95	482055			0.00- 30.00	116.33
11.392	11.392	(1.000)	176	405564			0.00- 30.00	97.87
$ 108 Naphthalene-d8							CAS #: 1146-65-2	
15.668	15.669	(1.375)	136	568042	28.4386	28.439	70.00- 130.00	100.00
15.661	15.669	(1.375)	108	52798			0.00- 30.00	9.29
109 Naphthalene							CAS #: 91-20-3	
15.704	15.704	(1.379)	128	12980	0.58260	0.5826	70.00- 130.00	100.00(a)
15.697	15.704	(1.378)	127	2030			0.00- 30.00	15.64

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: msd6.i
Lab File ID: 6072021.d
Lab Smp Id: 1607228B-11A
Analysis Type: VOA
Quant Type: ISTD
Operator: CT
Method File: /chem/msd6.i/20jul16.b/616z0712vi.m
Misc Info: G0152247

Calibration Date: 20-JUL-2016
Calibration Time: 11:18

Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
92 Bromofluorobenzen	432321	259393	605249	414393	-4.15

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
92 Bromofluorobenzen	11.39	11.06	11.72	11.39	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: 22-Jul-2016 06:25

Eurofins Air Toxics Inc.

RECOVERY REPORT

Client Name: Client SDG: 20jul16
Sample Matrix: GAS Fraction: VOA
Lab Smp Id: 1607228B-11A
Level: LOW Operator: CT
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: VOC+PAHlcs50.spk Quant Type: ISTD
Sublist File: NaphMDL.sub
Method File: /chem/msd6.i/20jul16.b/616z0712vi.m
Misc Info: G0152247

SURROGATE COMPOUND	AMOUNT ADDED ng	AMOUNT RECOVERED ng	% RECOVERED	LIMITS
$ 108 Naphthalene-d8	25.000	28.439	113.75	50-150

Data File: /chem/msd6.i/20jul16.b/6072021.d

Date : 21-JUL-2016 01:15

Client ID:

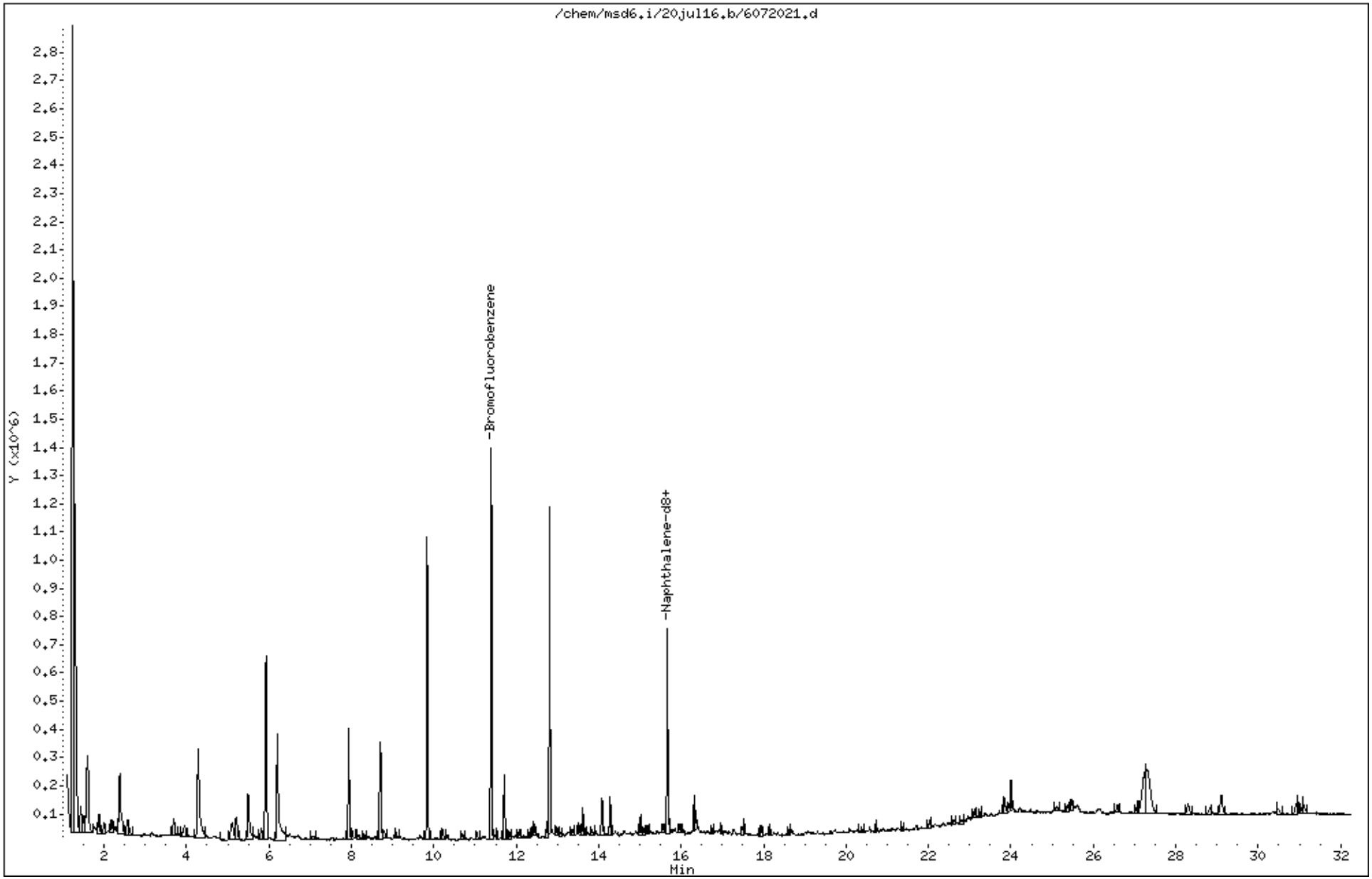
Instrument: msd6.i

Sample Info: ;1607228-11A

Operator: CT

Column phase: RTx-624

Column diameter: 0.53



Data File: /chem/msd6.i/20jul16.b/6072021.d

Date : 21-JUL-2016 01:15

Client ID:

Instrument: msd6.i

Sample Info: ;1607228-11A

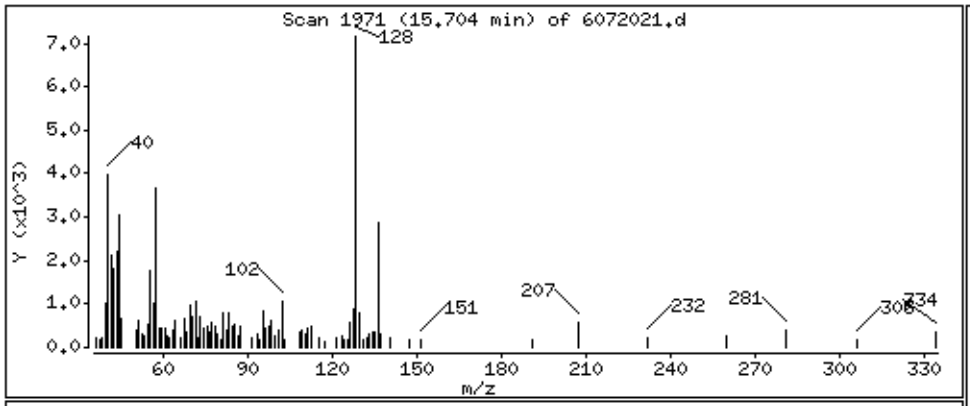
Operator: CT

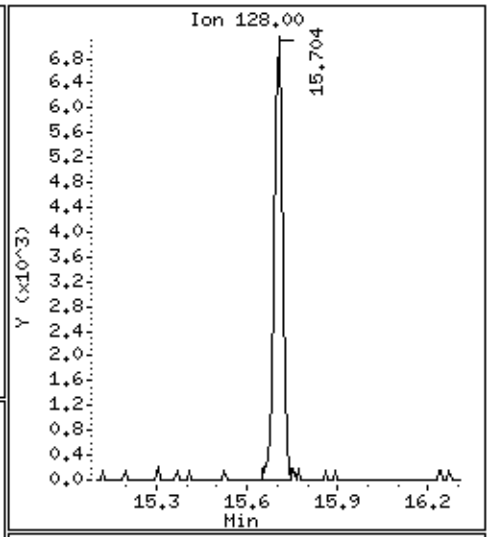
Column phase: RTx-624

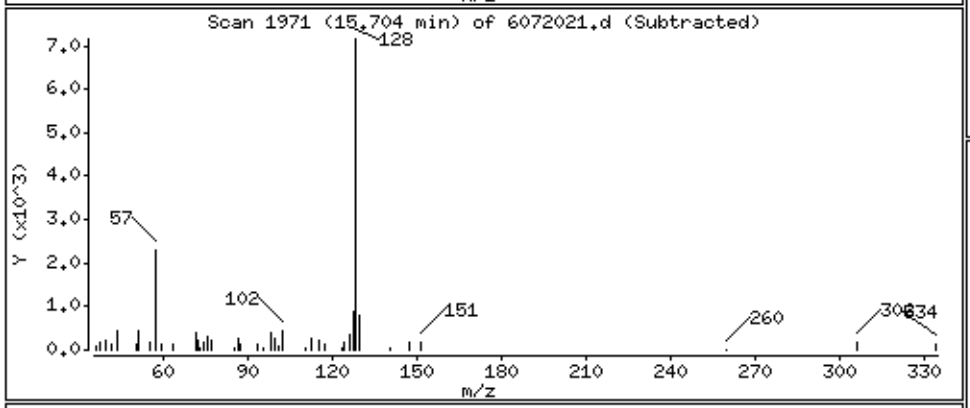
Column diameter: 0.53

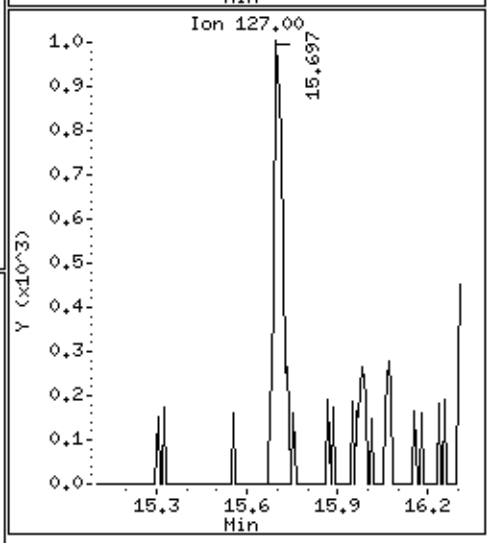
109 Naphthalene

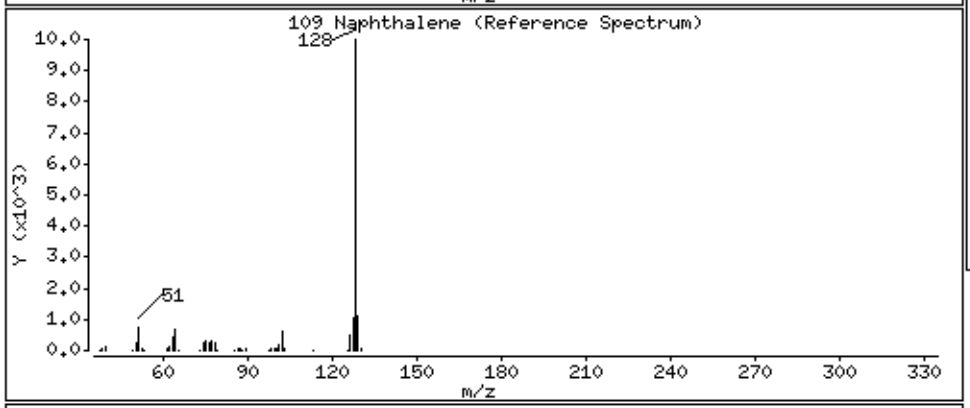
Concentration: 0.5826 NG

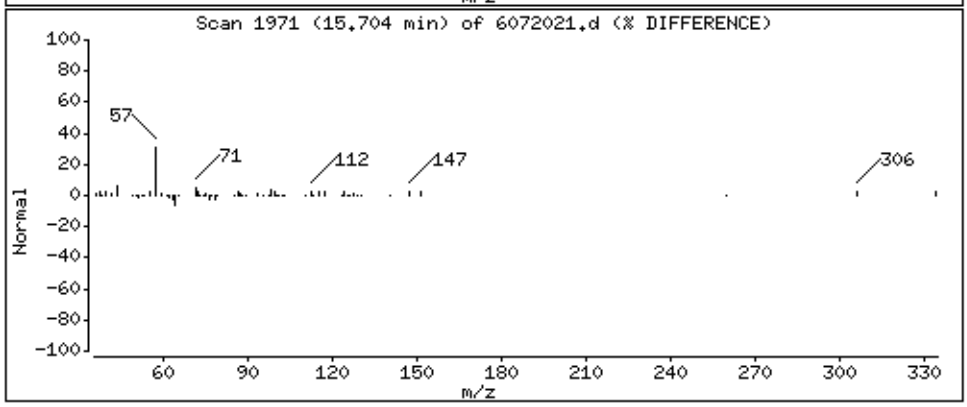












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Summary of Detected Compounds
EPA METHOD TO-17

Client Sample ID: B18SS-3

Lab ID#: 1607228B-12A

Compound	Rpt. Limit (ppbv)	Rpt. Limit (ug/m3)	Amount (ppbv)	Amount (ug/m3)
Naphthalene	0.48	2.5	2.3	12

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Client Sample ID: B18SS-3

Lab ID#: 1607228B-12A

EPA METHOD TO-17

File Name:	**6072022**	**Date of Extraction: NA**	**Date of Collection: 7/11/16 6:57:00 PM**
Dil. Factor:	**1.00**		**Date of Analysis: 7/21/16 01:54 AM**

Compound	**Rpt. Limit (ppbv)**	**Rpt. Limit (ug/m3)**	**Amount (ppbv)**	**Amount (ug/m3)**
Naphthalene	0.48	2.5	2.3	12

Air Sample Volume(L): 0.399
Container Type: TO-17 VI Tube

Surrogates	**%Recovery**	**Method Limits**
Naphthalene-d8	117	50-150

Eurofins Air Toxics Inc.

EPA Method TO-17 GC/MS

Data file : /chem/msd6.i/20jul16.b/6072022.d
Lab Smp Id: 1607228B-12A
Inj Date : 21-JUL-2016 01:54
Operator : CT Inst ID: msd6.i
Smp Info : ;1607228-12A
Misc Info : G0149806
Comment :
Method : /chem/msd6.i/20jul16.b/616z0712vi.m
Meth Date : 21-Jul-2016 09:29 U5BT Quant Type: ISTD
Cal Date : 13-JUL-2016 13:38 Cal File: 6071302.d
Als bottle: 32
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: NaphMDL.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
* 92 Bromofluorobenzene						CAS #: 460-00-4		
11.392	11.392	(1.000)	174	439949	36.0000		70.00- 130.00	100.00
11.392	11.392	(1.000)	95	525202			0.00- 30.00	119.38
11.392	11.392	(1.000)	176	431496			0.00- 30.00	98.08
$ 108 Naphthalene-d8						CAS #: 1146-65-2		
15.661	15.669	(1.375)	136	618253	29.1545	29.154	70.00- 130.00	100.00
15.661	15.669	(1.375)	108	56648			0.00- 30.00	9.16
109 Naphthalene						CAS #: 91-20-3		
15.704	15.704	(1.379)	128	112347	4.74957	4.750	70.00- 130.00	100.00
15.697	15.704	(1.378)	127	16092			0.00- 30.00	14.32

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd6.i
Lab File ID: 6072022.d
Lab Smp Id: 1607228B-12A
Analysis Type: VOA
Quant Type: ISTD
Operator: CT
Method File: /chem/msd6.i/20jul16.b/616z0712vi.m
Misc Info: G0149806

Calibration Date: 20-JUL-2016
Calibration Time: 11:18

Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
92 Bromofluorobenzen	432321	259393	605249	439949	1.76

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
92 Bromofluorobenzen	11.39	11.06	11.72	11.39	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: 22-Jul-2016 06:25

Eurofins Air Toxics Inc.

RECOVERY REPORT

Client Name: Client SDG: 20jul16
Sample Matrix: GAS Fraction: VOA
Lab Smp Id: 1607228B-12A
Level: LOW Operator: CT
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: VOC+PAHlcs50.spk Quant Type: ISTD
Sublist File: NaphMDL.sub
Method File: /chem/msd6.i/20jul16.b/616z0712vi.m
Misc Info: G0149806

SURROGATE COMPOUND	AMOUNT ADDED ng	AMOUNT RECOVERED ng	% RECOVERED	LIMITS
$ 108 Naphthalene-d8	25.000	29.154	116.62	50-150

Data File: /chem/msd6.i/20jul16.b/6072022.d

Date : 21-JUL-2016 01:54

Client ID:

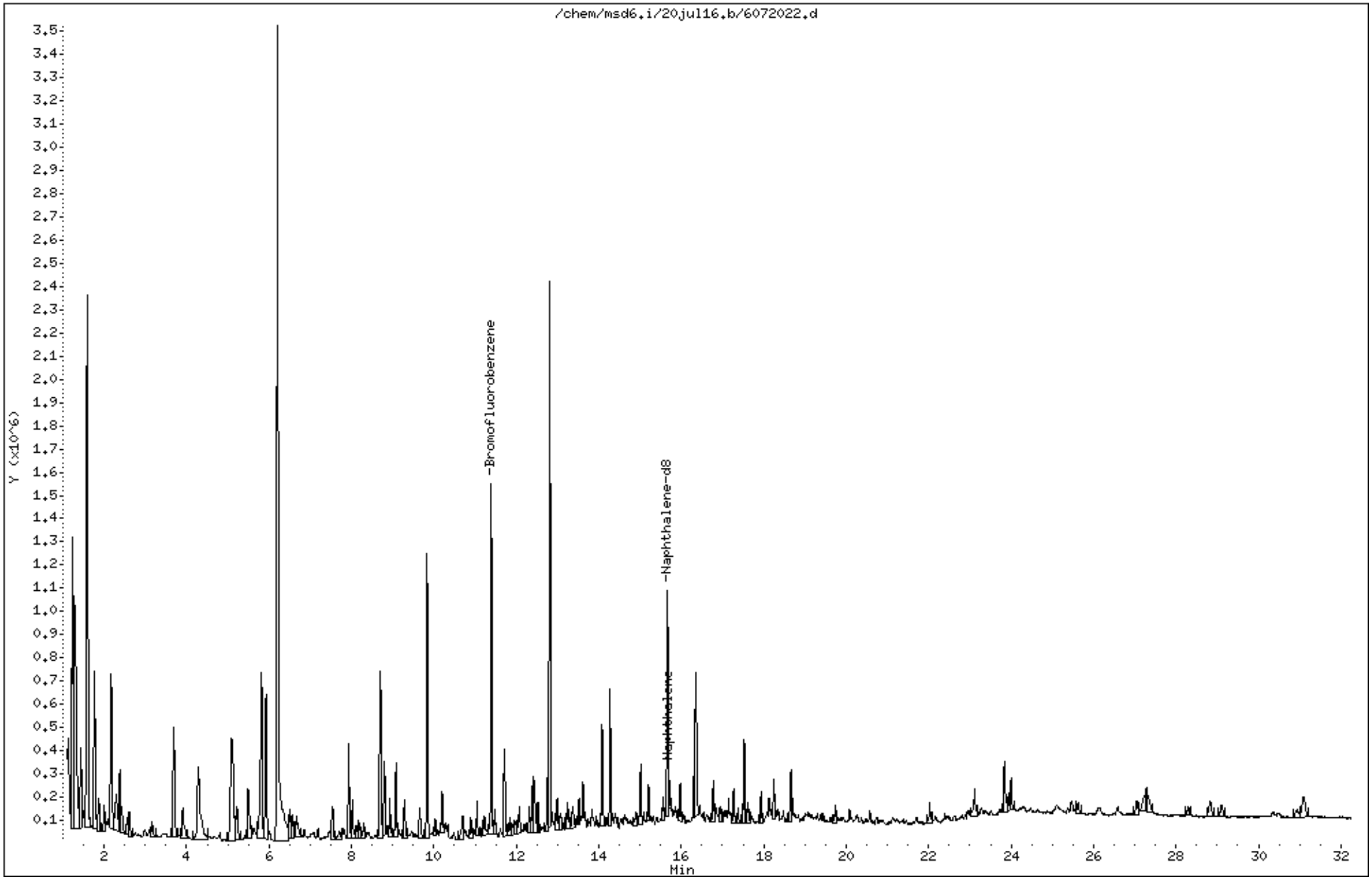
Instrument: msd6.i

Sample Info: ;1607228-12A

Operator: CT

Column phase: RTx-624

Column diameter: 0.53



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Date : 21-JUL-2016 01:54

Client ID:

Instrument: msd6.i

Sample Info: ;1607228-12A

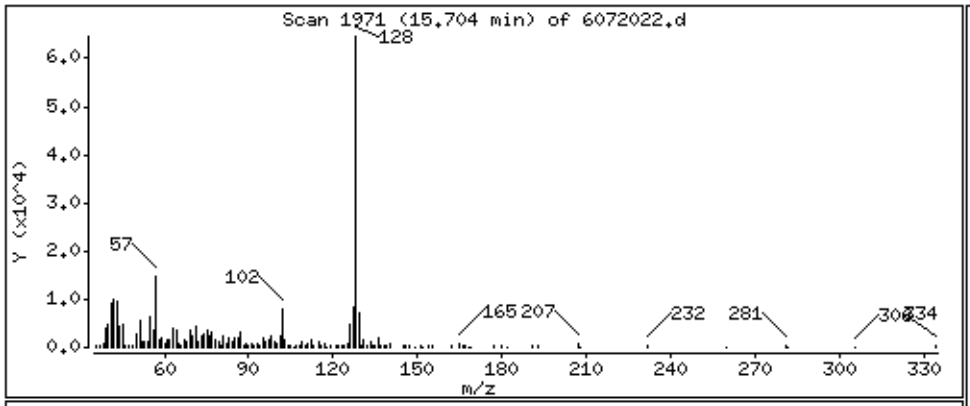
Operator: CT

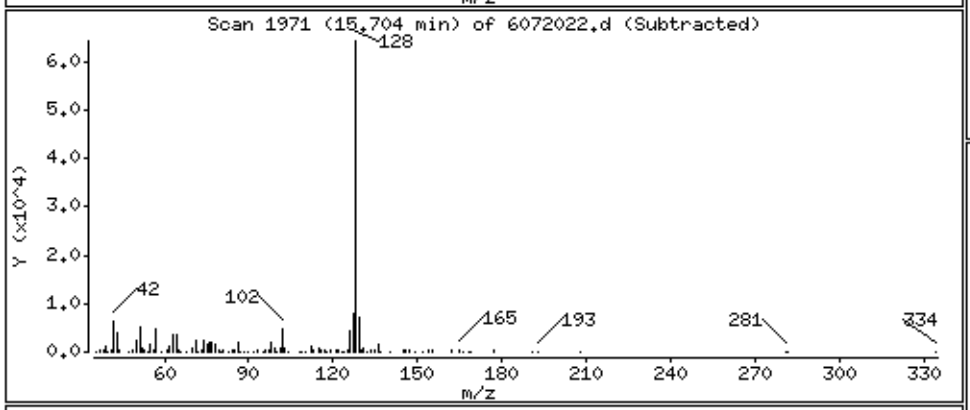
Column phase: RTx-624

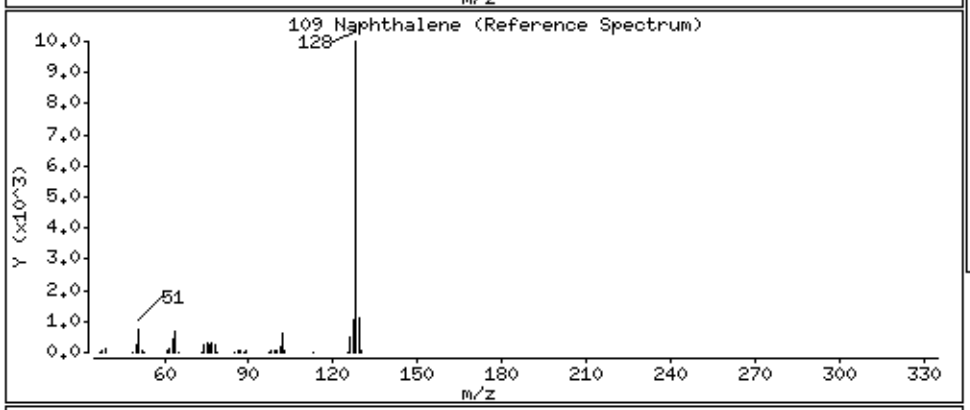
Column diameter: 0.53

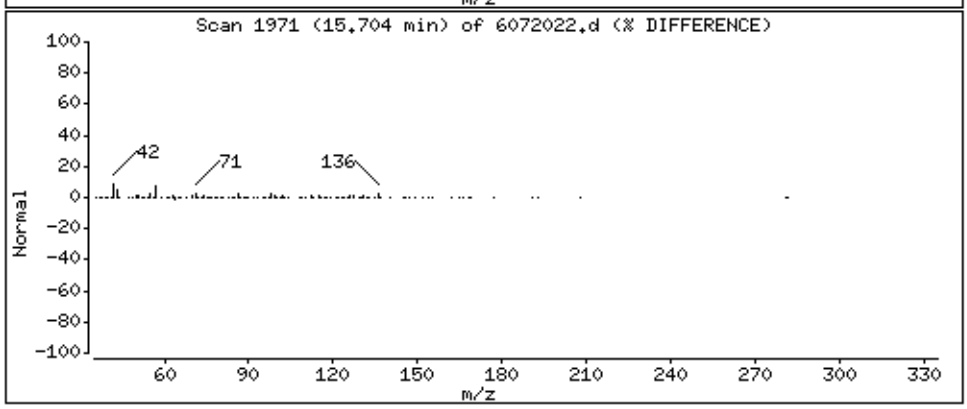
109 Naphthalene

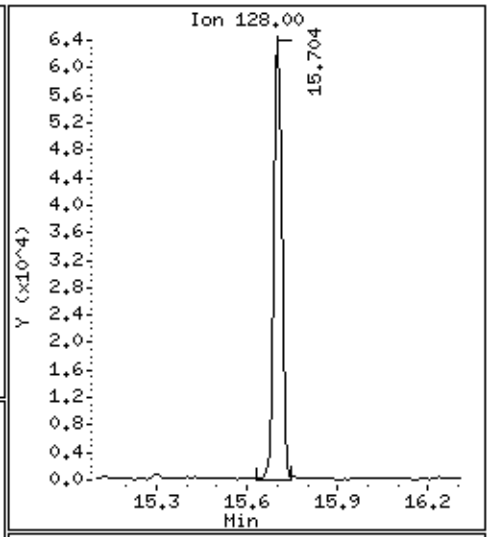
Concentration: 4.750 NG

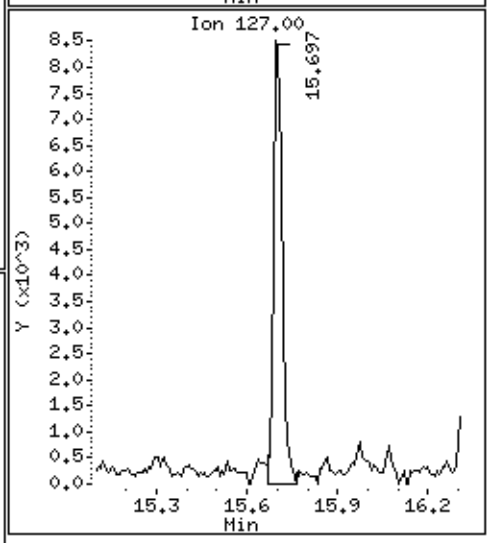












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Summary of Detected Compounds
EPA METHOD TO-17

Client Sample ID: B18SS-4

Lab ID#: 1607228B-13A

Compound	Rpt. Limit (ppbv)	Rpt. Limit (ug/m3)	Amount (ppbv)	Amount (ug/m3)
Naphthalene	0.48	2.5	0.72	3.8

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Client Sample ID: B18SS-4

Lab ID#: 1607228B-13A

EPA METHOD TO-17

File Name:	**6072023**	**Date of Extraction: NA**	**Date of Collection: 7/12/16 6:55:00 PM**
Dil. Factor:	**1.00**		**Date of Analysis: 7/21/16 02:34 AM**

Compound	**Rpt. Limit (ppbv)**	**Rpt. Limit (ug/m3)**	**Amount (ppbv)**	**Amount (ug/m3)**
Naphthalene	0.48	2.5	0.72	3.8

Air Sample Volume(L): 0.399
Container Type: TO-17 VI Tube

Surrogates	**%Recovery**	**Method Limits**
Naphthalene-d8	107	50-150

Eurofins Air Toxics Inc.

EPA Method TO-17 GC/MS

Data file : /chem/msd6.i/20jul16.b/6072023.d
Lab Smp Id: 1607228B-13A
Inj Date : 21-JUL-2016 02:34
Operator : CT Inst ID: msd6.i
Smp Info : ;1607228-13A
Misc Info : G0139968
Comment :
Method : /chem/msd6.i/20jul16.b/616z0712vi.m
Meth Date : 21-Jul-2016 09:29 U5BT Quant Type: ISTD
Cal Date : 13-JUL-2016 13:38 Cal File: 6071302.d
Als bottle: 33
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: NaphMDL.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
* 92 Bromofluorobenzene						CAS #: 460-00-4		
11.392	11.392	(1.000)	174	444557	36.0000		70.00- 130.00	100.00
11.392	11.392	(1.000)	95	526306			0.00- 30.00	118.39
11.392	11.392	(1.000)	176	435090			0.00- 30.00	97.87
$ 108 Naphthalene-d8						CAS #: 1146-65-2		
15.661	15.669	(1.375)	136	574532	26.8119	26.812	70.00- 130.00	100.00
15.661	15.669	(1.375)	108	53388			0.00- 30.00	9.29
109 Naphthalene						CAS #: 91-20-3		
15.704	15.704	(1.379)	128	35894	1.50173	1.502	70.00- 130.00	100.00
15.704	15.704	(1.379)	127	5083			0.00- 30.00	14.16

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd6.i
Lab File ID: 6072023.d
Lab Smp Id: 1607228B-13A
Analysis Type: VOA
Quant Type: ISTD
Operator: CT
Method File: /chem/msd6.i/20jul16.b/616z0712vi.m
Misc Info: G0139968

Calibration Date: 20-JUL-2016
Calibration Time: 11:18

Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
92 Bromofluorobenzen	432321	259393	605249	444557	2.83

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
92 Bromofluorobenzen	11.39	11.06	11.72	11.39	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: 22-Jul-2016 06:25

Eurofins Air Toxics Inc.

RECOVERY REPORT

Client Name: Client SDG: 20jul16
Sample Matrix: GAS Fraction: VOA
Lab Smp Id: 1607228B-13A
Level: LOW Operator: CT
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: VOC+PAHlcs50.spk Quant Type: ISTD
Sublist File: NaphMDL.sub
Method File: /chem/msd6.i/20jul16.b/616z0712vi.m
Misc Info: G0139968

SURROGATE COMPOUND	AMOUNT ADDED ng	AMOUNT RECOVERED ng	% RECOVERED	LIMITS
$ 108 Naphthalene-d8	25.000	26.812	107.25	50-150

Data File: /chem/msd6.i/20jul16.b/6072023.d

Date : 21-JUL-2016 02:34

Client ID:

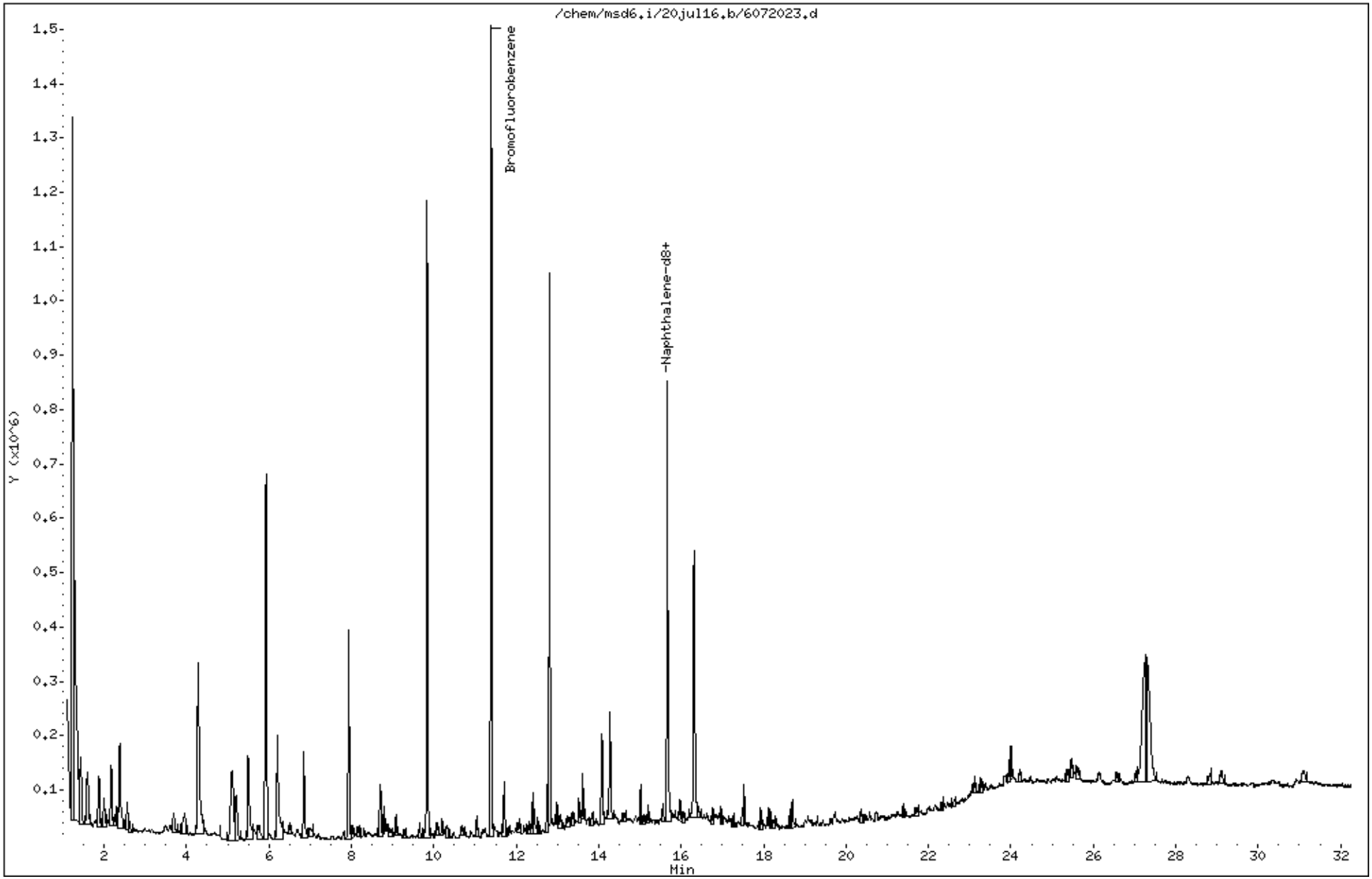
Instrument: msd6.i

Sample Info: ;1607228-13A

Operator: CT

Column phase: RTx-624

Column diameter: 0.53



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Date : 21-JUL-2016 02:34

Client ID:

Instrument: msd6.i

Sample Info: ;1607228-13A

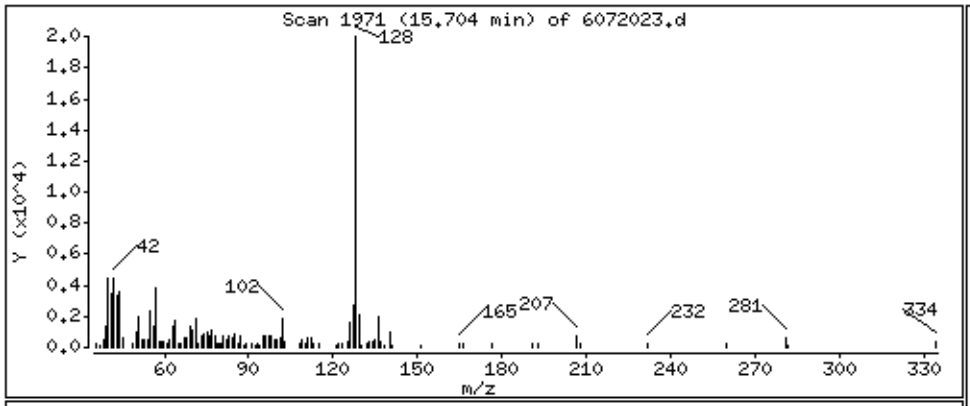
Operator: CT

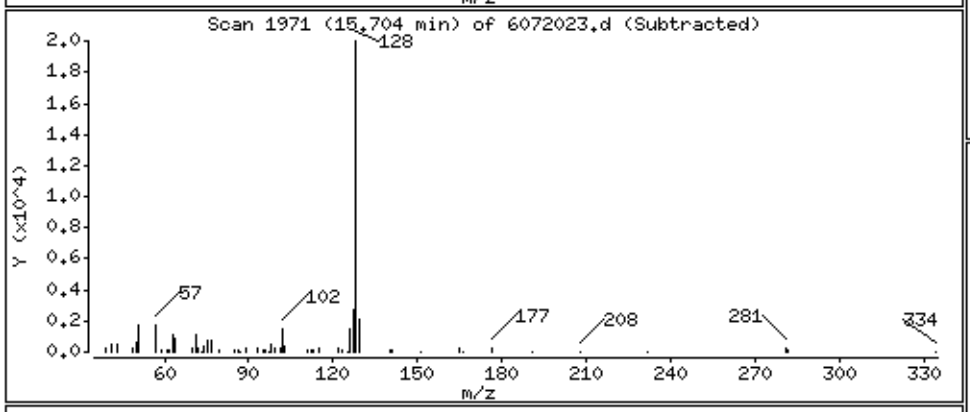
Column phase: RTx-624

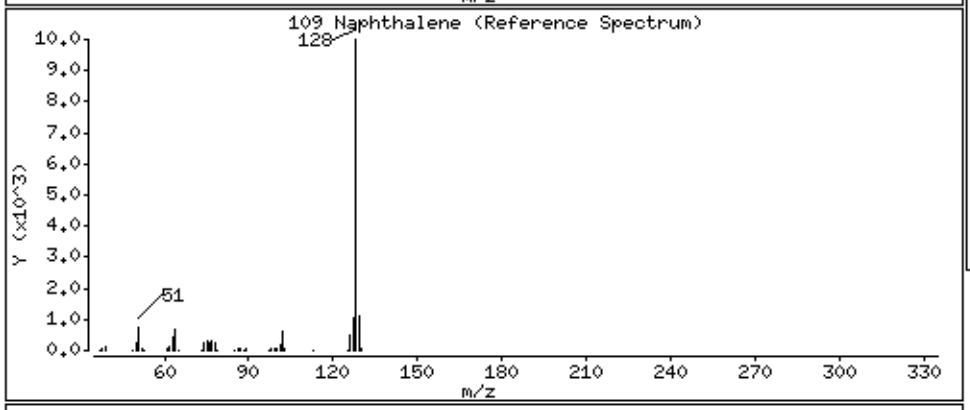
Column diameter: 0.53

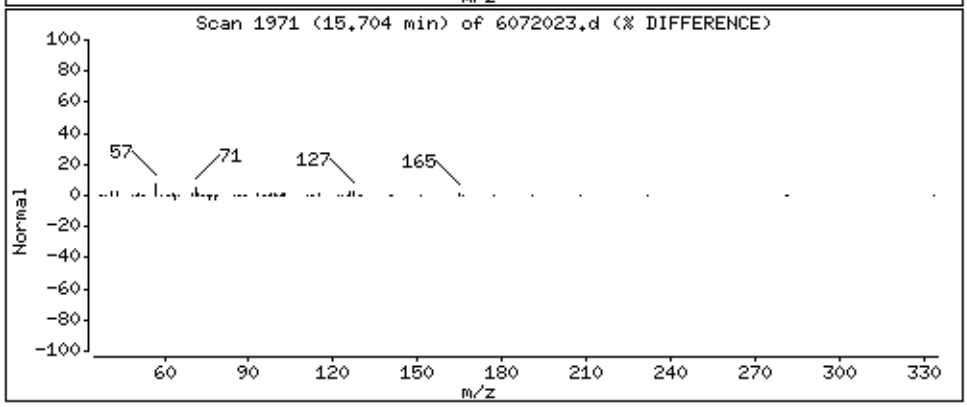
109 Naphthalene

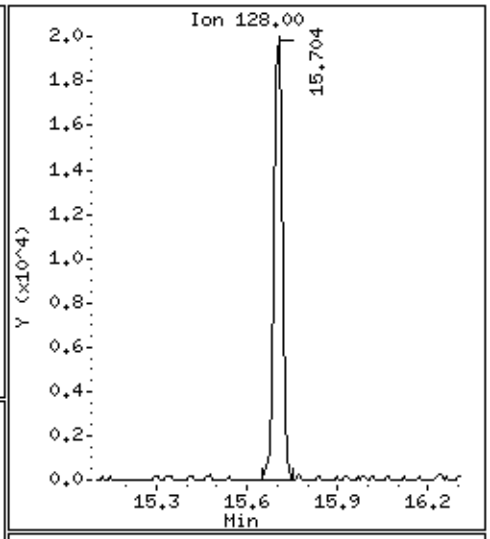
Concentration: 1.502 NG

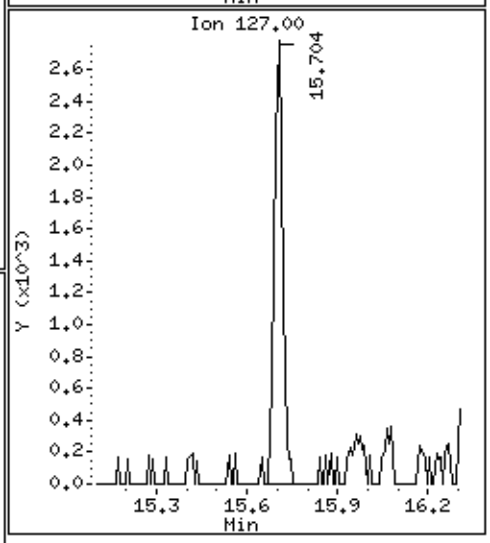












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Summary of Detected Compounds
EPA METHOD TO-17

Client Sample ID: B18SS-5

Lab ID#: 1607228B-14A

Compound	Rpt. Limit (ppbv)	Rpt. Limit (ug/m3)	Amount (ppbv)	Amount (ug/m3)
Naphthalene	0.52	2.7	0.50 J	2.6 J

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Client Sample ID: B18SS-5

Lab ID#: 1607228B-14A

EPA METHOD TO-17

File Name:	**6072024**	**Date of Extraction: NA**	**Date of Collection: 7/12/16 6:05:00 PM**
Dil. Factor:	**1.00**		**Date of Analysis: 7/21/16 03:14 AM**

Compound	**Rpt. Limit (ppbv)**	**Rpt. Limit (ug/m3)**	**Amount (ppbv)**	**Amount (ug/m3)**
Naphthalene	0.52	2.7	0.50 J	2.6 J

Air Sample Volume(L): 0.369

J = Estimated value.

Container Type: TO-17 VI Tube

Surrogates	**%Recovery**	**Method Limits**
Naphthalene-d8	112	50-150

Eurofins Air Toxics Inc.

EPA Method TO-17 GC/MS

Data file : /chem/msd6.i/20jul16.b/6072024.d
Lab Smp Id: 1607228B-14A
Inj Date : 21-JUL-2016 03:14
Operator : CT Inst ID: msd6.i
Smp Info : ;1607228-14A
Misc Info : G0153653
Comment :
Method : /chem/msd6.i/20jul16.b/616z0712vi.m
Meth Date : 21-Jul-2016 09:29 U5BT Quant Type: ISTD
Cal Date : 13-JUL-2016 13:38 Cal File: 6071302.d
Als bottle: 34
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: NaphMDL.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
* 92 Bromofluorobenzene					CAS #: 460-00-4		
11.392	11.392 (1.000)	174	448172	36.0000		70.00- 130.00	100.00
11.392	11.392 (1.000)	95	524480			0.00- 30.00	117.03
11.392	11.392 (1.000)	176	437166			0.00- 30.00	97.54
$ 108 Naphthalene-d8					CAS #: 1146-65-2		
15.661	15.669 (1.375)	136	602263	27.8794	27.879	70.00- 130.00	100.00
15.661	15.669 (1.375)	108	56000			0.00- 30.00	9.30
109 Naphthalene					CAS #: 91-20-3		
15.704	15.704 (1.379)	128	23123	0.95964	0.9596	70.00- 130.00	100.00(a)
15.704	15.704 (1.379)	127	3583			0.00- 30.00	15.50

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: msd6.i
Lab File ID: 6072024.d
Lab Smp Id: 1607228B-14A
Analysis Type: VOA
Quant Type: ISTD
Operator: CT
Method File: /chem/msd6.i/20jul16.b/616z0712vi.m
Misc Info: G0153653

Calibration Date: 20-JUL-2016
Calibration Time: 11:18

Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
92 Bromofluorobenzen	432321	259393	605249	448172	3.67

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
92 Bromofluorobenzen	11.39	11.06	11.72	11.39	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: 22-Jul-2016 06:25

Eurofins Air Toxics Inc.

RECOVERY REPORT

Client Name:
Client SDG: 20jul16
Sample Matrix: GAS
Fraction: VOA
Lab Smp Id: 1607228B-14A
Level: LOW
Operator: CT
Data Type: MS DATA
SampleType: SAMPLE
SpikeList File: VOC+PAHlcs50.spk
Quant Type: ISTD
Sublist File: NaphMDL.sub
Method File: /chem/msd6.i/20jul16.b/616z0712vi.m
Misc Info: G0153653

SURROGATE COMPOUND	AMOUNT ADDED ng	AMOUNT RECOVERED ng	% RECOVERED	LIMITS
$ 108 Naphthalene-d8	25.000	27.879	111.52	50-150

Data File: /chem/msd6.i/20jul16.b/6072024.d

Date : 21-JUL-2016 03:14

Client ID:

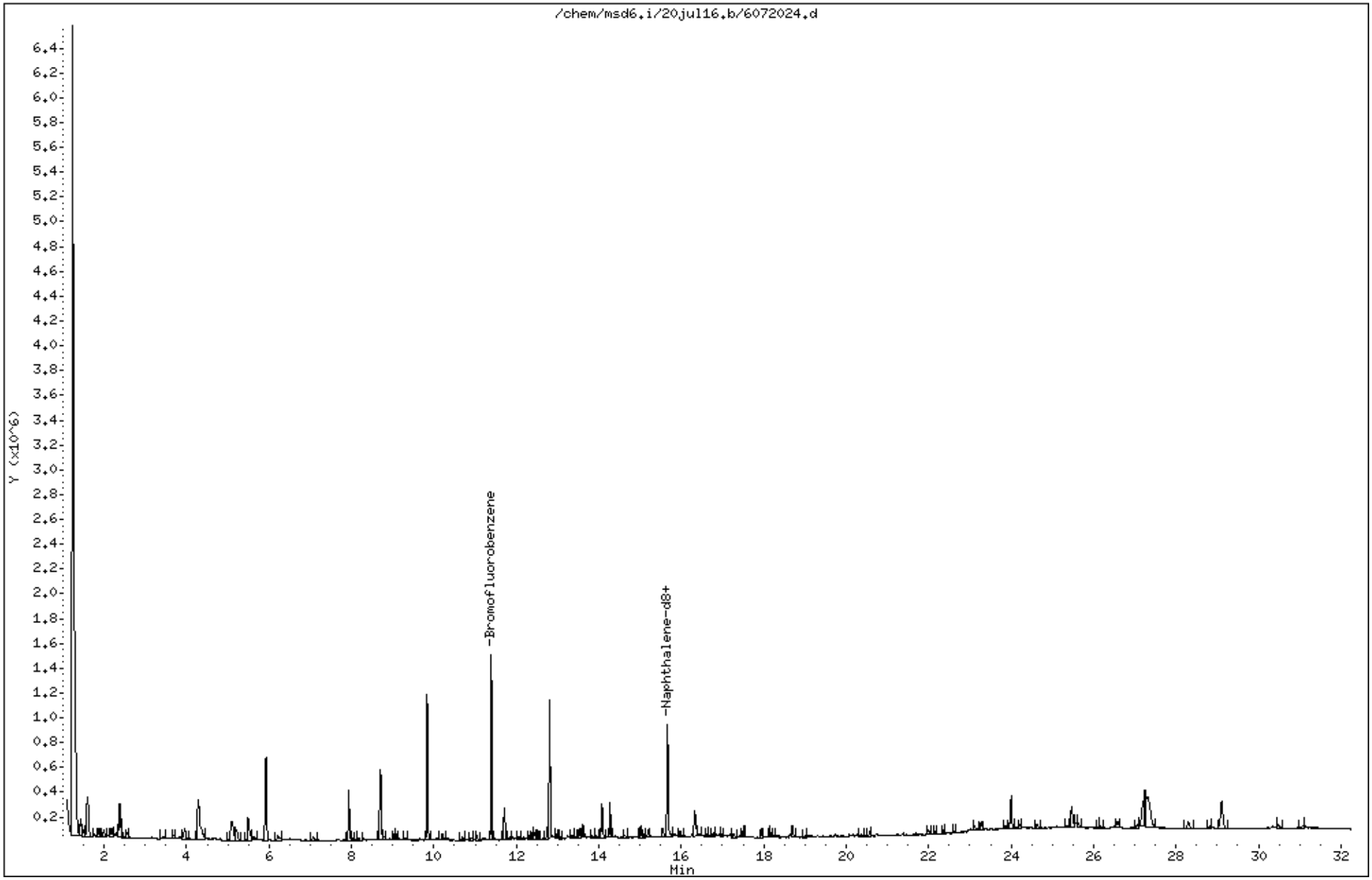
Instrument: msd6.i

Sample Info: ;1607228-14A

Operator: CT

Column phase: RTx-624

Column diameter: 0.53



Data File: /chem/msd6.i/20jul16.b/6072024.d

Date : 21-JUL-2016 03:14

Client ID:

Instrument: msd6.i

Sample Info: ;1607228-14A

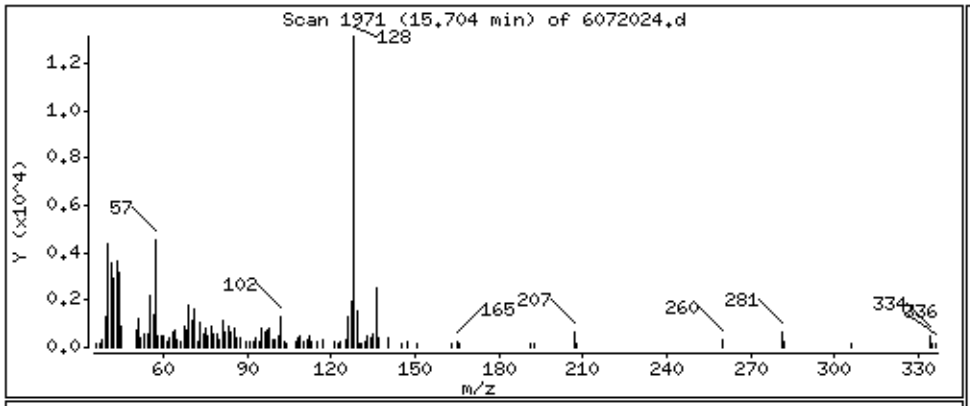
Operator: CT

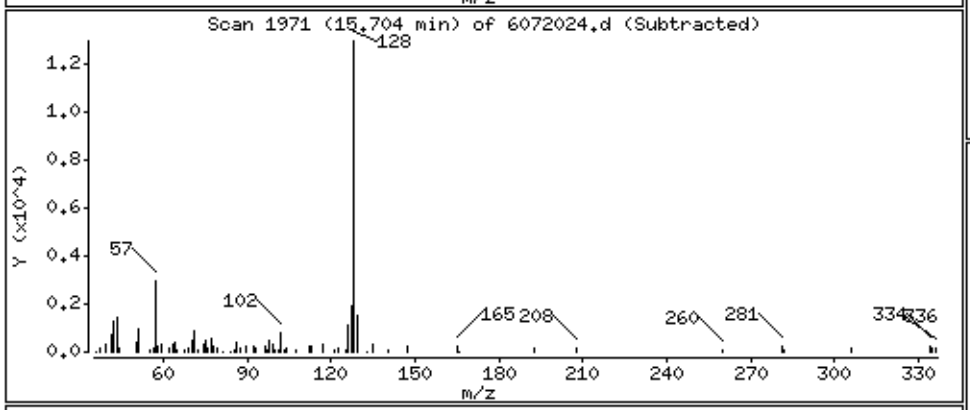
Column phase: RTx-624

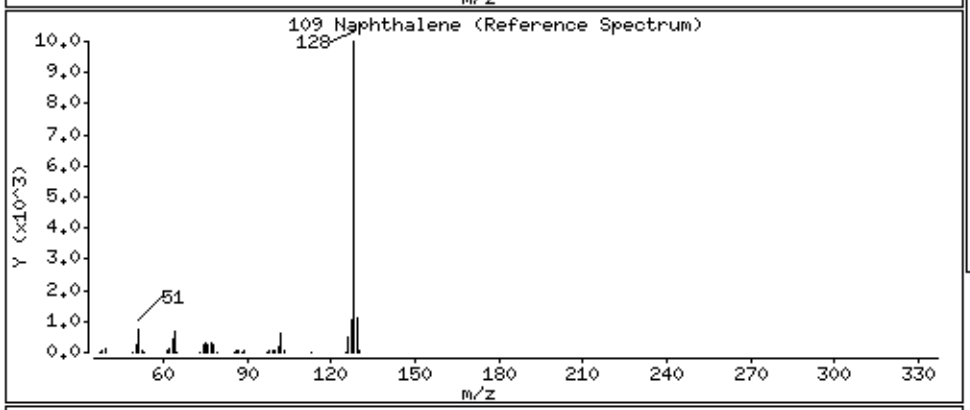
Column diameter: 0.53

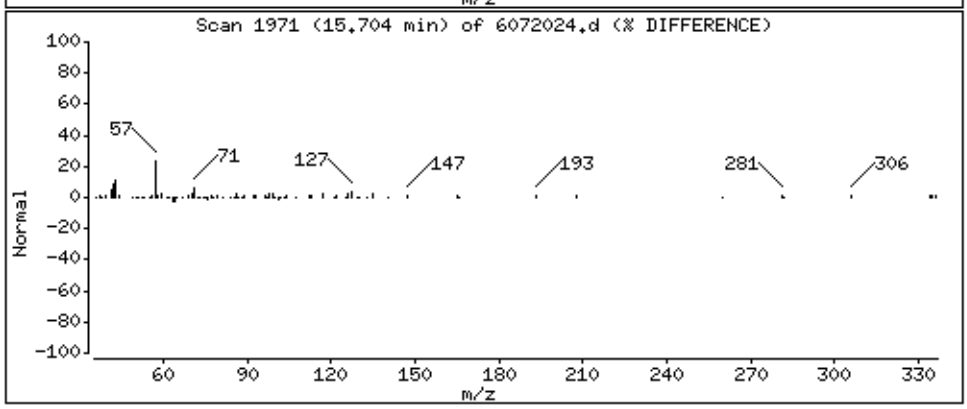
109 Naphthalene

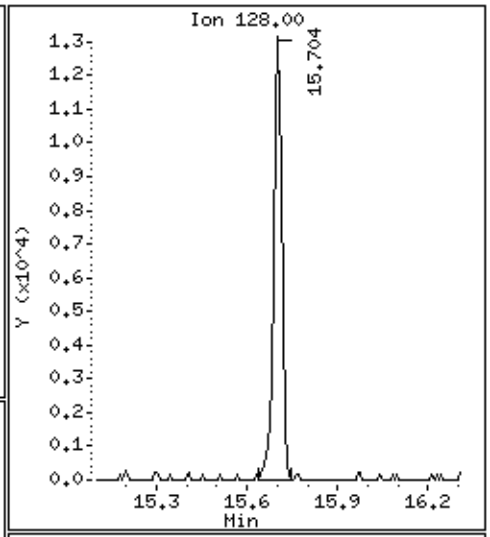
Concentration: 0.9596 NG

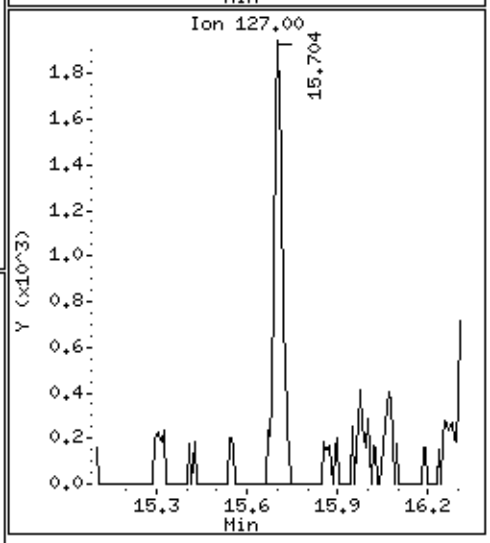












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Summary of Detected Compounds
EPA METHOD TO-17

Client Sample ID: Field Blank

Lab ID#: 1607228B-15A

No Detections Were Found.

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Client Sample ID: Field Blank

Lab ID#: 1607228B-15A

EPA METHOD TO-17

File Name:	**6072010**	**Date of Extraction: NA**	**Date of Collection: 7/12/16 6:10:00 PM**
Dil. Factor:	**1.00**		**Date of Analysis: 7/20/16 06:38 PM**

Compound	Rpt. Limit (ppbv)	Rpt. Limit (ug/m3)	Amount (ppbv)	Amount (ug/m3)
Naphthalene	0.011	0.056	Not Detected	Not Detected

Air Sample Volume(L): 17.8
Container Type: TO-17 VI Tube

Surrogates	%Recovery	Method Limits
Naphthalene-d8	106	50-150

Eurofins Air Toxics Inc.

EPA Method TO-17 GC/MS

Data file : /chem/msd6.i/20jul16.b/6072010.d
Lab Smp Id: 1607228B-15A
Inj Date : 20-JUL-2016 18:38
Operator : CT Inst ID: msd6.i
Smp Info : ;1607228-15A
Misc Info : G0149799
Comment :
Method : /chem/msd6.i/20jul16.b/616z0712vi.m
Meth Date : 21-Jul-2016 09:29 U5BT Quant Type: ISTD
Cal Date : 13-JUL-2016 13:38 Cal File: 6071302.d
Als bottle: 21
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: NaphMDL.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
* 92 Bromofluorobenzene							CAS #: 460-00-4	
11.392	11.392	(1.000)	174	423361	36.0000		70.00- 130.00	100.00
11.392	11.392	(1.000)	95	501480			0.00- 30.00	118.45
11.392	11.392	(1.000)	176	415399			0.00- 30.00	98.12
$ 108 Naphthalene-d8							CAS #: 1146-65-2	
15.661	15.669	(1.375)	136	541526	26.5368	26.537	70.00- 130.00	100.00
15.669	15.669	(1.375)	108	49099			0.00- 30.00	9.07

Report Date: 22-Jul-2016 06:24

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd6.i
Lab File ID: 6072010.d
Lab Smp Id: 1607228B-15A
Analysis Type: VOA
Quant Type: ISTD
Operator: CT
Method File: /chem/msd6.i/20jul16.b/616z0712vi.m
Misc Info: G0149799

Calibration Date: 20-JUL-2016
Calibration Time: 11:18

Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
92 Bromofluorobenzen	432321	259393	605249	423361	-2.07

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
92 Bromofluorobenzen	11.39	11.06	11.72	11.39	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: 22-Jul-2016 06:24

Eurofins Air Toxics Inc.

RECOVERY REPORT

Client Name: Client SDG: 20jul16
Sample Matrix: GAS Fraction: VOA
Lab Smp Id: 1607228B-15A
Level: LOW Operator: CT
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: VOC+PAHlcs50.spk Quant Type: ISTD
Sublist File: NaphMDL.sub
Method File: /chem/msd6.i/20jul16.b/616z0712vi.m
Misc Info: G0149799

SURROGATE COMPOUND	AMOUNT ADDED ng	AMOUNT RECOVERED ng	% RECOVERED	LIMITS
$ 108 Naphthalene-d8	25.000	26.537	106.15	50-150

Data File: /chem/msd6.i/20jul16.b/6072010.d

Date : 20-JUL-2016 18:38

Client ID:

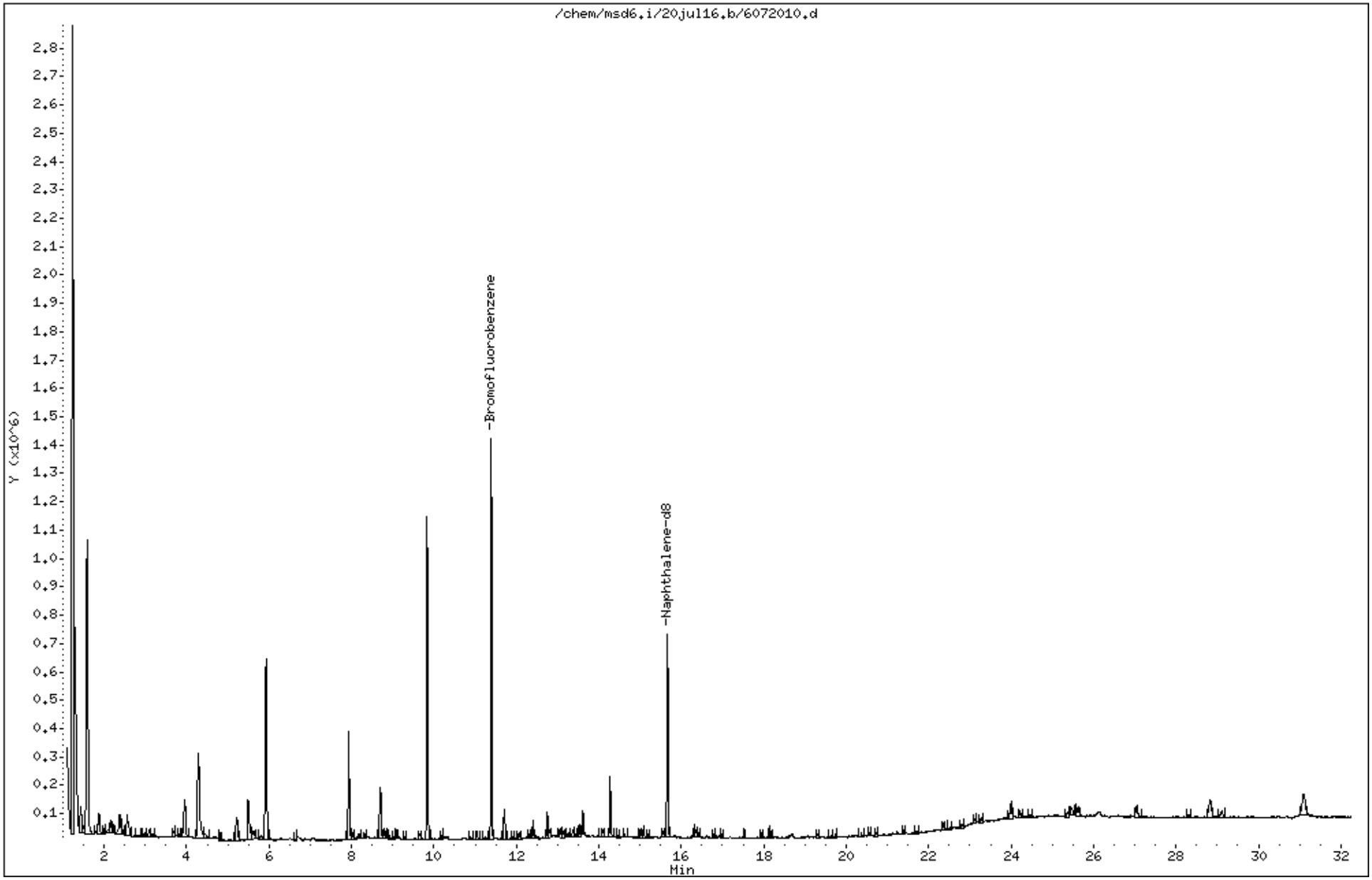
Instrument: msd6.i

Sample Info: ;1607228-15A

Operator: CT

Column phase: RTx-624

Column diameter: 0.53



QC Results and Raw Data

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Client Sample ID: Lab Blank

Lab ID#: 1607228B-16A

EPA METHOD TO-17

File Name:	**6072007a**	**Date of Extraction: NA**	**Date of Collection: NA**
Dil. Factor:	**1.00**		**Date of Analysis: 7/20/16 03:08 PM**

Compound	Rpt. Limit (ppbv)	Rpt. Limit (ug/m3)	Amount (ppbv)	Amount (ug/m3)
Naphthalene	0.011	0.056	0.0086 J	0.045 J

Air Sample Volume(L): 17.8

J = Estimated value.

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Naphthalene-d8	114	50-150

Eurofins Air Toxics Inc.

EPA Method TO-17 GC/MS

Data file : /chem/msd6.i/20jul16.b/6072007a.d
Lab Smp Id: DP Lab Blank Client Smp ID: Lab Blank
Inj Date : 20-JUL-2016 15:08
Operator : CT Inst ID: msd6.i
Smp Info : ;DP Lab Blank;Lab Blank
Misc Info : G0147216
Comment :
Method : /chem/msd6.i/20jul16.b/616z0712vi.m
Meth Date : 21-Jul-2016 09:29 U5BT Quant Type: ISTD
Cal Date : 13-JUL-2016 13:38 Cal File: 6071302.d
Als bottle: 11 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: NaphMDL.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
* 92 Bromofluorobenzene						CAS #: 460-00-4	
11.407	11.392 (1.000)	174	429946	36.0000		70.00- 130.00	100.00
11.407	11.392 (1.000)	95	521854			0.00- 30.00	121.38
11.407	11.392 (1.000)	176	420894			0.00- 30.00	97.89
$ 108 Naphthalene-d8						CAS #: 1146-65-2	
15.669	15.669 (1.374)	136	590257	28.4819	28.482	70.00- 130.00	100.00
15.669	15.669 (1.374)	108	53699			0.00- 30.00	9.10
109 Naphthalene						CAS #: 91-20-3	
15.712	15.704 (1.377)	128	18579	0.80372	0.8037	70.00- 130.00	100.00(a)
15.704	15.704 (1.377)	127	2484			0.00- 30.00	13.37

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: msd6.i
Lab File ID: 6072007a.d
Lab Smp Id: DP Lab Blank
Analysis Type: VOA
Quant Type: ISTD
Operator: CT
Method File: /chem/msd6.i/20jul16.b/616z0712vi.m
Misc Info: G0147216

Calibration Date: 20-JUL-2016
Calibration Time: 11:18
Client Smp ID: Lab Blank
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
92 Bromofluorobenzen	432321	259393	605249	429946	-0.55

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
92 Bromofluorobenzen	11.39	11.06	11.72	11.41	0.13

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: 22-Jul-2016 06:20

Eurofins Air Toxics Inc.

RECOVERY REPORT

Client Name:
Client SDG: 20jul16
Sample Matrix: GAS
Fraction: VOA
Lab Smp Id: DP Lab Blank
Client Smp ID: Lab Blank
Level: LOW
Operator: CT
Data Type: MS DATA
SampleType: BLANK
SpikeList File: VOC+PAHlcs50.spk
Quant Type: ISTD
Sublist File: NaphMDL.sub
Method File: /chem/msd6.i/20jul16.b/616z0712vi.m
Misc Info: G0147216

SURROGATE COMPOUND	AMOUNT ADDED ng	AMOUNT RECOVERED ng	% RECOVERED	LIMITS
$ 108 Naphthalene-d8	25.000	28.482	113.93	50-150

Data File: /chem/msd6.i/20jul16.b/6072007a.d

Date : 20-JUL-2016 15:08

Client ID: Lab Blank

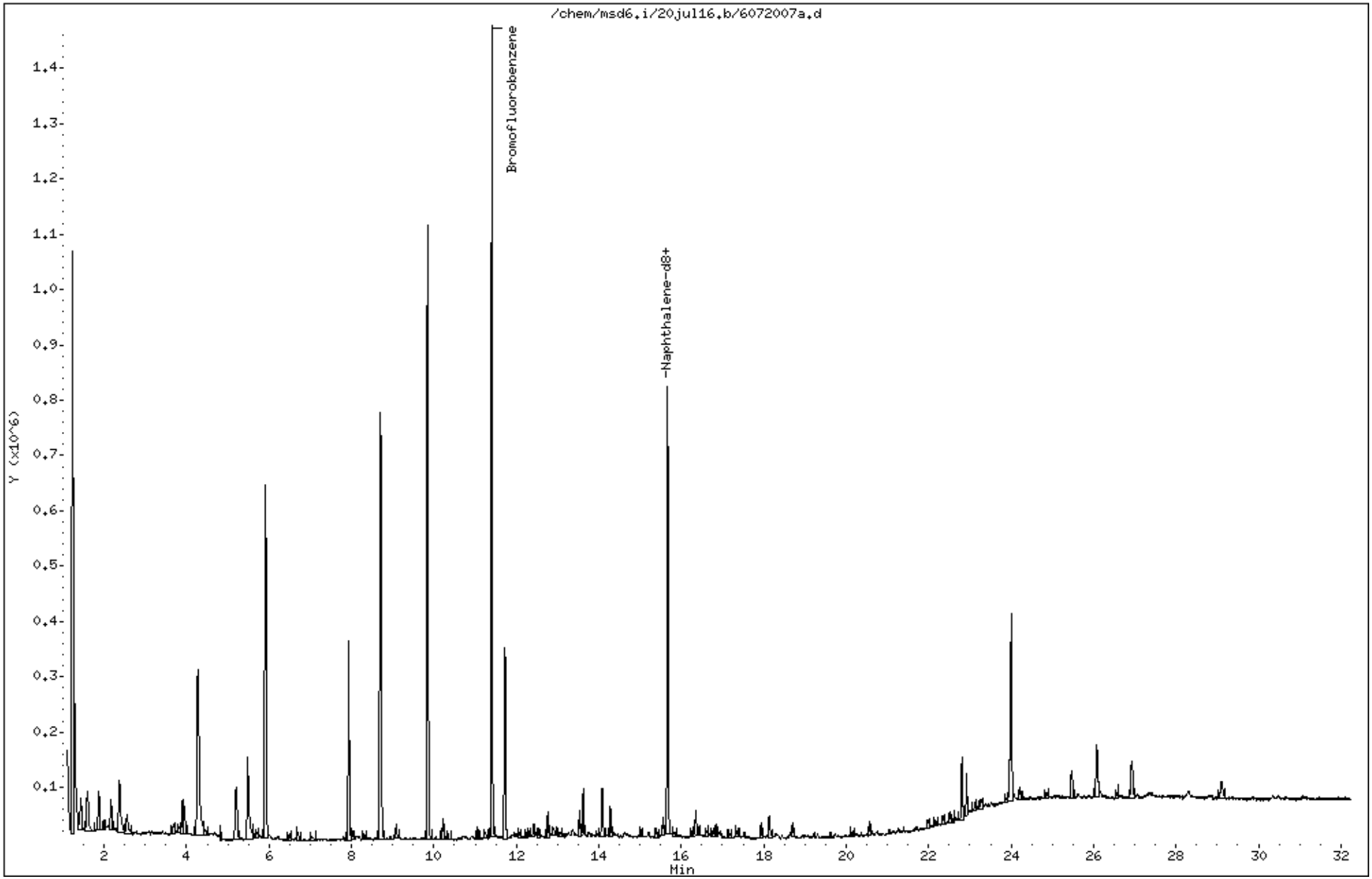
Instrument: msd6.i

Sample Info: ;DP Lab Blank;Lab Blank

Operator: CT

Column phase: RTx-624

Column diameter: 0.53



Data File: /chem/msd6.i/20jul16.b/6072007a.d

Date : 20-JUL-2016 15:08

Client ID: Lab Blank

Instrument: msd6.i

Sample Info: ;DP Lab Blank;Lab Blank

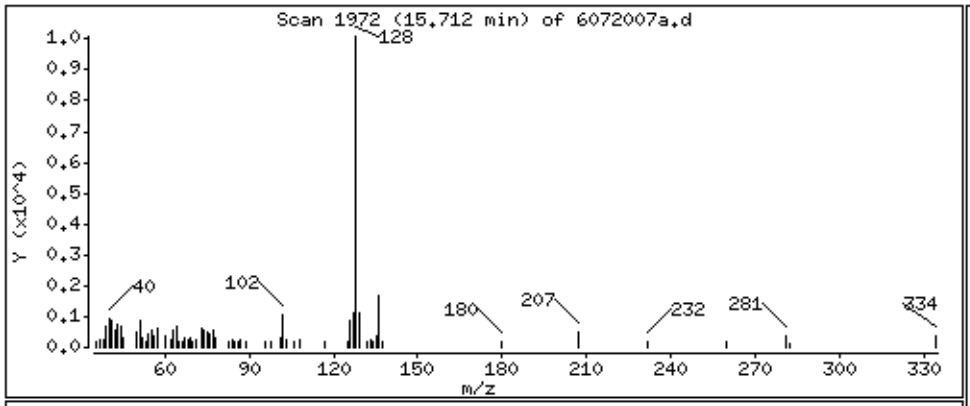
Operator: CT

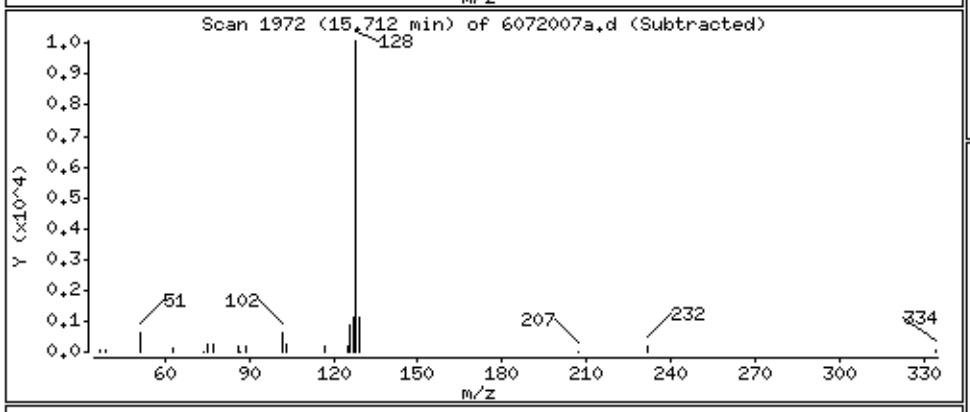
Column phase: RTx-624

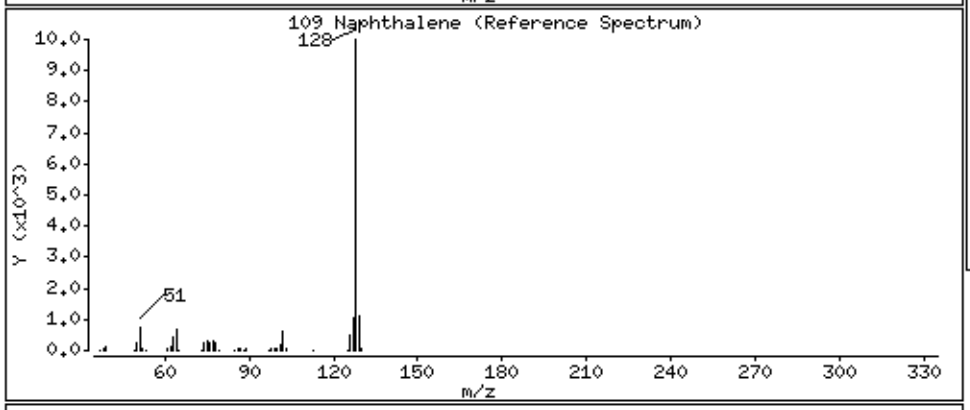
Column diameter: 0.53

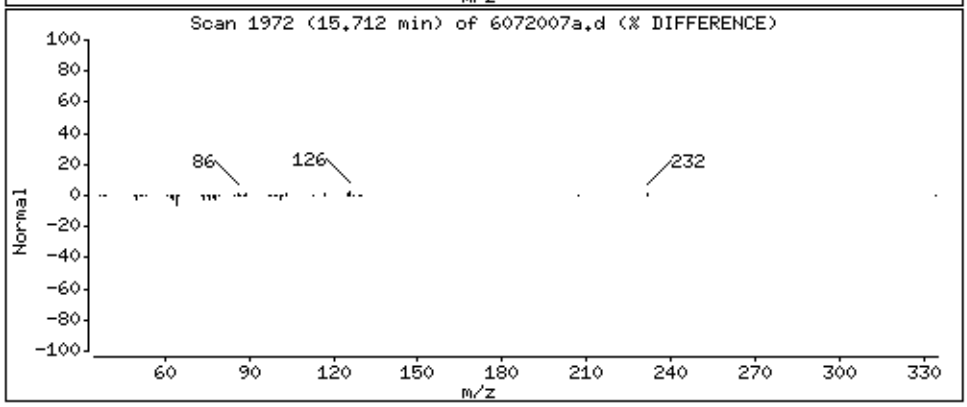
109 Naphthalene

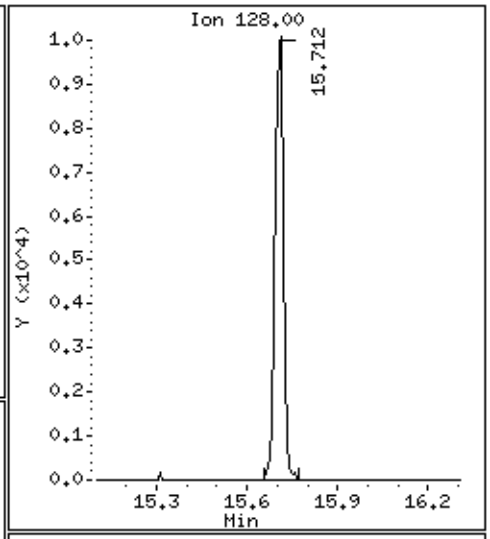
Concentration: 0.8037 NG

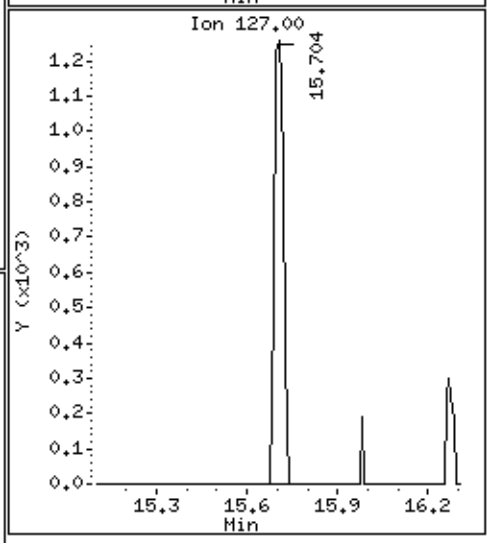












LEVEL-IV VALIDATABLE

EPA METHOD TO-17

SURROGATE RECOVERY FORM

Lab Name: AIR TOXICS LIMITED. SDG No.: 1607228B

	CLIENT SAMPLE NO.	SURROGATE % RECOVERY								
		Naphthalene-d8	#		#		#		#	TOTAL OUT
01	B18IA-1	105								0
02	B18IA-2	104								0
03	B18IA-3	117								0
04	B18IA-4	114								0
05	B18IA-5	108								0
06	B18IA-1D	116								0
07	B18AA-070816	111								0
08	B18SS-1	116								0
09	B18SS-2	108								0
10	B18SS-1D	114								0
11	B18SS-3	117								0
12	B18SS-4	107								0
13	B18SS-5	112								0
14	Field Blank	106								0
15	Lab Blank	114								0
16	CCV	117								0
17	LCS	124								0
18	LCSD	115								0
19										0
20										0
21										0
22										0
23										0
24										0

Surrogate Recovery Limits

Naphthalene-d8 50 - 150

* Designates values outside of QC limits

LEVEL-IV VALIDATABLE

EPA Method TO-17

INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: AIR TOXICS, LTD

Lab File ID: 6072003.d

Instrument ID: msd6.i

SDG No: 1607228B

Date Analyzed: 07/20/2016

Time Analyzed: 11:18 AM

		4-Bromofluorobenzene Area	#	RT	#	Area	#	RT	#	Area	#	RT	#
	24-HOUR STD	432321		11.39									
	UPPER LIMIT	605249		11.72									
	LOWER LIMIT	259393		11.06									
	CLIENT SAMPLE NO												
01	B18IA-1	440247		11.39									
02	B18IA-2	476964		11.39									
03	B18IA-3	408126		11.39									
04	B18IA-4	409260		11.39									
05	B18IA-5	438365		11.39									
06	B18IA-1D	410225		11.39									
07	B18AA-070816	406273		11.39									
08	B18SS-1	412355		11.39									
09	B18SS-2	424554		11.39									
10	B18SS-1D	414393		11.39									
11	B18SS-3	439949		11.39									
12	B18SS-4	444557		11.39									
13	B18SS-5	448172		11.39									
14	Field Blank	423361		11.39									
15	Lab Blank	429946		11.41									
16	CCV	432321		11.39									
17	LCS	387761		11.41									
18	LCSD	369653		11.41									
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: 6072006.d & 6072005.d

Lab Sample ID: &

Dilution: 1.00 & 1.00

Client Sample ID: LCS & LCSD

Date Analyzed: 7/20/16 & 7/20/16

CAS Number	Compound	Original Amount	Original Flags	Duplicate Amount	Duplicate Flags	RPD	Result Less Than 5X RL
91-20-3	Naphthalene	109		99		9.6	

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 : 12-JUL-2016 12:55
End Cal Date : 13-JUL-2016 13:38
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msd6.i/13jul16.b/616z0712vi.m
Cal Date : 14-Jul-2016 09:10 U5BT
Curve Type : Average

Calibration File Names:
Level 1: /chem/msd6.i/12jul16.b/6071202.d
Level 2: /chem/msd6.i/12jul16.b/6071203.d
Level 3: /chem/msd6.i/12jul16.b/6071204.d
Level 4: /chem/msd6.i/12jul16.b/6071205.d
Level 5: /chem/msd6.i/12jul16.b/6071206.d
Level 6: /chem/msd6.i/13jul16.b/6071302.d
Level 7: /chem/msd6.i/12jul16.b/6071208.d
Level 8: /chem/msd6.i/12jul16.b/6071209.d

Compound	1.000 Level 1	5.000 Level 2	10.000 Level 3	25.000 Level 4	50.000 Level 5	100.000 Level 6	RRF	% RSD
	250.000 Level 7	500.000 Level 8						
1 Propylene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
2 Dichlorodifluoromethane/Fr12	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
3 Freon 114	0.49059	0.46582	0.46422	0.46536	0.47421	0.47013		
	0.47304	0.42843					0.46648	3.759
4 Chloromethane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
5 Butane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
6 Vinyl Chloride	+++++	0.64227	0.76638	0.76469	0.76388	0.65444		
	0.69814	0.71161					0.71449	7.395
7 1,3-Butadiene	0.70094	0.69671	0.72512	0.70677	0.69736	0.56977		
	0.66611	0.65991					0.67783	7.159

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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
8 Bromomethane	+++++ +++++	+++++ +++++	+++++	+++++	+++++	+++++	+++++	+++++
9 Chloroethane	+++++ 0.26918	+++++ 0.35111	0.41967	0.36903	0.31823	0.28565	0.33548	16.668
10 Isopentane	0.54061 0.52302	0.50356 0.51423	0.55041	0.54030	0.54653	0.44639	0.52063	6.572
11 Trichlorofluoromethane/Fr11	0.79898 0.77911	0.64556 0.83473	0.78668	0.79866	0.82798	0.83043	0.78777	7.764
12 Vinyl Bromide	+++++ +++++	+++++ +++++	+++++	+++++	+++++	+++++	+++++	+++++
13 Ethanol	+++++ +++++	+++++ +++++	+++++	+++++	+++++	+++++	+++++	+++++
14 1,1-Dichloroethene	0.33541 0.31817	0.31675 0.31488	0.32683	0.37111	0.35865	0.33511	0.33461	6.135
15 Freon 113	0.51926 0.48292	0.44296 0.45793	0.50038	0.49988	0.51637	0.50936	0.49113	5.662
16 Acetone	+++++ +++++	+++++ +++++	+++++	+++++	+++++	+++++	+++++	+++++
17 Freon123a	+++++ +++++	+++++ +++++	+++++	+++++	+++++	+++++	+++++	+++++

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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
18 Carbon Disulfide	3.07035 1.82342	1.94383 1.78542	2.04544	1.91057	1.87933	1.69125	2.01870	21.699
19 2-Propanol	+++++ 1.56901	+++++ 1.54565	2.66128	1.92697	1.60126	1.22812	1.75538	28.262
20 Pentane	+++++ +++++	+++++ +++++	+++++	+++++	+++++	+++++	+++++	+++++
21 3-Chloropropene	+++++ +++++	+++++ +++++	+++++	+++++	+++++	+++++	+++++	+++++
22 Methylene Chloride	+++++ 0.77824	+++++ 0.71079	+++++	1.33211	0.91823	0.65898	0.87967	30.804 <-
23 Acrolein	+++++ +++++	+++++ +++++	+++++	+++++	+++++	+++++	+++++	+++++
24 tert-Butyl-Alcohol	+++++ +++++	+++++ +++++	+++++	+++++	+++++	+++++	+++++	+++++
25 trans-1,2-Dichloroethene	0.34335 0.33161	0.31161 0.32331	0.33466	0.33246	0.34039	0.35678	0.33427	4.030
26 MTBE	1.55523 1.42223	1.44660 +++++	1.56305	1.15174	1.23228	1.33221	1.38619	11.268
27 Acrylonitrile	+++++ +++++	+++++ +++++	+++++	+++++	+++++	+++++	+++++	+++++

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Compound	1.000 Level 1	5.000 Level 2	10.000 Level 3	25.000 Level 4	50.000 Level 5	100.000 Level 6	___ RRF	% RSD
	250.000 Level 7	500.000 Level 8						
28 Hexane	1.02591	0.90161	0.98206	0.97508	0.98035	0.93032		
	0.94217	0.93102					0.95857	4.117
29 1,1-Dichloroethane	0.81742	0.78052	0.85416	0.78545	0.88726	0.85733		
	0.88057	0.88129					0.84300	5.119
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	0.36868	0.33485	0.35782	0.35254	0.36242	0.33909		
	0.35244	0.34724					0.35188	3.230

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Compound	1.000 Level 1	5.000 Level 2	10.000 Level 3	25.000 Level 4	50.000 Level 5	100.000 Level 6	___ RRF	% RSD
	250.000 Level 7	500.000 Level 8						
38 2-Butanone	+++++	+++++	+++++	0.56671	0.39230	0.29488		
	0.33227	0.31486					0.38020	29.045
39 2-Chloroethyl vinyl ether	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
41 1,1-Dichloropropene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
42 Tetrahydrofuran	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
43 Octane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
44 Chloroform	0.87076	0.76671	0.85109	0.85047	0.88479	0.78805		
	0.81245	0.81209					0.82955	4.975
45 1,1,1-Trichloroethane	0.16800	0.14952	0.16310	0.13129	0.15501	0.14151		
	0.16239	0.16046					0.15391	8.083
46 Cyclohexane	0.16895	0.14638	0.16334	0.15895	0.16856	0.14574		
	0.16044	0.16550					0.15973	5.720
47 Carbon Tetrachloride	0.15352	0.13464	0.14975	0.13964	0.15307	0.14614		
	0.14483	0.15168					0.14666	4.612
48 Benzene	+++++	0.58968	0.49799	0.47847	0.43942	0.40726		
	0.40888	0.41279					0.46207	14.415

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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
50 1,2-Dichloroethane	0.14882 0.14154	0.12978 0.14472	0.14642	0.14021	0.14902	0.14696	0.14343	4.439
51 2,2,4-Trimethylpentane	0.48483 0.49231	0.44497 0.48241	0.50584	0.50603	0.51565	0.48300	0.48938	4.456
52 tert-amyl-Methyl Ether	+++++ +++++	+++++ +++++	+++++	+++++	+++++	+++++	+++++	+++++
53 Heptane	0.13110 0.10908	0.10184 0.11144	0.11378	0.11100	0.11427	0.10795	0.11256	7.511
55 Decane	+++++ +++++	+++++ +++++	+++++	+++++	+++++	+++++	+++++	+++++
56 Trichloroethene	0.12357 0.12096	0.10494 0.11683	0.11772	0.12483	0.12368	0.12324	0.11947	5.488
57 Dodecane	+++++ +++++	+++++ +++++	+++++	+++++	+++++	+++++	+++++	+++++
58 Methyl Cyclohexane	0.20423 0.20366	0.17867 0.20549	0.20263	0.19960	0.21326	0.20518	0.20159	4.981
59 1,2-Dichloropropane	0.11663 0.11259	0.10094 0.11383	0.11335	0.09693	0.10985	0.10619	0.10879	6.334
60 1,4-Dioxane	0.09753 0.09168	0.07654 0.09393	0.09242	0.08597	0.09417	0.09228	0.09056	7.209

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Compound	1.000 Level 1	5.000 Level 2	10.000 Level 3	25.000 Level 4	50.000 Level 5	100.000 Level 6	___ RRF	% RSD
	250.000 Level 7	500.000 Level 8						
61 Undecane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
62 Bromodichloromethane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
63 1,3-Dichloropropane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
64 cis-1,3-Dichloropropene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
65 4-Methyl-2-pentanone	0.10435	0.09051	0.10593	0.10013	0.10811	0.09366		
	0.10284	0.10450					0.10125	6.087
67 Toluene	0.57763	0.48046	0.51142	0.51412	0.51679	0.51204		
	0.50211	0.50472					0.51491	5.400
68 1,1,1,2-Tetrachloroethane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
69 trans-1,3-Dichloropropene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
70 1,1,2-Trichloroethane	0.10933	0.09641	0.10945	0.10724	0.11163	0.11267		
	0.10406	0.10783					0.10733	4.798
71 Tetrachloroethene	0.14995	0.12708	0.14506	0.14626	0.14812	0.16885		
	0.14314	0.14394					0.14655	7.785

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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	0.14347 0.15673	0.13378 0.16301	0.15593	0.14761	0.15926	0.15477	0.15182	6.314
73 Dibromochloromethane	+++++ +++++	+++++ +++++	+++++	+++++	+++++	+++++	+++++	+++++
74 1,2-Dibromoethane	0.13603 0.13259	0.11879 0.13486	0.14013	0.13124	0.13462	0.14673	0.13437	5.931
75 Bromobenzene	+++++ +++++	+++++ +++++	+++++	+++++	+++++	+++++	+++++	+++++
76 1,2,3-Trichloropropane	+++++ +++++	+++++ +++++	+++++	+++++	+++++	+++++	+++++	+++++
77 2-Chlorotoluene	+++++ +++++	+++++ +++++	+++++	+++++	+++++	+++++	+++++	+++++
78 4-Chlorotoluene	+++++ +++++	+++++ +++++	+++++	+++++	+++++	+++++	+++++	+++++
80 tert-Butylbenzene	+++++ +++++	+++++ +++++	+++++	+++++	+++++	+++++	+++++	+++++
81 Chlorobenzene	0.36906 0.33825	0.30994 0.33642	0.36031	0.35826	0.35875	0.35555	0.34832	5.479
82 Ethyl Benzene	0.19320 0.18423	0.16024 0.18650	0.19030	0.19192	0.19148	0.19008	0.18599	5.815

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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
83 sec-Butylbenzene	+++++ +++++	+++++ +++++	+++++	+++++	+++++	+++++	+++++	+++++
84 m,p-Xylene	0.23378 0.23253	0.20461 0.23561	0.24424	0.24743	0.24314	0.23725	0.23483	5.673
85 p-Cymene	+++++ +++++	+++++ +++++	+++++	+++++	+++++	+++++	+++++	+++++
86 1,2,3-Trimethylbenzene	+++++ +++++	+++++ +++++	+++++	+++++	+++++	+++++	+++++	+++++
87 Butylbenzene	+++++ +++++	+++++ +++++	+++++	+++++	+++++	+++++	+++++	+++++
88 o-Xylene	0.48586 0.47221	0.42387 0.46702	0.51451	0.50884	0.49896	0.46841	0.47996	6.065
89 Styrene	0.81565 0.81286	0.69979 0.80432	0.85046	0.86363	0.85919	0.80472	0.81383	6.412
90 Bromoform	+++++ +++++	+++++ +++++	+++++	+++++	+++++	+++++	+++++	+++++
91 Cumene	1.27553 1.25309	1.12772 1.21134	1.42331	1.42548	1.36565	1.28373	1.29573	8.027
93 1,2-Dibromo-3-Chloropropane	+++++ +++++	+++++ +++++	+++++	+++++	+++++	+++++	+++++	+++++

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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
94 1,1,2,2-Tetrachloroethane	0.43170 0.45679	0.39892 0.47697	0.51078	0.47767	0.48953	0.46017	0.46282	7.542
95 1,3,5-Trichlorobenzene	+++++ +++++	+++++ +++++	+++++	+++++	+++++	+++++	+++++	+++++
96 Propylbenzene	1.44823 1.48306	1.33129 1.35415	1.75197	1.74351	1.60130	1.51889	1.52905	10.469
97 4-Ethyltoluene	0.36776 0.38513	0.33789 0.38416	0.45915	0.45349	0.41032	0.40370	0.40020	10.280
98 1,3,5-Trimethylbenzene	0.52112 0.54778	0.47080 0.53367	0.64019	0.64289	0.57963	0.56892	0.56312	10.398
99 1,2,3-Trichlorobenzene	+++++ +++++	+++++ +++++	+++++	+++++	+++++	+++++	+++++	+++++
100 1,2,4-Trimethylbenzene	0.46760 0.51295	0.43119 0.49281	0.61576	0.60581	0.54651	0.53300	0.52570	12.151
101 1,3-Dichlorobenzene	0.57506 0.63945	0.54004 0.61498	0.78523	0.76126	0.68406	0.70203	0.66276	13.039
102 1,4-Dichlorobenzene	0.56515 0.63896	0.51835 0.61623	0.79518	0.75278	0.68554	0.70489	0.65964	14.148
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	0.53400 0.60545	0.49667 0.59791	0.76810	0.74621	0.65918	0.67748	0.63562	15.050
106 1,2,4-Trichlorobenzene	0.42043 0.46693	0.32205 0.46324	0.69910	0.64504	0.52473	0.52832	0.50873	23.719
107 Hexachlorobutadiene	0.25770 0.24611	0.17930 0.24417	0.46854	0.38789	0.27622	0.28043	0.29255	31.386 <-
109 Naphthalene	2.00437 1.80722	1.97804 +++++	1.88075	1.85724	1.96801	2.05334	1.93557	4.576
110 2-Methylnaphthalene	1.18689 1.20669	1.22856 +++++	1.18858	1.17222	1.27363	1.32539	1.22599	4.511
111 1-Methylnaphthalene	1.07617 1.09508	1.10258 +++++	1.08700	1.06126	1.16022	1.22362	1.11513	5.122
112 Acenaphthylene	1.32171 1.88083	1.55070 +++++	1.47487	1.95711	1.96528	2.38100	1.79021	20.295

Eurofins Air Toxics Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 12-JUL-2016 12:55
End Cal Date : 13-JUL-2016 13:38
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msd6.i/13jul16.b/616z0712vi.m
Cal Date : 14-Jul-2016 09:10 U5BT
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	0.96263	1.06182	1.01848	0.84625	1.02035	0.98561		
	1.04055	+++++					0.99081	7.240
114 Fluorene	1.07678	1.20905	1.15754	0.77840	1.03124	1.07879		
	0.99081	+++++					1.04609	13.287
115 Phenanthrene	1.67676	1.81672	1.71058	1.77848	1.82972	2.04248		
	1.81406	+++++					1.80983	6.504
116 Anthracene	1.00200	1.20235	1.11098	1.17512	1.29560	1.35343		
	1.28892	+++++					1.20406	10.071
117 Fluoranthene	1.33227	1.42518	1.33413	1.40903	1.45402	1.09603		
	1.18476	+++++					1.31934	10.062
118 Pyrene	1.45242	1.48709	1.41050	1.43160	1.47484	1.10295		
	1.23719	+++++					1.37094	10.565
$ 49 1,2-Dichloroethane-d4	0.12866	0.12084	0.12200	0.12085	0.12001	0.08768		
	0.10997	+++++					0.11571	11.686
$ 66 Toluene-d8	0.45896	0.44293	0.44985	0.45598	0.45628	0.35567		
	0.44149	+++++					0.43731	8.375
$ 108 Naphthalene-d8	1.73254	1.89226	1.74608	1.76377	1.78813	1.52306		
	1.70088	+++++					1.73525	6.426

Calibration History

Method : /chem/msd6.i/13jul16.b/616z0712vi.m
Start Cal Date: 12-JUL-2016 12:55
End Cal Date : 13-JUL-2016 13:38

Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 1 , Cal Amount: 1.00000		
12-JUL-2016 12:55	VOC+PAH_ICAL	/chem/msd6.i/12jul16.b/6071202.d
Cal Level: 2 , Cal Amount: 5.00000		
12-JUL-2016 13:44	VOC+PAH_ICAL	/chem/msd6.i/12jul16.b/6071203.d
Cal Level: 3 , Cal Amount: 10.00000		
12-JUL-2016 15:01	VOC+PAH_ICAL	/chem/msd6.i/12jul16.b/6071204.d
Cal Level: 4 , Cal Amount: 25.00000		
12-JUL-2016 16:51	VOC+PAH_ICAL	/chem/msd6.i/12jul16.b/6071205.d
Cal Level: 5 , Cal Amount: 50.00000		
12-JUL-2016 17:31	VOC+PAH_ICAL	/chem/msd6.i/12jul16.b/6071206.d
Cal Level: 6 , Cal Amount: 100.00000		
13-JUL-2016 13:38	VOC+PAH_ICAL	/chem/msd6.i/13jul16.b/6071302.d
Cal Level: 7 , Cal Amount: 250.00000		
12-JUL-2016 18:50	VOC+PAH_ICAL	/chem/msd6.i/12jul16.b/6071208.d
Cal Level: 8 , Cal Amount: 500.00000		

```
|12-JUL-2016 19:30 |VOC+PAH_noSS     |/chem/msd6.i/12jul16.b/6071209.d        |
+------------------+-----------------+----------------------------------------+


Continuing Calibration
Ccal Level Mode: GLOBAL LEVEL 5
+------------------+-----------------+----------------------------------------+
| Ccal Level: 5 , Ccal Amount: 50.000                                          |
+==============================================================================+
|12-JUL-2016 17:31 |VOC+PAH_ICAL     |/chem/msd6.i/12jul16.b/6071206a.d       |
+------------------+-----------------+----------------------------------------+
| Ccal Level: 5 , Ccal Amount: 50.000                                          |
+==============================================================================+
|12-JUL-2016 17:31 |VOC+PAH_ICAL     |/chem/msd6.i/12jul16.b/6071206.d        |
+------------------+-----------------+----------------------------------------+
| Ccal Level: 5 , Ccal Amount: 50.000                                          |
+==============================================================================+
|13-JUL-2016 20:28 |VOC+PAH_ICAL     |/chem/msd6.i/13jul16.b/6071308.d        |
+------------------+-----------------+----------------------------------------+
```

Initial Calibration Narrative

An 8 point calibration curve was performed for VOC and 7 point calibration curve was performed for PAH compounds (Level 8 at 250ng PAHs was not spiked) on instrument MSD-6 using VI sorbent media on July 12 and 13, 2016.

- 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.
- BFB File: 6071201 and 6071301
- ICAL name: 616z0712vi.m
- 2 compounds out: MeCl2 31% RSD and Hexachlorobutadiene 31% RSD.
- Units: in ng
- Markes Unity Method: VI.mth
- Chemstation Method: TO17+PAH.m
- DE study for PAH @ 100ng : file # 6071212.d (other passed except Fluoranthene = 87.1% and Pyrene = 87.6%)
- The Level 6 was reanalyzed due to unacceptable linearity of 1,1,2,2-TCA at 41% RSD on July 13, 2016.
- ICV was done on July 13, 2016 which was the day after the original ICAL analysis on July 12, 2016 due to reanalysis of level 6.
- ICV file: 6071306.d
- **The RL for Vinyl Chloride was raised from 2.6ng to 5.1ng due to the MDL study.**
- MDL: 4/1/16

@ Air Toxics Ltd. Run Log for MSD-6 Method TO14 & TO15
BFB verification of 176/174 Ratio: (233066/239210)x100% = 97.43%
Standard ID 1476-2872 Exp. date 5/4/18
Bromochloromethane 180845 File ID: 6071206
1,4-Difluorobenzene 751113 Compound:
Chlorobenzene-d5 701197 InitialIS: ct
Bromofluorobenzene 474592
Verification CCV IS vs ICAL mid-point (-40%)
Calculation Check:

ppbv of compound = (Area of sample / Area of IS) * (Concentration of IS / RRF) = (916978 / 751113) * (23.0 / 0.46637) = 63.9

Method: 6162071 2VIM

Data Directory: C:\msdchem\1\DATA\12JUL16.B\

Use	SampleName		Port pos.	Injection Time		Init.
1) ✓	6071201.D Comments					
;BFB;BFB		1476-2872, 36ng (5/4/18)	1	12 Jul 2016	10:13	ct
2) ✓	6071202.D Comments					
;VI ICAL1 1.0ng Surr		2787-1-1ml(10/7/16),2744-	1	12 Jul 2016	12:55	
3) ✓	6071203.D Comments					
;VI ICAL2 2.0ng Surr		2787-1-2ml(10/7/16),2744-	2	12 Jul 2016	13:44	
4) ✓	6071204.D Comments					
;VI ICAL3 5.0ng Surr		2787-1-3ml(10/7/16),2744-	3	12 Jul 2016	15:01	
5) ✓	6071205.D Comments					
;VI ICAL4 10ng Surr		2787-1-6ml(10/7/16),2744-	4	12 Jul 2016	16:51	
6) ✓	6071206.D Comments	midpoint				
;VI ICAL5 25ng Surr		2787-1-20ml(10/7/16),2744	5	12 Jul 2016	17:31	
7) X	6071207.D Comments	unacceptable linearity of 1,1,2,2-TCA @ 41% RSD				
;VI ICAL6 50ng Surr		2787-1-50ml(10/7/16),2744	6	12 Jul 2016	18:10	
8) ✓	6071208.D Comments					
;VI ICAL7 100ng Surr		2787-1-100ml(10/7/16),274	7	12 Jul 2016	18:50	
9) ✓	6071209.D Comments	No surr spiked. No PAHs spiked				
;VI ICAL8 no Surr		2787-1-200ml(10/7/16),no	8	12 Jul 2016	19:30	
10) ✓	6071210.D Comments	F & P > RL				
;Blank			10	12 Jul 2016	20:09	
11) X	6071211.D Comments	not used				
;VI D.E. Study ICAL6		G0143596	6	12 Jul 2016	20:49	
12) ✓	6071212.D Comments	all PAHs passed except				
;VI D.E. Study ICAL7		G0143780	7	12 Jul 2016	21:29	
13) X	6071213.D Comments	Not used				
;VI ICV/LCS;LCS		2787-2-20ml(10/7/16), 274	9	12 Jul 2016	22:08	
14) ✓	6071214.D Comments	F & P > RL				
;Blank		G0151866	10	12 Jul 2016	22:48	
15) ✓	6071215.D Comments	Benz = 1.1 (6.4				
;VI Tube Cert		G0145596	4	12 Jul 2016	23:28	
16) ✓	6071216.D Comments	F > RL				
;VI Tube Cert		G0153895	5	13 Jul 2016	00:07	
17) ✓	6071217.D Comments					
;VI Tube Cert		G0184971	8	13 Jul 2016	00:47	

Alarissa 7/13/16

@ Air Toxics Ltd. Run Log for MSD-6 Method TO14 & TO15
BFB verification of 176/174 Ratio: (197845/206056)x100% = 96.48%
Standard ID 1476-2872 Exp. date 5/4/18
Bromochloromethane 157510 File ID: 6071308
1,4-Difluorobenzene 657493 Compound: Benzene BFB 350731
Chlorobenzene-d5 526761 InitialIS:
Verification CCV IS vs ICAL mid-point (-40%)
Calculation Check:

$$\text{ppbv of compound} = \frac{\text{Area of sample}}{\text{Area of IS}} * \frac{\text{Concentration of IS}}{\text{RRF}} = \left(\frac{668349}{657493}\right) * \left(\frac{23.0}{0.46207}\right) = 50.598$$

Method: 6160712V.m

Data Directory: C:\msdchem\1\DATA\13JUL16.B\

Use	SampleName		Port pos.	Injection Time	Init.
1) ✓	6071301.D Comments				
;BFB;BFB		1476-2872, 36ng (5/4/18)	1	13 Jul 2016 12:34	ct
2) ✓	6071302.D Comments				
;VI ICAL6 50ng Surr		2787-1-50ml(10/7/16),2744	1	13 Jul 2016 13:38	
3) ✓	6071303.D Comments				
;Blank		G0143036	2	13 Jul 2016 14:17	
4) X	6071304.D Comments	not pass			
;VI VOC+PAH ICV/LCS;LCS		2787-2-20ml(10/7/16), 274	11	13 Jul 2016 17:01	
5) ✓	6071305.D Comments				
;Blank			1	13 Jul 2016 17:41	
6) ✓	6071306.D Comments				
;VI VOC+PAH ICV/LCS;LCS		2787-2-20ml(10/7/16), 274	1	13 Jul 2016 18:47	
7) ✓	6071307.D Comments	F&P>RL			
;Blank		G0153605	1	13 Jul 2016 19:48	
8) ✓	6071308.D Comments				
;VI VOC+PAH CCV;CCV		2787-1-20ml(10/7/16),2744	2	13 Jul 2016 20:28	
9) ✓	6071309.D Comments	F&P>RL			
;VI Tube Cert		G0151866	11	13 Jul 2016 21:08	
10) ✓	6071310.D Comments	clean			
;VI Tube Cert		G0143036	12	13 Jul 2016 21:47	
11) ✓	6071311.D Comments	F&P>RL			
;VI Tube Cert		G0147226	13	13 Jul 2016 22:27	
12) ✓	6071312.D Comments				
;VI Tube Cert		G0147048	14	13 Jul 2016 23:07	
13) ✓	6071313.D Comments	clean			
;VI Tube Cert		G0154191	15	13 Jul 2016 23:46	
14) ✓	6071314.D Comments	clean			
;VI Tube Cert		G0150557	16	14 Jul 2016 00:26	
15) ✓	6071315.D Comments	clean			
;VI Tube Cert		G0145581	17	14 Jul 2016 1:06	
16) ✓	6071316.D Comments				
;VI Tube Cert		G0139955	18	14 Jul 2016 1:45	
17) ✓	6071317.D Comments	F>RL			
;VI Tube Cert		G0153895	19	14 Jul 2016 2:25	

Charusat 7/14/16

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

Target Method:	616z0712vi.m
Instrument Method:	TO17 + PAH
Initial Run File:	6071208
Repeat Run File:	6071212

Compound	Enter mass (ng) Initial Run (m_i)	Repeat Run (m_r)	%DE
Naphthalene	6090521.0	11370.0	99.8%
2-Methylnaphthalene	4066657.0	4149.0	99.9%
1-Methylnaphthalene	3690515.0	3623.0	99.9%
Acenaphthylene	6338566.0	6831.0	99.9%
Acenaphthene	3506740.0	1409.0	100.0%
Fluorene	3339131.0	12774.0	99.6%
Phenanthrene	6113573.0	68851.0	98.9%
Anthracene	4343778.0	112148.0	97.5%
Fluoranthene*	3992770.0	589726.0	**87.1%**
Pyrene*	4169435.0	587900.0	**87.6%**

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)

Eurofins Air Toxics Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 12-JUL-2016 12:55
End Cal Date : 13-JUL-2016 13:38
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msd6.i/13jul16.b/616z0712vi.m
Cal Date : 13-Jul-2016 18:15 U5BT
Curve Type : Average

CT 7/13/16

Calibration File Names:
Level 1: /chem/msd6.i/12jul16.b/6071202.d
Level 2: /chem/msd6.i/12jul16.b/6071203.d
Level 3: /chem/msd6.i/12jul16.b/6071204.d
Level 4: /chem/msd6.i/12jul16.b/6071205.d
Level 5: /chem/msd6.i/12jul16.b/6071206.d
Level 6: /chem/msd6.i/13jul16.b/6071302.d
Level 7: /chem/msd6.i/12jul16.b/6071208.d
Level 8: /chem/msd6.i/12jul16.b/6071209.d

Compound	1.000 Level 1	5.000 Level 2	10.000 Level 3	25.000 Level 4	50.000 Level 5	100.000 Level 6	RRF	% RSD
	250.000 Level 7	500.000 Level 8						
3 Freon 114	0.49059	0.46582	0.46422	0.46536	0.47421	0.47013		
	0.47304	0.42843					0.46648	3.759
6 Vinyl Chloride	+++++	0.64227	0.76638	0.76469	0.76388	0.65444		
	0.69814	0.71161					0.71449	7.395
7 1,3-Butadiene	0.70094	0.69671	0.72512	0.70677	0.69736	0.56977		
	0.66611	0.65991					0.67783	7.159
9 Chloroethane	+++++	+++++	0.41967	0.36983	0.31823	0.28565		
	0.26918	0.35111					0.33548	16.668
10 Isopentane	0.54061	0.50356	0.55041	0.54030	0.54653	0.44639		
	0.52302	0.51423					0.52063	6.572
11 Trichlorofluoromethane/Fr11	0.79898	0.64556	0.78668	0.79866	0.82798	0.83043		
	0.77911	0.83473					0.78777	7.764
15 Freon 113	0.51926	0.44296	0.50038	0.49988	0.51637	0.50936		
	0.48292	0.45793					0.49113	5.662

Eurofins Air Toxics Inc.

EPA Method TO-17 GC/MS

Data file : /chem/msd6.i/13jul16.b/6071306.d
Lab Smp Id: VI VOC+PAH ICV/LCS Client Smp ID: LCS
Inj Date : 13-JUL-2016 18:47
Operator : CT Inst ID: msd6.i
Smp Info : ;VI VOC+PAH ICV/LCS;LCS
Misc Info : 2787-2-20ml(10/7/16), 2744-103-50(1/13/17)
Comment :
Method : /chem/msd6.i/13jul16.b/616z0712vi.m
Meth Date : 13-Jul-2016 18:15 U5BT Quant Type: ISTD
Cal Date : 12-JUL-2016 17:31 Cal File: 6071206.d
Als bottle: 1 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	
4.279	4.287 (1.000)	130	160249	26.0000		70.00- 130.00	100.00
4.286	4.287 (1.000)	128	123672			0.00- 30.00	77.17
4.279	4.287 (1.000)	49	193092			0.00- 30.00	120.49
* 54 1,4-Difluorobenzene						CAS #: 540-36-3	
5.920	5.927 (1.000)	114	673223	23.0000		70.00- 130.00	100.00
5.920	5.927 (1.000)	88	103571			0.00- 30.00	15.38
* 79 Chlorobenzene-d5						CAS #: 3114-55-4	
9.852	9.845 (1.000)	117	618946	24.0000		70.00- 130.00	100.00
9.852	9.845 (1.000)	82	315716			0.00- 30.00	51.01
* 92 Bromofluorobenzene						CAS #: 460-00-4	
11.406	11.392 (1.000)	174	423846	36.0000		70.00- 130.00	100.00
11.406	11.392 (1.000)	95	482769			0.00- 30.00	113.90
11.406	11.392 (1.000)	176	415934			0.00- 30.00	98.13
$ 49 1,2-Dichloroethane-d4						CAS #: 17060-07-0	
5.203	5.211 (0.879)	65	73186	21.6080	21.608	70.00- 130.00	100.00

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

$  49 1,2-Dichloroethane-d4 (continued)
  5.203   5.211 (0.879)    67     39105                     0.00-  30.00    53.43
-------------------------------------------------------------------------------
$  66 Toluene-d8                                  CAS #: 2037-26-5
  7.940   7.940 (0.806)    98    272641 24.1748   24.175  70.00- 130.00   100.00
  7.940   7.940 (0.806)    70     29145                     0.00-  30.00    10.69
  7.940   7.940 (0.806)   100    180365                     0.00-  30.00    66.16
-------------------------------------------------------------------------------
$ 108 Naphthalene-d8                              CAS #: 1146-65-2
 15.668  15.669 (1.374)   136    591071 28.9316   28.932  70.00- 130.00   100.00
 15.668  15.669 (1.374)   108     51829                     0.00-  30.00     8.77
-------------------------------------------------------------------------------
    3 Freon 114                                   CAS #: 76-14-2
  1.283   1.283 (0.300)   135    468482 162.945   162.94  70.00- 130.00   100.00
  1.283   1.283 (0.300)   137    151000                     0.00-  30.00    32.23
-------------------------------------------------------------------------------
    6 Vinyl Chloride                              CAS #: 75-01-4
  1.395   1.395 (0.326)    62    246325 55.9360   55.936  70.00- 130.00   100.00
  1.395   1.395 (0.326)    64     98395                     0.00-  30.00    39.95
-------------------------------------------------------------------------------
    7 1,3-Butadiene                               CAS #: 106-99-0
  1.395   1.395 (0.326)    54    185812 44.4762   44.476  70.00- 130.00   100.00
  1.395   1.395 (0.326)    39    280589                     0.00-  30.00   151.01
-------------------------------------------------------------------------------
    9 Chloroethane                                CAS #: 75-00-3
  1.646   1.647 (0.385)    64     99863 48.2968   48.297  70.00- 130.00   100.00
  1.646   1.647 (0.385)    66     30677                     0.00-  30.00    30.72
  1.646   1.647 (0.385)    49     30089                     0.00-  30.00    30.13
-------------------------------------------------------------------------------
   10 Isopentane                                  CAS #: 78-78-4
  1.688   1.689 (0.395)    57    179121 55.8203   55.820  70.00- 130.00   100.00
  1.688   1.689 (0.395)    43    270620                     0.00-  30.00   151.08
-------------------------------------------------------------------------------
   11 Trichlorofluoromethane/Fr11                 CAS #: 75-69-4
  1.814   1.815 (0.424)   101    571277 117.659   117.66  70.00- 130.00   100.00
  1.814   1.815 (0.424)   103    374124                     0.00-  30.00    65.49
-------------------------------------------------------------------------------
   15 Freon 113                                   CAS #: 76-13-1
  2.173   2.174 (0.508)   151    477917 157.881   157.88  70.00- 130.00   100.00
  2.173   2.174 (0.508)   153    307186                     0.00-  30.00    64.28
  2.166   2.174 (0.506)   101    533512                     0.00-  30.00   111.63
-------------------------------------------------------------------------------
   14 1,1-Dichloroethene                          CAS #: 75-35-4
  2.173   2.174 (0.508)    98    155413 75.3568   75.357  70.00- 130.00   100.00
  2.173   2.174 (0.508)    96    243152                     0.00-  30.00   156.46
  2.173   2.174 (0.508)    61    391013                     0.00-  30.00   251.60
-------------------------------------------------------------------------------
```

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (ng)	FINAL (NG)	TARGET RANGE	RATIO
18 Carbon Disulfide					CAS #: 75-15-0		
2.352	2.353 (0.550)	76	611782	49.1701	49.170	70.00- 130.00	100.00
19 2-Propanol					CAS #: 67-63-0		
2.259	2.267 (0.528)	45	403017	37.2502	37.250	70.00- 130.00	100.00(a)
2.259	2.267 (0.528)	43	83156			0.00- 30.00	20.63
2.266	2.267 (0.530)	59	16466			0.00- 30.00	4.09
22 Methylene Chloride					CAS #: 75-09-2		
2.560	2.560 (0.598)	49	323489	59.6646	59.664	70.00- 130.00	100.00
2.560	2.560 (0.598)	84	243093			0.00- 30.00	75.15
2.560	2.567 (0.598)	51	99712			0.00- 30.00	30.82
25 trans-1,2-Dichloroethene					CAS #: 156-60-5		
2.811	2.811 (0.657)	98	131921	64.0312	64.031	70.00- 130.00	100.00
2.811	2.811 (0.657)	61	289764			0.00- 30.00	219.65
2.811	2.811 (0.657)	96	205055			0.00- 30.00	155.44
26 MTBE					CAS #: 1634-04-4		
2.789	2.790 (0.652)	73	615144	71.9996	72.000	70.00- 130.00	100.00
2.789	2.790 (0.652)	57	139807			0.00- 30.00	22.73
2.789	2.790 (0.652)	41	141736			0.00- 30.00	23.04
28 Hexane					CAS #: 110-54-3		
3.090	3.090 (0.722)	57	380390	64.3849	64.385	70.00- 130.00	100.00
3.090	3.090 (0.722)	43	253733			0.00- 30.00	66.70
3.083	3.090 (0.720)	86	55495			0.00- 30.00	14.59
29 1,1-Dichloroethane					CAS #: 75-34-3		
3.255	3.255 (0.761)	63	408691	78.6581	78.658	70.00- 130.00	100.00
3.255	3.255 (0.761)	65	130376			0.00- 30.00	31.90
37 cis-1,2-Dichloroethene					CAS #: 156-59-2		
3.950	3.950 (0.923)	98	202137	93.2016	93.202	70.00- 130.00	100.00
3.950	3.950 (0.923)	96	315572			0.00- 30.00	156.12
3.950	3.950 (0.923)	61	407738			0.00- 30.00	201.71
38 2-Butanone					CAS #: 78-93-3		
3.907	3.914 (0.913)	72	151483	64.6436	64.644	70.00- 130.00	100.00
3.907	3.907 (0.913)	43	677474			0.00- 30.00	447.23
3.900	3.907 (0.911)	57	53534			0.00- 30.00	35.34
44 Chloroform					CAS #: 67-66-3		
4.458	4.459 (1.042)	83	518166	101.345	101.34	70.00- 130.00	100.00
4.458	4.459 (1.042)	85	336826			0.00- 30.00	65.00

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (ng)	FINAL (NG)	TARGET RANGE	RATIO
46 Cyclohexane					CAS #: 110-82-7		
4.809	4.817 (0.812)	84	339728	72.6619	72.662	70.00- 130.00	100.00
4.802	4.817 (0.811)	56	429647			0.00- 30.00	126.47
4.802	4.817 (0.811)	41	260768			0.00- 30.00	76.76
45 1,1,1-Trichloroethane					CAS #: 71-55-6		
4.688	4.695 (0.792)	97	542530	120.426	120.43	70.00- 130.00	100.00
4.688	4.695 (0.792)	99	349922			0.00- 30.00	64.50
47 Carbon Tetrachloride					CAS #: 56-23-5		
4.931	4.938 (0.833)	119	589330	137.284	137.28	70.00- 130.00	100.00
4.931	4.938 (0.833)	117	607909			0.00- 30.00	103.15
51 2,2,4-Trimethylpentane					CAS #: 540-84-1		
5.468	5.476 (0.924)	57	1339861	93.5368	93.537	70.00- 130.00	100.00
5.468	5.476 (0.924)	56	429381			0.00- 30.00	32.05
5.468	5.476 (0.924)	41	395317			0.00- 30.00	29.50
48 Benzene					CAS #: 71-43-2		
5.232	5.239 (0.884)	78	802633	59.3439	59.344	70.00- 130.00	100.00
5.232	5.239 (0.884)	77	185940			0.00- 30.00	23.17
50 1,2-Dichloroethane					CAS #: 107-06-2		
5.318	5.325 (0.898)	62	353764	84.2621	84.262	70.00- 130.00	100.00
5.318	5.325 (0.898)	64	114487			0.00- 30.00	32.36
53 Heptane					CAS #: 142-82-5		
5.769	5.777 (0.975)	71	270159	82.0006	82.000	70.00- 130.00	100.00
5.769	5.777 (0.975)	43	556460			0.00- 30.00	205.97
5.769	5.777 (0.975)	57	265421			0.00- 30.00	98.25
56 Trichloroethene					CAS #: 79-01-6		
6.235	6.242 (1.053)	95	386549	110.539	110.54	70.00- 130.00	100.00
6.235	6.242 (1.053)	130	414374			0.00- 30.00	107.20
6.235	6.242 (1.053)	97	250717			0.00- 30.00	64.86
58 Methyl Cyclohexane					CAS #: 108-87-2		
6.557	6.564 (1.108)	83	492649	83.4903	83.490	70.00- 130.00	100.00
6.557	6.572 (1.108)	98	218615			0.00- 30.00	44.38
6.557	6.564 (1.108)	55	411830			0.00- 30.00	83.60
59 1,2-Dichloropropane					CAS #: 78-87-5		
6.586	6.593 (1.113)	63	315837	99.1858	99.186	70.00- 130.00	100.00
6.586	6.593 (1.113)	62	218384			0.00- 30.00	69.14
6.571	6.586 (1.110)	41	418829			0.00- 30.00	132.61

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (ng)	FINAL (NG)	TARGET RANGE	RATIO
60 1,4-Dioxane					CAS #: 123-91-1		
6.707	6.715 (1.133)	88	198238	74.7834	74.783	70.00- 130.00	100.00
6.707	6.715 (1.133)	58	136664			0.00- 30.00	68.94
6.707	6.715 (1.133)	57	67554			0.00- 30.00	34.08
65 4-Methyl-2-pentanone					CAS #: 108-10-1		
7.811	7.811 (1.319)	58	259080	87.4169	87.417	70.00- 130.00	100.00
7.811	7.811 (1.319)	43	725608			0.00- 30.00	280.07
7.811	7.811 (1.319)	85	116310			0.00- 30.00	44.89
67 Toluene					CAS #: 108-88-3		
8.025	8.033 (0.815)	91	1026891	77.3304	77.330	70.00- 130.00	100.00
8.025	8.033 (0.815)	92	603984			0.00- 30.00	58.82
70 1,1,2-Trichloroethane					CAS #: 79-00-5		
8.634	8.627 (1.459)	97	372958	118.718	118.72	70.00- 130.00	100.00
8.634	8.627 (1.459)	99	236216			0.00- 30.00	63.34
8.627	8.627 (1.457)	83	312126			0.00- 30.00	83.69
71 Tetrachloroethene					CAS #: 127-18-4		
8.720	8.713 (0.885)	166	518821	137.276	137.28	70.00- 130.00	100.00
8.720	8.713 (0.885)	129	378254			0.00- 30.00	72.91
8.720	8.713 (0.885)	131	367944			0.00- 30.00	70.92
72 2-Hexanone					CAS #: 591-78-6		
8.942	8.935 (0.908)	58	334037	85.3146	85.315	70.00- 130.00	100.00
8.942	8.935 (0.908)	43	649364			0.00- 30.00	194.40
8.942	8.935 (0.908)	100	66706			0.00- 30.00	19.97
74 1,2-Dibromoethane					CAS #: 106-93-4		
9.229	9.222 (0.937)	107	591917	170.806	170.81	70.00- 130.00	100.00
9.229	9.222 (0.937)	109	560671			0.00- 30.00	94.72
81 Chlorobenzene					CAS #: 108-90-7		
9.888	9.881 (1.004)	112	838658	93.3613	93.361	70.00- 130.00	100.00
9.888	9.881 (1.004)	114	269149			0.00- 30.00	32.09
9.888	9.881 (1.004)	77	442179			0.00- 30.00	52.72
82 Ethyl Benzene					CAS #: 100-41-4		
10.045	10.039 (1.020)	106	391274	81.5723	81.572	70.00- 130.00	100.00
10.045	10.039 (1.020)	91	1195240			0.00- 30.00	305.47
84 m,p-Xylene					CAS #: 108-38-3		
10.225	10.218 (1.038)	106	510096	84.2296	84.230	70.00- 130.00	100.00
10.225	10.218 (1.038)	91	996971			0.00- 30.00	195.45

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

   88 o-Xylene                                        CAS #: 95-47-6
 10.712  10.698 (0.939)   106    531348 94.0305   94.030  70.00- 130.00   100.00
 10.712  10.698 (0.939)    91   1085960                     0.00-  30.00   204.38
-------------------------------------------------------------------------------
   89 Styrene                                         CAS #: 100-42-5
 10.740  10.726 (0.942)   104    875371 91.3596   91.360  70.00- 130.00   100.00
 10.740  10.726 (0.942)    78    408599                     0.00-  30.00    46.68
-------------------------------------------------------------------------------
   91 Cumene                                          CAS #: 98-82-8
 11.199  11.185 (0.982)   105   1582217 103.716   103.72  70.00- 130.00   100.00
 11.199  11.185 (0.982)   120    428341                     0.00-  30.00    27.07
 11.199  11.185 (0.982)    51    158097                     0.00-  30.00     9.99
-------------------------------------------------------------------------------
   94 1,1,2,2-Tetrachloroethane                       CAS #: 79-34-5
 11.614  11.600 (1.018)    83    822608 150.966   150.96  70.00- 130.00   100.00
 11.614  11.600 (1.018)    85    533307                     0.00-  30.00    64.83
-------------------------------------------------------------------------------
   96 Propylbenzene                                   CAS #: 103-65-1
 11.736  11.722 (1.029)    91   1918283 106.558   106.56  70.00- 130.00   100.00
 11.736  11.722 (1.029)   120    466474                     0.00-  30.00    24.32
 11.736  11.722 (1.029)   105     72728                     0.00-  30.00     3.79
-------------------------------------------------------------------------------
   97 4-Ethyltoluene                                  CAS #: 622-96-8
 11.901  11.887 (1.043)   120    488736 103.727   103.73  70.00- 130.00   100.00
 11.901  11.887 (1.043)   105   1586251                     0.00-  30.00   324.56
-------------------------------------------------------------------------------
   98 1,3,5-Trimethylbenzene                          CAS #: 108-67-8
 11.987  11.973 (1.051)   120    689296 103.967   103.97  70.00- 130.00   100.00
 11.987  11.973 (1.051)   105   1364050                     0.00-  30.00   197.89
-------------------------------------------------------------------------------
  100 1,2,4-Trimethylbenzene                          CAS #: 95-63-6
 12.452  12.445 (1.092)   120    643872 104.029   104.03  70.00- 130.00   100.00
 12.452  12.438 (1.092)   105   1374081                     0.00-  30.00   213.41
-------------------------------------------------------------------------------
  101 1,3-Dichlorobenzene                             CAS #: 541-73-1
 12.782  12.768 (1.121)   146   1004075 128.677   128.68  70.00- 130.00   100.00
 12.782  12.768 (1.121)   148    646221                     0.00-  30.00    64.36
 12.775  12.768 (1.120)   111    393906                     0.00-  30.00    39.23
-------------------------------------------------------------------------------
  102 1,4-Dichlorobenzene                             CAS #: 106-46-7
 12.918  12.904 (1.133)   146   1013304 130.476   130.48  70.00- 130.00   100.00
 12.918  12.904 (1.133)   148    644343                     0.00-  30.00    63.59
 12.918  12.904 (1.133)   111    380032                     0.00-  30.00    37.50
-------------------------------------------------------------------------------
  105 1,2-Dichlorobenzene                             CAS #: 95-50-1
 13.348  13.341 (1.170)   146    969020 129.487   129.49  70.00- 130.00   100.00
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RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (ng)	FINAL (NG)	TARGET RANGE	RATIO
105 1,2-Dichlorobenzene (continued)							
13.348	13.341 (1.170)	148	616979			0.00- 30.00	63.67
13.348	13.341 (1.170)	111	390711			0.00- 30.00	40.32
106 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
15.403	15.396 (1.350)	180	952357	159.003	159.00	70.00- 130.00	100.00
15.403	15.396 (1.350)	182	906841			0.00- 30.00	95.22
107 Hexachlorobutadiene					CAS #: 87-68-3		
15.618	15.611 (1.369)	225	701060	203.542	203.54	70.00- 130.00	100.00
15.618	15.611 (1.369)	223	437728			0.00- 30.00	62.44
109 Naphthalene					CAS #: 91-20-3		
15.711	15.704 (1.377)	128	1220512	53.5584	53.558	70.00- 130.00	100.00
15.711	15.704 (1.377)	127	159748			0.00- 30.00	13.09
110 2-Methylnaphthalene					CAS #: 91-57-6		
17.158	17.159 (1.504)	142	823785	57.0716	57.072	70.00- 130.00	100.00
17.158	17.159 (1.504)	141	710459			0.00- 30.00	86.24
17.158	17.159 (1.504)	115	249657			0.00- 30.00	30.31
111 1-Methylnaphthalene					CAS #: 90-12-0		
17.373	17.373 (1.523)	142	752263	57.2977	57.298	70.00- 130.00	100.00
17.373	17.373 (1.523)	141	676964			0.00- 30.00	89.99
17.373	17.373 (1.523)	115	240244			0.00- 30.00	31.94
112 Acenaphthylene					CAS #: 208-96-8		
19.221	19.222 (1.685)	152	1166933	55.3649	55.365	70.00- 130.00	100.00
19.221	19.222 (1.685)	151	230544			0.00- 30.00	19.76
19.221	19.222 (1.685)	153	152639			0.00- 30.00	13.08
113 Acenaphthene					CAS #: 83-32-9		
19.486	19.487 (1.708)	154	681478	58.4191	58.419	70.00- 130.00	100.00
19.486	19.487 (1.708)	152	355520			0.00- 30.00	52.17
19.486	19.487 (1.708)	153	747353			0.00- 30.00	109.67
114 Fluorene					CAS #: 86-73-7		
20.640	20.640 (1.809)	166	721880	58.6126	58.613	70.00- 130.00	100.00
20.640	20.640 (1.809)	165	688484			0.00- 30.00	95.37
115 Phenanthrene					CAS #: 85-01-8		
22.810	22.817 (2.000)	178	1182879	55.5133	55.513	70.00- 130.00	100.00
22.817	22.817 (2.000)	176	223233			0.00- 30.00	18.87
22.810	22.817 (2.000)	179	180785			0.00- 30.00	15.28
116 Anthracene					CAS #: 120-12-7		
22.925	22.925 (2.010)	178	650689	45.9008	45.901	70.00- 130.00	100.00

RT	EXP RT	(REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (ng)	FINAL (NG)	TARGET RANGE	RATIO
116 Anthracene (continued)								
22.925	22.925	(2.010)	176	119845			0.00- 30.00	18.42
22.925	22.925	(2.010)	179	98746			0.00- 30.00	15.18
117 Fluoranthene						CAS #: 206-44-0		
26.084	26.084	(2.287)	202	756428	48.6971	48.697	70.00- 130.00	100.00
26.084	26.084	(2.287)	101	123200			0.00- 30.00	16.29
118 Pyrene						CAS #: 129-00-0		
26.936	26.936	(2.361)	202	757169	46.9103	46.910	70.00- 130.00	100.00
26.936	26.936	(2.361)	101	145377			0.00- 30.00	19.20
26.936	26.936	(2.361)	100	114630			0.00- 44.51	15.14

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: msd6.i
Lab File ID: 6071306.d
Lab Smp Id: VI VOC+PAH ICV/LCS
Analysis Type: VOA
Quant Type: ISTD
Operator: CT
Method File: /chem/msd6.i/13jul16.b/616z0712vi.m
Misc Info: 2787-2-20ml(10/7/16), 2744-103-50(1/13/17)

Calibration Date: 12-JUL-2016
Calibration Time: 17:31
Client Smp ID: LCS
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
40 Bromochloromethan	180845	108507	253183	160249	-11.39
54 1,4-Difluorobenze	751113	450668	1051558	673223	-10.37
79 Chlorobenzene-d5	701197	420718	981676	618946	-11.73
92 Bromofluorobenzen	474592	284755	664429	423846	-10.69

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
40 Bromochloromethan	4.29	3.96	4.62	4.28	-0.17
54 1,4-Difluorobenze	5.93	5.60	6.26	5.92	-0.12
79 Chlorobenzene-d5	9.85	9.52	10.18	9.85	0.07
92 Bromofluorobenzen	11.39	11.06	11.72	11.41	0.12

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: 13-Jul-2016 19:30

Eurofins Air Toxics Inc.

RECOVERY REPORT

Client Name:
Client SDG: 13jul16
Sample Matrix: GAS
Fraction: VOA
Lab Smp Id: VI VOC+PAH ICV/LCS
Client Smp ID: LCS
Level: LOW
Operator: CT
Data Type: MS DATA
SampleType: LCS
SpikeList File: VOC+PAHlcs50.spk
Quant Type: ISTD
Sublist File: VOC+PAH_ICAL.sub
Method File: /chem/msd6.i/13jul16.b/616z0712vi.m
Misc Info: 2787-2-20ml(10/7/16), 2744-103-50(1/13/17)

SPIKE COMPOUND	CONC ADDED NG	CONC RECOVERED NG	% RECOVERED	LIMITS
3 Freon 114	139.80	162.94	116.56	70-130
6 Vinyl Chloride	51.100	55.936	109.46	70-130
7 1,3-Butadiene	44.200	44.476	100.62	70-130
9 Chloroethane	52.800	48.297	91.47	70-130
10 Isopentane	59.000	55.820	94.61	70-130
11 Trichlorofluoromet	112.40	117.66	104.68	70-130
14 1,1-Dichloroethene	79.300	75.357	95.03	70-130
15 Freon 113	153.30	157.88	102.99	70-130
18 Carbon Disulfide	62.300	49.170	78.92	70-130
19 2-Propanol	49.200	37.250	75.71	70-130
22 Methylene Chloride	69.500	59.664	85.85	70-130
25 trans-1,2-Dichloro	79.300	64.031	80.75	70-130
26 MTBE	72.100	72.000	99.86	70-130
28 Hexane	70.500	64.385	91.33	70-130
29 1,1-Dichloroethane	81.000	78.658	97.11	70-130
37 cis-1,2-Dichloroet	79.300	93.202	117.53	70-130
38 2-Butanone	59.000	64.644	109.57	70-130
44 Chloroform	97.700	101.34	103.73	70-130
45 1,1,1-Trichloroeth	109.10	120.43	110.38	70-130
46 Cyclohexane	68.800	72.662	105.61	70-130
47 Carbon Tetrachlori	125.80	137.28	109.13	70-130
48 Benzene	63.900	59.344	92.87	70-130
50 1,2-Dichloroethane	80.900	84.262	104.16	70-130
51 2,2,4-Trimethylpen	93.400	93.537	100.15	70-130
53 Heptane	82.000	82.000	100.00	70-130
56 Trichloroethene	107.50	110.54	102.83	70-130
58 Methyl Cyclohexane	80.300	83.490	103.97	70-130
59 1,2-Dichloropropan	92.400	99.186	107.34	70-130
60 1,4-Dioxane	72.100	74.783	103.72	70-130
65 4-Methyl-2-pentano	81.900	87.417	106.74	70-130
67 Toluene	75.400	77.330	102.56	70-130
70 1,1,2-Trichloroeth	109.10	118.72	108.82	70-130
71 Tetrachloroethene	135.70	137.28	101.16	70-130

SPIKE COMPOUND	CONC ADDED NG	CONC RECOVERED NG	% RECOVERED	LIMITS
72 2-Hexanone	81.900	85.315	104.17	70-130
74 1,2-Dibromoethane	153.70	170.81	111.13	70-130
81 Chlorobenzene	92.100	93.361	101.37	70-130
82 Ethyl Benzene	86.800	81.572	93.98	70-130
84 m,p-Xylene	86.800	84.230	97.04	70-130
88 o-Xylene	86.800	94.030	108.33	70-130
89 Styrene	85.200	91.360	107.23	70-130
91 Cumene	98.300	103.72	105.51	70-130
94 1,1,2,2-Tetrachlor	137.30	150.96	109.95	70-130
96 Propylbenzene	98.300	106.56	108.40	70-130
97 4-Ethyltoluene	98.300	103.73	105.52	70-130
98 1,3,5-Trimethylben	98.300	103.97	105.76	70-130
100 1,2,4-Trimethylben	98.300	104.03	105.83	70-130
101 1,3-Dichlorobenzen	120.30	128.68	106.96	70-130
102 1,4-Dichlorobenzen	120.30	130.48	108.46	70-130
105 1,2-Dichlorobenzen	120.30	129.49	107.64	70-130
106 1,2,4-Trichloroben	148.40	159.00	107.15	70-130
107 Hexachlorobutadien	213.30	203.54	95.43	70-130
109 Naphthalene	50.000	53.558	107.12	70-130
110 2-Methylnaphthalen	50.000	57.072	114.14	70-130
111 1-Methylnaphthalen	50.000	57.298	114.60	70-130
112 Acenaphthylene	50.000	55.365	110.73	70-130
113 Acenaphthene	50.000	58.419	116.84	70-130
114 Fluorene	50.000	58.613	117.23	60-140
115 Phenanthrene	50.000	55.513	111.03	60-140
116 Anthracene	50.000	45.901	91.80	60-140
117 Fluoranthene	50.000	48.697	97.39	60-140
118 Pyrene	50.000	46.910	93.82	60-140

SURROGATE COMPOUND	AMOUNT ADDED ng	AMOUNT RECOVERED ng	% RECOVERED	LIMITS
$ 49 1,2-Dichloroethane	25.000	21.608	86.43	50-150
$ 66 Toluene-d8	25.000	24.175	96.70	50-150
$ 108 Naphthalene-d8	25.000	28.932	115.73	50-150

Data File: /chem/msd6.i/13jul16.b/6071306.d

Date : 13-JUL-2016 18:47

Client ID: LCS

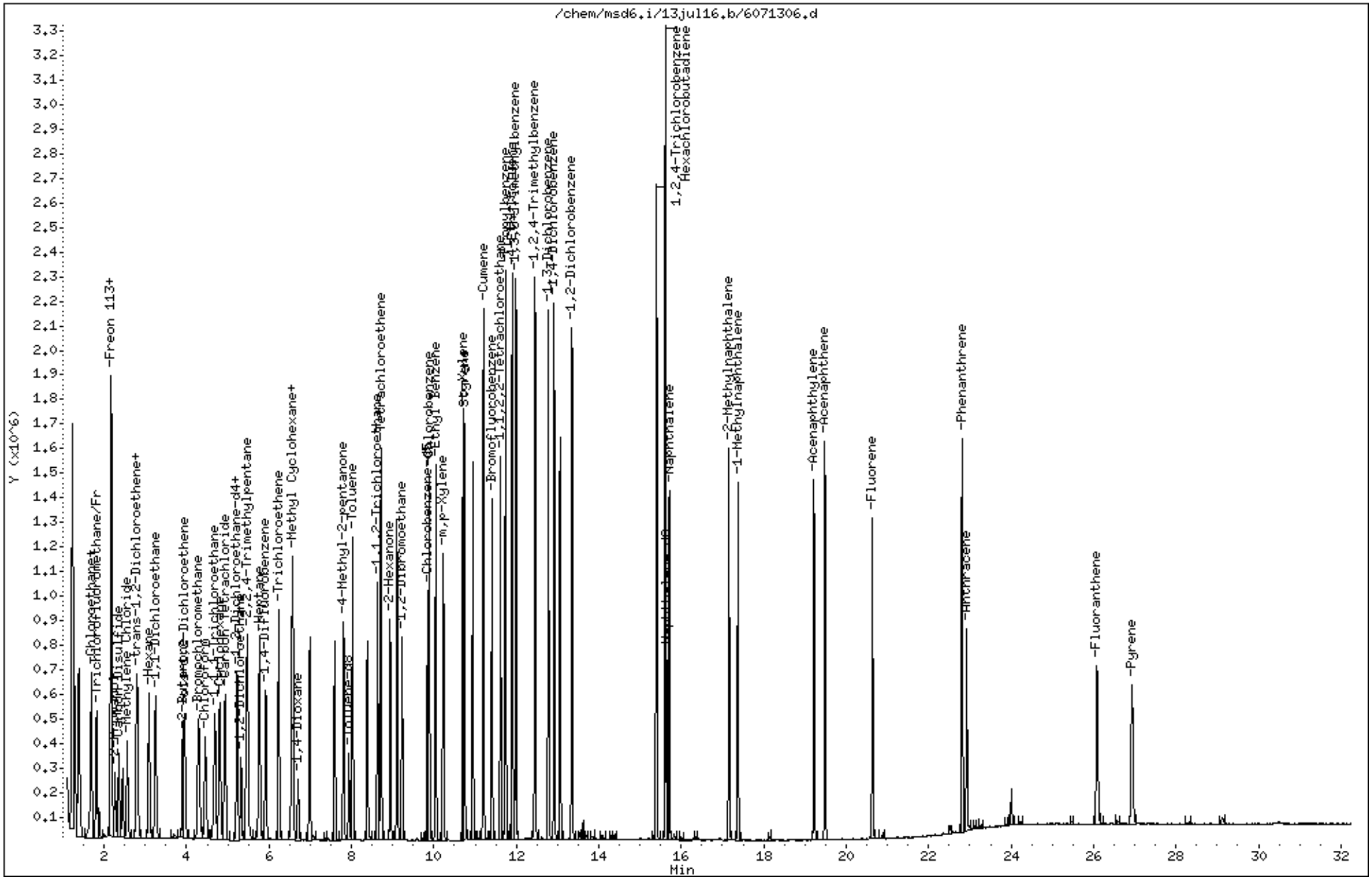
Sample Info: ;VI VOC+PAH ICV/LCS;LCS

Column phase: RTx-624

Instrument: msd6.i

Operator: CT

Column diameter: 0.53



Data File: /chem/msd6.i/13jul16.b/6071306.d

Date : 13-JUL-2016 18:47

Client ID: LCS

Instrument: msd6.i

Sample Info: ;VI VOC+PAH ICV/LCS;LCS

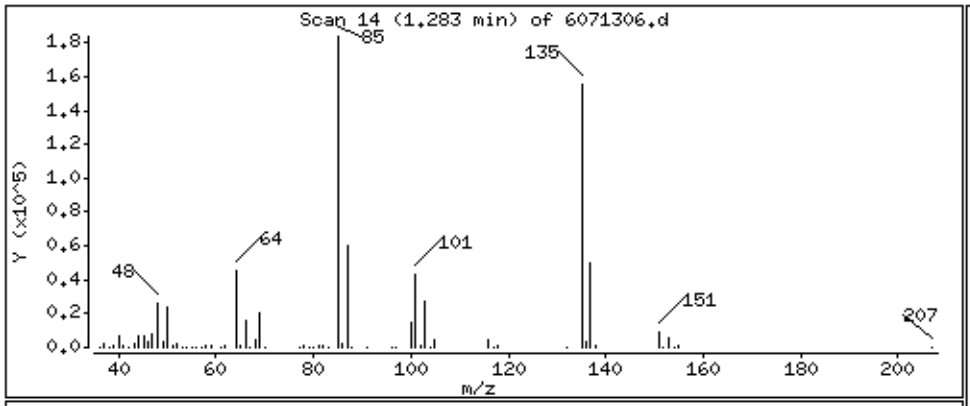
Operator: CT

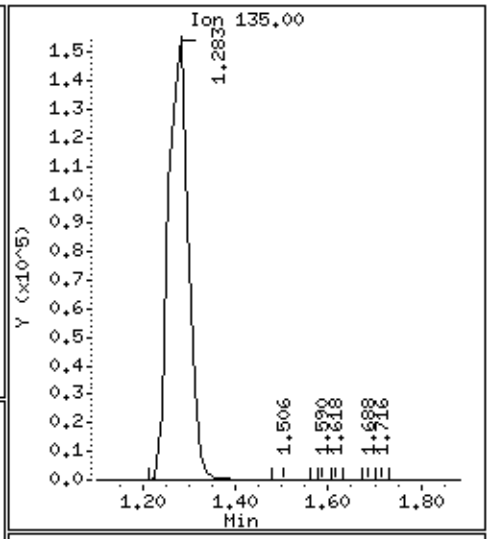
Column phase: RTx-624

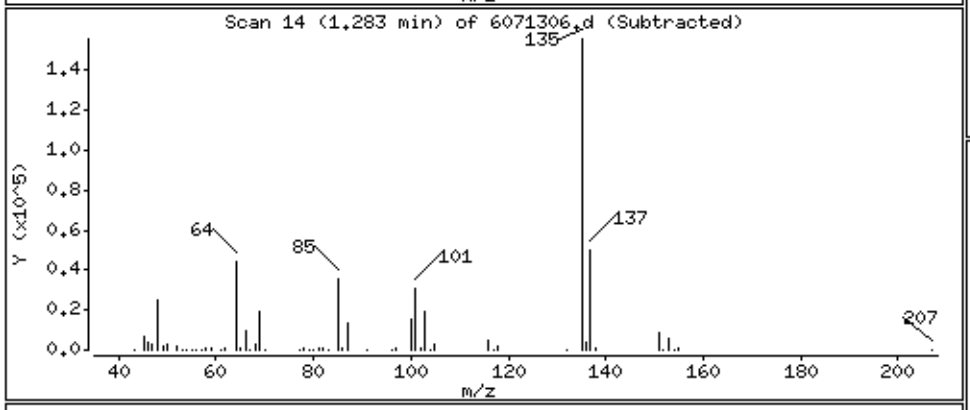
Column diameter: 0.53

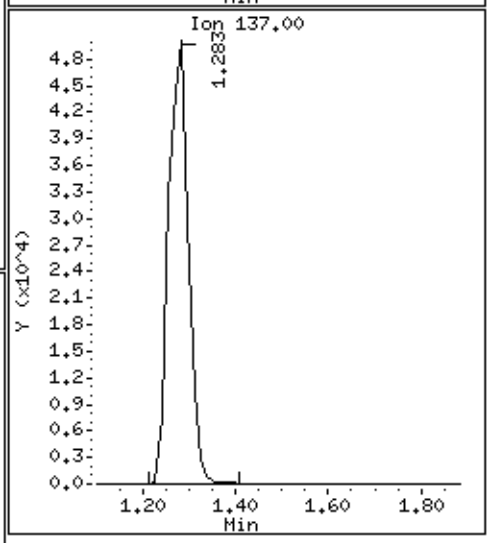
3 Freon 114

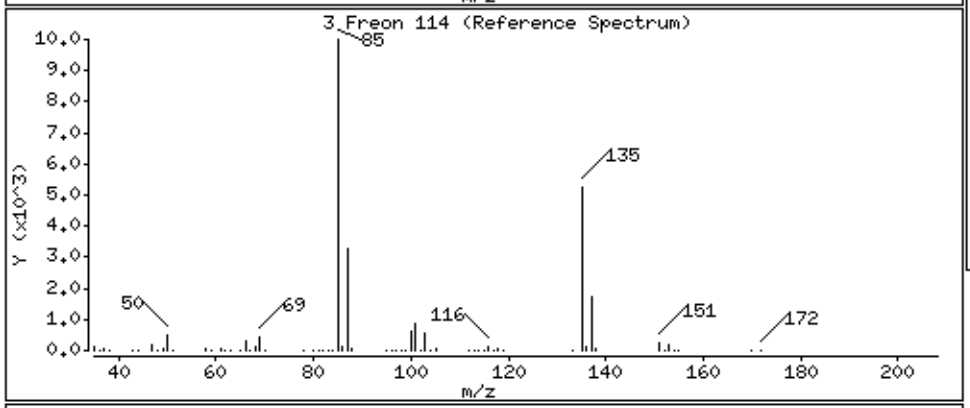
Concentration: 162.94 NG

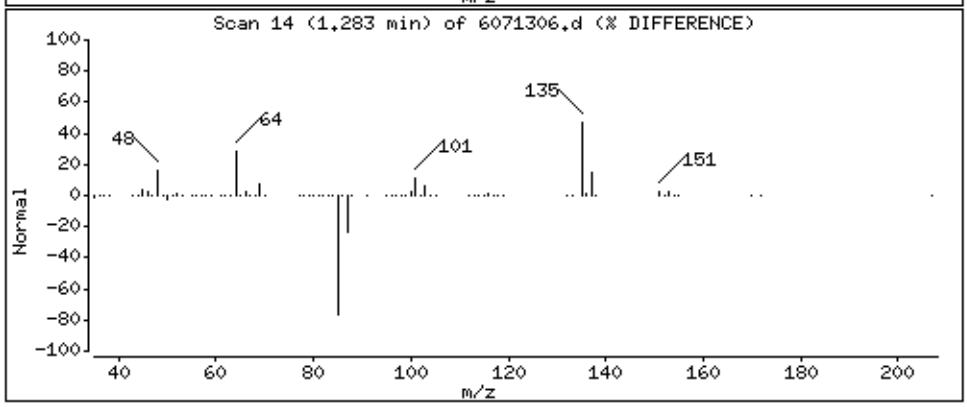












Data File: /chem/msd6.i/13jul16.b/6071306.d

Date : 13-JUL-2016 18:47

Client ID: LCS

Instrument: msd6.i

Sample Info: ;VI VOC+PAH ICV/LCS;LCS

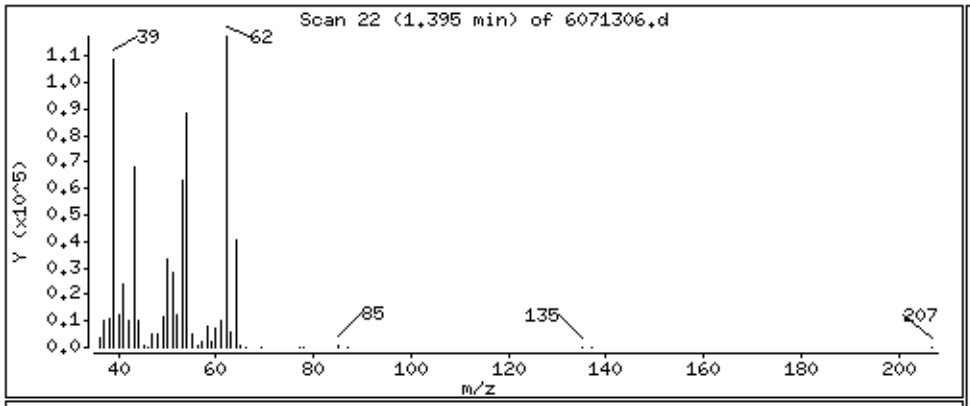
Operator: CT

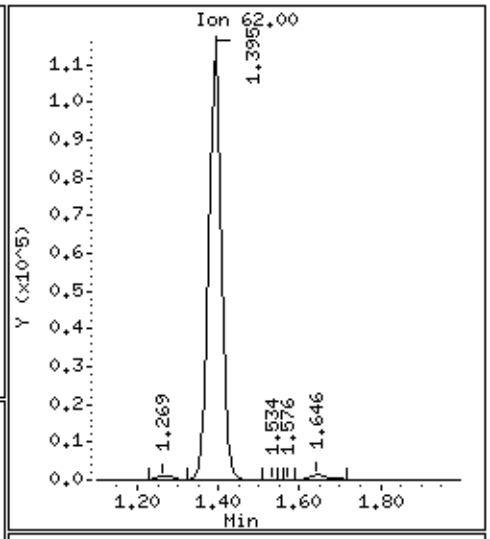
Column phase: RTx-624

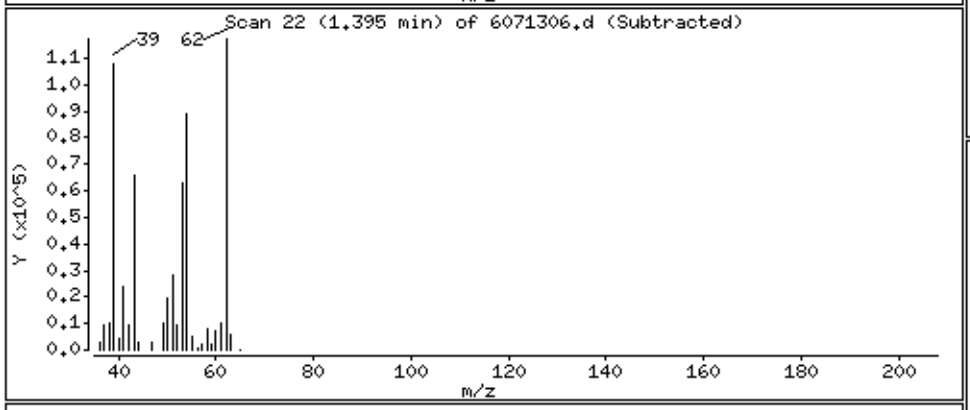
Column diameter: 0.53

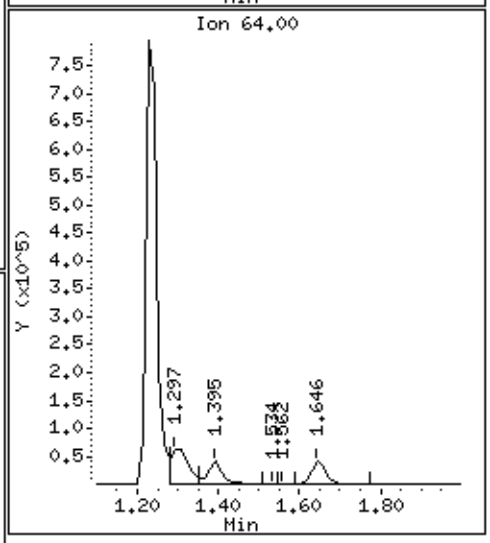
6 Vinyl Chloride

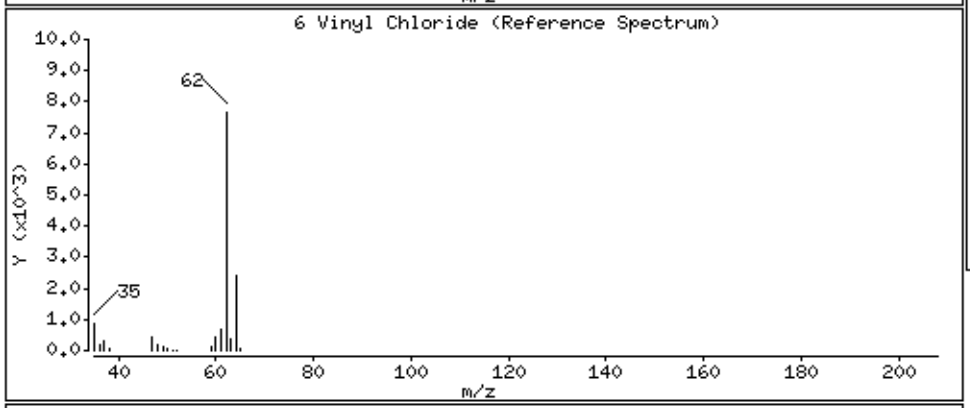
Concentration: 55.936 NG

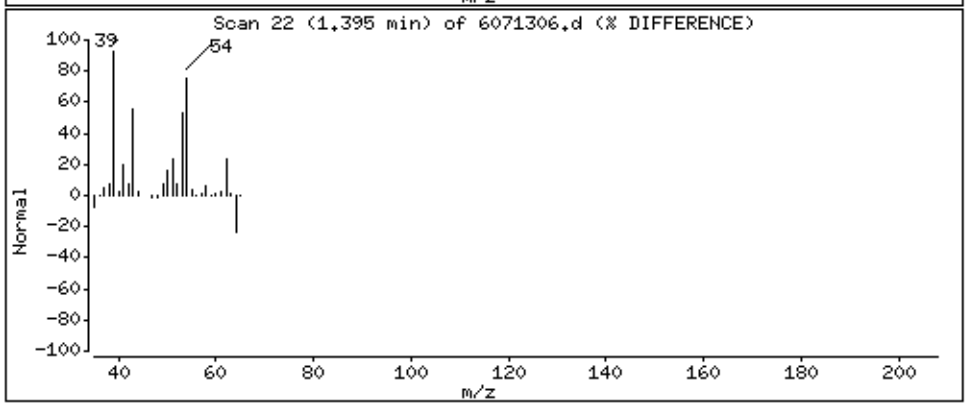












Data File: /chem/msd6.i/13jul16.b/6071306.d

Date : 13-JUL-2016 18:47

Client ID: LCS

Instrument: msd6.i

Sample Info: ;VI VOC+PAH ICV/LCS;LCS

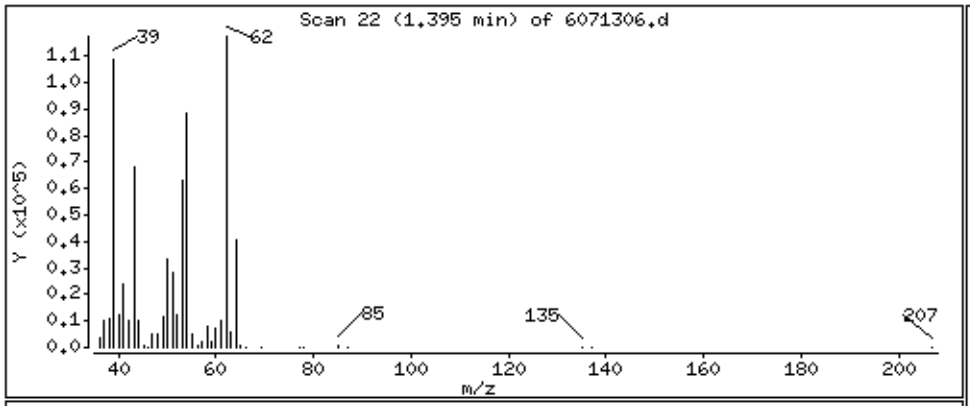
Operator: CT

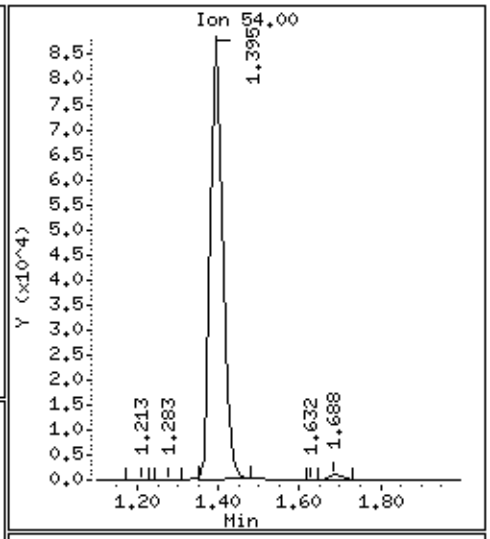
Column phase: RTx-624

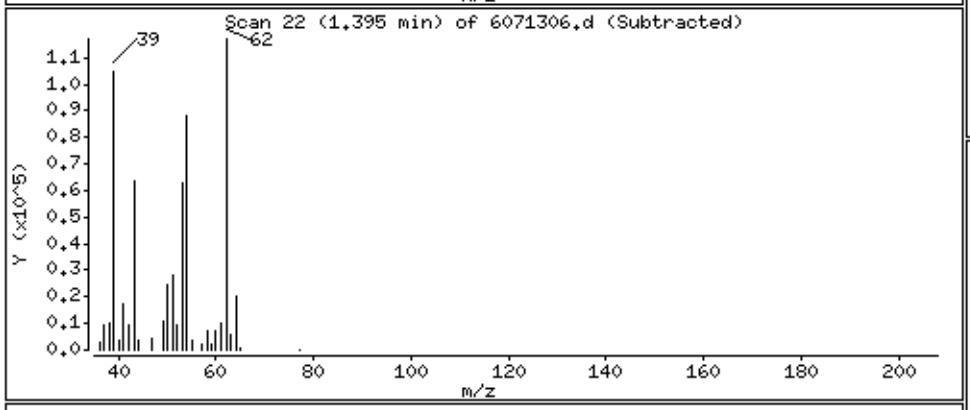
Column diameter: 0.53

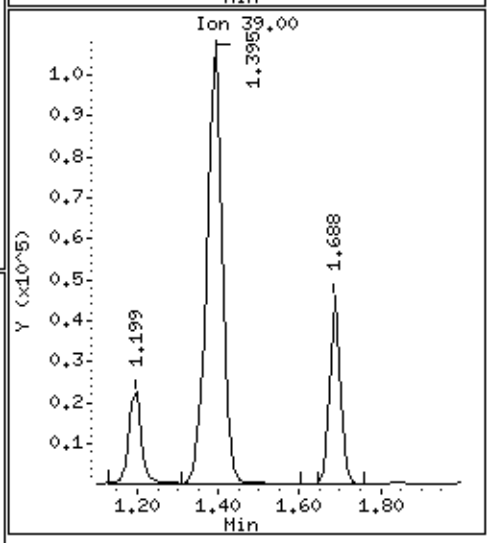
7 1,3-Butadiene

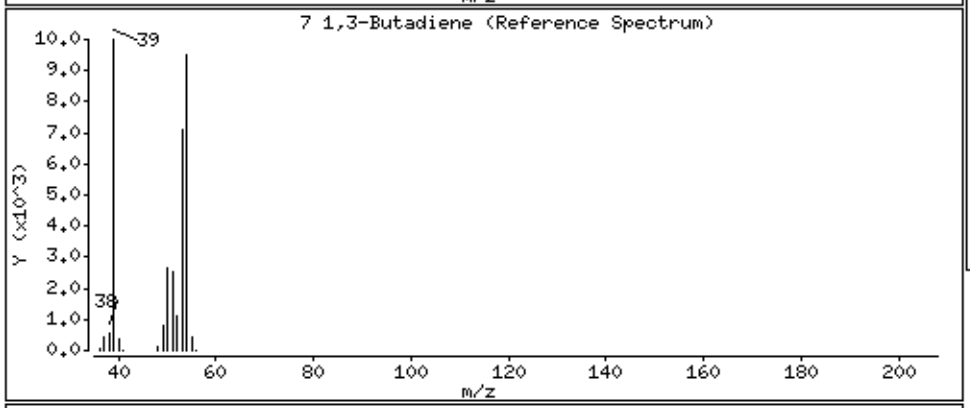
Concentration: 44.476 NG

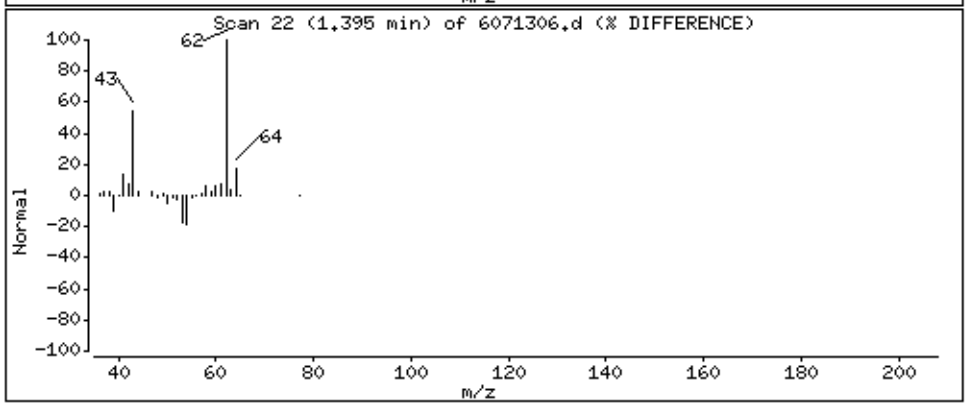












Data File: /chem/msd6.i/13jul16.b/6071306.d

Date : 13-JUL-2016 18:47

Client ID: LCS

Instrument: msd6.i

Sample Info: ;VI VOC+PAH ICV/LCS;LCS

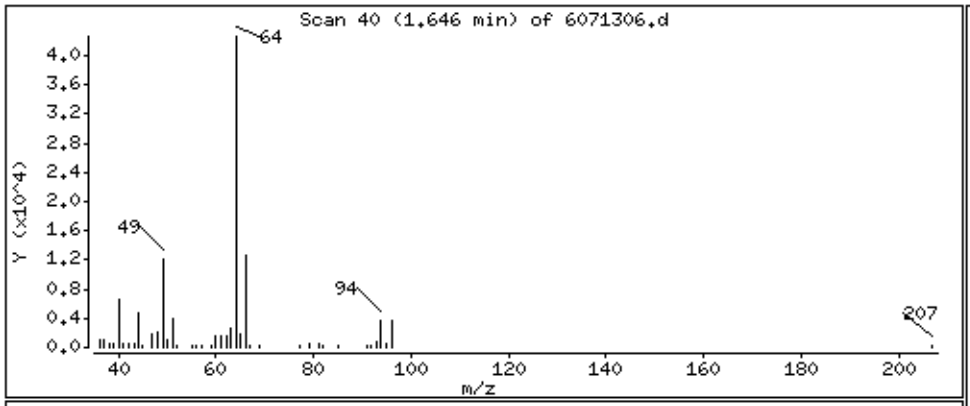
Operator: CT

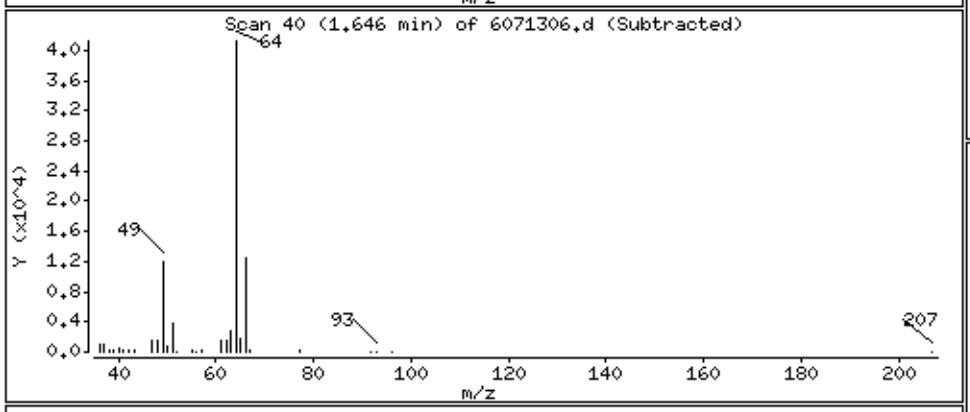
Column phase: RTx-624

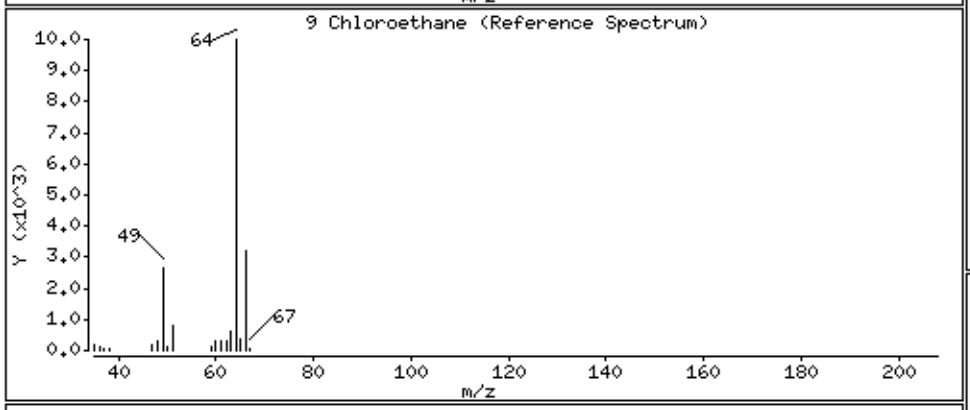
Column diameter: 0.53

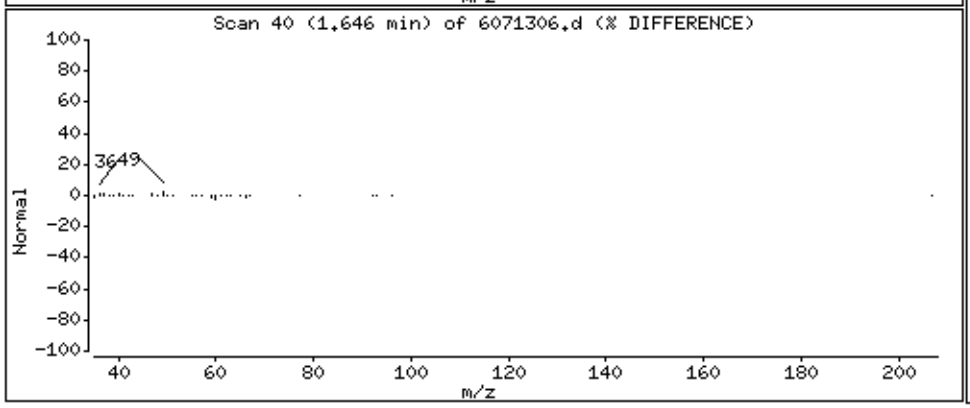
9 Chloroethane

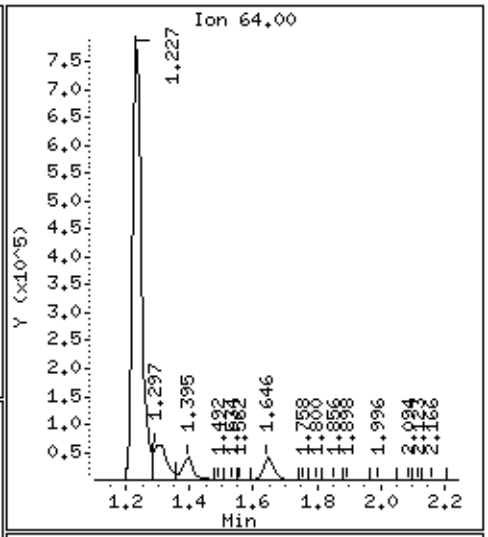
Concentration: 48.297 NG

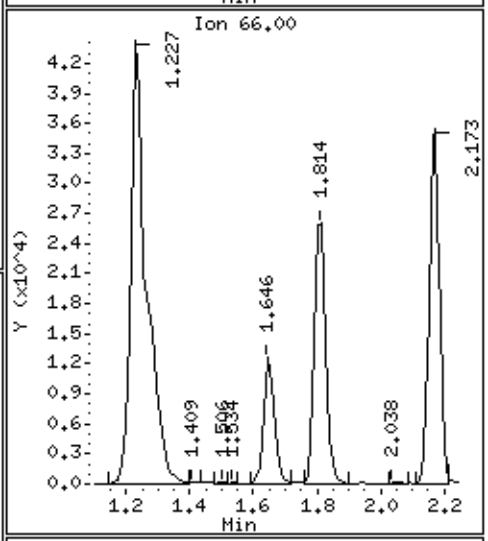


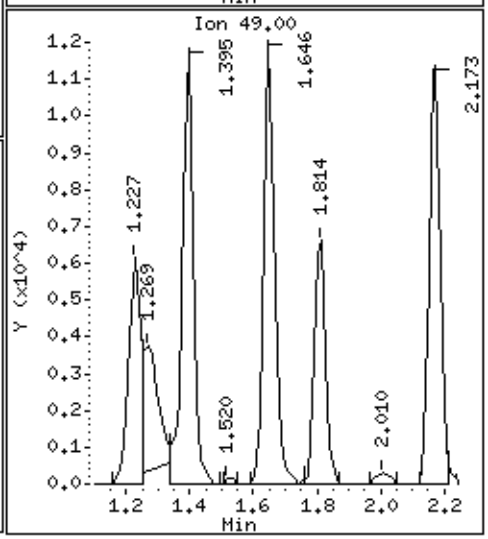












Data File: /chem/msd6.i/13jul16.b/6071306.d

Date : 13-JUL-2016 18:47

Client ID: LCS

Instrument: msd6.i

Sample Info: ;VI VOC+PAH ICV/LCS;LCS

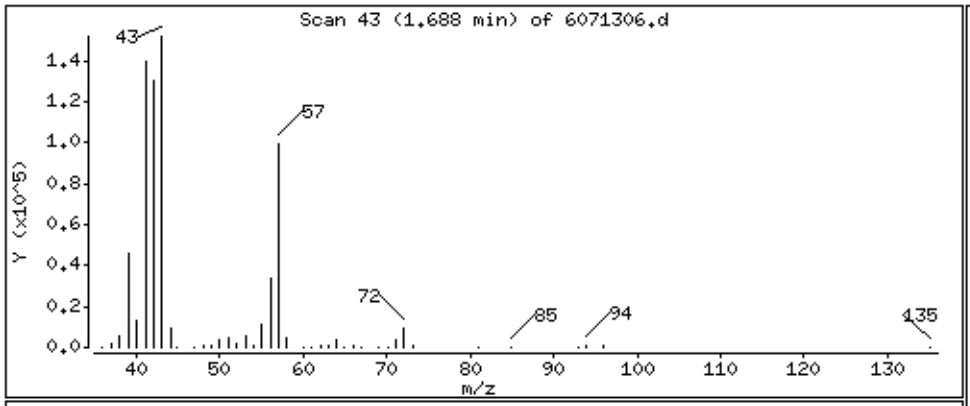
Operator: CT

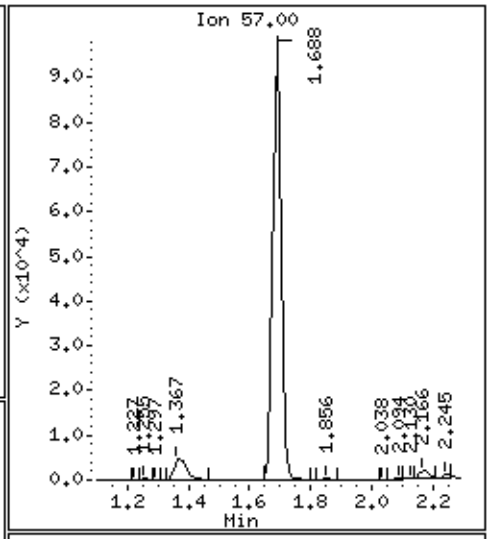
Column phase: RTx-624

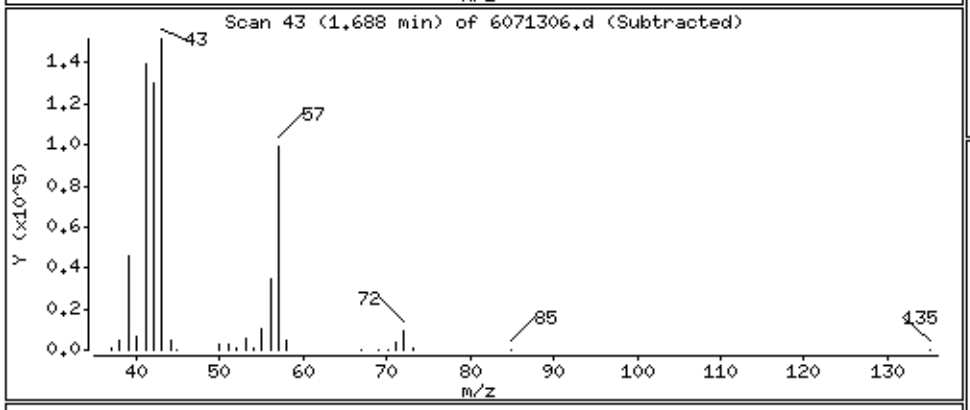
Column diameter: 0.53

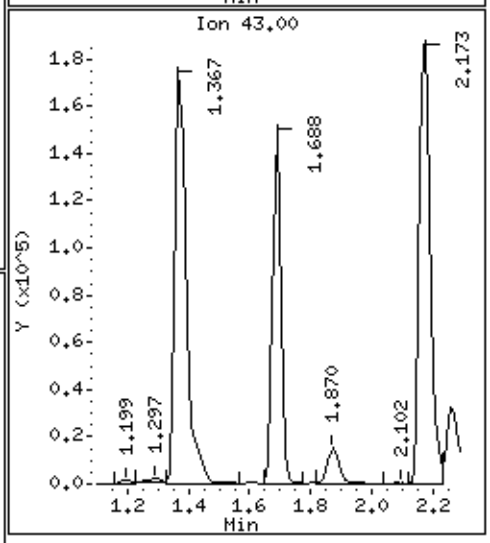
10 Isopentane

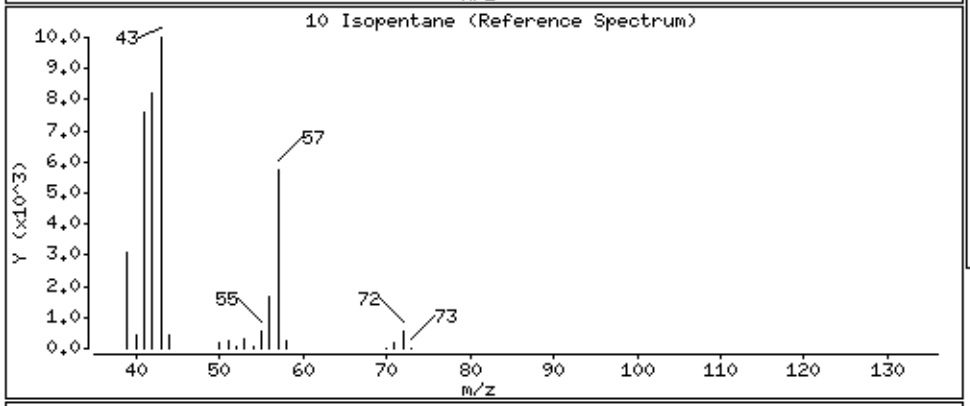
Concentration: 55.820 NG

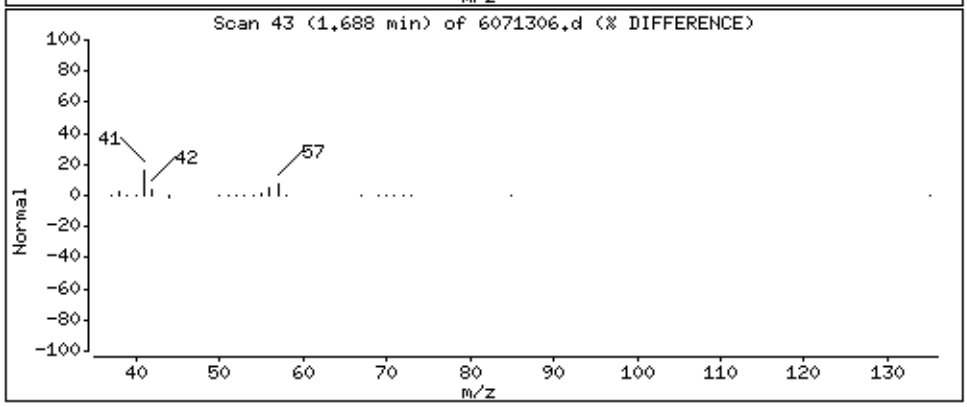












Data File: /chem/msd6.i/13jul16.b/6071306.d

Date : 13-JUL-2016 18:47

Client ID: LCS

Instrument: msd6.i

Sample Info: ;VI VOC+PAH ICV/LCS;LCS

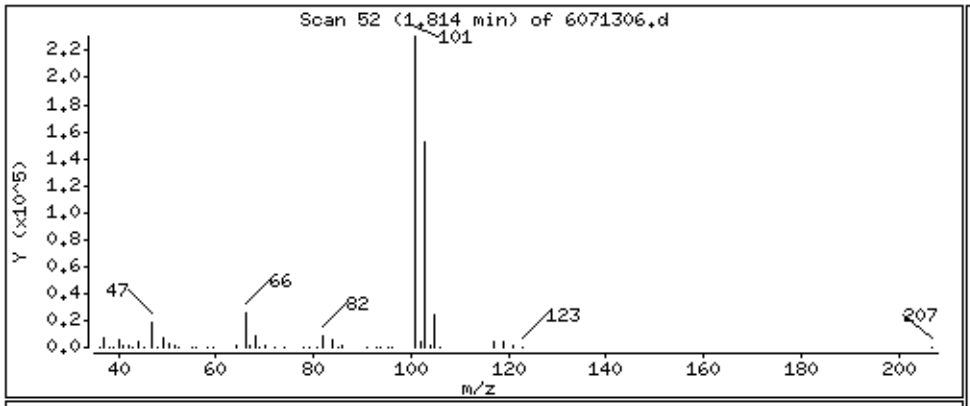
Operator: CT

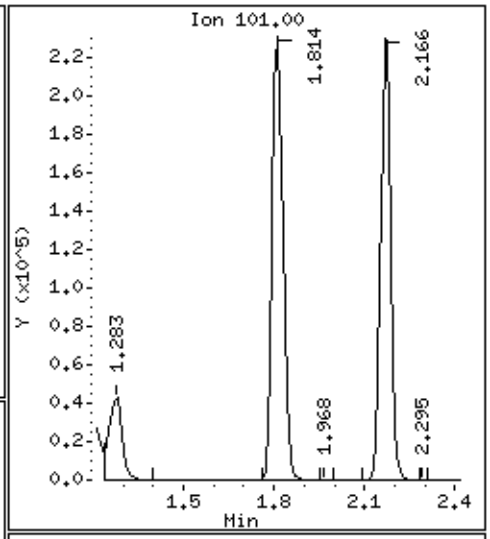
Column phase: RTx-624

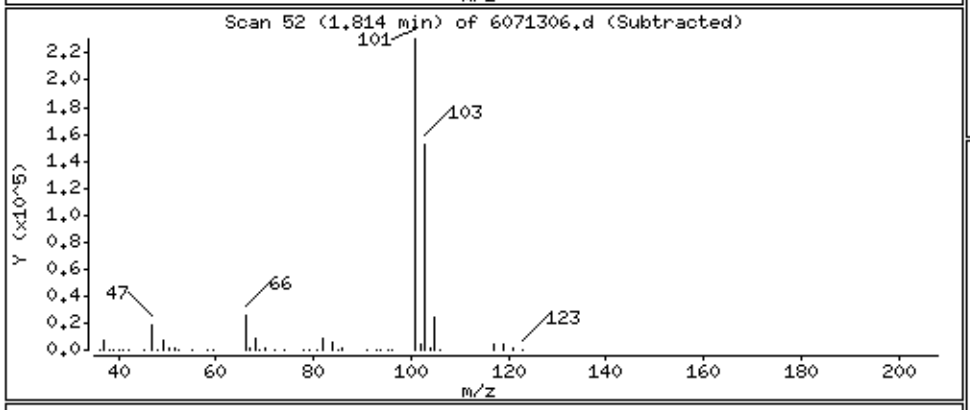
Column diameter: 0.53

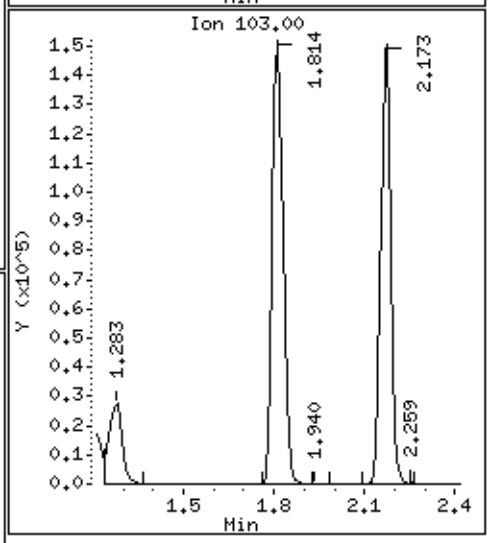
11 Trichlorofluoromethane/Fr11

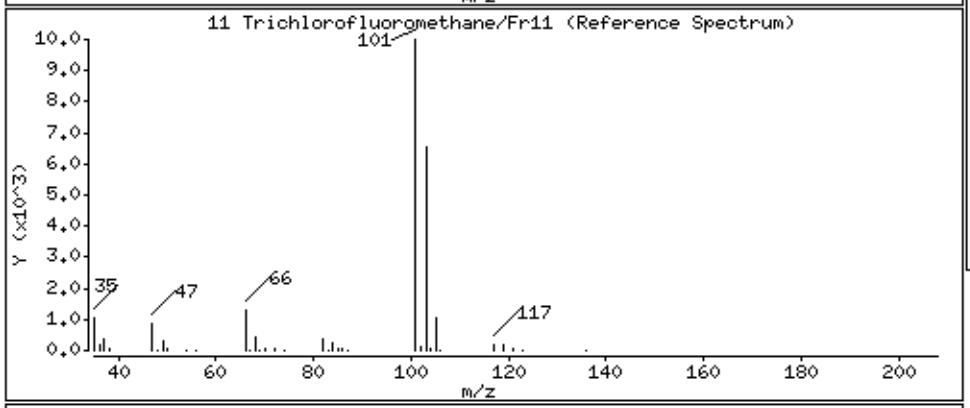
Concentration: 117.66 NG

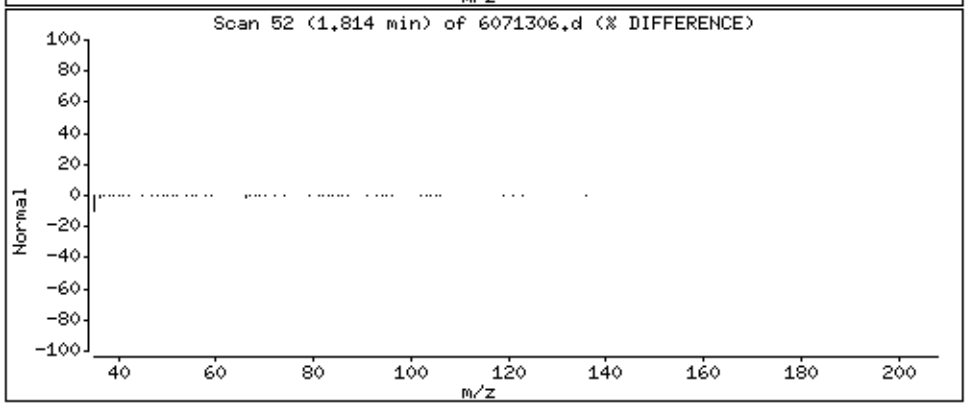












Data File: /chem/msd6.i/13jul16.b/6071306.d

Date : 13-JUL-2016 18:47

Client ID: LCS

Instrument: msd6.i

Sample Info: ;VI VOC+PAH ICV/LCS;LCS

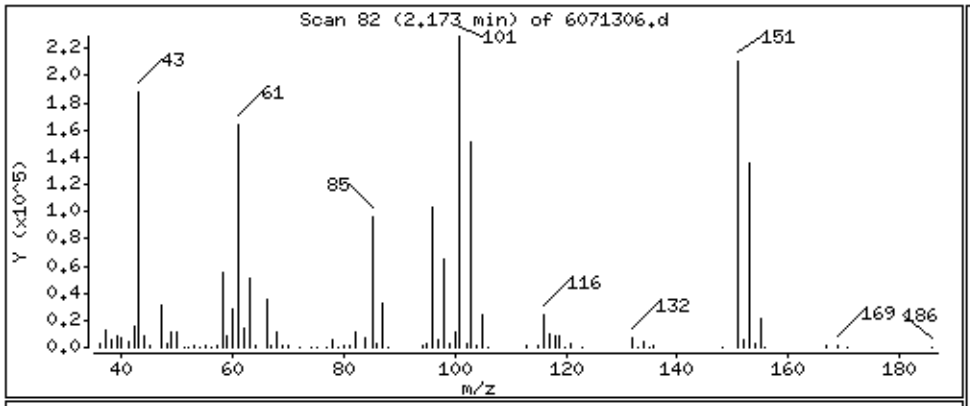
Operator: CT

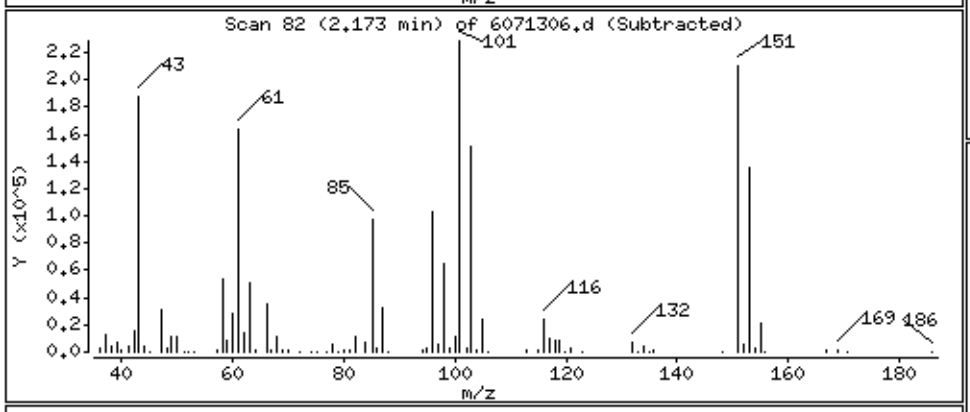
Column phase: RTx-624

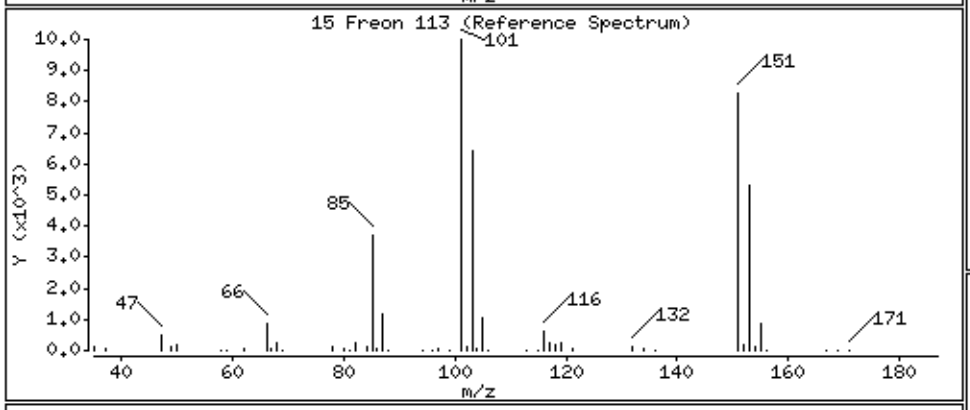
Column diameter: 0.53

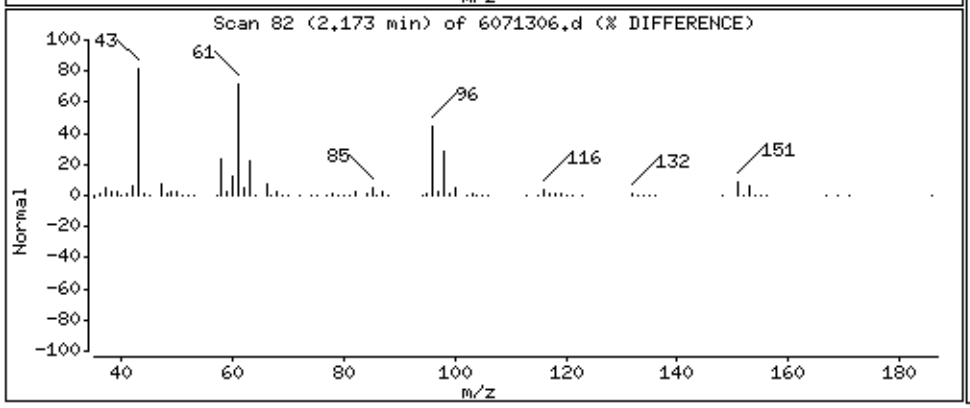
15 Freon 113

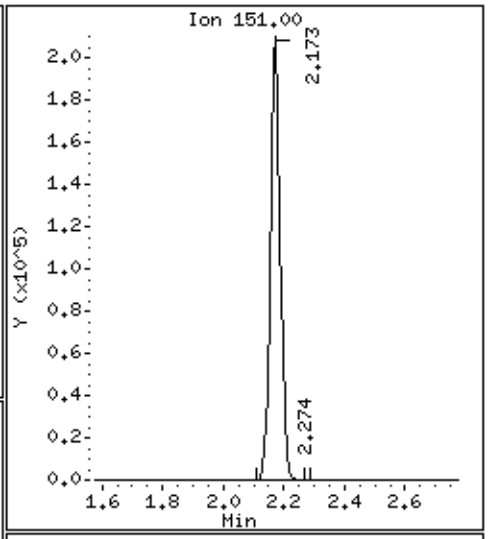
Concentration: 157.88 NG

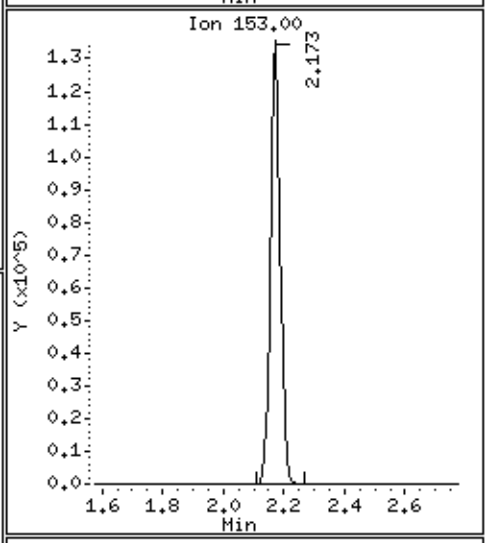


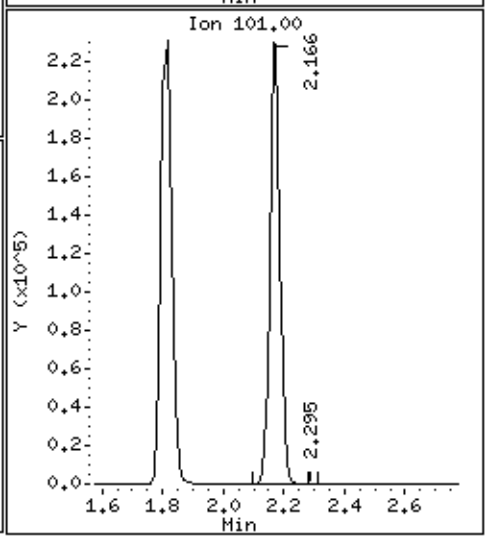












Data File: /chem/msd6.i/13jul16.b/6071306.d

Date : 13-JUL-2016 18:47

Client ID: LCS

Instrument: msd6.i

Sample Info: ;VI VOC+PAH ICV/LCS;LCS

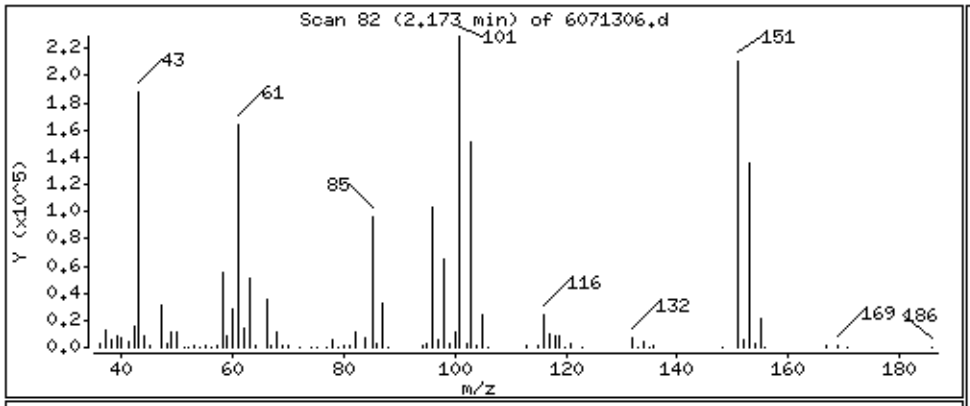
Operator: CT

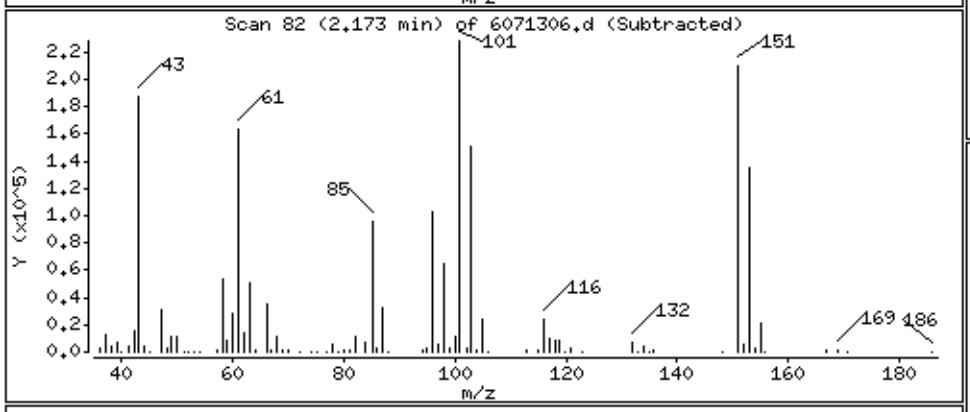
Column phase: RTx-624

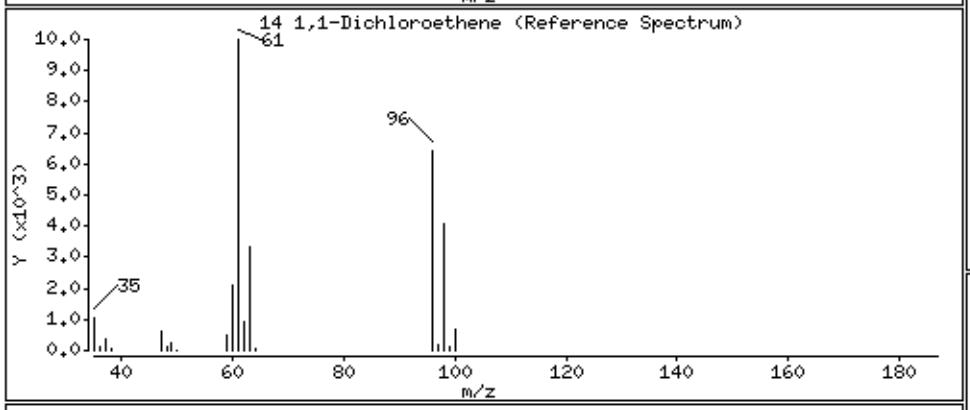
Column diameter: 0.53

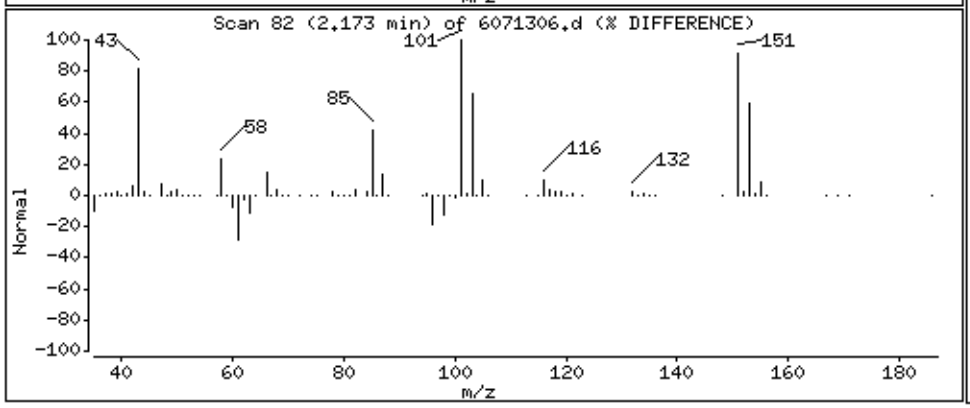
14 1,1-Dichloroethene

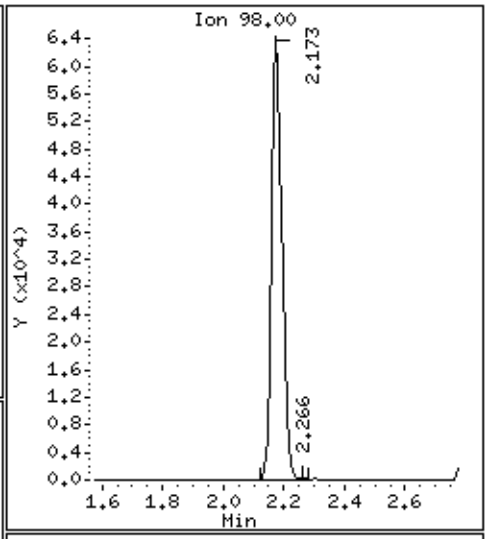
Concentration: 75.357 NG

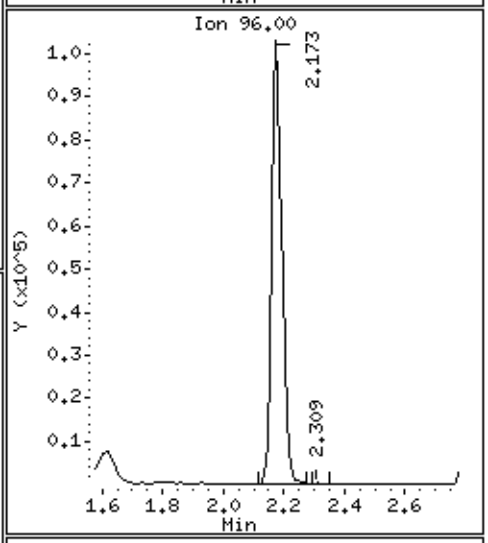


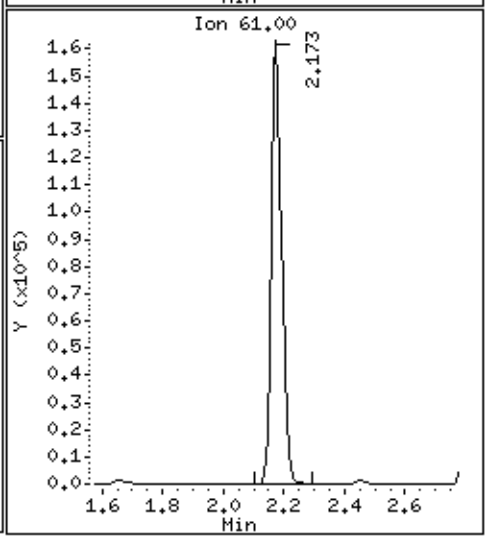












Data File: /chem/msd6.i/13jul16.b/6071306.d

Date : 13-JUL-2016 18:47

Client ID: LCS

Instrument: msd6.i

Sample Info: ;VI VOC+PAH ICV/LCS;LCS

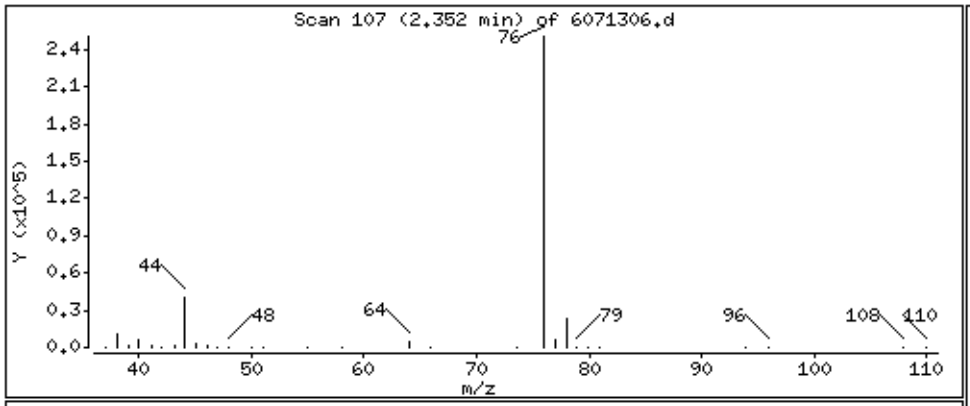
Operator: CT

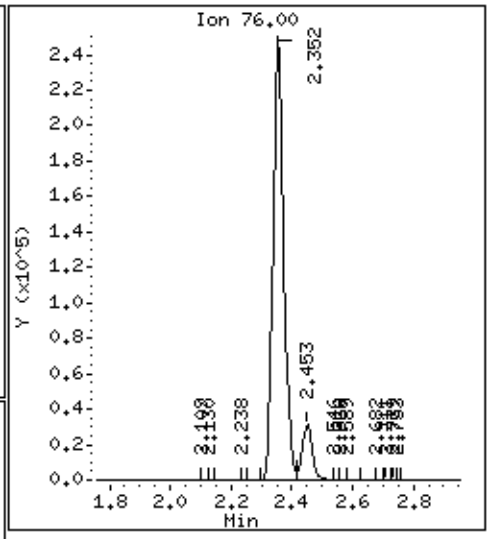
Column phase: RTx-624

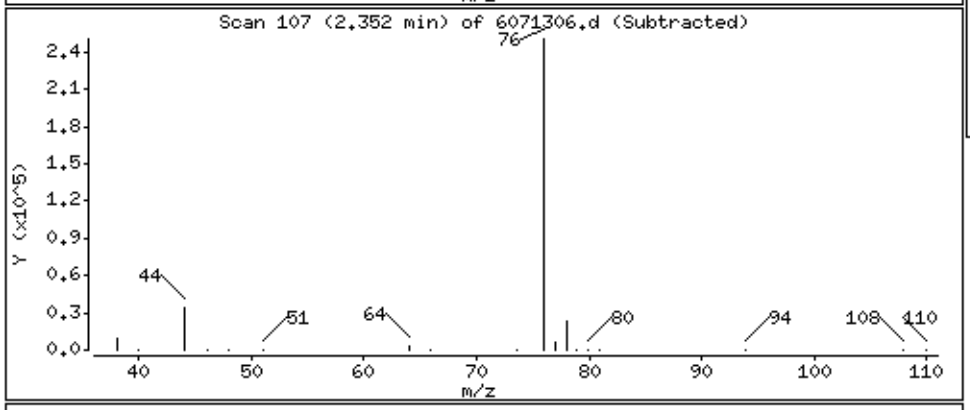
Column diameter: 0.53

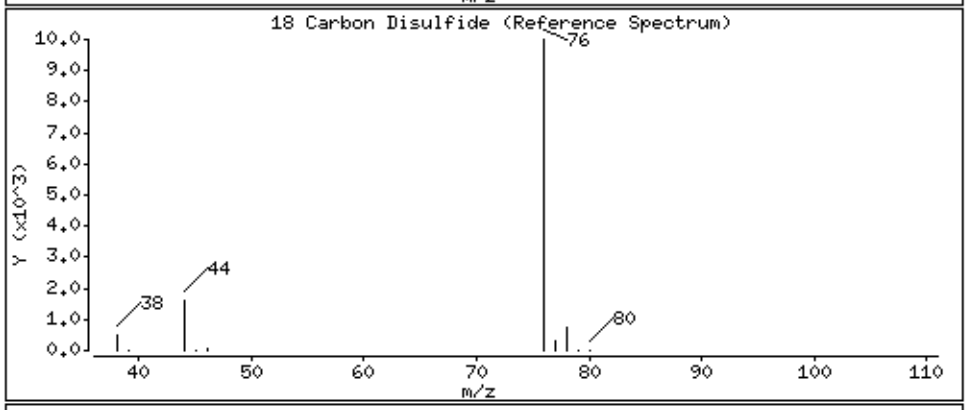
18 Carbon Disulfide

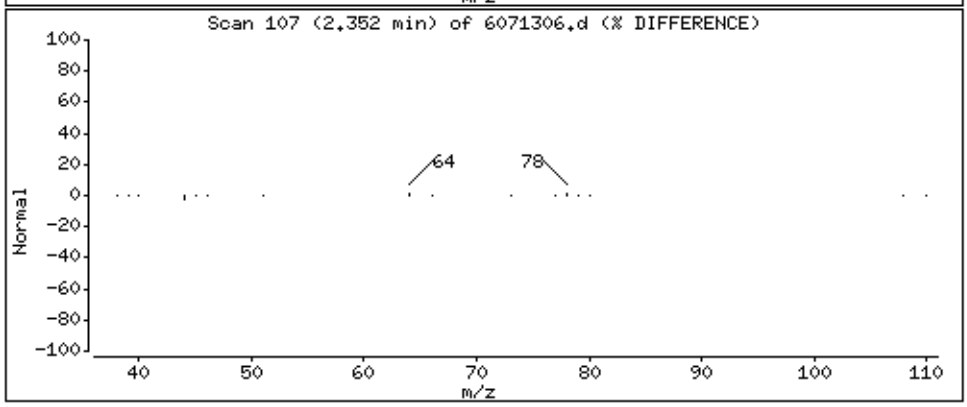
Concentration: 49.170 NG











Data File: /chem/msd6.i/13jul16.b/6071306.d

Date : 13-JUL-2016 18:47

Client ID: LCS

Instrument: msd6.i

Sample Info: ;VI VOC+PAH ICV/LCS;LCS

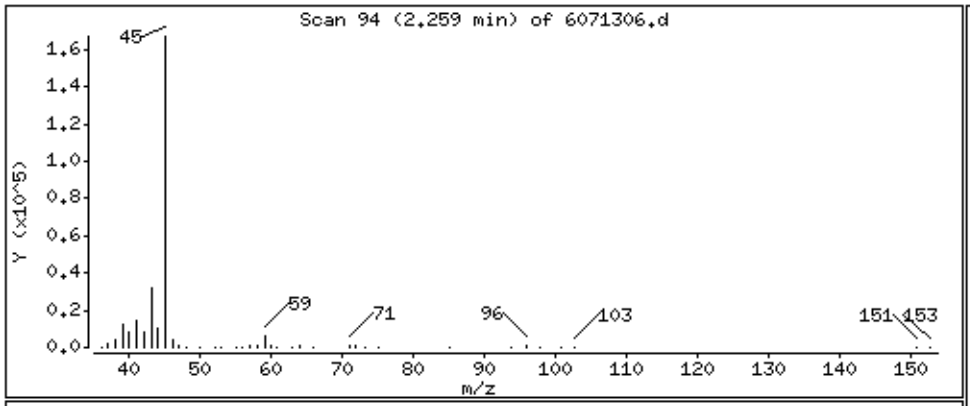
Operator: CT

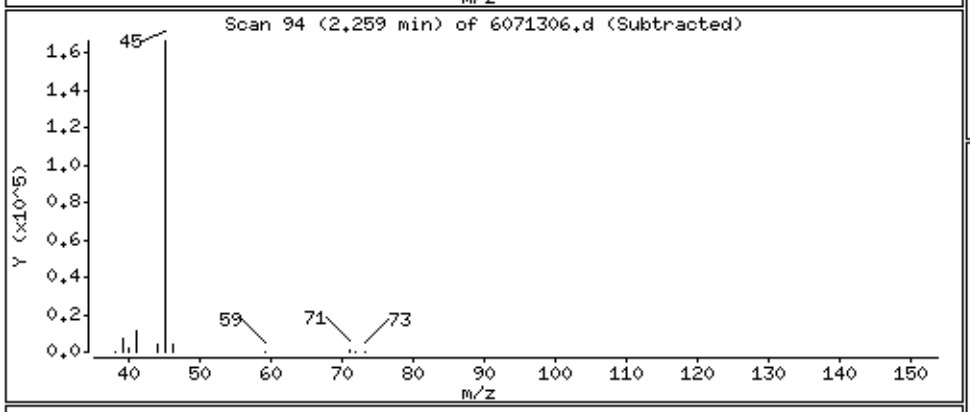
Column phase: RTx-624

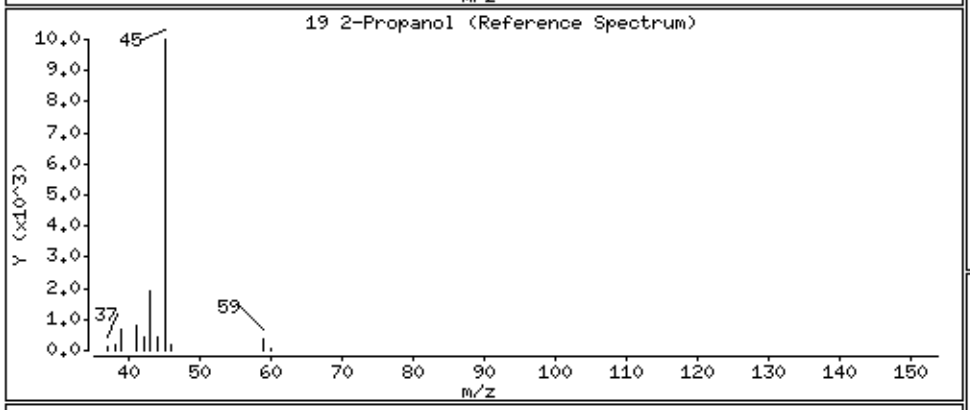
Column diameter: 0.53

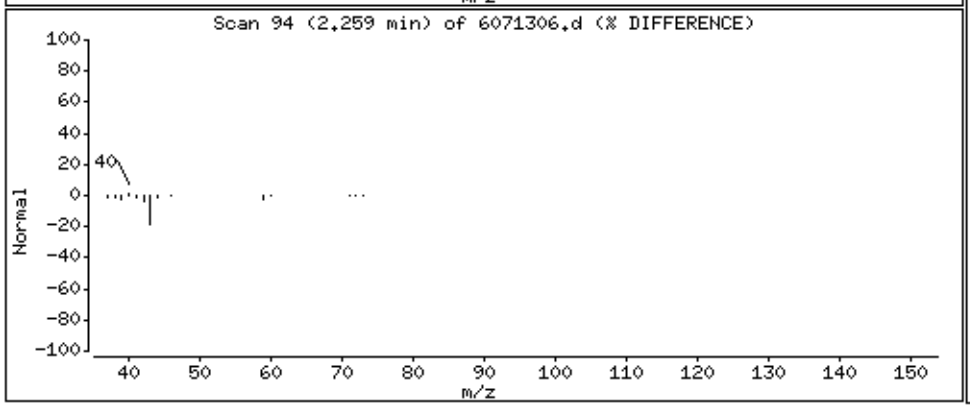
19 2-Propanol

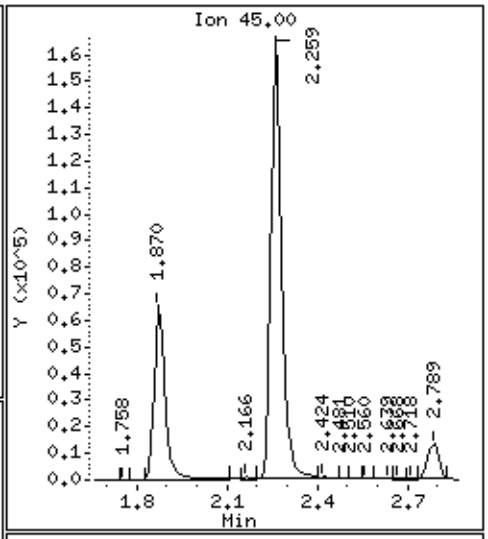
Concentration: 37.250 NG

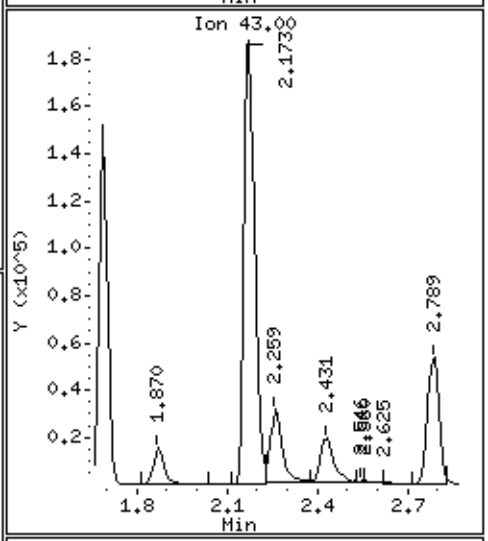


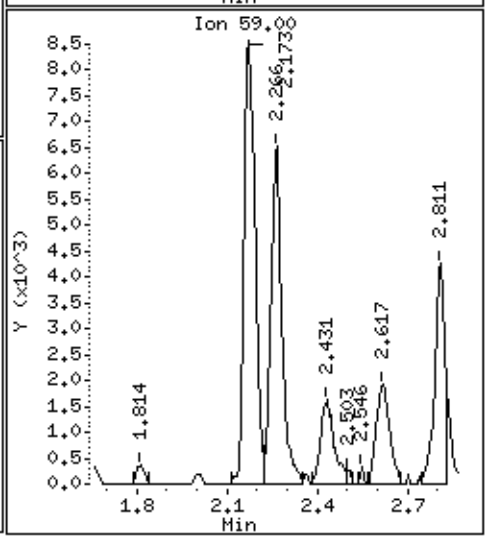












Data File: /chem/msd6.i/13jul16.b/6071306.d

Date : 13-JUL-2016 18:47

Client ID: LCS

Instrument: msd6.i

Sample Info: ;VI VOC+PAH ICV/LCS;LCS

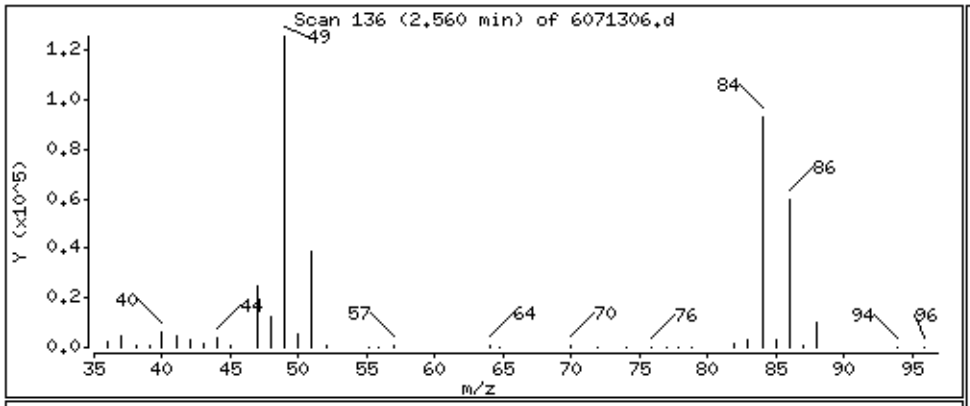
Operator: CT

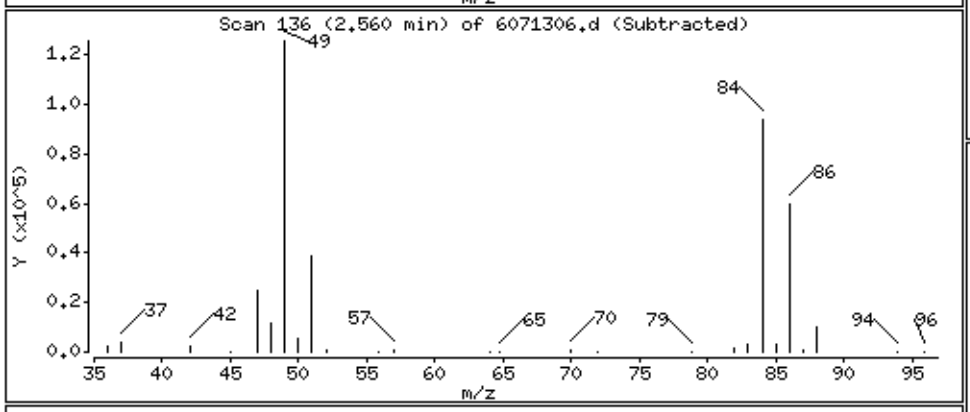
Column phase: RTx-624

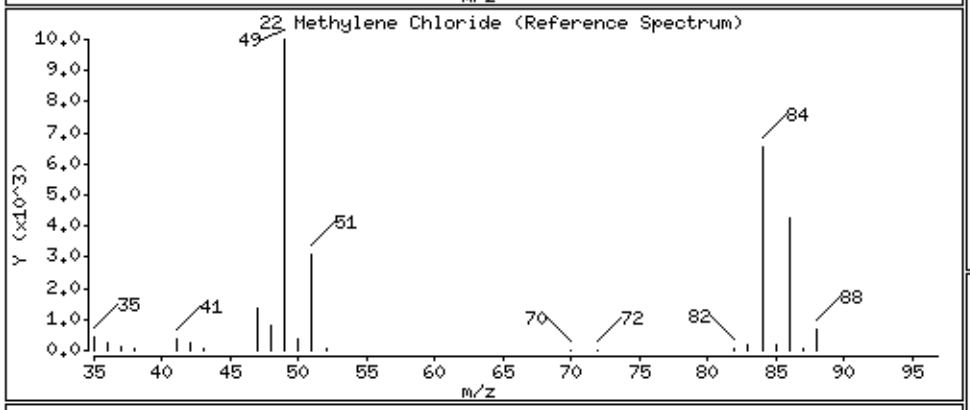
Column diameter: 0.53

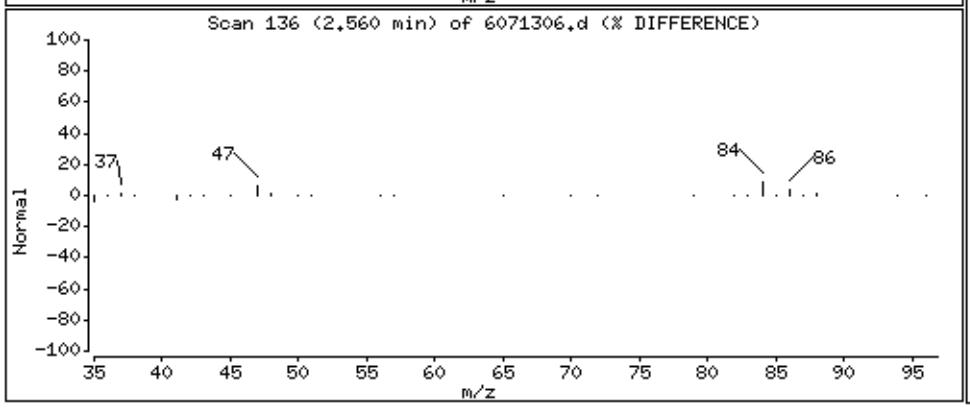
22 Methylene Chloride

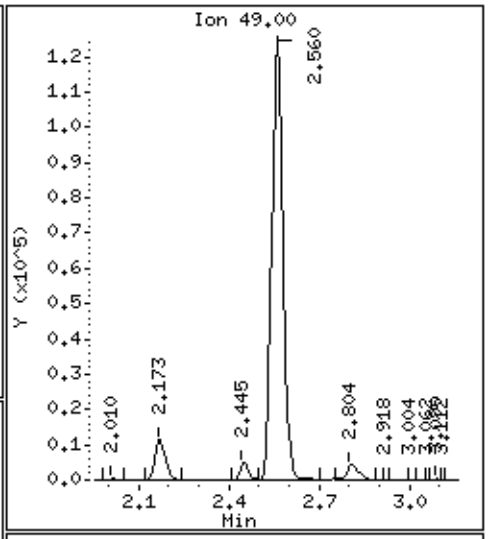
Concentration: 59.664 NG

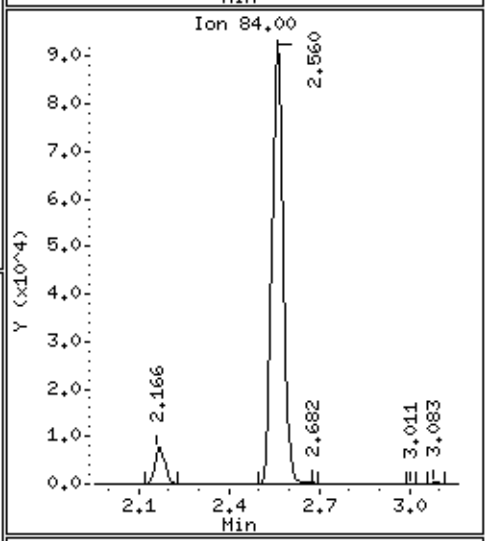


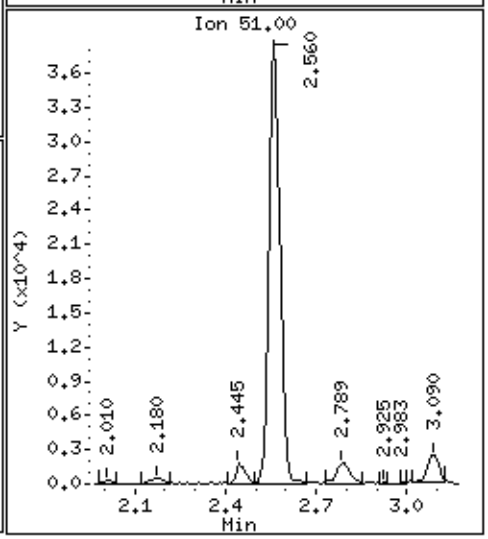












Data File: /chem/msd6.i/13jul16.b/6071306.d

Date : 13-JUL-2016 18:47

Client ID: LCS

Instrument: msd6.i

Sample Info: ;VI VOC+PAH ICV/LCS;LCS

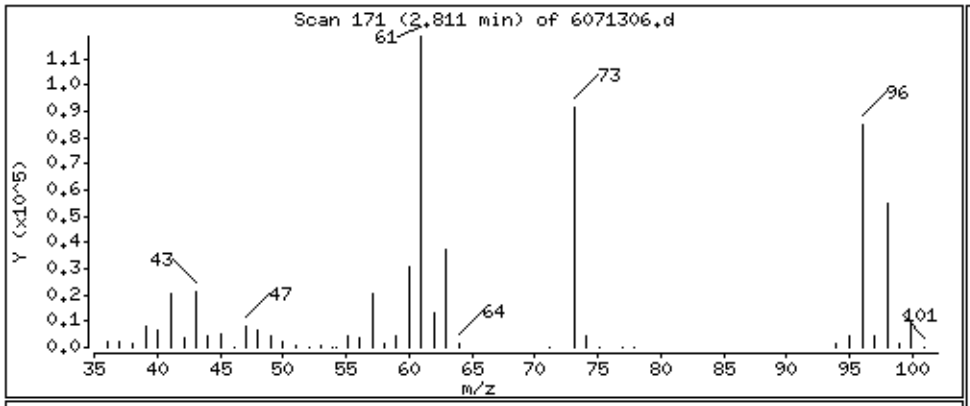
Operator: CT

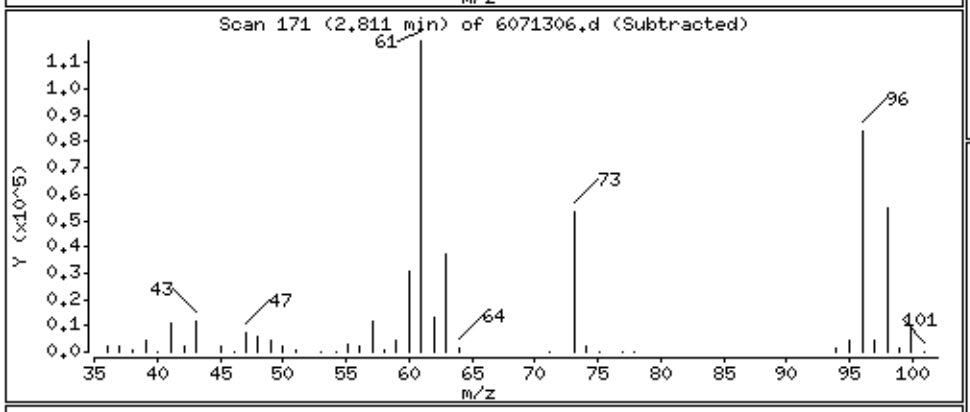
Column phase: RTx-624

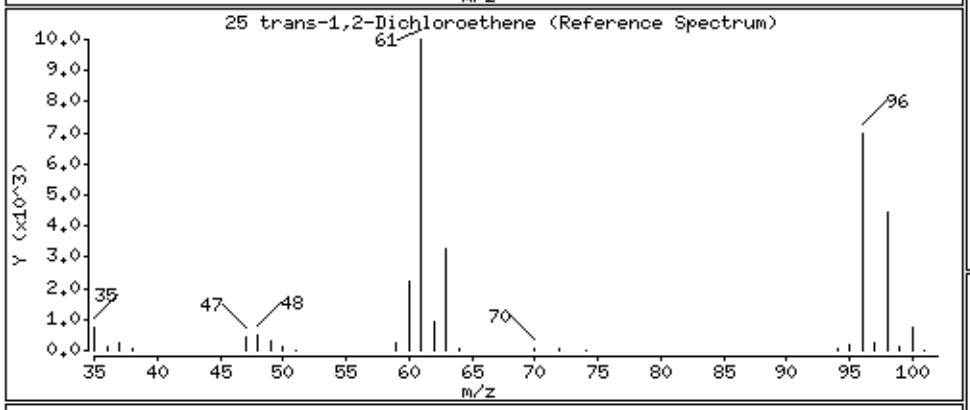
Column diameter: 0.53

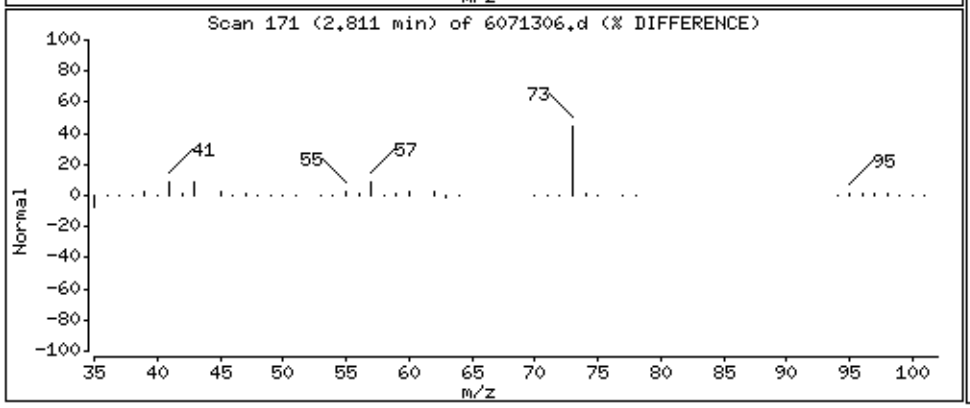
25 trans-1,2-Dichloroethene

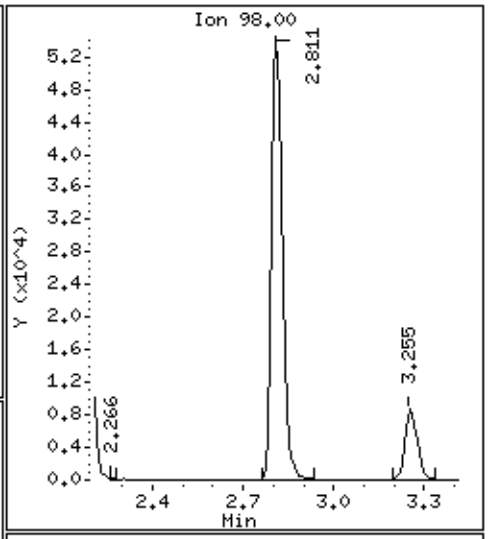
Concentration: 64.031 NG

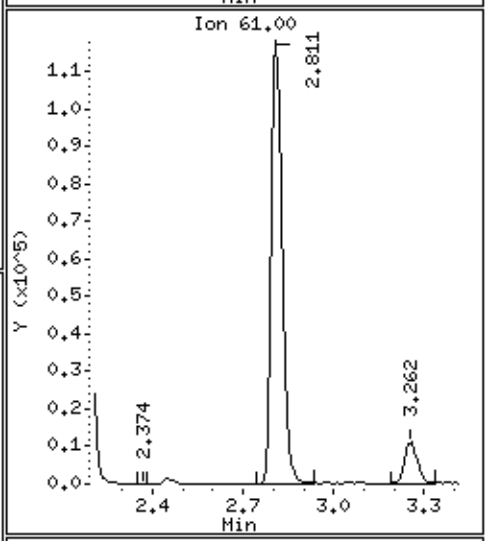


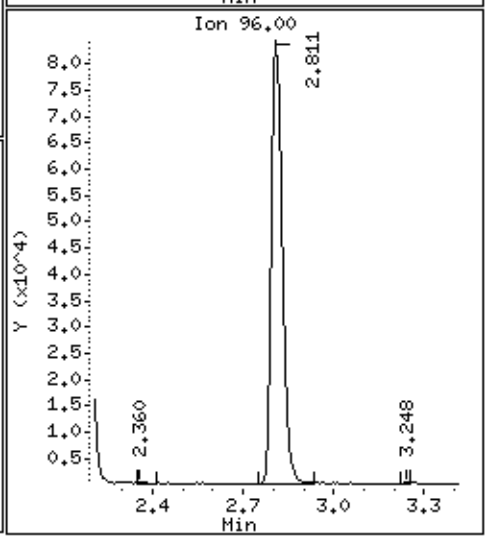












Data File: /chem/msd6.i/13jul16.b/6071306.d

Date : 13-JUL-2016 18:47

Client ID: LCS

Instrument: msd6.i

Sample Info: ;VI VOC+PAH ICV/LCS;LCS

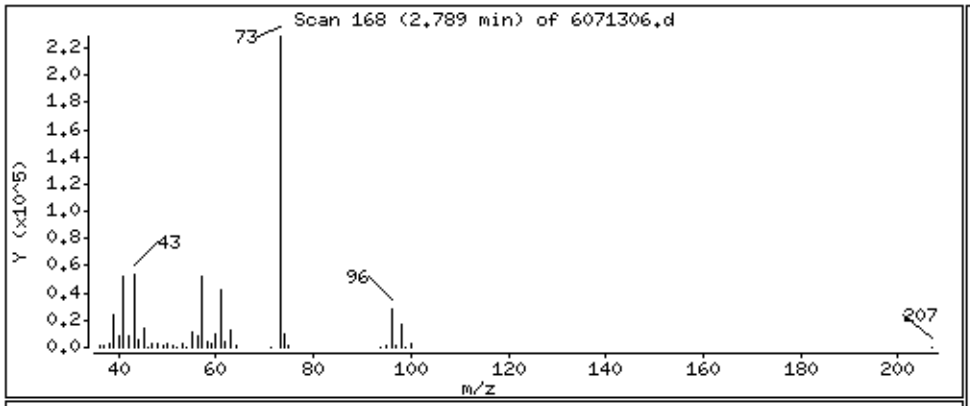
Operator: CT

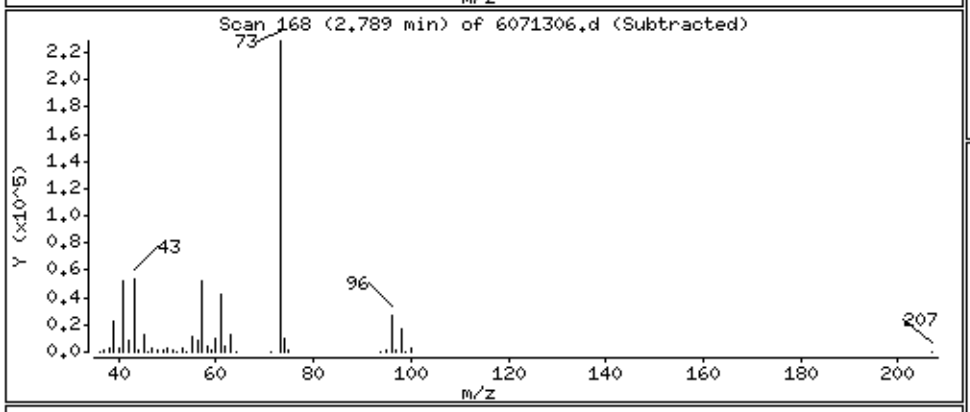
Column phase: RTx-624

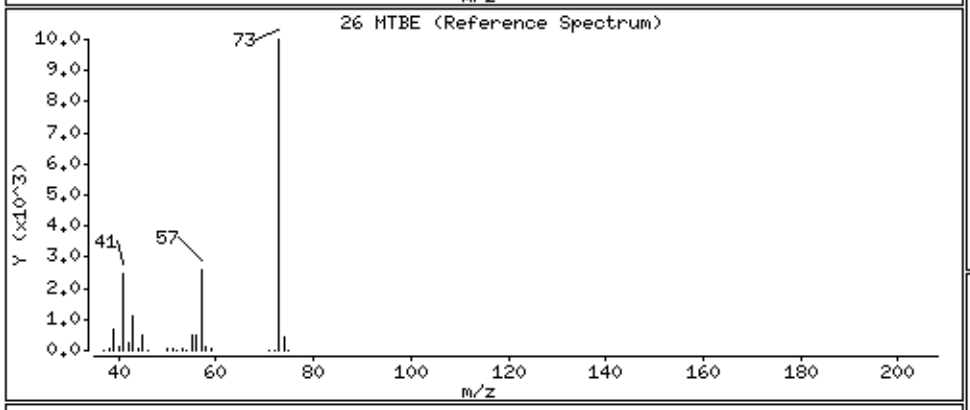
Column diameter: 0.53

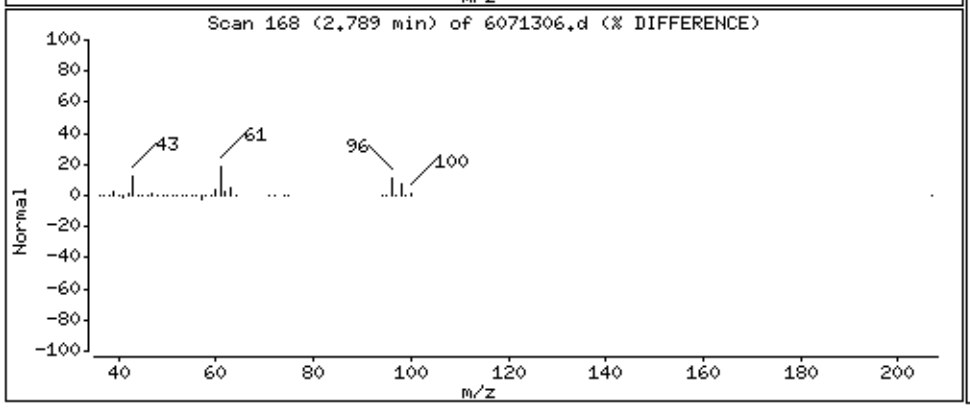
26 MTBE

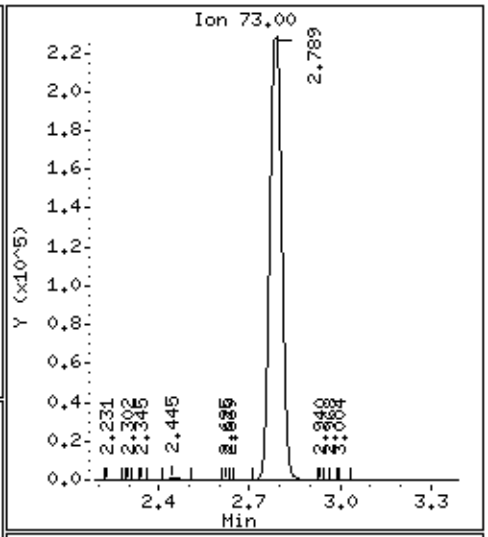
Concentration: 72.000 NG

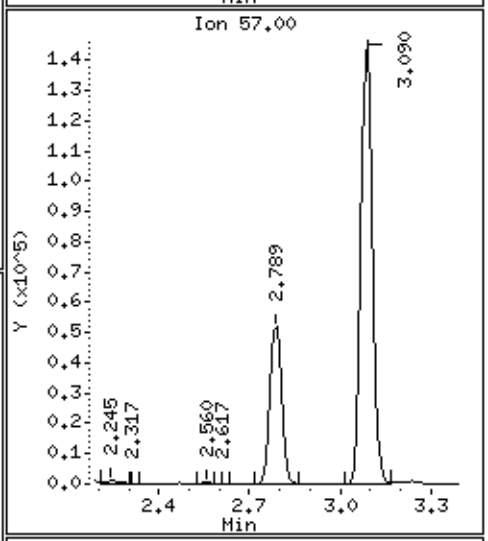


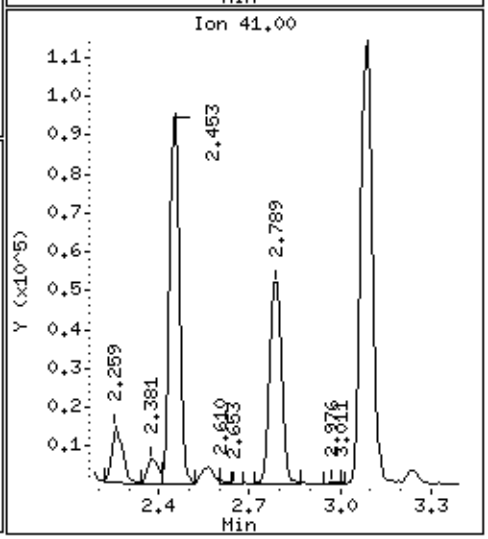












Data File: /chem/msd6.i/13jul16.b/6071306.d

Date : 13-JUL-2016 18:47

Client ID: LCS

Instrument: msd6.i

Sample Info: ;VI VOC+PAH ICV/LCS;LCS

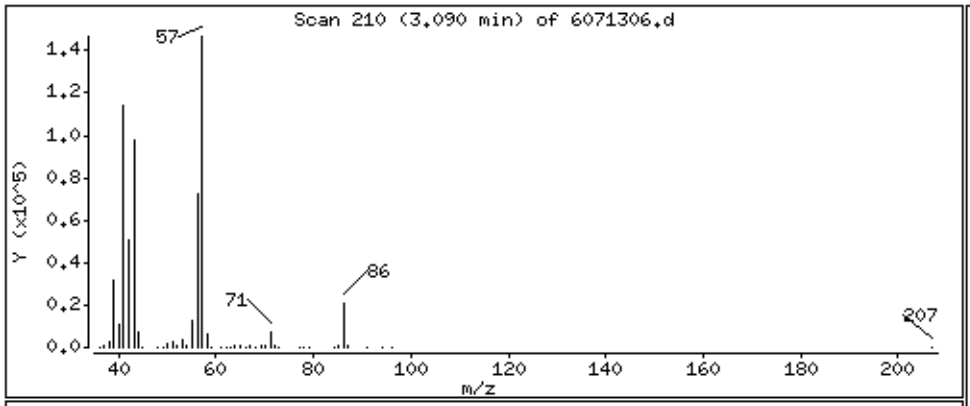
Operator: CT

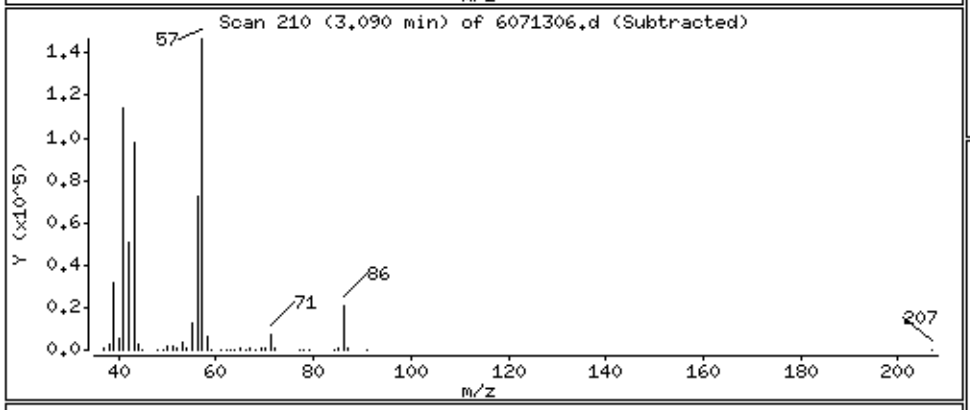
Column phase: RTx-624

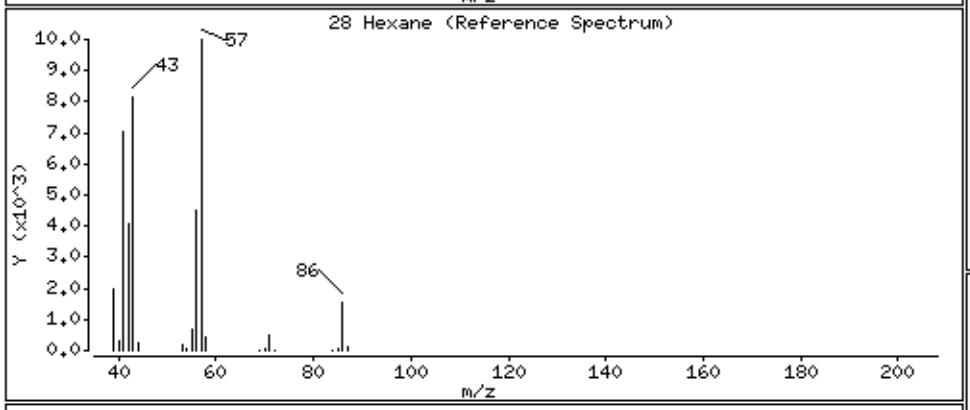
Column diameter: 0.53

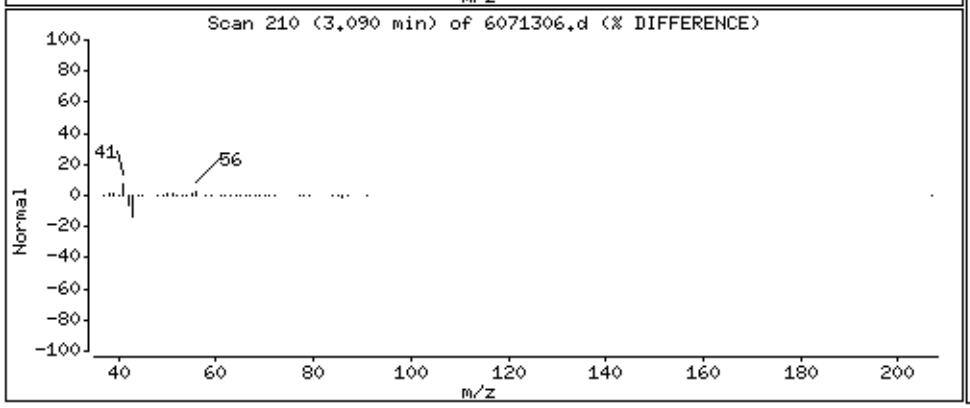
28 Hexane

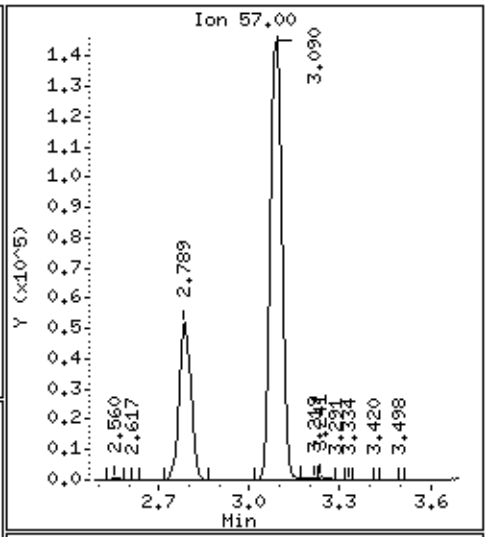
Concentration: 64.385 NG

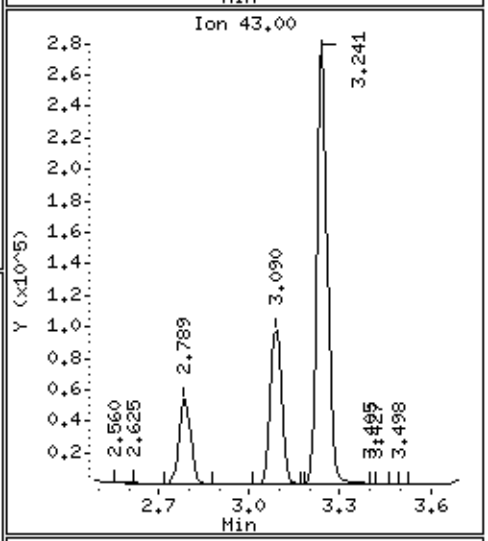


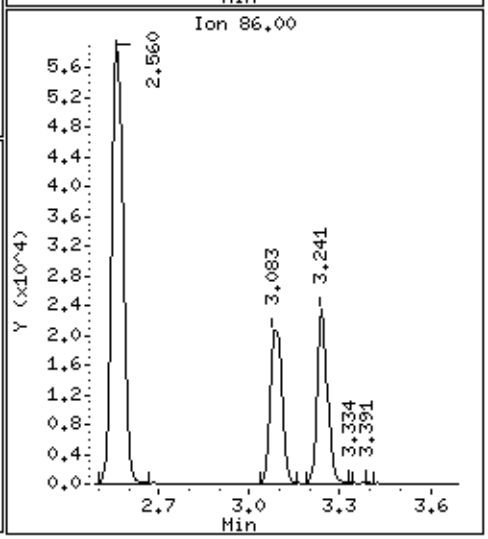












Data File: /chem/msd6.i/13jul16.b/6071306.d

Date : 13-JUL-2016 18:47

Client ID: LCS

Instrument: msd6.i

Sample Info: ;VI VOC+PAH ICV/LCS;LCS

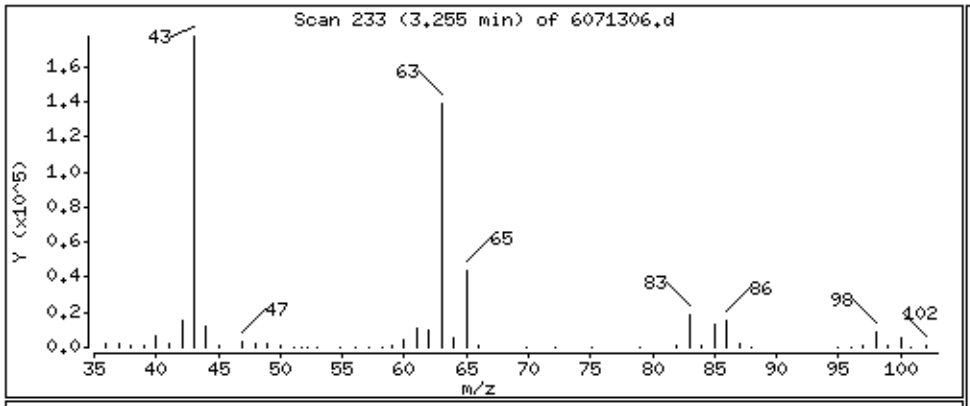
Operator: CT

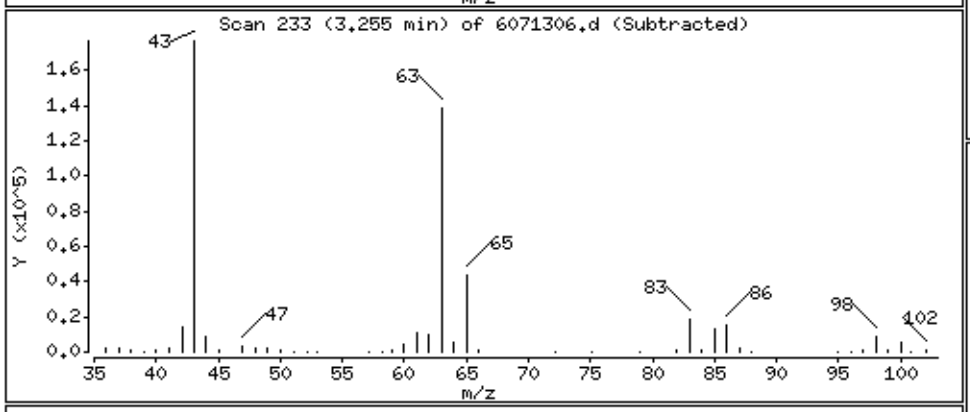
Column phase: RTx-624

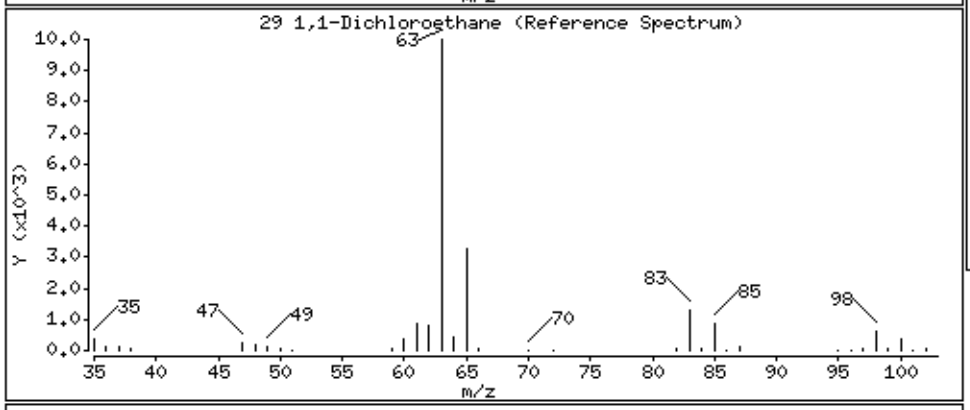
Column diameter: 0.53

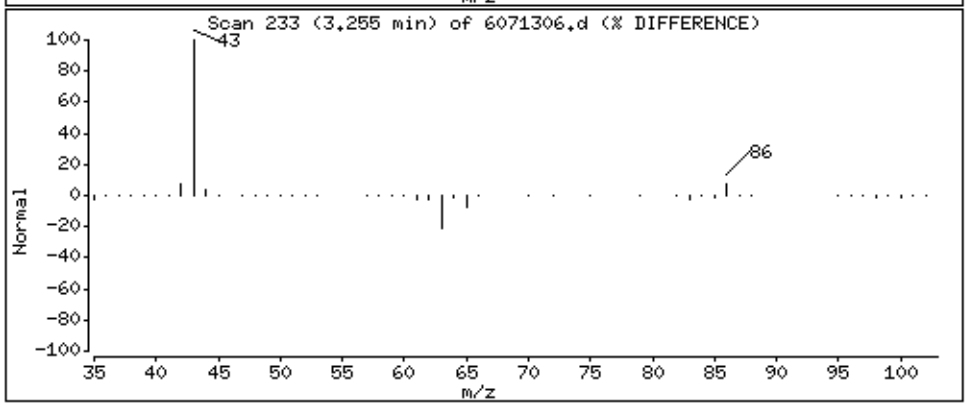
29 1,1-Dichloroethane

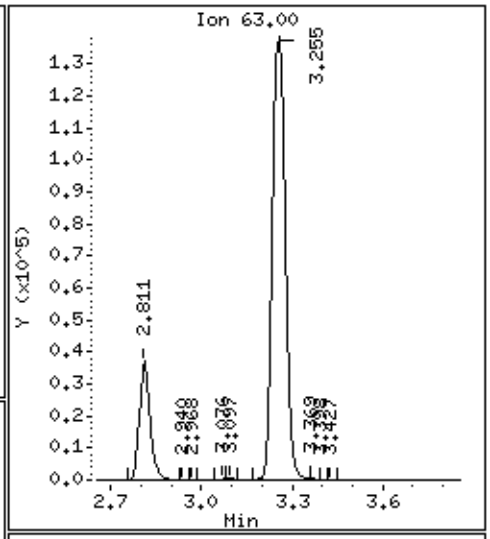
Concentration: 78.658 NG

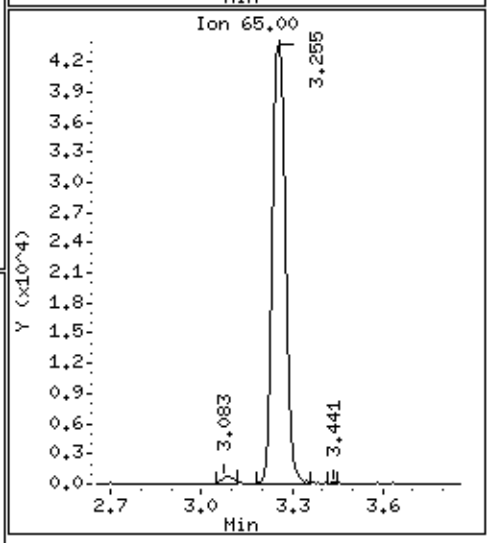












Data File: /chem/msd6.i/13jul16.b/6071306.d

Date : 13-JUL-2016 18:47

Client ID: LCS

Instrument: msd6.i

Sample Info: ;VI VOC+PAH ICV/LCS;LCS

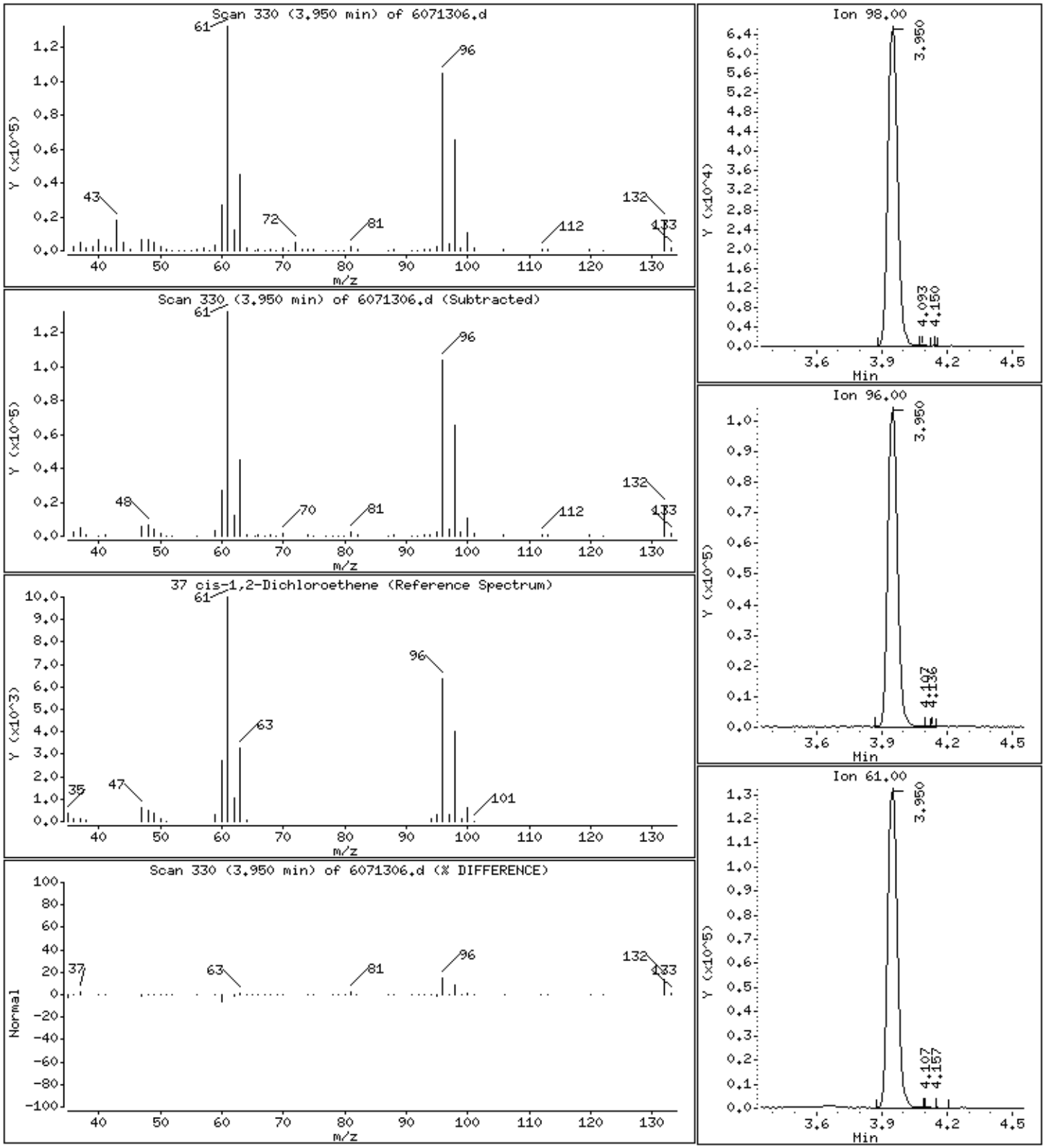
Operator: CT

Column phase: RTx-624

Column diameter: 0.53

37 cis-1,2-Dichloroethene

Concentration: 93.202 NG



Data File: /chem/msd6.i/13jul16.b/6071306.d

Date : 13-JUL-2016 18:47

Client ID: LCS

Instrument: msd6.i

Sample Info: ;VI VOC+PAH ICV/LCS;LCS

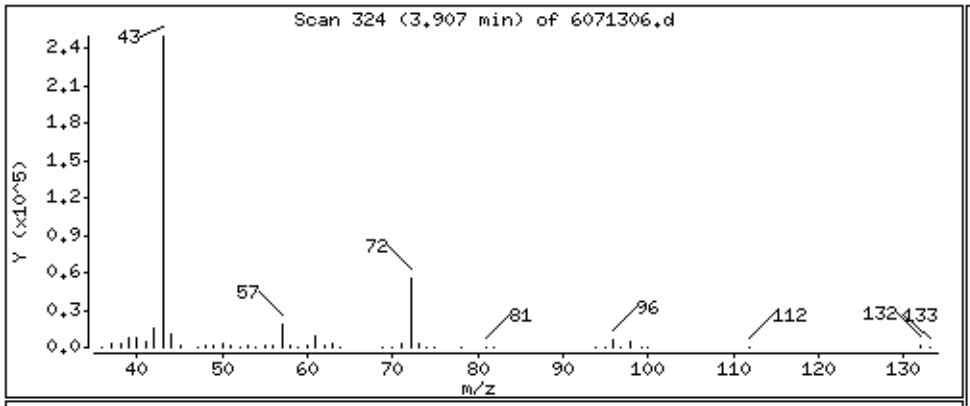
Operator: CT

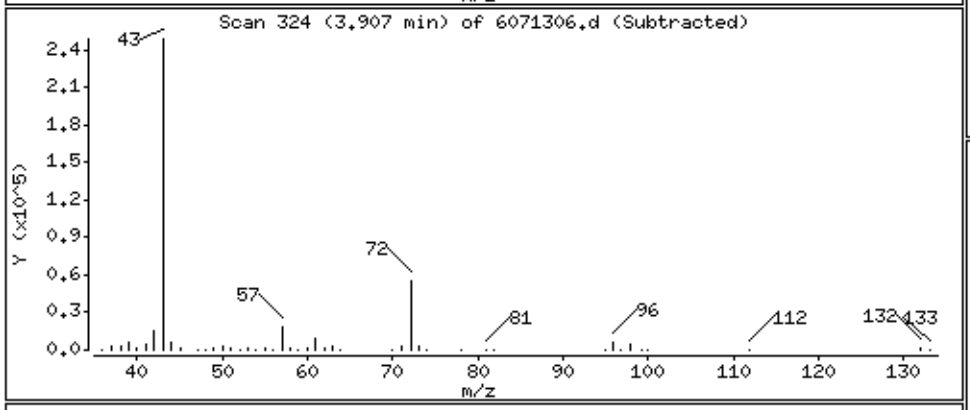
Column phase: RTx-624

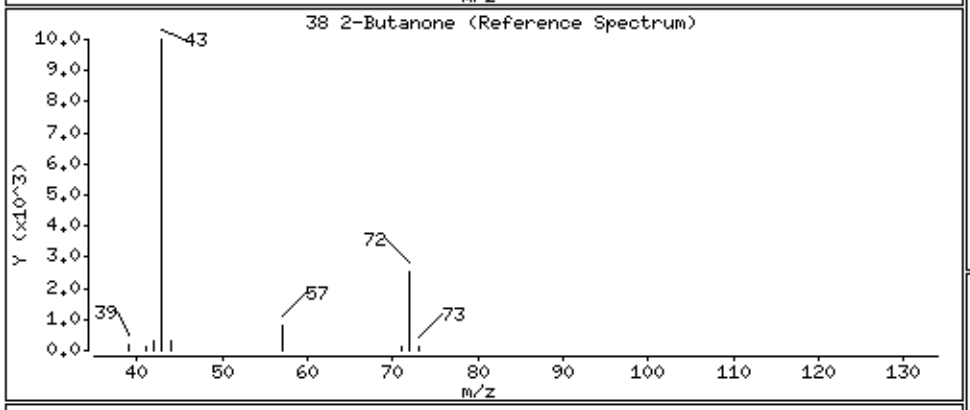
Column diameter: 0.53

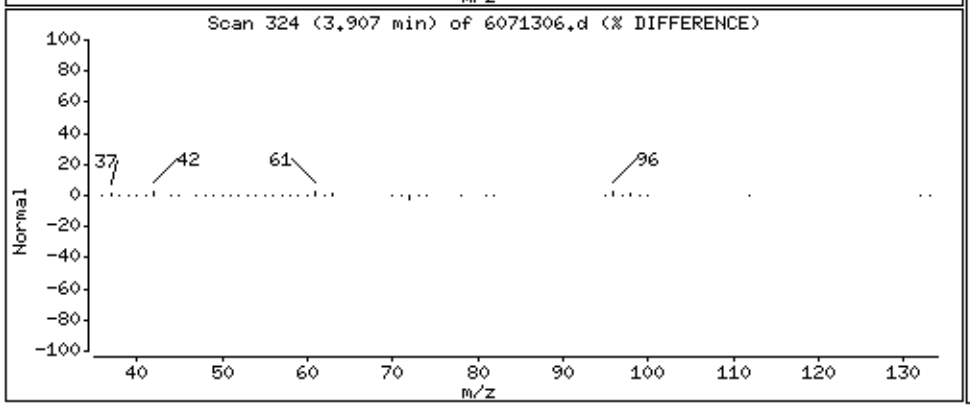
38 2-Butanone

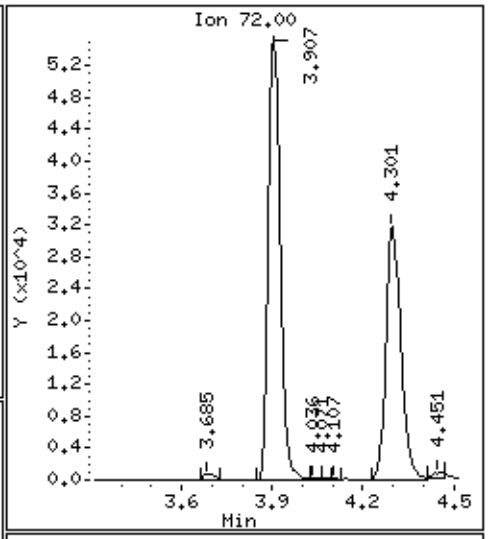
Concentration: 64.644 NG

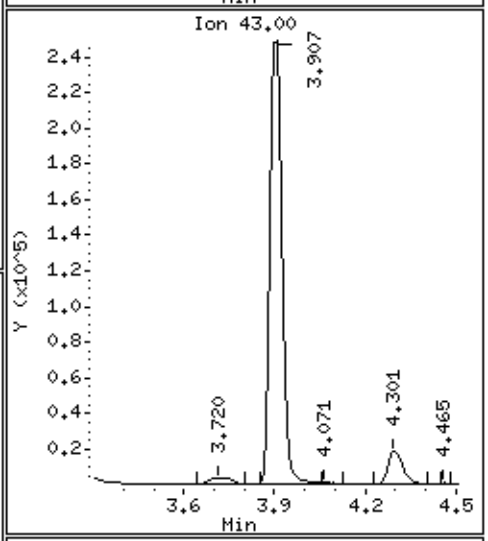


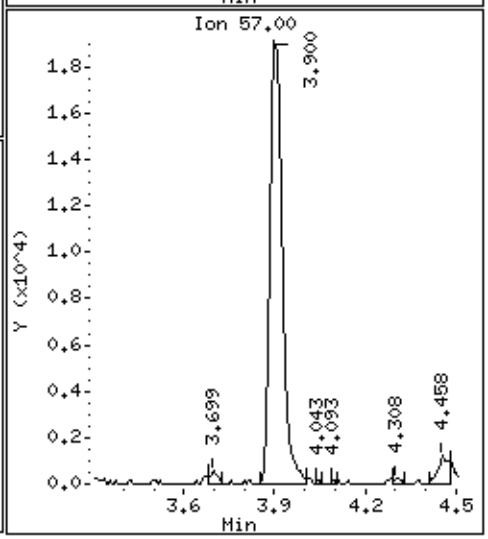












Data File: /chem/msd6.i/13jul16.b/6071306.d

Date : 13-JUL-2016 18:47

Client ID: LCS

Instrument: msd6.i

Sample Info: ;VI VOC+PAH ICV/LCS;LCS

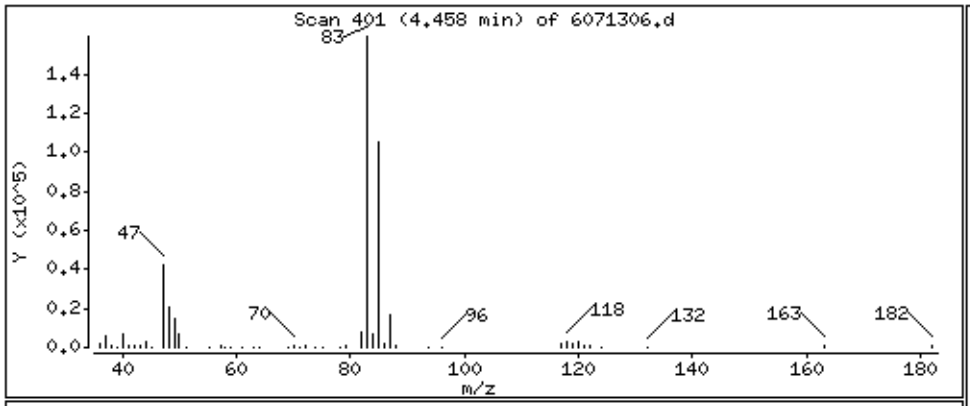
Operator: CT

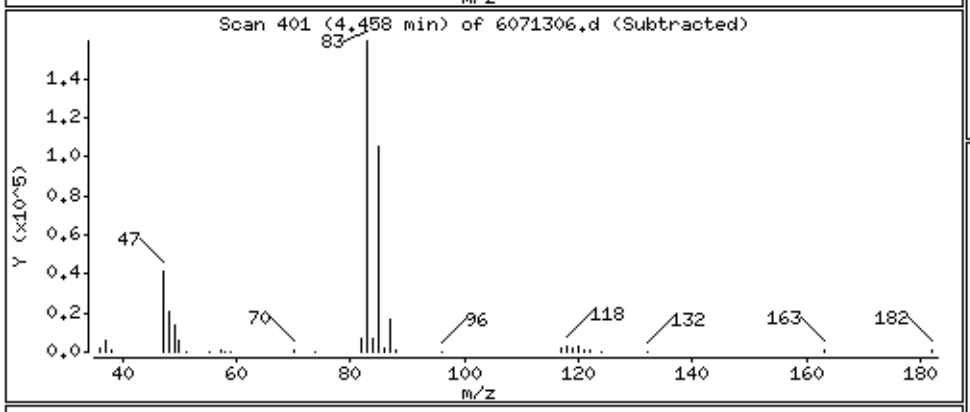
Column phase: RTx-624

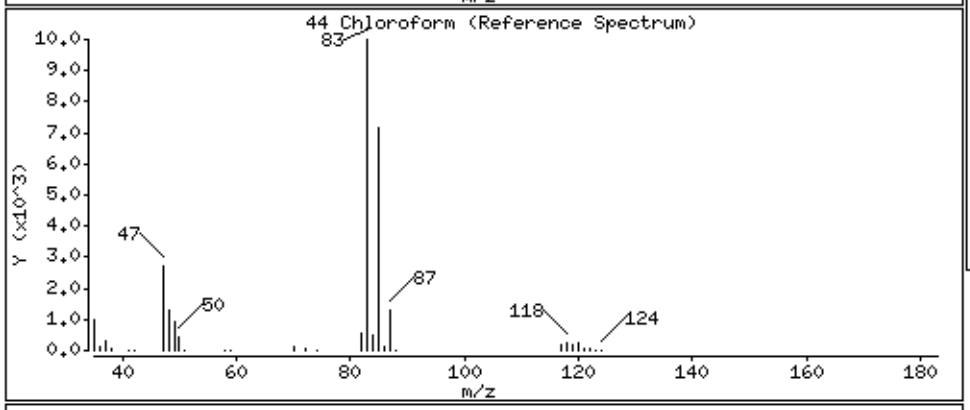
Column diameter: 0.53

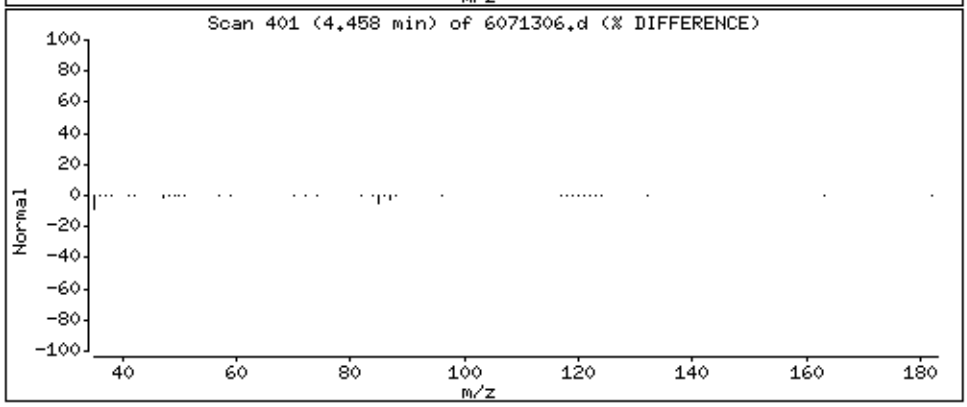
44 Chloroform

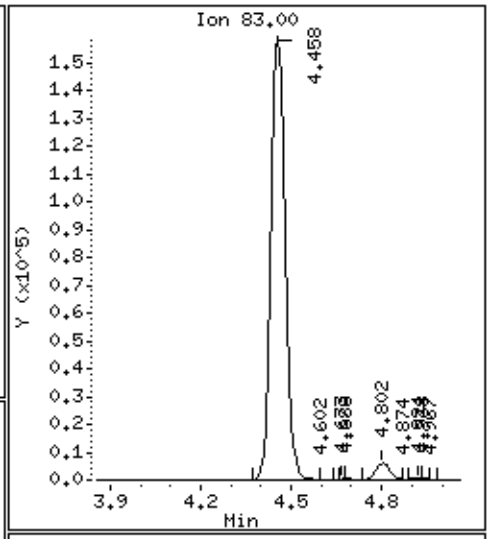
Concentration: 101.34 NG

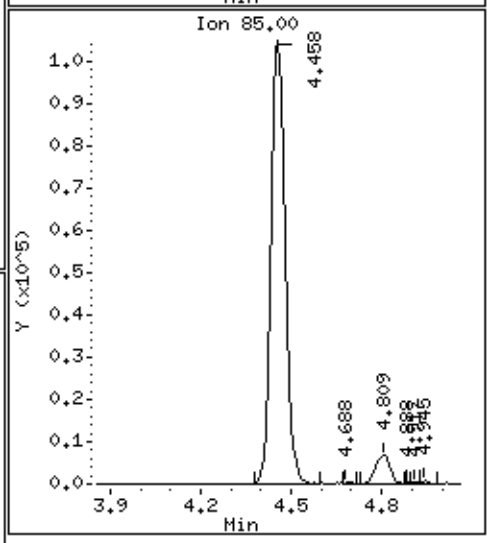












Data File: /chem/msd6.i/13jul16.b/6071306.d

Date : 13-JUL-2016 18:47

Client ID: LCS

Instrument: msd6.i

Sample Info: ;VI VOC+PAH ICV/LCS;LCS

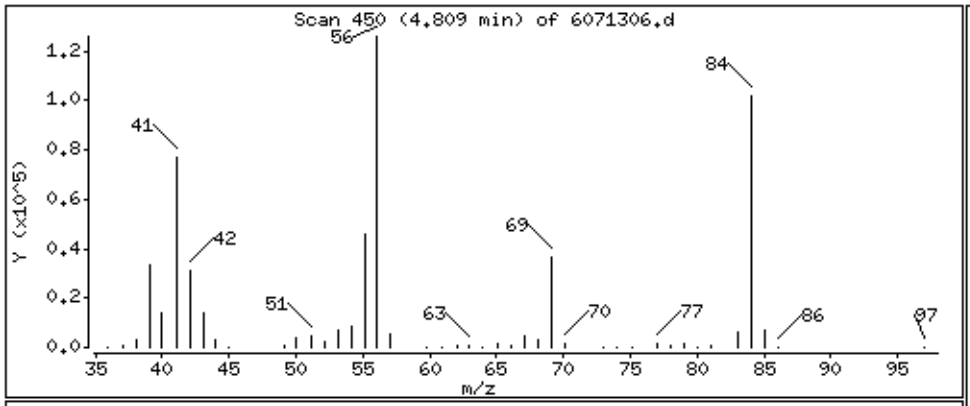
Operator: CT

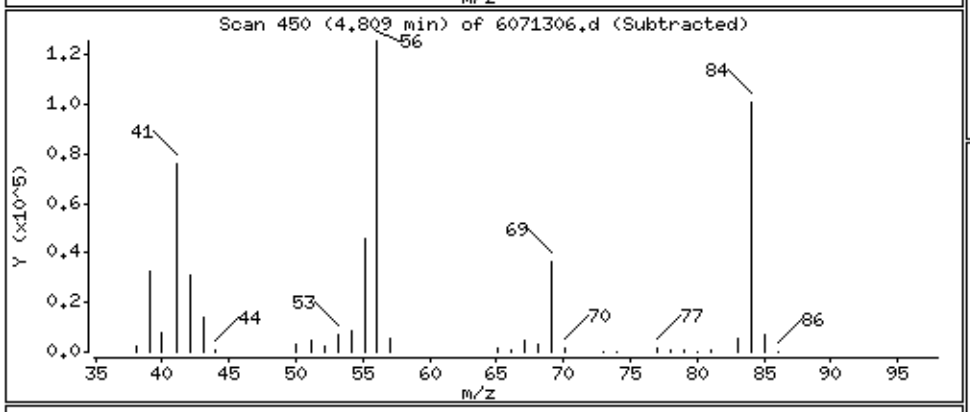
Column phase: RTx-624

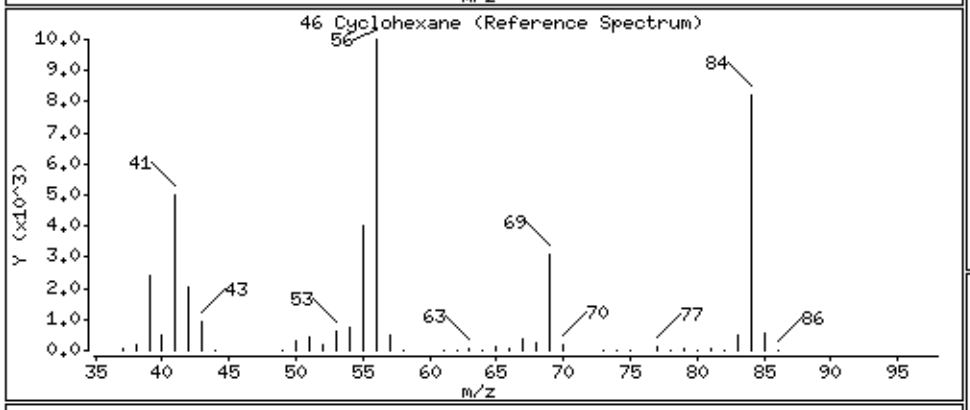
Column diameter: 0.53

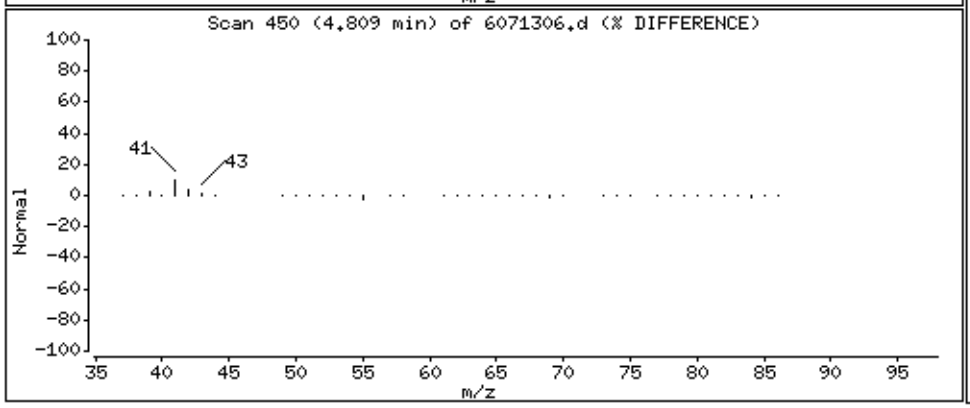
46 Cyclohexane

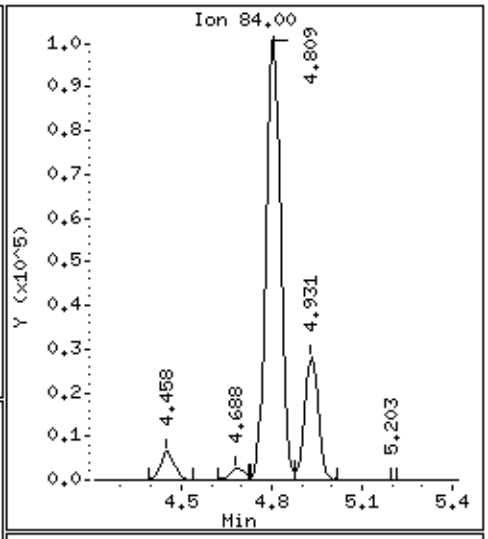
Concentration: 72.662 NG

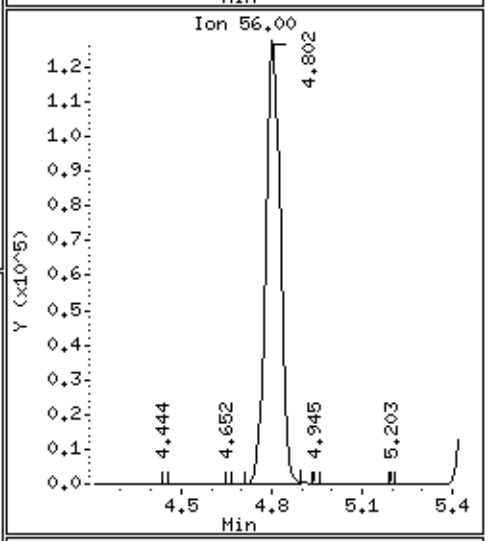


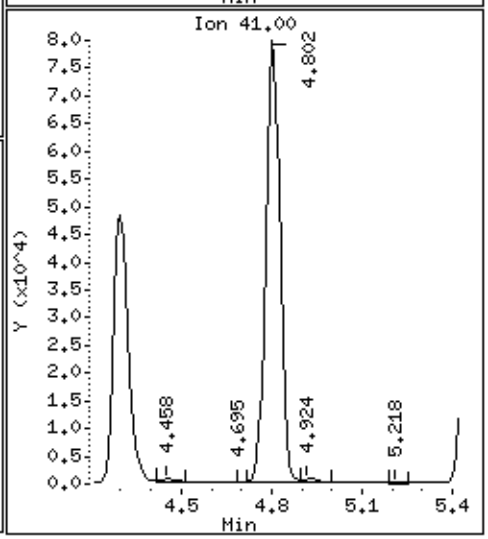












Data File: /chem/msd6.i/13jul16.b/6071306.d

Date : 13-JUL-2016 18:47

Client ID: LCS

Instrument: msd6.i

Sample Info: ;VI VOC+PAH ICV/LCS;LCS

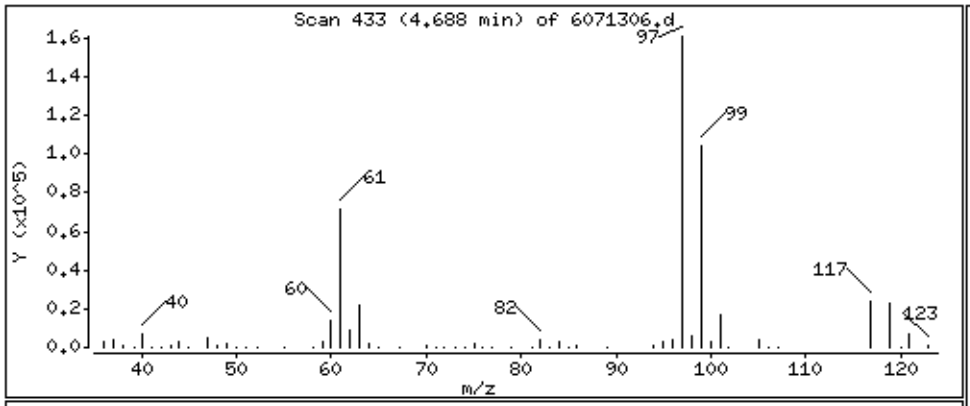
Operator: CT

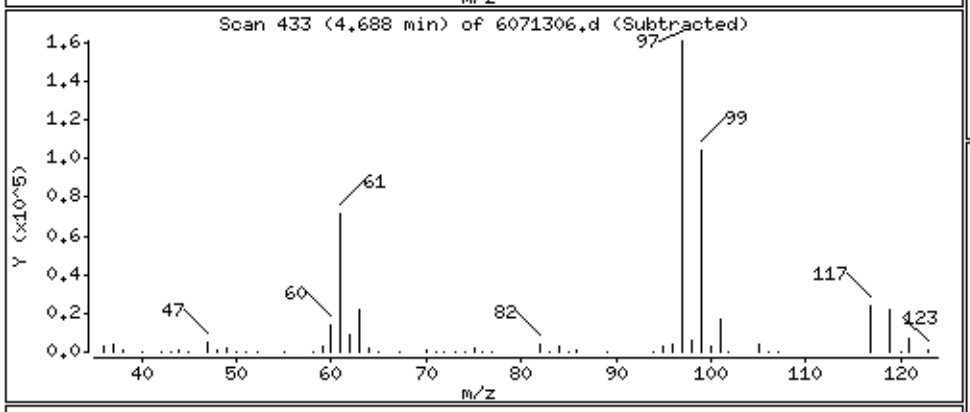
Column phase: RTx-624

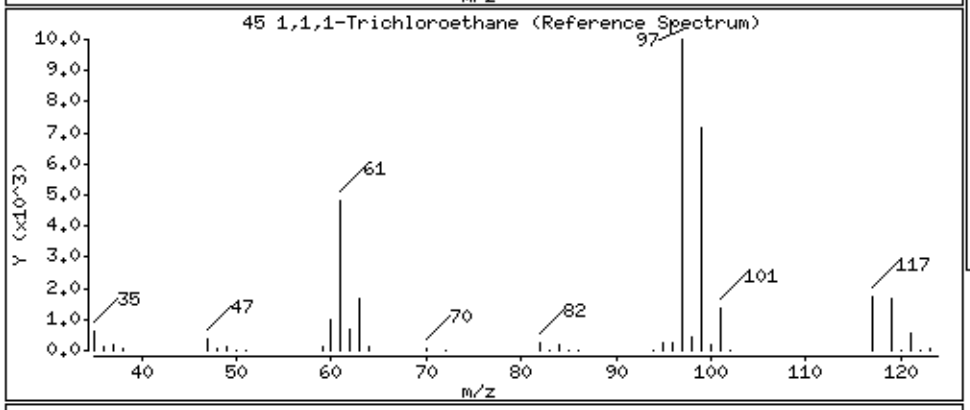
Column diameter: 0.53

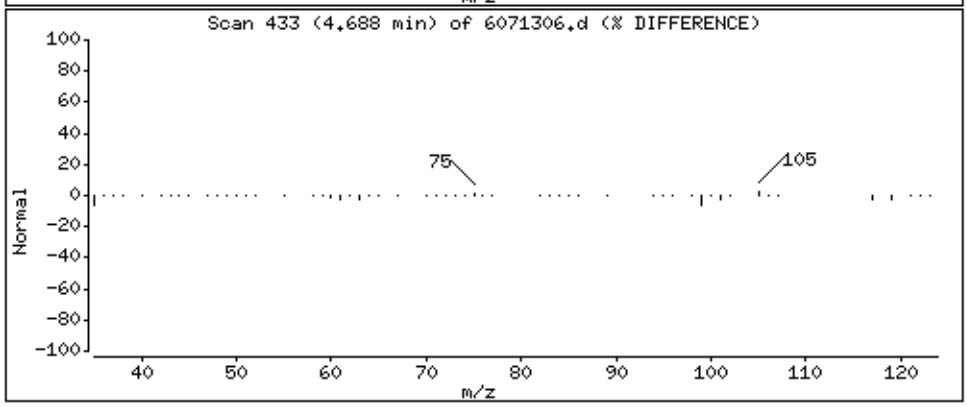
45 1,1,1-Trichloroethane

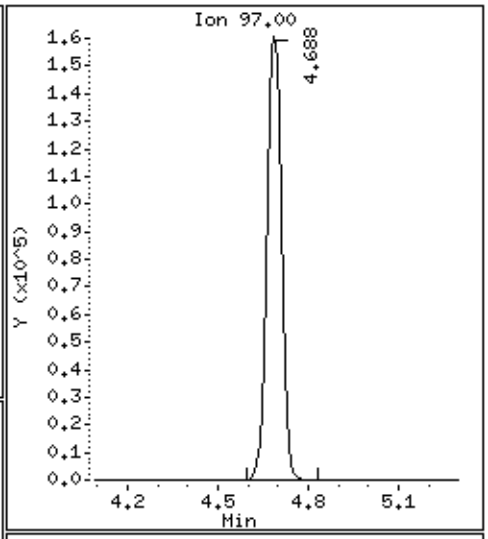
Concentration: 120.43 NG

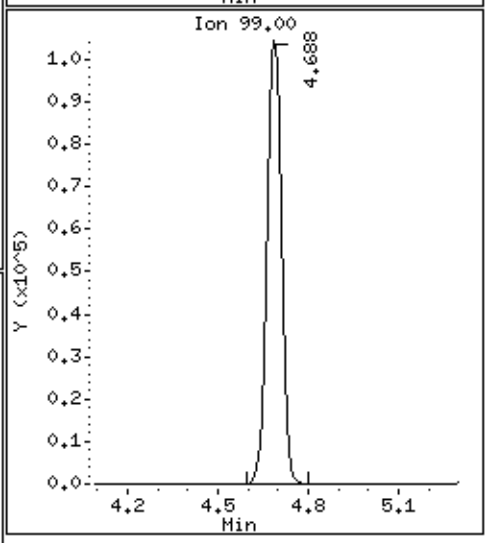












Data File: /chem/msd6.i/13jul16.b/6071306.d

Date : 13-JUL-2016 18:47

Client ID: LCS

Instrument: msd6.i

Sample Info: ;VI VOC+PAH ICV/LCS;LCS

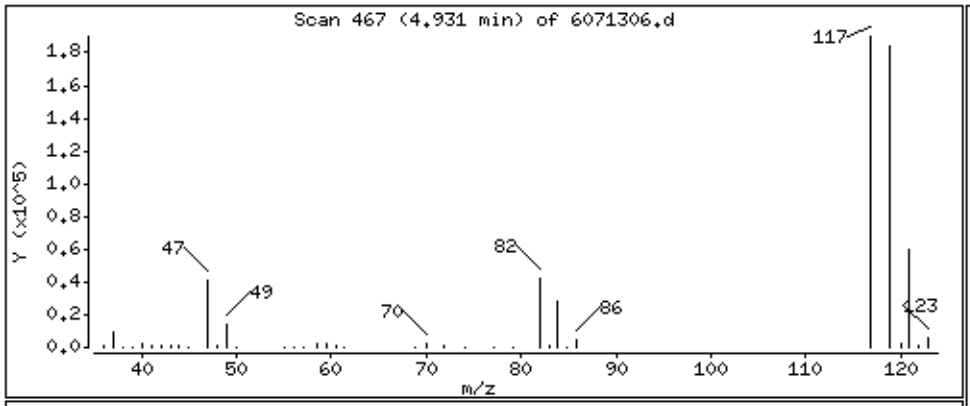
Operator: CT

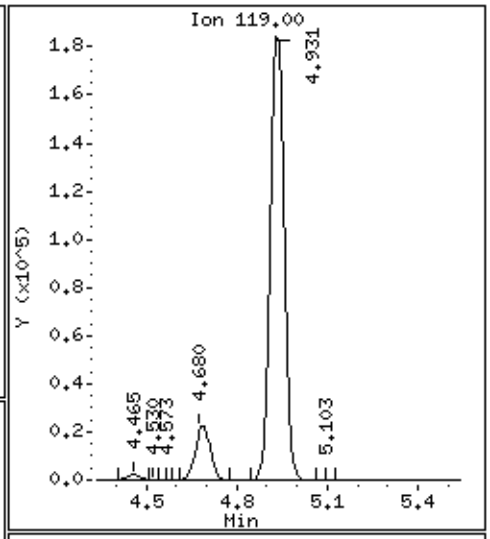
Column phase: RTx-624

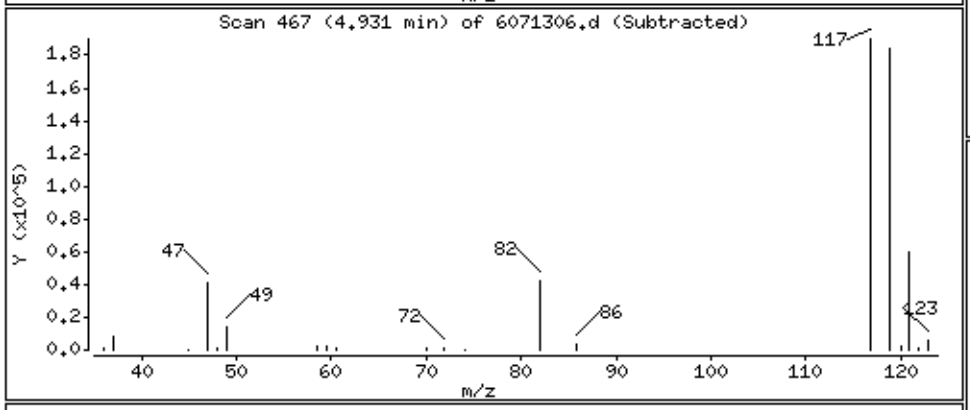
Column diameter: 0.53

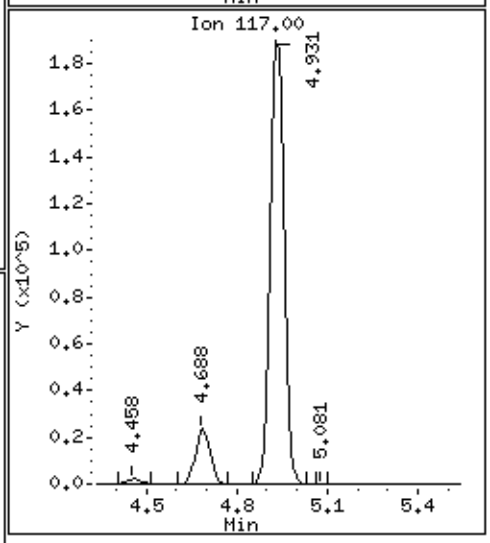
47 Carbon Tetrachloride

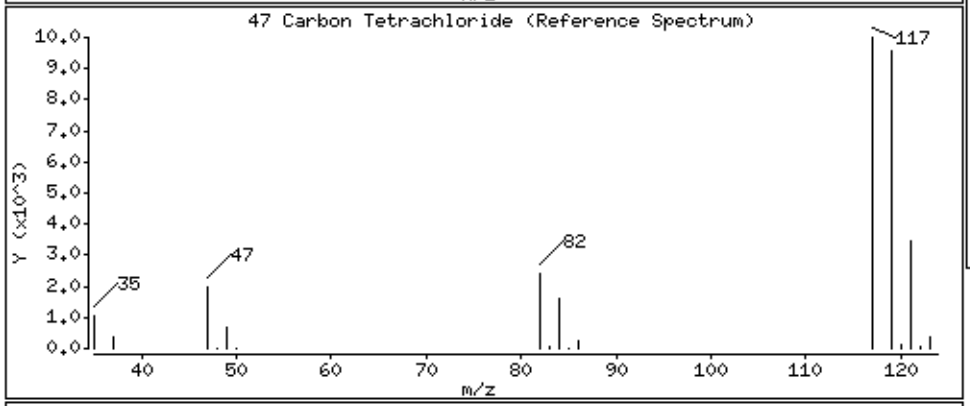
Concentration: 137.28 NG

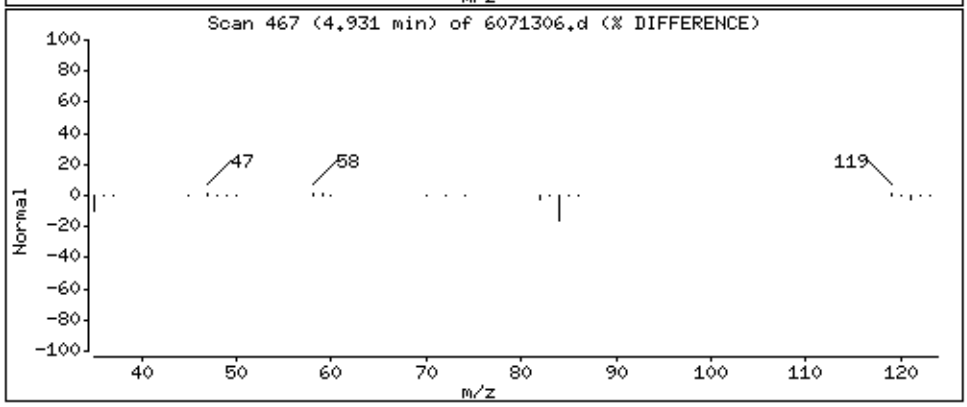












Data File: /chem/msd6.i/13jul16.b/6071306.d

Date : 13-JUL-2016 18:47

Client ID: LCS

Instrument: msd6.i

Sample Info: ;VI VOC+PAH ICV/LCS;LCS

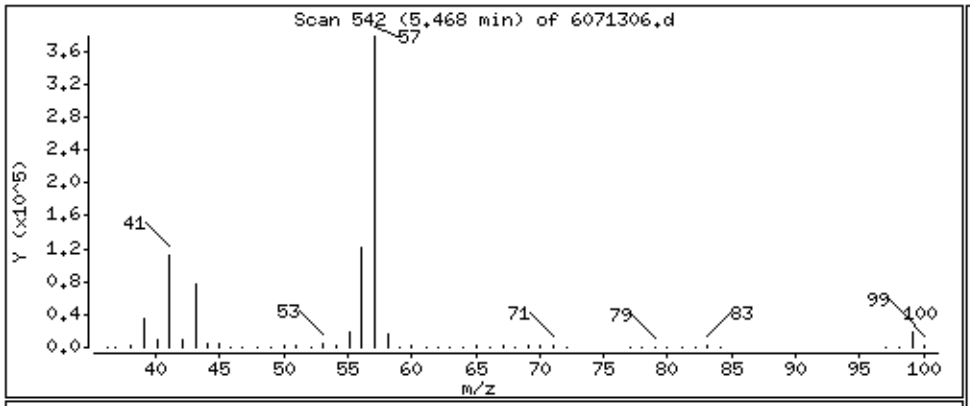
Operator: CT

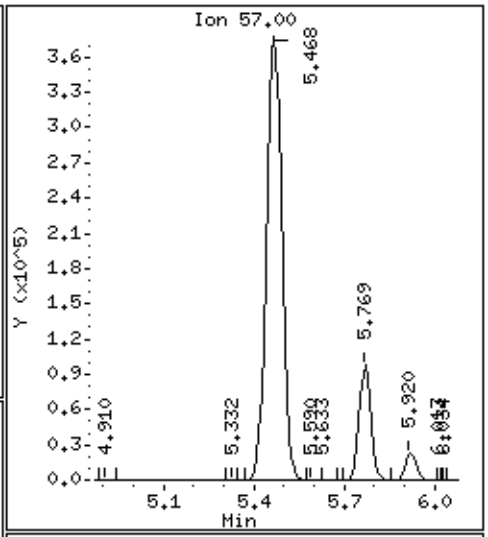
Column phase: RTx-624

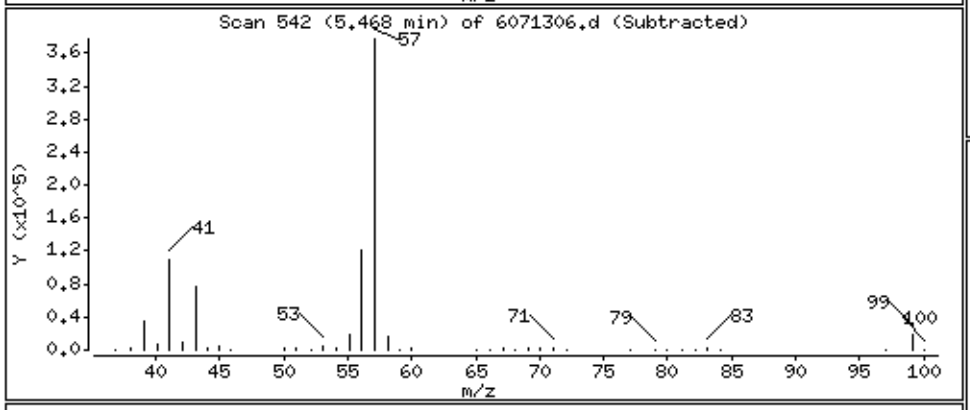
Column diameter: 0.53

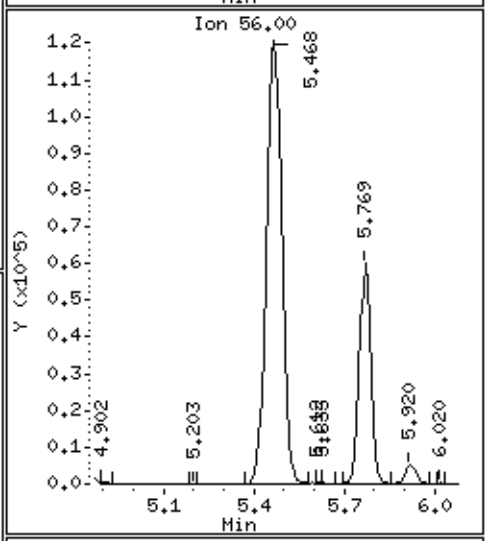
51 2,2,4-Trimethylpentane

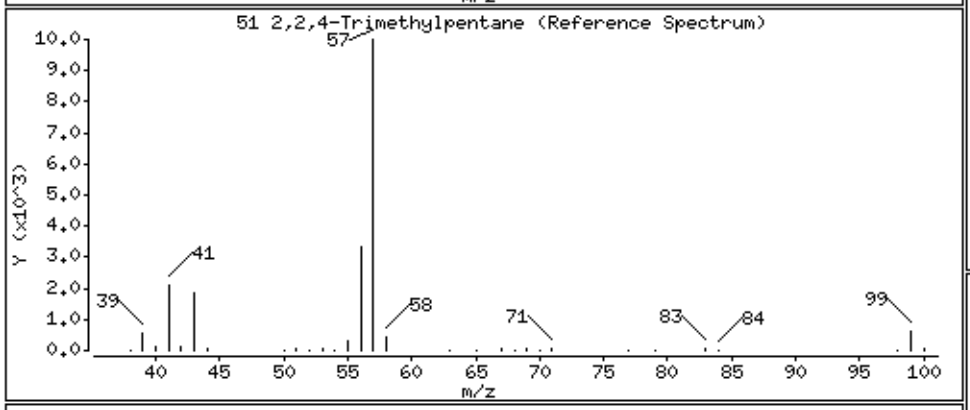
Concentration: 93.537 NG

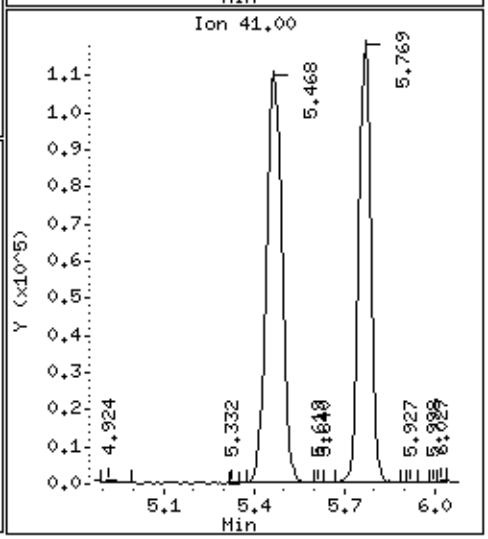


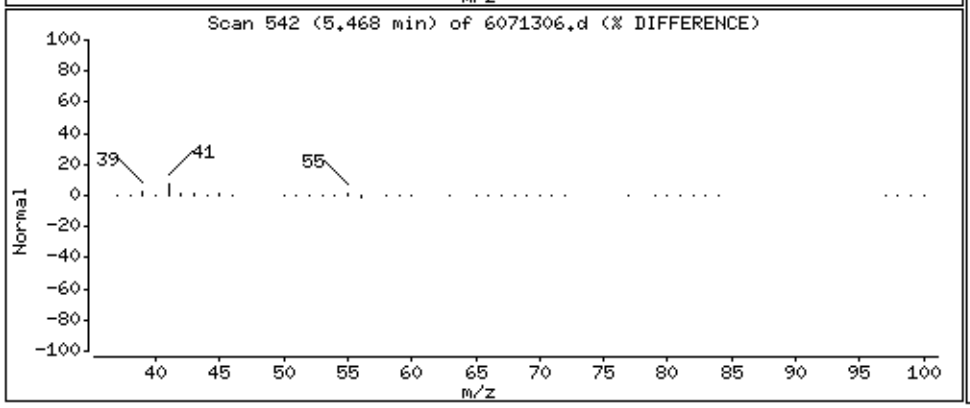












Data File: /chem/msd6.i/13jul16.b/6071306.d

Date : 13-JUL-2016 18:47

Client ID: LCS

Instrument: msd6.i

Sample Info: ;VI VOC+PAH ICV/LCS;LCS

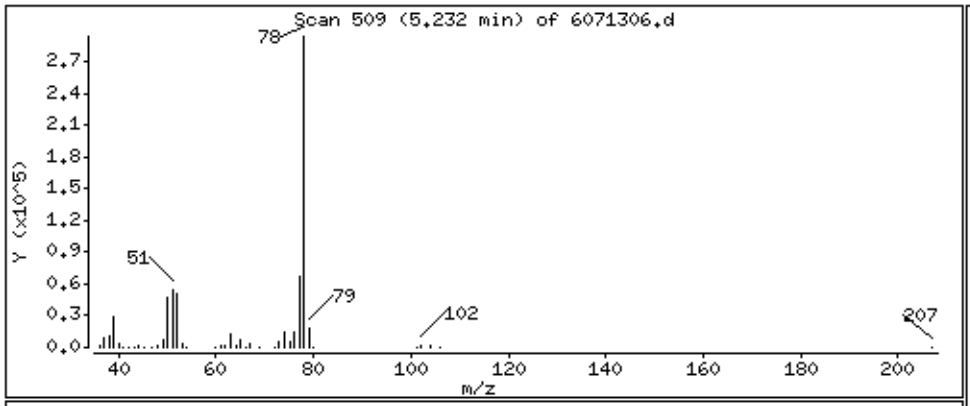
Operator: CT

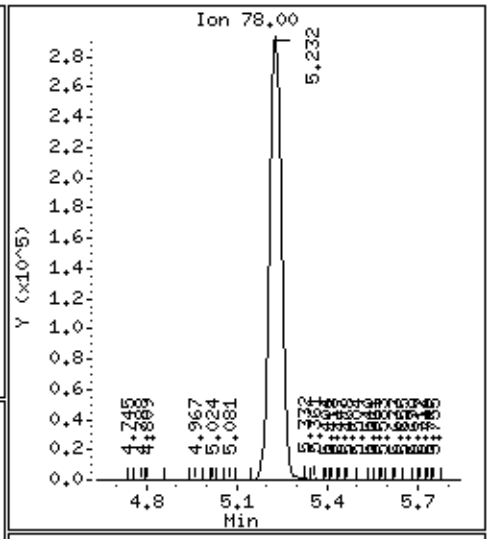
Column phase: RTx-624

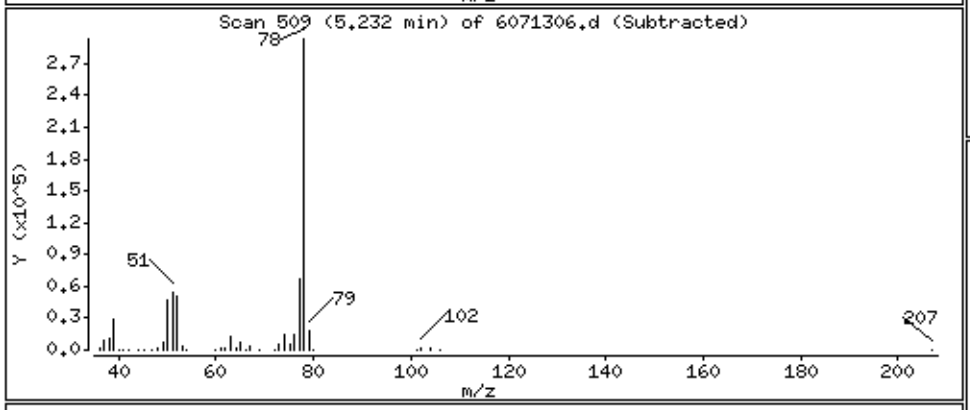
Column diameter: 0.53

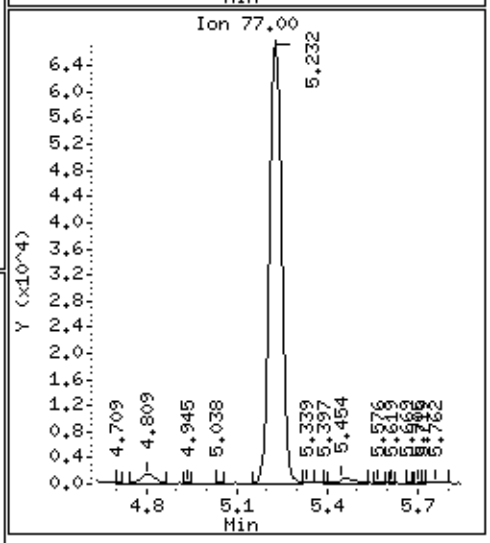
48 Benzene

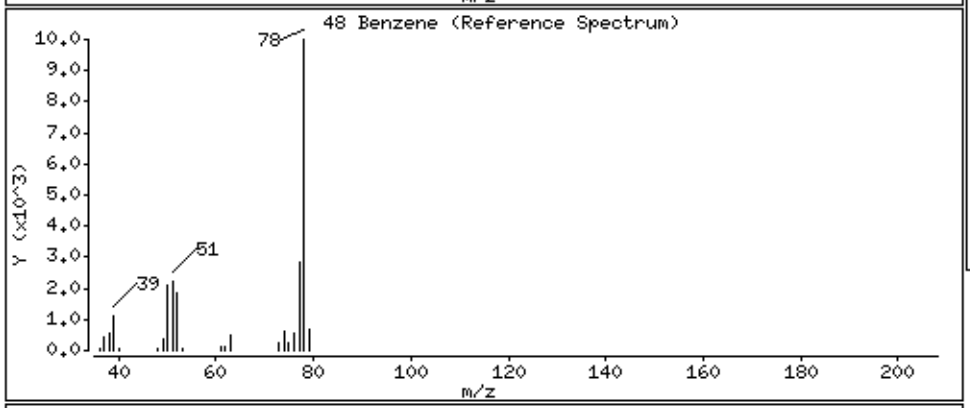
Concentration: 59.344 NG

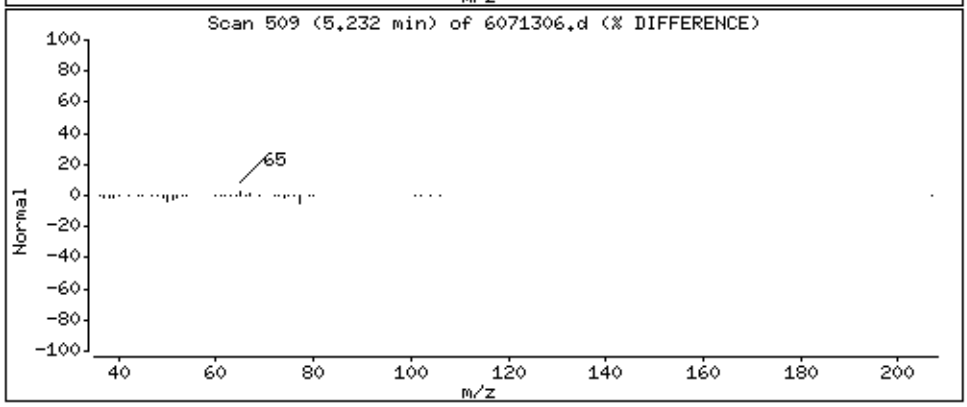












Data File: /chem/msd6.i/13jul16.b/6071306.d

Date : 13-JUL-2016 18:47

Client ID: LCS

Instrument: msd6.i

Sample Info: ;VI VOC+PAH ICV/LCS;LCS

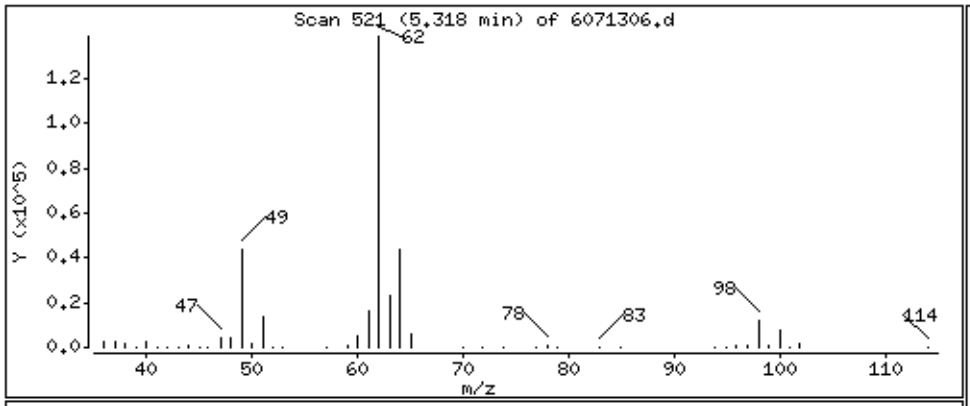
Operator: CT

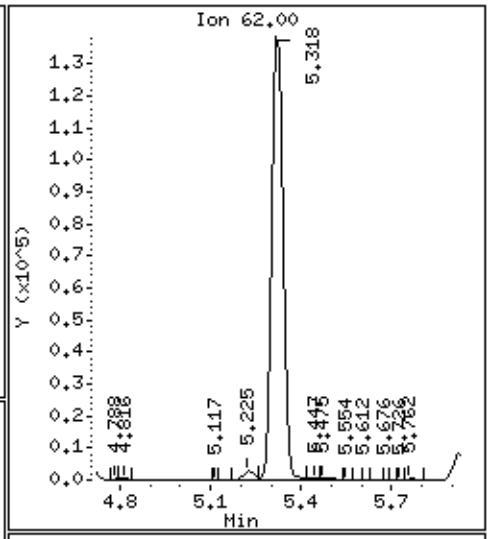
Column phase: RTx-624

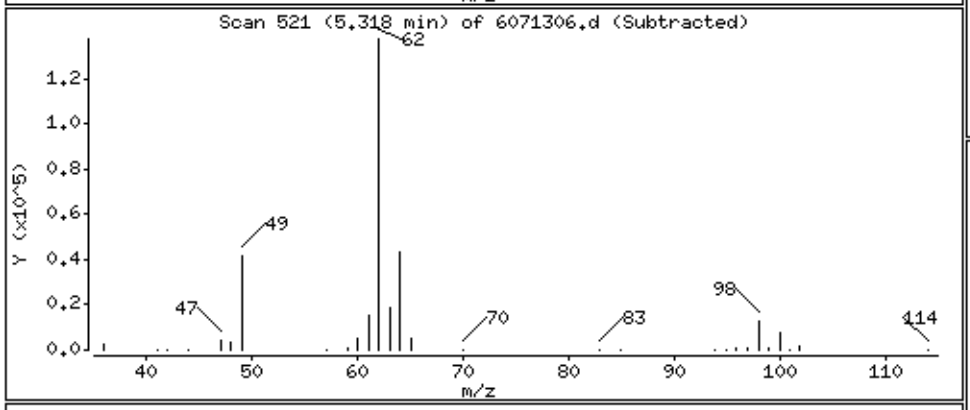
Column diameter: 0.53

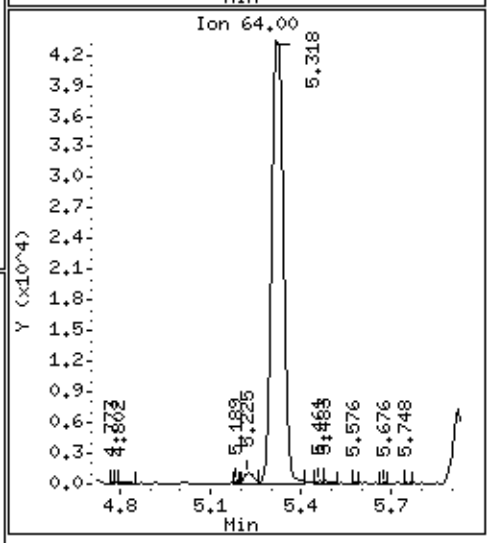
50 1,2-Dichloroethane

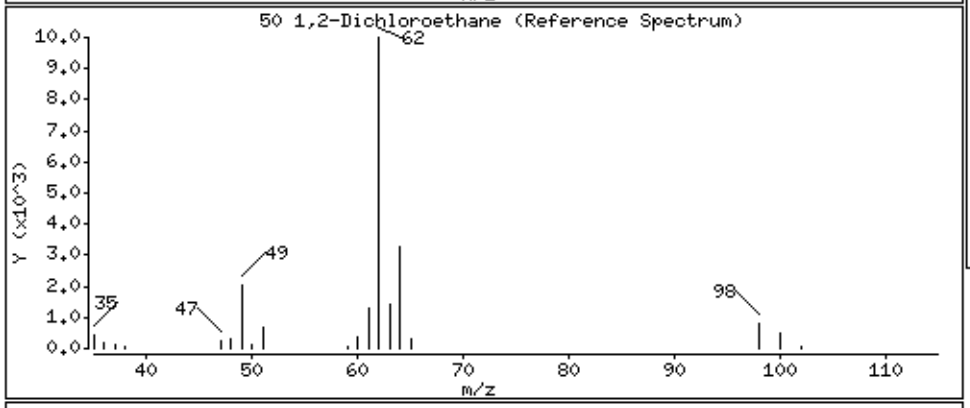
Concentration: 84.262 NG

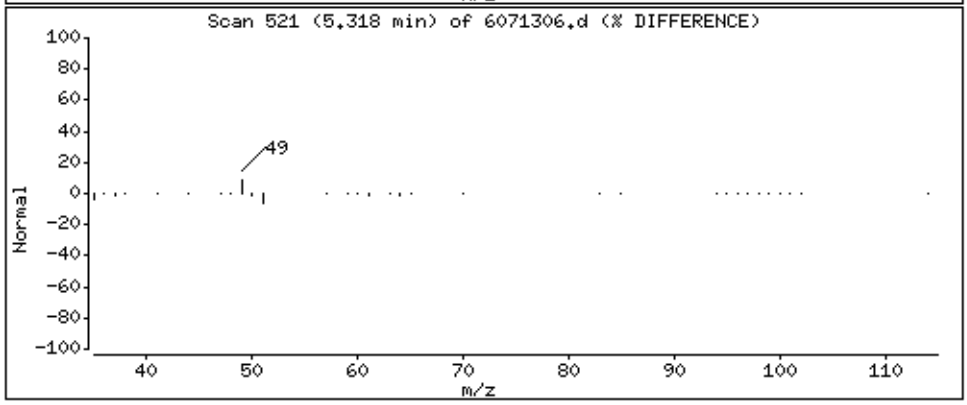












Data File: /chem/msd6.i/13jul16.b/6071306.d

Date : 13-JUL-2016 18:47

Client ID: LCS

Instrument: msd6.i

Sample Info: ;VI VOC+PAH ICV/LCS;LCS

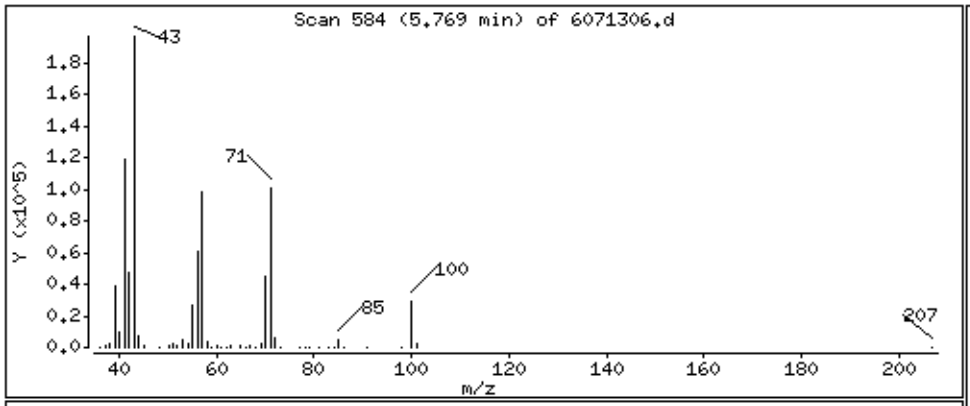
Operator: CT

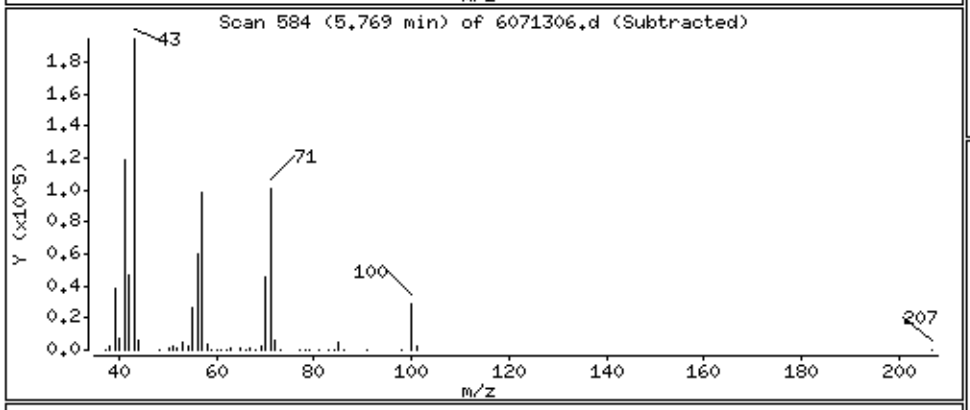
Column phase: RTx-624

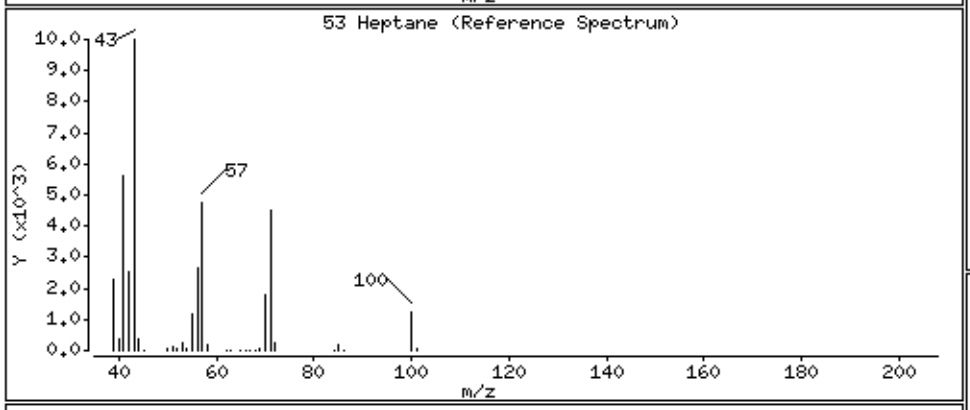
Column diameter: 0.53

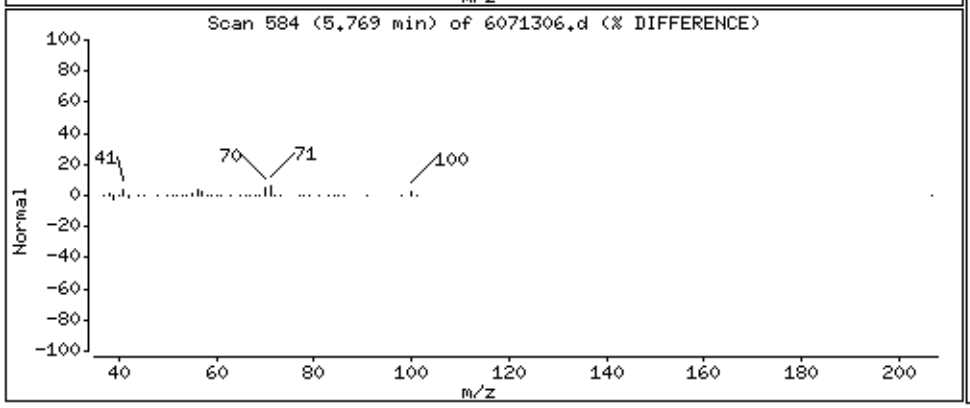
53 Heptane

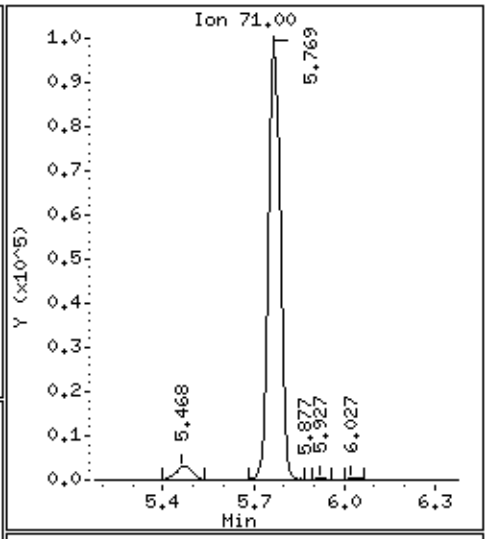
Concentration: 82.000 NG

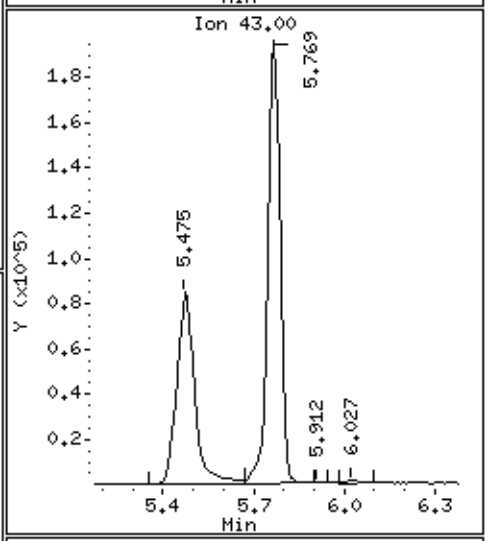


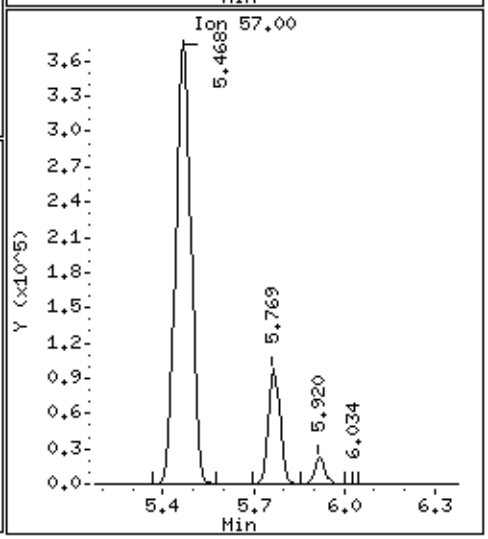












Data File: /chem/msd6.i/13jul16.b/6071306.d

Date : 13-JUL-2016 18:47

Client ID: LCS

Instrument: msd6.i

Sample Info: ;VI VOC+PAH ICV/LCS;LCS

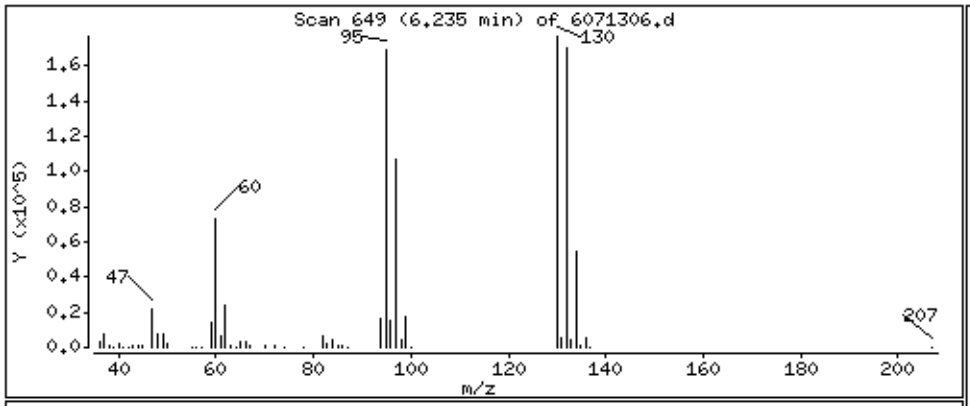
Operator: CT

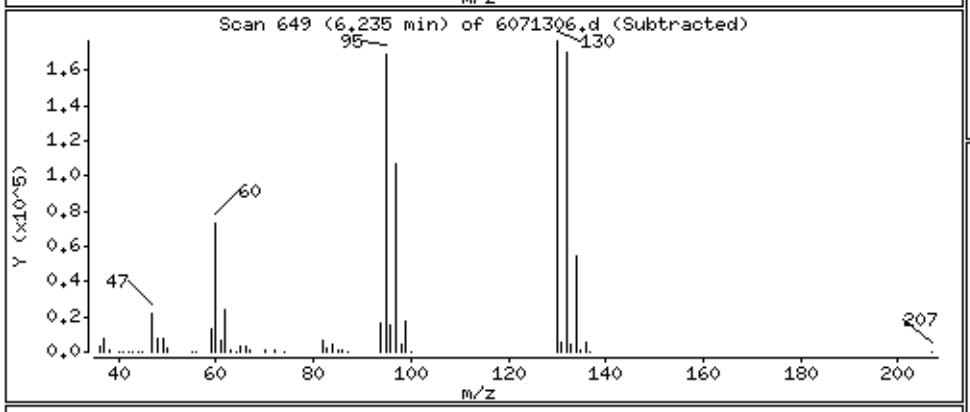
Column phase: RTx-624

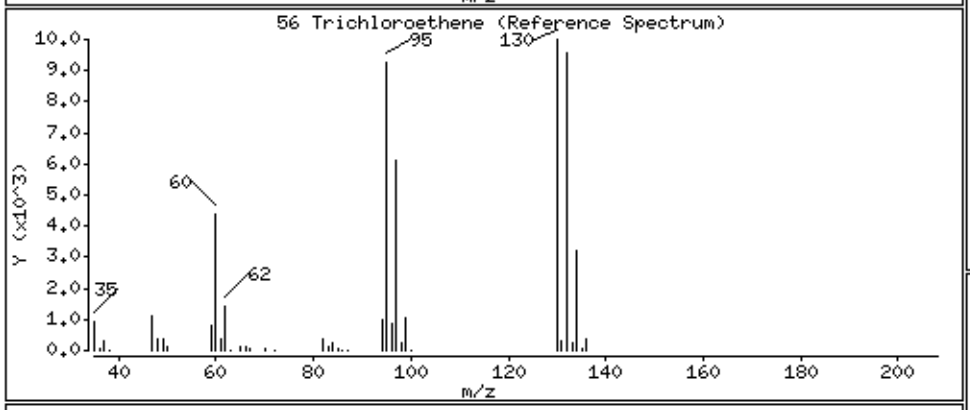
Column diameter: 0.53

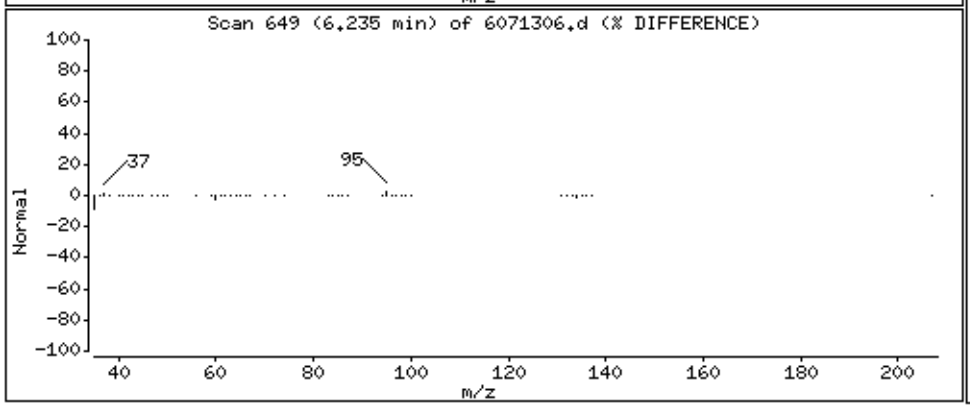
56 Trichloroethene

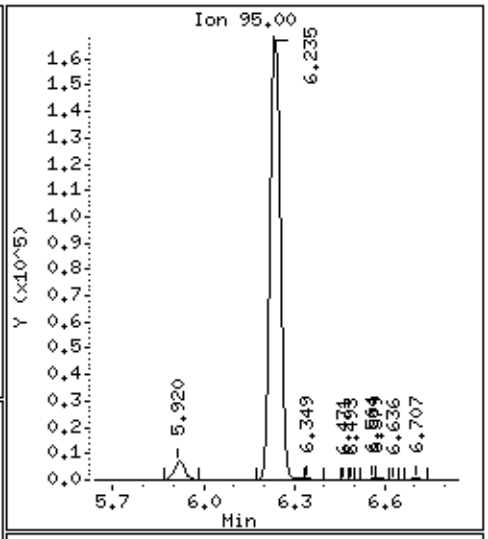
Concentration: 110.54 NG

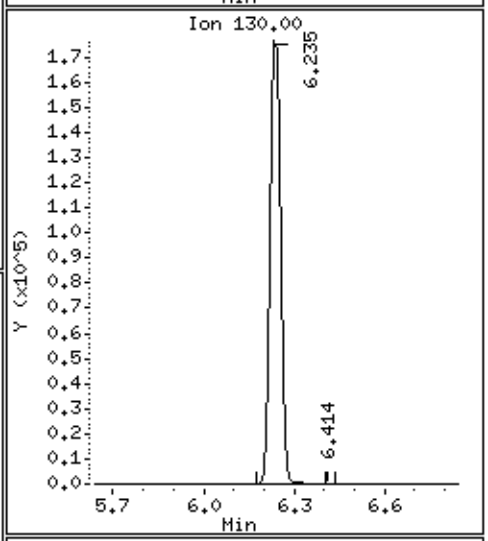


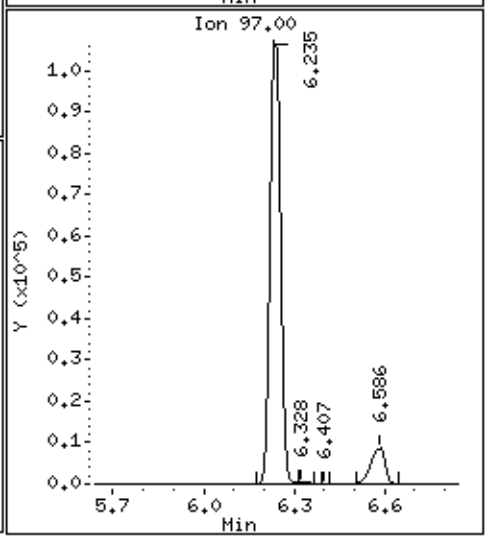












Data File: /chem/msd6.i/13jul16.b/6071306.d

Date : 13-JUL-2016 18:47

Client ID: LCS

Instrument: msd6.i

Sample Info: ;VI VOC+PAH ICV/LCS;LCS

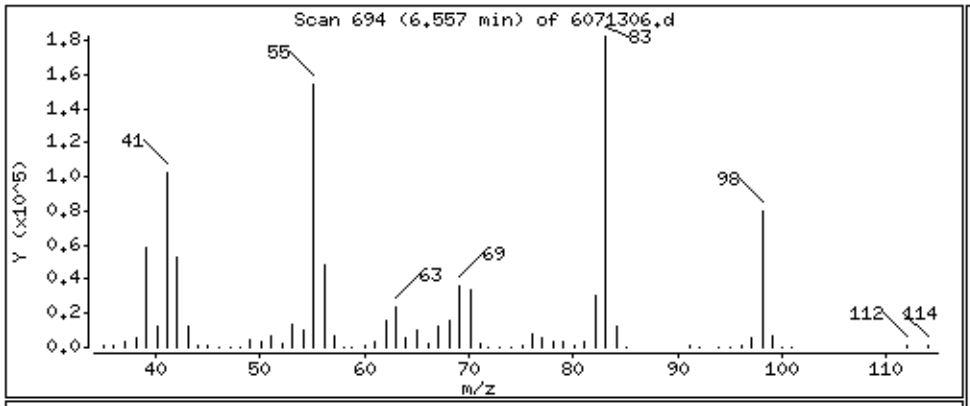
Operator: CT

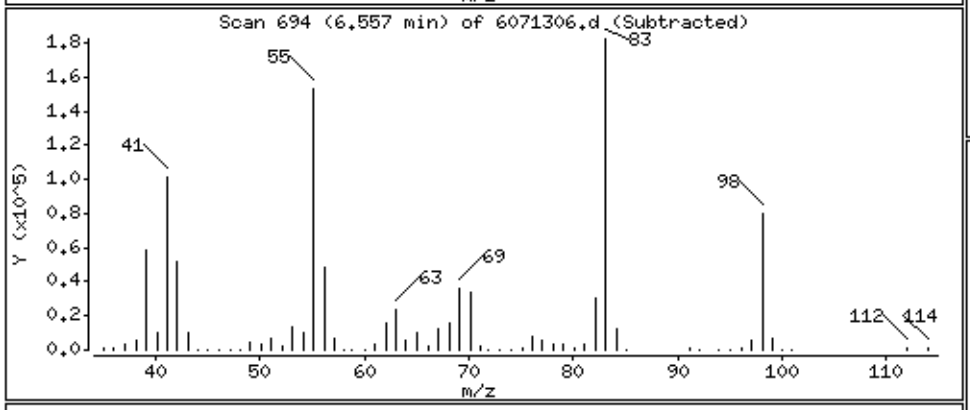
Column phase: RTx-624

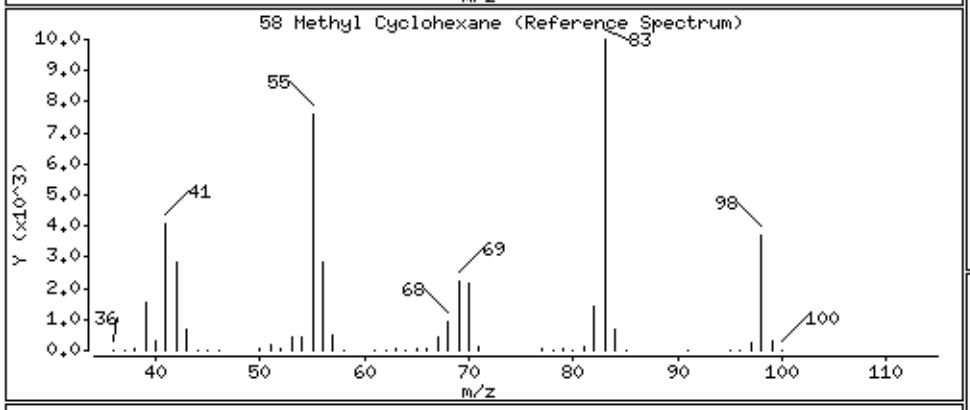
Column diameter: 0.53

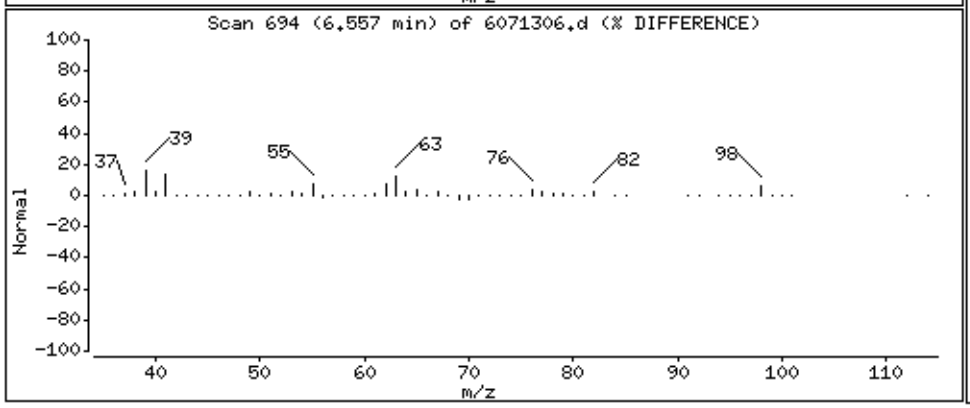
58 Methyl Cyclohexane

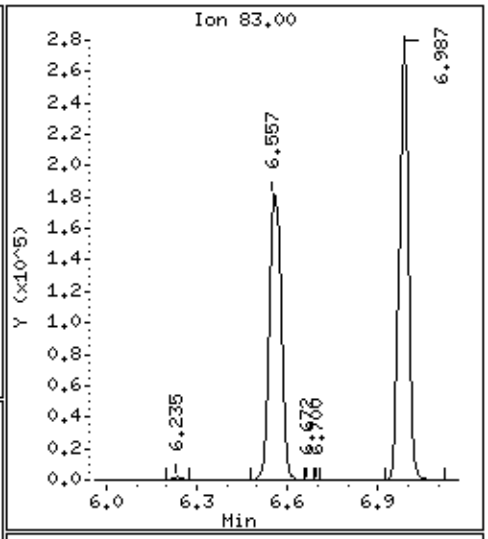
Concentration: 83.490 NG

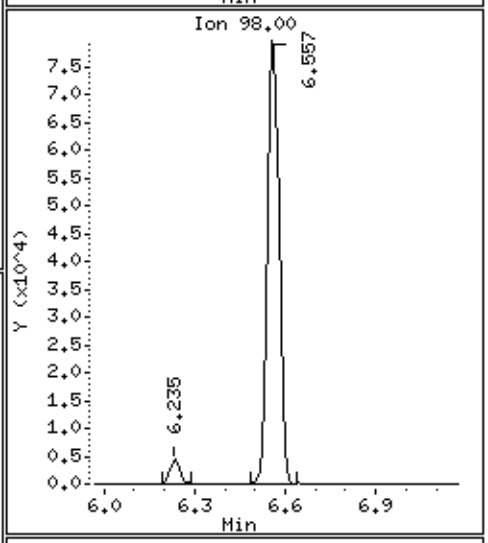


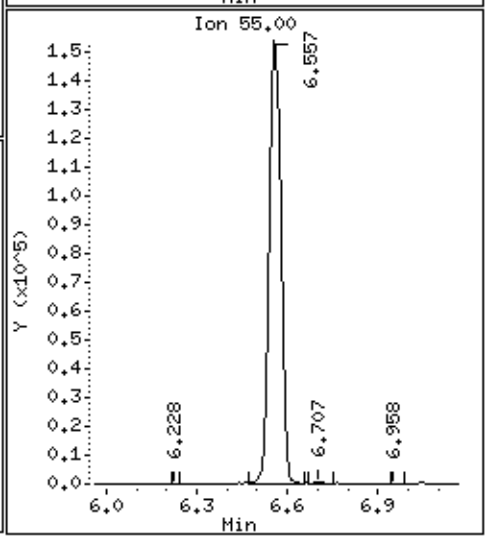












Data File: /chem/msd6.i/13jul16.b/6071306.d

Date : 13-JUL-2016 18:47

Client ID: LCS

Instrument: msd6.i

Sample Info: ;VI VOC+PAH ICV/LCS;LCS

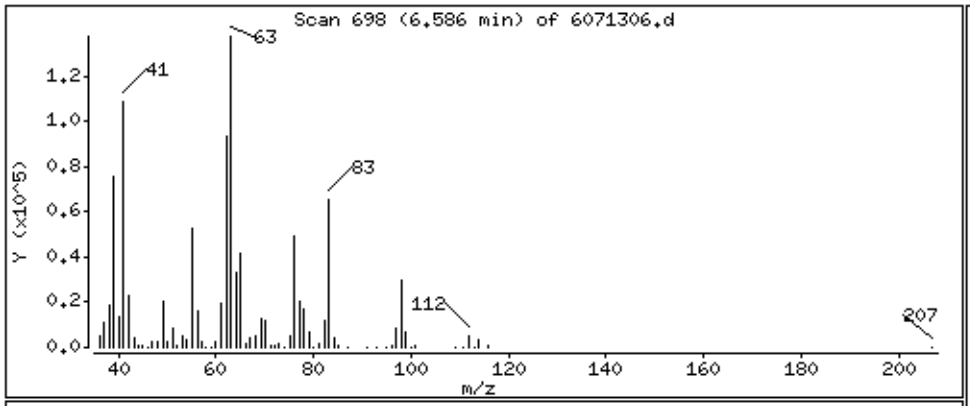
Operator: CT

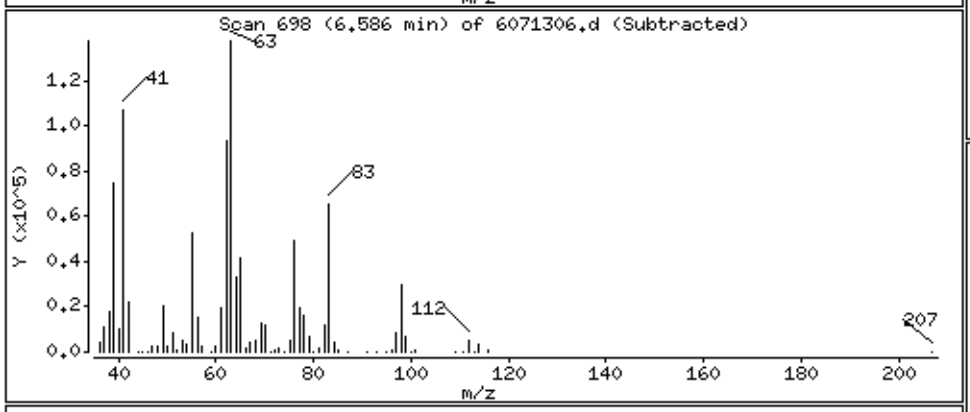
Column phase: RTx-624

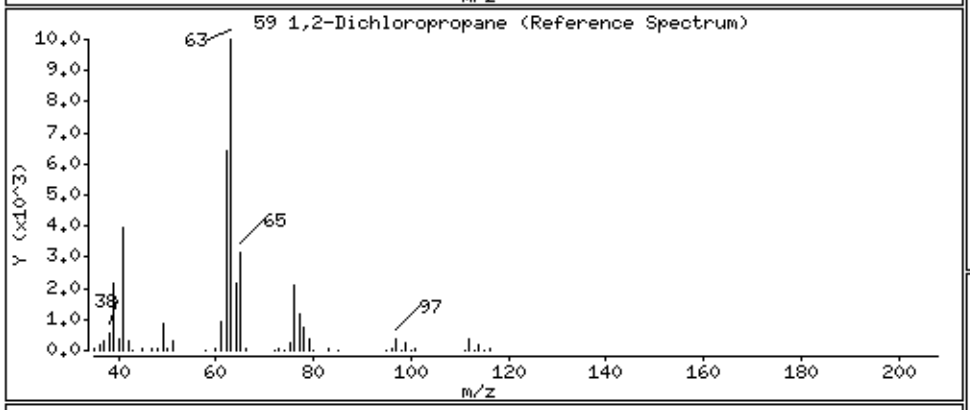
Column diameter: 0.53

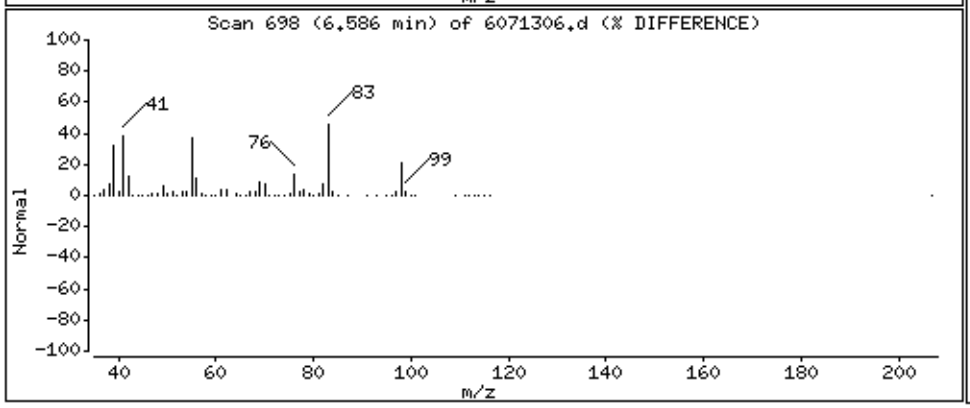
59 1,2-Dichloropropane

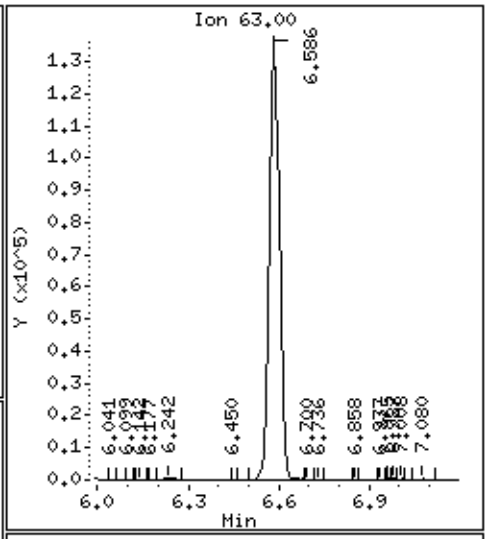
Concentration: 99.186 NG

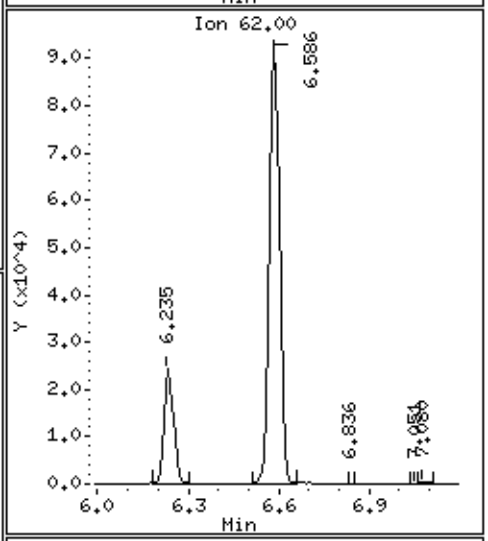


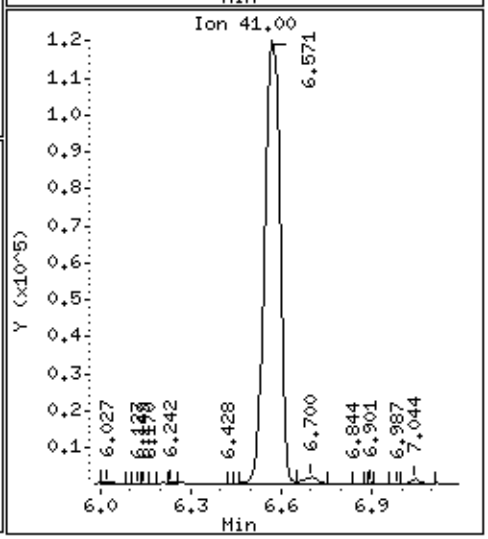












Data File: /chem/msd6.i/13jul16.b/6071306.d

Date : 13-JUL-2016 18:47

Client ID: LCS

Instrument: msd6.i

Sample Info: ;VI VOC+PAH ICV/LCS;LCS

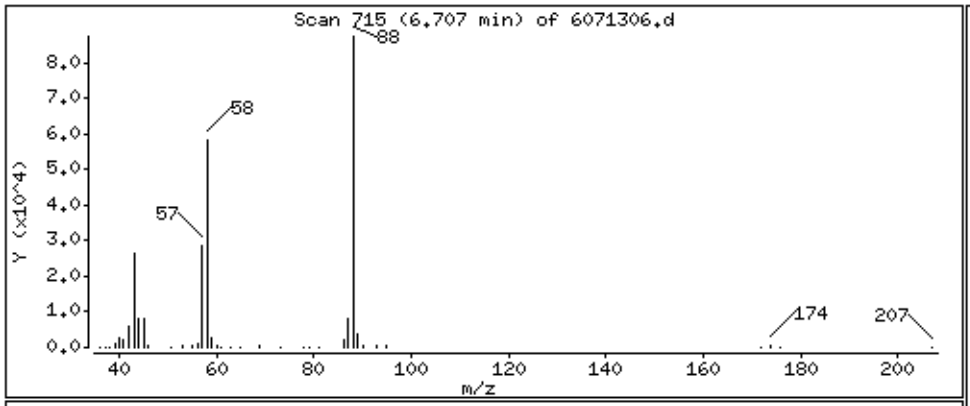
Operator: CT

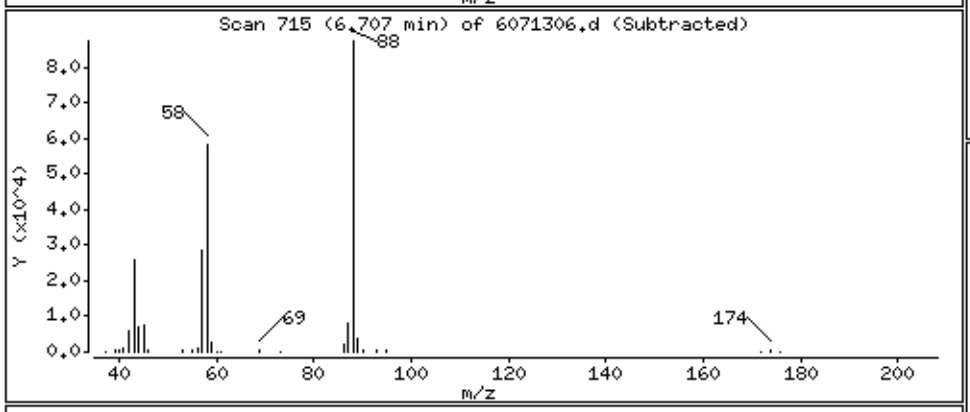
Column phase: RTx-624

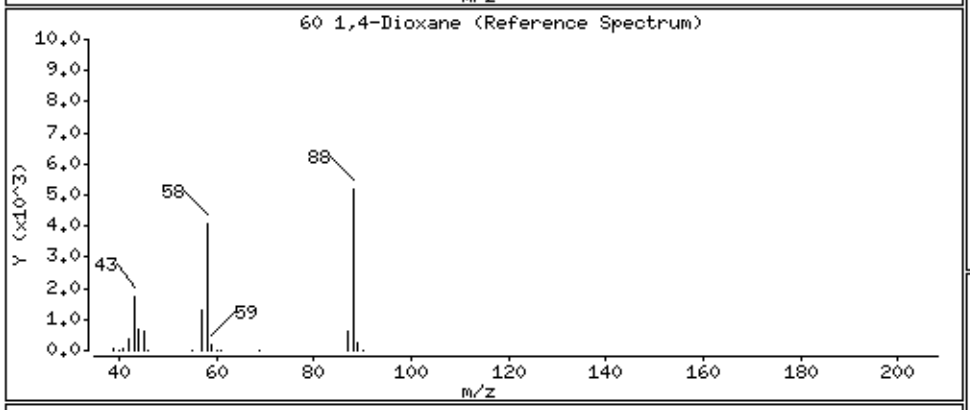
Column diameter: 0.53

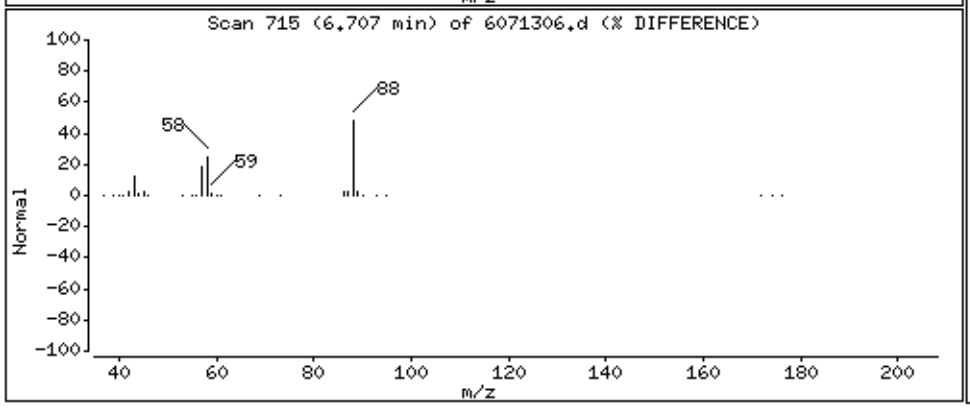
60 1,4-Dioxane

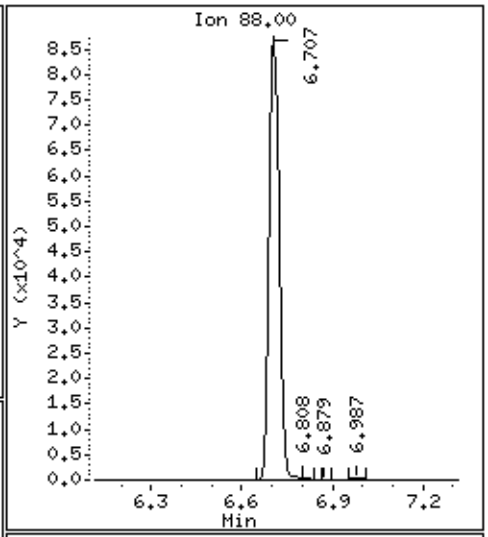
Concentration: 74.783 NG

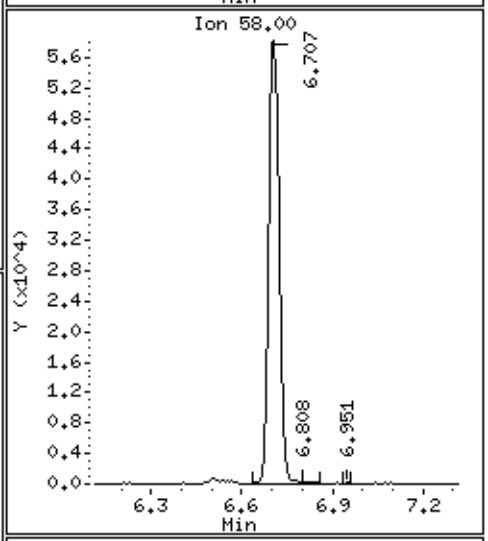


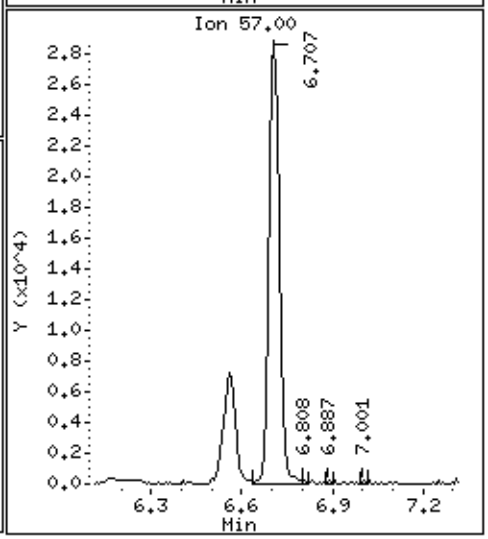












Data File: /chem/msd6.i/13jul16.b/6071306.d

Date : 13-JUL-2016 18:47

Client ID: LCS

Instrument: msd6.i

Sample Info: ;VI VOC+PAH ICV/LCS;LCS

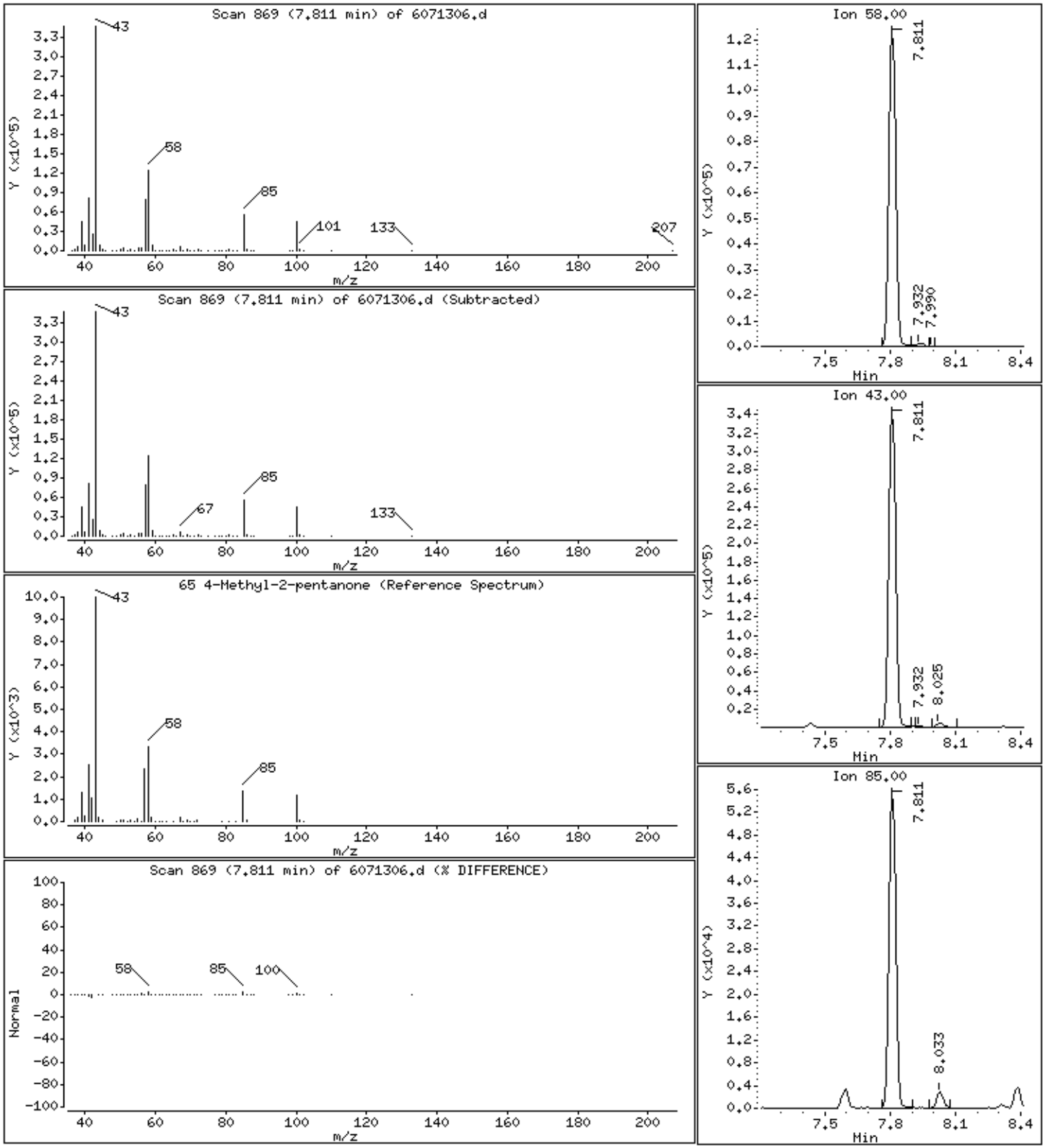
Operator: CT

Column phase: RTx-624

Column diameter: 0.53

65 4-Methyl-2-pentanone

Concentration: 87.417 NG



Data File: /chem/msd6.i/13jul16.b/6071306.d

Date : 13-JUL-2016 18:47

Client ID: LCS

Instrument: msd6.i

Sample Info: ;VI VOC+PAH ICV/LCS;LCS

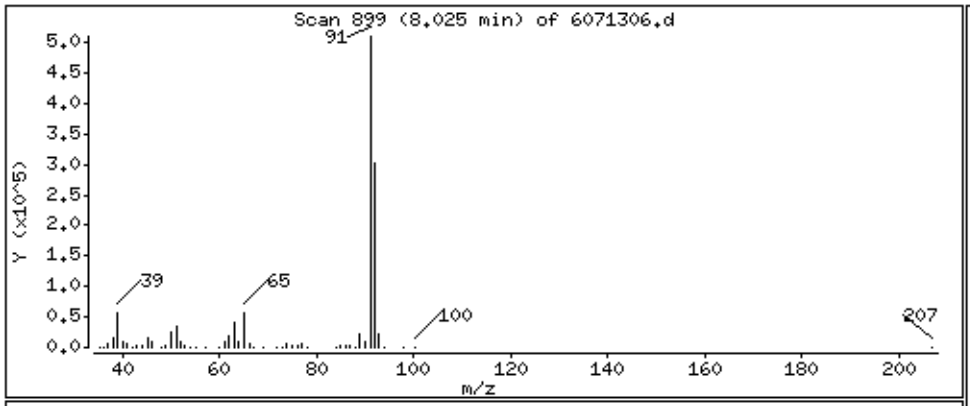
Operator: CT

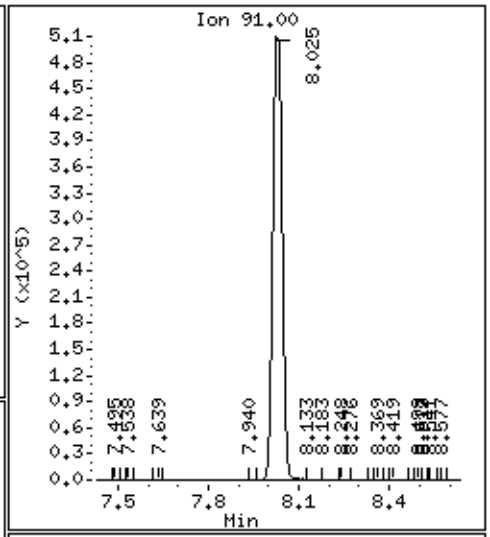
Column phase: RTx-624

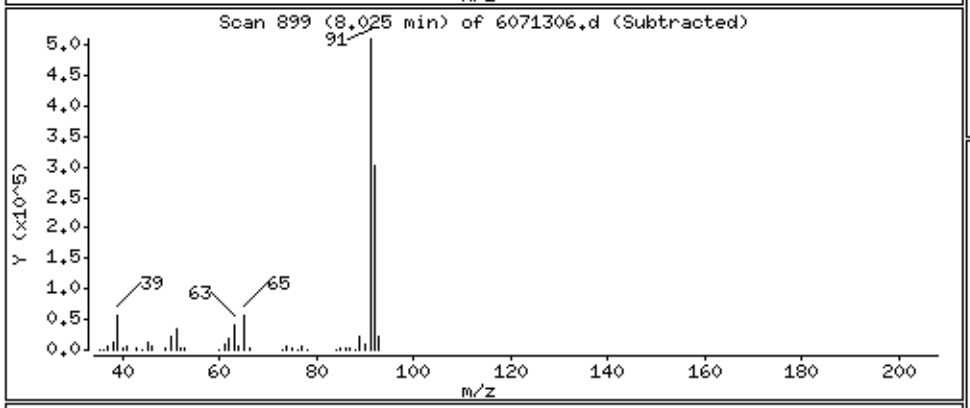
Column diameter: 0.53

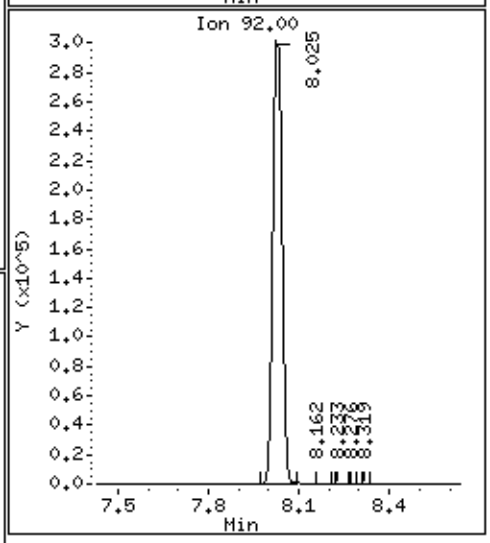
67 Toluene

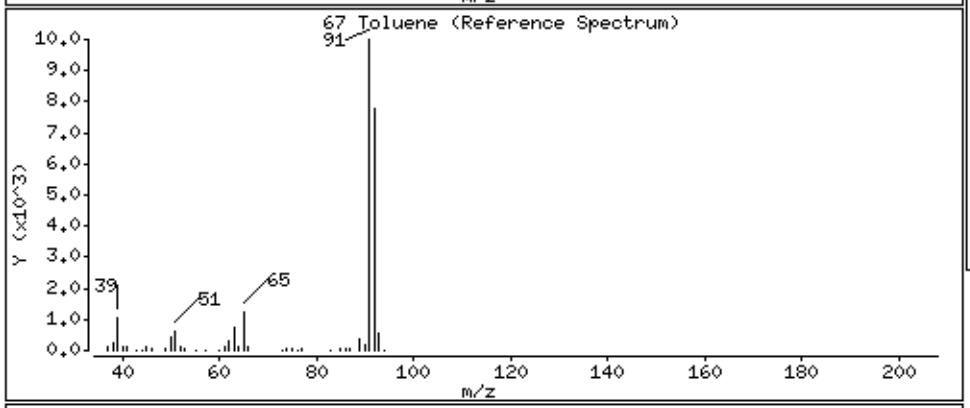
Concentration: 77.330 NG

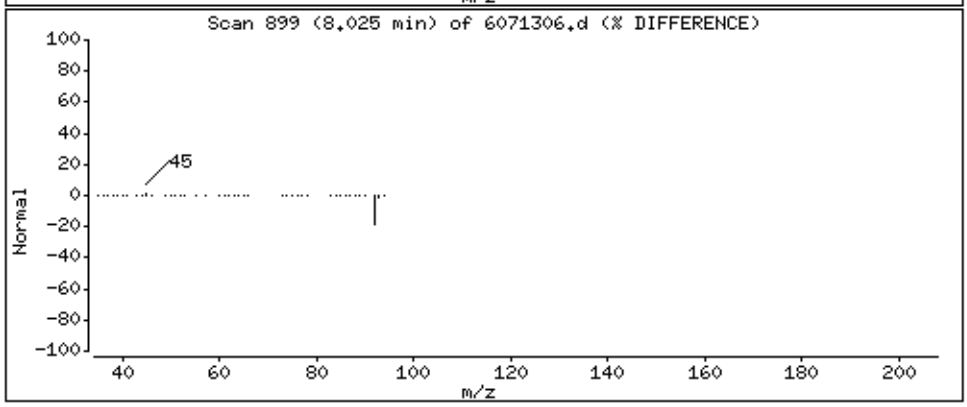












Data File: /chem/msd6.i/13jul16.b/6071306.d

Date : 13-JUL-2016 18:47

Client ID: LCS

Instrument: msd6.i

Sample Info: ;VI VOC+PAH ICV/LCS;LCS

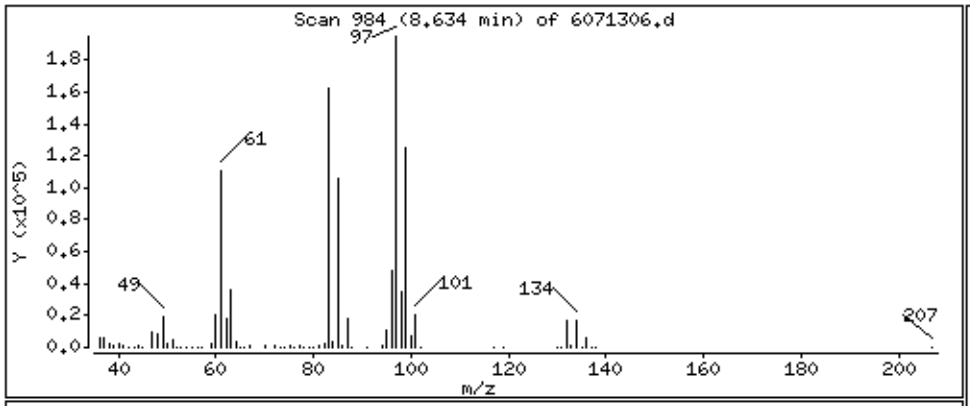
Operator: CT

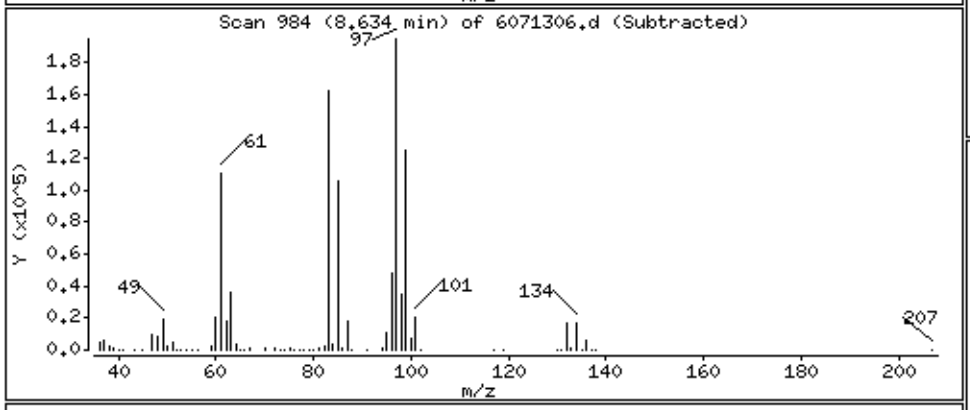
Column phase: RTx-624

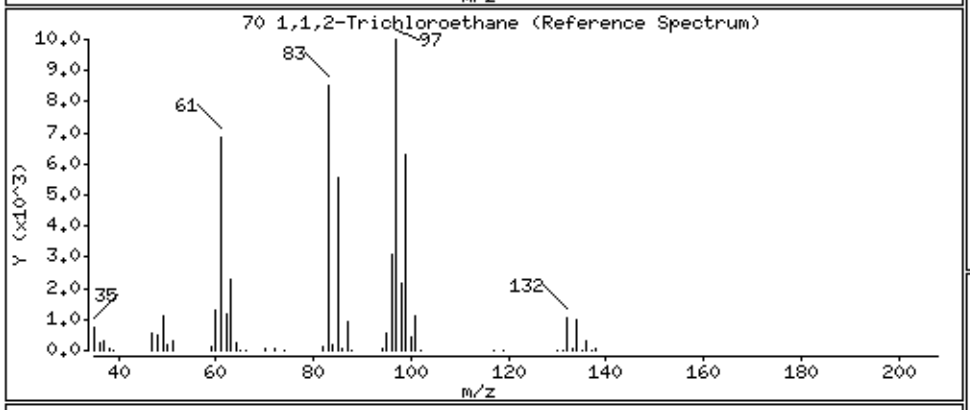
Column diameter: 0.53

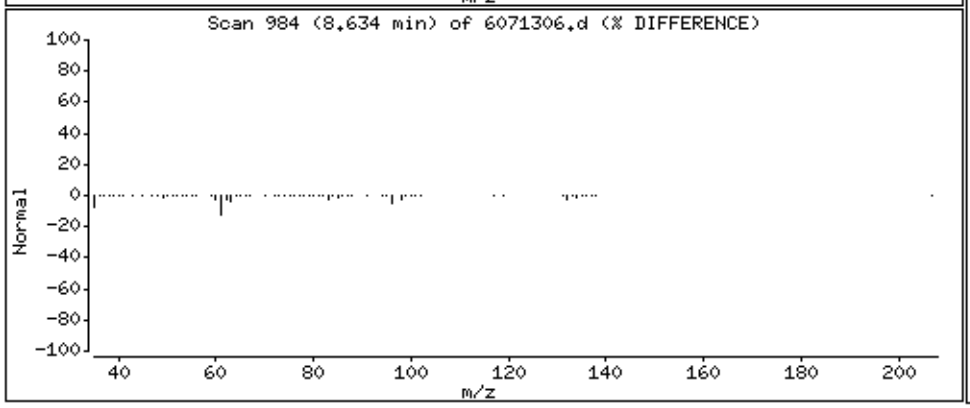
70 1,1,2-Trichloroethane

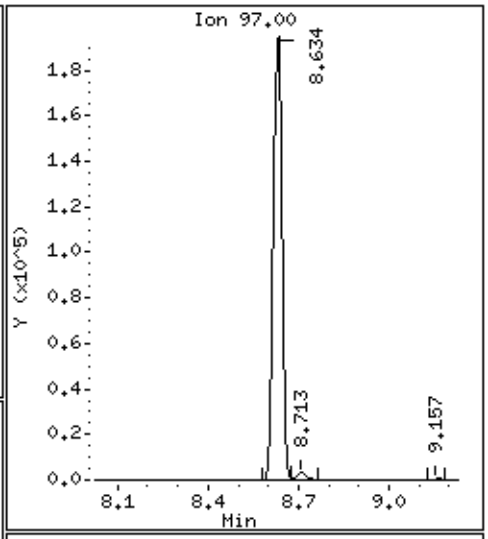
Concentration: 118.72 NG

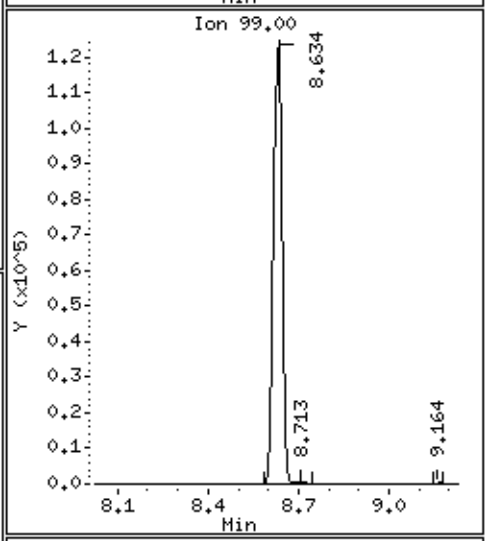


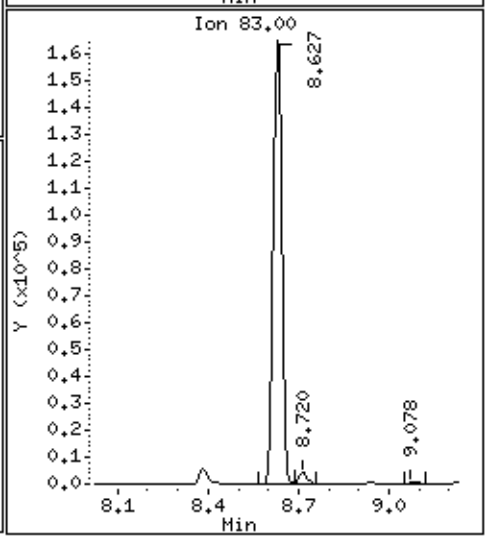












Data File: /chem/msd6.i/13jul16.b/6071306.d

Date : 13-JUL-2016 18:47

Client ID: LCS

Instrument: msd6.i

Sample Info: ;VI VOC+PAH ICV/LCS;LCS

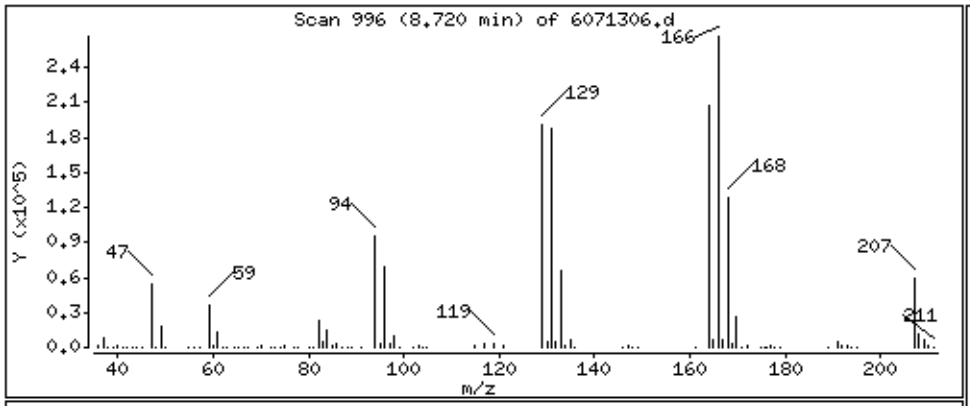
Operator: CT

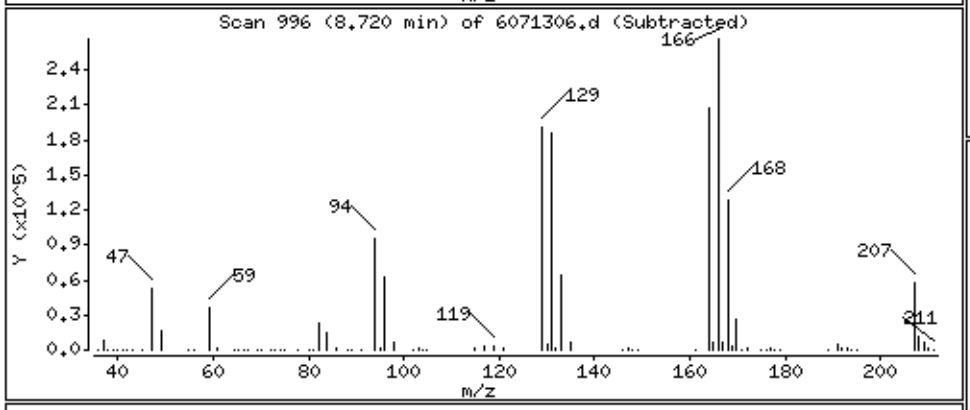
Column phase: RTx-624

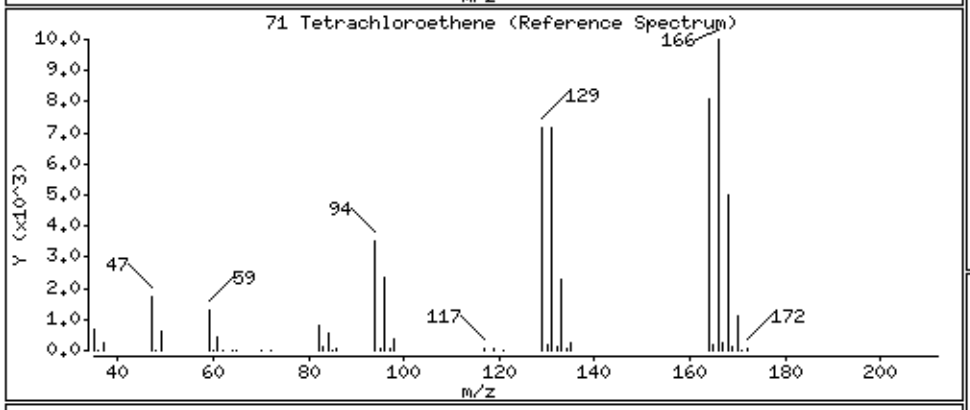
Column diameter: 0.53

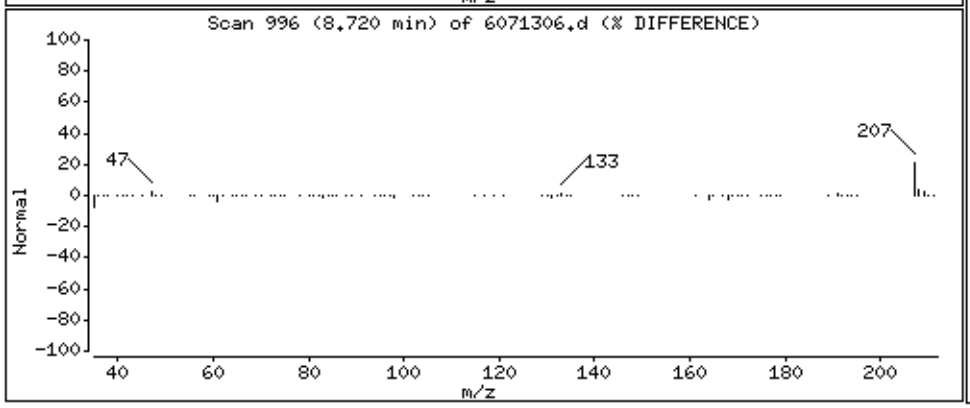
71 Tetrachloroethene

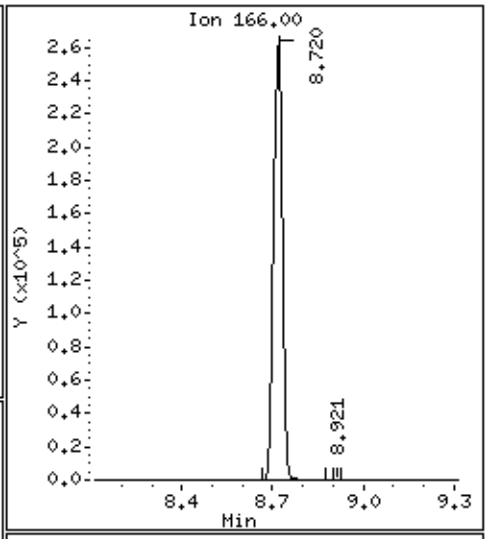
Concentration: 137.28 NG

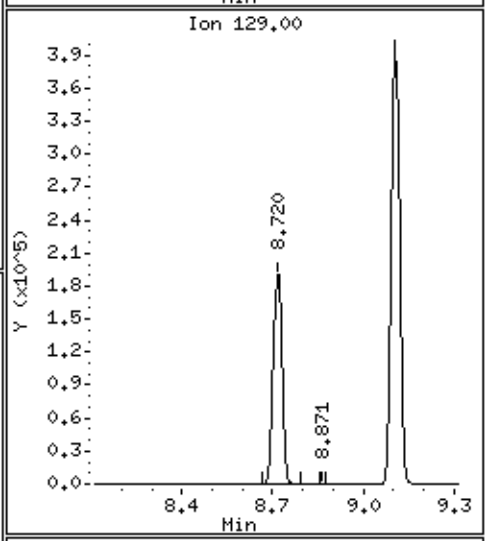


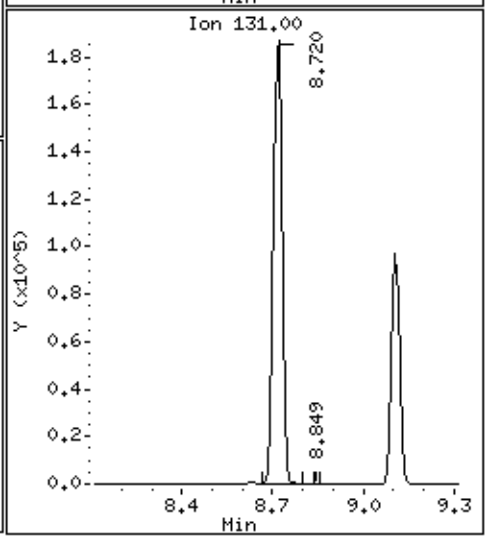












Data File: /chem/msd6.i/13jul16.b/6071306.d

Date : 13-JUL-2016 18:47

Client ID: LCS

Instrument: msd6.i

Sample Info: ;VI VOC+PAH ICV/LCS;LCS

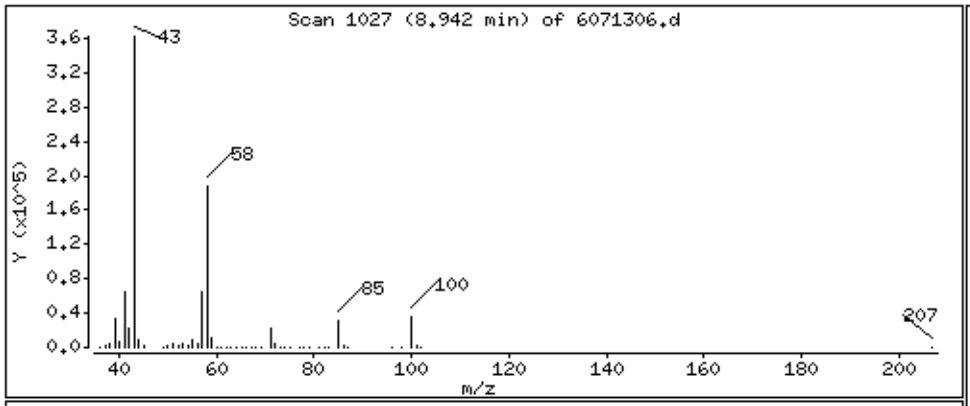
Operator: CT

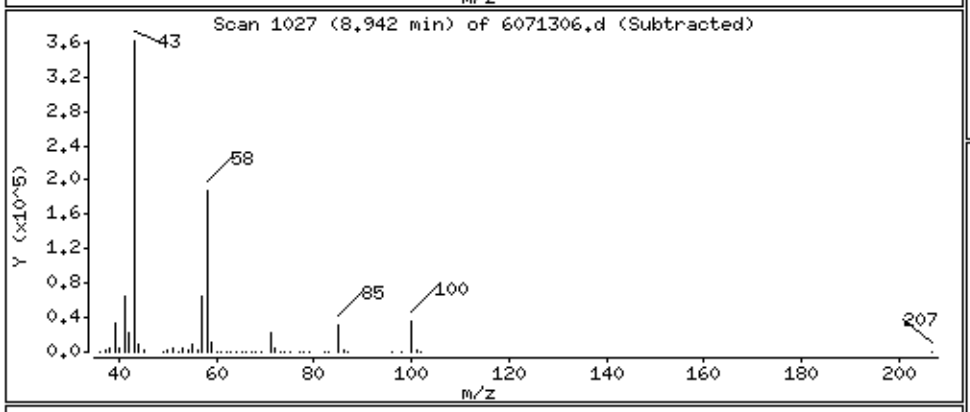
Column phase: RTx-624

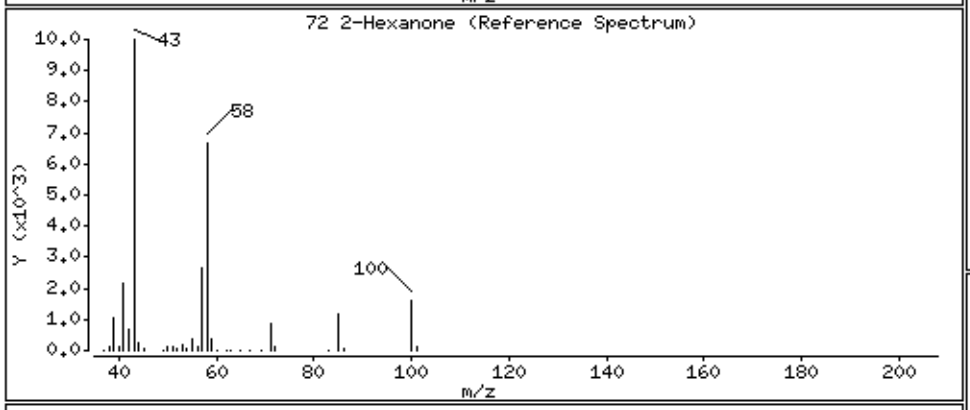
Column diameter: 0.53

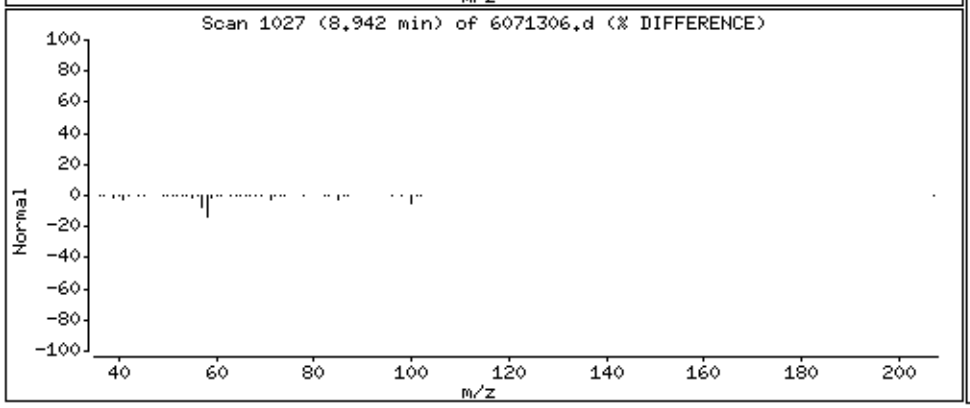
72 2-Hexanone

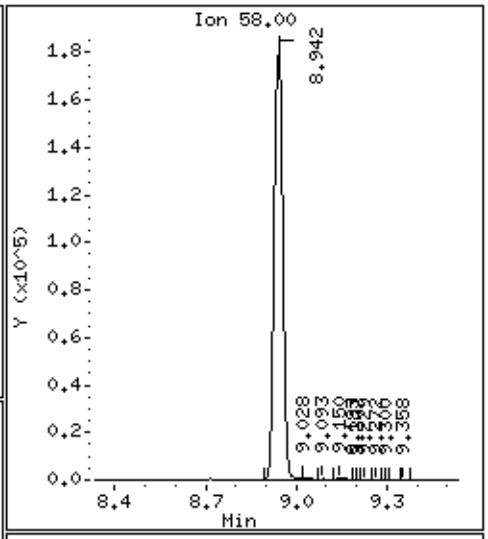
Concentration: 85.315 NG

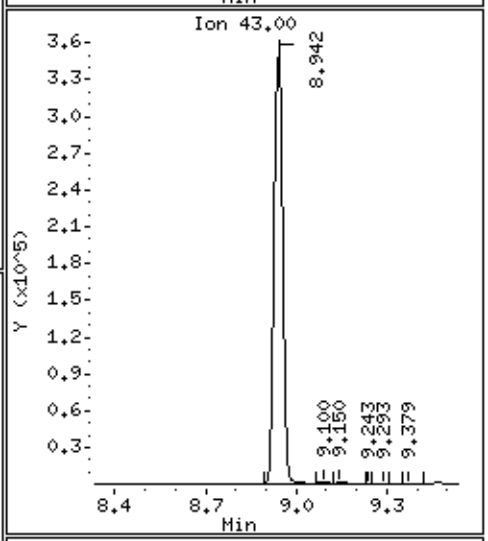


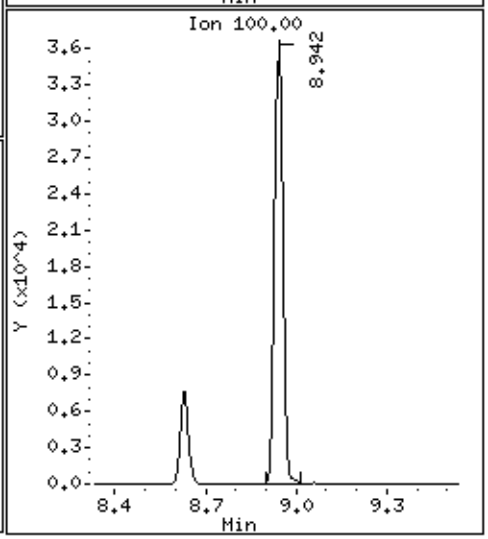












Data File: /chem/msd6.i/13jul16.b/6071306.d

Date : 13-JUL-2016 18:47

Client ID: LCS

Instrument: msd6.i

Sample Info: ;VI VOC+PAH ICV/LCS;LCS

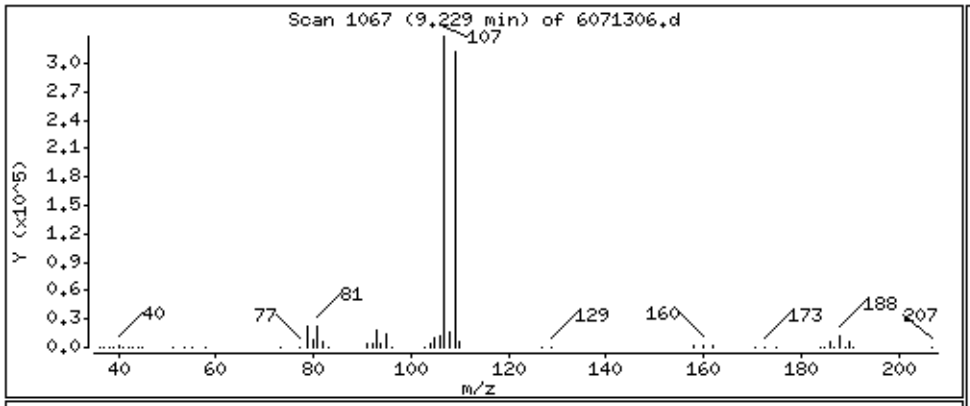
Operator: CT

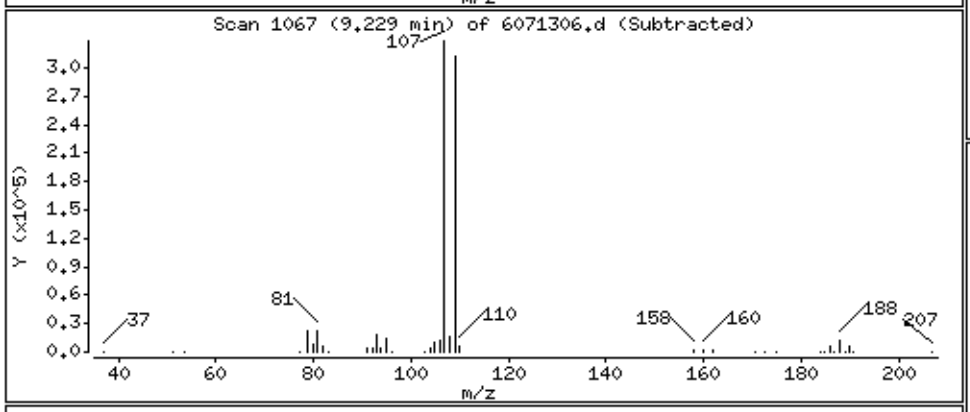
Column phase: RTx-624

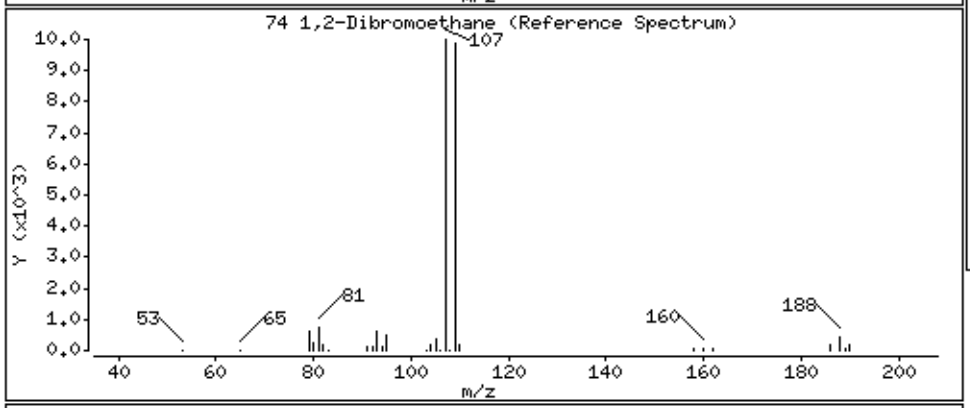
Column diameter: 0.53

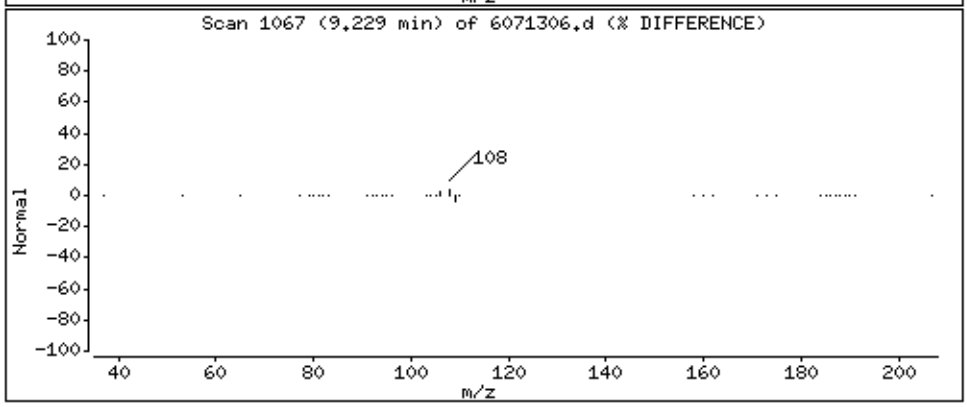
74 1,2-Dibromoethane

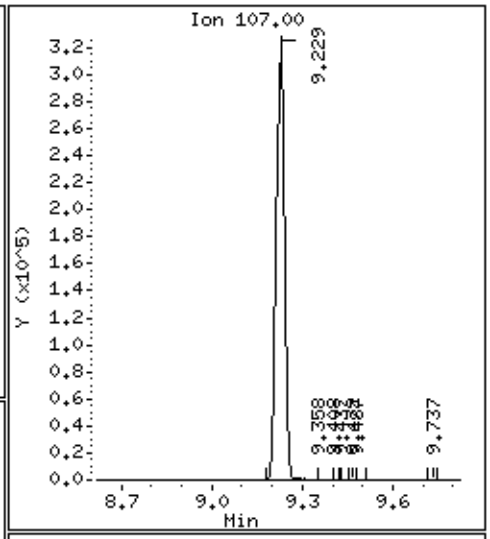
Concentration: 170.81 NG

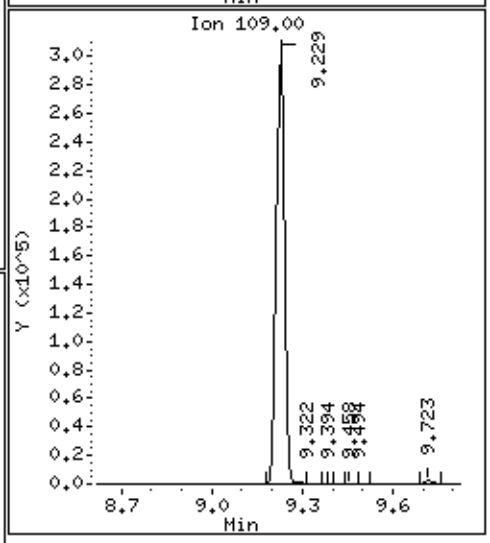












Data File: /chem/msd6.i/13jul16.b/6071306.d

Date : 13-JUL-2016 18:47

Client ID: LCS

Instrument: msd6.i

Sample Info: ;VI VOC+PAH ICV/LCS;LCS

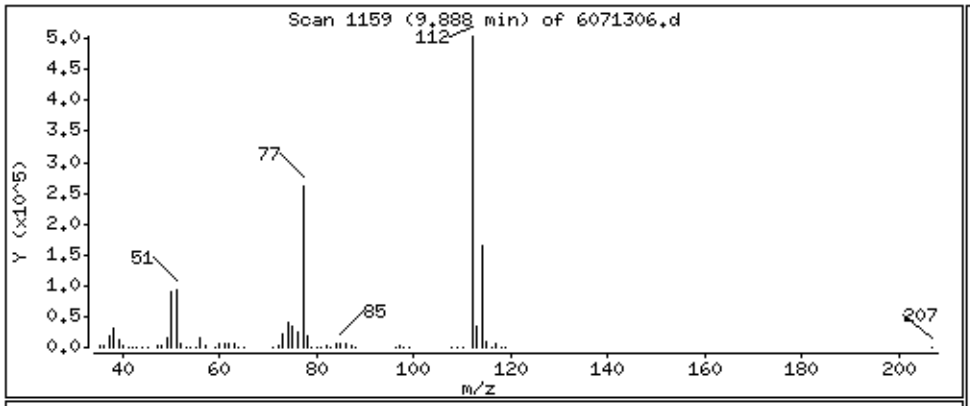
Operator: CT

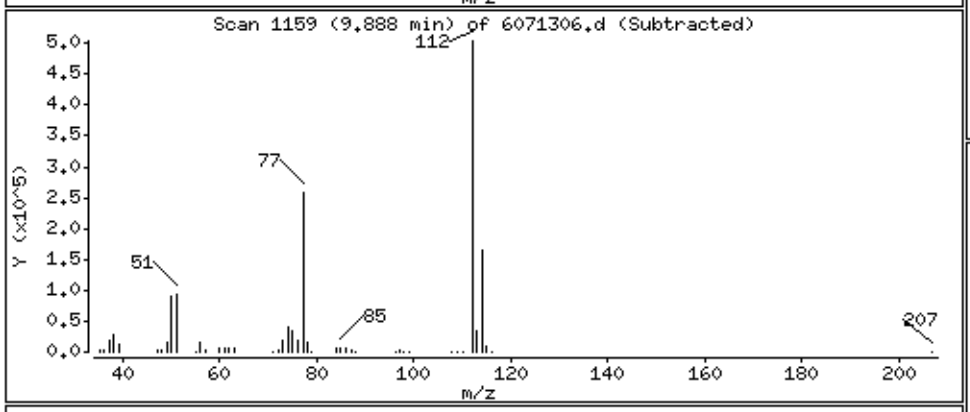
Column phase: RTx-624

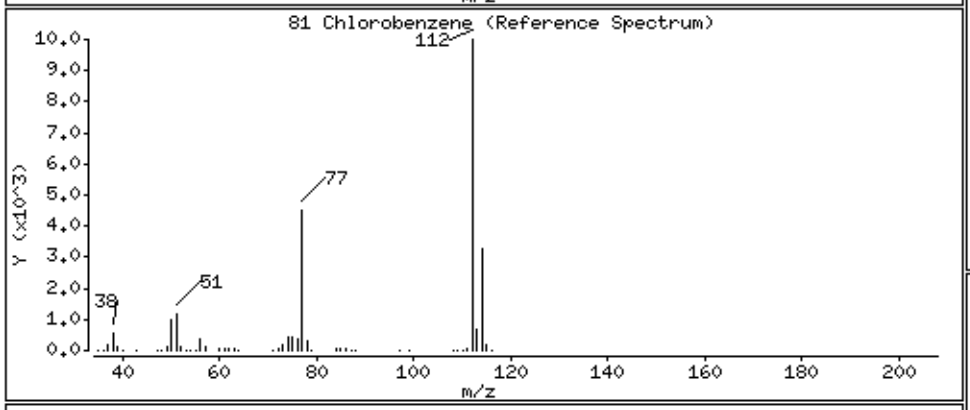
Column diameter: 0.53

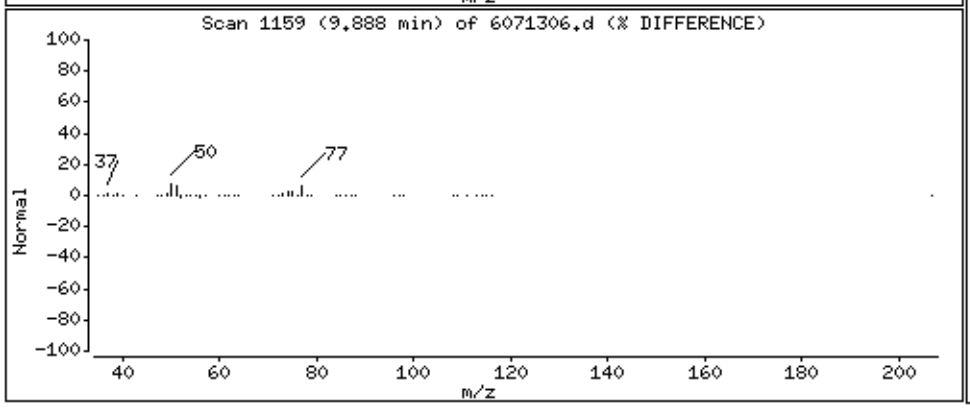
81 Chlorobenzene

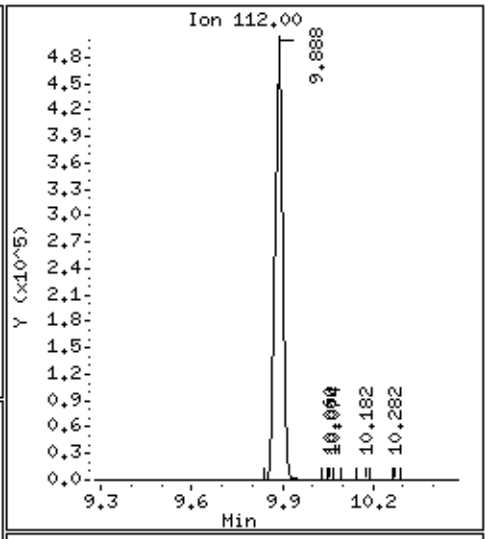
Concentration: 93.361 NG

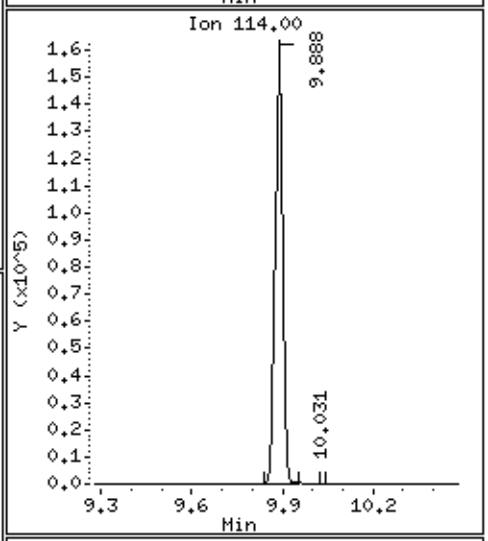


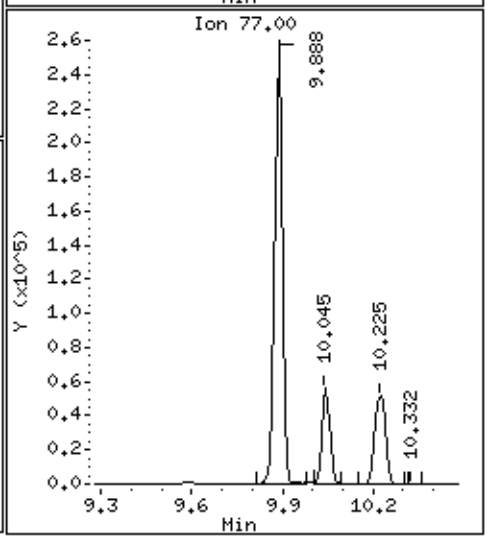












Data File: /chem/msd6.i/13jul16.b/6071306.d

Date : 13-JUL-2016 18:47

Client ID: LCS

Instrument: msd6.i

Sample Info: ;VI VOC+PAH ICV/LCS;LCS

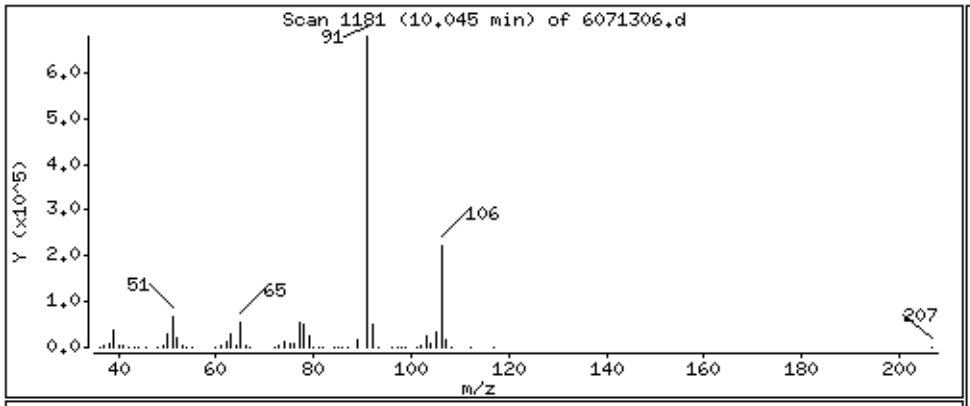
Operator: CT

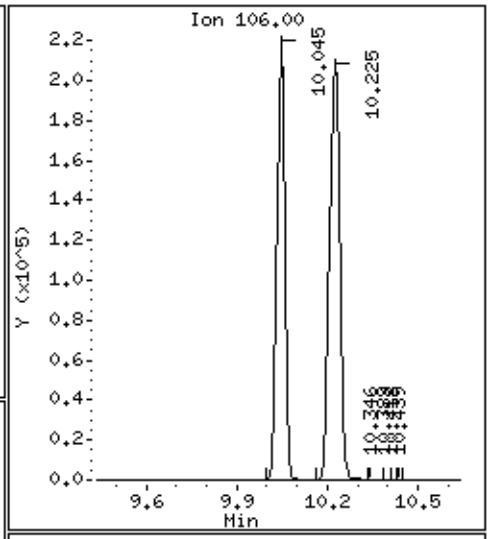
Column phase: RTx-624

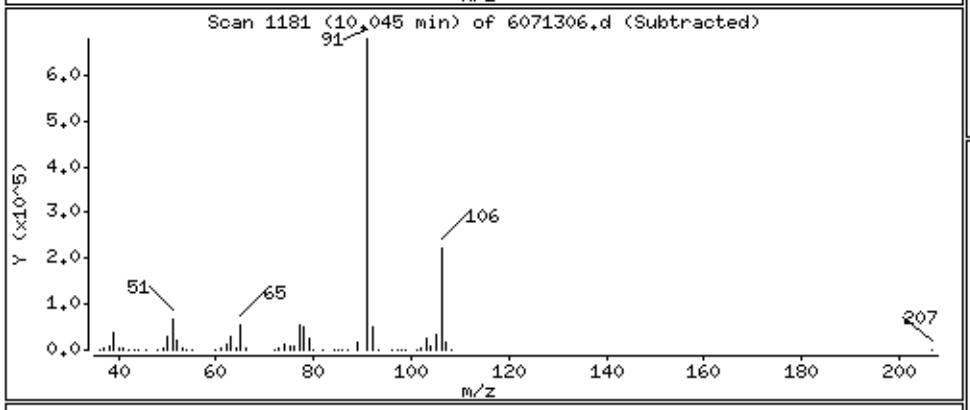
Column diameter: 0.53

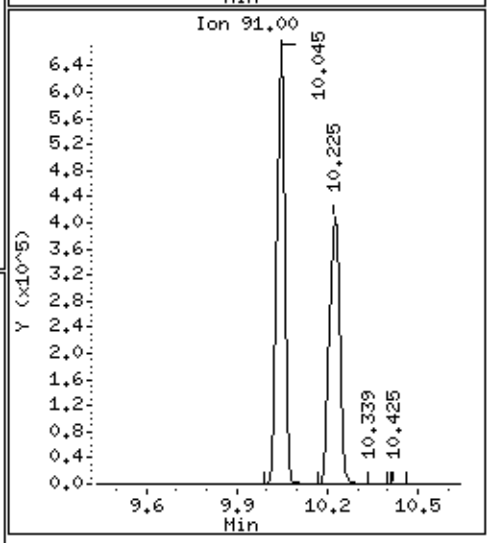
82 Ethyl Benzene

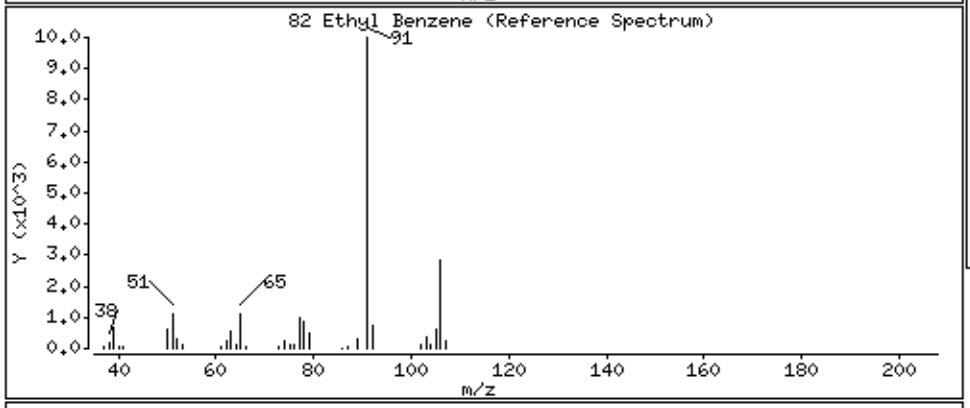
Concentration: 81.572 NG

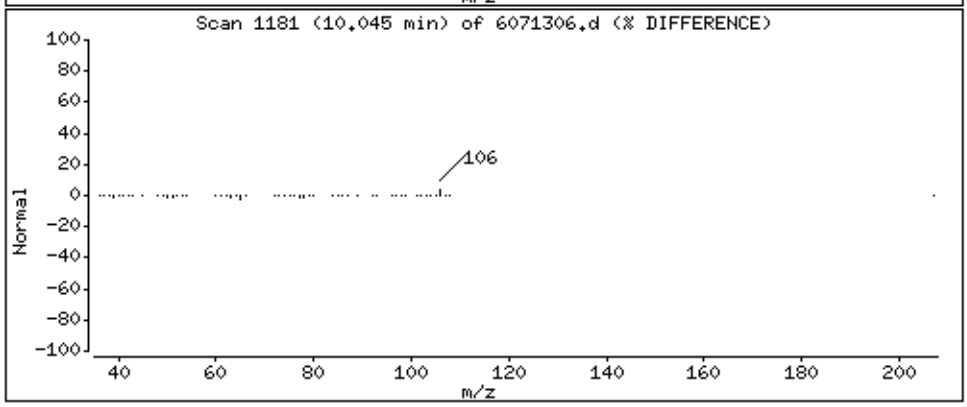












Data File: /chem/msd6.i/13jul16.b/6071306.d

Date : 13-JUL-2016 18:47

Client ID: LCS

Instrument: msd6.i

Sample Info: ;VI VOC+PAH ICV/LCS;LCS

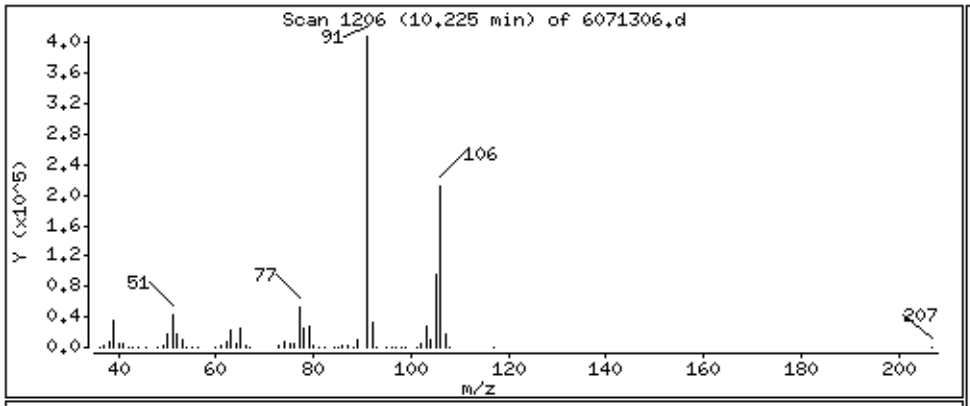
Operator: CT

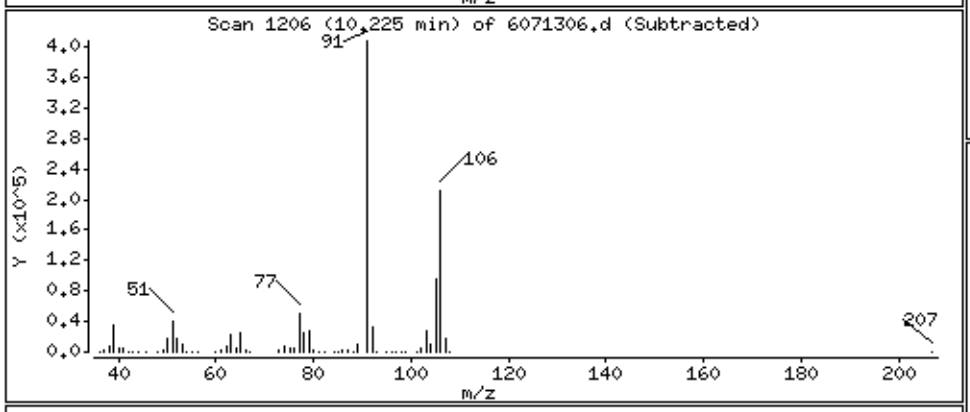
Column phase: RTx-624

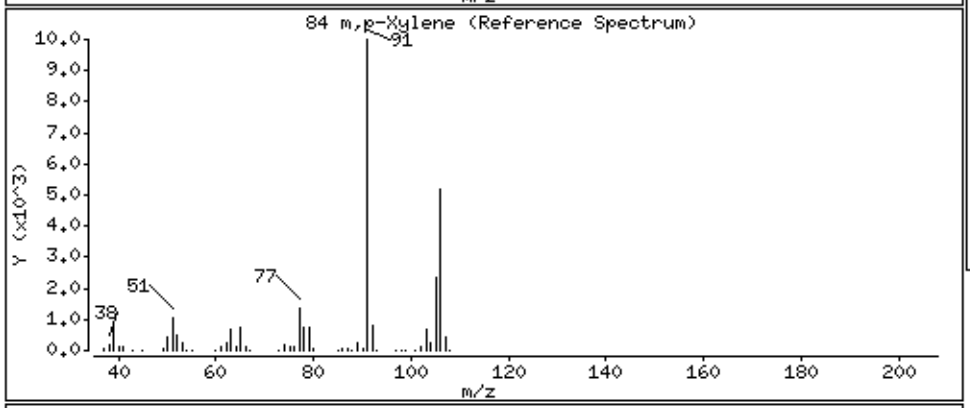
Column diameter: 0.53

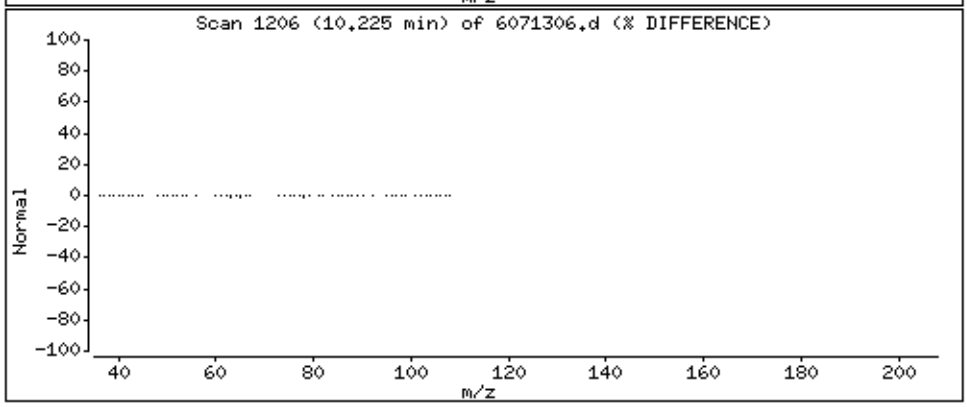
84 m,p-Xylene

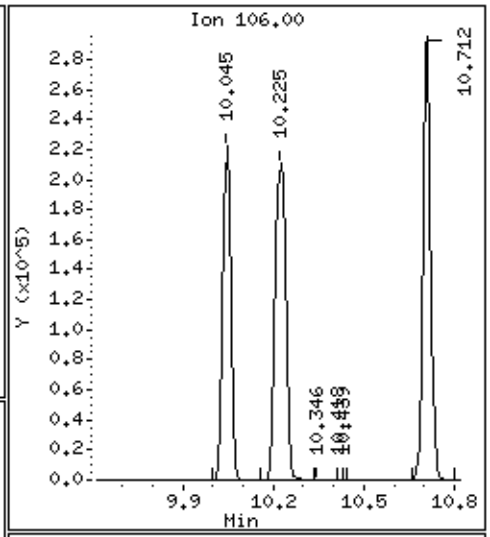
Concentration: 84.230 NG

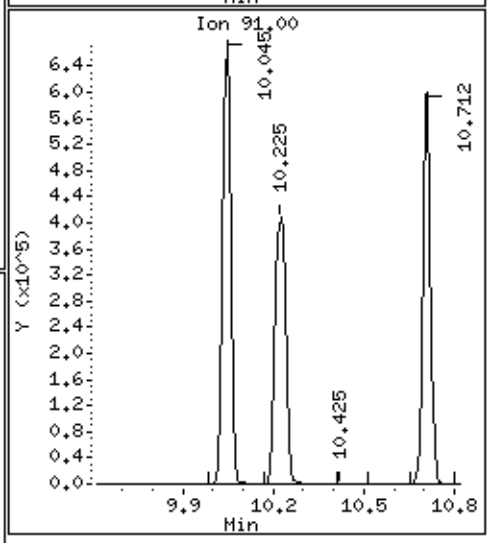












Data File: /chem/msd6.i/13jul16.b/6071306.d

Date : 13-JUL-2016 18:47

Client ID: LCS

Instrument: msd6.i

Sample Info: ;VI VOC+PAH ICV/LCS;LCS

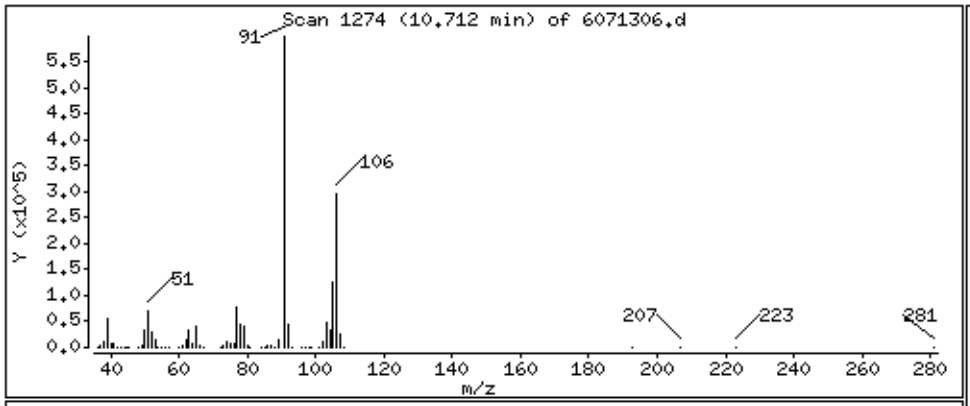
Operator: CT

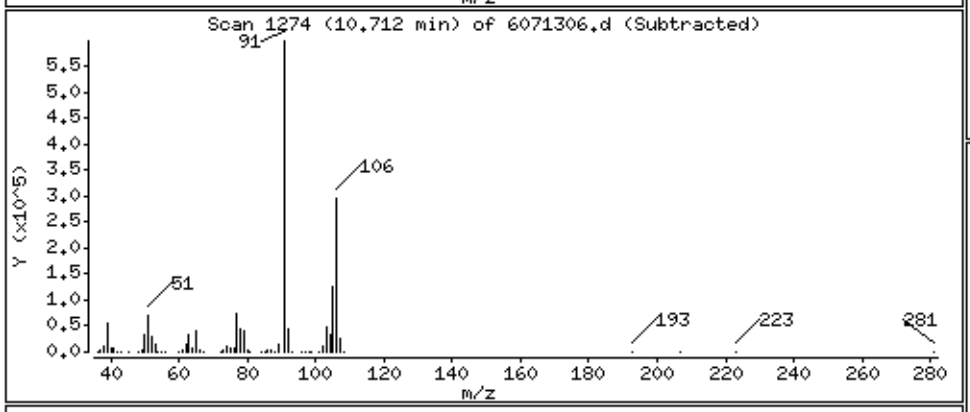
Column phase: RTx-624

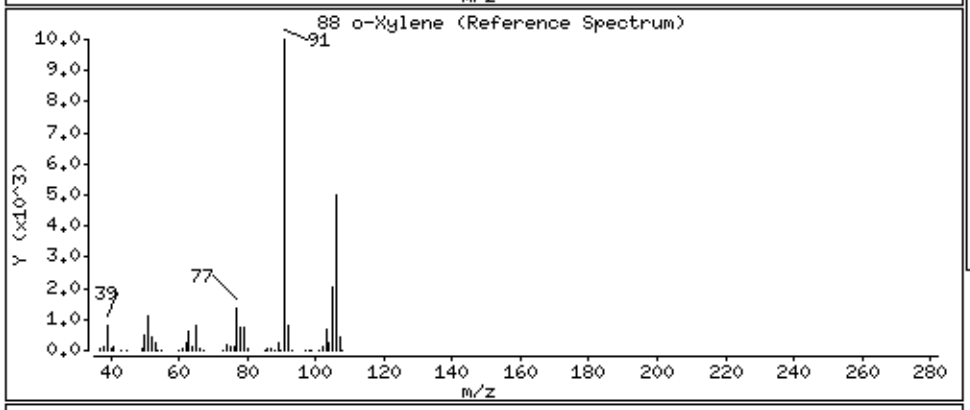
Column diameter: 0.53

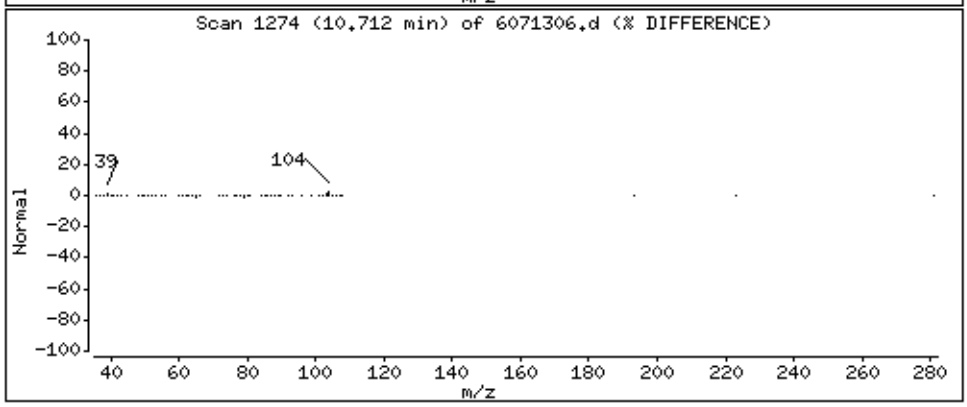
88 o-Xylene

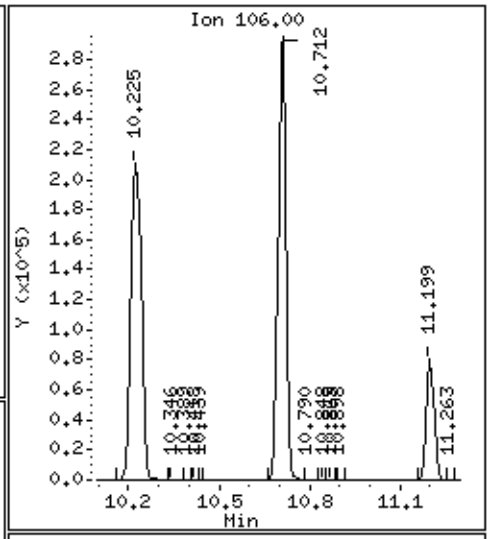
Concentration: 94.030 NG

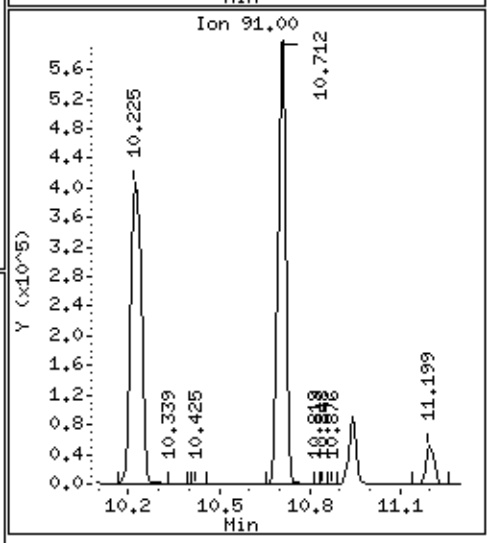












Data File: /chem/msd6.i/13jul16.b/6071306.d

Date : 13-JUL-2016 18:47

Client ID: LCS

Instrument: msd6.i

Sample Info: ;VI VOC+PAH ICV/LCS;LCS

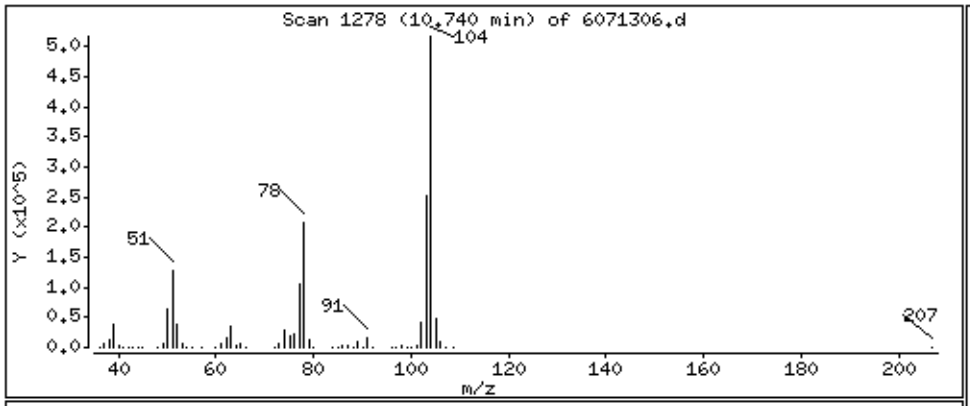
Operator: CT

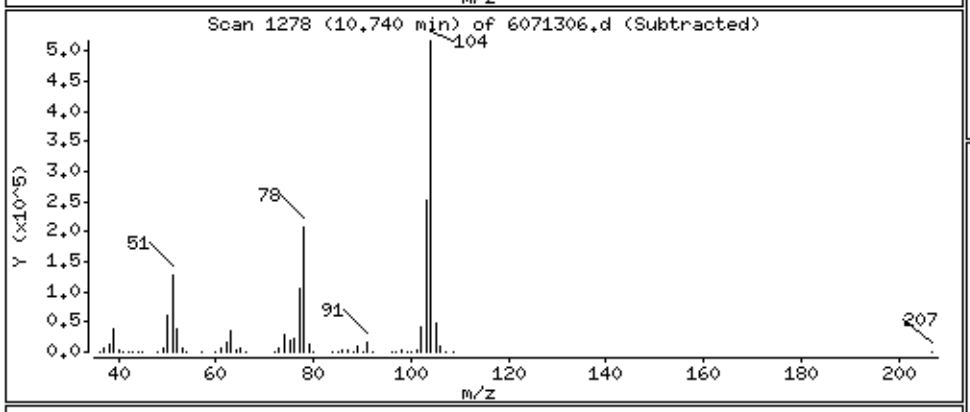
Column phase: RTx-624

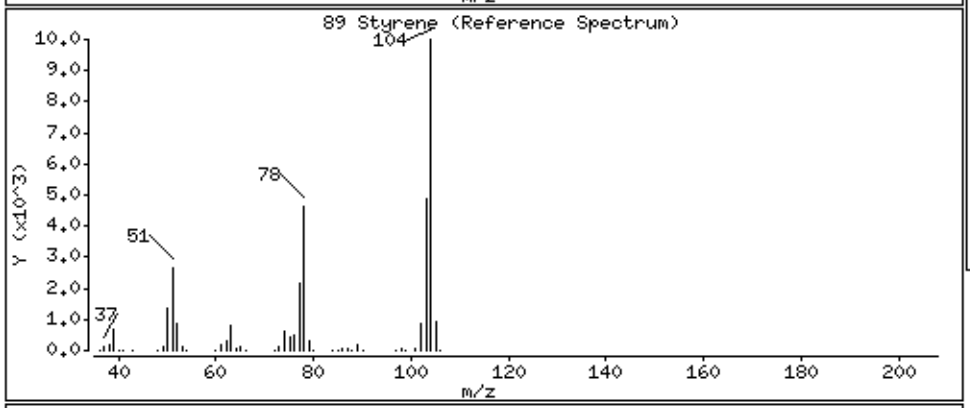
Column diameter: 0.53

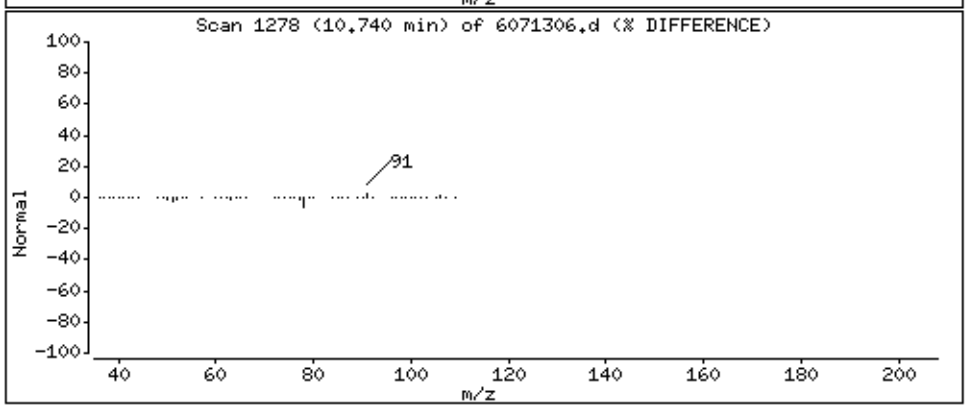
89 Styrene

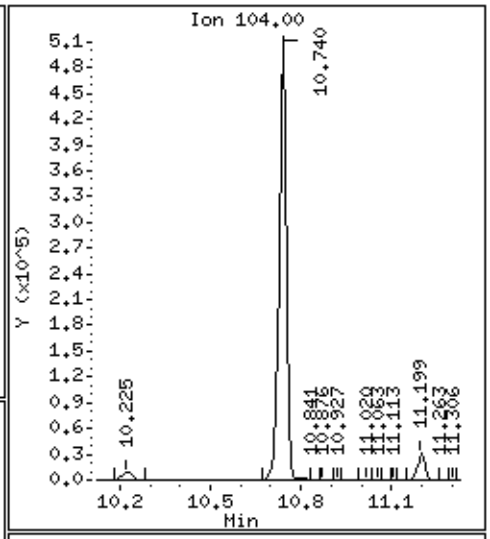
Concentration: 91.360 NG

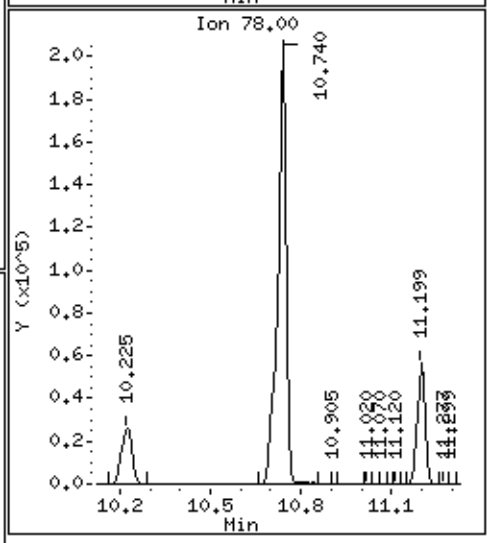












Data File: /chem/msd6.i/13jul16.b/6071306.d

Date : 13-JUL-2016 18:47

Client ID: LCS

Instrument: msd6.i

Sample Info: ;VI VOC+PAH ICV/LCS;LCS

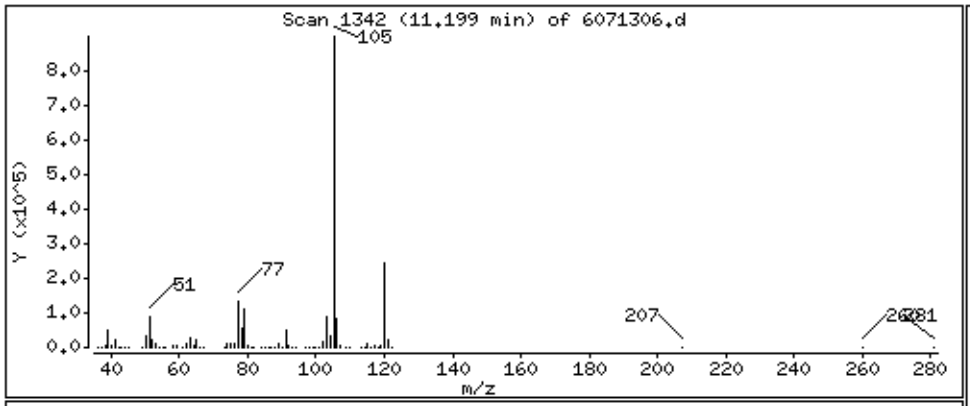
Operator: CT

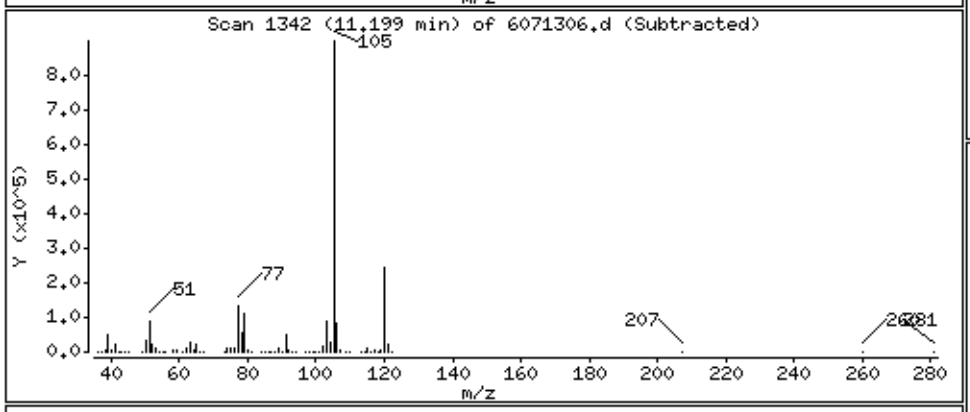
Column phase: RTx-624

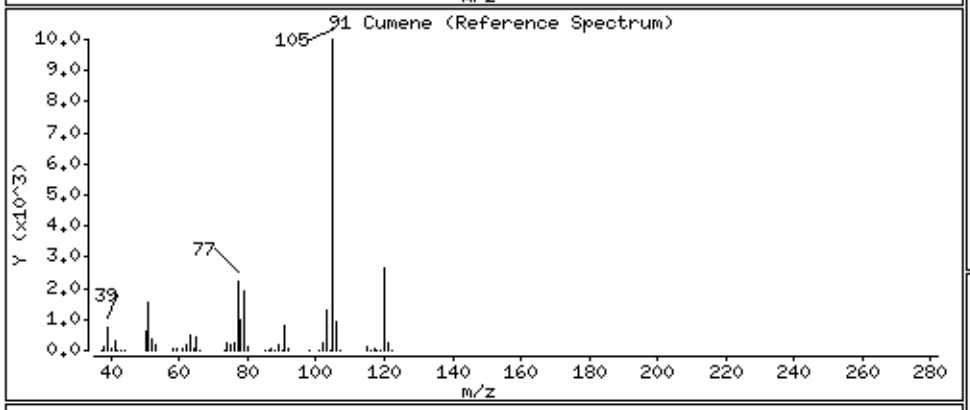
Column diameter: 0.53

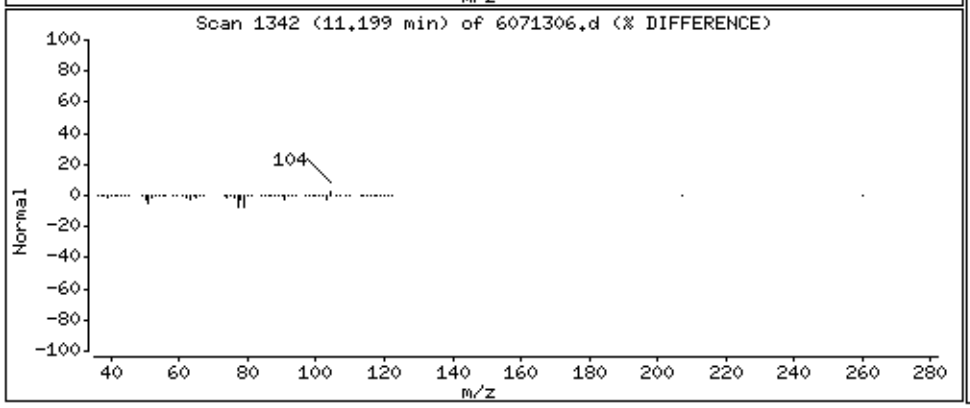
91 Cumene

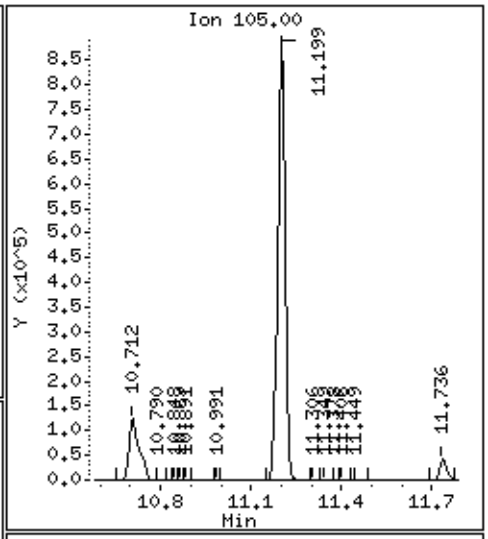
Concentration: 103.72 NG

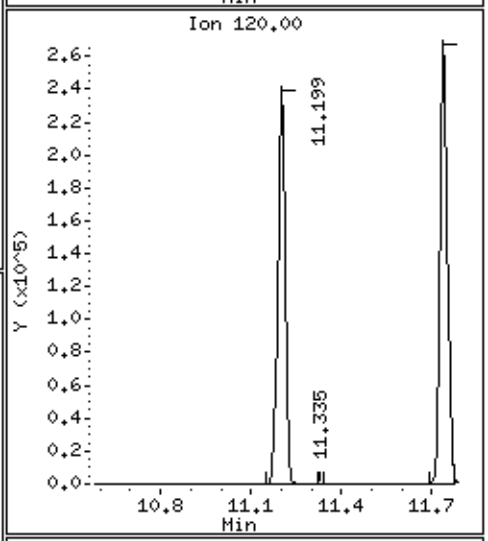


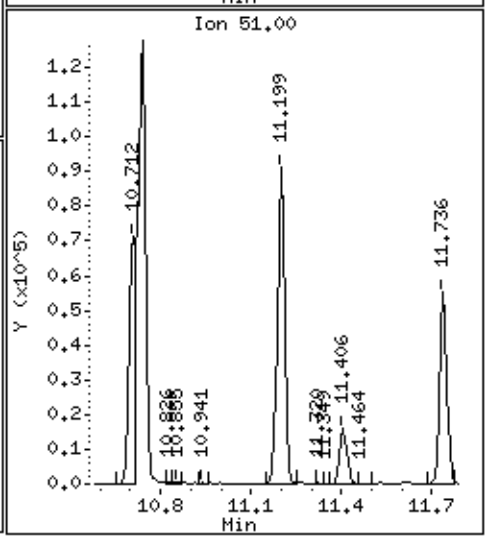












Data File: /chem/msd6.i/13jul16.b/6071306.d

Date : 13-JUL-2016 18:47

Client ID: LCS

Instrument: msd6.i

Sample Info: ;VI VOC+PAH ICV/LCS;LCS

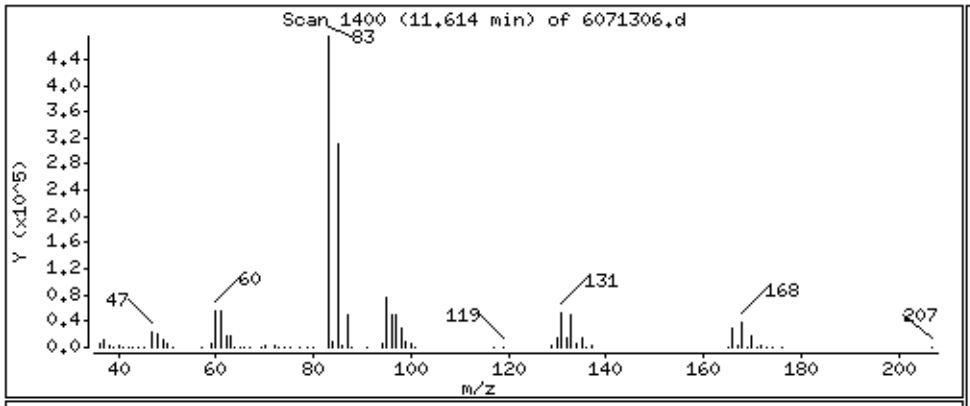
Operator: CT

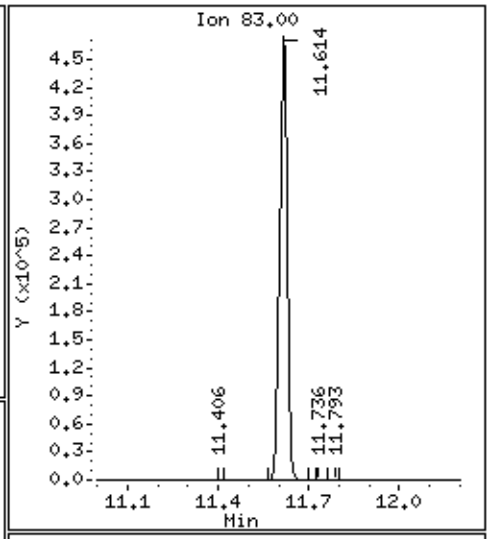
Column phase: RTx-624

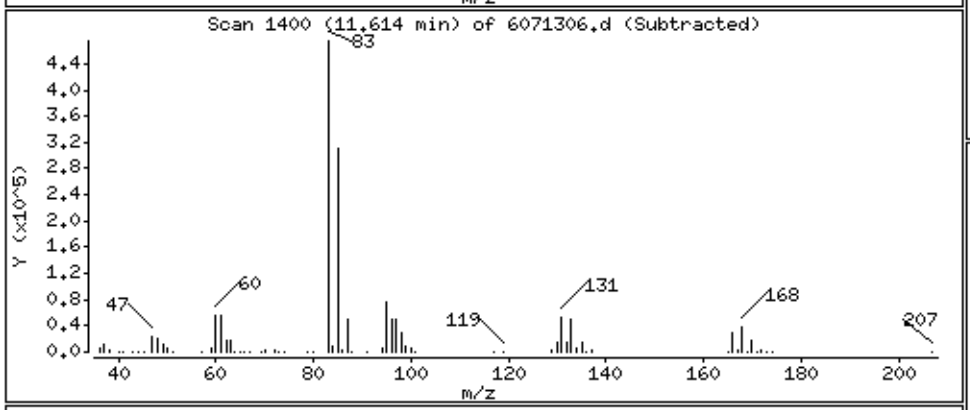
Column diameter: 0.53

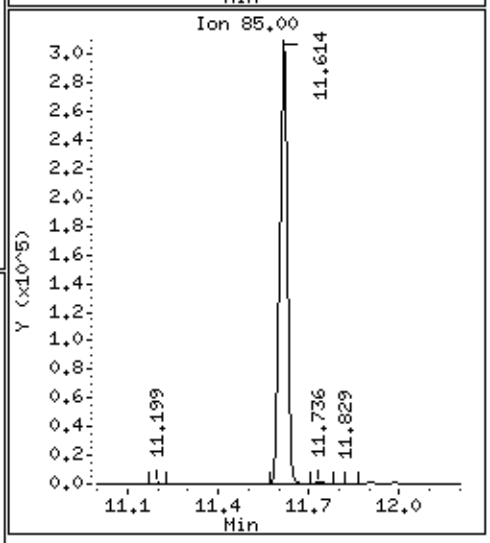
94 1,1,2,2-Tetrachloroethane

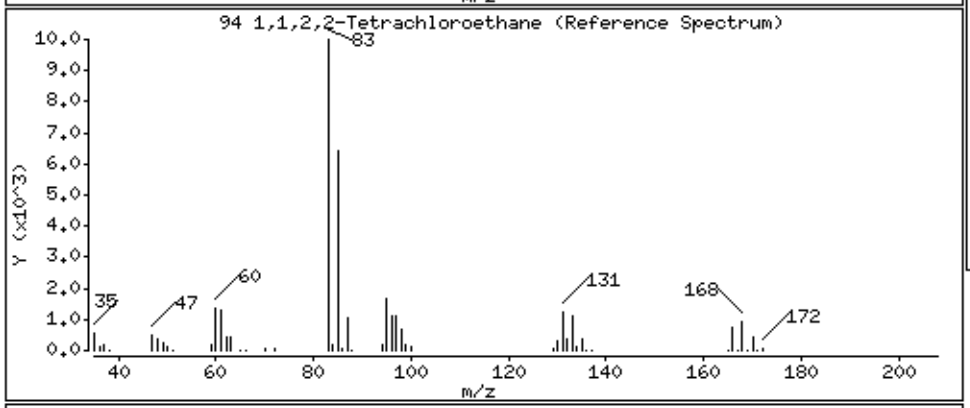
Concentration: 150.96 NG

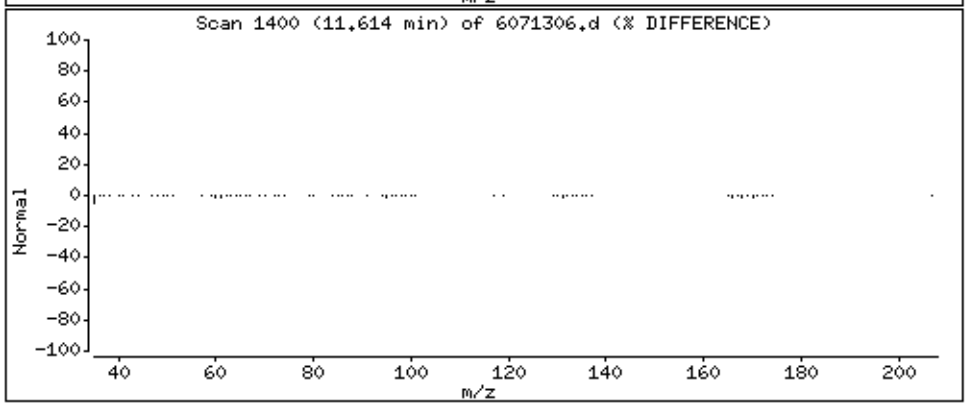












Data File: /chem/msd6.i/13jul16.b/6071306.d

Date : 13-JUL-2016 18:47

Client ID: LCS

Instrument: msd6.i

Sample Info: ;VI VOC+PAH ICV/LCS;LCS

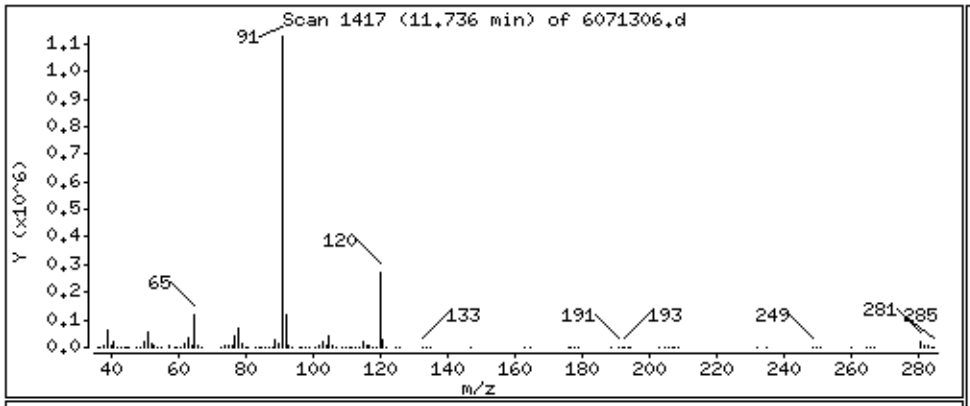
Operator: CT

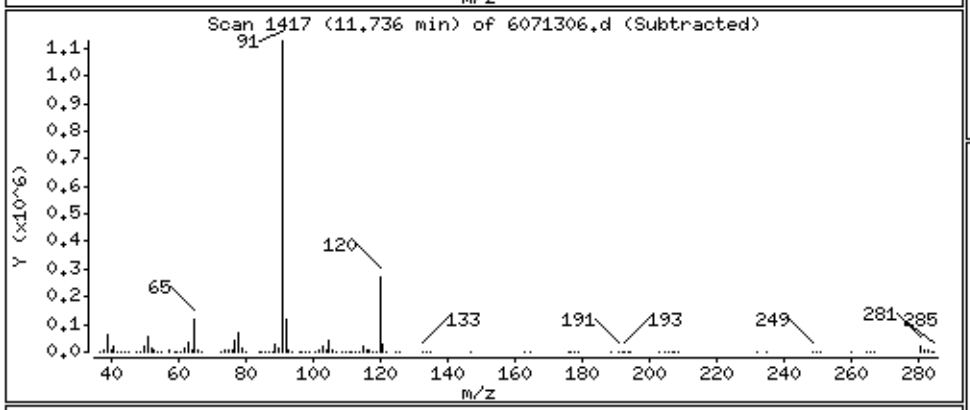
Column phase: RTx-624

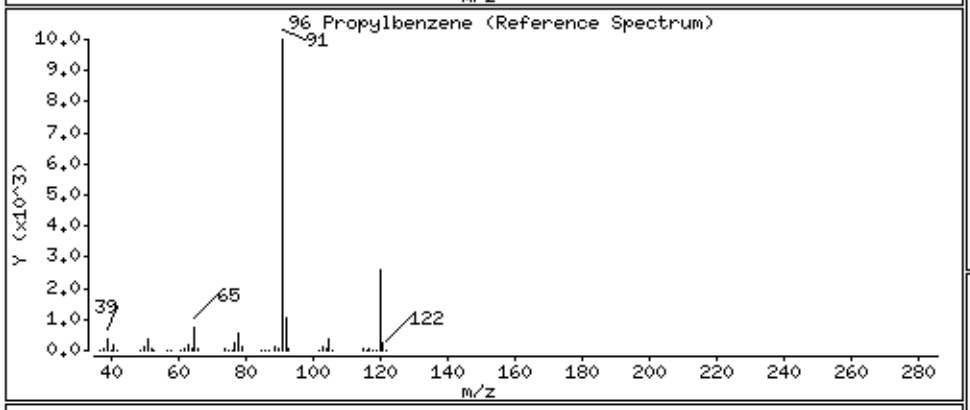
Column diameter: 0.53

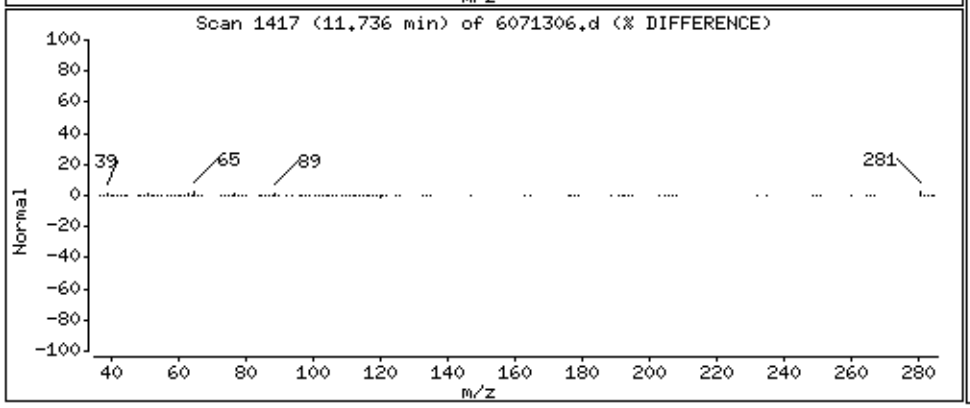
96 Propylbenzene

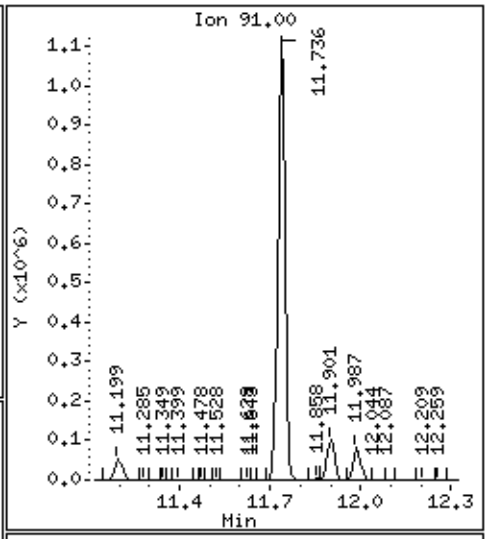
Concentration: 106.56 NG

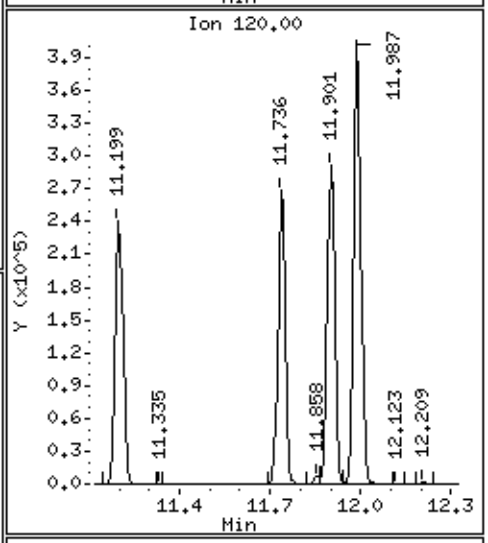


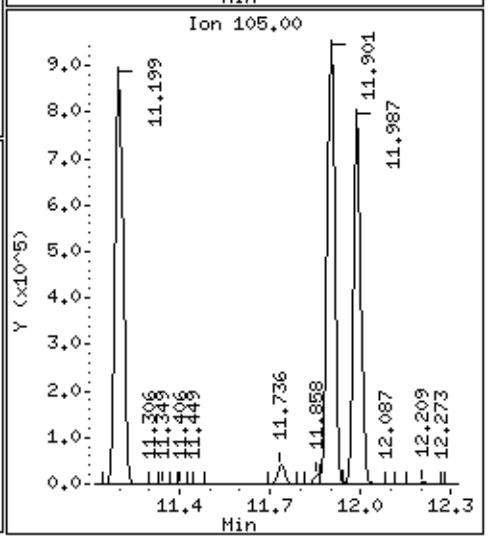












Data File: /chem/msd6.i/13jul16.b/6071306.d

Date : 13-JUL-2016 18:47

Client ID: LCS

Instrument: msd6.i

Sample Info: ;VI VOC+PAH ICV/LCS;LCS

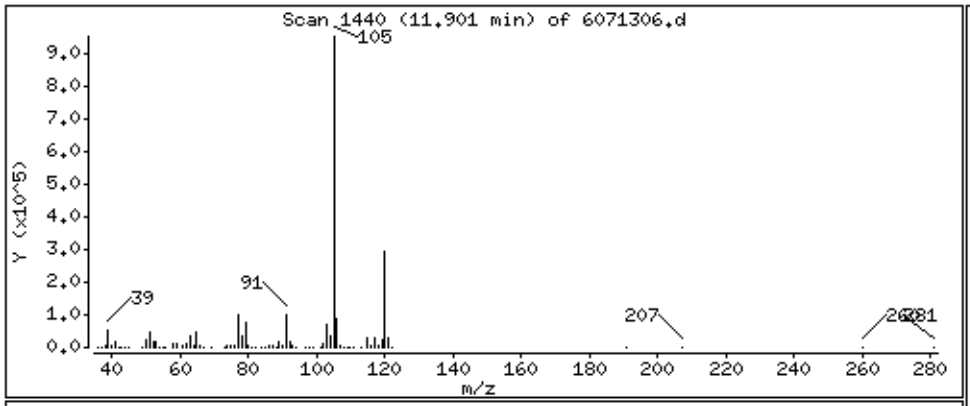
Operator: CT

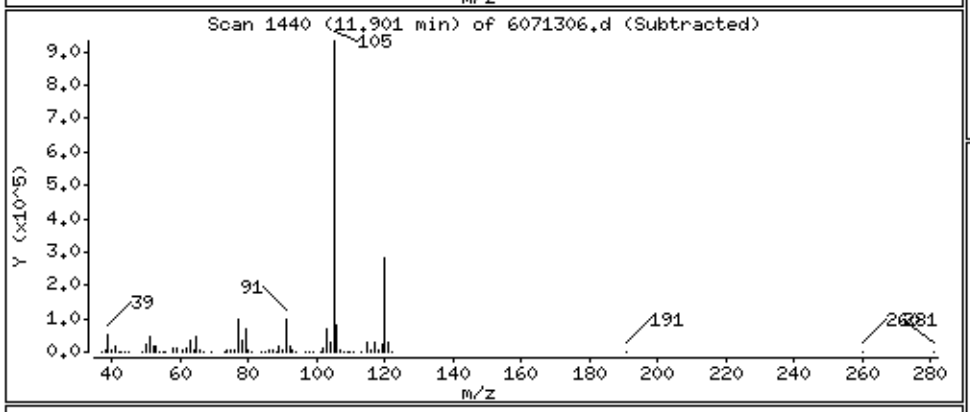
Column phase: RTx-624

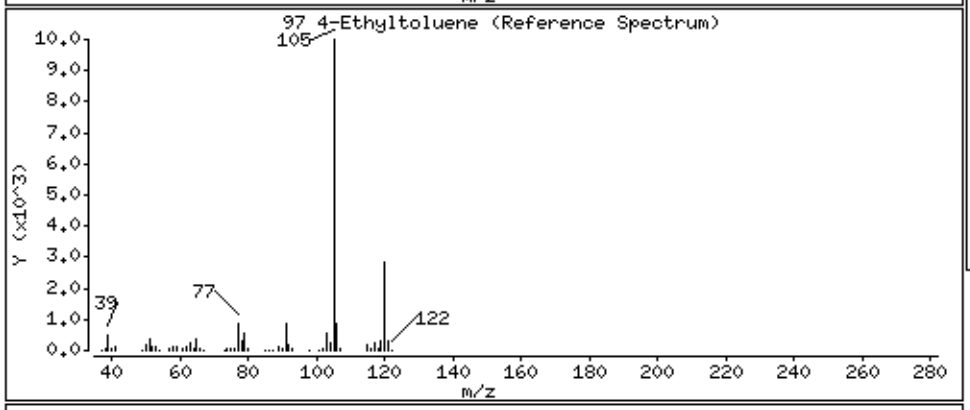
Column diameter: 0.53

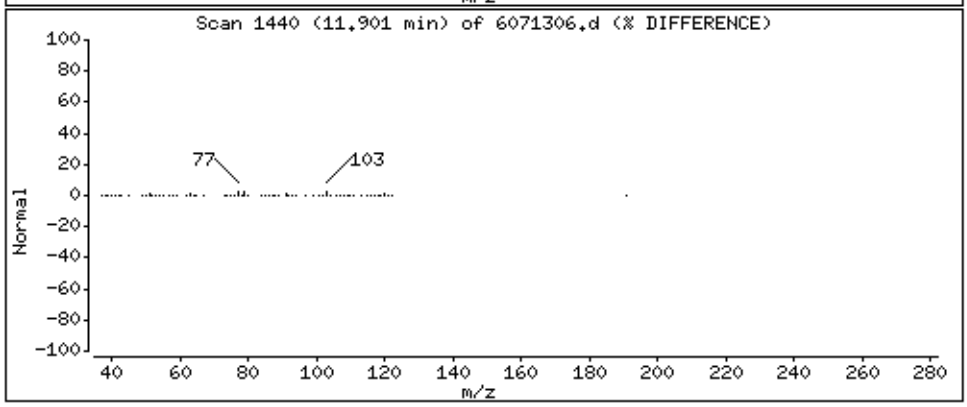
97 4-Ethyltoluene

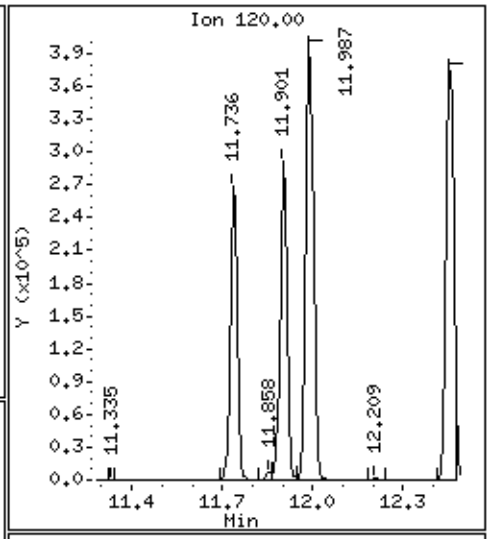
Concentration: 103.73 NG

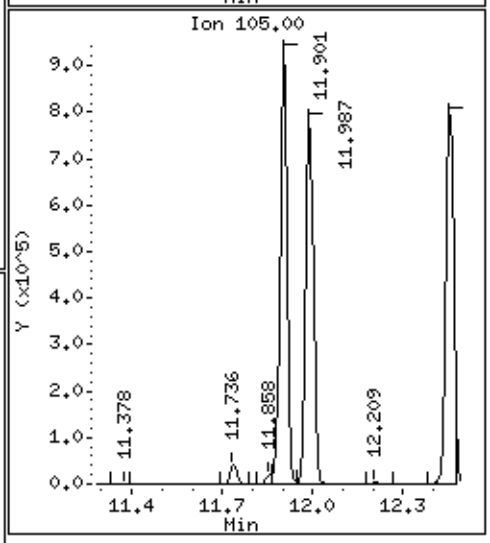












Data File: /chem/msd6.i/13jul16.b/6071306.d

Date : 13-JUL-2016 18:47

Client ID: LCS

Instrument: msd6.i

Sample Info: ;VI VOC+PAH ICV/LCS;LCS

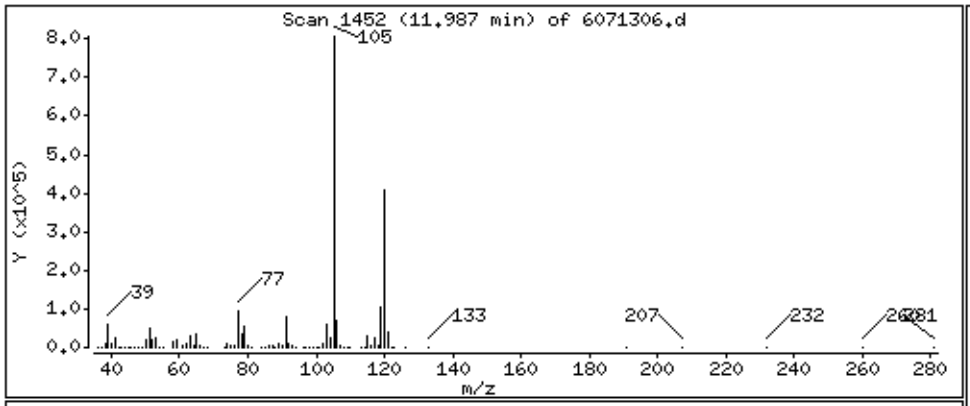
Operator: CT

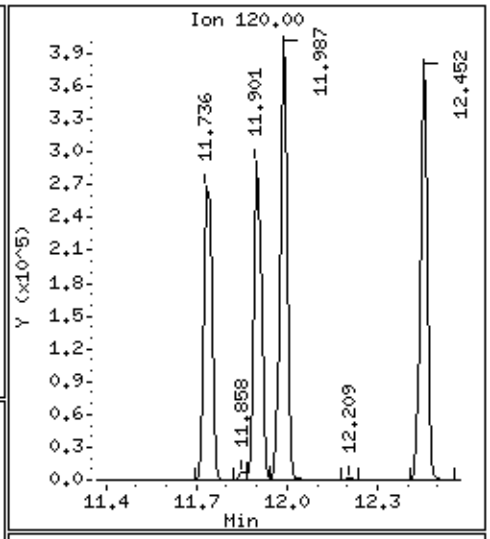
Column phase: RTx-624

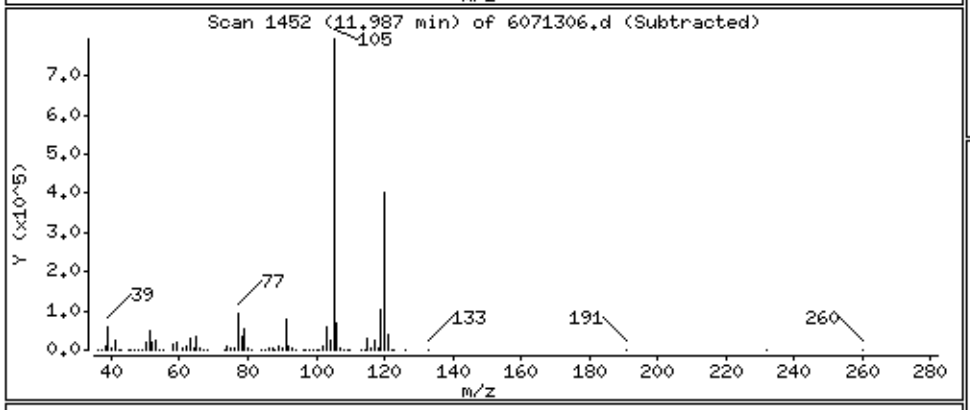
Column diameter: 0.53

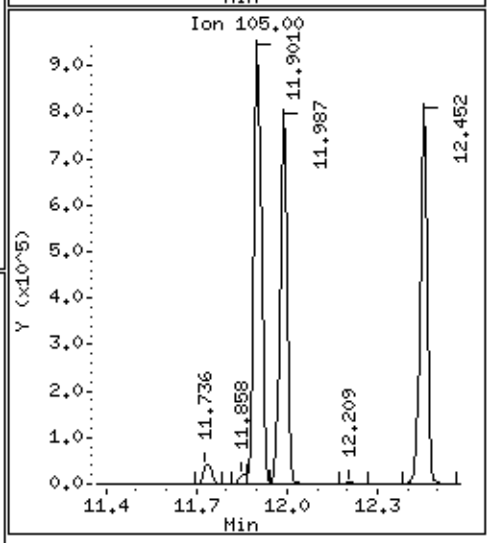
98 1,3,5-Trimethylbenzene

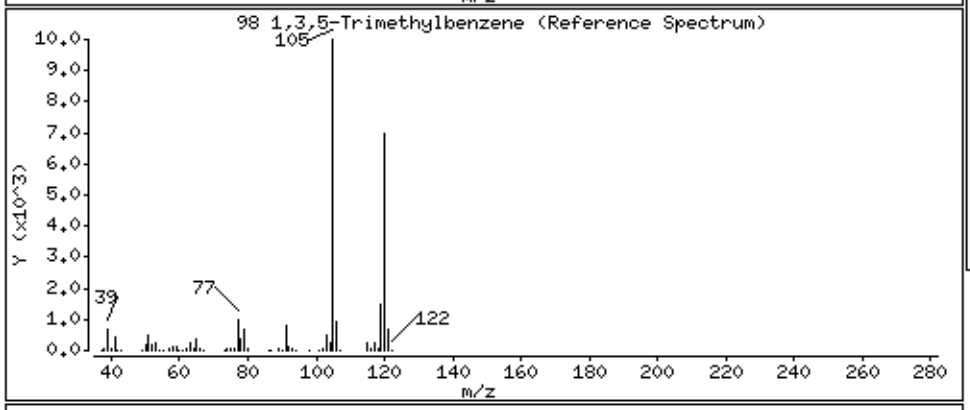
Concentration: 103.97 NG

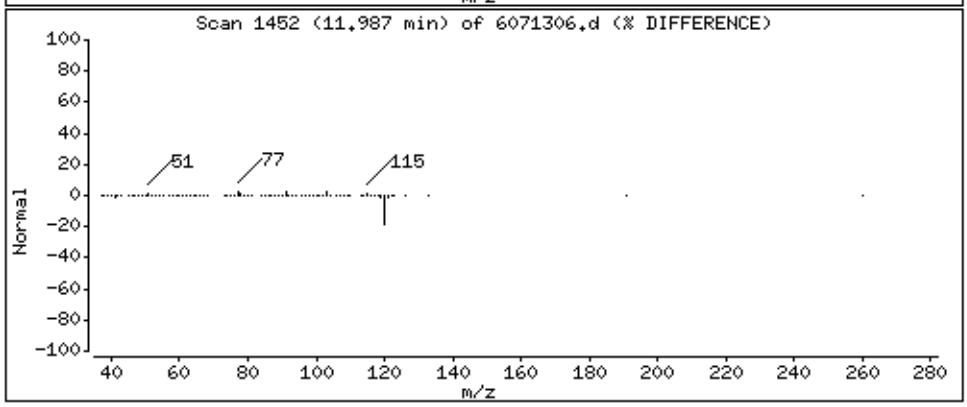












Data File: /chem/msd6.i/13jul16.b/6071306.d

Date : 13-JUL-2016 18:47

Client ID: LCS

Instrument: msd6.i

Sample Info: ;VI VOC+PAH ICV/LCS;LCS

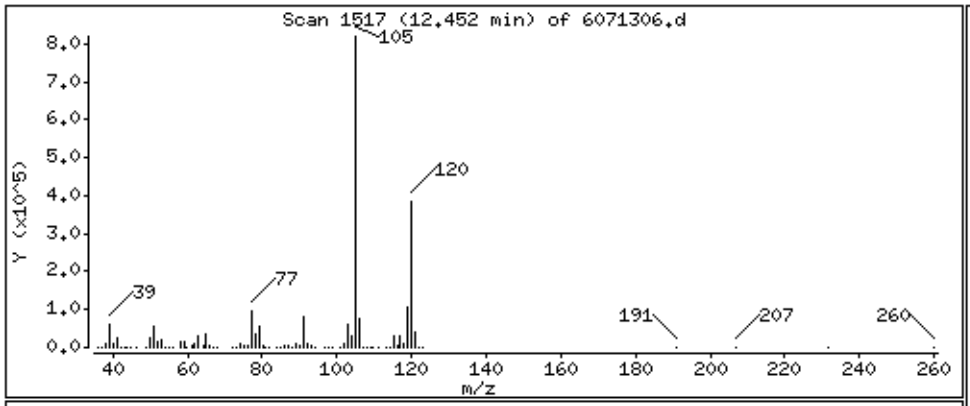
Operator: CT

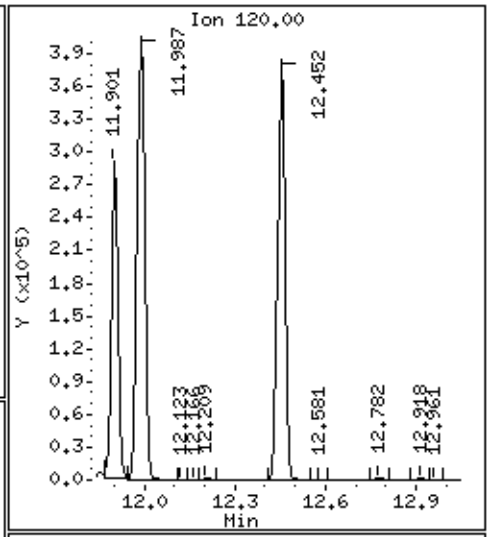
Column phase: RTx-624

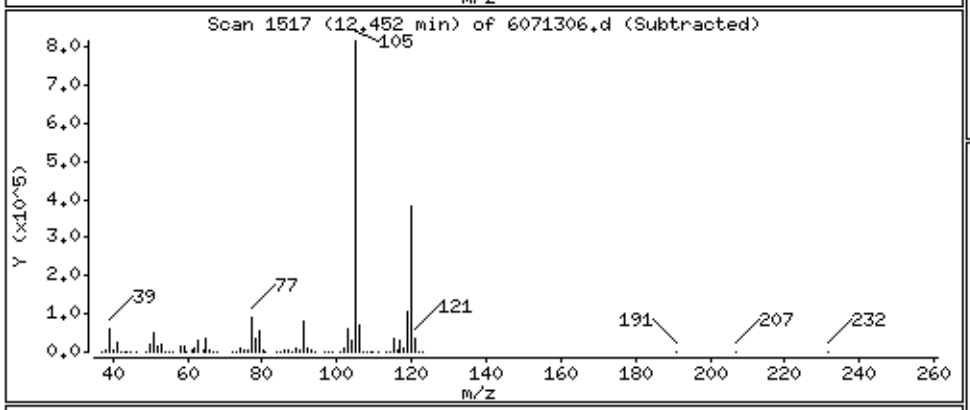
Column diameter: 0.53

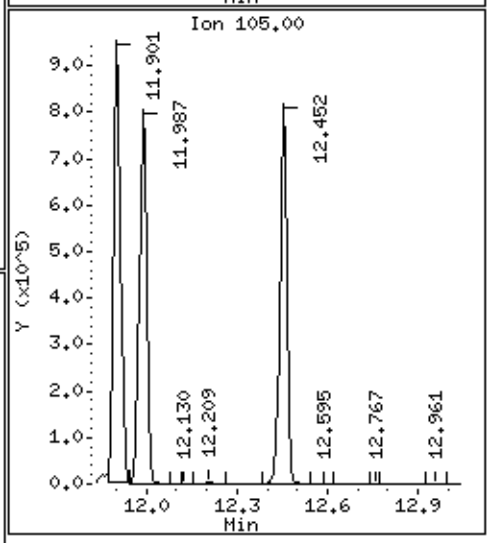
100 1,2,4-Trimethylbenzene

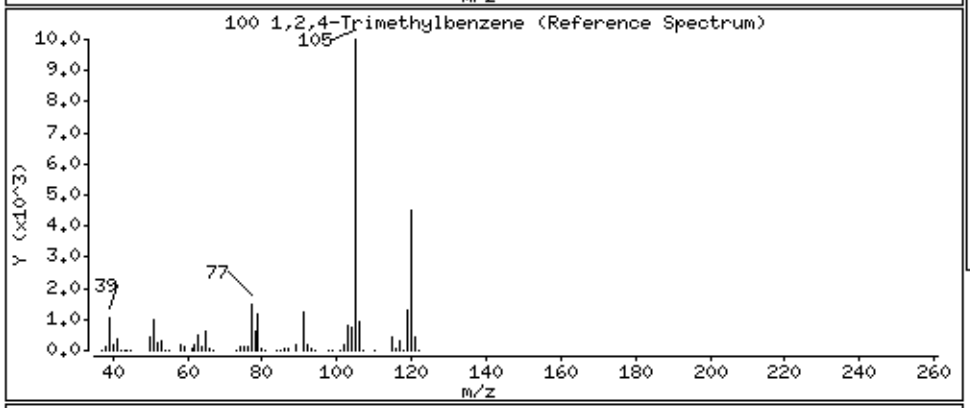
Concentration: 104.03 NG

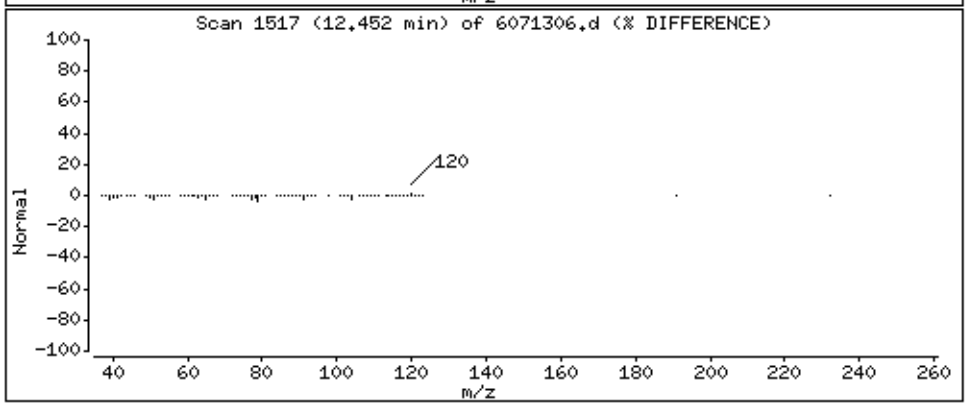












Data File: /chem/msd6.i/13jul16.b/6071306.d

Date : 13-JUL-2016 18:47

Client ID: LCS

Instrument: msd6.i

Sample Info: ;VI VOC+PAH ICV/LCS;LCS

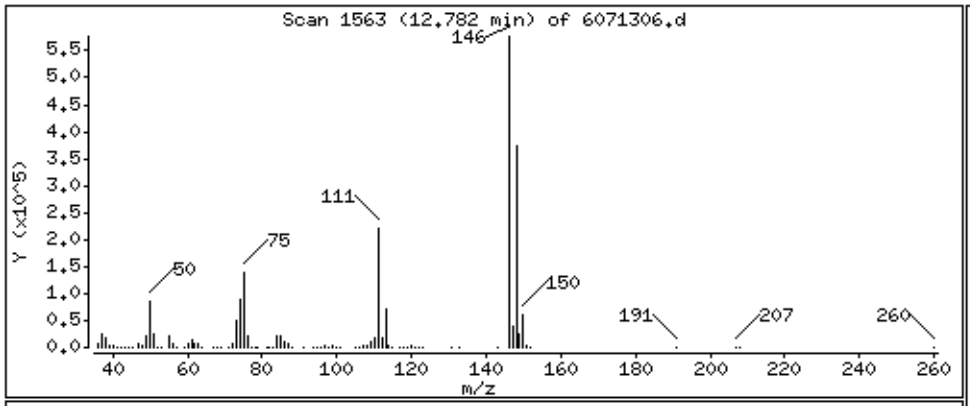
Operator: CT

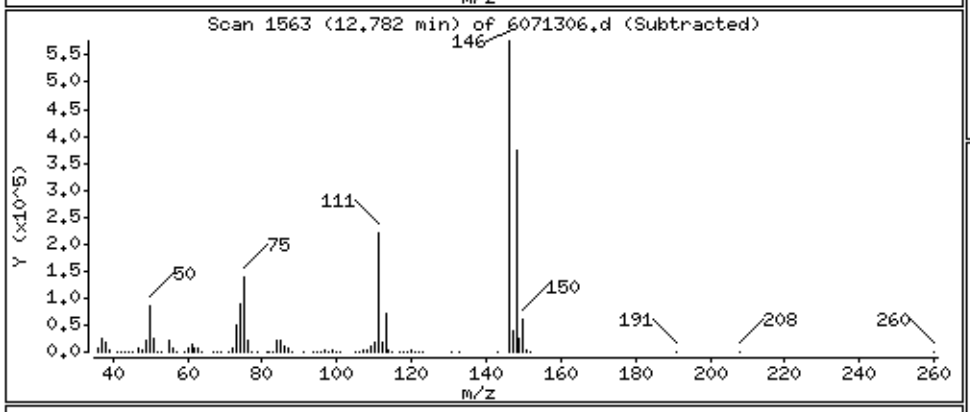
Column phase: RTx-624

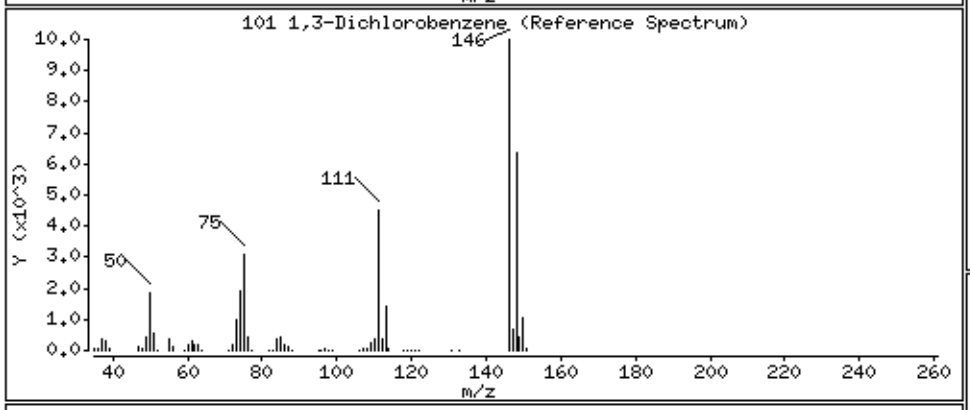
Column diameter: 0.53

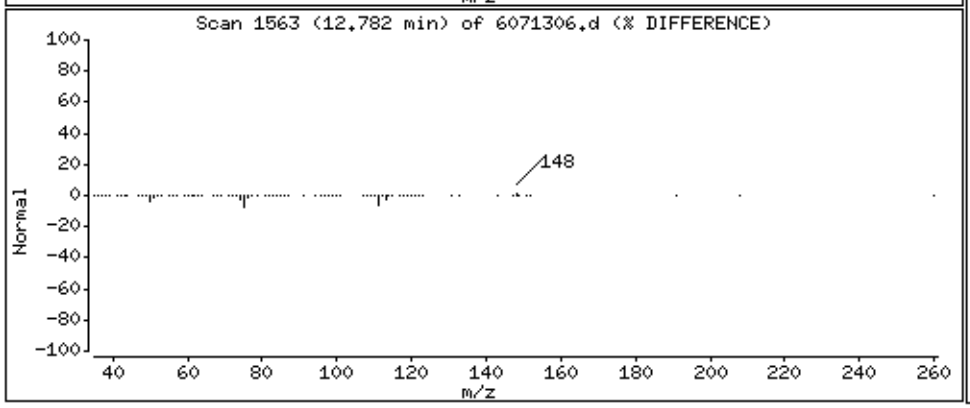
101 1,3-Dichlorobenzene

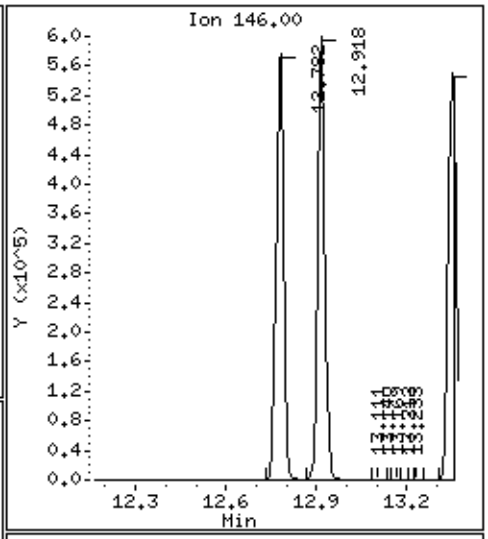
Concentration: 128.68 NG

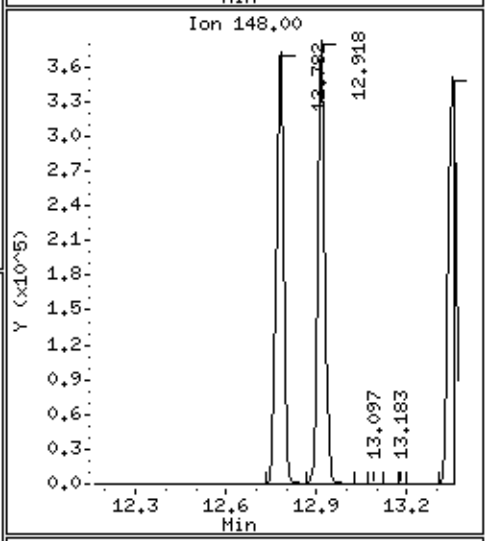


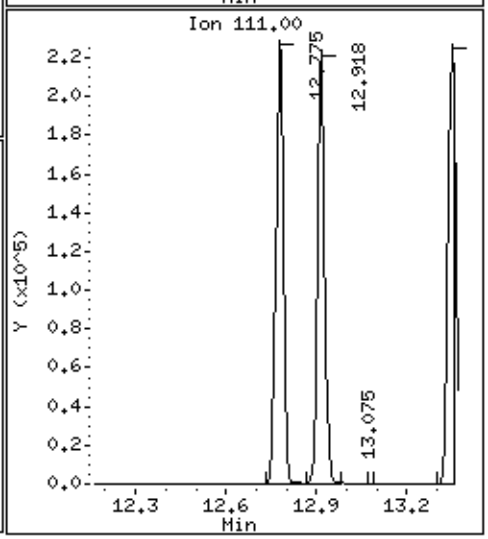












Data File: /chem/msd6.i/13jul16.b/6071306.d

Date : 13-JUL-2016 18:47

Client ID: LCS

Instrument: msd6.i

Sample Info: ;VI VOC+PAH ICV/LCS;LCS

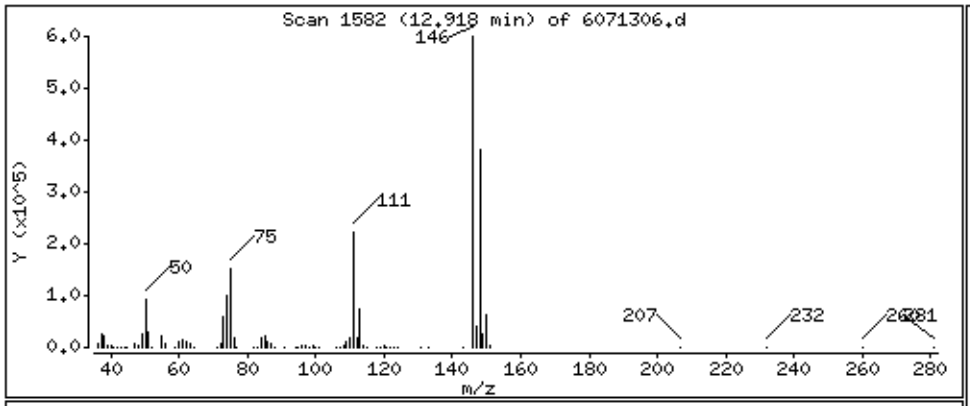
Operator: CT

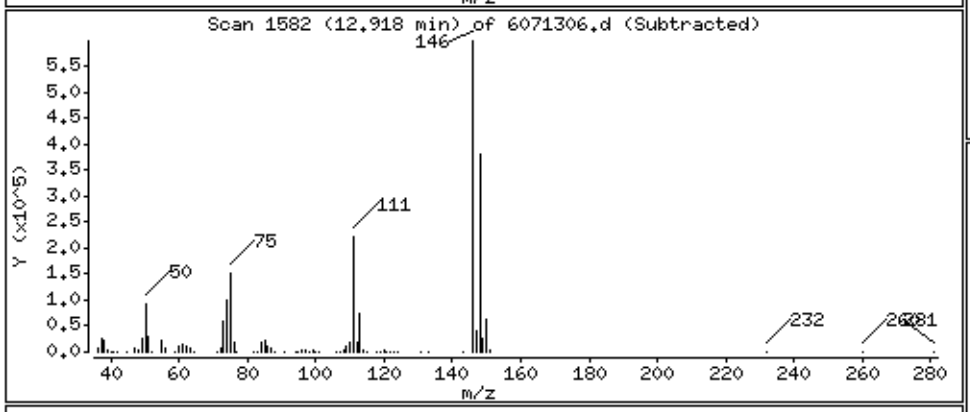
Column phase: RTx-624

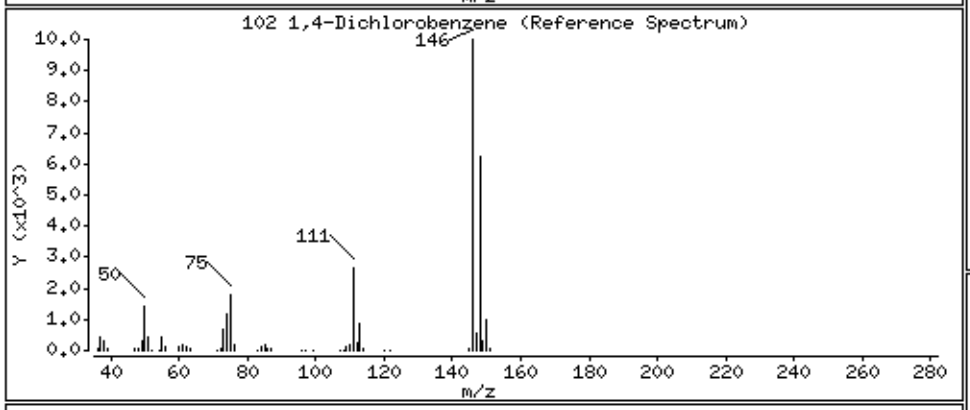
Column diameter: 0.53

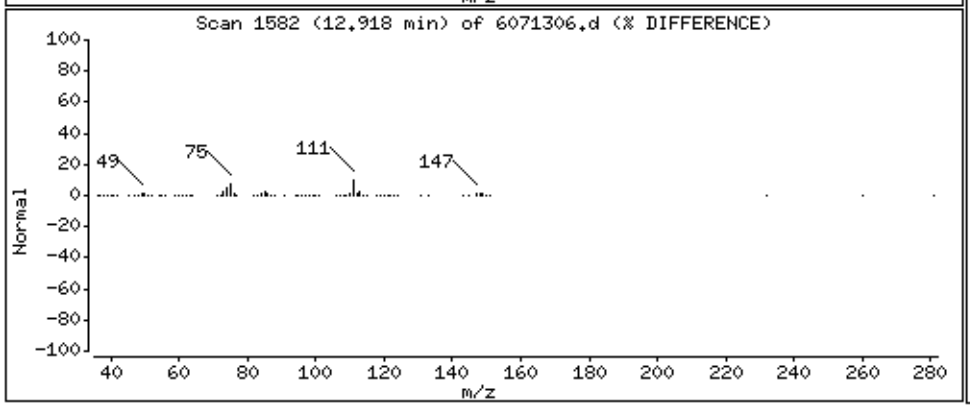
102 1,4-Dichlorobenzene

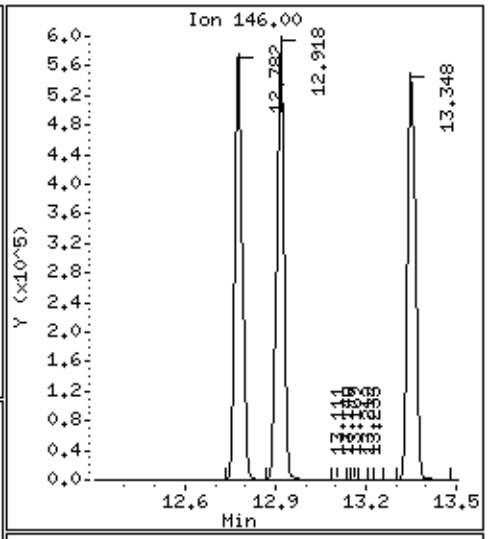
Concentration: 130.48 NG

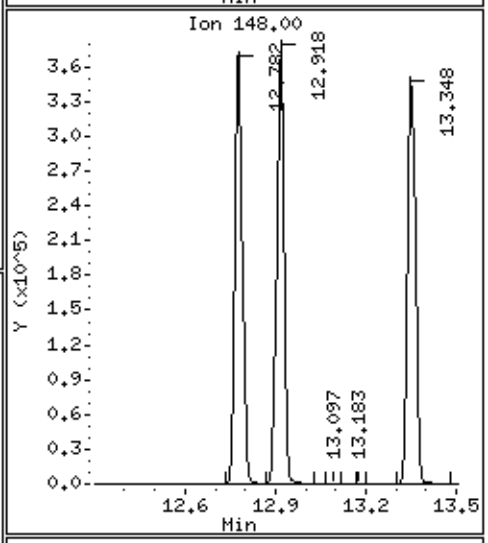


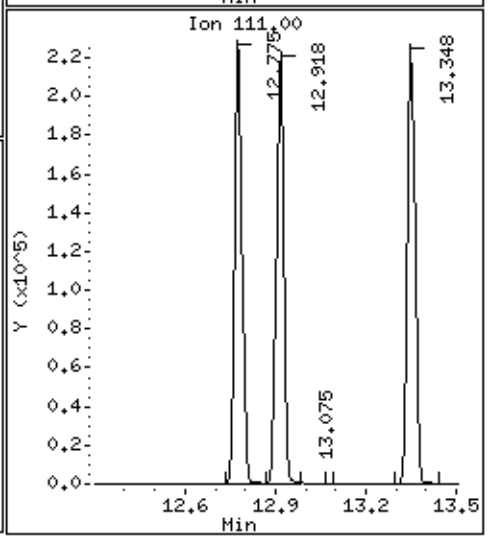












Data File: /chem/msd6.i/13jul16.b/6071306.d

Date : 13-JUL-2016 18:47

Client ID: LCS

Instrument: msd6.i

Sample Info: ;VI VOC+PAH ICV/LCS;LCS

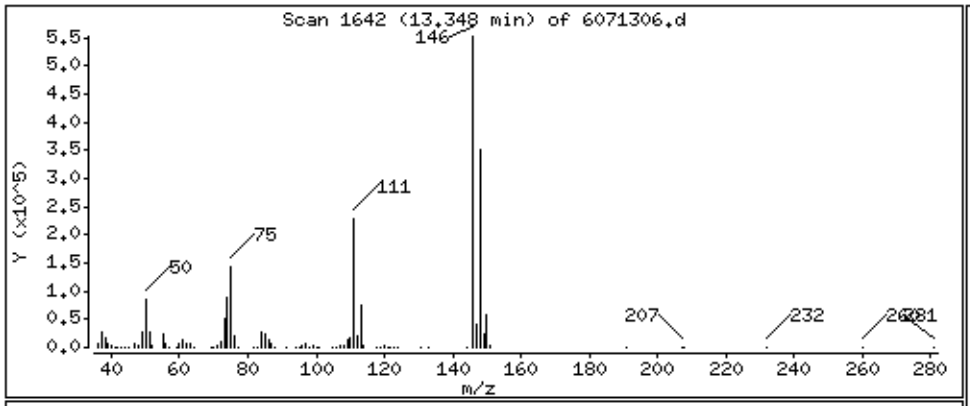
Operator: CT

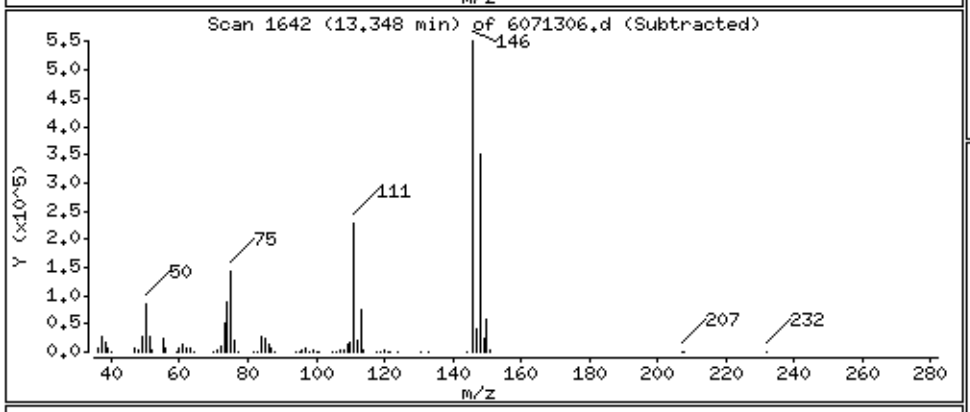
Column phase: RTx-624

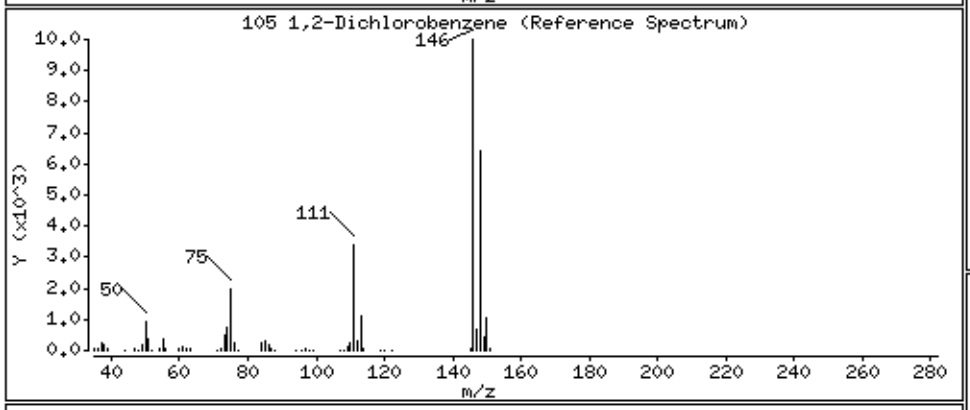
Column diameter: 0.53

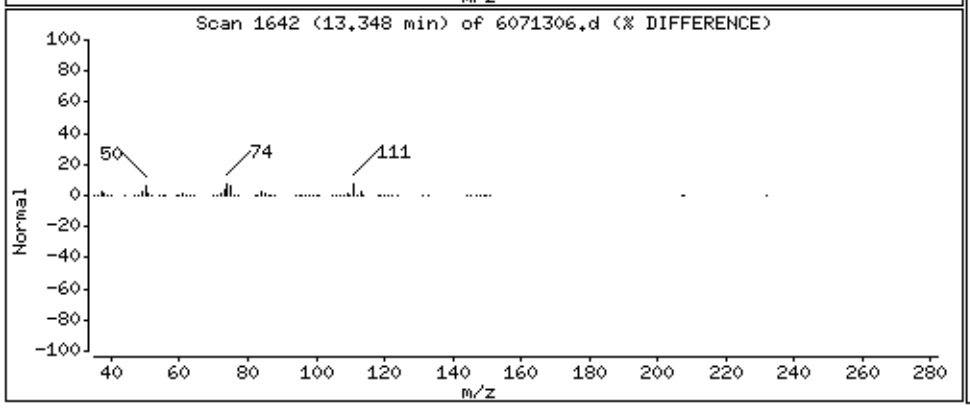
105 1,2-Dichlorobenzene

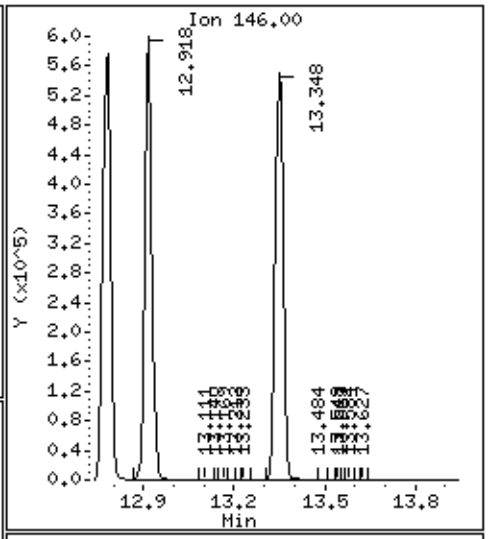
Concentration: 129.49 NG

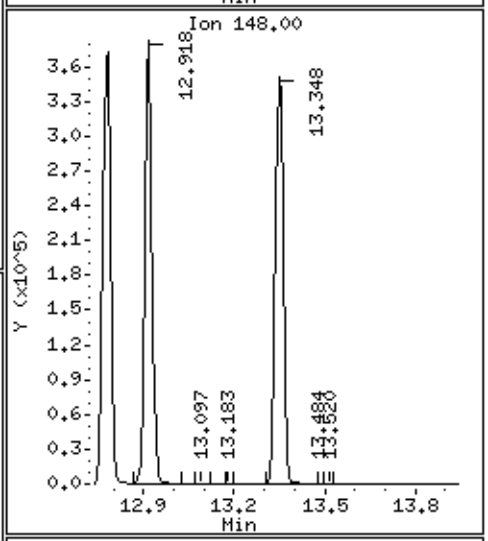


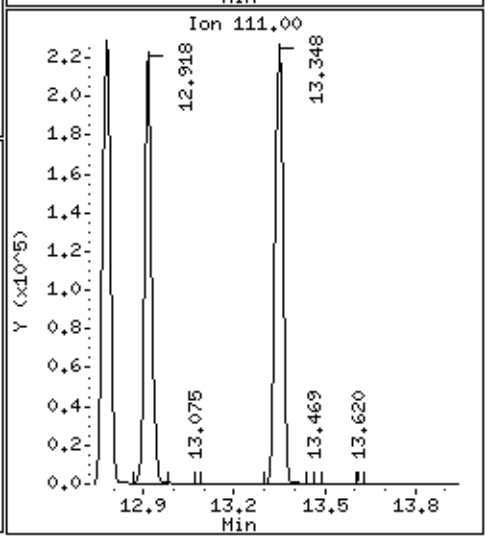












Data File: /chem/msd6.i/13jul16.b/6071306.d

Date : 13-JUL-2016 18:47

Client ID: LCS

Instrument: msd6.i

Sample Info: ;VI VOC+PAH ICV/LCS;LCS

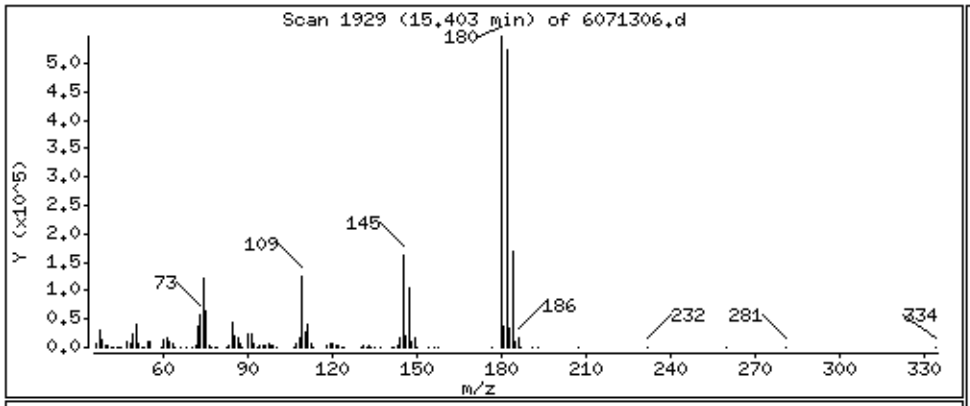
Operator: CT

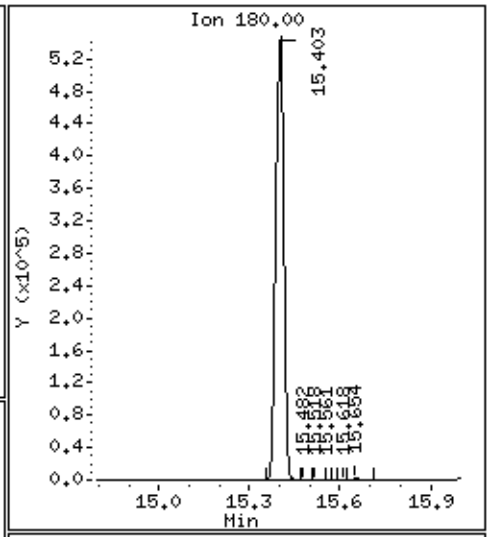
Column phase: RTx-624

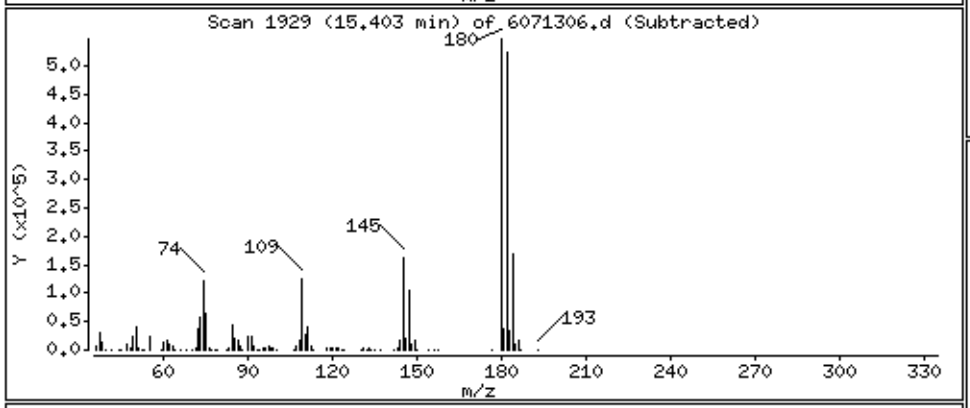
Column diameter: 0.53

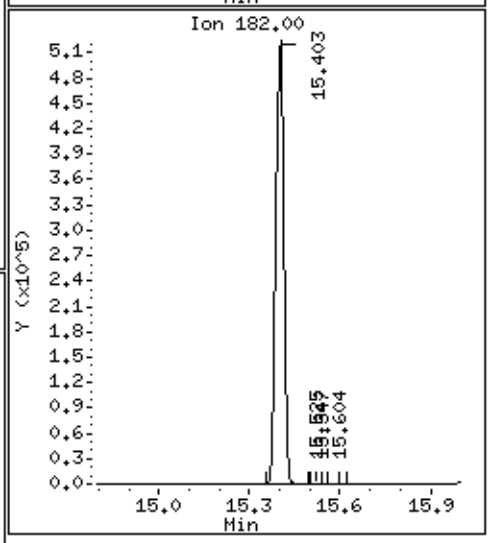
106 1,2,4-Trichlorobenzene

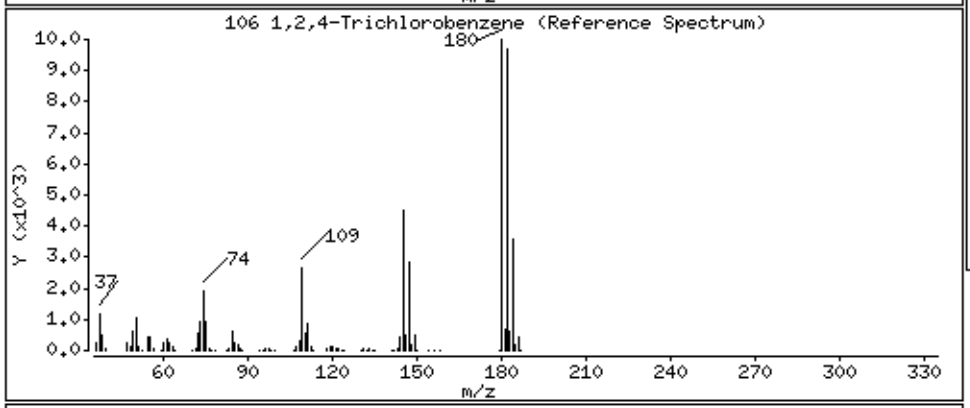
Concentration: 159.00 NG

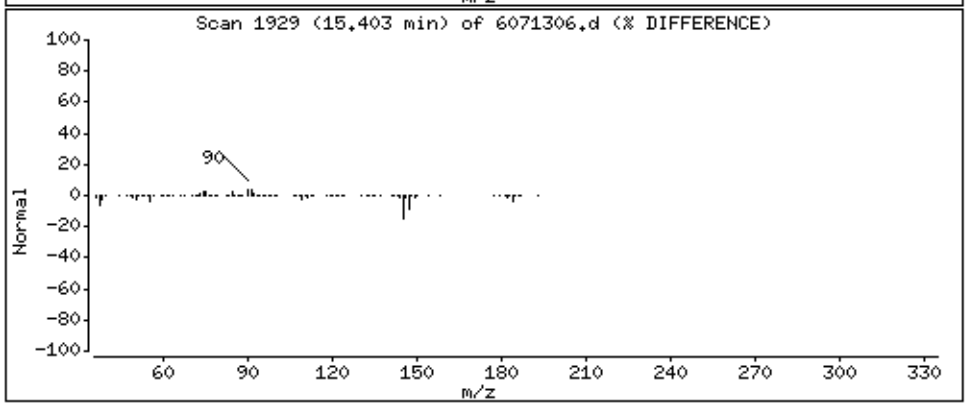












Data File: /chem/msd6.i/13jul16.b/6071306.d

Date : 13-JUL-2016 18:47

Client ID: LCS

Instrument: msd6.i

Sample Info: ;VI VOC+PAH ICV/LCS;LCS

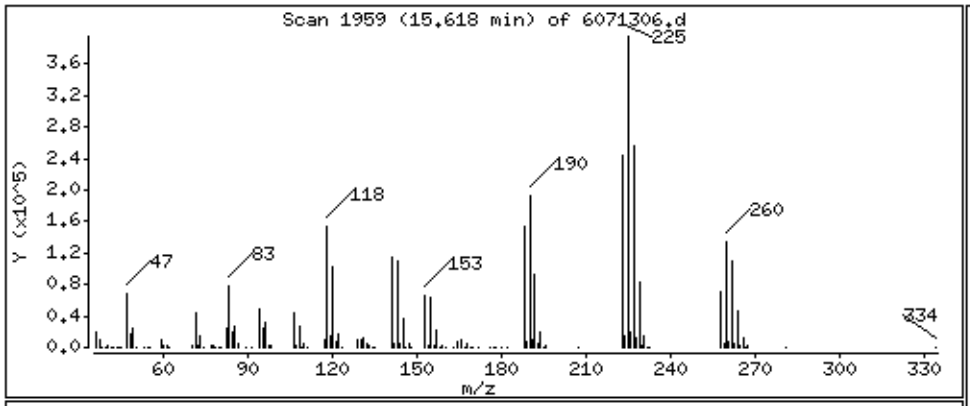
Operator: CT

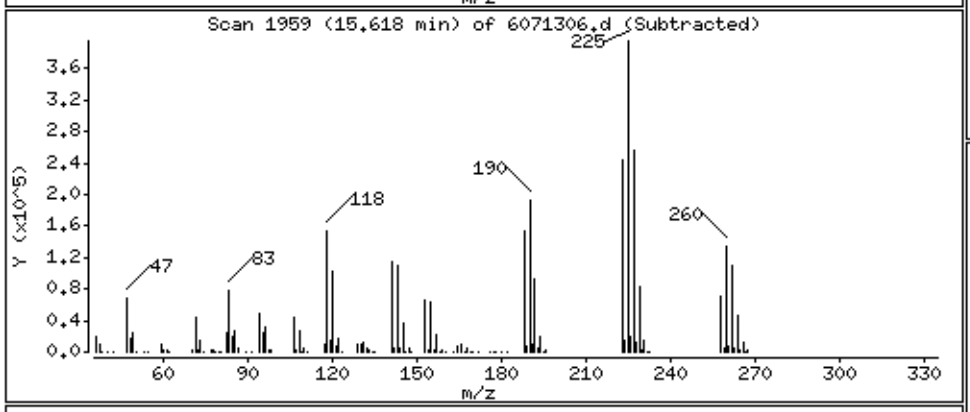
Column phase: RTx-624

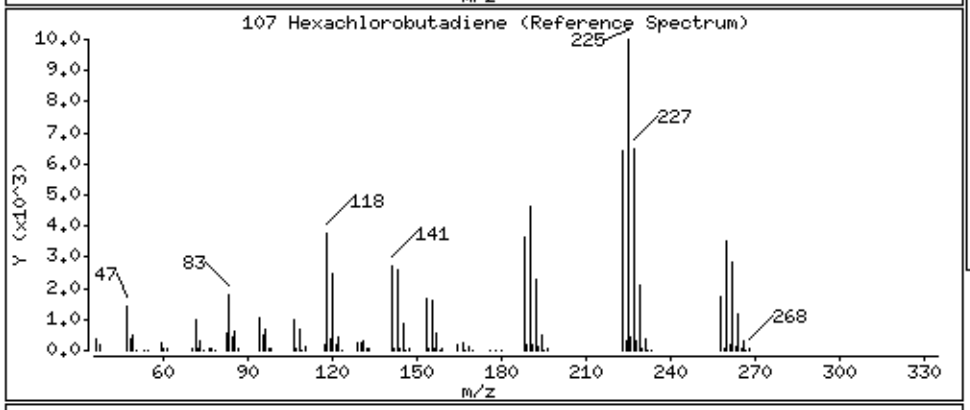
Column diameter: 0.53

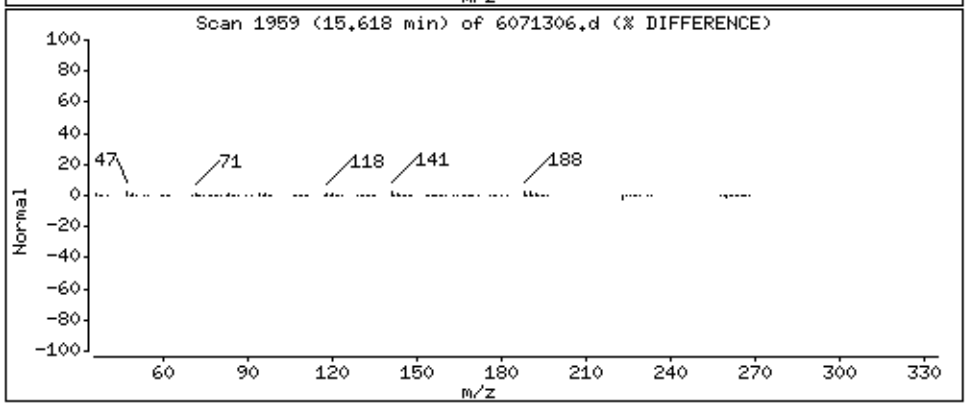
107 Hexachlorobutadiene

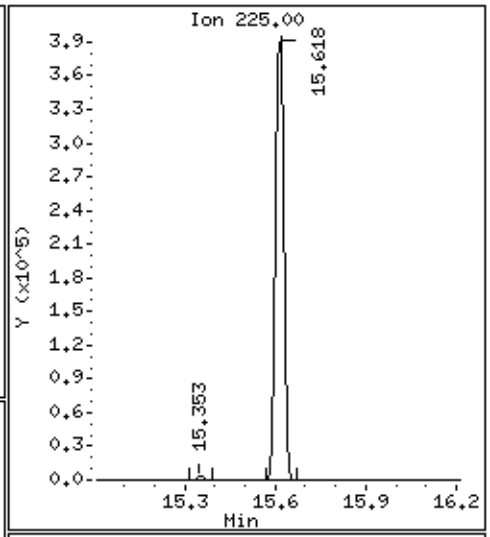
Concentration: 203.54 NG

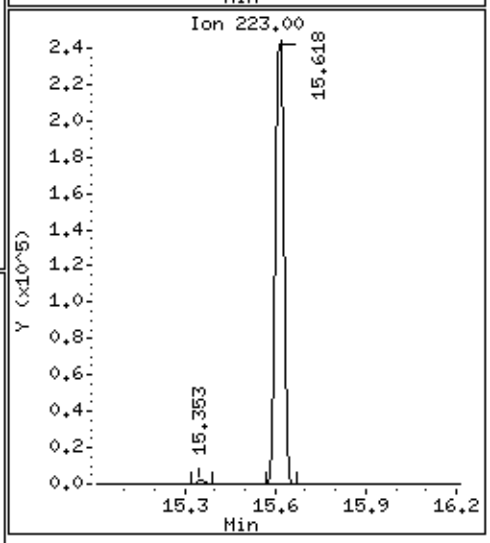












Data File: /chem/msd6.i/13jul16.b/6071306.d

Date : 13-JUL-2016 18:47

Client ID: LCS

Instrument: msd6.i

Sample Info: ;VI VOC+PAH ICV/LCS;LCS

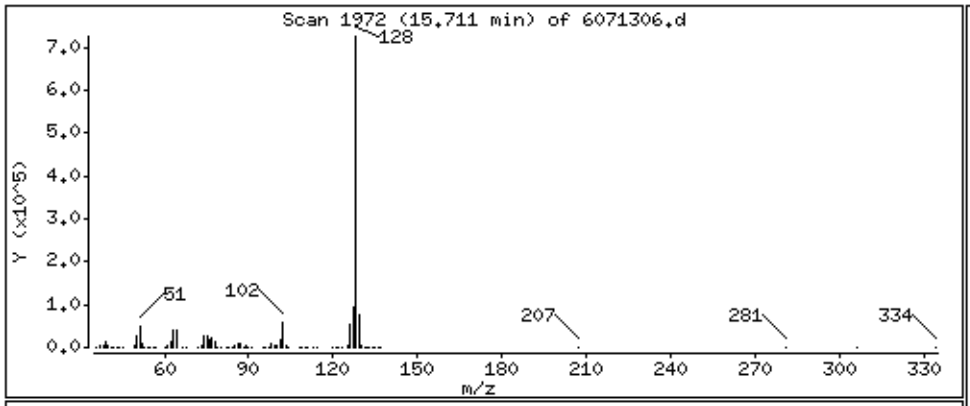
Operator: CT

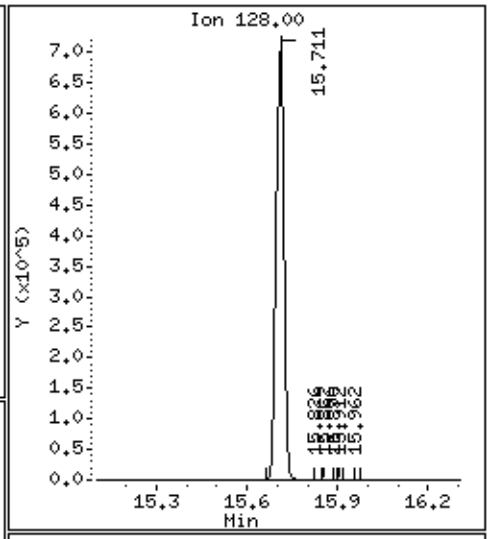
Column phase: RTx-624

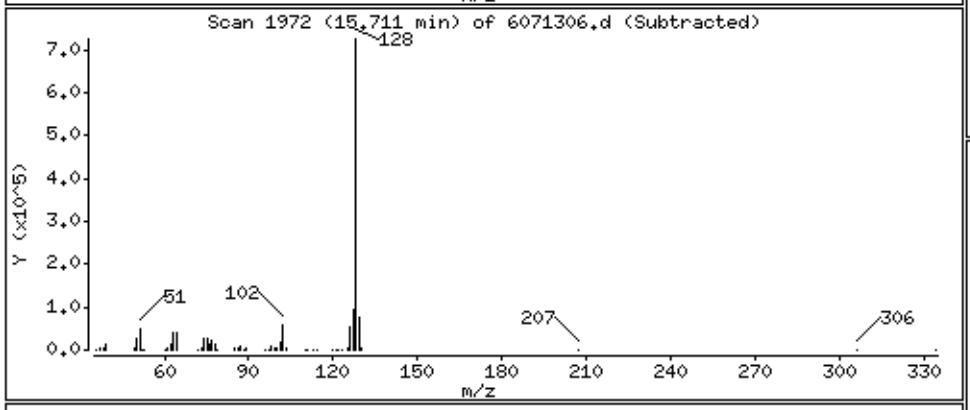
Column diameter: 0.53

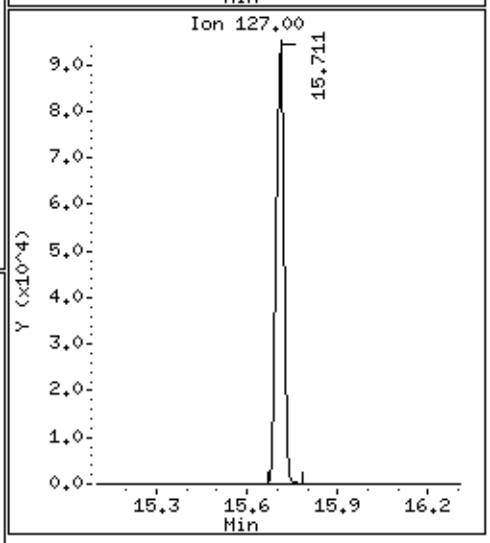
109 Naphthalene

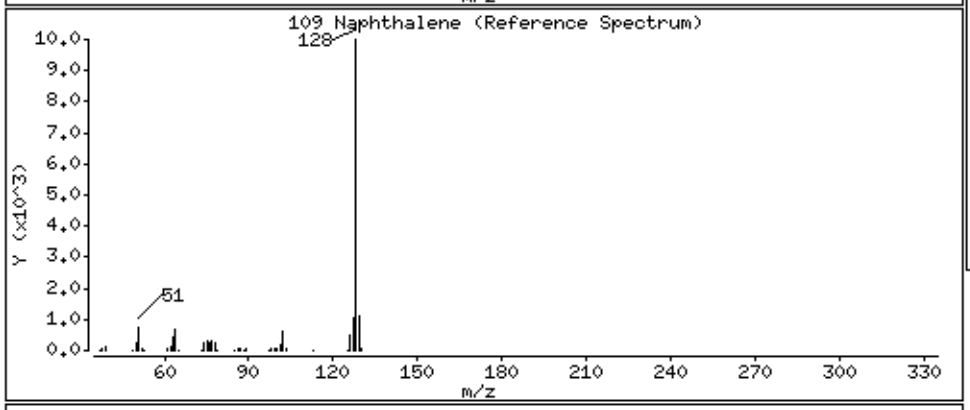
Concentration: 53.558 NG

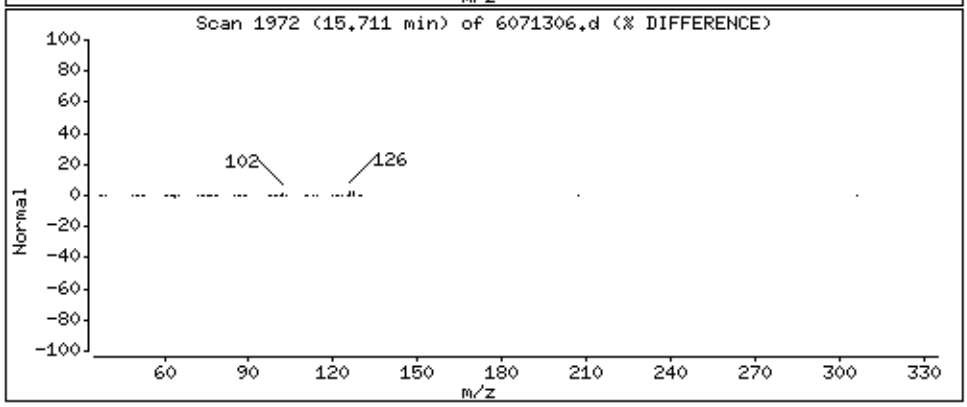












Data File: /chem/msd6.i/13jul16.b/6071306.d

Date : 13-JUL-2016 18:47

Client ID: LCS

Instrument: msd6.i

Sample Info: ;VI VOC+PAH ICV/LCS;LCS

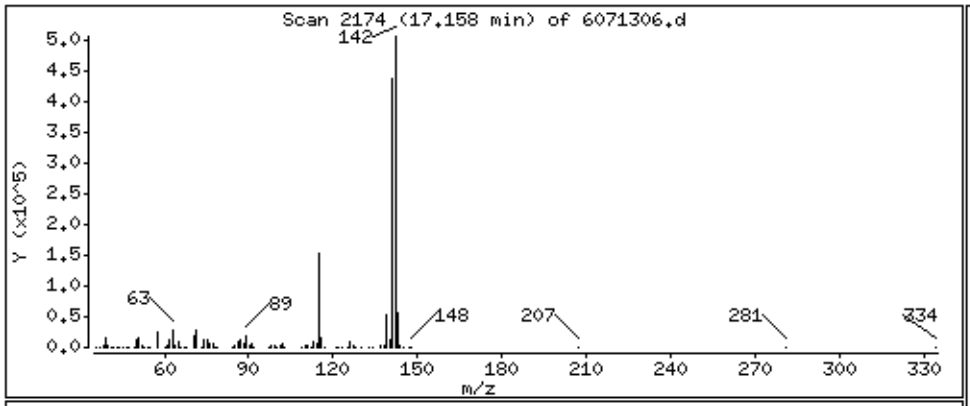
Operator: CT

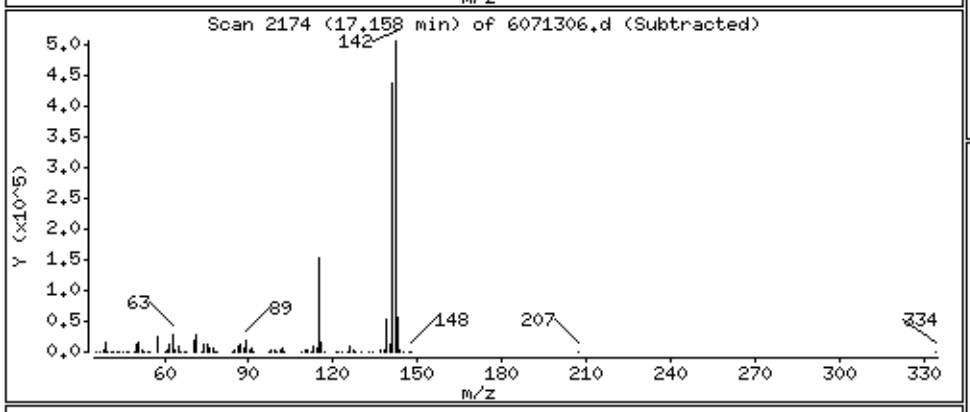
Column phase: RTx-624

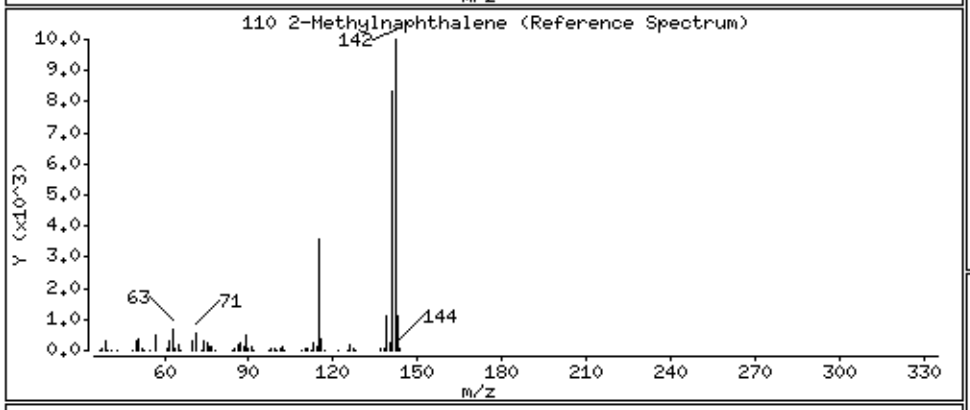
Column diameter: 0.53

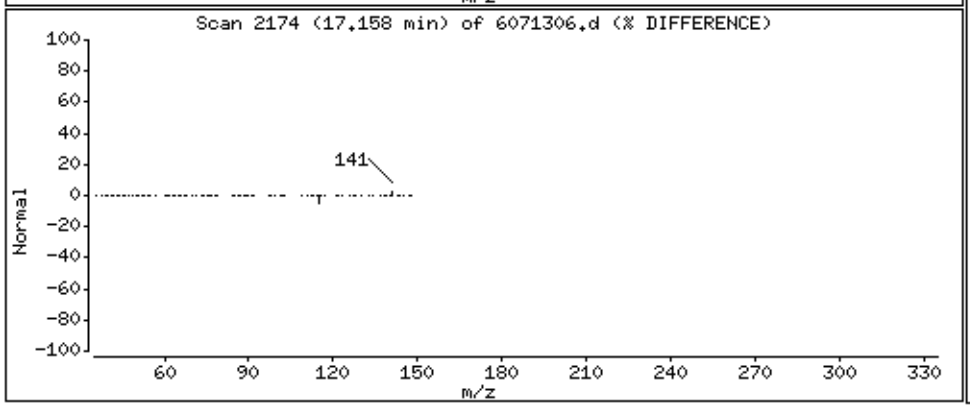
110 2-Methylnaphthalene

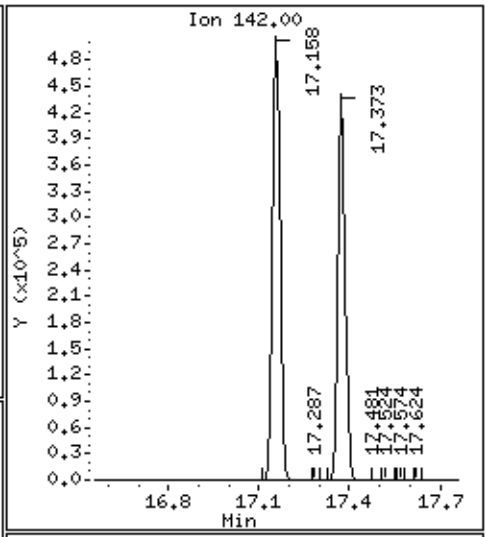
Concentration: 57.072 NG

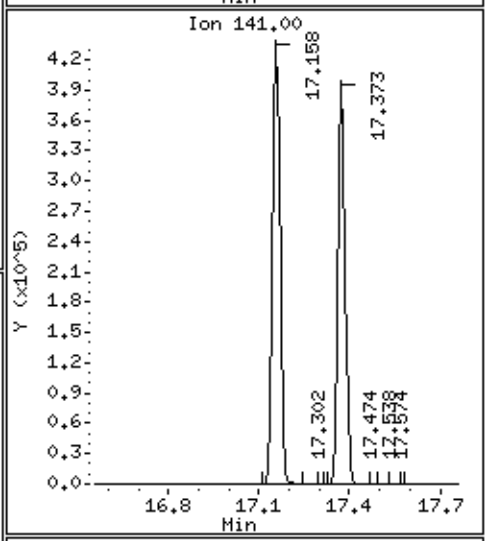


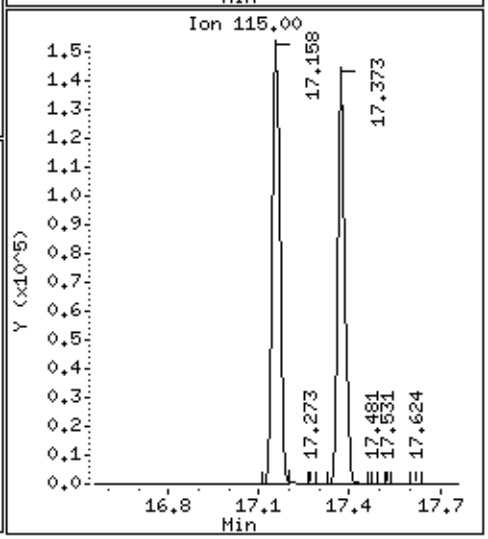












Data File: /chem/msd6.i/13jul16.b/6071306.d

Date : 13-JUL-2016 18:47

Client ID: LCS

Instrument: msd6.i

Sample Info: ;VI VOC+PAH ICV/LCS;LCS

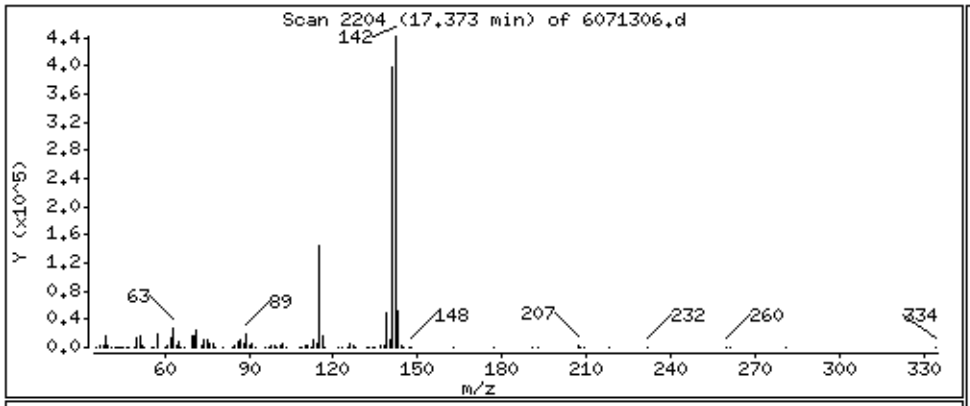
Operator: CT

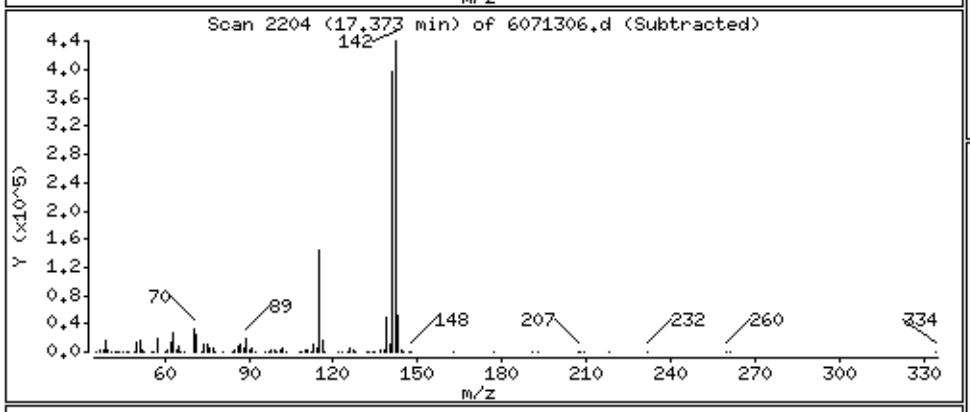
Column phase: RTx-624

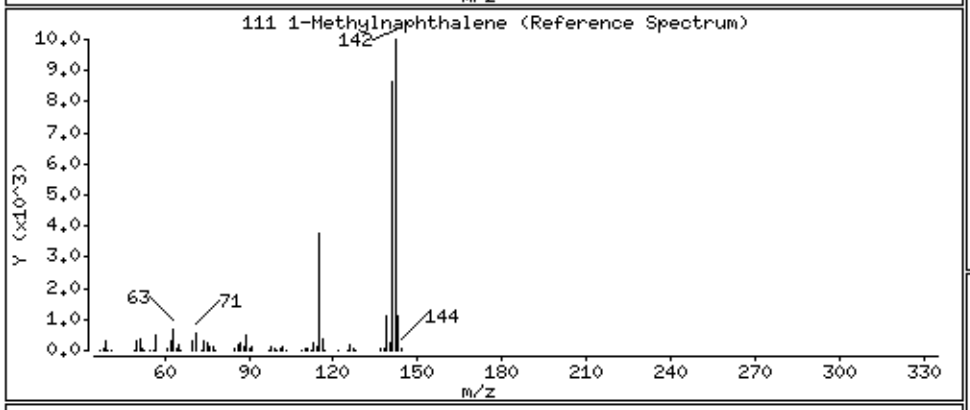
Column diameter: 0.53

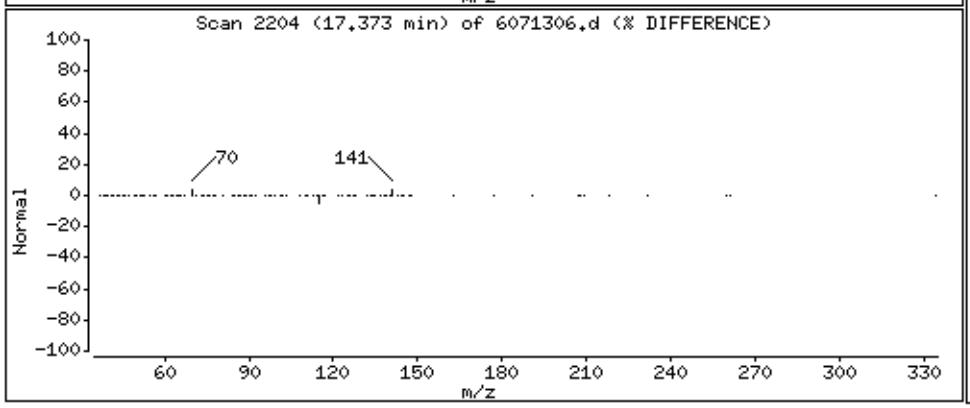
111 1-Methylnaphthalene

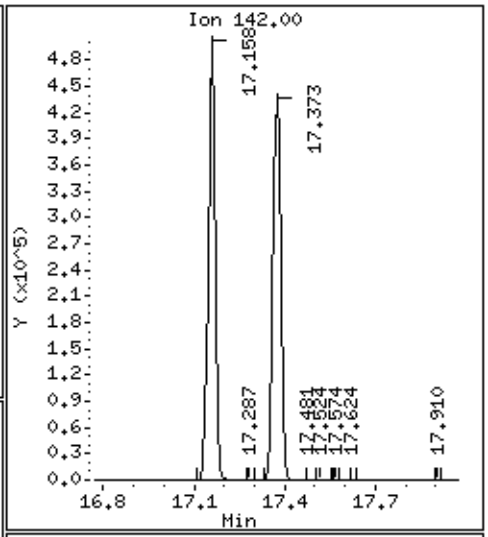
Concentration: 57.298 NG

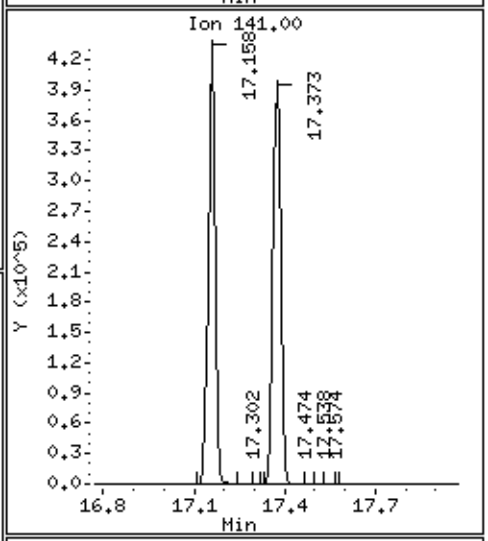


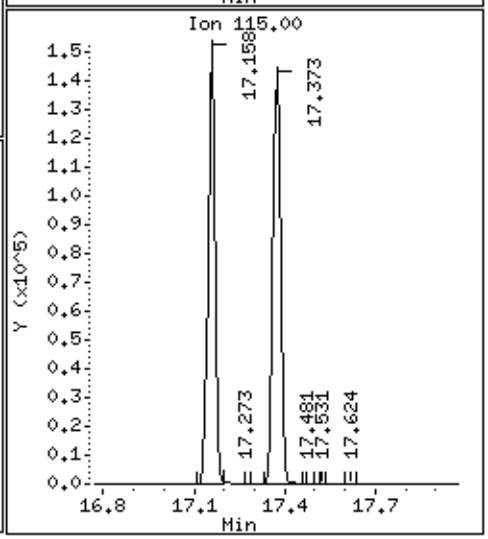












Data File: /chem/msd6.i/13jul16.b/6071306.d

Date : 13-JUL-2016 18:47

Client ID: LCS

Instrument: msd6.i

Sample Info: ;VI VOC+PAH ICV/LCS;LCS

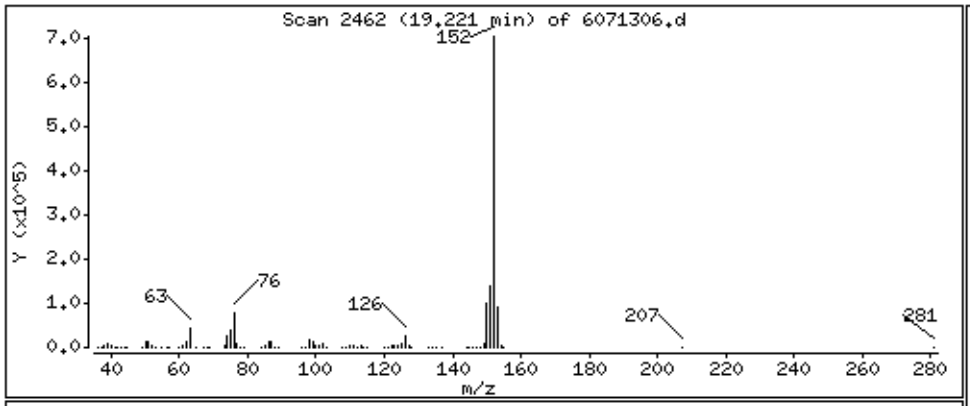
Operator: CT

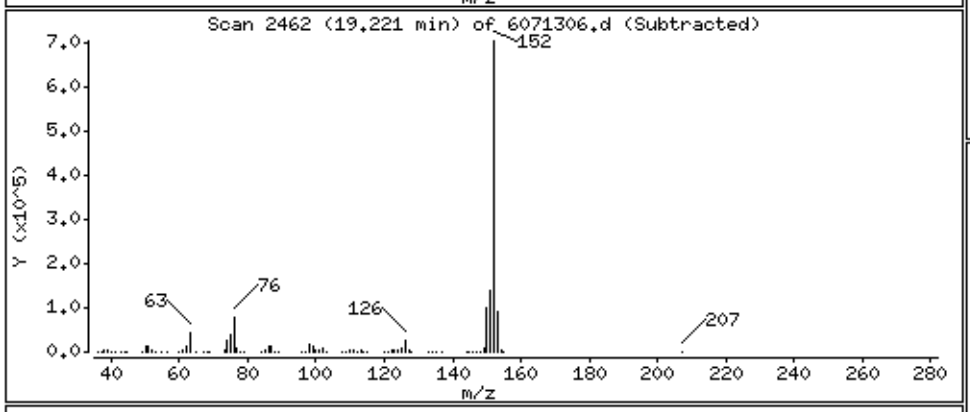
Column phase: RTx-624

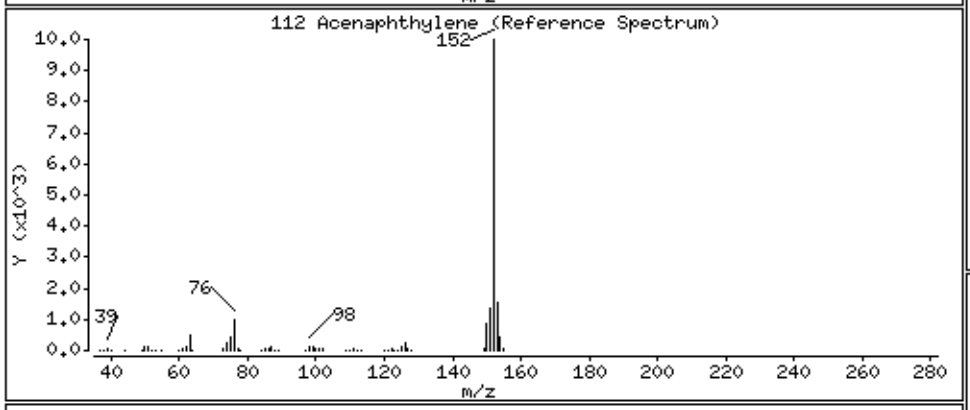
Column diameter: 0.53

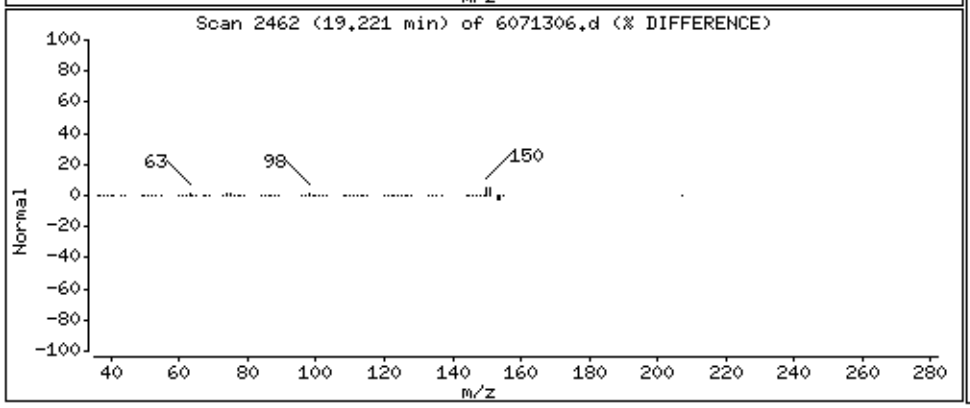
112 Acenaphthylene

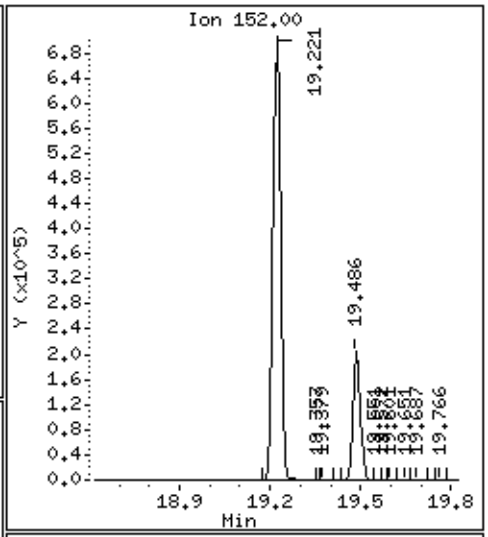
Concentration: 55.365 NG

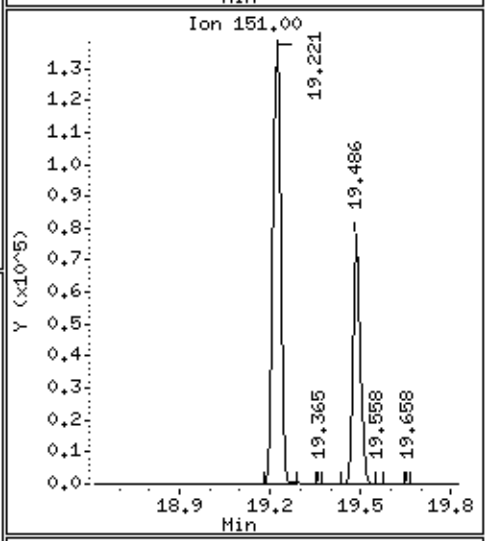


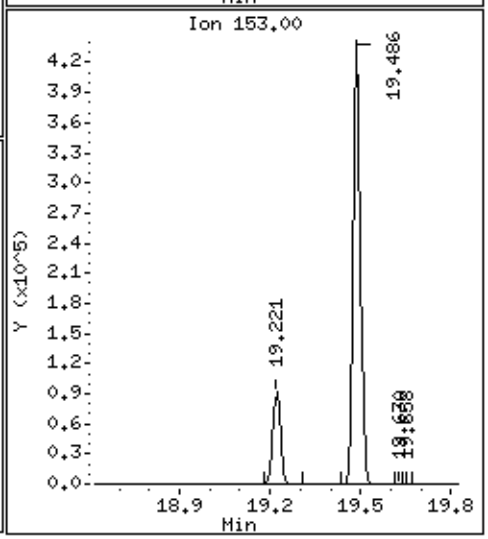












Data File: /chem/msd6.i/13jul16.b/6071306.d

Date : 13-JUL-2016 18:47

Client ID: LCS

Instrument: msd6.i

Sample Info: ;VI VOC+PAH ICV/LCS;LCS

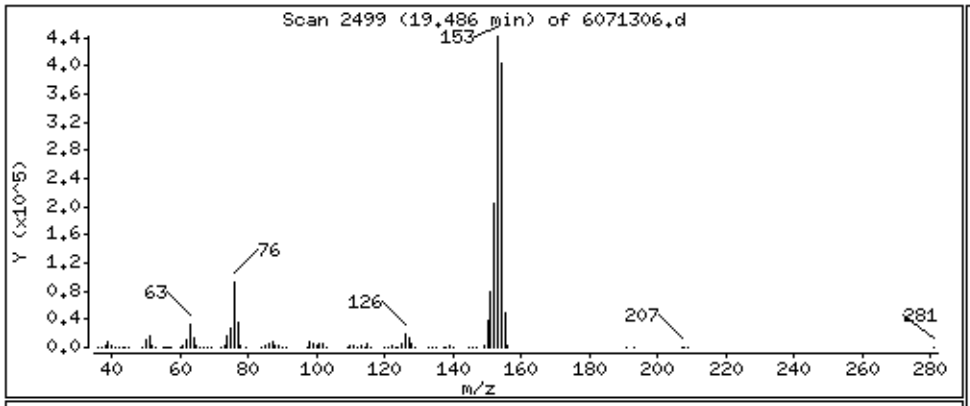
Operator: CT

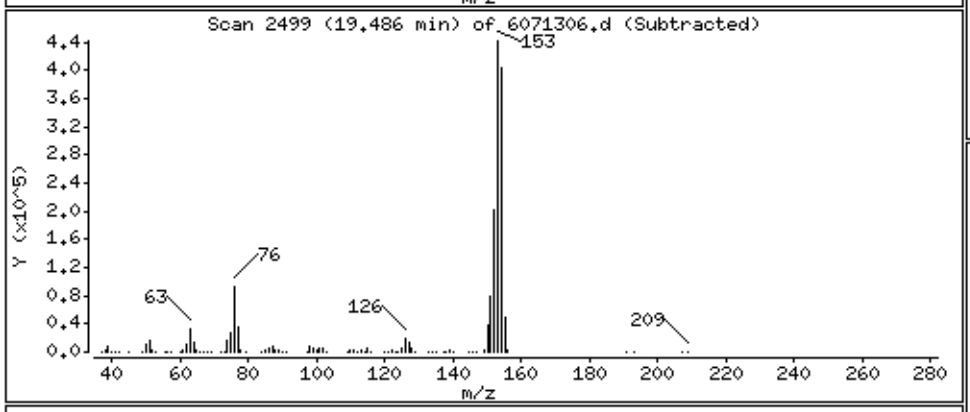
Column phase: RTx-624

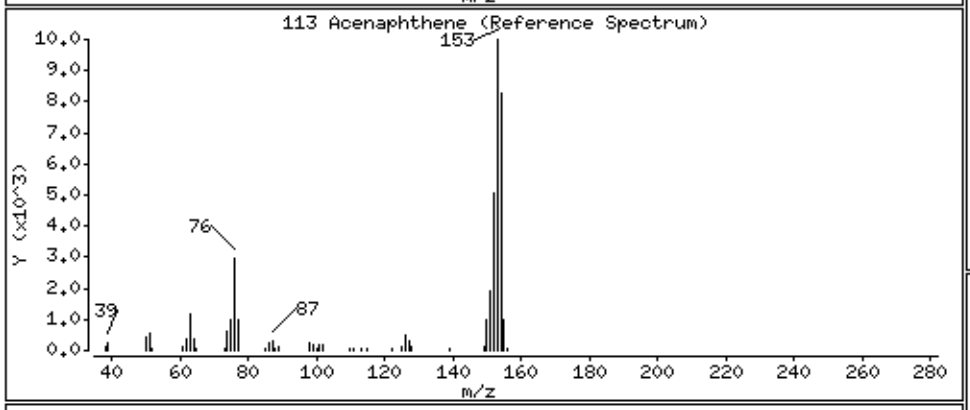
Column diameter: 0.53

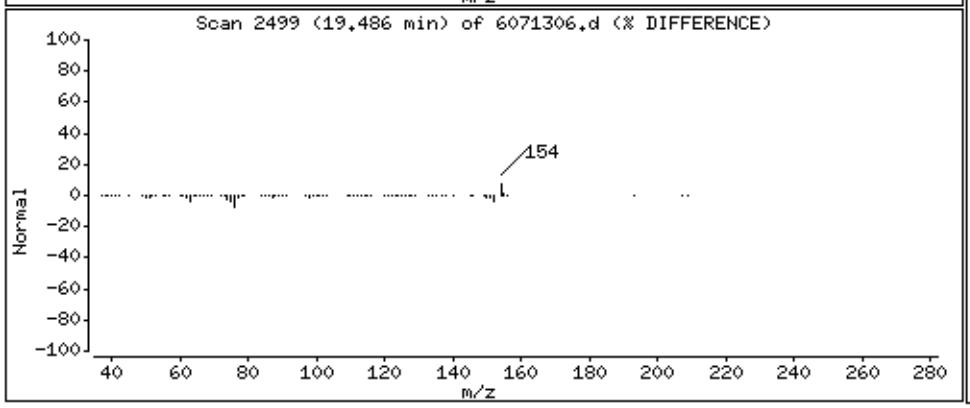
113 Acenaphthene

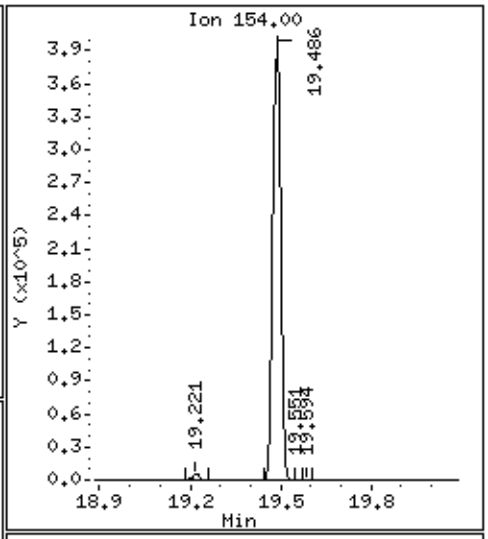
Concentration: 58.419 NG

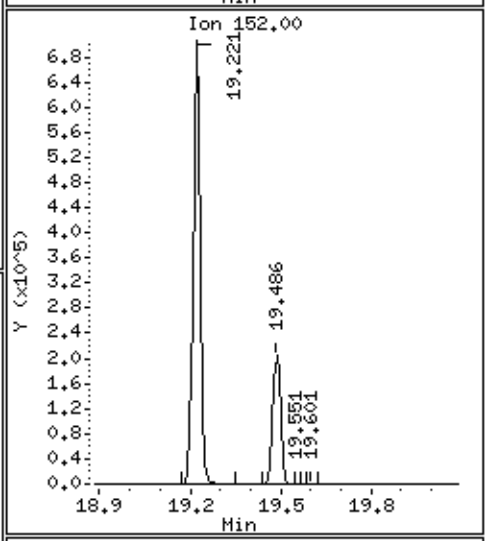


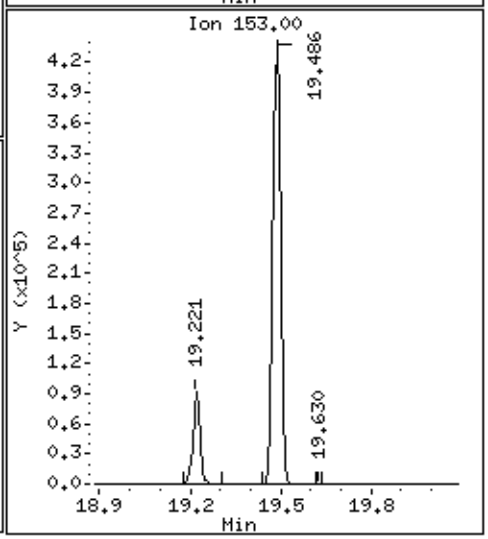












Data File: /chem/msd6.i/13jul16.b/6071306.d

Date : 13-JUL-2016 18:47

Client ID: LCS

Instrument: msd6.i

Sample Info: ;VI VOC+PAH ICV/LCS;LCS

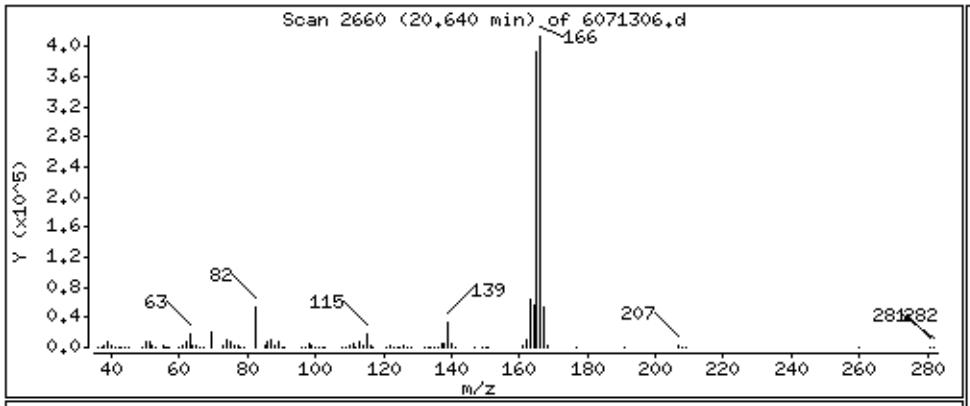
Operator: CT

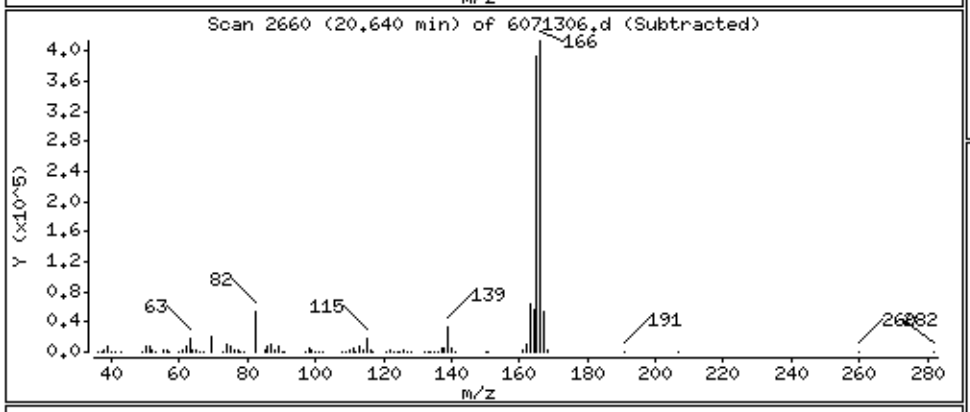
Column phase: RTx-624

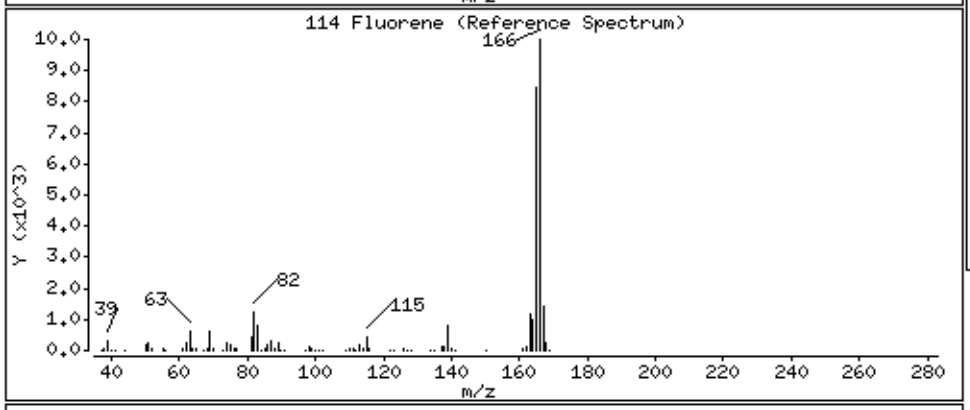
Column diameter: 0.53

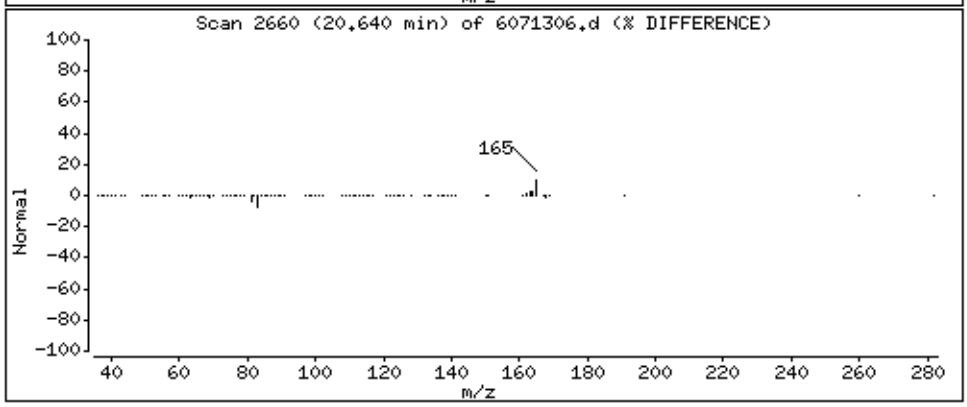
114 Fluorene

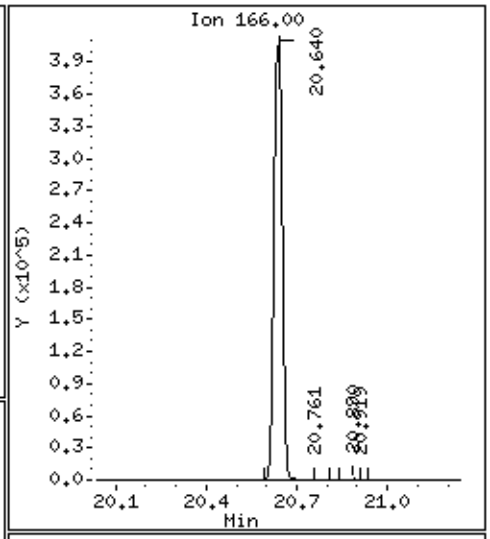
Concentration: 58.613 NG

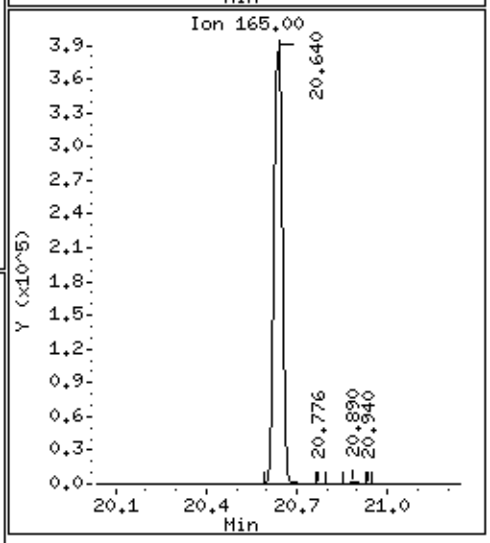












Data File: /chem/msd6.i/13jul16.b/6071306.d

Date : 13-JUL-2016 18:47

Client ID: LCS

Instrument: msd6.i

Sample Info: ;VI VOC+PAH ICV/LCS;LCS

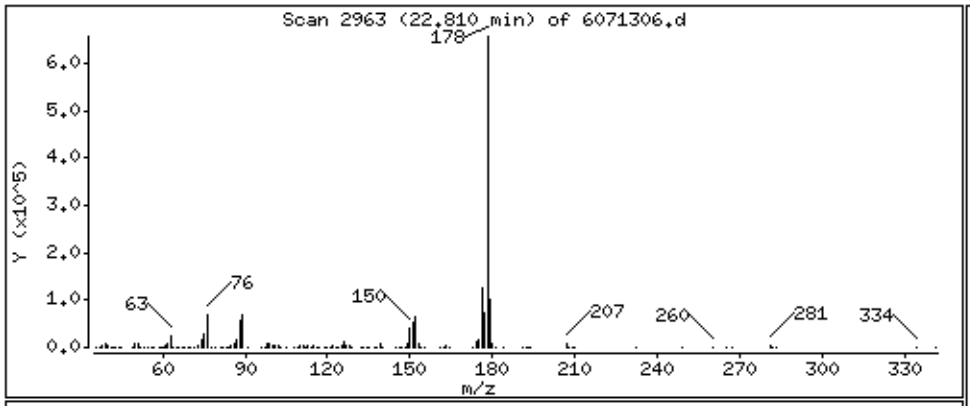
Operator: CT

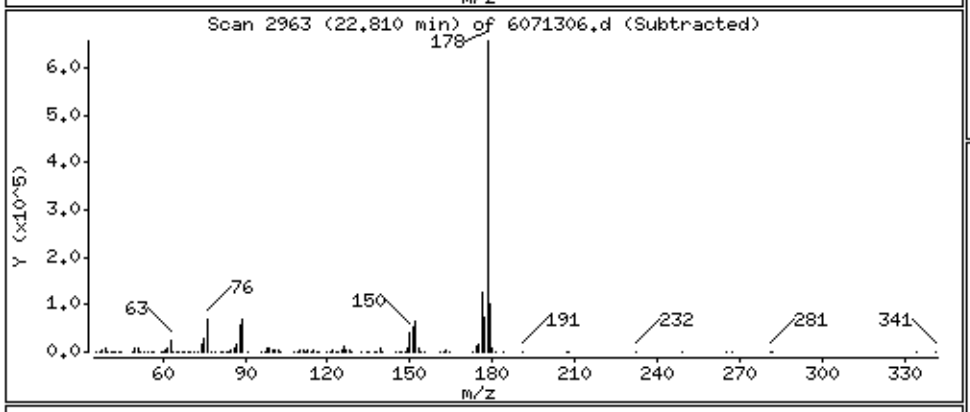
Column phase: RTx-624

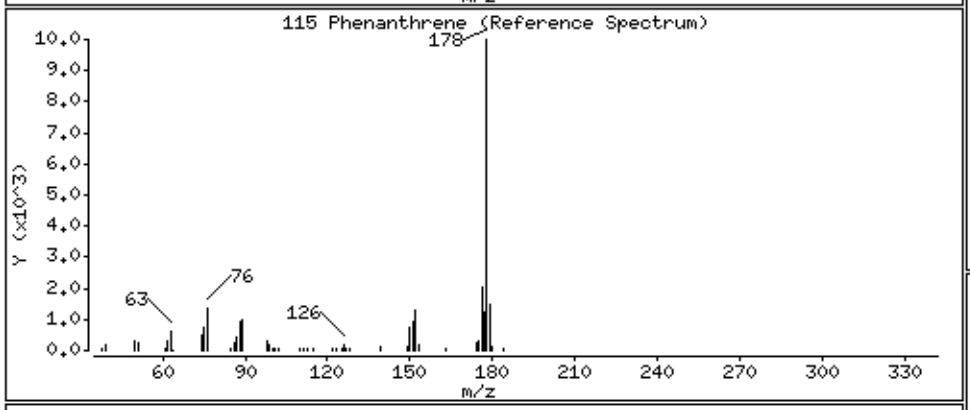
Column diameter: 0.53

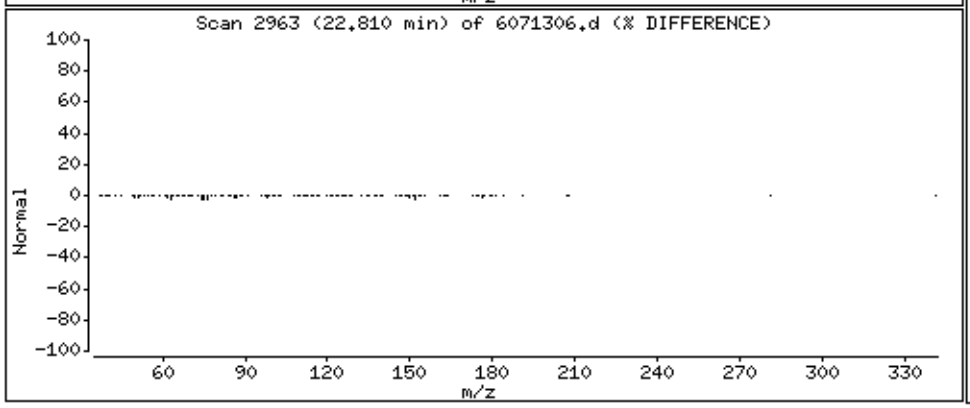
115 Phenanthrene

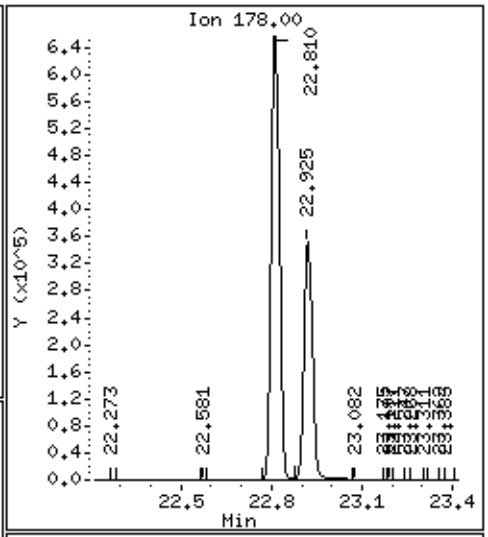
Concentration: 55.513 NG

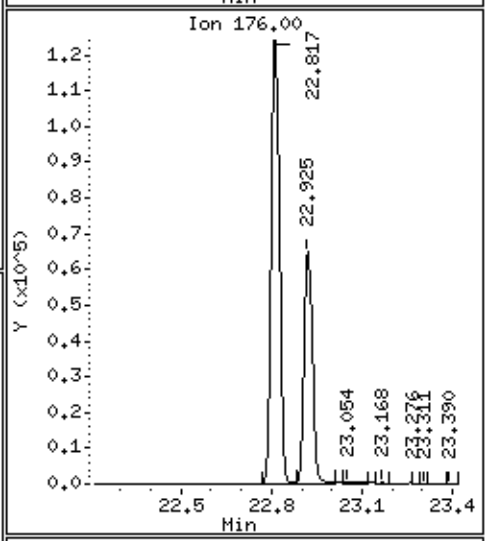


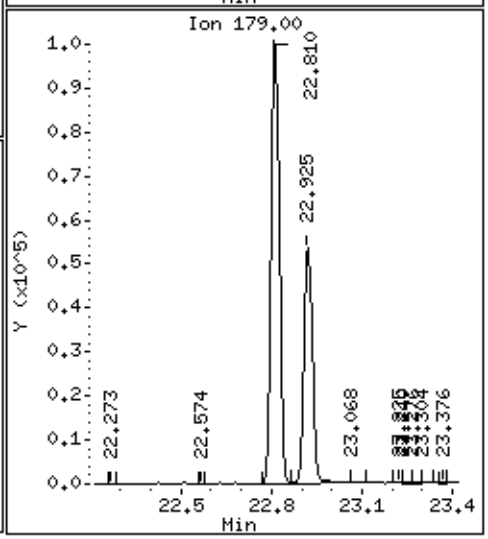












Data File: /chem/msd6.i/13jul16.b/6071306.d

Date : 13-JUL-2016 18:47

Client ID: LCS

Instrument: msd6.i

Sample Info: ;VI VOC+PAH ICV/LCS;LCS

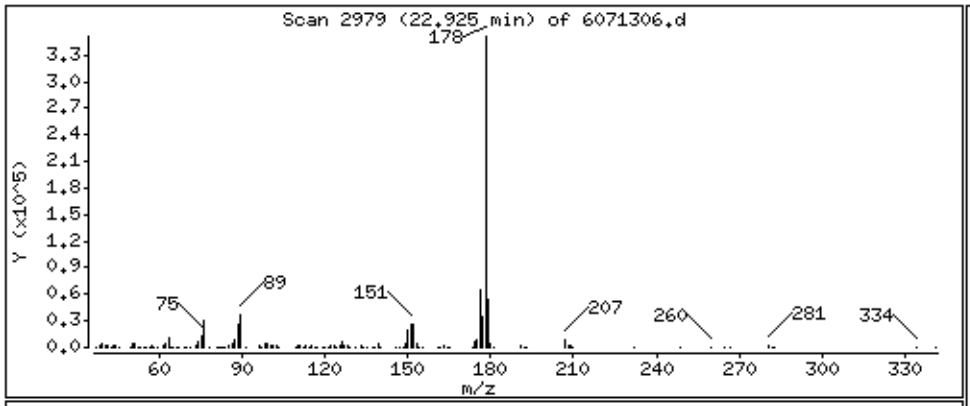
Operator: CT

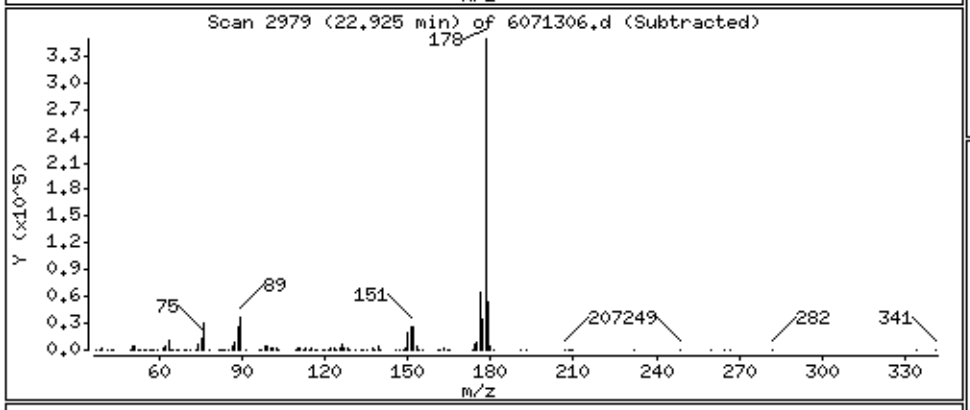
Column phase: RTx-624

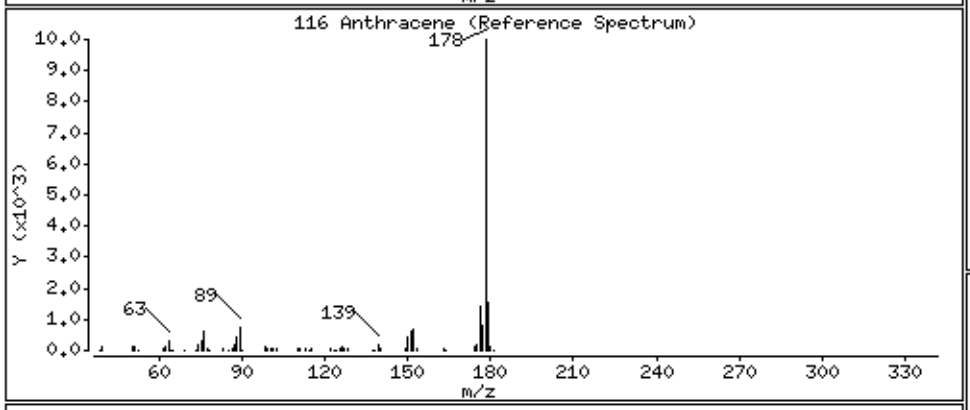
Column diameter: 0.53

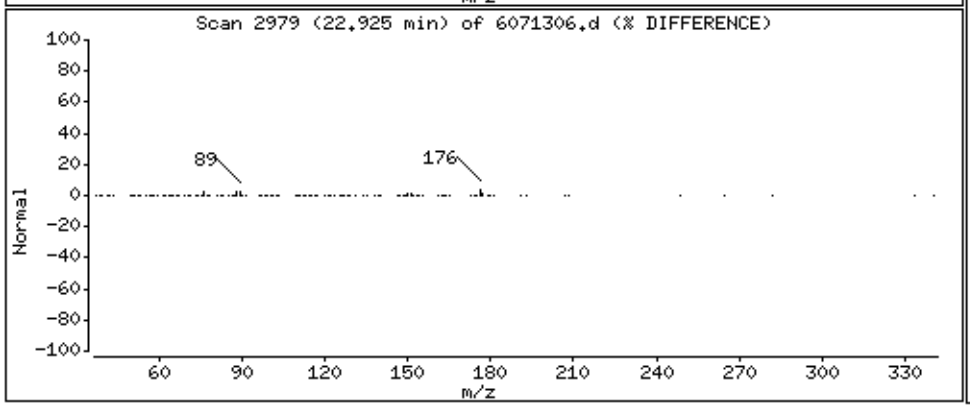
116 Anthracene

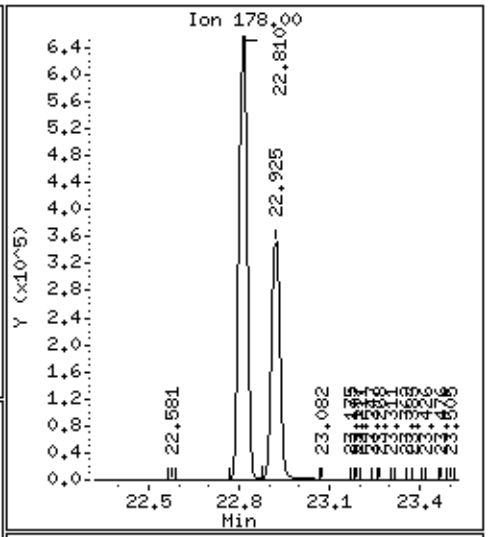
Concentration: 45.901 NG

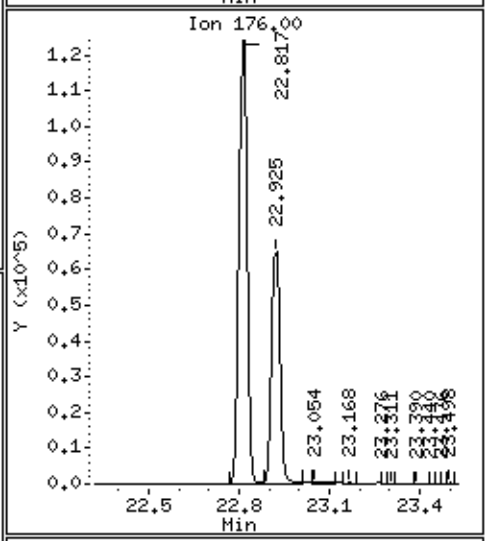


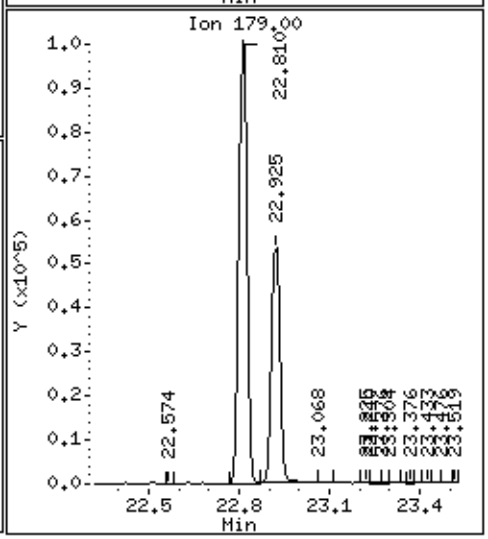












Data File: /chem/msd6.i/13jul16.b/6071306.d

Date : 13-JUL-2016 18:47

Client ID: LCS

Instrument: msd6.i

Sample Info: ;VI VOC+PAH ICV/LCS;LCS

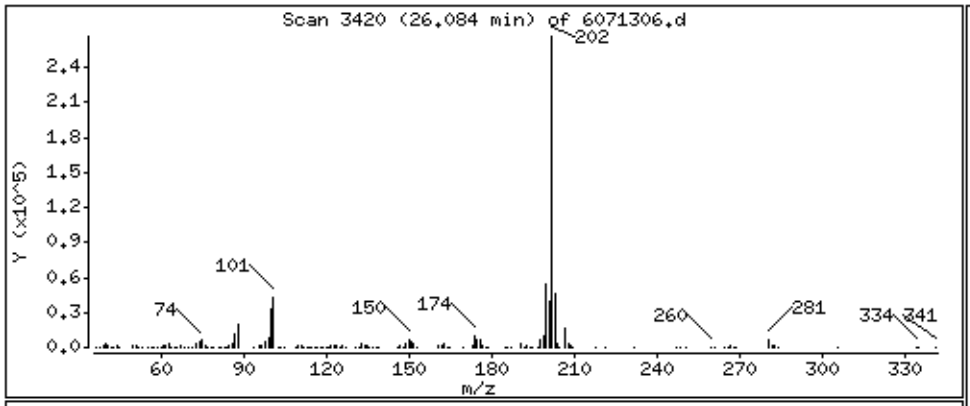
Operator: CT

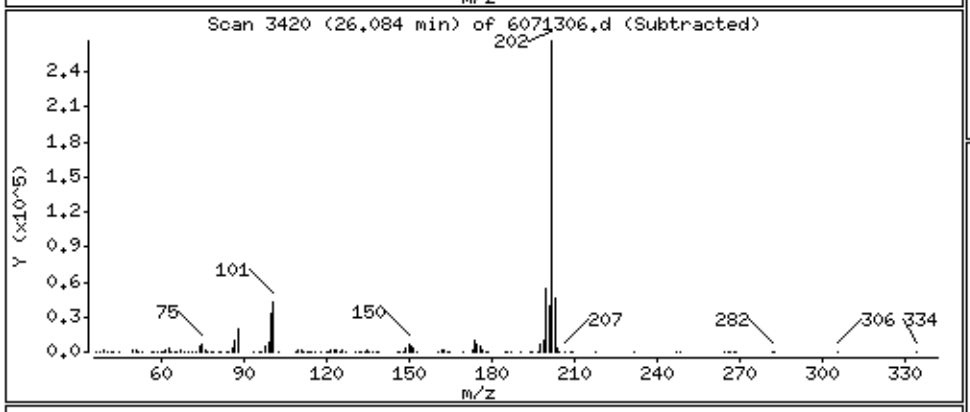
Column phase: RTx-624

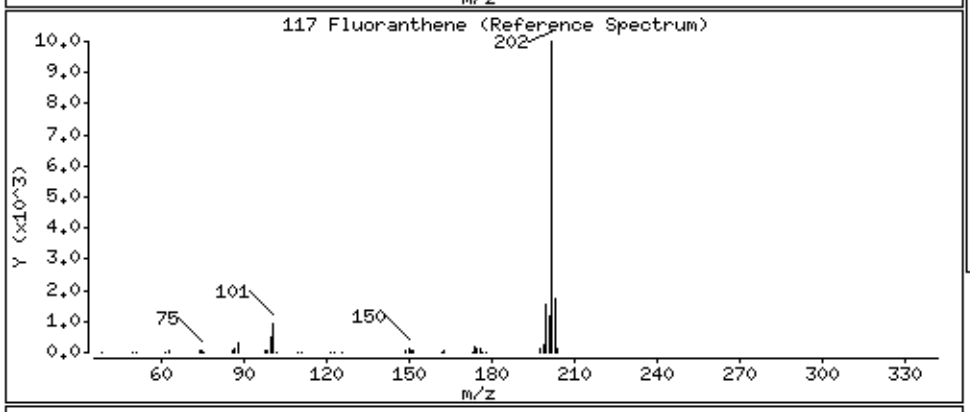
Column diameter: 0.53

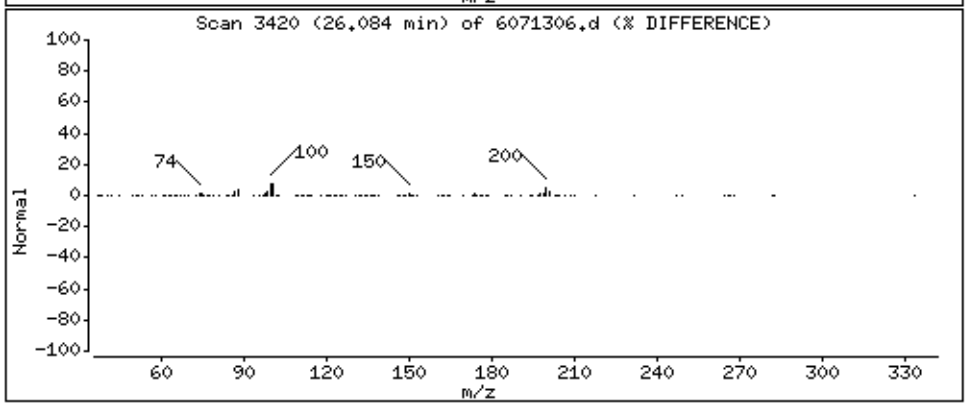
117 Fluoranthene

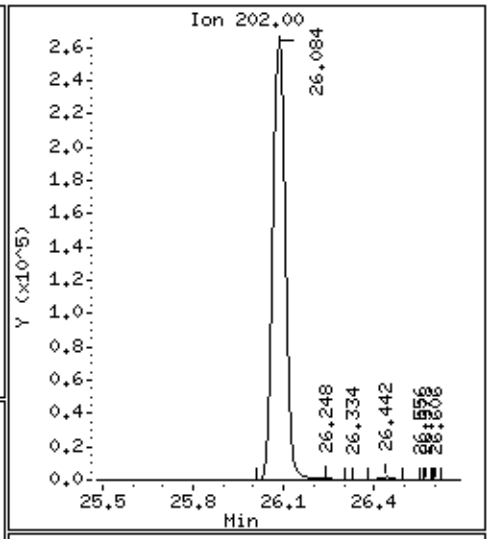
Concentration: 48.697 NG

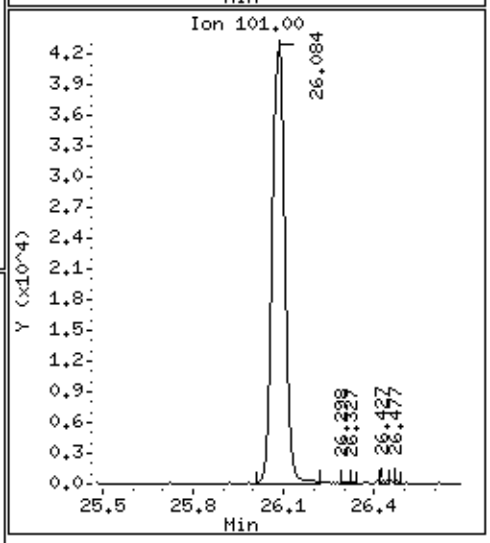












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Date : 13-JUL-2016 18:47

Client ID: LCS

Instrument: msd6.i

Sample Info: ;VI VOC+PAH ICV/LCS;LCS

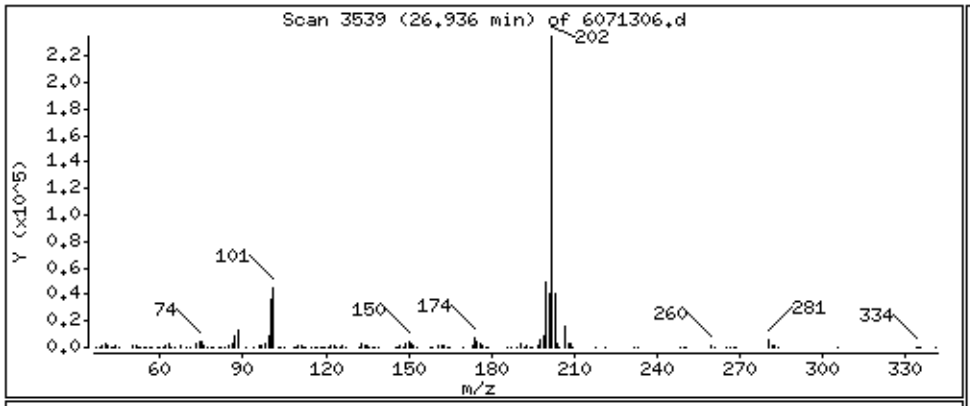
Operator: CT

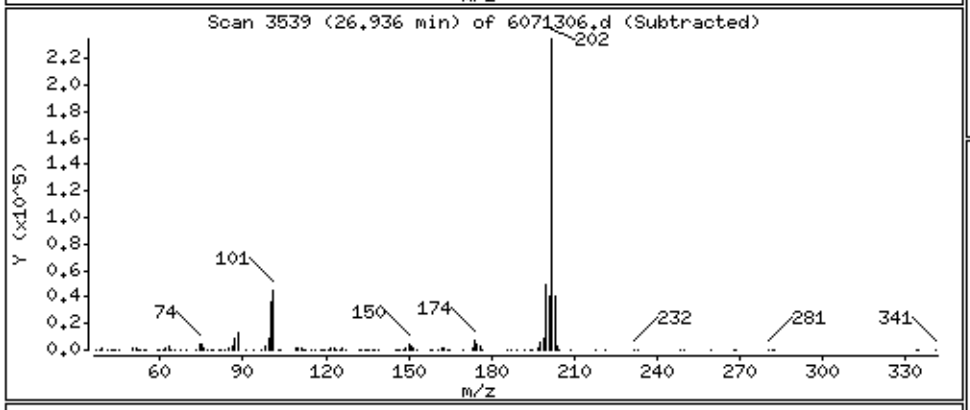
Column phase: RTx-624

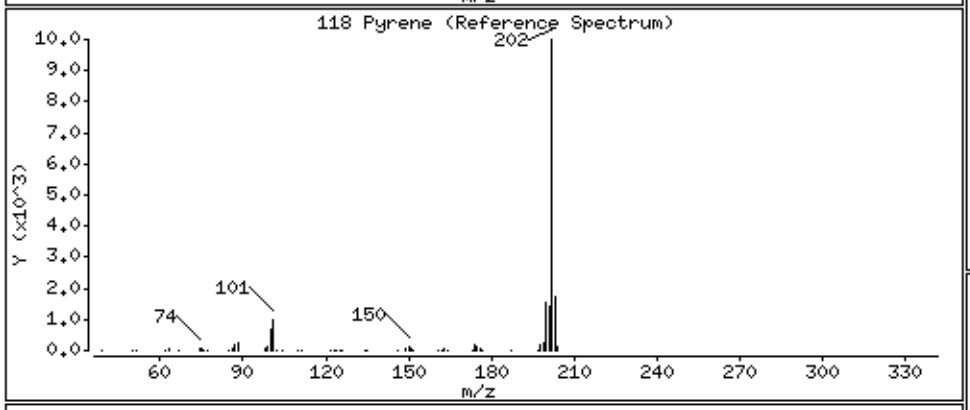
Column diameter: 0.53

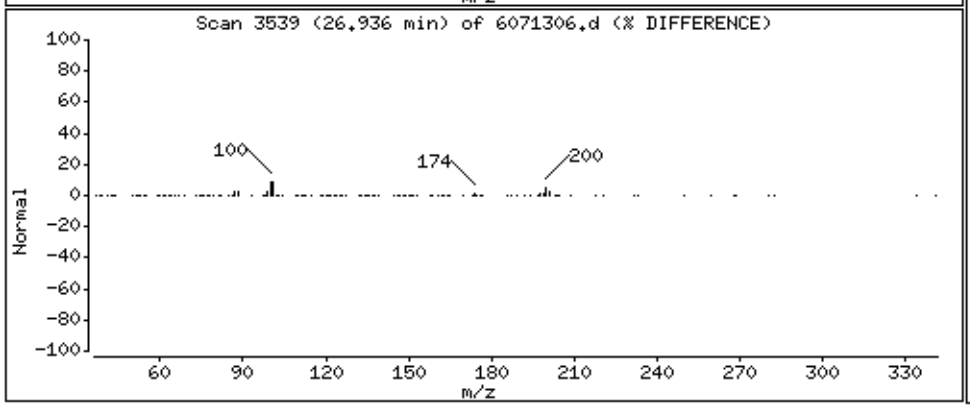
118 Pyrene

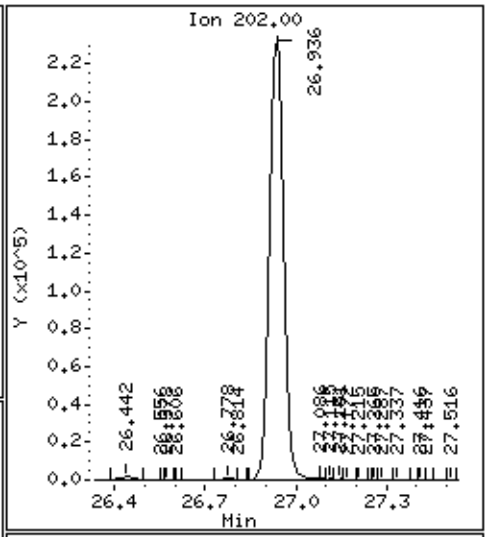
Concentration: 46.910 NG

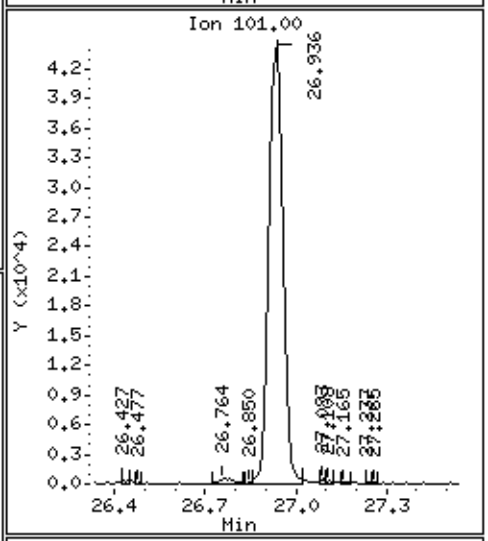


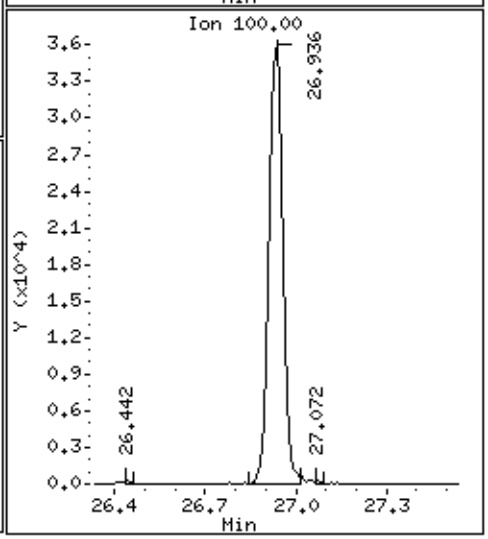












Eurofins Air Toxics Inc.

EPA Method TO-17 GC/MS

Data file : /chem/msd6.i/12jul16.b/6071202.d
Lab Smp Id: VI ICAL1 1.0ng Surr
Inj Date : 12-JUL-2016 12:55
Operator : CT Inst ID: msd6.i
Smp Info : ;VI ICAL1 1.0ng Surr
Misc Info : 2787-1-1ml(10/7/16),2744-98-1(1/6/17)
Comment :
Method : /chem/msd6.i/13jul16.b/616z0712vi.m
Meth Date : 14-Jul-2016 18:42 U5BT Quant Type: ISTD
Cal Date : 12-JUL-2016 12:55 Cal File: 6071202.d
Als bottle: 1 Calibration Sample, Level: 1
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		
4.279	4.279 (1.000)	130	178584	26.0000		70.00- 130.00	100.00
4.279	4.279 (1.000)	128	137916			0.00- 30.00	77.23
4.279	4.279 (1.000)	49	235825			0.00- 30.00	132.05
* 54 1,4-Difluorobenzene					CAS #: 540-36-3		
5.920	5.920 (1.000)	114	750474	23.0000		70.00- 130.00	100.00
5.920	5.920 (1.000)	88	115978			0.00- 30.00	15.45
* 79 Chlorobenzene-d5					CAS #: 3114-55-4		
9.852	9.852 (1.000)	117	699037	24.0000		70.00- 130.00	100.00
9.852	9.852 (1.000)	82	365598			0.00- 30.00	52.30
* 92 Bromofluorobenzene					CAS #: 460-00-4		
11.407	11.407 (1.000)	174	473714	36.0000		70.00- 130.00	100.00
11.407	11.407 (1.000)	95	543025			0.00- 30.00	114.63
11.407	11.407 (1.000)	176	458568			0.00- 30.00	96.80
$ 49 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
5.203	5.203 (0.879)	65	4198	1.00000	1.112	70.00- 130.00	100.00

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

$  49 1,2-Dichloroethane-d4 (continued)
  5.211   5.211 (0.880)    67      2457                     0.00-  30.00    58.53
-------------------------------------------------------------------------------
$  66 Toluene-d8                                   CAS #: 2037-26-5
  7.940   7.940 (0.806)    98     13368 1.00000    1.050  70.00- 130.00   100.00
  7.933   7.933 (0.805)    70      1937                     0.00-  30.00    14.49
  7.940   7.940 (0.806)   100      8523                     0.00-  30.00    63.76
-------------------------------------------------------------------------------
$ 108 Naphthalene-d8                               CAS #: 1146-65-2
 15.676  15.676 (1.374)   136     22798 1.00000   0.9984  70.00- 130.00   100.00
 15.676  15.676 (1.374)   108      2413                     0.00-  30.00    10.58
-------------------------------------------------------------------------------
    3 Freon 114                                    CAS #: 76-14-2
  1.283   1.283 (0.300)   135     23554 6.99000    7.351  70.00- 130.00   100.00(a)
  1.269   1.269 (0.296)   137      7500                     0.00-  30.00    31.84
-------------------------------------------------------------------------------
    6 Vinyl Chloride                               CAS #: 75-01-4
  1.395   1.395 (0.326)    62     13854 2.56000    2.823  70.00- 130.00   100.00
  1.451   1.451 (0.339)    64      7005                     0.00-  30.00    50.56
-------------------------------------------------------------------------------
    7 1,3-Butadiene                                CAS #: 106-99-0
  1.395   1.395 (0.326)    54     10640 2.21000    2.285  70.00- 130.00   100.00
  1.395   1.395 (0.326)    39     23268                     0.00-  30.00   218.68
-------------------------------------------------------------------------------
    9 Chloroethane                                 CAS #: 75-00-3
  1.647   1.647 (0.385)    64     12455 2.64000    5.405  70.00- 130.00   100.00(a)
  1.647   1.647 (0.385)    66      2880                     0.00-  30.00    23.12
  1.647   1.647 (0.385)    49      2338                     0.00-  30.00    18.77
-------------------------------------------------------------------------------
   10 Isopentane                                   CAS #: 78-78-4
  1.689   1.689 (0.395)    57     10954 2.95000    3.063  70.00- 130.00   100.00(a)
  1.689   1.689 (0.395)    43     18720                     0.00-  30.00   170.90
-------------------------------------------------------------------------------
   11 Trichlorofluoromethane/Fr11                  CAS #: 75-69-4
  1.801   1.801 (0.421)   101     30842 5.62000    5.700  70.00- 130.00   100.00(a)
  1.801   1.801 (0.421)   103     20597                     0.00-  30.00    66.78
-------------------------------------------------------------------------------
   15 Freon 113                                    CAS #: 76-13-1
  2.173   2.173 (0.508)   151     27320 7.66000    8.099  70.00- 130.00   100.00
  2.166   2.166 (0.506)   153     17525                     0.00-  30.00    64.15
  2.166   2.166 (0.506)   101     31765                     0.00-  30.00   116.27
-------------------------------------------------------------------------------
   14 1,1-Dichloroethene                           CAS #: 75-35-4
  2.166   2.166 (0.506)    98      9146 3.97000    3.979  70.00- 130.00   100.00(a)
  2.166   2.166 (0.506)    96     15408                     0.00-  30.00   168.47
  2.173   2.173 (0.508)    61     23295                     0.00-  30.00   254.70
-------------------------------------------------------------------------------
```

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		
2.353	2.353 (0.550)	76	65587	3.11000	4.730	70.00- 130.00	100.00(a)
19 2-Propanol					CAS #: 67-63-0		
2.259	2.259 (0.528)	45	142299	2.46000	11.802	70.00- 130.00	100.00(a)
2.166	2.166 (0.506)	43	314064			0.00- 30.00	220.71
2.252	2.252 (0.526)	59	2097			0.00- 30.00	1.47
22 Methylene Chloride					CAS #: 75-09-2		
2.560	2.560 (0.598)	49	105418	3.47000	17.447	70.00- 130.00	100.00(a)
2.560	2.560 (0.598)	84	74503			0.00- 30.00	70.67
2.560	2.560 (0.598)	51	33301			0.00- 30.00	31.59
25 trans-1,2-Dichloroethene					CAS #: 156-60-5		
2.804	2.804 (0.655)	98	9339	3.96000	4.068	70.00- 130.00	100.00
2.804	2.804 (0.655)	61	21113			0.00- 30.00	226.07
2.804	2.804 (0.655)	96	14918			0.00- 30.00	159.74
26 MTBE					CAS #: 1634-04-4		
2.782	2.782 (0.650)	73	38563	3.61000	4.050	70.00- 130.00	100.00(a)
2.782	2.782 (0.650)	57	10539			0.00- 30.00	27.33
2.782	2.782 (0.650)	41	10377			0.00- 30.00	26.91
28 Hexane					CAS #: 110-54-3		
3.083	3.083 (0.720)	57	24804	3.52000	3.767	70.00- 130.00	100.00(a)
3.090	3.090 (0.722)	43	18850			0.00- 30.00	76.00
3.083	3.083 (0.720)	86	3582			0.00- 30.00	14.44
29 1,1-Dichloroethane					CAS #: 75-34-3		
3.248	3.248 (0.759)	63	22739	4.05000	3.927	70.00- 130.00	100.00(a)
3.248	3.248 (0.759)	65	7763			0.00- 30.00	34.14
37 cis-1,2-Dichloroethene					CAS #: 156-59-2		
3.943	3.943 (0.921)	98	10028	3.96000	4.149	70.00- 130.00	100.00
3.943	3.943 (0.921)	96	15812			0.00- 30.00	157.68
3.943	3.943 (0.921)	61	24220			0.00- 30.00	241.52
38 2-Butanone					CAS #: 78-93-3		
3.907	3.907 (0.913)	72	48082	2.95000	18.412	70.00- 130.00	100.00(a)
3.900	3.900 (0.911)	43	233662			0.00- 30.00	485.97
3.907	3.907 (0.913)	57	23054			0.00- 30.00	47.95
44 Chloroform					CAS #: 67-66-3		
4.451	4.451 (1.040)	83	29187	4.88000	5.122	70.00- 130.00	100.00
4.451	4.451 (1.040)	85	18453			0.00- 30.00	63.22

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

   46 Cyclohexane                                     CAS #: 110-82-7
  4.802   4.802 (0.811)    84     18964 3.44000    3.638  70.00- 130.00   100.00(a)
  4.795   4.795 (0.810)    56     24900                     0.00-  30.00   131.30
  4.802   4.802 (0.811)    41     15133                     0.00-  30.00    79.80
-------------------------------------------------------------------------------
   45 1,1,1-Trichloroethane                           CAS #: 71-55-6
  4.681   4.681 (0.791)    97     29931 5.46000    5.960  70.00- 130.00   100.00
  4.681   4.681 (0.791)    99     19449                     0.00-  30.00    64.98
-------------------------------------------------------------------------------
   47 Carbon Tetrachloride                            CAS #: 56-23-5
  4.924   4.924 (0.832)   119     31509 6.29000    6.584  70.00- 130.00   100.00
  4.931   4.931 (0.833)   117     32944                     0.00-  30.00   104.55
-------------------------------------------------------------------------------
   51 2,2,4-Trimethylpentane                          CAS #: 540-84-1
  5.468   5.468 (0.924)    57     73878 4.67000    4.626  70.00- 130.00   100.00(a)
  5.468   5.468 (0.924)    56     25493                     0.00-  30.00    34.51
  5.476   5.476 (0.925)    41     32768                     0.00-  30.00    44.35
-------------------------------------------------------------------------------
   48 Benzene                                         CAS #: 71-43-2
  5.225   5.225 (0.883)    78     94934 3.19000    6.296  70.00- 130.00   100.00(a)
  5.225   5.225 (0.883)    77     22365                     0.00-  30.00    23.56
-------------------------------------------------------------------------------
   50 1,2-Dichloroethane                              CAS #: 107-06-2
  5.318   5.318 (0.898)    62     19667 4.05000    4.202  70.00- 130.00   100.00
  5.311   5.311 (0.897)    64      6762                     0.00-  30.00    34.38
-------------------------------------------------------------------------------
   53 Heptane                                         CAS #: 142-82-5
  5.769   5.769 (0.975)    71     17539 4.10000    4.776  70.00- 130.00   100.00(a)
  5.769   5.769 (0.975)    43     38976                     0.00-  30.00   222.22
  5.762   5.762 (0.973)    57     17149                     0.00-  30.00    97.78
-------------------------------------------------------------------------------
   56 Trichloroethene                                 CAS #: 79-01-6
  6.235   6.235 (1.053)    95     21651 5.37000    5.554  70.00- 130.00   100.00
  6.235   6.235 (1.053)   130     22007                     0.00-  30.00   101.64
  6.235   6.235 (1.053)    97     13962                     0.00-  30.00    64.49
-------------------------------------------------------------------------------
   58 Methyl Cyclohexane                              CAS #: 108-87-2
  6.557   6.557 (1.108)    83     26789 4.02000    4.073  70.00- 130.00   100.00(a)
  6.564   6.564 (1.109)    98     12029                     0.00-  30.00    44.90
  6.557   6.557 (1.108)    55     23396                     0.00-  30.00    87.33
-------------------------------------------------------------------------------
   59 1,2-Dichloropropane                             CAS #: 78-87-5
  6.586   6.586 (1.113)    63     17582 4.62000    4.953  70.00- 130.00   100.00
  6.586   6.586 (1.113)    62     12194                     0.00-  30.00    69.36
  6.572   6.572 (1.110)    41     25015                     0.00-  30.00   142.28
-------------------------------------------------------------------------------
```

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		
6.708	6.708 (1.133)	88	11456	3.60000	3.877	70.00- 130.00	100.00(a)
6.708	6.708 (1.133)	58	12022			0.00- 30.00	104.94
6.708	6.708 (1.133)	57	31148			0.00- 30.00	271.89
65 4-Methyl-2-pentanone					CAS #: 108-10-1		
7.811	7.811 (1.319)	58	13960	4.10000	4.225	70.00- 130.00	100.00(a)
7.811	7.811 (1.319)	43	38842			0.00- 30.00	278.24
7.811	7.811 (1.319)	85	6506			0.00- 30.00	46.60
67 Toluene					CAS #: 108-88-3		
8.033	8.033 (0.815)	91	63428	3.77000	4.229	70.00- 130.00	100.00(a)
8.033	8.033 (0.815)	92	37091			0.00- 30.00	58.48
70 1,1,2-Trichloroethane					CAS #: 79-00-5		
8.627	8.627 (1.457)	97	19478	5.46000	5.562	70.00- 130.00	100.00
8.635	8.635 (1.459)	99	12421			0.00- 30.00	63.77
8.627	8.627 (1.457)	83	16804			0.00- 30.00	86.27
71 Tetrachloroethene					CAS #: 127-18-4		
8.713	8.713 (0.884)	166	29612	6.78000	6.937	70.00- 130.00	100.00
8.713	8.713 (0.884)	129	22365			0.00- 30.00	75.53
8.713	8.713 (0.884)	131	22586			0.00- 30.00	76.27
72 2-Hexanone					CAS #: 591-78-6		
8.943	8.943 (0.908)	58	17133	4.10000	3.874	70.00- 130.00	100.00(a)
8.943	8.943 (0.908)	43	37534			0.00- 30.00	219.07
8.943	8.943 (0.908)	100	3204			0.00- 30.00	18.70
74 1,2-Dibromoethane					CAS #: 106-93-4		
9.229	9.229 (0.937)	107	30429	7.68000	7.775	70.00- 130.00	100.00
9.229	9.229 (0.937)	109	29397			0.00- 30.00	96.61
81 Chlorobenzene					CAS #: 108-90-7		
9.888	9.888 (1.004)	112	49448	4.60000	4.874	70.00- 130.00	100.00
9.888	9.888 (1.004)	114	16000			0.00- 30.00	32.36
9.888	9.888 (1.004)	77	27783			0.00- 30.00	56.19
82 Ethyl Benzene					CAS #: 100-41-4		
10.046	10.046 (1.020)	106	24422	4.34000	4.508	70.00- 130.00	100.00
10.046	10.046 (1.020)	91	72845			0.00- 30.00	298.28
84 m,p-Xylene					CAS #: 108-38-3		
10.225	10.225 (1.038)	106	29552	4.34000	4.321	70.00- 130.00	100.00(a)
10.225	10.225 (1.038)	91	58392			0.00- 30.00	197.59

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

   88 o-Xylene                                        CAS #: 95-47-6
 10.705  10.705 (0.938)   106     27747 4.34000    4.393  70.00- 130.00   100.00(a)
 10.705  10.705 (0.938)    91     56692                    0.00-  30.00   204.32
-------------------------------------------------------------------------------
   89 Styrene                                         CAS #: 100-42-5
 10.740  10.740 (0.942)   104     45722 4.26000    4.270  70.00- 130.00   100.00(a)
 10.740  10.740 (0.942)    78     22872                    0.00-  30.00    50.02
-------------------------------------------------------------------------------
   91 Cumene                                          CAS #: 98-82-8
 11.199  11.199 (0.982)   105     82579 4.92000    4.843  70.00- 130.00   100.00(a)
 11.199  11.199 (0.982)   120     22204                    0.00-  30.00    26.89
 11.199  11.199 (0.982)    51      9097                    0.00-  30.00    11.02
-------------------------------------------------------------------------------
   94 1,1,2,2-Tetrachloroethane                       CAS #: 79-34-5
 11.622  11.622 (1.019)    83     39026 6.87000    6.408  70.00- 130.00   100.00(a)
 11.614  11.614 (1.018)    85     25683                    0.00-  30.00    65.81
-------------------------------------------------------------------------------
   96 Propylbenzene                                   CAS #: 103-65-1
 11.736  11.736 (1.029)    91     93760 4.92000    4.660  70.00- 130.00   100.00(a)
 11.736  11.736 (1.029)   120     23293                    0.00-  30.00    24.84
 11.736  11.736 (1.029)   105      4625                    0.00-  30.00     4.93
-------------------------------------------------------------------------------
   97 4-Ethyltoluene                                  CAS #: 622-96-8
 11.901  11.901 (1.043)   120     23809 4.92000    4.521  70.00- 130.00   100.00(a)
 11.901  11.901 (1.043)   105     77434                    0.00-  30.00   325.23
-------------------------------------------------------------------------------
   98 1,3,5-Trimethylbenzene                          CAS #: 108-67-8
 11.987  11.987 (1.051)   120     33738 4.92000    4.553  70.00- 130.00   100.00(a)
 11.987  11.987 (1.051)   105     67019                    0.00-  30.00   198.65
-------------------------------------------------------------------------------
  100 1,2,4-Trimethylbenzene                          CAS #: 95-63-6
 12.452  12.452 (1.092)   120     30273 4.92000    4.376  70.00- 130.00   100.00(a)
 12.452  12.452 (1.092)   105     69370                    0.00-  30.00   229.15
-------------------------------------------------------------------------------
  101 1,3-Dichlorobenzene                             CAS #: 541-73-1
 12.782  12.782 (1.121)   146     45478 6.01000    5.215  70.00- 130.00   100.00(a)
 12.782  12.782 (1.121)   148     29075                    0.00-  30.00    63.93
 12.782  12.782 (1.121)   111     18455                    0.00-  30.00    40.58
-------------------------------------------------------------------------------
  102 1,4-Dichlorobenzene                             CAS #: 106-46-7
 12.918  12.918 (1.133)   146     44694 6.01000    5.149  70.00- 130.00   100.00(a)
 12.918  12.918 (1.133)   148     28745                    0.00-  30.00    64.32
 12.918  12.918 (1.133)   111     17158                    0.00-  30.00    38.39
-------------------------------------------------------------------------------
  105 1,2-Dichlorobenzene                             CAS #: 95-50-1
 13.348  13.348 (1.170)   146     42231 6.01000    5.049  70.00- 130.00   100.00(a)
```

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO
105 1,2-Dichlorobenzene (continued)							
13.348	13.348 (1.170)	148	27224			0.00- 30.00	64.46
13.348	13.348 (1.170)	111	17115			0.00- 30.00	40.53
106 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
15.404	15.404 (1.350)	180	41050	7.42000	6.132	70.00- 130.00	100.00(a)
15.404	15.404 (1.350)	182	38841			0.00- 30.00	94.62
107 Hexachlorobutadiene					CAS #: 87-68-3		
15.611	15.611 (1.369)	225	36284	10.7000	9.426	70.00- 130.00	100.00(a)
15.611	15.611 (1.369)	223	22790			0.00- 30.00	62.81
109 Naphthalene					CAS #: 91-20-3		
15.712	15.712 (1.377)	128	26375	1.00000	1.036	70.00- 130.00	100.00
15.712	15.712 (1.377)	127	3653			0.00- 30.00	13.85
110 2-Methylnaphthalene					CAS #: 91-57-6		
17.159	17.159 (1.504)	142	15618	1.00000	0.9681	70.00- 130.00	100.00(a)
17.159	17.159 (1.504)	141	13309			0.00- 30.00	85.22
17.159	17.159 (1.504)	115	5138			0.00- 30.00	32.90
111 1-Methylnaphthalene					CAS #: 90-12-0		
17.381	17.381 (1.524)	142	14161	1.00000	0.9650	70.00- 130.00	100.00(a)
17.381	17.381 (1.524)	141	12513			0.00- 30.00	88.36
17.381	17.381 (1.524)	115	5191			0.00- 30.00	36.66
112 Acenaphthylene					CAS #: 208-96-8		
19.221	19.221 (1.685)	152	17392	1.00000	0.7383	70.00- 130.00	100.00(a)
19.229	19.229 (1.686)	151	3880			0.00- 30.00	22.31
19.221	19.221 (1.685)	153	2235			0.00- 30.00	12.85
113 Acenaphthene					CAS #: 83-32-9		
19.494	19.494 (1.709)	154	12667	1.00000	0.9716	70.00- 130.00	100.00(a)
19.487	19.487 (1.708)	152	6681			0.00- 30.00	52.74
19.487	19.487 (1.708)	153	13957			0.00- 30.00	110.18
114 Fluorene					CAS #: 86-73-7		
20.640	20.640 (1.809)	166	14169	1.00000	1.029	70.00- 130.00	100.00(a)
20.640	20.640 (1.809)	165	13817			0.00- 30.00	97.52
115 Phenanthrene					CAS #: 85-01-8		
22.817	22.817 (2.000)	178	22064	1.00000	0.9265	70.00- 130.00	100.00(a)
22.817	22.817 (2.000)	176	4911			0.00- 30.00	22.26
22.817	22.817 (2.000)	179	4843			0.00- 30.00	21.95
116 Anthracene					CAS #: 120-12-7		
22.925	22.925 (2.010)	178	13185	1.00000	0.8322	70.00- 130.00	100.00(a)

RT	EXP RT	(REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO
116 Anthracene (continued)								
22.932	22.932	(2.010)	176	2741			0.00- 30.00	20.79
22.925	22.925	(2.010)	179	2116			0.00- 30.00	16.05
117 Fluoranthene						CAS #: 206-44-0		
26.084	26.084	(2.287)	202	17531	1.00000	1.010	70.00- 130.00	100.00(a)
26.084	26.084	(2.287)	101	3218			0.00- 30.00	18.36
118 Pyrene						CAS #: 129-00-0		
26.936	26.936	(2.361)	202	19112	1.00000	1.059	70.00- 130.00	100.00(a)
26.929	26.929	(2.361)	101	2730			0.00- 30.00	14.28
26.936	26.936	(2.361)	100	1779			0.00- 45.21	9.31

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: msd6.i
Lab File ID: 6071202.d
Lab Smp Id: VI ICAL1 1.0ng Surr
Analysis Type: VOA
Quant Type: ISTD
Operator: CT
Method File: /chem/msd6.i/13jul16.b/616z0712vi.m
Misc Info: 2787-1-1ml(10/7/16),2744-98-1(1/6/17)

Calibration Date: 12-JUL-2016
Calibration Time: 17:31
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
40 Bromochloromethan	180845	108507	253183	178584	-1.25
54 1,4-Difluorobenze	751113	450668	1051558	750474	-0.09
79 Chlorobenzene-d5	701197	420718	981676	699037	-0.31
92 Bromofluorobenzen	474592	284755	664429	473714	-0.19

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
40 Bromochloromethan	4.29	3.96	4.62	4.28	-0.17
54 1,4-Difluorobenze	5.93	5.60	6.26	5.92	-0.12
79 Chlorobenzene-d5	9.85	9.52	10.18	9.85	0.07
92 Bromofluorobenzen	11.39	11.06	11.72	11.41	0.13

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/msd6.i/12jul16.b/6071202.d

Date : 12-JUL-2016 12:55

Client ID:

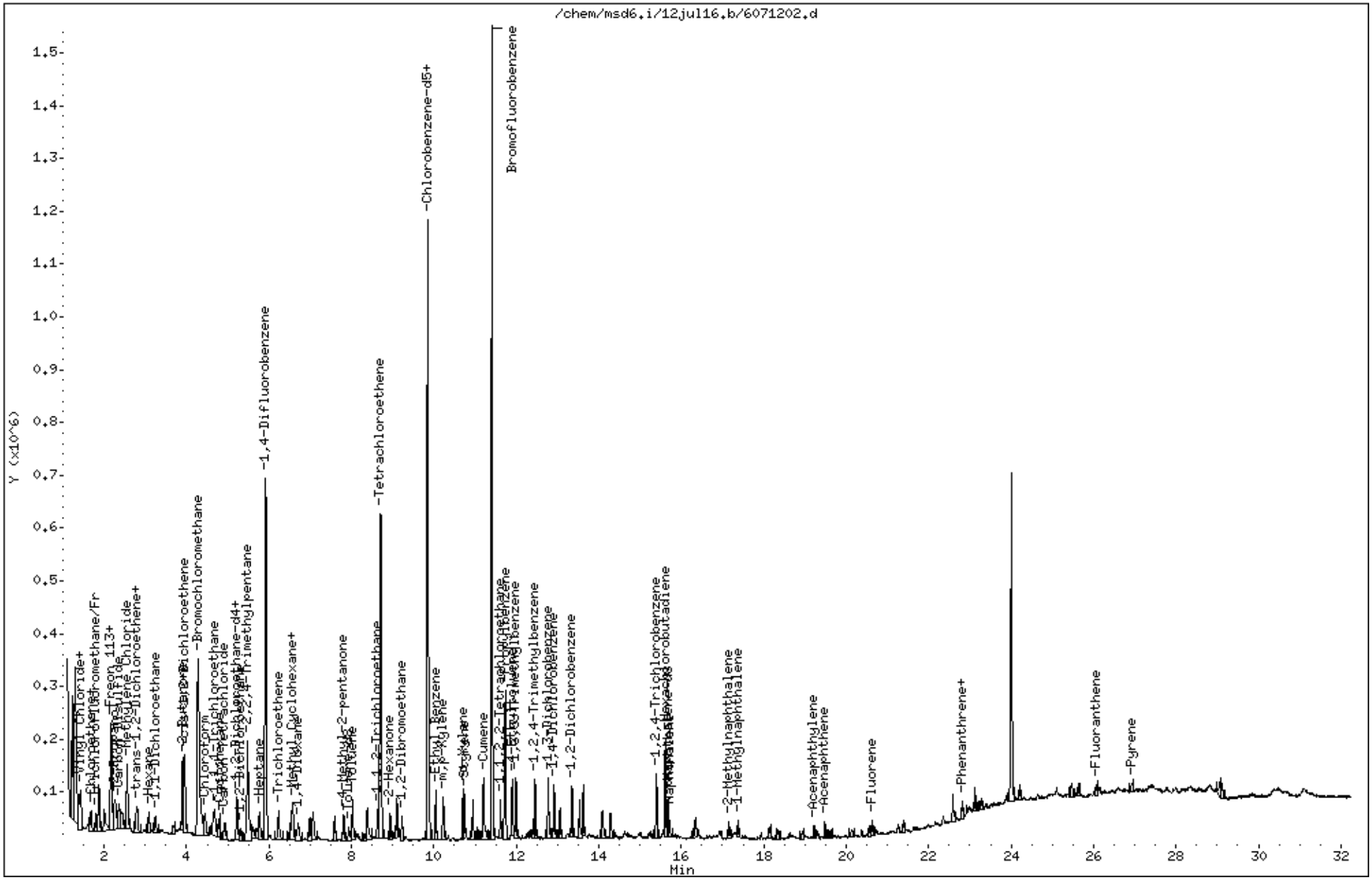
Sample Info: ;VI ICAL1 1.0ng Surr

Column phase: RTx-624

Instrument: msd6.i

Operator: CT

Column diameter: 0.53



Eurofins Air Toxics Inc.

EPA Method TO-17 GC/MS

Data file : /chem/msd6.i/12jul16.b/6071203.d
Lab Smp Id: VI ICAL2 2.0ng Surr
Inj Date : 12-JUL-2016 13:44
Operator : CT Inst ID: msd6.i
Smp Info : ;VI ICAL2 2.0ng Surr
Misc Info : 2787-1-2ml(10/7/16),2744-98-5(1/6/17)
Comment :
Method : /chem/msd6.i/13jul16.b/616z0712vi.m
Meth Date : 14-Jul-2016 18:42 U5BT Quant Type: ISTD
Cal Date : 12-JUL-2016 13:44 Cal File: 6071203.d
Als bottle: 2 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		
4.287	4.287 (1.000)	130	172881	26.0000		70.00- 130.00	100.00
4.287	4.287 (1.000)	128	134678			0.00- 30.00	77.90
4.287	4.287 (1.000)	49	227147			0.00- 30.00	131.39
* 54 1,4-Difluorobenzene					CAS #: 540-36-3		
5.927	5.927 (1.000)	114	752705	23.0000		70.00- 130.00	100.00
5.920	5.920 (1.000)	88	115775			0.00- 30.00	15.38
* 79 Chlorobenzene-d5					CAS #: 3114-55-4		
9.852	9.852 (1.000)	117	708172	24.0000		70.00- 130.00	100.00
9.852	9.852 (1.000)	82	365585			0.00- 30.00	51.62
* 92 Bromofluorobenzene					CAS #: 460-00-4		
11.407	11.407 (1.000)	174	474252	36.0000		70.00- 130.00	100.00
11.407	11.407 (1.000)	95	545948			0.00- 30.00	115.12
11.407	11.407 (1.000)	176	462117			0.00- 30.00	97.44
$ 49 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
5.203	5.203 (0.878)	65	7909	2.00000	2.088	70.00- 130.00	100.00

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

$  49 1,2-Dichloroethane-d4 (continued)
  5.203   5.203 (0.878)    67      4783                     0.00-  30.00    60.48
-------------------------------------------------------------------------------
$  66 Toluene-d8                                   CAS #: 2037-26-5
  7.940   7.940 (0.806)    98     26139 2.00000    2.026  70.00- 130.00   100.00
  7.940   7.940 (0.806)    70      3335                     0.00-  30.00    12.76
  7.940   7.940 (0.806)   100     17075                     0.00-  30.00    65.32
-------------------------------------------------------------------------------
$ 108 Naphthalene-d8                               CAS #: 1146-65-2
 15.669  15.669 (1.374)   136     49856 2.00000    2.181  70.00- 130.00   100.00
 15.669  15.669 (1.374)   108      4852                     0.00-  30.00     9.73
-------------------------------------------------------------------------------
    3 Freon 114                                    CAS #: 76-14-2
  1.297   1.297 (0.303)   135     43363 14.0000   13.980  70.00- 130.00   100.00(a)
  1.297   1.297 (0.303)   137     13871                     0.00-  30.00    31.99
-------------------------------------------------------------------------------
    6 Vinyl Chloride                               CAS #: 75-01-4
  1.409   1.409 (0.329)    62     21823 5.11000    4.594  70.00- 130.00   100.00
  1.395   1.395 (0.325)    64     21520                     0.00-  30.00    98.61
-------------------------------------------------------------------------------
    7 1,3-Butadiene                                CAS #: 106-99-0
  1.395   1.395 (0.325)    54     20476 4.42000    4.543  70.00- 130.00   100.00
  1.395   1.395 (0.325)    39     36381                     0.00-  30.00   177.68
-------------------------------------------------------------------------------
    9 Chloroethane                                 CAS #: 75-00-3
  1.661   1.661 (0.387)    64     13849 5.28000    6.208  70.00- 130.00   100.00(a)
  1.661   1.661 (0.387)    66      2124                     0.00-  30.00    15.34
  1.661   1.661 (0.387)    49      2112                     0.00-  30.00    15.25
-------------------------------------------------------------------------------
   10 Isopentane                                   CAS #: 78-78-4
  1.703   1.703 (0.397)    57     19755 5.90000    5.706  70.00- 130.00   100.00(a)
  1.703   1.703 (0.397)    43     31597                     0.00-  30.00   159.94
-------------------------------------------------------------------------------
   11 Trichlorofluoromethane/Fr11                  CAS #: 75-69-4
  1.815   1.815 (0.423)   101     48076 11.2000    9.178  70.00- 130.00   100.00(a)
  1.815   1.815 (0.423)   103     31273                     0.00-  30.00    65.05
-------------------------------------------------------------------------------
   15 Freon 113                                    CAS #: 76-13-1
  2.181   2.181 (0.509)   151     45064 15.3000   13.799  70.00- 130.00   100.00
  2.181   2.181 (0.509)   153     29410                     0.00-  30.00    65.26
  2.181   2.181 (0.509)   101     52179                     0.00-  30.00   115.79
-------------------------------------------------------------------------------
   14 1,1-Dichloroethene                           CAS #: 75-35-4
  2.173   2.173 (0.507)    98     16702 7.93000    7.507  70.00- 130.00   100.00
  2.173   2.173 (0.507)    96     26395                     0.00-  30.00   158.03
  2.173   2.173 (0.507)    61     41246                     0.00-  30.00   246.95
-------------------------------------------------------------------------------
```

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		
2.353	2.353 (0.549)	76	80523	6.23000	5.999	70.00- 130.00	100.00(a)
19 2-Propanol					CAS #: 67-63-0		
2.267	2.267 (0.529)	45	138688	4.92000	11.882	70.00- 130.00	100.00(a)
2.295	2.295 (0.535)	43	126831			0.00- 30.00	91.45
2.259	2.259 (0.527)	59	4583			0.00- 30.00	3.30
22 Methylene Chloride					CAS #: 75-09-2		
2.560	2.560 (0.597)	49	178683	6.95000	30.548	70.00- 130.00	100.00
2.560	2.560 (0.597)	84	127050			0.00- 30.00	71.10
2.560	2.560 (0.597)	51	52840			0.00- 30.00	29.57
25 trans-1,2-Dichloroethene					CAS #: 156-60-5		
2.818	2.818 (0.657)	98	16431	7.93000	7.392	70.00- 130.00	100.00
2.811	2.811 (0.656)	61	37579			0.00- 30.00	228.71
2.811	2.811 (0.656)	96	26721			0.00- 30.00	162.63
26 MTBE					CAS #: 1634-04-4		
2.797	2.797 (0.652)	73	69352	7.21000	7.524	70.00- 130.00	100.00(a)
2.789	2.789 (0.651)	57	17406			0.00- 30.00	25.10
2.789	2.789 (0.651)	41	18352			0.00- 30.00	26.46
28 Hexane					CAS #: 110-54-3		
3.090	3.090 (0.721)	57	42265	7.05000	6.631	70.00- 130.00	100.00(a)
3.083	3.083 (0.719)	43	32458			0.00- 30.00	76.80
3.098	3.098 (0.723)	86	6235			0.00- 30.00	14.75
29 1,1-Dichloroethane					CAS #: 75-34-3		
3.255	3.255 (0.759)	63	42038	8.10000	7.500	70.00- 130.00	100.00
3.255	3.255 (0.759)	65	13575			0.00- 30.00	32.29
37 cis-1,2-Dichloroethene					CAS #: 156-59-2		
3.943	3.943 (0.920)	98	17656	7.93000	7.546	70.00- 130.00	100.00
3.950	3.950 (0.921)	96	27978			0.00- 30.00	158.46
3.943	3.943 (0.920)	61	39699			0.00- 30.00	224.85
38 2-Butanone					CAS #: 78-93-3		
3.907	3.907 (0.911)	72	79788	5.90000	31.561	70.00- 130.00	100.00(a)
3.907	3.907 (0.911)	43	384550			0.00- 30.00	481.96
3.907	3.907 (0.911)	57	33289			0.00- 30.00	41.72
44 Chloroform					CAS #: 67-66-3		
4.458	4.458 (1.040)	83	49808	9.77000	9.030	70.00- 130.00	100.00
4.458	4.458 (1.040)	85	32699			0.00- 30.00	65.65

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO
46 Cyclohexane					CAS #: 110-82-7		
4.809	4.809 (0.811)	84	32959	6.88000	6.305	70.00- 130.00	100.00(a)
4.809	4.809 (0.811)	56	42876			0.00- 30.00	130.09
4.809	4.809 (0.811)	41	26130			0.00- 30.00	79.28
45 1,1,1-Trichloroethane					CAS #: 71-55-6		
4.688	4.688 (0.791)	97	53338	10.9000	10.589	70.00- 130.00	100.00
4.688	4.688 (0.791)	99	34710			0.00- 30.00	65.08
47 Carbon Tetrachloride					CAS #: 56-23-5		
4.938	4.938 (0.833)	119	55520	12.6000	11.568	70.00- 130.00	100.00
4.938	4.938 (0.833)	117	57681			0.00- 30.00	103.89
51 2,2,4-Trimethylpentane					CAS #: 540-84-1		
5.476	5.476 (0.924)	57	136011	9.34000	8.492	70.00- 130.00	100.00(a)
5.468	5.468 (0.923)	56	43238			0.00- 30.00	31.79
5.476	5.476 (0.924)	41	52278			0.00- 30.00	38.44
48 Benzene					CAS #: 71-43-2		
5.232	5.232 (0.883)	78	123315	6.39000	8.155	70.00- 130.00	100.00
5.225	5.225 (0.882)	77	29994			0.00- 30.00	24.32
50 1,2-Dichloroethane					CAS #: 107-06-2		
5.318	5.318 (0.897)	62	34359	8.09000	7.320	70.00- 130.00	100.00
5.318	5.318 (0.897)	64	11686			0.00- 30.00	34.01
53 Heptane					CAS #: 142-82-5		
5.776	5.776 (0.975)	71	27329	8.20000	7.419	70.00- 130.00	100.00(a)
5.769	5.769 (0.973)	43	60521			0.00- 30.00	221.45
5.776	5.776 (0.975)	57	28025			0.00- 30.00	102.55
56 Trichloroethene					CAS #: 79-01-6		
6.235	6.235 (1.052)	95	37089	10.8000	9.486	70.00- 130.00	100.00
6.242	6.242 (1.053)	130	38839			0.00- 30.00	104.72
6.242	6.242 (1.053)	97	24077			0.00- 30.00	64.92
58 Methyl Cyclohexane					CAS #: 108-87-2		
6.564	6.564 (1.108)	83	46953	8.03000	7.117	70.00- 130.00	100.00(a)
6.564	6.564 (1.108)	98	20625			0.00- 30.00	43.93
6.564	6.564 (1.108)	55	40481			0.00- 30.00	86.22
59 1,2-Dichloropropane					CAS #: 78-87-5		
6.586	6.586 (1.111)	63	30522	9.24000	8.573	70.00- 130.00	100.00
6.586	6.586 (1.111)	62	21247			0.00- 30.00	69.61
6.579	6.579 (1.110)	41	42265			0.00- 30.00	138.47

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		
6.715	6.715 (1.133)	88	18059	7.21000	6.093	70.00- 130.00	100.00(a)
6.715	6.715 (1.133)	58	17964			0.00- 30.00	99.47
6.708	6.708 (1.132)	57	52290			0.00- 30.00	289.55
65 4-Methyl-2-pentanone					CAS #: 108-10-1		
7.811	7.811 (1.318)	58	24260	8.19000	7.321	70.00- 130.00	100.00(a)
7.811	7.811 (1.318)	43	67538			0.00- 30.00	278.39
7.818	7.818 (1.319)	85	10552			0.00- 30.00	43.50
67 Toluene					CAS #: 108-88-3		
8.033	8.033 (0.815)	91	106895	7.54000	7.036	70.00- 130.00	100.00(a)
8.033	8.033 (0.815)	92	61310			0.00- 30.00	57.36
70 1,1,2-Trichloroethane					CAS #: 79-00-5		
8.635	8.635 (1.457)	97	34392	10.9000	9.791	70.00- 130.00	100.00
8.635	8.635 (1.457)	99	21639			0.00- 30.00	62.92
8.635	8.635 (1.457)	83	29710			0.00- 30.00	86.39
71 Tetrachloroethene					CAS #: 127-18-4		
8.720	8.720 (0.885)	166	50996	13.6000	11.793	70.00- 130.00	100.00
8.720	8.720 (0.885)	129	37294			0.00- 30.00	73.13
8.720	8.720 (0.885)	131	37421			0.00- 30.00	73.38
72 2-Hexanone					CAS #: 591-78-6		
8.943	8.943 (0.908)	58	32330	8.19000	7.217	70.00- 130.00	100.00(a)
8.943	8.943 (0.908)	43	68607			0.00- 30.00	212.21
8.943	8.943 (0.908)	100	6523			0.00- 30.00	20.18
74 1,2-Dibromoethane					CAS #: 106-93-4		
9.229	9.229 (0.937)	107	53981	15.4000	13.614	70.00- 130.00	100.00
9.229	9.229 (0.937)	109	52034			0.00- 30.00	96.39
81 Chlorobenzene					CAS #: 108-90-7		
9.888	9.888 (1.004)	112	84230	9.21000	8.195	70.00- 130.00	100.00
9.888	9.888 (1.004)	114	27151			0.00- 30.00	32.23
9.888	9.888 (1.004)	77	51473			0.00- 30.00	61.11
82 Ethyl Benzene					CAS #: 100-41-4		
10.046	10.046 (1.020)	106	41042	8.68000	7.478	70.00- 130.00	100.00
10.046	10.046 (1.020)	91	127123			0.00- 30.00	309.74
84 m,p-Xylene					CAS #: 108-38-3		
10.225	10.225 (1.038)	106	52406	8.68000	7.563	70.00- 130.00	100.00(a)
10.225	10.225 (1.038)	91	103788			0.00- 30.00	198.05

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

   88 o-Xylene                                        CAS #: 95-47-6
 10.712  10.712 (0.939)   106     48468 8.68000    7.666  70.00- 130.00   100.00(a)
 10.712  10.712 (0.939)    91     99525                     0.00-  30.00   205.34
-------------------------------------------------------------------------------
   89 Styrene                                         CAS #: 100-42-5
 10.740  10.740 (0.942)   104     78544 8.52000    7.326  70.00- 130.00   100.00(a)
 10.740  10.740 (0.942)    78     37698                     0.00-  30.00    48.00
-------------------------------------------------------------------------------
   91 Cumene                                          CAS #: 98-82-8
 11.199  11.199 (0.982)   105    146036 9.83000    8.555  70.00- 130.00   100.00(a)
 11.199  11.199 (0.982)   120     39191                     0.00-  30.00    26.84
 11.199  11.199 (0.982)    51     14507                     0.00-  30.00     9.93
-------------------------------------------------------------------------------
   94 1,1,2,2-Tetrachloroethane                       CAS #: 79-34-5
 11.614  11.614 (1.018)    83     71997 13.7000   11.809  70.00- 130.00   100.00
 11.614  11.614 (1.018)    85     47071                     0.00-  30.00    65.38
-------------------------------------------------------------------------------
   96 Propylbenzene                                   CAS #: 103-65-1
 11.736  11.736 (1.029)    91    172398 9.83000    8.559  70.00- 130.00   100.00(a)
 11.736  11.736 (1.029)   120     41559                     0.00-  30.00    24.11
 11.743  11.743 (1.030)   105      7009                     0.00-  30.00     4.07
-------------------------------------------------------------------------------
   97 4-Ethyltoluene                                  CAS #: 622-96-8
 11.901  11.901 (1.043)   120     43756 9.83000    8.300  70.00- 130.00   100.00(a)
 11.901  11.901 (1.043)   105    139483                     0.00-  30.00   318.77
-------------------------------------------------------------------------------
   98 1,3,5-Trimethylbenzene                          CAS #: 108-67-8
 11.987  11.987 (1.051)   120     60967 9.83000    8.218  70.00- 130.00   100.00(a)
 11.987  11.987 (1.051)   105    119967                     0.00-  30.00   196.77
-------------------------------------------------------------------------------
  100 1,2,4-Trimethylbenzene                          CAS #: 95-63-6
 12.452  12.452 (1.092)   120     55838 9.83000    8.063  70.00- 130.00   100.00(a)
 12.452  12.452 (1.092)   105    125061                     0.00-  30.00   223.97
-------------------------------------------------------------------------------
  101 1,3-Dichlorobenzene                             CAS #: 541-73-1
 12.782  12.782 (1.121)   146     85371 12.0000    9.778  70.00- 130.00   100.00
 12.782  12.782 (1.121)   148     54403                     0.00-  30.00    63.73
 12.782  12.782 (1.121)   111     33870                     0.00-  30.00    39.67
-------------------------------------------------------------------------------
  102 1,4-Dichlorobenzene                             CAS #: 106-46-7
 12.918  12.918 (1.133)   146     81943 12.0000    9.430  70.00- 130.00   100.00
 12.918  12.918 (1.133)   148     53837                     0.00-  30.00    65.70
 12.918  12.918 (1.133)   111     31480                     0.00-  30.00    38.42
-------------------------------------------------------------------------------
  105 1,2-Dichlorobenzene                             CAS #: 95-50-1
 13.348  13.348 (1.170)   146     78515 12.0000    9.376  70.00- 130.00   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)							
13.348	13.348 (1.170)	148	51164			0.00- 30.00	65.16
13.348	13.348 (1.170)	111	32208			0.00- 30.00	41.02
106 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
15.404	15.404 (1.350)	180	62790	14.8000	9.369	70.00- 130.00	100.00(a)
15.404	15.404 (1.350)	182	60166			0.00- 30.00	95.82
107 Hexachlorobutadiene					CAS #: 87-68-3		
15.611	15.611 (1.369)	225	50311	21.3000	13.054	70.00- 130.00	100.00(a)
15.611	15.611 (1.369)	223	31976			0.00- 30.00	63.56
109 Naphthalene					CAS #: 91-20-3		
15.712	15.712 (1.377)	128	130290	5.00000	5.110	70.00- 130.00	100.00
15.712	15.712 (1.377)	127	17588			0.00- 30.00	13.50
110 2-Methylnaphthalene					CAS #: 91-57-6		
17.159	17.159 (1.504)	142	80923	5.00000	5.010	70.00- 130.00	100.00
17.159	17.159 (1.504)	141	70056			0.00- 30.00	86.57
17.159	17.159 (1.504)	115	26050			0.00- 30.00	32.19
111 1-Methylnaphthalene					CAS #: 90-12-0		
17.373	17.373 (1.523)	142	72625	5.00000	4.944	70.00- 130.00	100.00
17.373	17.373 (1.523)	141	67227			0.00- 30.00	92.57
17.373	17.373 (1.523)	115	24927			0.00- 30.00	34.32
112 Acenaphthylene					CAS #: 208-96-8		
19.222	19.222 (1.685)	152	102142	5.00000	4.331	70.00- 130.00	100.00(a)
19.222	19.222 (1.685)	151	20652			0.00- 30.00	20.22
19.222	19.222 (1.685)	153	13378			0.00- 30.00	13.10
113 Acenaphthene					CAS #: 83-32-9		
19.487	19.487 (1.708)	154	69940	5.00000	5.358	70.00- 130.00	100.00
19.487	19.487 (1.708)	152	37398			0.00- 30.00	53.47
19.487	19.487 (1.708)	153	76236			0.00- 30.00	109.00
114 Fluorene					CAS #: 86-73-7		
20.640	20.640 (1.809)	166	79638	5.00000	5.779	70.00- 130.00	100.00
20.640	20.640 (1.809)	165	77632			0.00- 30.00	97.48
115 Phenanthrene					CAS #: 85-01-8		
22.810	22.810 (2.000)	178	119664	5.00000	5.019	70.00- 130.00	100.00
22.817	22.817 (2.000)	176	23538			0.00- 30.00	19.67
22.817	22.817 (2.000)	179	18553			0.00- 30.00	15.50
116 Anthracene					CAS #: 120-12-7		
22.918	22.918 (2.009)	178	79197	5.00000	4.993	70.00- 130.00	100.00(a)

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO
116 Anthracene (continued)							
22.925	22.925 (2.010)	176	14913			0.00- 30.00	18.83
22.925	22.925 (2.010)	179	12040			0.00- 30.00	15.20
117 Fluoranthene					CAS #: 206-44-0		
26.084	26.084 (2.287)	202	93874	5.00000	5.401	70.00- 130.00	100.00
26.084	26.084 (2.287)	101	17339			0.00- 30.00	18.47
118 Pyrene					CAS #: 129-00-0		
26.936	26.936 (2.361)	202	97952	5.00000	5.424	70.00- 130.00	100.00
26.936	26.936 (2.361)	101	19725			0.00- 30.00	20.14
26.929	26.929 (2.361)	100	16491			0.00- 45.21	16.84

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: msd6.i
Lab File ID: 6071203.d
Lab Smp Id: VI ICAL2 2.0ng Surr
Analysis Type: VOA
Quant Type: ISTD
Operator: CT
Method File: /chem/msd6.i/13jul16.b/616z0712vi.m
Misc Info: 2787-1-2ml(10/7/16),2744-98-5(1/6/17)

Calibration Date: 12-JUL-2016
Calibration Time: 17:31
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
40 Bromochloromethan	180845	108507	253183	172881	-4.40
54 1,4-Difluorobenze	751113	450668	1051558	752705	0.21
79 Chlorobenzene-d5	701197	420718	981676	708172	0.99
92 Bromofluorobenzen	474592	284755	664429	474252	-0.07

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
40 Bromochloromethan	4.29	3.96	4.62	4.29	0.00
54 1,4-Difluorobenze	5.93	5.60	6.26	5.93	0.00
79 Chlorobenzene-d5	9.85	9.52	10.18	9.85	0.07
92 Bromofluorobenzen	11.39	11.06	11.72	11.41	0.13

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/msd6.i/12jul16.b/6071203.d

Date : 12-JUL-2016 13:44

Client ID:

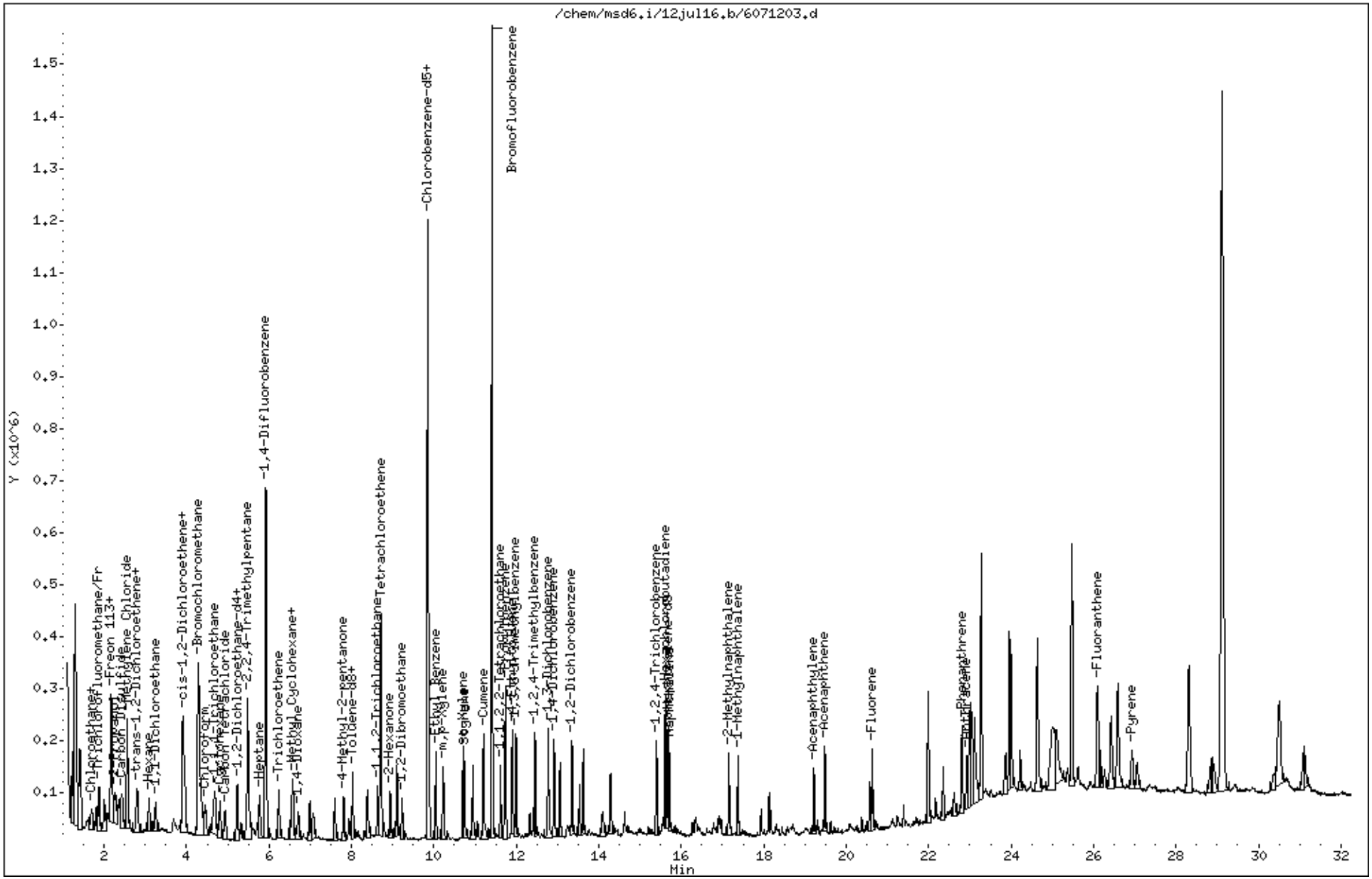
Sample Info: ;VI ICAL2 2.0ng Surr

Column phase: RTx-624

Instrument: msd6.i

Operator: CT

Column diameter: 0.53



Eurofins Air Toxics Inc.

EPA Method TO-17 GC/MS

Data file : /chem/msd6.i/12jul16.b/6071204.d
Lab Smp Id: VI ICAL3 5.0ng Surr
Inj Date : 12-JUL-2016 15:01
Operator : CT Inst ID: msd6.i
Smp Info : ;VI ICAL3 5.0ng Surr
Misc Info : 2787-1-3ml(10/7/16),2744-98-10(1/6/17)
Comment :
Method : /chem/msd6.i/13jul16.b/616z0712vi.m
Meth Date : 14-Jul-2016 18:42 U5BT Quant Type: ISTD
Cal Date : 12-JUL-2016 15:01 Cal File: 6071204.d
Als bottle: 3 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		
4.279	4.279 (1.000)	130	179421	26.0000		70.00- 130.00	100.00
4.279	4.279 (1.000)	128	139906			0.00- 30.00	77.98
4.279	4.279 (1.000)	49	241537			0.00- 30.00	134.62
* 54 1,4-Difluorobenzene					CAS #: 540-36-3		
5.920	5.920 (1.000)	114	759214	23.0000		70.00- 130.00	100.00
5.920	5.920 (1.000)	88	117900			0.00- 30.00	15.53
* 79 Chlorobenzene-d5					CAS #: 3114-55-4		
9.852	9.852 (1.000)	117	712681	24.0000		70.00- 130.00	100.00
9.852	9.852 (1.000)	82	373485			0.00- 30.00	52.41
* 92 Bromofluorobenzene					CAS #: 460-00-4		
11.406	11.406 (1.000)	174	478272	36.0000		70.00- 130.00	100.00
11.406	11.406 (1.000)	95	553276			0.00- 30.00	115.68
11.406	11.406 (1.000)	176	468429			0.00- 30.00	97.94
$ 49 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
5.203	5.203 (0.879)	65	20135	5.00000	5.271	70.00- 130.00	100.00

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

$  49 1,2-Dichloroethane-d4 (continued)
  5.203   5.203 (0.879)    67     11306                     0.00-  30.00    56.15
-------------------------------------------------------------------------------
$  66 Toluene-d8                                  CAS #: 2037-26-5
  7.940   7.940 (0.806)    98     66791 5.00000    5.143  70.00- 130.00   100.00
  7.940   7.940 (0.806)    70      7486                     0.00-  30.00    11.21
  7.940   7.940 (0.806)   100     44206                     0.00-  30.00    66.19
-------------------------------------------------------------------------------
$ 108 Naphthalene-d8                              CAS #: 1146-65-2
 15.676  15.676 (1.374)   136    115986 5.00000    5.031  70.00- 130.00   100.00
 15.668  15.668 (1.374)   108     10996                     0.00-  30.00     9.48
-------------------------------------------------------------------------------
    3 Freon 114                                   CAS #: 76-14-2
  1.283   1.283 (0.300)   135     67273 21.0000   20.898  70.00- 130.00   100.00
  1.269   1.269 (0.296)   137     21609                     0.00-  30.00    32.12
-------------------------------------------------------------------------------
    6 Vinyl Chloride                              CAS #: 75-01-4
  1.395   1.395 (0.326)    62     40564 7.67000    8.227  70.00- 130.00   100.00
  1.395   1.395 (0.326)    64     18920                     0.00-  30.00    46.64
-------------------------------------------------------------------------------
    7 1,3-Butadiene                               CAS #: 106-99-0
  1.395   1.395 (0.326)    54     33226 6.64000    7.103  70.00- 130.00   100.00
  1.395   1.395 (0.326)    39     49167                     0.00-  30.00   147.98
-------------------------------------------------------------------------------
    9 Chloroethane                                CAS #: 75-00-3
  1.646   1.646 (0.385)    64     22937 7.92000    9.908  70.00- 130.00   100.00(a)
  1.646   1.646 (0.385)    66      5137                     0.00-  30.00    22.40
  1.646   1.646 (0.385)    49      5292                     0.00-  30.00    23.07
-------------------------------------------------------------------------------
   10 Isopentane                                  CAS #: 78-78-4
  1.688   1.688 (0.395)    57     33615 8.85000    9.356  70.00- 130.00   100.00
  1.688   1.688 (0.395)    43     53617                     0.00-  30.00   159.50
-------------------------------------------------------------------------------
   11 Trichlorofluoromethane/Fr11                 CAS #: 75-69-4
  1.800   1.800 (0.421)   101     91745 16.9000   16.876  70.00- 130.00   100.00
  1.800   1.800 (0.421)   103     59488                     0.00-  30.00    64.84
-------------------------------------------------------------------------------
   15 Freon 113                                   CAS #: 76-13-1
  2.166   2.166 (0.506)   151     79419 23.0000   23.433  70.00- 130.00   100.00
  2.166   2.166 (0.506)   153     52001                     0.00-  30.00    65.48
  2.166   2.166 (0.506)   101     93257                     0.00-  30.00   117.42
-------------------------------------------------------------------------------
   14 1,1-Dichloroethene                          CAS #: 75-35-4
  2.173   2.173 (0.508)    98     26839 11.9000   11.623  70.00- 130.00   100.00
  2.173   2.173 (0.508)    96     42226                     0.00-  30.00   157.33
  2.173   2.173 (0.508)    61     70769                     0.00-  30.00   263.68
-------------------------------------------------------------------------------
```

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		
2.352	2.352 (0.550)	76	131836	9.34000	9.464	70.00- 130.00	100.00
19 2-Propanol					CAS #: 67-63-0		
2.259	2.259 (0.528)	45	135350	7.37000	11.173	70.00- 130.00	100.00(a)
2.259	2.259 (0.528)	43	50601			0.00- 30.00	37.39
2.259	2.259 (0.528)	59	5615			0.00- 30.00	4.15
22 Methylene Chloride					CAS #: 75-09-2		
2.560	2.560 (0.598)	49	140928	10.4000	23.216	70.00- 130.00	100.00
2.560	2.560 (0.598)	84	98070			0.00- 30.00	69.59
2.560	2.560 (0.598)	51	43541			0.00- 30.00	30.90
25 trans-1,2-Dichloroethene					CAS #: 156-60-5		
2.804	2.804 (0.655)	98	27482	11.9000	11.914	70.00- 130.00	100.00
2.804	2.804 (0.655)	61	63756			0.00- 30.00	231.99
2.804	2.804 (0.655)	96	44033			0.00- 30.00	160.22
26 MTBE					CAS #: 1634-04-4		
2.782	2.782 (0.650)	73	116492	10.8000	12.178	70.00- 130.00	100.00(a)
2.782	2.782 (0.650)	57	29031			0.00- 30.00	24.92
2.782	2.782 (0.650)	41	29753			0.00- 30.00	25.54
28 Hexane					CAS #: 110-54-3		
3.083	3.083 (0.720)	57	71836	10.6000	10.860	70.00- 130.00	100.00(a)
3.083	3.083 (0.720)	43	51104			0.00- 30.00	71.14
3.090	3.090 (0.722)	86	10495			0.00- 30.00	14.61
29 1,1-Dichloroethane					CAS #: 75-34-3		
3.248	3.248 (0.759)	63	71322	12.1000	12.260	70.00- 130.00	100.00
3.248	3.248 (0.759)	65	23330			0.00- 30.00	32.71
37 cis-1,2-Dichloroethene					CAS #: 156-59-2		
3.943	3.943 (0.921)	98	29384	11.9000	12.101	70.00- 130.00	100.00
3.943	3.943 (0.921)	96	45809			0.00- 30.00	155.90
3.943	3.943 (0.921)	61	62523			0.00- 30.00	212.78
38 2-Butanone					CAS #: 78-93-3		
3.907	3.907 (0.913)	72	61638	8.85000	23.493	70.00- 130.00	100.00(a)
3.907	3.907 (0.913)	43	298598			0.00- 30.00	484.44
3.907	3.907 (0.913)	57	24632			0.00- 30.00	39.96
44 Chloroform					CAS #: 67-66-3		
4.451	4.451 (1.040)	83	85749	14.6000	14.979	70.00- 130.00	100.00
4.451	4.451 (1.040)	85	55445			0.00- 30.00	64.66

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO
46 Cyclohexane					CAS #: 110-82-7		
4.802	4.802 (0.811)	84	55536	10.3000	10.533	70.00- 130.00	100.00
4.802	4.802 (0.811)	56	72348			0.00- 30.00	130.27
4.802	4.802 (0.811)	41	44521			0.00- 30.00	80.17
45 1,1,1-Trichloroethane					CAS #: 71-55-6		
4.688	4.688 (0.792)	97	88292	16.4000	17.378	70.00- 130.00	100.00
4.688	4.688 (0.792)	99	57145			0.00- 30.00	64.72
47 Carbon Tetrachloride					CAS #: 56-23-5		
4.931	4.931 (0.833)	119	93424	18.9000	19.298	70.00- 130.00	100.00
4.931	4.931 (0.833)	117	97403			0.00- 30.00	104.26
51 2,2,4-Trimethylpentane					CAS #: 540-84-1		
5.468	5.468 (0.924)	57	233764	14.0000	14.471	70.00- 130.00	100.00
5.468	5.468 (0.924)	56	76036			0.00- 30.00	32.53
5.475	5.475 (0.925)	41	76526			0.00- 30.00	32.74
48 Benzene					CAS #: 71-43-2		
5.232	5.232 (0.884)	78	157479	9.58000	10.325	70.00- 130.00	100.00
5.232	5.232 (0.884)	77	36539			0.00- 30.00	23.20
50 1,2-Dichloroethane					CAS #: 107-06-2		
5.318	5.318 (0.898)	62	58482	12.1000	12.352	70.00- 130.00	100.00
5.318	5.318 (0.898)	64	18820			0.00- 30.00	32.18
53 Heptane					CAS #: 142-82-5		
5.769	5.769 (0.975)	71	46195	12.3000	12.433	70.00- 130.00	100.00
5.769	5.769 (0.975)	43	98430			0.00- 30.00	213.08
5.769	5.769 (0.975)	57	44174			0.00- 30.00	95.63
56 Trichloroethene					CAS #: 79-01-6		
6.235	6.235 (1.053)	95	62562	16.1000	15.864	70.00- 130.00	100.00
6.235	6.235 (1.053)	130	66131			0.00- 30.00	105.70
6.242	6.242 (1.054)	97	41541			0.00- 30.00	66.40
58 Methyl Cyclohexane					CAS #: 108-87-2		
6.564	6.564 (1.109)	83	80266	12.0000	12.062	70.00- 130.00	100.00
6.557	6.557 (1.108)	98	36299			0.00- 30.00	45.22
6.557	6.557 (1.108)	55	69937			0.00- 30.00	87.13
59 1,2-Dichloropropane					CAS #: 78-87-5		
6.586	6.586 (1.113)	63	52010	13.9000	14.483	70.00- 130.00	100.00
6.586	6.586 (1.113)	62	36368			0.00- 30.00	69.93
6.571	6.571 (1.110)	41	76875			0.00- 30.00	147.81

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		
6.708	6.708 (1.133)	88	32946	10.8000	11.021	70.00- 130.00	100.00
6.708	6.708 (1.133)	58	24878			0.00- 30.00	75.51
6.708	6.708 (1.133)	57	35418			0.00- 30.00	107.50
65 4-Methyl-2-pentanone					CAS #: 108-10-1		
7.811	7.811 (1.319)	58	43008	12.3000	12.868	70.00- 130.00	100.00
7.811	7.811 (1.319)	43	122567			0.00- 30.00	284.99
7.811	7.811 (1.319)	85	18698			0.00- 30.00	43.48
67 Toluene					CAS #: 108-88-3		
8.033	8.033 (0.815)	91	171608	11.3000	11.223	70.00- 130.00	100.00
8.033	8.033 (0.815)	92	99770			0.00- 30.00	58.14
70 1,1,2-Trichloroethane					CAS #: 79-00-5		
8.634	8.634 (1.459)	97	59249	16.4000	16.724	70.00- 130.00	100.00
8.634	8.634 (1.459)	99	36851			0.00- 30.00	62.20
8.634	8.634 (1.459)	83	50793			0.00- 30.00	85.73
71 Tetrachloroethene					CAS #: 127-18-4		
8.720	8.720 (0.885)	166	87872	20.4000	20.192	70.00- 130.00	100.00
8.720	8.720 (0.885)	129	66027			0.00- 30.00	75.14
8.713	8.713 (0.884)	131	64452			0.00- 30.00	73.35
72 2-Hexanone					CAS #: 591-78-6		
8.942	8.942 (0.908)	58	56955	12.3000	12.633	70.00- 130.00	100.00
8.942	8.942 (0.908)	43	120155			0.00- 30.00	210.96
8.942	8.942 (0.908)	100	10922			0.00- 30.00	19.18
74 1,2-Dibromoethane					CAS #: 106-93-4		
9.229	9.229 (0.937)	107	95710	23.0000	23.986	70.00- 130.00	100.00
9.229	9.229 (0.937)	109	91069			0.00- 30.00	95.15
81 Chlorobenzene					CAS #: 108-90-7		
9.888	9.888 (1.004)	112	147653	13.8000	14.275	70.00- 130.00	100.00
9.888	9.888 (1.004)	114	46851			0.00- 30.00	31.73
9.888	9.888 (1.004)	77	84957			0.00- 30.00	57.54
82 Ethyl Benzene					CAS #: 100-41-4		
10.046	10.046 (1.020)	106	73461	13.0000	13.301	70.00- 130.00	100.00
10.046	10.046 (1.020)	91	227875			0.00- 30.00	310.20
84 m,p-Xylene					CAS #: 108-38-3		
10.225	10.225 (1.038)	106	94285	13.0000	13.521	70.00- 130.00	100.00
10.225	10.225 (1.038)	91	185260			0.00- 30.00	196.49

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

   88 o-Xylene                                        CAS #: 95-47-6
 10.712  10.712 (0.939)   106     88861 13.0000   13.936  70.00- 130.00   100.00
 10.712  10.712 (0.939)    91    184332                    0.00-  30.00   207.44
-------------------------------------------------------------------------------
   89 Styrene                                         CAS #: 100-42-5
 10.740  10.740 (0.942)   104    144623 12.8000   13.376  70.00- 130.00   100.00
 10.740  10.740 (0.942)    78     70057                    0.00-  30.00    48.44
-------------------------------------------------------------------------------
   91 Cumene                                          CAS #: 98-82-8
 11.199  11.199 (0.982)   105    279856 14.8000   16.257  70.00- 130.00   100.00
 11.199  11.199 (0.982)   120     75908                    0.00-  30.00    27.12
 11.199  11.199 (0.982)    51     29198                    0.00-  30.00    10.43
-------------------------------------------------------------------------------
   94 1,1,2,2-Tetrachloroethane                       CAS #: 79-34-5
 11.621  11.621 (1.019)    83    139789 20.6000   22.735  70.00- 130.00   100.00
 11.614  11.614 (1.018)    85     89762                    0.00-  30.00    64.21
-------------------------------------------------------------------------------
   96 Propylbenzene                                   CAS #: 103-65-1
 11.736  11.736 (1.029)    91    344477 14.8000   16.958  70.00- 130.00   100.00
 11.736  11.736 (1.029)   120     82748                    0.00-  30.00    24.02
 11.736  11.736 (1.029)   105     13701                    0.00-  30.00     3.98
-------------------------------------------------------------------------------
   97 4-Ethyltoluene                                  CAS #: 622-96-8
 11.901  11.901 (1.043)   120     90279 14.8000   16.980  70.00- 130.00   100.00
 11.901  11.901 (1.043)   105    286902                    0.00-  30.00   317.79
-------------------------------------------------------------------------------
   98 1,3,5-Trimethylbenzene                          CAS #: 108-67-8
 11.987  11.987 (1.051)   120    125876 14.8000   16.825  70.00- 130.00   100.00
 11.987  11.987 (1.051)   105    253737                    0.00-  30.00   201.58
-------------------------------------------------------------------------------
  100 1,2,4-Trimethylbenzene                          CAS #: 95-63-6
 12.452  12.452 (1.092)   120    121072 14.8000   17.335  70.00- 130.00   100.00(a)
 12.452  12.452 (1.092)   105    264599                    0.00-  30.00   218.55
-------------------------------------------------------------------------------
  101 1,3-Dichlorobenzene                             CAS #: 541-73-1
 12.782  12.782 (1.121)   146    187777 18.0000   21.326  70.00- 130.00   100.00
 12.782  12.782 (1.121)   148    120307                    0.00-  30.00    64.07
 12.782  12.782 (1.121)   111     75359                    0.00-  30.00    40.13
-------------------------------------------------------------------------------
  102 1,4-Dichlorobenzene                             CAS #: 106-46-7
 12.918  12.918 (1.133)   146    190157 18.0000   21.699  70.00- 130.00   100.00
 12.918  12.918 (1.133)   148    121005                    0.00-  30.00    63.63
 12.918  12.918 (1.133)   111     72471                    0.00-  30.00    38.11
-------------------------------------------------------------------------------
  105 1,2-Dichlorobenzene                             CAS #: 95-50-1
 13.348  13.348 (1.170)   146    183681 18.0000   21.752  70.00- 130.00   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)							
13.348	13.348 (1.170)	148	117048			0.00- 30.00	63.72
13.348	13.348 (1.170)	111	76289			0.00- 30.00	41.53
106 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
15.403	15.403 (1.350)	180	207118	22.3000	30.645	70.00- 130.00	100.00
15.403	15.403 (1.350)	182	197783			0.00- 30.00	95.49
107 Hexachlorobutadiene					CAS #: 87-68-3		
15.618	15.618 (1.369)	225	199190	32.0000	51.251	70.00- 130.00	100.00
15.618	15.618 (1.369)	223	124743			0.00- 30.00	62.63
109 Naphthalene					CAS #: 91-20-3		
15.711	15.711 (1.377)	128	249864	10.0000	9.717	70.00- 130.00	100.00
15.711	15.711 (1.377)	127	32725			0.00- 30.00	13.10
110 2-Methylnaphthalene					CAS #: 91-57-6		
17.158	17.158 (1.504)	142	157907	10.0000	9.695	70.00- 130.00	100.00
17.158	17.158 (1.504)	141	135088			0.00- 30.00	85.55
17.158	17.158 (1.504)	115	50400			0.00- 30.00	31.92
111 1-Methylnaphthalene					CAS #: 90-12-0		
17.373	17.373 (1.523)	142	144411	10.0000	9.748	70.00- 130.00	100.00
17.373	17.373 (1.523)	141	130586			0.00- 30.00	90.43
17.373	17.373 (1.523)	115	48389			0.00- 30.00	33.51
112 Acenaphthylene					CAS #: 208-96-8		
19.221	19.221 (1.685)	152	195941	10.0000	8.238	70.00- 130.00	100.00
19.221	19.221 (1.685)	151	39796			0.00- 30.00	20.31
19.221	19.221 (1.685)	153	25878			0.00- 30.00	13.21
113 Acenaphthene					CAS #: 83-32-9		
19.486	19.486 (1.708)	154	135308	10.0000	10.279	70.00- 130.00	100.00
19.486	19.486 (1.708)	152	71960			0.00- 30.00	53.18
19.486	19.486 (1.708)	153	147287			0.00- 30.00	108.85
114 Fluorene					CAS #: 86-73-7		
20.640	20.640 (1.809)	166	153783	10.0000	11.065	70.00- 130.00	100.00
20.640	20.640 (1.809)	165	147373			0.00- 30.00	95.83
115 Phenanthrene					CAS #: 85-01-8		
22.817	22.817 (2.000)	178	227256	10.0000	9.452	70.00- 130.00	100.00
22.817	22.817 (2.000)	176	44327			0.00- 30.00	19.51
22.817	22.817 (2.000)	179	34325			0.00- 30.00	15.10
116 Anthracene					CAS #: 120-12-7		
22.925	22.925 (2.010)	178	147597	10.0000	9.227	70.00- 130.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO
116 Anthracene (continued)							
22.925	22.925 (2.010)	176	27365			0.00- 30.00	18.54
22.925	22.925 (2.010)	179	22408			0.00- 30.00	15.18
117 Fluoranthene					CAS #: 206-44-0		
26.091	26.091 (2.287)	202	177243	10.0000	10.112	70.00- 130.00	100.00
26.076	26.076 (2.286)	101	29982			0.00- 30.00	16.92
118 Pyrene					CAS #: 129-00-0		
26.943	26.943 (2.362)	202	187390	10.0000	10.288	70.00- 130.00	100.00
26.936	26.936 (2.361)	101	37037			0.00- 30.00	19.76
26.936	26.936 (2.361)	100	28996			0.00- 45.21	15.47

QC Flag Legend

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

Report Date: 14-Jul-2016 18:42

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd6.i
Lab File ID: 6071204.d
Lab Smp Id: VI ICAL3 5.0ng Surr
Analysis Type: VOA
Quant Type: ISTD
Operator: CT
Method File: /chem/msd6.i/13jul16.b/616z0712vi.m
Misc Info: 2787-1-3ml(10/7/16),2744-98-10(1/6/17)

Calibration Date: 12-JUL-2016
Calibration Time: 17:31
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
40 Bromochloromethan	180845	108507	253183	179421	-0.79
54 1,4-Difluorobenze	751113	450668	1051558	759214	1.08
79 Chlorobenzene-d5	701197	420718	981676	712681	1.64
92 Bromofluorobenzen	474592	284755	664429	478272	0.78

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
40 Bromochloromethan	4.29	3.96	4.62	4.28	-0.17
54 1,4-Difluorobenze	5.93	5.60	6.26	5.92	-0.12
79 Chlorobenzene-d5	9.85	9.52	10.18	9.85	0.07
92 Bromofluorobenzen	11.39	11.06	11.72	11.41	0.12

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/msd6.i/12jul16.b/6071204.d

Date : 12-JUL-2016 15:01

Client ID:

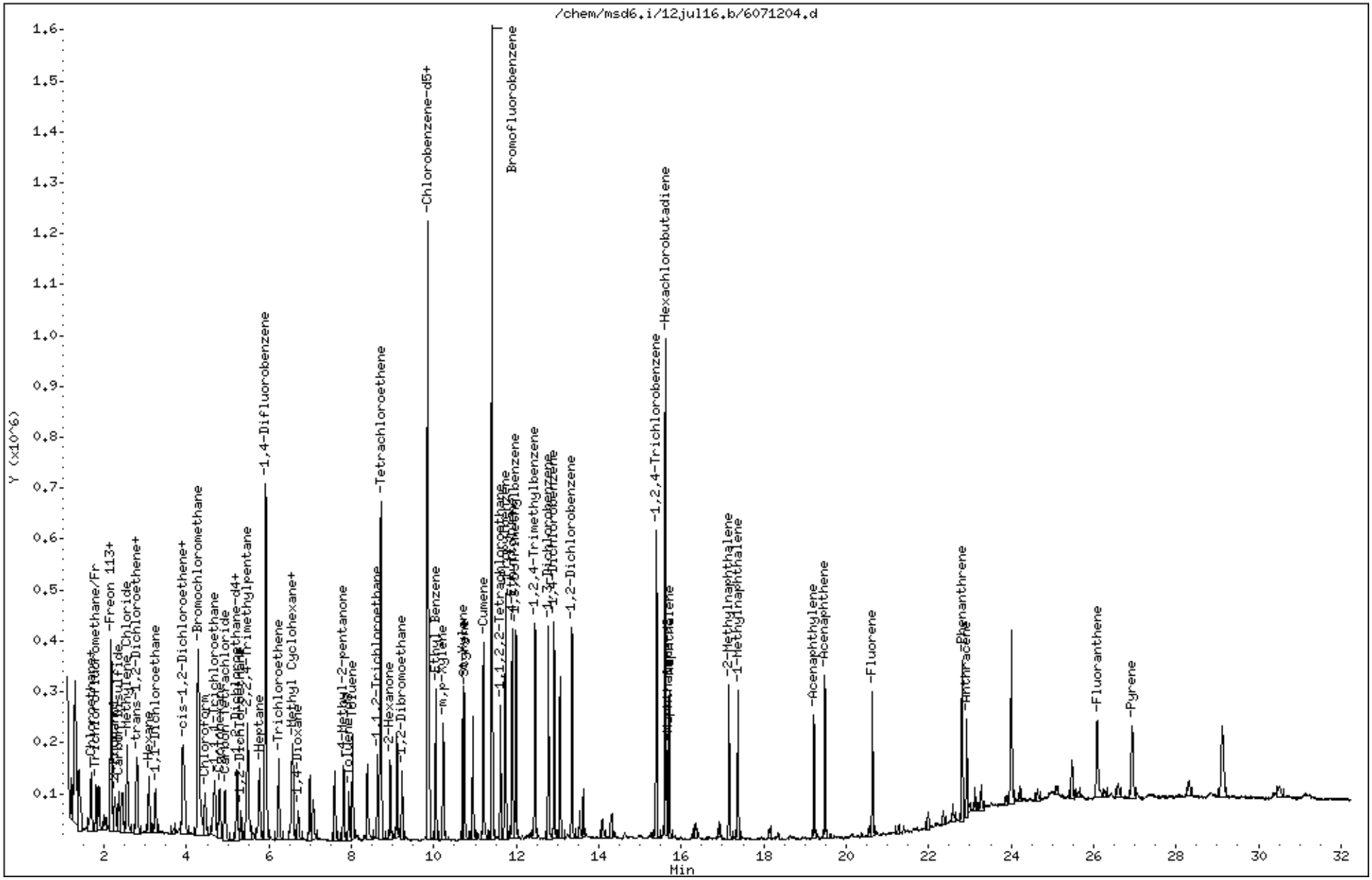
Sample Info: ;VI ICAL3 5.0ng Surr

Column phase: RTx-624

Instrument: msd6.i

Operator: CT

Column diameter: 0.53



Eurofins Air Toxics Inc.

EPA Method TO-17 GC/MS

Data file : /chem/msd6.i/12jul16.b/6071205.d
Lab Smp Id: VI ICAL4 10ng Surr
Inj Date : 12-JUL-2016 16:51
Operator : CT Inst ID: msd6.i
Smp Info : ;VI ICAL4 10ng Surr
Misc Info : 2787-1-6ml(10/7/16),2744-98-25(1/6/17)
Comment :
Method : /chem/msd6.i/13jul16.b/616z0712vi.m
Meth Date : 14-Jul-2016 18:42 U5BT Quant Type: ISTD
Cal Date : 12-JUL-2016 16:51 Cal File: 6071205.d
Als bottle: 4 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		
4.279	4.279 (1.000)	130	178962	26.0000		70.00- 130.00	100.00
4.279	4.279 (1.000)	128	139979			0.00- 30.00	78.22
4.279	4.279 (1.000)	49	246852			0.00- 30.00	137.94
* 54 1,4-Difluorobenzene					CAS #: 540-36-3		
5.920	5.920 (1.000)	114	760488	23.0000		70.00- 130.00	100.00
5.920	5.920 (1.000)	88	118319			0.00- 30.00	15.56
* 79 Chlorobenzene-d5					CAS #: 3114-55-4		
9.838	9.838 (1.000)	117	701784	24.0000		70.00- 130.00	100.00
9.838	9.838 (1.000)	82	367806			0.00- 30.00	52.41
* 92 Bromofluorobenzene					CAS #: 460-00-4		
11.392	11.392 (1.000)	174	477702	36.0000		70.00- 130.00	100.00
11.392	11.392 (1.000)	95	553550			0.00- 30.00	115.88
11.392	11.392 (1.000)	176	467301			0.00- 30.00	97.82
$ 49 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
5.203	5.203 (0.879)	65	39960	10.0000	10.444	70.00- 130.00	100.00

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

$  49 1,2-Dichloroethane-d4 (continued)
  5.203   5.203 (0.879)    67     21745                     0.00-  30.00    54.42
-------------------------------------------------------------------------------
$  66 Toluene-d8                                   CAS #: 2037-26-5
  7.932   7.932 (0.806)    98    133334 10.0000   10.427  70.00- 130.00   100.00
  7.932   7.932 (0.806)    70     14537                     0.00-  30.00    10.90
  7.932   7.932 (0.806)   100     88529                     0.00-  30.00    66.40
-------------------------------------------------------------------------------
$ 108 Naphthalene-d8                               CAS #: 1146-65-2
 15.669  15.669 (1.375)   136    234044 10.0000   10.164  70.00- 130.00   100.00
 15.669  15.669 (1.375)   108     21627                     0.00-  30.00     9.24
-------------------------------------------------------------------------------
    3 Freon 114                                    CAS #: 76-14-2
  1.283   1.283 (0.300)   135    134211 41.9000   41.800  70.00- 130.00   100.00
  1.283   1.283 (0.300)   137     42930                     0.00-  30.00    31.99
-------------------------------------------------------------------------------
    6 Vinyl Chloride                               CAS #: 75-01-4
  1.395   1.395 (0.326)    62     80531 15.3000   16.375  70.00- 130.00   100.00
  1.395   1.395 (0.326)    64     37899                     0.00-  30.00    47.06
-------------------------------------------------------------------------------
    7 1,3-Butadiene                                CAS #: 106-99-0
  1.395   1.395 (0.326)    54     64702 13.3000   13.868  70.00- 130.00   100.00
  1.395   1.395 (0.326)    39    115135                     0.00-  30.00   177.95
-------------------------------------------------------------------------------
    9 Chloroethane                                 CAS #: 75-00-3
  1.646   1.646 (0.385)    64     40133 15.8000   17.380  70.00- 130.00   100.00
  1.646   1.646 (0.385)    66      9863                     0.00-  30.00    24.58
  1.646   1.646 (0.385)    49     10435                     0.00-  30.00    26.00
-------------------------------------------------------------------------------
   10 Isopentane                                   CAS #: 78-78-4
  1.688   1.688 (0.395)    57     65826 17.7000   18.369  70.00- 130.00   100.00
  1.688   1.688 (0.395)    43    103635                     0.00-  30.00   157.44
-------------------------------------------------------------------------------
   11 Trichlorofluoromethane/Fr11                  CAS #: 75-69-4
  1.800   1.800 (0.421)   101    185260 33.7000   34.166  70.00- 130.00   100.00
  1.800   1.800 (0.421)   103    119754                     0.00-  30.00    64.64
-------------------------------------------------------------------------------
   15 Freon 113                                    CAS #: 76-13-1
  2.166   2.166 (0.506)   151    158276 46.0000   46.820  70.00- 130.00   100.00
  2.166   2.166 (0.506)   153    102367                     0.00-  30.00    64.68
  2.166   2.166 (0.506)   101    183916                     0.00-  30.00   116.20
-------------------------------------------------------------------------------
   14 1,1-Dichloroethene                           CAS #: 75-35-4
  2.173   2.173 (0.508)    98     60795 23.8000   26.396  70.00- 130.00   100.00
  2.173   2.173 (0.508)    96     97500                     0.00-  30.00   160.38
  2.173   2.173 (0.508)    61    160176                     0.00-  30.00   263.47
-------------------------------------------------------------------------------
```

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		
2.352	2.352 (0.550)	76	245919	18.7000	17.698	70.00- 130.00	100.00
19 2-Propanol					CAS #: 67-63-0		
2.259	2.259 (0.528)	45	194975	14.7000	16.137	70.00- 130.00	100.00(a)
2.259	2.259 (0.528)	43	52257			0.00- 30.00	26.80
2.259	2.259 (0.528)	59	7519			0.00- 30.00	3.86
22 Methylene Chloride					CAS #: 75-09-2		
2.560	2.560 (0.598)	49	190717	20.8000	31.498	70.00- 130.00	100.00
2.560	2.560 (0.598)	84	135194			0.00- 30.00	70.89
2.560	2.560 (0.598)	51	57300			0.00- 30.00	30.04
25 trans-1,2-Dichloroethene					CAS #: 156-60-5		
2.804	2.804 (0.655)	98	54464	23.8000	23.671	70.00- 130.00	100.00
2.804	2.804 (0.655)	61	126508			0.00- 30.00	232.28
2.804	2.804 (0.655)	96	86189			0.00- 30.00	158.25
26 MTBE					CAS #: 1634-04-4		
2.782	2.782 (0.650)	73	171236	21.6000	17.947	70.00- 130.00	100.00(a)
2.782	2.782 (0.650)	57	42097			0.00- 30.00	24.58
2.782	2.782 (0.650)	41	43464			0.00- 30.00	25.38
28 Hexane					CAS #: 110-54-3		
3.083	3.083 (0.720)	57	141616	21.1000	21.464	70.00- 130.00	100.00(a)
3.090	3.090 (0.722)	43	98449			0.00- 30.00	69.52
3.090	3.090 (0.722)	86	20229			0.00- 30.00	14.28
29 1,1-Dichloroethane					CAS #: 75-34-3		
3.248	3.248 (0.759)	63	131375	24.3000	22.641	70.00- 130.00	100.00
3.248	3.248 (0.759)	65	42421			0.00- 30.00	32.29
37 cis-1,2-Dichloroethene					CAS #: 156-59-2		
3.943	3.943 (0.921)	98	57752	23.8000	23.844	70.00- 130.00	100.00
3.943	3.943 (0.921)	96	91127			0.00- 30.00	157.79
3.943	3.943 (0.921)	61	123537			0.00- 30.00	213.91
38 2-Butanone					CAS #: 78-93-3		
3.900	3.900 (0.911)	72	69043	17.7000	26.382	70.00- 130.00	100.00(a)
3.900	3.900 (0.911)	43	337124			0.00- 30.00	488.28
3.900	3.900 (0.911)	57	25658			0.00- 30.00	37.16
44 Chloroform					CAS #: 67-66-3		
4.451	4.451 (1.040)	83	171519	29.3000	30.039	70.00- 130.00	100.00
4.451	4.451 (1.040)	85	111175			0.00- 30.00	64.82

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO
46 Cyclohexane					CAS #: 110-82-7		
4.802	4.802 (0.811)	84	108795	20.7000	20.599	70.00- 130.00	100.00
4.802	4.802 (0.811)	56	143958			0.00- 30.00	132.32
4.802	4.802 (0.811)	41	87594			0.00- 30.00	80.51
45 1,1,1-Trichloroethane					CAS #: 71-55-6		
4.680	4.680 (0.791)	97	141958	32.7000	27.895	70.00- 130.00	100.00
4.680	4.680 (0.791)	99	92319			0.00- 30.00	65.03
47 Carbon Tetrachloride					CAS #: 56-23-5		
4.931	4.931 (0.833)	119	174528	37.8000	35.991	70.00- 130.00	100.00
4.931	4.931 (0.833)	117	179771			0.00- 30.00	103.00
51 2,2,4-Trimethylpentane					CAS #: 540-84-1		
5.468	5.468 (0.924)	57	468490	28.0000	28.953	70.00- 130.00	100.00
5.468	5.468 (0.924)	56	149426			0.00- 30.00	31.90
5.468	5.468 (0.924)	41	148690			0.00- 30.00	31.74
48 Benzene					CAS #: 71-43-2		
5.225	5.225 (0.883)	78	303755	19.2000	19.881	70.00- 130.00	100.00
5.232	5.232 (0.884)	77	72495			0.00- 30.00	23.87
50 1,2-Dichloroethane					CAS #: 107-06-2		
5.318	5.318 (0.898)	62	112655	24.3000	23.754	70.00- 130.00	100.00
5.318	5.318 (0.898)	64	37310			0.00- 30.00	33.12
53 Heptane					CAS #: 142-82-5		
5.769	5.769 (0.975)	71	90287	24.6000	24.260	70.00- 130.00	100.00
5.769	5.769 (0.975)	43	213359			0.00- 30.00	236.31
5.769	5.769 (0.975)	57	89556			0.00- 30.00	99.19
56 Trichloroethene					CAS #: 79-01-6		
6.235	6.235 (1.053)	95	132906	32.2000	33.645	70.00- 130.00	100.00
6.235	6.235 (1.053)	130	141150			0.00- 30.00	106.20
6.235	6.235 (1.053)	97	86372			0.00- 30.00	64.99
58 Methyl Cyclohexane					CAS #: 108-87-2		
6.564	6.564 (1.109)	83	159054	24.1000	23.862	70.00- 130.00	100.00
6.557	6.557 (1.108)	98	70905			0.00- 30.00	44.58
6.557	6.557 (1.108)	55	139355			0.00- 30.00	87.61
59 1,2-Dichloropropane					CAS #: 78-87-5		
6.586	6.586 (1.113)	63	88775	27.7000	24.680	70.00- 130.00	100.00
6.586	6.586 (1.113)	62	61661			0.00- 30.00	69.46
6.571	6.571 (1.110)	41	136957			0.00- 30.00	154.27

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		
6.708	6.708 (1.133)	88	61398	21.6000	20.504	70.00- 130.00	100.00
6.708	6.708 (1.133)	58	45319			0.00- 30.00	73.81
6.708	6.708 (1.133)	57	41355			0.00- 30.00	67.36
65 4-Methyl-2-pentanone					CAS #: 108-10-1		
7.803	7.803 (1.318)	58	81442	24.6000	24.326	70.00- 130.00	100.00
7.803	7.803 (1.318)	43	233283			0.00- 30.00	286.44
7.803	7.803 (1.318)	85	35307			0.00- 30.00	43.35
67 Toluene					CAS #: 108-88-3		
8.018	8.018 (0.815)	91	339754	22.6000	22.565	70.00- 130.00	100.00
8.018	8.018 (0.815)	92	200392			0.00- 30.00	58.98
70 1,1,2-Trichloroethane					CAS #: 79-00-5		
8.620	8.620 (1.456)	97	115954	32.7000	32.674	70.00- 130.00	100.00
8.620	8.620 (1.456)	99	71272			0.00- 30.00	61.47
8.620	8.620 (1.456)	83	96322			0.00- 30.00	83.07
71 Tetrachloroethene					CAS #: 127-18-4		
8.706	8.706 (0.885)	166	174060	40.7000	40.619	70.00- 130.00	100.00
8.706	8.706 (0.885)	129	131748			0.00- 30.00	75.69
8.706	8.706 (0.885)	131	129364			0.00- 30.00	74.32
72 2-Hexanone					CAS #: 591-78-6		
8.928	8.928 (0.908)	58	106182	24.6000	23.918	70.00- 130.00	100.00
8.928	8.928 (0.908)	43	222157			0.00- 30.00	209.22
8.935	8.935 (0.908)	100	20426			0.00- 30.00	19.24
74 1,2-Dibromoethane					CAS #: 106-93-4		
9.215	9.215 (0.937)	107	176914	46.1000	45.025	70.00- 130.00	100.00
9.215	9.215 (0.937)	109	168831			0.00- 30.00	95.43
81 Chlorobenzene					CAS #: 108-90-7		
9.874	9.874 (1.004)	112	289132	27.6000	28.388	70.00- 130.00	100.00
9.874	9.874 (1.004)	114	93222			0.00- 30.00	32.24
9.874	9.874 (1.004)	77	163241			0.00- 30.00	56.46
82 Ethyl Benzene					CAS #: 100-41-4		
10.031	10.031 (1.020)	106	146471	26.1000	26.932	70.00- 130.00	100.00
10.031	10.031 (1.020)	91	457681			0.00- 30.00	312.47
84 m,p-Xylene					CAS #: 108-38-3		
10.210	10.210 (1.038)	106	188839	26.1000	27.501	70.00- 130.00	100.00
10.210	10.210 (1.038)	91	368518			0.00- 30.00	195.15

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

   88 o-Xylene                                          CAS #: 95-47-6
 10.697  10.697 (0.939)   106    176227 26.1000   27.670  70.00- 130.00   100.00
 10.690  10.690 (0.938)    91    364156                    0.00-  30.00   206.64
-------------------------------------------------------------------------------
   89 Styrene                                           CAS #: 100-42-5
 10.726  10.726 (0.942)   104    293374 25.6000   27.166  70.00- 130.00   100.00
 10.726  10.726 (0.942)    78    139769                    0.00-  30.00    47.64
-------------------------------------------------------------------------------
   91 Cumene                                            CAS #: 98-82-8
 11.184  11.184 (0.982)   105    558004 29.5000   32.454  70.00- 130.00   100.00
 11.184  11.184 (0.982)   120    150877                    0.00-  30.00    27.04
 11.184  11.184 (0.982)    51     55870                    0.00-  30.00    10.01
-------------------------------------------------------------------------------
   94 1,1,2,2-Tetrachloroethane                         CAS #: 79-34-5
 11.607  11.607 (1.019)    83    261146 41.2000   42.523  70.00- 130.00   100.00
 11.607  11.607 (1.019)    85    169510                    0.00-  30.00    64.91
-------------------------------------------------------------------------------
   96 Propylbenzene                                     CAS #: 103-65-1
 11.729  11.729 (1.030)    91    682496 29.5000   33.638  70.00- 130.00   100.00
 11.729  11.729 (1.030)   120    162848                    0.00-  30.00    23.86
 11.729  11.729 (1.030)   105     26489                    0.00-  30.00     3.88
-------------------------------------------------------------------------------
   97 4-Ethyltoluene                                    CAS #: 622-96-8
 11.894  11.894 (1.044)   120    177517 29.5000   33.428  70.00- 130.00   100.00
 11.894  11.894 (1.044)   105    575991                    0.00-  30.00   324.47
-------------------------------------------------------------------------------
   98 1,3,5-Trimethylbenzene                            CAS #: 108-67-8
 11.980  11.980 (1.052)   120    251659 29.5000   33.678  70.00- 130.00   100.00
 11.980  11.980 (1.052)   105    499807                    0.00-  30.00   198.60
-------------------------------------------------------------------------------
  100 1,2,4-Trimethylbenzene                            CAS #: 95-63-6
 12.445  12.445 (1.092)   120    237143 29.5000   33.995  70.00- 130.00   100.00
 12.445  12.445 (1.092)   105    544169                    0.00-  30.00   229.47
-------------------------------------------------------------------------------
  101 1,3-Dichlorobenzene                               CAS #: 541-73-1
 12.775  12.775 (1.121)   146    364667 36.1000   41.465  70.00- 130.00   100.00
 12.775  12.775 (1.121)   148    232504                    0.00-  30.00    63.76
 12.767  12.767 (1.121)   111    143971                    0.00-  30.00    39.48
-------------------------------------------------------------------------------
  102 1,4-Dichlorobenzene                               CAS #: 106-46-7
 12.911  12.911 (1.133)   146    360605 36.1000   41.198  70.00- 130.00   100.00
 12.911  12.911 (1.133)   148    233966                    0.00-  30.00    64.88
 12.911  12.911 (1.133)   111    140202                    0.00-  30.00    38.88
-------------------------------------------------------------------------------
  105 1,2-Dichlorobenzene                               CAS #: 95-50-1
 13.348  13.348 (1.172)   146    357455 36.1000   42.380  70.00- 130.00   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)							
13.348	13.348 (1.172)	148	228113			0.00- 30.00	63.82
13.348	13.348 (1.172)	111	145630			0.00- 30.00	40.74
106 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
15.403	15.403 (1.352)	180	380889	44.5000	56.423	70.00- 130.00	100.00
15.403	15.403 (1.352)	182	361608			0.00- 30.00	94.94
107 Hexachlorobutadiene					CAS #: 87-68-3		
15.618	15.618 (1.371)	225	329418	64.0000	84.859	70.00- 130.00	100.00
15.618	15.618 (1.371)	223	205865			0.00- 30.00	62.49
109 Naphthalene					CAS #: 91-20-3		
15.711	15.711 (1.379)	128	616117	25.0000	23.988	70.00- 130.00	100.00
15.711	15.711 (1.379)	127	80295			0.00- 30.00	13.03
110 2-Methylnaphthalene					CAS #: 91-57-6		
17.158	17.158 (1.506)	142	388868	25.0000	23.903	70.00- 130.00	100.00
17.158	17.158 (1.506)	141	338055			0.00- 30.00	86.93
17.158	17.158 (1.506)	115	123656			0.00- 30.00	31.80
111 1-Methylnaphthalene					CAS #: 90-12-0		
17.380	17.380 (1.526)	142	352060	25.0000	23.792	70.00- 130.00	100.00
17.380	17.380 (1.526)	141	318544			0.00- 30.00	90.48
17.380	17.380 (1.526)	115	118983			0.00- 30.00	33.80
112 Acenaphthylene					CAS #: 208-96-8		
19.229	19.229 (1.688)	152	649248	25.0000	27.331	70.00- 130.00	100.00
19.221	19.221 (1.687)	151	131557			0.00- 30.00	20.26
19.229	19.229 (1.688)	153	84440			0.00- 30.00	13.01
113 Acenaphthene					CAS #: 83-32-9		
19.494	19.494 (1.711)	154	280733	25.0000	21.352	70.00- 130.00	100.00
19.494	19.494 (1.711)	152	151086			0.00- 30.00	53.82
19.494	19.494 (1.711)	153	311307			0.00- 30.00	110.89
114 Fluorene					CAS #: 86-73-7		
20.640	20.640 (1.812)	166	258225	25.0000	18.603	70.00- 130.00	100.00
20.640	20.640 (1.812)	165	246804			0.00- 30.00	95.58
115 Phenanthrene					CAS #: 85-01-8		
22.817	22.817 (2.003)	178	589987	25.0000	24.567	70.00- 130.00	100.00
22.817	22.817 (2.003)	176	112587			0.00- 30.00	19.08
22.817	22.817 (2.003)	179	90499			0.00- 30.00	15.34
116 Anthracene					CAS #: 120-12-7		
22.925	22.925 (2.012)	178	389831	25.0000	24.399	70.00- 130.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO
116 Anthracene (continued)							
22.925	22.925 (2.012)	176	70784			0.00- 30.00	18.16
22.925	22.925 (2.012)	179	59378			0.00- 30.00	15.23
117 Fluoranthene					CAS #: 206-44-0		
26.091	26.091 (2.290)	202	467428	25.0000	26.699	70.00- 130.00	100.00
26.091	26.091 (2.290)	101	78682			0.00- 30.00	16.83
118 Pyrene					CAS #: 129-00-0		
26.943	26.943 (2.365)	202	474914	25.0000	26.106	70.00- 130.00	100.00
26.943	26.943 (2.365)	101	89772			0.00- 30.00	18.90
26.943	26.943 (2.365)	100	73358			0.00- 45.21	15.45

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: msd6.i
Lab File ID: 6071205.d
Lab Smp Id: VI ICAL4 10ng Surr
Analysis Type: VOA
Quant Type: ISTD
Operator: CT
Method File: /chem/msd6.i/13jul16.b/616z0712vi.m
Misc Info: 2787-1-6ml(10/7/16),2744-98-25(1/6/17)

Calibration Date: 12-JUL-2016
Calibration Time: 17:31
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
40 Bromochloromethan	180845	108507	253183	178962	-1.04
54 1,4-Difluorobenze	751113	450668	1051558	760488	1.25
79 Chlorobenzene-d5	701197	420718	981676	701784	0.08
92 Bromofluorobenzen	474592	284755	664429	477702	0.66

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
40 Bromochloromethan	4.29	3.96	4.62	4.28	-0.17
54 1,4-Difluorobenze	5.93	5.60	6.26	5.92	-0.12
79 Chlorobenzene-d5	9.85	9.52	10.18	9.84	-0.07
92 Bromofluorobenzen	11.39	11.06	11.72	11.39	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.

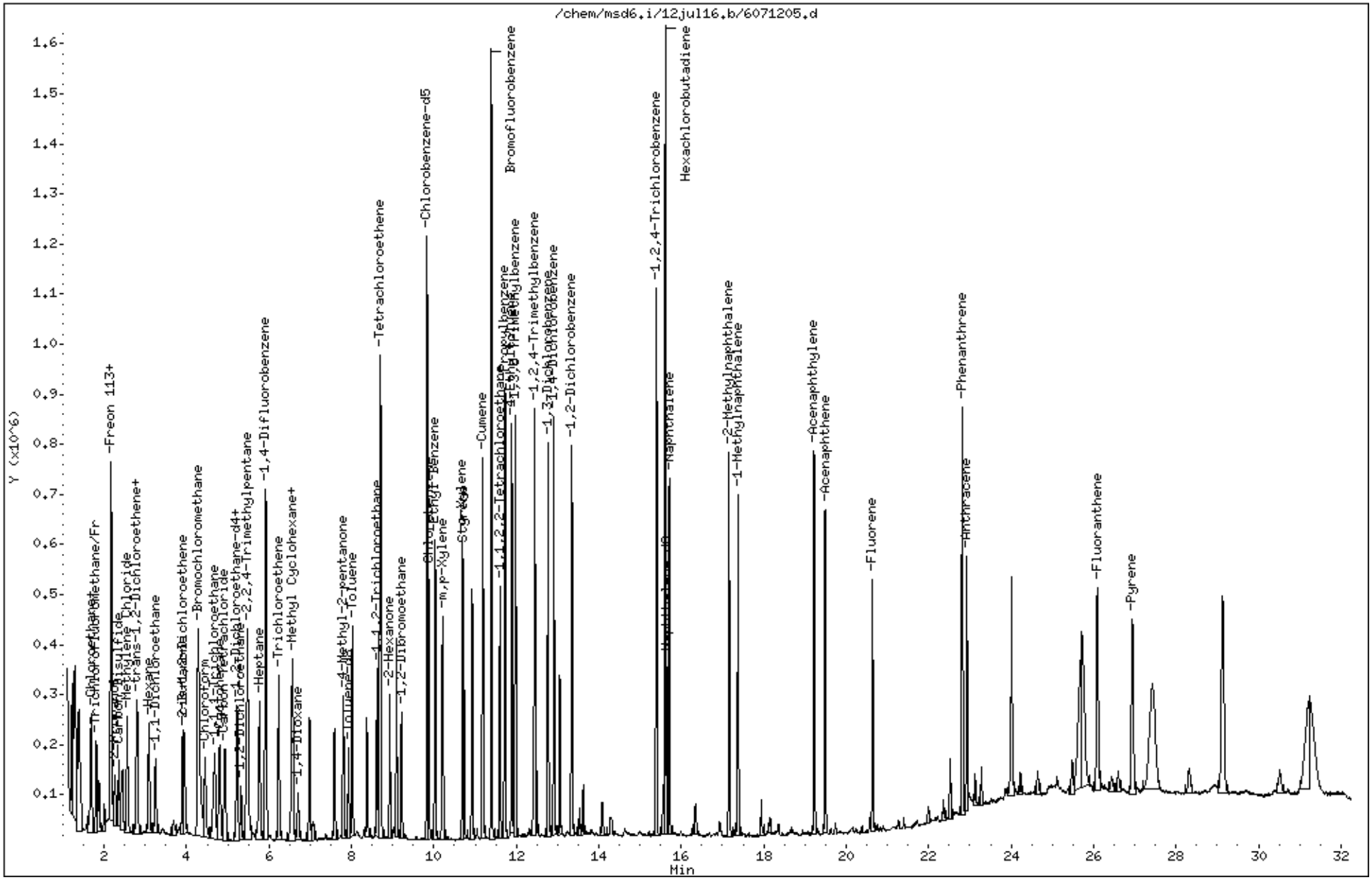
Data File: /chem/msd6.i/12jul16.b/6071205.d
Date : 12-JUL-2016 16:51
Client ID:
Sample Info: ;VI ICAL4 10ng Surr

Instrument: msd6.i

Operator: CT

Column phase: RTx-624

Column diameter: 0.53



Eurofins Air Toxics Inc.

EPA Method TO-17 GC/MS

Data file : /chem/msd6.i/12jul16.b/6071206.d
Lab Smp Id: VI ICAL5 25ng Surr
Inj Date : 12-JUL-2016 17:31
Operator : CT Inst ID: msd6.i
Smp Info : ;VI ICAL5 25ng Surr
Misc Info : 2787-1-20ml(10/7/16),2744-98-50(1/6/17)
Comment :
Method : /chem/msd6.i/13jul16.b/616z0712vi.m
Meth Date : 14-Jul-2016 18:41 U5BT Quant Type: ISTD
Cal Date : 12-JUL-2016 17:31 Cal File: 6071206.d
Als bottle: 5 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	
4.287	4.287 (1.000)	130	180845	26.0000		80.00- 120.00	100.00
4.287	4.287 (1.000)	128	138764			46.73- 106.73	76.73
4.287	4.287 (1.000)	49	242730			104.22- 164.22	134.22
* 54 1,4-Difluorobenzene						CAS #: 540-36-3	
5.927	5.927 (1.000)	114	751113	23.0000		80.00- 120.00	100.00
5.927	5.927 (1.000)	88	118044			0.00- 45.72	15.72
* 79 Chlorobenzene-d5						CAS #: 3114-55-4	
9.845	9.845 (1.000)	117	701197	24.0000		80.00- 120.00	100.00
9.845	9.845 (1.000)	82	368770			22.59- 82.59	52.59
* 92 Bromofluorobenzene						CAS #: 460-00-4	
11.392	11.392 (1.000)	174	474592	36.0000		80.00- 120.00	100.00
11.392	11.392 (1.000)	95	545300			84.90- 144.90	114.90
11.392	11.392 (1.000)	176	461488			67.24- 127.24	97.24
$ 49 1,2-Dichloroethane-d4						CAS #: 17060-07-0	
5.211	5.211 (0.879)	65	97978	25.0000	25.928	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
   ==   ====== ========  ====  ======== =======  =======   ============    =====

$  49 1,2-Dichloroethane-d4 (continued)
  5.211   5.211 (0.879)    67     52291                    23.37-  83.37    53.37
-------------------------------------------------------------------------------
$  66 Toluene-d8                                   CAS #: 2037-26-5
  7.940   7.940 (0.806)    98    333270 25.0000   26.084  80.00- 120.00   100.00
  7.940   7.940 (0.806)    70     35956                     0.00-  40.79    10.79
  7.940   7.940 (0.806)   100    220148                    36.06-  96.06    66.06
-------------------------------------------------------------------------------
$ 108 Naphthalene-d8                               CAS #: 1146-65-2
 15.669  15.669 (1.375)   136    589329 25.0000   25.762  80.00- 120.00   100.00
 15.669  15.669 (1.375)   108     54050                     0.00-  39.17     9.17
-------------------------------------------------------------------------------
    3 Freon 114                                    CAS #: 76-14-2
  1.283   1.283 (0.299)   135    461781 140.000   142.32  80.00- 120.00   100.00
  1.283   1.283 (0.299)   137    147836                     2.01-  62.01    32.01
-------------------------------------------------------------------------------
    6 Vinyl Chloride                               CAS #: 75-01-4
  1.395   1.395 (0.325)    62    271505 51.1000   54.632  80.00- 120.00   100.00
  1.395   1.395 (0.325)    64    113414                    11.77-  71.77    41.77
-------------------------------------------------------------------------------
    7 1,3-Butadiene                                CAS #: 106-99-0
  1.395   1.395 (0.325)    54    214393 44.2000   45.473  80.00- 120.00   100.00
  1.395   1.395 (0.325)    39    365932                   140.68- 200.68   170.68
-------------------------------------------------------------------------------
    9 Chloroethane                                 CAS #: 75-00-3
  1.647   1.647 (0.384)    64    116870 52.8000   50.085  80.00- 120.00   100.00
  1.647   1.647 (0.384)    66     34156                     0.00-  59.23    29.23
  1.647   1.647 (0.384)    49     34373                     0.00-  59.41    29.41
-------------------------------------------------------------------------------
   10 Isopentane                                   CAS #: 78-78-4
  1.689   1.689 (0.394)    57    224286 59.0000   61.935  80.00- 120.00   100.00
  1.689   1.689 (0.394)    43    355802                   128.64- 188.64   158.64
-------------------------------------------------------------------------------
   11 Trichlorofluoromethane/Fr11                  CAS #: 75-69-4
  1.815   1.815 (0.423)   101    645019 112.000   117.72  80.00- 120.00   100.00
  1.815   1.815 (0.423)   103    417591                    34.74-  94.74    64.74
-------------------------------------------------------------------------------
   15 Freon 113                                    CAS #: 76-13-1
  2.174   2.174 (0.507)   151    549524 153.000   160.86  80.00- 120.00   100.00
  2.174   2.174 (0.507)   153    350510                    33.78-  93.78    63.78
  2.174   2.174 (0.507)   101    636103                    85.76- 145.76   115.76
-------------------------------------------------------------------------------
   14 1,1-Dichloroethene                           CAS #: 75-35-4
  2.174   2.174 (0.507)    98    197824 79.3000   84.997  80.00- 120.00   100.00
  2.174   2.174 (0.507)    96    312727                   128.08- 188.08   158.08
  2.174   2.174 (0.507)    61    517624                   231.66- 291.66   261.66
-------------------------------------------------------------------------------
```

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		
2.353	2.353 (0.549)	76	814373	62.3000	57.999	80.00- 120.00	100.00
19 2-Propanol					CAS #: 67-63-0		
2.267	2.267 (0.529)	45	547975	49.2000	44.880	80.00- 120.00	100.00(a)
2.267	2.267 (0.529)	43	111064			0.00- 50.27	20.27
2.267	2.267 (0.529)	59	19423			0.00- 33.54	3.54
22 Methylene Chloride					CAS #: 75-09-2		
2.560	2.560 (0.597)	49	443883	69.5000	72.546	80.00- 120.00	100.00
2.560	2.560 (0.597)	84	309978			39.83- 99.83	69.83
2.567	2.567 (0.599)	51	134106			0.21- 60.21	30.21
25 trans-1,2-Dichloroethene					CAS #: 156-60-5		
2.811	2.811 (0.656)	98	187751	79.3000	80.751	80.00- 120.00	100.00
2.811	2.811 (0.656)	61	440805			204.78- 264.78	234.78
2.811	2.811 (0.656)	96	294649			126.94- 186.94	156.94
26 MTBE					CAS #: 1634-04-4		
2.790	2.790 (0.651)	73	617986	72.1000	64.095	80.00- 120.00	100.00
2.790	2.790 (0.651)	57	150900			0.00- 54.42	24.42
2.790	2.790 (0.651)	41	154300			0.00- 54.97	24.97
28 Hexane					CAS #: 110-54-3		
3.090	3.090 (0.721)	57	480734	70.5000	72.102	80.00- 120.00	100.00
3.090	3.090 (0.721)	43	335104			39.71- 99.71	69.71
3.090	3.090 (0.721)	86	67967			0.00- 44.14	14.14
29 1,1-Dichloroethane					CAS #: 75-34-3		
3.255	3.255 (0.759)	63	499886	81.0000	85.253	80.00- 120.00	100.00
3.255	3.255 (0.759)	65	156223			1.25- 61.25	31.25
37 cis-1,2-Dichloroethene					CAS #: 156-59-2		
3.950	3.950 (0.921)	98	199900	79.3000	81.673	80.00- 120.00	100.00
3.950	3.950 (0.921)	96	313213			126.68- 186.68	156.68
3.950	3.950 (0.921)	61	420029			180.12- 240.12	210.12
38 2-Butanone					CAS #: 78-93-3		
3.914	3.914 (0.913)	72	160993	59.0000	60.878	80.00- 120.00	100.00
3.907	3.907 (0.911)	43	766963			446.40- 506.40	476.40
3.907	3.907 (0.911)	57	58490			6.33- 66.33	36.33
44 Chloroform					CAS #: 67-66-3		
4.459	4.459 (1.040)	83	601266	97.7000	104.20	80.00- 120.00	100.00
4.459	4.459 (1.040)	85	392359			35.26- 95.26	65.26

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO
46 Cyclohexane					CAS #: 110-82-7		
4.817	4.817 (0.813)	84	378716	68.8000	72.601	80.00- 120.00	100.00
4.817	4.817 (0.813)	56	491329			99.74- 159.74	129.74
4.817	4.817 (0.813)	41	304250			50.34- 110.34	80.34
45 1,1,1-Trichloroethane					CAS #: 71-55-6		
4.695	4.695 (0.792)	97	551781	109.000	109.78	80.00- 120.00	100.00
4.695	4.695 (0.792)	99	357323			34.76- 94.76	64.76
47 Carbon Tetrachloride					CAS #: 56-23-5		
4.938	4.938 (0.833)	119	629833	126.000	131.50	80.00- 120.00	100.00
4.938	4.938 (0.833)	117	652067			73.53- 133.53	103.53
51 2,2,4-Trimethylpentane					CAS #: 540-84-1		
5.476	5.476 (0.924)	57	1572813	93.4000	98.413	80.00- 120.00	100.00
5.476	5.476 (0.924)	56	498847			1.72- 61.72	31.72
5.476	5.476 (0.924)	41	466923			0.00- 59.69	29.69
48 Benzene					CAS #: 71-43-2		
5.239	5.239 (0.884)	78	916978	63.9000	60.768	80.00- 120.00	100.00
5.239	5.239 (0.884)	77	215639			0.00- 53.52	23.52
50 1,2-Dichloroethane					CAS #: 107-06-2		
5.325	5.325 (0.898)	62	393700	80.9000	84.050	80.00- 120.00	100.00
5.325	5.325 (0.898)	64	127824			2.47- 62.47	32.47
53 Heptane					CAS #: 142-82-5		
5.777	5.777 (0.975)	71	306001	82.0000	83.248	80.00- 120.00	100.00
5.777	5.777 (0.975)	43	653732			183.64- 243.64	213.64
5.777	5.777 (0.975)	57	301310			68.47- 128.47	98.47
56 Trichloroethene					CAS #: 79-01-6		
6.242	6.242 (1.053)	95	436214	108.000	111.80	80.00- 120.00	100.00
6.242	6.242 (1.053)	130	450400			73.25- 133.25	103.25
6.242	6.242 (1.053)	97	280318			34.26- 94.26	64.26
58 Methyl Cyclohexane					CAS #: 108-87-2		
6.564	6.564 (1.108)	83	559242	80.3000	84.948	80.00- 120.00	100.00
6.572	6.572 (1.109)	98	246108			14.01- 74.01	44.01
6.564	6.564 (1.108)	55	476623			55.23- 115.23	85.23
59 1,2-Dichloropropane					CAS #: 78-87-5		
6.593	6.593 (1.112)	63	331487	92.4000	93.305	80.00- 120.00	100.00
6.593	6.593 (1.112)	62	231917			39.96- 99.96	69.96
6.586	6.586 (1.111)	41	475025			113.30- 173.30	143.30

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		
6.715	6.715 (1.133)	88	221720	72.1000	74.968	80.00- 120.00	100.00
6.715	6.715 (1.133)	58	156449			40.56- 100.56	70.56
6.715	6.715 (1.133)	57	77295			4.86- 64.86	34.86
65 4-Methyl-2-pentanone					CAS #: 108-10-1		
7.811	7.811 (1.318)	58	289161	81.9000	87.449	80.00- 120.00	100.00
7.811	7.811 (1.318)	43	818329			253.00- 313.00	283.00
7.811	7.811 (1.318)	85	124556			13.07- 73.07	43.07
67 Toluene					CAS #: 108-88-3		
8.033	8.033 (0.816)	91	1138440	75.4000	75.674	80.00- 120.00	100.00
8.033	8.033 (0.816)	92	668997			28.76- 88.76	58.76
70 1,1,2-Trichloroethane					CAS #: 79-00-5		
8.627	8.627 (1.456)	97	397367	109.000	113.37	80.00- 120.00	100.00
8.627	8.627 (1.456)	99	250256			32.98- 92.98	62.98
8.627	8.627 (1.456)	83	338114			55.09- 115.09	85.09
71 Tetrachloroethene					CAS #: 127-18-4		
8.713	8.713 (0.885)	166	588533	136.000	137.46	80.00- 120.00	100.00
8.713	8.713 (0.885)	129	443562			45.37- 105.37	75.37
8.713	8.713 (0.885)	131	429683			43.01- 103.01	73.01
72 2-Hexanone					CAS #: 591-78-6		
8.935	8.935 (0.908)	58	381084	81.9000	85.914	80.00- 120.00	100.00
8.935	8.935 (0.908)	43	777753			174.09- 234.09	204.09
8.935	8.935 (0.908)	100	71997			0.00- 48.89	18.89
74 1,2-Dibromoethane					CAS #: 106-93-4		
9.222	9.222 (0.937)	107	605691	154.000	154.28	80.00- 120.00	100.00
9.222	9.222 (0.937)	109	575713			65.05- 125.05	95.05
81 Chlorobenzene					CAS #: 108-90-7		
9.881	9.881 (1.004)	112	965346	92.1000	94.859	80.00- 120.00	100.00
9.881	9.881 (1.004)	114	310626			2.18- 62.18	32.18
9.881	9.881 (1.004)	77	523102			24.19- 84.19	54.19
82 Ethyl Benzene					CAS #: 100-41-4		
10.039	10.039 (1.020)	106	485583	86.8000	89.359	80.00- 120.00	100.00
10.039	10.039 (1.020)	91	1503851			279.70- 339.70	309.70
84 m,p-Xylene					CAS #: 108-38-3		
10.218	10.218 (1.038)	106	616611	86.8000	89.875	80.00- 120.00	100.00
10.218	10.218 (1.038)	91	1207335			165.80- 225.80	195.80

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

   88 o-Xylene                                       CAS #: 95-47-6
 10.698  10.698 (0.939)   106    570955 86.8000   90.236  80.00- 120.00   100.00
 10.698  10.698 (0.939)    91   1186483                  177.81- 237.81   207.81
-------------------------------------------------------------------------------
   89 Styrene                                        CAS #: 100-42-5
 10.726  10.726 (0.942)   104    965047 85.2000   89.949  80.00- 120.00   100.00
 10.726  10.726 (0.942)    78    461707                   17.84-  77.84    47.84
-------------------------------------------------------------------------------
   91 Cumene                                         CAS #: 98-82-8
 11.185  11.185 (0.982)   105   1769750 98.3000   103.60  80.00- 120.00   100.00
 11.185  11.185 (0.982)   120    474910                    0.00-  56.83    26.83
 11.185  11.185 (0.982)    51    181442                    0.00-  40.25    10.25
-------------------------------------------------------------------------------
   94 1,1,2,2-Tetrachloroethane                      CAS #: 79-34-5
 11.600  11.600 (1.018)    83    884133 137.000   144.91  80.00- 120.00   100.00
 11.600  11.600 (1.018)    85    574445                   34.97-  94.97    64.97
-------------------------------------------------------------------------------
   96 Propylbenzene                                  CAS #: 103-65-1
 11.722  11.722 (1.029)    91   2075124 98.3000   102.94  80.00- 120.00   100.00
 11.722  11.722 (1.029)   120    497966                    0.00-  54.00    24.00
 11.722  11.722 (1.029)   105     78666                    0.00-  33.79     3.79
-------------------------------------------------------------------------------
   97 4-Ethyltoluene                                 CAS #: 622-96-8
 11.887  11.887 (1.043)   120    531740 98.3000   100.79  80.00- 120.00   100.00
 11.887  11.887 (1.043)   105   1747084                  298.56- 358.56   328.56
-------------------------------------------------------------------------------
   98 1,3,5-Trimethylbenzene                         CAS #: 108-67-8
 11.973  11.973 (1.051)   120    751142 98.3000   101.18  80.00- 120.00   100.00
 11.973  11.973 (1.051)   105   1504278                  170.27- 230.27   200.27
-------------------------------------------------------------------------------
  100 1,2,4-Trimethylbenzene                         CAS #: 95-63-6
 12.445  12.445 (1.092)   120    708218 98.3000   102.19  80.00- 120.00   100.00
 12.438  12.438 (1.092)   105   1532534                  186.39- 246.39   216.39
-------------------------------------------------------------------------------
  101 1,3-Dichlorobenzene                            CAS #: 541-73-1
 12.768  12.768 (1.121)   146   1082158 120.000   123.86  80.00- 120.00   100.00
 12.768  12.768 (1.121)   148    695387                   34.26-  94.26    64.26
 12.768  12.768 (1.121)   111    430751                    9.80-  69.80    39.80
-------------------------------------------------------------------------------
  102 1,4-Dichlorobenzene                            CAS #: 106-46-7
 12.904  12.904 (1.133)   146   1084508 120.000   124.71  80.00- 120.00   100.00
 12.904  12.904 (1.133)   148    700199                   34.56-  94.56    64.56
 12.904  12.904 (1.133)   111    413686                    8.15-  68.15    38.15
-------------------------------------------------------------------------------
  105 1,2-Dichlorobenzene                            CAS #: 95-50-1
 13.341  13.341 (1.171)   146   1042803 120.000   124.45  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)							
13.341	13.341 (1.171)	148	668447			34.10- 94.10	64.10
13.341	13.341 (1.171)	111	426250			10.88- 70.88	40.88
106 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
15.396	15.396 (1.351)	180	1023795	148.000	152.65	80.00- 120.00	100.00
15.396	15.396 (1.351)	182	980466			65.77- 125.77	95.77
107 Hexachlorobutadiene					CAS #: 87-68-3		
15.611	15.611 (1.370)	225	775638	213.000	201.12	80.00- 120.00	100.00
15.611	15.611 (1.370)	223	481057			32.02- 92.02	62.02
109 Naphthalene					CAS #: 91-20-3		
15.704	15.704 (1.379)	128	1297223	50.0000	50.838	80.00- 120.00	100.00
15.704	15.704 (1.379)	127	167491			0.00- 42.91	12.91
110 2-Methylnaphthalene					CAS #: 91-57-6		
17.159	17.159 (1.506)	142	839520	50.0000	51.943	80.00- 120.00	100.00
17.159	17.159 (1.506)	141	725793			56.45- 116.45	86.45
17.159	17.159 (1.506)	115	263706			1.41- 61.41	31.41
111 1-Methylnaphthalene					CAS #: 90-12-0		
17.373	17.373 (1.525)	142	764766	50.0000	52.022	80.00- 120.00	100.00
17.373	17.373 (1.525)	141	681224			59.08- 119.08	89.08
17.373	17.373 (1.525)	115	254681			3.30- 63.30	33.30
112 Acenaphthylene					CAS #: 208-96-8		
19.222	19.222 (1.687)	152	1295424	50.0000	54.889	80.00- 120.00	100.00
19.222	19.222 (1.687)	151	261711			0.00- 50.20	20.20
19.222	19.222 (1.687)	153	169155			0.00- 43.06	13.06
113 Acenaphthene					CAS #: 83-32-9		
19.487	19.487 (1.710)	154	672568	50.0000	51.490	80.00- 120.00	100.00
19.487	19.487 (1.710)	152	351895			22.32- 82.32	52.32
19.487	19.487 (1.710)	153	733616			79.08- 139.08	109.08
114 Fluorene					CAS #: 86-73-7		
20.640	20.640 (1.812)	166	679748	50.0000	49.290	80.00- 120.00	100.00
20.640	20.640 (1.812)	165	648320			65.38- 125.38	95.38
115 Phenanthrene					CAS #: 85-01-8		
22.817	22.817 (2.003)	178	1206069	50.0000	50.550	80.00- 120.00	100.00
22.817	22.817 (2.003)	176	231800			0.00- 49.22	19.22
22.817	22.817 (2.003)	179	184163			0.00- 45.27	15.27
116 Anthracene					CAS #: 120-12-7		
22.925	22.925 (2.012)	178	854002	50.0000	53.801	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)								
22.925	22.925	(2.012)	176	157417			0.00- 48.43	18.43
22.925	22.925	(2.012)	179	128987			0.00- 45.10	15.10
117 Fluoranthene						CAS #: 206-44-0		
26.084	26.084	(2.290)	202	958424	50.0000	55.104	80.00- 120.00	100.00
26.084	26.084	(2.290)	101	158160			0.00- 46.50	16.50
118 Pyrene						CAS #: 129-00-0		
26.936	26.936	(2.364)	202	972150	50.0000	53.789	80.00- 120.00	100.00
26.936	26.936	(2.364)	101	184146			0.00- 48.94	18.94
26.936	26.936	(2.364)	100	147859			0.00- 45.21	15.21

QC Flag Legend

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

Report Date: 14-Jul-2016 18:41

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd6.i
Lab File ID: 6071206.d
Lab Smp Id: VI ICAL5 25ng Surr
Analysis Type: VOA
Quant Type: ISTD
Operator: CT
Method File: /chem/msd6.i/13jul16.b/616z0712vi.m
Misc Info: 2787-1-20ml(10/7/16),2744-98-50(1/6/17)

Calibration Date: 12-JUL-2016
Calibration Time: 17:31

Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
40 Bromochloromethan	180845	108507	253183	180845	0.00
54 1,4-Difluorobenze	751113	450668	1051558	751113	0.00
79 Chlorobenzene-d5	701197	420718	981676	701197	0.00
92 Bromofluorobenzen	474592	284755	664429	474592	0.00

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
40 Bromochloromethan	4.29	3.96	4.62	4.29	0.00
54 1,4-Difluorobenze	5.93	5.60	6.26	5.93	0.00
79 Chlorobenzene-d5	9.85	9.52	10.18	9.85	0.00
92 Bromofluorobenzen	11.39	11.06	11.72	11.39	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/msd6.i/12jul16.b/6071206.d

Date : 12-JUL-2016 17:31

Client ID:

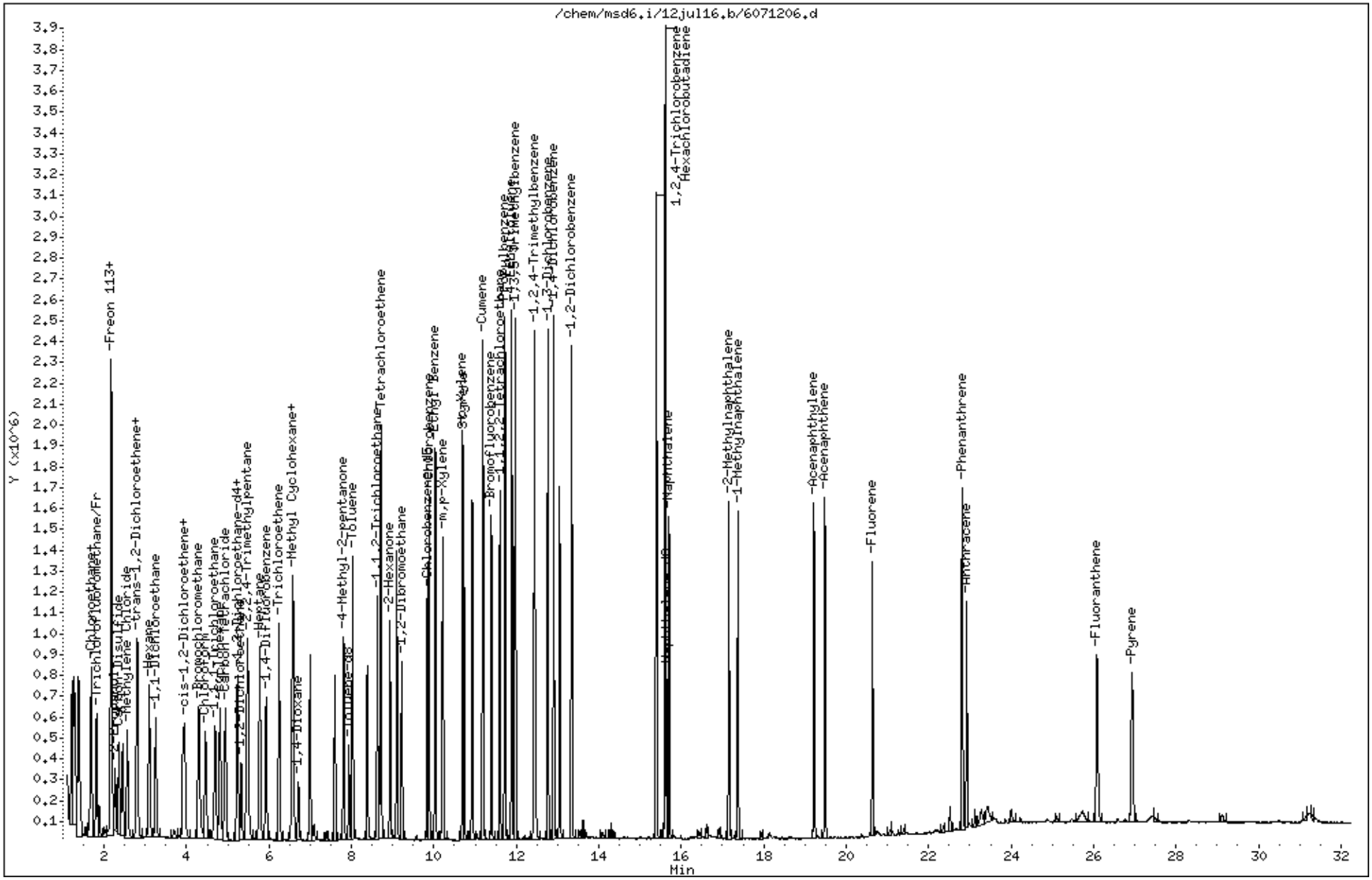
Sample Info: ;VI ICAL5 25ng Surr

Column phase: RTx-624

Instrument: msd6.i

Operator: CT

Column diameter: 0.53



Eurofins Air Toxics Inc.

EPA Method TO-17 GC/MS

Data file : /chem/msd6.i/13jul16.b/6071302.d
Lab Smp Id: VI ICAL6 50ng Surr
Inj Date : 13-JUL-2016 13:38
Operator : CT Inst ID: msd6.i
Smp Info : ;VI ICAL6 50ng Surr
Misc Info : 2787-1-50ml(10/7/16),2744-98-100(1/6/17)
Comment :
Method : /chem/msd6.i/13jul16.b/616z0712vi.m
Meth Date : 14-Jul-2016 18:42 U5BT Quant Type: ISTD
Cal Date : 13-JUL-2016 13:38 Cal File: 6071302.d
Als bottle: 1 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		
4.279	4.279 (1.000)	130	139808	26.0000		70.00- 130.00	100.00
4.279	4.279 (1.000)	128	107462			0.00- 30.00	76.86
4.279	4.279 (1.000)	49	152951			0.00- 30.00	109.40
* 54 1,4-Difluorobenzene					CAS #: 540-36-3		
5.920	5.920 (1.000)	114	608096	23.0000		70.00- 130.00	100.00
5.920	5.920 (1.000)	88	95546			0.00- 30.00	15.71
* 79 Chlorobenzene-d5					CAS #: 3114-55-4		
9.838	9.838 (1.000)	117	539409	24.0000		70.00- 130.00	100.00
9.838	9.838 (1.000)	82	276259			0.00- 30.00	51.22
* 92 Bromofluorobenzene					CAS #: 460-00-4		
11.392	11.392 (1.000)	174	389118	36.0000		70.00- 130.00	100.00
11.392	11.392 (1.000)	95	429331			0.00- 30.00	110.33
11.392	11.392 (1.000)	176	379592			0.00- 30.00	97.55
$ 49 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
5.203	5.203 (0.879)	65	115904	50.0000	37.885	70.00- 130.00	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)							
5.203	5.203 (0.879)	67	61274			0.00- 30.00	52.87
$ 66 Toluene-d8					CAS #: 2037-26-5		
7.932	7.932 (0.806)	98	399694	50.0000	40.666	70.00- 130.00	100.00
7.932	7.932 (0.806)	70	41185			0.00- 30.00	10.30
7.932	7.932 (0.806)	100	261217			0.00- 30.00	65.35
$ 108 Naphthalene-d8					CAS #: 1146-65-2		
15.669	15.669 (1.375)	136	823125	50.0000	43.886	70.00- 130.00	100.00
15.669	15.669 (1.375)	108	74262			0.00- 30.00	9.02
3 Freon 114					CAS #: 76-14-2		
1.283	1.283 (0.300)	135	884806	350.000	352.74	70.00- 130.00	100.00
1.283	1.283 (0.300)	137	281145			0.00- 30.00	31.77
6 Vinyl Chloride					CAS #: 75-01-4		
1.395	1.395 (0.326)	62	450441	128.000	117.24	70.00- 130.00	100.00
1.395	1.395 (0.326)	64	156298			0.00- 30.00	34.70
7 1,3-Butadiene					CAS #: 106-99-0		
1.395	1.395 (0.326)	54	340079	111.000	93.303	70.00- 130.00	100.00
1.395	1.395 (0.326)	39	547399			0.00- 30.00	160.96
9 Chloroethane					CAS #: 75-00-3		
1.646	1.646 (0.385)	64	202751	132.000	112.39	70.00- 130.00	100.00
1.646	1.646 (0.385)	66	63910			0.00- 30.00	31.52
1.646	1.646 (0.385)	49	59958			0.00- 30.00	29.57
10 Isopentane					CAS #: 78-78-4		
1.688	1.688 (0.395)	57	355249	148.000	126.89	70.00- 130.00	100.00
1.688	1.688 (0.395)	43	516749			0.00- 30.00	145.46
11 Trichlorofluoromethane/Fr11					CAS #: 75-69-4		
1.814	1.814 (0.424)	101	1254788	281.000	296.22	70.00- 130.00	100.00
1.814	1.814 (0.424)	103	824157			0.00- 30.00	65.68
15 Freon 113					CAS #: 76-13-1		
2.173	2.173 (0.508)	151	1049020	383.000	397.22	70.00- 130.00	100.00
2.173	2.173 (0.508)	153	676774			0.00- 30.00	64.51
2.173	2.173 (0.508)	101	1143523			0.00- 30.00	109.01
14 1,1-Dichloroethene					CAS #: 75-35-4		
2.173	2.173 (0.508)	98	356786	198.000	198.29	70.00- 130.00	100.00
2.173	2.173 (0.508)	96	557369			0.00- 30.00	156.22
2.173	2.173 (0.508)	61	883101			0.00- 30.00	247.52

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		
2.352	2.352 (0.550)	76	1418705	156.000	130.70	70.00- 130.00	100.00
19 2-Propanol					CAS #: 67-63-0		
2.259	2.259 (0.528)	45	812276	123.000	86.054	70.00- 130.00	100.00
2.259	2.259 (0.528)	43	166987			0.00- 30.00	20.56
2.259	2.259 (0.528)	59	32209			0.00- 30.00	3.97
22 Methylene Chloride					CAS #: 75-09-2		
2.560	2.560 (0.598)	49	616565	174.000	130.35	70.00- 130.00	100.00
2.560	2.560 (0.598)	84	489412			0.00- 30.00	79.38
2.560	2.560 (0.598)	51	187984			0.00- 30.00	30.49
25 trans-1,2-Dichloroethene					CAS #: 156-60-5		
2.811	2.811 (0.657)	98	379860	198.000	211.33	70.00- 130.00	100.00
2.811	2.811 (0.657)	61	841118			0.00- 30.00	221.43
2.811	2.811 (0.657)	96	598610			0.00- 30.00	157.59
26 MTBE					CAS #: 1634-04-4		
2.789	2.789 (0.652)	73	1289446	180.000	172.99	70.00- 130.00	100.00
2.789	2.789 (0.652)	57	295754			0.00- 30.00	22.94
2.789	2.789 (0.652)	41	292776			0.00- 30.00	22.71
28 Hexane					CAS #: 110-54-3		
3.090	3.090 (0.722)	57	880445	176.000	170.81	70.00- 130.00	100.00
3.090	3.090 (0.722)	43	569189			0.00- 30.00	64.65
3.090	3.090 (0.722)	86	132508			0.00- 30.00	15.05
29 1,1-Dichloroethane					CAS #: 75-34-3		
3.255	3.255 (0.761)	63	931232	202.000	205.43	70.00- 130.00	100.00
3.255	3.255 (0.761)	65	298438			0.00- 30.00	32.05
37 cis-1,2-Dichloroethene					CAS #: 156-59-2		
3.950	3.950 (0.923)	98	361030	198.000	190.80	70.00- 130.00	100.00
3.950	3.950 (0.923)	96	562818			0.00- 30.00	155.89
3.950	3.950 (0.923)	61	710633			0.00- 30.00	196.83
38 2-Butanone					CAS #: 78-93-3		
3.907	3.907 (0.913)	72	233089	147.000	114.01	70.00- 130.00	100.00
3.900	3.900 (0.911)	43	991901			0.00- 30.00	425.55
3.907	3.907 (0.913)	57	78878			0.00- 30.00	33.84
44 Chloroform					CAS #: 67-66-3		
4.458	4.458 (1.042)	83	1033951	244.000	231.79	70.00- 130.00	100.00
4.458	4.458 (1.042)	85	675855			0.00- 30.00	65.37

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO
46 Cyclohexane					CAS #: 110-82-7		
4.809	4.809 (0.812)	84	662745	172.000	156.93	70.00- 130.00	100.00
4.809	4.809 (0.812)	56	787874			0.00- 30.00	118.88
4.809	4.809 (0.812)	41	462000			0.00- 30.00	69.71
45 1,1,1-Trichloroethane					CAS #: 71-55-6		
4.688	4.688 (0.792)	97	1021395	273.000	251.00	70.00- 130.00	100.00
4.688	4.688 (0.792)	99	662830			0.00- 30.00	64.89
47 Carbon Tetrachloride					CAS #: 56-23-5		
4.938	4.938 (0.834)	119	1217122	315.000	313.89	70.00- 130.00	100.00
4.938	4.938 (0.834)	117	1257653			0.00- 30.00	103.33
51 2,2,4-Trimethylpentane					CAS #: 540-84-1		
5.468	5.468 (0.924)	57	2988182	234.000	230.95	70.00- 130.00	100.00
5.468	5.468 (0.924)	56	941633			0.00- 30.00	31.51
5.468	5.468 (0.924)	41	860649			0.00- 30.00	28.80
48 Benzene					CAS #: 71-43-2		
5.232	5.232 (0.884)	78	1722815	160.000	141.02	70.00- 130.00	100.00
5.232	5.232 (0.884)	77	405539			0.00- 30.00	23.54
50 1,2-Dichloroethane					CAS #: 107-06-2		
5.325	5.325 (0.900)	62	784862	202.000	206.96	70.00- 130.00	100.00
5.325	5.325 (0.900)	64	254620			0.00- 30.00	32.44
53 Heptane					CAS #: 142-82-5		
5.769	5.769 (0.975)	71	585082	205.000	196.61	70.00- 130.00	100.00
5.769	5.769 (0.975)	43	1088275			0.00- 30.00	186.00
5.769	5.769 (0.975)	57	553493			0.00- 30.00	94.60
56 Trichloroethene					CAS #: 79-01-6		
6.242	6.242 (1.054)	95	876507	269.000	277.49	70.00- 130.00	100.00
6.242	6.242 (1.054)	130	937062			0.00- 30.00	106.91
6.242	6.242 (1.054)	97	570583			0.00- 30.00	65.10
58 Methyl Cyclohexane					CAS #: 108-87-2		
6.557	6.557 (1.108)	83	1090378	201.000	204.58	70.00- 130.00	100.00
6.564	6.564 (1.109)	98	484105			0.00- 30.00	44.40
6.564	6.564 (1.109)	55	875145			0.00- 30.00	80.26
59 1,2-Dichloropropane					CAS #: 78-87-5		
6.586	6.586 (1.113)	63	648551	231.000	225.48	70.00- 130.00	100.00
6.586	6.586 (1.113)	62	447936			0.00- 30.00	69.07
6.571	6.571 (1.110)	41	852110			0.00- 30.00	131.39

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		
6.708	6.708 (1.133)	88	439164	180.000	183.41	70.00- 130.00	100.00
6.708	6.708 (1.133)	58	284928			0.00- 30.00	64.88
6.708	6.708 (1.133)	57	111346			0.00- 30.00	25.35
65 4-Methyl-2-pentanone					CAS #: 108-10-1		
7.803	7.803 (1.318)	58	507623	205.000	189.62	70.00- 130.00	100.00
7.803	7.803 (1.318)	43	1349608			0.00- 30.00	265.87
7.803	7.803 (1.318)	85	240276			0.00- 30.00	47.33
67 Toluene					CAS #: 108-88-3		
8.026	8.026 (0.816)	91	2163566	188.000	186.95	70.00- 130.00	100.00
8.026	8.026 (0.816)	92	1268959			0.00- 30.00	58.65
70 1,1,2-Trichloroethane					CAS #: 79-00-5		
8.620	8.620 (1.456)	97	813252	273.000	286.59	70.00- 130.00	100.00
8.620	8.620 (1.456)	99	509608			0.00- 30.00	62.66
8.620	8.620 (1.456)	83	677779			0.00- 30.00	83.34
71 Tetrachloroethene					CAS #: 127-18-4		
8.706	8.706 (0.885)	166	1286495	339.000	390.59	70.00- 130.00	100.00
8.706	8.706 (0.885)	129	938700			0.00- 30.00	72.97
8.706	8.706 (0.885)	131	911152			0.00- 30.00	70.82
72 2-Hexanone					CAS #: 591-78-6		
8.935	8.935 (0.908)	58	713074	205.000	208.98	70.00- 130.00	100.00
8.935	8.935 (0.908)	43	1394414			0.00- 30.00	195.55
8.935	8.935 (0.908)	100	148650			0.00- 30.00	20.85
74 1,2-Dibromoethane					CAS #: 106-93-4		
9.215	9.215 (0.937)	107	1266327	384.000	419.30	70.00- 130.00	100.00
9.215	9.215 (0.937)	109	1199721			0.00- 30.00	94.74
81 Chlorobenzene					CAS #: 108-90-7		
9.874	9.874 (1.004)	112	1837959	230.000	234.78	70.00- 130.00	100.00
9.874	9.874 (1.004)	114	595764			0.00- 30.00	32.41
9.874	9.874 (1.004)	77	967306			0.00- 30.00	52.63
82 Ethyl Benzene					CAS #: 100-41-4		
10.031	10.031 (1.020)	106	927066	217.000	221.77	70.00- 130.00	100.00
10.031	10.031 (1.020)	91	2825036			0.00- 30.00	304.73
84 m,p-Xylene					CAS #: 108-38-3		
10.210	10.210 (1.038)	106	1157095	217.000	219.24	70.00- 130.00	100.00
10.210	10.210 (1.038)	91	2281175			0.00- 30.00	197.15

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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
 10.697  10.697 (0.939)   106   1098666 217.000   211.78  70.00- 130.00   100.00
 10.697  10.697 (0.939)    91   2259630                    0.00-  30.00   205.67
-------------------------------------------------------------------------------
   89 Styrene                                         CAS #: 100-42-5
 10.726  10.726 (0.942)   104   1852688 213.000   210.62  70.00- 130.00   100.00
 10.726  10.726 (0.942)    78    876351                    0.00-  30.00    47.30
-------------------------------------------------------------------------------
   91 Cumene                                          CAS #: 98-82-8
 11.184  11.184 (0.982)   105   3413408 246.000   243.72  70.00- 130.00   100.00
 11.184  11.184 (0.982)   120    918285                    0.00-  30.00    26.90
 11.184  11.184 (0.982)    51    314020                    0.00-  30.00     9.20
-------------------------------------------------------------------------------
   94 1,1,2,2-Tetrachloroethane                       CAS #: 79-34-5
 11.600  11.600 (1.018)    83   1706031 343.000   341.04  70.00- 130.00   100.00
 11.600  11.600 (1.018)    85   1106800                    0.00-  30.00    64.88
-------------------------------------------------------------------------------
   96 Propylbenzene                                   CAS #: 103-65-1
 11.722  11.722 (1.029)    91   4038677 246.000   244.36  70.00- 130.00   100.00
 11.729  11.729 (1.030)   120    998736                    0.00-  30.00    24.73
 11.729  11.729 (1.030)   105    156185                    0.00-  30.00     3.87
-------------------------------------------------------------------------------
   97 4-Ethyltoluene                                  CAS #: 622-96-8
 11.894  11.894 (1.044)   120   1073432 246.000   248.15  70.00- 130.00   100.00
 11.894  11.894 (1.044)   105   3454579                    0.00-  30.00   321.83
-------------------------------------------------------------------------------
   98 1,3,5-Trimethylbenzene                          CAS #: 108-67-8
 11.980  11.980 (1.052)   120   1512747 246.000   248.53  70.00- 130.00   100.00
 11.980  11.980 (1.052)   105   3015850                    0.00-  30.00   199.36
-------------------------------------------------------------------------------
  100 1,2,4-Trimethylbenzene                          CAS #: 95-63-6
 12.445  12.445 (1.092)   120   1417235 246.000   249.41  70.00- 130.00   100.00
 12.445  12.445 (1.092)   105   3139068                    0.00-  30.00   221.49
-------------------------------------------------------------------------------
  101 1,3-Dichlorobenzene                             CAS #: 541-73-1
 12.767  12.767 (1.121)   146   2284017 301.000   318.83  70.00- 130.00   100.00
 12.775  12.775 (1.121)   148   1466488                    0.00-  30.00    64.21
 12.767  12.767 (1.121)   111    880510                    0.00-  30.00    38.55
-------------------------------------------------------------------------------
  102 1,4-Dichlorobenzene                             CAS #: 106-46-7
 12.911  12.911 (1.133)   146   2293344 301.000   321.65  70.00- 130.00   100.00
 12.911  12.911 (1.133)   148   1471860                    0.00-  30.00    64.18
 12.911  12.911 (1.133)   111    858567                    0.00-  30.00    37.44
-------------------------------------------------------------------------------
  105 1,2-Dichlorobenzene                             CAS #: 95-50-1
 13.348  13.348 (1.172)   146   2204142 301.000   320.82  70.00- 130.00   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)
 13.348  13.348 (1.172)   148   1419254                     0.00-  30.00    64.39
 13.348  13.348 (1.172)   111    889364                     0.00-  30.00    40.35
-------------------------------------------------------------------------------
  106 1,2,4-Trichlorobenzene                        CAS #: 120-82-1
 15.403  15.403 (1.352)   180   2118595 371.000   385.28  70.00- 130.00   100.00
 15.403  15.403 (1.352)   182   2013601                     0.00-  30.00    95.04
-------------------------------------------------------------------------------
  107 Hexachlorobutadiene                           CAS #: 87-68-3
 15.618  15.618 (1.371)   225   1615577 533.000   510.92  70.00- 130.00   100.00
 15.618  15.618 (1.371)   223   1012681                     0.00-  30.00    62.68
-------------------------------------------------------------------------------
  109 Naphthalene                                   CAS #: 91-20-3
 15.711  15.711 (1.379)   128   2219418 100.000   106.08  70.00- 130.00   100.00
 15.711  15.711 (1.379)   127    289897                     0.00-  30.00    13.06
-------------------------------------------------------------------------------
  110 2-Methylnaphthalene                           CAS #: 91-57-6
 17.158  17.158 (1.506)   142   1432591 100.000   108.11  70.00- 130.00   100.00
 17.158  17.158 (1.506)   141   1238943                     0.00-  30.00    86.48
 17.158  17.158 (1.506)   115    427268                     0.00-  30.00    29.82
-------------------------------------------------------------------------------
  111 1-Methylnaphthalene                           CAS #: 90-12-0
 17.373  17.373 (1.525)   142   1322594 100.000   109.73  70.00- 130.00   100.00
 17.373  17.373 (1.525)   141   1185496                     0.00-  30.00    89.63
 17.373  17.373 (1.525)   115    414350                     0.00-  30.00    31.33
-------------------------------------------------------------------------------
  112 Acenaphthylene                                CAS #: 208-96-8
 19.221  19.221 (1.687)   152   2573587 100.000   133.00  70.00- 130.00   100.00
 19.221  19.221 (1.687)   151    508464                     0.00-  30.00    19.76
 19.221  19.221 (1.687)   153    336905                     0.00-  30.00    13.09
-------------------------------------------------------------------------------
  113 Acenaphthene                                  CAS #: 83-32-9
 19.486  19.486 (1.710)   154   1065332 100.000   99.475  70.00- 130.00   100.00
 19.486  19.486 (1.710)   152    557206                     0.00-  30.00    52.30
 19.486  19.486 (1.710)   153   1171421                     0.00-  30.00   109.96
-------------------------------------------------------------------------------
  114 Fluorene                                      CAS #: 86-73-7
 20.640  20.640 (1.812)   166   1166043 100.000   103.12  70.00- 130.00   100.00
 20.640  20.640 (1.812)   165   1103591                     0.00-  30.00    94.64
-------------------------------------------------------------------------------
  115 Phenanthrene                                  CAS #: 85-01-8
 22.817  22.817 (2.003)   178   2207679 100.000   112.85  70.00- 130.00   100.00
 22.817  22.817 (2.003)   176    418109                     0.00-  30.00    18.94
 22.817  22.817 (2.003)   179    335535                     0.00-  30.00    15.20
-------------------------------------------------------------------------------
  116 Anthracene                                    CAS #: 120-12-7
 22.925  22.925 (2.012)   178   1462902 100.000   112.41  70.00- 130.00   100.00
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RT	EXP RT	(REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO
116 Anthracene (continued)								
22.925	22.925	(2.012)	176	263692			0.00- 30.00	18.03
22.925	22.925	(2.012)	179	221040			0.00- 30.00	15.11
117 Fluoranthene						CAS #: 206-44-0		
26.091	26.091	(2.290)	202	1184679	100.000	83.074	70.00- 130.00	100.00
26.084	26.084	(2.290)	101	192014			0.00- 30.00	16.21
118 Pyrene						CAS #: 129-00-0		
26.936	26.936	(2.364)	202	1192157	100.000	80.452	70.00- 130.00	100.00
26.936	26.936	(2.364)	101	225436			0.00- 30.00	18.91
26.936	26.936	(2.364)	100	181412			0.00- 45.21	15.22

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd6.i
Lab File ID: 6071302.d
Lab Smp Id: VI ICAL6 50ng Surr
Analysis Type: VOA
Quant Type: ISTD
Operator: CT
Method File: /chem/msd6.i/13jul16.b/616z0712vi.m
Misc Info: 2787-1-50ml(10/7/16),2744-98-100(1/6/17)

Calibration Date: 12-JUL-2016
Calibration Time: 17:31
Level: LOW
Sample Type: AIR

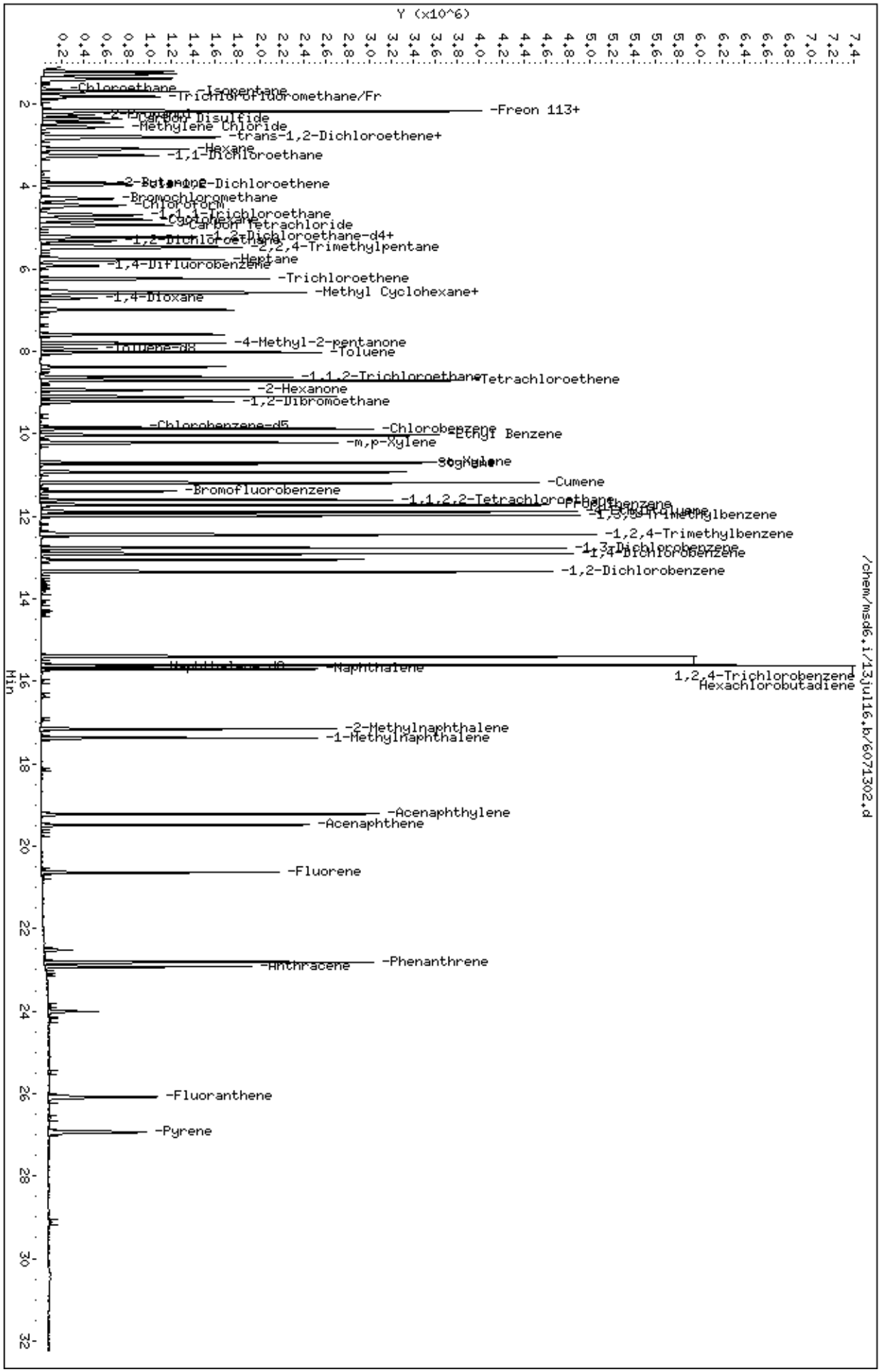
COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
40 Bromochloromethan	180845	108507	253183	139808	-22.69
54 1,4-Difluorobenze	751113	450668	1051558	608096	-19.04
79 Chlorobenzene-d5	701197	420718	981676	539409	-23.07
92 Bromofluorobenzen	474592	284755	664429	389118	-18.01

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
40 Bromochloromethan	4.29	3.96	4.62	4.28	-0.17
54 1,4-Difluorobenze	5.93	5.60	6.26	5.92	-0.12
79 Chlorobenzene-d5	9.85	9.52	10.18	9.84	-0.07
92 Bromofluorobenzen	11.39	11.06	11.72	11.39	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/msd6.i/13jul16.b/6071302.d
Date : 13-JUL-2016 13:38
Client ID:
Sample Info: ;VI ICAL6 50ng Surr
Column phase: RTx-624

Instrument: msd6.i
Operator: CT
Column diameter: 0.53



Page 1

Eurofins Air Toxics Inc.

EPA Method TO-17 GC/MS

Data file : /chem/msd6.i/12jul16.b/6071208.d
Lab Smp Id: VI ICAL7 100ng Surr
Inj Date : 12-JUL-2016 18:50
Operator : CT Inst ID: msd6.i
Smp Info : ;VI ICAL7 100ng Surr
Misc Info : 2787-1-100ml(10/7/16),2744-98-250(1/6/17)
Comment :
Method : /chem/msd6.i/13jul16.b/616z0712vi.m
Meth Date : 14-Jul-2016 18:42 U5BT Quant Type: ISTD
Cal Date : 12-JUL-2016 18:50 Cal File: 6071208.d
Als bottle: 7 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	
4.294	4.294 (1.000)	130	182774	26.0000		70.00- 130.00	100.00
4.294	4.294 (1.000)	128	142432			0.00- 30.00	77.93
4.294	4.294 (1.000)	49	245620			0.00- 30.00	134.38
* 54 1,4-Difluorobenzene						CAS #: 540-36-3	
5.934	5.934 (1.000)	114	777958	23.0000		70.00- 130.00	100.00
5.934	5.934 (1.000)	88	121164			0.00- 30.00	15.57
* 79 Chlorobenzene-d5						CAS #: 3114-55-4	
9.845	9.845 (1.000)	117	712267	24.0000		70.00- 130.00	100.00
9.845	9.845 (1.000)	82	376352			0.00- 30.00	52.84
* 92 Bromofluorobenzene						CAS #: 460-00-4	
11.392	11.392 (1.000)	174	485294	36.0000		70.00- 130.00	100.00
11.392	11.392 (1.000)	95	555382			0.00- 30.00	114.44
11.392	11.392 (1.000)	176	473527			0.00- 30.00	97.58
$ 49 1,2-Dichloroethane-d4						CAS #: 17060-07-0	
5.218	5.218 (0.879)	65	371967	100.000	95.036	70.00- 130.00	100.00

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

$  49 1,2-Dichloroethane-d4 (continued)
  5.218   5.218 (0.879)    67    195248                     0.00-  30.00    52.49
-------------------------------------------------------------------------------
$  66 Toluene-d8                                   CAS #: 2037-26-5
  7.940   7.940 (0.806)    98   1310234 100.000   100.96  70.00- 130.00   100.00
  7.940   7.940 (0.806)    70    141380                     0.00-  30.00    10.79
  7.940   7.940 (0.806)   100    858554                     0.00-  30.00    65.53
-------------------------------------------------------------------------------
$ 108 Naphthalene-d8                              CAS #: 1146-65-2
 15.668  15.668 (1.375)   136   2292857 100.000   98.020  70.00- 130.00   100.00
 15.668  15.668 (1.375)   108    217316                     0.00-  30.00     9.48
-------------------------------------------------------------------------------
    3 Freon 114                                   CAS #: 76-14-2
  1.297   1.297 (0.302)   135   2324416 699.000   708.83  70.00- 130.00   100.00
  1.297   1.297 (0.302)   137    753635                     0.00-  30.00    32.42
-------------------------------------------------------------------------------
    6 Vinyl Chloride                              CAS #: 75-01-4
  1.395   1.395 (0.325)    62   1256381 256.000   250.14  70.00- 130.00   100.00
  1.395   1.395 (0.325)    64    427057                     0.00-  30.00    33.99
-------------------------------------------------------------------------------
    7 1,3-Butadiene                               CAS #: 106-99-0
  1.395   1.395 (0.325)    54   1034857 221.000   217.18  70.00- 130.00   100.00
  1.395   1.395 (0.325)    39   1613981                     0.00-  30.00   155.96
-------------------------------------------------------------------------------
    9 Chloroethane                                CAS #: 75-00-3
  1.660   1.660 (0.387)    64    499567 264.000   211.83  70.00- 130.00   100.00
  1.660   1.660 (0.387)    66    153992                     0.00-  30.00    30.83
  1.660   1.660 (0.387)    49    151188                     0.00-  30.00    30.26
-------------------------------------------------------------------------------
   10 Isopentane                                  CAS #: 78-78-4
  1.688   1.688 (0.393)    57   1084624 295.000   296.35  70.00- 130.00   100.00
  1.688   1.688 (0.393)    43   1712409                     0.00-  30.00   157.88
-------------------------------------------------------------------------------
   11 Trichlorofluoromethane/Fr11                 CAS #: 75-69-4
  1.814   1.814 (0.423)   101   3078038 562.000   555.82  70.00- 130.00   100.00
  1.814   1.814 (0.423)   103   2108037                     0.00-  30.00    68.49
-------------------------------------------------------------------------------
   15 Freon 113                                   CAS #: 76-13-1
  2.173   2.173 (0.506)   151   2600407 766.000   753.19  70.00- 130.00   100.00
  2.180   2.180 (0.508)   153   1670751                     0.00-  30.00    64.25
  2.173   2.173 (0.506)   101   2991725                     0.00-  30.00   115.05
-------------------------------------------------------------------------------
   14 1,1-Dichloroethene                          CAS #: 75-35-4
  2.180   2.180 (0.508)    98    887944 397.000   377.49  70.00- 130.00   100.00
  2.180   2.180 (0.508)    96   1410508                     0.00-  30.00   158.85
  2.173   2.173 (0.506)    61   2323110                     0.00-  30.00   261.63
-------------------------------------------------------------------------------
```

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		
2.360	2.360 (0.550)	76	3986468	311.000	280.92	70.00- 130.00	100.00
19 2-Propanol					CAS #: 67-63-0		
2.266	2.266 (0.528)	45	2713327	246.000	219.88	70.00- 130.00	100.00
2.266	2.266 (0.528)	43	528454			0.00- 30.00	19.48
2.266	2.266 (0.528)	59	98006			0.00- 30.00	3.61
22 Methylene Chloride					CAS #: 75-09-2		
2.567	2.567 (0.598)	49	1898384	347.000	306.99	70.00- 130.00	100.00
2.567	2.567 (0.598)	84	1349028			0.00- 30.00	71.06
2.567	2.567 (0.598)	51	574828			0.00- 30.00	30.28
25 trans-1,2-Dichloroethene					CAS #: 156-60-5		
2.825	2.825 (0.658)	98	923141	396.000	392.85	70.00- 130.00	100.00
2.818	2.818 (0.656)	61	2138878			0.00- 30.00	231.70
2.818	2.818 (0.656)	96	1450187			0.00- 30.00	157.09
26 MTBE					CAS #: 1634-04-4		
2.796	2.796 (0.651)	73	3609253	361.000	370.38	70.00- 130.00	100.00
2.796	2.796 (0.651)	57	863353			0.00- 30.00	23.92
2.796	2.796 (0.651)	41	897232			0.00- 30.00	24.86
28 Hexane					CAS #: 110-54-3		
3.097	3.097 (0.721)	57	2331391	352.000	345.98	70.00- 130.00	100.00
3.097	3.097 (0.721)	43	1620834			0.00- 30.00	69.52
3.097	3.097 (0.721)	86	328837			0.00- 30.00	14.10
29 1,1-Dichloroethane					CAS #: 75-34-3		
3.262	3.262 (0.760)	63	2507030	405.000	423.05	70.00- 130.00	100.00
3.262	3.262 (0.760)	65	791273			0.00- 30.00	31.56
37 cis-1,2-Dichloroethene					CAS #: 156-59-2		
3.964	3.964 (0.923)	98	981130	396.000	396.63	70.00- 130.00	100.00
3.957	3.957 (0.922)	96	1529911			0.00- 30.00	155.93
3.957	3.957 (0.922)	61	2042895			0.00- 30.00	208.22
38 2-Butanone					CAS #: 78-93-3		
3.914	3.914 (0.912)	72	689056	295.000	257.81	70.00- 130.00	100.00
3.914	3.914 (0.912)	43	3247783			0.00- 30.00	471.34
3.914	3.914 (0.912)	57	238728			0.00- 30.00	34.65
44 Chloroform					CAS #: 67-66-3		
4.473	4.473 (1.042)	83	2787142	488.000	477.94	70.00- 130.00	100.00
4.473	4.473 (1.042)	85	1819306			0.00- 30.00	65.27

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO
46 Cyclohexane					CAS #: 110-82-7		
4.824	4.824 (0.813)	84	1866760	344.000	345.51	70.00- 130.00	100.00
4.824	4.824 (0.813)	56	2418538			0.00- 30.00	129.56
4.824	4.824 (0.813)	41	1481140			0.00- 30.00	79.34
45 1,1,1-Trichloroethane					CAS #: 71-55-6		
4.702	4.702 (0.792)	97	2999107	546.000	576.09	70.00- 130.00	100.00
4.702	4.702 (0.792)	99	1935969			0.00- 30.00	64.55
47 Carbon Tetrachloride					CAS #: 56-23-5		
4.945	4.945 (0.833)	119	3081221	629.000	621.14	70.00- 130.00	100.00
4.945	4.945 (0.833)	117	3192939			0.00- 30.00	103.63
51 2,2,4-Trimethylpentane					CAS #: 540-84-1		
5.475	5.475 (0.923)	57	7776469	467.000	469.79	70.00- 130.00	100.00
5.475	5.475 (0.923)	56	2469240			0.00- 30.00	31.75
5.483	5.483 (0.924)	41	2307075			0.00- 30.00	29.67
48 Benzene					CAS #: 71-43-2		
5.239	5.239 (0.883)	78	4411835	319.000	282.28	70.00- 130.00	100.00
5.239	5.239 (0.883)	77	1029571			0.00- 30.00	23.34
50 1,2-Dichloroethane					CAS #: 107-06-2		
5.332	5.332 (0.899)	62	1938971	405.000	399.66	70.00- 130.00	100.00
5.332	5.332 (0.899)	64	628478			0.00- 30.00	32.41
53 Heptane					CAS #: 142-82-5		
5.776	5.776 (0.973)	71	1512685	410.000	397.33	70.00- 130.00	100.00
5.776	5.776 (0.973)	43	3099114			0.00- 30.00	204.88
5.776	5.776 (0.973)	57	1495245			0.00- 30.00	98.85
56 Trichloroethene					CAS #: 79-01-6		
6.249	6.249 (1.053)	95	2197022	537.000	543.68	70.00- 130.00	100.00
6.249	6.249 (1.053)	130	2270888			0.00- 30.00	103.36
6.249	6.249 (1.053)	97	1431097			0.00- 30.00	65.14
58 Methyl Cyclohexane					CAS #: 108-87-2		
6.571	6.571 (1.107)	83	2769242	402.000	406.13	70.00- 130.00	100.00
6.571	6.571 (1.107)	98	1207254			0.00- 30.00	43.60
6.571	6.571 (1.107)	55	2358148			0.00- 30.00	85.15
59 1,2-Dichloropropane					CAS #: 78-87-5		
6.600	6.600 (1.112)	63	1759354	462.000	478.13	70.00- 130.00	100.00
6.600	6.600 (1.112)	62	1224269			0.00- 30.00	69.59
6.586	6.586 (1.110)	41	2398322			0.00- 30.00	136.32

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		
6.715	6.715 (1.132)	88	1116422	360.000	364.46	70.00- 130.00	100.00
6.715	6.715 (1.132)	58	776917			0.00- 30.00	69.59
6.715	6.715 (1.132)	57	295732			0.00- 30.00	26.49
65 4-Methyl-2-pentanone					CAS #: 108-10-1		
7.818	7.818 (1.317)	58	1426119	410.000	416.41	70.00- 130.00	100.00
7.818	7.818 (1.317)	43	4000554			0.00- 30.00	280.52
7.818	7.818 (1.317)	85	621748			0.00- 30.00	43.60
67 Toluene					CAS #: 108-88-3		
8.033	8.033 (0.816)	91	5617895	377.000	367.63	70.00- 130.00	100.00
8.033	8.033 (0.816)	92	3313852			0.00- 30.00	58.99
70 1,1,2-Trichloroethane					CAS #: 79-00-5		
8.627	8.627 (1.454)	97	1921810	546.000	529.38	70.00- 130.00	100.00
8.627	8.627 (1.454)	99	1213609			0.00- 30.00	63.15
8.627	8.627 (1.454)	83	1651558			0.00- 30.00	85.94
71 Tetrachloroethene					CAS #: 127-18-4		
8.720	8.720 (0.886)	166	2880233	678.000	662.24	70.00- 130.00	100.00
8.713	8.713 (0.885)	129	2123415			0.00- 30.00	73.72
8.713	8.713 (0.885)	131	2051437			0.00- 30.00	71.22
72 2-Hexanone					CAS #: 591-78-6		
8.942	8.942 (0.908)	58	1907030	410.000	423.25	70.00- 130.00	100.00
8.942	8.942 (0.908)	43	3881355			0.00- 30.00	203.53
8.942	8.942 (0.908)	100	363417			0.00- 30.00	19.06
74 1,2-Dibromoethane					CAS #: 106-93-4		
9.222	9.222 (0.937)	107	3022052	768.000	757.80	70.00- 130.00	100.00
9.222	9.222 (0.937)	109	2859880			0.00- 30.00	94.63
81 Chlorobenzene					CAS #: 108-90-7		
9.881	9.881 (1.004)	112	4617761	460.000	446.71	70.00- 130.00	100.00
9.881	9.881 (1.004)	114	1484886			0.00- 30.00	32.16
9.881	9.881 (1.004)	77	2545344			0.00- 30.00	55.12
82 Ethyl Benzene					CAS #: 100-41-4		
10.038	10.038 (1.020)	106	2372902	434.000	429.88	70.00- 130.00	100.00
10.038	10.038 (1.020)	91	7321764			0.00- 30.00	308.56
84 m,p-Xylene					CAS #: 108-38-3		
10.217	10.217 (1.038)	106	2995082	434.000	429.76	70.00- 130.00	100.00
10.217	10.217 (1.038)	91	5946843			0.00- 30.00	198.55

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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
 10.697  10.697 (0.939)   106   2762666 434.000   426.99  70.00- 130.00   100.00
 10.697  10.697 (0.939)    91   5743009                    0.00-  30.00   207.88
-------------------------------------------------------------------------------
   89 Styrene                                         CAS #: 100-42-5
 10.733  10.733 (0.942)   104   4667965 426.000   425.49  70.00- 130.00   100.00
 10.726  10.726 (0.942)    78   2268880                    0.00-  30.00    48.61
-------------------------------------------------------------------------------
   91 Cumene                                          CAS #: 98-82-8
 11.192  11.192 (0.982)   105   8310943 492.000   475.81  70.00- 130.00   100.00
 11.192  11.192 (0.982)   120   2255813                    0.00-  30.00    27.14
 11.184  11.184 (0.982)    51    852230                    0.00-  30.00    10.25
-------------------------------------------------------------------------------
   94 1,1,2,2-Tetrachloroethane                       CAS #: 79-34-5
 11.607  11.607 (1.019)    83   4230300 687.000   678.05  70.00- 130.00   100.00
 11.607  11.607 (1.019)    85   2746227                    0.00-  30.00    64.92
-------------------------------------------------------------------------------
   96 Propylbenzene                                   CAS #: 103-65-1
 11.729  11.729 (1.030)    91   9836159 492.000   477.20  70.00- 130.00   100.00
 11.729  11.729 (1.030)   120   2383717                    0.00-  30.00    24.23
 11.729  11.729 (1.030)   105    377482                    0.00-  30.00     3.84
-------------------------------------------------------------------------------
   97 4-Ethyltoluene                                  CAS #: 622-96-8
 11.894  11.894 (1.044)   120   2554346 492.000   473.48  70.00- 130.00   100.00
 11.894  11.894 (1.044)   105   8213750                    0.00-  30.00   321.56
-------------------------------------------------------------------------------
   98 1,3,5-Trimethylbenzene                          CAS #: 108-67-8
 11.979  11.979 (1.052)   120   3633077 492.000   478.59  70.00- 130.00   100.00
 11.979  11.979 (1.052)   105   7307244                    0.00-  30.00   201.13
-------------------------------------------------------------------------------
  100 1,2,4-Trimethylbenzene                          CAS #: 95-63-6
 12.445  12.445 (1.092)   120   3402053 492.000   480.06  70.00- 130.00   100.00
 12.445  12.445 (1.092)   105   7321421                    0.00-  30.00   215.21
-------------------------------------------------------------------------------
  101 1,3-Dichlorobenzene                             CAS #: 541-73-1
 12.767  12.767 (1.121)   146   5180622 601.000   579.86  70.00- 130.00   100.00
 12.767  12.767 (1.121)   148   3335153                    0.00-  30.00    64.38
 12.767  12.767 (1.121)   111   2093426                    0.00-  30.00    40.41
-------------------------------------------------------------------------------
  102 1,4-Dichlorobenzene                             CAS #: 106-46-7
 12.911  12.911 (1.133)   146   5176644 601.000   582.16  70.00- 130.00   100.00
 12.911  12.911 (1.133)   148   3329699                    0.00-  30.00    64.32
 12.911  12.911 (1.133)   111   2018529                    0.00-  30.00    38.99
-------------------------------------------------------------------------------
  105 1,2-Dichlorobenzene                             CAS #: 95-50-1
 13.348  13.348 (1.172)   146   4905180 601.000   572.47  70.00- 130.00   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)
 13.348  13.348 (1.172)   148   3166333                     0.00-  30.00    64.55
 13.348  13.348 (1.172)   111   2047119                     0.00-  30.00    41.73
-------------------------------------------------------------------------------
  106 1,2,4-Trichlorobenzene                        CAS #: 120-82-1
 15.403  15.403 (1.352)   180   4670465 742.000   681.04  70.00- 130.00   100.00
 15.403  15.403 (1.352)   182   4449749                     0.00-  30.00    95.27
-------------------------------------------------------------------------------
  107 Hexachlorobutadiene                           CAS #: 87-68-3
 15.618  15.618 (1.371)   225   3549918 1070.00   900.16  70.00- 130.00   100.00
 15.618  15.618 (1.371)   223   2239755                     0.00-  30.00    63.09
-------------------------------------------------------------------------------
  109 Naphthalene                                   CAS #: 91-20-3
 15.711  15.711 (1.379)   128   6090521 250.000   233.42  70.00- 130.00   100.00
 15.711  15.711 (1.379)   127    804319                     0.00-  30.00    13.21
-------------------------------------------------------------------------------
  110 2-Methylnaphthalene                           CAS #: 91-57-6
 17.158  17.158 (1.506)   142   4066657 250.000   246.06  70.00- 130.00   100.00
 17.158  17.158 (1.506)   141   3504962                     0.00-  30.00    86.19
 17.158  17.158 (1.506)   115   1292913                     0.00-  30.00    31.79
-------------------------------------------------------------------------------
  111 1-Methylnaphthalene                           CAS #: 90-12-0
 17.373  17.373 (1.525)   142   3690515 250.000   245.50  70.00- 130.00   100.00
 17.373  17.373 (1.525)   141   3305652                     0.00-  30.00    89.57
 17.373  17.373 (1.525)   115   1242879                     0.00-  30.00    33.68
-------------------------------------------------------------------------------
  112 Acenaphthylene                                CAS #: 208-96-8
 19.221  19.221 (1.687)   152   6338566 250.000   262.65  70.00- 130.00   100.00(A)
 19.221  19.221 (1.687)   151   1284460                     0.00-  30.00    20.26
 19.221  19.221 (1.687)   153    837148                     0.00-  30.00    13.21
-------------------------------------------------------------------------------
  113 Acenaphthene                                  CAS #: 83-32-9
 19.486  19.486 (1.710)   154   3506740 250.000   262.55  70.00- 130.00   100.00(A)
 19.486  19.486 (1.710)   152   1826193                     0.00-  30.00    52.08
 19.486  19.486 (1.710)   153   3820511                     0.00-  30.00   108.95
-------------------------------------------------------------------------------
  114 Fluorene                                      CAS #: 86-73-7
 20.640  20.640 (1.812)   166   3339131 250.000   236.79  70.00- 130.00   100.00
 20.640  20.640 (1.812)   165   3178302                     0.00-  30.00    95.18
-------------------------------------------------------------------------------
  115 Phenanthrene                                  CAS #: 85-01-8
 22.817  22.817 (2.003)   178   6113573 250.000   250.58  70.00- 130.00   100.00(A)
 22.817  22.817 (2.003)   176   1175394                     0.00-  30.00    19.23
 22.817  22.817 (2.003)   179    940061                     0.00-  30.00    15.38
-------------------------------------------------------------------------------
  116 Anthracene                                    CAS #: 120-12-7
 22.925  22.925 (2.012)   178   4343778 250.000   267.62  70.00- 130.00   100.00(A)
```

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO
116 Anthracene (continued)							
22.925	22.925 (2.012)	176	802774			0.00- 30.00	18.48
22.925	22.925 (2.012)	179	664671			0.00- 30.00	15.30
117 Fluoranthene					CAS #: 206-44-0		
26.091	26.091 (2.290)	202	3992770	250.000	224.50	70.00- 130.00	100.00
26.083	26.083 (2.290)	101	630086			0.00- 30.00	15.78
118 Pyrene					CAS #: 129-00-0		
26.943	26.943 (2.365)	202	4169435	250.000	225.61	70.00- 130.00	100.00
26.936	26.936 (2.364)	101	781071			0.00- 30.00	18.73
26.936	26.936 (2.364)	100	630397			0.00- 45.21	15.12

QC Flag Legend

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

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd6.i
Lab File ID: 6071208.d
Lab Smp Id: VI ICAL7 100ng Surr
Analysis Type: VOA
Quant Type: ISTD
Operator: CT
Method File: /chem/msd6.i/13jul16.b/616z0712vi.m
Misc Info: 2787-1-100ml(10/7/16),2744-98-250(1/6/17)

Calibration Date: 12-JUL-2016
Calibration Time: 17:31
Level: LOW
Sample Type: AIR

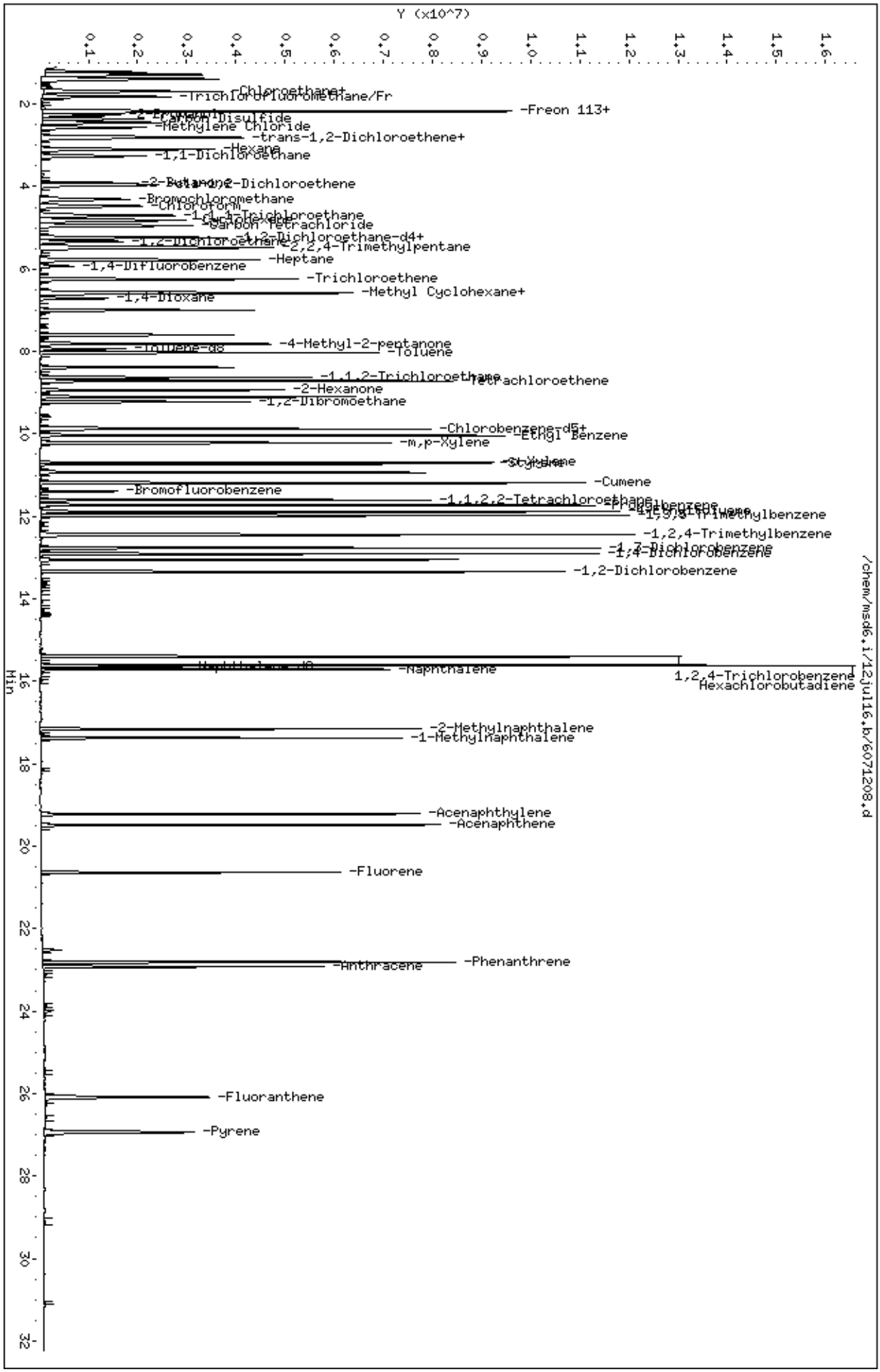
COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
40 Bromochloromethan	180845	108507	253183	182774	1.07
54 1,4-Difluorobenze	751113	450668	1051558	777958	3.57
79 Chlorobenzene-d5	701197	420718	981676	712267	1.58
92 Bromofluorobenzen	474592	284755	664429	485294	2.25

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
40 Bromochloromethan	4.29	3.96	4.62	4.29	0.16
54 1,4-Difluorobenze	5.93	5.60	6.26	5.93	0.12
79 Chlorobenzene-d5	9.85	9.52	10.18	9.84	0.00
92 Bromofluorobenzen	11.39	11.06	11.72	11.39	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/msd6.i/12jul16.b/6071208.d
Date : 12-JUL-2016 18:50
Client ID:
Sample Info: ;VI ICAL7 100ng Surr
Column phase: RTx-624

Instrument: msd6.i
Operator: CT
Column diameter: 0.53



Eurofins Air Toxics Inc.

EPA Method TO-17 GC/MS

Data file : /chem/msd6.i/12jul16.b/6071209.d
Lab Smp Id: VI ICAL8 no Surr
Inj Date : 12-JUL-2016 19:30
Operator : CT Inst ID: msd6.i
Smp Info : ;VI ICAL8 no Surr
Misc Info : 2787-1-200ml(10/7/16),no PAHs
Comment :
Method : /chem/msd6.i/13jul16.b/616z0712vi.m
Meth Date : 14-Jul-2016 18:42 U5BT Quant Type: ISTD
Cal Date : 12-JUL-2016 19:30 Cal File: 6071209.d
Als bottle: 8 Calibration Sample, Level: 8
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: VOC+PAH_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
* 40 Bromochloromethane						CAS #: 74-97-5	
4.293	4.293 (1.000)	130	184749	26.0000		70.00- 130.00	100.00
4.293	4.293 (1.000)	128	145470			0.00- 30.00	78.74
4.293	4.293 (1.000)	49	254584			0.00- 30.00	137.80
* 54 1,4-Difluorobenzene						CAS #: 540-36-3	
5.934	5.934 (1.000)	114	759118	23.0000		70.00- 130.00	100.00
5.934	5.934 (1.000)	88	119071			0.00- 30.00	15.69
* 79 Chlorobenzene-d5						CAS #: 3114-55-4	
9.845	9.845 (1.000)	117	684774	24.0000		70.00- 130.00	100.00
9.845	9.845 (1.000)	82	361996			0.00- 30.00	52.86
* 92 Bromofluorobenzene						CAS #: 460-00-4	
11.399	11.399 (1.000)	174	472146	36.0000		70.00- 130.00	100.00
11.392	11.392 (1.000)	95	547528			0.00- 30.00	115.97
11.399	11.399 (1.000)	176	458888			0.00- 30.00	97.19
3 Freon 114						CAS #: 76-14-2	
1.283	1.283 (0.299)	135	4262047	1400.00	1285.8	70.00- 130.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO
3 Freon 114 (continued)							
1.283	1.283 (0.299)	137	1371056			0.00- 30.00	32.17
6 Vinyl Chloride						CAS #: 75-01-4	
1.381	1.381 (0.322)	62	2583886	511.000	508.94	70.00- 130.00	100.00
1.381	1.381 (0.322)	64	873601			0.00- 30.00	33.81
7 1,3-Butadiene						CAS #: 106-99-0	
1.395	1.395 (0.325)	54	2072589	442.000	430.31	70.00- 130.00	100.00
1.395	1.395 (0.325)	39	3622050			0.00- 30.00	174.76
9 Chloroethane						CAS #: 75-00-3	
1.646	1.646 (0.383)	64	1317296	528.000	552.60	70.00- 130.00	100.00(A)
1.646	1.646 (0.383)	66	409379			0.00- 30.00	31.08
1.646	1.646 (0.383)	49	400266			0.00- 30.00	30.39
10 Isopentane						CAS #: 78-78-4	
1.702	1.702 (0.396)	57	2155844	590.000	582.74	70.00- 130.00	100.00
1.702	1.702 (0.396)	43	3379867			0.00- 30.00	156.78
11 Trichlorofluoromethane/Fr11						CAS #: 75-69-4	
1.814	1.814 (0.423)	101	6643131	1120.00	1186.8	70.00- 130.00	100.00(A)
1.814	1.814 (0.423)	103	4332552			0.00- 30.00	65.22
15 Freon 113						CAS #: 76-13-1	
2.188	2.188 (0.509)	151	4978463	1530.00	1426.6	70.00- 130.00	100.00
2.188	2.188 (0.509)	153	3219228			0.00- 30.00	64.66
2.180	2.180 (0.508)	101	5747678			0.00- 30.00	115.45
14 1,1-Dichloroethene						CAS #: 75-35-4	
2.180	2.180 (0.508)	98	1774285	793.000	746.23	70.00- 130.00	100.00
2.180	2.180 (0.508)	96	2805140			0.00- 30.00	158.10
2.180	2.180 (0.508)	61	4614662			0.00- 30.00	260.09
18 Carbon Disulfide						CAS #: 75-15-0	
2.359	2.359 (0.550)	76	7903812	623.000	551.00	70.00- 130.00	100.00
19 2-Propanol						CAS #: 67-63-0	
2.266	2.266 (0.528)	45	5403617	492.000	433.22	70.00- 130.00	100.00
2.266	2.266 (0.528)	43	1044282			0.00- 30.00	19.33
2.266	2.266 (0.528)	59	199197			0.00- 30.00	3.69
22 Methylene Chloride						CAS #: 75-09-2	
2.567	2.567 (0.598)	49	3510238	695.000	561.58	70.00- 130.00	100.00
2.567	2.567 (0.598)	84	2506828			0.00- 30.00	71.41
2.567	2.567 (0.598)	51	1059870			0.00- 30.00	30.19

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO
25 trans-1,2-Dichloroethene						CAS #: 156-60-5	
2.825	2.825 (0.658)	98	1821805	793.000	767.00	70.00- 130.00	100.00
2.825	2.825 (0.658)	61	4206886			0.00- 30.00	230.92
2.825	2.825 (0.658)	96	2864566			0.00- 30.00	157.24
26 MTBE						CAS #: 1634-04-4	
2.796	2.796 (0.651)	73	5263559	721.000	534.38	70.00- 130.00	100.00
2.796	2.796 (0.651)	57	1261757			0.00- 30.00	23.97
2.796	2.796 (0.651)	41	1298429			0.00- 30.00	24.67
28 Hexane						CAS #: 110-54-3	
3.097	3.097 (0.721)	57	4663972	705.000	684.74	70.00- 130.00	100.00
3.097	3.097 (0.721)	43	3219633			0.00- 30.00	69.03
3.097	3.097 (0.721)	86	656777			0.00- 30.00	14.08
29 1,1-Dichloroethane						CAS #: 75-34-3	
3.269	3.269 (0.761)	63	5072401	810.000	846.79	70.00- 130.00	100.00(A)
3.269	3.269 (0.761)	65	1608022			0.00- 30.00	31.70
37 cis-1,2-Dichloroethene						CAS #: 156-59-2	
3.964	3.964 (0.923)	98	1956634	793.000	782.53	70.00- 130.00	100.00
3.964	3.964 (0.923)	96	3063803			0.00- 30.00	156.59
3.964	3.964 (0.923)	61	4082887			0.00- 30.00	208.67
38 2-Butanone						CAS #: 78-93-3	
3.921	3.921 (0.913)	72	1319994	590.000	488.59	70.00- 130.00	100.00
3.921	3.921 (0.913)	43	6249504			0.00- 30.00	473.45
3.921	3.921 (0.913)	57	449683			0.00- 30.00	34.07
44 Chloroform						CAS #: 67-66-3	
4.480	4.480 (1.043)	83	5637739	977.000	956.43	70.00- 130.00	100.00
4.480	4.480 (1.043)	85	3697923			0.00- 30.00	65.59
46 Cyclohexane						CAS #: 110-82-7	
4.824	4.824 (0.813)	84	3758039	688.000	712.83	70.00- 130.00	100.00(A)
4.824	4.824 (0.813)	56	4834963			0.00- 30.00	128.66
4.824	4.824 (0.813)	41	2965310			0.00- 30.00	78.91
45 1,1,1-Trichloroethane						CAS #: 71-55-6	
4.702	4.702 (0.792)	97	5777817	1091.00	1137.4	70.00- 130.00	100.00(A)
4.702	4.702 (0.792)	99	3746475			0.00- 30.00	64.84
47 Carbon Tetrachloride						CAS #: 56-23-5	
4.952	4.952 (0.835)	119	6307763	1260.00	1303.1	70.00- 130.00	100.00(A)
4.952	4.952 (0.835)	117	6547294			0.00- 30.00	103.80

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO
51 2,2,4-Trimethylpentane					CAS #: 540-84-1		
5.483	5.483 (0.924)	57	14871095	934.000	920.69	70.00- 130.00	100.00
5.483	5.483 (0.924)	56	4733842			0.00- 30.00	31.83
5.483	5.483 (0.924)	41	4435399			0.00- 30.00	29.83
48 Benzene					CAS #: 71-43-2		
5.239	5.239 (0.883)	78	8705896	639.000	570.85	70.00- 130.00	100.00
5.239	5.239 (0.883)	77	2031634			0.00- 30.00	23.34
50 1,2-Dichloroethane					CAS #: 107-06-2		
5.346	5.346 (0.901)	62	3864112	809.000	816.24	70.00- 130.00	100.00(A)
5.346	5.346 (0.901)	64	1251480			0.00- 30.00	32.39
53 Heptane					CAS #: 142-82-5		
5.783	5.783 (0.975)	71	3016029	820.000	811.86	70.00- 130.00	100.00
5.783	5.783 (0.975)	43	6024351			0.00- 30.00	199.74
5.783	5.783 (0.975)	57	2969472			0.00- 30.00	98.46
56 Trichloroethene					CAS #: 79-01-6		
6.249	6.249 (1.053)	95	4164374	1080.00	1056.1	70.00- 130.00	100.00
6.249	6.249 (1.053)	130	4225999			0.00- 30.00	101.48
6.249	6.249 (1.053)	97	2711234			0.00- 30.00	65.11
58 Methyl Cyclohexane					CAS #: 108-87-2		
6.571	6.571 (1.107)	83	5446073	803.000	818.52	70.00- 130.00	100.00(A)
6.571	6.571 (1.107)	98	2386958			0.00- 30.00	43.83
6.571	6.571 (1.107)	55	4606286			0.00- 30.00	84.58
59 1,2-Dichloropropane					CAS #: 78-87-5		
6.600	6.600 (1.112)	63	3471358	924.000	966.80	70.00- 130.00	100.00(A)
6.600	6.600 (1.112)	62	2416617			0.00- 30.00	69.62
6.586	6.586 (1.110)	41	4661615			0.00- 30.00	134.29
60 1,4-Dioxane					CAS #: 123-91-1		
6.722	6.722 (1.133)	88	2235196	721.000	747.80	70.00- 130.00	100.00(A)
6.722	6.722 (1.133)	58	1542382			0.00- 30.00	69.00
6.722	6.722 (1.133)	57	523050			0.00- 30.00	23.40
65 4-Methyl-2-pentanone					CAS #: 108-10-1		
7.818	7.818 (1.317)	58	2824751	819.000	845.26	70.00- 130.00	100.00(A)
7.818	7.818 (1.317)	43	7848501			0.00- 30.00	277.85
7.818	7.818 (1.317)	85	1242823			0.00- 30.00	44.00
67 Toluene					CAS #: 108-88-3		
8.033	8.033 (0.816)	91	10858275	754.000	739.08	70.00- 130.00	100.00
8.033	8.033 (0.816)	92	6445976			0.00- 30.00	59.36

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

   70 1,1,2-Trichloroethane                        CAS #: 79-00-5
  8.634   8.634 (1.455)    97   3879094 1090.00   1095.0  70.00- 130.00   100.00(A)
  8.634   8.634 (1.455)    99   2431079                    0.00-  30.00    62.67
  8.634   8.634 (1.455)    83   3348485                    0.00-  30.00    86.32
-------------------------------------------------------------------------------
   71 Tetrachloroethene                            CAS #: 127-18-4
  8.720   8.720 (0.886)   166   5585382 1360.00   1335.8  70.00- 130.00   100.00
  8.720   8.720 (0.886)   129   4062785                    0.00-  30.00    72.74
  8.720   8.720 (0.886)   131   3917175                    0.00-  30.00    70.13
-------------------------------------------------------------------------------
   72 2-Hexanone                                   CAS #: 591-78-6
  8.942   8.942 (0.908)    58   3809275 819.000   879.38  70.00- 130.00   100.00(A)
  8.942   8.942 (0.908)    43   7657740                    0.00-  30.00   201.03
  8.942   8.942 (0.908)   100    725205                    0.00-  30.00    19.04
-------------------------------------------------------------------------------
   74 1,2-Dibromoethane                            CAS #: 106-93-4
  9.229   9.229 (0.937)   107   5925715 1540.00   1545.6  70.00- 130.00   100.00(A)
  9.229   9.229 (0.937)   109   5612108                    0.00-  30.00    94.71
-------------------------------------------------------------------------------
   81 Chlorobenzene                                CAS #: 108-90-7
  9.881   9.881 (1.004)   112   8840433 921.000   889.53  70.00- 130.00   100.00
  9.881   9.881 (1.004)   114   2881342                    0.00-  30.00    32.59
  9.881   9.881 (1.004)    77   5002605                    0.00-  30.00    56.59
-------------------------------------------------------------------------------
   82 Ethyl Benzene                                CAS #: 100-41-4
 10.038  10.038 (1.020)   106   4618816 868.000   870.36  70.00- 130.00   100.00(A)
 10.038  10.038 (1.020)    91  14138802                    0.00-  30.00   306.11
-------------------------------------------------------------------------------
   84 m,p-Xylene                                   CAS #: 108-38-3
 10.217  10.217 (1.038)   106   5835150 868.000   870.90  70.00- 130.00   100.00(A)
 10.217  10.217 (1.038)    91  11504589                    0.00-  30.00   197.16
-------------------------------------------------------------------------------
   88 o-Xylene                                     CAS #: 95-47-6
 10.704  10.704 (0.939)   106   5316542 868.000   844.60  70.00- 130.00   100.00
 10.704  10.704 (0.939)    91  11052773                    0.00-  30.00   207.89
-------------------------------------------------------------------------------
   89 Styrene                                      CAS #: 100-42-5
 10.733  10.733 (0.942)   104   8987550 852.000   842.04  70.00- 130.00   100.00
 10.733  10.733 (0.942)    78   4458343                    0.00-  30.00    49.61
-------------------------------------------------------------------------------
   91 Cumene                                       CAS #: 98-82-8
 11.191  11.191 (0.982)   105  15616912 983.000   918.98  70.00- 130.00   100.00
 11.191  11.191 (0.982)   120   4286440                    0.00-  30.00    27.45
 11.191  11.191 (0.982)    51   1679675                    0.00-  30.00    10.76
-------------------------------------------------------------------------------
   94 1,1,2,2-Tetrachloroethane                    CAS #: 79-34-5
 11.607  11.607 (1.018)    83   8570165 1370.00   1411.9  70.00- 130.00   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)
 11.607  11.607 (1.018)    85   5572890                     0.00-  30.00    65.03
-------------------------------------------------------------------------------
   96 Propylbenzene                                CAS #: 103-65-1
 11.722  11.722 (1.028)    91  17457930 983.000   870.56  70.00- 130.00   100.00
 11.729  11.729 (1.029)   120   4578962                     0.00-  30.00    26.23
 11.729  11.729 (1.029)   105    740312                     0.00-  30.00     4.24
-------------------------------------------------------------------------------
   97 4-Ethyltoluene                               CAS #: 622-96-8
 11.893  11.893 (1.043)   120   4952683 983.000   943.60  70.00- 130.00   100.00
 11.893  11.893 (1.043)   105  15497706                     0.00-  30.00   312.92
-------------------------------------------------------------------------------
   98 1,3,5-Trimethylbenzene                       CAS #: 108-67-8
 11.979  11.979 (1.051)   120   6880143 983.000   931.58  70.00- 130.00   100.00
 11.979  11.979 (1.051)   105  13759762                     0.00-  30.00   199.99
-------------------------------------------------------------------------------
  100 1,2,4-Trimethylbenzene                       CAS #: 95-63-6
 12.445  12.445 (1.092)   120   6353459 983.000   921.50  70.00- 130.00   100.00
 12.445  12.445 (1.092)   105  13826715                     0.00-  30.00   217.62
-------------------------------------------------------------------------------
  101 1,3-Dichlorobenzene                          CAS #: 541-73-1
 12.775  12.775 (1.121)   146   9678682 1200.00   1113.5  70.00- 130.00   100.00
 12.775  12.775 (1.121)   148   6310205                     0.00-  30.00    65.20
 12.775  12.775 (1.121)   111   4019763                     0.00-  30.00    41.53
-------------------------------------------------------------------------------
  102 1,4-Dichlorobenzene                          CAS #: 106-46-7
 12.911  12.911 (1.133)   146   9698293 1200.00   1121.0  70.00- 130.00   100.00
 12.911  12.911 (1.133)   148   6321497                     0.00-  30.00    65.18
 12.911  12.911 (1.133)   111   3888970                     0.00-  30.00    40.10
-------------------------------------------------------------------------------
  105 1,2-Dichlorobenzene                          CAS #: 95-50-1
 13.348  13.348 (1.171)   146   9410099 1200.00   1128.8  70.00- 130.00   100.00
 13.348  13.348 (1.171)   148   6097195                     0.00-  30.00    64.79
 13.348  13.348 (1.171)   111   4007025                     0.00-  30.00    42.58
-------------------------------------------------------------------------------
  106 1,2,4-Trichlorobenzene                       CAS #: 120-82-1
 15.403  15.403 (1.351)   180   8991791 1480.00   1347.7  70.00- 130.00   100.00
 15.403  15.403 (1.351)   182   8613785                     0.00-  30.00    95.80
-------------------------------------------------------------------------------
  107 Hexachlorobutadiene                          CAS #: 87-68-3
 15.618  15.618 (1.370)   225   6821096 2130.00   1777.8  70.00- 130.00   100.00
 15.618  15.618 (1.370)   223   4347091                     0.00-  30.00    63.73
-------------------------------------------------------------------------------
  109 Naphthalene                                  CAS #: 91-20-3
 15.711  15.711 (1.378)   128     40711 250.000    1.604  70.00- 130.00   100.00
 15.704  15.704 (1.378)   127      5503                     0.00-  30.00    13.52
-------------------------------------------------------------------------------
```

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO
110 2-Methylnaphthalene					CAS #: 91-57-6		
17.158	17.158 (1.505)	142	13752	250.000	0.8553	70.00- 130.00	100.00(a)
17.158	17.158 (1.505)	141	12076			0.00- 30.00	87.81
17.158	17.158 (1.505)	115	4850			0.00- 30.00	35.27
111 1-Methylnaphthalene					CAS #: 90-12-0		
17.373	17.373 (1.524)	142	11905	250.000	0.8140	70.00- 130.00	100.00(a)
17.380	17.380 (1.525)	141	10323			0.00- 30.00	86.71
17.373	17.373 (1.524)	115	4279			0.00- 30.00	35.94
112 Acenaphthylene					CAS #: 208-96-8		
19.221	19.221 (1.686)	152	18125	250.000	0.7720	70.00- 130.00	100.00(a)
19.228	19.228 (1.687)	151	3759			0.00- 30.00	20.74
19.221	19.221 (1.686)	153	2557			0.00- 30.00	14.11
113 Acenaphthene					CAS #: 83-32-9		
19.486	19.486 (1.709)	154	8130	250.000	0.6256	70.00- 130.00	100.00(a)
19.486	19.486 (1.709)	152	4721			0.00- 30.00	58.07
19.486	19.486 (1.709)	153	8918			0.00- 30.00	109.69
114 Fluorene					CAS #: 86-73-7		
20.640	20.640 (1.811)	166	14146	250.000	1.031	70.00- 130.00	100.00(a)
20.640	20.640 (1.811)	165	14410			0.00- 30.00	101.87
115 Phenanthrene					CAS #: 85-01-8		
22.817	22.817 (2.002)	178	62067	250.000	2.615	70.00- 130.00	100.00(a)
22.810	22.810 (2.001)	176	11788			0.00- 30.00	18.99
22.817	22.817 (2.002)	179	9528			0.00- 30.00	15.35
116 Anthracene					CAS #: 120-12-7		
22.925	22.925 (2.011)	178	38462	250.000	2.436	70.00- 130.00	100.00(a)
22.925	22.925 (2.011)	176	6907			0.00- 30.00	17.96
22.917	22.917 (2.010)	179	6150			0.00- 30.00	15.99
117 Fluoranthene					CAS #: 206-44-0		
26.091	26.091 (2.289)	202	52163	250.000	3.015	70.00- 130.00	100.00(a)
26.091	26.091 (2.289)	101	8210			0.00- 30.00	15.74
118 Pyrene					CAS #: 129-00-0		
26.943	26.943 (2.364)	202	56087	250.000	3.119	70.00- 130.00	100.00(a)
26.936	26.936 (2.363)	101	12486			0.00- 30.00	22.26
26.943	26.943 (2.364)	100	8917			0.00- 45.21	15.90

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: 14-Jul-2016 18:42

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd6.i
Lab File ID: 6071209.d
Lab Smp Id: VI ICAL8 no Surr
Analysis Type: VOA
Quant Type: ISTD
Operator: CT
Method File: /chem/msd6.i/13jul16.b/616z0712vi.m
Misc Info: 2787-1-200ml(10/7/16),no PAHs

Calibration Date: 12-JUL-2016
Calibration Time: 17:31

Level: LOW
Sample Type: AIR

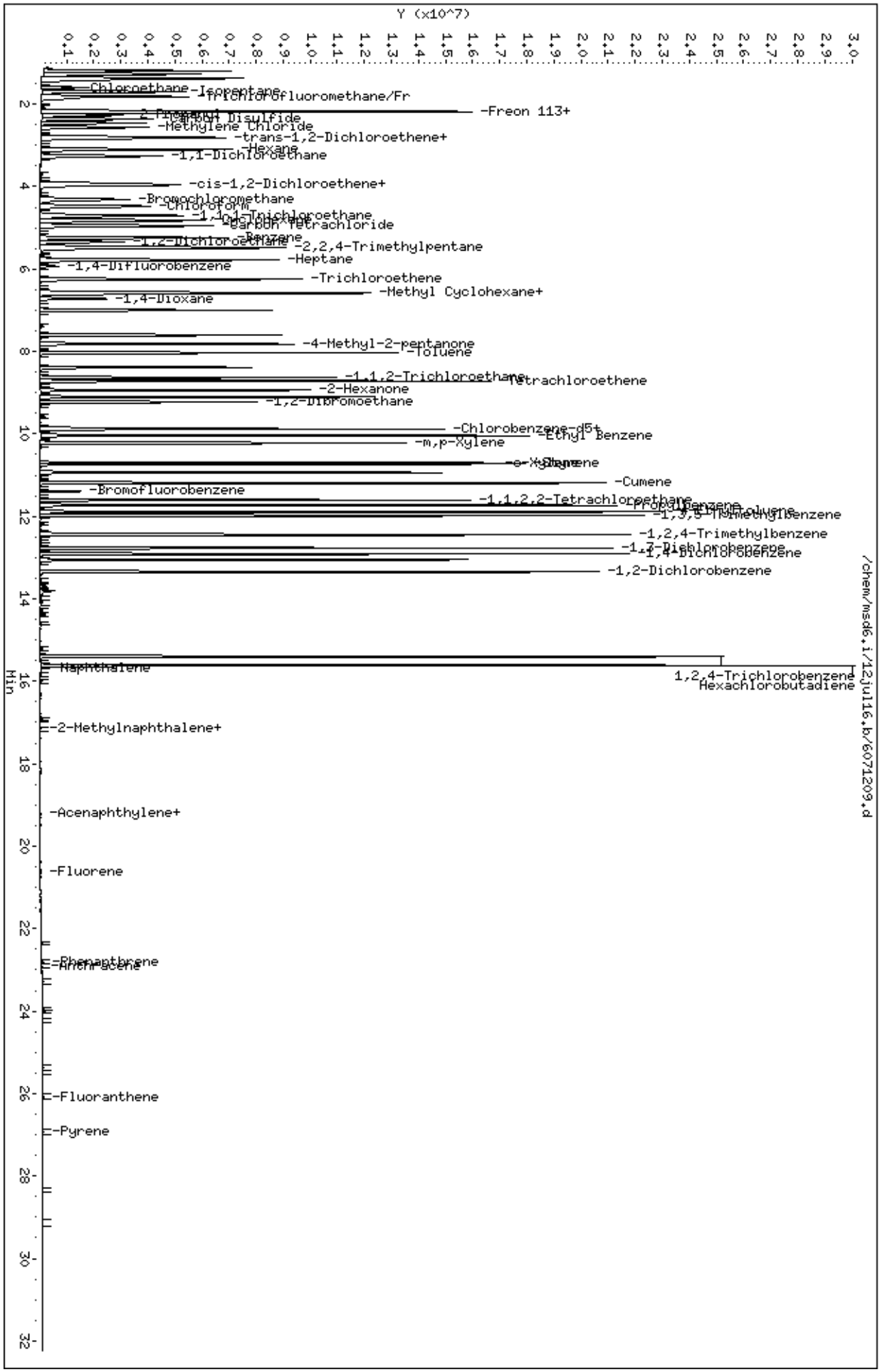
COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
40 Bromochloromethan	180845	108507	253183	184749	2.16
54 1,4-Difluorobenze	751113	450668	1051558	759118	1.07
79 Chlorobenzene-d5	701197	420718	981676	684774	-2.34
92 Bromofluorobenzen	474592	284755	664429	472146	-0.52

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
40 Bromochloromethan	4.29	3.96	4.62	4.29	0.16
54 1,4-Difluorobenze	5.93	5.60	6.26	5.93	0.12
79 Chlorobenzene-d5	9.85	9.52	10.18	9.84	0.00
92 Bromofluorobenzen	11.39	11.06	11.72	11.40	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/msd6.i/12jul16.b/6071209.d
Date : 12-JUL-2016 19:30
Client ID:
Sample Info: ;VI ICAL8 no Surr
Column phase: RTx-624

Instrument: msd6.i
Operator: CT
Column diameter: 0.53



Page 1

Eurofins Air Toxics Inc.
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msd6.i/01apr16.b/616z0331vi.m
Batch File: /chem/msd6.i/01apr16.b
Inst ID: msd6.i

Compound units in ng	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	AVG CONC	STD DEV	MDL	RL	amt spk
109 Naphthalene	1.22	0.96	0.98	1.35	0.91	0.97	1.07	1.09	1.07	0.15	0.45	1.00	1.00
110 2-Methylnaphthalene	1.28	0.99	0.96	0.90	0.89	0.92	0.90	0.91	0.97	0.13	0.40		
111 1-Methylnaphthalene	1.10	0.93	0.96	0.91	0.87	0.92	0.91	0.91	0.94	0.07	0.21		
112 Acenaphthylene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
113 Acenaphthene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
114 Fluorene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
115 Phenanthrene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
116 Anthracene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
117 Fluoranthene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
118 Pyrene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		

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Client Sample ID: CCV
Lab ID#: 1607228B-17A
EPA METHOD TO-17

File Name:	**6072003**	**Date of Extraction: NA**	**Date of Collection: NA**
Dil. Factor:	**1.00**		**Date of Analysis: 7/20/16 11:18 AM**

Compound	**%Recovery**
Naphthalene	99

Air Sample Volume(L): 1.00
Container Type: NA - Not Applicable

Surrogates	**%Recovery**	**Method Limits**
Naphthalene-d8	117	50-150

Eurofins Air Toxics Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: msd6.i Injection Date: 20-JUL-2016 11:18
Lab File ID: 6072003.d Init. Cal. Date(s): 12-JUL-2016 13-JUL-2016
Analysis Type: AIR Init. Cal. Times: 12:55 13:38
Lab Sample ID: VI VOC+PAH CCV Quant Type: ISTD
Method: /chem/msd6.i/20jul16.b/616z0712vi.m

COMPOUND	RRF / AMOUNT	RF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
$ 49 1,2-Dichloroethane-d4	0.11571	0.08504	0.010	26.50952	30.00000	Averaged
$ 66 Toluene-d8	0.43731	0.39560	0.010	9.53658	30.00000	Averaged
$ 108 Naphthalene-d8	1.73525	2.03573	0.010	-17.31632	30.00000	Averaged
3 Freon 114	0.46648	0.49637	0.010	-6.40971	30.00000	Averaged
6 Vinyl Chloride	0.71449	0.82234	0.010	-15.09486	30.00000	Averaged
7 1,3-Butadiene	0.67783	0.79129	0.010	-16.73792	30.00000	Averaged
9 Chloroethane	0.33548	0.35987	0.010	-7.27107	30.00000	Averaged
10 Isopentane	0.52063	0.59048	0.010	-13.41559	30.00000	Averaged
11 Trichlorofluoromethane/Fr11	0.78777	0.86514	0.010	-9.82120	30.00000	Averaged
15 Freon 113	0.49113	0.51689	0.010	-5.24525	30.00000	Averaged
14 1,1-Dichloroethene	0.33461	0.36180	0.010	-8.12625	30.00000	Averaged
18 Carbon Disulfide	2.01870	1.99278	0.010	1.28393	30.00000	Averaged
19 2-Propanol	1.75538	1.59564	0.010	9.10010	30.00000	Averaged
22 Methylene Chloride	0.87967	0.89829	0.010	-2.11633	30.00000	Averaged
25 trans-1,2-Dichloroethene	0.33427	0.34791	0.010	-4.08048	30.00000	Averaged
26 MTBE	1.38619	1.33994	0.010	3.33679	30.00000	Averaged
28 Hexane	0.95857	1.06108	0.010	-10.69429	30.00000	Averaged
29 1,1-Dichloroethane	0.84300	0.94325	0.010	-11.89178	30.00000	Averaged
37 cis-1,2-Dichloroethene	0.35188	0.37070	0.010	-5.34772	30.00000	Averaged
38 2-Butanone	0.38020	0.39504	0.010	-3.90310	30.00000	Averaged
44 Chloroform	0.82955	0.88732	0.010	-6.96423	30.00000	Averaged
46 Cyclohexane	0.15973	0.17245	0.010	-7.96245	30.00000	Averaged
45 1,1,1-Trichloroethane	0.15391	0.15375	0.010	0.10354	30.00000	Averaged
47 Carbon Tetrachloride	0.14666	0.14404	0.010	1.78421	30.00000	Averaged
51 2,2,4-Trimethylpentane	0.48938	0.52155	0.010	-6.57310	30.00000	Averaged
48 Benzene	0.46207	0.43457	0.010	5.95188	30.00000	Averaged
50 1,2-Dichloroethane	0.14343	0.14525	0.010	-1.26561	30.00000	Averaged
53 Heptane	0.11256	0.11694	0.010	-3.89603	30.00000	Averaged
56 Trichloroethene	0.11947	0.12139	0.010	-1.60745	30.00000	Averaged
58 Methyl Cyclohexane	0.20159	0.21077	0.010	-4.55307	30.00000	Averaged
59 1,2-Dichloropropane	0.10879	0.11680	0.010	-7.36548	30.00000	Averaged
60 1,4-Dioxane	0.09056	0.09402	0.010	-3.82122	30.00000	Averaged
65 4-Methyl-2-pentanone	0.10125	0.11390	0.010	-12.49514	30.00000	Averaged
67 Toluene	0.51491	0.53065	0.010	-3.05579	30.00000	Averaged
70 1,1,2-Trichloroethane	0.10733	0.11214	0.010	-4.47913	30.00000	Averaged

Eurofins Air Toxics Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: msd6.i Injection Date: 20-JUL-2016 11:18
Lab File ID: 6072003.d Init. Cal. Date(s): 12-JUL-2016 13-JUL-2016
Analysis Type: AIR Init. Cal. Times: 12:55 13:38
Lab Sample ID: VI VOC+PAH CCV Quant Type: ISTD
Method: /chem/msd6.i/20jul16.b/616z0712vi.m

COMPOUND	RRF / AMOUNT	RF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
71 Tetrachloroethene	0.14655	0.14569	0.010	0.58782	30.00000	Averaged
72 2-Hexanone	0.15182	0.16708	0.010	-10.05430	30.00000	Averaged
74 1,2-Dibromoethane	0.13437	0.14255	0.010	-6.08702	30.00000	Averaged
81 Chlorobenzene	0.34832	0.36158	0.010	-3.80851	30.00000	Averaged
82 Ethyl Benzene	0.18599	0.18508	0.010	0.49219	30.00000	Averaged
84 m,p-Xylene	0.23483	0.23719	0.010	-1.00607	30.00000	Averaged
88 o-Xylene	0.47996	0.53170	0.010	-10.78114	30.00000	Averaged
89 Styrene	0.81383	0.90856	0.010	-11.64081	30.00000	Averaged
91 Cumene	1.29573	1.43564	0.010	-10.79735	30.00000	Averaged
94 1,1,2,2-Tetrachloroethane	0.46282	0.53837	0.010	-16.32372	30.00000	Averaged
96 Propylbenzene	1.52905	1.73832	0.010	-13.68620	30.00000	Averaged
97 4-Ethyltoluene	0.40020	0.43842	0.010	-9.54910	30.00000	Averaged
98 1,3,5-Trimethylbenzene	0.56312	0.61903	0.010	-9.92700	30.00000	Averaged
100 1,2,4-Trimethylbenzene	0.52570	0.57233	0.010	-8.86986	30.00000	Averaged
101 1,3-Dichlorobenzene	0.66276	0.70526	0.010	-6.41279	30.00000	Averaged
102 1,4-Dichlorobenzene	0.65964	0.70654	0.010	-7.11116	30.00000	Averaged
105 1,2-Dichlorobenzene	0.63562	0.68104	0.010	-7.14483	30.00000	Averaged
106 1,2,4-Trichlorobenzene	0.50873	0.50134	0.010	1.45192	30.00000	Averaged
107 Hexachlorobutadiene	0.29255	0.27116	0.010	7.30962	30.00000	Averaged
109 Naphthalene	1.93557	1.92023	0.010	0.79259	30.00000	Averaged
110 2-Methylnaphthalene	1.22599	1.22955	0.010	-0.28979	30.00000	Averaged
111 1-Methylnaphthalene	1.11513	1.12305	0.010	-0.71040	30.00000	Averaged
112 Acenaphthylene	1.79021	1.87020	0.010	-4.46780	30.00000	Averaged
113 Acenaphthene	0.99081	1.04709	0.010	-5.68025	30.00000	Averaged
114 Fluorene	1.04609	1.07609	0.010	-2.86789	30.00000	Averaged
115 Phenanthrene	1.80983	1.83617	0.010	-1.45533	30.00000	Averaged
116 Anthracene	1.20406	1.42264	0.010	-18.15375	30.00000	Averaged
117 Fluoranthene	1.31934	1.54190	0.010	-16.86843	30.00000	Averaged
118 Pyrene	1.37094	1.61561	0.010	-17.84659	30.00000	Averaged

Eurofins Air Toxics Inc.

EPA Method TO-17 GC/MS

Data file : /chem/msd6.i/20jul16.b/6072003.d
Lab Smp Id: VI VOC+PAH CCV Client Smp ID: CCV
Inj Date : 20-JUL-2016 11:18
Operator : CT Inst ID: msd6.i
Smp Info : ;VI VOC+PAH CCV;CCV
Misc Info : 2787-1-20ml(10/7/16),2744-98-50(1/6/17)
Comment :
Method : /chem/msd6.i/20jul16.b/616z0712vi.m
Meth Date : 21-Jul-2016 09:29 U5BT Quant Type: ISTD
Cal Date : 13-JUL-2016 13:38 Cal File: 6071302.d
Als bottle: 1 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		
4.272	4.272 (1.000)	130	167735	26.0000		70.00- 130.00	100.00
4.272	4.272 (1.000)	128	131378			0.00- 30.00	78.32
4.272	4.272 (1.000)	49	236902			0.00- 30.00	141.24
* 54 1,4-Difluorobenzene					CAS #: 540-36-3		
5.920	5.920 (1.000)	114	708066	23.0000		70.00- 130.00	100.00
5.920	5.920 (1.000)	88	110014			0.00- 30.00	15.54
* 79 Chlorobenzene-d5					CAS #: 3114-55-4		
9.838	9.838 (1.000)	117	656580	24.0000		70.00- 130.00	100.00
9.838	9.838 (1.000)	82	345772			0.00- 30.00	52.66
* 92 Bromofluorobenzene					CAS #: 460-00-4		
11.392	11.392 (1.000)	174	432321	36.0000		70.00- 130.00	100.00
11.392	11.392 (1.000)	95	519898			0.00- 30.00	120.26
11.392	11.392 (1.000)	176	419662			0.00- 30.00	97.07
$ 49 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
5.196	5.196 (0.878)	65	65449	25.0000	18.373	70.00- 130.00	100.00

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

$  49 1,2-Dichloroethane-d4 (continued)
  5.196   5.196 (0.878)    67     34929                     0.00-  30.00    53.37
-------------------------------------------------------------------------------
$  66 Toluene-d8                                   CAS #: 2037-26-5
  7.925   7.925 (0.806)    98    270568 25.0000   22.616  70.00- 130.00   100.00
  7.933   7.933 (0.806)    70     29310                     0.00-  30.00    10.83
  7.933   7.933 (0.806)   100    177148                     0.00-  30.00    65.47
-------------------------------------------------------------------------------
$ 108 Naphthalene-d8                               CAS #: 1146-65-2
 15.669  15.669 (1.375)   136    611172 25.0000   29.329  70.00- 130.00   100.00
 15.669  15.669 (1.375)   108     56921                     0.00-  30.00     9.31
-------------------------------------------------------------------------------
    3 Freon 114                                    CAS #: 76-14-2
  1.283   1.283 (0.300)   135    448320 140.000   148.97  70.00- 130.00   100.00
  1.283   1.283 (0.300)   137    142356                     0.00-  30.00    31.75
-------------------------------------------------------------------------------
    6 Vinyl Chloride                               CAS #: 75-01-4
  1.395   1.395 (0.326)    62    271095 51.1000   58.813  70.00- 130.00   100.00
  1.395   1.395 (0.326)    64    101719                     0.00-  30.00    37.52
-------------------------------------------------------------------------------
    7 1,3-Butadiene                                CAS #: 106-99-0
  1.395   1.395 (0.326)    54    225636 44.2000   51.598  70.00- 130.00   100.00
  1.395   1.395 (0.326)    39    389758                     0.00-  30.00   172.74
-------------------------------------------------------------------------------
    9 Chloroethane                                 CAS #: 75-00-3
  1.647   1.647 (0.385)    64    122583 52.8000   56.639  70.00- 130.00   100.00
  1.647   1.647 (0.385)    66     38773                     0.00-  30.00    31.63
  1.647   1.647 (0.385)    49     39505                     0.00-  30.00    32.23
-------------------------------------------------------------------------------
   10 Isopentane                                   CAS #: 78-78-4
  1.689   1.689 (0.395)    57    224753 59.0000   66.915  70.00- 130.00   100.00
  1.689   1.689 (0.395)    43    372180                     0.00-  30.00   165.60
-------------------------------------------------------------------------------
   11 Trichlorofluoromethane/Fr11                  CAS #: 75-69-4
  1.814   1.814 (0.425)   101    625104 112.000   123.00  70.00- 130.00   100.00
  1.814   1.814 (0.425)   103    408150                     0.00-  30.00    65.29
-------------------------------------------------------------------------------
   15 Freon 113                                    CAS #: 76-13-1
  2.166   2.166 (0.507)   151    510202 153.000   161.02  70.00- 130.00   100.00
  2.166   2.166 (0.507)   153    327841                     0.00-  30.00    64.26
  2.166   2.166 (0.507)   101    601529                     0.00-  30.00   117.90
-------------------------------------------------------------------------------
   14 1,1-Dichloroethene                           CAS #: 75-35-4
  2.173   2.173 (0.509)    98    185096 79.3000   85.744  70.00- 130.00   100.00
  2.173   2.173 (0.509)    96    294673                     0.00-  30.00   159.20
  2.173   2.173 (0.509)    61    493680                     0.00-  30.00   266.72
-------------------------------------------------------------------------------
```

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		
2.353	2.353 (0.551)	76	800937	62.3000	61.500	70.00- 130.00	100.00
19 2-Propanol					CAS #: 67-63-0		
2.259	2.259 (0.529)	45	506466	49.2000	44.723	70.00- 130.00	100.00(a)
2.259	2.259 (0.529)	43	105984			0.00- 30.00	20.93
2.259	2.259 (0.529)	59	17205			0.00- 30.00	3.40
22 Methylene Chloride					CAS #: 75-09-2		
2.560	2.560 (0.599)	49	402763	69.5000	70.971	70.00- 130.00	100.00
2.560	2.560 (0.599)	84	263800			0.00- 30.00	65.50
2.553	2.553 (0.598)	51	119483			0.00- 30.00	29.67
25 trans-1,2-Dichloroethene					CAS #: 156-60-5		
2.804	2.804 (0.656)	98	177989	79.3000	82.536	70.00- 130.00	100.00
2.804	2.804 (0.656)	61	426073			0.00- 30.00	239.38
2.804	2.804 (0.656)	96	281725			0.00- 30.00	158.28
26 MTBE					CAS #: 1634-04-4		
2.782	2.782 (0.651)	73	623261	72.1000	69.694	70.00- 130.00	100.00
2.782	2.782 (0.651)	57	153855			0.00- 30.00	24.69
2.782	2.782 (0.651)	41	161533			0.00- 30.00	25.92
28 Hexane					CAS #: 110-54-3		
3.083	3.083 (0.722)	57	482599	70.5000	78.039	70.00- 130.00	100.00
3.083	3.083 (0.722)	43	345920			0.00- 30.00	71.68
3.083	3.083 (0.722)	86	64403			0.00- 30.00	13.35
29 1,1-Dichloroethane					CAS #: 75-34-3		
3.248	3.248 (0.760)	63	492903	81.0000	90.632	70.00- 130.00	100.00
3.248	3.248 (0.760)	65	156083			0.00- 30.00	31.67
37 cis-1,2-Dichloroethene					CAS #: 156-59-2		
3.943	3.943 (0.923)	98	189648	79.3000	83.541	70.00- 130.00	100.00
3.943	3.943 (0.923)	96	295927			0.00- 30.00	156.04
3.943	3.943 (0.923)	61	406367			0.00- 30.00	214.27
38 2-Butanone					CAS #: 78-93-3		
3.900	3.900 (0.913)	72	150365	59.0000	61.303	70.00- 130.00	100.00
3.900	3.900 (0.913)	43	763406			0.00- 30.00	507.70
3.900	3.900 (0.913)	57	57390			0.00- 30.00	38.17
44 Chloroform					CAS #: 67-66-3		
4.451	4.451 (1.042)	83	559276	97.7000	104.50	70.00- 130.00	100.00
4.451	4.451 (1.042)	85	364956			0.00- 30.00	65.26

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO
46 Cyclohexane					CAS #: 110-82-7		
4.802	4.802 (0.811)	84	365259	68.8000	74.278	70.00- 130.00	100.00
4.802	4.802 (0.811)	56	495462			0.00- 30.00	135.65
4.802	4.802 (0.811)	41	309581			0.00- 30.00	84.76
45 1,1,1-Trichloroethane					CAS #: 71-55-6		
4.681	4.681 (0.791)	97	515933	109.000	108.89	70.00- 130.00	100.00
4.681	4.681 (0.791)	99	336491			0.00- 30.00	65.22
47 Carbon Tetrachloride					CAS #: 56-23-5		
4.924	4.924 (0.832)	119	558733	126.000	123.75	70.00- 130.00	100.00
4.931	4.931 (0.833)	117	582643			0.00- 30.00	104.28
51 2,2,4-Trimethylpentane					CAS #: 540-84-1		
5.461	5.461 (0.923)	57	1499637	93.4000	99.539	70.00- 130.00	100.00
5.461	5.461 (0.923)	56	480388			0.00- 30.00	32.03
5.461	5.461 (0.923)	41	455829			0.00- 30.00	30.40
48 Benzene					CAS #: 71-43-2		
5.225	5.225 (0.883)	78	854883	63.9000	60.097	70.00- 130.00	100.00
5.225	5.225 (0.883)	77	198920			0.00- 30.00	23.27
50 1,2-Dichloroethane					CAS #: 107-06-2		
5.311	5.311 (0.897)	62	361749	80.9000	81.924	70.00- 130.00	100.00
5.311	5.311 (0.897)	64	117554			0.00- 30.00	32.50
53 Heptane					CAS #: 142-82-5		
5.762	5.762 (0.973)	71	295210	82.0000	85.195	70.00- 130.00	100.00
5.762	5.762 (0.973)	43	665684			0.00- 30.00	225.50
5.762	5.762 (0.973)	57	301448			0.00- 30.00	102.11
56 Trichloroethene					CAS #: 79-01-6		
6.235	6.235 (1.053)	95	403602	108.000	109.74	70.00- 130.00	100.00
6.235	6.235 (1.053)	130	420056			0.00- 30.00	104.08
6.235	6.235 (1.053)	97	260896			0.00- 30.00	64.64
58 Methyl Cyclohexane					CAS #: 108-87-2		
6.557	6.557 (1.108)	83	521037	80.3000	83.956	70.00- 130.00	100.00
6.557	6.557 (1.108)	98	227831			0.00- 30.00	43.73
6.557	6.557 (1.108)	55	454833			0.00- 30.00	87.29
59 1,2-Dichloropropane					CAS #: 78-87-5		
6.579	6.579 (1.111)	63	332250	92.4000	99.206	70.00- 130.00	100.00
6.586	6.586 (1.113)	62	229565			0.00- 30.00	69.09
6.564	6.564 (1.109)	41	469148			0.00- 30.00	141.20

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		
6.700	6.700 (1.132)	88	208698	72.1000	74.855	70.00- 130.00	100.00
6.700	6.700 (1.132)	58	152661			0.00- 30.00	73.15
6.700	6.700 (1.132)	57	76221			0.00- 30.00	36.52
65 4-Methyl-2-pentanone					CAS #: 108-10-1		
7.796	7.796 (1.317)	58	287191	81.9000	92.134	70.00- 130.00	100.00
7.804	7.804 (1.318)	43	848623			0.00- 30.00	295.49
7.804	7.804 (1.318)	85	119614			0.00- 30.00	41.65
67 Toluene					CAS #: 108-88-3		
8.018	8.018 (0.815)	91	1094593	75.4000	77.704	70.00- 130.00	100.00
8.018	8.018 (0.815)	92	642583			0.00- 30.00	58.71
70 1,1,2-Trichloroethane					CAS #: 79-00-5		
8.620	8.620 (1.456)	97	376284	109.000	113.88	70.00- 130.00	100.00
8.620	8.620 (1.456)	99	234573			0.00- 30.00	62.34
8.620	8.620 (1.456)	83	323291			0.00- 30.00	85.92
71 Tetrachloroethene					CAS #: 127-18-4		
8.706	8.706 (0.885)	166	542046	136.000	135.20	70.00- 130.00	100.00
8.706	8.706 (0.885)	129	414083			0.00- 30.00	76.39
8.706	8.706 (0.885)	131	395965			0.00- 30.00	73.05
72 2-Hexanone					CAS #: 591-78-6		
8.928	8.928 (0.908)	58	374367	81.9000	90.134	70.00- 130.00	100.00
8.928	8.928 (0.908)	43	795247			0.00- 30.00	212.42
8.928	8.928 (0.908)	100	67398			0.00- 30.00	18.00
74 1,2-Dibromoethane					CAS #: 106-93-4		
9.215	9.215 (0.937)	107	600586	154.000	163.37	70.00- 130.00	100.00
9.215	9.215 (0.937)	109	566379			0.00- 30.00	94.30
81 Chlorobenzene					CAS #: 108-90-7		
9.874	9.874 (1.004)	112	911057	92.1000	95.608	70.00- 130.00	100.00
9.874	9.874 (1.004)	114	294401			0.00- 30.00	32.31
9.874	9.874 (1.004)	77	509922			0.00- 30.00	55.97
82 Ethyl Benzene					CAS #: 100-41-4		
10.031	10.031 (1.020)	106	439491	86.8000	86.373	70.00- 130.00	100.00
10.031	10.031 (1.020)	91	1345929			0.00- 30.00	306.25
84 m,p-Xylene					CAS #: 108-38-3		
10.210	10.210 (1.038)	106	563234	86.8000	87.673	70.00- 130.00	100.00
10.210	10.210 (1.038)	91	1103801			0.00- 30.00	195.98

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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
 10.690  10.690 (0.938)   106    554235 86.8000   96.158  70.00- 130.00   100.00
 10.690  10.690 (0.938)    91   1159947                    0.00-  30.00   209.29
-------------------------------------------------------------------------------
   89 Styrene                                         CAS #: 100-42-5
 10.719  10.719 (0.941)   104    929605 85.2000   95.118  70.00- 130.00   100.00
 10.719  10.719 (0.941)    78    449253                    0.00-  30.00    48.33
-------------------------------------------------------------------------------
   91 Cumene                                          CAS #: 98-82-8
 11.185  11.185 (0.982)   105   1694736 98.3000   108.91  70.00- 130.00   100.00
 11.185  11.185 (0.982)   120    450996                    0.00-  30.00    26.61
 11.185  11.185 (0.982)    51    181214                    0.00-  30.00    10.69
-------------------------------------------------------------------------------
   94 1,1,2,2-Tetrachloroethane                       CAS #: 79-34-5
 11.600  11.600 (1.018)    83    885730 137.000   159.36  70.00- 130.00   100.00
 11.600  11.600 (1.018)    85    575994                    0.00-  30.00    65.03
-------------------------------------------------------------------------------
   96 Propylbenzene                                   CAS #: 103-65-1
 11.722  11.722 (1.029)    91   2052042 98.3000   111.75  70.00- 130.00   100.00
 11.722  11.722 (1.029)   120    486218                    0.00-  30.00    23.69
 11.722  11.722 (1.029)   105     76725                    0.00-  30.00     3.74
-------------------------------------------------------------------------------
   97 4-Ethyltoluene                                  CAS #: 622-96-8
 11.887  11.887 (1.043)   120    517540 98.3000   107.69  70.00- 130.00   100.00
 11.887  11.887 (1.043)   105   1707356                    0.00-  30.00   329.90
-------------------------------------------------------------------------------
   98 1,3,5-Trimethylbenzene                          CAS #: 108-67-8
 11.972  11.972 (1.051)   120    730746 98.3000   108.06  70.00- 130.00   100.00
 11.972  11.972 (1.051)   105   1458393                    0.00-  30.00   199.58
-------------------------------------------------------------------------------
  100 1,2,4-Trimethylbenzene                          CAS #: 95-63-6
 12.445  12.445 (1.092)   120    675625 98.3000   107.02  70.00- 130.00   100.00
 12.445  12.445 (1.092)   105   1484169                    0.00-  30.00   219.67
-------------------------------------------------------------------------------
  101 1,3-Dichlorobenzene                             CAS #: 541-73-1
 12.768  12.768 (1.121)   146   1016335 120.000   127.70  70.00- 130.00   100.00
 12.768  12.768 (1.121)   148    652858                    0.00-  30.00    64.24
 12.768  12.768 (1.121)   111    410542                    0.00-  30.00    40.39
-------------------------------------------------------------------------------
  102 1,4-Dichlorobenzene                             CAS #: 106-46-7
 12.904  12.904 (1.133)   146   1018178 120.000   128.53  70.00- 130.00   100.00
 12.904  12.904 (1.133)   148    654724                    0.00-  30.00    64.30
 12.904  12.904 (1.133)   111    396821                    0.00-  30.00    38.97
-------------------------------------------------------------------------------
  105 1,2-Dichlorobenzene                             CAS #: 95-50-1
 13.341  13.341 (1.171)   146    981425 120.000   128.57  70.00- 130.00   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)
 13.341  13.341 (1.171)   148    625729                     0.00-  30.00    63.76
 13.341  13.341 (1.171)   111    410102                     0.00-  30.00    41.79
-------------------------------------------------------------------------------
  106 1,2,4-Trichlorobenzene                        CAS #: 120-82-1
 15.396  15.396 (1.351)   180    891048 148.000   145.85  70.00- 130.00   100.00
 15.396  15.396 (1.351)   182    847174                     0.00-  30.00    95.08
-------------------------------------------------------------------------------
  107 Hexachlorobutadiene                           CAS #: 87-68-3
 15.611  15.611 (1.370)   225    693606 213.000   197.43  70.00- 130.00   100.00
 15.611  15.611 (1.370)   223    434745                     0.00-  30.00    62.68
-------------------------------------------------------------------------------
  109 Naphthalene                                   CAS #: 91-20-3
 15.704  15.704 (1.379)   128   1152992 50.0000   49.604  70.00- 130.00   100.00
 15.704  15.704 (1.379)   127    151134                     0.00-  30.00    13.11
-------------------------------------------------------------------------------
  110 2-Methylnaphthalene                           CAS #: 91-57-6
 17.159  17.159 (1.506)   142    738276 50.0000   50.145  70.00- 130.00   100.00
 17.159  17.159 (1.506)   141    638111                     0.00-  30.00    86.43
 17.159  17.159 (1.506)   115    234199                     0.00-  30.00    31.72
-------------------------------------------------------------------------------
  111 1-Methylnaphthalene                           CAS #: 90-12-0
 17.373  17.373 (1.525)   142    674333 50.0000   50.355  70.00- 130.00   100.00
 17.373  17.373 (1.525)   141    608325                     0.00-  30.00    90.21
 17.373  17.373 (1.525)   115    227218                     0.00-  30.00    33.70
-------------------------------------------------------------------------------
  112 Acenaphthylene                                CAS #: 208-96-8
 19.221  19.221 (1.687)   152   1122952 50.0000   52.234  70.00- 130.00   100.00
 19.221  19.221 (1.687)   151    225034                     0.00-  30.00    20.04
 19.221  19.221 (1.687)   153    147165                     0.00-  30.00    13.11
-------------------------------------------------------------------------------
  113 Acenaphthene                                  CAS #: 83-32-9
 19.487  19.487 (1.710)   154    628722 50.0000   52.840  70.00- 130.00   100.00
 19.487  19.487 (1.710)   152    328682                     0.00-  30.00    52.28
 19.487  19.487 (1.710)   153    687693                     0.00-  30.00   109.38
-------------------------------------------------------------------------------
  114 Fluorene                                      CAS #: 86-73-7
 20.640  20.640 (1.812)   166    646132 50.0000   51.434  70.00- 130.00   100.00
 20.640  20.640 (1.812)   165    612260                     0.00-  30.00    94.76
-------------------------------------------------------------------------------
  115 Phenanthrene                                  CAS #: 85-01-8
 22.817  22.817 (2.003)   178   1102518 50.0000   50.728  70.00- 130.00   100.00
 22.817  22.817 (2.003)   176    211819                     0.00-  30.00    19.21
 22.817  22.817 (2.003)   179    167132                     0.00-  30.00    15.16
-------------------------------------------------------------------------------
  116 Anthracene                                    CAS #: 120-12-7
 22.925  22.925 (2.012)   178    854217 50.0000   59.077  70.00- 130.00   100.00
```

RT	EXP RT	(REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO
116 Anthracene (continued)								
22.918	22.918	(2.012)	176	157786			0.00- 30.00	18.47
22.918	22.918	(2.012)	179	129092			0.00- 30.00	15.11
117 Fluoranthene						CAS #: 206-44-0		
26.084	26.084	(2.290)	202	925826	50.0000	58.434	70.00- 130.00	100.00
26.084	26.084	(2.290)	101	155198			0.00- 30.00	16.76
118 Pyrene						CAS #: 129-00-0		
26.936	26.936	(2.364)	202	970084	50.0000	58.923	70.00- 130.00	100.00
26.936	26.936	(2.364)	101	191760			0.00- 30.00	19.77
26.936	26.936	(2.364)	100	153086			0.00- 45.21	15.78

QC Flag Legend

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

Report Date: 21-Jul-2016 09:29

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd6.i
Lab File ID: 6072003.d
Lab Smp Id: VI VOC+PAH CCV
Analysis Type: VOA
Quant Type: ISTD
Operator: CT
Method File: /chem/msd6.i/20jul16.b/616z0712vi.m
Misc Info: 2787-1-20ml(10/7/16),2744-98-50(1/6/17)

Calibration Date: 20-JUL-2016
Calibration Time: 11:58
Client Smp ID: CCV
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF	
40 Bromochloromethan	23741	14245	33237	167735	606.52	<-
54 1,4-Difluorobenze	96787	58072	135502	708066	631.57	<-
79 Chlorobenzene-d5	88804	53282	124326	656580	639.36	<-
92 Bromofluorobenzen	58103	34862	81344	432321	644.06	<-

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
40 Bromochloromethan	4.47	4.14	4.80	4.27	-4.33
54 1,4-Difluorobenze	6.03	5.70	6.36	5.92	-1.90
79 Chlorobenzene-d5	9.86	9.53	10.19	9.84	-0.22
92 Bromofluorobenzen	11.41	11.08	11.74	11.39	-0.13

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/msd6.i/20jul16.b/6072003.d

Date : 20-JUL-2016 11:18

Client ID: CCV

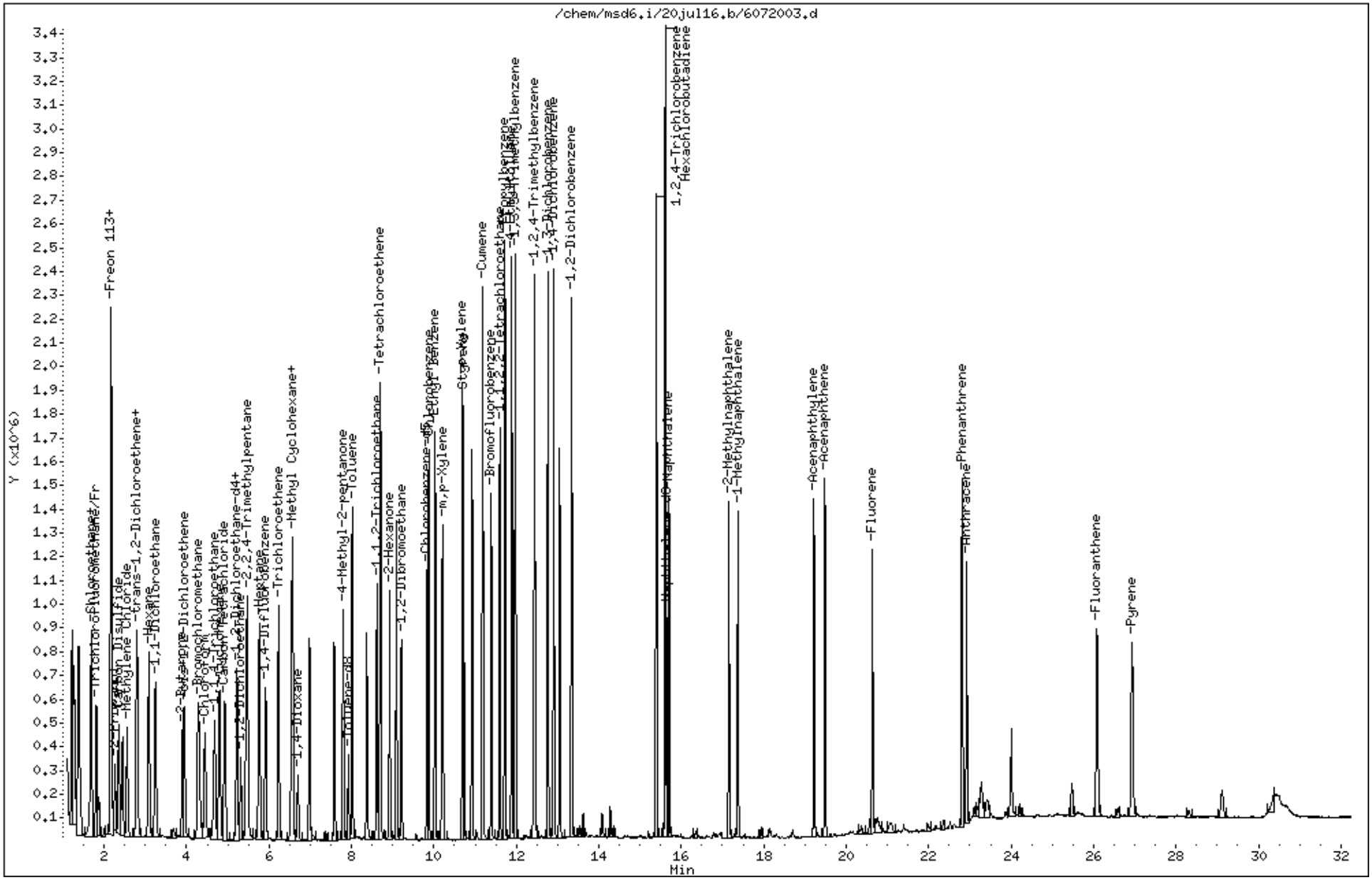
Sample Info: ;VI VOC+PAH CCV;CCV

Column phase: RTx-624

Instrument: msd6.i

Operator: CT

Column diameter: 0.53



eurofins | Air Toxics

Client Sample ID: LCS
Lab ID#: 1607228B-18A
EPA METHOD TO-17

File Name:	**6072005**	**Date of Extraction: NA**	**Date of Collection: NA**
Dil. Factor:	**1.00**		**Date of Analysis: 7/20/16 12:38 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	124	50-150

Report Date: 20-Jul-2016 14:25

Eurofins Air Toxics Inc.

RECOVERY REPORT

Client Name:
Client SDG: 20jul16
Sample Matrix: GAS
Fraction: VOA
Lab Smp Id: VI VOC+PAH LCS
Client Smp ID: LCS
Level: LOW
Operator: CT
Data Type: MS DATA
SampleType: LCS
SpikeList File: VOC+PAHlcs50.spk
Quant Type: ISTD
Sublist File: VOC+PAH_ICAL.sub
Method File: /chem/msd6.i/20jul16.b/616z0712vi.m
Misc Info: 2787-2-20ml(10/7/16), 2744-103-50(1/13/17)

SPIKE COMPOUND	CONC ADDED NG	CONC RECOVERED NG	% RECOVERED	LIMITS
3 Freon 114	139.80	161.12	115.25	70-130
6 Vinyl Chloride	51.100	60.177	117.76	70-130
7 1,3-Butadiene	44.200	48.970	110.79	70-130
9 Chloroethane	52.800	55.664	105.42	70-130
10 Isopentane	59.000	61.341	103.97	70-130
11 Trichlorofluoromet	112.40	119.69	106.48	70-130
14 1,1-Dichloroethene	79.300	78.396	98.86	70-130
15 Freon 113	153.30	155.88	101.68	70-130
18 Carbon Disulfide	62.300	54.545	87.55	70-130
19 2-Propanol	49.200	43.524	88.46	70-130
22 Methylene Chloride	69.500	68.967	99.23	70-130
25 trans-1,2-Dichloro	79.300	70.482	88.88	70-130
26 MTBE	72.100	75.919	105.30	70-130
28 Hexane	70.500	72.786	103.24	70-130
29 1,1-Dichloroethane	81.000	86.984	107.39	70-130
37 cis-1,2-Dichloroet	79.300	93.286	117.64	70-130
38 2-Butanone	59.000	64.860	109.93	70-130
44 Chloroform	97.700	106.45	108.96	70-130
45 1,1,1-Trichloroeth	109.10	123.46	113.16	70-130
46 Cyclohexane	68.800	76.771	111.59	70-130
47 Carbon Tetrachlori	125.80	127.22	101.13	70-130
48 Benzene	63.900	64.412	100.80	70-130
50 1,2-Dichloroethane	80.900	89.878	111.10	70-130
51 2,2,4-Trimethylpen	93.400	104.56	111.95	70-130
53 Heptane	82.000	86.974	106.07	70-130
56 Trichloroethene	107.50	125.27	116.53	70-130
58 Methyl Cyclohexane	80.300	88.664	110.42	70-130
59 1,2-Dichloropropan	92.400	107.05	115.86	70-130
60 1,4-Dioxane	72.100	79.197	109.84	70-130
65 4-Methyl-2-pentano	81.900	87.389	106.70	70-130
67 Toluene	75.400	88.163	116.93	70-130
70 1,1,2-Trichloroeth	109.10	104.29	95.59	70-130
71 Tetrachloroethene	135.70	144.20	106.26	70-130

SPIKE COMPOUND	CONC ADDED NG	CONC RECOVERED NG	% RECOVERED	LIMITS
72 2-Hexanone	81.900	85.008	103.79	70-130
74 1,2-Dibromoethane	153.70	157.27	102.32	70-130
81 Chlorobenzene	92.100	95.968	104.20	70-130
82 Ethyl Benzene	86.800	91.195	105.06	70-130
84 m,p-Xylene	86.800	88.669	102.15	70-130
88 o-Xylene	86.800	85.910	98.98	70-130
89 Styrene	85.200	83.447	97.94	70-130
91 Cumene	98.300	101.27	103.02	70-130
94 1,1,2,2-Tetrachlor	137.30	131.42	95.72	70-130
96 Propylbenzene	98.300	102.50	104.27	70-130
97 4-Ethyltoluene	98.300	102.71	104.49	70-130
98 1,3,5-Trimethylben	98.300	101.01	102.76	70-130
100 1,2,4-Trimethylben	98.300	100.42	102.16	70-130
101 1,3-Dichlorobenzen	120.30	130.46	108.44	70-130
102 1,4-Dichlorobenzen	120.30	131.56	109.36	70-130
105 1,2-Dichlorobenzen	120.30	131.83	109.59	70-130
106 1,2,4-Trichloroben	148.40	170.38	114.81	70-130
107 Hexachlorobutadien	213.30	223.82	104.93	70-130
109 Naphthalene	50.000	54.455	108.91	70-130
110 2-Methylnaphthalen	50.000	63.377	126.75	70-130
111 1-Methylnaphthalen	50.000	63.605	127.21	70-130
112 Acenaphthylene	50.000	67.861	135.72*	70-130
113 Acenaphthene	50.000	54.306	108.61	70-130
114 Fluorene	50.000	39.234	78.47	60-140
115 Phenanthrene	50.000	67.529	135.06	60-140
116 Anthracene	50.000	61.085	122.17	60-140
117 Fluoranthene	50.000	44.537	89.07	60-140
118 Pyrene	50.000	43.569	87.14	60-140

SURROGATE COMPOUND	AMOUNT ADDED ng	AMOUNT RECOVERED ng	% RECOVERED	LIMITS
$ 49 1,2-Dichloroethane	25.000	20.358	81.43	50-150
$ 66 Toluene-d8	25.000	25.643	102.57	50-150
$ 108 Naphthalene-d8	25.000	31.015	124.06	50-150

Eurofins Air Toxics Inc.

EPA Method TO-17 GC/MS

Data file : /chem/msd6.i/20jul16.b/6072005.d
Lab Smp Id: VI VOC+PAH LCS Client Smp ID: LCS
Inj Date : 20-JUL-2016 12:38
Operator : CT Inst ID: msd6.i
Smp Info : ;VI VOC+PAH LCS;LCS
Misc Info : 2787-2-20ml(10/7/16), 2744-103-50(1/13/17)
Comment :
Method : /chem/msd6.i/20jul16.b/616z0712vi.m
Meth Date : 20-Jul-2016 14:23 U5BT Quant Type: ISTD
Cal Date : 13-JUL-2016 13:38 Cal File: 6071302.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		
4.287	4.272 (1.000)	130	174067	26.0000		70.00- 130.00	100.00
4.287	4.272 (1.000)	128	135494			0.00- 30.00	77.84
4.287	4.272 (1.000)	49	257580			0.00- 30.00	147.98
* 54 1,4-Difluorobenzene					CAS #: 540-36-3		
5.920	5.920 (1.000)	114	719483	23.0000		70.00- 130.00	100.00
5.920	5.920 (1.000)	88	112488			0.00- 30.00	15.63
* 79 Chlorobenzene-d5					CAS #: 3114-55-4		
9.859	9.838 (1.000)	117	601187	24.0000		70.00- 130.00	100.00
9.852	9.838 (1.000)	82	309884			0.00- 30.00	51.55
* 92 Bromofluorobenzene					CAS #: 460-00-4		
11.414	11.392 (1.000)	174	387761	36.0000		70.00- 130.00	100.00
11.407	11.392 (1.000)	95	435555			0.00- 30.00	112.33
11.414	11.392 (1.000)	176	381964			0.00- 30.00	98.51
$ 49 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
5.203	5.196 (0.879)	65	73690	20.3578	20.358	70.00- 130.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (ng)	FINAL (NG)	TARGET RANGE	RATIO
$ 49 1,2-Dichloroethane-d4 (continued)							
5.203	5.196 (0.879)	67	38282			0.00- 30.00	51.95
$ 66 Toluene-d8						CAS #: 2037-26-5	
7.940	7.925 (0.805)	98	280903	25.6431	25.643	70.00- 130.00	100.00
7.940	7.933 (0.805)	70	30249			0.00- 30.00	10.77
7.940	7.933 (0.805)	100	184713			0.00- 30.00	65.76
$ 108 Naphthalene-d8						CAS #: 1146-65-2	
15.669	15.669 (1.373)	136	579697	31.0155	31.015	70.00- 130.00	100.00
15.669	15.669 (1.373)	108	51964			0.00- 30.00	8.96
3 Freon 114						CAS #: 76-14-2	
1.283	1.283 (0.299)	135	503190	161.124	161.12	70.00- 130.00	100.00
1.283	1.283 (0.299)	137	161628			0.00- 30.00	32.12
6 Vinyl Chloride						CAS #: 75-01-4	
1.395	1.395 (0.325)	62	287852	60.1772	60.177	70.00- 130.00	100.00
1.395	1.395 (0.325)	64	99857			0.00- 30.00	34.69
7 1,3-Butadiene						CAS #: 106-99-0	
1.395	1.395 (0.325)	54	222228	48.9702	48.970	70.00- 130.00	100.00
1.395	1.395 (0.325)	39	365920			0.00- 30.00	164.66
9 Chloroethane						CAS #: 75-00-3	
1.647	1.647 (0.384)	64	125020	55.6638	55.664	70.00- 130.00	100.00
1.647	1.647 (0.384)	66	37696			0.00- 30.00	30.15
1.647	1.647 (0.384)	49	39033			0.00- 30.00	31.22
10 Isopentane						CAS #: 78-78-4	
1.689	1.689 (0.394)	57	213808	61.3409	61.341	70.00- 130.00	100.00
1.689	1.689 (0.394)	43	342251			0.00- 30.00	160.07
11 Trichlorofluoromethane/Fr11						CAS #: 75-69-4	
1.814	1.814 (0.423)	101	631241	119.689	119.69	70.00- 130.00	100.00
1.814	1.814 (0.423)	103	417250			0.00- 30.00	66.10
15 Freon 113						CAS #: 76-13-1	
2.173	2.166 (0.507)	151	512537	155.878	155.88	70.00- 130.00	100.00
2.173	2.166 (0.507)	153	330799			0.00- 30.00	64.54
2.173	2.166 (0.507)	101	594380			0.00- 30.00	115.97
14 1,1-Dichloroethene						CAS #: 75-35-4	
2.173	2.173 (0.507)	98	175623	78.3964	78.396	70.00- 130.00	100.00
2.173	2.173 (0.507)	96	276615			0.00- 30.00	157.50
2.173	2.173 (0.507)	61	459370			0.00- 30.00	261.56

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (ng)	FINAL (NG)	TARGET RANGE	RATIO
18 Carbon Disulfide					CAS #: 75-15-0		
2.353	2.353 (0.549)	76	737172	54.5448	54.545	70.00- 130.00	100.00
19 2-Propanol					CAS #: 67-63-0		
2.267	2.259 (0.529)	45	511503	43.5245	43.524	70.00- 130.00	100.00(a)
2.267	2.259 (0.529)	43	109830			0.00- 30.00	21.47
2.267	2.259 (0.529)	59	18447			0.00- 30.00	3.61
22 Methylene Chloride					CAS #: 75-09-2		
2.560	2.560 (0.597)	49	406165	68.9668	68.967	70.00- 130.00	100.00
2.560	2.560 (0.597)	84	283626			0.00- 30.00	69.83
2.560	2.553 (0.597)	51	125401			0.00- 30.00	30.87
25 trans-1,2-Dichloroethene					CAS #: 156-60-5		
2.811	2.804 (0.656)	98	157734	70.4826	70.482	70.00- 130.00	100.00
2.811	2.804 (0.656)	61	364082			0.00- 30.00	230.82
2.811	2.804 (0.656)	96	244806			0.00- 30.00	155.20
26 MTBE					CAS #: 1634-04-4		
2.789	2.782 (0.651)	73	704562	75.9194	75.919	70.00- 130.00	100.00
2.789	2.782 (0.651)	57	170817			0.00- 30.00	24.24
2.789	2.782 (0.651)	41	181894			0.00- 30.00	25.82
28 Hexane					CAS #: 110-54-3		
3.090	3.083 (0.721)	57	467101	72.7857	72.786	70.00- 130.00	100.00
3.090	3.083 (0.721)	43	321819			0.00- 30.00	68.90
3.090	3.083 (0.721)	86	62943			0.00- 30.00	13.48
29 1,1-Dichloroethane					CAS #: 75-34-3		
3.255	3.248 (0.759)	63	490919	86.9839	86.984	70.00- 130.00	100.00
3.248	3.248 (0.758)	65	156723			0.00- 30.00	31.92
37 cis-1,2-Dichloroethene					CAS #: 156-59-2		
3.950	3.943 (0.921)	98	219765	93.2859	93.286	70.00- 130.00	100.00
3.950	3.943 (0.921)	96	343937			0.00- 30.00	156.50
3.950	3.943 (0.921)	61	480068			0.00- 30.00	218.45
38 2-Butanone					CAS #: 78-93-3		
3.907	3.900 (0.911)	72	165096	64.8601	64.860	70.00- 130.00	100.00
3.907	3.900 (0.911)	43	840082			0.00- 30.00	508.84
3.907	3.900 (0.911)	57	62368			0.00- 30.00	37.78
44 Chloroform					CAS #: 67-66-3		
4.458	4.451 (1.040)	83	591196	106.450	106.45	70.00- 130.00	100.00
4.458	4.451 (1.040)	85	388878			0.00- 30.00	65.78

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (ng)	FINAL (NG)	TARGET RANGE	RATIO
46 Cyclohexane					CAS #: 110-82-7		
4.809	4.802 (0.812)	84	383603	76.7707	76.771	70.00- 130.00	100.00
4.809	4.802 (0.812)	56	516356			0.00- 30.00	134.61
4.809	4.802 (0.812)	41	326860			0.00- 30.00	85.21
45 1,1,1-Trichloroethane					CAS #: 71-55-6		
4.688	4.681 (0.792)	97	594407	123.458	123.46	70.00- 130.00	100.00
4.695	4.681 (0.793)	99	385410			0.00- 30.00	64.84
47 Carbon Tetrachloride					CAS #: 56-23-5		
4.938	4.924 (0.834)	119	583642	127.218	127.22	70.00- 130.00	100.00
4.938	4.931 (0.834)	117	606512			0.00- 30.00	103.92
51 2,2,4-Trimethylpentane					CAS #: 540-84-1		
5.476	5.461 (0.925)	57	1600717	104.563	104.56	70.00- 130.00	100.00
5.476	5.461 (0.925)	56	506131			0.00- 30.00	31.62
5.468	5.461 (0.924)	41	487086			0.00- 30.00	30.43
48 Benzene					CAS #: 71-43-2		
5.232	5.225 (0.884)	78	931045	64.4122	64.412	70.00- 130.00	100.00
5.232	5.225 (0.884)	77	218587			0.00- 30.00	23.48
50 1,2-Dichloroethane					CAS #: 107-06-2		
5.325	5.311 (0.900)	62	403273	89.8784	89.878	70.00- 130.00	100.00
5.325	5.311 (0.900)	64	130270			0.00- 30.00	32.30
53 Heptane					CAS #: 142-82-5		
5.769	5.762 (0.975)	71	306235	86.9741	86.974	70.00- 130.00	100.00
5.769	5.762 (0.975)	43	701475			0.00- 30.00	229.06
5.769	5.762 (0.975)	57	314908			0.00- 30.00	102.83
56 Trichloroethene					CAS #: 79-01-6		
6.235	6.235 (1.053)	95	468169	125.271	125.27	70.00- 130.00	100.00
6.235	6.235 (1.053)	130	477953			0.00- 30.00	102.09
6.235	6.235 (1.053)	97	303962			0.00- 30.00	64.93
58 Methyl Cyclohexane					CAS #: 108-87-2		
6.557	6.557 (1.108)	83	559128	88.6642	88.664	70.00- 130.00	100.00
6.557	6.557 (1.108)	98	245370			0.00- 30.00	43.88
6.557	6.557 (1.108)	55	498620			0.00- 30.00	89.18
59 1,2-Dichloropropane					CAS #: 78-87-5		
6.586	6.579 (1.113)	63	364311	107.053	107.05	70.00- 130.00	100.00
6.586	6.586 (1.113)	62	252045			0.00- 30.00	69.18
6.572	6.564 (1.110)	41	524893			0.00- 30.00	144.08

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (ng)	FINAL (NG)	TARGET RANGE	RATIO
60 1,4-Dioxane					CAS #: 123-91-1		
6.708	6.700 (1.133)	88	224364	79.1971	79.197	70.00- 130.00	100.00
6.700	6.700 (1.132)	58	164417			0.00- 30.00	73.28
6.708	6.700 (1.133)	57	80398			0.00- 30.00	35.83
65 4-Methyl-2-pentanone					CAS #: 108-10-1		
7.811	7.796 (1.319)	58	276795	87.3893	87.389	70.00- 130.00	100.00
7.811	7.804 (1.319)	43	779760			0.00- 30.00	281.71
7.811	7.804 (1.319)	85	122167			0.00- 30.00	44.14
67 Toluene					CAS #: 108-88-3		
8.033	8.018 (0.815)	91	1137155	88.1635	88.163	70.00- 130.00	100.00
8.033	8.018 (0.815)	92	667026			0.00- 30.00	58.66
70 1,1,2-Trichloroethane					CAS #: 79-00-5		
8.634	8.620 (1.459)	97	350137	104.287	104.29	70.00- 130.00	100.00
8.634	8.620 (1.459)	99	220064			0.00- 30.00	62.85
8.634	8.620 (1.459)	83	292515			0.00- 30.00	83.54
71 Tetrachloroethene					CAS #: 127-18-4		
8.720	8.706 (0.884)	166	529334	144.195	144.20	70.00- 130.00	100.00
8.720	8.706 (0.884)	129	389777			0.00- 30.00	73.64
8.720	8.706 (0.884)	131	382201			0.00- 30.00	72.20
72 2-Hexanone					CAS #: 591-78-6		
8.950	8.928 (0.908)	58	323287	85.0080	85.008	70.00- 130.00	100.00
8.950	8.928 (0.908)	43	638217			0.00- 30.00	197.41
8.950	8.928 (0.908)	100	64531			0.00- 30.00	19.96
74 1,2-Dibromoethane					CAS #: 106-93-4		
9.229	9.215 (0.936)	107	529376	157.272	157.27	70.00- 130.00	100.00
9.229	9.215 (0.936)	109	501857			0.00- 30.00	94.80
81 Chlorobenzene					CAS #: 108-90-7		
9.895	9.874 (1.004)	112	837343	95.9685	95.968	70.00- 130.00	100.00
9.895	9.874 (1.004)	114	270479			0.00- 30.00	32.30
9.895	9.874 (1.004)	77	448811			0.00- 30.00	53.60
82 Ethyl Benzene					CAS #: 100-41-4		
10.053	10.031 (1.020)	106	424878	91.1946	91.195	70.00- 130.00	100.00
10.053	10.031 (1.020)	91	1304543			0.00- 30.00	307.04
84 m,p-Xylene					CAS #: 108-38-3		
10.232	10.210 (1.038)	106	521575	88.6693	88.669	70.00- 130.00	100.00
10.232	10.210 (1.038)	91	1015529			0.00- 30.00	194.70

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

   88 o-Xylene                                        CAS #: 95-47-6
 10.712  10.690 (0.938)   106    444132 85.9104   85.910  70.00- 130.00   100.00
 10.712  10.690 (0.938)    91    927461                    0.00-  30.00   208.83
-------------------------------------------------------------------------------
   89 Styrene                                         CAS #: 100-42-5
 10.740  10.719 (0.941)   104    731486 83.4473   83.447  70.00- 130.00   100.00
 10.740  10.719 (0.941)    78    347487                    0.00-  30.00    47.50
-------------------------------------------------------------------------------
   91 Cumene                                          CAS #: 98-82-8
 11.206  11.185 (0.982)   105   1413337 101.267   101.27  70.00- 130.00   100.00
 11.206  11.185 (0.982)   120    380612                    0.00-  30.00    26.93
 11.199  11.185 (0.981)    51    131934                    0.00-  30.00     9.33
-------------------------------------------------------------------------------
   94 1,1,2,2-Tetrachloroethane                       CAS #: 79-34-5
 11.621  11.600 (1.018)    83    655129 131.419   131.42  70.00- 130.00   100.00
 11.621  11.600 (1.018)    85    425002                    0.00-  30.00    64.87
-------------------------------------------------------------------------------
   96 Propylbenzene                                   CAS #: 103-65-1
 11.743  11.722 (1.029)    91   1688072 102.496   102.50  70.00- 130.00   100.00
 11.743  11.722 (1.029)   120    408946                    0.00-  30.00    24.23
 11.743  11.722 (1.029)   105     66810                    0.00-  30.00     3.96
-------------------------------------------------------------------------------
   97 4-Ethyltoluene                                  CAS #: 622-96-8
 11.908  11.887 (1.043)   120    442753 102.712   102.71  70.00- 130.00   100.00
 11.908  11.887 (1.043)   105   1459921                    0.00-  30.00   329.74
-------------------------------------------------------------------------------
   98 1,3,5-Trimethylbenzene                          CAS #: 108-67-8
 11.994  11.972 (1.051)   120    612703 101.014   101.01  70.00- 130.00   100.00
 11.994  11.972 (1.051)   105   1233465                    0.00-  30.00   201.32
-------------------------------------------------------------------------------
  100 1,2,4-Trimethylbenzene                          CAS #: 95-63-6
 12.452  12.445 (1.091)   120    568630 100.422   100.42  70.00- 130.00   100.00
 12.452  12.445 (1.091)   105   1252868                    0.00-  30.00   220.33
-------------------------------------------------------------------------------
  101 1,3-Dichlorobenzene                             CAS #: 541-73-1
 12.782  12.768 (1.120)   146    931287 130.456   130.46  70.00- 130.00   100.00
 12.782  12.768 (1.120)   148    598576                    0.00-  30.00    64.27
 12.782  12.768 (1.120)   111    361533                    0.00-  30.00    38.82
-------------------------------------------------------------------------------
  102 1,4-Dichlorobenzene                             CAS #: 106-46-7
 12.918  12.904 (1.132)   146    934769 131.565   131.56  70.00- 130.00   100.00
 12.918  12.904 (1.132)   148    598184                    0.00-  30.00    63.99
 12.918  12.904 (1.132)   111    347209                    0.00-  30.00    37.14
-------------------------------------------------------------------------------
  105 1,2-Dichlorobenzene                             CAS #: 95-50-1
 13.348  13.341 (1.169)   146    902570 131.831   131.83  70.00- 130.00   100.00
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                                        CONCENTRATIONS
                                        ON-COL    FINAL
   RT   EXP RT (REL RT)  MASS  RESPONSE (   ng)  (   NG)   TARGET RANGE    RATIO
   ==   ====== ========  ====  ======== =======  =======   ============    =====

  105 1,2-Dichlorobenzene (continued)
 13.348  13.341 (1.169)   148    577745                     0.00-  30.00    64.01
 13.348  13.341 (1.169)   111    362230                     0.00-  30.00    40.13
-------------------------------------------------------------------------------
  106 1,2,4-Trichlorobenzene                        CAS #: 120-82-1
 15.396  15.396 (1.349)   180    933617 170.380   170.38  70.00- 130.00   100.00
 15.396  15.396 (1.349)   182    884284                     0.00-  30.00    94.72
-------------------------------------------------------------------------------
  107 Hexachlorobutadiene                           CAS #: 87-68-3
 15.618  15.611 (1.368)   225    705258 223.816   223.82  70.00- 130.00   100.00
 15.618  15.611 (1.368)   223    438615                     0.00-  30.00    62.19
-------------------------------------------------------------------------------
  109 Naphthalene                                   CAS #: 91-20-3
 15.704  15.704 (1.376)   128   1135301 54.4554   54.455  70.00- 130.00   100.00
 15.704  15.704 (1.376)   127    149520                     0.00-  30.00    13.17
-------------------------------------------------------------------------------
  110 2-Methylnaphthalene                           CAS #: 91-57-6
 17.159  17.159 (1.503)   142    836912 63.3768   63.377  70.00- 130.00   100.00
 17.159  17.159 (1.503)   141    721443                     0.00-  30.00    86.20
 17.159  17.159 (1.503)   115    254373                     0.00-  30.00    30.39
-------------------------------------------------------------------------------
  111 1-Methylnaphthalene                           CAS #: 90-12-0
 17.373  17.373 (1.522)   142    763978 63.6052   63.605  70.00- 130.00   100.00
 17.373  17.373 (1.522)   141    687481                     0.00-  30.00    89.99
 17.373  17.373 (1.522)   115    245833                     0.00-  30.00    32.18
-------------------------------------------------------------------------------
  112 Acenaphthylene                                CAS #: 208-96-8
 19.221  19.221 (1.684)   152   1308532 67.8606   67.861  70.00- 130.00   100.00(R)
 19.221  19.221 (1.684)   151    263929                     0.00-  30.00    20.17
 19.221  19.221 (1.684)   153    170003                     0.00-  30.00    12.99
-------------------------------------------------------------------------------
  113 Acenaphthene                                  CAS #: 83-32-9
 19.486  19.487 (1.707)   154    579559 54.3057   54.306  70.00- 130.00   100.00
 19.486  19.487 (1.707)   152    307409                     0.00-  30.00    53.04
 19.486  19.487 (1.707)   153    638195                     0.00-  30.00   110.12
-------------------------------------------------------------------------------
  114 Fluorene                                      CAS #: 86-73-7
 20.633  20.640 (1.808)   166    442072 39.2342   39.234  70.00- 130.00   100.00(M)
 20.754  20.640 (1.818)   165       831                     0.00-  30.00     0.19
-------------------------------------------------------------------------------
  115 Phenanthrene                                  CAS #: 85-01-8
 22.810  22.817 (1.998)   178   1316398 67.5287   67.529  70.00- 130.00   100.00
 22.810  22.817 (1.998)   176    251485                     0.00-  30.00    19.10
 22.810  22.817 (1.998)   179    201734                     0.00-  30.00    15.32
-------------------------------------------------------------------------------
  116 Anthracene                                    CAS #: 120-12-7
 22.918  22.925 (2.008)   178    792214 61.0849   61.085  70.00- 130.00   100.00(M)
```

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (ng)	FINAL (NG)	TARGET RANGE	RATIO
116 Anthracene (continued)							
22.989	22.918 (2.014)	176	574			0.00- 30.00	0.07
23.054	22.918 (2.020)	179	167			0.00- 30.00	0.02
117 Fluoranthene					CAS #: 206-44-0		
26.076	26.084 (2.285)	202	632904	44.5367	44.537	70.00- 130.00	100.00
26.076	26.084 (2.285)	101	106400			0.00- 30.00	16.81
118 Pyrene					CAS #: 129-00-0		
26.929	26.936 (2.359)	202	643360	43.5686	43.569	70.00- 130.00	100.00
26.929	26.936 (2.359)	101	124825			0.00- 30.00	19.40
26.922	26.936 (2.359)	100	97018			0.00- 45.21	15.08

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).
R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.

Report Date: 20-Jul-2016 14:25

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd6.i
Lab File ID: 6072005.d
Lab Smp Id: VI VOC+PAH LCS
Analysis Type: VOA
Quant Type: ISTD
Operator: CT
Method File: /chem/msd6.i/20jul16.b/616z0712vi.m
Misc Info: 2787-2-20ml(10/7/16), 2744-103-50(1/13/17)

Calibration Date: 20-JUL-2016
Calibration Time: 11:18
Client Smp ID: LCS
Level: LOW
Sample Type: AIR

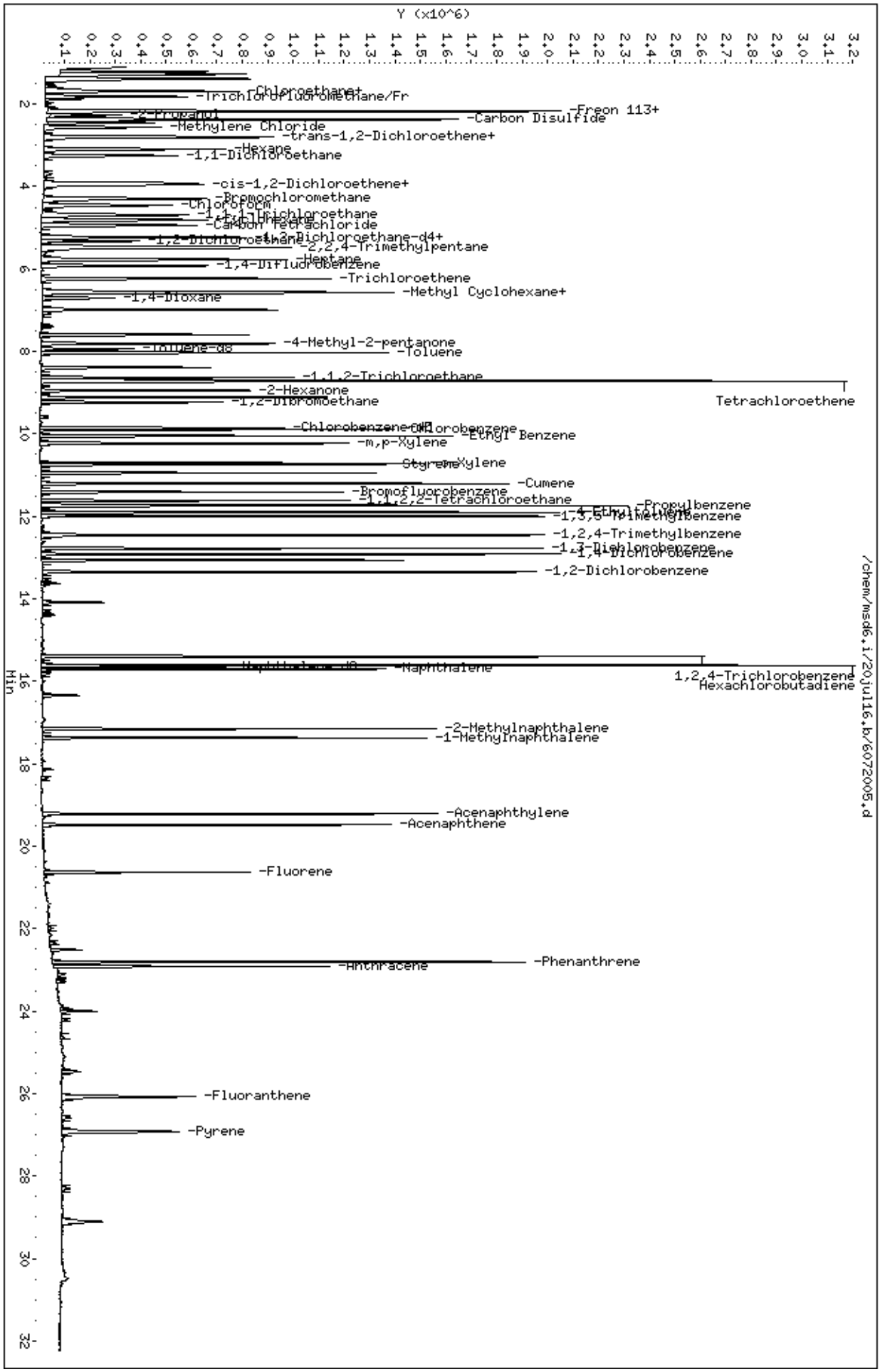
COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
40 Bromochloromethan	167735	100641	234829	174067	3.78
54 1,4-Difluorobenze	708066	424840	991292	719483	1.61
79 Chlorobenzene-d5	656580	393948	919212	601187	-8.44
92 Bromofluorobenzen	432321	259393	605249	387761	-10.31

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
40 Bromochloromethan	4.27	3.94	4.60	4.29	0.33
54 1,4-Difluorobenze	5.92	5.59	6.25	5.92	0.00
79 Chlorobenzene-d5	9.84	9.51	10.17	9.86	0.22
92 Bromofluorobenzen	11.39	11.06	11.72	11.41	0.19

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/msd6.i/20jul16.b/6072005.d
Date : 20-JUL-2016 12:38
Client ID: LCS
Sample Info: ;VI VOC+PAH LCS;LCS
Column phase: RTx-624

Instrument: msd6.i
Operator: CT
Column diameter: 0.53



Data File: /chem/msd6.i/20jul16.b/6072005.d

Date : 20-JUL-2016 12:38

Client ID: LCS

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCS;LCS

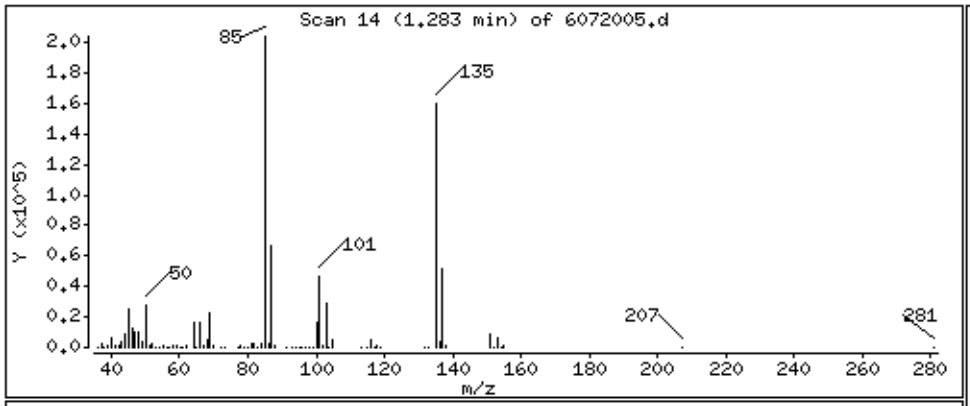
Operator: CT

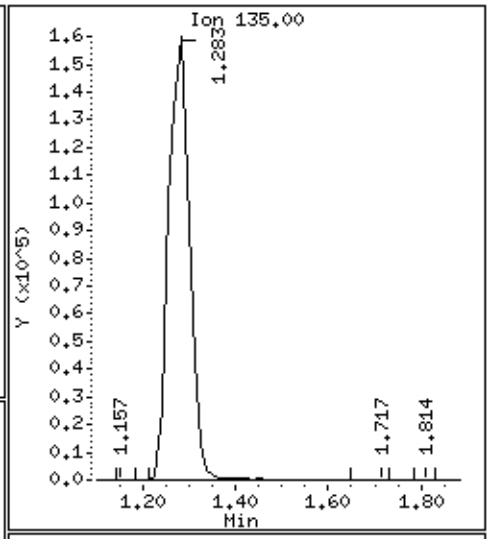
Column phase: RTx-624

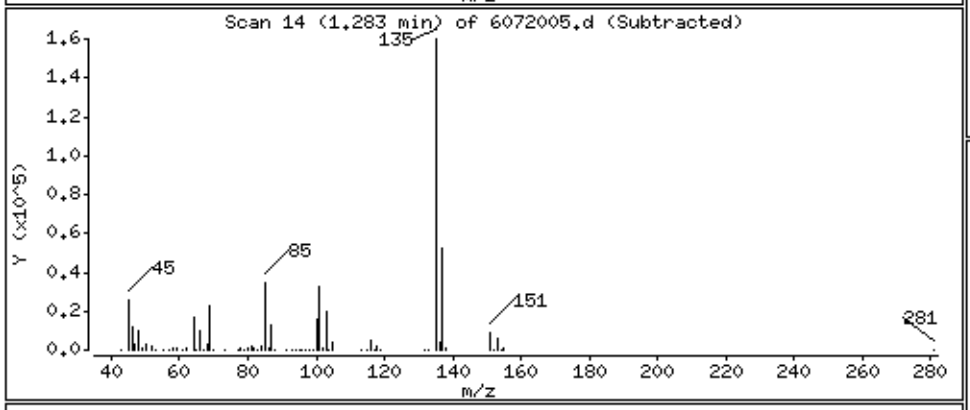
Column diameter: 0.53

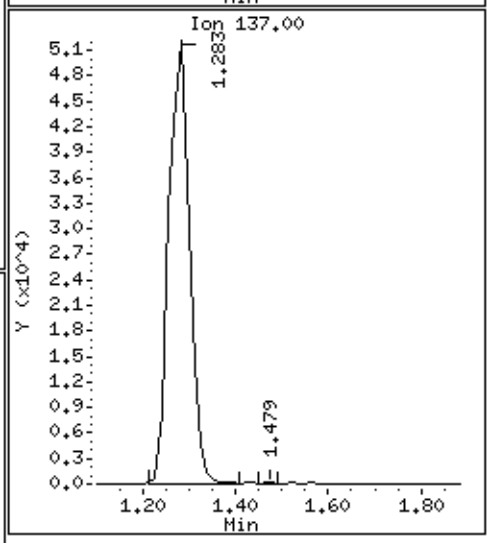
3 Freon 114

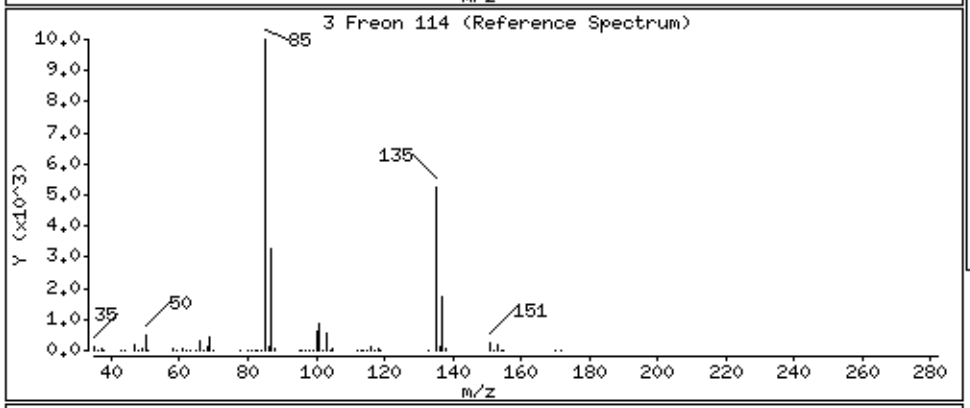
Concentration: 161.12 NG

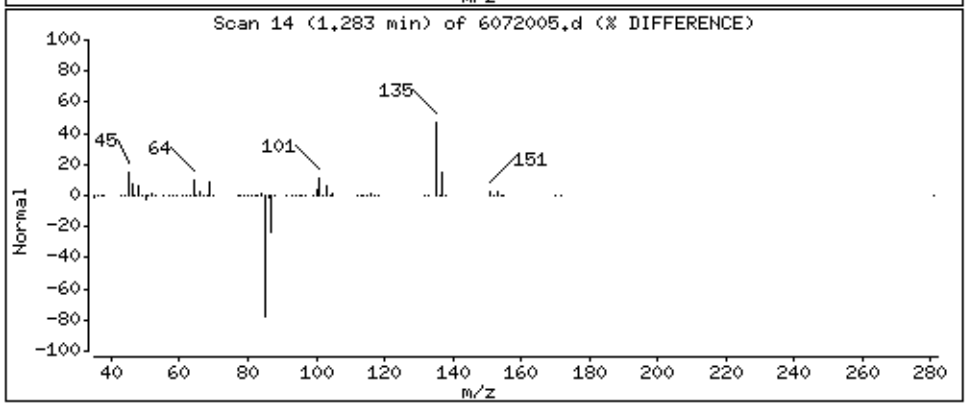












Data File: /chem/msd6.i/20jul16.b/6072005.d

Date : 20-JUL-2016 12:38

Client ID: LCS

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCS;LCS

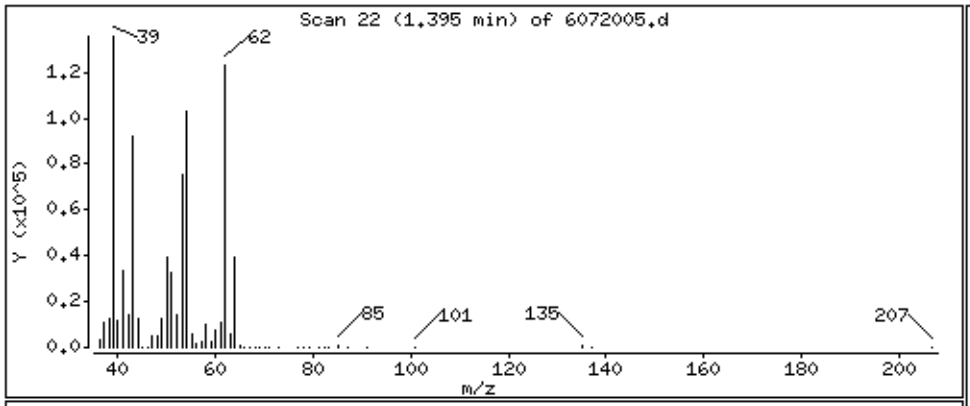
Operator: CT

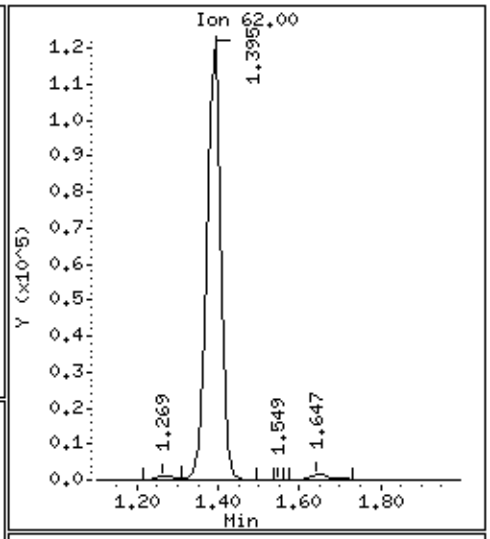
Column phase: RTx-624

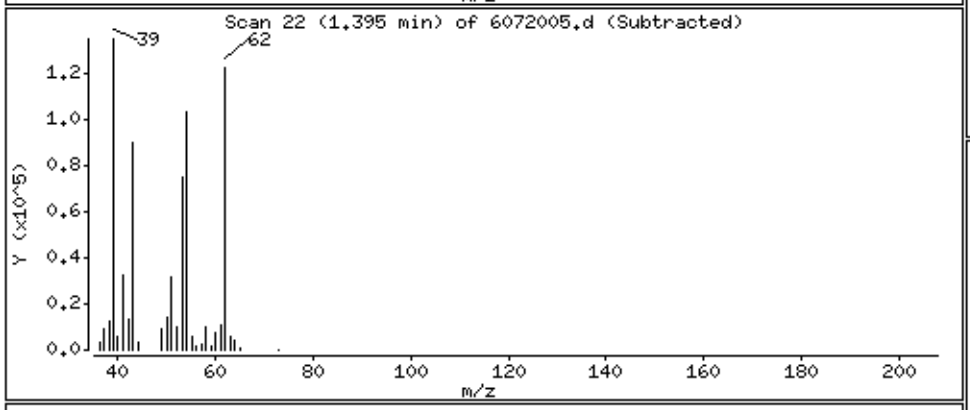
Column diameter: 0.53

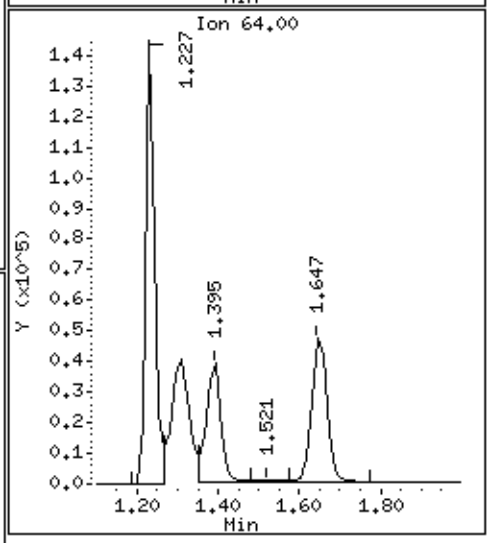
6 Vinyl Chloride

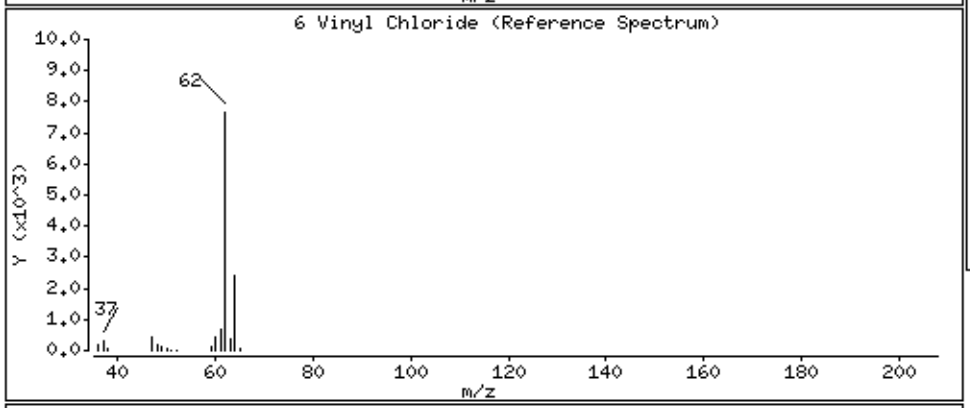
Concentration: 60.177 NG

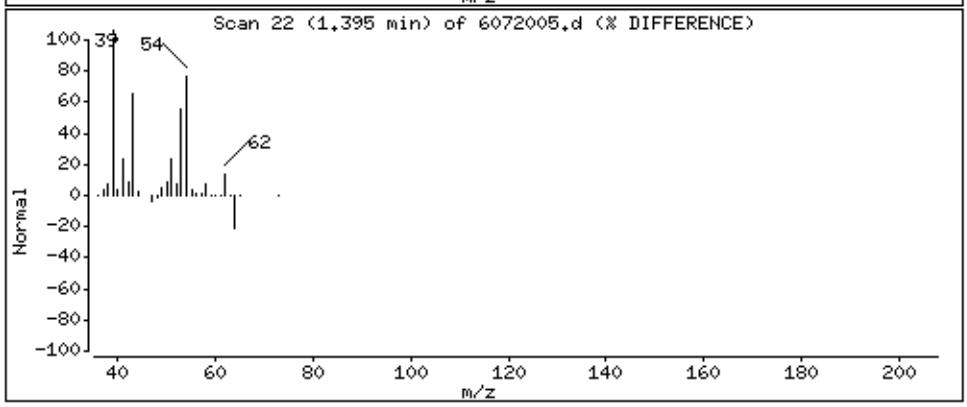












Data File: /chem/msd6.i/20jul16.b/6072005.d

Date : 20-JUL-2016 12:38

Client ID: LCS

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCS;LCS

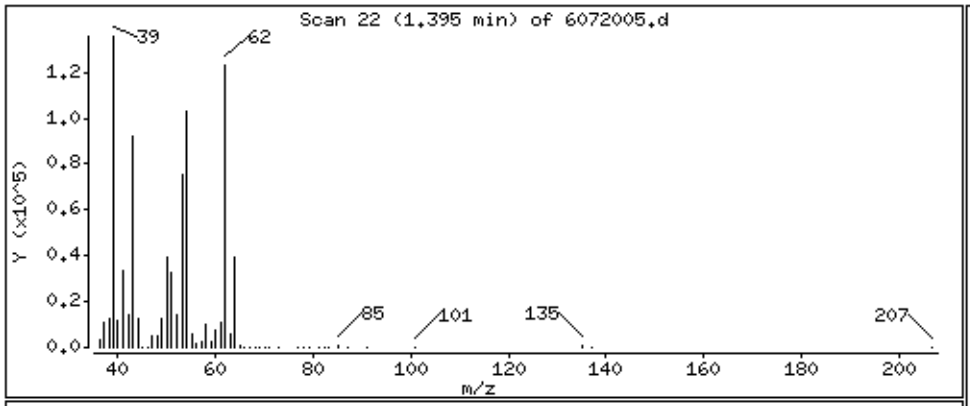
Operator: CT

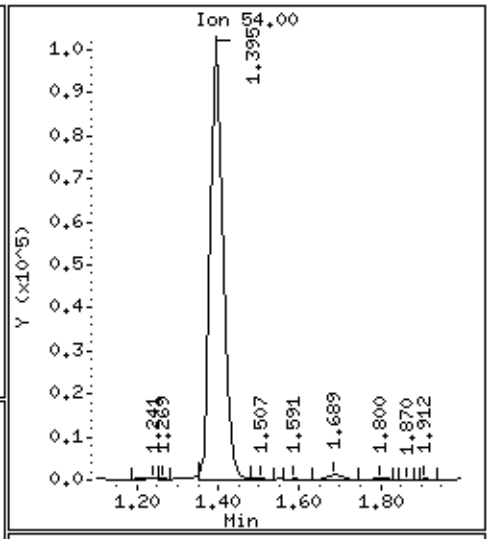
Column phase: RTx-624

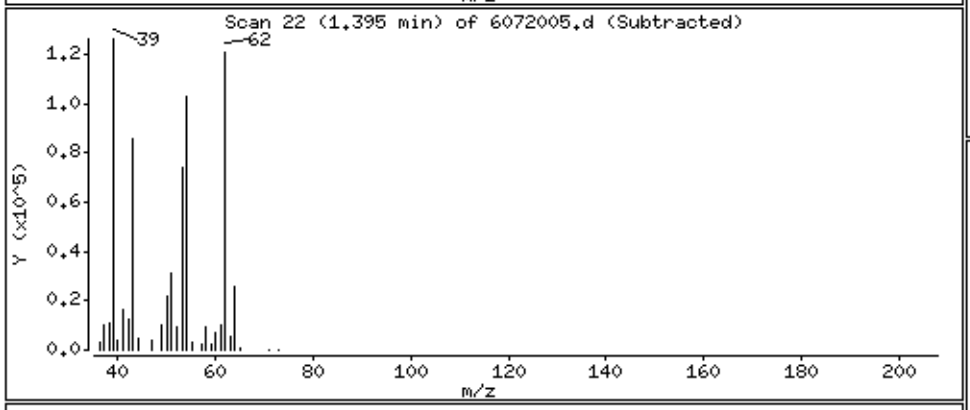
Column diameter: 0.53

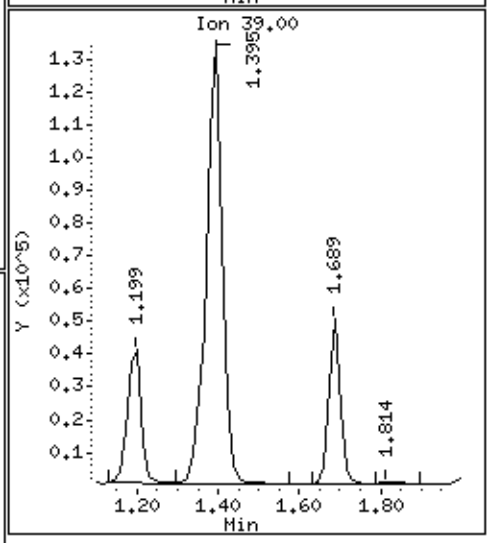
7 1,3-Butadiene

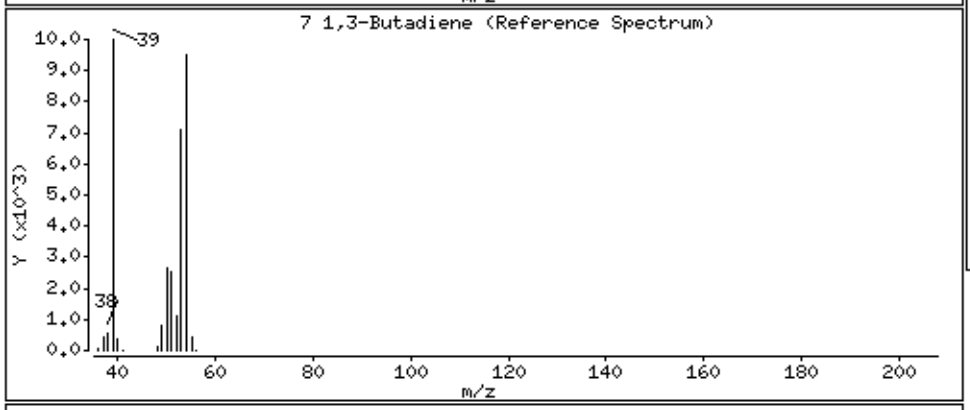
Concentration: 48.970 NG

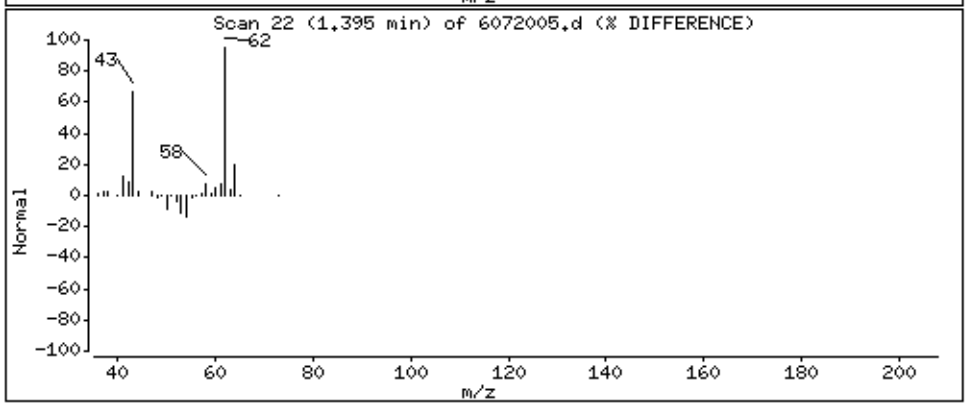












Data File: /chem/msd6.i/20jul16.b/6072005.d

Date : 20-JUL-2016 12:38

Client ID: LCS

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCS;LCS

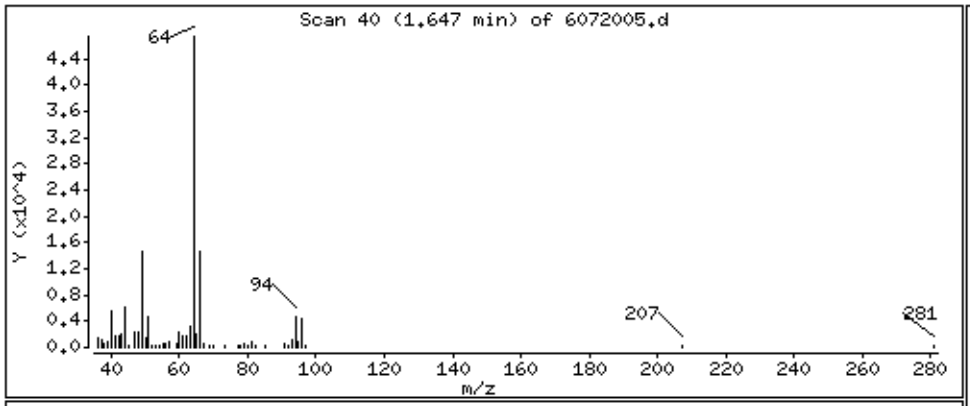
Operator: CT

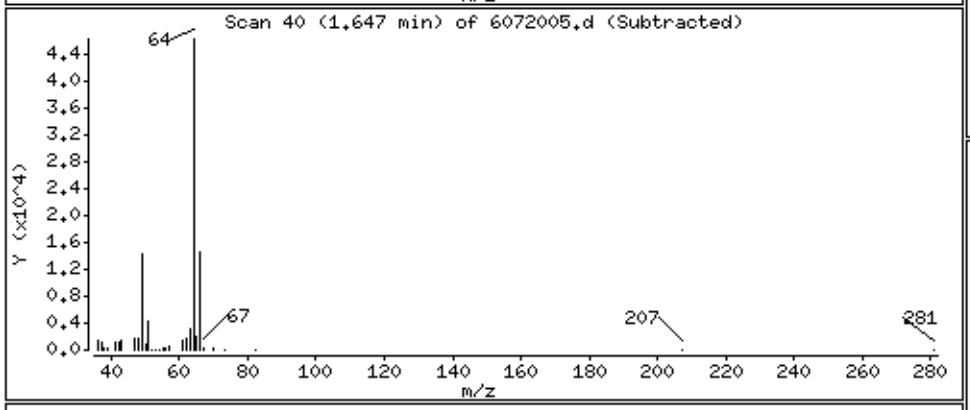
Column phase: RTx-624

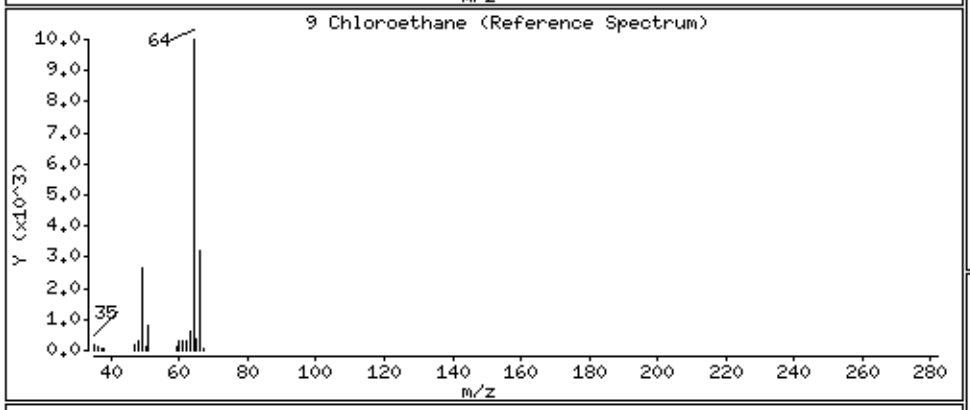
Column diameter: 0.53

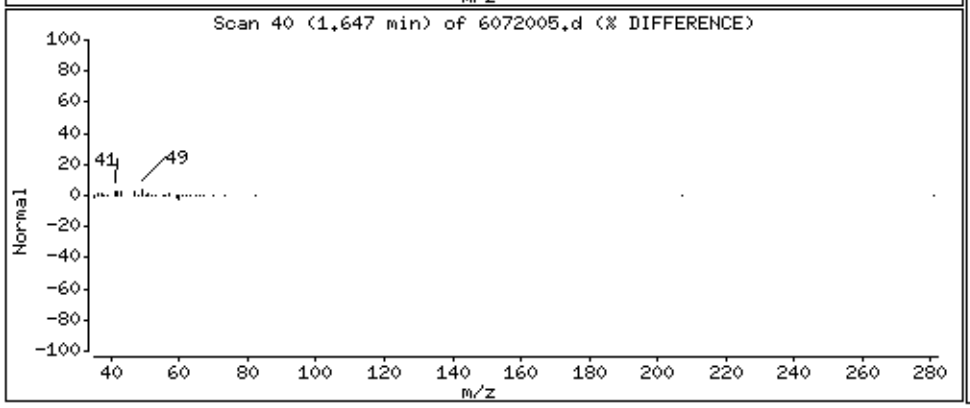
9 Chloroethane

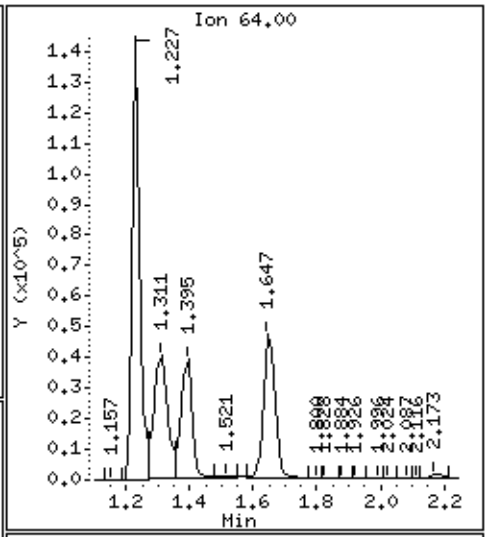
Concentration: 55.664 NG

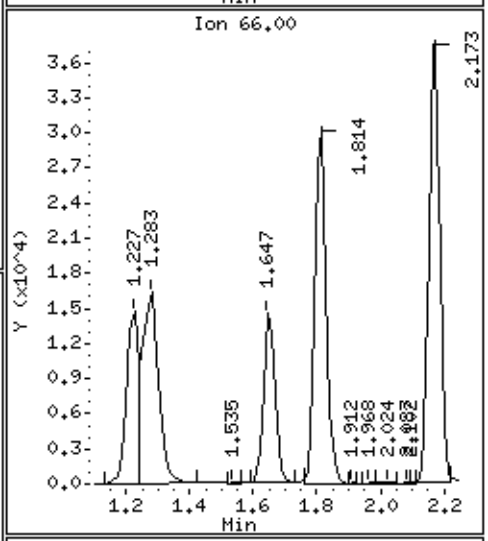


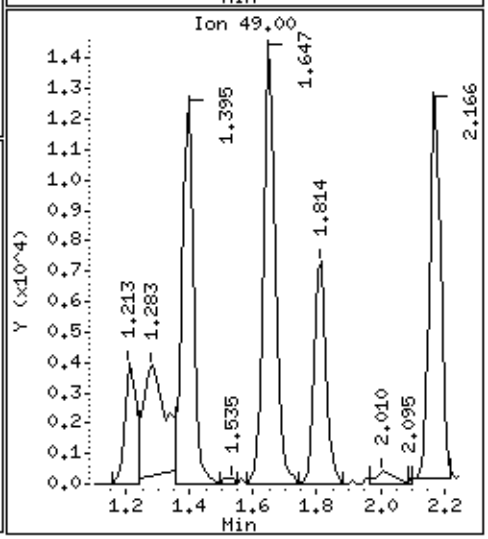












Data File: /chem/msd6.i/20jul16.b/6072005.d

Date : 20-JUL-2016 12:38

Client ID: LCS

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCS;LCS

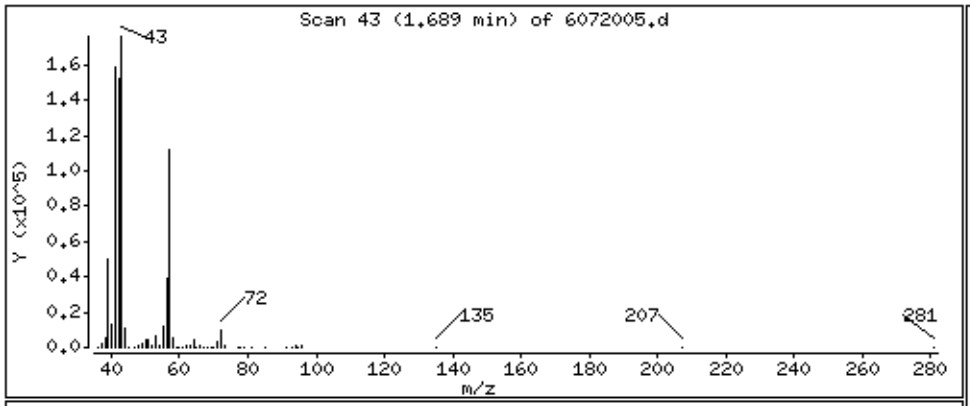
Operator: CT

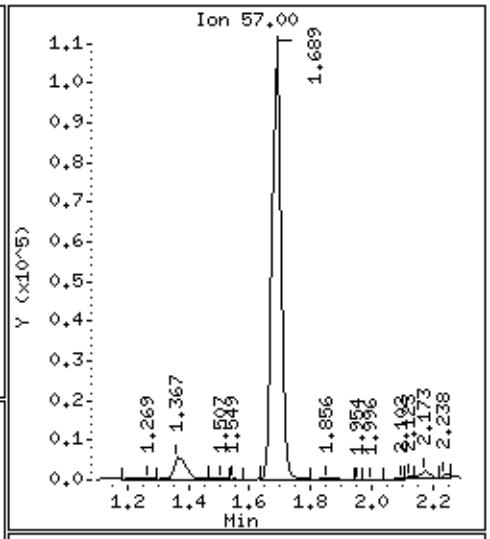
Column phase: RTx-624

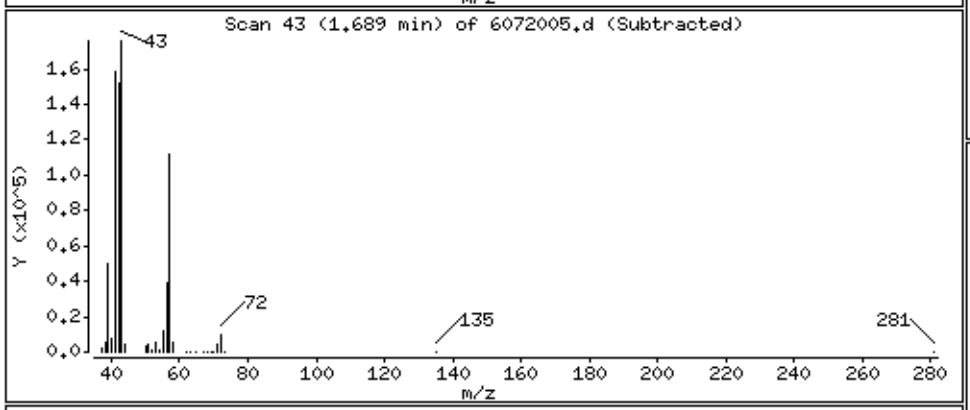
Column diameter: 0.53

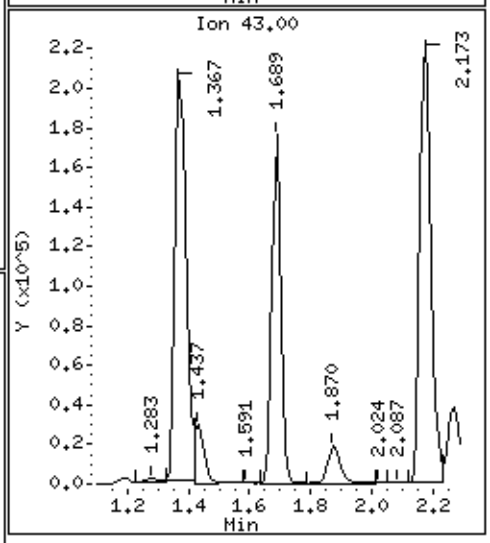
10 Isopentane

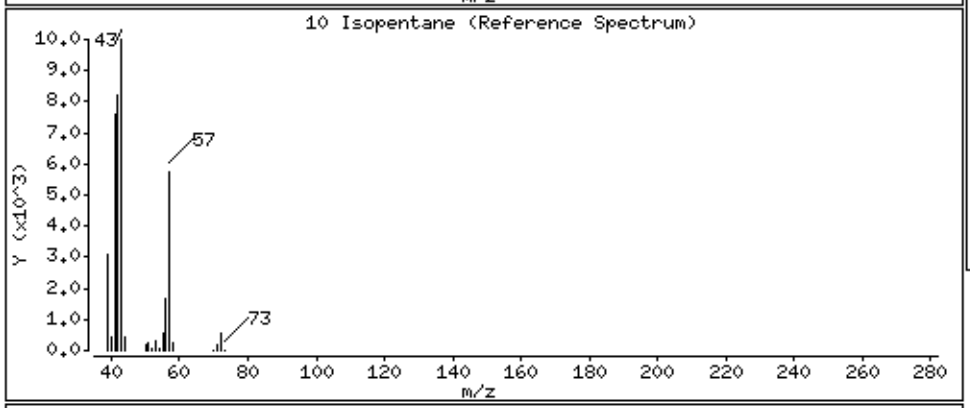
Concentration: 61.341 NG

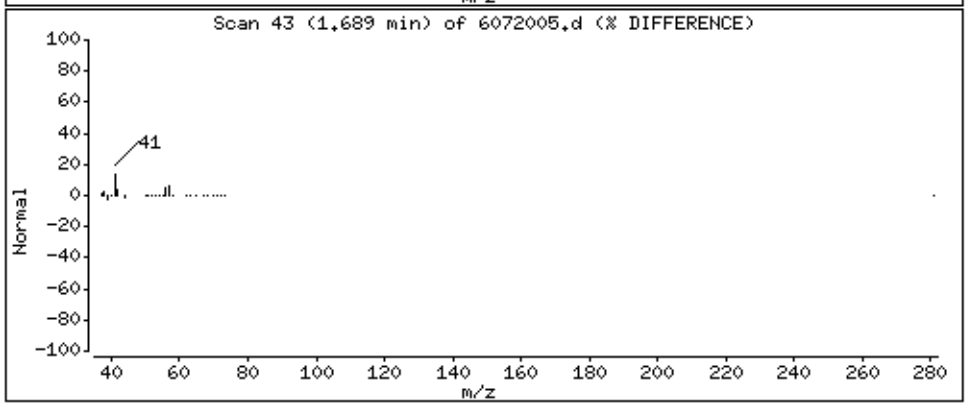












Data File: /chem/msd6.i/20jul16.b/6072005.d

Date : 20-JUL-2016 12:38

Client ID: LCS

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCS;LCS

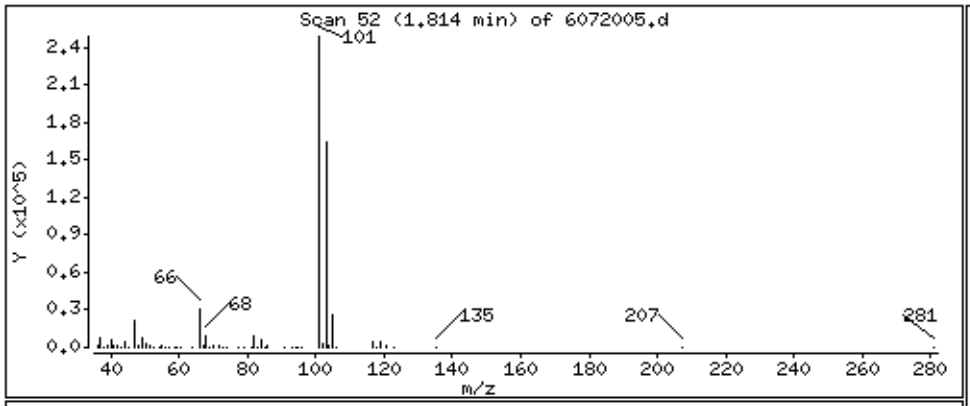
Operator: CT

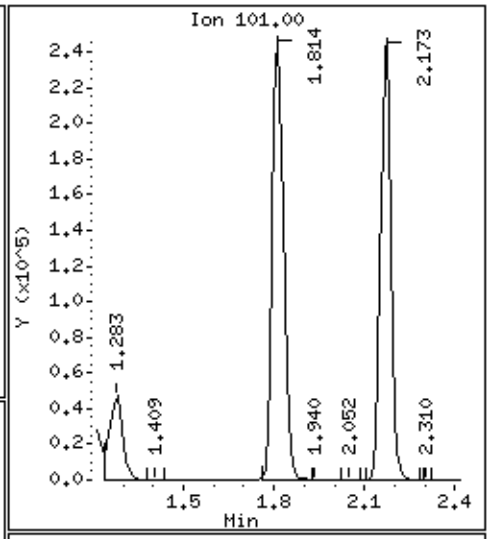
Column phase: RTx-624

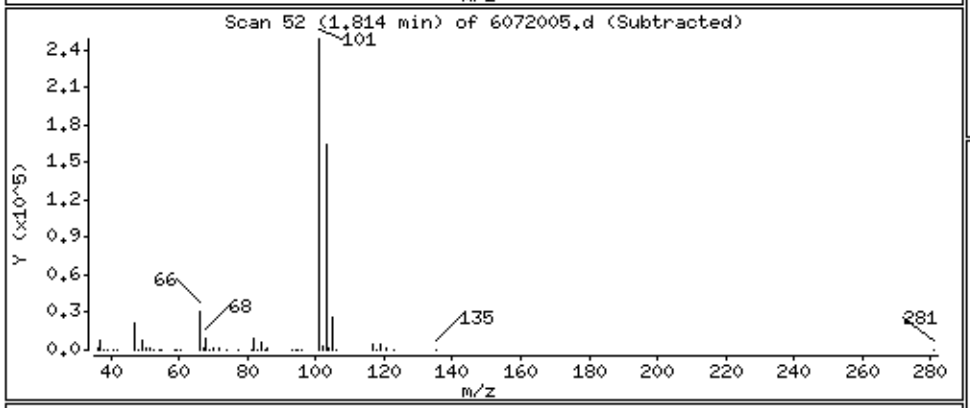
Column diameter: 0.53

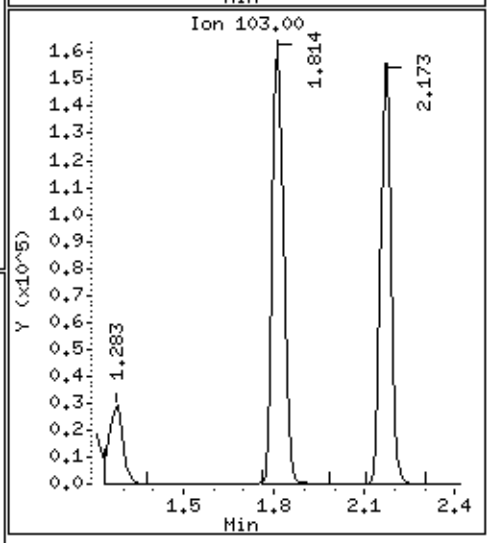
11 Trichlorofluoromethane/Fr11

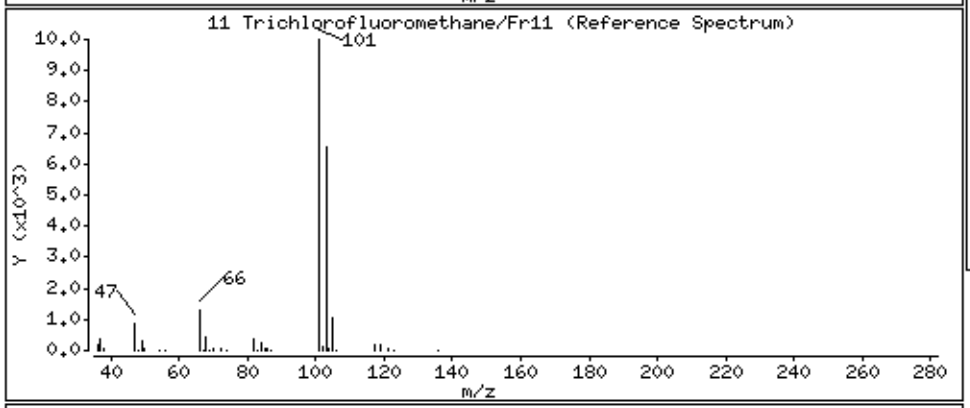
Concentration: 119.69 NG

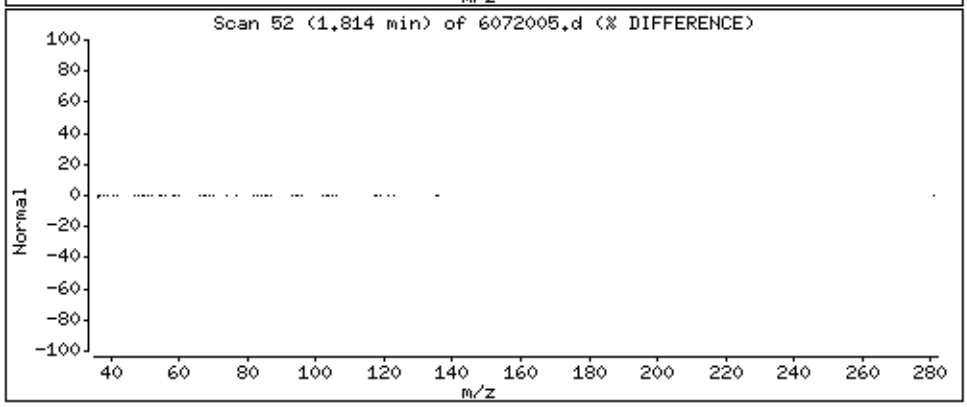












Data File: /chem/msd6.i/20jul16.b/6072005.d

Date : 20-JUL-2016 12:38

Client ID: LCS

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCS;LCS

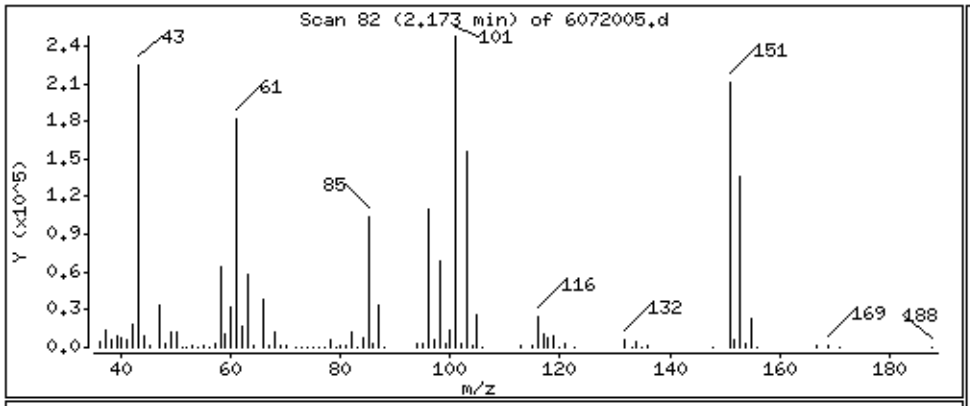
Operator: CT

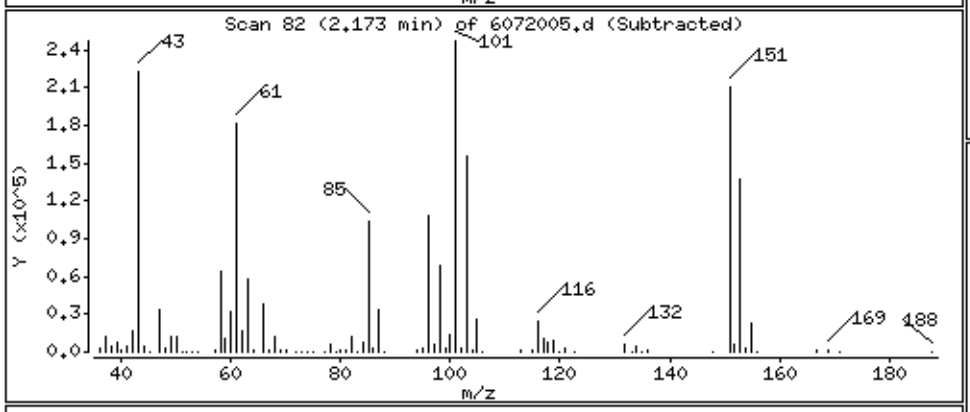
Column phase: RTx-624

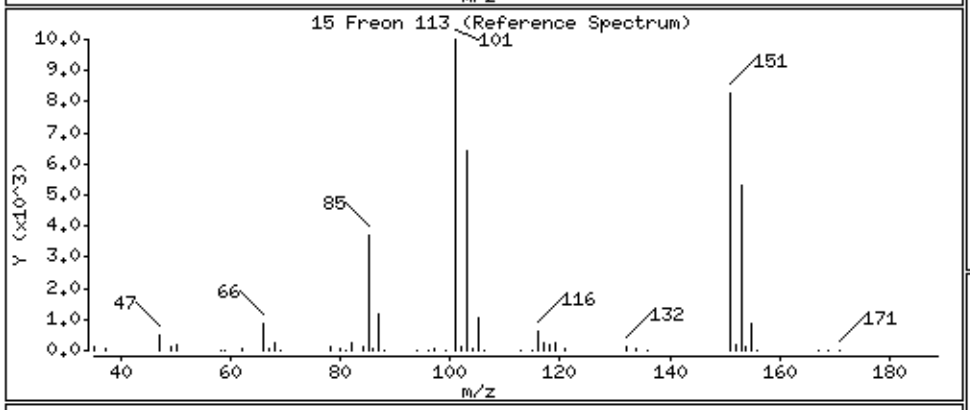
Column diameter: 0.53

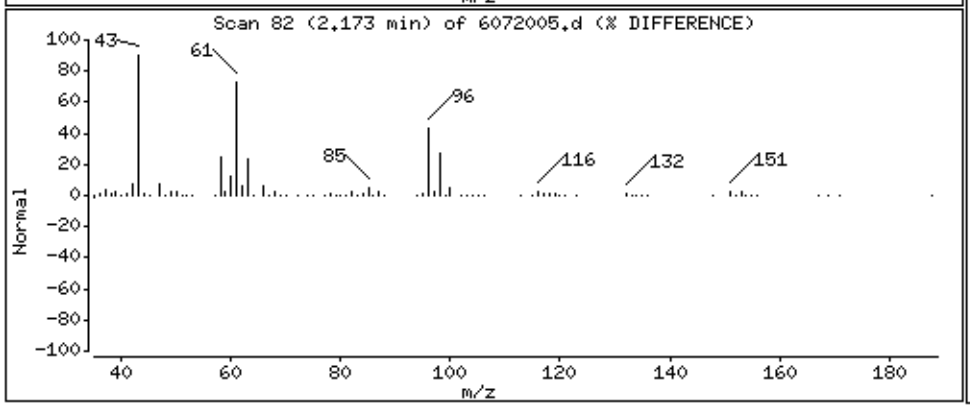
15 Freon 113

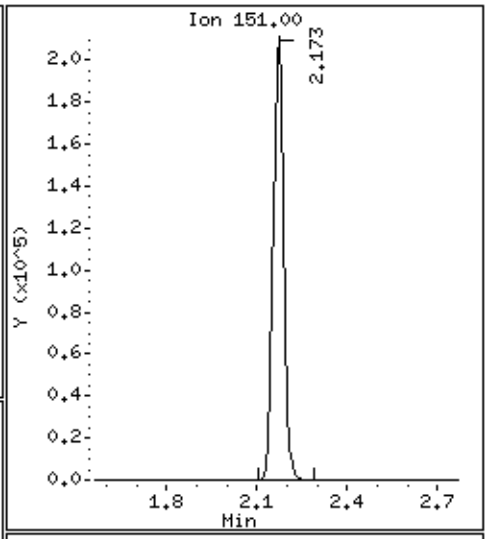
Concentration: 155.88 NG

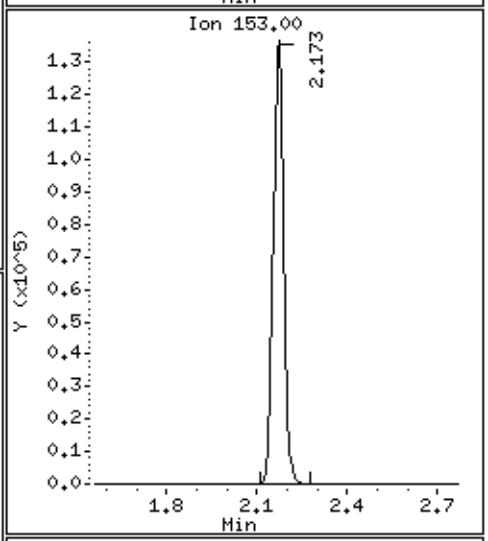


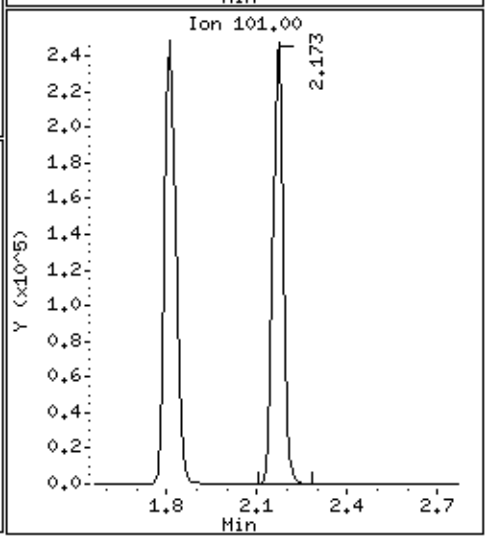












Data File: /chem/msd6.i/20jul16.b/6072005.d

Date : 20-JUL-2016 12:38

Client ID: LCS

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCS;LCS

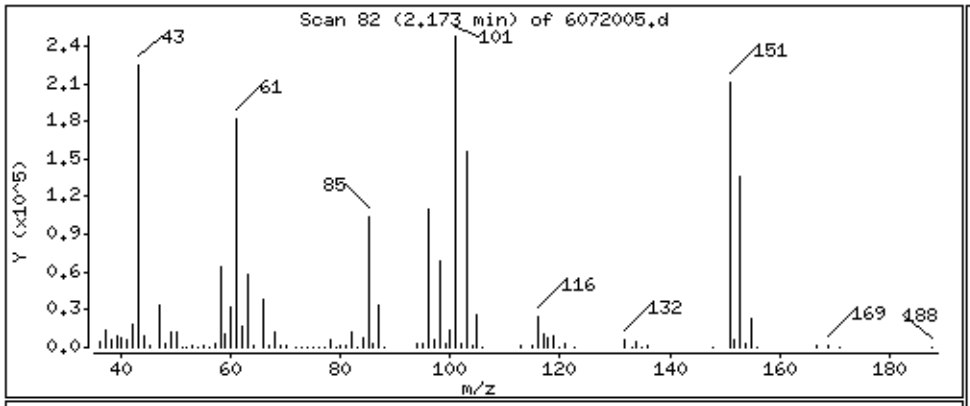
Operator: CT

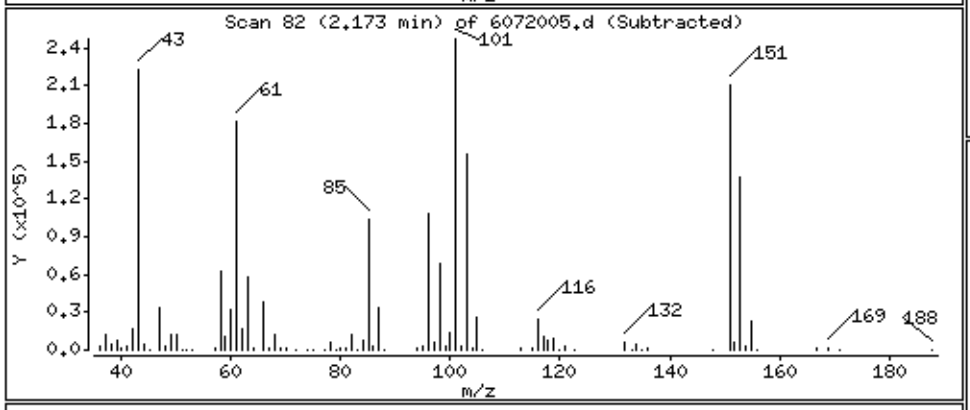
Column phase: RTx-624

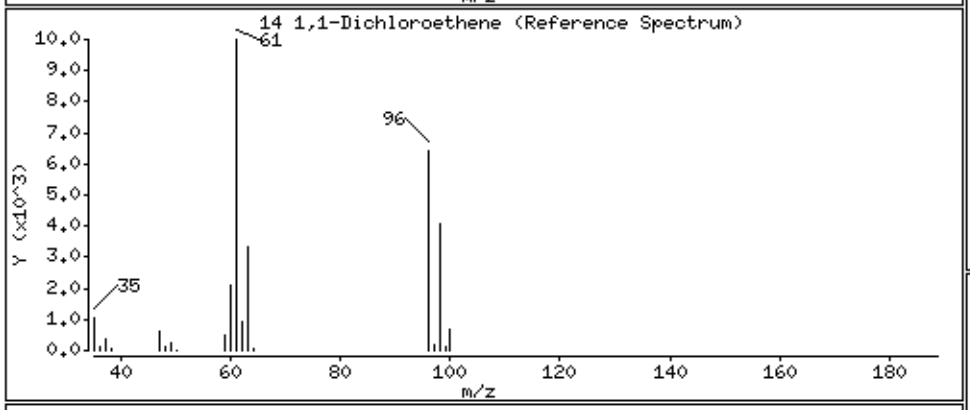
Column diameter: 0.53

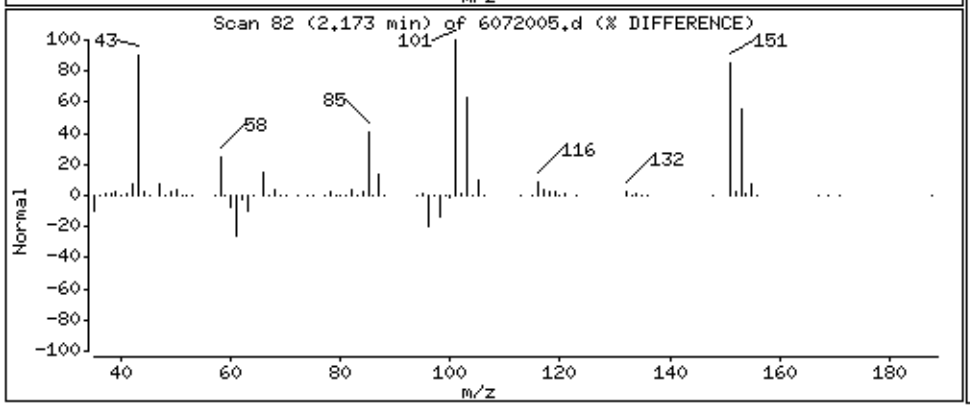
14 1,1-Dichloroethene

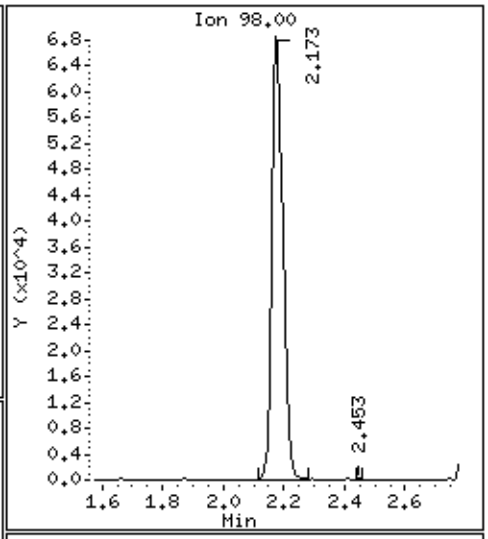
Concentration: 78.396 NG

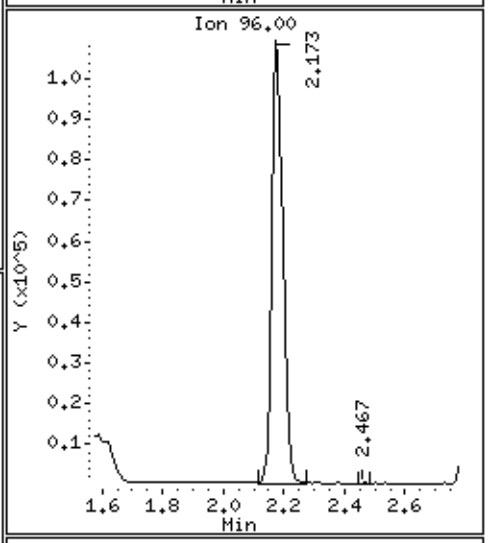


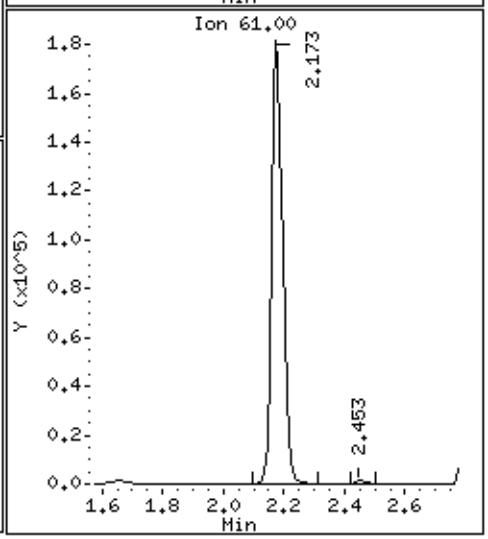












Data File: /chem/msd6.i/20jul16.b/6072005.d

Date : 20-JUL-2016 12:38

Client ID: LCS

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCS;LCS

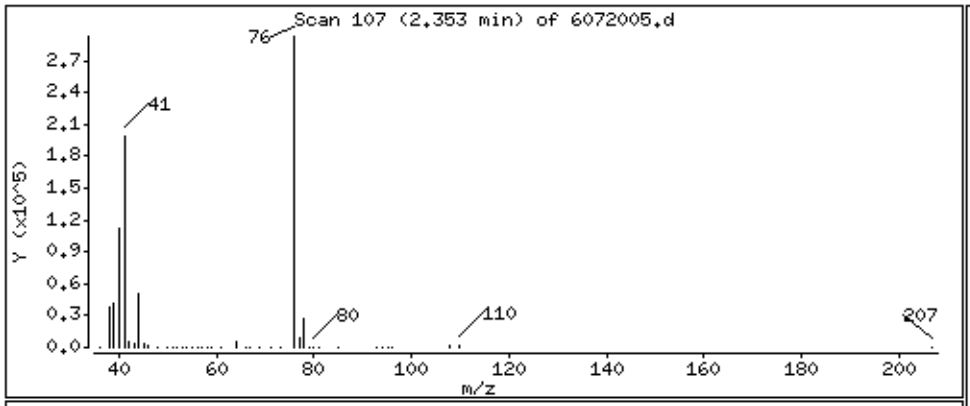
Operator: CT

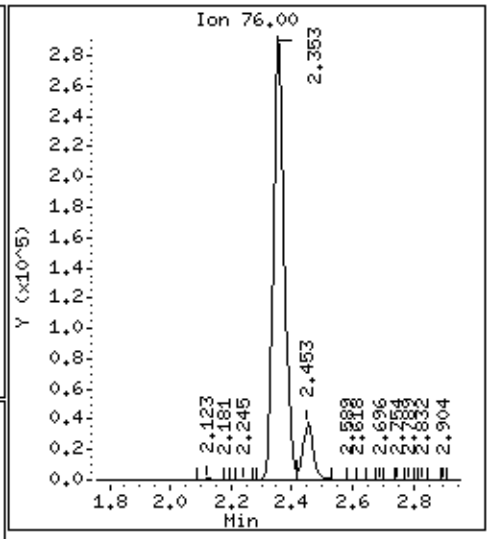
Column phase: RTx-624

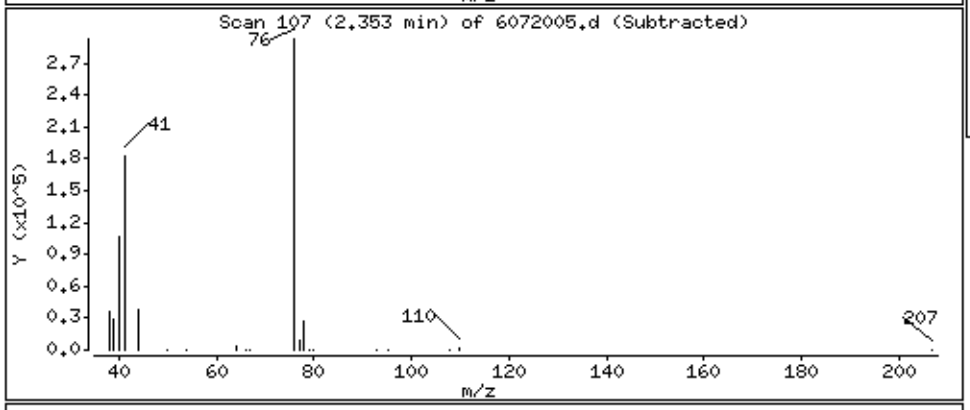
Column diameter: 0.53

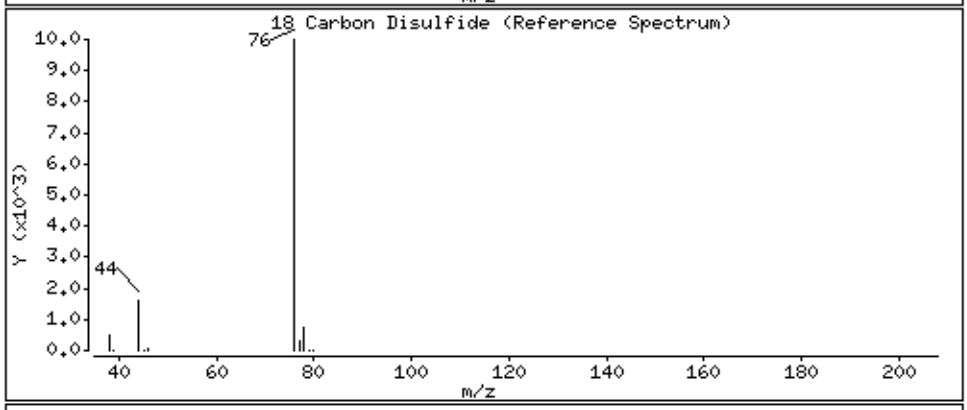
18 Carbon Disulfide

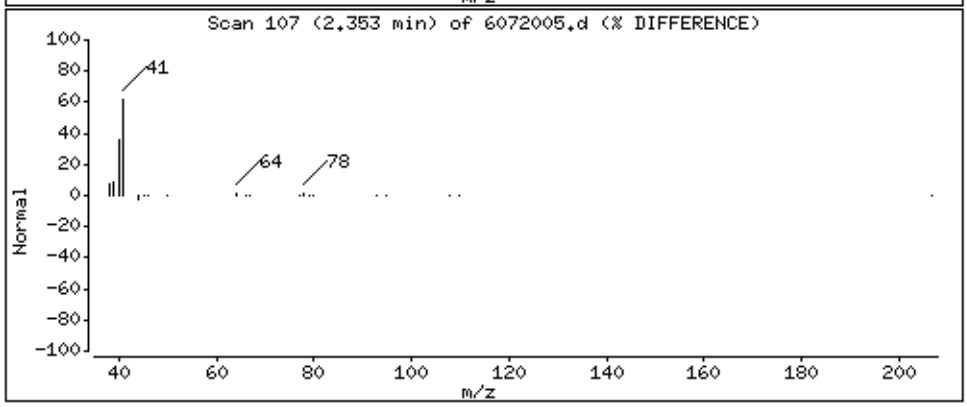
Concentration: 54.545 NG











Data File: /chem/msd6.i/20jul16.b/6072005.d

Date : 20-JUL-2016 12:38

Client ID: LCS

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCS;LCS

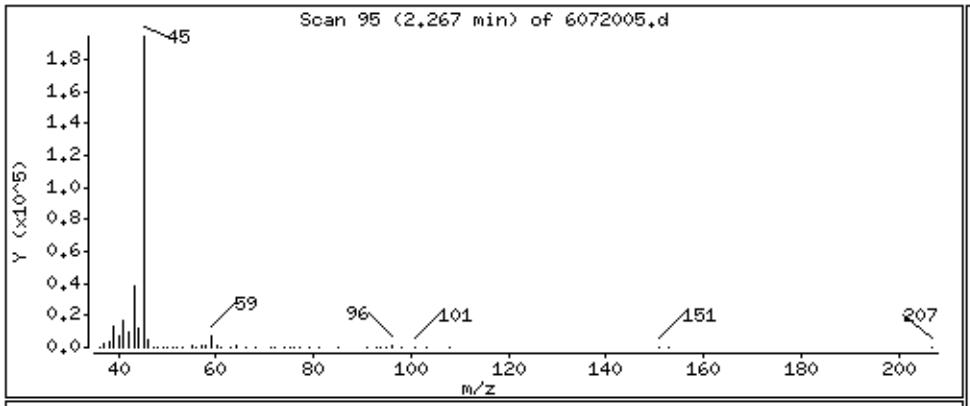
Operator: CT

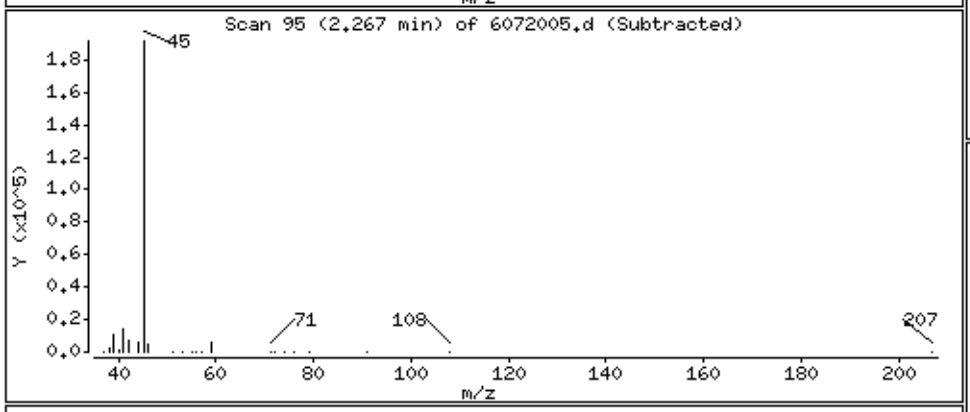
Column phase: RTx-624

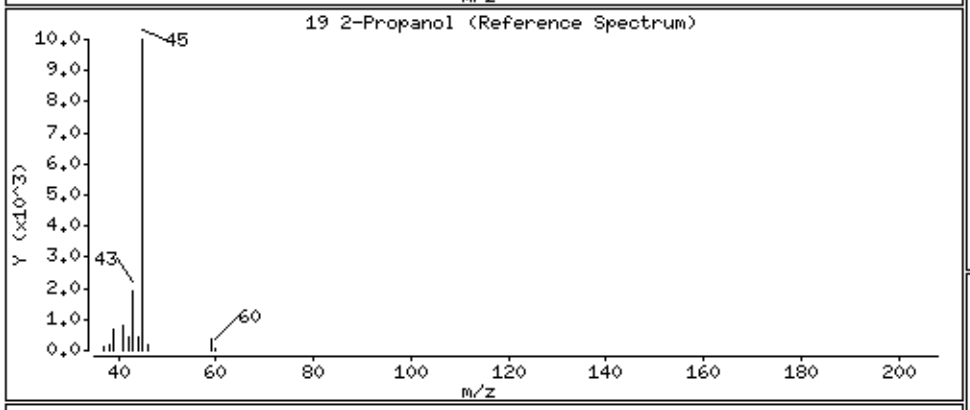
Column diameter: 0.53

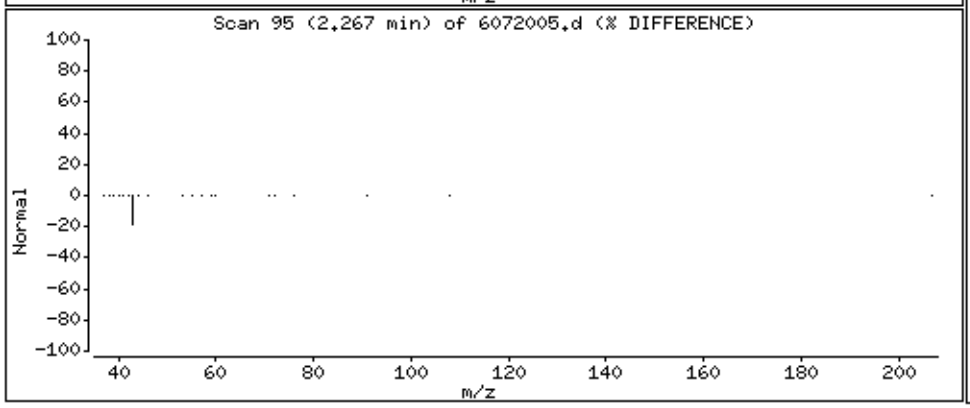
19 2-Propanol

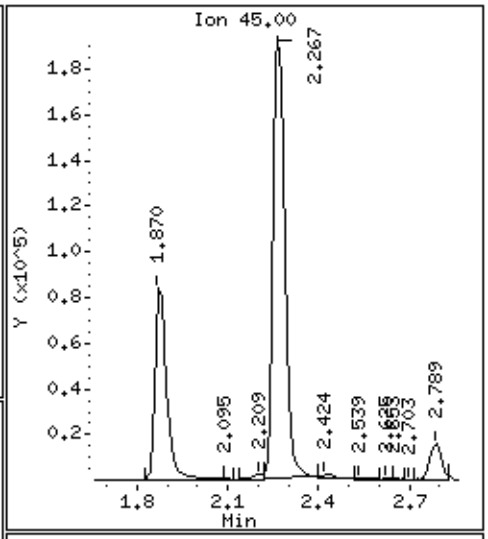
Concentration: 43.524 NG

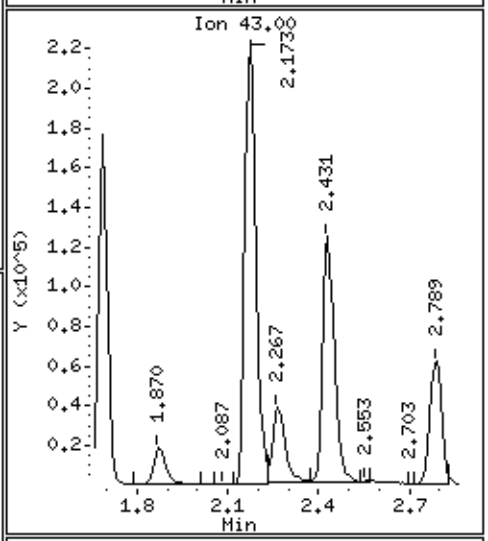


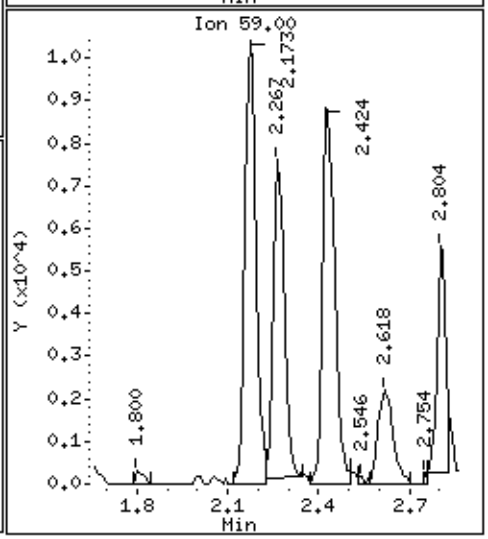












Data File: /chem/msd6.i/20jul16.b/6072005.d

Date : 20-JUL-2016 12:38

Client ID: LCS

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCS;LCS

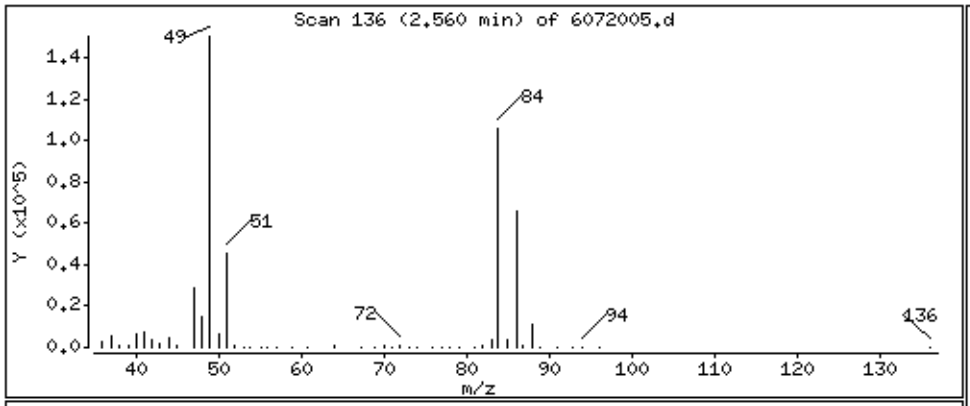
Operator: CT

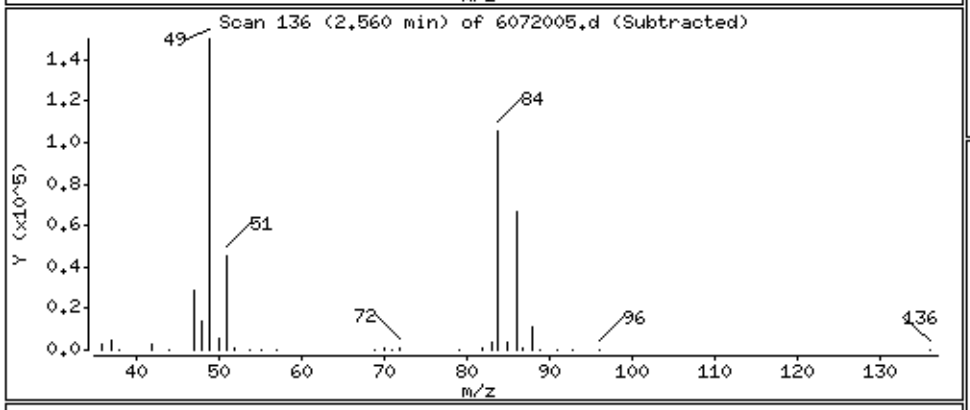
Column phase: RTx-624

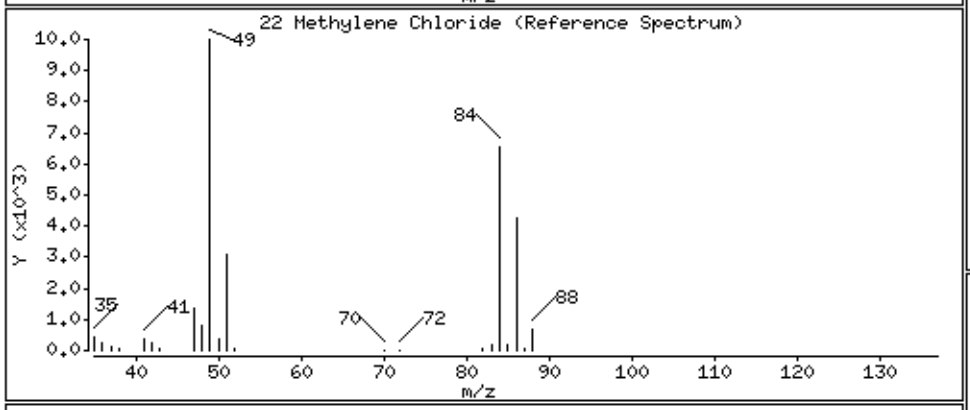
Column diameter: 0.53

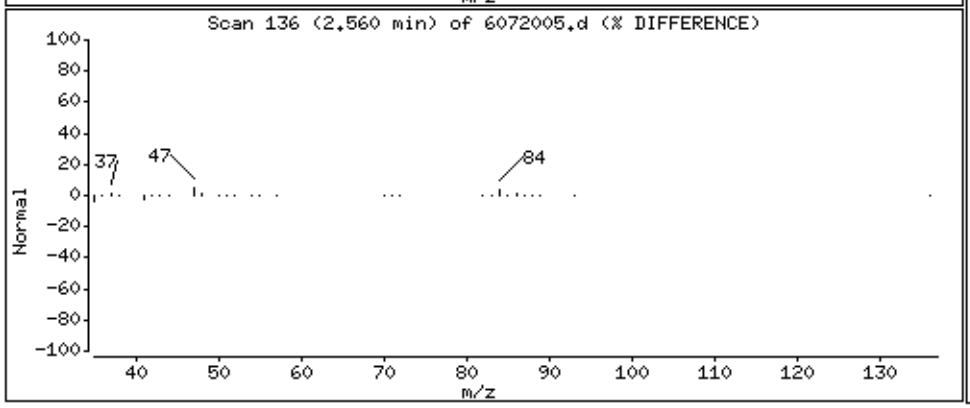
22 Methylene Chloride

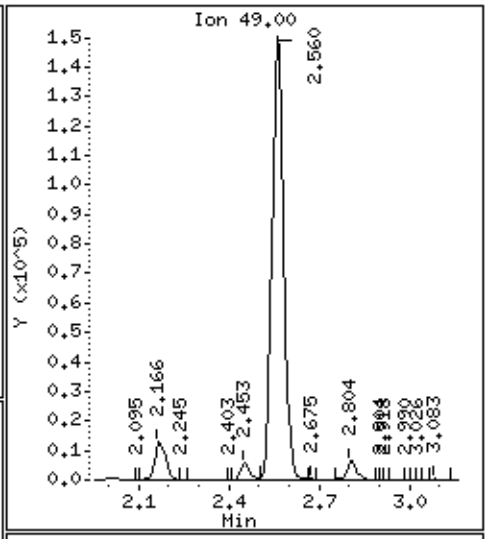
Concentration: 68.967 NG

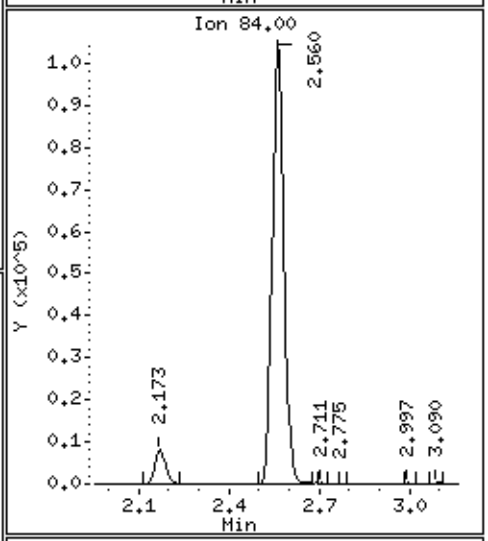


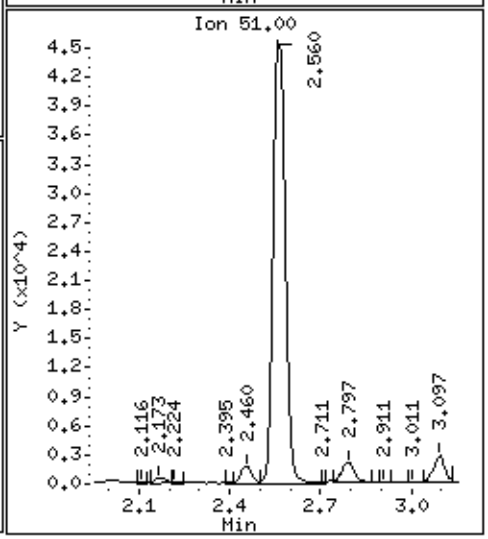












Data File: /chem/msd6.i/20jul16.b/6072005.d

Date : 20-JUL-2016 12:38

Client ID: LCS

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCS;LCS

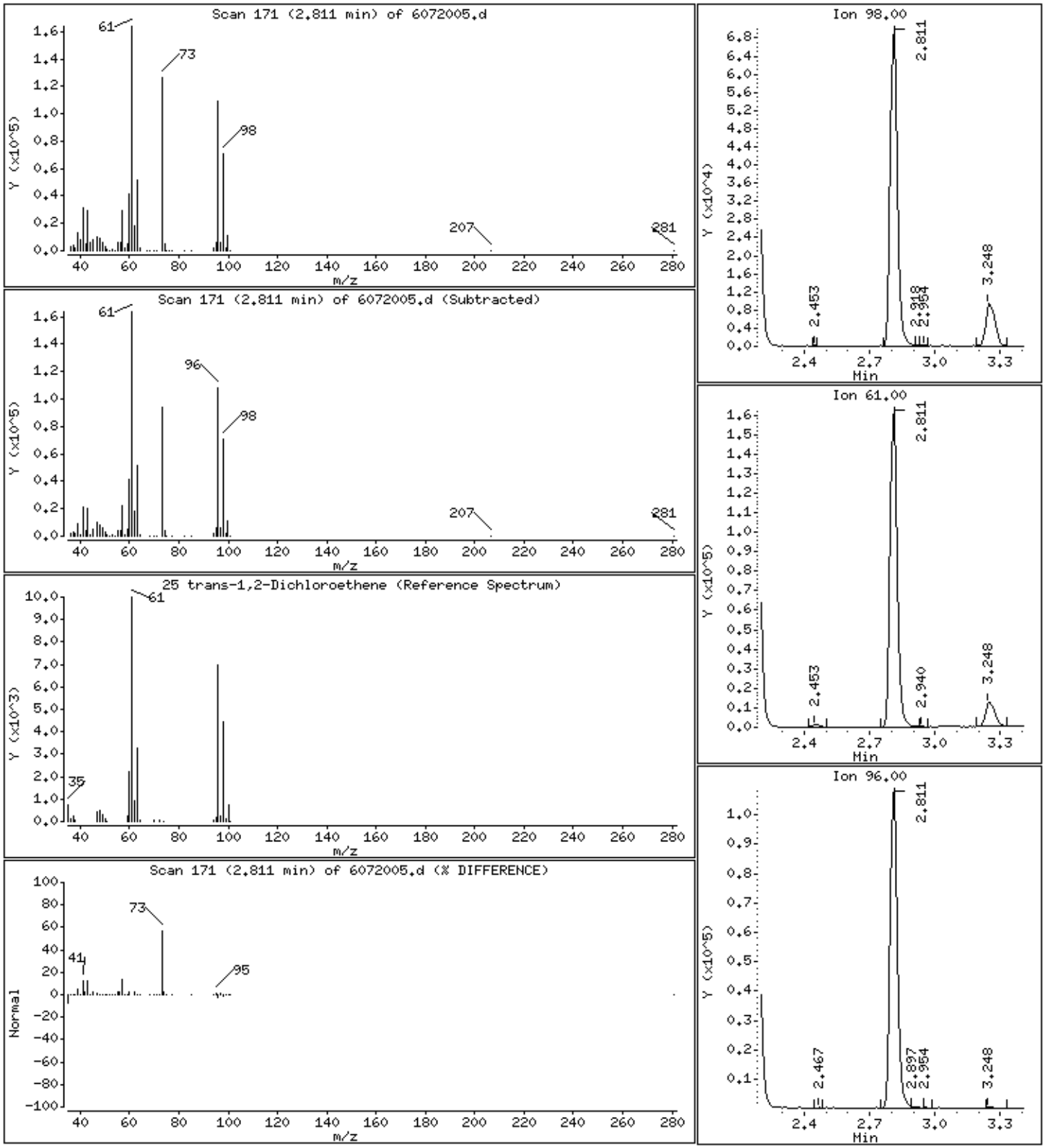
Operator: CT

Column phase: RTx-624

Column diameter: 0.53

25 trans-1,2-Dichloroethene

Concentration: 70.482 NG



Data File: /chem/msd6.i/20jul16.b/6072005.d

Date : 20-JUL-2016 12:38

Client ID: LCS

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCS;LCS

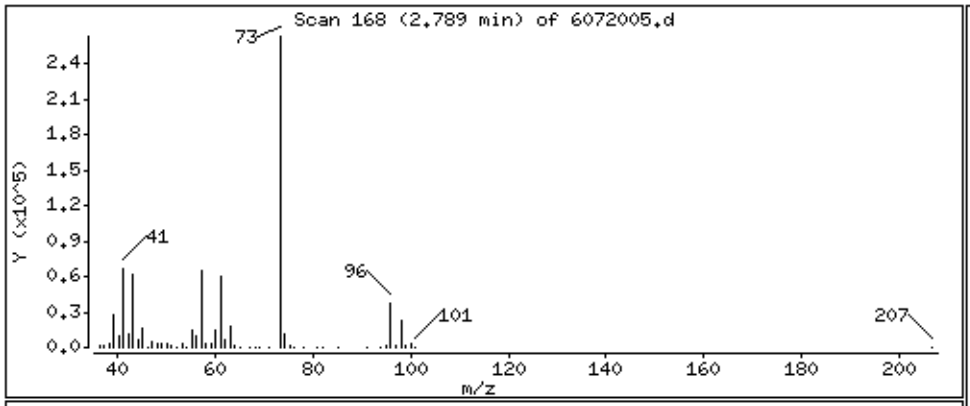
Operator: CT

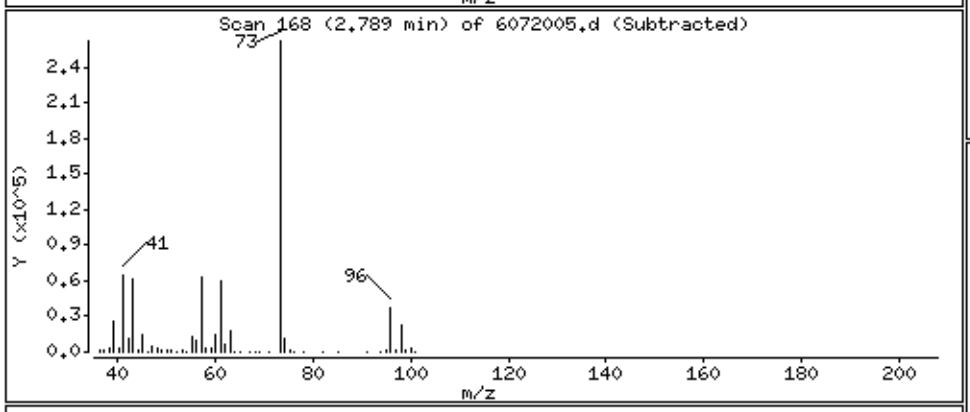
Column phase: RTx-624

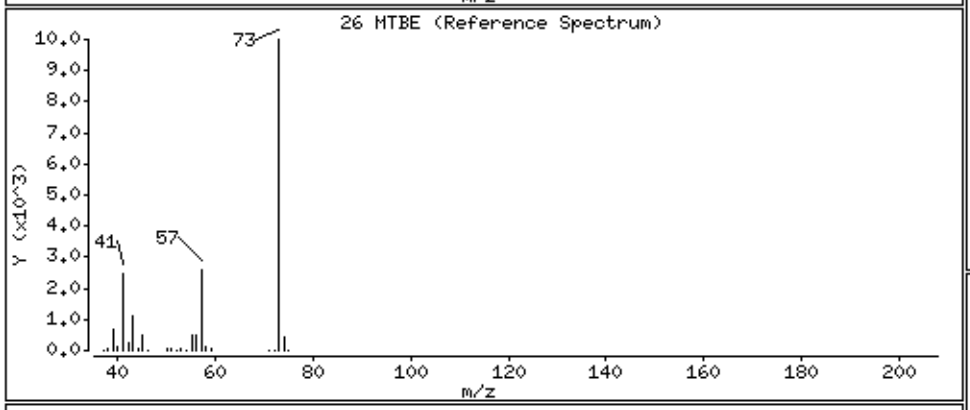
Column diameter: 0.53

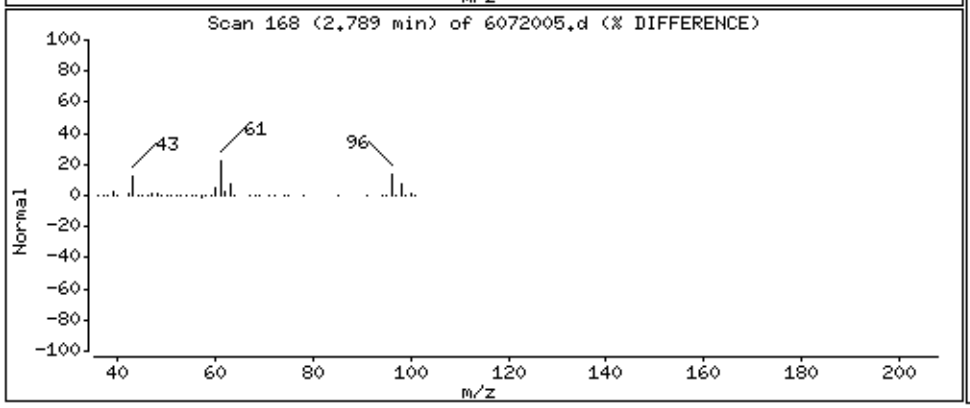
26 MTBE

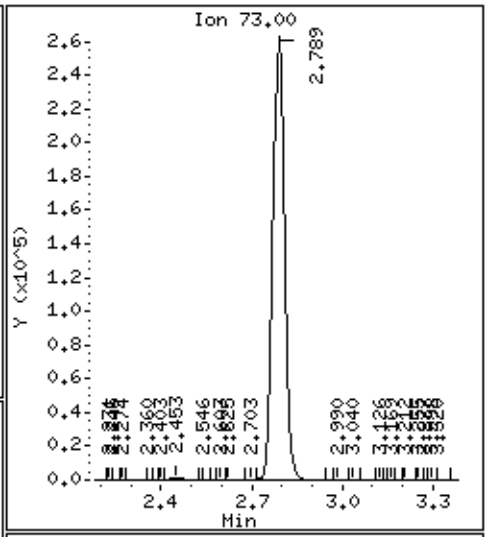
Concentration: 75.919 NG

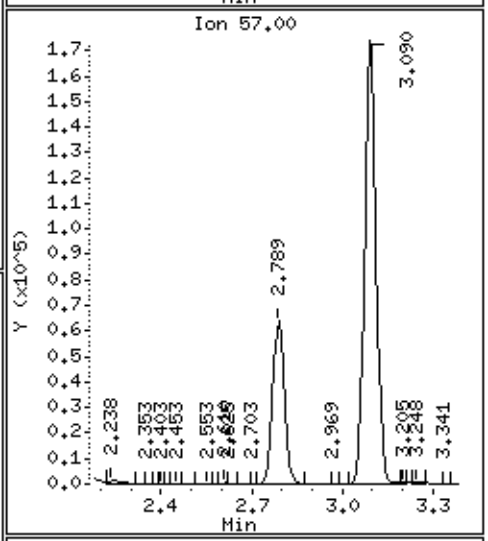


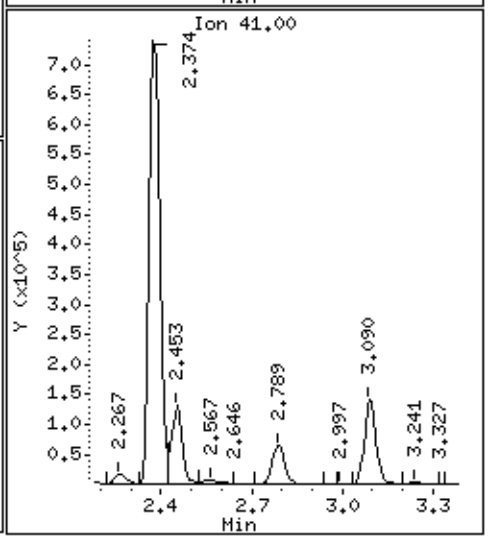












Data File: /chem/msd6.i/20jul16.b/6072005.d

Date : 20-JUL-2016 12:38

Client ID: LCS

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCS;LCS

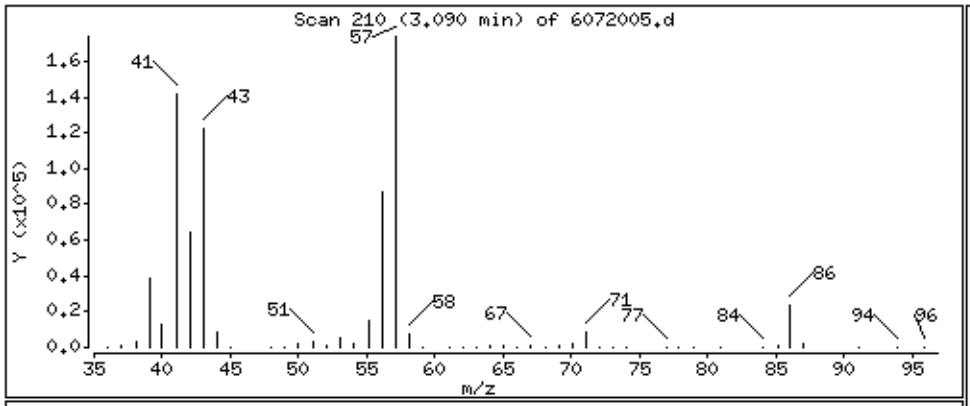
Operator: CT

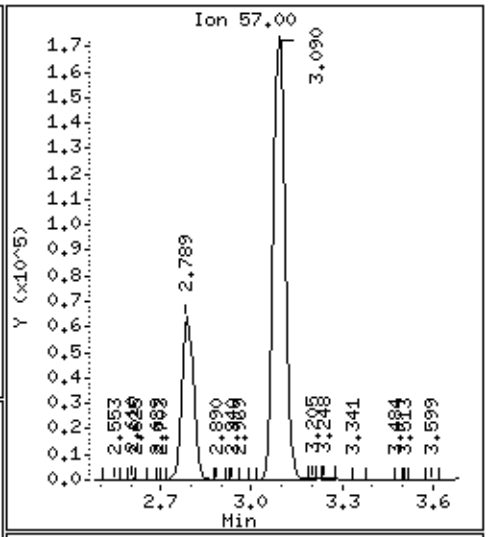
Column phase: RTx-624

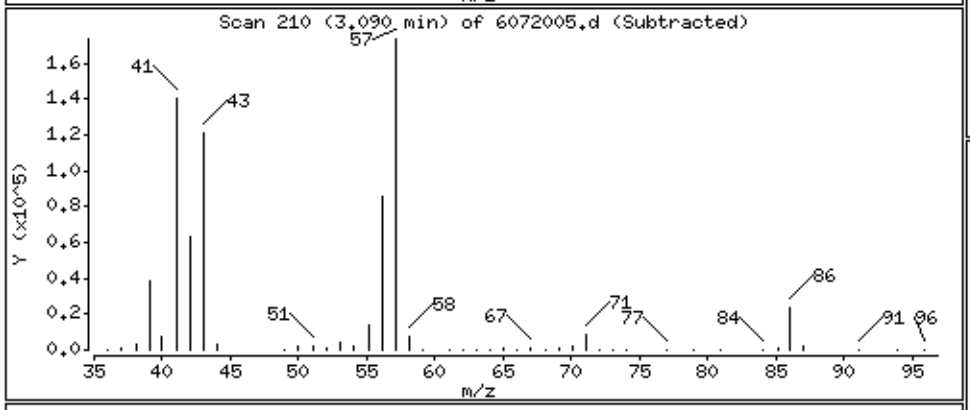
Column diameter: 0.53

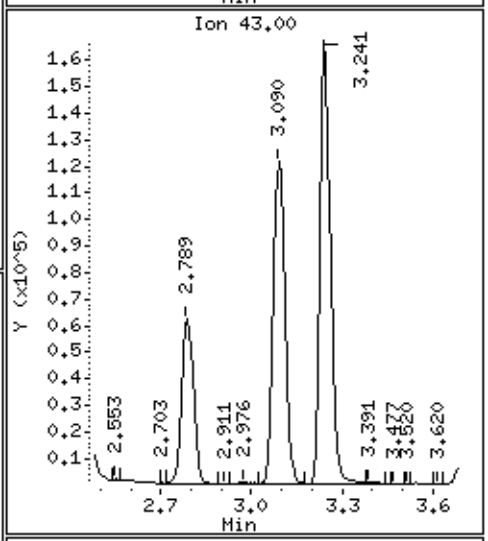
28 Hexane

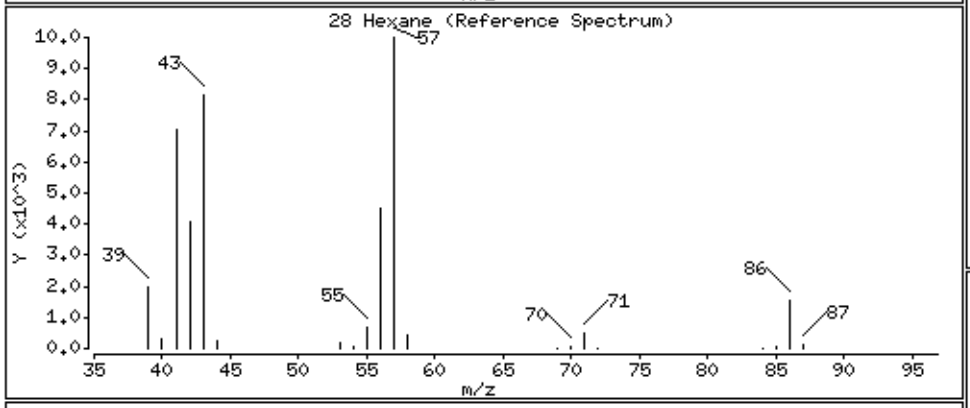
Concentration: 72.786 NG

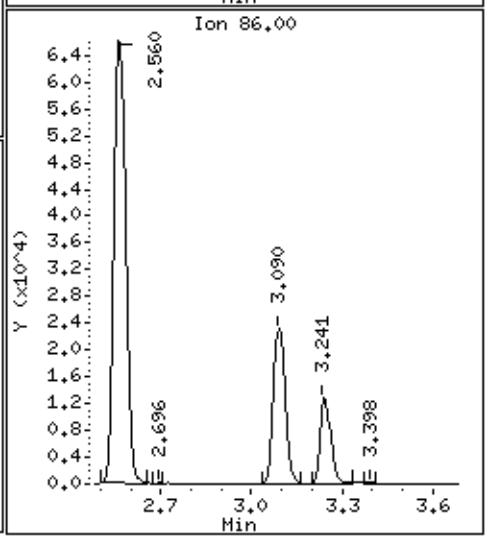


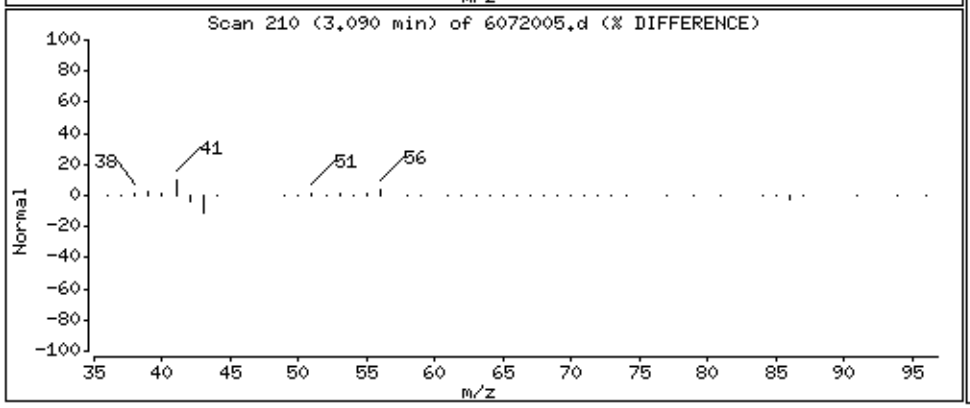












Data File: /chem/msd6.i/20jul16.b/6072005.d

Date : 20-JUL-2016 12:38

Client ID: LCS

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCS;LCS

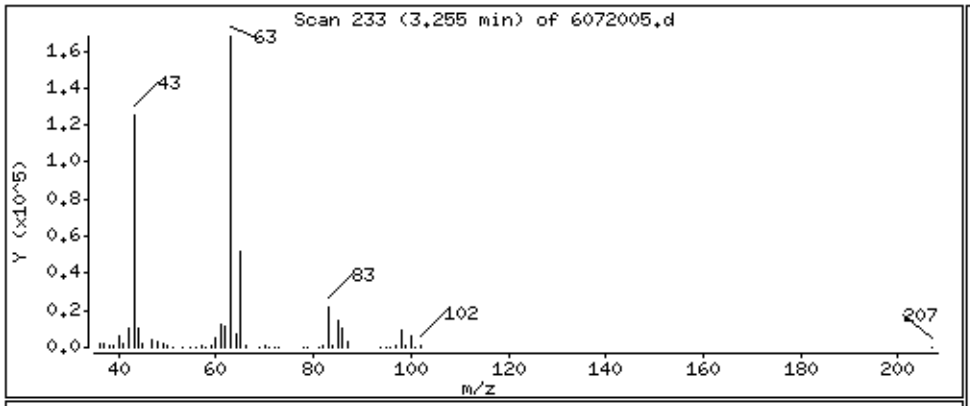
Operator: CT

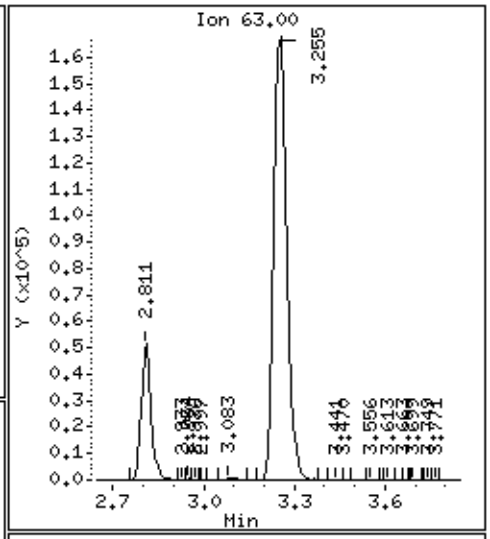
Column phase: RTx-624

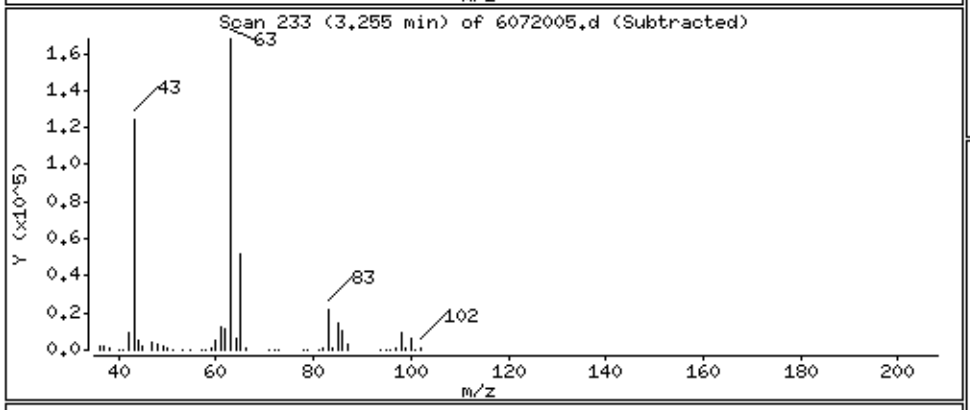
Column diameter: 0.53

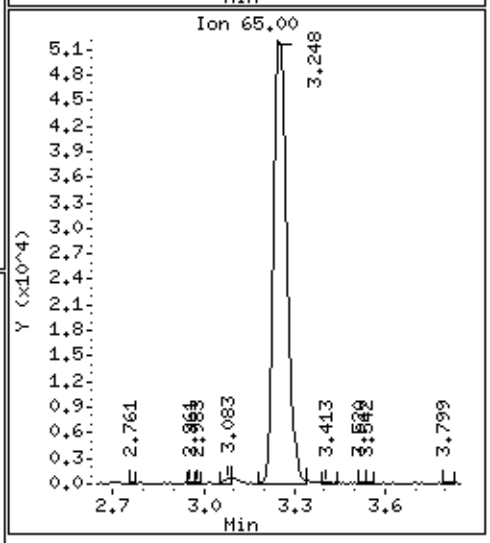
29 1,1-Dichloroethane

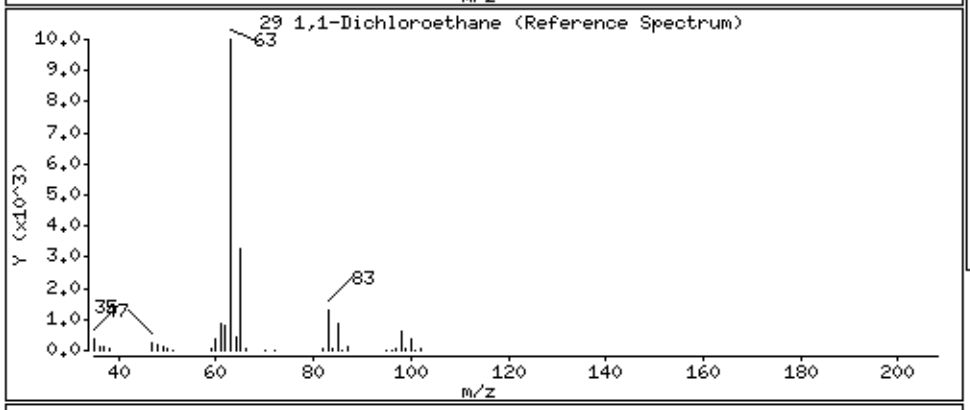
Concentration: 86.984 NG

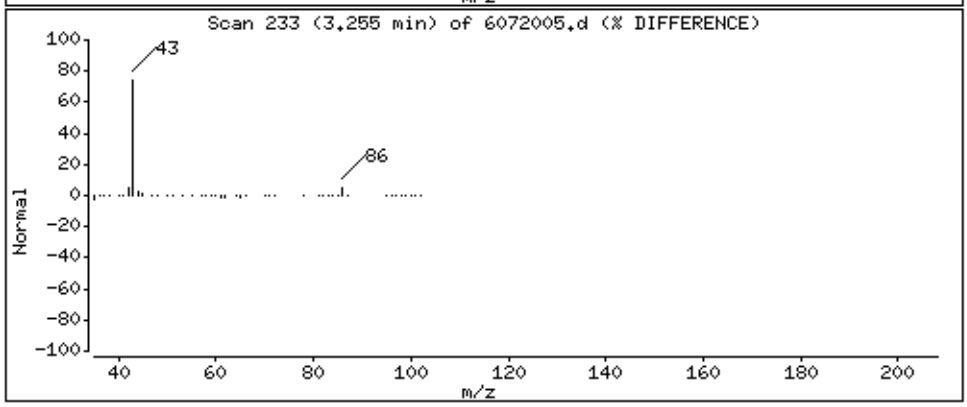












Data File: /chem/msd6.i/20jul16.b/6072005.d

Date : 20-JUL-2016 12:38

Client ID: LCS

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCS;LCS

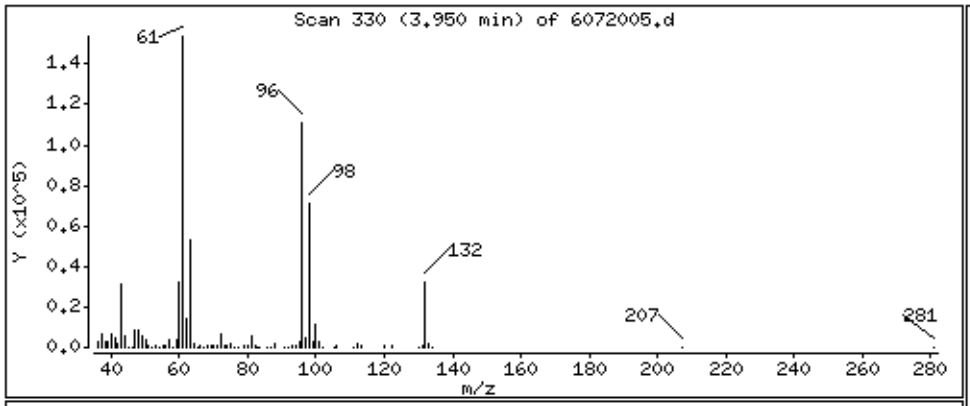
Operator: CT

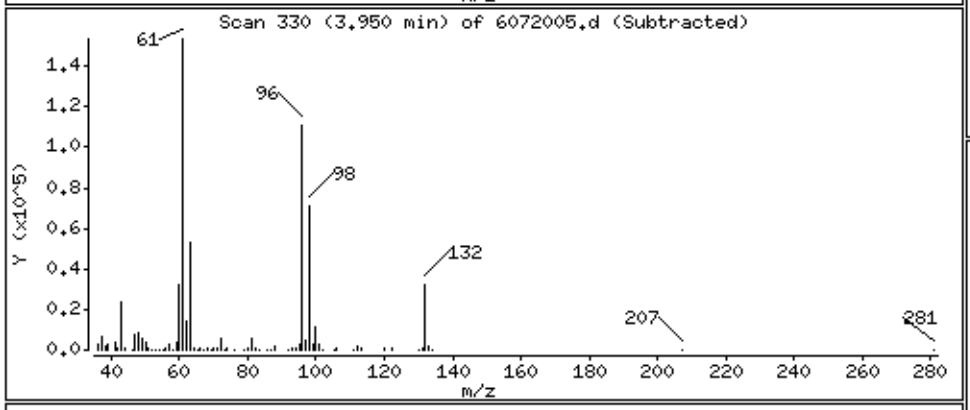
Column phase: RTx-624

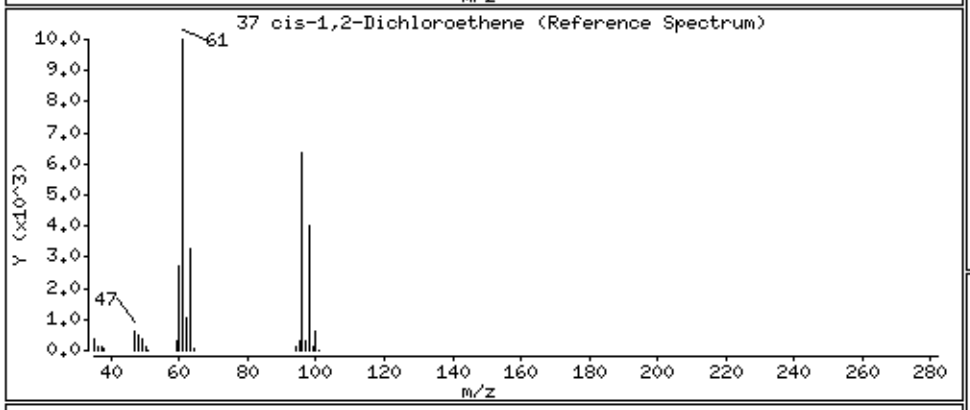
Column diameter: 0.53

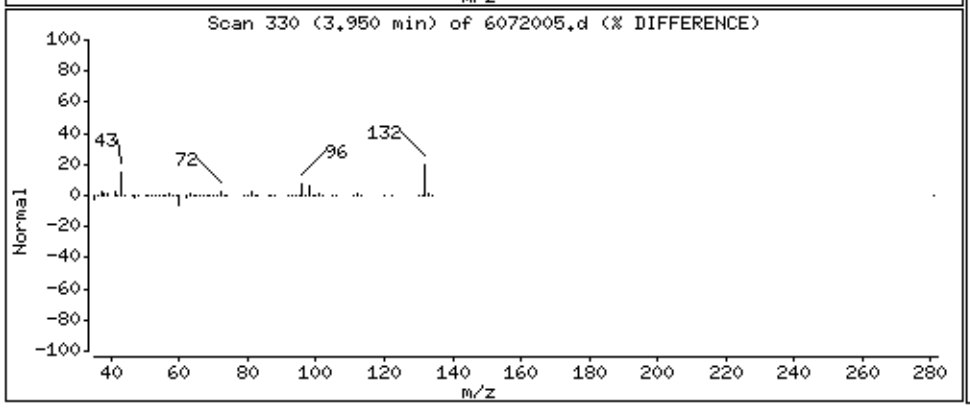
37 cis-1,2-Dichloroethene

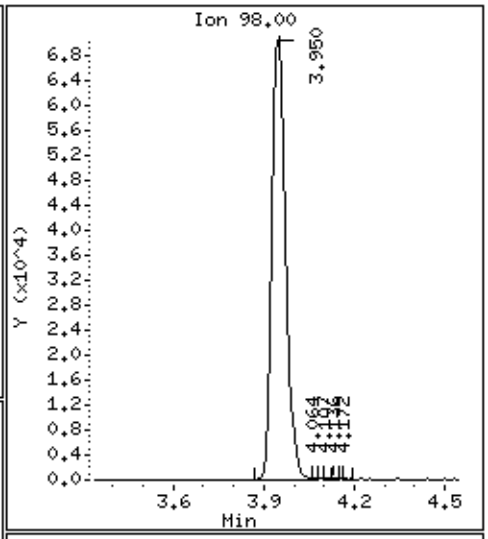
Concentration: 93.286 NG

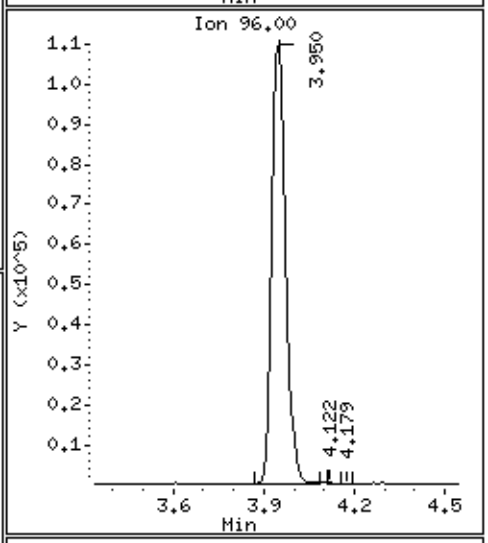


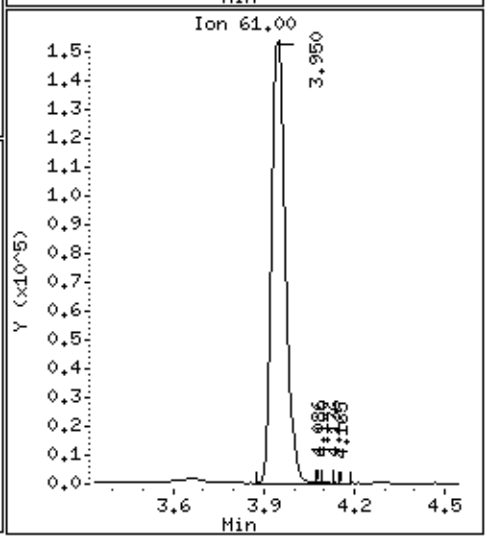












Data File: /chem/msd6.i/20jul16.b/6072005.d

Date : 20-JUL-2016 12:38

Client ID: LCS

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCS;LCS

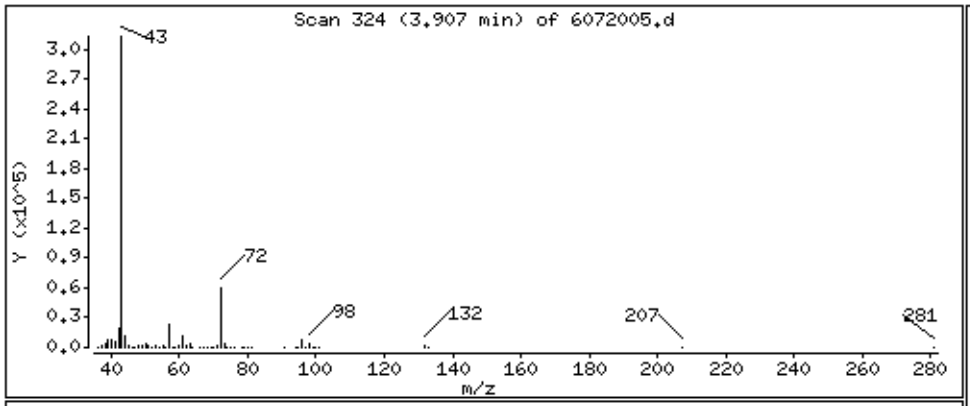
Operator: CT

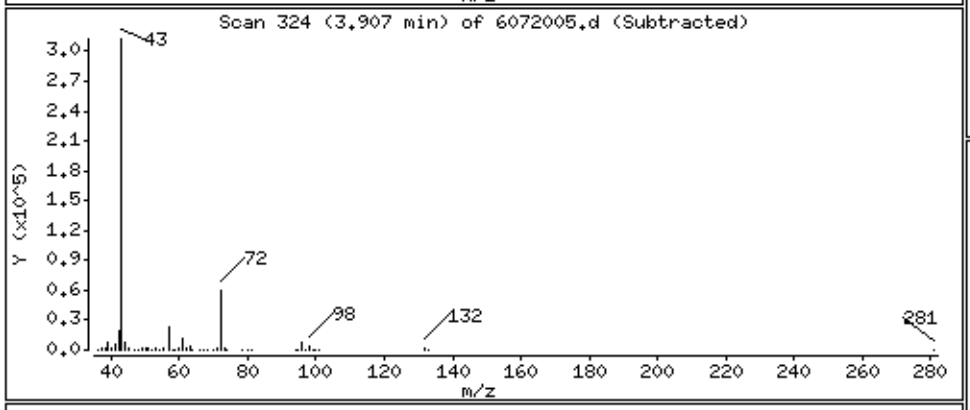
Column phase: RTx-624

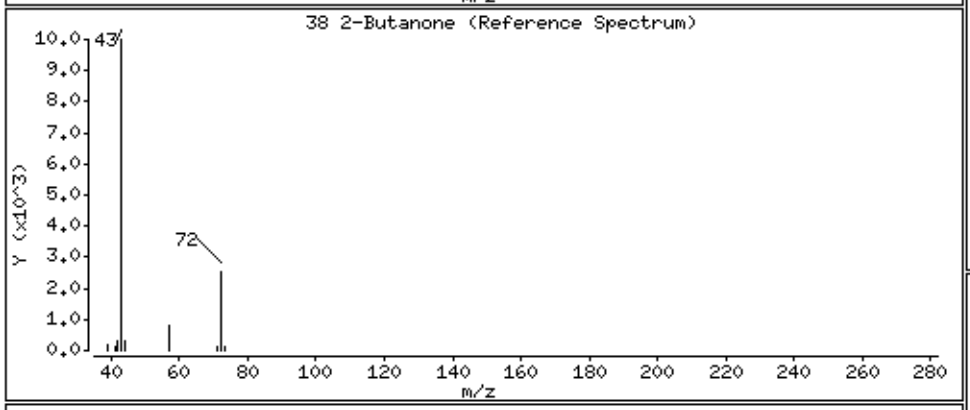
Column diameter: 0.53

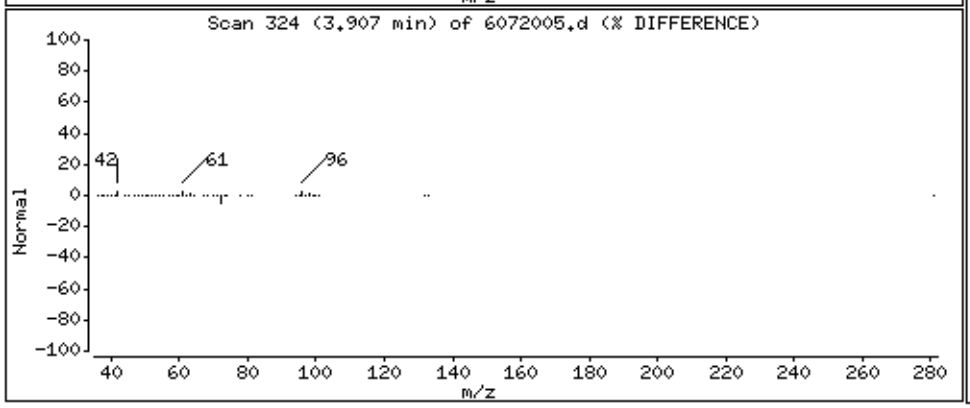
38 2-Butanone

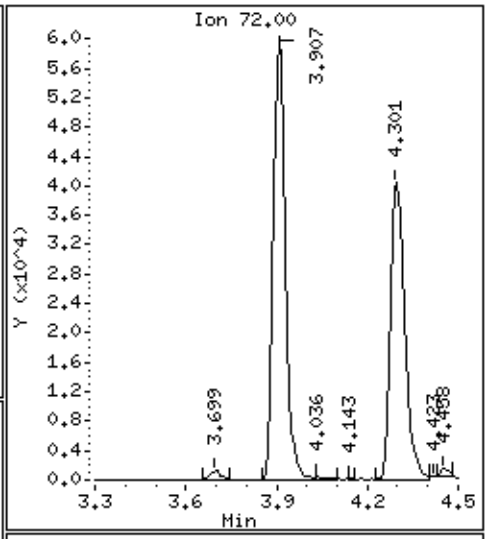
Concentration: 64.860 NG

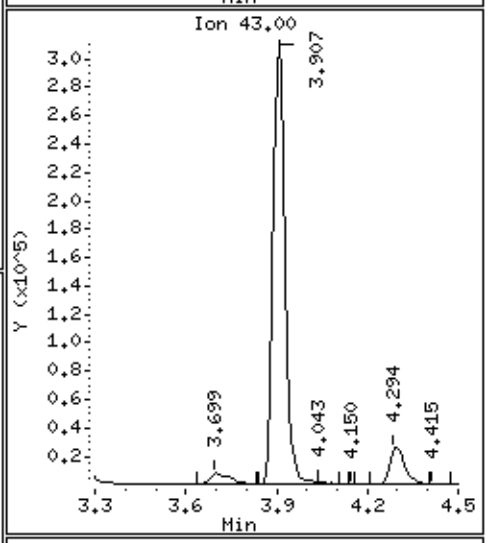


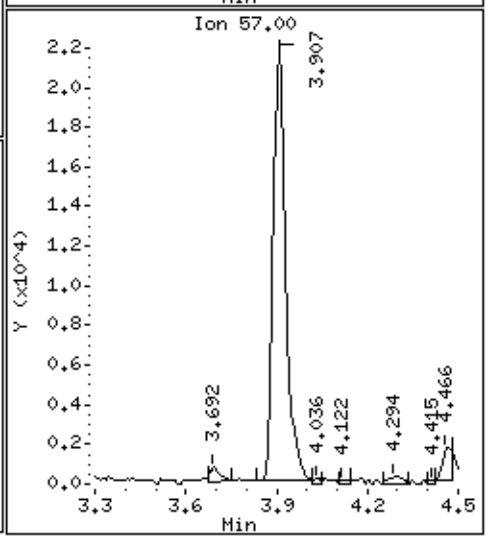












Data File: /chem/msd6.i/20jul16.b/6072005.d

Date : 20-JUL-2016 12:38

Client ID: LCS

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCS;LCS

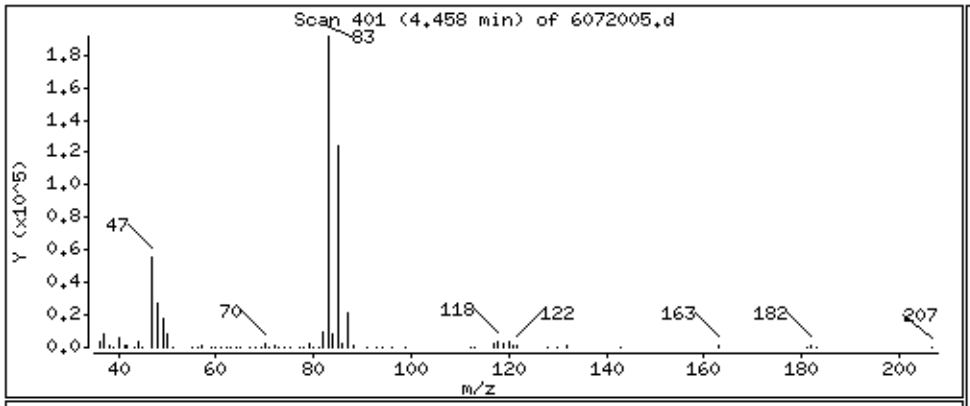
Operator: CT

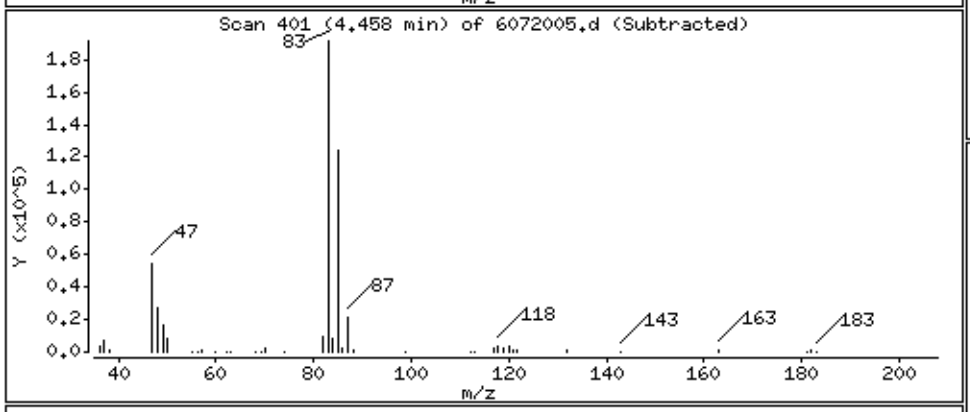
Column phase: RTx-624

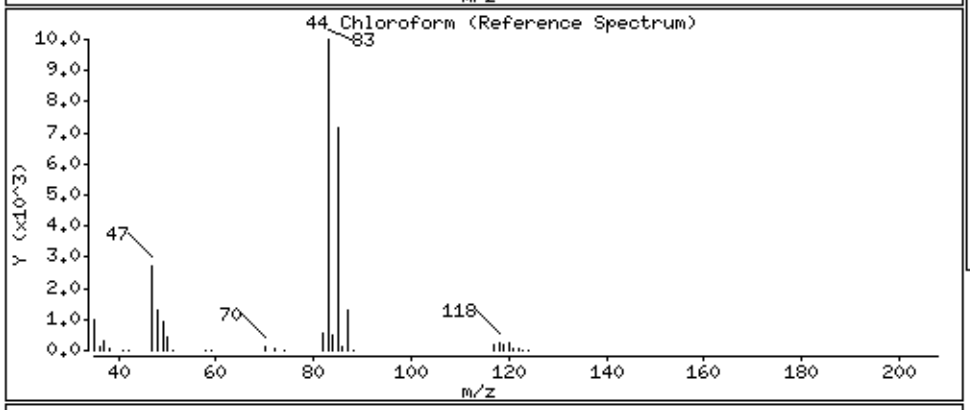
Column diameter: 0.53

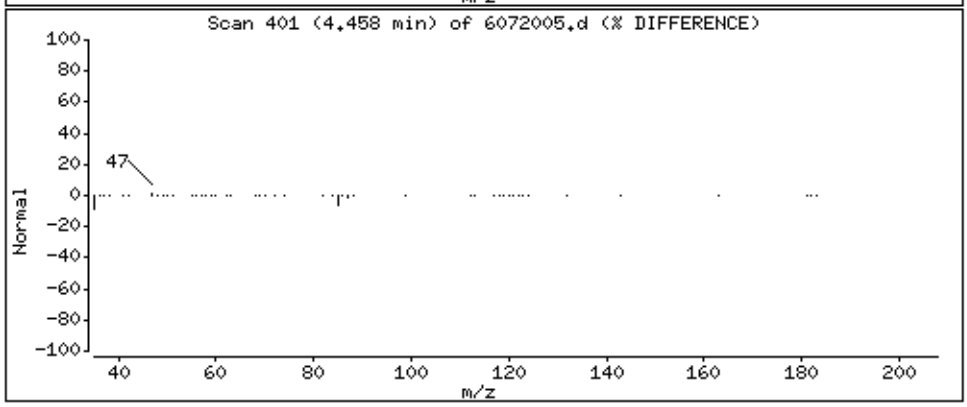
44 Chloroform

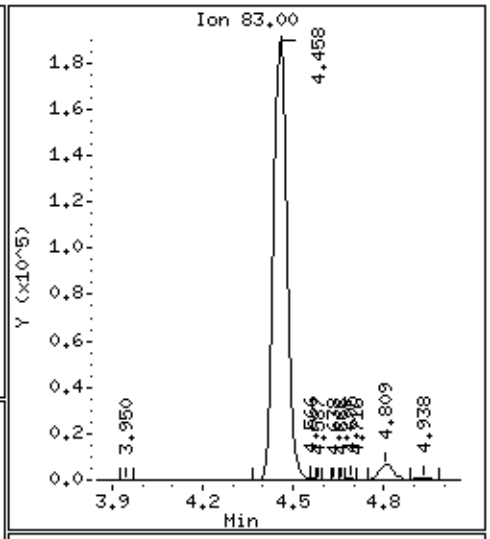
Concentration: 106.45 NG

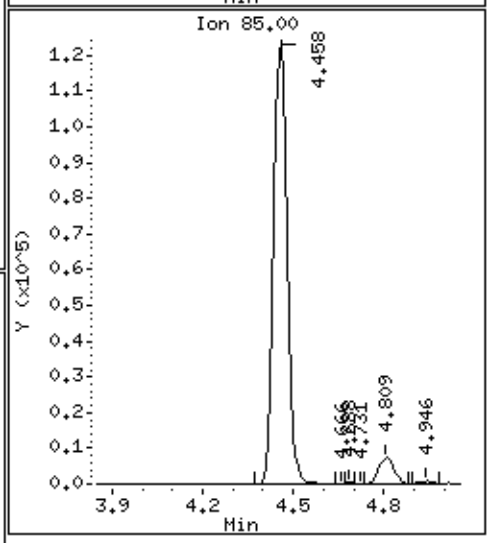












Data File: /chem/msd6.i/20jul16.b/6072005.d

Date : 20-JUL-2016 12:38

Client ID: LCS

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCS;LCS

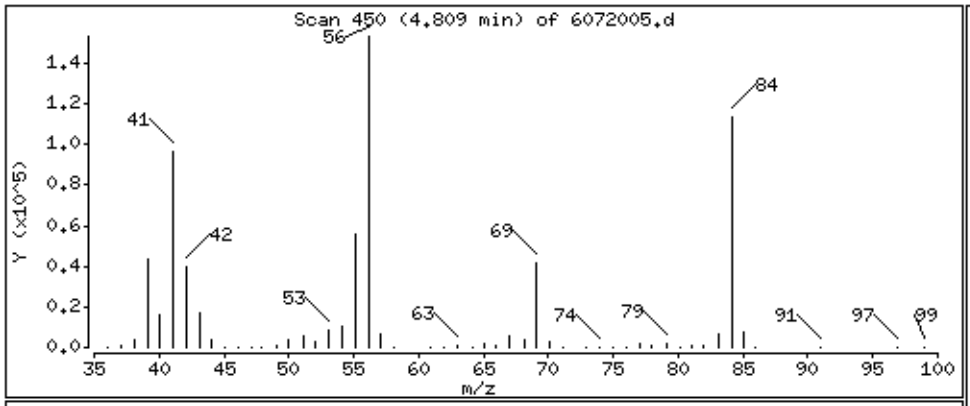
Operator: CT

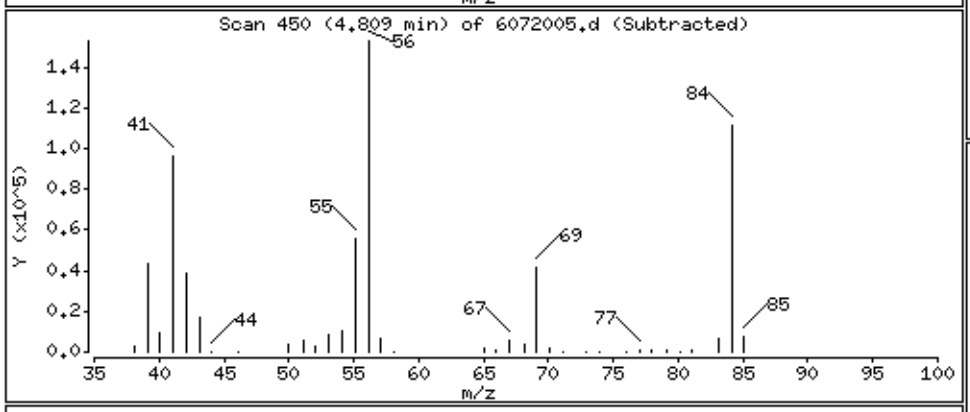
Column phase: RTx-624

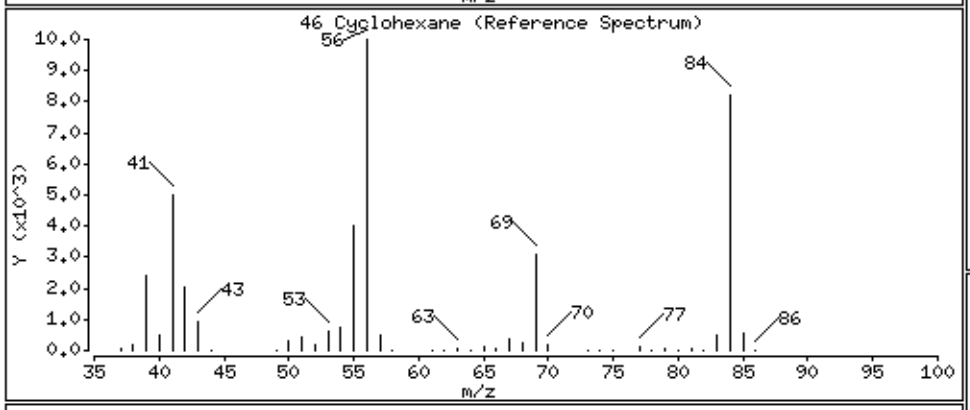
Column diameter: 0.53

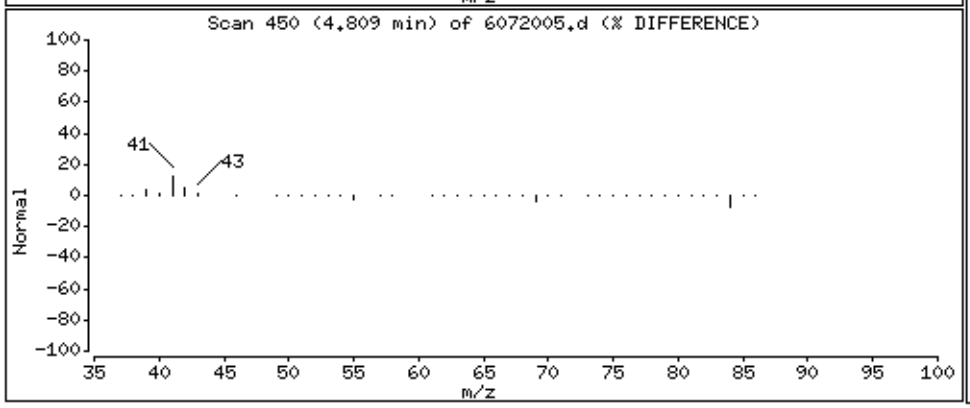
46 Cyclohexane

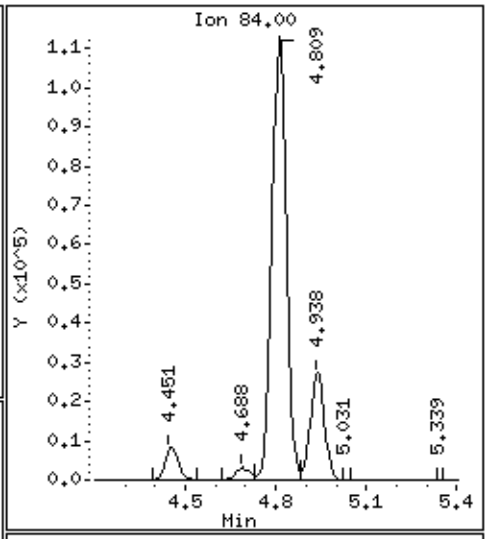
Concentration: 76.771 NG

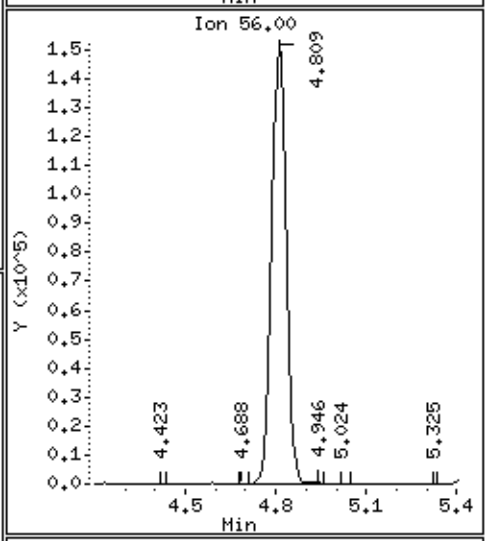


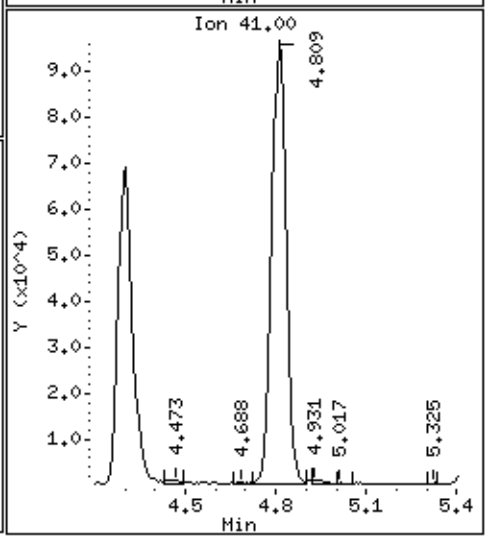












Data File: /chem/msd6.i/20jul16.b/6072005.d

Date : 20-JUL-2016 12:38

Client ID: LCS

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCS;LCS

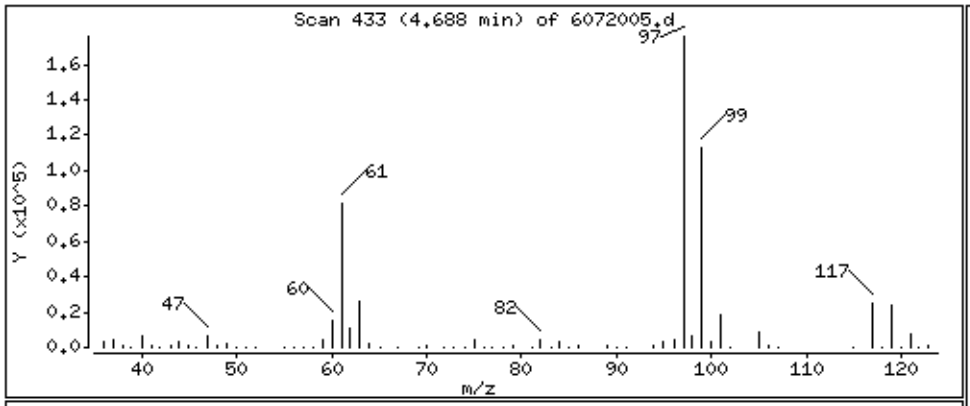
Operator: CT

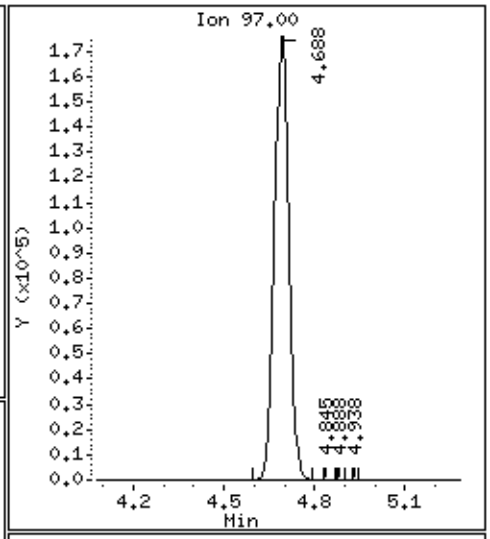
Column phase: RTx-624

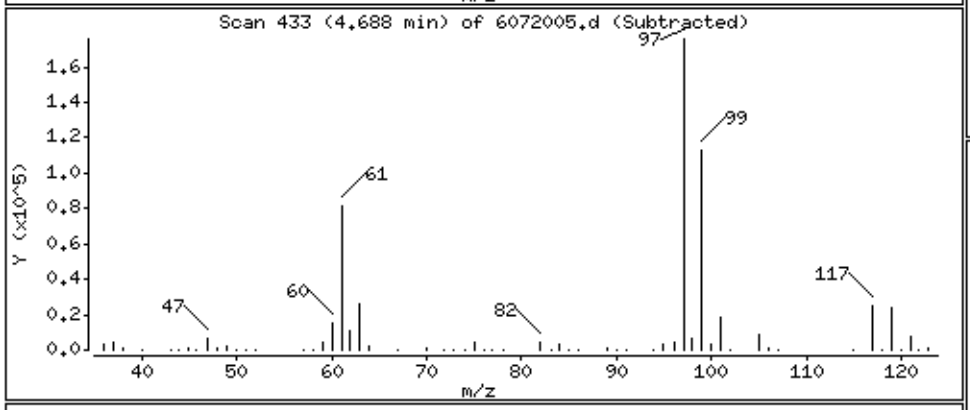
Column diameter: 0.53

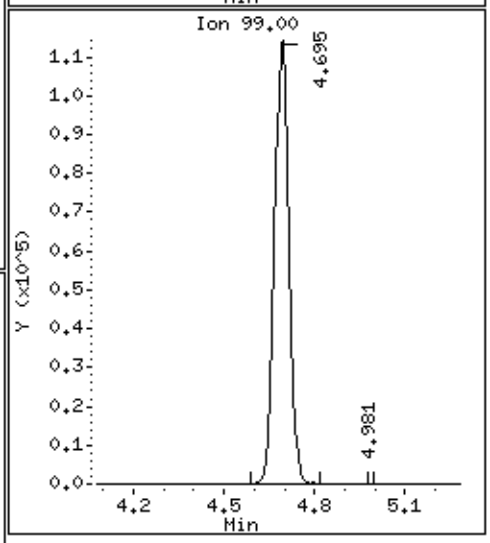
45 1,1,1-Trichloroethane

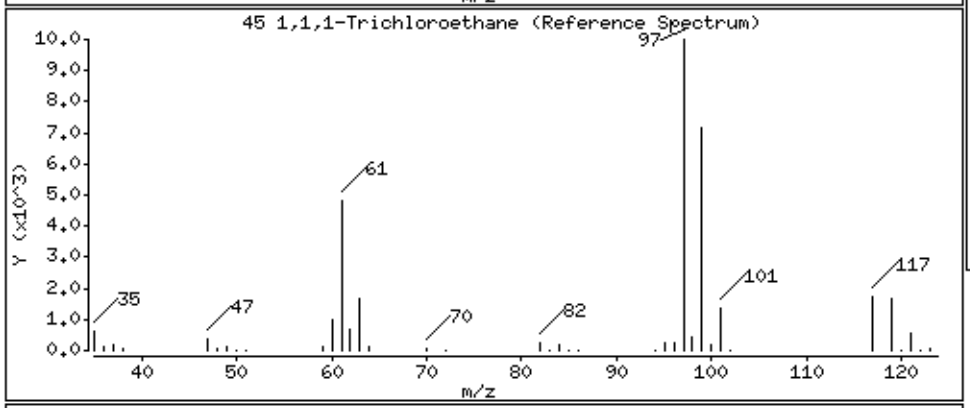
Concentration: 123.46 NG

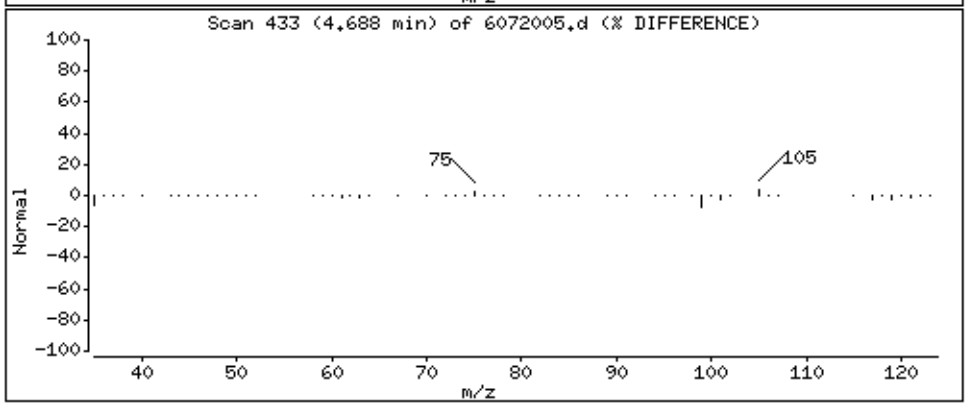












Data File: /chem/msd6.i/20jul16.b/6072005.d

Date : 20-JUL-2016 12:38

Client ID: LCS

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCS;LCS

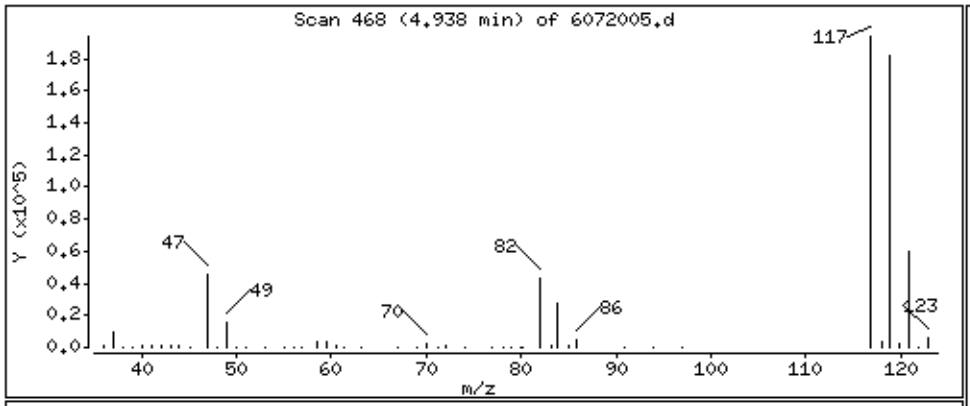
Operator: CT

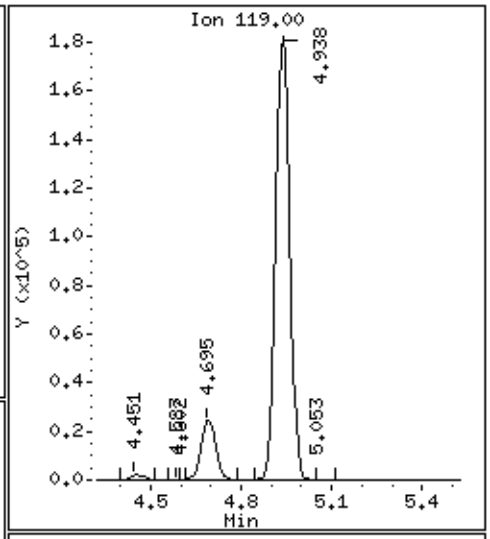
Column phase: RTx-624

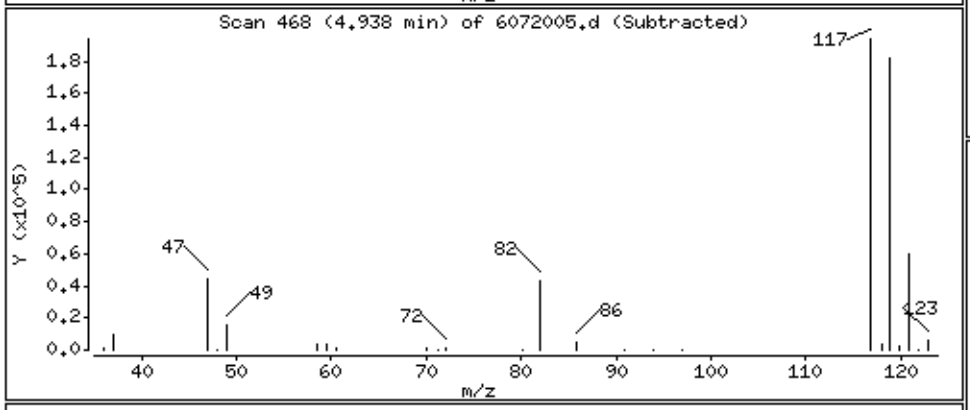
Column diameter: 0.53

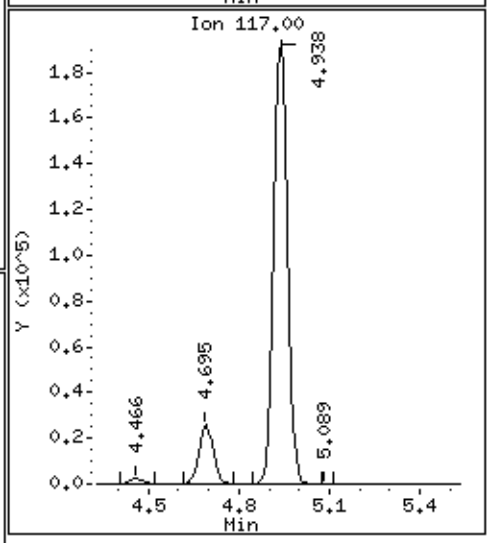
47 Carbon Tetrachloride

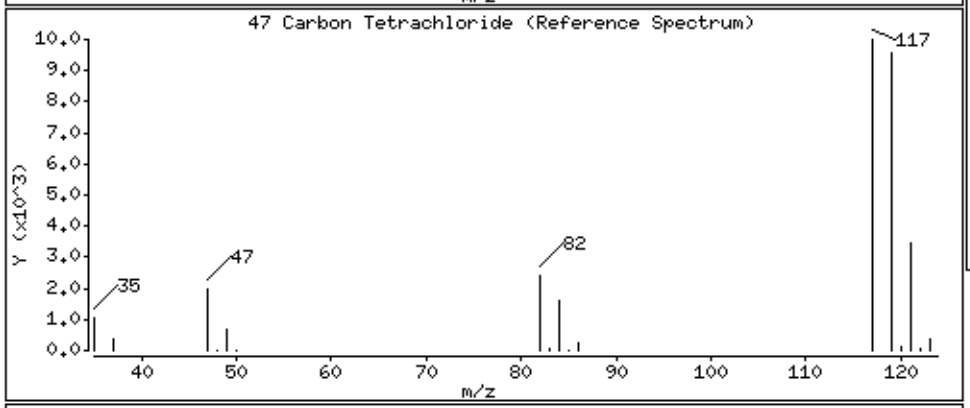
Concentration: 127.22 NG

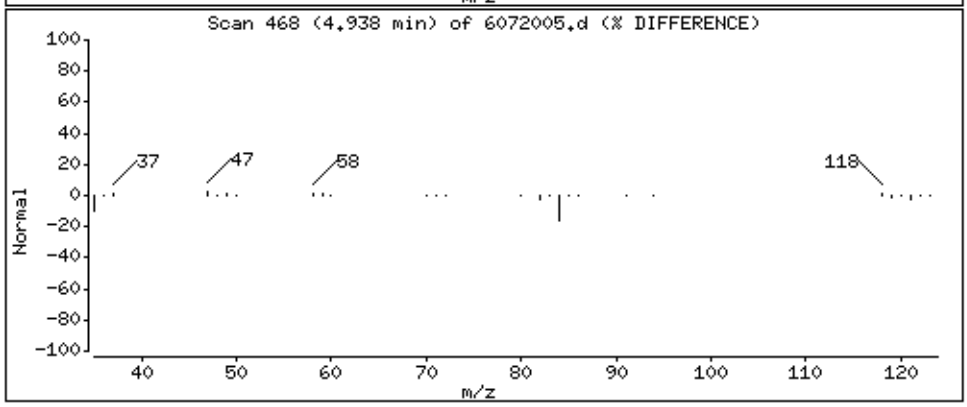












Data File: /chem/msd6.i/20jul16.b/6072005.d

Date : 20-JUL-2016 12:38

Client ID: LCS

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCS;LCS

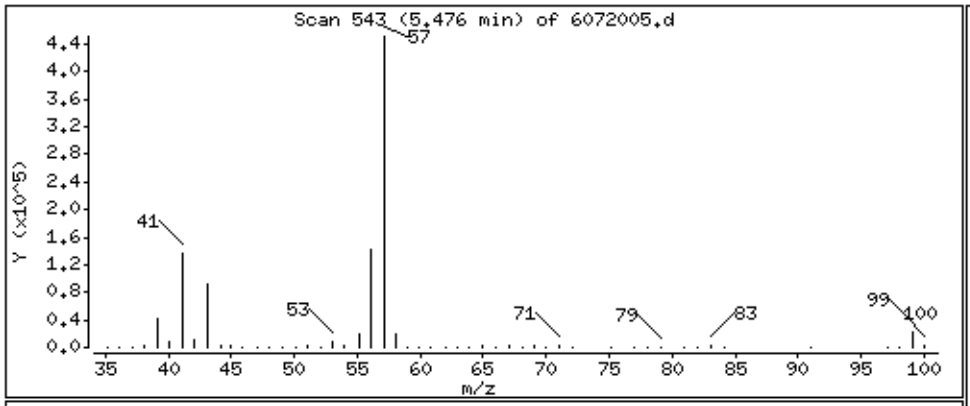
Operator: CT

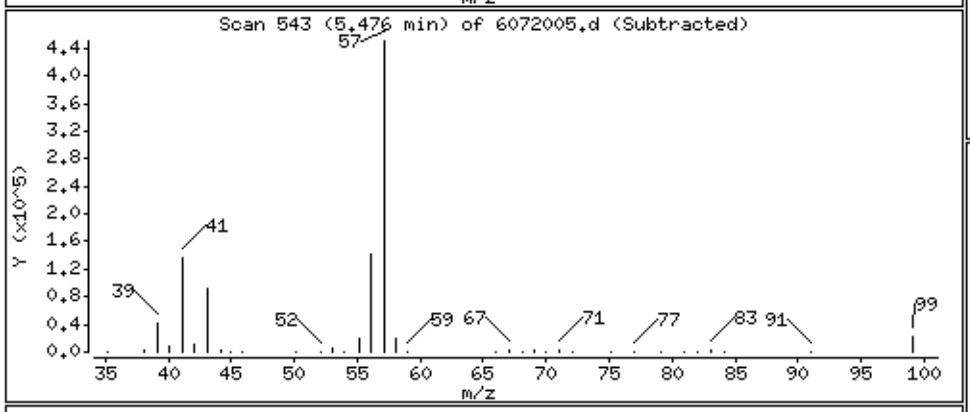
Column phase: RTx-624

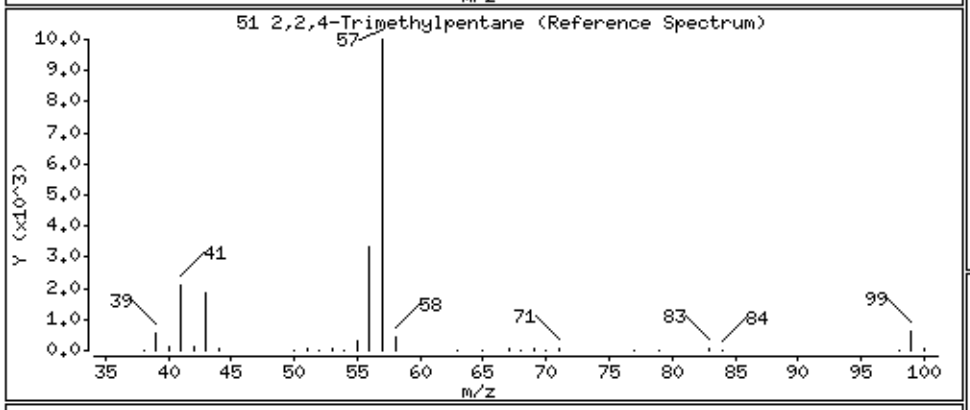
Column diameter: 0.53

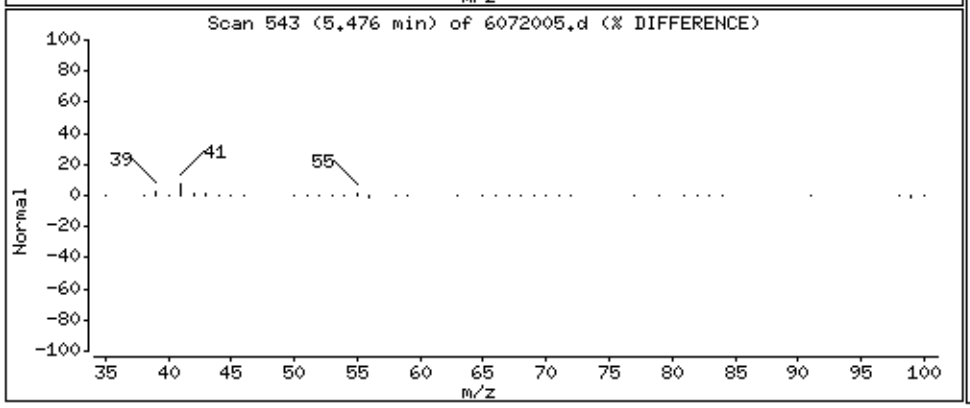
51 2,2,4-Trimethylpentane

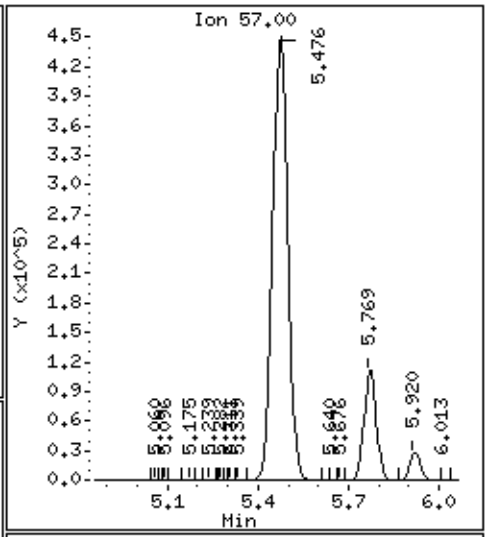
Concentration: 104.56 NG

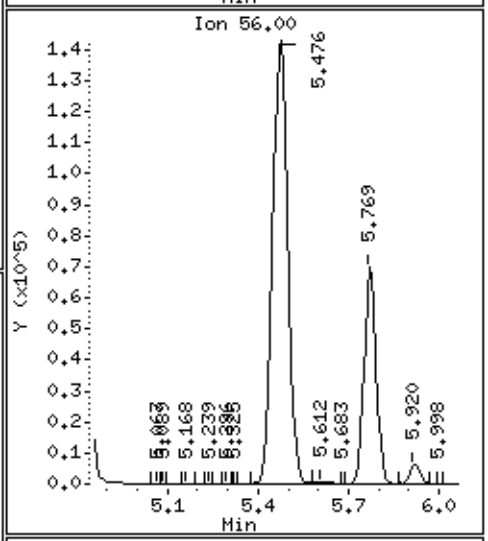


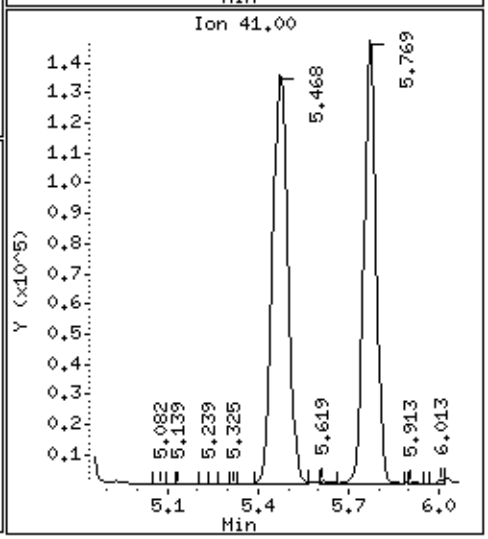












Data File: /chem/msd6.i/20jul16.b/6072005.d

Date : 20-JUL-2016 12:38

Client ID: LCS

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCS;LCS

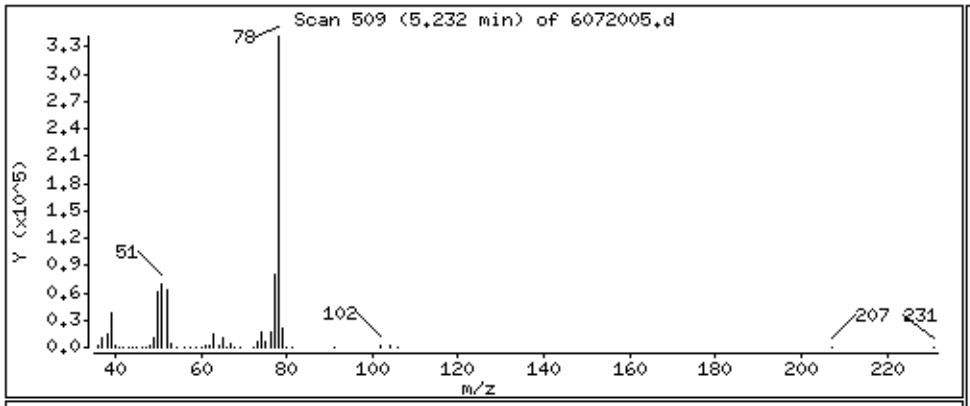
Operator: CT

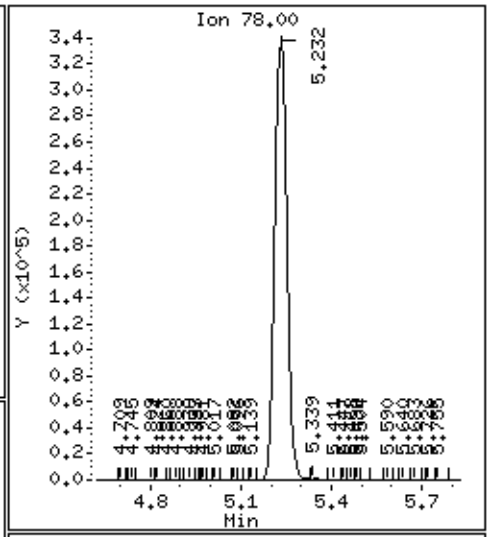
Column phase: RTx-624

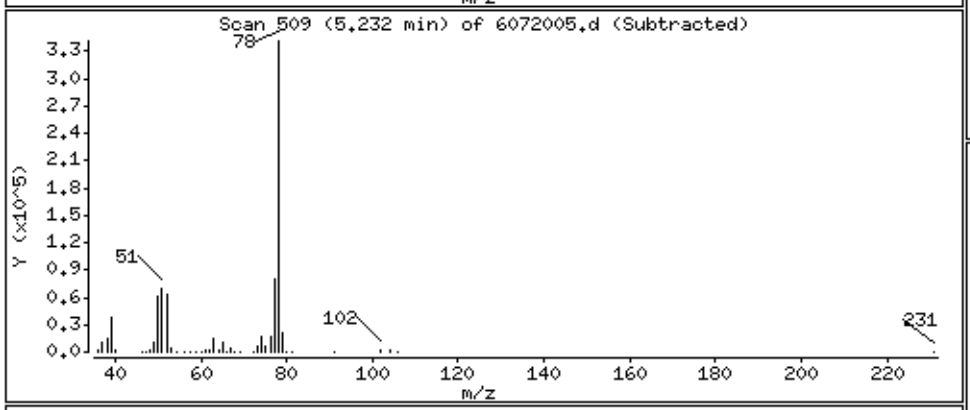
Column diameter: 0.53

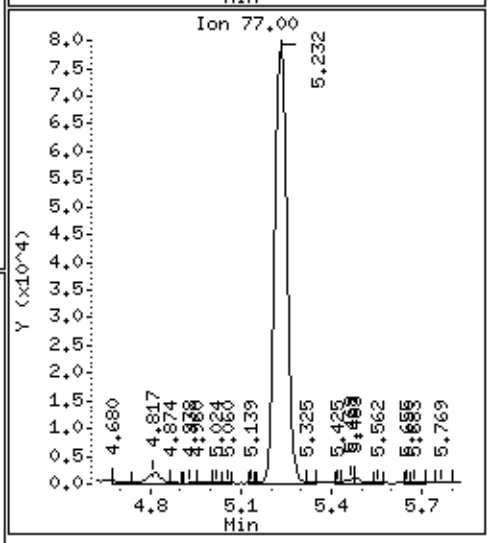
48 Benzene

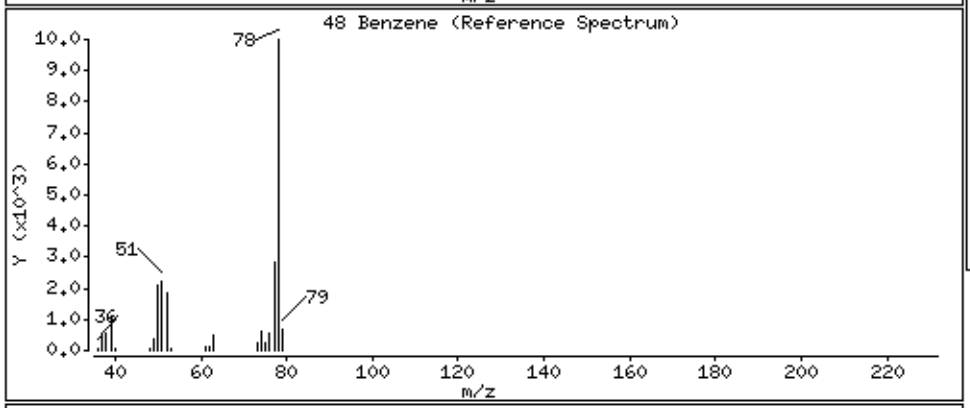
Concentration: 64.412 NG

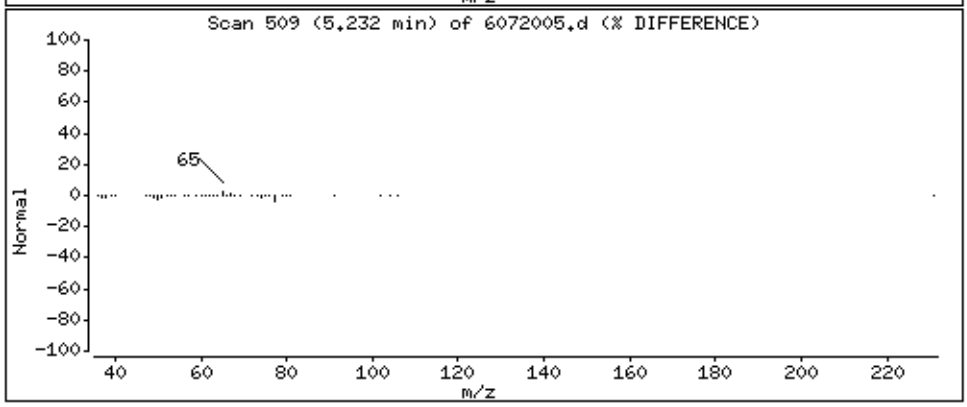












Data File: /chem/msd6.i/20jul16.b/6072005.d

Date : 20-JUL-2016 12:38

Client ID: LCS

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCS;LCS

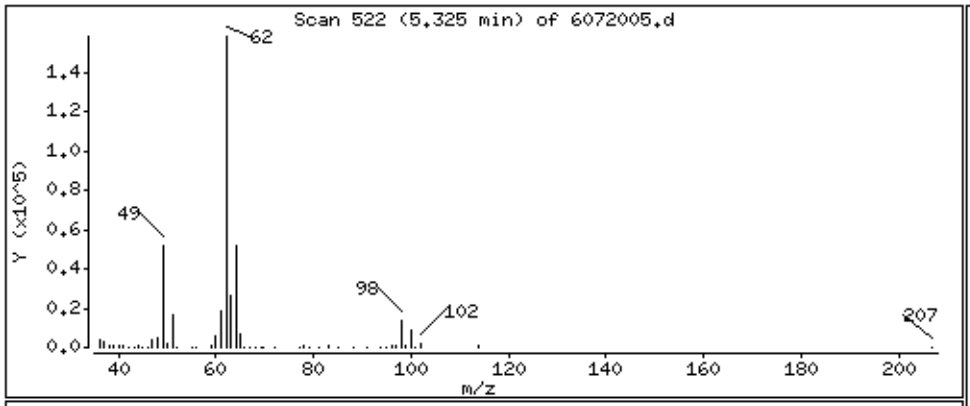
Operator: CT

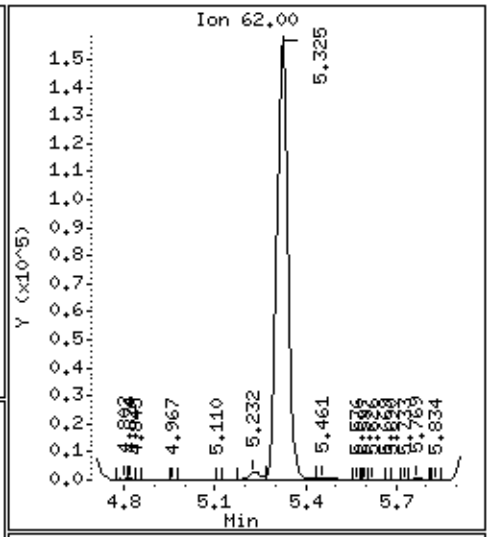
Column phase: RTx-624

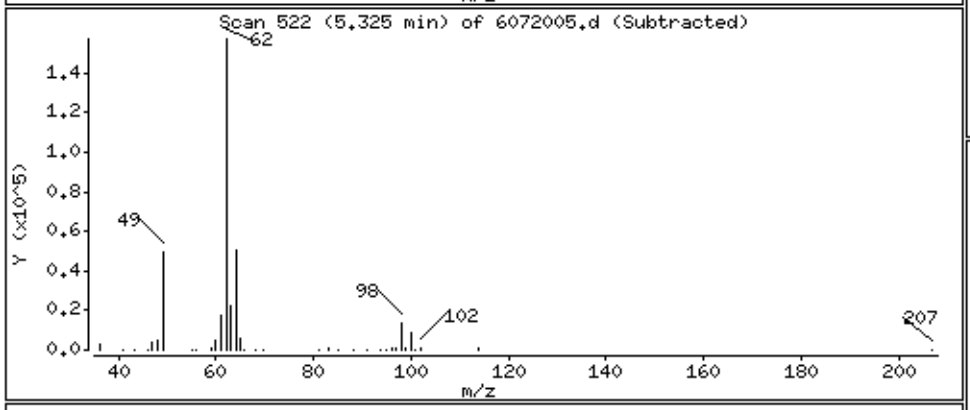
Column diameter: 0.53

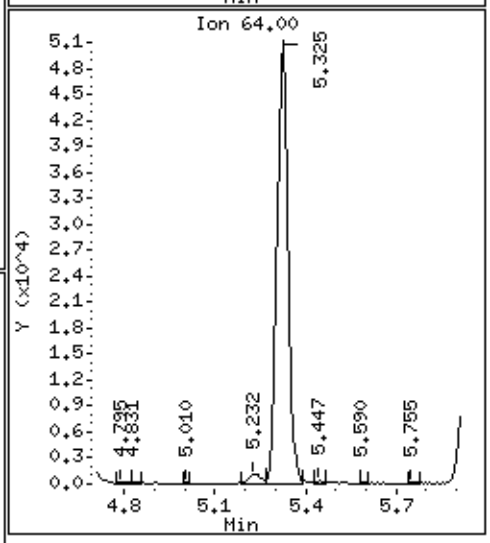
50 1,2-Dichloroethane

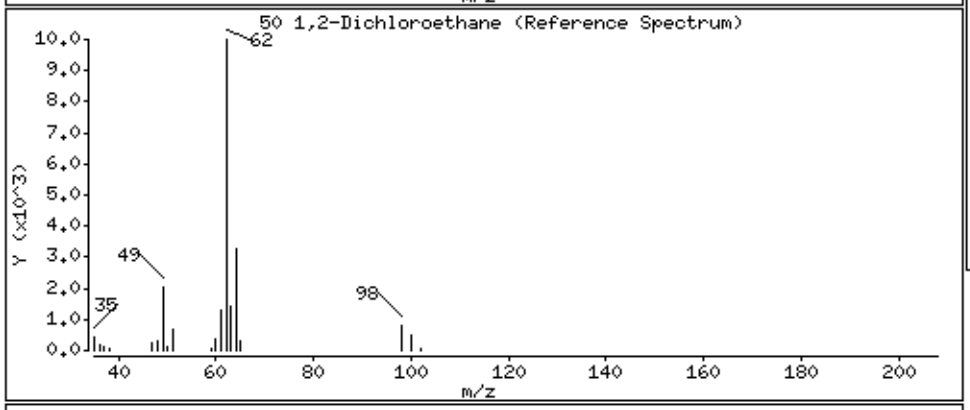
Concentration: 89.878 NG

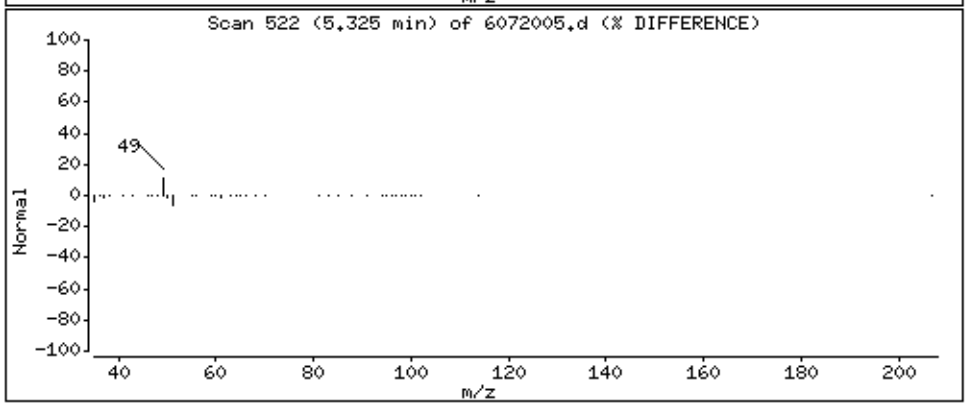












Data File: /chem/msd6.i/20jul16.b/6072005.d

Date : 20-JUL-2016 12:38

Client ID: LCS

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCS;LCS

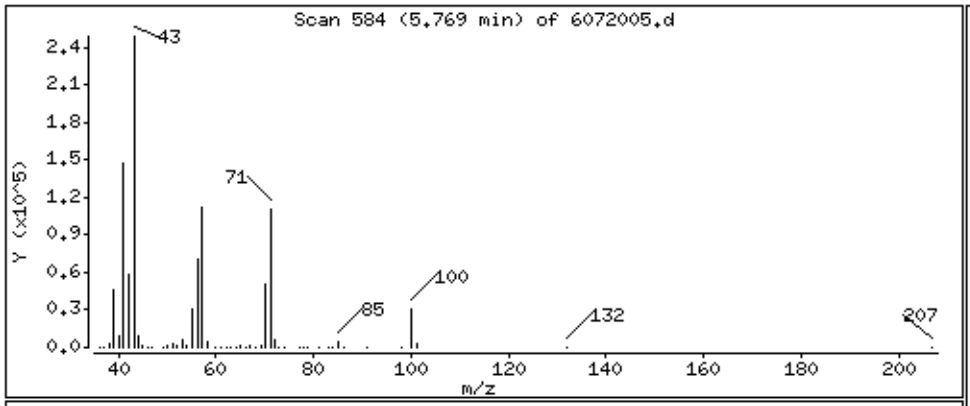
Operator: CT

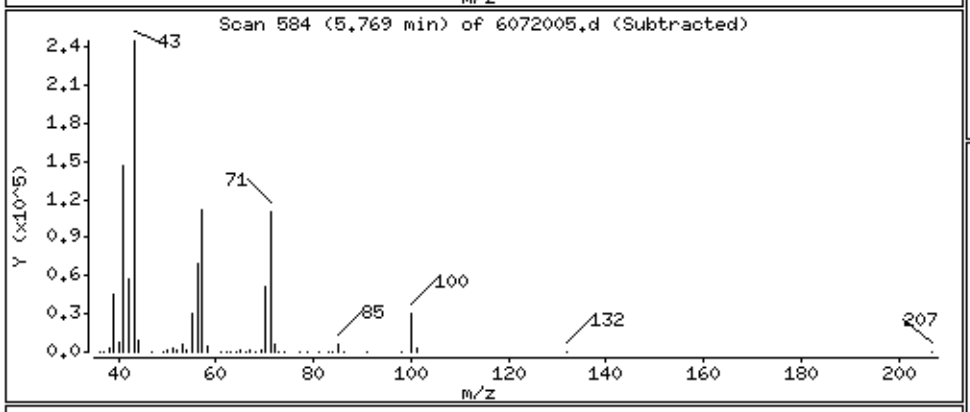
Column phase: RTx-624

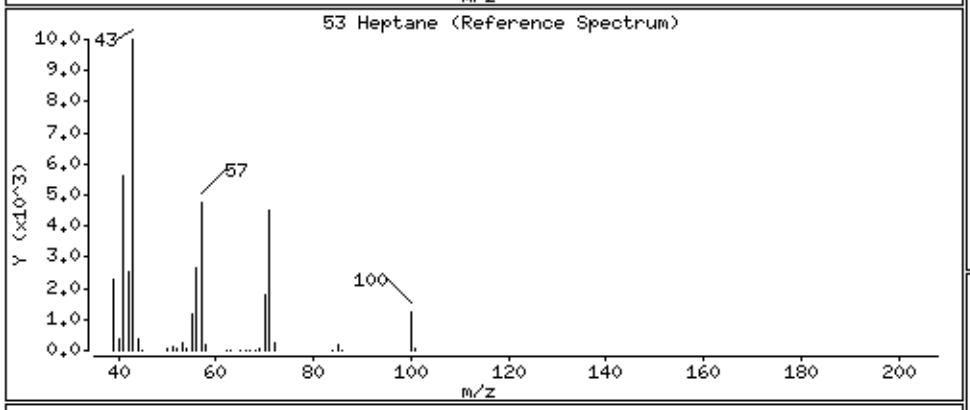
Column diameter: 0.53

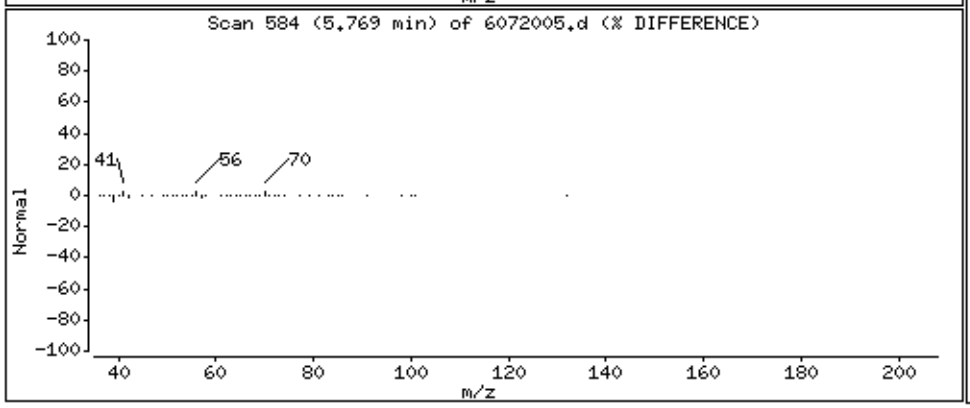
53 Heptane

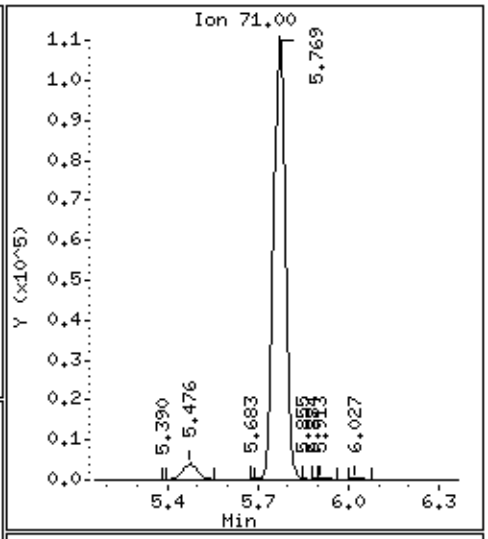
Concentration: 86.974 NG

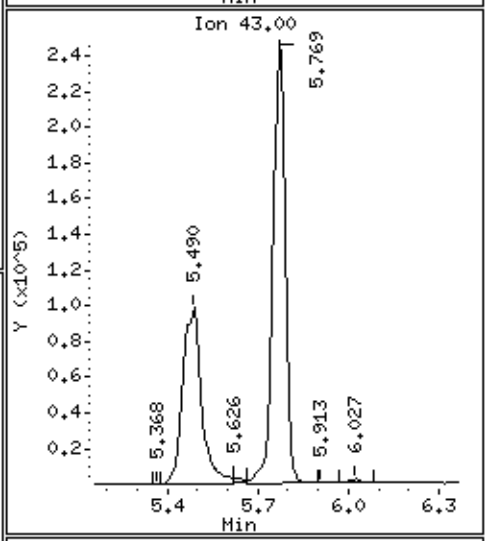


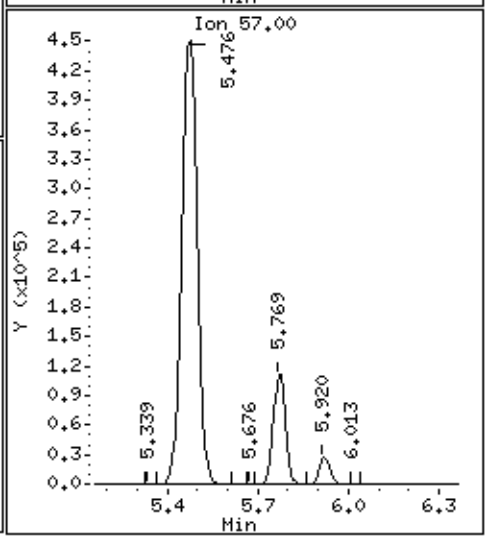












Data File: /chem/msd6.i/20jul16.b/6072005.d

Date : 20-JUL-2016 12:38

Client ID: LCS

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCS;LCS

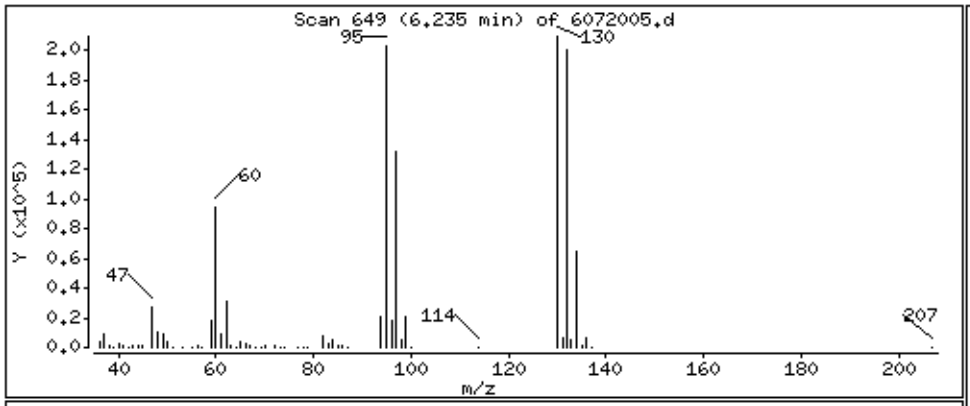
Operator: CT

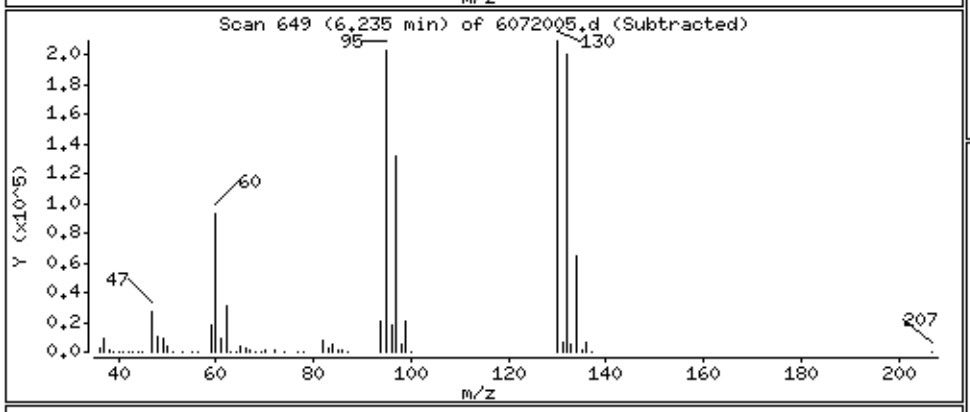
Column phase: RTx-624

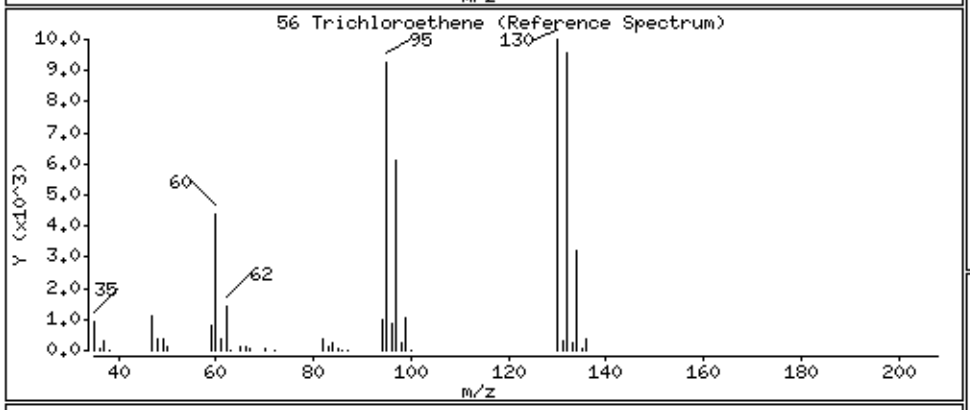
Column diameter: 0.53

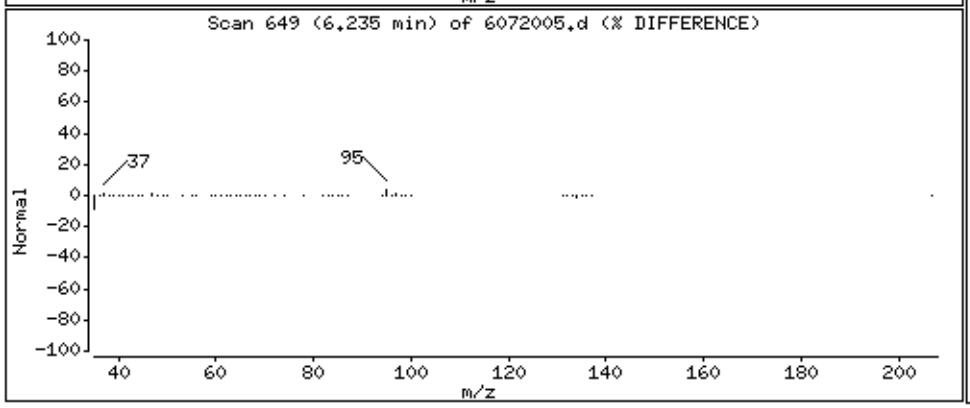
56 Trichloroethene

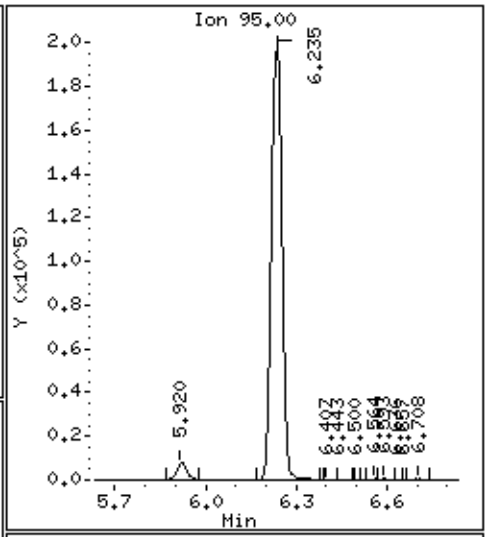
Concentration: 125.27 NG

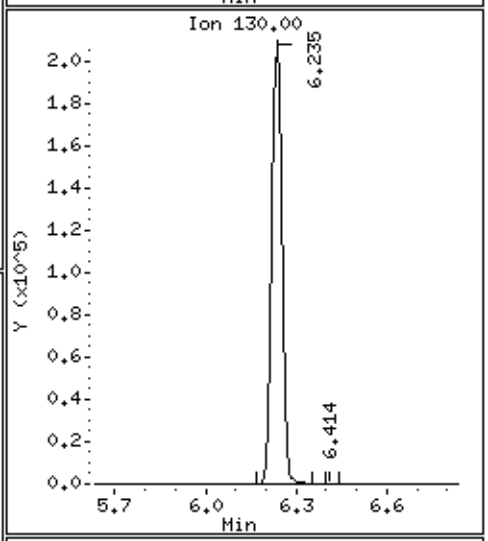


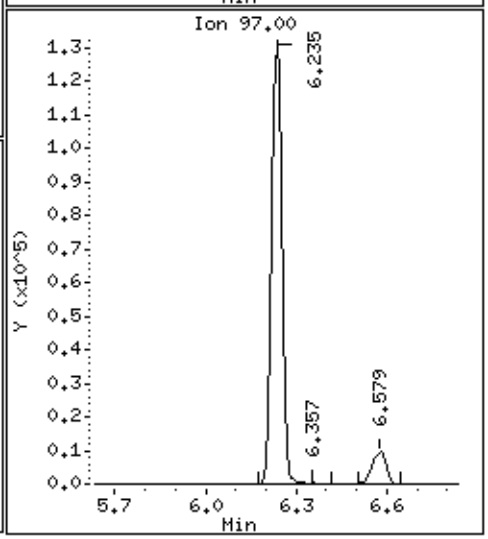












Data File: /chem/msd6.i/20jul16.b/6072005.d

Date : 20-JUL-2016 12:38

Client ID: LCS

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCS;LCS

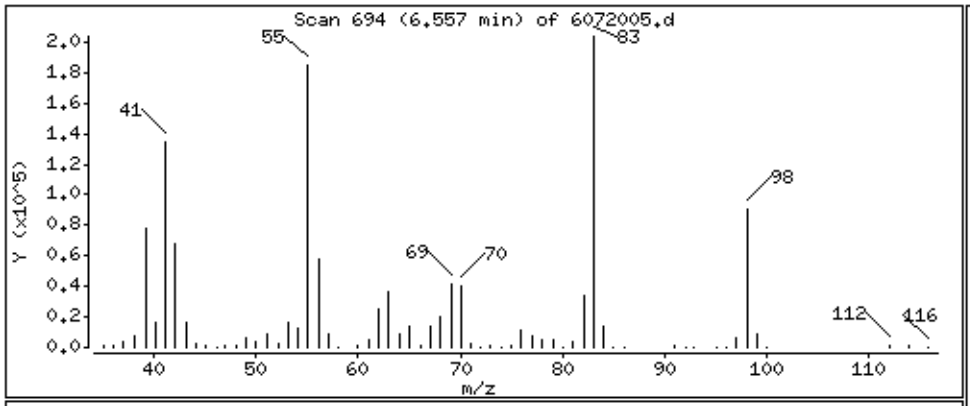
Operator: CT

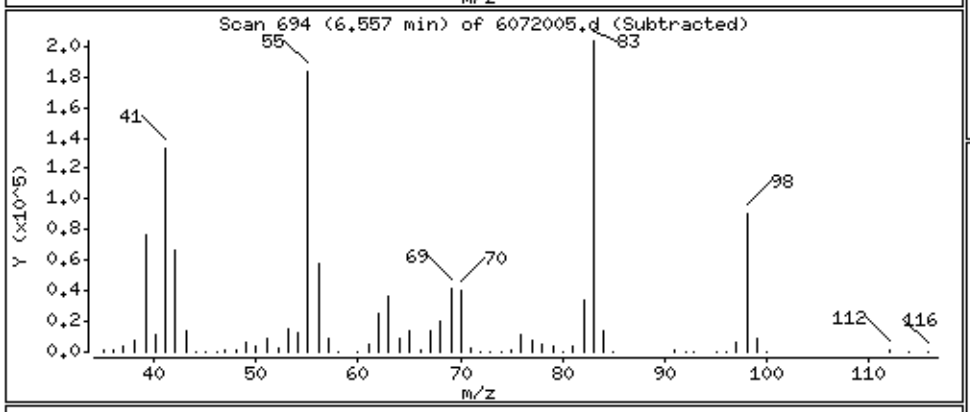
Column phase: RTx-624

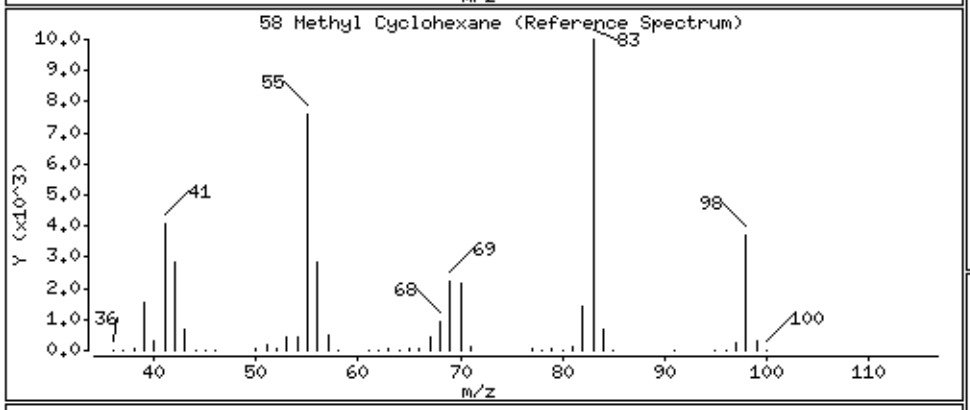
Column diameter: 0.53

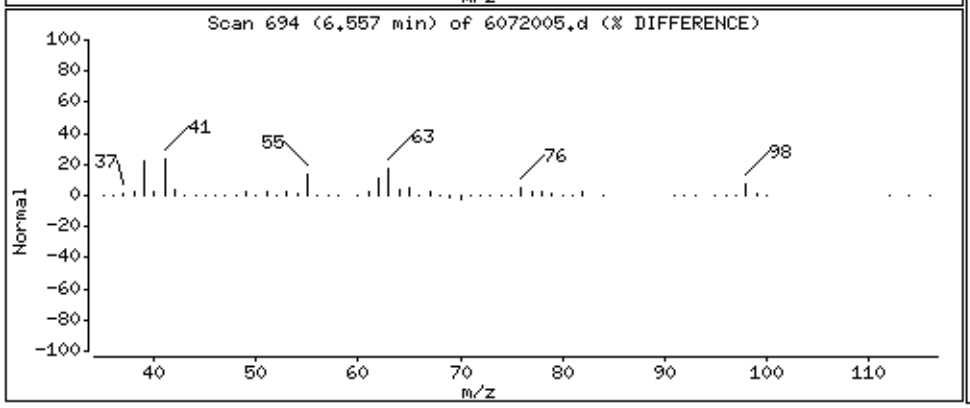
58 Methyl Cyclohexane

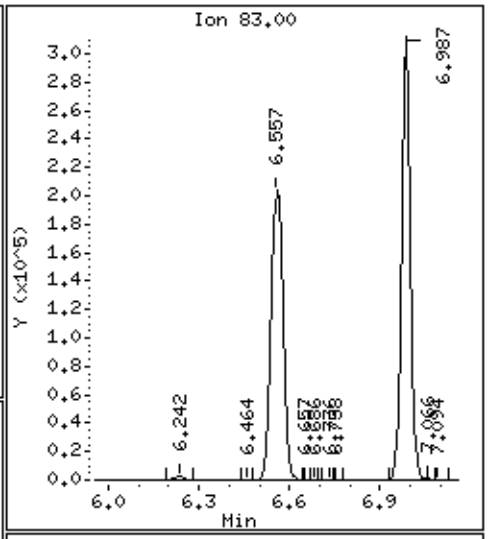
Concentration: 88.664 NG

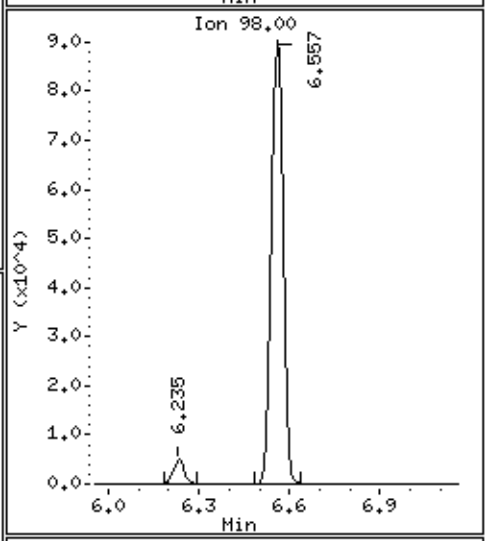


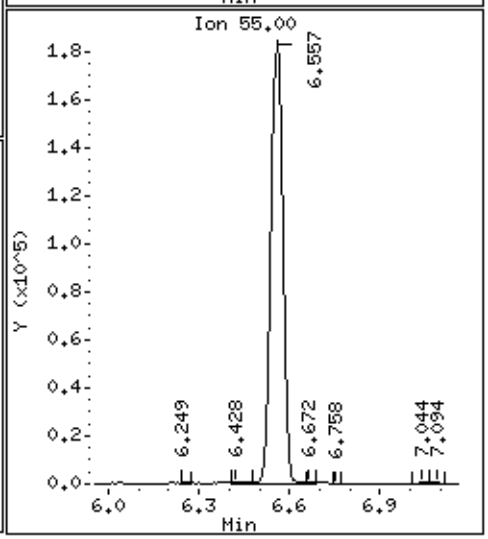












Data File: /chem/msd6.i/20jul16.b/6072005.d

Date : 20-JUL-2016 12:38

Client ID: LCS

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCS;LCS

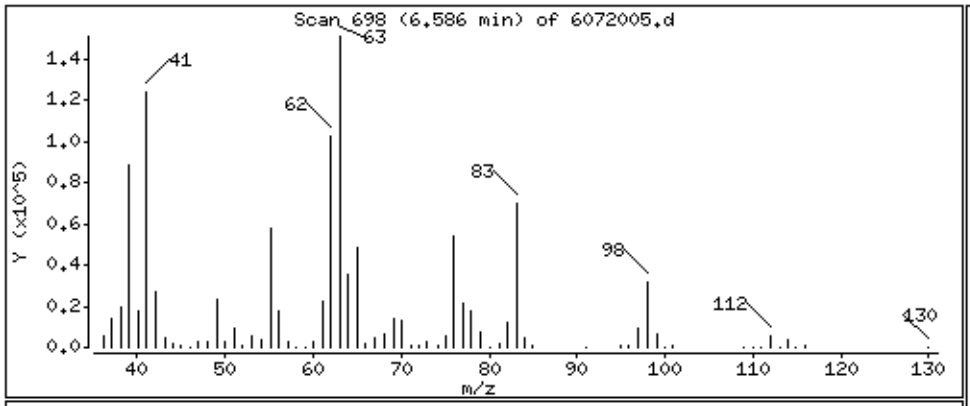
Operator: CT

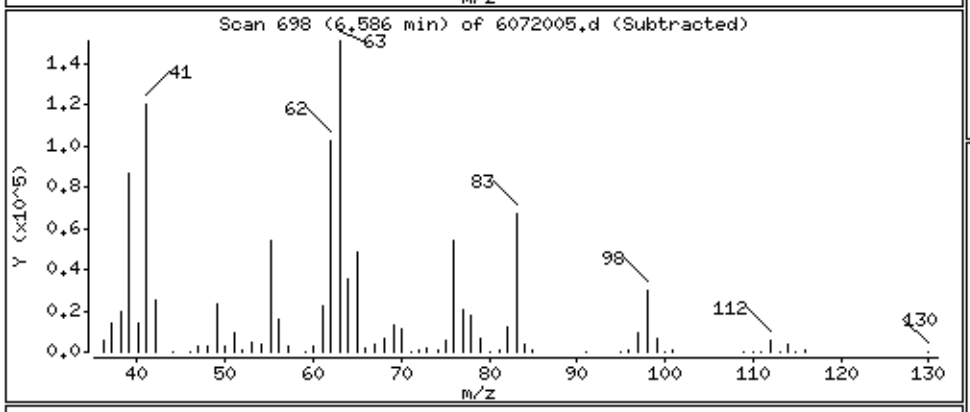
Column phase: RTx-624

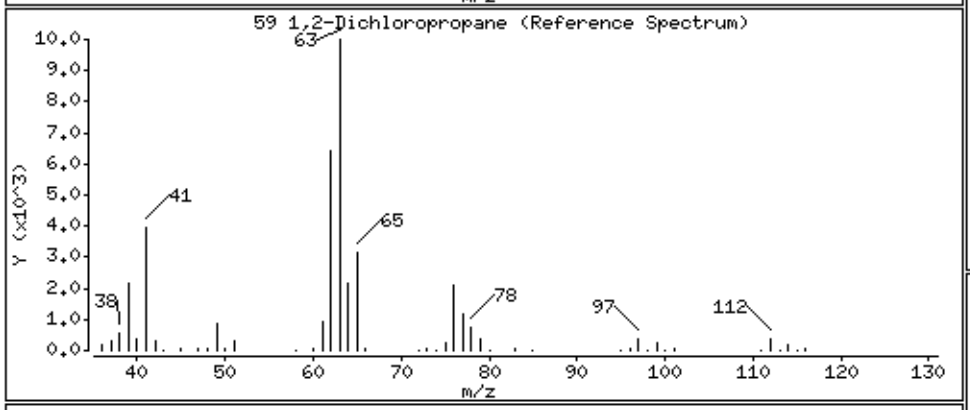
Column diameter: 0.53

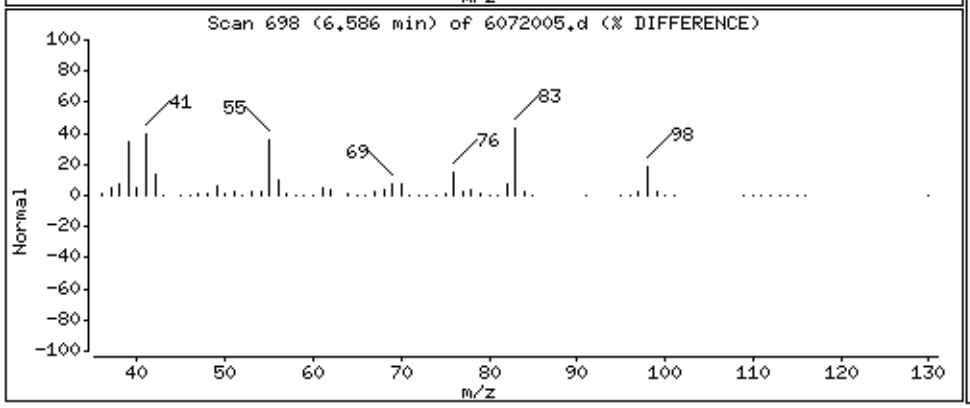
59 1,2-Dichloropropane

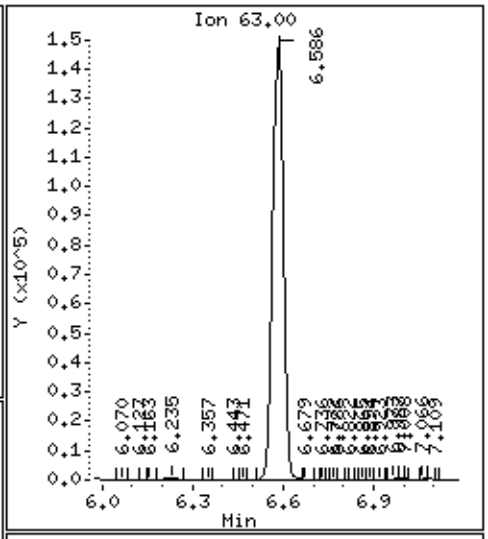
Concentration: 107.05 NG

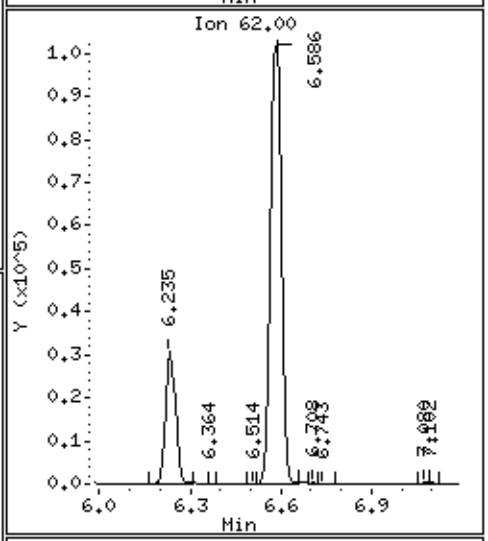


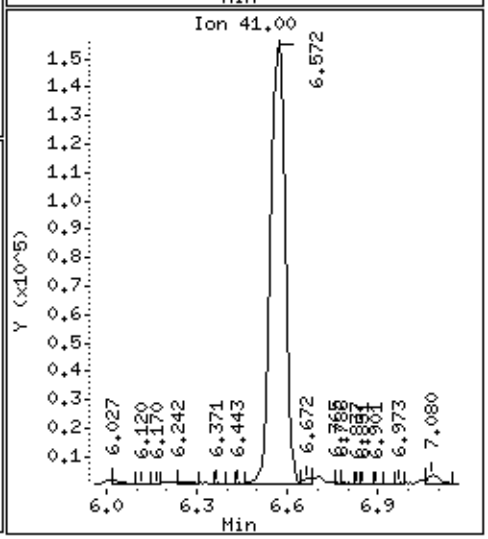












Data File: /chem/msd6.i/20jul16.b/6072005.d

Date : 20-JUL-2016 12:38

Client ID: LCS

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCS;LCS

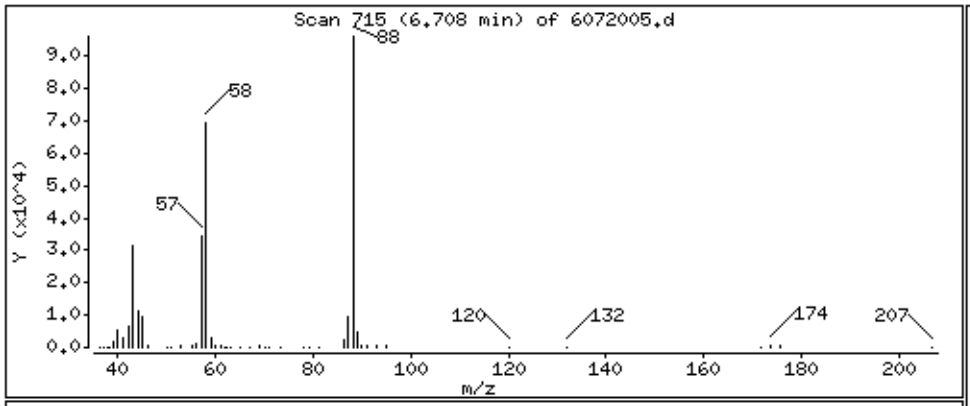
Operator: CT

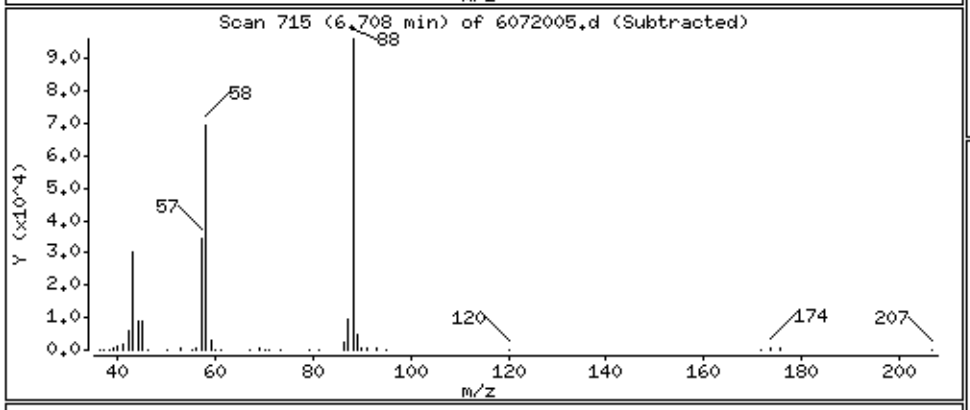
Column phase: RTx-624

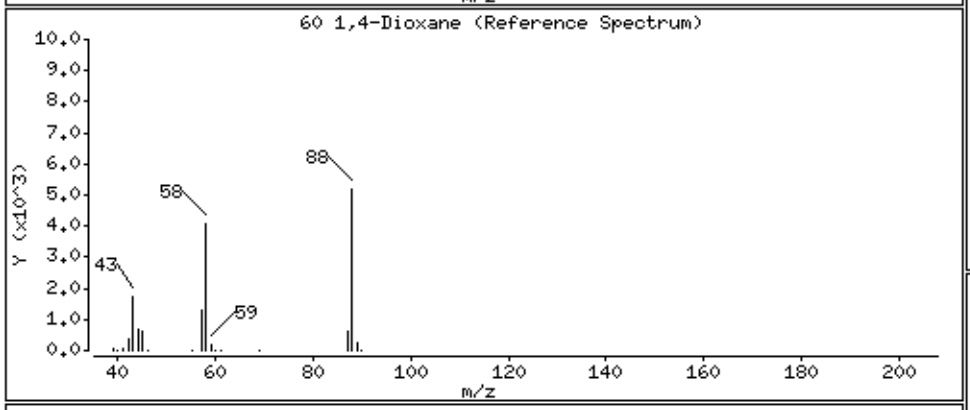
Column diameter: 0.53

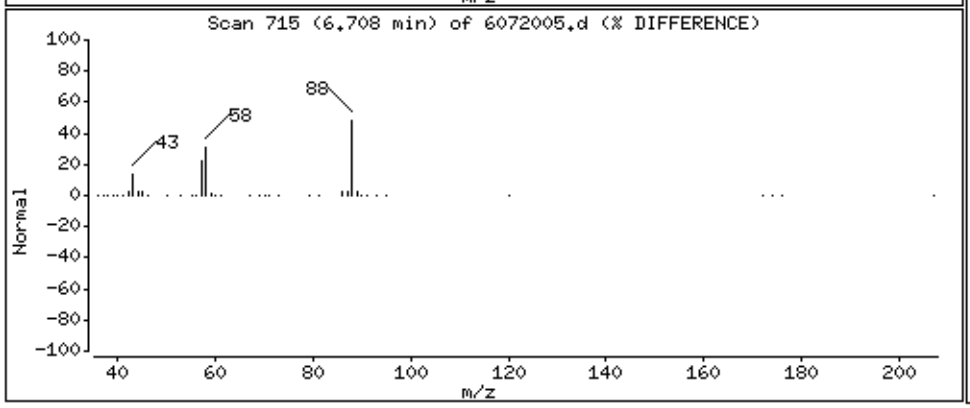
60 1,4-Dioxane

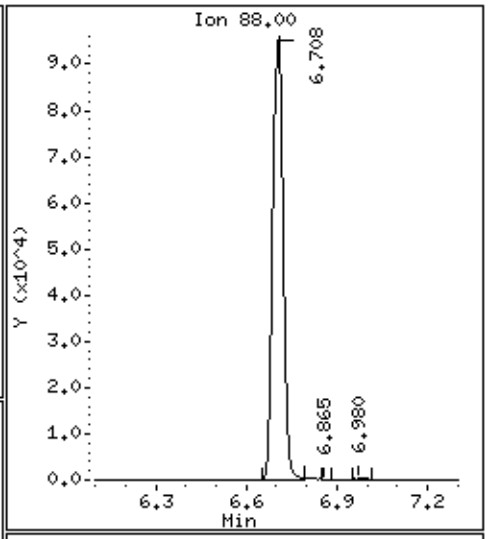
Concentration: 79.197 NG

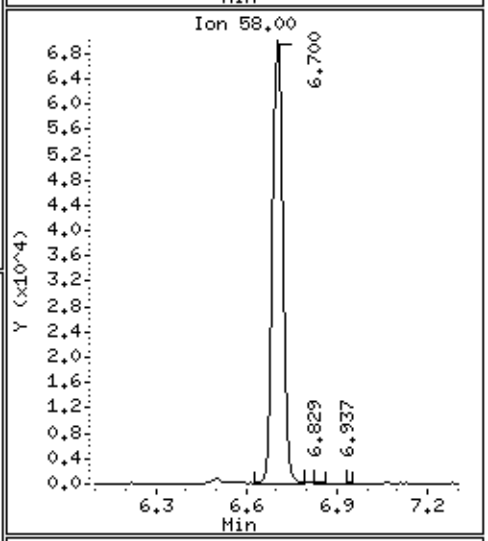


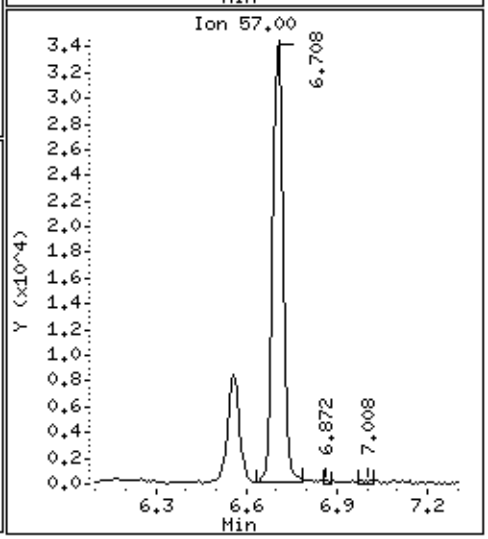












Data File: /chem/msd6.i/20jul16.b/6072005.d

Date : 20-JUL-2016 12:38

Client ID: LCS

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCS;LCS

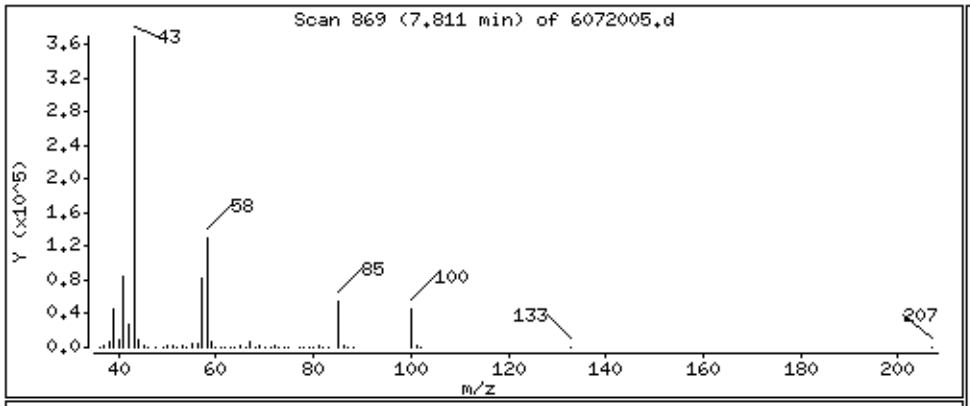
Operator: CT

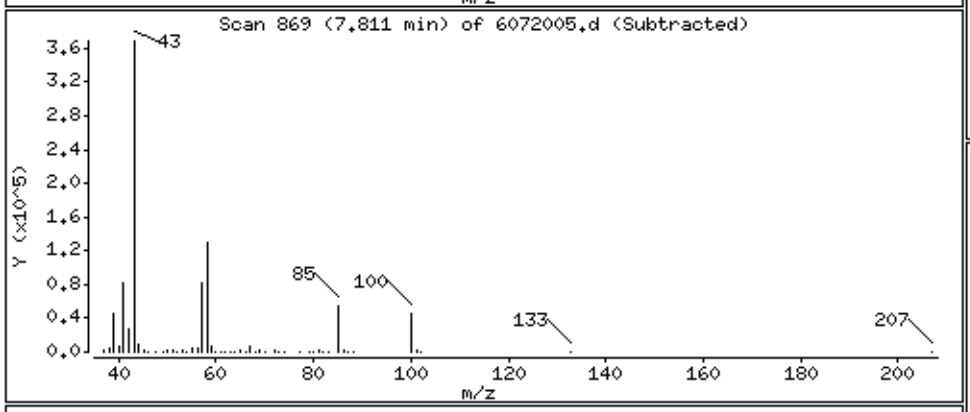
Column phase: RTx-624

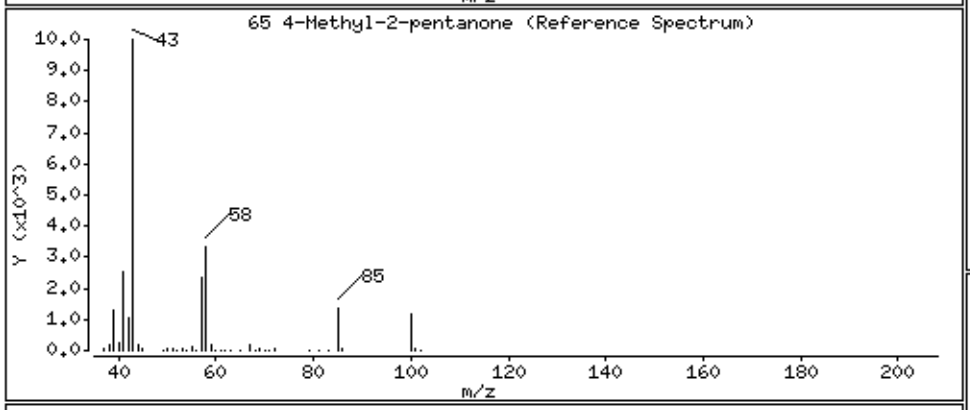
Column diameter: 0.53

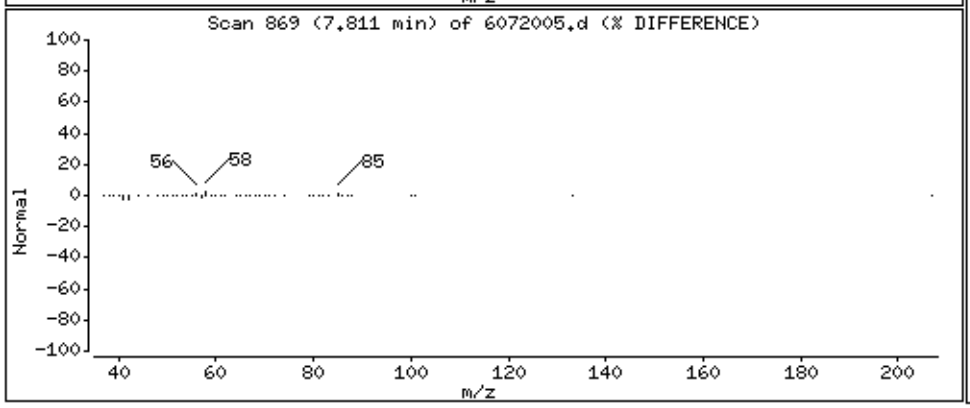
65 4-Methyl-2-pentanone

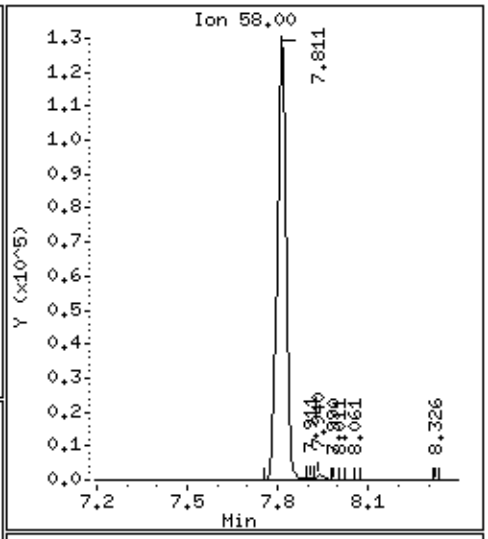
Concentration: 87.389 NG

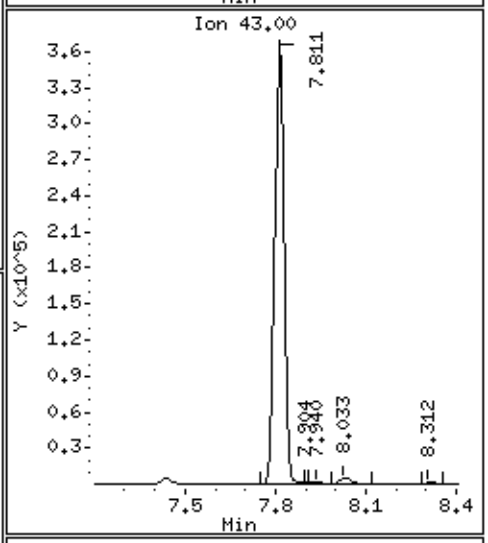


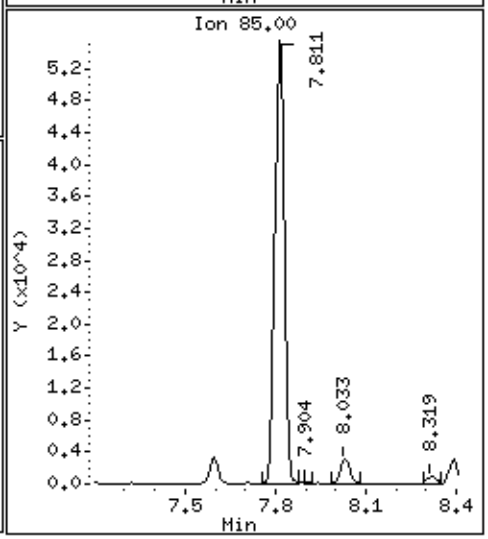












Data File: /chem/msd6.i/20jul16.b/6072005.d

Date : 20-JUL-2016 12:38

Client ID: LCS

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCS;LCS

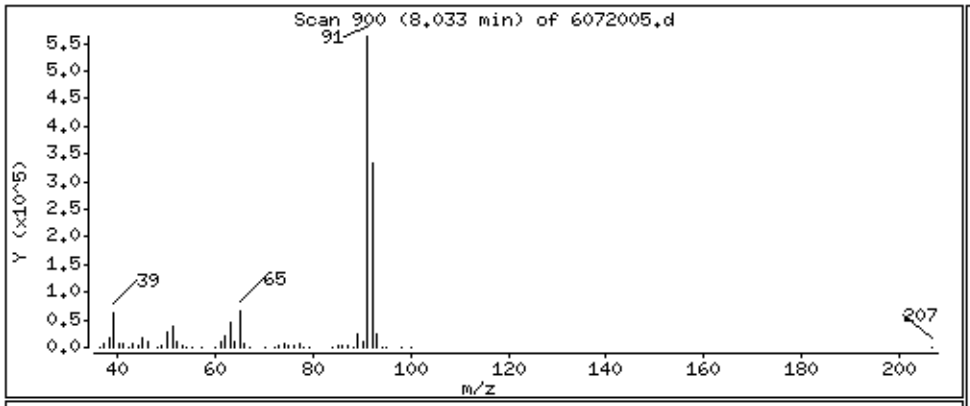
Operator: CT

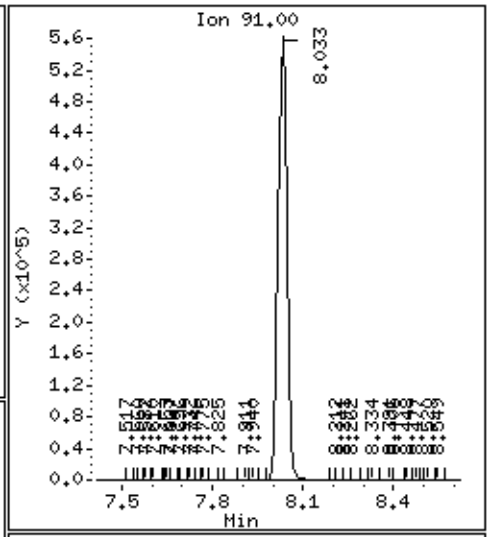
Column phase: RTx-624

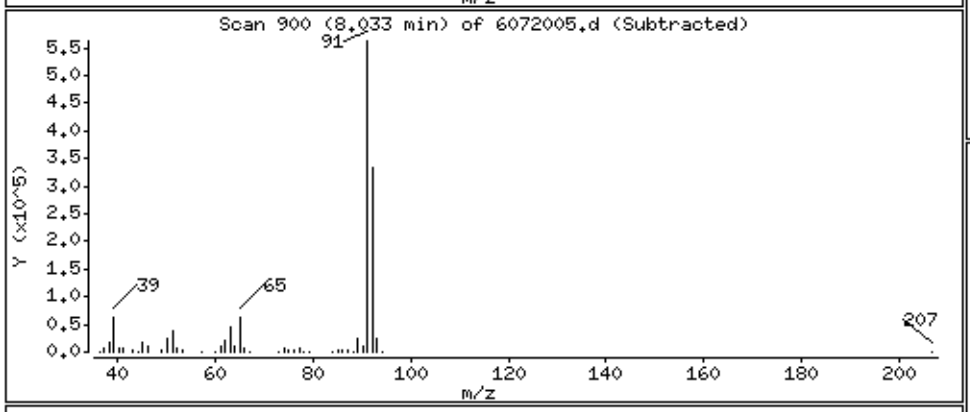
Column diameter: 0.53

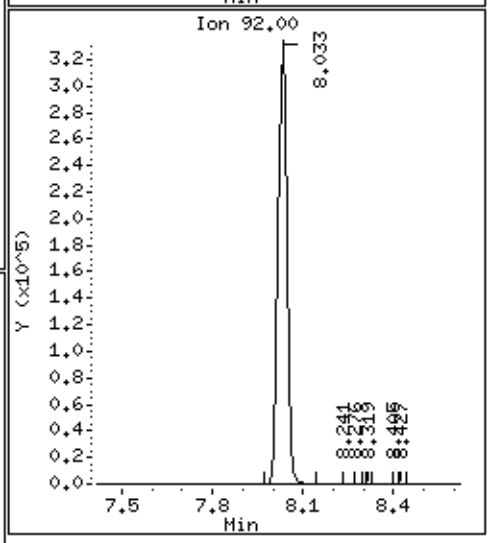
67 Toluene

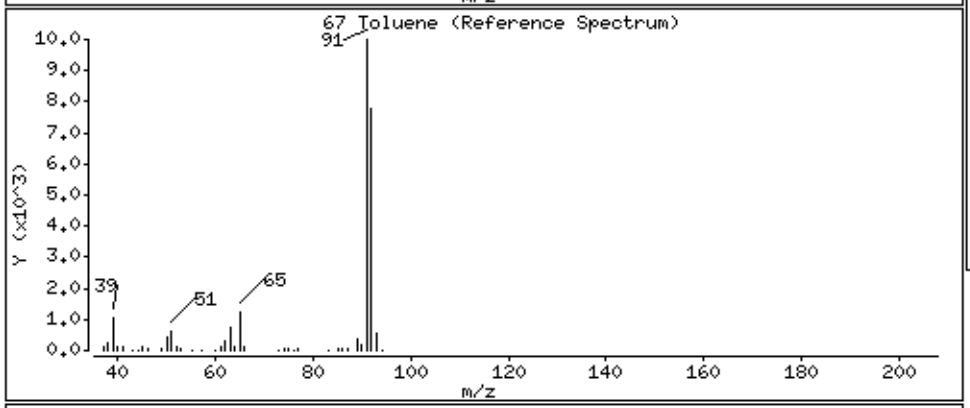
Concentration: 88.163 NG

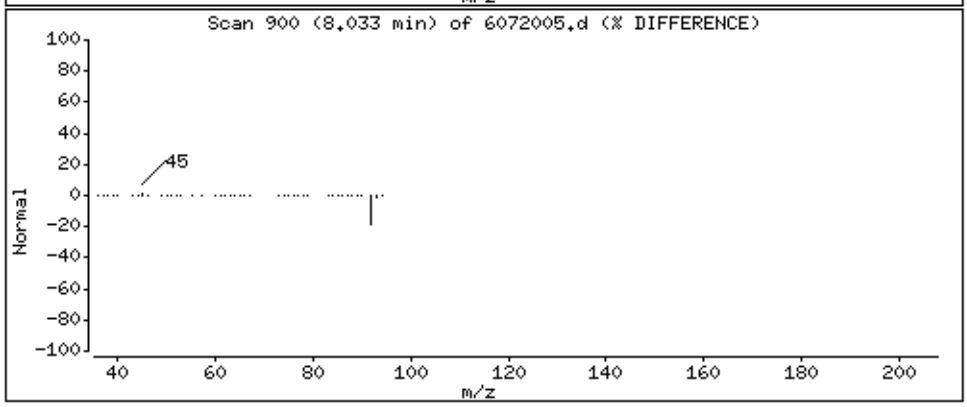












Data File: /chem/msd6.i/20jul16.b/6072005.d

Date : 20-JUL-2016 12:38

Client ID: LCS

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCS;LCS

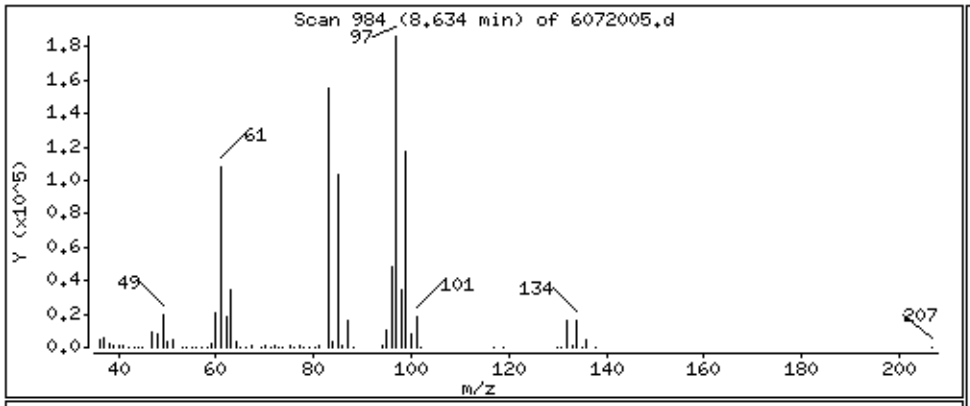
Operator: CT

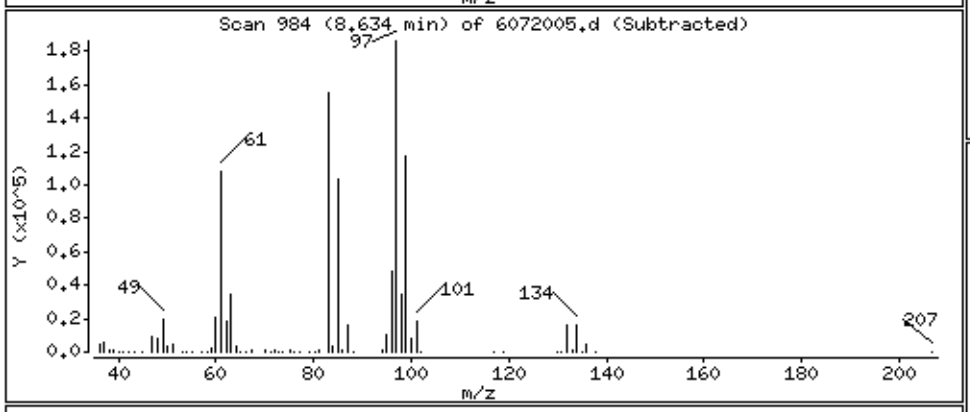
Column phase: RTx-624

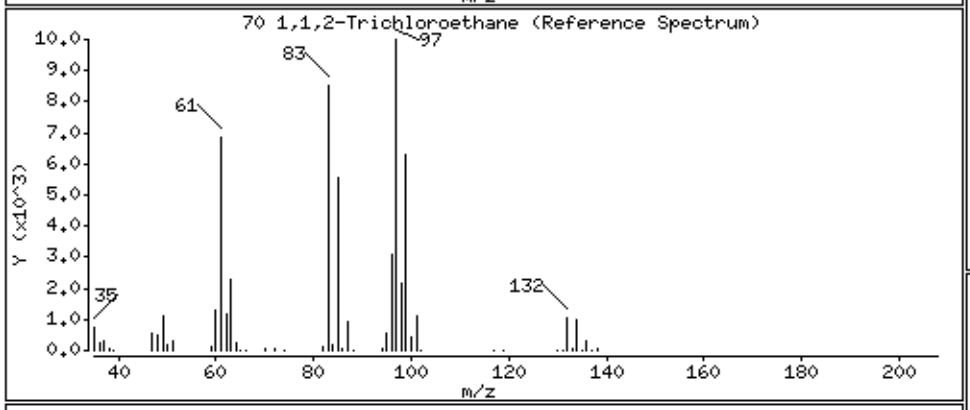
Column diameter: 0.53

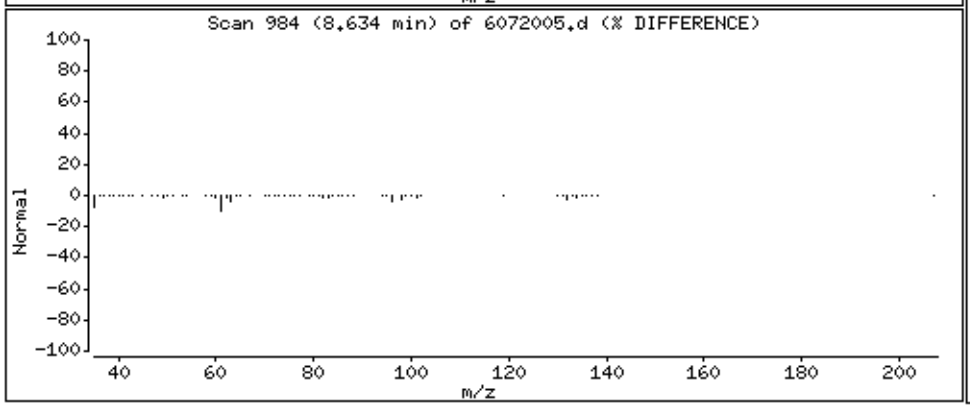
70 1,1,2-Trichloroethane

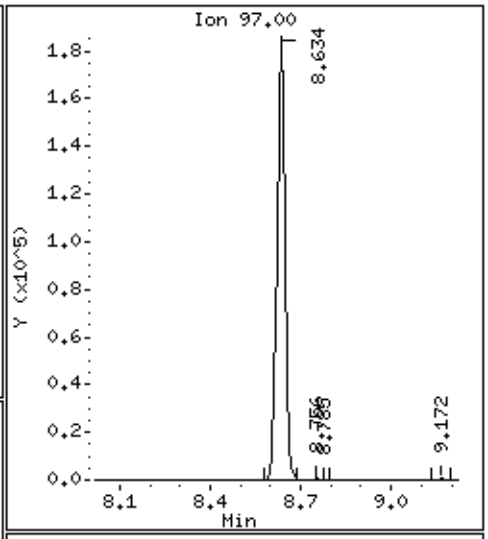
Concentration: 104.29 NG

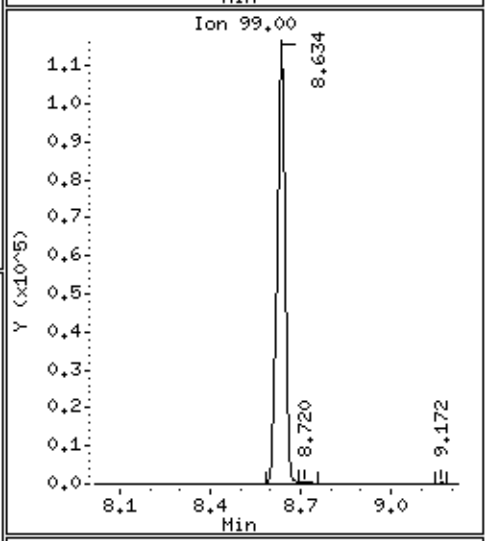


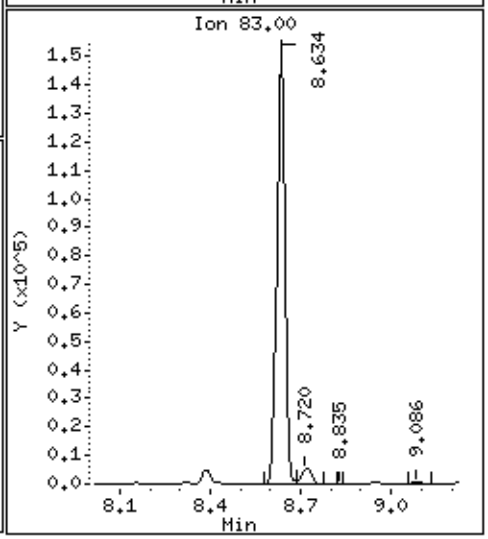












Data File: /chem/msd6.i/20jul16.b/6072005.d

Date : 20-JUL-2016 12:38

Client ID: LCS

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCS;LCS

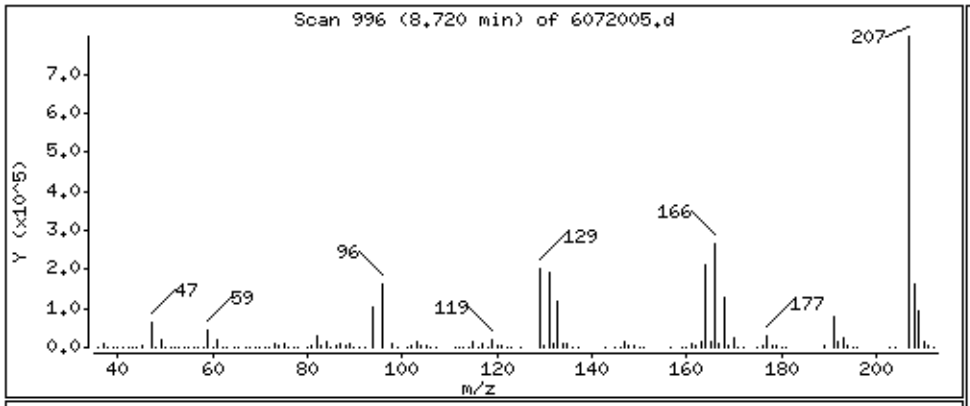
Operator: CT

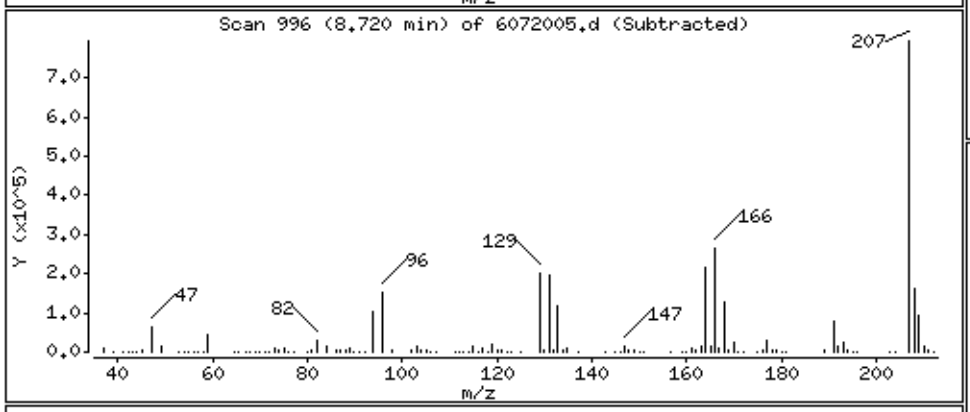
Column phase: RTx-624

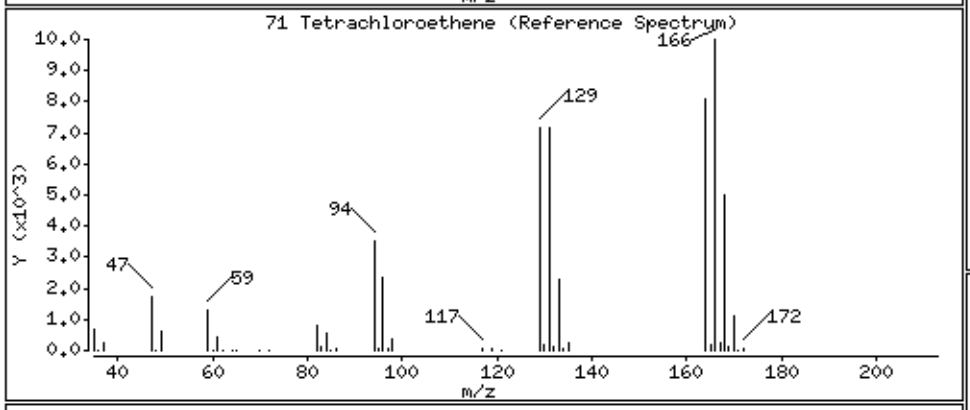
Column diameter: 0.53

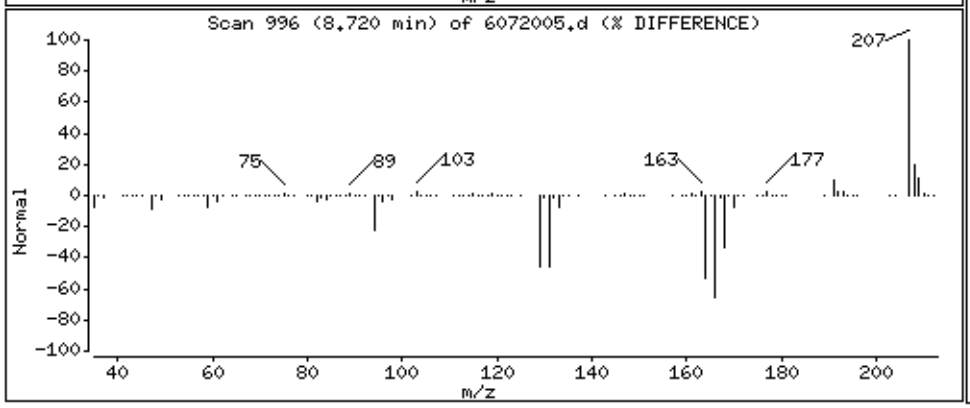
71 Tetrachloroethene

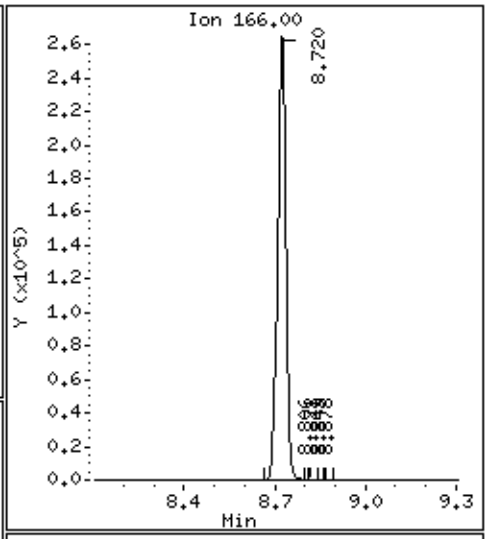
Concentration: 144.20 NG

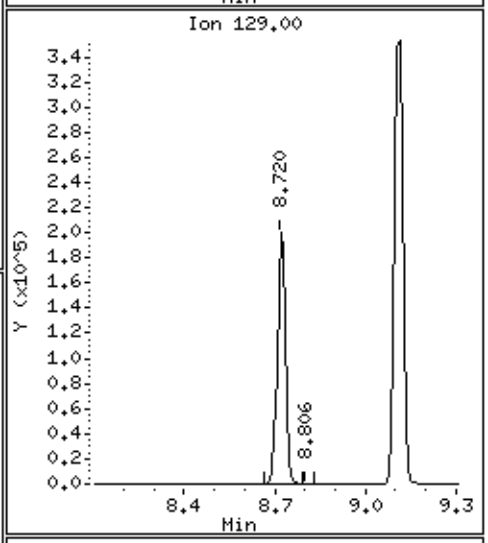


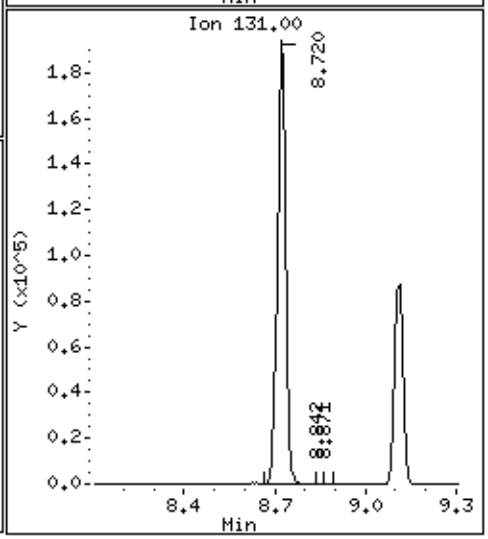












Data File: /chem/msd6.i/20jul16.b/6072005.d

Date : 20-JUL-2016 12:38

Client ID: LCS

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCS;LCS

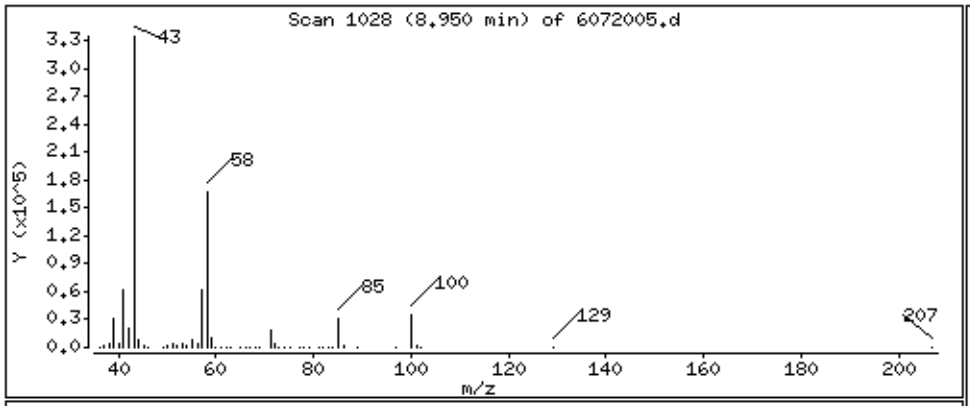
Operator: CT

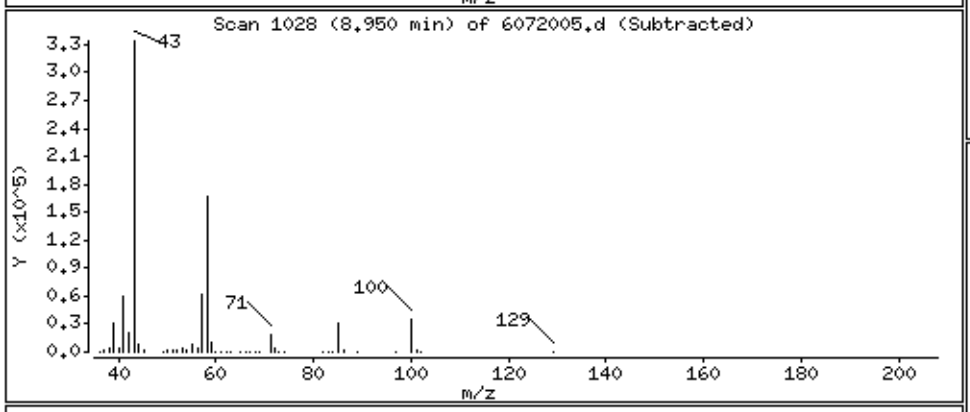
Column phase: RTx-624

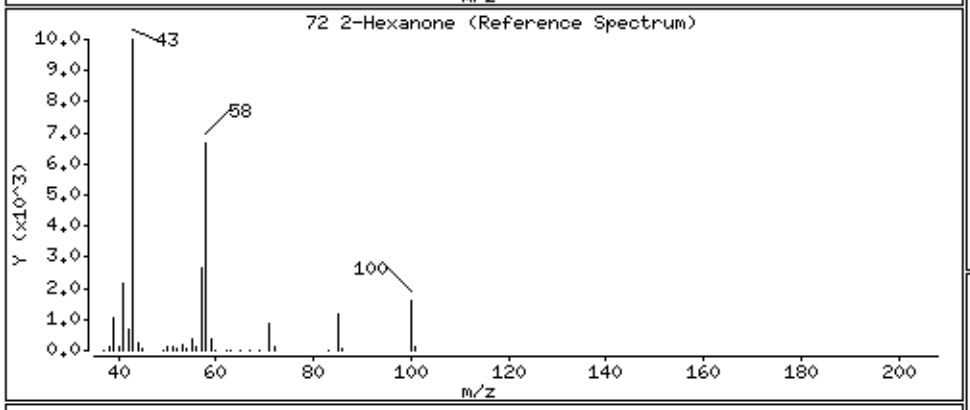
Column diameter: 0.53

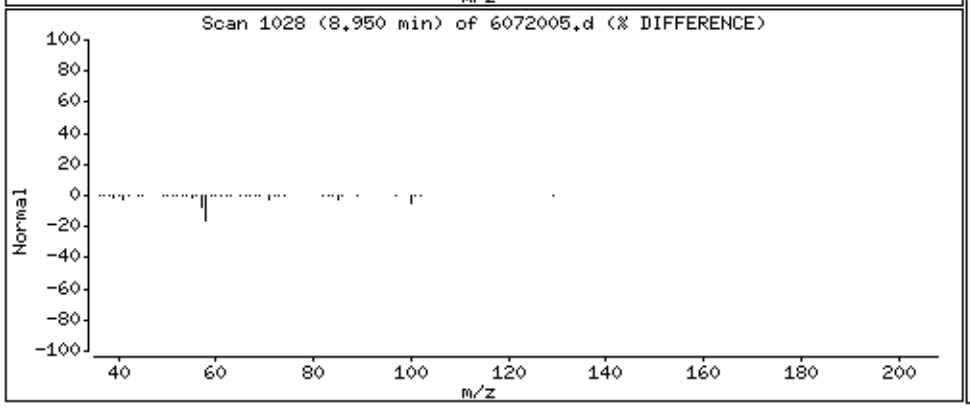
72 2-Hexanone

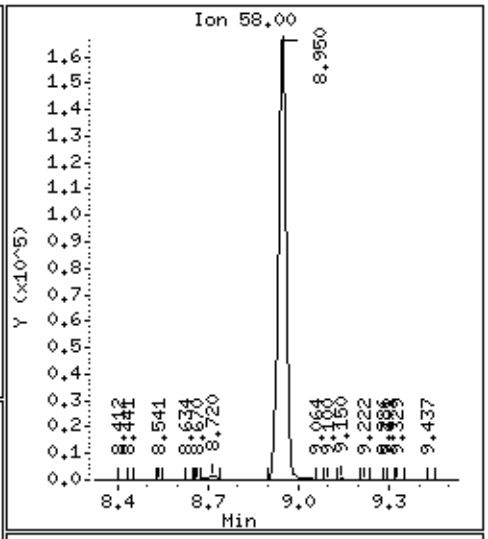
Concentration: 85.008 NG

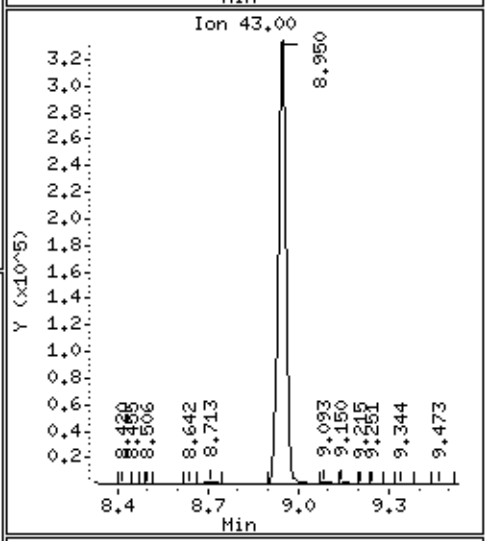


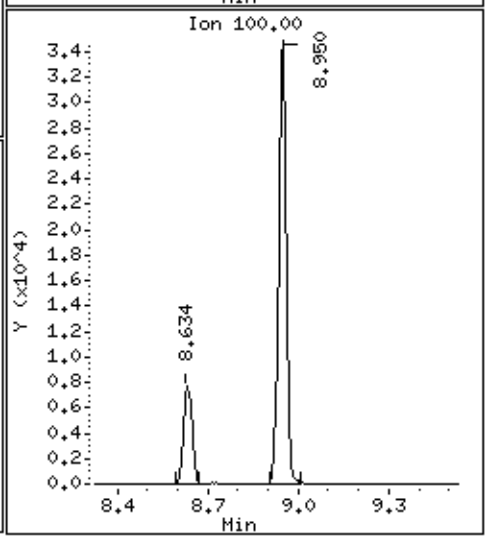












Data File: /chem/msd6.i/20jul16.b/6072005.d

Date : 20-JUL-2016 12:38

Client ID: LCS

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCS;LCS

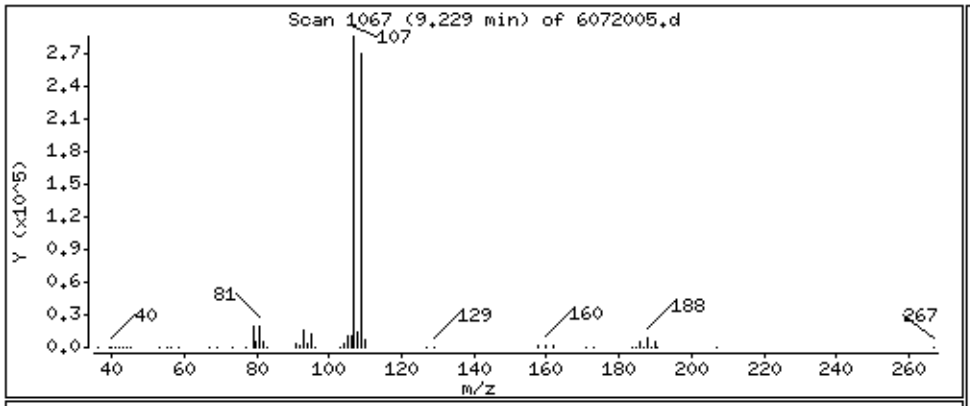
Operator: CT

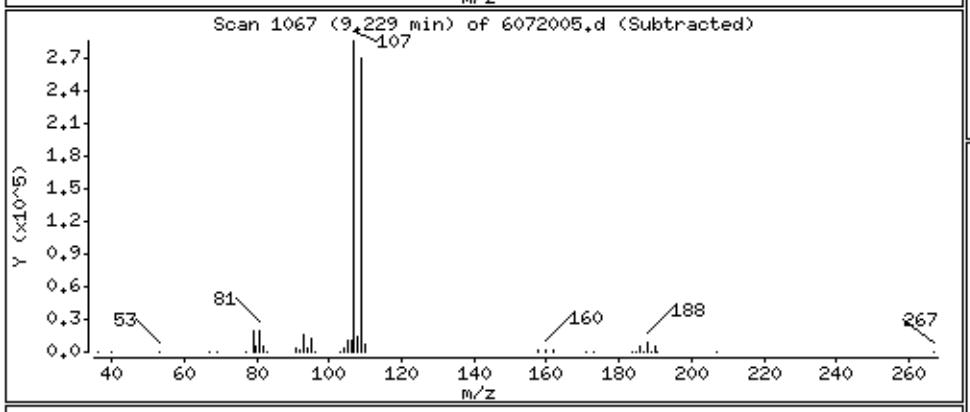
Column phase: RTx-624

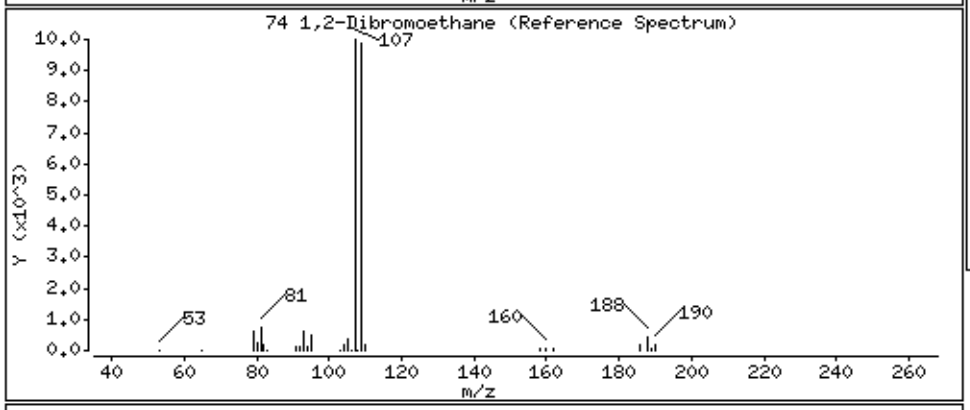
Column diameter: 0.53

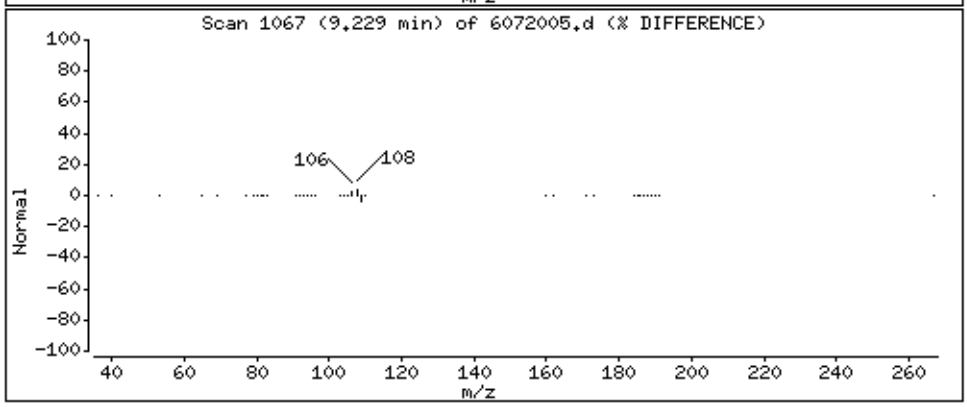
74 1,2-Dibromoethane

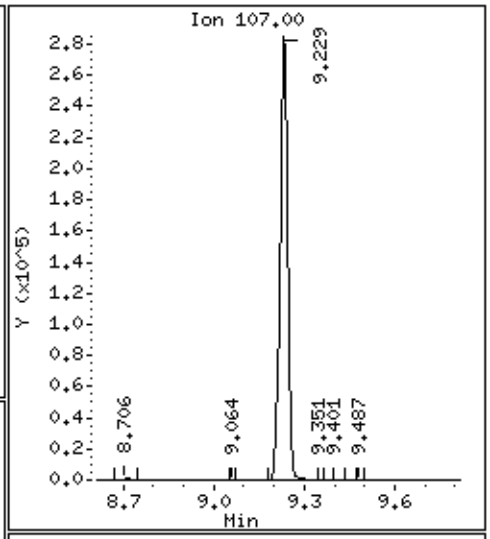
Concentration: 157.27 NG

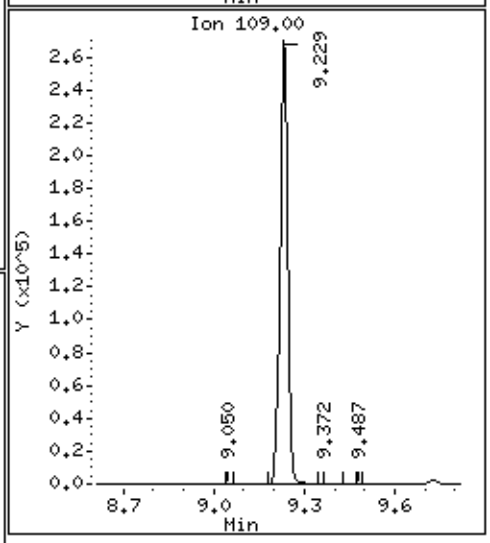












Data File: /chem/msd6.i/20jul16.b/6072005.d

Date : 20-JUL-2016 12:38

Client ID: LCS

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCS;LCS

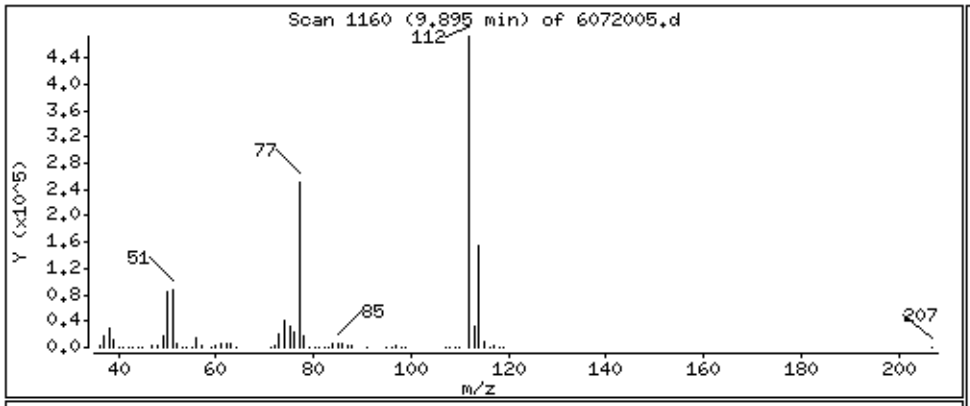
Operator: CT

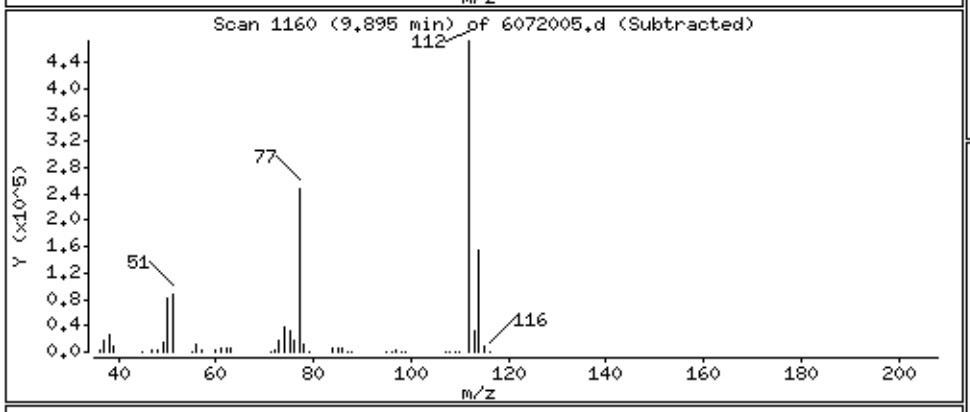
Column phase: RTx-624

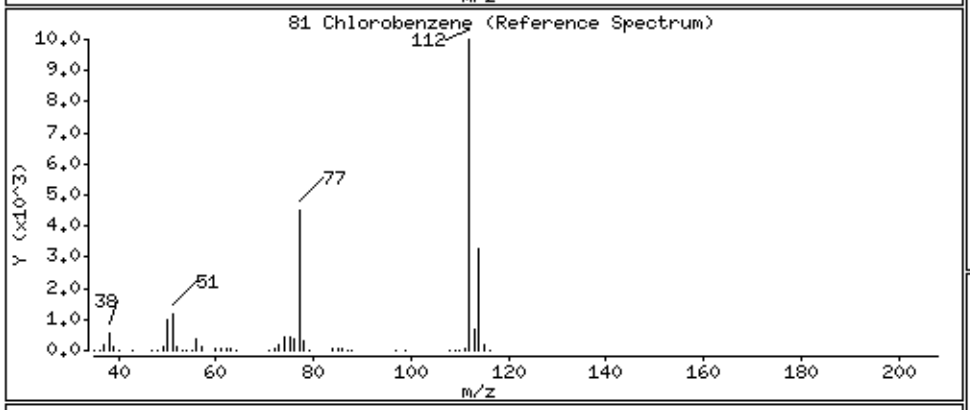
Column diameter: 0.53

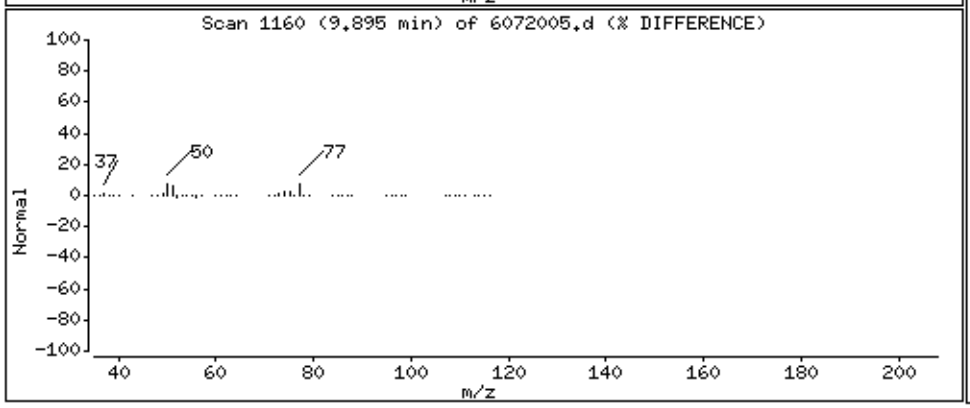
81 Chlorobenzene

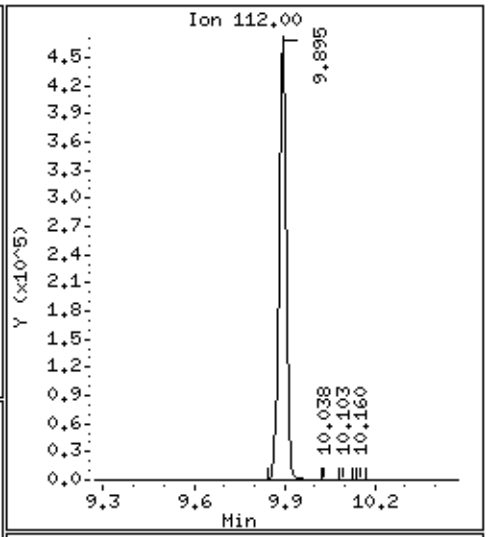
Concentration: 95.968 NG

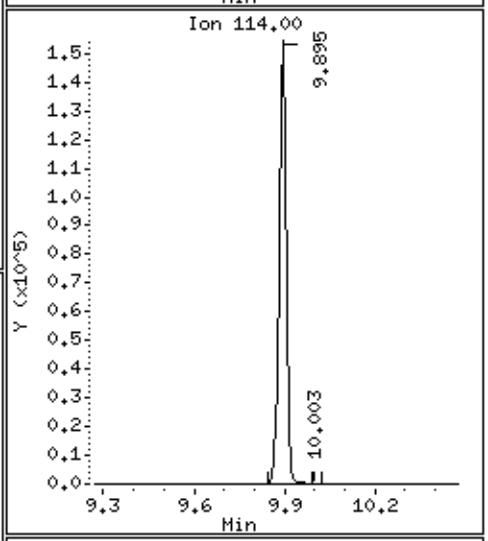


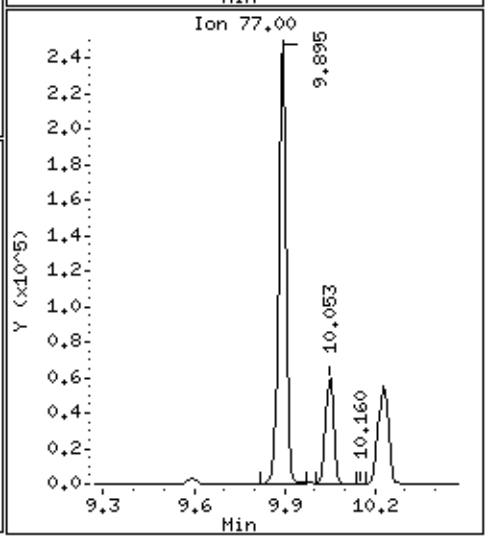












Data File: /chem/msd6.i/20jul16.b/6072005.d

Date : 20-JUL-2016 12:38

Client ID: LCS

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCS;LCS

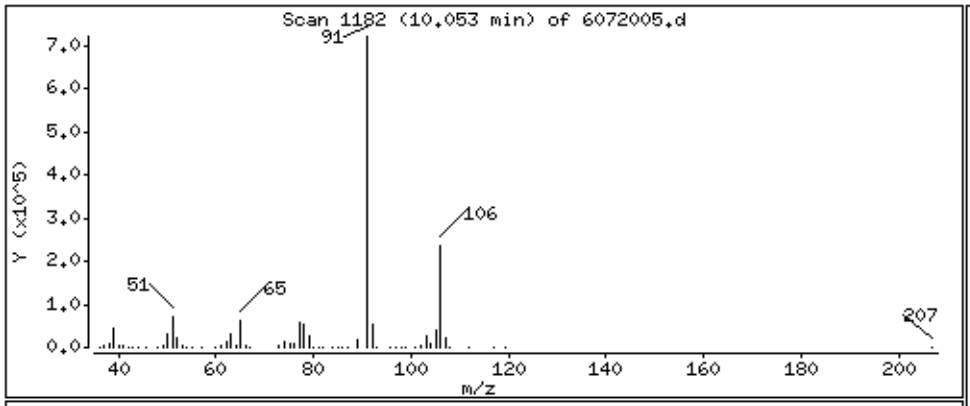
Operator: CT

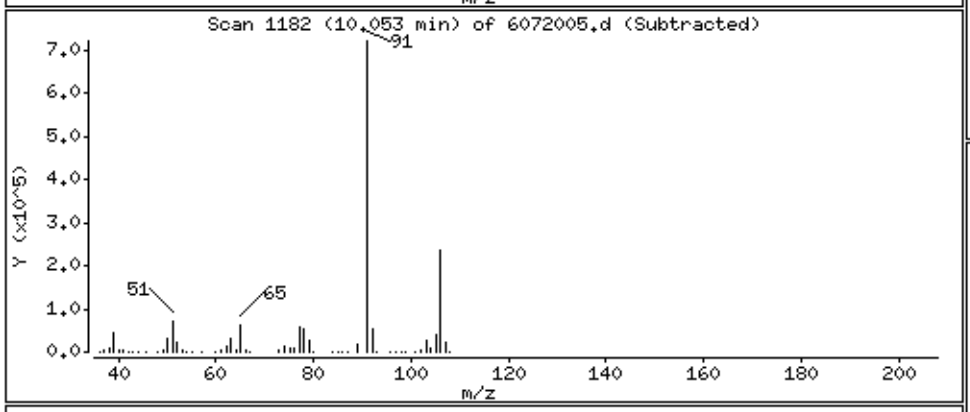
Column phase: RTx-624

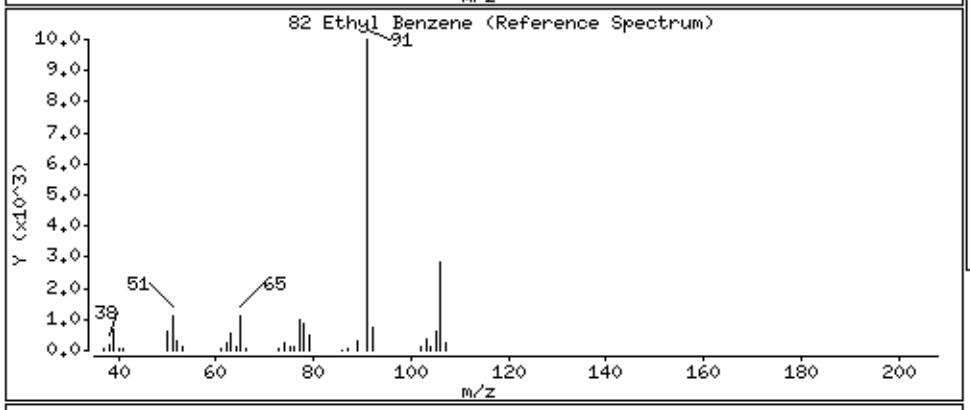
Column diameter: 0.53

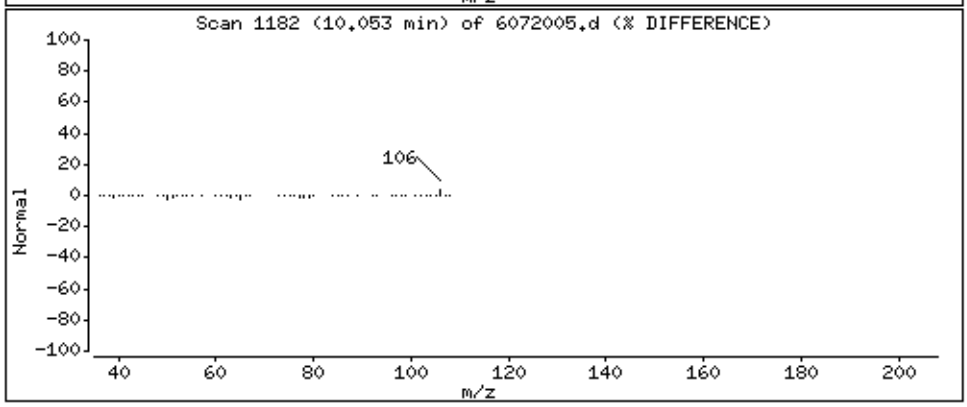
82 Ethyl Benzene

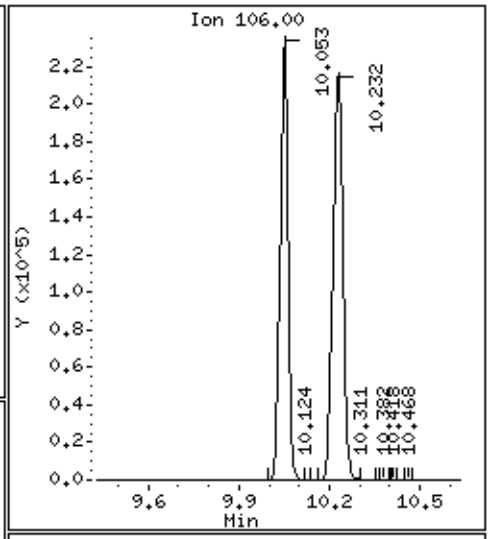
Concentration: 91.195 NG

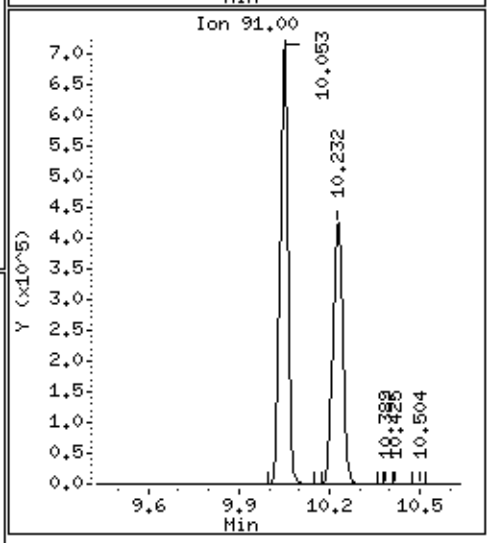












Data File: /chem/msd6.i/20jul16.b/6072005.d

Date : 20-JUL-2016 12:38

Client ID: LCS

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCS;LCS

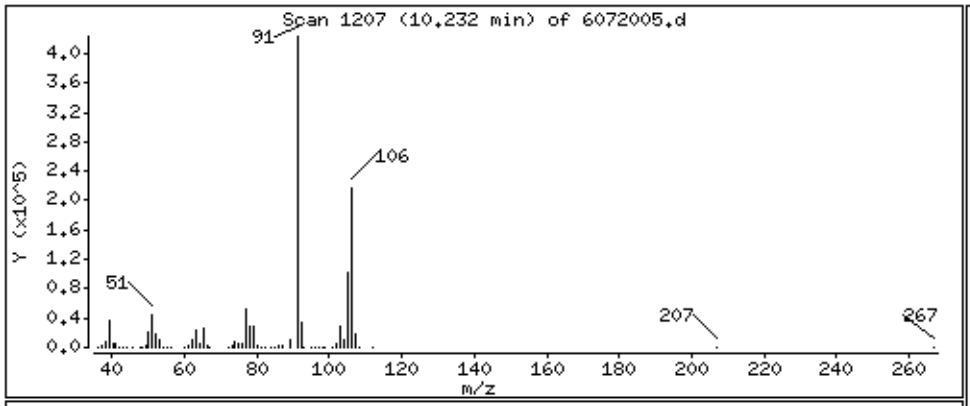
Operator: CT

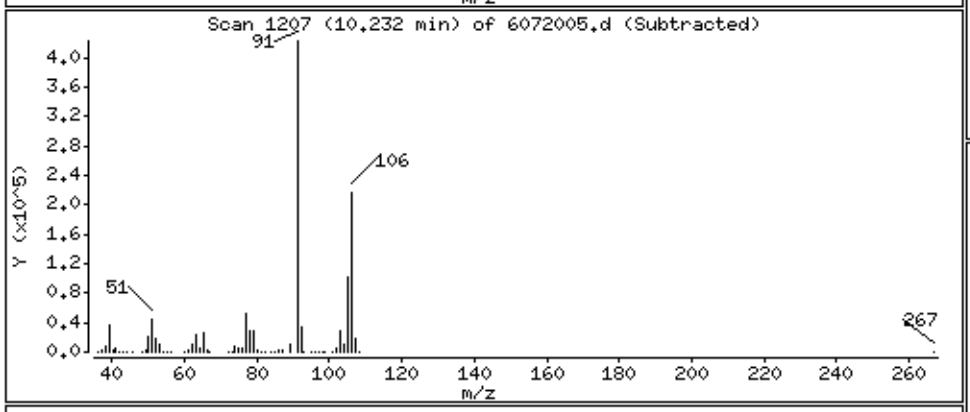
Column phase: RTx-624

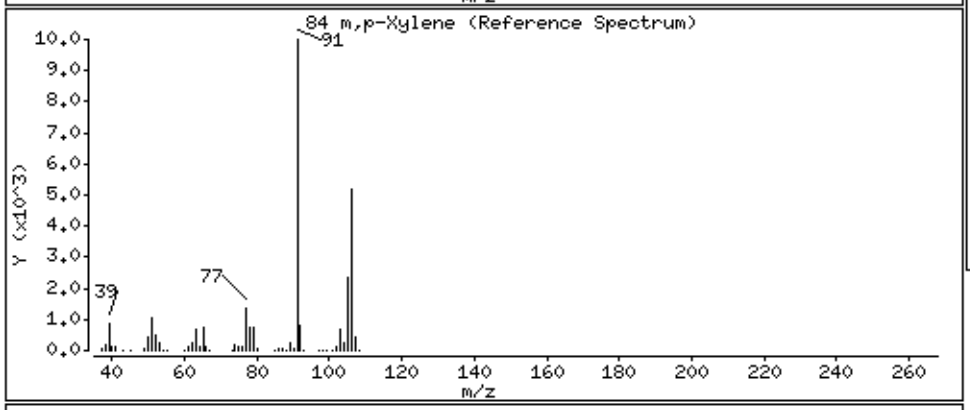
Column diameter: 0.53

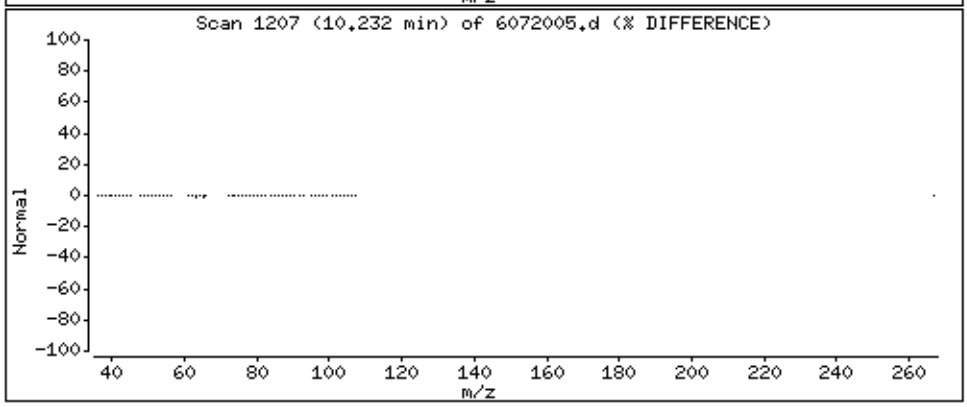
84 m,p-Xylene

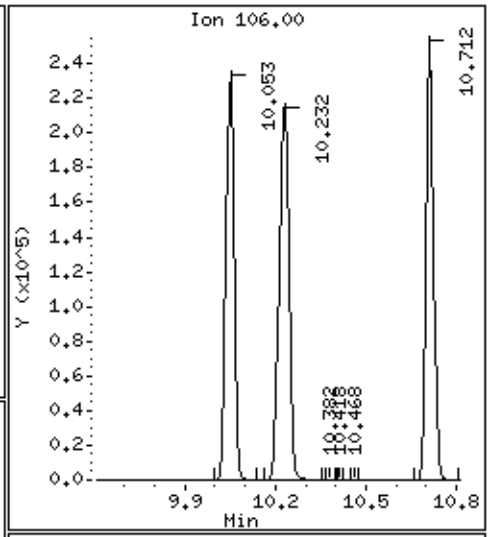
Concentration: 88.669 NG

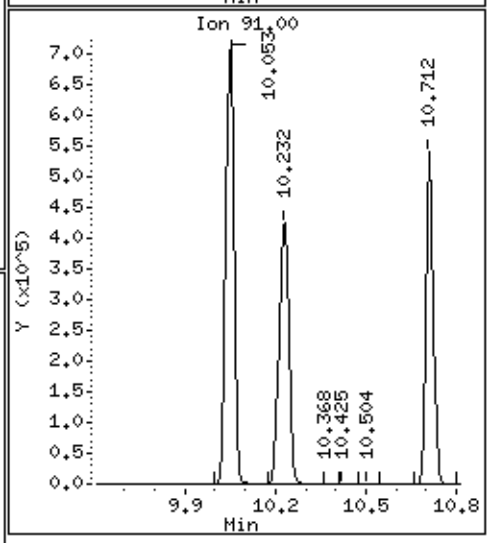












Data File: /chem/msd6.i/20jul16.b/6072005.d

Date : 20-JUL-2016 12:38

Client ID: LCS

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCS;LCS

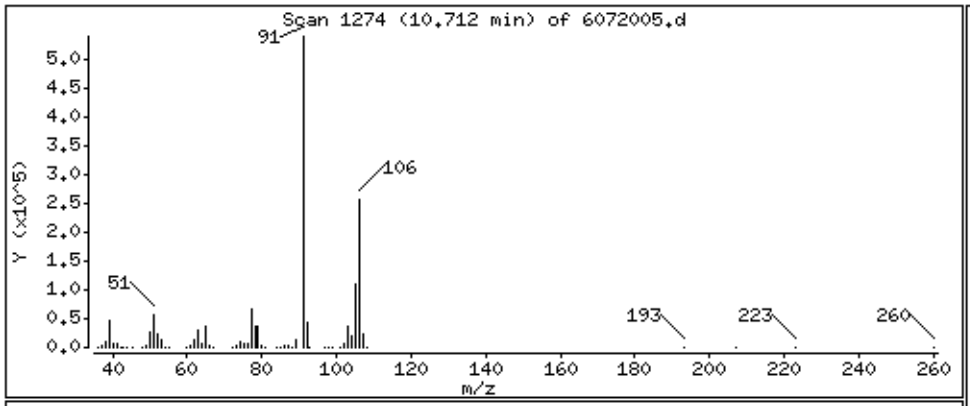
Operator: CT

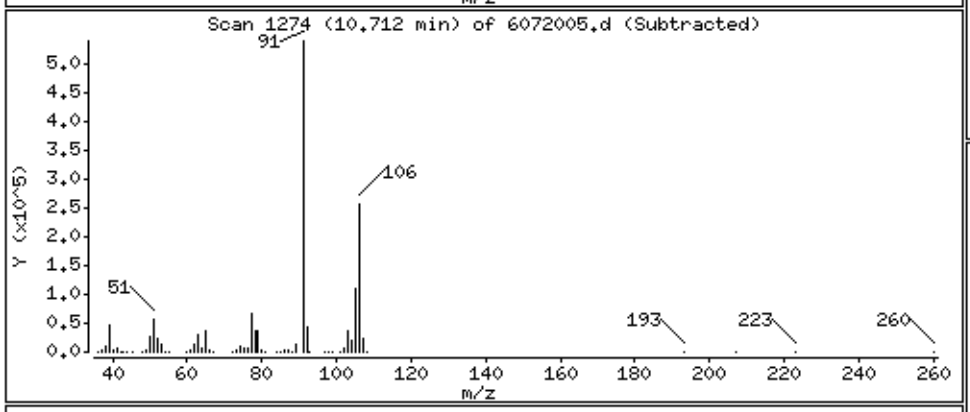
Column phase: RTx-624

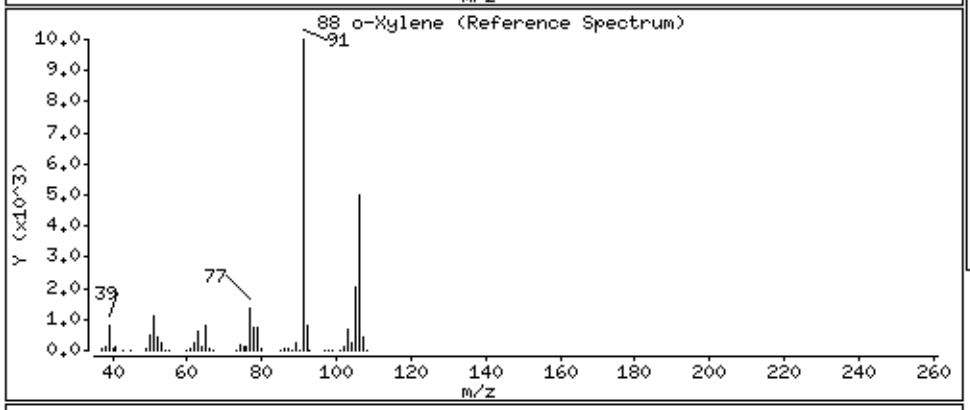
Column diameter: 0.53

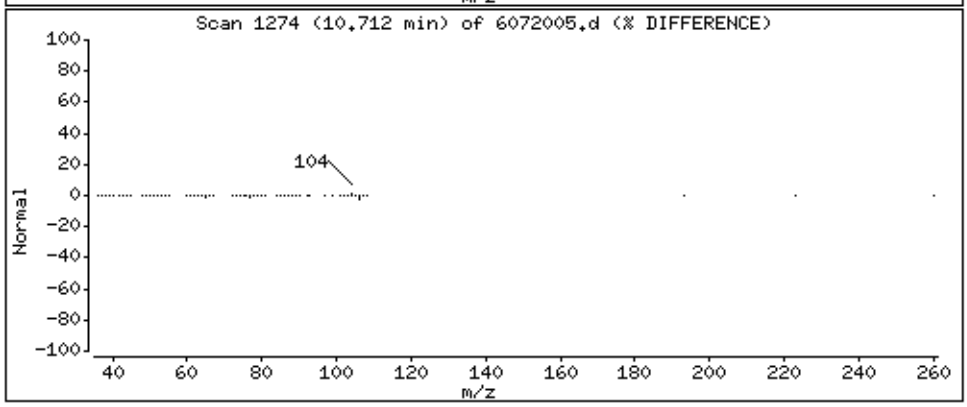
88 o-Xylene

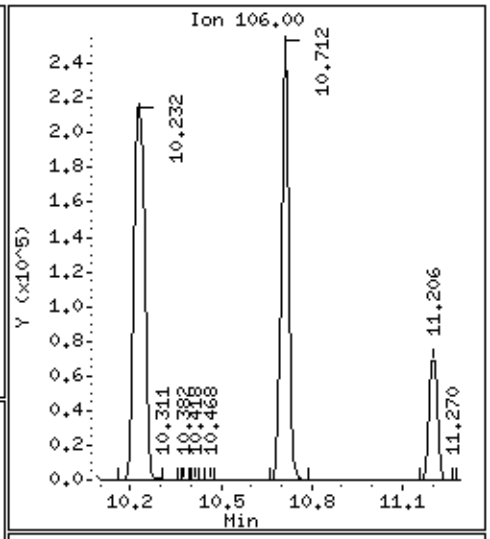
Concentration: 85.910 NG

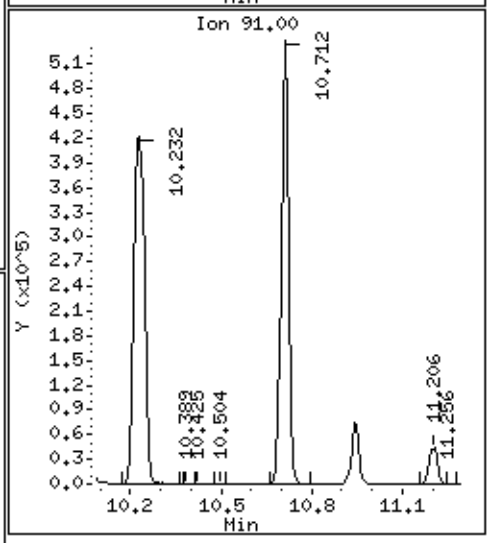












Data File: /chem/msd6.i/20jul16.b/6072005.d

Date : 20-JUL-2016 12:38

Client ID: LCS

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCS;LCS

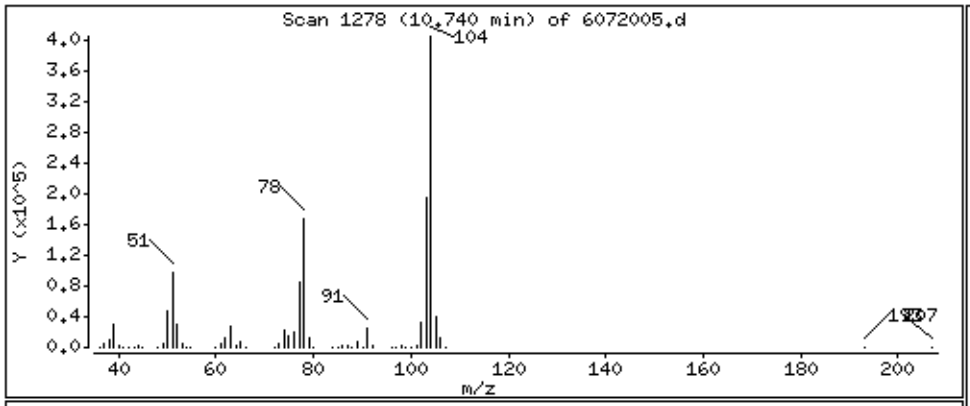
Operator: CT

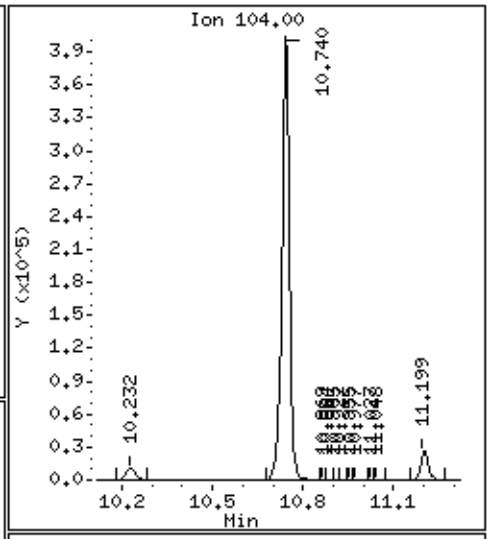
Column phase: RTx-624

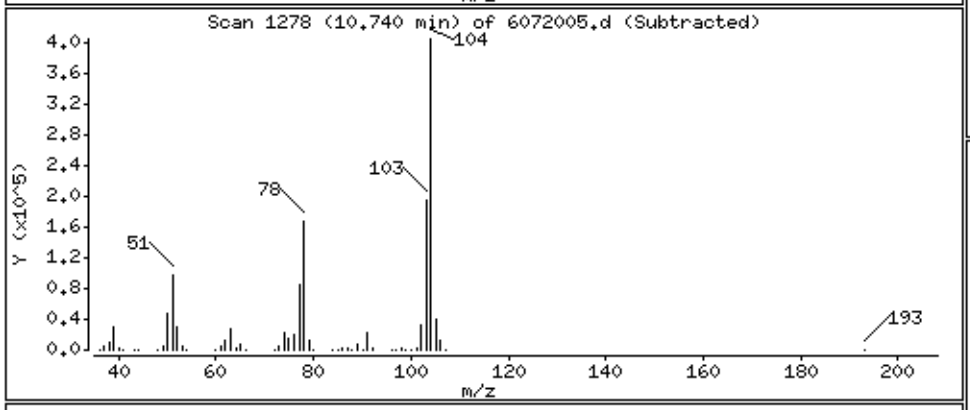
Column diameter: 0.53

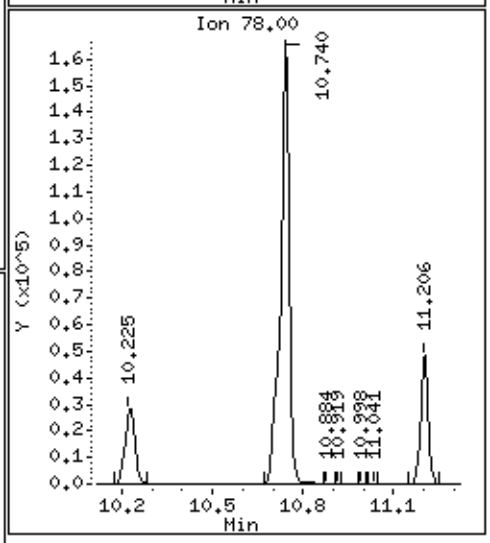
89 Styrene

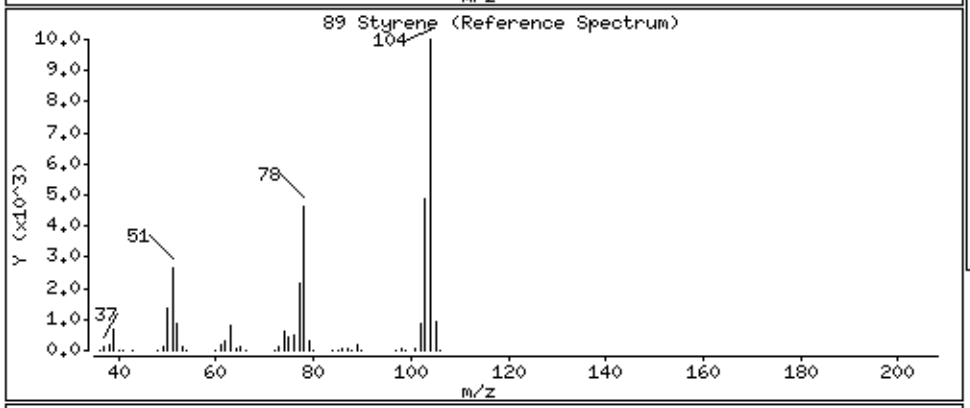
Concentration: 83.447 NG

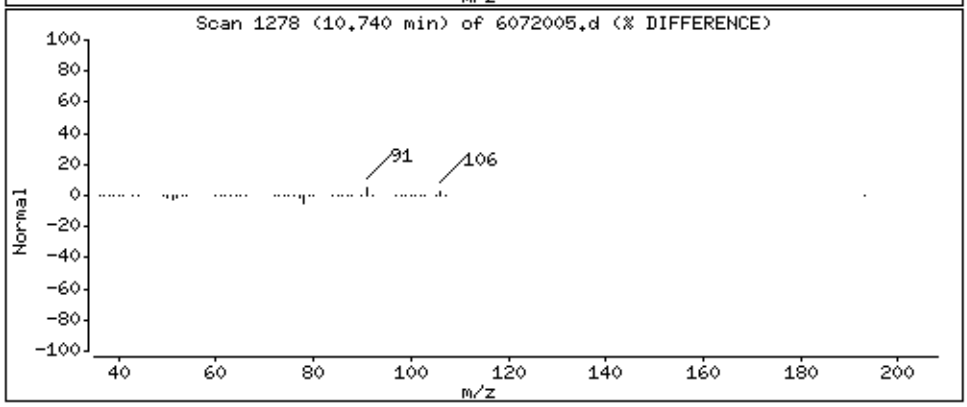












Data File: /chem/msd6.i/20jul16.b/6072005.d

Date : 20-JUL-2016 12:38

Client ID: LCS

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCS;LCS

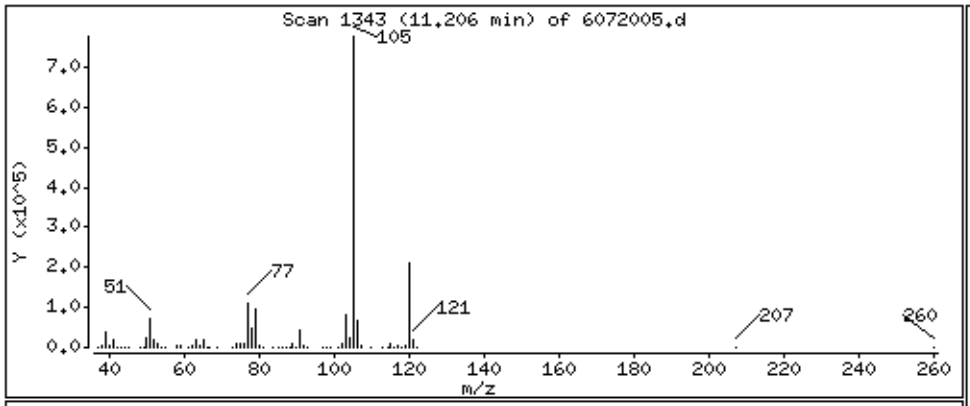
Operator: CT

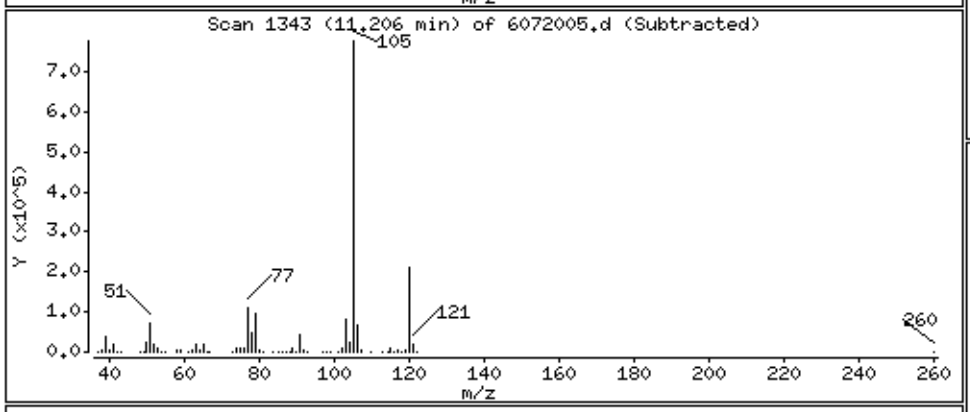
Column phase: RTx-624

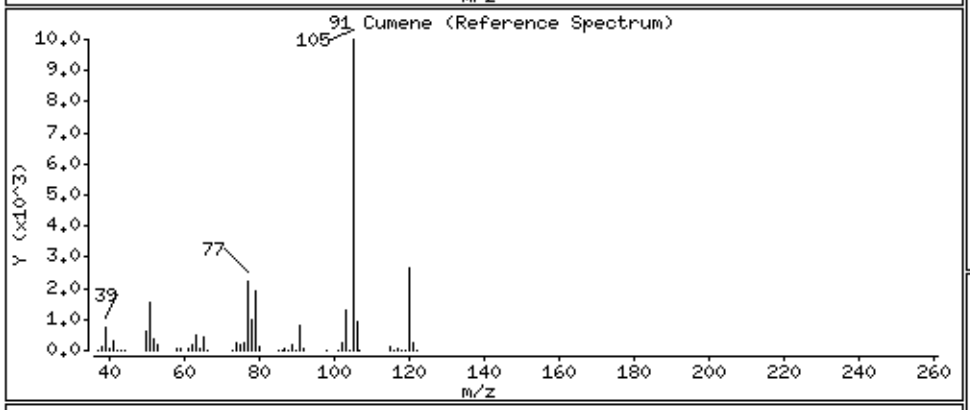
Column diameter: 0.53

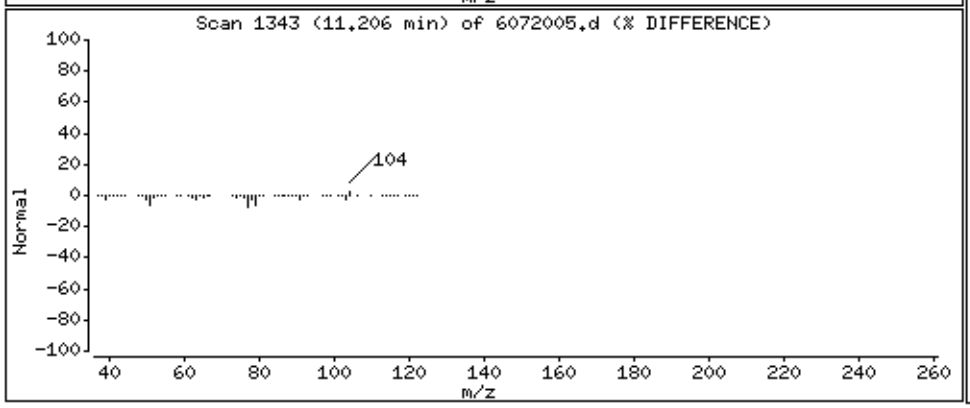
91 Cumene

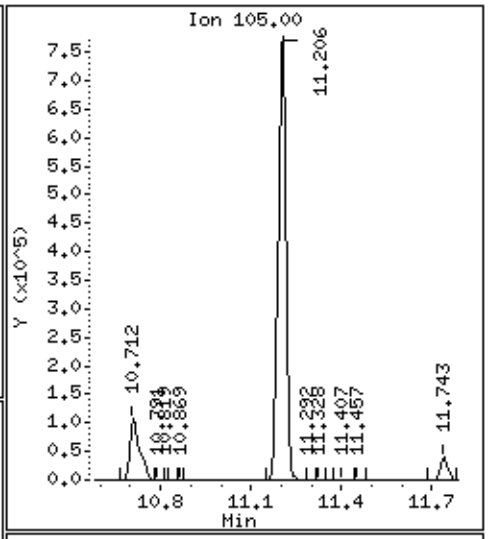
Concentration: 101.27 NG

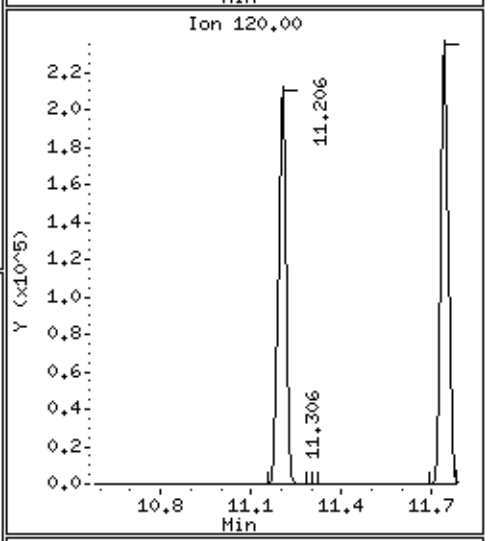


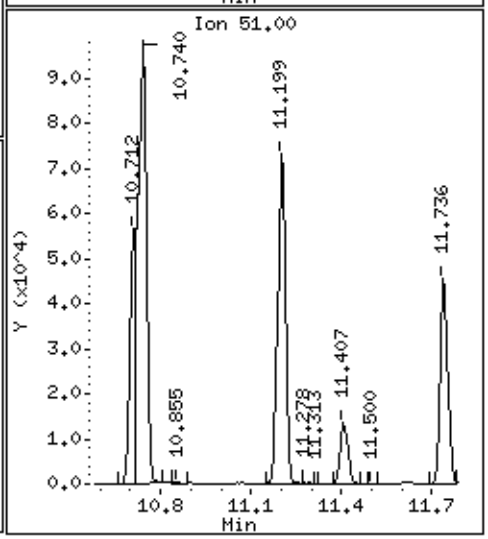












Data File: /chem/msd6.i/20jul16.b/6072005.d

Date : 20-JUL-2016 12:38

Client ID: LCS

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCS;LCS

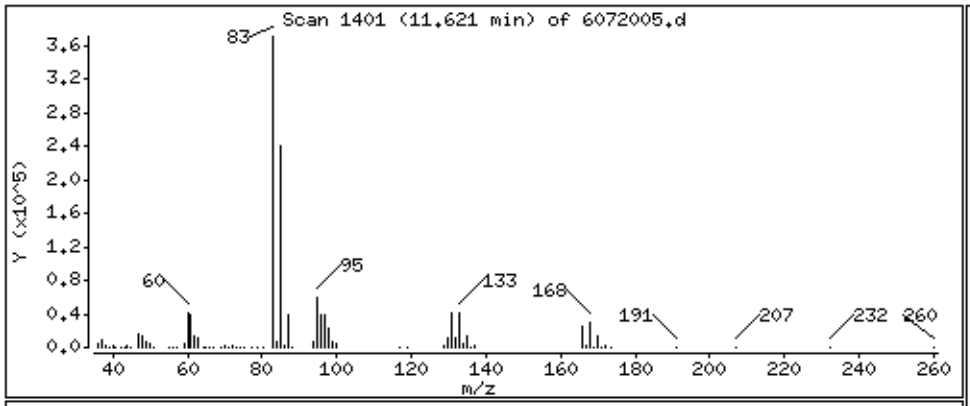
Operator: CT

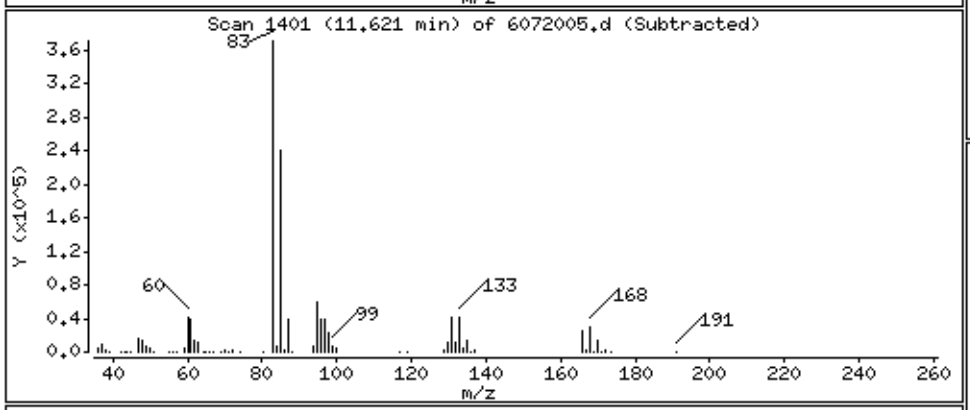
Column phase: RTx-624

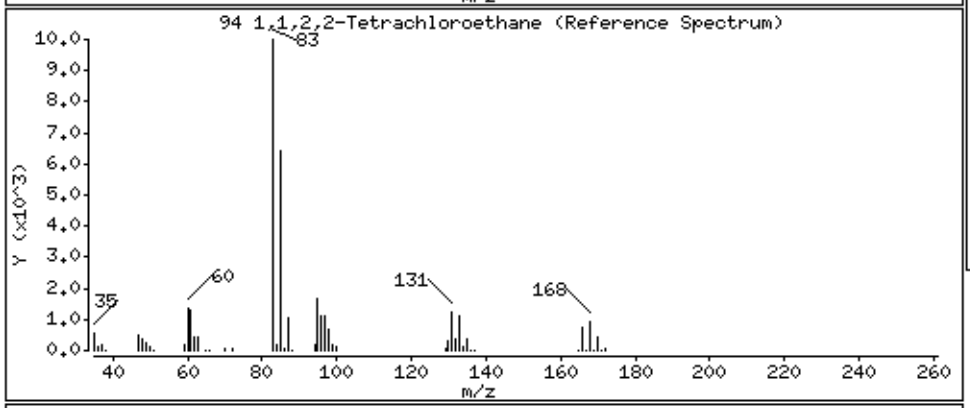
Column diameter: 0.53

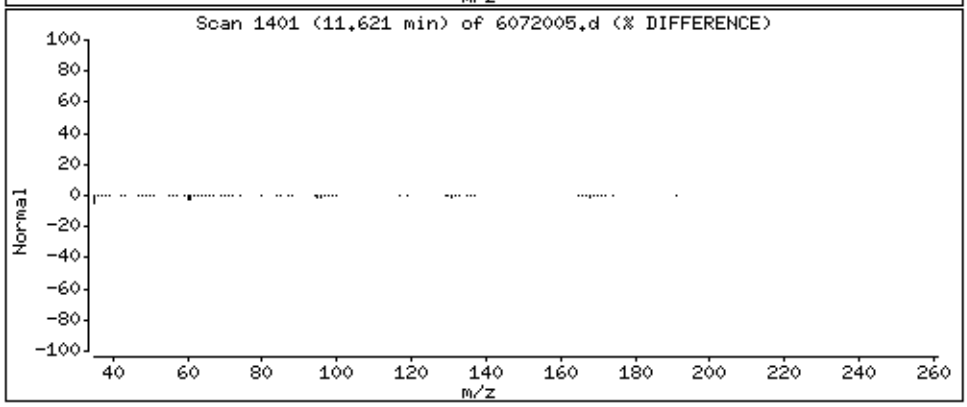
94 1,1,2,2-Tetrachloroethane

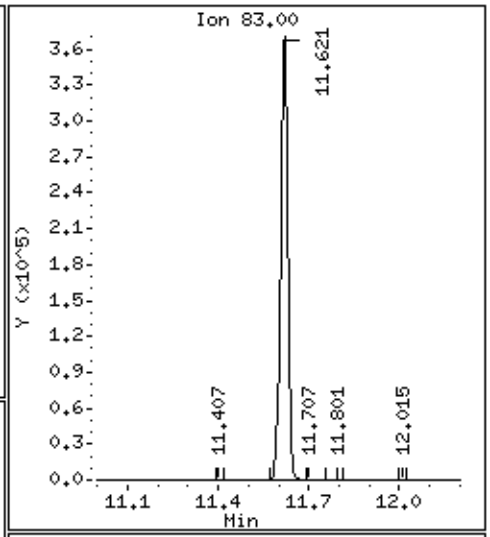
Concentration: 131.42 NG

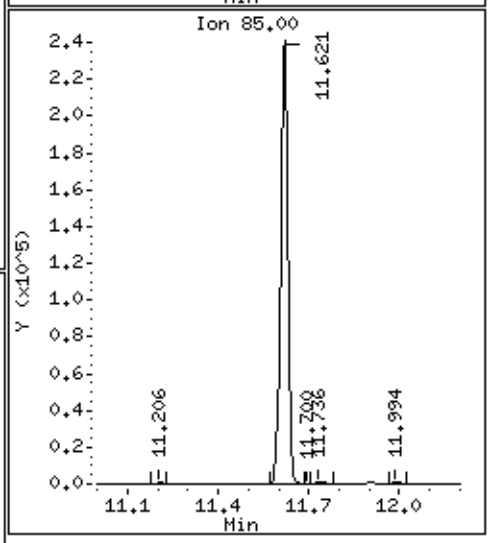












Data File: /chem/msd6.i/20jul16.b/6072005.d

Date : 20-JUL-2016 12:38

Client ID: LCS

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCS;LCS

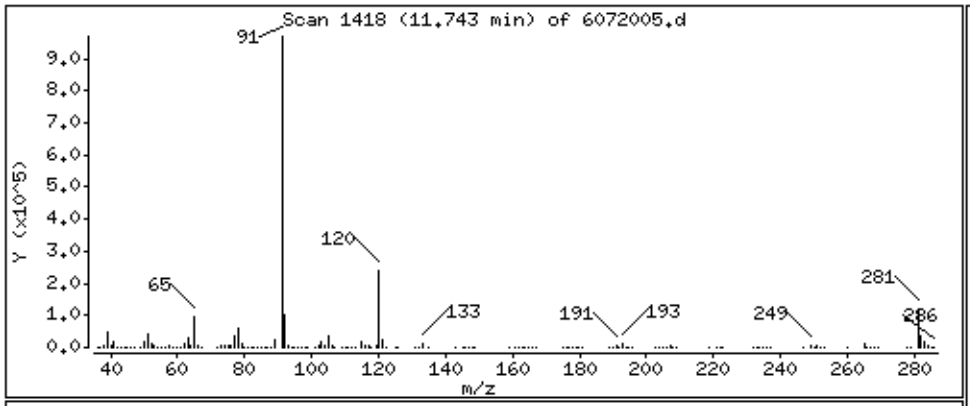
Operator: CT

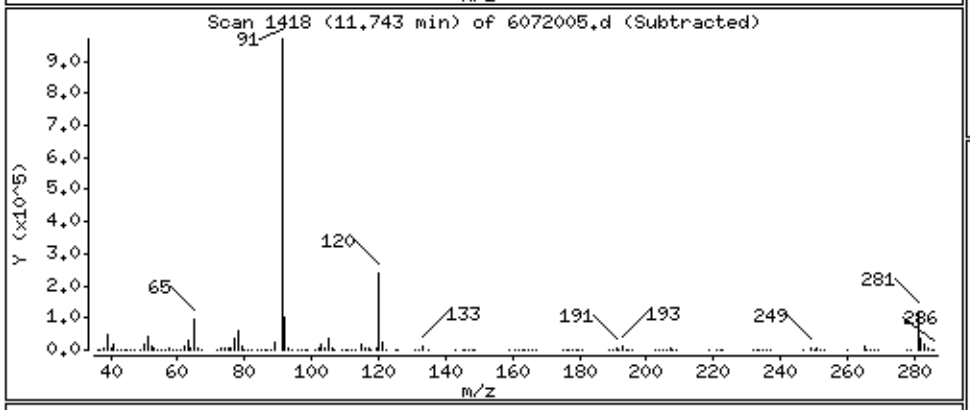
Column phase: RTx-624

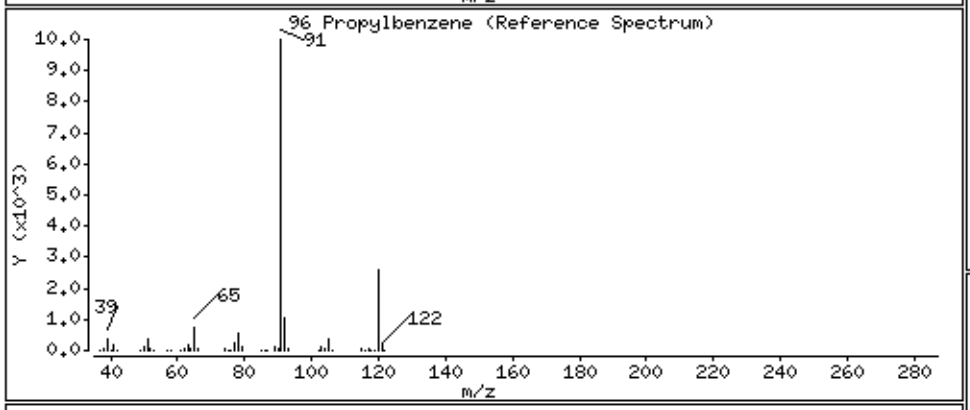
Column diameter: 0.53

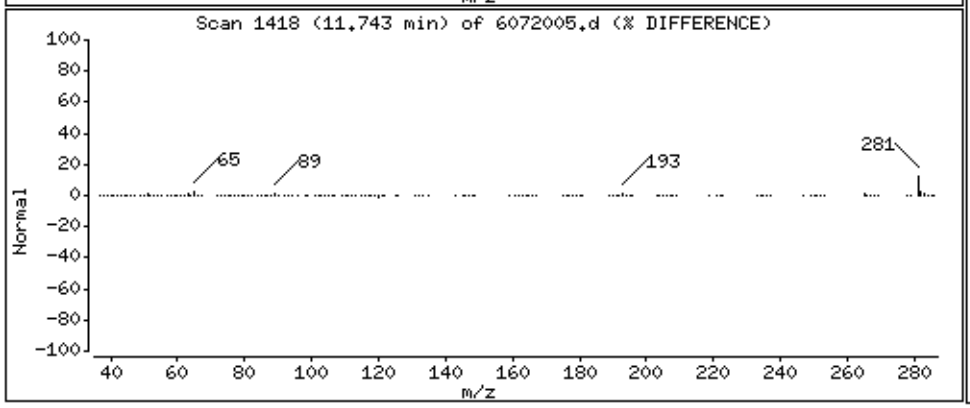
96 Propylbenzene

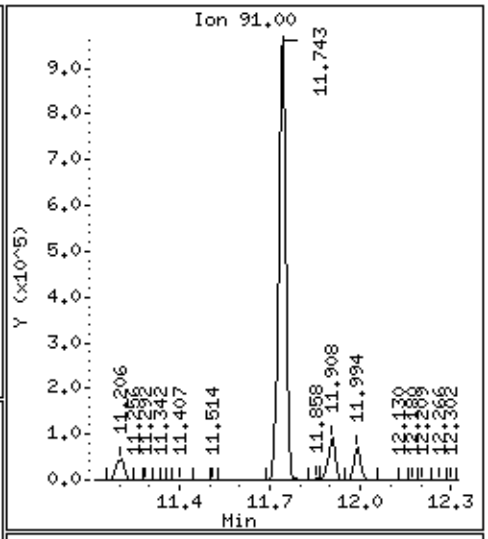
Concentration: 102.50 NG

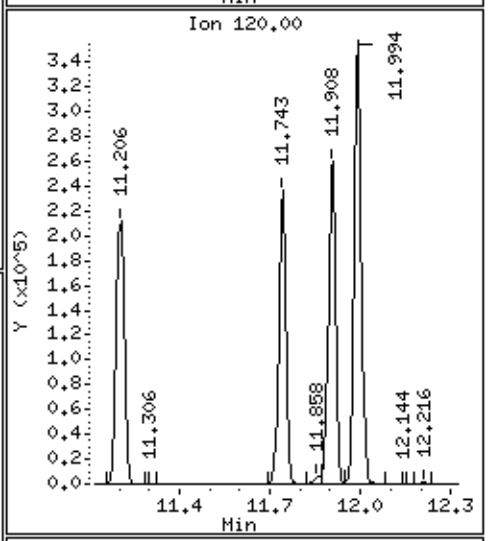


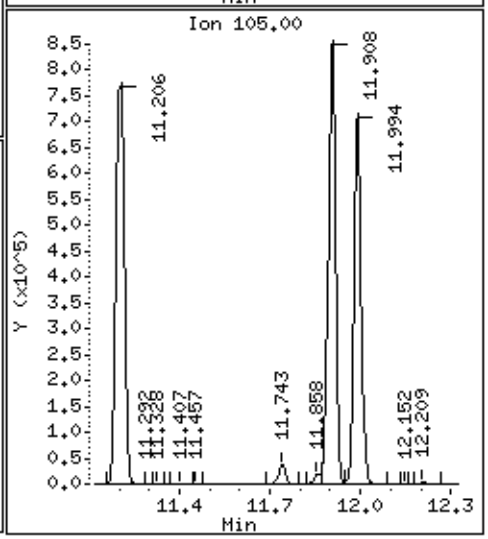












Data File: /chem/msd6.i/20jul16.b/6072005.d

Date : 20-JUL-2016 12:38

Client ID: LCS

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCS;LCS

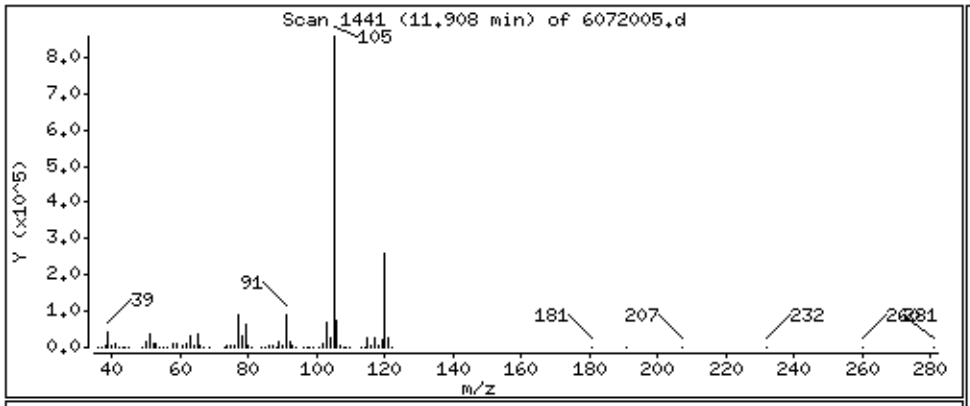
Operator: CT

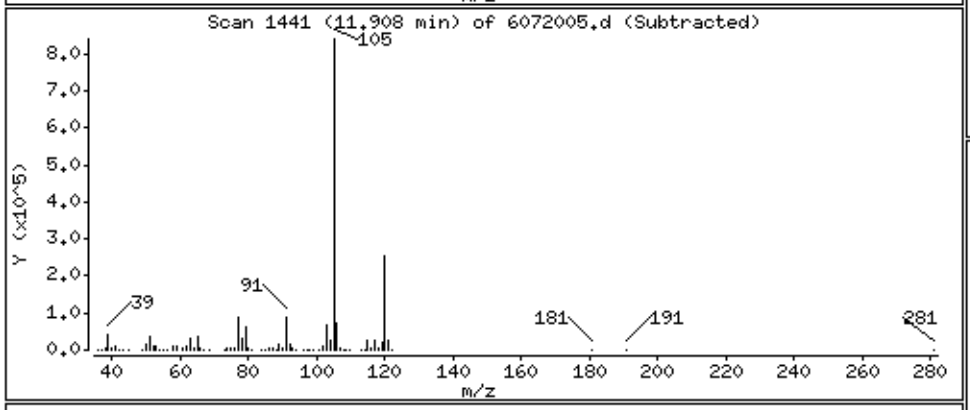
Column phase: RTx-624

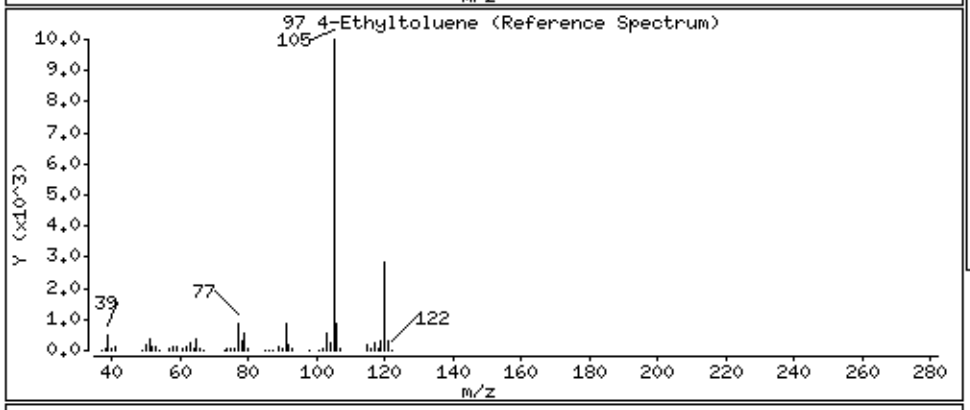
Column diameter: 0.53

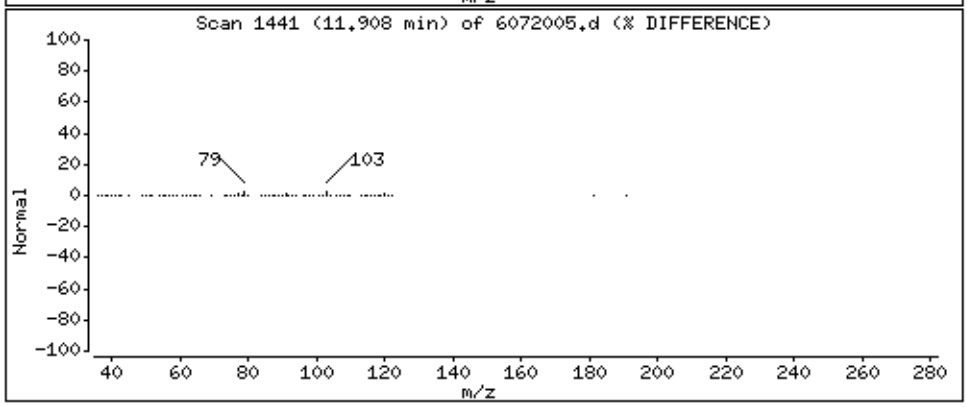
97 4-Ethyltoluene

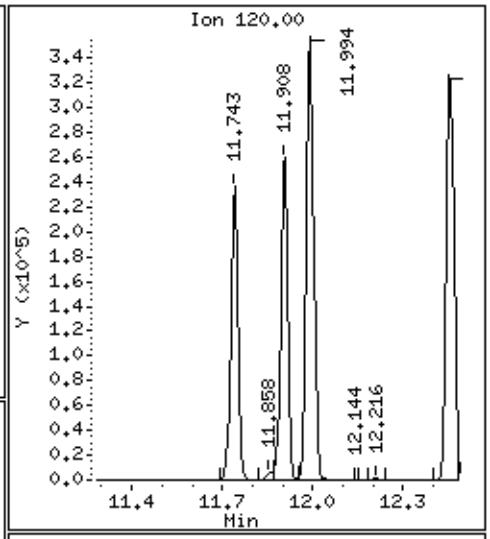
Concentration: 102.71 NG

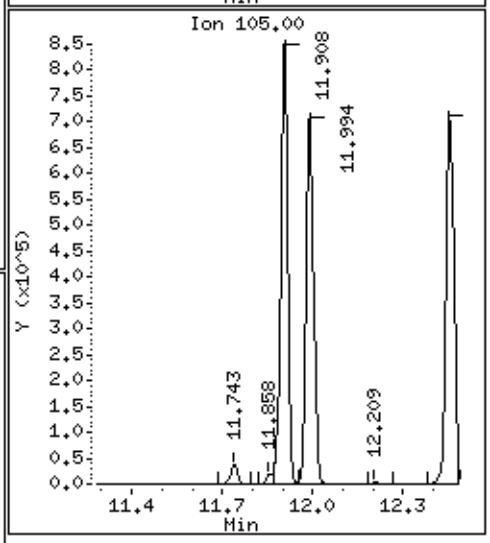












Data File: /chem/msd6.i/20jul16.b/6072005.d

Date : 20-JUL-2016 12:38

Client ID: LCS

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCS;LCS

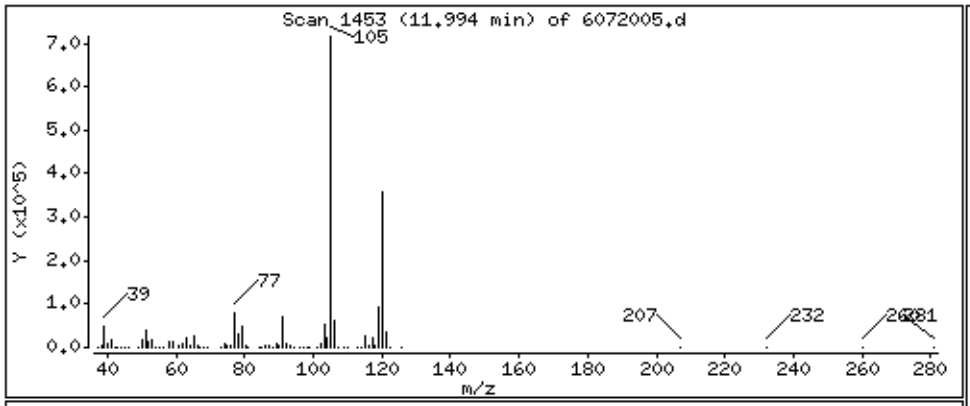
Operator: CT

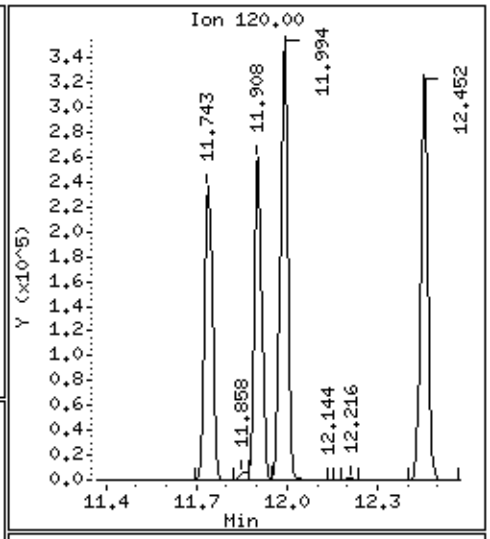
Column phase: RTx-624

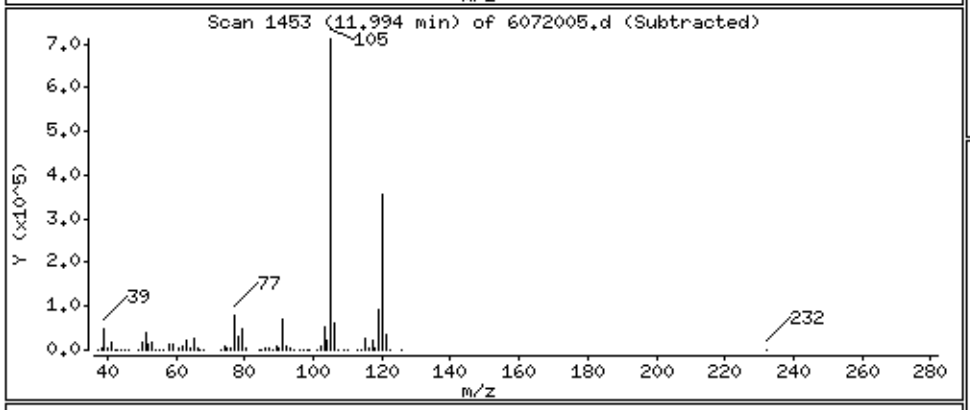
Column diameter: 0.53

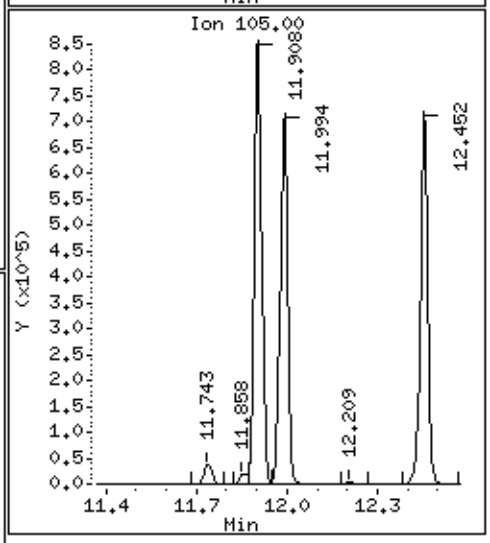
98 1,3,5-Trimethylbenzene

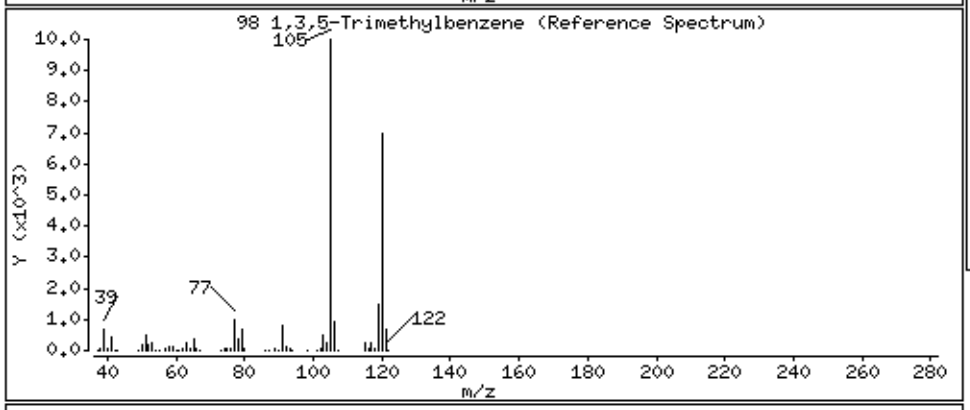
Concentration: 101.01 NG

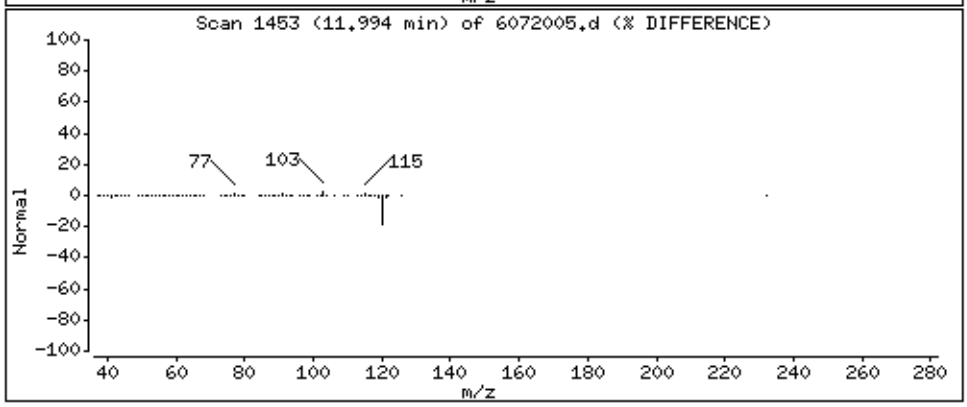












Data File: /chem/msd6.i/20jul16.b/6072005.d

Date : 20-JUL-2016 12:38

Client ID: LCS

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCS;LCS

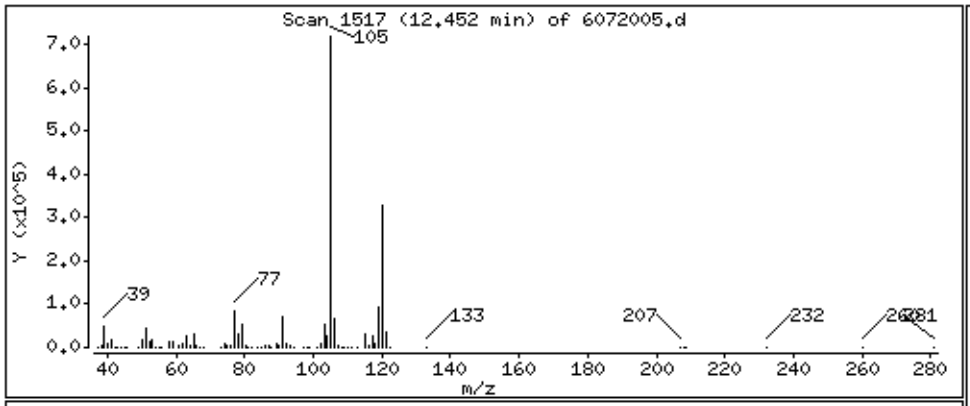
Operator: CT

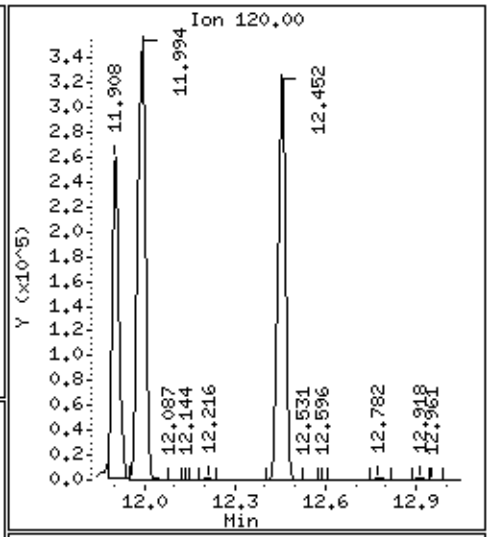
Column phase: RTx-624

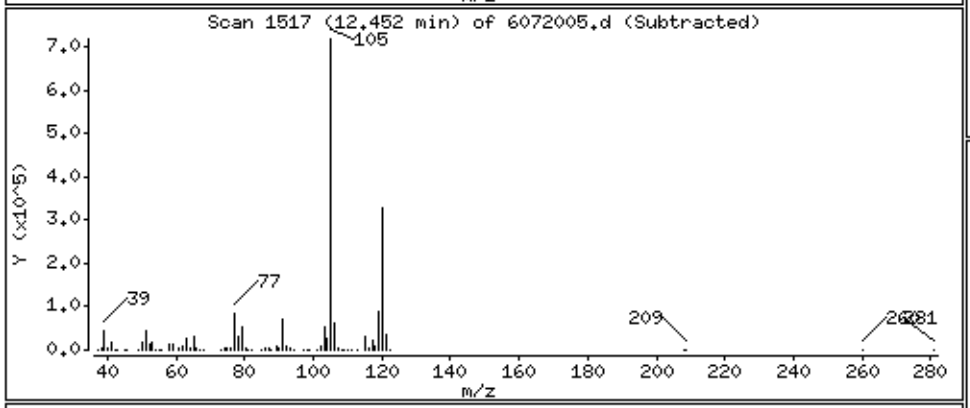
Column diameter: 0.53

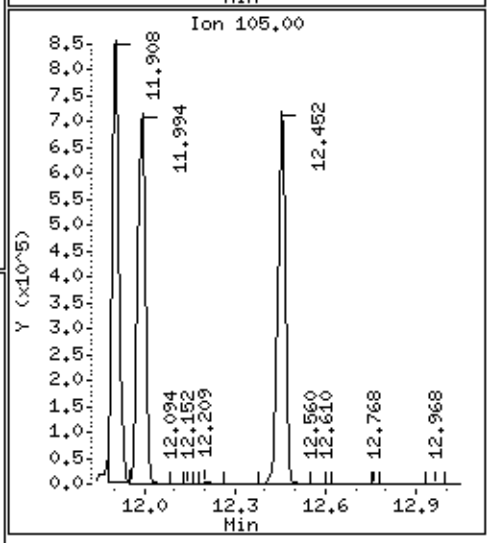
100 1,2,4-Trimethylbenzene

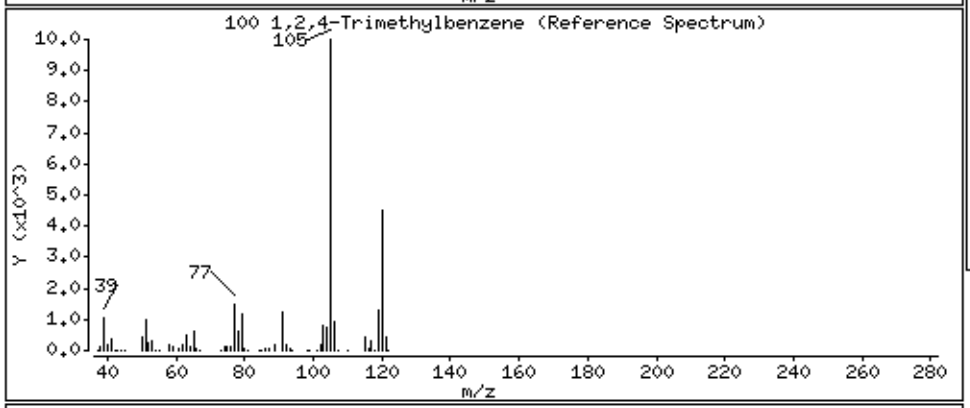
Concentration: 100.42 NG

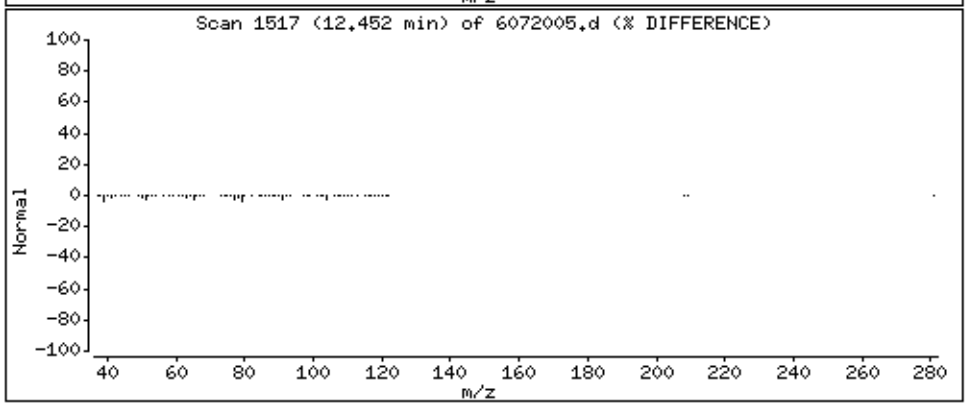












Data File: /chem/msd6.i/20jul16.b/6072005.d

Date : 20-JUL-2016 12:38

Client ID: LCS

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCS;LCS

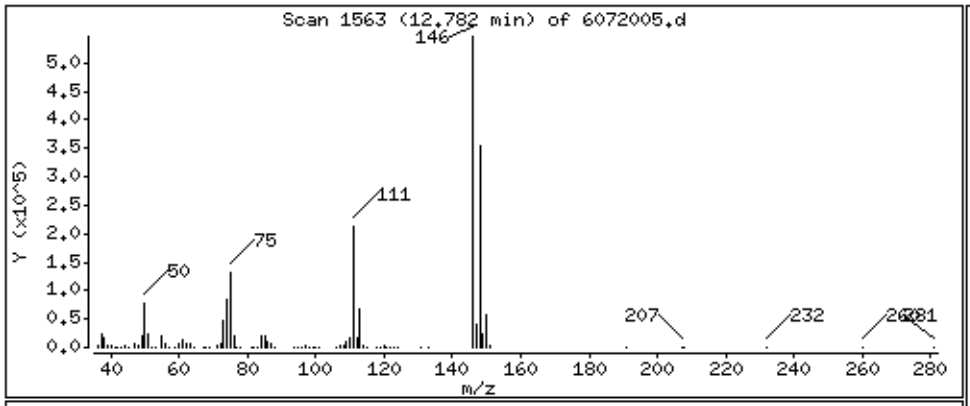
Operator: CT

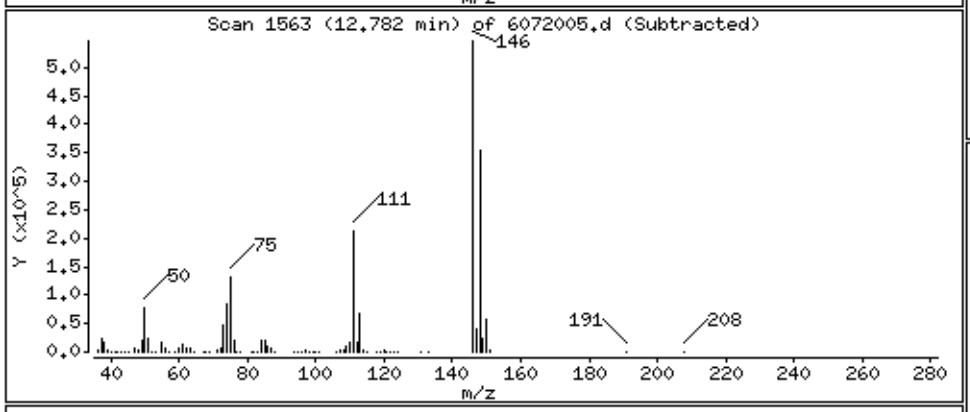
Column phase: RTx-624

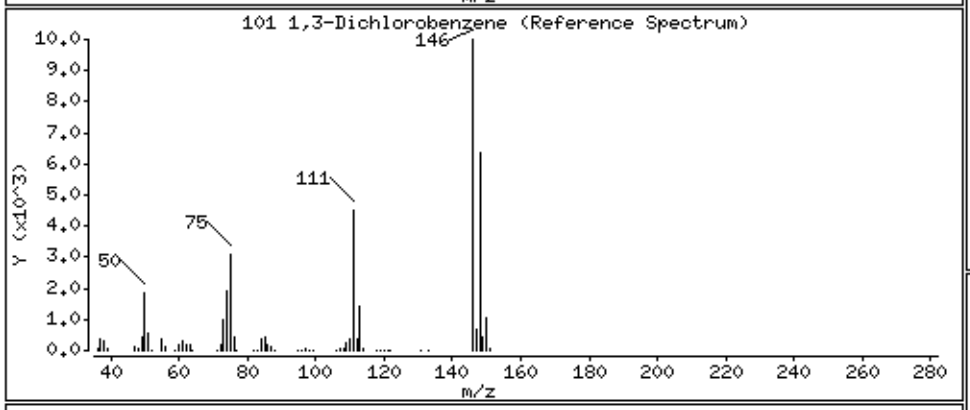
Column diameter: 0.53

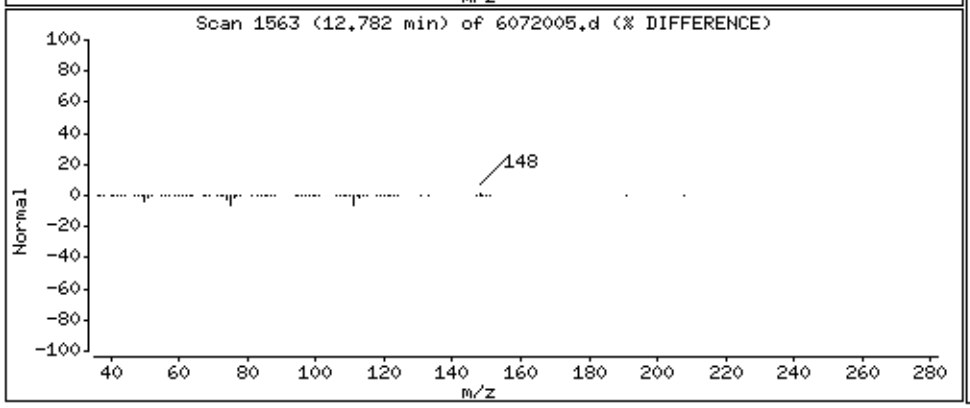
101 1,3-Dichlorobenzene

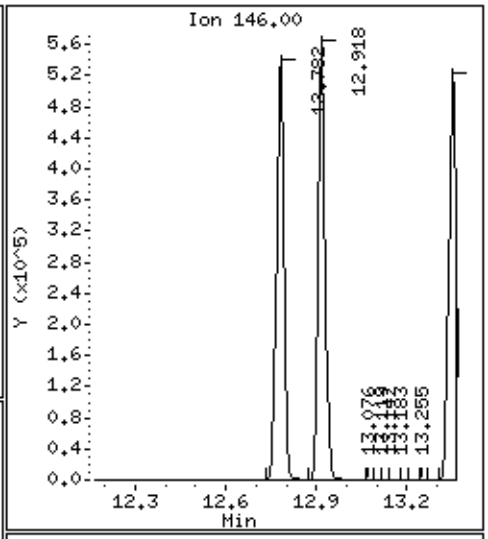
Concentration: 130.46 NG

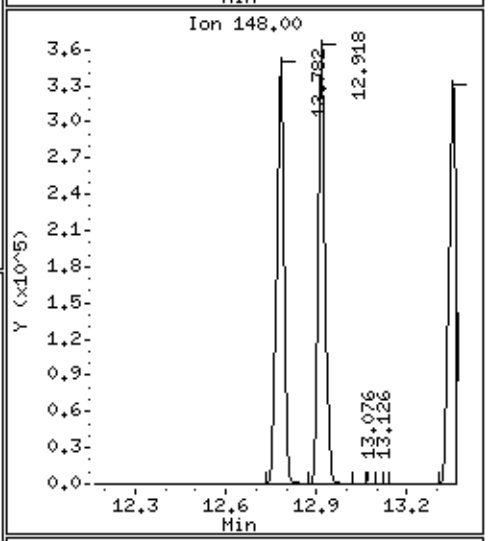


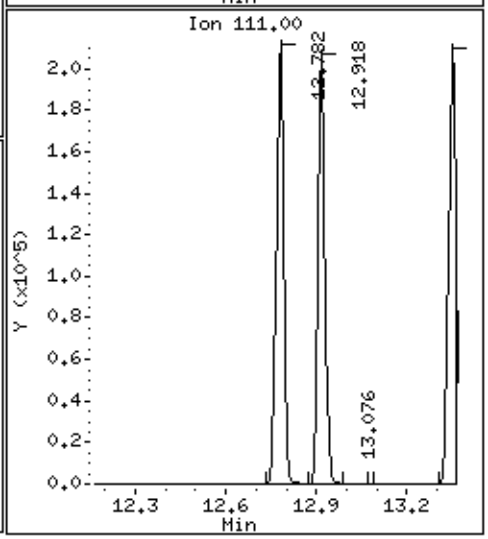












Data File: /chem/msd6.i/20jul16.b/6072005.d

Date : 20-JUL-2016 12:38

Client ID: LCS

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCS;LCS

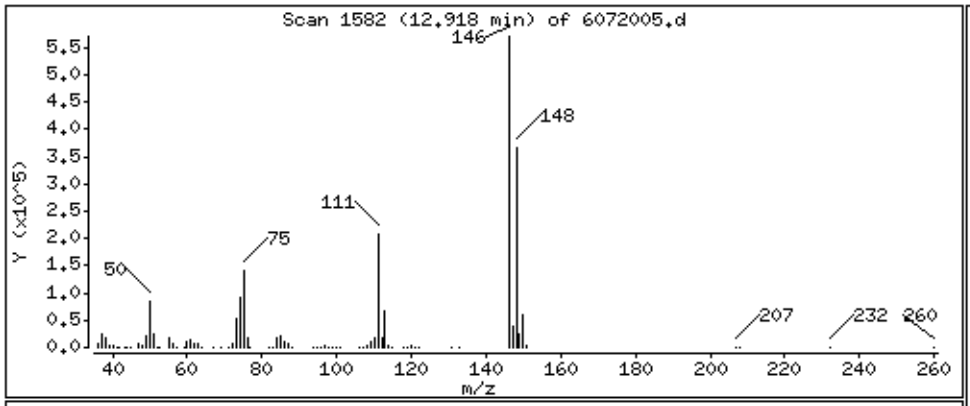
Operator: CT

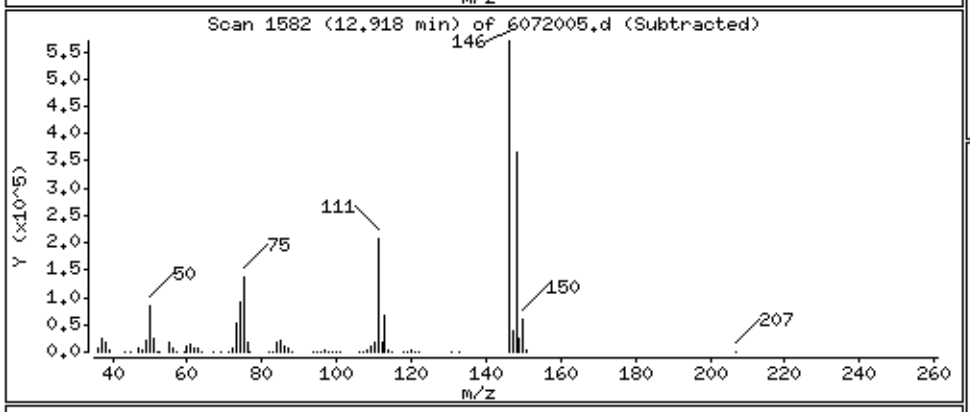
Column phase: RTx-624

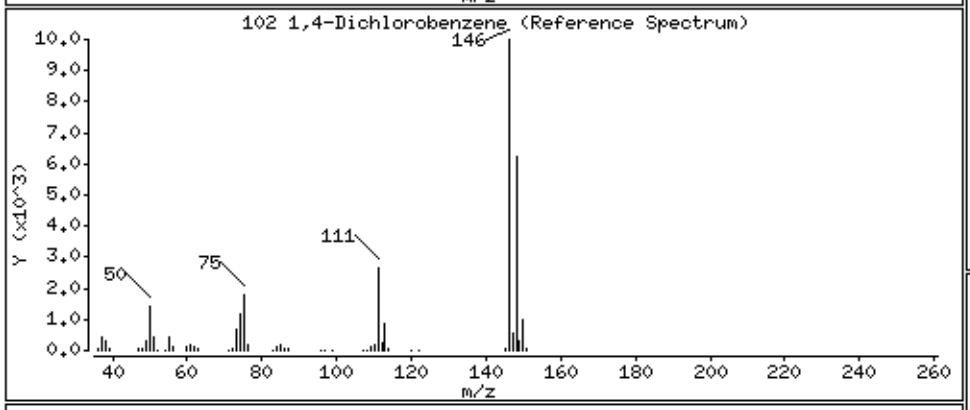
Column diameter: 0.53

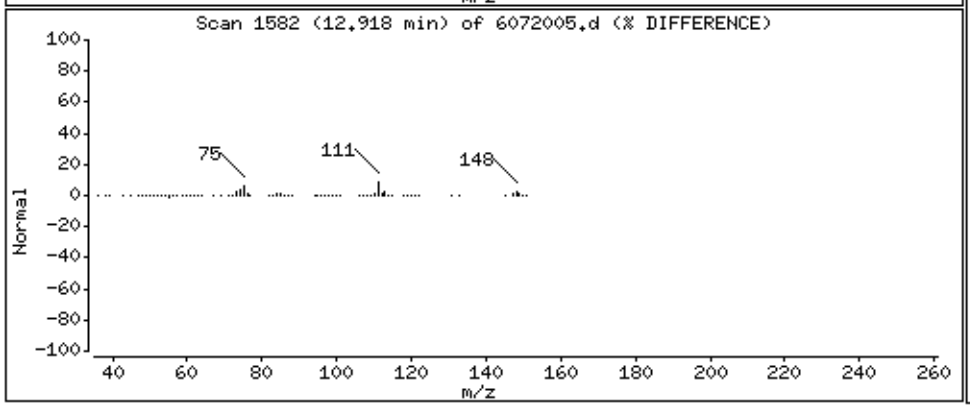
102 1,4-Dichlorobenzene

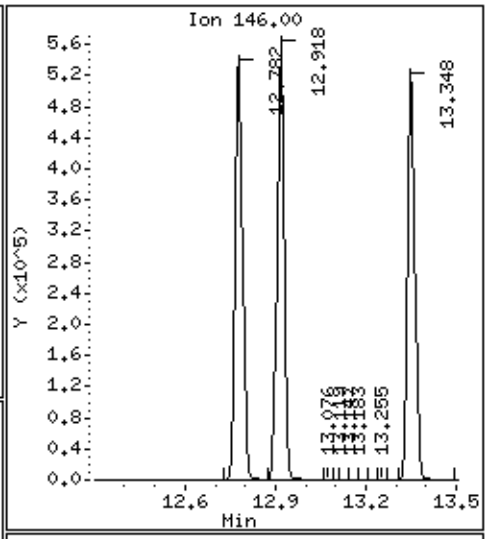
Concentration: 131.56 NG

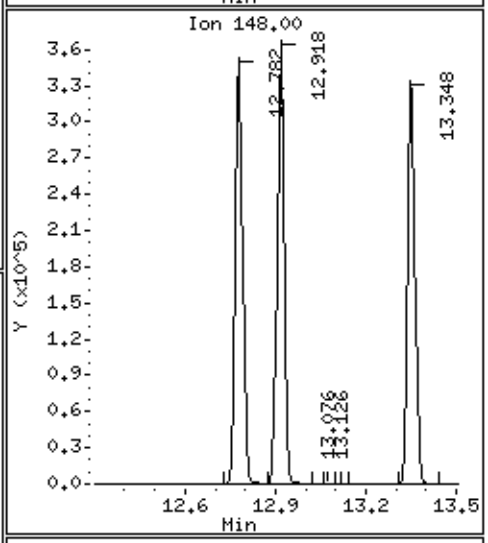


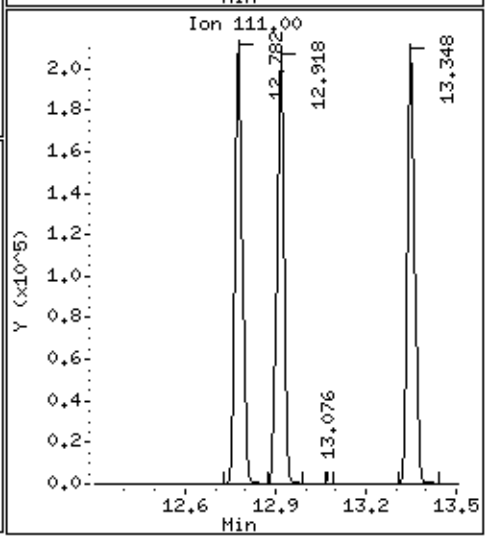












Data File: /chem/msd6.i/20jul16.b/6072005.d

Date : 20-JUL-2016 12:38

Client ID: LCS

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCS;LCS

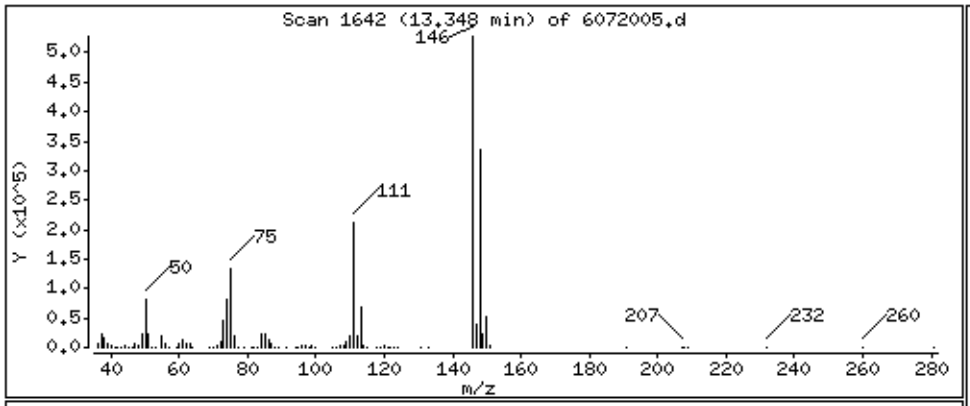
Operator: CT

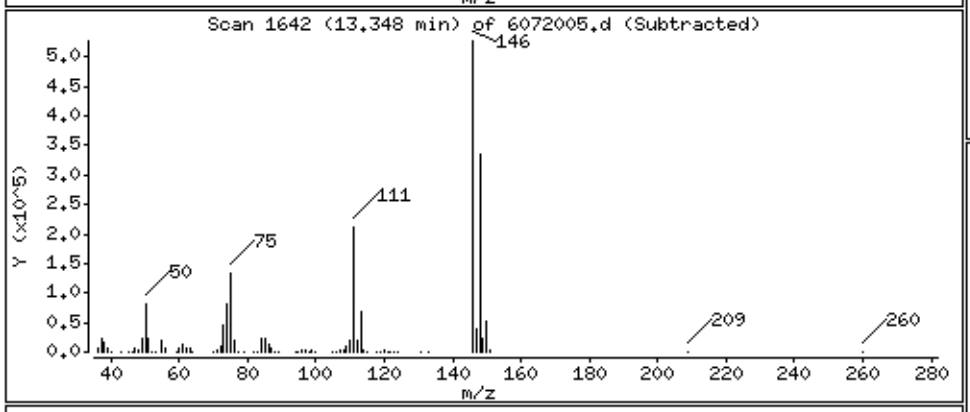
Column phase: RTx-624

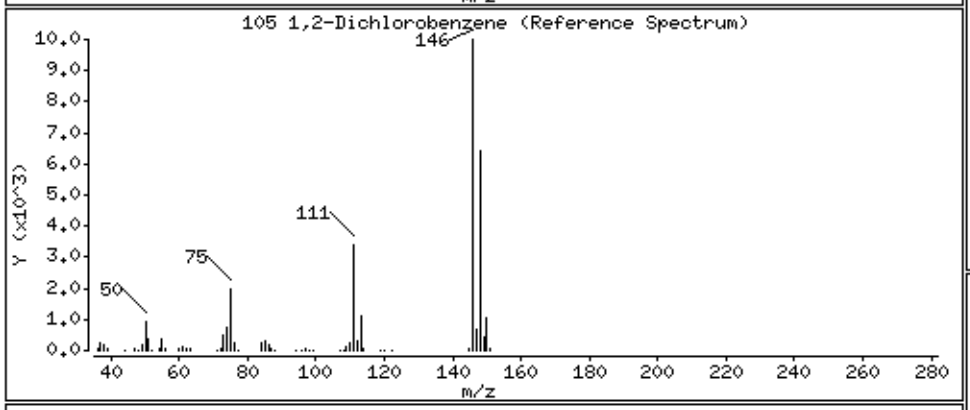
Column diameter: 0.53

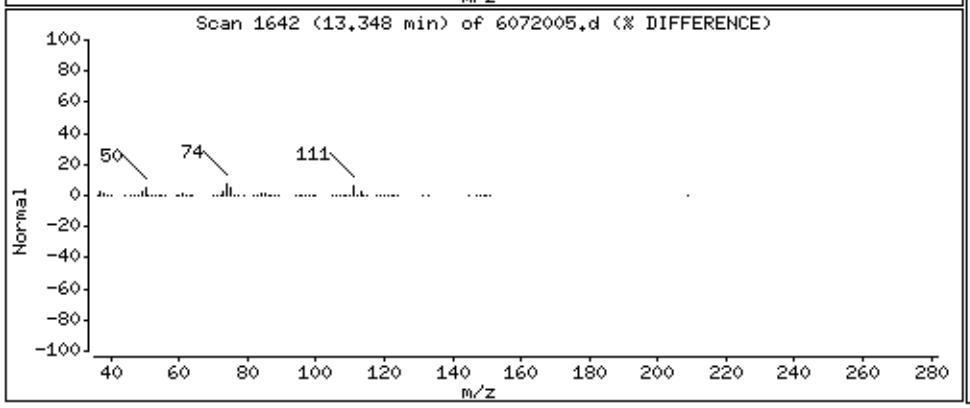
105 1,2-Dichlorobenzene

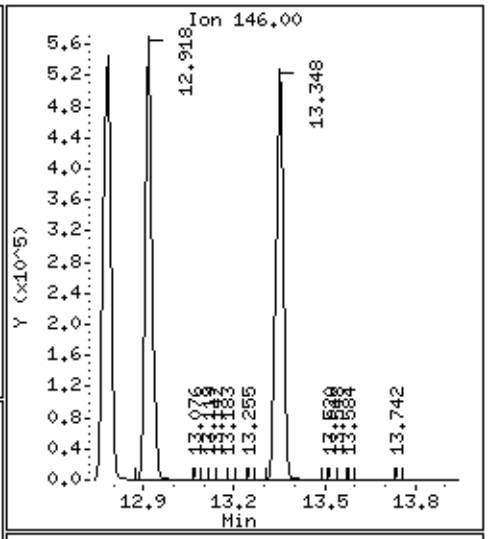
Concentration: 131.83 NG

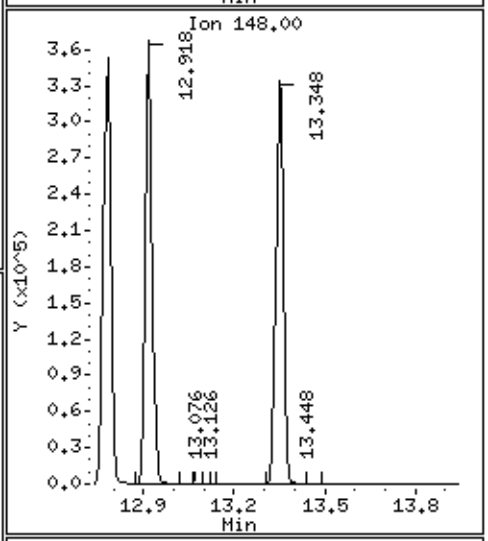


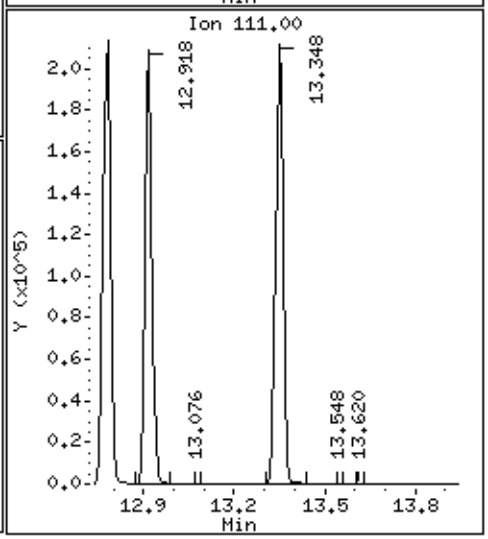












Data File: /chem/msd6.i/20jul16.b/6072005.d

Date : 20-JUL-2016 12:38

Client ID: LCS

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCS;LCS

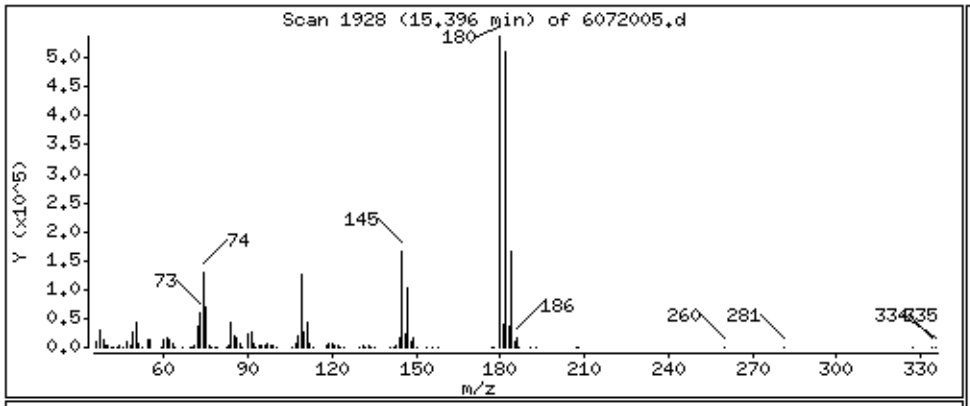
Operator: CT

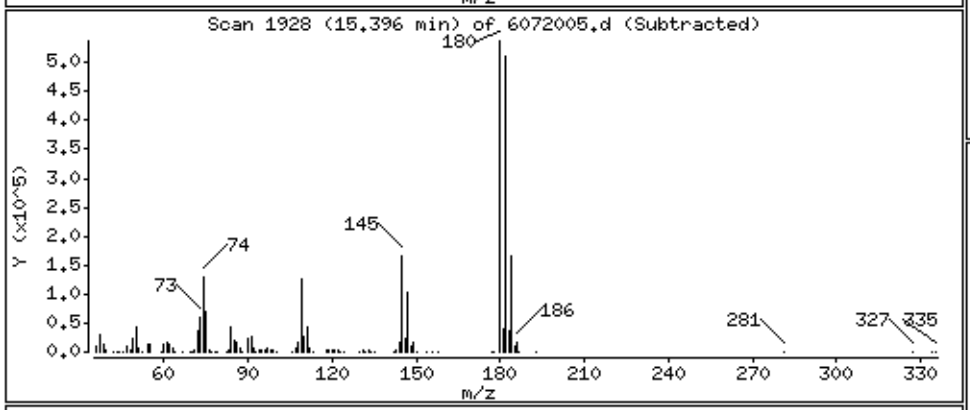
Column phase: RTx-624

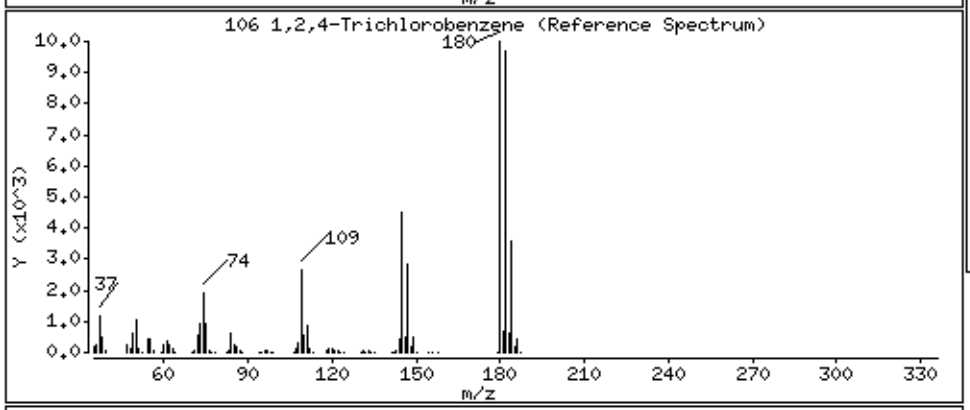
Column diameter: 0.53

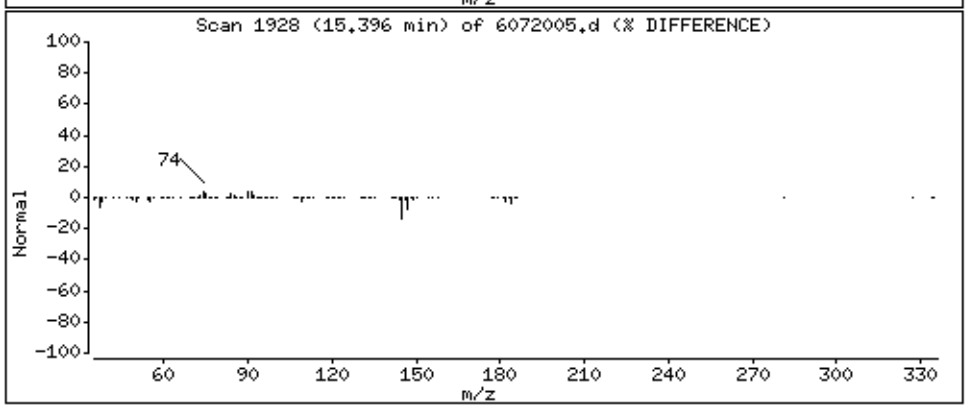
106 1,2,4-Trichlorobenzene

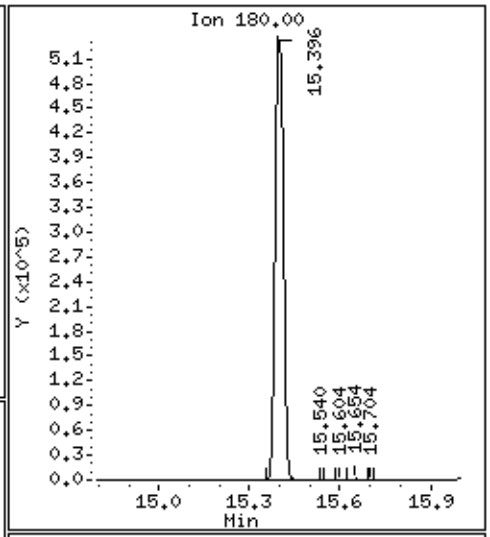
Concentration: 170.38 NG

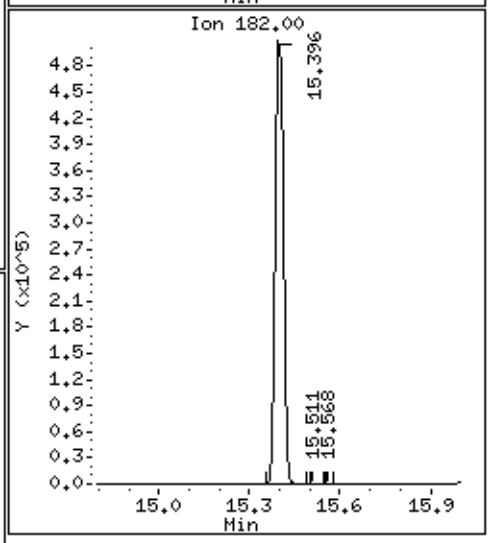












Data File: /chem/msd6.i/20jul16.b/6072005.d

Date : 20-JUL-2016 12:38

Client ID: LCS

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCS;LCS

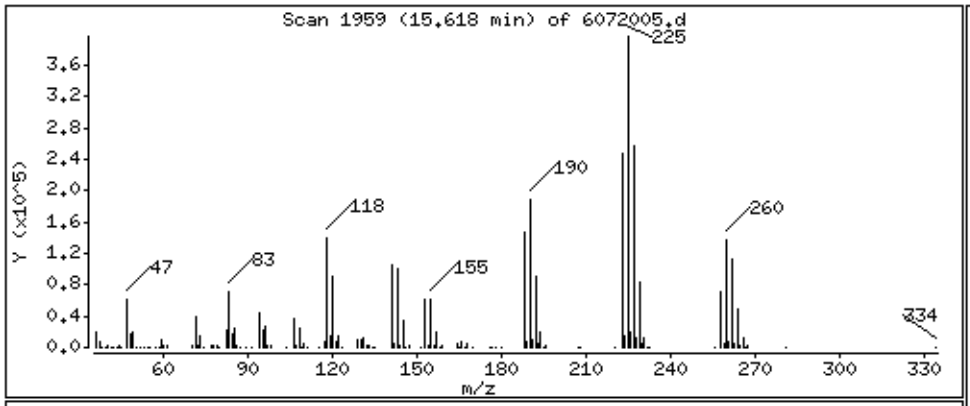
Operator: CT

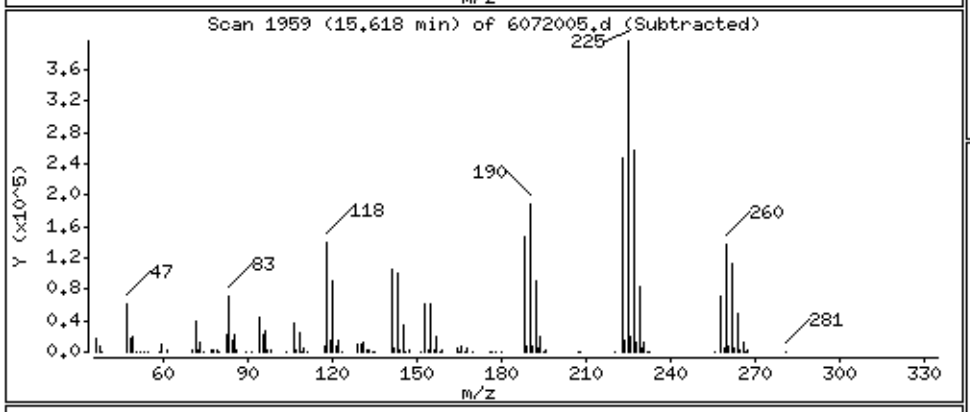
Column phase: RTx-624

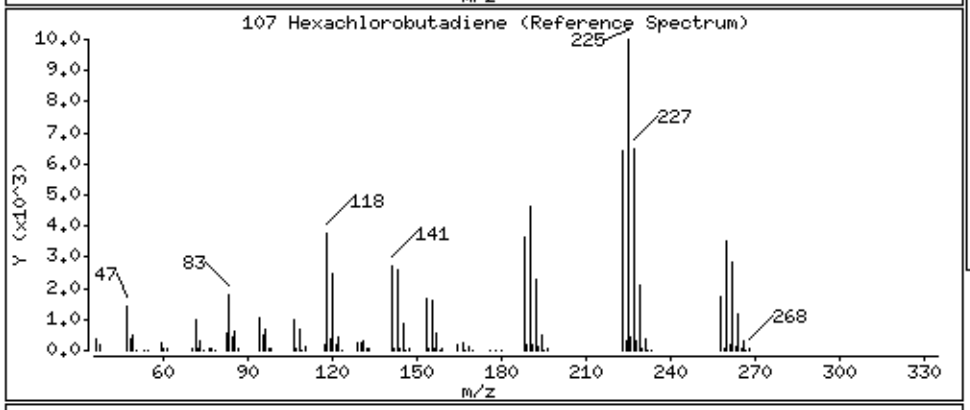
Column diameter: 0.53

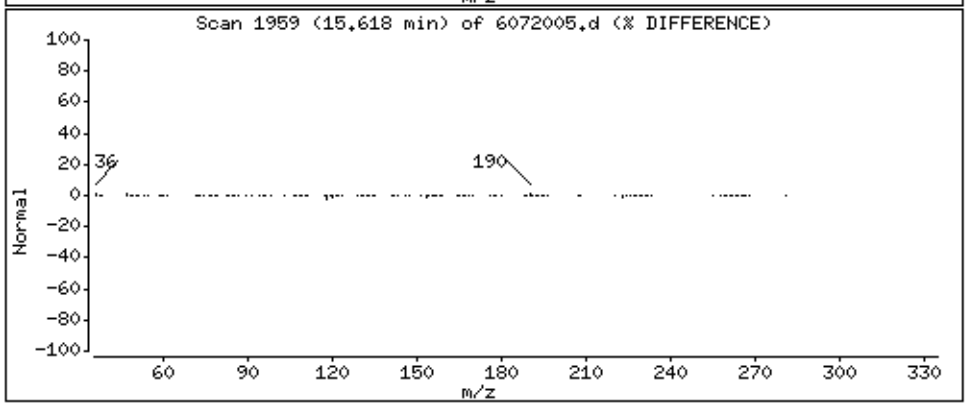
107 Hexachlorobutadiene

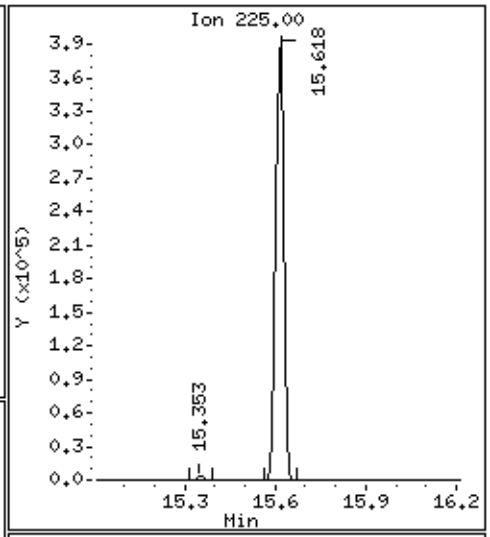
Concentration: 223.82 NG

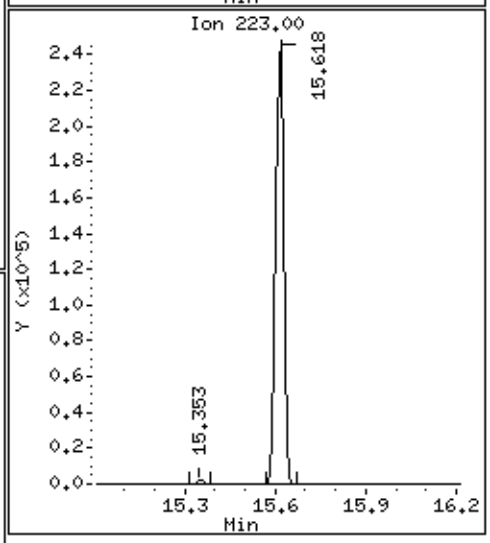












Data File: /chem/msd6.i/20jul16.b/6072005.d

Date : 20-JUL-2016 12:38

Client ID: LCS

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCS;LCS

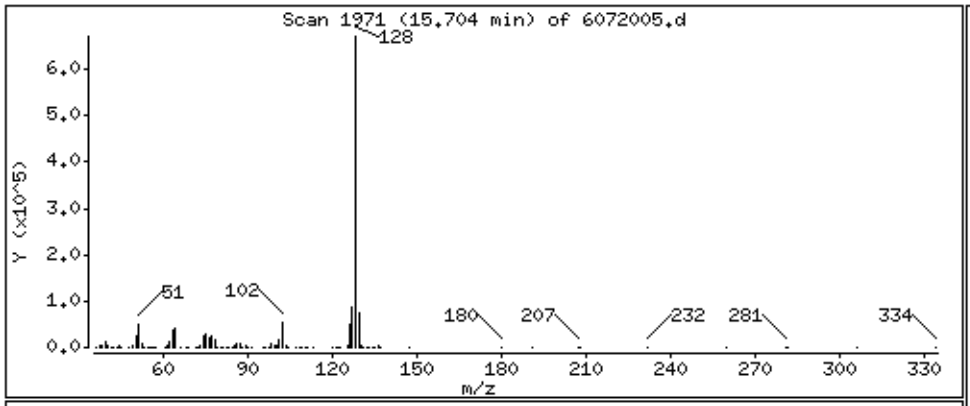
Operator: CT

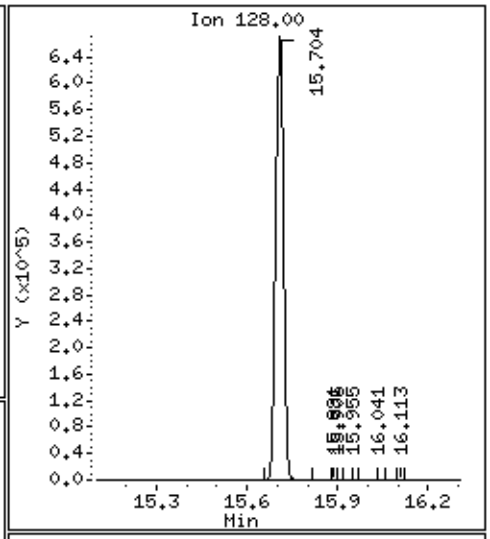
Column phase: RTx-624

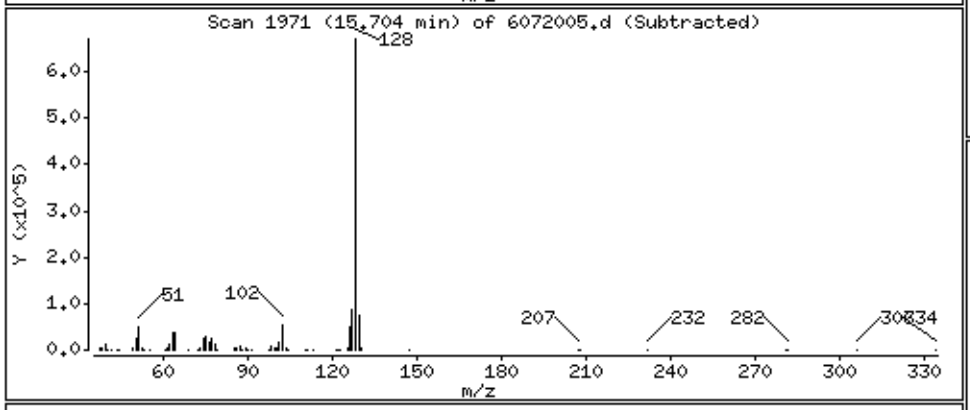
Column diameter: 0.53

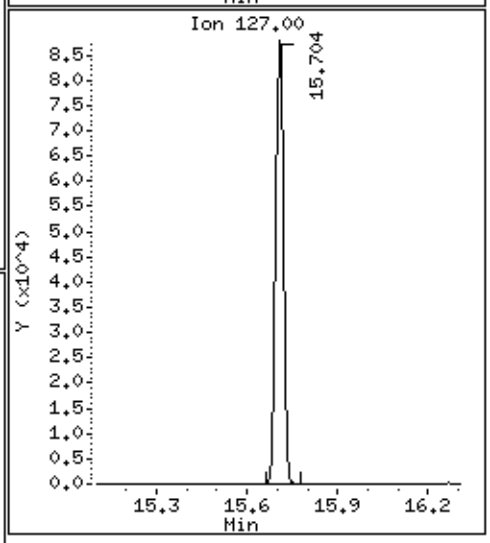
109 Naphthalene

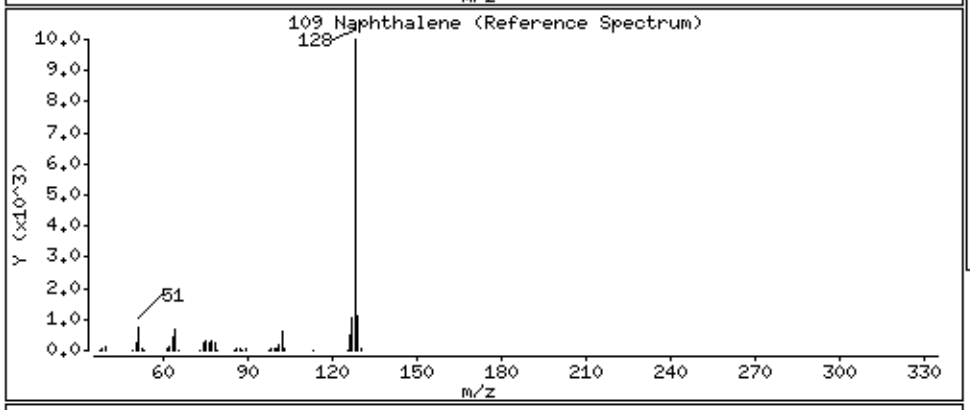
Concentration: 54.455 NG

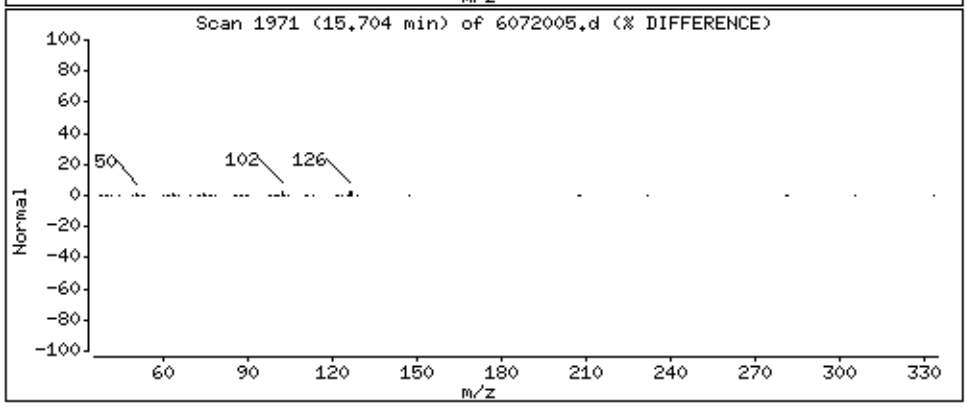












Data File: /chem/msd6.i/20jul16.b/6072005.d

Date : 20-JUL-2016 12:38

Client ID: LCS

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCS;LCS

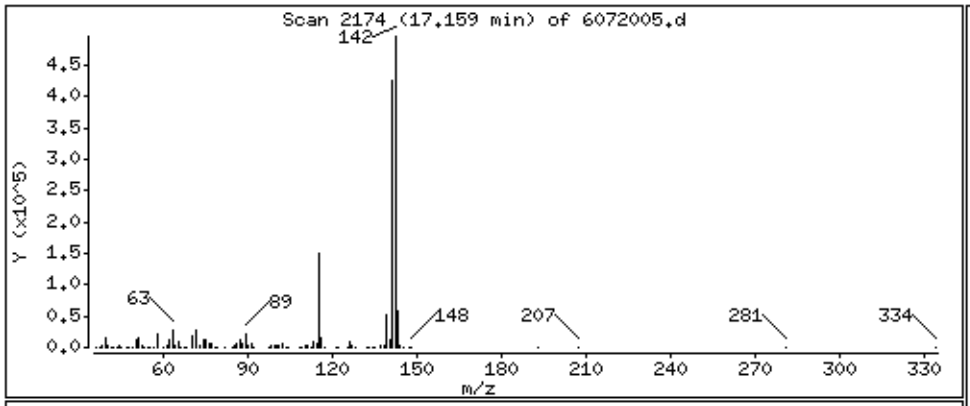
Operator: CT

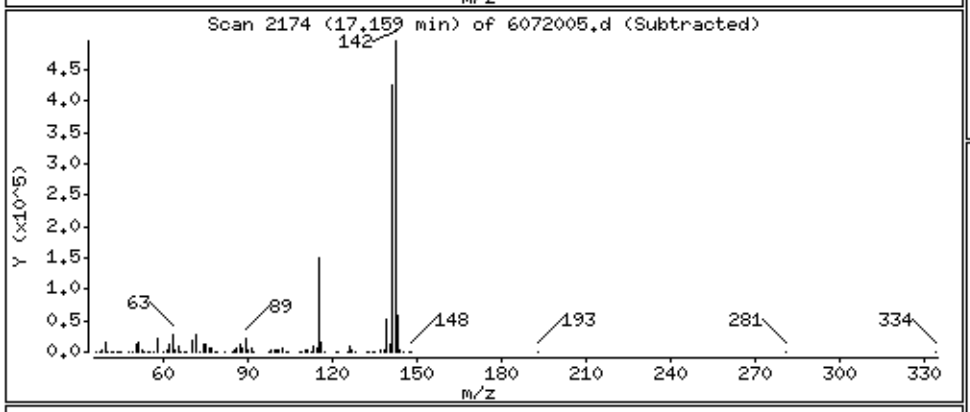
Column phase: RTx-624

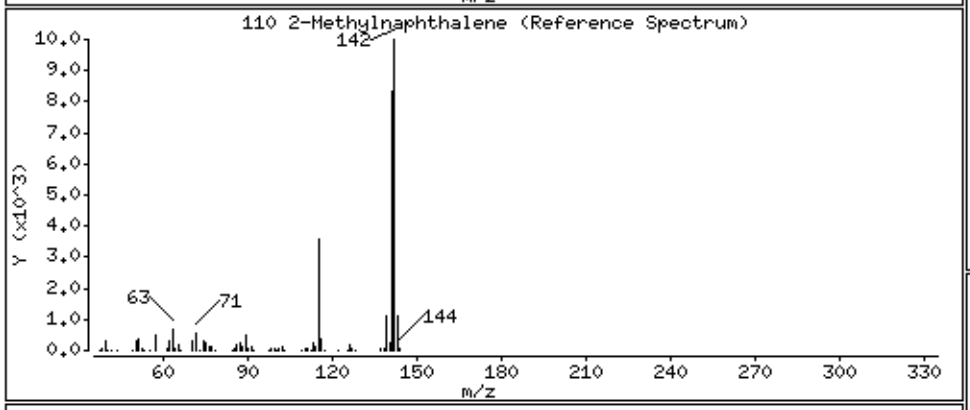
Column diameter: 0.53

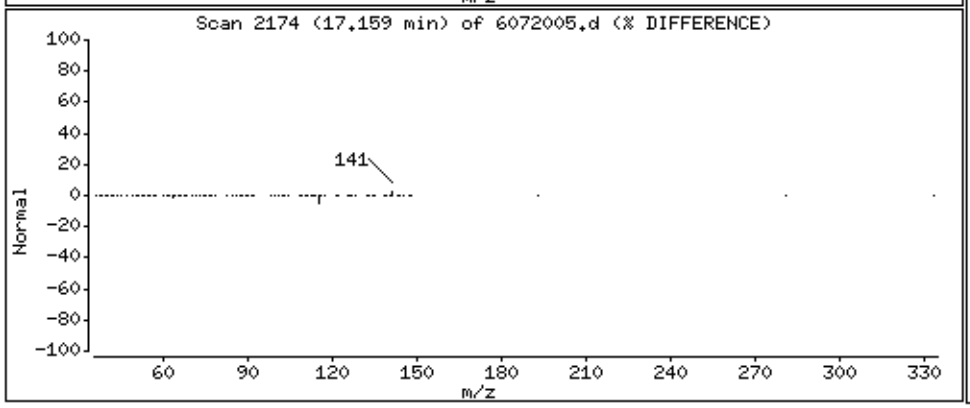
110 2-Methylnaphthalene

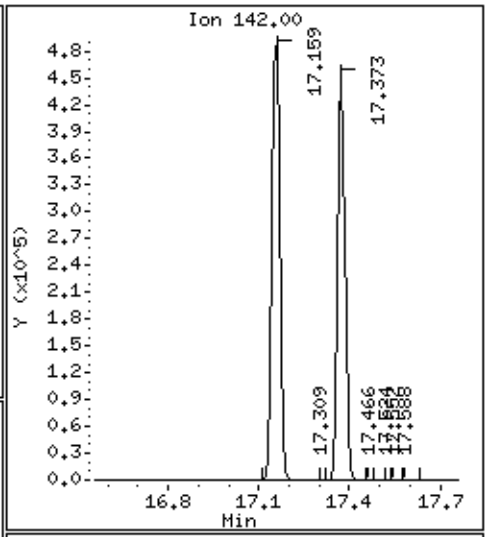
Concentration: 63.377 NG

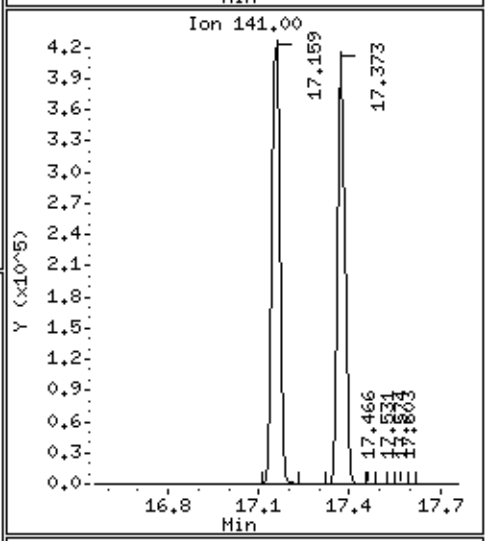


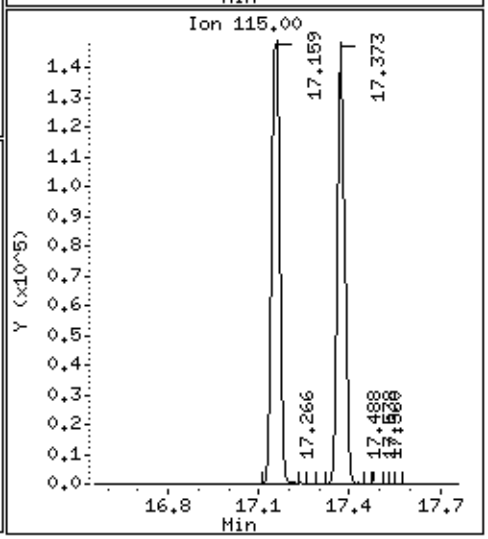












Data File: /chem/msd6.i/20jul16.b/6072005.d

Date : 20-JUL-2016 12:38

Client ID: LCS

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCS;LCS

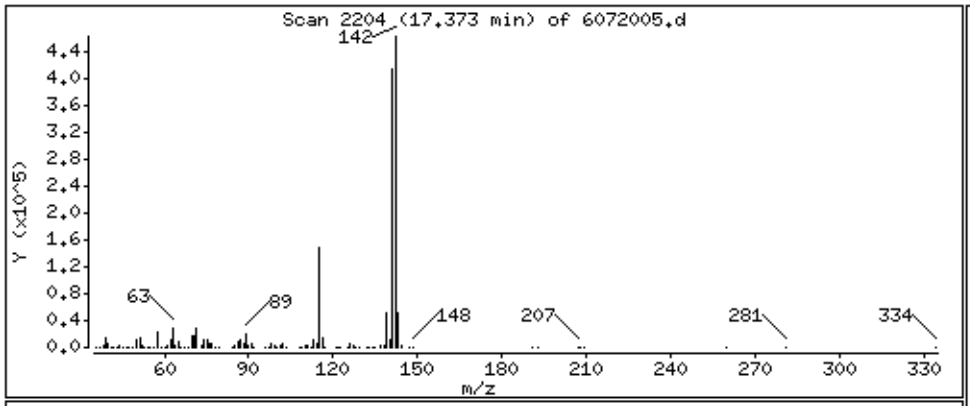
Operator: CT

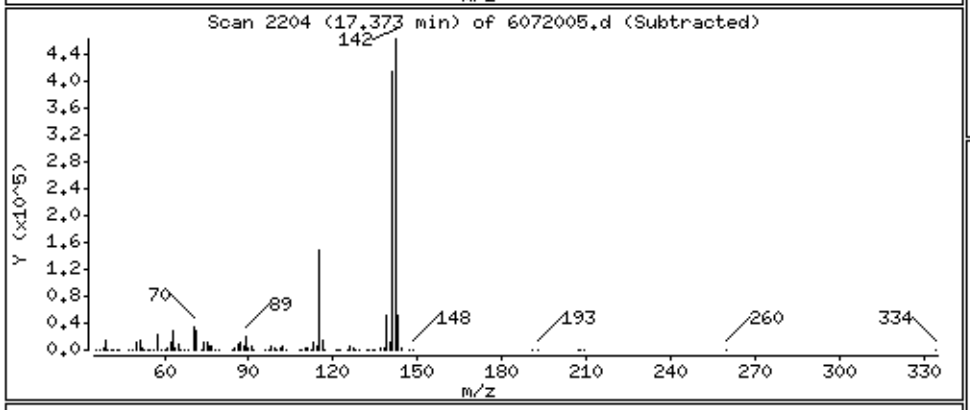
Column phase: RTx-624

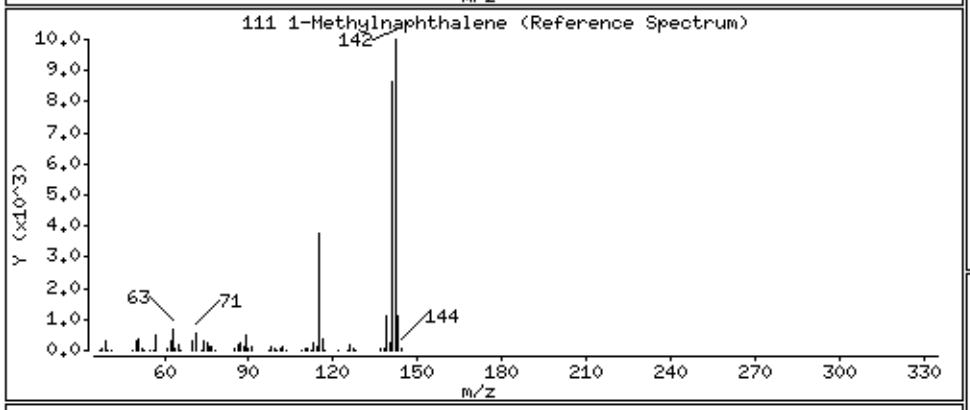
Column diameter: 0.53

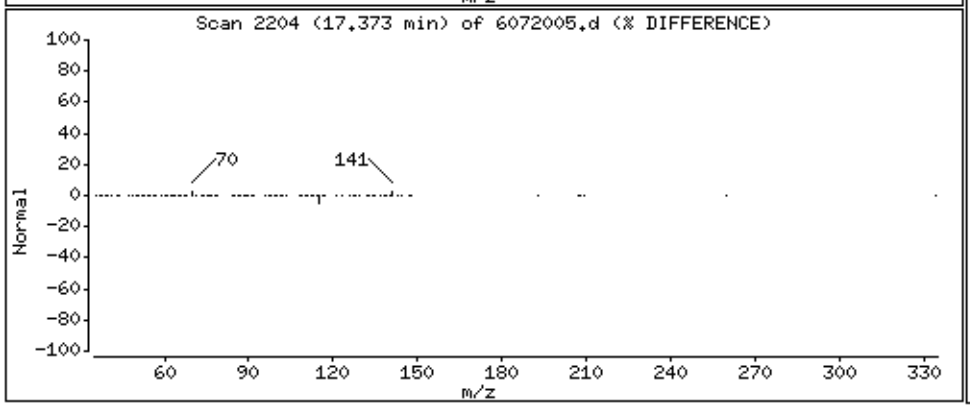
111 1-Methylnaphthalene

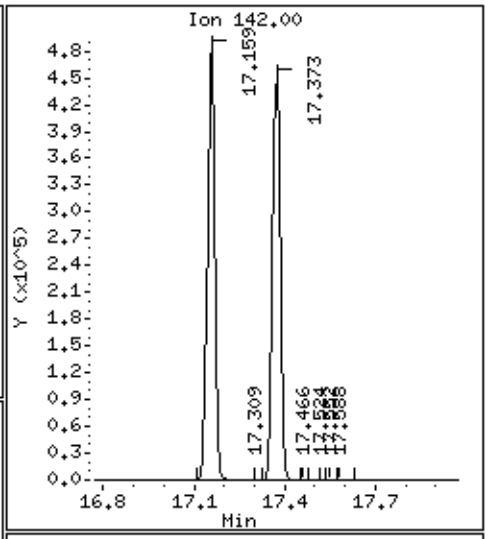
Concentration: 63.605 NG

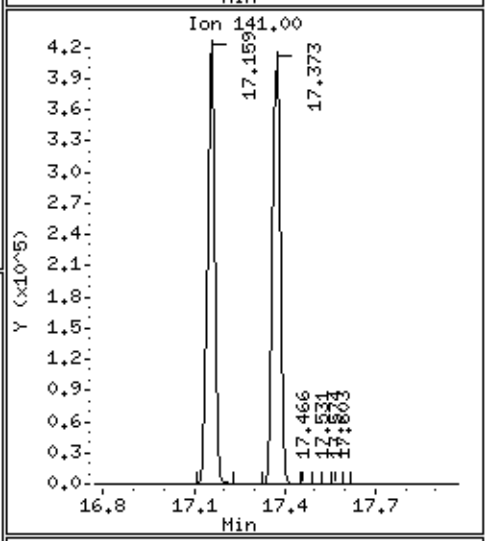


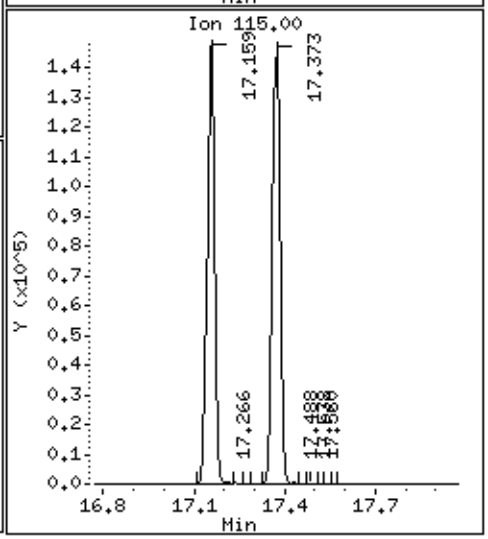












Data File: /chem/msd6.i/20jul16.b/6072005.d

Date : 20-JUL-2016 12:38

Client ID: LCS

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCS;LCS

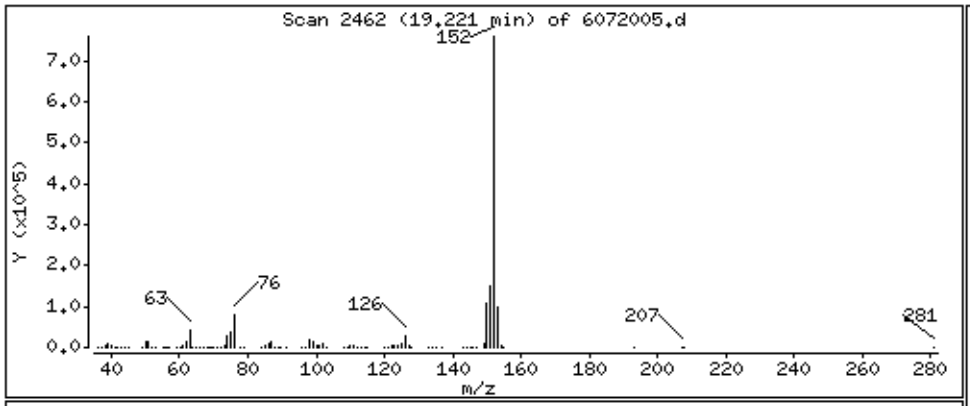
Operator: CT

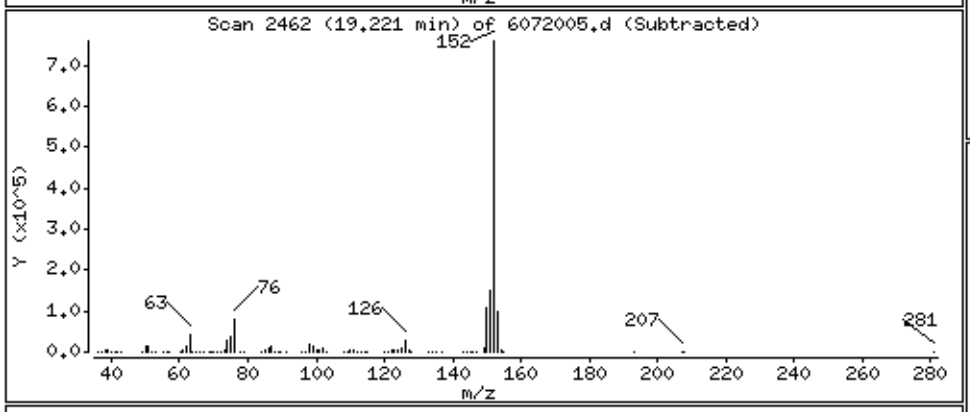
Column phase: RTx-624

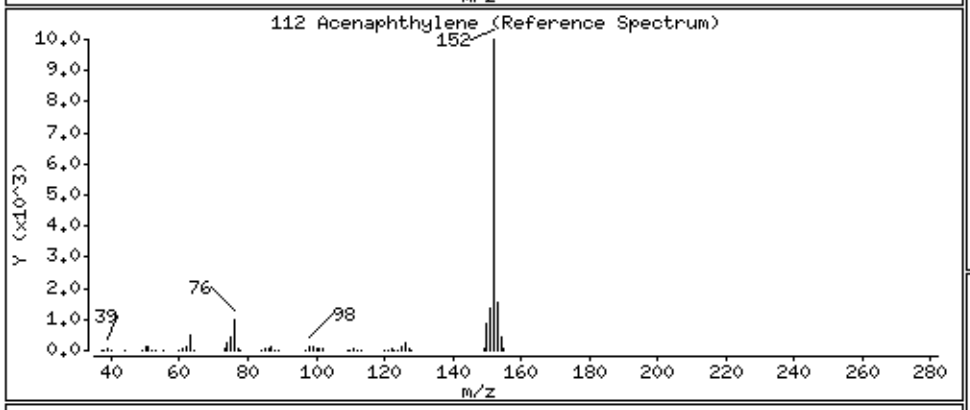
Column diameter: 0.53

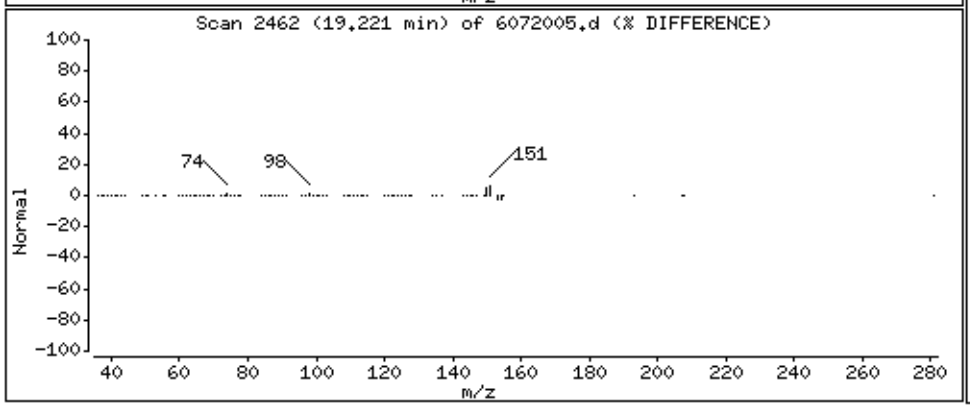
112 Acenaphthylene

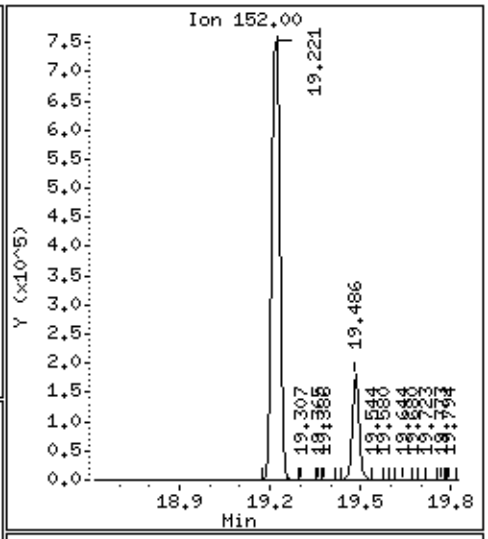
Concentration: 67.861 NG

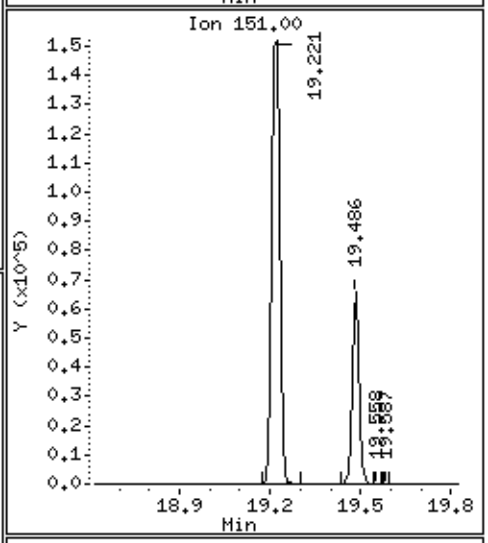


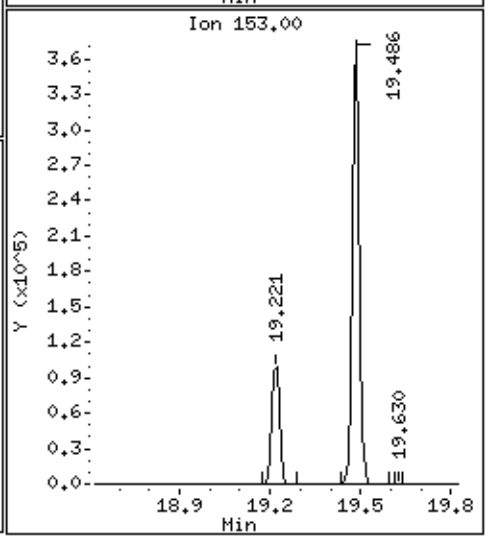












Data File: /chem/msd6.i/20jul16.b/6072005.d

Date : 20-JUL-2016 12:38

Client ID: LCS

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCS;LCS

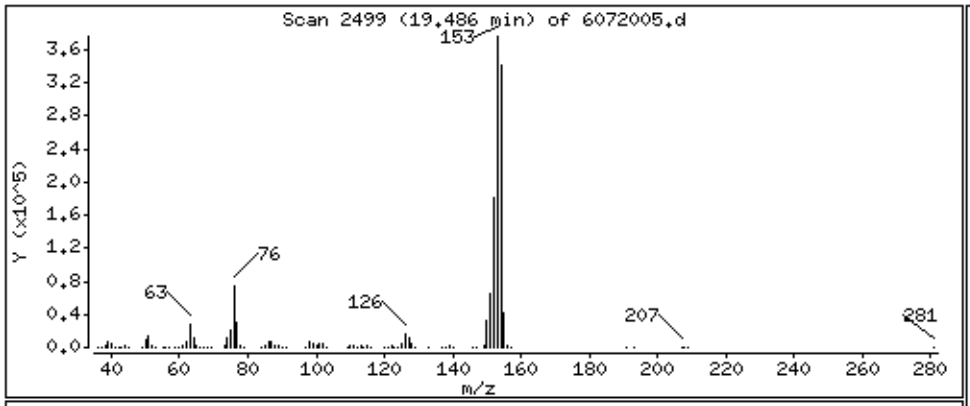
Operator: CT

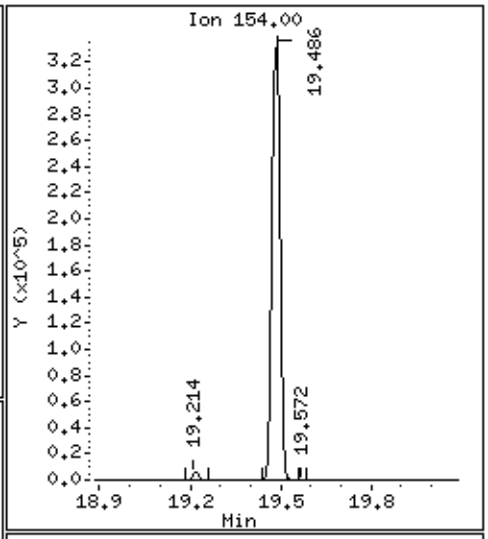
Column phase: RTx-624

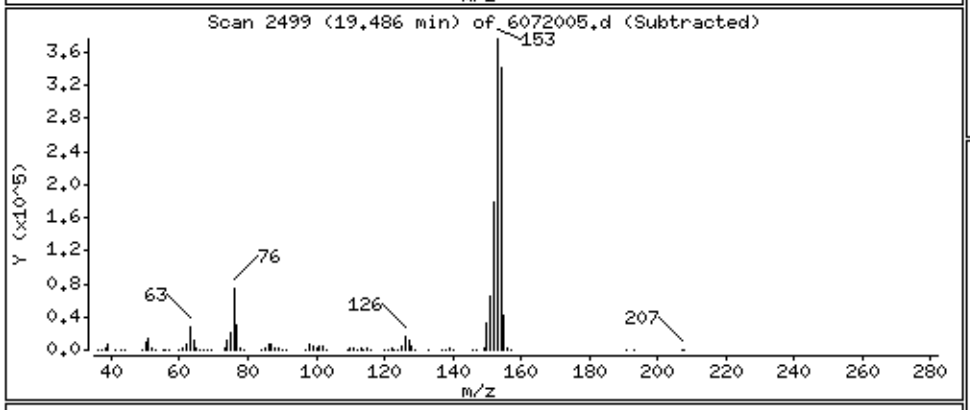
Column diameter: 0.53

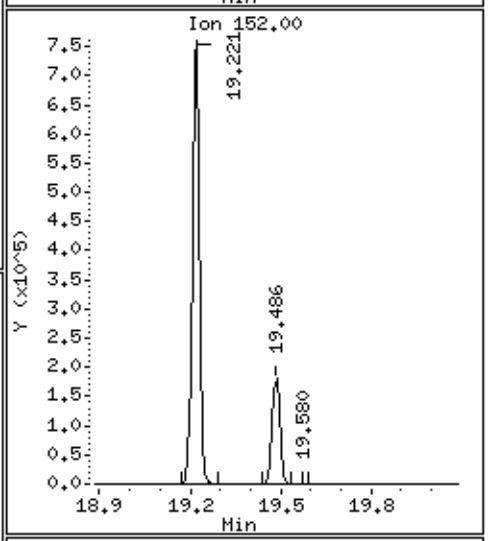
113 Acenaphthene

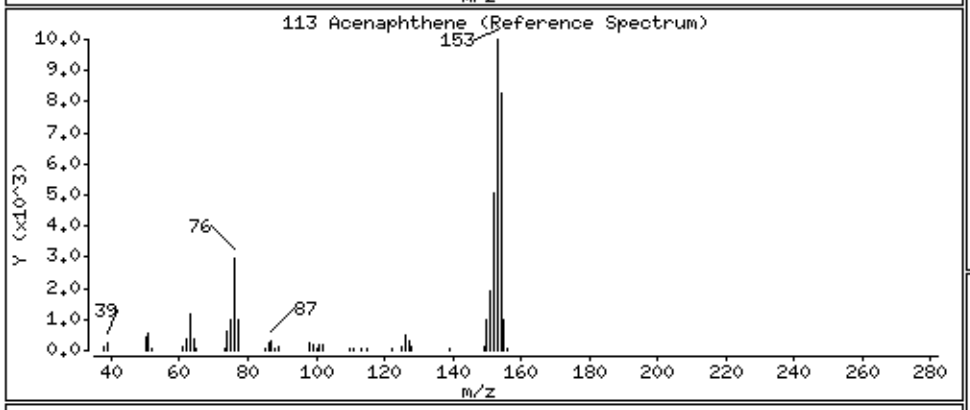
Concentration: 54.306 NG

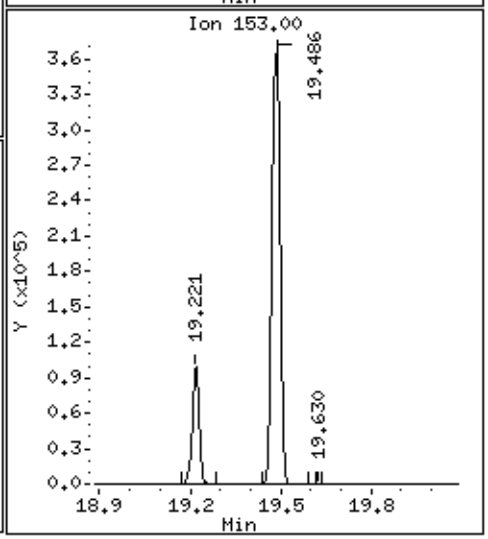


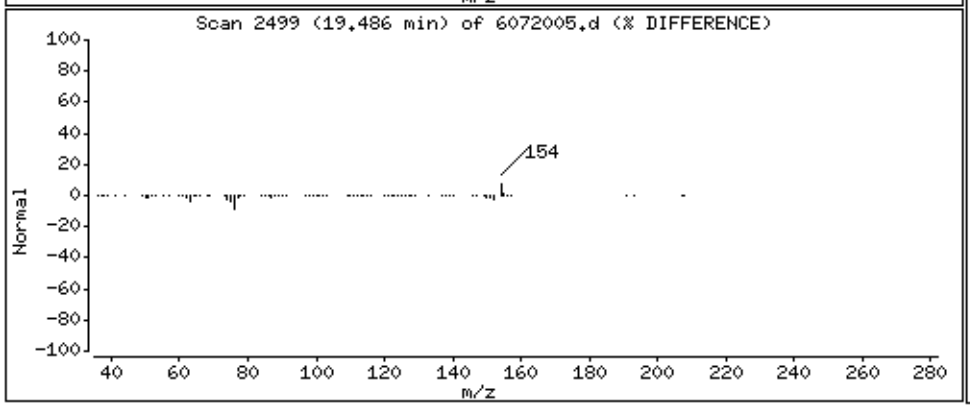












Data File: /chem/msd6.i/20jul16.b/6072005.d

Date : 20-JUL-2016 12:38

Client ID: LCS

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCS;LCS

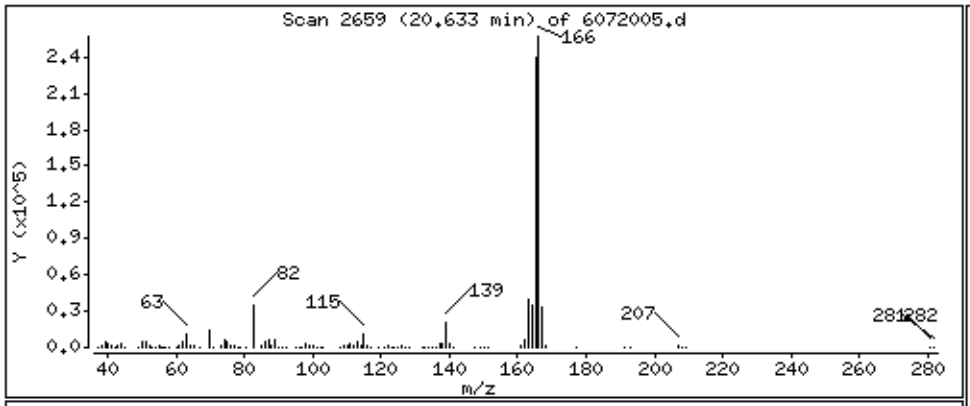
Operator: CT

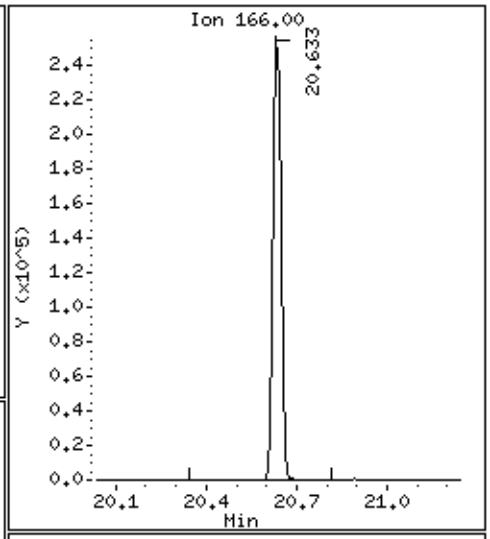
Column phase: RTx-624

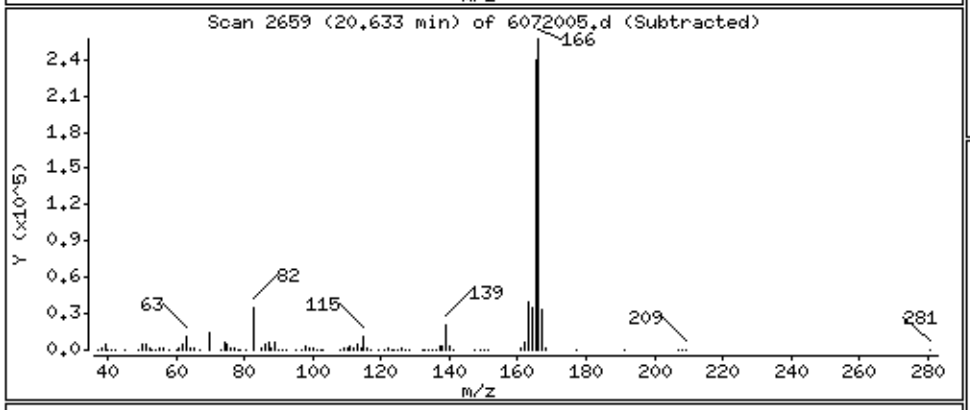
Column diameter: 0.53

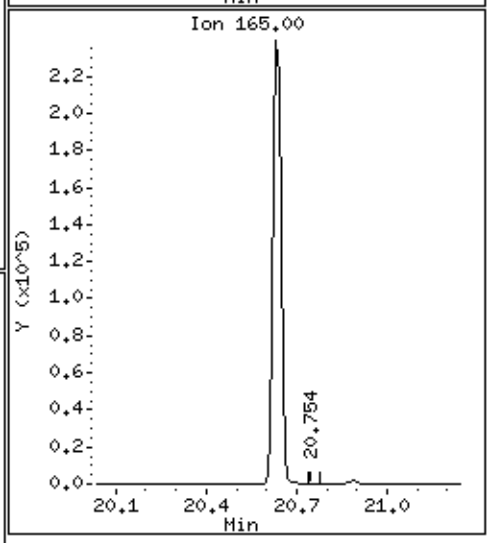
114 Fluorene

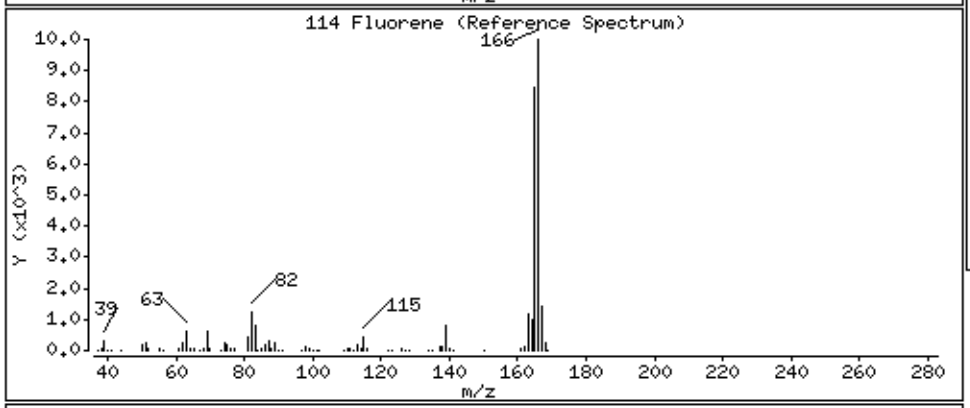
Concentration: 39.234 NG

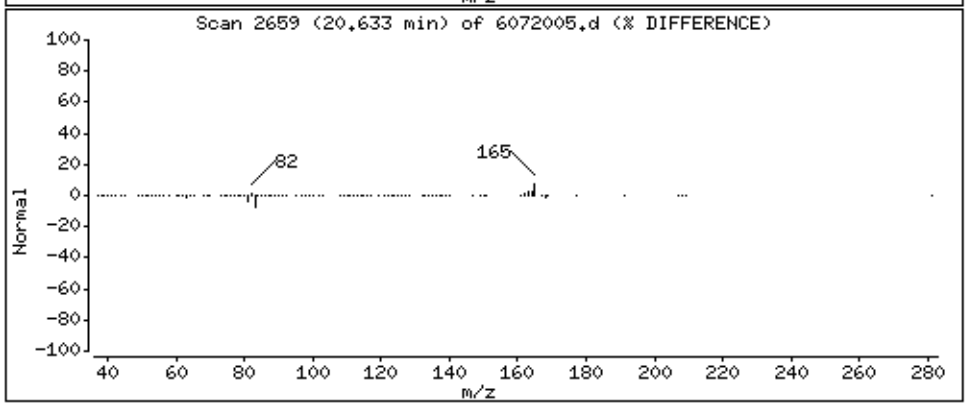












Data File: /chem/msd6.i/20jul16.b/6072005.d

Date : 20-JUL-2016 12:38

Client ID: LCS

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCS;LCS

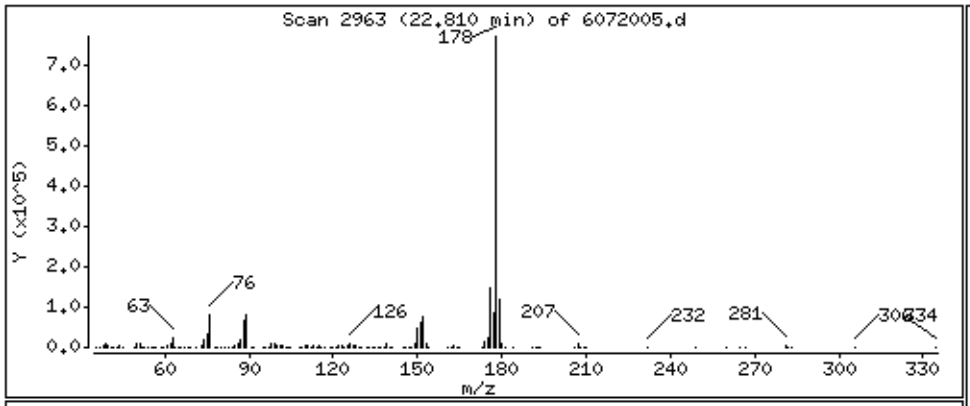
Operator: CT

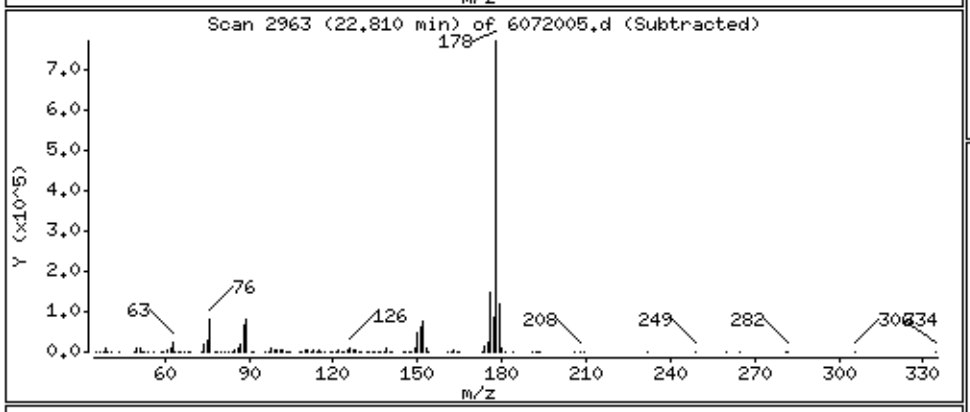
Column phase: RTx-624

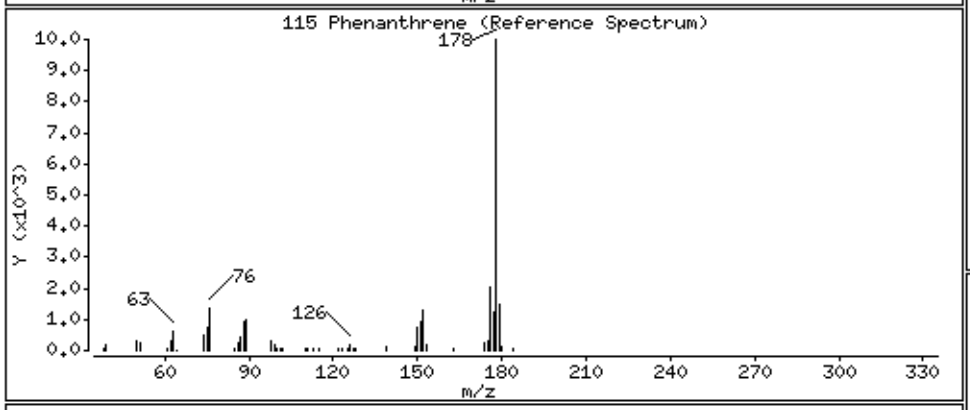
Column diameter: 0.53

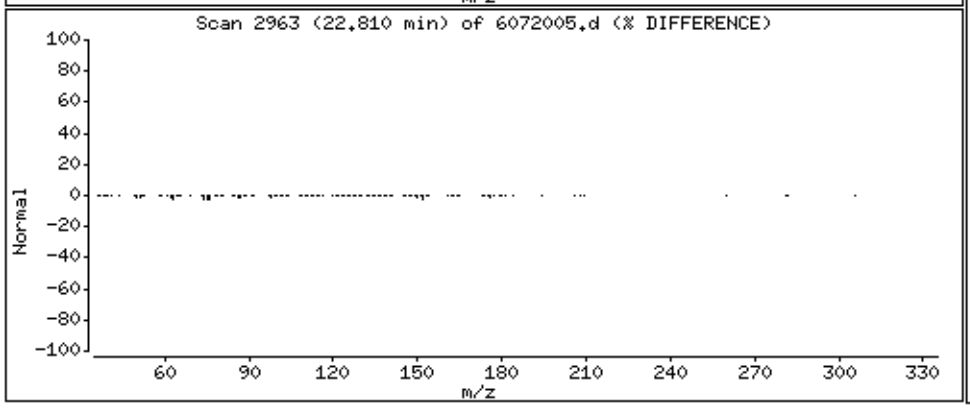
115 Phenanthrene

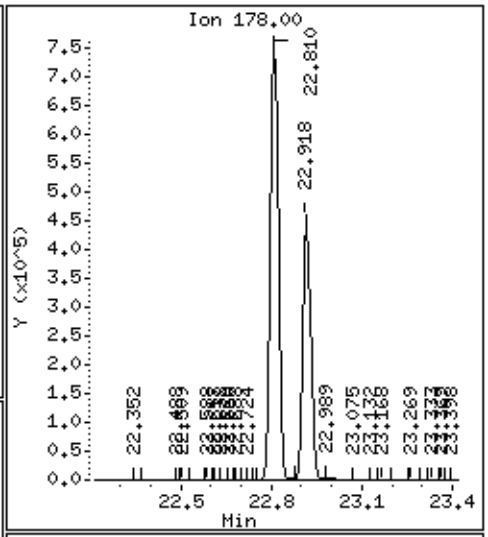
Concentration: 67.529 NG

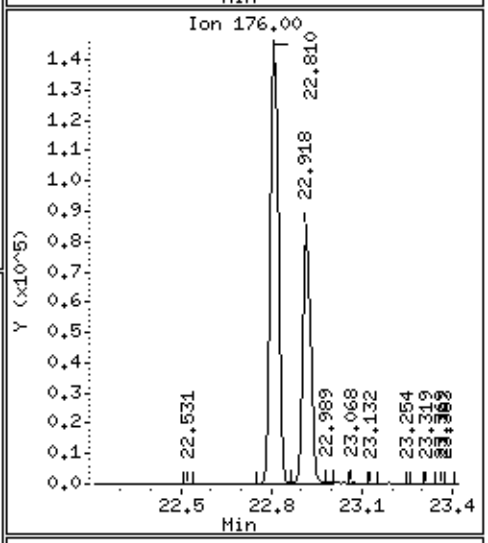


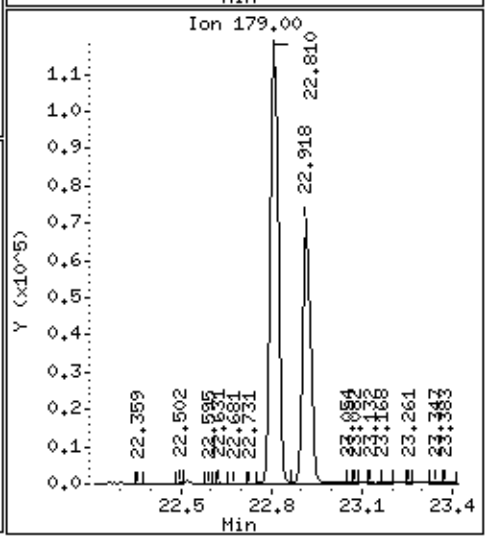












Data File: /chem/msd6.i/20jul16.b/6072005.d

Date : 20-JUL-2016 12:38

Client ID: LCS

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCS;LCS

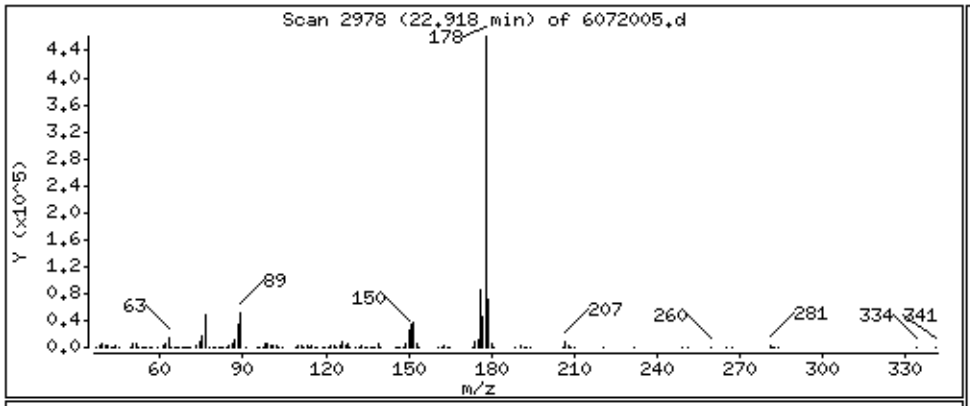
Operator: CT

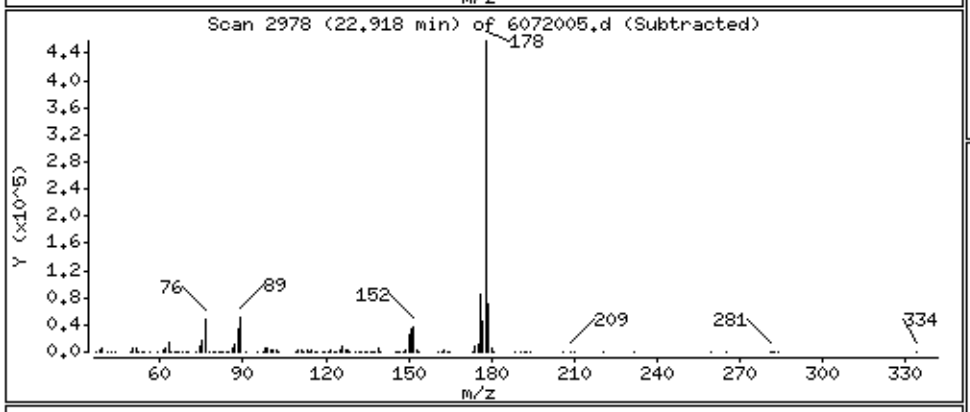
Column phase: RTx-624

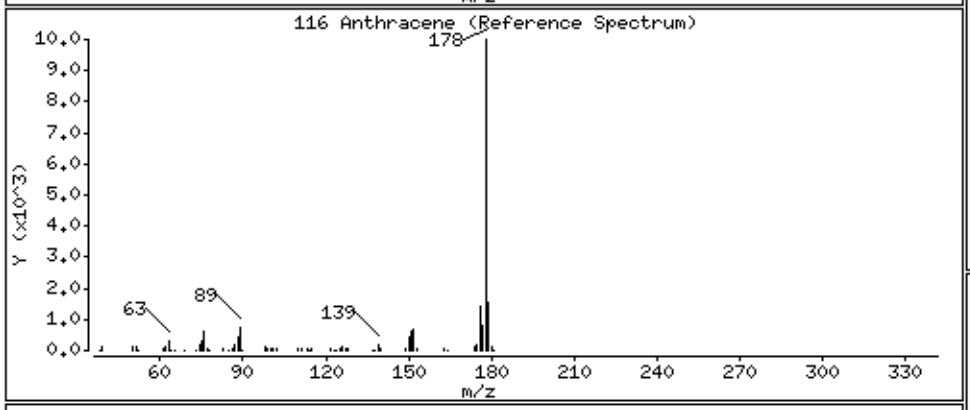
Column diameter: 0.53

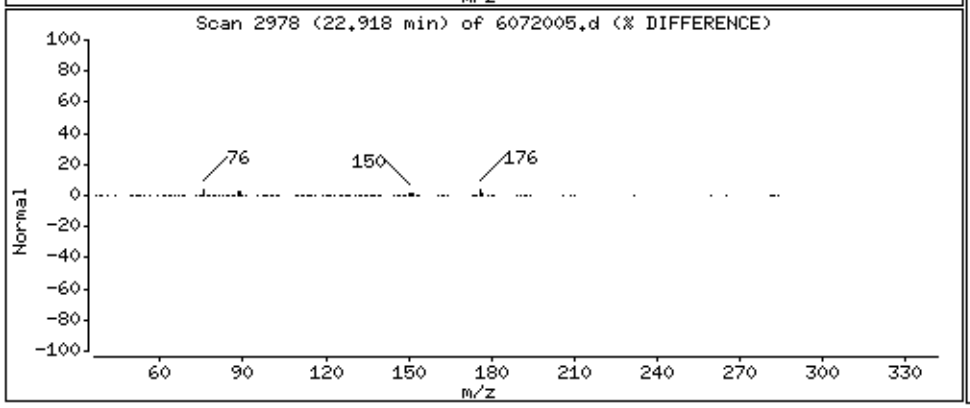
116 Anthracene

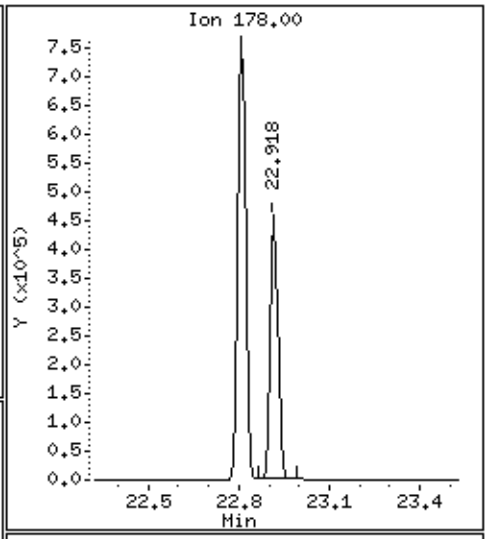
Concentration: 61.085 NG

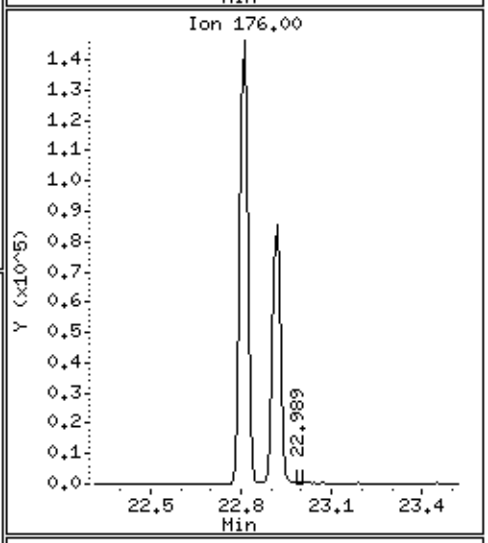


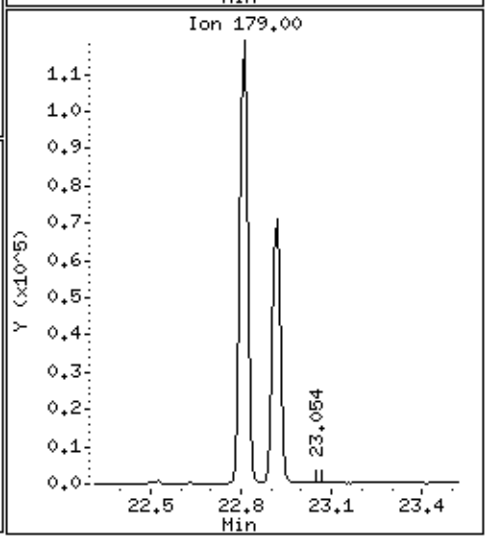












Data File: /chem/msd6.i/20jul16.b/6072005.d

Date : 20-JUL-2016 12:38

Client ID: LCS

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCS;LCS

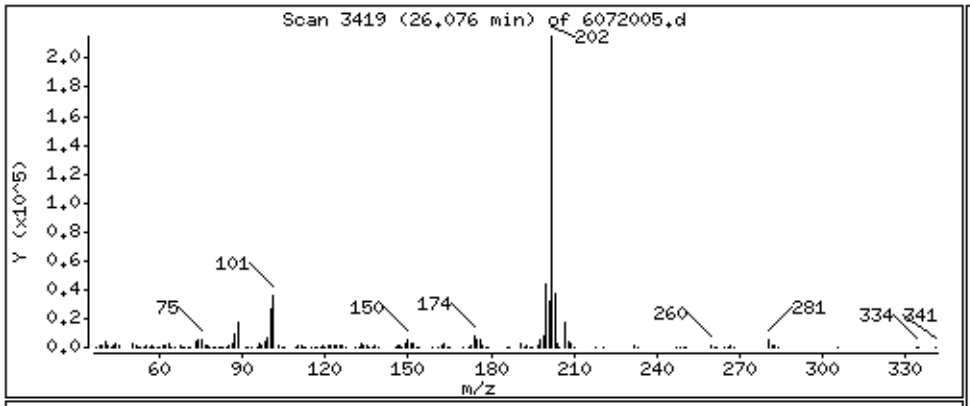
Operator: CT

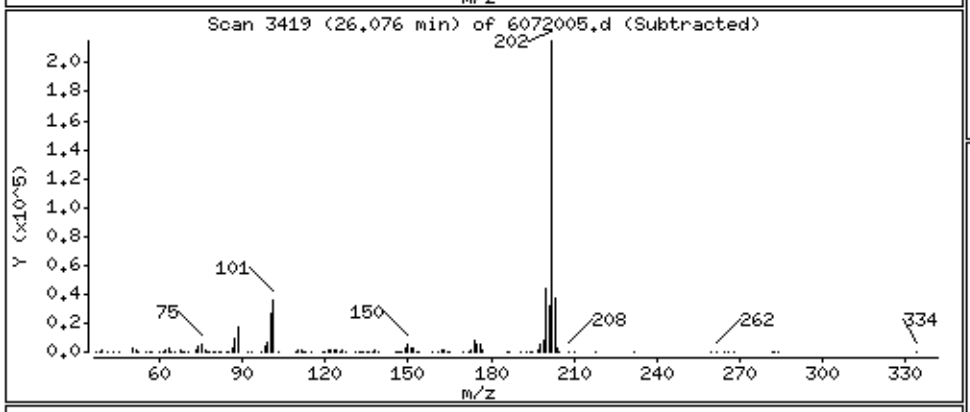
Column phase: RTx-624

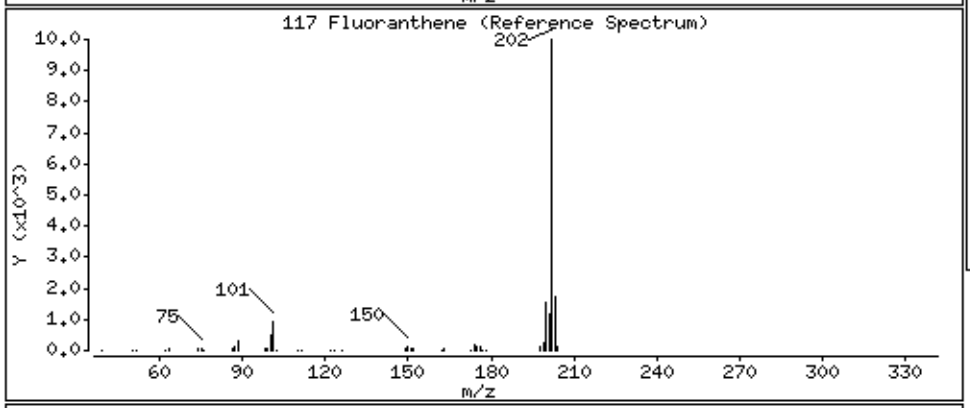
Column diameter: 0.53

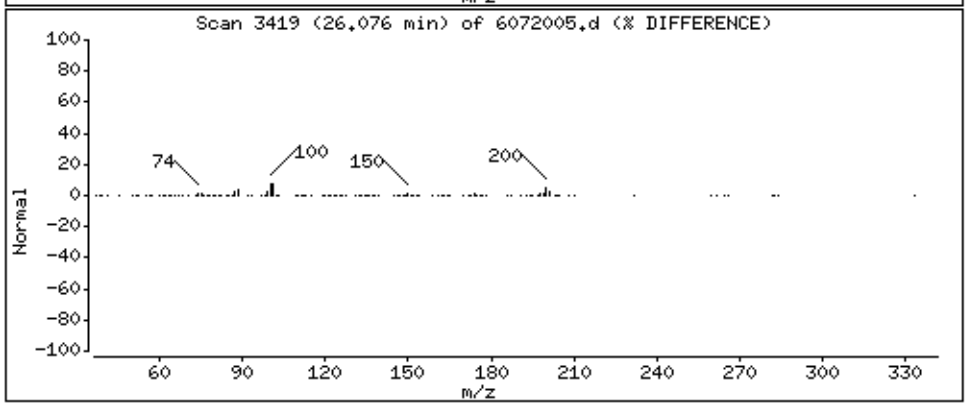
117 Fluoranthene

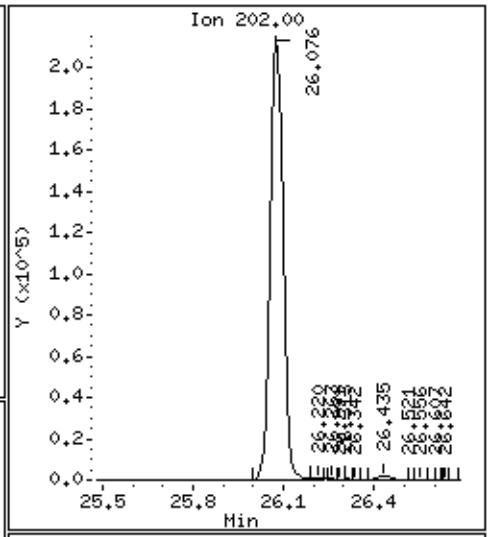
Concentration: 44.537 NG

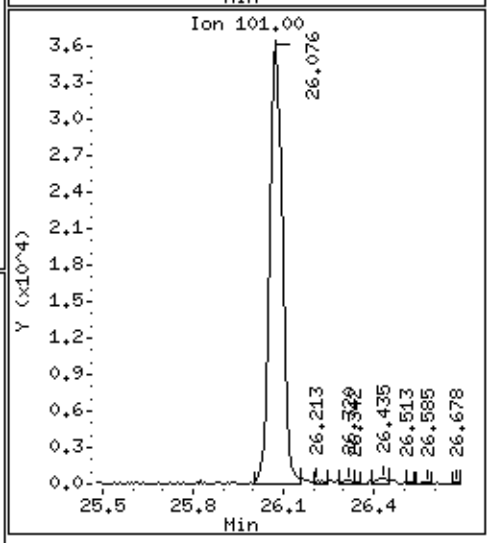












Data File: /chem/msd6.i/20jul16.b/6072005.d

Date : 20-JUL-2016 12:38

Client ID: LCS

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCS;LCS

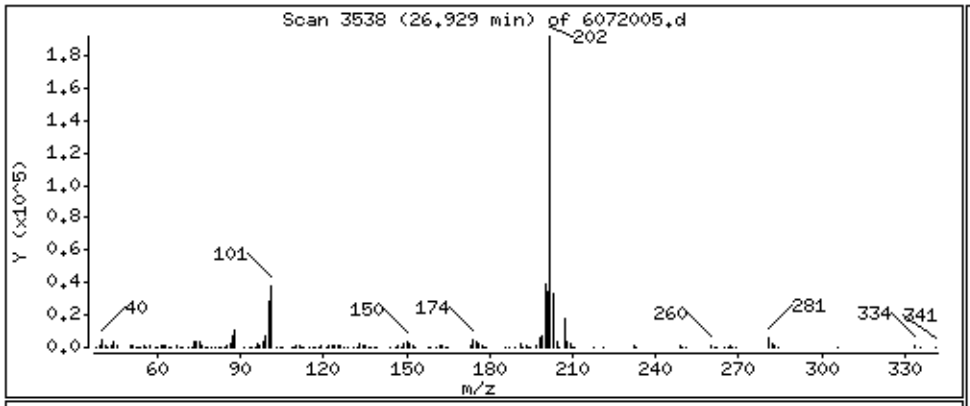
Operator: CT

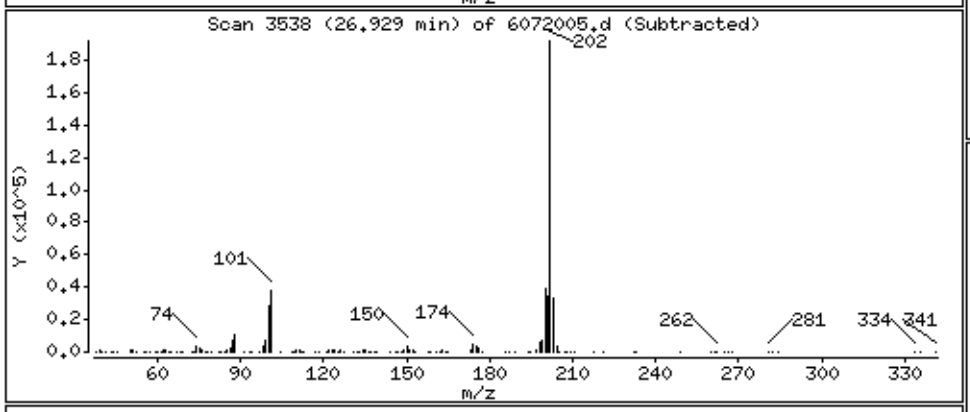
Column phase: RTx-624

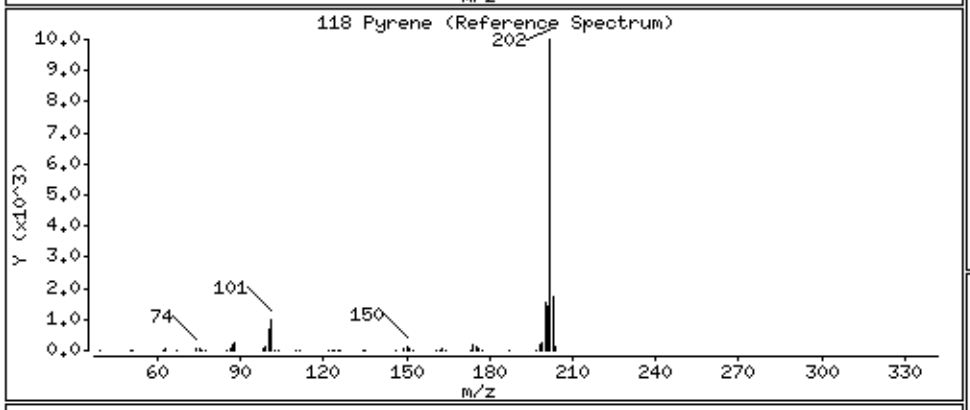
Column diameter: 0.53

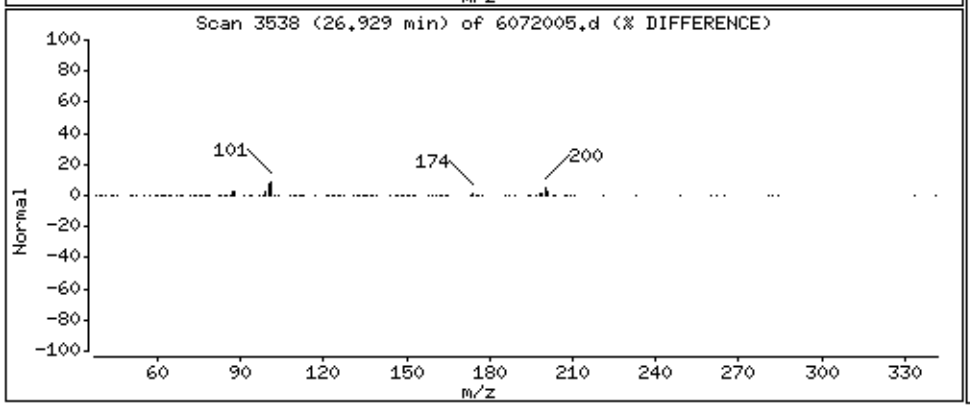
118 Pyrene

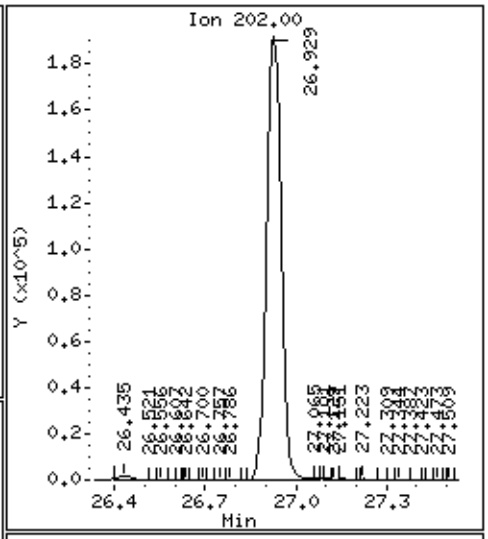
Concentration: 43.569 NG

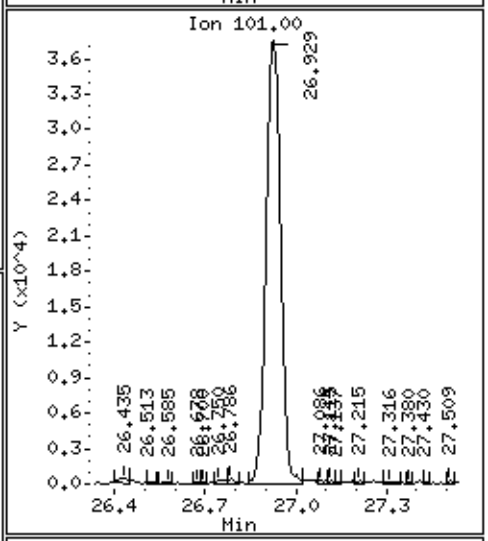


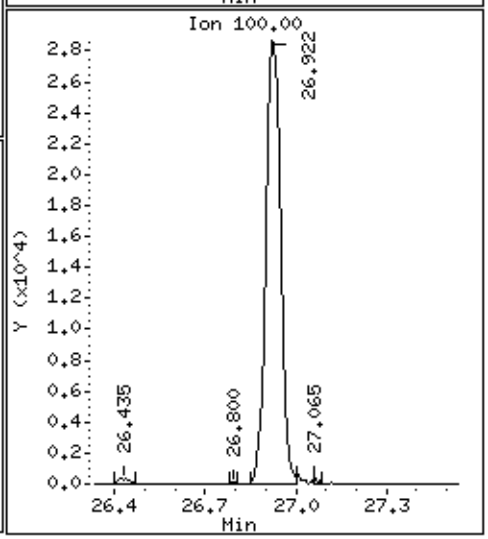












eurofins | Air Toxics

Client Sample ID: LCSD
Lab ID#: 1607228B-18AA
EPA METHOD TO-17

File Name:	**6072006**	**Date of Extraction: NA**	**Date of Collection: NA**
Dil. Factor:	**1.00**		**Date of Analysis: 7/20/16 01:18 PM**

Compound	**%Recovery**	**Method Limits**
Naphthalene	99	70-130

Air Sample Volume(L): 1.00
Container Type: NA - Not Applicable

Surrogates	**%Recovery**	**Method Limits**
Naphthalene-d8	115	50-150

Report Date: 20-Jul-2016 14:23

Eurofins Air Toxics Inc.

RECOVERY REPORT

Client Name:
Client SDG: 20jul16
Sample Matrix: GAS
Fraction: VOA
Lab Smp Id: VI VOC+PAH LCSD
Client Smp ID: LCSD
Level: LOW
Operator: CT
Data Type: MS DATA
SampleType: LCSD
SpikeList File: VOC+PAHlcs50.spk
Quant Type: ISTD
Sublist File: VOC+PAH_ICAL.sub
Method File: /chem/msd6.i/20jul16.b/616z0712vi.m
Misc Info: 2787-2-20ml(10/7/16), 2744-103-50(1/13/17)

SPIKE COMPOUND	CONC ADDED NG	CONC RECOVERED NG	% RECOVERED	LIMITS
3 Freon 114	139.80	158.24	113.19	70-130
6 Vinyl Chloride	51.100	61.969	121.27	70-130
7 1,3-Butadiene	44.200	48.594	109.94	70-130
9 Chloroethane	52.800	61.344	116.18	70-130
10 Isopentane	59.000	67.871	115.04	70-130
11 Trichlorofluoromet	112.40	125.68	111.82	70-130
14 1,1-Dichloroethene	79.300	91.366	115.22	70-130
15 Freon 113	153.30	177.56	115.82	70-130
18 Carbon Disulfide	62.300	61.215	98.26	70-130
19 2-Propanol	49.200	45.934	93.36	70-130
22 Methylene Chloride	69.500	79.402	114.25	70-130
25 trans-1,2-Dichloro	79.300	79.766	100.59	70-130
26 MTBE	72.100	83.699	116.09	70-130
28 Hexane	70.500	88.128	125.01	70-130
29 1,1-Dichloroethane	81.000	100.84	124.50	70-130
37 cis-1,2-Dichloroet	79.300	102.68	129.48	70-130
38 2-Butanone	59.000	69.552	117.88	70-130
44 Chloroform	97.700	104.33	106.78	70-130
45 1,1,1-Trichloroeth	109.10	118.57	108.68	70-130
46 Cyclohexane	68.800	72.721	105.70	70-130
47 Carbon Tetrachlori	125.80	121.38	96.49	70-130
48 Benzene	63.900	62.891	98.42	70-130
50 1,2-Dichloroethane	80.900	85.827	106.09	70-130
51 2,2,4-Trimethylpen	93.400	96.605	103.43	70-130
53 Heptane	82.000	82.241	100.29	70-130
56 Trichloroethene	107.50	125.54	116.78	70-130
58 Methyl Cyclohexane	80.300	85.676	106.70	70-130
59 1,2-Dichloropropan	92.400	99.648	107.84	70-130
60 1,4-Dioxane	72.100	76.688	106.36	70-130
65 4-Methyl-2-pentano	81.900	101.00	123.32	70-130
67 Toluene	75.400	76.831	101.90	70-130
70 1,1,2-Trichloroeth	109.10	132.08	121.06	70-130
71 Tetrachloroethene	135.70	142.28	104.85	70-130

SPIKE COMPOUND	CONC ADDED NG	CONC RECOVERED NG	% RECOVERED	LIMITS
72 2-Hexanone	81.900	75.213	91.84	70-130
74 1,2-Dibromoethane	153.70	155.61	101.24	70-130
81 Chlorobenzene	92.100	96.276	104.53	70-130
82 Ethyl Benzene	86.800	92.071	106.07	70-130
84 m,p-Xylene	86.800	82.768	95.36	70-130
88 o-Xylene	86.800	91.383	105.28	70-130
89 Styrene	85.200	87.926	103.20	70-130
91 Cumene	98.300	103.10	104.88	70-130
94 1,1,2,2-Tetrachlor	137.30	127.40	92.79	70-130
96 Propylbenzene	98.300	102.42	104.19	70-130
97 4-Ethyltoluene	98.300	99.016	100.73	70-130
98 1,3,5-Trimethylben	98.300	99.960	101.69	70-130
100 1,2,4-Trimethylben	98.300	99.698	101.42	70-130
101 1,3-Dichlorobenzen	120.30	125.02	103.93	70-130
102 1,4-Dichlorobenzen	120.30	125.10	103.99	70-130
105 1,2-Dichlorobenzen	120.30	125.07	103.97	70-130
106 1,2,4-Trichloroben	148.40	155.64	104.88	70-130
107 Hexachlorobutadien	213.30	205.16	96.18	70-130
109 Naphthalene	50.000	49.371	98.74	70-130
110 2-Methylnaphthalen	50.000	54.177	108.35	70-130
111 1-Methylnaphthalen	50.000	53.879	107.76	70-130
112 Acenaphthylene	50.000	57.687	115.37	70-130
113 Acenaphthene	50.000	47.214	94.43	70-130
114 Fluorene	50.000	31.551	63.10	60-140
115 Phenanthrene	50.000	61.559	123.12	60-140
116 Anthracene	50.000	59.647	119.29	60-140
117 Fluoranthene	50.000	49.109	98.22	60-140
118 Pyrene	50.000	46.952	93.90	60-140

SURROGATE COMPOUND	AMOUNT ADDED ng	AMOUNT RECOVERED ng	% RECOVERED	LIMITS
$ 49 1,2-Dichloroethane	25.000	19.651	78.61	50-150
$ 66 Toluene-d8	25.000	22.552	90.21	50-150
$ 108 Naphthalene-d8	25.000	28.711	114.84	50-150

Eurofins Air Toxics Inc.

EPA Method TO-17 GC/MS

Data file : /chem/msd6.i/20jul16.b/6072006.d
Lab Smp Id: VI VOC+PAH LCSD Client Smp ID: LCSD
Inj Date : 20-JUL-2016 13:18
Operator : CT Inst ID: msd6.i
Smp Info : ;VI VOC+PAH LCSD;LCSD
Misc Info : 2787-2-20ml(10/7/16), 2744-103-50(1/13/17)
Comment :
Method : /chem/msd6.i/20jul16.b/616z0712vi.m
Meth Date : 20-Jul-2016 14:23 U5BT Quant Type: ISTD
Cal Date : 13-JUL-2016 13:38 Cal File: 6071302.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		
4.287	4.272 (1.000)	130	128921	26.0000		70.00- 130.00	100.00
4.287	4.272 (1.000)	128	99583			0.00- 30.00	77.24
4.279	4.272 (1.000)	49	168265			0.00- 30.00	130.52
* 54 1,4-Difluorobenzene					CAS #: 540-36-3		
5.927	5.920 (1.000)	114	547582	23.0000		70.00- 130.00	100.00
5.927	5.920 (1.000)	88	85350			0.00- 30.00	15.59
* 79 Chlorobenzene-d5					CAS #: 3114-55-4		
9.852	9.838 (1.000)	117	576856	24.0000		70.00- 130.00	100.00
9.852	9.838 (1.000)	82	303099			0.00- 30.00	52.54
* 92 Bromofluorobenzene					CAS #: 460-00-4		
11.407	11.392 (1.000)	174	369653	36.0000		70.00- 130.00	100.00
11.407	11.392 (1.000)	95	430115			0.00- 30.00	116.36
11.407	11.392 (1.000)	176	357459			0.00- 30.00	96.70
$ 49 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
5.203	5.196 (0.878)	65	54137	19.6513	19.651	70.00- 130.00	100.00

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

$  49 1,2-Dichloroethane-d4 (continued)
  5.211   5.196 (0.879)    67     28227                     0.00-  30.00    52.14
-------------------------------------------------------------------------------
$  66 Toluene-d8                                  CAS #: 2037-26-5
  7.940   7.925 (0.806)    98    237039 22.5516   22.552  70.00- 130.00   100.00
  7.940   7.933 (0.806)    70     25942                     0.00-  30.00    10.94
  7.940   7.933 (0.806)   100    153460                     0.00-  30.00    64.74
-------------------------------------------------------------------------------
$ 108 Naphthalene-d8                             CAS #: 1146-65-2
 15.669  15.669 (1.374)   136    511570 28.7112   28.711  70.00- 130.00   100.00
 15.669  15.669 (1.374)   108     46506                     0.00-  30.00     9.09
-------------------------------------------------------------------------------
    3 Freon 114                                  CAS #: 76-14-2
  1.269   1.283 (0.296)   135    366001 158.236   158.24  70.00- 130.00   100.00
  1.269   1.283 (0.296)   137    117617                     0.00-  30.00    32.14
-------------------------------------------------------------------------------
    6 Vinyl Chloride                             CAS #: 75-01-4
  1.381   1.395 (0.322)    62    219542 61.9687   61.969  70.00- 130.00   100.00
  1.381   1.395 (0.322)    64     88434                     0.00-  30.00    40.28
-------------------------------------------------------------------------------
    7 1,3-Butadiene                              CAS #: 106-99-0
  1.395   1.395 (0.325)    54    163328 48.5944   48.594  70.00- 130.00   100.00
  1.395   1.395 (0.325)    39    273890                     0.00-  30.00   167.69
-------------------------------------------------------------------------------
    9 Chloroethane                               CAS #: 75-00-3
  1.647   1.647 (0.384)    64    102043 61.3437   61.344  70.00- 130.00   100.00
  1.647   1.647 (0.384)    66     30335                     0.00-  30.00    29.73
  1.647   1.647 (0.384)    49     31350                     0.00-  30.00    30.72
-------------------------------------------------------------------------------
   10 Isopentane                                 CAS #: 78-78-4
  1.689   1.689 (0.394)    57    175212 67.8710   67.871  70.00- 130.00   100.00
  1.689   1.689 (0.394)    43    282955                     0.00-  30.00   161.49
-------------------------------------------------------------------------------
   11 Trichlorofluoromethane/Fr11                CAS #: 75-69-4
  1.815   1.814 (0.423)   101    490938 125.684   125.68  70.00- 130.00   100.00
  1.815   1.814 (0.423)   103    323874                     0.00-  30.00    65.97
-------------------------------------------------------------------------------
   15 Freon 113                                  CAS #: 76-13-1
  2.166   2.166 (0.505)   151    432405 177.559   177.56  70.00- 130.00   100.00
  2.173   2.166 (0.507)   153    276746                     0.00-  30.00    64.00
  2.166   2.166 (0.505)   101    503333                     0.00-  30.00   116.40
-------------------------------------------------------------------------------
   14 1,1-Dichloroethene                         CAS #: 75-35-4
  2.173   2.173 (0.507)    98    151593 91.3663   91.366  70.00- 130.00   100.00
  2.173   2.173 (0.507)    96    238227                     0.00-  30.00   157.15
  2.173   2.173 (0.507)    61    394116                     0.00-  30.00   259.98
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RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (ng)	FINAL (NG)	TARGET RANGE	RATIO
18 Carbon Disulfide					CAS #: 75-15-0		
2.353	2.353 (0.549)	76	612744	61.2148	61.215	70.00- 130.00	100.00
19 2-Propanol					CAS #: 67-63-0		
2.259	2.259 (0.527)	45	399815	45.9344	45.934	70.00- 130.00	100.00(a)
2.259	2.259 (0.527)	43	81311			0.00- 30.00	20.34
2.267	2.259 (0.529)	59	14995			0.00- 30.00	3.75
22 Methylene Chloride					CAS #: 75-09-2		
2.560	2.560 (0.597)	49	346340	79.4023	79.402	70.00- 130.00	100.00
2.560	2.560 (0.597)	84	237734			0.00- 30.00	68.64
2.560	2.553 (0.597)	51	104626			0.00- 30.00	30.21
25 trans-1,2-Dichloroethene					CAS #: 156-60-5		
2.811	2.804 (0.656)	98	132212	79.7666	79.766	70.00- 130.00	100.00
2.804	2.804 (0.654)	61	310192			0.00- 30.00	234.62
2.811	2.804 (0.656)	96	205740			0.00- 30.00	155.61
26 MTBE					CAS #: 1634-04-4		
2.789	2.782 (0.651)	73	575298	83.6989	83.699	70.00- 130.00	100.00
2.789	2.782 (0.651)	57	141018			0.00- 30.00	24.51
2.789	2.782 (0.651)	41	149901			0.00- 30.00	26.06
28 Hexane					CAS #: 110-54-3		
3.090	3.083 (0.721)	57	418879	88.1285	88.128	70.00- 130.00	100.00
3.090	3.083 (0.721)	43	297624			0.00- 30.00	71.05
3.098	3.083 (0.723)	86	56513			0.00- 30.00	13.49
29 1,1-Dichloroethane					CAS #: 75-34-3		
3.255	3.248 (0.759)	63	421529	100.844	100.84	70.00- 130.00	100.00
3.248	3.248 (0.758)	65	133085			0.00- 30.00	31.57
37 cis-1,2-Dichloroethene					CAS #: 156-59-2		
3.943	3.943 (0.920)	98	179158	102.680	102.68	70.00- 130.00	100.00
3.950	3.943 (0.921)	96	280367			0.00- 30.00	156.49
3.950	3.943 (0.921)	61	389285			0.00- 30.00	217.29
38 2-Butanone					CAS #: 78-93-3		
3.907	3.900 (0.911)	72	131121	69.5518	69.552	70.00- 130.00	100.00
3.907	3.900 (0.911)	43	667478			0.00- 30.00	509.05
3.907	3.900 (0.911)	57	55486			0.00- 30.00	42.32
44 Chloroform					CAS #: 67-66-3		
4.458	4.451 (1.040)	83	429138	104.329	104.33	70.00- 130.00	100.00
4.458	4.451 (1.040)	85	280755			0.00- 30.00	65.42

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (ng)	FINAL (NG)	TARGET RANGE	RATIO
46 Cyclohexane					CAS #: 110-82-7		
4.809	4.802 (0.811)	84	276550	72.7210	72.721	70.00- 130.00	100.00
4.809	4.802 (0.811)	56	356830			0.00- 30.00	129.03
4.809	4.802 (0.811)	41	220202			0.00- 30.00	79.62
45 1,1,1-Trichloroethane					CAS #: 71-55-6		
4.695	4.681 (0.792)	97	434469	118.568	118.57	70.00- 130.00	100.00
4.688	4.681 (0.791)	99	279689			0.00- 30.00	64.37
47 Carbon Tetrachloride					CAS #: 56-23-5		
4.938	4.924 (0.833)	119	423814	121.380	121.38	70.00- 130.00	100.00
4.938	4.931 (0.833)	117	439742			0.00- 30.00	103.76
51 2,2,4-Trimethylpentane					CAS #: 540-84-1		
5.476	5.461 (0.924)	57	1125556	96.6051	96.605	70.00- 130.00	100.00
5.476	5.461 (0.924)	56	353939			0.00- 30.00	31.45
5.476	5.461 (0.924)	41	342304			0.00- 30.00	30.41
48 Benzene					CAS #: 71-43-2		
5.232	5.225 (0.883)	78	691863	62.8911	62.891	70.00- 130.00	100.00
5.232	5.225 (0.883)	77	161736			0.00- 30.00	23.38
50 1,2-Dichloroethane					CAS #: 107-06-2		
5.325	5.311 (0.898)	62	293087	85.8271	85.827	70.00- 130.00	100.00
5.325	5.311 (0.898)	64	95352			0.00- 30.00	32.53
53 Heptane					CAS #: 142-82-5		
5.776	5.762 (0.975)	71	220384	82.2407	82.241	70.00- 130.00	100.00
5.776	5.762 (0.975)	43	477210			0.00- 30.00	216.54
5.776	5.762 (0.975)	57	224278			0.00- 30.00	101.77
56 Trichloroethene					CAS #: 79-01-6		
6.242	6.235 (1.053)	95	357078	125.540	125.54	70.00- 130.00	100.00
6.242	6.235 (1.053)	130	376436			0.00- 30.00	105.42
6.242	6.235 (1.053)	97	232337			0.00- 30.00	65.07
58 Methyl Cyclohexane					CAS #: 108-87-2		
6.564	6.557 (1.108)	83	411200	85.6765	85.676	70.00- 130.00	100.00
6.564	6.557 (1.108)	98	183100			0.00- 30.00	44.53
6.564	6.557 (1.108)	55	349198			0.00- 30.00	84.92
59 1,2-Dichloropropane					CAS #: 78-87-5		
6.593	6.579 (1.112)	63	258090	99.6479	99.648	70.00- 130.00	100.00
6.586	6.586 (1.111)	62	179007			0.00- 30.00	69.36
6.579	6.564 (1.110)	41	360370			0.00- 30.00	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		
6.708	6.700 (1.132)	88	165349	76.6885	76.688	70.00- 130.00	100.00
6.708	6.700 (1.132)	58	116582			0.00- 30.00	70.51
6.708	6.700 (1.132)	57	57526			0.00- 30.00	34.79
65 4-Methyl-2-pentanone					CAS #: 108-10-1		
7.811	7.796 (1.318)	58	243469	100.999	101.00	70.00- 130.00	100.00
7.811	7.804 (1.318)	43	707687			0.00- 30.00	290.67
7.811	7.804 (1.318)	85	103019			0.00- 30.00	42.31
67 Toluene					CAS #: 108-88-3		
8.033	8.018 (0.815)	91	950879	76.8310	76.831	70.00- 130.00	100.00
8.033	8.018 (0.815)	92	556435			0.00- 30.00	58.52
70 1,1,2-Trichloroethane					CAS #: 79-00-5		
8.635	8.620 (1.457)	97	337500	132.081	132.08	70.00- 130.00	100.00
8.635	8.620 (1.457)	99	212261			0.00- 30.00	62.89
8.635	8.620 (1.457)	83	289340			0.00- 30.00	85.73
71 Tetrachloroethene					CAS #: 127-18-4		
8.720	8.706 (0.885)	166	501148	142.275	142.28	70.00- 130.00	100.00
8.720	8.706 (0.885)	129	374390			0.00- 30.00	74.71
8.720	8.706 (0.885)	131	369297			0.00- 30.00	73.69
72 2-Hexanone					CAS #: 591-78-6		
8.943	8.928 (0.908)	58	274460	75.2130	75.213	70.00- 130.00	100.00
8.943	8.928 (0.908)	43	546184			0.00- 30.00	199.00
8.943	8.928 (0.908)	100	54424			0.00- 30.00	19.83
74 1,2-Dibromoethane					CAS #: 106-93-4		
9.229	9.215 (0.937)	107	502591	155.612	155.61	70.00- 130.00	100.00
9.229	9.215 (0.937)	109	476712			0.00- 30.00	94.85
81 Chlorobenzene					CAS #: 108-90-7		
9.888	9.874 (1.004)	112	806025	96.2756	96.276	70.00- 130.00	100.00
9.888	9.874 (1.004)	114	260097			0.00- 30.00	32.27
9.888	9.874 (1.004)	77	445681			0.00- 30.00	55.29
82 Ethyl Benzene					CAS #: 100-41-4		
10.046	10.031 (1.020)	106	411598	92.0707	92.071	70.00- 130.00	100.00
10.046	10.031 (1.020)	91	1291903			0.00- 30.00	313.87
84 m,p-Xylene					CAS #: 108-38-3		
10.225	10.210 (1.038)	106	467161	82.7686	82.768	70.00- 130.00	100.00
10.225	10.210 (1.038)	91	914071			0.00- 30.00	195.67

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (ng)	FINAL (NG)	TARGET RANGE	RATIO
88 o-Xylene					CAS #: 95-47-6		
10.705	10.690 (0.938)	106	450364	91.3834	91.383	70.00- 130.00	100.00
10.705	10.690 (0.938)	91	930536			0.00- 30.00	206.62
89 Styrene					CAS #: 100-42-5		
10.740	10.719 (0.942)	104	734755	87.9261	87.926	70.00- 130.00	100.00
10.740	10.719 (0.942)	78	344426			0.00- 30.00	46.88
91 Cumene					CAS #: 98-82-8		
11.199	11.185 (0.982)	105	1371695	103.098	103.10	70.00- 130.00	100.00
11.199	11.185 (0.982)	120	367026			0.00- 30.00	26.76
11.199	11.185 (0.982)	51	135065			0.00- 30.00	9.85
94 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
11.614	11.600 (1.018)	83	605444	127.401	127.40	70.00- 130.00	100.00
11.614	11.600 (1.018)	85	395894			0.00- 30.00	65.39
96 Propylbenzene					CAS #: 103-65-1		
11.736	11.722 (1.029)	91	1607969	102.415	102.42	70.00- 130.00	100.00
11.736	11.722 (1.029)	120	393321			0.00- 30.00	24.46
11.736	11.722 (1.029)	105	63129			0.00- 30.00	3.93
97 4-Ethyltoluene					CAS #: 622-96-8		
11.901	11.887 (1.043)	120	406890	99.0165	99.016	70.00- 130.00	100.00
11.901	11.887 (1.043)	105	1325144			0.00- 30.00	325.68
98 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
11.987	11.972 (1.051)	120	577995	99.9602	99.960	70.00- 130.00	100.00
11.987	11.972 (1.051)	105	1150290			0.00- 30.00	199.01
100 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
12.452	12.445 (1.092)	120	538172	99.6984	99.698	70.00- 130.00	100.00
12.452	12.445 (1.092)	105	1190058			0.00- 30.00	221.13
101 1,3-Dichlorobenzene					CAS #: 541-73-1		
12.775	12.768 (1.120)	146	850826	125.023	125.02	70.00- 130.00	100.00
12.775	12.768 (1.120)	148	541905			0.00- 30.00	63.69
12.775	12.768 (1.120)	111	332828			0.00- 30.00	39.12
102 1,4-Dichlorobenzene					CAS #: 106-46-7		
12.911	12.904 (1.132)	146	847355	125.103	125.10	70.00- 130.00	100.00
12.911	12.904 (1.132)	148	542221			0.00- 30.00	63.99
12.911	12.904 (1.132)	111	321812			0.00- 30.00	37.98
105 1,2-Dichlorobenzene					CAS #: 95-50-1		
13.348	13.341 (1.170)	146	816324	125.075	125.07	70.00- 130.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (ng)	FINAL (NG)	TARGET RANGE	RATIO
105 1,2-Dichlorobenzene (continued)							
13.348	13.341 (1.170)	148	518507			0.00- 30.00	63.52
13.348	13.341 (1.170)	111	328710			0.00- 30.00	40.27
106 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
15.396	15.396 (1.350)	180	813049	155.646	155.64	70.00- 130.00	100.00
15.396	15.396 (1.350)	182	774914			0.00- 30.00	95.31
107 Hexachlorobutadiene					CAS #: 87-68-3		
15.611	15.611 (1.369)	225	616280	205.159	205.16	70.00- 130.00	100.00
15.611	15.611 (1.369)	223	387730			0.00- 30.00	62.91
109 Naphthalene					CAS #: 91-20-3		
15.704	15.704 (1.377)	128	981234	49.3710	49.371	70.00- 130.00	100.00
15.704	15.704 (1.377)	127	128787			0.00- 30.00	13.13
110 2-Methylnaphthalene					CAS #: 91-57-6		
17.151	17.159 (1.504)	142	682013	54.1766	54.177	70.00- 130.00	100.00
17.151	17.159 (1.504)	141	588316			0.00- 30.00	86.26
17.151	17.159 (1.504)	115	208258			0.00- 30.00	30.54
111 1-Methylnaphthalene					CAS #: 90-12-0		
17.366	17.373 (1.522)	142	616938	53.8794	53.879	70.00- 130.00	100.00
17.366	17.373 (1.522)	141	555483			0.00- 30.00	90.04
17.366	17.373 (1.522)	115	197422			0.00- 30.00	32.00
112 Acenaphthylene					CAS #: 208-96-8		
19.214	19.221 (1.684)	152	1060419	57.6873	57.687	70.00- 130.00	100.00
19.214	19.221 (1.684)	151	212216			0.00- 30.00	20.01
19.214	19.221 (1.684)	153	137591			0.00- 30.00	12.98
113 Acenaphthene					CAS #: 83-32-9		
19.479	19.487 (1.708)	154	480344	47.2138	47.214	70.00- 130.00	100.00
19.479	19.487 (1.708)	152	252821			0.00- 30.00	52.63
19.479	19.487 (1.708)	153	525729			0.00- 30.00	109.45
114 Fluorene					CAS #: 86-73-7		
20.633	20.640 (1.809)	166	338906	31.5515	31.551	70.00- 130.00	100.00
20.633	20.640 (1.809)	165	324751			0.00- 30.00	95.82
115 Phenanthrene					CAS #: 85-01-8		
22.803	22.817 (1.999)	178	1143992	61.5593	61.559	70.00- 130.00	100.00
22.803	22.817 (1.999)	176	217630			0.00- 30.00	19.02
22.803	22.817 (1.999)	179	174991			0.00- 30.00	15.30
116 Anthracene					CAS #: 120-12-7		
22.910	22.925 (2.009)	178	737445	59.6473	59.647	70.00- 130.00	100.00

RT	EXP RT	(REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (ng)	FINAL (NG)	TARGET RANGE	RATIO
116 Anthracene (continued)								
22.910	22.918	(2.009)	176	135269			0.00- 30.00	18.34
22.910	22.918	(2.009)	179	112872			0.00- 30.00	15.31
117 Fluoranthene						CAS #: 206-44-0		
26.069	26.084	(2.285)	202	665295	49.1093	49.109	70.00- 130.00	100.00
26.069	26.084	(2.285)	101	110913			0.00- 30.00	16.67
118 Pyrene						CAS #: 129-00-0		
26.922	26.936	(2.360)	202	660949	46.9523	46.952	70.00- 130.00	100.00
26.922	26.936	(2.360)	101	127813			0.00- 30.00	19.34
26.915	26.936	(2.360)	100	100689			0.00- 45.21	15.23

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: msd6.i
Lab File ID: 6072006.d
Lab Smp Id: VI VOC+PAH LCSD
Analysis Type: VOA
Quant Type: ISTD
Operator: CT
Method File: /chem/msd6.i/20jul16.b/616z0712vi.m
Misc Info: 2787-2-20ml(10/7/16), 2744-103-50(1/13/17)

Calibration Date: 20-JUL-2016
Calibration Time: 11:18
Client Smp ID: LCSD
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
40 Bromochloromethan	167735	100641	234829	128921	-23.14
54 1,4-Difluorobenze	708066	424840	991292	547582	-22.67
79 Chlorobenzene-d5	656580	393948	919212	576856	-12.14
92 Bromofluorobenzen	432321	259393	605249	369653	-14.50

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
40 Bromochloromethan	4.27	3.94	4.60	4.29	0.34
54 1,4-Difluorobenze	5.92	5.59	6.25	5.93	0.12
79 Chlorobenzene-d5	9.84	9.51	10.17	9.85	0.15
92 Bromofluorobenzen	11.39	11.06	11.72	11.41	0.13

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/msd6.i/20jul16.b/6072006.d

Date : 20-JUL-2016 13:18

Client ID: LCSD

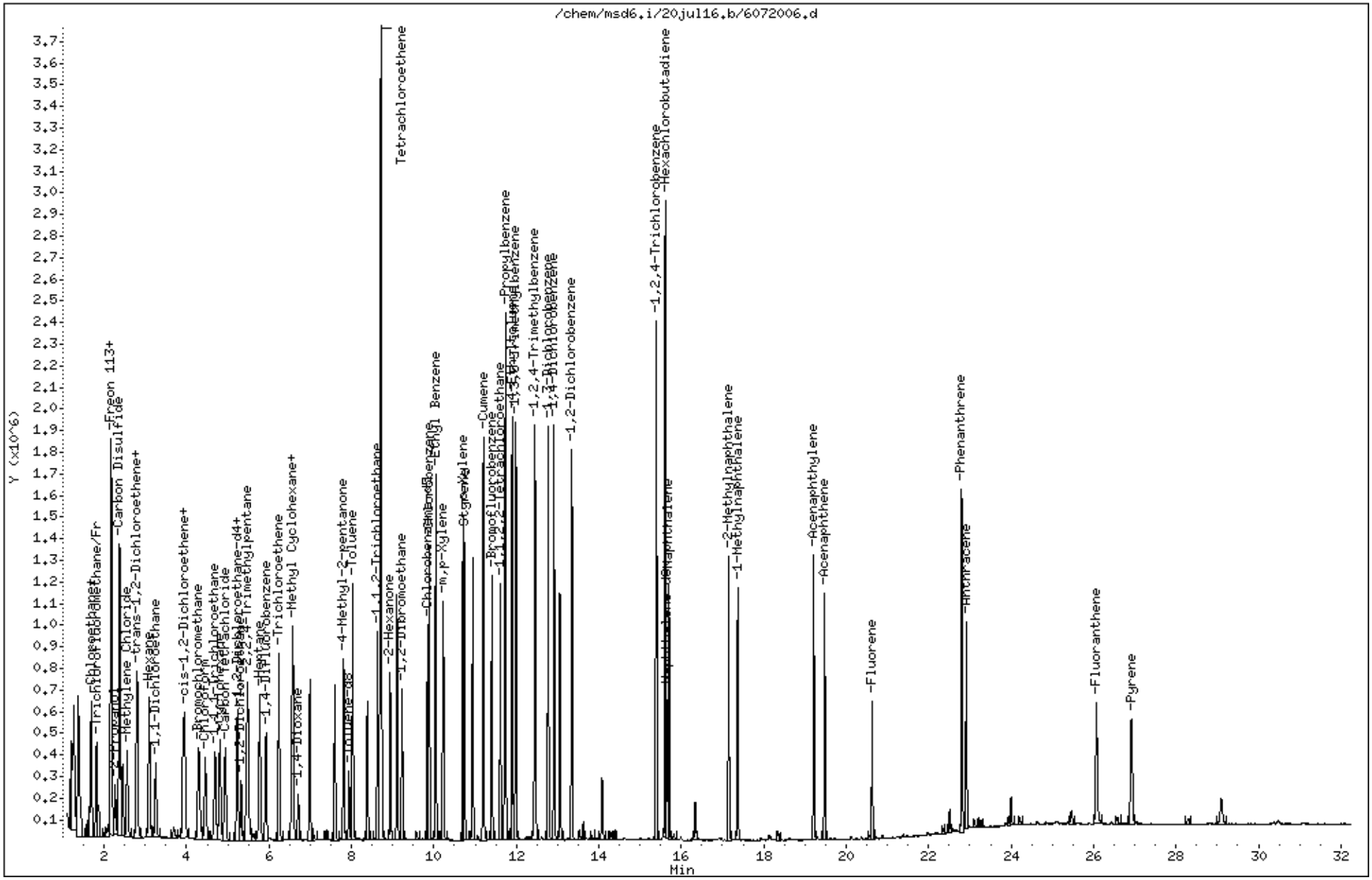
Sample Info: ;VI VOC+PAH LCSD;LCSD

Column phase: RTx-624

Instrument: msd6.i

Operator: CT

Column diameter: 0.53



Data File: /chem/msd6.i/20jul16.b/6072006.d

Date : 20-JUL-2016 13:18

Client ID: LCSD

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCSD;LCSD

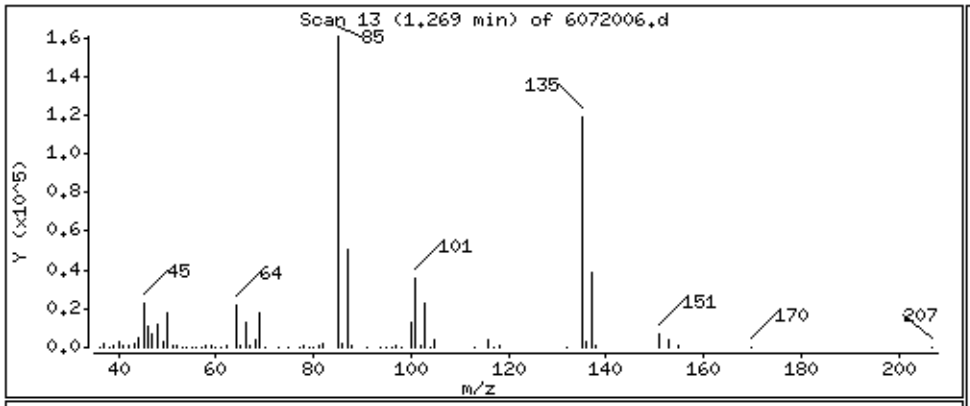
Operator: CT

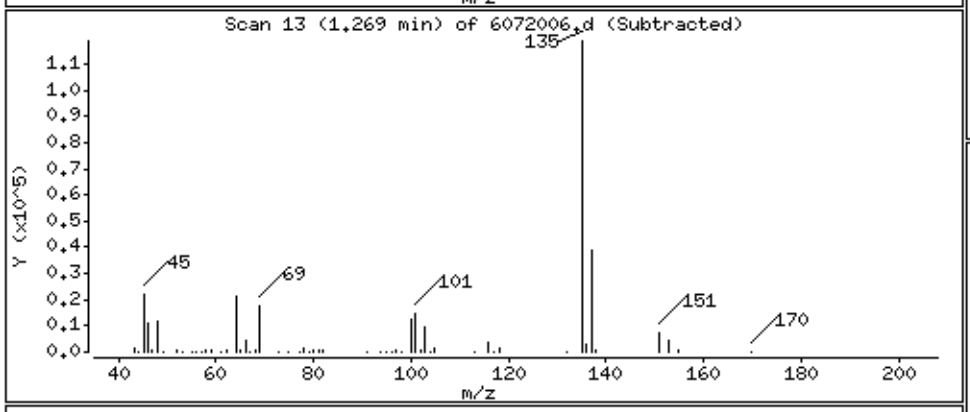
Column phase: RTx-624

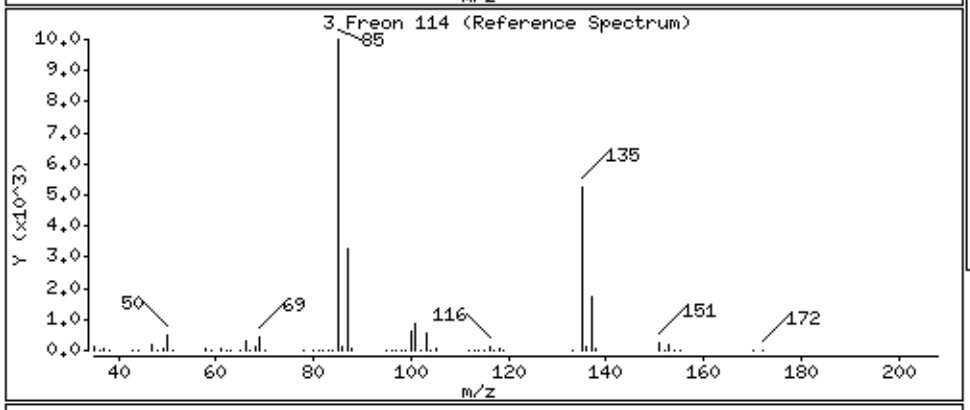
Column diameter: 0.53

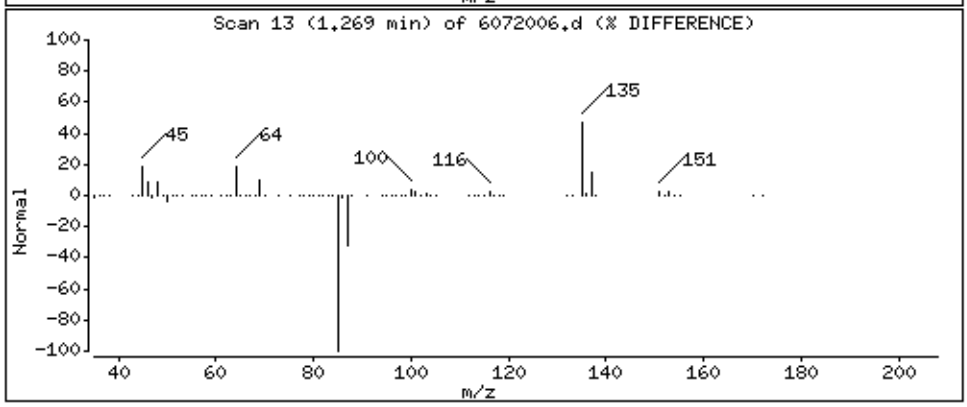
3 Freon 114

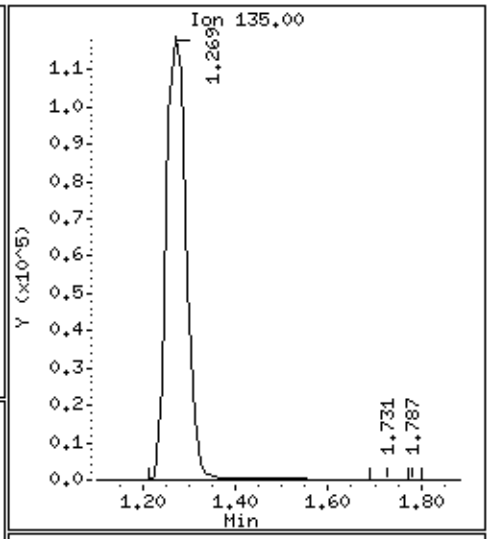
Concentration: 158.24 NG

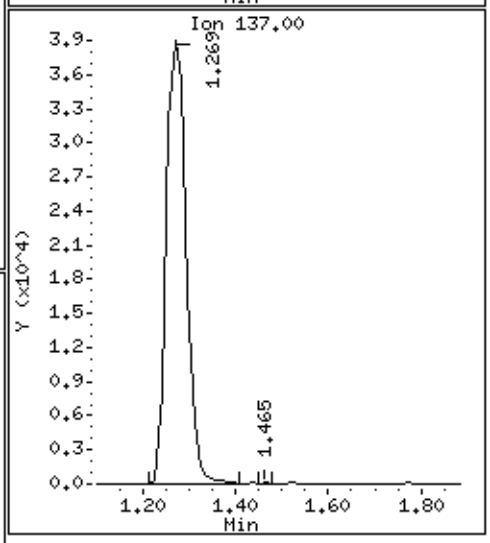












Data File: /chem/msd6.i/20jul16.b/6072006.d

Date : 20-JUL-2016 13:18

Client ID: LCSD

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCSD;LCSD

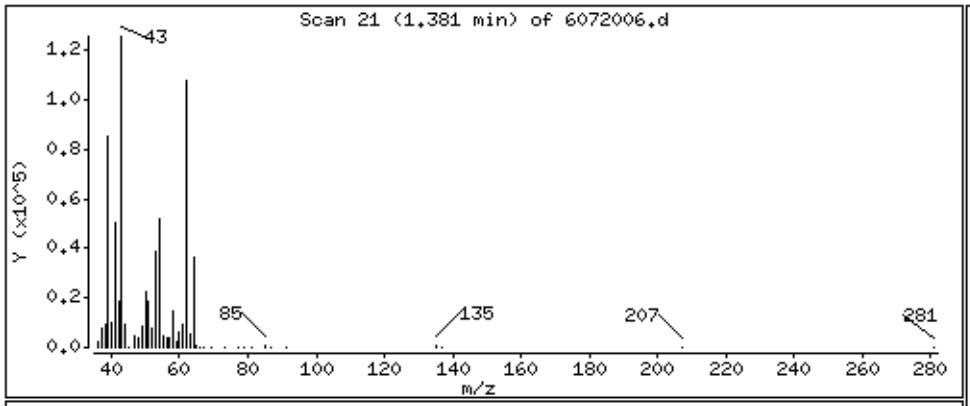
Operator: CT

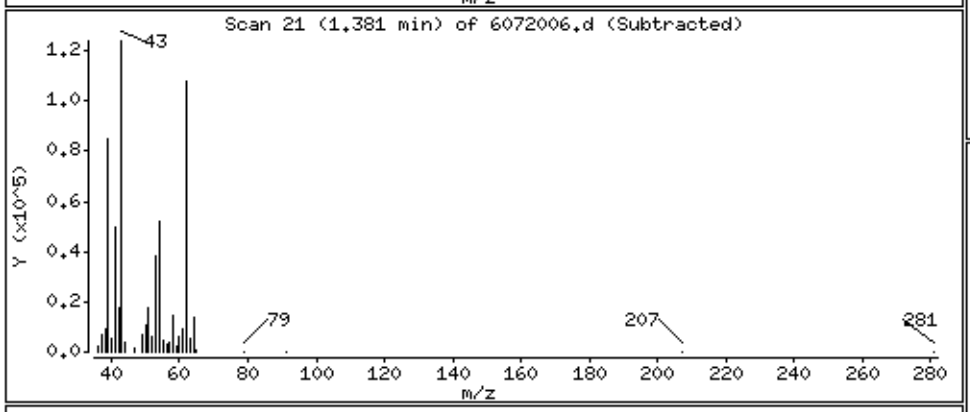
Column phase: RTx-624

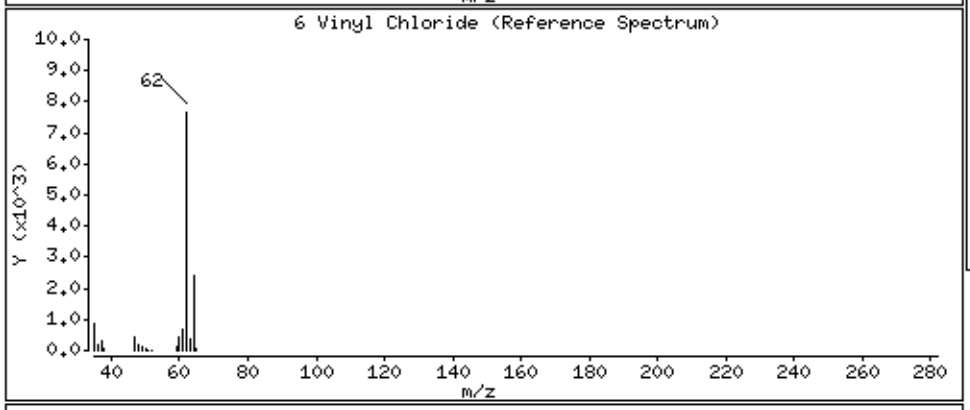
Column diameter: 0.53

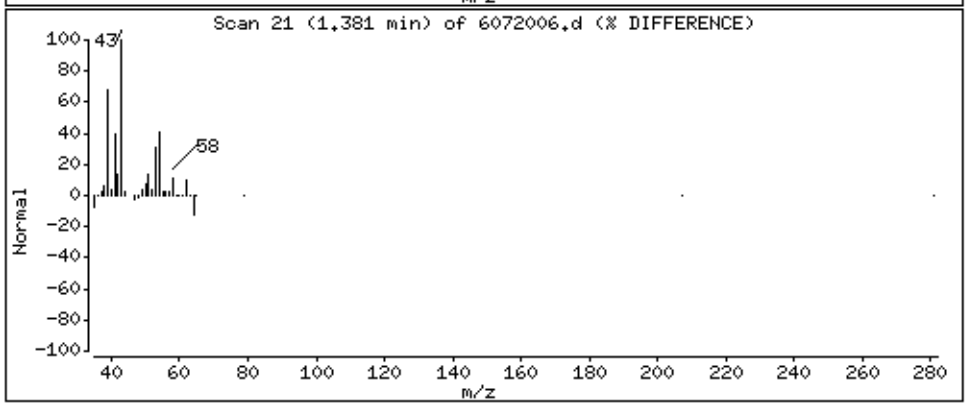
6 Vinyl Chloride

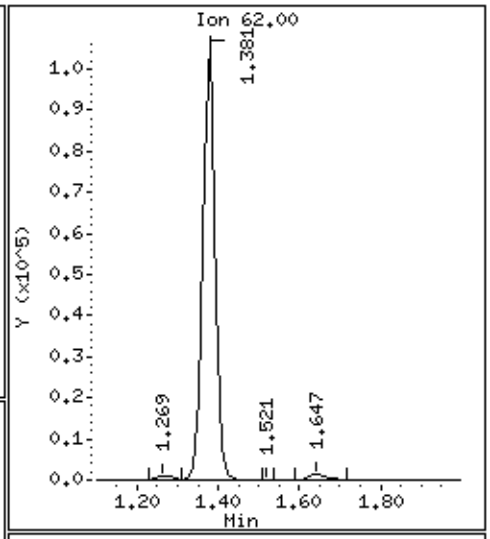
Concentration: 61.969 NG

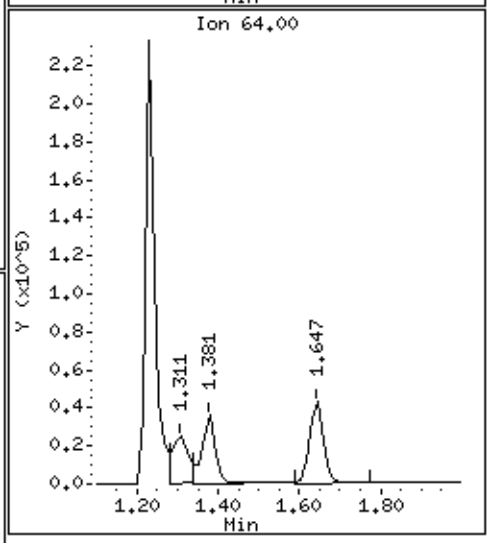












Data File: /chem/msd6.i/20jul16.b/6072006.d

Date : 20-JUL-2016 13:18

Client ID: LCSD

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCSD;LCSD

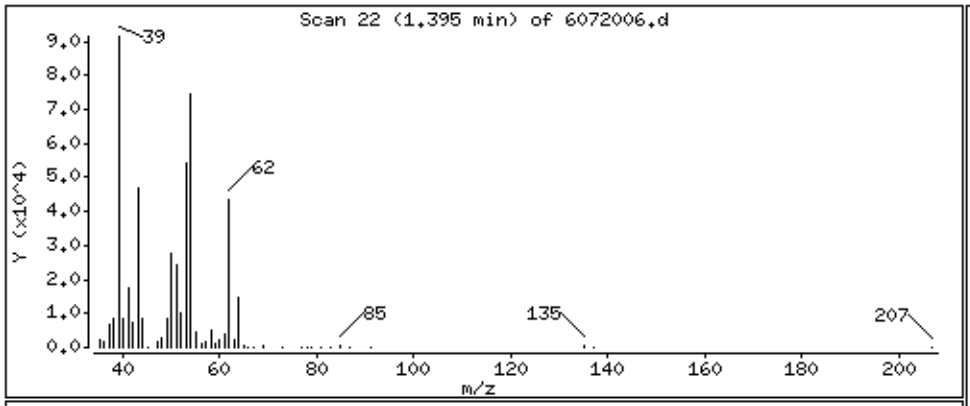
Operator: CT

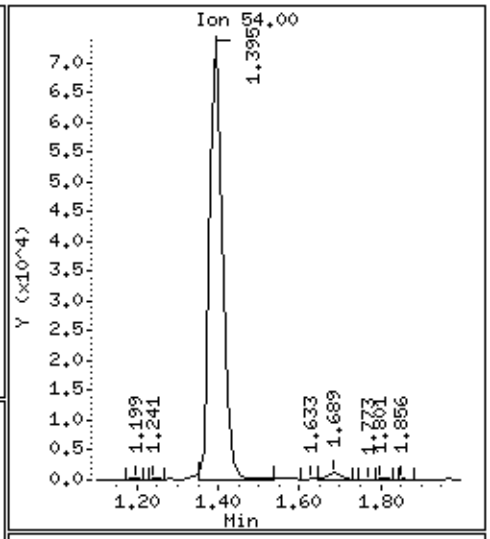
Column phase: RTx-624

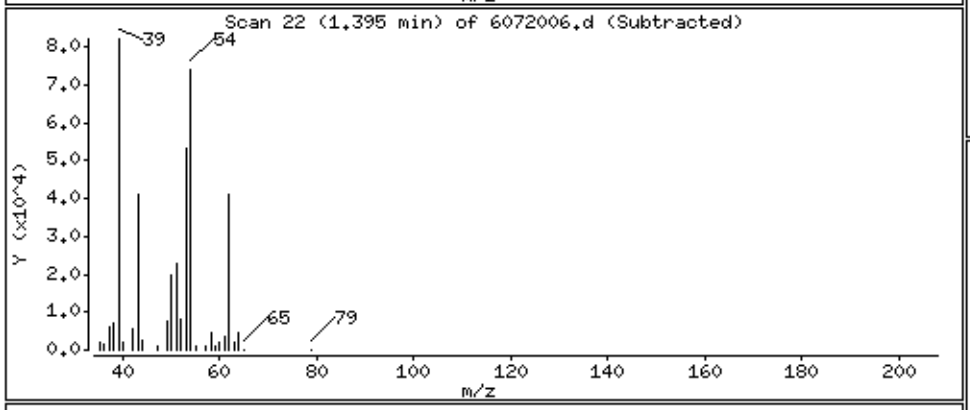
Column diameter: 0.53

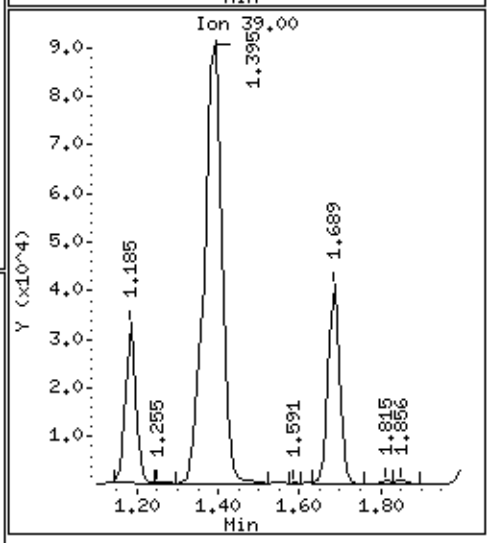
7 1,3-Butadiene

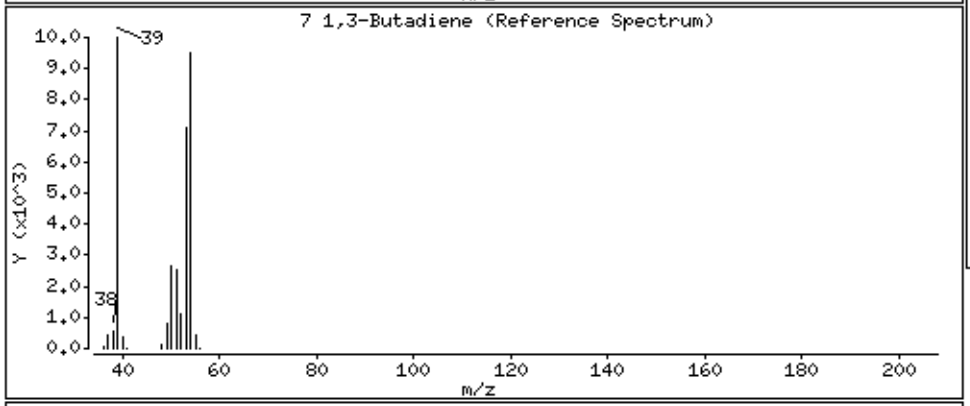
Concentration: 48.594 NG

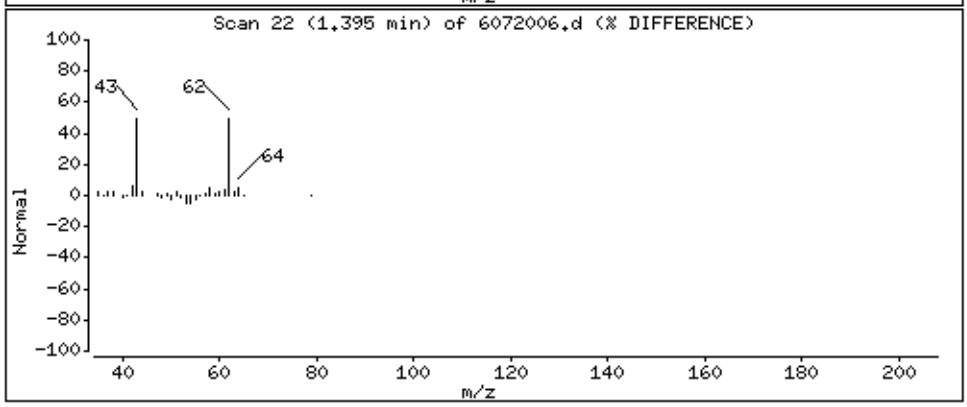












Data File: /chem/msd6.i/20jul16.b/6072006.d

Date : 20-JUL-2016 13:18

Client ID: LCSD

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCSD;LCSD

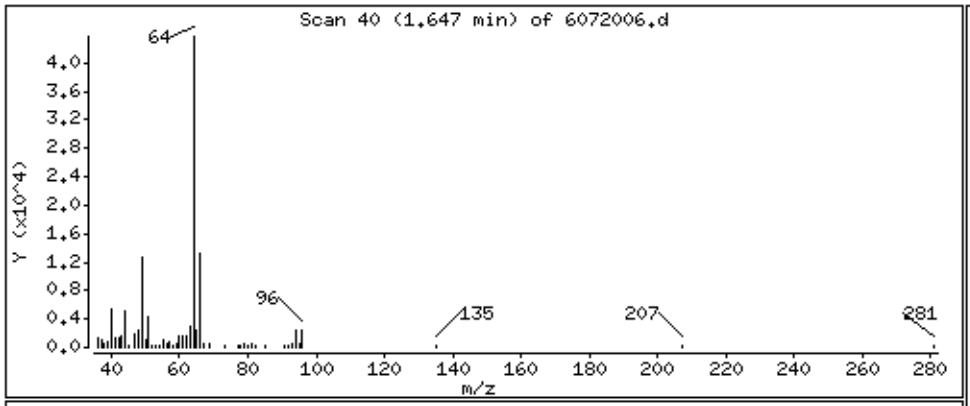
Operator: CT

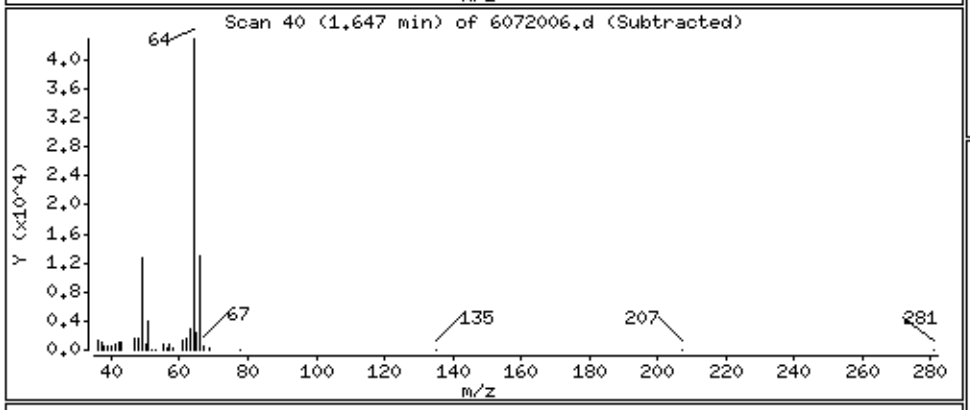
Column phase: RTx-624

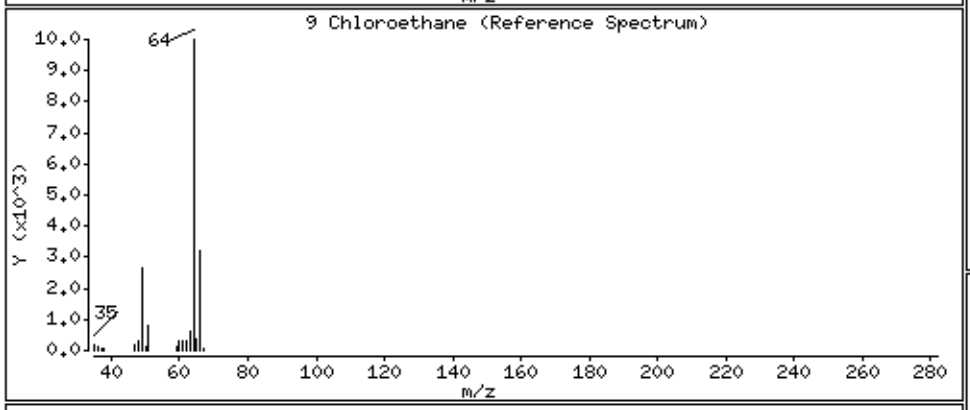
Column diameter: 0.53

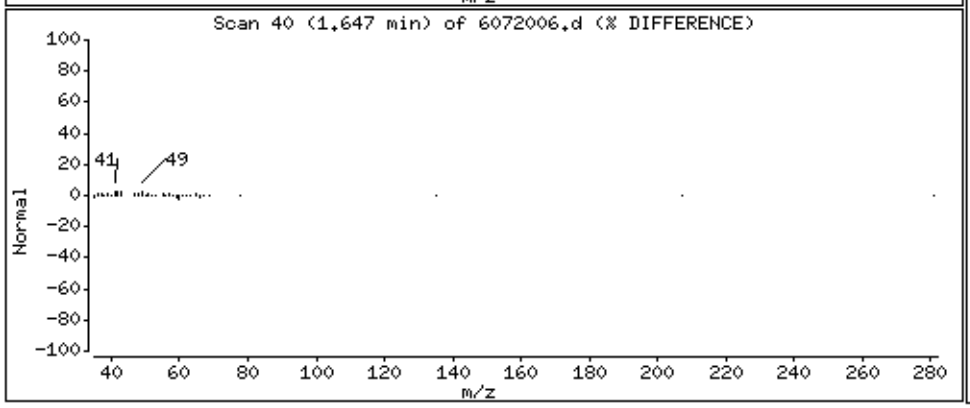
9 Chloroethane

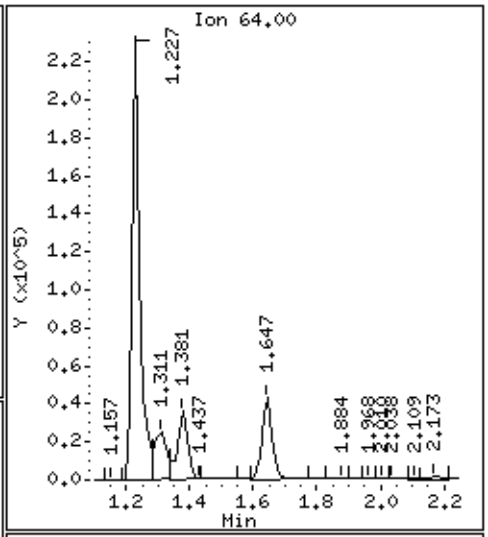
Concentration: 61.344 NG

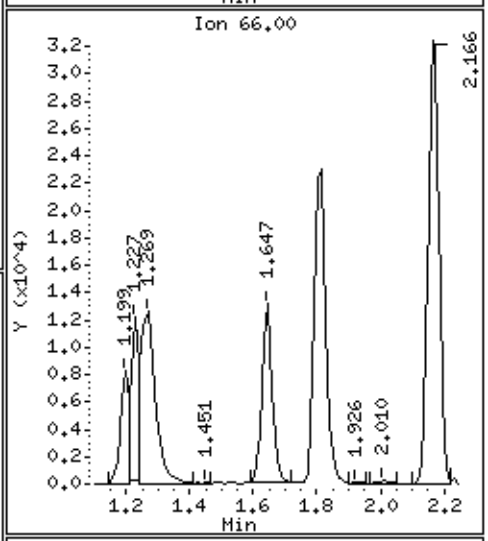


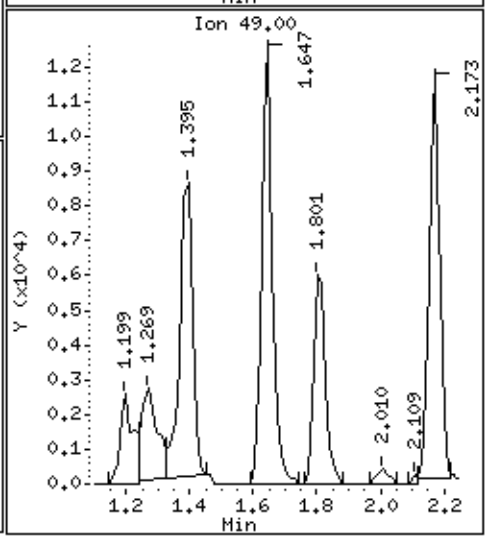












Data File: /chem/msd6.i/20jul16.b/6072006.d

Date : 20-JUL-2016 13:18

Client ID: LCSD

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCSD;LCSD

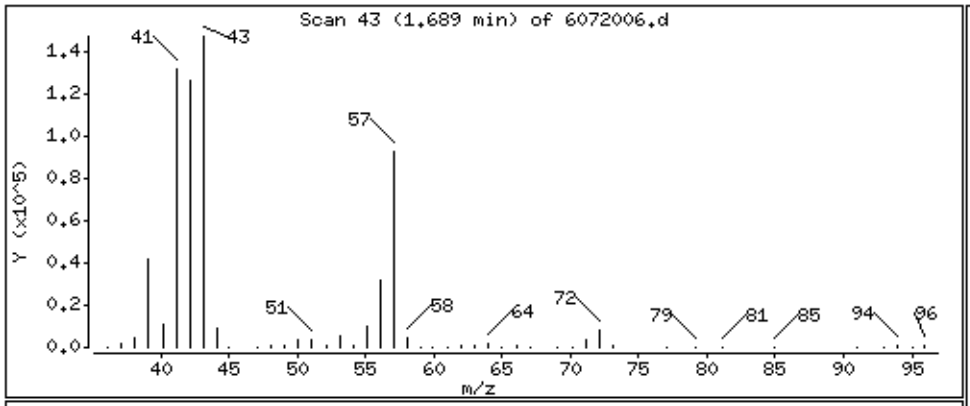
Operator: CT

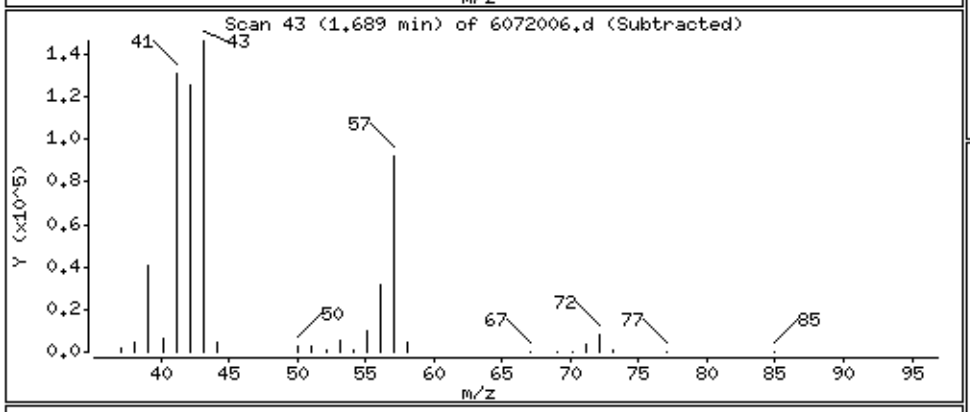
Column phase: RTx-624

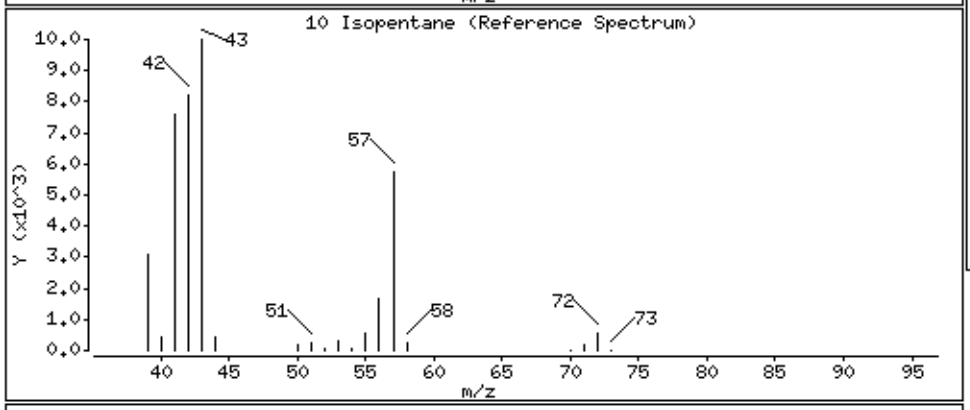
Column diameter: 0.53

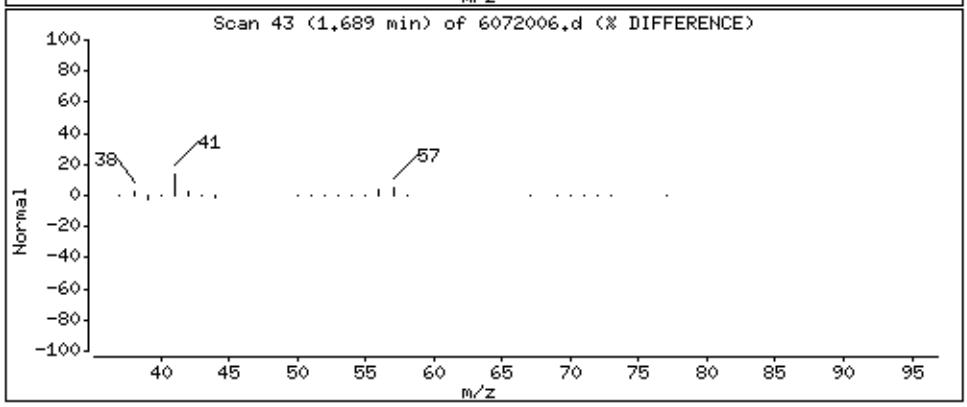
10 Isopentane

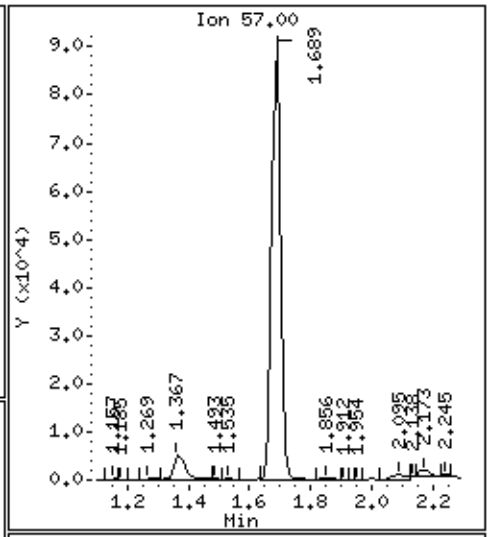
Concentration: 67.871 NG

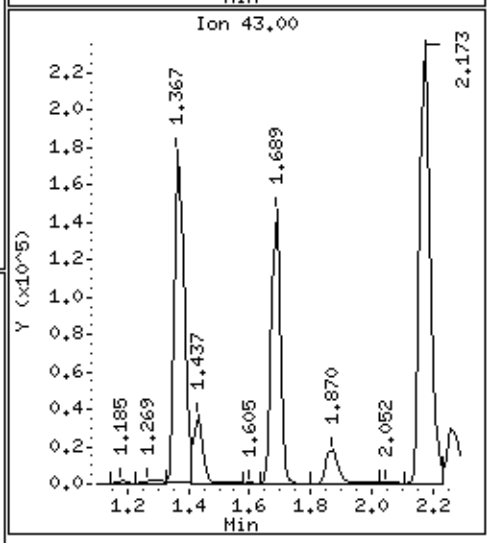












Data File: /chem/msd6.i/20jul16.b/6072006.d

Date : 20-JUL-2016 13:18

Client ID: LCSD

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCSD;LCSD

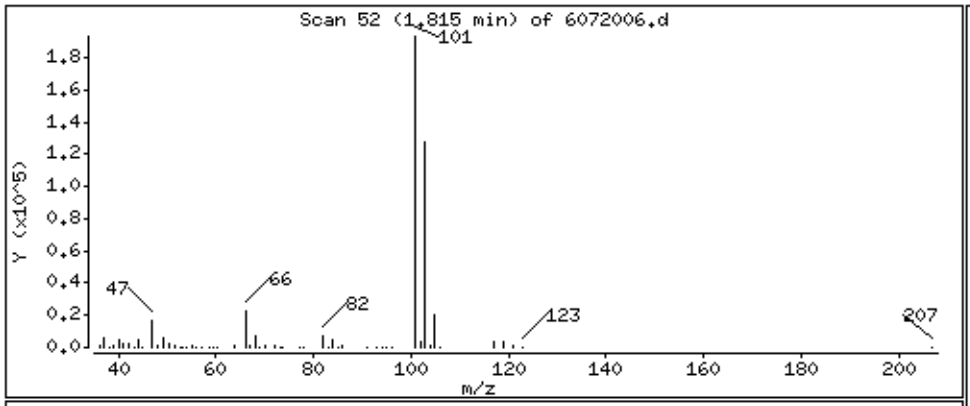
Operator: CT

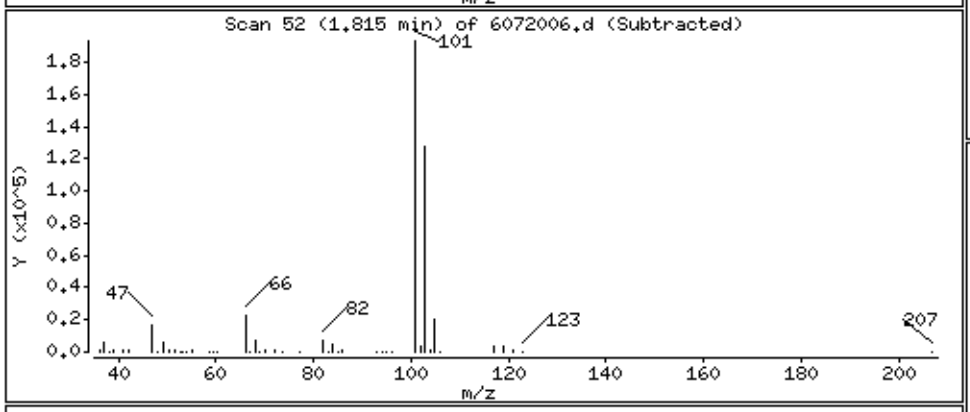
Column phase: RTx-624

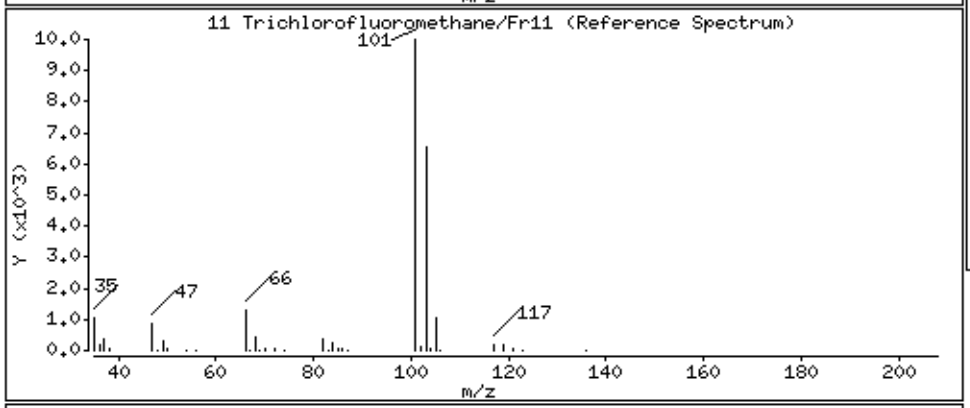
Column diameter: 0.53

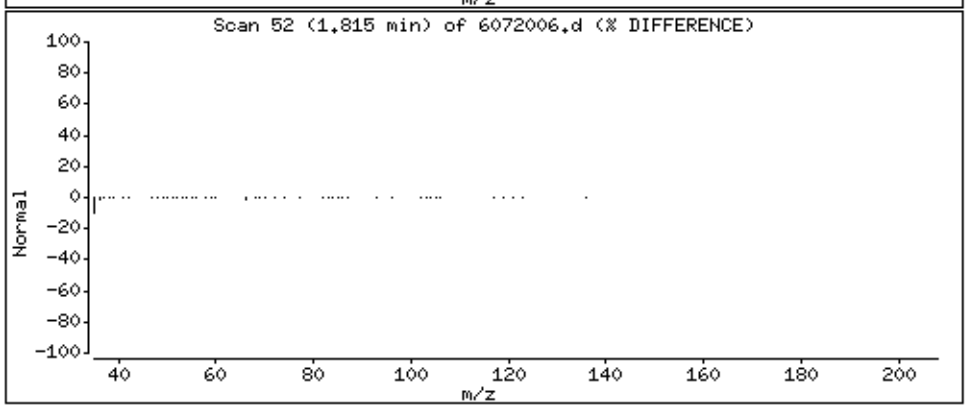
11 Trichlorofluoromethane/Fr11

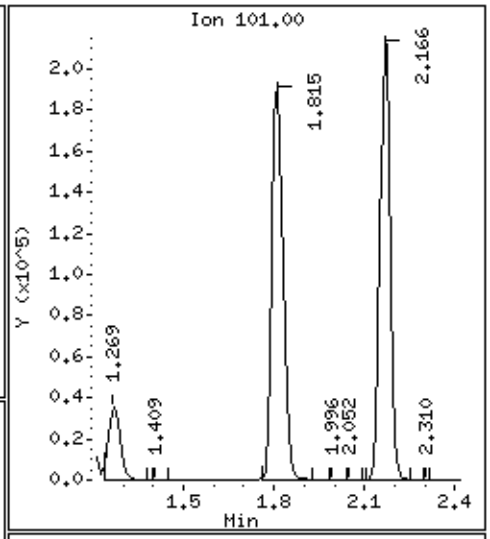
Concentration: 125.68 NG

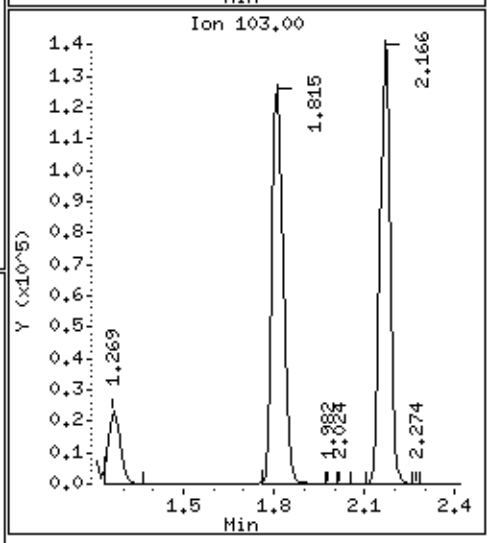












Data File: /chem/msd6.i/20jul16.b/6072006.d

Date : 20-JUL-2016 13:18

Client ID: LCSD

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCSD;LCSD

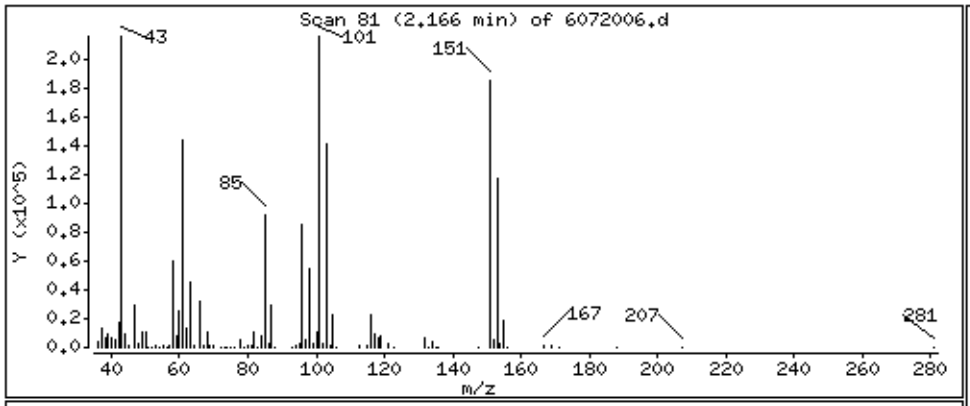
Operator: CT

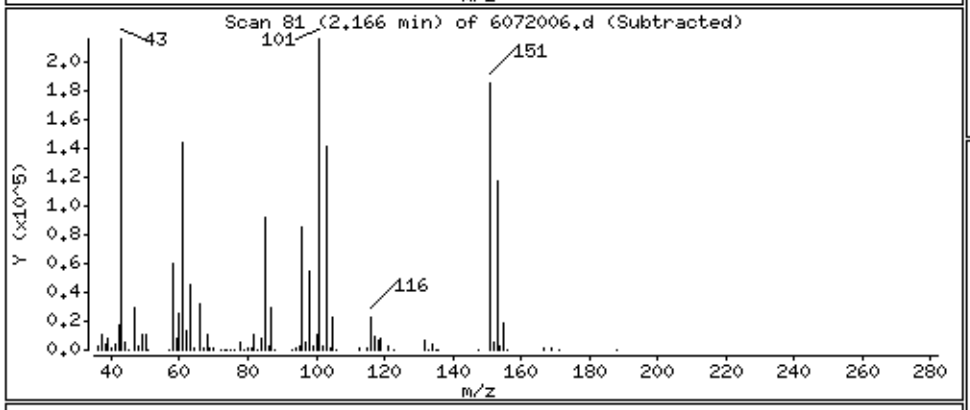
Column phase: RTx-624

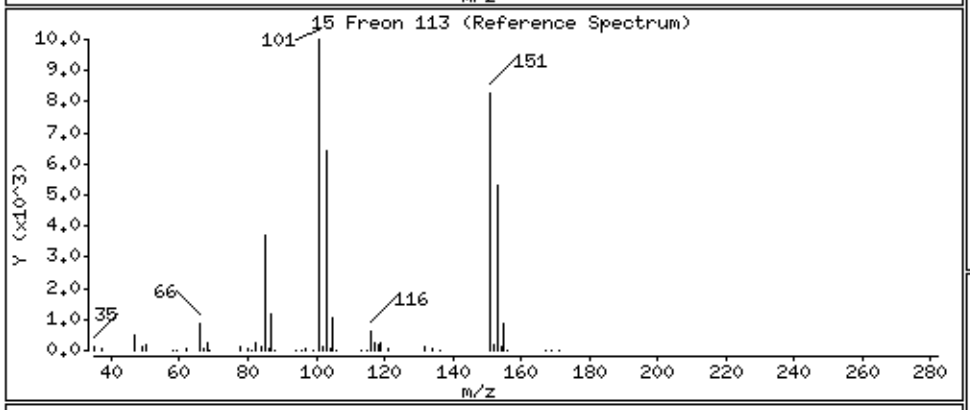
Column diameter: 0.53

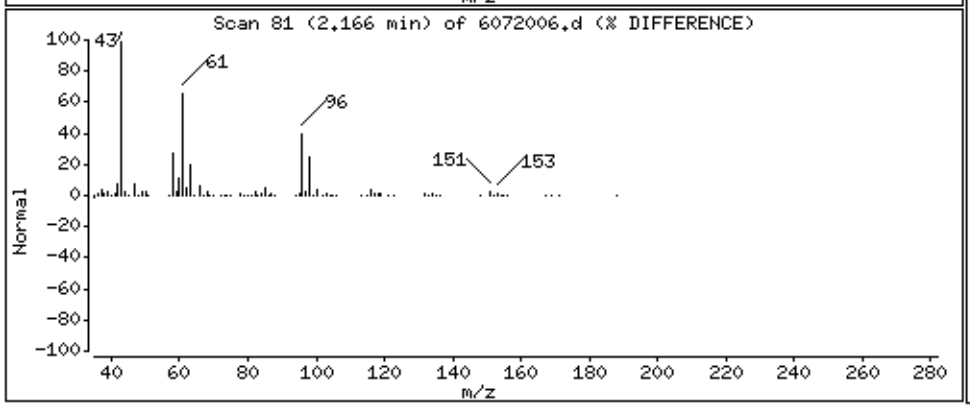
15 Freon 113

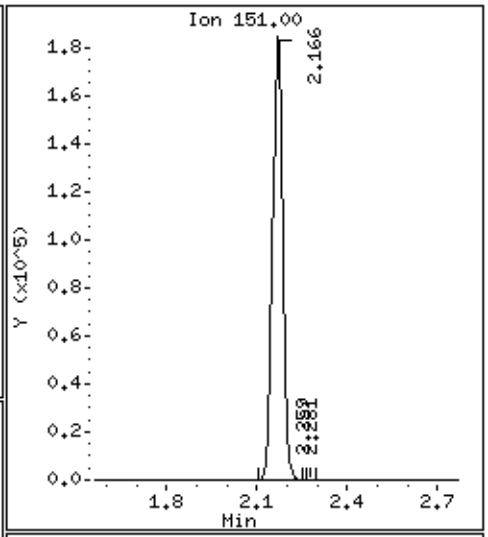
Concentration: 177.56 NG

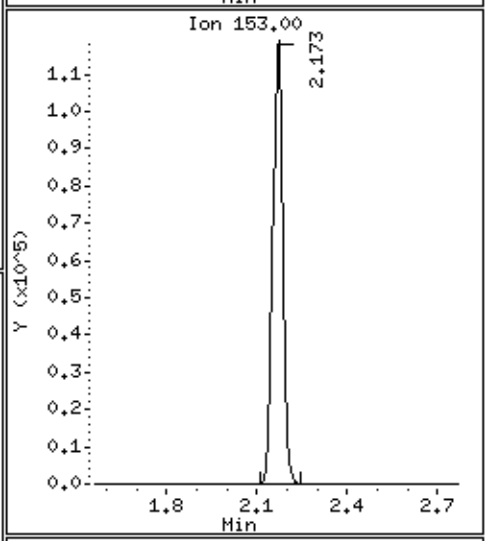


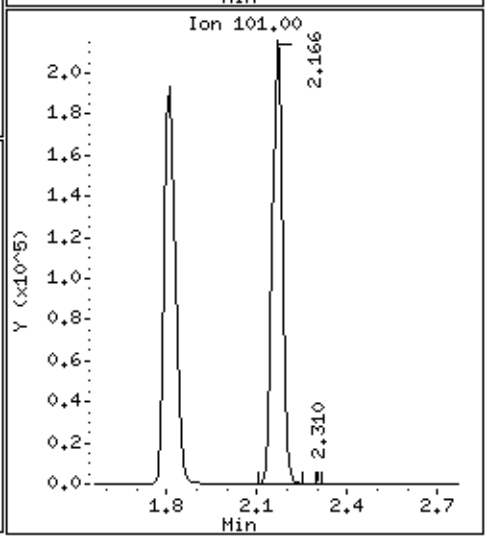












Data File: /chem/msd6.i/20jul16.b/6072006.d

Date : 20-JUL-2016 13:18

Client ID: LCSD

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCSD;LCSD

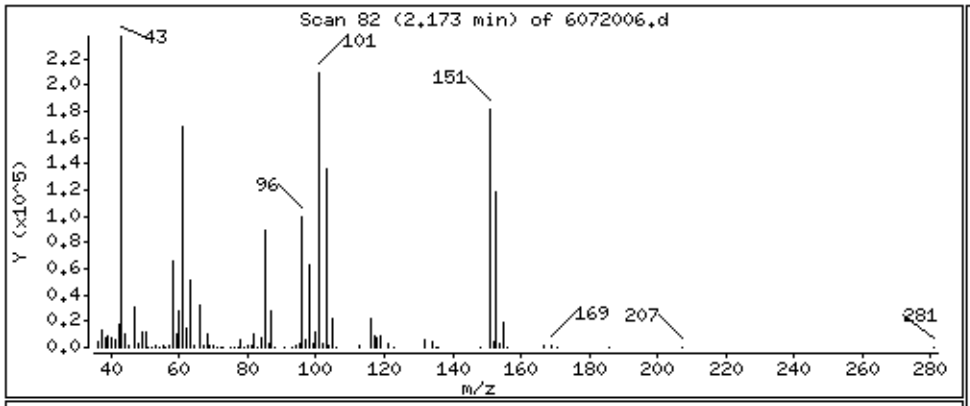
Operator: CT

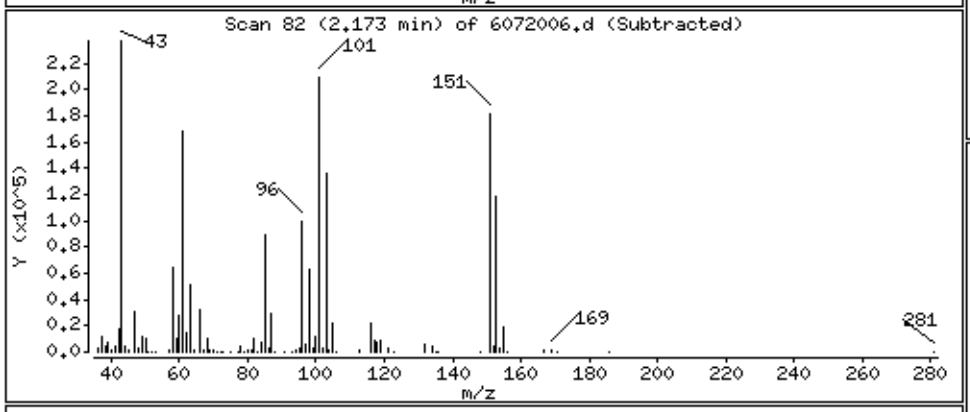
Column phase: RTx-624

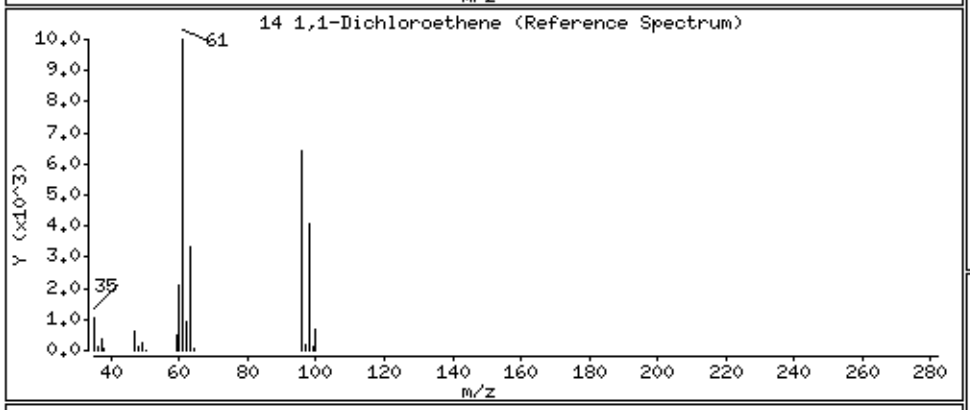
Column diameter: 0.53

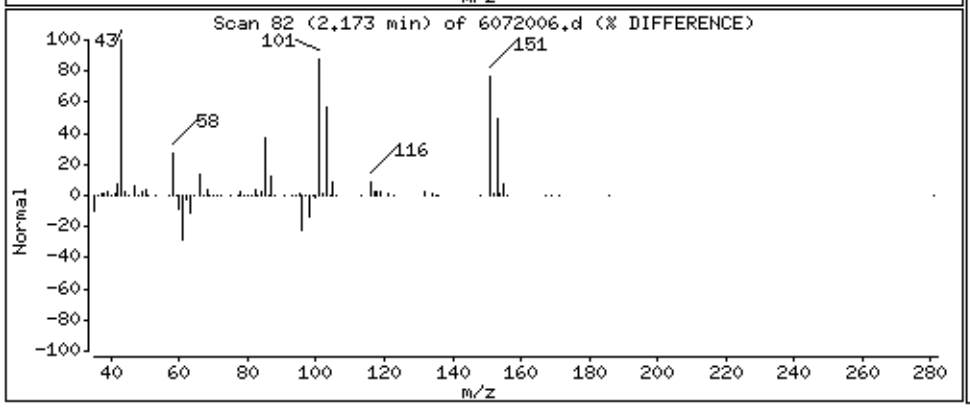
14 1,1-Dichloroethene

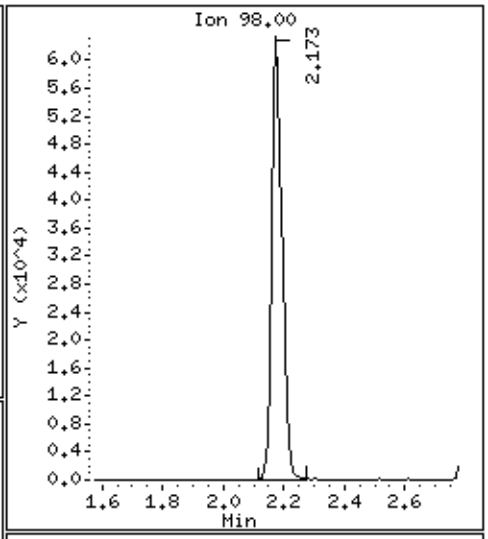
Concentration: 91.366 NG

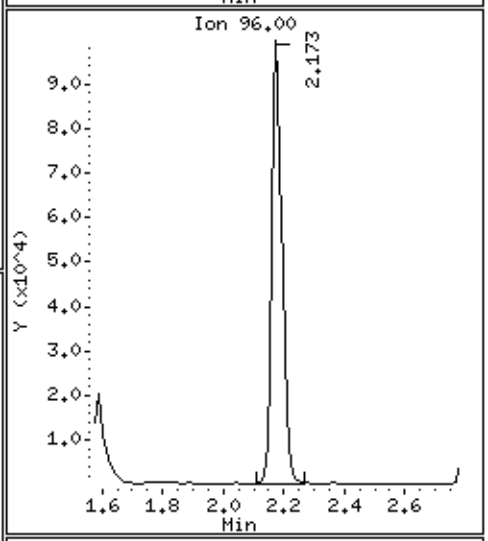


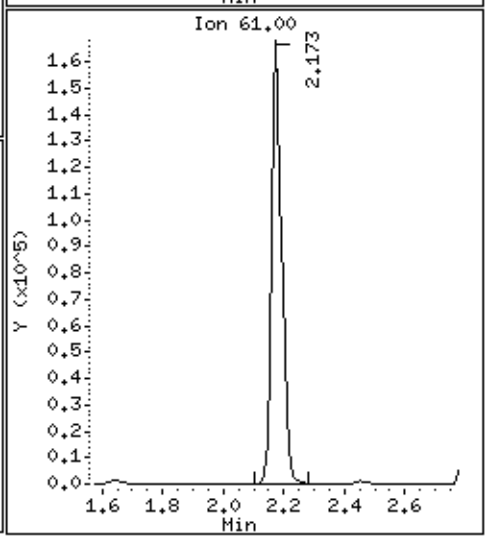












Data File: /chem/msd6.i/20jul16.b/6072006.d

Date : 20-JUL-2016 13:18

Client ID: LCSD

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCSD;LCSD

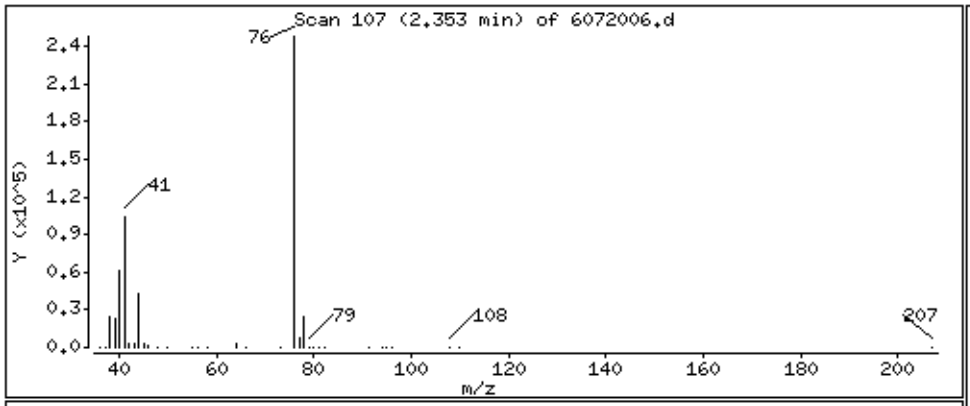
Operator: CT

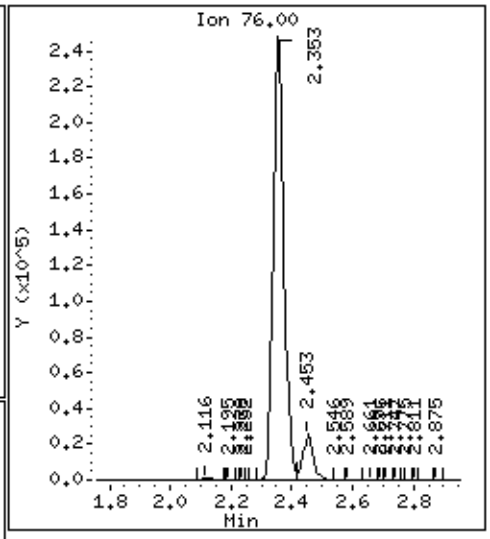
Column phase: RTx-624

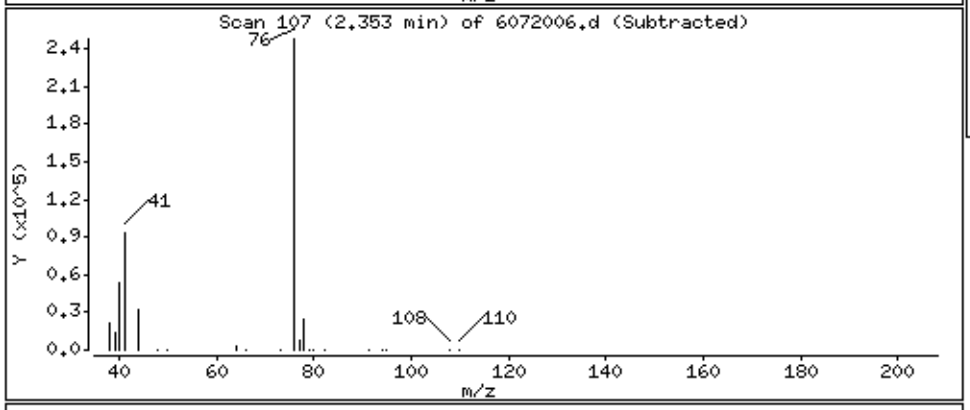
Column diameter: 0.53

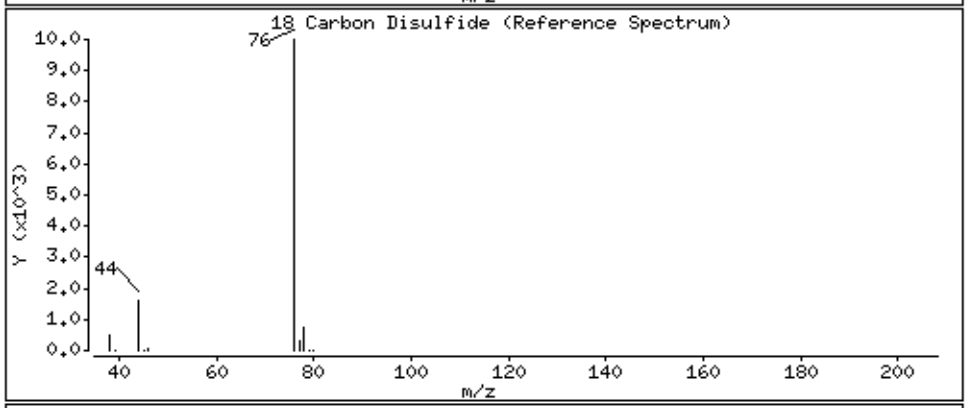
18 Carbon Disulfide

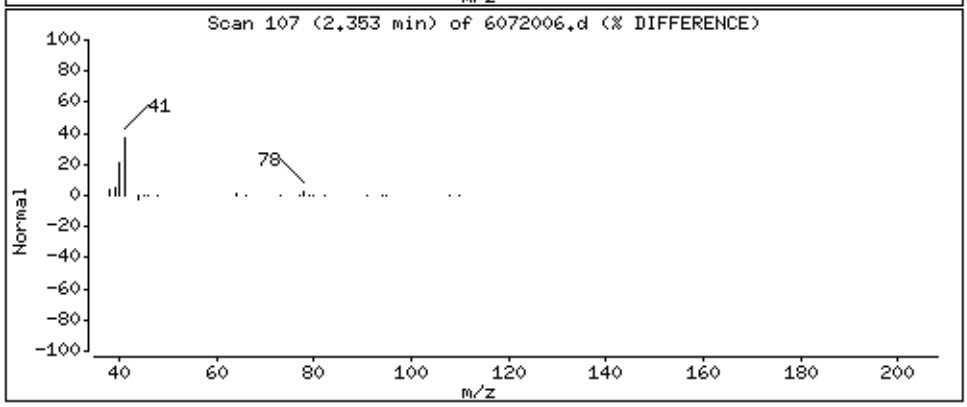
Concentration: 61.215 NG











Data File: /chem/msd6.i/20jul16.b/6072006.d

Date : 20-JUL-2016 13:18

Client ID: LCSD

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCSD;LCSD

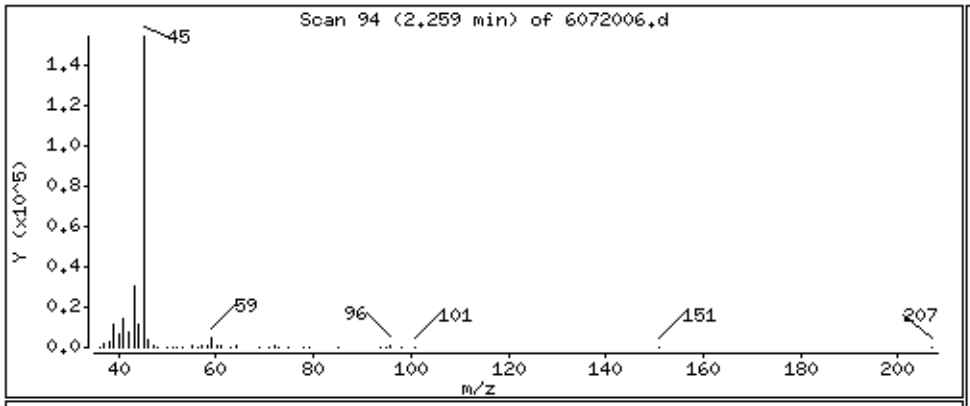
Operator: CT

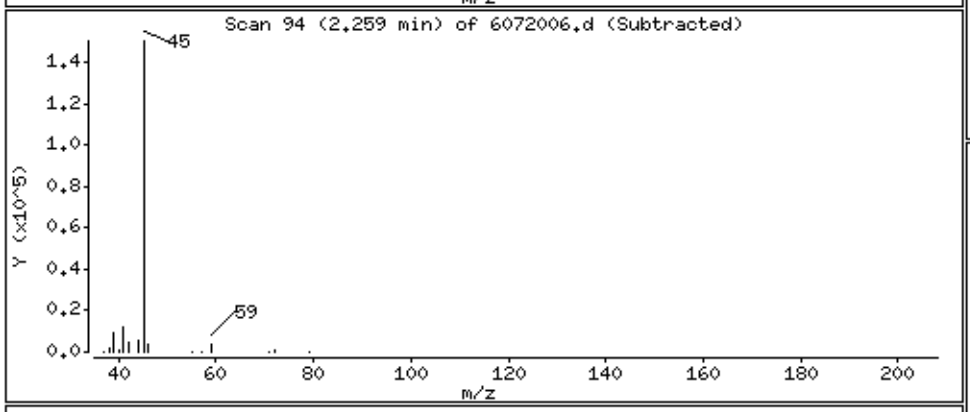
Column phase: RTx-624

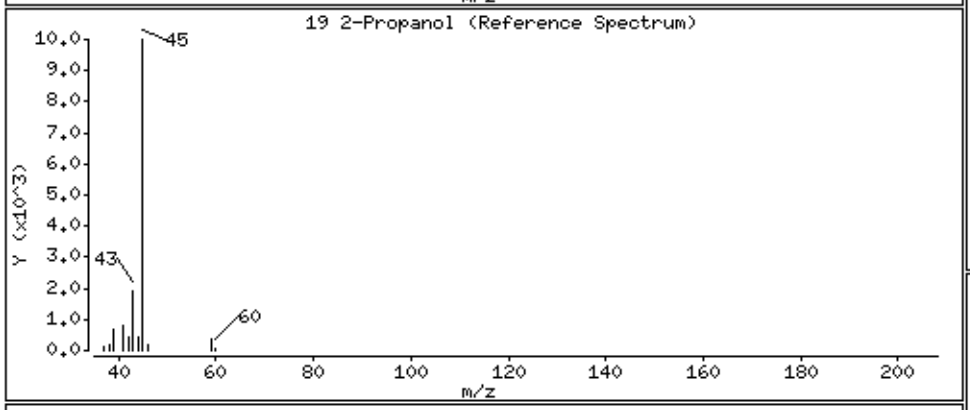
Column diameter: 0.53

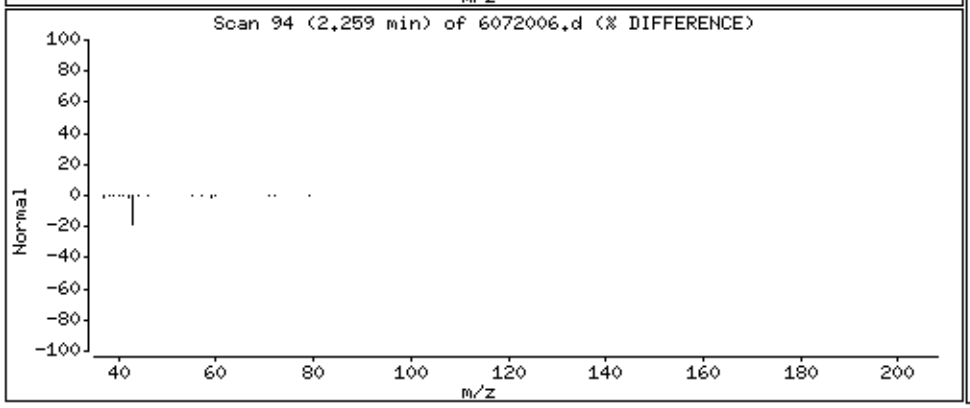
19 2-Propanol

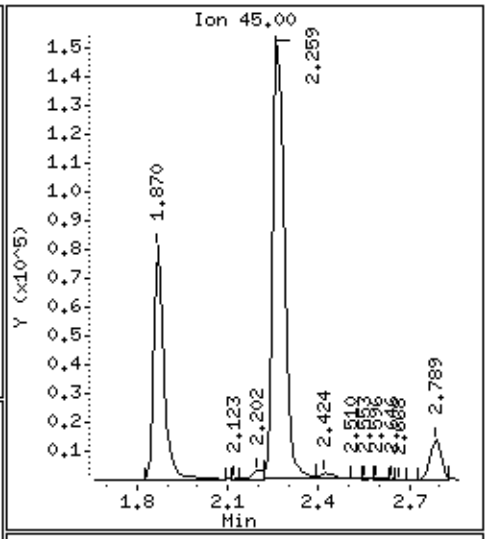
Concentration: 45.934 NG

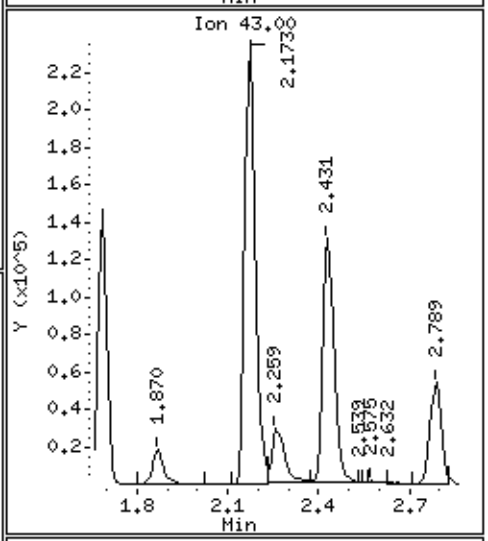


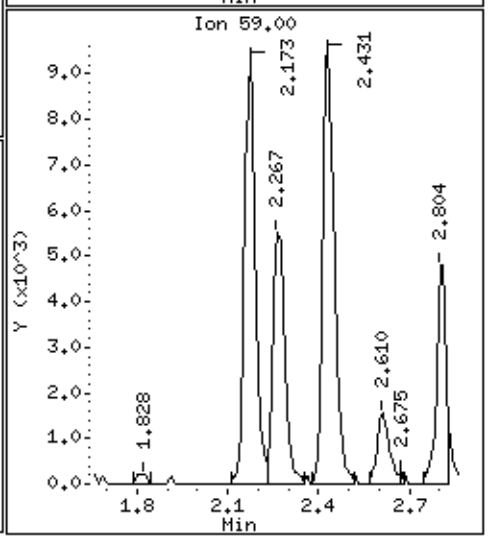












Data File: /chem/msd6.i/20jul16.b/6072006.d

Date : 20-JUL-2016 13:18

Client ID: LCSD

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCSD;LCSD

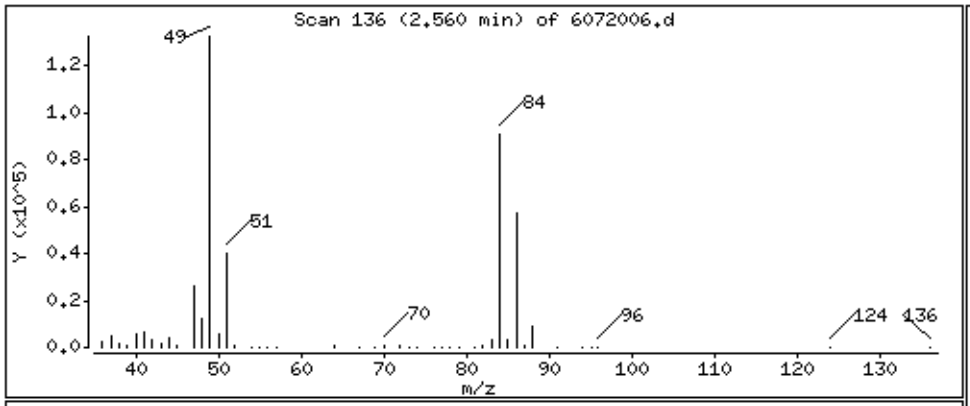
Operator: CT

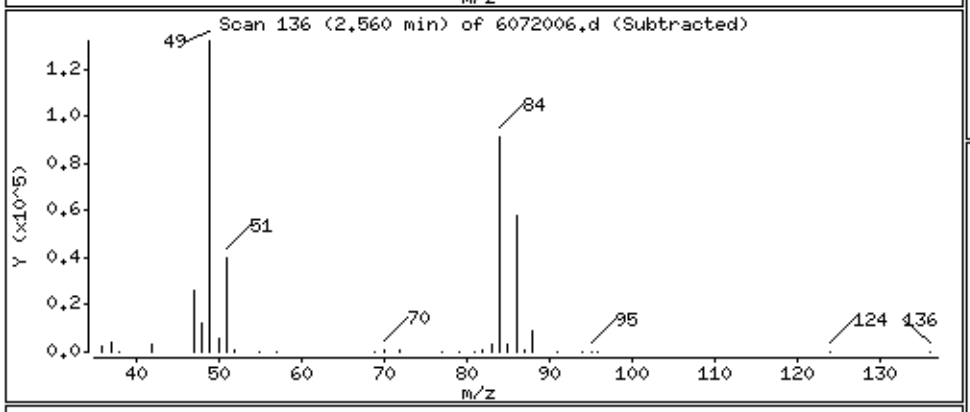
Column phase: RTx-624

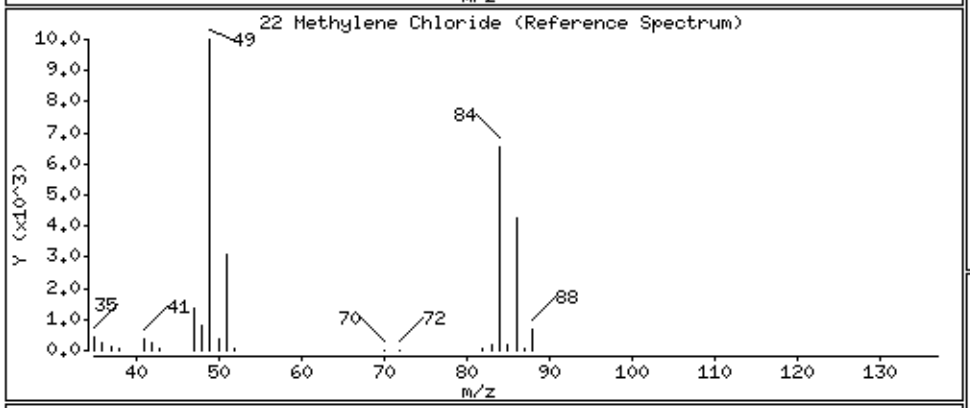
Column diameter: 0.53

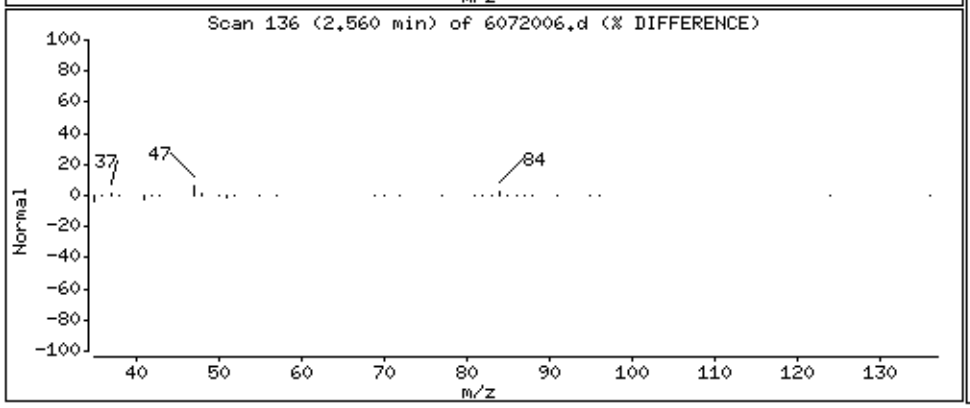
22 Methylene Chloride

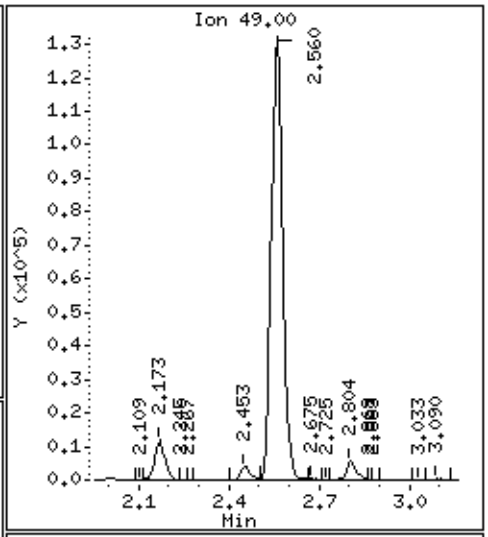
Concentration: 79.402 NG

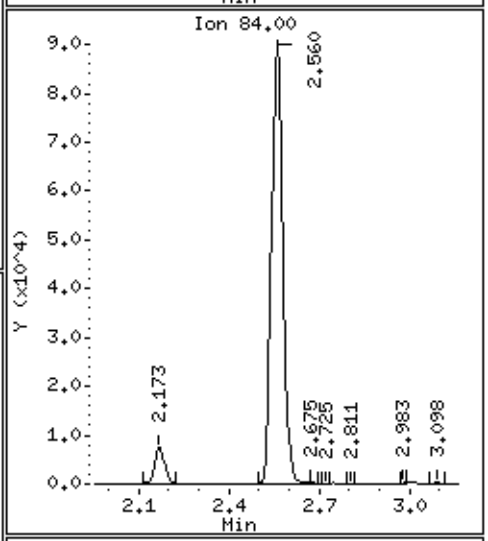


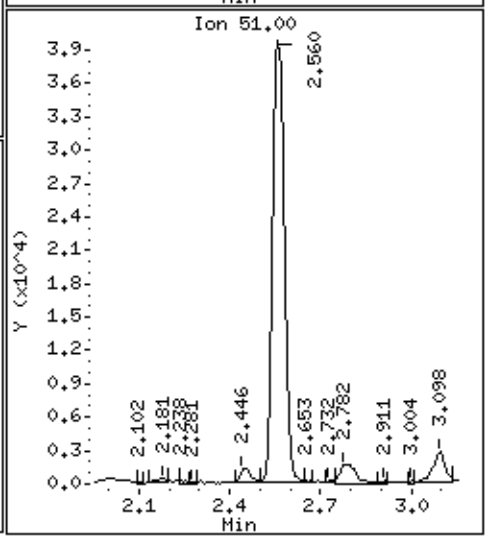












Data File: /chem/msd6.i/20jul16.b/6072006.d

Date : 20-JUL-2016 13:18

Client ID: LCSD

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCSD;LCSD

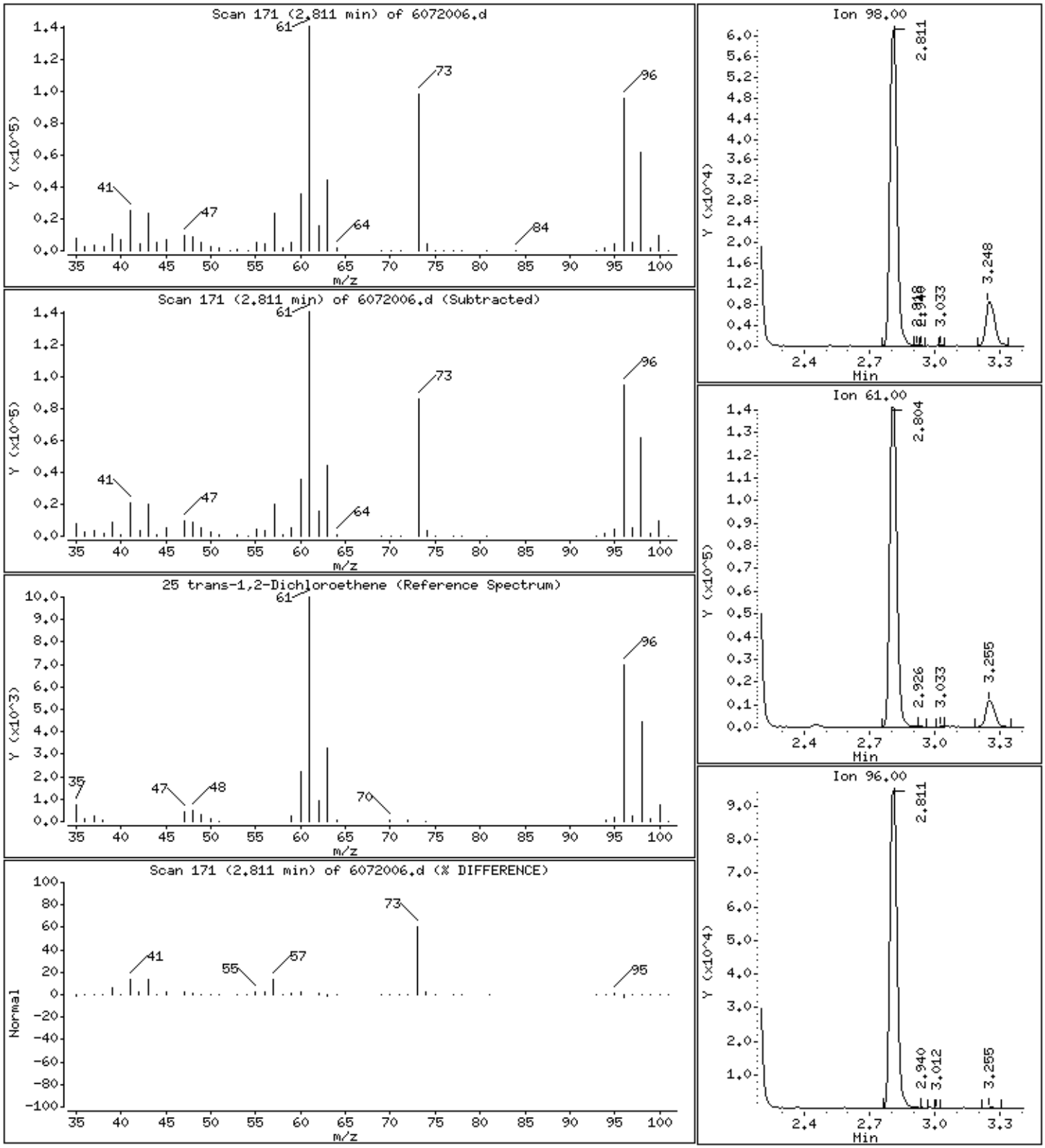
Operator: CT

Column phase: RTx-624

Column diameter: 0.53

25 trans-1,2-Dichloroethene

Concentration: 79.766 NG



Data File: /chem/msd6.i/20jul16.b/6072006.d

Date : 20-JUL-2016 13:18

Client ID: LCSD

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCSD;LCSD

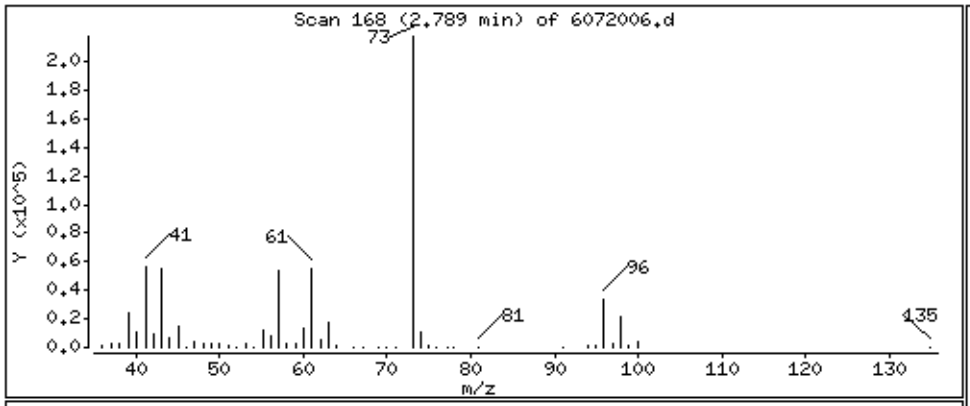
Operator: CT

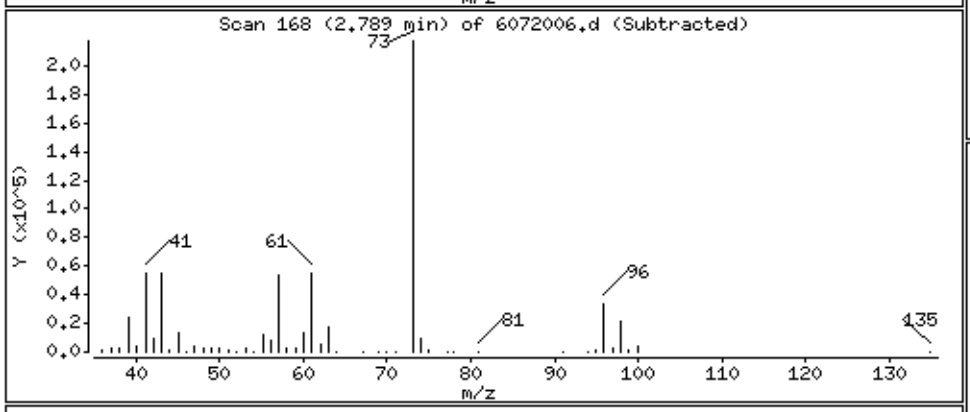
Column phase: RTx-624

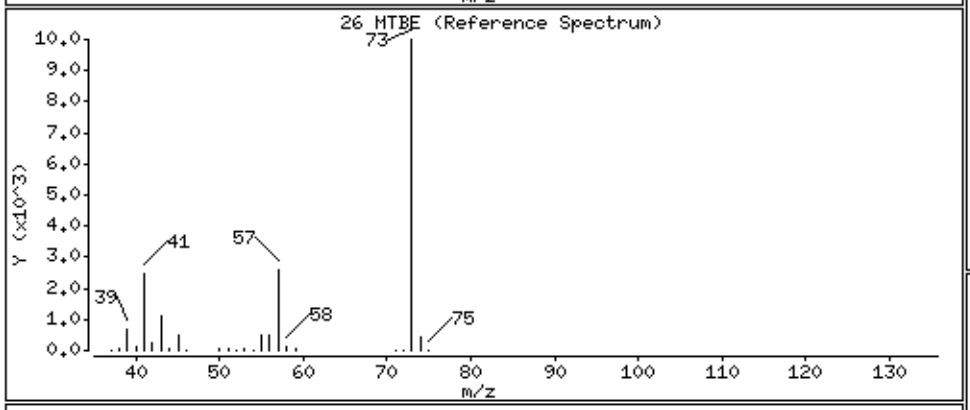
Column diameter: 0.53

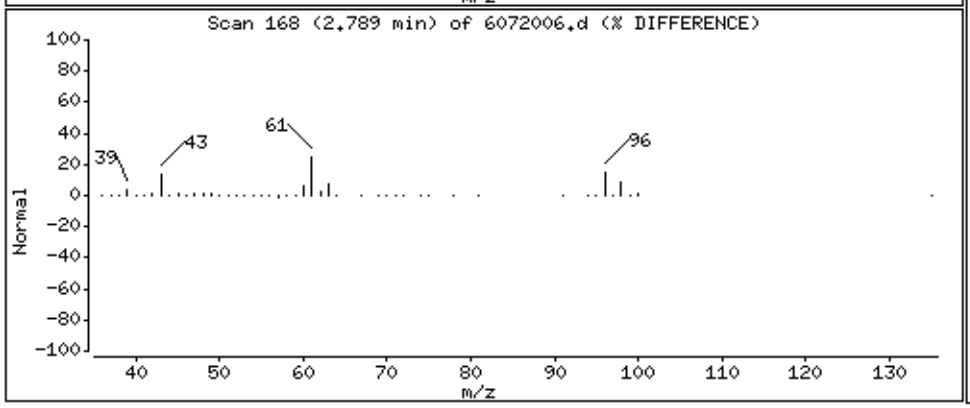
26 MTBE

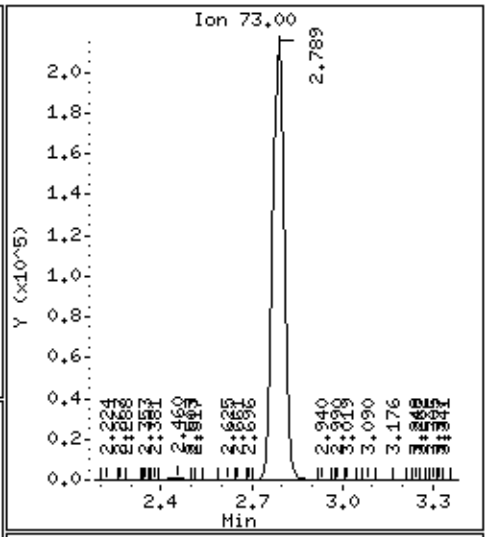
Concentration: 83.699 NG

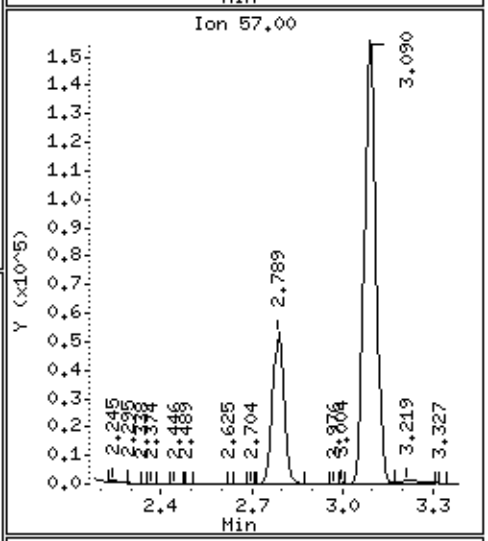


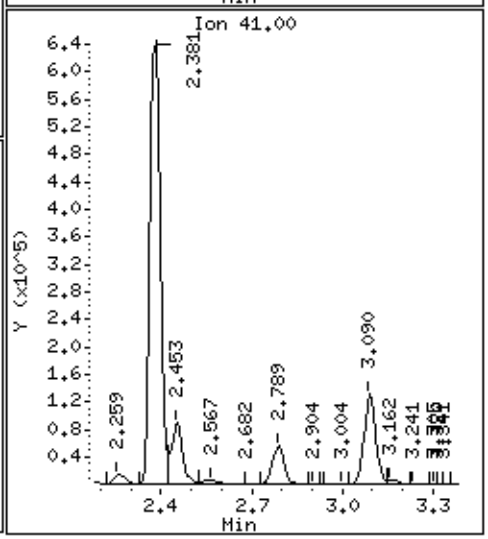












Data File: /chem/msd6.i/20jul16.b/6072006.d

Date : 20-JUL-2016 13:18

Client ID: LCSD

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCSD;LCSD

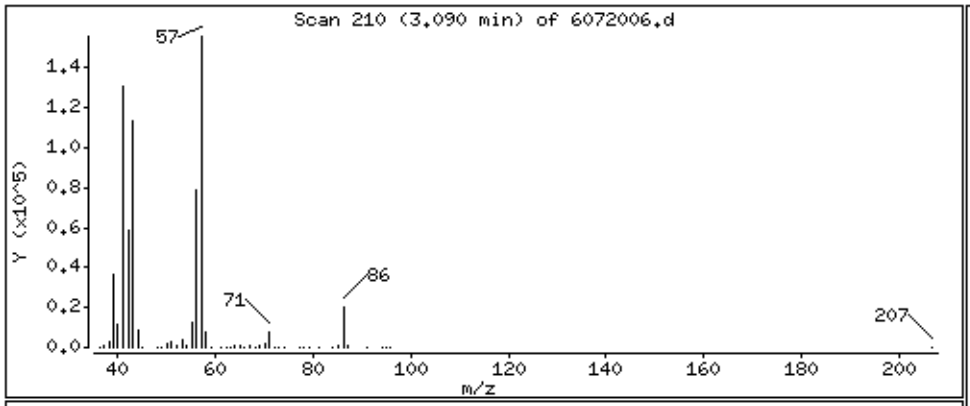
Operator: CT

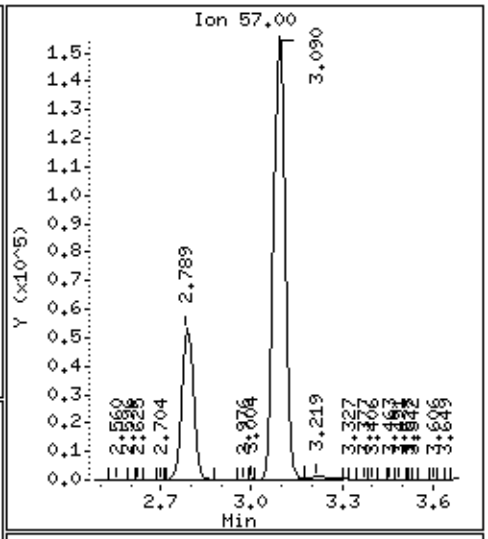
Column phase: RTx-624

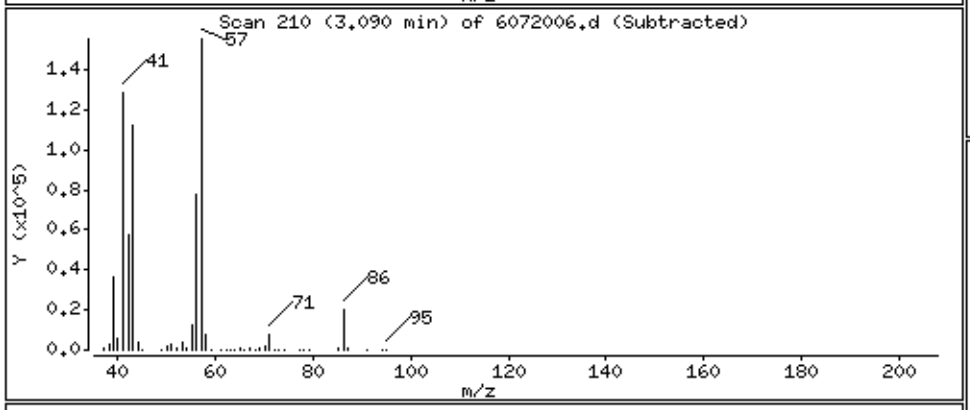
Column diameter: 0.53

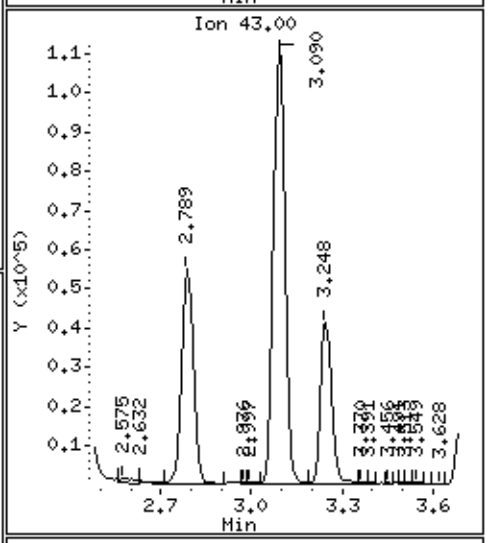
28 Hexane

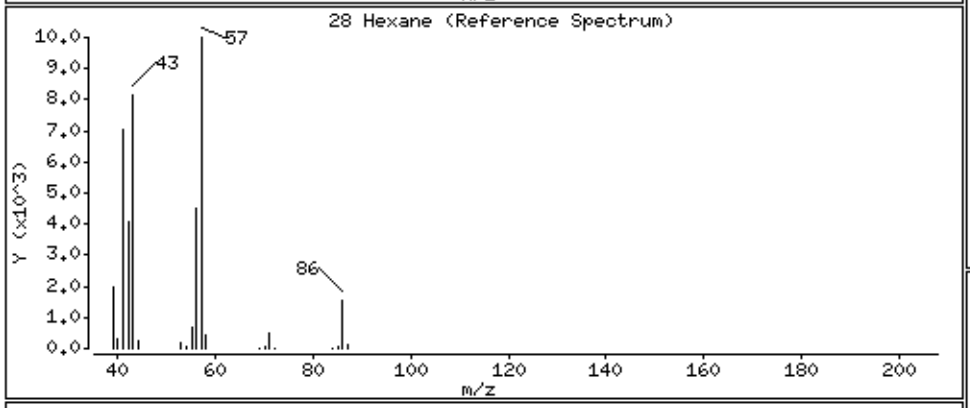
Concentration: 88.128 NG

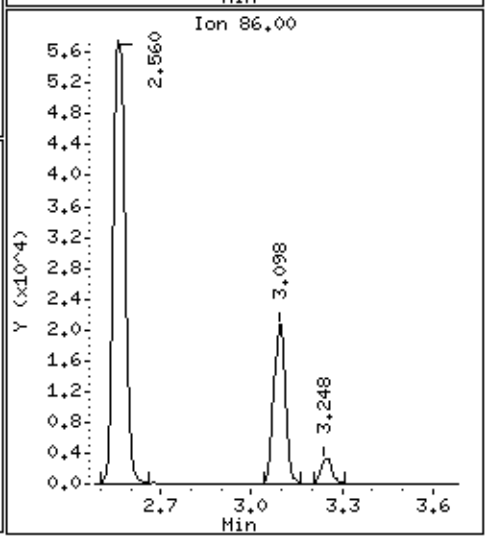


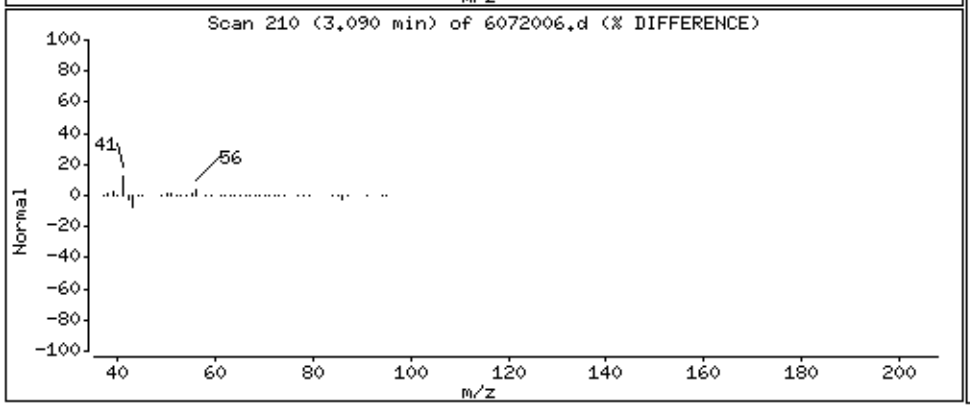












Data File: /chem/msd6.i/20jul16.b/6072006.d

Date : 20-JUL-2016 13:18

Client ID: LCSD

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCSD;LCSD

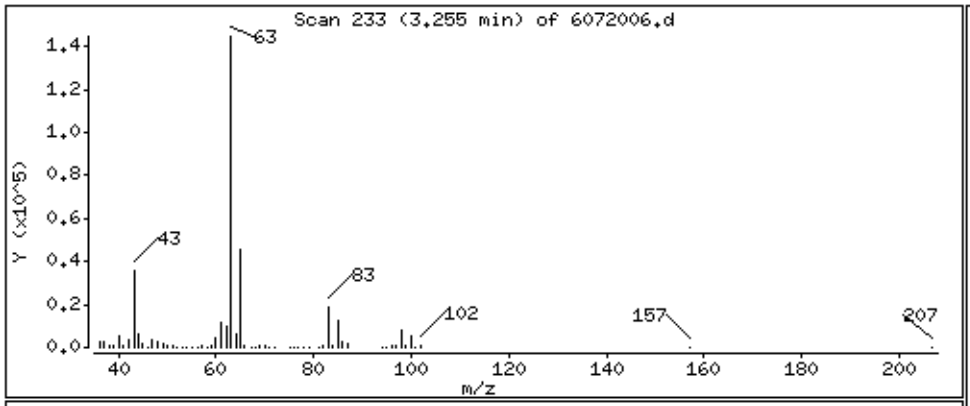
Operator: CT

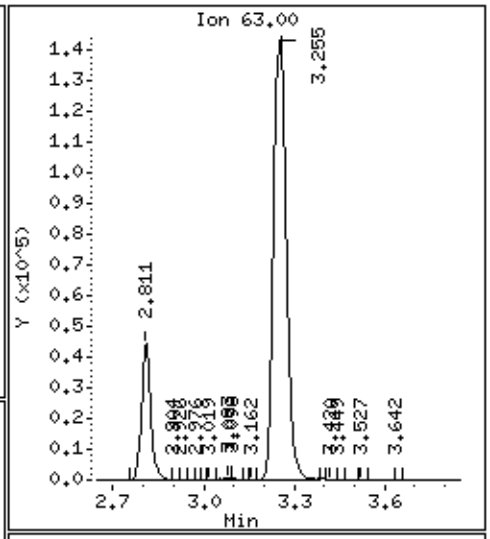
Column phase: RTx-624

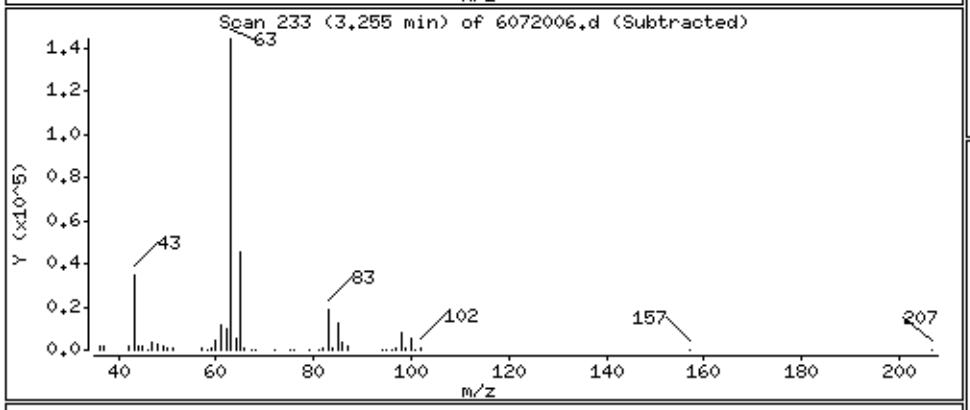
Column diameter: 0.53

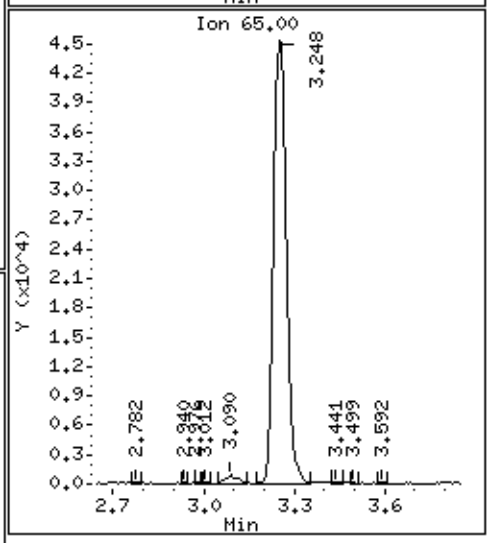
29 1,1-Dichloroethane

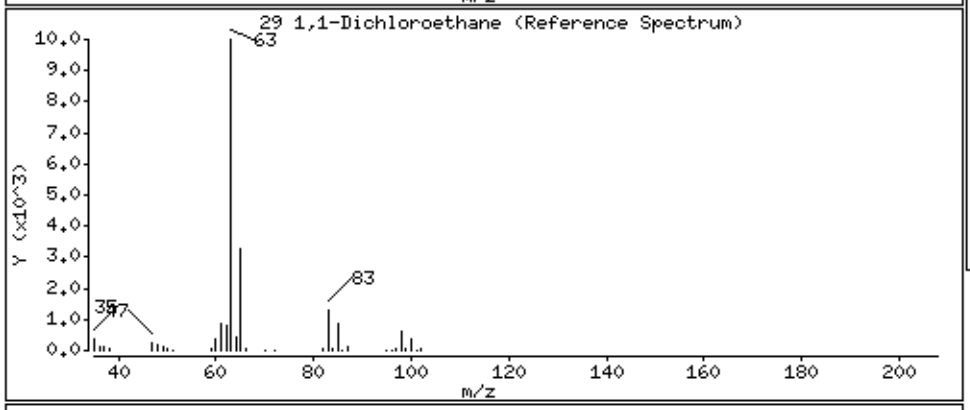
Concentration: 100.84 NG

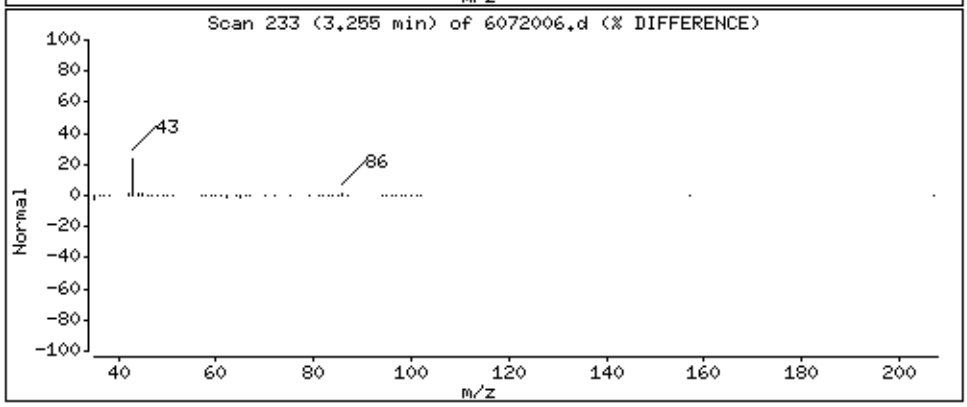












Data File: /chem/msd6.i/20jul16.b/6072006.d

Date : 20-JUL-2016 13:18

Client ID: LCSD

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCSD;LCSD

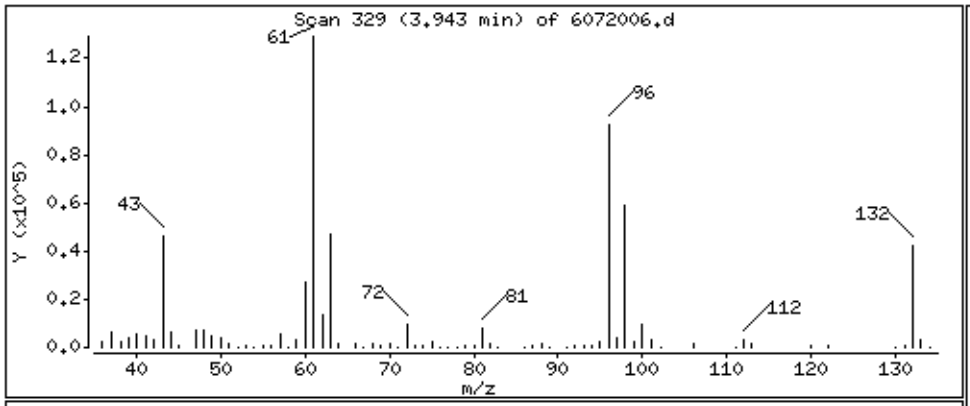
Operator: CT

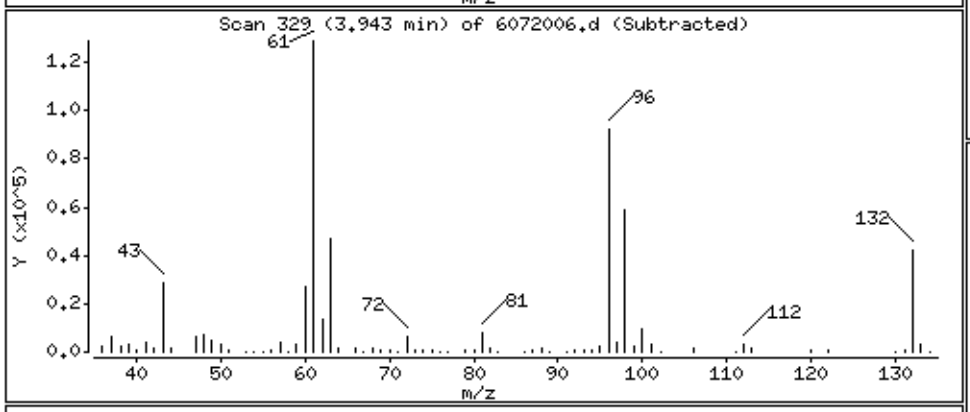
Column phase: RTx-624

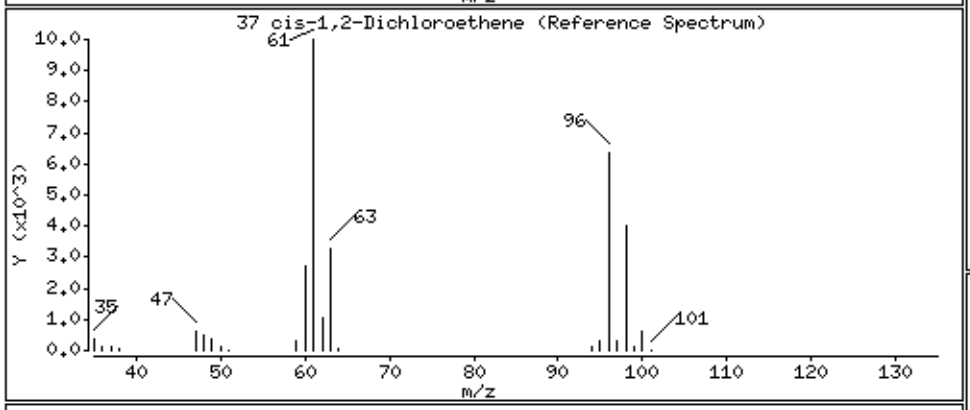
Column diameter: 0.53

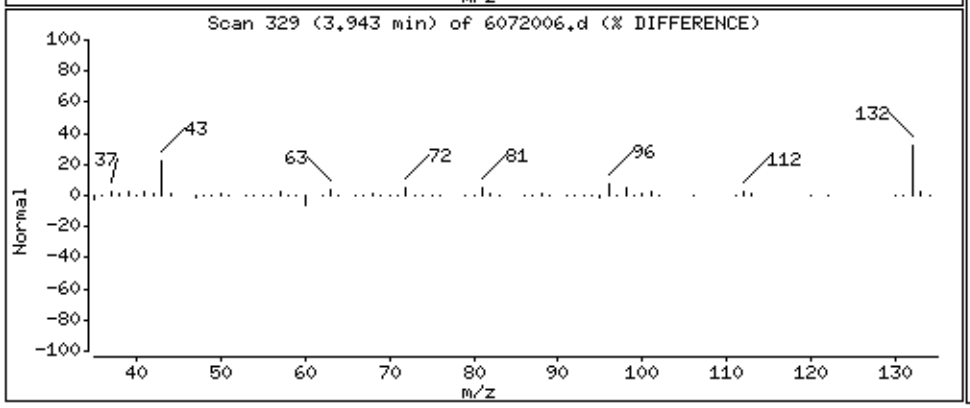
37 cis-1,2-Dichloroethene

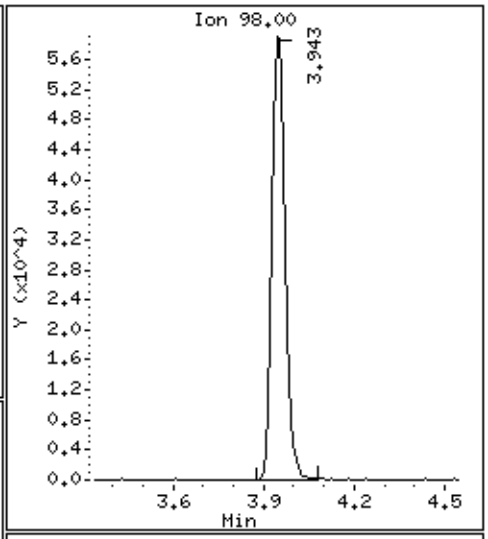
Concentration: 102.68 NG

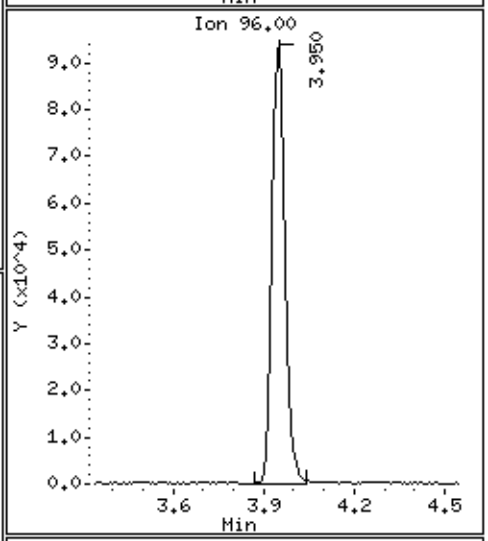


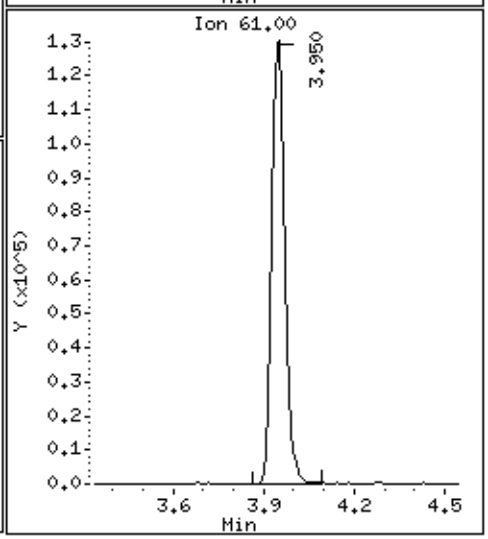












Data File: /chem/msd6.i/20jul16.b/6072006.d

Date : 20-JUL-2016 13:18

Client ID: LCSD

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCSD;LCSD

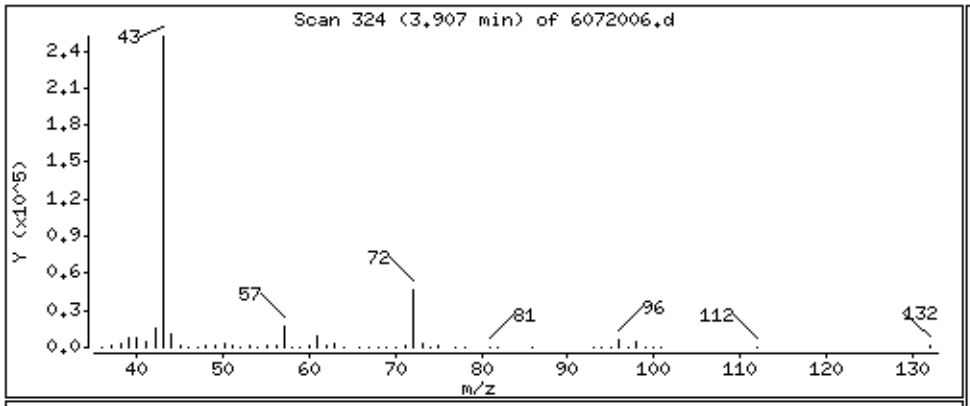
Operator: CT

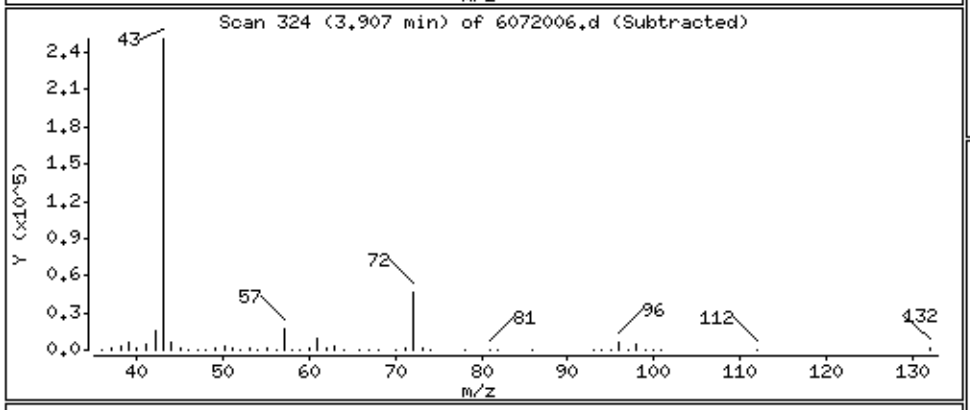
Column phase: RTx-624

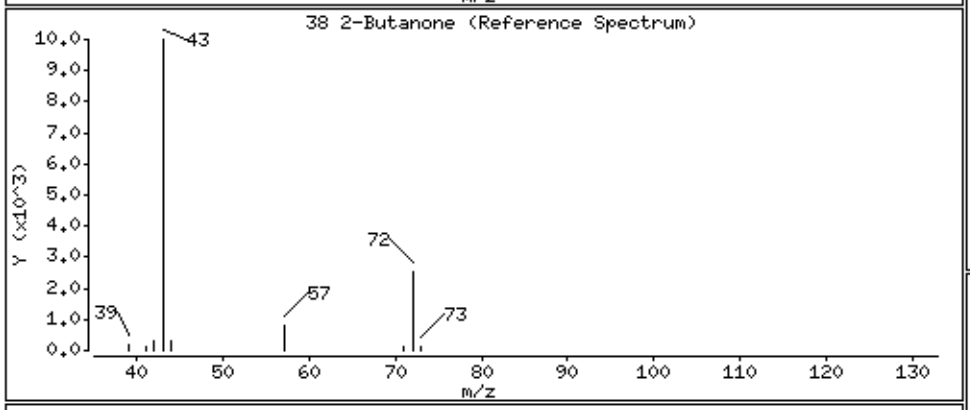
Column diameter: 0.53

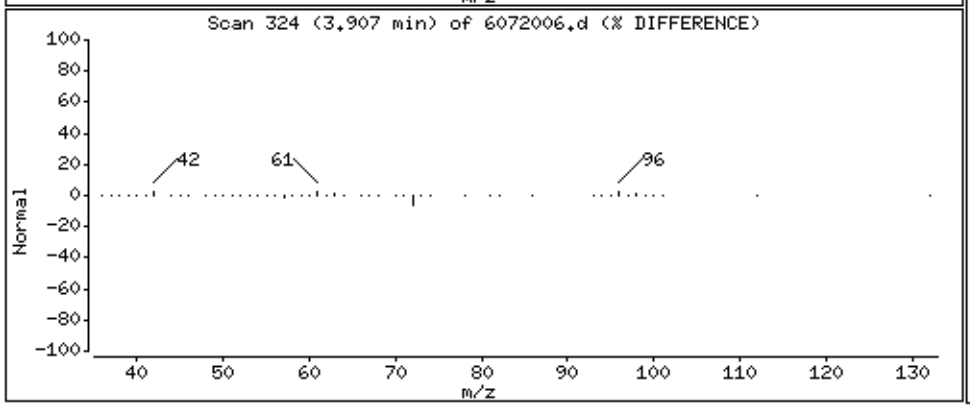
38 2-Butanone

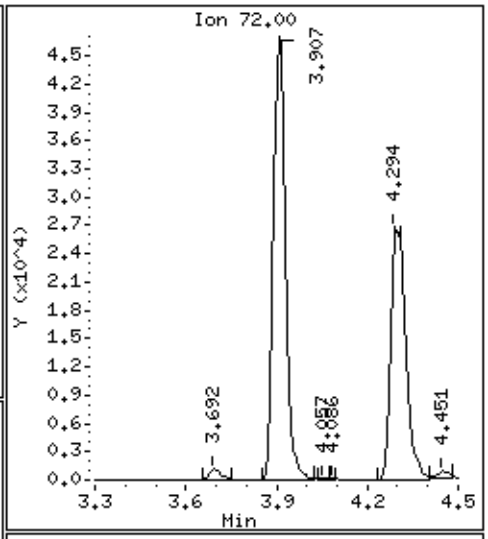
Concentration: 69.552 NG

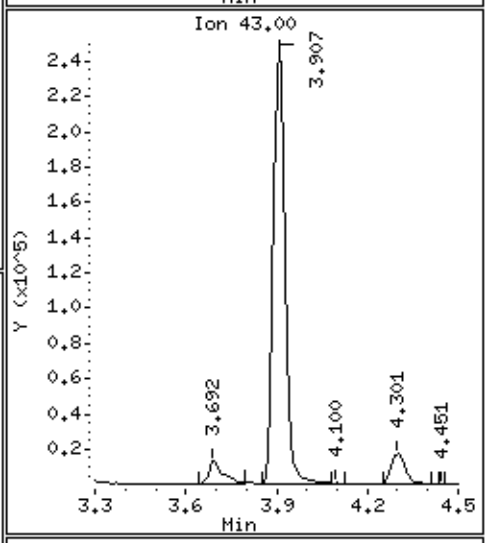


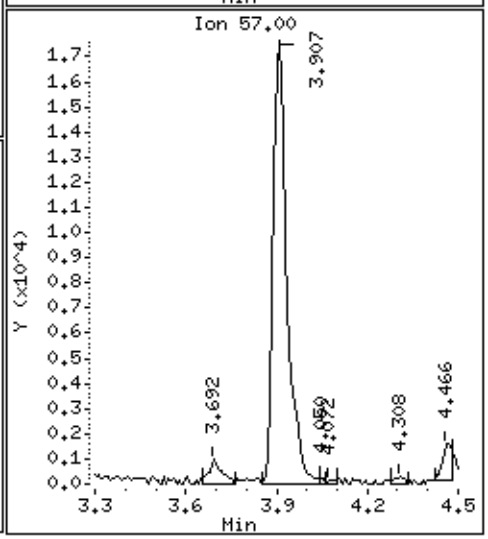












Data File: /chem/msd6.i/20jul16.b/6072006.d

Date : 20-JUL-2016 13:18

Client ID: LCSD

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCSD;LCSD

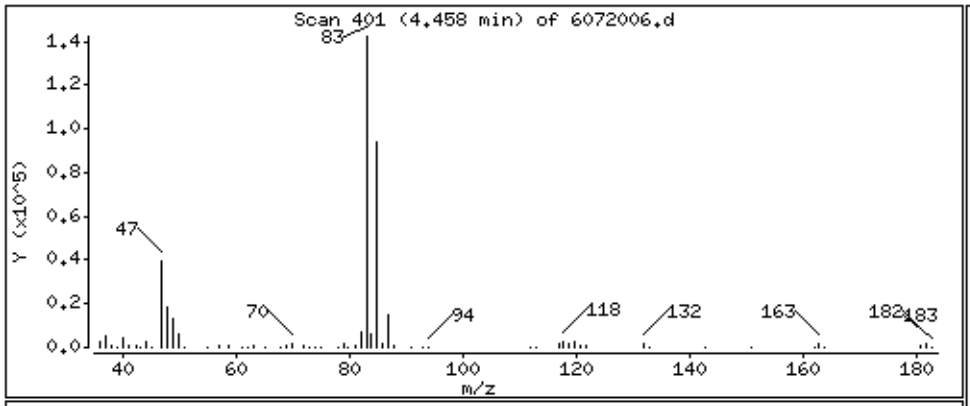
Operator: CT

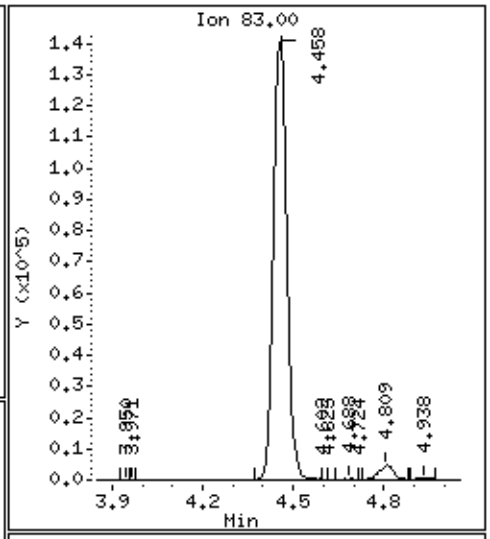
Column phase: RTx-624

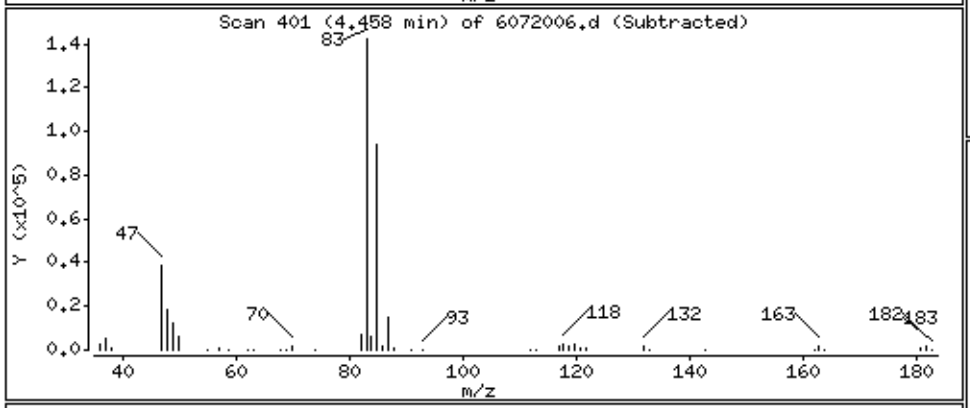
Column diameter: 0.53

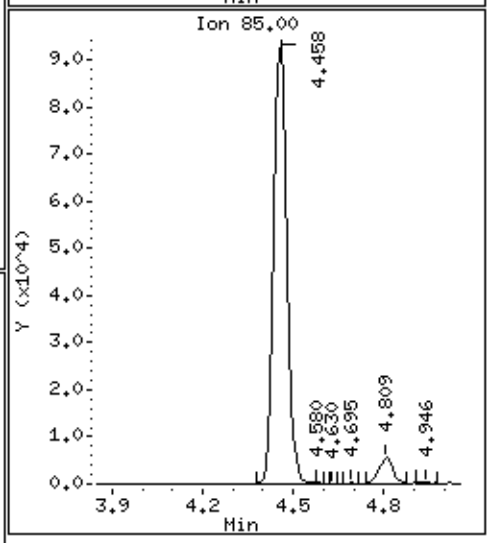
44 Chloroform

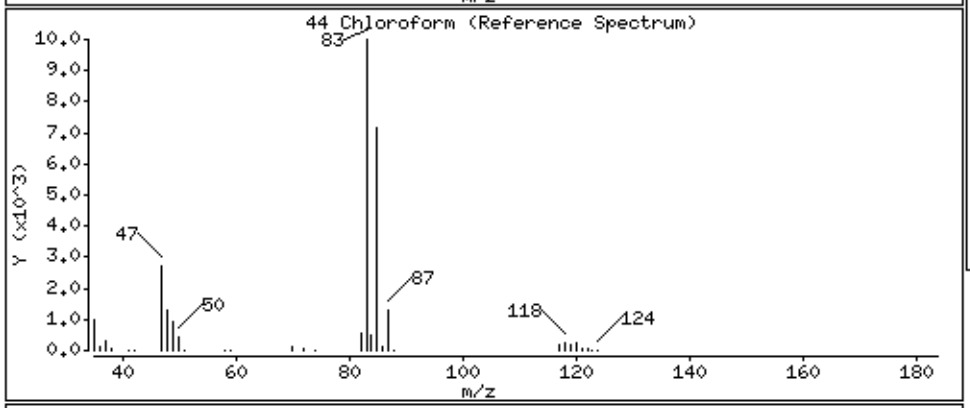
Concentration: 104.33 NG

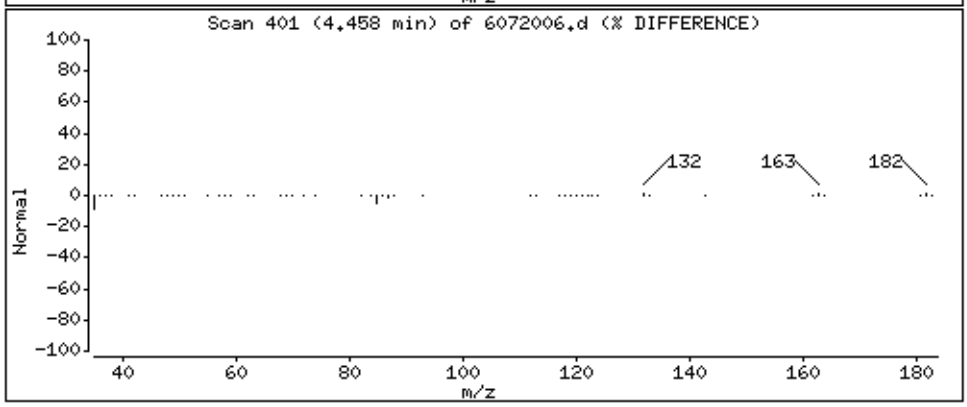












Data File: /chem/msd6.i/20jul16.b/6072006.d

Date : 20-JUL-2016 13:18

Client ID: LCSD

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCSD;LCSD

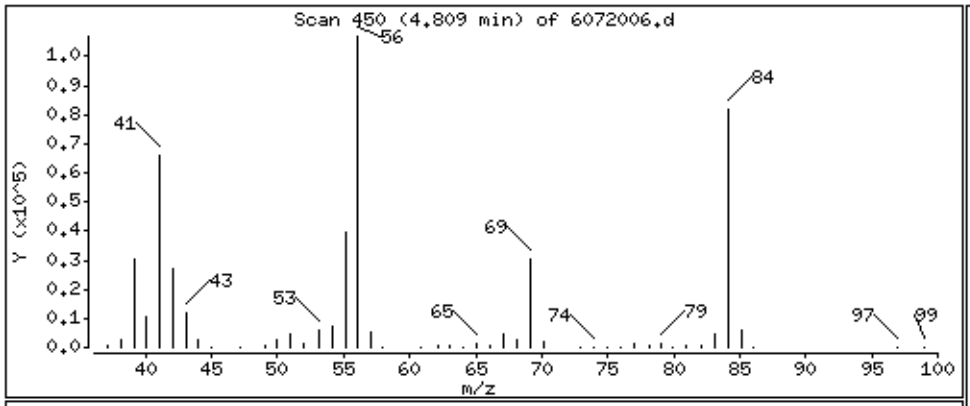
Operator: CT

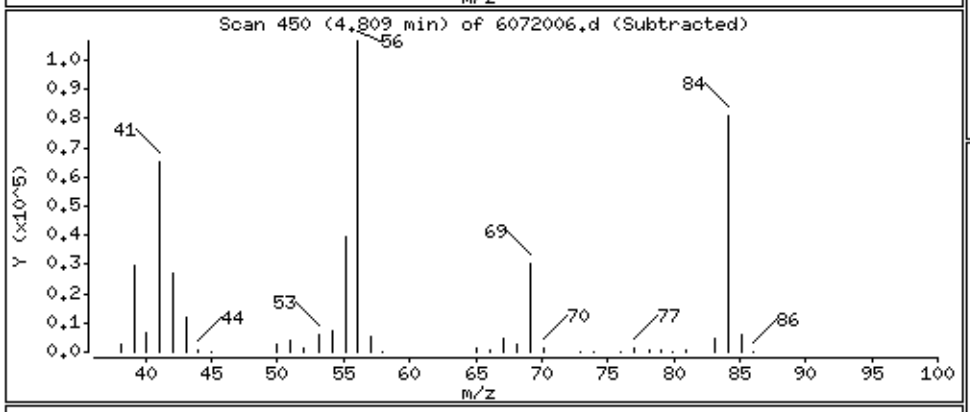
Column phase: RTx-624

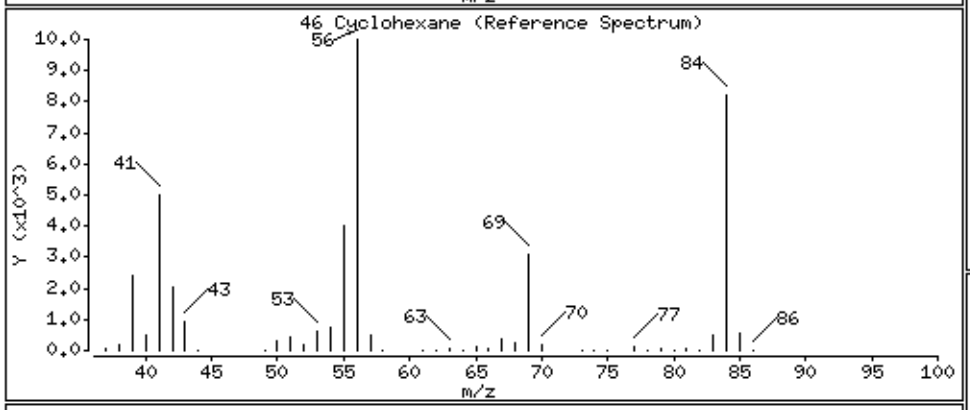
Column diameter: 0.53

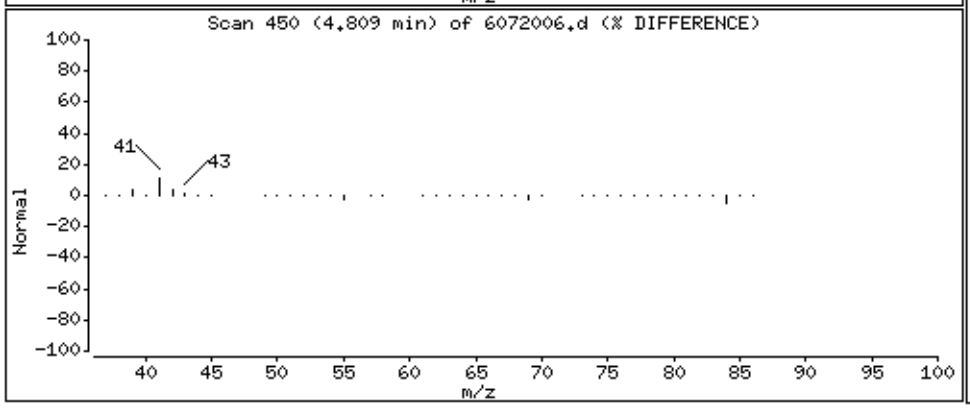
46 Cyclohexane

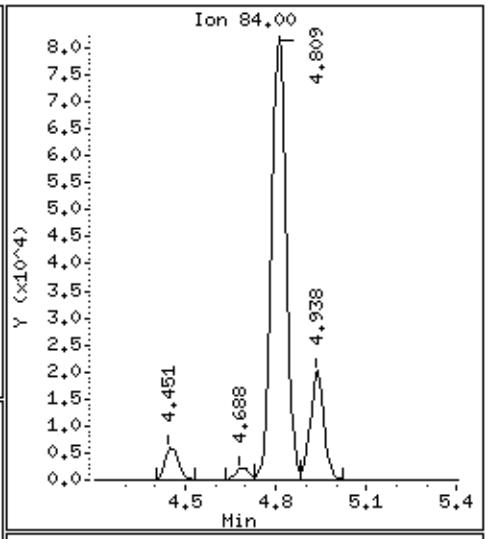
Concentration: 72.721 NG

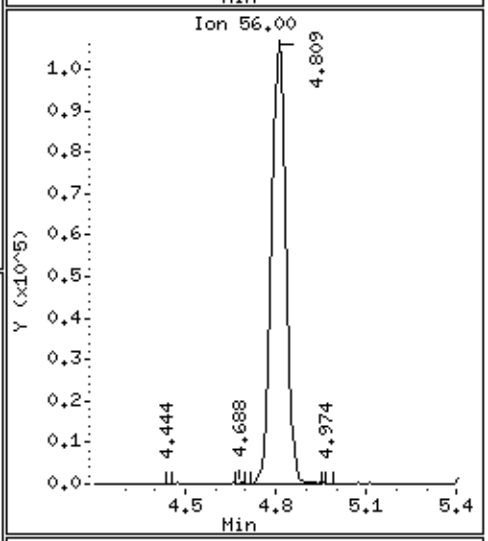


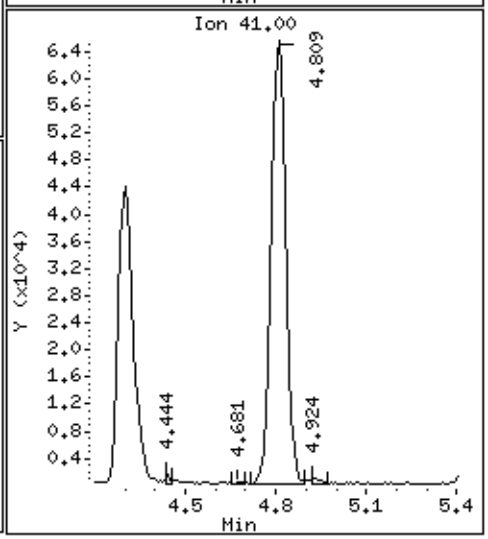












Data File: /chem/msd6.i/20jul16.b/6072006.d

Date : 20-JUL-2016 13:18

Client ID: LCSD

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCSD;LCSD

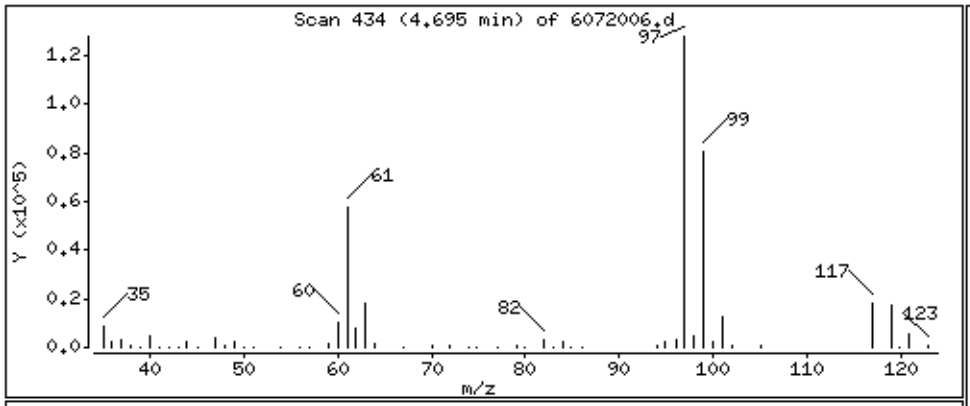
Operator: CT

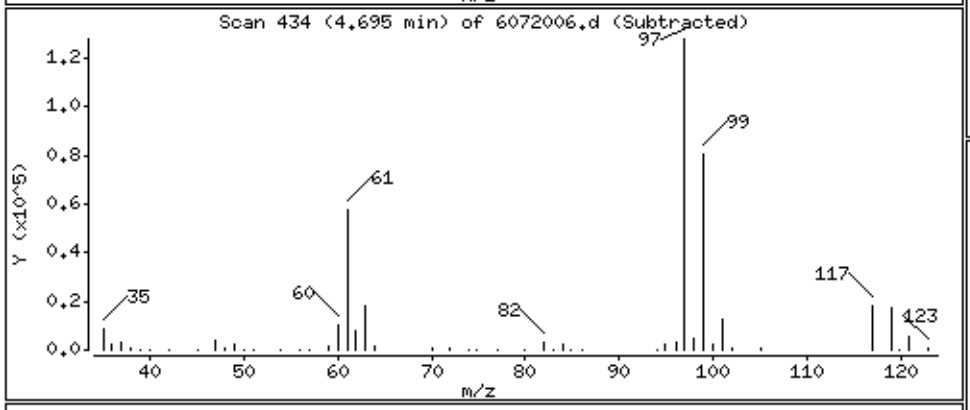
Column phase: RTx-624

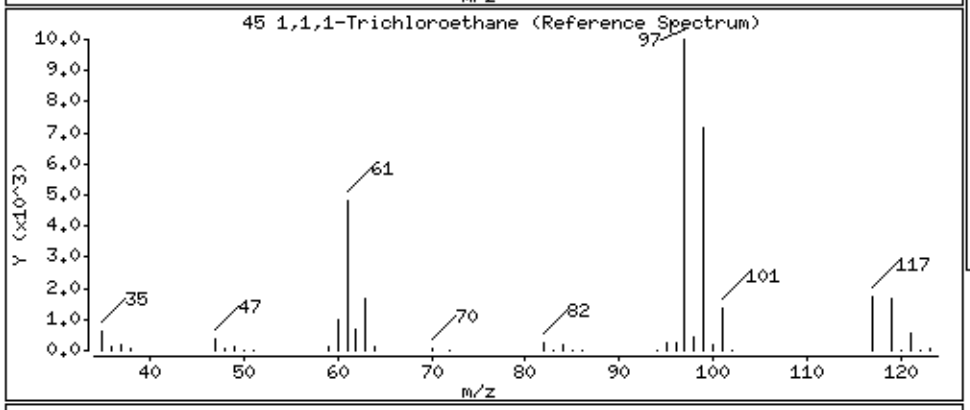
Column diameter: 0.53

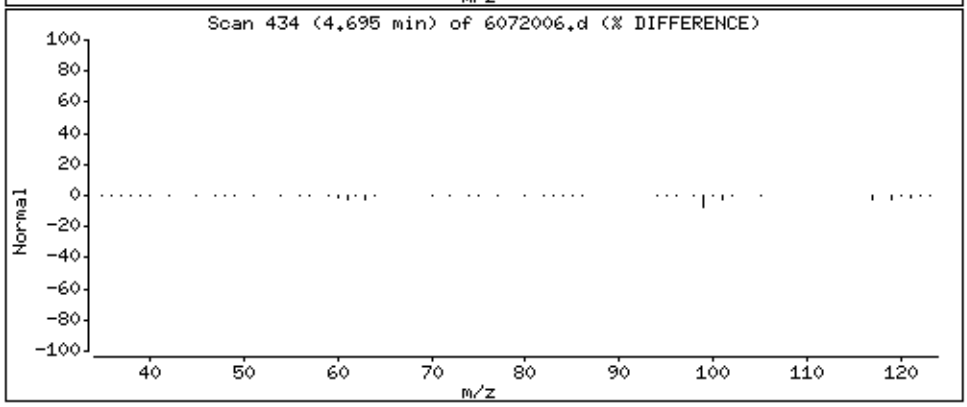
45 1,1,1-Trichloroethane

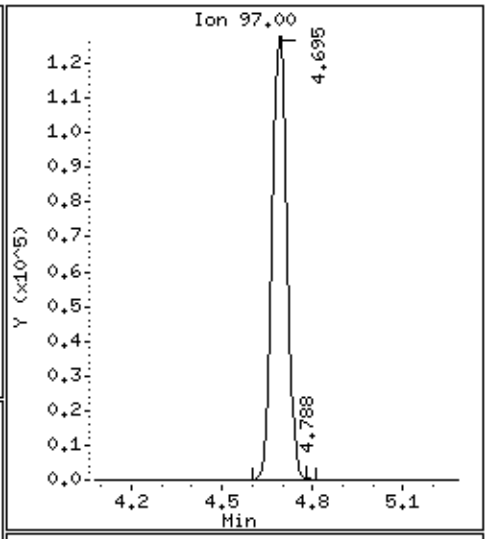
Concentration: 118.57 NG

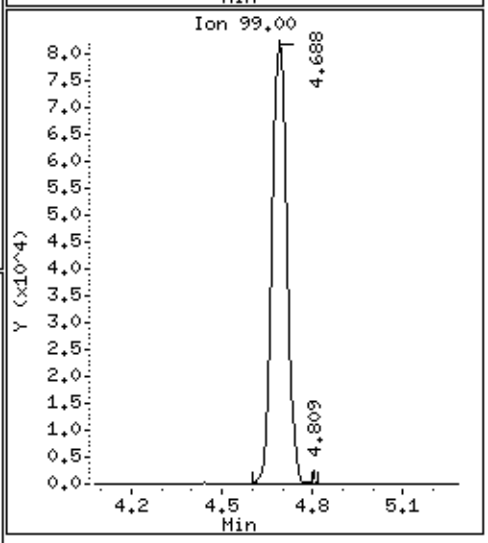












Data File: /chem/msd6.i/20jul16.b/6072006.d

Date : 20-JUL-2016 13:18

Client ID: LCSD

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCSD;LCSD

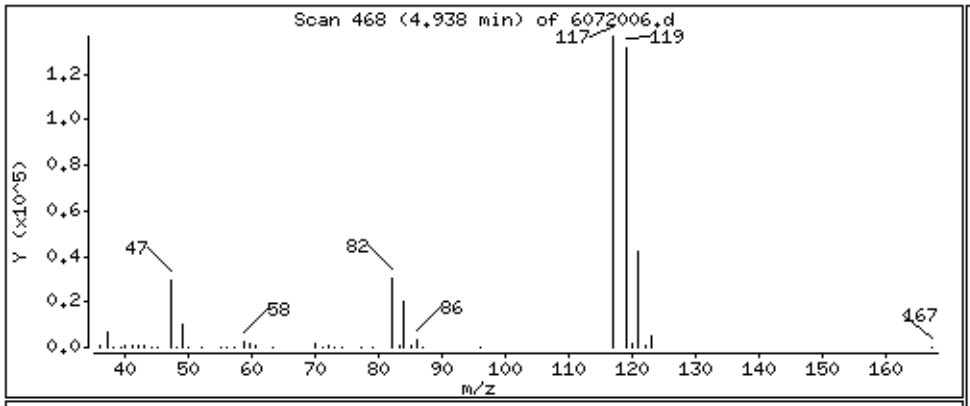
Operator: CT

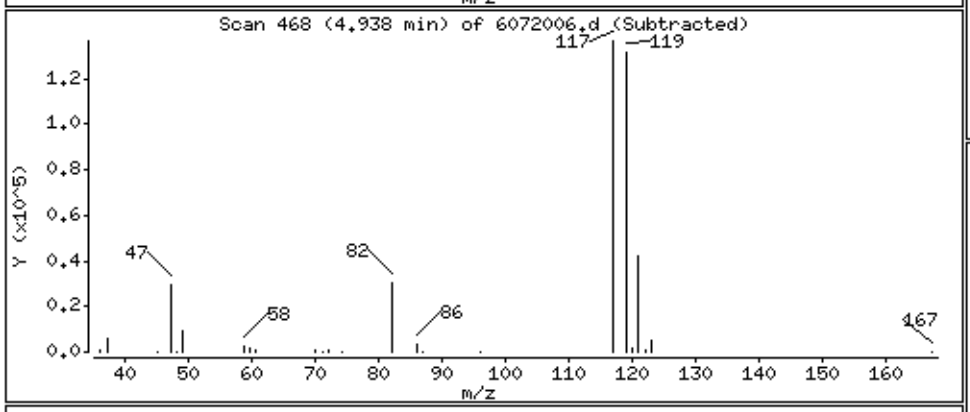
Column phase: RTx-624

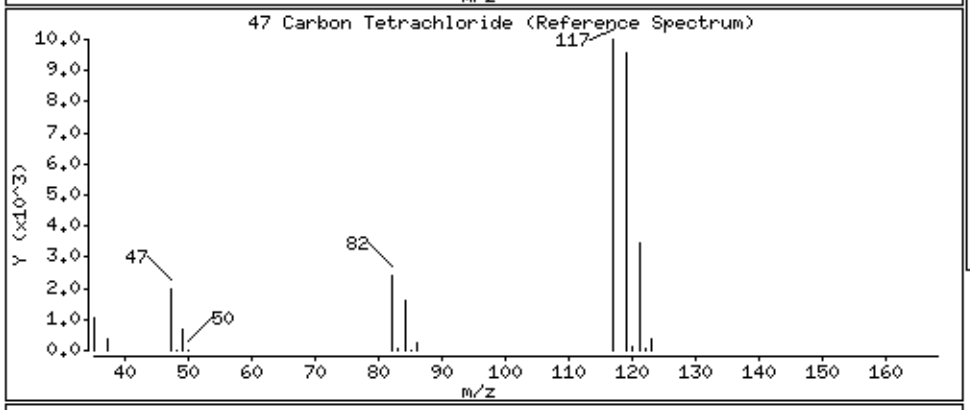
Column diameter: 0.53

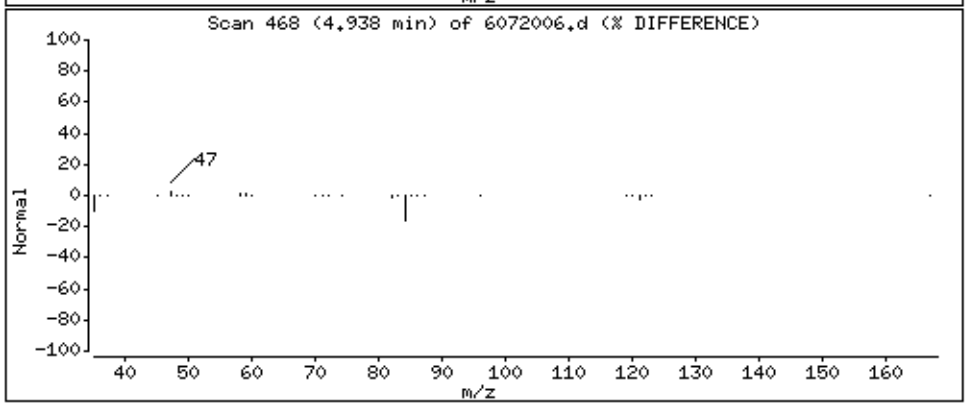
47 Carbon Tetrachloride

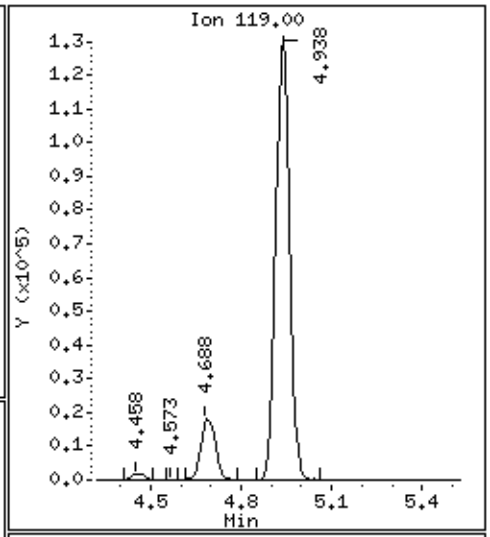
Concentration: 121.38 NG

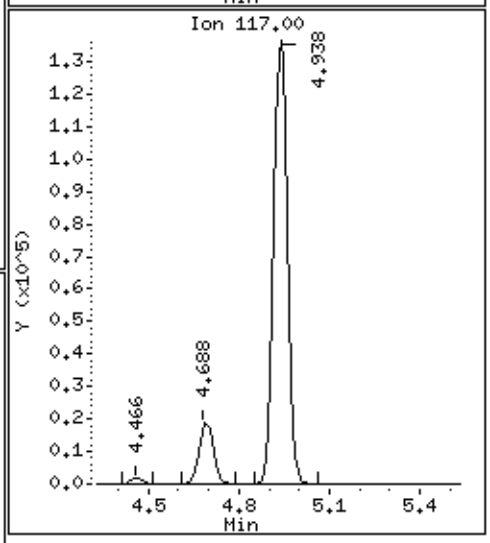












Data File: /chem/msd6.i/20jul16.b/6072006.d

Date : 20-JUL-2016 13:18

Client ID: LCSD

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCSD;LCSD

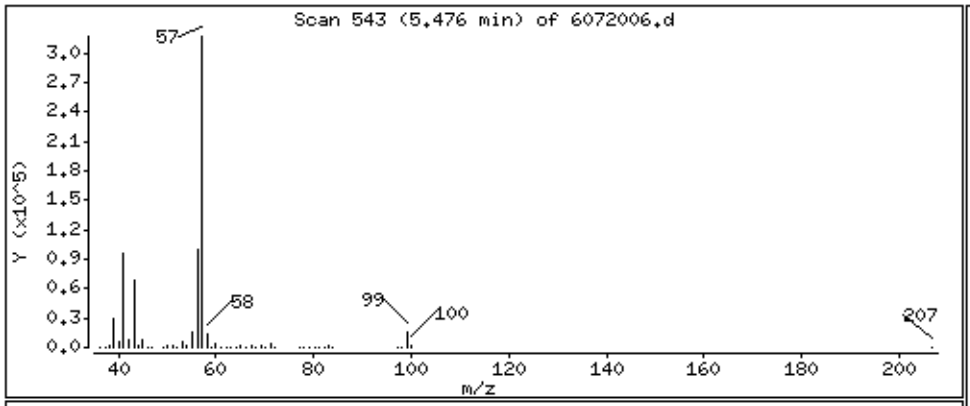
Operator: CT

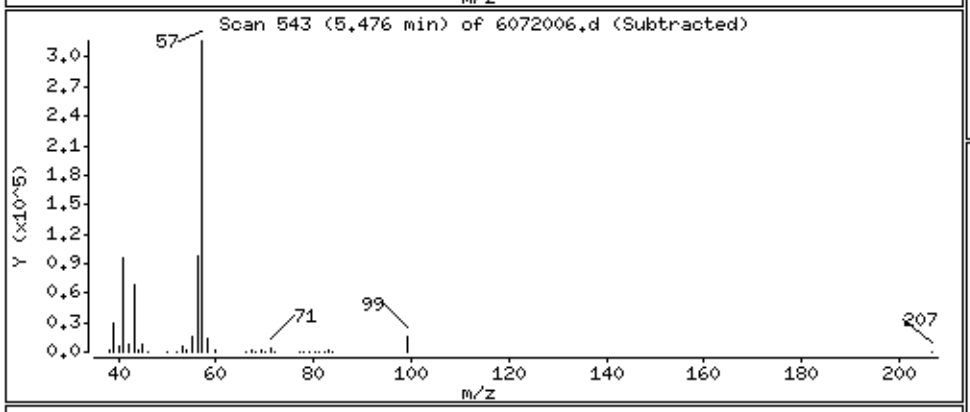
Column phase: RTx-624

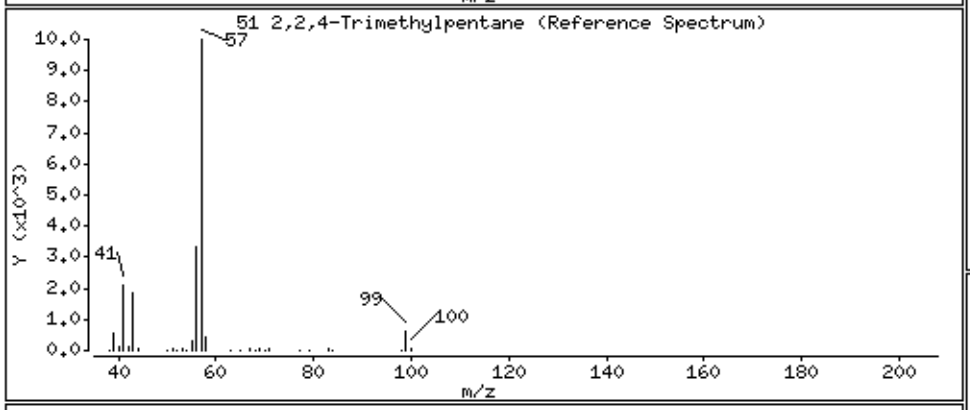
Column diameter: 0.53

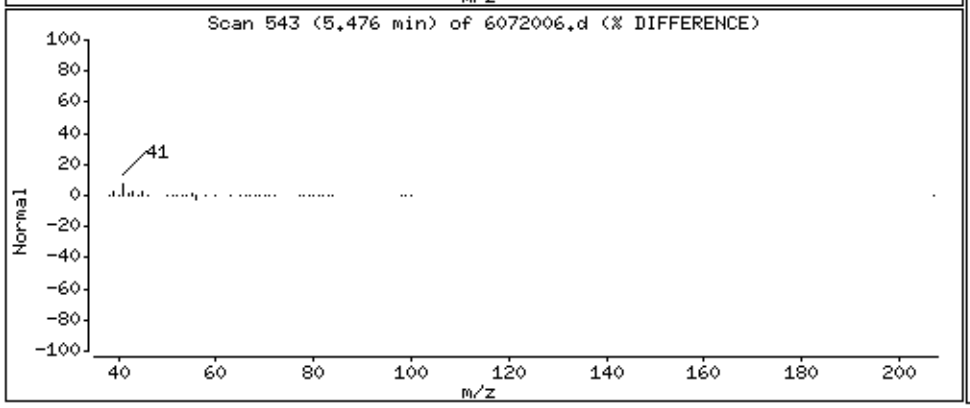
51 2,2,4-Trimethylpentane

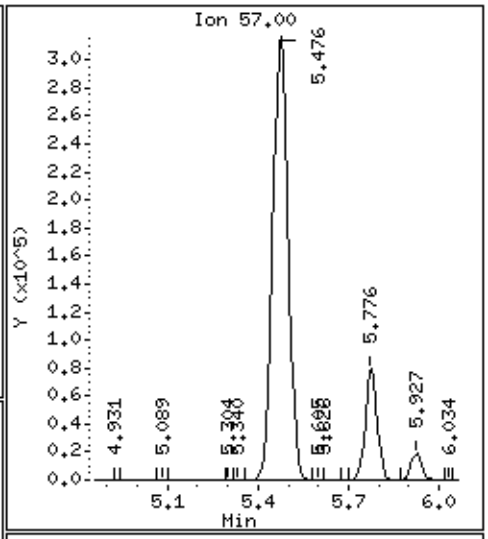
Concentration: 96.605 NG

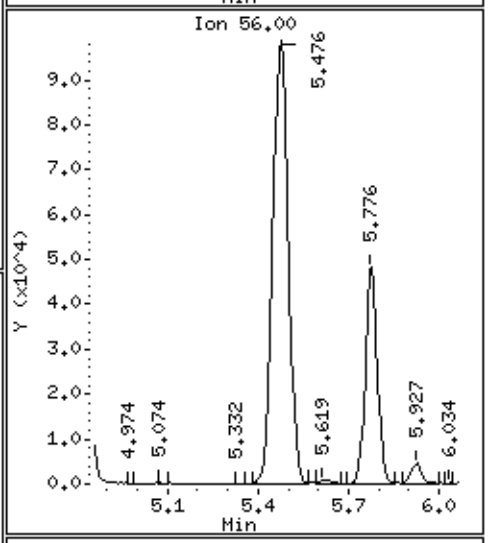


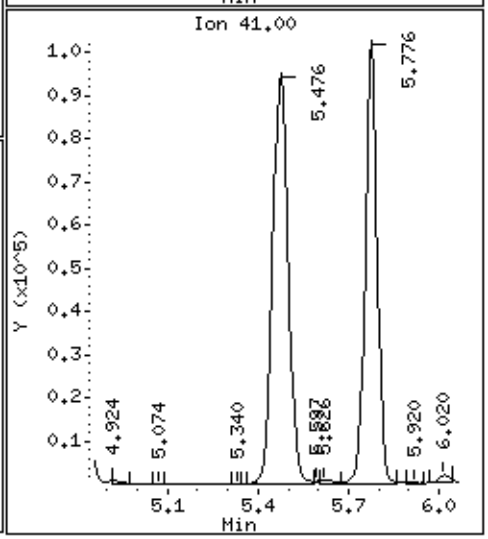












Data File: /chem/msd6.i/20jul16.b/6072006.d

Date : 20-JUL-2016 13:18

Client ID: LCSD

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCSD;LCSD

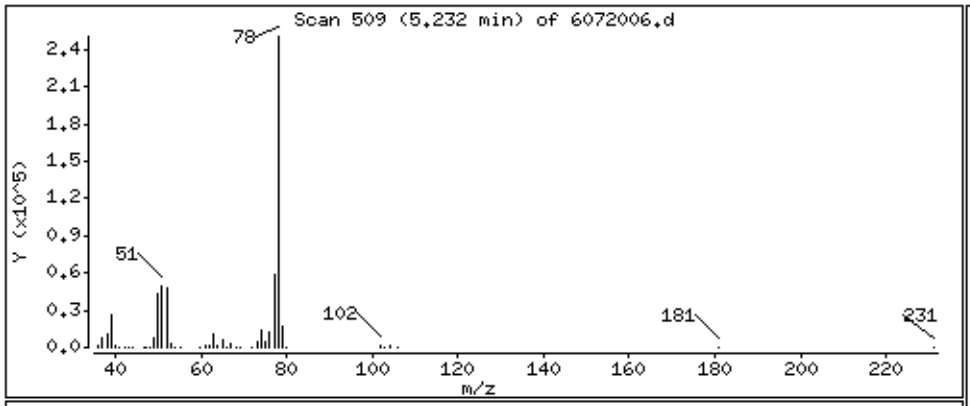
Operator: CT

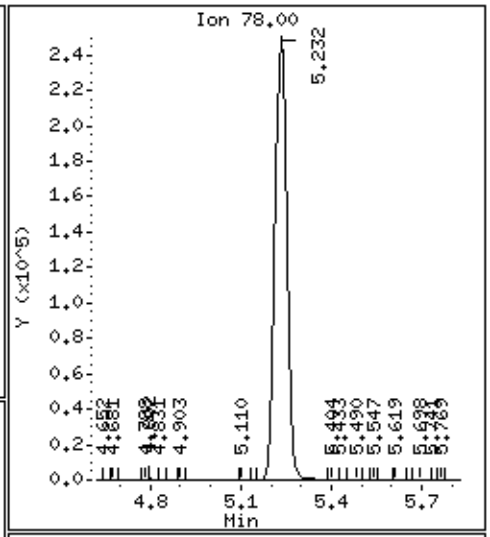
Column phase: RTx-624

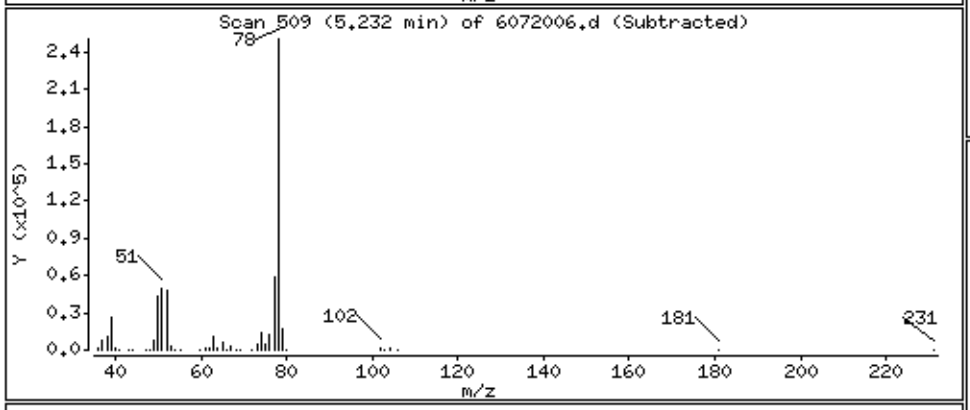
Column diameter: 0.53

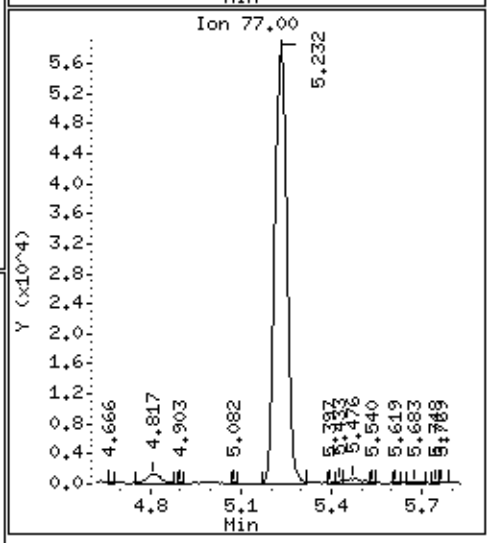
48 Benzene

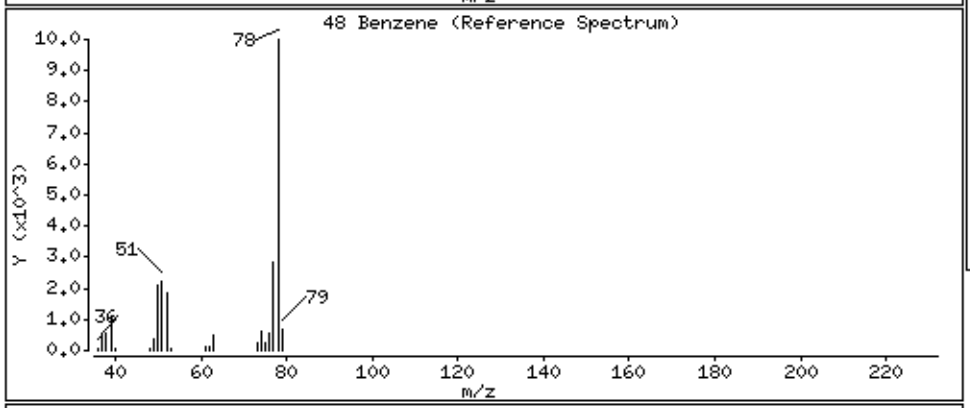
Concentration: 62.891 NG

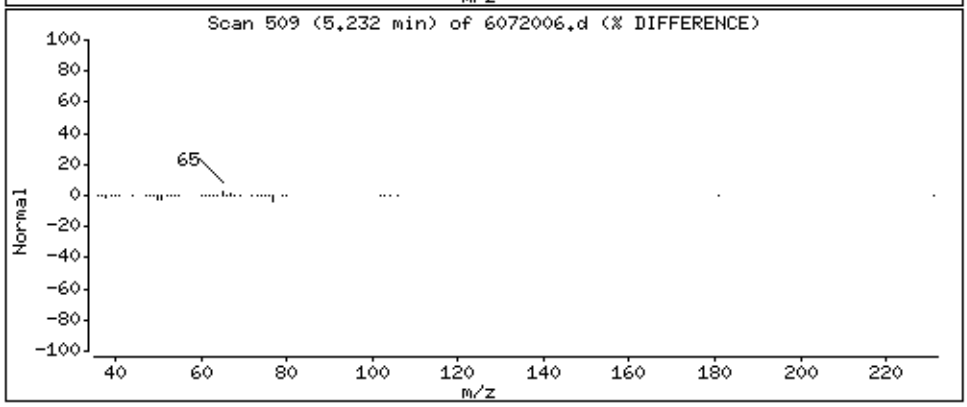












Data File: /chem/msd6.i/20jul16.b/6072006.d

Date : 20-JUL-2016 13:18

Client ID: LCSD

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCSD;LCSD

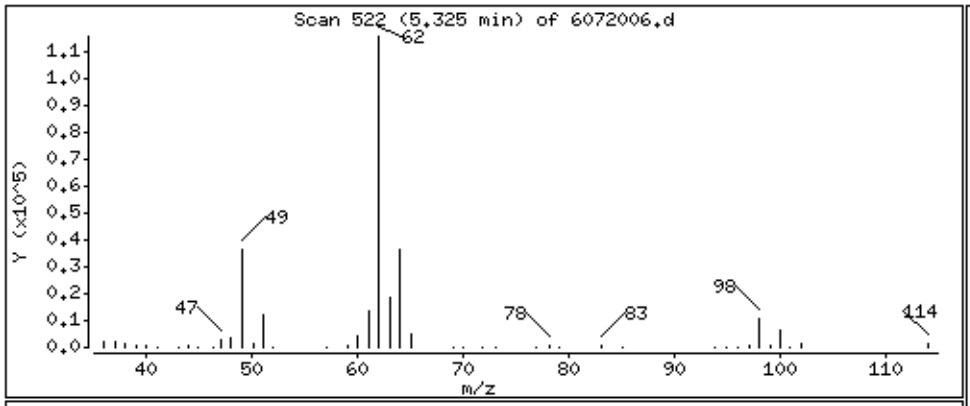
Operator: CT

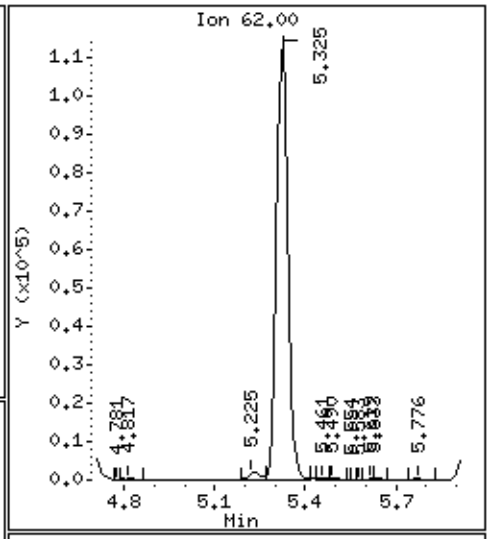
Column phase: RTx-624

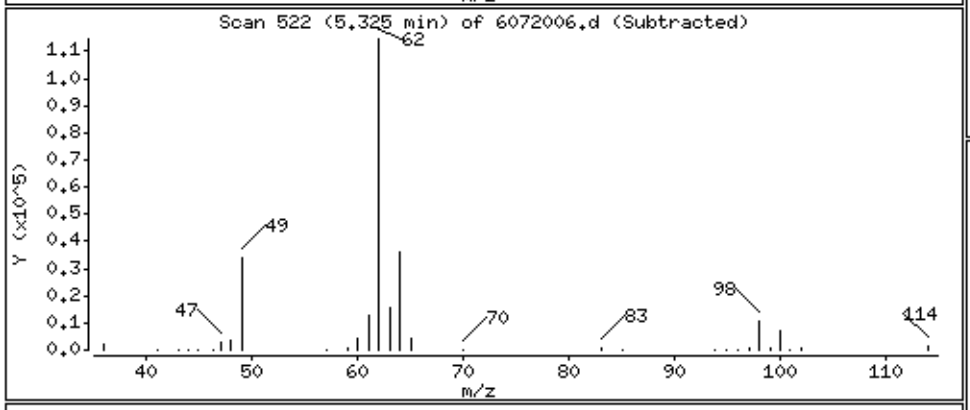
Column diameter: 0.53

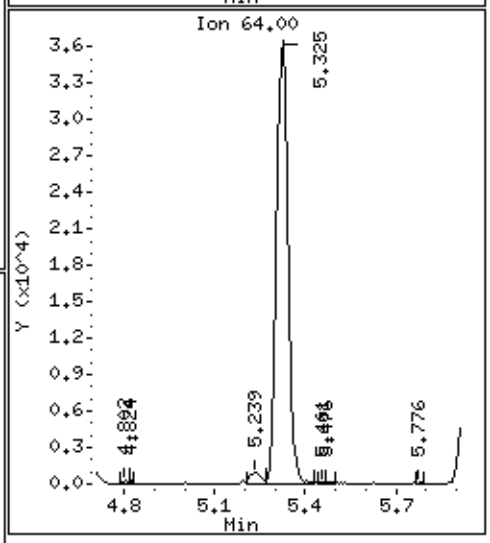
50 1,2-Dichloroethane

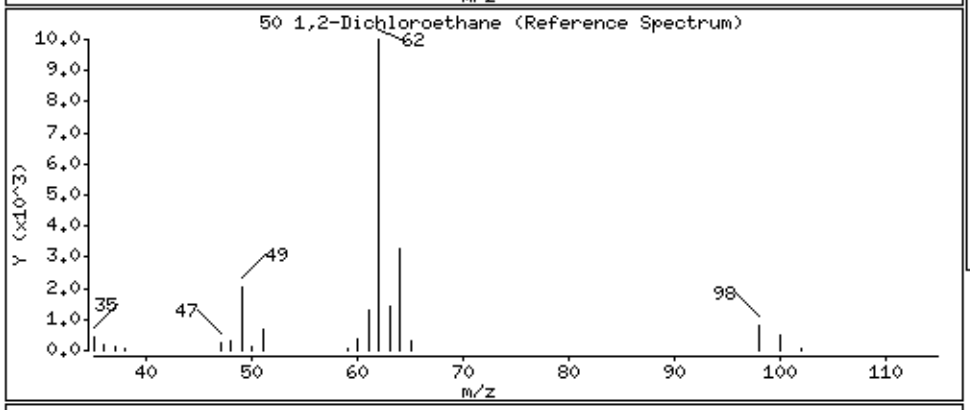
Concentration: 85.827 NG

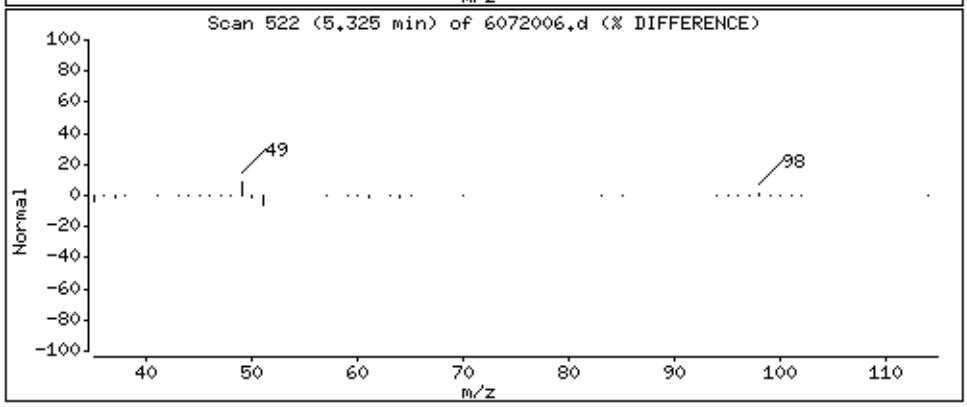












Data File: /chem/msd6.i/20jul16.b/6072006.d

Date : 20-JUL-2016 13:18

Client ID: LCSD

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCSD;LCSD

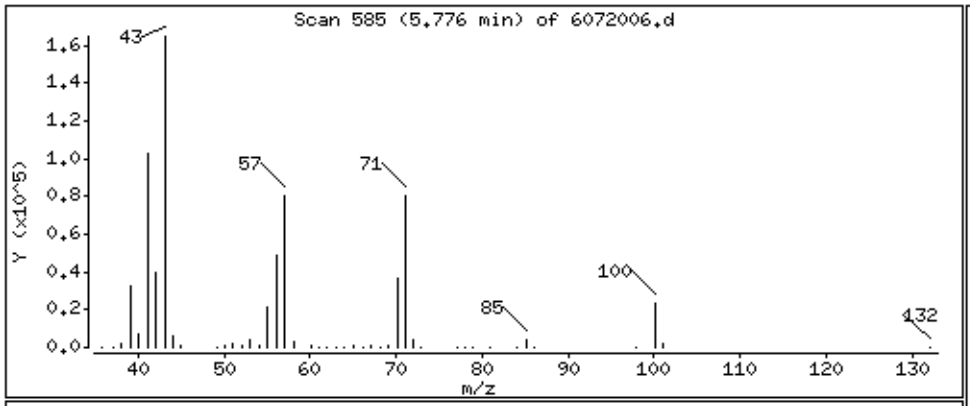
Operator: CT

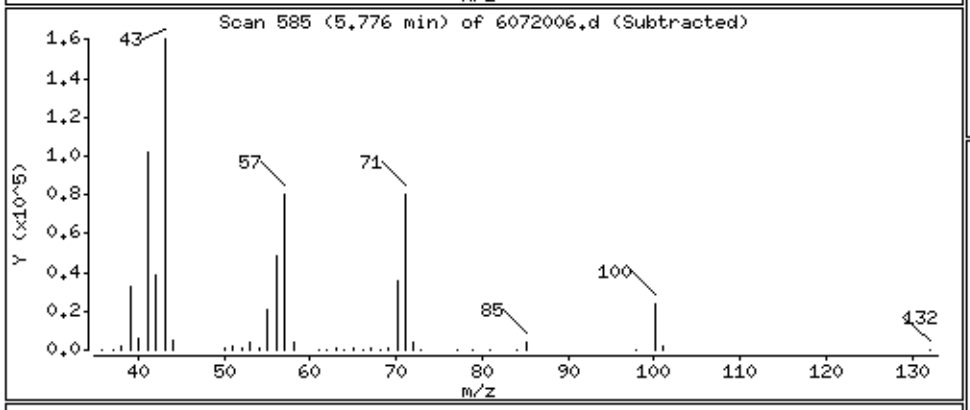
Column phase: RTx-624

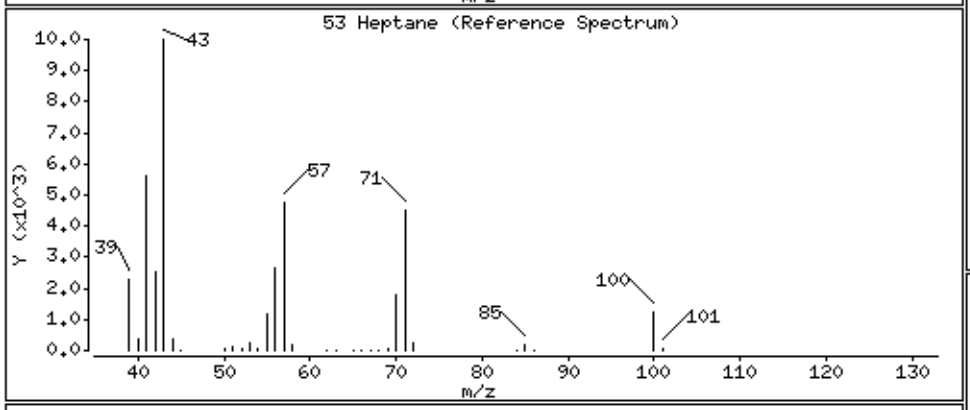
Column diameter: 0.53

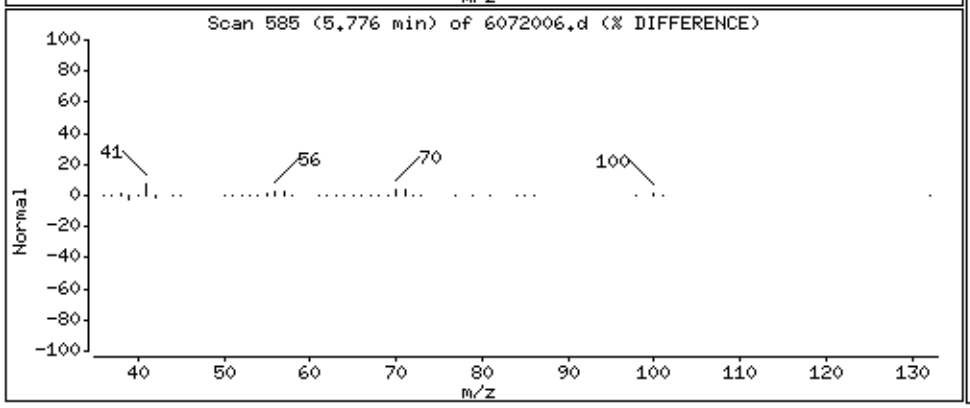
53 Heptane

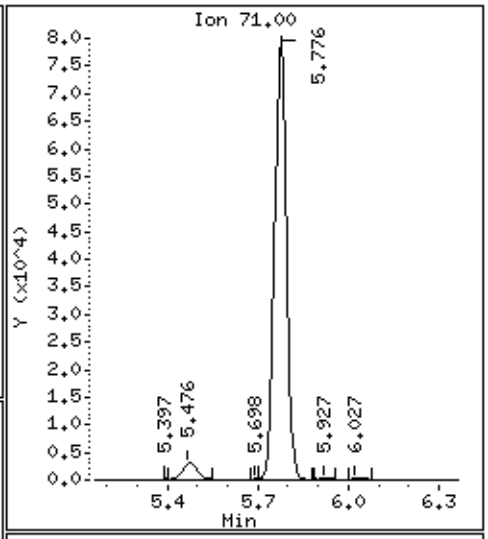
Concentration: 82.241 NG

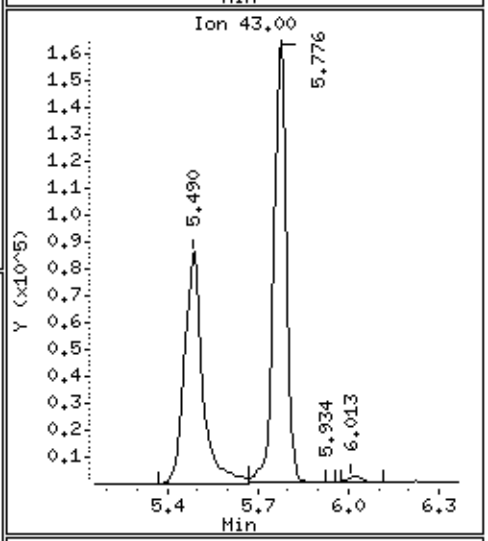


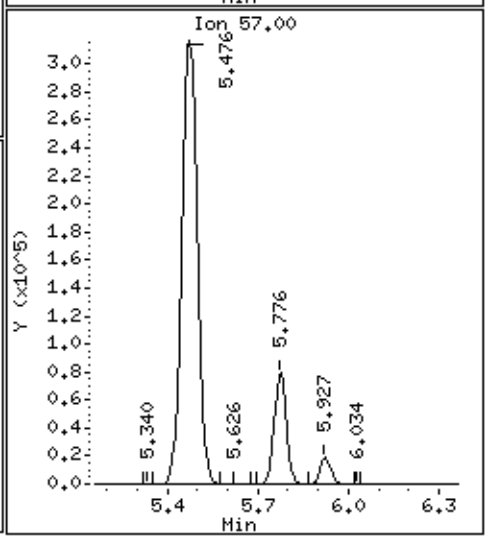












Data File: /chem/msd6.i/20jul16.b/6072006.d

Date : 20-JUL-2016 13:18

Client ID: LCSD

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCSD;LCSD

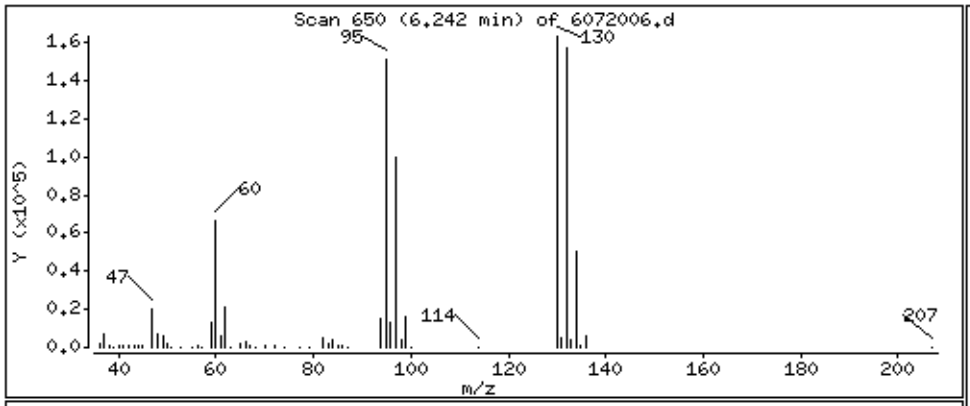
Operator: CT

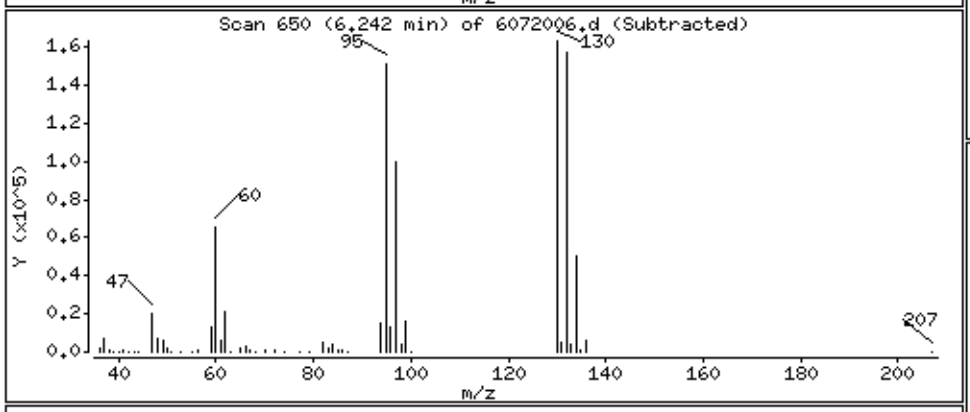
Column phase: RTx-624

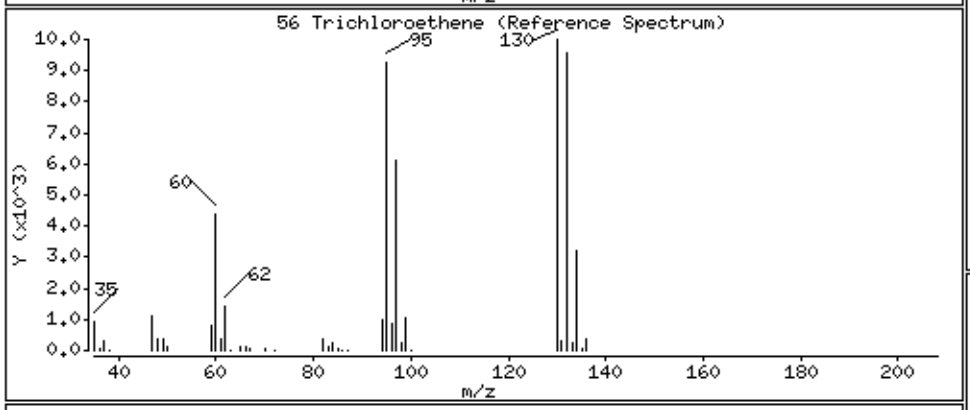
Column diameter: 0.53

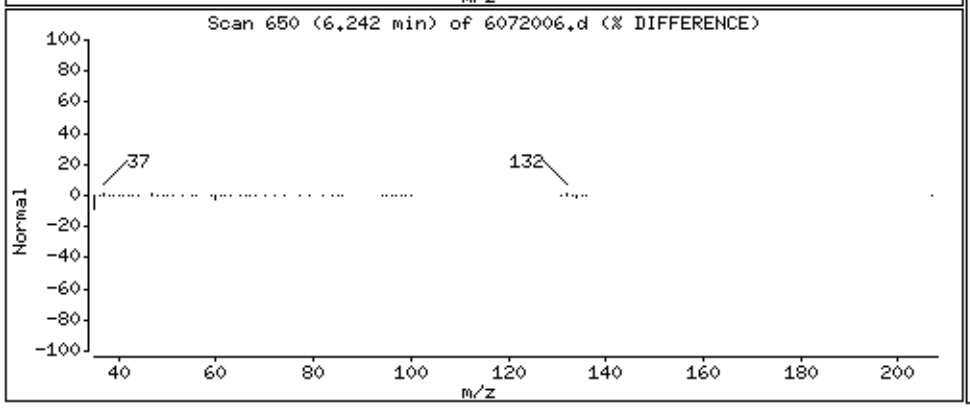
56 Trichloroethene

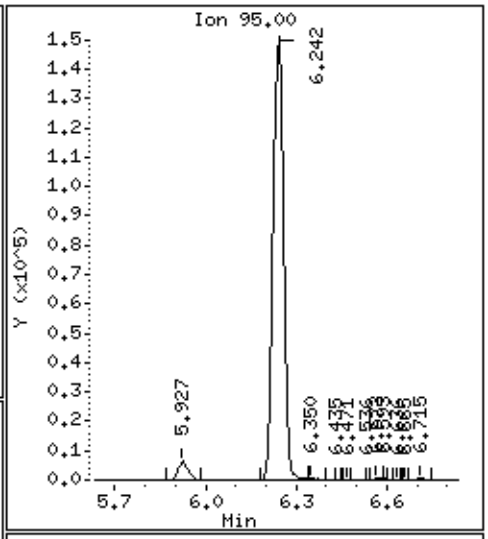
Concentration: 125.54 NG

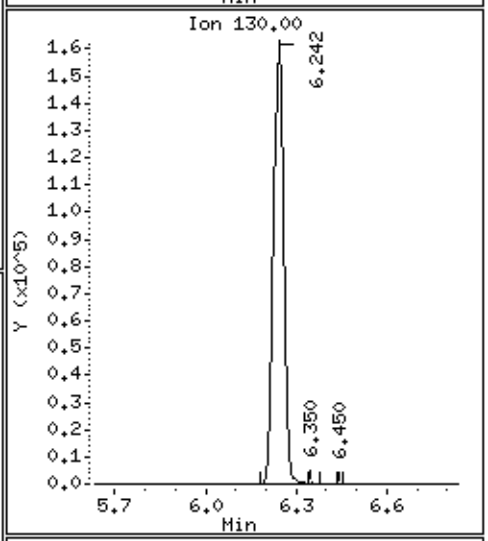


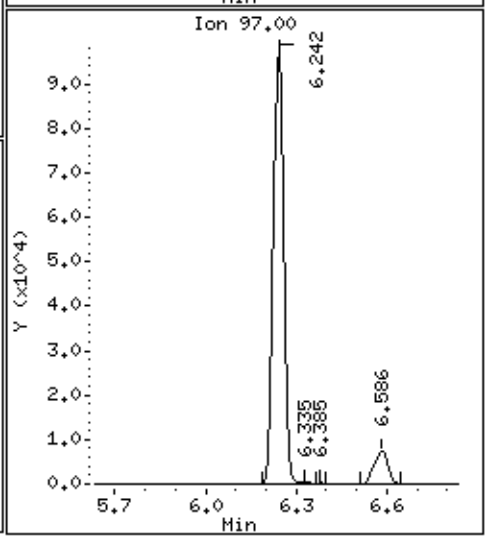












Data File: /chem/msd6.i/20jul16.b/6072006.d

Date : 20-JUL-2016 13:18

Client ID: LCSD

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCSD;LCSD

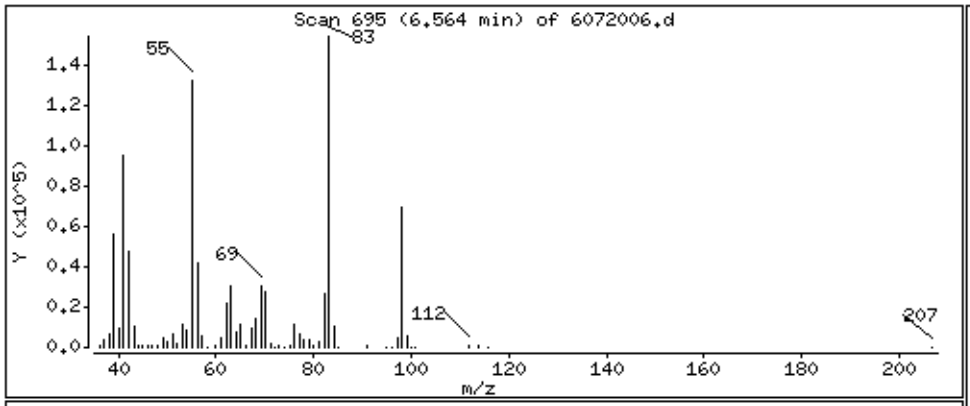
Operator: CT

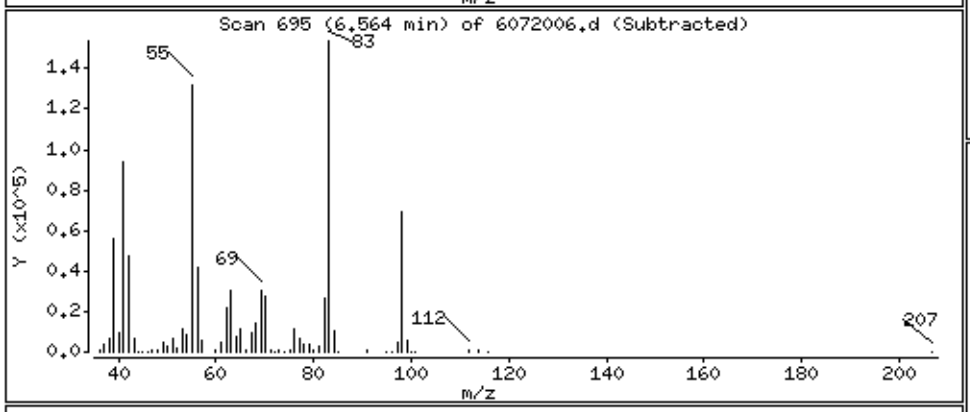
Column phase: RTx-624

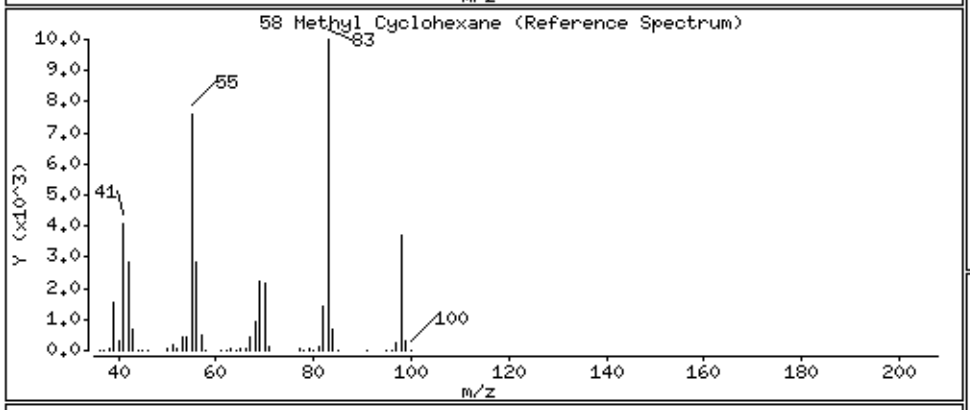
Column diameter: 0.53

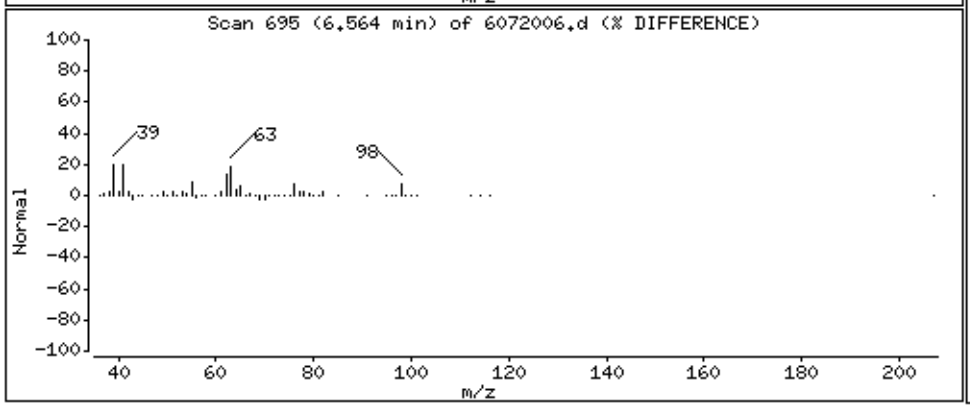
58 Methyl Cyclohexane

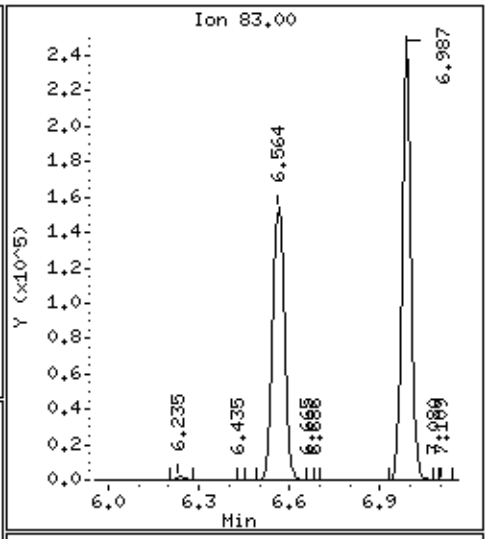
Concentration: 85.676 NG

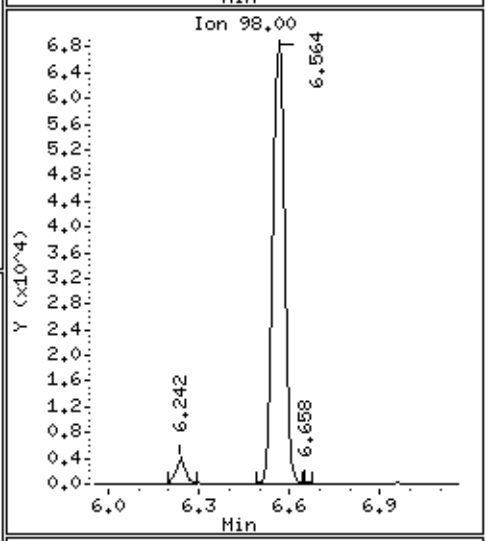


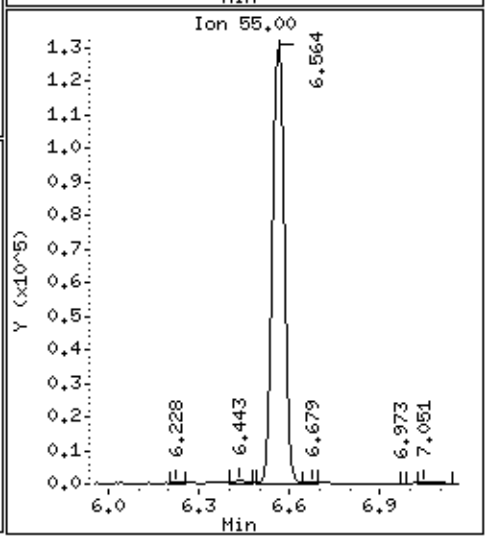












Data File: /chem/msd6.i/20jul16.b/6072006.d

Date : 20-JUL-2016 13:18

Client ID: LCSD

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCSD;LCSD

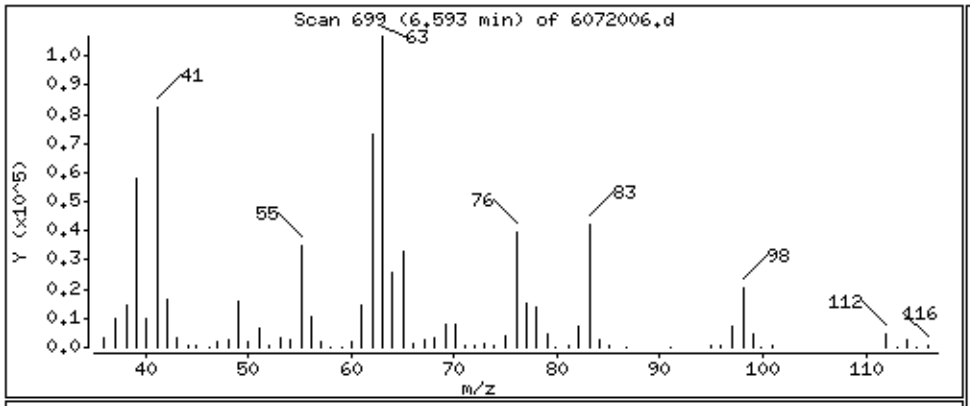
Operator: CT

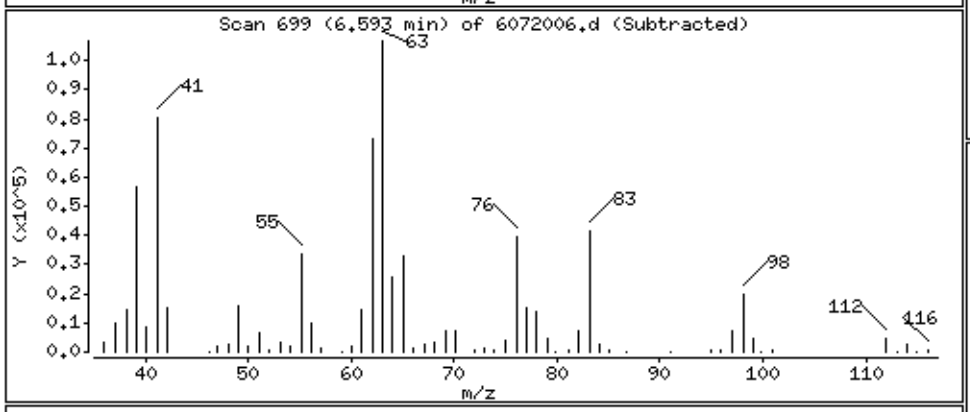
Column phase: RTx-624

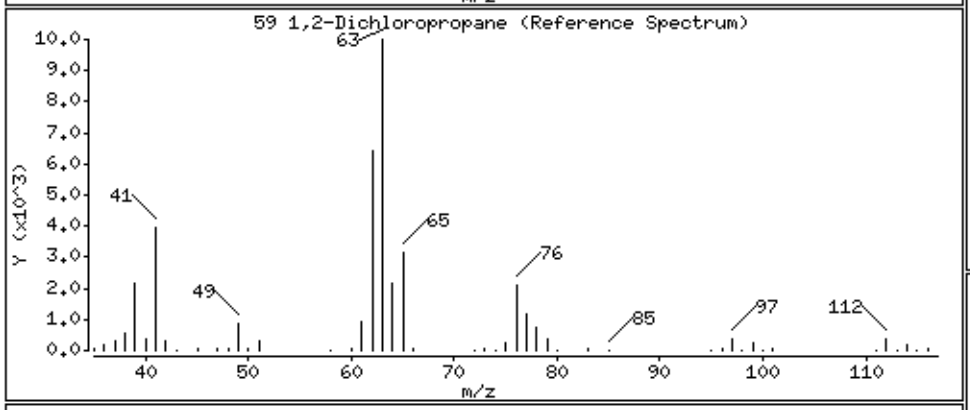
Column diameter: 0.53

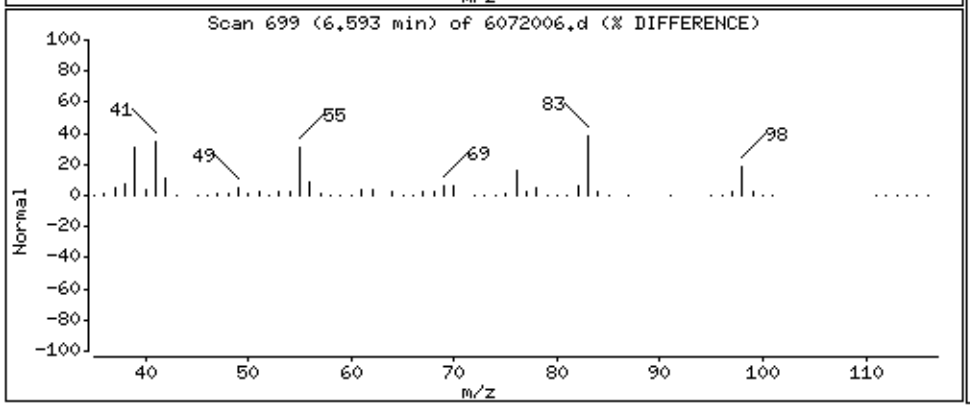
59 1,2-Dichloropropane

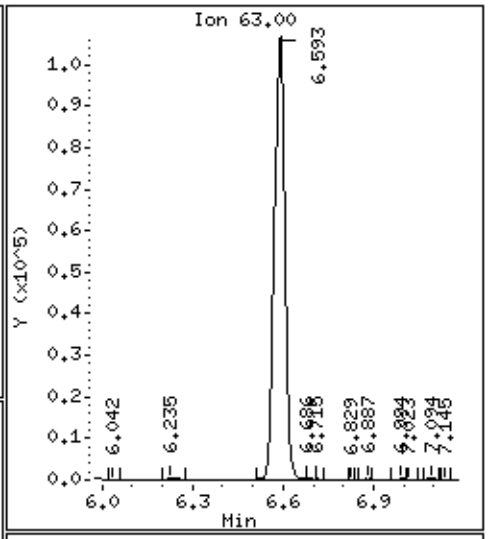
Concentration: 99.648 NG

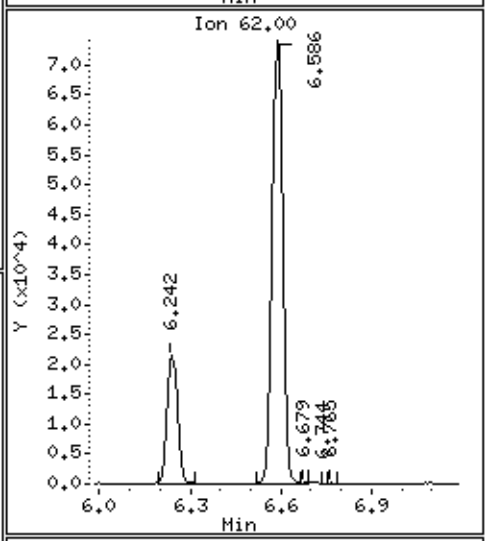


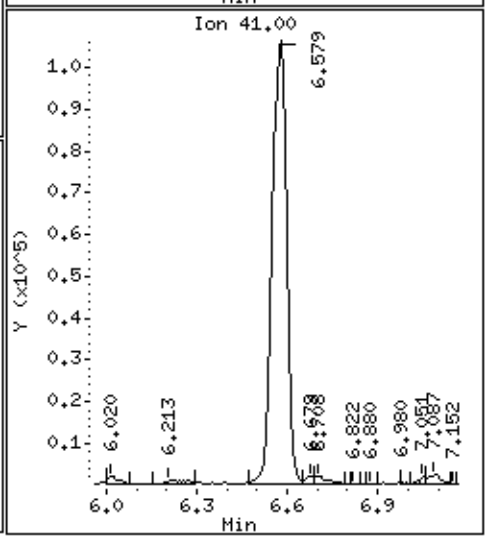












Data File: /chem/msd6.i/20jul16.b/6072006.d

Date : 20-JUL-2016 13:18

Client ID: LCSD

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCSD;LCSD

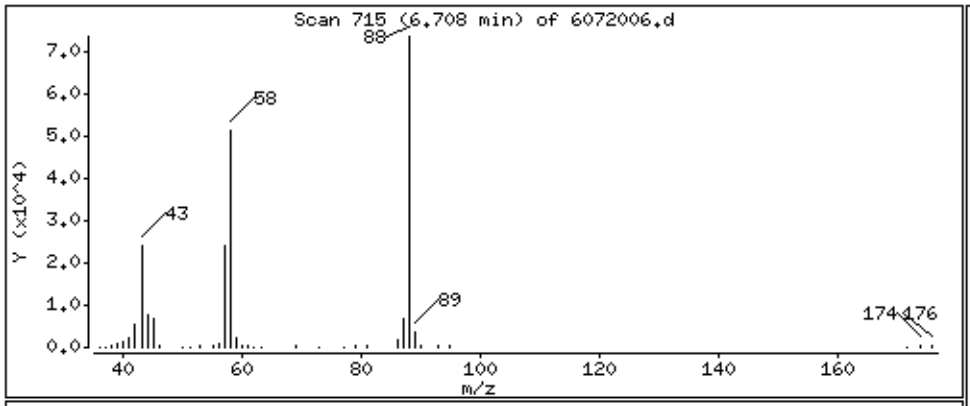
Operator: CT

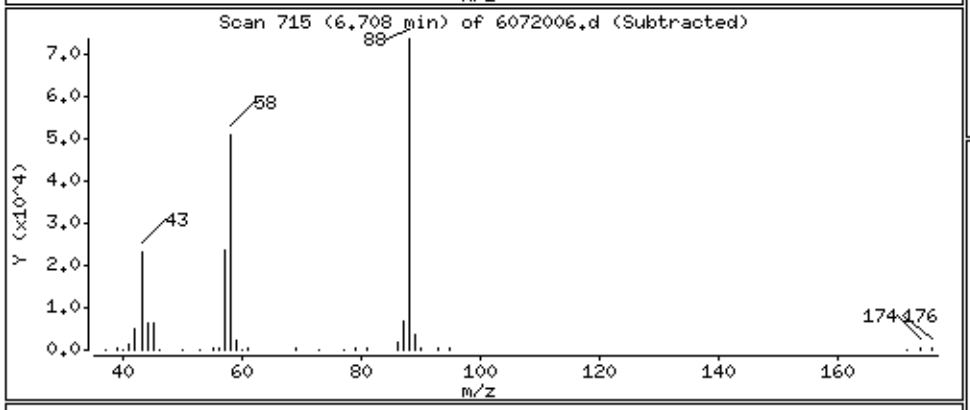
Column phase: RTx-624

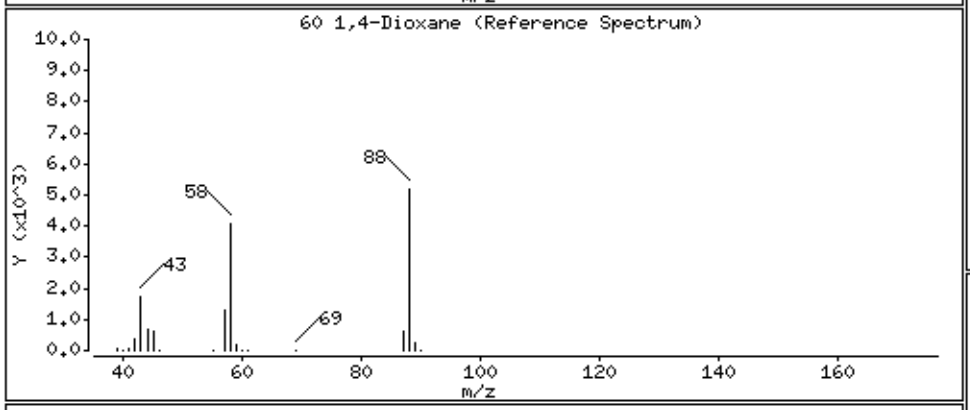
Column diameter: 0.53

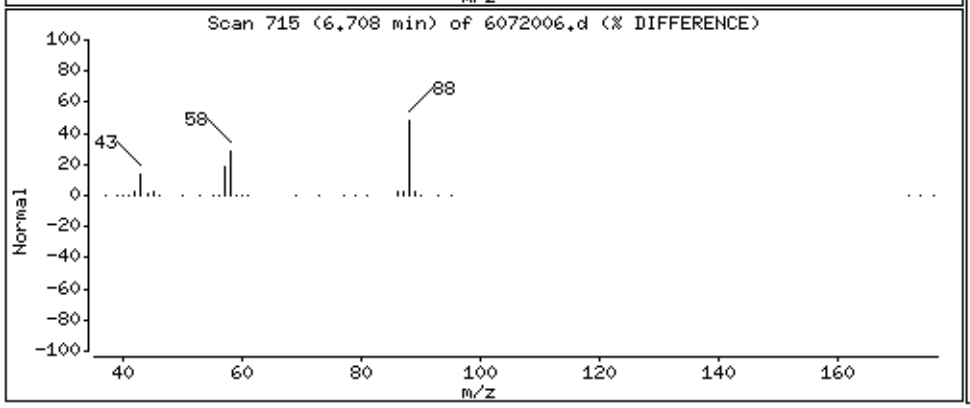
60 1,4-Dioxane

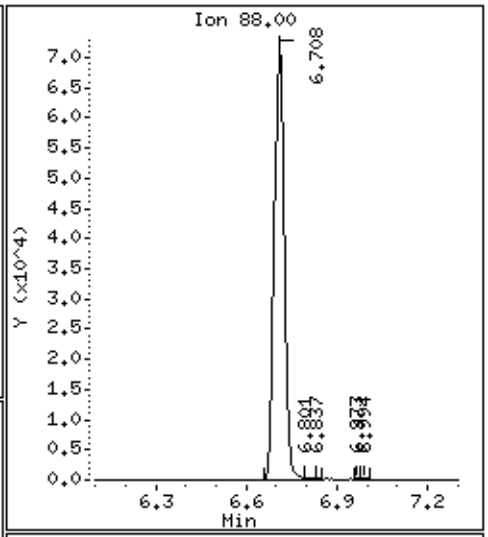
Concentration: 76.688 NG

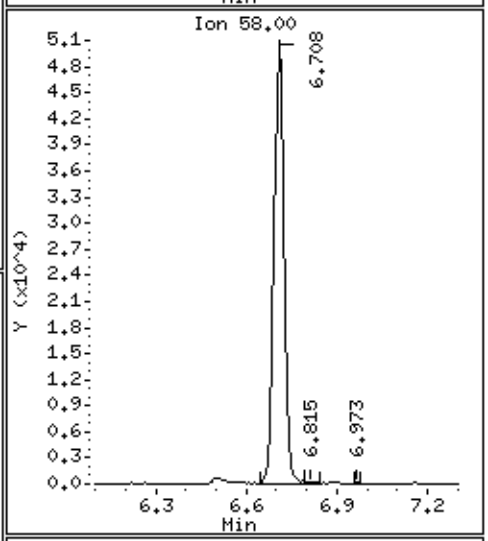


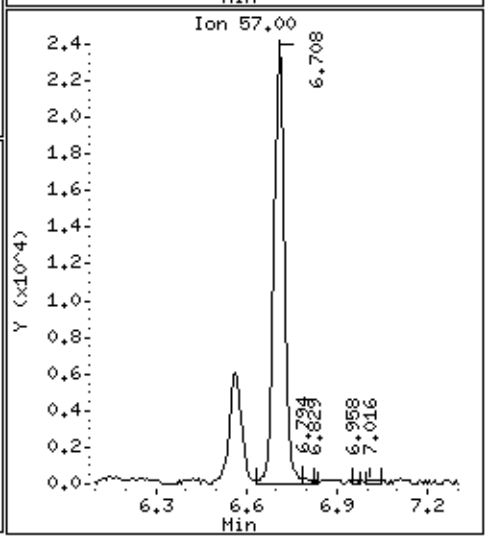












Data File: /chem/msd6.i/20jul16.b/6072006.d

Date : 20-JUL-2016 13:18

Client ID: LCSD

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCSD;LCSD

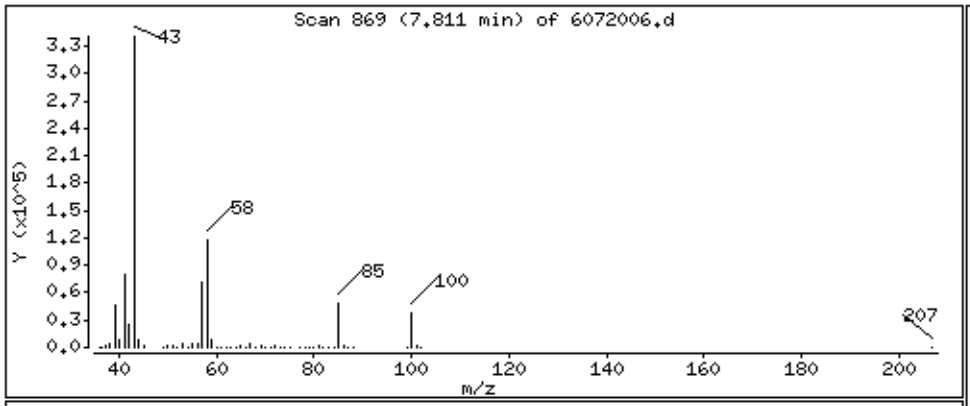
Operator: CT

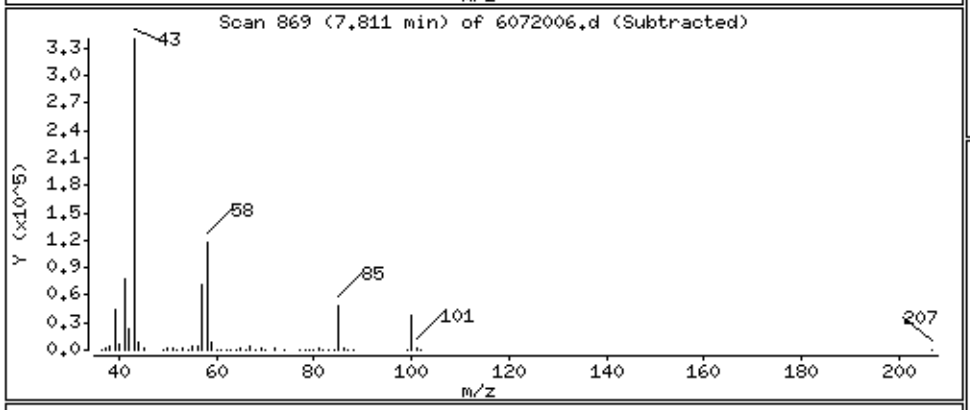
Column phase: RTx-624

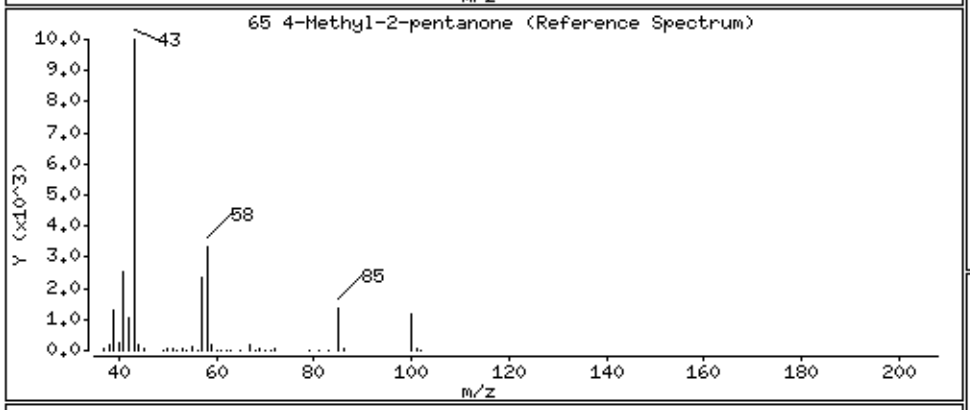
Column diameter: 0.53

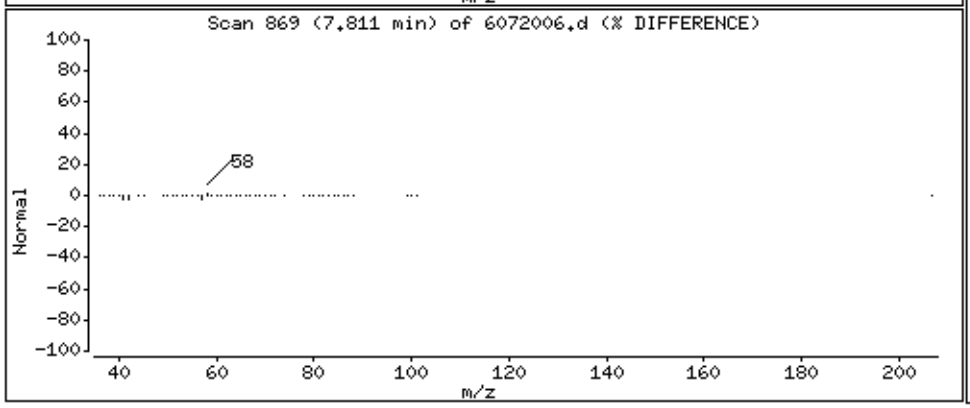
65 4-Methyl-2-pentanone

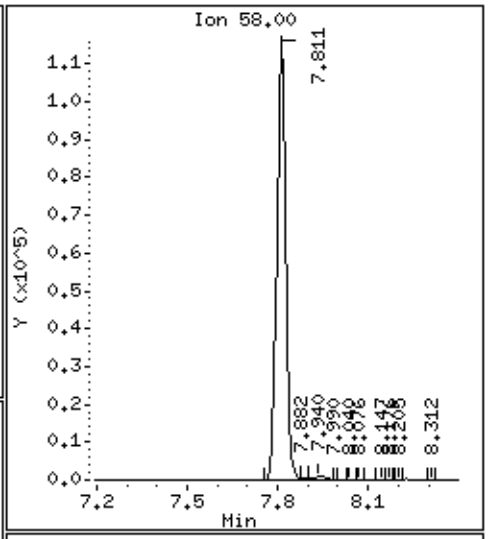
Concentration: 101.00 NG

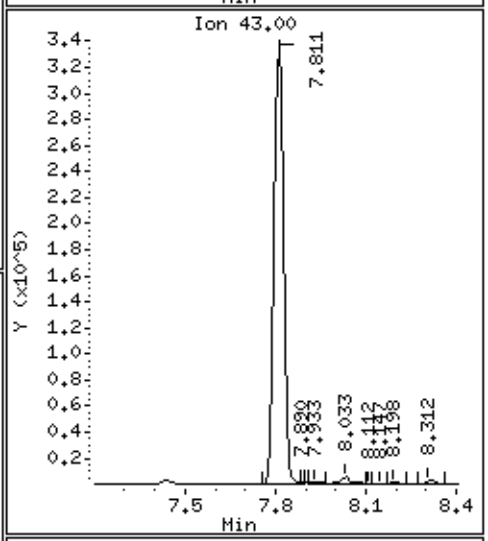


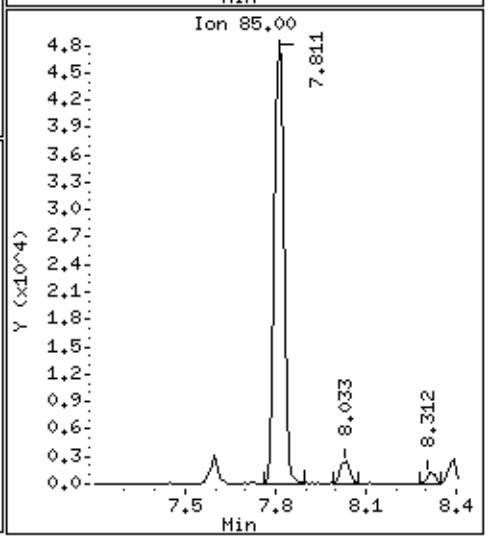












Data File: /chem/msd6.i/20jul16.b/6072006.d

Date : 20-JUL-2016 13:18

Client ID: LCSD

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCSD;LCSD

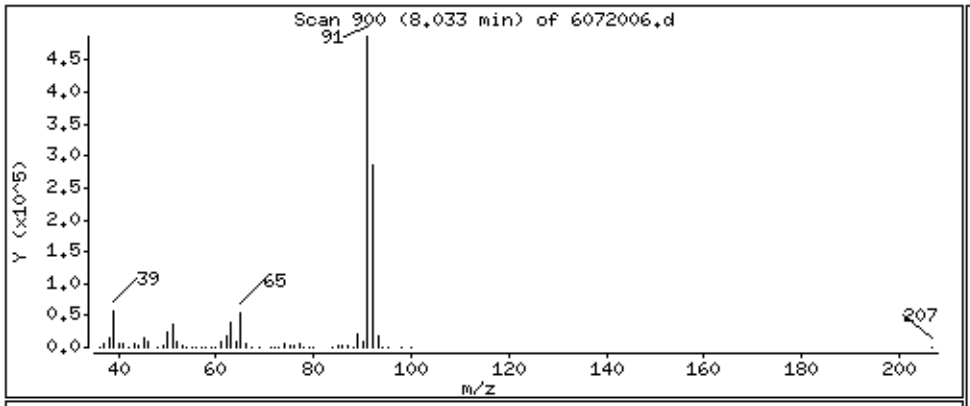
Operator: CT

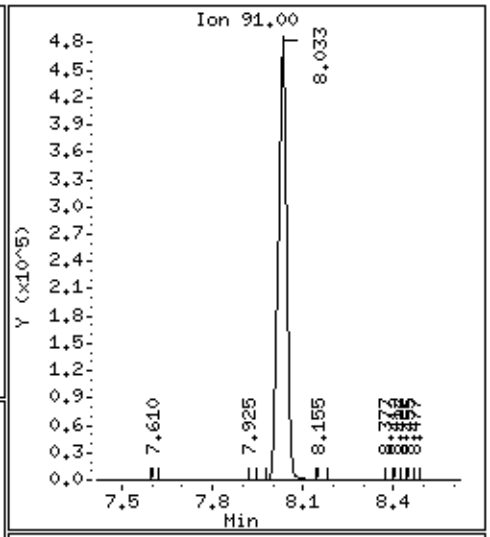
Column phase: RTx-624

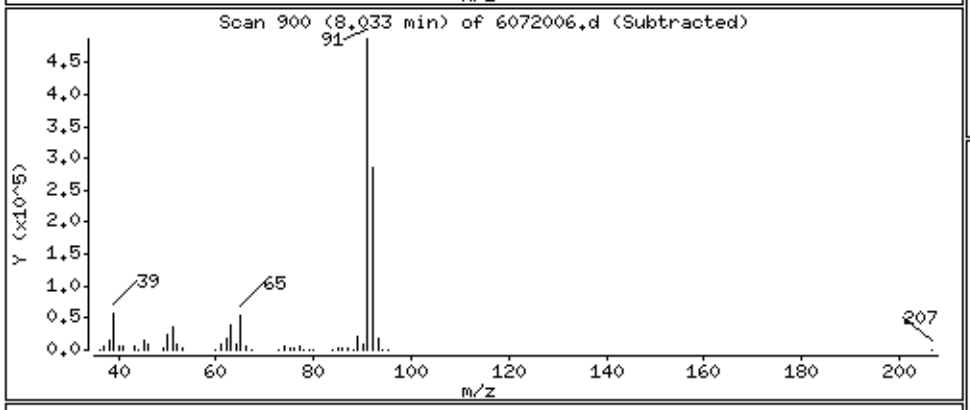
Column diameter: 0.53

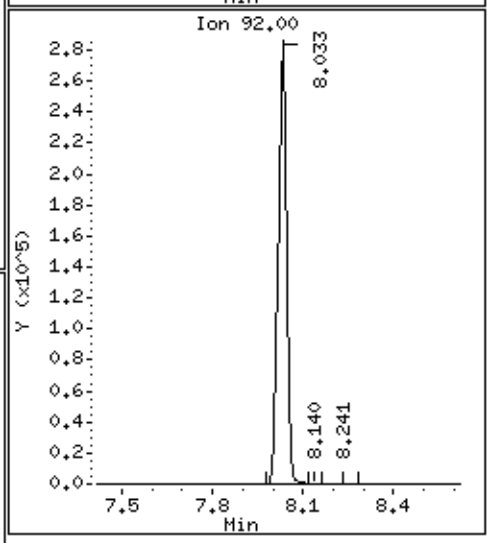
67 Toluene

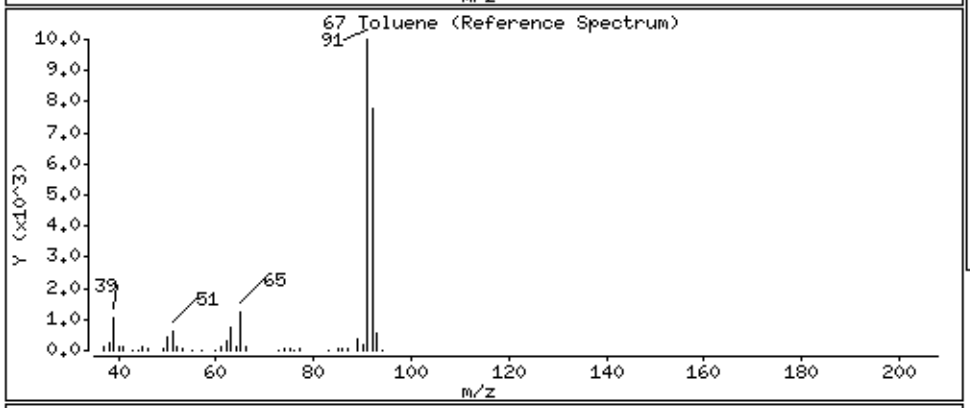
Concentration: 76.831 NG

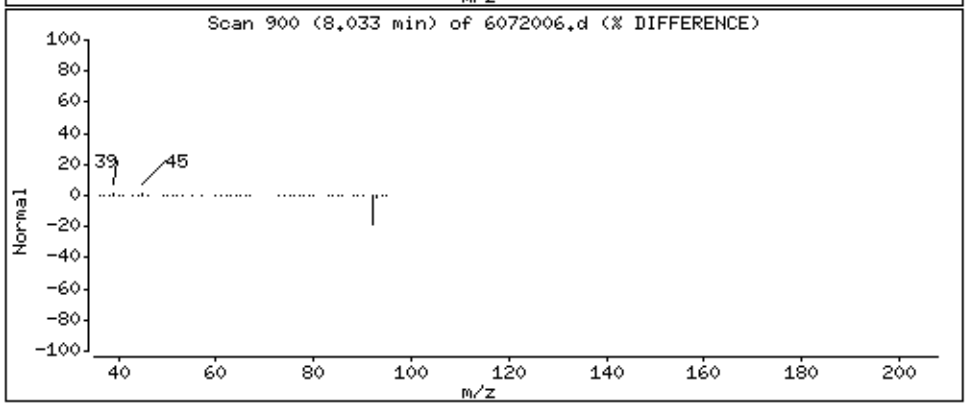












Data File: /chem/msd6.i/20jul16.b/6072006.d

Date : 20-JUL-2016 13:18

Client ID: LCSD

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCSD;LCSD

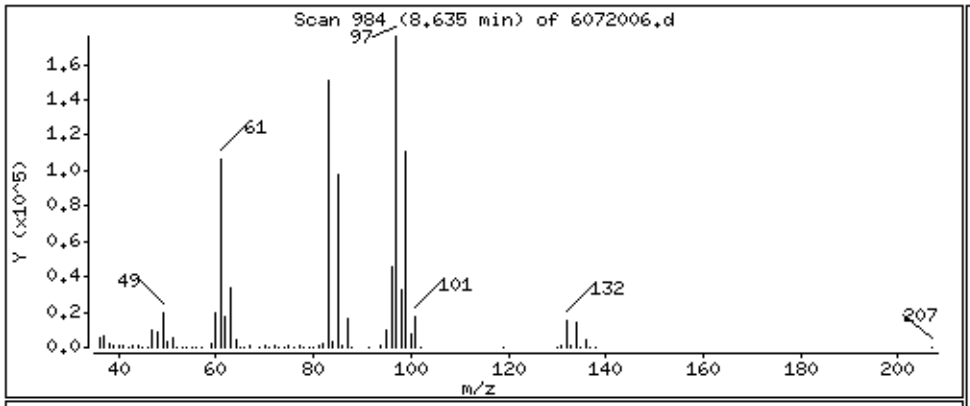
Operator: CT

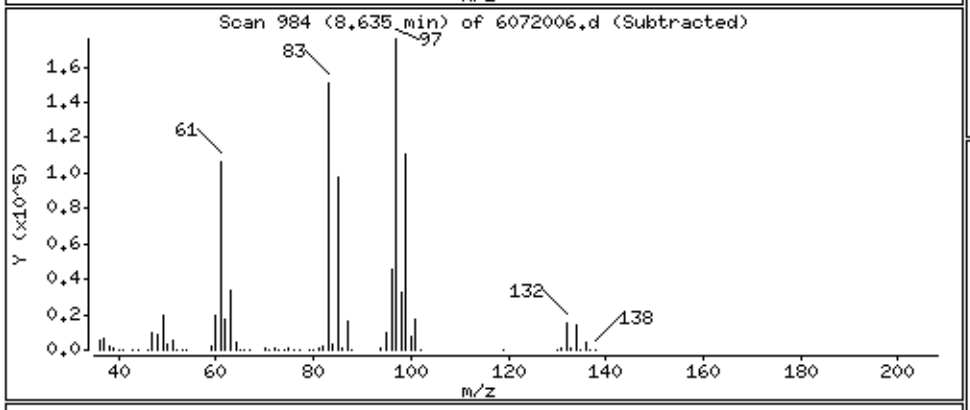
Column phase: RTx-624

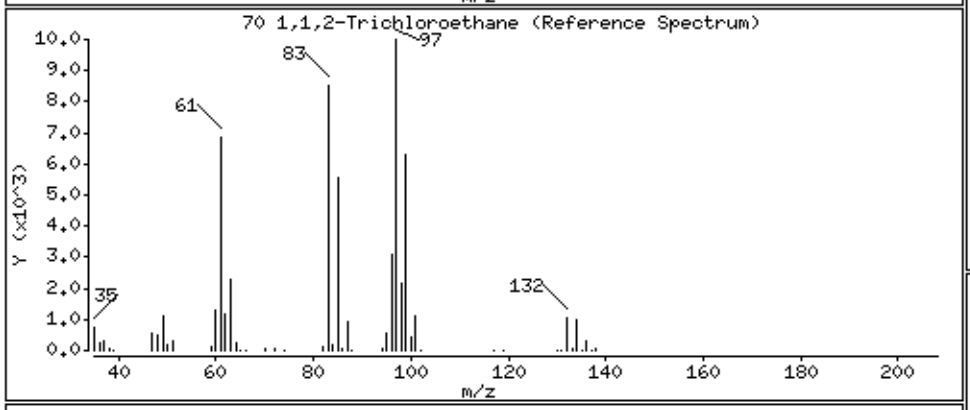
Column diameter: 0.53

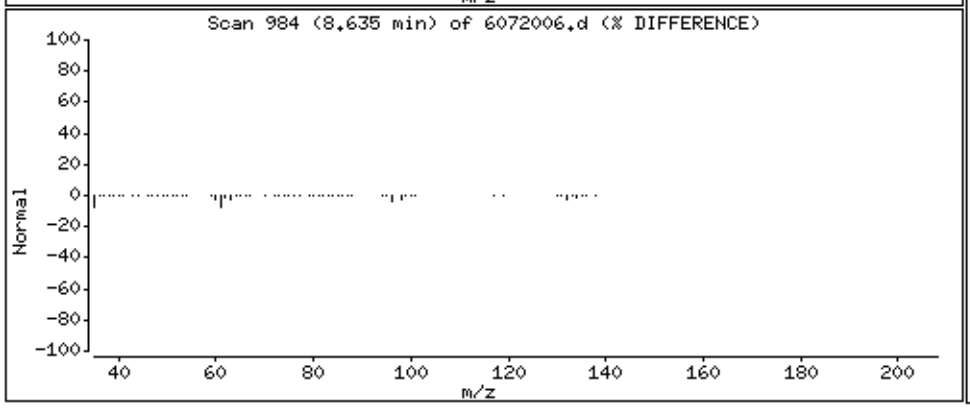
70 1,1,2-Trichloroethane

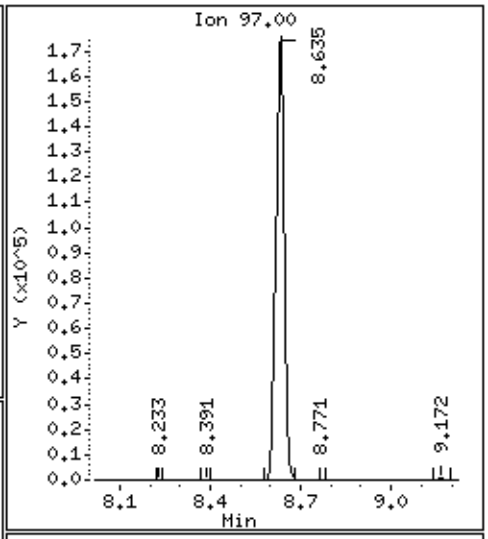
Concentration: 132.08 NG

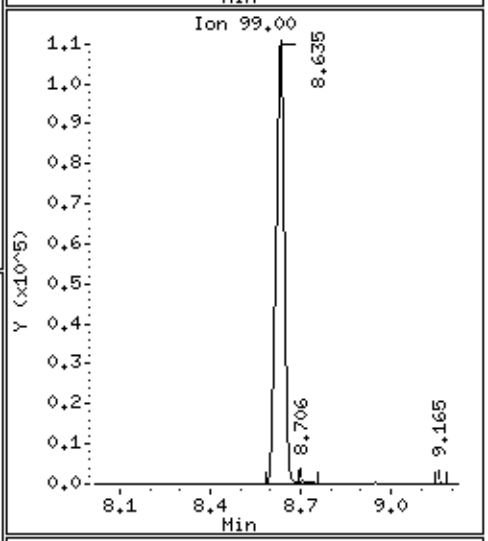


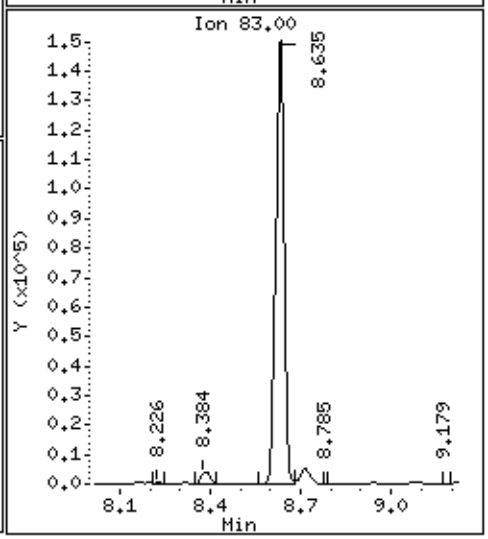












Data File: /chem/msd6.i/20jul16.b/6072006.d

Date : 20-JUL-2016 13:18

Client ID: LCSD

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCSD;LCSD

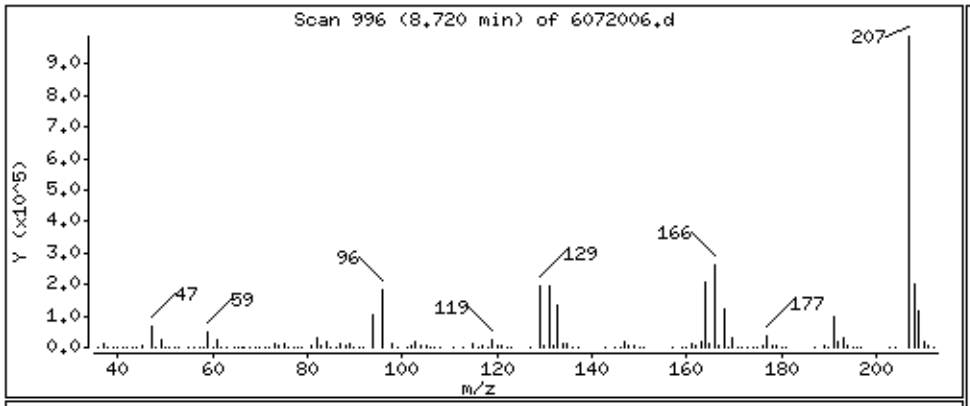
Operator: CT

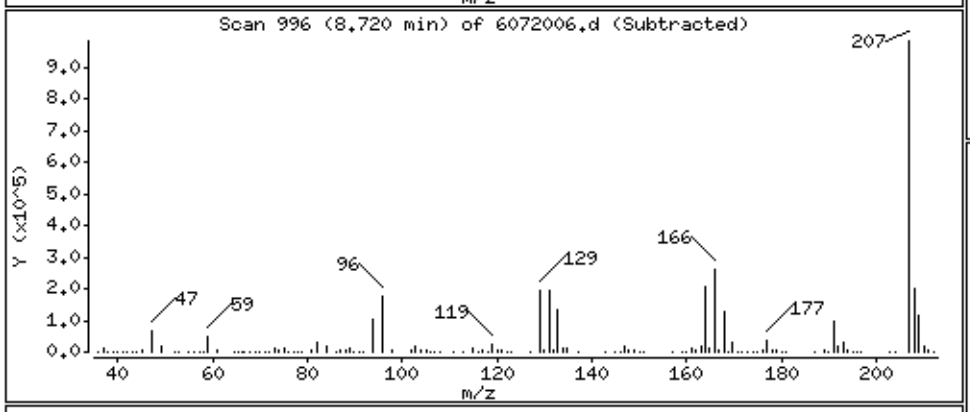
Column phase: RTx-624

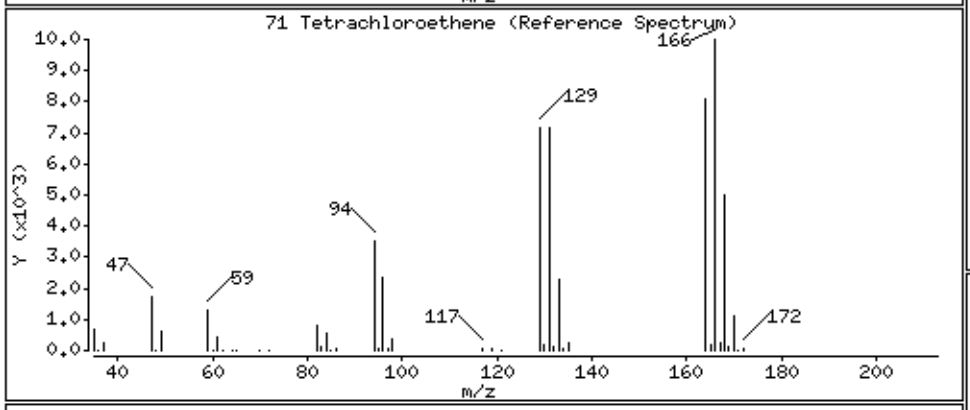
Column diameter: 0.53

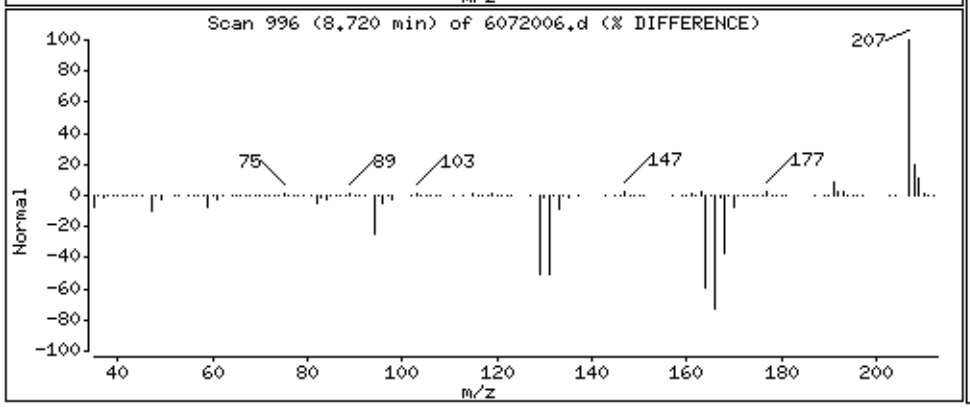
71 Tetrachloroethene

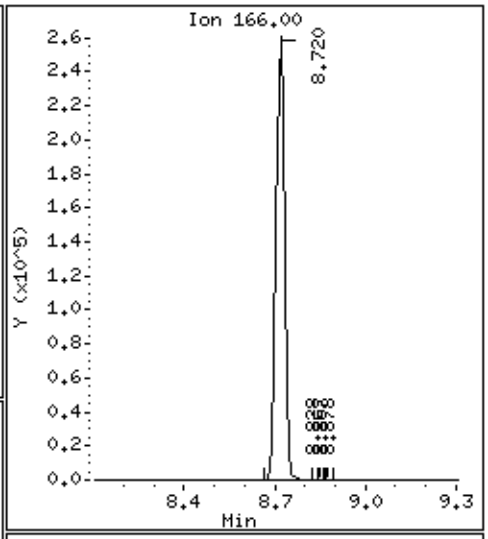
Concentration: 142.28 NG

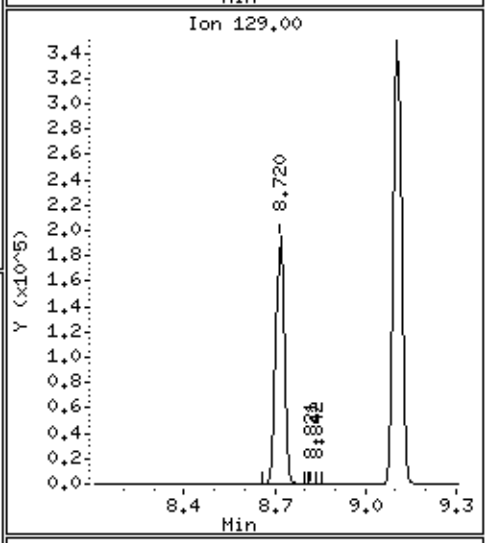


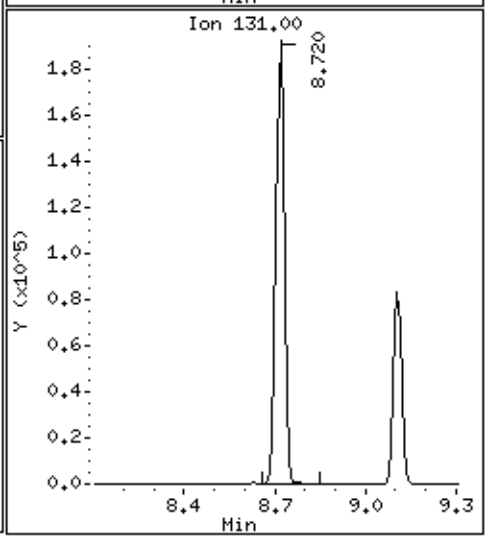












Data File: /chem/msd6.i/20jul16.b/6072006.d

Date : 20-JUL-2016 13:18

Client ID: LCSD

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCSD;LCSD

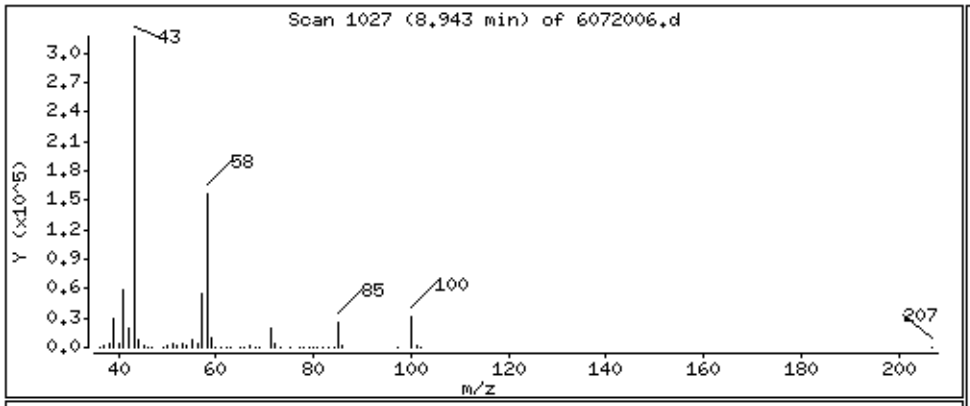
Operator: CT

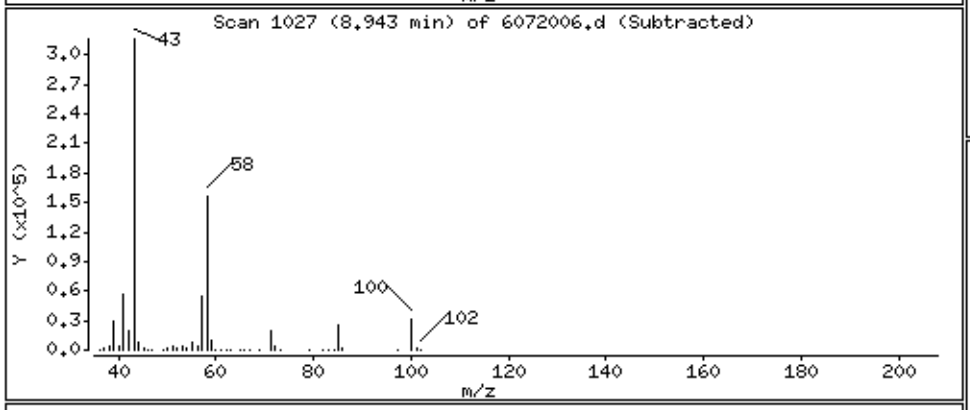
Column phase: RTx-624

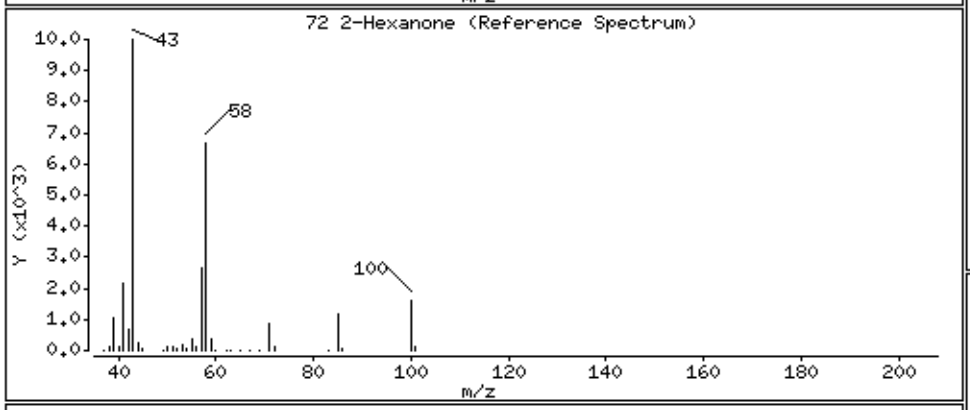
Column diameter: 0.53

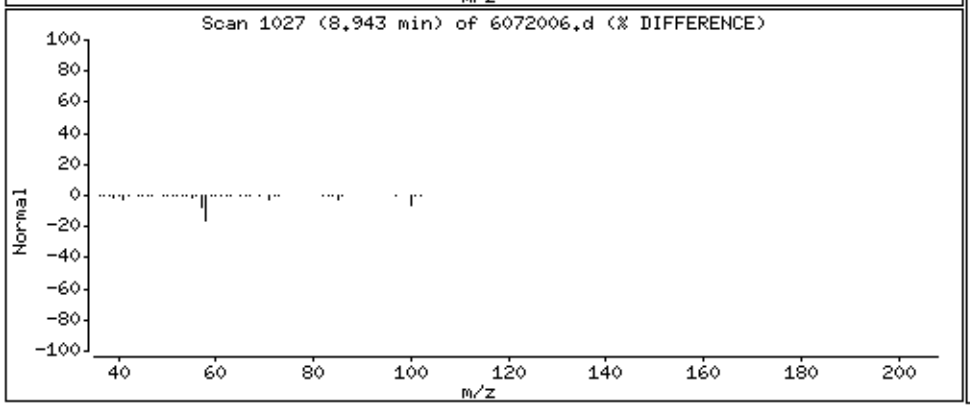
72 2-Hexanone

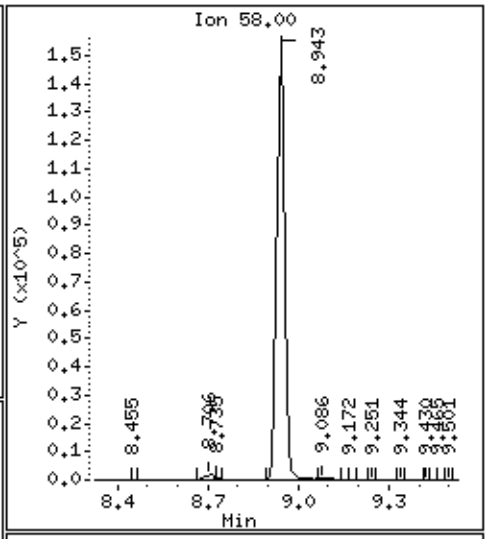
Concentration: 75.213 NG

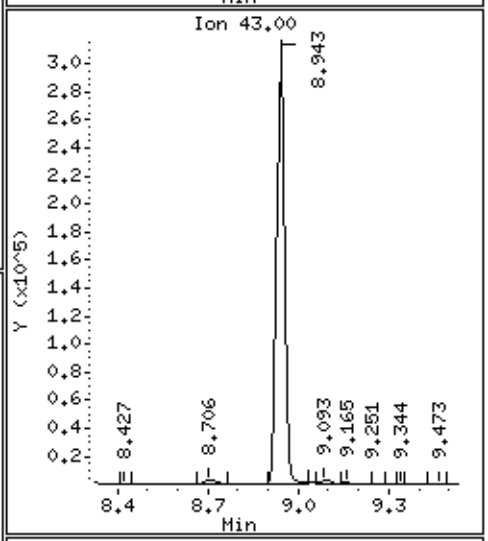


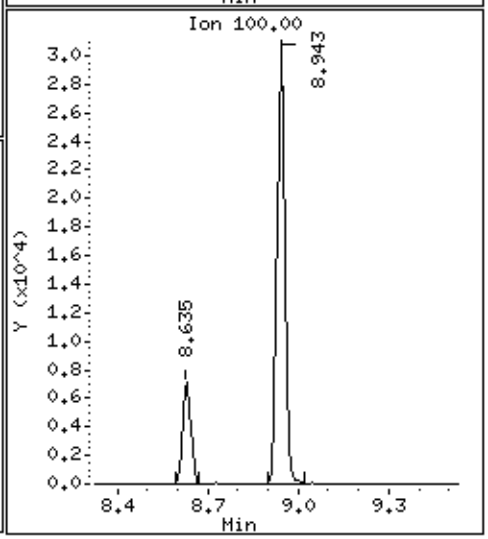












Data File: /chem/msd6.i/20jul16.b/6072006.d

Date : 20-JUL-2016 13:18

Client ID: LCSD

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCSD;LCSD

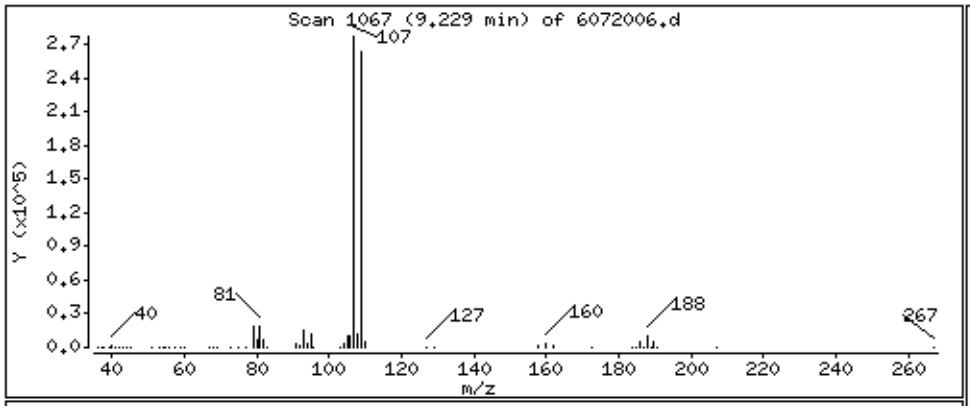
Operator: CT

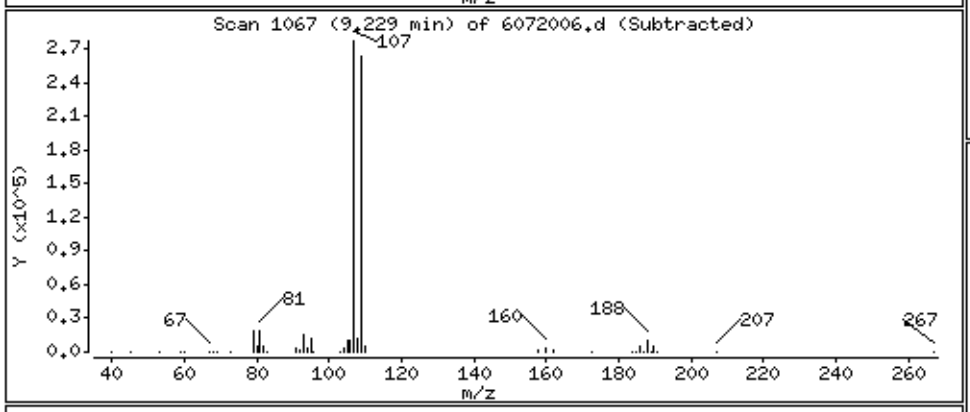
Column phase: RTx-624

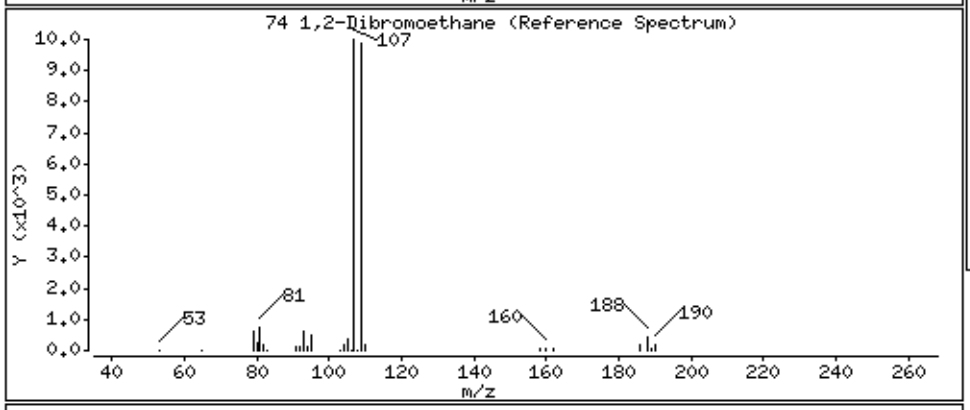
Column diameter: 0.53

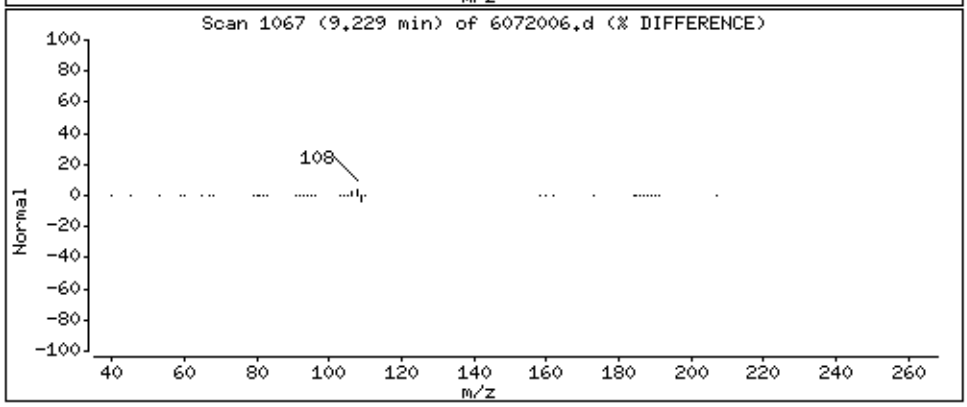
74 1,2-Dibromoethane

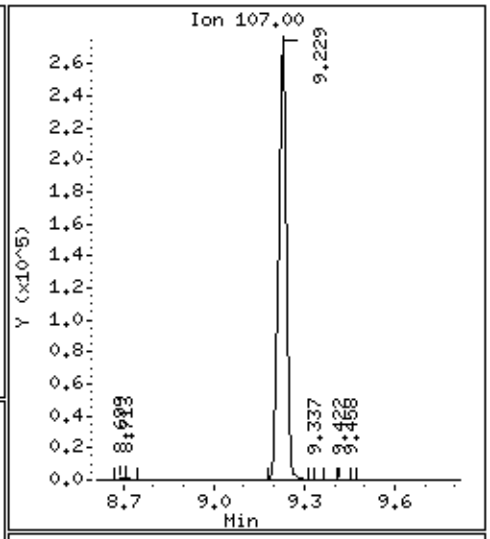
Concentration: 155.61 NG

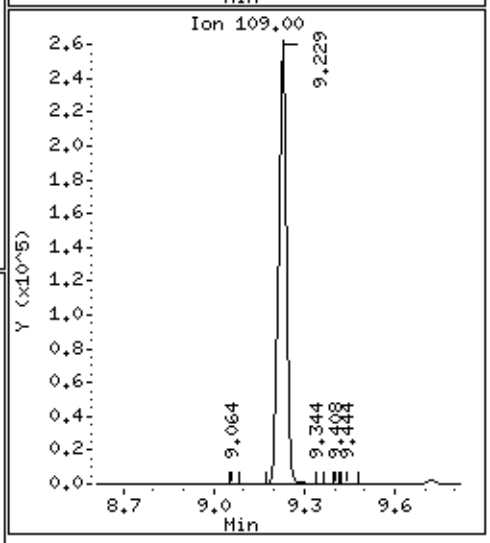












Data File: /chem/msd6.i/20jul16.b/6072006.d

Date : 20-JUL-2016 13:18

Client ID: LCSD

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCSD;LCSD

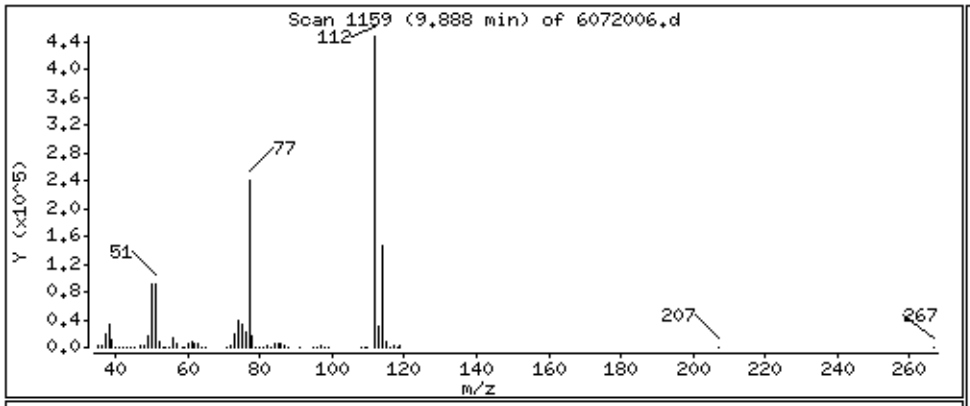
Operator: CT

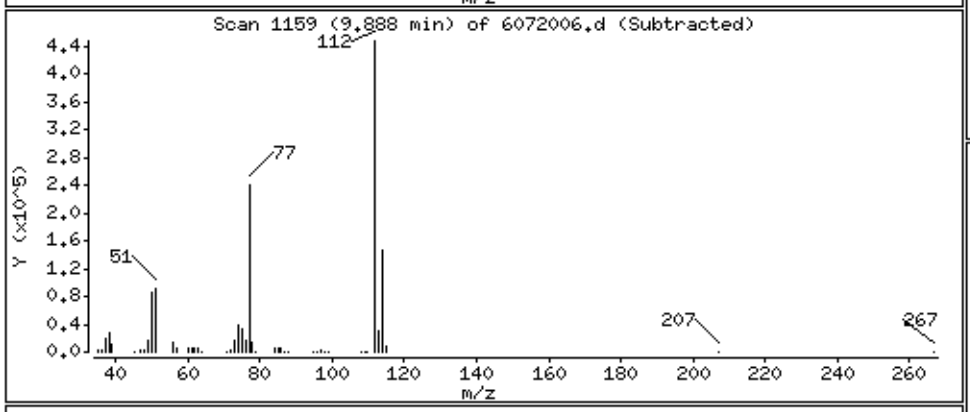
Column phase: RTx-624

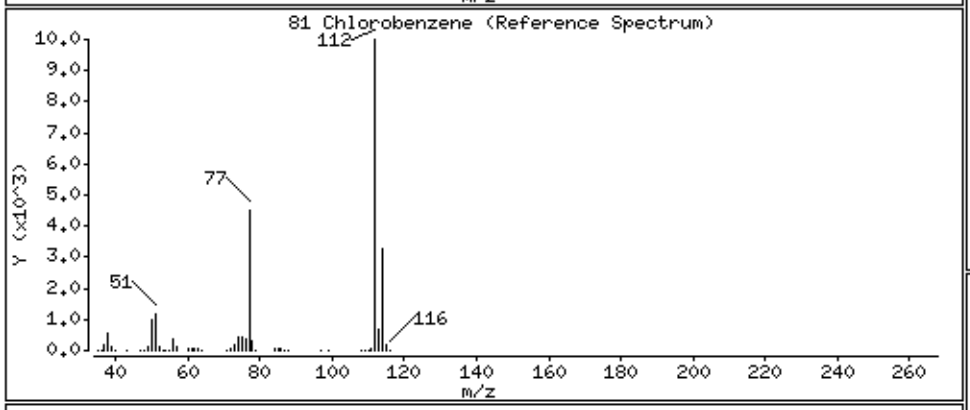
Column diameter: 0.53

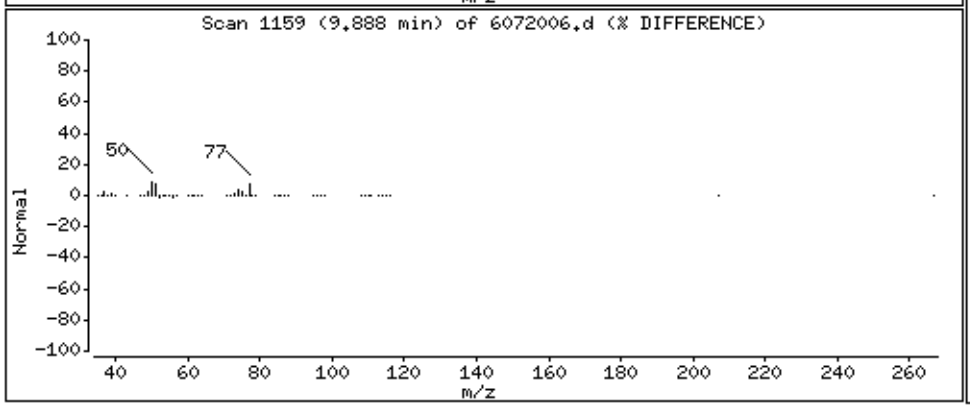
81 Chlorobenzene

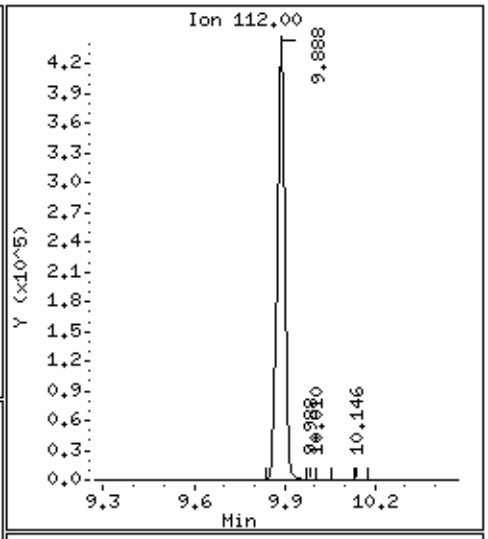
Concentration: 96.276 NG

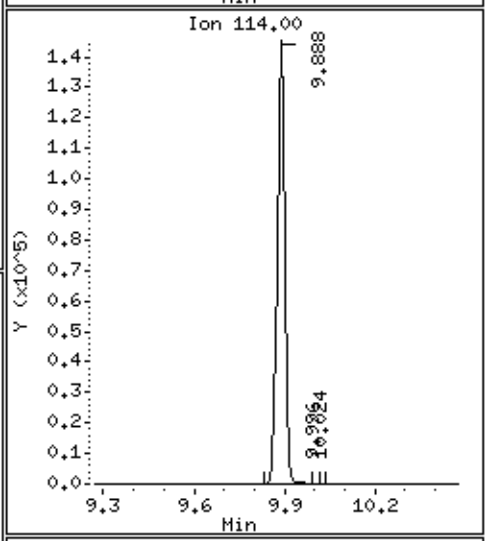


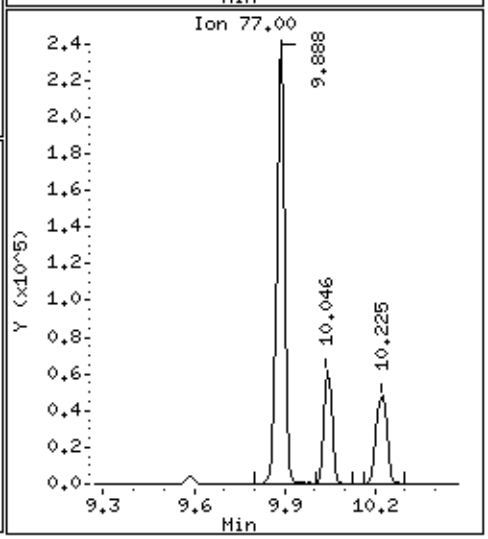












Data File: /chem/msd6.i/20jul16.b/6072006.d

Date : 20-JUL-2016 13:18

Client ID: LCSD

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCSD;LCSD

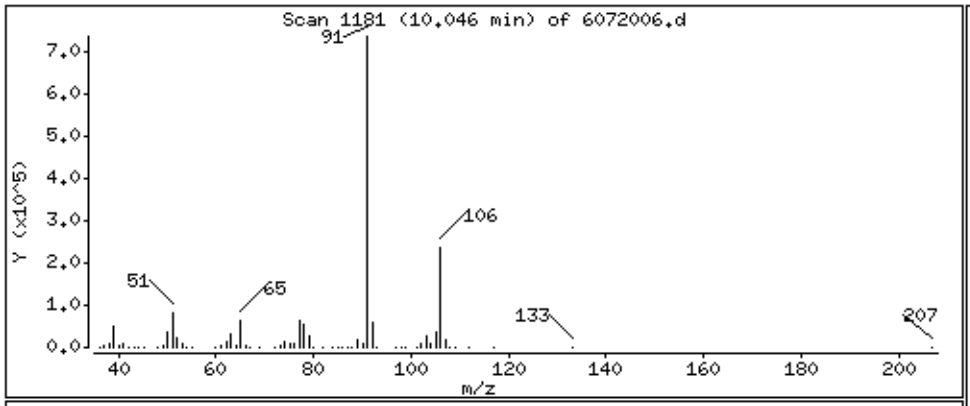
Operator: CT

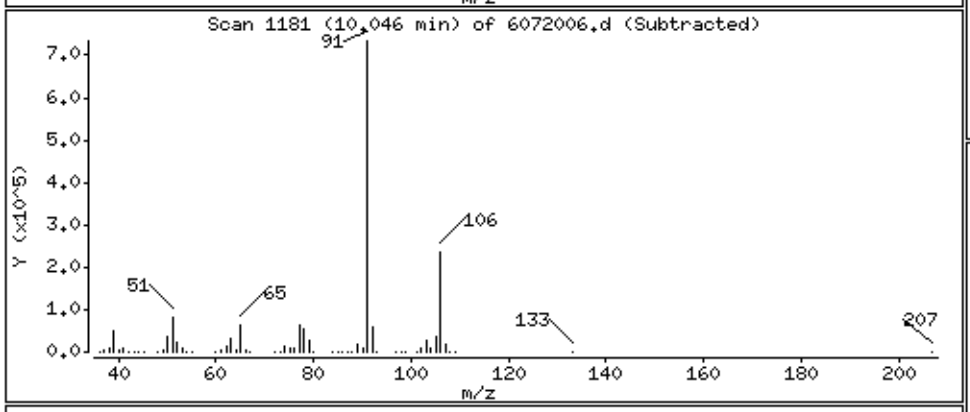
Column phase: RTx-624

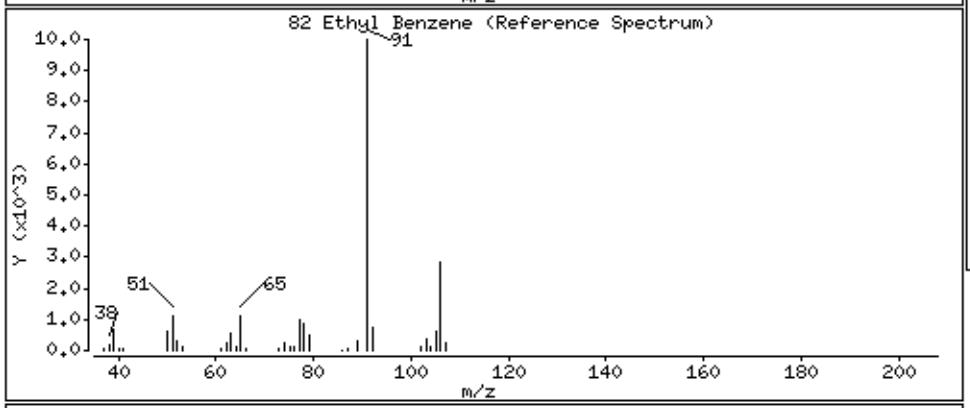
Column diameter: 0.53

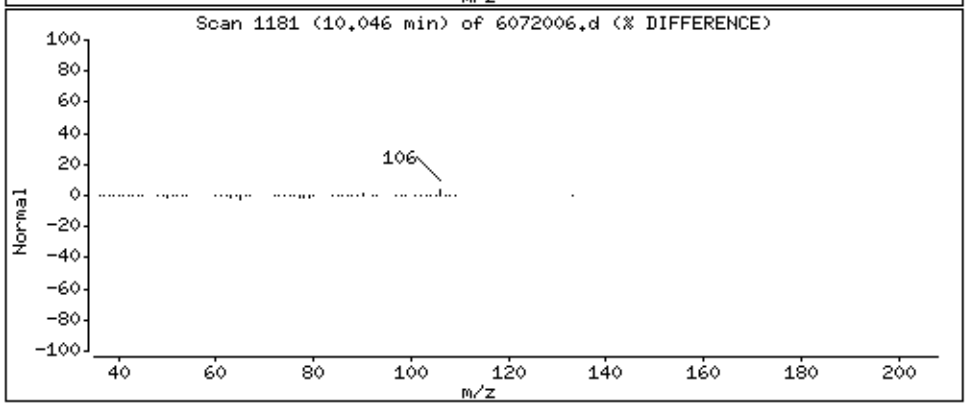
82 Ethyl Benzene

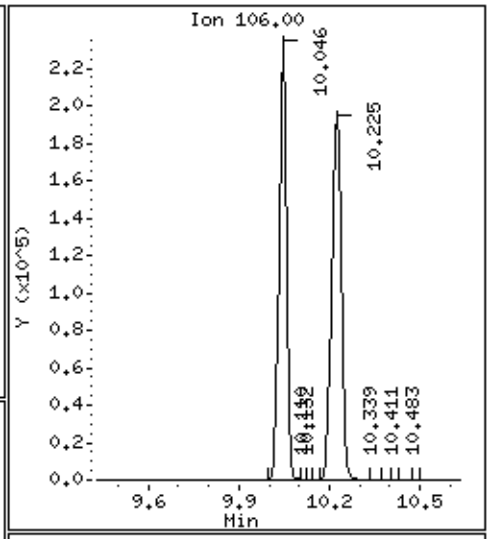
Concentration: 92.071 NG

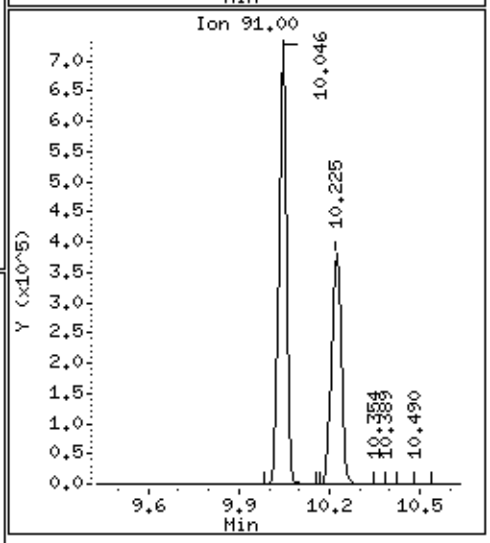












Data File: /chem/msd6.i/20jul16.b/6072006.d

Date : 20-JUL-2016 13:18

Client ID: LCSD

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCSD;LCSD

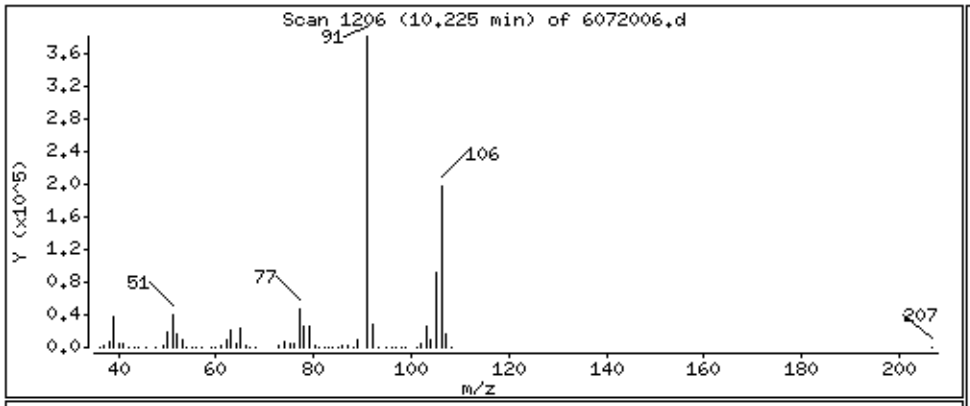
Operator: CT

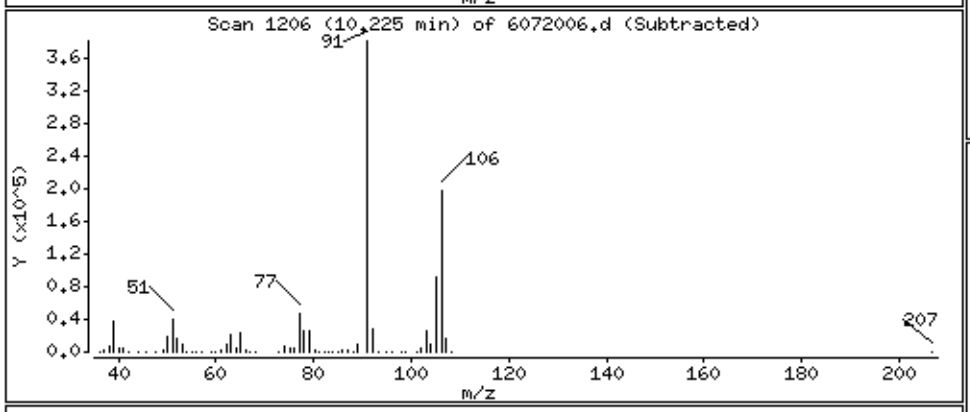
Column phase: RTx-624

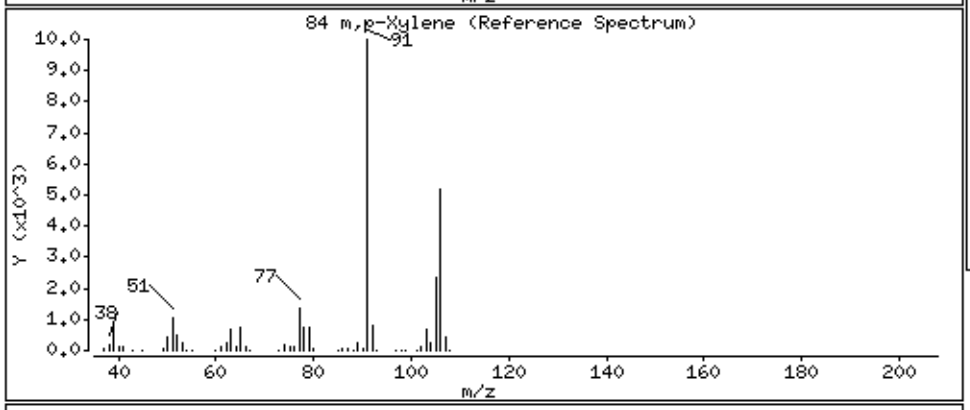
Column diameter: 0.53

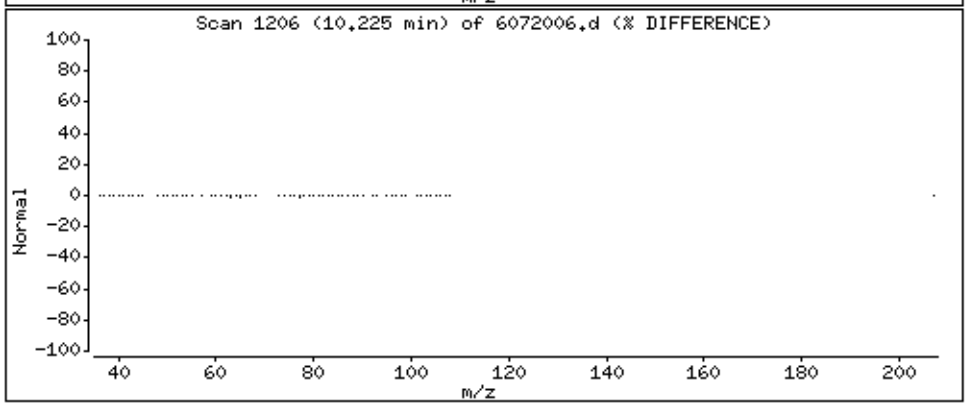
84 m,p-Xylene

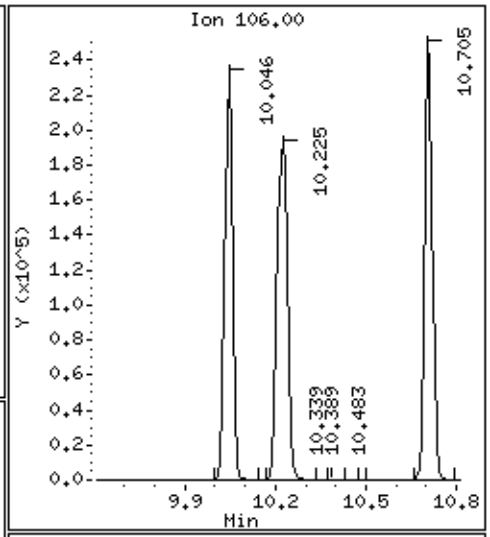
Concentration: 82.768 NG

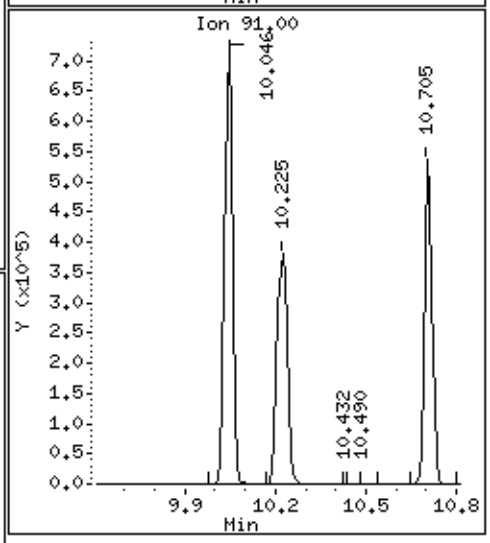












Data File: /chem/msd6.i/20jul16.b/6072006.d

Date : 20-JUL-2016 13:18

Client ID: LCSD

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCSD;LCSD

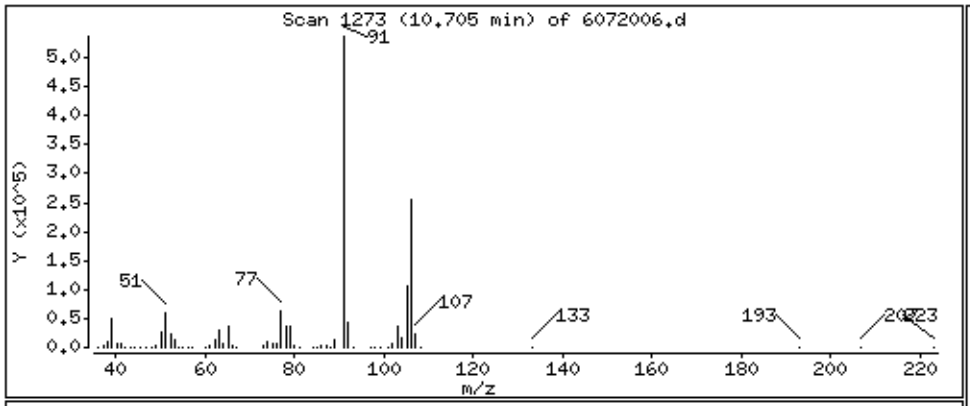
Operator: CT

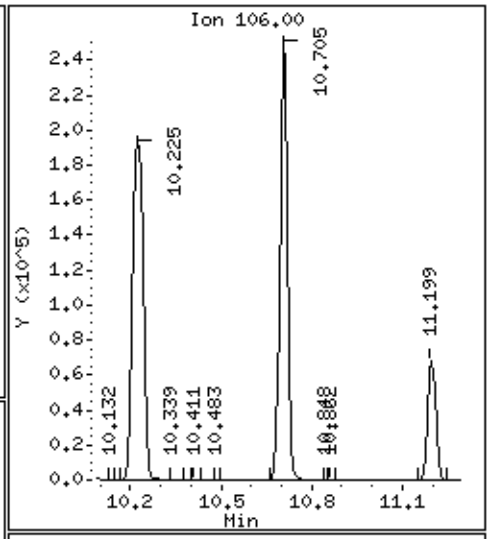
Column phase: RTx-624

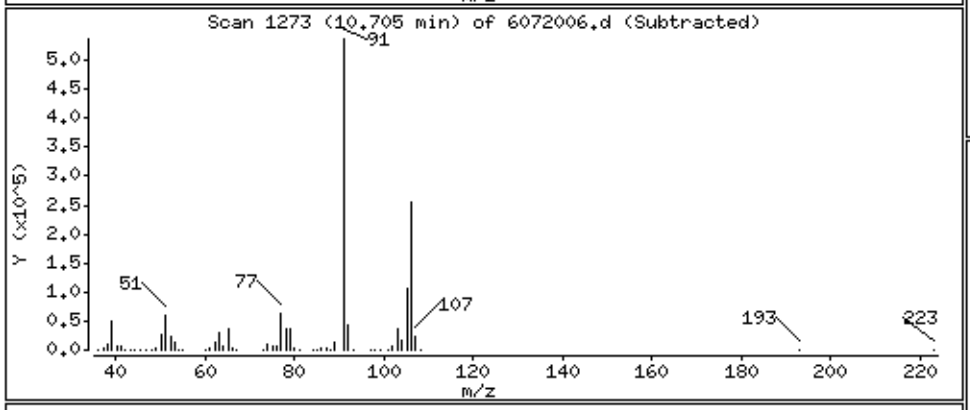
Column diameter: 0.53

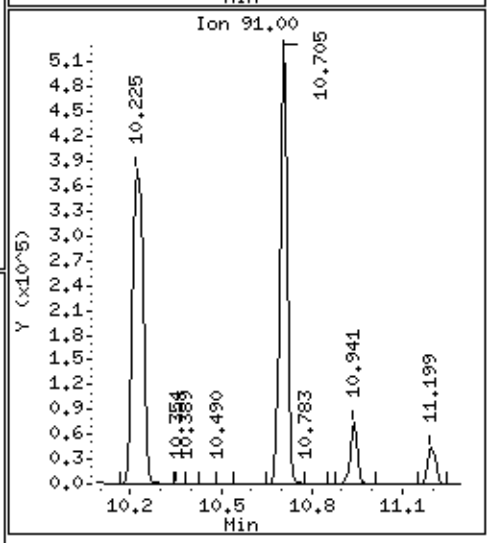
88 o-Xylene

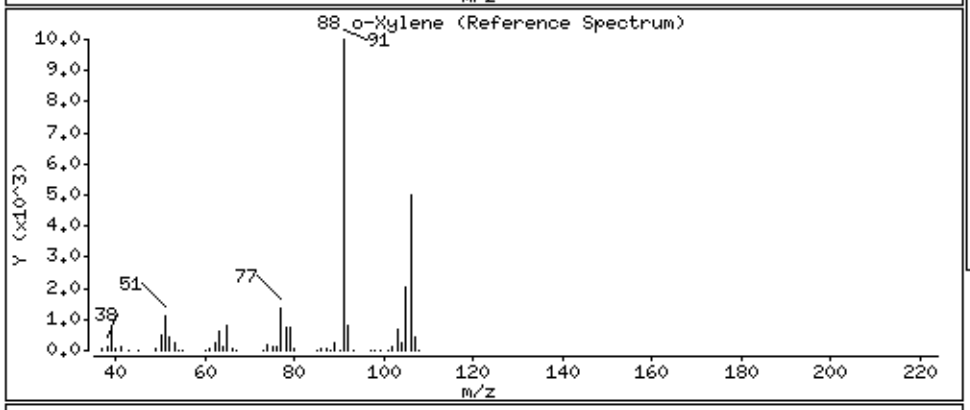
Concentration: 91.383 NG

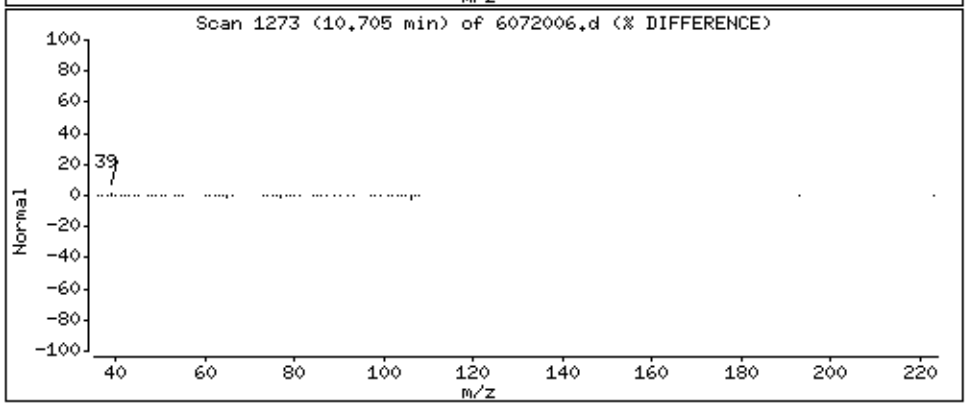












Data File: /chem/msd6.i/20jul16.b/6072006.d

Date : 20-JUL-2016 13:18

Client ID: LCSD

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCSD;LCSD

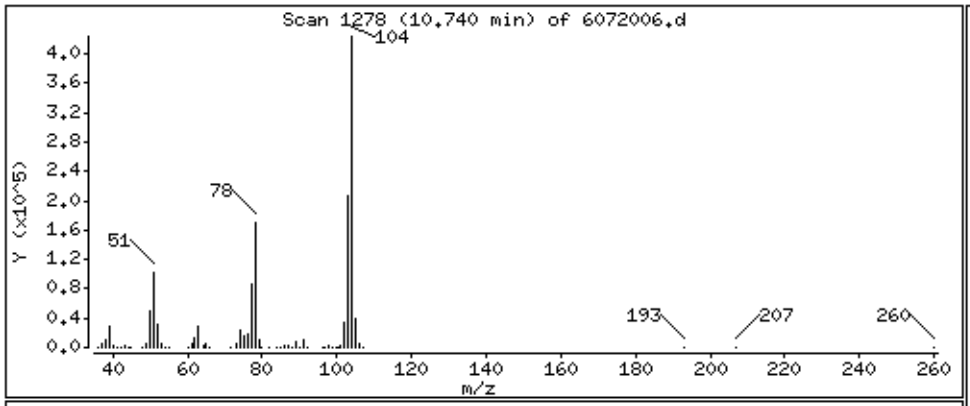
Operator: CT

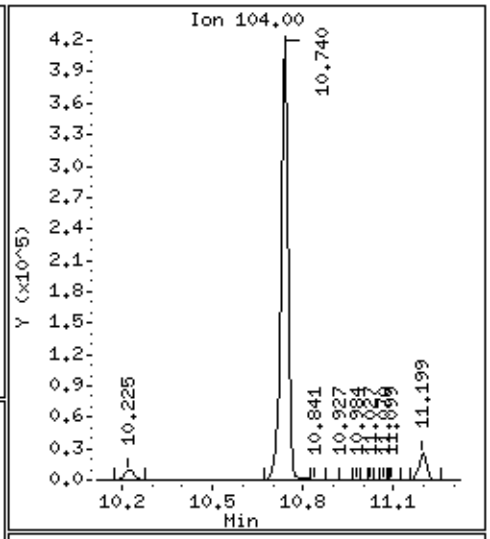
Column phase: RTx-624

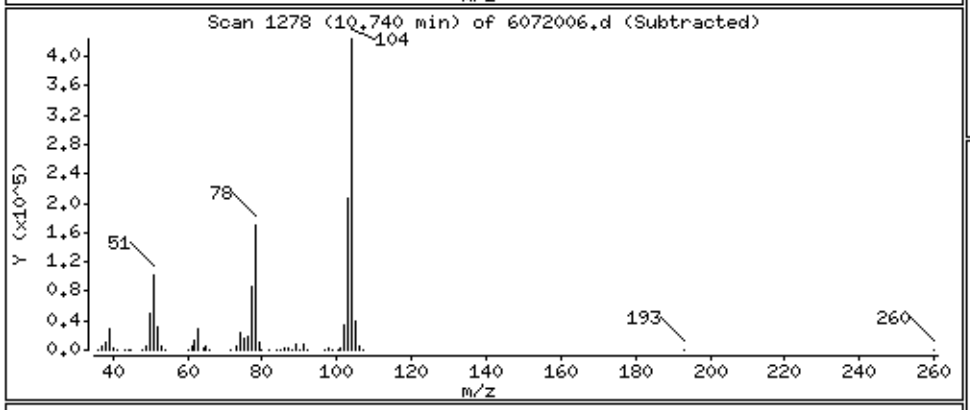
Column diameter: 0.53

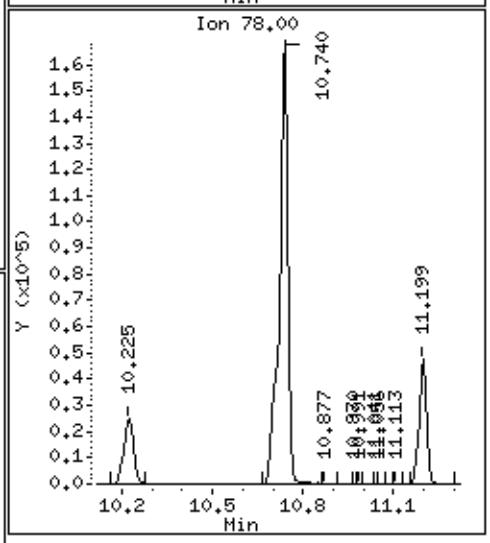
89 Styrene

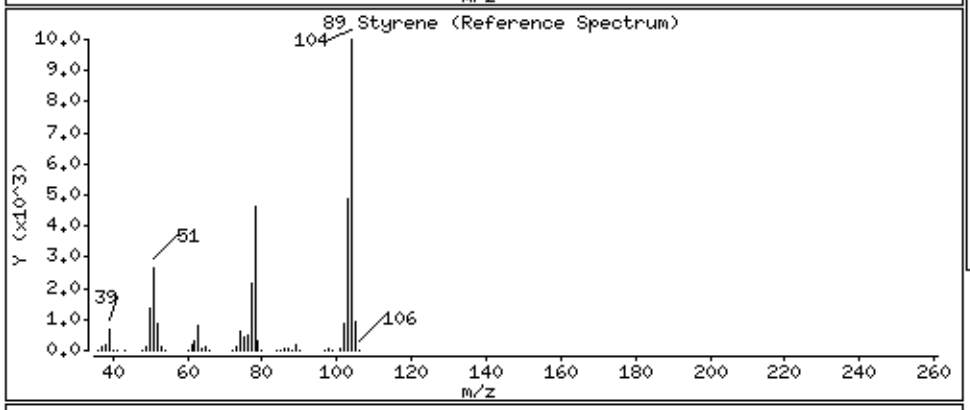
Concentration: 87.926 NG

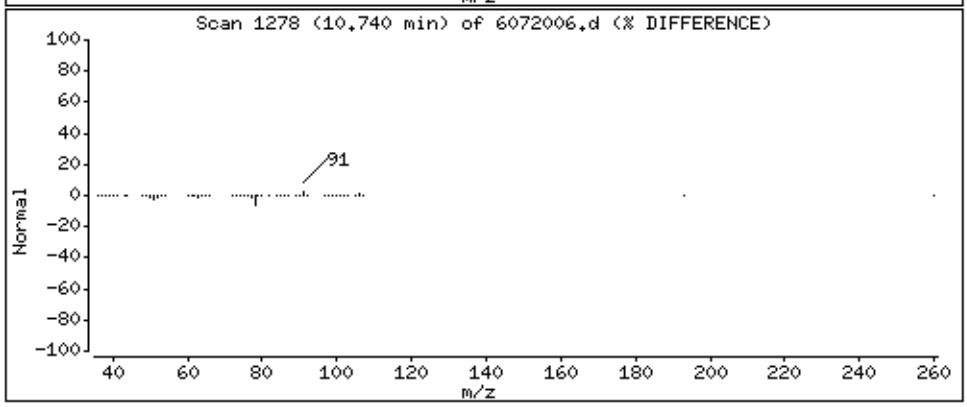












Data File: /chem/msd6.i/20jul16.b/6072006.d

Date : 20-JUL-2016 13:18

Client ID: LCSD

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCSD;LCSD

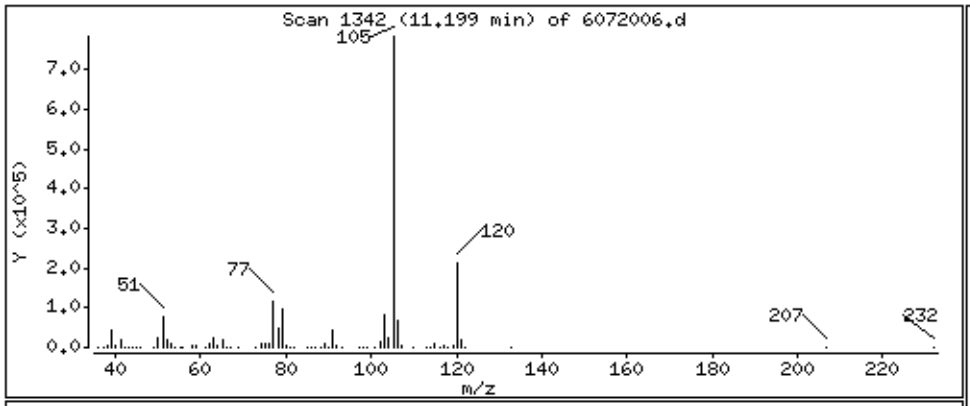
Operator: CT

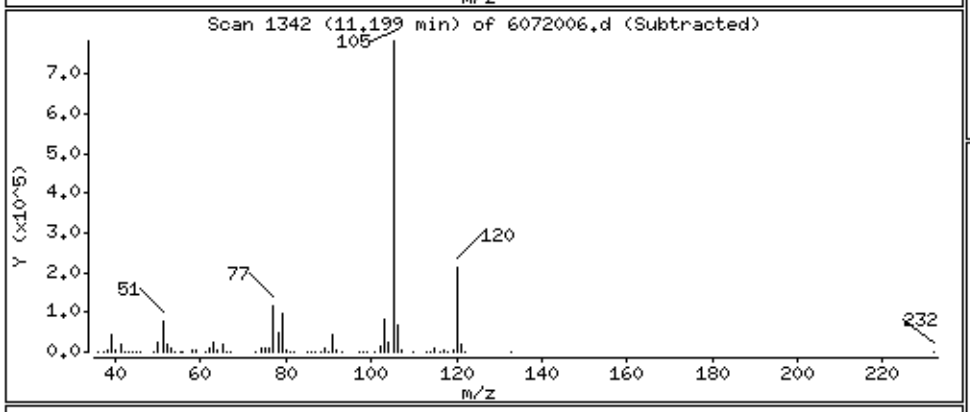
Column phase: RTx-624

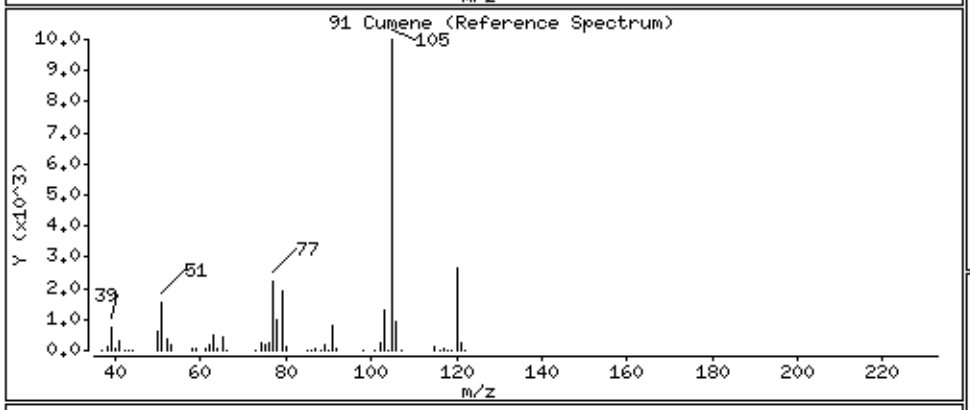
Column diameter: 0.53

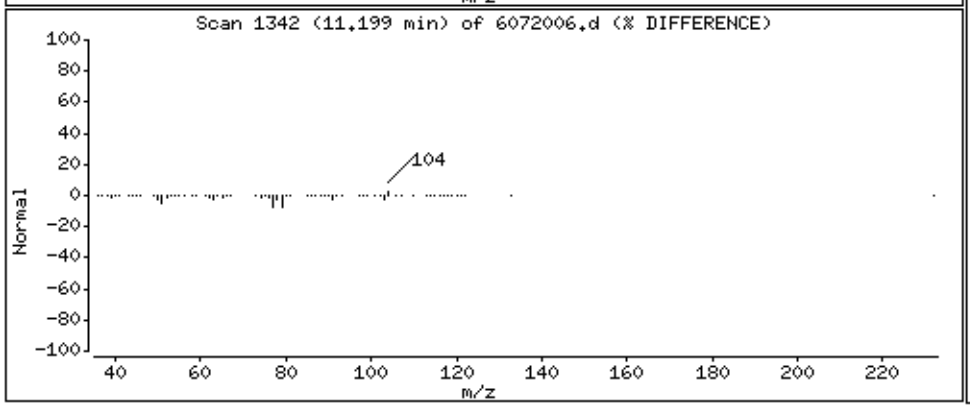
91 Cumene

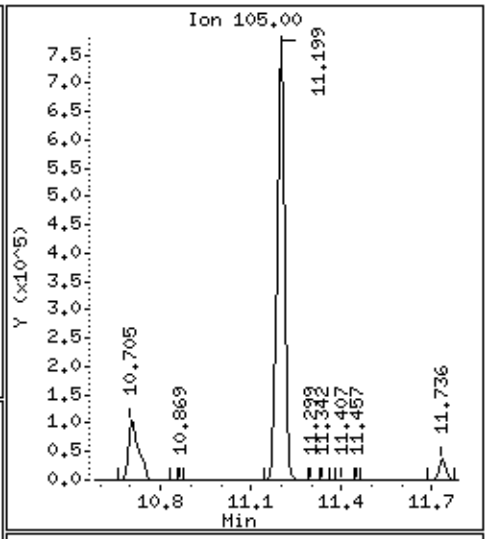
Concentration: 103.10 NG

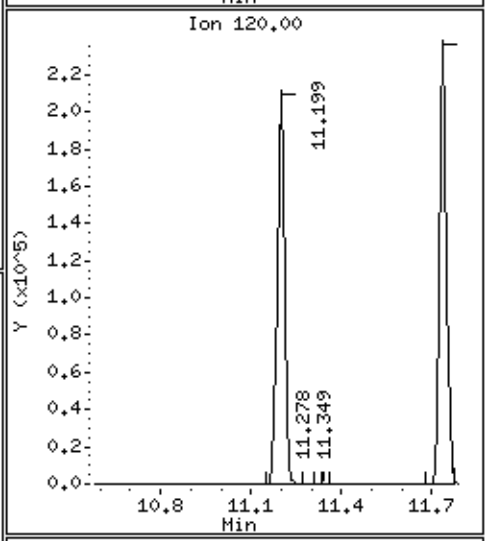


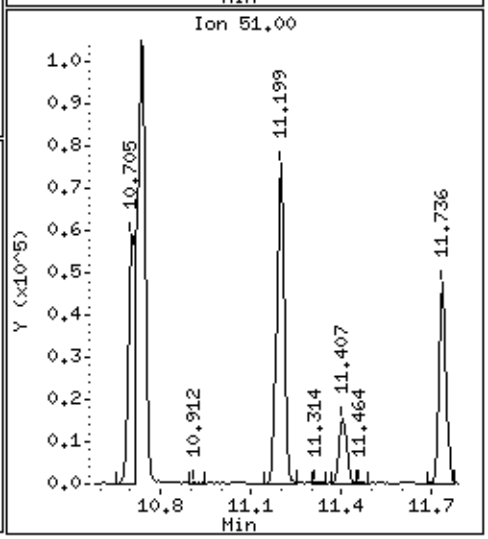












Data File: /chem/msd6.i/20jul16.b/6072006.d

Date : 20-JUL-2016 13:18

Client ID: LCSD

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCSD;LCSD

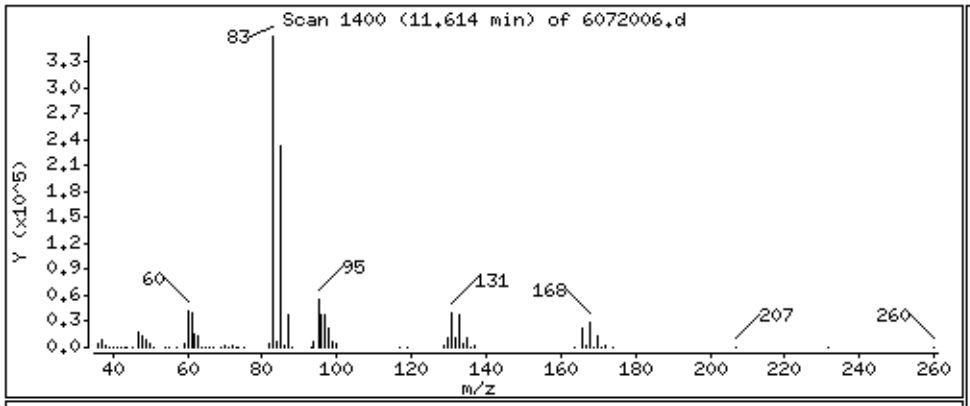
Operator: CT

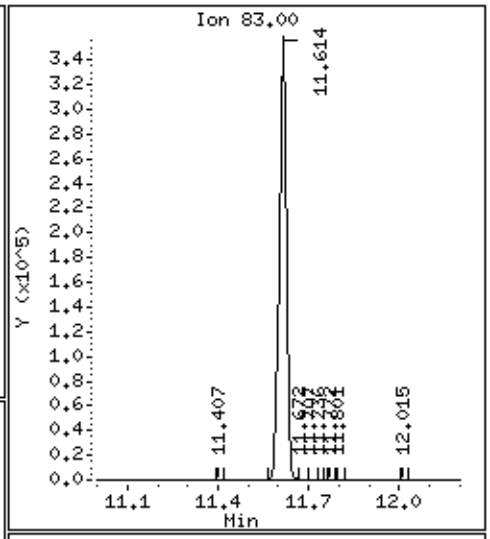
Column phase: RTx-624

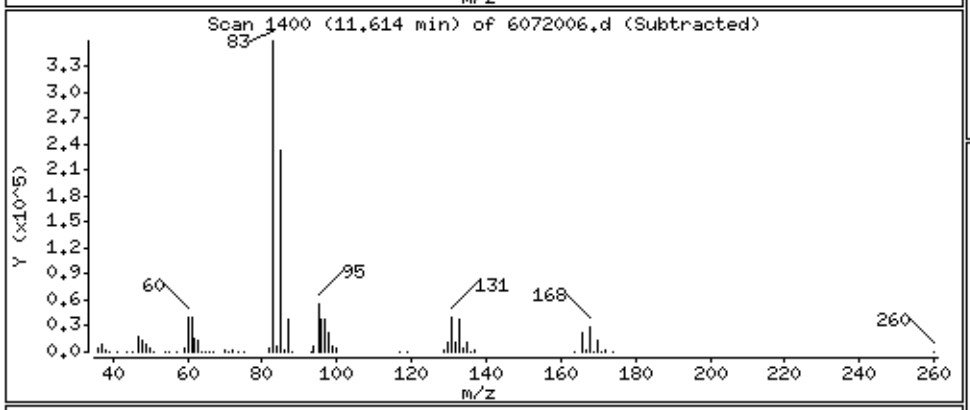
Column diameter: 0.53

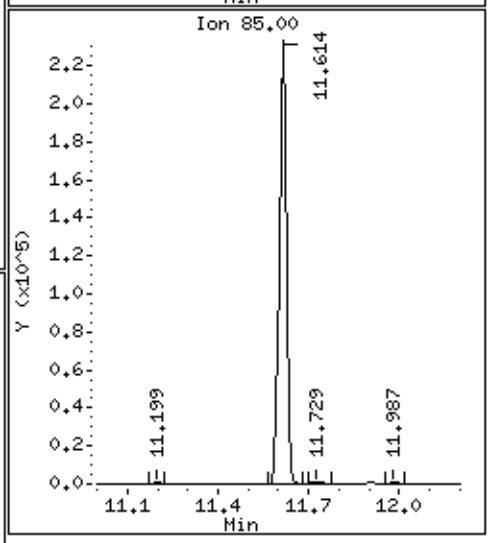
94 1,1,2,2-Tetrachloroethane

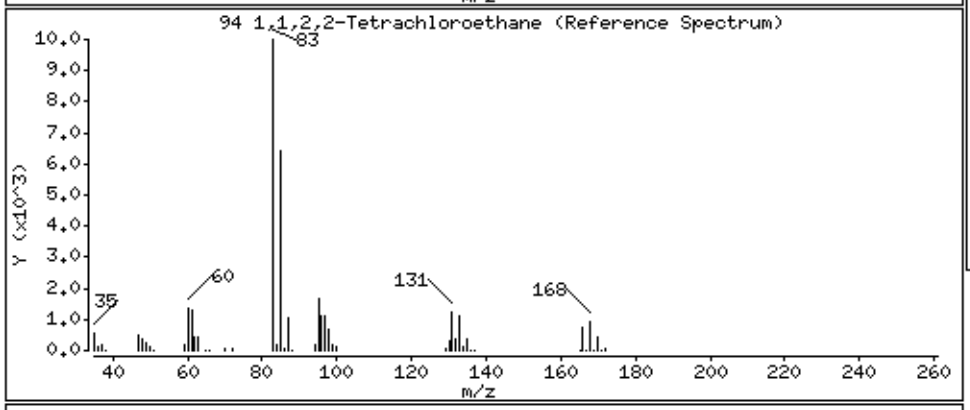
Concentration: 127.40 NG

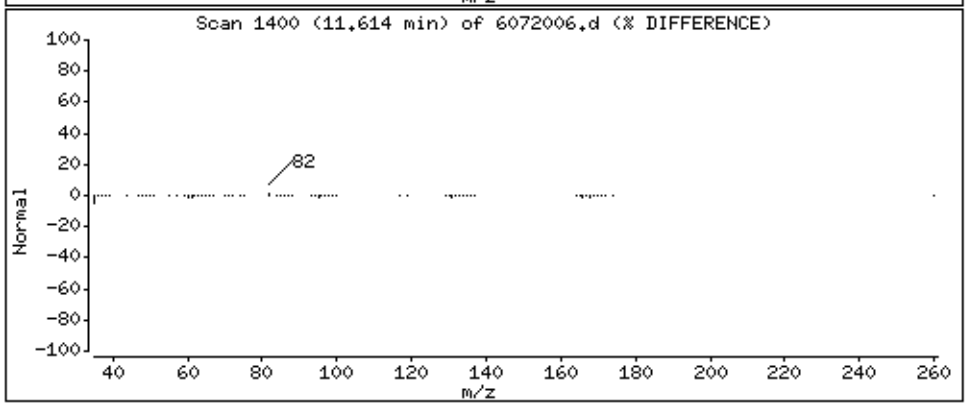












Data File: /chem/msd6.i/20jul16.b/6072006.d

Date : 20-JUL-2016 13:18

Client ID: LCSD

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCSD;LCSD

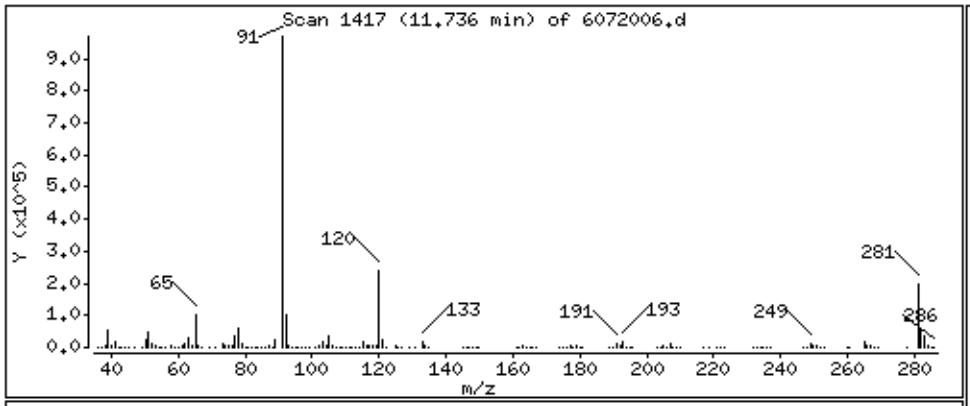
Operator: CT

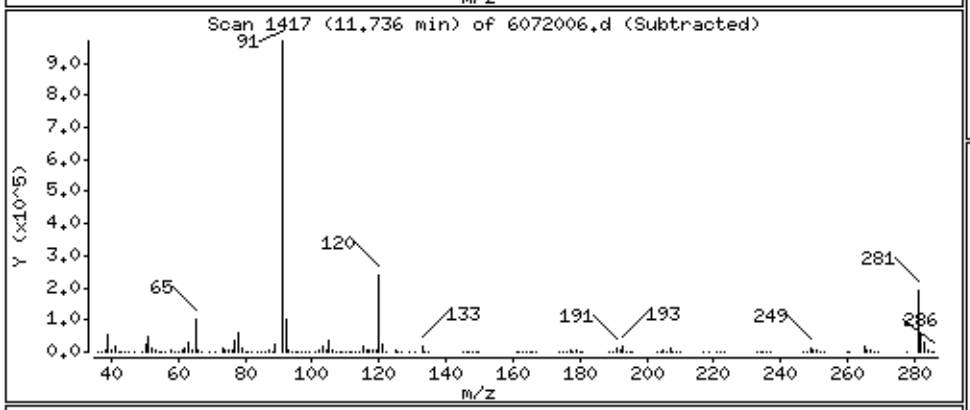
Column phase: RTx-624

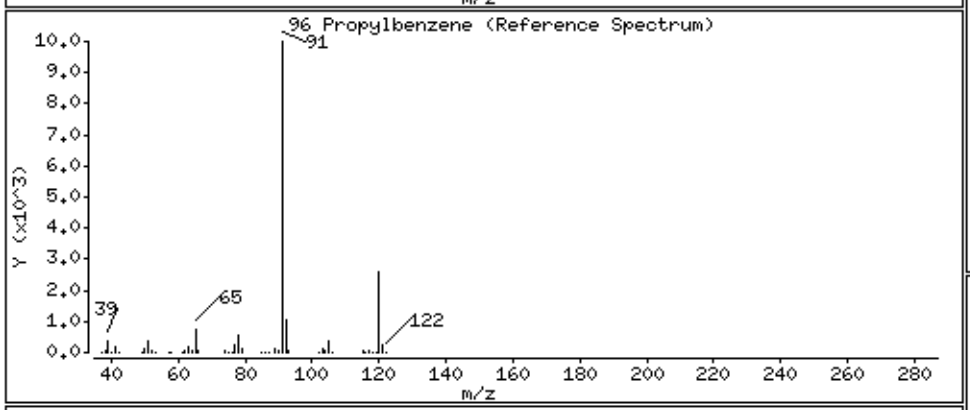
Column diameter: 0.53

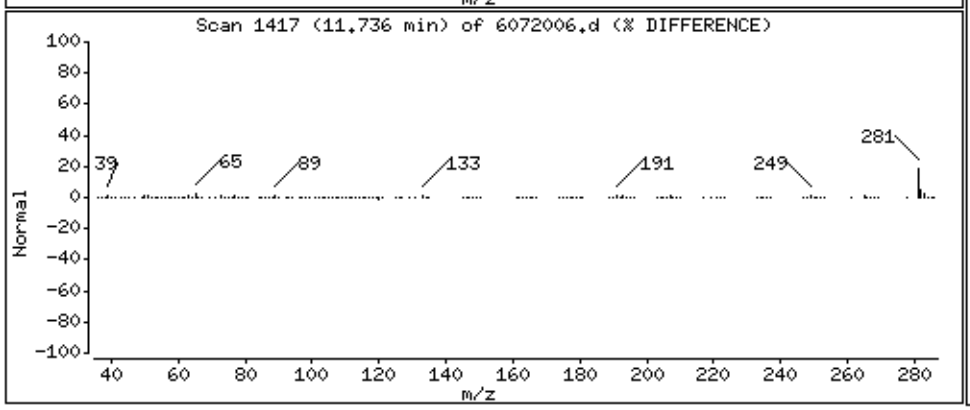
96 Propylbenzene

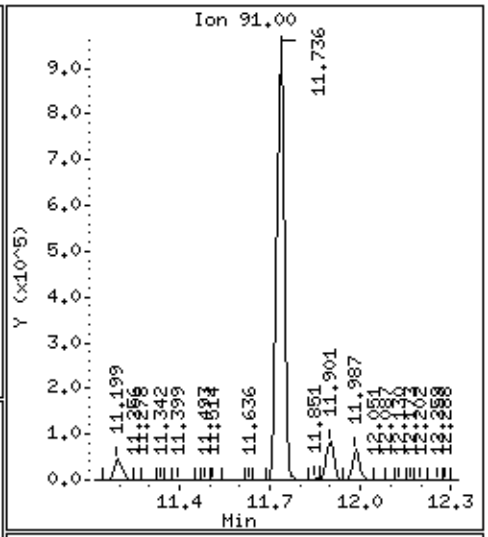
Concentration: 102.42 NG

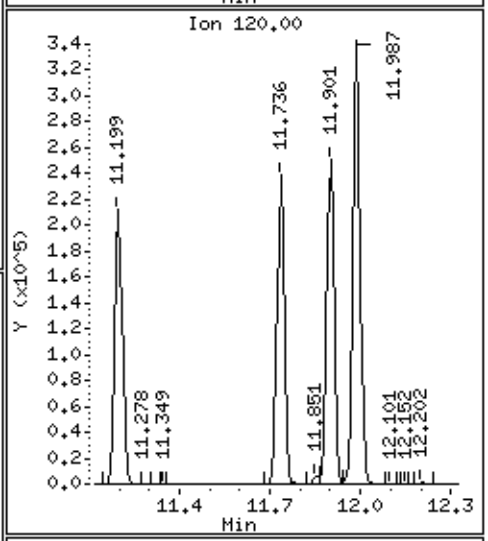


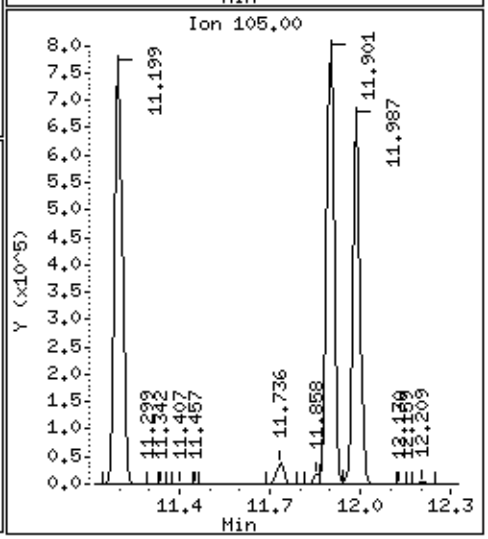












Data File: /chem/msd6.i/20jul16.b/6072006.d

Date : 20-JUL-2016 13:18

Client ID: LCSD

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCSD;LCSD

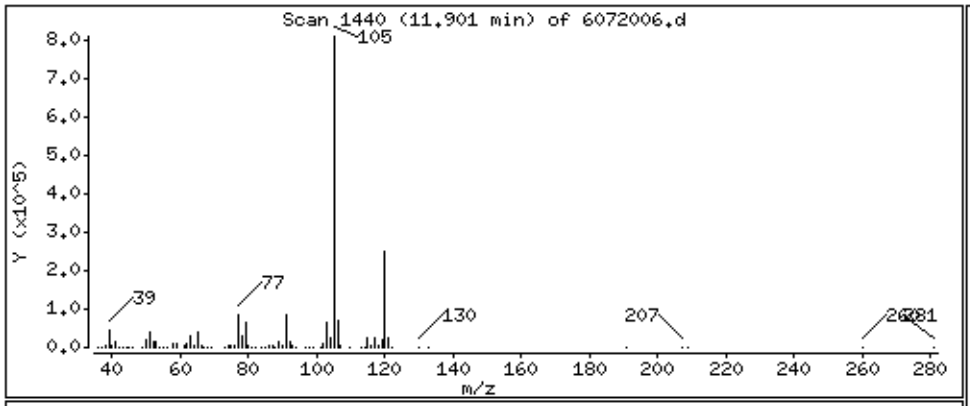
Operator: CT

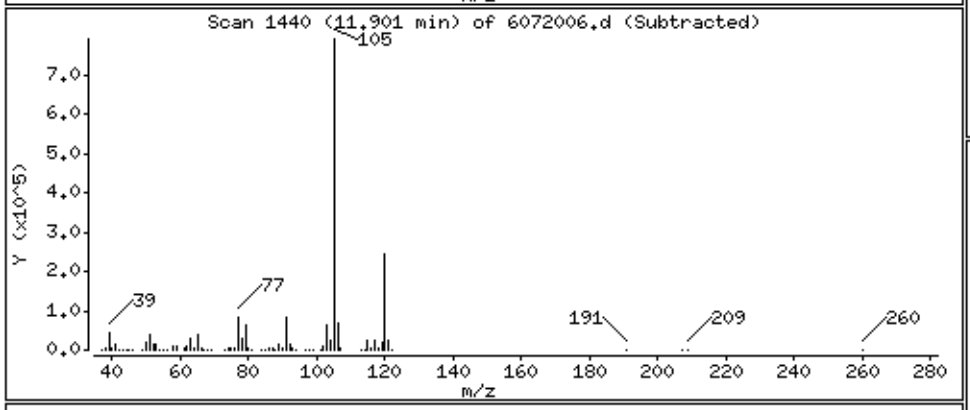
Column phase: RTx-624

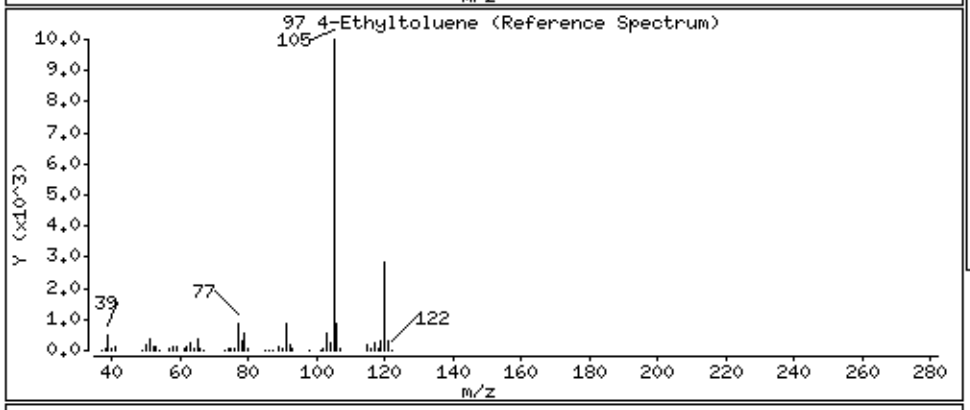
Column diameter: 0.53

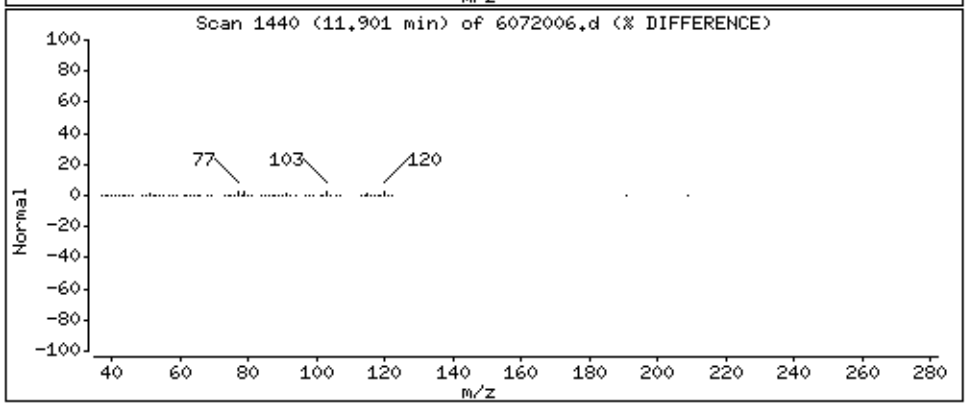
97 4-Ethyltoluene

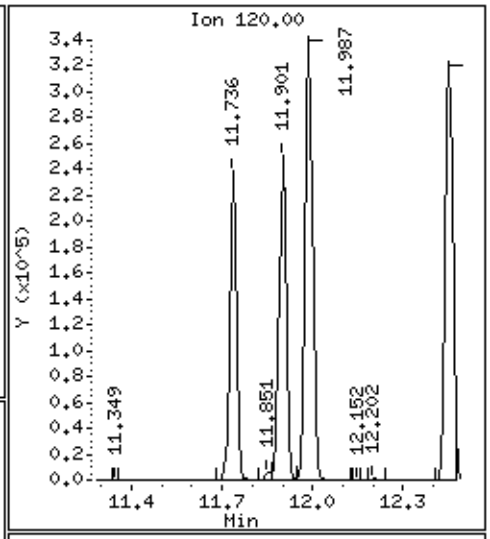
Concentration: 99.016 NG

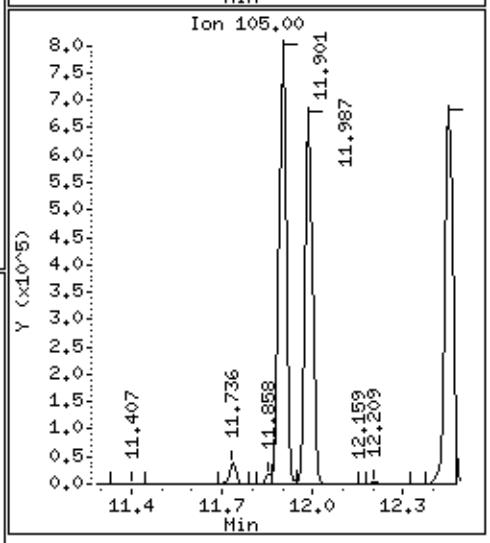












Data File: /chem/msd6.i/20jul16.b/6072006.d

Date : 20-JUL-2016 13:18

Client ID: LCSD

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCSD;LCSD

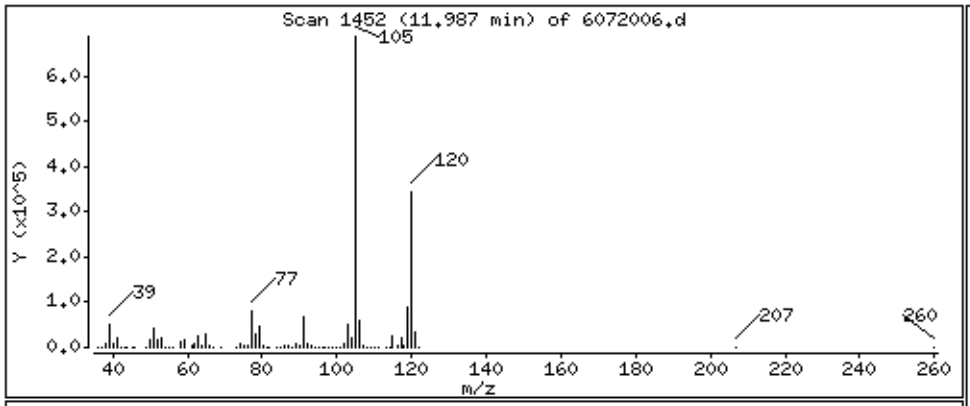
Operator: CT

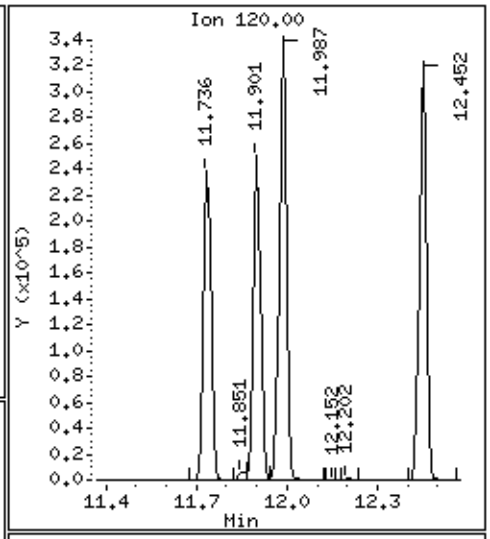
Column phase: RTx-624

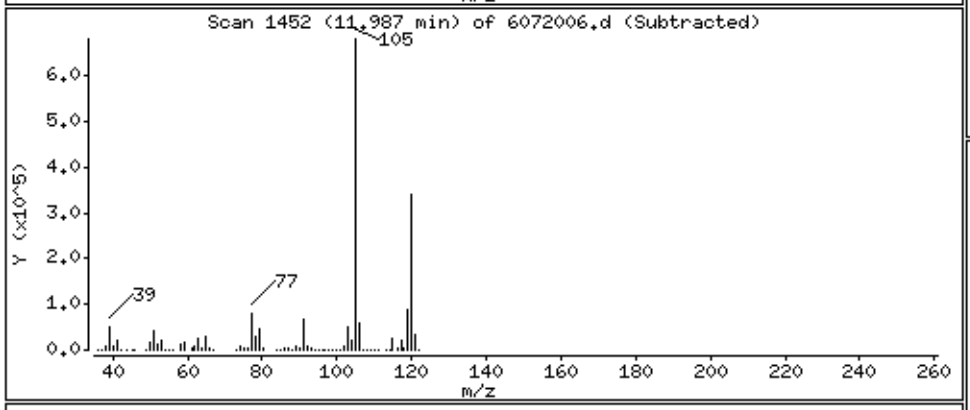
Column diameter: 0.53

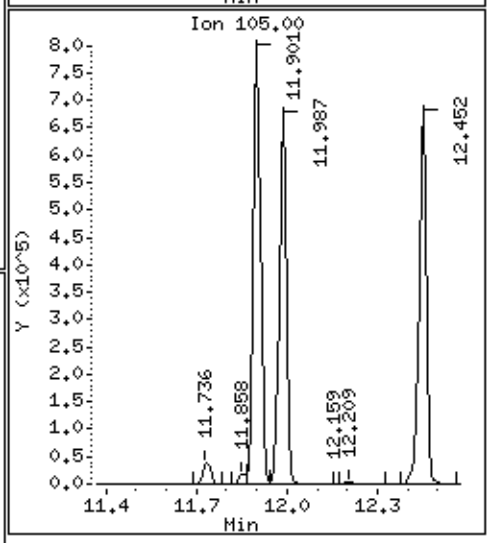
98 1,3,5-Trimethylbenzene

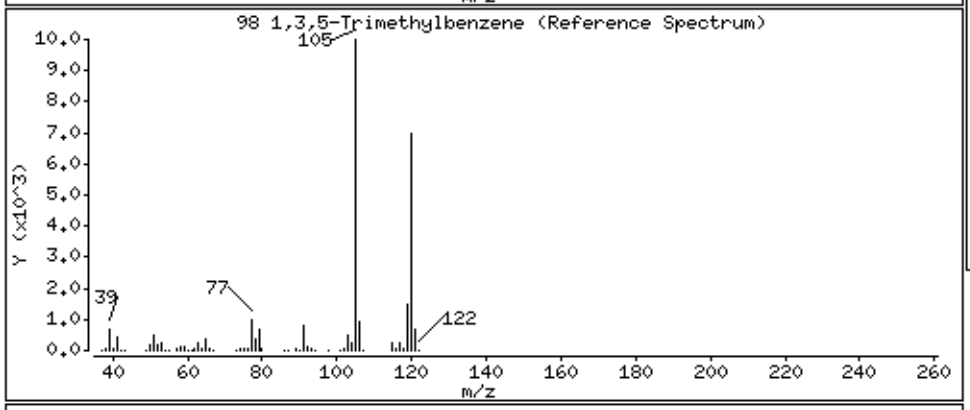
Concentration: 99.960 NG

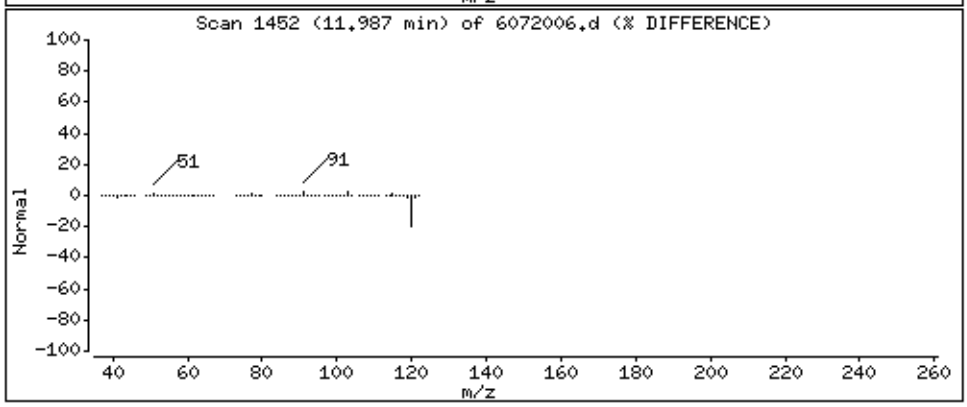












Data File: /chem/msd6.i/20jul16.b/6072006.d

Date : 20-JUL-2016 13:18

Client ID: LCSD

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCSD;LCSD

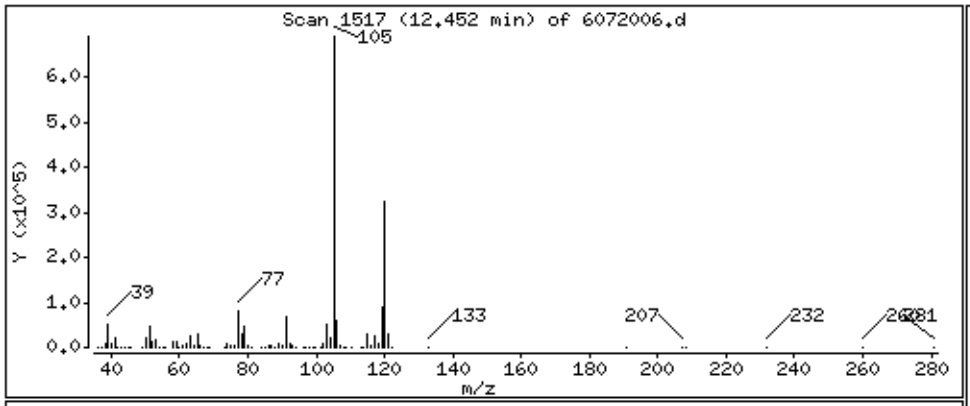
Operator: CT

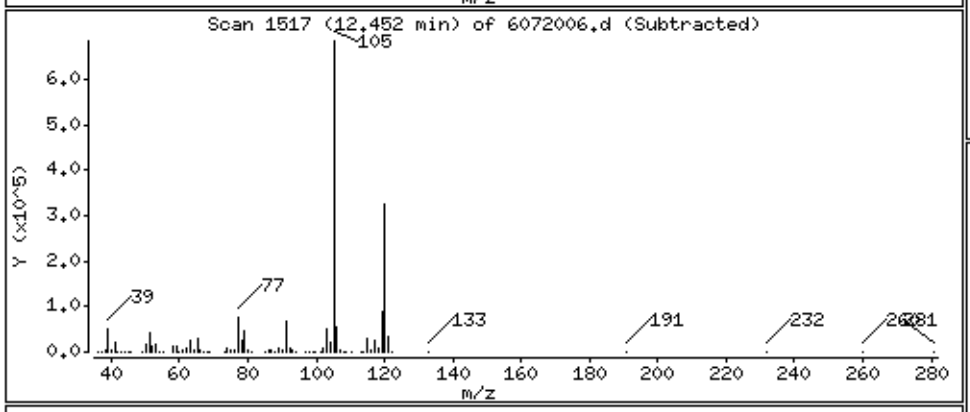
Column phase: RTx-624

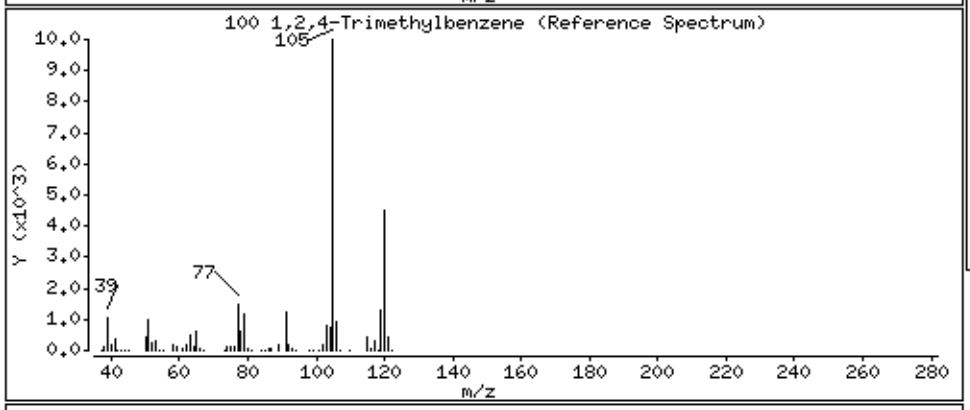
Column diameter: 0.53

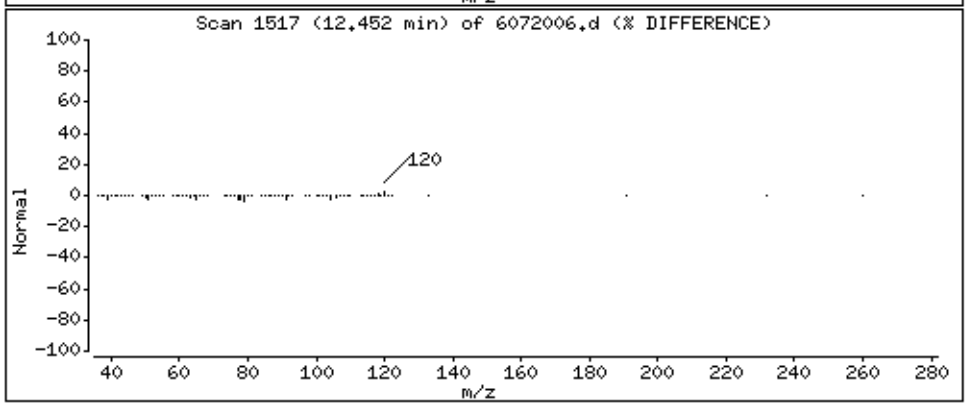
100 1,2,4-Trimethylbenzene

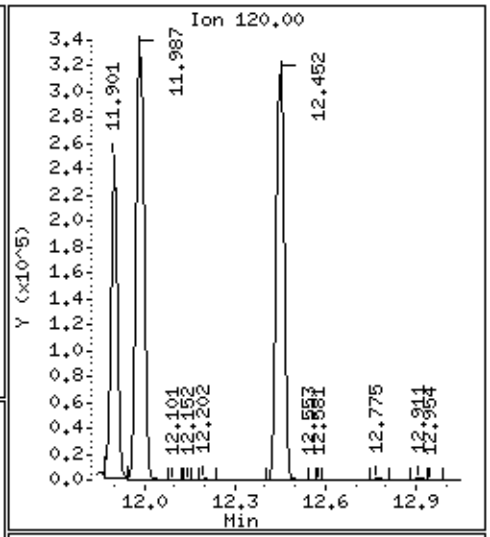
Concentration: 99.698 NG

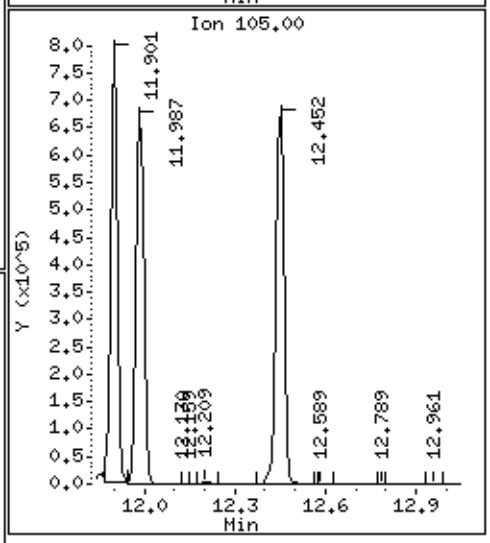












Data File: /chem/msd6.i/20jul16.b/6072006.d

Date : 20-JUL-2016 13:18

Client ID: LCSD

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCSD;LCSD

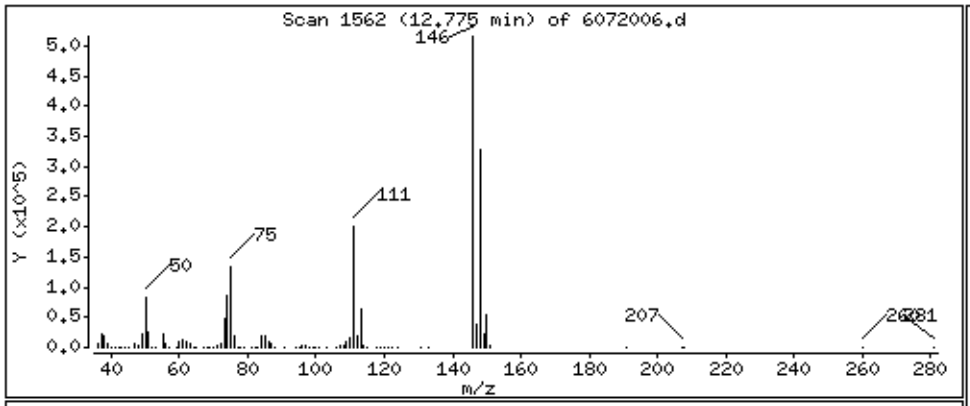
Operator: CT

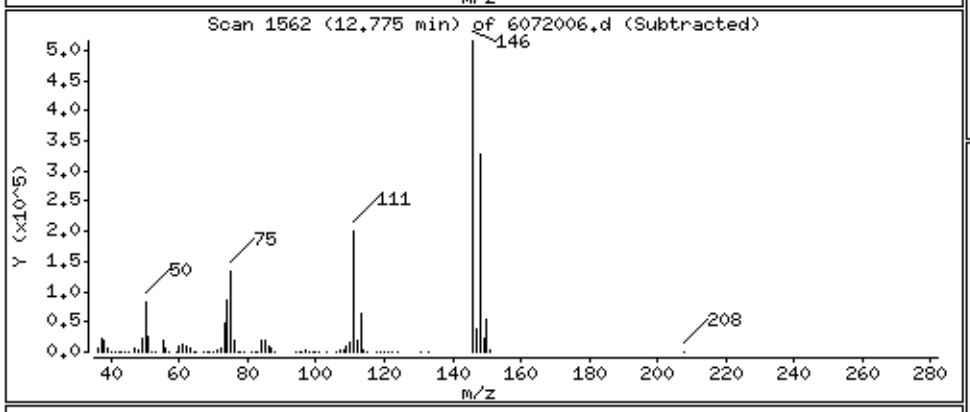
Column phase: RTx-624

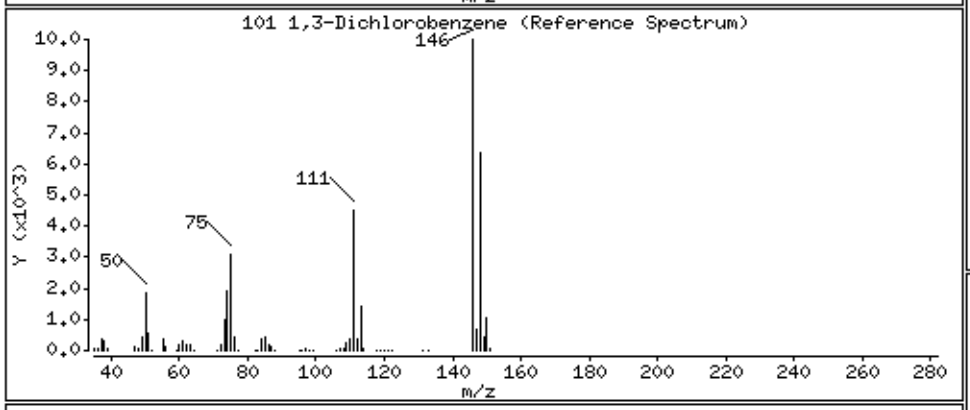
Column diameter: 0.53

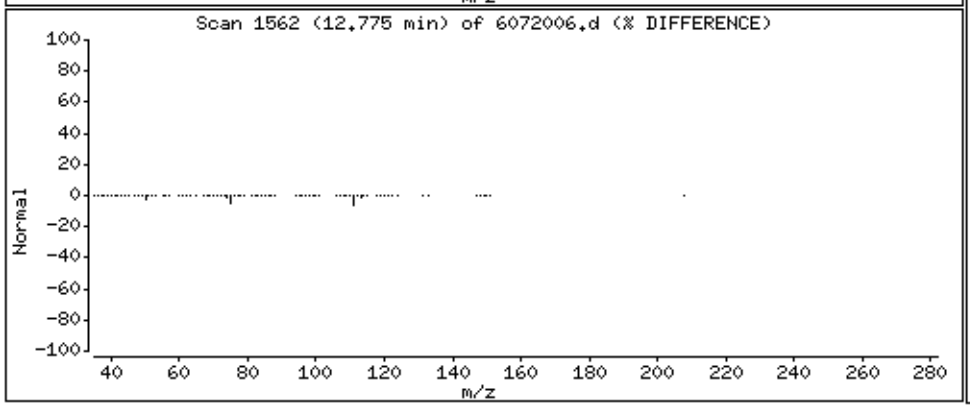
101 1,3-Dichlorobenzene

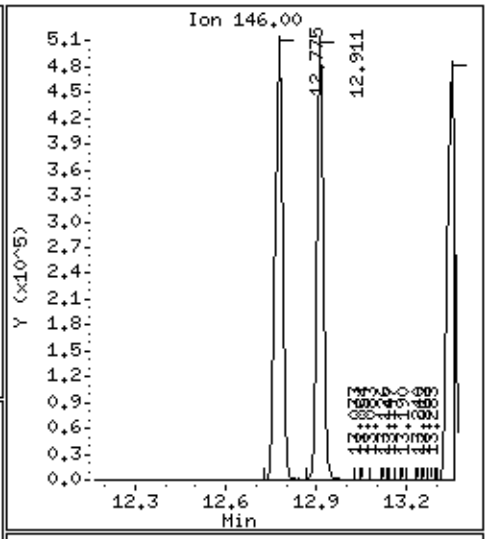
Concentration: 125.02 NG

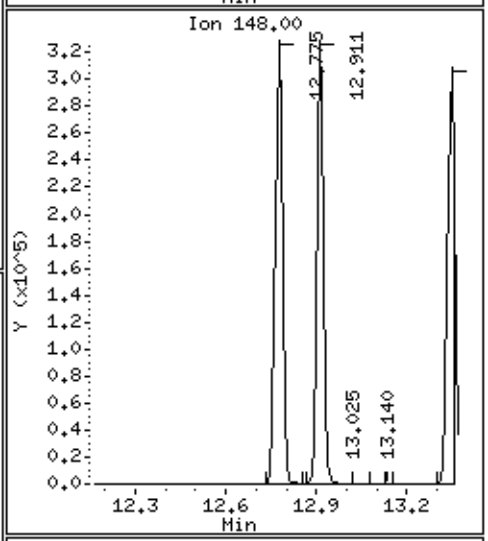


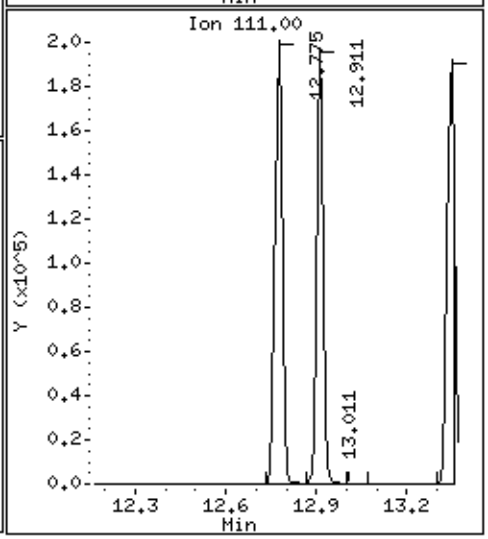












Data File: /chem/msd6.i/20jul16.b/6072006.d

Date : 20-JUL-2016 13:18

Client ID: LCSD

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCSD;LCSD

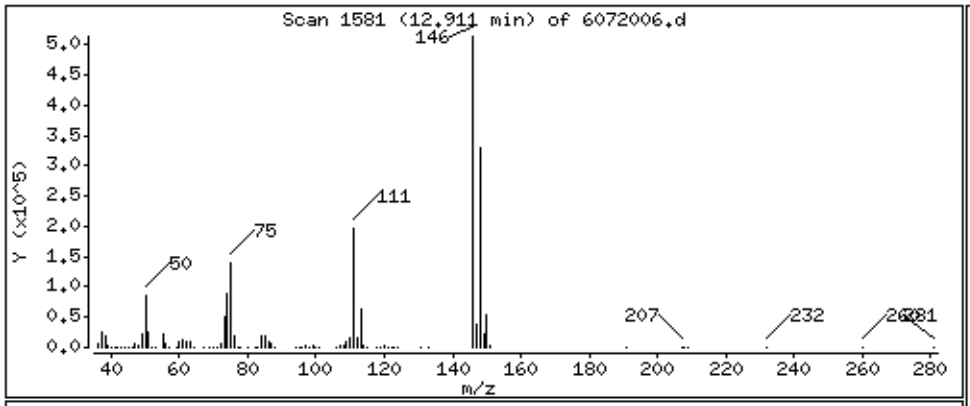
Operator: CT

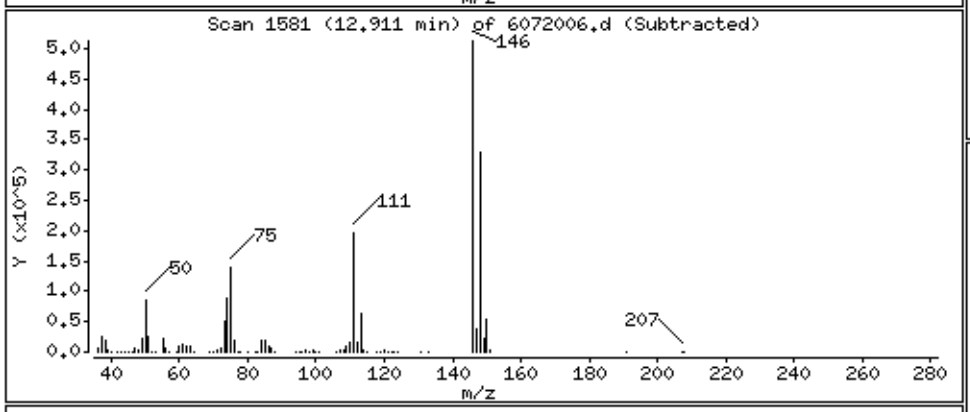
Column phase: RTx-624

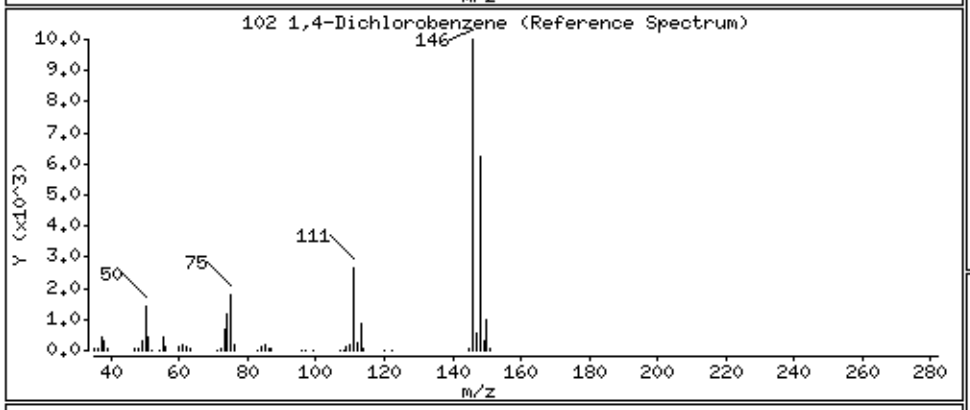
Column diameter: 0.53

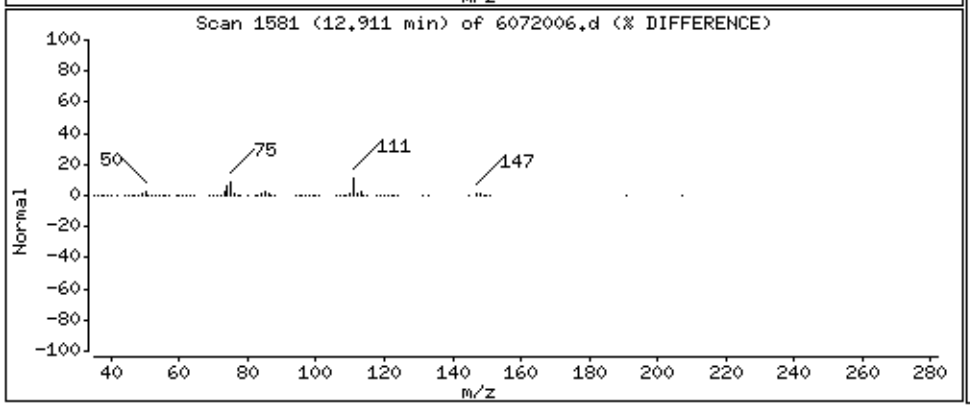
102 1,4-Dichlorobenzene

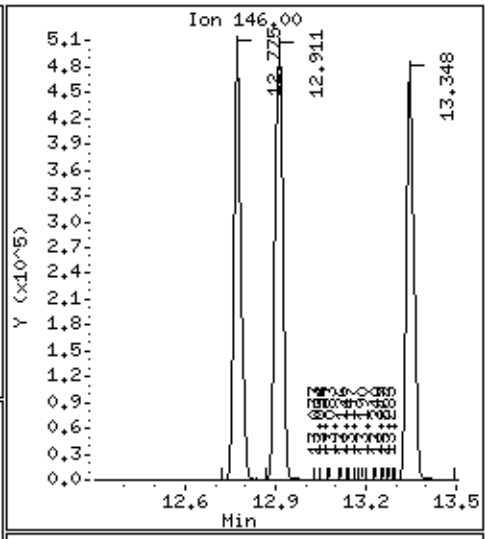
Concentration: 125.10 NG

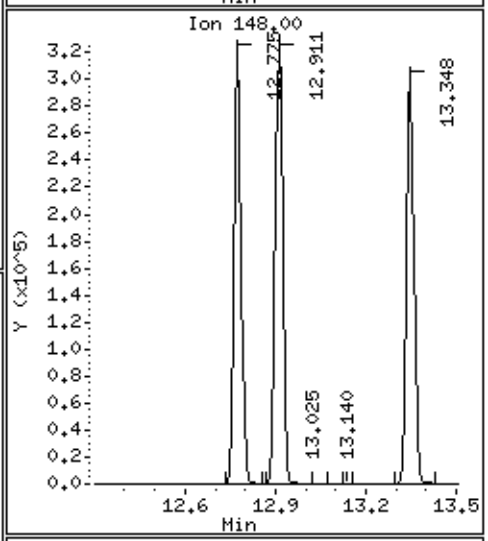


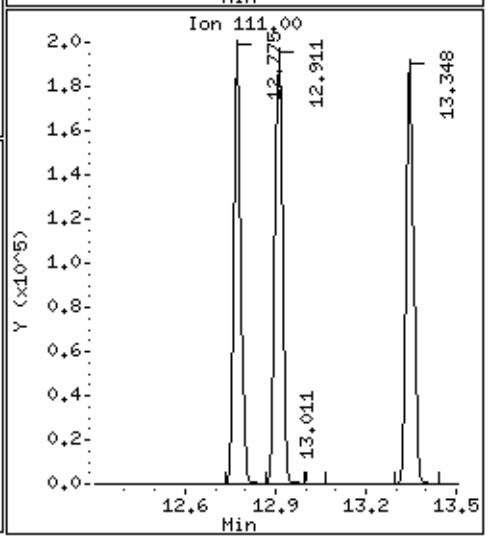












Data File: /chem/msd6.i/20jul16.b/6072006.d

Date : 20-JUL-2016 13:18

Client ID: LCSD

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCSD;LCSD

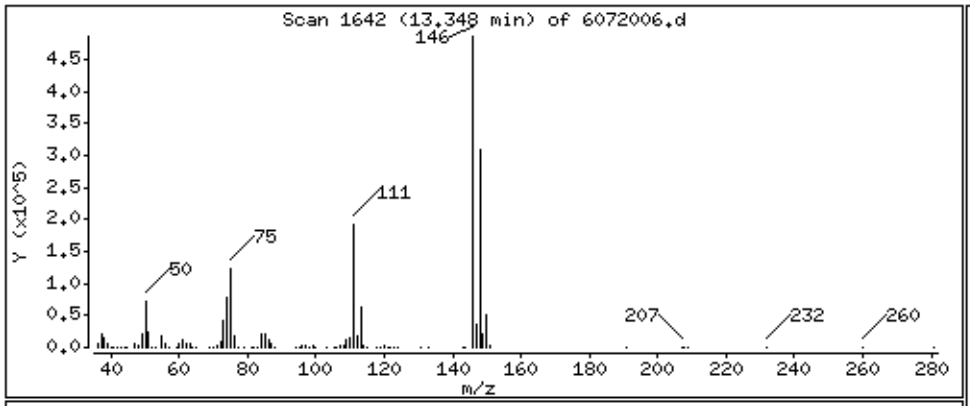
Operator: CT

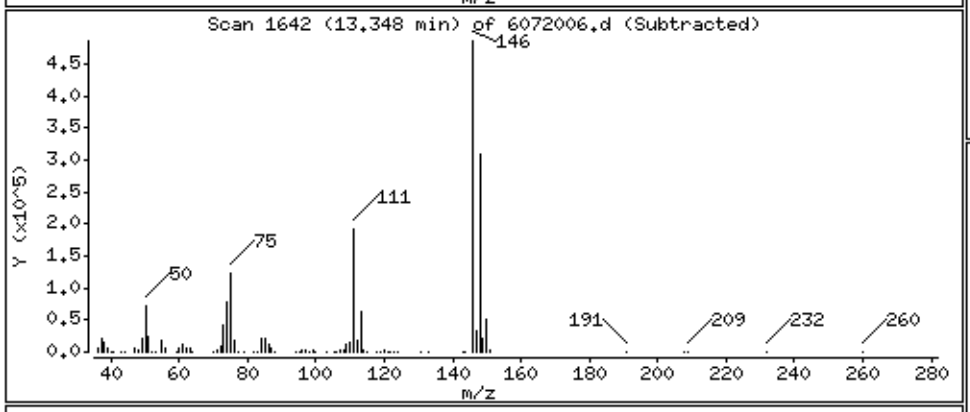
Column phase: RTx-624

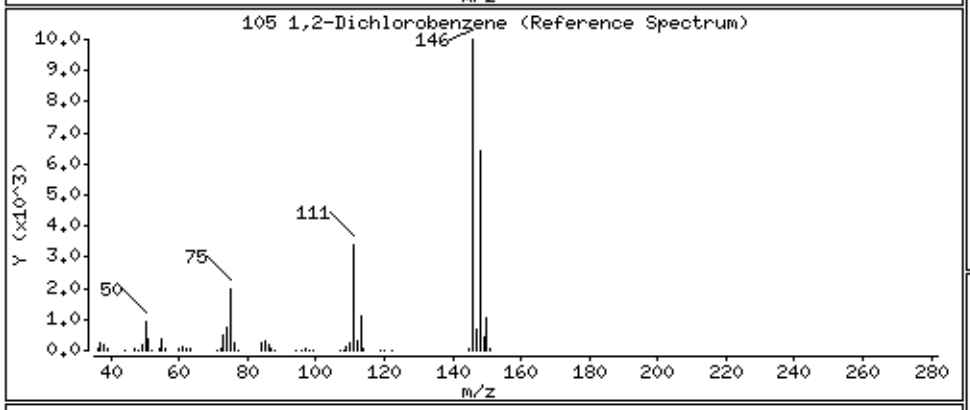
Column diameter: 0.53

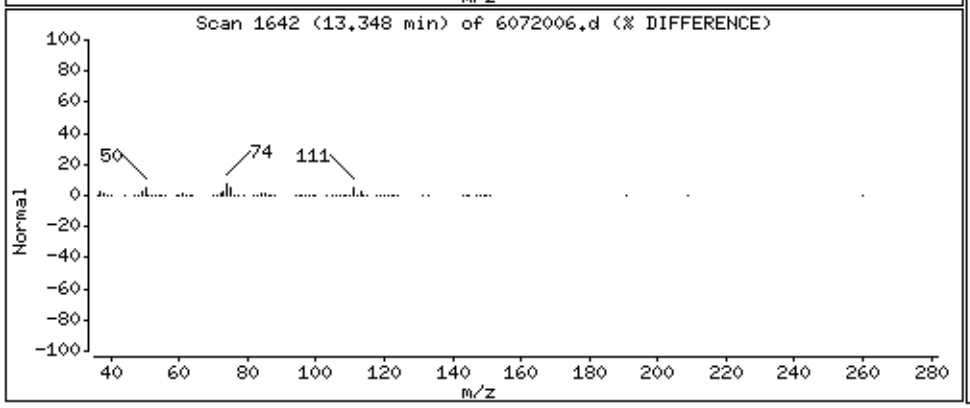
105 1,2-Dichlorobenzene

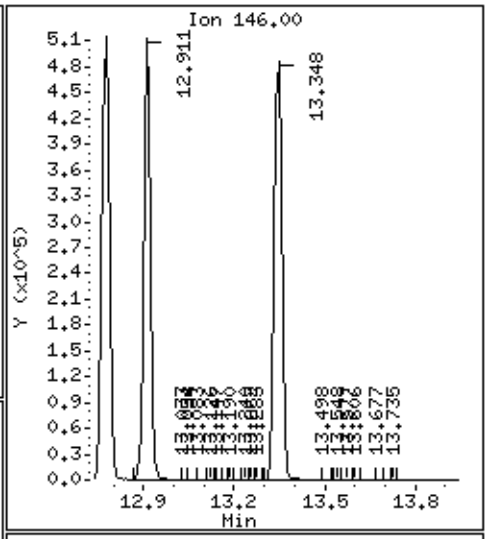
Concentration: 125.07 NG

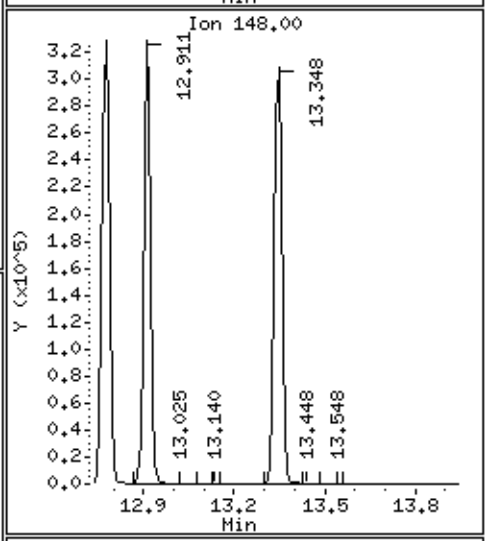


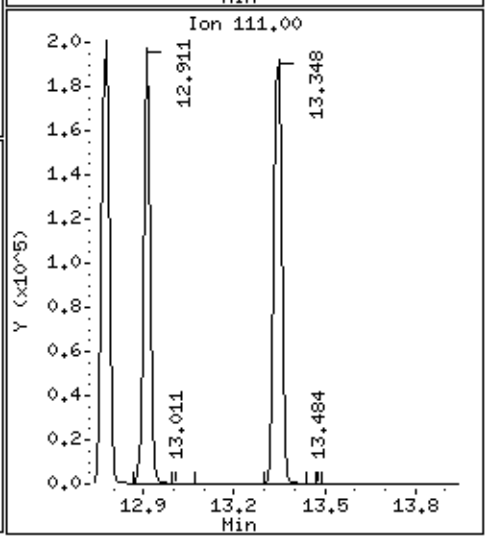












Data File: /chem/msd6.i/20jul16.b/6072006.d

Date : 20-JUL-2016 13:18

Client ID: LCSD

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCSD;LCSD

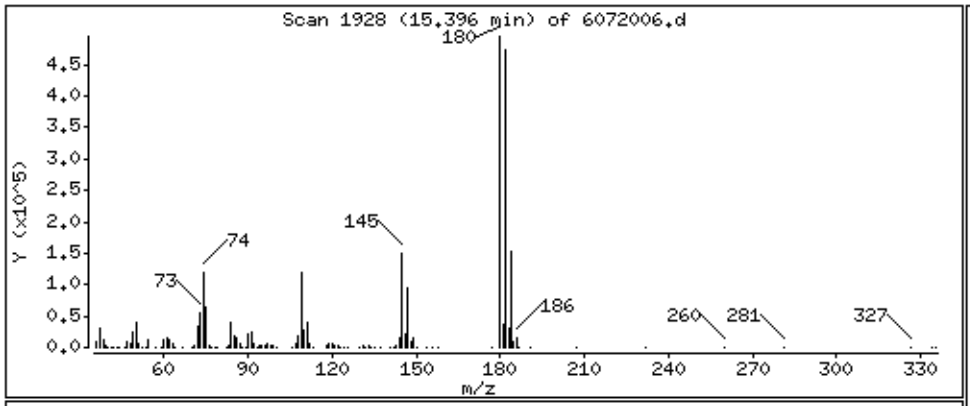
Operator: CT

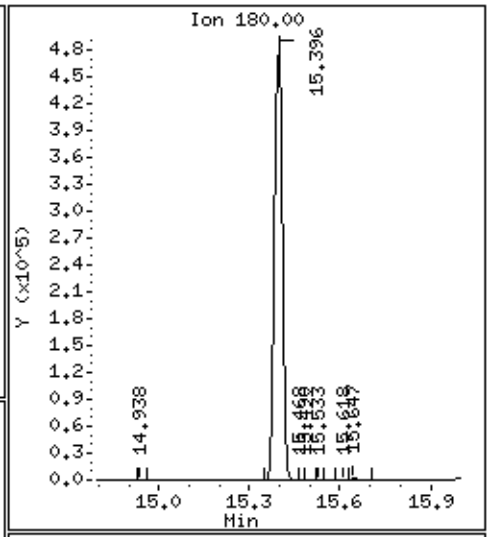
Column phase: RTx-624

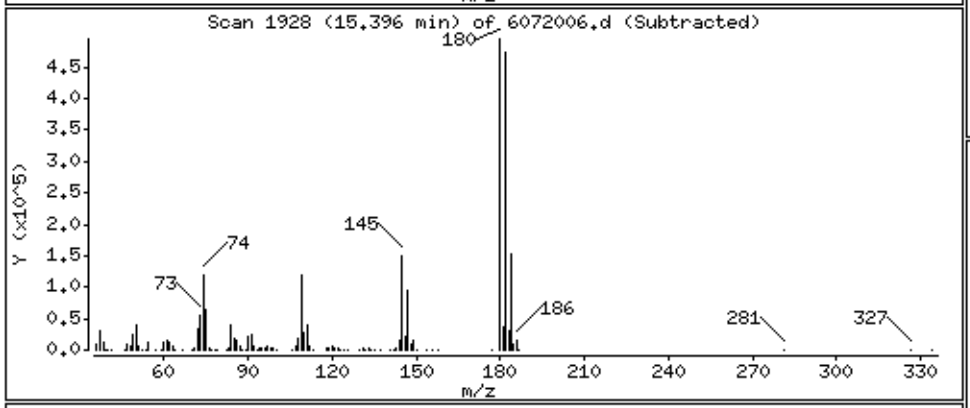
Column diameter: 0.53

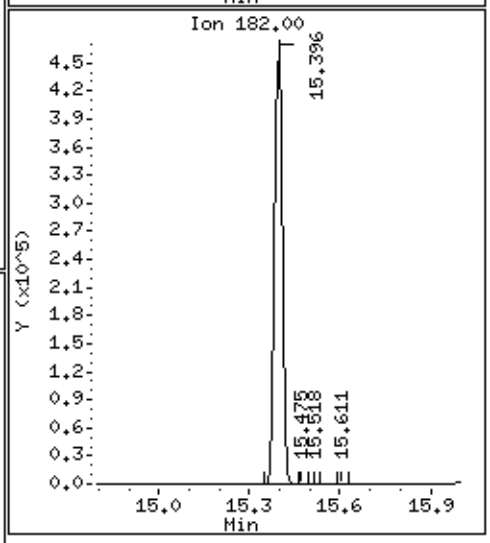
106 1,2,4-Trichlorobenzene

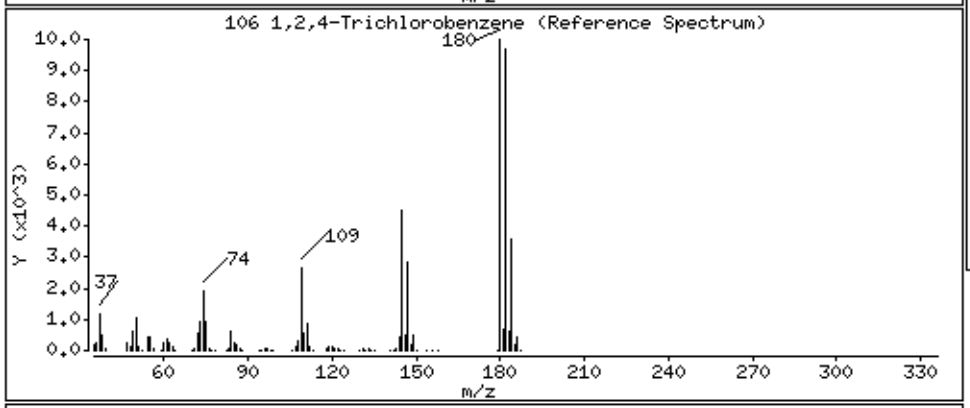
Concentration: 155.64 NG

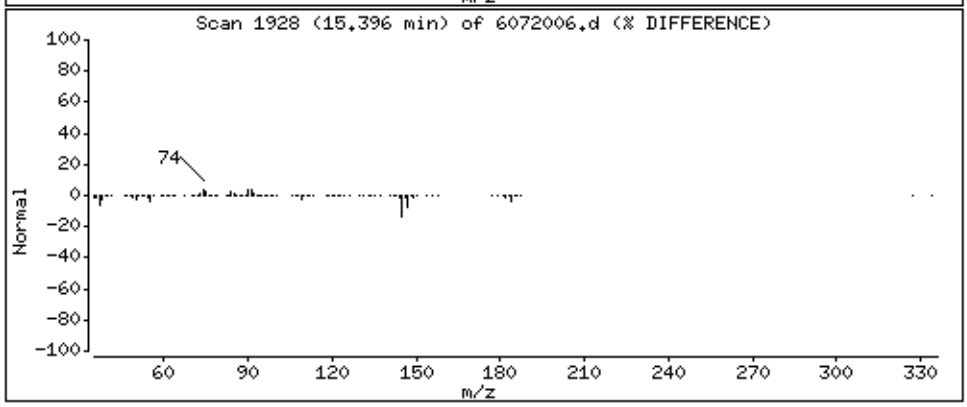












Data File: /chem/msd6.i/20jul16.b/6072006.d

Date : 20-JUL-2016 13:18

Client ID: LCSD

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCSD;LCSD

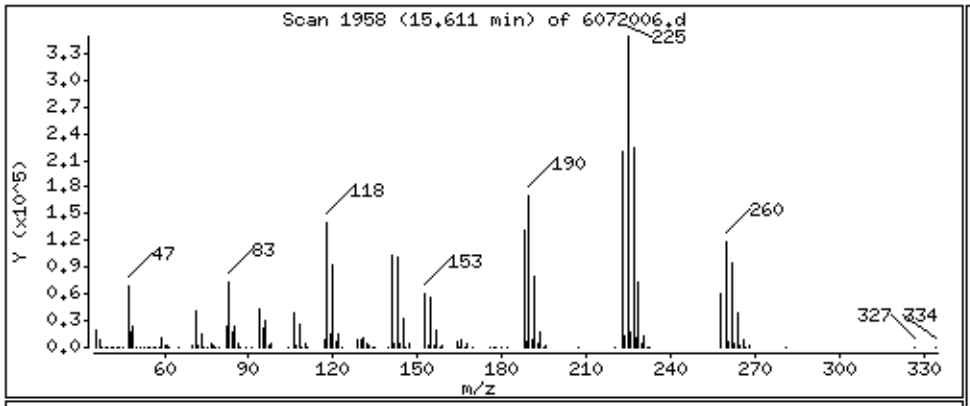
Operator: CT

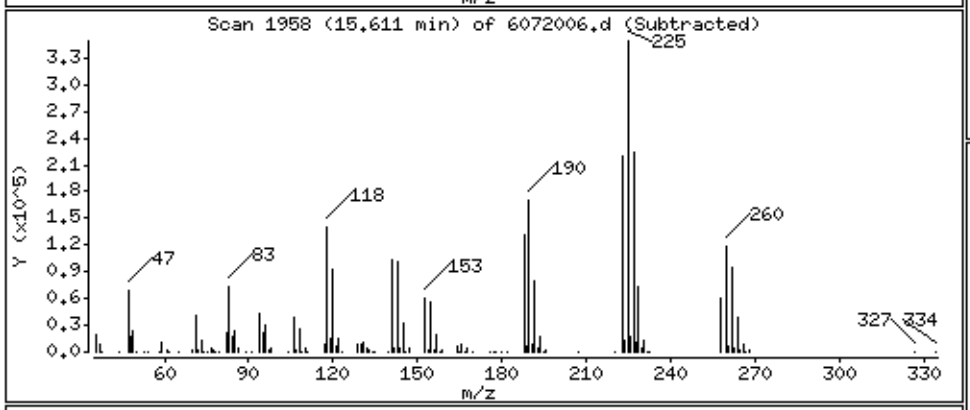
Column phase: RTx-624

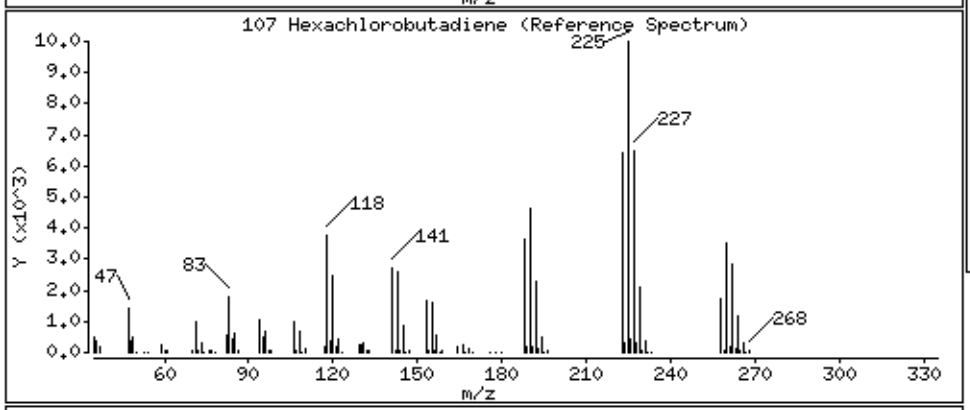
Column diameter: 0.53

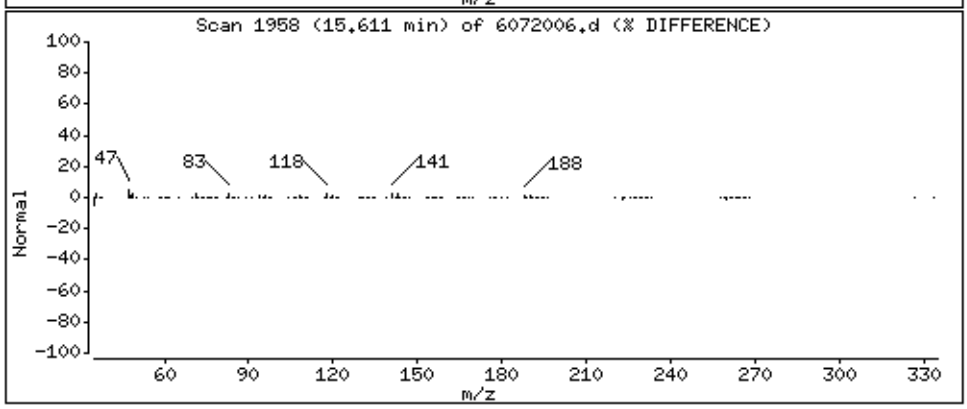
107 Hexachlorobutadiene

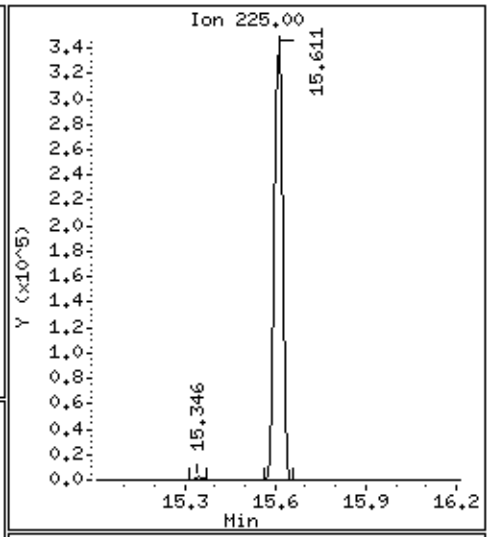
Concentration: 205.16 NG

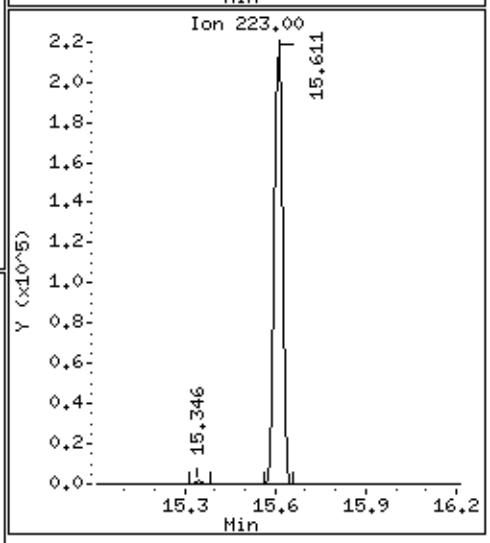












Data File: /chem/msd6.i/20jul16.b/6072006.d

Date : 20-JUL-2016 13:18

Client ID: LCSD

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCSD;LCSD

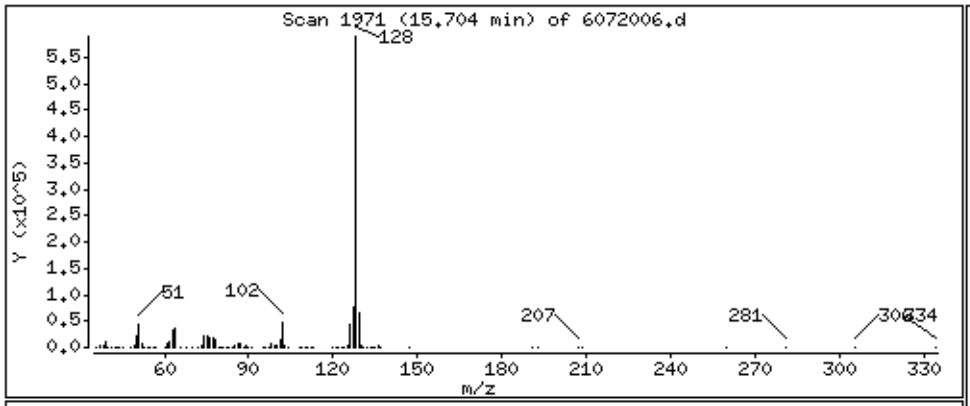
Operator: CT

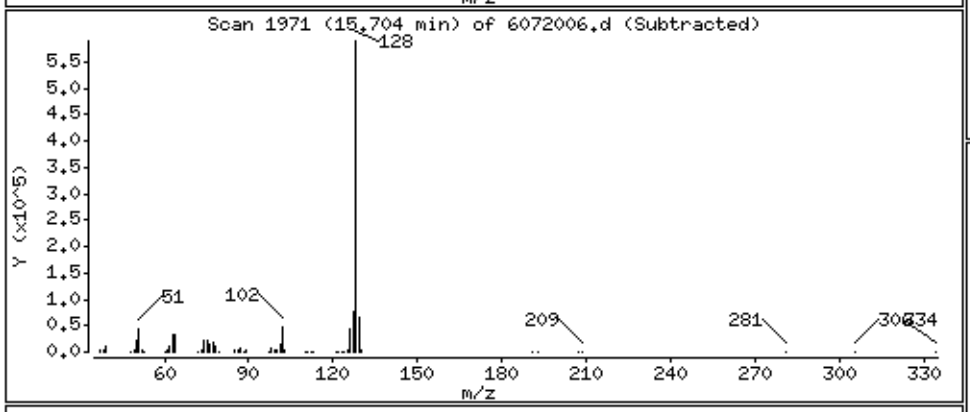
Column phase: RTx-624

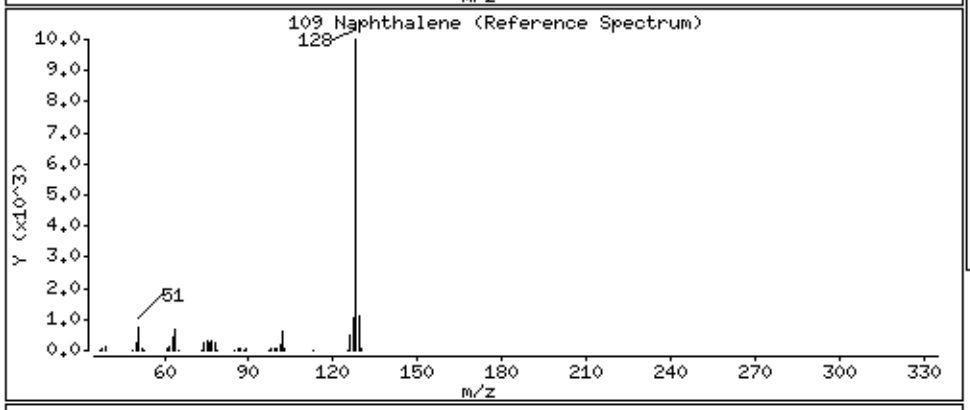
Column diameter: 0.53

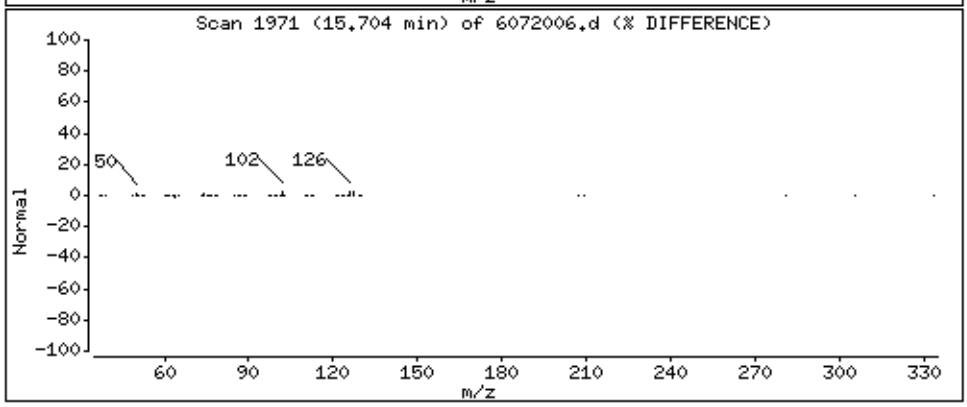
109 Naphthalene

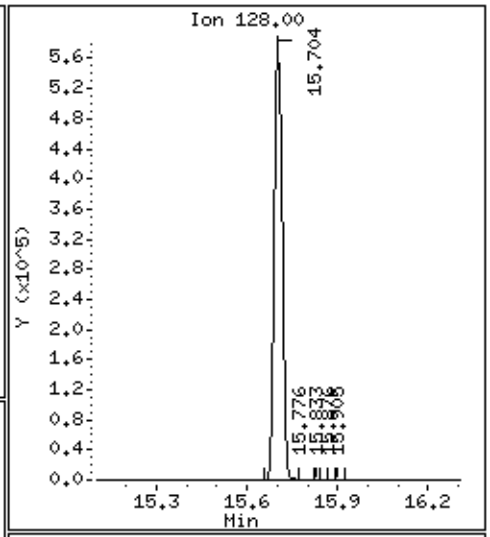
Concentration: 49.371 NG

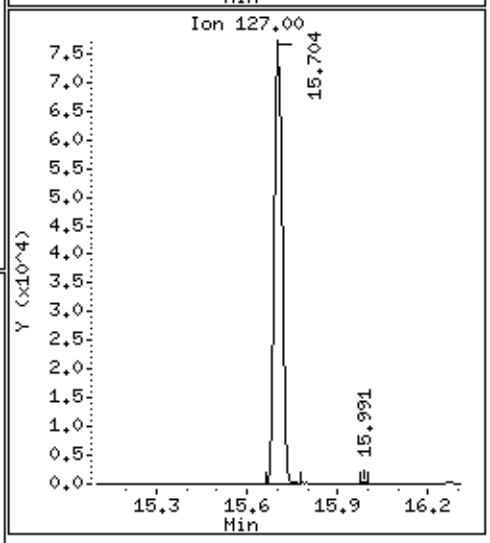












Data File: /chem/msd6.i/20jul16.b/6072006.d

Date : 20-JUL-2016 13:18

Client ID: LCSD

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCSD;LCSD

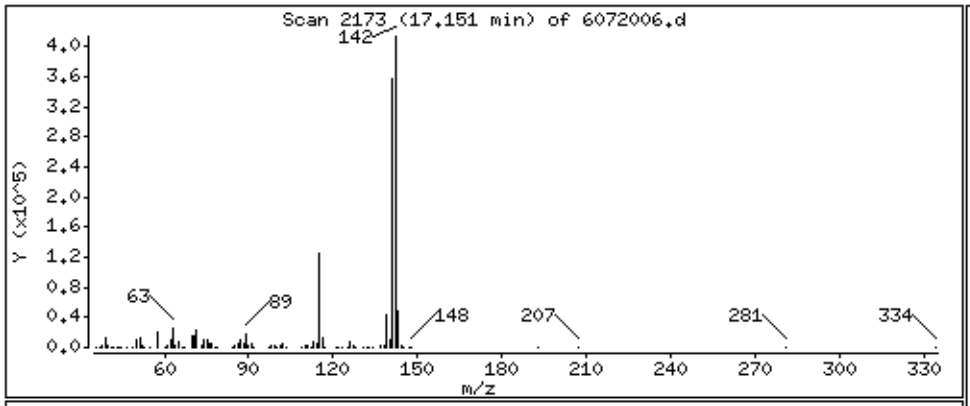
Operator: CT

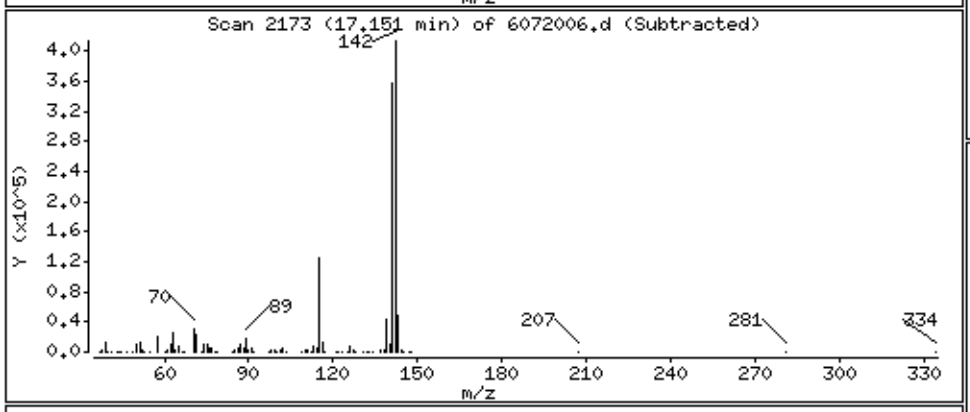
Column phase: RTx-624

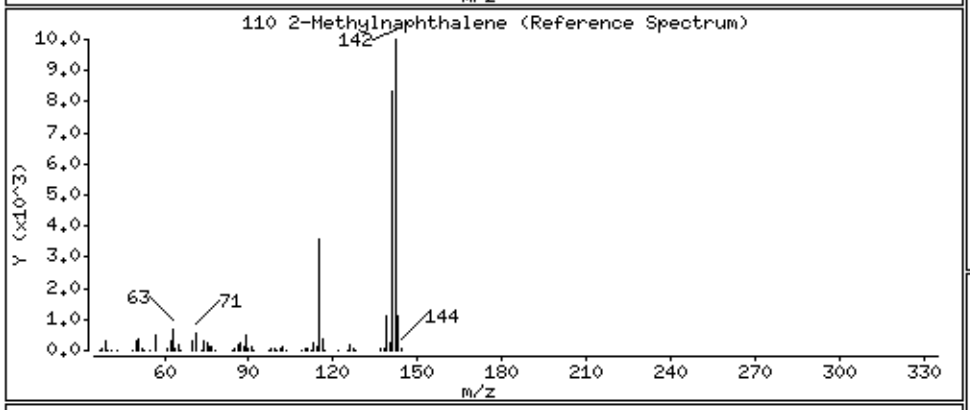
Column diameter: 0.53

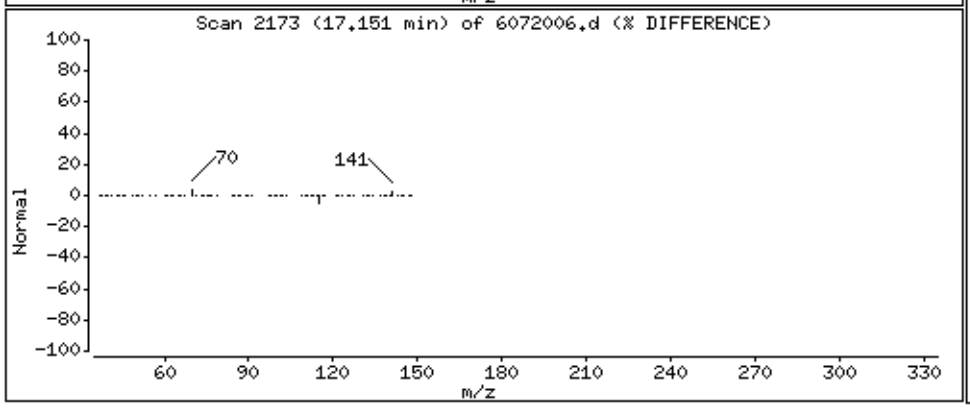
110 2-Methylnaphthalene

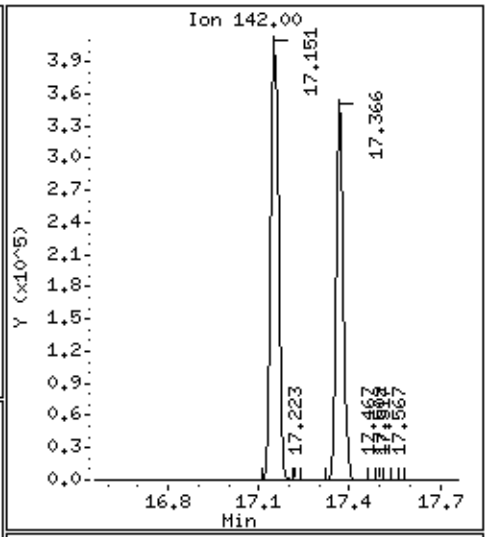
Concentration: 54.177 NG

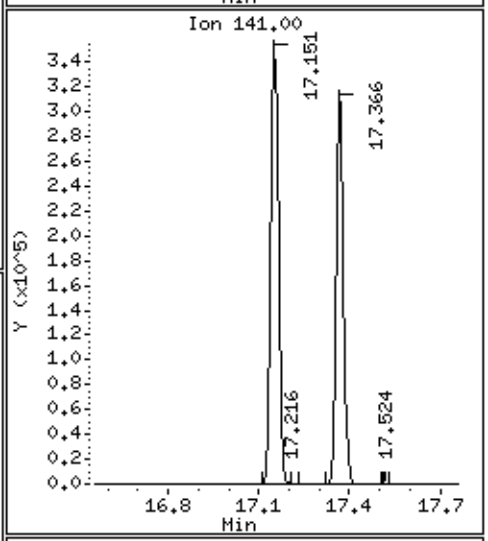


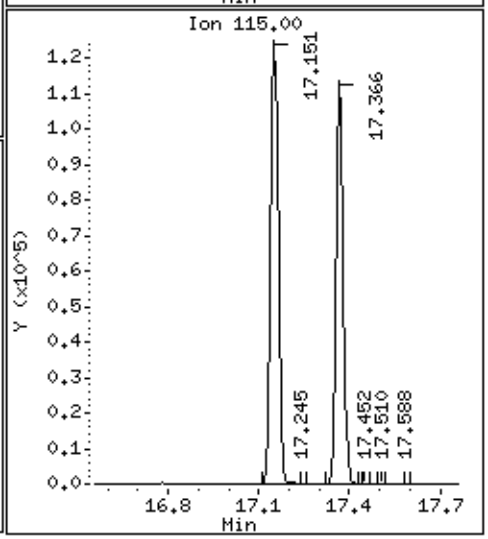












Data File: /chem/msd6.i/20jul16.b/6072006.d

Date : 20-JUL-2016 13:18

Client ID: LCSD

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCSD;LCSD

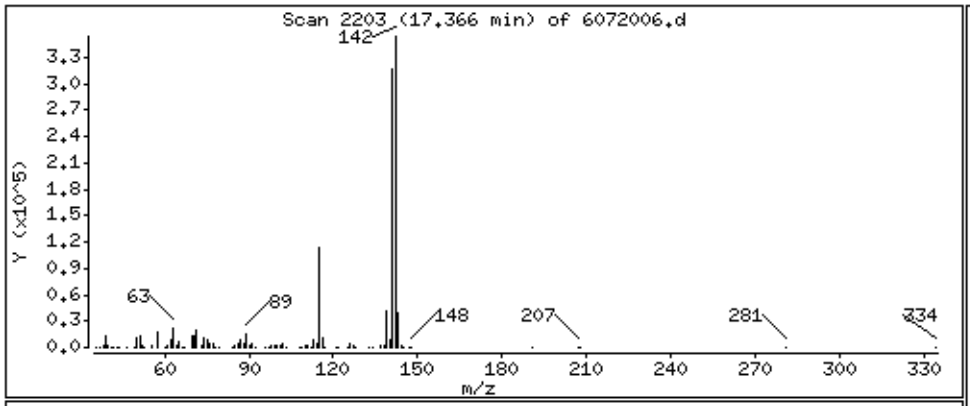
Operator: CT

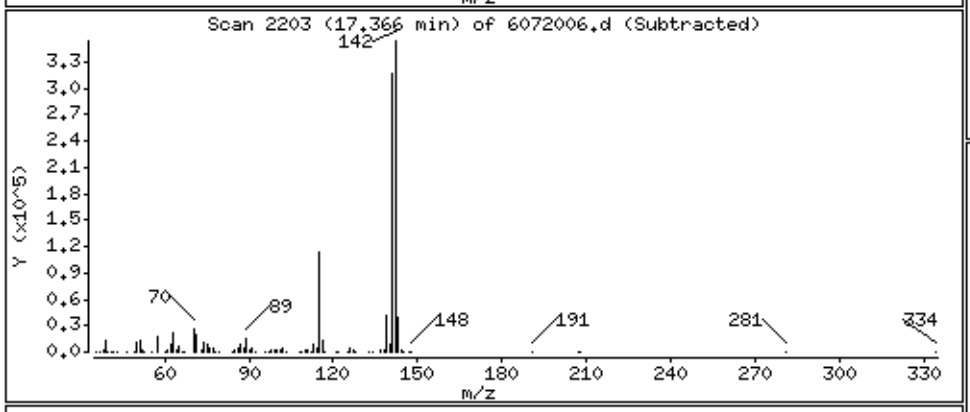
Column phase: RTx-624

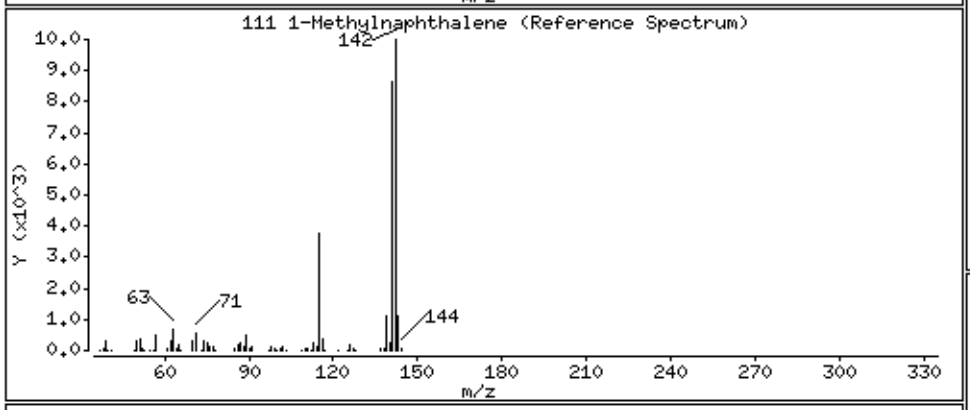
Column diameter: 0.53

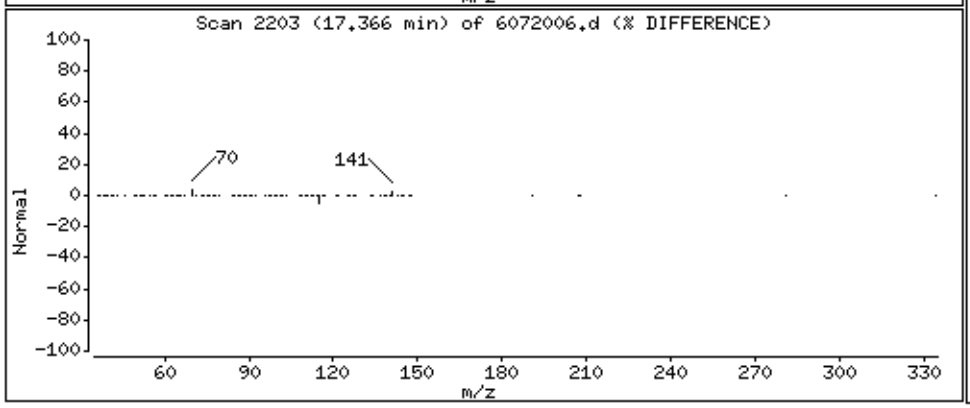
111 1-Methylnaphthalene

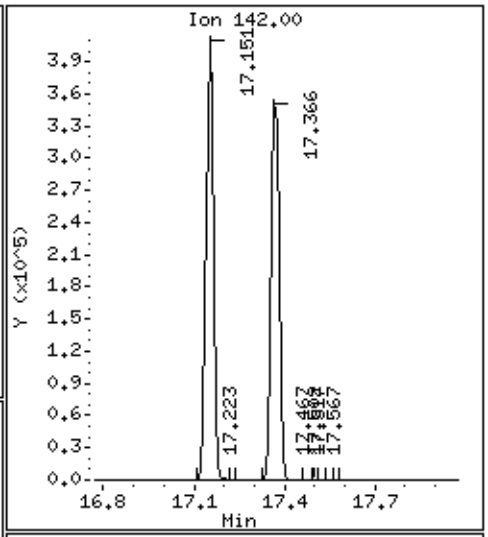
Concentration: 53.879 NG

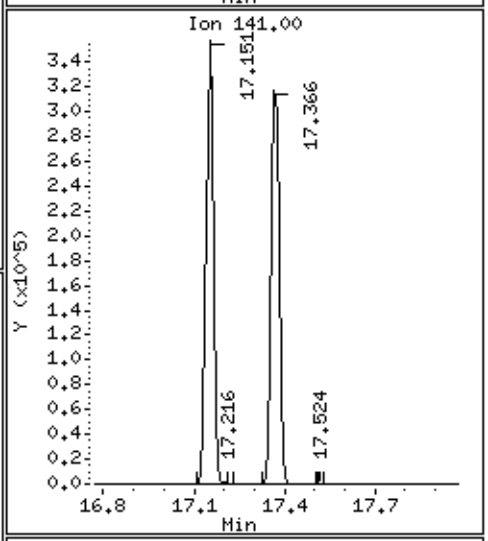


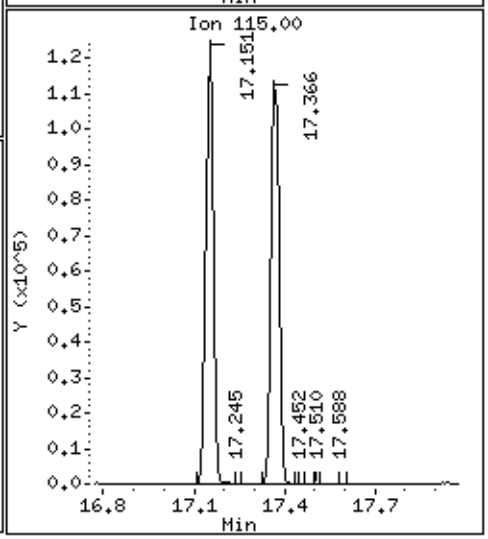












Data File: /chem/msd6.i/20jul16.b/6072006.d

Date : 20-JUL-2016 13:18

Client ID: LCSD

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCSD;LCSD

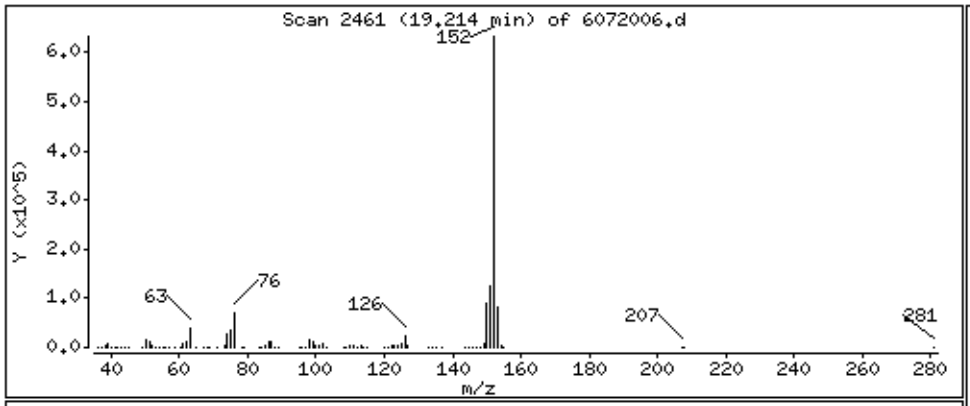
Operator: CT

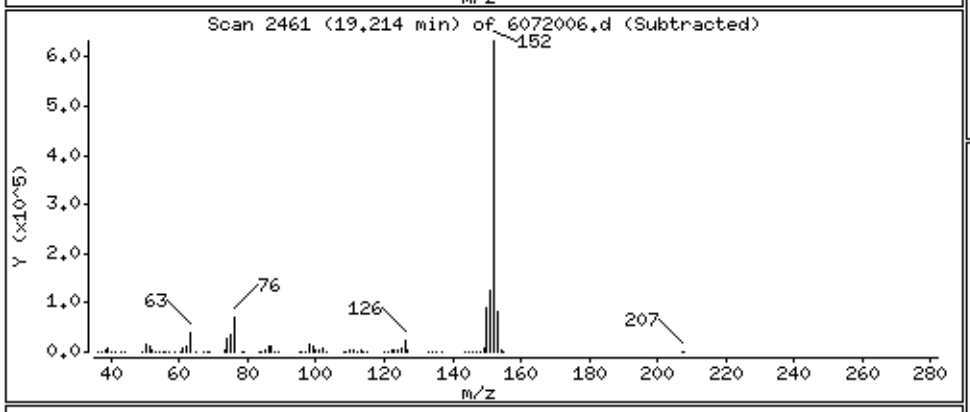
Column phase: RTx-624

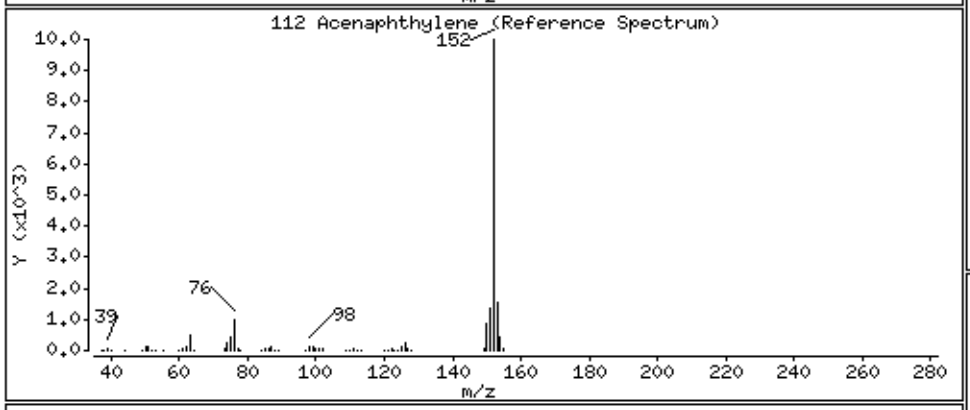
Column diameter: 0.53

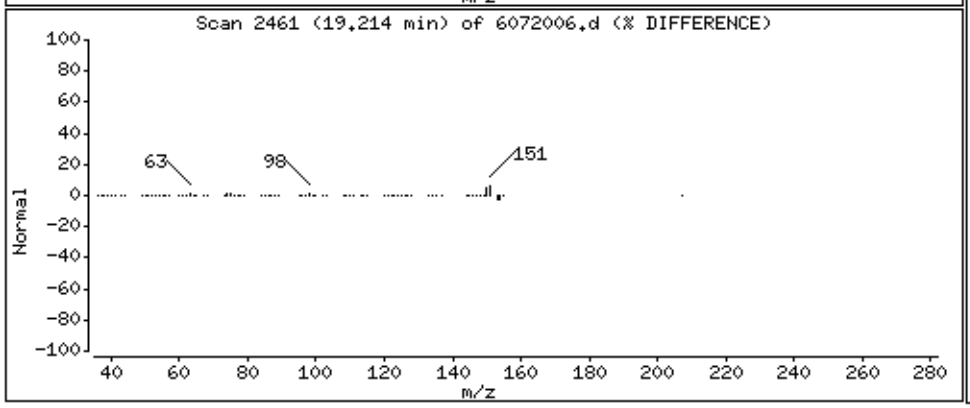
112 Acenaphthylene

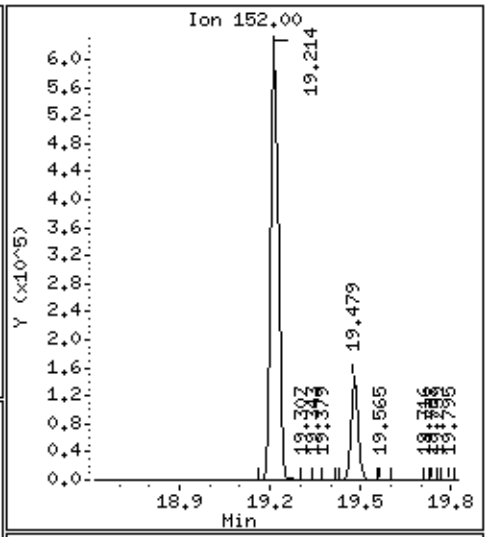
Concentration: 57.687 NG

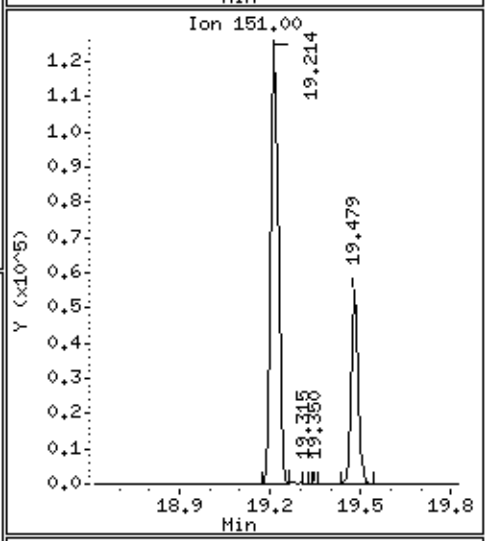


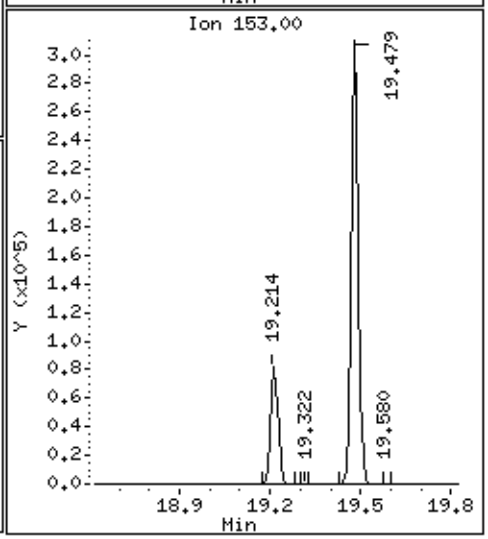












Data File: /chem/msd6.i/20jul16.b/6072006.d

Date : 20-JUL-2016 13:18

Client ID: LCSD

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCSD;LCSD

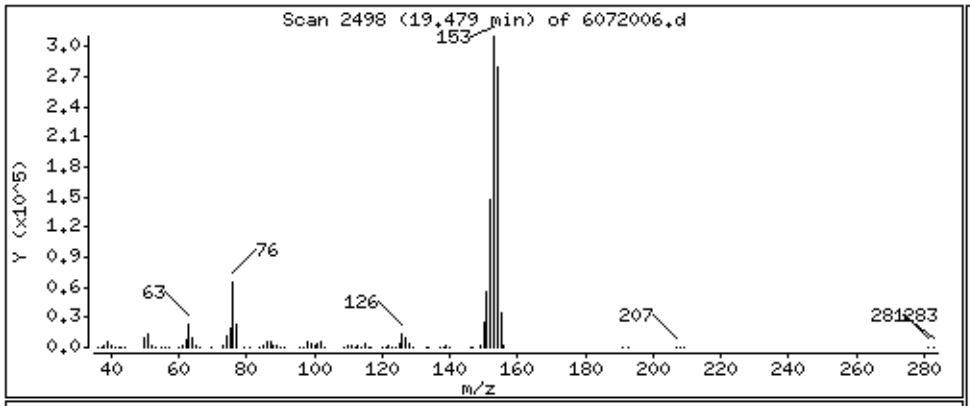
Operator: CT

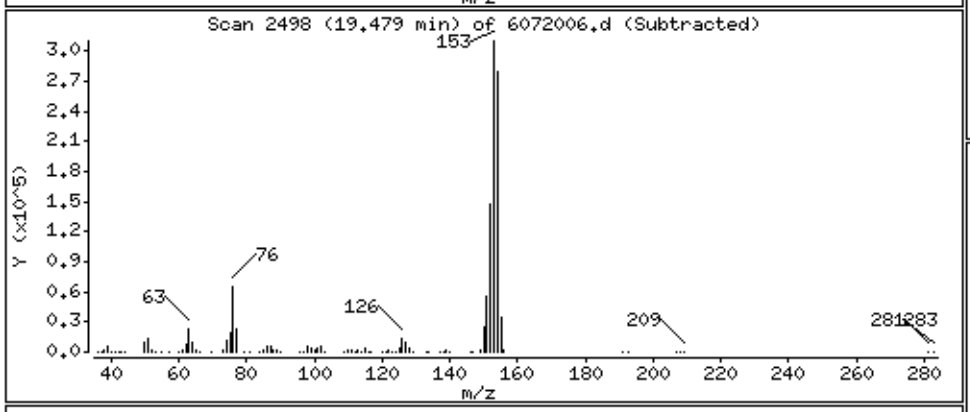
Column phase: RTx-624

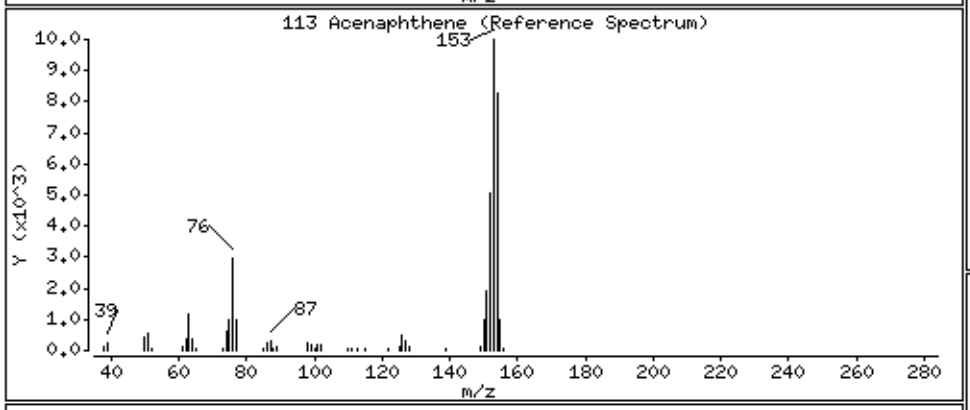
Column diameter: 0.53

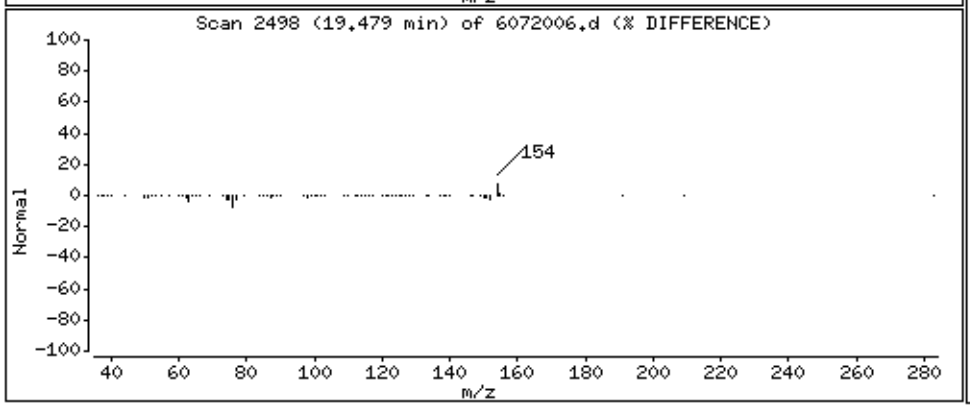
113 Acenaphthene

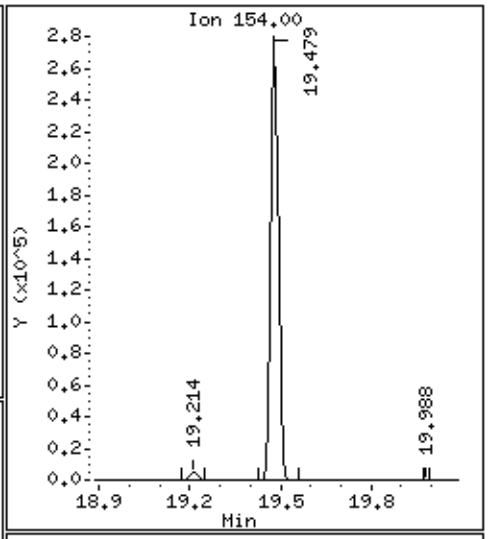
Concentration: 47.214 NG

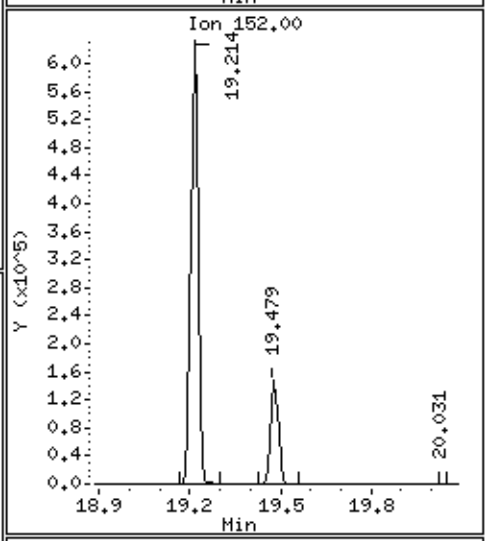


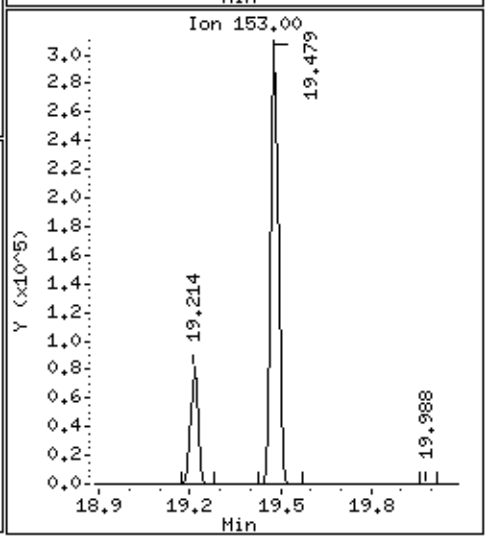












Data File: /chem/msd6.i/20jul16.b/6072006.d

Date : 20-JUL-2016 13:18

Client ID: LCSD

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCSD;LCSD

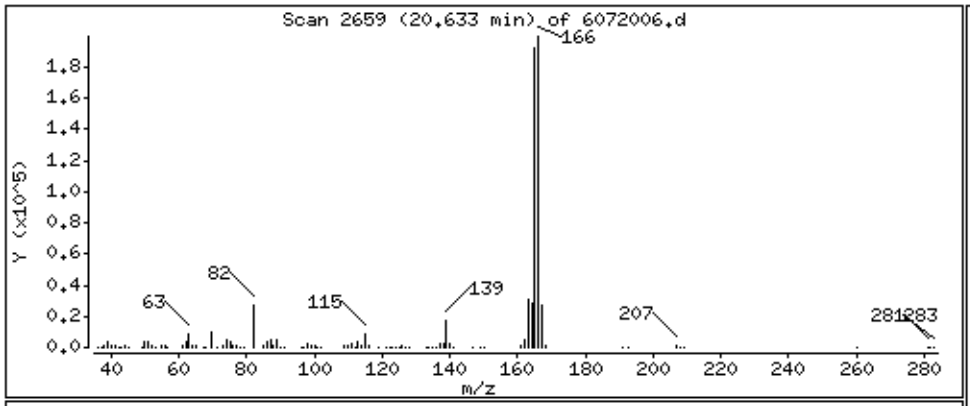
Operator: CT

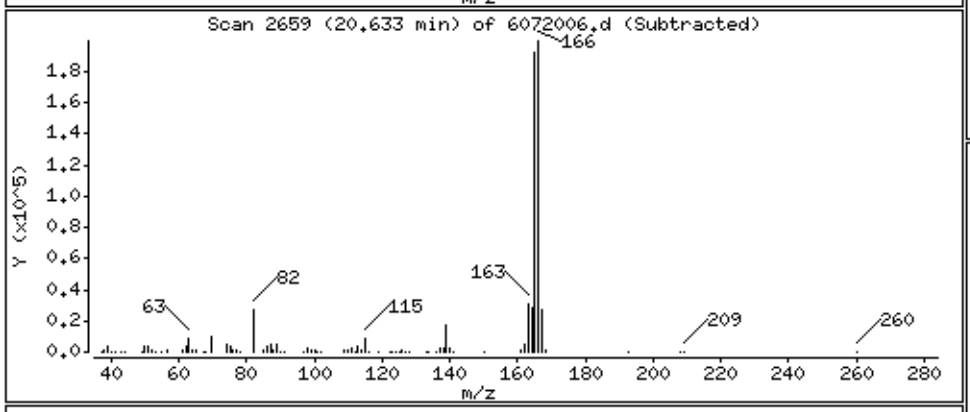
Column phase: RTx-624

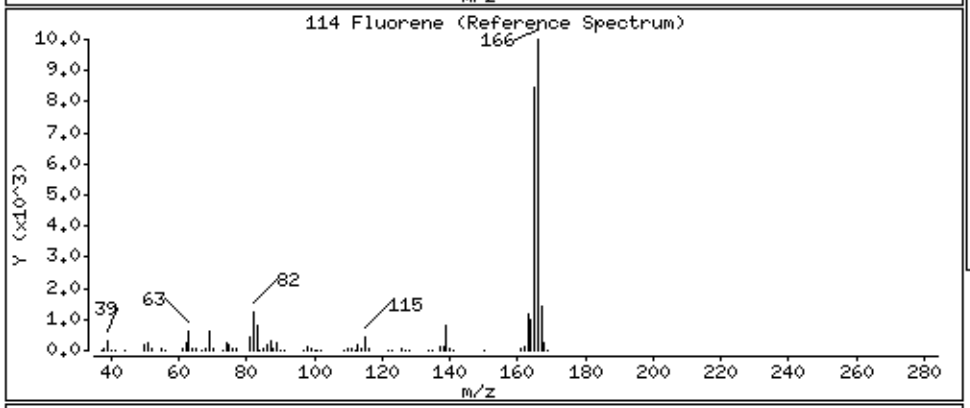
Column diameter: 0.53

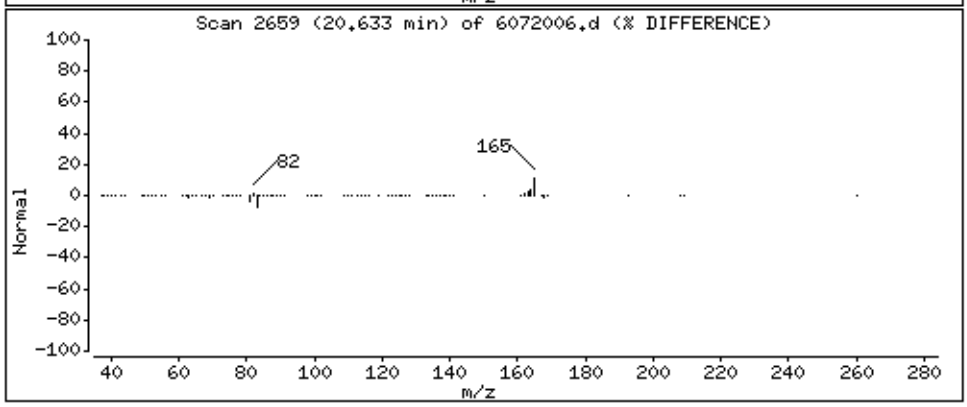
114 Fluorene

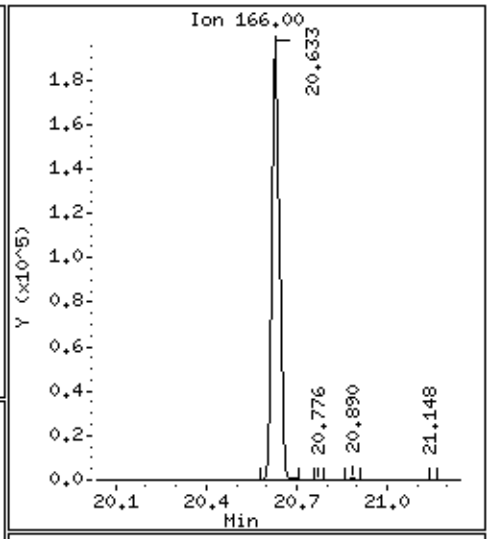
Concentration: 31.551 NG

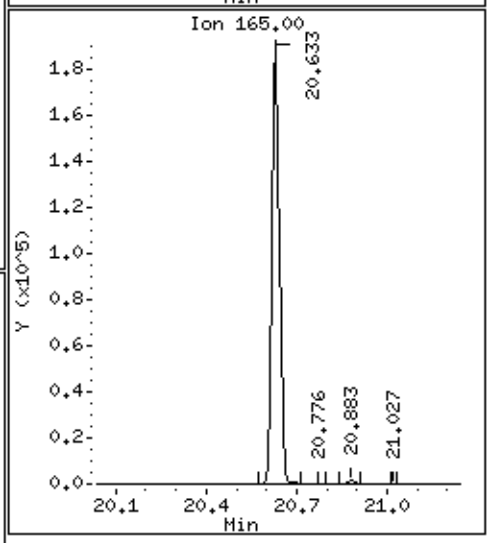












Data File: /chem/msd6.i/20jul16.b/6072006.d

Date : 20-JUL-2016 13:18

Client ID: LCSD

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCSD;LCSD

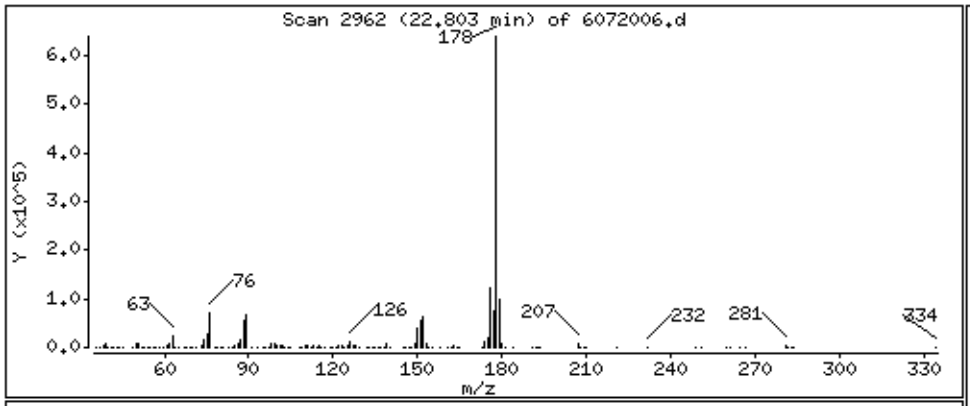
Operator: CT

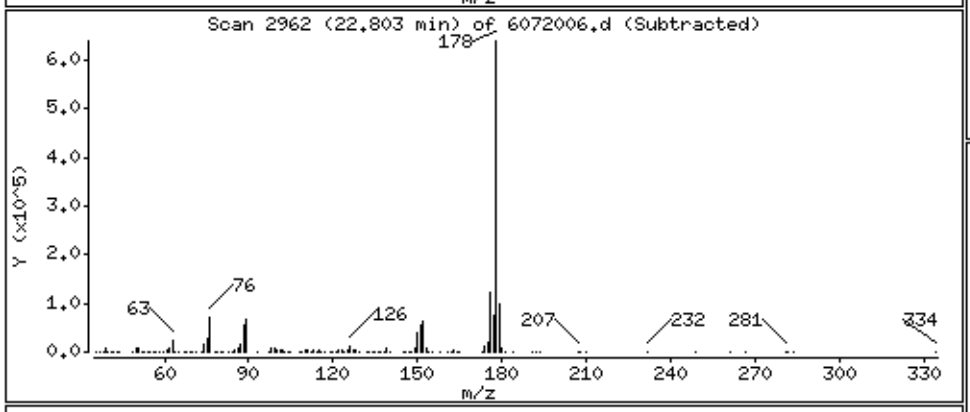
Column phase: RTx-624

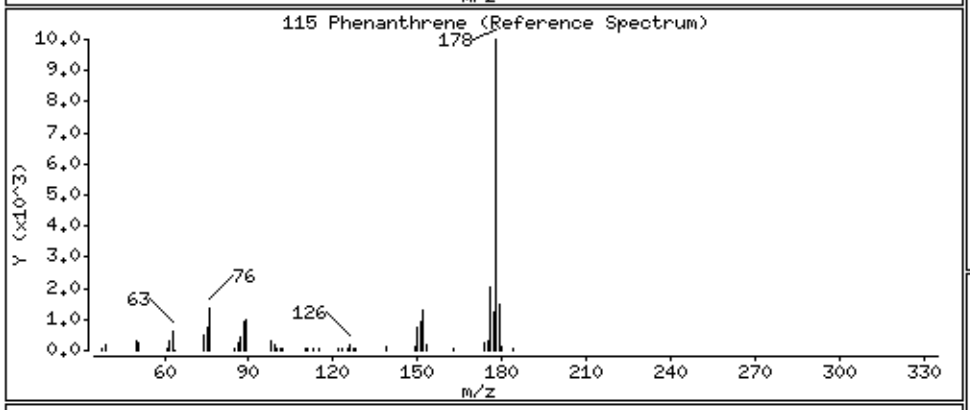
Column diameter: 0.53

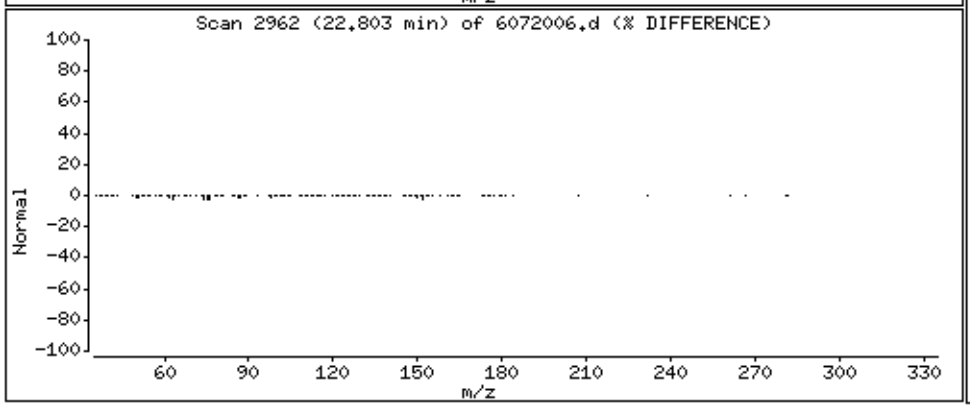
115 Phenanthrene

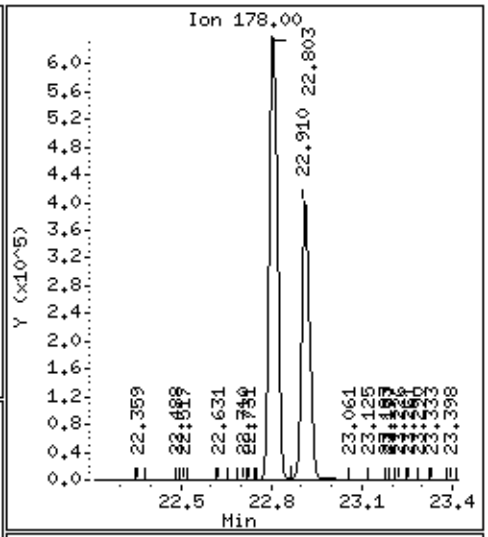
Concentration: 61.559 NG

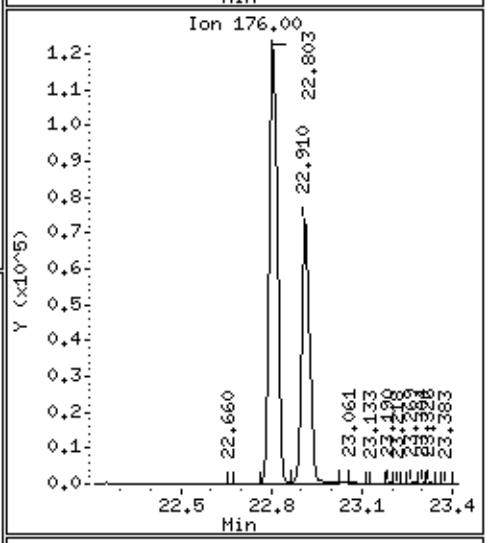


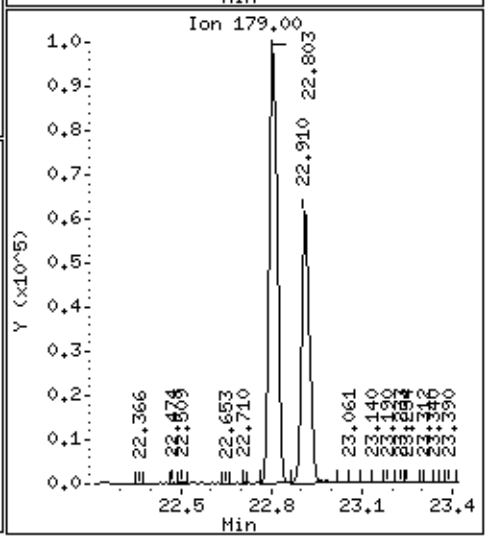












Data File: /chem/msd6.i/20jul16.b/6072006.d

Date : 20-JUL-2016 13:18

Client ID: LCSD

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCSD;LCSD

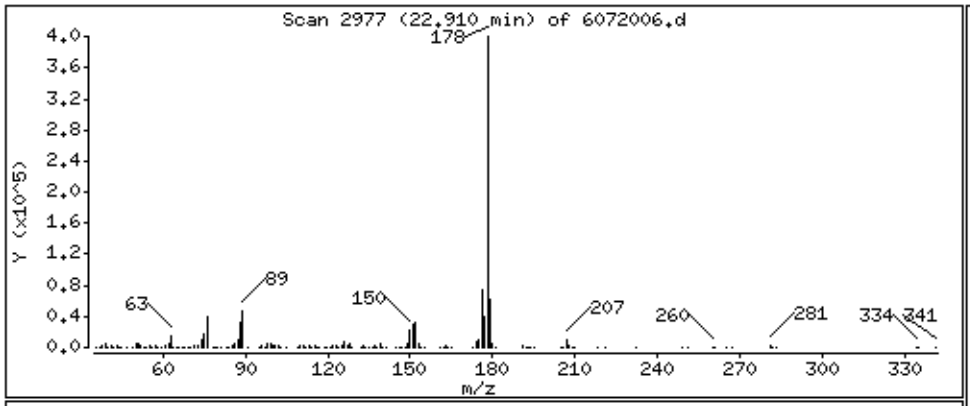
Operator: CT

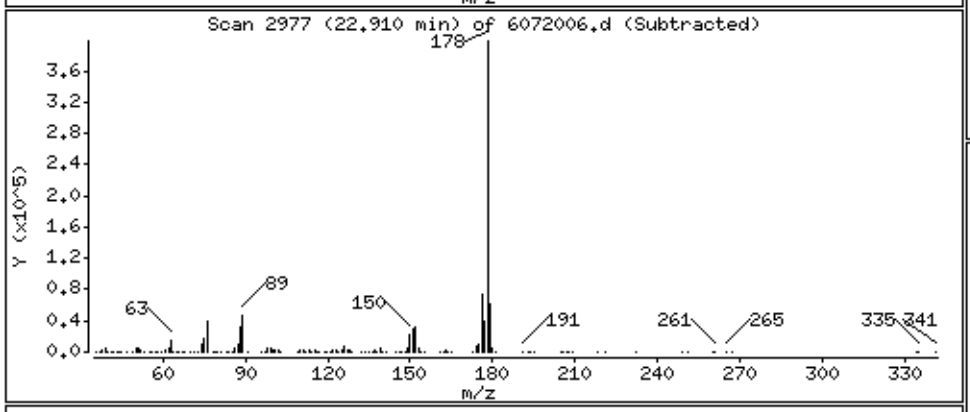
Column phase: RTx-624

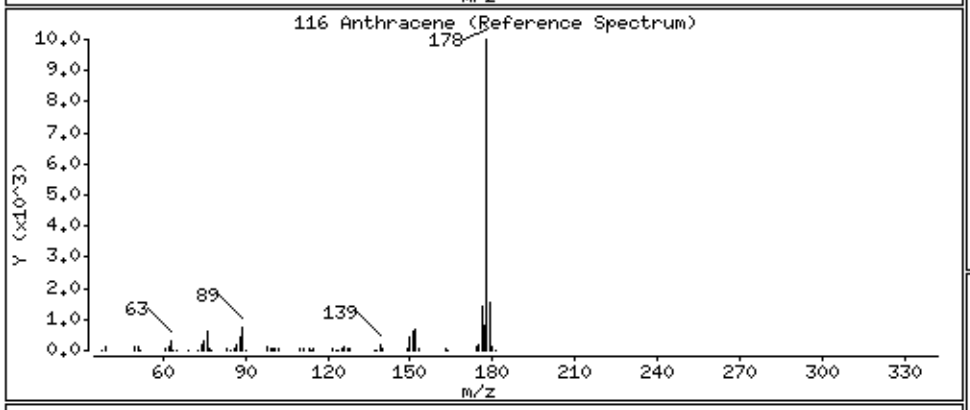
Column diameter: 0.53

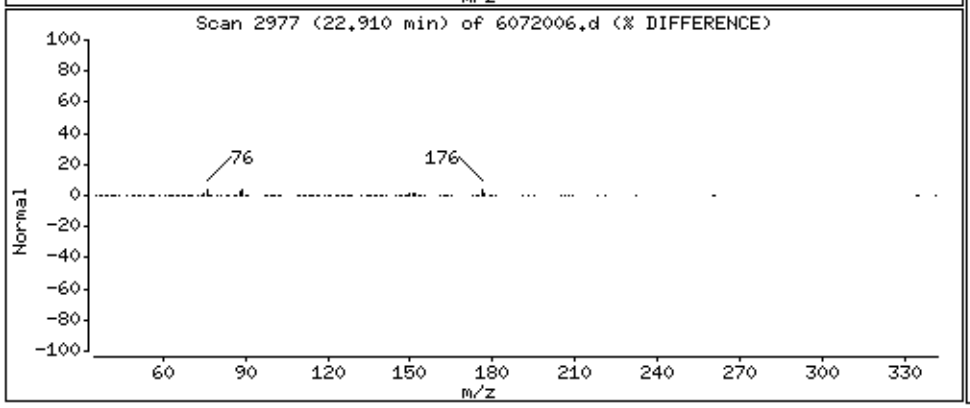
116 Anthracene

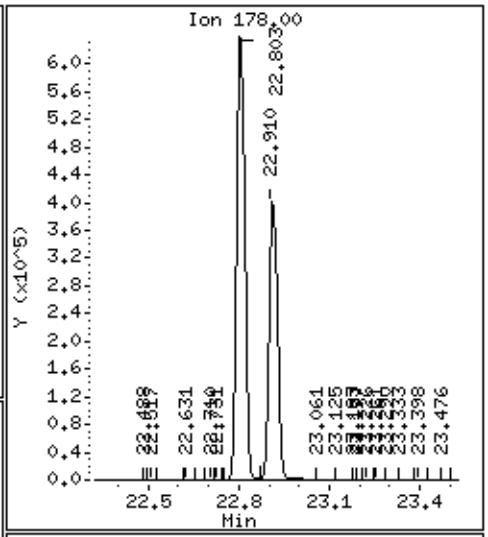
Concentration: 59.647 NG

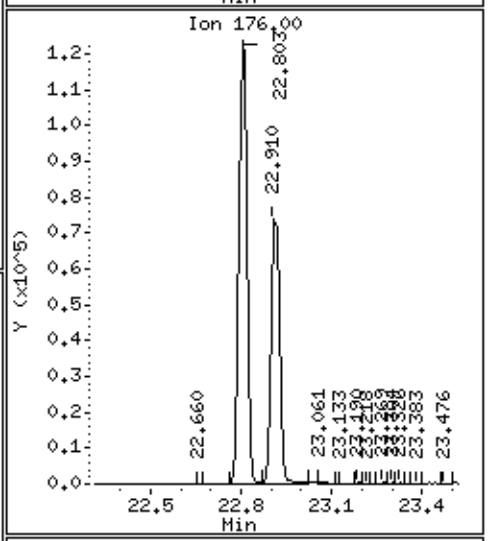


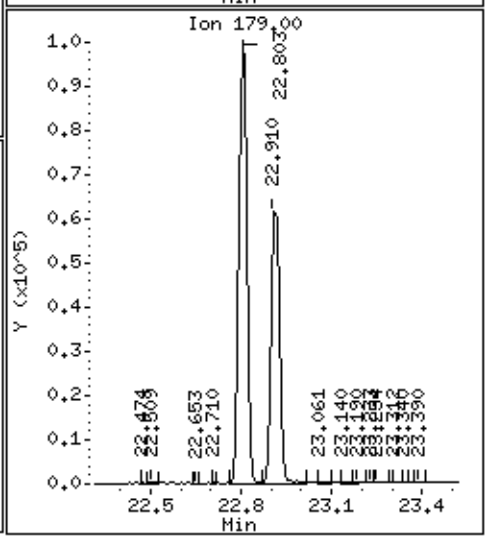












Data File: /chem/msd6.i/20jul16.b/6072006.d

Date : 20-JUL-2016 13:18

Client ID: LCSD

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCSD;LCSD

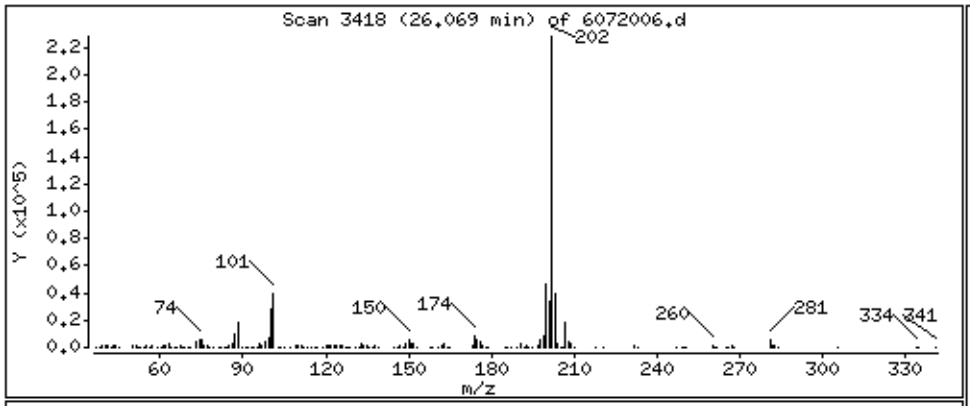
Operator: CT

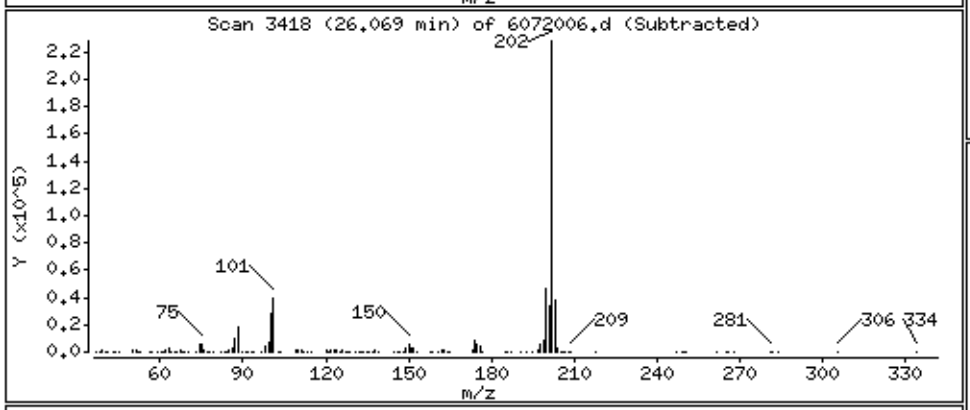
Column phase: RTx-624

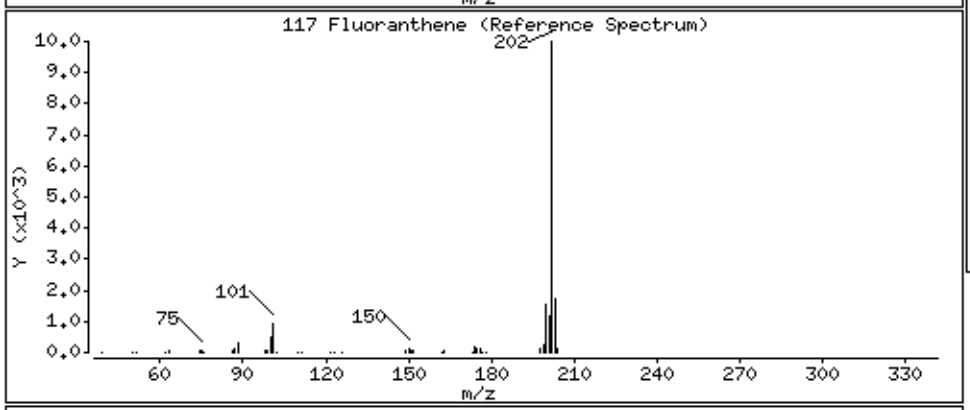
Column diameter: 0.53

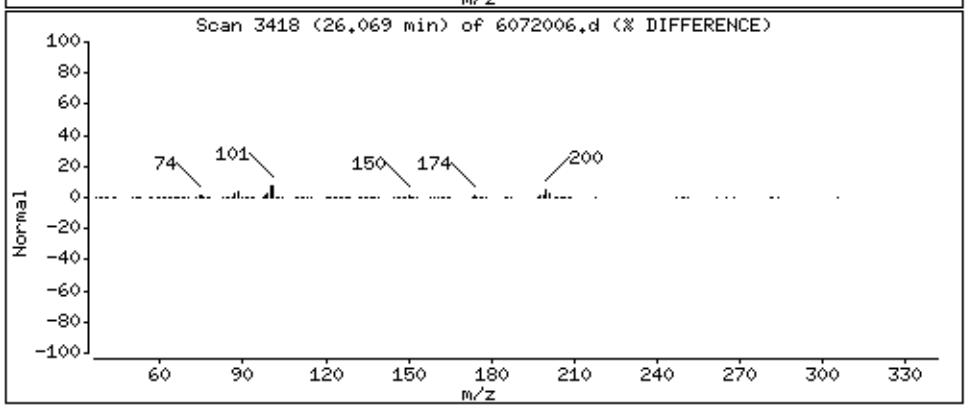
117 Fluoranthene

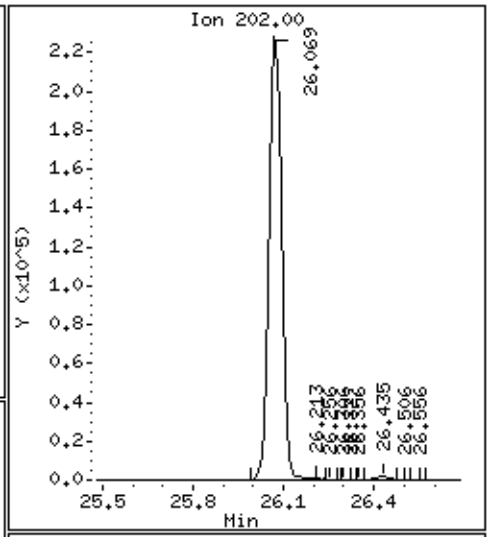
Concentration: 49.109 NG

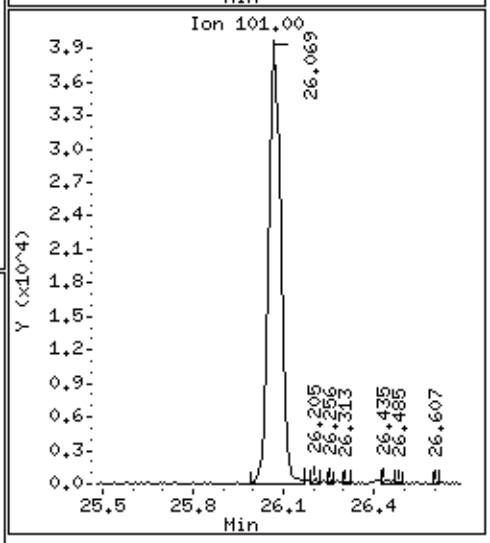












Data File: /chem/msd6.i/20jul16.b/6072006.d

Date : 20-JUL-2016 13:18

Client ID: LCSD

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCSD;LCSD

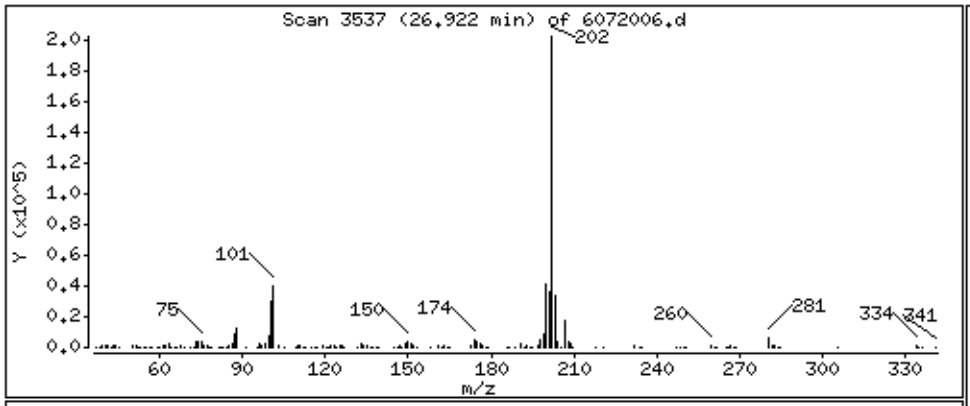
Operator: CT

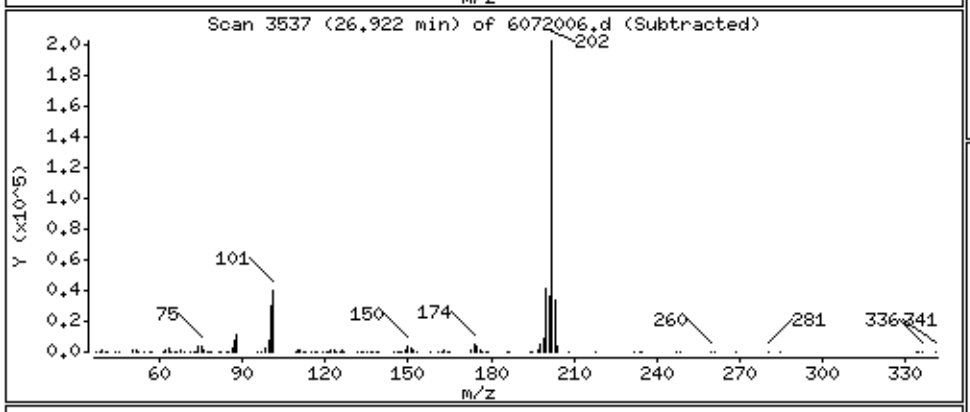
Column phase: RTx-624

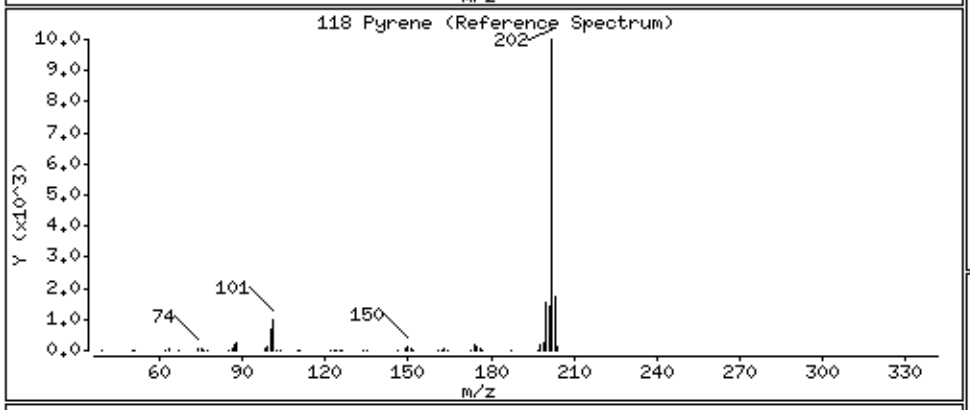
Column diameter: 0.53

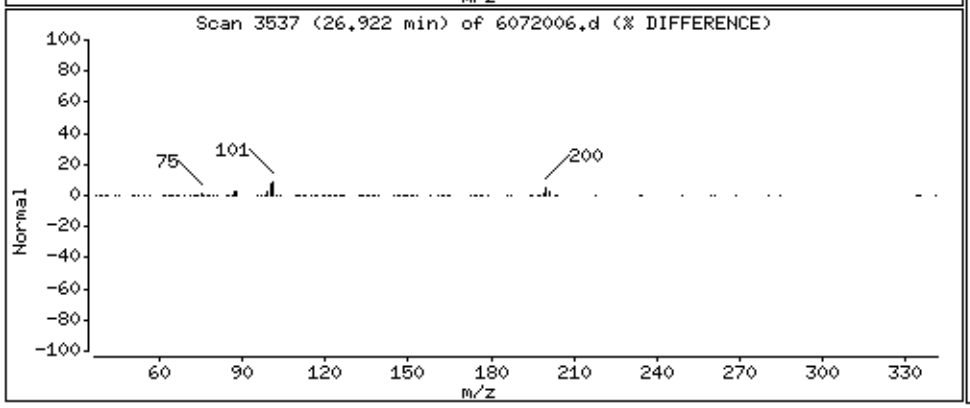
118 Pyrene

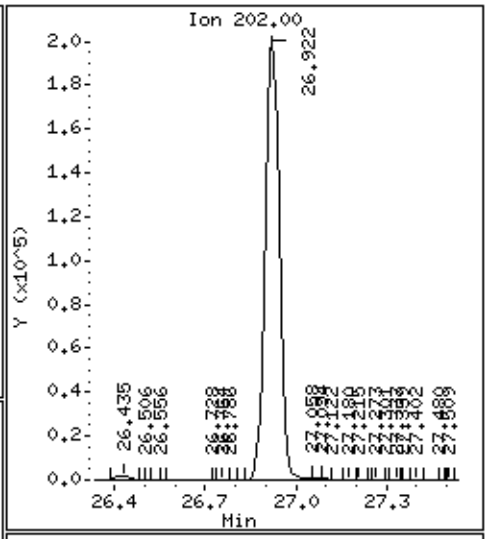
Concentration: 46.952 NG

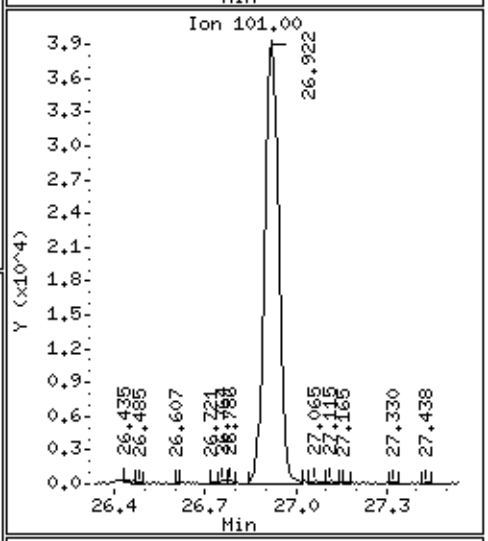


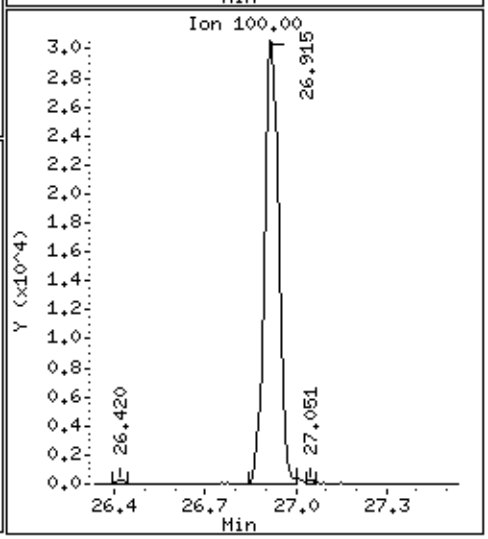












@ Air Toxics Ltd. Run Log for MSD-6 Method TO14 & TO15
BFB verification of 176/174 Ratio: (215445/223024)x100% = 96.43%
Standard ID 1476-2872 Exp. date 5/4/18
Bromochloromethane 167735 File ID: 6072003 BFB 432321
1,4-Difluorobenzene 708066 Compound: Naph
Chlorobenzene-d5 656580 InitialIS: ct
Verification CCV IS vs ICAL mid-point (-40%)
Calculation Check:

ppbv of compound = (Area of sample / Area of IS) * (Concentration of IS / RRF) = (1152992 / 432321) * (36 / 1.93557) = 49.604

Method: 6162071 2Vi.m

Data Directory: C:\msdchem\1\DATA\20JUL16.B\

Use	SampleName		Port pos.	Injection Time		Init.
1) ✓	6072001.D Comments					
;BFB;BFB		1476-2872, 36ng (5/4/18)	1	20 Jul 2016	8:57	ct
2) ✓	6072002.D Comments					
;BFB;BFB		1476-2872, 36ng (5/4/18)	2	20 Jul 2016	9:36	
3) ✓	6072003.D Comments					
;VI VOC+PAH CCV;CCV		2787-1-20ml(10/7/16),2744	1	20 Jul 2016	11:18	
4)	6072004.D Comments					
;VI VOC+PAH 4:1HS CCV;CCV		2787-1-100ml(10/7/16),274	2	20 Jul 2016	11:58	
5) ✓	6072005.D Comments					
;VI VOC+PAH LCS;LCS		2787-2-20ml(10/7/16), 274	3	20 Jul 2016	12:38	
6) ✓	6072006.D Comments					
;VI VOC+PAH LCSD;LCSD		2787-2-20ml(10/7/16), 274	3	20 Jul 2016	13:18	
7) ✓	6072007.D Comments					
;DP Lab Blank;Lab Blank		G0147216	11	20 Jul 2016	15:08	
8)	6072008.D Comments	run with 4:1HS, IS (Tol-d8)↑, (VC, 1,1-DCE, 1,1-TCA, MeChloroform Toluene exceedance)				
;1607178-11A		G0144325,reanalysis	41	20 Jul 2016	17:18	
9) ✓	6072009.D Comments					
;Blank			11	20 Jul 2016	17:58	
10) ✓	6072010.D Comments					
;1607228-15A		G0149799	21	20 Jul 2016	18:38	
11) ✓	6072011.D Comments					
;1607228-01A		G0151814	22	20 Jul 2016	19:17	
12) ✓	6072012.D Comments					
;1607228-02A		G0151188	23	20 Jul 2016	19:57	
13) ✓	6072013.D Comments					
;1607228-03A		G0150090	24	20 Jul 2016	20:37	
14) ✓	6072014.D Comments					
;1607228-04A		G0153639	25	20 Jul 2016	21:16	
15) ✓	6072015.D Comments					
;1607228-05A		G0150877	26	20 Jul 2016	21:56	
16) ✓	6072016.D Comments					
;1607228-06A		G0149733	27	20 Jul 2016	22:36	
17) ✓	6072018.D Comments					
;1607228-08A		G0149726	28	20 Jul 2016	23:15	

[signature] 7/21/16

18) ✓	6072019.D	Comments				ct
;1607228-09A		G0149703	29	20 Jul 2016	23:55	
19) ✓	6072020.D	Comments				
;1607228-10A		G0149853	30	21 Jul 2016	00:35	
20) ✓	6072021.D	Comments				
;1607228-11A		G0152247	31	21 Jul 2016	1:15	
21) ✓	6072022.D	Comments				
;1607228-12A		G0149806	32	21 Jul 2016	1:54	
22) ✓	6072023.D	Comments				
;1607228-13A		G0139968	33	21 Jul 2016	2:34	
23) ✓	6072024.D	Comments				
;1607228-14A		G0153653	34	21 Jul 2016	3:14	
24) ✓	6072025.D	Comments				
;VI tube cert/Blank		G0149263	51	21 Jul 2016	3:53	
25) ✓	6072026.D	Comments				
;VI tube cert		G0149671	52	21 Jul 2016	4:33	
26) ✓	6072027.D	Comments				
;VI tube cert		G0137249	53	21 Jul 2016	5:13	
27) ✓	6072028.D	Comments	clean			
;DOD tube cert		G0147654	54	21 Jul 2016	5:52	
28) ✓	6072029.D	Comments	Benz > RL			
;VI tube cert		G0132032	55	21 Jul 2016	6:32	
29) ✓	6072030.D	Comments				
;VI tube cert		G0145560	56	21 Jul 2016	7:12	
30) ✓	6072031.D	Comments				
;VI tube cert		G0147378	57	21 Jul 2016	7:52	✓

Clarissa 7/21/16

Eurofins Air Toxics Inc.

Data file : /chem/msd6.i/12jul16.b/6071201.d
Lab Smp Id: Client Smp ID: BFB
Inj Date : 12-JUL-2016 10:13
Operator : CT Inst ID: msd6.i
Smp Info : ;BFB;BFB
Misc Info : 1476-2872, 36ng (5/4/18)
Comment :
Method : /chem/msd6.i/12jul16.b/bfb.m
Meth Date : 31-Mar-2016 12:20 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		
11.407	11.478	-0.071	95	279445		100.00-	100.00	100.00
11.407	11.478	-0.071	50	53280		8.00-	40.00	19.07
11.407	11.478	-0.071	75	125095		30.00-	66.00	44.77
11.407	11.478	-0.071	96	19168		5.00-	9.00	6.86
11.407	11.478	-0.071	173	0		0.00-	1.99	0.00
11.407	11.478	-0.071	174	239210		50.00-	120.00	85.60
11.407	11.478	-0.071	175	17634		4.00-	9.00	7.37
11.407	11.478	-0.071	176	233066		93.00-	101.00	97.43
11.407	11.478	-0.071	177	15543		5.00-	9.00	6.67

Data File: /chem/msd6.i/12jul16.b/6071201.d

Date : 12-JUL-2016 10:13

Client ID: BFB

Instrument: msd6.i

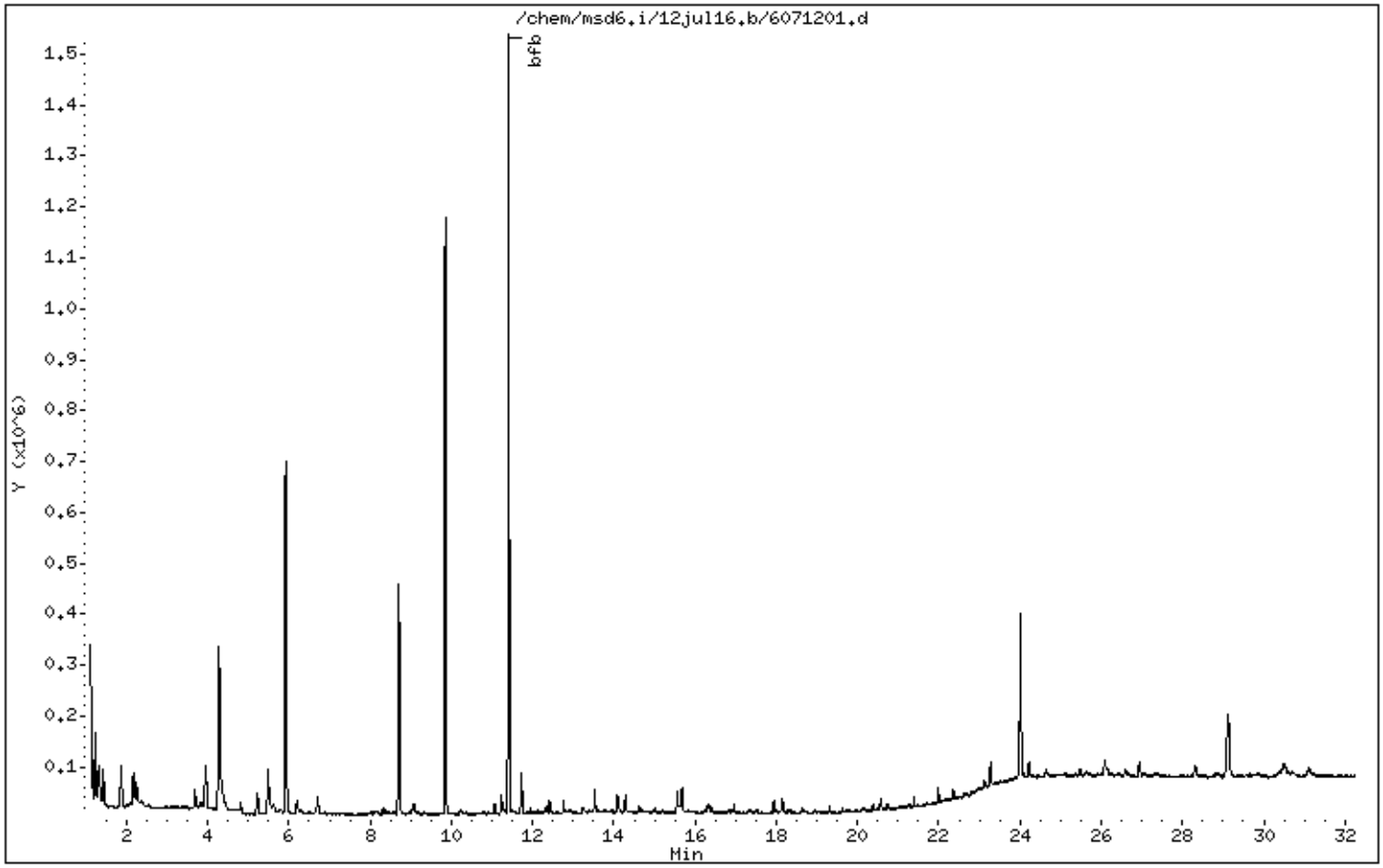
Sample Info: ;BFB;BFB

Volume Injected (uL): 1.0

Operator: CT

Column phase:

Column diameter: 2.00



Data File: /chem/msd6.i/12jul16.b/6071201.d

Date : 12-JUL-2016 10:13

Client ID: BFB

Instrument: msd6.i

Sample Info: ;BFB;BFB

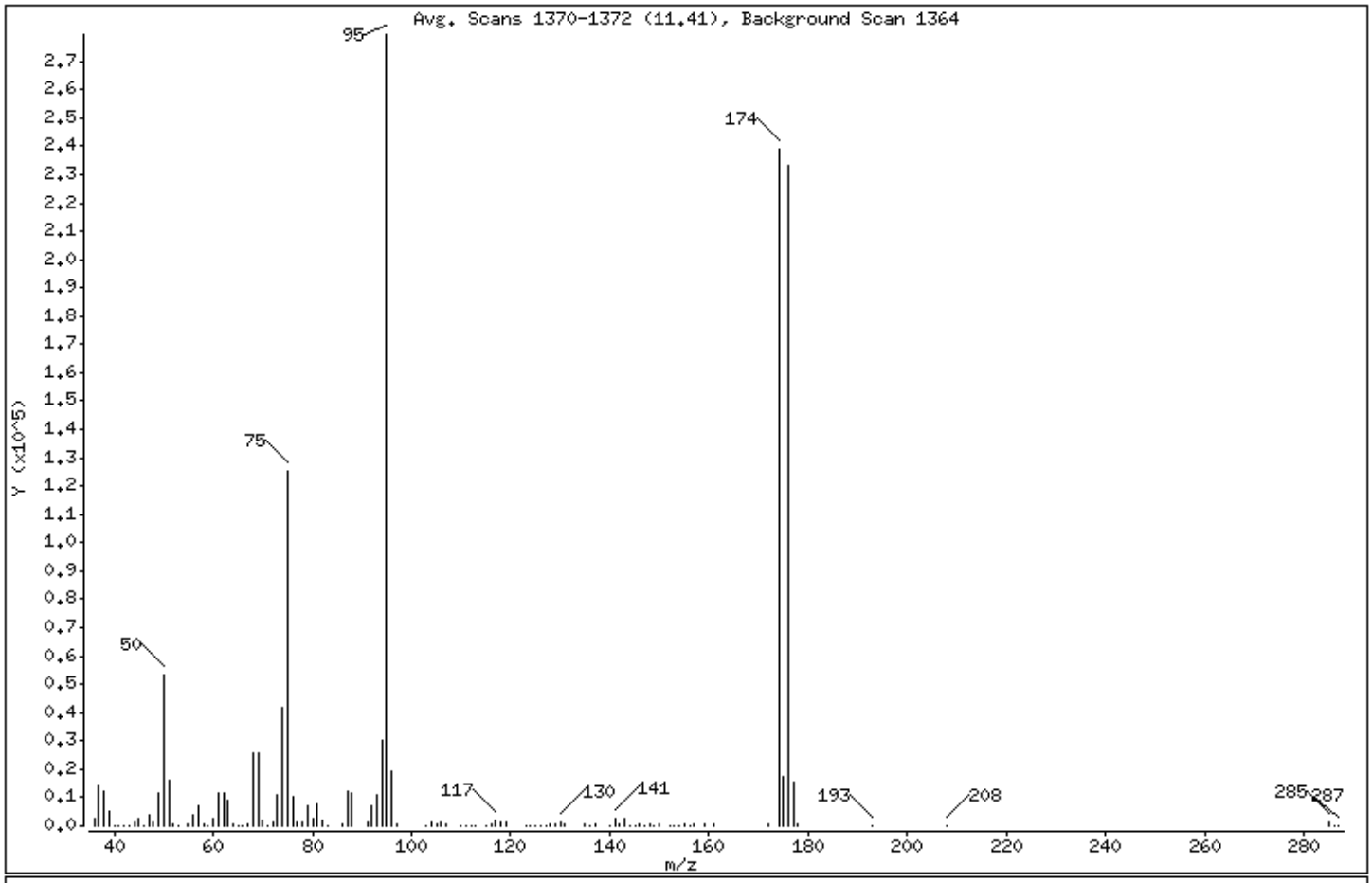
Volume Injected (uL): 1.0

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	19.07
75	30.00 - 66.00% of mass 95	44.77
96	5.00 - 9.00% of mass 95	6.86
173	Less than 1.99% of mass 174	0.00 (0.00)
174	50.00 - 120.00% of mass 95	85.60
175	4.00 - 9.00% of mass 174	6.31 (7.37)
176	93.00 - 101.00% of mass 174	83.40 (97.43)
177	5.00 - 9.00% of mass 176	5.56 (6.67)

Data File: /chem/msd6.i/12jul16.b/6071201.d

Date : 12-JUL-2016 10:13

Client ID: BFB

Instrument: msd6.i

Sample Info: ;BFB;BFB

Volume Injected (uL): 1.0

Operator: CT

Column phase:

Column diameter: 2.00

Data File: 6071201.d
Spectrum: Avg. Scans 1370-1372 (11.41), Background Scan 1364
Location of Maximum: 95.00
Number of points: 113

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	2449	66.00	118	104.00	1112	144.00	172
37.00	13889	67.00	947	105.00	494	145.00	286
38.00	11962	68.00	25824	106.00	1225	146.00	449
39.00	4990	69.00	25824	107.00	344	147.00	300
40.00	224	70.00	2098	110.00	184	148.00	600
41.00	263	71.00	31	111.00	226	149.00	222
42.00	48	72.00	1299	112.00	212	150.00	324
43.00	194	73.00	10744	113.00	287	152.00	50
44.00	1288	74.00	41544	115.00	298	153.00	254
45.00	2646	75.00	125088	116.00	899	154.00	190
46.00	107	76.00	10452	117.00	1697	155.00	733
47.00	3782	77.00	1357	118.00	972	156.00	51
48.00	1550	78.00	1182	119.00	1400	157.00	499
49.00	11360	79.00	6972	123.00	55	159.00	389
50.00	53280	80.00	2429	124.00	194	161.00	356
51.00	16342	81.00	7564	125.00	113	172.00	406
52.00	781	82.00	1788	126.00	57	174.00	239168
53.00	130	83.00	239	127.00	138	175.00	17632
55.00	702	86.00	361	128.00	960	176.00	233024
56.00	3911	87.00	11929	129.00	564	177.00	15543
57.00	6948	88.00	11583	130.00	1022	178.00	524
58.00	354	91.00	1060	131.00	386	193.00	195
59.00	110	92.00	7196	135.00	533	208.00	61
60.00	2712	93.00	10852	136.00	50	285.00	965
61.00	11806	94.00	30472	137.00	546	286.00	258
62.00	11273	95.00	279424	140.00	76	287.00	124
63.00	8866	96.00	19168	141.00	2482		
64.00	802	97.00	631	142.00	365		
65.00	278	103.00	153	143.00	2432		

Eurofins Air Toxics Inc.

Data file : /chem/msd6.i/13jul16.b/6071301.d
Lab Smp Id: Client Smp ID: BFB
Inj Date : 13-JUL-2016 12:34
Operator : CT Inst ID: msd6.i
Smp Info : ;BFB;BFB
Misc Info : 1476-2872, 36ng (5/4/18)
Comment :
Method : /chem/msd6.i/13jul16.b/bfb.m
Meth Date : 31-Mar-2016 12:20 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		
11.407	11.478	-0.071	95	225386		100.00	100.00	100.00
11.407	11.478	-0.071	50	38034		8.00	40.00	16.88
11.407	11.478	-0.071	75	97986		30.00	66.00	43.47
11.407	11.478	-0.071	96	15243		5.00	9.00	6.76
11.407	11.478	-0.071	173	0		0.00	1.99	0.00
11.407	11.478	-0.071	174	205056		50.00	120.00	90.98
11.407	11.478	-0.071	175	15384		4.00	9.00	7.50
11.407	11.478	-0.071	176	197845		93.00	101.00	96.48
11.407	11.478	-0.071	177	13294		5.00	9.00	6.72

Data File: /chem/msd6.i/13jul16.b/6071301.d

Date : 13-JUL-2016 12:34

Client ID: BFB

Instrument: msd6.i

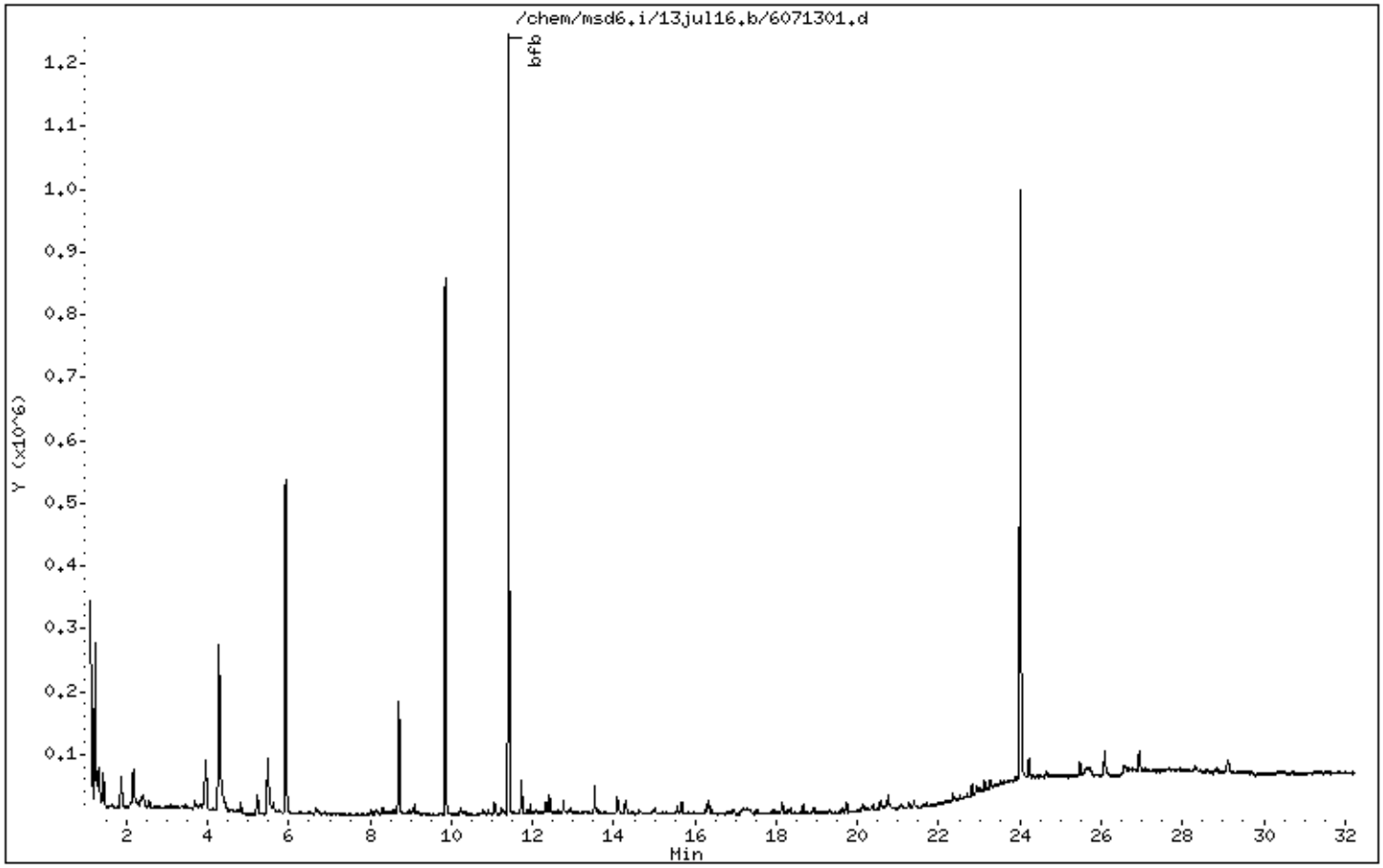
Sample Info: ;BFB;BFB

Volume Injected (uL): 1.0

Operator: CT

Column phase:

Column diameter: 2.00



Data File: /chem/msd6.i/13jul16.b/6071301.d

Date : 13-JUL-2016 12:34

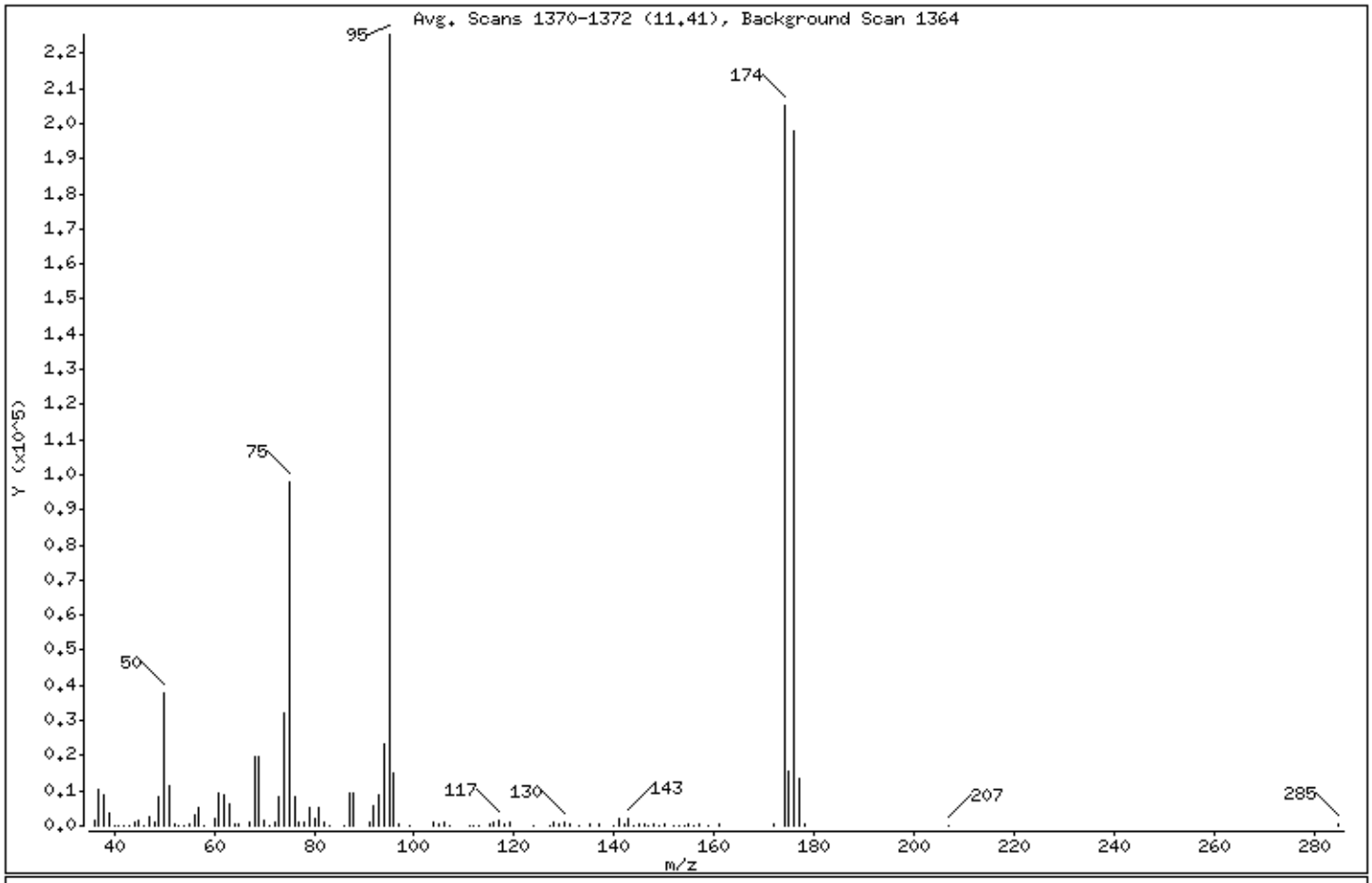
Client ID: BFB Instrument: msd6.i

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	16.88
75	30.00 - 66.00% of mass 95	43.47
96	5.00 - 9.00% of mass 95	6.76
173	Less than 1.99% of mass 174	0.00 (0.00)
174	50.00 - 120.00% of mass 95	90.98
175	4.00 - 9.00% of mass 174	6.83 (7.50)
176	93.00 - 101.00% of mass 174	87.78 (96.48)
177	5.00 - 9.00% of mass 176	5.90 (6.72)

Data File: /chem/msd6.i/13jul16.b/6071301.d

Date : 13-JUL-2016 12:34

Client ID: BFB

Instrument: msd6.i

Sample Info: ;BFB;BFB

Volume Injected (uL): 1.0

Operator: CT

Column phase:

Column diameter: 2.00

Data File: 6071301.d
Spectrum: Avg. Scans 1370-1372 (11.41), Background Scan 1364
Location of Maximum: 95.00
Number of points: 105

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	1732	64.00	651	96.00	15243	143.00	2078
37.00	10373	65.00	278	97.00	537	144.00	110
38.00	8749	67.00	910	99.00	53	145.00	291
39.00	3420	68.00	19704	104.00	866	146.00	353
40.00	8	69.00	19504	105.00	317	147.00	207
41.00	128	70.00	1512	106.00	844	148.00	597
42.00	76	71.00	51	107.00	233	149.00	179
43.00	125	72.00	1078	111.00	119	150.00	324
44.00	1106	73.00	8490	112.00	60	152.00	55
45.00	1773	74.00	31976	113.00	215	153.00	155
46.00	231	75.00	97984	115.00	303	154.00	135
47.00	2520	76.00	8303	116.00	792	155.00	566
48.00	1273	77.00	1207	117.00	1355	156.00	52
49.00	8303	78.00	898	118.00	747	157.00	466
50.00	38032	79.00	5192	119.00	1118	159.00	247
51.00	11453	80.00	1849	124.00	59	161.00	264
52.00	526	81.00	5307	127.00	67	172.00	400
53.00	242	82.00	1290	128.00	792	174.00	205056
54.00	162	83.00	209	129.00	368	175.00	15384
55.00	613	86.00	207	130.00	804	176.00	197824
56.00	3110	87.00	9445	131.00	326	177.00	13294
57.00	5319	88.00	9164	133.00	84	178.00	387
58.00	253	91.00	801	135.00	382	207.00	131
60.00	2289	92.00	5883	137.00	392	285.00	336
61.00	9138	93.00	8746	140.00	61		
62.00	8872	94.00	23472	141.00	1913		
63.00	6440	95.00	225344	142.00	278		

Eurofins Air Toxics Inc.

Data file : /chem/msd6.i/19jul16.b/6071902.d
Lab Smp Id: Client Smp ID: BFB
Inj Date : 19-JUL-2016 11:29
Operator : CT Inst ID: msd6.i
Smp Info : ;BFB;BFB
Misc Info : 1476-2872, 36ng (5/4/18)
Comment :
Method : /chem/msd6.i/19jul16.b/bfb.m
Meth Date : 31-Mar-2016 12:20 lantonic Quant Type: ESTD
Cal Date : 11-OCT-2009 15:24 Cal File: l101104.d
Als bottle: 2 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		
12.448	11.478	0.970	95	176061		100.00-	100.00	100.00(a)
12.448	11.478	0.970	50	32281		8.00-	40.00	18.34
12.448	11.478	0.970	75	76666		30.00-	66.00	43.55
12.448	11.478	0.970	96	11848		5.00-	9.00	6.73
12.448	11.478	0.970	173	811		0.00-	1.99	0.53
12.448	11.478	0.970	174	154218		50.00-	120.00	87.59
12.448	11.478	0.970	175	11406		4.00-	9.00	7.40
12.448	11.478	0.970	176	150552		93.00-	101.00	97.62
12.448	11.478	0.970	177	9682		5.00-	9.00	6.43

QC Flag Legend

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

Data File: /chem/msd6.i/19jul16.b/6071902.d

Date : 19-JUL-2016 11:29

Client ID: BFB

Instrument: msd6.i

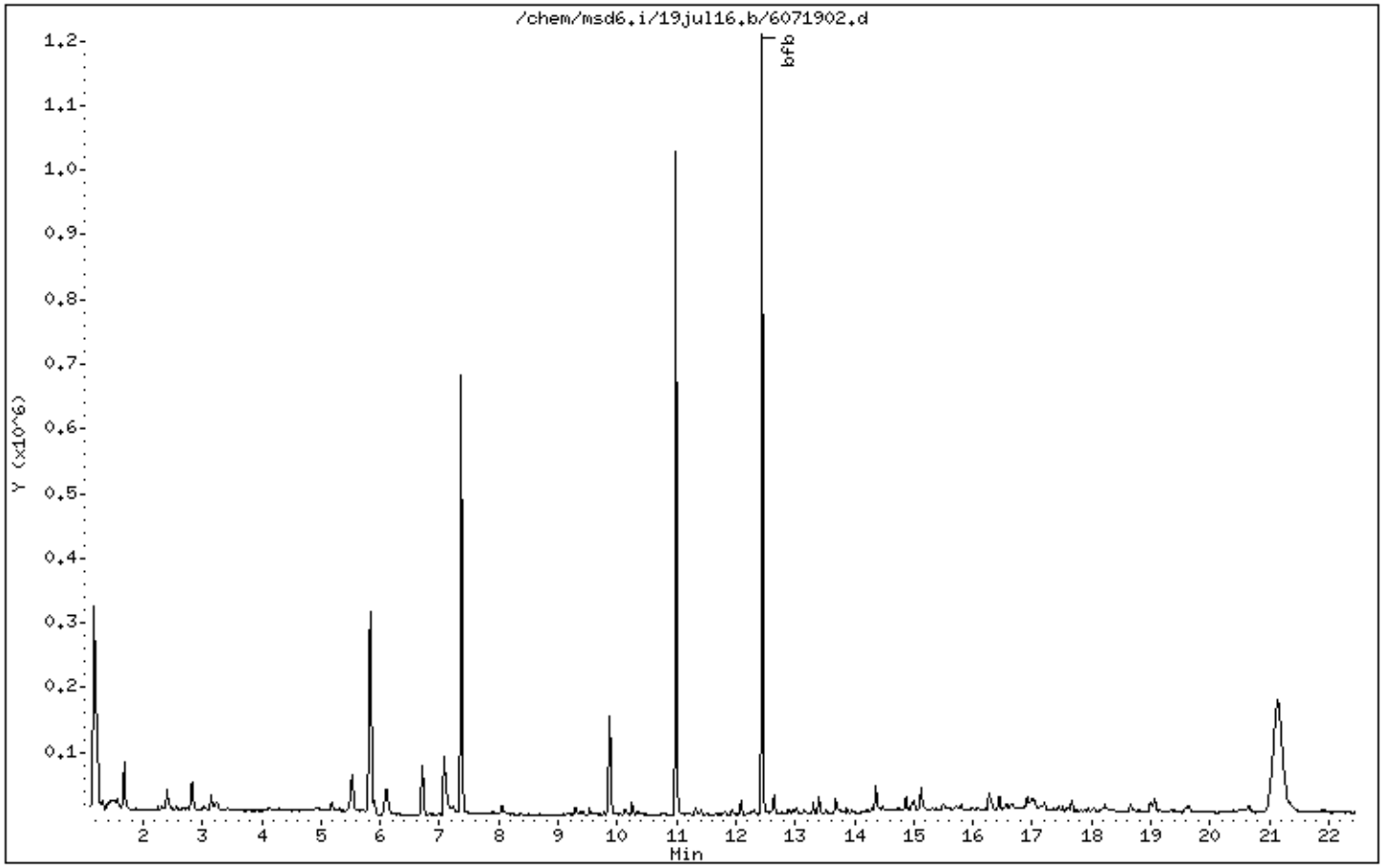
Sample Info: ;BFB;BFB

Volume Injected (uL): 1.0

Operator: CT

Column phase:

Column diameter: 2.00



Data File: /chem/msd6.i/19jul16.b/6071902.d

Date : 19-JUL-2016 11:29

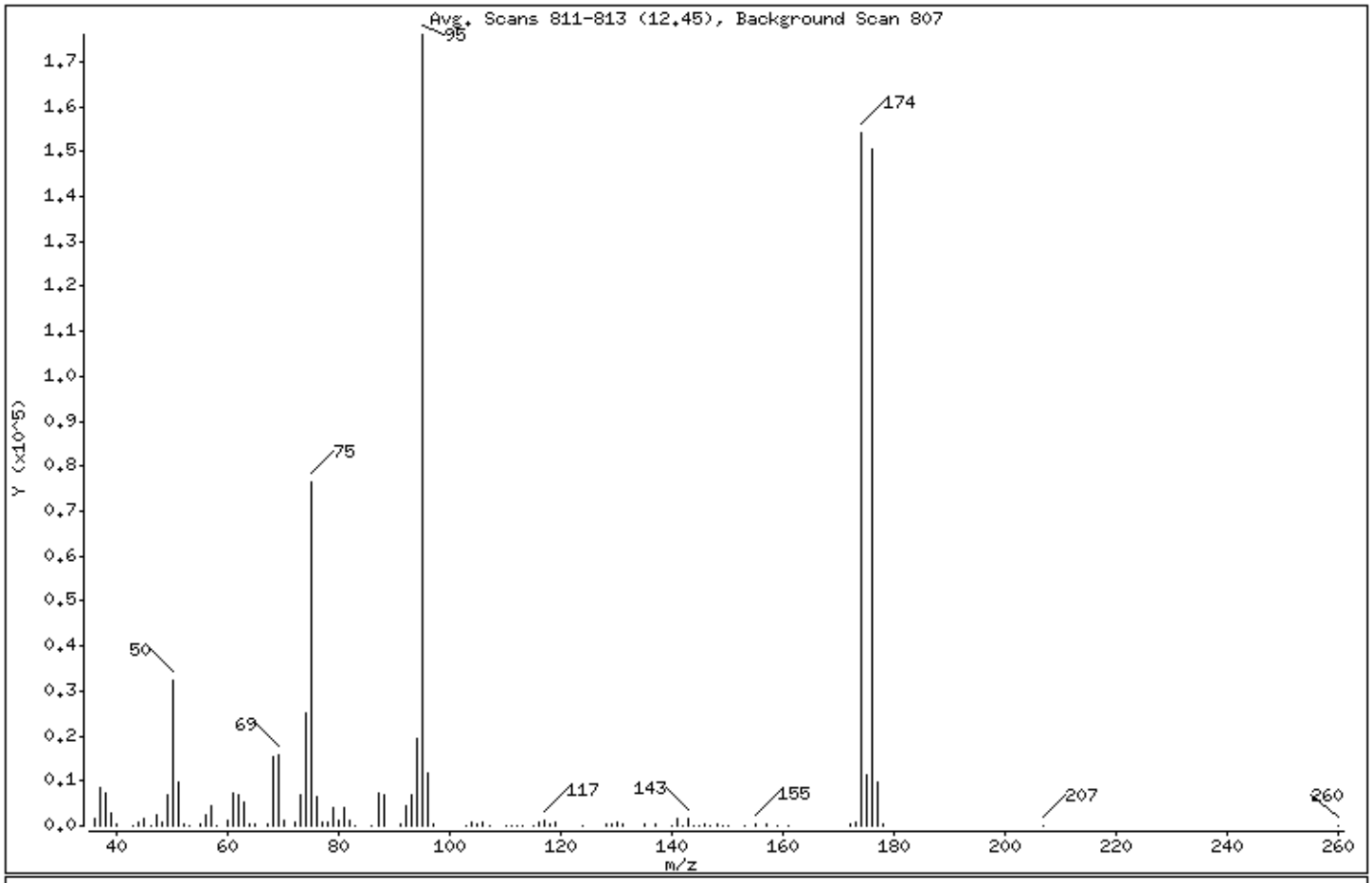
Client ID: BFB Instrument: msd6.i

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	18.34
75	30.00 - 66.00% of mass 95	43.55
96	5.00 - 9.00% of mass 95	6.73
173	Less than 1.99% of mass 174	0.46 (0.53)
174	50.00 - 120.00% of mass 95	87.59
175	4.00 - 9.00% of mass 174	6.48 (7.40)
176	93.00 - 101.00% of mass 174	85.51 (97.62)
177	5.00 - 9.00% of mass 176	5.50 (6.43)

Data File: /chem/msd6.i/19jul16.b/6071902.d

Date : 19-JUL-2016 11:29

Client ID: BFB

Instrument: msd6.i

Sample Info: ;BFB;BFB

Volume Injected (uL): 1.0

Operator: CT

Column phase:

Column diameter: 2.00

Data File: 6071902.d
Spectrum: Avg. Scans 811-813 (12.45), Background Scan 807
Location of Maximum: 95.00
Number of points: 98

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	1539	65.00	221	96.00	11848	142.00	165
37.00	8331	67.00	578	97.00	392	143.00	1553
38.00	7478	68.00	15378	103.00	50	144.00	56
39.00	2899	69.00	15599	104.00	700	145.00	132
40.00	211	70.00	1280	105.00	298	146.00	223
43.00	99	72.00	710	106.00	665	147.00	122
44.00	860	73.00	6676	107.00	152	148.00	421
45.00	1463	74.00	25128	110.00	112	149.00	64
46.00	127	75.00	76664	111.00	154	150.00	145
47.00	2445	76.00	6391	112.00	123	153.00	115
48.00	983	77.00	1001	113.00	136	155.00	445
49.00	6830	78.00	655	115.00	143	157.00	345
50.00	32280	79.00	4003	116.00	630	159.00	148
51.00	9867	80.00	1409	117.00	1057	161.00	160
52.00	418	81.00	4152	118.00	555	172.00	346
53.00	85	82.00	1103	119.00	903	173.00	811
55.00	372	83.00	160	124.00	52	174.00	154176
56.00	2447	86.00	202	128.00	602	175.00	11406
57.00	4409	87.00	7196	129.00	324	176.00	150528
58.00	187	88.00	7070	130.00	650	177.00	9682
60.00	1291	91.00	582	131.00	212	178.00	260
61.00	7341	92.00	4437	135.00	339	207.00	76
62.00	7040	93.00	6765	137.00	310	260.00	68
63.00	5339	94.00	19376	140.00	68		
64.00	524	95.00	176000	141.00	1475		

Eurofins Air Toxics Inc.

Data file : /chem/msd6.i/20jul16.b/6072001.d
Lab Smp Id: Client Smp ID: BFB
Inj Date : 20-JUL-2016 08:57
Operator : CT Inst ID: msd6.i
Smp Info : ;BFB;BFB
Misc Info : 1476-2872, 36ng (5/4/18)
Comment :
Method : /chem/msd6.i/20jul16.b/bfb.m
Meth Date : 31-Mar-2016 12:20 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		
11.392	11.478	-0.086	95	259434		100.00-	100.00	100.00
11.392	11.478	-0.086	50	49108		8.00-	40.00	18.93
11.392	11.478	-0.086	75	114114		30.00-	66.00	43.99
11.392	11.478	-0.086	96	17048		5.00-	9.00	6.57
11.392	11.478	-0.086	173	0		0.00-	1.99	0.00
11.392	11.478	-0.086	174	223296		50.00-	120.00	86.07
11.392	11.478	-0.086	175	16643		4.00-	9.00	7.45
11.392	11.478	-0.086	176	217984		93.00-	101.00	97.62
11.392	11.478	-0.086	177	14269		5.00-	9.00	6.55

Data File: /chem/msd6.i/20jul16.b/6072001.d

Date : 20-JUL-2016 08:57

Client ID: BFB

Instrument: msd6.i

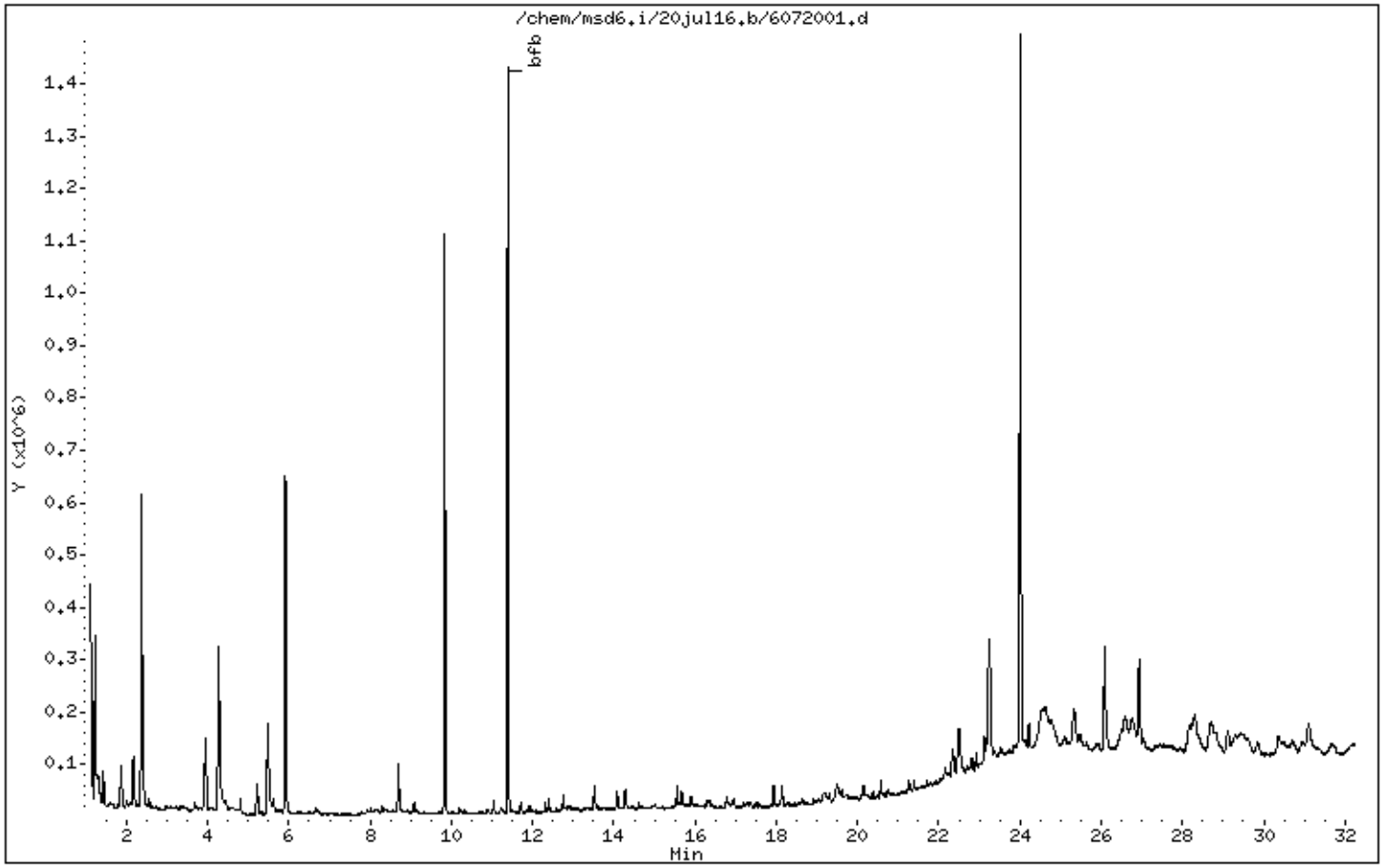
Sample Info: ;BFB;BFB

Volume Injected (uL): 1.0

Operator: CT

Column phase:

Column diameter: 2.00



Data File: /chem/msd6.i/20jul16.b/6072001.d

Date : 20-JUL-2016 08:57

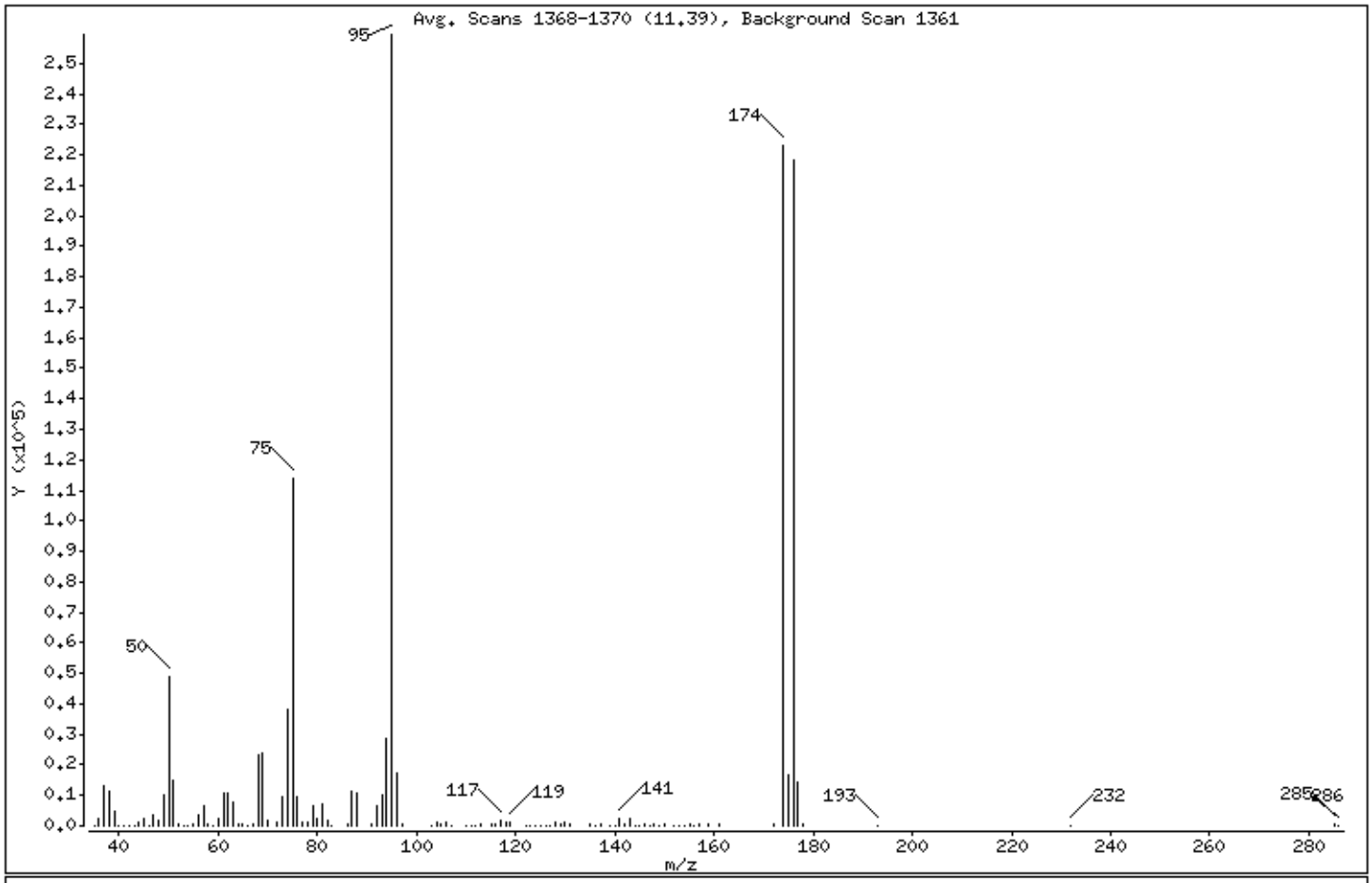
Client ID: BFB | Instrument: msd6.i

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	18.93
75	30.00 - 66.00% of mass 95	43.99
96	5.00 - 9.00% of mass 95	6.57
173	Less than 1.99% of mass 174	0.00 (0.00)
174	50.00 - 120.00% of mass 95	86.07
175	4.00 - 9.00% of mass 174	6.42 (7.45)
176	93.00 - 101.00% of mass 174	84.02 (97.62)
177	5.00 - 9.00% of mass 176	5.50 (6.55)

Data File: /chem/msd6.i/20jul16.b/6072001.d

Date : 20-JUL-2016 08:57

Client ID: BFB

Instrument: msd6.i

Sample Info: ;BFB;BFB

Volume Injected (uL): 1.0

Operator: CT

Column phase:

Column diameter: 2.00

Data File: 6072001.d
Spectrum: Avg. Scans 1368-1370 (11.39), Background Scan 1361
Location of Maximum: 95.00
Number of points: 115

m/z	Y	m/z	Y	m/z	Y	m/z	Y
35.00	54	64.00	769	103.00	130	141.00	2224
36.00	2228	65.00	460	104.00	1020	142.00	331
37.00	12893	66.00	114	105.00	352	143.00	2208
38.00	11432	67.00	734	106.00	1056	144.00	116
39.00	4735	68.00	23056	107.00	264	145.00	277
40.00	30	69.00	23632	110.00	129	146.00	341
41.00	167	70.00	1822	111.00	250	147.00	274
42.00	113	72.00	1063	112.00	185	148.00	671
43.00	206	73.00	9665	113.00	307	149.00	138
44.00	1055	74.00	38224	115.00	315	150.00	318
45.00	2375	75.00	114112	116.00	891	152.00	138
46.00	30	76.00	9603	117.00	1572	153.00	259
47.00	3735	77.00	1413	118.00	984	154.00	127
48.00	1535	78.00	968	119.00	1327	155.00	730
49.00	10183	79.00	6452	122.00	55	156.00	64
50.00	49104	80.00	2196	123.00	60	157.00	553
51.00	14744	81.00	6865	124.00	128	159.00	346
52.00	739	82.00	1653	125.00	75	161.00	304
53.00	137	83.00	284	126.00	56	172.00	624
54.00	224	86.00	311	127.00	67	174.00	223296
55.00	685	87.00	11168	128.00	968	175.00	16640
56.00	3491	88.00	10681	129.00	432	176.00	217984
57.00	6351	91.00	813	130.00	1018	177.00	14269
58.00	351	92.00	6830	131.00	431	178.00	462
59.00	244	93.00	9948	135.00	489	193.00	78
60.00	2533	94.00	28752	136.00	56	232.00	84
61.00	10542	95.00	259392	137.00	519	285.00	856
62.00	10524	96.00	17048	139.00	68	286.00	269
63.00	8039	97.00	497	140.00	67		

Eurofins Air Toxics Inc.

Data file : /chem/msd6.i/20jul16.b/6072002.d
Lab Smp Id: Client Smp ID: BFB
Inj Date : 20-JUL-2016 09:36
Operator : CT Inst ID: msd6.i
Smp Info : ;BFB;BFB
Misc Info : 1476-2872, 36ng (5/4/18)
Comment :
Method : /chem/msd6.i/20jul16.b/bfb.m
Meth Date : 31-Mar-2016 12:20 lantonic Quant Type: ESTD
Cal Date : 11-OCT-2009 15:24 Cal File: l101104.d
Als bottle: 2 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	
11.407	11.478	-0.071	95	253930			100.00- 100.00	100.00
11.407	11.478	-0.071	50	45512			8.00- 40.00	17.92
11.407	11.478	-0.071	75	110794			30.00- 66.00	43.63
11.407	11.478	-0.071	96	16871			5.00- 9.00	6.64
11.407	11.478	-0.071	173	0			0.00- 1.99	0.00
11.407	11.478	-0.071	174	223424			50.00- 120.00	87.99
11.407	11.478	-0.071	175	16669			4.00- 9.00	7.46
11.407	11.478	-0.071	176	215445			93.00- 101.00	96.43
11.407	11.478	-0.071	177	14139			5.00- 9.00	6.56

Data File: /chem/msd6.i/20jul16.b/6072002.d

Date : 20-JUL-2016 09:36

Client ID: BFB

Instrument: msd6.i

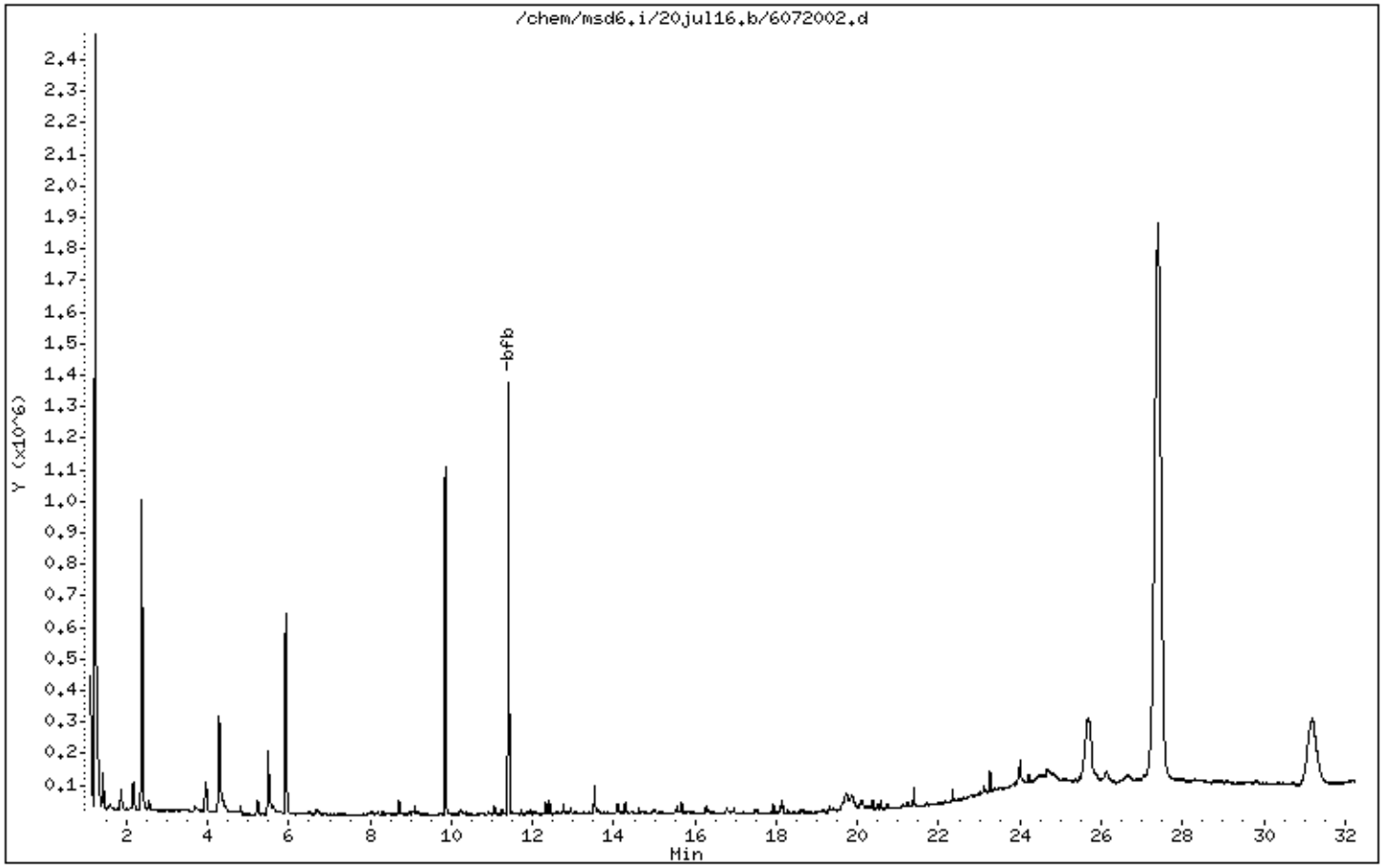
Sample Info: ;BFB;BFB

Volume Injected (uL): 1.0

Operator: CT

Column phase:

Column diameter: 2.00



Data File: /chem/msd6.i/20jul16.b/6072002.d

Date : 20-JUL-2016 09:36

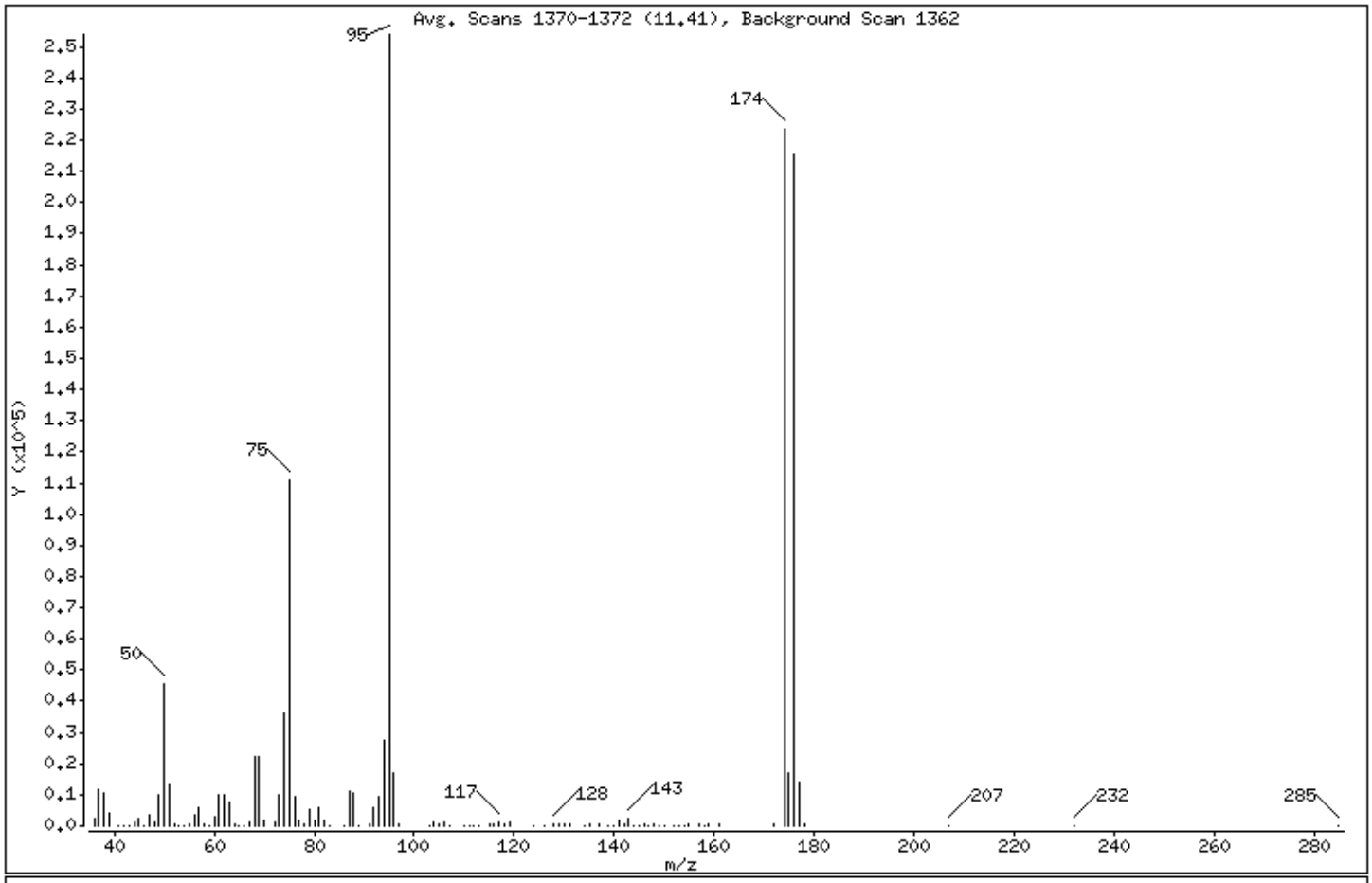
Client ID: BFB | Instrument: msd6.i

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	17.92
75	30.00 - 66.00% of mass 95	43.63
96	5.00 - 9.00% of mass 95	6.64
173	Less than 1.99% of mass 174	0.00 (0.00)
174	50.00 - 120.00% of mass 95	87.99
175	4.00 - 9.00% of mass 174	6.56 (7.46)
176	93.00 - 101.00% of mass 174	84.84 (96.43)
177	5.00 - 9.00% of mass 176	5.57 (6.56)

Data File: /chem/msd6.i/20jul16.b/6072002.d

Date : 20-JUL-2016 09:36

Client ID: BFB

Instrument: msd6.i

Sample Info: ;BFB;BFB

Volume Injected (uL): 1.0

Operator: CT

Column phase:

Column diameter: 2.00

Data File: 6072002.d
Spectrum: Avg. Scans 1370-1372 (11.41), Background Scan 1362
Location of Maximum: 95.00
Number of points: 109

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	2209	65.00	269	97.00	542	143.00	2214
37.00	11852	66.00	108	103.00	173	144.00	119
38.00	10653	67.00	1232	104.00	926	145.00	240
39.00	4339	68.00	22328	105.00	416	146.00	405
41.00	133	69.00	22064	106.00	1015	147.00	186
42.00	195	70.00	1713	107.00	284	148.00	531
43.00	52	72.00	1208	110.00	198	149.00	144
44.00	1135	73.00	9647	111.00	149	150.00	287
45.00	2150	74.00	35904	112.00	63	152.00	188
46.00	158	75.00	110792	113.00	200	153.00	231
47.00	3233	76.00	9629	115.00	311	154.00	119
48.00	1323	77.00	1464	116.00	756	155.00	666
49.00	9971	78.00	819	117.00	1330	157.00	524
50.00	45512	79.00	5411	118.00	838	158.00	108
51.00	13713	80.00	1930	119.00	1202	159.00	344
52.00	764	81.00	5870	124.00	207	161.00	305
53.00	194	82.00	1487	126.00	124	172.00	526
54.00	2	83.00	196	128.00	866	174.00	223424
55.00	544	86.00	243	129.00	393	175.00	16664
56.00	3472	87.00	10889	130.00	850	176.00	215424
57.00	5868	88.00	10658	131.00	389	177.00	14139
58.00	371	89.00	102	134.00	52	178.00	443
59.00	186	91.00	722	135.00	493	207.00	184
60.00	2708	92.00	6070	137.00	422	232.00	57
61.00	9841	93.00	9481	139.00	70	285.00	148
62.00	10122	94.00	27584	140.00	179		
63.00	7471	95.00	253888	141.00	2002		
64.00	696	96.00	16864	142.00	419		

Shipping/ Receiving Documents

eurofins | Air Toxics

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

Project Manager: Terry Taylor
Collected by: (Print and Sign) RO, TT, DL
Company: AMAI Email: TTaylor@AMAIconsult.com
Address: 2700 Westchester Ave City: Purchase State: NY Zip: 10577
Phone: 914-251-0400 x309 Fax: 914-251-1286

Project Info:
P.O. #
Project # BMS B18 V1
Project Name

Turn Around Time: ☒ Normal * ☐ Rush B30IA-1 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 ml	Indoor/Outdoor % RH	Indoor/Outdoor Temp	Indoor Air	Outdoor Air	Soil Vapor	Other ( )
01A	B18IA-1	151814	7/9/16	1803	0957	35	35	11,100	85	80	☒	☐	☐	☐
02A	B18IA-2	151188	7/9/16	1852	1852	36	34	16,800	86	80	☒	☐	☐	☐
03A	B18IA-3	150090	7/9/16	1827	1827	36	38	17,760	98	79	☒	☐	☐	☐
04A	B18IA-4	153639	7/9/16	1836	1836	34	33	16,080	88	78	☒	☐	☐	☐
05A	B18IA-5	150877	7/9/16	1844	1844	35	34	16,560	79	83	☒	☐	☐	☐
06A	B18IA-1D	149733	7/9/16	1803	1051	35	33	11,120	85	80	☒	☐	☐	☐
	B30IA-1	137170	7/9/16	1810	1810	36	52	21,120	81	81	☒	☐	☐	☐
08A	B18AA-070816	149726	7/11/16	1145	1145	34	36	16,800	75	87	☐	☒	☐	☐
09A	B18SS-1	149703	7/11/16	1746	1749	134	134	402	77	75	☐	☐	☒	☐
10A	B18SS-2	149853	7/12/16	1938	1941	133	134	402	70	74	☐	☐	☒	☐

Relinquished by: (signature) [signature] Date/Time 07-13-16 1700
Received by: (signature) Fed EX Date/Time
Relinquished by: (signature) Date/Time
Received by: (signature) Andrea Augustin EATL Date/Time 7/14/16 1020
Relinquished by: (signature) Date/Time
Received by: (signature) Date/Time

Notes: * 24 hour turnaround time for B30IA-1. All other samples are normal turnaround. Report only NAP.

Lab Use Only	Shipper Name	Air Bill #	Temp (°C)	Condition	Custody Seals Intact?	Work Order #
	Fed Ex		9.8°C	SDR	Yes No None	1607228

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

Project Manager: Terry Taylor
Collected by: (Print and Sign) RO, DL, TT
Company: AMAI Email: Hayleeamaiconsult.com
Address: 2200 Westchester Ave City: Purchase State: NY Zip: 10577
Phone: 914-251-0400 Fax:

Project Info:
P.O. #:
Project #: Building 18 VI
Project Name:

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 ml	Indoor/Outdoor % RH	Indoor/Outdoor Temp	Indoor Air	Outdoor Air	Soil Vapor	Other (Field Blank)
11A	B18SS-1D	152247	7/11/16	1751	1754	134	134	402	77	75	☐	☐	☒	☐
12A	B18SS-3	149806	7/11/16	1852	1857	134	84	399	67	77	☐	☐	☒	☐
13A	B18SS-4	139968	7/12/16	1852	1855	133	133	399	76	74	☐	☐	☒	☐
14A	B18SS-5	153653	7/12/16	1802	1805	133	113		66	79	☐	☐	☐	☐
15A	Field Blank	149799	7/12/16	1810	1810	–	–	–	66	79	☐	☐	☐	☒
											☐	☐	☐	☐
											☐	☐	☐	☐
											☐	☐	☐	☐
											☐	☐	☐	☐
											☐	☐	☐	☐

Relinquished by: (signature)	Date/Time	Received by: (signature)	Date/Time
[signature]	07-13-16 1700	FedEx	
Relinquished by: (signature)	Date/Time	Received by: (signature)	Date/Time
		Andrea Augustin EATL	7/14/16 1030
Relinquished by: (signature)	Date/Time	Received by: (signature)	Date/Time

Notes:

Lab Use Only	Shipper Name	Air Bill #	Temp (°C)	Condition	Custody Seals Intact?	Work Order #
	Fed Ex		9.8°C	SDR	Yes No None	1607228

Eurofins Air Toxics, Inc. **Dry Purge** **Logbook #: 2654**

Date: 7/20/16

Instrument: MSD-6

Drying Device: Short Path Thermal Desorption Conditioning System
Manufacturer: Scientific Instrument Services, INC. Ringoes, NJ USA
Model: CS-1
Drying Gas: Nitrogen (N_2) N1866188101

Flow Meter: CN 2296

Calibration Tube#: G0147703

Temperature (°C): 40
Acceptance Range (°C): 35-45

Position #	Workorder #/Lab ID #	Media Type	Tube ID #	Flow Rate (mL/min) Acceptance Range (mL/min): 45-55		Time		Comments
				Start	End	Start	End	
1	Lab Blank	VI	G0147216	49.4	48.6	1223	1253	
2	Lab Blank		G0150300	50.2	48.4			
3	1607228-15A		G0149799	50.5	47.5			
4	-01A		G0151814	49.7	48.4			
5	-02A		G0151188	51.1	49.4			
6	-03A		G0150090	50.6	50.1			
1	1607228 -04A	VI	G0153639	49.4	49.3	1309	1339	
2	-05A		G0150877	49.2	49.1			
3	-06A		G0149733	50.0	47.6			
4	-08A		G0149726	49.0	49.0			
5	-09A		G0149703	50.0	50.1			
6	-10A		G0149853	50.9	50.9			
1	1607228 -11A	VI	G0152247	49.0	49.4	1358	1428	
2	SU7/20/16 -12A		G0149806	48.8	48.8			
3	-13A		G0139968	49.2	48.4			
4	-14A		G0153653	48.8	48.7			

Clarissa
Reviewed

7/20/16
Date

cl 7/20/16

eurofins | Air Toxics

SAMPLE RECEIPT SUMMARY

WORKORDER 1607228B

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: 07/27/16
Date Completed: 7/26/16
Date Received: 7/14/16
PO#:
Project#: BMS B18 VI BMS

Total $: $ 1,470.00
Logged By: AA

Fraction	Sample #	Analysis	Collected	Amount$
01A	B18IA-1	Modified TO-17 VI	7/9/2016	$100.00
02A	B18IA-2	Modified TO-17 VI	7/9/2016	$100.00
03A	B18IA-3	Modified TO-17 VI	7/9/2016	$100.00
04A	B18IA-4	Modified TO-17 VI	7/9/2016	$100.00
05A	B18IA-5	Modified TO-17 VI	7/9/2016	$100.00
06A	B18IA-1D	Modified TO-17 VI	7/9/2016	$100.00
08A	B18AA-070816	Modified TO-17 VI	7/11/2016	$100.00
09A	B18SS-1	Modified TO-17 VI	7/11/2016	$100.00
10A	B18SS-2	Modified TO-17 VI	7/12/2016	$100.00
11A	B18SS-1D	Modified TO-17 VI	7/11/2016	$100.00
12A	B18SS-3	Modified TO-17 VI	7/11/2016	$100.00
13A	B18SS-4	Modified TO-17 VI	7/12/2016	$100.00
14A	B18SS-5	Modified TO-17 VI	7/12/2016	$100.00
15A	Field Blank	Modified TO-17 VI	7/12/2016	$100.00
16A	Lab Blank	Modified TO-17 VI	NA	$0.00
17A	CCV	Modified TO-17 VI	NA	$0.00
18A	LCS	Modified TO-17 VI	NA	$0.00
18AA	LCSD	Modified TO-17 VI	NA	$0.00

Misc. ChargeseCVP (14) @ $5.00 each. $70.00

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:

Reporting Method: TO-17 VI (Sh)-Naph only-1.0 ng

Sample Discrepancy Report

Identification

Initiated By: AA **Project ID:**19256 **PM**: BSW **Date:** 7/14/2016 **Discrepancy Type:** ☐ **1.** ☒ **2.** ☐ **3.**

Workorder(s) affected:1607228A **Sample(s) affected:** All

1. Sample Receipt Discrepancies

Narration Not Required:

1.1. ☐ Sample container (cartridge/tube/VOA vial) was received broken, however sample was intact.

1.2. ☐ No brass cap on canister.

1.3. ☐ Date of Collection noted on first sample, but no arrow down to indicate all samples.

Notify Lab for further determination:

1.4. ☐ Tedlar bag received with minimal volume.

Initials: _____ Date: _____

Narration Required in Lab Narrative and Sample Confirmation:

1.5. ☐ COC was not filled out in ink.

1.6. ☐ COC improperly relinquished / received.

1.7. ☐ Sample tags / can numbers do not match the COC.

1.8. ☐ Sample date ☐ error / ☐ missing on COC but noted on sample tag (check one).

1.9. ☐ Custody Seal on the outside of the container was ☐ broken / ☐ improperly placed (check one).

1.10. ☐ ID-none on the sample Tag/Blank.

1.11. ☐ Other (describe below).

Describe the Discrepancy: _____

2. Sample Receipt/Screening Discrepancies requiring PM notification

Document on Cover Page of Sample Receipt Confirmation and in Receiving Notes of Lab Narrative

If Section II. is filled out PM must be notified within 24 hrs of initiation

2.1. ☐ COC was not received with samples.

2.2. ☐ Analysis method(s) is ☐ not specified / ☐ incorrectly specified (check one) on the COC.

2.3. ☐ Incorrect sampling media / container for analysis requested.

2.4. ☐ Number of samples on the COC does not match the number of samples that were received.

2.5. ☐ Samples were received expired.

2.6. ☐ Sampling date (time for sulfur) is not documented for ☐ *some* / ☐ *any* samples (check one).

2.7. ☐ Sample received with amount of H_2O in the Tedlar Bag.

2.8. ☐ Sample cannot be analyzed. Container was ☐ received broken / ☐ leaking / ☐ flat / ☐ defective.

2.9. ☐ Tedlar bag / canister received emitting a strong odor; Sample ☐ can / ☐ cannot (check one) be analyzed.

2.10. ☐ Tedlar Bag for Sulfur analysis has metal fitting.

2.11. ☐ Environmental Supply Company valves.

2.12. ☐ Sorbent samples-sampling volume was not provided.

2.13. ☐ Flow controller used – canister samples received at ambient or under pressure.

2.14. ☐ Canister was at ambient pressure at time of pressurization and (check all that apply):

- ☐ Canister failed leak check on two manifolds, after fitting replaced.
- ☐ Canister valve was open.
- ☐ Brass nut was loose/not present.
- ☐ Sample can be analyzed.
- ☐ Sample cannot be analyzed.

2.15. ☐ Canister sample received with a vacuum difference >5.0"Hg between the receipt vac. and the final recorded vac. on the COC.

- ☐ Canister passed leak check in lab <2psi, no evidence sample was compromised.
- ☐ Canister failed lab leak check, canister found to be leaking. Canister sample compromised.

2.16. ☐ Canister sample received at >15"Hg (*not* identified as a Trip/Field Blank).

2.17. ☐ Canister Trip Blank received at low vacuum (<25"Hg).

2.18. ☒ Sorbent Sample received outside method required temperature of 2°C to 6°C; ☐ ice / ☒ blue ice (check one) was present. A temp. Blank ☒ was / ☐ was not present (check one).

2.19. ☐ Flow Controller RPD of = 20% was not met.

2.20. ☐ Other (describe below).

Initials: **AA** **Date:** **7/14/2016** **Notify Receiving:** ☐ **Notify PM:** ☒

Describe the Discrepancy: 2.18, All; Samples received outside required temperature range

3. Lab Discrepancies requiring Team Leader/PM notification

Document in Analytical Notes of Lab Narrative

If Section III. is filled out PM must be notified within 24 hrs of initiation

3.1. ☐ Tedlar Bag found to be leaking at the time of analysis; sample ☐ can / ☐ cannot (check one) be analyzed.

3.2. ☐ Tedlar Bag found to be flat/low volume; sample cannot be analyzed.

3.3. ☐ Sulfur samples received with insufficient time to analyze prior to expiration.

3.4. ☐ Canister found to be leaking at the time of analysis.

3.5. ☐ VOST tube saturated; bag dilution necessary.

3.6. ☐ Sample loss due to instrument malfunction / broken glassware.

3.7. ☐ Low/high surrogate recoveries noted in QC/sample(s) for extractable samples.

3.8. ☐ Reporting Limit was raised.

3.9. ☐ Post weight > Pre weight in field/lab Blank for PM10/TSP samples.

3.10. ☐ Other (describe below).

Initials: _____ **Date:** _____ **Notify Receiving:** ☐ **Notify PM:** ☐ _____

Team Lead Initials: _____ **Date:** _____

Describe the Discrepancy: _____

_____

_____

How Does this Affect Client: _____

_____

_____

Project Manager Use Only

Project Manager Notification ☒ **Section 2 Complete** ☐ **Section 3 Complete**

Action:

☒ It is not necessary to notify the client. Narrate the discrepancy in Receiving Notes/Analytical Notes of Lab Narrative.

PM Initials: BSW Date: 7/25/2016

☐ Client notification required. See attached client contact / email, or comments below:

Client Notification:

PM Initials: _____ Person notified: _____ Date: _____

☐ Waiting for Client Reply

Comments: **Narrate and proceed.**

_____

☐ Notify Lab Name: _____ Date: _____ **Notify Receiving:** ☐

☐ **Additional notifications attached.**

Additional Comments:

_____

Other Records

Compound List

TO-17 VI (Sh)-Naph only-1.0 ng

CAS Number	Compound	Detection Limit ng	Type
91-20-3	Naphthalene	1.0	
1146-65-2	Naphthalene-d8		

Eurofins Air Toxics, Inc.	Data Review Checklist			Release Date: 02/23/16
Workorder # 1607228B	Form F1.27	Revision #13	Revision Date: 02/23/16	Page 1 of 2

S1	S2	S3	S4	D	Section 1 – Spec Out				
					Initials/Instrument/Date	S1: AC MSD-6 7/22/16	S2:	S3:	S4:
✓					Project Identification (PID), Project Requirements Table (PRT), Daily QC and ICAL met Criteria				
NA					Lumen QC and ICAL evaluation (ref. SOP/Method) report initialed and in folder				
NA					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:

Ø out QC

J- Flag to MDL

A1	A2	A3	A4	D	Section 2 – Sample Analysis				
					Initials/Date	A1: AC 7/22/16	A2:	A3:	A4:
✓				✓	IS/Surr Recoveries, Dilution Factors, Load Volumes, leg(s) of instrument, Initial/Final Pressures, and Canister #s Verified				
NA				NA	a) Tedlar Bag IDs verified against COC b) Tedlar Bag ID confirmed with loading sequence/leg(s) of instrument				
NA				NA	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, samples following bad loads on CIAAs have been verified (system blks, confirmation runs).				
✓					All runs have been evaluated for potential carry-over (TPHg/non-Target/over-range compounds/ etc.)				

Analytical and special notes: ISA FB ND

OGA - Blind FD - OK

D1	D2	D3	D4	T	3T	Section 3 – Target Data Reduction	Technical Review Needed? Circle one: Yes/No		T:	
						Initials/Instrument/Date	D1: AC 7/22/16	D2:	D3:	D4:
NA				NA		CAR # (if applicable)				
✓				✓		Spectra Verified (documentation of spectral defense included if applicable)				
NA				NA		TICs resemble reference spectra/ TICs between sample dups. are consistent (if applicable)				
✓				✓		Lab Narrative is correct				
NA				NA		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: VA 7/26/16	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: Sample volumes provided by the client

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