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Electronic Comprehensive Validation Package (eCVP)

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COMPREHENSIVE VALIDATION PACKAGE

Modified TO-17 VI

INVENTORY SHEET

Work Order #: 1606272

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Comments:

Completed by:

Vera Belitsky	Vera Belitsky / Document Control	7/7/16
(Signature)	(Print Name & Title)	(Date)

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WORK ORDER #: 1606272

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 #**	Building 7 VI BMS
DATE RECEIVED:	06/14/2016	**CONTACT:**	Brian Whittaker
DATE COMPLETED:	06/27/2016		

FRACTION #	NAME	TEST
01A	B7IA-1 (061016)	Modified TO-17 VI
02A	B7IA-1D (061016)	Modified TO-17 VI
03A	B7IA-2 (061016)	Modified TO-17 VI
04A	B7IA-3 (061016)	Modified TO-17 VI
05A	B7IA-4 (061016)	Modified TO-17 VI
06A	B7IA-5 (061016)	Modified TO-17 VI
07A	B7IA-6 (061016)	Modified TO-17 VI
08A	B7AA (061016)	Modified TO-17 VI
09A	B7SS-1 (061216)	Modified TO-17 VI
10A	B7SS-1D (061216)	Modified TO-17 VI
11A	B7SS-2 (061216)	Modified TO-17 VI
12A	B7SS-3 (061216)	Modified TO-17 VI
13A	B7SS-4 (061216)	Modified TO-17 VI
14A	B7SS-5 (061216)	Modified TO-17 VI
15A	B7SS-6 (061216)	Modified TO-17 VI
16A	B15SS-1 (061216)	Modified TO-17 VI
17A	Lab Blank	Modified TO-17 VI
17B	Lab Blank	Modified TO-17 VI
18A	CCV	Modified TO-17 VI
18B	CCV	Modified TO-17 VI
19A	LCS	Modified TO-17 VI
19AA	LCSD	Modified TO-17 VI
19B	LCS	Modified TO-17 VI

Continued on next page

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WORK ORDER #: 1606272

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 #**	Building 7 VI BMS
DATE RECEIVED:	06/14/2016	**CONTACT:**	Brian Whittaker
DATE COMPLETED:	06/27/2016		

FRACTION #	NAME	TEST
19BB	LCSD	Modified TO-17 VI

CERTIFIED BY: Heidi Hayes

Technical Director

DATE: 06/27/16

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
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LABORATORY NARRATIVE
Modified EPA Method TO-17 (VI Tubes)
Anderson Mulholland & Associates, Inc.
Workorder# 1606272

Sixteen TO-17 VI Tube samples were received on June 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

There were no receiving discrepancies.

Analytical Notes

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.

Sampling volume was supplied by the client. A sampling volume of 17.0 L was used to convert ng to ug/m3 for the associated Lab Blank.

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
B7IA-1 (061016)	1606272-01A	6/11/2016	6/14/2016	NA	6	6/17/2016	NA	Good
B7IA-1D (061016)	1606272-02A	6/11/2016	6/14/2016	NA	6	6/17/2016	NA	Good
B7IA-2 (061016)	1606272-03A	6/11/2016	6/14/2016	NA	6	6/17/2016	NA	Good
B7IA-3 (061016)	1606272-04A	6/11/2016	6/14/2016	NA	6	6/17/2016	NA	Good
B7IA-4 (061016)	1606272-05A	6/11/2016	6/14/2016	NA	6	6/17/2016	NA	Good
B7IA-5 (061016)	1606272-06A	6/11/2016	6/14/2016	NA	6	6/17/2016	NA	Good
B7IA-6 (061016)	1606272-07A	6/11/2016	6/14/2016	NA	6	6/17/2016	NA	Good
B7AA (061016)	1606272-08A	6/11/2016	6/14/2016	NA	6	6/17/2016	NA	Good
B7SS-1 (061216)	1606272-09A	6/12/2016	6/14/2016	NA	3	6/15/2016	NA	Good
B7SS-1D (061216)	1606272-10A	6/12/2016	6/14/2016	NA	3	6/15/2016	NA	Good
B7SS-2 (061216)	1606272-11A	6/12/2016	6/14/2016	NA	3	6/15/2016	NA	Good
B7SS-3 (061216)	1606272-12A	6/12/2016	6/14/2016	NA	4	6/16/2016	NA	Good
B7SS-4 (061216)	1606272-13A	6/12/2016	6/14/2016	NA	4	6/16/2016	NA	Good
B7SS-5 (061216)	1606272-14A	6/12/2016	6/14/2016	NA	4	6/16/2016	NA	Good
B7SS-6 (061216)	1606272-15A	6/12/2016	6/14/2016	NA	4	6/16/2016	NA	Good
B15SS-1 (061216)	1606272-16A	6/12/2016	6/14/2016	NA	4	6/16/2016	NA	Good
Lab Blank	1606272-17A	NA	NA	NA	NA	6/15/2016	NA	Good
Lab Blank	1606272-17B	NA	NA	NA	NA	6/17/2016	NA	Good
CCV	1606272-18A	NA	NA	NA	NA	6/15/2016	NA	Good
CCV	1606272-18B	NA	NA	NA	NA	6/17/2016	NA	Good
LCS	1606272-19A	NA	NA	NA	NA	6/15/2016	NA	Good
LCSD	1606272-19AA	NA	NA	NA	NA	6/15/2016	NA	Good
LCS	1606272-19B	NA	NA	NA	NA	6/17/2016	NA	Good
LCSD	1606272-19BB	NA	NA	NA	NA	6/17/2016	NA	Good

Sample Results and Raw Data

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Summary of Detected Compounds
EPA METHOD TO-17

Client Sample ID: B7IA-1 (061016)

Lab ID#: 1606272-01A

Compound	Rpt. Limit (ng)	Rpt. Limit (ug/m3)	Amount (ng)	Amount (ug/m3)
Naphthalene	1.0	0.059	2.1	0.12

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Client Sample ID: B7IA-1 (061016)

Lab ID#: 1606272-01A

EPA METHOD TO-17

File Name:	**6061710**	**Date of Extraction: NA**	**Date of Collection: 6/11/16 6:40:00 PM**
Dil. Factor:	**1.00**		**Date of Analysis: 6/17/16 05:19 PM**

Compound	Rpt. Limit (ng)	Rpt. Limit (ug/m3)	Amount (ng)	Amount (ug/m3)
Naphthalene	1.0	0.059	2.1	0.12

Air Sample Volume(L): 17.0
Container Type: TO-17 VI Tube

Surrogates	%Recovery	Method Limits
Naphthalene-d8	100	50-150

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EPA Method TO-17 GC/MS

Data file : /chem/msd6.i/17jun16.b/6061710.d
Lab Smp Id: 1606272-01A
Inj Date : 17-JUN-2016 17:19
Operator : CT Inst ID: msd6.i
Smp Info : ;1606272-01A
Misc Info : G0150557
Comment :
Method : /chem/msd6.i/17jun16.b/616z0614vi.m
Meth Date : 21-Jun-2016 06:03 atoyama Quant Type: ISTD
Cal Date : 15-JUN-2016 11:01 Cal File: 6061502.d
Als bottle: 51
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	
11.406	11.421	(1.000)	174	474805	36.0000		80.00- 120.00	100.00
11.406	11.421	(1.000)	95	505727			74.19- 134.19	106.51
11.406	11.421	(1.000)	176	463774			67.61- 127.61	97.68
$ 108 Naphthalene-d8							CAS #: 1146-65-2	
15.683	15.683	(1.375)	136	618179	25.1429	25.143	80.00- 120.00	100.00
15.683	15.683	(1.375)	108	54010			0.00- 38.72	8.74
109 Naphthalene							CAS #: 91-20-3	
15.726	15.726	(1.379)	128	55723	2.11017	2.110	80.00- 120.00	100.00
15.719	15.726	(1.378)	127	7150			0.00- 42.99	12.83

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INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd6.i
Lab File ID: 6061710.d
Lab Smp Id: 1606272-01A
Analysis Type: VOA
Quant Type: ISTD
Operator: CT
Method File: /chem/msd6.i/17jun16.b/616z0614vi.m
Misc Info: G0150557

Calibration Date: 17-JUN-2016
Calibration Time: 09:49

Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
92 Bromofluorobenzen	469803	281882	657724	474805	1.06

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
92 Bromofluorobenzen	11.42	11.09	11.75	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: 21-Jun-2016 06:06

Eurofins Air Toxics Inc.

RECOVERY REPORT

Client Name:
Client SDG: 17jun16
Sample Matrix: GAS
Fraction: VOA
Lab Smp Id: 1606272-01A
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/17jun16.b/616z0614vi.m
Misc Info: G0150557

SURROGATE COMPOUND	AMOUNT ADDED ng	AMOUNT RECOVERED ng	% RECOVERED	LIMITS
$ 108 Naphthalene-d8	25.000	25.143	100.57	50-150

Data File: /chem/msd6.i/17jun16.b/6061710.d

Date : 17-JUN-2016 17:19

Client ID:

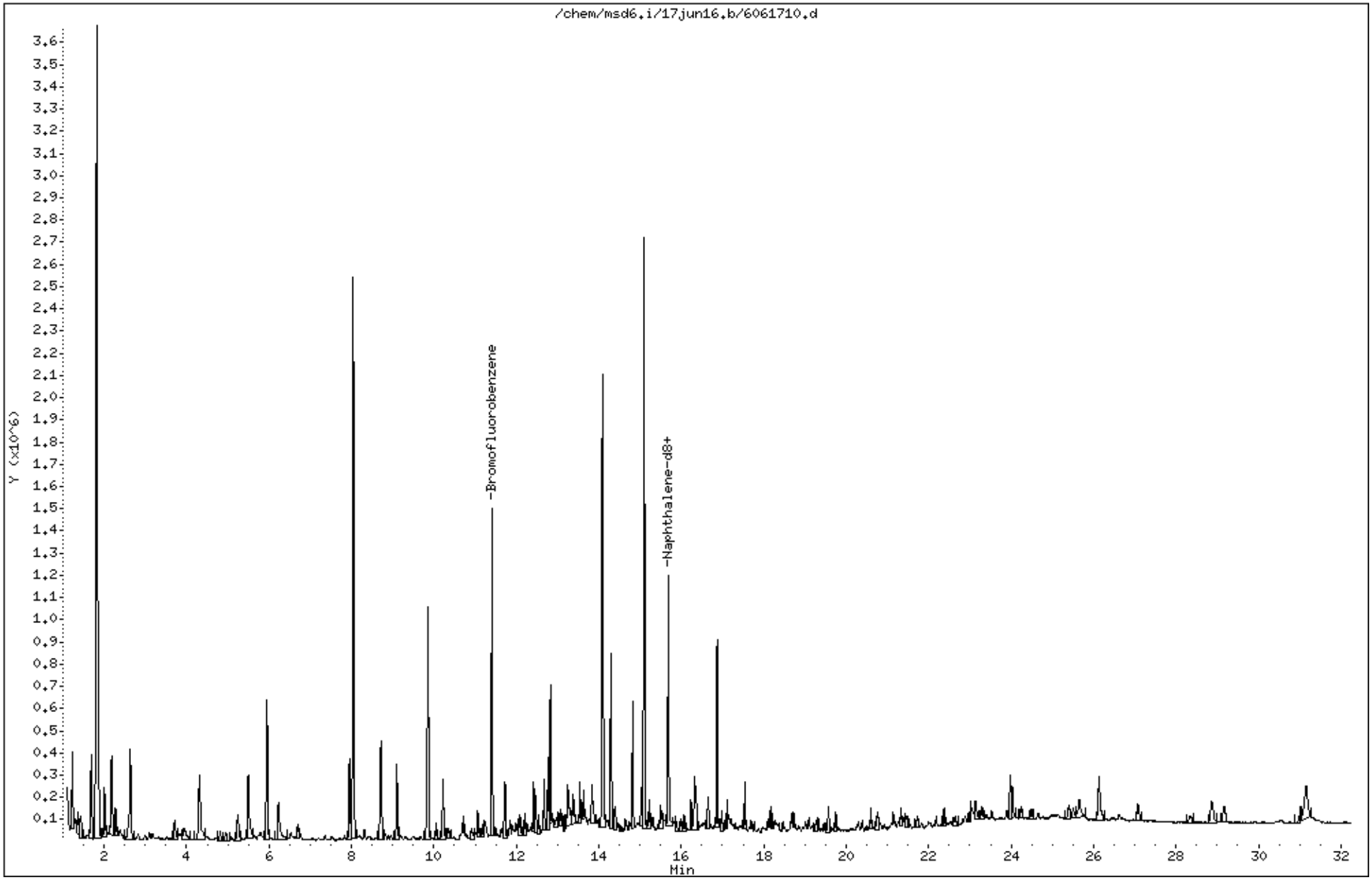
Instrument: msd6.i

Sample Info: :1606272-01A

Operator: CT

Column phase: RTx-624

Column diameter: 0.53



Data File: /chem/msd6.i/17jun16.b/6061710.d

Date : 17-JUN-2016 17:19

Client ID:

Instrument: msd6.i

Sample Info: ;1606272-01A

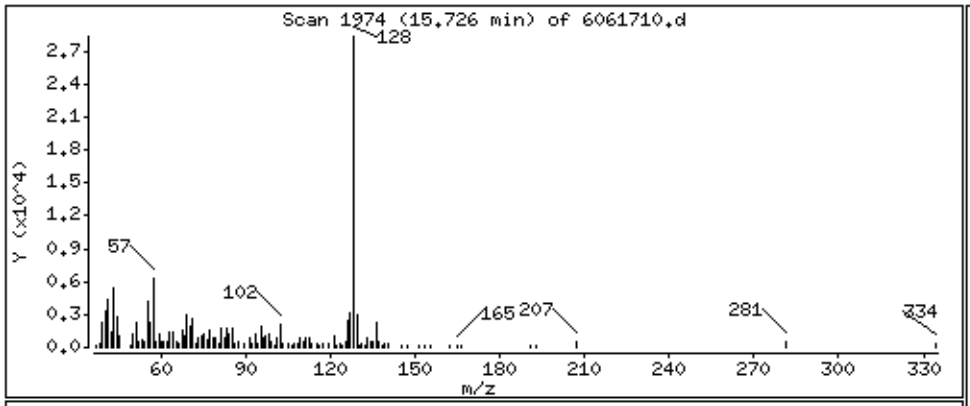
Operator: CT

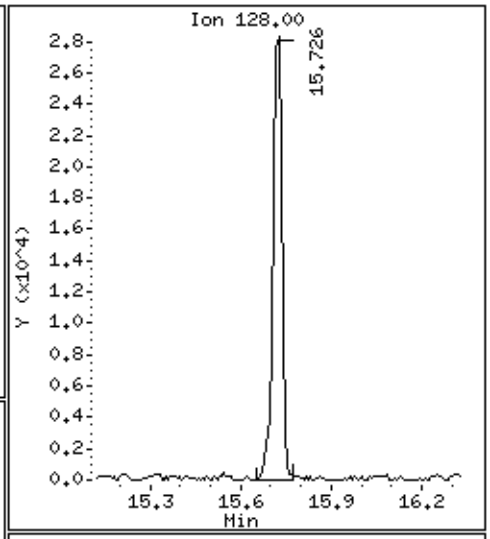
Column phase: RTx-624

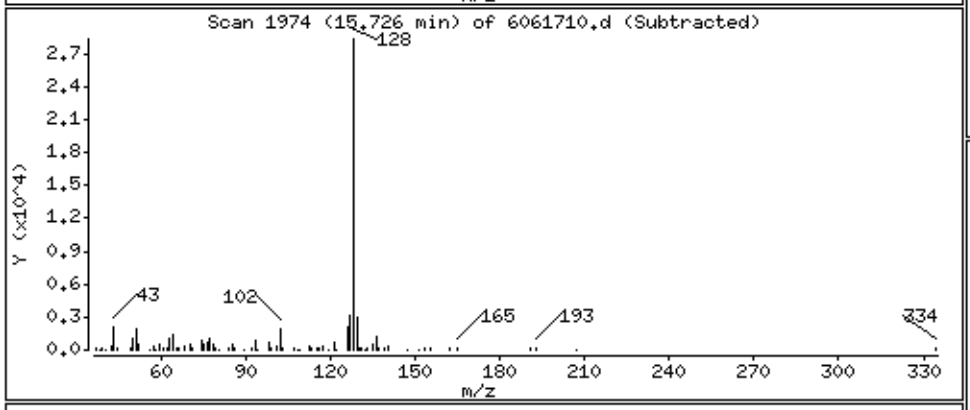
Column diameter: 0.53

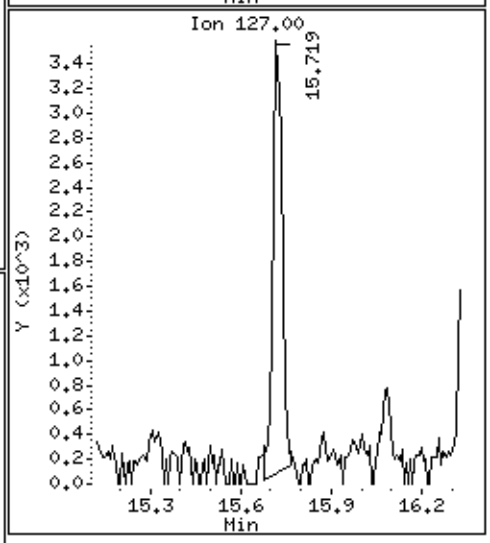
109 Naphthalene

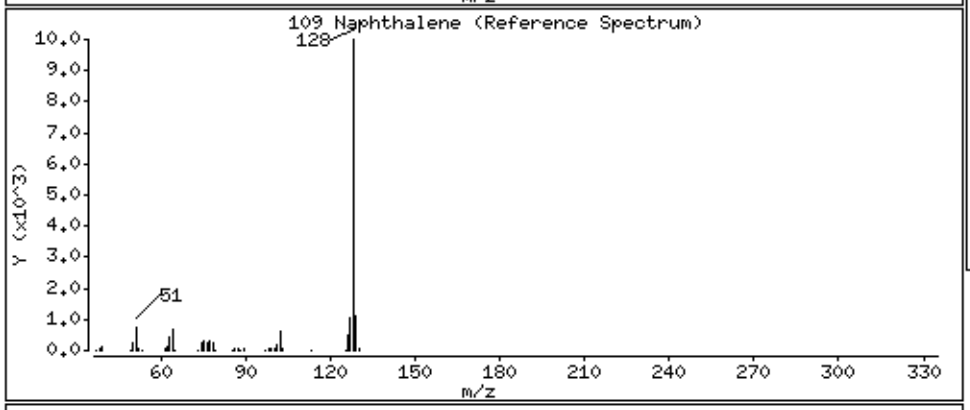
Concentration: 2.110 NG

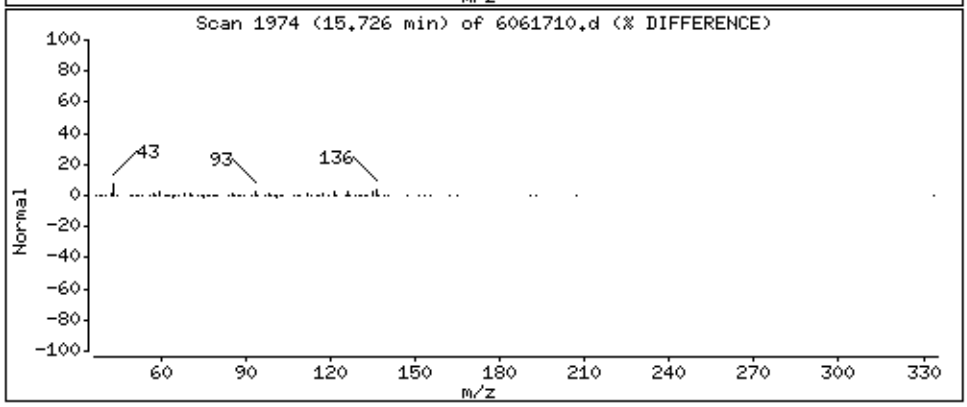












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Summary of Detected Compounds
EPA METHOD TO-17

Client Sample ID: B7IA-1D (061016)

Lab ID#: 1606272-02A

Compound	Rpt. Limit (ng)	Rpt. Limit (ug/m3)	Amount (ng)	Amount (ug/m3)
Naphthalene	1.0	0.060	2.0	0.12

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Client Sample ID: B7IA-1D (061016)

Lab ID#: 1606272-02A

EPA METHOD TO-17

File Name:	**6061711**	**Date of Extraction: NA**	**Date of Collection: 6/11/16 6:43:00 PM**
Dil. Factor:	**1.00**		**Date of Analysis: 6/17/16 05:59 PM**

Compound	Rpt. Limit (ng)	Rpt. Limit (ug/m3)	Amount (ng)	Amount (ug/m3)
Naphthalene	1.0	0.060	2.0	0.12

Air Sample Volume(L): 16.6
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/17jun16.b/6061711.d
Lab Smp Id: 1606272-02A
Inj Date : 17-JUN-2016 17:59
Operator : CT Inst ID: msd6.i
Smp Info : ;1606272-02A
Misc Info : G0143596
Comment :
Method : /chem/msd6.i/17jun16.b/616z0614vi.m
Meth Date : 21-Jun-2016 06:03 atoyama Quant Type: ISTD
Cal Date : 15-JUN-2016 11:01 Cal File: 6061502.d
Als bottle: 52
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		
11.406	11.421	(1.000)	174	499055	36.0000		80.00- 120.00	100.00
11.406	11.421	(1.000)	95	536628			74.19- 134.19	107.53
11.406	11.421	(1.000)	176	487263			67.61- 127.61	97.64
$ 108 Naphthalene-d8						CAS #: 1146-65-2		
15.683	15.683	(1.375)	136	683498	26.4488	26.449	80.00- 120.00	100.00
15.683	15.683	(1.375)	108	58998			0.00- 38.72	8.63
109 Naphthalene						CAS #: 91-20-3		
15.726	15.726	(1.379)	128	56322	2.02923	2.029	80.00- 120.00	100.00
15.726	15.726	(1.379)	127	7664			0.00- 42.99	13.61

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd6.i
Lab File ID: 6061711.d
Lab Smp Id: 1606272-02A
Analysis Type: VOA
Quant Type: ISTD
Operator: CT
Method File: /chem/msd6.i/17jun16.b/616z0614vi.m
Misc Info: G0143596

Calibration Date: 17-JUN-2016
Calibration Time: 09:49

Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
92 Bromofluorobenzen	469803	281882	657724	499055	6.23

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
92 Bromofluorobenzen	11.42	11.09	11.75	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: 21-Jun-2016 06:06

Eurofins Air Toxics Inc.

RECOVERY REPORT

Client Name:
Client SDG: 17jun16
Sample Matrix: GAS
Fraction: VOA
Lab Smp Id: 1606272-02A
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/17jun16.b/616z0614vi.m
Misc Info: G0143596

SURROGATE COMPOUND	AMOUNT ADDED ng	AMOUNT RECOVERED ng	% RECOVERED	LIMITS
$ 108 Naphthalene-d8	25.000	26.449	105.80	50-150

Data File: /chem/msd6.i/17jun16.b/6061711.d

Date : 17-JUN-2016 17:59

Client ID:

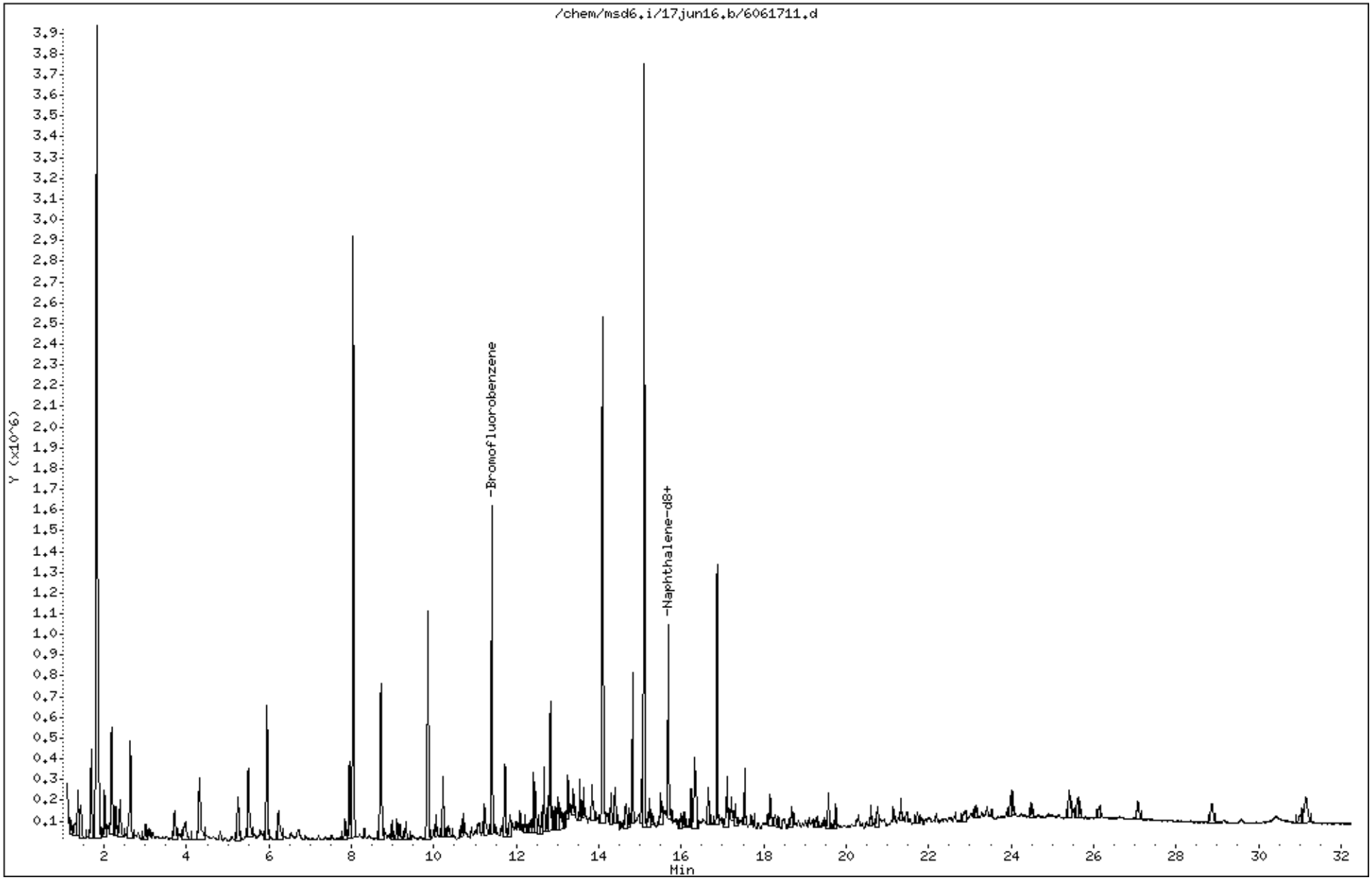
Instrument: msd6.i

Sample Info: ;1606272-02A

Operator: CT

Column phase: RTx-624

Column diameter: 0.53



Data File: /chem/msd6.i/17jun16.b/6061711.d

Date : 17-JUN-2016 17:59

Client ID:

Instrument: msd6.i

Sample Info: ;1606272-02A

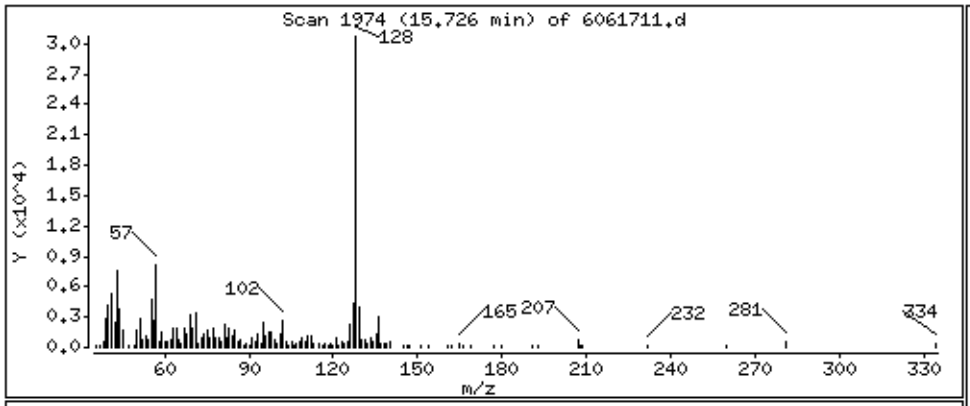
Operator: CT

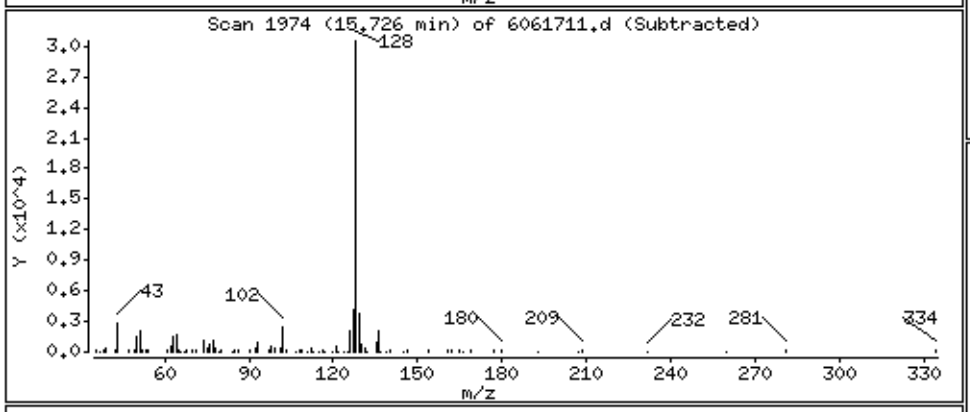
Column phase: RTx-624

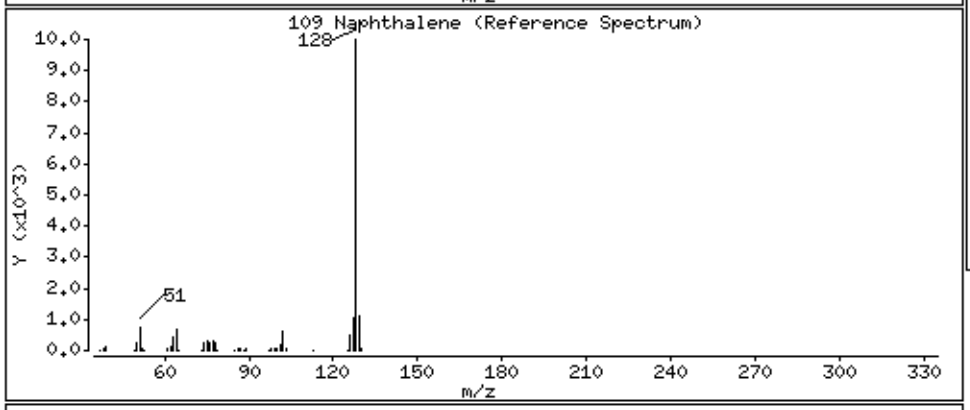
Column diameter: 0.53

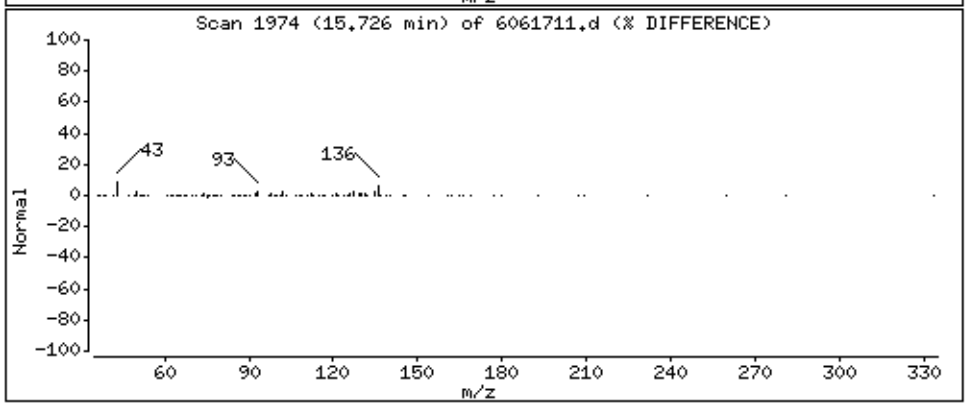
109 Naphthalene

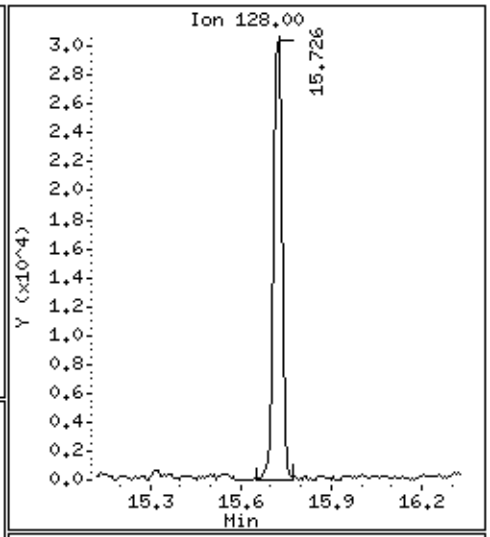
Concentration: 2.029 NG

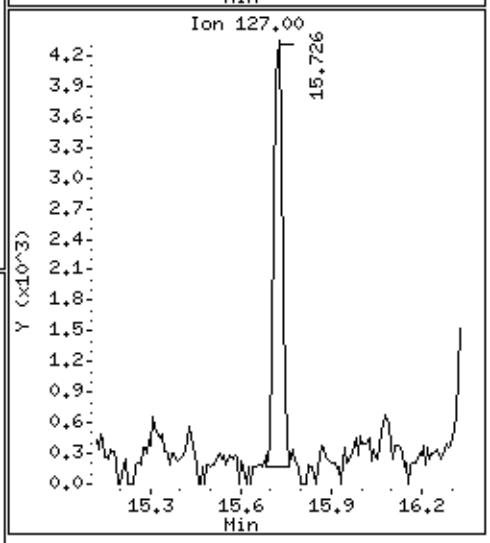












Summary of Detected Compounds
EPA METHOD TO-17

Client Sample ID: B7IA-2 (061016)

Lab ID#: 1606272-03A

Compound	Rpt. Limit (ng)	Rpt. Limit (ug/m3)	Amount (ng)	Amount (ug/m3)
Naphthalene	1.0	0.095	1.5	0.14

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Client Sample ID: B7IA-2 (061016)

Lab ID#: 1606272-03A

EPA METHOD TO-17

File Name:	**6061712**	**Date of Extraction: NA**	**Date of Collection: 6/11/16 10:41:00 AM**
Dil. Factor:	**1.00**		**Date of Analysis: 6/17/16 06:39 PM**

Compound	Rpt. Limit (ng)	Rpt. Limit (ug/m3)	Amount (ng)	Amount (ug/m3)
Naphthalene	1.0	0.095	1.5	0.14

Air Sample Volume(L): 10.5
Container Type: TO-17 VI Tube

Surrogates	%Recovery	Method Limits
Naphthalene-d8	98	50-150

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EPA Method TO-17 GC/MS

Data file : /chem/msd6.i/17jun16.b/6061712.d
Lab Smp Id: 1606272-03A
Inj Date : 17-JUN-2016 18:39
Operator : CT Inst ID: msd6.i
Smp Info : ;1606272-03A
Misc Info : G0145511
Comment :
Method : /chem/msd6.i/17jun16.b/616z0614vi.m
Meth Date : 21-Jun-2016 06:03 atoyama Quant Type: ISTD
Cal Date : 15-JUN-2016 11:01 Cal File: 6061502.d
Als bottle: 53
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		
11.406	11.421 (1.000)	174	567238	36.0000		80.00- 120.00	100.00
11.406	11.421 (1.000)	95	636331			74.19- 134.19	112.18
11.406	11.421 (1.000)	176	554754			67.61- 127.61	97.80
$ 108 Naphthalene-d8					CAS #: 1146-65-2		
15.683	15.683 (1.375)	136	719775	24.5046	24.505	80.00- 120.00	100.00
15.683	15.683 (1.375)	108	63372			0.00- 38.72	8.80
109 Naphthalene					CAS #: 91-20-3		
15.726	15.726 (1.379)	128	47371	1.50157	1.502	80.00- 120.00	100.00
15.726	15.726 (1.379)	127	6825			0.00- 42.99	14.41

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd6.i
Lab File ID: 6061712.d
Lab Smp Id: 1606272-03A
Analysis Type: VOA
Quant Type: ISTD
Operator: CT
Method File: /chem/msd6.i/17jun16.b/616z0614vi.m
Misc Info: G0145511

Calibration Date: 17-JUN-2016
Calibration Time: 09:49

Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
92 Bromofluorobenzen	469803	281882	657724	567238	20.74

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
92 Bromofluorobenzen	11.42	11.09	11.75	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: 21-Jun-2016 06:06

Eurofins Air Toxics Inc.

RECOVERY REPORT

Client Name:
Client SDG: 17jun16
Sample Matrix: GAS
Fraction: VOA
Lab Smp Id: 1606272-03A
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/17jun16.b/616z0614vi.m
Misc Info: G0145511

SURROGATE COMPOUND	AMOUNT ADDED ng	AMOUNT RECOVERED ng	% RECOVERED	LIMITS
$ 108 Naphthalene-d8	25.000	24.505	98.02	50-150

Data File: /chem/msd6.i/17jun16.b/6061712.d

Date : 17-JUN-2016 18:39

Client ID:

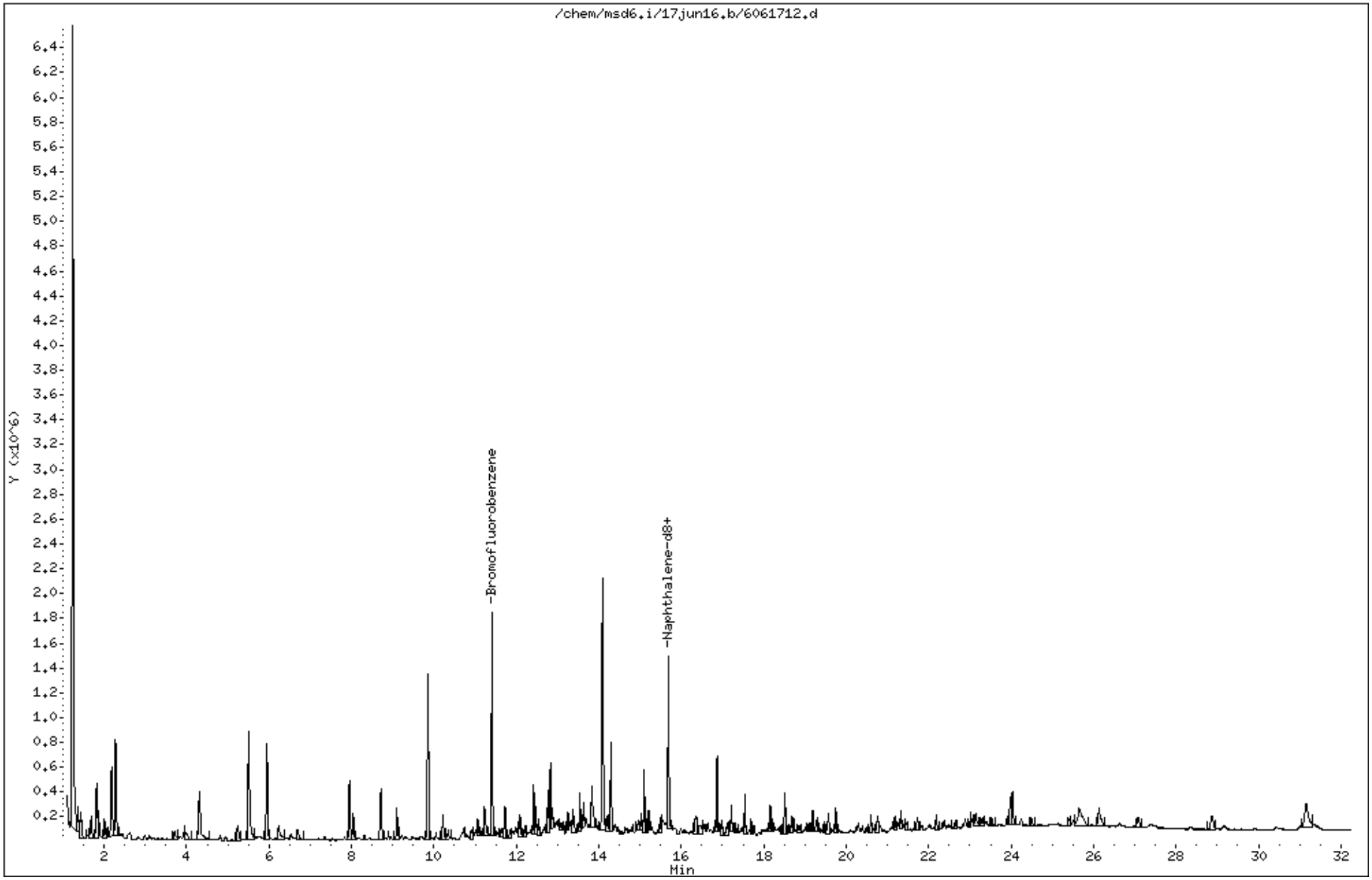
Instrument: msd6.i

Sample Info: ;1606272-03A

Operator: CT

Column phase: RTx-624

Column diameter: 0.53



Data File: /chem/msd6.i/17jun16.b/6061712.d

Date : 17-JUN-2016 18:39

Client ID:

Instrument: msd6.i

Sample Info: ;1606272-03A

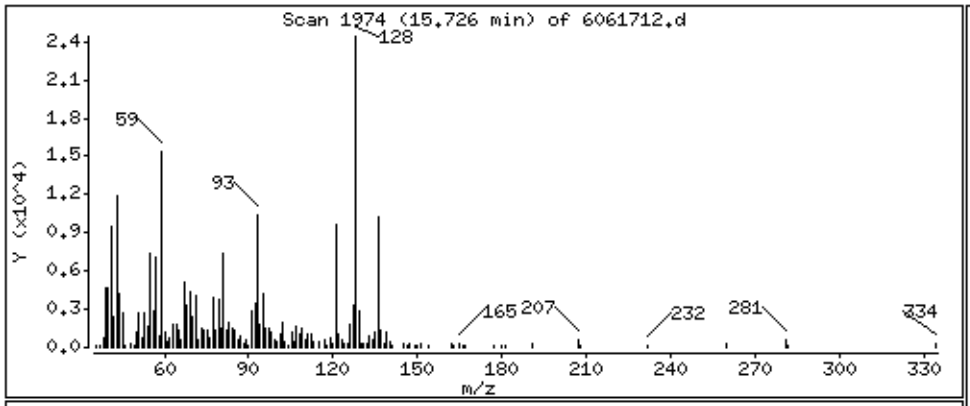
Operator: CT

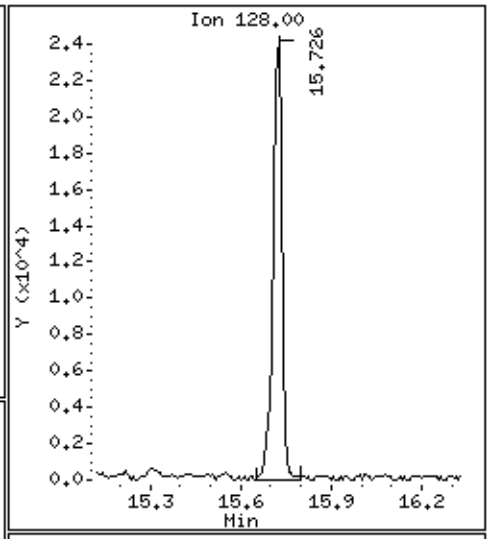
Column phase: RTx-624

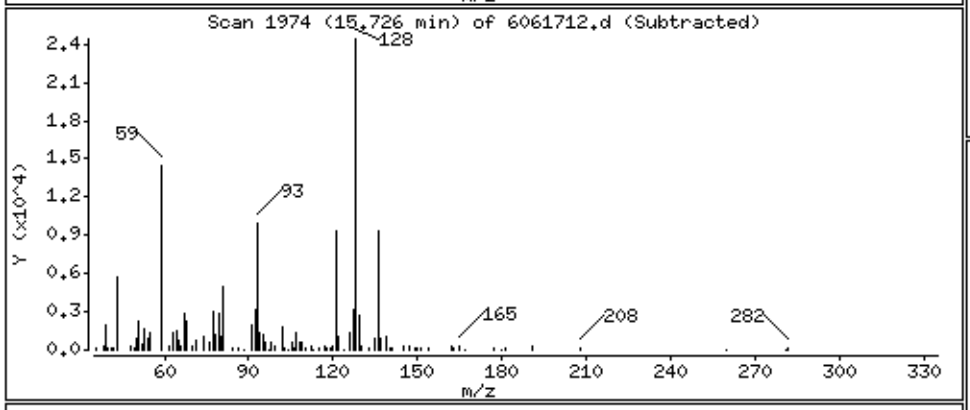
Column diameter: 0.53

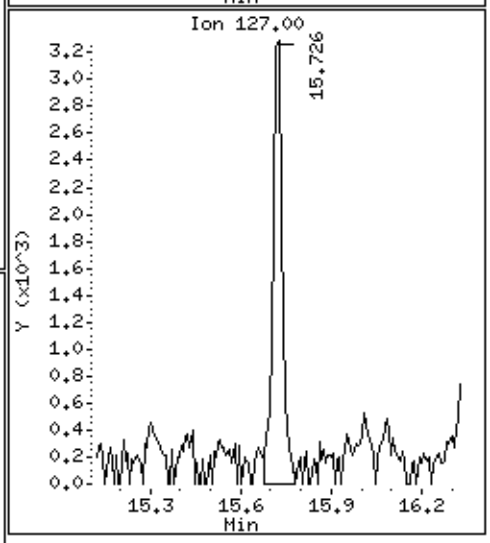
109 Naphthalene

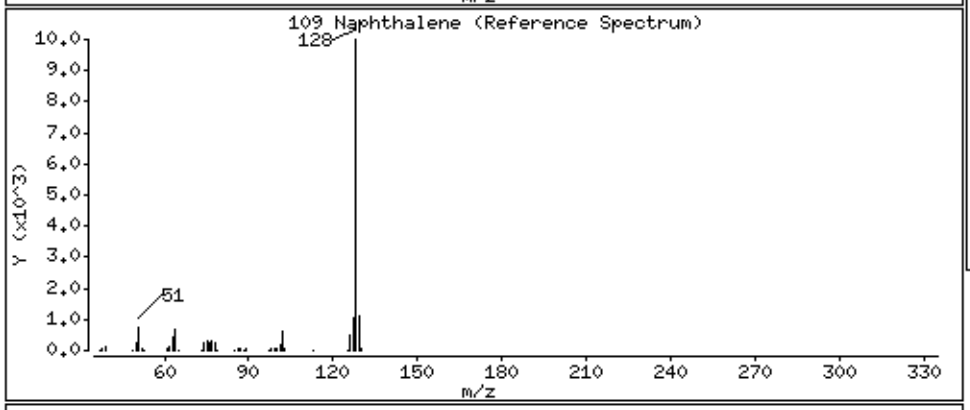
Concentration: 1.502 NG

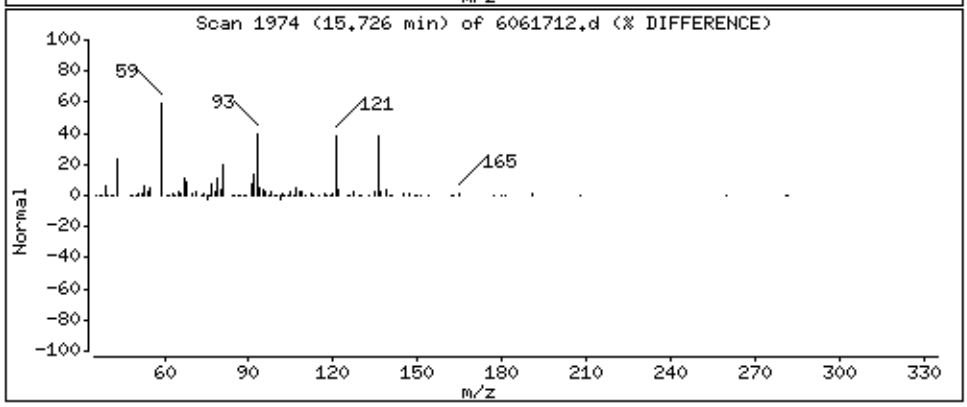












Summary of Detected Compounds
EPA METHOD TO-17

Client Sample ID: B7IA-3 (061016)

Lab ID#: 1606272-04A

Compound	Rpt. Limit (ng)	Rpt. Limit (ug/m3)	Amount (ng)	Amount (ug/m3)
Naphthalene	1.0	0.063	3.7	0.24

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Client Sample ID: B7IA-3 (061016)

Lab ID#: 1606272-04A

EPA METHOD TO-17

File Name:	**6061713**	**Date of Extraction: NA**	**Date of Collection: 6/11/16 7:47:00 PM**
Dil. Factor:	**1.00**		**Date of Analysis: 6/17/16 07:18 PM**

Compound	Rpt. Limit (ng)	Rpt. Limit (ug/m3)	Amount (ng)	Amount (ug/m3)
Naphthalene	1.0	0.063	3.7	0.24

Air Sample Volume(L): 15.8
Container Type: TO-17 VI Tube

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

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EPA Method TO-17 GC/MS

Data file : /chem/msd6.i/17jun16.b/6061713.d
Lab Smp Id: 1606272-04A
Inj Date : 17-JUN-2016 19:18
Operator : CT Inst ID: msd6.i
Smp Info : ;1606272-04A
Misc Info : G0184971
Comment :
Method : /chem/msd6.i/17jun16.b/616z0614vi.m
Meth Date : 21-Jun-2016 06:03 atoyama Quant Type: ISTD
Cal Date : 15-JUN-2016 11:01 Cal File: 6061502.d
Als bottle: 54
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	11.421	(1.000)	174	572750	36.0000		80.00- 120.00	100.00
11.407	11.421	(1.000)	95	640975			74.19- 134.19	111.91
11.407	11.421	(1.000)	176	556108			67.61- 127.61	97.09
$ 108 Naphthalene-d8							CAS #: 1146-65-2	
15.683	15.683	(1.375)	136	732795	24.7078	24.708	80.00- 120.00	100.00
15.683	15.683	(1.375)	108	65264			0.00- 38.72	8.91
109 Naphthalene							CAS #: 91-20-3	
15.726	15.726	(1.379)	128	119145	3.74031	3.740	80.00- 120.00	100.00
15.719	15.726	(1.378)	127	16833			0.00- 42.99	14.13

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd6.i
Lab File ID: 6061713.d
Lab Smp Id: 1606272-04A
Analysis Type: VOA
Quant Type: ISTD
Operator: CT
Method File: /chem/msd6.i/17jun16.b/616z0614vi.m
Misc Info: G0184971

Calibration Date: 17-JUN-2016
Calibration Time: 09:49

Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
92 Bromofluorobenzen	469803	281882	657724	572750	21.91

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
92 Bromofluorobenzen	11.42	11.09	11.75	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: 21-Jun-2016 06:06

Eurofins Air Toxics Inc.

RECOVERY REPORT

Client Name:
Client SDG: 17jun16
Sample Matrix: GAS
Fraction: VOA
Lab Smp Id: 1606272-04A
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/17jun16.b/616z0614vi.m
Misc Info: G0184971

SURROGATE COMPOUND	AMOUNT ADDED ng	AMOUNT RECOVERED ng	% RECOVERED	LIMITS
$ 108 Naphthalene-d8	25.000	24.708	98.83	50-150

Data File: /chem/msd6.i/17jun16.b/6061713.d

Date : 17-JUN-2016 19:18

Client ID:

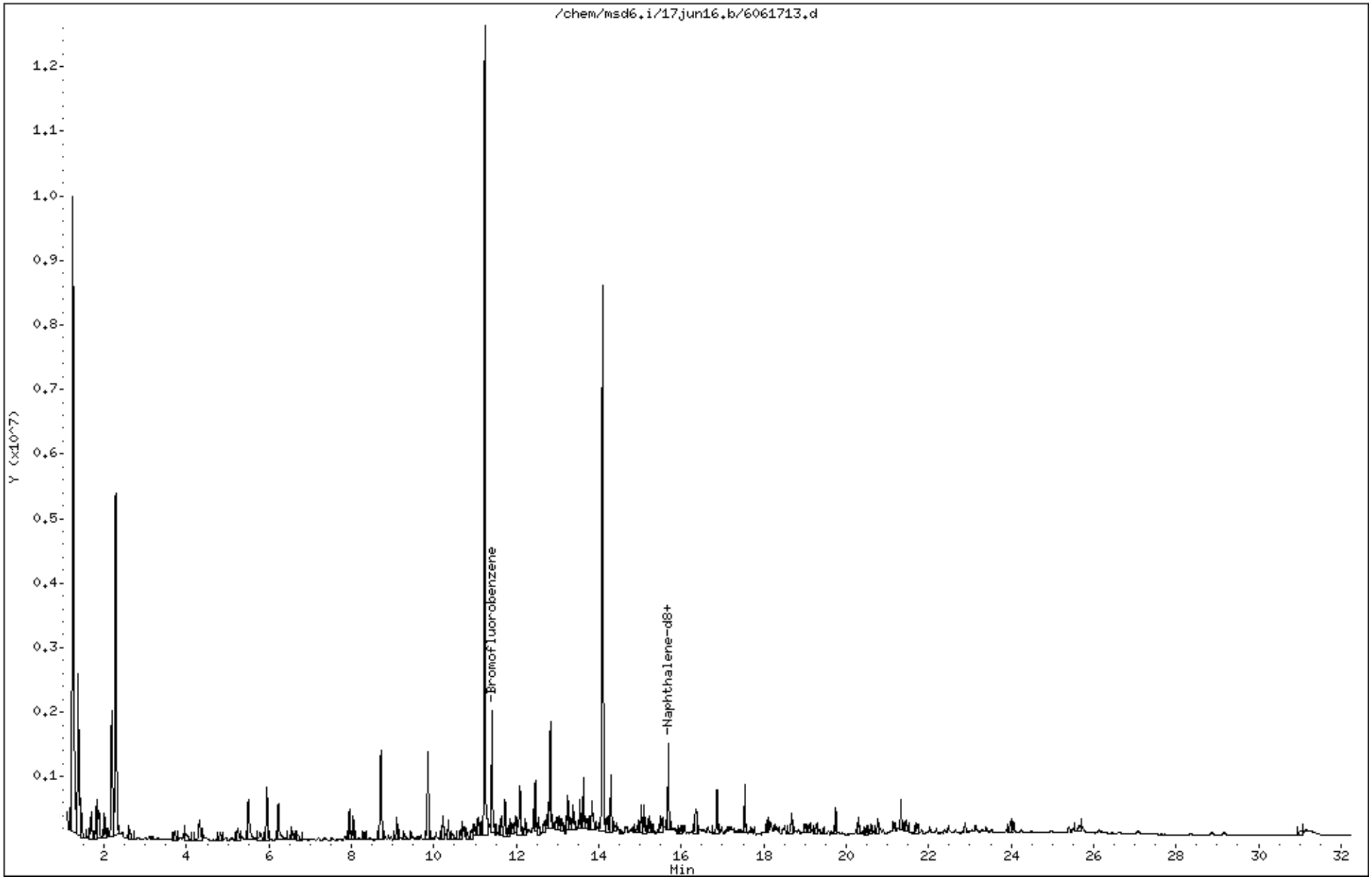
Sample Info: :1606272-04A

Column phase: RTx-624

Instrument: msd6.i

Operator: CT

Column diameter: 0.53



Data File: /chem/msd6.i/17jun16.b/6061713.d

Date : 17-JUN-2016 19:18

Client ID:

Instrument: msd6.i

Sample Info: ;1606272-04A

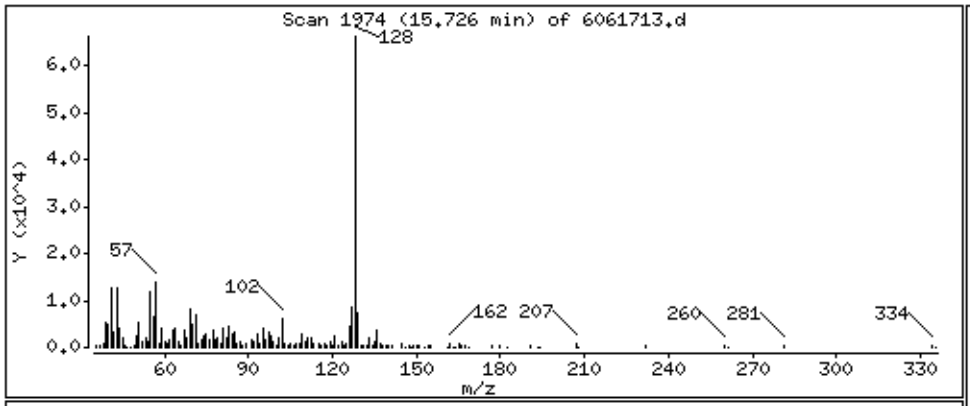
Operator: CT

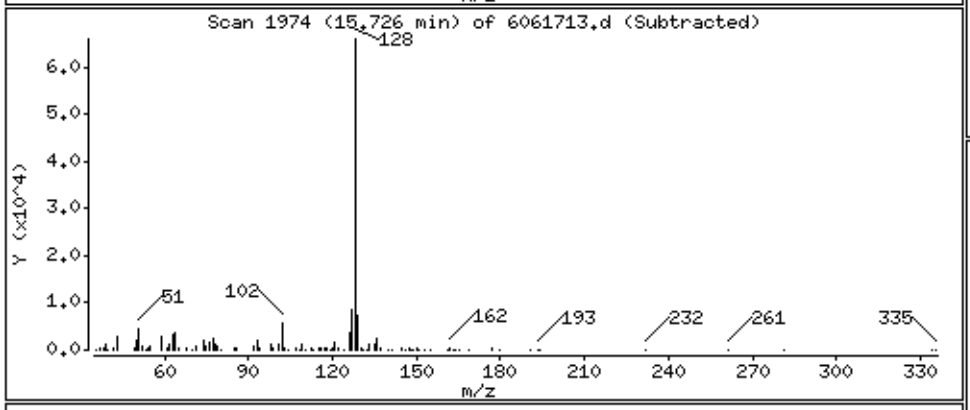
Column phase: RTx-624

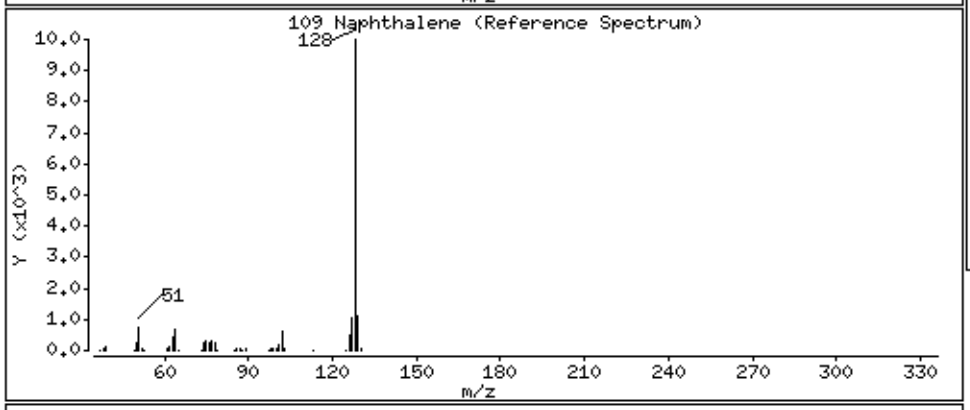
Column diameter: 0.53

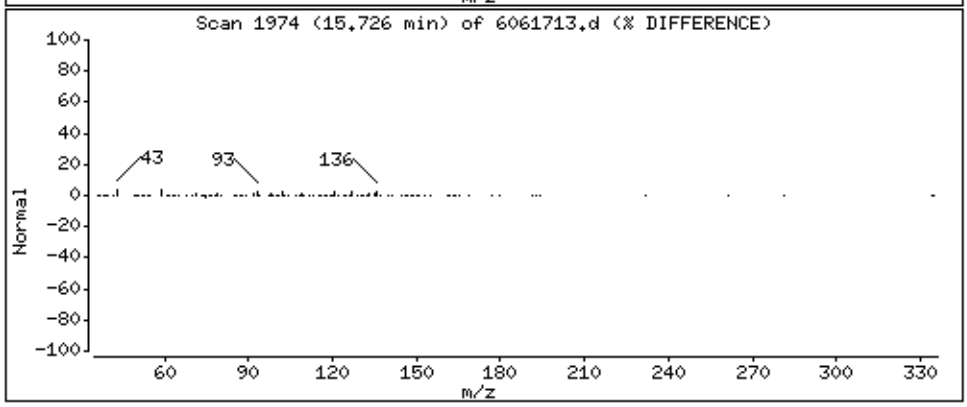
109 Naphthalene

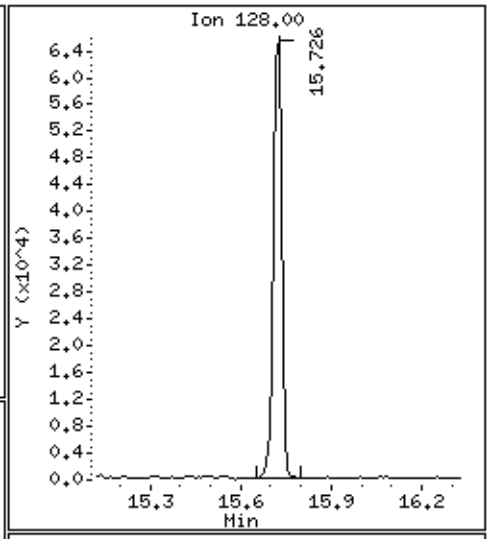
Concentration: 3.740 NG

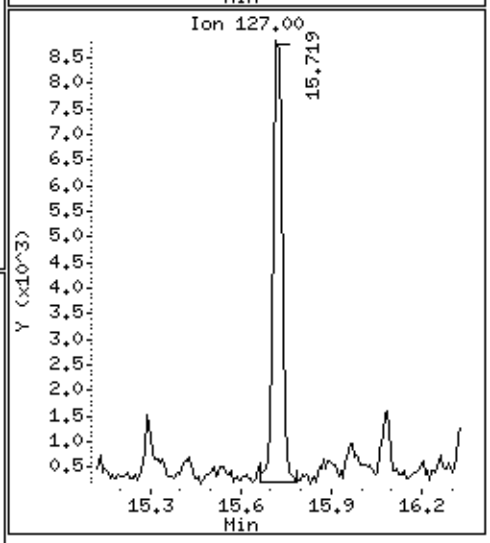












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Summary of Detected Compounds
EPA METHOD TO-17

Client Sample ID: B7IA-4 (061016)

Lab ID#: 1606272-05A

Compound	Rpt. Limit (ng)	Rpt. Limit (ug/m3)	Amount (ng)	Amount (ug/m3)
Naphthalene	1.0	0.085	1.0	0.090

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Client Sample ID: B7IA-4 (061016)

Lab ID#: 1606272-05A

EPA METHOD TO-17

File Name:	**6061714**	**Date of Extraction: NA**	**Date of Collection: 6/11/16 12:20:00 PM**
Dil. Factor:	**1.00**		**Date of Analysis: 6/17/16 07:58 PM**

Compound	Rpt. Limit (ng)	Rpt. Limit (ug/m3)	Amount (ng)	Amount (ug/m3)
Naphthalene	1.0	0.085	1.0	0.090

Air Sample Volume(L): 11.7
Container Type: TO-17 VI Tube

Surrogates	%Recovery	Method Limits
Naphthalene-d8	93	50-150

Eurofins Air Toxics Inc.

EPA Method TO-17 GC/MS

Data file : /chem/msd6.i/17jun16.b/6061714.d
Lab Smp Id: 1606272-05A
Inj Date : 17-JUN-2016 19:58
Operator : CT Inst ID: msd6.i
Smp Info : ;1606272-05A
Misc Info : G0154191
Comment :
Method : /chem/msd6.i/17jun16.b/616z0614vi.m
Meth Date : 21-Jun-2016 06:03 atoyama Quant Type: ISTD
Cal Date : 15-JUN-2016 11:01 Cal File: 6061502.d
Als bottle: 55
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	11.421	(1.000)	174	569889	36.0000		80.00- 120.00	100.00
11.407	11.421	(1.000)	95	634308			74.19- 134.19	111.30
11.407	11.421	(1.000)	176	553269			67.61- 127.61	97.08
$ 108 Naphthalene-d8						CAS #: 1146-65-2		
15.683	15.683	(1.375)	136	685340	23.2237	23.224	80.00- 120.00	100.00
15.683	15.683	(1.375)	108	61639			0.00- 38.72	8.99
109 Naphthalene						CAS #: 91-20-3		
15.719	15.726	(1.378)	128	33492	1.05669	1.057	80.00- 120.00	100.00
15.726	15.726	(1.379)	127	5146			0.00- 42.99	15.37

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd6.i
Lab File ID: 6061714.d
Lab Smp Id: 1606272-05A
Analysis Type: VOA
Quant Type: ISTD
Operator: CT
Method File: /chem/msd6.i/17jun16.b/616z0614vi.m
Misc Info: G0154191

Calibration Date: 17-JUN-2016
Calibration Time: 09:49

Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
92 Bromofluorobenzen	469803	281882	657724	569889	21.30

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
92 Bromofluorobenzen	11.42	11.09	11.75	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: 21-Jun-2016 06:06

Eurofins Air Toxics Inc.

RECOVERY REPORT

Client Name:
Client SDG: 17jun16
Sample Matrix: GAS
Fraction: VOA
Lab Smp Id: 1606272-05A
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/17jun16.b/616z0614vi.m
Misc Info: G0154191

SURROGATE COMPOUND	AMOUNT ADDED ng	AMOUNT RECOVERED ng	% RECOVERED	LIMITS
$ 108 Naphthalene-d8	25.000	23.224	92.89	50-150

Data File: /chem/msd6.i/17jun16.b/6061714.d

Date : 17-JUN-2016 19:58

Client ID:

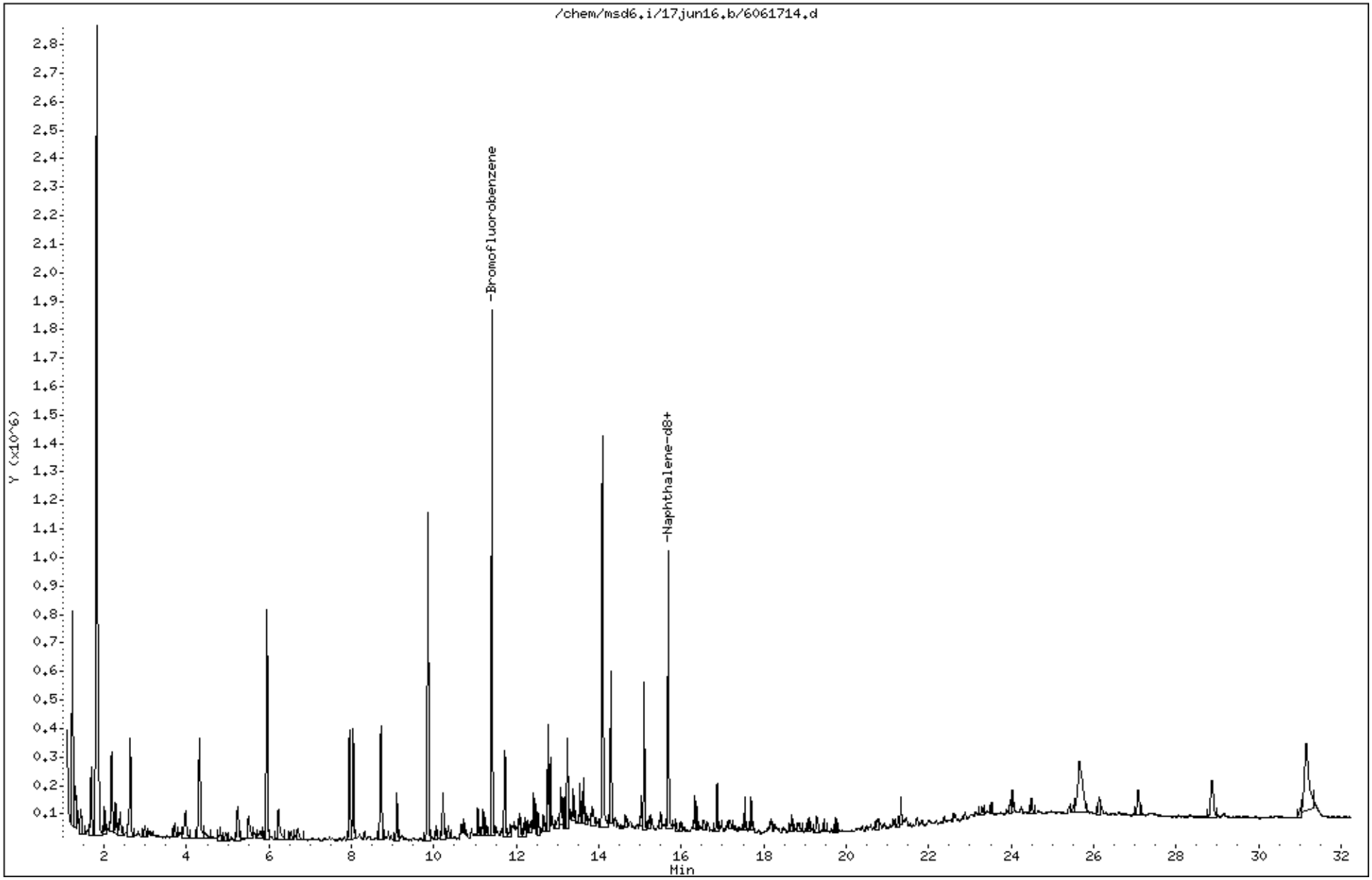
Instrument: msd6.i

Sample Info: :1606272-05A

Operator: CT

Column phase: RTx-624

Column diameter: 0.53



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Date : 17-JUN-2016 19:58

Client ID:

Instrument: msd6.i

Sample Info: ;1606272-05A

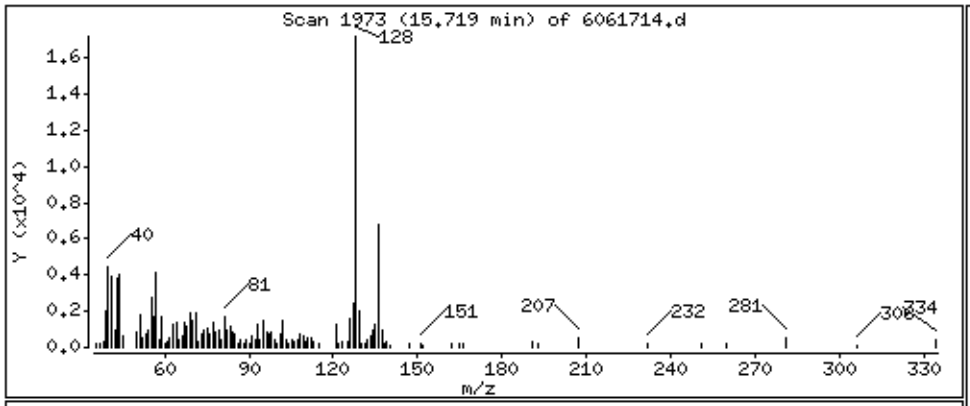
Operator: CT

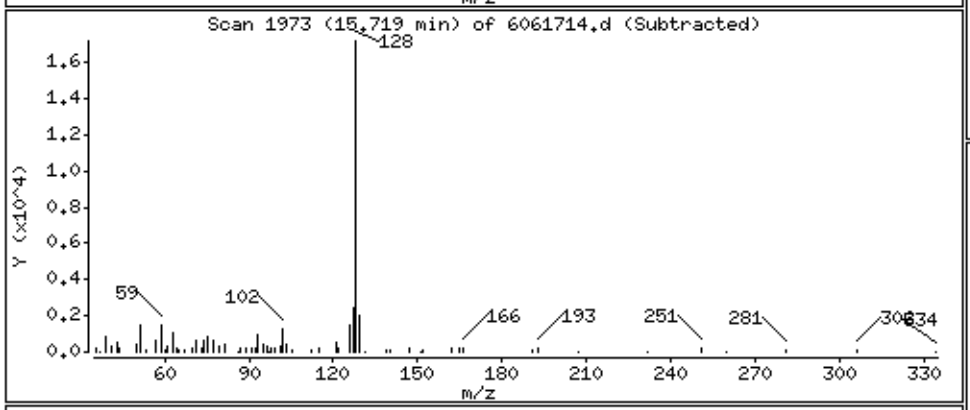
Column phase: RTx-624

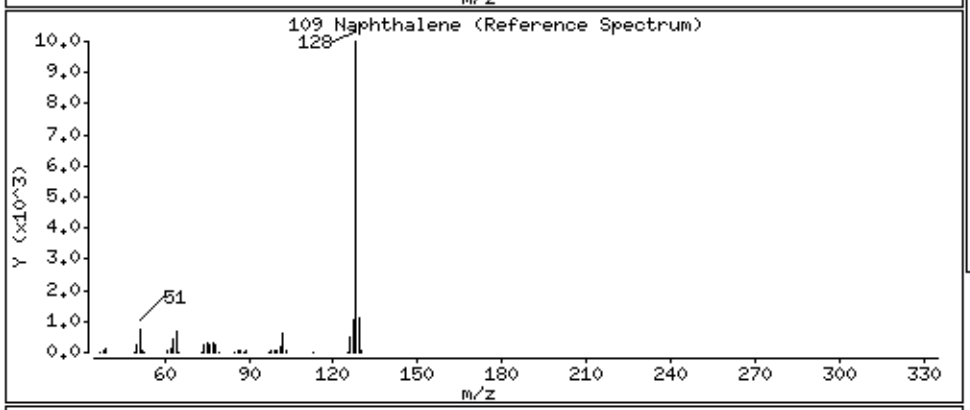
Column diameter: 0.53

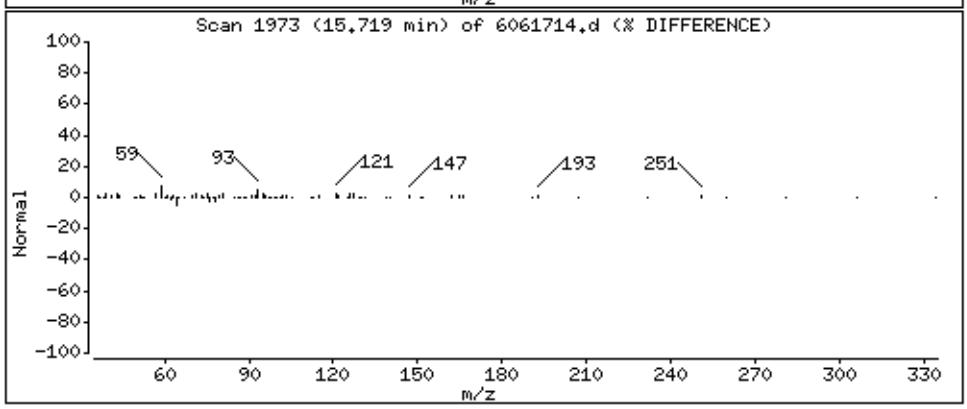
109 Naphthalene

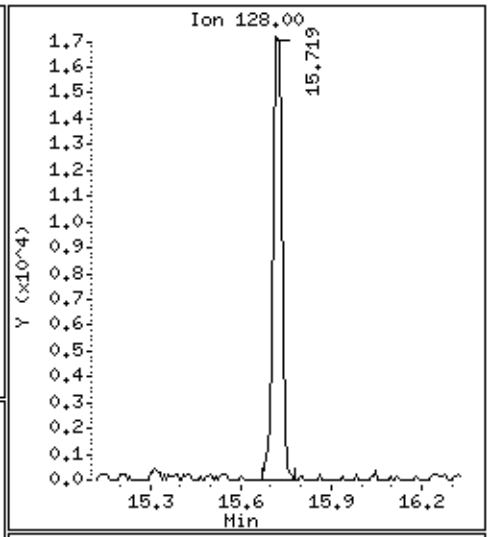
Concentration: 1.057 NG

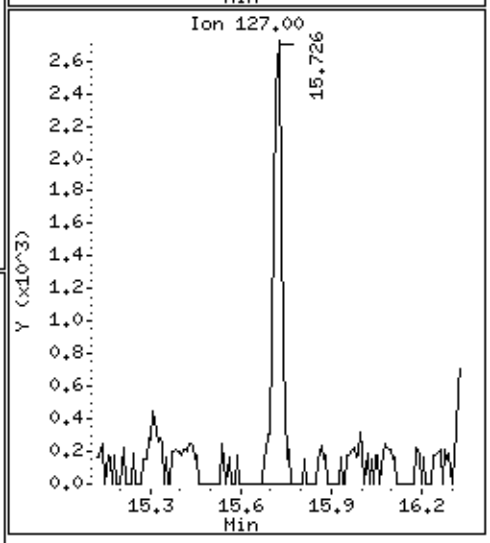












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Summary of Detected Compounds
EPA METHOD TO-17

Client Sample ID: B7IA-5 (061016)

Lab ID#: 1606272-06A

Compound	Rpt. Limit (ng)	Rpt. Limit (ug/m3)	Amount (ng)	Amount (ug/m3)
Naphthalene	1.0	0.088	3.5	0.31

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Client Sample ID: B7IA-5 (061016)

Lab ID#: 1606272-06A

EPA METHOD TO-17

File Name:	**6061715**	**Date of Extraction: NA**	**Date of Collection: 6/11/16 7:25:00 PM**
Dil. Factor:	**1.00**		**Date of Analysis: 6/17/16 08:38 PM**

Compound	Rpt. Limit (ng)	Rpt. Limit (ug/m3)	Amount (ng)	Amount (ug/m3)
Naphthalene	1.0	0.088	3.5	0.31

Air Sample Volume(L): 11.3
Container Type: TO-17 VI Tube

Surrogates	%Recovery	Method Limits
Naphthalene-d8	98	50-150

Eurofins Air Toxics Inc.

EPA Method TO-17 GC/MS

Data file : /chem/msd6.i/17jun16.b/6061715.d
Lab Smp Id: 1606272-06A
Inj Date : 17-JUN-2016 20:38
Operator : CT Inst ID: msd6.i
Smp Info : ;1606272-06A
Misc Info : G0147322
Comment :
Method : /chem/msd6.i/17jun16.b/616z0614vi.m
Meth Date : 21-Jun-2016 06:03 atoyama Quant Type: ISTD
Cal Date : 15-JUN-2016 11:01 Cal File: 6061502.d
Als bottle: 56
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	
11.406	11.421	(1.000)	174	572773	36.0000		80.00- 120.00	100.00
11.406	11.421	(1.000)	95	640459			74.19- 134.19	111.82
11.406	11.421	(1.000)	176	555401			67.61- 127.61	96.97
$ 108 Naphthalene-d8							CAS #: 1146-65-2	
15.683	15.683	(1.375)	136	724796	24.4371	24.437	80.00- 120.00	100.00
15.683	15.683	(1.375)	108	65469			0.00- 38.72	9.03
109 Naphthalene							CAS #: 91-20-3	
15.726	15.726	(1.379)	128	111385	3.49655	3.496	80.00- 120.00	100.00
15.726	15.726	(1.379)	127	15417			0.00- 42.99	13.84

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd6.i
Lab File ID: 6061715.d
Lab Smp Id: 1606272-06A
Analysis Type: VOA
Quant Type: ISTD
Operator: CT
Method File: /chem/msd6.i/17jun16.b/616z0614vi.m
Misc Info: G0147322

Calibration Date: 17-JUN-2016
Calibration Time: 09:49

Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
92 Bromofluorobenzen	469803	281882	657724	572773	21.92

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
92 Bromofluorobenzen	11.42	11.09	11.75	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: 21-Jun-2016 06:06

Eurofins Air Toxics Inc.

RECOVERY REPORT

Client Name:
Client SDG: 17jun16
Sample Matrix: GAS
Fraction: VOA
Lab Smp Id: 1606272-06A
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/17jun16.b/616z0614vi.m
Misc Info: G0147322

SURROGATE COMPOUND	AMOUNT ADDED ng	AMOUNT RECOVERED ng	% RECOVERED	LIMITS
$ 108 Naphthalene-d8	25.000	24.437	97.75	50-150

Data File: /chem/msd6.i/17jun16.b/6061715.d

Page 1

Date : 17-JUN-2016 20:38

Client ID:

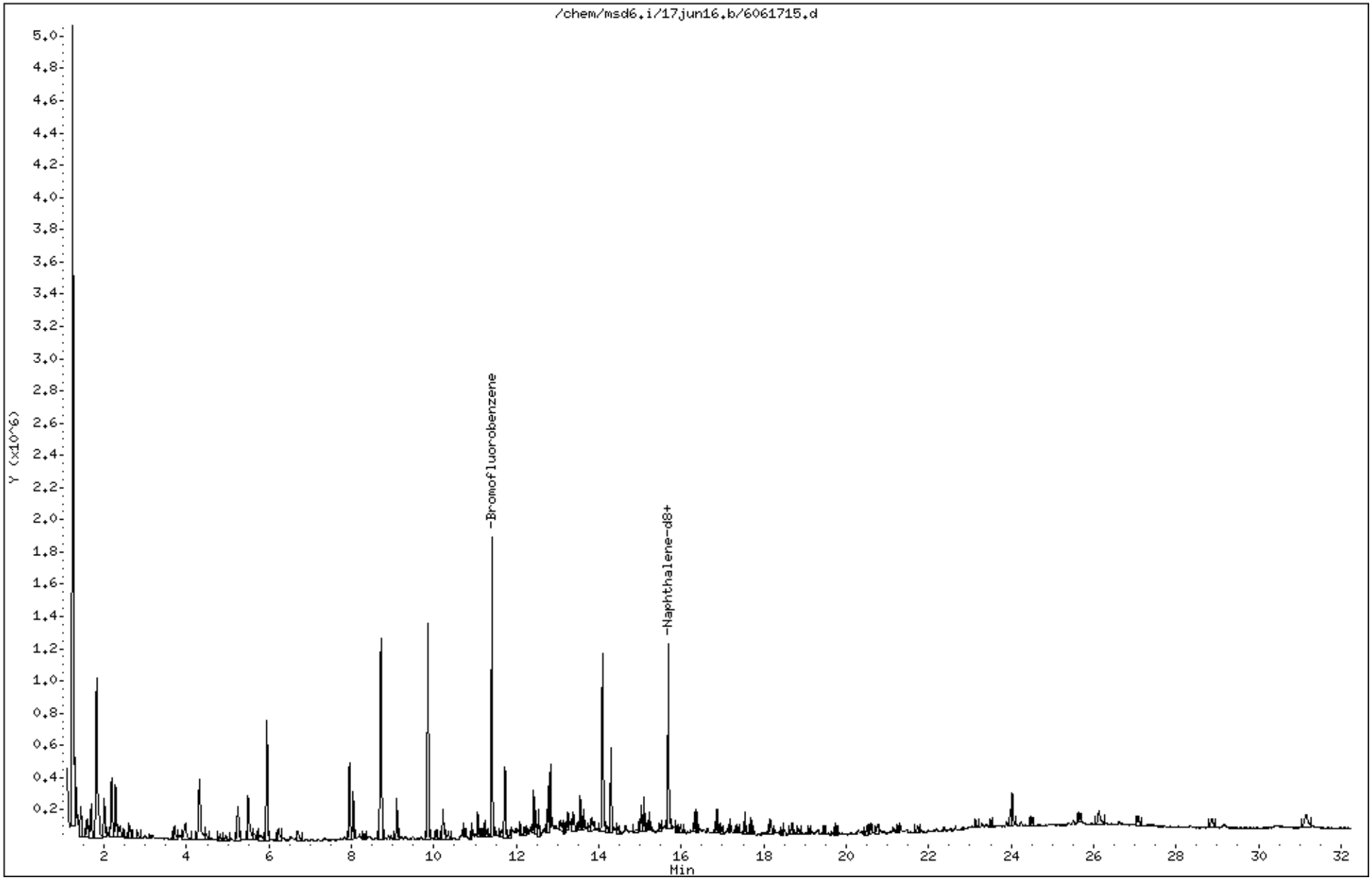
Instrument: msd6.i

Sample Info: ;1606272-06A

Operator: CT

Column phase: RTx-624

Column diameter: 0.53



Data File: /chem/msd6.i/17jun16.b/6061715.d

Date : 17-JUN-2016 20:38

Client ID:

Instrument: msd6.i

Sample Info: ;1606272-06A

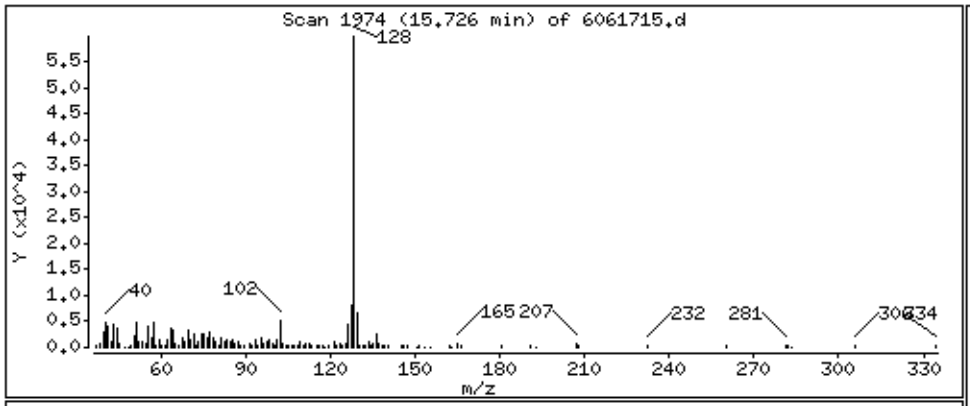
Operator: CT

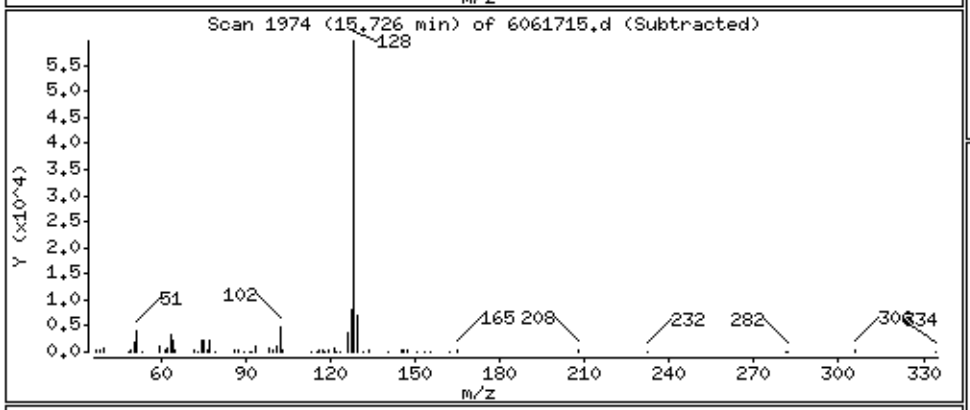
Column phase: RTx-624

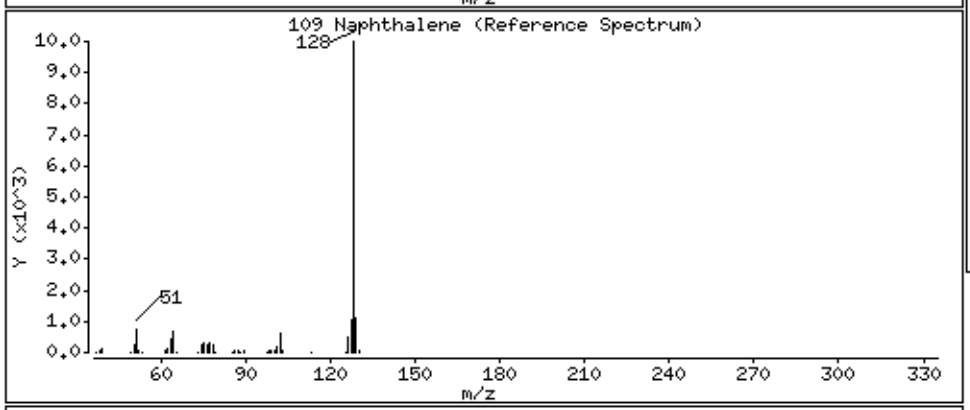
Column diameter: 0.53

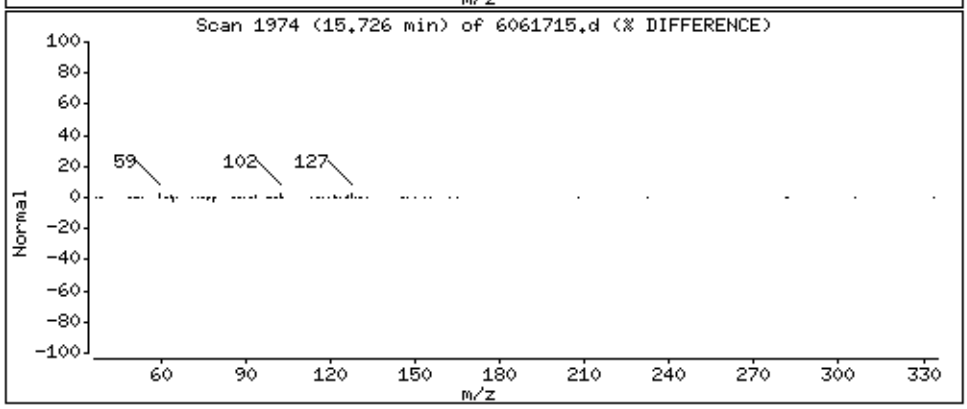
109 Naphthalene

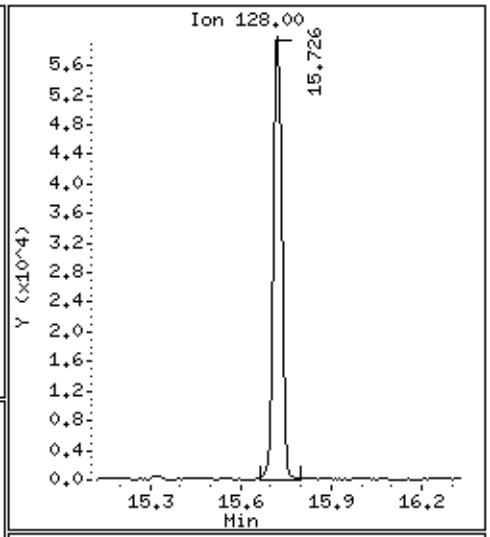
Concentration: 3.496 NG

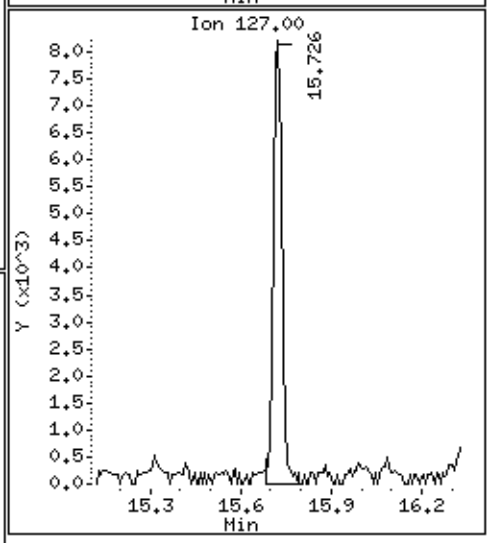












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Summary of Detected Compounds
EPA METHOD TO-17

Client Sample ID: B7IA-6 (061016)

Lab ID#: 1606272-07A

Compound	Rpt. Limit (ng)	Rpt. Limit (ug/m3)	Amount (ng)	Amount (ug/m3)
Naphthalene	1.0	0.061	3.8	0.23

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Client Sample ID: B7IA-6 (061016)

Lab ID#: 1606272-07A

EPA METHOD TO-17

File Name:	**6061716**	**Date of Extraction: NA**	**Date of Collection: 6/11/16 7:36:00 PM**
Dil. Factor:	**1.00**		**Date of Analysis: 6/17/16 09:17 PM**

Compound	Rpt. Limit (ng)	Rpt. Limit (ug/m3)	Amount (ng)	Amount (ug/m3)
Naphthalene	1.0	0.061	3.8	0.23

Air Sample Volume(L): 16.3
Container Type: TO-17 VI Tube

Surrogates	%Recovery	Method Limits
Naphthalene-d8	100	50-150

Eurofins Air Toxics Inc.

EPA Method TO-17 GC/MS

Data file : /chem/msd6.i/17jun16.b/6061716.d
Lab Smp Id: 1606272-07A
Inj Date : 17-JUN-2016 21:17
Operator : CT Inst ID: msd6.i
Smp Info : ;1606272-07A
Misc Info : G0143780
Comment :
Method : /chem/msd6.i/17jun16.b/616z0614vi.m
Meth Date : 21-Jun-2016 06:03 atoyama Quant Type: ISTD
Cal Date : 15-JUN-2016 11:01 Cal File: 6061502.d
Als bottle: 57
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	11.421	(1.000)	174	567228	36.0000		80.00- 120.00	100.00
11.407	11.421	(1.000)	95	635877			74.19- 134.19	112.10
11.407	11.421	(1.000)	176	553067			67.61- 127.61	97.50
$ 108 Naphthalene-d8						CAS #: 1146-65-2		
15.683	15.683	(1.375)	136	733893	24.9857	24.986	80.00- 120.00	100.00
15.683	15.683	(1.375)	108	67002			0.00- 38.72	9.13
109 Naphthalene						CAS #: 91-20-3		
15.726	15.726	(1.379)	128	119560	3.78988	3.790	80.00- 120.00	100.00
15.726	15.726	(1.379)	127	16376			0.00- 42.99	13.70

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd6.i
Lab File ID: 6061716.d
Lab Smp Id: 1606272-07A
Analysis Type: VOA
Quant Type: ISTD
Operator: CT
Method File: /chem/msd6.i/17jun16.b/616z0614vi.m
Misc Info: G0143780

Calibration Date: 17-JUN-2016
Calibration Time: 09:49

Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
92 Bromofluorobenzen	469803	281882	657724	567228	20.74

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
92 Bromofluorobenzen	11.42	11.09	11.75	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: 21-Jun-2016 06:06

Eurofins Air Toxics Inc.

RECOVERY REPORT

Client Name:
Client SDG: 17jun16
Sample Matrix: GAS
Fraction: VOA
Lab Smp Id: 1606272-07A
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/17jun16.b/616z0614vi.m
Misc Info: G0143780

SURROGATE COMPOUND	AMOUNT ADDED ng	AMOUNT RECOVERED ng	% RECOVERED	LIMITS
$ 108 Naphthalene-d8	25.000	24.986	99.94	50-150

Data File: /chem/msd6.i/17jun16.b/6061716.d

Date : 17-JUN-2016 21:17

Client ID:

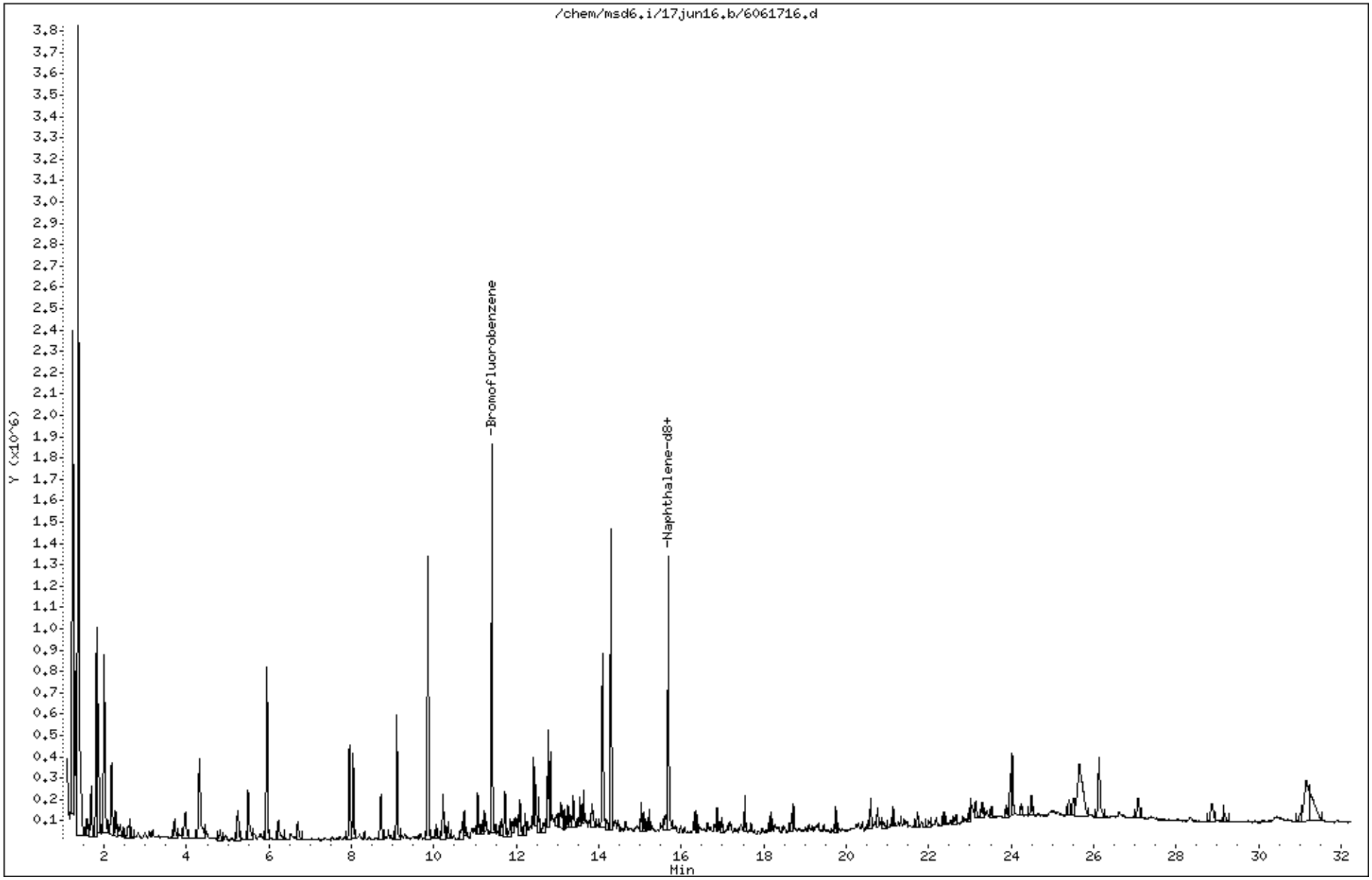
Instrument: msd6.i

Sample Info: ;1606272-07A

Operator: CT

Column phase: RTx-624

Column diameter: 0.53



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Date : 17-JUN-2016 21:17

Client ID:

Instrument: msd6.i

Sample Info: ;1606272-07A

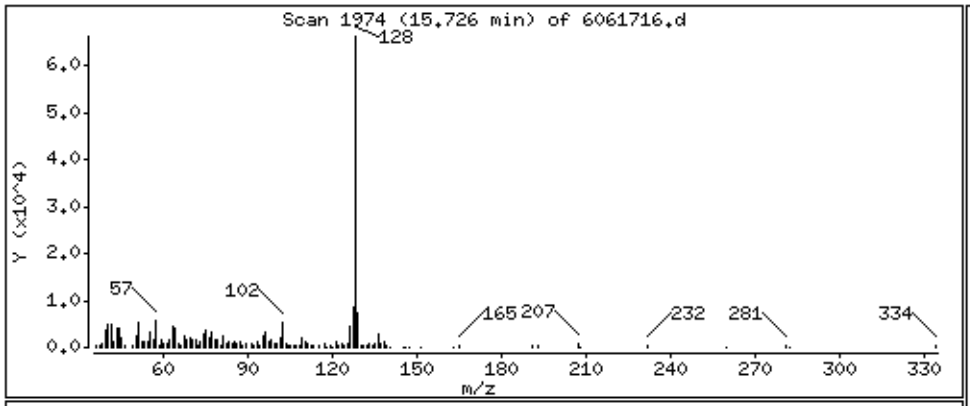
Operator: CT

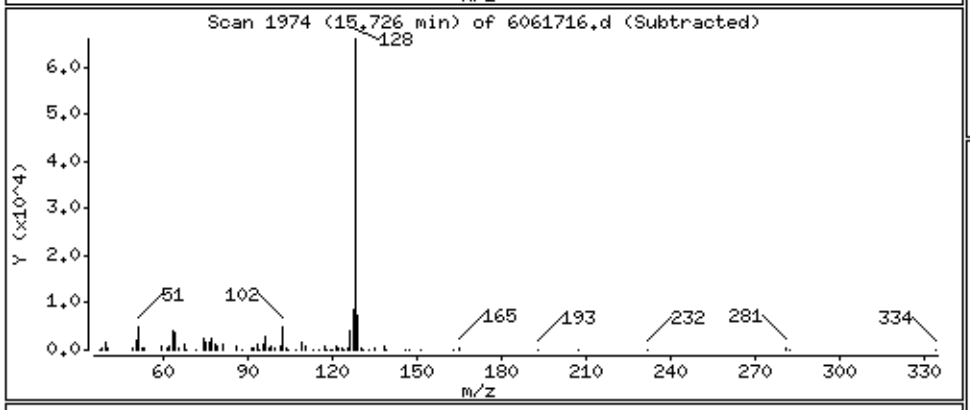
Column phase: RTx-624

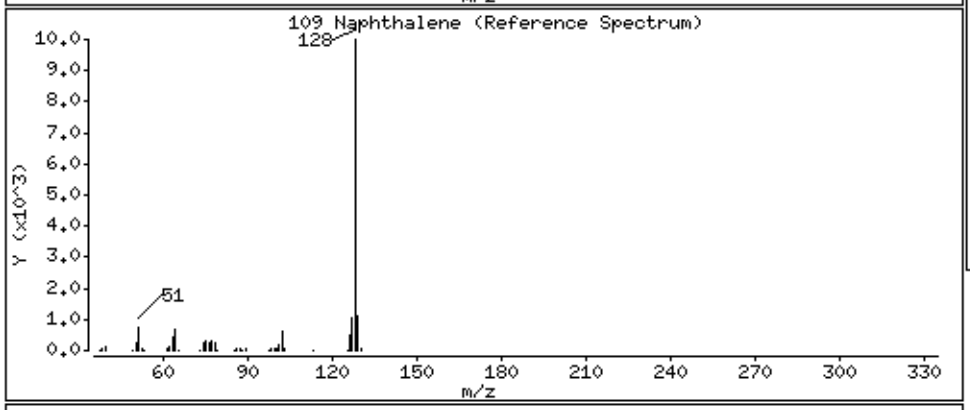
Column diameter: 0.53

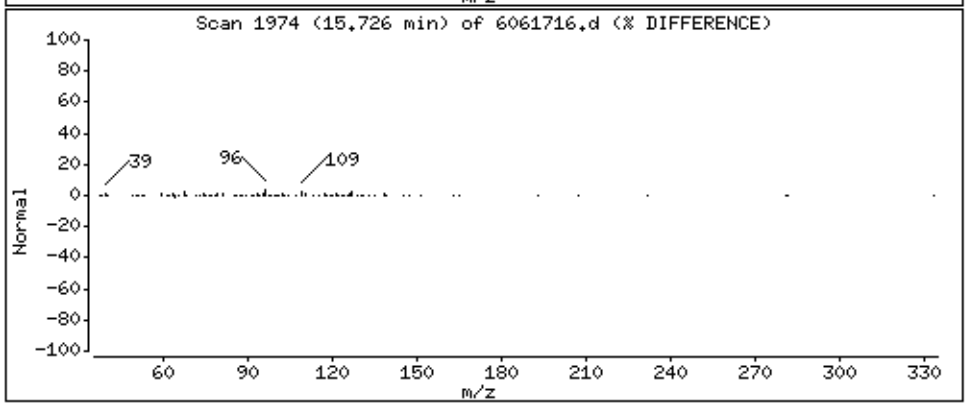
109 Naphthalene

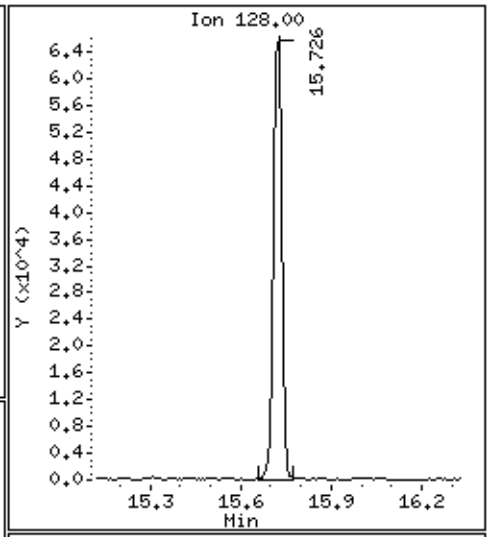
Concentration: 3.790 NG

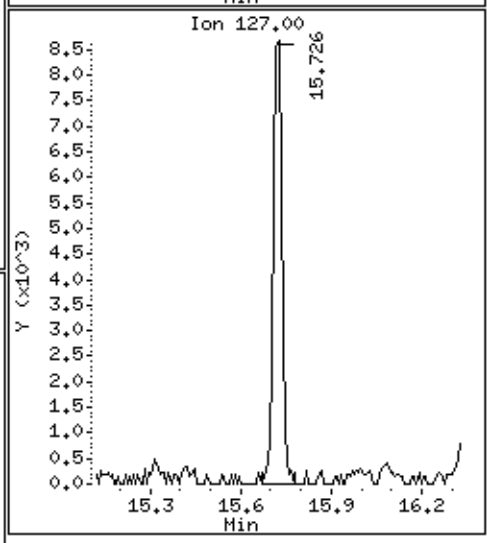












Summary of Detected Compounds
EPA METHOD TO-17

Client Sample ID: B7AA (061016)

Lab ID#: 1606272-08A

Compound	Rpt. Limit (ng)	Rpt. Limit (ug/m3)	Amount (ng)	Amount (ug/m3)
Naphthalene	1.0	0.060	0.52 J	0.032 J

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Client Sample ID: B7AA (061016)

Lab ID#: 1606272-08A

EPA METHOD TO-17

File Name:	**6061717**	**Date of Extraction: NA**	**Date of Collection: 6/11/16 6:25:00 PM**
Dil. Factor:	**1.00**		**Date of Analysis: 6/17/16 09:57 PM**

Compound	Rpt. Limit (ng)	Rpt. Limit (ug/m3)	Amount (ng)	Amount (ug/m3)
Naphthalene	1.0	0.060	0.52 J	0.032 J

Air Sample Volume(L): 16.6

J = Estimated value.

Container Type: TO-17 VI Tube

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

Eurofins Air Toxics Inc.

EPA Method TO-17 GC/MS

Data file : /chem/msd6.i/17jun16.b/6061717.d
Lab Smp Id: 1606272-08A
Inj Date : 17-JUN-2016 21:57
Operator : CT Inst ID: msd6.i
Smp Info : ;1606272-08A
Misc Info : G0147216
Comment :
Method : /chem/msd6.i/17jun16.b/616z0614vi.m
Meth Date : 21-Jun-2016 06:03 atoyama Quant Type: ISTD
Cal Date : 15-JUN-2016 11:01 Cal File: 6061502.d
Als bottle: 58
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	
11.414	11.421 (1.000)	174	565176	36.0000		80.00- 120.00	100.00
11.407	11.421 (1.000)	95	635006			74.19- 134.19	112.36
11.414	11.421 (1.000)	176	550961			67.61- 127.61	97.48
$ 108 Naphthalene-d8						CAS #: 1146-65-2	
15.683	15.683 (1.374)	136	666293	22.7666	22.767	80.00- 120.00	100.00
15.683	15.683 (1.374)	108	59093			0.00- 38.72	8.87
109 Naphthalene						CAS #: 91-20-3	
15.726	15.726 (1.378)	128	16483	0.52440	0.5244	80.00- 120.00	100.00(a)
15.719	15.726 (1.377)	127	2324			0.00- 42.99	14.10

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: 6061717.d
Lab Smp Id: 1606272-08A
Analysis Type: VOA
Quant Type: ISTD
Operator: CT
Method File: /chem/msd6.i/17jun16.b/616z0614vi.m
Misc Info: G0147216

Calibration Date: 17-JUN-2016
Calibration Time: 09:49

Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
92 Bromofluorobenzen	469803	281882	657724	565176	20.30

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
92 Bromofluorobenzen	11.42	11.09	11.75	11.41	-0.06

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

Report Date: 21-Jun-2016 06:06

Eurofins Air Toxics Inc.

RECOVERY REPORT

Client Name:
Client SDG: 17jun16
Sample Matrix: GAS
Fraction: VOA
Lab Smp Id: 1606272-08A
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/17jun16.b/616z0614vi.m
Misc Info: G0147216

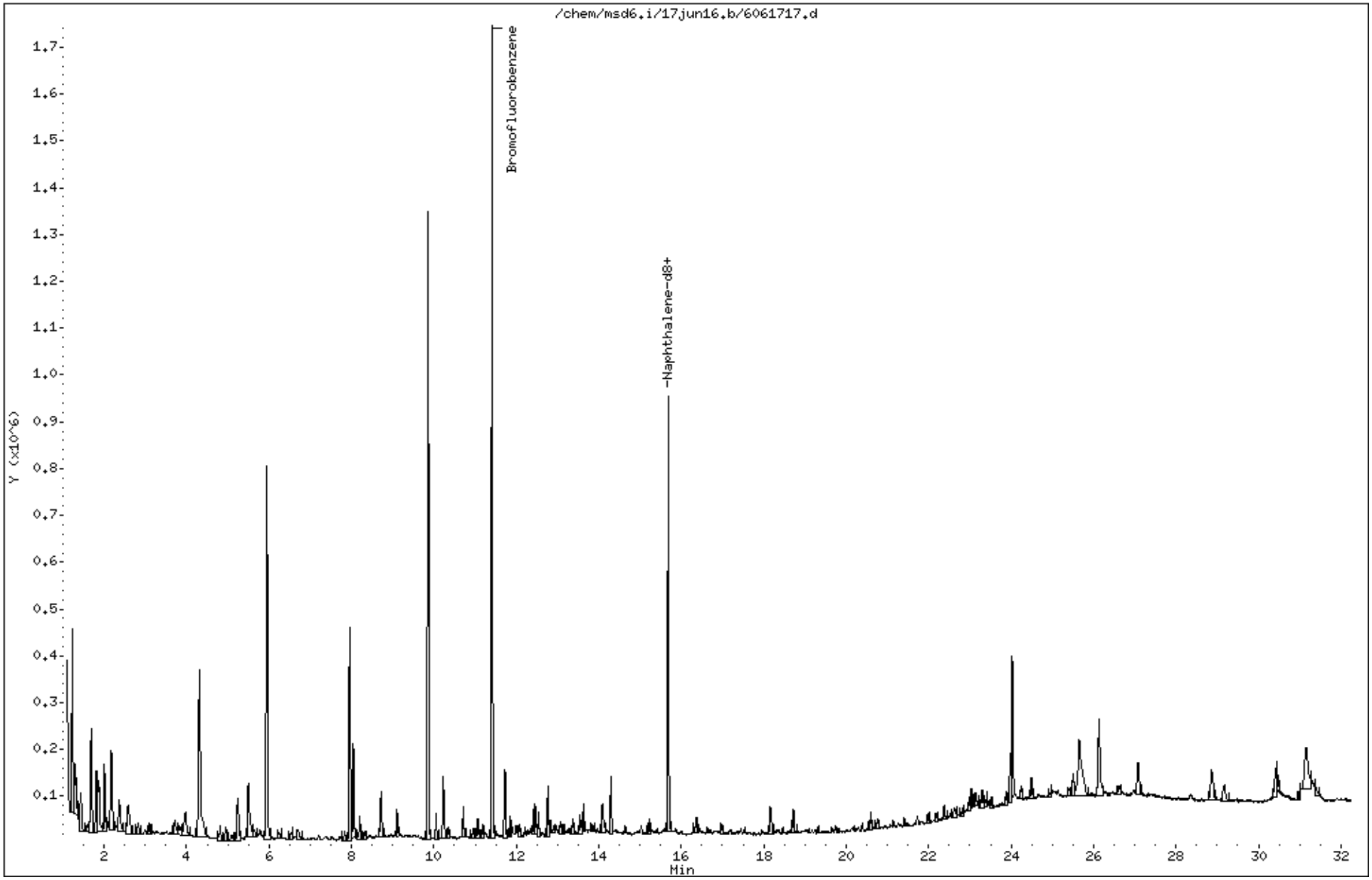
SURROGATE COMPOUND	AMOUNT ADDED ng	AMOUNT RECOVERED ng	% RECOVERED	LIMITS
$ 108 Naphthalene-d8	25.000	22.767	91.07	50-150

Data File: /chem/msd6.i/17jun16.b/6061717.d
Date : 17-JUN-2016 21:57
Client ID:
Sample Info: :1606272-08A

Column phase: RTx-624

Instrument: msd6.i

Operator: CT
Column diameter: 0.53



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Date : 17-JUN-2016 21:57

Client ID:

Instrument: msd6.i

Sample Info: ;1606272-08A

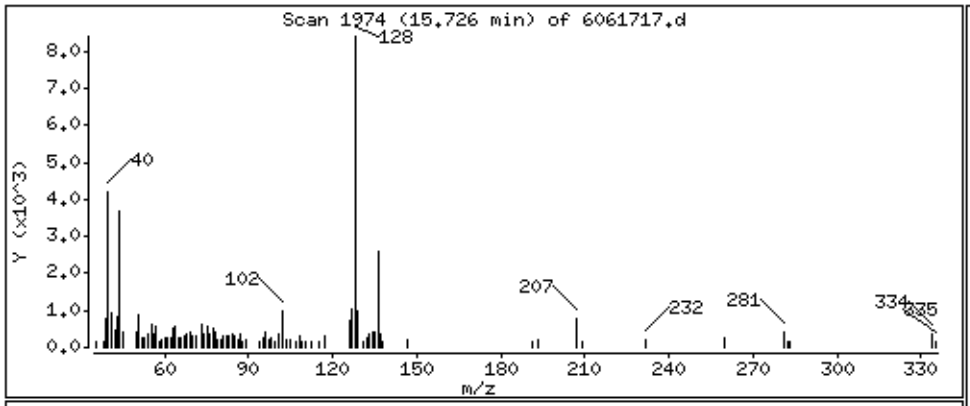
Operator: CT

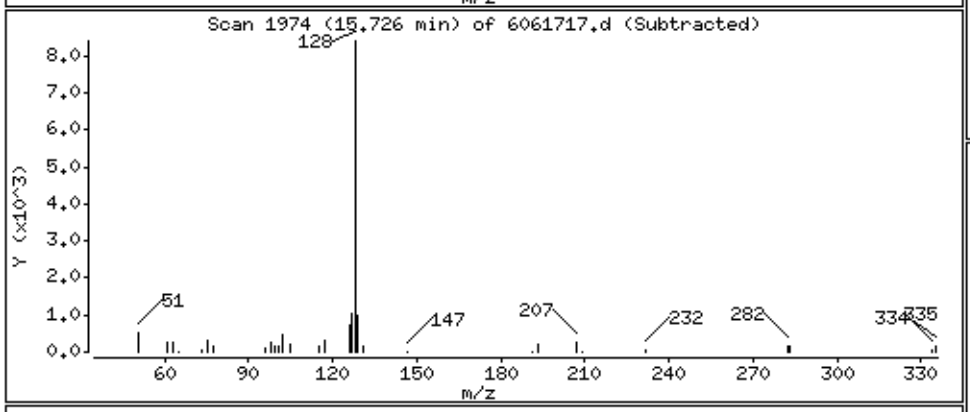
Column phase: RTx-624

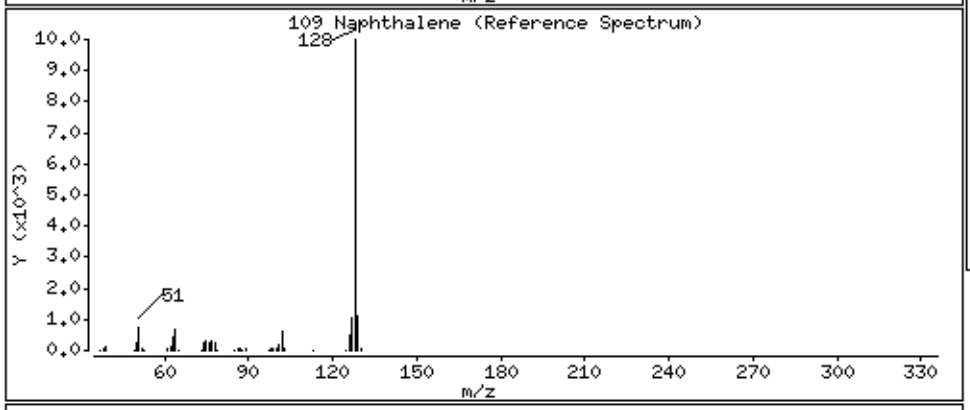
Column diameter: 0.53

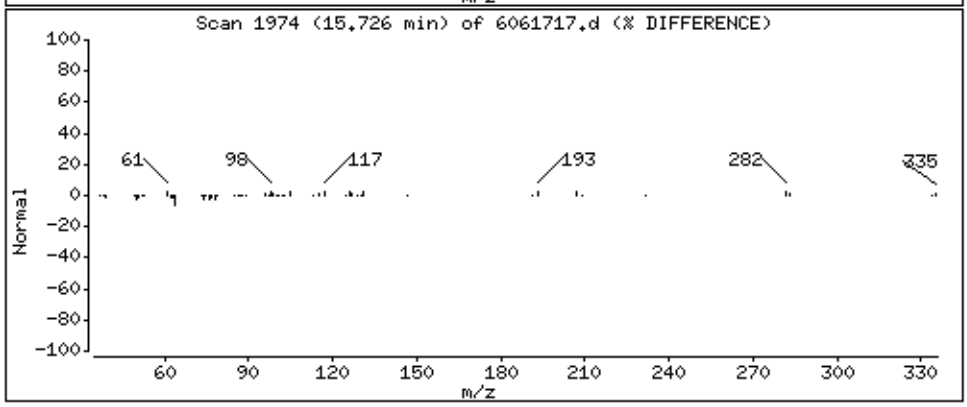
109 Naphthalene

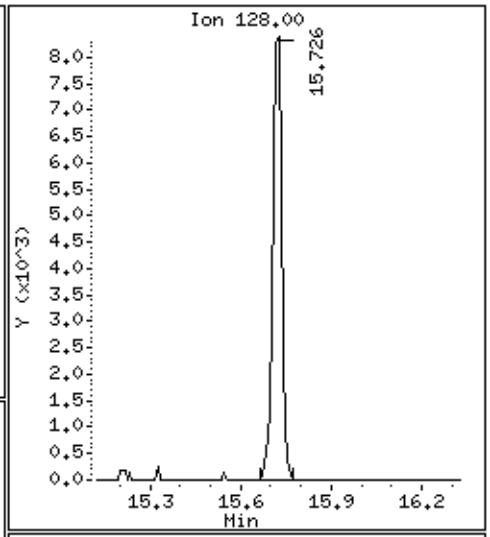
Concentration: 0.5244 NG

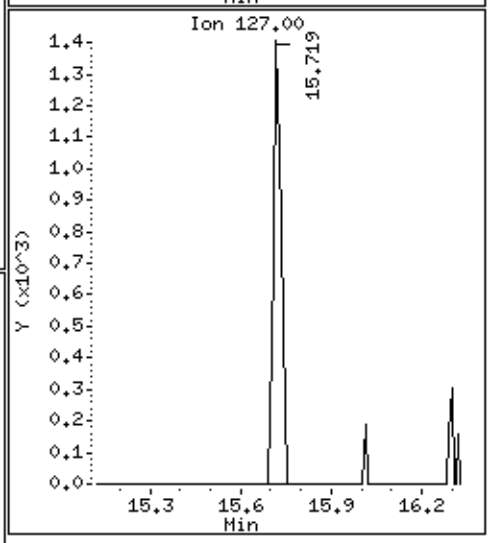












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Summary of Detected Compounds
EPA METHOD TO-17

Client Sample ID: B7SS-1 (061216)

Lab ID#: 1606272-09A

No Detections Were Found.

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Client Sample ID: B7SS-1 (061216)

Lab ID#: 1606272-09A

EPA METHOD TO-17

File Name:	**6061517**	**Date of Extraction: NA**	**Date of Collection: 6/12/16 1:03:00 PM**
Dil. Factor:	**1.00**		**Date of Analysis: 6/15/16 10:19 PM**

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

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

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

Eurofins Air Toxics Inc.

EPA Method TO-17 GC/MS

Data file : /chem/msd6.i/15jun16.b/6061517.d
Lab Smp Id: 1606272-09A
Inj Date : 15-JUN-2016 22:19
Operator : CT Inst ID: msd6.i
Smp Info : ;1606272-09A
Misc Info : G0141302
Comment :
Method : /chem/msd6.i/15jun16.b/616z0614vi.m
Meth Date : 16-Jun-2016 10:04 U5BT Quant Type: ISTD
Cal Date : 15-JUN-2016 11:01 Cal File: 6061502.d
Als bottle: 41
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	11.414 (1.000)	174	460151	36.0000		80.00- 120.00	100.00
11.407	11.414 (1.000)	95	487432			74.19- 134.19	105.93
11.407	11.414 (1.000)	176	450122			67.61- 127.61	97.82
$ 108 Naphthalene-d8					CAS #: 1146-65-2		
15.683	15.690 (1.375)	136	550273	23.0938	23.094	80.00- 120.00	100.00
15.683	15.690 (1.375)	108	47806			0.00- 38.72	8.69

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd6.i
Lab File ID: 6061517.d
Lab Smp Id: 1606272-09A
Analysis Type: VOA
Quant Type: ISTD
Operator: CT
Method File: /chem/msd6.i/15jun16.b/616z0614vi.m
Misc Info: G0141302

Calibration Date: 15-JUN-2016
Calibration Time: 12:15

Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
92 Bromofluorobenzen	417214	250328	584100	460151	10.29

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
92 Bromofluorobenzen	11.41	11.08	11.74	11.41	-0.06

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

Report Date: 21-Jun-2016 06:12

Eurofins Air Toxics Inc.

RECOVERY REPORT

Client Name:
Client SDG: 15jun16
Sample Matrix: GAS
Fraction: VOA
Lab Smp Id: 1606272-09A
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/15jun16.b/616z0614vi.m
Misc Info: G0141302

SURROGATE COMPOUND	AMOUNT ADDED ng	AMOUNT RECOVERED ng	% RECOVERED	LIMITS
$ 108 Naphthalene-d8	25.000	23.094	92.38	50-150

Data File: /chem/msd6.i/15jun16.b/6061517.d

Date : 15-JUN-2016 22:19

Client ID:

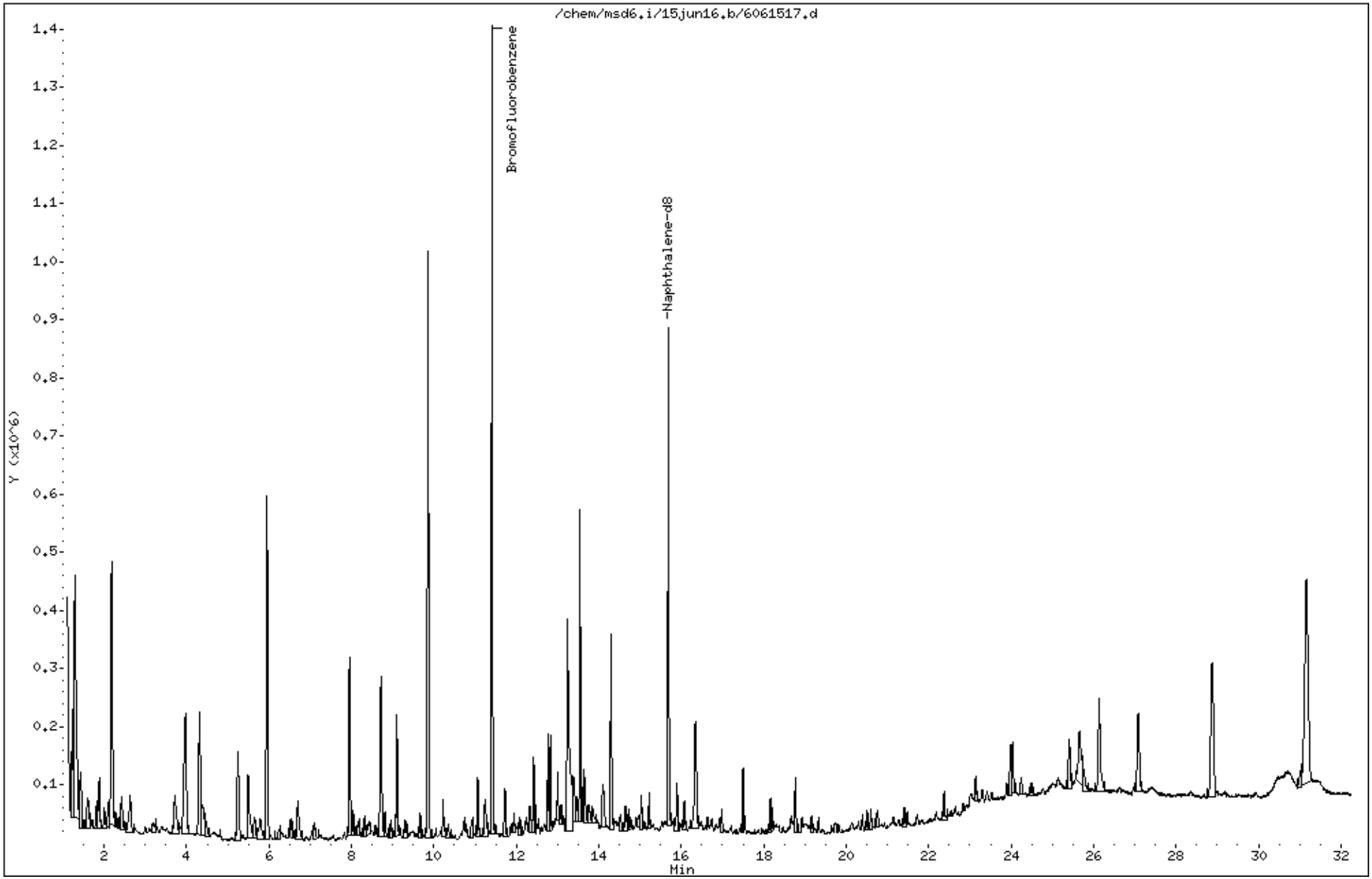
Sample Info: :1606272-09A

Column phase: RTx-624

Instrument: msd6.i

Operator: CT

Column diameter: 0.53



Summary of Detected Compounds
EPA METHOD TO-17

Client Sample ID: B7SS-1D (061216)

Lab ID#: 1606272-10A

No Detections Were Found.

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Client Sample ID: B7SS-1D (061216)

Lab ID#: 1606272-10A

EPA METHOD TO-17

File Name:	**6061518**	**Date of Extraction: NA**	**Date of Collection: 6/12/16 12:58:00 PM**
Dil. Factor:	**1.00**		**Date of Analysis: 6/15/16 10:59 PM**

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

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

Surrogates	**%Recovery**	**Method Limits**
Naphthalene-d8	98	50-150

Eurofins Air Toxics Inc.

EPA Method TO-17 GC/MS

Data file : /chem/msd6.i/15jun16.b/6061518.d
Lab Smp Id: 1606272-10A
Inj Date : 15-JUN-2016 22:59
Operator : CT Inst ID: msd6.i
Smp Info : ;1606272-10A
Misc Info : G0148999
Comment :
Method : /chem/msd6.i/15jun16.b/616z0614vi.m
Meth Date : 16-Jun-2016 10:04 U5BT Quant Type: ISTD
Cal Date : 15-JUN-2016 11:01 Cal File: 6061502.d
Als bottle: 42
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	
11.414	11.414	(1.000)	174	501461	36.0000		80.00- 120.00	100.00
11.406	11.414	(1.000)	95	535601			74.19- 134.19	106.81
11.414	11.414	(1.000)	176	489688			67.61- 127.61	97.65
$ 108 Naphthalene-d8							CAS #: 1146-65-2	
15.683	15.690	(1.374)	136	633143	24.3827	24.383	80.00- 120.00	100.00
15.683	15.690	(1.374)	108	53386			0.00- 38.72	8.43

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd6.i
Lab File ID: 6061518.d
Lab Smp Id: 1606272-10A
Analysis Type: VOA
Quant Type: ISTD
Operator: CT
Method File: /chem/msd6.i/15jun16.b/616z0614vi.m
Misc Info: G0148999

Calibration Date: 15-JUN-2016
Calibration Time: 12:15

Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
92 Bromofluorobenzen	417214	250328	584100	501461	20.19

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
92 Bromofluorobenzen	11.41	11.08	11.74	11.41	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: 21-Jun-2016 06:12

Eurofins Air Toxics Inc.

RECOVERY REPORT

Client Name:
Client SDG: 15jun16
Sample Matrix: GAS
Fraction: VOA
Lab Smp Id: 1606272-10A
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/15jun16.b/616z0614vi.m
Misc Info: G0148999

SURROGATE COMPOUND	AMOUNT ADDED ng	AMOUNT RECOVERED ng	% RECOVERED	LIMITS
$ 108 Naphthalene-d8	25.000	24.383	97.53	50-150

Data File: /chem/msd6.i/15jun16.b/6061518.d

Date : 15-JUN-2016 22:59

Client ID:

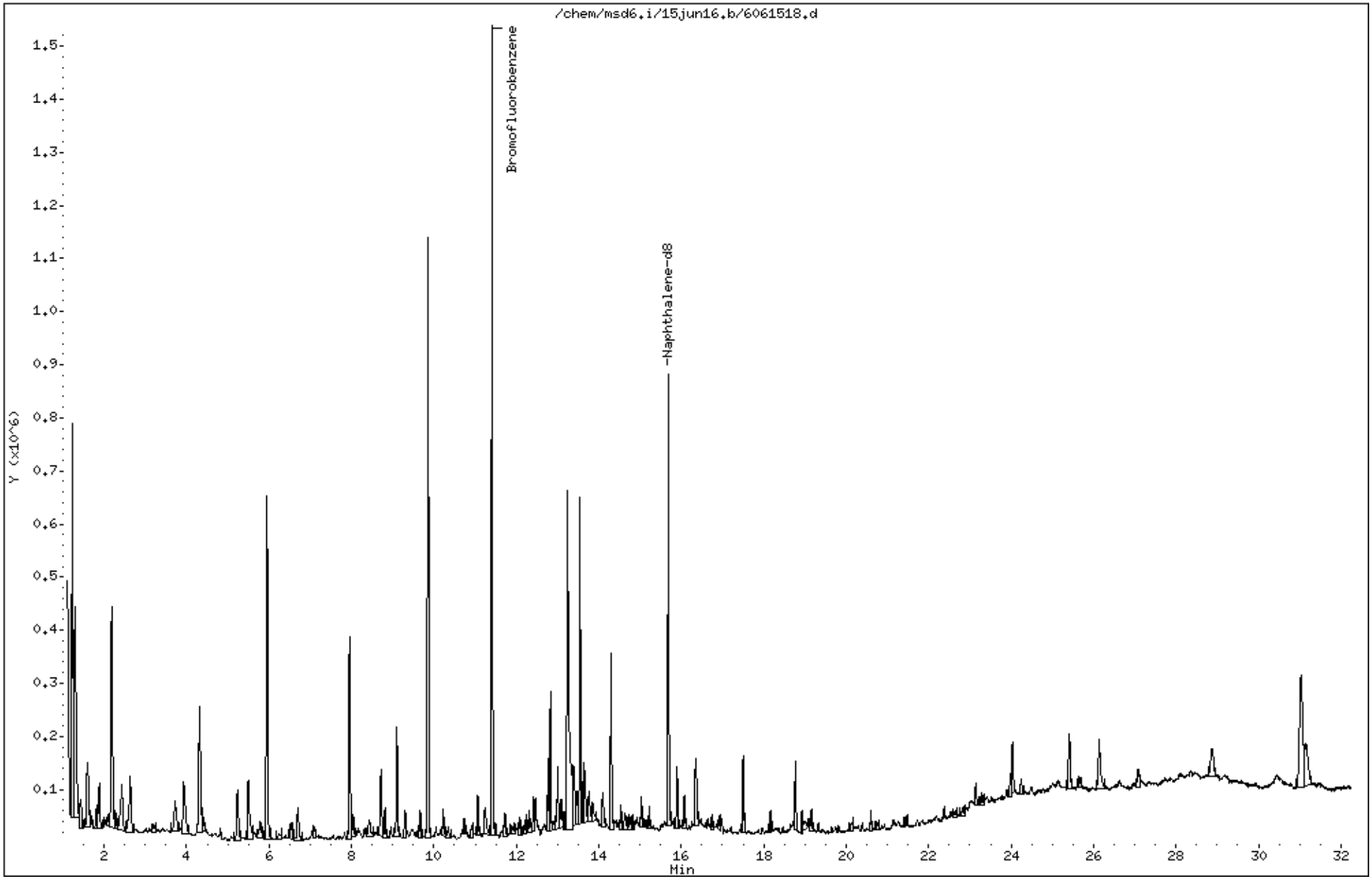
Sample Info: :1606272-10A

Column phase: RTx-624

Instrument: msd6.i

Operator: CT

Column diameter: 0.53



Summary of Detected Compounds
EPA METHOD TO-17

Client Sample ID: B7SS-2 (061216)

Lab ID#: 1606272-11A

Compound	Rpt. Limit (ng)	Rpt. Limit (ug/m3)	Amount (ng)	Amount (ug/m3)
Naphthalene	1.0	2.5	0.49 J	1.2 J

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Client Sample ID: B7SS-2 (061216)

Lab ID#: 1606272-11A

EPA METHOD TO-17

File Name:	**6061519**	**Date of Extraction: NA**	**Date of Collection: 6/12/16 1:52:00 PM**
Dil. Factor:	**1.00**		**Date of Analysis: 6/15/16 11:39 PM**

Compound	Rpt. Limit (ng)	Rpt. Limit (ug/m3)	Amount (ng)	Amount (ug/m3)
Naphthalene	1.0	2.5	0.49 J	1.2 J

Air Sample Volume(L): 0.400

J = Estimated value.

Container Type: TO-17 VI Tube

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

Eurofins Air Toxics Inc.

EPA Method TO-17 GC/MS

Data file : /chem/msd6.i/15jun16.b/6061519.d
Lab Smp Id: 1606272-11A
Inj Date : 15-JUN-2016 23:39
Operator : CT Inst ID: msd6.i
Smp Info : ;1606272-11A
Misc Info : G0143671
Comment :
Method : /chem/msd6.i/15jun16.b/616z0614vi.m
Meth Date : 16-Jun-2016 10:04 U5BT Quant Type: ISTD
Cal Date : 15-JUN-2016 11:01 Cal File: 6061502.d
Als bottle: 43
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	11.414 (1.000)	174	498973	36.0000		80.00- 120.00	100.00
11.407	11.414 (1.000)	95	532160			74.19- 134.19	106.65
11.407	11.414 (1.000)	176	489716			67.61- 127.61	98.14
$ 108 Naphthalene-d8					CAS #: 1146-65-2		
15.683	15.690 (1.375)	136	626113	24.2322	24.232	80.00- 120.00	100.00
15.683	15.690 (1.375)	108	54778			0.00- 38.72	8.75
109 Naphthalene					CAS #: 91-20-3		
15.726	15.726 (1.379)	128	13580	0.48938	0.4894	80.00- 120.00	100.00(a)
15.719	15.726 (1.378)	127	1895			0.00- 42.99	13.96

QC Flag Legend

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

Report Date: 21-Jun-2016 06:12

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd6.i
Lab File ID: 6061519.d
Lab Smp Id: 1606272-11A
Analysis Type: VOA
Quant Type: ISTD
Operator: CT
Method File: /chem/msd6.i/15jun16.b/616z0614vi.m
Misc Info: G0143671

Calibration Date: 15-JUN-2016
Calibration Time: 12:15

Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
92 Bromofluorobenzen	417214	250328	584100	498973	19.60

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
92 Bromofluorobenzen	11.41	11.08	11.74	11.41	-0.06

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

Report Date: 21-Jun-2016 06:12

Eurofins Air Toxics Inc.

RECOVERY REPORT

Client Name:
Client SDG: 15jun16
Sample Matrix: GAS
Fraction: VOA
Lab Smp Id: 1606272-11A
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/15jun16.b/616z0614vi.m
Misc Info: G0143671

SURROGATE COMPOUND	AMOUNT ADDED ng	AMOUNT RECOVERED ng	% RECOVERED	LIMITS
$ 108 Naphthalene-d8	25.000	24.232	96.93	50-150

Data File: /chem/msd6.i/15jun16.b/6061519.d

Date : 15-JUN-2016 23:39

Client ID:

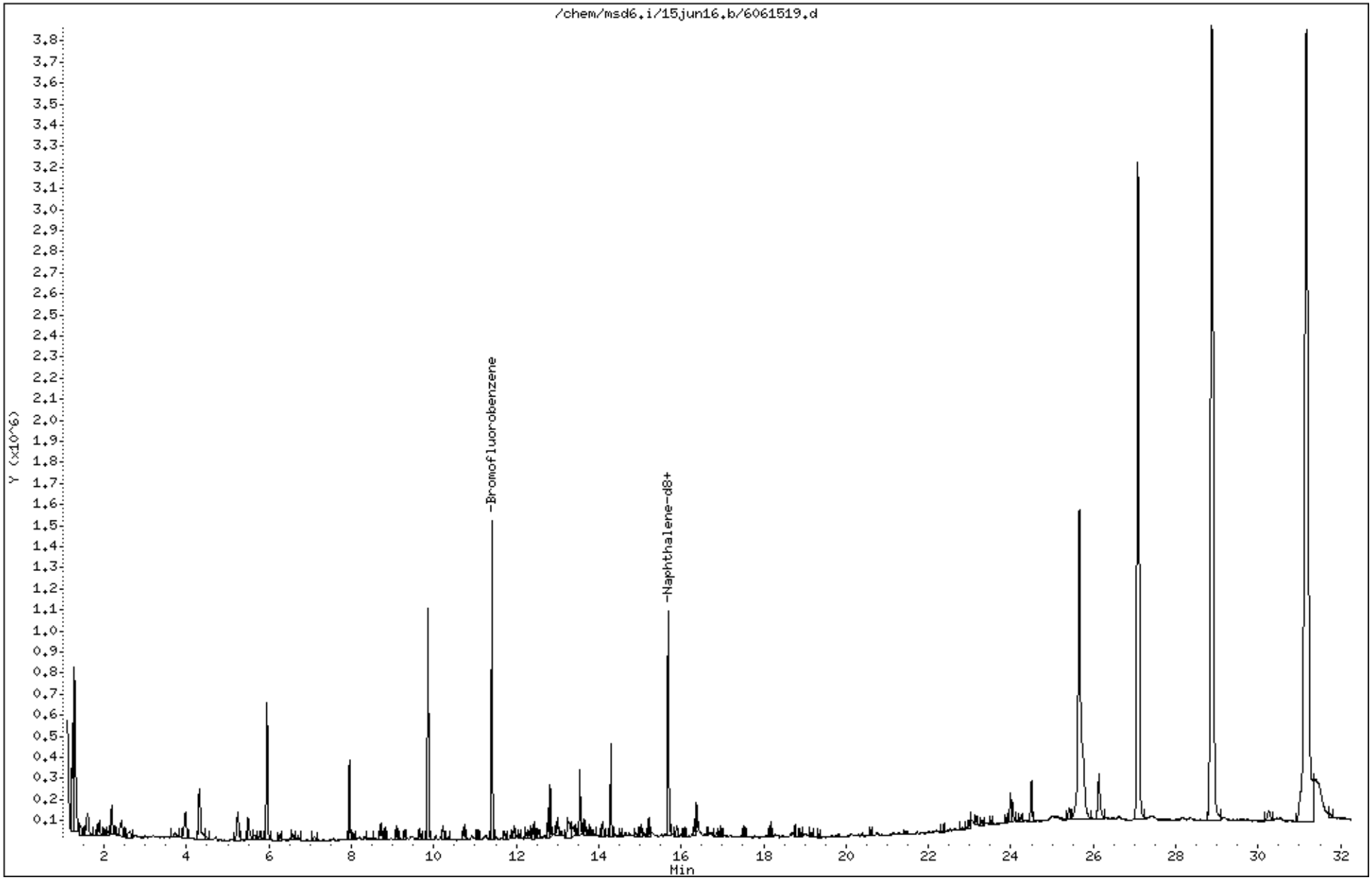
Instrument: msd6.i

Sample Info: ;1606272-11A

Operator: CT

Column phase: RTx-624

Column diameter: 0.53



Data File: /chem/msd6.i/15jun16.b/6061519.d

Date : 15-JUN-2016 23:39

Client ID:

Instrument: msd6.i

Sample Info: ;1606272-11A

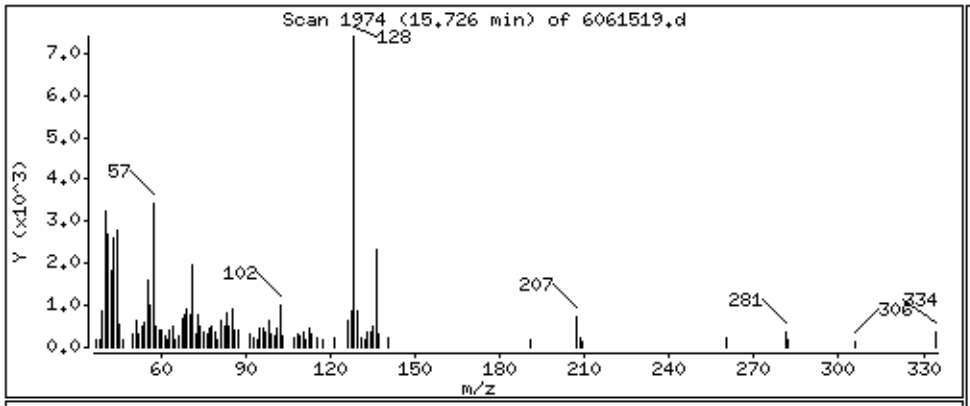
Operator: CT

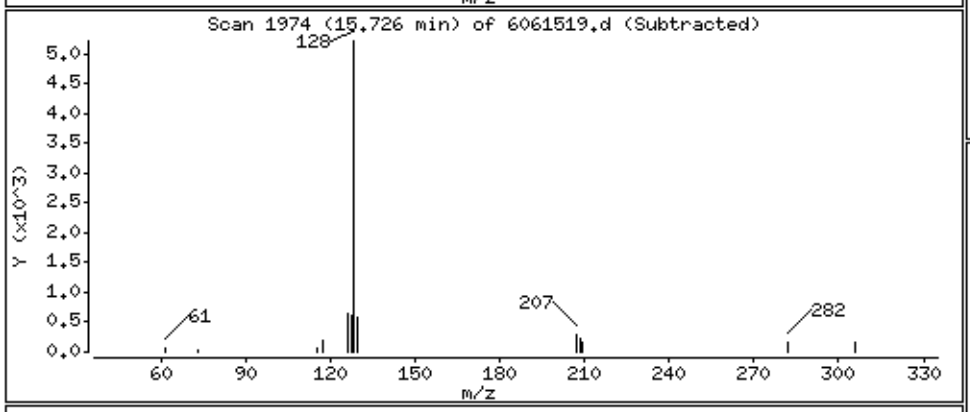
Column phase: RTx-624

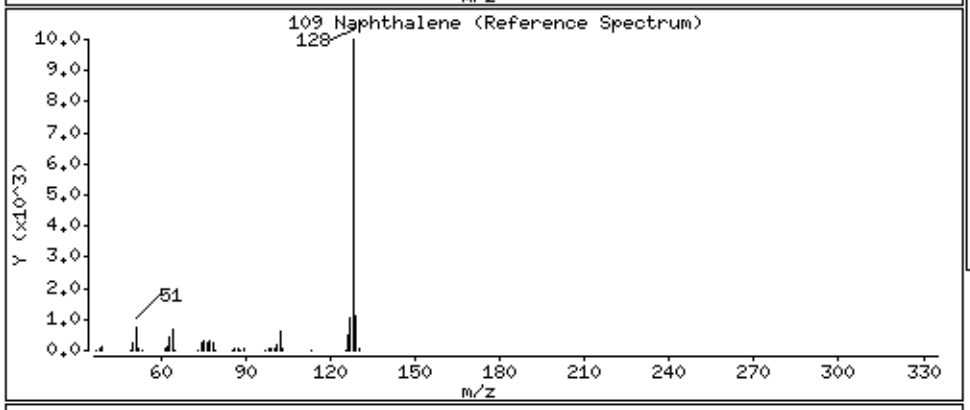
Column diameter: 0.53

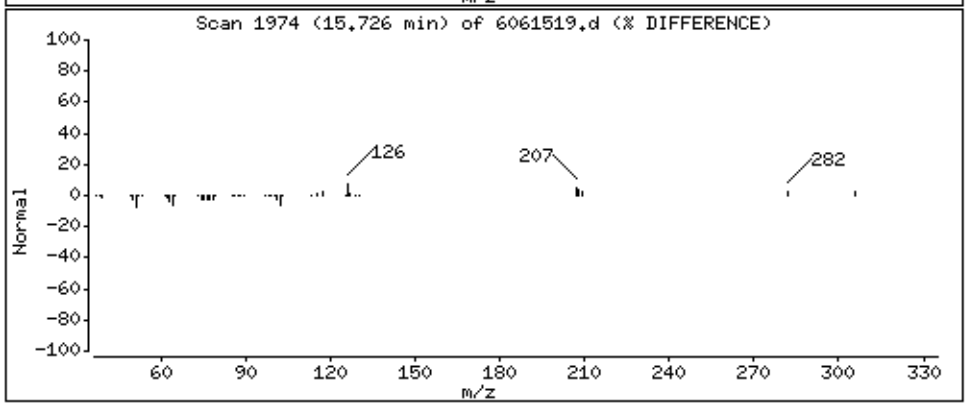
109 Naphthalene

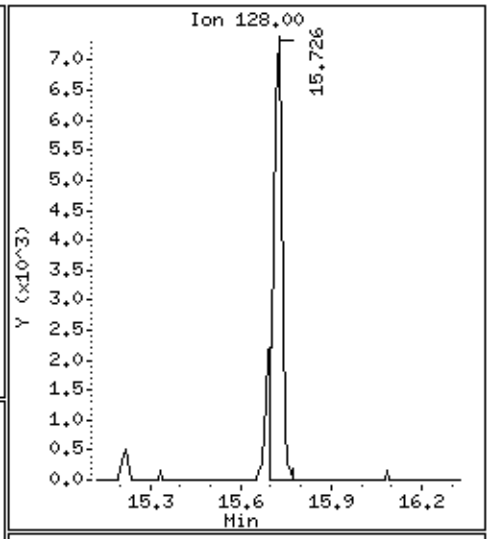
Concentration: 0.4894 NG

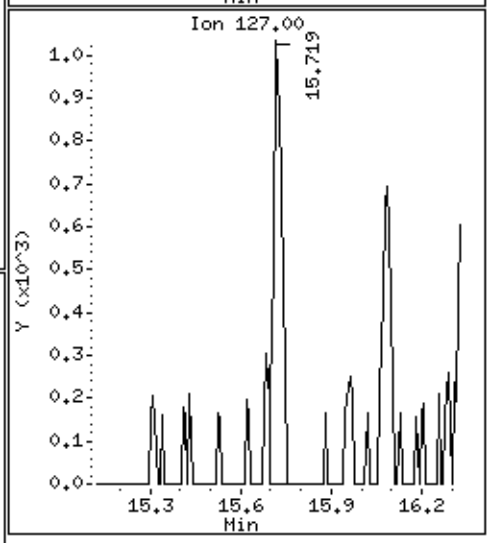












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Summary of Detected Compounds
EPA METHOD TO-17

Client Sample ID: B7SS-3 (061216)

Lab ID#: 1606272-12A

No Detections Were Found.

eurofins | Air Toxics

Client Sample ID: B7SS-3 (061216)

Lab ID#: 1606272-12A

EPA METHOD TO-17

File Name:	**6061520**	**Date of Extraction: NA**	**Date of Collection: 6/12/16 5:14:00 PM**
Dil. Factor:	**1.00**		**Date of Analysis: 6/16/16 12:19 AM**

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

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

Surrogates	**%Recovery**	**Method Limits**
Naphthalene-d8	102	50-150

Eurofins Air Toxics Inc.

EPA Method TO-17 GC/MS

Data file : /chem/msd6.i/15jun16.b/6061520.d
Lab Smp Id: 1606272-12A
Inj Date : 16-JUN-2016 00:19
Operator : CT Inst ID: msd6.i
Smp Info : ;1606272-12A
Misc Info : G0143423
Comment :
Method : /chem/msd6.i/15jun16.b/616z0614vi.m
Meth Date : 16-Jun-2016 10:04 U5BT Quant Type: ISTD
Cal Date : 15-JUN-2016 11:01 Cal File: 6061502.d
Als bottle: 44
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	
11.414	11.414	(1.000)	174	489061	36.0000		80.00- 120.00	100.00
11.406	11.414	(1.000)	95	521338			74.19- 134.19	106.60
11.414	11.414	(1.000)	176	474852			67.61- 127.61	97.09
$ 108 Naphthalene-d8							CAS #: 1146-65-2	
15.683	15.690	(1.374)	136	646620	25.5331	25.533	80.00- 120.00	100.00
15.683	15.690	(1.374)	108	55558			0.00- 38.72	8.59

Report Date: 21-Jun-2016 06:12

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd6.i
Lab File ID: 6061520.d
Lab Smp Id: 1606272-12A
Analysis Type: VOA
Quant Type: ISTD
Operator: CT
Method File: /chem/msd6.i/15jun16.b/616z0614vi.m
Misc Info: G0143423

Calibration Date: 15-JUN-2016
Calibration Time: 12:15

Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
92 Bromofluorobenzen	417214	250328	584100	489061	17.22

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
92 Bromofluorobenzen	11.41	11.08	11.74	11.41	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: 21-Jun-2016 06:12

Eurofins Air Toxics Inc.

RECOVERY REPORT

Client Name:
Client SDG: 15jun16
Sample Matrix: GAS
Fraction: VOA
Lab Smp Id: 1606272-12A
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/15jun16.b/616z0614vi.m
Misc Info: G0143423

SURROGATE COMPOUND	AMOUNT ADDED ng	AMOUNT RECOVERED ng	% RECOVERED	LIMITS
$ 108 Naphthalene-d8	25.000	25.533	102.13	50-150

Data File: /chem/msd6.i/15jun16.b/6061520.d

Date : 16-JUN-2016 00:19

Client ID:

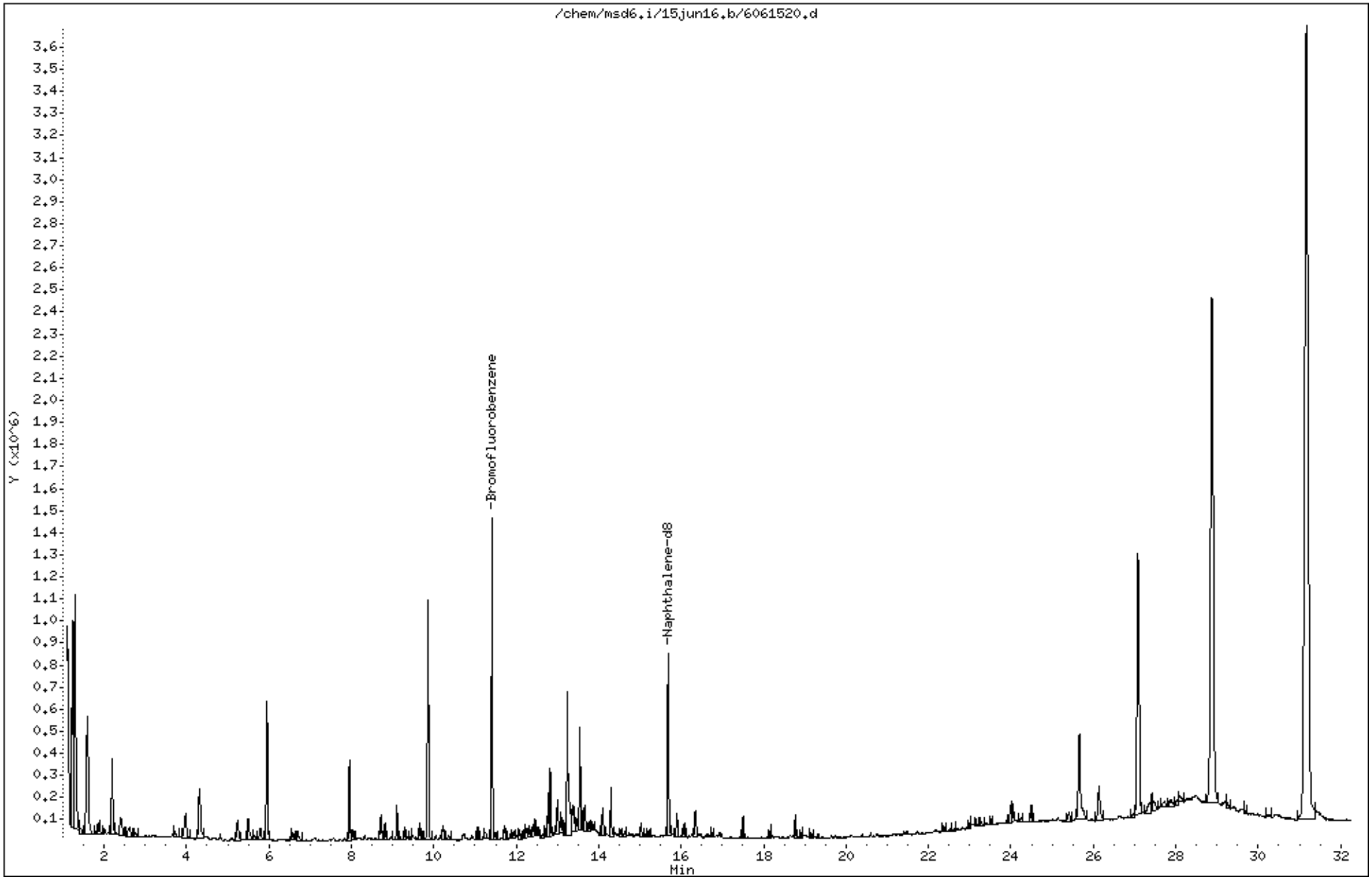
Instrument: msd6.i

Sample Info: :1606272-12A

Operator: CT

Column phase: RTx-624

Column diameter: 0.53



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Summary of Detected Compounds
EPA METHOD TO-17

Client Sample ID: B7SS-4 (061216)

Lab ID#: 1606272-13A

No Detections Were Found.

eurofins | Air Toxics

Client Sample ID: B7SS-4 (061216)

Lab ID#: 1606272-13A

EPA METHOD TO-17

File Name:	**6061521**	**Date of Extraction: NA**	**Date of Collection: 6/12/16 4:25:00 PM**
Dil. Factor:	**1.00**		**Date of Analysis: 6/16/16 12:58 AM**

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

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

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

Eurofins Air Toxics Inc.

EPA Method TO-17 GC/MS

Data file : /chem/msd6.i/15jun16.b/6061521.d
Lab Smp Id: 1606272-13A
Inj Date : 16-JUN-2016 00:58
Operator : CT Inst ID: msd6.i
Smp Info : ;1606272-13A
Misc Info : G0153666
Comment :
Method : /chem/msd6.i/15jun16.b/616z0614vi.m
Meth Date : 16-Jun-2016 10:04 U5BT Quant Type: ISTD
Cal Date : 15-JUN-2016 11:01 Cal File: 6061502.d
Als bottle: 45
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	
11.406	11.414	(1.000)	174	491410	36.0000		80.00- 120.00	100.00
11.406	11.414	(1.000)	95	523365			74.19- 134.19	106.50
11.406	11.414	(1.000)	176	481783			67.61- 127.61	98.04
$ 108 Naphthalene-d8							CAS #: 1146-65-2	
15.683	15.690	(1.375)	136	672643	26.4337	26.434	80.00- 120.00	100.00
15.683	15.690	(1.375)	108	58545			0.00- 38.72	8.70

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd6.i
Lab File ID: 6061521.d
Lab Smp Id: 1606272-13A
Analysis Type: VOA
Quant Type: ISTD
Operator: CT
Method File: /chem/msd6.i/15jun16.b/616z0614vi.m
Misc Info: G0153666

Calibration Date: 15-JUN-2016
Calibration Time: 12:15

Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
92 Bromofluorobenzen	417214	250328	584100	491410	17.78

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
92 Bromofluorobenzen	11.41	11.08	11.74	11.41	-0.06

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

Report Date: 21-Jun-2016 06:12

Eurofins Air Toxics Inc.

RECOVERY REPORT

Client Name:
Client SDG: 15jun16
Sample Matrix: GAS
Fraction: VOA
Lab Smp Id: 1606272-13A
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/15jun16.b/616z0614vi.m
Misc Info: G0153666

SURROGATE COMPOUND	AMOUNT ADDED ng	AMOUNT RECOVERED ng	% RECOVERED	LIMITS
$ 108 Naphthalene-d8	25.000	26.434	105.73	50-150

Data File: /chem/msd6.i/15jun16.b/6061521.d

Date : 16-JUN-2016 00:58

Client ID:

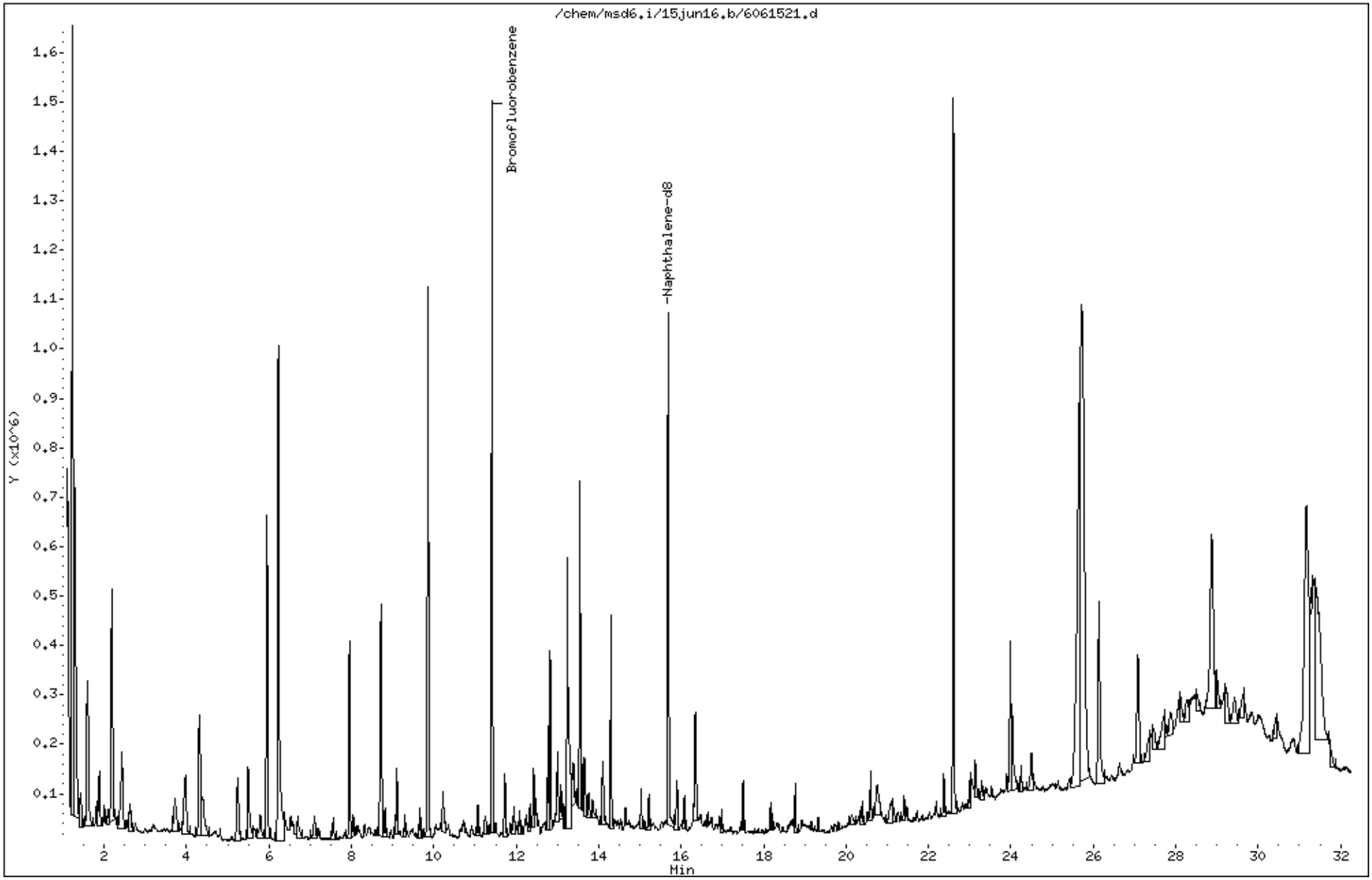
Instrument: msd6.i

Sample Info: ;1606272-13A

Operator: CT

Column phase: RTx-624

Column diameter: 0.53



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Summary of Detected Compounds
EPA METHOD TO-17

Client Sample ID: B7SS-5 (061216)

Lab ID#: 1606272-14A

Compound	Rpt. Limit (ng)	Rpt. Limit (ug/m3)	Amount (ng)	Amount (ug/m3)
Naphthalene	1.0	2.5	0.80 J	2.0 J

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Client Sample ID: B7SS-5 (061216)

Lab ID#: 1606272-14A

EPA METHOD TO-17

File Name:	**6061522**	**Date of Extraction: NA**	**Date of Collection: 6/12/16 11:20:00 AM**
Dil. Factor:	**1.00**		**Date of Analysis: 6/16/16 01:38 AM**

Compound	Rpt. Limit (ng)	Rpt. Limit (ug/m3)	Amount (ng)	Amount (ug/m3)
Naphthalene	1.0	2.5	0.80 J	2.0 J

Air Sample Volume(L): 0.400

J = Estimated value.

Container Type: TO-17 VI Tube

Surrogates	%Recovery	Method Limits
Naphthalene-d8	103	50-150

Eurofins Air Toxics Inc.

EPA Method TO-17 GC/MS

Data file : /chem/msd6.i/15jun16.b/6061522.d
Lab Smp Id: 1606272-14A
Inj Date : 16-JUN-2016 01:38
Operator : CT Inst ID: msd6.i
Smp Info : ;1606272-14A
Misc Info : G0153605
Comment :
Method : /chem/msd6.i/15jun16.b/616z0614vi.m
Meth Date : 16-Jun-2016 10:04 U5BT Quant Type: ISTD
Cal Date : 15-JUN-2016 11:01 Cal File: 6061502.d
Als bottle: 46
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	11.414 (1.000)	174	497371	36.0000		80.00- 120.00	100.00
11.407	11.414 (1.000)	95	526134			74.19- 134.19	105.78
11.414	11.414 (1.000)	176	485403			67.61- 127.61	97.59
$ 108 Naphthalene-d8					CAS #: 1146-65-2		
15.683	15.690 (1.375)	136	665481	25.8388	25.839	80.00- 120.00	100.00
15.683	15.690 (1.375)	108	57509			0.00- 38.72	8.64
109 Naphthalene					CAS #: 91-20-3		
15.726	15.726 (1.379)	128	22064	0.79763	0.7976	80.00- 120.00	100.00(a)
15.726	15.726 (1.379)	127	4062			0.00- 42.99	18.41

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: 6061522.d
Lab Smp Id: 1606272-14A
Analysis Type: VOA
Quant Type: ISTD
Operator: CT
Method File: /chem/msd6.i/15jun16.b/616z0614vi.m
Misc Info: G0153605

Calibration Date: 15-JUN-2016
Calibration Time: 12:15

Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
92 Bromofluorobenzen	417214	250328	584100	497371	19.21

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
92 Bromofluorobenzen	11.41	11.08	11.74	11.41	-0.06

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

Report Date: 21-Jun-2016 06:12

Eurofins Air Toxics Inc.

RECOVERY REPORT

Client Name:
Client SDG: 15jun16
Sample Matrix: GAS
Fraction: VOA
Lab Smp Id: 1606272-14A
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/15jun16.b/616z0614vi.m
Misc Info: G0153605

SURROGATE COMPOUND	AMOUNT ADDED ng	AMOUNT RECOVERED ng	% RECOVERED	LIMITS
$ 108 Naphthalene-d8	25.000	25.839	103.36	50-150

Data File: /chem/msd6.i/15jun16.b/6061522.d

Date : 16-JUN-2016 01:38

Client ID:

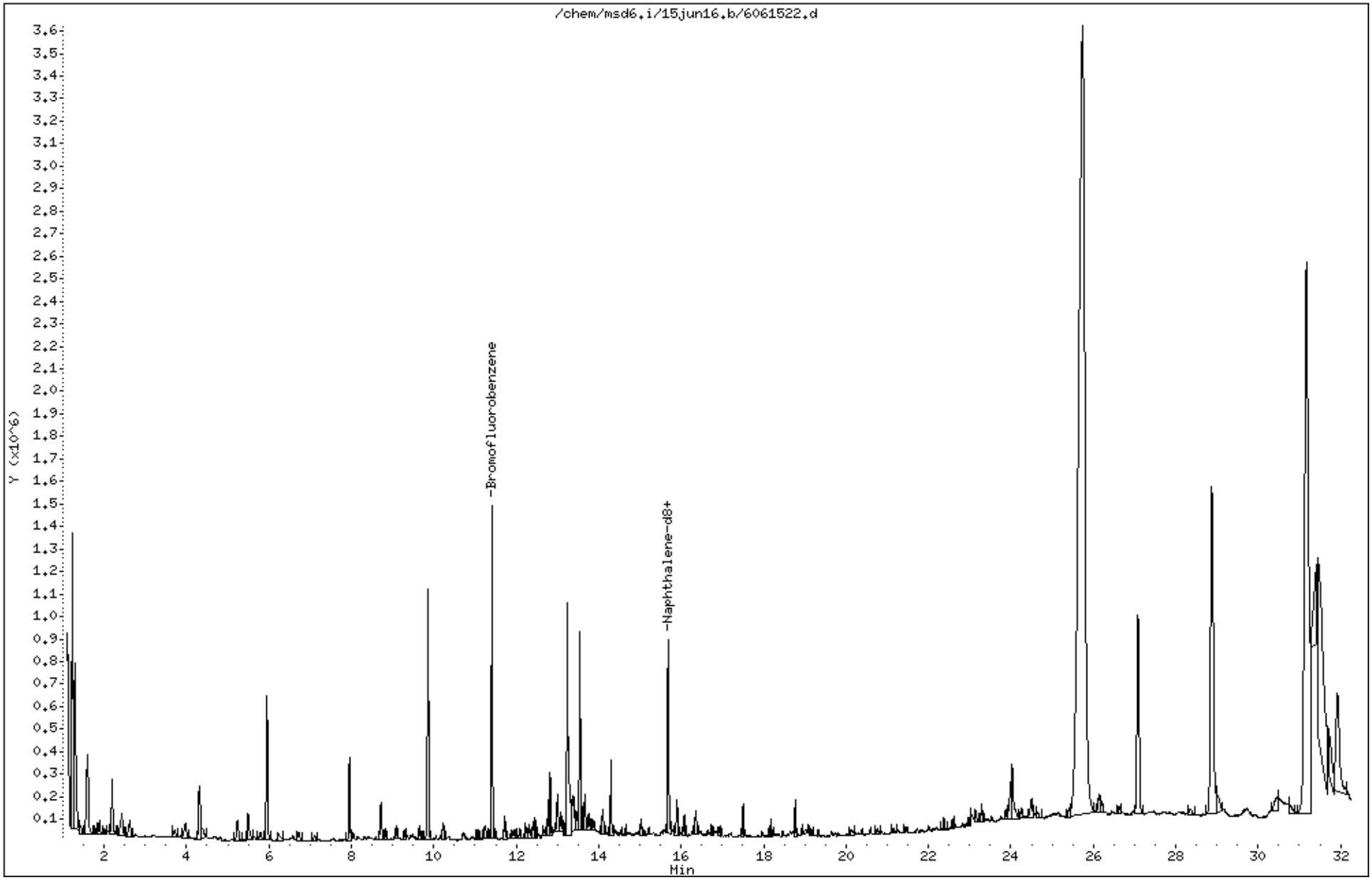
Instrument: msd6.i

Sample Info: ;1606272-14A

Operator: CT

Column phase: RTx-624

Column diameter: 0.53



Data File: /chem/msd6.i/15jun16.b/6061522.d

Date : 16-JUN-2016 01:38

Client ID:

Instrument: msd6.i

Sample Info: ;1606272-14A

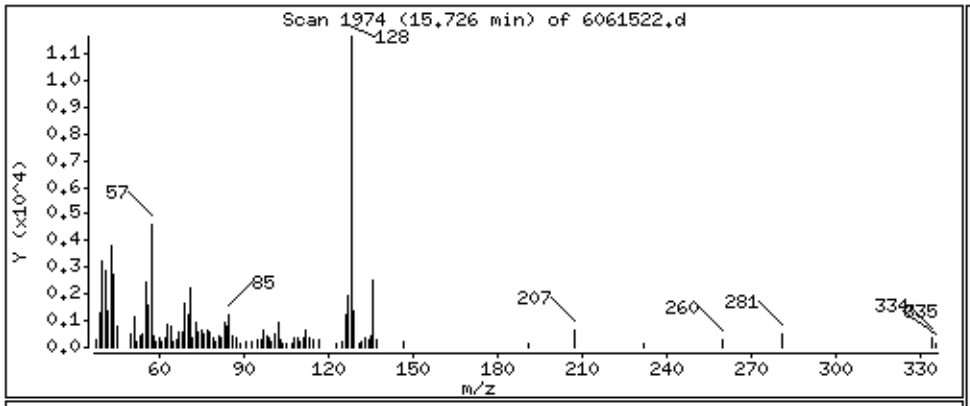
Operator: CT

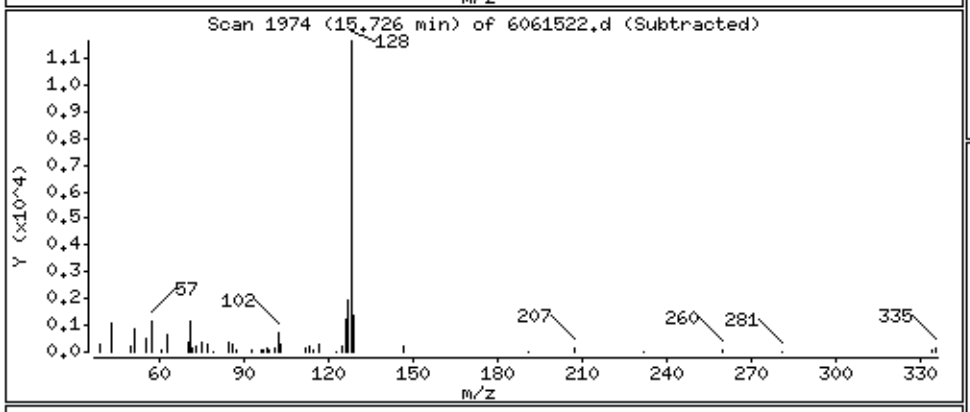
Column phase: RTx-624

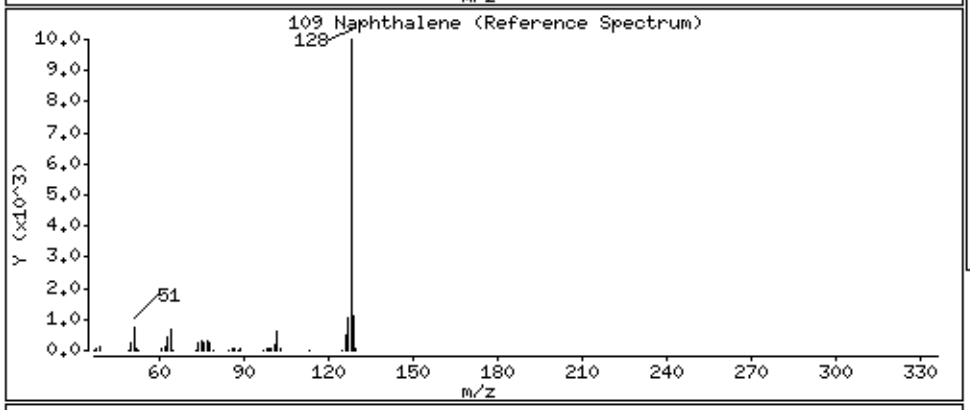
Column diameter: 0.53

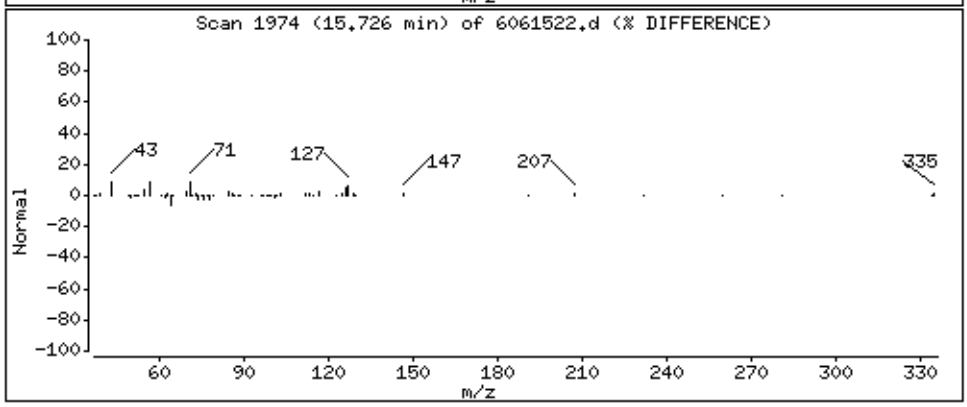
109 Naphthalene

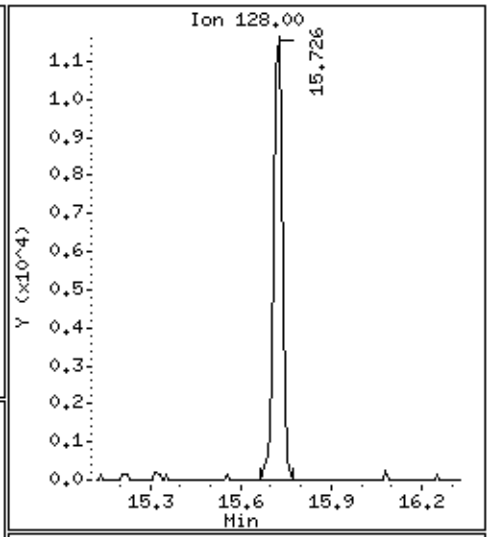
Concentration: 0.7976 NG

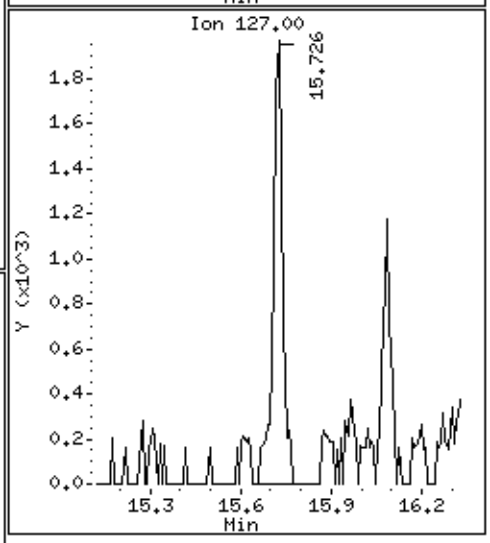












Summary of Detected Compounds
EPA METHOD TO-17

Client Sample ID: B7SS-6 (061216)

Lab ID#: 1606272-15A

No Detections Were Found.

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Client Sample ID: B7SS-6 (061216)

Lab ID#: 1606272-15A

EPA METHOD TO-17

File Name:	**6061523**	**Date of Extraction: NA**	**Date of Collection: 6/12/16 5:53:00 PM**
Dil. Factor:	**1.00**		**Date of Analysis: 6/16/16 02:18 AM**

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

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

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

Eurofins Air Toxics Inc.

EPA Method TO-17 GC/MS

Data file : /chem/msd6.i/15jun16.b/6061523.d
Lab Smp Id: 1606272-15A
Inj Date : 16-JUN-2016 02:18
Operator : CT Inst ID: msd6.i
Smp Info : ;1606272-15A
Misc Info : G0147006
Comment :
Method : /chem/msd6.i/15jun16.b/616z0614vi.m
Meth Date : 16-Jun-2016 10:04 U5BT Quant Type: ISTD
Cal Date : 15-JUN-2016 11:01 Cal File: 6061502.d
Als bottle: 47
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	11.414	(1.000)	174	516442	36.0000		80.00- 120.00	100.00
11.407	11.414	(1.000)	95	551689			74.19- 134.19	106.82
11.414	11.414	(1.000)	176	505412			67.61- 127.61	97.86
$ 108 Naphthalene-d8							CAS #: 1146-65-2	
15.683	15.690	(1.375)	136	643985	24.0808	24.081	80.00- 120.00	100.00
15.683	15.690	(1.375)	108	56901			0.00- 38.72	8.84

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd6.i
Lab File ID: 6061523.d
Lab Smp Id: 1606272-15A
Analysis Type: VOA
Quant Type: ISTD
Operator: CT
Method File: /chem/msd6.i/15jun16.b/616z0614vi.m
Misc Info: G0147006

Calibration Date: 15-JUN-2016
Calibration Time: 12:15

Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
92 Bromofluorobenzen	417214	250328	584100	516442	23.78

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
92 Bromofluorobenzen	11.41	11.08	11.74	11.41	-0.06

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

Report Date: 21-Jun-2016 06:12

Eurofins Air Toxics Inc.

RECOVERY REPORT

Client Name:
Client SDG: 15jun16
Sample Matrix: GAS
Fraction: VOA
Lab Smp Id: 1606272-15A
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/15jun16.b/616z0614vi.m
Misc Info: G0147006

SURROGATE COMPOUND	AMOUNT ADDED ng	AMOUNT RECOVERED ng	% RECOVERED	LIMITS
$ 108 Naphthalene-d8	25.000	24.081	96.32	50-150

Data File: /chem/msd6.i/15jun16.b/6061523.d

Date : 16-JUN-2016 02:18

Client ID:

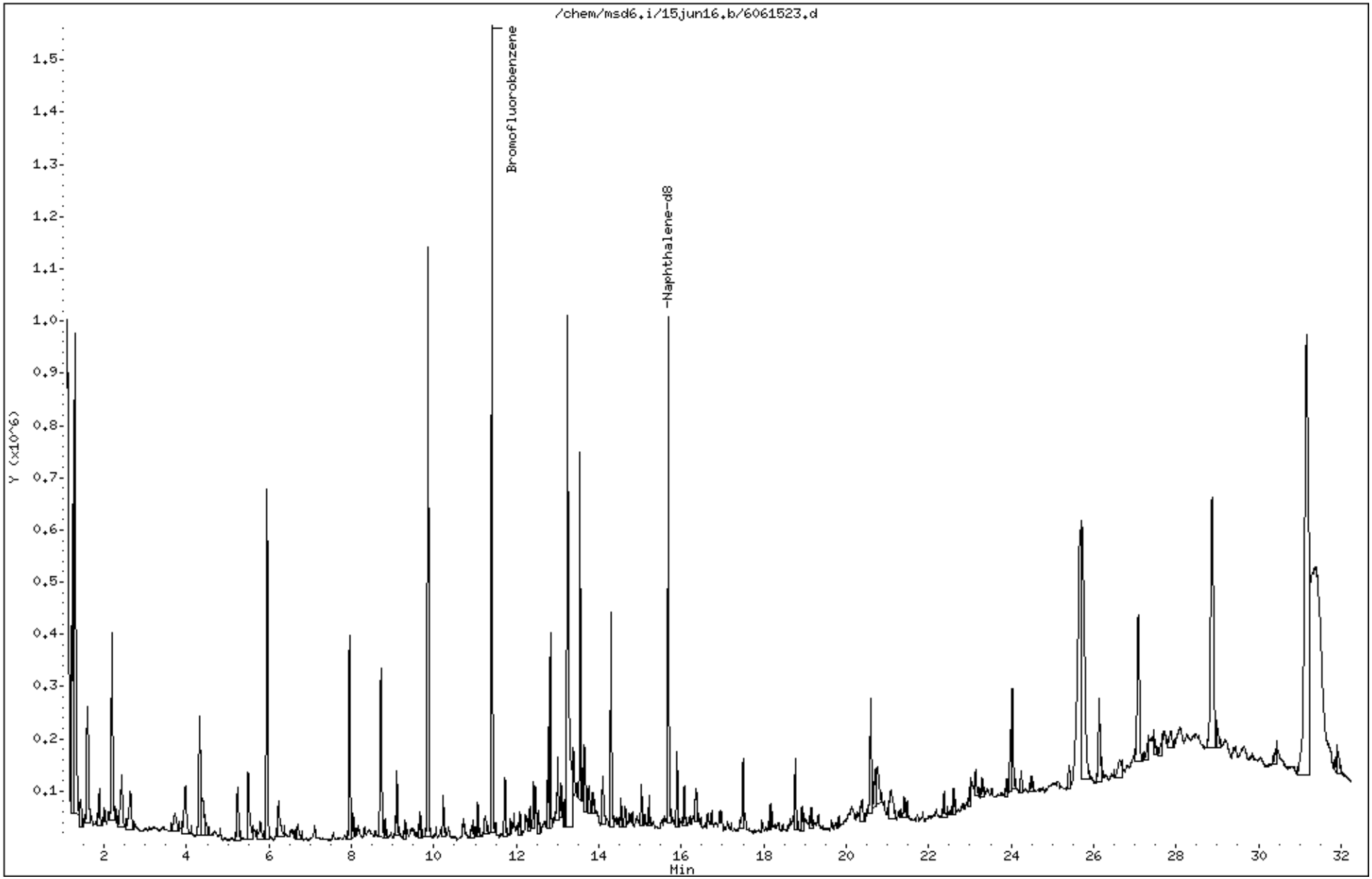
Sample Info: :1606272-15A

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: B15SS-1 (061216)

Lab ID#: 1606272-16A

No Detections Were Found.

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Client Sample ID: B15SS-1 (061216)

Lab ID#: 1606272-16A

EPA METHOD TO-17

File Name:	**6061524**	**Date of Extraction: NA**	**Date of Collection: 6/12/16 8:17:00 PM**
Dil. Factor:	**1.00**		**Date of Analysis: 6/16/16 02:58 AM**

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

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

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

Eurofins Air Toxics Inc.

EPA Method TO-17 GC/MS

Data file : /chem/msd6.i/15jun16.b/6061524.d
Lab Smp Id: 1606272-16A
Inj Date : 16-JUN-2016 02:58
Operator : CT Inst ID: msd6.i
Smp Info : ;1606272-16A
Misc Info : G0147226
Comment :
Method : /chem/msd6.i/15jun16.b/616z0614vi.m
Meth Date : 16-Jun-2016 10:04 U5BT Quant Type: ISTD
Cal Date : 15-JUN-2016 11:01 Cal File: 6061502.d
Als bottle: 48
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	
11.414	11.414	(1.000)	174	485151	36.0000		80.00- 120.00	100.00
11.406	11.414	(1.000)	95	511947			74.19- 134.19	105.52
11.414	11.414	(1.000)	176	473495			67.61- 127.61	97.60
$ 108 Naphthalene-d8							CAS #: 1146-65-2	
15.683	15.690	(1.374)	136	608844	24.2351	24.235	80.00- 120.00	100.00
15.683	15.690	(1.374)	108	52467			0.00- 38.72	8.62

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd6.i
Lab File ID: 6061524.d
Lab Smp Id: 1606272-16A
Analysis Type: VOA
Quant Type: ISTD
Operator: CT
Method File: /chem/msd6.i/15jun16.b/616z0614vi.m
Misc Info: G0147226

Calibration Date: 15-JUN-2016
Calibration Time: 12:15

Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
92 Bromofluorobenzen	417214	250328	584100	485151	16.28

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
92 Bromofluorobenzen	11.41	11.08	11.74	11.41	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: 21-Jun-2016 06:12

Eurofins Air Toxics Inc.

RECOVERY REPORT

Client Name:
Client SDG: 15jun16
Sample Matrix: GAS
Fraction: VOA
Lab Smp Id: 1606272-16A
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/15jun16.b/616z0614vi.m
Misc Info: G0147226

SURROGATE COMPOUND	AMOUNT ADDED ng	AMOUNT RECOVERED ng	% RECOVERED	LIMITS
$ 108 Naphthalene-d8	25.000	24.235	96.94	50-150

Data File: /chem/msd6.i/15jun16.b/6061524.d

Date : 16-JUN-2016 02:58

Client ID:

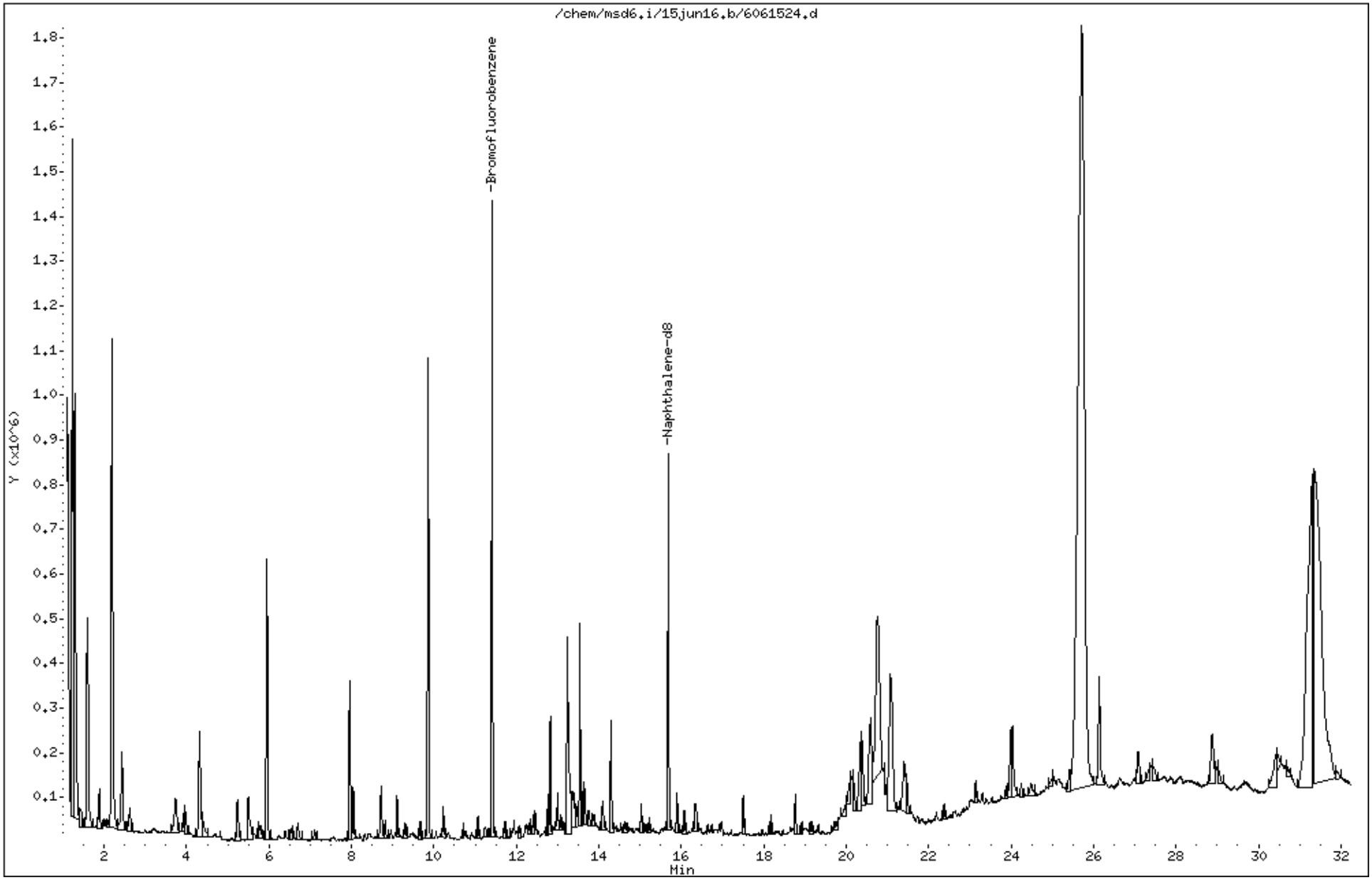
Instrument: msd6.i

Sample Info: ;1606272-16A

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#: 1606272-17A

EPA METHOD TO-17

File Name:	**6061508a**	**Date of Extraction: NA**	**Date of Collection: NA**
Dil. Factor:	**1.00**		**Date of Analysis: 6/15/16 03:45 PM**

Compound	Rpt. Limit (ng)	Rpt. Limit (ug/m3)	Amount (ng)	Amount (ug/m3)
Naphthalene	1.0	0.059	Not Detected	Not Detected

Air Sample Volume(L): 17.0
Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Naphthalene-d8	94	50-150

Eurofins Air Toxics Inc.

EPA Method TO-17 GC/MS

Data file : /chem/msd6.i/15jun16.b/6061508a.d
Lab Smp Id: Lab Blank Client Smp ID: Lab Blank
Inj Date : 15-JUN-2016 15:45
Operator : CT Inst ID: msd6.i
Smp Info : ;Lab Blank;Lab Blank
Misc Info : G0139970
Comment :
Method : /chem/msd6.i/15jun16.b/616z0614vi.m
Meth Date : 16-Jun-2016 10:04 U5BT Quant Type: ISTD
Cal Date : 15-JUN-2016 11:01 Cal File: 6061502.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	
11.428	11.414 (1.000)	174	437344	36.0000		80.00- 120.00	100.00
11.421	11.414 (1.000)	95	457758			74.19- 134.19	104.67
11.428	11.414 (1.000)	176	426789			67.61- 127.61	97.59
$ 108 Naphthalene-d8						CAS #: 1146-65-2	
15.683	15.690 (1.372)	136	532211	23.5006	23.500	80.00- 120.00	100.00
15.690	15.690 (1.373)	108	45468			0.00- 38.72	8.54

Report Date: 21-Jun-2016 06:09

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd6.i
Lab File ID: 6061508a.d
Lab Smp Id: Lab Blank
Analysis Type: VOA
Quant Type: ISTD
Operator: CT
Method File: /chem/msd6.i/15jun16.b/616z0614vi.m
Misc Info: G0139970

Calibration Date: 15-JUN-2016
Calibration Time: 12:15
Client Smp ID: Lab Blank
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
92 Bromofluorobenzen	417214	250328	584100	437344	4.82

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
92 Bromofluorobenzen	11.41	11.08	11.74	11.43	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: 21-Jun-2016 06:09

Eurofins Air Toxics Inc.

RECOVERY REPORT

Client Name:
Client SDG: 15jun16
Sample Matrix: GAS
Fraction: VOA
Lab Smp Id: 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/15jun16.b/616z0614vi.m
Misc Info: G0139970

SURROGATE COMPOUND	AMOUNT ADDED ng	AMOUNT RECOVERED ng	% RECOVERED	LIMITS
$ 108 Naphthalene-d8	25.000	23.500	94.00	50-150

Data File: /chem/msd6.i/15jun16.b/6061508a.d

Date : 15-JUN-2016 15:45

Client ID: Lab Blank

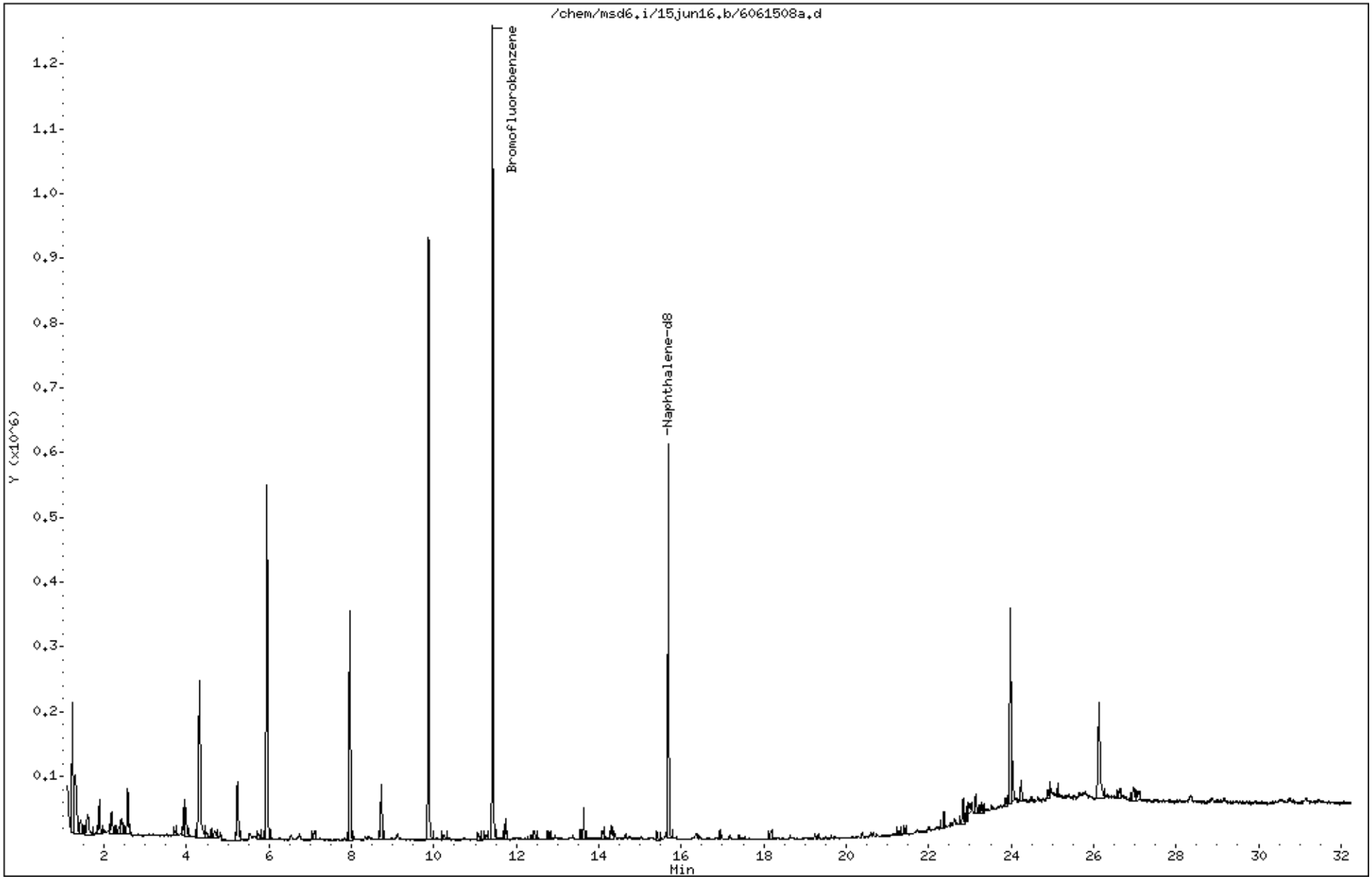
Sample Info: ;Lab Blank;Lab Blank

Column phase: RTx-624

Instrument: msd6.i

Operator: CT

Column diameter: 0.53



eurofins | Air Toxics

Client Sample ID: Lab Blank

Lab ID#: 1606272-17B

EPA METHOD TO-17

File Name:	**6061705a**	**Date of Extraction: NA**	**Date of Collection: NA**
Dil. Factor:	**1.00**		**Date of Analysis: 6/17/16 01:11 PM**

Compound	Rpt. Limit (ng)	Rpt. Limit (ug/m3)	Amount (ng)	Amount (ug/m3)
Naphthalene	1.0	0.059	Not Detected	Not Detected

Air Sample Volume(L): 17.0
Container Type: NA - Not Applicable

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

Eurofins Air Toxics Inc.

EPA Method TO-17 GC/MS

Data file : /chem/msd6.i/17jun16.b/6061705a.d
Lab Smp Id: DP Lab Blank Client Smp ID: Lab Blank
Inj Date : 17-JUN-2016 13:11
Operator : CT Inst ID: msd6.i
Smp Info : ;DP Lab Blank;Lab Blank
Misc Info : G0137108
Comment :
Method : /chem/msd6.i/17jun16.b/616z0614vi.m
Meth Date : 21-Jun-2016 06:03 atoyama Quant Type: ISTD
Cal Date : 15-JUN-2016 11:01 Cal File: 6061502.d
Als bottle: 3 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	
11.421	11.421 (1.000)	174	521150	36.0000		80.00- 120.00	100.00
11.421	11.421 (1.000)	95	555916			74.19- 134.19	106.67
11.428	11.421 (1.000)	176	504177			67.61- 127.61	96.74
$ 108 Naphthalene-d8						CAS #: 1146-65-2	
15.690	15.683 (1.374)	136	645906	23.9344	23.934	80.00- 120.00	100.00
15.683	15.683 (1.373)	108	57594			0.00- 38.72	8.92

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd6.i
Lab File ID: 6061705a.d
Lab Smp Id: DP Lab Blank
Analysis Type: VOA
Quant Type: ISTD
Operator: CT
Method File: /chem/msd6.i/17jun16.b/616z0614vi.m
Misc Info: G0137108

Calibration Date: 17-JUN-2016
Calibration Time: 09:49
Client Smp ID: Lab Blank
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
92 Bromofluorobenzen	469803	281882	657724	521150	10.93

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
92 Bromofluorobenzen	11.42	11.09	11.75	11.42	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: 21-Jun-2016 06:04

Eurofins Air Toxics Inc.

RECOVERY REPORT

Client Name:
Client SDG: 17jun16
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/17jun16.b/616z0614vi.m
Misc Info: G0137108

SURROGATE COMPOUND	AMOUNT ADDED ng	AMOUNT RECOVERED ng	% RECOVERED	LIMITS
$ 108 Naphthalene-d8	25.000	23.934	95.74	50-150

Data File: /chem/msd6.i/17jun16.b/6061705a.d

Page 1

Date : 17-JUN-2016 13:11

Client ID: Lab Blank

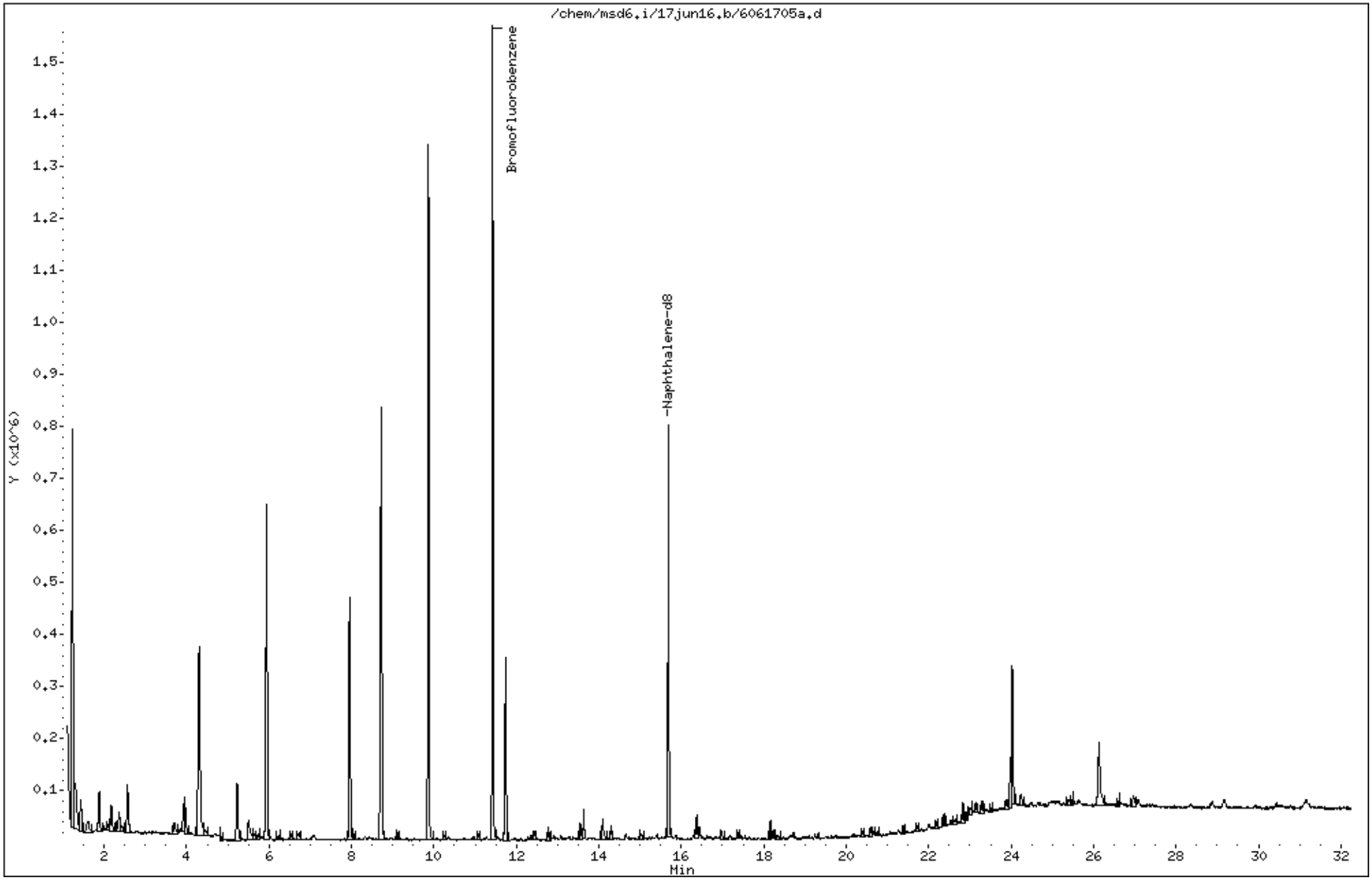
Instrument: msd6.i

Sample Info: ;DP Lab Blank;Lab Blank

Operator: CT

Column phase: RTx-624

Column diameter: 0.53



LEVEL-IV VALIDATABLE

EPA METHOD TO-17

SURROGATE RECOVERY FORM

Lab Name: AIR TOXICS LIMITED. SDG No.: 1606272

	CLIENT SAMPLE NO.	SURROGATE % RECOVERY								
		Naphthalene-d8	#		#		#		#	TOTAL OUT
01	B7IA-1 (061016)	100								0
02	B7IA-1D (061016)	106								0
03	B7IA-2 (061016)	98								0
04	B7IA-3 (061016)	99								0
05	B7IA-4 (061016)	93								0
06	B7IA-5 (061016)	98								0
07	B7IA-6 (061016)	100								0
08	B7AA (061016)	91								0
09	B7SS-1 (061216)	92								0
10	B7SS-1D (061216)	98								0
11	B7SS-2 (061216)	97								0
12	B7SS-3 (061216)	102								0
13	B7SS-4 (061216)	106								0
14	B7SS-5 (061216)	103								0
15	B7SS-6 (061216)	96								0
16	B15SS-1 (061216)	97								0
17	Lab Blank	94								0
18	Lab Blank	96								0
19	CCV	96								0
20	CCV	99								0
21	LCS	94								0
22	LCSD	94								0
23	LCS	94								0
24	LCSD	92								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: 6061503.d

Instrument ID: msd6.i

SDG No: 1606272

Date Analyzed: 06/15/2016

Time Analyzed: 12:15 PM

		4-Bromofluorobenzene Area	#	RT	#	Area	#	RT	#	Area	#	RT	#
	24-HOUR STD	417214		11.41									
	UPPER LIMIT	584100		11.74									
	LOWER LIMIT	250328		11.08									
	CLIENT SAMPLE NO												
01	B7SS-1 (061216)	460151		11.41									
02	B7SS-1D (061216)	501461		11.41									
03	B7SS-2 (061216)	498973		11.41									
04	B7SS-3 (061216)	489061		11.41									
05	B7SS-4 (061216)	491410		11.41									
06	B7SS-5 (061216)	497371		11.41									
07	B7SS-6 (061216)	516442		11.41									
08	B15SS-1 (061216)	485151		11.41									
09	Lab Blank	437344		11.43									
10	CCV	417214		11.41									
11	LCS	454753		11.43									
12	LCSD	392195		11.41									
13													
14													
15													
16													
17													
18													
19													
20													
21													
22													

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

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

RT Upper Limit=+0.33 minutes of internal standard RT

RT Lower Limit=-0.33 minutes of internal standard RT

* Designates values outside of QC limits

LEVEL-IV VALIDATABLE

EPA Method TO-17

INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: AIR TOXICS, LTD

SDG No: 1606272

Lab File ID: 6061702.d

Date Analyzed: 06/17/2016

Instrument ID: msd6.i

Time Analyzed: 09:49 AM

		4-Bromofluorobenzene Area	#	RT	#	Area	#	RT	#	Area	#	RT	#
	24-HOUR STD	469803		11.42									
	UPPER LIMIT	657724		11.75									
	LOWER LIMIT	281882		11.09									
	CLIENT SAMPLE NO												
01	B7IA-1 (061016)	474805		11.41									
02	B7IA-1D (061016)	499055		11.41									
03	B7IA-2 (061016)	567238		11.41									
04	B7IA-3 (061016)	572750		11.41									
05	B7IA-4 (061016)	569889		11.41									
06	B7IA-5 (061016)	572773		11.41									
07	B7IA-6 (061016)	567228		11.41									
08	B7AA (061016)	565176		11.41									
09	Lab Blank	521150		11.42									
10	CCV	469803		11.42									
11	LCS	573759		11.43									
12	LCSD	495793		11.42									
13													
14													
15													
16													
17													
18													
19													
20													
21													
22													

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

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

RT Upper Limit=+0.33 minutes of internal standard RT

RT Lower Limit=-0.33 minutes of internal standard RT

* Designates values outside of QC limits

SAMPLE RESULTS/SAMPLE RESULTS DUPLICATE

Lab Name: Air Toxics Ltd.

Lab File ID: 6061507.d & 6061506.d

Lab Sample ID: &

Dilution: 1.00 & 1.00

Client Sample ID: LCS & LCSD

Date Analyzed: 6/15/16 & 6/15/16

CAS Number	Compound	Original Amount	Original Flags	Duplicate Amount	Duplicate Flags	RPD	Result Less Than 5X RL
91-20-3	Naphthalene	108		107		0.93	

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

SAMPLE RESULTS/SAMPLE RESULTS DUPLICATE

Lab Name: Air Toxics Ltd.

Lab File ID: 6061704.d & 6061703.d

Lab Sample ID: &

Dilution: 1.00 & 1.00

Client Sample ID: LCS & LCSD

Date Analyzed: 6/17/16 & 6/17/16

CAS Number	Compound	Original Amount	Original Flags	Duplicate Amount	Duplicate Flags	RPD	Result Less Than 5X RL
91-20-3	Naphthalene	119		116		2.6	

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 : 14-JUN-2016 12:59
End Cal Date : 15-JUN-2016 11:01
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msd6.i/15jun16.b/616z0614vi.m
Cal Date : 21-Jun-2016 11:24 U5BT
Curve Type : Average

Calibration File Names:
Level 1: /chem/msd6.i/15jun16.b/6061502.d
Level 2: /chem/msd6.i/14jun16a.b/6061409.d
Level 3: /chem/msd6.i/14jun16a.b/6061410.d
Level 4: /chem/msd6.i/14jun16a.b/6061411.d
Level 5: /chem/msd6.i/14jun16a.b/6061412.d
Level 6: /chem/msd6.i/14jun16a.b/6061413.d
Level 7: /chem/msd6.i/14jun16a.b/6061414.d
Level 8: /chem/msd6.i/14jun16a.b/6061415.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	0.49473	0.54605	0.50247	0.48861	0.49714	0.47472		
	0.45702	0.42120					0.48524	7.489
4 Chloromethane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
5 Butane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
6 Vinyl Chloride	+++++	0.60121	0.65311	0.64236	0.65659	0.62649		
	0.59926	0.57585					0.62213	4.945
7 1,3-Butadiene	0.62655	0.59012	0.56991	0.54346	0.55997	0.53286		
	0.52931	0.51087					0.55788	6.694

Eurofins Air Toxics Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 14-JUN-2016 12:59
End Cal Date : 15-JUN-2016 11:01
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msd6.i/15jun16.b/616z0614vi.m
Cal Date : 21-Jun-2016 11:24 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
8 Bromomethane	+++++ +++++	+++++ +++++	+++++	+++++	+++++	+++++	+++++	+++++
9 Chloroethane	+++++ 0.27696	+++++ 0.27186	0.43186	0.29384	0.28706	0.26237	0.30399	20.927
10 Isopentane	0.52903 0.42743	0.54439 0.41018	0.46183	0.44709	0.45610	0.43821	0.46428	10.279
11 Trichlorofluoromethane/Fr11	0.74575 0.82360	0.82478 0.80385	0.87198	0.84178	0.86152	0.89317	0.83330	5.489
12 Vinyl Bromide	+++++ +++++	+++++ +++++	+++++	+++++	+++++	+++++	+++++	+++++
13 Ethanol	+++++ +++++	+++++ +++++	+++++	+++++	+++++	+++++	+++++	+++++
14 1,1-Dichloroethene	0.30533 0.30084	0.39236 0.29908	0.37464	0.33902	0.33429	0.34730	0.33661	10.258
15 Freon 113	0.49819 0.50337	0.55494 0.46023	0.58367	0.55794	0.57141	0.53539	0.53314	7.938
16 Acetone	+++++ +++++	+++++ +++++	+++++	+++++	+++++	+++++	+++++	+++++
17 Freon123a	+++++ +++++	+++++ +++++	+++++	+++++	+++++	+++++	+++++	+++++

Eurofins Air Toxics Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 14-JUN-2016 12:59
End Cal Date : 15-JUN-2016 11:01
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msd6.i/15jun16.b/616z0614vi.m
Cal Date : 21-Jun-2016 11:24 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
18 Carbon Disulfide	2.76231 1.73640	2.90578 1.60264	2.30969	2.05679	1.91439	1.75429	2.13028	22.859
19 2-Propanol	+++++ 1.17974	+++++ 1.04304	1.44897	1.27308	1.18750	1.17811	1.21840	11.071
20 Pentane	+++++ +++++	+++++ +++++	+++++	+++++	+++++	+++++	+++++	+++++
21 3-Chloropropene	+++++ +++++	+++++ +++++	+++++	+++++	+++++	+++++	+++++	+++++
22 Methylene Chloride	+++++ 0.60385	+++++ 0.53873	+++++	1.23408	0.77202	0.63173	0.75608	37.093 <-
23 Acrolein	+++++ +++++	+++++ +++++	+++++	+++++	+++++	+++++	+++++	+++++
24 tert-Butyl-Alcohol	+++++ +++++	+++++ +++++	+++++	+++++	+++++	+++++	+++++	+++++
25 trans-1,2-Dichloroethene	0.26746 0.31402	0.36801 0.29930	0.34375	0.33341	0.34000	0.32275	0.32359	9.473
26 MTBE	1.09385 1.28530	1.32387 +++++	1.25044	1.21910	1.37164	0.96974	1.21628	11.502
27 Acrylonitrile	+++++ +++++	+++++ +++++	+++++	+++++	+++++	+++++	+++++	+++++

Eurofins Air Toxics Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 14-JUN-2016 12:59
End Cal Date : 15-JUN-2016 11:01
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msd6.i/15jun16.b/616z0614vi.m
Cal Date : 21-Jun-2016 11:24 U5BT
Curve Type : Average

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	0.68669	0.89392	0.80183	0.78767	0.81658	0.77821		
	0.76945	0.73247					0.78335	7.756
29 1,1-Dichloroethane	0.74800	0.79030	0.82180	0.79130	0.80898	0.74800		
	0.77743	0.72406					0.77623	4.325
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	0.34290	0.38146	0.36801	0.34890	0.35962	0.34272		
	0.33449	0.31769					0.34947	5.717

Eurofins Air Toxics Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 14-JUN-2016 12:59
End Cal Date : 15-JUN-2016 11:01
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msd6.i/15jun16.b/616z0614vi.m
Cal Date : 21-Jun-2016 11:24 U5BT
Curve Type : Average

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	+++++	+++++	+++++	0.49358	0.35647	0.28038		
	0.27683	0.24399					0.33025	30.335 <-
39 2-Chloroethyl vinyl ether	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
41 1,1-Dichloropropene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
42 Tetrahydrofuran	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
43 Octane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
44 Chloroform	0.76656	0.91372	0.86379	0.82846	0.85673	0.80799		
	0.77995	0.75352					0.82134	6.689
45 1,1,1-Trichloroethane	0.20202	0.15069	0.14718	0.16284	0.17518	0.14961		
	0.16819	0.14823					0.16299	11.587
46 Cyclohexane	0.19047	0.15514	0.15470	0.15530	0.16213	0.15679		
	0.15828	0.15576					0.16107	7.526
47 Carbon Tetrachloride	0.17566	0.12786	0.14697	0.14423	0.16019	0.15154		
	0.15114	0.15289					0.15131	8.985
48 Benzene	+++++	0.56996	0.50403	0.44592	0.40954	0.39280		
	0.39373	0.38391					0.44284	15.810

Eurofins Air Toxics Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 14-JUN-2016 12:59
End Cal Date : 15-JUN-2016 11:01
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msd6.i/15jun16.b/616z0614vi.m
Cal Date : 21-Jun-2016 11:24 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
50 1,2-Dichloroethane	0.15321	0.13909	0.14048	0.13904	0.14304	0.13867		
	0.13820	0.13460					0.14079	3.935
51 2,2,4-Trimethylpentane	0.35643	0.41698	0.41921	0.42216	0.42516	0.41402		
	0.42247	0.40151					0.40974	5.553
52 tert-amyl-Methyl Ether	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
53 Heptane	0.09408	0.11454	0.10884	0.10293	0.10587	0.10270		
	0.10470	0.10059					0.10428	5.739
55 Decane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
56 Trichloroethene	0.12461	0.16456	0.13350	0.14381	0.13192	0.12904		
	0.12121	0.11625					0.13311	11.426
57 Dodecane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
58 Methyl Cyclohexane	0.16955	0.20451	0.20160	0.19816	0.20647	0.19998		
	0.20012	0.19212					0.19657	5.967
59 1,2-Dichloropropane	0.09381	0.09212	0.09491	0.09708	0.10450	0.09331		
	0.10208	0.09519					0.09663	4.567
60 1,4-Dioxane	0.09101	0.08638	0.08564	0.08089	0.09224	0.08847		
	0.09047	0.08953					0.08808	4.168

Eurofins Air Toxics Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 14-JUN-2016 12:59
End Cal Date : 15-JUN-2016 11:01
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msd6.i/15jun16.b/616z0614vi.m
Cal Date : 21-Jun-2016 11:24 U5BT
Curve Type : Average

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	0.06898	0.08581	0.08820	0.08851	0.09258	0.09028		
	0.09127	0.08762					0.08665	8.606
67 Toluene	0.45146	0.53315	0.52073	0.50485	0.51625	0.49612		
	0.48454	0.46456					0.49646	5.688
68 1,1,1,2-Tetrachloroethane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
69 trans-1,3-Dichloropropene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
70 1,1,2-Trichloroethane	0.09840	0.11275	0.11269	0.10968	0.11514	0.10964		
	0.10843	0.10381					0.10882	4.982
71 Tetrachloroethene	0.14543	0.17175	0.17638	0.16941	0.17253	0.16403		
	0.15855	0.14989					0.16350	6.884

Eurofins Air Toxics Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 14-JUN-2016 12:59
End Cal Date : 15-JUN-2016 11:01
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msd6.i/15jun16.b/616z0614vi.m
Cal Date : 21-Jun-2016 11:24 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
72 2-Hexanone	0.10197 0.13537	0.11170 0.13054	0.13611	0.12738	0.13476	0.13293	0.12635	10.006
73 Dibromochloromethane	+++++ +++++	+++++ +++++	+++++	+++++	+++++	+++++	+++++	+++++
74 1,2-Dibromoethane	0.11202 0.13424	0.12720 0.12189	0.12803	0.13099	0.14038	0.13243	0.12840	6.666
75 Bromobenzene	+++++ +++++	+++++ +++++	+++++	+++++	+++++	+++++	+++++	+++++
76 1,2,3-Trichloropropane	+++++ +++++	+++++ +++++	+++++	+++++	+++++	+++++	+++++	+++++
77 2-Chlorotoluene	+++++ +++++	+++++ +++++	+++++	+++++	+++++	+++++	+++++	+++++
78 4-Chlorotoluene	+++++ +++++	+++++ +++++	+++++	+++++	+++++	+++++	+++++	+++++
80 tert-Butylbenzene	+++++ +++++	+++++ +++++	+++++	+++++	+++++	+++++	+++++	+++++
81 Chlorobenzene	0.32968 0.34704	0.39697 0.32495	0.39412	0.36755	0.37650	0.35766	0.36181	7.501
82 Ethyl Benzene	0.15427 0.18304	0.20041 0.17100	0.20587	0.18936	0.19595	0.18754	0.18593	8.990

Eurofins Air Toxics Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 14-JUN-2016 12:59
End Cal Date : 15-JUN-2016 11:01
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msd6.i/15jun16.b/616z0614vi.m
Cal Date : 21-Jun-2016 11:24 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
83 sec-Butylbenzene	+++++ +++++	+++++ +++++	+++++	+++++	+++++	+++++	+++++	+++++
84 m,p-Xylene	0.20468 0.23044	0.25618 0.21952	0.25823	0.23969	0.24819	0.23528	0.23653	7.739
85 p-Cymene	+++++ +++++	+++++ +++++	+++++	+++++	+++++	+++++	+++++	+++++
86 1,2,3-Trimethylbenzene	+++++ +++++	+++++ +++++	+++++	+++++	+++++	+++++	+++++	+++++
87 Butylbenzene	+++++ +++++	+++++ +++++	+++++	+++++	+++++	+++++	+++++	+++++
88 o-Xylene	0.39862 0.44348	0.49892 0.40582	0.50523	0.46376	0.48077	0.45294	0.45619	8.656
89 Styrene	0.59554 0.75288	0.81352 0.68546	0.82497	0.79274	0.81568	0.76716	0.75599	10.467
90 Bromoform	+++++ +++++	+++++ +++++	+++++	+++++	+++++	+++++	+++++	+++++
91 Cumene	1.04988 1.19563	1.38044 1.07619	1.39978	1.28212	1.31079	1.23478	1.24120	10.416
93 1,2-Dibromo-3-Chloropropane	+++++ +++++	+++++ +++++	+++++	+++++	+++++	+++++	+++++	+++++

Eurofins Air Toxics Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 14-JUN-2016 12:59
End Cal Date : 15-JUN-2016 11:01
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msd6.i/15jun16.b/616z0614vi.m
Cal Date : 21-Jun-2016 11:24 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
94 1,1,2,2-Tetrachloroethane	0.29969	0.34403	0.45333	0.38244	0.43319	0.41391		
	0.42616	0.40517					0.39474	12.893
95 1,3,5-Trichlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
96 Propylbenzene	1.17364	1.66394	1.69343	1.49239	1.51451	1.43372		
	1.39226	1.24324					1.45089	12.594
97 4-Ethyltoluene	0.29940	0.45121	0.45742	0.40875	0.40576	0.38842		
	0.37301	0.33033					0.38929	14.052
98 1,3,5-Trimethylbenzene	0.45499	0.64293	0.66777	0.58169	0.57816	0.54255		
	0.52030	0.45787					0.55578	14.018
99 1,2,3-Trichlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
100 1,2,4-Trimethylbenzene	0.39201	0.60795	0.63388	0.54782	0.54494	0.50952		
	0.48565	0.43436					0.51952	15.790
101 1,3-Dichlorobenzene	0.53568	0.84866	0.88052	0.73793	0.74185	0.68803		
	0.65501	0.58959					0.70966	16.715
102 1,4-Dichlorobenzene	0.52825	0.85873	0.88859	0.73778	0.74525	0.68607		
	0.65752	0.59338					0.71195	17.281
103 Phenol	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++

Eurofins Air Toxics Inc.

INITIAL CALIBRATION DATA

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End Cal Date : 15-JUN-2016 11:01
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msd6.i/15jun16.b/616z0614vi.m
Cal Date : 21-Jun-2016 11:24 U5BT
Curve Type : Average

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						
217 2-Methylphenol	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
218 3-Methylphenol/4-Methylphenol	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
104 alpha-Chlorotoluene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
105 1,2-Dichlorobenzene	0.52060	0.84080	0.86226	0.71201	0.71636	0.66464		
	0.63082	0.57204					0.68994	17.354
106 1,2,4-Trichlorobenzene	0.38803	0.64157	0.73000	0.55585	0.61522	0.52947		
	0.50483	0.46692					0.55399	19.363
107 Hexachlorobutadiene	0.23288	0.33781	0.37537	0.28978	0.31121	0.27075		
	0.25731	0.23927					0.28930	17.182
109 Naphthalene	2.08517	2.11835	1.91268	1.94890	2.13194	1.99822		
	1.82004	+++++					2.00219	5.812
110 2-Methylnaphthalene	1.17616	1.35982	1.25831	1.31893	1.50505	1.36983		
	1.27696	+++++					1.32358	7.838
111 1-Methylnaphthalene	1.10786	1.23304	1.14816	1.20011	1.37144	1.25279		
	1.16183	+++++					1.21075	7.160
112 Acenaphthylene	1.71972	2.35242	2.05319	2.01378	2.60163	2.31937		
	2.04874	+++++					2.15841	13.327

Eurofins Air Toxics Inc.

INITIAL CALIBRATION DATA

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Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msd6.i/15jun16.b/616z0614vi.m
Cal Date : 21-Jun-2016 11:24 U5BT
Curve Type : Average

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						
113 Acenaphthene	0.79731	0.84038	0.90499	1.14859	1.26774	1.10805		
	1.15132	+++++					1.03120	17.577
114 Fluorene	0.69840	0.62408	0.84591	1.15595	0.94216	0.61749		
	1.18256	+++++					0.86665	27.421
115 Phenanthrene	2.17717	2.15782	1.94416	2.05174	2.41489	2.20269		
	2.09931	+++++					2.14968	6.803
116 Anthracene	1.43035	1.68536	1.71063	1.90461	2.08980	2.04627		
	2.01542	+++++					1.84035	13.093
117 Fluoranthene	2.01212	1.39825	1.31411	1.76386	1.10234	1.33701		
	1.83356	+++++					1.53732	21.623
118 Pyrene	1.96405	1.38744	1.38374	1.84126	1.11520	1.37674		
	1.94952	+++++					1.57399	21.467
$ 49 1,2-Dichloroethane-d4	0.14533	0.10724	0.11598	0.11978	0.11663	0.11319		
	0.11224	+++++					0.11863	10.469
$ 66 Toluene-d8	0.41316	0.43120	0.45180	0.46411	0.46736	0.45187		
	0.45675	+++++					0.44803	4.309
$ 108 Naphthalene-d8	1.79788	2.15251	1.75024	1.80581	1.86874	1.83692		
	1.83704	+++++					1.86416	7.111

Calibration History

Method : /chem/msd6.i/15jun16.b/616z0614vi.m
Start Cal Date: 14-JUN-2016 12:59
End Cal Date : 15-JUN-2016 11:01

Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 1 , Cal Amount: 1.00000		
15-JUN-2016 11:01	VOC+PAH_ICAL	/chem/msd6.i/15jun16.b/6061502.d
Cal Level: 2 , Cal Amount: 5.00000		
14-JUN-2016 12:59	VOC+PAH_ICAL	/chem/msd6.i/14jun16a.b/6061409.d
Cal Level: 3 , Cal Amount: 10.00000		
14-JUN-2016 13:39	VOC+PAH_ICAL	/chem/msd6.i/14jun16a.b/6061410.d
Cal Level: 4 , Cal Amount: 25.00000		
14-JUN-2016 14:19	VOC+PAH_ICAL	/chem/msd6.i/14jun16a.b/6061411.d
Cal Level: 5 , Cal Amount: 50.00000		
14-JUN-2016 14:59	VOC+PAH_ICAL	/chem/msd6.i/14jun16a.b/6061412.d
Cal Level: 6 , Cal Amount: 100.00000		
14-JUN-2016 15:39	VOC+PAH_ICAL	/chem/msd6.i/14jun16a.b/6061413.d
Cal Level: 7 , Cal Amount: 250.00000		
14-JUN-2016 16:18	VOC+PAH_ICAL	/chem/msd6.i/14jun16a.b/6061414.d
Cal Level: 8 , Cal Amount: 500.00000		

```
|14-JUN-2016 16:58 |VOC_ICALnoSS     |/chem/msd6.i/14jun16a.b/6061415.d       |
+------------------+-----------------+----------------------------------------+


Continuing Calibration
Ccal Level Mode: GLOBAL LEVEL 5
+------------------+-----------------+----------------------------------------+
| Ccal Level: 5 , Ccal Amount: 50.000                                          |
+==============================================================================+
|14-JUN-2016 14:59 |VOC+PAH_ICAL     |/chem/msd6.i/14jun16a.b/6061412.d       |
+------------------+-----------------+----------------------------------------+
| Ccal Level: 5 , Ccal Amount: 50.000                                          |
+==============================================================================+
|14-JUN-2016 14:59 |VOC+PAH_ICAL     |/chem/msd6.i/14jun16a.b/6061412a.d      |
+------------------+-----------------+----------------------------------------+
```

Initial Calibration Narrative

An 8 point calibration curve was performed on instrument MSD-6 using VI sorbent media on June 14 and 15, 2016 for VOC+PAH compounds.

- The VOC compounds were spiked in a vapor phase onto the VI tubes using the ATIS.
- The PAH compounds were spiked directly onto the tube.
- BFB File: 6061407 and 6061501
- ICAL name: 616z0614vi.m
- 1 compound out, MeCl2 37% RSD
- Units: in ng
- Markes Unity Method: VI.mth
- Chemstation Method: TO17+PAH.m
- DE study for PAH @ 100ng : file # 6061417.d (other passed except Fluoranthene = 85.9% and Pyrene = 86.0%)
- DE study for PAH @ 250ng : file # 6061418.d (passed)
- The Level 1 was reanalyzed due to unacceptable linearity of several VOC compounds.
- ICV file: 6061506.d
- **The RL for Vinyl Chloride was raised from 2.6ng to 5.1ng due to the MDL study.**
- MDL: 4/1/16

Eurofins Air Toxics Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 14-JUN-2016 12:59
End Cal Date : 15-JUN-2016 11:01
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msd6.i/15jun16.b/616z0614vi.m
Cal Date : 21-Jun-2016 11:24 U5BT
Curve Type : Average

Calibration File Names:
Level 1: /chem/msd6.i/15jun16.b/6061502.d
Level 2: /chem/msd6.i/14jun16a.b/6061409.d
Level 3: /chem/msd6.i/14jun16a.b/6061410.d
Level 4: /chem/msd6.i/14jun16a.b/6061411.d
Level 5: /chem/msd6.i/14jun16a.b/6061412.d
Level 6: /chem/msd6.i/14jun16a.b/6061413.d
Level 7: /chem/msd6.i/14jun16a.b/6061414.d
Level 8: /chem/msd6.i/14jun16a.b/6061415.d

ct 6/21/16

6/21/16

Compound	1.000 Level 1 / 250.000 Level 7	5.000 Level 2 / 500.000 Level 8	10.000 Level 3	25.000 Level 4	50.000 Level 5	100.000 Level 6	___ RRF	% RSD
3 Freon 114	0.49473	0.54605	0.50247	0.48861	0.49714	0.47472		
	0.45702	0.42120					0.48524	7.489
6 Vinyl Chloride	+++++	0.60121	0.65311	0.64236	0.65659	0.62649		
	0.59926	0.57585					0.62213	4.945
7 1,3-Butadiene	0.62655	0.59012	0.56991	0.54346	0.55997	0.53286		
	0.52931	0.51087					0.55788	6.694
9 Chloroethane	+++++	+++++	0.43186	0.29384	0.28706	0.26237		
	0.27696	0.27186					0.30399	20.927
10 Isopentane	0.52903	0.54439	0.46183	0.44709	0.45610	0.43821		
	0.42743	0.41018					0.46428	10.279
11 Trichlorofluoromethane/Fr11	0.74575	0.82478	0.87198	0.84178	0.86152	0.89317		
	0.82360	0.80385					0.83330	5.489
15 Freon 113	0.49819	0.55494	0.58367	0.55794	0.57141	0.53539		
	0.50337	0.46023					0.53314	7.938

@ Air Toxics Ltd. Run Log for MSD-6 Method TO14 & TO15
BFB verification of 176/174 Ratio: (209685/215082)x100% = 97.49%
Standard ID 1476-2872 Exp. date 5/4/18
Bromochloromethane 156066 File ID: 6061412 Bromofluorobenzene 441798
1,4-Difluorobenzene 638538 Compound: toluene
Chlorobenzene-d5 603523 InitialIS: ct
Verification CCV IS vs ICAL mid-point (-40%)
Calculation Check:

$$\text{ppbv of compound} = \frac{\text{Area of sample} * \text{Concentration of IS}}{\text{Area of IS} \quad \text{RRF}} = \left(\frac{978843}{603523}\right) * \left(\frac{24.0}{0.4964858}\right) = 78.4065$$

Method: 6167061 4 Vi.m

ct 6/17/16

Data Directory: C:\msdchem\1\DATA\14JUN16a.B\

Use	SampleName		Port pos.	Injection Time		Init.
1) ✓	6061406.D Comments					
;BFB;BFB		1476-2872, 36ng (5/4/18)	1	14 Jun 2016	8:53	ct
2) ✓	6061407.D Comments					
;BFB;BFB		1476-2872, 36ng (5/4/18)	2	14 Jun 2016	9:33	
3) X	6061408.D Comments	will rerun this point due to unacceptable linearity of some VOCs				
;VI ICAL1,1.0Surr		2516-246-1ml(9/10/16),274	11	14 Jun 2016	12:17	
4) ✓	6061409.D Comments					
;VI ICAL2,2.0Surr		2516-246-2ml(9/10/16),274	12	14 Jun 2016	12:59	
5) ✓	6061410.D Comments					
;VI ICAL3,5.0Surr		2516-246-3ml(9/10/16),274	13	14 Jun 2016	13:39	
6) ✓	6061411.D Comments					
;VI ICAL4,10Surr		2516-246-6ml(9/10/16),274	14	14 Jun 2016	14:19	
7) ✓	6061412.D Comments	midpoint ccv file = 6061412a				
;VI ICAL5,25Surr		2516-246-20ml(9/10/16),27	15	14 Jun 2016	14:59	
8) ✓	6061413.D Comments					
;VI ICAL6,50Surr		2516-246-50ml(9/10/16),27	16	14 Jun 2016	15:39	
9) ✓	6061414.D Comments					
;VI ICAL7,100Surr		2516-246-100ml(9/10/16),2	17	14 Jun 2016	16:18	
10) ✓	6061415.D Comments					
;VI ICAL8,noSurr		2516-246-200ml(9/10/16),n	18	14 Jun 2016	16:58	
11) ✓	6061416.D Comments					
;Blank			1	14 Jun 2016	17:38	
12)	6061417.D Comments					
;DE PAH study 100ng			16	14 Jun 2016	18:18	
13)	6061418.D Comments					
;DE PAH study 250ng			17	14 Jun 2016	18:58	
14) X	6061419.D Comments	Not used				
;VI ICV/LCS;LCS		2516-245-20ml(9/7/16),274	19	14 Jun 2016	19:38	
15) ✓	6061420.D Comments					
;VI Tube Cert		G0148954	3	14 Jun 2016	20:18	
16) ✓	6061421.D Comments					
;VI Tube Cert		G0135584	4	14 Jun 2016	20:58	
17) ✓	6061422.D Comments					
;VI Tube Cert		G0139970	11	14 Jun 2016	21:37	

Reviewed ct 6/17/16

@ Air Toxics Ltd. Run Log for MSD-6 Method TO14 & TO15
BFB verification of 176/174 Ratio: (243392/252096)×100% = 96.55%
Standard ID 1476-2872 Exp. date 5/4/18
Bromochloromethane 155560 File ID: 6061503.d Bromofluorobenzene 417214
1,4-Difluorobenzene 608468 Compound: Naphthalene
Chlorobenzene-d5 578036 InitialIS: ct
Verification CCV IS vs ICAL mid-point (-40%)
Calculation Check:

$$\text{ppbv of compound} = \frac{\text{Area of sample}}{\text{Area of IS}} * \frac{\text{Concentration of IS}}{\text{RRF}} = \left(\frac{1292702}{417214}\right) * \left(\frac{36.0}{2.06219}\right) = 55.710$$

Method: 6163 0614 Vim

Data Directory: C:\msdchem\1\DATA\15JUN16.B\

Use	SampleName		Port pos.	Injection Time	Init.
1) ✓	6061501.D Comments				
;BFB;BFB		1476-2872, 36ng (5/4/18)	1	15 Jun 2016 9:38	ct
2) ✓	6061502.D Comments				
;VI ICAL1,1.0Surr		2516-246-1ml(9/10/16),274	12	15 Jun 2016 11:01	
3) ✓	6061503.D Comments				
;VI VOC+PAH CCV;CCV		2516-246-20ml(9/10/16),27	1	15 Jun 2016 12:15	
4) ✗	6061504.D Comments	%R of Fluorene > 150%			
;VI VOC+PAH LCS;LCS		2516-245-20ml(9/7/16),274	2	15 Jun 2016 12:54	
5) ✗	6061505.D Comments	not used, %R of Fluorene > 150%			
VI VOC+PAH LCSD;LCSD		2516-245-20ml(9/7/16),274	2	15 Jun 2016 13:34	
6) ✓	6061506.D Comments	%R of Fluorene = 147.92%			
VI VOC+PAH ICV/LCS;LCS		2516-245-20ml(9/7/16),274	12	15 Jun 2016 14:25	
7) ✓	6061507.D Comments				
VI VOC+PAH LCSD;LCSD		2516-245-20ml(9/7/16),274	12	15 Jun 2016 15:05	
) ✓	6061508.D Comments				
Lab Blank;Lab Blank		G0139970	11	15 Jun 2016 15:45	
) ✓	6061509.D Comments				
1606243-01A		G0153248	31	15 Jun 2016 16:59	
0) ✓	6061510.D Comments				
1606243-02A		G0143706	32	15 Jun 2016 17:41	
1) ✓	6061511.D Comments				
1606243-03A		G0143404	33	15 Jun 2016 18:20	
2)	6061512.D Comments	IS (1,4-DFB and Chlorobenzene-d5) ↑			
1606243-04A		G0160972	34	15 Jun 2016 19:00	
3) ✓	6061513.D Comments				
1606243-05A		G0149175	35	15 Jun 2016 19:40	
4)	6061514.D Comments	IS (CB-d5) ↑			
1606243-06A		G0153856	36	15 Jun 2016 20:20	
5)	6061515.D Comments	IS (1,4-DFB and CB-d5) ↑			
1606243-07A		G0132057	37	15 Jun 2016 21:00	
6) ✓	6061516.D Comments				
Blank		G0139970	11	15 Jun 2016 21:39	
7) ✓	6061517.D Comments				
1606272-09A		G0141302	41	15 Jun 2016 22:19	

Clarissat 6/16/16

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

Target Method:	616z0614vi.m
Instrument Method:	TO17 + PAH
Initial Run File:	6061413
Repeat Run File:	6061417

Compound	Enter mass (ng) Initial Run (m_i)	Repeat Run (m_r)	%DE
Naphthalene	2525217.0	6436.0	99.7%
2-Methylnaphthalene	1731102.0	3696.0	99.8%
1-Methylnaphthalene	1583191.0	3316.0	99.8%
Acenaphthylene	2931060.0	6259.0	99.8%
Acenaphthene	1400283.0	1015.0	99.9%
Fluorene	780339.0	2860.0	99.6%
Phenanthrene	2783614.0	54309.0	98.1%
Anthracene	2585941.0	75623.0	97.2%
Fluoranthene*	1689628.0	278014.0	**85.9%**
Pyrene*	1739831.0	282511.0	**86.0%**

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)

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

Target Method:	616z0614vi.m
Instrument Method:	TO17 + PAH
Initial Run File:	6061414
Repeat Run File:	6061418

Compound	Enter mass (ng) Initial Run (m_i)	Repeat Run (m_r)	%DE
Naphthalene	6003996.0	6677.0	99.9%
2-Methylnaphthalene	4212465.0	3789.0	99.9%
1-Methylnaphthalene	3832686.0	3321.0	99.9%
Acenaphthylene	6758454.0	7159.0	99.9%
Acenaphthene	3798006.0	1359.0	100.0%
Fluorene	3901079.0	6366.0	99.8%
Phenanthrene	6925288.0	92572.0	98.7%
Anthracene	6648535.0	176497.0	97.4%
Fluoranthene*	6048618.0	231210.0	96.3%
Pyrene*	6431144.0	236089.0	96.5%

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.

EPA Method TO-17 GC/MS

Data file : /chem/msd6.i/15jun16.b/6061506.d
Lab Smp Id: VI VOC+PAH ICV/LCS Client Smp ID: LCS
Inj Date : 15-JUN-2016 14:25
Operator : CT Inst ID: msd6.i
Smp Info : ;VI VOC+PAH ICV/LCS;LCS
Misc Info : 2516-245-20ml(9/7/16),2744-32-50(7/20/16)
Comment :
Method : /chem/msd6.i/15jun16.b/616z0614vi.m
Meth Date : 21-Jun-2016 11:24 U5BT Quant Type: ISTD
Cal Date : 14-JUN-2016 14:59 Cal File: 6061412.d
Als bottle: 12 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	
4.308	4.315 (1.000)	130	164425	26.0000		80.00- 120.00	100.00
4.308	4.315 (1.000)	128	127049			47.94- 107.94	77.27
4.308	4.315 (1.000)	49	161406			68.24- 128.24	98.16
* 54 1,4-Difluorobenzene						CAS #: 540-36-3	
5.941	5.948 (1.000)	114	649923	23.0000		80.00- 120.00	100.00
5.941	5.948 (1.000)	88	98988			0.00- 45.46	15.23
* 79 Chlorobenzene-d5						CAS #: 3114-55-4	
9.874	9.859 (1.000)	117	618896	24.0000		80.00- 120.00	100.00
9.874	9.859 (1.000)	82	310566			19.06- 79.06	50.18
* 92 Bromofluorobenzene						CAS #: 460-00-4	
11.428	11.414 (1.000)	174	454753	36.0000		80.00- 120.00	100.00
11.428	11.407 (1.000)	95	474941			74.19- 134.19	104.44
11.428	11.414 (1.000)	176	440112			67.61- 127.61	96.78
$ 49 1,2-Dichloroethane-d4						CAS #: 17060-07-0	
5.225	5.239 (0.879)	65	76325	22.7689	22.769	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (ng)	FINAL (NG)	TARGET RANGE	RATIO
$ 49 1,2-Dichloroethane-d4 (continued)							
5.232	5.232 (0.881)	67	39878			21.95- 81.95	52.25
$ 66 Toluene-d8						CAS #: 2037-26-5	
7.961	7.954 (0.806)	98	285027	24.6700	24.670	80.00- 120.00	100.00
7.961	7.954 (0.806)	70	28074			0.00- 39.97	9.85
7.961	7.954 (0.806)	100	186061			35.51- 95.51	65.28
$ 108 Naphthalene-d8						CAS #: 1146-65-2	
15.690	15.690 (1.373)	136	555893	23.6067	23.607	80.00- 120.00	100.00
15.690	15.690 (1.373)	108	47511			0.00- 38.72	8.55
3 Freon 114						CAS #: 76-14-2	
1.283	1.283 (0.298)	135	457391	149.050	149.05	80.00- 120.00	100.00
1.283	1.283 (0.298)	137	146853			2.20- 62.20	32.11
6 Vinyl Chloride						CAS #: 75-01-4	
1.395	1.395 (0.324)	62	219689	55.8387	55.839	80.00- 120.00	100.00
1.395	1.395 (0.324)	64	87786			13.62- 73.62	39.96
7 1,3-Butadiene						CAS #: 106-99-0	
1.395	1.395 (0.324)	54	152289	43.1650	43.165	80.00- 120.00	100.00
1.395	1.395 (0.324)	39	221047			117.26- 177.26	145.15
9 Chloroethane						CAS #: 75-00-3	
1.661	1.661 (0.385)	64	94674	49.2463	49.246	80.00- 120.00	100.00
1.661	1.661 (0.385)	66	29533			0.84- 60.84	31.19
1.647	1.661 (0.382)	49	26055			0.00- 56.89	27.52
10 Isopentane						CAS #: 78-78-4	
1.689	1.688 (0.392)	57	166896	56.8420	56.842	80.00- 120.00	100.00
1.689	1.688 (0.392)	43	231296			107.36- 167.36	138.59
11 Trichlorofluoromethane/Fr11						CAS #: 75-69-4	
1.814	1.814 (0.421)	101	614586	116.622	116.62	80.00- 120.00	100.00
1.814	1.814 (0.421)	103	400664			35.47- 95.47	65.19
15 Freon 113						CAS #: 76-13-1	
2.181	2.181 (0.506)	151	525542	155.873	155.87	80.00- 120.00	100.00
2.181	2.181 (0.506)	153	338256			34.42- 94.42	64.36
2.181	2.181 (0.506)	101	554460			75.78- 135.78	105.50
14 1,1-Dichloroethene						CAS #: 75-35-4	
2.181	2.181 (0.506)	98	165830	77.9011	77.901	80.00- 120.00	100.00
2.181	2.181 (0.506)	96	262043			128.07- 188.07	158.02
2.181	2.181 (0.506)	61	393230			203.73- 263.73	237.13

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (ng)	FINAL (NG)	TARGET RANGE	RATIO
18 Carbon Disulfide					CAS #: 75-15-0		
2.360	2.360 (0.548)	76	593287	44.0384	44.038	80.00- 120.00	100.00
19 2-Propanol					CAS #: 67-63-0		
2.274	2.274 (0.528)	45	371596	48.2262	48.226	80.00- 120.00	100.00(a)
2.274	2.274 (0.528)	43	74936			0.00- 50.57	20.17
2.274	2.281 (0.528)	59	14748			0.00- 34.17	3.97
22 Methylene Chloride					CAS #: 75-09-2		
2.567	2.575 (0.596)	49	310611	64.9609	64.961	80.00- 120.00	100.00
2.575	2.575 (0.598)	84	264969			55.25- 115.25	85.31
2.575	2.575 (0.598)	51	96920			0.54- 60.54	31.20
25 trans-1,2-Dichloroethene					CAS #: 156-60-5		
2.818	2.818 (0.654)	98	143315	70.0331	70.033	80.00- 120.00	100.00
2.818	2.818 (0.654)	61	294343			178.66- 238.66	205.38
2.818	2.818 (0.654)	96	220897			127.69- 187.69	154.13
26 MTBE					CAS #: 1634-04-4		
2.797	2.804 (0.649)	73	634257	82.4586	82.459	80.00- 120.00	100.00
2.797	2.804 (0.649)	57	136957			0.00- 51.21	21.59
2.797	2.804 (0.649)	41	132475			0.00- 50.32	20.89
28 Hexane					CAS #: 110-54-3		
3.098	3.105 (0.719)	57	350195	70.6898	70.690	80.00- 120.00	100.00
3.098	3.105 (0.719)	43	213598			30.80- 90.80	60.99
3.098	3.105 (0.719)	86	55502			0.00- 45.79	15.85
29 1,1-Dichloroethane					CAS #: 75-34-3		
3.269	3.269 (0.759)	63	371526	75.6833	75.683	80.00- 120.00	100.00
3.269	3.269 (0.759)	65	119663			1.92- 61.92	32.21
37 cis-1,2-Dichloroethene					CAS #: 156-59-2		
3.971	3.971 (0.922)	98	190770	86.3177	86.318	80.00- 120.00	100.00
3.964	3.971 (0.920)	96	301889			125.20- 185.20	158.25
3.971	3.971 (0.922)	61	363057			158.24- 218.24	190.31
38 2-Butanone					CAS #: 78-93-3		
3.928	3.928 (0.912)	72	136425	65.3214	65.321	80.00- 120.00	100.00
3.928	3.936 (0.912)	43	528403			361.05- 421.05	387.32
3.928	3.936 (0.912)	57	45994			4.40- 64.40	33.71
44 Chloroform					CAS #: 67-66-3		
4.480	4.487 (1.040)	83	500118	96.2841	96.284	80.00- 120.00	100.00
4.480	4.487 (1.040)	85	324312			35.45- 95.45	64.85

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (ng)	FINAL (NG)	TARGET RANGE	RATIO
46 Cyclohexane					CAS #: 110-82-7		
4.824	4.831 (0.812)	84	310652	68.2535	68.253	80.00- 120.00	100.00
4.824	4.831 (0.812)	56	353234			82.98- 142.98	113.71
4.817	4.831 (0.811)	41	198023			32.69- 92.69	63.74
45 1,1,1-Trichloroethane					CAS #: 71-55-6		
4.709	4.716 (0.793)	97	513860	111.568	111.57	80.00- 120.00	100.00
4.709	4.716 (0.793)	99	329223			34.83- 94.83	64.07
47 Carbon Tetrachloride					CAS #: 56-23-5		
4.953	4.960 (0.834)	119	556795	130.225	130.22	80.00- 120.00	100.00
4.953	4.960 (0.834)	117	574755			73.53- 133.53	103.23
51 2,2,4-Trimethylpentane					CAS #: 540-84-1		
5.483	5.490 (0.923)	57	1112658	96.0985	96.098	80.00- 120.00	100.00
5.483	5.497 (0.923)	56	345604			1.12- 61.12	31.06
5.483	5.490 (0.923)	41	313017			0.00- 57.96	28.13
48 Benzene					CAS #: 71-43-2		
5.254	5.253 (0.884)	78	730042	58.3398	58.340	80.00- 120.00	100.00
5.246	5.253 (0.883)	77	171473			0.00- 53.50	23.49
50 1,2-Dichloroethane					CAS #: 107-06-2		
5.347	5.354 (0.900)	62	325366	81.7834	81.783	80.00- 120.00	100.00
5.347	5.354 (0.900)	64	106230			2.93- 62.93	32.65
53 Heptane					CAS #: 142-82-5		
5.784	5.791 (0.973)	71	236780	80.3530	80.353	80.00- 120.00	100.00
5.784	5.791 (0.973)	43	412450			143.29- 203.29	174.19
5.784	5.791 (0.973)	57	216199			61.40- 121.40	91.31
56 Trichloroethene					CAS #: 79-01-6		
6.249	6.263 (1.052)	95	384276	102.162	102.16	80.00- 120.00	100.00
6.249	6.263 (1.052)	130	428089			81.46- 141.46	111.40
6.249	6.263 (1.052)	97	248702			34.92- 94.92	64.72
58 Methyl Cyclohexane					CAS #: 108-87-2		
6.572	6.586 (1.106)	83	467364	84.1419	84.142	80.00- 120.00	100.00
6.572	6.586 (1.106)	98	212304			15.14- 75.14	45.43
6.572	6.586 (1.106)	55	357532			46.07- 106.07	76.50
59 1,2-Dichloropropane					CAS #: 78-87-5		
6.607	6.614 (1.112)	63	277857	101.764	101.76	80.00- 120.00	100.00
6.607	6.614 (1.112)	62	190569			38.13- 98.13	68.59
6.579	6.586 (1.107)	41	342292			92.30- 152.30	123.19

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (ng)	FINAL (NG)	TARGET RANGE	RATIO
60 1,4-Dioxane					CAS #: 123-91-1		
6.722	6.736 (1.131)	88	187692	75.4128	75.413	80.00- 120.00	100.00
6.722	6.736 (1.131)	58	116194			31.73- 91.73	61.91
6.722	6.736 (1.131)	57	60643			1.20- 61.20	32.31
65 4-Methyl-2-pentanone					CAS #: 108-10-1		
7.832	7.832 (1.318)	58	213808	87.3165	87.316	80.00- 120.00	100.00
7.832	7.832 (1.318)	43	537458			221.14- 281.14	251.37
7.832	7.832 (1.318)	85	107063			20.58- 80.58	50.07
67 Toluene					CAS #: 108-88-3		
8.047	8.047 (0.815)	91	984588	76.9069	76.907	80.00- 120.00	100.00
8.047	8.047 (0.815)	92	575731			28.32- 88.32	58.47
70 1,1,2-Trichloroethane					CAS #: 79-00-5		
8.656	8.649 (1.457)	97	356227	115.850	115.85	80.00- 120.00	100.00
8.656	8.649 (1.457)	99	223521			32.57- 92.57	62.75
8.656	8.649 (1.457)	83	289371			50.93- 110.93	81.23
71 Tetrachloroethene					CAS #: 127-18-4		
8.735	8.728 (0.885)	166	590632	140.088	140.09	80.00- 120.00	100.00
8.735	8.728 (0.885)	129	419760			41.03- 101.03	71.07
8.735	8.728 (0.885)	131	408768			38.99- 98.99	69.21
72 2-Hexanone					CAS #: 591-78-6		
8.971	8.957 (0.909)	58	276285	84.7993	84.799	80.00- 120.00	100.00
8.964	8.957 (0.908)	43	509496			155.38- 215.38	184.41
8.971	8.957 (0.909)	100	63363			0.00- 52.71	22.93
74 1,2-Dibromoethane					CAS #: 106-93-4		
9.251	9.236 (0.937)	107	568850	171.805	171.80	80.00- 120.00	100.00
9.251	9.236 (0.937)	109	544265			65.47- 125.47	95.68
81 Chlorobenzene					CAS #: 108-90-7		
9.910	9.895 (1.004)	112	856126	91.7598	91.760	80.00- 120.00	100.00
9.910	9.895 (1.004)	114	279375			2.20- 62.20	32.63
9.910	9.895 (1.004)	77	441776			20.93- 80.93	51.60
82 Ethyl Benzene					CAS #: 100-41-4		
10.067	10.053 (1.020)	106	425997	88.8491	88.849	80.00- 120.00	100.00
10.067	10.053 (1.020)	91	1294125			272.45- 332.45	303.79
84 m,p-Xylene					CAS #: 108-38-3		
10.246	10.232 (1.038)	106	541310	88.7485	88.748	80.00- 120.00	100.00
10.246	10.232 (1.038)	91	1037621			164.06- 224.06	191.69

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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
 10.733  10.712 (0.939)   106    519507 90.1511   90.151  80.00- 120.00   100.00
 10.726  10.712 (0.939)    91   1059464                  174.12- 234.12   203.94
-------------------------------------------------------------------------------
   89 Styrene                                       CAS #: 100-42-5
 10.762  10.740 (0.942)   104    855341 89.5669   89.567  80.00- 120.00   100.00
 10.762  10.740 (0.942)    78    395280                   16.31-  76.31    46.21
-------------------------------------------------------------------------------
   91 Cumene                                        CAS #: 98-82-8
 11.220  11.206 (0.982)   105   1562717 99.6701   99.670  80.00- 120.00   100.00
 11.220  11.206 (0.982)   120    429591                    0.00-  57.22    27.49
 11.220  11.199 (0.982)    51    134452                    0.00-  38.43     8.60
-------------------------------------------------------------------------------
   94 1,1,2,2-Tetrachloroethane                     CAS #: 79-34-5
 11.643  11.621 (1.019)    83    735470 147.496   147.50  80.00- 120.00   100.00
 11.643  11.621 (1.019)    85    481868                   35.83-  95.83    65.52
-------------------------------------------------------------------------------
   96 Propylbenzene                                 CAS #: 103-65-1
 11.758  11.736 (1.029)    91   1843105 100.564   100.56  80.00- 120.00   100.00
 11.758  11.743 (1.029)   120    467650                    0.00-  55.53    25.37
 11.758  11.743 (1.029)   105     72431                    0.00-  33.92     3.93
-------------------------------------------------------------------------------
   97 4-Ethyltoluene                                CAS #: 622-96-8
 11.922  11.908 (1.043)   120    485180 98.6639   98.664  80.00- 120.00   100.00
 11.922  11.908 (1.043)   105   1573987                  298.20- 358.20   324.41
-------------------------------------------------------------------------------
   98 1,3,5-Trimethylbenzene                        CAS #: 108-67-8
 12.008  11.994 (1.051)   120    687804 97.9689   97.969  80.00- 120.00   100.00
 12.008  11.994 (1.051)   105   1361446                  167.68- 227.68   197.94
-------------------------------------------------------------------------------
  100 1,2,4-Trimethylbenzene                        CAS #: 95-63-6
 12.474  12.460 (1.091)   120    651756 99.3145   99.314  80.00- 120.00   100.00
 12.474  12.460 (1.091)   105   1438502                  185.14- 245.14   220.71
-------------------------------------------------------------------------------
  101 1,3-Dichlorobenzene                           CAS #: 541-73-1
 12.796  12.789 (1.120)   146   1068454 119.188   119.19  80.00- 120.00   100.00
 12.796  12.789 (1.120)   148    691628                   34.46-  94.46    64.73
 12.796  12.782 (1.120)   111    402793                    7.45-  67.45    37.70
-------------------------------------------------------------------------------
  102 1,4-Dichlorobenzene                           CAS #: 106-46-7
 12.940  12.925 (1.132)   146   1077580 119.820   119.82  80.00- 120.00   100.00
 12.940  12.925 (1.132)   148    692473                   33.91-  93.91    64.26
 12.932  12.925 (1.132)   111    389005                    6.02-  66.02    36.10
-------------------------------------------------------------------------------
  105 1,2-Dichlorobenzene                           CAS #: 95-50-1
 13.369  13.362 (1.170)   146   1034537 118.702   118.70  80.00- 120.00   100.00
```

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

  105 1,2-Dichlorobenzene (continued)
 13.369  13.362 (1.170)   148    660762                    34.29-  94.29    63.87
 13.369  13.362 (1.170)   111    400721                     8.63-  68.63    38.73
-------------------------------------------------------------------------------
  106 1,2,4-Trichlorobenzene                        CAS #: 120-82-1
 15.418  15.418 (1.349)   180   1053922 150.604   150.60  80.00- 120.00   100.00
 15.418  15.418 (1.349)   182    999607                    64.63- 124.63    94.85
-------------------------------------------------------------------------------
  107 Hexachlorobutadiene                           CAS #: 87-68-3
 15.633  15.626 (1.368)   225    767673 210.067   210.07  80.00- 120.00   100.00
 15.633  15.626 (1.368)   223    482978                    32.03-  92.03    62.91
-------------------------------------------------------------------------------
  109 Naphthalene                                   CAS #: 91-20-3
 15.733  15.726 (1.377)   128   1361597 53.8357   53.836  80.00- 120.00   100.00
 15.733  15.726 (1.377)   127    174654                     0.00-  42.99    12.83
-------------------------------------------------------------------------------
  110 2-Methylnaphthalene                           CAS #: 91-57-6
 17.180  17.173 (1.503)   142    957914 57.2932   57.293  80.00- 120.00   100.00
 17.180  17.173 (1.503)   141    830485                    56.24- 116.24    86.70
 17.180  17.173 (1.503)   115    280772                     0.00-  58.81    29.31
-------------------------------------------------------------------------------
  111 1-Methylnaphthalene                           CAS #: 90-12-0
 17.395  17.395 (1.522)   142    875258 57.2281   57.228  80.00- 120.00   100.00
 17.395  17.395 (1.522)   141    792075                    60.38- 120.38    90.50
 17.395  17.395 (1.522)   115    270011                     0.56-  60.56    30.85
-------------------------------------------------------------------------------
  112 Acenaphthylene                                CAS #: 208-96-8
 19.243  19.243 (1.684)   152   1644122 60.3014   60.301  80.00- 120.00   100.00
 19.243  19.243 (1.684)   151    324897                     0.00-  49.78    19.76
 19.243  19.243 (1.684)   153    213972                     0.00-  43.07    13.01
-------------------------------------------------------------------------------
  113 Acenaphthene                                  CAS #: 83-32-9
 19.508  19.508 (1.707)   154    810491 62.2205   62.220  80.00- 120.00   100.00
 19.508  19.508 (1.707)   152    421664                    21.85-  81.85    52.03
 19.508  19.508 (1.707)   153    890388                    79.23- 139.23   109.86
-------------------------------------------------------------------------------
  114 Fluorene                                      CAS #: 86-73-7
 20.661  20.661 (1.808)   166    809659 73.9580   73.958  80.00- 120.00   100.00(R)
 20.661  20.661 (1.808)   165    766781                    65.14- 125.14    94.70
-------------------------------------------------------------------------------
  115 Phenanthrene                                  CAS #: 85-01-8
 22.839  22.839 (1.998)   178   1590087 58.5562   58.556  80.00- 120.00   100.00
 22.839  22.839 (1.998)   176    294901                     0.00-  48.56    18.55
 22.839  22.832 (1.998)   179    241363                     0.00-  45.19    15.18
-------------------------------------------------------------------------------
  116 Anthracene                                    CAS #: 120-12-7
 22.946  22.946 (2.008)   178   1508642 64.8953   64.895  80.00- 120.00   100.00
```

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (ng)	FINAL (NG)	TARGET RANGE	RATIO
116 Anthracene (continued)							
22.946	22.946 (2.008)	176	269628			0.00- 47.99	17.87
22.946	22.946 (2.008)	179	228388			0.00- 45.19	15.14
117 Fluoranthene					CAS #: 206-44-0		
26.127	26.119 (2.286)	202	1401783	72.1842	72.184	80.00- 120.00	100.00(R)
26.127	26.119 (2.286)	101	216136			0.00- 45.14	15.42
118 Pyrene					CAS #: 129-00-0		
26.979	26.979 (2.361)	202	1487810	74.8293	74.829	80.00- 120.00	100.00(R)
26.979	26.979 (2.361)	101	266455			0.00- 48.11	17.91
26.979	26.979 (2.361)	100	218420			0.00- 44.51	14.68

QC Flag Legend

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

Report Date: 21-Jun-2016 11:31

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd6.i
Lab File ID: 6061506.d
Lab Smp Id: VI VOC+PAH ICV/LCS
Analysis Type: VOA
Quant Type: ISTD
Operator: CT
Method File: /chem/msd6.i/15jun16.b/616z0614vi.m
Misc Info: 2516-245-20ml(9/7/16),2744-32-50(7/20/16)

Calibration Date: 14-JUN-2016
Calibration Time: 14:59
Client Smp ID: LCS
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
40 Bromochloromethan	156066	93640	218492	164425	5.36
54 1,4-Difluorobenze	638538	383123	893953	649923	1.78
79 Chlorobenzene-d5	603523	362114	844932	618896	2.55
92 Bromofluorobenzen	441798	265079	618517	454753	2.93

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
40 Bromochloromethan	4.32	3.99	4.65	4.31	-0.16
54 1,4-Difluorobenze	5.95	5.62	6.28	5.94	-0.12
79 Chlorobenzene-d5	9.86	9.53	10.19	9.87	0.15
92 Bromofluorobenzen	11.41	11.08	11.74	11.43	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: 21-Jun-2016 11:31

Eurofins Air Toxics Inc.

RECOVERY REPORT

Client Name:
Client SDG: 15jun16
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/15jun16.b/616z0614vi.m
Misc Info: 2516-245-20ml(9/7/16),2744-32-50(7/20/16)

SPIKE COMPOUND	CONC ADDED NG	CONC RECOVERED NG	% RECOVERED	LIMITS
3 Freon 114	139.80	149.05	106.62	70-130
6 Vinyl Chloride	51.100	55.839	109.27	70-130
7 1,3-Butadiene	44.200	43.165	97.66	70-130
9 Chloroethane	52.800	49.246	93.27	70-130
10 Isopentane	59.000	56.842	96.34	70-130
11 Trichlorofluoromet	112.40	116.62	103.76	70-130
14 1,1-Dichloroethene	79.300	77.901	98.24	70-130
15 Freon 113	153.30	155.87	101.68	70-130
18 Carbon Disulfide	62.300	44.038	70.69	70-130
19 2-Propanol	49.200	48.226	98.02	70-130
22 Methylene Chloride	69.500	64.961	93.47	70-130
25 trans-1,2-Dichloro	79.300	70.033	88.31	70-130
26 MTBE	72.100	82.459	114.37	70-130
28 Hexane	70.500	70.690	100.27	70-130
29 1,1-Dichloroethane	81.000	75.683	93.44	70-130
37 cis-1,2-Dichloroet	79.300	86.318	108.85	70-130
38 2-Butanone	59.000	65.321	110.71	70-130
44 Chloroform	97.700	96.284	98.55	70-130
45 1,1,1-Trichloroeth	109.10	111.57	102.26	70-130
46 Cyclohexane	68.800	68.253	99.21	70-130
47 Carbon Tetrachlori	125.80	130.22	103.52	70-130
48 Benzene	63.900	58.340	91.30	70-130
50 1,2-Dichloroethane	80.900	81.783	101.09	70-130
51 2,2,4-Trimethylpen	93.400	96.098	102.89	70-130
53 Heptane	82.000	80.353	97.99	70-130
56 Trichloroethene	107.50	102.16	95.03	70-130
58 Methyl Cyclohexane	80.300	84.142	104.78	70-130
59 1,2-Dichloropropan	92.400	101.76	110.13	70-130
60 1,4-Dioxane	72.100	75.413	104.59	70-130
65 4-Methyl-2-pentano	81.900	87.316	106.61	70-130
67 Toluene	75.400	76.907	102.00	70-130
70 1,1,2-Trichloroeth	109.10	115.85	106.19	70-130
71 Tetrachloroethene	135.70	140.09	103.23	70-130

SPIKE COMPOUND	CONC ADDED NG	CONC RECOVERED NG	% RECOVERED	LIMITS
72 2-Hexanone	81.900	84.799	103.54	70-130
74 1,2-Dibromoethane	153.70	171.80	111.78	70-130
81 Chlorobenzene	92.100	91.760	99.63	70-130
82 Ethyl Benzene	86.800	88.849	102.36	70-130
84 m,p-Xylene	86.800	88.748	102.24	70-130
88 o-Xylene	86.800	90.151	103.86	70-130
89 Styrene	85.200	89.567	105.13	70-130
91 Cumene	98.300	99.670	101.39	70-130
94 1,1,2,2-Tetrachlor	137.30	147.50	107.43	70-130
96 Propylbenzene	98.300	100.56	102.30	70-130
97 4-Ethyltoluene	98.300	98.664	100.37	70-130
98 1,3,5-Trimethylben	98.300	97.969	99.66	70-130
100 1,2,4-Trimethylben	98.300	99.314	101.03	70-130
101 1,3-Dichlorobenzen	120.30	119.19	99.08	70-130
102 1,4-Dichlorobenzen	120.30	119.82	99.60	70-130
105 1,2-Dichlorobenzen	120.30	118.70	98.67	70-130
106 1,2,4-Trichloroben	148.40	150.60	101.48	70-130
107 Hexachlorobutadien	213.30	210.07	98.48	70-130
109 Naphthalene	50.000	53.836	107.67	70-130
110 2-Methylnaphthalen	50.000	57.293	114.59	70-130
111 1-Methylnaphthalen	50.000	57.228	114.46	70-130
112 Acenaphthylene	50.000	60.301	120.60	70-130
113 Acenaphthene	50.000	62.220	124.44	70-130
114 Fluorene	50.000	73.958	147.92*	60-140
115 Phenanthrene	50.000	58.556	117.11	60-140
116 Anthracene	50.000	64.895	129.79	60-140
117 Fluoranthene	50.000	72.184	144.37*	60-140
118 Pyrene	50.000	74.829	149.66*	60-140

SURROGATE COMPOUND	AMOUNT ADDED ng	AMOUNT RECOVERED ng	% RECOVERED	LIMITS
$ 49 1,2-Dichloroethane	25.000	22.769	91.08	50-150
$ 66 Toluene-d8	25.000	24.670	98.68	50-150
$ 108 Naphthalene-d8	25.000	23.607	94.43	50-150

Data File: /chem/msd6.i/15jun16.b/6061506.d

Date : 15-JUN-2016 14:25

Client ID: LCS

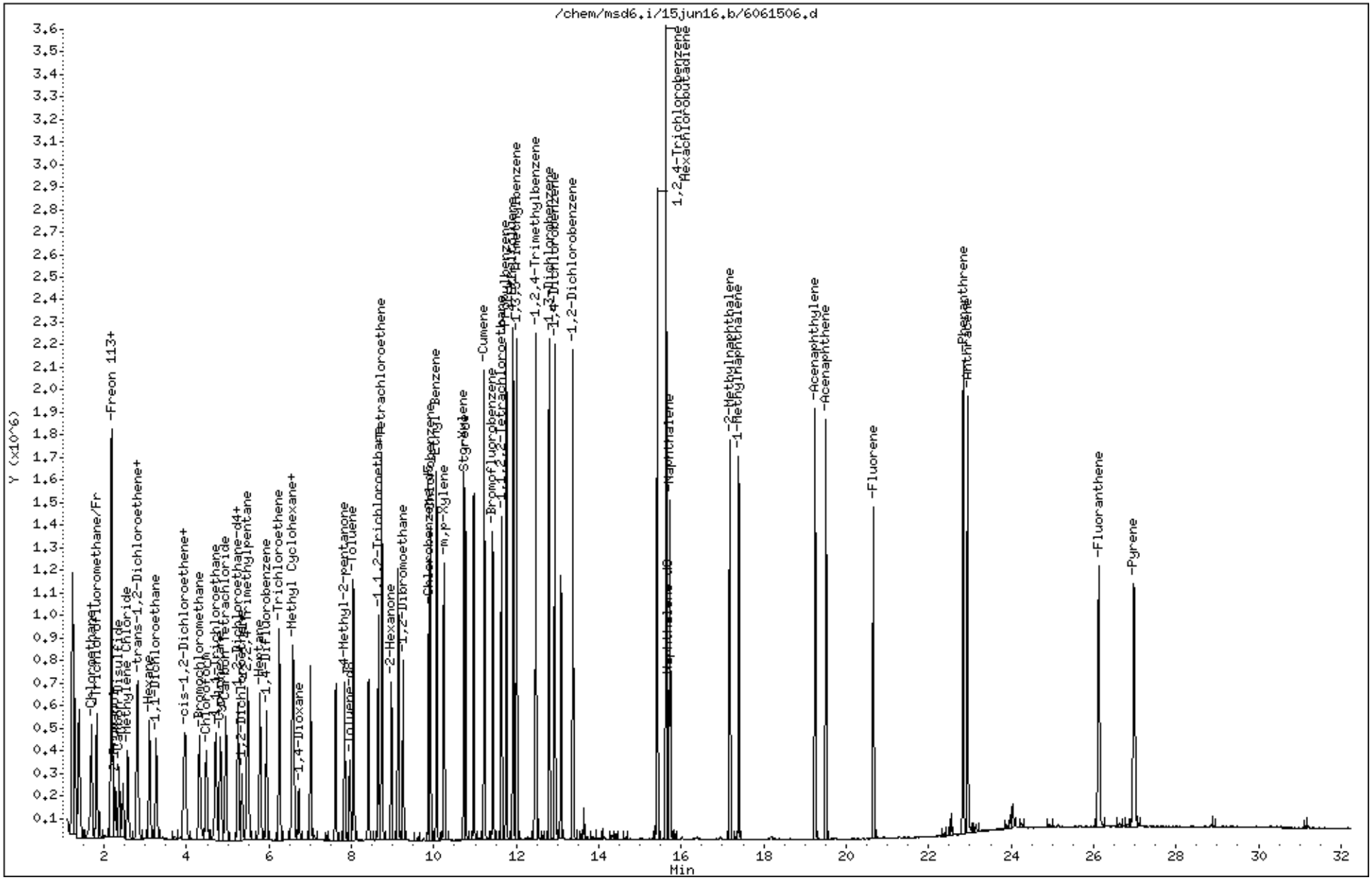
Sample Info: ;VI VOC+PAH ICV/LCS;LCS

Column phase: RTx-624

Instrument: msd6.i

Operator: CT

Column diameter: 0.53



Data File: /chem/msd6.i/15jun16.b/6061506.d

Date : 15-JUN-2016 14:25

Client ID: LCS

Instrument: msd6.i

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

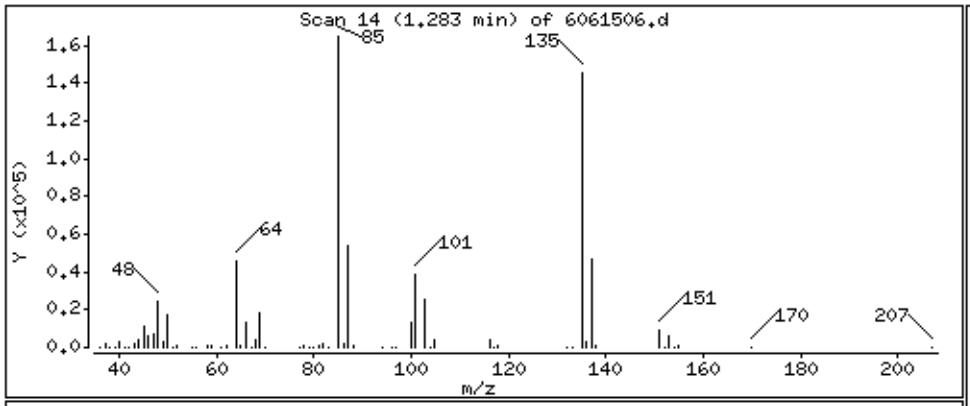
Operator: CT

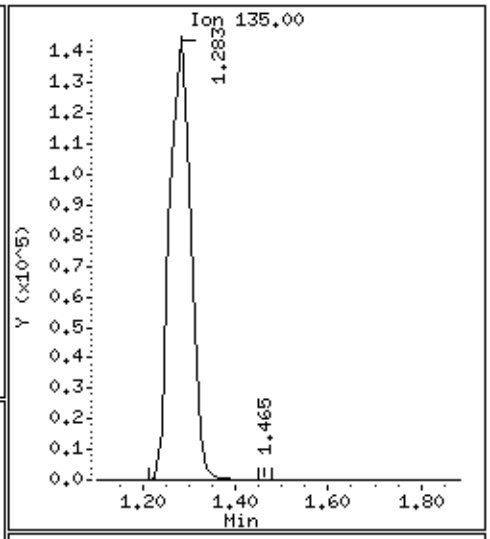
Column phase: RTx-624

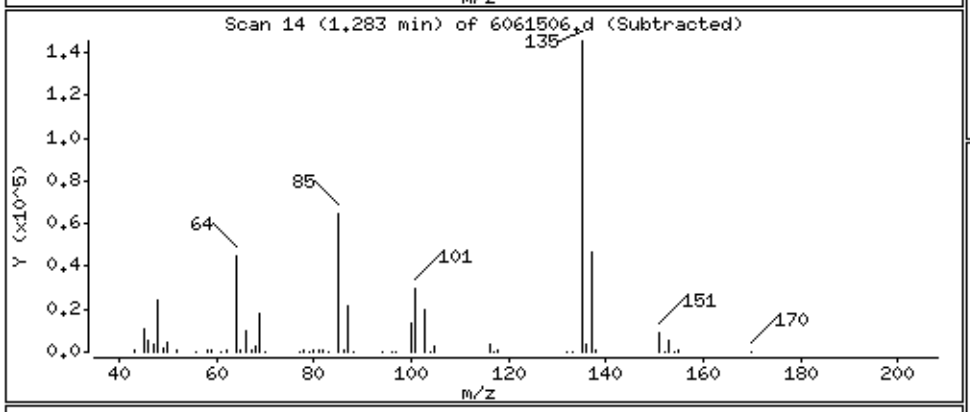
Column diameter: 0.53

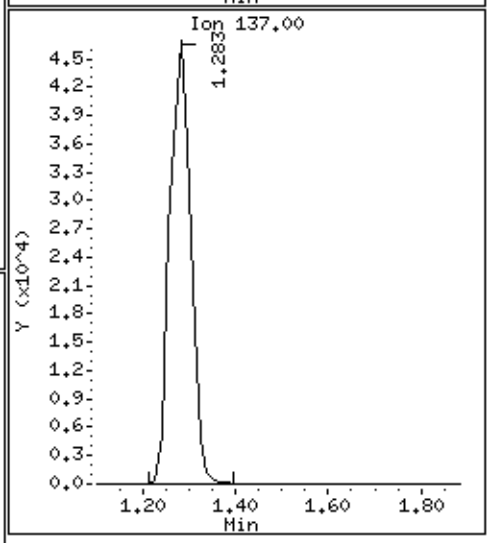
3 Freon 114

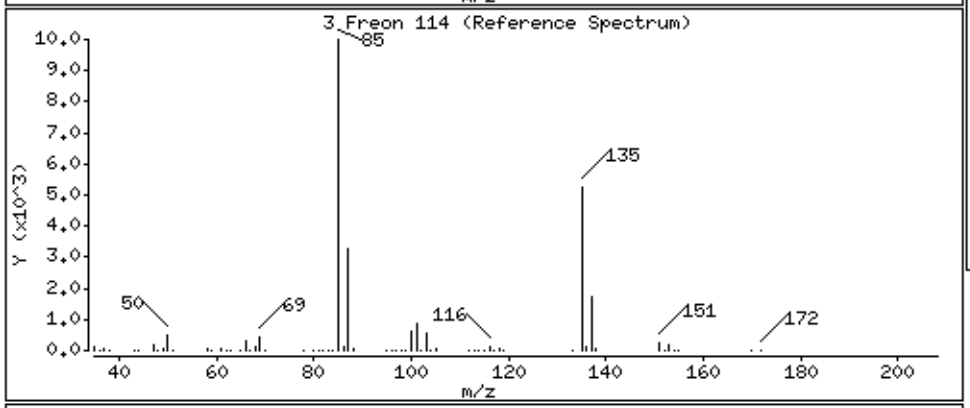
Concentration: 149.05 NG

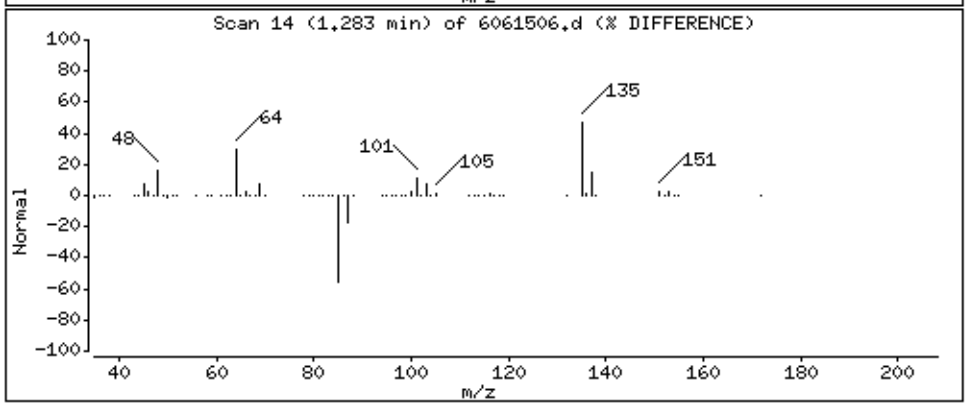












Data File: /chem/msd6.i/15jun16.b/6061506.d

Date : 15-JUN-2016 14:25

Client ID: LCS

Instrument: msd6.i

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

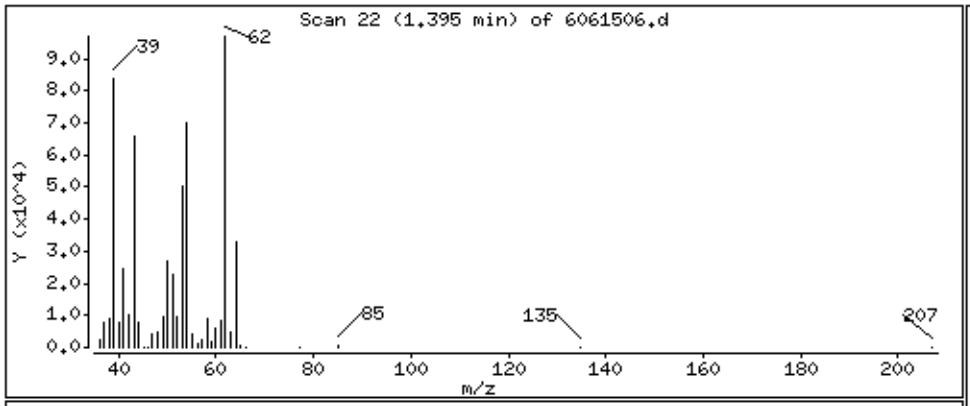
Operator: CT

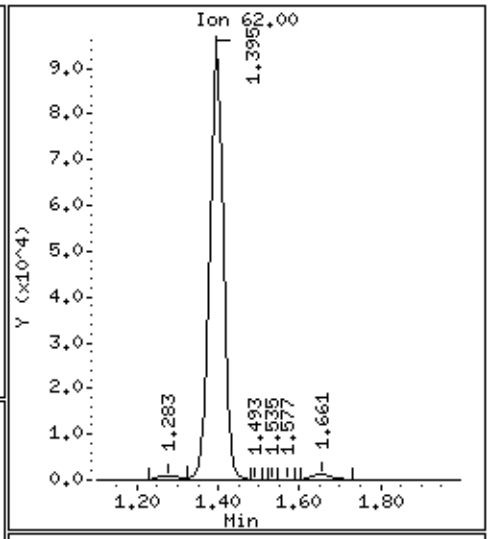
Column phase: RTx-624

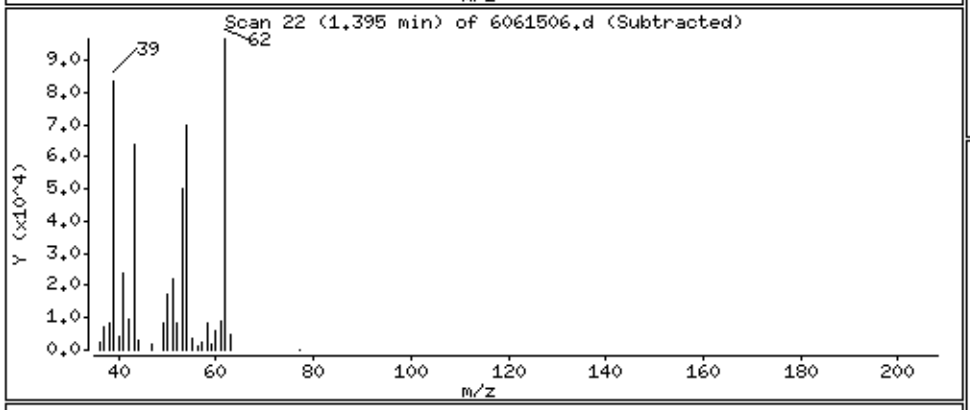
Column diameter: 0.53

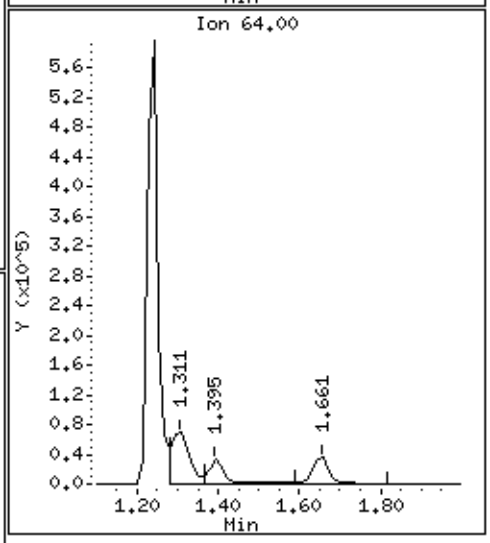
6 Vinyl Chloride

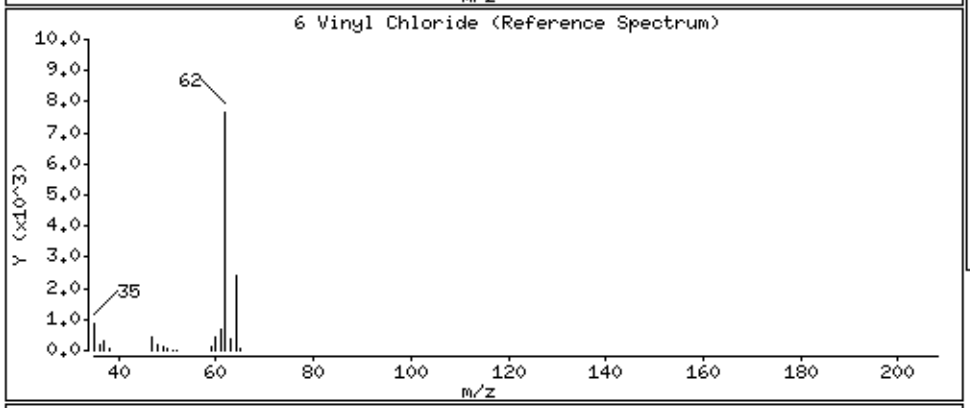
Concentration: 55.839 NG

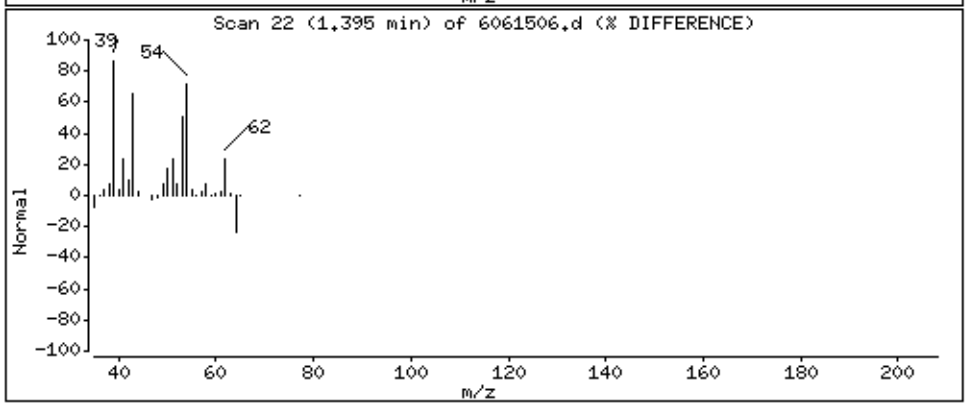












Data File: /chem/msd6.i/15jun16.b/6061506.d

Date : 15-JUN-2016 14:25

Client ID: LCS

Instrument: msd6.i

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

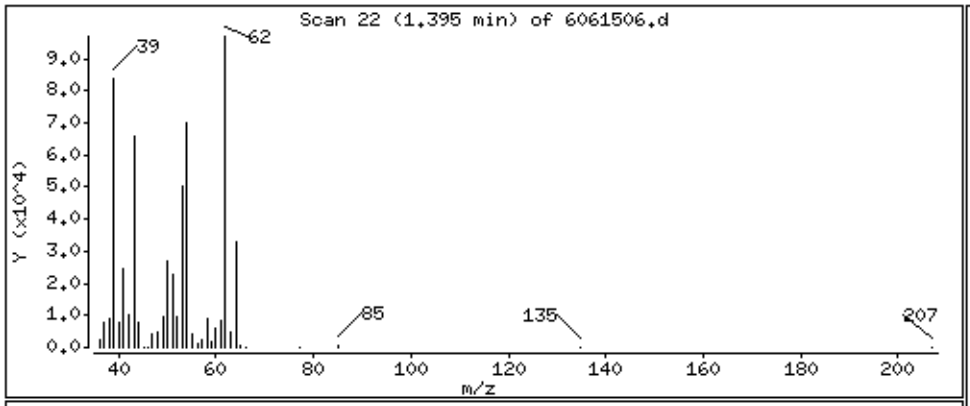
Operator: CT

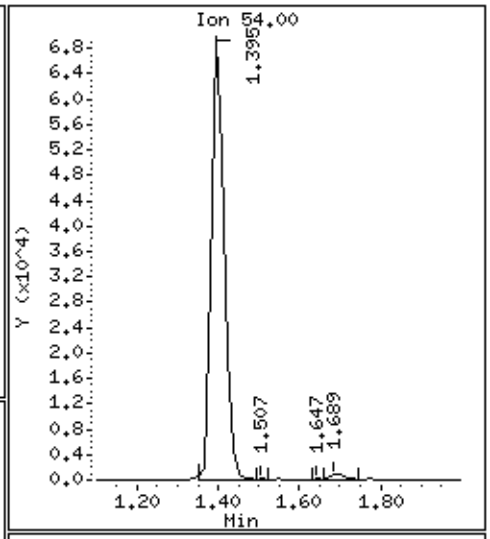
Column phase: RTx-624

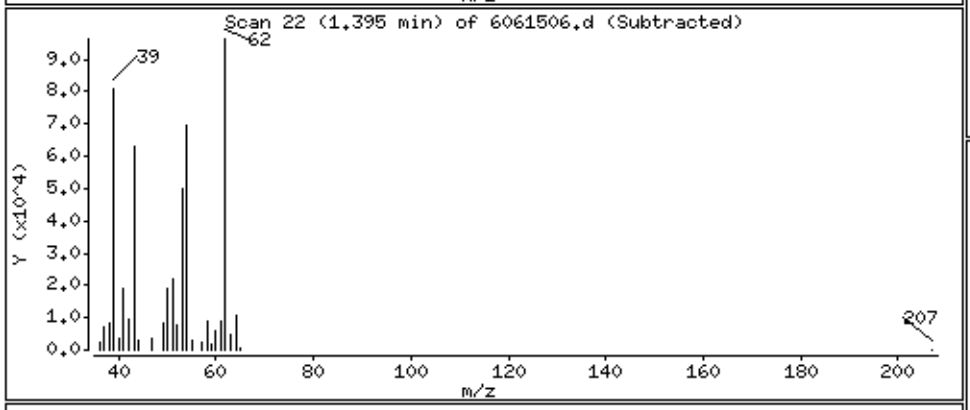
Column diameter: 0.53

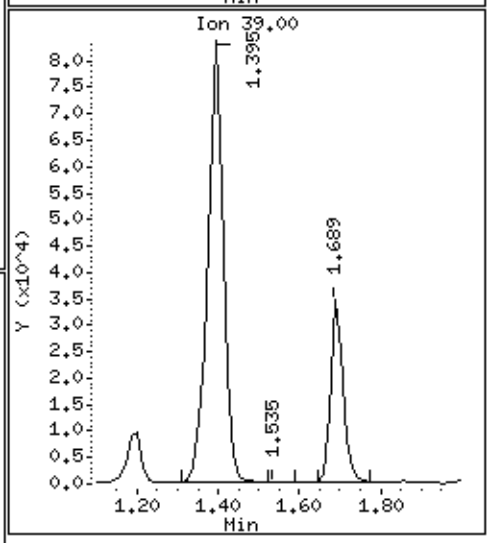
7 1,3-Butadiene

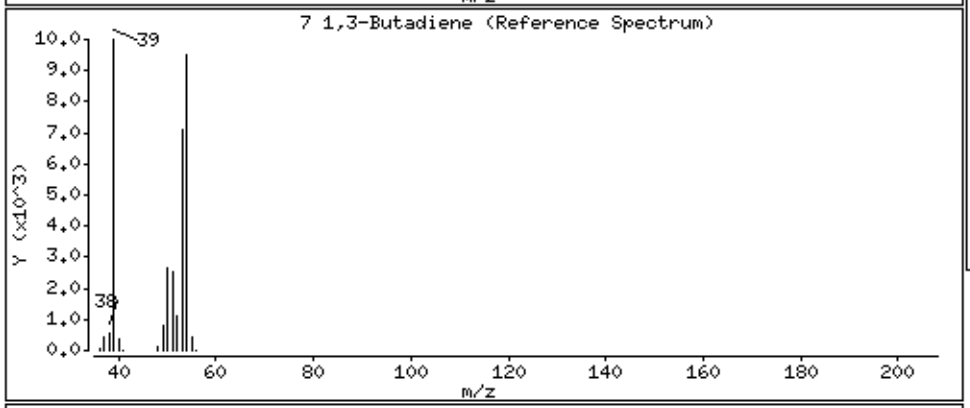
Concentration: 43.165 NG

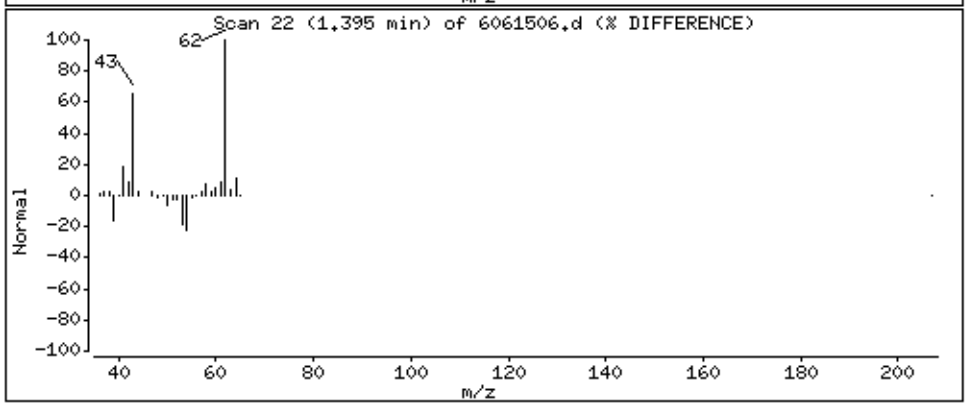












Data File: /chem/msd6.i/15jun16.b/6061506.d

Date : 15-JUN-2016 14:25

Client ID: LCS

Instrument: msd6.i

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

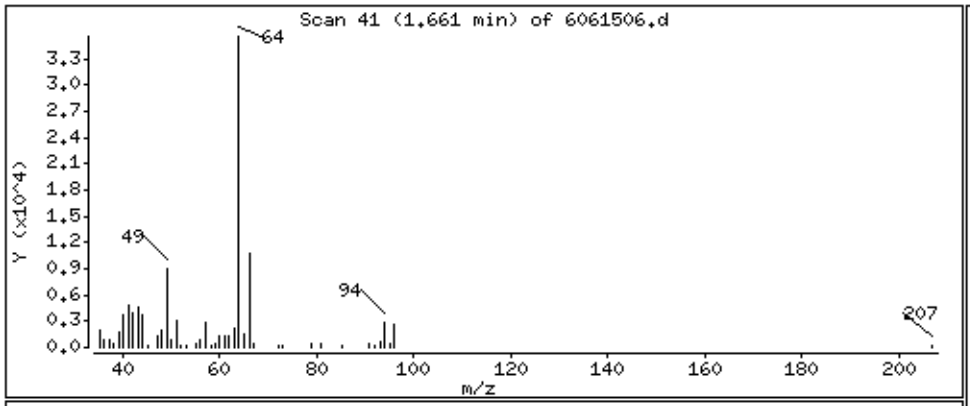
Operator: CT

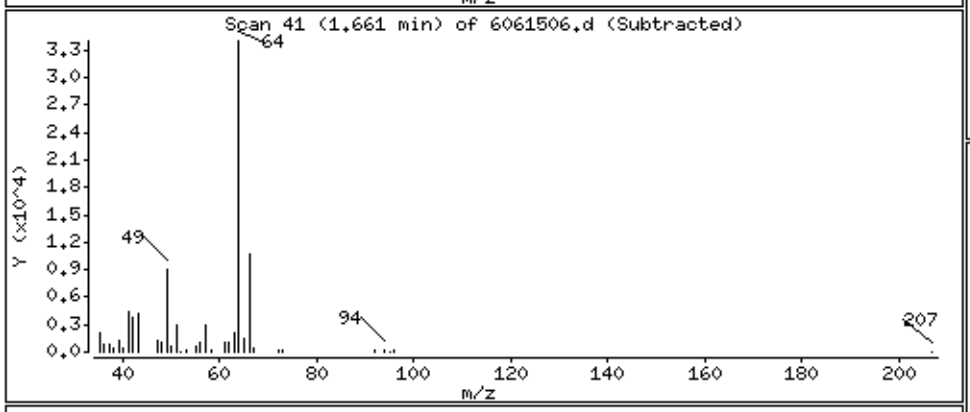
Column phase: RTx-624

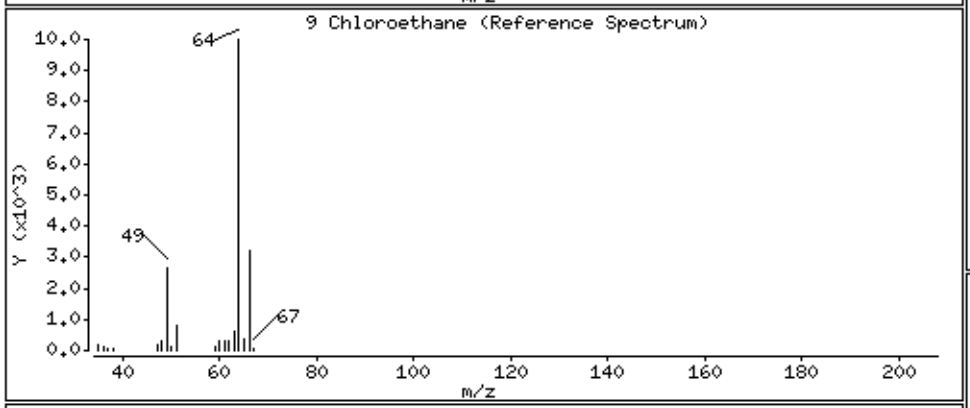
Column diameter: 0.53

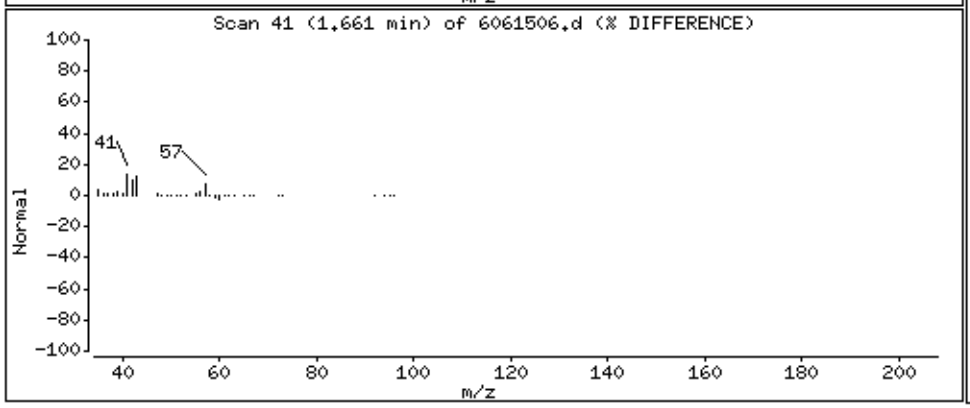
9 Chloroethane

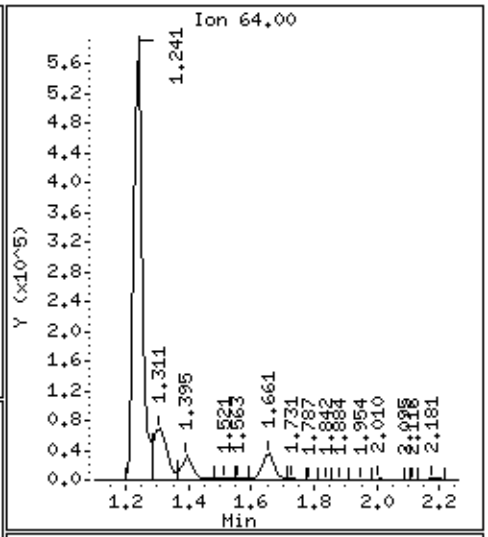
Concentration: 49.246 NG

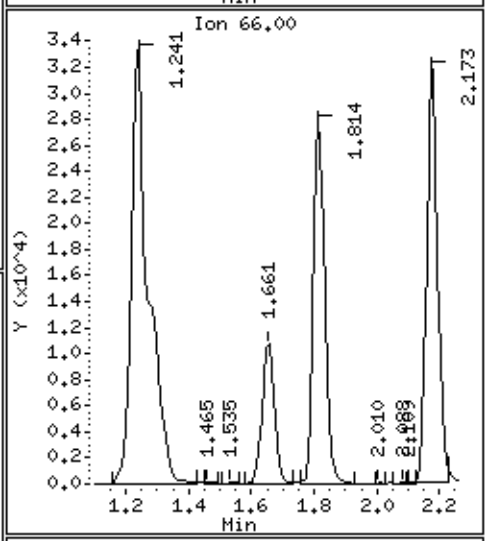


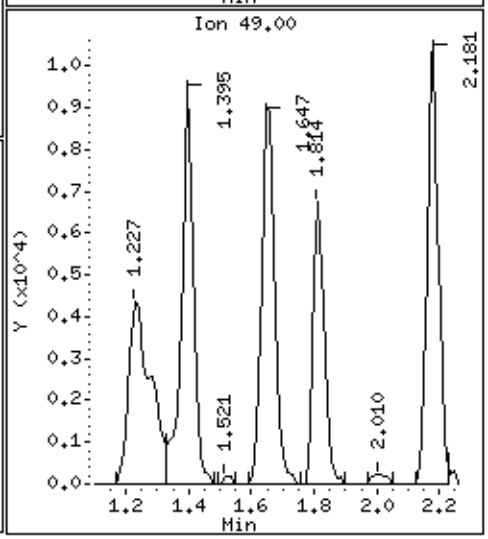












Data File: /chem/msd6.i/15jun16.b/6061506.d

Date : 15-JUN-2016 14:25

Client ID: LCS

Instrument: msd6.i

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

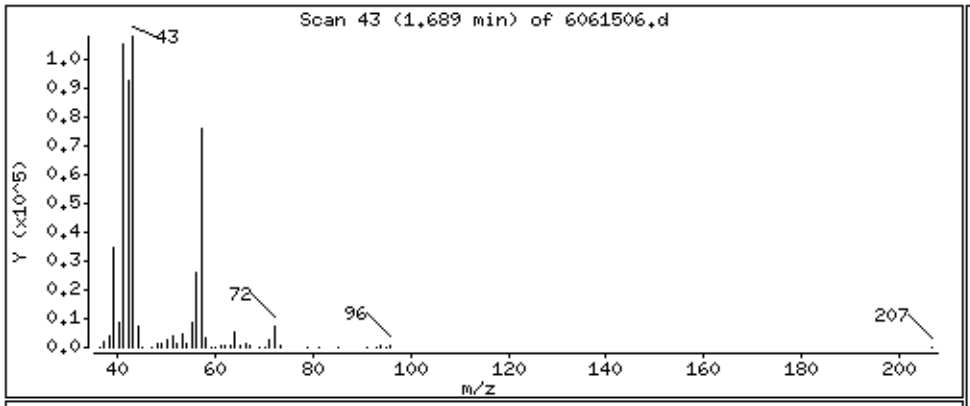
Operator: CT

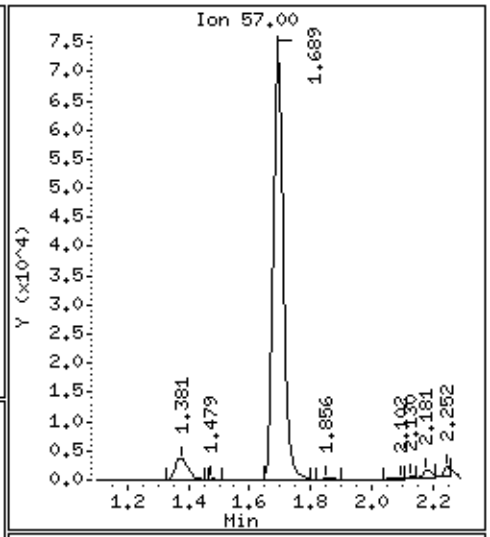
Column phase: RTx-624

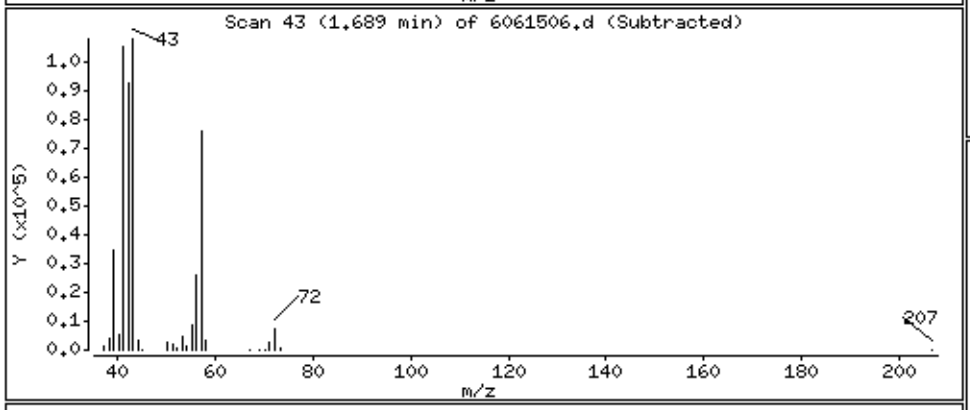
Column diameter: 0.53

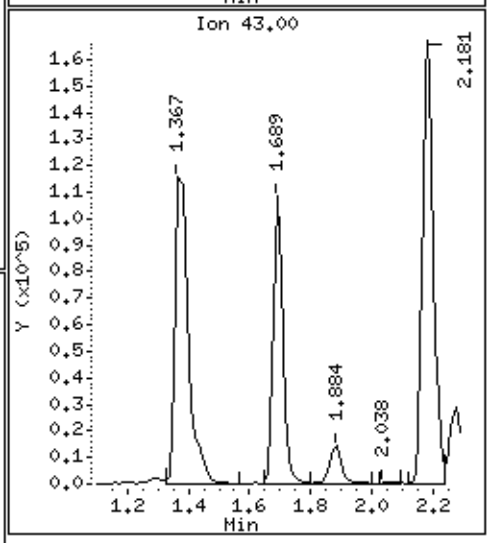
10 Isopentane

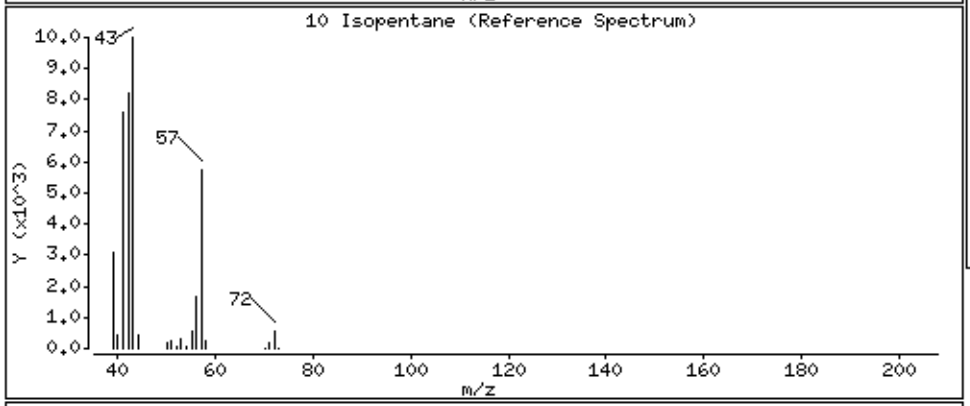
Concentration: 56.842 NG

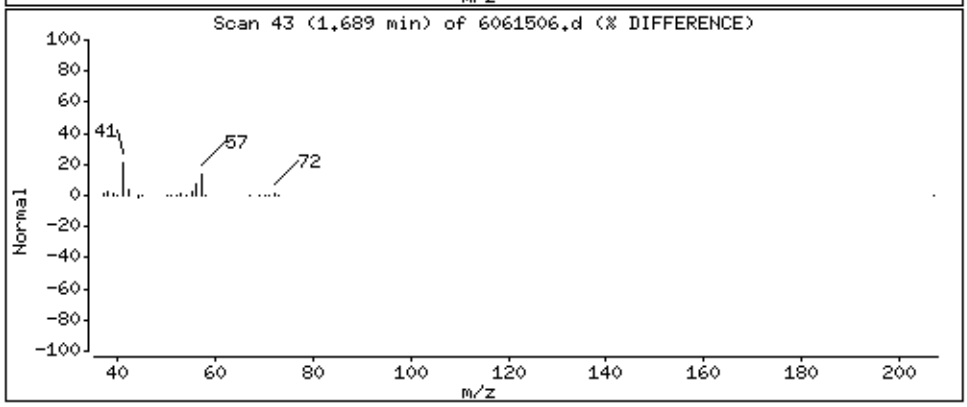












Data File: /chem/msd6.i/15jun16.b/6061506.d

Date : 15-JUN-2016 14:25

Client ID: LCS

Instrument: msd6.i

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

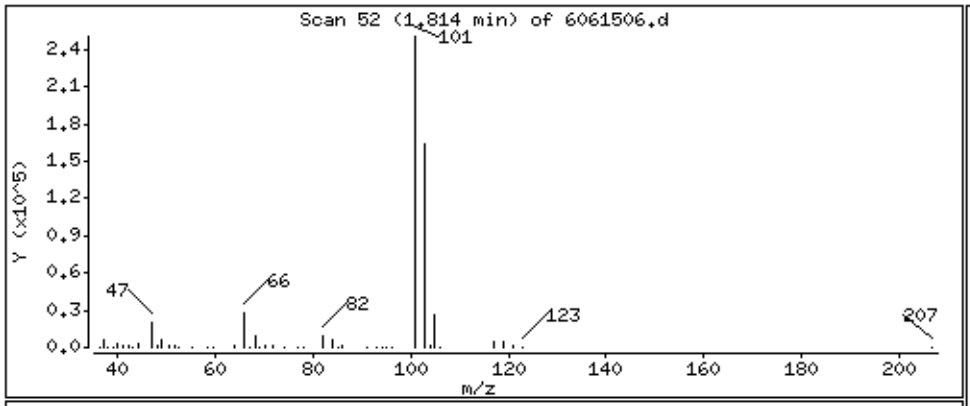
Operator: CT

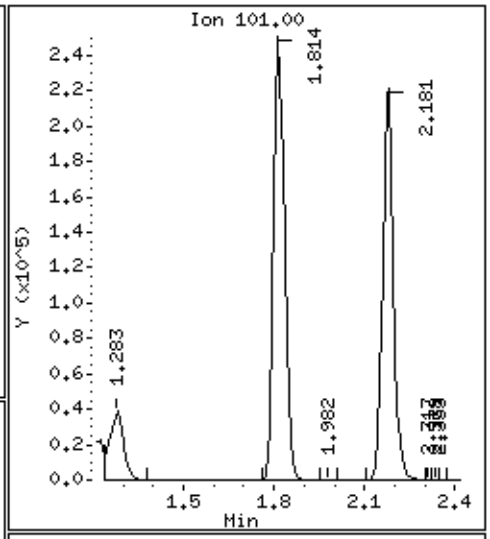
Column phase: RTx-624

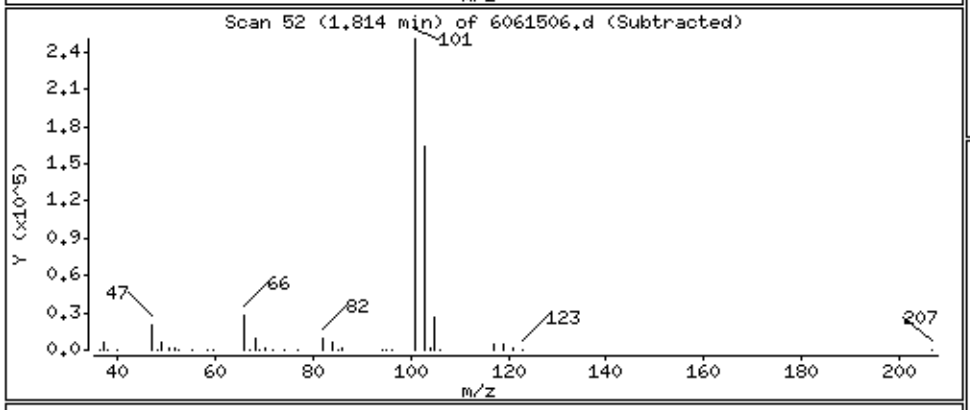
Column diameter: 0.53

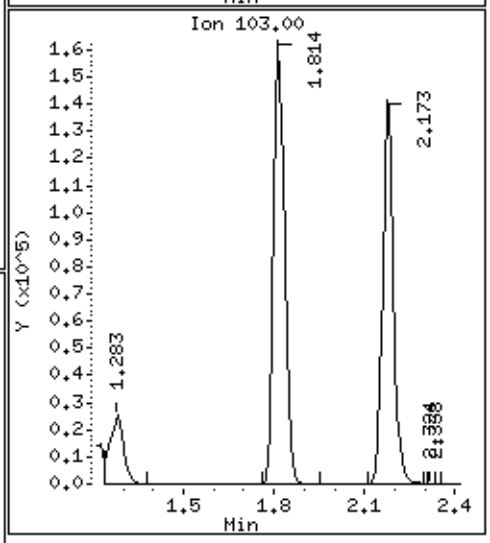
11 Trichlorofluoromethane/Fr11

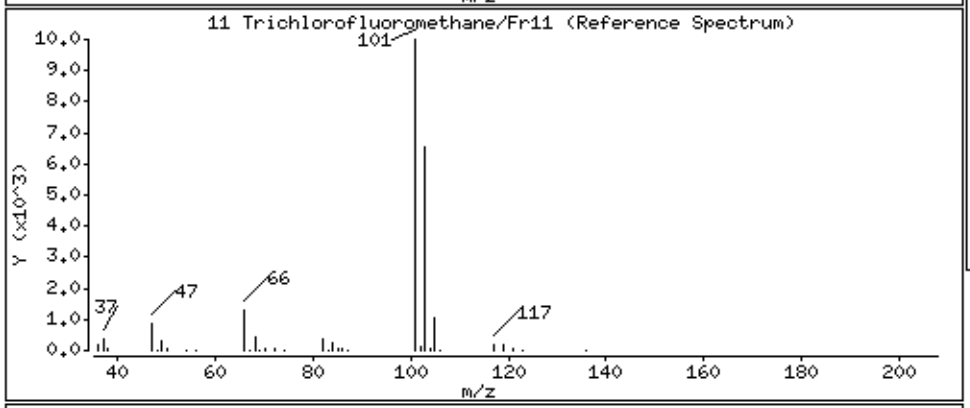
Concentration: 116.62 NG

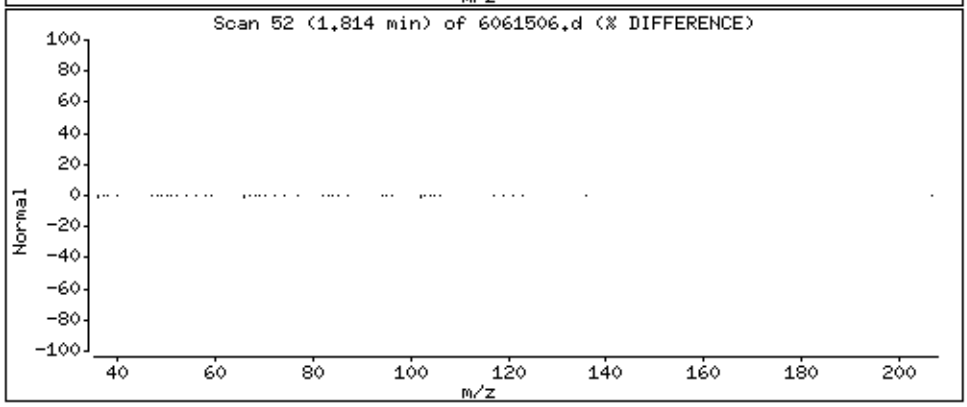












Data File: /chem/msd6.i/15jun16.b/6061506.d

Date : 15-JUN-2016 14:25

Client ID: LCS

Instrument: msd6.i

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

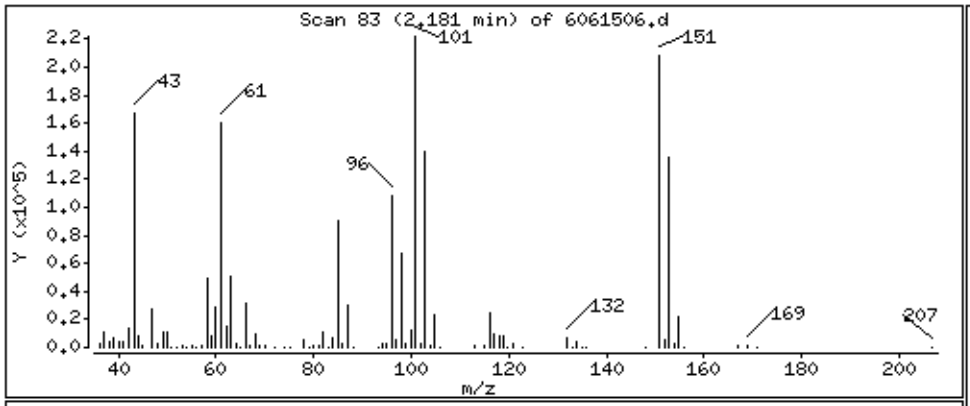
Operator: CT

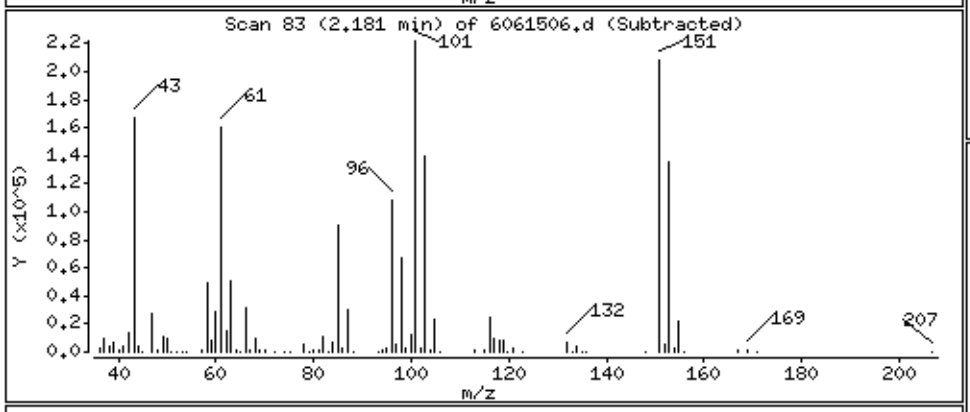
Column phase: RTx-624

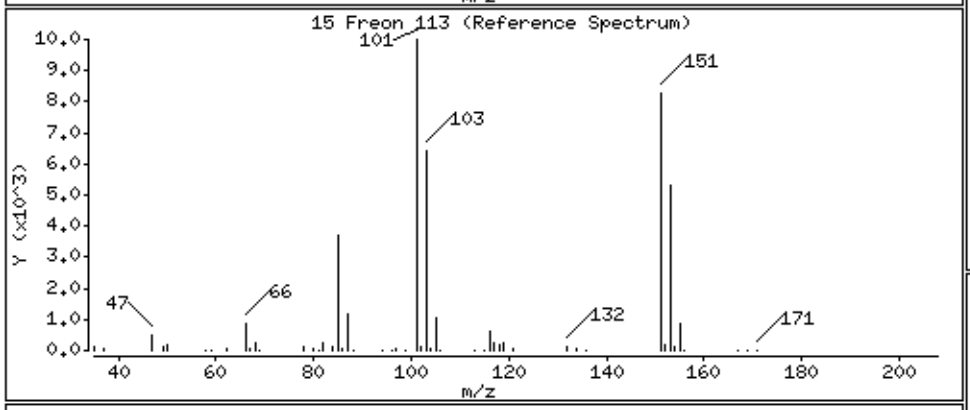
Column diameter: 0.53

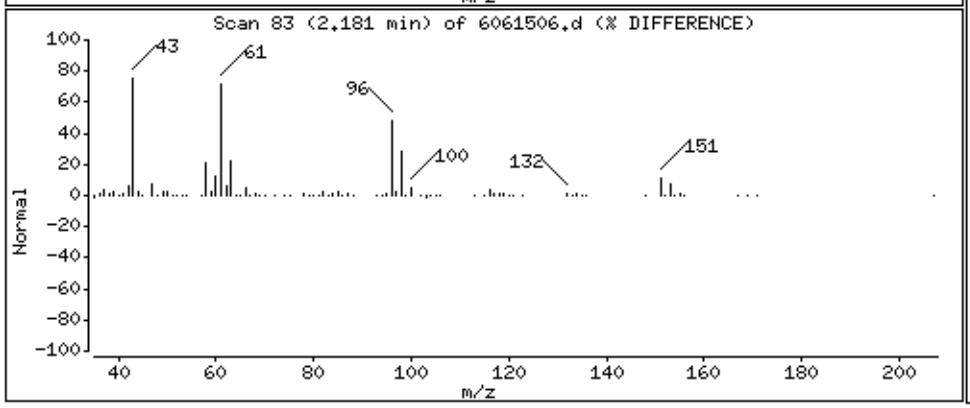
15 Freon 113

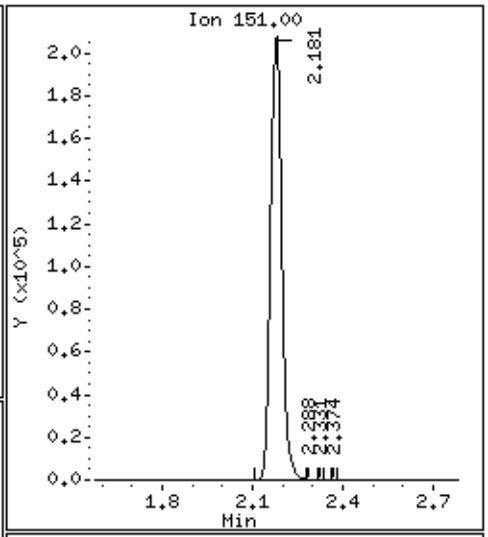
Concentration: 155.87 NG

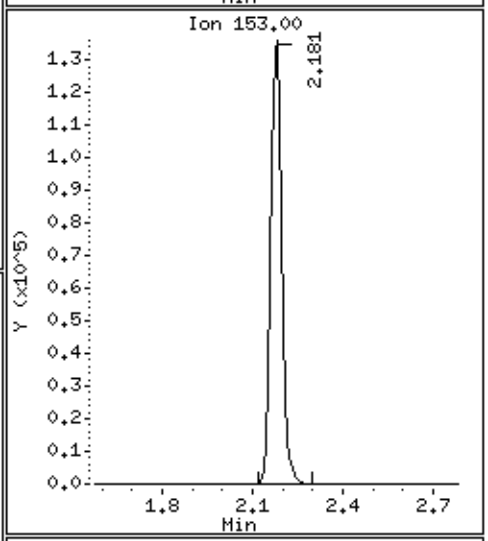


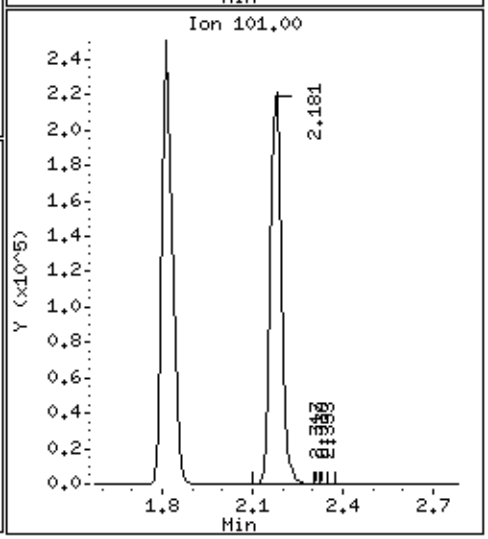












Data File: /chem/msd6.i/15jun16.b/6061506.d

Date : 15-JUN-2016 14:25

Client ID: LCS

Instrument: msd6.i

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

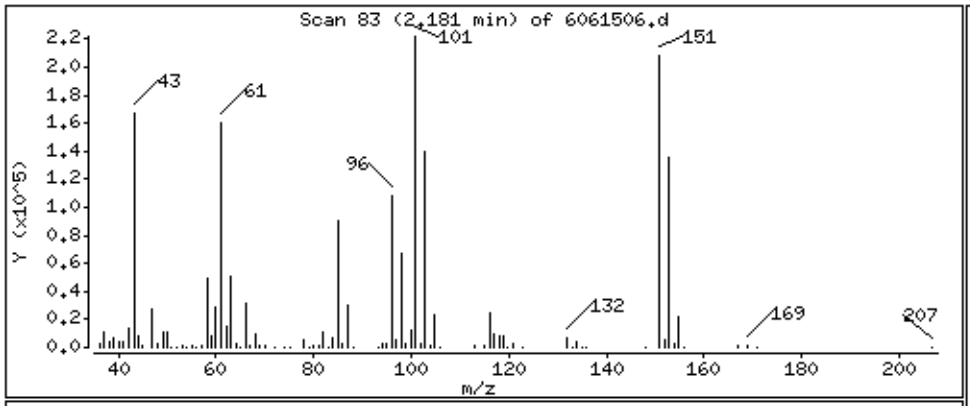
Operator: CT

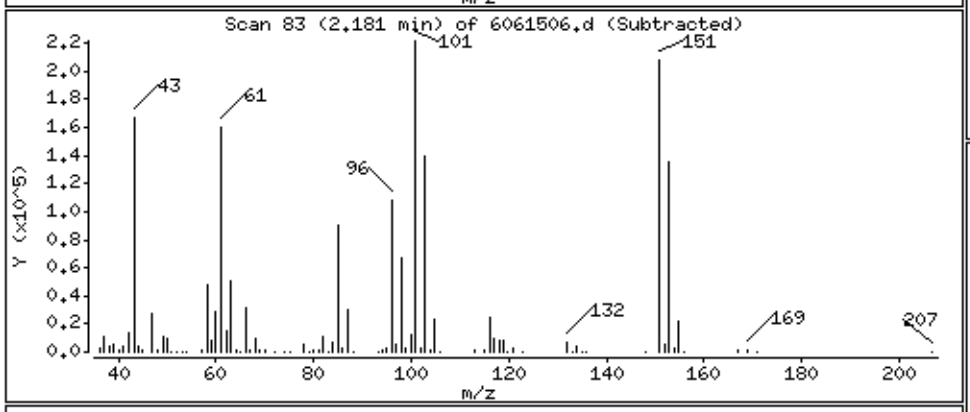
Column phase: RTx-624

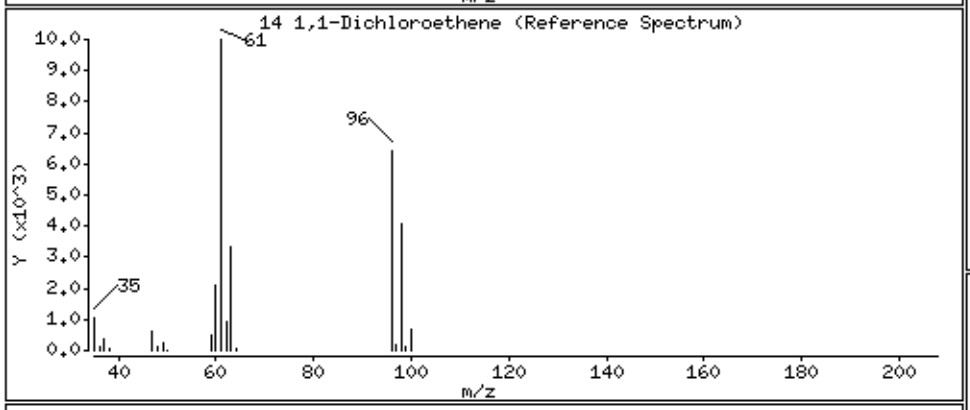
Column diameter: 0.53

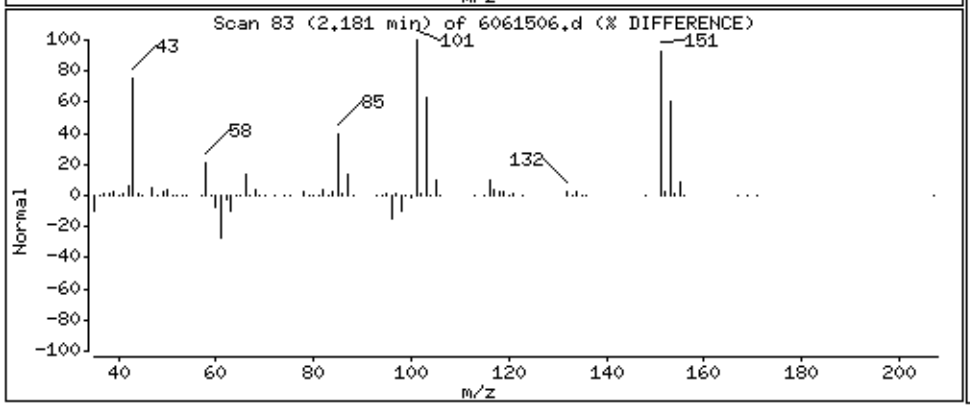
14 1,1-Dichloroethene

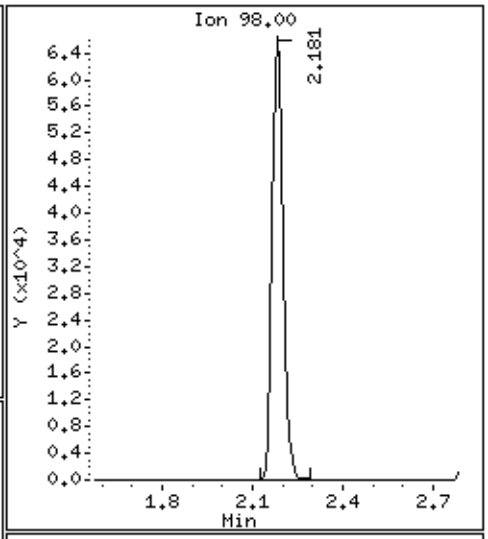
Concentration: 77.901 NG

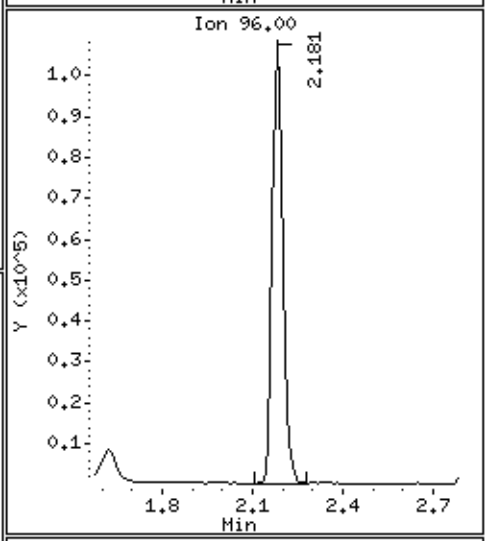


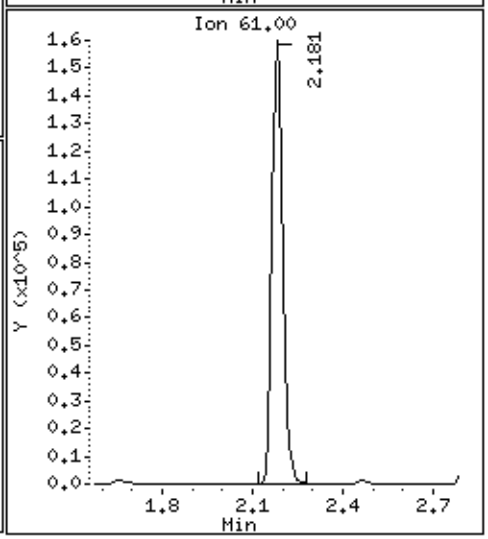












Data File: /chem/msd6.i/15jun16.b/6061506.d

Date : 15-JUN-2016 14:25

Client ID: LCS

Instrument: msd6.i

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

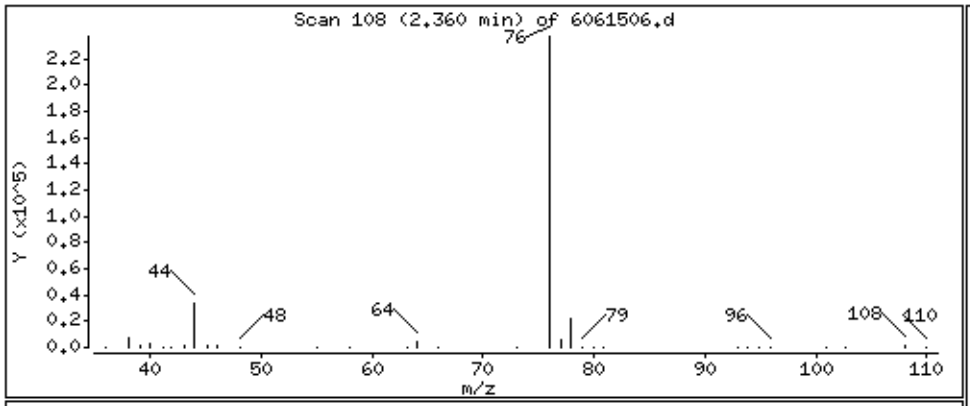
Operator: CT

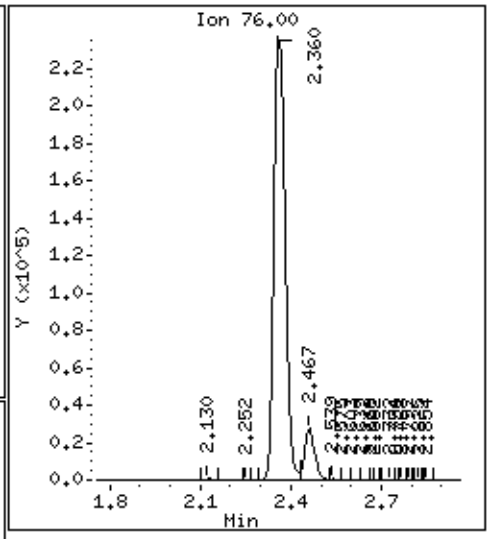
Column phase: RTx-624

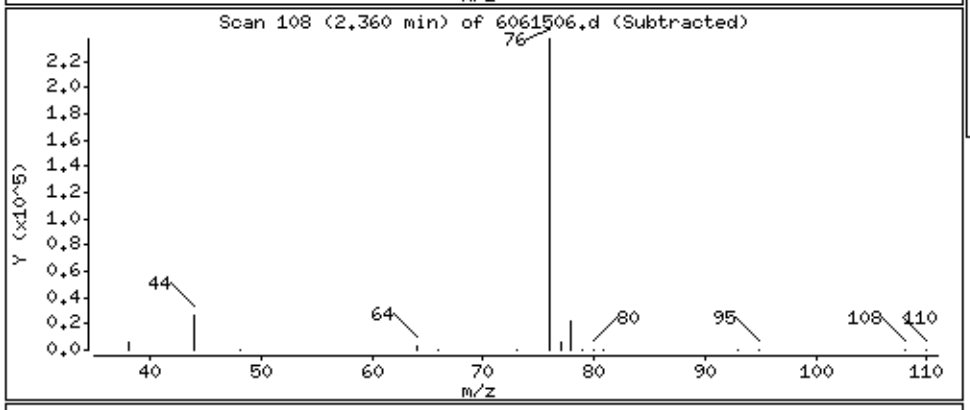
Column diameter: 0.53

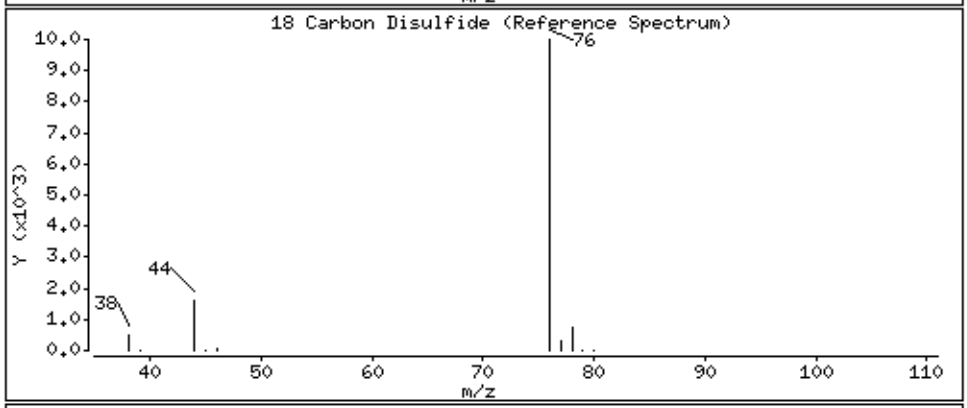
18 Carbon Disulfide

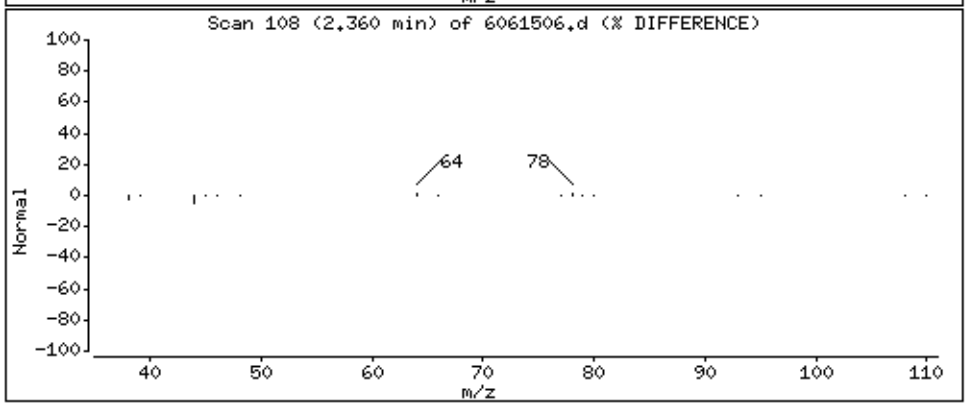
Concentration: 44.038 NG











Data File: /chem/msd6.i/15jun16.b/6061506.d

Date : 15-JUN-2016 14:25

Client ID: LCS

Instrument: msd6.i

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

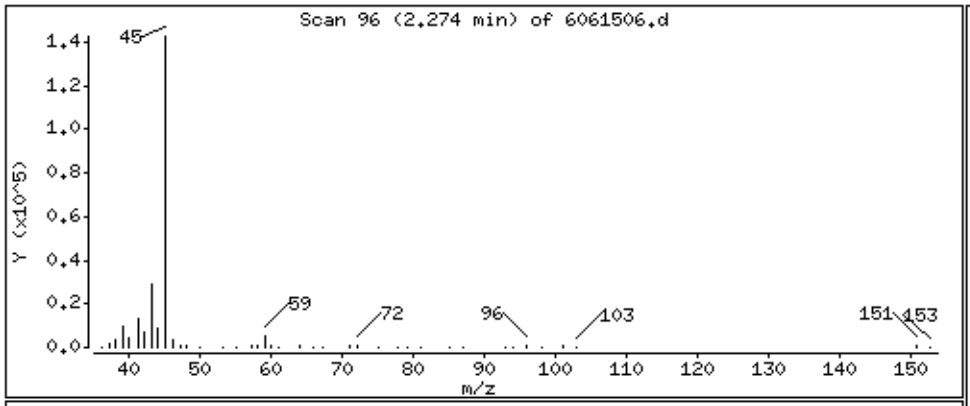
Operator: CT

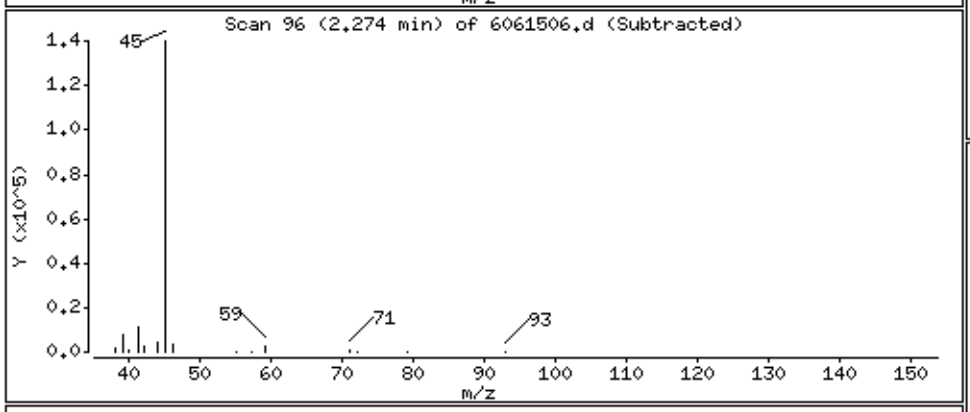
Column phase: RTx-624

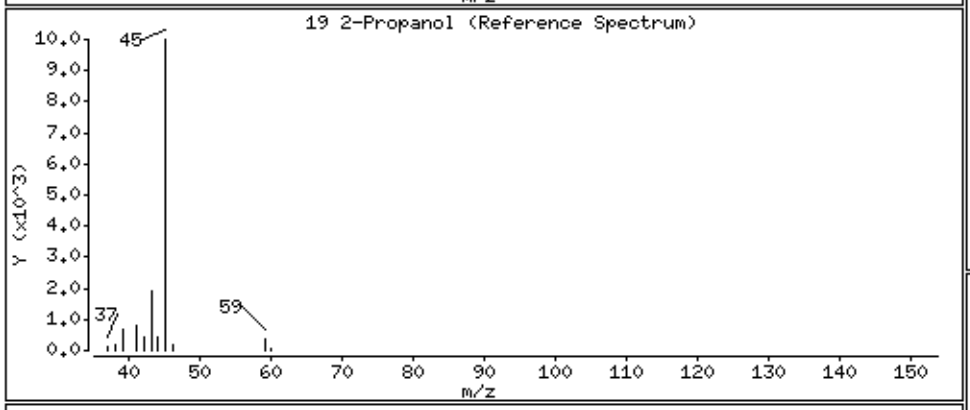
Column diameter: 0.53

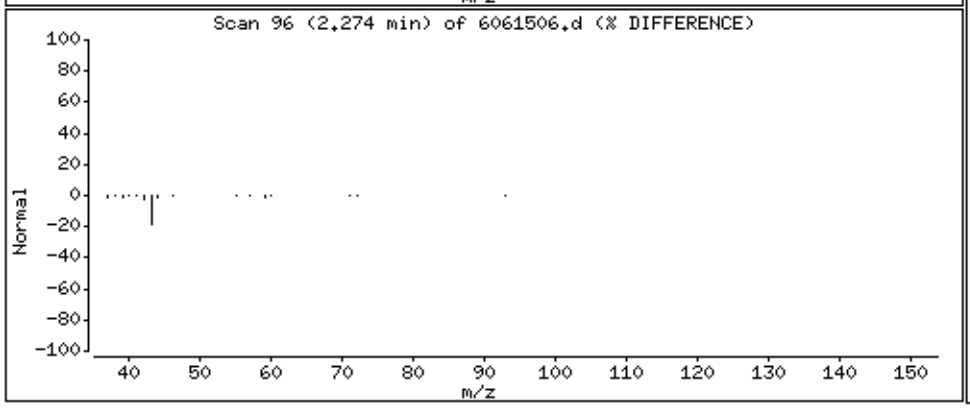
19 2-Propanol

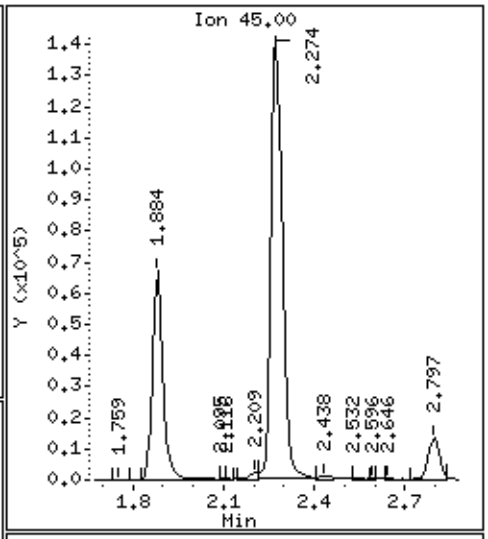
Concentration: 48.226 NG

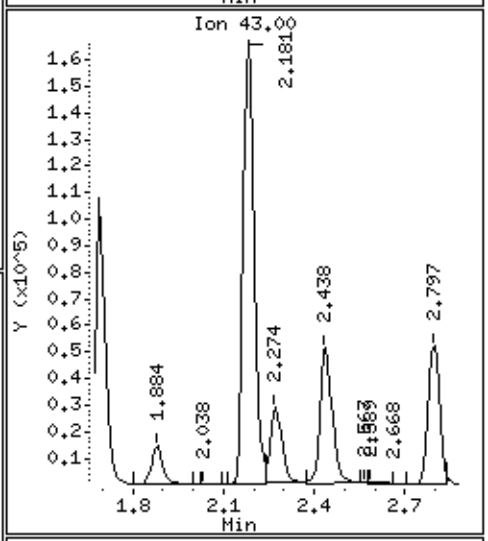


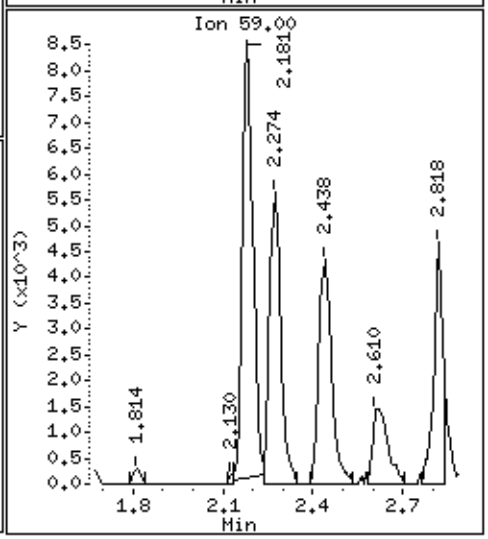












Data File: /chem/msd6.i/15jun16.b/6061506.d

Date : 15-JUN-2016 14:25

Client ID: LCS

Instrument: msd6.i

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

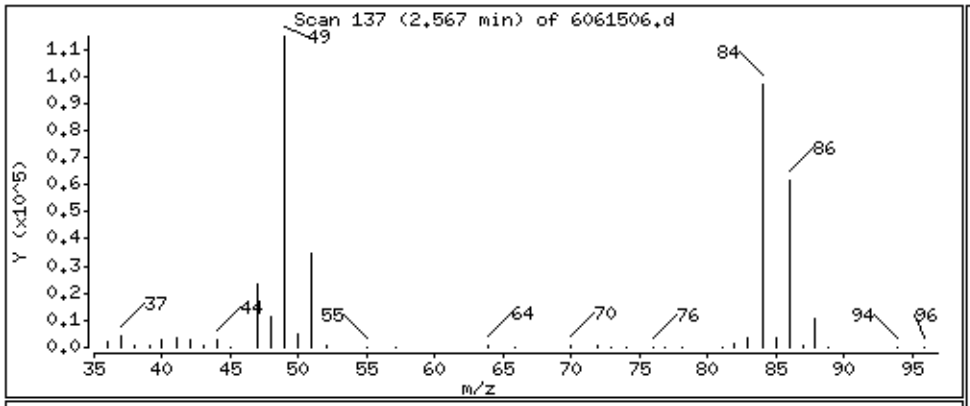
Operator: CT

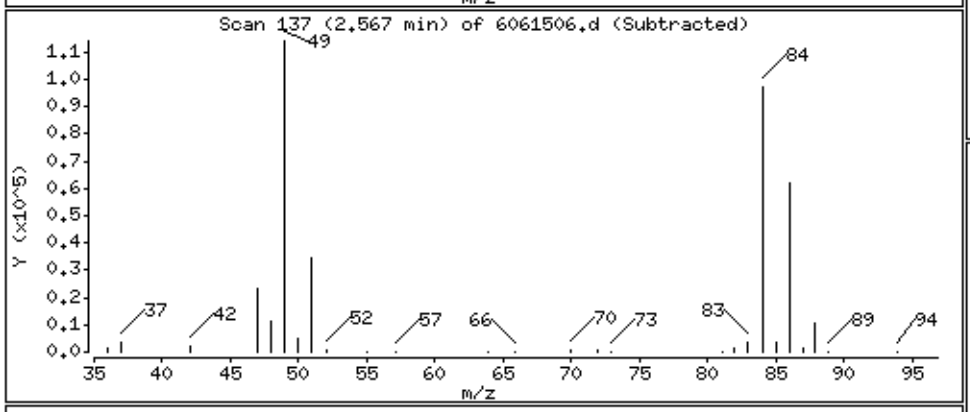
Column phase: RTx-624

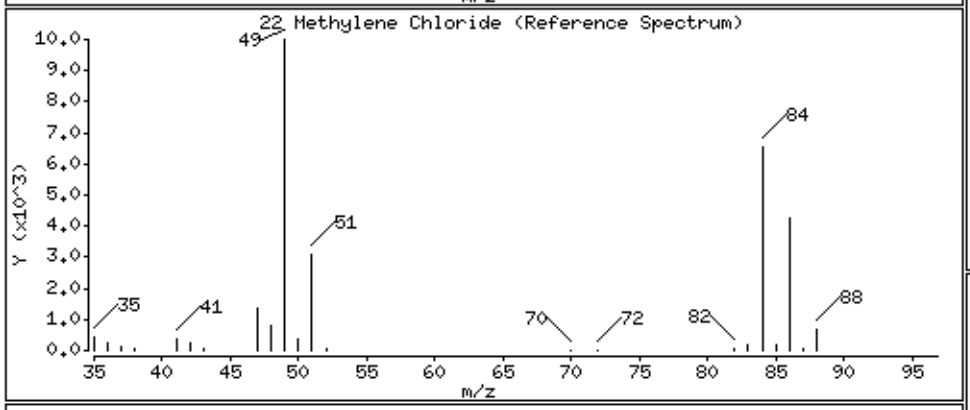
Column diameter: 0.53

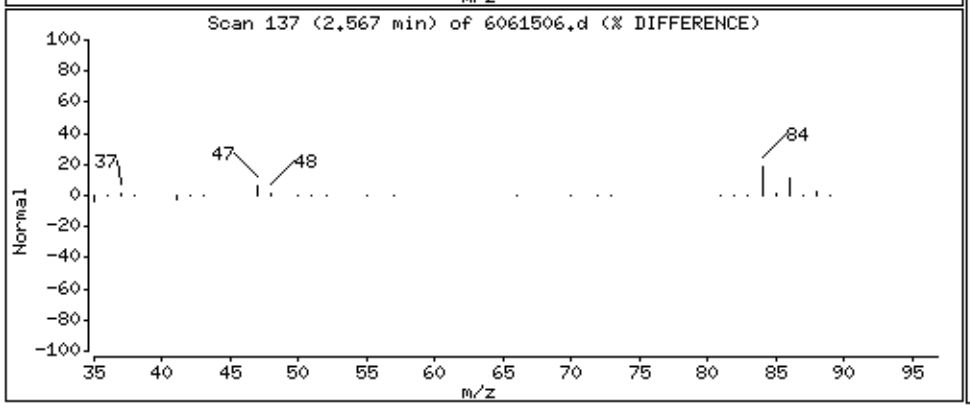
22 Methylene Chloride

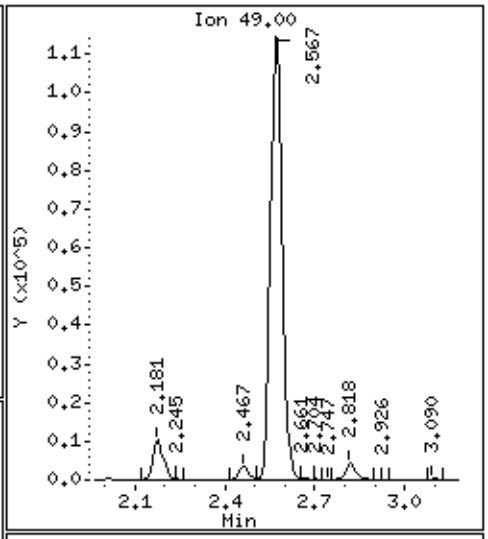
Concentration: 64.961 NG

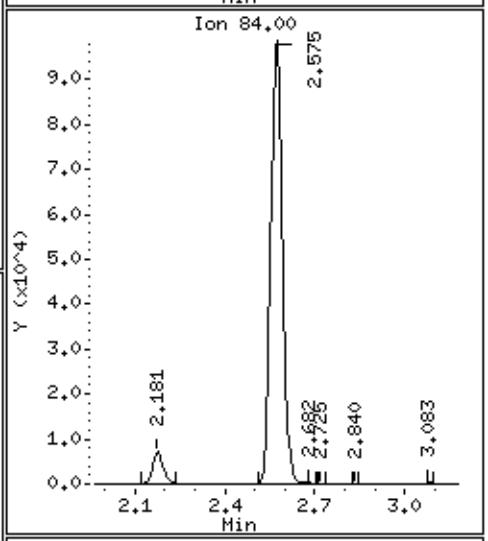


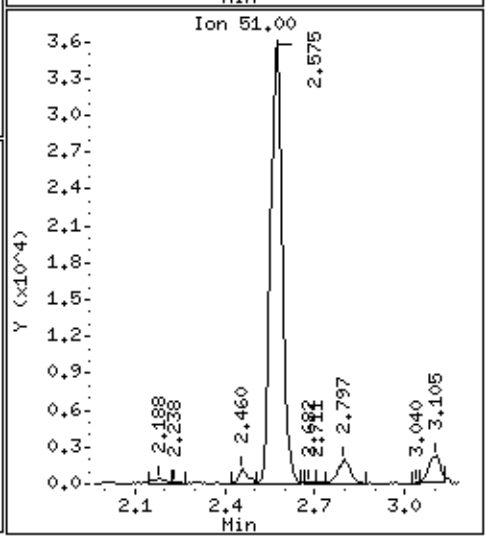












Data File: /chem/msd6.i/15jun16.b/6061506.d

Date : 15-JUN-2016 14:25

Client ID: LCS

Instrument: msd6.i

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

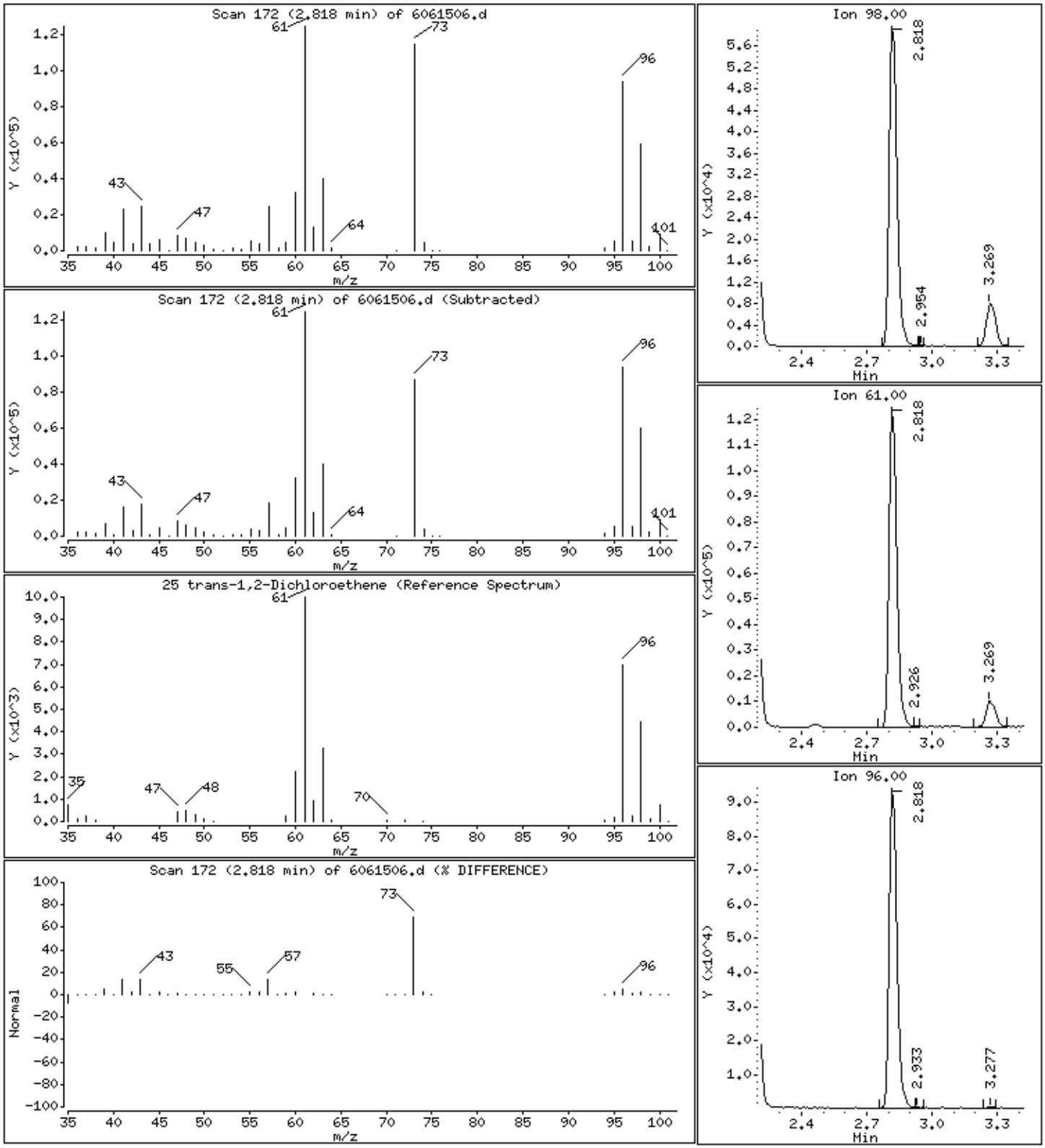
Operator: CT

Column phase: RTx-624

Column diameter: 0.53

25 trans-1,2-Dichloroethene

Concentration: 70.033 NG



Data File: /chem/msd6.i/15jun16.b/6061506.d

Date : 15-JUN-2016 14:25

Client ID: LCS

Instrument: msd6.i

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

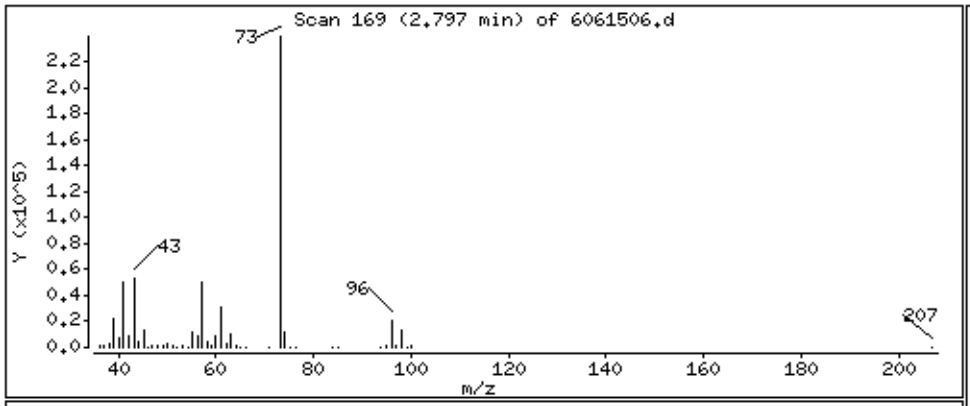
Operator: CT

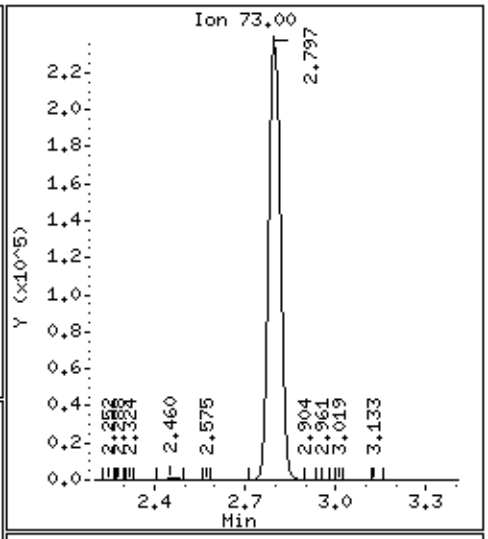
Column phase: RTx-624

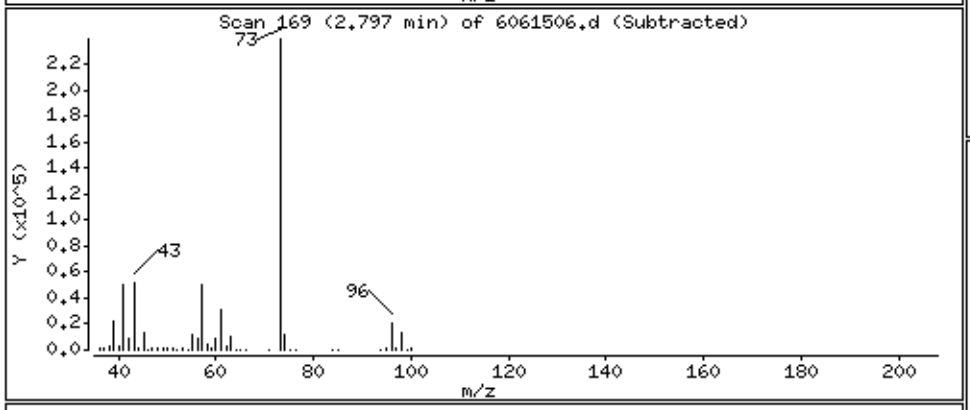
Column diameter: 0.53

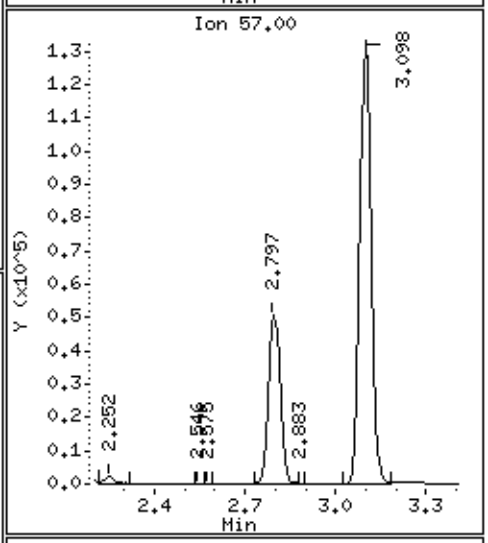
26 MTBE

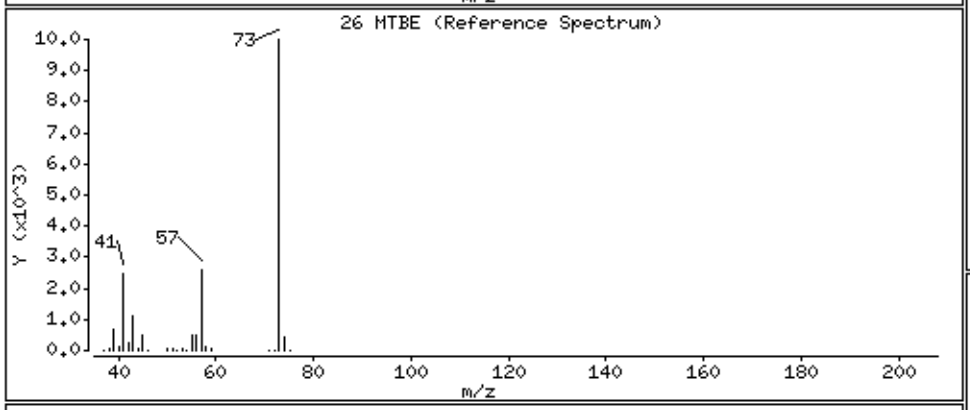
Concentration: 82.459 NG

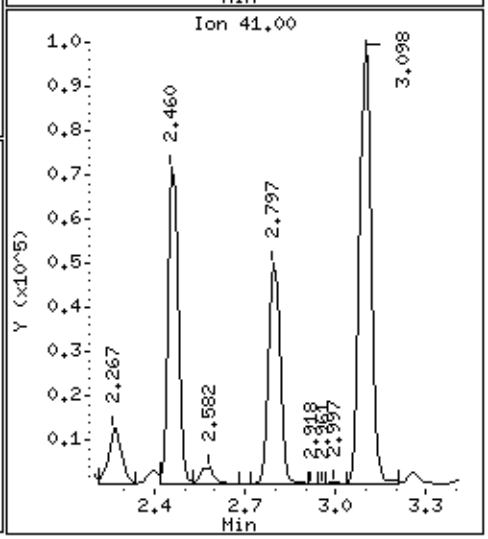


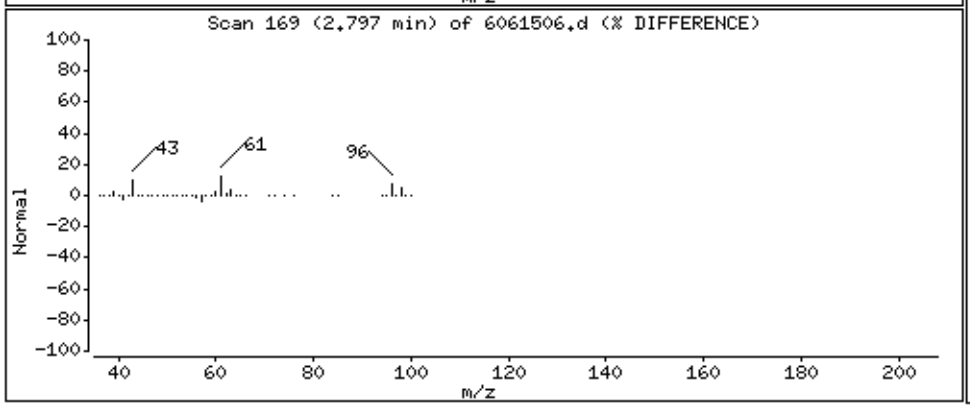












Data File: /chem/msd6.i/15jun16.b/6061506.d

Date : 15-JUN-2016 14:25

Client ID: LCS

Instrument: msd6.i

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

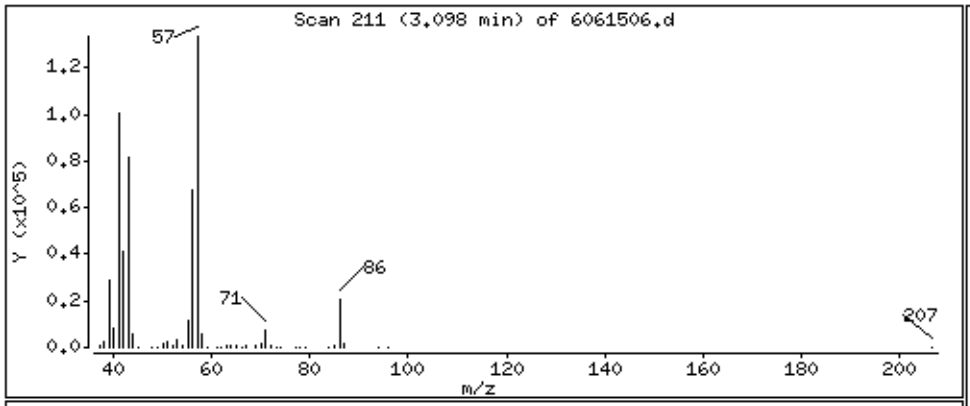
Operator: CT

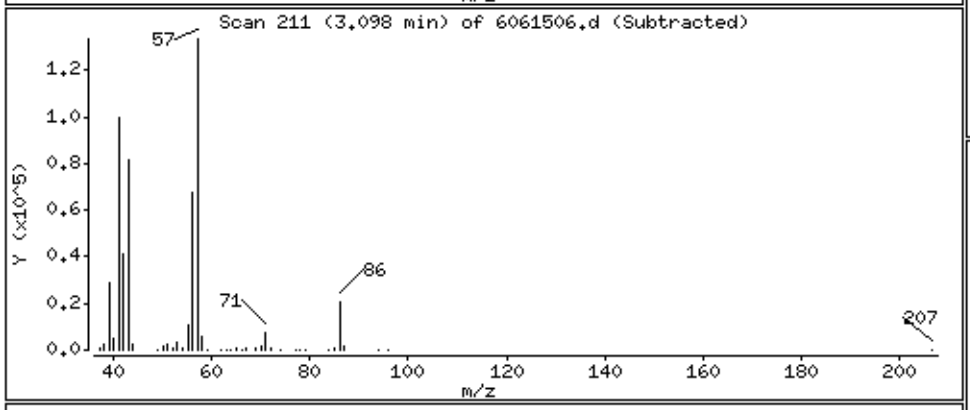
Column phase: RTx-624

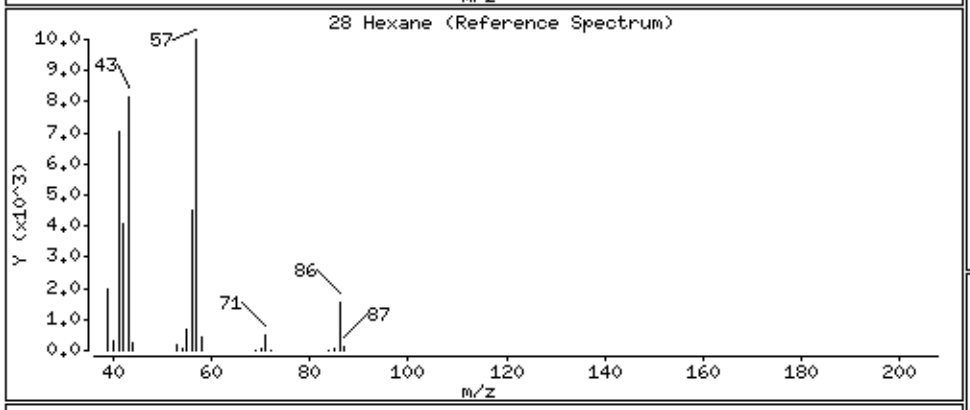
Column diameter: 0.53

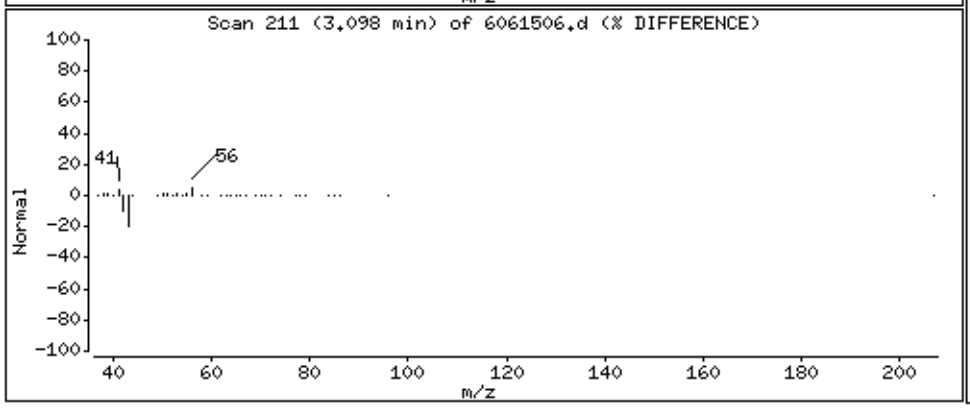
28 Hexane

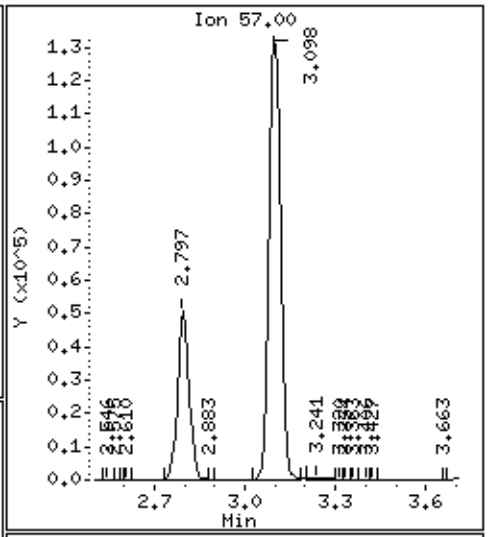
Concentration: 70.690 NG

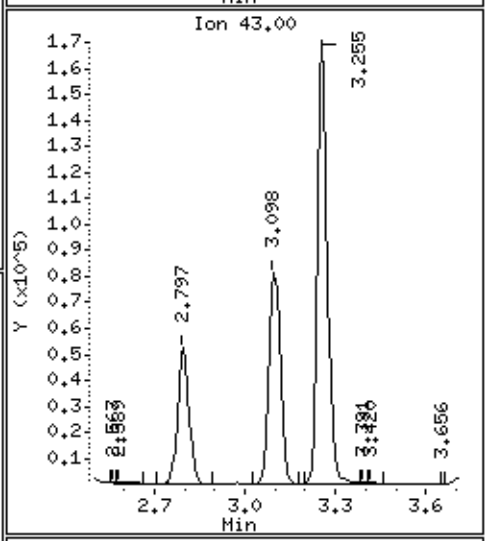


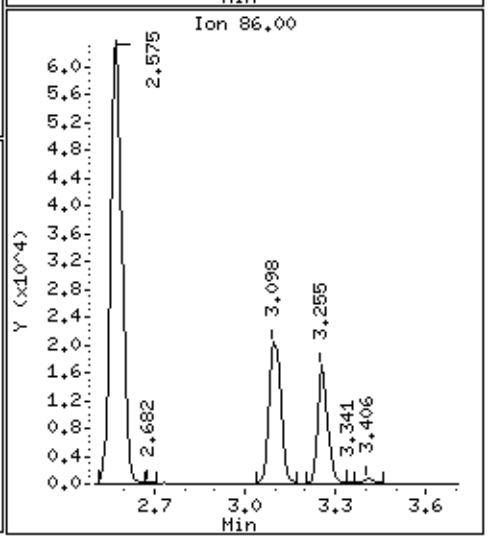












Data File: /chem/msd6.i/15jun16.b/6061506.d

Date : 15-JUN-2016 14:25

Client ID: LCS

Instrument: msd6.i

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

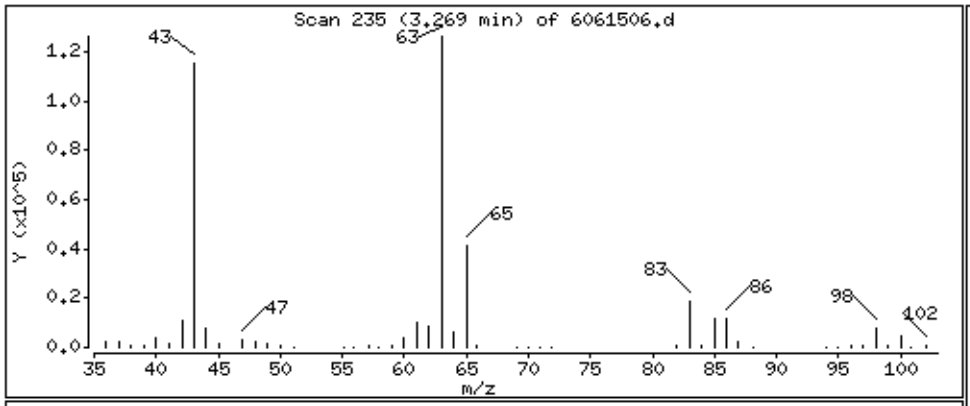
Operator: CT

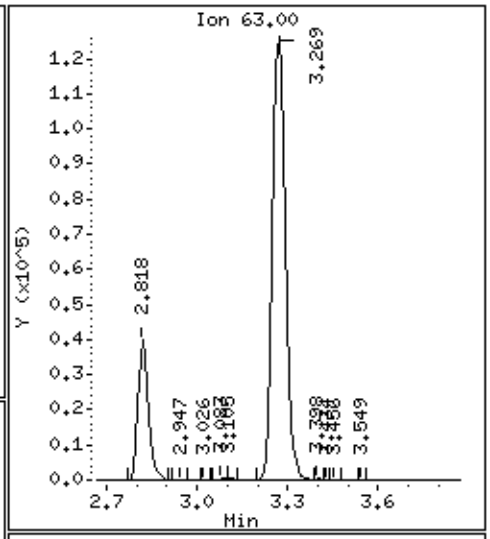
Column phase: RTx-624

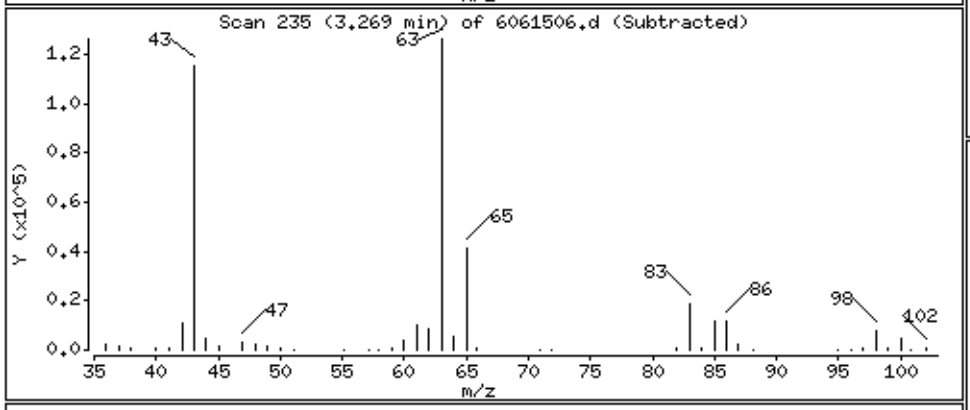
Column diameter: 0.53

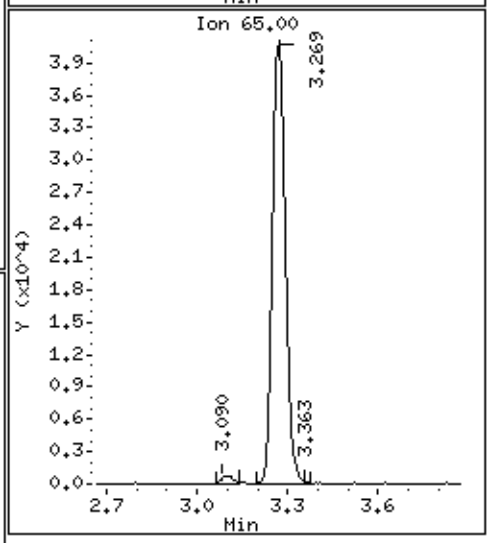
29 1,1-Dichloroethane

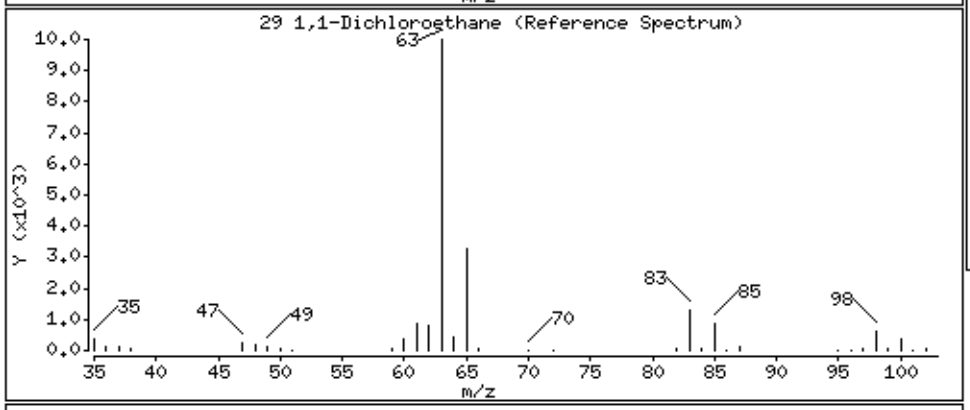
Concentration: 75.683 NG

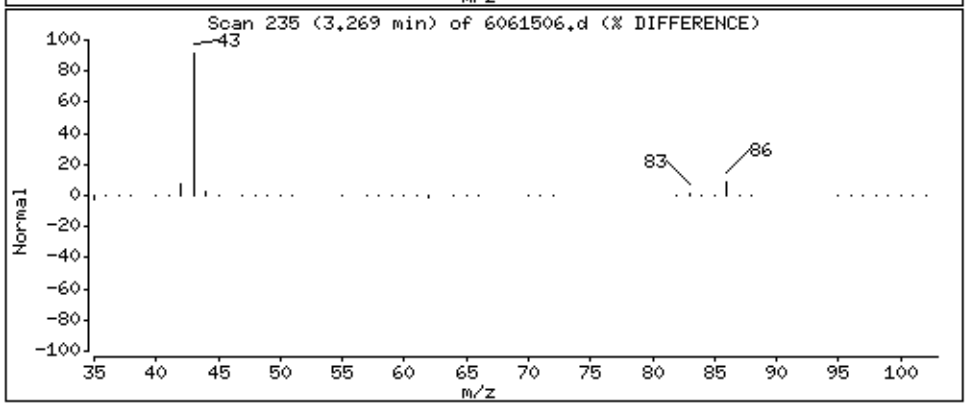












Data File: /chem/msd6.i/15jun16.b/6061506.d

Date : 15-JUN-2016 14:25

Client ID: LCS

Instrument: msd6.i

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

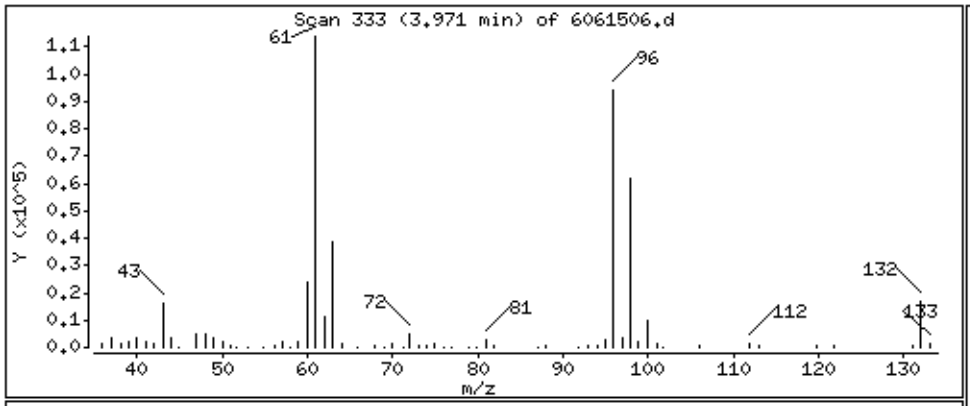
Operator: CT

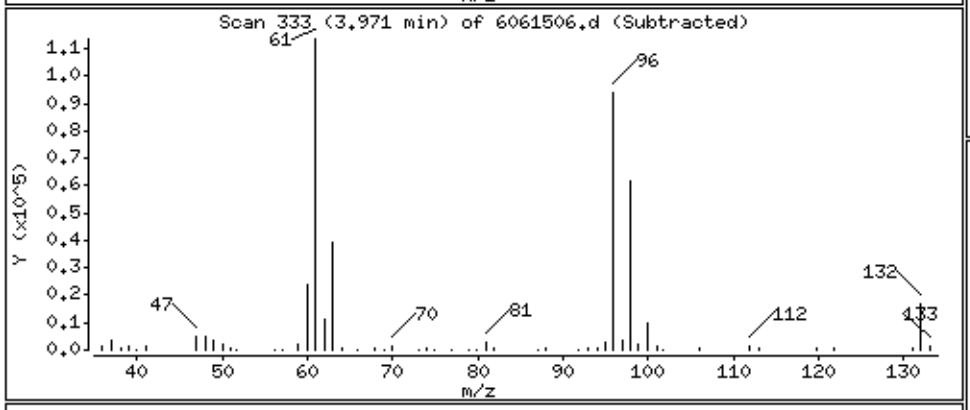
Column phase: RTx-624

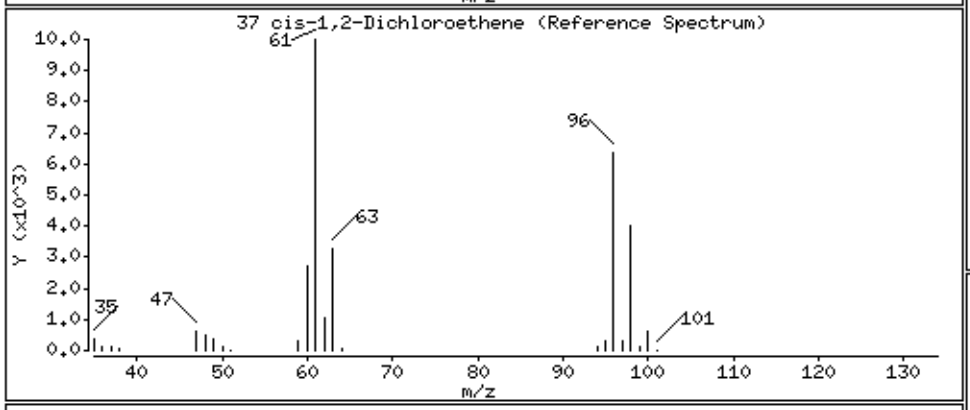
Column diameter: 0.53

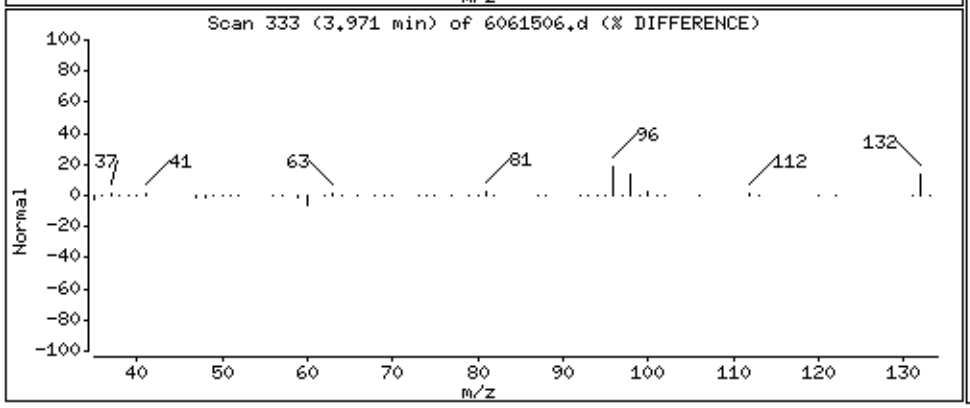
37 cis-1,2-Dichloroethene

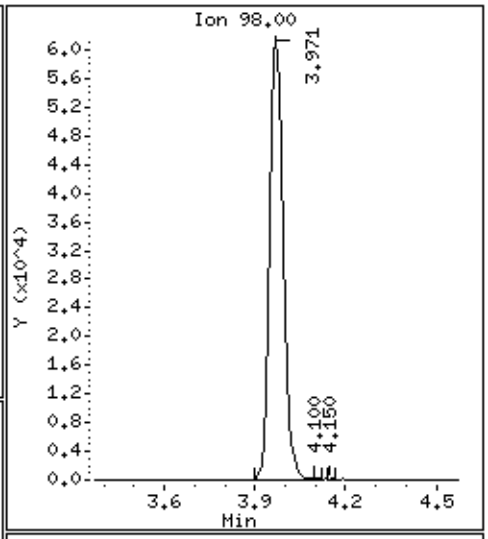
Concentration: 86.318 NG

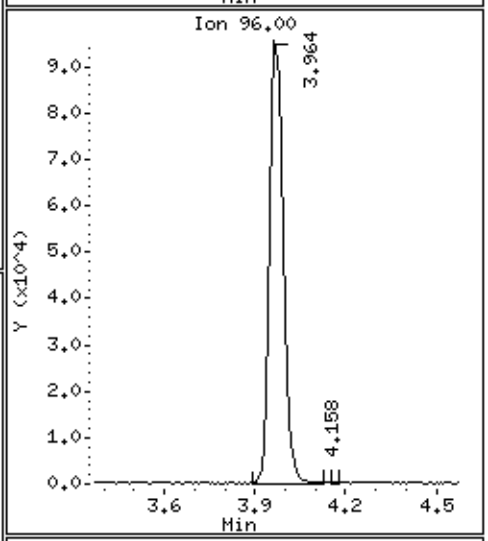


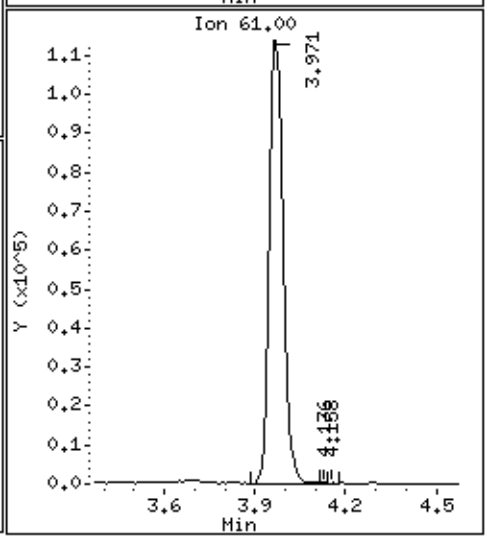












Data File: /chem/msd6.i/15jun16.b/6061506.d

Date : 15-JUN-2016 14:25

Client ID: LCS

Instrument: msd6.i

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

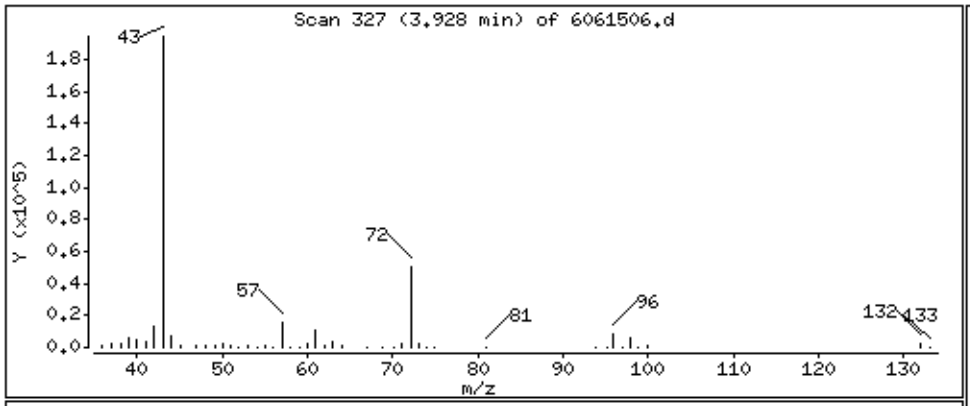
Operator: CT

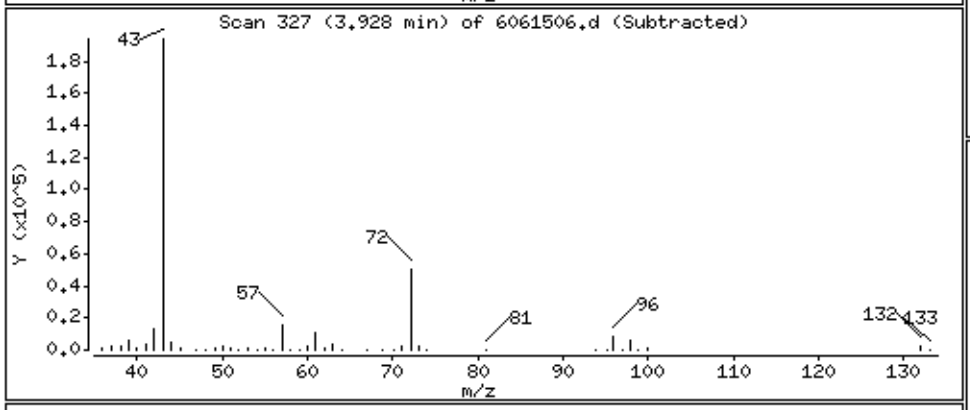
Column phase: RTx-624

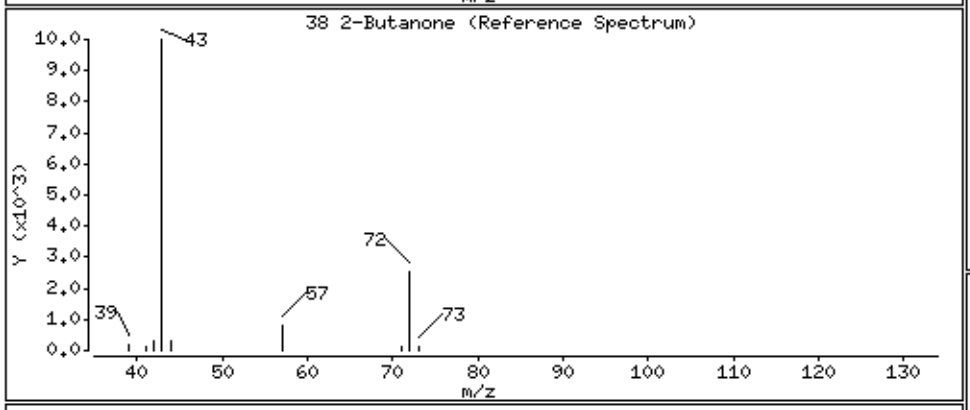
Column diameter: 0.53

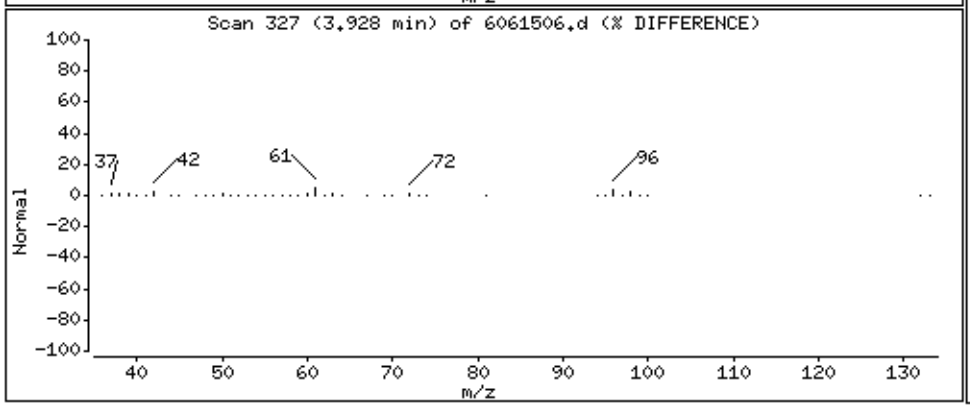
38 2-Butanone

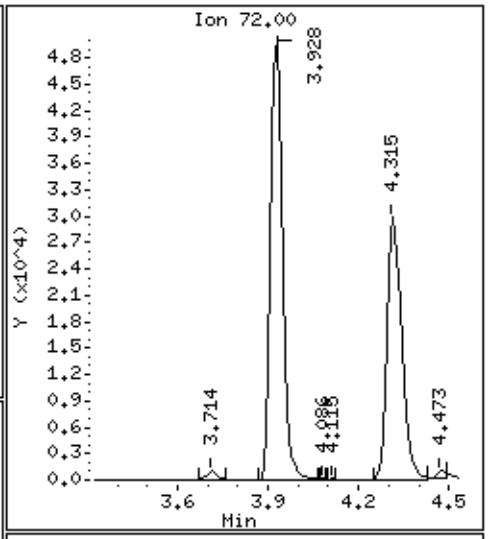
Concentration: 65.321 NG

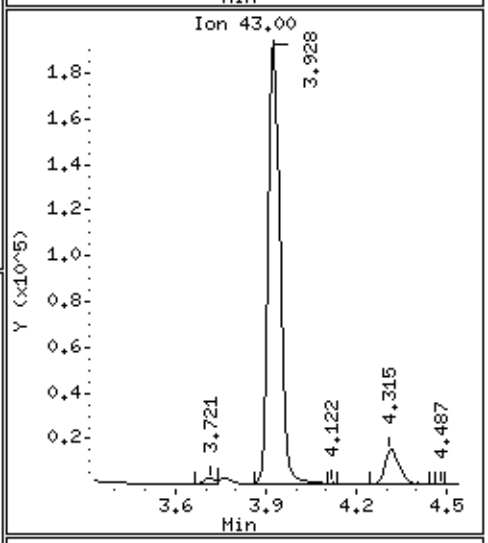


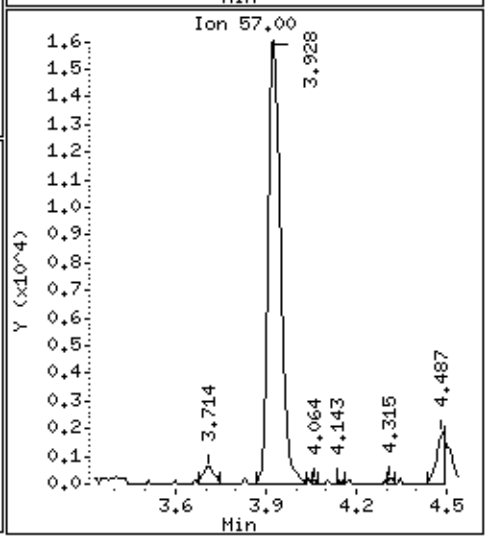












Data File: /chem/msd6.i/15jun16.b/6061506.d

Date : 15-JUN-2016 14:25

Client ID: LCS

Instrument: msd6.i

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

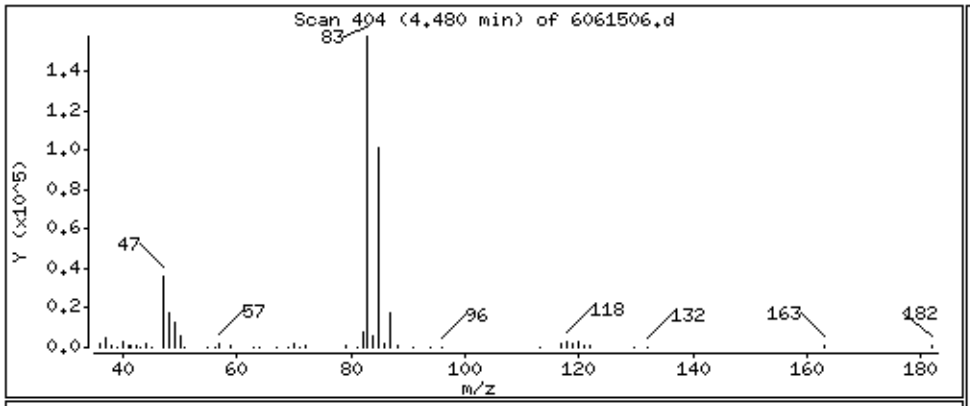
Operator: CT

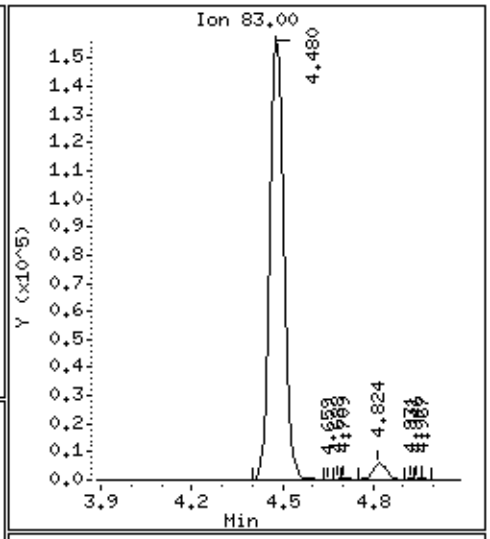
Column phase: RTx-624

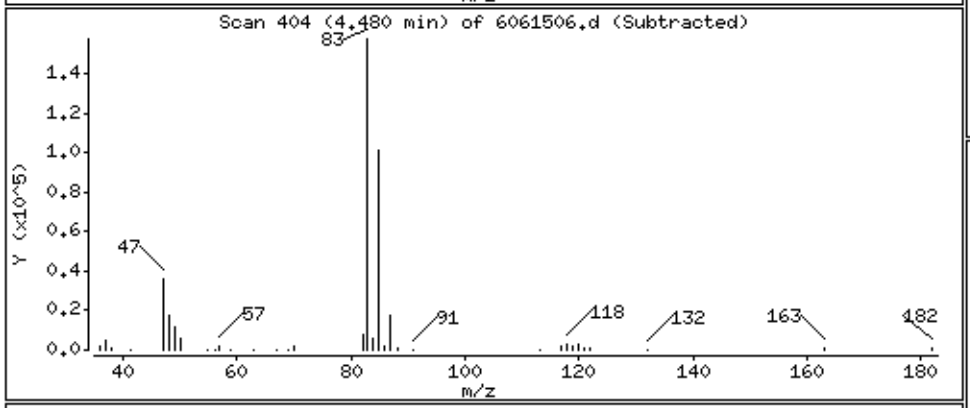
Column diameter: 0.53

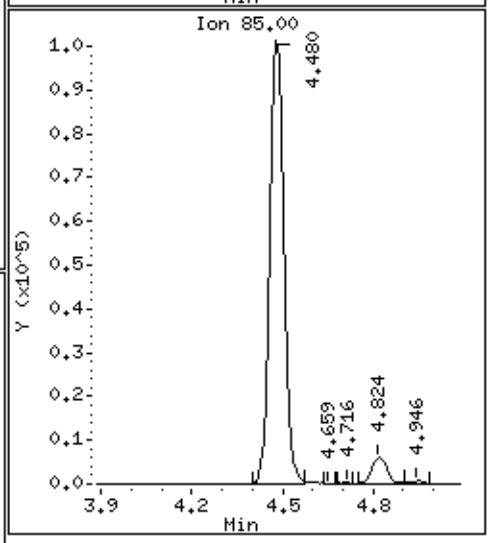
44 Chloroform

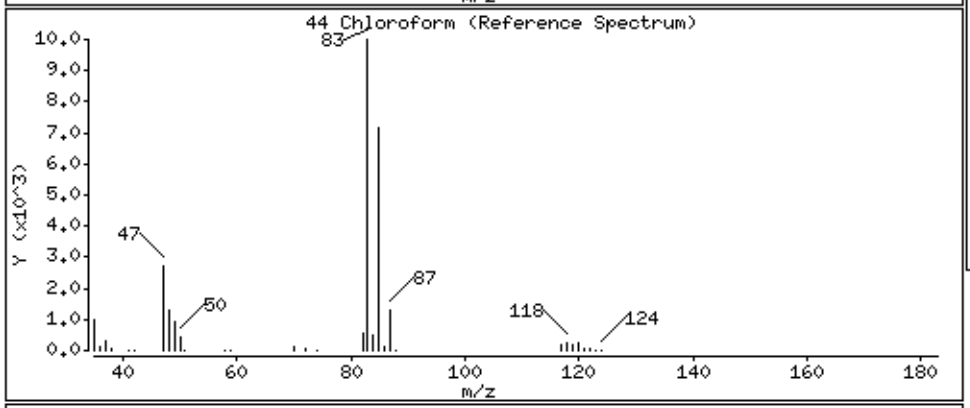
Concentration: 96.284 NG

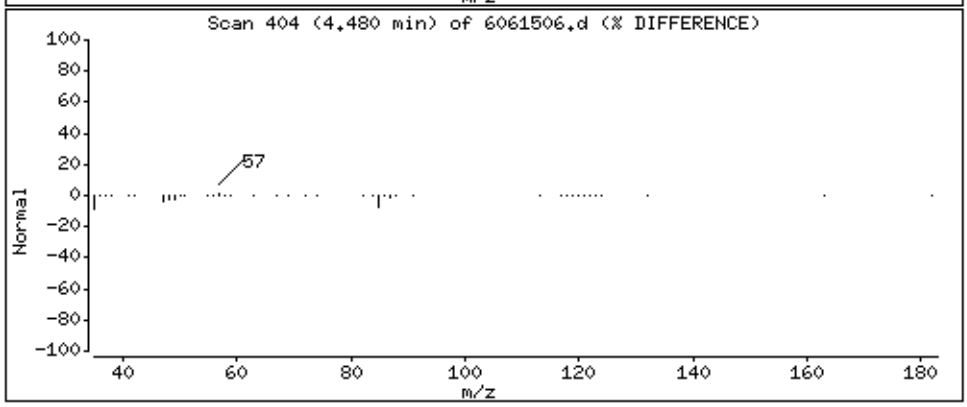












Data File: /chem/msd6.i/15jun16.b/6061506.d

Date : 15-JUN-2016 14:25

Client ID: LCS

Instrument: msd6.i

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

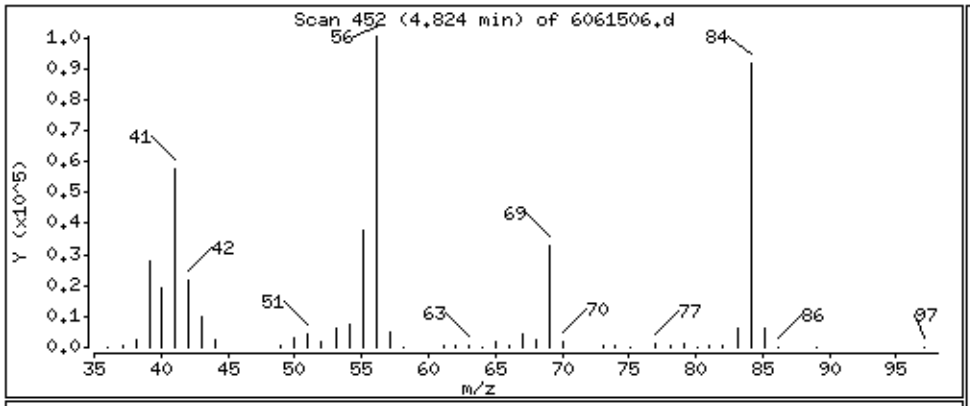
Operator: CT

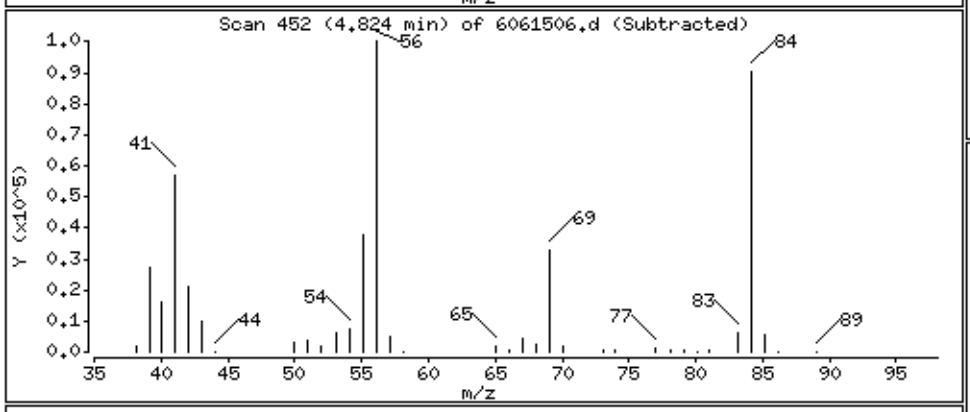
Column phase: RTx-624

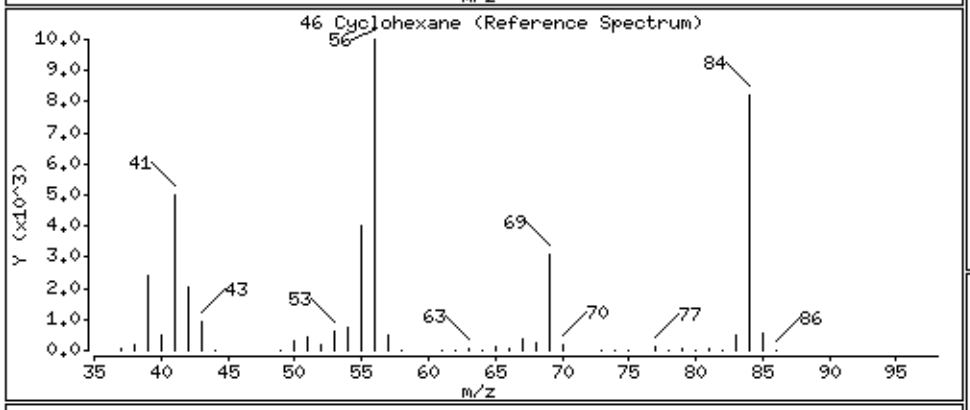
Column diameter: 0.53

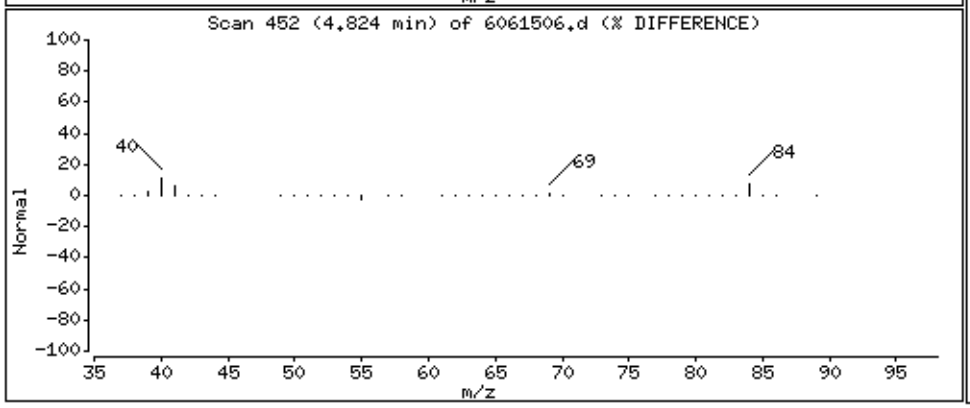
46 Cyclohexane

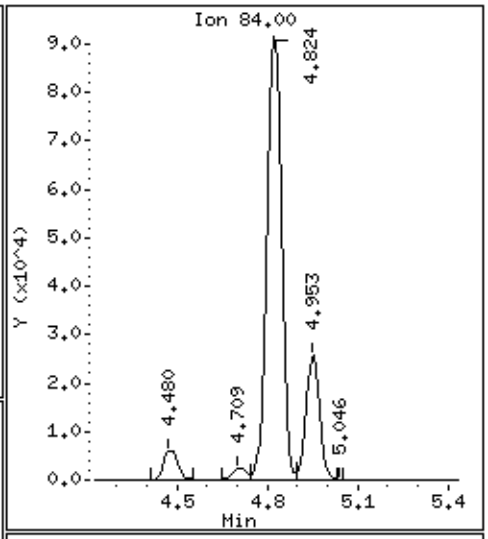
Concentration: 68.253 NG

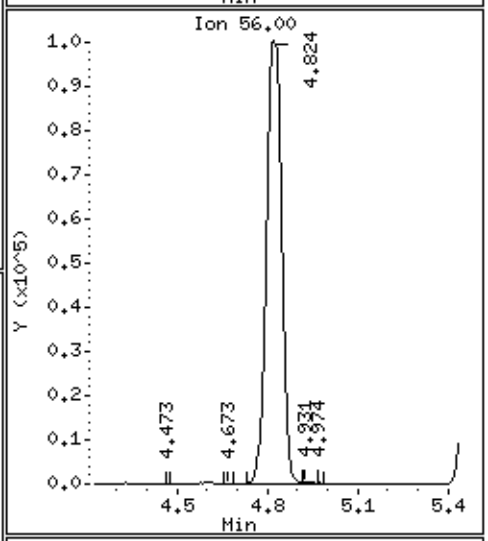


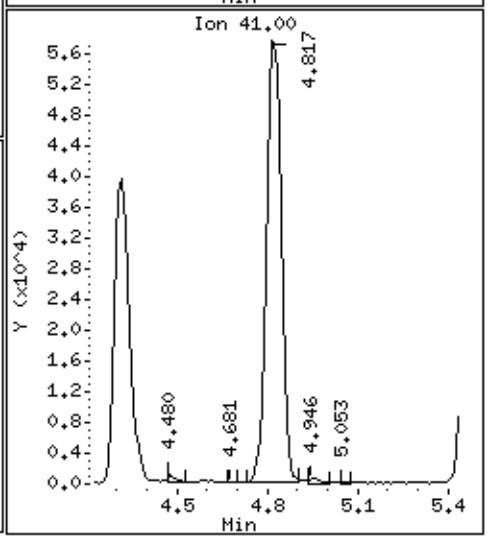












Data File: /chem/msd6.i/15jun16.b/6061506.d

Date : 15-JUN-2016 14:25

Client ID: LCS

Instrument: msd6.i

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

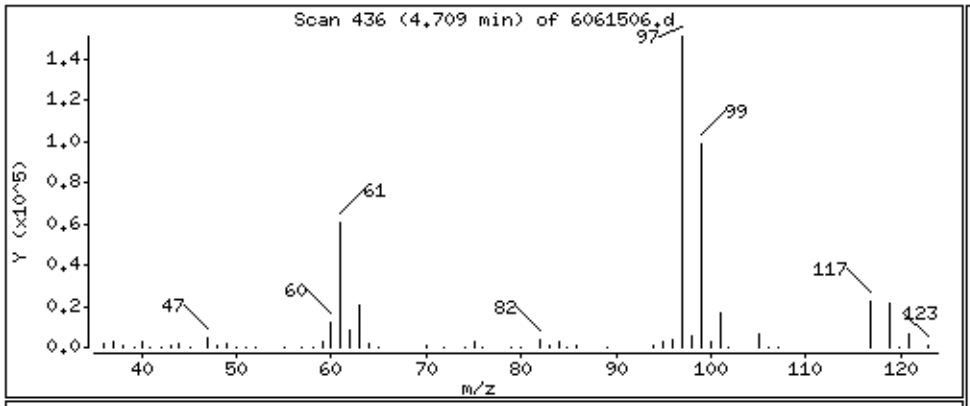
Operator: CT

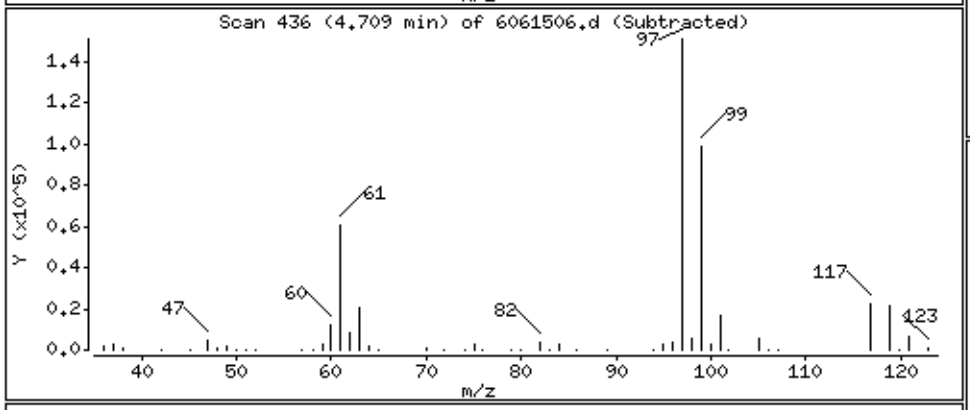
Column phase: RTx-624

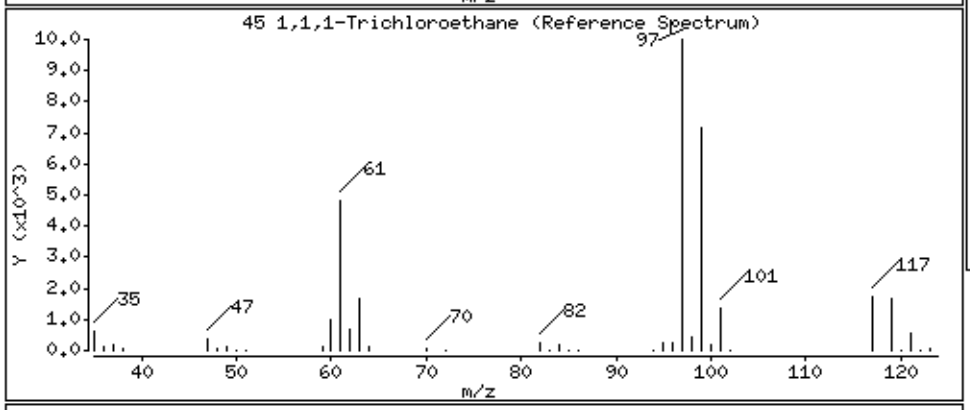
Column diameter: 0.53

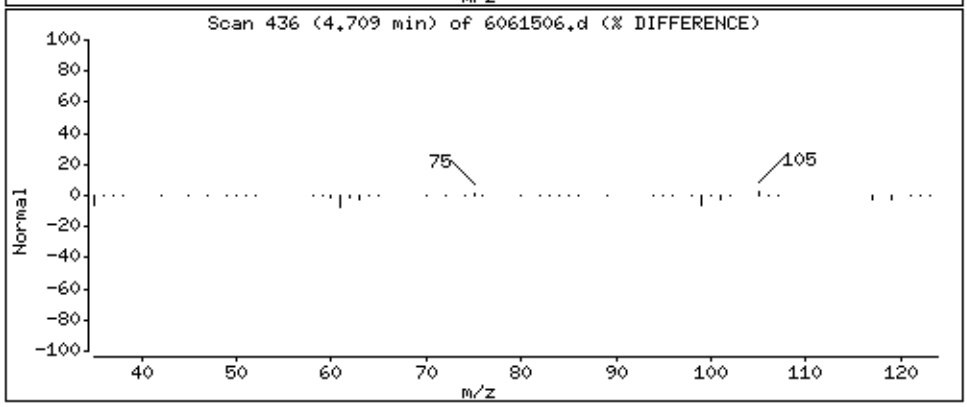
45 1,1,1-Trichloroethane

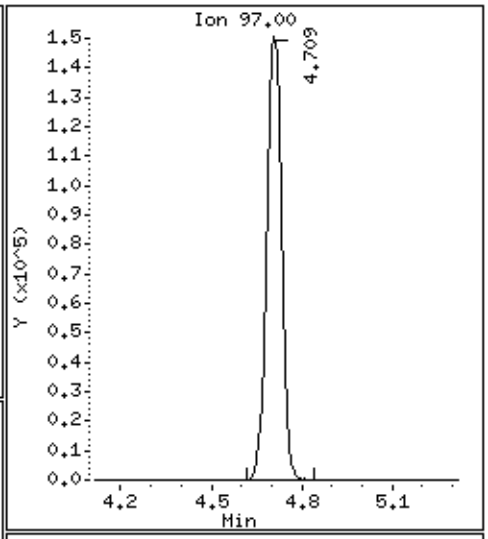
Concentration: 111.57 NG

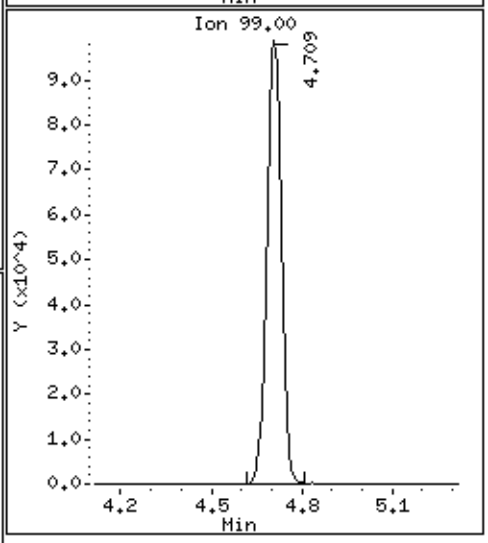












Data File: /chem/msd6.i/15jun16.b/6061506.d

Date : 15-JUN-2016 14:25

Client ID: LCS

Instrument: msd6.i

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

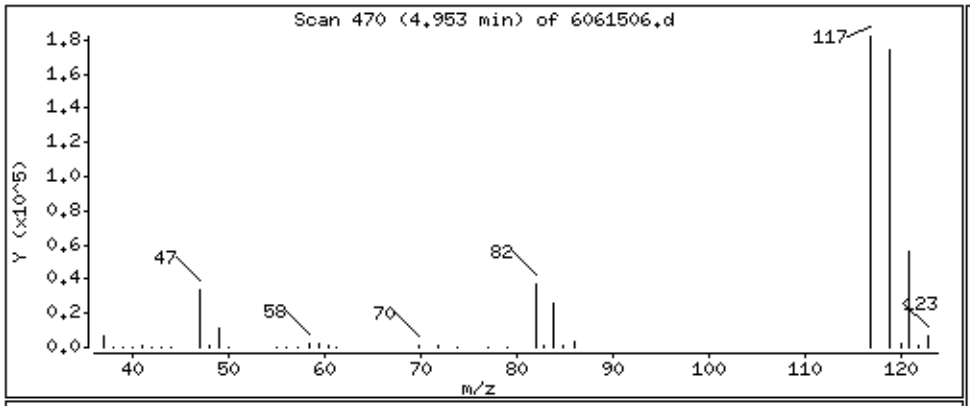
Operator: CT

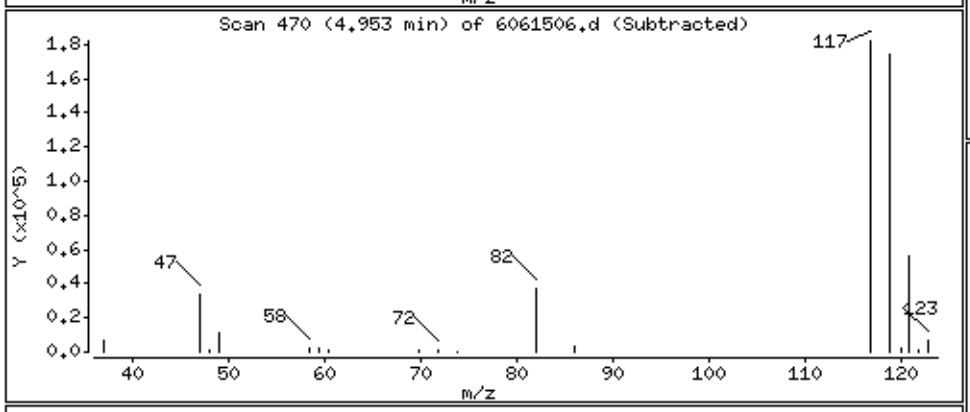
Column phase: RTx-624

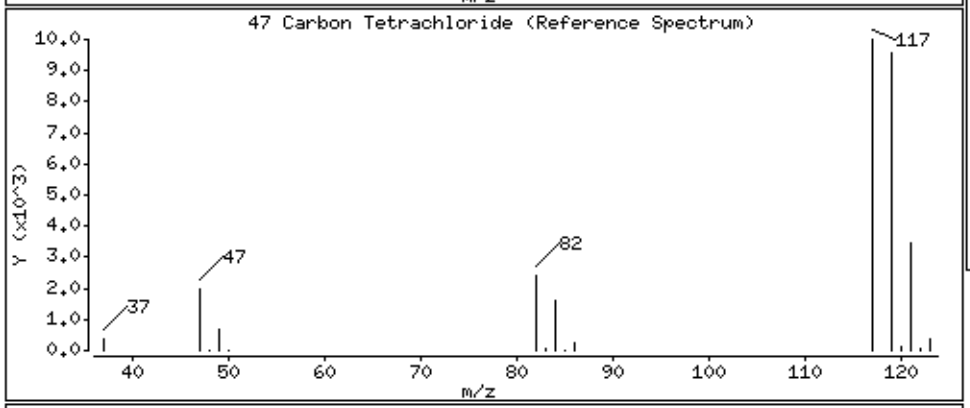
Column diameter: 0.53

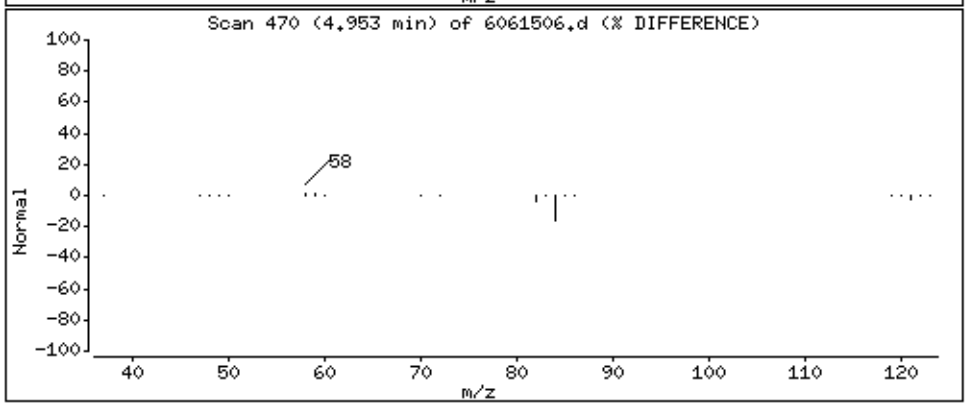
47 Carbon Tetrachloride

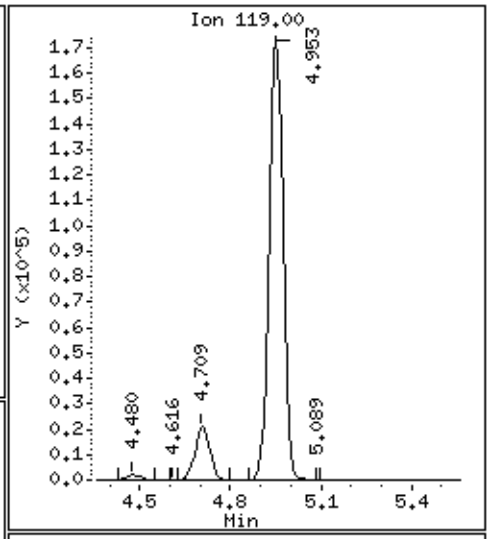
Concentration: 130.22 NG

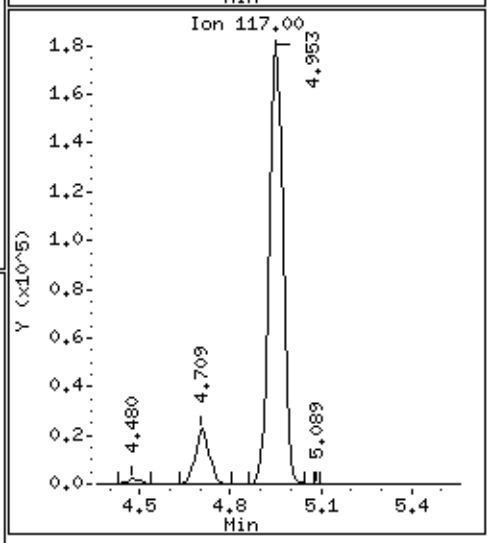












Data File: /chem/msd6.i/15jun16.b/6061506.d

Date : 15-JUN-2016 14:25

Client ID: LCS

Instrument: msd6.i

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

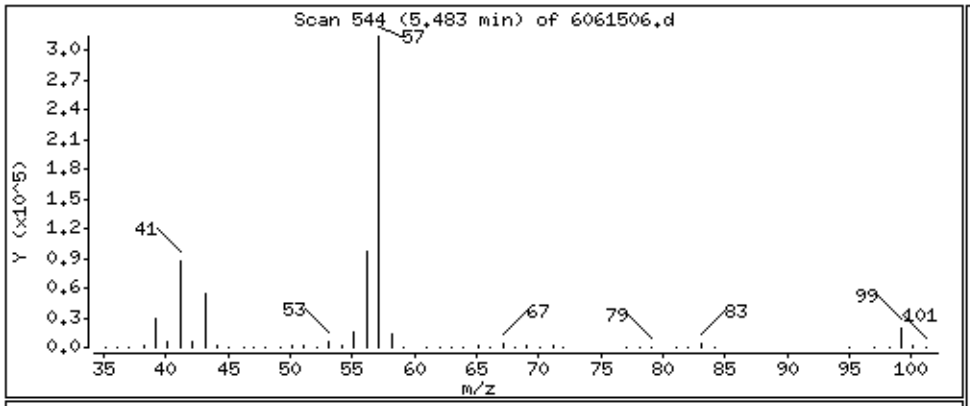
Operator: CT

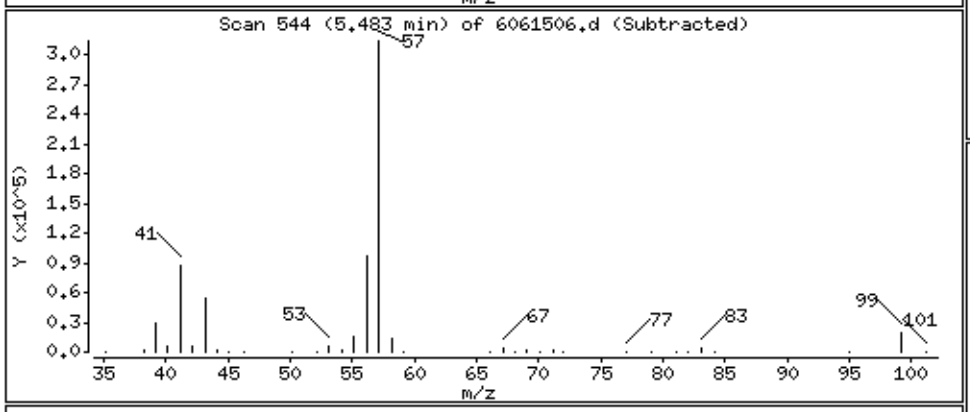
Column phase: RTx-624

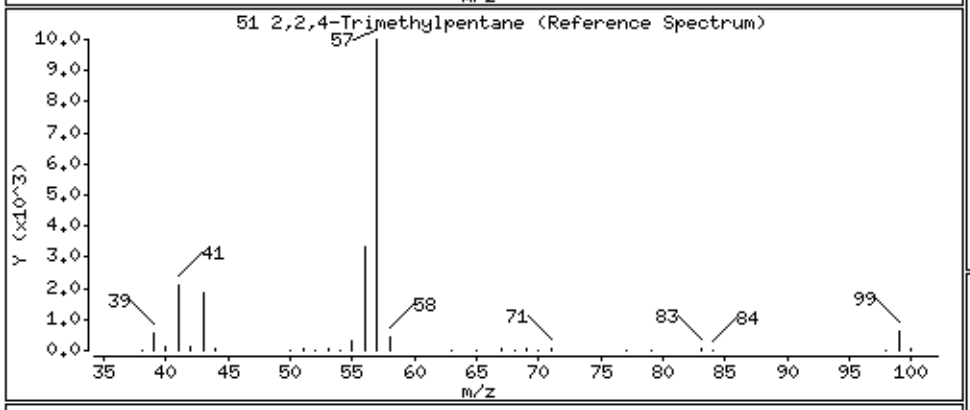
Column diameter: 0.53

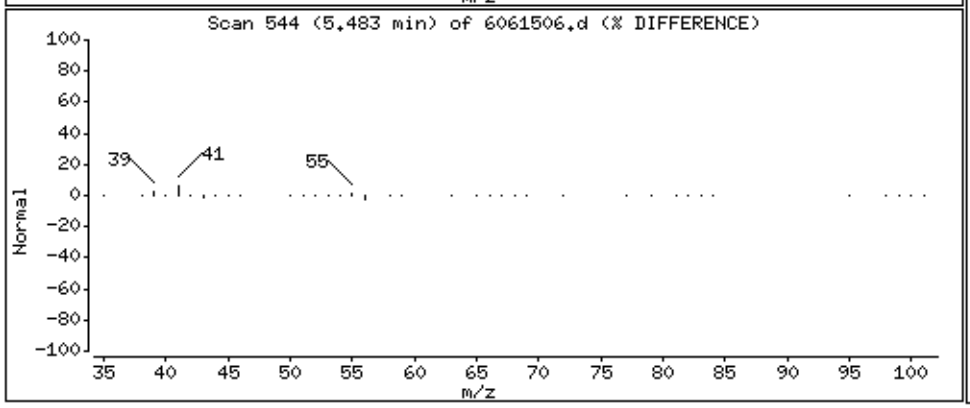
51 2,2,4-Trimethylpentane

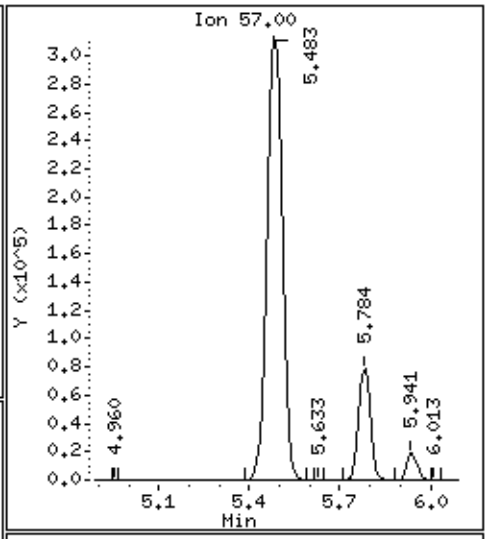
Concentration: 96.098 NG

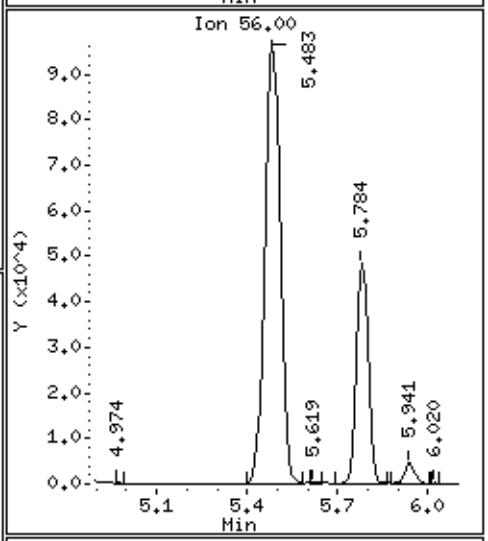


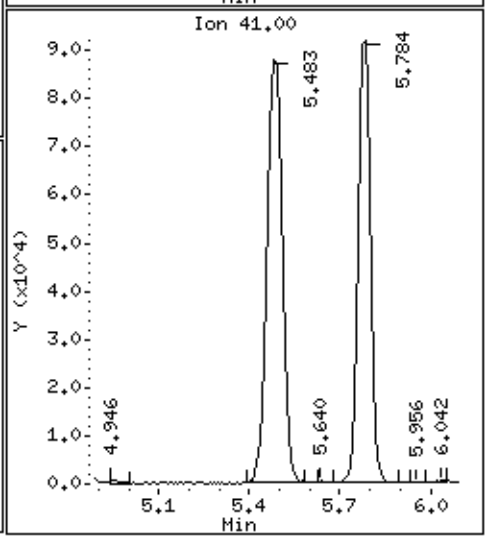












Data File: /chem/msd6.i/15jun16.b/6061506.d

Date : 15-JUN-2016 14:25

Client ID: LCS

Instrument: msd6.i

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

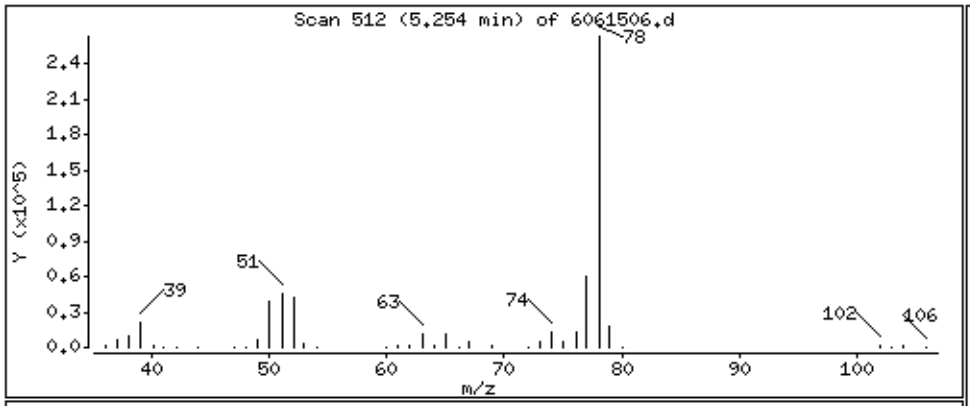
Operator: CT

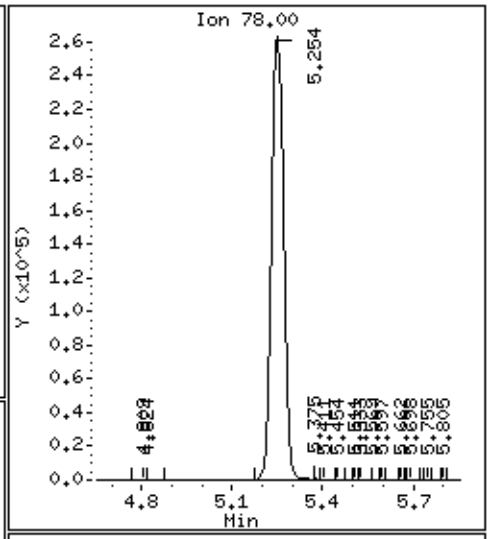
Column phase: RTx-624

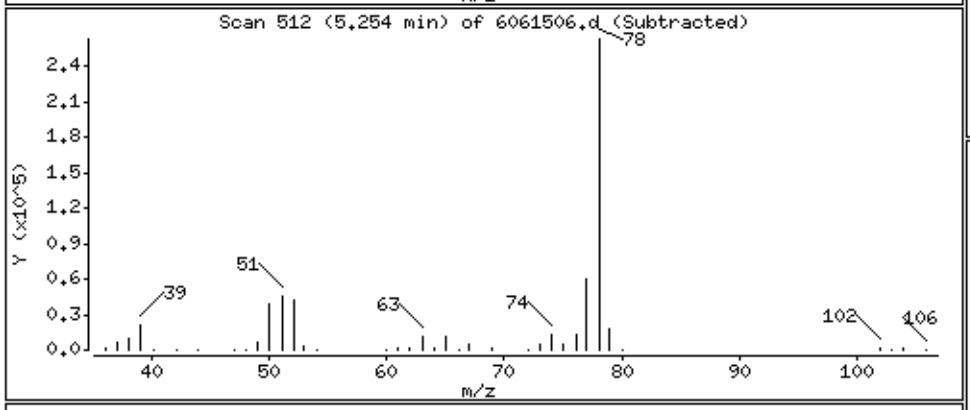
Column diameter: 0.53

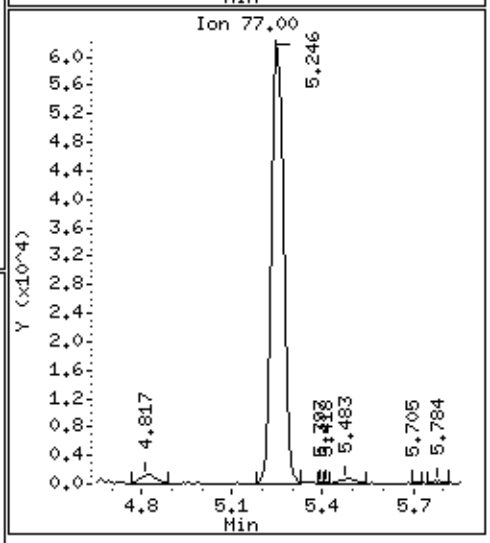
48 Benzene

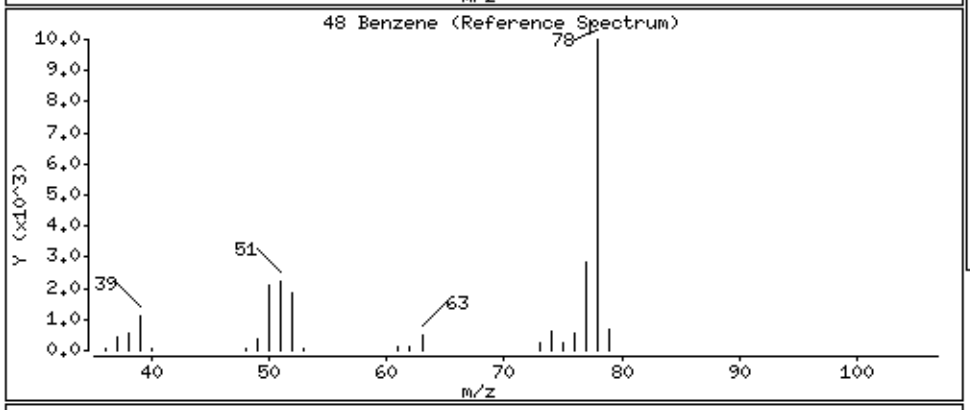
Concentration: 58.340 NG

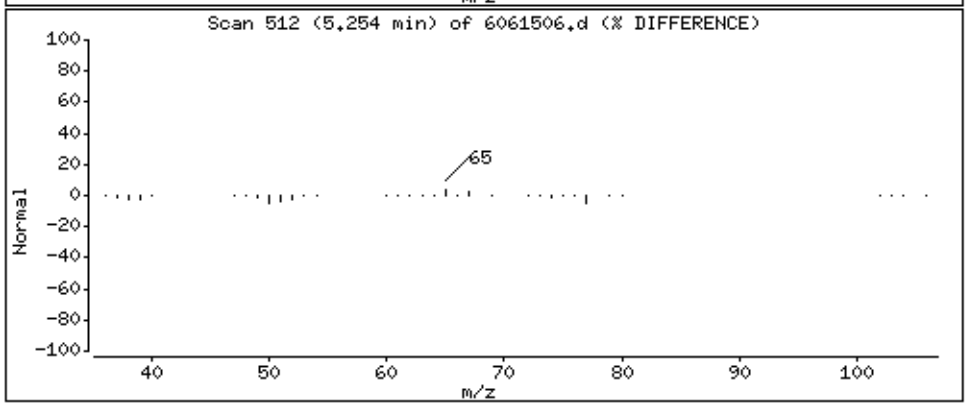












Data File: /chem/msd6.i/15jun16.b/6061506.d

Date : 15-JUN-2016 14:25

Client ID: LCS

Instrument: msd6.i

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

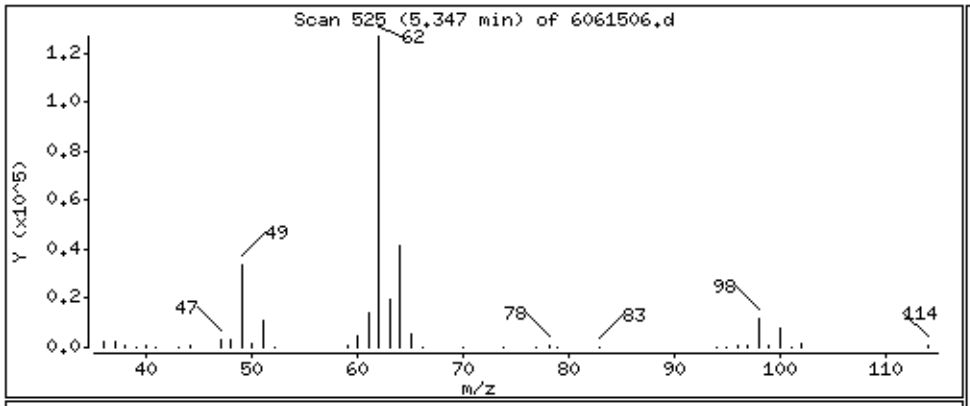
Operator: CT

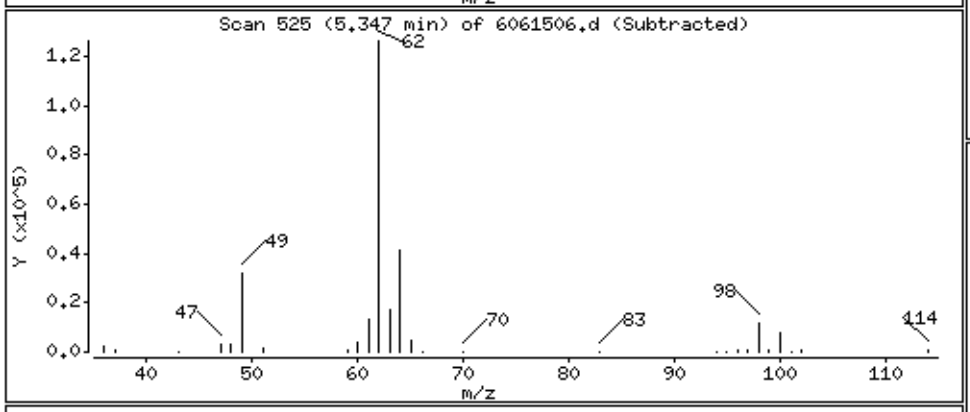
Column phase: RTx-624

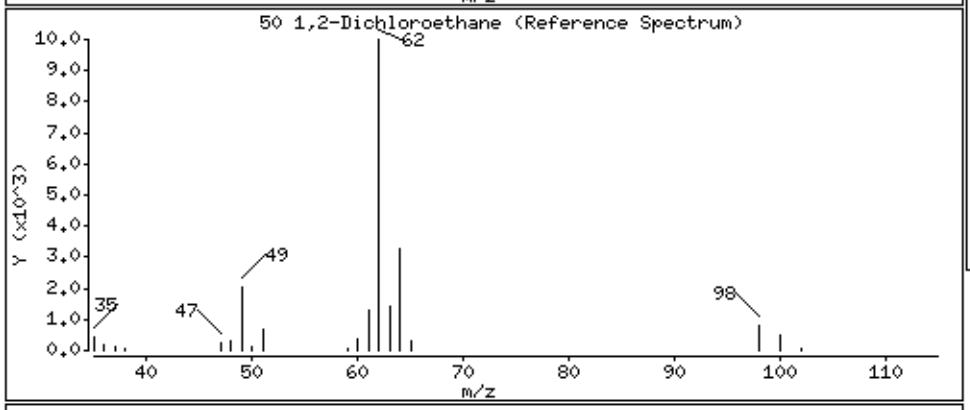
Column diameter: 0.53

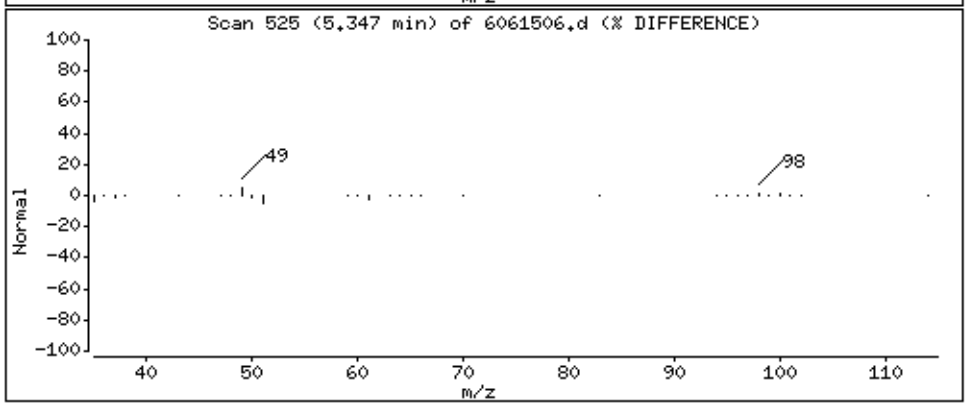
50 1,2-Dichloroethane

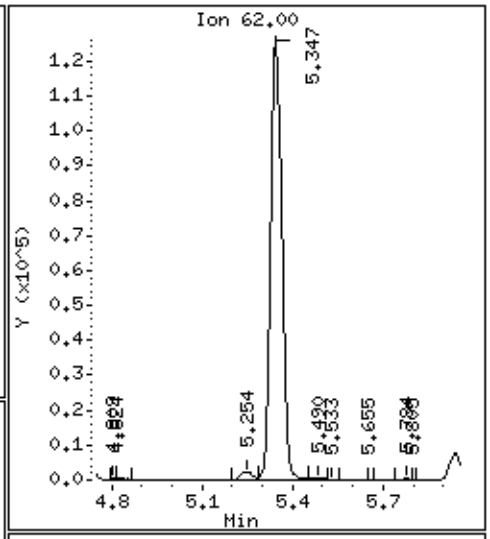
Concentration: 81.783 NG

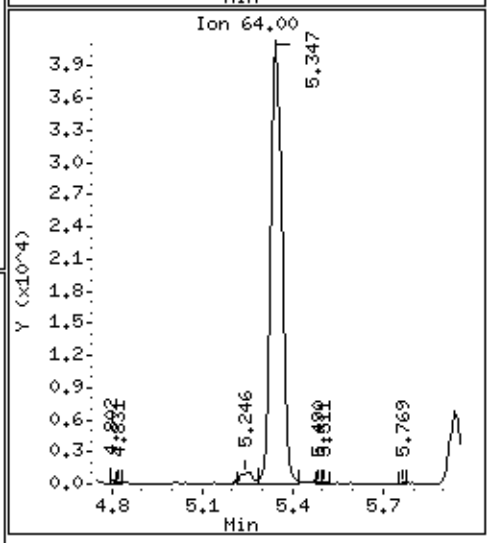












Data File: /chem/msd6.i/15jun16.b/6061506.d

Date : 15-JUN-2016 14:25

Client ID: LCS

Instrument: msd6.i

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

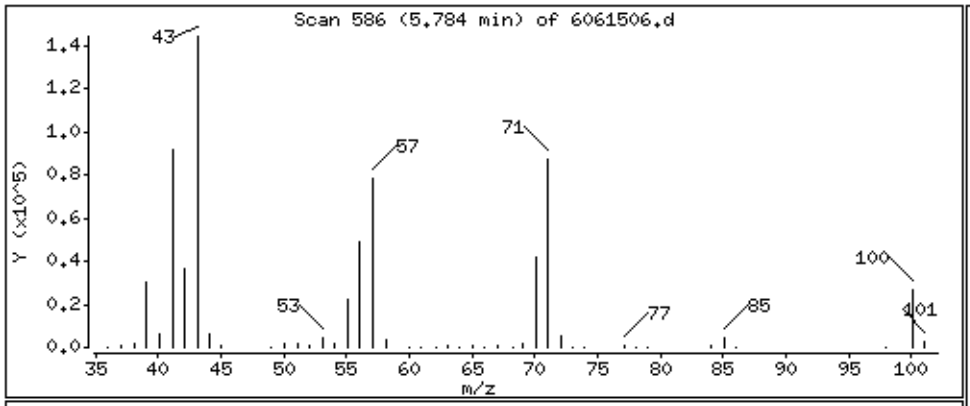
Operator: CT

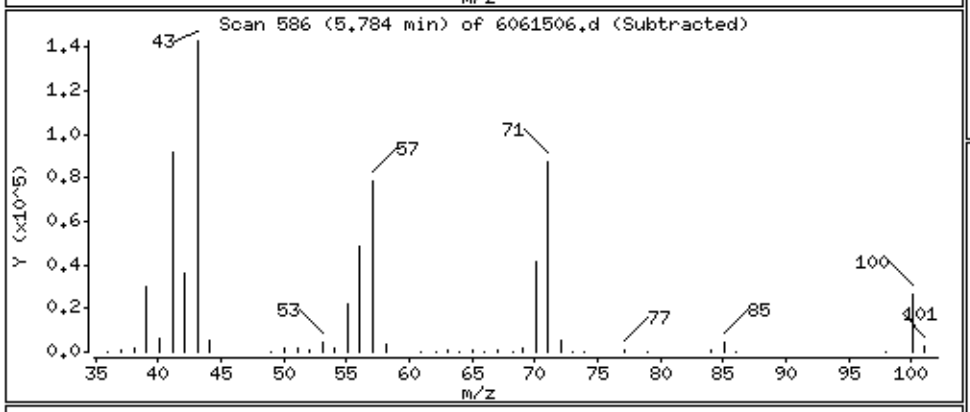
Column phase: RTx-624

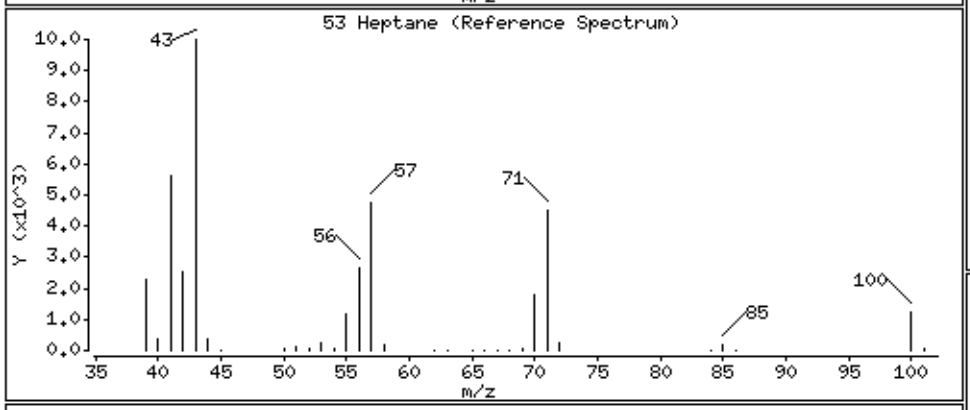
Column diameter: 0.53

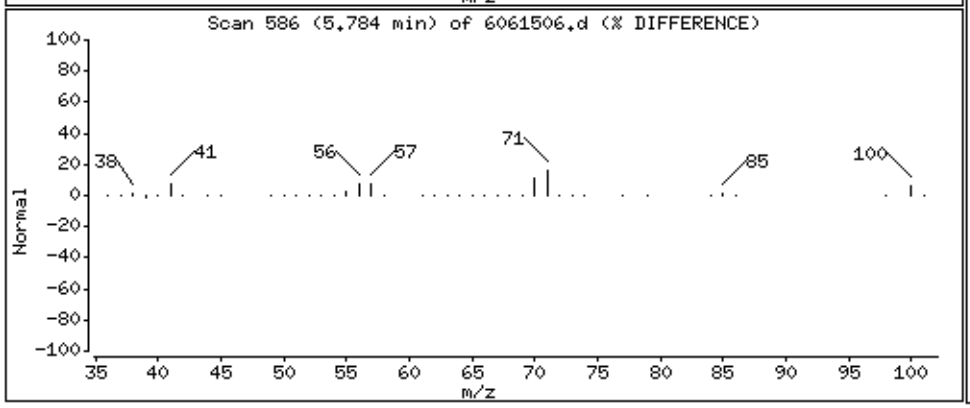
53 Heptane

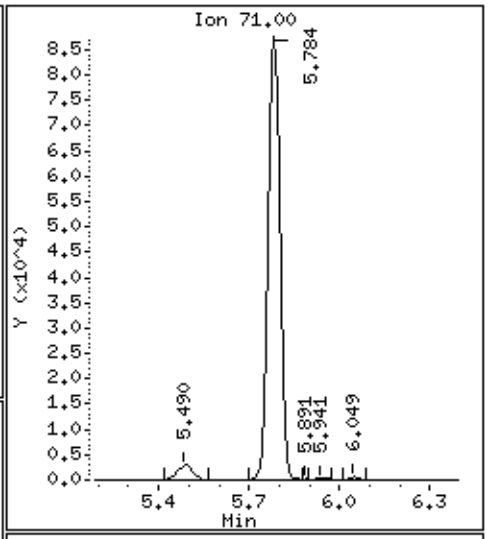
Concentration: 80.353 NG

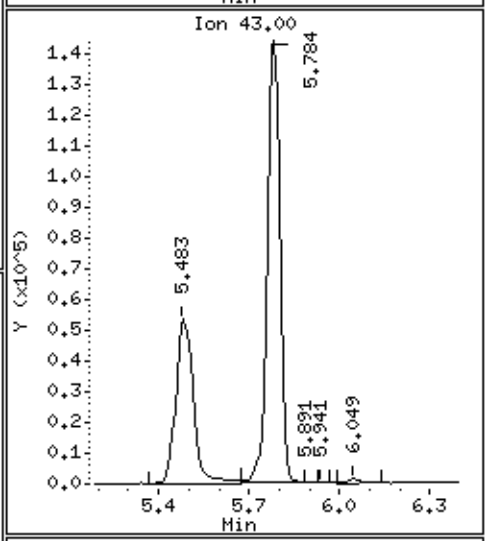


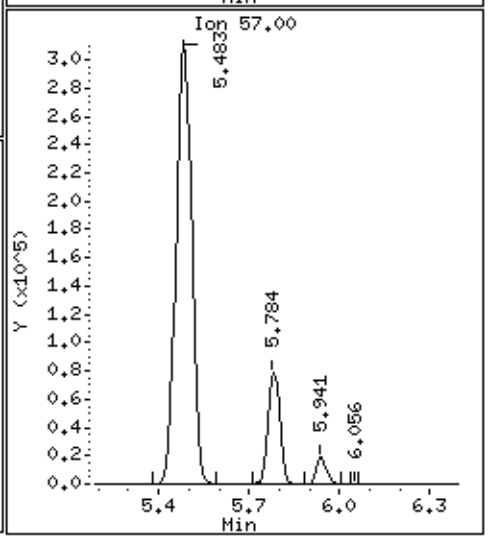












Data File: /chem/msd6.i/15jun16.b/6061506.d

Date : 15-JUN-2016 14:25

Client ID: LCS

Instrument: msd6.i

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

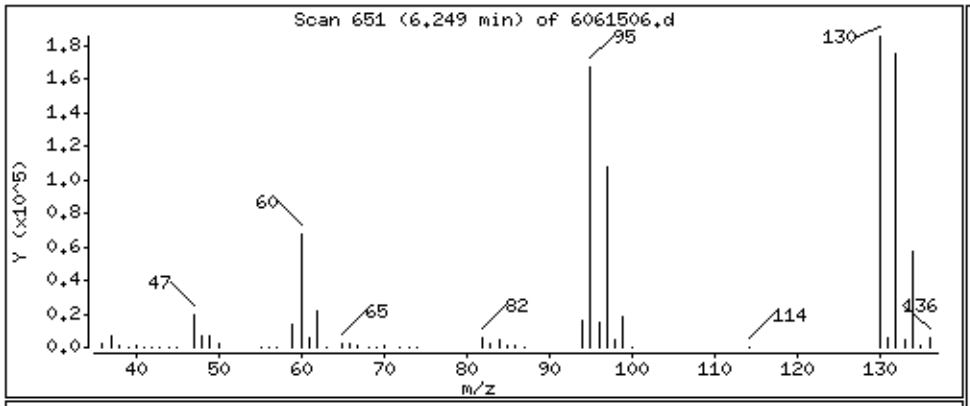
Operator: CT

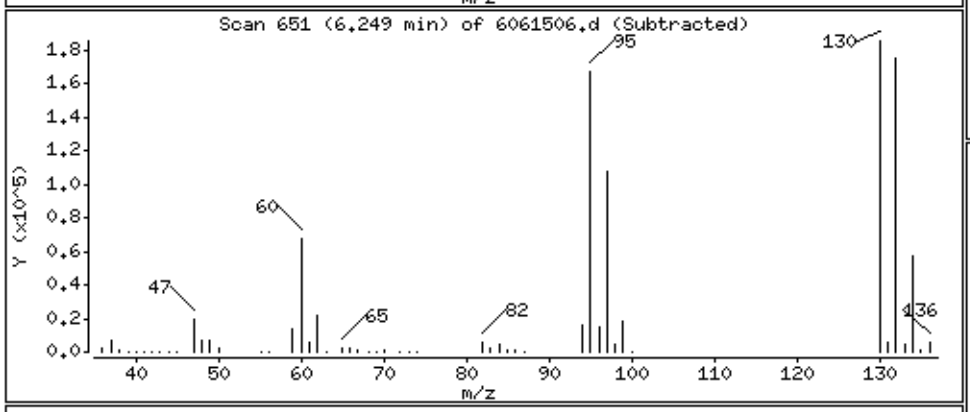
Column phase: RTx-624

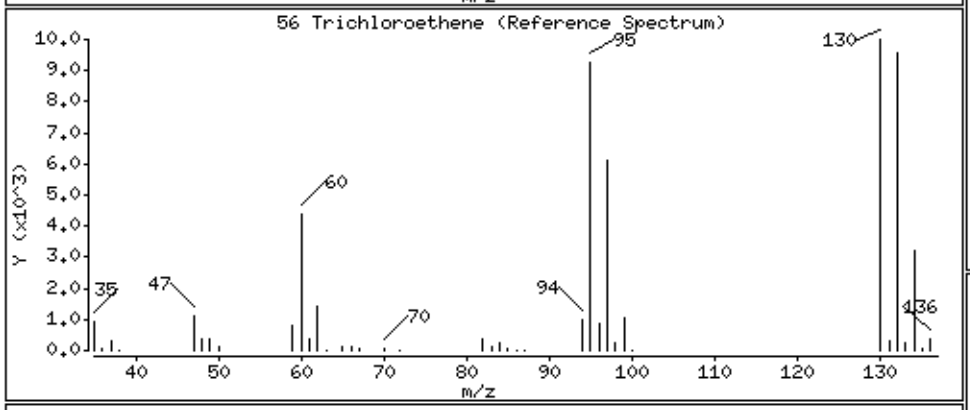
Column diameter: 0.53

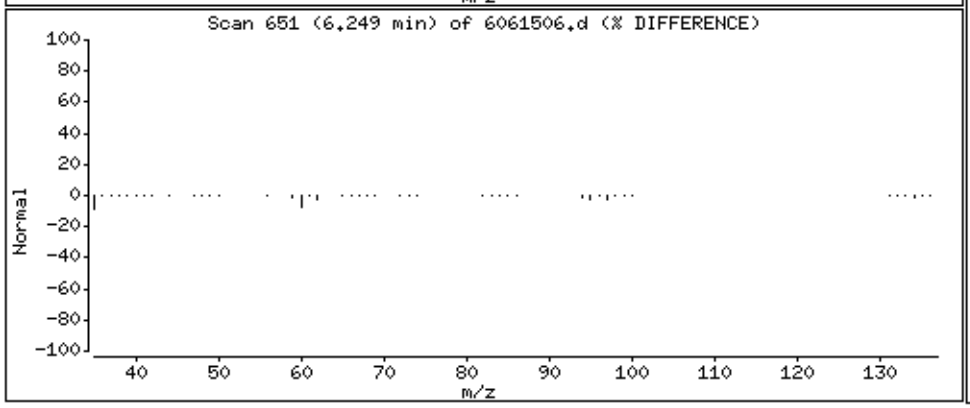
56 Trichloroethene

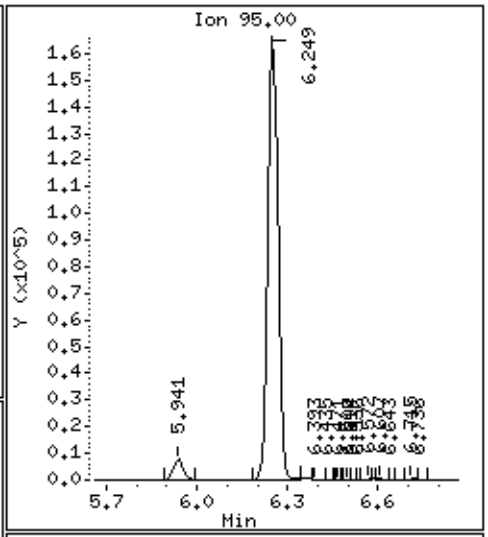
Concentration: 102.16 NG

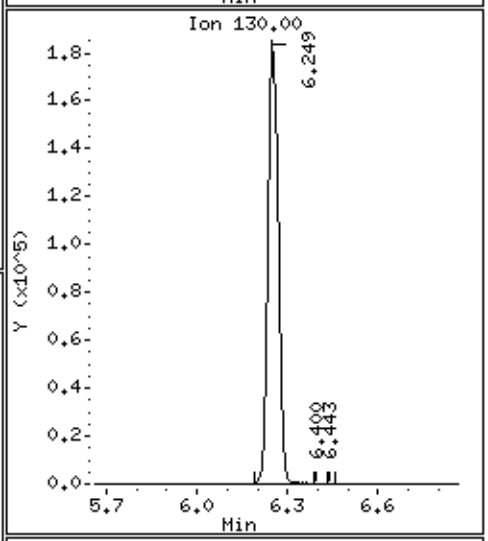


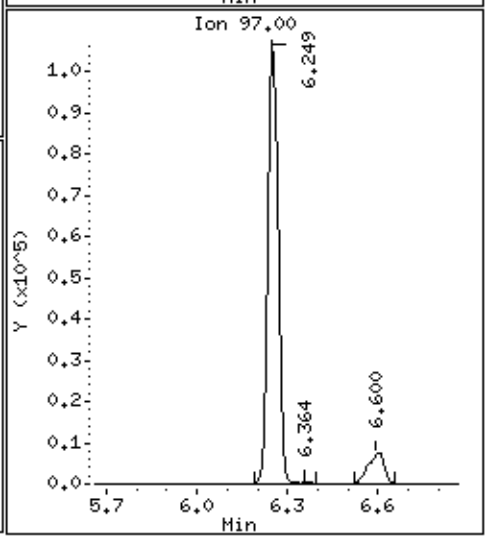












Data File: /chem/msd6.i/15jun16.b/6061506.d

Date : 15-JUN-2016 14:25

Client ID: LCS

Instrument: msd6.i

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

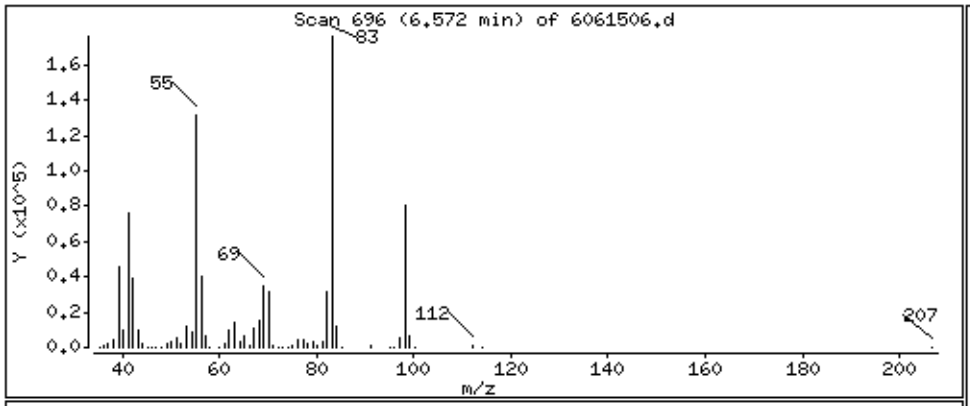
Operator: CT

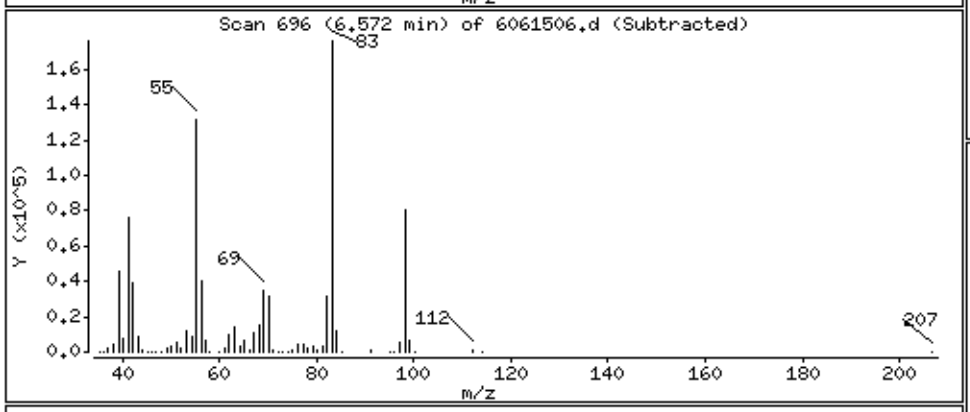
Column phase: RTx-624

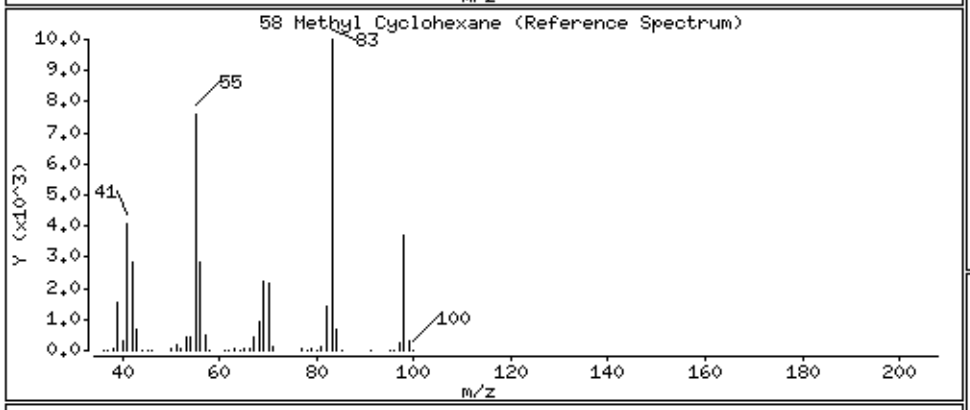
Column diameter: 0.53

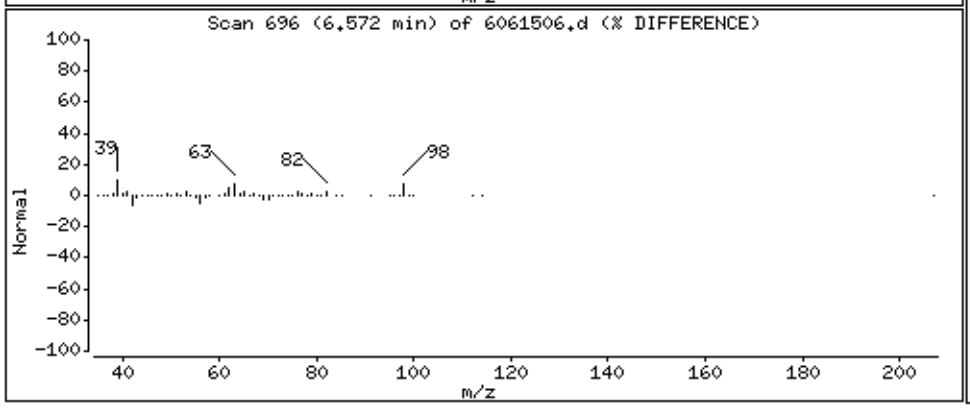
58 Methyl Cyclohexane

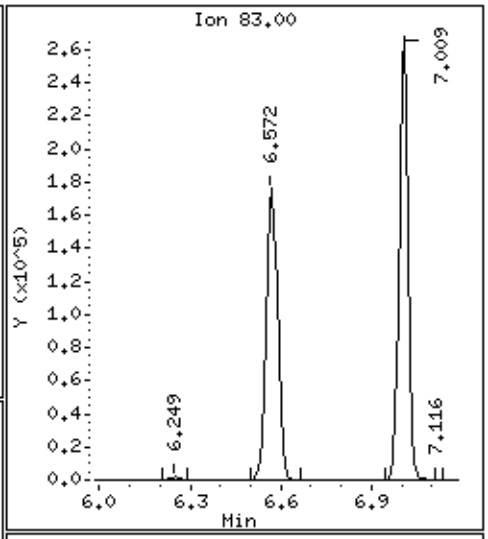
Concentration: 84.142 NG

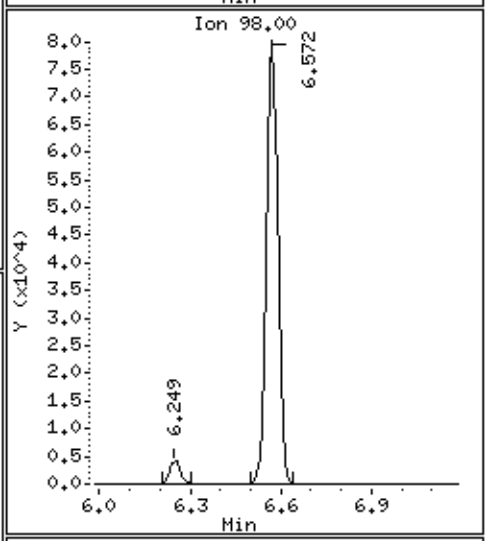


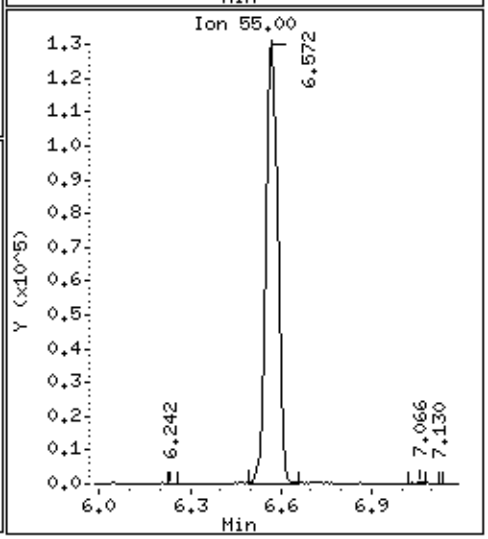












Data File: /chem/msd6.i/15jun16.b/6061506.d

Date : 15-JUN-2016 14:25

Client ID: LCS

Instrument: msd6.i

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

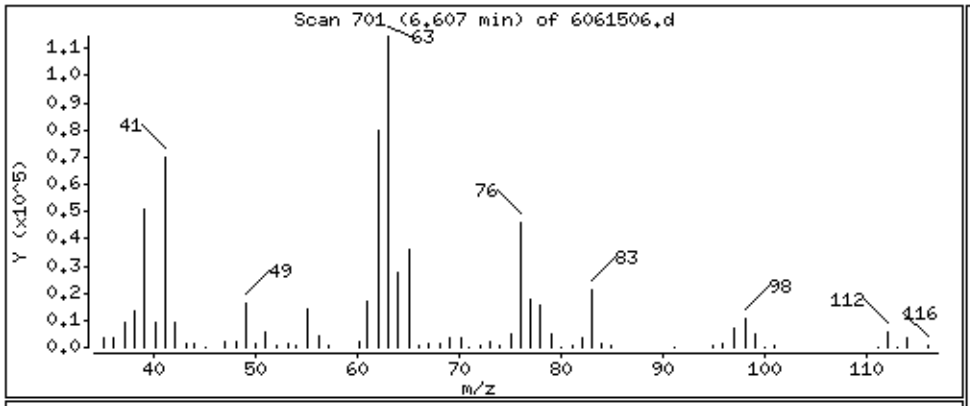
Operator: CT

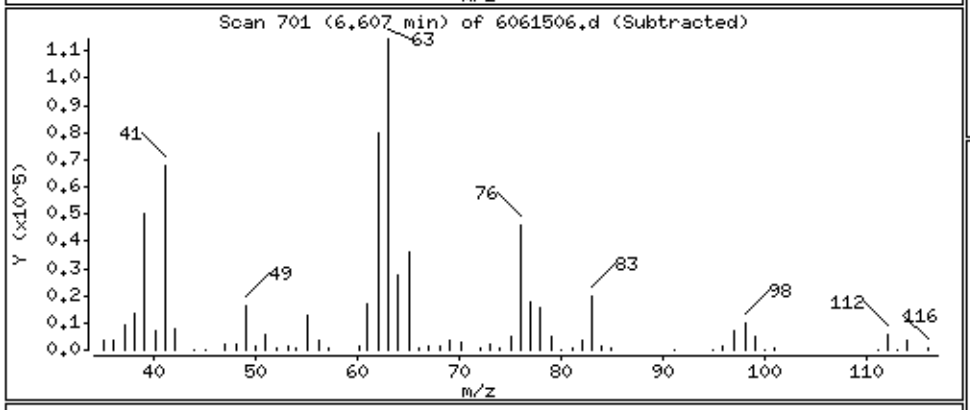
Column phase: RTx-624

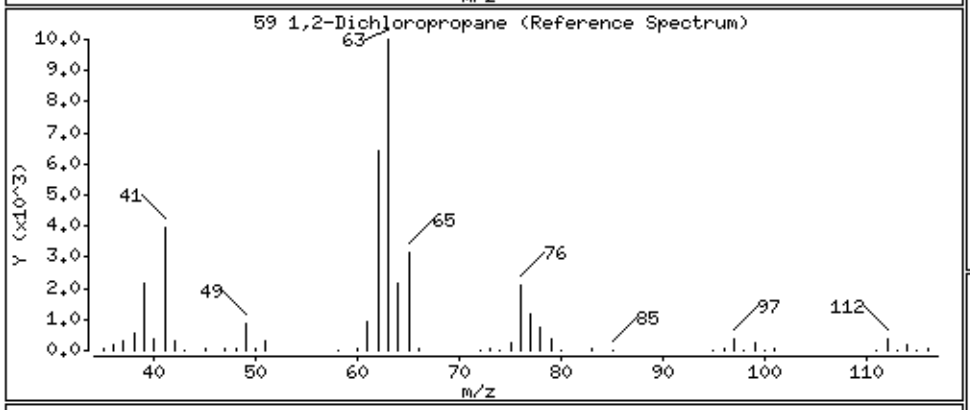
Column diameter: 0.53

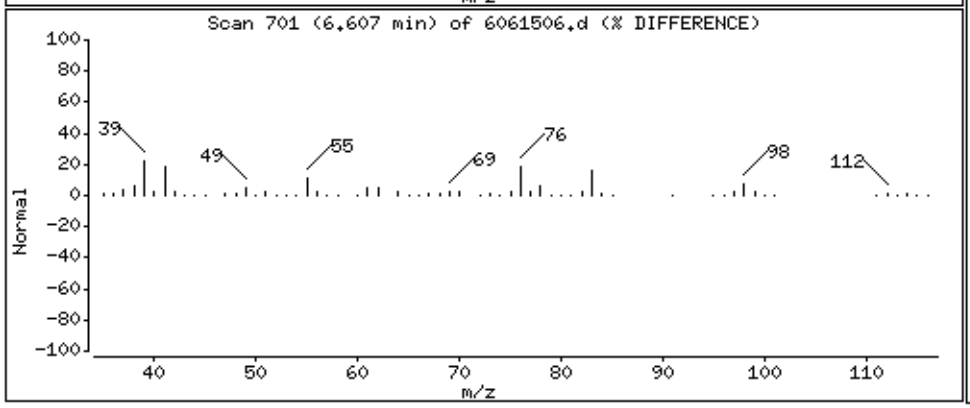
59 1,2-Dichloropropane

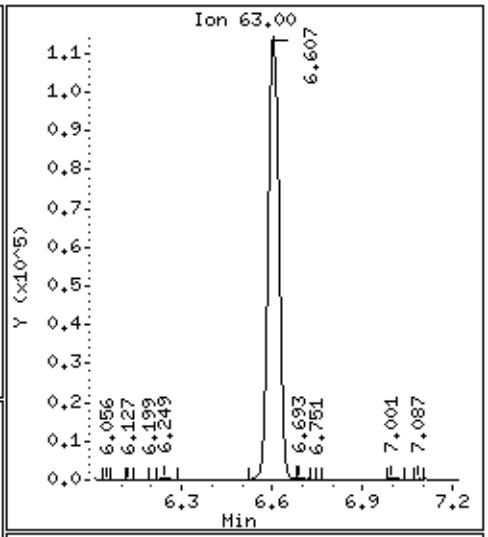
Concentration: 101.76 NG

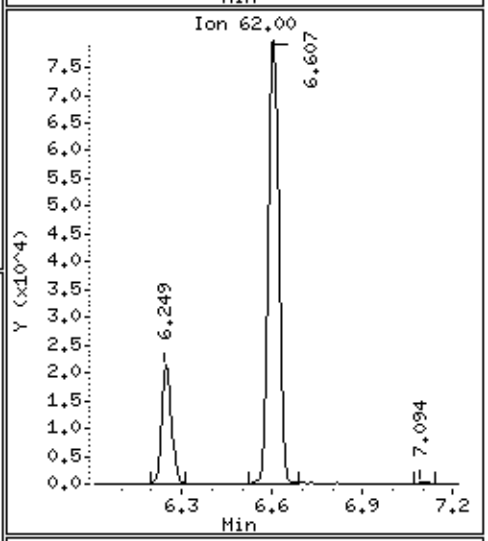


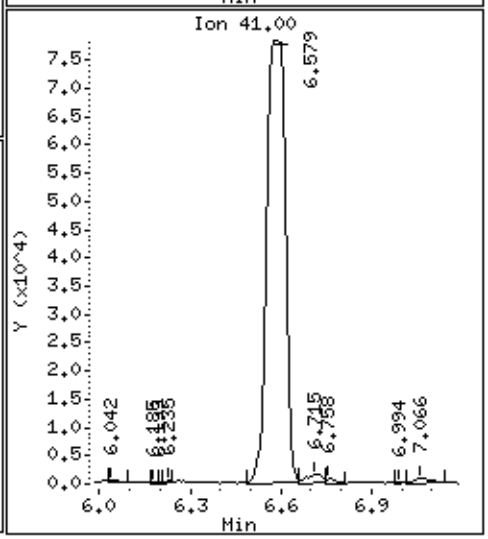












Data File: /chem/msd6.i/15jun16.b/6061506.d

Date : 15-JUN-2016 14:25

Client ID: LCS

Instrument: msd6.i

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

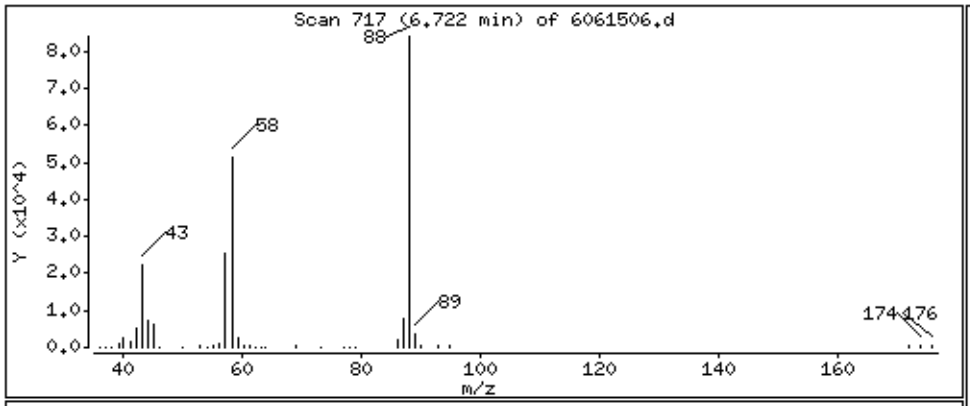
Operator: CT

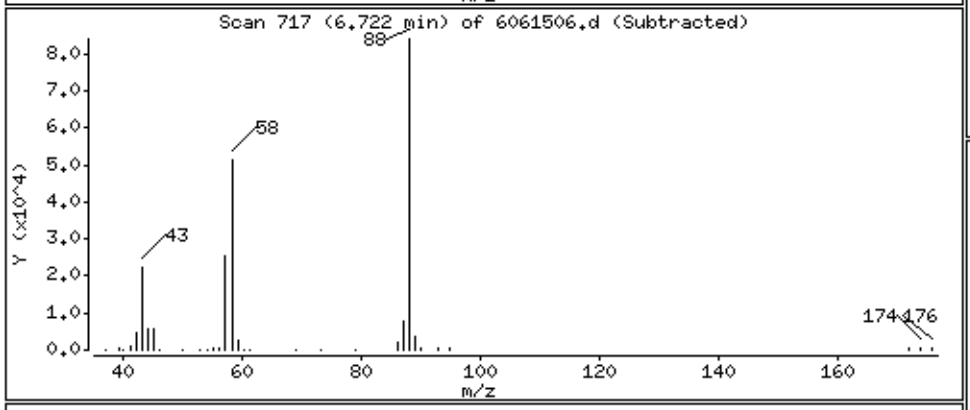
Column phase: RTx-624

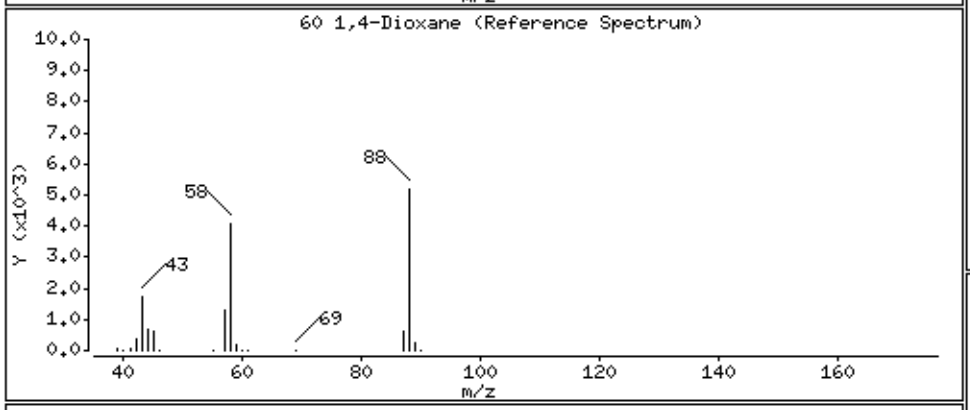
Column diameter: 0.53

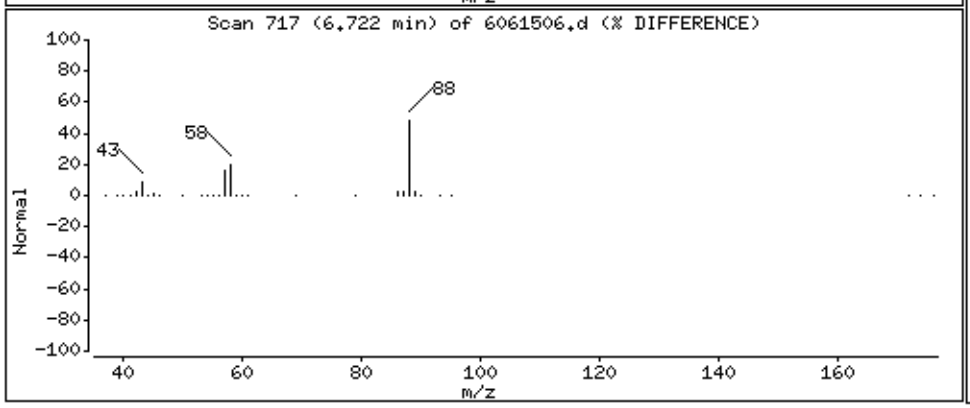
60 1,4-Dioxane

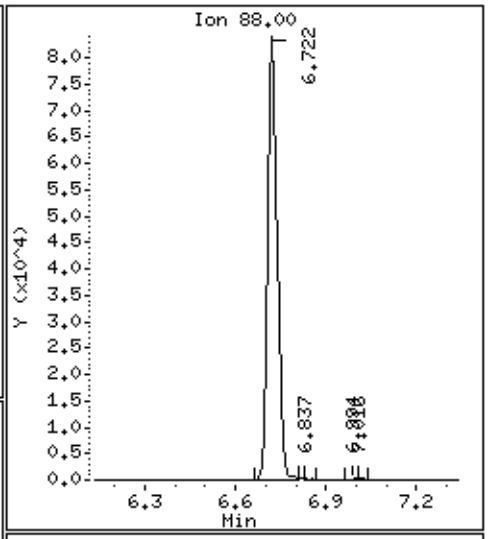
Concentration: 75.413 NG

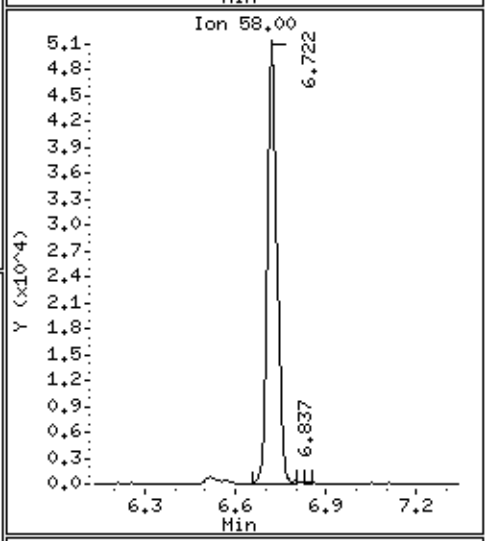


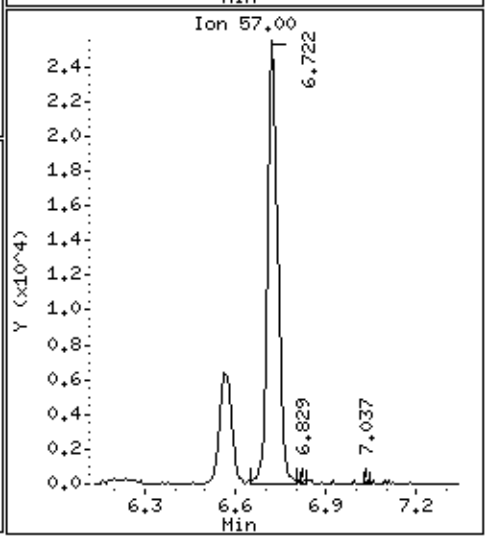












Data File: /chem/msd6.i/15jun16.b/6061506.d

Date : 15-JUN-2016 14:25

Client ID: LCS

Instrument: msd6.i

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

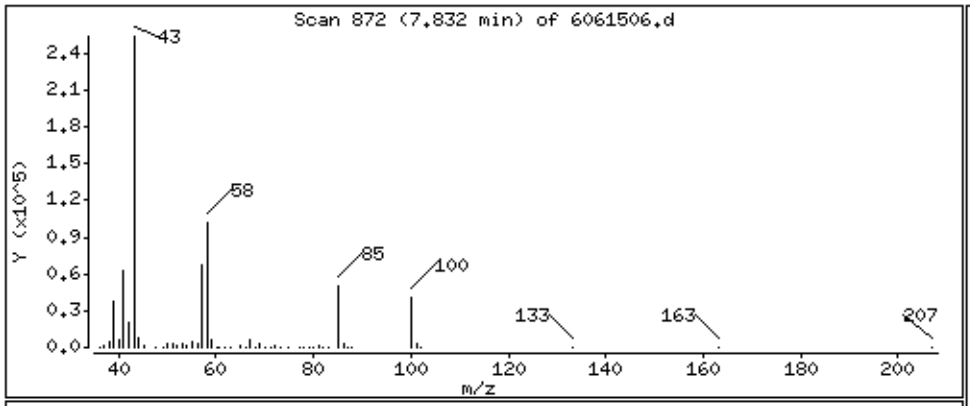
Operator: CT

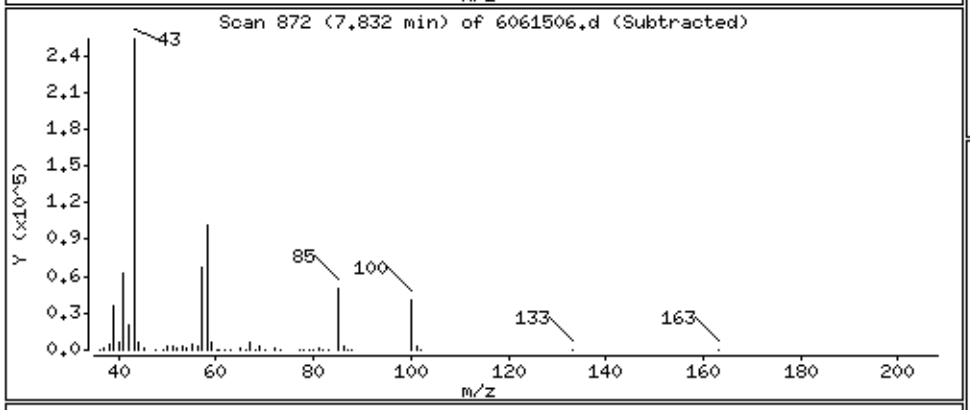
Column phase: RTx-624

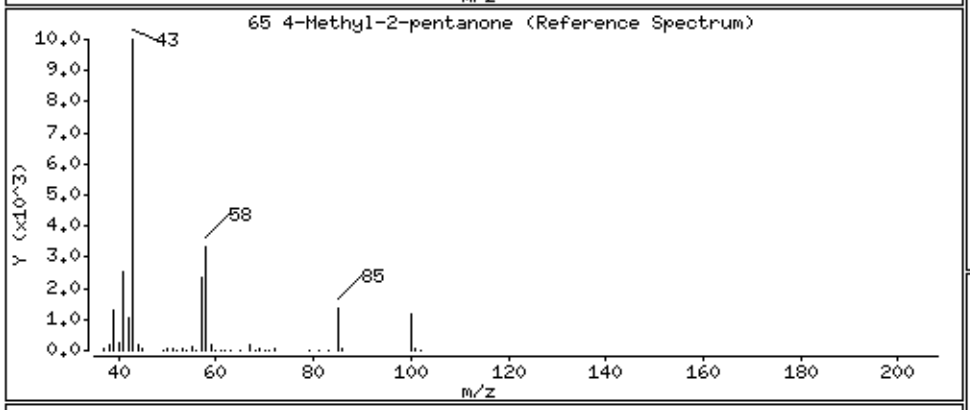
Column diameter: 0.53

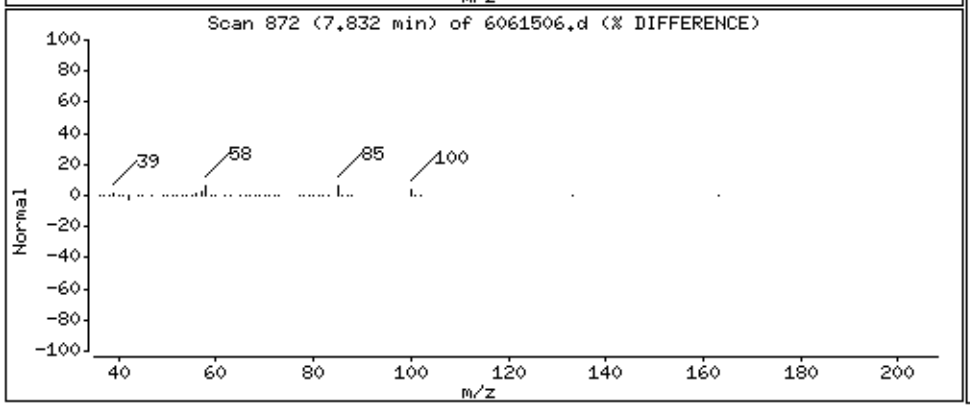
65 4-Methyl-2-pentanone

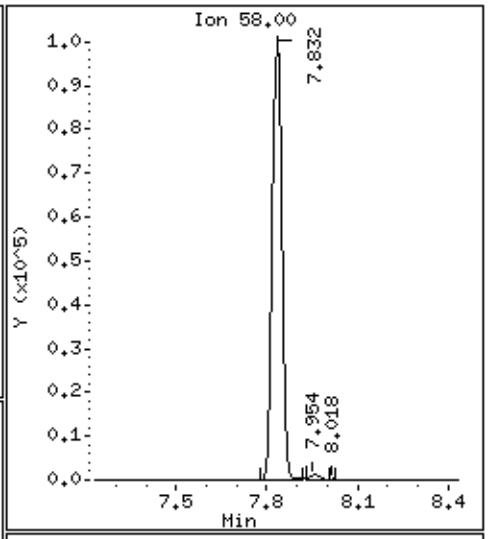
Concentration: 87.316 NG

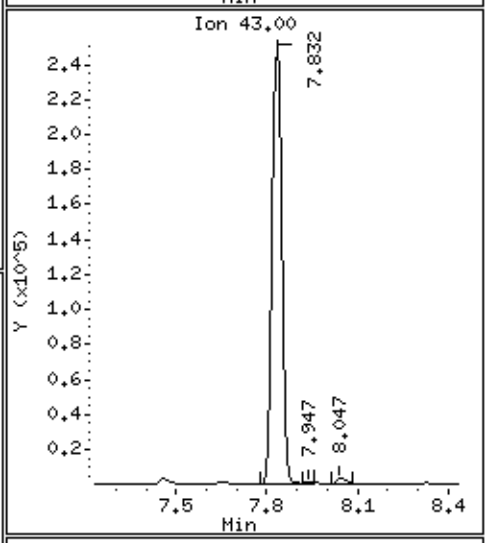


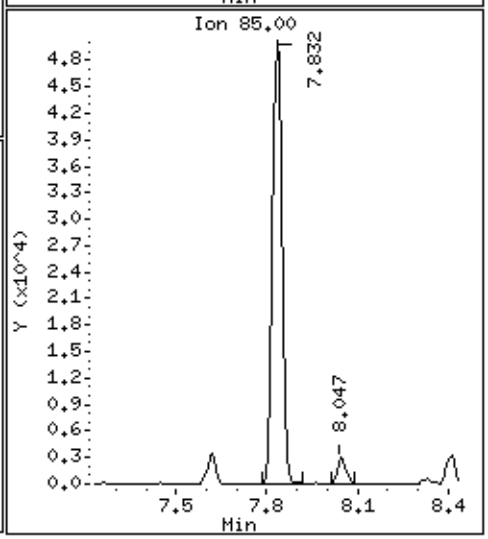












Data File: /chem/msd6.i/15jun16.b/6061506.d

Date : 15-JUN-2016 14:25

Client ID: LCS

Instrument: msd6.i

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

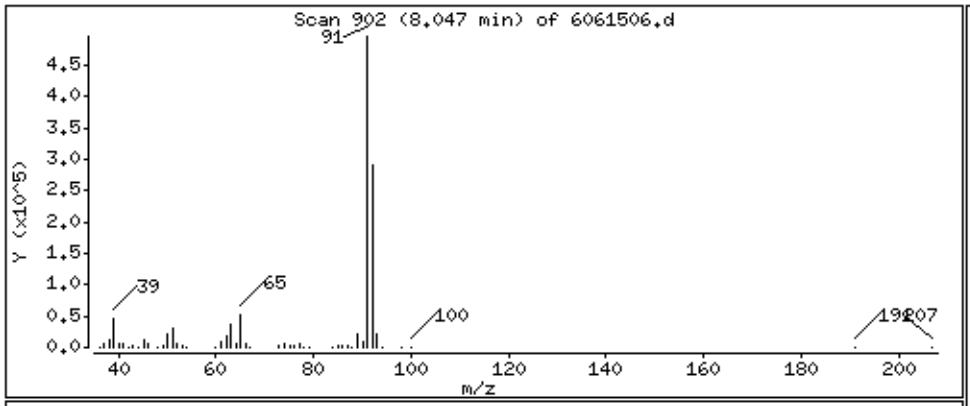
Operator: CT

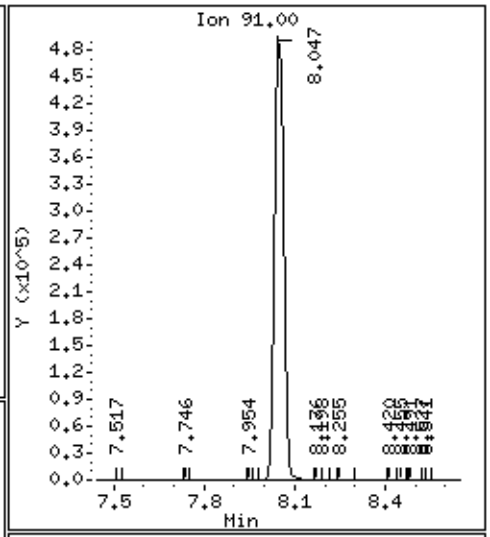
Column phase: RTx-624

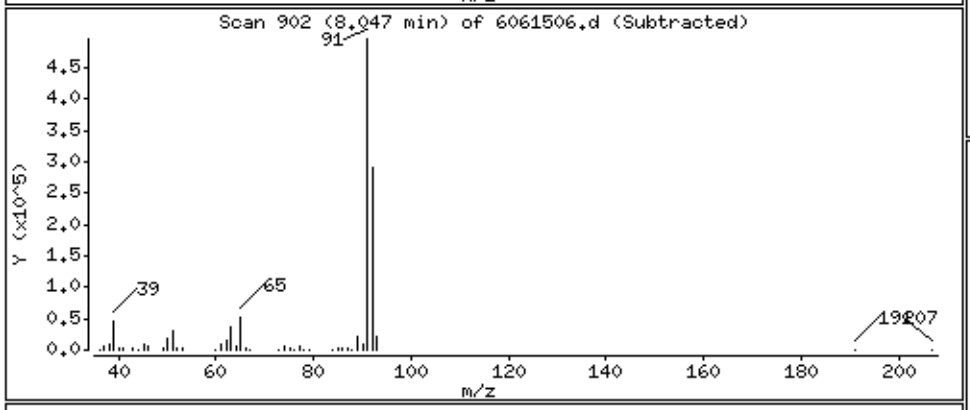
Column diameter: 0.53

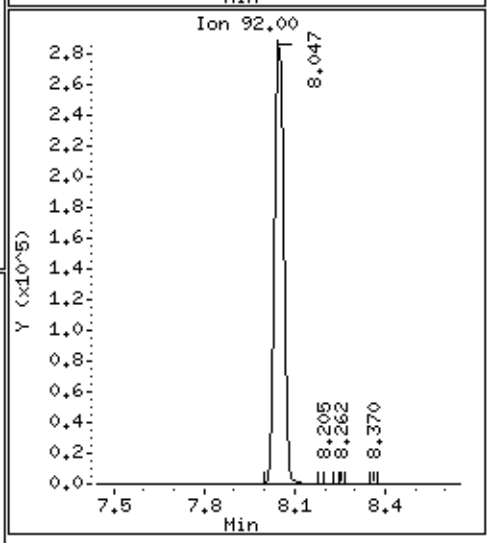
67 Toluene

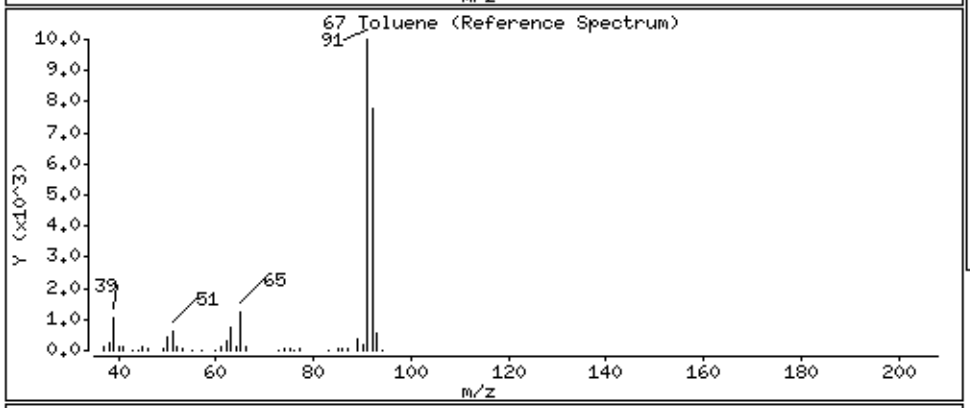
Concentration: 76.907 NG

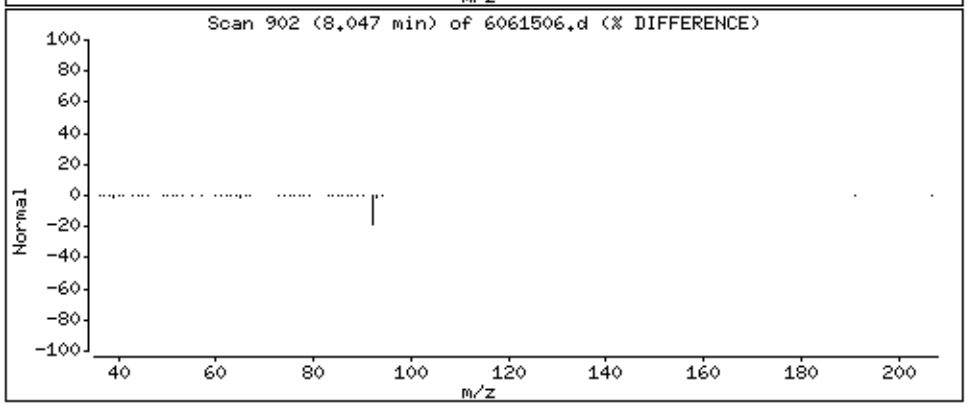












Data File: /chem/msd6.i/15jun16.b/6061506.d

Date : 15-JUN-2016 14:25

Client ID: LCS

Instrument: msd6.i

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

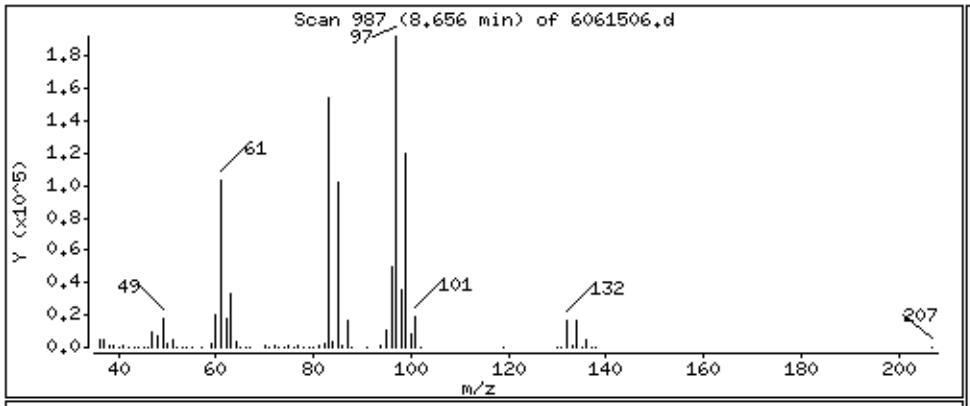
Operator: CT

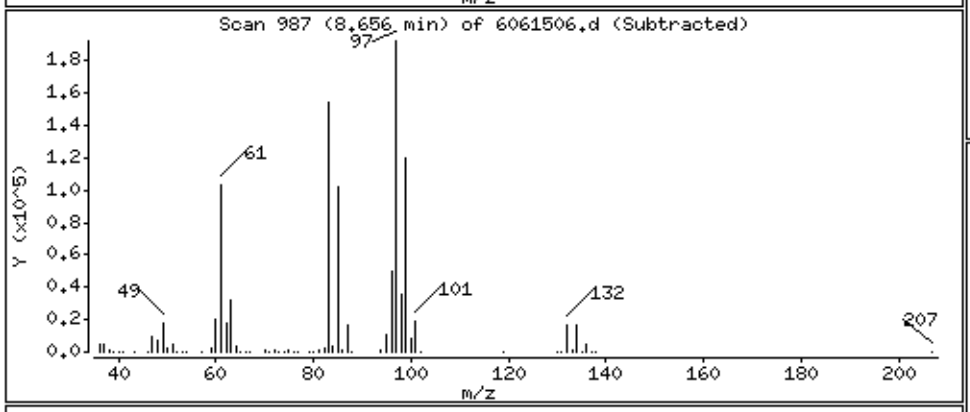
Column phase: RTx-624

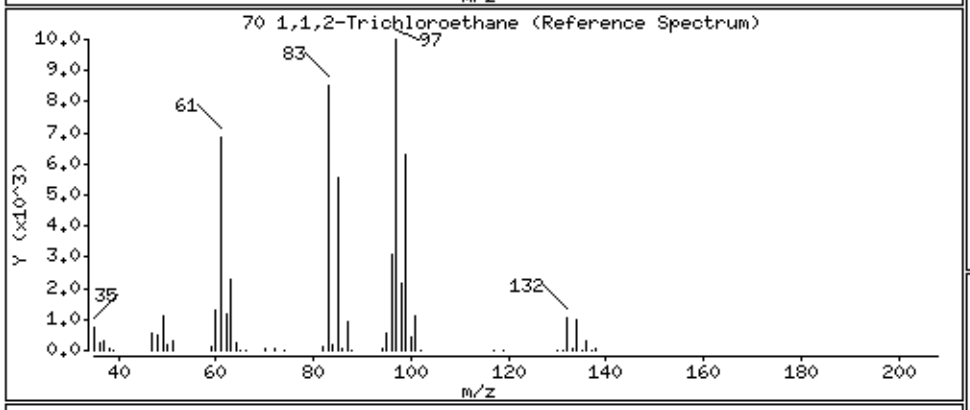
Column diameter: 0.53

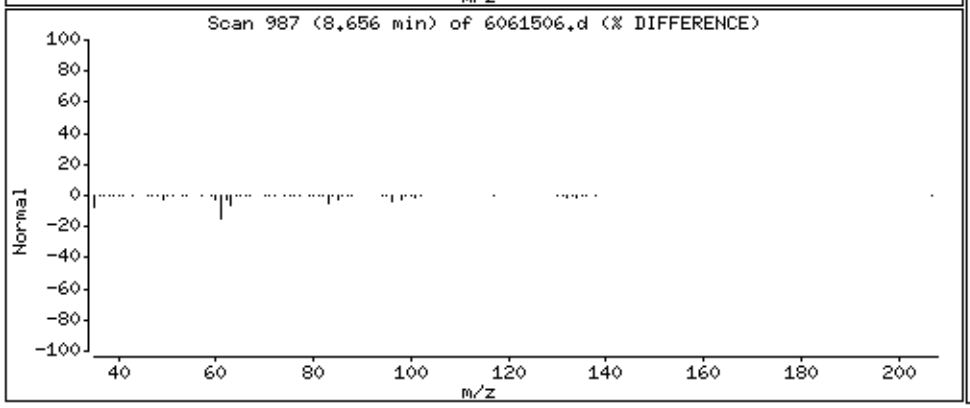
70 1,1,2-Trichloroethane

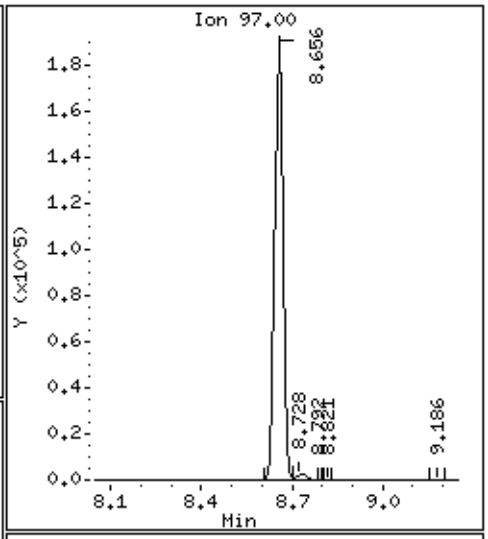
Concentration: 115.85 NG

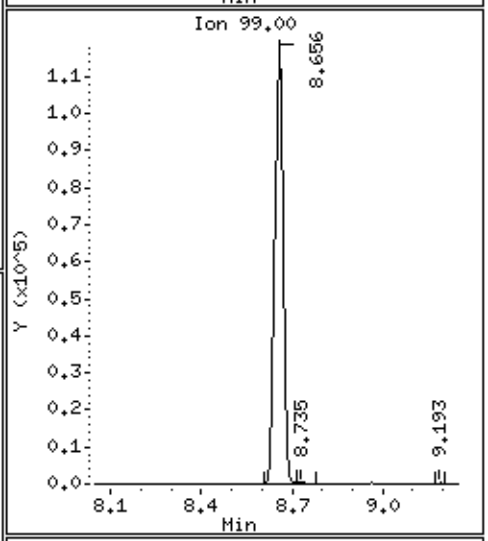


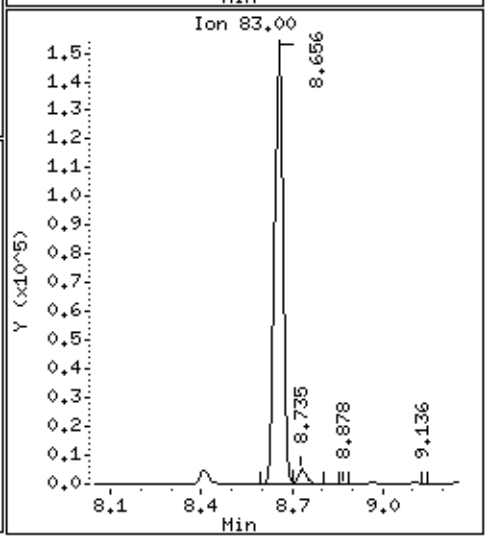












Data File: /chem/msd6.i/15jun16.b/6061506.d

Date : 15-JUN-2016 14:25

Client ID: LCS

Instrument: msd6.i

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

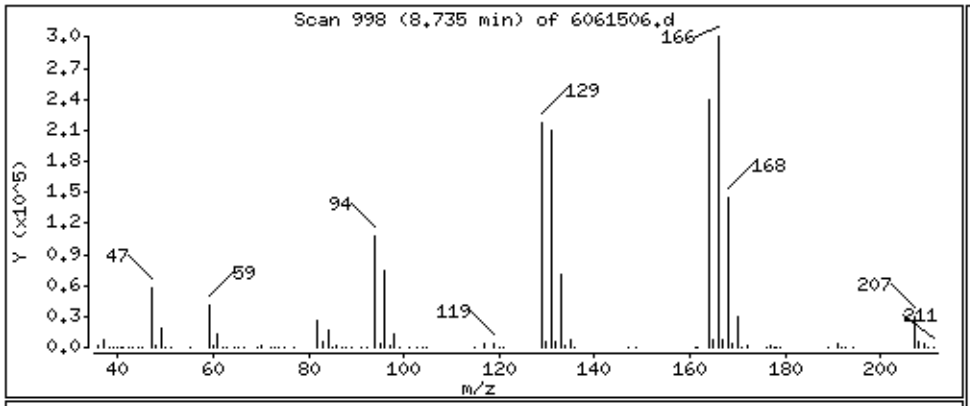
Operator: CT

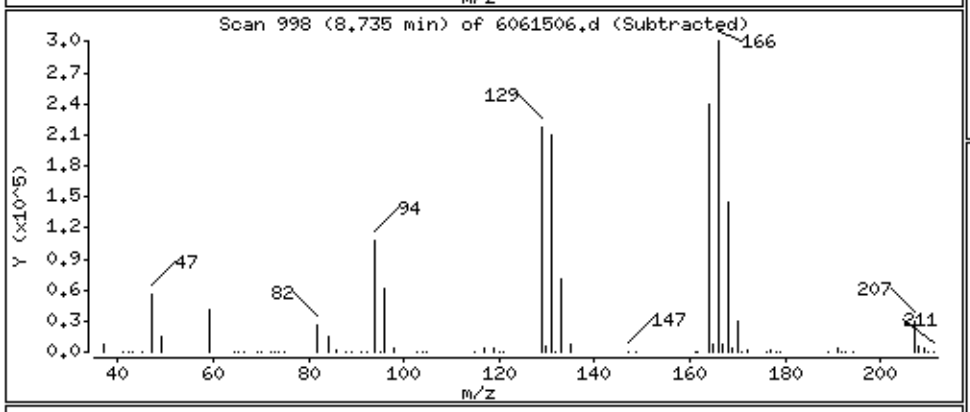
Column phase: RTx-624

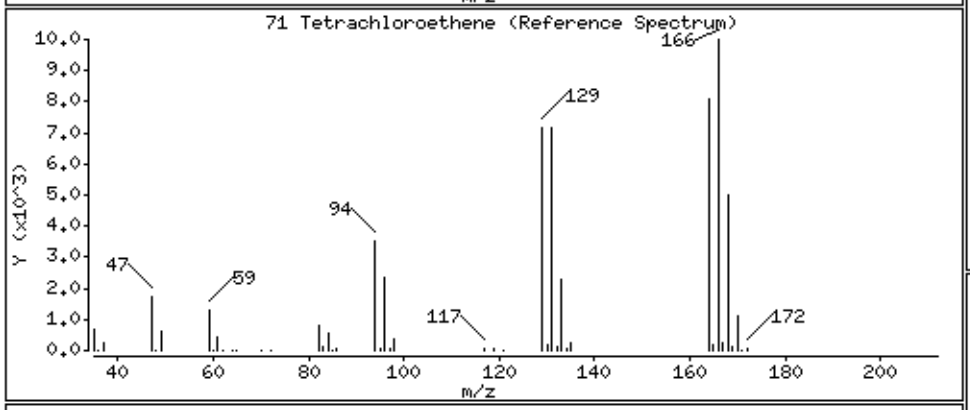
Column diameter: 0.53

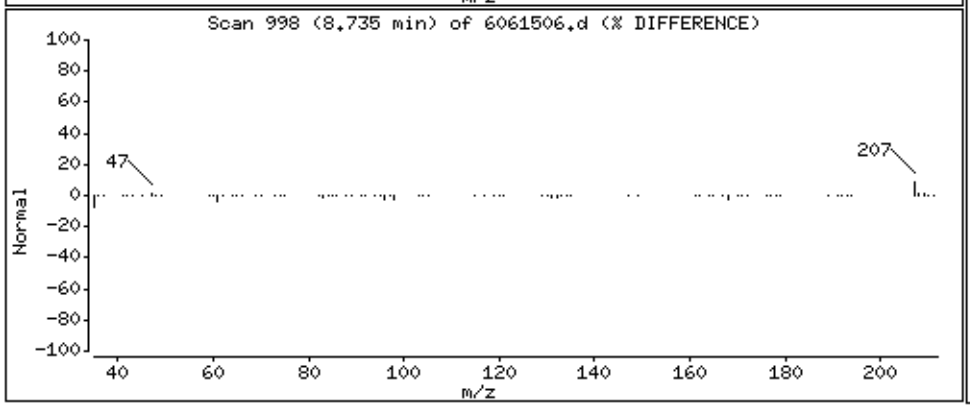
71 Tetrachloroethene

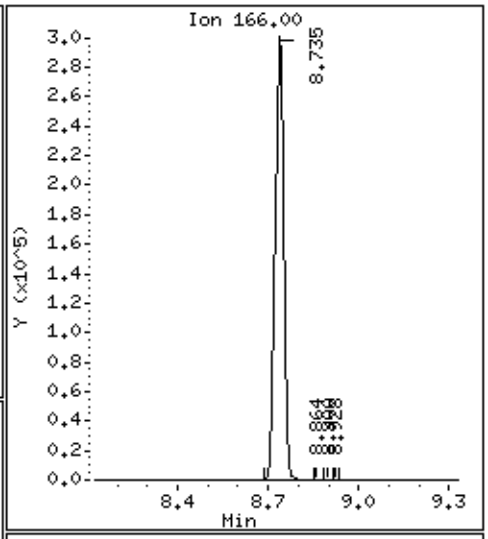
Concentration: 140.09 NG

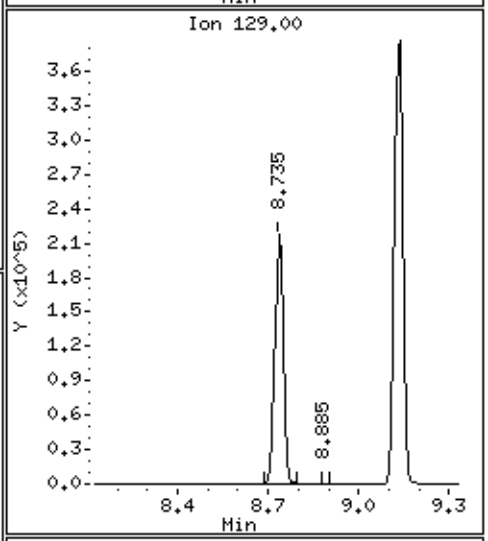


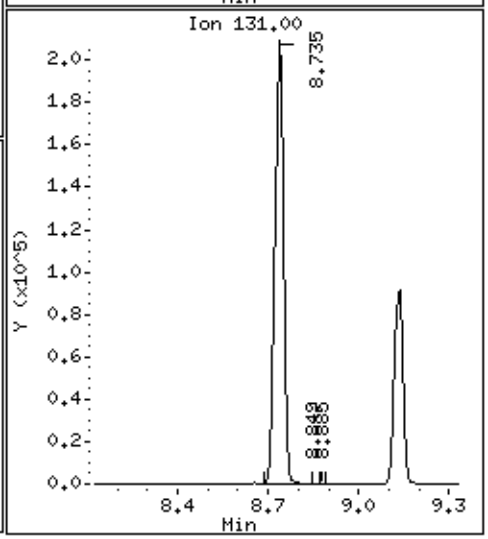












Data File: /chem/msd6.i/15jun16.b/6061506.d

Date : 15-JUN-2016 14:25

Client ID: LCS

Instrument: msd6.i

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

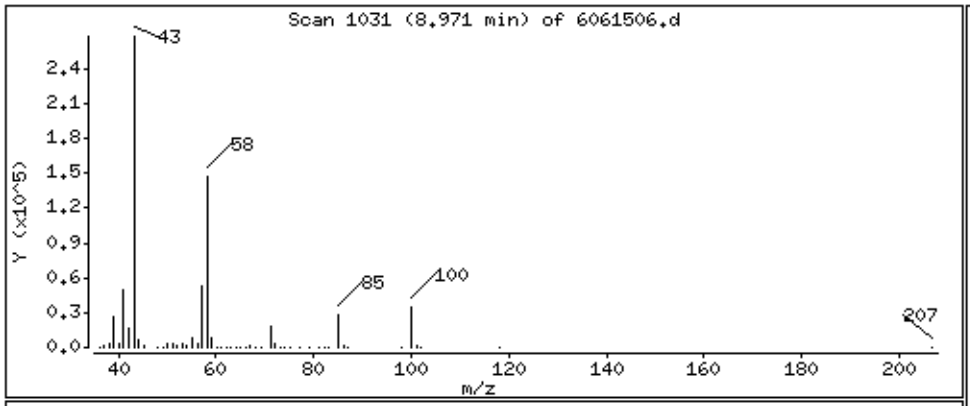
Operator: CT

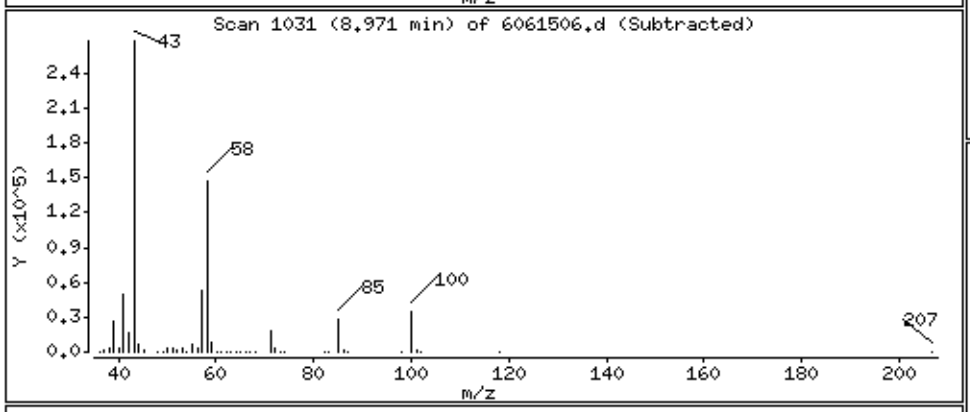
Column phase: RTx-624

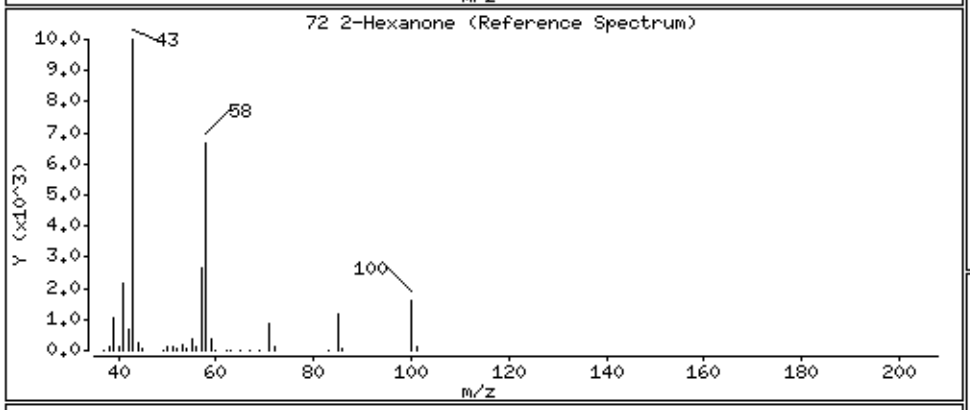
Column diameter: 0.53

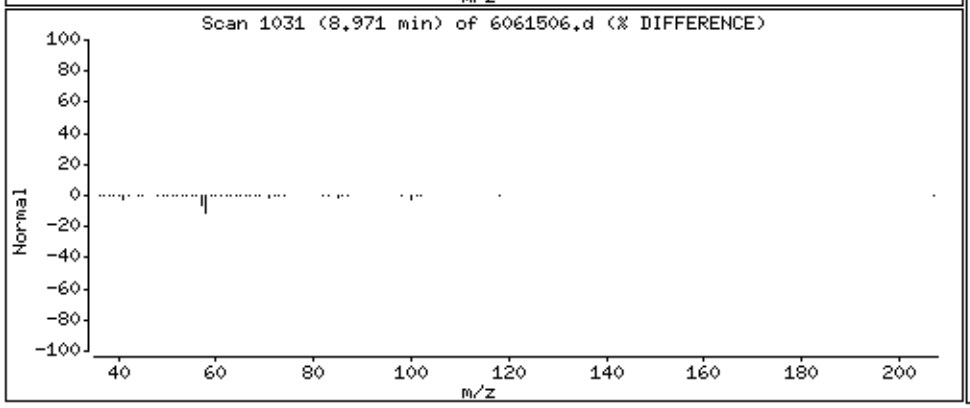
72 2-Hexanone

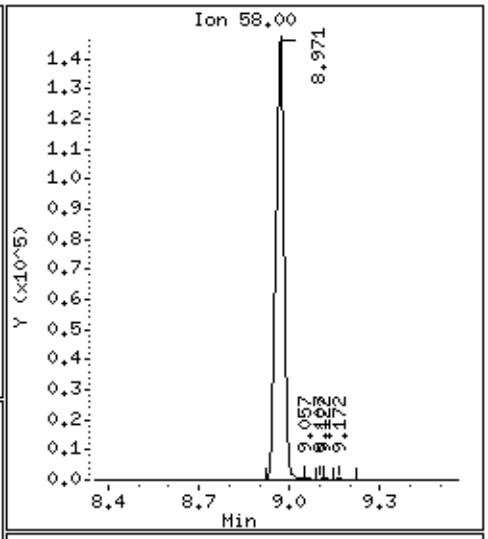
Concentration: 84.799 NG

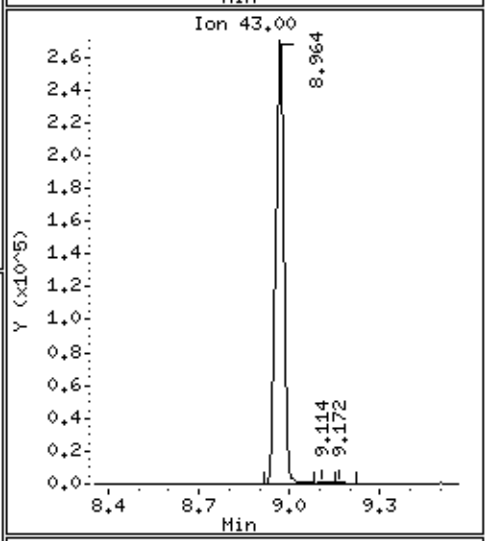


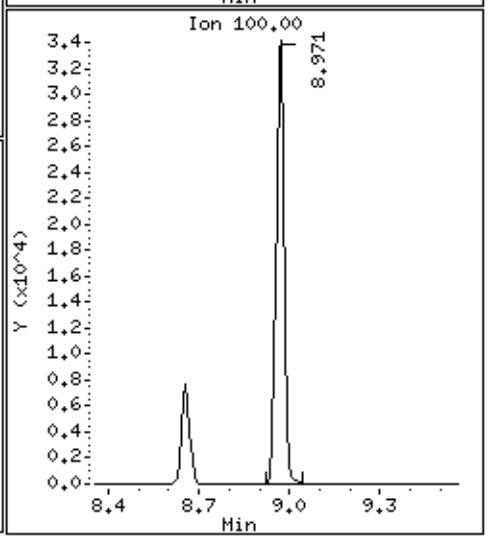












Data File: /chem/msd6.i/15jun16.b/6061506.d

Date : 15-JUN-2016 14:25

Client ID: LCS

Instrument: msd6.i

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

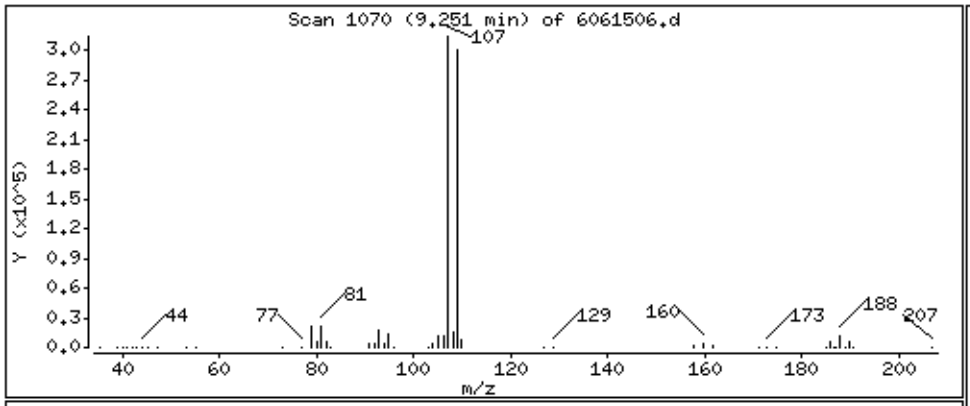
Operator: CT

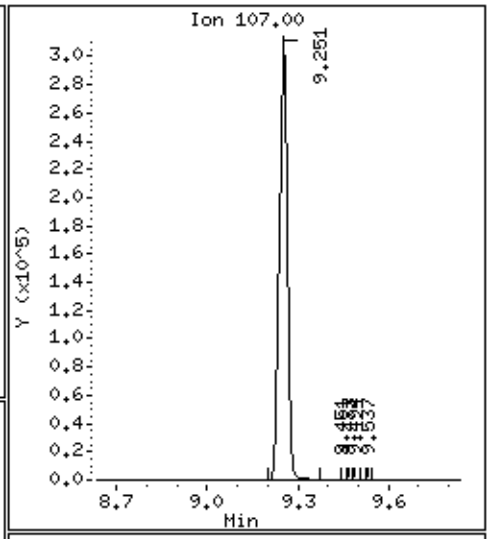
Column phase: RTx-624

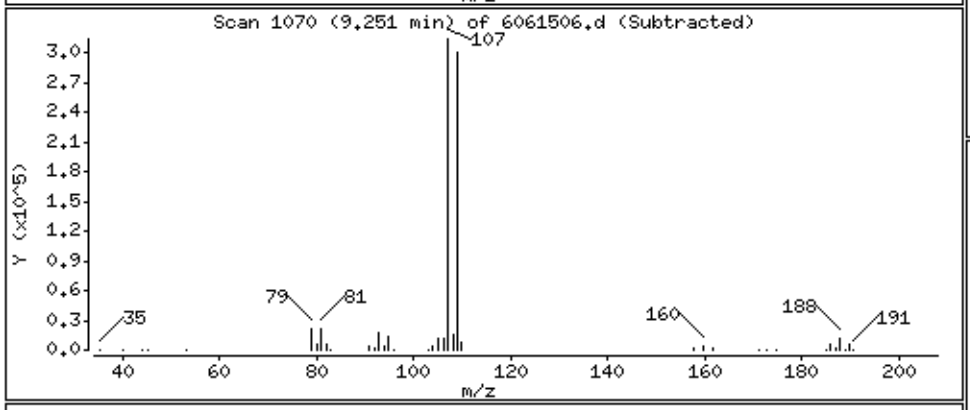
Column diameter: 0.53

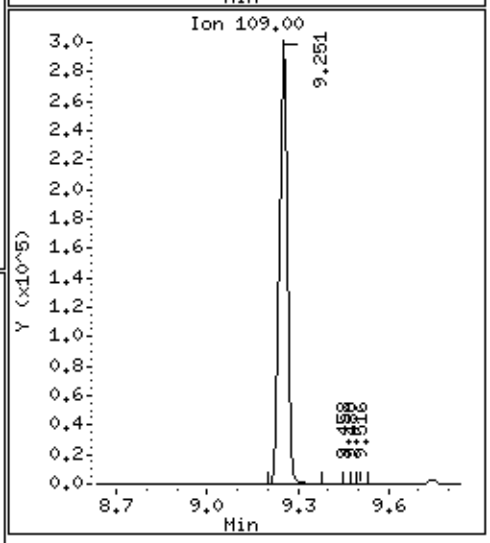
74 1,2-Dibromoethane

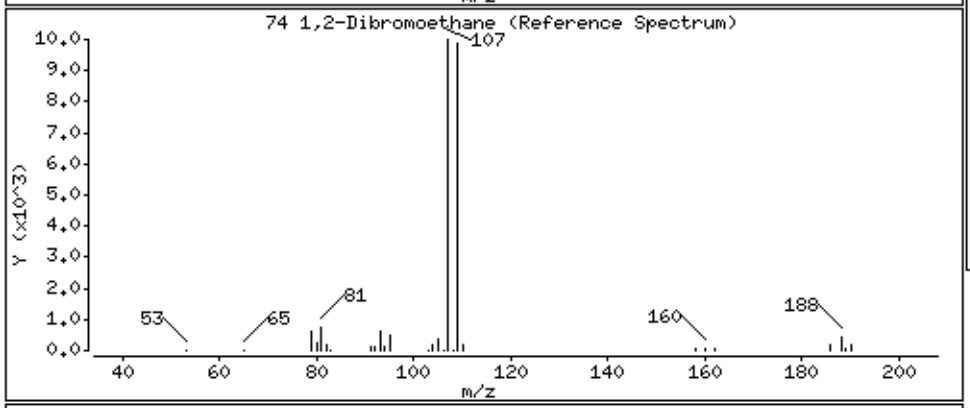
Concentration: 171.80 NG

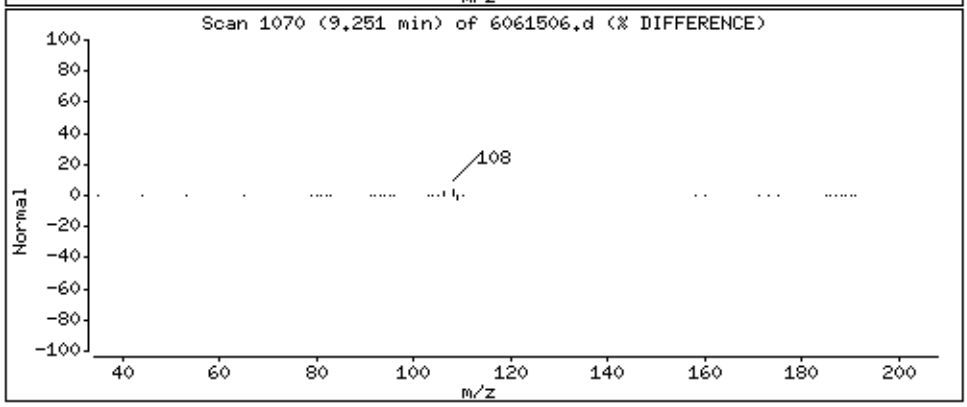












Data File: /chem/msd6.i/15jun16.b/6061506.d

Date : 15-JUN-2016 14:25

Client ID: LCS

Instrument: msd6.i

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

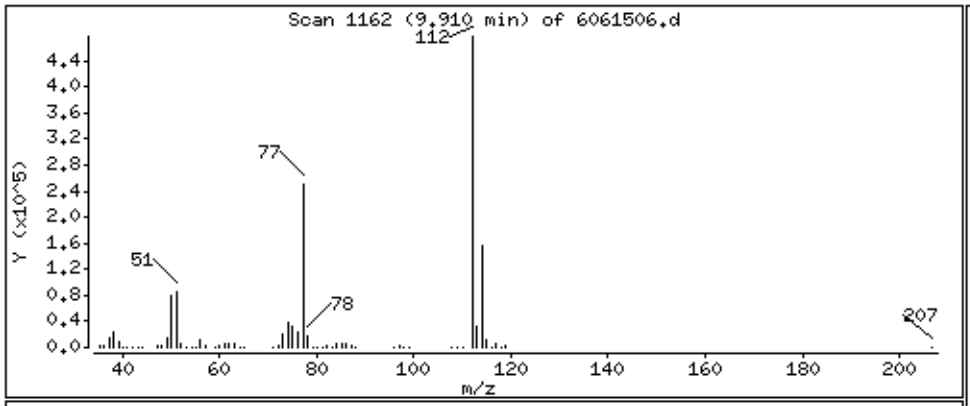
Operator: CT

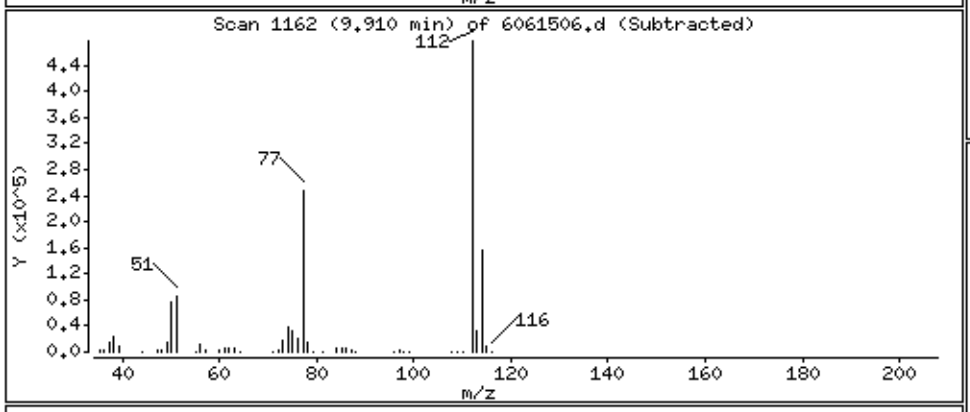
Column phase: RTx-624

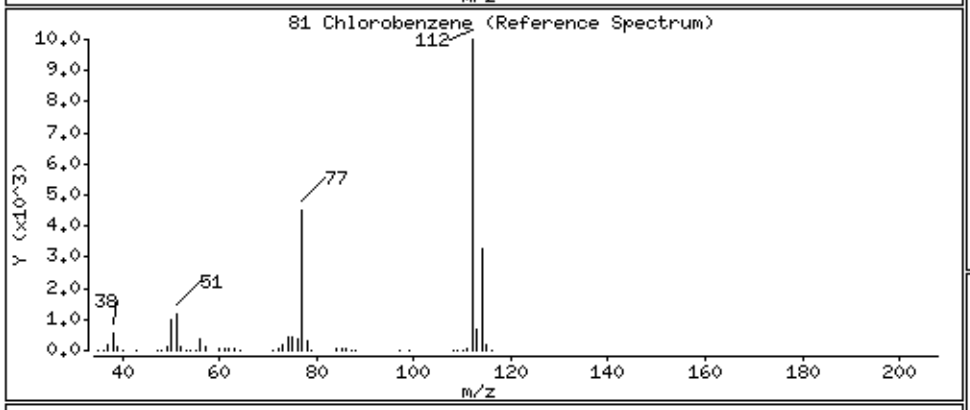
Column diameter: 0.53

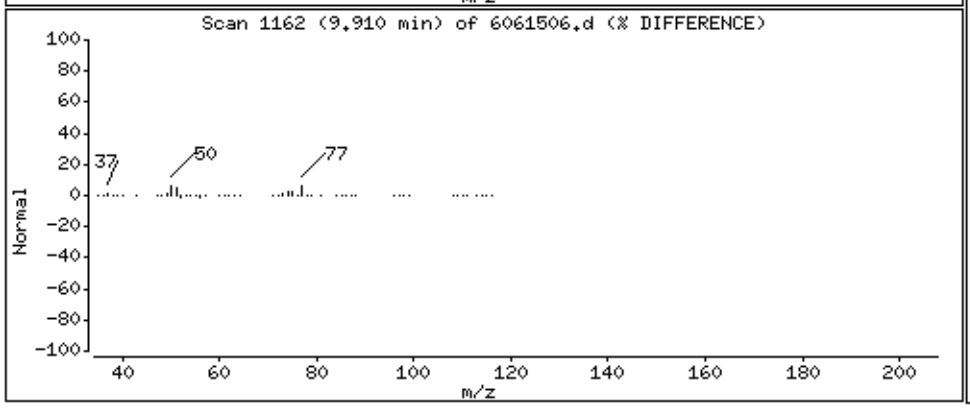
81 Chlorobenzene

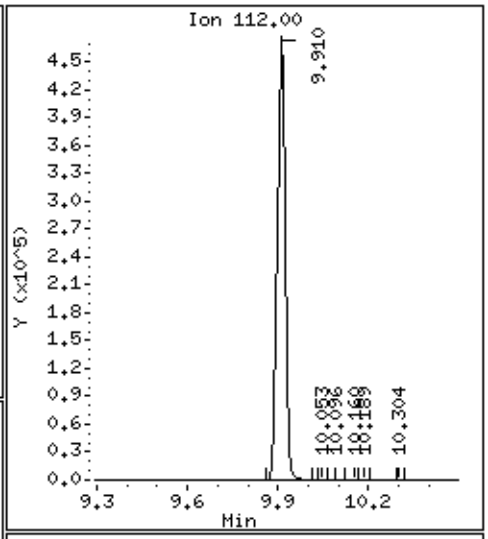
Concentration: 91.760 NG

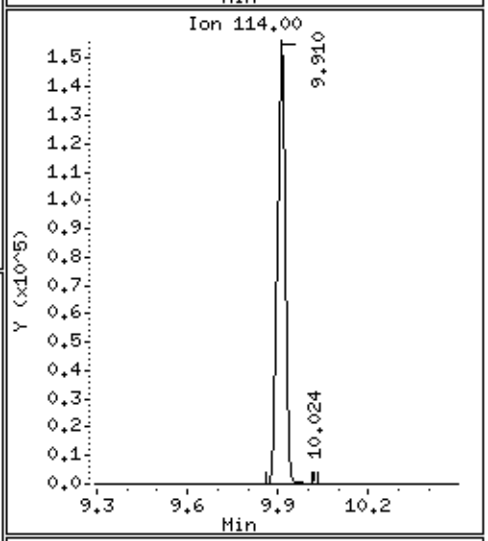


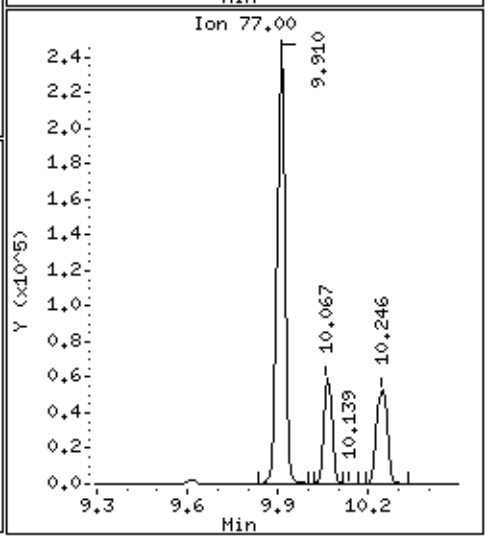












Data File: /chem/msd6.i/15jun16.b/6061506.d

Date : 15-JUN-2016 14:25

Client ID: LCS

Instrument: msd6.i

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

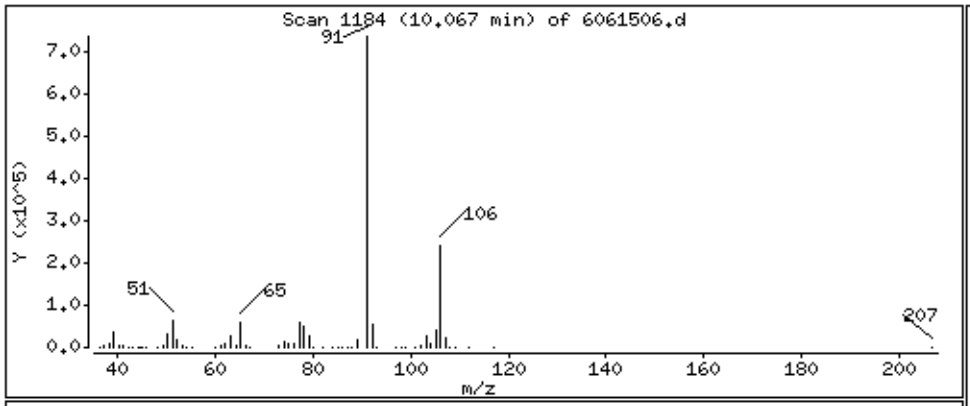
Operator: CT

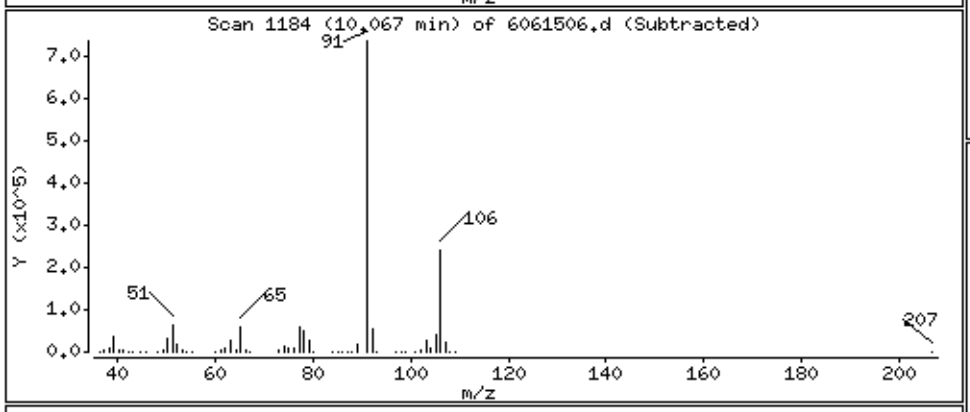
Column phase: RTx-624

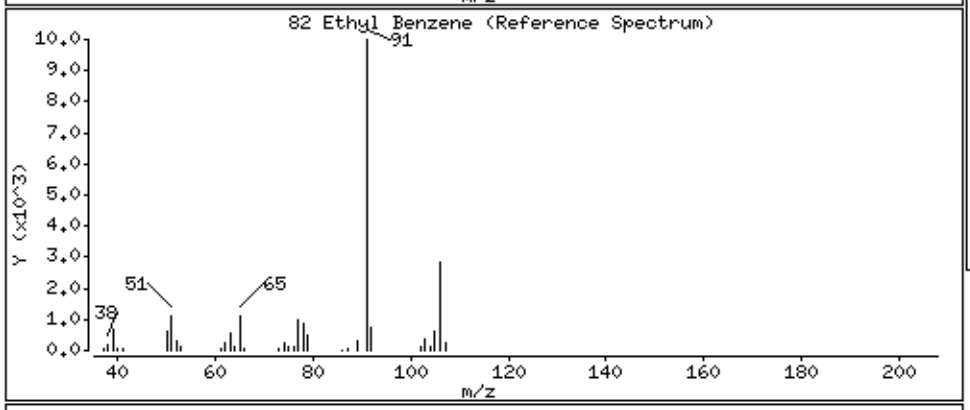
Column diameter: 0.53

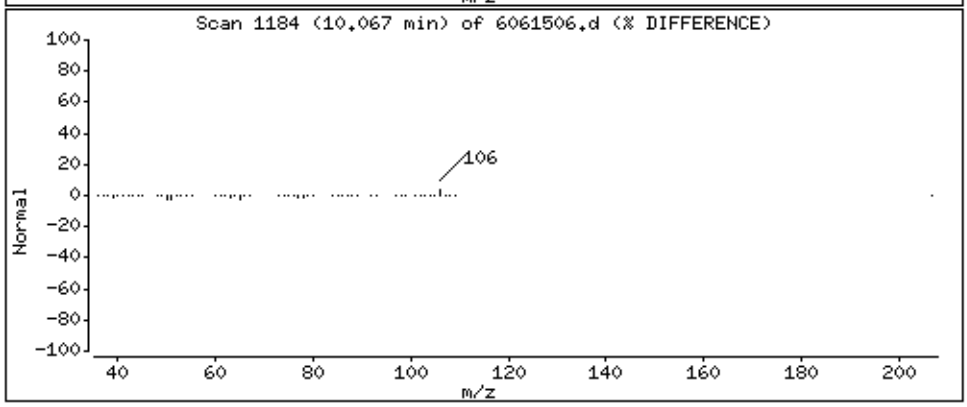
82 Ethyl Benzene

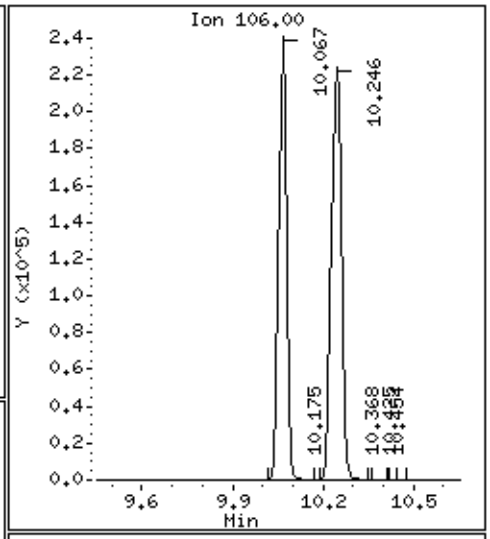
Concentration: 88.849 NG

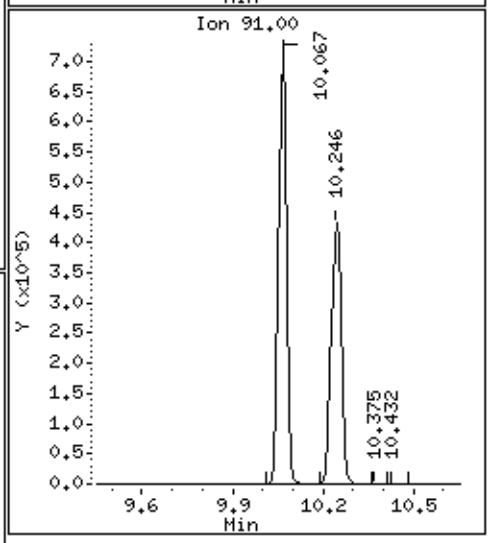












Data File: /chem/msd6.i/15jun16.b/6061506.d

Date : 15-JUN-2016 14:25

Client ID: LCS

Instrument: msd6.i

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

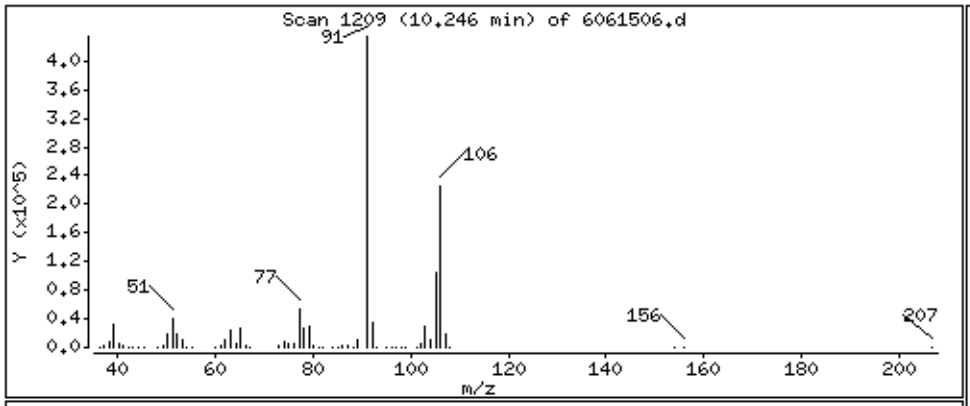
Operator: CT

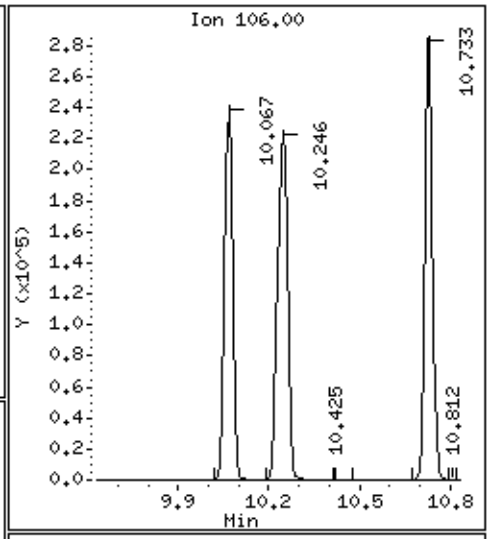
Column phase: RTx-624

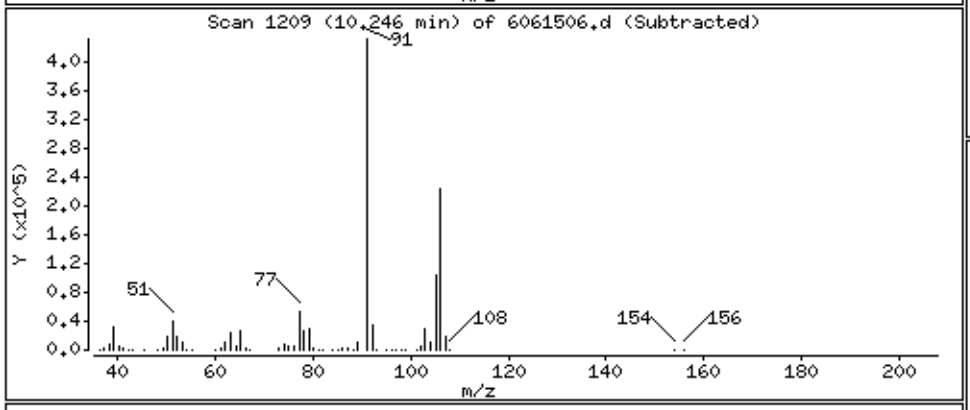
Column diameter: 0.53

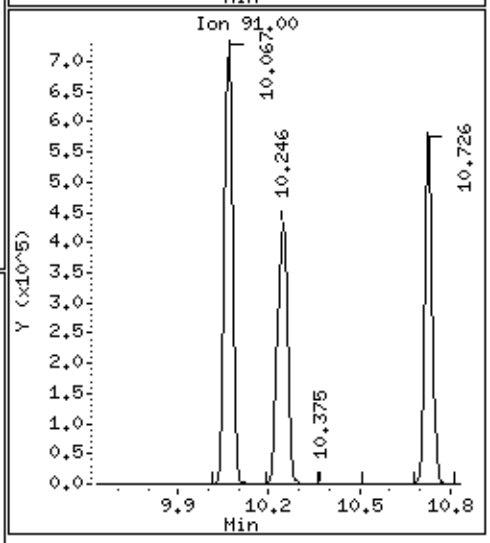
84 m,p-Xylene

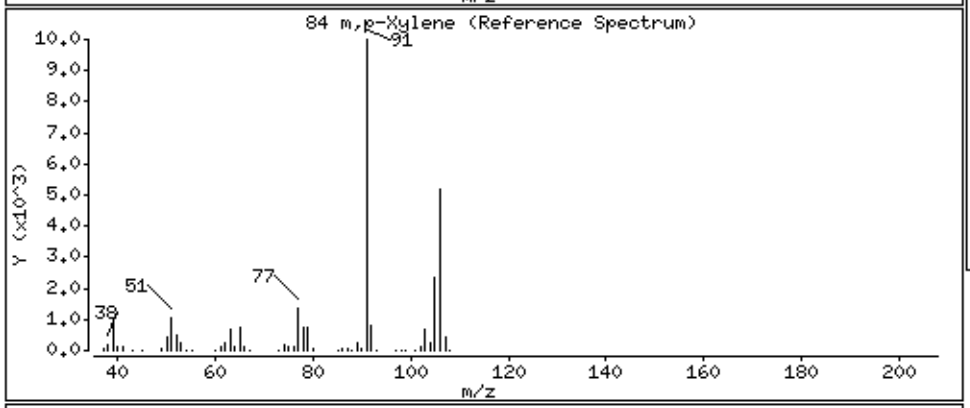
Concentration: 88.748 NG

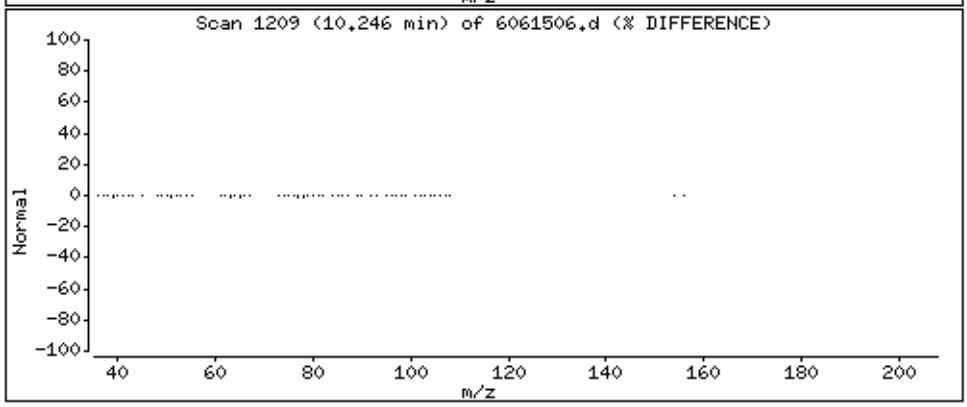












Data File: /chem/msd6.i/15jun16.b/6061506.d

Date : 15-JUN-2016 14:25

Client ID: LCS

Instrument: msd6.i

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

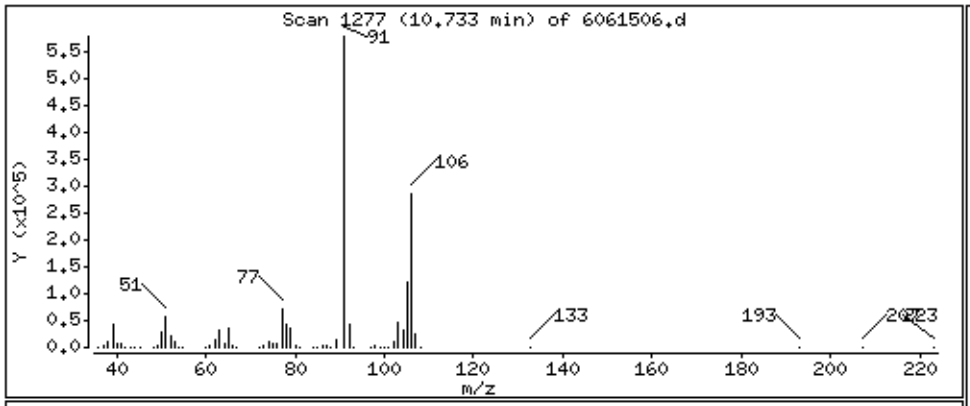
Operator: CT

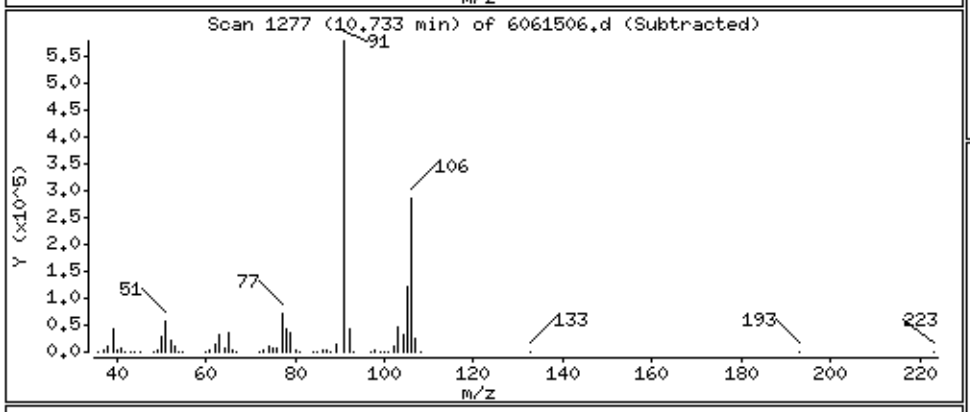
Column phase: RTx-624

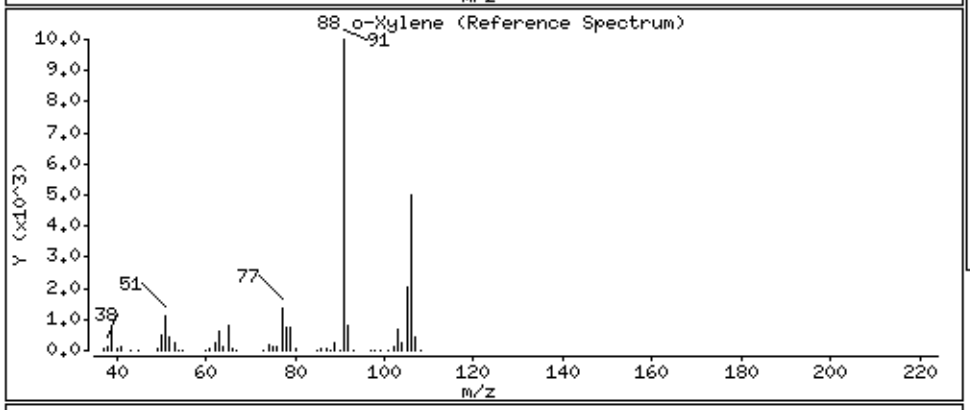
Column diameter: 0.53

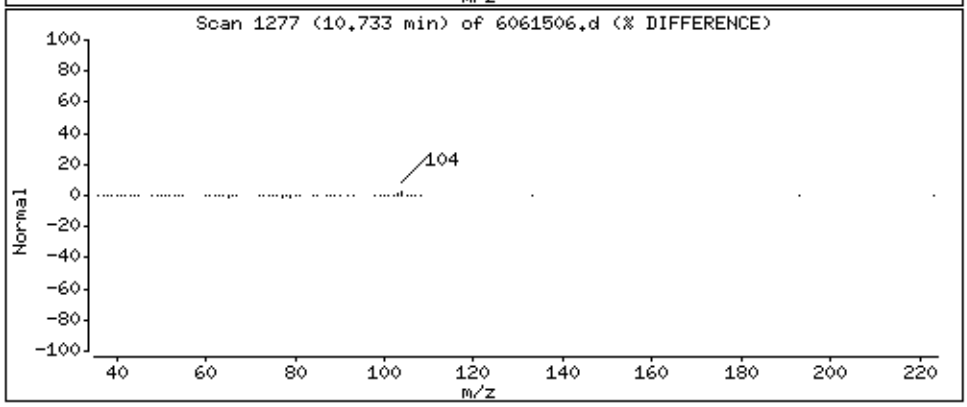
88 o-Xylene

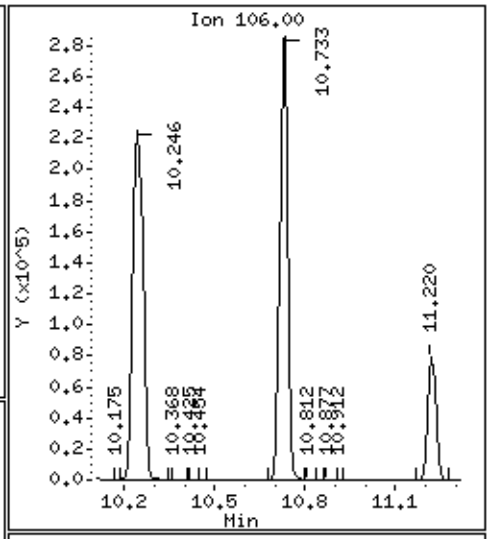
Concentration: 90.151 NG

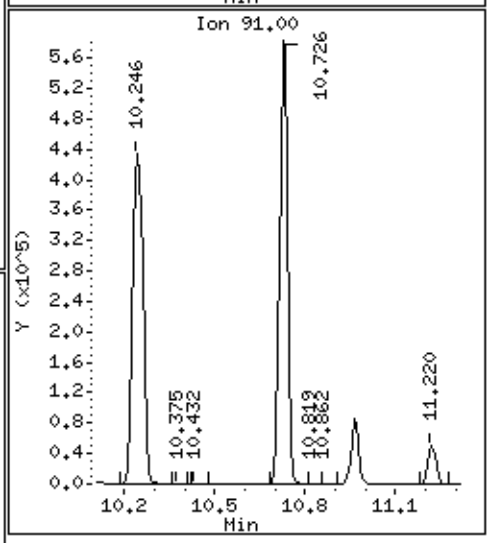












Data File: /chem/msd6.i/15jun16.b/6061506.d

Date : 15-JUN-2016 14:25

Client ID: LCS

Instrument: msd6.i

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

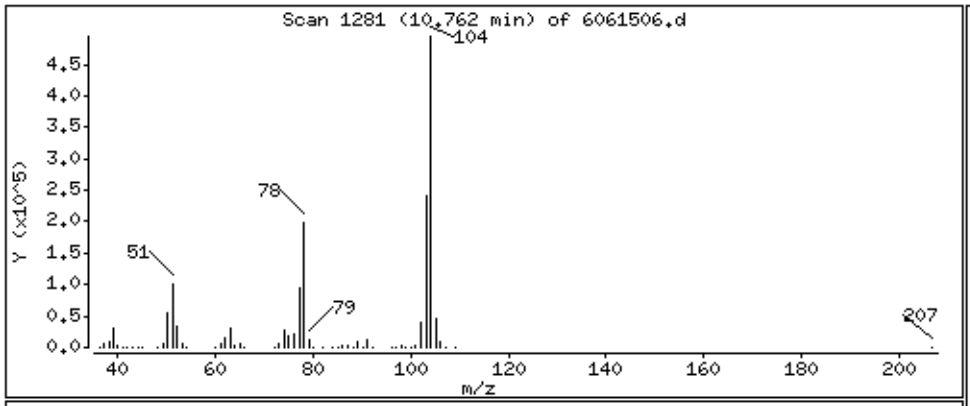
Operator: CT

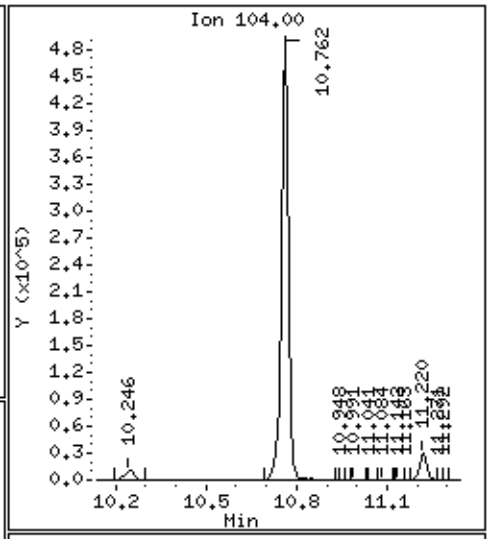
Column phase: RTx-624

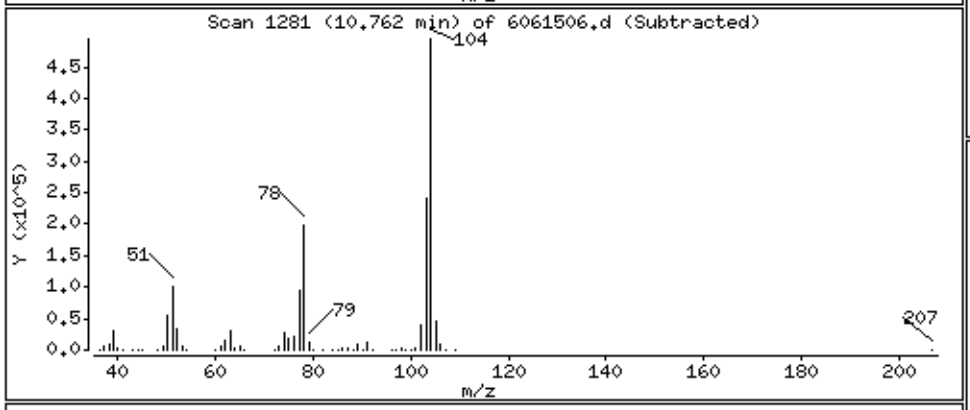
Column diameter: 0.53

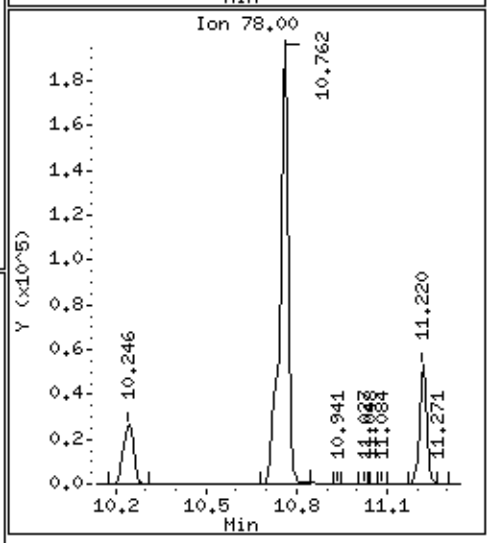
89 Styrene

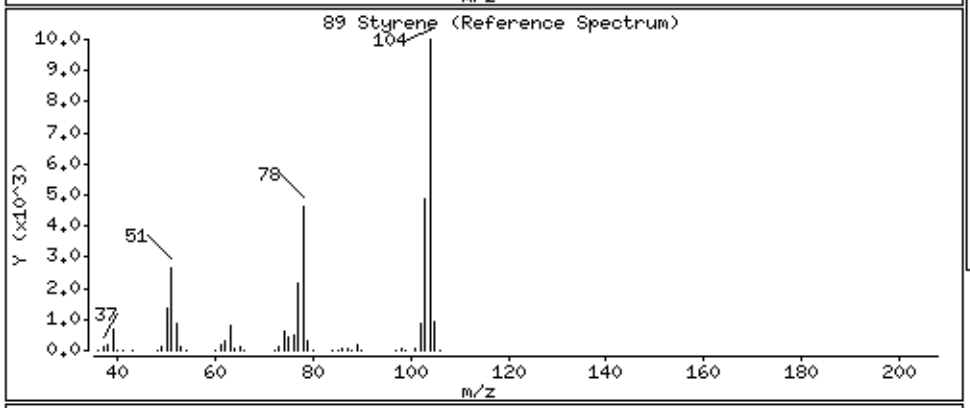
Concentration: 89.567 NG

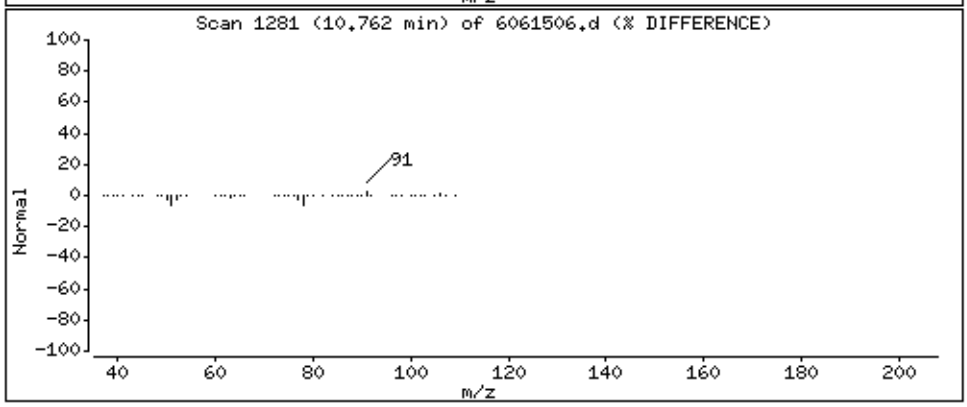












Data File: /chem/msd6.i/15jun16.b/6061506.d

Date : 15-JUN-2016 14:25

Client ID: LCS

Instrument: msd6.i

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

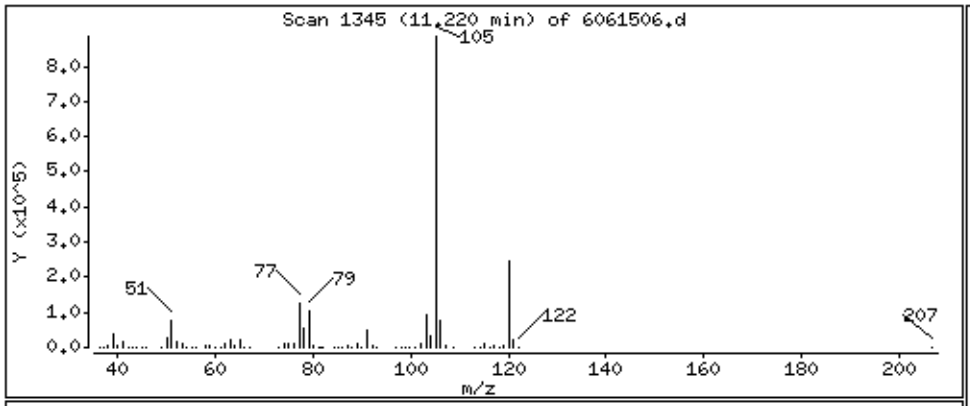
Operator: CT

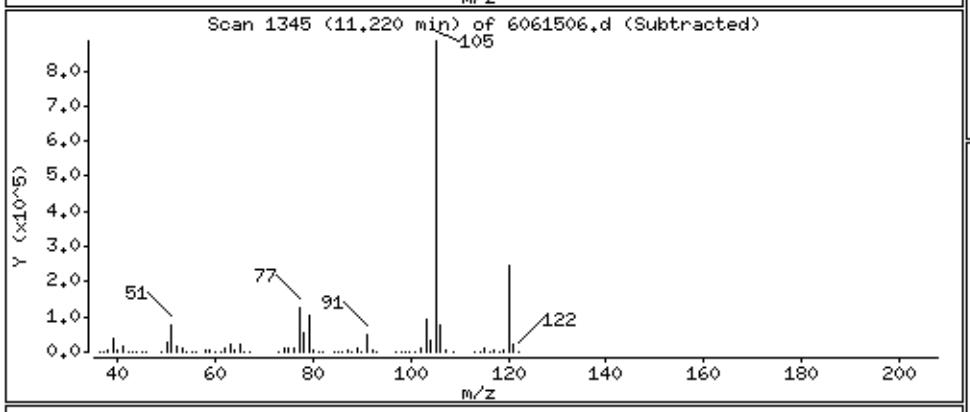
Column phase: RTx-624

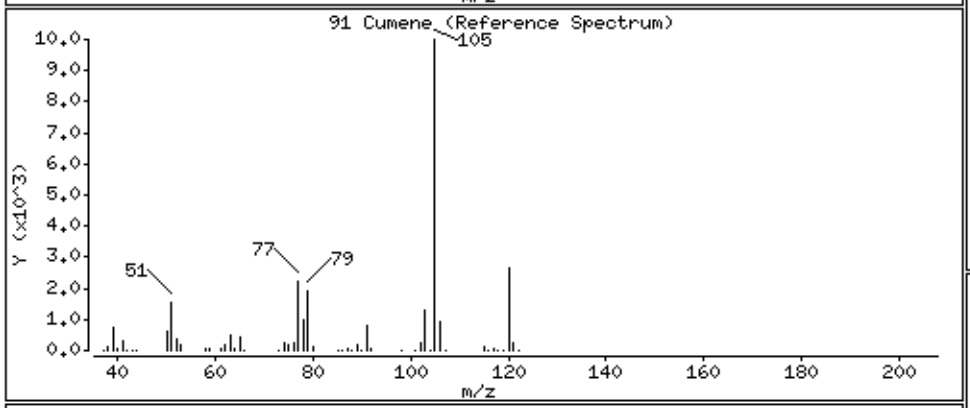
Column diameter: 0.53

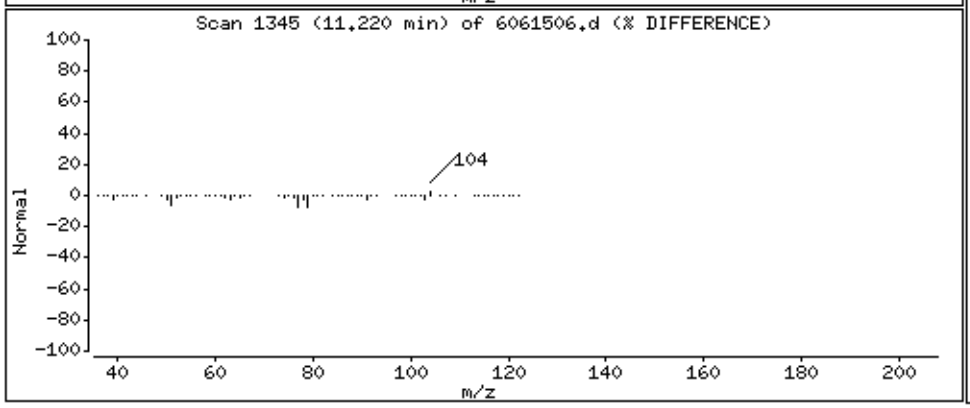
91 Cumene

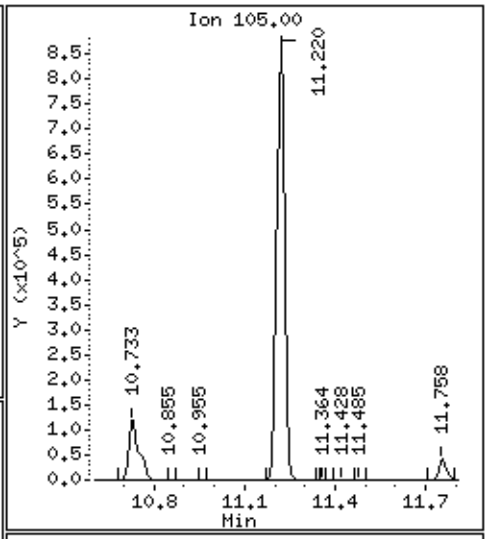
Concentration: 99.670 NG

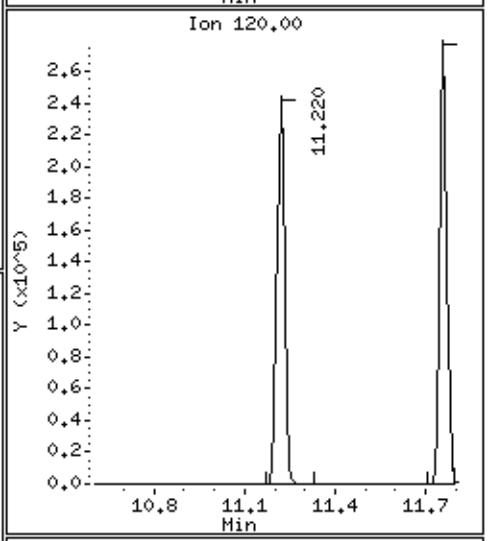


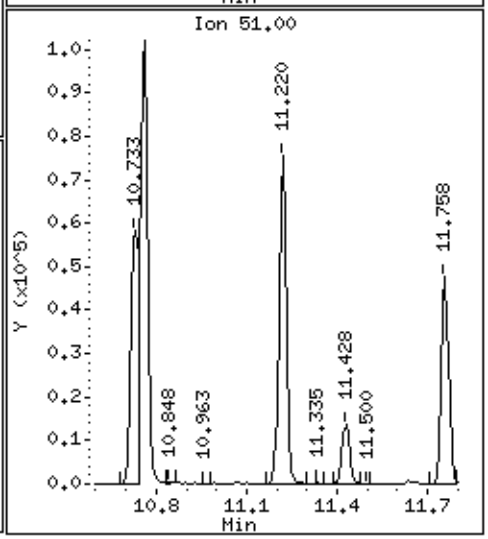












Data File: /chem/msd6.i/15jun16.b/6061506.d

Date : 15-JUN-2016 14:25

Client ID: LCS

Instrument: msd6.i

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

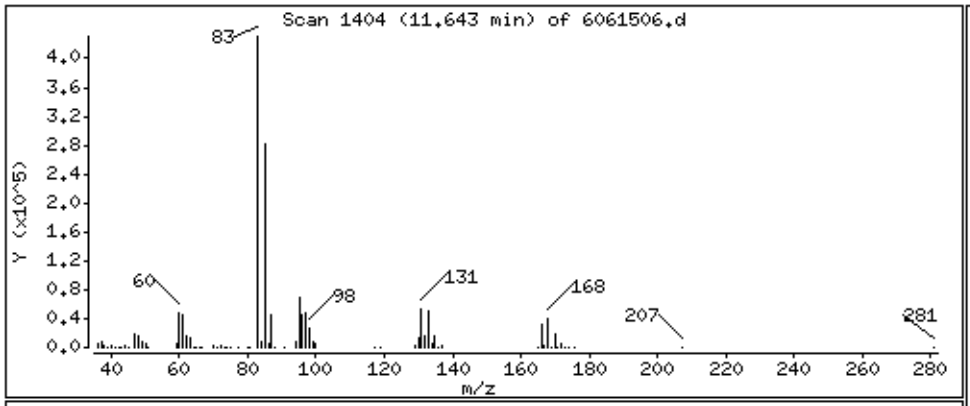
Operator: CT

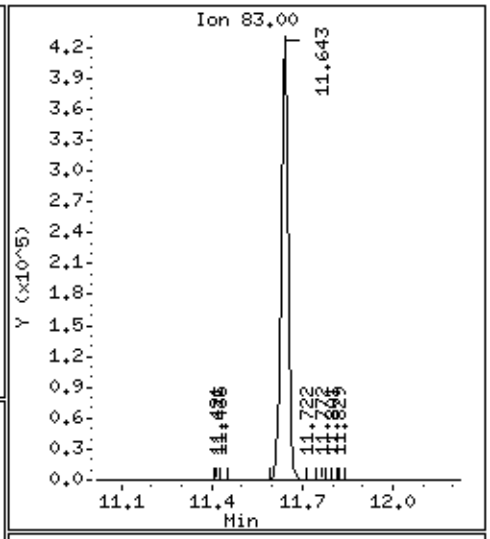
Column phase: RTx-624

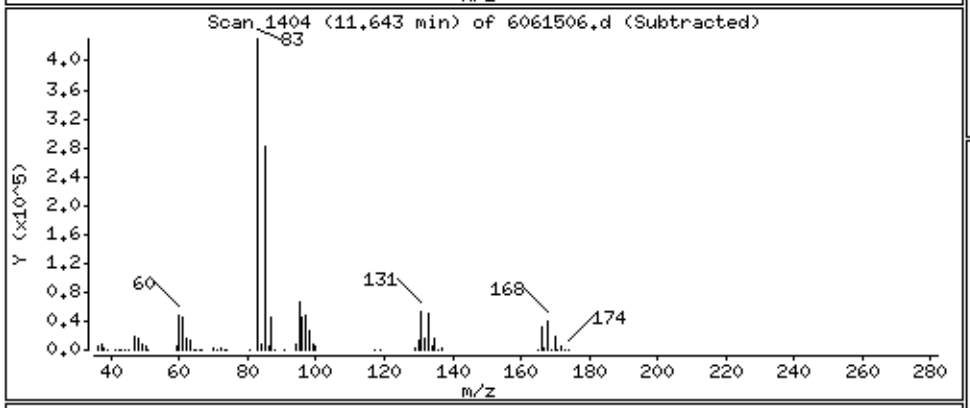
Column diameter: 0.53

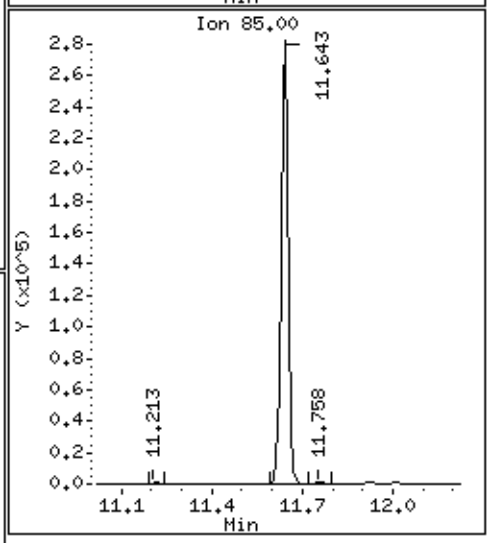
94 1,1,2,2-Tetrachloroethane

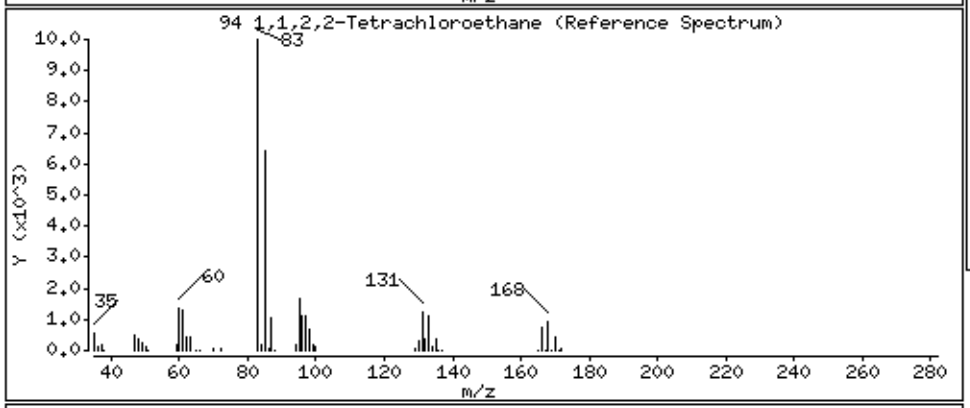
Concentration: 147.50 NG

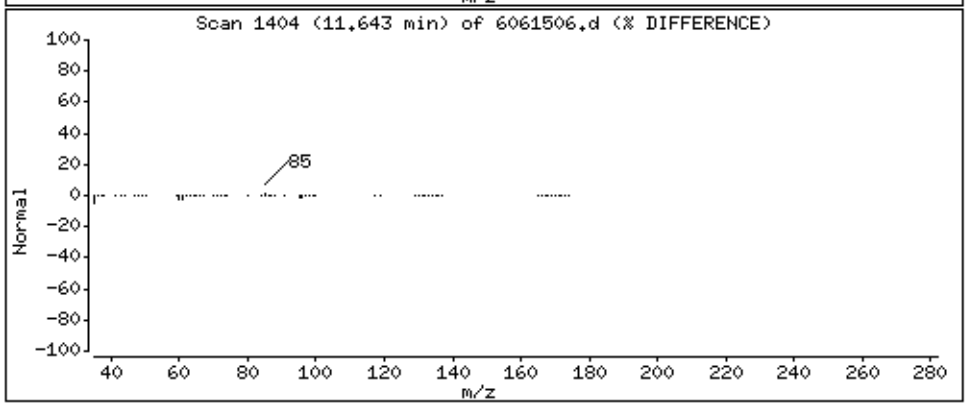












Data File: /chem/msd6.i/15jun16.b/6061506.d

Date : 15-JUN-2016 14:25

Client ID: LCS

Instrument: msd6.i

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

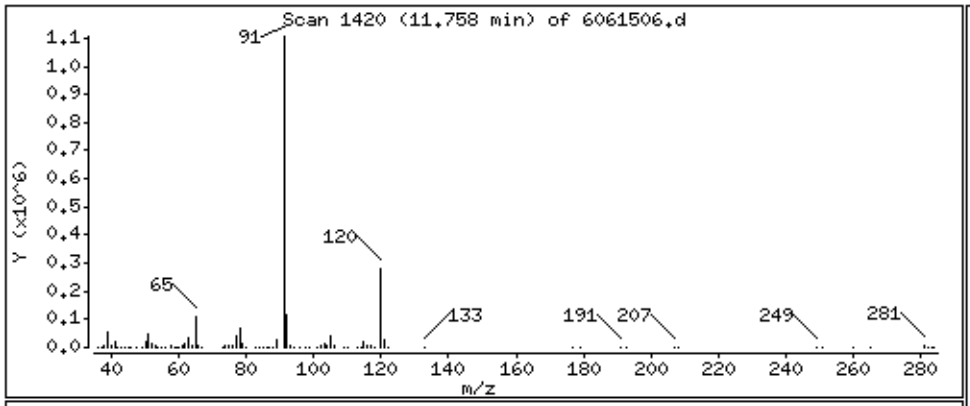
Operator: CT

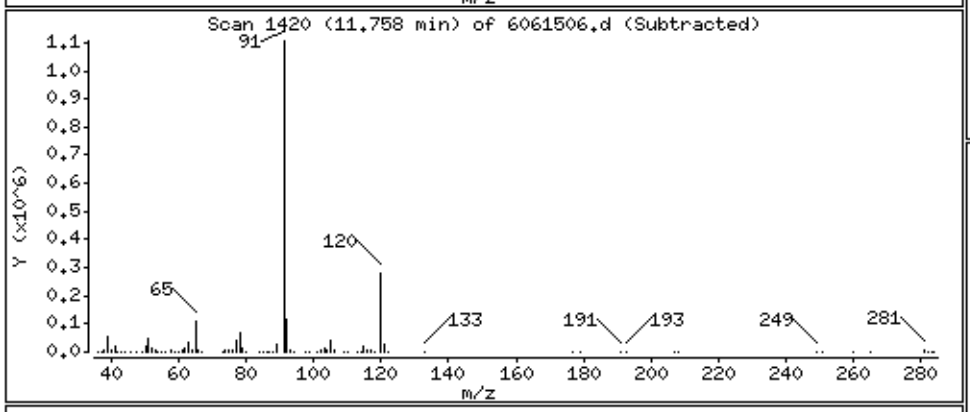
Column phase: RTx-624

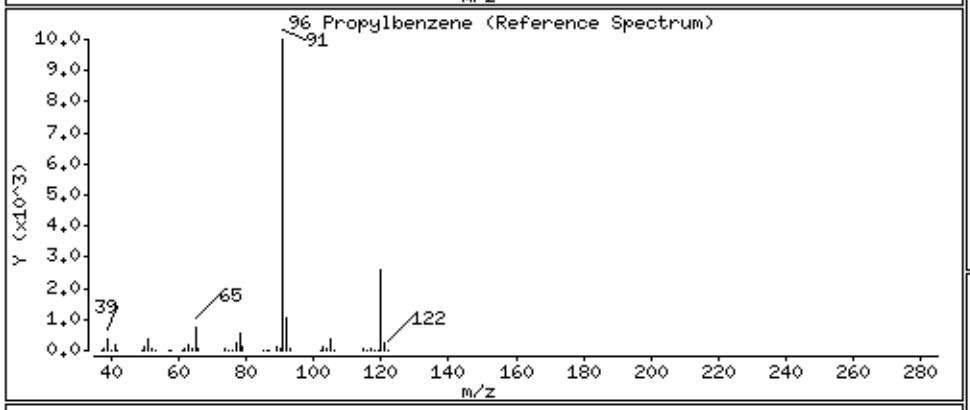
Column diameter: 0.53

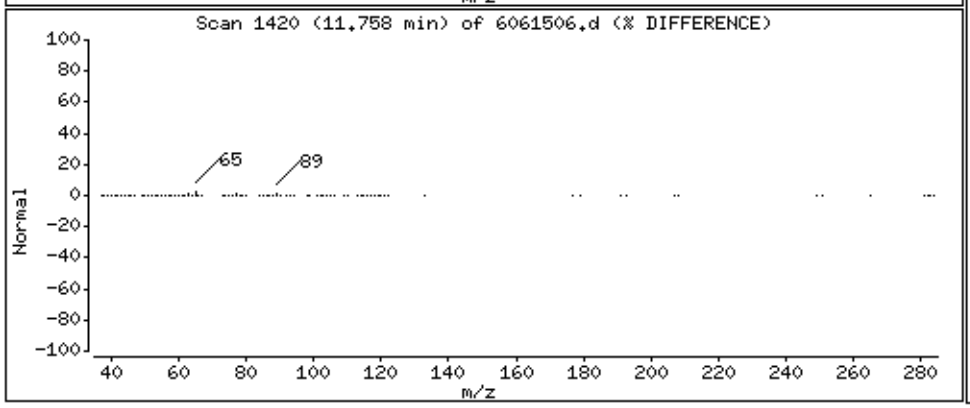
96 Propylbenzene

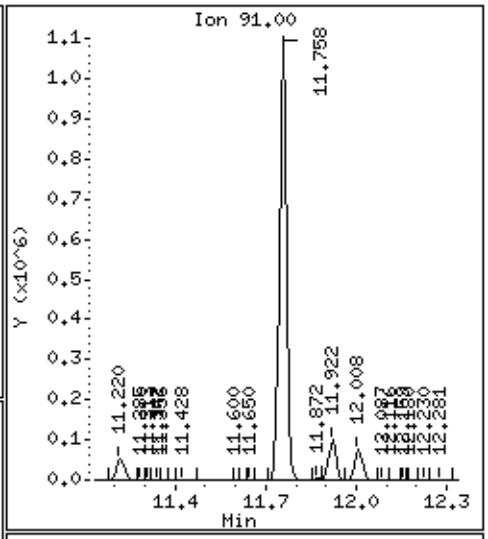
Concentration: 100.56 NG

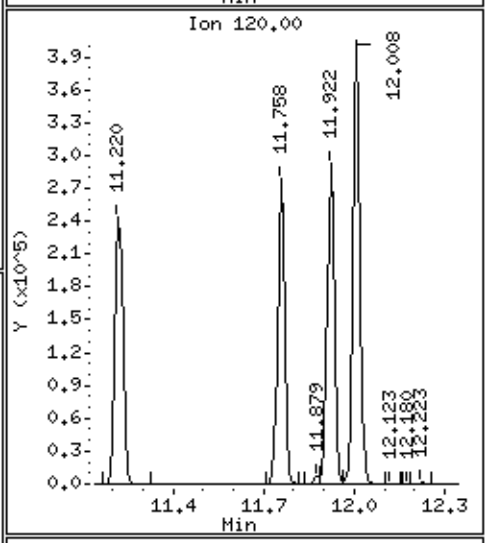


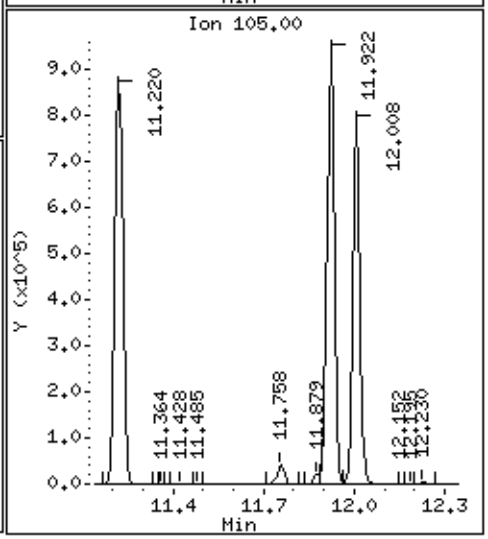












Data File: /chem/msd6.i/15jun16.b/6061506.d

Date : 15-JUN-2016 14:25

Client ID: LCS

Instrument: msd6.i

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

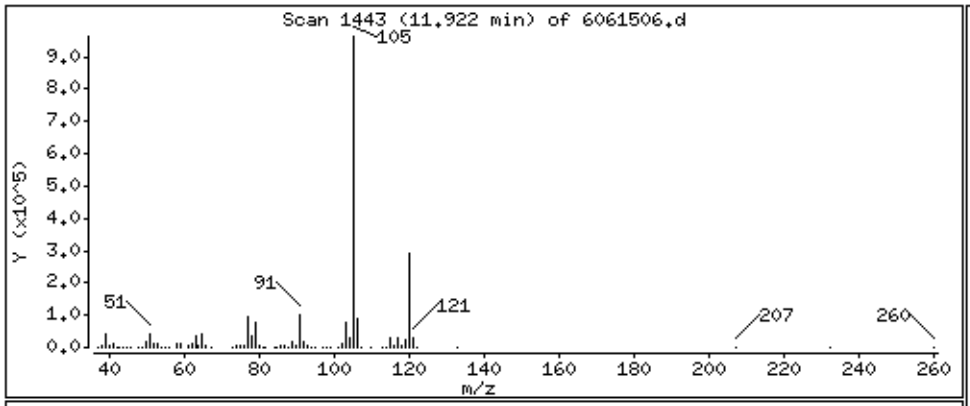
Operator: CT

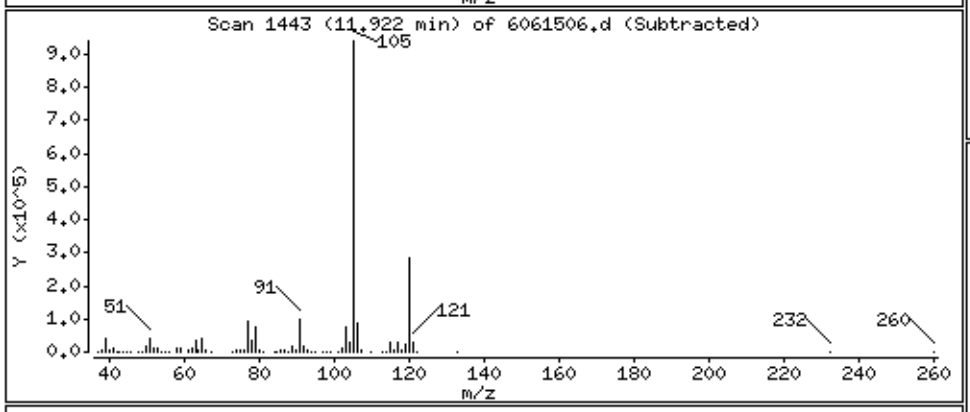
Column phase: RTx-624

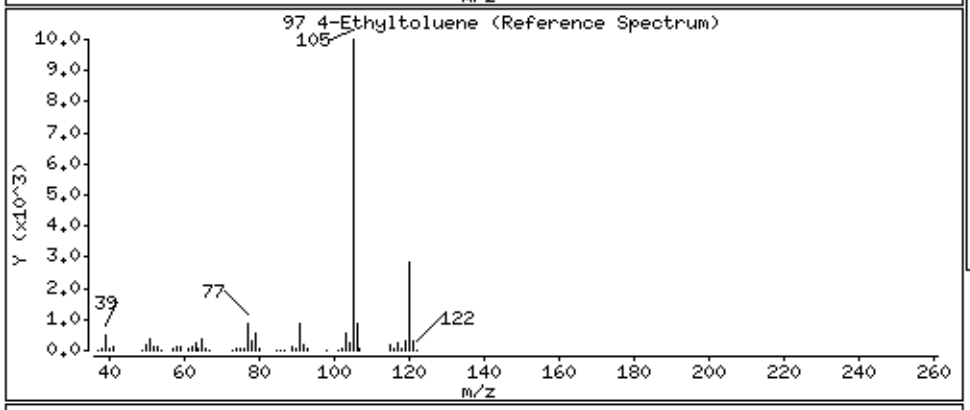
Column diameter: 0.53

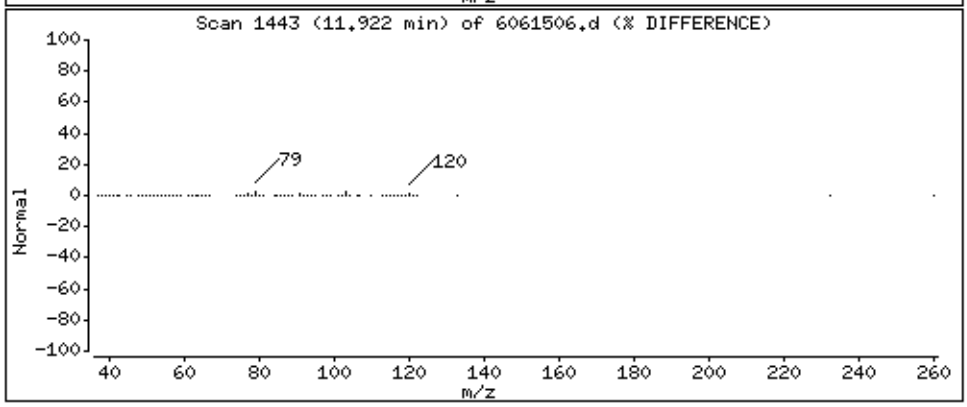
97 4-Ethyltoluene

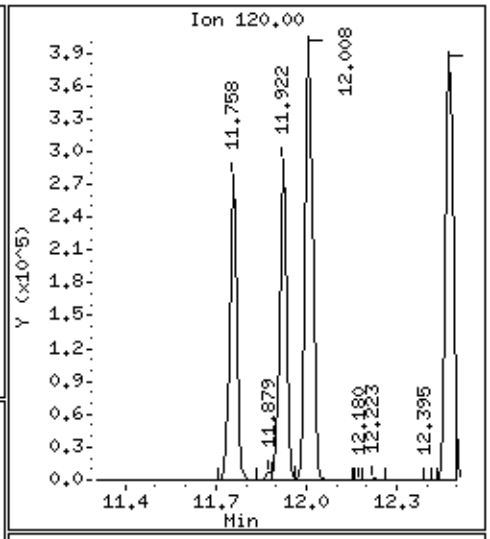
Concentration: 98.664 NG

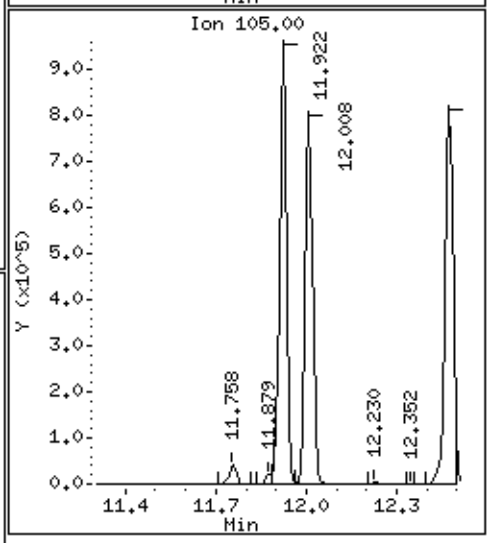












Data File: /chem/msd6.i/15jun16.b/6061506.d

Date : 15-JUN-2016 14:25

Client ID: LCS

Instrument: msd6.i

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

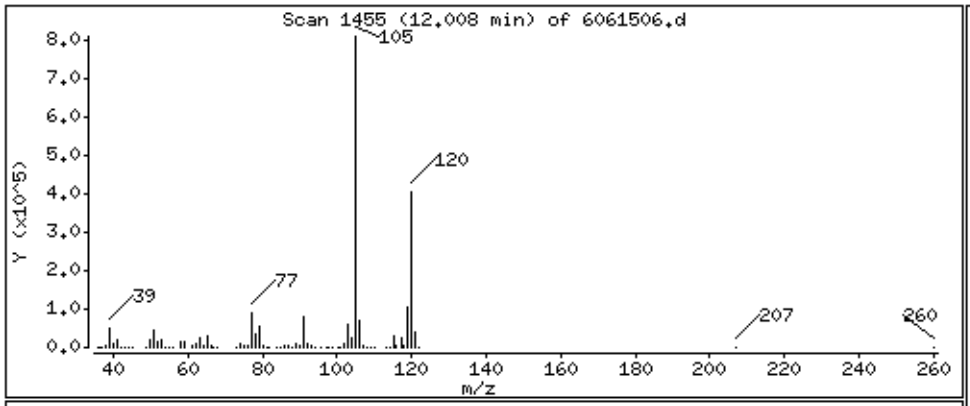
Operator: CT

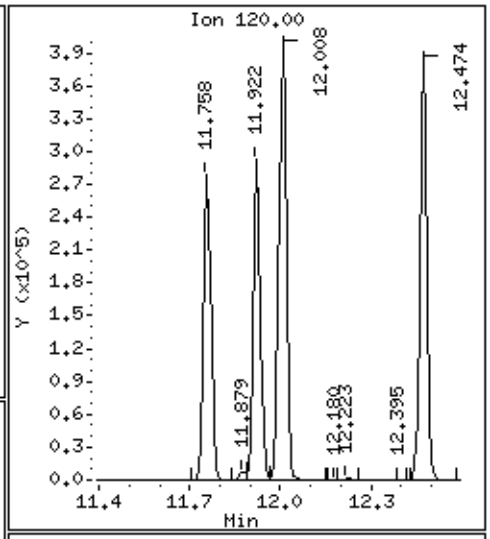
Column phase: RTx-624

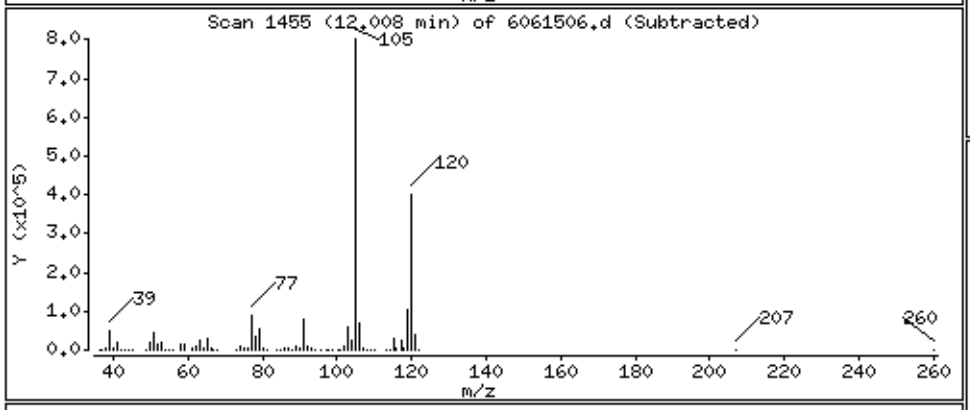
Column diameter: 0.53

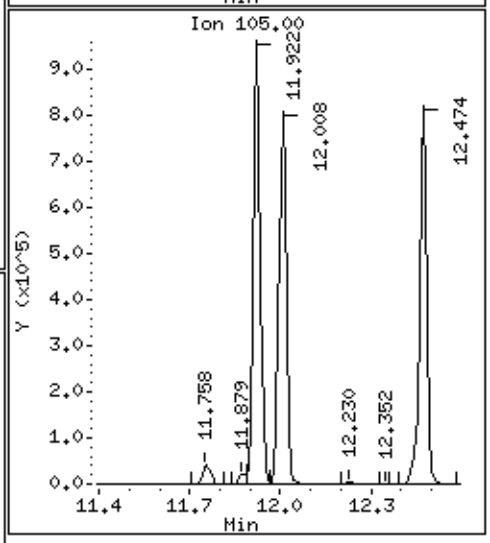
98 1,3,5-Trimethylbenzene

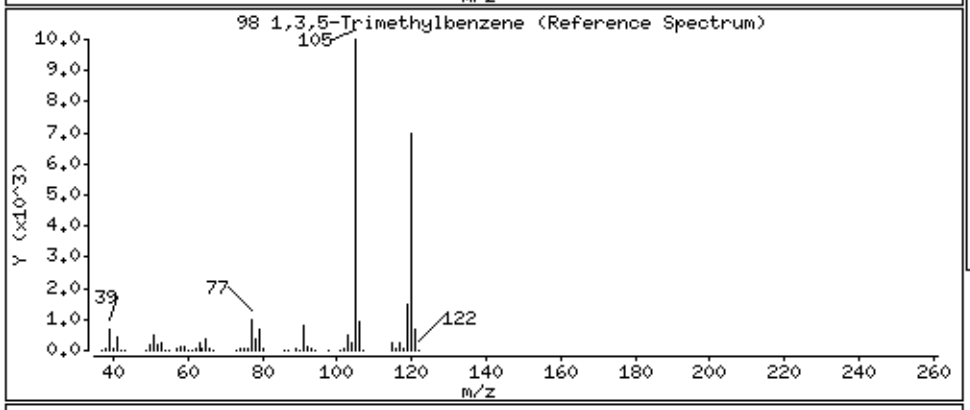
Concentration: 97.969 NG

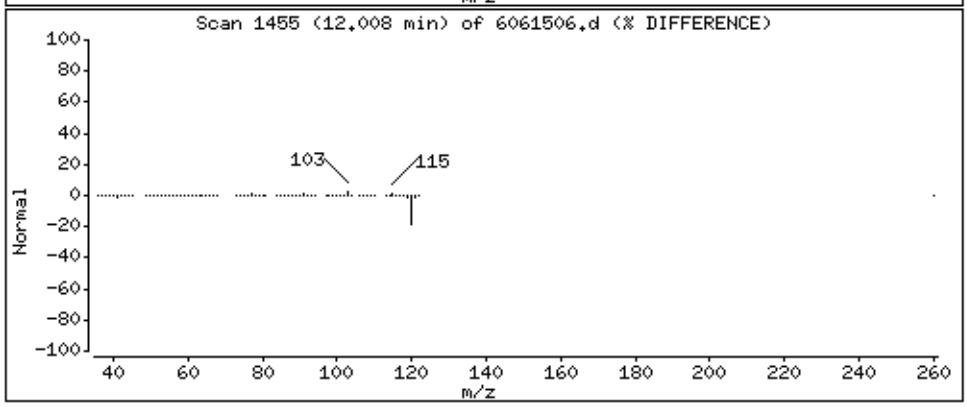












Data File: /chem/msd6.i/15jun16.b/6061506.d

Date : 15-JUN-2016 14:25

Client ID: LCS

Instrument: msd6.i

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

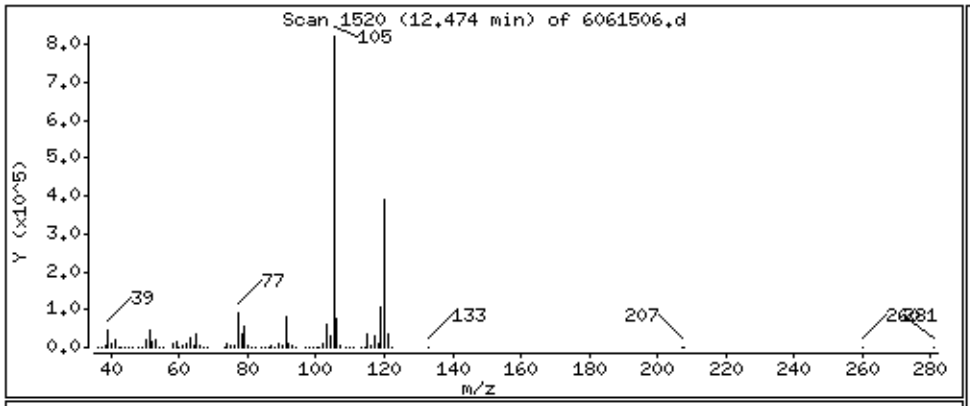
Operator: CT

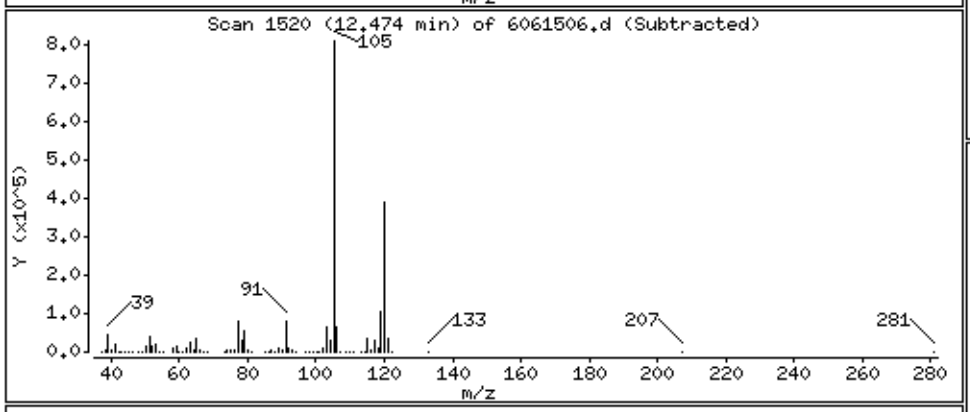
Column phase: RTx-624

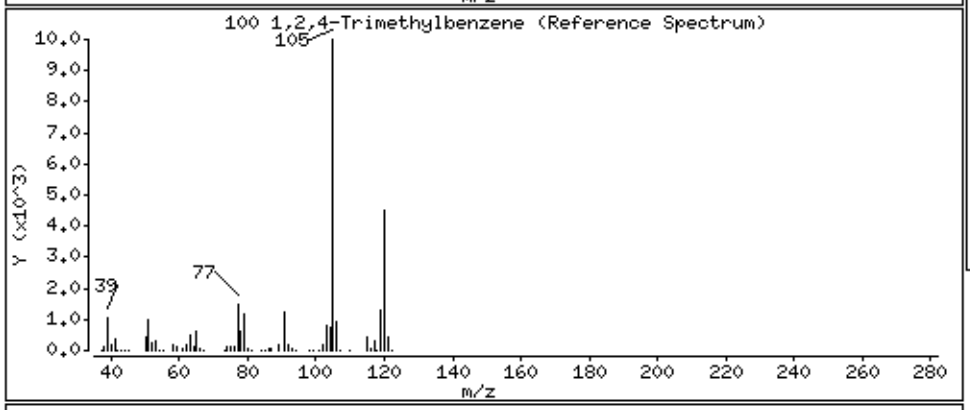
Column diameter: 0.53

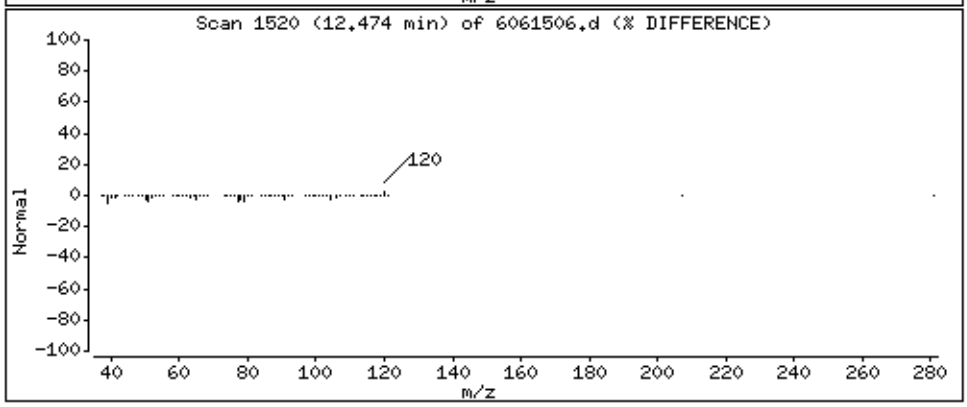
100 1,2,4-Trimethylbenzene

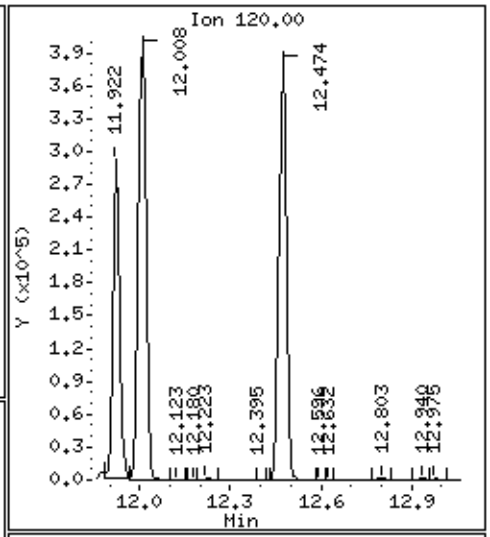
Concentration: 99.314 NG

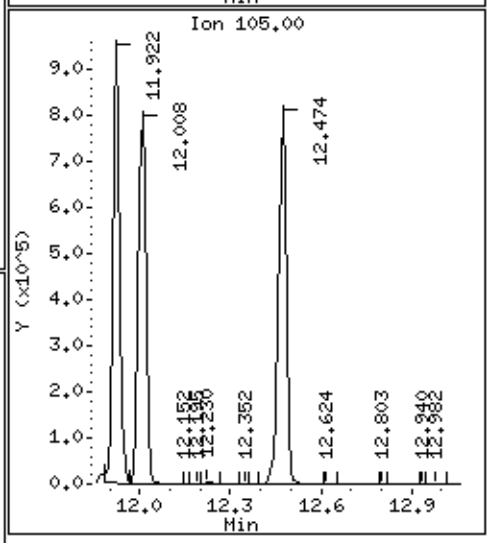












Data File: /chem/msd6.i/15jun16.b/6061506.d

Date : 15-JUN-2016 14:25

Client ID: LCS

Instrument: msd6.i

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

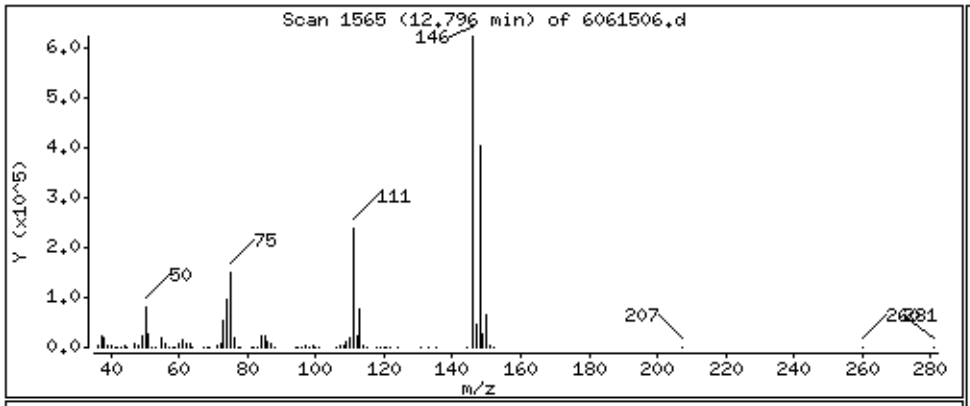
Operator: CT

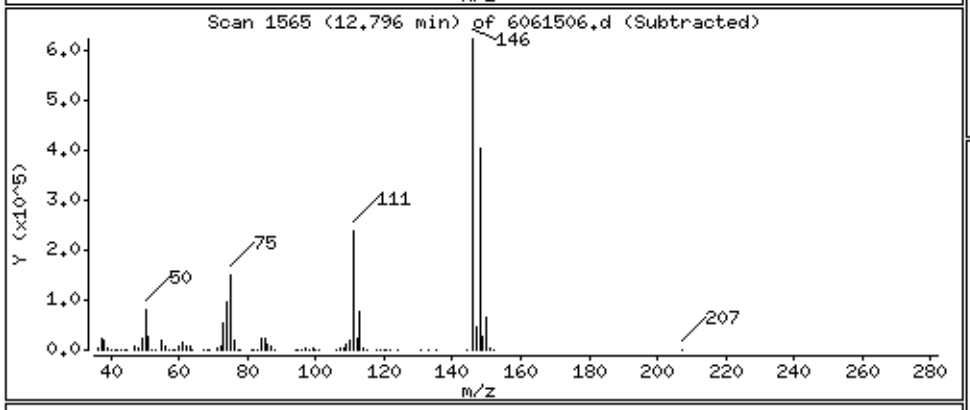
Column phase: RTx-624

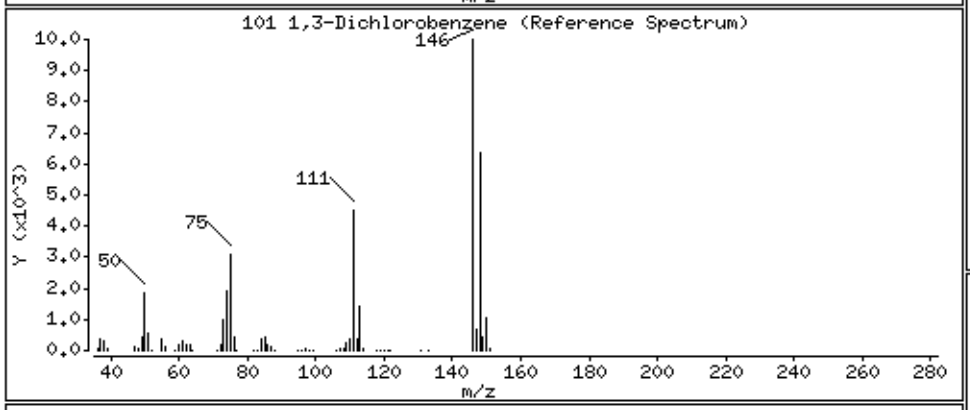
Column diameter: 0.53

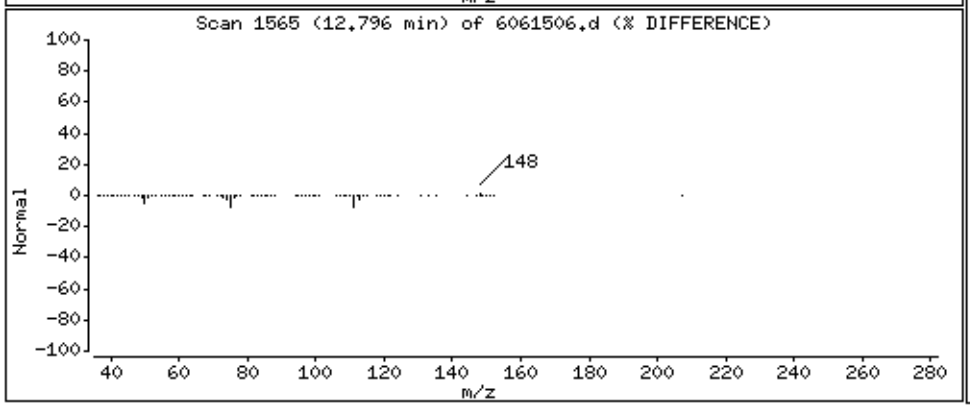
101 1,3-Dichlorobenzene

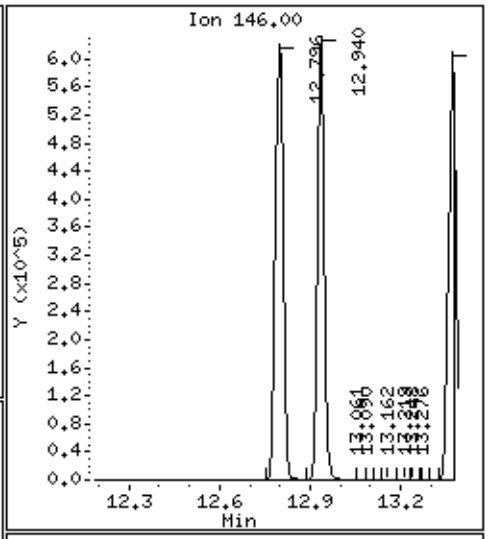
Concentration: 119.19 NG

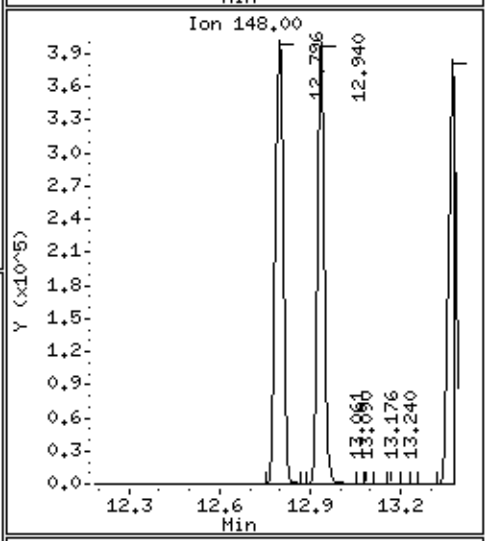


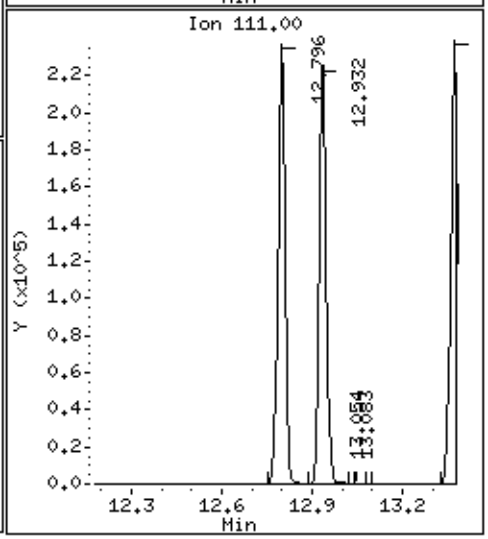












Data File: /chem/msd6.i/15jun16.b/6061506.d

Date : 15-JUN-2016 14:25

Client ID: LCS

Instrument: msd6.i

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

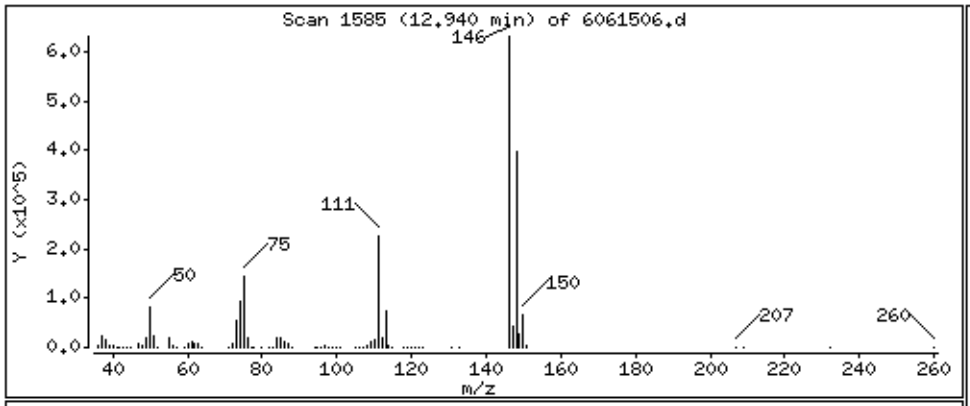
Operator: CT

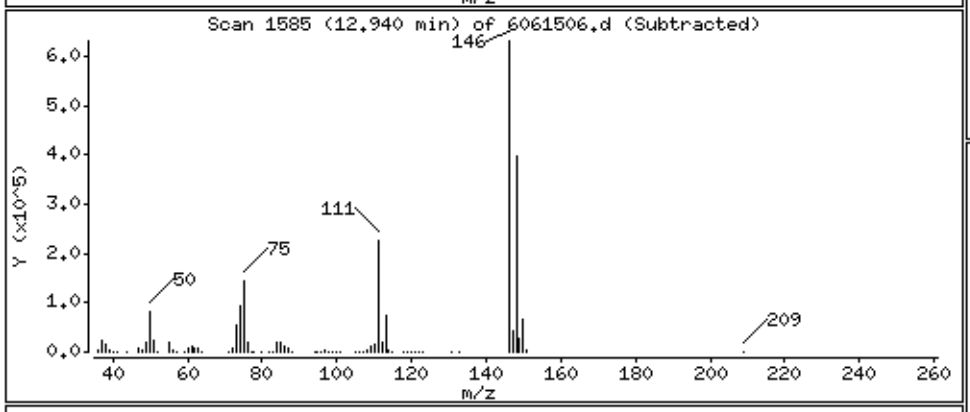
Column phase: RTx-624

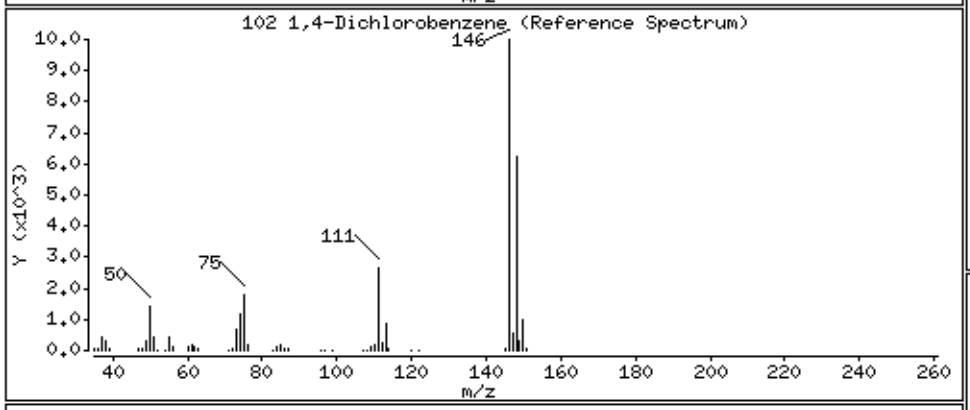
Column diameter: 0.53

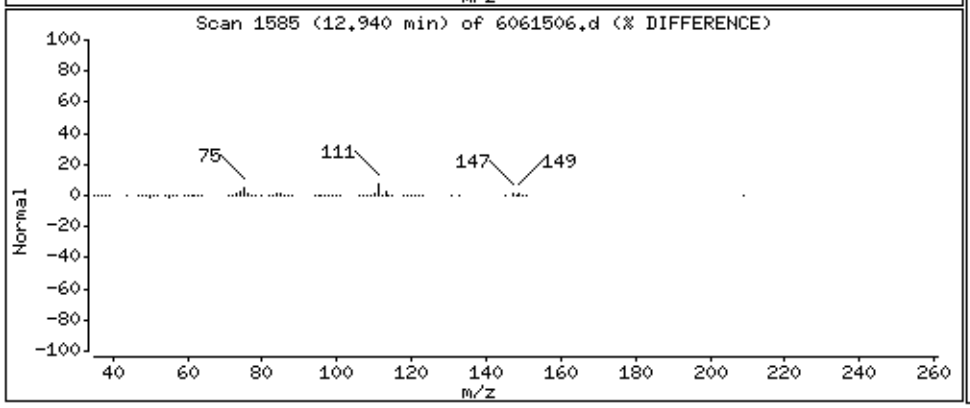
102 1,4-Dichlorobenzene

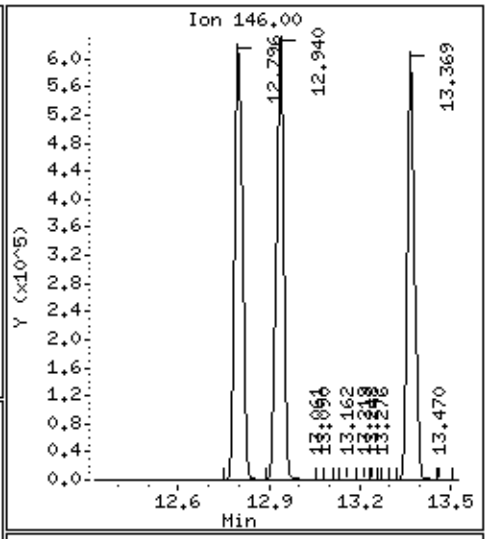
Concentration: 119.82 NG

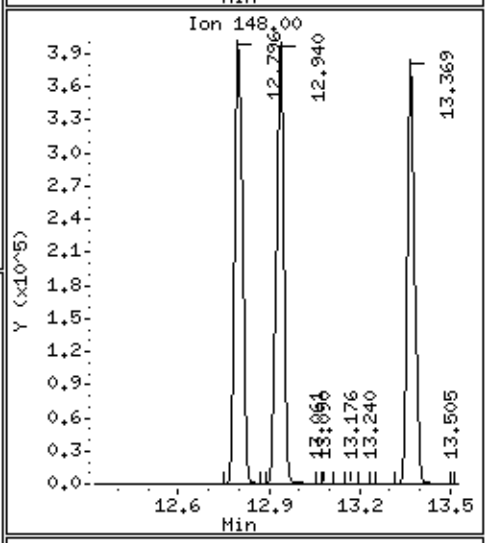


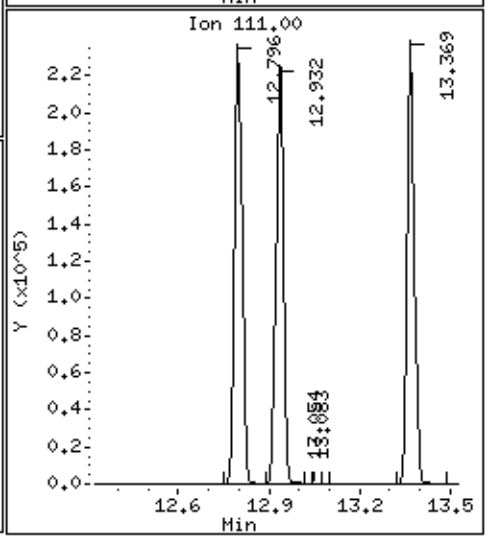












Data File: /chem/msd6.i/15jun16.b/6061506.d

Date : 15-JUN-2016 14:25

Client ID: LCS

Instrument: msd6.i

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

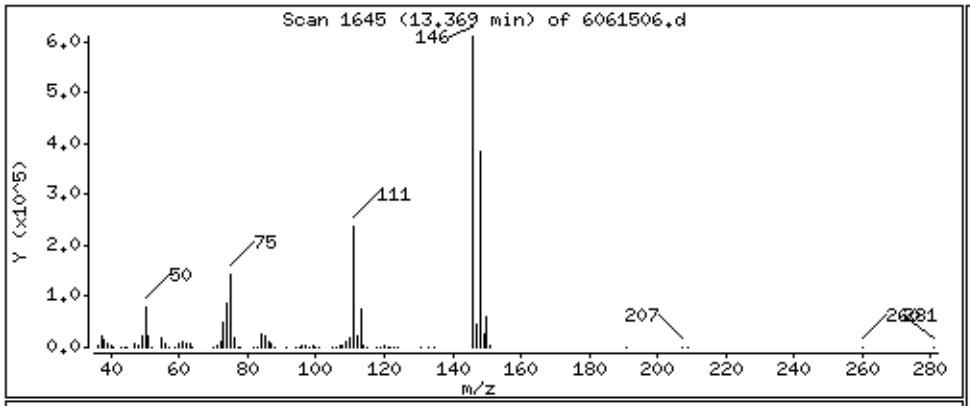
Operator: CT

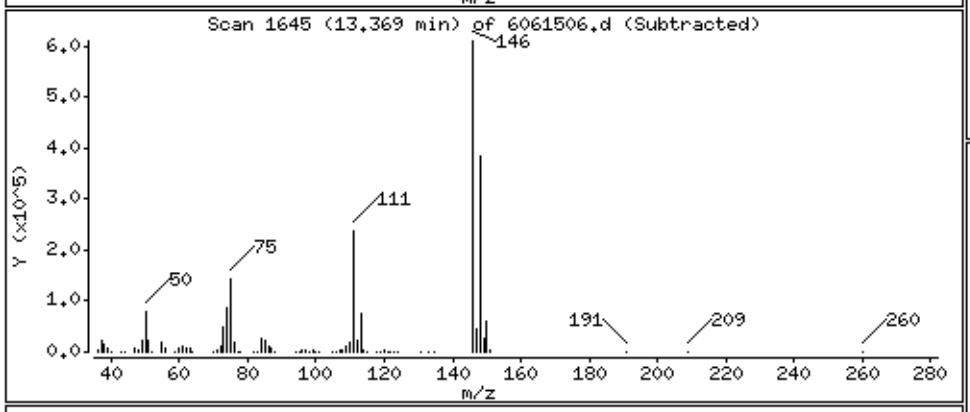
Column phase: RTx-624

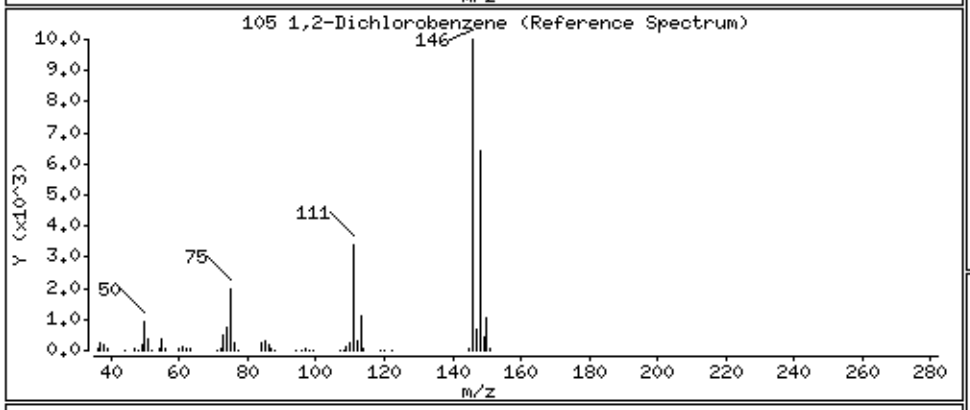
Column diameter: 0.53

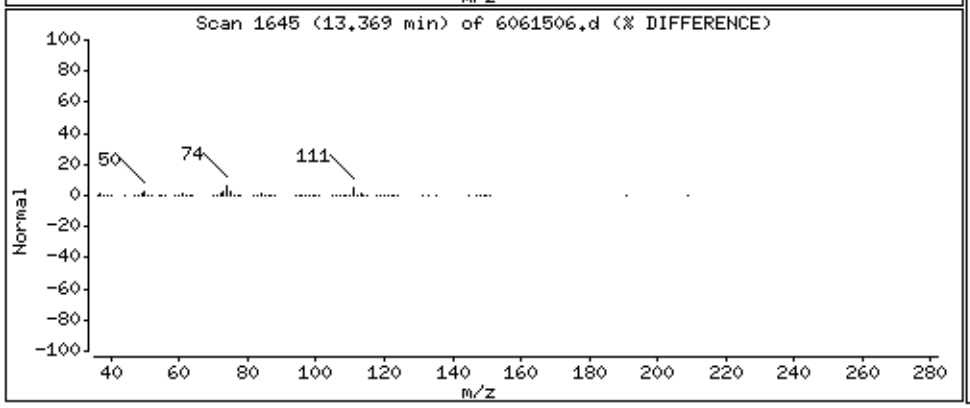
105 1,2-Dichlorobenzene

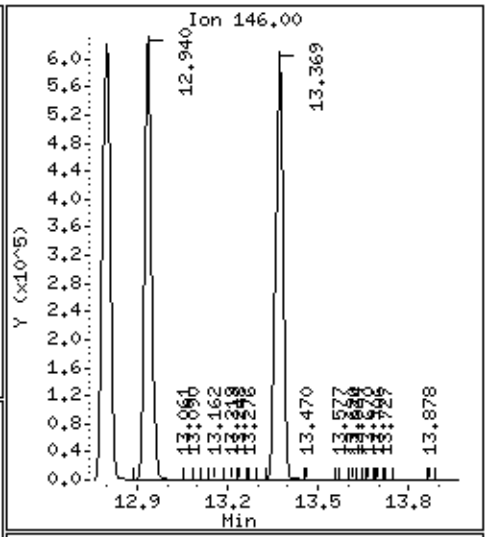
Concentration: 118.70 NG

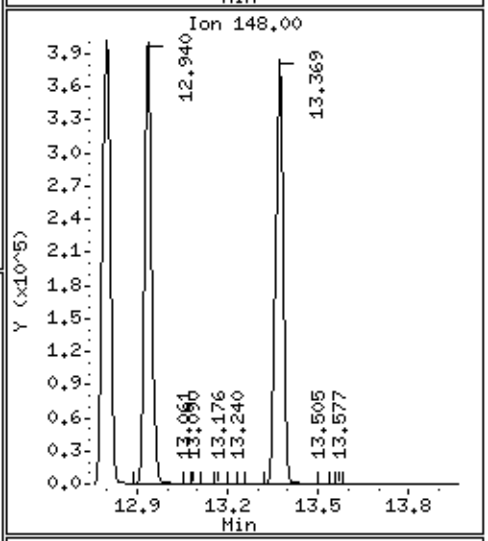


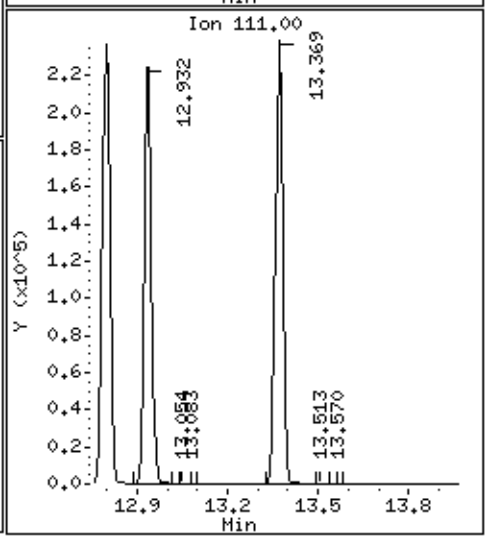












Data File: /chem/msd6.i/15jun16.b/6061506.d

Date : 15-JUN-2016 14:25

Client ID: LCS

Instrument: msd6.i

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

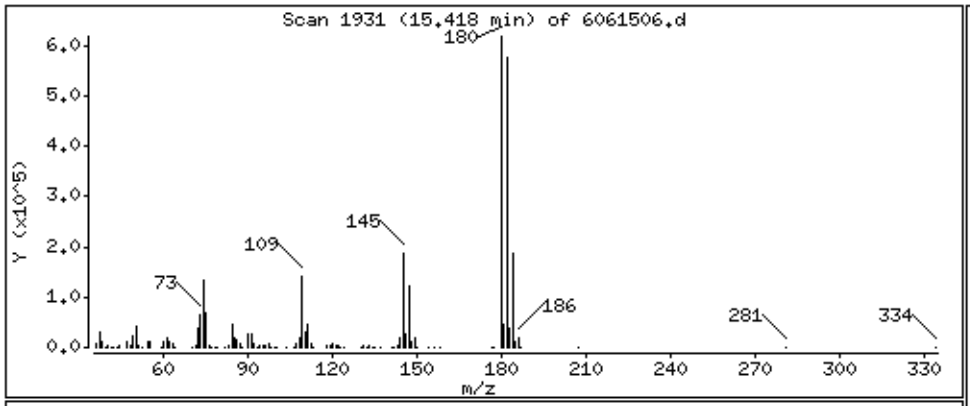
Operator: CT

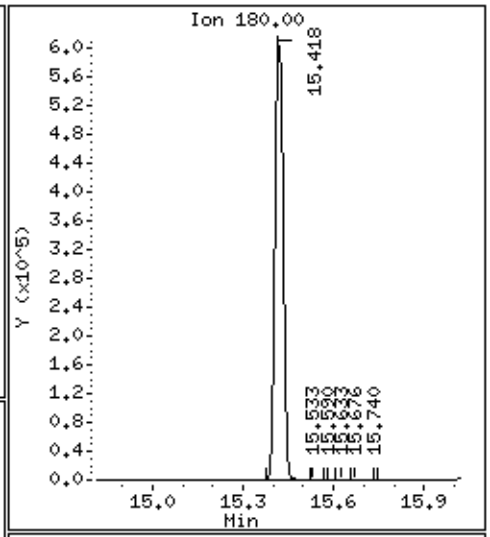
Column phase: RTx-624

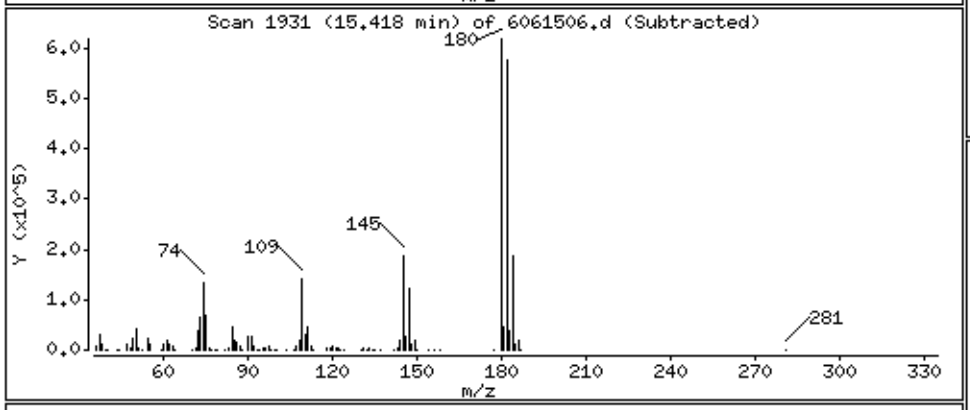
Column diameter: 0.53

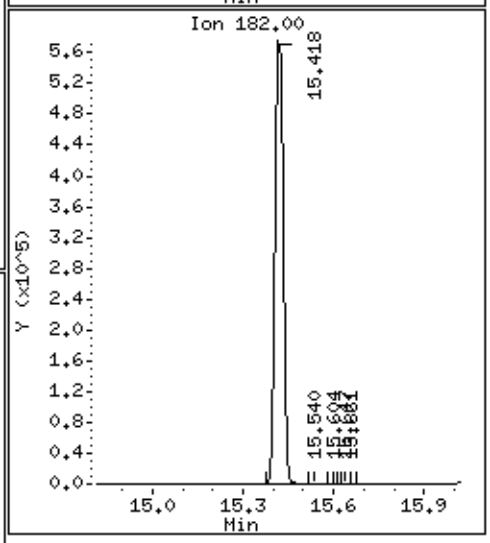
106 1,2,4-Trichlorobenzene

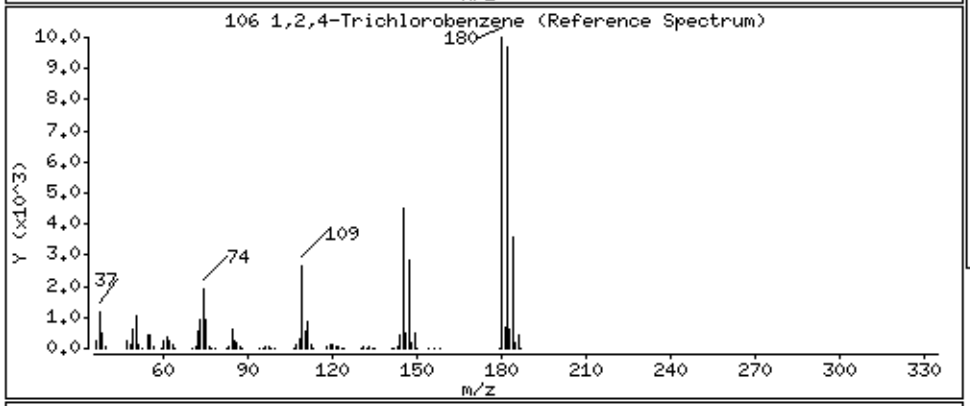
Concentration: 150.60 NG

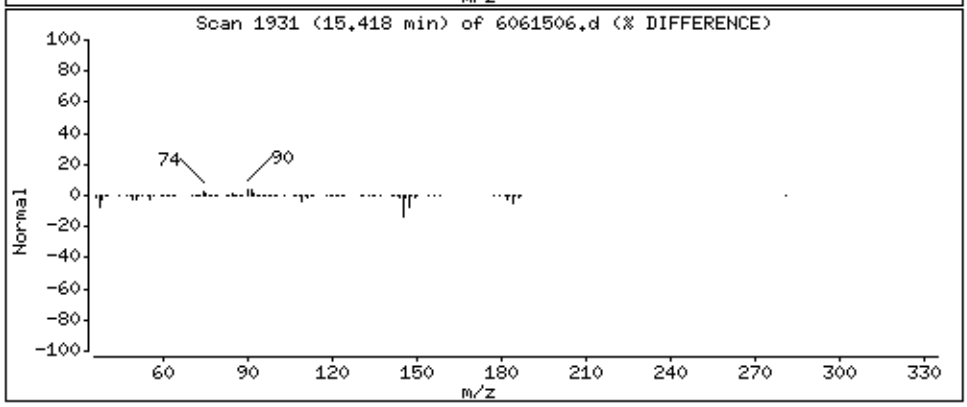












Data File: /chem/msd6.i/15jun16.b/6061506.d

Date : 15-JUN-2016 14:25

Client ID: LCS

Instrument: msd6.i

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

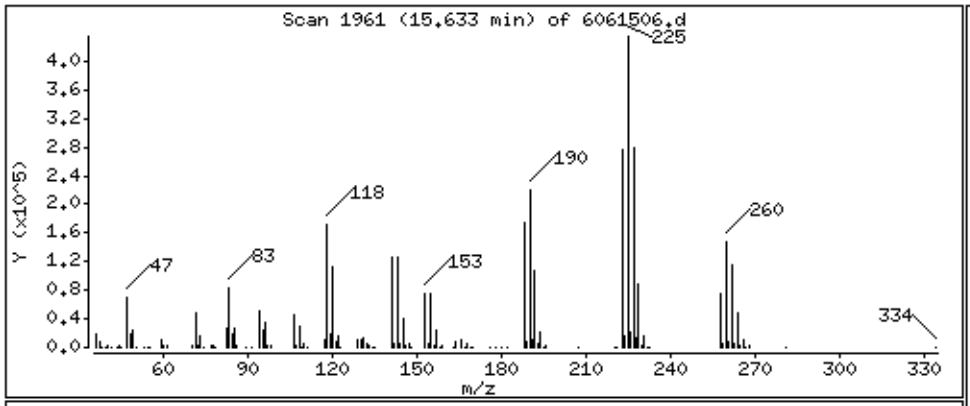
Operator: CT

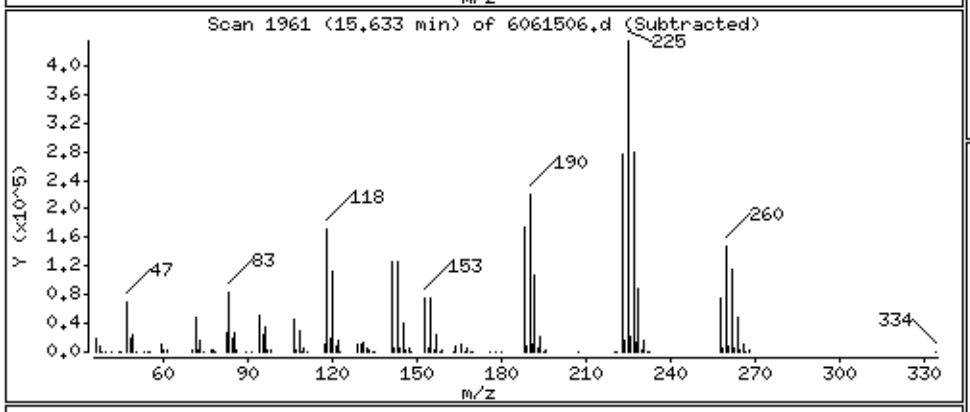
Column phase: RTx-624

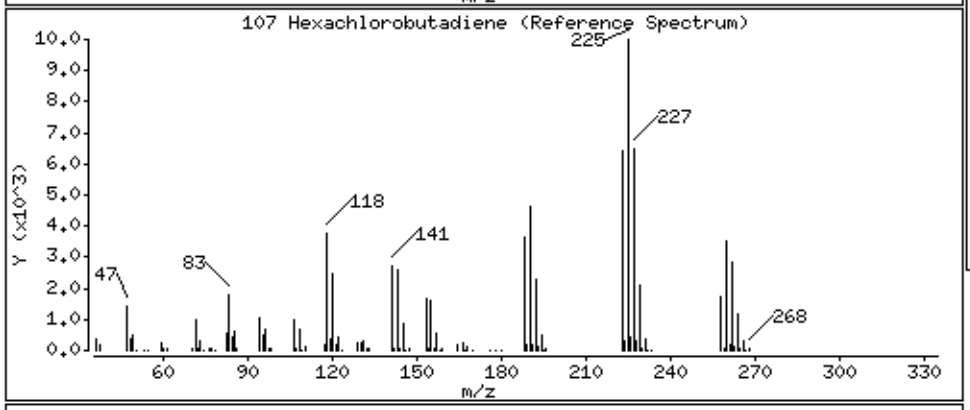
Column diameter: 0.53

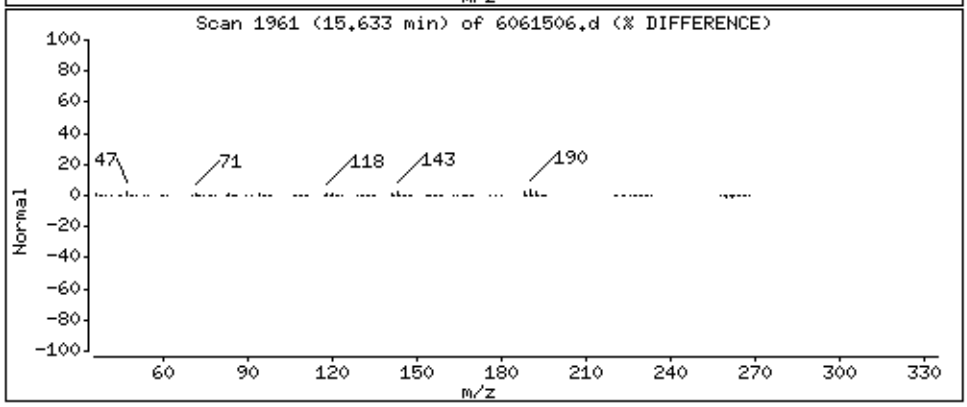
107 Hexachlorobutadiene

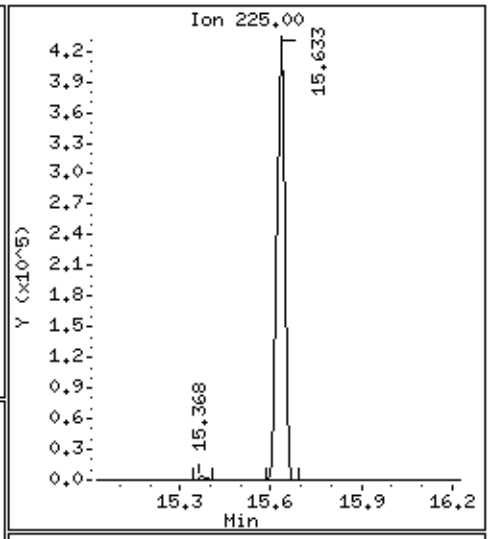
Concentration: 210.07 NG

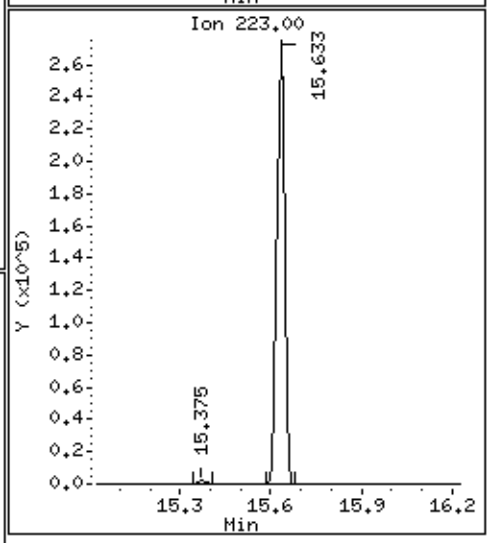












Data File: /chem/msd6.i/15jun16.b/6061506.d

Date : 15-JUN-2016 14:25

Client ID: LCS

Instrument: msd6.i

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

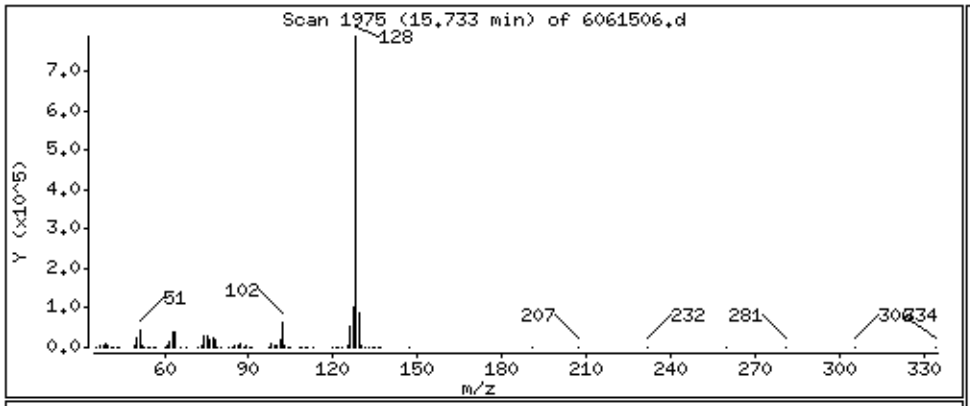
Operator: CT

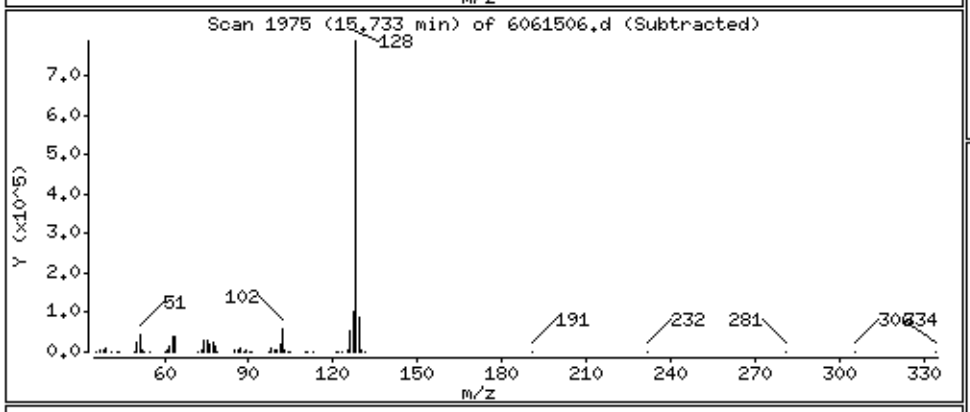
Column phase: RTx-624

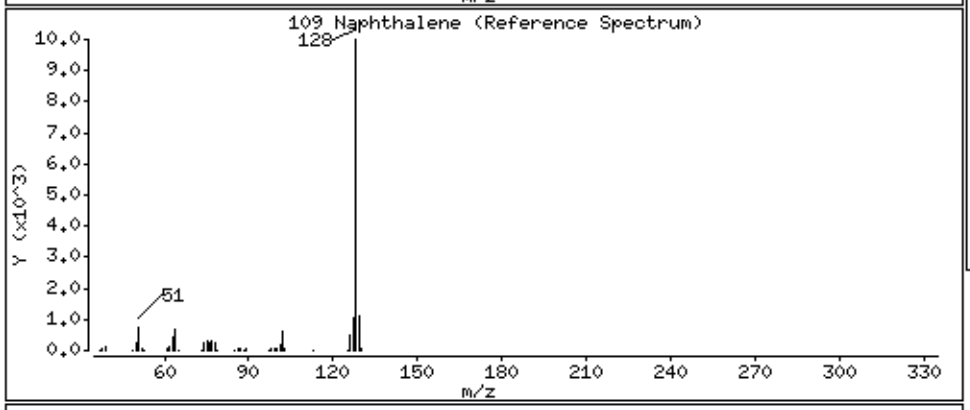
Column diameter: 0.53

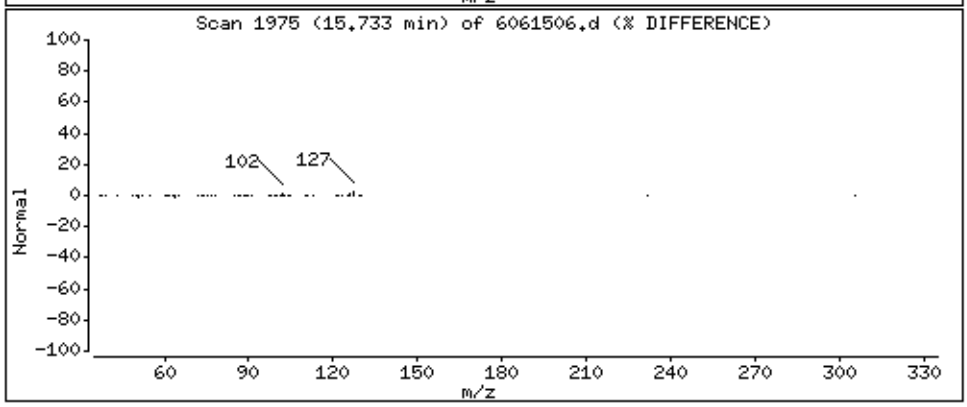
109 Naphthalene

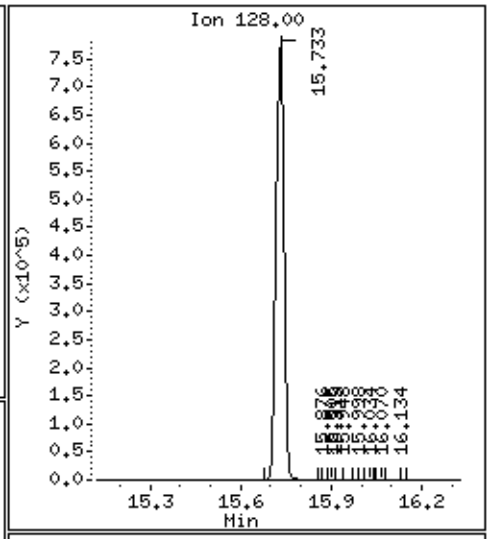
Concentration: 53.836 NG

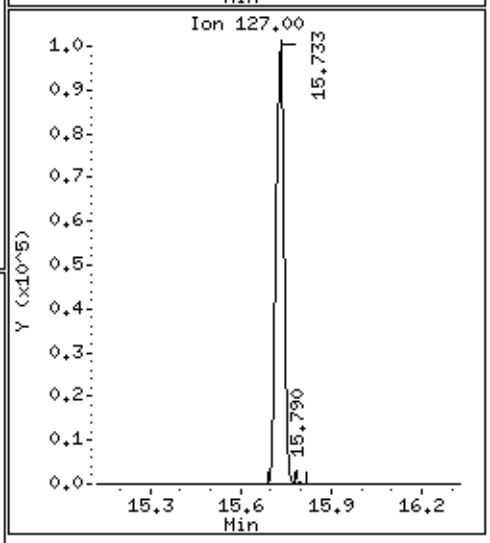












Data File: /chem/msd6.i/15jun16.b/6061506.d

Date : 15-JUN-2016 14:25

Client ID: LCS

Instrument: msd6.i

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

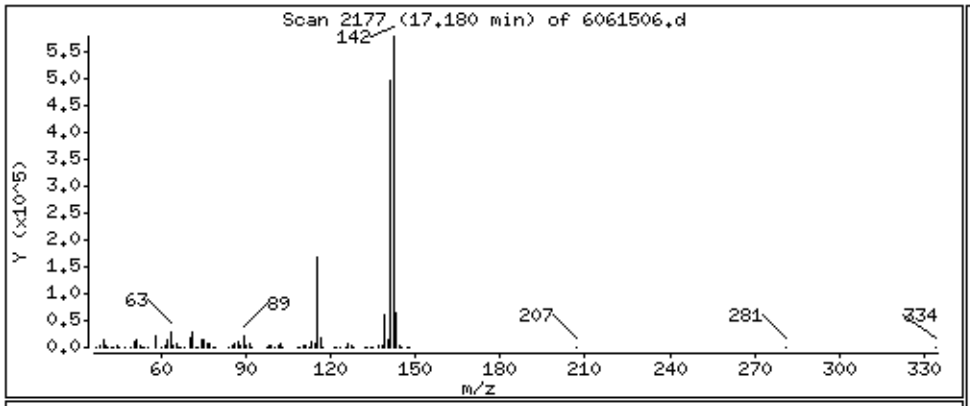
Operator: CT

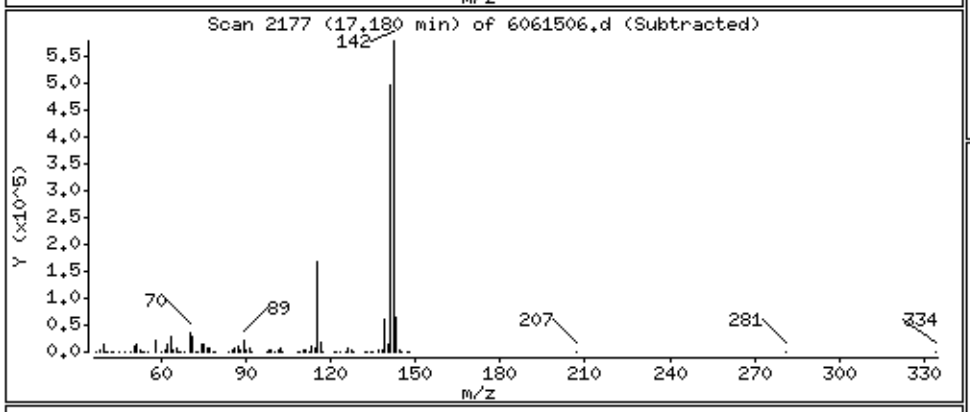
Column phase: RTx-624

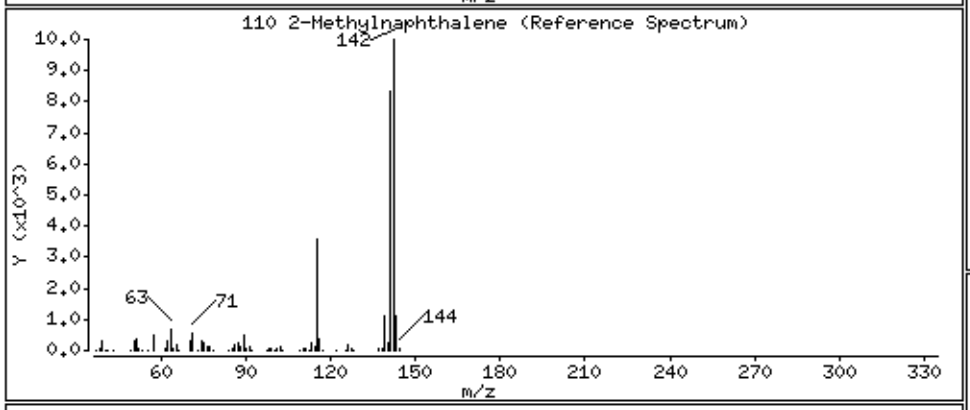
Column diameter: 0.53

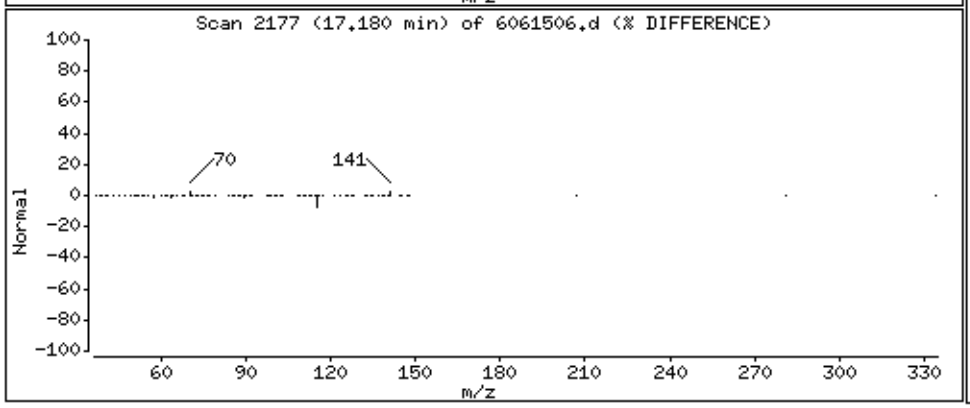
110 2-Methylnaphthalene

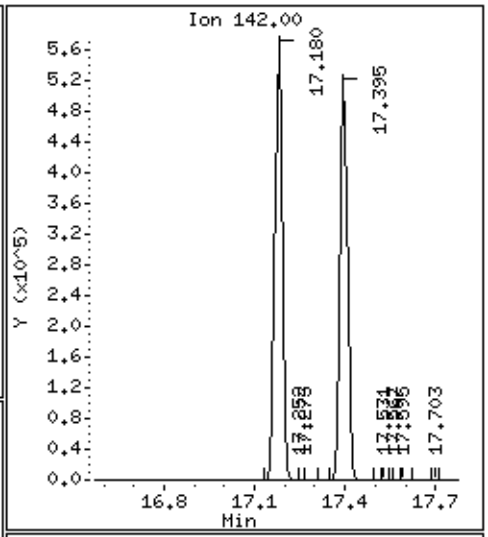
Concentration: 57.293 NG

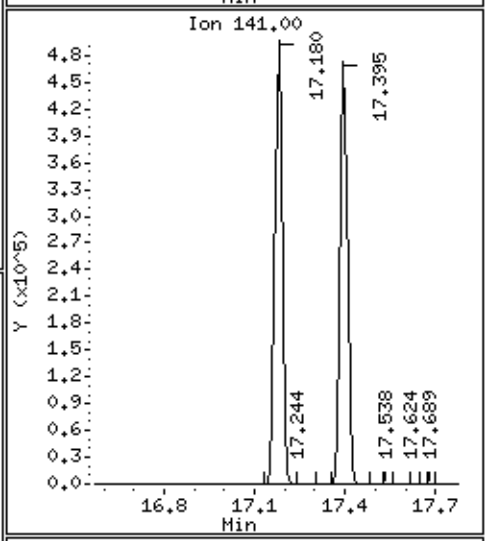


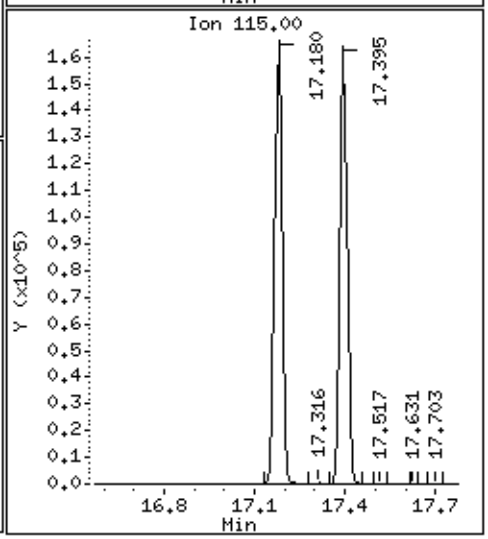












Data File: /chem/msd6.i/15jun16.b/6061506.d

Date : 15-JUN-2016 14:25

Client ID: LCS

Instrument: msd6.i

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

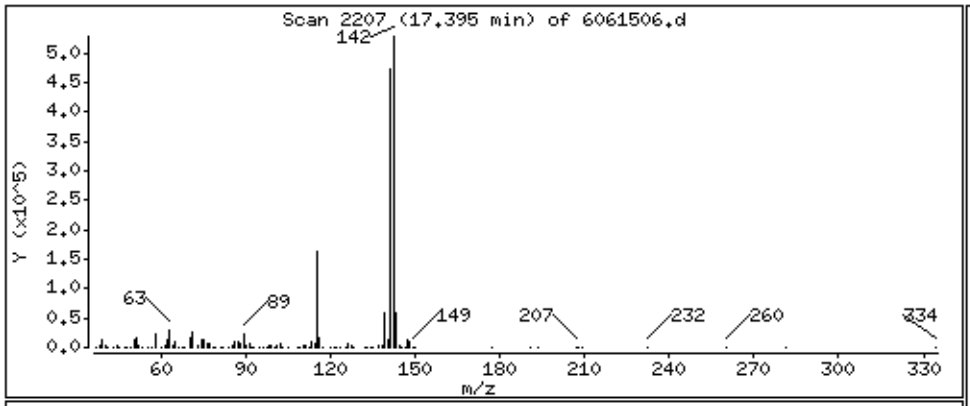
Operator: CT

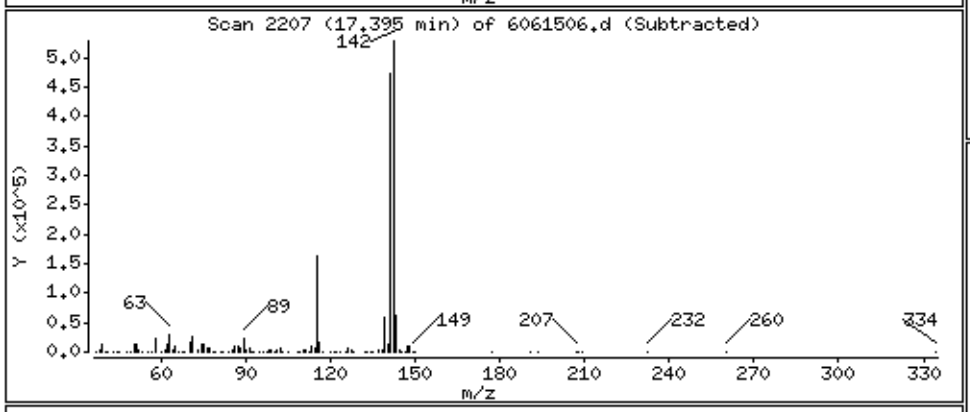
Column phase: RTx-624

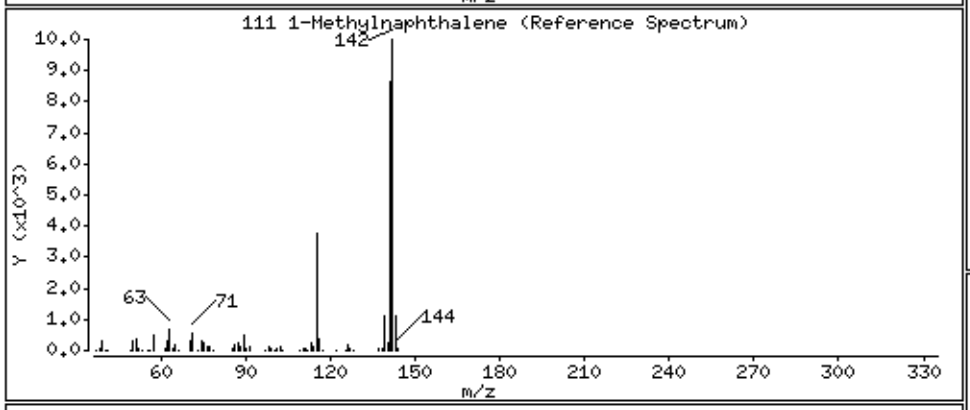
Column diameter: 0.53

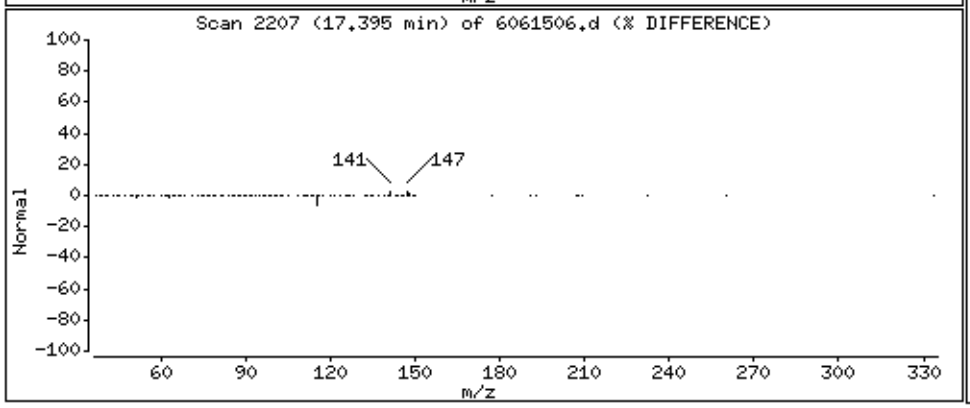
111 1-Methylnaphthalene

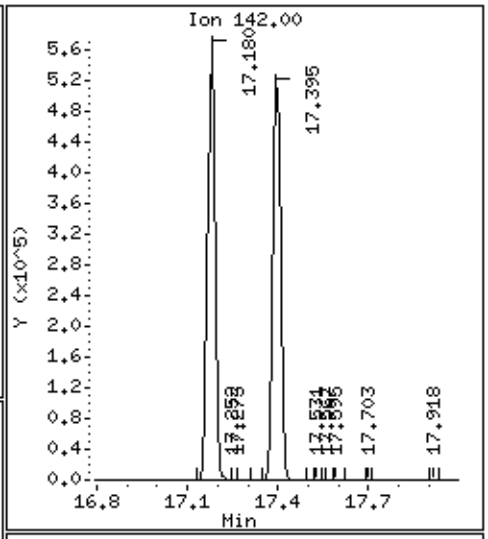
Concentration: 57.228 NG

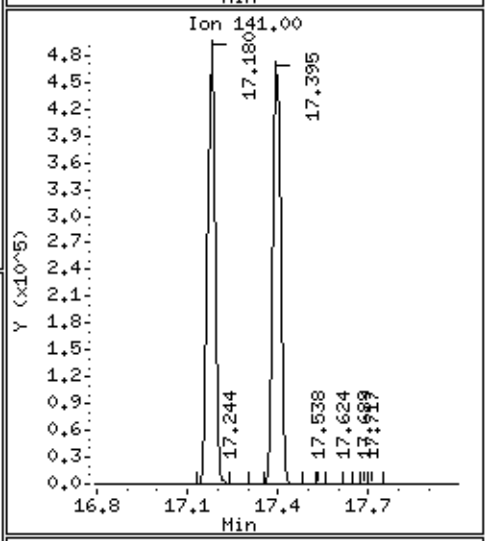


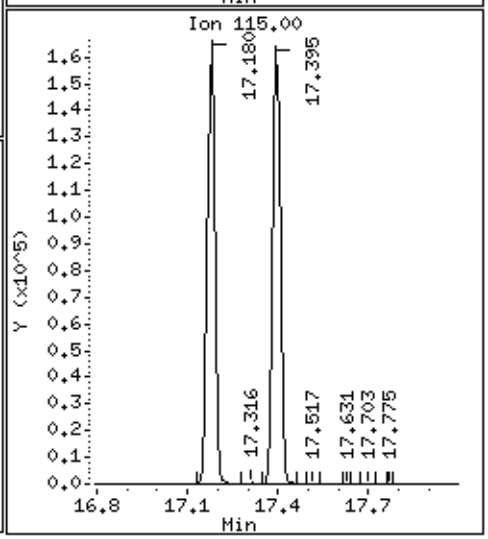












Data File: /chem/msd6.i/15jun16.b/6061506.d

Date : 15-JUN-2016 14:25

Client ID: LCS

Instrument: msd6.i

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

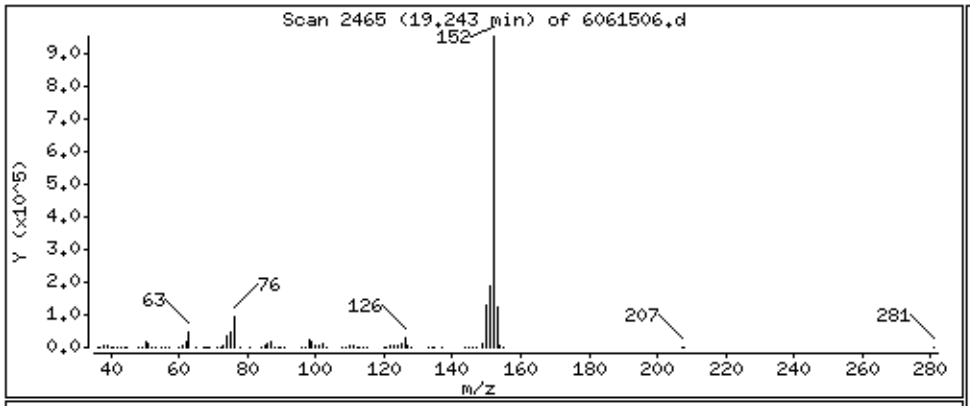
Operator: CT

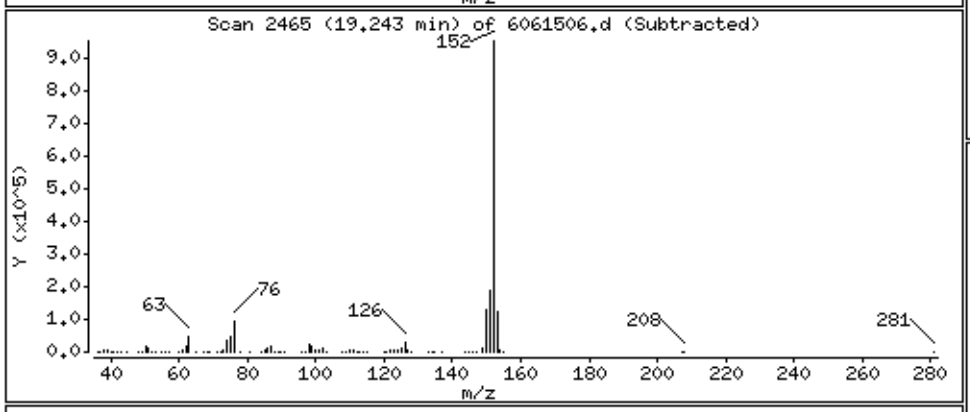
Column phase: RTx-624

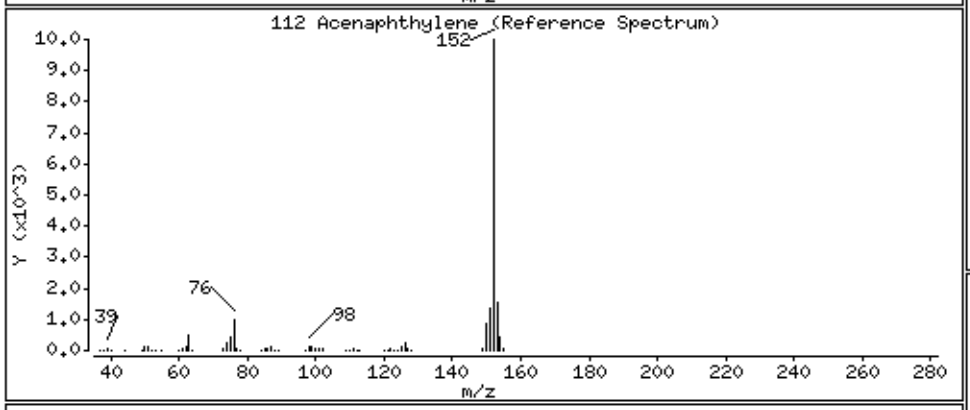
Column diameter: 0.53

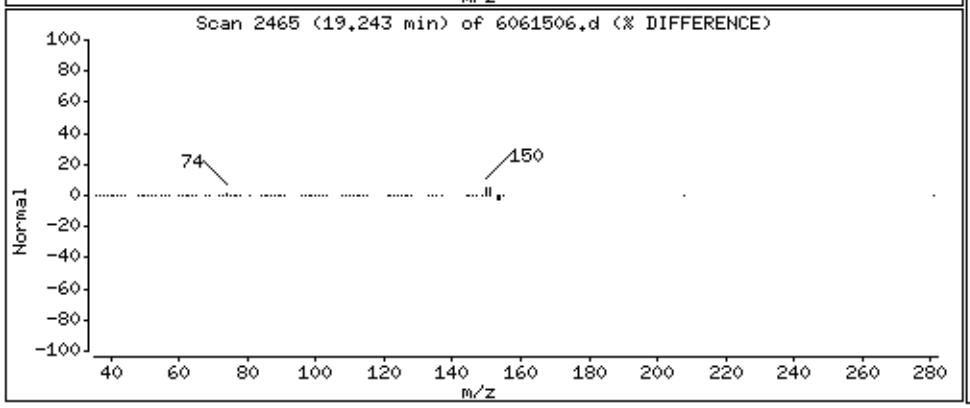
112 Acenaphthylene

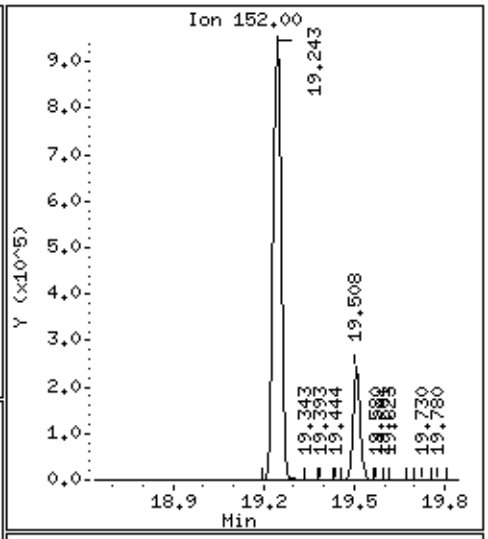
Concentration: 60.301 NG

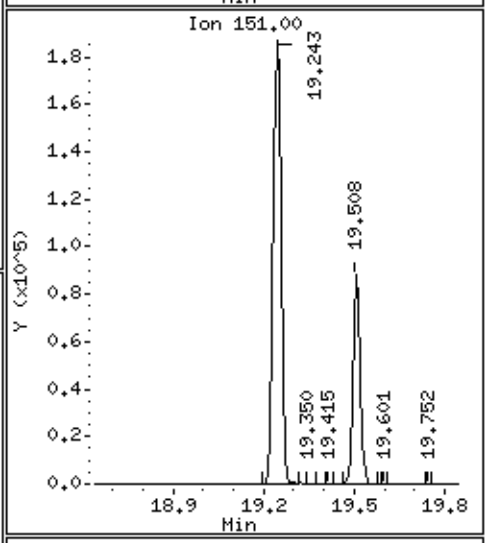


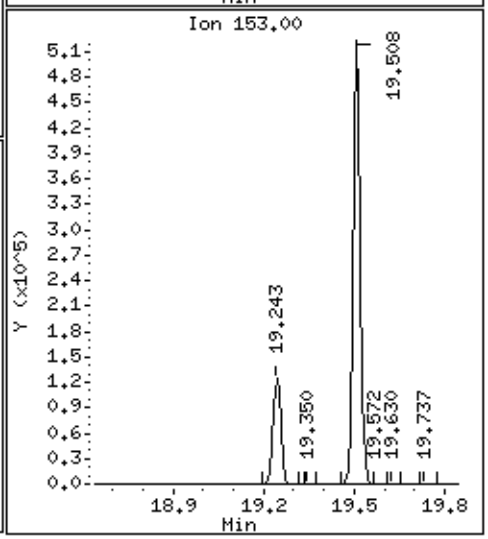












Data File: /chem/msd6.i/15jun16.b/6061506.d

Date : 15-JUN-2016 14:25

Client ID: LCS

Instrument: msd6.i

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

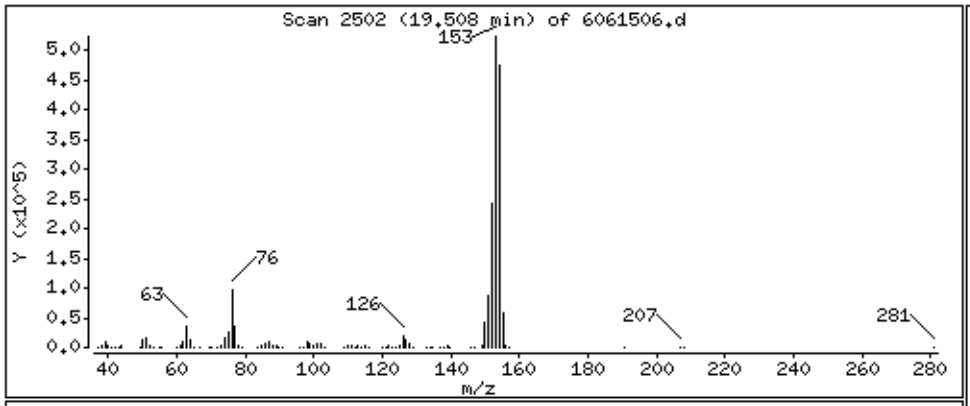
Operator: CT

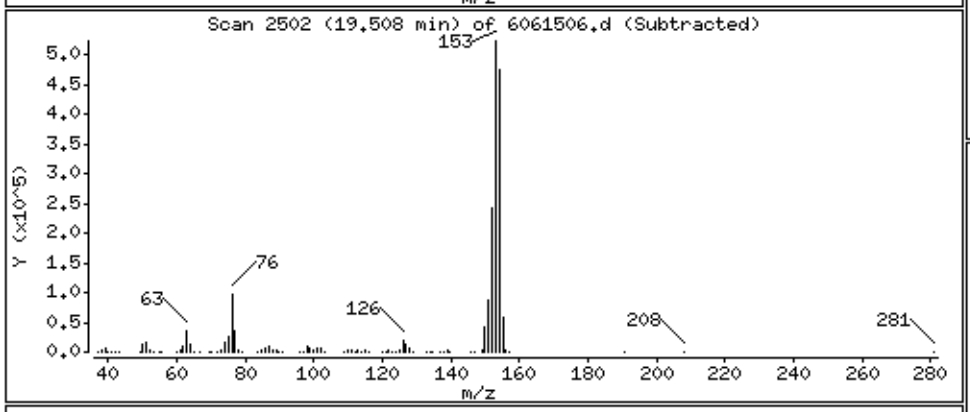
Column phase: RTx-624

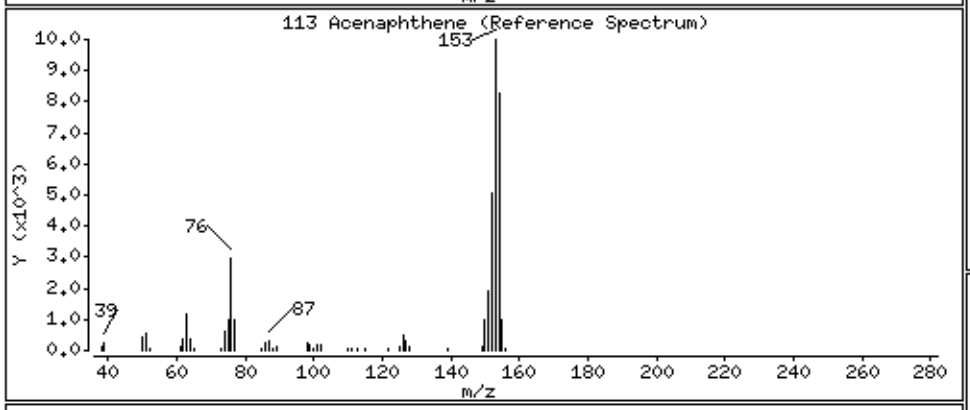
Column diameter: 0.53

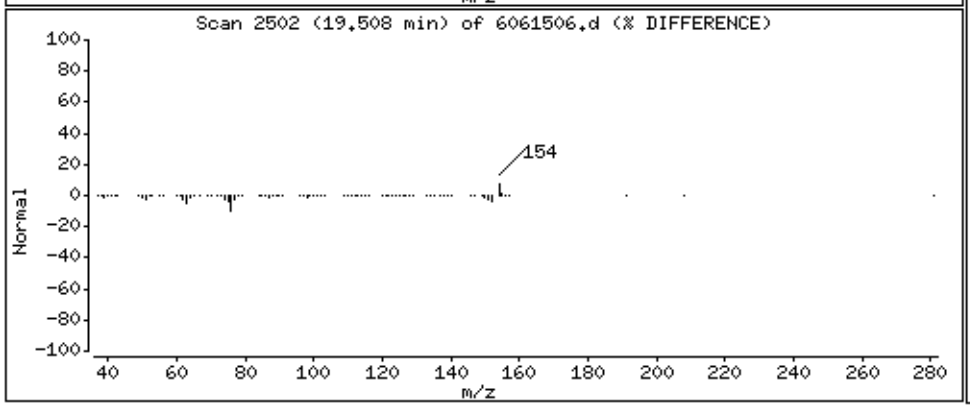
113 Acenaphthene

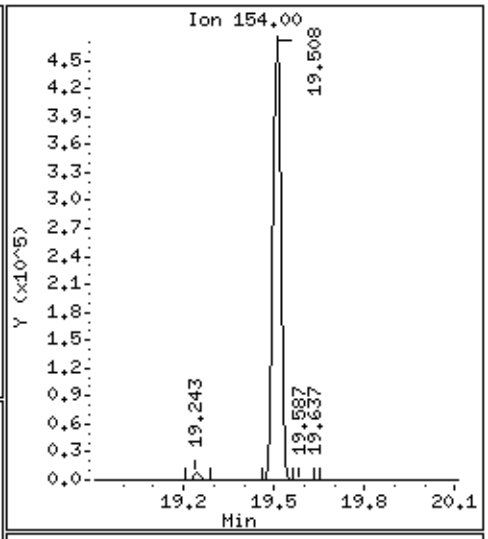
Concentration: 62.220 NG

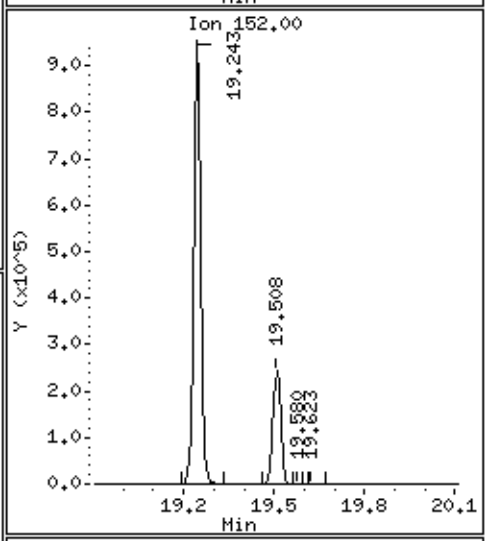


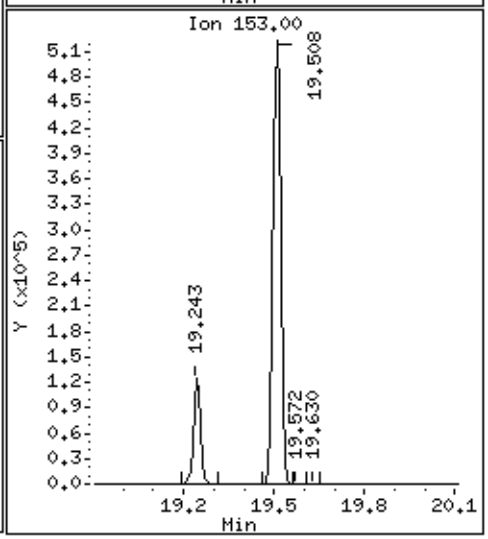












Data File: /chem/msd6.i/15jun16.b/6061506.d

Date : 15-JUN-2016 14:25

Client ID: LCS

Instrument: msd6.i

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

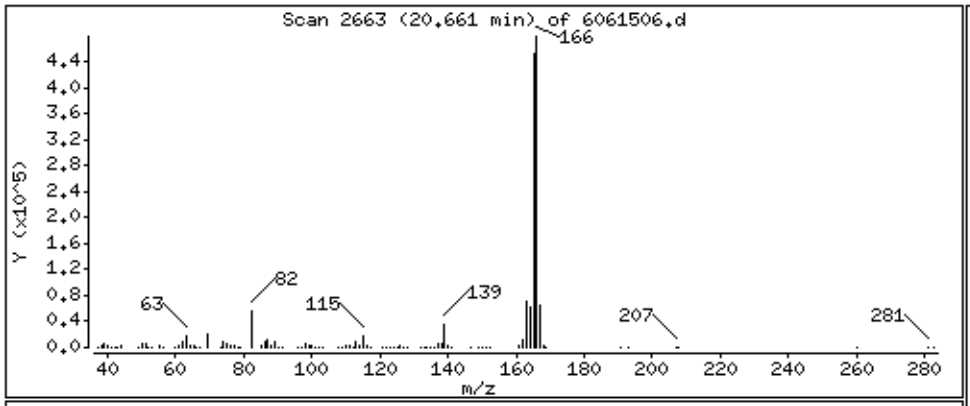
Operator: CT

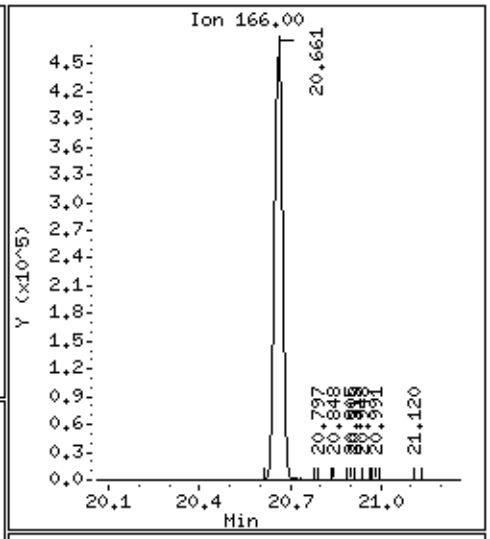
Column phase: RTx-624

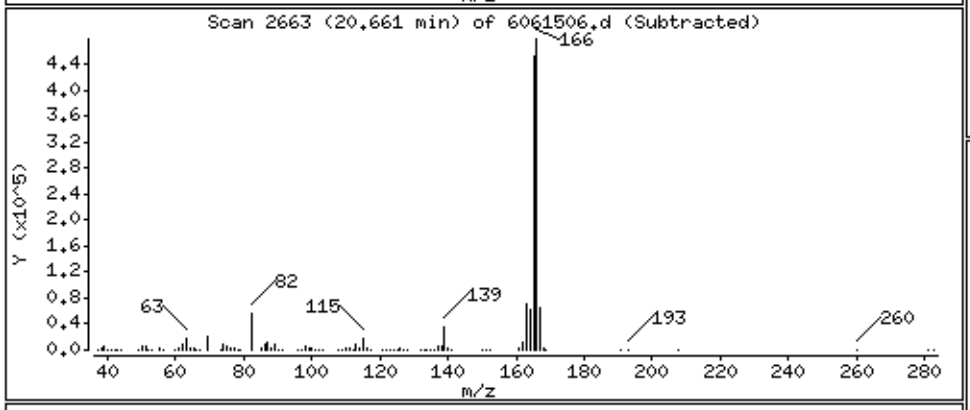
Column diameter: 0.53

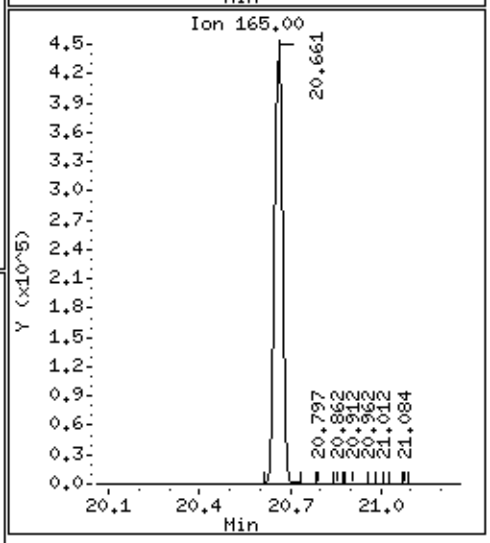
114 Fluorene

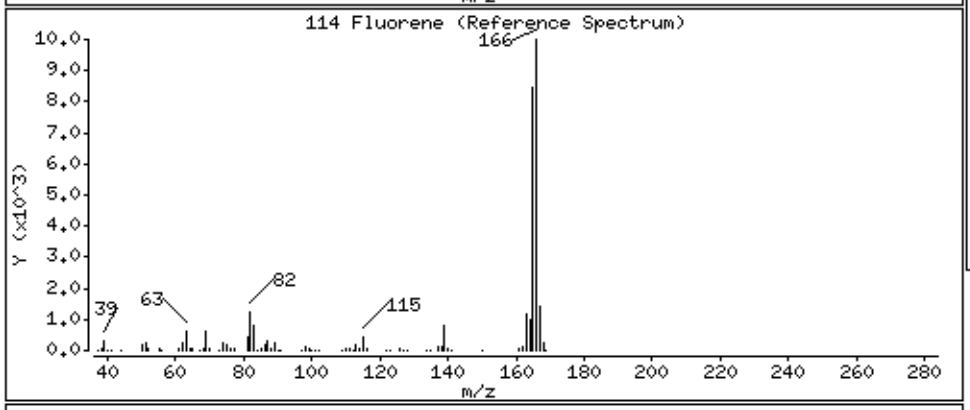
Concentration: 73.958 NG

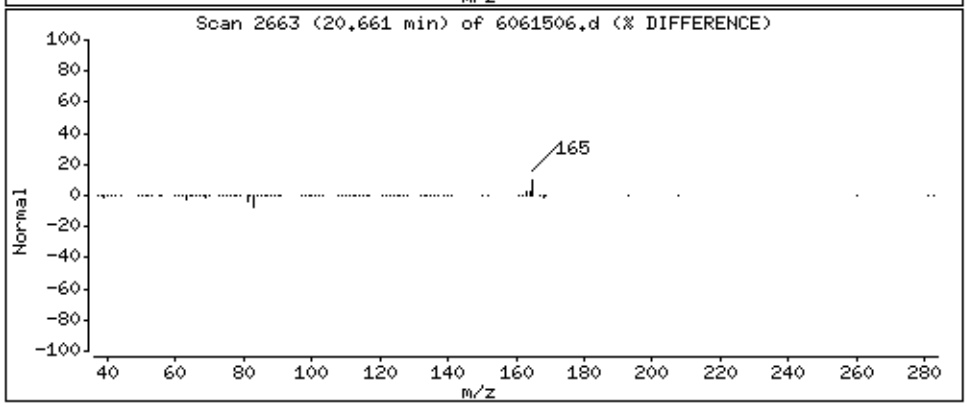












Data File: /chem/msd6.i/15jun16.b/6061506.d

Date : 15-JUN-2016 14:25

Client ID: LCS

Instrument: msd6.i

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

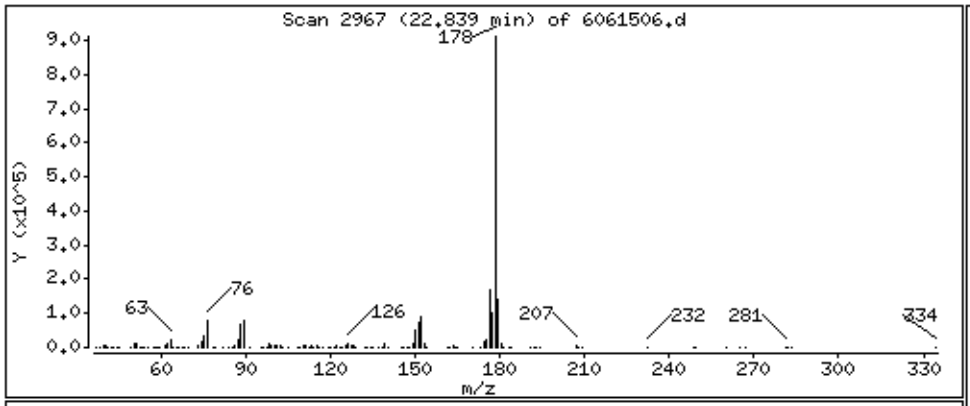
Operator: CT

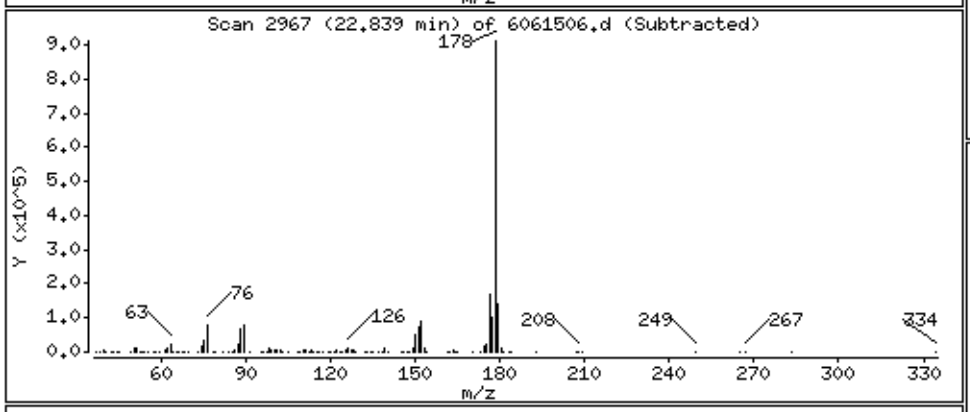
Column phase: RTx-624

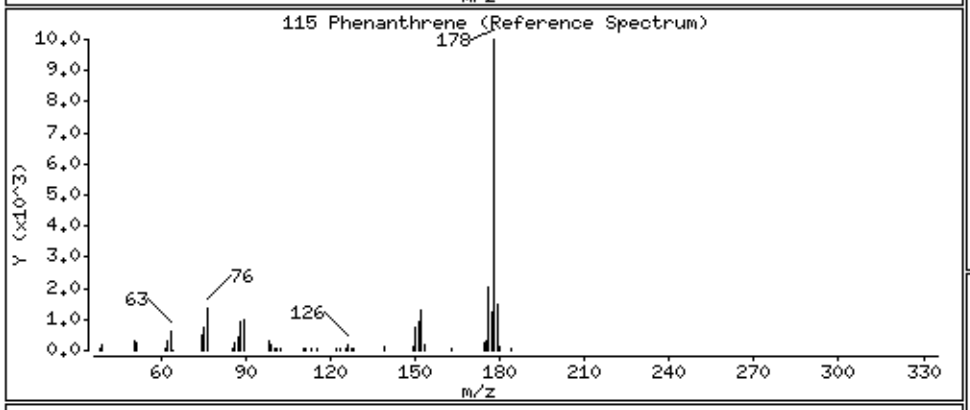
Column diameter: 0.53

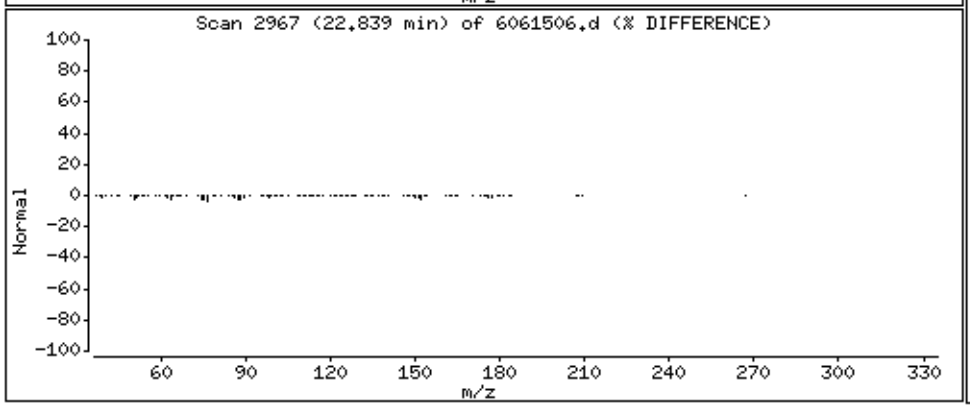
115 Phenanthrene

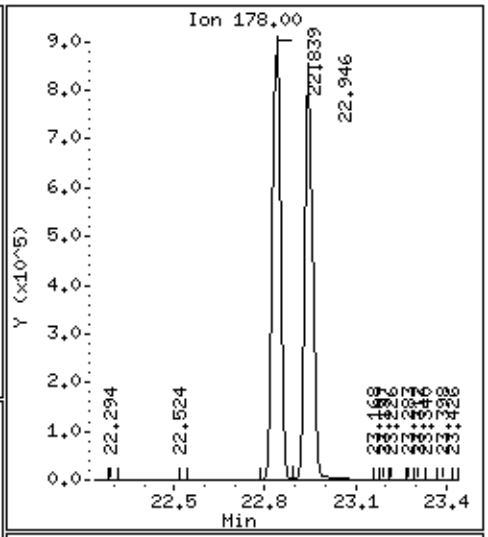
Concentration: 58.556 NG

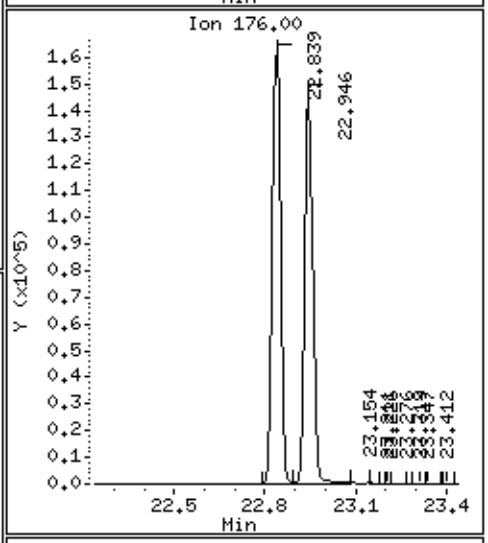


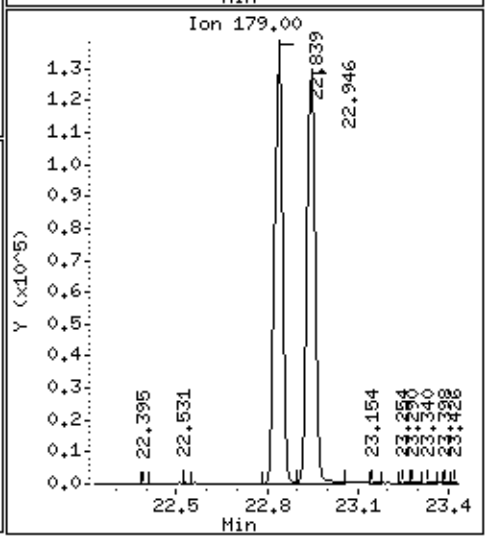












Data File: /chem/msd6.i/15jun16.b/6061506.d

Date : 15-JUN-2016 14:25

Client ID: LCS

Instrument: msd6.i

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

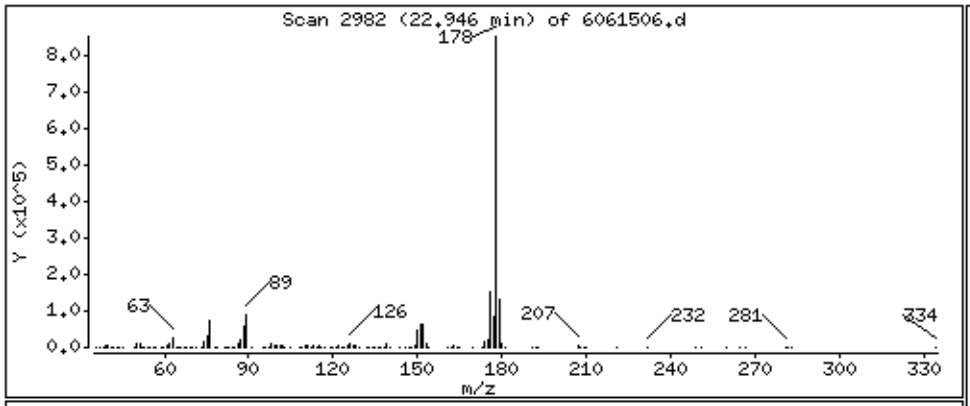
Operator: CT

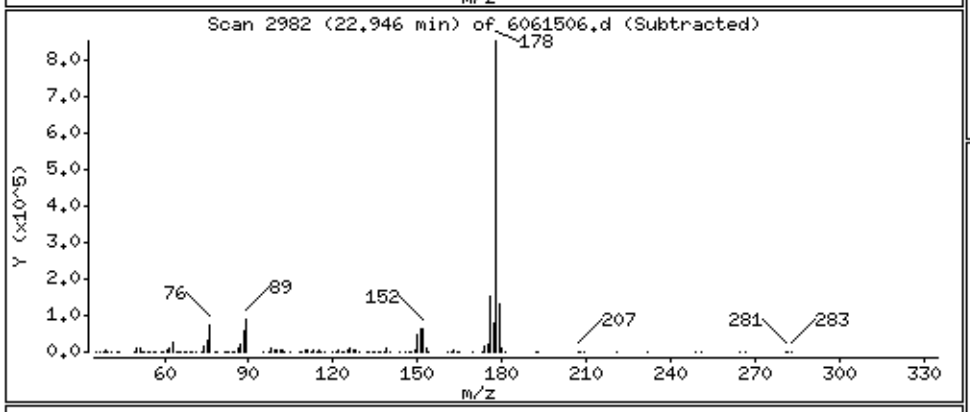
Column phase: RTx-624

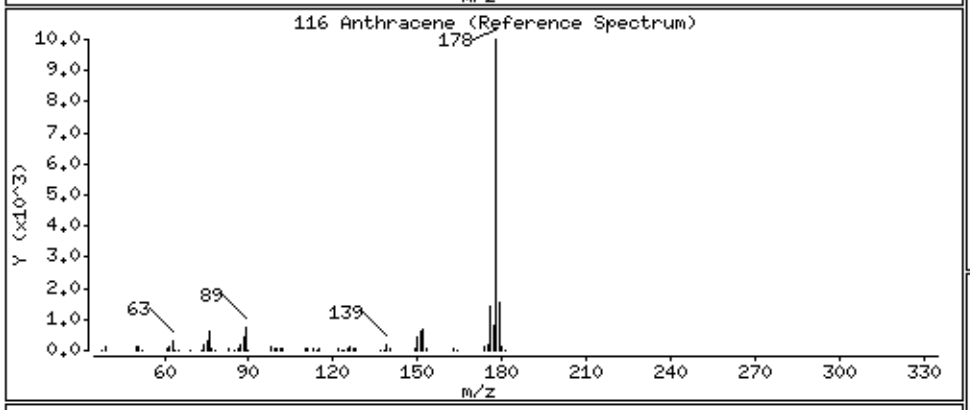
Column diameter: 0.53

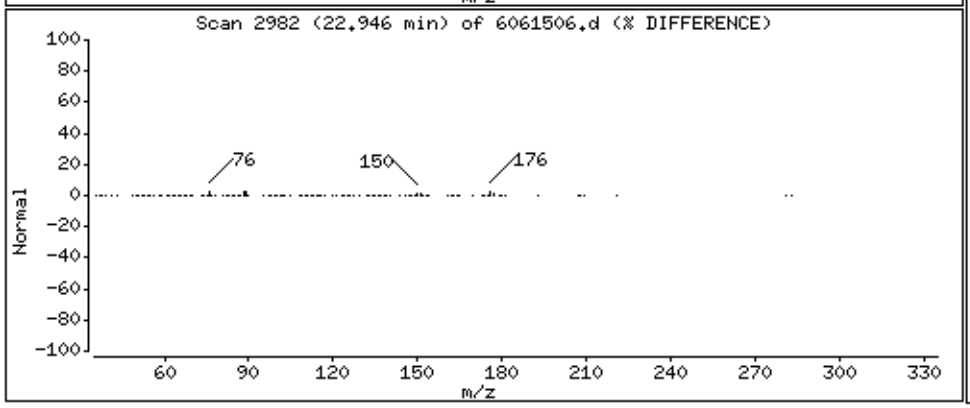
116 Anthracene

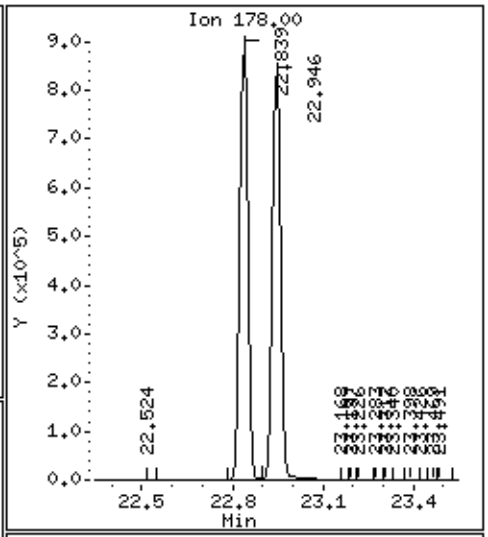
Concentration: 64.895 NG

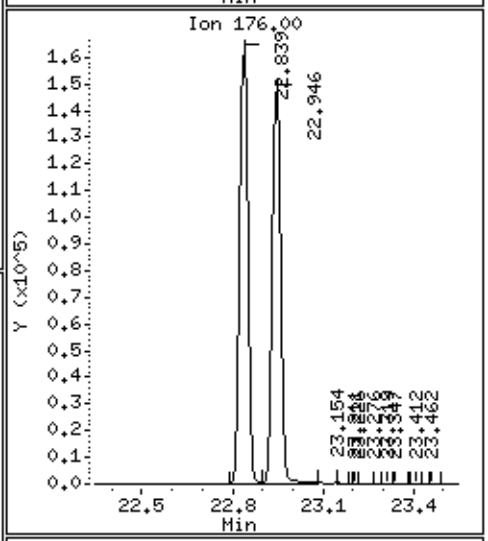


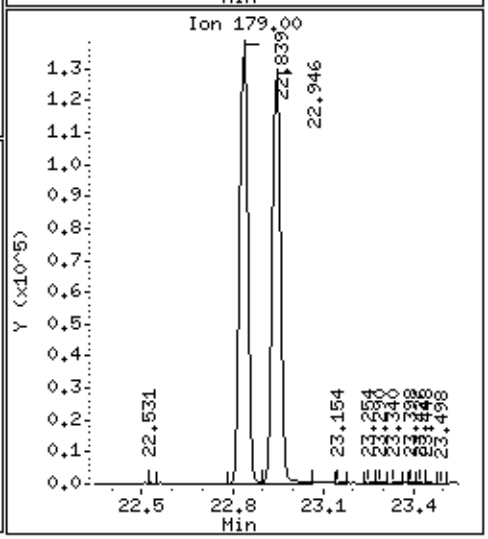












Data File: /chem/msd6.i/15jun16.b/6061506.d

Date : 15-JUN-2016 14:25

Client ID: LCS

Instrument: msd6.i

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

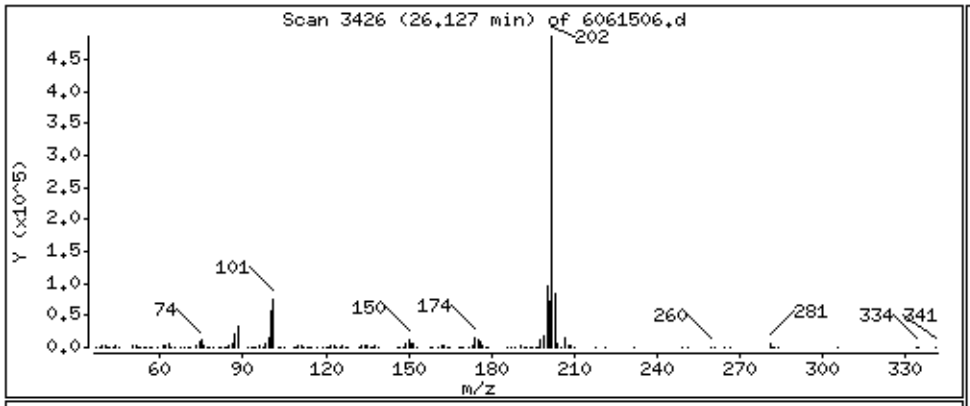
Operator: CT

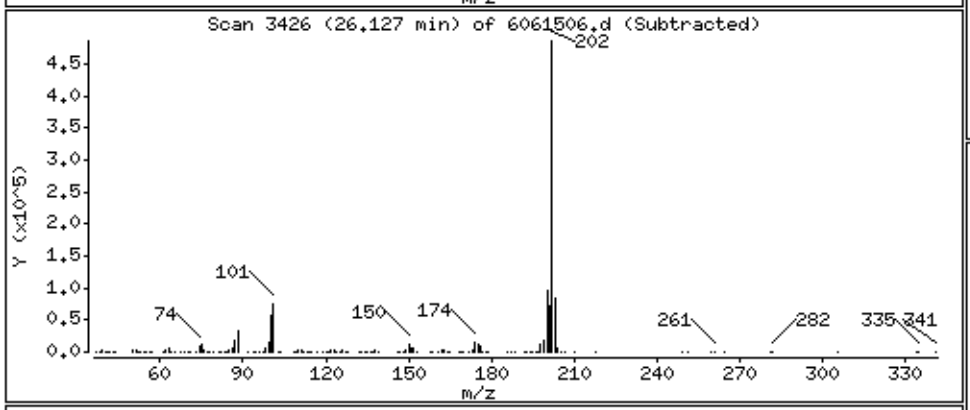
Column phase: RTx-624

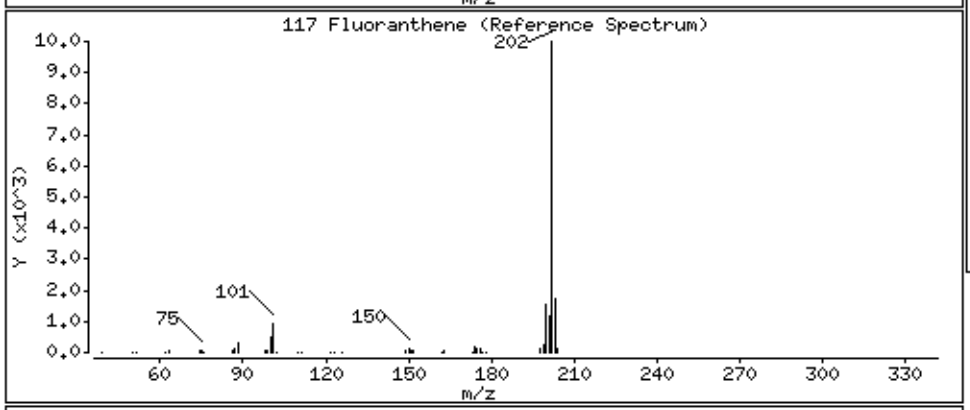
Column diameter: 0.53

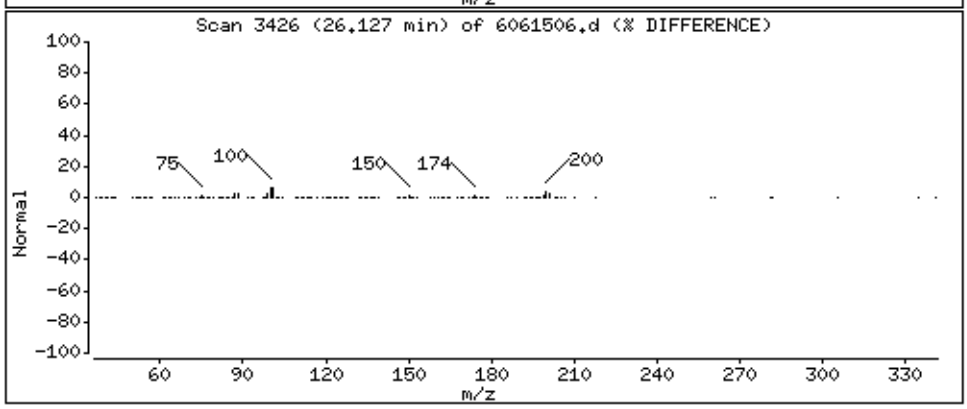
117 Fluoranthene

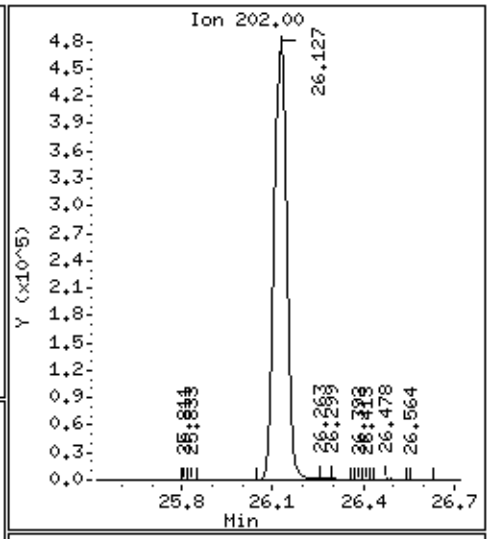
Concentration: 72.184 NG

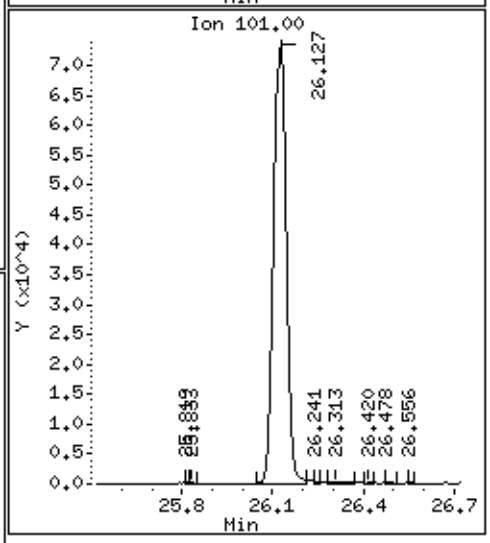












Data File: /chem/msd6.i/15jun16.b/6061506.d

Date : 15-JUN-2016 14:25

Client ID: LCS

Instrument: msd6.i

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

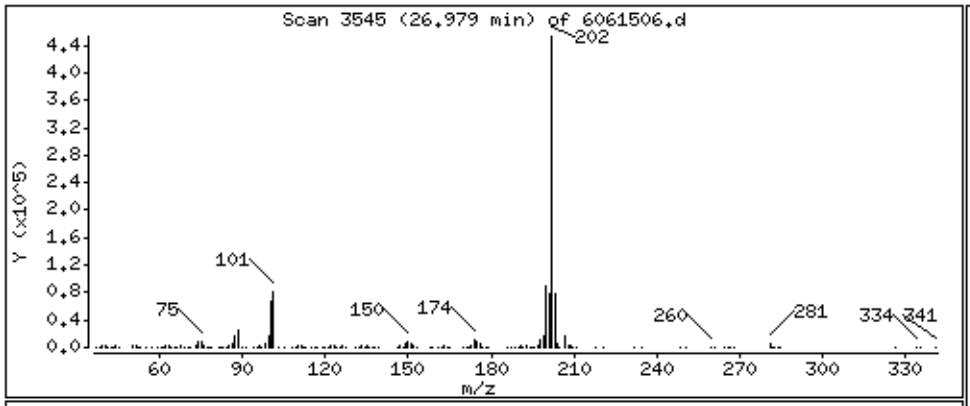
Operator: CT

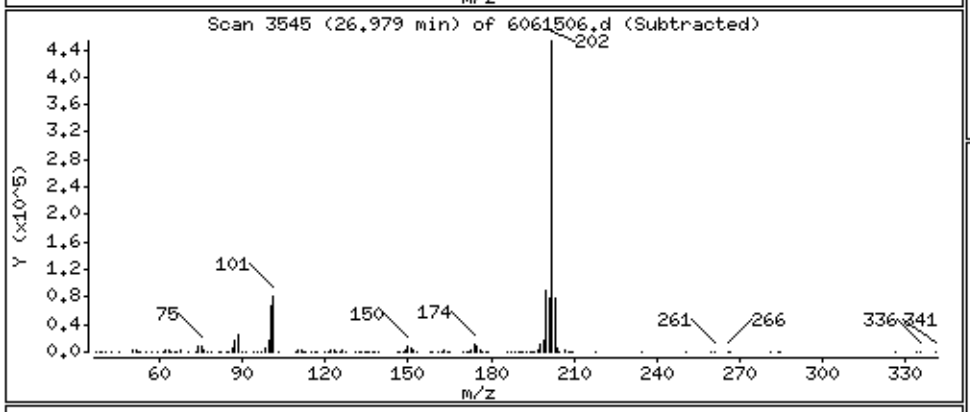
Column phase: RTx-624

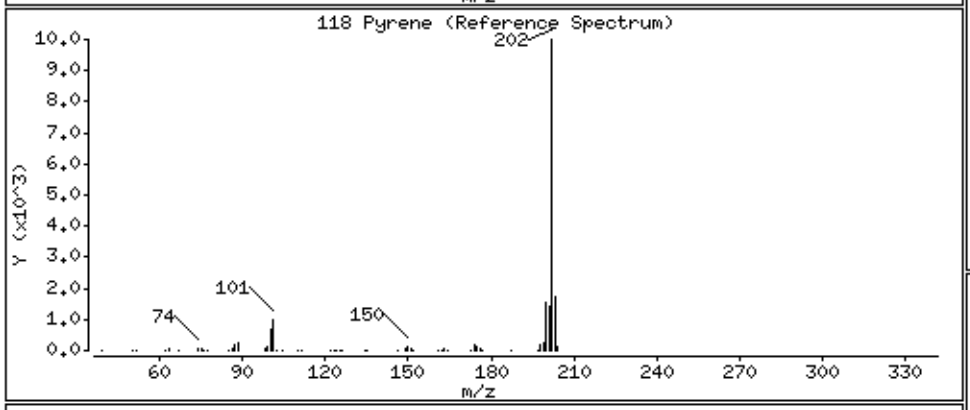
Column diameter: 0.53

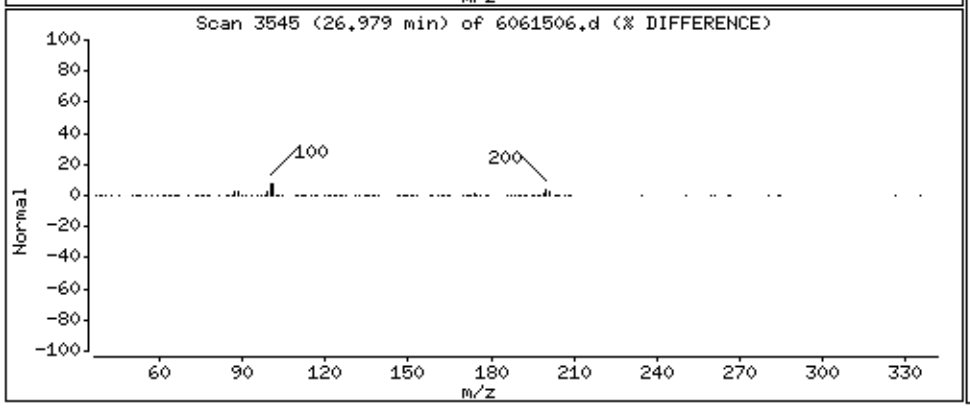
118 Pyrene

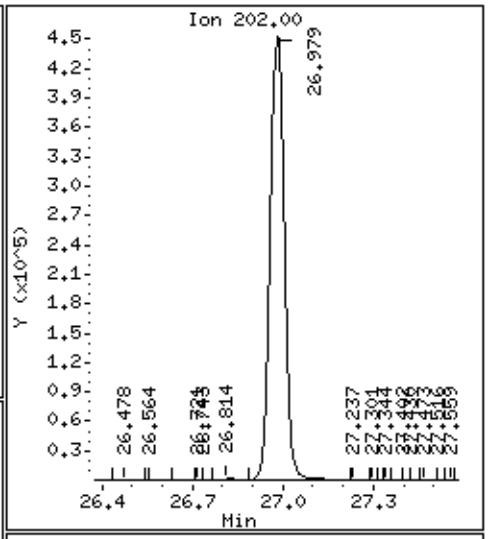
Concentration: 74.829 NG

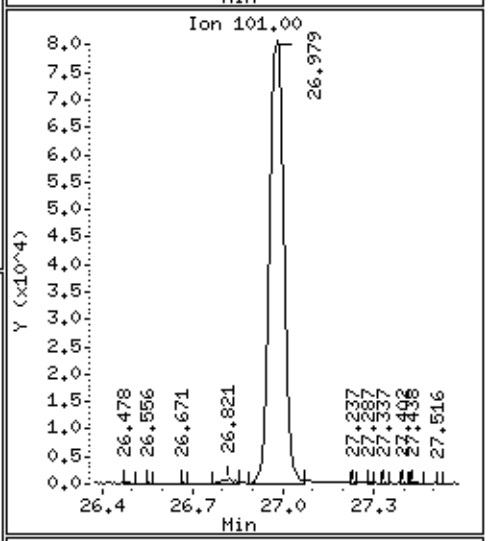


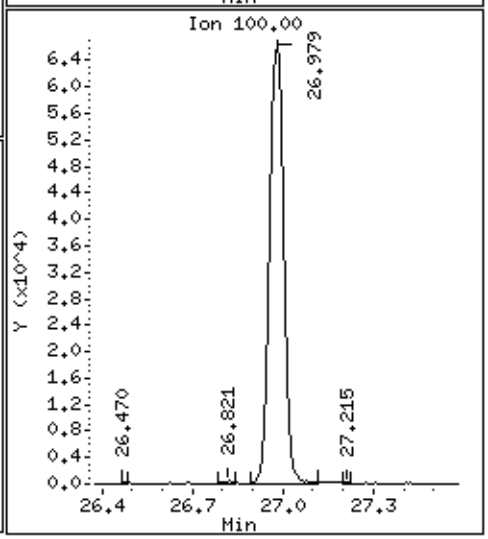












Eurofins Air Toxics Inc.

EPA Method TO-17 GC/MS

Data file : /chem/msd6.i/15jun16.b/6061502.d
Lab Smp Id: VI ICAL1,1.0Surr
Inj Date : 15-JUN-2016 11:01
Operator : CT Inst ID: msd6.i
Smp Info : ;VI ICAL1,1.0Surr
Misc Info : 2516-246-1ml(9/10/16),2744-31-1(7/5/16)
Comment :
Method : /chem/msd6.i/15jun16.b/616z0614vi.m
Meth Date : 21-Jun-2016 11:23 U5BT Quant Type: ISTD
Cal Date : 15-JUN-2016 11:01 Cal File: 6061502.d
Als bottle: 12 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		
4.301	4.301 (1.000)	130	203750	26.0000		80.00- 120.00	100.00
4.301	4.301 (1.000)	128	156646			47.94- 107.94	76.88
4.301	4.301 (1.000)	49	231302			68.24- 128.24	113.52
* 54 1,4-Difluorobenzene					CAS #: 540-36-3		
5.941	5.941 (1.000)	114	621793	23.0000		80.00- 120.00	100.00
5.941	5.941 (1.000)	88	92197			0.00- 45.46	14.83
* 79 Chlorobenzene-d5					CAS #: 3114-55-4		
9.866	9.866 (1.000)	117	588035	24.0000		80.00- 120.00	100.00
9.866	9.866 (1.000)	82	285304			19.06- 79.06	48.52
* 92 Bromofluorobenzene					CAS #: 460-00-4		
11.428	11.428 (1.000)	174	416391	36.0000		80.00- 120.00	100.00
11.421	11.421 (1.000)	95	439704			74.19- 134.19	105.60
11.428	11.428 (1.000)	176	404706			67.61- 127.61	97.19
$ 49 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
5.218	5.218 (0.878)	65	3929	1.00000	1.225	80.00- 120.00	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)
  5.225   5.225 (0.879)    67      2327                    21.95-  81.95    59.23
-------------------------------------------------------------------------------
$  66 Toluene-d8                                   CAS #: 2037-26-5
  7.954   7.954 (0.806)    98     10123 1.00000   0.9222  80.00- 120.00   100.00
  7.961   7.961 (0.807)    70      1153                     0.00-  39.97    11.39
  7.954   7.954 (0.806)   100      6840                    35.51-  95.51    67.57
-------------------------------------------------------------------------------
$ 108 Naphthalene-d8                               CAS #: 1146-65-2
 15.690  15.690 (1.373)   136     20795 1.00000   0.9644  80.00- 120.00   100.00
 15.690  15.690 (1.373)   108      1831                     0.00-  38.72     8.81
-------------------------------------------------------------------------------
    3 Freon 114                                    CAS #: 76-14-2
  1.283   1.283 (0.298)   135     27100 6.99000    7.127  80.00- 120.00   100.00(a)
  1.283   1.283 (0.298)   137      9184                     2.20-  62.20    33.89
-------------------------------------------------------------------------------
    6 Vinyl Chloride                               CAS #: 75-01-4
  1.395   1.395 (0.324)    62     13091 2.56000    2.685  80.00- 120.00   100.00
  1.451   1.451 (0.337)    64      2679                    13.62-  73.62    20.46
-------------------------------------------------------------------------------
    7 1,3-Butadiene                                CAS #: 106-99-0
  1.395   1.395 (0.324)    54     10851 2.21000    2.482  80.00- 120.00   100.00
  1.395   1.395 (0.324)    39     19605                   117.26- 177.26   180.67
-------------------------------------------------------------------------------
    9 Chloroethane                                 CAS #: 75-00-3
  1.646   1.646 (0.383)    64     10784 2.64000    4.527  80.00- 120.00   100.00(a)
  1.646   1.646 (0.383)    66      2715                     0.84-  60.84    25.18
  1.646   1.646 (0.383)    49      1946                     0.00-  56.89    18.05
-------------------------------------------------------------------------------
   10 Isopentane                                   CAS #: 78-78-4
  1.688   1.688 (0.393)    57     12230 2.95000    3.361  80.00- 120.00   100.00(a)
  1.688   1.688 (0.393)    43     16719                   107.36- 167.36   136.70
-------------------------------------------------------------------------------
   11 Trichlorofluoromethane/Fr11                  CAS #: 75-69-4
  1.814   1.814 (0.422)   101     32844 5.62000    5.030  80.00- 120.00   100.00(a)
  1.814   1.814 (0.422)   103     21852                    35.47-  95.47    66.53
-------------------------------------------------------------------------------
   15 Freon 113                                    CAS #: 76-13-1
  2.173   2.173 (0.505)   151     29905 7.66000    7.158  80.00- 120.00   100.00(a)
  2.173   2.173 (0.505)   153     19665                    34.42-  94.42    65.76
  2.173   2.173 (0.505)   101     34152                    75.78- 135.78   114.20
-------------------------------------------------------------------------------
   14 1,1-Dichloroethene                           CAS #: 75-35-4
  2.180   2.180 (0.507)    98      9499 3.97000    3.601  80.00- 120.00   100.00(a)
  2.180   2.180 (0.507)    96     15264                   128.07- 188.07   160.69
  2.180   2.180 (0.507)    61     23234                   203.73- 263.73   244.59
-------------------------------------------------------------------------------
```

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 (0.549)	76	67322	3.11000	4.033	80.00- 120.00	100.00(a)
19 2-Propanol					CAS #: 67-63-0		
2.274	2.274 (0.529)	45	48985	2.46000	5.130	80.00- 120.00	100.00(a)
2.274	2.274 (0.529)	43	14803			0.00- 50.57	30.22
2.266	2.266 (0.527)	59	2262			0.00- 34.17	4.62
22 Methylene Chloride					CAS #: 75-09-2		
2.567	2.567 (0.597)	49	107730	3.47000	18.182	80.00- 120.00	100.00(a)
2.567	2.567 (0.597)	84	86210			55.25- 115.25	80.02
2.574	2.574 (0.599)	51	33592			0.54- 60.54	31.18
25 trans-1,2-Dichloroethene					CAS #: 156-60-5		
2.818	2.818 (0.655)	98	8300	3.96000	3.273	80.00- 120.00	100.00(a)
2.818	2.818 (0.655)	61	16787			178.66- 238.66	202.25
2.818	2.818 (0.655)	96	13302			127.69- 187.69	160.27
26 MTBE					CAS #: 1634-04-4		
2.789	2.789 (0.649)	73	30945	3.61000	3.247	80.00- 120.00	100.00(a)
2.796	2.796 (0.650)	57	7428			0.00- 51.21	24.00
2.789	2.789 (0.649)	41	8492			0.00- 50.32	27.44
28 Hexane					CAS #: 110-54-3		
3.090	3.090 (0.719)	57	18942	3.52000	3.086	80.00- 120.00	100.00(a)
3.090	3.090 (0.719)	43	12071			30.80- 90.80	63.73
3.097	3.097 (0.720)	86	3072			0.00- 45.79	16.22
29 1,1-Dichloroethane					CAS #: 75-34-3		
3.262	3.262 (0.758)	63	23740	4.05000	3.903	80.00- 120.00	100.00(a)
3.262	3.262 (0.758)	65	7679			1.92- 61.92	32.35
37 cis-1,2-Dichloroethene					CAS #: 156-59-2		
3.957	3.957 (0.920)	98	10641	3.96000	3.885	80.00- 120.00	100.00(a)
3.957	3.957 (0.920)	96	17150			125.20- 185.20	161.17
3.957	3.957 (0.920)	61	24681			158.24- 218.24	231.94
38 2-Butanone					CAS #: 78-93-3		
3.921	3.921 (0.912)	72	50514	2.95000	19.518	80.00- 120.00	100.00(a)
3.921	3.921 (0.912)	43	223557			361.05- 421.05	442.56
3.921	3.921 (0.912)	57	22741			4.40- 64.40	45.02
44 Chloroform					CAS #: 67-66-3		
4.473	4.473 (1.040)	83	29315	4.88000	4.554	80.00- 120.00	100.00(a)
4.473	4.473 (1.040)	85	20283			35.45- 95.45	69.19

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO
46 Cyclohexane					CAS #: 110-82-7		
4.816	4.816 (0.811)	84	17713	3.44000	4.068	80.00- 120.00	100.00(a)
4.824	4.824 (0.812)	56	22922			82.98- 142.98	129.41
4.816	4.816 (0.811)	41	14992			32.69- 92.69	84.64
45 1,1,1-Trichloroethane					CAS #: 71-55-6		
4.702	4.702 (0.791)	97	29820	5.46000	6.767	80.00- 120.00	100.00
4.702	4.702 (0.791)	99	20301			34.83- 94.83	68.08
47 Carbon Tetrachloride					CAS #: 56-23-5		
4.945	4.945 (0.832)	119	29871	6.29000	7.302	80.00- 120.00	100.00
4.945	4.945 (0.832)	117	30456			73.53- 133.53	101.96
51 2,2,4-Trimethylpentane					CAS #: 540-84-1		
5.483	5.483 (0.923)	57	45000	4.67000	4.062	80.00- 120.00	100.00(a)
5.475	5.475 (0.922)	56	14882			1.12- 61.12	33.07
5.490	5.490 (0.924)	41	16448			0.00- 57.96	36.55
48 Benzene					CAS #: 71-43-2		
5.239	5.239 (0.882)	78	64583	3.19000	5.394	80.00- 120.00	100.00(a)
5.246	5.246 (0.883)	77	15610			0.00- 53.50	24.17
50 1,2-Dichloroethane					CAS #: 107-06-2		
5.339	5.339 (0.899)	62	16775	4.05000	4.407	80.00- 120.00	100.00
5.347	5.347 (0.900)	64	5907			2.93- 62.93	35.21
53 Heptane					CAS #: 142-82-5		
5.776	5.776 (0.972)	71	10428	4.10000	3.699	80.00- 120.00	100.00(a)
5.783	5.783 (0.973)	43	15143			143.29- 203.29	145.21
5.783	5.783 (0.973)	57	9787			61.40- 121.40	93.85
56 Trichloroethene					CAS #: 79-01-6		
6.256	6.256 (1.053)	95	18091	5.37000	5.027	80.00- 120.00	100.00(a)
6.256	6.256 (1.053)	130	20523			81.46- 141.46	113.44
6.249	6.249 (1.052)	97	11401			34.92- 94.92	63.02
58 Methyl Cyclohexane					CAS #: 108-87-2		
6.571	6.571 (1.106)	83	18427	4.02000	3.468	80.00- 120.00	100.00(a)
6.571	6.571 (1.106)	98	8838			15.14- 75.14	47.96
6.564	6.564 (1.105)	55	14671			46.07- 106.07	79.62
59 1,2-Dichloropropane					CAS #: 78-87-5		
6.607	6.607 (1.112)	63	11717	4.62000	4.485	80.00- 120.00	100.00(a)
6.607	6.607 (1.112)	62	7840			38.13- 98.13	66.91
6.579	6.579 (1.107)	41	15134			92.30- 152.30	129.16

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

   60 1,4-Dioxane                                  CAS #: 123-91-1
  6.729   6.729 (1.133)    88      8857 3.60000    3.720  80.00- 120.00   100.00(a)
  6.729   6.729 (1.133)    58      8042                   31.73-  91.73    90.80
  6.729   6.729 (1.133)    57     21718                    1.20-  61.20   245.21
--------------------------------------------------------------------------------
   65 4-Methyl-2-pentanone                         CAS #: 108-10-1
  7.832   7.832 (1.318)    58      7646 4.10000    3.264  80.00- 120.00   100.00(a)
  7.832   7.832 (1.318)    43     20585                  221.14- 281.14   269.23
  7.832   7.832 (1.318)    85      3938                   20.58-  80.58    51.50
--------------------------------------------------------------------------------
   67 Toluene                                      CAS #: 108-88-3
  8.047   8.047 (0.816)    91     41702 3.77000    3.428  80.00- 120.00   100.00(a)
  8.047   8.047 (0.816)    92     23619                   28.32-  88.32    56.64
--------------------------------------------------------------------------------
   70 1,1,2-Trichloroethane                        CAS #: 79-00-5
  8.649   8.649 (1.456)    97     14524 5.46000    4.937  80.00- 120.00   100.00(a)
  8.649   8.649 (1.456)    99      9078                   32.57-  92.57    62.50
  8.649   8.649 (1.456)    83     12083                   50.93- 110.93    83.19
--------------------------------------------------------------------------------
   71 Tetrachloroethene                            CAS #: 127-18-4
  8.727   8.727 (0.885)   166     24159 6.78000    6.031  80.00- 120.00   100.00(a)
  8.727   8.727 (0.885)   129     17428                   41.03- 101.03    72.14
  8.735   8.735 (0.885)   131     17043                   38.99-  98.99    70.55
--------------------------------------------------------------------------------
   72 2-Hexanone                                   CAS #: 591-78-6
  8.964   8.964 (0.909)    58     10243 4.10000    3.309  80.00- 120.00   100.00(a)
  8.964   8.964 (0.909)    43     19587                  155.38- 215.38   191.22
  8.964   8.964 (0.909)   100      2202                    0.00-  52.71    21.50
--------------------------------------------------------------------------------
   74 1,2-Dibromoethane                            CAS #: 106-93-4
  9.250   9.250 (0.938)   107     21079 7.68000    6.700  80.00- 120.00   100.00(a)
  9.243   9.243 (0.937)   109     20555                   65.47- 125.47    97.51
--------------------------------------------------------------------------------
   81 Chlorobenzene                                CAS #: 108-90-7
  9.909   9.909 (1.004)   112     37157 4.60000    4.192  80.00- 120.00   100.00(a)
  9.909   9.909 (1.004)   114     12540                    2.20-  62.20    33.75
  9.902   9.902 (1.004)    77     19628                   20.93-  80.93    52.82
--------------------------------------------------------------------------------
   82 Ethyl Benzene                                CAS #: 100-41-4
 10.060  10.060 (1.020)   106     16404 4.34000    3.601  80.00- 120.00   100.00(a)
 10.060  10.060 (1.020)    91     50463                  272.45- 332.45   307.63
--------------------------------------------------------------------------------
   84 m,p-Xylene                                   CAS #: 108-38-3
 10.232  10.232 (1.037)   106     21765 4.34000    3.756  80.00- 120.00   100.00(a)
 10.239  10.239 (1.038)    91     41705                  164.06- 224.06   191.61
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                                        AMOUNTS
                                     CAL-AMT   ON-COL
   RT   EXP RT (REL RT)  MASS  RESPONSE (   ng)  (   ng)   TARGET RANGE    RATIO
   ==   ====== ========  ====  ======== =======  =======   ============    =====

   88 o-Xylene                                        CAS #: 95-47-6
 10.726  10.726 (0.939)   106     20010 4.34000    3.792  80.00- 120.00   100.00(a)
 10.726  10.726 (0.939)    91     41209                  174.12- 234.12   205.94
-------------------------------------------------------------------------------
   89 Styrene                                         CAS #: 100-42-5
 10.762  10.762 (0.942)   104     29344 4.26000    3.356  80.00- 120.00   100.00(a)
 10.762  10.762 (0.942)    78     14285                   16.31-  76.31    48.68
-------------------------------------------------------------------------------
   91 Cumene                                          CAS #: 98-82-8
 11.213  11.213 (0.981)   105     59745 4.92000    4.162  80.00- 120.00   100.00(a)
 11.220  11.220 (0.982)   120     16747                    0.00-  57.22    28.03
 11.213  11.213 (0.981)    51      5676                    0.00-  38.43     9.50
-------------------------------------------------------------------------------
   94 1,1,2,2-Tetrachloroethane                       CAS #: 79-34-5
 11.636  11.636 (1.018)    83     23814 6.87000    5.216  80.00- 120.00   100.00(a)
 11.636  11.636 (1.018)    85     16501                   35.83-  95.83    69.29
-------------------------------------------------------------------------------
   96 Propylbenzene                                   CAS #: 103-65-1
 11.750  11.750 (1.028)    91     66788 4.92000    3.980  80.00- 120.00   100.00(a)
 11.757  11.757 (1.029)   120     17156                    0.00-  55.53    25.69
 11.750  11.750 (1.028)   105      2739                    0.00-  33.92     4.10
-------------------------------------------------------------------------------
   97 4-Ethyltoluene                                  CAS #: 622-96-8
 11.922  11.922 (1.043)   120     17038 4.92000    3.784  80.00- 120.00   100.00(a)
 11.915  11.915 (1.043)   105     53528                  298.20- 358.20   314.17
-------------------------------------------------------------------------------
   98 1,3,5-Trimethylbenzene                          CAS #: 108-67-8
 12.001  12.001 (1.050)   120     25892 4.92000    4.028  80.00- 120.00   100.00(a)
 12.001  12.001 (1.050)   105     49670                  167.68- 227.68   191.84
-------------------------------------------------------------------------------
  100 1,2,4-Trimethylbenzene                          CAS #: 95-63-6
 12.474  12.474 (1.091)   120     22308 4.92000    3.712  80.00- 120.00   100.00(a)
 12.467  12.467 (1.091)   105     60621                  185.14- 245.14   271.75
-------------------------------------------------------------------------------
  101 1,3-Dichlorobenzene                             CAS #: 541-73-1
 12.796  12.796 (1.120)   146     37237 6.01000    4.536  80.00- 120.00   100.00(a)
 12.796  12.796 (1.120)   148     24116                   34.46-  94.46    64.76
 12.796  12.796 (1.120)   111     13909                    7.45-  67.45    37.35
-------------------------------------------------------------------------------
  102 1,4-Dichlorobenzene                             CAS #: 106-46-7
 12.932  12.932 (1.132)   146     36721 6.01000    4.459  80.00- 120.00   100.00(a)
 12.932  12.932 (1.132)   148     23693                   33.91-  93.91    64.52
 12.932  12.932 (1.132)   111     13270                    6.02-  66.02    36.14
-------------------------------------------------------------------------------
  105 1,2-Dichlorobenzene                             CAS #: 95-50-1
 13.369  13.369 (1.170)   146     36189 6.01000    4.535  80.00- 120.00   100.00(a)
```

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

  105 1,2-Dichlorobenzene (continued)
 13.369  13.369 (1.170)   148     22415                    34.29-  94.29    61.94
 13.369  13.369 (1.170)   111     13759                     8.63-  68.63    38.02
-------------------------------------------------------------------------------
  106 1,2,4-Trichlorobenzene                        CAS #: 120-82-1
 15.418  15.418 (1.349)   180     33302 7.42000    5.197  80.00- 120.00   100.00(a)
 15.418  15.418 (1.349)   182     31632                    64.63- 124.63    94.99
-------------------------------------------------------------------------------
  107 Hexachlorobutadiene                           CAS #: 87-68-3
 15.625  15.625 (1.367)   225     28821 10.7000    8.613  80.00- 120.00   100.00(a)
 15.625  15.625 (1.367)   223     18230                    32.03-  92.03    63.25
-------------------------------------------------------------------------------
  109 Naphthalene                                   CAS #: 91-20-3
 15.726  15.726 (1.376)   128     24118 1.00000    1.041  80.00- 120.00   100.00
 15.733  15.733 (1.377)   127      3408                     0.00-  42.99    14.13
-------------------------------------------------------------------------------
  110 2-Methylnaphthalene                           CAS #: 91-57-6
 17.180  17.180 (1.503)   142     13604 1.00000   0.8886  80.00- 120.00   100.00(a)
 17.180  17.180 (1.503)   141     12077                    56.24- 116.24    88.78
 17.180  17.180 (1.503)   115      4316                     0.00-  58.81    31.73
-------------------------------------------------------------------------------
  111 1-Methylnaphthalene                           CAS #: 90-12-0
 17.395  17.395 (1.522)   142     12814 1.00000   0.9150  80.00- 120.00   100.00(a)
 17.395  17.395 (1.522)   141     11857                    60.38- 120.38    92.53
 17.395  17.395 (1.522)   115      4254                     0.56-  60.56    33.20
-------------------------------------------------------------------------------
  112 Acenaphthylene                                CAS #: 208-96-8
 19.243  19.243 (1.684)   152     19891 1.00000   0.7968  80.00- 120.00   100.00(a)
 19.236  19.236 (1.683)   151      4005                     0.00-  49.78    20.13
 19.243  19.243 (1.684)   153      2531                     0.00-  43.07    12.72
-------------------------------------------------------------------------------
  113 Acenaphthene                                  CAS #: 83-32-9
 19.508  19.508 (1.707)   154      9222 1.00000   0.7732  80.00- 120.00   100.00(a)
 19.508  19.508 (1.707)   152      5432                    21.85-  81.85    58.90
 19.508  19.508 (1.707)   153     10178                    79.23- 139.23   110.37
-------------------------------------------------------------------------------
  114 Fluorene                                      CAS #: 86-73-7
 20.661  20.661 (1.808)   166      8078 1.00000   0.8059  80.00- 120.00   100.00(a)
 20.661  20.661 (1.808)   165      8148                    65.14- 125.14   100.87
-------------------------------------------------------------------------------
  115 Phenanthrene                                  CAS #: 85-01-8
 22.839  22.839 (1.998)   178     25182 1.00000    1.013  80.00- 120.00   100.00(a)
 22.839  22.839 (1.998)   176      4671                     0.00-  48.56    18.55
 22.839  22.839 (1.998)   179      4326                     0.00-  45.19    17.18
-------------------------------------------------------------------------------
  116 Anthracene                                    CAS #: 120-12-7
 22.946  22.946 (2.008)   178     16544 1.00000   0.7772  80.00- 120.00   100.00(a)
```

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO
116 Anthracene (continued)							
22.946	22.946 (2.008)	176	3026			0.00- 47.99	18.29
22.946	22.946 (2.008)	179	3344			0.00- 45.19	20.21
117 Fluoranthene					CAS #: 206-44-0		
26.119	26.119 (2.286)	202	23273	1.00000	1.309	80.00- 120.00	100.00(a)
26.126	26.126 (2.286)	101	4166			0.00- 45.14	17.90
118 Pyrene					CAS #: 129-00-0		
26.986	26.986 (2.361)	202	22717	1.00000	1.248	80.00- 120.00	100.00(a)
26.993	26.993 (2.362)	101	2086			0.00- 48.11	9.18
26.979	26.979 (2.361)	100	3486			0.00- 44.51	15.35

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: 6061502.d
Lab Smp Id: VI ICAL1,1.0Surr
Analysis Type: VOA
Quant Type: ISTD
Operator: CT
Method File: /chem/msd6.i/15jun16.b/616z0614vi.m
Misc Info: 2516-246-1ml(9/10/16),2744-31-1(7/5/16)

Calibration Date: 14-JUN-2016
Calibration Time: 14:59
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
40 Bromochloromethan	156066	93640	218492	203750	30.55
54 1,4-Difluorobenze	638538	383123	893953	621793	-2.62
79 Chlorobenzene-d5	603523	362114	844932	588035	-2.57
92 Bromofluorobenzen	441798	265079	618517	416391	-5.75

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
40 Bromochloromethan	4.32	3.99	4.65	4.30	-0.33
54 1,4-Difluorobenze	5.95	5.62	6.28	5.94	-0.12
79 Chlorobenzene-d5	9.86	9.53	10.19	9.87	0.07
92 Bromofluorobenzen	11.41	11.08	11.74	11.43	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/15jun16.b/6061502.d

Date : 15-JUN-2016 11:01

Client ID:

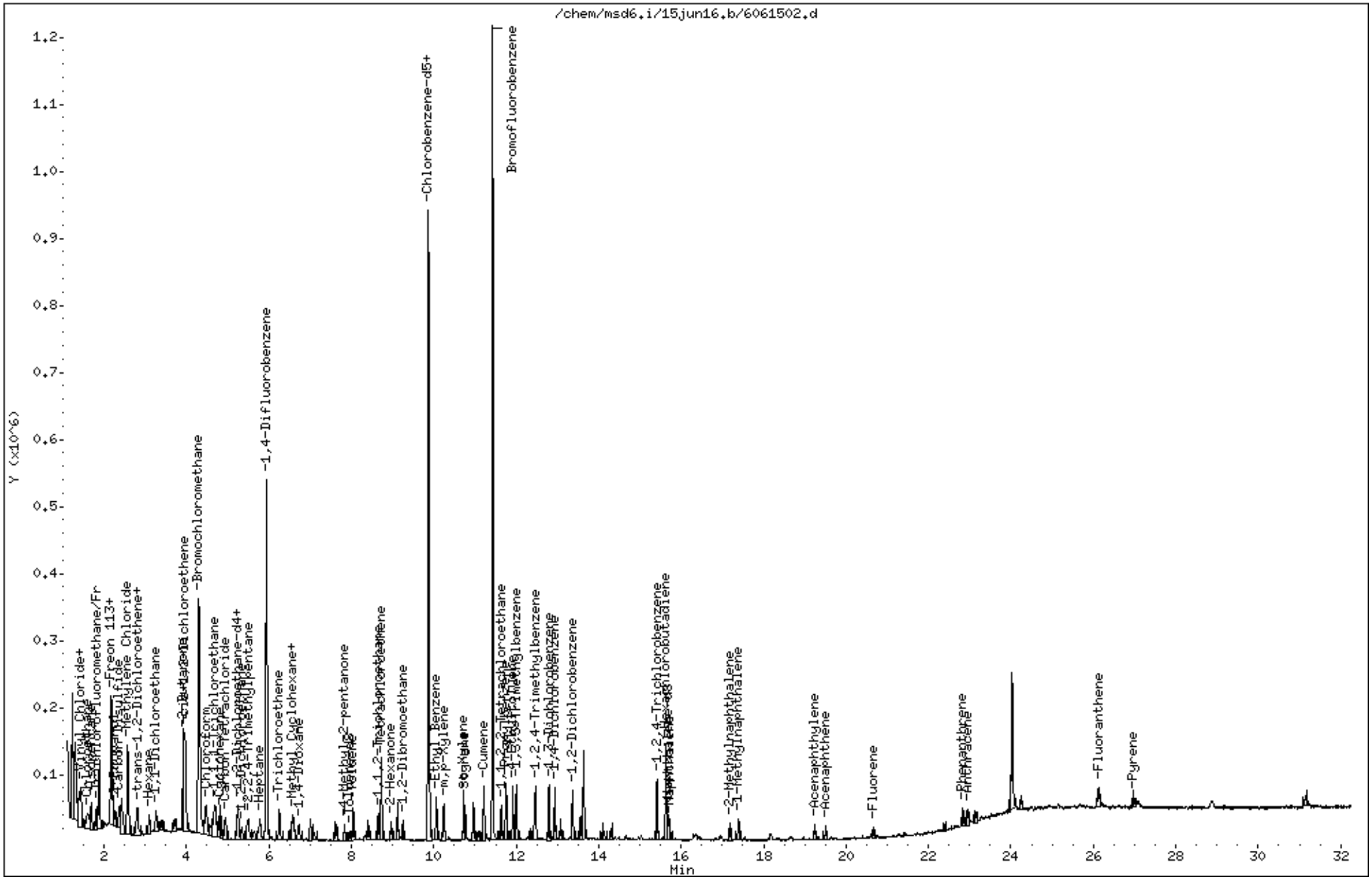
Sample Info: ;VI ICAL1,1.0Surr

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/14jun16a.b/6061409.d
Lab Smp Id: VI ICAL2,2.0Surr
Inj Date : 14-JUN-2016 12:59
Operator : CT Inst ID: msd6.i
Smp Info : ;VI ICAL2,2.0Surr
Misc Info : 2516-246-2ml(9/10/16),2744-31-5(7/5/16)
Comment :
Method : /chem/msd6.i/15jun16.b/616z0614vi.m
Meth Date : 21-Jun-2016 11:23 U5BT Quant Type: ISTD
Cal Date : 14-JUN-2016 12:59 Cal File: 6061409.d
Als bottle: 12 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: VOC+PAH_ICAL.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO
* 40 Bromochloromethane					CAS #: 74-97-5		
4.315	4.315 (1.000)	130	141079	26.0000		80.00- 120.00	100.00
4.315	4.315 (1.000)	128	108034			47.94- 107.94	76.58
4.308	4.308 (1.000)	49	136200			68.24- 128.24	96.54
* 54 1,4-Difluorobenzene					CAS #: 540-36-3		
5.948	5.948 (1.000)	114	620893	23.0000		80.00- 120.00	100.00
5.948	5.948 (1.000)	88	94360			0.00- 45.46	15.20
* 79 Chlorobenzene-d5					CAS #: 3114-55-4		
9.859	9.859 (1.000)	117	580434	24.0000		80.00- 120.00	100.00
9.859	9.859 (1.000)	82	288403			19.06- 79.06	49.69
* 92 Bromofluorobenzene					CAS #: 460-00-4		
11.414	11.414 (1.000)	174	423384	36.0000		80.00- 120.00	100.00
11.406	11.406 (1.000)	95	439550			74.19- 134.19	103.82
11.414	11.414 (1.000)	176	414597			67.61- 127.61	97.92
$ 49 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
5.232	5.232 (0.880)	65	5790	2.00000	1.808	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)
  5.232   5.232 (0.880)    67      3230                    21.95-  81.95    55.79
-------------------------------------------------------------------------------
$  66 Toluene-d8                                   CAS #: 2037-26-5
  7.954   7.954 (0.807)    98     20857 2.00000    1.925  80.00- 120.00   100.00
  7.954   7.954 (0.807)    70      2418                     0.00-  39.97    11.59
  7.954   7.954 (0.807)   100     13597                    35.51-  95.51    65.19
-------------------------------------------------------------------------------
$ 108 Naphthalene-d8                               CAS #: 1146-65-2
 15.690  15.690 (1.375)   136     50630 2.00000    2.309  80.00- 120.00   100.00
 15.690  15.690 (1.375)   108      4624                     0.00-  38.72     9.13
-------------------------------------------------------------------------------
    3 Freon 114                                    CAS #: 76-14-2
  1.297   1.297 (0.300)   135     41481 14.0000   15.754  80.00- 120.00   100.00
  1.297   1.297 (0.300)   137     13081                     2.20-  62.20    31.53
-------------------------------------------------------------------------------
    6 Vinyl Chloride                               CAS #: 75-01-4
  1.409   1.409 (0.326)    62     16670 5.11000    4.938  80.00- 120.00   100.00
  1.409   1.409 (0.326)    64     15593                    13.62-  73.62    93.54
-------------------------------------------------------------------------------
    7 1,3-Butadiene                                CAS #: 106-99-0
  1.395   1.395 (0.323)    54     14153 4.42000    4.675  80.00- 120.00   100.00
  1.395   1.395 (0.323)    39     27049                   117.26- 177.26   191.12
-------------------------------------------------------------------------------
    9 Chloroethane                                 CAS #: 75-00-3
  1.660   1.660 (0.385)    64     13419 5.28000    8.135  80.00- 120.00   100.00(a)
  1.660   1.660 (0.385)    66      2620                     0.84-  60.84    19.52
  1.660   1.660 (0.385)    49      1904                     0.00-  56.89    14.19
-------------------------------------------------------------------------------
   10 Isopentane                                   CAS #: 78-78-4
  1.688   1.688 (0.391)    57     17428 5.90000    6.918  80.00- 120.00   100.00
  1.688   1.688 (0.391)    43     21879                   107.36- 167.36   125.54
-------------------------------------------------------------------------------
   11 Trichlorofluoromethane/Fr11                  CAS #: 75-69-4
  1.814   1.814 (0.420)   101     50124 11.2000   11.085  80.00- 120.00   100.00
  1.814   1.814 (0.420)   103     32236                    35.47-  95.47    64.31
-------------------------------------------------------------------------------
   15 Freon 113                                    CAS #: 76-13-1
  2.173   2.173 (0.504)   151     46071 15.3000   15.926  80.00- 120.00   100.00
  2.173   2.173 (0.504)   153     30020                    34.42-  94.42    65.16
  2.173   2.173 (0.504)   101     48471                    75.78- 135.78   105.21
-------------------------------------------------------------------------------
   14 1,1-Dichloroethene                           CAS #: 75-35-4
  2.180   2.180 (0.505)    98     16883 7.93000    9.243  80.00- 120.00   100.00
  2.180   2.180 (0.505)    96     28171                   128.07- 188.07   166.86
  2.180   2.180 (0.505)    61     38793                   203.73- 263.73   229.78
-------------------------------------------------------------------------------
```

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 (0.547)	76	98229	6.23000	8.498	80.00- 120.00	100.00
19 2-Propanol					CAS #: 67-63-0		
2.274	2.274 (0.527)	45	45157	4.92000	6.830	80.00- 120.00	100.00(a)
2.274	2.274 (0.527)	43	16021			0.00- 50.57	35.48
2.274	2.274 (0.527)	59	2401			0.00- 34.17	5.32
22 Methylene Chloride					CAS #: 75-09-2		
2.574	2.574 (0.597)	49	136755	6.95000	33.334	80.00- 120.00	100.00
2.574	2.574 (0.597)	84	118542			55.25- 115.25	86.68
2.574	2.574 (0.597)	51	43687			0.54- 60.54	31.95
25 trans-1,2-Dichloroethene					CAS #: 156-60-5		
2.818	2.818 (0.653)	98	15835	7.93000	9.018	80.00- 120.00	100.00
2.818	2.818 (0.653)	61	32276			178.66- 238.66	203.83
2.818	2.818 (0.653)	96	25494			127.69- 187.69	161.00
26 MTBE					CAS #: 1634-04-4		
2.804	2.804 (0.650)	73	51793	7.21000	7.848	80.00- 120.00	100.00(a)
2.804	2.804 (0.650)	57	12087			0.00- 51.21	23.34
2.796	2.796 (0.648)	41	10804			0.00- 50.32	20.86
28 Hexane					CAS #: 110-54-3		
3.097	3.097 (0.718)	57	34196	7.05000	8.045	80.00- 120.00	100.00(a)
3.104	3.104 (0.719)	43	20704			30.80- 90.80	60.55
3.104	3.104 (0.719)	86	5337			0.00- 45.79	15.61
29 1,1-Dichloroethane					CAS #: 75-34-3		
3.262	3.262 (0.756)	63	34735	8.10000	8.247	80.00- 120.00	100.00
3.262	3.262 (0.756)	65	11506			1.92- 61.92	33.13
37 cis-1,2-Dichloroethene					CAS #: 156-59-2		
3.964	3.964 (0.919)	98	16414	7.93000	8.656	80.00- 120.00	100.00
3.964	3.964 (0.919)	96	26830			125.20- 185.20	163.46
3.964	3.964 (0.919)	61	33765			158.24- 218.24	205.71
38 2-Butanone					CAS #: 78-93-3		
3.928	3.928 (0.910)	72	51463	5.90000	28.719	80.00- 120.00	100.00(a)
3.928	3.928 (0.910)	43	199583			361.05- 421.05	387.82
3.928	3.928 (0.910)	57	20369			4.40- 64.40	39.58
44 Chloroform					CAS #: 67-66-3		
4.480	4.480 (1.038)	83	48439	9.77000	10.869	80.00- 120.00	100.00
4.480	4.480 (1.038)	85	31882			35.45- 95.45	65.82

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO
46 Cyclohexane					CAS #: 110-82-7		
4.831	4.831 (0.812)	84	28814	6.88000	6.627	80.00- 120.00	100.00(a)
4.824	4.824 (0.811)	56	33554			82.98- 142.98	116.45
4.816	4.816 (0.810)	41	19709			32.69- 92.69	68.40
45 1,1,1-Trichloroethane					CAS #: 71-55-6		
4.709	4.709 (0.792)	97	44341	10.9000	10.077	80.00- 120.00	100.00
4.716	4.716 (0.793)	99	28876			34.83- 94.83	65.12
47 Carbon Tetrachloride					CAS #: 56-23-5		
4.960	4.960 (0.834)	119	43489	12.6000	10.647	80.00- 120.00	100.00
4.953	4.953 (0.833)	117	44774			73.53- 133.53	102.95
51 2,2,4-Trimethylpentane					CAS #: 540-84-1		
5.490	5.490 (0.923)	57	105135	9.34000	9.505	80.00- 120.00	100.00
5.483	5.483 (0.922)	56	34055			1.12- 61.12	32.39
5.490	5.490 (0.923)	41	34001			0.00- 57.96	32.34
48 Benzene					CAS #: 71-43-2		
5.253	5.253 (0.883)	78	98319	6.39000	8.224	80.00- 120.00	100.00
5.246	5.246 (0.882)	77	22990			0.00- 53.50	23.38
50 1,2-Dichloroethane					CAS #: 107-06-2		
5.346	5.346 (0.899)	62	30377	8.09000	7.992	80.00- 120.00	100.00
5.346	5.346 (0.899)	64	10165			2.93- 62.93	33.46
53 Heptane					CAS #: 142-82-5		
5.791	5.791 (0.974)	71	25355	8.20000	9.007	80.00- 120.00	100.00
5.791	5.791 (0.974)	43	43811			143.29- 203.29	172.79
5.791	5.791 (0.974)	57	22164			61.40- 121.40	87.41
56 Trichloroethene					CAS #: 79-01-6		
6.263	6.263 (1.053)	95	47977	10.8000	13.351	80.00- 120.00	100.00
6.263	6.263 (1.053)	130	52961			81.46- 141.46	110.39
6.263	6.263 (1.053)	97	31049			34.92- 94.92	64.72
58 Methyl Cyclohexane					CAS #: 108-87-2		
6.579	6.579 (1.106)	83	44333	8.03000	8.355	80.00- 120.00	100.00
6.579	6.579 (1.106)	98	19291			15.14- 75.14	43.51
6.579	6.579 (1.106)	55	34388			46.07- 106.07	77.57
59 1,2-Dichloropropane					CAS #: 78-87-5		
6.614	6.614 (1.112)	63	22979	9.24000	8.809	80.00- 120.00	100.00
6.614	6.614 (1.112)	62	16102			38.13- 98.13	70.07
6.586	6.586 (1.107)	41	32815			92.30- 152.30	142.80

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		
6.736	6.736 (1.132)	88	16813	7.21000	7.071	80.00- 120.00	100.00(a)
6.729	6.729 (1.131)	58	14058			31.73- 91.73	83.61
6.736	6.736 (1.132)	57	33807			1.20- 61.20	201.08
65 4-Methyl-2-pentanone					CAS #: 108-10-1		
7.832	7.832 (1.317)	58	18971	8.19000	8.110	80.00- 120.00	100.00(a)
7.832	7.832 (1.317)	43	47564			221.14- 281.14	250.72
7.832	7.832 (1.317)	85	10024			20.58- 80.58	52.84
67 Toluene					CAS #: 108-88-3		
8.047	8.047 (0.816)	91	97222	7.54000	8.097	80.00- 120.00	100.00
8.047	8.047 (0.816)	92	56081			28.32- 88.32	57.68
70 1,1,2-Trichloroethane					CAS #: 79-00-5		
8.649	8.649 (1.454)	97	33178	10.9000	11.294	80.00- 120.00	100.00
8.649	8.649 (1.454)	99	20661			32.57- 92.57	62.27
8.649	8.649 (1.454)	83	27487			50.93- 110.93	82.85
71 Tetrachloroethene					CAS #: 127-18-4		
8.727	8.727 (0.885)	166	56491	13.6000	14.286	80.00- 120.00	100.00
8.727	8.727 (0.885)	129	40345			41.03- 101.03	71.42
8.727	8.727 (0.885)	131	39806			38.99- 98.99	70.46
72 2-Hexanone					CAS #: 591-78-6		
8.957	8.957 (0.908)	58	22124	8.19000	7.240	80.00- 120.00	100.00(a)
8.957	8.957 (0.908)	43	41166			155.38- 215.38	186.07
8.957	8.957 (0.908)	100	5028			0.00- 52.71	22.73
74 1,2-Dibromoethane					CAS #: 106-93-4		
9.236	9.236 (0.937)	107	47374	15.4000	15.256	80.00- 120.00	100.00
9.236	9.236 (0.937)	109	44754			65.47- 125.47	94.47
81 Chlorobenzene					CAS #: 108-90-7		
9.895	9.895 (1.004)	112	88422	9.21000	10.105	80.00- 120.00	100.00
9.895	9.895 (1.004)	114	28123			2.20- 62.20	31.81
9.895	9.895 (1.004)	77	49826			20.93- 80.93	56.35
82 Ethyl Benzene					CAS #: 100-41-4		
10.053	10.053 (1.020)	106	42070	8.68000	9.356	80.00- 120.00	100.00
10.053	10.053 (1.020)	91	128191			272.45- 332.45	304.71
84 m,p-Xylene					CAS #: 108-38-3		
10.232	10.232 (1.038)	106	53779	8.68000	9.401	80.00- 120.00	100.00
10.225	10.225 (1.037)	91	104927			164.06- 224.06	195.11

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

   88 o-Xylene                                        CAS #: 95-47-6
 10.712  10.712 (0.938)   106     50931 8.68000    9.493  80.00- 120.00   100.00
 10.712  10.712 (0.938)    91    104993                  174.12- 234.12   206.15
-------------------------------------------------------------------------------
   89 Styrene                                         CAS #: 100-42-5
 10.740  10.740 (0.941)   104     81515 8.52000    9.168  80.00- 120.00   100.00
 10.740  10.740 (0.941)    78     38435                   16.31-  76.31    47.15
-------------------------------------------------------------------------------
   91 Cumene                                          CAS #: 98-82-8
 11.199  11.199 (0.981)   105    159589 9.83000   10.933  80.00- 120.00   100.00
 11.199  11.199 (0.981)   120     44575                    0.00-  57.22    27.93
 11.199  11.199 (0.981)    51     14343                    0.00-  38.43     8.99
-------------------------------------------------------------------------------
   94 1,1,2,2-Tetrachloroethane                       CAS #: 79-34-5
 11.621  11.621 (1.018)    83     55431 13.7000   11.940  80.00- 120.00   100.00
 11.621  11.621 (1.018)    85     36933                   35.83-  95.83    66.63
-------------------------------------------------------------------------------
   96 Propylbenzene                                   CAS #: 103-65-1
 11.743  11.743 (1.029)    91    192364 9.83000   11.273  80.00- 120.00   100.00
 11.743  11.743 (1.029)   120     49176                    0.00-  55.53    25.56
 11.743  11.743 (1.029)   105      7616                    0.00-  33.92     3.96
-------------------------------------------------------------------------------
   97 4-Ethyltoluene                                  CAS #: 622-96-8
 11.908  11.908 (1.043)   120     52163 9.83000   11.394  80.00- 120.00   100.00
 11.908  11.908 (1.043)   105    167249                  298.20- 358.20   320.63
-------------------------------------------------------------------------------
   98 1,3,5-Trimethylbenzene                          CAS #: 108-67-8
 11.994  11.994 (1.051)   120     74327 9.83000   11.371  80.00- 120.00   100.00
 11.994  11.994 (1.051)   105    148259                  167.68- 227.68   199.47
-------------------------------------------------------------------------------
  100 1,2,4-Trimethylbenzene                          CAS #: 95-63-6
 12.459  12.459 (1.092)   120     70284 9.83000   11.503  80.00- 120.00   100.00(a)
 12.459  12.459 (1.092)   105    170021                  185.14- 245.14   241.91
-------------------------------------------------------------------------------
  101 1,3-Dichlorobenzene                             CAS #: 541-73-1
 12.789  12.789 (1.120)   146    119770 12.0000   14.350  80.00- 120.00   100.00
 12.789  12.789 (1.120)   148     78218                   34.46-  94.46    65.31
 12.789  12.789 (1.120)   111     44861                    7.45-  67.45    37.46
-------------------------------------------------------------------------------
  102 1,4-Dichlorobenzene                             CAS #: 106-46-7
 12.925  12.925 (1.132)   146    121191 12.0000   14.474  80.00- 120.00   100.00
 12.925  12.925 (1.132)   148     78358                   33.91-  93.91    64.66
 12.925  12.925 (1.132)   111     43097                    6.02-  66.02    35.56
-------------------------------------------------------------------------------
  105 1,2-Dichlorobenzene                             CAS #: 95-50-1
 13.362  13.362 (1.171)   146    118661 12.0000   14.624  80.00- 120.00   100.00
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                                        AMOUNTS
                                     CAL-AMT   ON-COL
   RT   EXP RT (REL RT)  MASS  RESPONSE (   ng)  (   ng)   TARGET RANGE    RATIO
   ==   ====== ========  ====  ======== =======  =======   ============    =====

  105 1,2-Dichlorobenzene (continued)
 13.362  13.362 (1.171)   148     74878                    34.29-  94.29    63.10
 13.362  13.362 (1.171)   111     45201                     8.63-  68.63    38.09
-------------------------------------------------------------------------------
  106 1,2,4-Trichlorobenzene                        CAS #: 120-82-1
 15.418  15.418 (1.351)   180    111671 14.8000   17.140  80.00- 120.00   100.00
 15.418  15.418 (1.351)   182    105559                   64.63- 124.63    94.53
-------------------------------------------------------------------------------
  107 Hexachlorobutadiene                           CAS #: 87-68-3
 15.625  15.625 (1.369)   225     84622 21.3000   24.872  80.00- 120.00   100.00
 15.625  15.625 (1.369)   223     51183                   32.03-  92.03    60.48
-------------------------------------------------------------------------------
  109 Naphthalene                                   CAS #: 91-20-3
 15.726  15.726 (1.378)   128    124566 5.00000    5.290  80.00- 120.00   100.00
 15.726  15.726 (1.378)   127     16563                    0.00-  42.99    13.30
-------------------------------------------------------------------------------
  110 2-Methylnaphthalene                           CAS #: 91-57-6
 17.180  17.180 (1.505)   142     79962 5.00000    5.137  80.00- 120.00   100.00
 17.180  17.180 (1.505)   141     69400                   56.24- 116.24    86.79
 17.180  17.180 (1.505)   115     24217                    0.00-  58.81    30.29
-------------------------------------------------------------------------------
  111 1-Methylnaphthalene                           CAS #: 90-12-0
 17.395  17.395 (1.524)   142     72507 5.00000    5.092  80.00- 120.00   100.00
 17.395  17.395 (1.524)   141     65711                   60.38- 120.38    90.63
 17.395  17.395 (1.524)   115     22811                    0.56-  60.56    31.46
-------------------------------------------------------------------------------
  112 Acenaphthylene                                CAS #: 208-96-8
 19.243  19.243 (1.686)   152    138330 5.00000    5.449  80.00- 120.00   100.00
 19.243  19.243 (1.686)   151     27238                    0.00-  49.78    19.69
 19.243  19.243 (1.686)   153     17637                    0.00-  43.07    12.75
-------------------------------------------------------------------------------
  113 Acenaphthene                                  CAS #: 83-32-9
 19.508  19.508 (1.709)   154     49417 5.00000    4.075  80.00- 120.00   100.00(a)
 19.508  19.508 (1.709)   152     27329                   21.85-  81.85    55.30
 19.508  19.508 (1.709)   153     54668                   79.23- 139.23   110.63
-------------------------------------------------------------------------------
  114 Fluorene                                      CAS #: 86-73-7
 20.661  20.661 (1.810)   166     36698 5.00000    3.600  80.00- 120.00   100.00(a)
 20.661  20.661 (1.810)   165     36123                   65.14- 125.14    98.43
-------------------------------------------------------------------------------
  115 Phenanthrene                                  CAS #: 85-01-8
 22.839  22.839 (2.001)   178    126887 5.00000    5.019  80.00- 120.00   100.00
 22.839  22.839 (2.001)   176     23625                    0.00-  48.56    18.62
 22.839  22.839 (2.001)   179     19147                    0.00-  45.19    15.09
-------------------------------------------------------------------------------
  116 Anthracene                                    CAS #: 120-12-7
 22.946  22.946 (2.010)   178     99105 5.00000    4.579  80.00- 120.00   100.00(a)
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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)							
22.946	22.946 (2.010)	176	17830			0.00- 47.99	17.99
22.946	22.946 (2.010)	179	14806			0.00- 45.19	14.94
117 Fluoranthene					CAS #: 206-44-0		
26.126	26.126 (2.289)	202	82222	5.00000	4.548	80.00- 120.00	100.00(a)
26.126	26.126 (2.289)	101	12827			0.00- 45.14	15.60
118 Pyrene					CAS #: 129-00-0		
26.979	26.979 (2.364)	202	81586	5.00000	4.407	80.00- 120.00	100.00(a)
26.979	26.979 (2.364)	101	14936			0.00- 48.11	18.31
26.979	26.979 (2.364)	100	12653			0.00- 44.51	15.51

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: 6061409.d
Lab Smp Id: VI ICAL2,2.0Surr
Analysis Type: VOA
Quant Type: ISTD
Operator: CT
Method File: /chem/msd6.i/15jun16.b/616z0614vi.m
Misc Info: 2516-246-2ml(9/10/16),2744-31-5(7/5/16)

Calibration Date: 14-JUN-2016
Calibration Time: 14:59

Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
40 Bromochloromethan	156066	93640	218492	141079	-9.60
54 1,4-Difluorobenze	638538	383123	893953	620893	-2.76
79 Chlorobenzene-d5	603523	362114	844932	580434	-3.83
92 Bromofluorobenzen	441798	265079	618517	423384	-4.17

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
40 Bromochloromethan	4.32	3.99	4.65	4.32	0.00
54 1,4-Difluorobenze	5.95	5.62	6.28	5.95	0.00
79 Chlorobenzene-d5	9.86	9.53	10.19	9.86	0.00
92 Bromofluorobenzen	11.41	11.08	11.74	11.41	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/14jun16a.b/6061409.d

Date : 14-JUN-2016 12:59

Client ID:

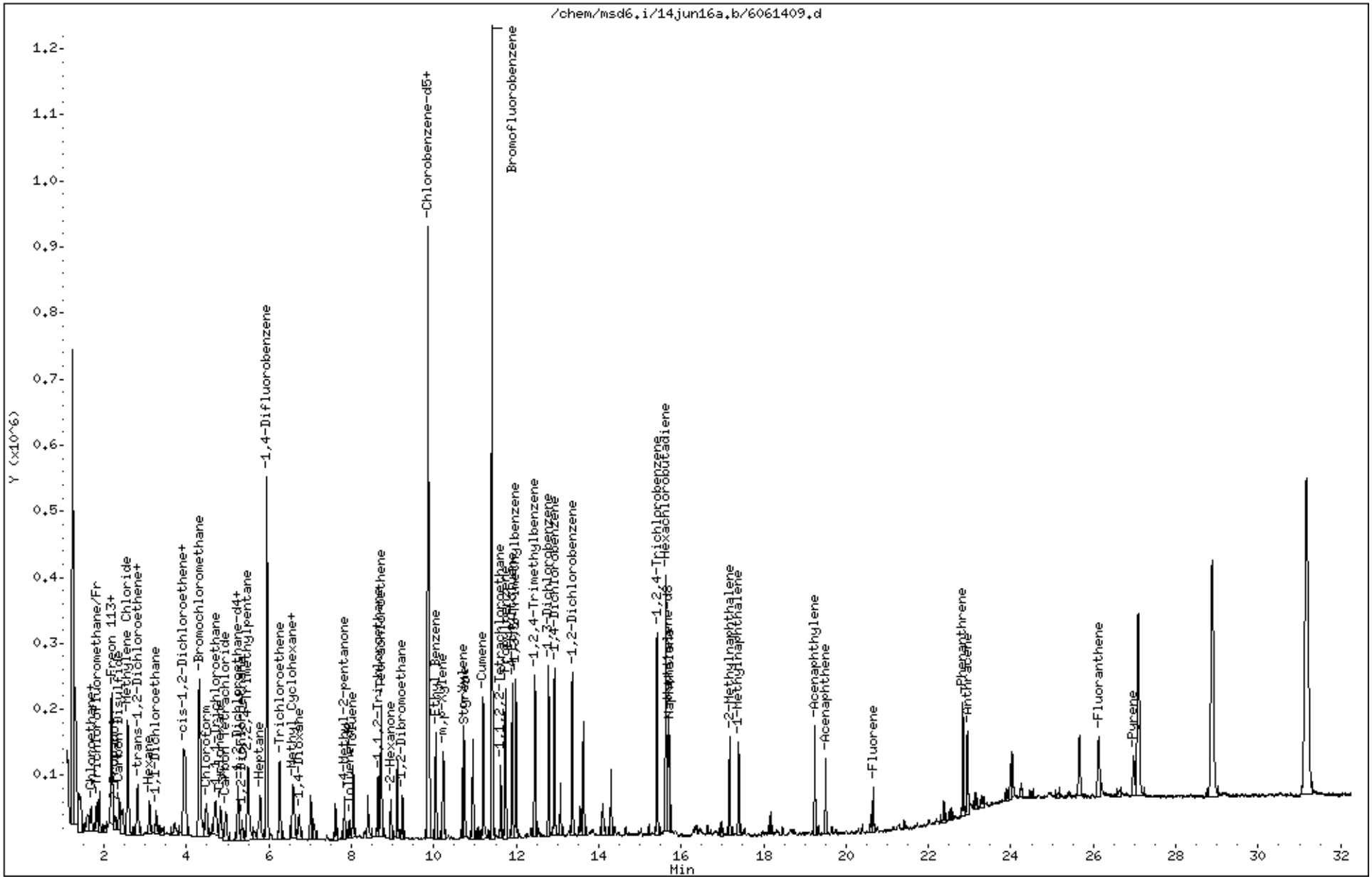
Sample Info: ;VI ICAL2,2.0Surr

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/14jun16a.b/6061410.d
Lab Smp Id: VI ICAL3,5.0Surr
Inj Date : 14-JUN-2016 13:39
Operator : CT Inst ID: msd6.i
Smp Info : ;VI ICAL3,5.0Surr
Misc Info : 2516-246-3ml(9/10/16),2744-31-10(7/5/16)
Comment :
Method : /chem/msd6.i/15jun16.b/616z0614vi.m
Meth Date : 21-Jun-2016 11:23 U5BT Quant Type: ISTD
Cal Date : 14-JUN-2016 13:39 Cal File: 6061410.d
Als bottle: 13 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: VOC+PAH_ICAL.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO
* 40 Bromochloromethane					CAS #: 74-97-5		
4.315	4.315 (1.000)	130	151203	26.0000		80.00- 120.00	100.00
4.315	4.315 (1.000)	128	116973			47.94- 107.94	77.36
4.315	4.315 (1.000)	49	146544			68.24- 128.24	96.92
* 54 1,4-Difluorobenzene					CAS #: 540-36-3		
5.955	5.955 (1.000)	114	625202	23.0000		80.00- 120.00	100.00
5.948	5.948 (1.000)	88	96014			0.00- 45.46	15.36
* 79 Chlorobenzene-d5					CAS #: 3114-55-4		
9.859	9.859 (1.000)	117	587835	24.0000		80.00- 120.00	100.00
9.859	9.859 (1.000)	82	291396			19.06- 79.06	49.57
* 92 Bromofluorobenzene					CAS #: 460-00-4		
11.414	11.414 (1.000)	174	433176	36.0000		80.00- 120.00	100.00
11.414	11.414 (1.000)	95	446645			74.19- 134.19	103.11
11.414	11.414 (1.000)	176	418150			67.61- 127.61	96.53
$ 49 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
5.232	5.232 (0.879)	65	15763	5.00000	4.888	80.00- 120.00	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)
  5.232   5.232 (0.879)    67      8189                    21.95-  81.95    51.95
-------------------------------------------------------------------------------
$  66 Toluene-d8                                   CAS #: 2037-26-5
  7.954   7.954 (0.807)    98     55330 5.00000    5.042  80.00- 120.00   100.00
  7.954   7.954 (0.807)    70      5950                     0.00-  39.97    10.75
  7.954   7.954 (0.807)   100     36381                    35.51-  95.51    65.75
-------------------------------------------------------------------------------
$ 108 Naphthalene-d8                               CAS #: 1146-65-2
 15.690  15.690 (1.375)   136    105300 5.00000    4.694  80.00- 120.00   100.00
 15.690  15.690 (1.375)   108      9670                     0.00-  38.72     9.18
-------------------------------------------------------------------------------
    3 Freon 114                                    CAS #: 76-14-2
  1.283   1.283 (0.297)   135     61364 21.0000   21.745  80.00- 120.00   100.00
  1.283   1.283 (0.297)   137     20161                     2.20-  62.20    32.85
-------------------------------------------------------------------------------
    6 Vinyl Chloride                               CAS #: 75-01-4
  1.395   1.395 (0.323)    62     29132 7.67000    8.052  80.00- 120.00   100.00
  1.395   1.395 (0.323)    64     19117                    13.62-  73.62    65.62
-------------------------------------------------------------------------------
    7 1,3-Butadiene                                CAS #: 106-99-0
  1.395   1.395 (0.323)    54     22007 6.64000    6.783  80.00- 120.00   100.00
  1.395   1.395 (0.323)    39     35207                   117.26- 177.26   159.98
-------------------------------------------------------------------------------
    9 Chloroethane                                 CAS #: 75-00-3
  1.660   1.660 (0.385)    64     19891 7.92000   11.251  80.00- 120.00   100.00(a)
  1.646   1.646 (0.382)    66      4348                     0.84-  60.84    21.86
  1.660   1.660 (0.385)    49      3516                     0.00-  56.89    17.68
-------------------------------------------------------------------------------
   10 Isopentane                                   CAS #: 78-78-4
  1.688   1.688 (0.391)    57     23769 8.85000    8.803  80.00- 120.00   100.00
  1.688   1.688 (0.391)    43     32764                   107.36- 167.36   137.84
-------------------------------------------------------------------------------
   11 Trichlorofluoromethane/Fr11                  CAS #: 75-69-4
  1.814   1.814 (0.420)   101     85700 16.9000   17.684  80.00- 120.00   100.00
  1.814   1.814 (0.420)   103     54556                    35.47-  95.47    63.66
-------------------------------------------------------------------------------
   15 Freon 113                                    CAS #: 76-13-1
  2.173   2.173 (0.504)   151     78069 23.0000   25.180  80.00- 120.00   100.00
  2.173   2.173 (0.504)   153     50479                    34.42-  94.42    64.66
  2.173   2.173 (0.504)   101     82482                    75.78- 135.78   105.65
-------------------------------------------------------------------------------
   14 1,1-Dichloroethene                           CAS #: 75-35-4
  2.180   2.180 (0.505)    98     25927 11.9000   13.245  80.00- 120.00   100.00
  2.180   2.180 (0.505)    96     42017                   128.07- 188.07   162.06
  2.180   2.180 (0.505)    61     59737                   203.73- 263.73   230.40
-------------------------------------------------------------------------------
```

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 (0.547)	76	125455	9.34000	10.126	80.00- 120.00	100.00
19 2-Propanol					CAS #: 67-63-0		
2.281	2.281 (0.529)	45	62103	7.37000	8.765	80.00- 120.00	100.00(a)
2.281	2.281 (0.529)	43	15070			0.00- 50.57	24.27
2.281	2.281 (0.529)	59	1728			0.00- 34.17	2.78
22 Methylene Chloride					CAS #: 75-09-2		
2.574	2.574 (0.597)	49	111140	10.4000	25.276	80.00- 120.00	100.00
2.574	2.574 (0.597)	84	96625			55.25- 115.25	86.94
2.574	2.574 (0.597)	51	35002			0.54- 60.54	31.49
25 trans-1,2-Dichloroethene					CAS #: 156-60-5		
2.818	2.818 (0.653)	98	23789	11.9000	12.641	80.00- 120.00	100.00
2.818	2.818 (0.653)	61	47712			178.66- 238.66	200.56
2.818	2.818 (0.653)	96	38034			127.69- 187.69	159.88
26 MTBE					CAS #: 1634-04-4		
2.796	2.796 (0.648)	73	78537	10.8000	11.103	80.00- 120.00	100.00(a)
2.796	2.796 (0.648)	57	16723			0.00- 51.21	21.29
2.796	2.796 (0.648)	41	17449			0.00- 50.32	22.22
28 Hexane					CAS #: 110-54-3		
3.104	3.104 (0.719)	57	49428	10.6000	10.850	80.00- 120.00	100.00(a)
3.097	3.097 (0.718)	43	31363			30.80- 90.80	63.45
3.104	3.104 (0.719)	86	7942			0.00- 45.79	16.07
29 1,1-Dichloroethane					CAS #: 75-34-3		
3.262	3.262 (0.756)	63	57828	12.1000	12.810	80.00- 120.00	100.00
3.262	3.262 (0.756)	65	18665			1.92- 61.92	32.28
37 cis-1,2-Dichloroethene					CAS #: 156-59-2		
3.964	3.964 (0.919)	98	25468	11.9000	12.531	80.00- 120.00	100.00
3.971	3.971 (0.920)	96	40781			125.20- 185.20	160.13
3.964	3.964 (0.919)	61	49268			158.24- 218.24	193.45
38 2-Butanone					CAS #: 78-93-3		
3.928	3.928 (0.910)	72	39277	8.85000	20.451	80.00- 120.00	100.00(a)
3.935	3.935 (0.912)	43	154258			361.05- 421.05	392.74
3.935	3.935 (0.912)	57	14997			4.40- 64.40	38.18
44 Chloroform					CAS #: 67-66-3		
4.487	4.487 (1.040)	83	73341	14.6000	15.354	80.00- 120.00	100.00
4.480	4.480 (1.038)	85	48832			35.45- 95.45	66.58

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO
46 Cyclohexane					CAS #: 110-82-7		
4.831	4.831 (0.811)	84	43313	10.3000	9.893	80.00- 120.00	100.00
4.831	4.831 (0.811)	56	50112			82.98- 142.98	115.70
4.831	4.831 (0.811)	41	29449			32.69- 92.69	67.99
45 1,1,1-Trichloroethane					CAS #: 71-55-6		
4.716	4.716 (0.792)	97	65614	16.4000	14.809	80.00- 120.00	100.00
4.716	4.716 (0.792)	99	41184			34.83- 94.83	62.77
47 Carbon Tetrachloride					CAS #: 56-23-5		
4.960	4.960 (0.833)	119	75505	18.9000	18.358	80.00- 120.00	100.00
4.960	4.960 (0.833)	117	77144			73.53- 133.53	102.17
51 2,2,4-Trimethylpentane					CAS #: 540-84-1		
5.497	5.497 (0.923)	57	159532	14.0000	14.323	80.00- 120.00	100.00
5.490	5.490 (0.922)	56	51006			1.12- 61.12	31.97
5.497	5.497 (0.923)	41	48996			0.00- 57.96	30.71
48 Benzene					CAS #: 71-43-2		
5.253	5.253 (0.882)	78	131254	9.58000	10.904	80.00- 120.00	100.00
5.253	5.253 (0.882)	77	31403			0.00- 53.50	23.93
50 1,2-Dichloroethane					CAS #: 107-06-2		
5.346	5.346 (0.898)	62	46205	12.1000	12.073	80.00- 120.00	100.00
5.354	5.354 (0.899)	64	15126			2.93- 62.93	32.74
53 Heptane					CAS #: 142-82-5		
5.791	5.791 (0.972)	71	36392	12.3000	12.838	80.00- 120.00	100.00
5.791	5.791 (0.972)	43	74618			143.29- 203.29	205.04
5.791	5.791 (0.972)	57	33219			61.40- 121.40	91.28
56 Trichloroethene					CAS #: 79-01-6		
6.263	6.263 (1.052)	95	58423	16.1000	16.146	80.00- 120.00	100.00
6.263	6.263 (1.052)	130	66020			81.46- 141.46	113.00
6.263	6.263 (1.052)	97	38412			34.92- 94.92	65.75
58 Methyl Cyclohexane					CAS #: 108-87-2		
6.579	6.579 (1.105)	83	65762	12.0000	12.308	80.00- 120.00	100.00
6.586	6.586 (1.106)	98	29627			15.14- 75.14	45.05
6.579	6.579 (1.105)	55	50860			46.07- 106.07	77.34
59 1,2-Dichloropropane					CAS #: 78-87-5		
6.614	6.614 (1.111)	63	35861	13.9000	13.653	80.00- 120.00	100.00
6.614	6.614 (1.111)	62	23647			38.13- 98.13	65.94
6.586	6.586 (1.106)	41	48414			92.30- 152.30	135.00

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		
6.736	6.736 (1.131)	88	25142	10.8000	10.501	80.00- 120.00	100.00(a)
6.736	6.736 (1.131)	58	17651			31.73- 91.73	70.21
6.743	6.743 (1.132)	57	24297			1.20- 61.20	96.64
65 4-Methyl-2-pentanone					CAS #: 108-10-1		
7.832	7.832 (1.315)	58	29489	12.3000	12.519	80.00- 120.00	100.00
7.832	7.832 (1.315)	43	75593			221.14- 281.14	256.34
7.839	7.839 (1.316)	85	15111			20.58- 80.58	51.24
67 Toluene					CAS #: 108-88-3		
8.047	8.047 (0.816)	91	144124	11.3000	11.852	80.00- 120.00	100.00
8.047	8.047 (0.816)	92	84558			28.32- 88.32	58.67
70 1,1,2-Trichloroethane					CAS #: 79-00-5		
8.649	8.649 (1.452)	97	50236	16.4000	16.983	80.00- 120.00	100.00
8.649	8.649 (1.452)	99	31394			32.57- 92.57	62.49
8.649	8.649 (1.452)	83	41060			50.93- 110.93	81.73
71 Tetrachloroethene					CAS #: 127-18-4		
8.727	8.727 (0.885)	166	88130	20.4000	22.007	80.00- 120.00	100.00
8.727	8.727 (0.885)	129	63619			41.03- 101.03	72.19
8.727	8.727 (0.885)	131	60657			38.99- 98.99	68.83
72 2-Hexanone					CAS #: 591-78-6		
8.957	8.957 (0.908)	58	41006	12.3000	13.251	80.00- 120.00	100.00
8.957	8.957 (0.908)	43	73448			155.38- 215.38	179.12
8.957	8.957 (0.908)	100	8875			0.00- 52.71	21.64
74 1,2-Dibromoethane					CAS #: 106-93-4		
9.243	9.243 (0.938)	107	72123	23.0000	22.934	80.00- 120.00	100.00
9.243	9.243 (0.938)	109	69284			65.47- 125.47	96.06
81 Chlorobenzene					CAS #: 108-90-7		
9.895	9.895 (1.004)	112	133214	13.8000	15.032	80.00- 120.00	100.00
9.895	9.895 (1.004)	114	43427			2.20- 62.20	32.60
9.895	9.895 (1.004)	77	73133			20.93- 80.93	54.90
82 Ethyl Benzene					CAS #: 100-41-4		
10.053	10.053 (1.020)	106	65550	13.0000	14.394	80.00- 120.00	100.00
10.053	10.053 (1.020)	91	196935			272.45- 332.45	300.43
84 m,p-Xylene					CAS #: 108-38-3		
10.232	10.232 (1.038)	106	82223	13.0000	14.193	80.00- 120.00	100.00
10.232	10.232 (1.038)	91	159726			164.06- 224.06	194.26

```
                                          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 (0.938)   106     79030 13.0000   14.397  80.00- 120.00   100.00
 10.712  10.712 (0.938)    91    160142                  174.12- 234.12   202.63
-------------------------------------------------------------------------------
   89 Styrene                                         CAS #: 100-42-5
 10.747  10.747 (0.942)   104    127060 12.8000   13.968  80.00- 120.00   100.00
 10.747  10.747 (0.942)    78     60619                   16.31-  76.31    47.71
-------------------------------------------------------------------------------
   91 Cumene                                          CAS #: 98-82-8
 11.206  11.206 (0.982)   105    249277 14.8000   16.691  80.00- 120.00   100.00
 11.206  11.206 (0.982)   120     67821                    0.00-  57.22    27.21
 11.199  11.199 (0.981)    51     21084                    0.00-  38.43     8.46
-------------------------------------------------------------------------------
   94 1,1,2,2-Tetrachloroethane                       CAS #: 79-34-5
 11.621  11.621 (1.018)    83    112367 20.6000   23.657  80.00- 120.00   100.00
 11.621  11.621 (1.018)    85     75002                   35.83-  95.83    66.75
-------------------------------------------------------------------------------
   96 Propylbenzene                                   CAS #: 103-65-1
 11.743  11.743 (1.029)    91    301571 14.8000   17.274  80.00- 120.00   100.00
 11.743  11.743 (1.029)   120     75741                    0.00-  55.53    25.12
 11.736  11.736 (1.028)   105     11974                    0.00-  33.92     3.97
-------------------------------------------------------------------------------
   97 4-Ethyltoluene                                  CAS #: 622-96-8
 11.908  11.908 (1.043)   120     81459 14.8000   17.390  80.00- 120.00   100.00
 11.908  11.908 (1.043)   105    265457                  298.20- 358.20   325.88
-------------------------------------------------------------------------------
   98 1,3,5-Trimethylbenzene                          CAS #: 108-67-8
 11.994  11.994 (1.051)   120    118918 14.8000   17.782  80.00- 120.00   100.00
 11.994  11.994 (1.051)   105    234498                  167.68- 227.68   197.19
-------------------------------------------------------------------------------
  100 1,2,4-Trimethylbenzene                          CAS #: 95-63-6
 12.459  12.459 (1.092)   120    112884 14.8000   18.058  80.00- 120.00   100.00(a)
 12.459  12.459 (1.092)   105    249273                  185.14- 245.14   220.82
-------------------------------------------------------------------------------
  101 1,3-Dichlorobenzene                             CAS #: 541-73-1
 12.789  12.789 (1.120)   146    190709 18.0000   22.334  80.00- 120.00   100.00
 12.789  12.789 (1.120)   148    122510                   34.46-  94.46    64.24
 12.789  12.789 (1.120)   111     70324                    7.45-  67.45    36.88
-------------------------------------------------------------------------------
  102 1,4-Dichlorobenzene                             CAS #: 106-46-7
 12.925  12.925 (1.132)   146    192459 18.0000   22.466  80.00- 120.00   100.00
 12.925  12.925 (1.132)   148    122815                   33.91-  93.91    63.81
 12.925  12.925 (1.132)   111     68382                    6.02-  66.02    35.53
-------------------------------------------------------------------------------
  105 1,2-Dichlorobenzene                             CAS #: 95-50-1
 13.362  13.362 (1.171)   146    186756 18.0000   22.496  80.00- 120.00   100.00
```

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO
105 1,2-Dichlorobenzene (continued)							
13.362	13.362 (1.171)	148	120269			34.29- 94.29	64.40
13.362	13.362 (1.171)	111	71553			8.63- 68.63	38.31
106 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
15.418	15.418 (1.351)	180	195881	22.3000	29.385	80.00- 120.00	100.00
15.418	15.418 (1.351)	182	184757			64.63- 124.63	94.32
107 Hexachlorobutadiene					CAS #: 87-68-3		
15.625	15.625 (1.369)	225	144533	32.0000	41.520	80.00- 120.00	100.00
15.625	15.625 (1.369)	223	90408			32.03- 92.03	62.55
109 Naphthalene					CAS #: 91-20-3		
15.726	15.726 (1.378)	128	230147	10.0000	9.553	80.00- 120.00	100.00
15.726	15.726 (1.378)	127	29193			0.00- 42.99	12.68
110 2-Methylnaphthalene					CAS #: 91-57-6		
17.180	17.180 (1.505)	142	151408	10.0000	9.507	80.00- 120.00	100.00
17.180	17.180 (1.505)	141	129292			56.24- 116.24	85.39
17.173	17.173 (1.505)	115	44152			0.00- 58.81	29.16
111 1-Methylnaphthalene					CAS #: 90-12-0		
17.395	17.395 (1.524)	142	138154	10.0000	9.483	80.00- 120.00	100.00
17.395	17.395 (1.524)	141	124554			60.38- 120.38	90.16
17.395	17.395 (1.524)	115	42636			0.56- 60.56	30.86
112 Acenaphthylene					CAS #: 208-96-8		
19.243	19.243 (1.686)	152	247054	10.0000	9.512	80.00- 120.00	100.00
19.243	19.243 (1.686)	151	49559			0.00- 49.78	20.06
19.243	19.243 (1.686)	153	32628			0.00- 43.07	13.21
113 Acenaphthene					CAS #: 83-32-9		
19.508	19.508 (1.709)	154	108894	10.0000	8.776	80.00- 120.00	100.00
19.508	19.508 (1.709)	152	58802			21.85- 81.85	54.00
19.508	19.508 (1.709)	153	120485			79.23- 139.23	110.64
114 Fluorene					CAS #: 86-73-7		
20.661	20.661 (1.810)	166	101785	10.0000	9.761	80.00- 120.00	100.00
20.661	20.661 (1.810)	165	97134			65.14- 125.14	95.43
115 Phenanthrene					CAS #: 85-01-8		
22.839	22.839 (2.001)	178	233934	10.0000	9.044	80.00- 120.00	100.00
22.839	22.839 (2.001)	176	43838			0.00- 48.56	18.74
22.839	22.839 (2.001)	179	35453			0.00- 45.19	15.16
116 Anthracene					CAS #: 120-12-7		
22.946	22.946 (2.010)	178	205834	10.0000	9.295	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)								
22.946	22.946	(2.010)	176	37232			0.00- 47.99	18.09
22.946	22.946	(2.010)	179	31617			0.00- 45.19	15.36
117 Fluoranthene						CAS #: 206-44-0		
26.126	26.126	(2.289)	202	158123	10.0000	8.548	80.00- 120.00	100.00
26.126	26.126	(2.289)	101	24866			0.00- 45.14	15.73
118 Pyrene						CAS #: 129-00-0		
26.979	26.979	(2.364)	202	166501	10.0000	8.791	80.00- 120.00	100.00
26.979	26.979	(2.364)	101	29221			0.00- 48.11	17.55
26.972	26.972	(2.363)	100	24570			0.00- 44.51	14.76

QC Flag Legend

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

Report Date: 21-Jun-2016 11:23

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd6.i
Lab File ID: 6061410.d
Lab Smp Id: VI ICAL3,5.0Surr
Analysis Type: VOA
Quant Type: ISTD
Operator: CT
Method File: /chem/msd6.i/15jun16.b/616z0614vi.m
Misc Info: 2516-246-3ml(9/10/16),2744-31-10(7/5/16)

Calibration Date: 14-JUN-2016
Calibration Time: 14:59

Level: LOW
Sample Type: AIR

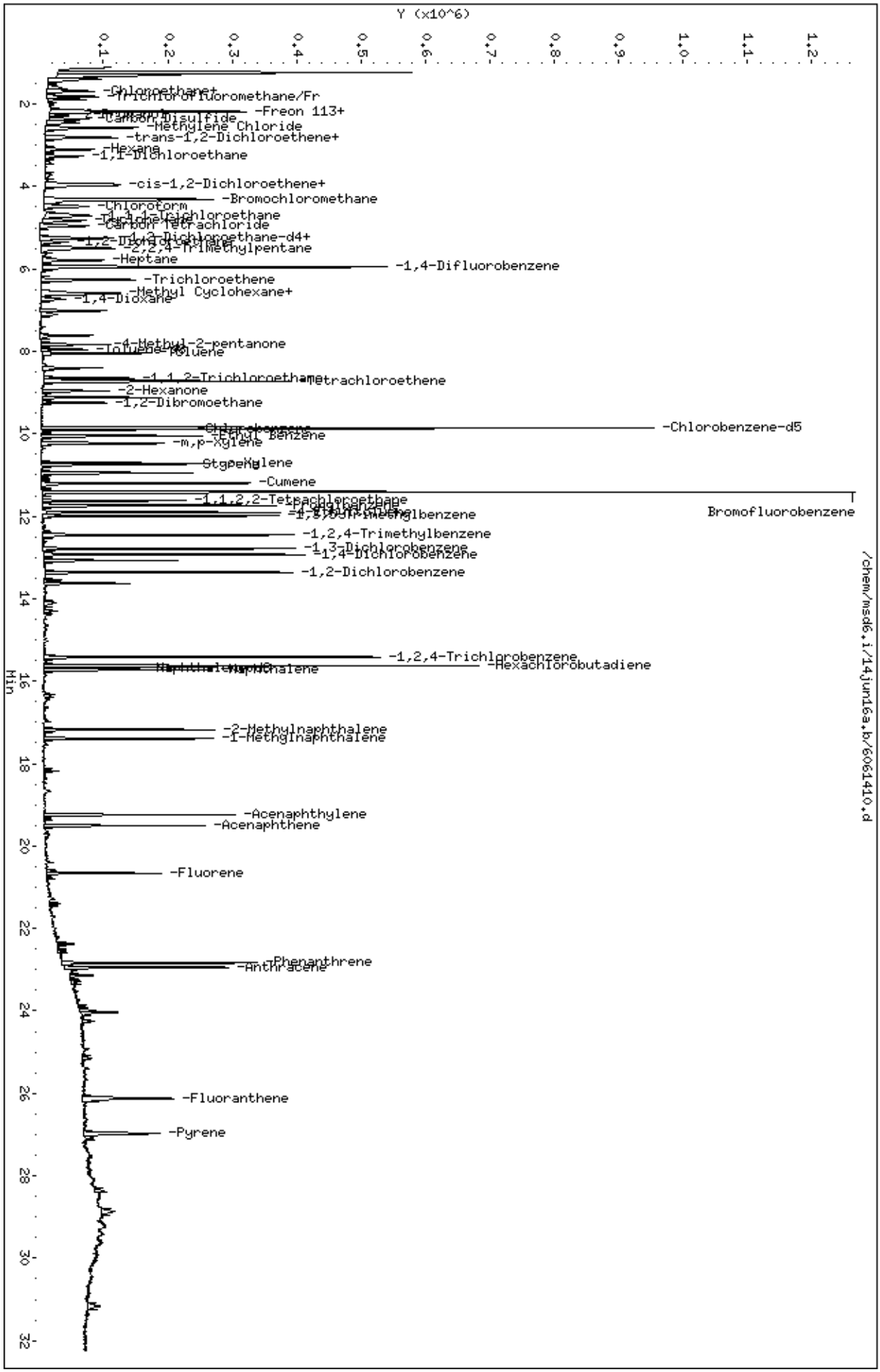
COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
40 Bromochloromethan	156066	93640	218492	151203	-3.12
54 1,4-Difluorobenze	638538	383123	893953	625202	-2.09
79 Chlorobenzene-d5	603523	362114	844932	587835	-2.60
92 Bromofluorobenzen	441798	265079	618517	433176	-1.95

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
40 Bromochloromethan	4.32	3.99	4.65	4.32	0.00
54 1,4-Difluorobenze	5.95	5.62	6.28	5.96	0.12
79 Chlorobenzene-d5	9.86	9.53	10.19	9.86	0.00
92 Bromofluorobenzen	11.41	11.08	11.74	11.41	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/14jun16a.b/6061410.d
Date : 14-JUN-2016 13:39
Client ID:
Sample Info: ;VI ICAL3,5,0Surr
Column phase: RTx-624

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



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Eurofins Air Toxics Inc.

EPA Method TO-17 GC/MS

Data file : /chem/msd6.i/14jun16a.b/6061411.d
Lab Smp Id: VI ICAL4,10Surr
Inj Date : 14-JUN-2016 14:19
Operator : CT Inst ID: msd6.i
Smp Info : ;VI ICAL4,10Surr
Misc Info : 2516-246-6ml(9/10/16),2744-31-25(7/5/16)
Comment :
Method : /chem/msd6.i/15jun16.b/616z0614vi.m
Meth Date : 21-Jun-2016 11:23 U5BT Quant Type: ISTD
Cal Date : 14-JUN-2016 14:19 Cal File: 6061411.d
Als bottle: 14 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: VOC+PAH_ICAL.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO
* 40 Bromochloromethane						CAS #: 74-97-5	
4.315	4.315 (1.000)	130	155009	26.0000		80.00- 120.00	100.00
4.315	4.315 (1.000)	128	117510			47.94- 107.94	75.81
4.308	4.308 (1.000)	49	148840			68.24- 128.24	96.02
* 54 1,4-Difluorobenzene						CAS #: 540-36-3	
5.955	5.955 (1.000)	114	629109	23.0000		80.00- 120.00	100.00
5.955	5.955 (1.000)	88	96703			0.00- 45.46	15.37
* 79 Chlorobenzene-d5						CAS #: 3114-55-4	
9.859	9.859 (1.000)	117	593875	24.0000		80.00- 120.00	100.00
9.859	9.859 (1.000)	82	292313			19.06- 79.06	49.22
* 92 Bromofluorobenzene						CAS #: 460-00-4	
11.414	11.414 (1.000)	174	435084	36.0000		80.00- 120.00	100.00
11.406	11.406 (1.000)	95	453643			74.19- 134.19	104.27
11.414	11.414 (1.000)	176	424390			67.61- 127.61	97.54
$ 49 1,2-Dichloroethane-d4						CAS #: 17060-07-0	
5.232	5.232 (0.879)	65	32764	10.0000	10.097	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO
$ 49 1,2-Dichloroethane-d4 (continued)							
5.239	5.239 (0.880)	67	17166			21.95- 81.95	52.39
$ 66 Toluene-d8					CAS #: 2037-26-5		
7.954	7.954 (0.807)	98	114842	10.0000	10.359	80.00- 120.00	100.00
7.954	7.954 (0.807)	70	11515			0.00- 39.97	10.03
7.954	7.954 (0.807)	100	74192			35.51- 95.51	64.60
$ 108 Naphthalene-d8					CAS #: 1146-65-2		
15.690	15.690 (1.375)	136	218244	10.0000	9.687	80.00- 120.00	100.00
15.690	15.690 (1.375)	108	18443			0.00- 38.72	8.45
3 Freon 114					CAS #: 76-14-2		
1.283	1.283 (0.297)	135	122057	41.9000	42.191	80.00- 120.00	100.00
1.283	1.283 (0.297)	137	39652			2.20- 62.20	32.49
6 Vinyl Chloride					CAS #: 75-01-4		
1.395	1.395 (0.323)	62	58594	15.3000	15.798	80.00- 120.00	100.00
1.395	1.395 (0.323)	64	31126			13.62- 73.62	53.12
7 1,3-Butadiene					CAS #: 106-99-0		
1.395	1.395 (0.323)	54	43093	13.3000	12.956	80.00- 120.00	100.00
1.395	1.395 (0.323)	39	69373			117.26- 177.26	160.98
9 Chloroethane					CAS #: 75-00-3		
1.660	1.660 (0.385)	64	27679	15.8000	15.272	80.00- 120.00	100.00(a)
1.660	1.660 (0.385)	66	8203			0.84- 60.84	29.64
1.660	1.660 (0.385)	49	7070			0.00- 56.89	25.54
10 Isopentane					CAS #: 78-78-4		
1.688	1.688 (0.391)	57	47179	17.7000	17.044	80.00- 120.00	100.00
1.688	1.688 (0.391)	43	65194			107.36- 167.36	138.18
11 Trichlorofluoromethane/Fr11					CAS #: 75-69-4		
1.814	1.814 (0.420)	101	169126	33.7000	34.043	80.00- 120.00	100.00
1.814	1.814 (0.420)	103	109876			35.47- 95.47	64.97
15 Freon 113					CAS #: 76-13-1		
2.173	2.173 (0.504)	151	153012	46.0000	48.139	80.00- 120.00	100.00
2.173	2.173 (0.504)	153	98906			34.42- 94.42	64.64
2.173	2.173 (0.504)	101	160239			75.78- 135.78	104.72
14 1,1-Dichloroethene					CAS #: 75-35-4		
2.180	2.180 (0.505)	98	48104	23.8000	23.970	80.00- 120.00	100.00
2.180	2.180 (0.505)	96	74974			128.07- 188.07	155.86
2.180	2.180 (0.505)	61	112526			203.73- 263.73	233.92

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 (0.547)	76	229306	18.7000	18.055	80.00- 120.00	100.00
19 2-Propanol					CAS #: 67-63-0		
2.274	2.274 (0.527)	45	111572	14.7000	15.360	80.00- 120.00	100.00(a)
2.281	2.281 (0.529)	43	32026			0.00- 50.57	28.70
2.281	2.281 (0.529)	59	4494			0.00- 34.17	4.03
22 Methylene Chloride					CAS #: 75-09-2		
2.574	2.574 (0.597)	49	153035	20.8000	33.950	80.00- 120.00	100.00
2.574	2.574 (0.597)	84	132294			55.25- 115.25	86.45
2.574	2.574 (0.597)	51	48142			0.54- 60.54	31.46
25 trans-1,2-Dichloroethene					CAS #: 156-60-5		
2.818	2.818 (0.653)	98	47309	23.8000	24.523	80.00- 120.00	100.00
2.818	2.818 (0.653)	61	97160			178.66- 238.66	205.37
2.818	2.818 (0.653)	96	72060			127.69- 187.69	152.32
26 MTBE					CAS #: 1634-04-4		
2.796	2.796 (0.648)	73	156992	21.6000	21.650	80.00- 120.00	100.00(a)
2.804	2.804 (0.650)	57	33689			0.00- 51.21	21.46
2.804	2.804 (0.650)	41	33083			0.00- 50.32	21.07
28 Hexane					CAS #: 110-54-3		
3.105	3.105 (0.719)	57	99086	21.1000	21.216	80.00- 120.00	100.00(a)
3.105	3.105 (0.719)	43	60380			30.80- 90.80	60.94
3.105	3.105 (0.719)	86	16057			0.00- 45.79	16.21
29 1,1-Dichloroethane					CAS #: 75-34-3		
3.262	3.262 (0.756)	63	114639	24.3000	24.772	80.00- 120.00	100.00
3.269	3.269 (0.758)	65	36938			1.92- 61.92	32.22
37 cis-1,2-Dichloroethene					CAS #: 156-59-2		
3.971	3.971 (0.920)	98	49507	23.8000	23.761	80.00- 120.00	100.00
3.971	3.971 (0.920)	96	78803			125.20- 185.20	159.18
3.964	3.964 (0.919)	61	94881			158.24- 218.24	191.65
38 2-Butanone					CAS #: 78-93-3		
3.935	3.935 (0.912)	72	52085	17.7000	26.454	80.00- 120.00	100.00(a)
3.935	3.935 (0.912)	43	207591			361.05- 421.05	398.56
3.935	3.935 (0.912)	57	20498			4.40- 64.40	39.35
44 Chloroform					CAS #: 67-66-3		
4.487	4.487 (1.040)	83	144718	29.3000	29.554	80.00- 120.00	100.00
4.480	4.480 (1.038)	85	95974			35.45- 95.45	66.32

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 (0.810)	84	87928	20.7000	19.958	80.00- 120.00	100.00
4.824	4.824 (0.810)	56	99069			82.98- 142.98	112.67
4.824	4.824 (0.810)	41	57287			32.69- 92.69	65.15
45 1,1,1-Trichloroethane					CAS #: 71-55-6		
4.716	4.716 (0.792)	97	145645	32.7000	32.668	80.00- 120.00	100.00
4.716	4.716 (0.792)	99	93274			34.83- 94.83	64.04
47 Carbon Tetrachloride					CAS #: 56-23-5		
4.960	4.960 (0.833)	119	149120	37.8000	36.031	80.00- 120.00	100.00
4.953	4.953 (0.832)	117	154581			73.53- 133.53	103.66
51 2,2,4-Trimethylpentane					CAS #: 540-84-1		
5.497	5.497 (0.923)	57	323320	28.0000	28.848	80.00- 120.00	100.00
5.497	5.497 (0.923)	56	101892			1.12- 61.12	31.51
5.497	5.497 (0.923)	41	94510			0.00- 57.96	29.23
48 Benzene					CAS #: 71-43-2		
5.253	5.253 (0.882)	78	234182	19.2000	19.333	80.00- 120.00	100.00
5.253	5.253 (0.882)	77	55905			0.00- 53.50	23.87
50 1,2-Dichloroethane					CAS #: 107-06-2		
5.354	5.354 (0.899)	62	92413	24.3000	23.997	80.00- 120.00	100.00
5.354	5.354 (0.899)	64	30526			2.93- 62.93	33.03
53 Heptane					CAS #: 142-82-5		
5.791	5.791 (0.972)	71	69257	24.6000	24.280	80.00- 120.00	100.00
5.791	5.791 (0.972)	43	131612			143.29- 203.29	190.03
5.791	5.791 (0.972)	57	63867			61.40- 121.40	92.22
56 Trichloroethene					CAS #: 79-01-6		
6.263	6.263 (1.052)	95	126657	32.2000	34.786	80.00- 120.00	100.00
6.263	6.263 (1.052)	130	141967			81.46- 141.46	112.09
6.263	6.263 (1.052)	97	82676			34.92- 94.92	65.28
58 Methyl Cyclohexane					CAS #: 108-87-2		
6.586	6.586 (1.106)	83	130629	24.1000	24.296	80.00- 120.00	100.00
6.586	6.586 (1.106)	98	58714			15.14- 75.14	44.95
6.586	6.586 (1.106)	55	101066			46.07- 106.07	77.37
59 1,2-Dichloropropane					CAS #: 78-87-5		
6.614	6.614 (1.111)	63	73553	27.7000	27.830	80.00- 120.00	100.00
6.614	6.614 (1.111)	62	50425			38.13- 98.13	68.56
6.593	6.593 (1.107)	41	93930			92.30- 152.30	127.70

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		
6.736	6.736 (1.131)	88	47791	21.6000	19.837	80.00- 120.00	100.00
6.736	6.736 (1.131)	58	30951			31.73- 91.73	64.76
6.736	6.736 (1.131)	57	30050			1.20- 61.20	62.88
65 4-Methyl-2-pentanone					CAS #: 108-10-1		
7.832	7.832 (1.315)	58	59553	24.6000	25.125	80.00- 120.00	100.00
7.832	7.832 (1.315)	43	147980			221.14- 281.14	248.48
7.832	7.832 (1.315)	85	30094			20.58- 80.58	50.53
67 Toluene					CAS #: 108-88-3		
8.047	8.047 (0.816)	91	282330	22.6000	22.982	80.00- 120.00	100.00
8.047	8.047 (0.816)	92	165034			28.32- 88.32	58.45
70 1,1,2-Trichloroethane					CAS #: 79-00-5		
8.649	8.649 (1.452)	97	98102	32.7000	32.960	80.00- 120.00	100.00
8.649	8.649 (1.452)	99	61987			32.57- 92.57	63.19
8.649	8.649 (1.452)	83	79841			50.93- 110.93	81.39
71 Tetrachloroethene					CAS #: 127-18-4		
8.727	8.727 (0.885)	166	170613	40.7000	42.171	80.00- 120.00	100.00
8.727	8.727 (0.885)	129	120200			41.03- 101.03	70.45
8.727	8.727 (0.885)	131	117226			38.99- 98.99	68.71
72 2-Hexanone					CAS #: 591-78-6		
8.957	8.957 (0.908)	58	77542	24.6000	24.802	80.00- 120.00	100.00
8.957	8.957 (0.908)	43	142274			155.38- 215.38	183.48
8.957	8.957 (0.908)	100	17404			0.00- 52.71	22.44
74 1,2-Dibromoethane					CAS #: 106-93-4		
9.236	9.236 (0.937)	107	149422	46.1000	47.030	80.00- 120.00	100.00
9.236	9.236 (0.937)	109	141687			65.47- 125.47	94.82
81 Chlorobenzene					CAS #: 108-90-7		
9.895	9.895 (1.004)	112	251019	27.6000	28.038	80.00- 120.00	100.00
9.895	9.895 (1.004)	114	81461			2.20- 62.20	32.45
9.895	9.895 (1.004)	77	132975			20.93- 80.93	52.97
82 Ethyl Benzene					CAS #: 100-41-4		
10.053	10.053 (1.020)	106	122295	26.1000	26.581	80.00- 120.00	100.00
10.053	10.053 (1.020)	91	371551			272.45- 332.45	303.82
84 m,p-Xylene					CAS #: 108-38-3		
10.232	10.232 (1.038)	106	154798	26.1000	26.448	80.00- 120.00	100.00
10.232	10.232 (1.038)	91	304927			164.06- 224.06	196.98

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO
88 o-Xylene					CAS #: 95-47-6		
10.712	10.712 (0.938)	106	146285	26.1000	26.533	80.00- 120.00	100.00
10.712	10.712 (0.938)	91	301006			174.12- 234.12	205.77
89 Styrene					CAS #: 100-42-5		
10.740	10.740 (0.941)	104	245269	25.6000	26.844	80.00- 120.00	100.00
10.740	10.740 (0.941)	78	112523			16.31- 76.31	45.88
91 Cumene					CAS #: 98-82-8		
11.199	11.199 (0.981)	105	457111	29.5000	30.472	80.00- 120.00	100.00
11.199	11.199 (0.981)	120	125459			0.00- 57.22	27.45
11.199	11.199 (0.981)	51	38378			0.00- 38.43	8.40
94 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
11.621	11.621 (1.018)	83	190429	41.2000	39.916	80.00- 120.00	100.00
11.621	11.621 (1.018)	85	126468			35.83- 95.83	66.41
96 Propylbenzene					CAS #: 103-65-1		
11.743	11.743 (1.029)	91	532079	29.5000	30.344	80.00- 120.00	100.00
11.743	11.743 (1.029)	120	136523			0.00- 55.53	25.66
11.743	11.743 (1.029)	105	21528			0.00- 33.92	4.05
97 4-Ethyltoluene					CAS #: 622-96-8		
11.908	11.908 (1.043)	120	145732	29.5000	30.975	80.00- 120.00	100.00
11.908	11.908 (1.043)	105	471092			298.20- 358.20	323.26
98 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
11.994	11.994 (1.051)	120	207389	29.5000	30.875	80.00- 120.00	100.00
11.994	11.994 (1.051)	105	410001			167.68- 227.68	197.70
100 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
12.459	12.459 (1.092)	120	195311	29.5000	31.107	80.00- 120.00	100.00
12.459	12.459 (1.092)	105	420416			185.14- 245.14	215.25
101 1,3-Dichlorobenzene					CAS #: 541-73-1		
12.789	12.789 (1.120)	146	321953	36.1000	37.538	80.00- 120.00	100.00
12.789	12.789 (1.120)	148	207310			34.46- 94.46	64.39
12.782	12.782 (1.120)	111	118955			7.45- 67.45	36.95
102 1,4-Dichlorobenzene					CAS #: 106-46-7		
12.925	12.925 (1.132)	146	321887	36.1000	37.410	80.00- 120.00	100.00
12.925	12.925 (1.132)	148	205808			33.91- 93.91	63.94
12.925	12.925 (1.132)	111	114600			6.02- 66.02	35.60
105 1,2-Dichlorobenzene					CAS #: 95-50-1		
13.362	13.362 (1.171)	146	310646	36.1000	37.255	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)							
13.362	13.362 (1.171)	148	199930			34.29- 94.29	64.36
13.362	13.362 (1.171)	111	118539			8.63- 68.63	38.16
106 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
15.418	15.418 (1.351)	180	298944	44.5000	44.650	80.00- 120.00	100.00
15.418	15.418 (1.351)	182	283544			64.63- 124.63	94.85
107 Hexachlorobutadiene					CAS #: 87-68-3		
15.626	15.626 (1.369)	225	224143	64.0000	64.108	80.00- 120.00	100.00
15.626	15.626 (1.369)	223	137984			32.03- 92.03	61.56
109 Naphthalene					CAS #: 91-20-3		
15.726	15.726 (1.378)	128	588844	25.0000	24.335	80.00- 120.00	100.00
15.726	15.726 (1.378)	127	76801			0.00- 42.99	13.04
110 2-Methylnaphthalene					CAS #: 91-57-6		
17.180	17.180 (1.505)	142	398504	25.0000	24.912	80.00- 120.00	100.00
17.180	17.180 (1.505)	141	343671			56.24- 116.24	86.24
17.173	17.173 (1.505)	115	113902			0.00- 58.81	28.58
111 1-Methylnaphthalene					CAS #: 90-12-0		
17.395	17.395 (1.524)	142	362602	25.0000	24.780	80.00- 120.00	100.00
17.395	17.395 (1.524)	141	326451			60.38- 120.38	90.03
17.395	17.395 (1.524)	115	110132			0.56- 60.56	30.37
112 Acenaphthylene					CAS #: 208-96-8		
19.243	19.243 (1.686)	152	608446	25.0000	23.325	80.00- 120.00	100.00
19.243	19.243 (1.686)	151	120293			0.00- 49.78	19.77
19.243	19.243 (1.686)	153	79049			0.00- 43.07	12.99
113 Acenaphthene					CAS #: 83-32-9		
19.508	19.508 (1.709)	154	347036	25.0000	27.846	80.00- 120.00	100.00
19.508	19.508 (1.709)	152	183928			21.85- 81.85	53.00
19.508	19.508 (1.709)	153	383660			79.23- 139.23	110.55
114 Fluorene					CAS #: 86-73-7		
20.654	20.654 (1.810)	166	349262	25.0000	33.345	80.00- 120.00	100.00
20.654	20.654 (1.810)	165	331544			65.14- 125.14	94.93
115 Phenanthrene					CAS #: 85-01-8		
22.839	22.839 (2.001)	178	619917	25.0000	23.861	80.00- 120.00	100.00
22.832	22.832 (2.000)	176	114703			0.00- 48.56	18.50
22.832	22.832 (2.000)	179	93473			0.00- 45.19	15.08
116 Anthracene					CAS #: 120-12-7		
22.946	22.946 (2.010)	178	575461	25.0000	25.873	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)							
22.946	22.946 (2.010)	176	102184			0.00- 47.99	17.76
22.939	22.939 (2.010)	179	87994			0.00- 45.19	15.29
117 Fluoranthene					CAS #: 206-44-0		
26.119	26.119 (2.288)	202	532935	25.0000	28.684	80.00- 120.00	100.00
26.112	26.112 (2.288)	101	83315			0.00- 45.14	15.63
118 Pyrene					CAS #: 129-00-0		
26.979	26.979 (2.364)	202	556320	25.0000	29.245	80.00- 120.00	100.00
26.972	26.972 (2.363)	101	101530			0.00- 48.11	18.25
26.972	26.972 (2.363)	100	81505			0.00- 44.51	14.65

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: 6061411.d
Lab Smp Id: VI ICAL4,10Surr
Analysis Type: VOA
Quant Type: ISTD
Operator: CT
Method File: /chem/msd6.i/15jun16.b/616z0614vi.m
Misc Info: 2516-246-6ml(9/10/16),2744-31-25(7/5/16)

Calibration Date: 14-JUN-2016
Calibration Time: 14:59

Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
40 Bromochloromethan	156066	93640	218492	155009	-0.68
54 1,4-Difluorobenze	638538	383123	893953	629109	-1.48
79 Chlorobenzene-d5	603523	362114	844932	593875	-1.60
92 Bromofluorobenzen	441798	265079	618517	435084	-1.52

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
40 Bromochloromethan	4.32	3.99	4.65	4.32	0.00
54 1,4-Difluorobenze	5.95	5.62	6.28	5.96	0.12
79 Chlorobenzene-d5	9.86	9.53	10.19	9.86	0.00
92 Bromofluorobenzen	11.41	11.08	11.74	11.41	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.

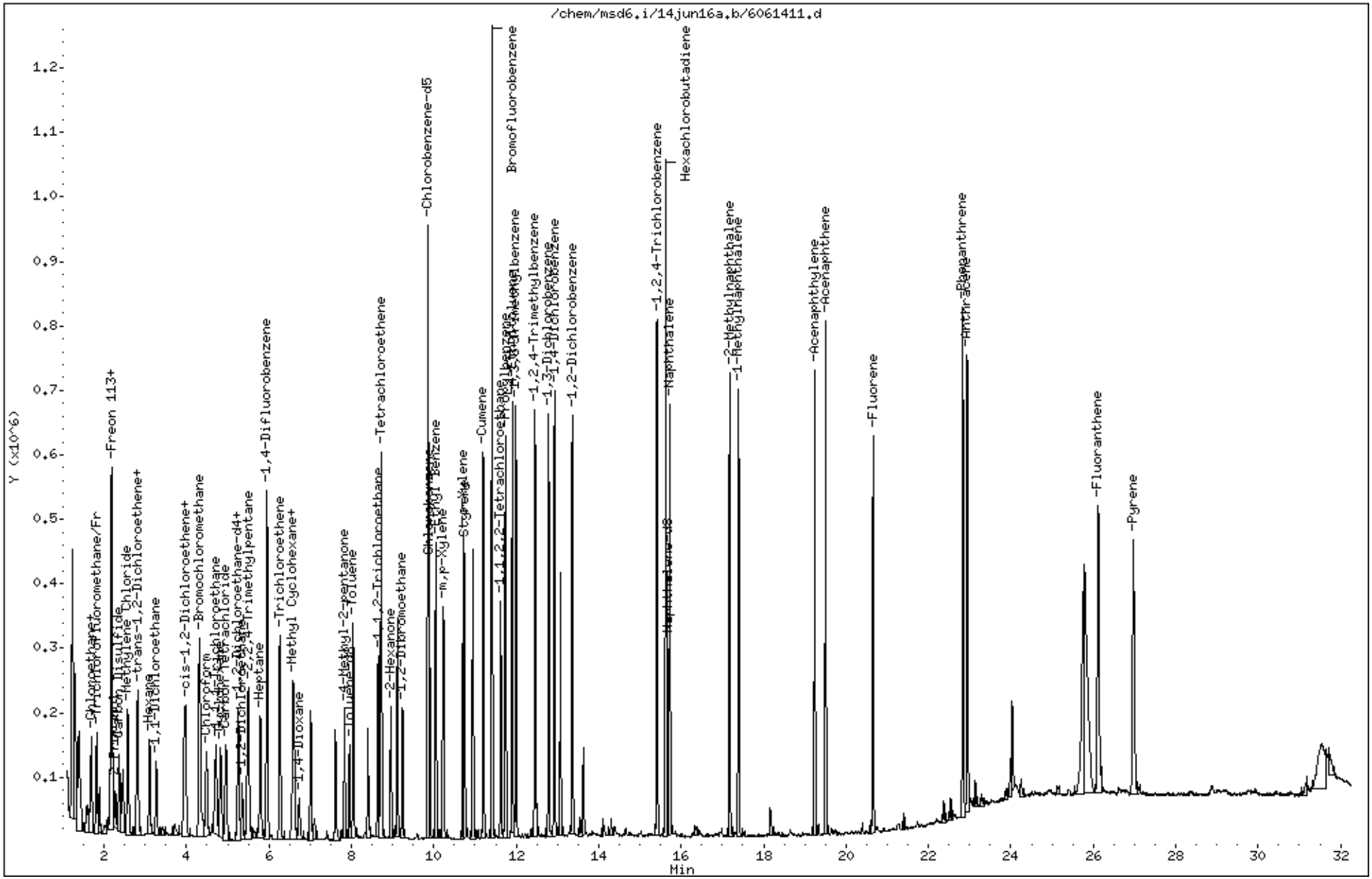
Data File: /chem/msd6.i/14jun16a.b/6061411.d
Date : 14-JUN-2016 14:19
Client ID:
Sample Info: ;VI ICAL4,10Surr

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/14jun16a.b/6061412.d
Lab Smp Id: VI ICAL5,25Surr
Inj Date : 14-JUN-2016 14:59
Operator : CT Inst ID: msd6.i
Smp Info : ;VI ICAL5,25Surr
Misc Info : 2516-246-20ml(9/10/16),2744-31-50(7/5/16
Comment :
Method : /chem/msd6.i/15jun16.b/616z0614vi.m
Meth Date : 21-Jun-2016 11:24 U5BT Quant Type: ISTD
Cal Date : 14-JUN-2016 14:59 Cal File: 6061412.d
Als bottle: 15 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: VOC+PAH_ICAL.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO
* 40 Bromochloromethane						CAS #: 74-97-5	
4.315	4.315 (1.000)	130	156066	26.0000		80.00- 120.00	100.00
4.315	4.315 (1.000)	128	121637			47.94- 107.94	77.94
4.315	4.315 (1.000)	49	153316			68.24- 128.24	98.24
* 54 1,4-Difluorobenzene						CAS #: 540-36-3	
5.948	5.948 (1.000)	114	638538	23.0000		80.00- 120.00	100.00
5.948	5.948 (1.000)	88	98726			0.00- 45.46	15.46
* 79 Chlorobenzene-d5						CAS #: 3114-55-4	
9.859	9.859 (1.000)	117	603523	24.0000		80.00- 120.00	100.00
9.859	9.859 (1.000)	82	296099			19.06- 79.06	49.06
* 92 Bromofluorobenzene						CAS #: 460-00-4	
11.414	11.414 (1.000)	174	441798	36.0000		80.00- 120.00	100.00
11.407	11.407 (1.000)	95	460326			74.19- 134.19	104.19
11.414	11.414 (1.000)	176	431218			67.61- 127.61	97.61
$ 49 1,2-Dichloroethane-d4						CAS #: 17060-07-0	
5.239	5.239 (0.881)	65	80952	25.0000	24.580	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO
$ 49 1,2-Dichloroethane-d4 (continued)							
5.232	5.232 (0.880)	67	42050			21.95- 81.95	51.94
$ 66 Toluene-d8						CAS #: 2037-26-5	
7.954	7.954 (0.807)	98	293815	25.0000	26.078	80.00- 120.00	100.00
7.954	7.954 (0.807)	70	29304			0.00- 39.97	9.97
7.954	7.954 (0.807)	100	192485			35.51- 95.51	65.51
$ 108 Naphthalene-d8						CAS #: 1146-65-2	
15.690	15.690 (1.375)	136	573337	25.0000	25.061	80.00- 120.00	100.00
15.690	15.690 (1.375)	108	50017			0.00- 38.72	8.72
3 Freon 114						CAS #: 76-14-2	
1.283	1.283 (0.297)	135	417775	140.000	143.43	80.00- 120.00	100.00
1.283	1.283 (0.297)	137	134525			2.20- 62.20	32.20
6 Vinyl Chloride						CAS #: 75-01-4	
1.395	1.395 (0.323)	62	201397	51.1000	53.931	80.00- 120.00	100.00
1.395	1.395 (0.323)	64	87849			13.62- 73.62	43.62
7 1,3-Butadiene						CAS #: 106-99-0	
1.395	1.395 (0.323)	54	148566	44.2000	44.365	80.00- 120.00	100.00
1.395	1.395 (0.323)	39	218777			117.26- 177.26	147.26
9 Chloroethane						CAS #: 75-00-3	
1.661	1.661 (0.385)	64	90978	52.8000	49.858	80.00- 120.00	100.00
1.661	1.661 (0.385)	66	28054			0.84- 60.84	30.84
1.661	1.661 (0.385)	49	24465			0.00- 56.89	26.89
10 Isopentane						CAS #: 78-78-4	
1.688	1.688 (0.391)	57	161529	59.0000	57.961	80.00- 120.00	100.00
1.688	1.688 (0.391)	43	221869			107.36- 167.36	137.36
11 Trichlorofluoromethane/Fr11						CAS #: 75-69-4	
1.814	1.814 (0.420)	101	579187	112.000	115.79	80.00- 120.00	100.00
1.814	1.814 (0.420)	103	379186			35.47- 95.47	65.47
15 Freon 113						CAS #: 76-13-1	
2.181	2.181 (0.505)	151	524773	153.000	163.98	80.00- 120.00	100.00
2.181	2.181 (0.505)	153	338066			34.42- 94.42	64.42
2.181	2.181 (0.505)	101	555105			75.78- 135.78	105.78
14 1,1-Dichloroethene						CAS #: 75-35-4	
2.181	2.181 (0.505)	98	159124	79.3000	78.755	80.00- 120.00	100.00
2.181	2.181 (0.505)	96	251533			128.07- 188.07	158.07
2.181	2.181 (0.505)	61	371921			203.73- 263.73	233.73

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO
18 Carbon Disulfide					CAS #: 75-15-0		
2.360	2.360 (0.547)	76	715900	62.3000	55.986	80.00- 120.00	100.00
19 2-Propanol					CAS #: 67-63-0		
2.274	2.274 (0.527)	45	350698	49.2000	47.952	80.00- 120.00	100.00(a)
2.274	2.274 (0.527)	43	72125			0.00- 50.57	20.57
2.281	2.281 (0.529)	59	14618			0.00- 34.17	4.17
22 Methylene Chloride					CAS #: 75-09-2		
2.575	2.575 (0.597)	49	322068	69.5000	70.965	80.00- 120.00	100.00
2.575	2.575 (0.597)	84	274574			55.25- 115.25	85.25
2.575	2.575 (0.597)	51	98375			0.54- 60.54	30.54
25 trans-1,2-Dichloroethene					CAS #: 156-60-5		
2.818	2.818 (0.653)	98	161842	79.3000	83.323	80.00- 120.00	100.00
2.818	2.818 (0.653)	61	337708			178.66- 238.66	208.67
2.818	2.818 (0.653)	96	255214			127.69- 187.69	157.69
26 MTBE					CAS #: 1634-04-4		
2.804	2.804 (0.650)	73	593621	72.1000	81.310	80.00- 120.00	100.00
2.804	2.804 (0.650)	57	125894			0.00- 51.21	21.21
2.804	2.804 (0.650)	41	120652			0.00- 50.32	20.32
28 Hexane					CAS #: 110-54-3		
3.105	3.105 (0.719)	57	345559	70.5000	73.490	80.00- 120.00	100.00
3.105	3.105 (0.719)	43	210104			30.80- 90.80	60.80
3.105	3.105 (0.719)	86	54550			0.00- 45.79	15.79
29 1,1-Dichloroethane					CAS #: 75-34-3		
3.269	3.269 (0.758)	63	393329	81.0000	84.417	80.00- 120.00	100.00
3.269	3.269 (0.758)	65	125558			1.92- 61.92	31.92
37 cis-1,2-Dichloroethene					CAS #: 156-59-2		
3.971	3.971 (0.920)	98	171180	79.3000	81.602	80.00- 120.00	100.00
3.971	3.971 (0.920)	96	265669			125.20- 185.20	155.20
3.971	3.971 (0.920)	61	322237			158.24- 218.24	188.24
38 2-Butanone					CAS #: 78-93-3		
3.928	3.928 (0.910)	72	126245	59.0000	63.685	80.00- 120.00	100.00
3.936	3.936 (0.912)	43	493684			361.05- 421.05	391.05
3.936	3.936 (0.912)	57	43433			4.40- 64.40	34.40
44 Chloroform					CAS #: 67-66-3		
4.487	4.487 (1.040)	83	502426	97.7000	101.91	80.00- 120.00	100.00
4.487	4.487 (1.040)	85	328828			35.45- 95.45	65.45

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO
46 Cyclohexane					CAS #: 110-82-7		
4.831	4.831 (0.812)	84	309680	68.8000	69.253	80.00- 120.00	100.00
4.831	4.831 (0.812)	56	349864			82.98- 142.98	112.98
4.831	4.831 (0.812)	41	194135			32.69- 92.69	62.69
45 1,1,1-Trichloroethane					CAS #: 71-55-6		
4.716	4.716 (0.793)	97	530102	109.000	117.15	80.00- 120.00	100.00
4.716	4.716 (0.793)	99	343669			34.83- 94.83	64.83
47 Carbon Tetrachloride					CAS #: 56-23-5		
4.960	4.960 (0.834)	119	560367	126.000	133.40	80.00- 120.00	100.00
4.960	4.960 (0.834)	117	580139			73.53- 133.53	103.53
51 2,2,4-Trimethylpentane					CAS #: 540-84-1		
5.490	5.490 (0.923)	57	1102439	93.4000	96.914	80.00- 120.00	100.00
5.497	5.497 (0.924)	56	343097			1.12- 61.12	31.12
5.490	5.490 (0.923)	41	308283			0.00- 57.96	27.96
48 Benzene					CAS #: 71-43-2		
5.253	5.253 (0.883)	78	726533	63.9000	59.095	80.00- 120.00	100.00
5.253	5.253 (0.883)	77	170761			0.00- 53.50	23.50
50 1,2-Dichloroethane					CAS #: 107-06-2		
5.354	5.354 (0.900)	62	321255	80.9000	82.190	80.00- 120.00	100.00
5.354	5.354 (0.900)	64	105787			2.93- 62.93	32.93
53 Heptane					CAS #: 142-82-5		
5.791	5.791 (0.974)	71	241015	82.0000	83.248	80.00- 120.00	100.00
5.791	5.791 (0.974)	43	417655			143.29- 203.29	173.29
5.791	5.791 (0.974)	57	220280			61.40- 121.40	91.40
56 Trichloroethene					CAS #: 79-01-6		
6.263	6.263 (1.053)	95	395556	108.000	107.04	80.00- 120.00	100.00
6.263	6.263 (1.053)	130	440902			81.46- 141.46	111.46
6.263	6.263 (1.053)	97	256788			34.92- 94.92	64.92
58 Methyl Cyclohexane					CAS #: 108-87-2		
6.586	6.586 (1.107)	83	460292	80.3000	84.346	80.00- 120.00	100.00
6.586	6.586 (1.107)	98	207798			15.14- 75.14	45.14
6.586	6.586 (1.107)	55	350138			46.07- 106.07	76.07
59 1,2-Dichloropropane					CAS #: 78-87-5		
6.614	6.614 (1.112)	63	268081	92.4000	99.935	80.00- 120.00	100.00
6.614	6.614 (1.112)	62	182635			38.13- 98.13	68.13
6.586	6.586 (1.107)	41	327858			92.30- 152.30	122.30

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		
6.736	6.736 (1.132)	88	184630	72.1000	75.505	80.00- 120.00	100.00
6.736	6.736 (1.132)	58	113967			31.73- 91.73	61.73
6.736	6.736 (1.132)	57	57608			1.20- 61.20	31.20
65 4-Methyl-2-pentanone					CAS #: 108-10-1		
7.832	7.832 (1.317)	58	210508	81.9000	87.502	80.00- 120.00	100.00
7.832	7.832 (1.317)	43	528672			221.14- 281.14	251.14
7.832	7.832 (1.317)	85	106465			20.58- 80.58	50.58
67 Toluene					CAS #: 108-88-3		
8.047	8.047 (0.816)	91	978843	75.4000	78.406	80.00- 120.00	100.00
8.047	8.047 (0.816)	92	570838			28.32- 88.32	58.32
70 1,1,2-Trichloroethane					CAS #: 79-00-5		
8.649	8.649 (1.454)	97	348427	109.000	115.33	80.00- 120.00	100.00
8.649	8.649 (1.454)	99	218007			32.57- 92.57	62.57
8.649	8.649 (1.454)	83	281982			50.93- 110.93	80.93
71 Tetrachloroethene					CAS #: 127-18-4		
8.728	8.728 (0.885)	166	590049	136.000	143.51	80.00- 120.00	100.00
8.728	8.728 (0.885)	129	419093			41.03- 101.03	71.03
8.728	8.728 (0.885)	131	407051			38.99- 98.99	68.99
72 2-Hexanone					CAS #: 591-78-6		
8.957	8.957 (0.908)	58	277532	81.9000	87.352	80.00- 120.00	100.00
8.957	8.957 (0.908)	43	514483			155.38- 215.38	185.38
8.957	8.957 (0.908)	100	63039			0.00- 52.71	22.71
74 1,2-Dibromoethane					CAS #: 106-93-4		
9.236	9.236 (0.937)	107	543622	154.000	168.37	80.00- 120.00	100.00
9.236	9.236 (0.937)	109	519001			65.47- 125.47	95.47
81 Chlorobenzene					CAS #: 108-90-7		
9.895	9.895 (1.004)	112	871975	92.1000	95.839	80.00- 120.00	100.00
9.895	9.895 (1.004)	114	280763			2.20- 62.20	32.20
9.895	9.895 (1.004)	77	444130			20.93- 80.93	50.93
82 Ethyl Benzene					CAS #: 100-41-4		
10.053	10.053 (1.020)	106	427717	86.8000	91.480	80.00- 120.00	100.00
10.053	10.053 (1.020)	91	1293644			272.45- 332.45	302.45
84 m,p-Xylene					CAS #: 108-38-3		
10.232	10.232 (1.038)	106	541729	86.8000	91.079	80.00- 120.00	100.00
10.232	10.232 (1.038)	91	1051276			164.06- 224.06	194.06

RT	EXP RT	(REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO
88 o-Xylene						CAS #: 95-47-6		
10.712	10.712	(0.938)	106	512130	86.8000	91.477	80.00- 120.00	100.00
10.712	10.712	(0.938)	91	1045344			174.12- 234.12	204.12
89 Styrene						CAS #: 100-42-5		
10.740	10.740	(0.941)	104	852863	85.2000	91.926	80.00- 120.00	100.00
10.740	10.740	(0.941)	78	394958			16.31- 76.31	46.31
91 Cumene						CAS #: 98-82-8		
11.206	11.206	(0.982)	105	1581279	98.3000	103.81	80.00- 120.00	100.00
11.206	11.206	(0.982)	120	430367			0.00- 57.22	27.22
11.199	11.199	(0.981)	51	133370			0.00- 38.43	8.43
94 1,1,2,2-Tetrachloroethane						CAS #: 79-34-5		
11.621	11.621	(1.018)	83	728324	137.000	150.34	80.00- 120.00	100.00
11.621	11.621	(1.018)	85	479431			35.83- 95.83	65.83
96 Propylbenzene						CAS #: 103-65-1		
11.736	11.736	(1.028)	91	1827030	98.3000	102.61	80.00- 120.00	100.00
11.743	11.743	(1.029)	120	466483			0.00- 55.53	25.53
11.743	11.743	(1.029)	105	71539			0.00- 33.92	3.92
97 4-Ethyltoluene						CAS #: 622-96-8		
11.908	11.908	(1.043)	120	489489	98.3000	102.46	80.00- 120.00	100.00
11.908	11.908	(1.043)	105	1606500			298.20- 358.20	328.20
98 1,3,5-Trimethylbenzene						CAS #: 108-67-8		
11.994	11.994	(1.051)	120	697462	98.3000	102.26	80.00- 120.00	100.00
11.994	11.994	(1.051)	105	1378725			167.68- 227.68	197.68
100 1,2,4-Trimethylbenzene						CAS #: 95-63-6		
12.460	12.460	(1.092)	120	657396	98.3000	103.11	80.00- 120.00	100.00
12.460	12.460	(1.092)	105	1414338			185.14- 245.14	215.14
101 1,3-Dichlorobenzene						CAS #: 541-73-1		
12.789	12.789	(1.120)	146	1092487	120.000	125.44	80.00- 120.00	100.00
12.789	12.789	(1.120)	148	704208			34.46- 94.46	64.46
12.782	12.782	(1.120)	111	409152			7.45- 67.45	37.45
102 1,4-Dichlorobenzene						CAS #: 106-46-7		
12.925	12.925	(1.132)	146	1097493	120.000	125.61	80.00- 120.00	100.00
12.925	12.925	(1.132)	148	701439			33.91- 93.91	63.91
12.925	12.925	(1.132)	111	395297			6.02- 66.02	36.02
105 1,2-Dichlorobenzene						CAS #: 95-50-1		
13.362	13.362	(1.171)	146	1054956	120.000	124.59	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)							
13.362	13.362 (1.171)	148	678211			34.29- 94.29	64.29
13.362	13.362 (1.171)	111	407480			8.63- 68.63	38.63
106 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
15.418	15.418 (1.351)	180	1117414	148.000	164.36	80.00- 120.00	100.00
15.418	15.418 (1.351)	182	1057449			64.63- 124.63	94.63
107 Hexachlorobutadiene					CAS #: 87-68-3		
15.626	15.626 (1.369)	225	813503	213.000	229.14	80.00- 120.00	100.00
15.626	15.626 (1.369)	223	504627			32.03- 92.03	62.03
109 Naphthalene					CAS #: 91-20-3		
15.726	15.726 (1.378)	128	1308174	50.0000	53.240	80.00- 120.00	100.00
15.726	15.726 (1.378)	127	169872			0.00- 42.99	12.99
110 2-Methylnaphthalene					CAS #: 91-57-6		
17.173	17.173 (1.505)	142	923514	50.0000	56.855	80.00- 120.00	100.00
17.173	17.173 (1.505)	141	796473			56.24- 116.24	86.24
17.173	17.173 (1.505)	115	266101			0.00- 58.81	28.81
111 1-Methylnaphthalene					CAS #: 90-12-0		
17.395	17.395 (1.524)	142	841528	50.0000	56.636	80.00- 120.00	100.00
17.395	17.395 (1.524)	141	760588			60.38- 120.38	90.38
17.395	17.395 (1.524)	115	257164			0.56- 60.56	30.56
112 Acenaphthylene					CAS #: 208-96-8		
19.243	19.243 (1.686)	152	1596384	50.0000	60.267	80.00- 120.00	100.00
19.243	19.243 (1.686)	151	315821			0.00- 49.78	19.78
19.243	19.243 (1.686)	153	208587			0.00- 43.07	13.07
113 Acenaphthene					CAS #: 83-32-9		
19.508	19.508 (1.709)	154	777896	50.0000	61.469	80.00- 120.00	100.00
19.508	19.508 (1.709)	152	403317			21.85- 81.85	51.85
19.508	19.508 (1.709)	153	849685			79.23- 139.23	109.23
114 Fluorene					CAS #: 86-73-7		
20.661	20.661 (1.810)	166	578120	50.0000	54.357	80.00- 120.00	100.00
20.661	20.661 (1.810)	165	550024			65.14- 125.14	95.14
115 Phenanthrene					CAS #: 85-01-8		
22.839	22.839 (2.001)	178	1481799	50.0000	56.168	80.00- 120.00	100.00
22.839	22.839 (2.001)	176	275066			0.00- 48.56	18.56
22.832	22.832 (2.000)	179	225121			0.00- 45.19	15.19
116 Anthracene					CAS #: 120-12-7		
22.946	22.946 (2.010)	178	1282317	50.0000	56.777	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)								
22.946	22.946	(2.010)	176	230650			0.00- 47.99	17.99
22.946	22.946	(2.010)	179	194735			0.00- 45.19	15.19
117 Fluoranthene							CAS #: 206-44-0	
26.119	26.119	(2.288)	202	676405	50.0000	35.852	80.00- 120.00	100.00
26.119	26.119	(2.288)	101	102416			0.00- 45.14	15.14
118 Pyrene							CAS #: 129-00-0	
26.979	26.979	(2.364)	202	684296	50.0000	35.426	80.00- 120.00	100.00
26.979	26.979	(2.364)	101	123960			0.00- 48.11	18.11
26.979	26.979	(2.364)	100	99316			0.00- 44.51	14.51

QC Flag Legend

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

Report Date: 21-Jun-2016 11:24

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd6.i
Lab File ID: 6061412.d
Lab Smp Id: VI ICAL5,25Surr
Analysis Type: VOA
Quant Type: ISTD
Operator: CT
Method File: /chem/msd6.i/15jun16.b/616z0614vi.m
Misc Info: 2516-246-20ml(9/10/16),2744-31-50(7/5/16

Calibration Date: 14-JUN-2016
Calibration Time: 14:59

Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
40 Bromochloromethan	156066	93640	218492	156066	0.00
54 1,4-Difluorobenze	638538	383123	893953	638538	0.00
79 Chlorobenzene-d5	603523	362114	844932	603523	0.00
92 Bromofluorobenzen	441798	265079	618517	441798	0.00

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
40 Bromochloromethan	4.32	3.99	4.65	4.32	0.00
54 1,4-Difluorobenze	5.95	5.62	6.28	5.95	0.00
79 Chlorobenzene-d5	9.86	9.53	10.19	9.86	0.00
92 Bromofluorobenzen	11.41	11.08	11.74	11.41	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/14jun16a.b/6061412.d

Date : 14-JUN-2016 14:59

Client ID:

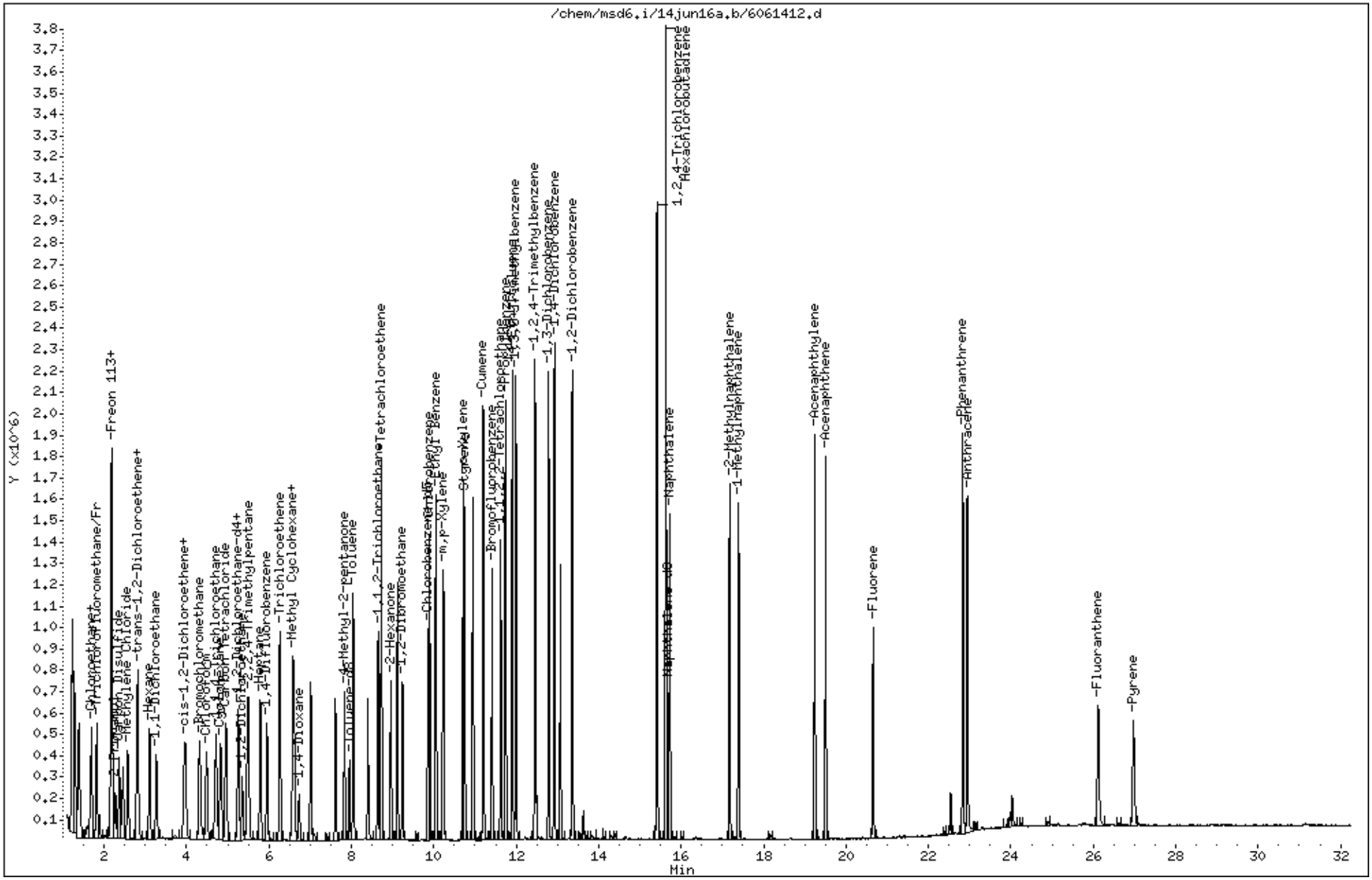
Sample Info: ;VI ICAL5,25Surr

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/14jun16a.b/6061413.d
Lab Smp Id: VI ICAL6,50Surr
Inj Date : 14-JUN-2016 15:39
Operator : CT Inst ID: msd6.i
Smp Info : ;VI ICAL6,50Surr
Misc Info : 2516-246-50ml(9/10/16),2744-31-100(7/5/16)
Comment :
Method : /chem/msd6.i/15jun16.b/616z0614vi.m
Meth Date : 21-Jun-2016 11:23 U5BT Quant Type: ISTD
Cal Date : 14-JUN-2016 15:39 Cal File: 6061413.d
Als bottle: 16 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: VOC+PAH_ICAL.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO
* 40 Bromochloromethane						CAS #: 74-97-5	
4.315	4.315 (1.000)	130	163442	26.0000		80.00- 120.00	100.00
4.315	4.315 (1.000)	128	125687			47.94- 107.94	76.90
4.315	4.315 (1.000)	49	163711			68.24- 128.24	100.16
* 54 1,4-Difluorobenzene						CAS #: 540-36-3	
5.955	5.955 (1.000)	114	659113	23.0000		80.00- 120.00	100.00
5.948	5.948 (1.000)	88	101293			0.00- 45.46	15.37
* 79 Chlorobenzene-d5						CAS #: 3114-55-4	
9.859	9.859 (1.000)	117	621218	24.0000		80.00- 120.00	100.00
9.859	9.859 (1.000)	82	311516			19.06- 79.06	50.15
* 92 Bromofluorobenzene						CAS #: 460-00-4	
11.414	11.414 (1.000)	174	454944	36.0000		80.00- 120.00	100.00
11.407	11.407 (1.000)	95	474158			74.19- 134.19	104.22
11.414	11.414 (1.000)	176	442988			67.61- 127.61	97.37
$ 49 1,2-Dichloroethane-d4						CAS #: 17060-07-0	
5.239	5.239 (0.880)	65	162185	50.0000	47.708	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO
$ 49 1,2-Dichloroethane-d4 (continued)							
5.239	5.239 (0.880)	67	85009			21.95- 81.95	52.41
$ 66 Toluene-d8					CAS #: 2037-26-5		
7.954	7.954 (0.807)	98	584808	50.0000	50.428	80.00- 120.00	100.00
7.954	7.954 (0.807)	70	58956			0.00- 39.97	10.08
7.954	7.954 (0.807)	100	384621			35.51- 95.51	65.77
$ 108 Naphthalene-d8					CAS #: 1146-65-2		
15.690	15.690 (1.375)	136	1160687	50.0000	49.269	80.00- 120.00	100.00
15.690	15.690 (1.375)	108	100527			0.00- 38.72	8.66
3 Freon 114					CAS #: 76-14-2		
1.283	1.283 (0.297)	135	1044471	350.000	342.41	80.00- 120.00	100.00
1.283	1.283 (0.297)	137	336057			2.20- 62.20	32.17
6 Vinyl Chloride					CAS #: 75-01-4		
1.395	1.395 (0.323)	62	504098	128.000	128.90	80.00- 120.00	100.00
1.395	1.395 (0.323)	64	186609			13.62- 73.62	37.02
7 1,3-Butadiene					CAS #: 106-99-0		
1.395	1.395 (0.323)	54	371817	111.000	106.02	80.00- 120.00	100.00
1.395	1.395 (0.323)	39	620534			117.26- 177.26	166.89
9 Chloroethane					CAS #: 75-00-3		
1.660	1.660 (0.385)	64	217712	132.000	113.93	80.00- 120.00	100.00
1.660	1.660 (0.385)	66	66821			0.84- 60.84	30.69
1.660	1.660 (0.385)	49	60488			0.00- 56.89	27.78
10 Isopentane					CAS #: 78-78-4		
1.688	1.688 (0.391)	57	407698	148.000	139.69	80.00- 120.00	100.00
1.688	1.688 (0.391)	43	557925			107.36- 167.36	136.85
11 Trichlorofluoromethane/Fr11					CAS #: 75-69-4		
1.814	1.814 (0.420)	101	1577731	281.000	301.19	80.00- 120.00	100.00
1.814	1.814 (0.420)	103	967248			35.47- 95.47	61.31
15 Freon 113					CAS #: 76-13-1		
2.181	2.181 (0.505)	151	1289012	383.000	384.61	80.00- 120.00	100.00
2.181	2.181 (0.505)	153	831533			34.42- 94.42	64.51
2.181	2.181 (0.505)	101	1363312			75.78- 135.78	105.76
14 1,1-Dichloroethene					CAS #: 75-35-4		
2.181	2.181 (0.505)	98	432271	198.000	204.29	80.00- 120.00	100.00
2.181	2.181 (0.505)	96	674713			128.07- 188.07	156.09
2.181	2.181 (0.505)	61	1018130			203.73- 263.73	235.53

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		
2.367	2.367 (0.548)	76	1720344	156.000	128.46	80.00- 120.00	100.00
19 2-Propanol					CAS #: 67-63-0		
2.274	2.274 (0.527)	45	910921	123.000	118.93	80.00- 120.00	100.00
2.274	2.274 (0.527)	43	168877			0.00- 50.57	18.54
2.274	2.274 (0.527)	59	37117			0.00- 34.17	4.07
22 Methylene Chloride					CAS #: 75-09-2		
2.574	2.574 (0.597)	49	690984	174.000	145.38	80.00- 120.00	100.00
2.574	2.574 (0.597)	84	595666			55.25- 115.25	86.21
2.574	2.574 (0.597)	51	214212			0.54- 60.54	31.00
25 trans-1,2-Dichloroethene					CAS #: 156-60-5		
2.825	2.825 (0.655)	98	401719	198.000	197.49	80.00- 120.00	100.00
2.825	2.825 (0.655)	61	837487			178.66- 238.66	208.48
2.825	2.825 (0.655)	96	629339			127.69- 187.69	156.66
26 MTBE					CAS #: 1634-04-4		
2.804	2.804 (0.650)	73	1097281	180.000	143.51	80.00- 120.00	100.00
2.804	2.804 (0.650)	57	239656			0.00- 51.21	21.84
2.797	2.797 (0.648)	41	226294			0.00- 50.32	20.62
28 Hexane					CAS #: 110-54-3		
3.105	3.105 (0.719)	57	860997	176.000	174.84	80.00- 120.00	100.00
3.105	3.105 (0.719)	43	524770			30.80- 90.80	60.95
3.105	3.105 (0.719)	86	137959			0.00- 45.79	16.02
29 1,1-Dichloroethane					CAS #: 75-34-3		
3.276	3.276 (0.759)	63	949824	202.000	194.65	80.00- 120.00	100.00
3.276	3.276 (0.759)	65	302125			1.92- 61.92	31.81
37 cis-1,2-Dichloroethene					CAS #: 156-59-2		
3.978	3.978 (0.922)	98	426573	198.000	194.17	80.00- 120.00	100.00
3.978	3.978 (0.922)	96	663017			125.20- 185.20	155.43
3.978	3.978 (0.922)	61	803096			158.24- 218.24	188.27
38 2-Butanone					CAS #: 78-93-3		
3.935	3.935 (0.912)	72	259091	147.000	124.80	80.00- 120.00	100.00
3.935	3.935 (0.912)	43	1009572			361.05- 421.05	389.66
3.935	3.935 (0.912)	57	85275			4.40- 64.40	32.91
44 Chloroform					CAS #: 67-66-3		
4.487	4.487 (1.040)	83	1239320	244.000	240.03	80.00- 120.00	100.00
4.487	4.487 (1.040)	85	811521			35.45- 95.45	65.48

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO
46 Cyclohexane					CAS #: 110-82-7		
4.831	4.831 (0.811)	84	772831	172.000	167.43	80.00- 120.00	100.00
4.831	4.831 (0.811)	56	875166			82.98- 142.98	113.24
4.831	4.831 (0.811)	41	486284			32.69- 92.69	62.92
45 1,1,1-Trichloroethane					CAS #: 71-55-6		
4.716	4.716 (0.792)	97	1170462	273.000	250.58	80.00- 120.00	100.00
4.716	4.716 (0.792)	99	755167			34.83- 94.83	64.52
47 Carbon Tetrachloride					CAS #: 56-23-5		
4.960	4.960 (0.833)	119	1367965	315.000	315.48	80.00- 120.00	100.00
4.960	4.960 (0.833)	117	1410990			73.53- 133.53	103.15
51 2,2,4-Trimethylpentane					CAS #: 540-84-1		
5.490	5.490 (0.922)	57	2776326	234.000	236.44	80.00- 120.00	100.00
5.490	5.490 (0.922)	56	865731			1.12- 61.12	31.18
5.490	5.490 (0.922)	41	776343			0.00- 57.96	27.96
48 Benzene					CAS #: 71-43-2		
5.261	5.261 (0.883)	78	1801030	160.000	141.92	80.00- 120.00	100.00
5.261	5.261 (0.883)	77	422862			0.00- 53.50	23.48
50 1,2-Dichloroethane					CAS #: 107-06-2		
5.354	5.354 (0.899)	62	802703	202.000	198.95	80.00- 120.00	100.00
5.354	5.354 (0.899)	64	263565			2.93- 62.93	32.83
53 Heptane					CAS #: 142-82-5		
5.791	5.791 (0.972)	71	603339	205.000	201.89	80.00- 120.00	100.00
5.791	5.791 (0.972)	43	1020670			143.29- 203.29	169.17
5.791	5.791 (0.972)	57	549250			61.40- 121.40	91.04
56 Trichloroethene					CAS #: 79-01-6		
6.263	6.263 (1.052)	95	994765	269.000	260.78	80.00- 120.00	100.00
6.263	6.263 (1.052)	130	1097478			81.46- 141.46	110.33
6.263	6.263 (1.052)	97	650203			34.92- 94.92	65.36
58 Methyl Cyclohexane					CAS #: 108-87-2		
6.586	6.586 (1.106)	83	1151897	201.000	204.49	80.00- 120.00	100.00
6.586	6.586 (1.106)	98	519144			15.14- 75.14	45.07
6.586	6.586 (1.106)	55	873037			46.07- 106.07	75.79
59 1,2-Dichloropropane					CAS #: 78-87-5		
6.614	6.614 (1.111)	63	617660	231.000	223.06	80.00- 120.00	100.00
6.614	6.614 (1.111)	62	426975			38.13- 98.13	69.13
6.586	6.586 (1.106)	41	787985			92.30- 152.30	127.58

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		
6.736	6.736 (1.131)	88	456346	180.000	180.80	80.00- 120.00	100.00
6.729	6.729 (1.130)	58	283451			31.73- 91.73	62.11
6.736	6.736 (1.131)	57	113677			1.20- 61.20	24.91
65 4-Methyl-2-pentanone					CAS #: 108-10-1		
7.832	7.832 (1.315)	58	530343	205.000	213.56	80.00- 120.00	100.00
7.832	7.832 (1.315)	43	1326832			221.14- 281.14	250.18
7.832	7.832 (1.315)	85	265498			20.58- 80.58	50.06
67 Toluene					CAS #: 108-88-3		
8.047	8.047 (0.816)	91	2414214	188.000	187.87	80.00- 120.00	100.00
8.047	8.047 (0.816)	92	1410529			28.32- 88.32	58.43
70 1,1,2-Trichloroethane					CAS #: 79-00-5		
8.649	8.649 (1.452)	97	857729	273.000	275.06	80.00- 120.00	100.00
8.649	8.649 (1.452)	99	541687			32.57- 92.57	63.15
8.649	8.649 (1.452)	83	703321			50.93- 110.93	82.00
71 Tetrachloroethene					CAS #: 127-18-4		
8.728	8.728 (0.885)	166	1439310	339.000	340.10	80.00- 120.00	100.00
8.728	8.728 (0.885)	129	1023909			41.03- 101.03	71.14
8.728	8.728 (0.885)	131	991493			38.99- 98.99	68.89
72 2-Hexanone					CAS #: 591-78-6		
8.957	8.957 (0.908)	58	705379	205.000	215.69	80.00- 120.00	100.00
8.957	8.957 (0.908)	43	1280099			155.38- 215.38	181.48
8.957	8.957 (0.908)	100	157440			0.00- 52.71	22.32
74 1,2-Dibromoethane					CAS #: 106-93-4		
9.243	9.243 (0.938)	107	1316300	384.000	396.06	80.00- 120.00	100.00
9.243	9.243 (0.938)	109	1256805			65.47- 125.47	95.48
81 Chlorobenzene					CAS #: 108-90-7		
9.895	9.895 (1.004)	112	2129281	230.000	227.36	80.00- 120.00	100.00
9.895	9.895 (1.004)	114	686289			2.20- 62.20	32.23
9.895	9.895 (1.004)	77	1090640			20.93- 80.93	51.22
82 Ethyl Benzene					CAS #: 100-41-4		
10.053	10.053 (1.020)	106	1053391	217.000	218.88	80.00- 120.00	100.00
10.053	10.053 (1.020)	91	3171580			272.45- 332.45	301.08
84 m,p-Xylene					CAS #: 108-38-3		
10.232	10.232 (1.038)	106	1321548	217.000	215.86	80.00- 120.00	100.00
10.232	10.232 (1.038)	91	2571182			164.06- 224.06	194.56

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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
 10.712  10.712 (0.938)   106   1242110 217.000   215.46  80.00- 120.00   100.00
 10.712  10.712 (0.938)    91   2549906                  174.12- 234.12   205.29
-------------------------------------------------------------------------------
   89 Styrene                                         CAS #: 100-42-5
 10.748  10.748 (0.942)   104   2065014 213.000   216.15  80.00- 120.00   100.00
 10.740  10.740 (0.941)    78    968528                   16.31-  76.31    46.90
-------------------------------------------------------------------------------
   91 Cumene                                          CAS #: 98-82-8
 11.206  11.206 (0.982)   105   3838664 246.000   244.73  80.00- 120.00   100.00
 11.206  11.206 (0.982)   120   1042138                    0.00-  57.22    27.15
 11.199  11.199 (0.981)    51    326558                    0.00-  38.43     8.51
-------------------------------------------------------------------------------
   94 1,1,2,2-Tetrachloroethane                       CAS #: 79-34-5
 11.621  11.621 (1.018)    83   1794116 343.000   359.65  80.00- 120.00   100.00
 11.621  11.621 (1.018)    85   1168140                   35.83-  95.83    65.11
-------------------------------------------------------------------------------
   96 Propylbenzene                                   CAS #: 103-65-1
 11.743  11.743 (1.029)    91   4457113 246.000   243.09  80.00- 120.00   100.00
 11.743  11.743 (1.029)   120   1124936                    0.00-  55.53    25.24
 11.743  11.743 (1.029)   105    174974                    0.00-  33.92     3.93
-------------------------------------------------------------------------------
   97 4-Ethyltoluene                                  CAS #: 622-96-8
 11.908  11.908 (1.043)   120   1207510 246.000   245.45  80.00- 120.00   100.00
 11.908  11.908 (1.043)   105   3846056                  298.20- 358.20   318.51
-------------------------------------------------------------------------------
   98 1,3,5-Trimethylbenzene                          CAS #: 108-67-8
 11.994  11.994 (1.051)   120   1686662 246.000   240.14  80.00- 120.00   100.00
 11.994  11.994 (1.051)   105   3356769                  167.68- 227.68   199.02
-------------------------------------------------------------------------------
  100 1,2,4-Trimethylbenzene                          CAS #: 95-63-6
 12.459  12.459 (1.092)   120   1583981 246.000   241.26  80.00- 120.00   100.00
 12.459  12.459 (1.092)   105   3434422                  185.14- 245.14   216.82
-------------------------------------------------------------------------------
  101 1,3-Dichlorobenzene                             CAS #: 541-73-1
 12.789  12.789 (1.120)   146   2617157 301.000   291.83  80.00- 120.00   100.00
 12.789  12.789 (1.120)   148   1678154                   34.46-  94.46    64.12
 12.789  12.789 (1.120)   111    988859                    7.45-  67.45    37.78
-------------------------------------------------------------------------------
  102 1,4-Dichlorobenzene                             CAS #: 106-46-7
 12.925  12.925 (1.132)   146   2609682 301.000   290.06  80.00- 120.00   100.00
 12.925  12.925 (1.132)   148   1685108                   33.91-  93.91    64.57
 12.925  12.925 (1.132)   111    955413                    6.02-  66.02    36.61
-------------------------------------------------------------------------------
  105 1,2-Dichlorobenzene                             CAS #: 95-50-1
 13.362  13.362 (1.171)   146   2528184 301.000   289.96  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)							
13.362	13.362 (1.171)	148	1612807			34.29- 94.29	63.79
13.362	13.362 (1.171)	111	983155			8.63- 68.63	38.89
106 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
15.418	15.418 (1.351)	180	2482388	371.000	354.58	80.00- 120.00	100.00
15.418	15.418 (1.351)	182	2358821			64.63- 124.63	95.02
107 Hexachlorobutadiene					CAS #: 87-68-3		
15.633	15.633 (1.370)	225	1823661	533.000	498.82	80.00- 120.00	100.00
15.626	15.626 (1.369)	223	1142219			32.03- 92.03	62.63
109 Naphthalene					CAS #: 91-20-3		
15.726	15.726 (1.378)	128	2525217	100.000	99.802	80.00- 120.00	100.00
15.726	15.726 (1.378)	127	327327			0.00- 42.99	12.96
110 2-Methylnaphthalene					CAS #: 91-57-6		
17.173	17.173 (1.505)	142	1731102	100.000	103.49	80.00- 120.00	100.00
17.173	17.173 (1.505)	141	1506115			56.24- 116.24	87.00
17.173	17.173 (1.505)	115	510346			0.00- 58.81	29.48
111 1-Methylnaphthalene					CAS #: 90-12-0		
17.395	17.395 (1.524)	142	1583191	100.000	103.47	80.00- 120.00	100.00
17.395	17.395 (1.524)	141	1424574			60.38- 120.38	89.98
17.395	17.395 (1.524)	115	486848			0.56- 60.56	30.75
112 Acenaphthylene					CAS #: 208-96-8		
19.243	19.243 (1.686)	152	2931060	100.000	107.46	80.00- 120.00	100.00
19.243	19.243 (1.686)	151	580346			0.00- 49.78	19.80
19.243	19.243 (1.686)	153	385128			0.00- 43.07	13.14
113 Acenaphthene					CAS #: 83-32-9		
19.508	19.508 (1.709)	154	1400283	100.000	107.45	80.00- 120.00	100.00
19.508	19.508 (1.709)	152	719922			21.85- 81.85	51.41
19.508	19.508 (1.709)	153	1521541			79.23- 139.23	108.66
114 Fluorene					CAS #: 86-73-7		
20.661	20.661 (1.810)	166	780339	100.000	71.250	80.00- 120.00	100.00
20.661	20.661 (1.810)	165	742478			65.14- 125.14	95.15
115 Phenanthrene					CAS #: 85-01-8		
22.839	22.839 (2.001)	178	2783614	100.000	102.46	80.00- 120.00	100.00
22.839	22.839 (2.001)	176	517433			0.00- 48.56	18.59
22.839	22.839 (2.001)	179	424032			0.00- 45.19	15.23
116 Anthracene					CAS #: 120-12-7		
22.946	22.946 (2.010)	178	2585941	100.000	111.19	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)								
22.946	22.946	(2.010)	176	465188			0.00- 47.99	17.99
22.946	22.946	(2.010)	179	395621			0.00- 45.19	15.30
117 Fluoranthene						CAS #: 206-44-0		
26.119	26.119	(2.288)	202	1689628	100.000	86.970	80.00- 120.00	100.00
26.119	26.119	(2.288)	101	266171			0.00- 45.14	15.75
118 Pyrene						CAS #: 129-00-0		
26.979	26.979	(2.364)	202	1739831	100.000	87.468	80.00- 120.00	100.00
26.979	26.979	(2.364)	101	315008			0.00- 48.11	18.11
26.979	26.979	(2.364)	100	253648			0.00- 44.51	14.58

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd6.i
Lab File ID: 6061413.d
Lab Smp Id: VI ICAL6,50Surr
Analysis Type: VOA
Quant Type: ISTD
Operator: CT
Method File: /chem/msd6.i/15jun16.b/616z0614vi.m
Misc Info: 2516-246-50ml(9/10/16),2744-31-100(7/5/16)

Calibration Date: 14-JUN-2016
Calibration Time: 14:59

Level: LOW
Sample Type: AIR

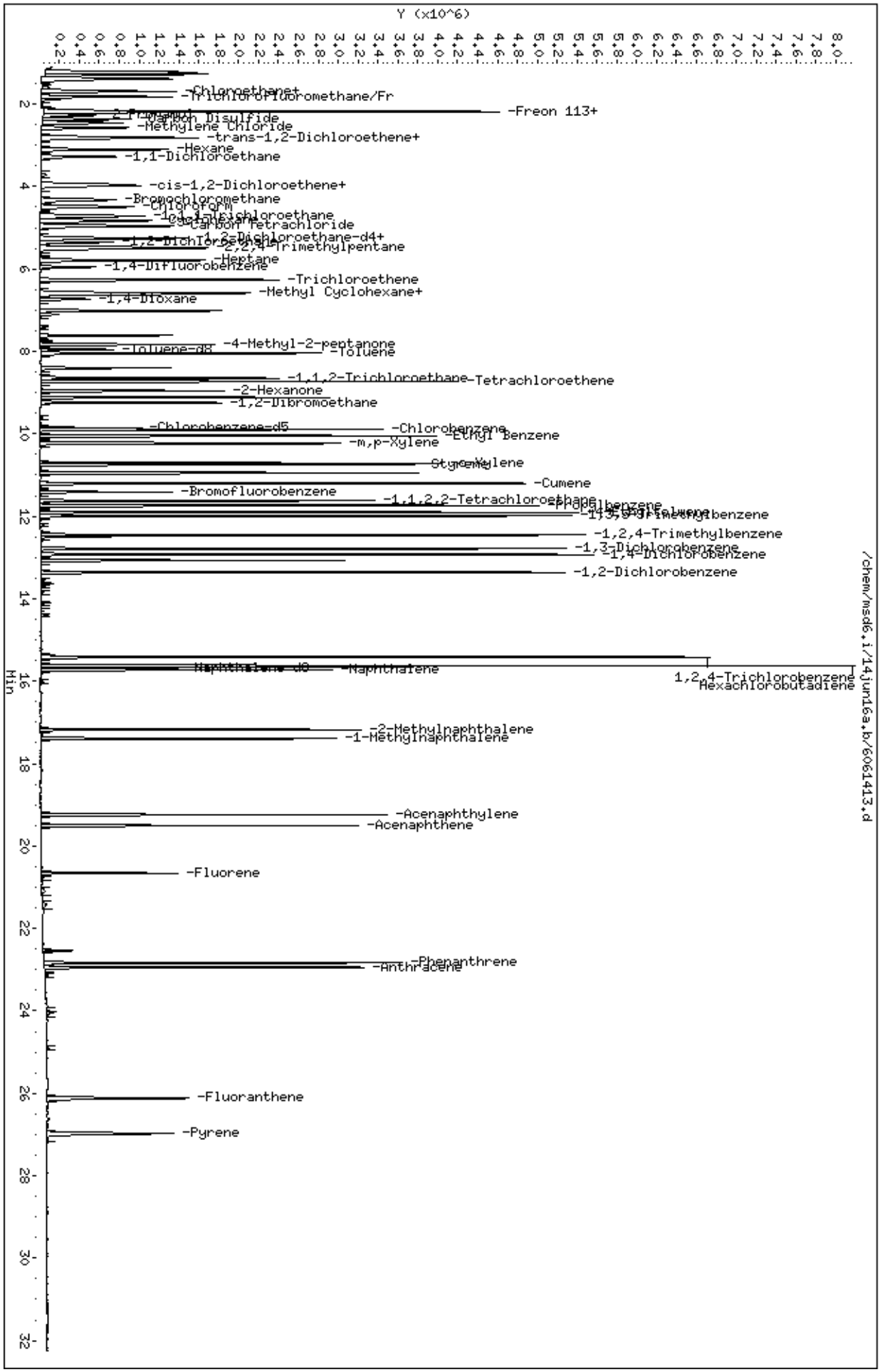
COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
40 Bromochloromethan	156066	93640	218492	163442	4.73
54 1,4-Difluorobenze	638538	383123	893953	659113	3.22
79 Chlorobenzene-d5	603523	362114	844932	621218	2.93
92 Bromofluorobenzen	441798	265079	618517	454944	2.98

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
40 Bromochloromethan	4.32	3.99	4.65	4.32	0.00
54 1,4-Difluorobenze	5.95	5.62	6.28	5.96	0.12
79 Chlorobenzene-d5	9.86	9.53	10.19	9.86	0.00
92 Bromofluorobenzen	11.41	11.08	11.74	11.41	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/14jun16a.b/6061413.d
Date : 14-JUN-2016 15:39
Client ID:
Sample Info: ;VI ICAL6,50Surr
Column phase: RTx-624

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



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Eurofins Air Toxics Inc.

EPA Method TO-17 GC/MS

Data file : /chem/msd6.i/14jun16a.b/6061414.d
Lab Smp Id: VI ICAL7,100Surr
Inj Date : 14-JUN-2016 16:18
Operator : CT Inst ID: msd6.i
Smp Info : ;VI ICAL7,100Surr
Misc Info : 2516-246-100ml(9/10/16),2744-31-250(7/5/16)
Comment :
Method : /chem/msd6.i/15jun16.b/616z0614vi.m
Meth Date : 21-Jun-2016 11:23 U5BT Quant Type: ISTD
Cal Date : 14-JUN-2016 16:18 Cal File: 6061414.d
Als bottle: 17 Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: VOC+PAH_ICAL.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO
* 40 Bromochloromethane						CAS #: 74-97-5	
4.315	4.315 (1.000)	130	175805	26.0000		80.00- 120.00	100.00
4.315	4.315 (1.000)	128	134209			47.94- 107.94	76.34
4.315	4.315 (1.000)	49	182029			68.24- 128.24	103.54
* 54 1,4-Difluorobenzene						CAS #: 540-36-3	
5.956	5.956 (1.000)	114	690432	23.0000		80.00- 120.00	100.00
5.948	5.948 (1.000)	88	106078			0.00- 45.46	15.36
* 79 Chlorobenzene-d5						CAS #: 3114-55-4	
9.859	9.859 (1.000)	117	651647	24.0000		80.00- 120.00	100.00
9.859	9.859 (1.000)	82	324928			19.06- 79.06	49.86
* 92 Bromofluorobenzene						CAS #: 460-00-4	
11.414	11.414 (1.000)	174	475032	36.0000		80.00- 120.00	100.00
11.414	11.414 (1.000)	95	500684			74.19- 134.19	105.40
11.414	11.414 (1.000)	176	461847			67.61- 127.61	97.22
$ 49 1,2-Dichloroethane-d4						CAS #: 17060-07-0	
5.239	5.239 (0.880)	65	336938	100.000	94.616	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO
$ 49 1,2-Dichloroethane-d4 (continued)							
5.239	5.239 (0.880)	67	175840			21.95- 81.95	52.19
$ 66 Toluene-d8						CAS #: 2037-26-5	
7.954	7.954 (0.807)	98	1240167	100.000	101.94	80.00- 120.00	100.00
7.954	7.954 (0.807)	70	123331			0.00- 39.97	9.94
7.954	7.954 (0.807)	100	802736			35.51- 95.51	64.73
$ 108 Naphthalene-d8						CAS #: 1146-65-2	
15.690	15.690 (1.375)	136	2424038	100.000	98.545	80.00- 120.00	100.00
15.690	15.690 (1.375)	108	211867			0.00- 38.72	8.74
3 Freon 114						CAS #: 76-14-2	
1.283	1.283 (0.297)	135	2160103	699.000	658.35	80.00- 120.00	100.00
1.283	1.283 (0.297)	137	695648			2.20- 62.20	32.20
6 Vinyl Chloride						CAS #: 75-01-4	
1.395	1.395 (0.323)	62	1037318	256.000	246.59	80.00- 120.00	100.00
1.395	1.395 (0.323)	64	349360			13.62- 73.62	33.68
7 1,3-Butadiene						CAS #: 106-99-0	
1.395	1.395 (0.323)	54	790974	221.000	209.68	80.00- 120.00	100.00
1.395	1.395 (0.323)	39	1140994			117.26- 177.26	144.25
9 Chloroethane						CAS #: 75-00-3	
1.661	1.661 (0.385)	64	494399	264.000	240.52	80.00- 120.00	100.00
1.661	1.661 (0.385)	66	156928			0.84- 60.84	31.74
1.661	1.661 (0.385)	49	137267			0.00- 56.89	27.76
10 Isopentane						CAS #: 78-78-4	
1.689	1.689 (0.391)	57	852603	295.000	271.58	80.00- 120.00	100.00
1.689	1.689 (0.391)	43	1193674			107.36- 167.36	140.00
11 Trichlorofluoromethane/Fr11						CAS #: 75-69-4	
1.814	1.814 (0.420)	101	3129754	562.000	555.45	80.00- 120.00	100.00
1.814	1.814 (0.420)	103	2057311			35.47- 95.47	65.73
15 Freon 113						CAS #: 76-13-1	
2.181	2.181 (0.505)	151	2607210	766.000	723.23	80.00- 120.00	100.00
2.181	2.181 (0.505)	153	1687356			34.42- 94.42	64.72
2.181	2.181 (0.505)	101	2760452			75.78- 135.78	105.88
14 1,1-Dichloroethene						CAS #: 75-35-4	
2.181	2.181 (0.505)	98	807590	397.000	354.82	80.00- 120.00	100.00
2.181	2.181 (0.505)	96	1266655			128.07- 188.07	156.84
2.181	2.181 (0.505)	61	1915456			203.73- 263.73	237.18

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		
2.367	2.367 (0.548)	76	3651465	311.000	253.50	80.00- 120.00	100.00
19 2-Propanol					CAS #: 67-63-0		
2.274	2.274 (0.527)	45	1962357	246.000	238.19	80.00- 120.00	100.00
2.274	2.274 (0.527)	43	402218			0.00- 50.57	20.50
2.281	2.281 (0.529)	59	79520			0.00- 34.17	4.05
22 Methylene Chloride					CAS #: 75-09-2		
2.575	2.575 (0.597)	49	1416823	347.000	277.13	80.00- 120.00	100.00
2.575	2.575 (0.597)	84	1203654			55.25- 115.25	84.95
2.575	2.575 (0.597)	51	433976			0.54- 60.54	30.63
25 trans-1,2-Dichloroethene					CAS #: 156-60-5		
2.832	2.832 (0.656)	98	840836	396.000	384.29	80.00- 120.00	100.00
2.832	2.832 (0.656)	61	1752765			178.66- 238.66	208.46
2.832	2.832 (0.656)	96	1306850			127.69- 187.69	155.42
26 MTBE					CAS #: 1634-04-4		
2.804	2.804 (0.650)	73	3137392	361.000	381.48	80.00- 120.00	100.00
2.804	2.804 (0.650)	57	683986			0.00- 51.21	21.80
2.804	2.804 (0.650)	41	649518			0.00- 50.32	20.70
28 Hexane					CAS #: 110-54-3		
3.105	3.105 (0.719)	57	1831393	352.000	345.75	80.00- 120.00	100.00
3.105	3.105 (0.719)	43	1126063			30.80- 90.80	61.49
3.105	3.105 (0.719)	86	290898			0.00- 45.79	15.88
29 1,1-Dichloroethane					CAS #: 75-34-3		
3.277	3.277 (0.759)	63	2128980	405.000	405.62	80.00- 120.00	100.00
3.277	3.277 (0.759)	65	683921			1.92- 61.92	32.12
37 cis-1,2-Dichloroethene					CAS #: 156-59-2		
3.979	3.979 (0.922)	98	895649	396.000	379.02	80.00- 120.00	100.00
3.979	3.979 (0.922)	96	1391906			125.20- 185.20	155.41
3.979	3.979 (0.922)	61	1697300			158.24- 218.24	189.51
38 2-Butanone					CAS #: 78-93-3		
3.936	3.936 (0.912)	72	552201	295.000	247.28	80.00- 120.00	100.00
3.936	3.936 (0.912)	43	2182178			361.05- 421.05	395.18
3.936	3.936 (0.912)	57	180262			4.40- 64.40	32.64
44 Chloroform					CAS #: 67-66-3		
4.501	4.501 (1.043)	83	2573616	488.000	463.41	80.00- 120.00	100.00
4.501	4.501 (1.043)	85	1681959			35.45- 95.45	65.35

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO
46 Cyclohexane					CAS #: 110-82-7		
4.831	4.831 (0.811)	84	1634476	344.000	338.04	80.00- 120.00	100.00
4.831	4.831 (0.811)	56	1872057			82.98- 142.98	114.54
4.838	4.838 (0.812)	41	1040405			32.69- 92.69	63.65
45 1,1,1-Trichloroethane					CAS #: 71-55-6		
4.723	4.723 (0.793)	97	2756739	546.000	563.42	80.00- 120.00	100.00
4.723	4.723 (0.793)	99	1786985			34.83- 94.83	64.82
47 Carbon Tetrachloride					CAS #: 56-23-5		
4.967	4.967 (0.834)	119	2853712	629.000	628.28	80.00- 120.00	100.00
4.960	4.960 (0.833)	117	2956284			73.53- 133.53	103.59
51 2,2,4-Trimethylpentane					CAS #: 540-84-1		
5.490	5.490 (0.922)	57	5922529	467.000	481.51	80.00- 120.00	100.00
5.490	5.490 (0.922)	56	1842407			1.12- 61.12	31.11
5.490	5.490 (0.922)	41	1651566			0.00- 57.96	27.89
48 Benzene					CAS #: 71-43-2		
5.261	5.261 (0.883)	78	3770364	319.000	283.62	80.00- 120.00	100.00
5.261	5.261 (0.883)	77	886690			0.00- 53.50	23.52
50 1,2-Dichloroethane					CAS #: 107-06-2		
5.361	5.361 (0.900)	62	1680178	405.000	397.55	80.00- 120.00	100.00
5.361	5.361 (0.900)	64	550811			2.93- 62.93	32.78
53 Heptane					CAS #: 142-82-5		
5.791	5.791 (0.972)	71	1288555	410.000	411.62	80.00- 120.00	100.00
5.791	5.791 (0.972)	43	2163696			143.29- 203.29	167.92
5.791	5.791 (0.972)	57	1169617			61.40- 121.40	90.77
56 Trichloroethene					CAS #: 79-01-6		
6.264	6.264 (1.052)	95	1953940	537.000	488.99	80.00- 120.00	100.00
6.264	6.264 (1.052)	130	2141235			81.46- 141.46	109.59
6.264	6.264 (1.052)	97	1277216			34.92- 94.92	65.37
58 Methyl Cyclohexane					CAS #: 108-87-2		
6.586	6.586 (1.106)	83	2414967	402.000	409.27	80.00- 120.00	100.00
6.586	6.586 (1.106)	98	1080457			15.14- 75.14	44.74
6.586	6.586 (1.106)	55	1838115			46.07- 106.07	76.11
59 1,2-Dichloropropane					CAS #: 78-87-5		
6.622	6.622 (1.112)	63	1415767	462.000	488.10	80.00- 120.00	100.00
6.622	6.622 (1.112)	62	976151			38.13- 98.13	68.95
6.607	6.607 (1.109)	41	1721860			92.30- 152.30	121.62

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		
6.736	6.736 (1.131)	88	977673	360.000	369.77	80.00- 120.00	100.00
6.736	6.736 (1.131)	58	608168			31.73- 91.73	62.21
6.736	6.736 (1.131)	57	223238			1.20- 61.20	22.83
65 4-Methyl-2-pentanone					CAS #: 108-10-1		
7.832	7.832 (1.315)	58	1123299	410.000	431.83	80.00- 120.00	100.00
7.832	7.832 (1.315)	43	2825916			221.14- 281.14	251.57
7.832	7.832 (1.315)	85	560739			20.58- 80.58	49.92
67 Toluene					CAS #: 108-88-3		
8.047	8.047 (0.816)	91	4959918	377.000	367.95	80.00- 120.00	100.00
8.047	8.047 (0.816)	92	2903791			28.32- 88.32	58.55
70 1,1,2-Trichloroethane					CAS #: 79-00-5		
8.649	8.649 (1.452)	97	1777126	546.000	544.04	80.00- 120.00	100.00
8.649	8.649 (1.452)	99	1114236			32.57- 92.57	62.70
8.649	8.649 (1.452)	83	1467893			50.93- 110.93	82.60
71 Tetrachloroethene					CAS #: 127-18-4		
8.728	8.728 (0.885)	166	2918812	678.000	657.50	80.00- 120.00	100.00
8.728	8.728 (0.885)	129	2059673			41.03- 101.03	70.57
8.728	8.728 (0.885)	131	1999865			38.99- 98.99	68.52
72 2-Hexanone					CAS #: 591-78-6		
8.957	8.957 (0.908)	58	1506986	410.000	439.29	80.00- 120.00	100.00
8.957	8.957 (0.908)	43	2756418			155.38- 215.38	182.91
8.957	8.957 (0.908)	100	335612			0.00- 52.71	22.27
74 1,2-Dibromoethane					CAS #: 106-93-4		
9.243	9.243 (0.938)	107	2799353	768.000	802.97	80.00- 120.00	100.00
9.243	9.243 (0.938)	109	2666533			65.47- 125.47	95.26
81 Chlorobenzene					CAS #: 108-90-7		
9.895	9.895 (1.004)	112	4334555	460.000	441.23	80.00- 120.00	100.00
9.895	9.895 (1.004)	114	1399518			2.20- 62.20	32.29
9.895	9.895 (1.004)	77	2260079			20.93- 80.93	52.14
82 Ethyl Benzene					CAS #: 100-41-4		
10.053	10.053 (1.020)	106	2156985	434.000	427.27	80.00- 120.00	100.00
10.053	10.053 (1.020)	91	6530722			272.45- 332.45	302.77
84 m,p-Xylene					CAS #: 108-38-3		
10.232	10.232 (1.038)	106	2715538	434.000	422.84	80.00- 120.00	100.00
10.232	10.232 (1.038)	91	5343115			164.06- 224.06	196.76

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO
88 o-Xylene					CAS #: 95-47-6		
10.712	10.712 (0.938)	106	2539690	434.000	421.90	80.00- 120.00	100.00
10.712	10.712 (0.938)	91	5206365			174.12- 234.12	205.00
89 Styrene					CAS #: 100-42-5		
10.748	10.748 (0.942)	104	4232104	426.000	424.25	80.00- 120.00	100.00
10.748	10.748 (0.942)	78	2016039			16.31- 76.31	47.64
91 Cumene					CAS #: 98-82-8		
11.206	11.206 (0.982)	105	7762180	492.000	473.94	80.00- 120.00	100.00
11.206	11.206 (0.982)	120	2109918			0.00- 57.22	27.18
11.206	11.206 (0.982)	51	672718			0.00- 38.43	8.67
94 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
11.621	11.621 (1.018)	83	3863246	687.000	741.68	80.00- 120.00	100.00
11.629	11.629 (1.019)	85	2512056			35.83- 95.83	65.02
96 Propylbenzene					CAS #: 103-65-1		
11.743	11.743 (1.029)	91	9038717	492.000	472.12	80.00- 120.00	100.00
11.743	11.743 (1.029)	120	2278269			0.00- 55.53	25.21
11.743	11.743 (1.029)	105	358651			0.00- 33.92	3.97
97 4-Ethyltoluene					CAS #: 622-96-8		
11.908	11.908 (1.043)	120	2421629	492.000	471.43	80.00- 120.00	100.00
11.908	11.908 (1.043)	105	7761593			298.20- 358.20	320.51
98 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
11.994	11.994 (1.051)	120	3377843	492.000	460.59	80.00- 120.00	100.00
11.994	11.994 (1.051)	105	6779261			167.68- 227.68	200.70
100 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
12.460	12.460 (1.092)	120	3152883	492.000	459.93	80.00- 120.00	100.00
12.460	12.460 (1.092)	105	6833961			185.14- 245.14	216.75
101 1,3-Dichlorobenzene					CAS #: 541-73-1		
12.789	12.789 (1.120)	146	5194507	601.000	554.72	80.00- 120.00	100.00
12.789	12.789 (1.120)	148	3355979			34.46- 94.46	64.61
12.789	12.789 (1.120)	111	2008749			7.45- 67.45	38.67
102 1,4-Dichlorobenzene					CAS #: 106-46-7		
12.925	12.925 (1.132)	146	5214396	601.000	555.06	80.00- 120.00	100.00
12.925	12.925 (1.132)	148	3361841			33.91- 93.91	64.47
12.925	12.925 (1.132)	111	1932477			6.02- 66.02	37.06
105 1,2-Dichlorobenzene					CAS #: 95-50-1		
13.362	13.362 (1.171)	146	5002624	601.000	549.50	80.00- 120.00	100.00

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

  105 1,2-Dichlorobenzene (continued)
 13.362  13.362 (1.171)   148   3207447                    34.29-  94.29    64.12
 13.362  13.362 (1.171)   111   1987533                     8.63-  68.63    39.73
-------------------------------------------------------------------------------
  106 1,2,4-Trichlorobenzene                        CAS #: 120-82-1
 15.418  15.418 (1.351)   180   4942744 742.000   676.16  80.00- 120.00   100.00
 15.418  15.418 (1.351)   182   4674321                    64.63- 124.63    94.57
-------------------------------------------------------------------------------
  107 Hexachlorobutadiene                           CAS #: 87-68-3
 15.633  15.633 (1.370)   225   3632972 1070.00   951.69  80.00- 120.00   100.00
 15.633  15.633 (1.370)   223   2298871                    32.03-  92.03    63.28
-------------------------------------------------------------------------------
  109 Naphthalene                                   CAS #: 91-20-3
 15.726  15.726 (1.378)   128   6003996 250.000   227.26  80.00- 120.00   100.00
 15.726  15.726 (1.378)   127    786785                     0.00-  42.99    13.10
-------------------------------------------------------------------------------
  110 2-Methylnaphthalene                           CAS #: 91-57-6
 17.180  17.180 (1.505)   142   4212465 250.000   241.19  80.00- 120.00   100.00
 17.180  17.180 (1.505)   141   3657387                    56.24- 116.24    86.82
 17.173  17.173 (1.505)   115   1256426                     0.00-  58.81    29.83
-------------------------------------------------------------------------------
  111 1-Methylnaphthalene                           CAS #: 90-12-0
 17.395  17.395 (1.524)   142   3832686 250.000   239.90  80.00- 120.00   100.00
 17.395  17.395 (1.524)   141   3454709                    60.38- 120.38    90.14
 17.395  17.395 (1.524)   115   1190003                     0.56-  60.56    31.05
-------------------------------------------------------------------------------
  112 Acenaphthylene                                CAS #: 208-96-8
 19.243  19.243 (1.686)   152   6758454 250.000   237.30  80.00- 120.00   100.00
 19.243  19.243 (1.686)   151   1351598                     0.00-  49.78    20.00
 19.243  19.243 (1.686)   153    890081                     0.00-  43.07    13.17
-------------------------------------------------------------------------------
  113 Acenaphthene                                  CAS #: 83-32-9
 19.508  19.508 (1.709)   154   3798006 250.000   279.12  80.00- 120.00   100.00(A)
 19.508  19.508 (1.709)   152   1940820                    21.85-  81.85    51.10
 19.508  19.508 (1.709)   153   4159105                    79.23- 139.23   109.51
-------------------------------------------------------------------------------
  114 Fluorene                                      CAS #: 86-73-7
 20.661  20.661 (1.810)   166   3901079 250.000   341.13  80.00- 120.00   100.00(A)
 20.661  20.661 (1.810)   165   3706509                    65.14- 125.14    95.01
-------------------------------------------------------------------------------
  115 Phenanthrene                                  CAS #: 85-01-8
 22.839  22.839 (2.001)   178   6925288 250.000   244.14  80.00- 120.00   100.00
 22.839  22.839 (2.001)   176   1305209                     0.00-  48.56    18.85
 22.839  22.839 (2.001)   179   1063923                     0.00-  45.19    15.36
-------------------------------------------------------------------------------
  116 Anthracene                                    CAS #: 120-12-7
 22.946  22.946 (2.010)   178   6648535 250.000   273.78  80.00- 120.00   100.00(A)
```

RT	EXP RT	(REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO
116 Anthracene (continued)								
22.946	22.946	(2.010)	176	1206817			0.00- 47.99	18.15
22.946	22.946	(2.010)	179	1019678			0.00- 45.19	15.34
117 Fluoranthene						CAS #: 206-44-0		
26.127	26.127	(2.289)	202	6048618	250.000	298.17	80.00- 120.00	100.00(A)
26.119	26.119	(2.288)	101	914497			0.00- 45.14	15.12
118 Pyrene						CAS #: 129-00-0		
26.979	26.979	(2.364)	202	6431144	250.000	309.64	80.00- 120.00	100.00(A)
26.979	26.979	(2.364)	101	1143371			0.00- 48.11	17.78
26.979	26.979	(2.364)	100	926163			0.00- 44.51	14.40

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: 6061414.d
Lab Smp Id: VI ICAL7,100Surr
Analysis Type: VOA
Quant Type: ISTD
Operator: CT
Method File: /chem/msd6.i/15jun16.b/616z0614vi.m
Misc Info: 2516-246-100ml(9/10/16),2744-31-250(7/5/16)

Calibration Date: 14-JUN-2016
Calibration Time: 14:59
Level: LOW
Sample Type: AIR

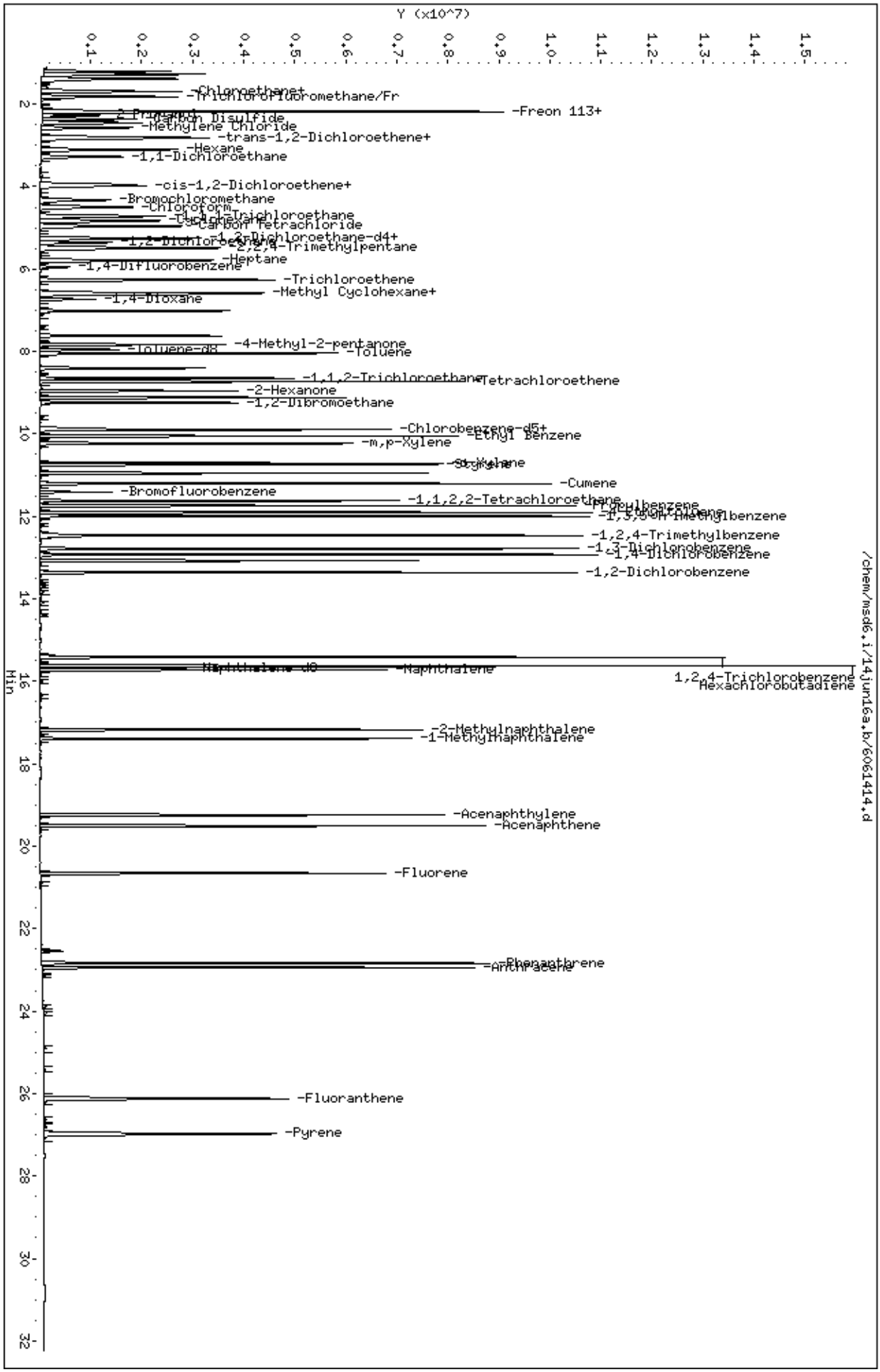
COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
40 Bromochloromethan	156066	93640	218492	175805	12.65
54 1,4-Difluorobenze	638538	383123	893953	690432	8.13
79 Chlorobenzene-d5	603523	362114	844932	651647	7.97
92 Bromofluorobenzen	441798	265079	618517	475032	7.52

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
40 Bromochloromethan	4.32	3.99	4.65	4.32	0.00
54 1,4-Difluorobenze	5.95	5.62	6.28	5.96	0.12
79 Chlorobenzene-d5	9.86	9.53	10.19	9.86	0.00
92 Bromofluorobenzen	11.41	11.08	11.74	11.41	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/14jun16a.b/6061414.d
Date : 14-JUN-2016 16:18
Client ID:
Sample Info: ;VI ICAL7.100Surr
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/14jun16a.b/6061415.d
Lab Smp Id: VI ICAL8,noSurr
Inj Date : 14-JUN-2016 16:58
Operator : CT Inst ID: msd6.i
Smp Info : ;VI ICAL8,noSurr
Misc Info : 2516-246-200ml(9/10/16),noPAH
Comment :
Method : /chem/msd6.i/15jun16.b/616z0614vi.m
Meth Date : 21-Jun-2016 11:23 U5BT Quant Type: ISTD
Cal Date : 14-JUN-2016 16:58 Cal File: 6061415.d
Als bottle: 18 Calibration Sample, Level: 8
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: VOC_ICALnoSS.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO
* 40 Bromochloromethane						CAS #: 74-97-5	
4.315	4.315 (1.000)	130	182260	26.0000		80.00- 120.00	100.00
4.315	4.315 (1.000)	128	140855			47.94- 107.94	77.28
4.315	4.315 (1.000)	49	190848			68.24- 128.24	104.71
* 54 1,4-Difluorobenzene						CAS #: 540-36-3	
5.955	5.955 (1.000)	114	700715	23.0000		80.00- 120.00	100.00
5.955	5.955 (1.000)	88	108615			0.00- 45.46	15.50
* 79 Chlorobenzene-d5						CAS #: 3114-55-4	
9.866	9.866 (1.000)	117	650215	24.0000		80.00- 120.00	100.00
9.866	9.866 (1.000)	82	328867			19.06- 79.06	50.58
* 92 Bromofluorobenzene						CAS #: 460-00-4	
11.414	11.414 (1.000)	174	481361	36.0000		80.00- 120.00	100.00
11.414	11.414 (1.000)	95	508543			74.19- 134.19	105.65
11.414	11.414 (1.000)	176	471467			67.61- 127.61	97.94
3 Freon 114						CAS #: 76-14-2	
1.283	1.283 (0.297)	135	4133697	1400.00	1215.2	80.00- 120.00	100.00(A)

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

    3 Freon 114 (continued)
  1.283   1.283 (0.297)   137   1338265                     2.20-  62.20    32.37
-------------------------------------------------------------------------------
    6 Vinyl Chloride                                CAS #: 75-01-4
  1.381   1.381 (0.320)    62   2062767 511.000   472.99  80.00- 120.00   100.00(A)
  1.381   1.381 (0.320)    64    722427                    13.62-  73.62    35.02
-------------------------------------------------------------------------------
    7 1,3-Butadiene                                 CAS #: 106-99-0
  1.395   1.395 (0.323)    54   1582899 442.000   404.76  80.00- 120.00   100.00(A)
  1.395   1.395 (0.323)    39   3144900                  117.26- 177.26   198.68
-------------------------------------------------------------------------------
    9 Chloroethane                                  CAS #: 75-00-3
  1.647   1.647 (0.382)    64   1006235 528.000   472.19  80.00- 120.00   100.00
  1.647   1.647 (0.382)    66    319850                     0.84-  60.84    31.79
  1.647   1.647 (0.382)    49    280048                     0.00-  56.89    27.83
-------------------------------------------------------------------------------
   10 Isopentane                                    CAS #: 78-78-4
  1.702   1.702 (0.395)    57   1696444 590.000   521.24  80.00- 120.00   100.00(A)
  1.702   1.702 (0.395)    43   2356003                  107.36- 167.36   138.88
-------------------------------------------------------------------------------
   11 Trichlorofluoromethane/Fr11                   CAS #: 75-69-4
  1.814   1.814 (0.420)   101   6311202 1120.00   1080.4  80.00- 120.00   100.00(A)
  1.814   1.814 (0.420)   103   4045835                    35.47-  95.47    64.11
-------------------------------------------------------------------------------
   15 Freon 113                                     CAS #: 76-13-1
  2.188   2.188 (0.507)   151   4936084 1530.00   1320.8  80.00- 120.00   100.00(A)
  2.188   2.188 (0.507)   153   3179314                    34.42-  94.42    64.41
  2.188   2.188 (0.507)   101   5228343                    75.78- 135.78   105.92
-------------------------------------------------------------------------------
   14 1,1-Dichloroethene                            CAS #: 75-35-4
  2.181   2.181 (0.505)    98   1662581 793.000   704.60  80.00- 120.00   100.00(A)
  2.181   2.181 (0.505)    96   2608148                  128.07- 188.07   156.87
  2.181   2.181 (0.505)    61   4021273                  203.73- 263.73   241.87
-------------------------------------------------------------------------------
   18 Carbon Disulfide                              CAS #: 75-15-0
  2.367   2.367 (0.548)    76   6999082 623.000   468.69  80.00- 120.00   100.00(A)
-------------------------------------------------------------------------------
   19 2-Propanol                                    CAS #: 67-63-0
  2.274   2.274 (0.527)    45   3597345 492.000   421.18  80.00- 120.00   100.00(A)
  2.274   2.274 (0.527)    43    713052                     0.00-  50.57    19.82
  2.274   2.274 (0.527)    59    147765                     0.00-  34.17     4.11
-------------------------------------------------------------------------------
   22 Methylene Chloride                            CAS #: 75-09-2
  2.575   2.575 (0.597)    49   2624677 695.000   495.21  80.00- 120.00   100.00(A)
  2.575   2.575 (0.597)    84   2240219                    55.25- 115.25    85.35
  2.575   2.575 (0.597)    51    808915                     0.54-  60.54    30.82
-------------------------------------------------------------------------------
```

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO
26 MTBE					CAS #: 1634-04-4		
2.804	2.804 (0.650)	73	1829740	721.000	214.60	80.00- 120.00	100.00(A)
2.804	2.804 (0.650)	57	403940			0.00- 51.21	22.08
2.804	2.804 (0.650)	41	382609			0.00- 50.32	20.91
25 trans-1,2-Dichloroethene					CAS #: 156-60-5		
2.832	2.832 (0.656)	98	1663795	793.000	733.48	80.00- 120.00	100.00(A)
2.832	2.832 (0.656)	61	3513941			178.66- 238.66	211.20
2.832	2.832 (0.656)	96	2622063			127.69- 187.69	157.60
28 Hexane					CAS #: 110-54-3		
3.105	3.105 (0.719)	57	3619895	705.000	659.20	80.00- 120.00	100.00(A)
3.105	3.105 (0.719)	43	2203901			30.80- 90.80	60.88
3.105	3.105 (0.719)	86	574736			0.00- 45.79	15.88
29 1,1-Dichloroethane					CAS #: 75-34-3		
3.284	3.284 (0.761)	63	4111296	810.000	755.56	80.00- 120.00	100.00(A)
3.276	3.276 (0.759)	65	1318108			1.92- 61.92	32.06
37 cis-1,2-Dichloroethene					CAS #: 156-59-2		
3.986	3.986 (0.924)	98	1766008	793.000	720.87	80.00- 120.00	100.00(A)
3.978	3.978 (0.922)	96	2735695			125.20- 185.20	154.91
3.978	3.978 (0.922)	61	3347209			158.24- 218.24	189.54
38 2-Butanone					CAS #: 78-93-3		
3.943	3.943 (0.914)	72	1009101	590.000	435.89	80.00- 120.00	100.00(A)
3.943	3.943 (0.914)	43	3958151			361.05- 421.05	392.25
3.943	3.943 (0.914)	57	322225			4.40- 64.40	31.93
44 Chloroform					CAS #: 67-66-3		
4.501	4.501 (1.043)	83	5160684	977.000	896.33	80.00- 120.00	100.00(A)
4.501	4.501 (1.043)	85	3368396			35.45- 95.45	65.27
46 Cyclohexane					CAS #: 110-82-7		
4.838	4.838 (0.812)	84	3264741	688.000	665.30	80.00- 120.00	100.00(A)
4.838	4.838 (0.812)	56	3745032			82.98- 142.98	114.71
4.838	4.838 (0.812)	41	2079964			32.69- 92.69	63.71
45 1,1,1-Trichloroethane					CAS #: 71-55-6		
4.723	4.723 (0.793)	97	4926980	1091.00	992.20	80.00- 120.00	100.00(A)
4.723	4.723 (0.793)	99	3176323			34.83- 94.83	64.47
47 Carbon Tetrachloride					CAS #: 56-23-5		
4.967	4.967 (0.834)	119	5868981	1260.00	1273.2	80.00- 120.00	100.00(A)
4.967	4.967 (0.834)	117	6061606			73.53- 133.53	103.28

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

   51 2,2,4-Trimethylpentane                        CAS #: 540-84-1
  5.497   5.497 (0.923)    57  11425131 934.000   915.24  80.00- 120.00   100.00(A)
  5.497   5.497 (0.923)    56   3565244                     1.12-  61.12    31.21
  5.497   5.497 (0.923)    41   3222510                     0.00-  57.96    28.21
-------------------------------------------------------------------------------
   48 Benzene                                       CAS #: 71-43-2
  5.261   5.261 (0.883)    78   7473889 639.000   553.97  80.00- 120.00   100.00(A)
  5.261   5.261 (0.883)    77   1763907                     0.00-  53.50    23.60
-------------------------------------------------------------------------------
   50 1,2-Dichloroethane                            CAS #: 107-06-2
  5.368   5.368 (0.901)    62   3317524 809.000   773.44  80.00- 120.00   100.00(A)
  5.368   5.368 (0.901)    64   1081820                     2.93-  62.93    32.61
-------------------------------------------------------------------------------
   53 Heptane                                       CAS #: 142-82-5
  5.798   5.798 (0.974)    71   2513053 820.000   791.01  80.00- 120.00   100.00(A)
  5.791   5.791 (0.972)    43   4149914                   143.29- 203.29   165.13
  5.798   5.798 (0.974)    57   2262713                    61.40- 121.40    90.04
-------------------------------------------------------------------------------
   56 Trichloroethene                               CAS #: 79-01-6
  6.263   6.263 (1.052)    95   3825103 1080.00   943.21  80.00- 120.00   100.00(A)
  6.263   6.263 (1.052)   130   4104217                    81.46- 141.46   107.30
  6.263   6.263 (1.052)    97   2484227                    34.92-  94.92    64.95
-------------------------------------------------------------------------------
   58 Methyl Cyclohexane                            CAS #: 108-87-2
  6.586   6.586 (1.106)    83   4700008 803.000   784.83  80.00- 120.00   100.00(A)
  6.586   6.586 (1.106)    98   2102106                    15.14-  75.14    44.73
  6.586   6.586 (1.106)    55   3597512                    46.07- 106.07    76.54
-------------------------------------------------------------------------------
   59 1,2-Dichloropropane                           CAS #: 78-87-5
  6.622   6.622 (1.112)    63   2679517 924.000   910.23  80.00- 120.00   100.00(A)
  6.622   6.622 (1.112)    62   1852583                    38.13-  98.13    69.14
  6.593   6.593 (1.107)    41   3320747                    92.30- 152.30   123.93
-------------------------------------------------------------------------------
   60 1,4-Dioxane                                   CAS #: 123-91-1
  6.736   6.736 (1.131)    88   1966598 721.000   732.88  80.00- 120.00   100.00(A)
  6.736   6.736 (1.131)    58   1222268                    31.73-  91.73    62.15
  6.736   6.736 (1.131)    57    419980                     1.20-  61.20    21.36
-------------------------------------------------------------------------------
   65 4-Methyl-2-pentanone                          CAS #: 108-10-1
  7.839   7.839 (1.316)    58   2186316 819.000   828.14  80.00- 120.00   100.00(A)
  7.839   7.839 (1.316)    43   5450911                   221.14- 281.14   249.32
  7.839   7.839 (1.316)    85   1101265                    20.58-  80.58    50.37
-------------------------------------------------------------------------------
   67 Toluene                                       CAS #: 108-88-3
  8.054   8.054 (0.816)    91   9489753 754.000   705.55  80.00- 120.00   100.00(A)
  8.054   8.054 (0.816)    92   5576308                    28.32-  88.32    58.76
-------------------------------------------------------------------------------
```

```
                                        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
  8.656   8.656 (1.453)    97   3447367 1090.00   1039.9  80.00- 120.00   100.00(A)
  8.656   8.656 (1.453)    99   2175318                   32.57-  92.57    63.10
  8.656   8.656 (1.453)    83   2884663                   50.93- 110.93    83.68
-------------------------------------------------------------------------------
   71 Tetrachloroethene                            CAS #: 127-18-4
  8.735   8.735 (0.885)   166   5522957 1360.00   1246.8  80.00- 120.00   100.00(A)
  8.735   8.735 (0.885)   129   3866477                   41.03- 101.03    70.01
  8.735   8.735 (0.885)   131   3738254                   38.99-  98.99    67.69
-------------------------------------------------------------------------------
   72 2-Hexanone                                   CAS #: 591-78-6
  8.964   8.964 (0.909)    58   2896554 819.000   846.21  80.00- 120.00   100.00(A)
  8.964   8.964 (0.909)    43   5271782                  155.38- 215.38   182.00
  8.964   8.964 (0.909)   100    640590                    0.00-  52.71    22.12
-------------------------------------------------------------------------------
   74 1,2-Dibromoethane                            CAS #: 106-93-4
  9.243   9.243 (0.937)   107   5085613 1540.00   1462.0  80.00- 120.00   100.00(A)
  9.243   9.243 (0.937)   109   4814275                   65.47- 125.47    94.66
-------------------------------------------------------------------------------
   81 Chlorobenzene                                CAS #: 108-90-7
  9.902   9.902 (1.004)   112   8108148 921.000   827.17  80.00- 120.00   100.00(A)
  9.902   9.902 (1.004)   114   2646493                    2.20-  62.20    32.64
  9.902   9.902 (1.004)    77   4409076                   20.93-  80.93    54.38
-------------------------------------------------------------------------------
   82 Ethyl Benzene                                CAS #: 100-41-4
 10.060  10.060 (1.020)   106   4021195 868.000   798.29  80.00- 120.00   100.00(A)
 10.060  10.060 (1.020)    91  12286622                  272.45- 332.45   305.55
-------------------------------------------------------------------------------
   84 m,p-Xylene                                   CAS #: 108-38-3
 10.239  10.239 (1.038)   106   5162145 868.000   805.57  80.00- 120.00   100.00(A)
 10.239  10.239 (1.038)    91  10250816                  164.06- 224.06   198.58
-------------------------------------------------------------------------------
   88 o-Xylene                                     CAS #: 95-47-6
 10.719  10.719 (0.939)   106   4710017 868.000   772.16  80.00- 120.00   100.00(A)
 10.719  10.719 (0.939)    91   9798795                  174.12- 234.12   208.04
-------------------------------------------------------------------------------
   89 Styrene                                      CAS #: 100-42-5
 10.748  10.748 (0.942)   104   7808916 852.000   772.51  80.00- 120.00   100.00(A)
 10.748  10.748 (0.942)    78   3891895                   16.31-  76.31    49.84
-------------------------------------------------------------------------------
   91 Cumene                                       CAS #: 98-82-8
 11.206  11.206 (0.982)   105  14145245 983.000   852.31  80.00- 120.00   100.00(A)
 11.206  11.206 (0.982)   120   3876011                    0.00-  57.22    27.40
 11.206  11.206 (0.982)    51   1290944                    0.00-  38.43     9.13
-------------------------------------------------------------------------------
   94 1,1,2,2-Tetrachloroethane                    CAS #: 79-34-5
 11.629  11.629 (1.019)    83   7422143 1370.00   1406.2  80.00- 120.00   100.00(A)
```

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

   94 1,1,2,2-Tetrachloroethane (continued)
 11.629  11.629 (1.019)    85   4823732                    35.83-  95.83    64.99
-------------------------------------------------------------------------------
   96 Propylbenzene                                CAS #: 103-65-1
 11.743  11.743 (1.029)    91  16340947 983.000   842.31  80.00- 120.00   100.00(A)
 11.743  11.743 (1.029)   120   4181840                     0.00-  55.53    25.59
 11.743  11.743 (1.029)   105    667249                     0.00-  33.92     4.08
-------------------------------------------------------------------------------
   97 4-Ethyltoluene                               CAS #: 622-96-8
 11.908  11.908 (1.043)   120   4341824 983.000   834.13  80.00- 120.00   100.00(A)
 11.908  11.908 (1.043)   105  14021432                   298.20- 358.20   322.94
-------------------------------------------------------------------------------
   98 1,3,5-Trimethylbenzene                       CAS #: 108-67-8
 11.994  11.994 (1.051)   120   6018119 983.000   809.82  80.00- 120.00   100.00(A)
 11.994  11.994 (1.051)   105  12298196                   167.68- 227.68   204.35
-------------------------------------------------------------------------------
  100 1,2,4-Trimethylbenzene                       CAS #: 95-63-6
 12.460  12.460 (1.092)   120   5709113 983.000   821.87  80.00- 120.00   100.00(A)
 12.460  12.460 (1.092)   105  12733438                   185.14- 245.14   223.04
-------------------------------------------------------------------------------
  101 1,3-Dichlorobenzene                          CAS #: 541-73-1
 12.789  12.789 (1.120)   146   9460208 1200.00   996.97  80.00- 120.00   100.00(A)
 12.789  12.789 (1.120)   148   6150612                    34.46-  94.46    65.02
 12.789  12.789 (1.120)   111   3772968                     7.45-  67.45    39.88
-------------------------------------------------------------------------------
  102 1,4-Dichlorobenzene                          CAS #: 106-46-7
 12.925  12.925 (1.132)   146   9521033 1200.00   1000.2  80.00- 120.00   100.00(A)
 12.925  12.925 (1.132)   148   6199684                    33.91-  93.91    65.12
 12.925  12.925 (1.132)   111   3666683                     6.02-  66.02    38.51
-------------------------------------------------------------------------------
  105 1,2-Dichlorobenzene                          CAS #: 95-50-1
 13.362  13.362 (1.171)   146   9178637 1200.00   994.94  80.00- 120.00   100.00(A)
 13.362  13.362 (1.171)   148   5944230                    34.29-  94.29    64.76
 13.362  13.362 (1.171)   111   3746857                     8.63-  68.63    40.82
-------------------------------------------------------------------------------
  106 1,2,4-Trichlorobenzene                       CAS #: 120-82-1
 15.418  15.418 (1.351)   180   9239917 1480.00   1247.4  80.00- 120.00   100.00(A)
 15.418  15.418 (1.351)   182   8688707                    64.63- 124.63    94.03
-------------------------------------------------------------------------------
  107 Hexachlorobutadiene                          CAS #: 87-68-3
 15.633  15.633 (1.370)   225   6814625 2130.00   1761.7  80.00- 120.00   100.00(A)
 15.633  15.633 (1.370)   223   4322109                    32.03-  92.03    63.42
-------------------------------------------------------------------------------
```

QC Flag Legend

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

Report Date: 21-Jun-2016 11:23

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd6.i
Lab File ID: 6061415.d
Lab Smp Id: VI ICAL8,noSurr
Analysis Type: VOA
Quant Type: ISTD
Operator: CT
Method File: /chem/msd6.i/15jun16.b/616z0614vi.m
Misc Info: 2516-246-200ml(9/10/16),noPAH

Calibration Date: 14-JUN-2016
Calibration Time: 14:59

Level: LOW
Sample Type: AIR

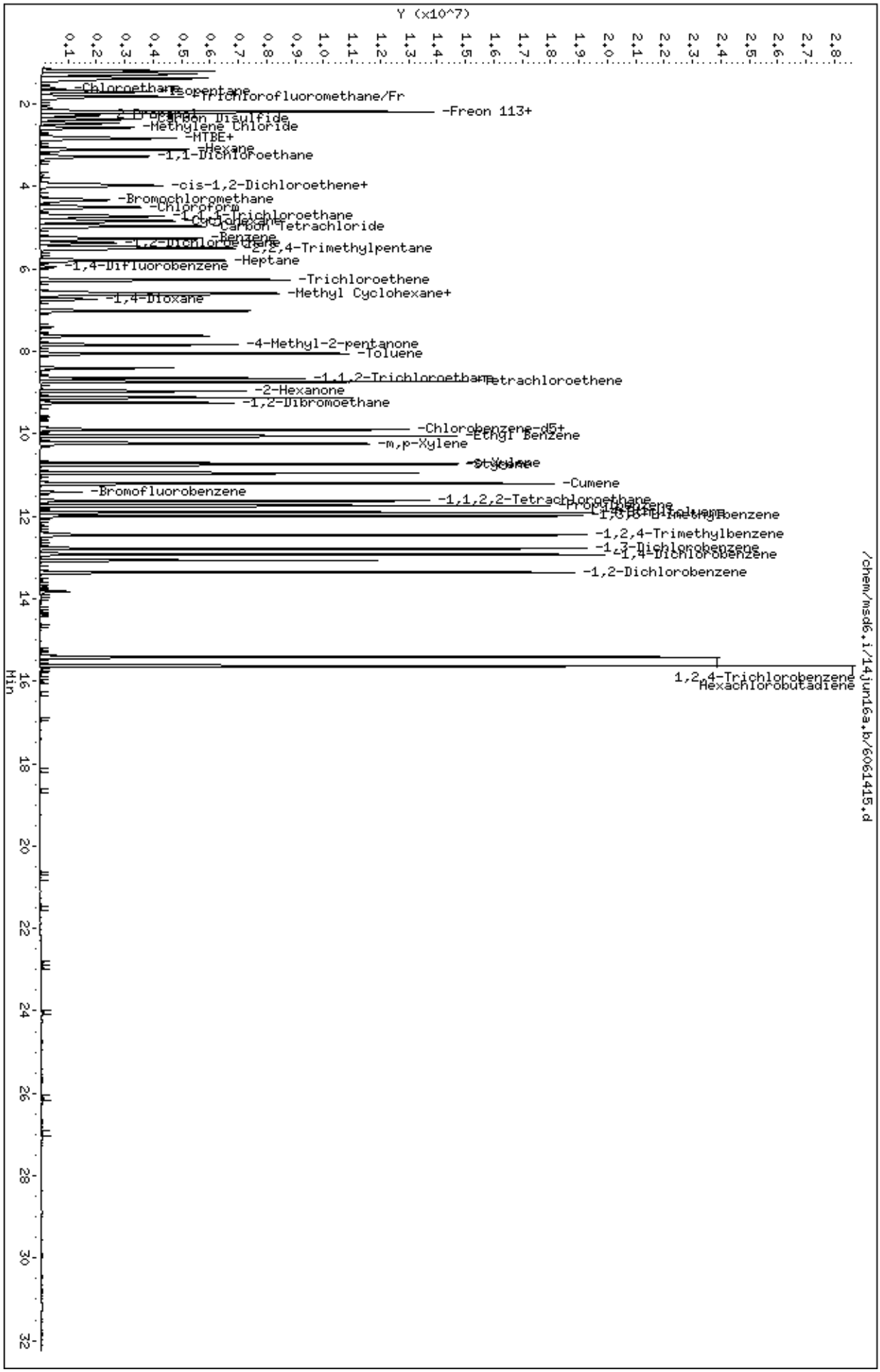
COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
40 Bromochloromethan	156066	93640	218492	182260	16.78
54 1,4-Difluorobenze	638538	383123	893953	700715	9.74
79 Chlorobenzene-d5	603523	362114	844932	650215	7.74
92 Bromofluorobenzen	441798	265079	618517	481361	8.95

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
40 Bromochloromethan	4.32	3.99	4.65	4.32	0.00
54 1,4-Difluorobenze	5.95	5.62	6.28	5.96	0.12
79 Chlorobenzene-d5	9.86	9.53	10.19	9.87	0.07
92 Bromofluorobenzen	11.41	11.08	11.74	11.41	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/14jun16a.b/6061415.d
Date : 14-JUN-2016 16:58
Client ID:
Sample Info: ;VI ICAL8,noSurr
Column phase: RTx-624

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



Page 1

MSD-6 VI VOC + Naphs MDL L1

Report Date : 04-Apr-2016 11:55

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

VOC std id: 2516-231-1000 ppbv
VOC amt spiked: 1.0 mL
(Naphthalene, 2-MN, 1-MN spiked using 1st source std.
PAH std id: 2744-32-1.0 ng
PAH amt spiked: 1.0 uL

ID:	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08
FILENAME:	6040105	6040106	6040107	6040109	6040110	6040111	6040112	6040113
INJ.DATE:	01-APR-2016	01-APR-2016	01-APR-2016	01-APR-2016	01-APR-2016	01-APR-2016	01-APR-2016	01-APR-2016
INJ.TIME:	10:48	11:28	12:07	13:48	14:28	15:07	15:48	16:27

Compound units in ng	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	AVG CONC	STD DEV	MDL	RL	amt spk
1 Propylene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
2 Dichlorodifluoromethan	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
3 Freon 114	7.90	7.90	7.72	8.21	8.00	7.87	7.72	7.75	7.88	0.17	0.50	14	7.0
4 Chloromethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
5 Butane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
~~6 Vinyl Chloride~~	~~2.74~~	~~2.75~~	~~2.76~~	~~2.97~~	~~2.68~~	~~2.64~~	~~2.67~~	~~2.50~~	~~2.73~~	~~0.05~~	~~0.16~~	LA 4/12/16	
7 1,3-Butadiene	2.84	2.69	2.41	2.82	2.85	2.53	2.97	2.48	2.70	0.20	0.61	2.2	2.2
8 Bromomethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
9 Chloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
10 Isopentane	4.50	3.20	3.60	3.90	3.28	3.20	3.52	3.42	3.59	0.46	1.39	5.9	3.0
11 Trichlorofluoromethane	5.10	5.18	4.80	4.83	5.09	4.93	5.28	5.39	5.08	0.21	0.63	11	5.6
12 Vinyl Bromide	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
13 Ethanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
14 1,1-Dichloroethene	4.25	4.02	3.57	3.89	4.25	3.71	4.02	3.82	3.94	0.24	0.73	4.0	4.0
15 Freon 113	7.48	7.24	6.73	7.22	7.13	6.86	7.21	7.50	7.17	0.27	0.80	7.7	7.7
16 Acetone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
17 Freon123a	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		

Reviewer 1 Lynette Antonacelli Date: 4/4/16
Reviewer 2 Brent Gates Date: 4/22/16

* Vinyl chloride was not included at the RL level due to poor performance of the secondary ion.

** 1,4-Dioxane did not meet the 1 and 20 mean recovered conc / MDL value.

Report Date : 04-Apr-2016 11:55

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
18 Carbon Disulfide	4.76	3.52	3.48	4.60	3.86	3.36	3.90	4.43	3.99	0.54	1.63	6.2	3.1
19 2-Propanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
20 Pentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
21 3-Chloropropene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
22 Methylene Chloride	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
23 Acrolein	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
24 tert-Butyl-Alcohol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
25 trans-1,2-Dichloroethe	3.52	3.31	3.02	3.25	3.26	2.92	3.06	3.50	3.23	0.22	0.66	4.0	4.0
26 MTBE	4.24	3.27	3.55	3.95	3.43	3.42	3.48	3.88	3.65	0.33	0.99	22	3.6
27 Acrylonitrile	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
28 Hexane	4.14	3.85	3.35	3.69	3.87	3.31	3.63	3.77	3.70	0.27	0.82	35	3.5
29 1,1-Dichloroethane	3.98	3.78	3.59	3.77	3.96	3.58	3.96	4.24	3.86	0.22	0.66	4.0	4.0
30 Isopropyl ether	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
31 Vinyl Acetate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
32 Chloroprene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
33 1-Propanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
34 2,2-Dichloropropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
35 t-Butylethyl Ether	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
36 Ethyl Acetate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
37 cis-1,2-Dichloroethene	4.25	4.16	3.84	3.99	4.25	3.58	3.90	4.36	4.04	0.26	0.78	4.0	4.0
38 2-Butanone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
39 2-Chloroethyl vinyl et	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		

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
*	40 Bromochloromethane	26.00	26.00	26.00	26.00	26.00	26.00	26.00	26.00	26.00	0.00	0.00		
	41 1,1-Dichloropropene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
	42 Tetrahydrofuran	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
	43 Octane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
	44 Chloroform	4.82	4.55	4.14	4.36	4.68	4.15	4.41	4.80	4.49	0.27	0.80	4.9	4.9
	45 1,1,1-Trichloroethane	5.36	4.52	4.28	4.84	4.69	4.31	4.71	5.39	4.76	0.43	1.27	5.4	5.5
	46 Cyclohexane	3.55	3.11	2.69	3.27	3.05	2.78	3.05	3.42	3.11	0.29	0.88	6.9	3.4
	47 Carbon Tetrachloride	5.88	4.86	4.40	5.30	5.09	4.40	3.82	5.88	4.95	0.73	2.20	6.3	6.3
	48 Benzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
$	49 1,2-Dichloroethane-d4	2.14	1.93	2.10	2.02	2.27	2.12	1.99	2.18	2.09	0.11	0.33	2.0	2.0
	50 1,2-Dichloroethane	3.90	3.54	3.18	3.38	3.63	3.16	3.60	3.99	3.55	0.30	0.91	4.0	4.0
	51 2,2,4-Trimethylpentane	5.00	4.64	3.69	4.14	4.36	3.73	4.03	4.32	4.24	0.44	1.33	9.4	4.7
	52 tert-amyl-Methyl Ether	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
	53 Heptane	4.45	4.30	3.41	3.64	4.06	3.23	3.91	4.41	3.93	0.46	1.39	8.2	4.1
*	54 1,4-Difluorobenzene	23.00	23.00	23.00	23.00	23.00	23.00	23.00	23.00	23.00	0.00	0.00		
	55 Decane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
	56 Trichloroethene	5.33	4.72	3.94	4.75	4.72	3.81	4.59	5.54	4.67	0.59	1.78	5.4	5.4
	57 Dodecane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
	58 Methyl Cyclohexane	3.83	3.45	3.00	3.17	3.36	2.87	3.12	3.67	3.31	0.33	0.98	8.0	4.0
	59 1,2-Dichloropropane	4.59	3.87	3.65	3.95	4.00	3.56	3.81	4.66	4.01	0.41	1.22	4.6	4.6
	60 1,4-Dioxane	4.25	4.58	2.70	3.49	3.94	2.61	4.10	7.05	4.09	1.39	4.17	11	3.6
	61 Undecane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
	62 Bromodichloromethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
	63 1,3-Dichloropropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		

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	and SPK
	64 cis-1,3-Dichloropropen	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
	65 4-Methyl-2-pentanone	3.89	3.56	3.13	3.22	3.52	2.87	3.26	3.27	3.34	0.31	0.93	8.2	4.1
$	66 Toluene-d8	1.89	1.90	1.90	1.86	2.20	1.85	1.91	1.92	1.93	0.11	0.34	2.0	2.0
	67 Toluene	4.06	3.51	2.78	3.25	3.26	2.57	2.99	4.45	3.36	0.63	1.90	7.5	3.8
	68 1,1,1,2-Tetrachloroeth	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
	69 trans-1,3-Dichloroprop	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
	70 1,1,2-Trichloroethane	4.77	4.45	3.91	4.25	4.42	3.73	4.06	5.11	4.34	0.45	1.36	5.4	5.4
	71 Tetrachloroethene	5.73	5.22	4.62	4.94	5.10	3.98	4.61	5.59	4.97	0.57	1.71	6.8	6.8
	72 2-Hexanone	3.65	3.57	2.91	3.01	3.29	2.62	2.98	3.48	3.19	0.36	1.09	8.2	4.1
	73 Dibromochloromethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
	74 1,2-Dibromoethane	6.10	5.84	5.08	5.08	5.82	4.57	4.95	6.73	5.52	0.72	2.15	7.7	7.7
	75 Bromobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
	76 1,2,3-Trichloropropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
	77 2-Chlorotoluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
	78 4-Chlorotoluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
*	79 Chlorobenzene-d5	24.00	24.00	24.00	24.00	24.00	24.00	24.00	24.00	24.00	0.00	0.00		
	80 tert-Butylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
	81 Chlorobenzene	4.09	3.81	3.09	3.37	3.66	2.81	3.33	4.19	3.54	0.48	1.44	4.6	4.6
	82 Ethyl Benzene	3.66	3.41	2.84	3.10	3.22	2.59	2.90	3.86	3.20	0.43	1.28	4.3	4.3
	83 sec-Butylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
	84 m,p-Xylene	3.86	3.54	2.83	3.21	3.22	2.50	2.83	4.92	3.36	0.76	2.28	8.7	4.3
	85 p-Cymene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
	86 1,2,3-Trimethylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		

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
87 Butylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
88 o-Xylene	3.80	3.69	2.89	3.27	3.44	2.79	3.02	4.42	3.42	0.54	1.63	8.7	4.3
89 Styrene	3.64	3.17	2.66	3.15	3.04	2.42	2.76	3.63	3.06	0.44	1.31	8.5	4.3
90 Bromoform	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
91 Cumene	4.00	3.84	3.25	3.66	3.72	3.06	3.21	4.26	3.63	0.42	1.26	9.8	4.9
* 92 Bromofluorobenzene	36.00	36.00	36.00	36.00	36.00	36.00	36.00	36.00	36.00	0.00	0.00		
93 1,2-Dibromo-3-Chloropr	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
94 1,1,2,2-Tetrachloroeth	4.88	5.03	4.46	4.49	5.03	4.03	4.18	5.26	4.67	0.44	1.33	6.9	6.9
95 1,3,5-Trichlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
96 Propylbenzene	3.97	3.89	3.31	3.72	3.79	3.02	3.28	4.31	3.66	0.43	1.28	9.8	4.9
97 4-Ethyltoluene	3.52	3.52	3.10	3.38	3.32	2.79	2.90	4.50	3.31	0.39	1.16	9.8	
98 1,3,5-Trimethylbenzene	3.59	3.60	3.05	3.42	3.50	2.78	2.99	4.00	3.37	0.40	1.20	9.8	
99 1,2,3-Trichlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
100 1,2,4-Trimethylbenzene	3.57	3.99	2.94	3.43	3.37	2.71	2.84	3.92	3.30	0.42	1.27	29	
101 1,3-Dichlorobenzene	4.05	4.08	3.52	4.11	3.96	3.30	3.40	4.64	3.88	0.45	1.34	6.0	6.0
102 1,4-Dichlorobenzene	3.89	3.91	3.46	4.16	4.02	3.15	3.37	4.44	3.80	0.44	1.30	6.0	6.0
103 Phenol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
217 2-Methylphenol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
218 3-Methylphenol/4-Methy	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
104 alpha-Chlorotoluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
105 1,2-Dichlorobenzene	3.90	3.94	3.37	4.18	3.94	3.20	3.33	4.52	3.80	0.46	1.38	6.0	6.0
106 1,2,4-Trichlorobenzene	4.05	4.05	3.21	4.99	4.64	3.23	3.24	5.28	4.09	0.83	2.47	15	7.4
107 Hexachlorobutadiene	7.15	6.68	5.25	7.98	7.61	5.38	5.01	8.92	6.75	1.43	4.28	21	"
$ 108 Naphthalene-d8	1.85	1.78	1.90	1.85	2.10	1.80	1.89	1.89	1.88	0.10	0.29	2.0	2.0

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#: 1606272-18A
EPA METHOD TO-17

File Name:	**6061503**	**Date of Extraction: NA**	**Date of Collection: NA**
Dil. Factor:	**1.00**		**Date of Analysis: 6/15/16 12:15 PM**

Compound	**%Recovery**
Naphthalene	111

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

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

Eurofins Air Toxics Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: msd6.i Injection Date: 15-JUN-2016 12:15
Lab File ID: 6061503.d Init. Cal. Date(s): 14-JUN-2016 15-JUN-2016
Analysis Type: AIR Init. Cal. Times: 12:17 11:01
Lab Sample ID: VI VOC+PAH CCV Quant Type: ISTD
Method: /chem/msd6.i/15jun16.b/616z0614vi.m

COMPOUND	RRF / AMOUNT	RF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
$ 49 1,2-Dichloroethane-d4	0.11863	0.10819	0.010	8.80045	30.00000	Averaged
$ 66 Toluene-d8	0.44804	0.42891	0.010	4.27017	30.00000	Averaged
$ 108 Naphthalene-d8	1.86417	1.78545	0.010	4.22260	30.00000	Averaged
3 Freon 114	0.48525	0.48563	0.010	-0.07888	30.00000	Averaged
6 Vinyl Chloride	0.62213	0.61926	0.010	0.46035	30.00000	Averaged
7 1,3-Butadiene	0.55788	0.53430	0.010	4.22692	30.00000	Averaged
9 Chloroethane	0.30285	0.25397	0.010	16.13950	30.00000	Averaged
10 Isopentane	0.46428	0.42905	0.010	7.58932	30.00000	Averaged
11 Trichlorofluoromethane/Fr11	0.83331	0.85971	0.010	-3.16906	30.00000	Averaged
15 Freon 113	0.53314	0.54923	0.010	-3.01808	30.00000	Averaged
14 1,1-Dichloroethene	0.33661	0.32212	0.010	4.30318	30.00000	Averaged
18 Carbon Disulfide	2.13028	1.62944	0.010	23.51078	30.00000	Averaged
19 2-Propanol	1.21734	1.16634	0.010	4.19002	30.00000	Averaged
22 Methylene Chloride	0.75608	0.68292	0.010	9.67653	30.00000	Averaged
25 trans-1,2-Dichloroethene	0.32359	0.31853	0.010	1.56469	30.00000	Averaged
26 MTBE	1.21628	1.10746	0.010	8.94666	30.00000	Averaged
28 Hexane	0.78335	0.74892	0.010	4.39533	30.00000	Averaged
29 1,1-Dichloroethane	0.77623	0.73842	0.010	4.87151	30.00000	Averaged
37 cis-1,2-Dichloroethene	0.34947	0.33288	0.010	4.74944	30.00000	Averaged
38 2-Butanone	0.33025	0.32959	0.010	0.20042	30.00000	Averaged
44 Chloroform	0.82134	0.79535	0.010	3.16461	30.00000	Averaged
46 Cyclohexane	0.16107	0.15461	0.010	4.00850	30.00000	Averaged
45 1,1,1-Trichloroethane	0.16299	0.16807	0.010	-3.11558	30.00000	Averaged
47 Carbon Tetrachloride	0.15131	0.16093	0.010	-6.35509	30.00000	Averaged
51 2,2,4-Trimethylpentane	0.40974	0.40582	0.010	0.95701	30.00000	Averaged
48 Benzene	0.44284	0.39312	0.010	11.22789	30.00000	Averaged
50 1,2-Dichloroethane	0.14079	0.13966	0.010	0.80338	30.00000	Averaged
53 Heptane	0.10428	0.09972	0.010	4.37906	30.00000	Averaged
56 Trichloroethene	0.13311	0.12409	0.010	6.77733	30.00000	Averaged
58 Methyl Cyclohexane	0.19657	0.19666	0.010	-0.04842	30.00000	Averaged
59 1,2-Dichloropropane	0.09663	0.09854	0.010	-1.97983	30.00000	Averaged
60 1,4-Dioxane	0.08808	0.08757	0.010	0.57323	30.00000	Averaged
65 4-Methyl-2-pentanone	0.08666	0.08740	0.010	-0.86313	30.00000	Averaged
67 Toluene	0.49646	0.48955	0.010	1.39224	30.00000	Averaged
70 1,1,2-Trichloroethane	0.10882	0.11236	0.010	-3.25382	30.00000	Averaged

Eurofins Air Toxics Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: msd6.i Injection Date: 15-JUN-2016 12:15
Lab File ID: 6061503.d Init. Cal. Date(s): 14-JUN-2016 15-JUN-2016
Analysis Type: AIR Init. Cal. Times: 12:17 11:01
Lab Sample ID: VI VOC+PAH CCV Quant Type: ISTD
Method: /chem/msd6.i/15jun16.b/616z0614vi.m

COMPOUND	RRF / AMOUNT	RF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
71 Tetrachloroethene	0.16350	0.16539	0.010	-1.15709	30.00000	Averaged
72 2-Hexanone	0.12635	0.12851	0.010	-1.71122	30.00000	Averaged
74 1,2-Dibromoethane	0.12840	0.13635	0.010	-6.19277	30.00000	Averaged
81 Chlorobenzene	0.36181	0.36532	0.010	-0.96959	30.00000	Averaged
82 Ethyl Benzene	0.18593	0.18879	0.010	-1.53878	30.00000	Averaged
84 m,p-Xylene	0.23653	0.23896	0.010	-1.02761	30.00000	Averaged
88 o-Xylene	0.45619	0.46987	0.010	-2.99898	30.00000	Averaged
89 Styrene	0.75599	0.79997	0.010	-5.81662	30.00000	Averaged
91 Cumene	1.24120	1.28042	0.010	-3.16003	30.00000	Averaged
94 1,1,2,2-Tetrachloroethane	0.39474	0.43562	0.010	-10.35446	30.00000	Averaged
96 Propylbenzene	1.45089	1.48345	0.010	-2.24399	30.00000	Averaged
97 4-Ethyltoluene	0.38929	0.41174	0.010	-5.76768	30.00000	Averaged
98 1,3,5-Trimethylbenzene	0.55578	0.57554	0.010	-3.55543	30.00000	Averaged
100 1,2,4-Trimethylbenzene	0.51952	0.54338	0.010	-4.59421	30.00000	Averaged
101 1,3-Dichlorobenzene	0.70966	0.74547	0.010	-5.04612	30.00000	Averaged
102 1,4-Dichlorobenzene	0.71195	0.74001	0.010	-3.94210	30.00000	Averaged
105 1,2-Dichlorobenzene	0.68994	0.71856	0.010	-4.14756	30.00000	Averaged
106 1,2,4-Trichlorobenzene	0.55399	0.61068	0.010	-10.23342	30.00000	Averaged
107 Hexachlorobutadiene	0.28930	0.31278	0.010	-8.11768	30.00000	Averaged
109 Naphthalene	2.00219	2.23086	0.010	-11.42066	30.00000	Averaged
110 2-Methylnaphthalene	1.32359	1.55673	0.010	-17.61440	30.00000	Averaged
111 1-Methylnaphthalene	1.21075	1.42199	0.010	-17.44650	30.00000	Averaged
112 Acenaphthylene	2.15842	2.53797	0.010	-17.58462	30.00000	Averaged
113 Acenaphthene	1.03120	1.43592	0.010	-39.24792	30.00000	Averaged <-
114 Fluorene	0.86665	1.51457	0.010	-74.76153	30.00000	Averaged <-
115 Phenanthrene	2.14968	2.58376	0.010	-20.19237	30.00000	Averaged
116 Anthracene	1.84039	2.47391	0.010	-34.42255	30.00000	Averaged <-
117 Fluoranthene	1.53732	1.78387	0.010	-16.03774	30.00000	Averaged
118 Pyrene	1.57399	1.86973	0.010	-18.78894	30.00000	Averaged

Eurofins Air Toxics Inc.

EPA Method TO-17 GC/MS

Data file : /chem/msd6.i/15jun16.b/6061503.d
Lab Smp Id: VI VOC+PAH CCV Client Smp ID: CCV
Inj Date : 15-JUN-2016 12:15
Operator : CT Inst ID: msd6.i
Smp Info : ;VI VOC+PAH CCV;CCV
Misc Info : 2516-246-20ml(9/10/16),2744-31-50(7/5/16)
Comment :
Method : /chem/msd6.i/15jun16.b/616z0614vi.m
Meth Date : 16-Jun-2016 09:56 U5BT Quant Type: ISTD
Cal Date : 15-JUN-2016 11:01 Cal File: 6061502.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	
4.301	4.301 (1.000)	130	155560	26.0000		80.00- 120.00	100.00
4.301	4.301 (1.000)	128	120199			47.94- 107.94	77.27
4.301	4.301 (1.000)	49	150514			68.24- 128.24	96.76
* 54 1,4-Difluorobenzene						CAS #: 540-36-3	
5.941	5.941 (1.000)	114	608468	23.0000		80.00- 120.00	100.00
5.941	5.941 (1.000)	88	91173			0.00- 45.46	14.98
* 79 Chlorobenzene-d5						CAS #: 3114-55-4	
9.852	9.852 (1.000)	117	578034	24.0000		80.00- 120.00	100.00
9.852	9.852 (1.000)	82	280397			19.06- 79.06	48.51
* 92 Bromofluorobenzene						CAS #: 460-00-4	
11.414	11.414 (1.000)	174	417214	36.0000		80.00- 120.00	100.00
11.406	11.406 (1.000)	95	429838			74.19- 134.19	103.03
11.414	11.414 (1.000)	176	400909			67.61- 127.61	96.09
$ 49 1,2-Dichloroethane-d4						CAS #: 17060-07-0	
5.225	5.225 (0.879)	65	71557	25.0000	22.800	80.00- 120.00	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)
  5.225   5.225 (0.879)    67     37946                    21.94-  81.94    53.03
-------------------------------------------------------------------------------
$  66 Toluene-d8                                   CAS #: 2037-26-5
  7.947   7.947 (0.807)    98    258253 25.0000   23.932  80.00- 120.00   100.00
  7.947   7.947 (0.807)    70     25964                     0.00-  39.97    10.05
  7.947   7.947 (0.807)   100    168305                    35.51-  95.51    65.17
-------------------------------------------------------------------------------
$ 108 Naphthalene-d8                               CAS #: 1146-65-2
 15.690  15.690 (1.375)   136    517303 25.0000   23.944  80.00- 120.00   100.00
 15.690  15.690 (1.375)   108     43751                     0.00-  38.72     8.46
-------------------------------------------------------------------------------
    3 Freon 114                                    CAS #: 76-14-2
  1.283   1.283 (0.298)   135    406777 140.000   140.11  80.00- 120.00   100.00
  1.283   1.283 (0.298)   137    131094                     2.20-  62.20    32.23
-------------------------------------------------------------------------------
    6 Vinyl Chloride                               CAS #: 75-01-4
  1.395   1.395 (0.324)    62    189330 51.1000   50.865  80.00- 120.00   100.00
  1.395   1.395 (0.324)    64     72376                    13.62-  73.62    38.23
-------------------------------------------------------------------------------
    7 1,3-Butadiene                                CAS #: 106-99-0
  1.395   1.395 (0.324)    54    141297 44.2000   42.332  80.00- 120.00   100.00
  1.395   1.395 (0.324)    39    224794                   117.53- 177.53   159.09
-------------------------------------------------------------------------------
    9 Chloroethane                                 CAS #: 75-00-3
  1.646   1.646 (0.383)    64     80230 52.8000   44.278  80.00- 120.00   100.00
  1.660   1.660 (0.386)    66     25493                     1.59-  61.59    31.77
  1.646   1.646 (0.383)    49     23141                     0.00-  57.55    28.84
-------------------------------------------------------------------------------
   10 Isopentane                                   CAS #: 78-78-4
  1.688   1.688 (0.393)    57    151454 59.0000   54.522  80.00- 120.00   100.00
  1.688   1.688 (0.393)    43    210010                   107.36- 167.36   138.66
-------------------------------------------------------------------------------
   11 Trichlorofluoromethane/Fr11                  CAS #: 75-69-4
  1.814   1.814 (0.422)   101    576098 112.000   115.55  80.00- 120.00   100.00
  1.814   1.814 (0.422)   103    377544                    35.47-  95.47    65.53
-------------------------------------------------------------------------------
   15 Freon 113                                    CAS #: 76-13-1
  2.173   2.173 (0.505)   151    502772 153.000   157.62  80.00- 120.00   100.00
  2.173   2.173 (0.505)   153    324540                    34.42-  94.42    64.55
  2.173   2.173 (0.505)   101    530268                    75.78- 135.78   105.47
-------------------------------------------------------------------------------
   14 1,1-Dichloroethene                           CAS #: 75-35-4
  2.180   2.180 (0.507)    98    152834 79.3000   75.888  80.00- 120.00   100.00
  2.180   2.180 (0.507)    96    240844                   128.07- 188.07   157.59
  2.180   2.180 (0.507)    61    359115                   203.73- 263.73   234.97
-------------------------------------------------------------------------------
```

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		
2.359	2.359 (0.549)	76	607366	62.3000	47.653	80.00- 120.00	100.00
19 2-Propanol					CAS #: 67-63-0		
2.274	2.274 (0.529)	45	343331	49.2000	47.138	80.00- 120.00	100.00(a)
2.274	2.274 (0.529)	43	73219			0.00- 50.21	21.33
2.266	2.266 (0.527)	59	14190			0.00- 34.19	4.13
22 Methylene Chloride					CAS #: 75-09-2		
2.574	2.574 (0.599)	49	283974	69.5000	62.775	80.00- 120.00	100.00
2.574	2.574 (0.599)	84	240076			55.25- 115.25	84.54
2.567	2.567 (0.597)	51	88192			0.48- 60.48	31.06
25 trans-1,2-Dichloroethene					CAS #: 156-60-5		
2.818	2.818 (0.655)	98	151127	79.3000	78.059	80.00- 120.00	100.00
2.818	2.818 (0.655)	61	311571			178.67- 238.67	206.17
2.818	2.818 (0.655)	96	237086			127.45- 187.45	156.88
26 MTBE					CAS #: 1634-04-4		
2.796	2.796 (0.650)	73	477738	72.1000	65.649	80.00- 120.00	100.00
2.796	2.796 (0.650)	57	103889			0.00- 51.21	21.75
2.789	2.789 (0.649)	41	102938			0.00- 50.32	21.55
28 Hexane					CAS #: 110-54-3		
3.097	3.097 (0.720)	57	315901	70.5000	67.401	80.00- 120.00	100.00
3.097	3.097 (0.720)	43	193733			30.98- 90.98	61.33
3.097	3.097 (0.720)	86	51192			0.00- 45.79	16.21
29 1,1-Dichloroethane					CAS #: 75-34-3		
3.269	3.269 (0.760)	63	357860	81.0000	77.054	80.00- 120.00	100.00
3.269	3.269 (0.760)	65	115374			1.92- 61.92	32.24
37 cis-1,2-Dichloroethene					CAS #: 156-59-2		
3.964	3.964 (0.922)	98	157936	79.3000	75.534	80.00- 120.00	100.00
3.964	3.964 (0.922)	96	248274			125.20- 185.20	157.20
3.964	3.964 (0.922)	61	296960			158.24- 218.24	188.03
38 2-Butanone					CAS #: 78-93-3		
3.921	3.921 (0.912)	72	116345	59.0000	58.882	80.00- 120.00	100.00(a)
3.921	3.921 (0.912)	43	456256			364.90- 424.90	392.16
3.921	3.921 (0.912)	57	39823			4.40- 64.40	34.23
44 Chloroform					CAS #: 67-66-3		
4.473	4.473 (1.040)	83	464917	97.7000	94.608	80.00- 120.00	100.00
4.473	4.473 (1.040)	85	303162			35.45- 95.45	65.21

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 (0.812)	84	281415	68.8000	66.042	80.00- 120.00	100.00
4.816	4.816 (0.811)	56	316836			82.98- 142.98	112.59
4.816	4.816 (0.811)	41	181633			32.54- 92.54	64.54
45 1,1,1-Trichloroethane					CAS #: 71-55-6		
4.709	4.709 (0.793)	97	484654	109.000	112.40	80.00- 120.00	100.00
4.709	4.709 (0.793)	99	313034			34.83- 94.83	64.59
47 Carbon Tetrachloride					CAS #: 56-23-5		
4.952	4.952 (0.834)	119	536420	126.000	134.01	80.00- 120.00	100.00
4.945	4.945 (0.832)	117	554364			73.53- 133.53	103.35
51 2,2,4-Trimethylpentane					CAS #: 540-84-1		
5.483	5.483 (0.923)	57	1002747	93.4000	92.506	80.00- 120.00	100.00
5.483	5.483 (0.923)	56	313019			1.12- 61.12	31.22
5.483	5.483 (0.923)	41	290969			0.00- 57.96	29.02
48 Benzene					CAS #: 71-43-2		
5.246	5.246 (0.883)	78	664562	63.9000	56.725	80.00- 120.00	100.00
5.246	5.246 (0.883)	77	154892			0.00- 53.50	23.31
50 1,2-Dichloroethane					CAS #: 107-06-2		
5.346	5.346 (0.900)	62	298902	80.9000	80.250	80.00- 120.00	100.00
5.346	5.346 (0.900)	64	97308			2.93- 62.93	32.56
53 Heptane					CAS #: 142-82-5		
5.783	5.783 (0.973)	71	216315	82.0000	78.409	80.00- 120.00	100.00
5.783	5.783 (0.973)	43	380046			143.29- 203.29	175.69
5.783	5.783 (0.973)	57	198382			61.40- 121.40	91.71
56 Trichloroethene					CAS #: 79-01-6		
6.256	6.256 (1.053)	95	354551	108.000	100.68	80.00- 120.00	100.00
6.256	6.256 (1.053)	130	403617			81.46- 141.46	113.84
6.256	6.256 (1.053)	97	232485			34.92- 94.92	65.57
58 Methyl Cyclohexane					CAS #: 108-87-2		
6.579	6.579 (1.107)	83	417777	80.3000	80.339	80.00- 120.00	100.00
6.571	6.571 (1.106)	98	191586			15.14- 75.14	45.86
6.571	6.571 (1.106)	55	320922			45.62- 105.62	76.82
59 1,2-Dichloropropane					CAS #: 78-87-5		
6.607	6.607 (1.112)	63	240875	92.4000	94.229	80.00- 120.00	100.00
6.607	6.607 (1.112)	62	164982			38.13- 98.13	68.49
6.579	6.579 (1.107)	41	302033			92.30- 152.30	125.39

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		
6.722	6.722 (1.131)	88	167039	72.1000	71.687	80.00- 120.00	100.00
6.729	6.729 (1.133)	58	103635			31.73- 91.73	62.04
6.722	6.722 (1.131)	57	53485			1.20- 61.20	32.02
65 4-Methyl-2-pentanone					CAS #: 108-10-1		
7.825	7.825 (1.317)	58	189375	81.9000	82.607	80.00- 120.00	100.00
7.825	7.825 (1.317)	43	487067			221.14- 281.14	257.20
7.825	7.825 (1.317)	85	96038			20.58- 80.58	50.71
67 Toluene					CAS #: 108-88-3		
8.040	8.040 (0.816)	91	889012	75.4000	74.350	80.00- 120.00	100.00
8.040	8.040 (0.816)	92	516825			28.32- 88.32	58.13
70 1,1,2-Trichloroethane					CAS #: 79-00-5		
8.641	8.641 (1.455)	97	323996	109.000	112.55	80.00- 120.00	100.00
8.641	8.641 (1.455)	99	203064			32.57- 92.57	62.67
8.641	8.641 (1.455)	83	260378			50.93- 110.93	80.36
71 Tetrachloroethene					CAS #: 127-18-4		
8.720	8.720 (0.885)	166	541737	136.000	137.57	80.00- 120.00	100.00
8.720	8.720 (0.885)	129	391156			41.03- 101.03	72.20
8.720	8.720 (0.885)	131	381622			38.99- 98.99	70.44
72 2-Hexanone					CAS #: 591-78-6		
8.949	8.949 (0.908)	58	253486	81.9000	83.301	80.00- 120.00	100.00
8.949	8.949 (0.908)	43	471106			155.38- 215.38	185.85
8.949	8.949 (0.908)	100	58629			0.00- 52.71	23.13
74 1,2-Dibromoethane					CAS #: 106-93-4		
9.236	9.236 (0.937)	107	505725	154.000	163.54	80.00- 120.00	100.00
9.236	9.236 (0.937)	109	487691			65.47- 125.47	96.43
81 Chlorobenzene					CAS #: 108-90-7		
9.895	9.895 (1.004)	112	810349	92.1000	92.993	80.00- 120.00	100.00
9.895	9.895 (1.004)	114	260368			2.20- 62.20	32.13
9.895	9.895 (1.004)	77	401854			20.93- 80.93	49.59
82 Ethyl Benzene					CAS #: 100-41-4		
10.045	10.045 (1.020)	106	394678	86.8000	88.136	80.00- 120.00	100.00
10.045	10.045 (1.020)	91	1187965			272.45- 332.45	301.00
84 m,p-Xylene					CAS #: 108-38-3		
10.225	10.225 (1.038)	106	499554	86.8000	87.692	80.00- 120.00	100.00
10.225	10.225 (1.038)	91	961079			164.06- 224.06	192.39

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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
 10.712  10.712 (0.938)   106    472670 86.8000   89.403  80.00- 120.00   100.00
 10.712  10.712 (0.938)    91    954664                  174.12- 234.12   201.97
-------------------------------------------------------------------------------
   89 Styrene                                         CAS #: 100-42-5
 10.740  10.740 (0.941)   104    789893 85.2000   90.156  80.00- 120.00   100.00
 10.740  10.740 (0.941)    78    363705                   16.31-  76.31    46.04
-------------------------------------------------------------------------------
   91 Cumene                                          CAS #: 98-82-8
 11.199  11.199 (0.981)   105   1458692 98.3000   101.41  80.00- 120.00   100.00
 11.199  11.199 (0.981)   120    401890                    0.00-  57.22    27.55
 11.199  11.199 (0.981)    51    122593                    0.00-  38.43     8.40
-------------------------------------------------------------------------------
   94 1,1,2,2-Tetrachloroethane                       CAS #: 79-34-5
 11.621  11.621 (1.018)    83    691640 137.000   151.18  80.00- 120.00   100.00
 11.621  11.621 (1.018)    85    452177                   35.83-  95.83    65.38
-------------------------------------------------------------------------------
   96 Propylbenzene                                   CAS #: 103-65-1
 11.736  11.736 (1.028)    91   1689984 98.3000   100.50  80.00- 120.00   100.00
 11.736  11.736 (1.028)   120    435189                    0.00-  55.53    25.75
 11.736  11.736 (1.028)   105     67173                    0.00-  33.92     3.97
-------------------------------------------------------------------------------
   97 4-Ethyltoluene                                  CAS #: 622-96-8
 11.908  11.908 (1.043)   120    469068 98.3000   103.97  80.00- 120.00   100.00
 11.908  11.908 (1.043)   105   1495633                  298.20- 358.20   318.85
-------------------------------------------------------------------------------
   98 1,3,5-Trimethylbenzene                          CAS #: 108-67-8
 11.994  11.994 (1.051)   120    655672 98.3000   101.79  80.00- 120.00   100.00
 11.994  11.994 (1.051)   105   1292093                  167.68- 227.68   197.06
-------------------------------------------------------------------------------
  100 1,2,4-Trimethylbenzene                          CAS #: 95-63-6
 12.459  12.459 (1.092)   120    619038 98.3000   102.82  80.00- 120.00   100.00
 12.459  12.459 (1.092)   105   1304435                  185.14- 245.14   210.72
-------------------------------------------------------------------------------
  101 1,3-Dichlorobenzene                             CAS #: 541-73-1
 12.789  12.789 (1.120)   146   1036733 120.000   126.06  80.00- 120.00   100.00
 12.789  12.789 (1.120)   148    664374                   34.46-  94.46    64.08
 12.782  12.782 (1.120)   111    381369                    7.45-  67.45    36.79
-------------------------------------------------------------------------------
  102 1,4-Dichlorobenzene                             CAS #: 106-46-7
 12.925  12.925 (1.132)   146   1029145 120.000   124.73  80.00- 120.00   100.00
 12.925  12.925 (1.132)   148    660715                   33.85-  93.85    64.20
 12.925  12.925 (1.132)   111    369733                    6.02-  66.02    35.93
-------------------------------------------------------------------------------
  105 1,2-Dichlorobenzene                             CAS #: 95-50-1
 13.362  13.362 (1.171)   146    999309 120.000   124.98  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)							
13.362	13.362 (1.171)	148	637772			34.29- 94.29	63.82
13.362	13.362 (1.171)	111	382312			8.63- 68.63	38.26
106 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
15.418	15.418 (1.351)	180	1047446	148.000	163.14	80.00- 120.00	100.00
15.418	15.418 (1.351)	182	993779			64.63- 124.63	94.88
107 Hexachlorobutadiene					CAS #: 87-68-3		
15.633	15.633 (1.370)	225	772109	213.000	230.29	80.00- 120.00	100.00
15.633	15.633 (1.370)	223	482734			32.03- 92.03	62.52
109 Naphthalene					CAS #: 91-20-3		
15.726	15.726 (1.378)	128	1292702	50.0000	55.710	80.00- 120.00	100.00
15.726	15.726 (1.378)	127	167594			0.00- 42.99	12.96
110 2-Methylnaphthalene					CAS #: 91-57-6		
17.180	17.180 (1.505)	142	902069	50.0000	58.807	80.00- 120.00	100.00
17.180	17.180 (1.505)	141	782306			56.24- 116.24	86.72
17.180	17.180 (1.505)	115	260002			0.00- 58.81	28.82
111 1-Methylnaphthalene					CAS #: 90-12-0		
17.395	17.395 (1.524)	142	823990	50.0000	58.723	80.00- 120.00	100.00
17.395	17.395 (1.524)	141	741874			60.38- 120.38	90.03
17.395	17.395 (1.524)	115	255531			0.56- 60.56	31.01
112 Acenaphthylene					CAS #: 208-96-8		
19.243	19.243 (1.686)	152	1470660	50.0000	58.792	80.00- 120.00	100.00
19.243	19.243 (1.686)	151	291090			0.00- 49.78	19.79
19.243	19.243 (1.686)	153	192964			0.00- 43.07	13.12
113 Acenaphthene					CAS #: 83-32-9		
19.508	19.508 (1.709)	154	832063	50.0000	69.624	80.00- 120.00	100.00
19.508	19.508 (1.709)	152	436084			21.85- 81.85	52.41
19.508	19.508 (1.709)	153	909646			79.23- 139.23	109.32
114 Fluorene					CAS #: 86-73-7		
20.661	20.661 (1.810)	166	877640	50.0000	87.381	80.00- 120.00	100.00
20.661	20.661 (1.810)	165	827304			65.14- 125.14	94.26
115 Phenanthrene					CAS #: 85-01-8		
22.839	22.839 (2.001)	178	1497193	50.0000	60.096	80.00- 120.00	100.00
22.839	22.839 (2.001)	176	277434			0.00- 48.56	18.53
22.839	22.839 (2.001)	179	227348			0.00- 45.19	15.18
116 Anthracene					CAS #: 120-12-7		
22.946	22.946 (2.010)	178	1433539	50.0000	67.211	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)							
22.946	22.946 (2.010)	176	257980			0.00- 47.98	18.00
22.946	22.946 (2.010)	179	218176			0.00- 45.18	15.22
117 Fluoranthene					CAS #: 206-44-0		
26.126	26.126 (2.289)	202	1033691	50.0000	58.019	80.00- 120.00	100.00
26.126	26.126 (2.289)	101	161722			0.00- 45.14	15.65
118 Pyrene					CAS #: 129-00-0		
26.986	26.986 (2.364)	202	1083440	50.0000	59.394	80.00- 120.00	100.00
26.979	26.979 (2.364)	101	199295			0.00- 48.11	18.39
26.979	26.979 (2.364)	100	161374			0.00- 44.51	14.89

QC Flag Legend

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

Report Date: 16-Jun-2016 09:56

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd6.i
Lab File ID: 6061503.d
Lab Smp Id: VI VOC+PAH CCV
Analysis Type: VOA
Quant Type: ISTD
Operator: CT
Method File: /chem/msd6.i/15jun16.b/616z0614vi.m
Misc Info: 2516-246-20ml(9/10/16),2744-31-50(7/5/16)

Calibration Date: 14-JUN-2016
Calibration Time: 14:59
Client Smp ID: CCV
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
40 Bromochloromethan	156066	93640	218492	155560	-0.32
54 1,4-Difluorobenze	638538	383123	893953	608468	-4.71
79 Chlorobenzene-d5	603523	362114	844932	578034	-4.22
92 Bromofluorobenzen	441798	265079	618517	417214	-5.56

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
40 Bromochloromethan	4.32	3.99	4.65	4.30	-0.34
54 1,4-Difluorobenze	5.95	5.62	6.28	5.94	-0.12
79 Chlorobenzene-d5	9.86	9.53	10.19	9.85	-0.07
92 Bromofluorobenzen	11.41	11.08	11.74	11.41	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/15jun16.b/6061503.d

Date : 15-JUN-2016 12:15

Client ID: CCV

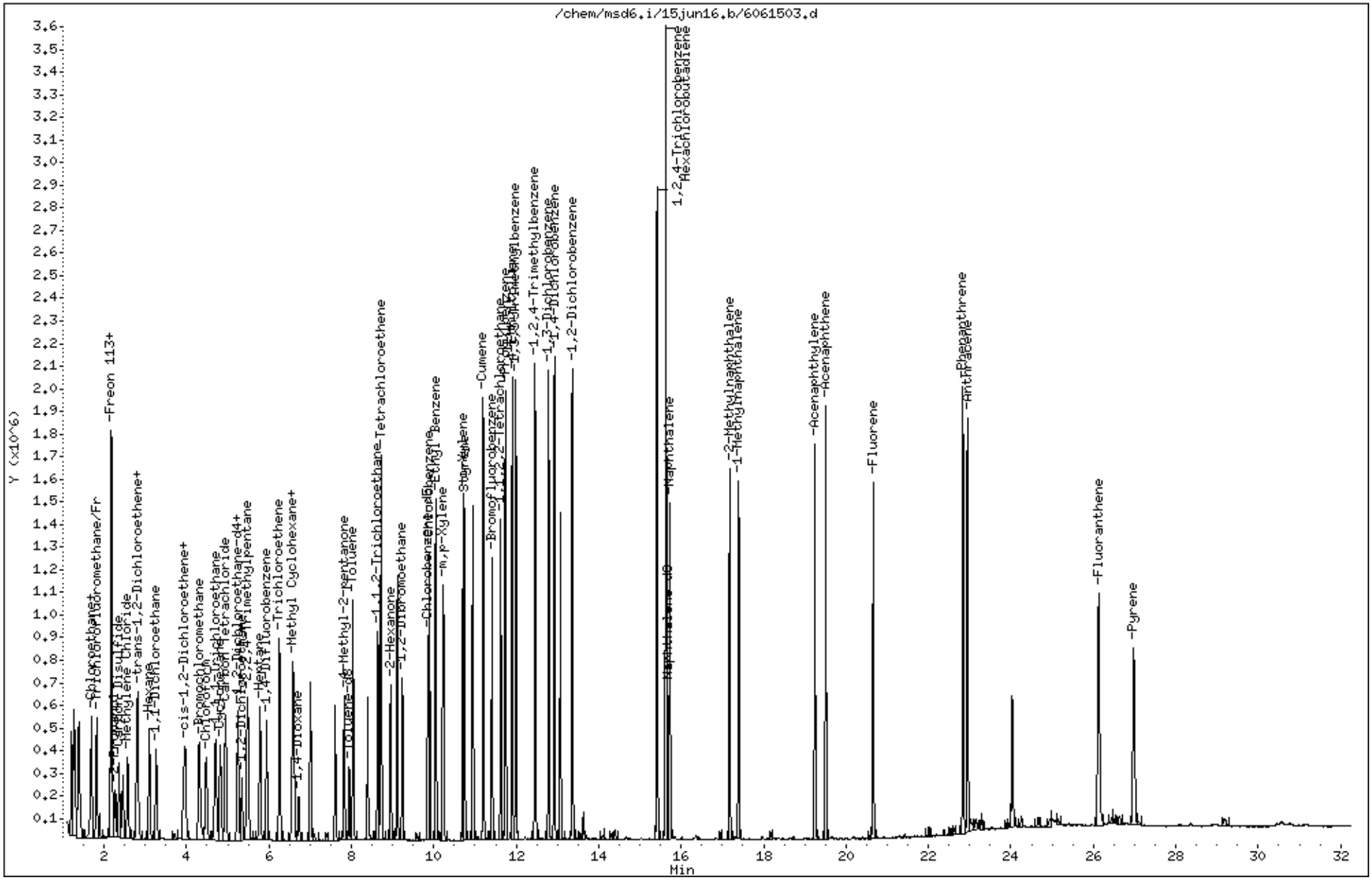
Sample Info: ;VI VOC+PAH CCV;CCV

Column phase: RTx-624

Instrument: msd6.i

Operator: CT

Column diameter: 0.53



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Client Sample ID: CCV
Lab ID#: 1606272-18B
EPA METHOD TO-17

File Name:	**6061702**	**Date of Extraction: NA**	**Date of Collection: NA**
Dil. Factor:	**1.00**		**Date of Analysis: 6/17/16 09:49 AM**

Compound	**%Recovery**
Naphthalene	98

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

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

Eurofins Air Toxics Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: msd6.i Injection Date: 17-JUN-2016 09:49
Lab File ID: 6061702.d Init. Cal. Date(s): 14-JUN-2016 15-JUN-2016
Analysis Type: AIR Init. Cal. Times: 12:17 11:01
Lab Sample ID: VI VOC+PAH CCV Quant Type: ISTD
Method: /chem/msd6.i/17jun16.b/616z0614vi.m

COMPOUND	RRF / AMOUNT	RF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
$ 49 1,2-Dichloroethane-d4	0.11863	0.09590	0.010	19.16539	30.00000	Averaged	
$ 66 Toluene-d8	0.44804	0.56302	0.010	-25.66266	30.00000	Averaged	
$ 108 Naphthalene-d8	1.86417	1.84681	0.010	0.93109	30.00000	Averaged	
3 Freon 114	0.48525	0.51558	0.010	-6.25166	30.00000	Averaged	
6 Vinyl Chloride	0.62213	0.67482	0.010	-8.46946	30.00000	Averaged	
7 1,3-Butadiene	0.55788	0.67051	0.010	-20.18832	30.00000	Averaged	
9 Chloroethane	0.30285	0.24902	0.010	17.77349	30.00000	Averaged	
10 Isopentane	0.46428	0.53173	0.010	-14.52685	30.00000	Averaged	
11 Trichlorofluoromethane/Fr11	0.83331	0.80803	0.010	3.03284	30.00000	Averaged	
15 Freon 113	0.53314	0.53499	0.010	-0.34678	30.00000	Averaged	
14 1,1-Dichloroethene	0.33661	0.36176	0.010	-7.47321	30.00000	Averaged	
18 Carbon Disulfide	2.13028	1.90814	0.010	10.42784	30.00000	Averaged	
19 2-Propanol	1.21734	1.32261	0.010	-8.64760	30.00000	Averaged	
22 Methylene Chloride	0.75608	0.92554	0.010	-22.41284	30.00000	Averaged	
25 trans-1,2-Dichloroethene	0.32359	0.35649	0.010	-10.16763	30.00000	Averaged	
26 MTBE	1.21628	1.45735	0.010	-19.81979	30.00000	Averaged	
28 Hexane	0.78335	0.94740	0.010	-20.94122	30.00000	Averaged	
29 1,1-Dichloroethane	0.77623	0.81741	0.010	-5.30470	30.00000	Averaged	
37 cis-1,2-Dichloroethene	0.34947	0.37496	0.010	-7.29339	30.00000	Averaged	
38 2-Butanone	0.33025	0.46126	0.010	-39.67022	30.00000	Averaged	<-
44 Chloroform	0.82134	0.84021	0.010	-2.29705	30.00000	Averaged	
46 Cyclohexane	0.16107	0.16110	0.010	-0.01609	30.00000	Averaged	
45 1,1,1-Trichloroethane	0.16299	0.15619	0.010	4.17394	30.00000	Averaged	
47 Carbon Tetrachloride	0.15131	0.13518	0.010	10.66046	30.00000	Averaged	
51 2,2,4-Trimethylpentane	0.40974	0.41097	0.010	-0.30070	30.00000	Averaged	
48 Benzene	0.44284	0.37766	0.010	14.71941	30.00000	Averaged	
50 1,2-Dichloroethane	0.14079	0.12849	0.010	8.73617	30.00000	Averaged	
53 Heptane	0.10428	0.11272	0.010	-8.08808	30.00000	Averaged	
56 Trichloroethene	0.13311	0.12985	0.010	2.45393	30.00000	Averaged	
58 Methyl Cyclohexane	0.19657	0.21407	0.010	-8.90553	30.00000	Averaged	
59 1,2-Dichloropropane	0.09663	0.11583	0.010	-19.87911	30.00000	Averaged	
60 1,4-Dioxane	0.08808	0.09593	0.010	-8.91810	30.00000	Averaged	
65 4-Methyl-2-pentanone	0.08666	0.10559	0.010	-21.84938	30.00000	Averaged	
67 Toluene	0.49646	0.65582	0.010	-32.09988	30.00000	Averaged	<-
70 1,1,2-Trichloroethane	0.10882	0.10159	0.010	6.64398	30.00000	Averaged	

Eurofins Air Toxics Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: msd6.i Injection Date: 17-JUN-2016 09:49
Lab File ID: 6061702.d Init. Cal. Date(s): 14-JUN-2016 15-JUN-2016
Analysis Type: AIR Init. Cal. Times: 12:17 11:01
Lab Sample ID: VI VOC+PAH CCV Quant Type: ISTD
Method: /chem/msd6.i/17jun16.b/616z0614vi.m

COMPOUND	RRF / AMOUNT	RF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
71 Tetrachloroethene	0.16350	0.18488	0.010	-13.07657	30.00000	Averaged	
72 2-Hexanone	0.12635	0.17291	0.010	-36.85219	30.00000	Averaged	<-
74 1,2-Dibromoethane	0.12840	0.14604	0.010	-13.74131	30.00000	Averaged	
81 Chlorobenzene	0.36181	0.37010	0.010	-2.29054	30.00000	Averaged	
82 Ethyl Benzene	0.18593	0.19352	0.010	-4.08457	30.00000	Averaged	
84 m,p-Xylene	0.23653	0.24385	0.010	-3.09771	30.00000	Averaged	
88 o-Xylene	0.45619	0.48345	0.010	-5.97537	30.00000	Averaged	
89 Styrene	0.75599	0.82483	0.010	-9.10573	30.00000	Averaged	
91 Cumene	1.24120	1.30964	0.010	-5.51359	30.00000	Averaged	
94 1,1,2,2-Tetrachloroethane	0.39474	0.45106	0.010	-14.26623	30.00000	Averaged	
96 Propylbenzene	1.45089	1.51000	0.010	-4.07395	30.00000	Averaged	
97 4-Ethyltoluene	0.38929	0.40480	0.010	-3.98485	30.00000	Averaged	
98 1,3,5-Trimethylbenzene	0.55578	0.57483	0.010	-3.42778	30.00000	Averaged	
100 1,2,4-Trimethylbenzene	0.51952	0.53612	0.010	-3.19541	30.00000	Averaged	
101 1,3-Dichlorobenzene	0.70966	0.71839	0.010	-1.23025	30.00000	Averaged	
102 1,4-Dichlorobenzene	0.71195	0.72072	0.010	-1.23268	30.00000	Averaged	
105 1,2-Dichlorobenzene	0.68994	0.69524	0.010	-0.76801	30.00000	Averaged	
106 1,2,4-Trichlorobenzene	0.55399	0.53911	0.010	2.68558	30.00000	Averaged	
107 Hexachlorobutadiene	0.28930	0.27882	0.010	3.62114	30.00000	Averaged	
109 Naphthalene	2.00219	1.95685	0.010	2.26456	30.00000	Averaged	
110 2-Methylnaphthalene	1.32359	1.30868	0.010	1.12607	30.00000	Averaged	
111 1-Methylnaphthalene	1.21075	1.20973	0.010	0.08452	30.00000	Averaged	
112 Acenaphthylene	2.15842	2.00632	0.010	7.04686	30.00000	Averaged	
113 Acenaphthene	1.03120	1.12053	0.010	-8.66271	30.00000	Averaged	
114 Fluorene	0.86665	1.12001	0.010	-29.23384	30.00000	Averaged	
115 Phenanthrene	2.14968	2.02512	0.010	5.79429	30.00000	Averaged	
116 Anthracene	1.84039	1.77942	0.010	3.31300	30.00000	Averaged	
117 Fluoranthene	1.53732	1.27672	0.010	16.95198	30.00000	Averaged	
118 Pyrene	1.57399	1.32401	0.010	15.88225	30.00000	Averaged	

Eurofins Air Toxics Inc.

EPA Method TO-17 GC/MS

Data file : /chem/msd6.i/17jun16.b/6061702.d
Lab Smp Id: VI VOC+PAH CCV Client Smp ID: CCV
Inj Date : 17-JUN-2016 09:49
Operator : CT Inst ID: msd6.i
Smp Info : ;VI VOC+PAH CCV;CCV
Misc Info : 2516-246-20ml(9/10/16),2744-31-50(7/5/16)
Comment :
Method : /chem/msd6.i/17jun16.b/616z0614vi.m
Meth Date : 17-Jun-2016 11:15 U5BT Quant Type: ISTD
Cal Date : 15-JUN-2016 11:01 Cal File: 6061502.d
Als bottle: 2 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: VOC+PAH_ICAL.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO
* 40 Bromochloromethane						CAS #: 74-97-5	
4.308	4.308 (1.000)	130	204967	26.0000		80.00- 120.00	100.00
4.308	4.308 (1.000)	128	156701			47.94- 107.94	76.45
4.301	4.301 (1.000)	49	243008			68.24- 128.24	118.56
* 54 1,4-Difluorobenzene						CAS #: 540-36-3	
5.941	5.941 (1.000)	114	857366	23.0000		80.00- 120.00	100.00
5.941	5.941 (1.000)	88	130403			0.00- 45.46	15.21
* 79 Chlorobenzene-d5						CAS #: 3114-55-4	
9.867	9.867 (1.000)	117	655402	24.0000		80.00- 120.00	100.00
9.867	9.867 (1.000)	82	320825			19.06- 79.06	48.95
* 92 Bromofluorobenzene						CAS #: 460-00-4	
11.421	11.421 (1.000)	174	469803	36.0000		80.00- 120.00	100.00
11.421	11.421 (1.000)	95	492399			74.19- 134.19	104.81
11.421	11.421 (1.000)	176	457214			67.61- 127.61	97.32
$ 49 1,2-Dichloroethane-d4						CAS #: 17060-07-0	
5.225	5.225 (0.879)	65	89368	25.0000	20.209	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO
$ 49 1,2-Dichloroethane-d4 (continued)							
5.225	5.225 (0.879)	67	47589			21.94- 81.94	53.25
$ 66 Toluene-d8						CAS #: 2037-26-5	
7.954	7.954 (0.806)	98	384378	25.0000	31.416	80.00- 120.00	100.00
7.954	7.954 (0.806)	70	40066			0.00- 39.97	10.42
7.954	7.954 (0.806)	100	251443			35.51- 95.51	65.42
$ 108 Naphthalene-d8						CAS #: 1146-65-2	
15.683	15.683 (1.373)	136	602527	25.0000	24.767	80.00- 120.00	100.00
15.683	15.683 (1.373)	108	51880			0.00- 38.72	8.61
3 Freon 114						CAS #: 76-14-2	
1.283	1.283 (0.298)	135	569031	140.000	148.75	80.00- 120.00	100.00
1.283	1.283 (0.298)	137	180824			2.20- 62.20	31.78
6 Vinyl Chloride						CAS #: 75-01-4	
1.409	1.409 (0.327)	62	271842	51.1000	55.428	80.00- 120.00	100.00
1.409	1.409 (0.327)	64	102051			13.62- 73.62	37.54
7 1,3-Butadiene						CAS #: 106-99-0	
1.395	1.395 (0.324)	54	233635	44.2000	53.123	80.00- 120.00	100.00
1.395	1.395 (0.324)	39	346979			117.53- 177.53	148.51
9 Chloroethane						CAS #: 75-00-3	
1.647	1.647 (0.382)	64	103652	52.8000	43.416	80.00- 120.00	100.00
1.647	1.647 (0.382)	66	30159			1.59- 61.59	29.10
1.647	1.647 (0.382)	49	29160			0.00- 57.55	28.13
10 Isopentane						CAS #: 78-78-4	
1.689	1.689 (0.392)	57	247316	59.0000	67.571	80.00- 120.00	100.00
1.689	1.689 (0.392)	43	375571			107.36- 167.36	151.86
11 Trichlorofluoromethane/Fr11						CAS #: 75-69-4	
1.814	1.814 (0.421)	101	713441	112.000	108.60	80.00- 120.00	100.00
1.814	1.814 (0.421)	103	462316			35.47- 95.47	64.80
15 Freon 113						CAS #: 76-13-1	
2.173	2.173 (0.504)	151	645279	153.000	153.53	80.00- 120.00	100.00
2.181	2.181 (0.506)	153	415271			34.42- 94.42	64.36
2.173	2.173 (0.504)	101	724763			75.78- 135.78	112.32
14 1,1-Dichloroethene						CAS #: 75-35-4	
2.181	2.181 (0.506)	98	226156	79.3000	85.226	80.00- 120.00	100.00
2.181	2.181 (0.506)	96	357786			128.07- 188.07	158.20
2.181	2.181 (0.506)	61	561410			203.73- 263.73	248.24

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 (0.548)	76	937152	62.3000	55.803	80.00- 120.00	100.00
19 2-Propanol					CAS #: 67-63-0		
2.267	2.267 (0.526)	45	512990	49.2000	53.455	80.00- 120.00	100.00
2.267	2.267 (0.526)	43	100142			0.00- 50.21	19.52
2.267	2.267 (0.526)	59	18914			0.00- 34.19	3.69
22 Methylene Chloride					CAS #: 75-09-2		
2.575	2.575 (0.598)	49	507097	69.5000	85.077	80.00- 120.00	100.00
2.575	2.575 (0.598)	84	384370			55.25- 115.25	75.80
2.567	2.567 (0.596)	51	155697			0.48- 60.48	30.70
25 trans-1,2-Dichloroethene					CAS #: 156-60-5		
2.818	2.818 (0.654)	98	222859	79.3000	87.363	80.00- 120.00	100.00
2.818	2.818 (0.654)	61	488837			178.67- 238.67	219.35
2.818	2.818 (0.654)	96	349132			127.45- 187.45	156.66
26 MTBE					CAS #: 1634-04-4		
2.797	2.797 (0.649)	73	828341	72.1000	86.390	80.00- 120.00	100.00
2.797	2.797 (0.649)	57	195526			0.00- 51.21	23.60
2.797	2.797 (0.649)	41	196946			0.00- 50.32	23.78
28 Hexane					CAS #: 110-54-3		
3.098	3.098 (0.719)	57	526542	70.5000	85.264	80.00- 120.00	100.00
3.098	3.098 (0.719)	43	349367			30.98- 90.98	66.35
3.098	3.098 (0.719)	86	77325			0.00- 45.79	14.69
29 1,1-Dichloroethane					CAS #: 75-34-3		
3.262	3.262 (0.757)	63	521959	81.0000	85.297	80.00- 120.00	100.00
3.262	3.262 (0.757)	65	164873			1.92- 61.92	31.59
37 cis-1,2-Dichloroethene					CAS #: 156-59-2		
3.964	3.964 (0.920)	98	234408	79.3000	85.084	80.00- 120.00	100.00
3.964	3.964 (0.920)	96	365957			125.20- 185.20	156.12
3.964	3.964 (0.920)	61	468647			158.24- 218.24	199.93
38 2-Butanone					CAS #: 78-93-3		
3.928	3.928 (0.912)	72	214540	59.0000	82.405	80.00- 120.00	100.00
3.921	3.921 (0.910)	43	945532			364.90- 424.90	440.72
3.921	3.921 (0.910)	57	74013			4.40- 64.40	34.50
44 Chloroform					CAS #: 67-66-3		
4.480	4.480 (1.040)	83	647129	97.7000	99.944	80.00- 120.00	100.00
4.480	4.480 (1.040)	85	427647			35.45- 95.45	66.08

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 (0.812)	84	413155	68.8000	68.811	80.00- 120.00	100.00
4.824	4.824 (0.812)	56	509513			82.98- 142.98	123.32
4.817	4.817 (0.811)	41	292074			32.54- 92.54	70.69
45 1,1,1-Trichloroethane					CAS #: 71-55-6		
4.709	4.709 (0.793)	97	634628	109.000	104.45	80.00- 120.00	100.00
4.709	4.709 (0.793)	99	414370			34.83- 94.83	65.29
47 Carbon Tetrachloride					CAS #: 56-23-5		
4.953	4.953 (0.834)	119	634920	126.000	112.57	80.00- 120.00	100.00
4.953	4.953 (0.834)	117	655971			73.53- 133.53	103.32
51 2,2,4-Trimethylpentane					CAS #: 540-84-1		
5.483	5.483 (0.923)	57	1430870	93.4000	93.681	80.00- 120.00	100.00
5.483	5.483 (0.923)	56	454469			1.12- 61.12	31.76
5.483	5.483 (0.923)	41	398309			0.00- 57.96	27.84
48 Benzene					CAS #: 71-43-2		
5.246	5.246 (0.883)	78	899576	63.9000	54.494	80.00- 120.00	100.00
5.246	5.246 (0.883)	77	210117			0.00- 53.50	23.36
50 1,2-Dichloroethane					CAS #: 107-06-2		
5.340	5.340 (0.899)	62	387488	80.9000	73.832	80.00- 120.00	100.00
5.347	5.347 (0.900)	64	126816			2.93- 62.93	32.73
53 Heptane					CAS #: 142-82-5		
5.784	5.784 (0.973)	71	344540	82.0000	88.632	80.00- 120.00	100.00
5.784	5.784 (0.973)	43	690408			143.29- 203.29	200.39
5.784	5.784 (0.973)	57	333678			61.40- 121.40	96.85
56 Trichloroethene					CAS #: 79-01-6		
6.256	6.256 (1.053)	95	522751	108.000	105.35	80.00- 120.00	100.00
6.256	6.256 (1.053)	130	564088			81.46- 141.46	107.91
6.256	6.256 (1.053)	97	337399			34.92- 94.92	64.54
58 Methyl Cyclohexane					CAS #: 108-87-2		
6.579	6.579 (1.107)	83	640785	80.3000	87.451	80.00- 120.00	100.00
6.579	6.579 (1.107)	98	285459			15.14- 75.14	44.55
6.572	6.572 (1.106)	55	523142			45.62- 105.62	81.64
59 1,2-Dichloropropane					CAS #: 78-87-5		
6.607	6.607 (1.112)	63	398978	92.4000	110.77	80.00- 120.00	100.00
6.607	6.607 (1.112)	62	276783			38.13- 98.13	69.37
6.586	6.586 (1.109)	41	515048			92.30- 152.30	129.09

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		
6.722	6.722 (1.131)	88	257835	72.1000	78.530	80.00- 120.00	100.00
6.722	6.722 (1.131)	58	175521			31.73- 91.73	68.08
6.722	6.722 (1.131)	57	99641			1.20- 61.20	38.65
65 4-Methyl-2-pentanone					CAS #: 108-10-1		
7.832	7.832 (1.318)	58	322360	81.9000	99.795	80.00- 120.00	100.00
7.832	7.832 (1.318)	43	871266			221.14- 281.14	270.28
7.832	7.832 (1.318)	85	144183			20.58- 80.58	44.73
67 Toluene					CAS #: 108-88-3		
8.047	8.047 (0.816)	91	1350373	75.4000	99.603	80.00- 120.00	100.00
8.047	8.047 (0.816)	92	788878			28.32- 88.32	58.42
70 1,1,2-Trichloroethane					CAS #: 79-00-5		
8.649	8.649 (1.456)	97	412766	109.000	101.76	80.00- 120.00	100.00
8.649	8.649 (1.456)	99	258522			32.57- 92.57	62.63
8.649	8.649 (1.456)	83	339884			50.93- 110.93	82.34
71 Tetrachloroethene					CAS #: 127-18-4		
8.735	8.735 (0.885)	166	686625	136.000	153.78	80.00- 120.00	100.00
8.728	8.728 (0.885)	129	495176			41.03- 101.03	72.12
8.728	8.728 (0.885)	131	481765			38.99- 98.99	70.16
72 2-Hexanone					CAS #: 591-78-6		
8.964	8.964 (0.909)	58	386715	81.9000	112.08	80.00- 120.00	100.00
8.957	8.957 (0.908)	43	743526			155.38- 215.38	192.27
8.964	8.964 (0.909)	100	81082			0.00- 52.71	20.97
74 1,2-Dibromoethane					CAS #: 106-93-4		
9.243	9.243 (0.937)	107	614175	154.000	175.16	80.00- 120.00	100.00
9.243	9.243 (0.937)	109	583566			65.47- 125.47	95.02
81 Chlorobenzene					CAS #: 108-90-7		
9.902	9.902 (1.004)	112	930833	92.1000	94.210	80.00- 120.00	100.00
9.902	9.902 (1.004)	114	302802			2.20- 62.20	32.53
9.902	9.902 (1.004)	77	476213			20.93- 80.93	51.16
82 Ethyl Benzene					CAS #: 100-41-4		
10.060	10.060 (1.020)	106	458724	86.8000	90.345	80.00- 120.00	100.00
10.060	10.060 (1.020)	91	1391234			272.45- 332.45	303.28
84 m,p-Xylene					CAS #: 108-38-3		
10.239	10.239 (1.038)	106	578024	86.8000	89.489	80.00- 120.00	100.00
10.239	10.239 (1.038)	91	1112660			164.06- 224.06	192.49

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO
88 o-Xylene					CAS #: 95-47-6		
10.726	10.726 (0.939)	106	547630	86.8000	91.987	80.00- 120.00	100.00
10.726	10.726 (0.939)	91	1113331			174.12- 234.12	203.30
89 Styrene					CAS #: 100-42-5		
10.755	10.755 (0.942)	104	917105	85.2000	92.958	80.00- 120.00	100.00
10.755	10.755 (0.942)	78	418395			16.31- 76.31	45.62
91 Cumene					CAS #: 98-82-8		
11.213	11.213 (0.982)	105	1680032	98.3000	103.72	80.00- 120.00	100.00
11.213	11.213 (0.982)	120	459124			0.00- 57.22	27.33
11.213	11.213 (0.982)	51	145657			0.00- 38.43	8.67
94 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
11.636	11.636 (1.019)	83	806427	137.000	156.54	80.00- 120.00	100.00
11.636	11.636 (1.019)	85	527855			35.83- 95.83	65.46
96 Propylbenzene					CAS #: 103-65-1		
11.750	11.750 (1.029)	91	1937064	98.3000	102.30	80.00- 120.00	100.00
11.750	11.750 (1.029)	120	486441			0.00- 55.53	25.11
11.750	11.750 (1.029)	105	76202			0.00- 33.92	3.93
97 4-Ethyltoluene					CAS #: 622-96-8		
11.915	11.915 (1.043)	120	519290	98.3000	102.22	80.00- 120.00	100.00
11.915	11.915 (1.043)	105	1684611			298.20- 358.20	324.41
98 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
12.001	12.001 (1.051)	120	737408	98.3000	101.67	80.00- 120.00	100.00
12.001	12.001 (1.051)	105	1451626			167.68- 227.68	196.86
100 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
12.467	12.467 (1.092)	120	687744	98.3000	101.44	80.00- 120.00	100.00
12.467	12.467 (1.092)	105	1541333			185.14- 245.14	224.11
101 1,3-Dichlorobenzene					CAS #: 541-73-1		
12.789	12.789 (1.120)	146	1125004	120.000	121.48	80.00- 120.00	100.00
12.789	12.789 (1.120)	148	723605			34.46- 94.46	64.32
12.789	12.789 (1.120)	111	421694			7.45- 67.45	37.48
102 1,4-Dichlorobenzene					CAS #: 106-46-7		
12.932	12.932 (1.132)	146	1128659	120.000	121.48	80.00- 120.00	100.00
12.932	12.932 (1.132)	148	725879			33.85- 93.85	64.31
12.932	12.932 (1.132)	111	406627			6.02- 66.02	36.03
105 1,2-Dichlorobenzene					CAS #: 95-50-1		
13.362	13.362 (1.170)	146	1088756	120.000	120.92	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)							
13.362	13.362 (1.170)	148	700776			34.29- 94.29	64.36
13.362	13.362 (1.170)	111	420888			8.63- 68.63	38.66
106 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
15.411	15.411 (1.349)	180	1041244	148.000	144.02	80.00- 120.00	100.00
15.411	15.411 (1.349)	182	985852			64.63- 124.63	94.68
107 Hexachlorobutadiene					CAS #: 87-68-3		
15.626	15.626 (1.368)	225	775034	213.000	205.29	80.00- 120.00	100.00
15.626	15.626 (1.368)	223	483069			32.03- 92.03	62.33
109 Naphthalene					CAS #: 91-20-3		
15.726	15.726 (1.377)	128	1276856	50.0000	48.868	80.00- 120.00	100.00
15.726	15.726 (1.377)	127	166088			0.00- 42.99	13.01
110 2-Methylnaphthalene					CAS #: 91-57-6		
17.173	17.173 (1.504)	142	853922	50.0000	49.437	80.00- 120.00	100.00
17.173	17.173 (1.504)	141	744591			56.24- 116.24	87.20
17.173	17.173 (1.504)	115	248010			0.00- 58.81	29.04
111 1-Methylnaphthalene					CAS #: 90-12-0		
17.388	17.388 (1.522)	142	789354	50.0000	49.958	80.00- 120.00	100.00
17.388	17.388 (1.522)	141	707140			60.38- 120.38	89.58
17.388	17.388 (1.522)	115	240759			0.56- 60.56	30.50
112 Acenaphthylene					CAS #: 208-96-8		
19.236	19.236 (1.684)	152	1309130	50.0000	46.476	80.00- 120.00	100.00
19.236	19.236 (1.684)	151	258816			0.00- 49.78	19.77
19.236	19.236 (1.684)	153	168458			0.00- 43.07	12.87
113 Acenaphthene					CAS #: 83-32-9		
19.501	19.501 (1.707)	154	731147	50.0000	54.331	80.00- 120.00	100.00
19.501	19.501 (1.707)	152	380793			21.85- 81.85	52.08
19.501	19.501 (1.707)	153	795889			79.23- 139.23	108.85
114 Fluorene					CAS #: 86-73-7		
20.654	20.654 (1.808)	166	730809	50.0000	64.617	80.00- 120.00	100.00
20.654	20.654 (1.808)	165	693206			65.14- 125.14	94.85
115 Phenanthrene					CAS #: 85-01-8		
22.832	22.832 (1.999)	178	1321403	50.0000	47.103	80.00- 120.00	100.00
22.832	22.832 (1.999)	176	249566			0.00- 48.56	18.89
22.832	22.832 (1.999)	179	199621			0.00- 45.19	15.11
116 Anthracene					CAS #: 120-12-7		
22.939	22.939 (2.009)	178	1161081	50.0000	48.344	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)								
22.939	22.939	(2.009)	176	211704			0.00- 47.98	18.23
22.939	22.939	(2.009)	179	176786			0.00- 45.18	15.23
117 Fluoranthene						CAS #: 206-44-0		
26.112	26.112	(2.286)	202	833063	50.0000	41.524	80.00- 120.00	100.00
26.112	26.112	(2.286)	101	132985			0.00- 45.14	15.96
118 Pyrene						CAS #: 129-00-0		
26.965	26.965	(2.361)	202	863920	50.0000	42.059	80.00- 120.00	100.00
26.965	26.965	(2.361)	101	158996			0.00- 48.11	18.40
26.965	26.965	(2.361)	100	130294			0.00- 44.51	15.08

Report Date: 17-Jun-2016 11:15

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd6.i
Lab File ID: 6061702.d
Lab Smp Id: VI VOC+PAH CCV
Analysis Type: VOA
Quant Type: ISTD
Operator: CT
Method File: /chem/msd6.i/17jun16.b/616z0614vi.m
Misc Info: 2516-246-20ml(9/10/16),2744-31-50(7/5/16)

Calibration Date: 17-JUN-2016
Calibration Time: 09:49
Client Smp ID: CCV
Level: LOW
Sample Type: AIR

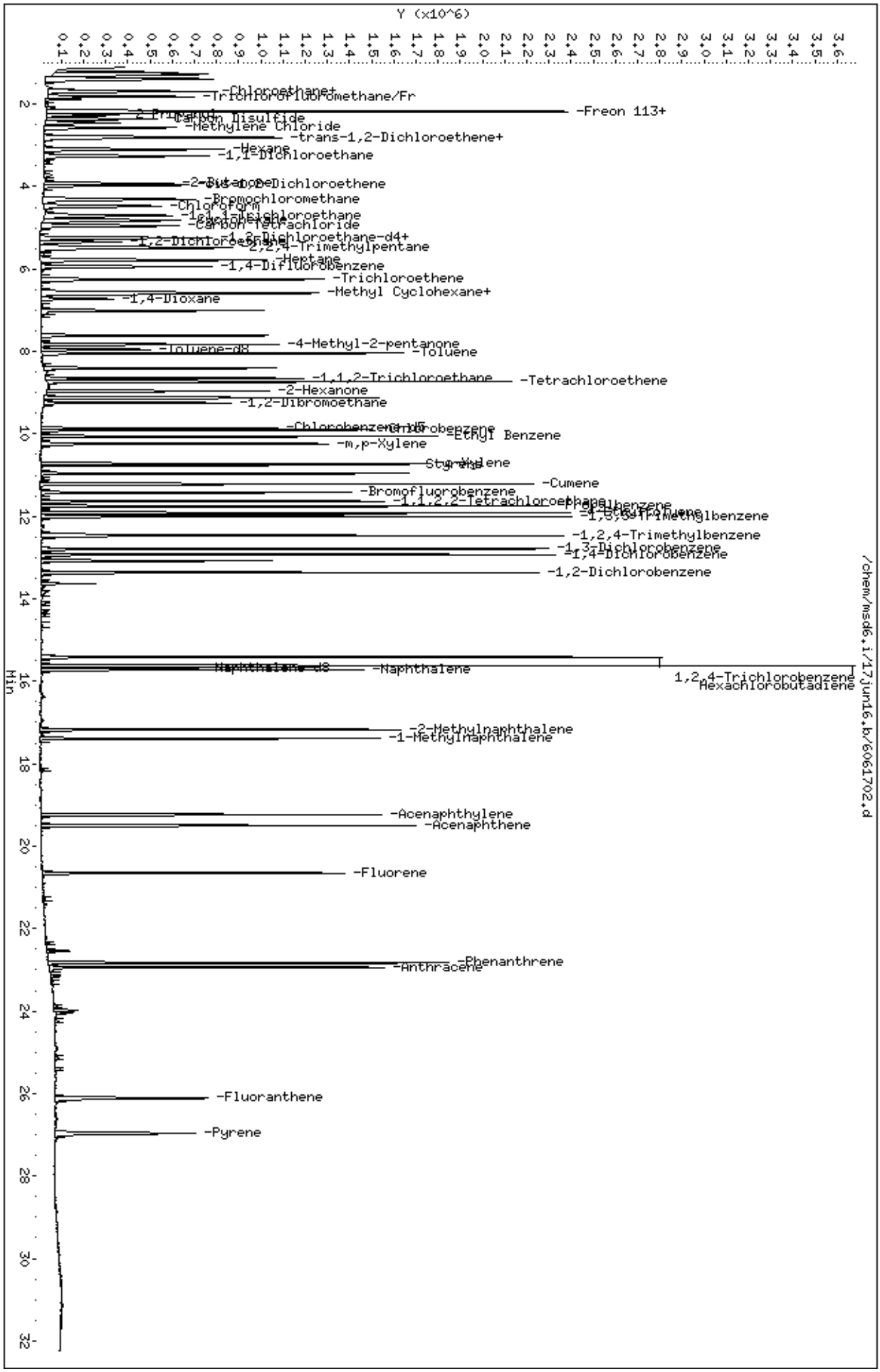
COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
40 Bromochloromethan	204967	122980	286954	204967	0.00
54 1,4-Difluorobenze	857366	514420	1200312	857366	0.00
79 Chlorobenzene-d5	655402	393241	917563	655402	0.00
92 Bromofluorobenzen	469803	281882	657724	469803	0.00

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
40 Bromochloromethan	4.31	3.98	4.64	4.31	0.00
54 1,4-Difluorobenze	5.94	5.61	6.27	5.94	0.00
79 Chlorobenzene-d5	9.87	9.54	10.20	9.87	0.00
92 Bromofluorobenzen	11.42	11.09	11.75	11.42	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/17jun16.b/6061702.d
Date : 17-JUN-2016 09:49
Client ID: CCV
Sample Info: ;VI VOC+PAH CCV;CCV
Column phase: RTx-624

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



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Client Sample ID: LCS
Lab ID#: 1606272-19A
EPA METHOD TO-17

File Name:	**6061506**	**Date of Extraction: NA**	**Date of Collection: NA**
Dil. Factor:	**1.00**		**Date of Analysis: 6/15/16 02:25 PM**

Compound	**%Recovery**	**Method Limits**
Naphthalene	108	70-130

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

Surrogates	**%Recovery**	**Method Limits**
Naphthalene-d8	94	50-150

Report Date: 21-Jun-2016 11:31

Eurofins Air Toxics Inc.

RECOVERY REPORT

Client Name:
Client SDG: 15jun16
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/15jun16.b/616z0614vi.m
Misc Info: 2516-245-20ml(9/7/16),2744-32-50(7/20/16)

SPIKE COMPOUND	CONC ADDED NG	CONC RECOVERED NG	% RECOVERED	LIMITS
3 Freon 114	139.80	149.05	106.62	70-130
6 Vinyl Chloride	51.100	55.839	109.27	70-130
7 1,3-Butadiene	44.200	43.165	97.66	70-130
9 Chloroethane	52.800	49.246	93.27	70-130
10 Isopentane	59.000	56.842	96.34	70-130
11 Trichlorofluoromet	112.40	116.62	103.76	70-130
14 1,1-Dichloroethene	79.300	77.901	98.24	70-130
15 Freon 113	153.30	155.87	101.68	70-130
18 Carbon Disulfide	62.300	44.038	70.69	70-130
19 2-Propanol	49.200	48.226	98.02	70-130
22 Methylene Chloride	69.500	64.961	93.47	70-130
25 trans-1,2-Dichloro	79.300	70.033	88.31	70-130
26 MTBE	72.100	82.459	114.37	70-130
28 Hexane	70.500	70.690	100.27	70-130
29 1,1-Dichloroethane	81.000	75.683	93.44	70-130
37 cis-1,2-Dichloroet	79.300	86.318	108.85	70-130
38 2-Butanone	59.000	65.321	110.71	70-130
44 Chloroform	97.700	96.284	98.55	70-130
45 1,1,1-Trichloroeth	109.10	111.57	102.26	70-130
46 Cyclohexane	68.800	68.253	99.21	70-130
47 Carbon Tetrachlori	125.80	130.22	103.52	70-130
48 Benzene	63.900	58.340	91.30	70-130
50 1,2-Dichloroethane	80.900	81.783	101.09	70-130
51 2,2,4-Trimethylpen	93.400	96.098	102.89	70-130
53 Heptane	82.000	80.353	97.99	70-130
56 Trichloroethene	107.50	102.16	95.03	70-130
58 Methyl Cyclohexane	80.300	84.142	104.78	70-130
59 1,2-Dichloropropan	92.400	101.76	110.13	70-130
60 1,4-Dioxane	72.100	75.413	104.59	70-130
65 4-Methyl-2-pentano	81.900	87.316	106.61	70-130
67 Toluene	75.400	76.907	102.00	70-130
70 1,1,2-Trichloroeth	109.10	115.85	106.19	70-130
71 Tetrachloroethene	135.70	140.09	103.23	70-130

SPIKE COMPOUND	CONC ADDED NG	CONC RECOVERED NG	% RECOVERED	LIMITS
72 2-Hexanone	81.900	84.799	103.54	70-130
74 1,2-Dibromoethane	153.70	171.80	111.78	70-130
81 Chlorobenzene	92.100	91.760	99.63	70-130
82 Ethyl Benzene	86.800	88.849	102.36	70-130
84 m,p-Xylene	86.800	88.748	102.24	70-130
88 o-Xylene	86.800	90.151	103.86	70-130
89 Styrene	85.200	89.567	105.13	70-130
91 Cumene	98.300	99.670	101.39	70-130
94 1,1,2,2-Tetrachlor	137.30	147.50	107.43	70-130
96 Propylbenzene	98.300	100.56	102.30	70-130
97 4-Ethyltoluene	98.300	98.664	100.37	70-130
98 1,3,5-Trimethylben	98.300	97.969	99.66	70-130
100 1,2,4-Trimethylben	98.300	99.314	101.03	70-130
101 1,3-Dichlorobenzen	120.30	119.19	99.08	70-130
102 1,4-Dichlorobenzen	120.30	119.82	99.60	70-130
105 1,2-Dichlorobenzen	120.30	118.70	98.67	70-130
106 1,2,4-Trichloroben	148.40	150.60	101.48	70-130
107 Hexachlorobutadien	213.30	210.07	98.48	70-130
109 Naphthalene	50.000	53.836	107.67	70-130
110 2-Methylnaphthalen	50.000	57.293	114.59	70-130
111 1-Methylnaphthalen	50.000	57.228	114.46	70-130
112 Acenaphthylene	50.000	60.301	120.60	70-130
113 Acenaphthene	50.000	62.220	124.44	70-130
114 Fluorene	50.000	73.958	147.92*	60-140
115 Phenanthrene	50.000	58.556	117.11	60-140
116 Anthracene	50.000	64.895	129.79	60-140
117 Fluoranthene	50.000	72.184	144.37*	60-140
118 Pyrene	50.000	74.829	149.66*	60-140

SURROGATE COMPOUND	AMOUNT ADDED ng	AMOUNT RECOVERED ng	% RECOVERED	LIMITS
$ 49 1,2-Dichloroethane	25.000	22.769	91.08	50-150
$ 66 Toluene-d8	25.000	24.670	98.68	50-150
$ 108 Naphthalene-d8	25.000	23.607	94.43	50-150

Eurofins Air Toxics Inc.

EPA Method TO-17 GC/MS

Data file : /chem/msd6.i/15jun16.b/6061506.d
Lab Smp Id: VI VOC+PAH ICV/LCS Client Smp ID: LCS
Inj Date : 15-JUN-2016 14:25
Operator : CT Inst ID: msd6.i
Smp Info : ;VI VOC+PAH ICV/LCS;LCS
Misc Info : 2516-245-20ml(9/7/16),2744-32-50(7/20/16)
Comment :
Method : /chem/msd6.i/15jun16.b/616z0614vi.m
Meth Date : 21-Jun-2016 11:24 U5BT Quant Type: ISTD
Cal Date : 14-JUN-2016 14:59 Cal File: 6061412.d
Als bottle: 12 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	
4.308	4.315	(1.000)	130	164425	26.0000		80.00- 120.00	100.00
4.308	4.315	(1.000)	128	127049			47.94- 107.94	77.27
4.308	4.315	(1.000)	49	161406			68.24- 128.24	98.16
* 54 1,4-Difluorobenzene							CAS #: 540-36-3	
5.941	5.948	(1.000)	114	649923	23.0000		80.00- 120.00	100.00
5.941	5.948	(1.000)	88	98988			0.00- 45.46	15.23
* 79 Chlorobenzene-d5							CAS #: 3114-55-4	
9.874	9.859	(1.000)	117	618896	24.0000		80.00- 120.00	100.00
9.874	9.859	(1.000)	82	310566			19.06- 79.06	50.18
* 92 Bromofluorobenzene							CAS #: 460-00-4	
11.428	11.414	(1.000)	174	454753	36.0000		80.00- 120.00	100.00
11.428	11.407	(1.000)	95	474941			74.19- 134.19	104.44
11.428	11.414	(1.000)	176	440112			67.61- 127.61	96.78
$ 49 1,2-Dichloroethane-d4							CAS #: 17060-07-0	
5.225	5.239	(0.879)	65	76325	22.7689	22.769	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (ng)	FINAL (NG)	TARGET RANGE	RATIO
$ 49 1,2-Dichloroethane-d4 (continued)							
5.232	5.232 (0.881)	67	39878			21.95- 81.95	52.25
$ 66 Toluene-d8					CAS #: 2037-26-5		
7.961	7.954 (0.806)	98	285027	24.6700	24.670	80.00- 120.00	100.00
7.961	7.954 (0.806)	70	28074			0.00- 39.97	9.85
7.961	7.954 (0.806)	100	186061			35.51- 95.51	65.28
$ 108 Naphthalene-d8					CAS #: 1146-65-2		
15.690	15.690 (1.373)	136	555893	23.6067	23.607	80.00- 120.00	100.00
15.690	15.690 (1.373)	108	47511			0.00- 38.72	8.55
3 Freon 114					CAS #: 76-14-2		
1.283	1.283 (0.298)	135	457391	149.050	149.05	80.00- 120.00	100.00
1.283	1.283 (0.298)	137	146853			2.20- 62.20	32.11
6 Vinyl Chloride					CAS #: 75-01-4		
1.395	1.395 (0.324)	62	219689	55.8387	55.839	80.00- 120.00	100.00
1.395	1.395 (0.324)	64	87786			13.62- 73.62	39.96
7 1,3-Butadiene					CAS #: 106-99-0		
1.395	1.395 (0.324)	54	152289	43.1650	43.165	80.00- 120.00	100.00
1.395	1.395 (0.324)	39	221047			117.26- 177.26	145.15
9 Chloroethane					CAS #: 75-00-3		
1.661	1.661 (0.385)	64	94674	49.2463	49.246	80.00- 120.00	100.00
1.661	1.661 (0.385)	66	29533			0.84- 60.84	31.19
1.647	1.661 (0.382)	49	26055			0.00- 56.89	27.52
10 Isopentane					CAS #: 78-78-4		
1.689	1.688 (0.392)	57	166896	56.8420	56.842	80.00- 120.00	100.00
1.689	1.688 (0.392)	43	231296			107.36- 167.36	138.59
11 Trichlorofluoromethane/Fr11					CAS #: 75-69-4		
1.814	1.814 (0.421)	101	614586	116.622	116.62	80.00- 120.00	100.00
1.814	1.814 (0.421)	103	400664			35.47- 95.47	65.19
15 Freon 113					CAS #: 76-13-1		
2.181	2.181 (0.506)	151	525542	155.873	155.87	80.00- 120.00	100.00
2.181	2.181 (0.506)	153	338256			34.42- 94.42	64.36
2.181	2.181 (0.506)	101	554460			75.78- 135.78	105.50
14 1,1-Dichloroethene					CAS #: 75-35-4		
2.181	2.181 (0.506)	98	165830	77.9011	77.901	80.00- 120.00	100.00
2.181	2.181 (0.506)	96	262043			128.07- 188.07	158.02
2.181	2.181 (0.506)	61	393230			203.73- 263.73	237.13

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (ng)	FINAL (NG)	TARGET RANGE	RATIO
18 Carbon Disulfide					CAS #: 75-15-0		
2.360	2.360 (0.548)	76	593287	44.0384	44.038	80.00- 120.00	100.00
19 2-Propanol					CAS #: 67-63-0		
2.274	2.274 (0.528)	45	371596	48.2262	48.226	80.00- 120.00	100.00(a)
2.274	2.274 (0.528)	43	74936			0.00- 50.57	20.17
2.274	2.281 (0.528)	59	14748			0.00- 34.17	3.97
22 Methylene Chloride					CAS #: 75-09-2		
2.567	2.575 (0.596)	49	310611	64.9609	64.961	80.00- 120.00	100.00
2.575	2.575 (0.598)	84	264969			55.25- 115.25	85.31
2.575	2.575 (0.598)	51	96920			0.54- 60.54	31.20
25 trans-1,2-Dichloroethene					CAS #: 156-60-5		
2.818	2.818 (0.654)	98	143315	70.0331	70.033	80.00- 120.00	100.00
2.818	2.818 (0.654)	61	294343			178.66- 238.66	205.38
2.818	2.818 (0.654)	96	220897			127.69- 187.69	154.13
26 MTBE					CAS #: 1634-04-4		
2.797	2.804 (0.649)	73	634257	82.4586	82.459	80.00- 120.00	100.00
2.797	2.804 (0.649)	57	136957			0.00- 51.21	21.59
2.797	2.804 (0.649)	41	132475			0.00- 50.32	20.89
28 Hexane					CAS #: 110-54-3		
3.098	3.105 (0.719)	57	350195	70.6898	70.690	80.00- 120.00	100.00
3.098	3.105 (0.719)	43	213598			30.80- 90.80	60.99
3.098	3.105 (0.719)	86	55502			0.00- 45.79	15.85
29 1,1-Dichloroethane					CAS #: 75-34-3		
3.269	3.269 (0.759)	63	371526	75.6833	75.683	80.00- 120.00	100.00
3.269	3.269 (0.759)	65	119663			1.92- 61.92	32.21
37 cis-1,2-Dichloroethene					CAS #: 156-59-2		
3.971	3.971 (0.922)	98	190770	86.3177	86.318	80.00- 120.00	100.00
3.964	3.971 (0.920)	96	301889			125.20- 185.20	158.25
3.971	3.971 (0.922)	61	363057			158.24- 218.24	190.31
38 2-Butanone					CAS #: 78-93-3		
3.928	3.928 (0.912)	72	136425	65.3214	65.321	80.00- 120.00	100.00
3.928	3.936 (0.912)	43	528403			361.05- 421.05	387.32
3.928	3.936 (0.912)	57	45994			4.40- 64.40	33.71
44 Chloroform					CAS #: 67-66-3		
4.480	4.487 (1.040)	83	500118	96.2841	96.284	80.00- 120.00	100.00
4.480	4.487 (1.040)	85	324312			35.45- 95.45	64.85

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (ng)	FINAL (NG)	TARGET RANGE	RATIO
46 Cyclohexane					CAS #: 110-82-7		
4.824	4.831 (0.812)	84	310652	68.2535	68.253	80.00- 120.00	100.00
4.824	4.831 (0.812)	56	353234			82.98- 142.98	113.71
4.817	4.831 (0.811)	41	198023			32.69- 92.69	63.74
45 1,1,1-Trichloroethane					CAS #: 71-55-6		
4.709	4.716 (0.793)	97	513860	111.568	111.57	80.00- 120.00	100.00
4.709	4.716 (0.793)	99	329223			34.83- 94.83	64.07
47 Carbon Tetrachloride					CAS #: 56-23-5		
4.953	4.960 (0.834)	119	556795	130.225	130.22	80.00- 120.00	100.00
4.953	4.960 (0.834)	117	574755			73.53- 133.53	103.23
51 2,2,4-Trimethylpentane					CAS #: 540-84-1		
5.483	5.490 (0.923)	57	1112658	96.0985	96.098	80.00- 120.00	100.00
5.483	5.497 (0.923)	56	345604			1.12- 61.12	31.06
5.483	5.490 (0.923)	41	313017			0.00- 57.96	28.13
48 Benzene					CAS #: 71-43-2		
5.254	5.253 (0.884)	78	730042	58.3398	58.340	80.00- 120.00	100.00
5.246	5.253 (0.883)	77	171473			0.00- 53.50	23.49
50 1,2-Dichloroethane					CAS #: 107-06-2		
5.347	5.354 (0.900)	62	325366	81.7834	81.783	80.00- 120.00	100.00
5.347	5.354 (0.900)	64	106230			2.93- 62.93	32.65
53 Heptane					CAS #: 142-82-5		
5.784	5.791 (0.973)	71	236780	80.3530	80.353	80.00- 120.00	100.00
5.784	5.791 (0.973)	43	412450			143.29- 203.29	174.19
5.784	5.791 (0.973)	57	216199			61.40- 121.40	91.31
56 Trichloroethene					CAS #: 79-01-6		
6.249	6.263 (1.052)	95	384276	102.162	102.16	80.00- 120.00	100.00
6.249	6.263 (1.052)	130	428089			81.46- 141.46	111.40
6.249	6.263 (1.052)	97	248702			34.92- 94.92	64.72
58 Methyl Cyclohexane					CAS #: 108-87-2		
6.572	6.586 (1.106)	83	467364	84.1419	84.142	80.00- 120.00	100.00
6.572	6.586 (1.106)	98	212304			15.14- 75.14	45.43
6.572	6.586 (1.106)	55	357532			46.07- 106.07	76.50
59 1,2-Dichloropropane					CAS #: 78-87-5		
6.607	6.614 (1.112)	63	277857	101.764	101.76	80.00- 120.00	100.00
6.607	6.614 (1.112)	62	190569			38.13- 98.13	68.59
6.579	6.586 (1.107)	41	342292			92.30- 152.30	123.19

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (ng)	FINAL (NG)	TARGET RANGE	RATIO
60 1,4-Dioxane					CAS #: 123-91-1		
6.722	6.736 (1.131)	88	187692	75.4128	75.413	80.00- 120.00	100.00
6.722	6.736 (1.131)	58	116194			31.73- 91.73	61.91
6.722	6.736 (1.131)	57	60643			1.20- 61.20	32.31
65 4-Methyl-2-pentanone					CAS #: 108-10-1		
7.832	7.832 (1.318)	58	213808	87.3165	87.316	80.00- 120.00	100.00
7.832	7.832 (1.318)	43	537458			221.14- 281.14	251.37
7.832	7.832 (1.318)	85	107063			20.58- 80.58	50.07
67 Toluene					CAS #: 108-88-3		
8.047	8.047 (0.815)	91	984588	76.9069	76.907	80.00- 120.00	100.00
8.047	8.047 (0.815)	92	575731			28.32- 88.32	58.47
70 1,1,2-Trichloroethane					CAS #: 79-00-5		
8.656	8.649 (1.457)	97	356227	115.850	115.85	80.00- 120.00	100.00
8.656	8.649 (1.457)	99	223521			32.57- 92.57	62.75
8.656	8.649 (1.457)	83	289371			50.93- 110.93	81.23
71 Tetrachloroethene					CAS #: 127-18-4		
8.735	8.728 (0.885)	166	590632	140.088	140.09	80.00- 120.00	100.00
8.735	8.728 (0.885)	129	419760			41.03- 101.03	71.07
8.735	8.728 (0.885)	131	408768			38.99- 98.99	69.21
72 2-Hexanone					CAS #: 591-78-6		
8.971	8.957 (0.909)	58	276285	84.7993	84.799	80.00- 120.00	100.00
8.964	8.957 (0.908)	43	509496			155.38- 215.38	184.41
8.971	8.957 (0.909)	100	63363			0.00- 52.71	22.93
74 1,2-Dibromoethane					CAS #: 106-93-4		
9.251	9.236 (0.937)	107	568850	171.805	171.80	80.00- 120.00	100.00
9.251	9.236 (0.937)	109	544265			65.47- 125.47	95.68
81 Chlorobenzene					CAS #: 108-90-7		
9.910	9.895 (1.004)	112	856126	91.7598	91.760	80.00- 120.00	100.00
9.910	9.895 (1.004)	114	279375			2.20- 62.20	32.63
9.910	9.895 (1.004)	77	441776			20.93- 80.93	51.60
82 Ethyl Benzene					CAS #: 100-41-4		
10.067	10.053 (1.020)	106	425997	88.8491	88.849	80.00- 120.00	100.00
10.067	10.053 (1.020)	91	1294125			272.45- 332.45	303.79
84 m,p-Xylene					CAS #: 108-38-3		
10.246	10.232 (1.038)	106	541310	88.7485	88.748	80.00- 120.00	100.00
10.246	10.232 (1.038)	91	1037621			164.06- 224.06	191.69

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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
 10.733  10.712 (0.939)   106    519507 90.1511   90.151  80.00- 120.00   100.00
 10.726  10.712 (0.939)    91   1059464                  174.12- 234.12   203.94
-------------------------------------------------------------------------------
   89 Styrene                                       CAS #: 100-42-5
 10.762  10.740 (0.942)   104    855341 89.5669   89.567  80.00- 120.00   100.00
 10.762  10.740 (0.942)    78    395280                   16.31-  76.31    46.21
-------------------------------------------------------------------------------
   91 Cumene                                        CAS #: 98-82-8
 11.220  11.206 (0.982)   105   1562717 99.6701   99.670  80.00- 120.00   100.00
 11.220  11.206 (0.982)   120    429591                    0.00-  57.22    27.49
 11.220  11.199 (0.982)    51    134452                    0.00-  38.43     8.60
-------------------------------------------------------------------------------
   94 1,1,2,2-Tetrachloroethane                     CAS #: 79-34-5
 11.643  11.621 (1.019)    83    735470 147.496   147.50  80.00- 120.00   100.00
 11.643  11.621 (1.019)    85    481868                   35.83-  95.83    65.52
-------------------------------------------------------------------------------
   96 Propylbenzene                                 CAS #: 103-65-1
 11.758  11.736 (1.029)    91   1843105 100.564   100.56  80.00- 120.00   100.00
 11.758  11.743 (1.029)   120    467650                    0.00-  55.53    25.37
 11.758  11.743 (1.029)   105     72431                    0.00-  33.92     3.93
-------------------------------------------------------------------------------
   97 4-Ethyltoluene                                CAS #: 622-96-8
 11.922  11.908 (1.043)   120    485180 98.6639   98.664  80.00- 120.00   100.00
 11.922  11.908 (1.043)   105   1573987                  298.20- 358.20   324.41
-------------------------------------------------------------------------------
   98 1,3,5-Trimethylbenzene                        CAS #: 108-67-8
 12.008  11.994 (1.051)   120    687804 97.9689   97.969  80.00- 120.00   100.00
 12.008  11.994 (1.051)   105   1361446                  167.68- 227.68   197.94
-------------------------------------------------------------------------------
  100 1,2,4-Trimethylbenzene                        CAS #: 95-63-6
 12.474  12.460 (1.091)   120    651756 99.3145   99.314  80.00- 120.00   100.00
 12.474  12.460 (1.091)   105   1438502                  185.14- 245.14   220.71
-------------------------------------------------------------------------------
  101 1,3-Dichlorobenzene                           CAS #: 541-73-1
 12.796  12.789 (1.120)   146   1068454 119.188   119.19  80.00- 120.00   100.00
 12.796  12.789 (1.120)   148    691628                   34.46-  94.46    64.73
 12.796  12.782 (1.120)   111    402793                    7.45-  67.45    37.70
-------------------------------------------------------------------------------
  102 1,4-Dichlorobenzene                           CAS #: 106-46-7
 12.940  12.925 (1.132)   146   1077580 119.820   119.82  80.00- 120.00   100.00
 12.940  12.925 (1.132)   148    692473                   33.91-  93.91    64.26
 12.932  12.925 (1.132)   111    389005                    6.02-  66.02    36.10
-------------------------------------------------------------------------------
  105 1,2-Dichlorobenzene                           CAS #: 95-50-1
 13.369  13.362 (1.170)   146   1034537 118.702   118.70  80.00- 120.00   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)
 13.369  13.362 (1.170)   148    660762                    34.29-  94.29    63.87
 13.369  13.362 (1.170)   111    400721                     8.63-  68.63    38.73
-------------------------------------------------------------------------------
  106 1,2,4-Trichlorobenzene                        CAS #: 120-82-1
 15.418  15.418 (1.349)   180   1053922 150.604   150.60  80.00- 120.00   100.00
 15.418  15.418 (1.349)   182    999607                    64.63- 124.63    94.85
-------------------------------------------------------------------------------
  107 Hexachlorobutadiene                           CAS #: 87-68-3
 15.633  15.626 (1.368)   225    767673 210.067   210.07  80.00- 120.00   100.00
 15.633  15.626 (1.368)   223    482978                    32.03-  92.03    62.91
-------------------------------------------------------------------------------
  109 Naphthalene                                   CAS #: 91-20-3
 15.733  15.726 (1.377)   128   1361597 53.8357   53.836  80.00- 120.00   100.00
 15.733  15.726 (1.377)   127    174654                     0.00-  42.99    12.83
-------------------------------------------------------------------------------
  110 2-Methylnaphthalene                           CAS #: 91-57-6
 17.180  17.173 (1.503)   142    957914 57.2932   57.293  80.00- 120.00   100.00
 17.180  17.173 (1.503)   141    830485                    56.24- 116.24    86.70
 17.180  17.173 (1.503)   115    280772                     0.00-  58.81    29.31
-------------------------------------------------------------------------------
  111 1-Methylnaphthalene                           CAS #: 90-12-0
 17.395  17.395 (1.522)   142    875258 57.2281   57.228  80.00- 120.00   100.00
 17.395  17.395 (1.522)   141    792075                    60.38- 120.38    90.50
 17.395  17.395 (1.522)   115    270011                     0.56-  60.56    30.85
-------------------------------------------------------------------------------
  112 Acenaphthylene                                CAS #: 208-96-8
 19.243  19.243 (1.684)   152   1644122 60.3014   60.301  80.00- 120.00   100.00
 19.243  19.243 (1.684)   151    324897                     0.00-  49.78    19.76
 19.243  19.243 (1.684)   153    213972                     0.00-  43.07    13.01
-------------------------------------------------------------------------------
  113 Acenaphthene                                  CAS #: 83-32-9
 19.508  19.508 (1.707)   154    810491 62.2205   62.220  80.00- 120.00   100.00
 19.508  19.508 (1.707)   152    421664                    21.85-  81.85    52.03
 19.508  19.508 (1.707)   153    890388                    79.23- 139.23   109.86
-------------------------------------------------------------------------------
  114 Fluorene                                      CAS #: 86-73-7
 20.661  20.661 (1.808)   166    809659 73.9580   73.958  80.00- 120.00   100.00(R)
 20.661  20.661 (1.808)   165    766781                    65.14- 125.14    94.70
-------------------------------------------------------------------------------
  115 Phenanthrene                                  CAS #: 85-01-8
 22.839  22.839 (1.998)   178   1590087 58.5562   58.556  80.00- 120.00   100.00
 22.839  22.839 (1.998)   176    294901                     0.00-  48.56    18.55
 22.839  22.832 (1.998)   179    241363                     0.00-  45.19    15.18
-------------------------------------------------------------------------------
  116 Anthracene                                    CAS #: 120-12-7
 22.946  22.946 (2.008)   178   1508642 64.8953   64.895  80.00- 120.00   100.00
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RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (ng)	FINAL (NG)	TARGET RANGE	RATIO
116 Anthracene (continued)							
22.946	22.946 (2.008)	176	269628			0.00- 47.99	17.87
22.946	22.946 (2.008)	179	228388			0.00- 45.19	15.14
117 Fluoranthene					CAS #: 206-44-0		
26.127	26.119 (2.286)	202	1401783	72.1842	72.184	80.00- 120.00	100.00(R)
26.127	26.119 (2.286)	101	216136			0.00- 45.14	15.42
118 Pyrene					CAS #: 129-00-0		
26.979	26.979 (2.361)	202	1487810	74.8293	74.829	80.00- 120.00	100.00(R)
26.979	26.979 (2.361)	101	266455			0.00- 48.11	17.91
26.979	26.979 (2.361)	100	218420			0.00- 44.51	14.68

QC Flag Legend

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

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd6.i
Lab File ID: 6061506.d
Lab Smp Id: VI VOC+PAH ICV/LCS
Analysis Type: VOA
Quant Type: ISTD
Operator: CT
Method File: /chem/msd6.i/15jun16.b/616z0614vi.m
Misc Info: 2516-245-20ml(9/7/16),2744-32-50(7/20/16)

Calibration Date: 14-JUN-2016
Calibration Time: 14:59
Client Smp ID: LCS
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
40 Bromochloromethan	156066	93640	218492	164425	5.36
54 1,4-Difluorobenze	638538	383123	893953	649923	1.78
79 Chlorobenzene-d5	603523	362114	844932	618896	2.55
92 Bromofluorobenzen	441798	265079	618517	454753	2.93

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
40 Bromochloromethan	4.32	3.99	4.65	4.31	-0.16
54 1,4-Difluorobenze	5.95	5.62	6.28	5.94	-0.12
79 Chlorobenzene-d5	9.86	9.53	10.19	9.87	0.15
92 Bromofluorobenzen	11.41	11.08	11.74	11.43	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/15jun16.b/6061506.d

Date : 15-JUN-2016 14:25

Client ID: LCS

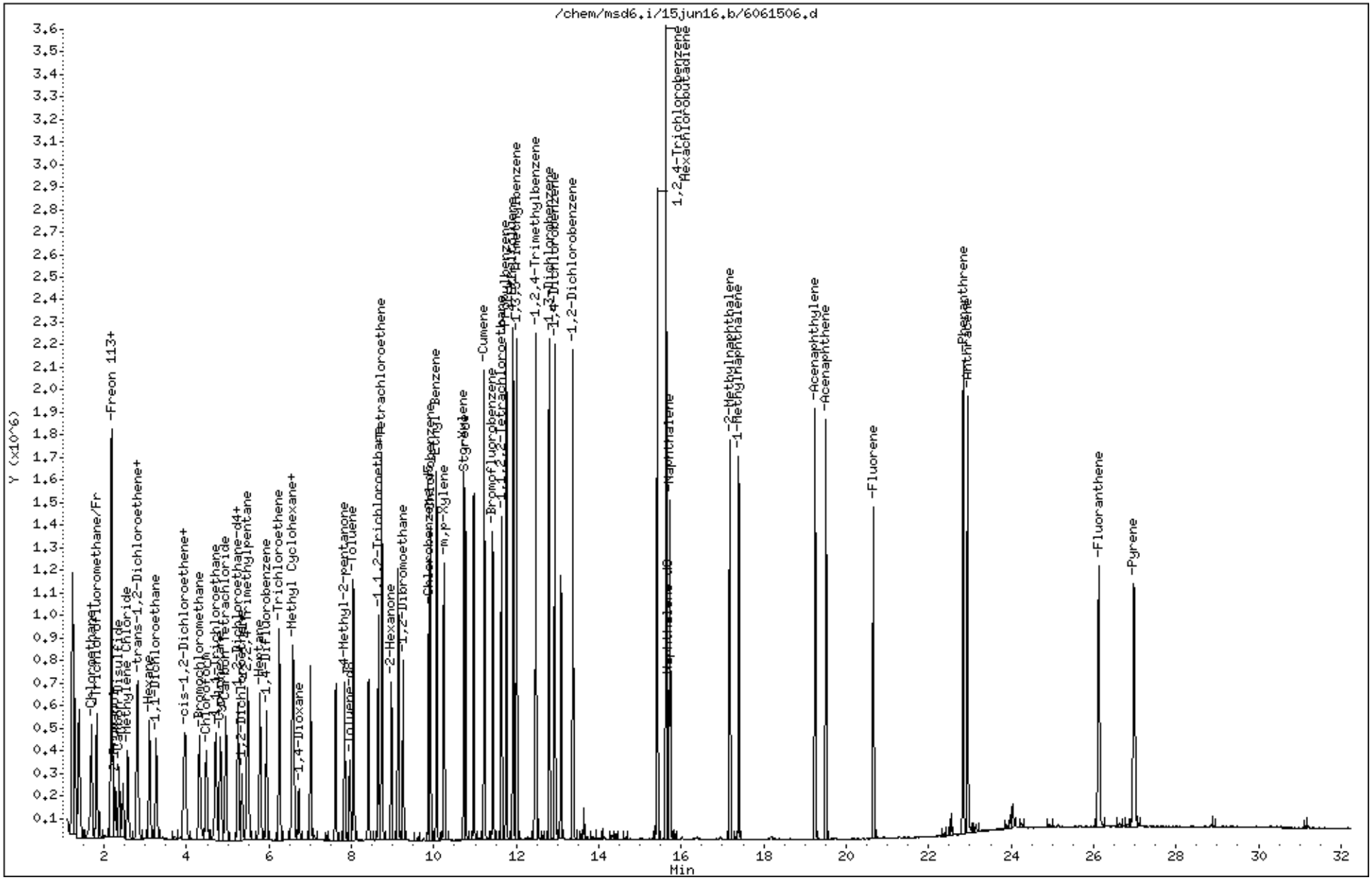
Sample Info: ;VI VOC+PAH ICV/LCS;LCS

Column phase: RTx-624

Instrument: msd6.i

Operator: CT

Column diameter: 0.53



Data File: /chem/msd6.i/15jun16.b/6061506.d

Date : 15-JUN-2016 14:25

Client ID: LCS

Instrument: msd6.i

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

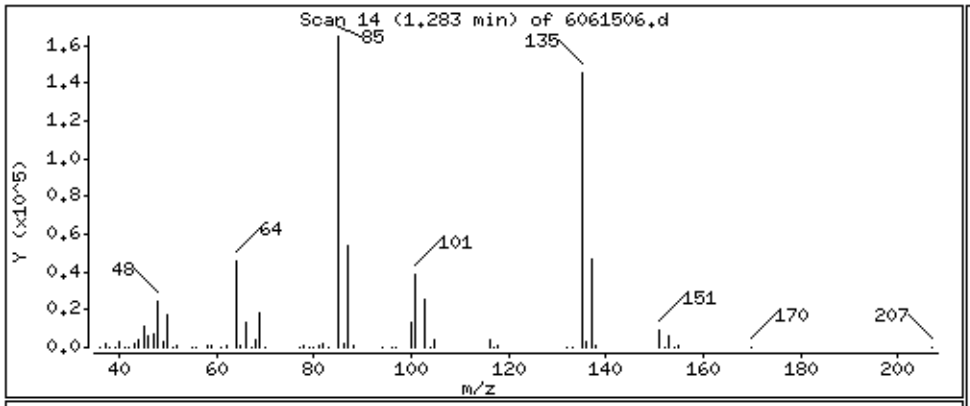
Operator: CT

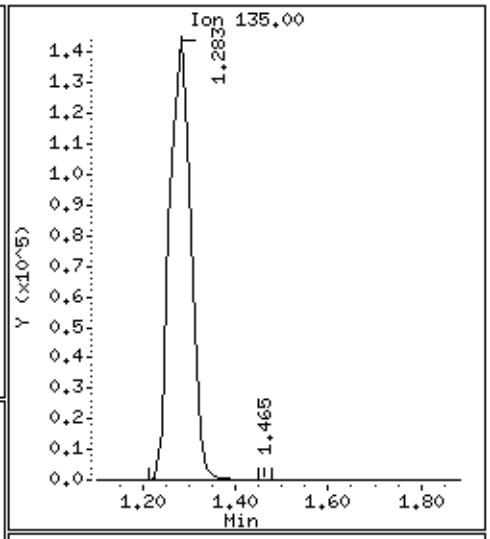
Column phase: RTx-624

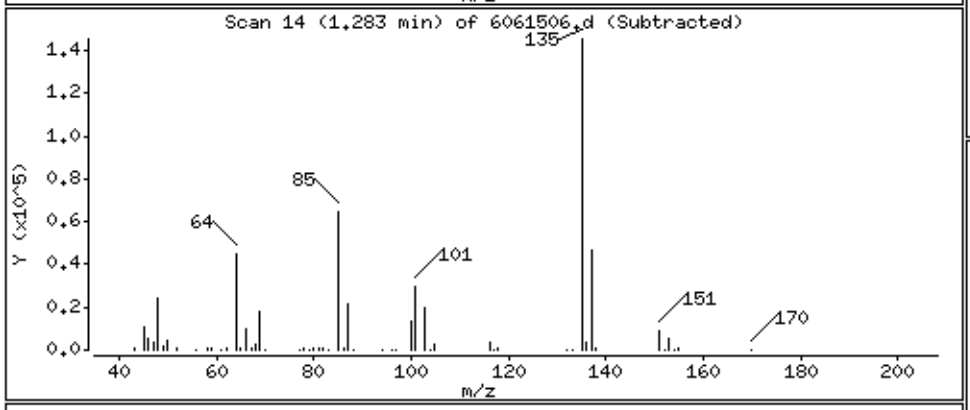
Column diameter: 0.53

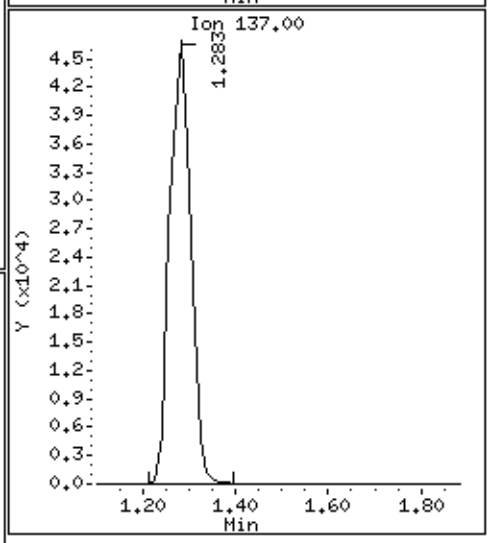
3 Freon 114

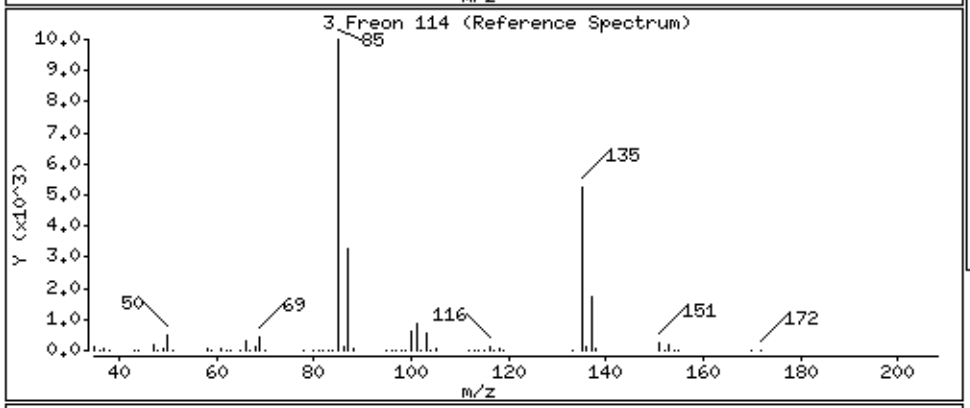
Concentration: 149.05 NG

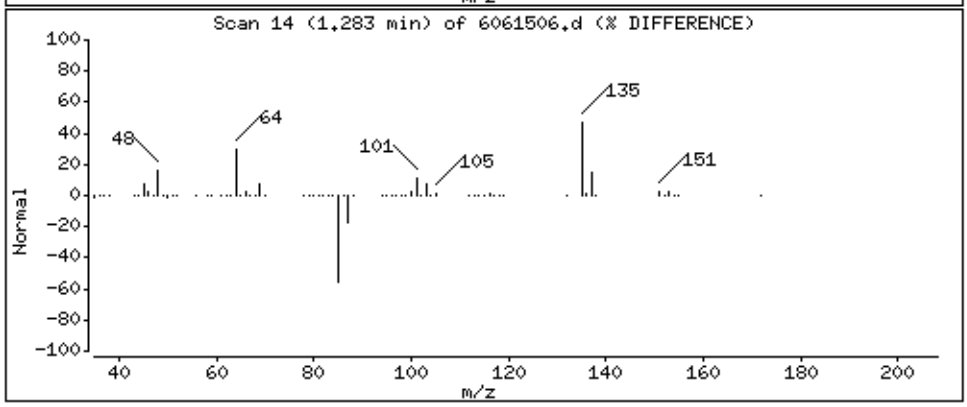












Data File: /chem/msd6.i/15jun16.b/6061506.d

Date : 15-JUN-2016 14:25

Client ID: LCS

Instrument: msd6.i

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

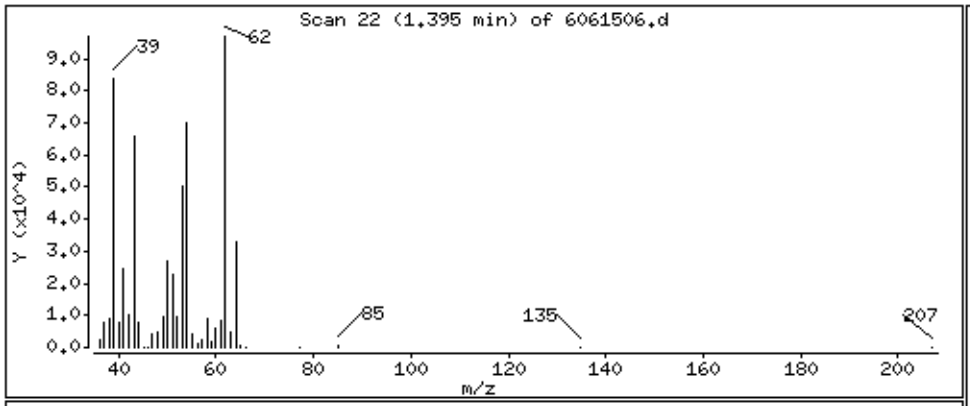
Operator: CT

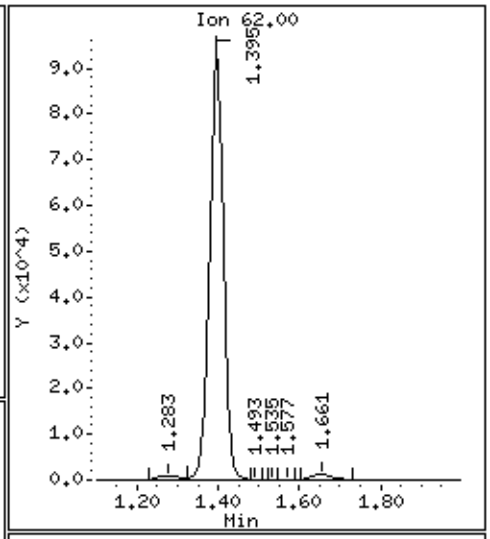
Column phase: RTx-624

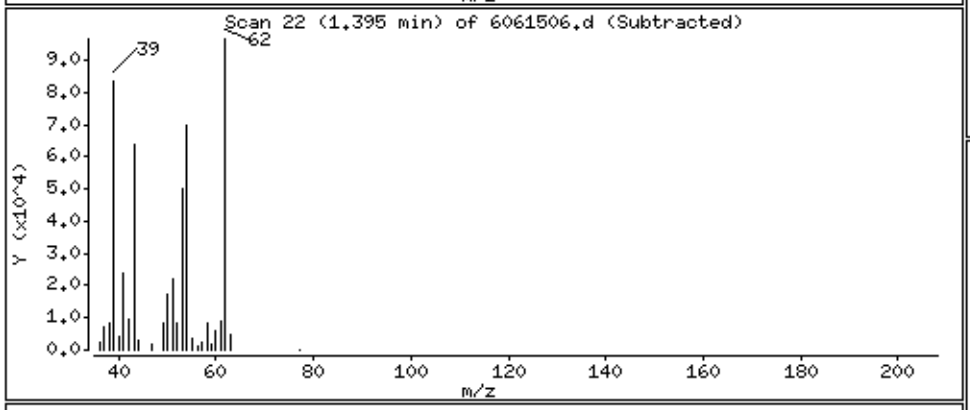
Column diameter: 0.53

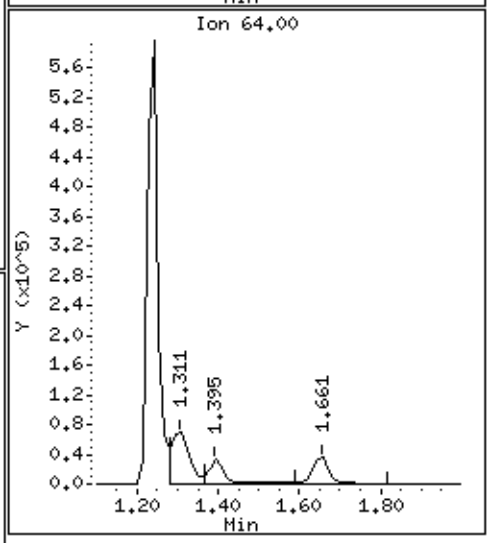
6 Vinyl Chloride

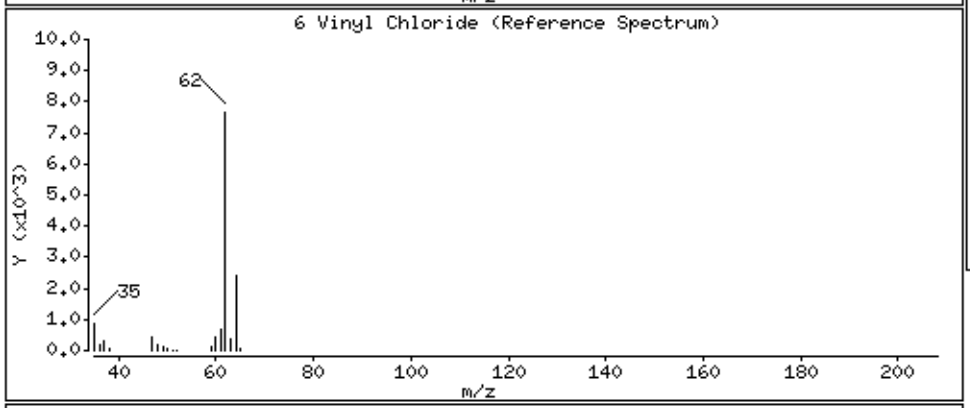
Concentration: 55.839 NG

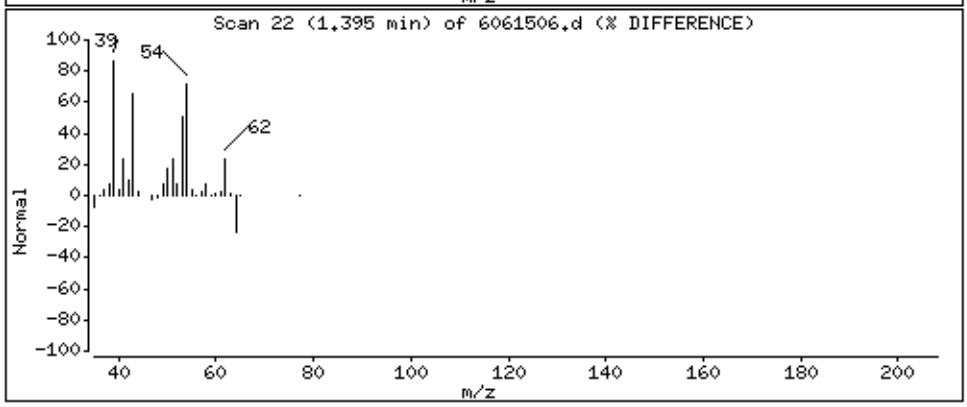












Data File: /chem/msd6.i/15jun16.b/6061506.d

Date : 15-JUN-2016 14:25

Client ID: LCS

Instrument: msd6.i

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

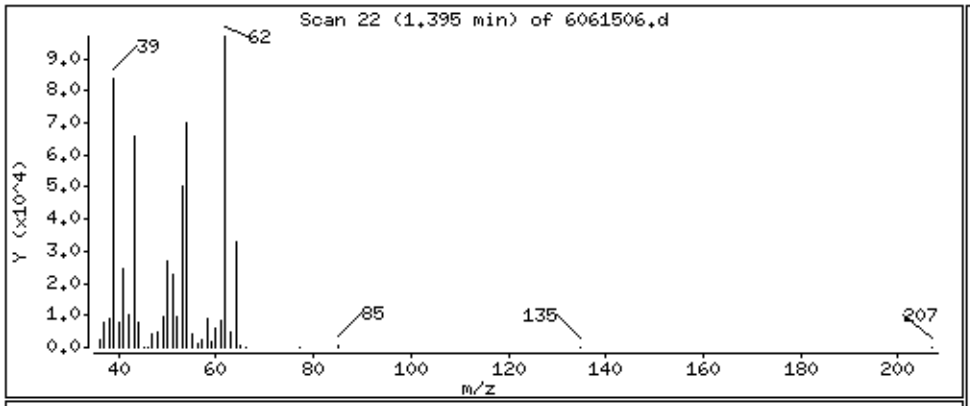
Operator: CT

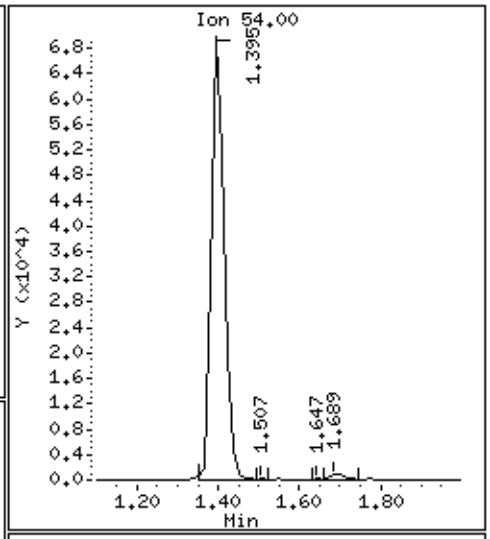
Column phase: RTx-624

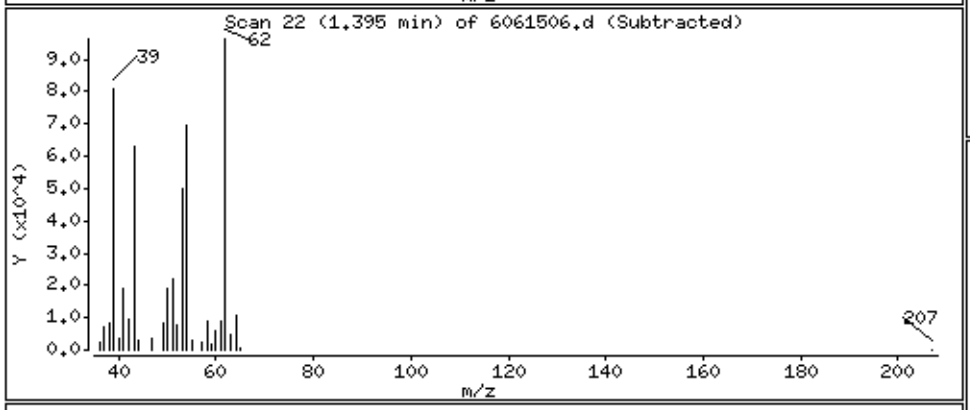
Column diameter: 0.53

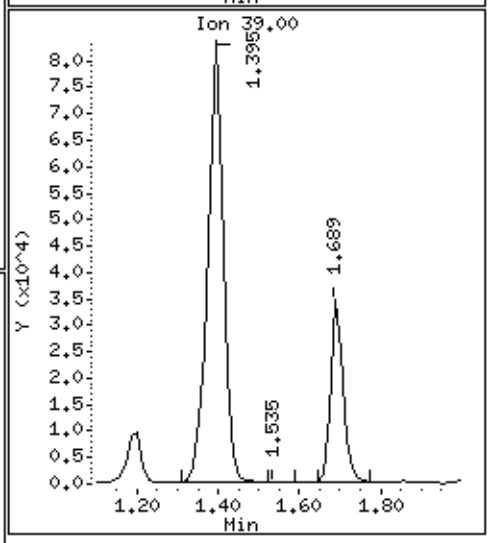
7 1,3-Butadiene

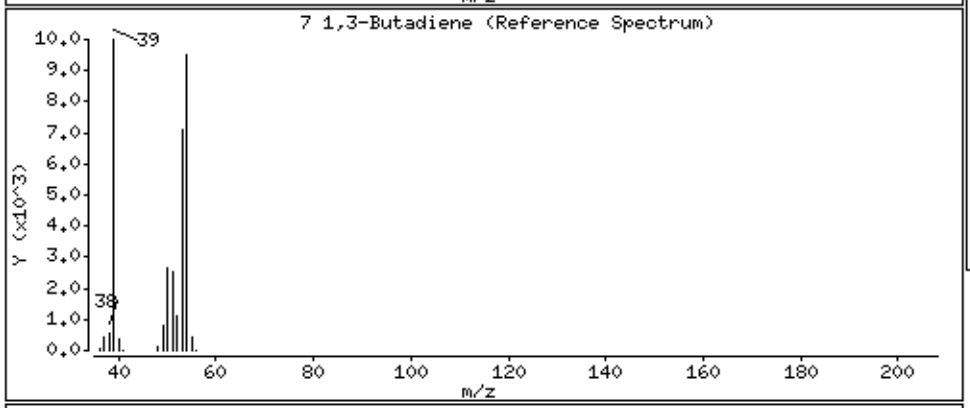
Concentration: 43.165 NG

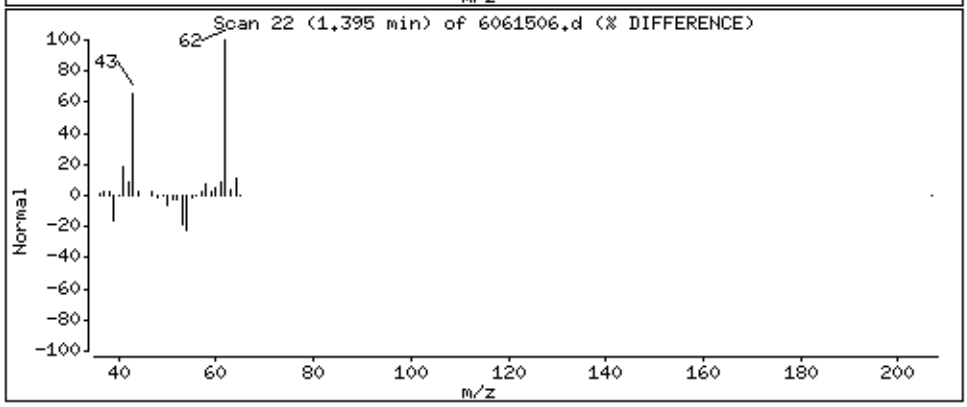












Data File: /chem/msd6.i/15jun16.b/6061506.d

Date : 15-JUN-2016 14:25

Client ID: LCS

Instrument: msd6.i

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

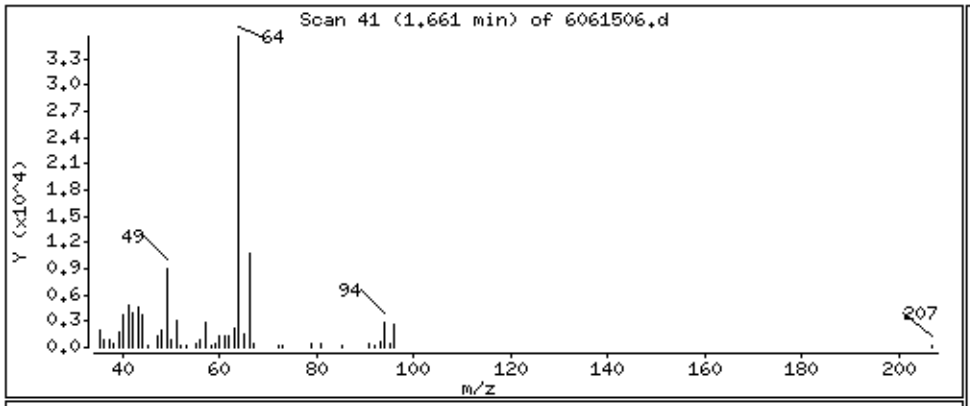
Operator: CT

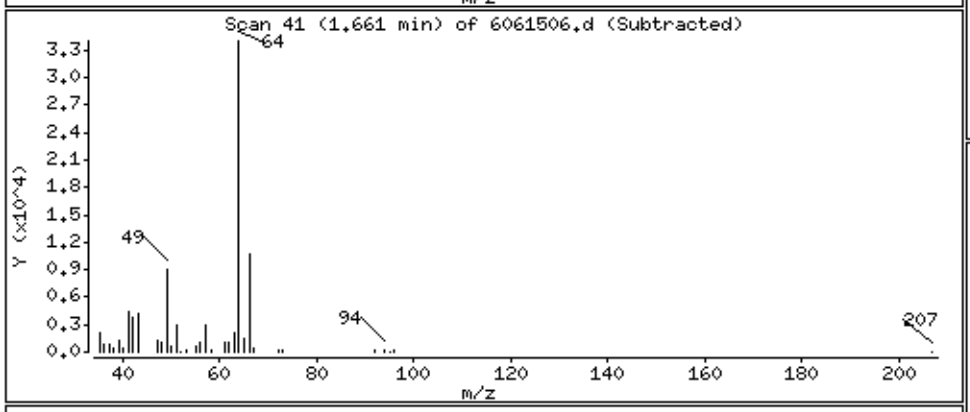
Column phase: RTx-624

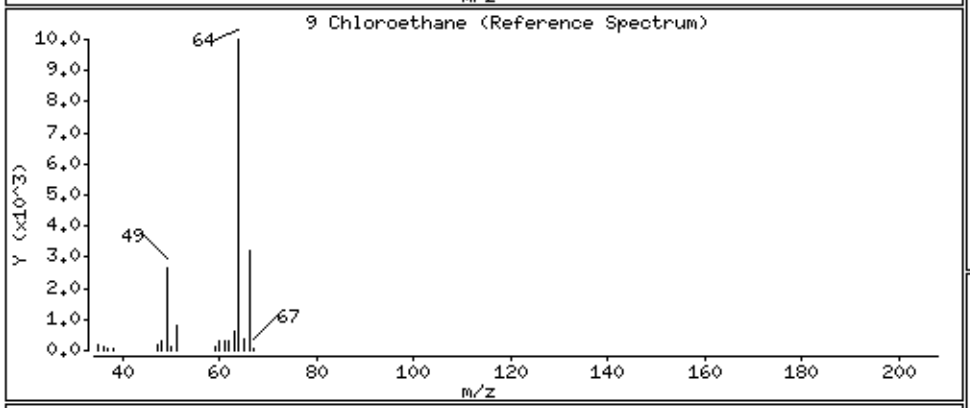
Column diameter: 0.53

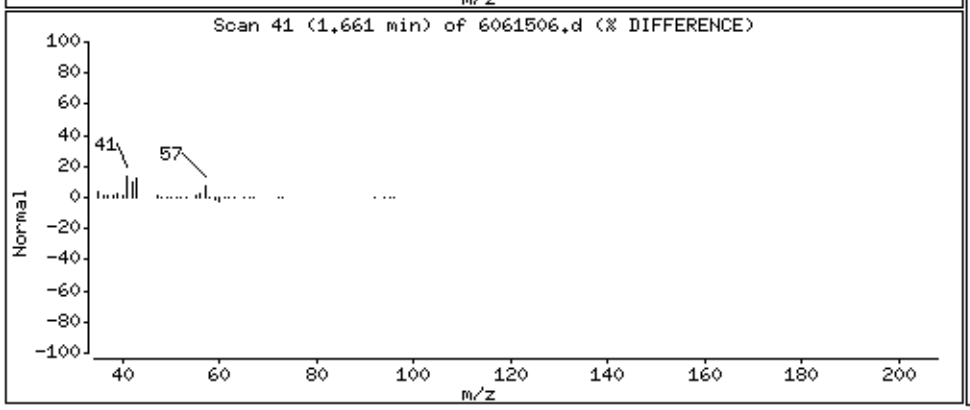
9 Chloroethane

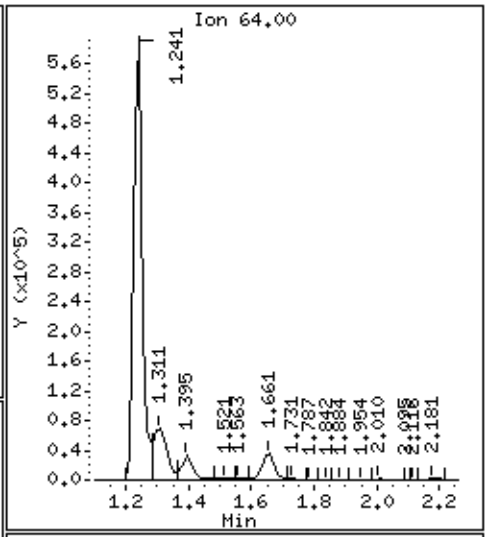
Concentration: 49.246 NG

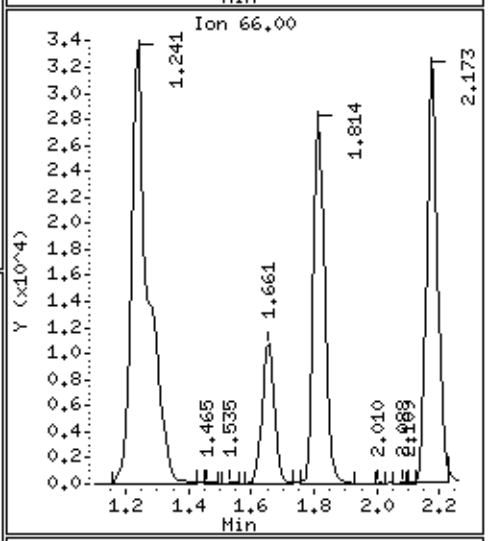


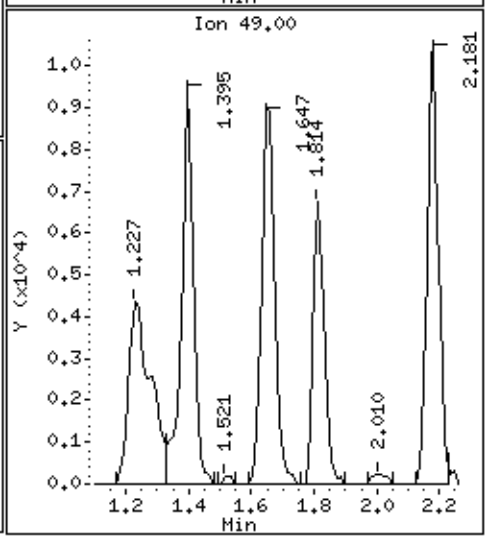












Data File: /chem/msd6.i/15jun16.b/6061506.d

Date : 15-JUN-2016 14:25

Client ID: LCS

Instrument: msd6.i

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

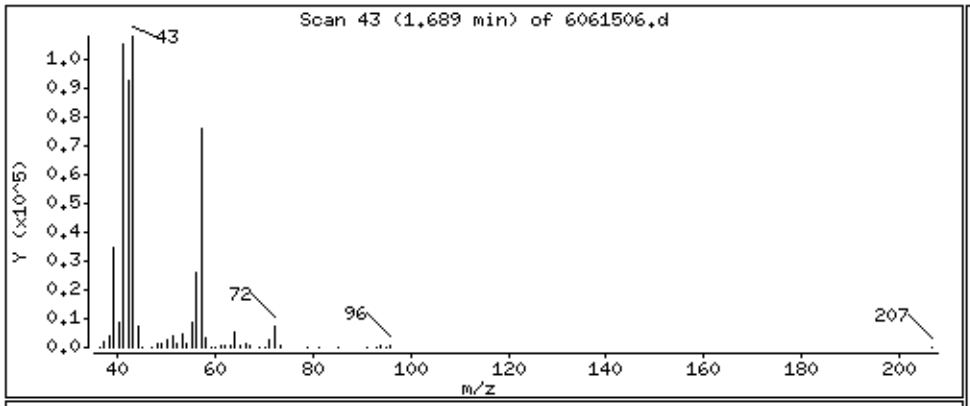
Operator: CT

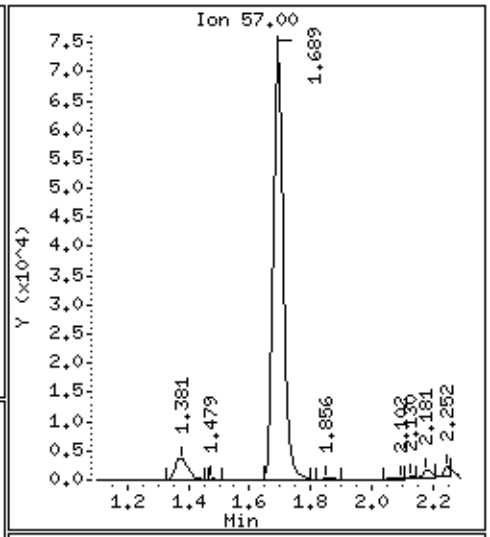
Column phase: RTx-624

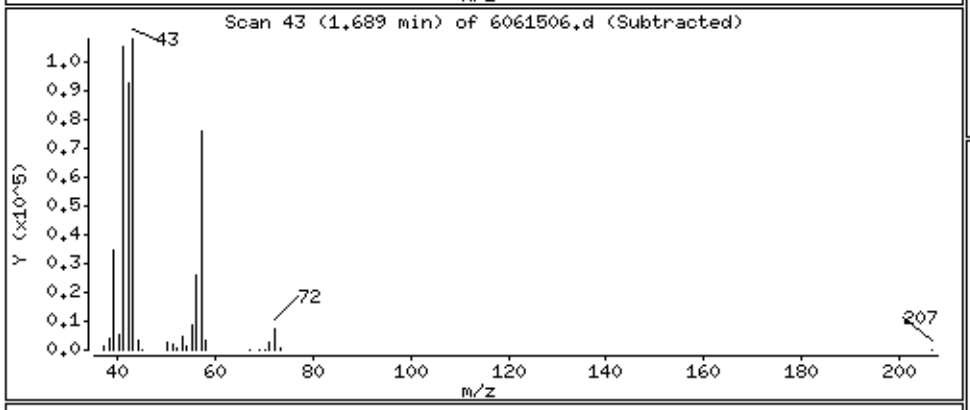
Column diameter: 0.53

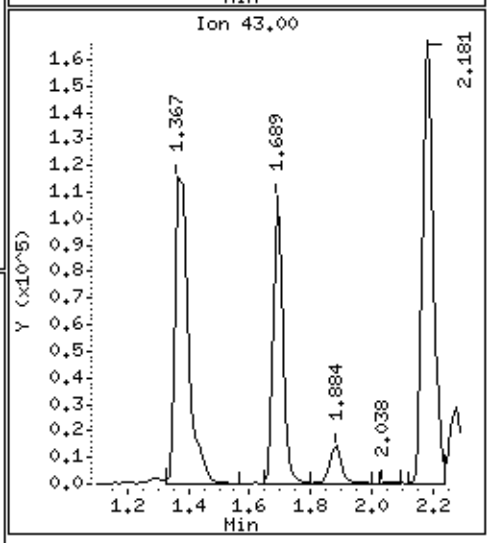
10 Isopentane

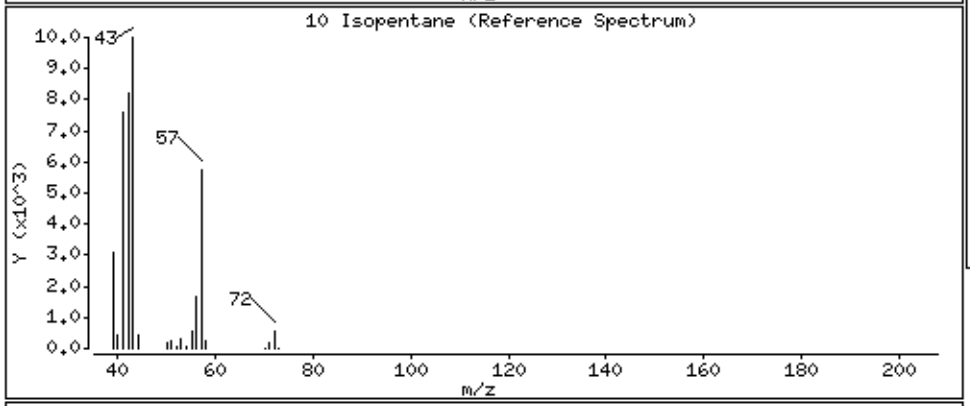
Concentration: 56.842 NG

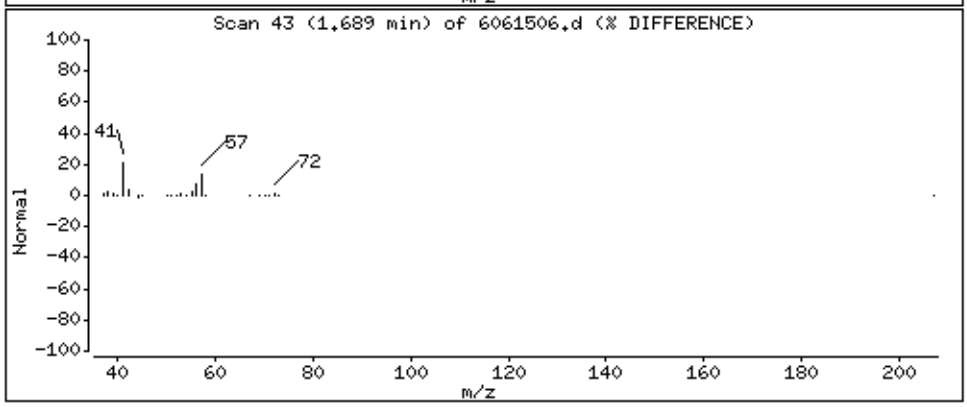












Data File: /chem/msd6.i/15jun16.b/6061506.d

Date : 15-JUN-2016 14:25

Client ID: LCS

Instrument: msd6.i

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

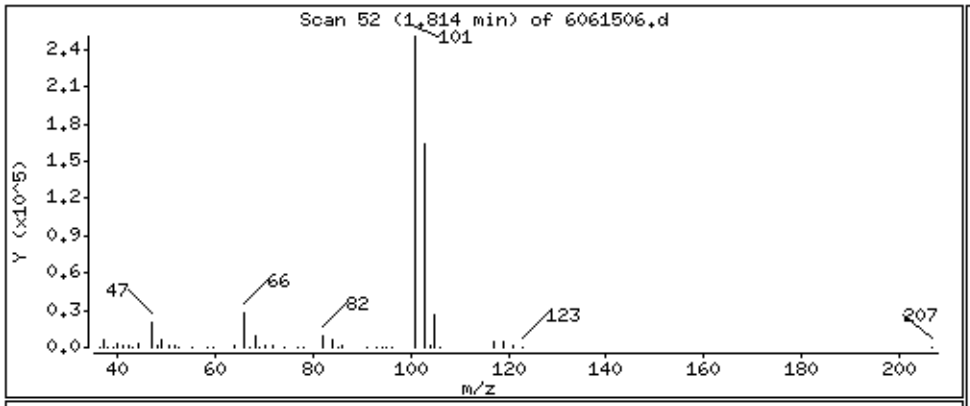
Operator: CT

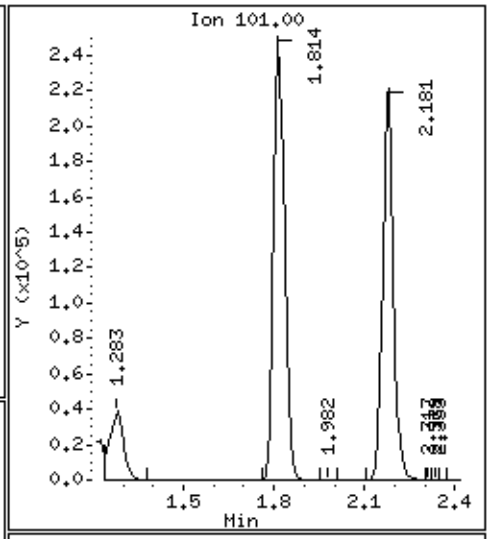
Column phase: RTx-624

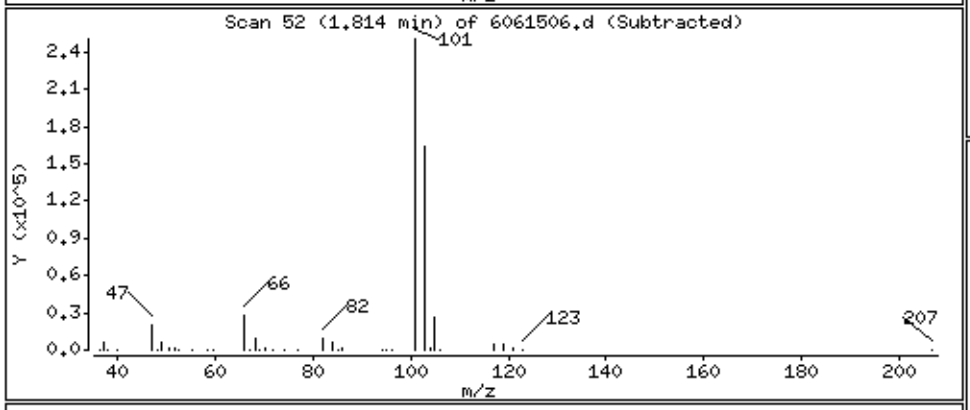
Column diameter: 0.53

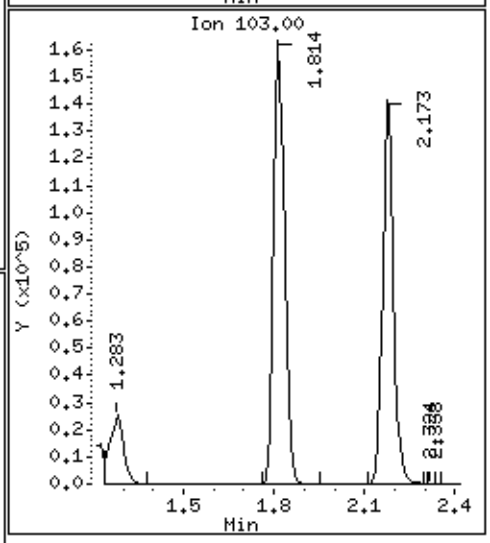
11 Trichlorofluoromethane/Fr11

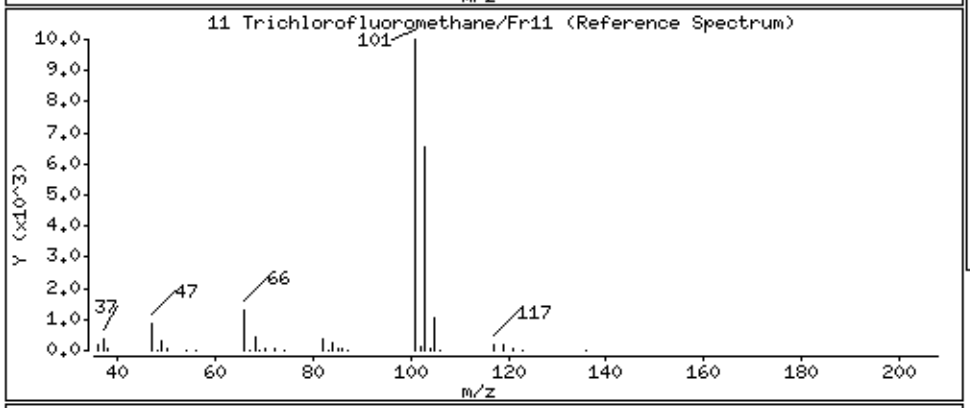
Concentration: 116.62 NG

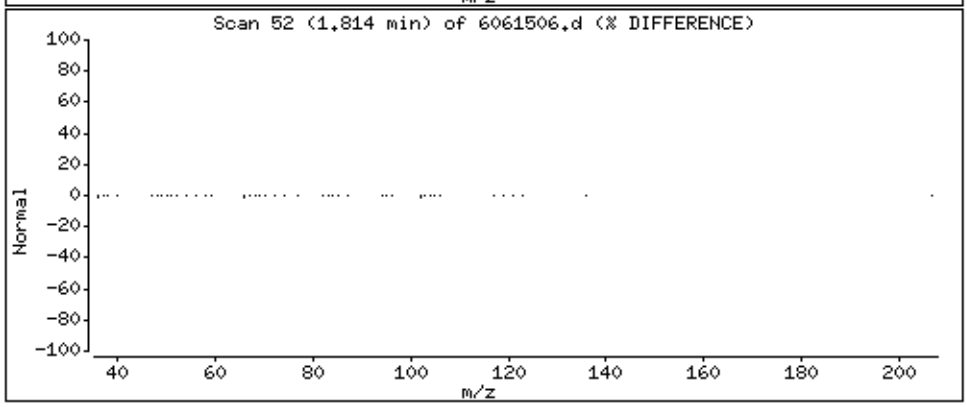












Data File: /chem/msd6.i/15jun16.b/6061506.d

Date : 15-JUN-2016 14:25

Client ID: LCS

Instrument: msd6.i

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

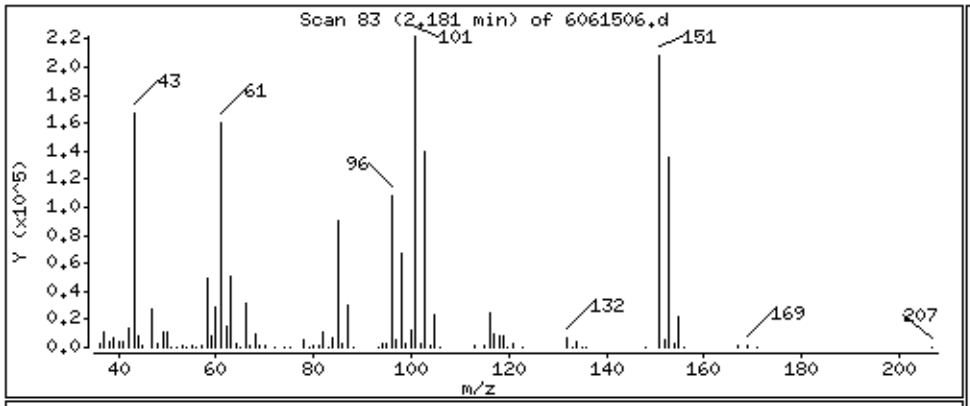
Operator: CT

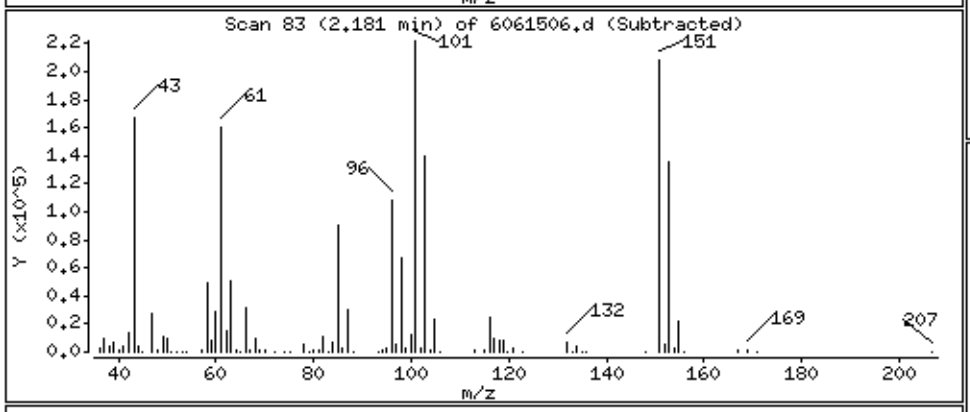
Column phase: RTx-624

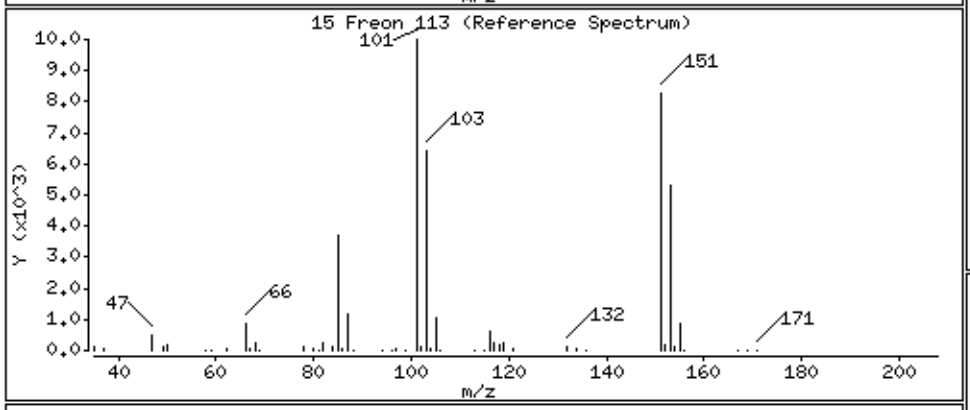
Column diameter: 0.53

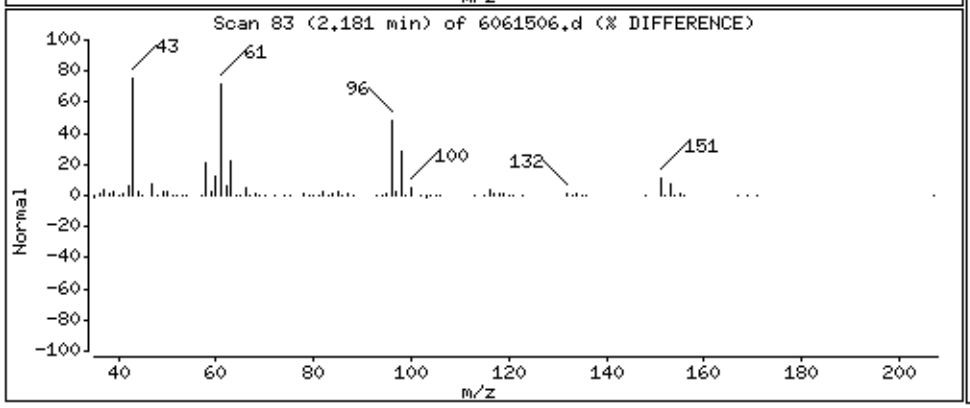
15 Freon 113

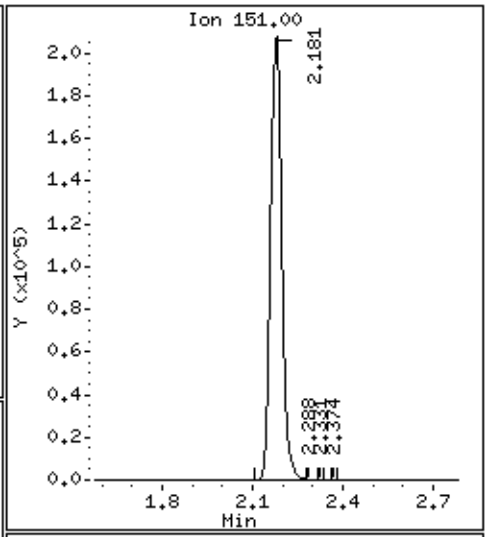
Concentration: 155.87 NG

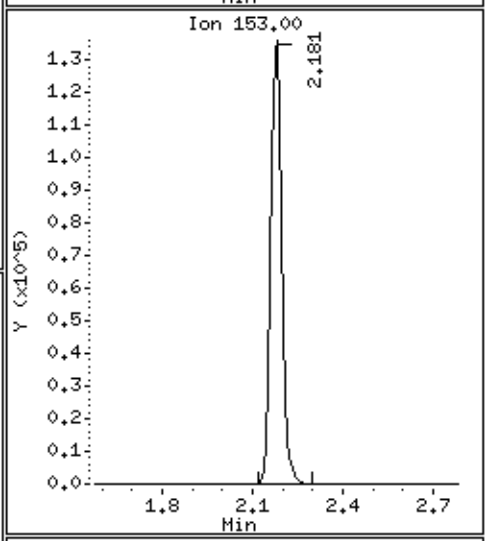


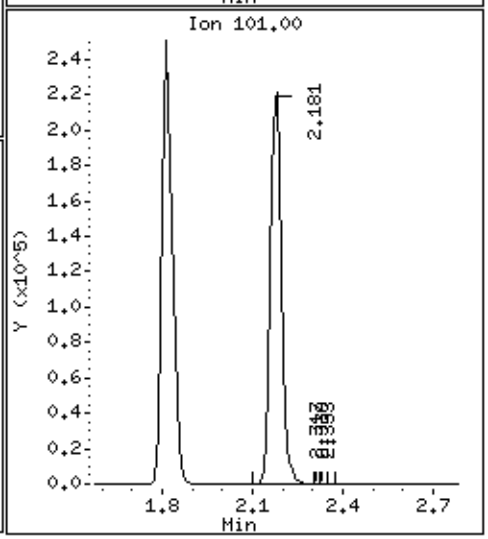












Data File: /chem/msd6.i/15jun16.b/6061506.d

Date : 15-JUN-2016 14:25

Client ID: LCS

Instrument: msd6.i

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

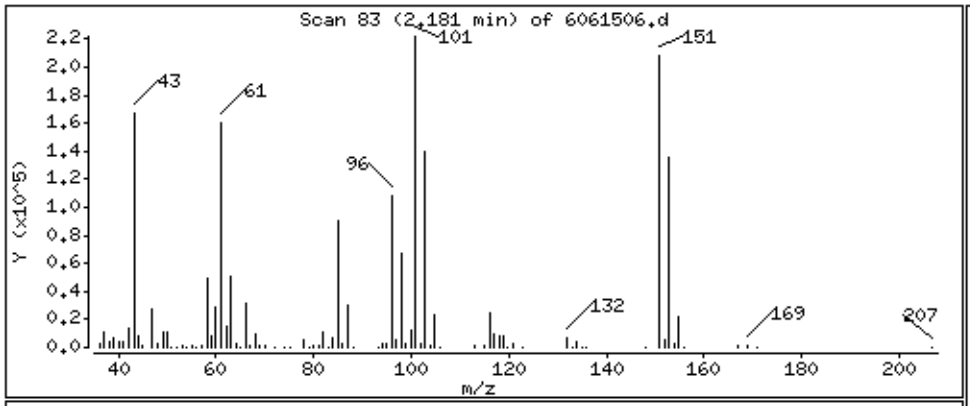
Operator: CT

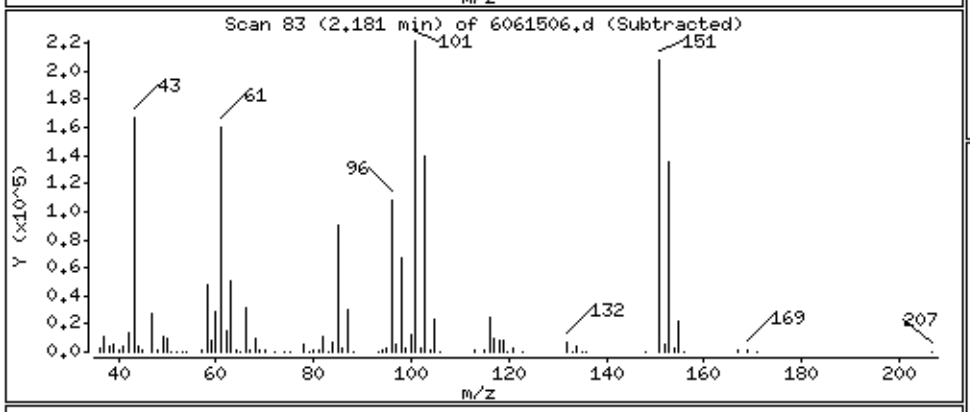
Column phase: RTx-624

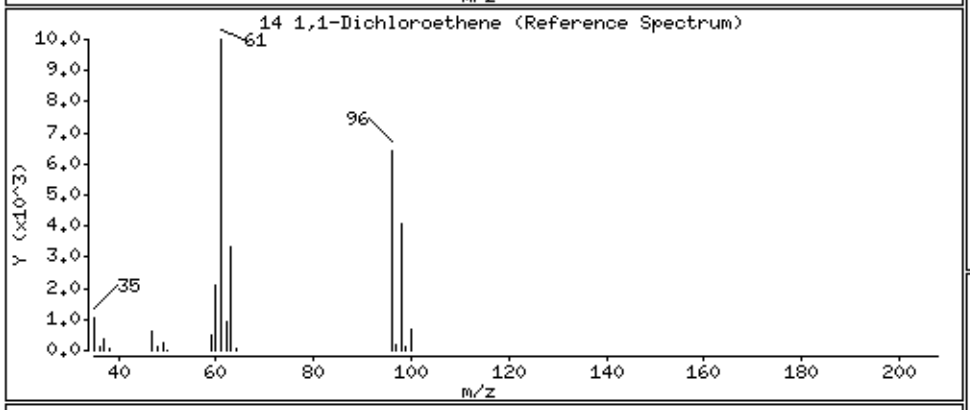
Column diameter: 0.53

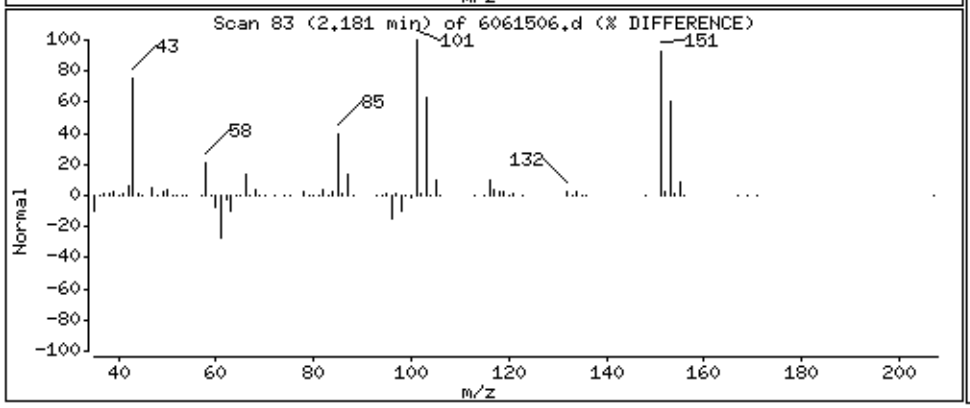
14 1,1-Dichloroethene

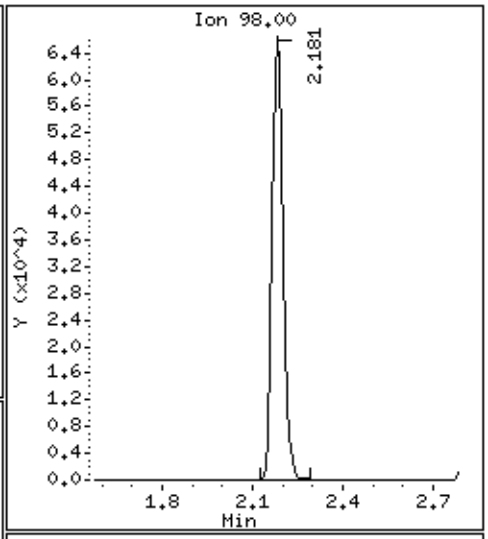
Concentration: 77.901 NG

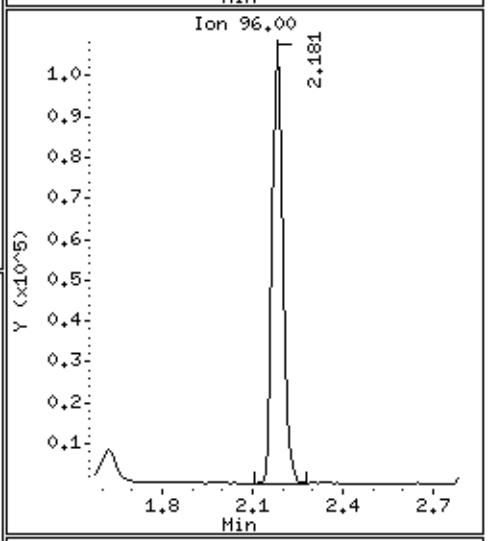


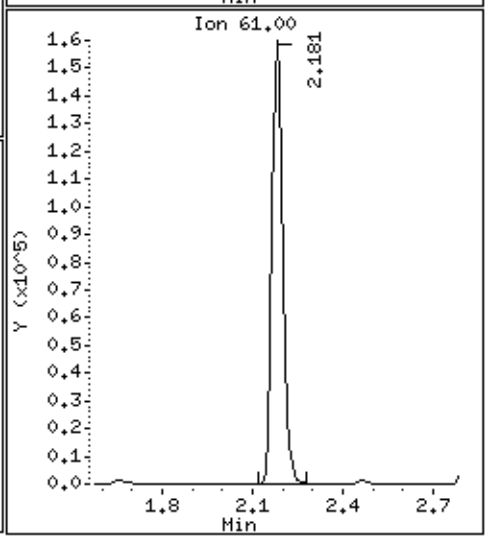












Data File: /chem/msd6.i/15jun16.b/6061506.d

Date : 15-JUN-2016 14:25

Client ID: LCS

Instrument: msd6.i

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

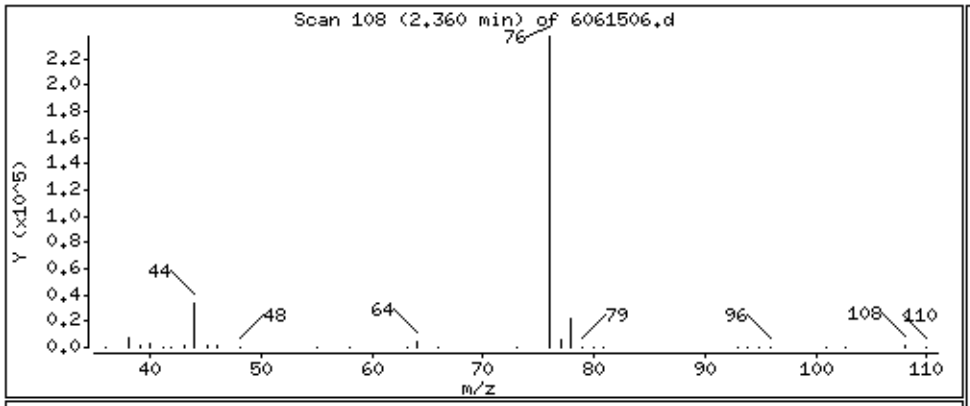
Operator: CT

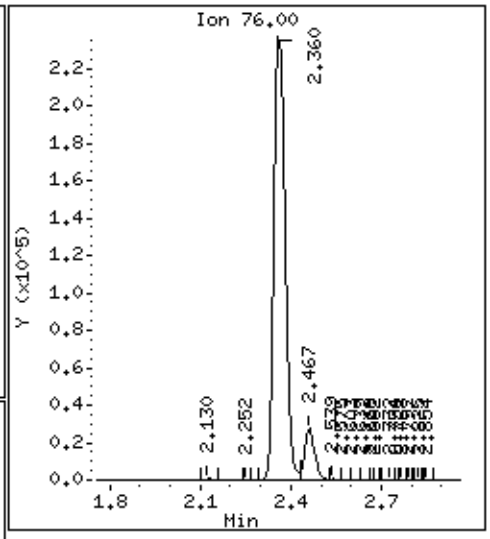
Column phase: RTx-624

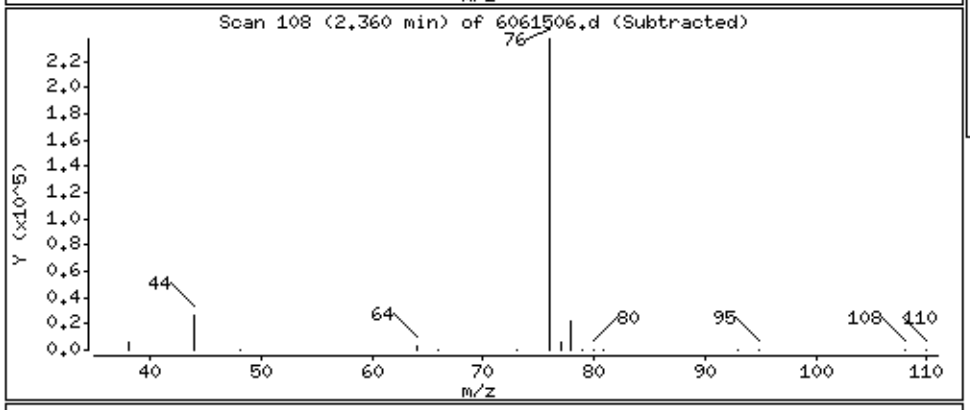
Column diameter: 0.53

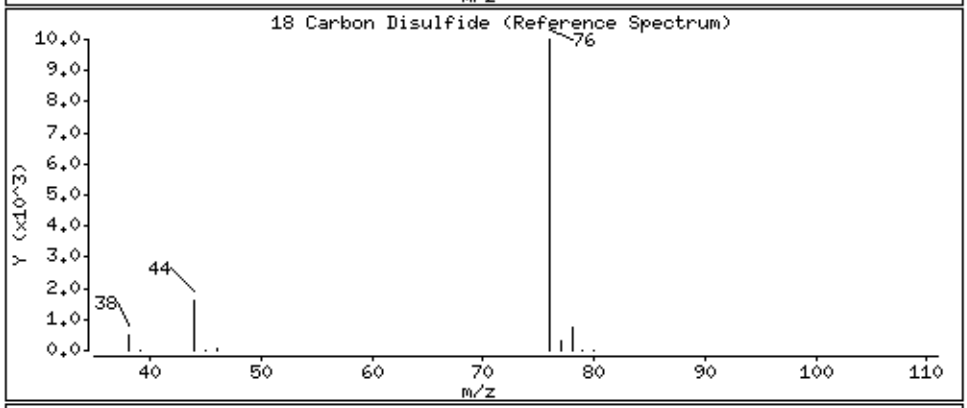
18 Carbon Disulfide

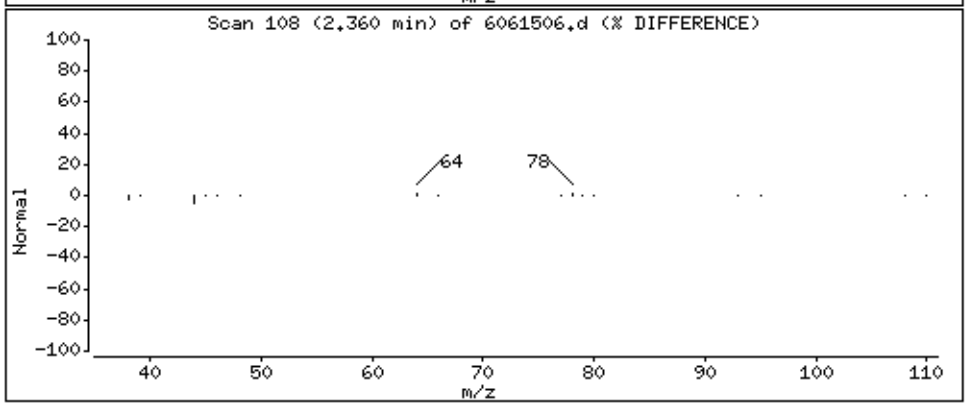
Concentration: 44.038 NG











Data File: /chem/msd6.i/15jun16.b/6061506.d

Date : 15-JUN-2016 14:25

Client ID: LCS

Instrument: msd6.i

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

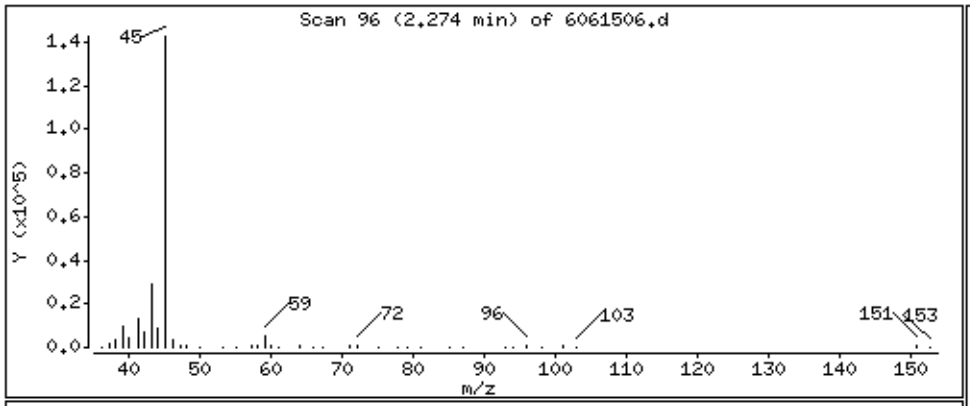
Operator: CT

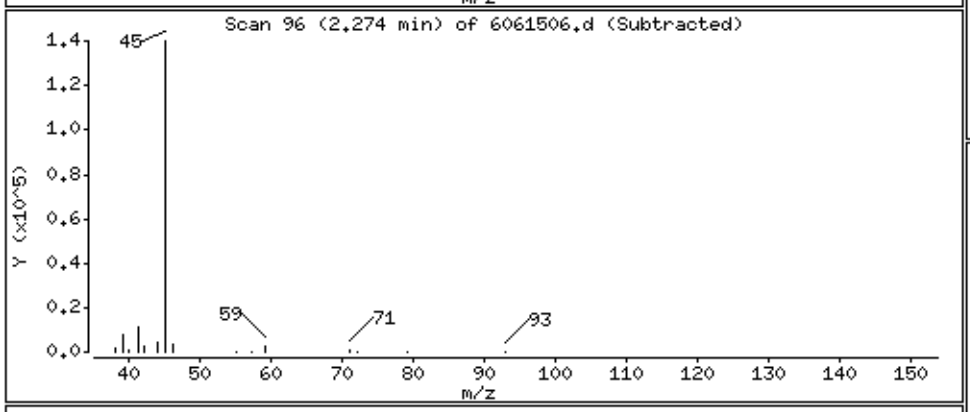
Column phase: RTx-624

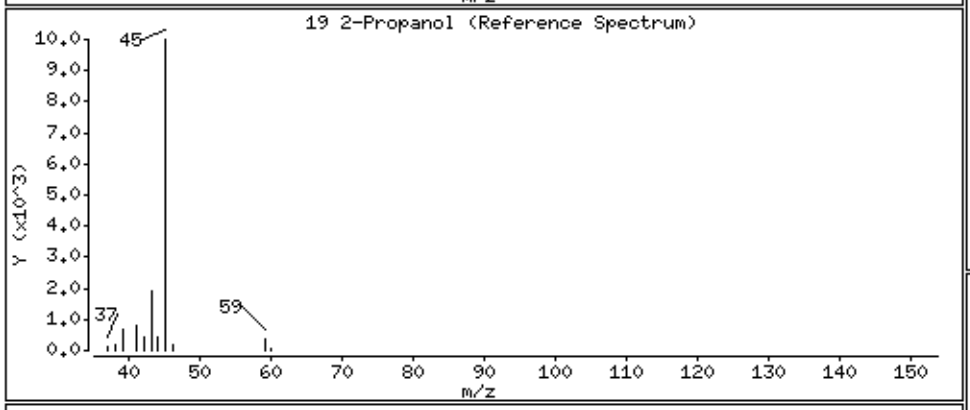
Column diameter: 0.53

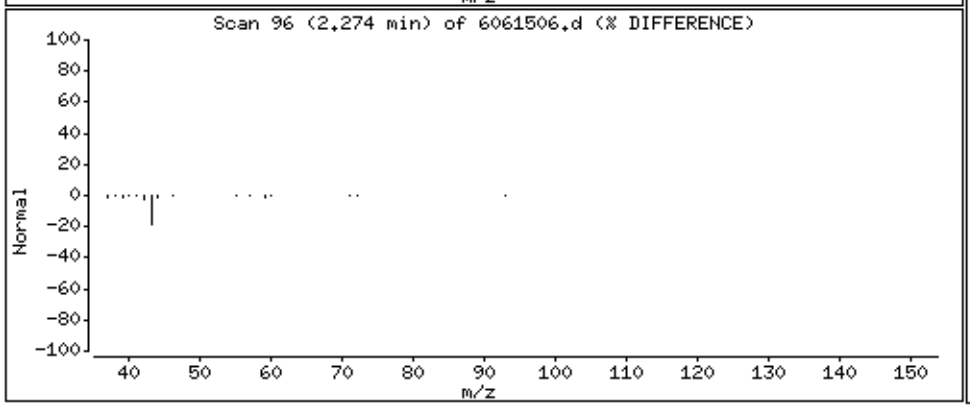
19 2-Propanol

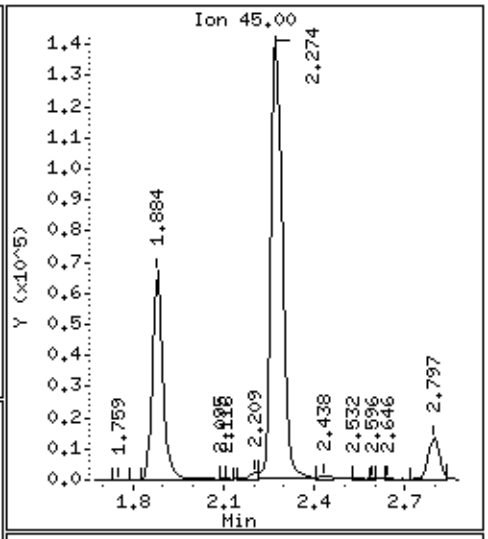
Concentration: 48.226 NG

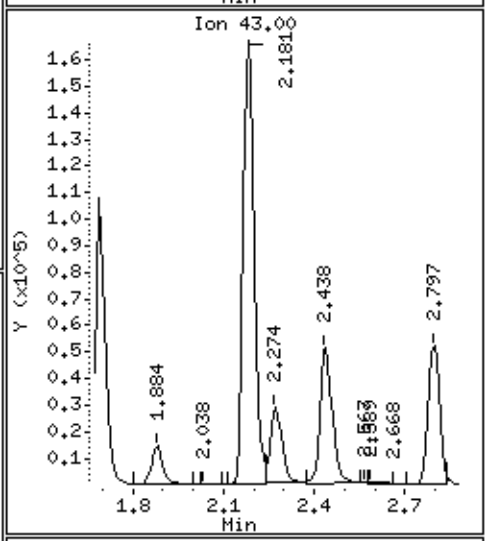


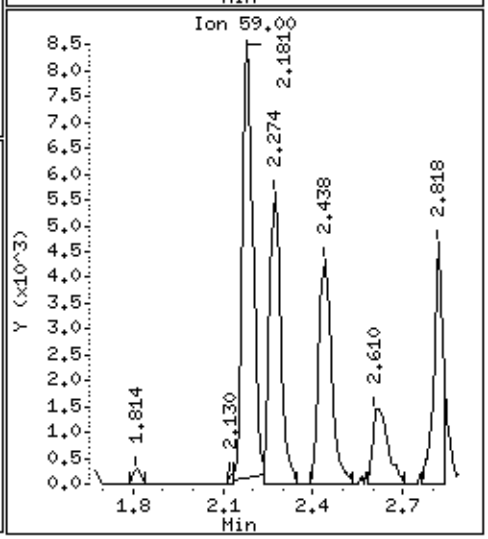












Data File: /chem/msd6.i/15jun16.b/6061506.d

Date : 15-JUN-2016 14:25

Client ID: LCS

Instrument: msd6.i

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

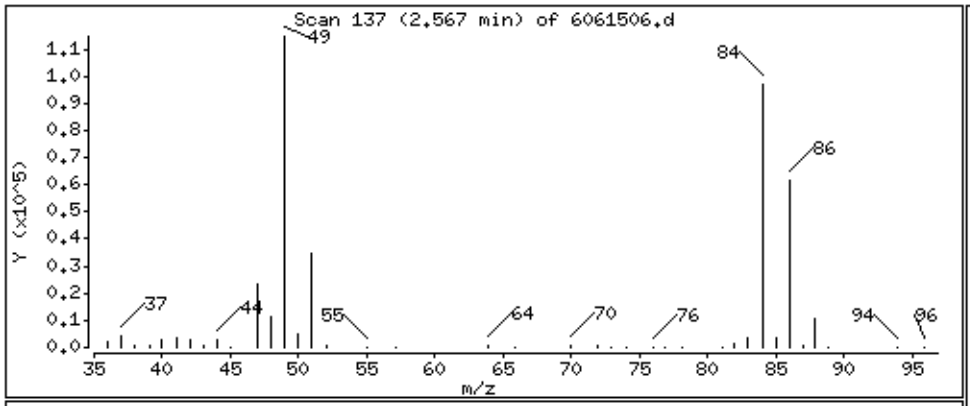
Operator: CT

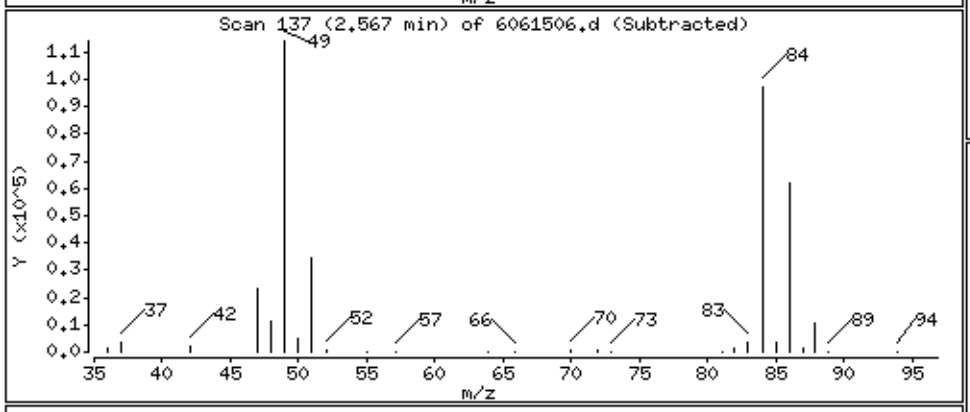
Column phase: RTx-624

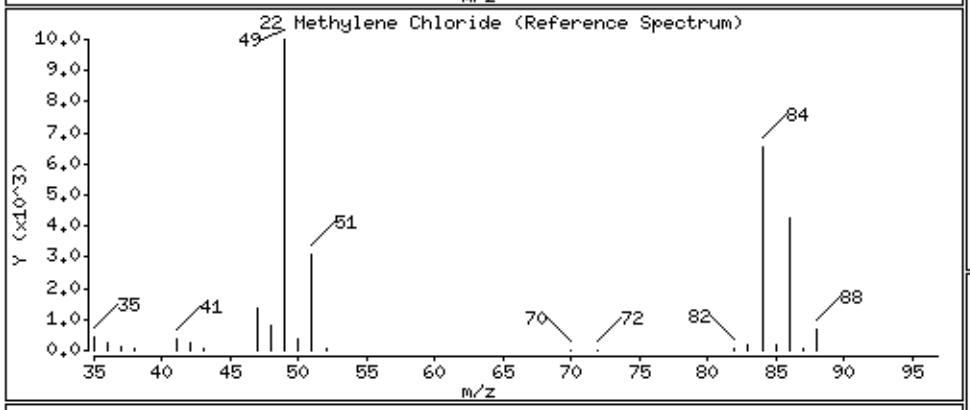
Column diameter: 0.53

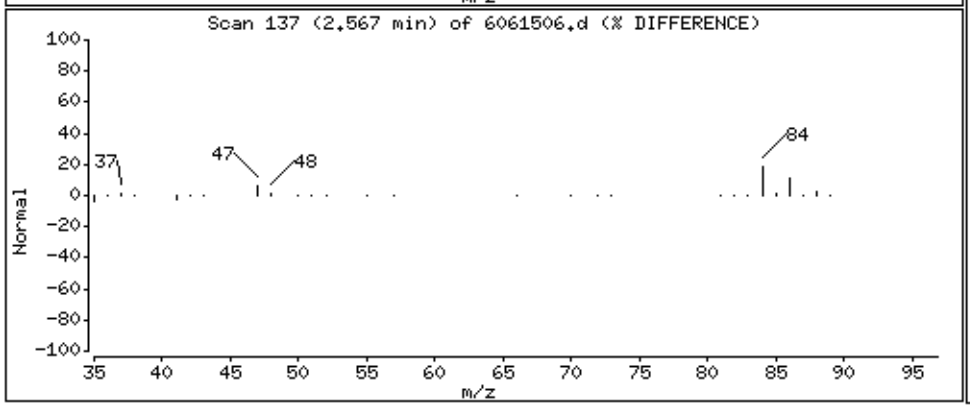
22 Methylene Chloride

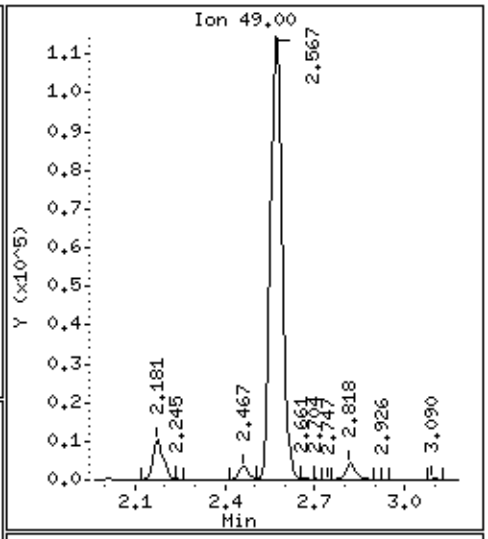
Concentration: 64.961 NG

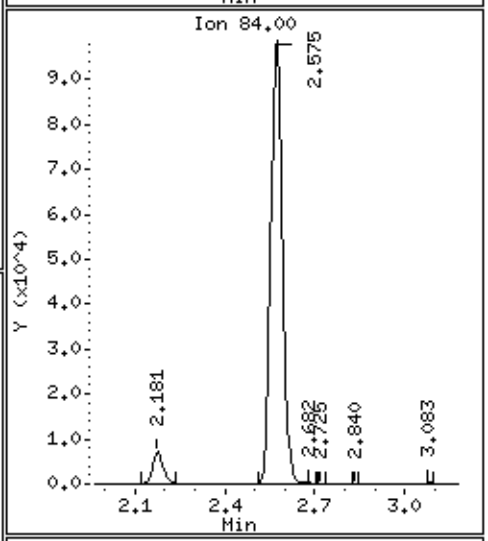


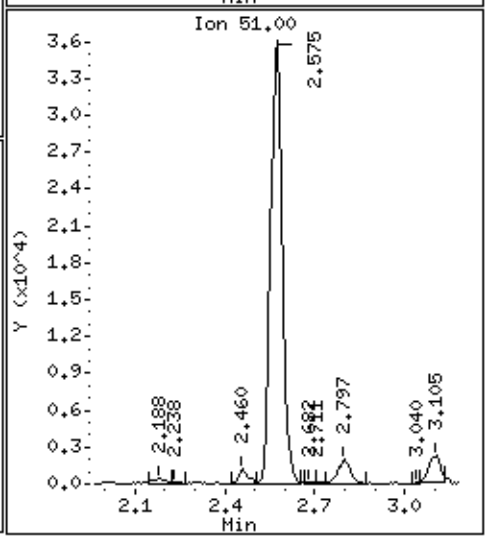












Data File: /chem/msd6.i/15jun16.b/6061506.d

Date : 15-JUN-2016 14:25

Client ID: LCS

Instrument: msd6.i

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

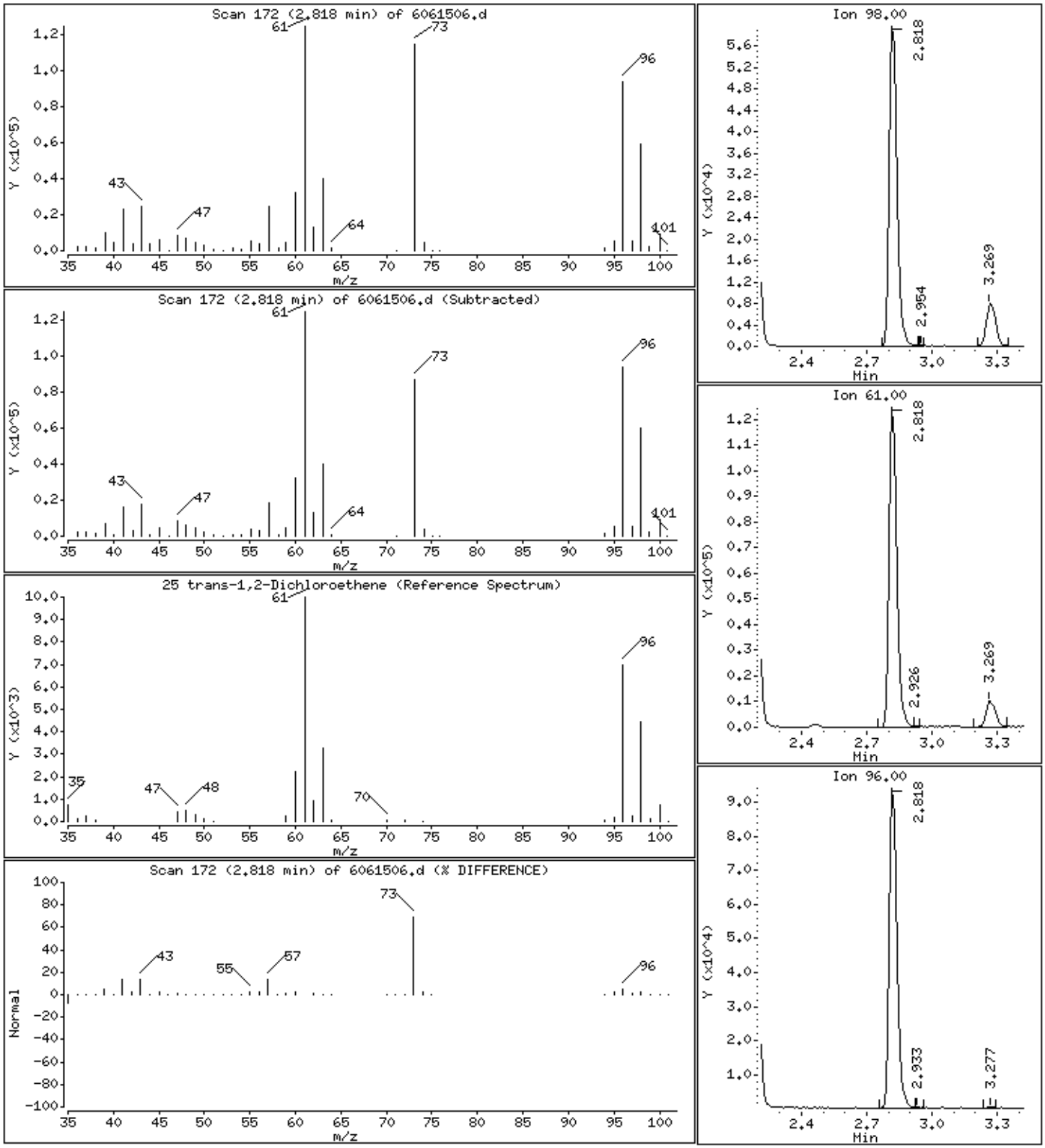
Operator: CT

Column phase: RTx-624

Column diameter: 0.53

25 trans-1,2-Dichloroethene

Concentration: 70.033 NG



Data File: /chem/msd6.i/15jun16.b/6061506.d

Date : 15-JUN-2016 14:25

Client ID: LCS

Instrument: msd6.i

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

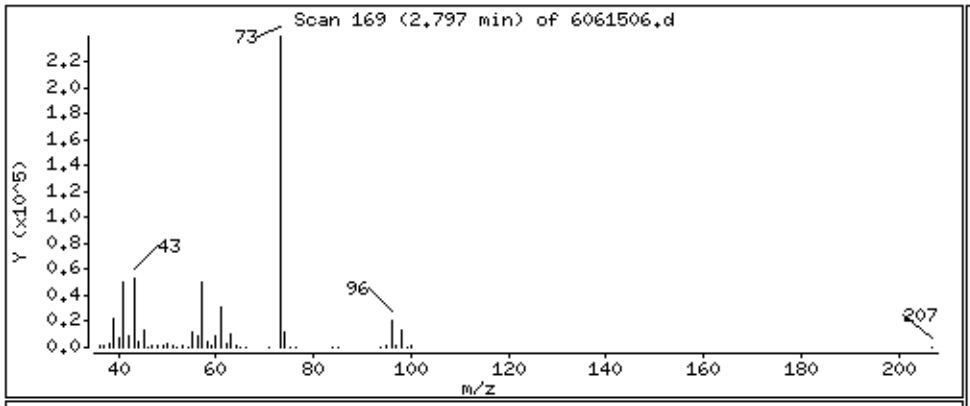
Operator: CT

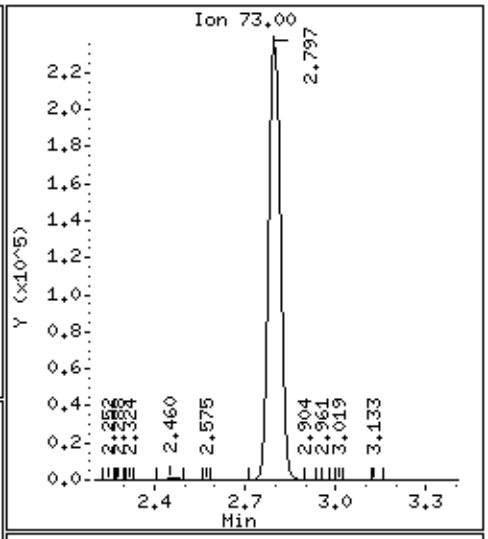
Column phase: RTx-624

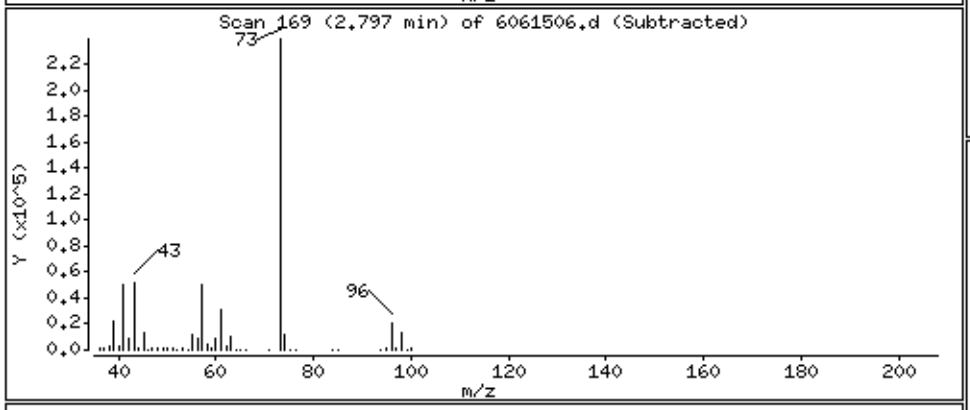
Column diameter: 0.53

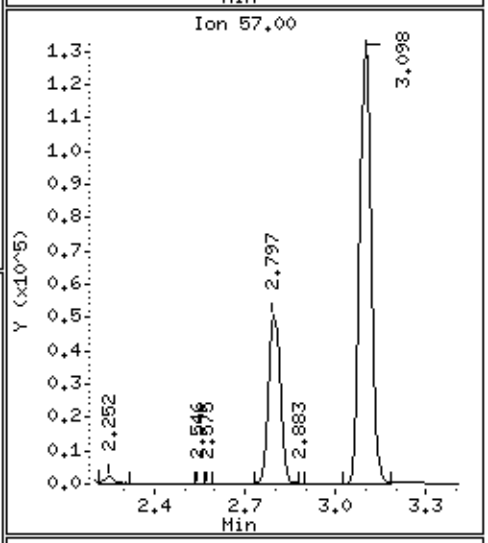
26 MTBE

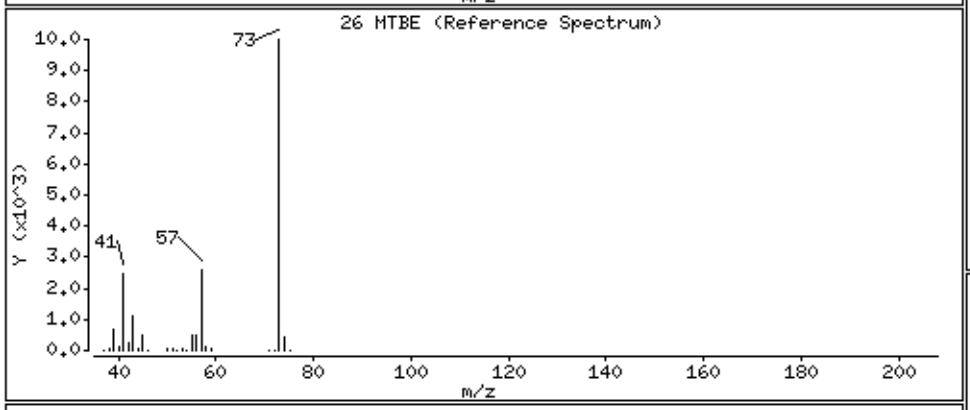
Concentration: 82.459 NG

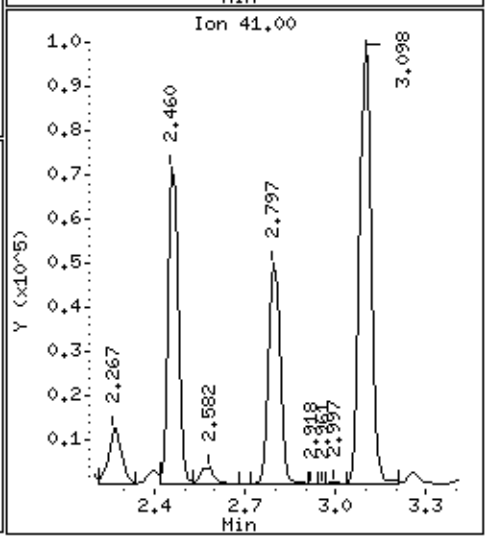


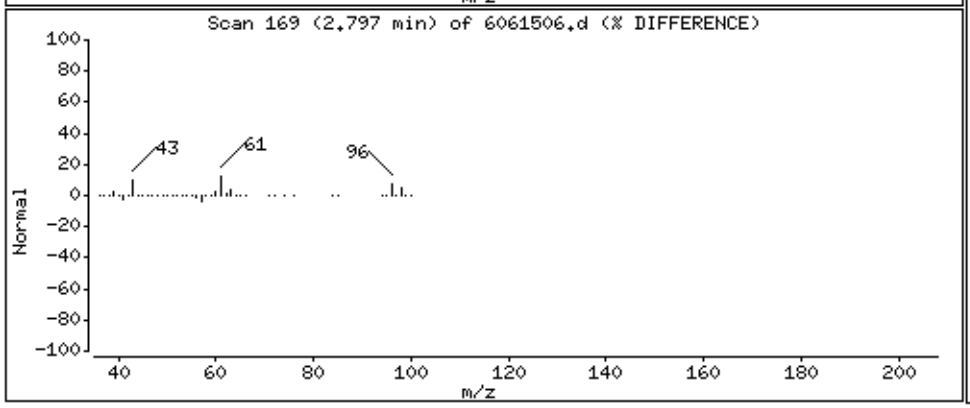












Data File: /chem/msd6.i/15jun16.b/6061506.d

Date : 15-JUN-2016 14:25

Client ID: LCS

Instrument: msd6.i

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

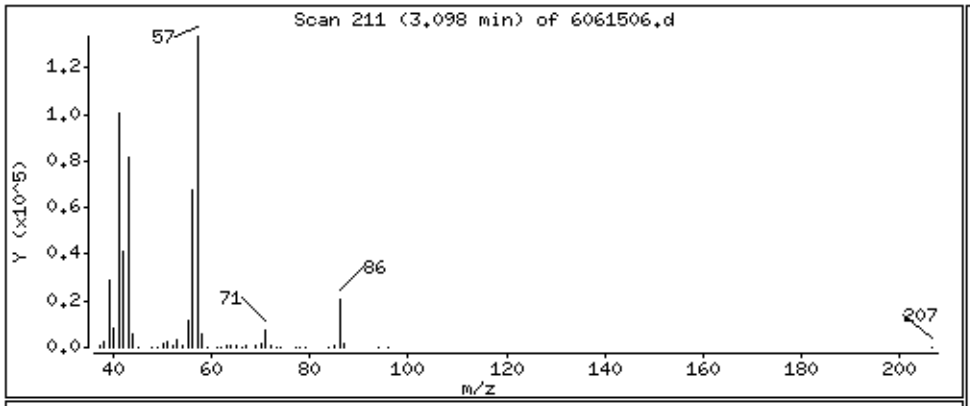
Operator: CT

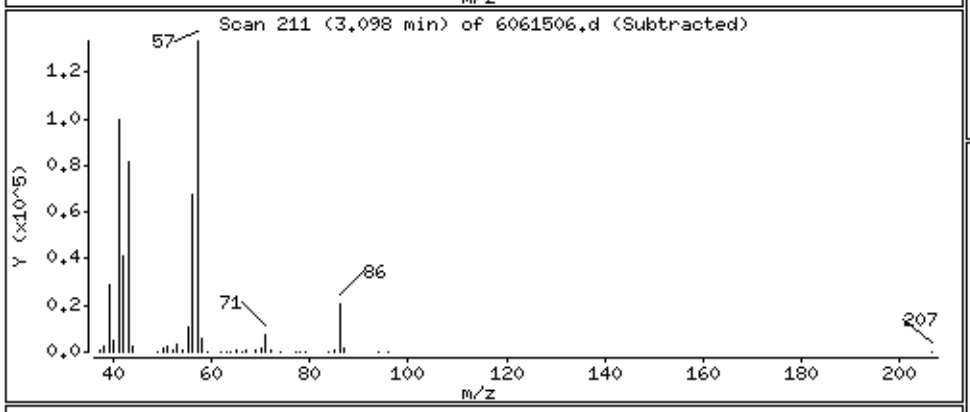
Column phase: RTx-624

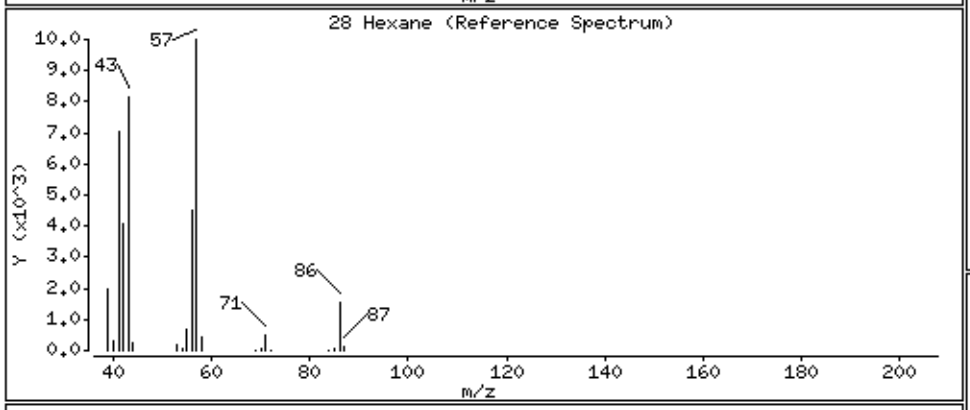
Column diameter: 0.53

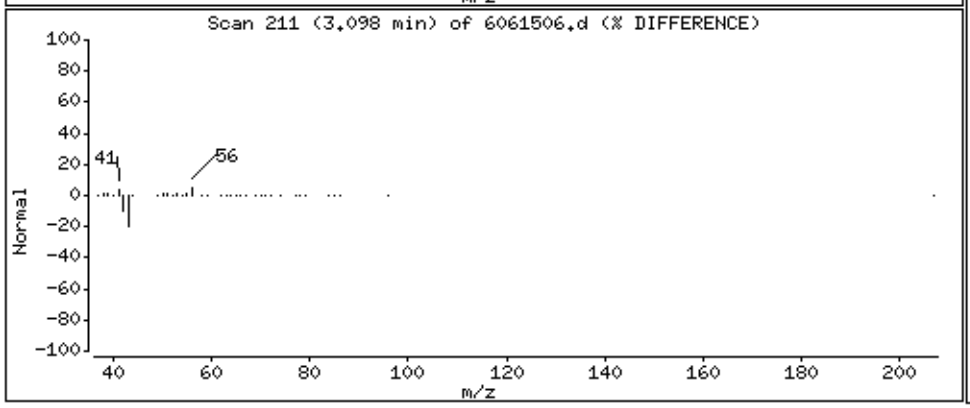
28 Hexane

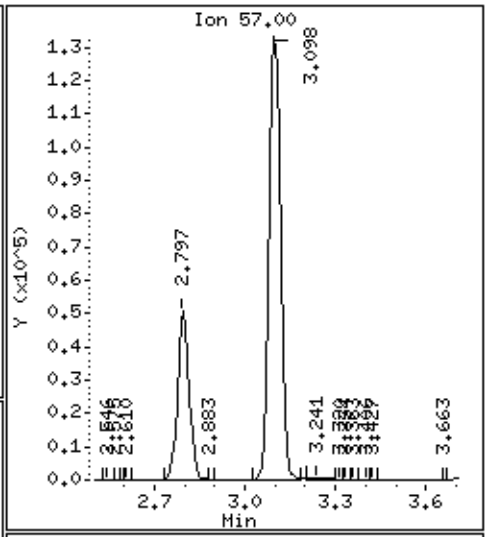
Concentration: 70.690 NG

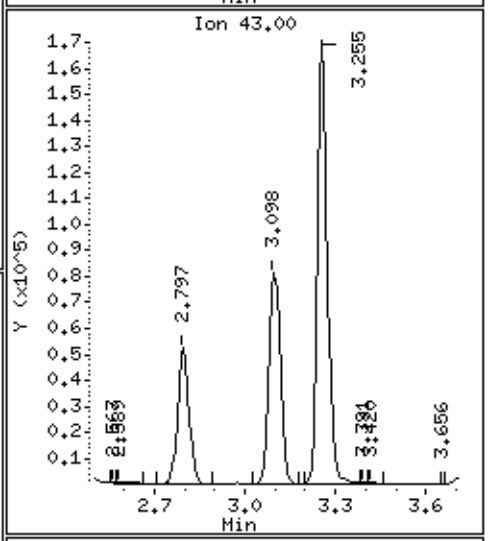


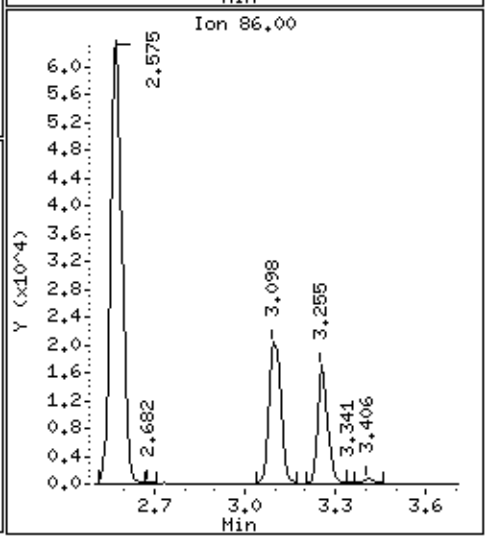












Data File: /chem/msd6.i/15jun16.b/6061506.d

Date : 15-JUN-2016 14:25

Client ID: LCS

Instrument: msd6.i

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

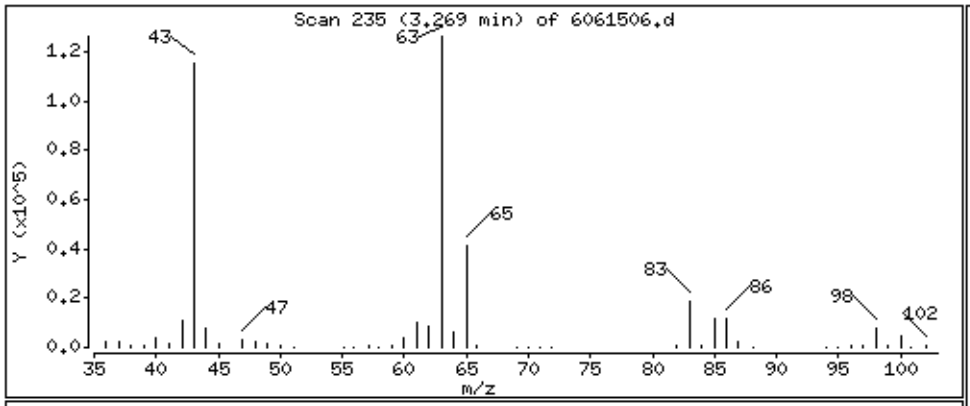
Operator: CT

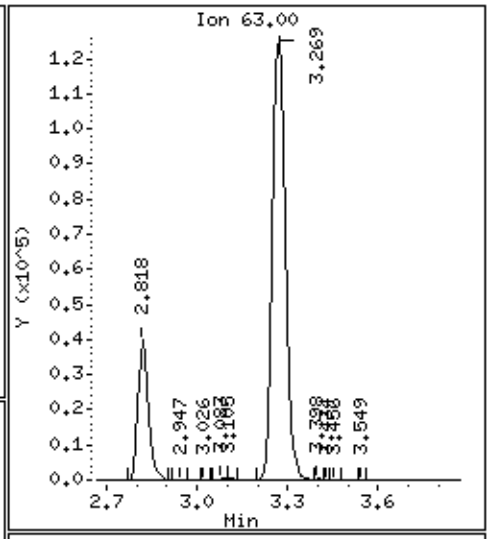
Column phase: RTx-624

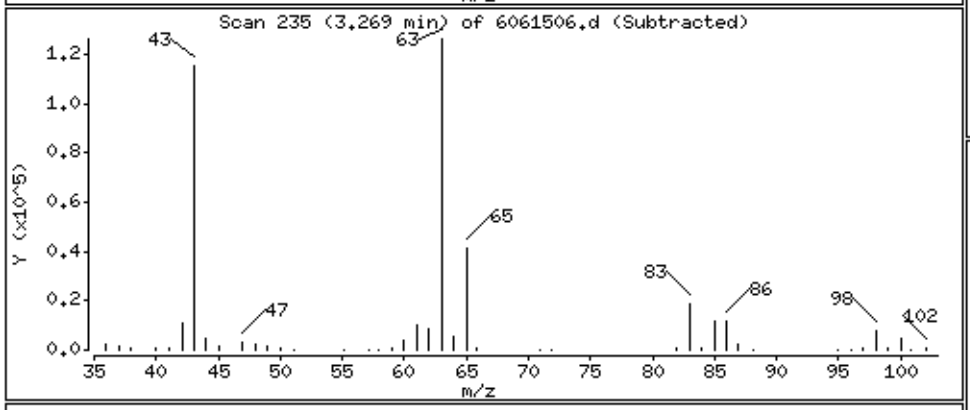
Column diameter: 0.53

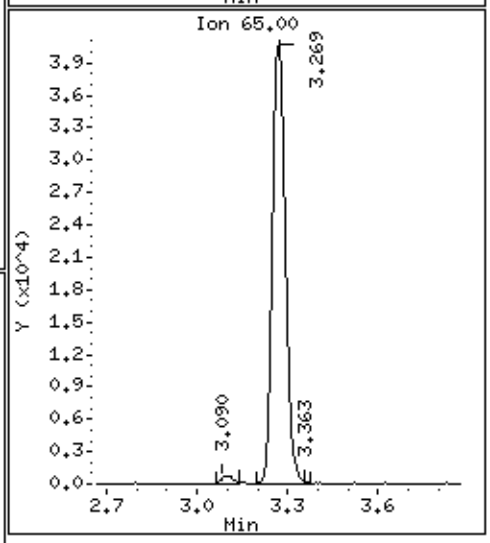
29 1,1-Dichloroethane

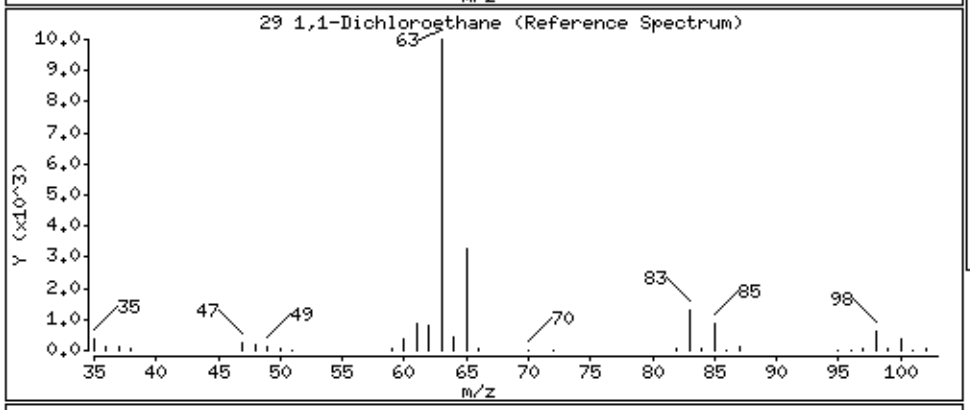
Concentration: 75.683 NG

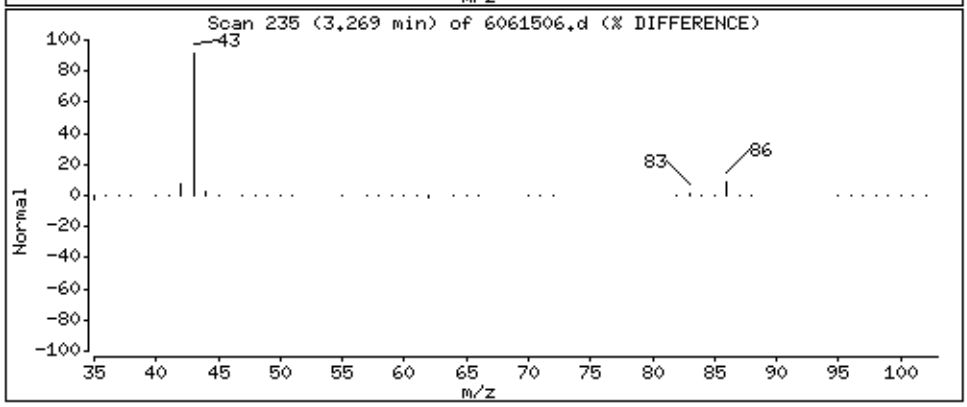












Data File: /chem/msd6.i/15jun16.b/6061506.d

Date : 15-JUN-2016 14:25

Client ID: LCS

Instrument: msd6.i

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

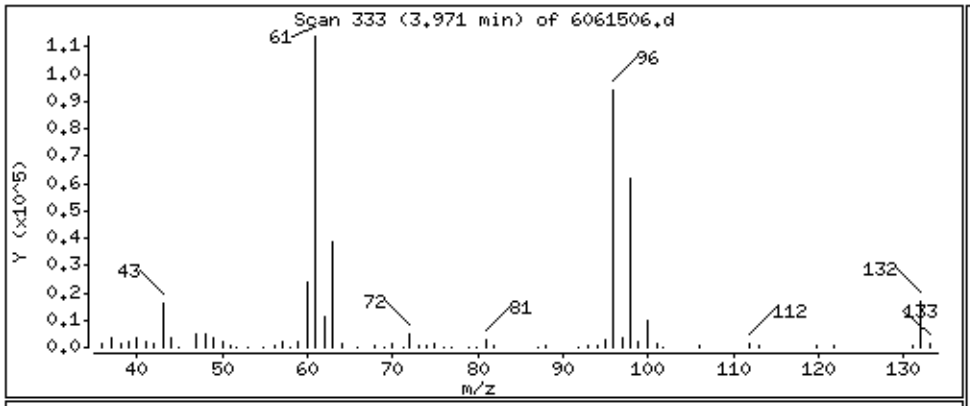
Operator: CT

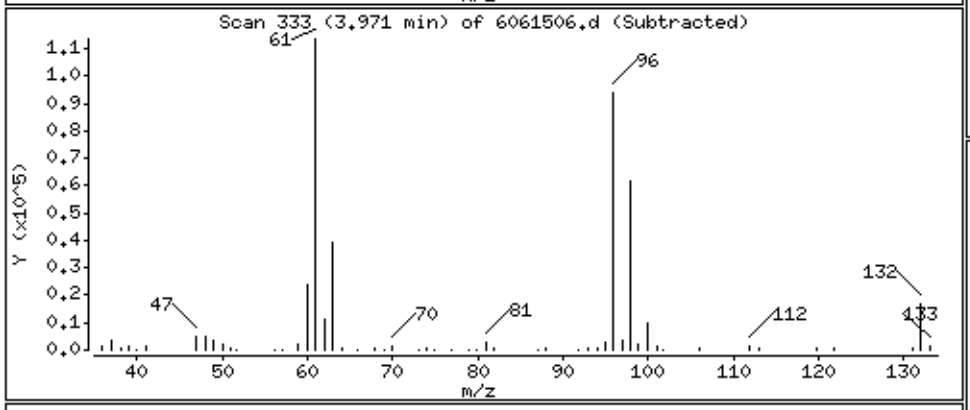
Column phase: RTx-624

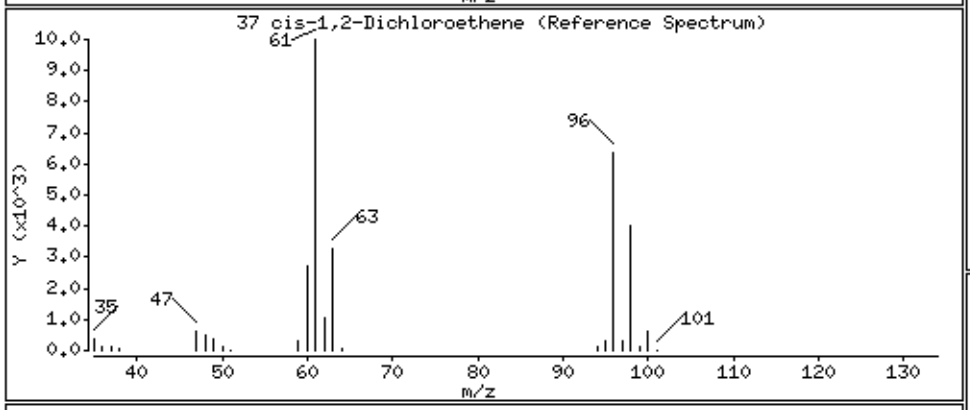
Column diameter: 0.53

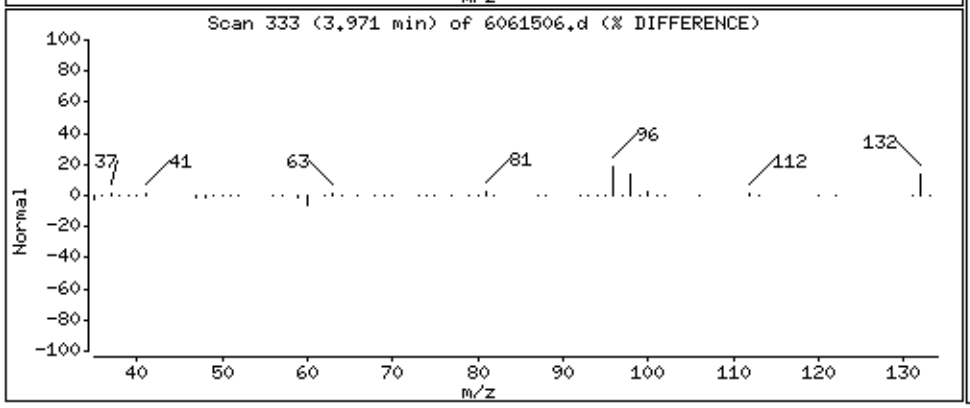
37 cis-1,2-Dichloroethene

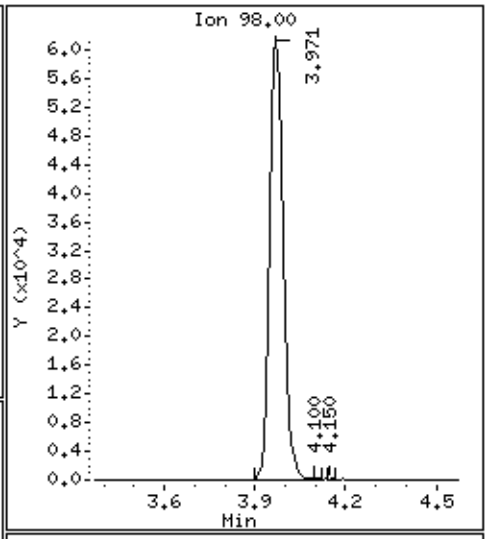
Concentration: 86.318 NG

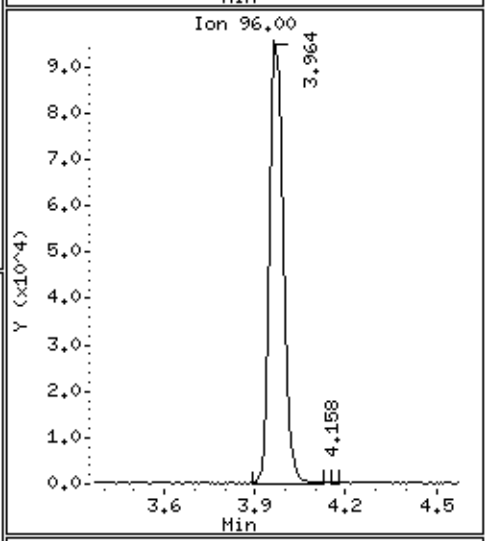


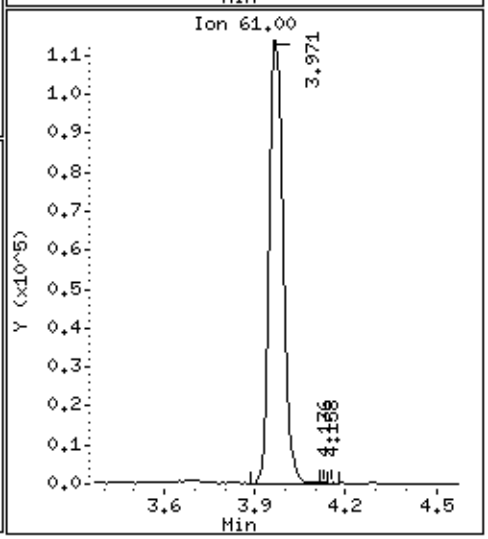












Data File: /chem/msd6.i/15jun16.b/6061506.d

Date : 15-JUN-2016 14:25

Client ID: LCS

Instrument: msd6.i

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

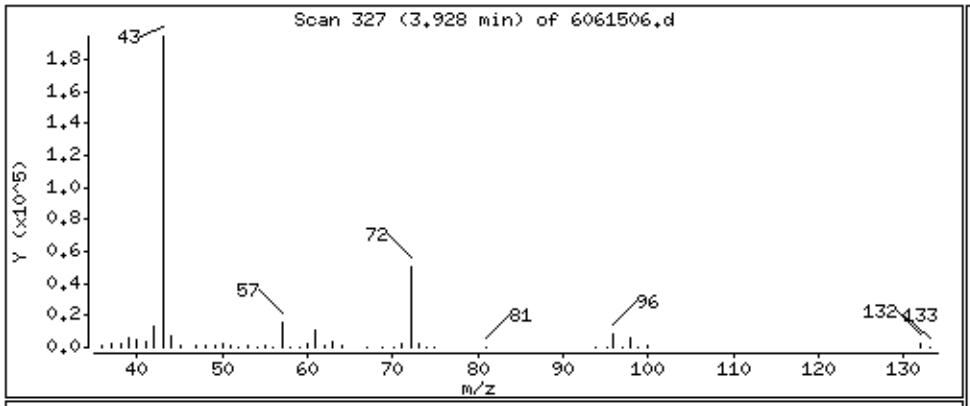
Operator: CT

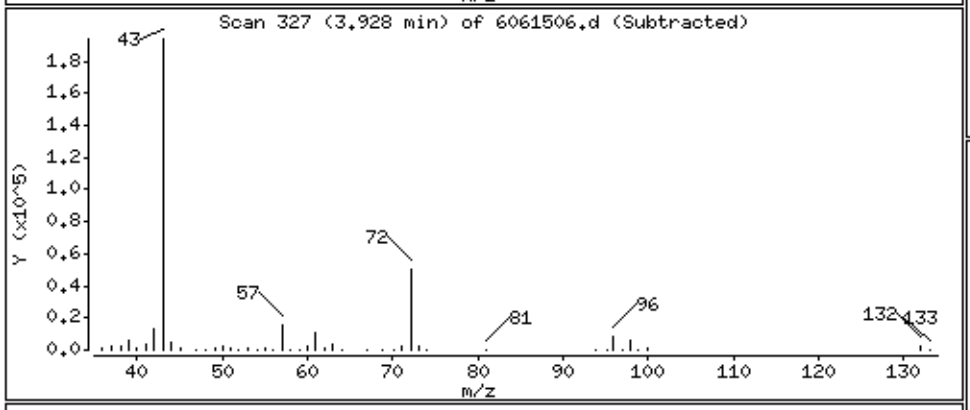
Column phase: RTx-624

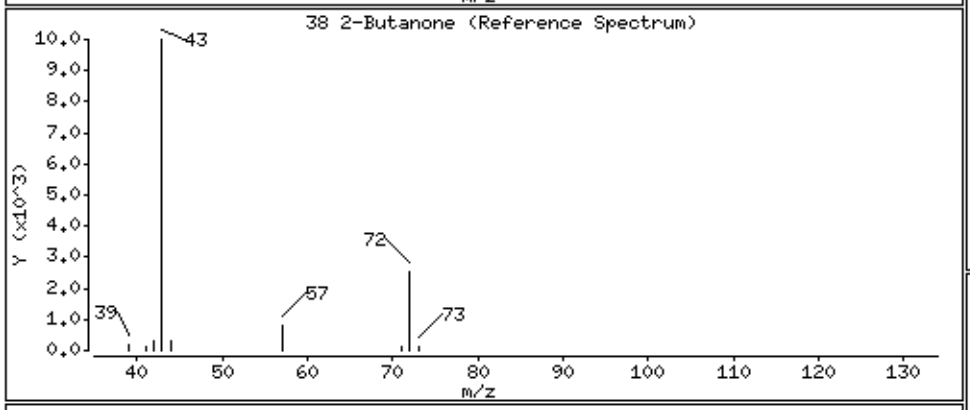
Column diameter: 0.53

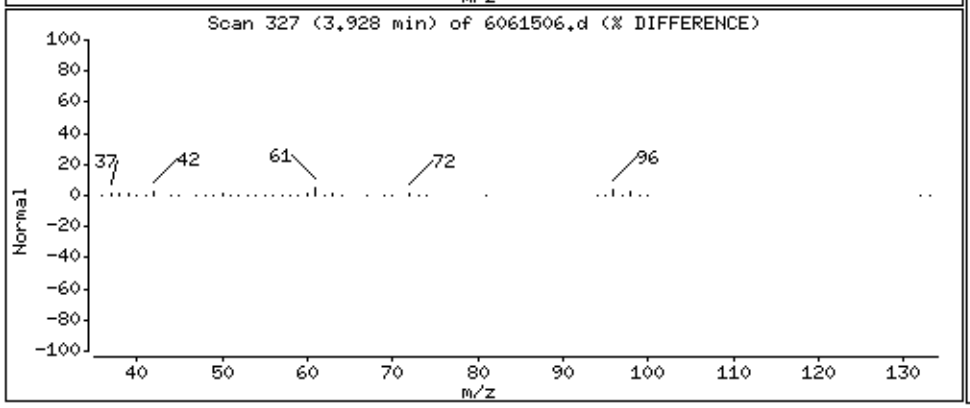
38 2-Butanone

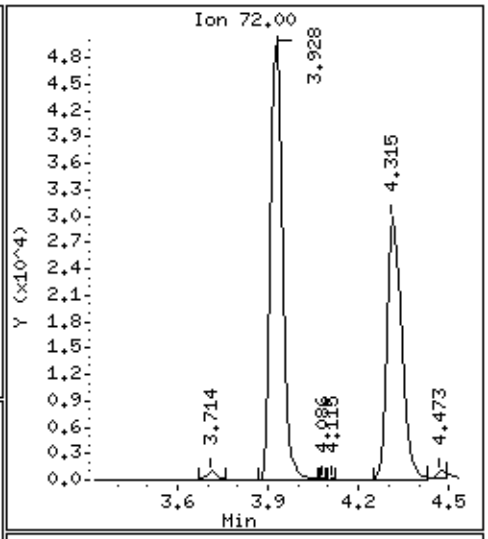
Concentration: 65.321 NG

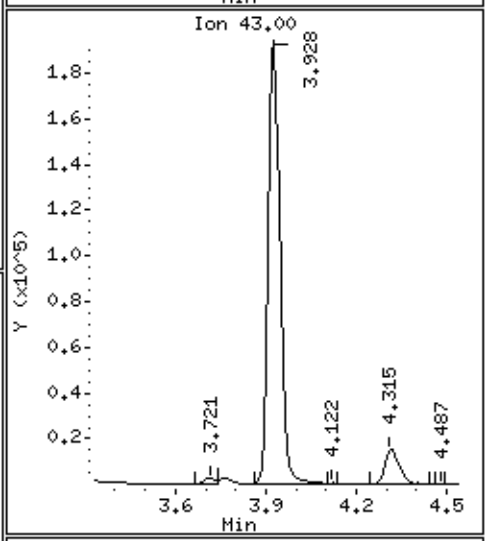


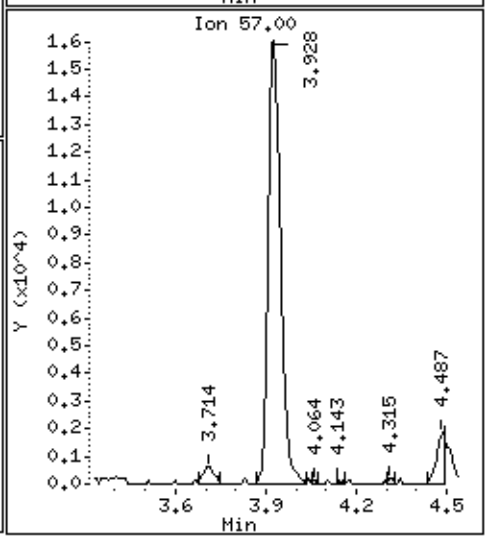












Data File: /chem/msd6.i/15jun16.b/6061506.d

Date : 15-JUN-2016 14:25

Client ID: LCS

Instrument: msd6.i

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

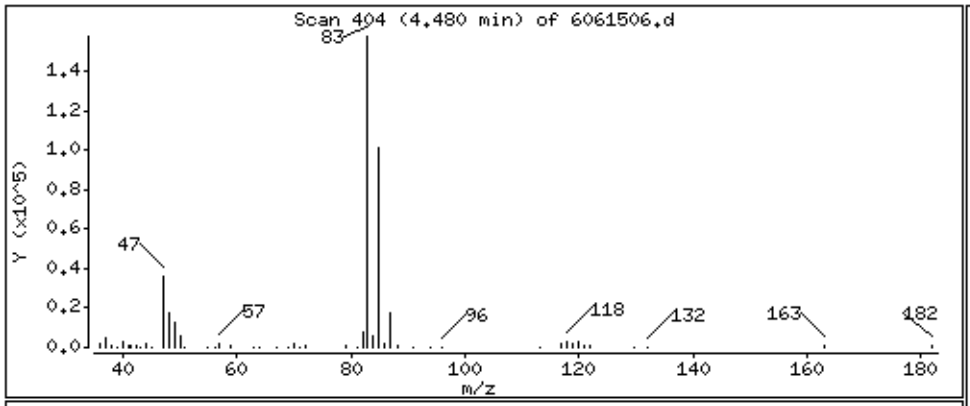
Operator: CT

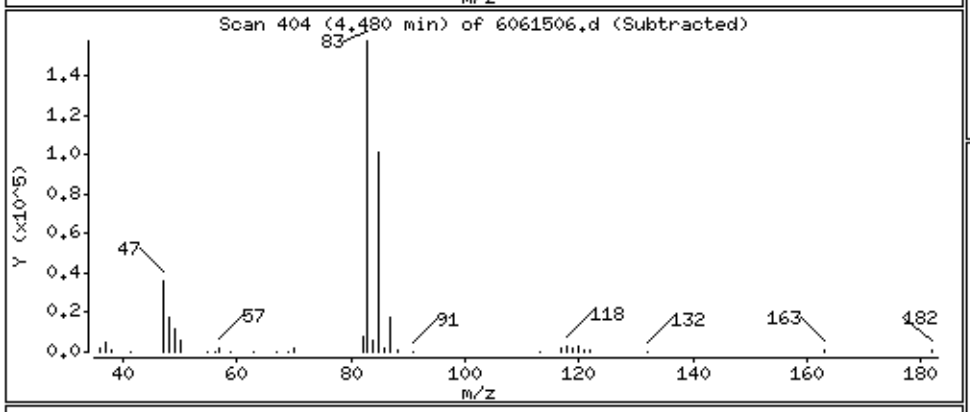
Column phase: RTx-624

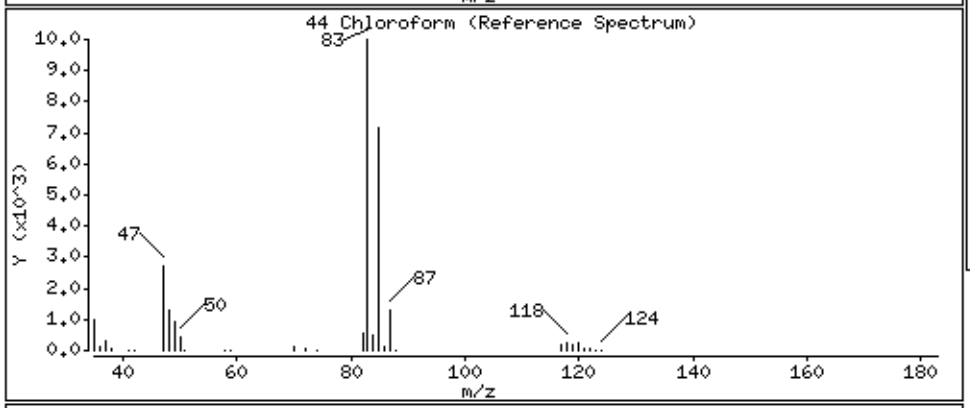
Column diameter: 0.53

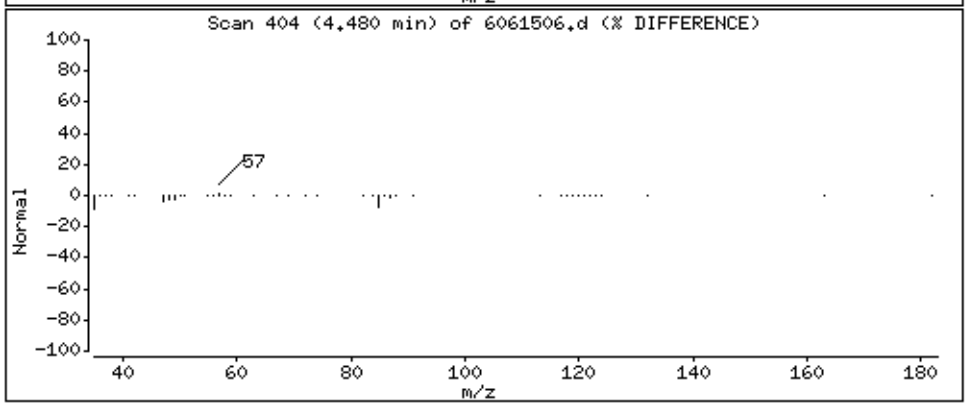
44 Chloroform

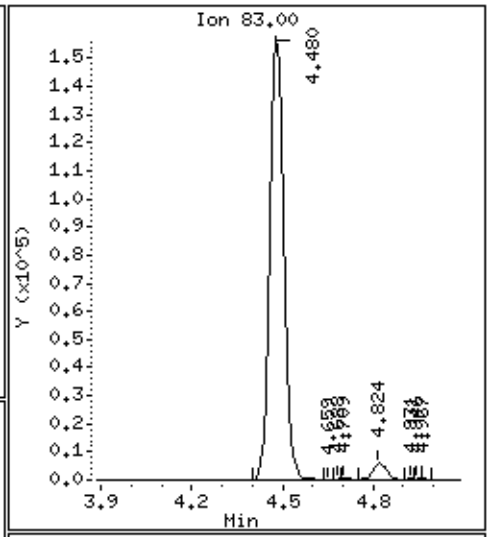
Concentration: 96.284 NG

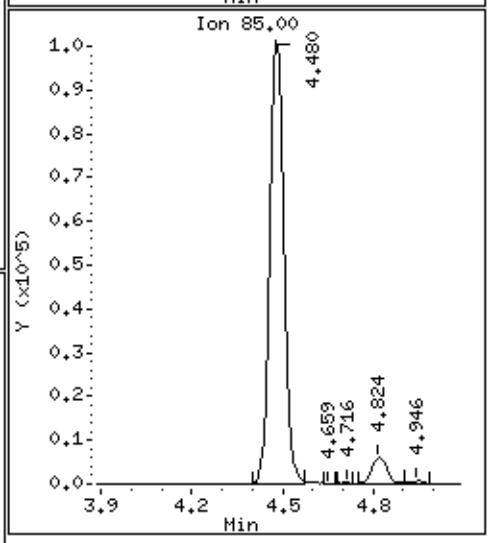












Data File: /chem/msd6.i/15jun16.b/6061506.d

Date : 15-JUN-2016 14:25

Client ID: LCS

Instrument: msd6.i

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

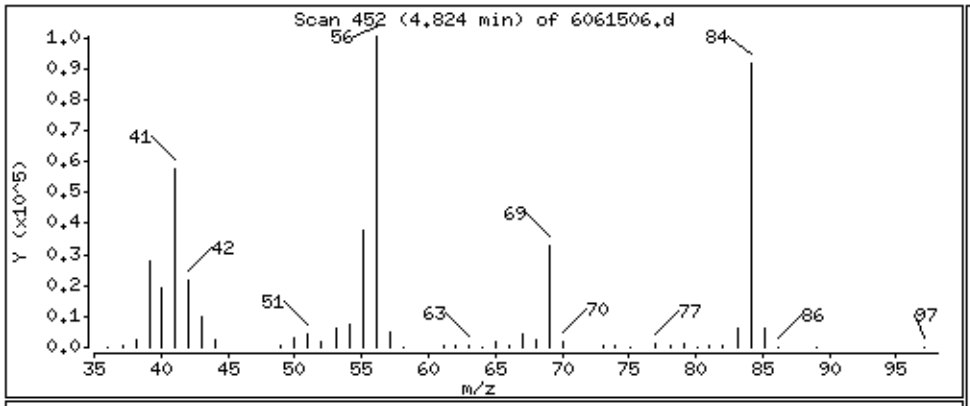
Operator: CT

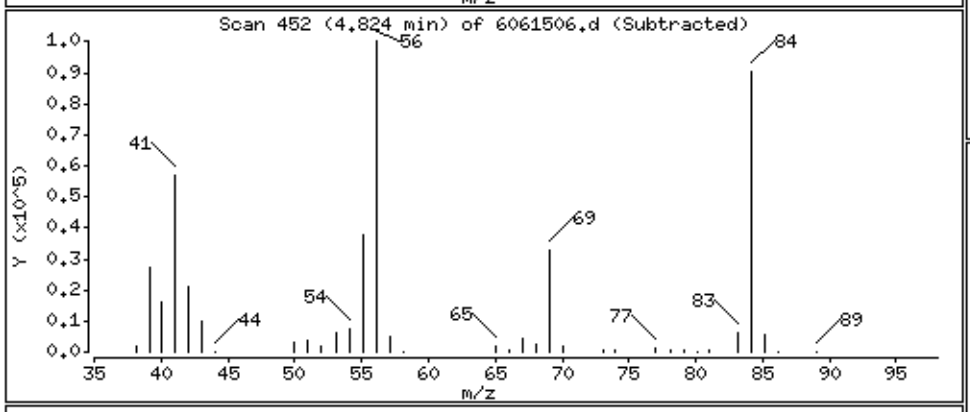
Column phase: RTx-624

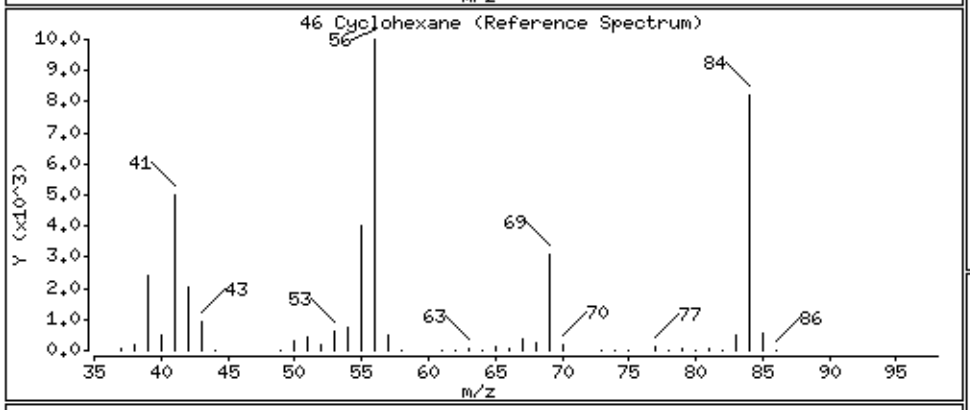
Column diameter: 0.53

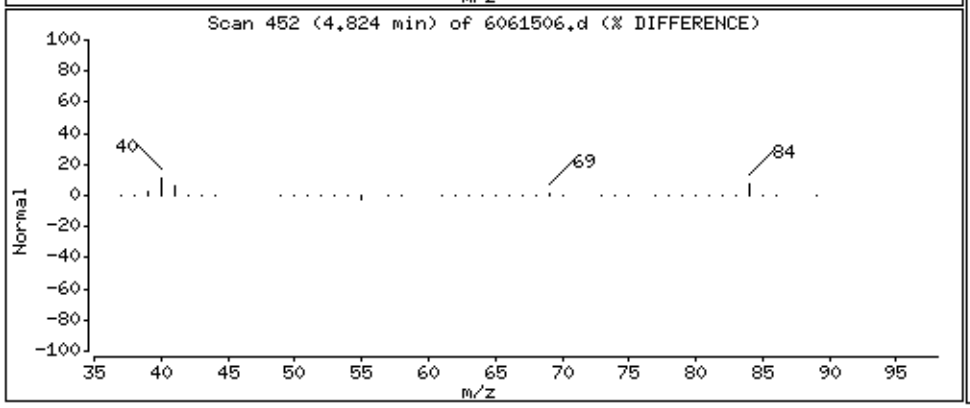
46 Cyclohexane

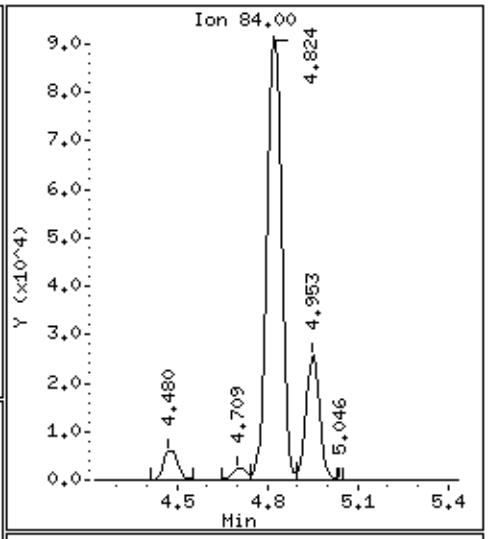
Concentration: 68.253 NG

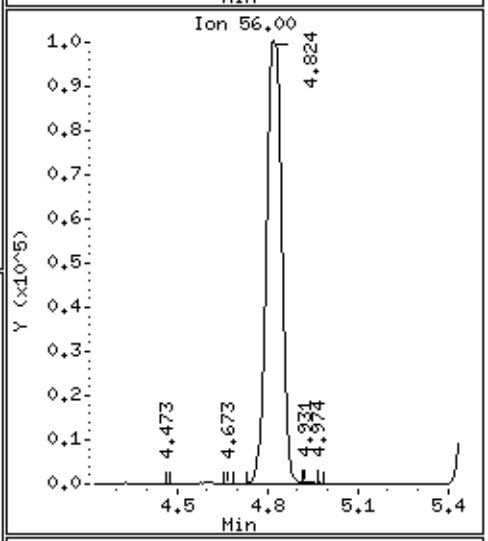


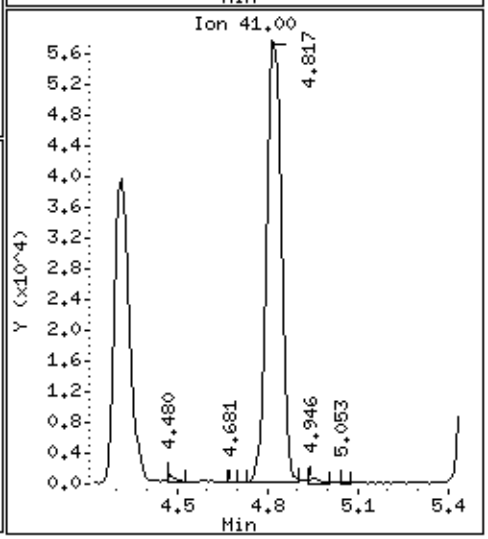












Data File: /chem/msd6.i/15jun16.b/6061506.d

Date : 15-JUN-2016 14:25

Client ID: LCS

Instrument: msd6.i

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

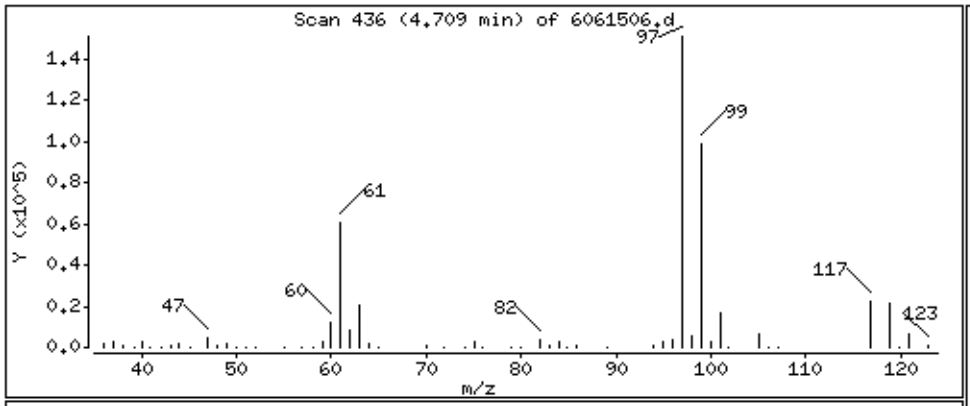
Operator: CT

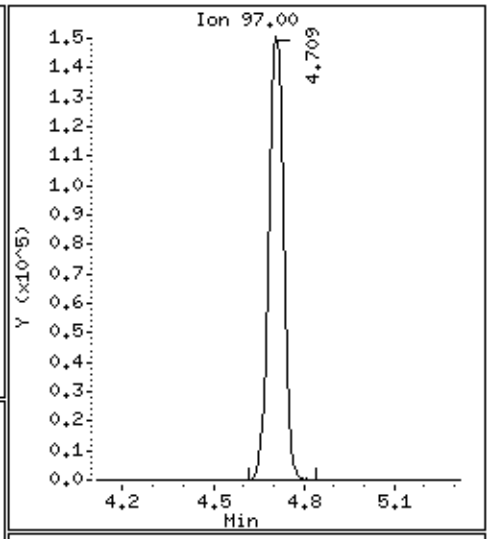
Column phase: RTx-624

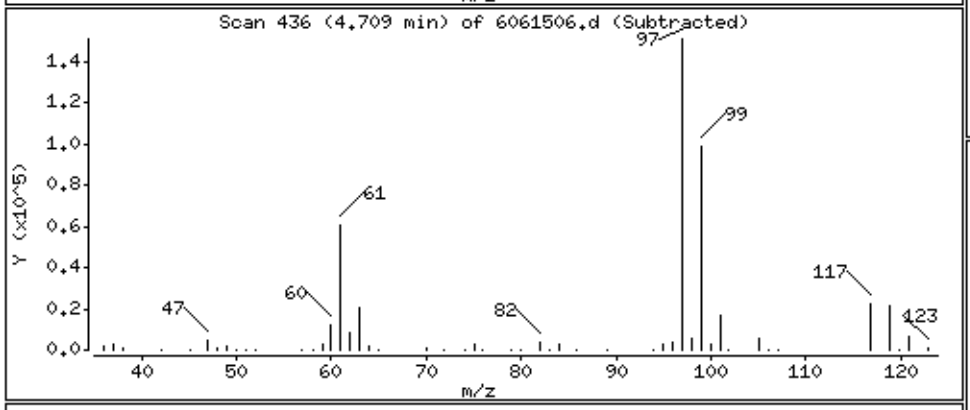
Column diameter: 0.53

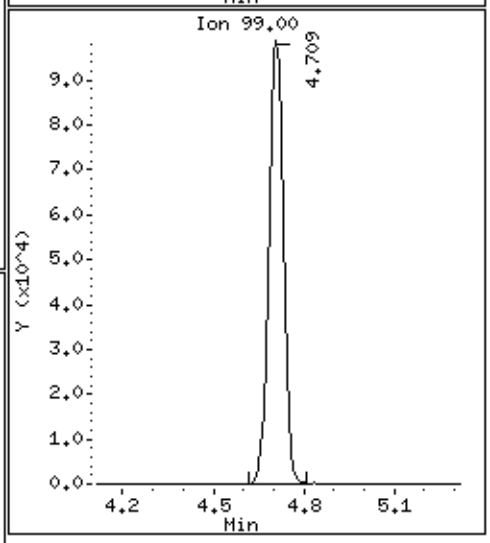
45 1,1,1-Trichloroethane

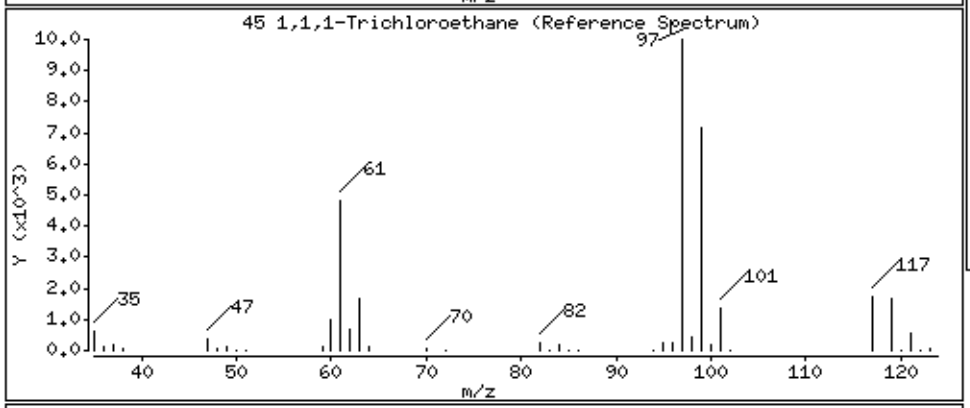
Concentration: 111.57 NG

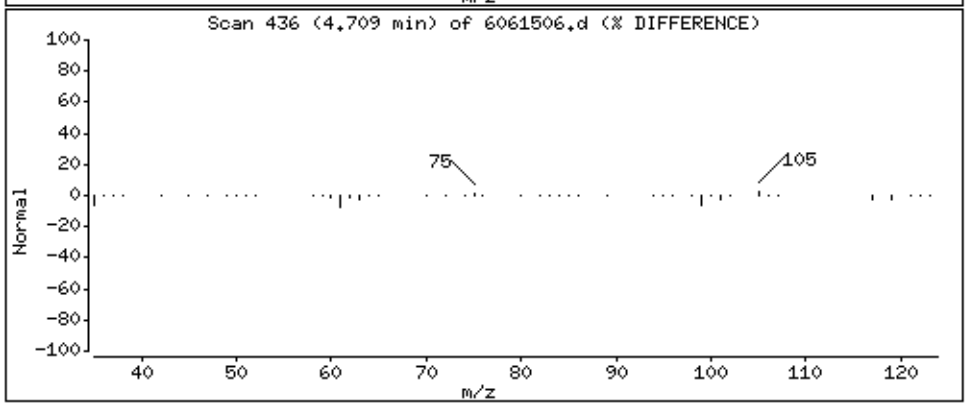












Data File: /chem/msd6.i/15jun16.b/6061506.d

Date : 15-JUN-2016 14:25

Client ID: LCS

Instrument: msd6.i

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

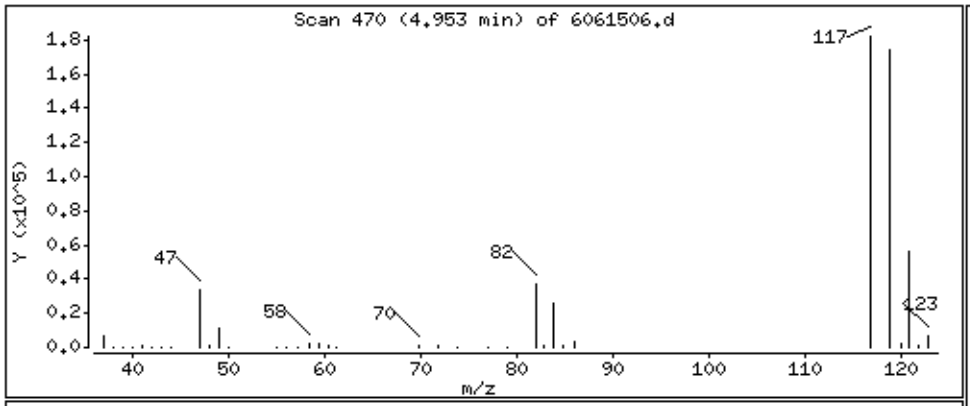
Operator: CT

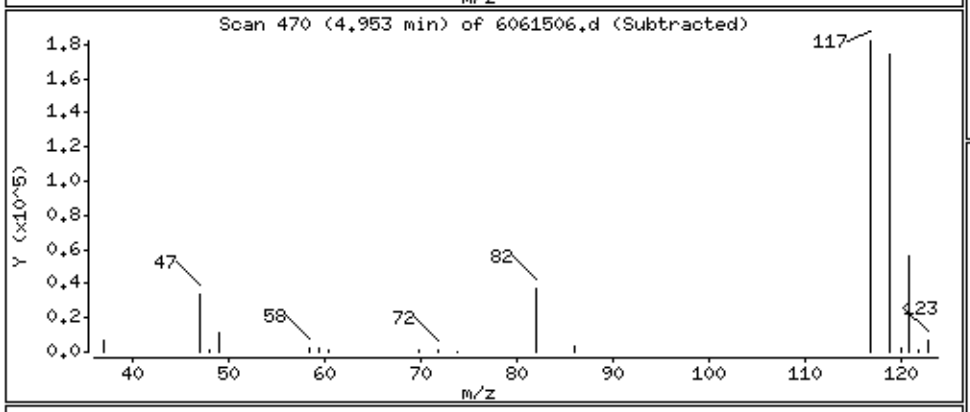
Column phase: RTx-624

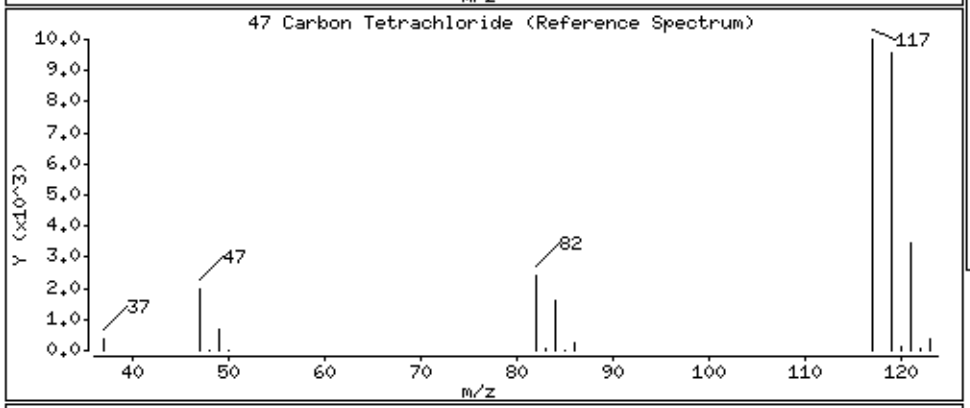
Column diameter: 0.53

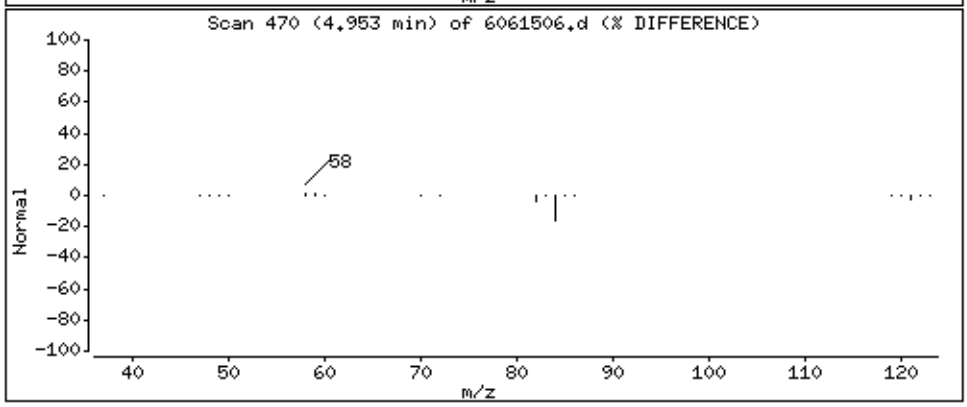
47 Carbon Tetrachloride

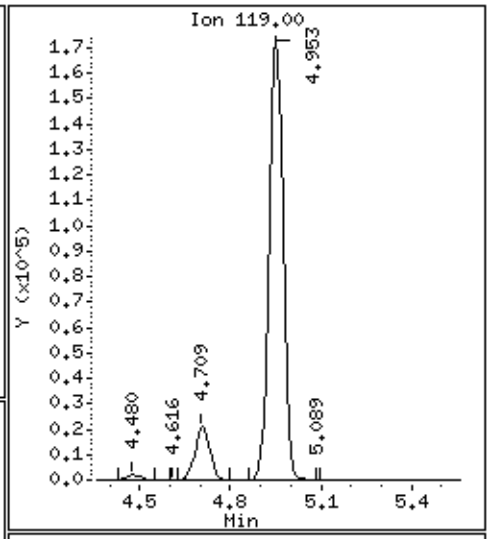
Concentration: 130.22 NG

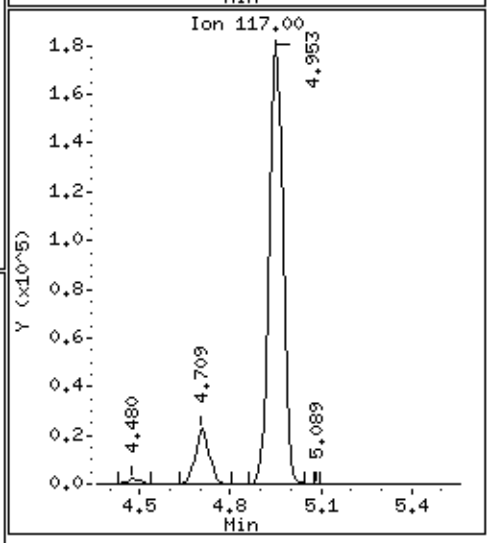












Data File: /chem/msd6.i/15jun16.b/6061506.d

Date : 15-JUN-2016 14:25

Client ID: LCS

Instrument: msd6.i

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

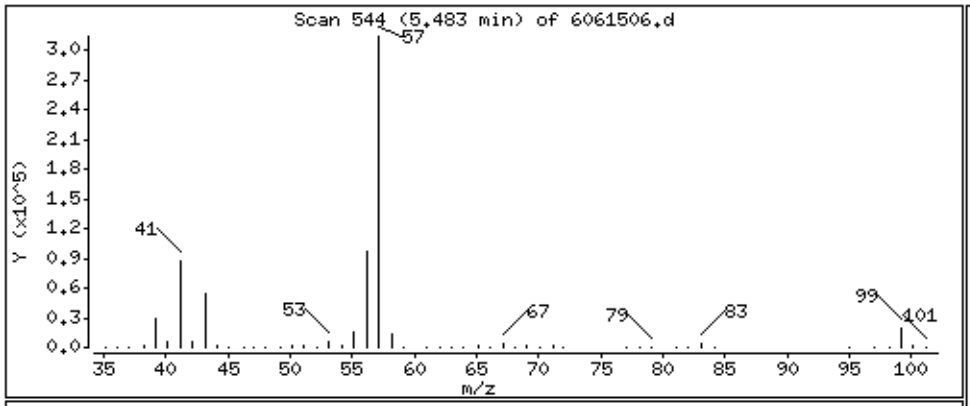
Operator: CT

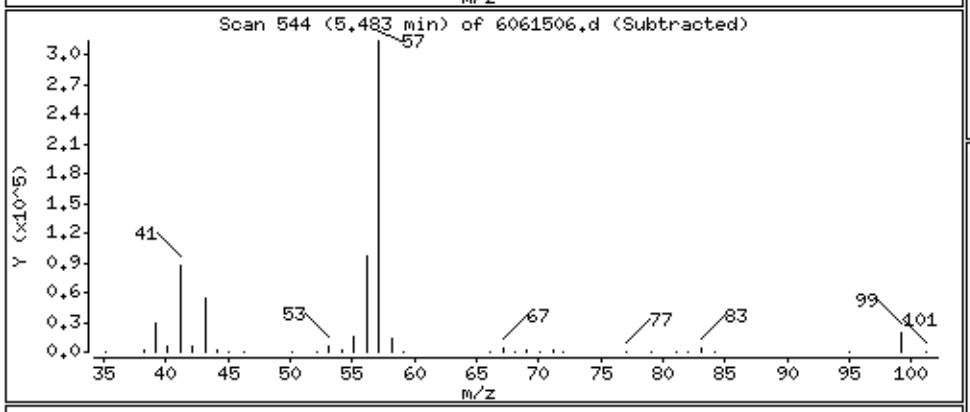
Column phase: RTx-624

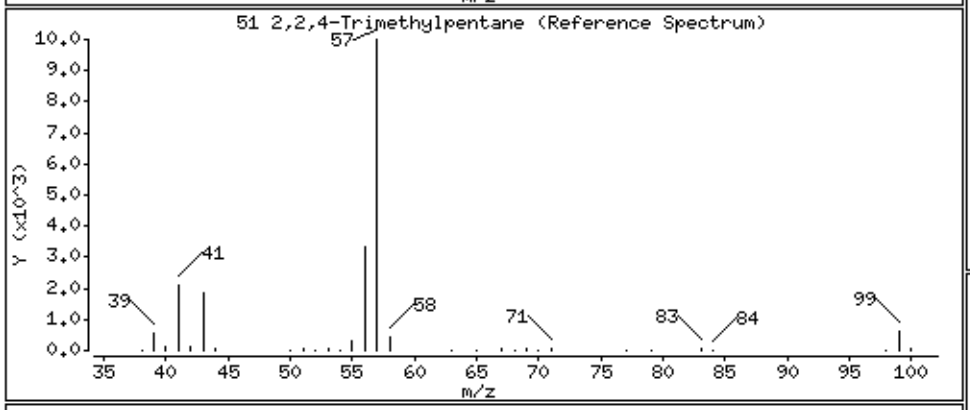
Column diameter: 0.53

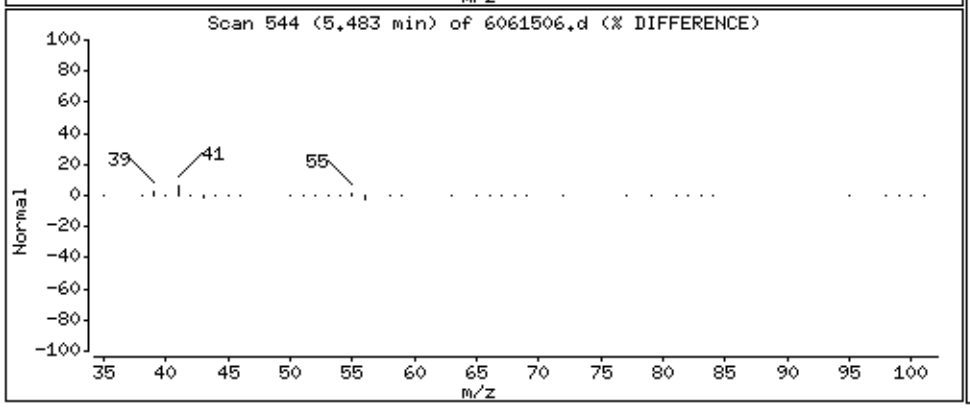
51 2,2,4-Trimethylpentane

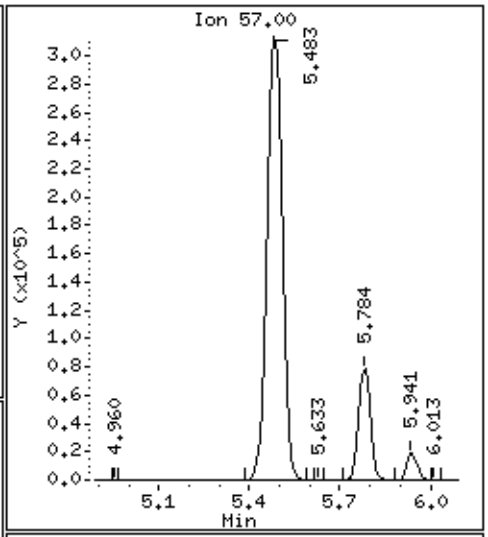
Concentration: 96.098 NG

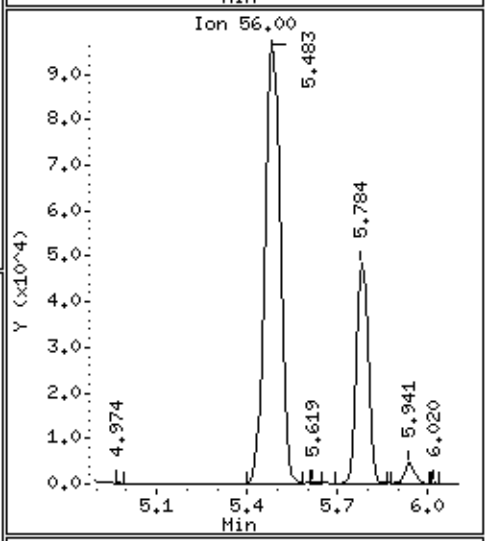


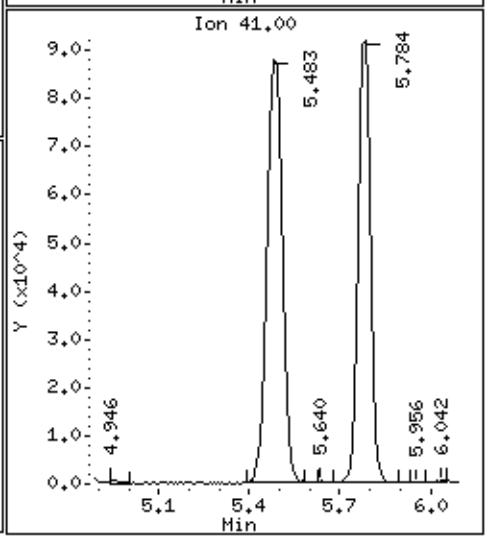












Data File: /chem/msd6.i/15jun16.b/6061506.d

Date : 15-JUN-2016 14:25

Client ID: LCS

Instrument: msd6.i

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

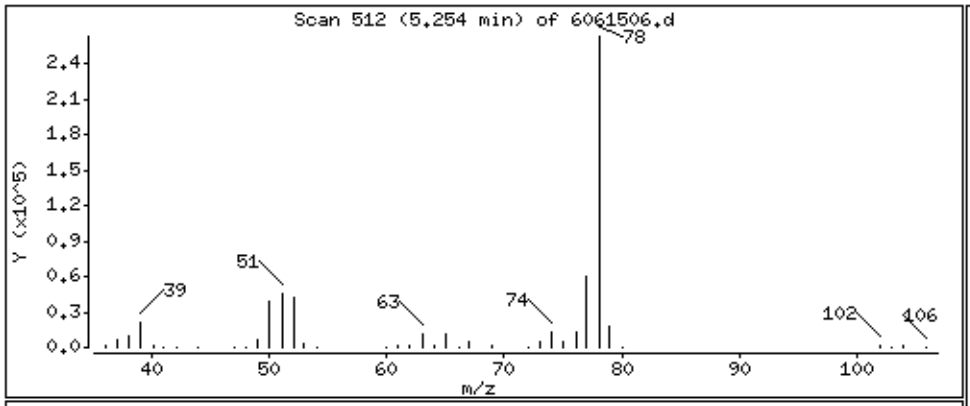
Operator: CT

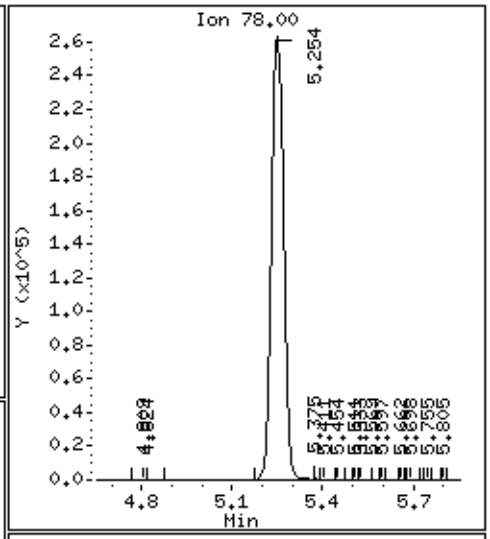
Column phase: RTx-624

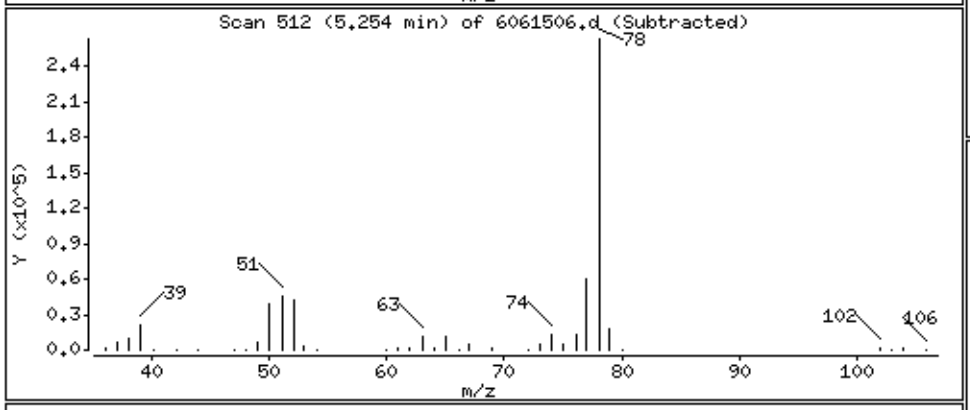
Column diameter: 0.53

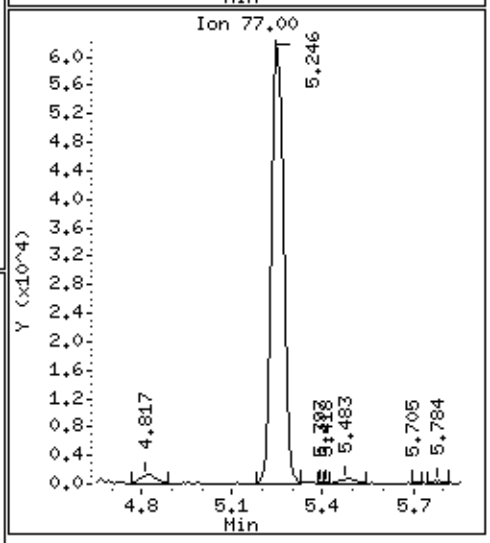
48 Benzene

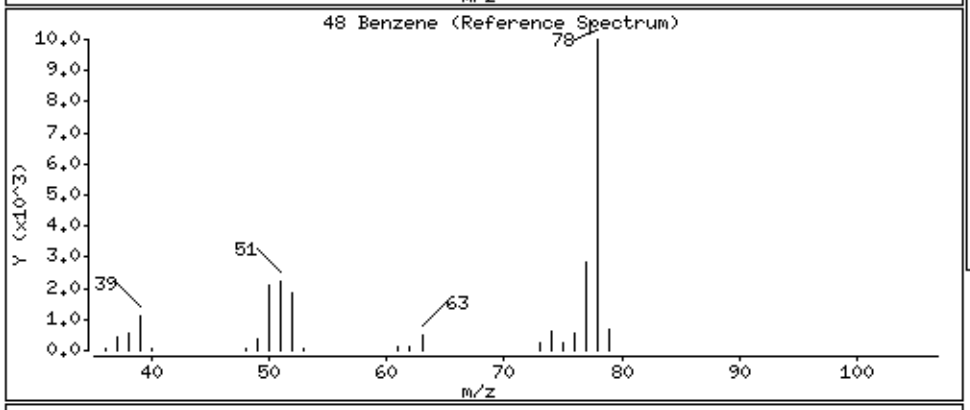
Concentration: 58.340 NG

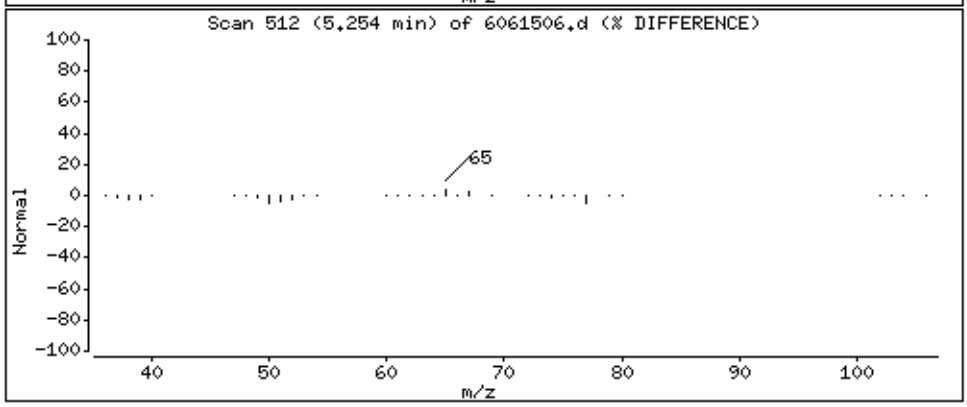












Data File: /chem/msd6.i/15jun16.b/6061506.d

Date : 15-JUN-2016 14:25

Client ID: LCS

Instrument: msd6.i

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

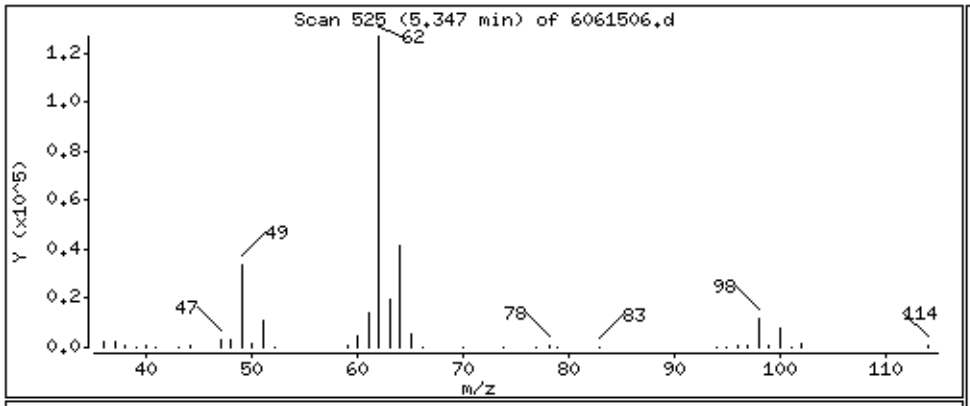
Operator: CT

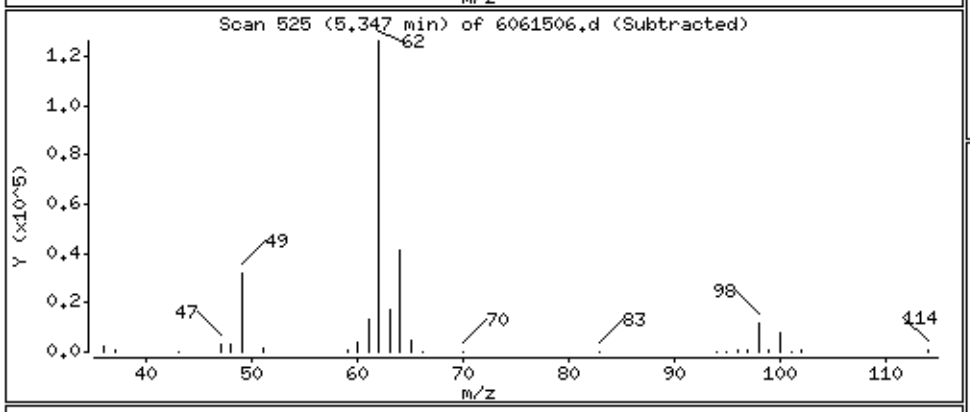
Column phase: RTx-624

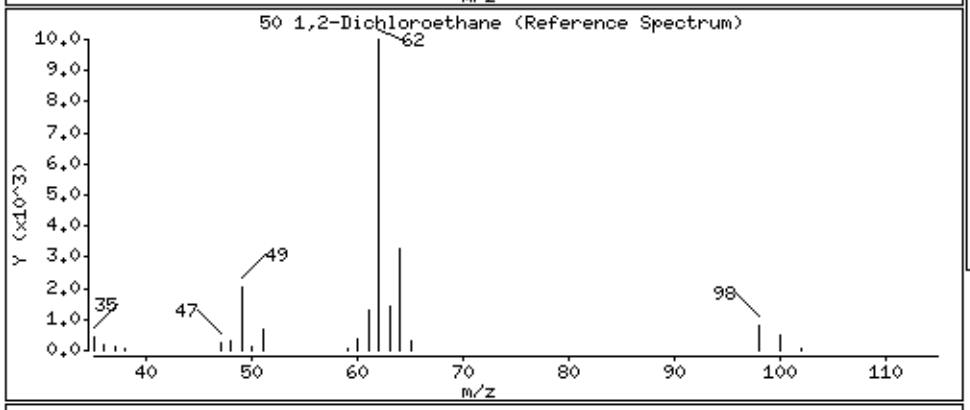
Column diameter: 0.53

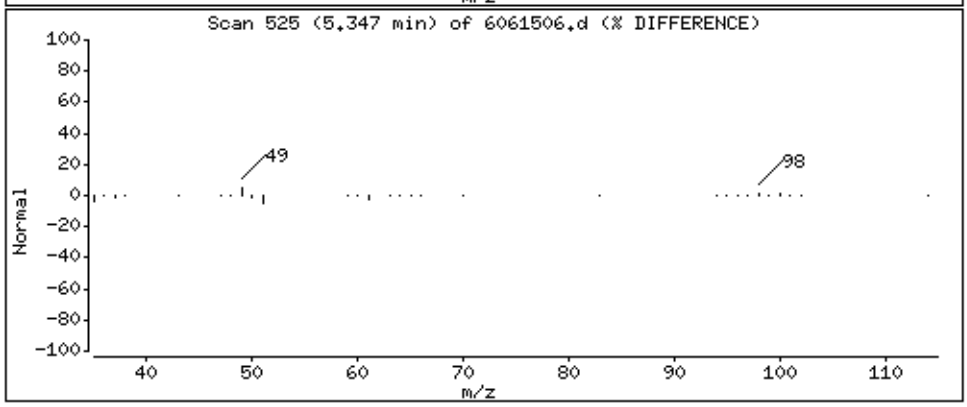
50 1,2-Dichloroethane

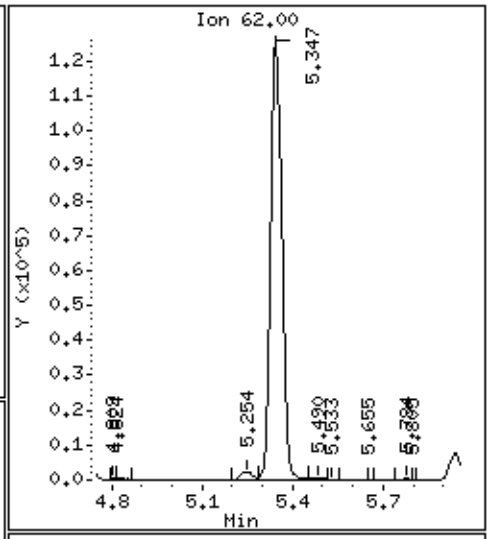
Concentration: 81.783 NG

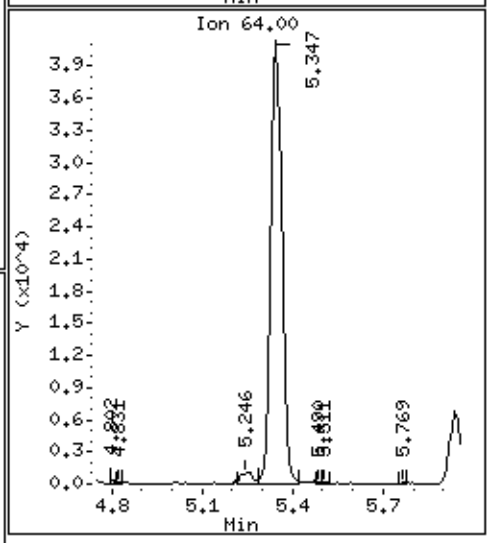












Data File: /chem/msd6.i/15jun16.b/6061506.d

Date : 15-JUN-2016 14:25

Client ID: LCS

Instrument: msd6.i

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

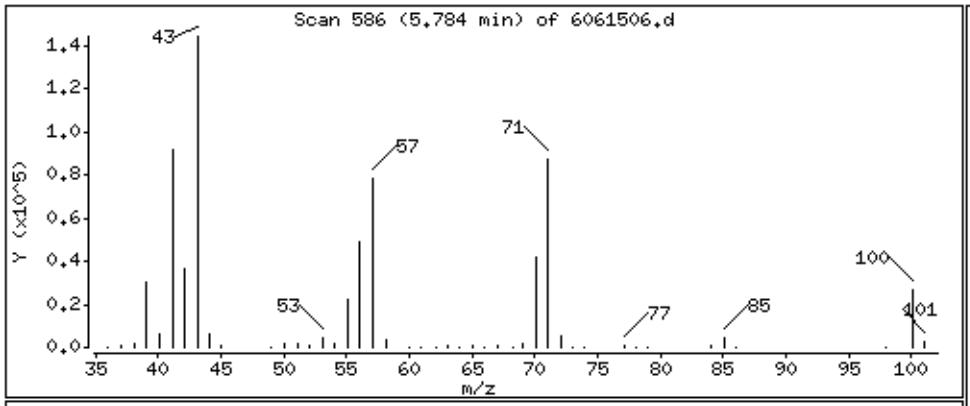
Operator: CT

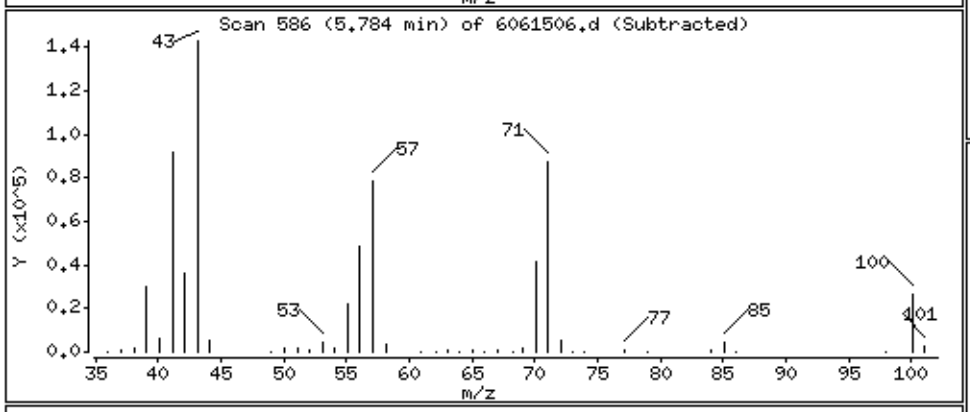
Column phase: RTx-624

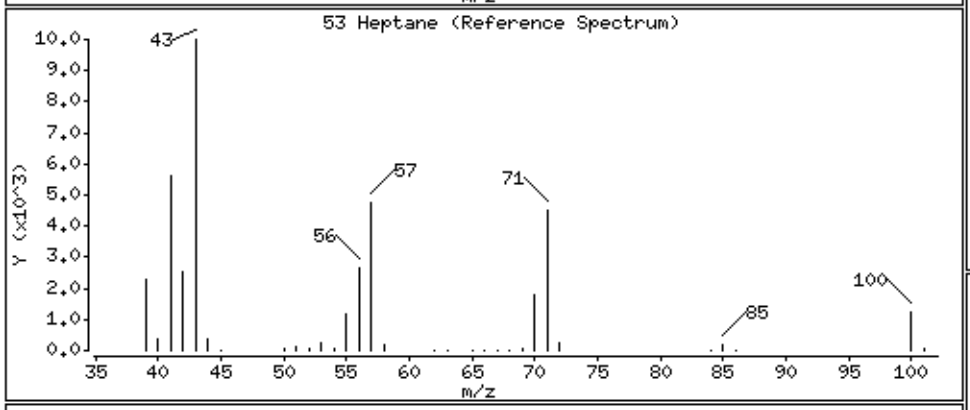
Column diameter: 0.53

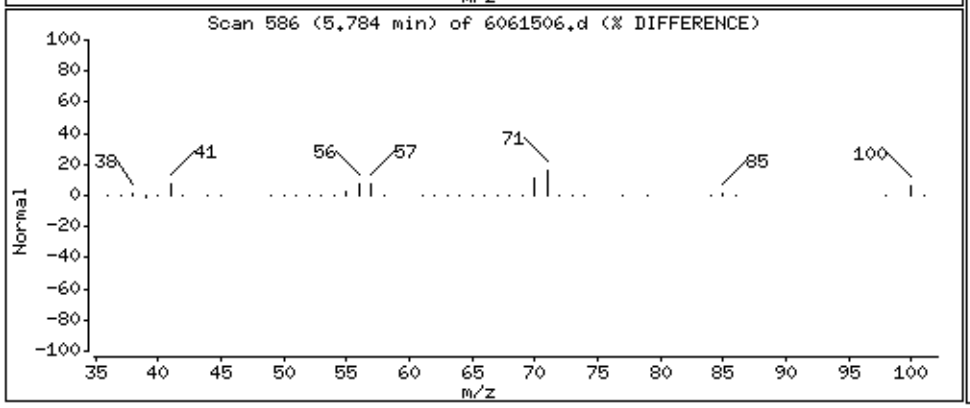
53 Heptane

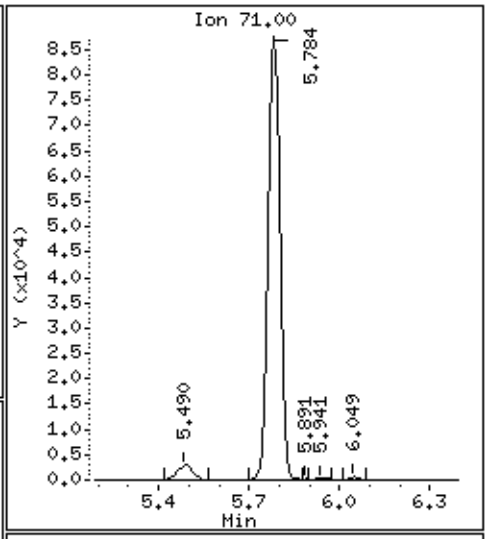
Concentration: 80.353 NG

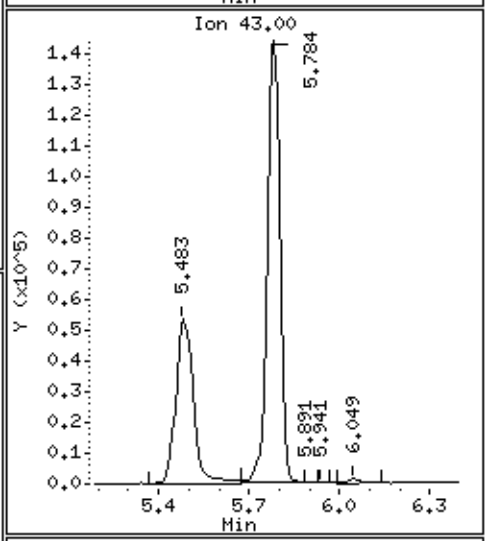


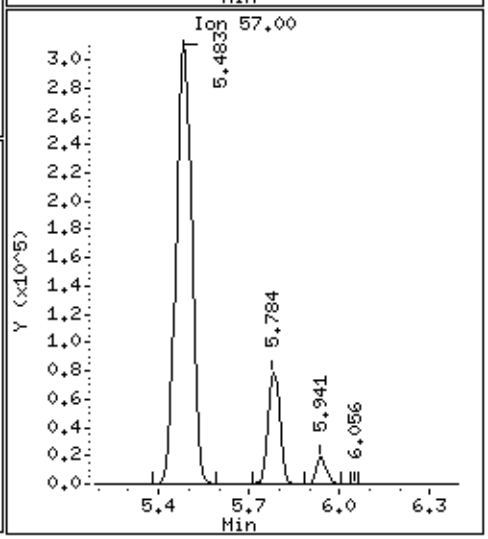












Data File: /chem/msd6.i/15jun16.b/6061506.d

Date : 15-JUN-2016 14:25

Client ID: LCS

Instrument: msd6.i

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

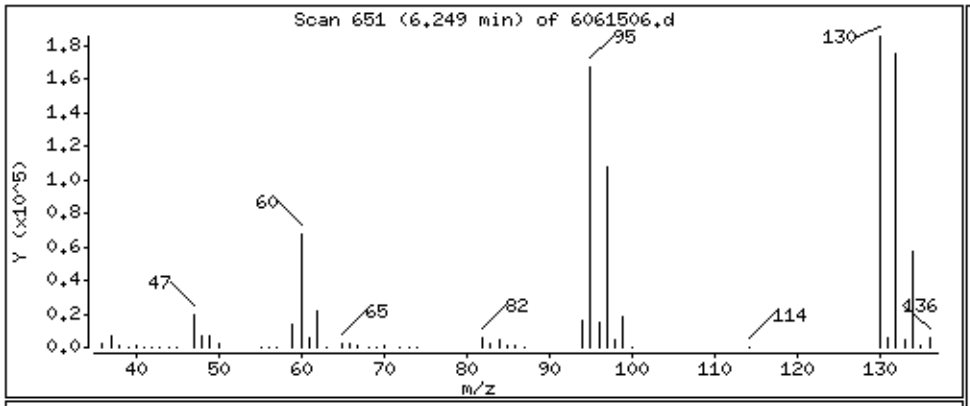
Operator: CT

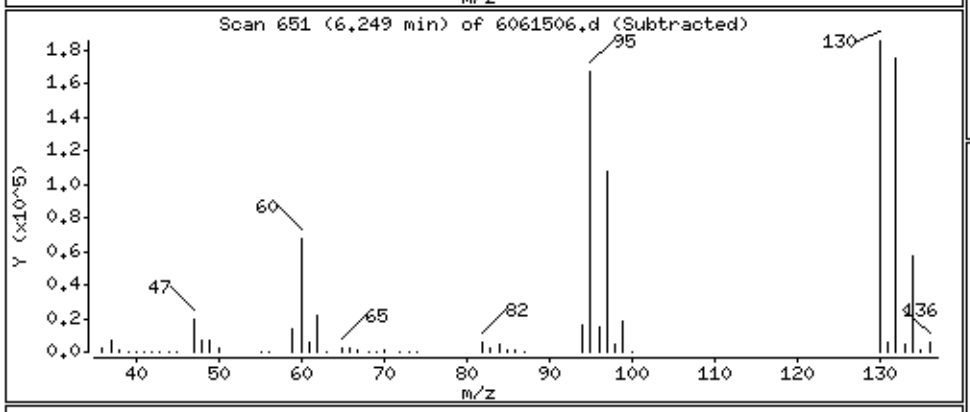
Column phase: RTx-624

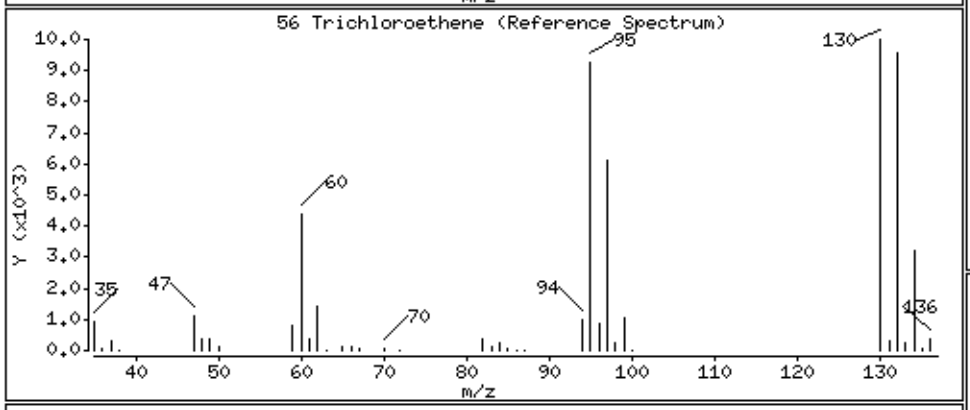
Column diameter: 0.53

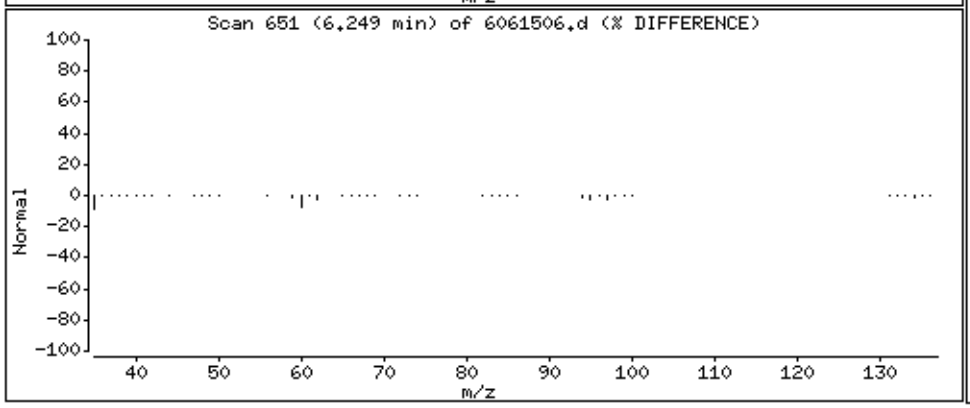
56 Trichloroethene

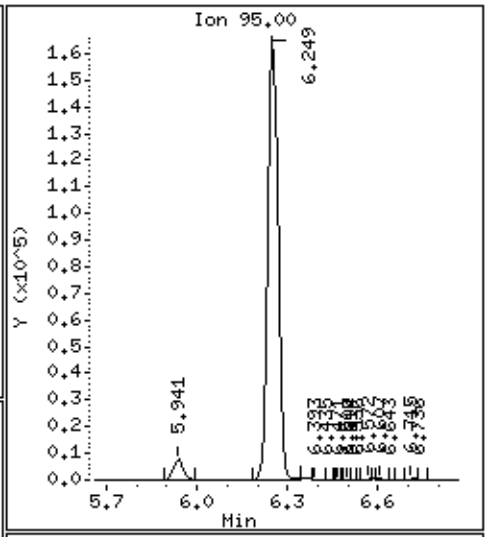
Concentration: 102.16 NG

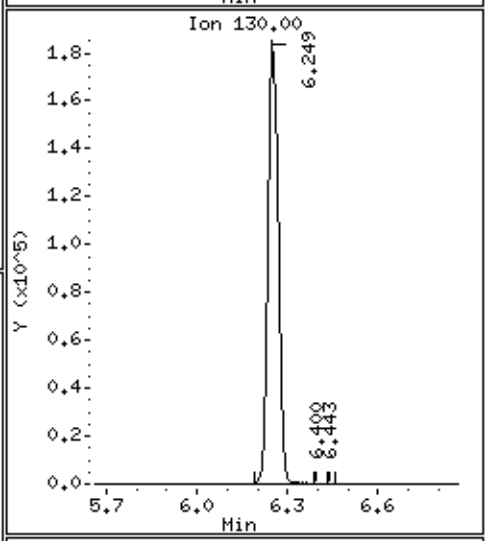


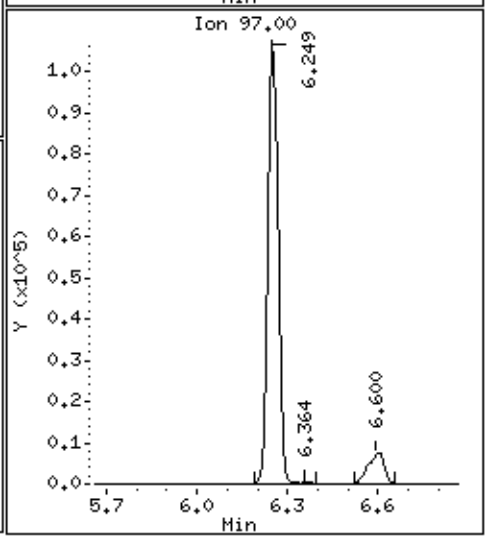












Data File: /chem/msd6.i/15jun16.b/6061506.d

Date : 15-JUN-2016 14:25

Client ID: LCS

Instrument: msd6.i

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

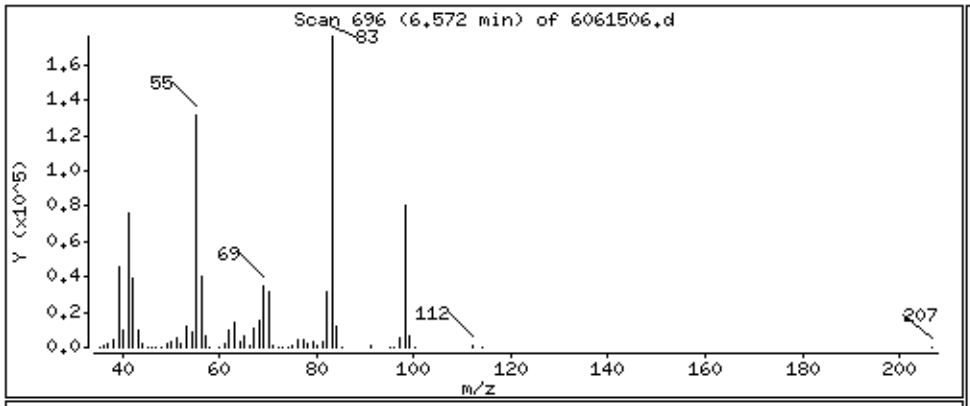
Operator: CT

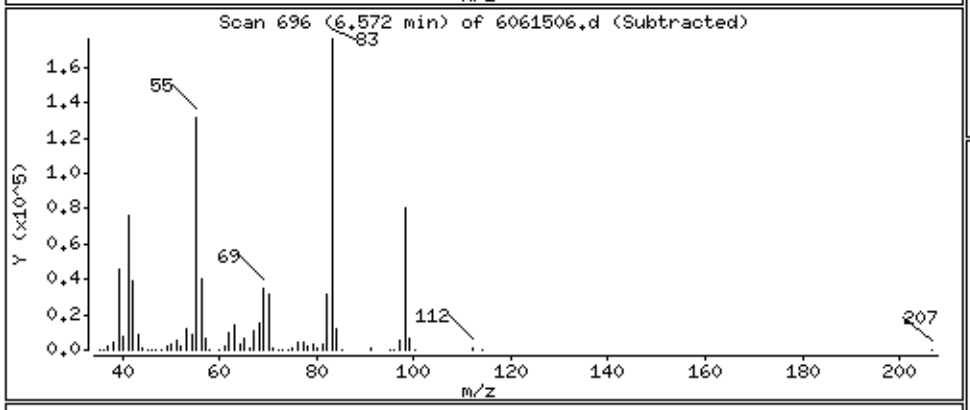
Column phase: RTx-624

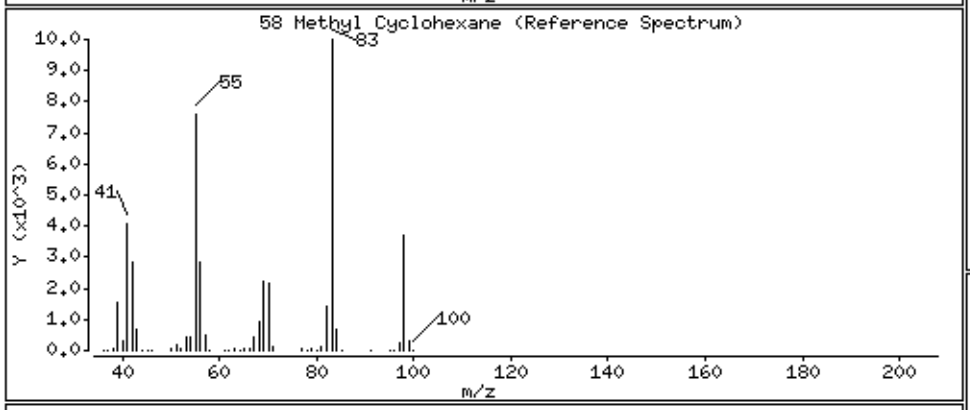
Column diameter: 0.53

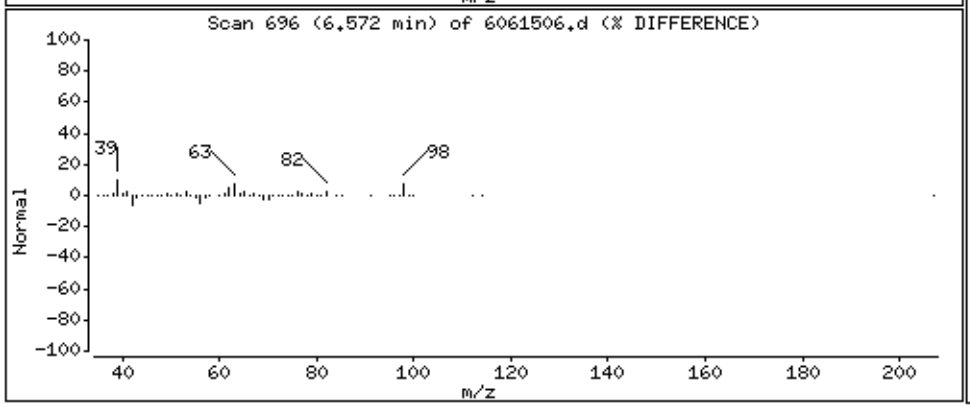
58 Methyl Cyclohexane

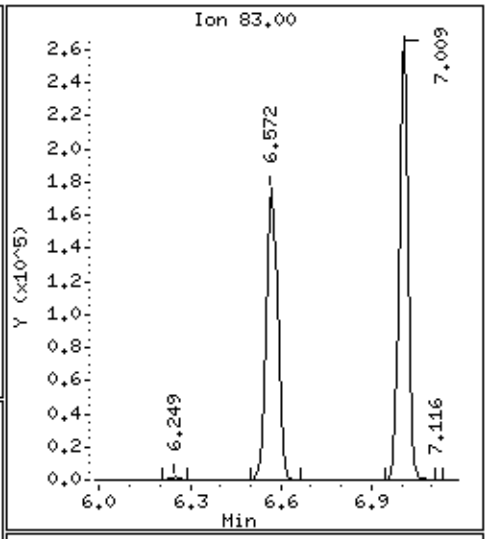
Concentration: 84.142 NG

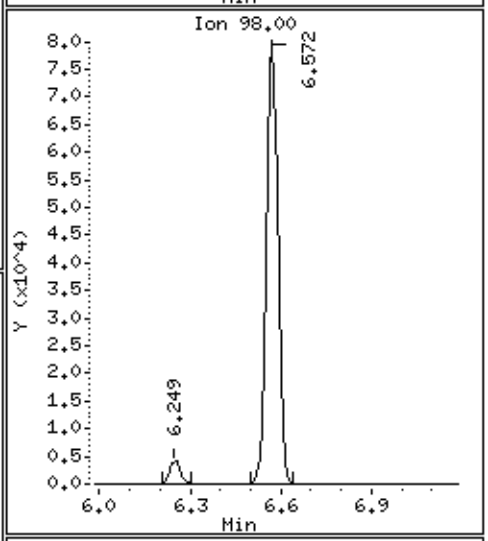


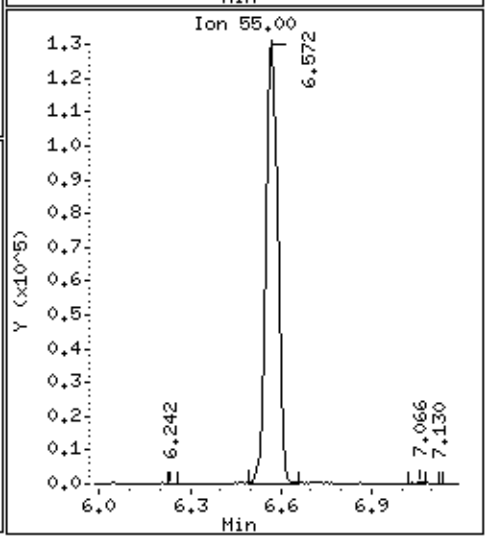












Data File: /chem/msd6.i/15jun16.b/6061506.d

Date : 15-JUN-2016 14:25

Client ID: LCS

Instrument: msd6.i

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

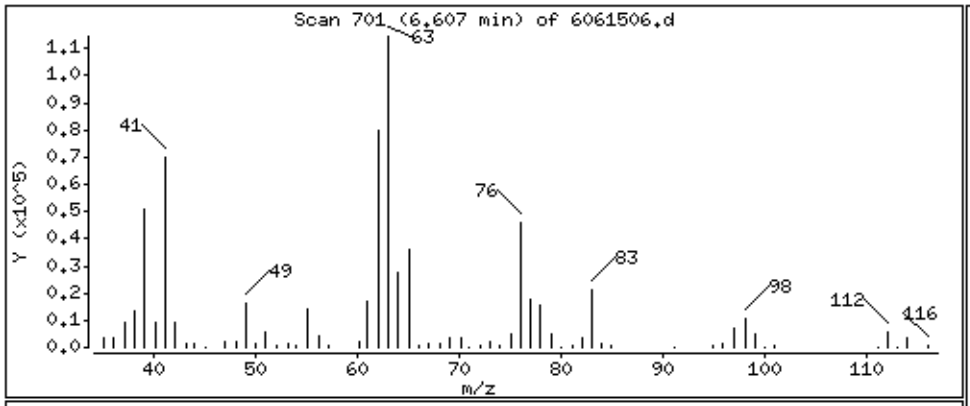
Operator: CT

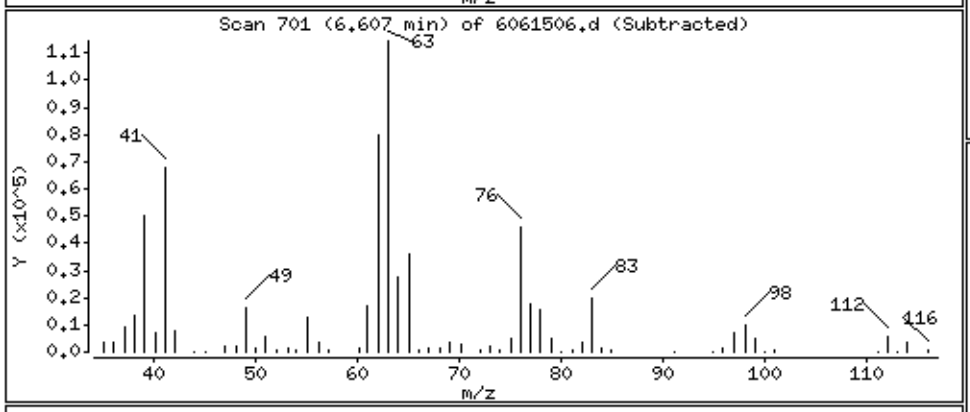
Column phase: RTx-624

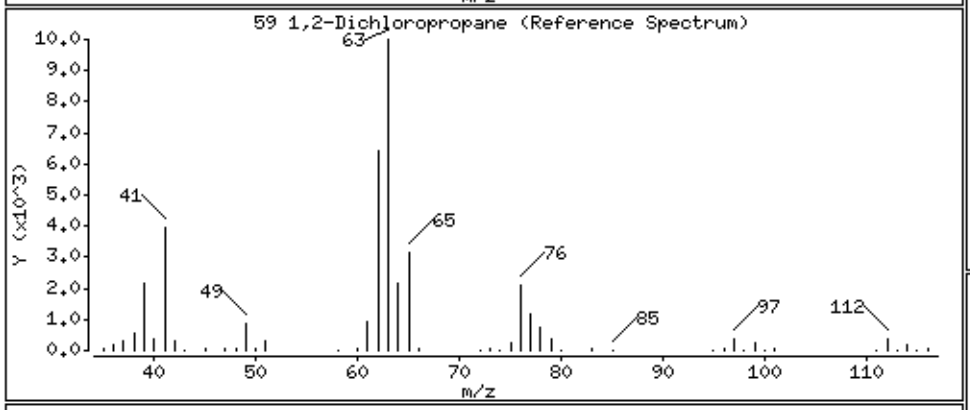
Column diameter: 0.53

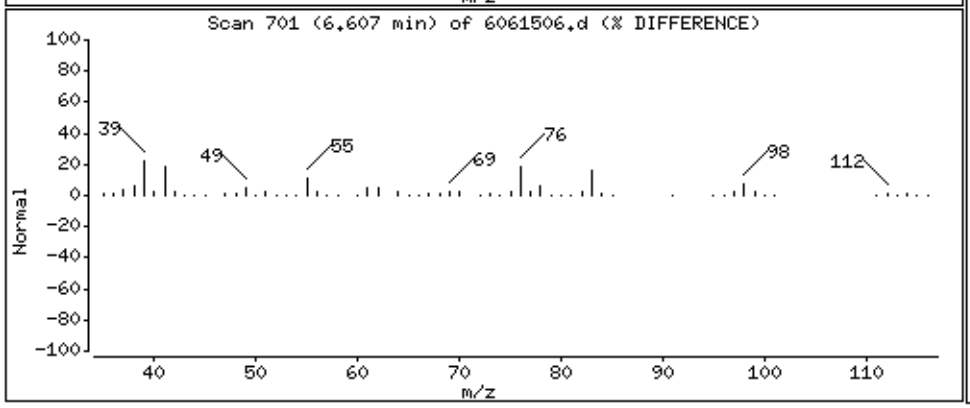
59 1,2-Dichloropropane

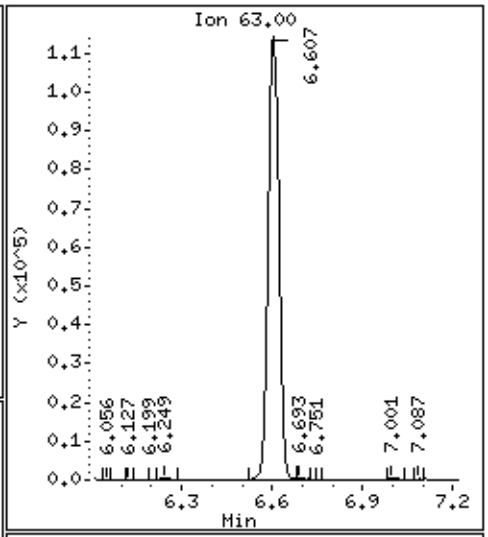
Concentration: 101.76 NG

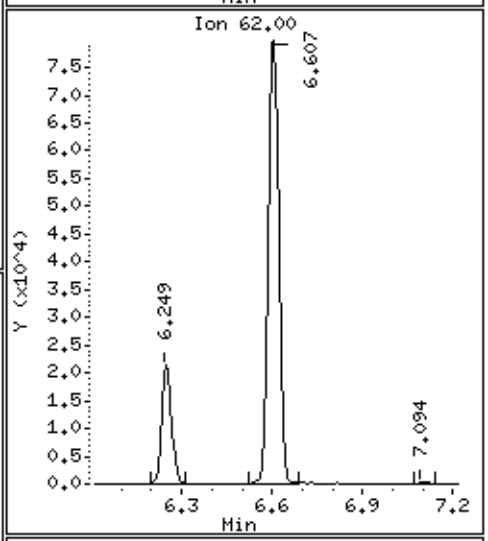


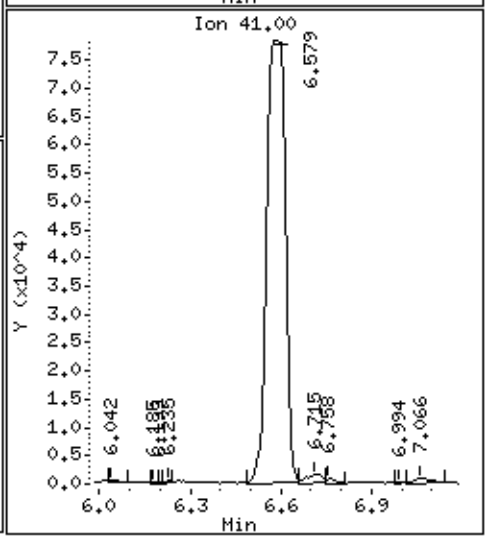












Data File: /chem/msd6.i/15jun16.b/6061506.d

Date : 15-JUN-2016 14:25

Client ID: LCS

Instrument: msd6.i

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

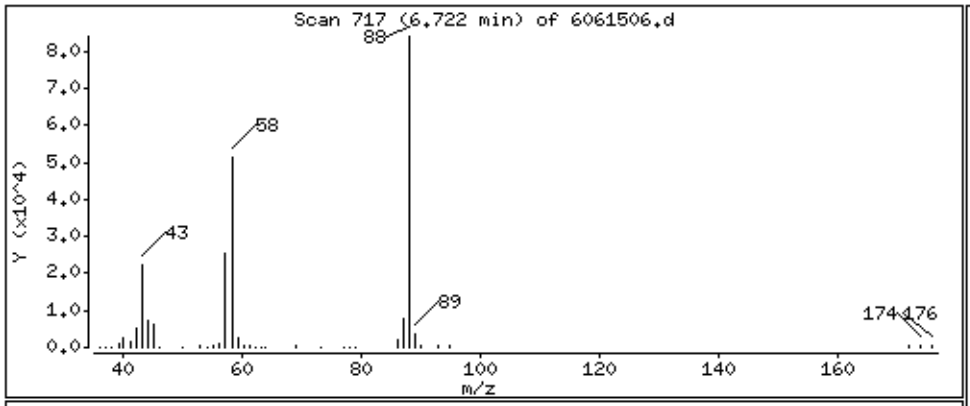
Operator: CT

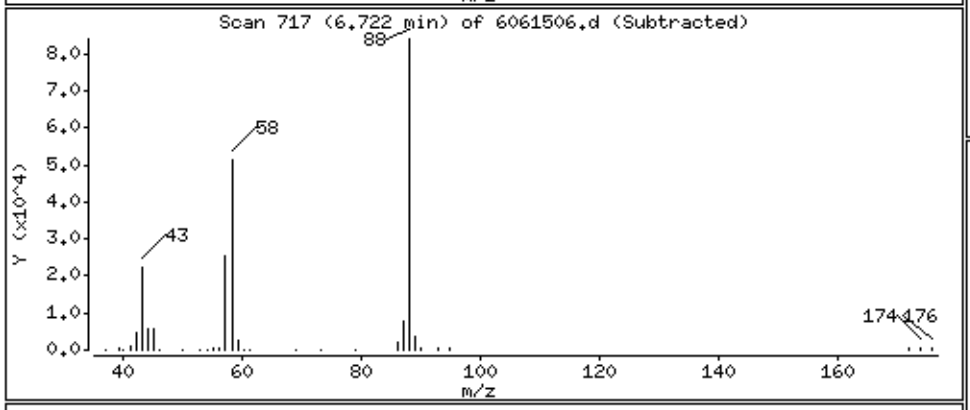
Column phase: RTx-624

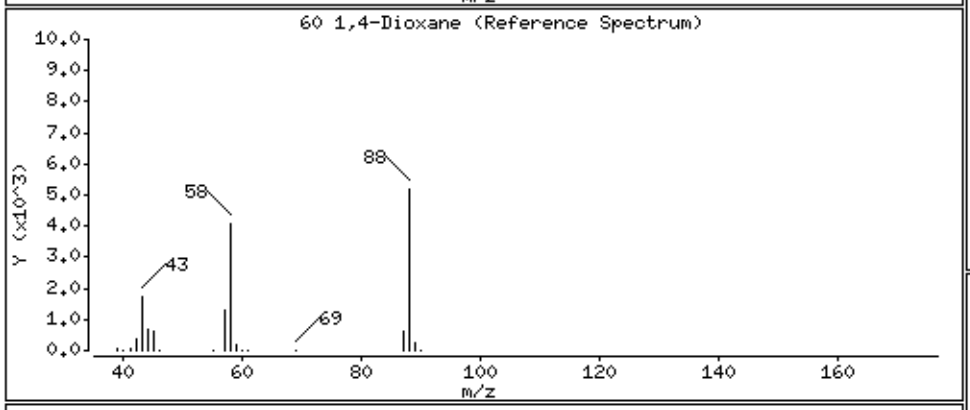
Column diameter: 0.53

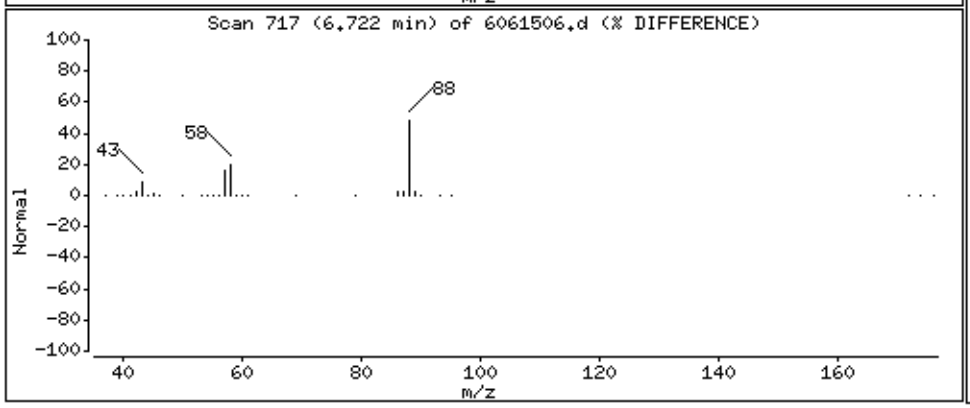
60 1,4-Dioxane

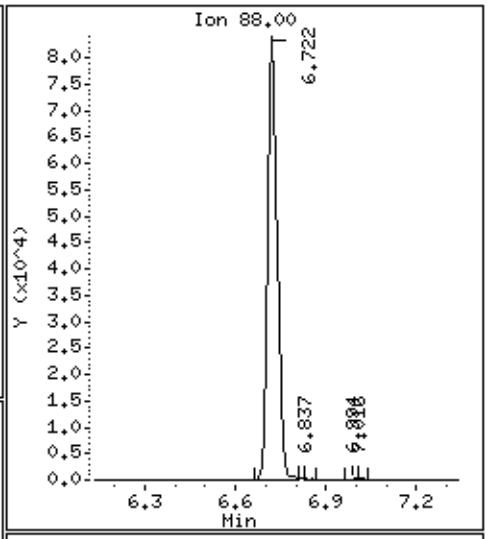
Concentration: 75.413 NG

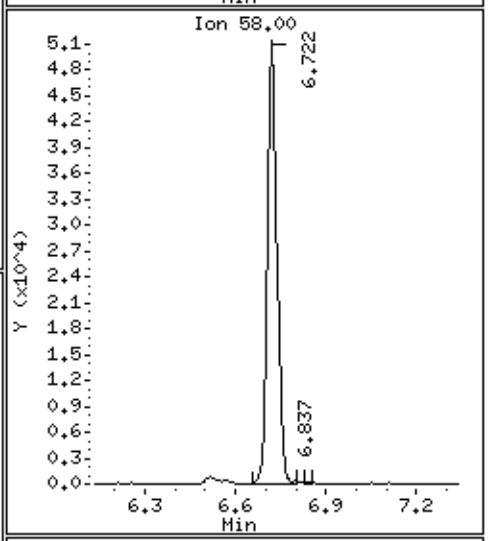


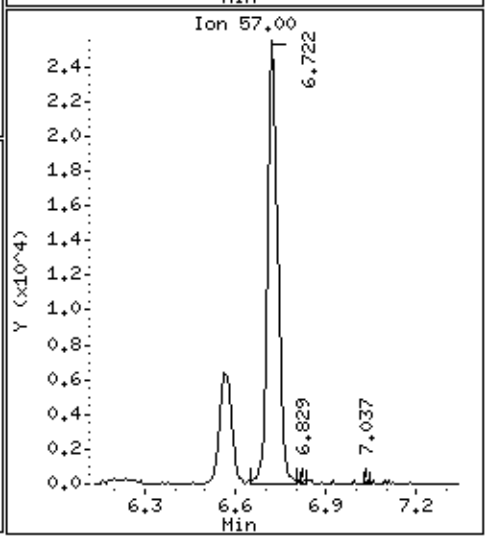












Data File: /chem/msd6.i/15jun16.b/6061506.d

Date : 15-JUN-2016 14:25

Client ID: LCS

Instrument: msd6.i

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

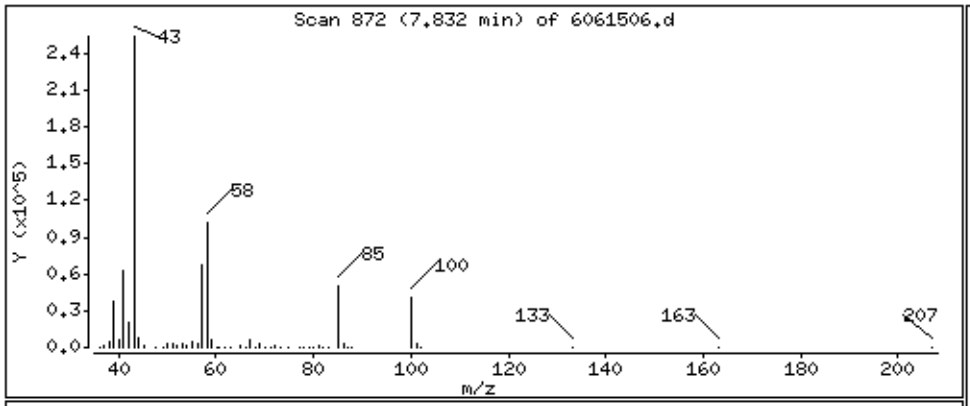
Operator: CT

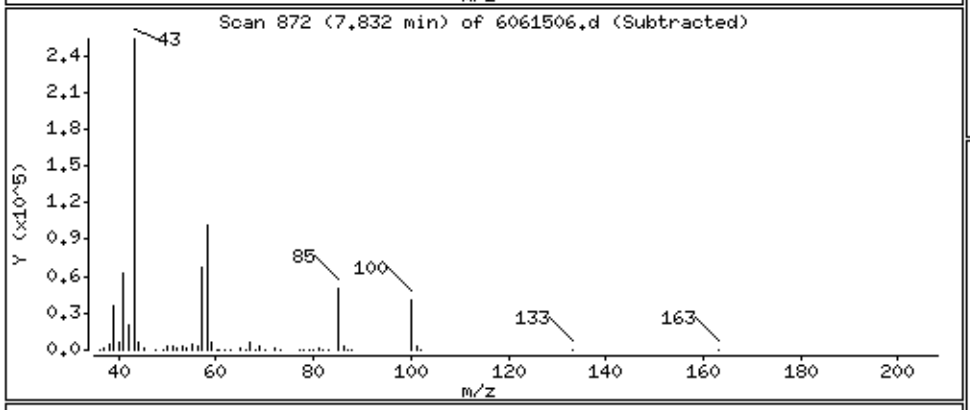
Column phase: RTx-624

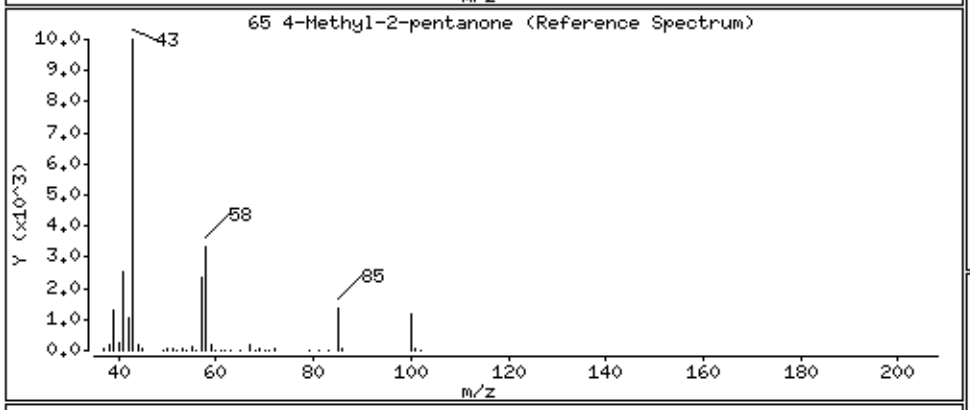
Column diameter: 0.53

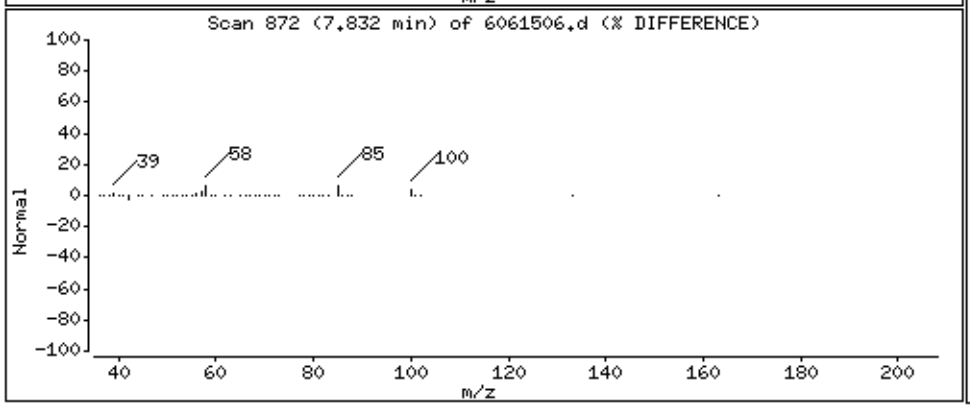
65 4-Methyl-2-pentanone

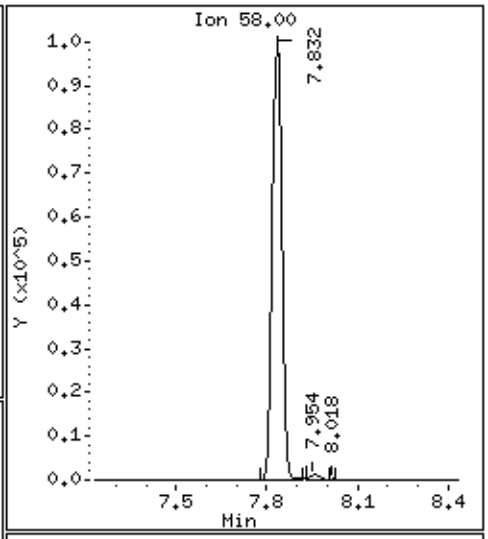
Concentration: 87.316 NG

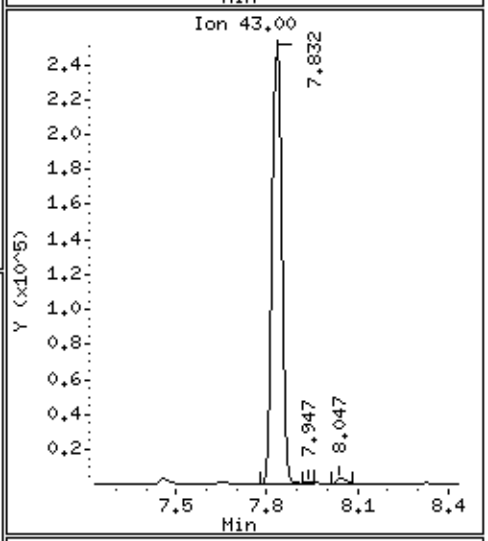


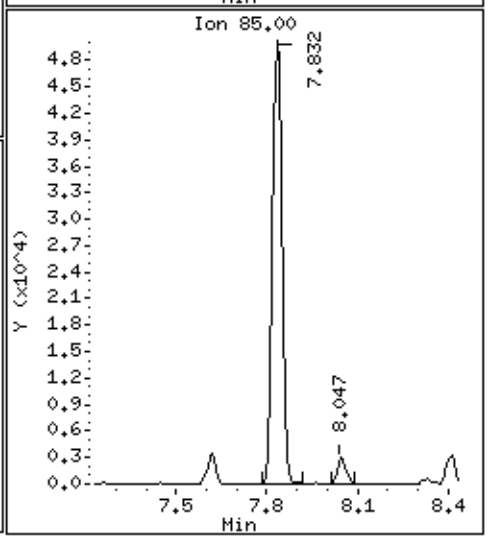












Data File: /chem/msd6.i/15jun16.b/6061506.d

Date : 15-JUN-2016 14:25

Client ID: LCS

Instrument: msd6.i

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

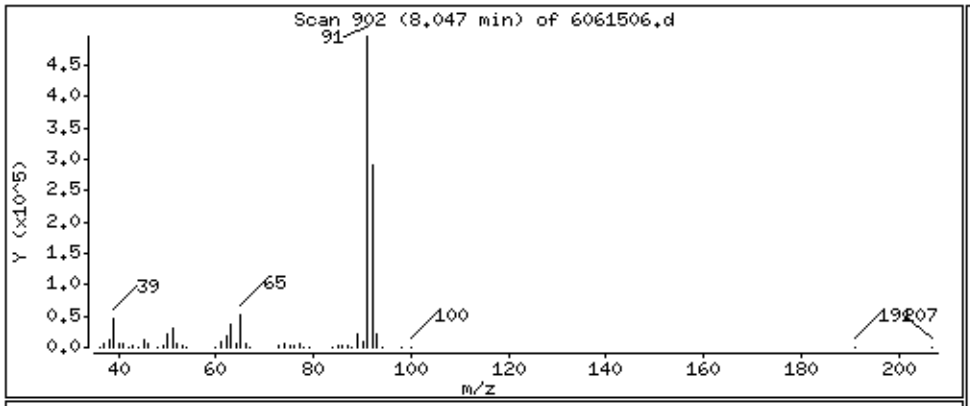
Operator: CT

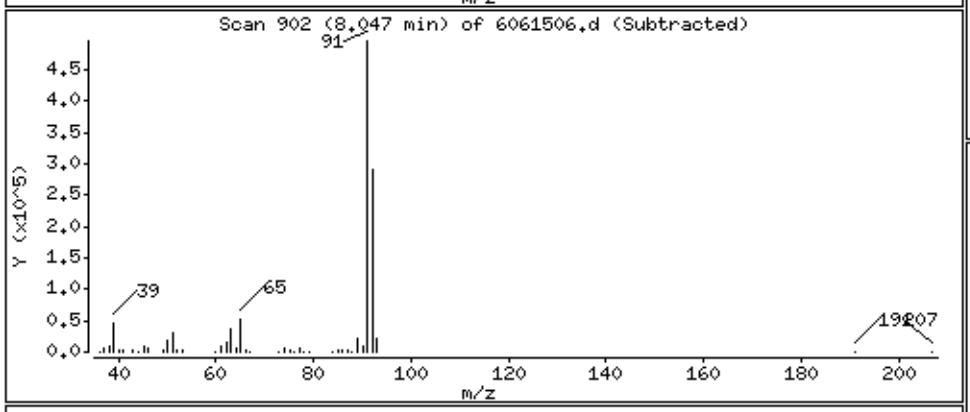
Column phase: RTx-624

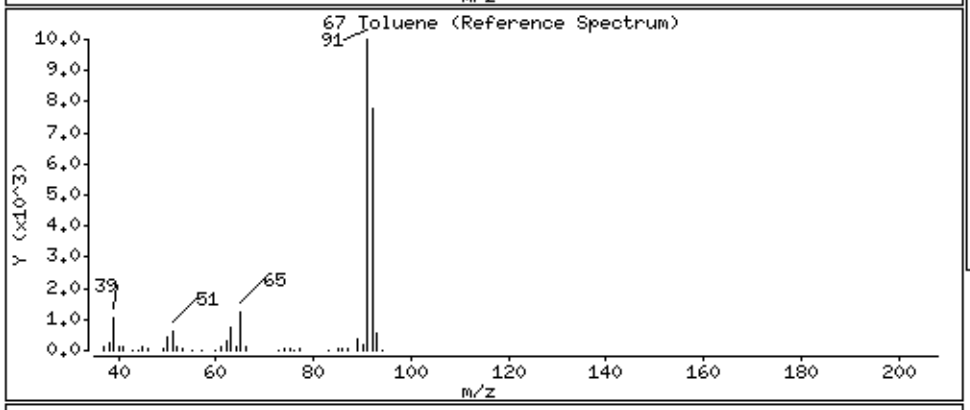
Column diameter: 0.53

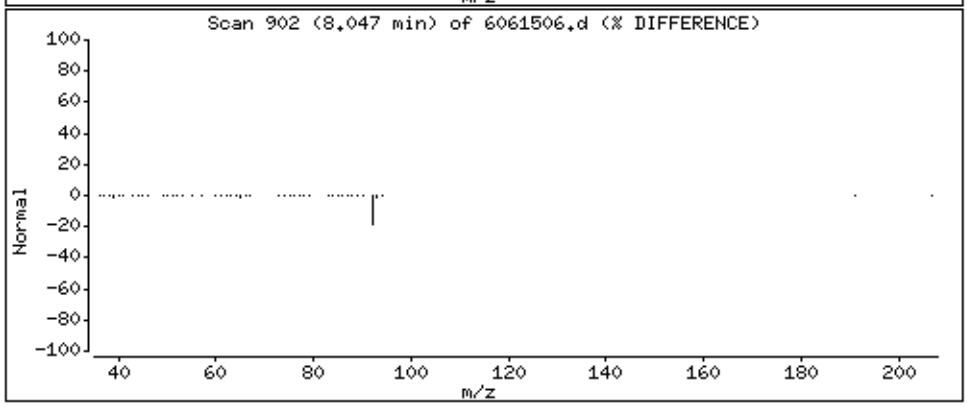
67 Toluene

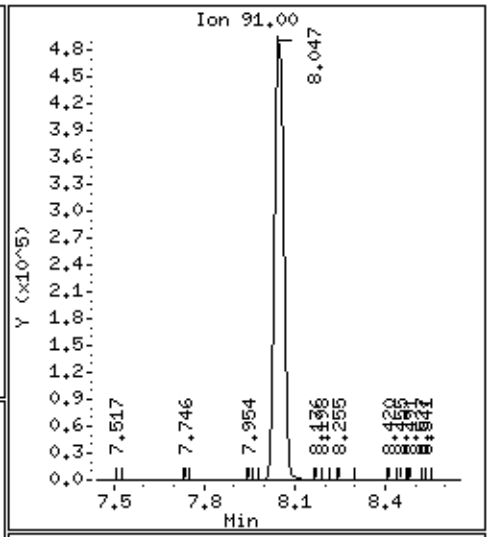
Concentration: 76.907 NG

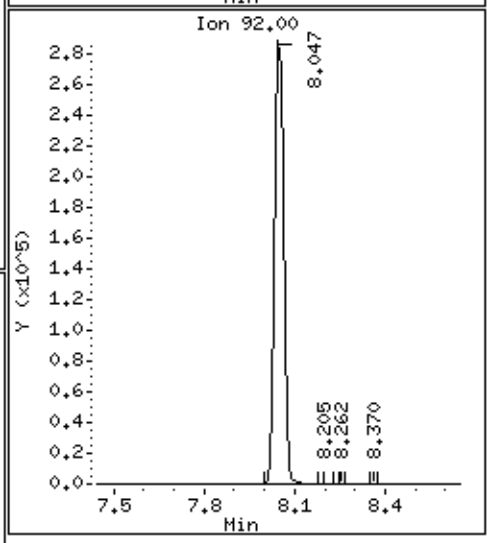












Data File: /chem/msd6.i/15jun16.b/6061506.d

Date : 15-JUN-2016 14:25

Client ID: LCS

Instrument: msd6.i

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

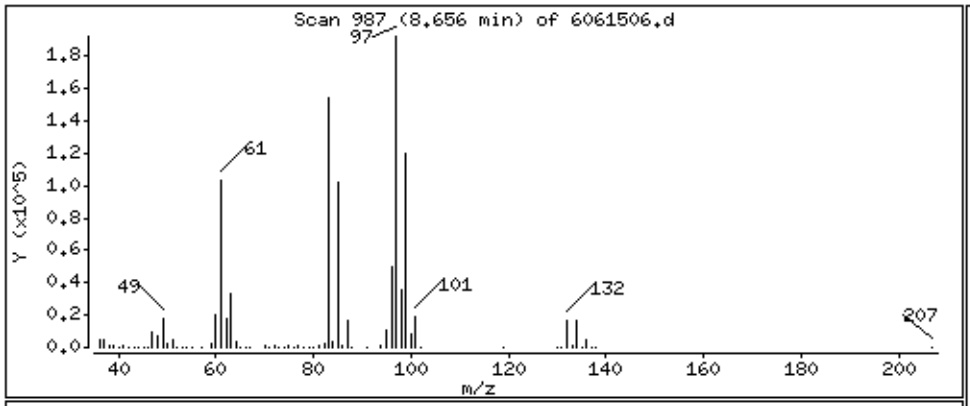
Operator: CT

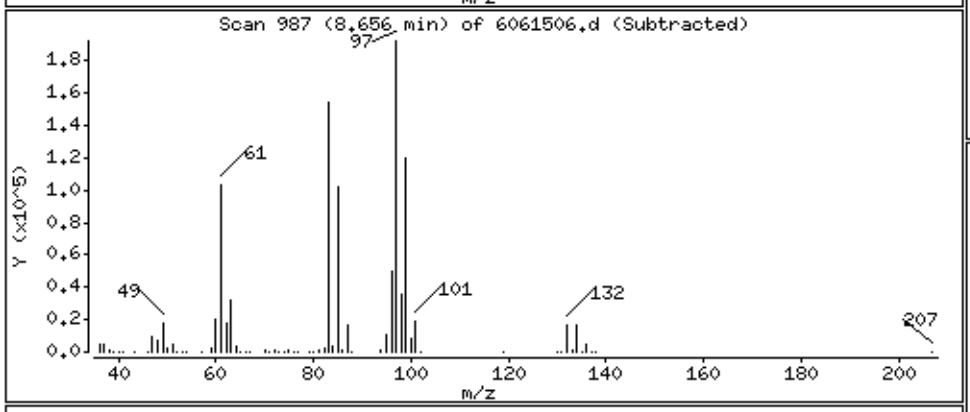
Column phase: RTx-624

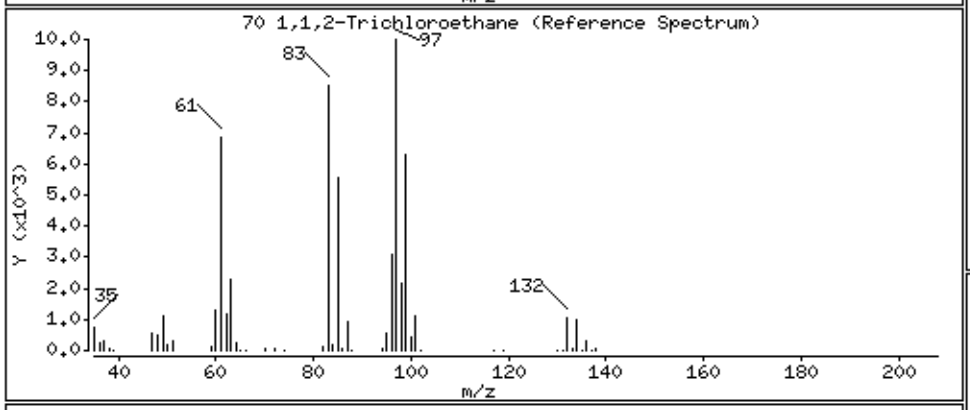
Column diameter: 0.53

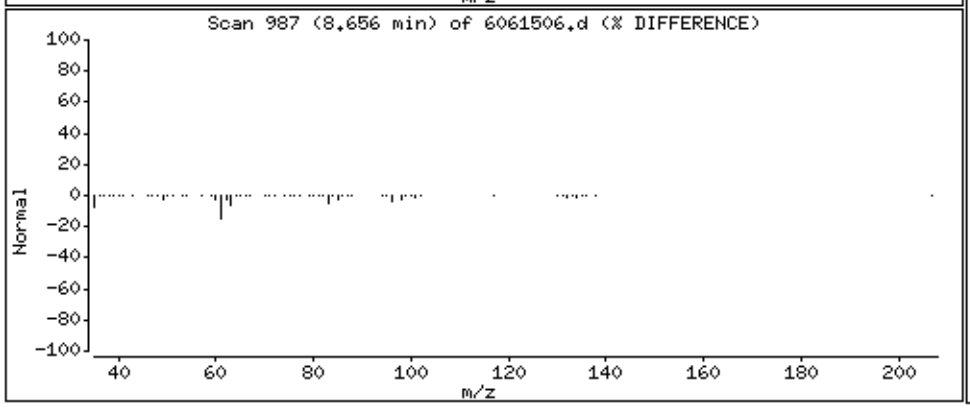
70 1,1,2-Trichloroethane

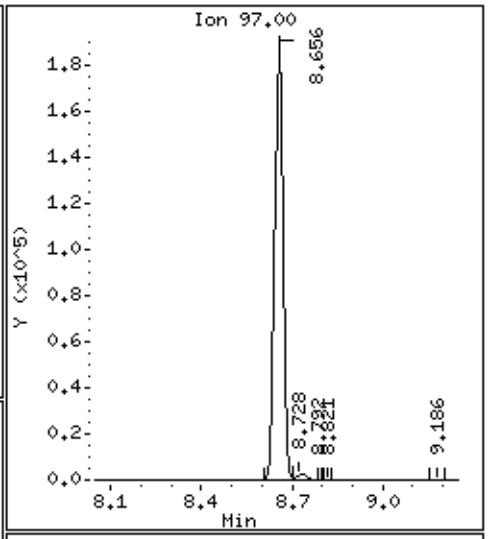
Concentration: 115.85 NG

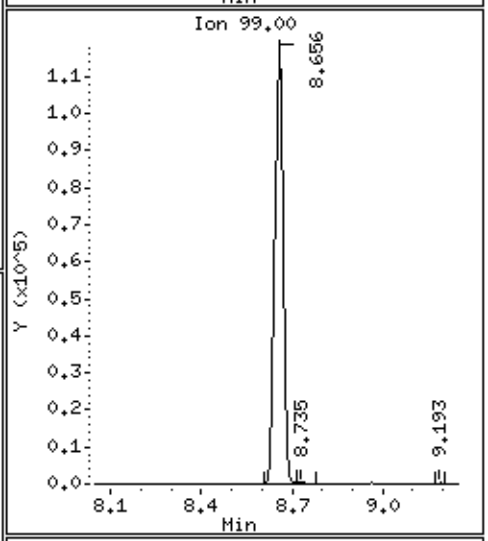


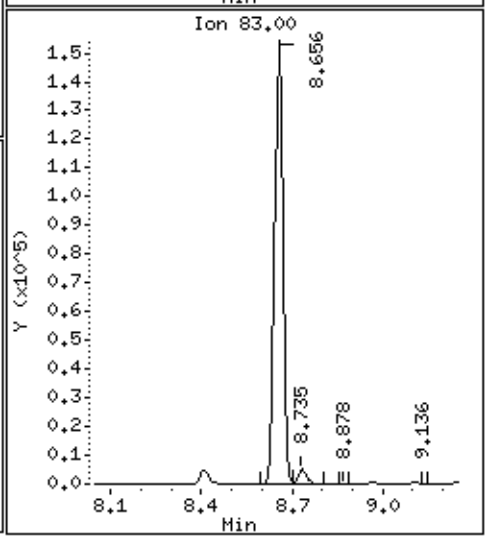












Data File: /chem/msd6.i/15jun16.b/6061506.d

Date : 15-JUN-2016 14:25

Client ID: LCS

Instrument: msd6.i

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

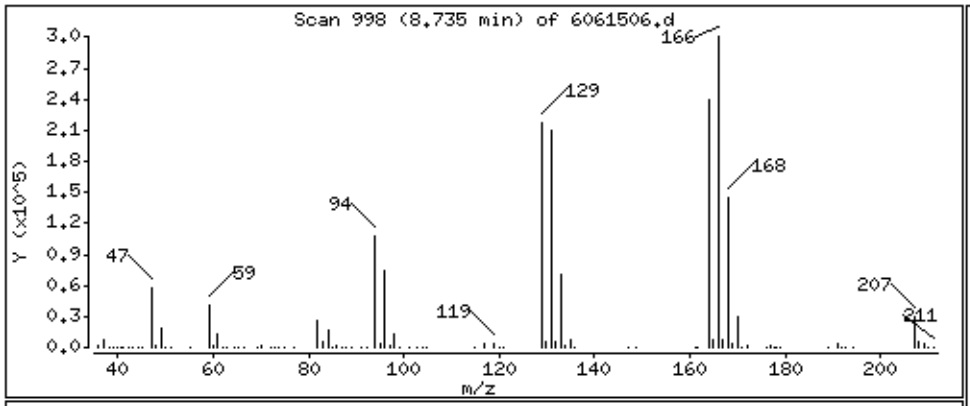
Operator: CT

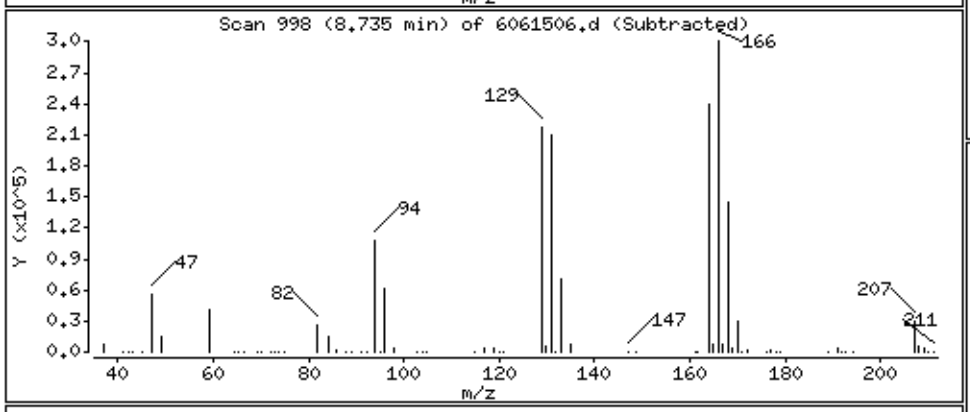
Column phase: RTx-624

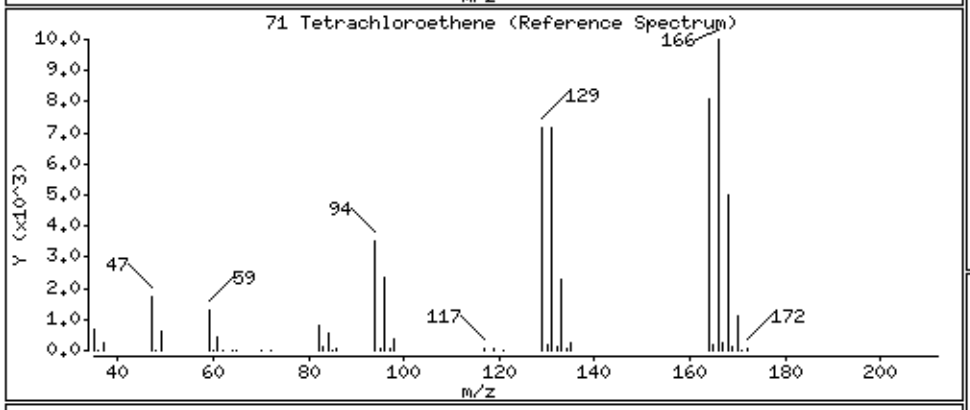
Column diameter: 0.53

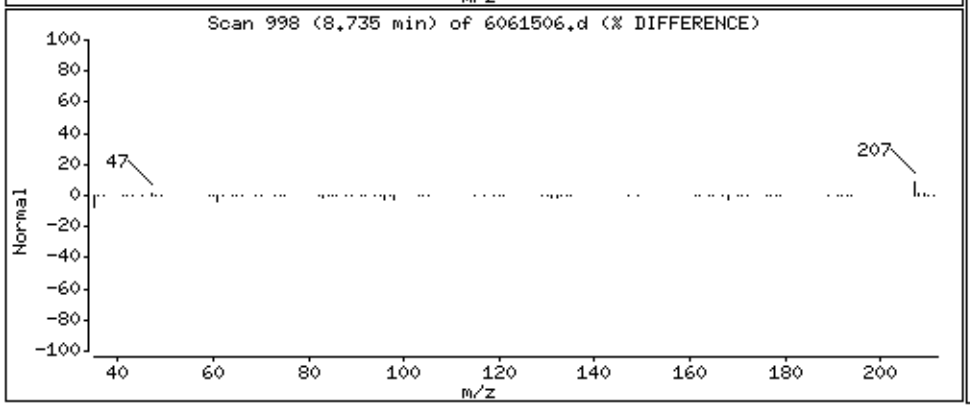
71 Tetrachloroethene

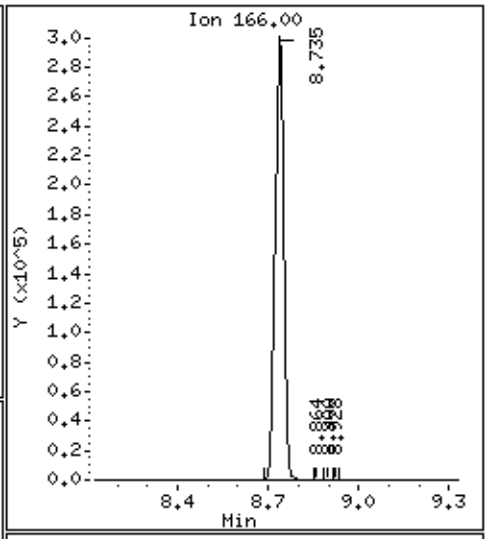
Concentration: 140.09 NG

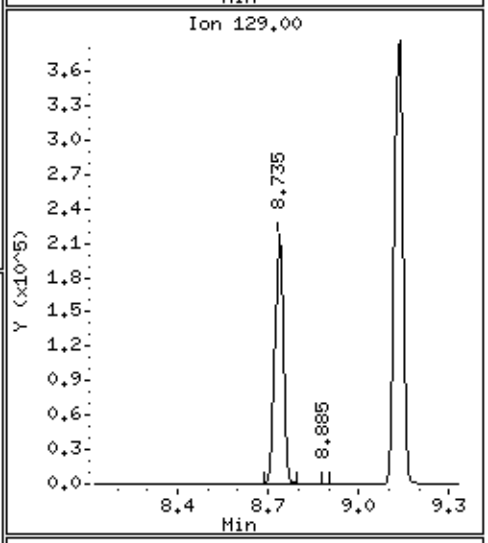


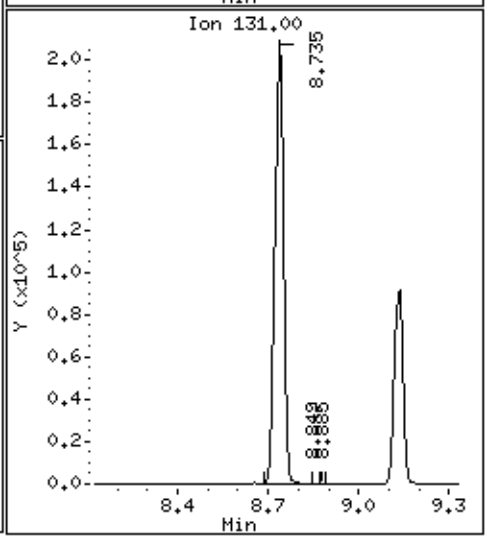












Data File: /chem/msd6.i/15jun16.b/6061506.d

Date : 15-JUN-2016 14:25

Client ID: LCS

Instrument: msd6.i

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

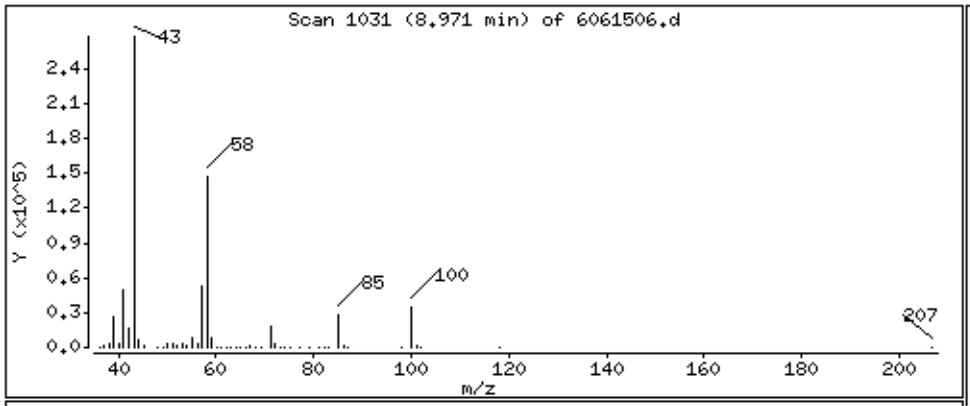
Operator: CT

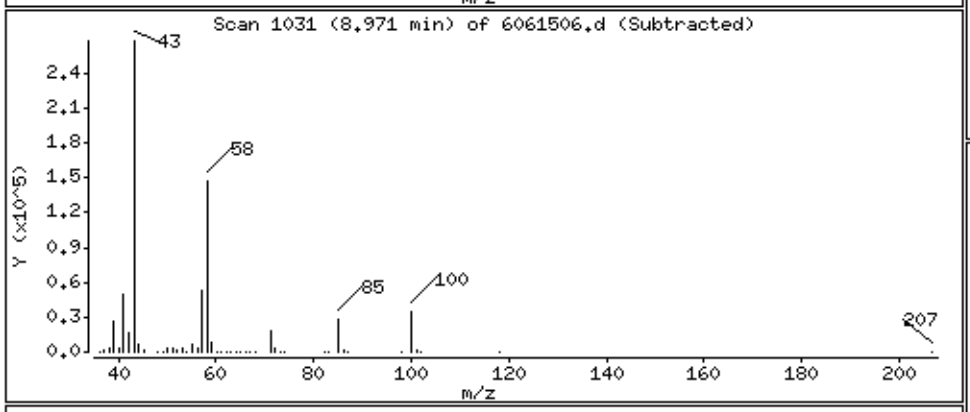
Column phase: RTx-624

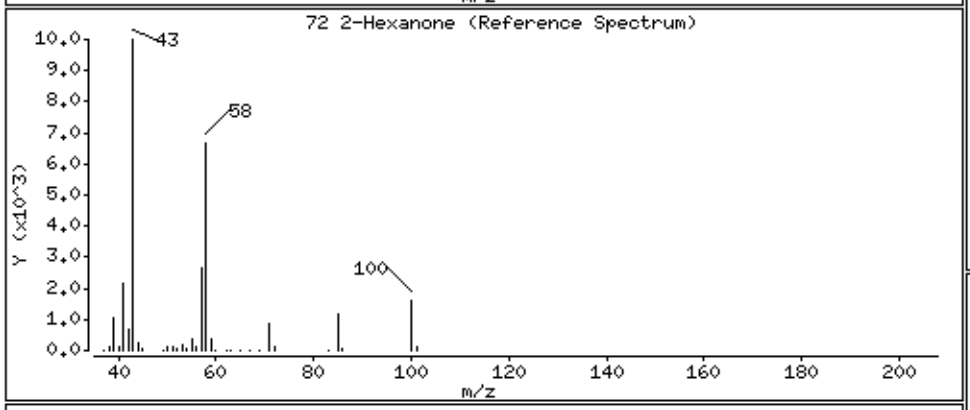
Column diameter: 0.53

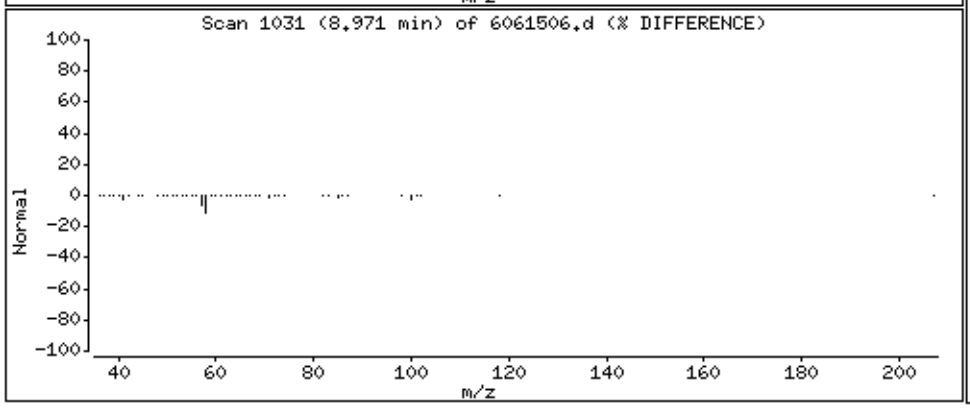
72 2-Hexanone

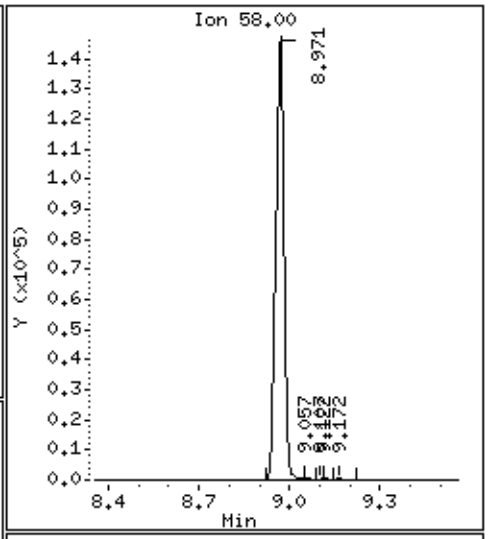
Concentration: 84.799 NG

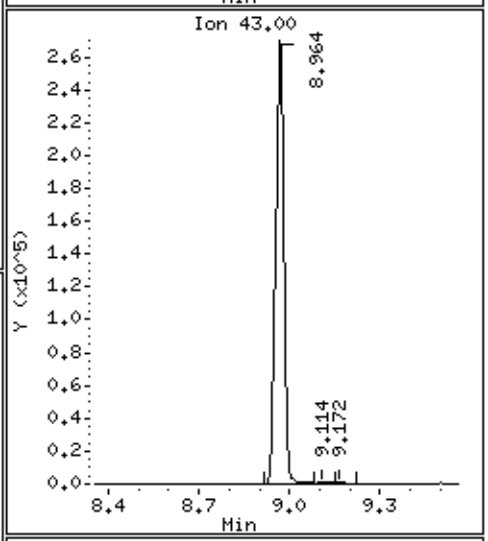


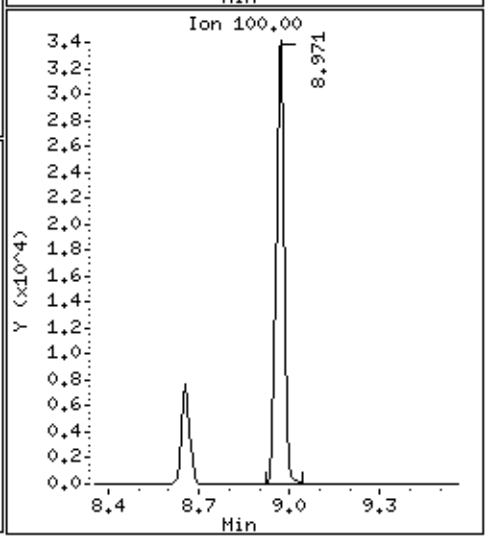












Data File: /chem/msd6.i/15jun16.b/6061506.d

Date : 15-JUN-2016 14:25

Client ID: LCS

Instrument: msd6.i

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

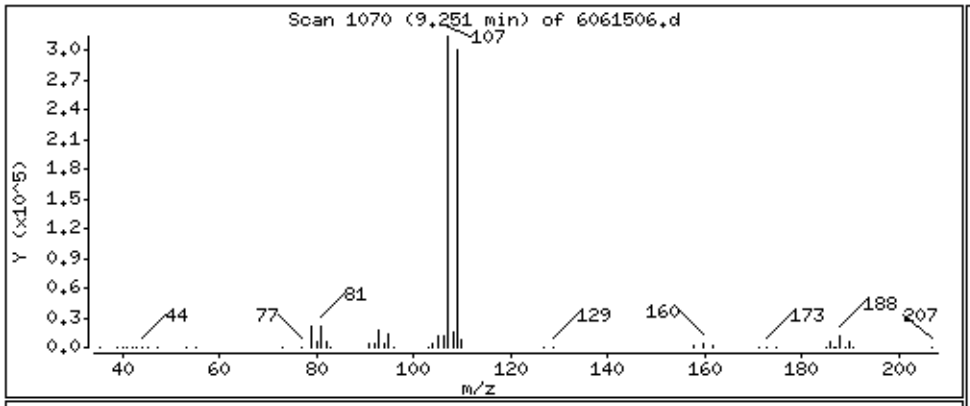
Operator: CT

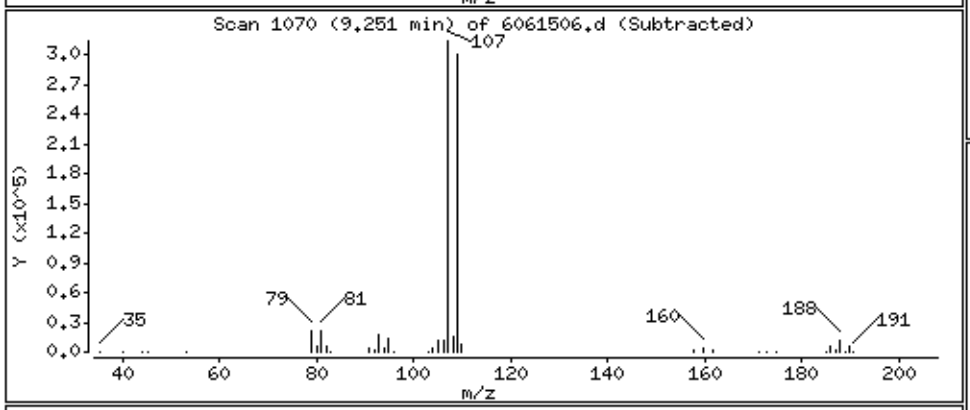
Column phase: RTx-624

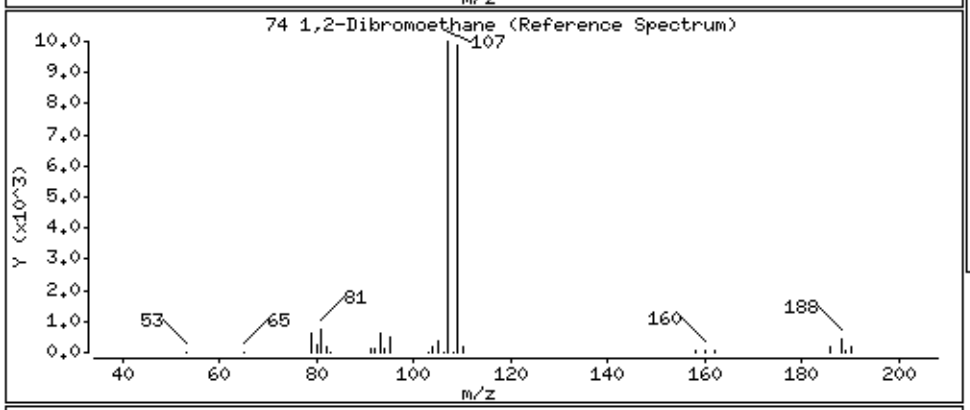
Column diameter: 0.53

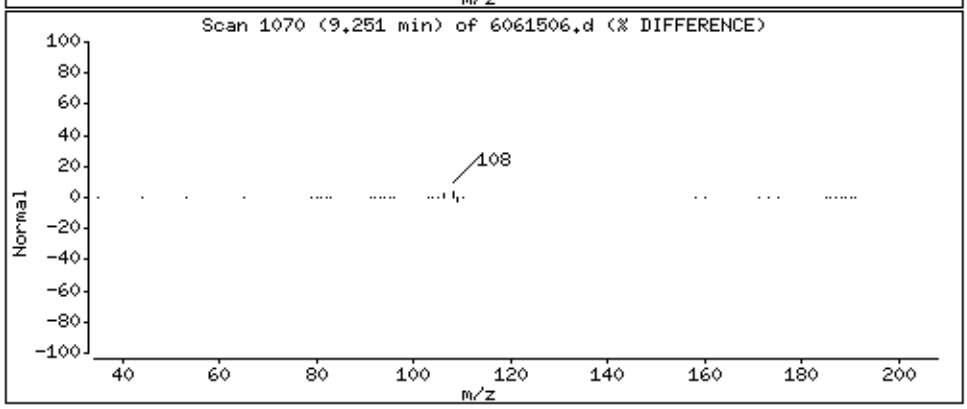
74 1,2-Dibromoethane

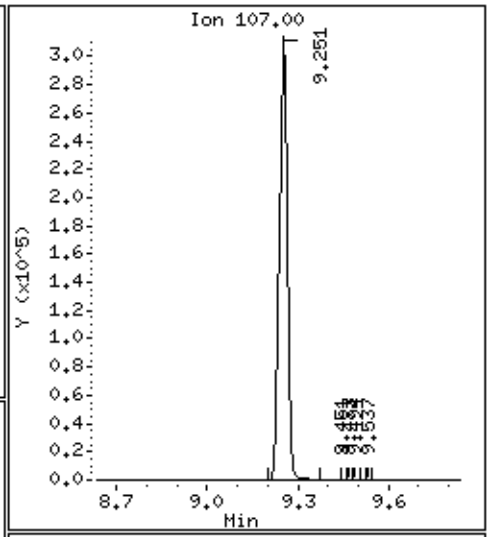
Concentration: 171.80 NG

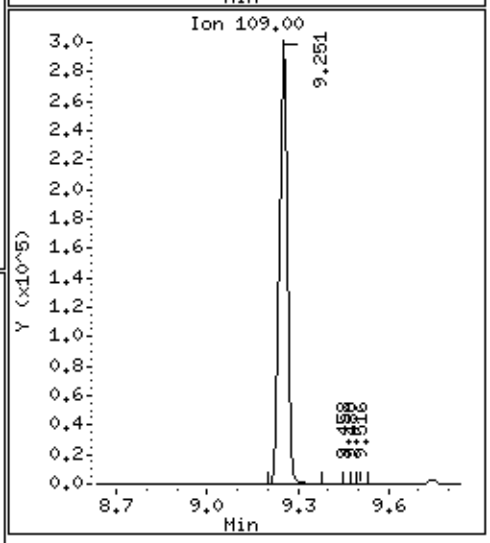












Data File: /chem/msd6.i/15jun16.b/6061506.d

Date : 15-JUN-2016 14:25

Client ID: LCS

Instrument: msd6.i

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

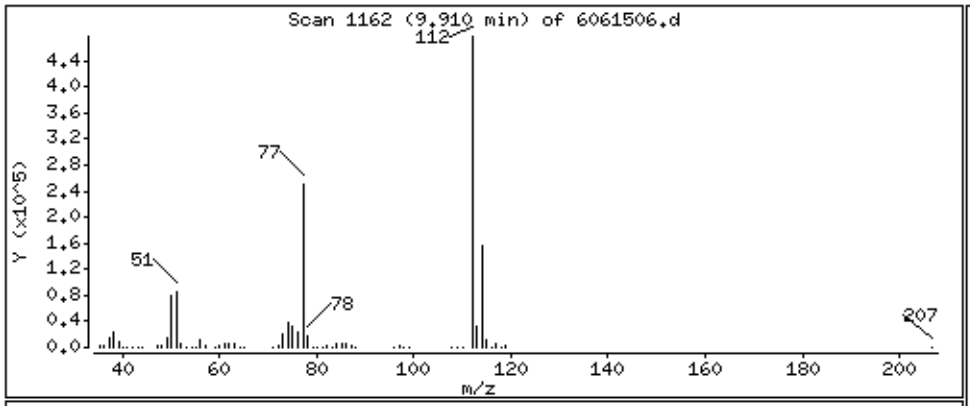
Operator: CT

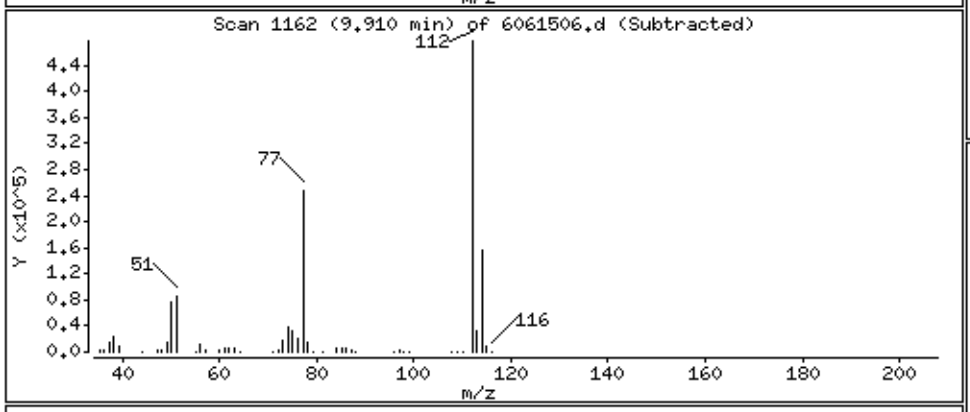
Column phase: RTx-624

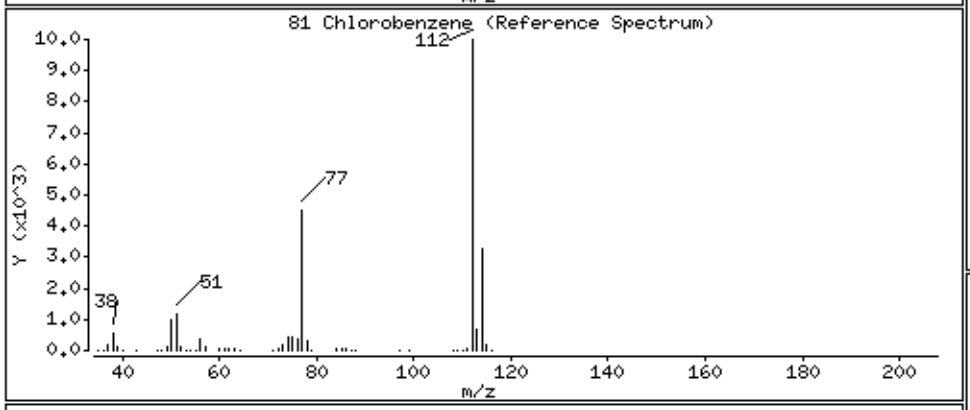
Column diameter: 0.53

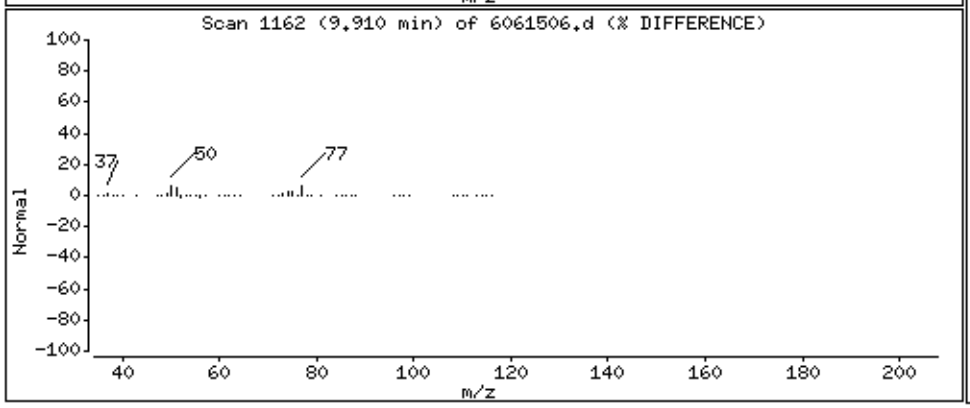
81 Chlorobenzene

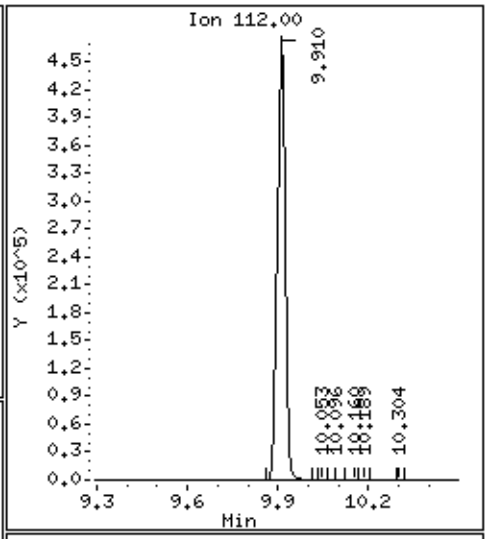
Concentration: 91.760 NG

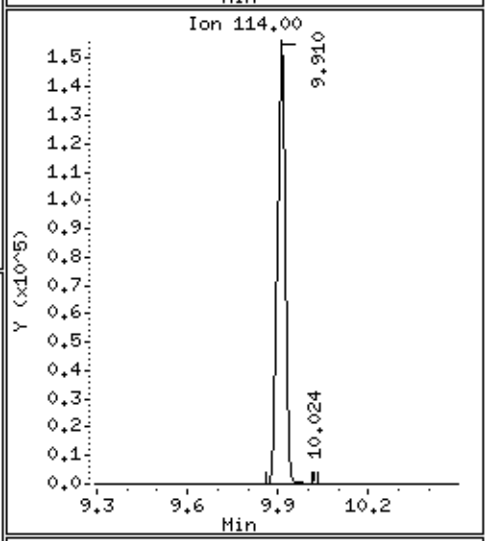


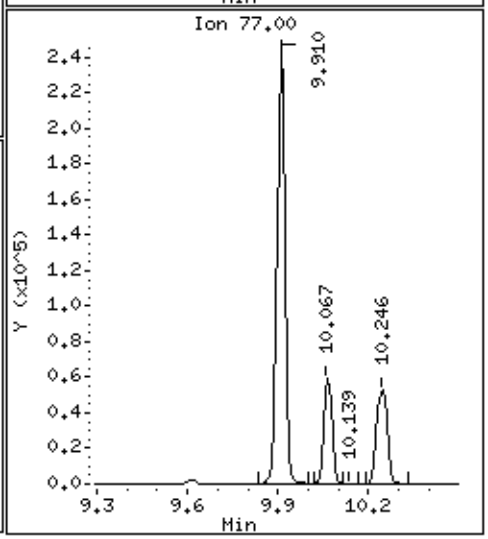












Data File: /chem/msd6.i/15jun16.b/6061506.d

Date : 15-JUN-2016 14:25

Client ID: LCS

Instrument: msd6.i

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

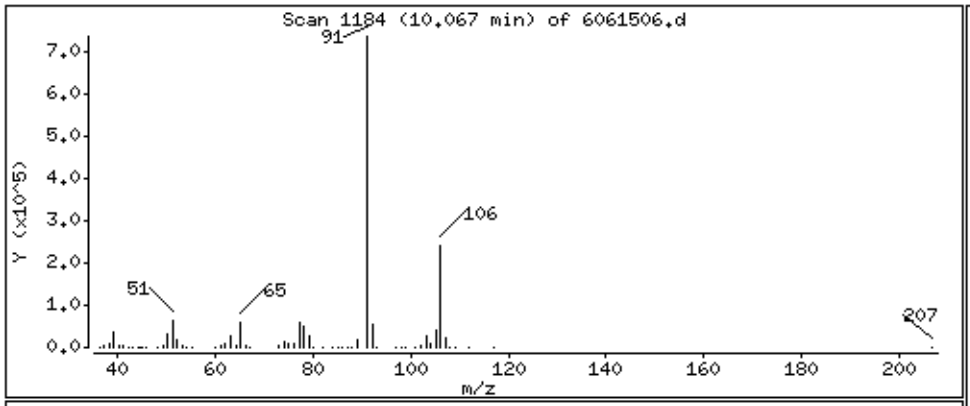
Operator: CT

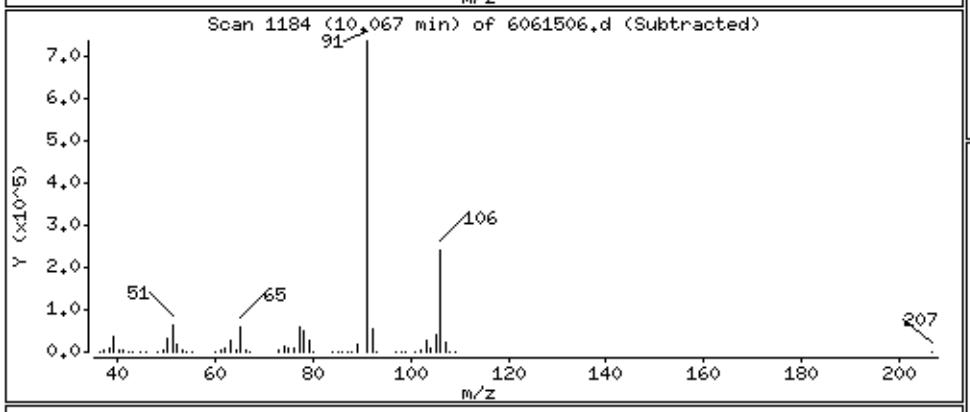
Column phase: RTx-624

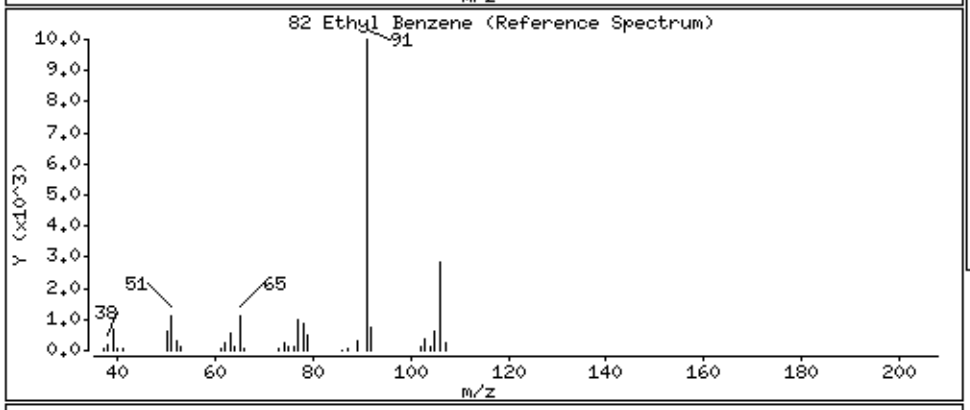
Column diameter: 0.53

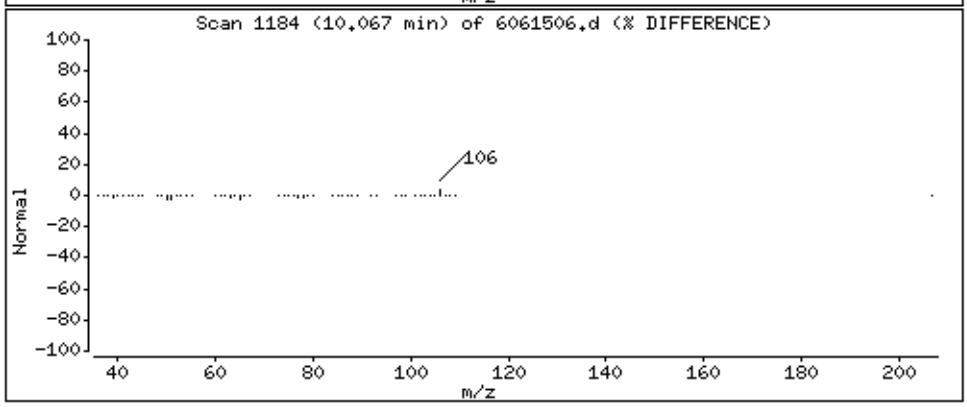
82 Ethyl Benzene

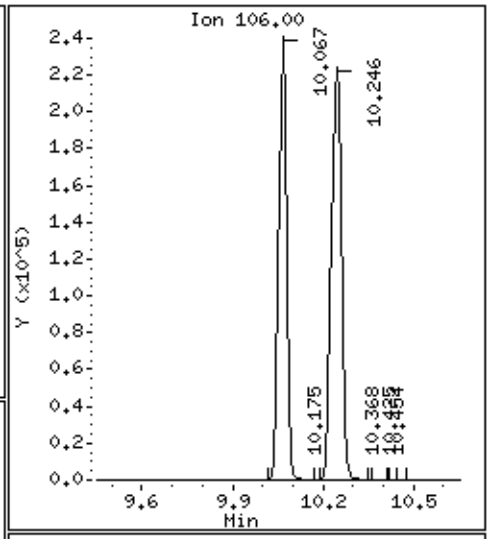
Concentration: 88.849 NG

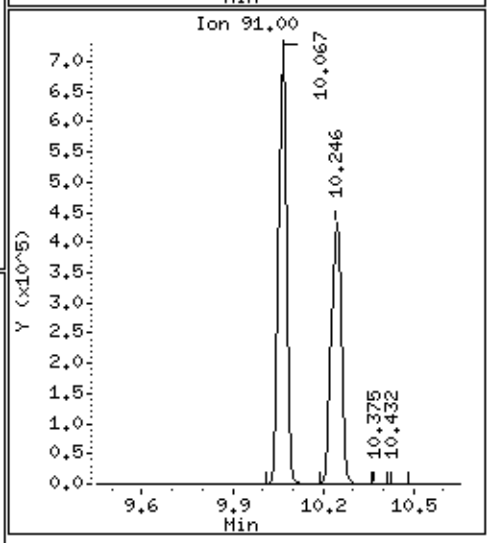












Data File: /chem/msd6.i/15jun16.b/6061506.d

Date : 15-JUN-2016 14:25

Client ID: LCS

Instrument: msd6.i

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

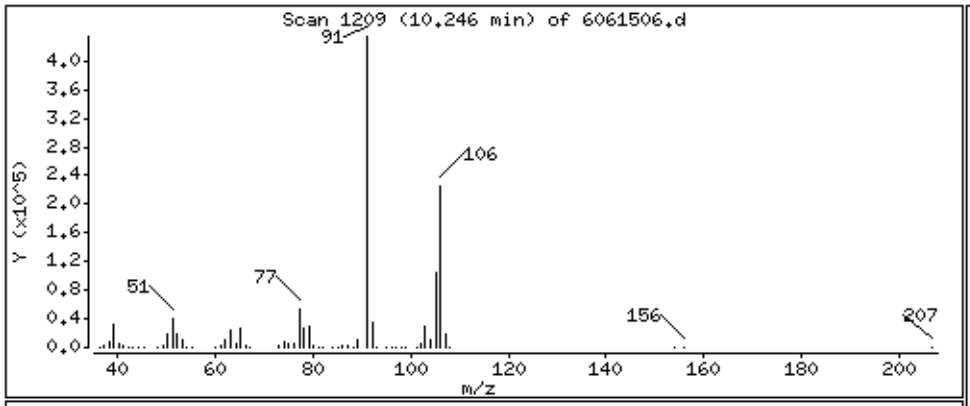
Operator: CT

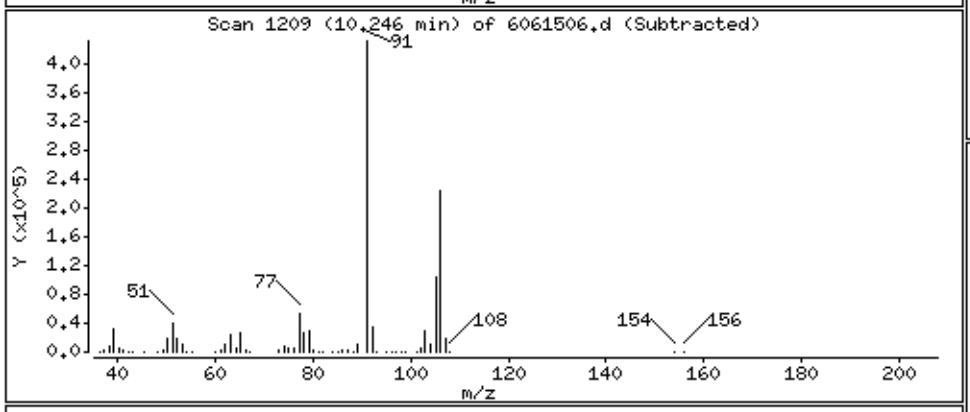
Column phase: RTx-624

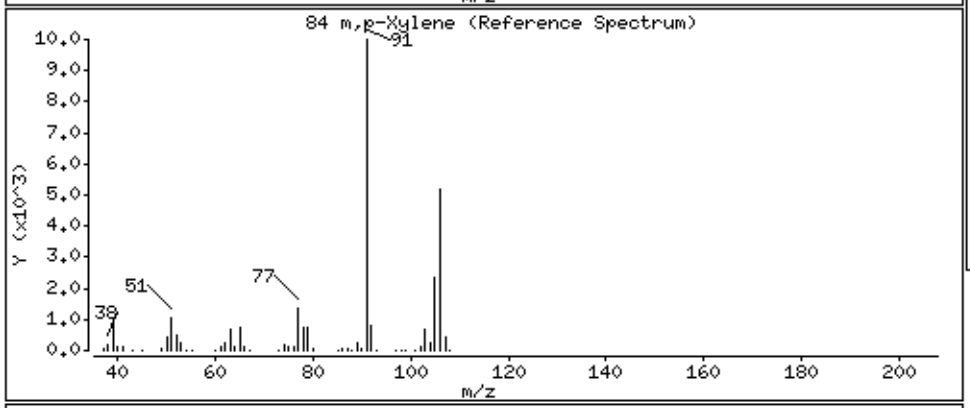
Column diameter: 0.53

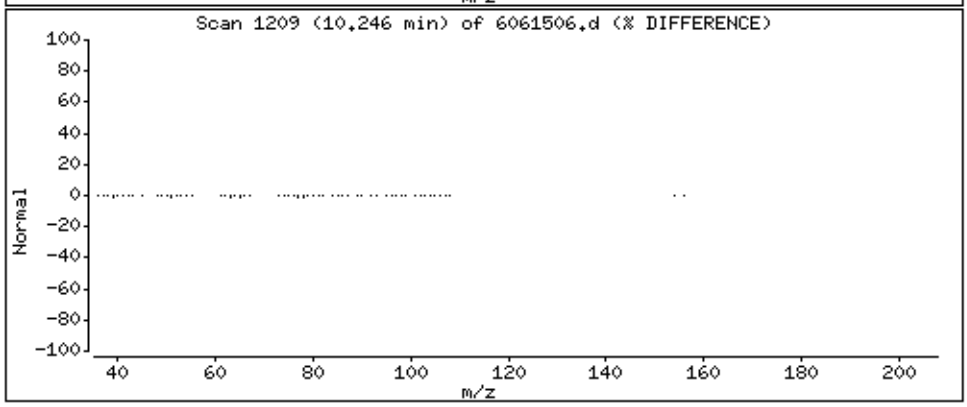
84 m,p-Xylene

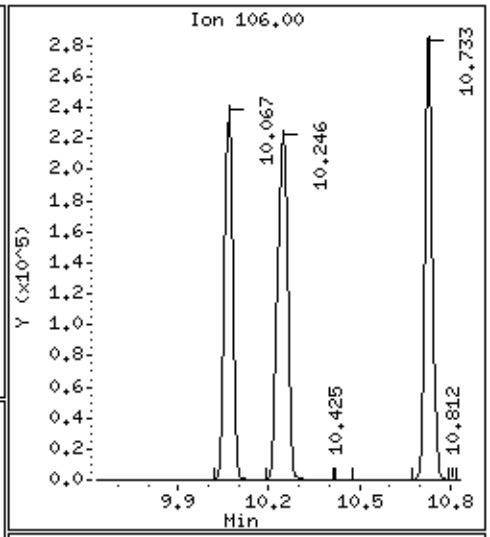
Concentration: 88.748 NG

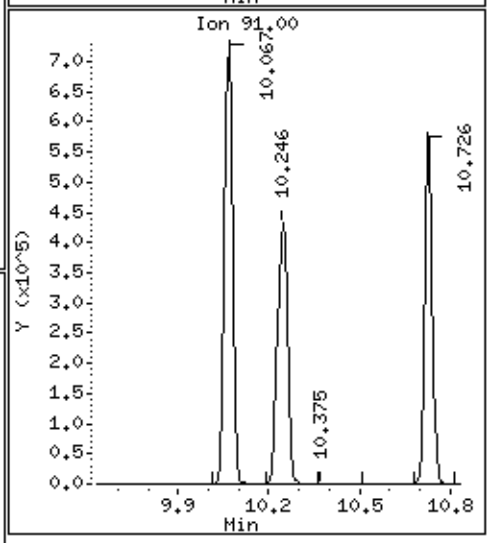












Data File: /chem/msd6.i/15jun16.b/6061506.d

Date : 15-JUN-2016 14:25

Client ID: LCS

Instrument: msd6.i

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

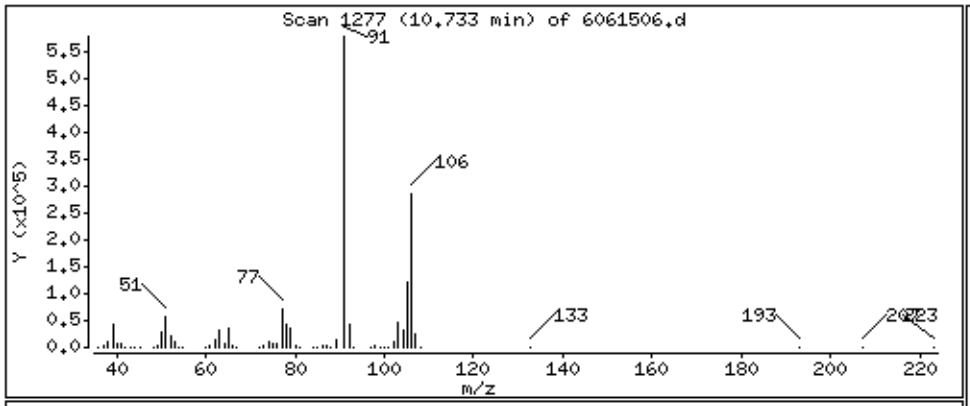
Operator: CT

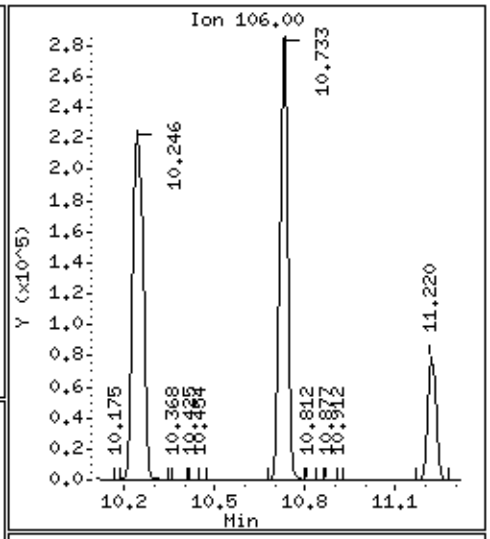
Column phase: RTx-624

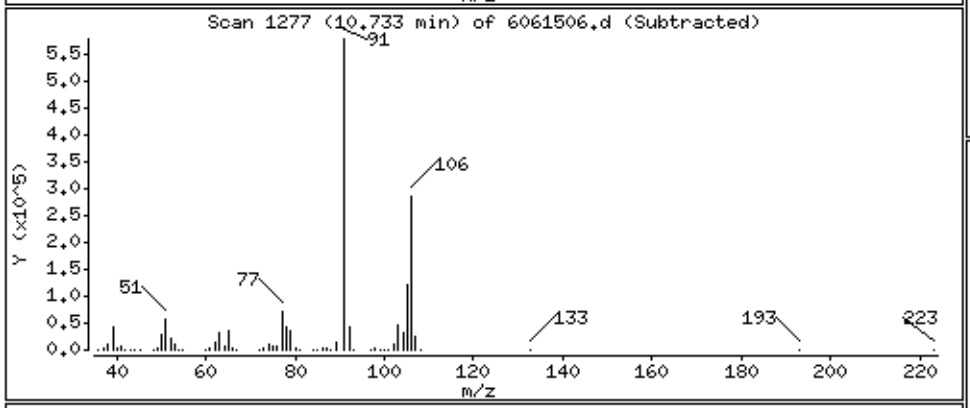
Column diameter: 0.53

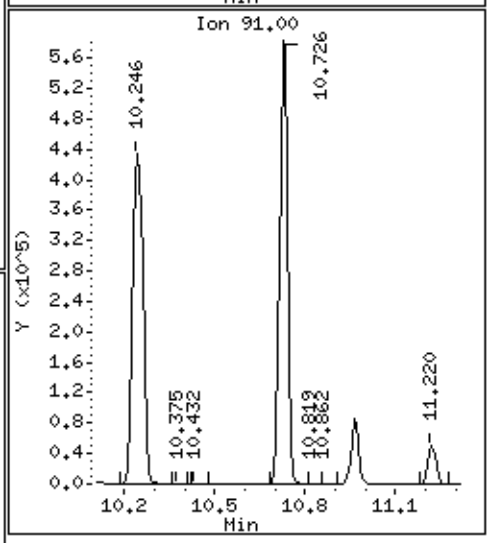
88 o-Xylene

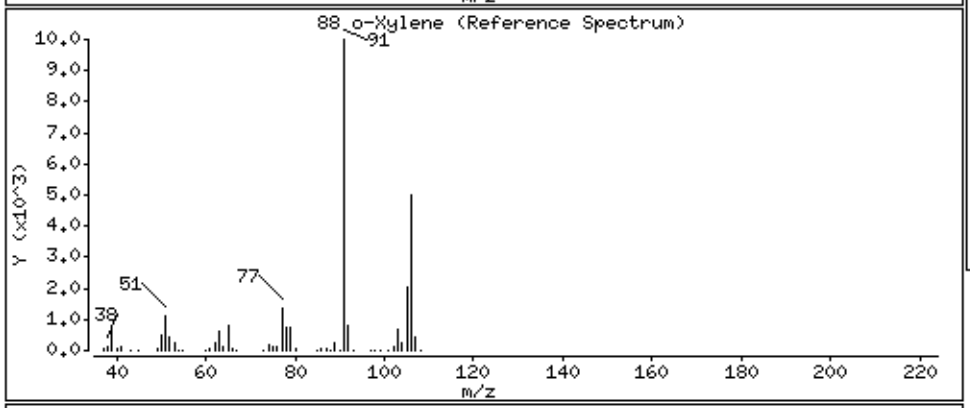
Concentration: 90.151 NG

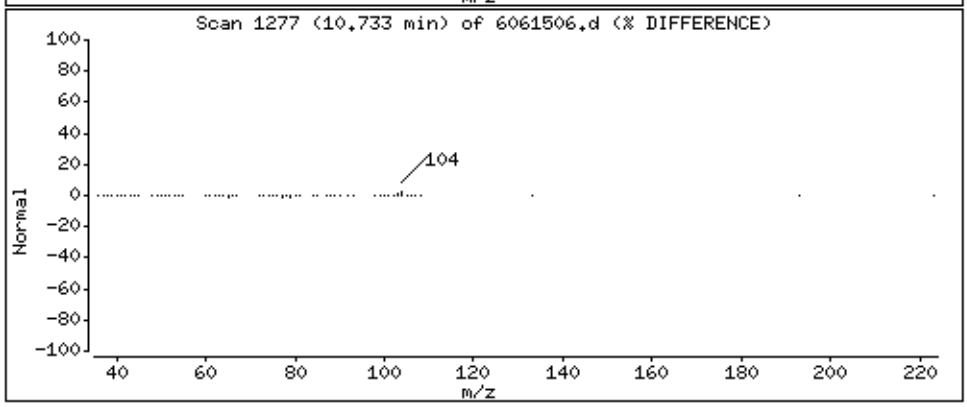












Data File: /chem/msd6.i/15jun16.b/6061506.d

Date : 15-JUN-2016 14:25

Client ID: LCS

Instrument: msd6.i

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

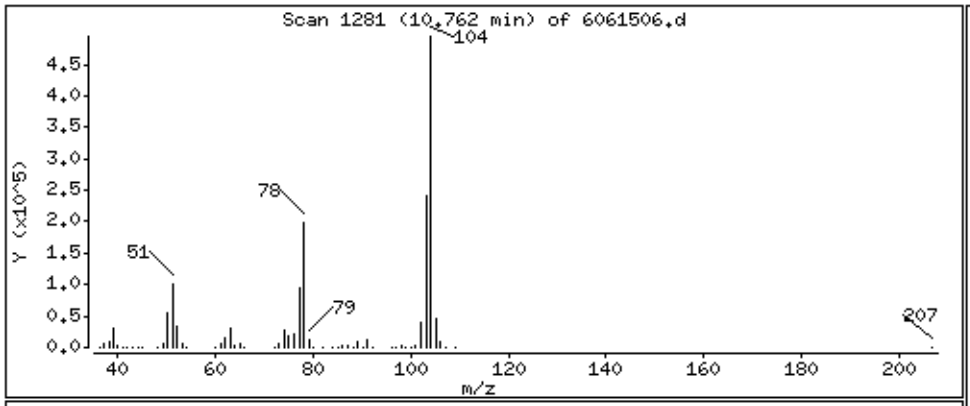
Operator: CT

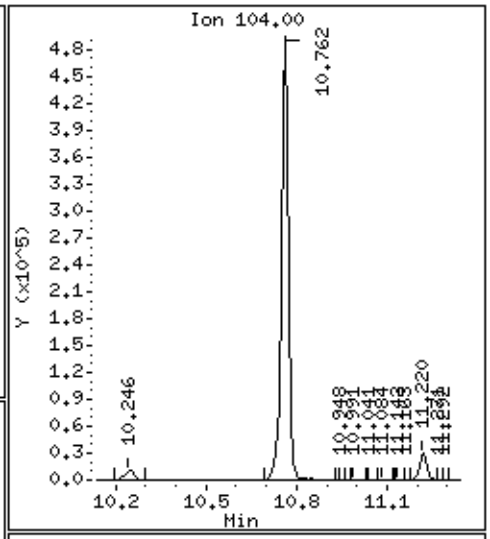
Column phase: RTx-624

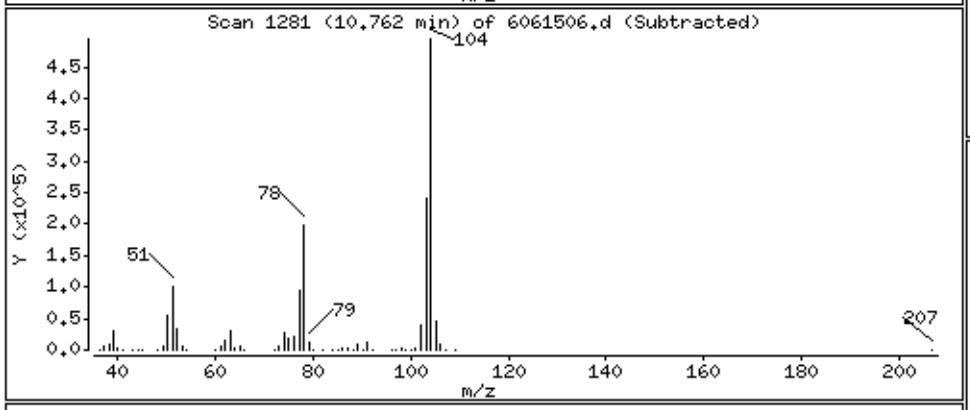
Column diameter: 0.53

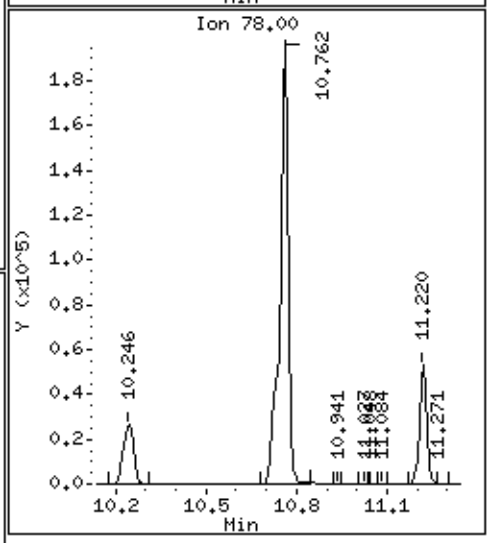
89 Styrene

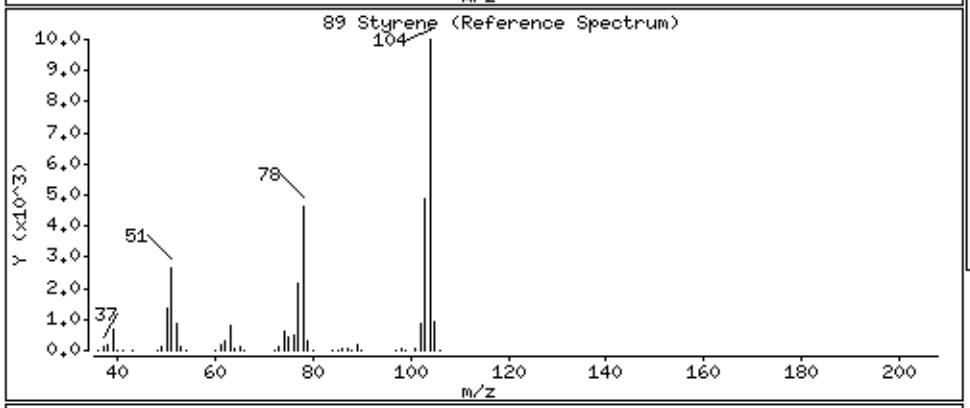
Concentration: 89.567 NG

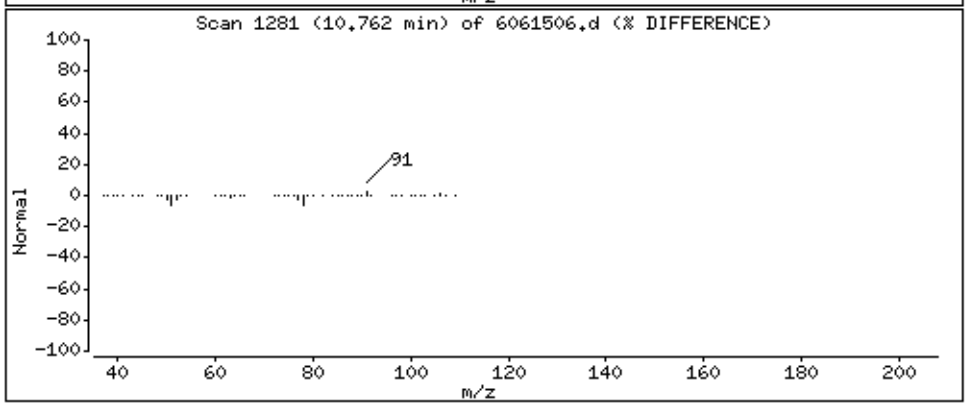












Data File: /chem/msd6.i/15jun16.b/6061506.d

Date : 15-JUN-2016 14:25

Client ID: LCS

Instrument: msd6.i

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

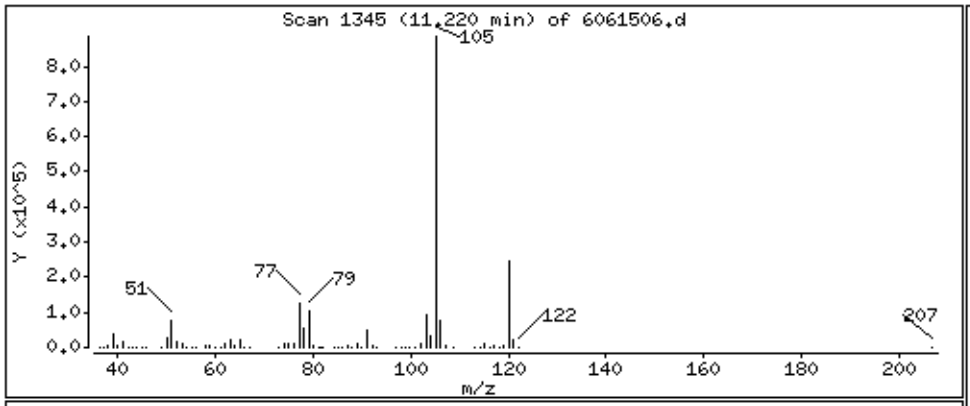
Operator: CT

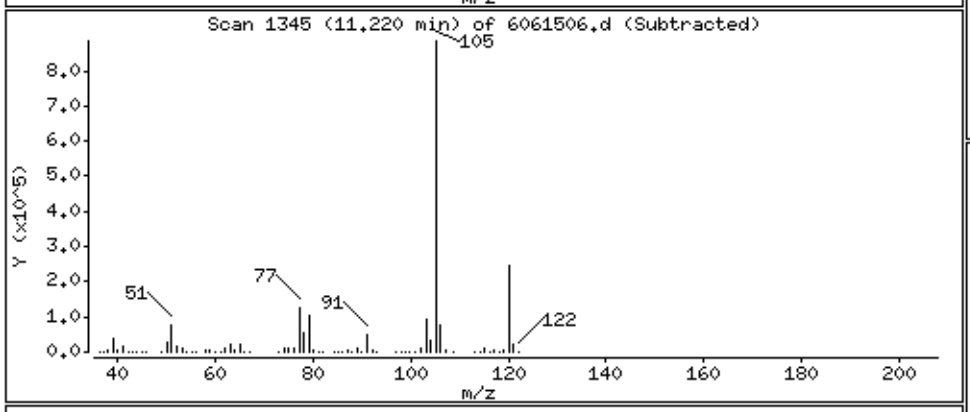
Column phase: RTx-624

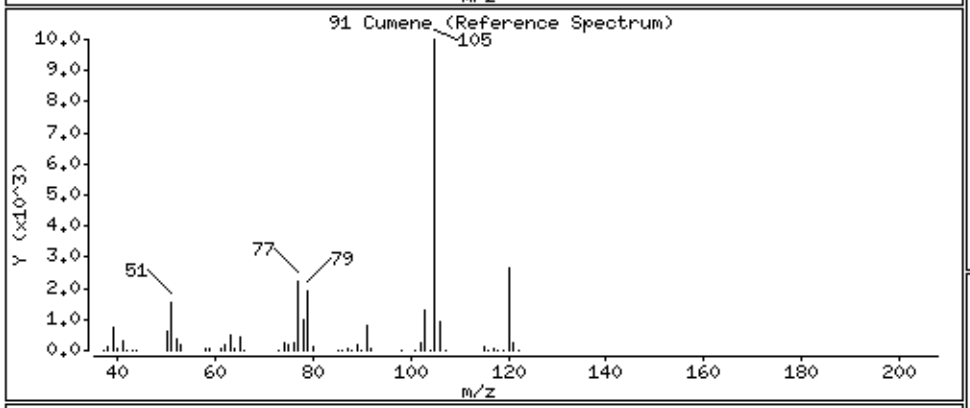
Column diameter: 0.53

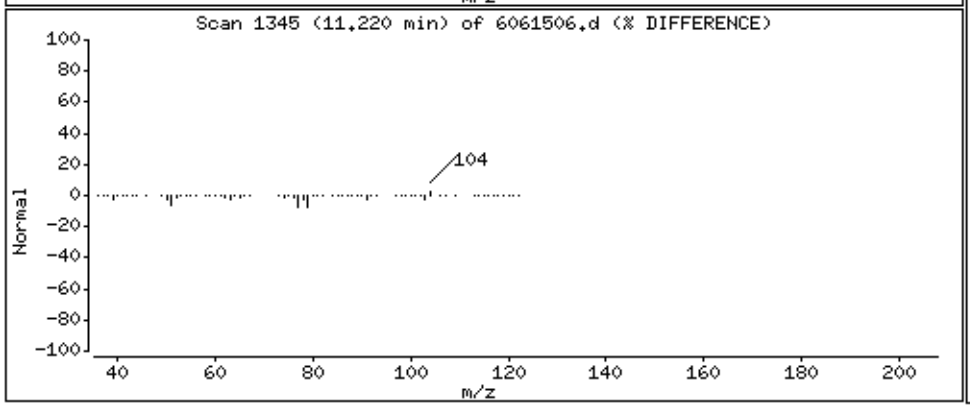
91 Cumene

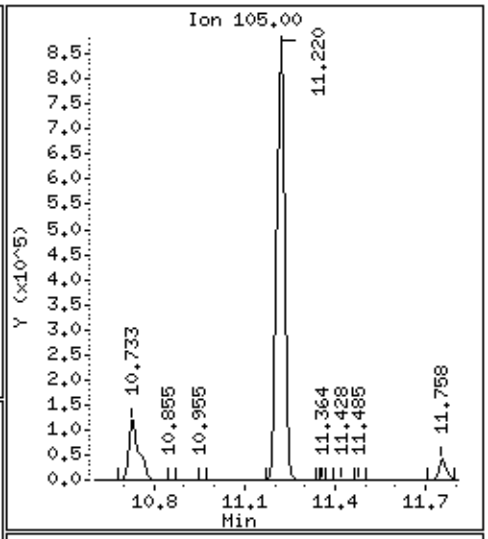
Concentration: 99.670 NG

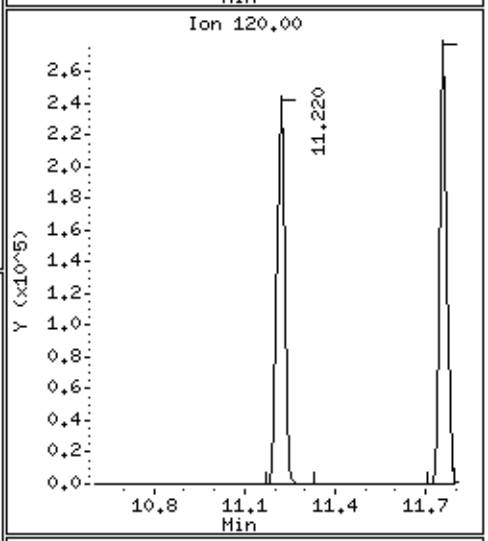


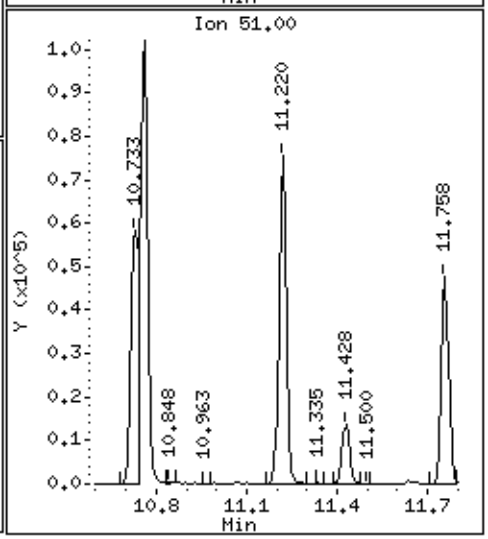












Data File: /chem/msd6.i/15jun16.b/6061506.d

Date : 15-JUN-2016 14:25

Client ID: LCS

Instrument: msd6.i

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

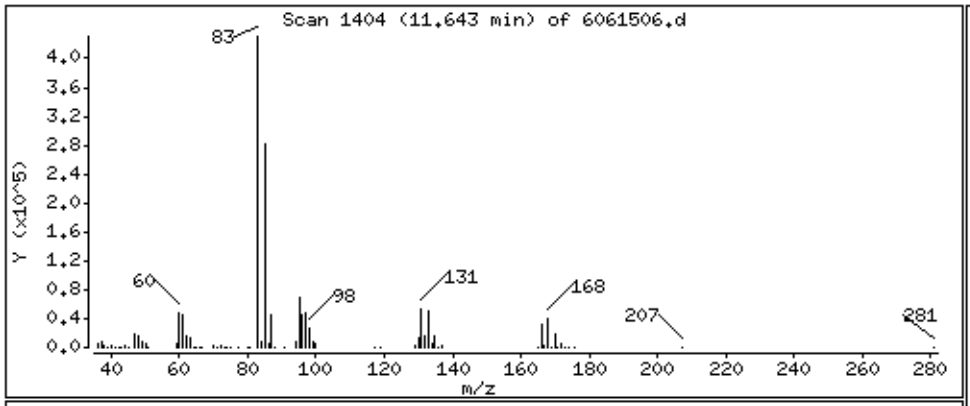
Operator: CT

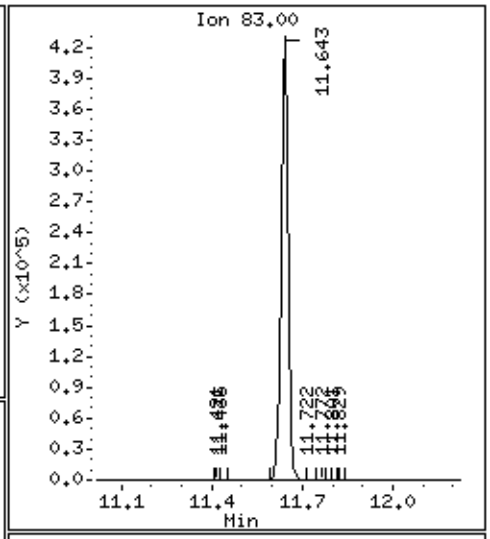
Column phase: RTx-624

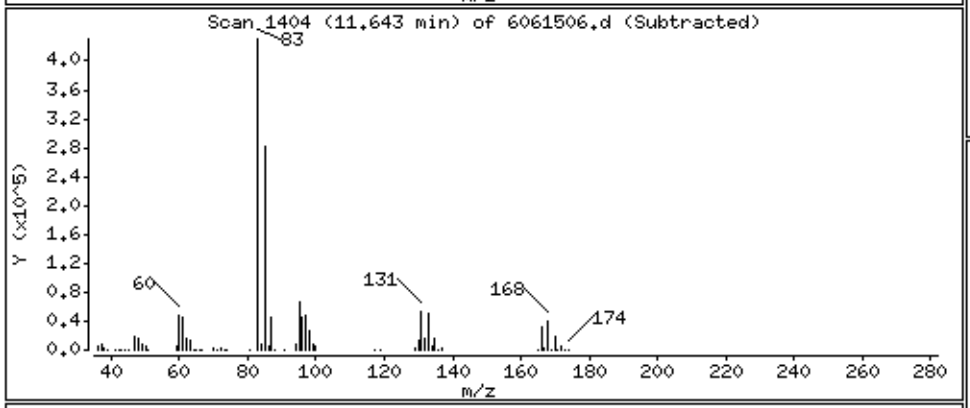
Column diameter: 0.53

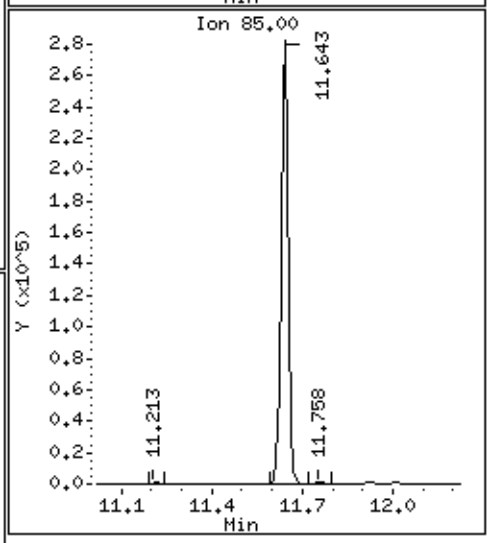
94 1,1,2,2-Tetrachloroethane

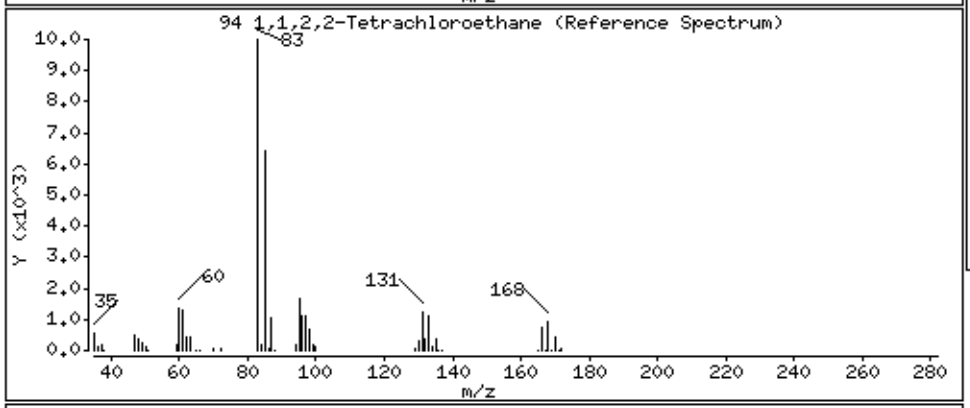
Concentration: 147.50 NG

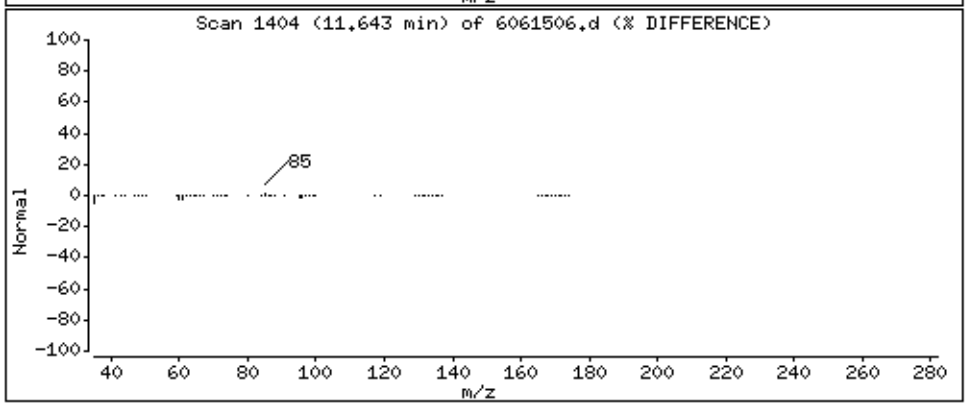












Data File: /chem/msd6.i/15jun16.b/6061506.d

Date : 15-JUN-2016 14:25

Client ID: LCS

Instrument: msd6.i

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

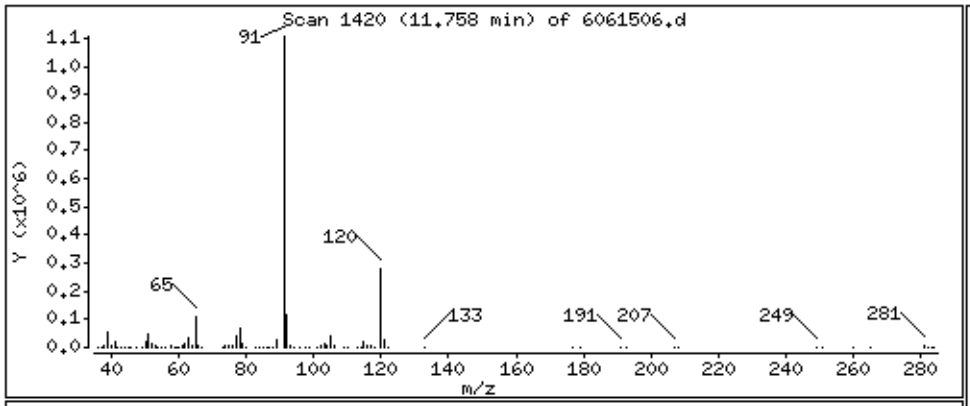
Operator: CT

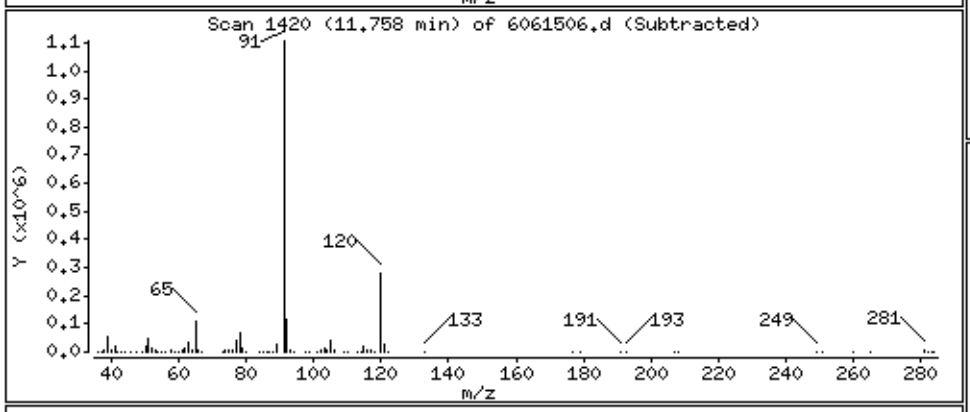
Column phase: RTx-624

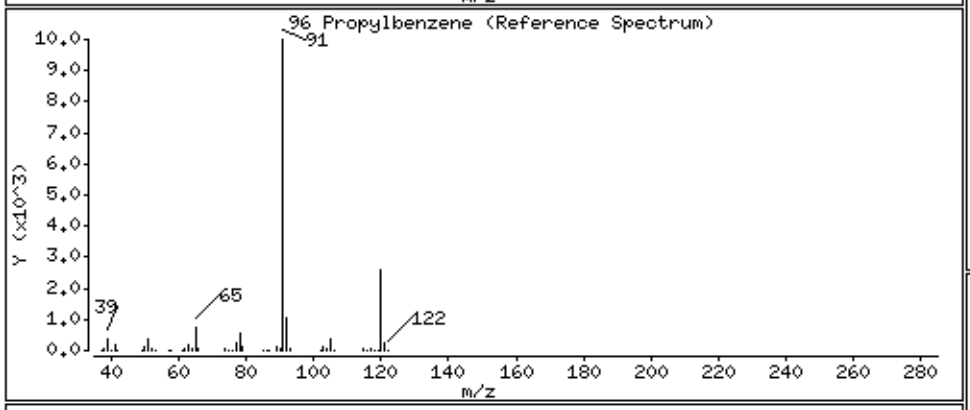
Column diameter: 0.53

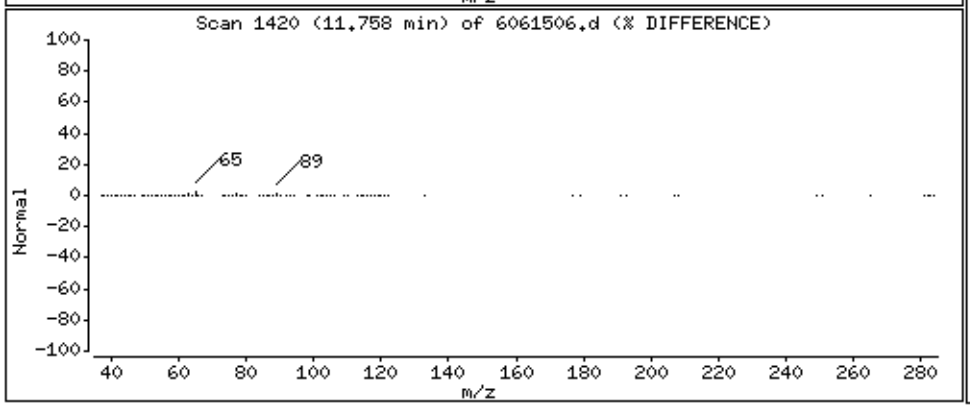
96 Propylbenzene

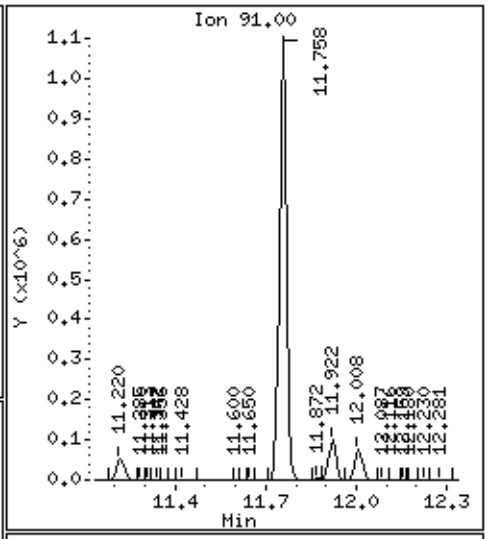
Concentration: 100.56 NG

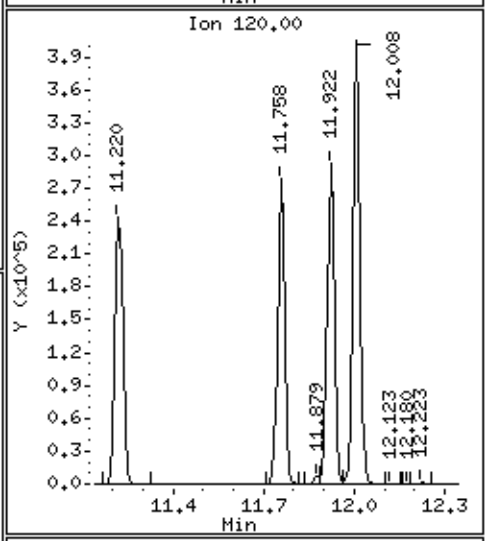


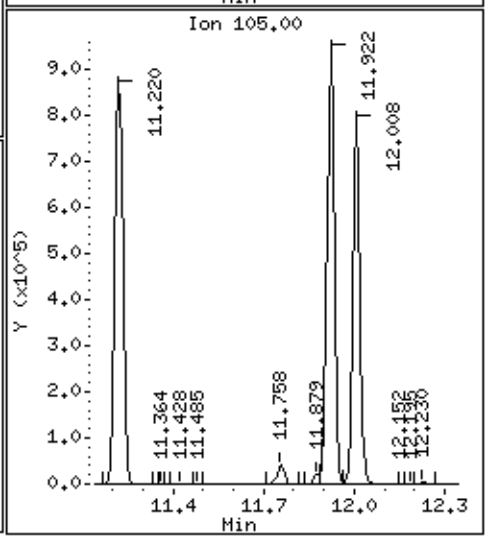












Data File: /chem/msd6.i/15jun16.b/6061506.d

Date : 15-JUN-2016 14:25

Client ID: LCS

Instrument: msd6.i

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

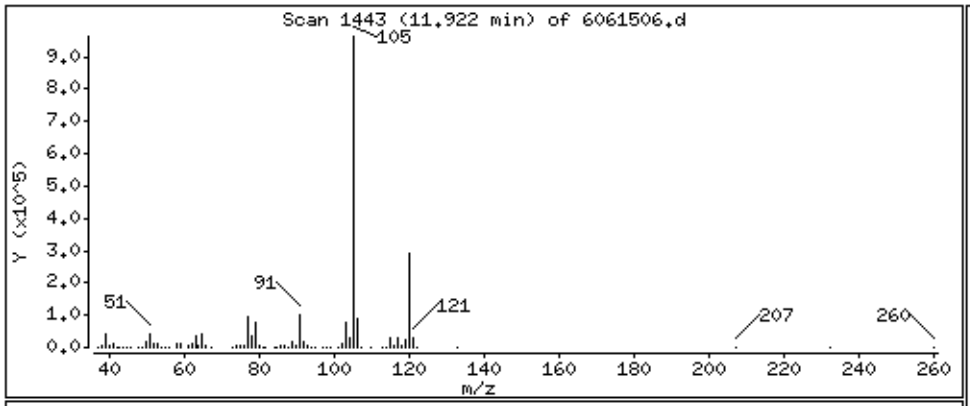
Operator: CT

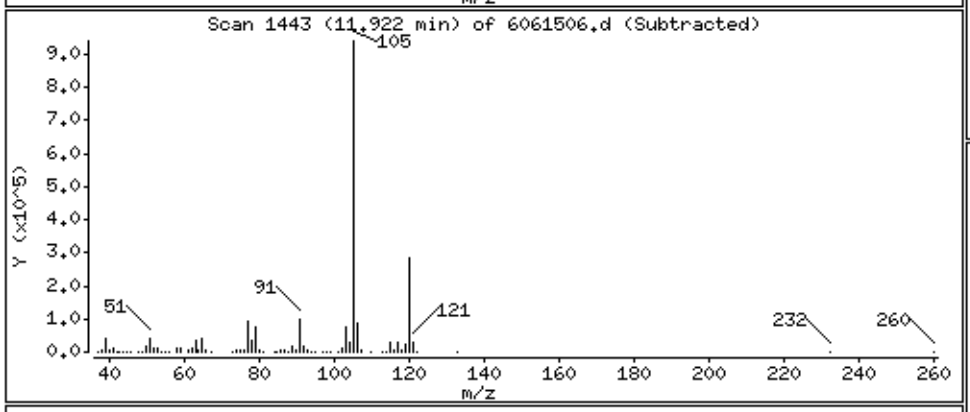
Column phase: RTx-624

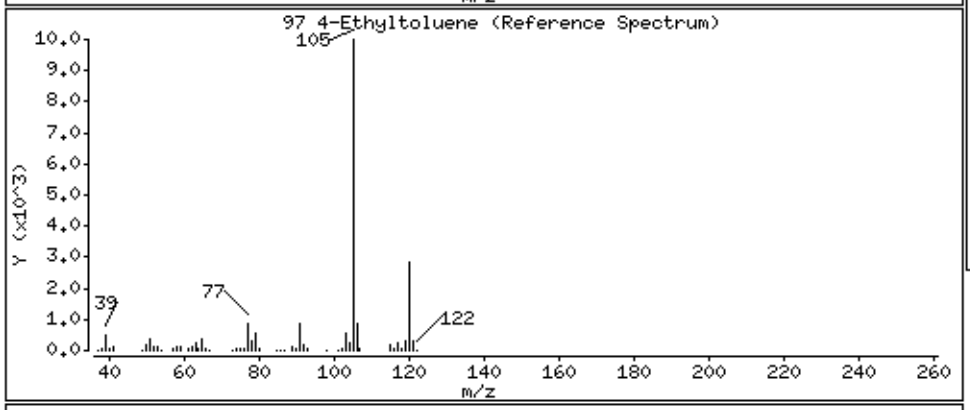
Column diameter: 0.53

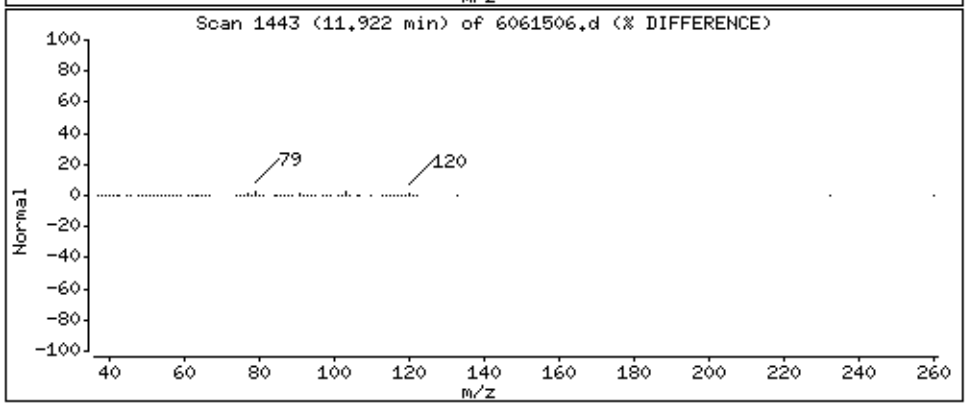
97 4-Ethyltoluene

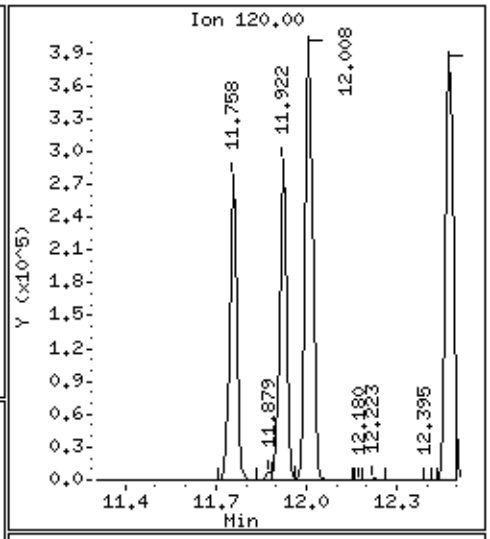
Concentration: 98.664 NG

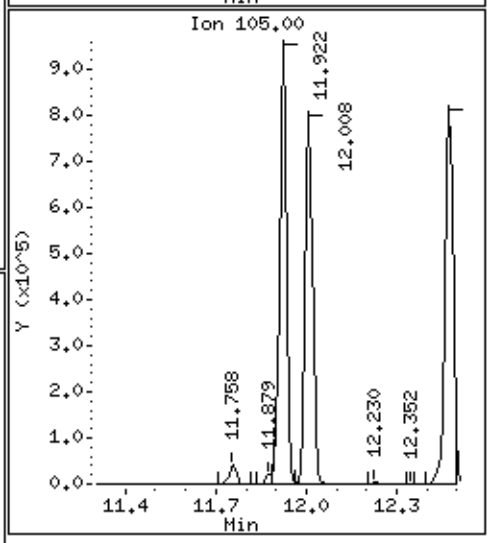












Data File: /chem/msd6.i/15jun16.b/6061506.d

Date : 15-JUN-2016 14:25

Client ID: LCS

Instrument: msd6.i

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

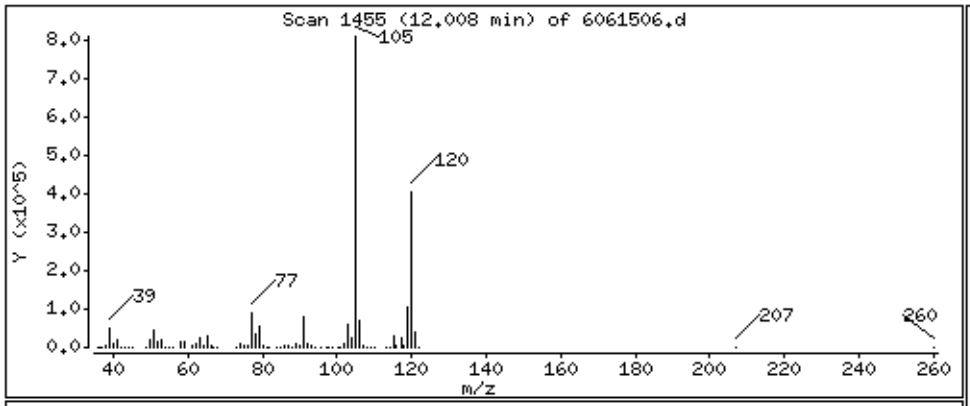
Operator: CT

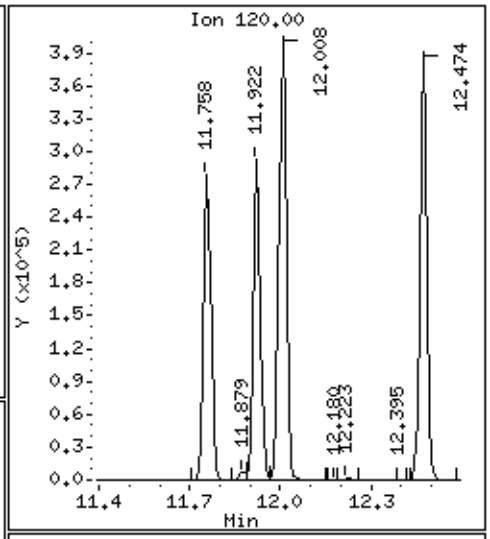
Column phase: RTx-624

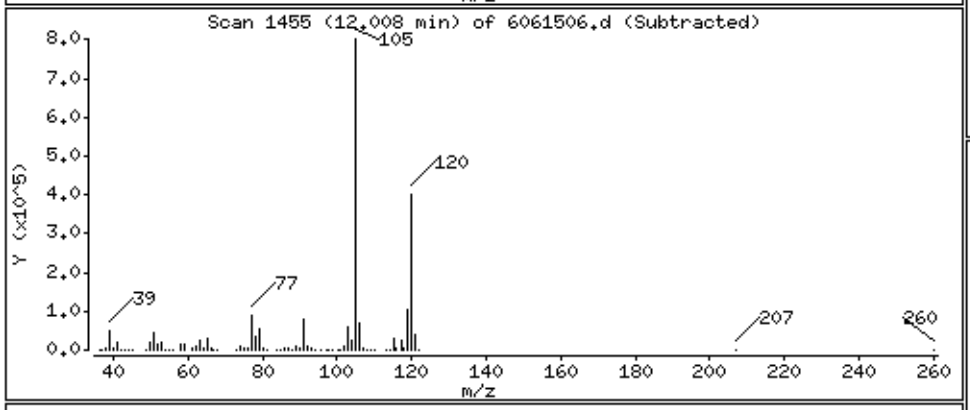
Column diameter: 0.53

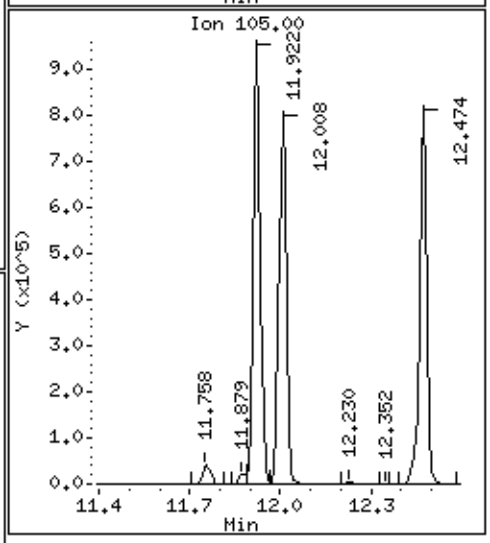
98 1,3,5-Trimethylbenzene

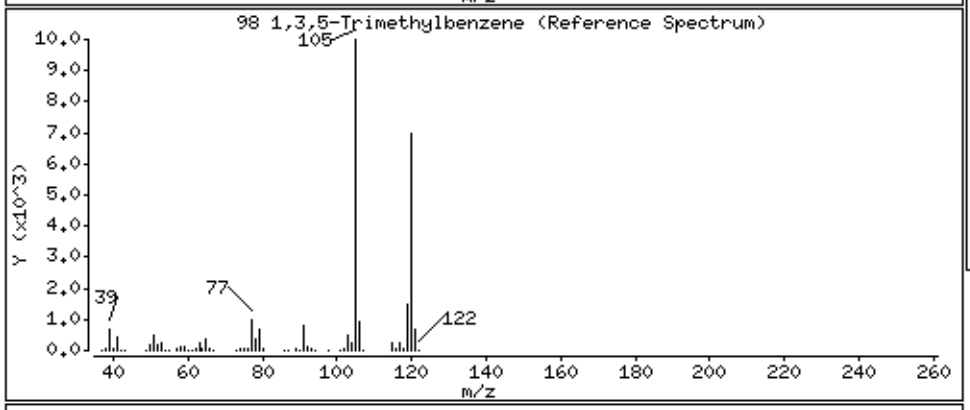
Concentration: 97.969 NG

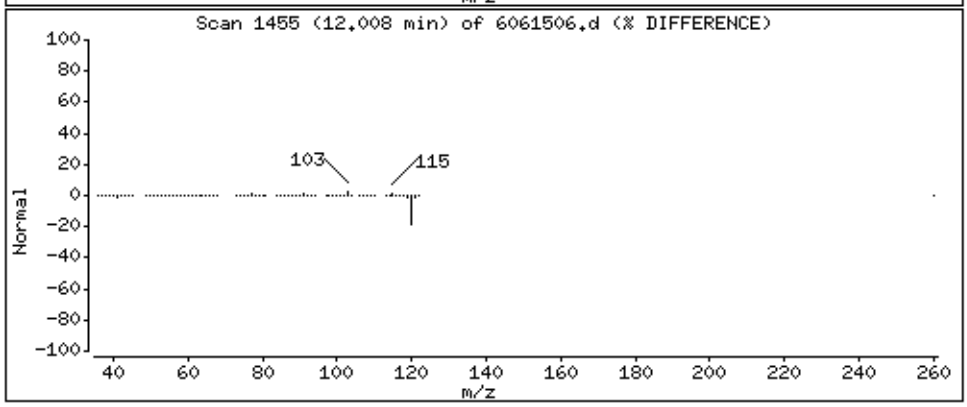












Data File: /chem/msd6.i/15jun16.b/6061506.d

Date : 15-JUN-2016 14:25

Client ID: LCS

Instrument: msd6.i

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

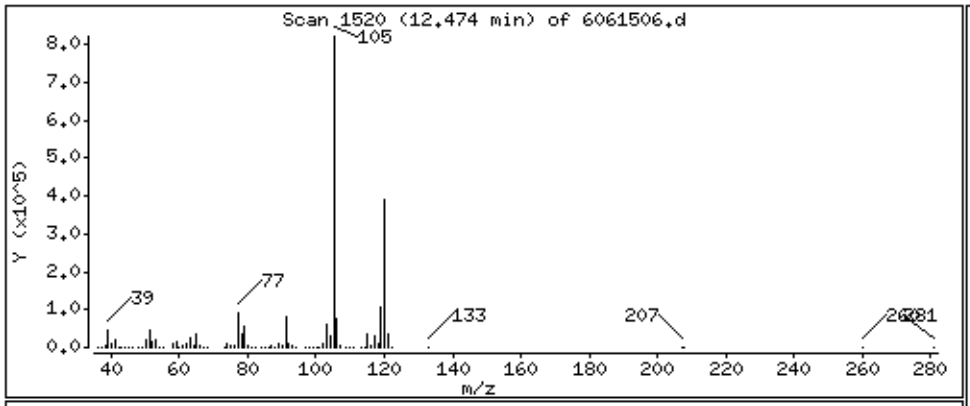
Operator: CT

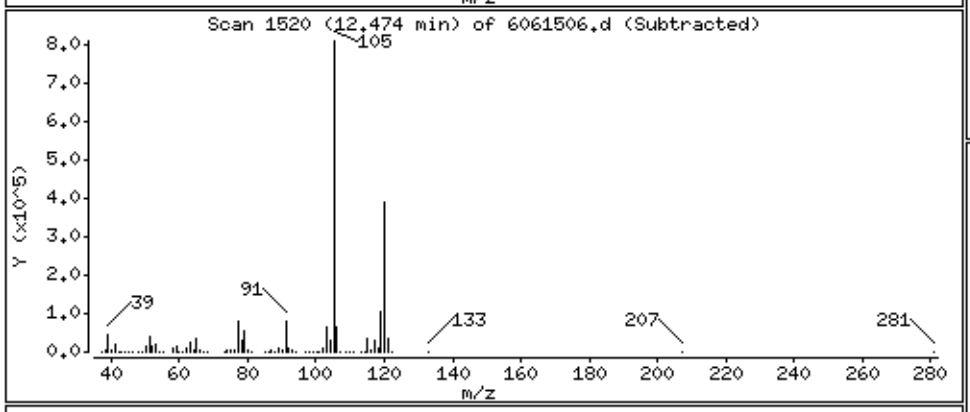
Column phase: RTx-624

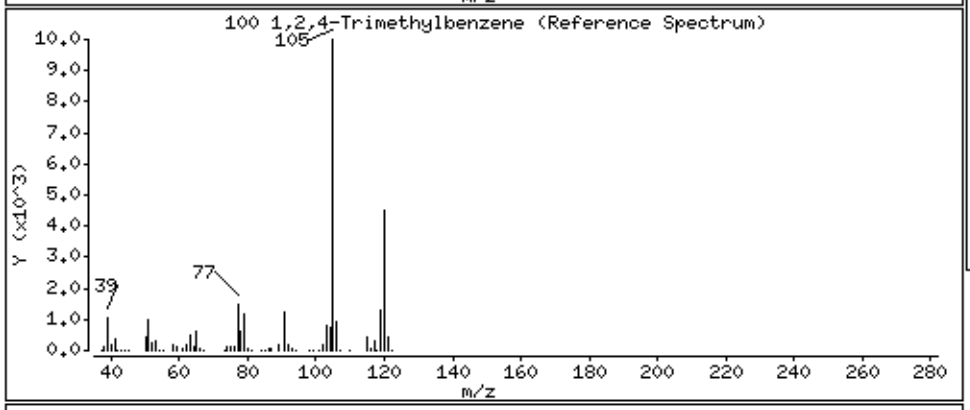
Column diameter: 0.53

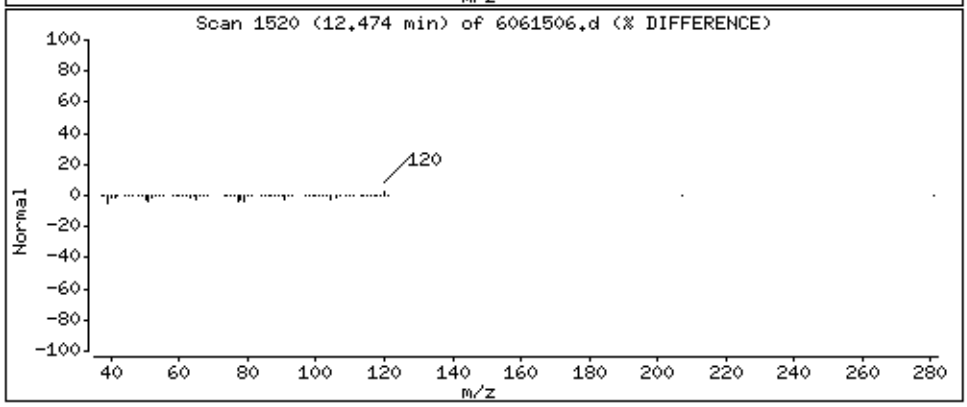
100 1,2,4-Trimethylbenzene

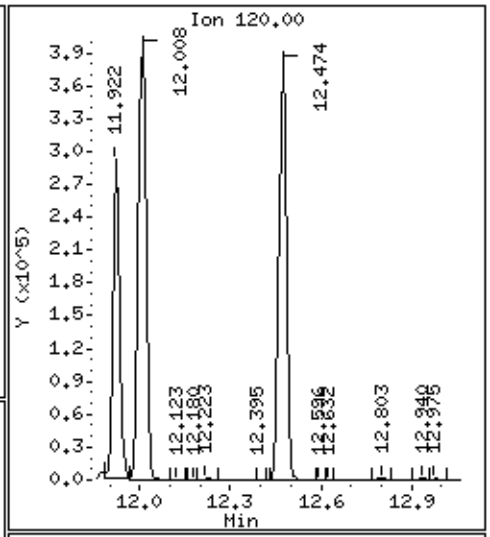
Concentration: 99.314 NG

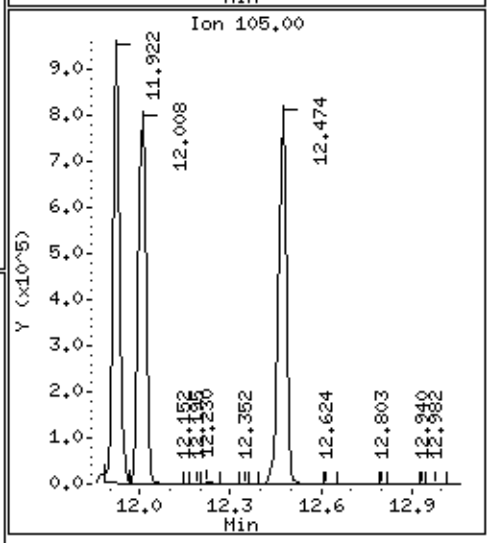












Data File: /chem/msd6.i/15jun16.b/6061506.d

Date : 15-JUN-2016 14:25

Client ID: LCS

Instrument: msd6.i

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

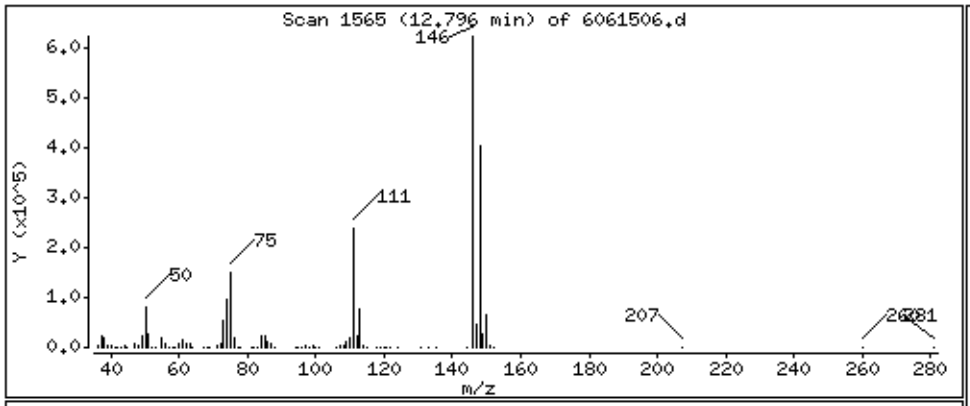
Operator: CT

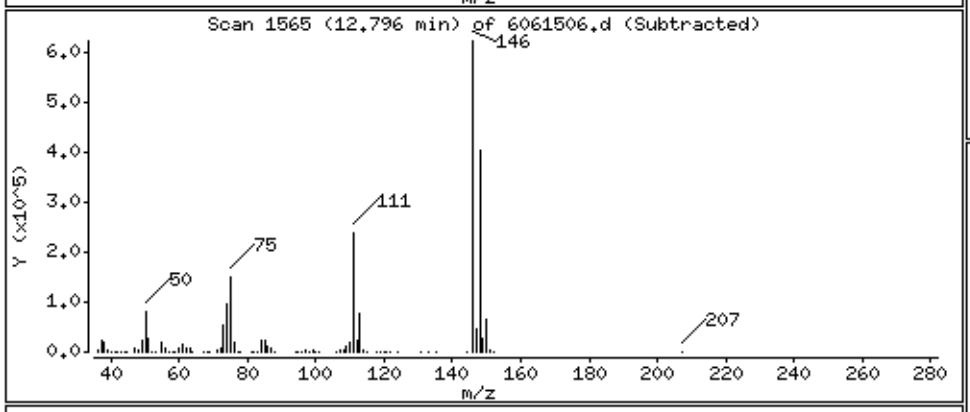
Column phase: RTx-624

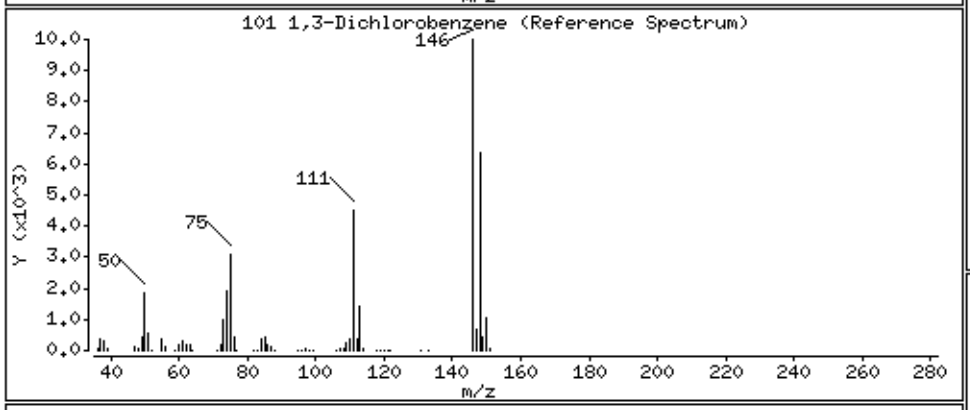
Column diameter: 0.53

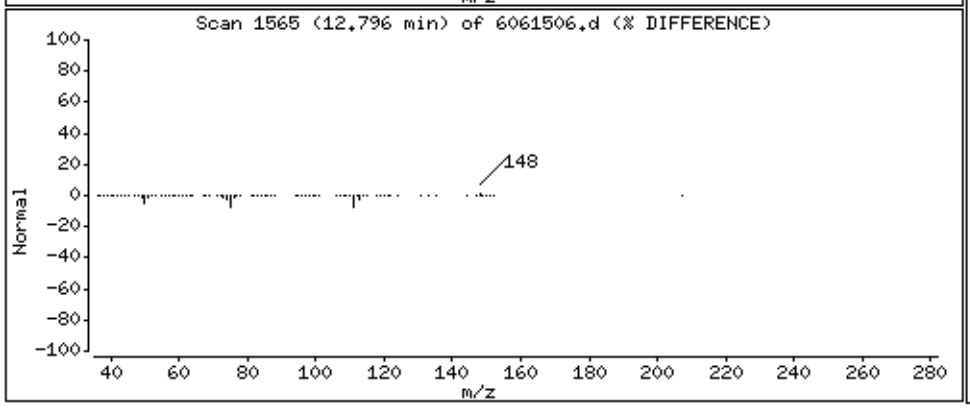
101 1,3-Dichlorobenzene

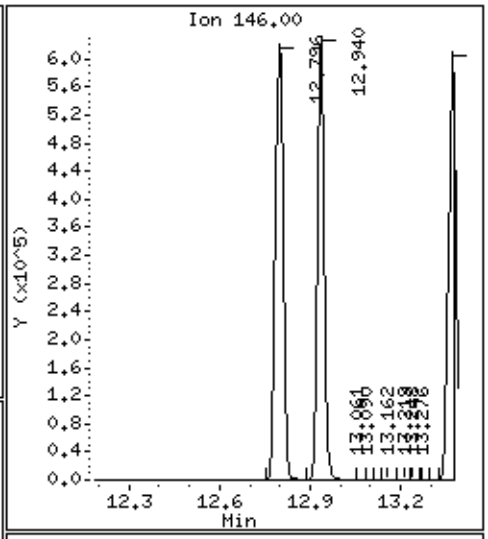
Concentration: 119.19 NG

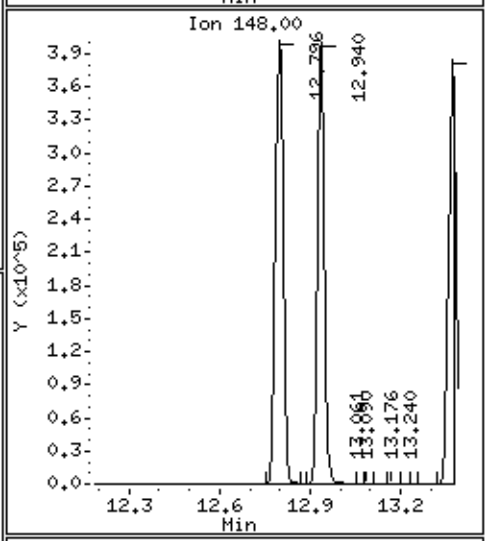


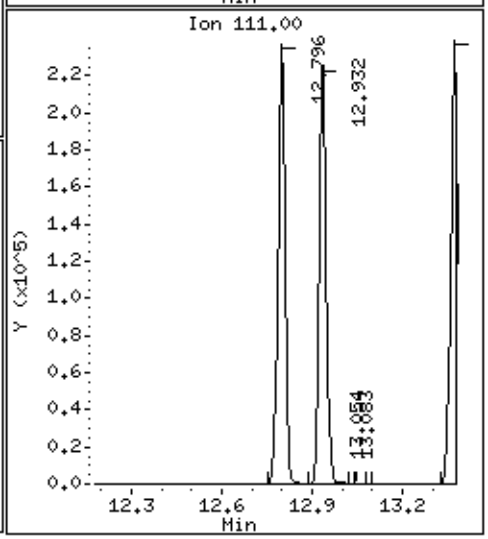












Data File: /chem/msd6.i/15jun16.b/6061506.d

Date : 15-JUN-2016 14:25

Client ID: LCS

Instrument: msd6.i

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

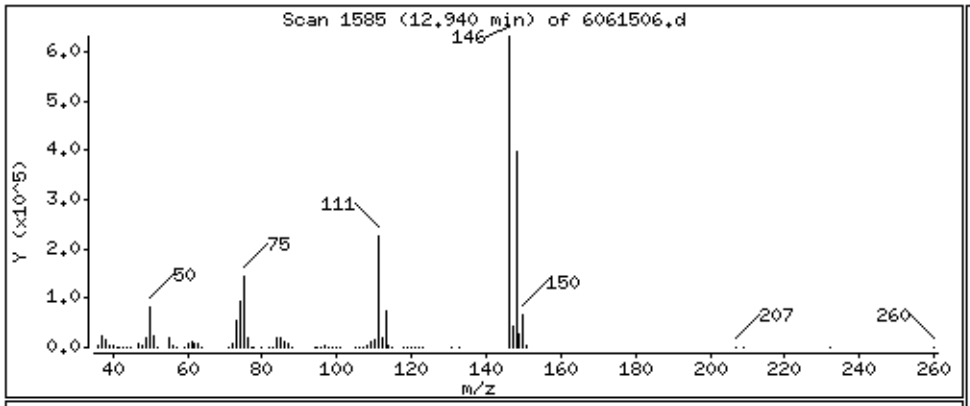
Operator: CT

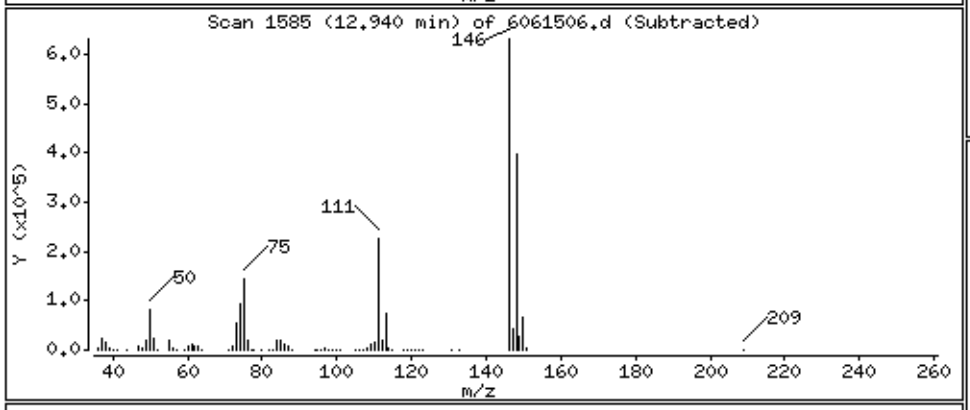
Column phase: RTx-624

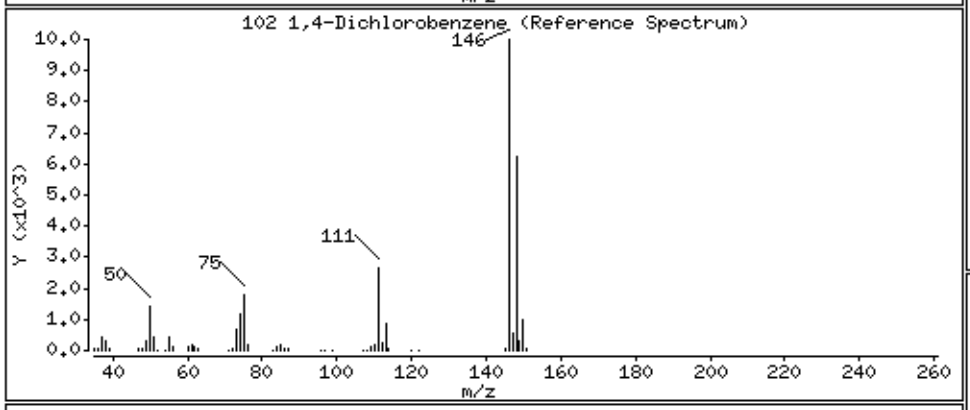
Column diameter: 0.53

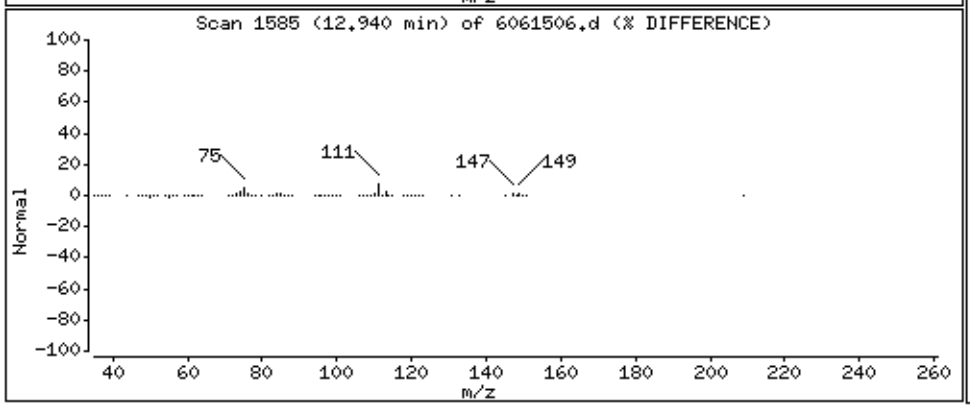
102 1,4-Dichlorobenzene

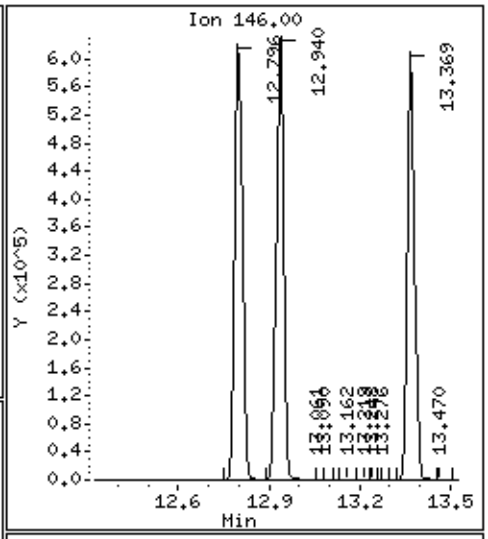
Concentration: 119.82 NG

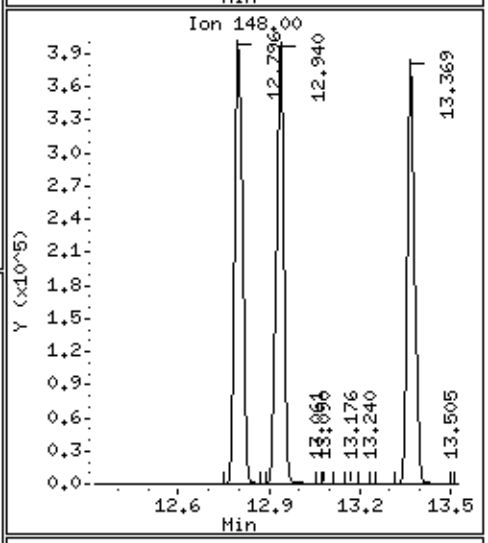


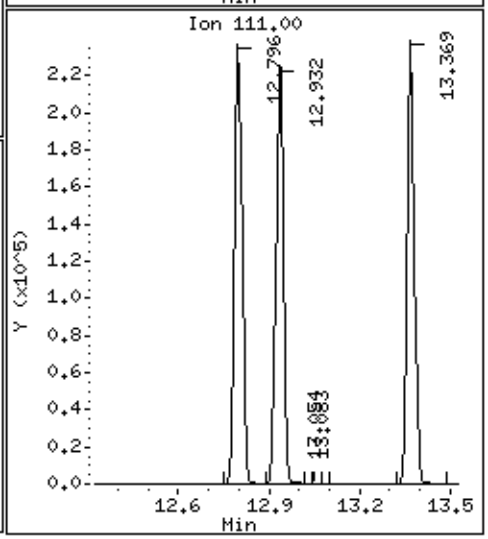












Data File: /chem/msd6.i/15jun16.b/6061506.d

Date : 15-JUN-2016 14:25

Client ID: LCS

Instrument: msd6.i

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

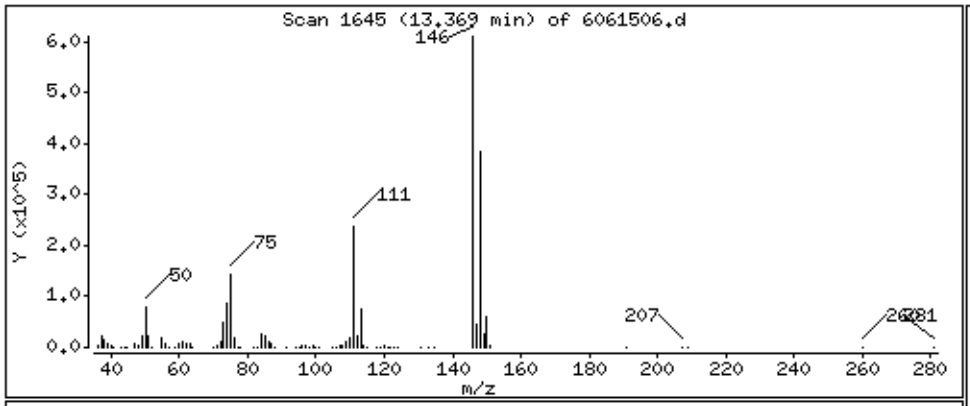
Operator: CT

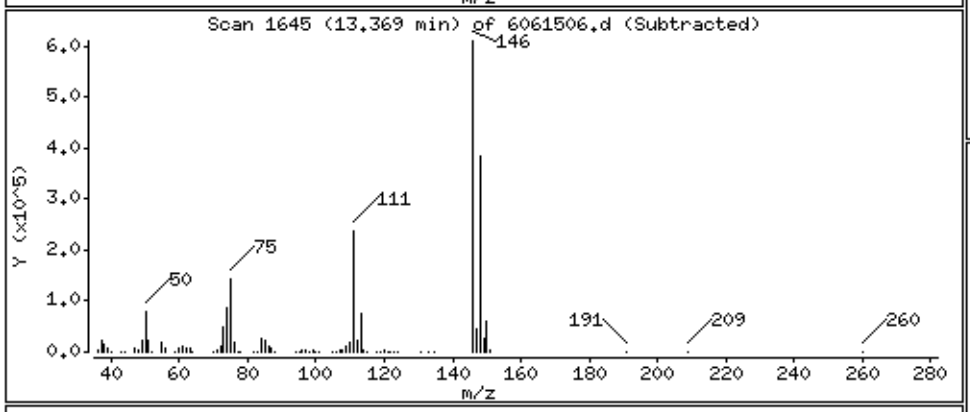
Column phase: RTx-624

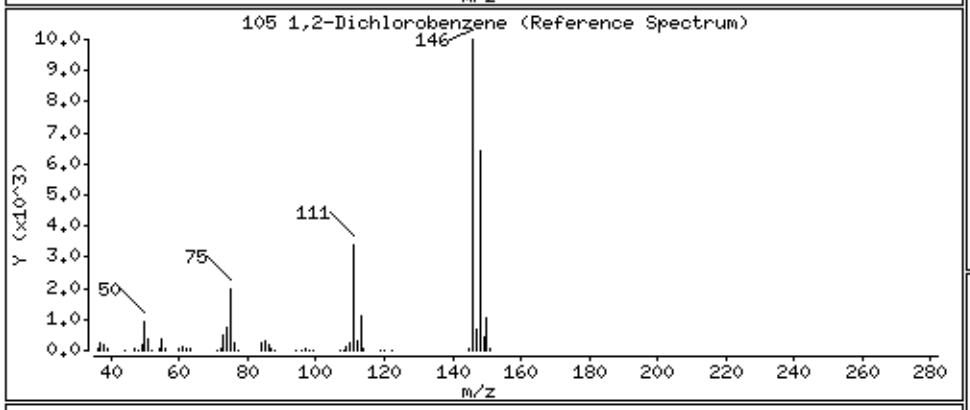
Column diameter: 0.53

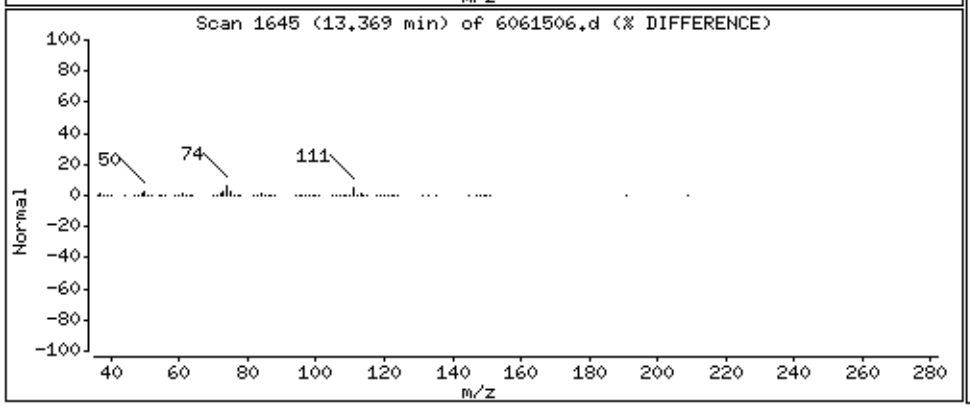
105 1,2-Dichlorobenzene

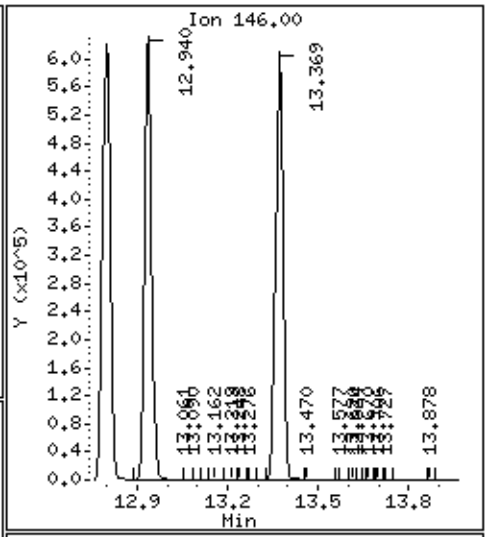
Concentration: 118.70 NG

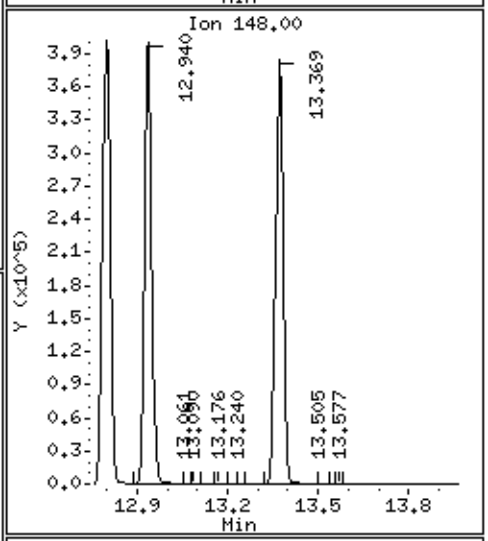


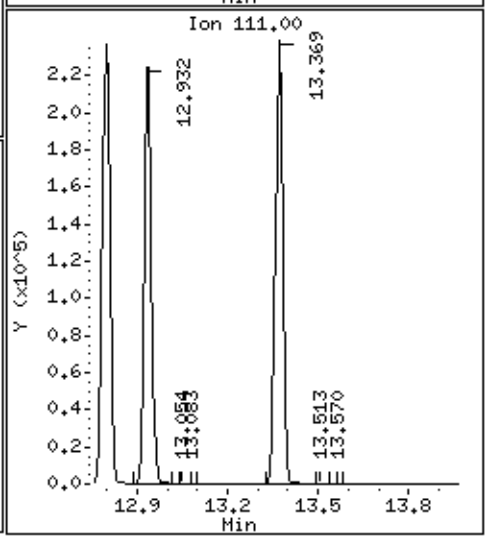












Data File: /chem/msd6.i/15jun16.b/6061506.d

Date : 15-JUN-2016 14:25

Client ID: LCS

Instrument: msd6.i

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

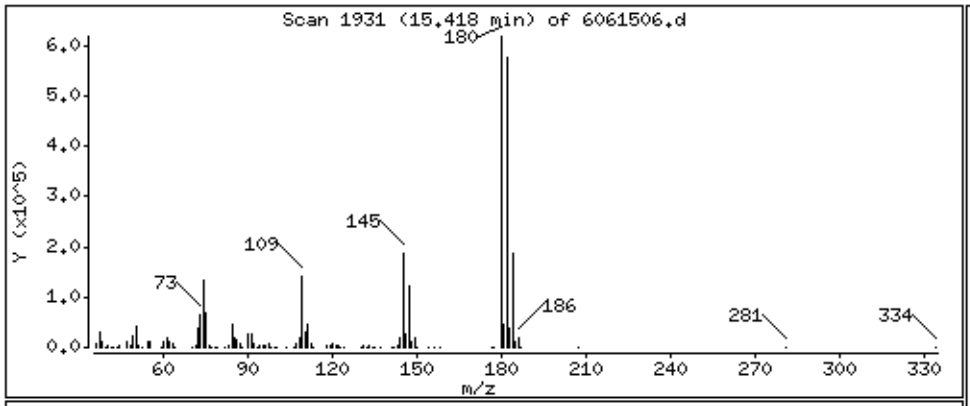
Operator: CT

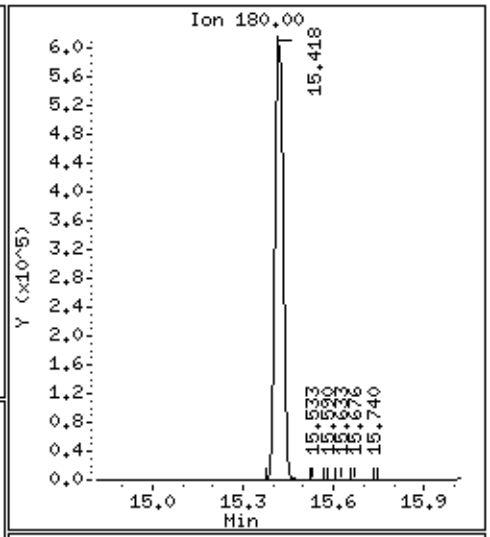
Column phase: RTx-624

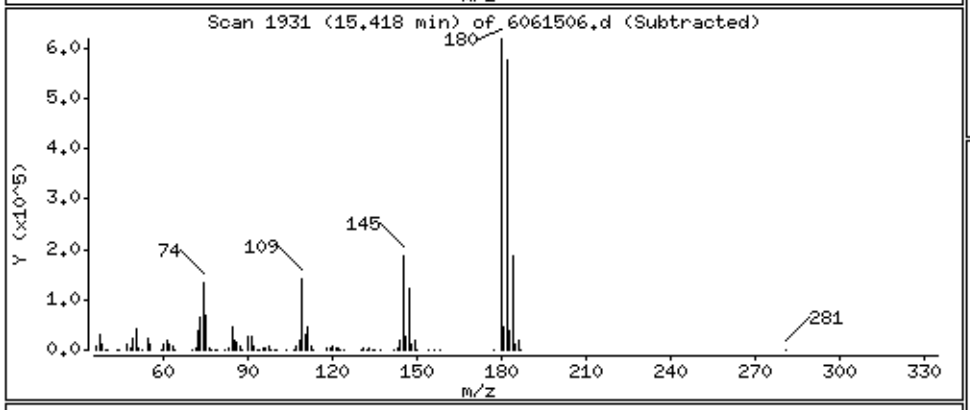
Column diameter: 0.53

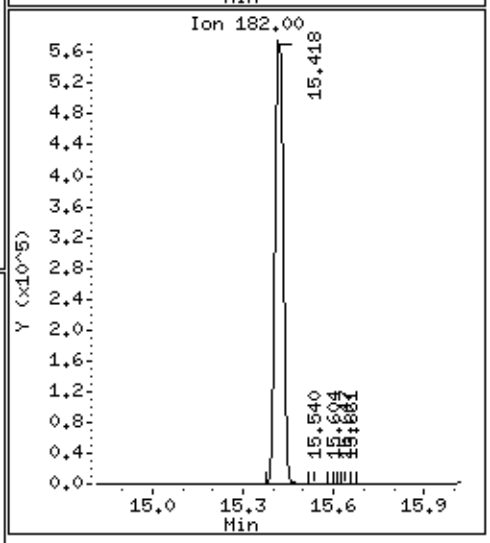
106 1,2,4-Trichlorobenzene

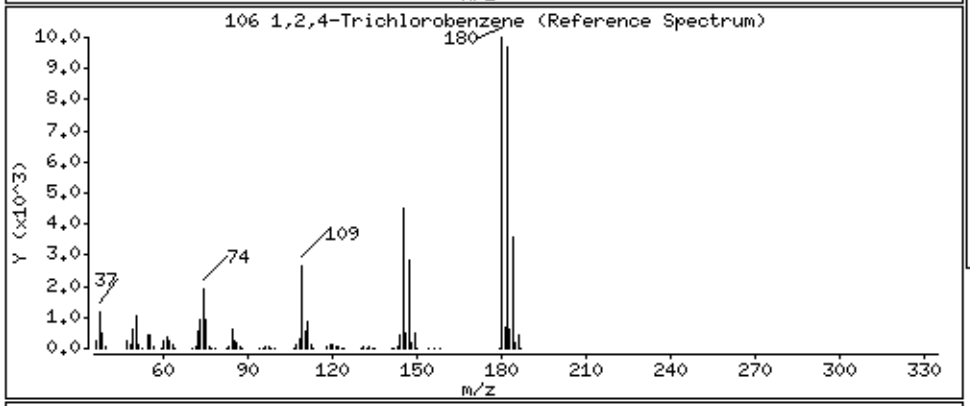
Concentration: 150.60 NG

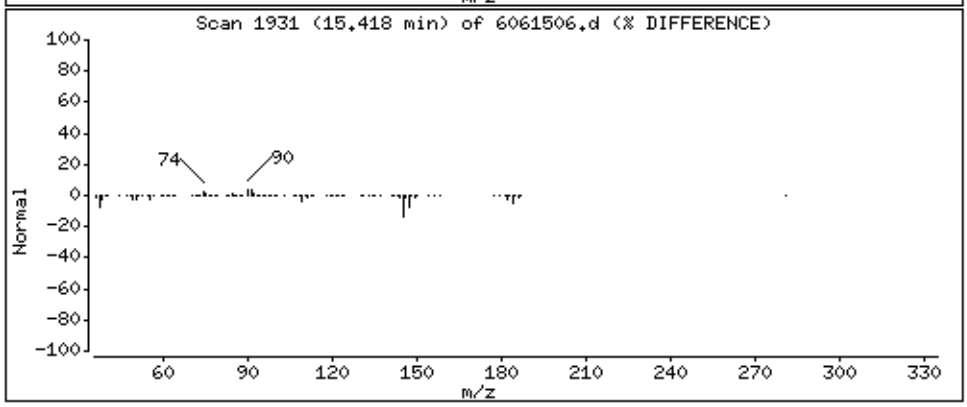












Data File: /chem/msd6.i/15jun16.b/6061506.d

Date : 15-JUN-2016 14:25

Client ID: LCS

Instrument: msd6.i

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

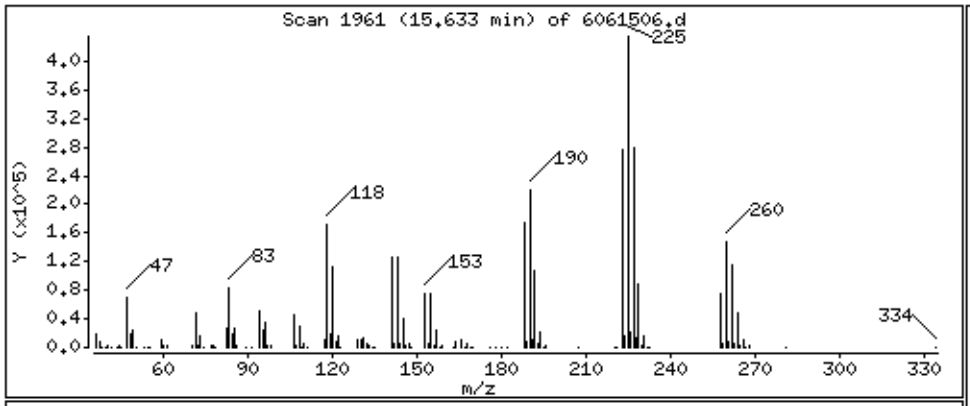
Operator: CT

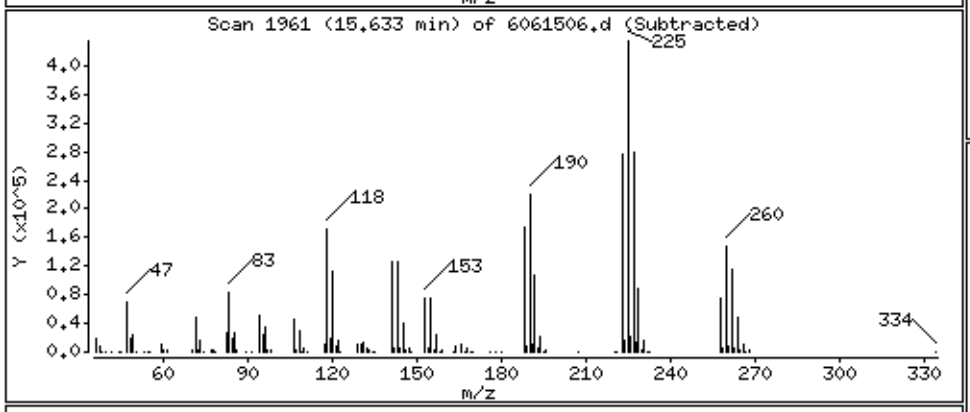
Column phase: RTx-624

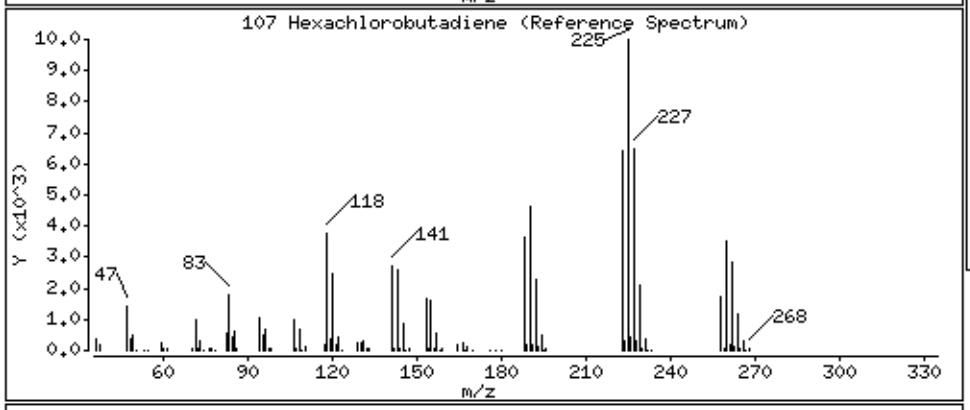
Column diameter: 0.53

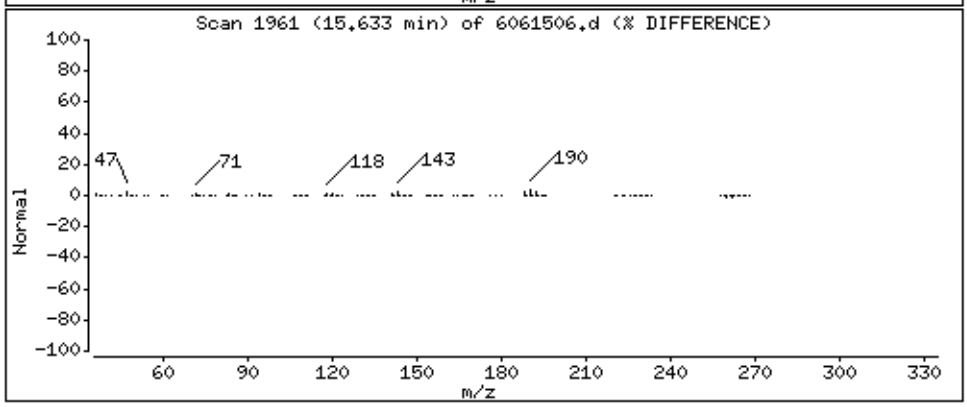
107 Hexachlorobutadiene

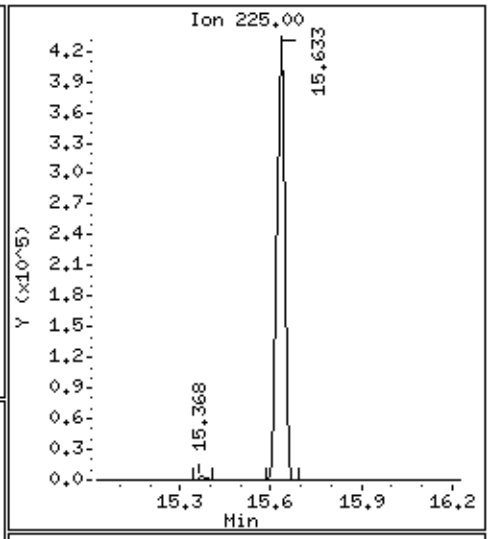
Concentration: 210.07 NG

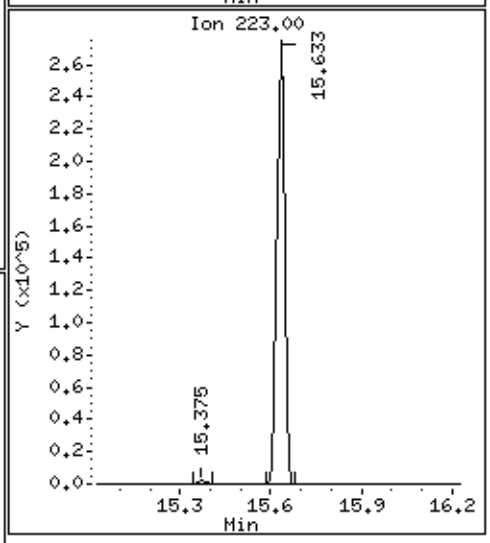












Data File: /chem/msd6.i/15jun16.b/6061506.d

Date : 15-JUN-2016 14:25

Client ID: LCS

Instrument: msd6.i

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

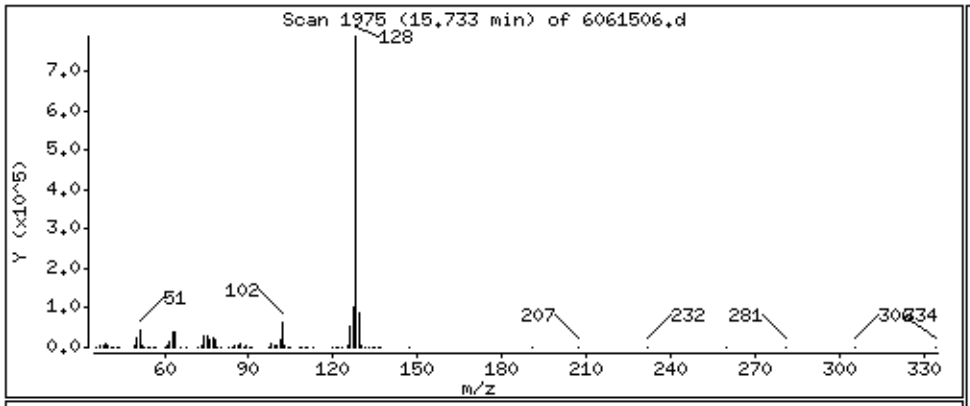
Operator: CT

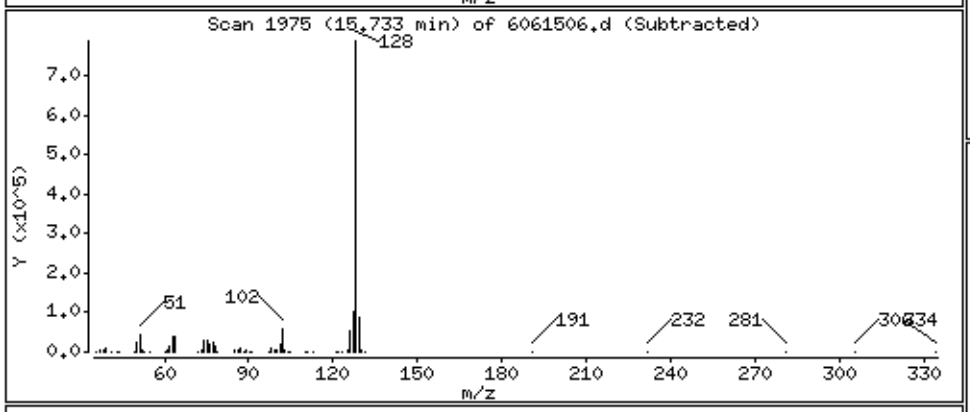
Column phase: RTx-624

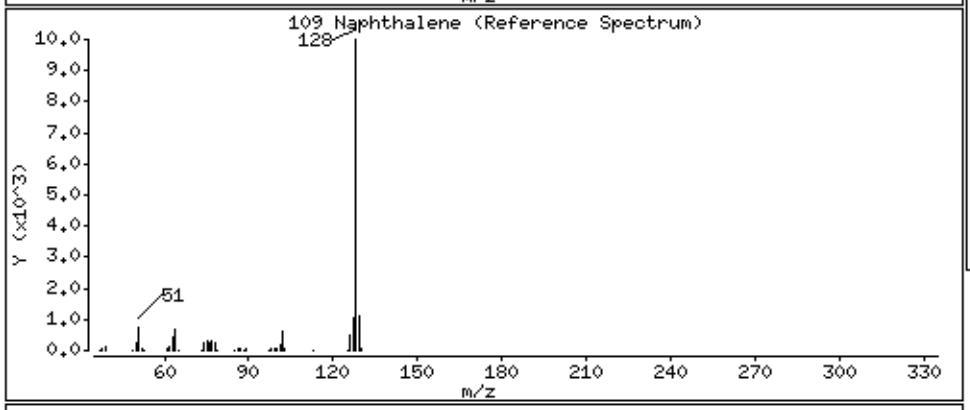
Column diameter: 0.53

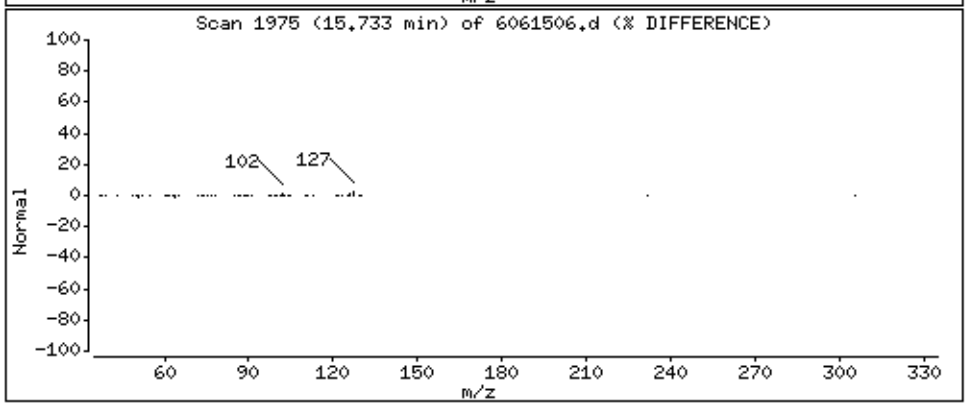
109 Naphthalene

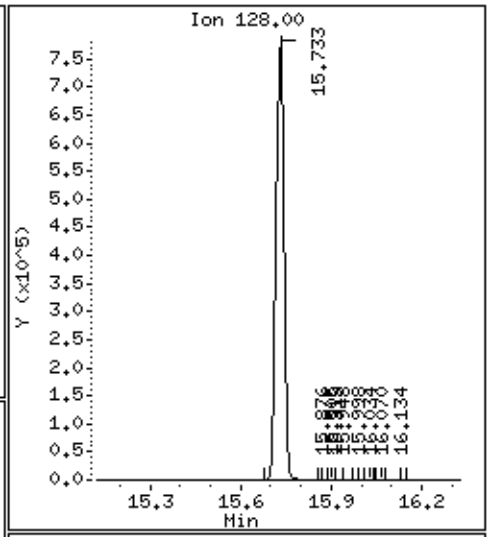
Concentration: 53.836 NG

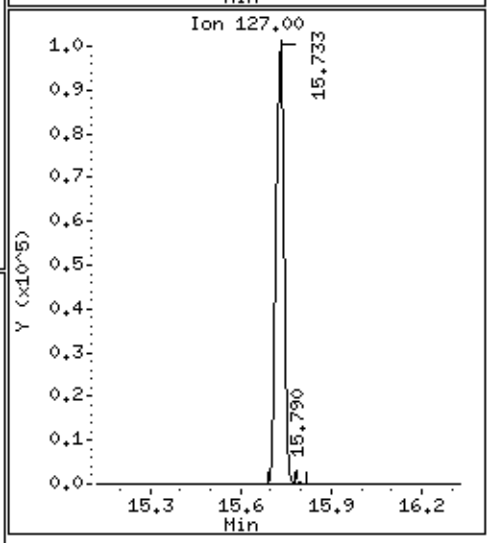












Data File: /chem/msd6.i/15jun16.b/6061506.d

Date : 15-JUN-2016 14:25

Client ID: LCS

Instrument: msd6.i

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

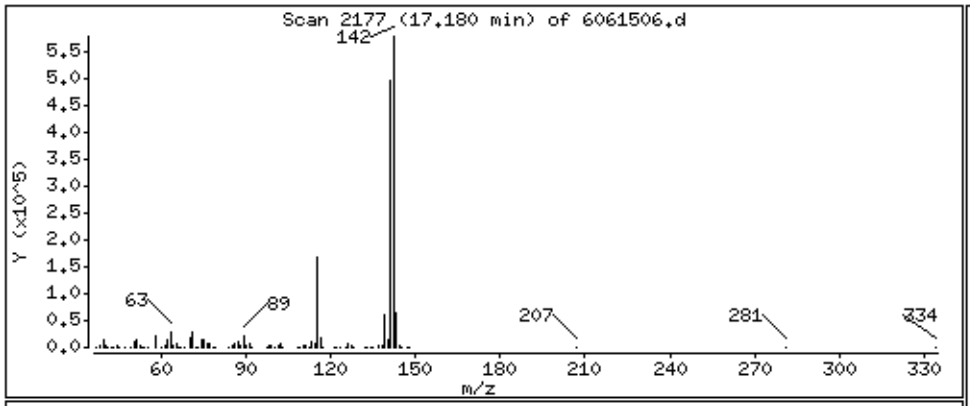
Operator: CT

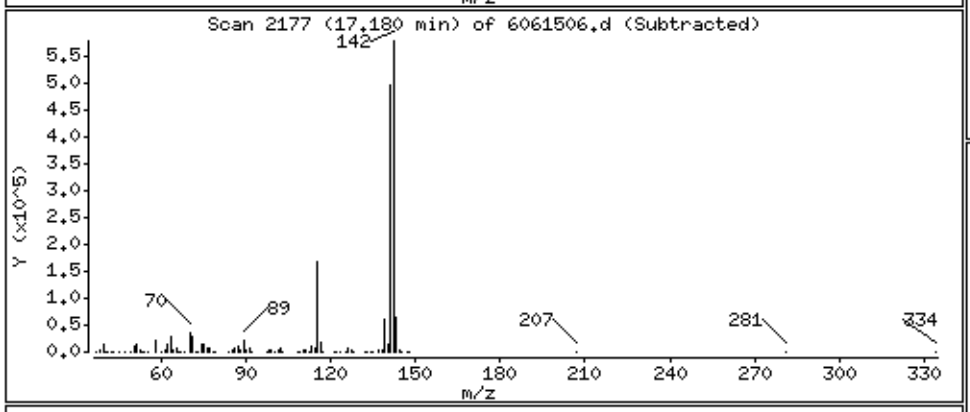
Column phase: RTx-624

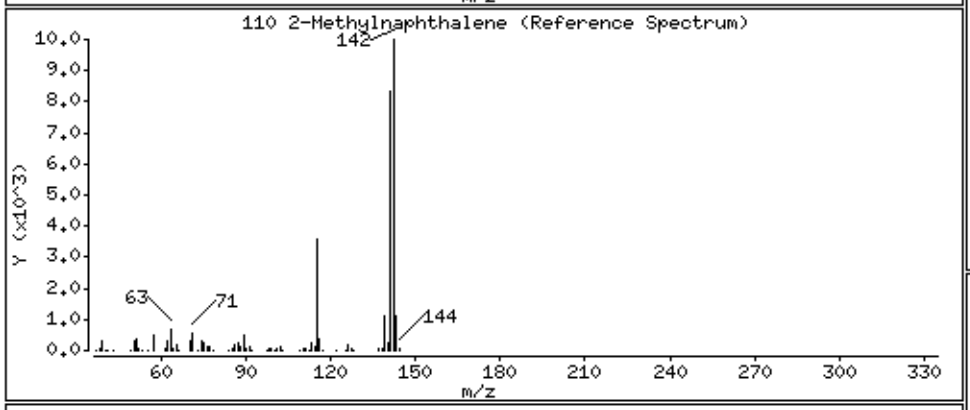
Column diameter: 0.53

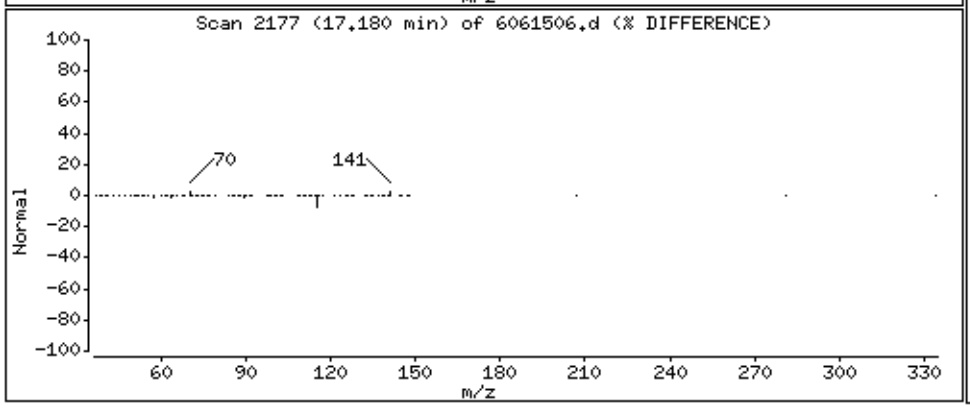
110 2-Methylnaphthalene

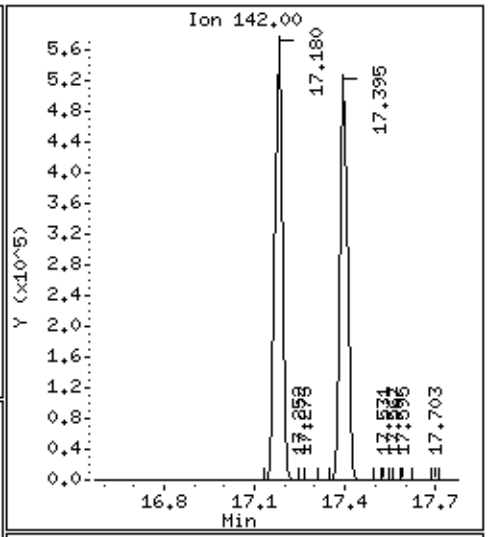
Concentration: 57.293 NG

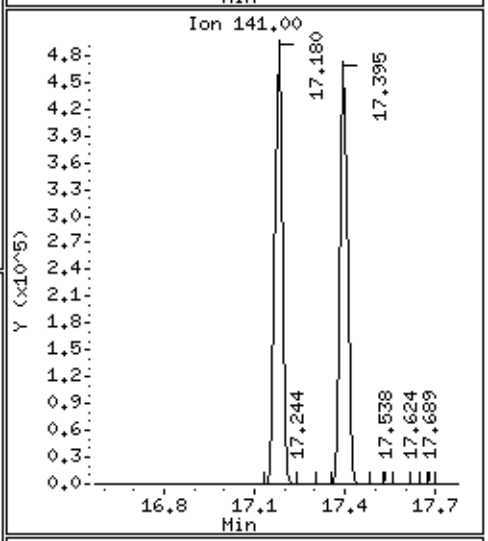


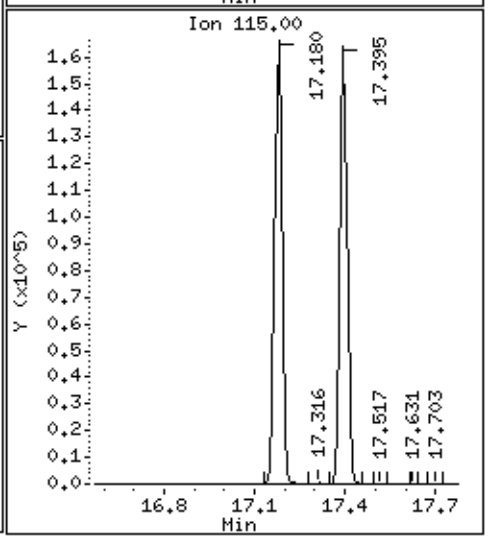












Data File: /chem/msd6.i/15jun16.b/6061506.d

Date : 15-JUN-2016 14:25

Client ID: LCS

Instrument: msd6.i

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

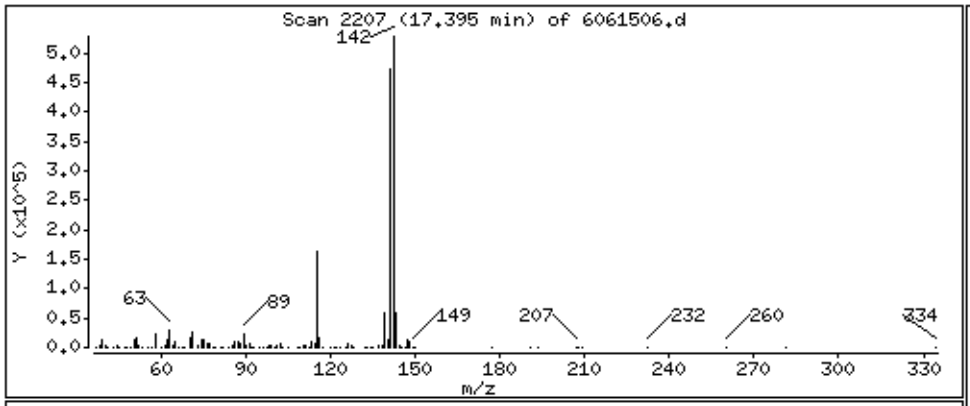
Operator: CT

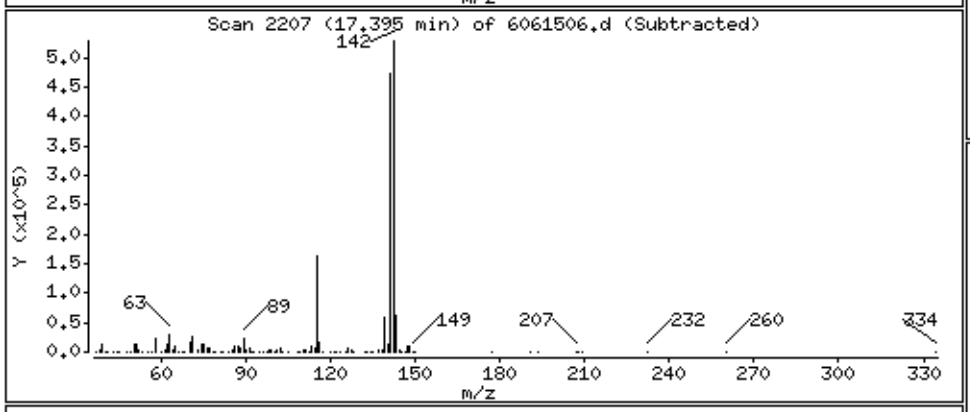
Column phase: RTx-624

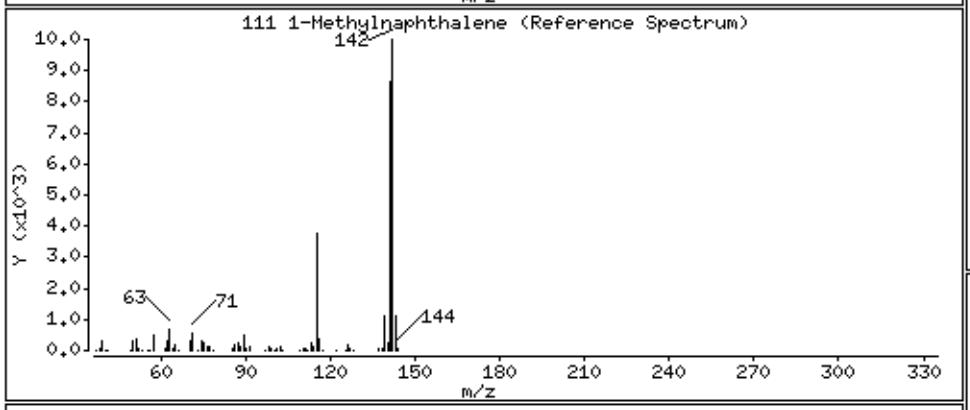
Column diameter: 0.53

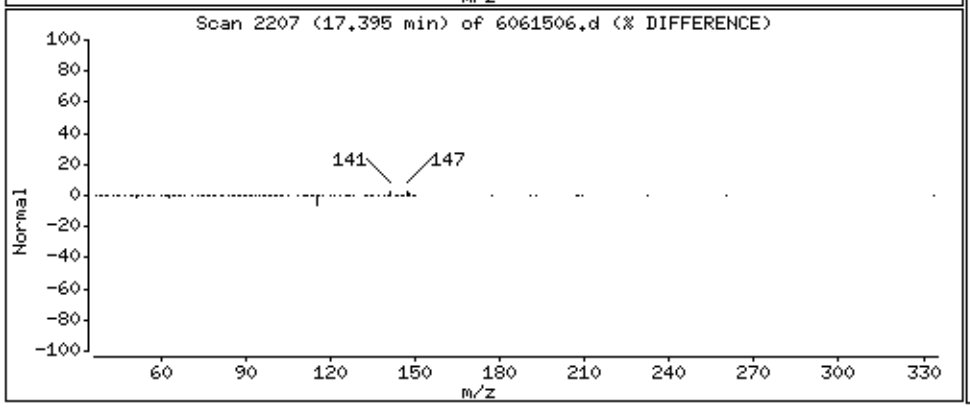
111 1-Methylnaphthalene

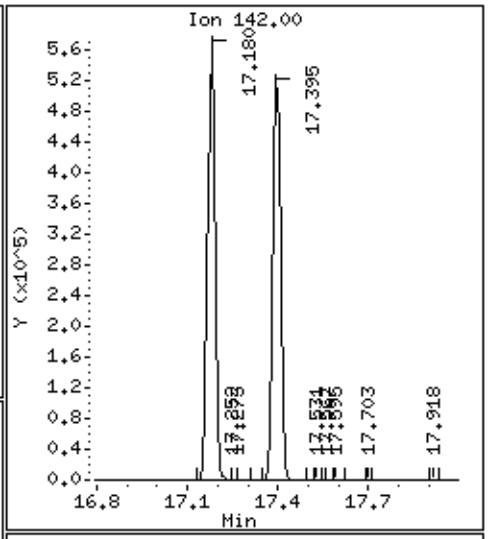
Concentration: 57.228 NG

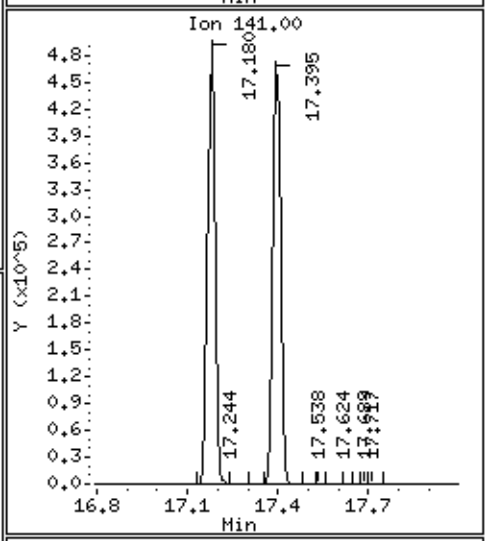


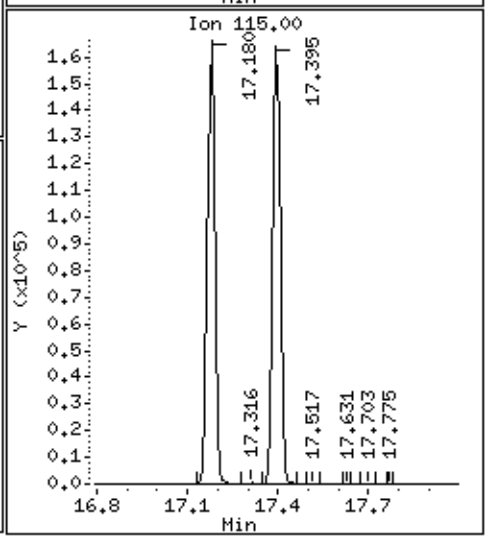












Data File: /chem/msd6.i/15jun16.b/6061506.d

Date : 15-JUN-2016 14:25

Client ID: LCS

Instrument: msd6.i

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

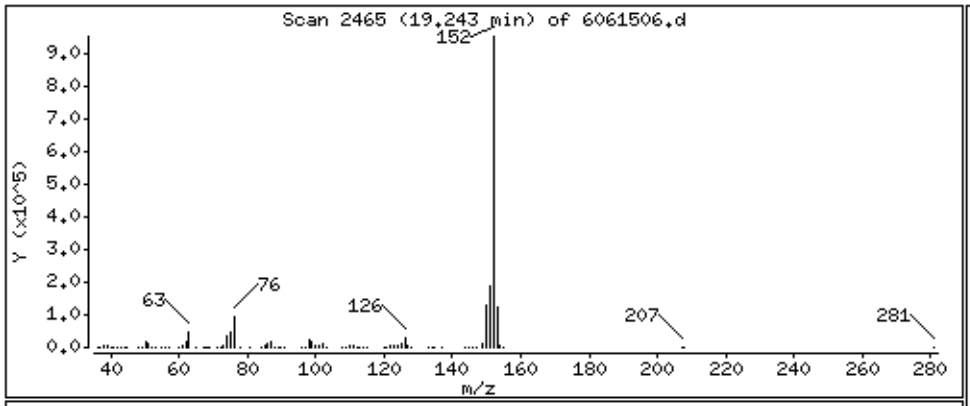
Operator: CT

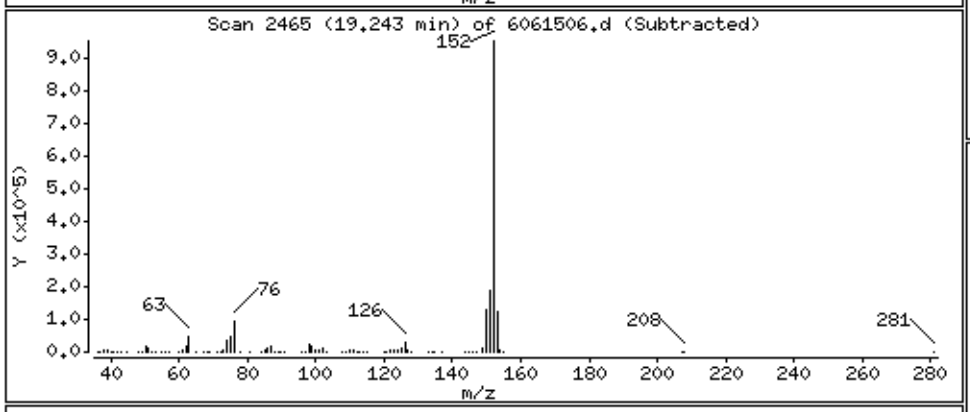
Column phase: RTx-624

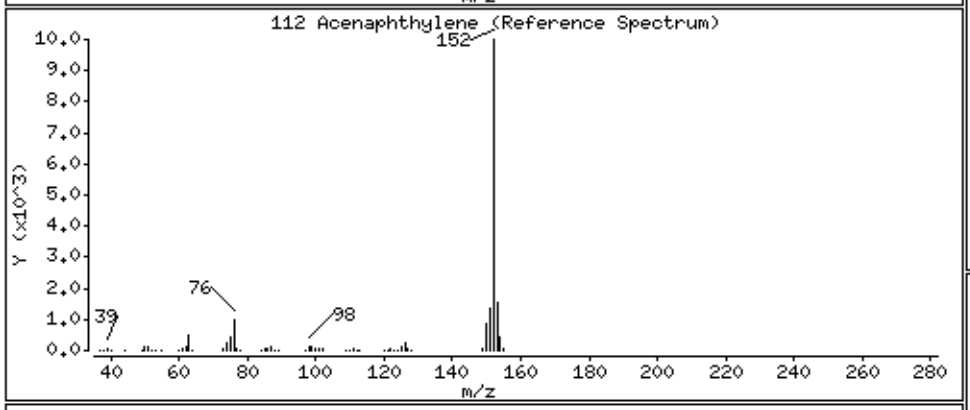
Column diameter: 0.53

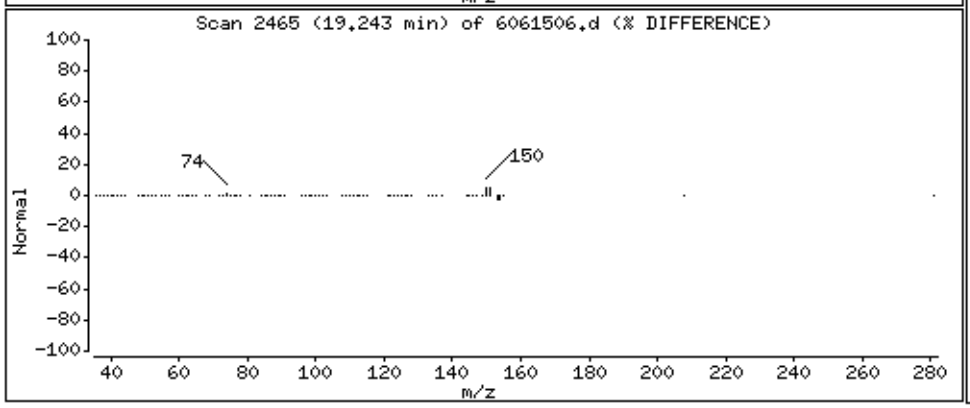
112 Acenaphthylene

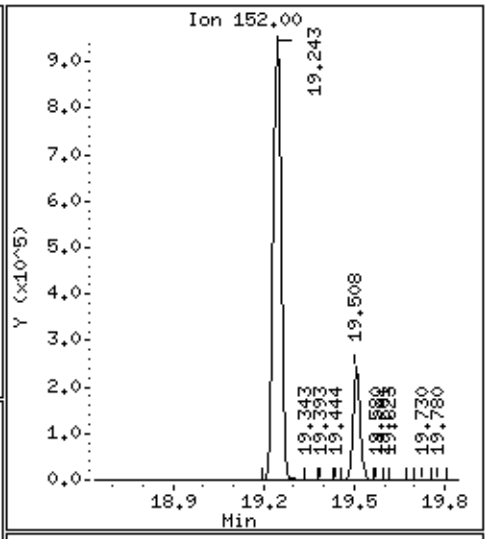
Concentration: 60.301 NG

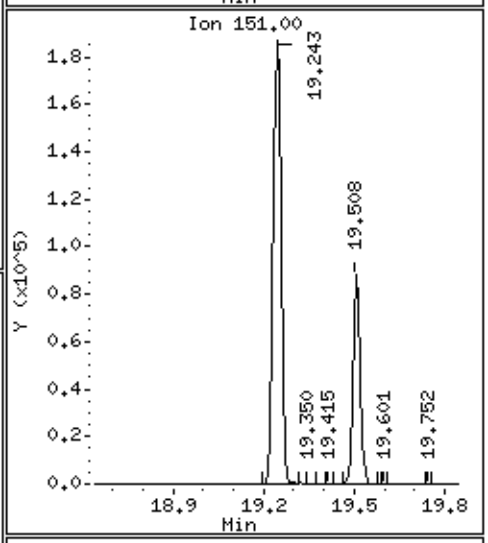


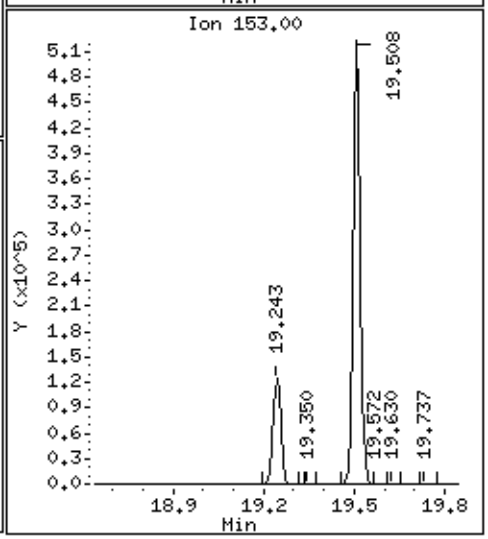












Data File: /chem/msd6.i/15jun16.b/6061506.d

Date : 15-JUN-2016 14:25

Client ID: LCS

Instrument: msd6.i

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

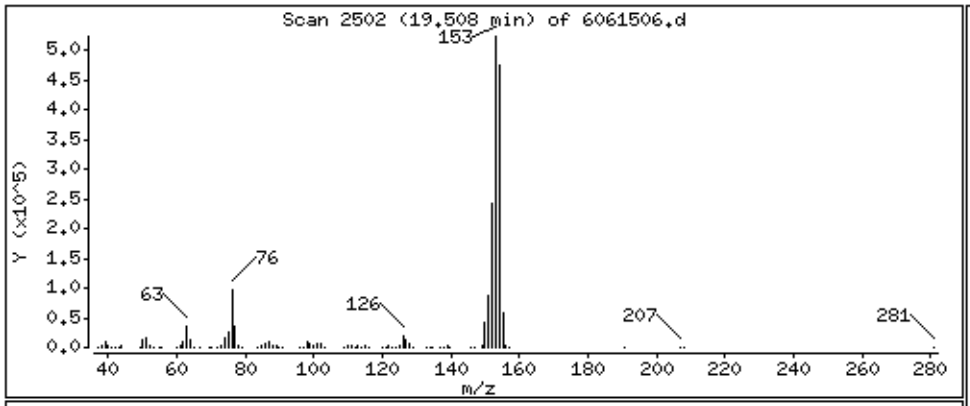
Operator: CT

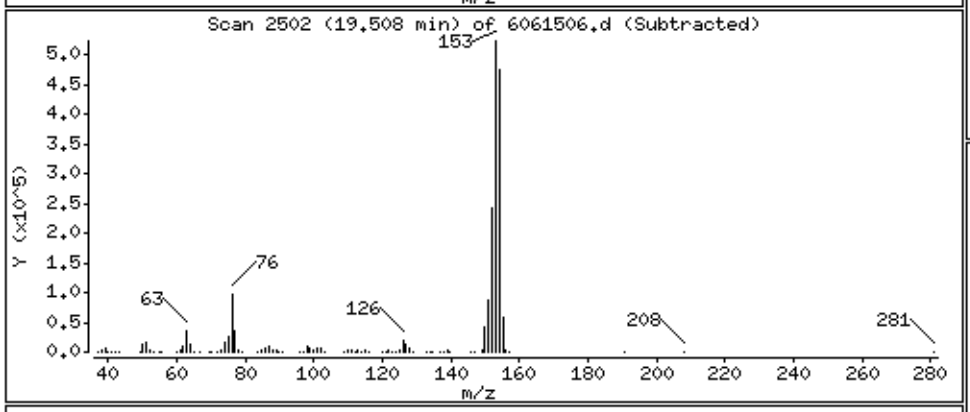
Column phase: RTx-624

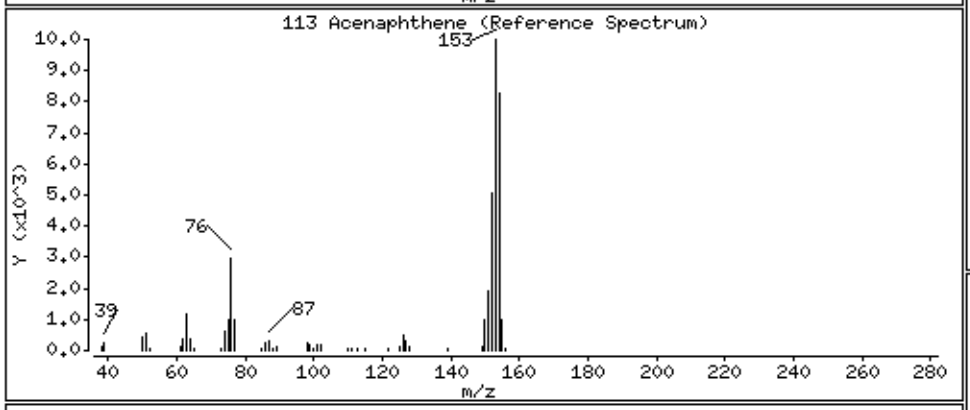
Column diameter: 0.53

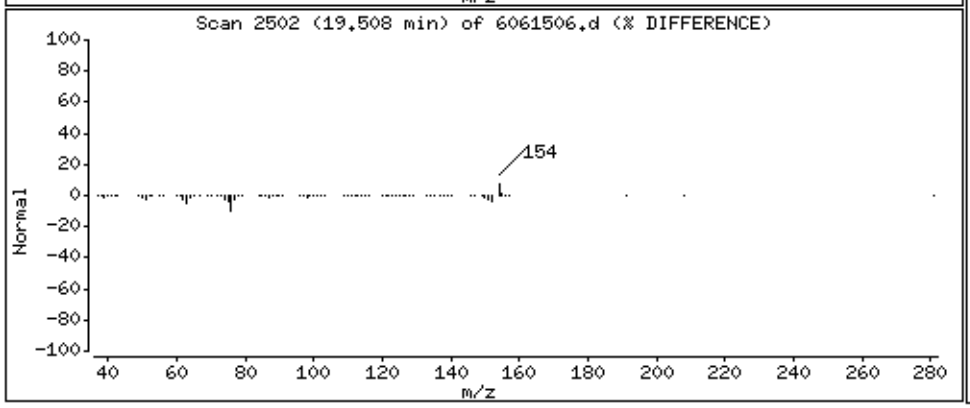
113 Acenaphthene

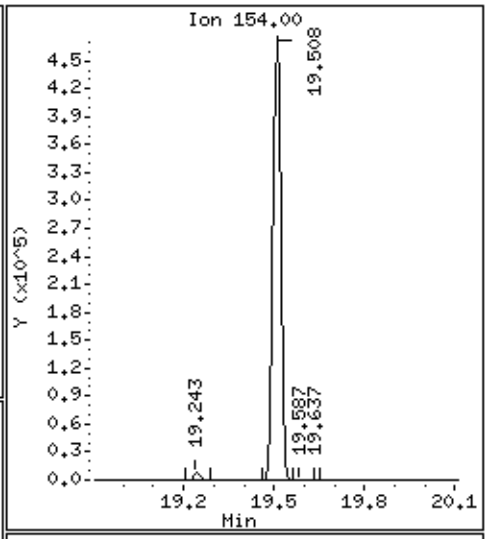
Concentration: 62.220 NG

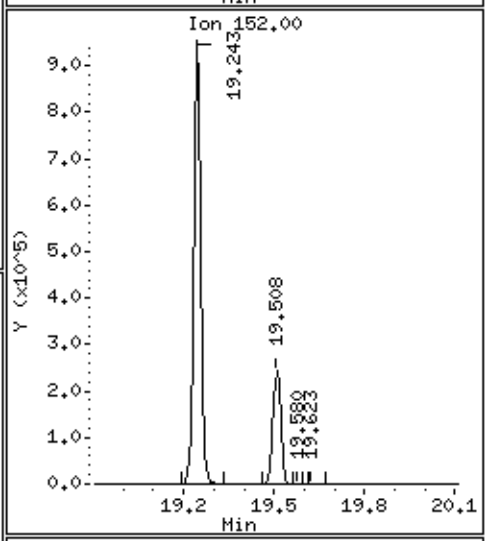


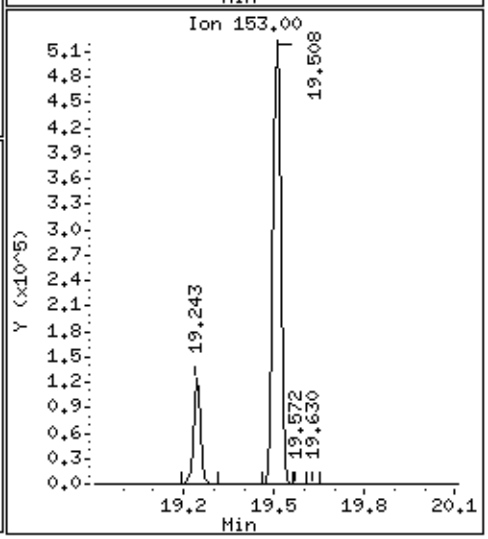












Data File: /chem/msd6.i/15jun16.b/6061506.d

Date : 15-JUN-2016 14:25

Client ID: LCS

Instrument: msd6.i

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

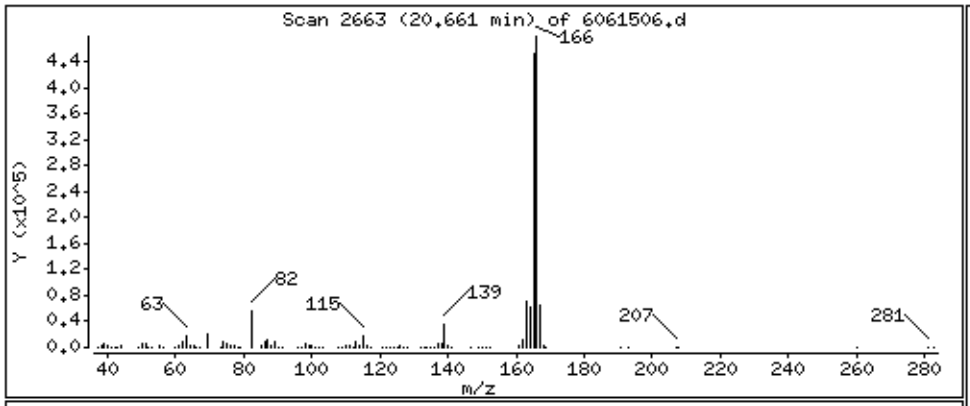
Operator: CT

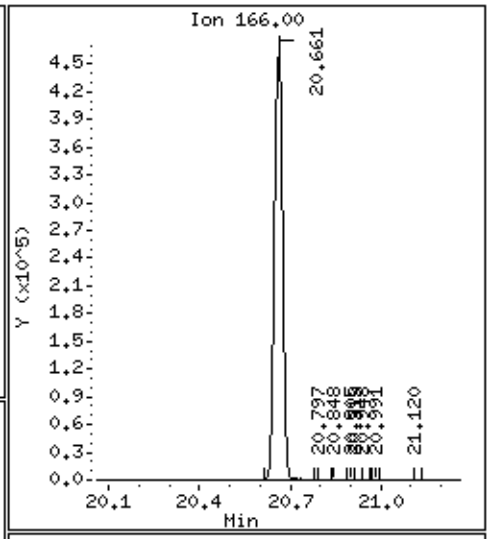
Column phase: RTx-624

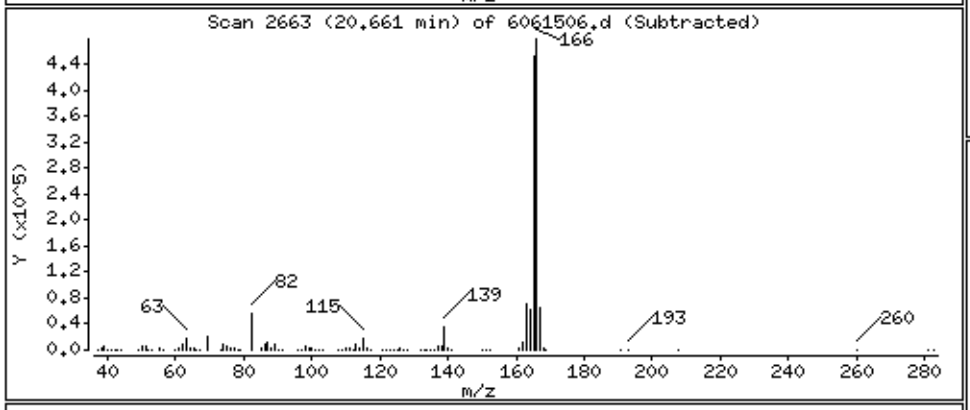
Column diameter: 0.53

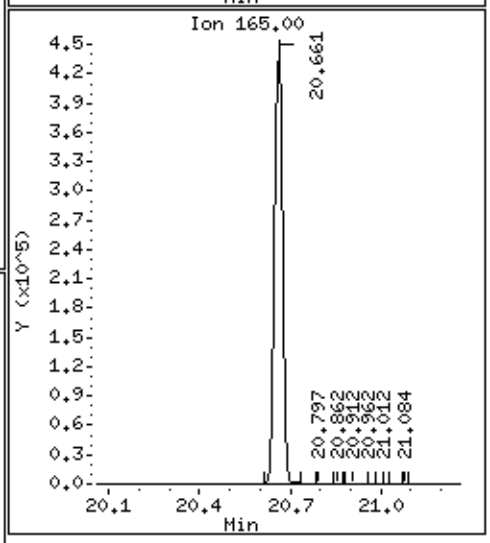
114 Fluorene

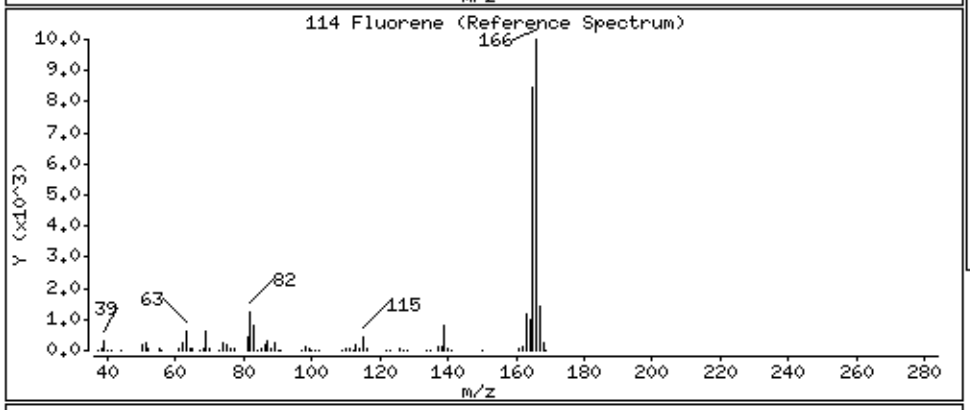
Concentration: 73.958 NG

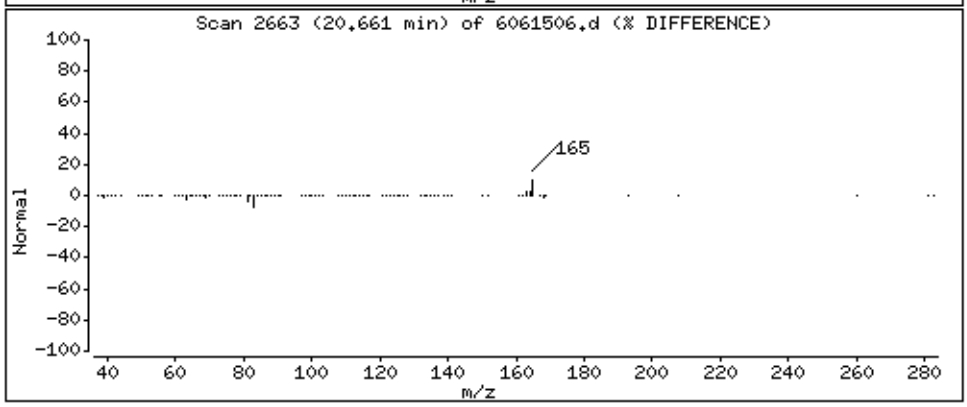












Data File: /chem/msd6.i/15jun16.b/6061506.d

Date : 15-JUN-2016 14:25

Client ID: LCS

Instrument: msd6.i

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

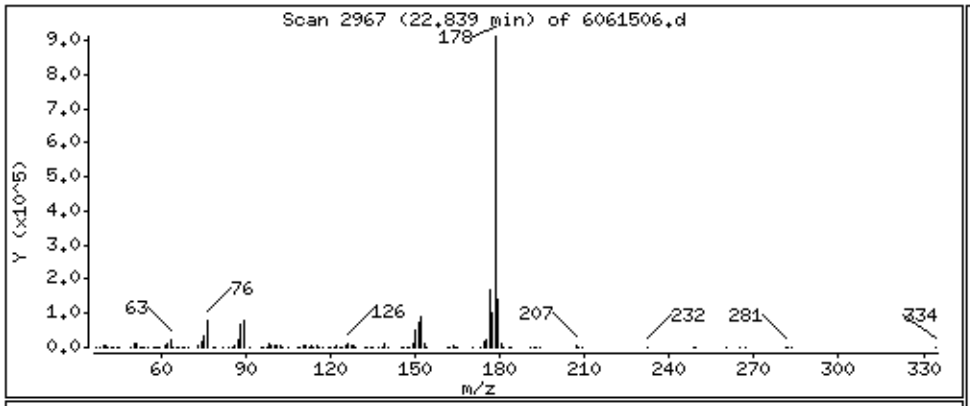
Operator: CT

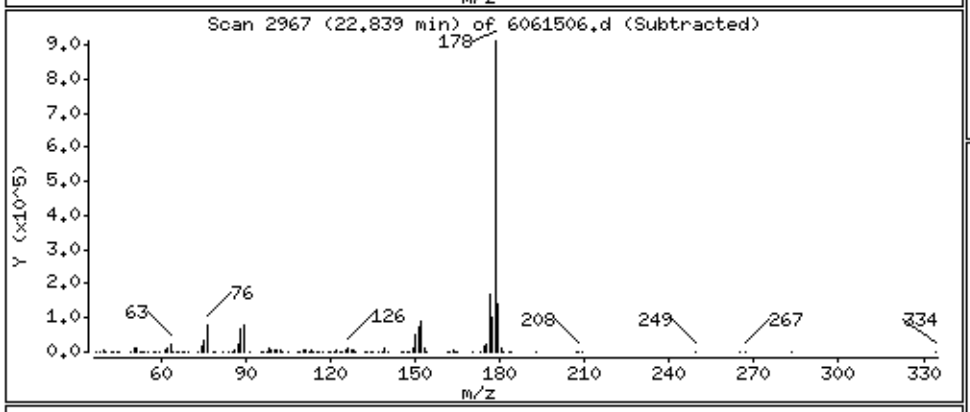
Column phase: RTx-624

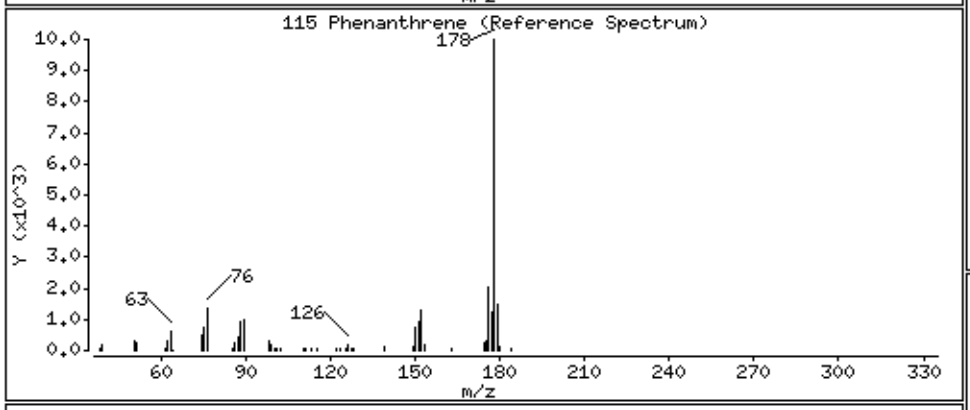
Column diameter: 0.53

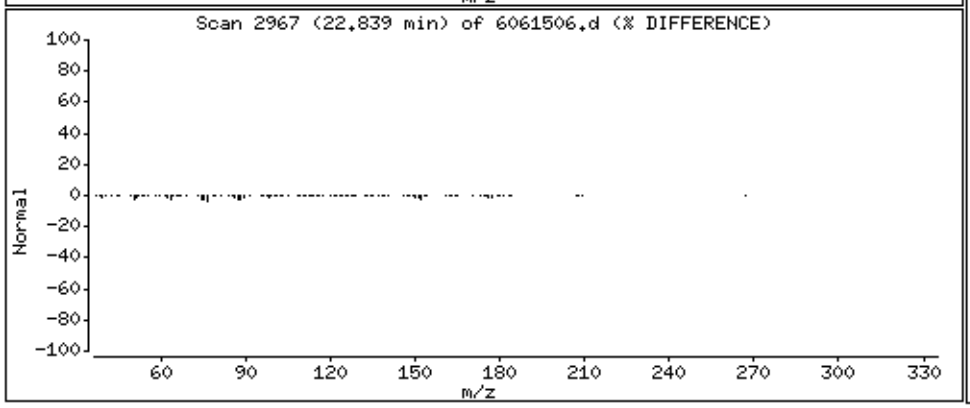
115 Phenanthrene

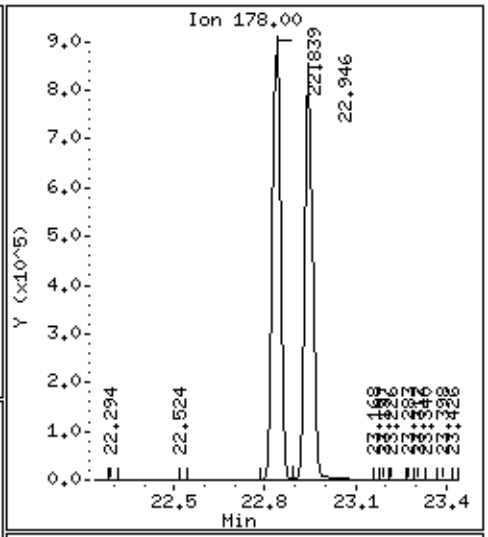
Concentration: 58.556 NG

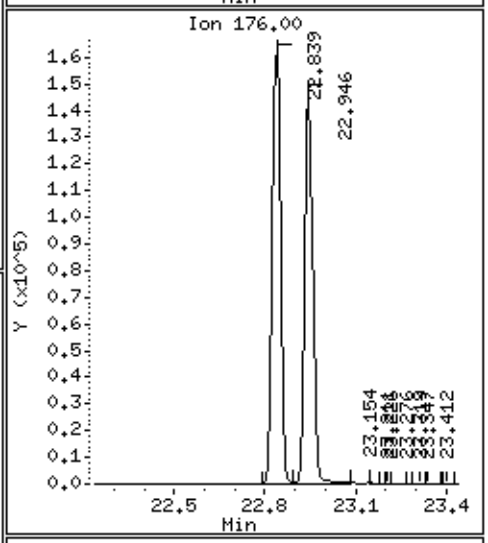


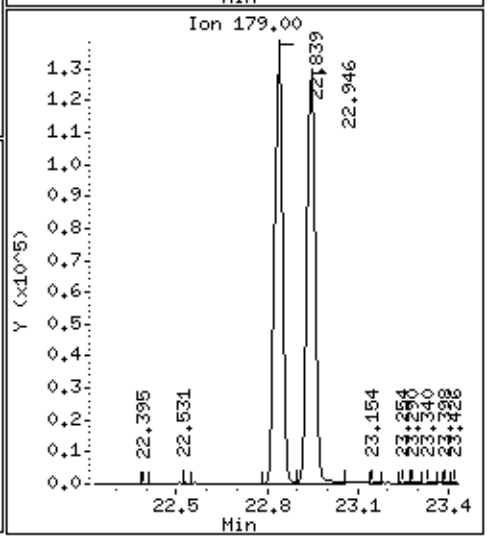












Data File: /chem/msd6.i/15jun16.b/6061506.d

Date : 15-JUN-2016 14:25

Client ID: LCS

Instrument: msd6.i

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

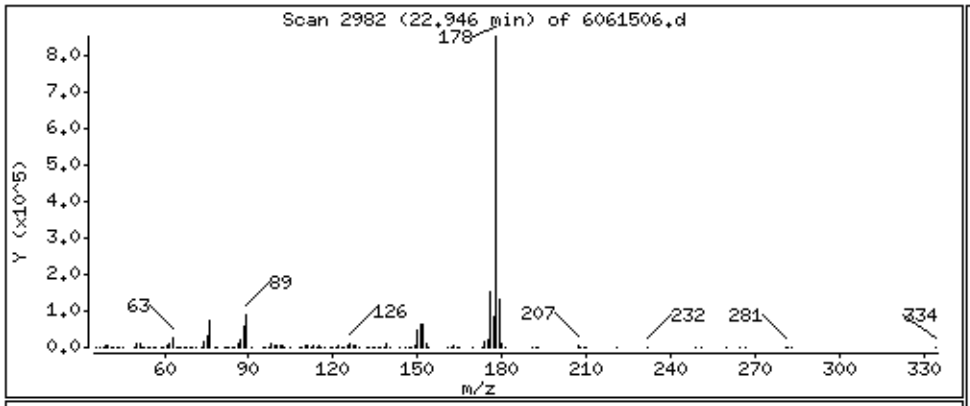
Operator: CT

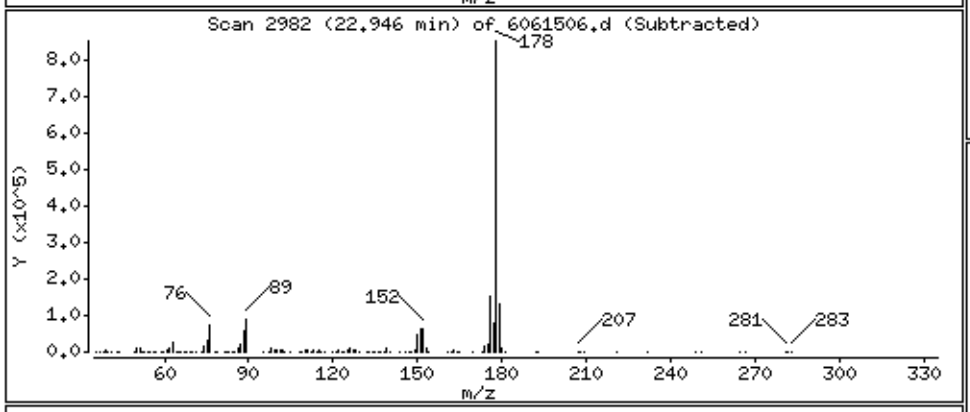
Column phase: RTx-624

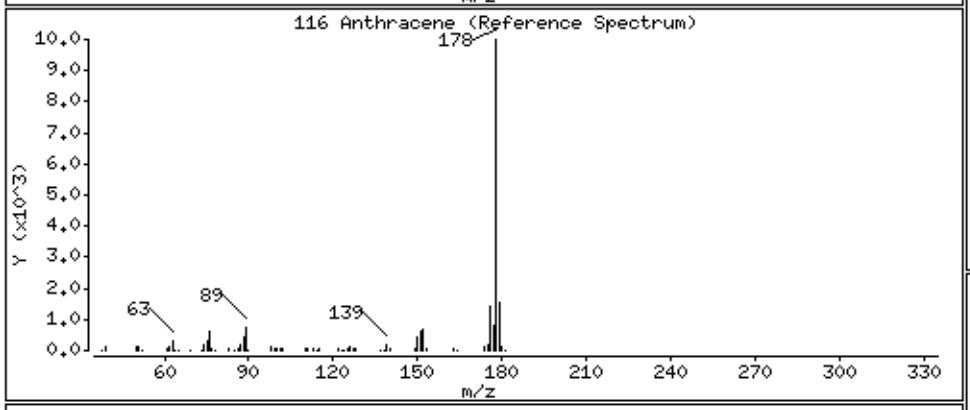
Column diameter: 0.53

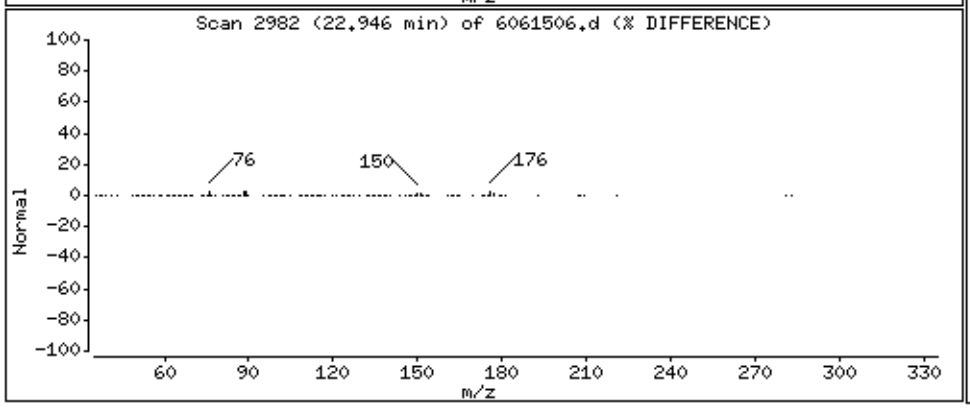
116 Anthracene

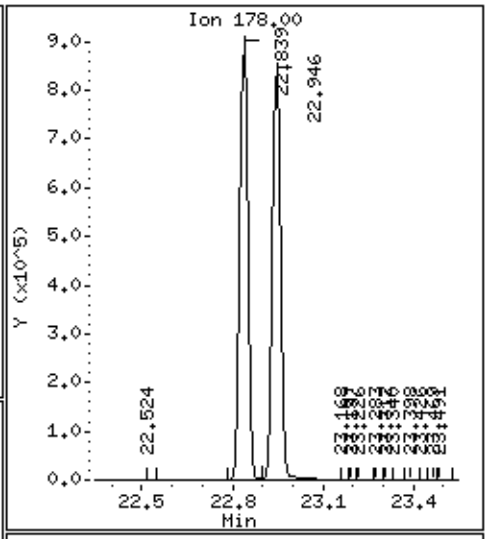
Concentration: 64.895 NG

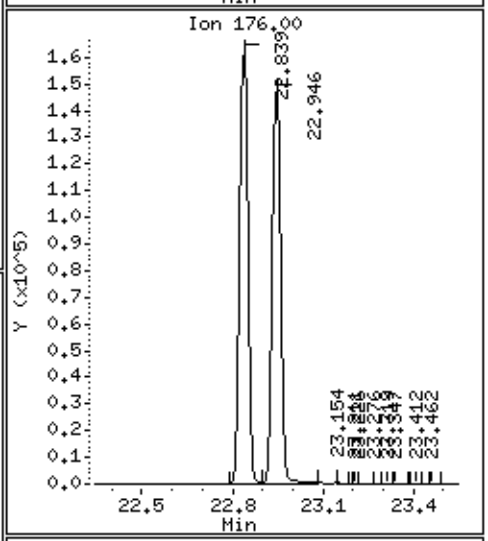


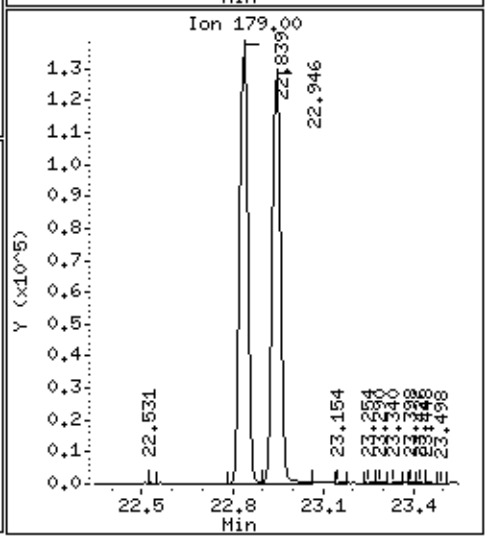












Data File: /chem/msd6.i/15jun16.b/6061506.d

Date : 15-JUN-2016 14:25

Client ID: LCS

Instrument: msd6.i

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

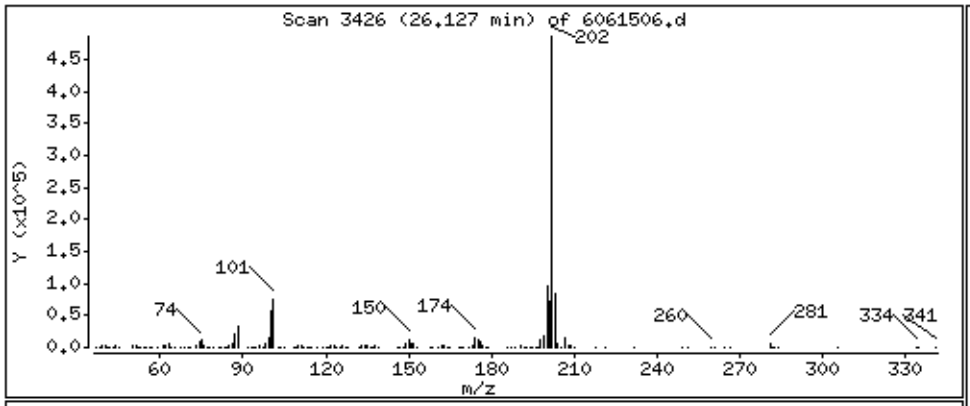
Operator: CT

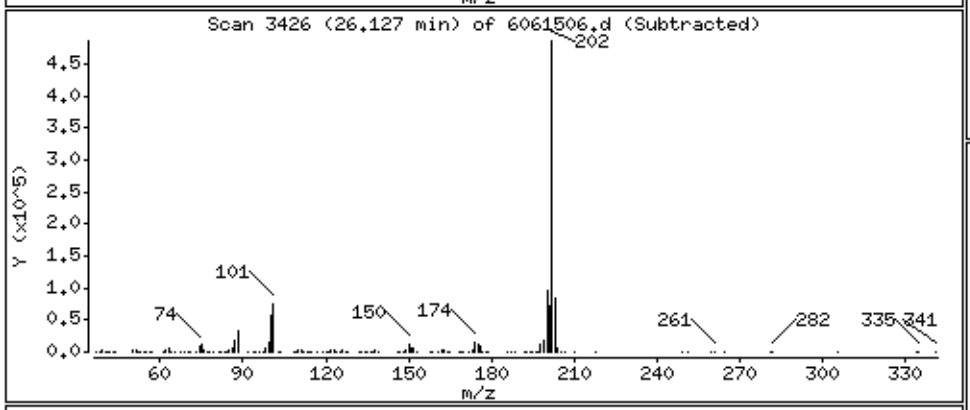
Column phase: RTx-624

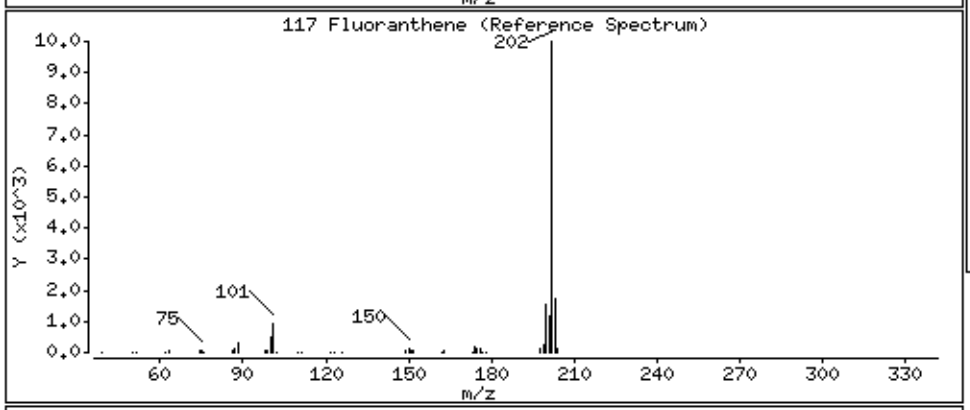
Column diameter: 0.53

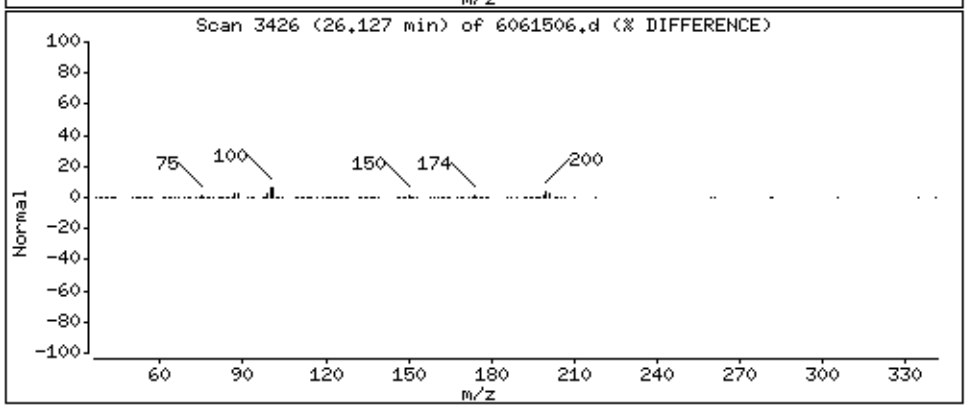
117 Fluoranthene

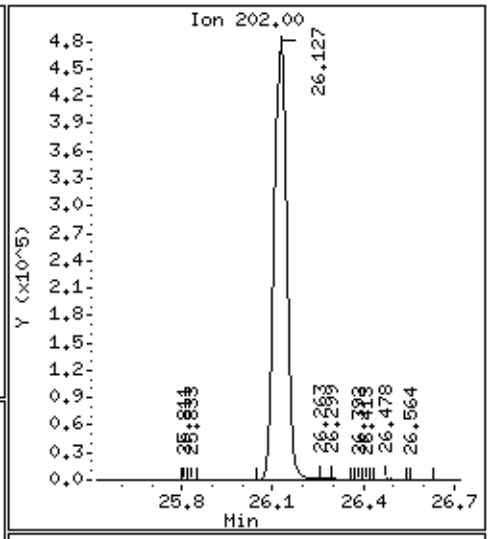
Concentration: 72.184 NG

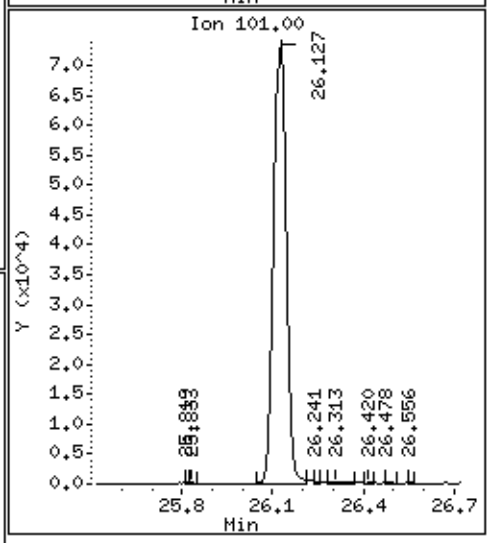












Data File: /chem/msd6.i/15jun16.b/6061506.d

Date : 15-JUN-2016 14:25

Client ID: LCS

Instrument: msd6.i

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

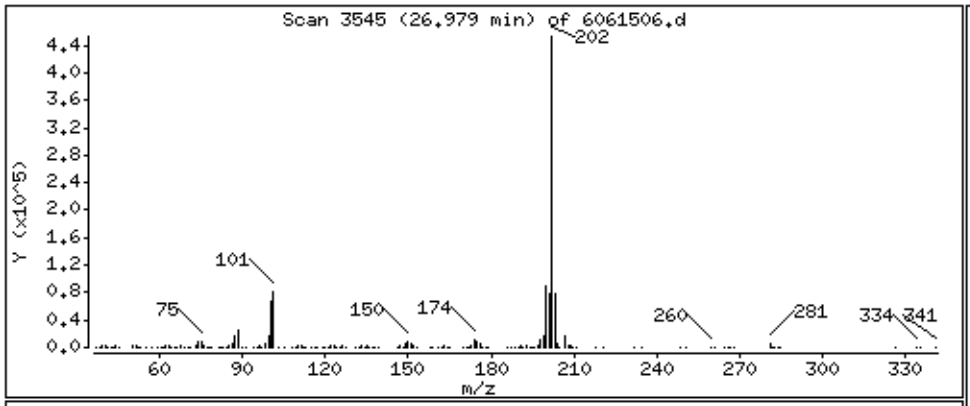
Operator: CT

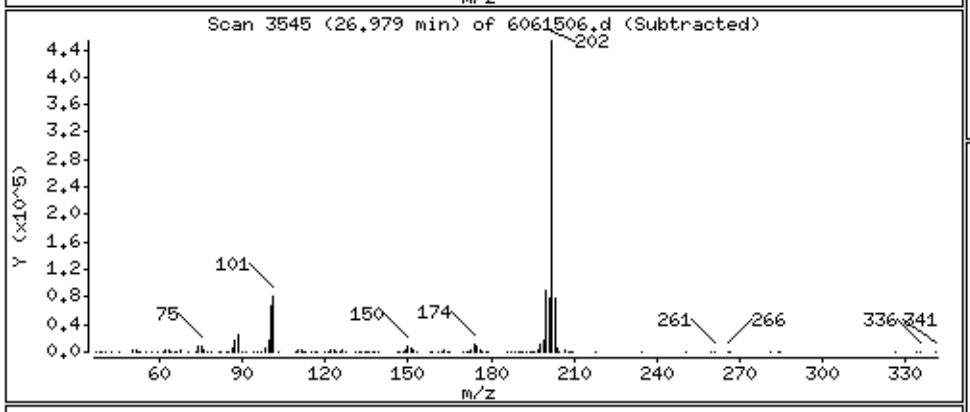
Column phase: RTx-624

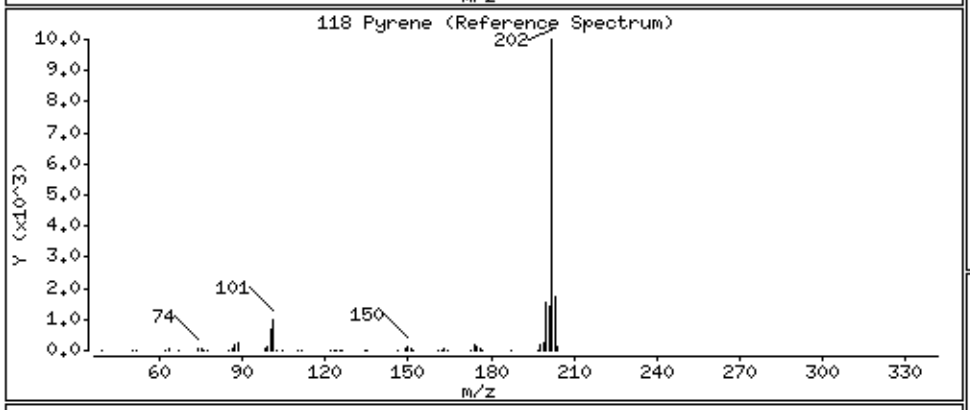
Column diameter: 0.53

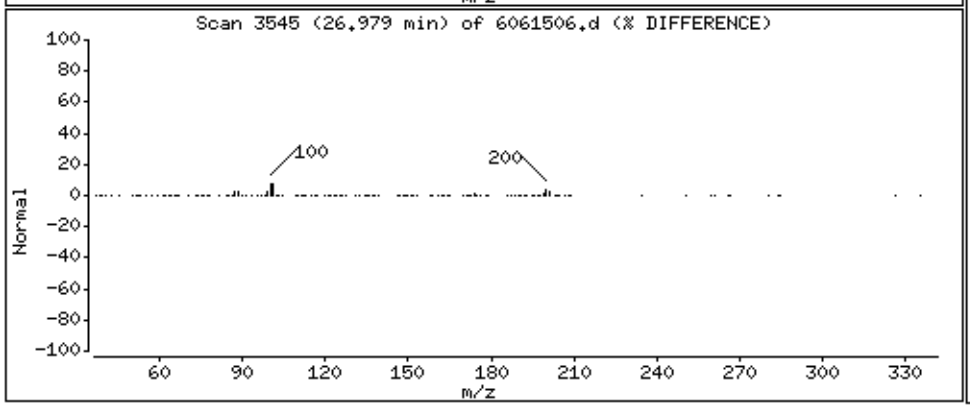
118 Pyrene

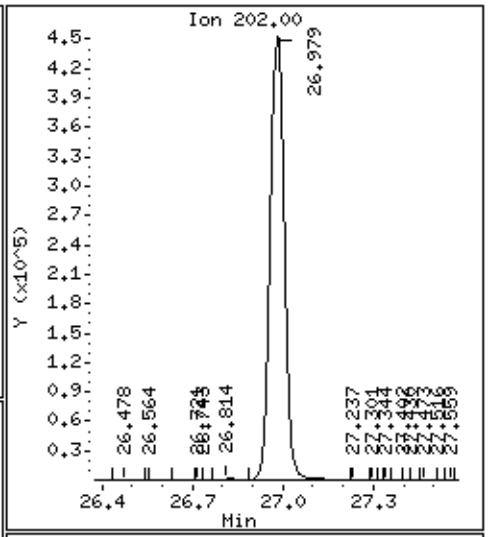
Concentration: 74.829 NG

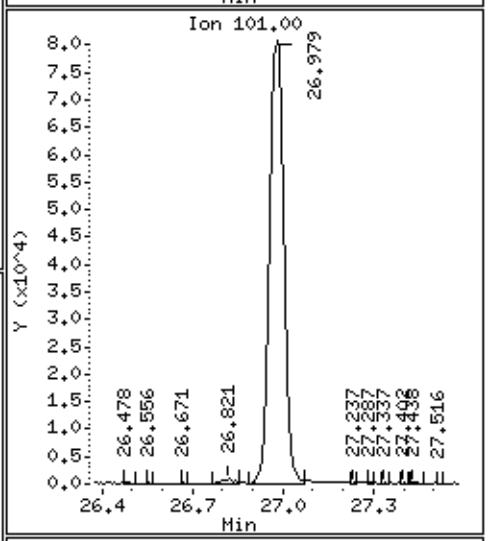


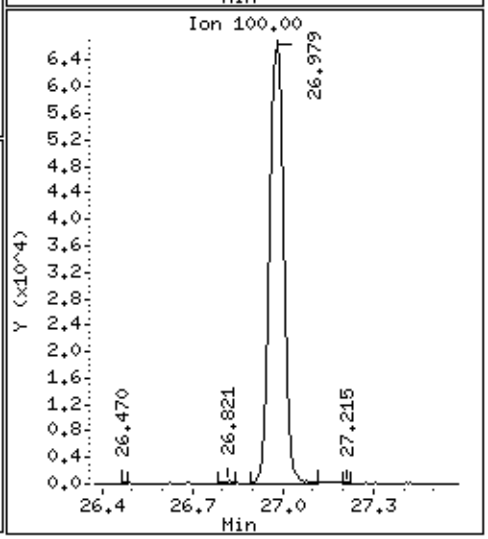












eurofins | Air Toxics

Client Sample ID: LCSD
Lab ID#: 1606272-19AA
EPA METHOD TO-17

File Name:	**6061507**	**Date of Extraction: NA**	**Date of Collection: NA**
Dil. Factor:	**1.00**		**Date of Analysis: 6/15/16 03:05 PM**

Compound	**%Recovery**	**Method Limits**
Naphthalene	107	70-130

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

Surrogates	**%Recovery**	**Method Limits**
Naphthalene-d8	94	50-150

Report Date: 15-Jun-2016 15:50

Eurofins Air Toxics Inc.

RECOVERY REPORT

Client Name:
Client SDG: 15jun16
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/15jun16.b/616z0614vi.m
Misc Info: 2516-245-20ml(9/7/16),2744-32-50(7/20/16)

SPIKE COMPOUND	CONC ADDED NG	CONC RECOVERED NG	% RECOVERED	LIMITS
3 Freon 114	139.80	154.40	110.44	70-130
6 Vinyl Chloride	51.100	58.297	114.08	70-130
7 1,3-Butadiene	44.200	44.430	100.52	70-130
9 Chloroethane	52.800	52.239	98.94	70-130
10 Isopentane	59.000	60.938	103.28	70-130
11 Trichlorofluoromet	112.40	118.91	105.79	70-130
14 1,1-Dichloroethene	79.300	83.639	105.47	70-130
15 Freon 113	153.30	164.83	107.52	70-130
18 Carbon Disulfide	62.300	46.503	74.64	70-130
19 2-Propanol	49.200	44.483	90.41	70-130
22 Methylene Chloride	69.500	68.461	98.51	70-130
25 trans-1,2-Dichloro	79.300	73.409	92.57	70-130
26 MTBE	72.100	81.249	112.69	70-130
28 Hexane	70.500	74.120	105.13	70-130
29 1,1-Dichloroethane	81.000	75.510	93.22	70-130
37 cis-1,2-Dichloroet	79.300	91.702	115.64	70-130
38 2-Butanone	59.000	68.512	116.12	70-130
44 Chloroform	97.700	101.10	103.48	70-130
45 1,1,1-Trichloroeth	109.10	106.42	97.55	70-130
46 Cyclohexane	68.800	67.765	98.50	70-130
47 Carbon Tetrachlori	125.80	125.62	99.85	70-130
48 Benzene	63.900	59.255	92.73	70-130
50 1,2-Dichloroethane	80.900	79.533	98.31	70-130
51 2,2,4-Trimethylpen	93.400	95.361	102.10	70-130
53 Heptane	82.000	82.376	100.46	70-130
56 Trichloroethene	107.50	102.74	95.57	70-130
58 Methyl Cyclohexane	80.300	82.025	102.15	70-130
59 1,2-Dichloropropan	92.400	98.091	106.16	70-130
60 1,4-Dioxane	72.100	73.926	102.53	70-130
65 4-Methyl-2-pentano	81.900	83.451	101.89	70-130
67 Toluene	75.400	76.656	101.67	70-130
70 1,1,2-Trichloroeth	109.10	111.83	102.50	70-130
71 Tetrachloroethene	135.70	139.51	102.80	70-130

SPIKE COMPOUND	CONC ADDED NG	CONC RECOVERED NG	% RECOVERED	LIMITS
72 2-Hexanone	81.900	82.618	100.88	70-130
74 1,2-Dibromoethane	153.70	168.32	109.51	70-130
81 Chlorobenzene	92.100	92.007	99.90	70-130
82 Ethyl Benzene	86.800	89.064	102.61	70-130
84 m,p-Xylene	86.800	88.519	101.98	70-130
88 o-Xylene	86.800	89.730	103.38	70-130
89 Styrene	85.200	87.792	103.04	70-130
91 Cumene	98.300	99.504	101.23	70-130
94 1,1,2,2-Tetrachlor	137.30	146.95	107.03	70-130
96 Propylbenzene	98.300	101.05	102.80	70-130
97 4-Ethyltoluene	98.300	99.442	101.16	70-130
98 1,3,5-Trimethylben	98.300	99.102	100.82	70-130
100 1,2,4-Trimethylben	98.300	99.664	101.39	70-130
101 1,3-Dichlorobenzen	120.30	120.87	100.48	70-130
102 1,4-Dichlorobenzen	120.30	119.92	99.69	70-130
105 1,2-Dichlorobenzen	120.30	119.40	99.26	70-130
106 1,2,4-Trichloroben	148.40	152.02	102.44	70-130
107 Hexachlorobutadien	213.30	213.26	99.98	70-130
109 Naphthalene	50.000	53.508	107.02	70-130
110 2-Methylnaphthalen	50.000	57.331	114.66	70-130
111 1-Methylnaphthalen	50.000	56.911	113.82	70-130
112 Acenaphthylene	50.000	58.691	117.38	70-130
113 Acenaphthene	50.000	55.572	111.14	70-130
114 Fluorene	50.000	58.162	116.32	60-140
115 Phenanthrene	50.000	51.477	102.95	60-140
116 Anthracene	50.000	54.323	108.65	60-140
117 Fluoranthene	50.000	59.992	119.98	60-140
118 Pyrene	50.000	59.904	119.81	60-140

SURROGATE COMPOUND	AMOUNT ADDED ng	AMOUNT RECOVERED ng	% RECOVERED	LIMITS
$ 49 1,2-Dichloroethane	25.000	22.222	88.89	50-150
$ 66 Toluene-d8	25.000	24.448	97.79	50-150
$ 108 Naphthalene-d8	25.000	23.416	93.66	50-150

Eurofins Air Toxics Inc.

EPA Method TO-17 GC/MS

Data file : /chem/msd6.i/15jun16.b/6061507.d
Lab Smp Id: VI VOC+PAH LCSD Client Smp ID: LCSD
Inj Date : 15-JUN-2016 15:05
Operator : CT Inst ID: msd6.i
Smp Info : ;VI VOC+PAH LCSD;LCSD
Misc Info : 2516-245-20ml(9/7/16),2744-32-50(7/20/16)
Comment :
Method : /chem/msd6.i/15jun16.b/616z0614vi.m
Meth Date : 15-Jun-2016 15:49 U5BT Quant Type: ISTD
Cal Date : 15-JUN-2016 11:01 Cal File: 6061502.d
Als bottle: 12 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		
4.308	4.301 (1.000)	130	134487	26.0000		80.00- 120.00	100.00
4.315	4.301 (1.000)	128	104047			47.94- 107.94	77.37
4.308	4.301 (1.000)	49	134572			68.24- 128.24	100.06
* 54 1,4-Difluorobenzene					CAS #: 540-36-3		
5.948	5.941 (1.000)	114	571553	23.0000		80.00- 120.00	100.00
5.948	5.941 (1.000)	88	87742			0.00- 45.46	15.35
* 79 Chlorobenzene-d5					CAS #: 3114-55-4		
9.859	9.852 (1.000)	117	531838	24.0000		80.00- 120.00	100.00
9.859	9.852 (1.000)	82	267261			19.06- 79.06	50.25
* 92 Bromofluorobenzene					CAS #: 460-00-4		
11.414	11.414 (1.000)	174	392195	36.0000		80.00- 120.00	100.00
11.407	11.406 (1.000)	95	412020			74.19- 134.19	105.06
11.414	11.414 (1.000)	176	384639			67.61- 127.61	98.07
$ 49 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
5.232	5.225 (0.880)	65	65512	22.2222	22.222	80.00- 120.00	100.00

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

$  49 1,2-Dichloroethane-d4 (continued)
  5.232   5.225 (0.880)    67     34300                    21.94-  81.94    52.36
-------------------------------------------------------------------------------
$  66 Toluene-d8                                   CAS #: 2037-26-5
  7.954   7.947 (0.807)    98    242736 24.4483   24.448  80.00- 120.00   100.00
  7.954   7.947 (0.807)    70     24017                     0.00-  39.97     9.89
  7.954   7.947 (0.807)   100    158175                    35.51-  95.51    65.16
-------------------------------------------------------------------------------
$ 108 Naphthalene-d8                               CAS #: 1146-65-2
 15.683  15.690 (1.374)   136    475543 23.4155   23.416  80.00- 120.00   100.00
 15.683  15.690 (1.374)   108     41995                     0.00-  38.72     8.83
-------------------------------------------------------------------------------
    3 Freon 114                                    CAS #: 76-14-2
  1.283   1.283 (0.298)   135    387544 154.402   154.40  80.00- 120.00   100.00
  1.283   1.283 (0.298)   137    125608                     2.20-  62.20    32.41
-------------------------------------------------------------------------------
    6 Vinyl Chloride                               CAS #: 75-01-4
  1.381   1.395 (0.320)    62    187600 58.2973   58.297  80.00- 120.00   100.00
  1.381   1.395 (0.320)    64     85615                    13.62-  73.62    45.64
-------------------------------------------------------------------------------
    7 1,3-Butadiene                                CAS #: 106-99-0
  1.395   1.395 (0.324)    54    128210 44.4295   44.430  80.00- 120.00   100.00
  1.395   1.395 (0.324)    39    197049                   117.53- 177.53   153.69
-------------------------------------------------------------------------------
    9 Chloroethane                                 CAS #: 75-00-3
  1.647   1.646 (0.382)    64     81832 52.2392   52.239  80.00- 120.00   100.00
  1.647   1.660 (0.382)    66     25314                     1.59-  61.59    30.93
  1.647   1.646 (0.382)    49     22359                     0.00-  57.55    27.32
-------------------------------------------------------------------------------
   10 Isopentane                                   CAS #: 78-78-4
  1.689   1.688 (0.392)    57    146344 60.9376   60.938  80.00- 120.00   100.00
  1.689   1.688 (0.392)    43    200596                   107.36- 167.36   137.07
-------------------------------------------------------------------------------
   11 Trichlorofluoromethane/Fr11                  CAS #: 75-69-4
  1.814   1.814 (0.421)   101    512544 118.910   118.91  80.00- 120.00   100.00
  1.814   1.814 (0.421)   103    332693                    35.47-  95.47    64.91
-------------------------------------------------------------------------------
   15 Freon 113                                    CAS #: 76-13-1
  2.173   2.173 (0.504)   151    454546 164.827   164.83  80.00- 120.00   100.00
  2.173   2.173 (0.504)   153    294634                    34.42-  94.42    64.82
  2.173   2.173 (0.504)   101    481172                    75.78- 135.78   105.86
-------------------------------------------------------------------------------
   14 1,1-Dichloroethene                           CAS #: 75-35-4
  2.181   2.180 (0.506)    98    145626 83.6388   83.639  80.00- 120.00   100.00
  2.181   2.180 (0.506)    96    228548                   128.07- 188.07   156.94
  2.181   2.180 (0.506)    61    343323                   203.73- 263.73   235.76
-------------------------------------------------------------------------------
```

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (ng)	FINAL (NG)	TARGET RANGE	RATIO
18 Carbon Disulfide					CAS #: 75-15-0		
2.360	2.359 (0.548)	76	512425	46.5034	46.503	80.00- 120.00	100.00
19 2-Propanol					CAS #: 67-63-0		
2.274	2.274 (0.528)	45	280098	44.4826	44.483	80.00- 120.00	100.00(a)
2.274	2.274 (0.528)	43	57495			0.00- 50.21	20.53
2.274	2.266 (0.528)	59	11702			0.00- 34.19	4.18
22 Methylene Chloride					CAS #: 75-09-2		
2.575	2.574 (0.598)	49	267745	68.4613	68.461	80.00- 120.00	100.00
2.575	2.574 (0.598)	84	227940			55.25- 115.25	85.13
2.575	2.567 (0.598)	51	82667			0.48- 60.48	30.88
25 trans-1,2-Dichloroethene					CAS #: 156-60-5		
2.818	2.818 (0.654)	98	122872	73.4095	73.409	80.00- 120.00	100.00
2.818	2.818 (0.654)	61	255737			178.67- 238.67	208.13
2.818	2.818 (0.654)	96	193542			127.45- 187.45	157.52
26 MTBE					CAS #: 1634-04-4		
2.797	2.796 (0.649)	73	511166	81.2493	81.249	80.00- 120.00	100.00
2.797	2.796 (0.649)	57	109743			0.00- 51.21	21.47
2.797	2.789 (0.649)	41	104665			0.00- 50.32	20.48
28 Hexane					CAS #: 110-54-3		
3.105	3.097 (0.721)	57	300331	74.1197	74.120	80.00- 120.00	100.00
3.105	3.097 (0.721)	43	184599			30.98- 90.98	61.47
3.105	3.097 (0.721)	86	47602			0.00- 45.79	15.85
29 1,1-Dichloroethane					CAS #: 75-34-3		
3.269	3.269 (0.759)	63	303182	75.5097	75.510	80.00- 120.00	100.00
3.269	3.269 (0.759)	65	97957			1.92- 61.92	32.31
37 cis-1,2-Dichloroethene					CAS #: 156-59-2		
3.971	3.964 (0.922)	98	165769	91.7021	91.702	80.00- 120.00	100.00
3.971	3.964 (0.922)	96	254946			125.20- 185.20	153.80
3.971	3.964 (0.922)	61	314288			158.24- 218.24	189.59
38 2-Butanone					CAS #: 78-93-3		
3.936	3.921 (0.914)	72	117036	68.5124	68.512	80.00- 120.00	100.00
3.936	3.921 (0.914)	43	466959			364.90- 424.90	398.99
3.936	3.921 (0.914)	57	41779			4.40- 64.40	35.70
44 Chloroform					CAS #: 67-66-3		
4.487	4.473 (1.042)	83	429501	101.096	101.10	80.00- 120.00	100.00
4.487	4.473 (1.042)	85	279777			35.45- 95.45	65.14

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (ng)	FINAL (NG)	TARGET RANGE	RATIO
46 Cyclohexane					CAS #: 110-82-7		
4.831	4.824 (0.812)	84	271238	67.7651	67.765	80.00- 120.00	100.00
4.831	4.816 (0.812)	56	308239			82.98- 142.98	113.64
4.831	4.816 (0.812)	41	173523			32.54- 92.54	63.97
45 1,1,1-Trichloroethane					CAS #: 71-55-6		
4.716	4.709 (0.793)	97	431054	106.422	106.42	80.00- 120.00	100.00
4.709	4.709 (0.792)	99	279835			34.83- 94.83	64.92
47 Carbon Tetrachloride					CAS #: 56-23-5		
4.960	4.952 (0.834)	119	472321	125.615	125.62	80.00- 120.00	100.00
4.960	4.945 (0.834)	117	488697			73.53- 133.53	103.47
51 2,2,4-Trimethylpentane					CAS #: 540-84-1		
5.490	5.483 (0.923)	57	970980	95.3609	95.361	80.00- 120.00	100.00
5.490	5.483 (0.923)	56	303938			1.12- 61.12	31.30
5.490	5.483 (0.923)	41	275277			0.00- 57.96	28.35
48 Benzene					CAS #: 71-43-2		
5.254	5.246 (0.883)	78	652083	59.2551	59.255	80.00- 120.00	100.00
5.254	5.246 (0.883)	77	152844			0.00- 53.50	23.44
50 1,2-Dichloroethane					CAS #: 107-06-2		
5.354	5.346 (0.900)	62	278261	79.5335	79.533	80.00- 120.00	100.00
5.354	5.346 (0.900)	64	92150			2.93- 62.93	33.12
53 Heptane					CAS #: 142-82-5		
5.791	5.783 (0.974)	71	213470	82.3756	82.376	80.00- 120.00	100.00
5.791	5.783 (0.974)	43	372492			143.29- 203.29	174.49
5.791	5.783 (0.974)	57	193659			61.40- 121.40	90.72
56 Trichloroethene					CAS #: 79-01-6		
6.264	6.256 (1.053)	95	339849	102.738	102.74	80.00- 120.00	100.00
6.264	6.256 (1.053)	130	376350			81.46- 141.46	110.74
6.264	6.256 (1.053)	97	220816			34.92- 94.92	64.97
58 Methyl Cyclohexane					CAS #: 108-87-2		
6.586	6.579 (1.107)	83	400666	82.0247	82.025	80.00- 120.00	100.00
6.586	6.571 (1.107)	98	180007			15.14- 75.14	44.93
6.586	6.571 (1.107)	55	306026			45.62- 105.62	76.38
59 1,2-Dichloropropane					CAS #: 78-87-5		
6.615	6.607 (1.112)	63	235535	98.0914	98.091	80.00- 120.00	100.00
6.615	6.607 (1.112)	62	163500			38.13- 98.13	69.42
6.586	6.579 (1.107)	41	288203			92.30- 152.30	122.36

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (ng)	FINAL (NG)	TARGET RANGE	RATIO
60 1,4-Dioxane					CAS #: 123-91-1		
6.729	6.722 (1.131)	88	161807	73.9263	73.926	80.00- 120.00	100.00
6.729	6.729 (1.131)	58	102667			31.73- 91.73	63.45
6.736	6.722 (1.132)	57	52378			1.20- 61.20	32.37
65 4-Methyl-2-pentanone					CAS #: 108-10-1		
7.832	7.825 (1.317)	58	179703	83.4510	83.451	80.00- 120.00	100.00
7.832	7.825 (1.317)	43	453883			221.14- 281.14	252.57
7.832	7.825 (1.317)	85	90295			20.58- 80.58	50.25
67 Toluene					CAS #: 108-88-3		
8.047	8.040 (0.816)	91	843336	76.6564	76.656	80.00- 120.00	100.00
8.047	8.040 (0.816)	92	497942			28.32- 88.32	59.04
70 1,1,2-Trichloroethane					CAS #: 79-00-5		
8.649	8.641 (1.454)	97	302398	111.829	111.83	80.00- 120.00	100.00
8.649	8.641 (1.454)	99	190188			32.57- 92.57	62.89
8.649	8.641 (1.454)	83	248023			50.93- 110.93	82.02
71 Tetrachloroethene					CAS #: 127-18-4		
8.728	8.720 (0.885)	166	505443	139.506	139.51	80.00- 120.00	100.00
8.728	8.720 (0.885)	129	363997			41.03- 101.03	72.02
8.728	8.720 (0.885)	131	350024			38.99- 98.99	69.25
72 2-Hexanone					CAS #: 591-78-6		
8.957	8.949 (0.908)	58	231313	82.6177	82.618	80.00- 120.00	100.00
8.957	8.949 (0.908)	43	427741			155.38- 215.38	184.92
8.957	8.949 (0.908)	100	51857			0.00- 52.71	22.42
74 1,2-Dibromoethane					CAS #: 106-93-4		
9.236	9.236 (0.937)	107	478903	168.315	168.32	80.00- 120.00	100.00
9.236	9.236 (0.937)	109	457756			65.47- 125.47	95.58
81 Chlorobenzene					CAS #: 108-90-7		
9.895	9.895 (1.004)	112	737681	92.0069	92.007	80.00- 120.00	100.00
9.895	9.895 (1.004)	114	238549			2.20- 62.20	32.34
9.895	9.895 (1.004)	77	378988			20.93- 80.93	51.38
82 Ethyl Benzene					CAS #: 100-41-4		
10.053	10.045 (1.020)	106	366961	89.0641	89.064	80.00- 120.00	100.00
10.053	10.045 (1.020)	91	1115567			272.45- 332.45	304.00
84 m,p-Xylene					CAS #: 108-38-3		
10.232	10.225 (1.038)	106	463966	88.5192	88.519	80.00- 120.00	100.00
10.232	10.225 (1.038)	91	901711			164.06- 224.06	194.35

```
                                        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  10.712 (0.938)   106    445950 89.7299   89.730  80.00- 120.00   100.00
 10.712  10.712 (0.938)    91    910723                  174.12- 234.12   204.22
-------------------------------------------------------------------------------
   89 Styrene                                         CAS #: 100-42-5
 10.740  10.740 (0.941)   104    723058 87.7921   87.792  80.00- 120.00   100.00
 10.740  10.740 (0.941)    78    336917                   16.31-  76.31    46.60
-------------------------------------------------------------------------------
   91 Cumene                                          CAS #: 98-82-8
 11.199  11.199 (0.981)   105   1345502 99.5044   99.504  80.00- 120.00   100.00
 11.199  11.199 (0.981)   120    369864                    0.00-  57.22    27.49
 11.199  11.199 (0.981)    51    116635                    0.00-  38.43     8.67
-------------------------------------------------------------------------------
   94 1,1,2,2-Tetrachloroethane                       CAS #: 79-34-5
 11.622  11.621 (1.018)    83    631949 146.950   146.95  80.00- 120.00   100.00
 11.622  11.621 (1.018)    85    411033                   35.83-  95.83    65.04
-------------------------------------------------------------------------------
   96 Propylbenzene                                   CAS #: 103-65-1
 11.736  11.736 (1.028)    91   1597245 101.050   101.05  80.00- 120.00   100.00
 11.736  11.736 (1.028)   120    402044                    0.00-  55.53    25.17
 11.736  11.736 (1.028)   105     62039                    0.00-  33.92     3.88
-------------------------------------------------------------------------------
   97 4-Ethyltoluene                                  CAS #: 622-96-8
 11.901  11.908 (1.043)   120    421736 99.4416   99.442  80.00- 120.00   100.00
 11.901  11.908 (1.043)   105   1366814                  298.20- 358.20   324.09
-------------------------------------------------------------------------------
   98 1,3,5-Trimethylbenzene                          CAS #: 108-67-8
 11.987  11.994 (1.050)   120    600049 99.1021   99.102  80.00- 120.00   100.00
 11.987  11.994 (1.050)   105   1187139                  167.68- 227.68   197.84
-------------------------------------------------------------------------------
  100 1,2,4-Trimethylbenzene                          CAS #: 95-63-6
 12.460  12.459 (1.092)   120    564076 99.6639   99.664  80.00- 120.00   100.00
 12.460  12.459 (1.092)   105   1292374                  185.14- 245.14   229.11
-------------------------------------------------------------------------------
  101 1,3-Dichlorobenzene                             CAS #: 541-73-1
 12.782  12.789 (1.120)   146    934491 120.872   120.87  80.00- 120.00   100.00
 12.782  12.789 (1.120)   148    596350                   34.46-  94.46    63.82
 12.782  12.782 (1.120)   111    348463                    7.45-  67.45    37.29
-------------------------------------------------------------------------------
  102 1,4-Dichlorobenzene                             CAS #: 106-46-7
 12.925  12.925 (1.132)   146    930130 119.921   119.92  80.00- 120.00   100.00
 12.925  12.925 (1.132)   148    597468                   33.85-  93.85    64.23
 12.918  12.925 (1.132)   111    334994                    6.02-  66.02    36.02
-------------------------------------------------------------------------------
  105 1,2-Dichlorobenzene                             CAS #: 95-50-1
 13.362  13.362 (1.171)   146    897506 119.406   119.40  80.00- 120.00   100.00
```

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (ng)	FINAL (NG)	TARGET RANGE	RATIO
105 1,2-Dichlorobenzene (continued)							
13.362	13.362 (1.171)	148	574929			34.29- 94.29	64.06
13.355	13.362 (1.170)	111	346803			8.63- 68.63	38.64
106 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
15.411	15.418 (1.350)	180	917505	152.023	152.02	80.00- 120.00	100.00
15.411	15.418 (1.350)	182	862708			64.63- 124.63	94.03
107 Hexachlorobutadiene					CAS #: 87-68-3		
15.626	15.633 (1.369)	225	672148	213.265	213.26	80.00- 120.00	100.00
15.626	15.633 (1.369)	223	418764			32.03- 92.03	62.30
109 Naphthalene					CAS #: 91-20-3		
15.726	15.726 (1.378)	128	1167148	53.5081	53.508	80.00- 120.00	100.00
15.726	15.726 (1.378)	127	151549			0.00- 42.99	12.98
110 2-Methylnaphthalene					CAS #: 91-57-6		
17.173	17.180 (1.505)	142	826689	57.3310	57.331	80.00- 120.00	100.00
17.173	17.180 (1.505)	141	716021			56.24- 116.24	86.61
17.173	17.180 (1.505)	115	238172			0.00- 58.81	28.81
111 1-Methylnaphthalene					CAS #: 90-12-0		
17.395	17.395 (1.524)	142	750680	56.9114	56.911	80.00- 120.00	100.00
17.395	17.395 (1.524)	141	680803			60.38- 120.38	90.69
17.388	17.395 (1.523)	115	233305			0.56- 60.56	31.08
112 Acenaphthylene					CAS #: 208-96-8		
19.243	19.243 (1.686)	152	1380098	58.6914	58.691	80.00- 120.00	100.00
19.243	19.243 (1.686)	151	273571			0.00- 49.78	19.82
19.243	19.243 (1.686)	153	181767			0.00- 43.07	13.17
113 Acenaphthene					CAS #: 83-32-9		
19.508	19.508 (1.709)	154	624310	55.5725	55.572	80.00- 120.00	100.00
19.508	19.508 (1.709)	152	325361			21.85- 81.85	52.12
19.508	19.508 (1.709)	153	678348			79.23- 139.23	108.66
114 Fluorene					CAS #: 86-73-7		
20.654	20.661 (1.810)	166	549145	58.1625	58.162	80.00- 120.00	100.00
20.654	20.661 (1.810)	165	526330			65.14- 125.14	95.85
115 Phenanthrene					CAS #: 85-01-8		
22.832	22.839 (2.000)	178	1205556	51.4770	51.477	80.00- 120.00	100.00
22.832	22.839 (2.000)	176	222125			0.00- 48.56	18.43
22.832	22.839 (2.000)	179	181992			0.00- 45.19	15.10
116 Anthracene					CAS #: 120-12-7		
22.939	22.946 (2.010)	178	1089163	54.3228	54.323	80.00- 120.00	100.00

RT	EXP RT	(REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (ng)	FINAL (NG)	TARGET RANGE	RATIO
116 Anthracene (continued)								
22.939	22.946	(2.010)	176	193244			0.00- 47.98	17.74
22.939	22.946	(2.010)	179	165712			0.00- 45.18	15.21
117 Fluoranthene						CAS #: 206-44-0		
26.119	26.126	(2.288)	202	1004754	59.9922	59.992	80.00- 120.00	100.00
26.112	26.126	(2.288)	101	154747			0.00- 45.14	15.40
118 Pyrene						CAS #: 129-00-0		
26.979	26.986	(2.364)	202	1027208	59.9041	59.904	80.00- 120.00	100.00
26.972	26.979	(2.363)	101	188500			0.00- 48.11	18.35
26.972	26.979	(2.363)	100	149725			0.00- 44.51	14.58

QC Flag Legend

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

Report Date: 15-Jun-2016 15:50

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd6.i
Lab File ID: 6061507.d
Lab Smp Id: VI VOC+PAH LCSD
Analysis Type: VOA
Quant Type: ISTD
Operator: CT
Method File: /chem/msd6.i/15jun16.b/616z0614vi.m
Misc Info: 2516-245-20ml(9/7/16),2744-32-50(7/20/16)

Calibration Date: 15-JUN-2016
Calibration Time: 12:15
Client Smp ID: LCSD
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
40 Bromochloromethan	155560	93336	217784	134487	-13.55
54 1,4-Difluorobenze	608468	365081	851855	571553	-6.07
79 Chlorobenzene-d5	578034	346820	809248	531838	-7.99
92 Bromofluorobenzen	417214	250328	584100	392195	-6.00

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
40 Bromochloromethan	4.30	3.97	4.63	4.31	0.17
54 1,4-Difluorobenze	5.94	5.61	6.27	5.95	0.12
79 Chlorobenzene-d5	9.85	9.52	10.18	9.86	0.07
92 Bromofluorobenzen	11.41	11.08	11.74	11.41	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.

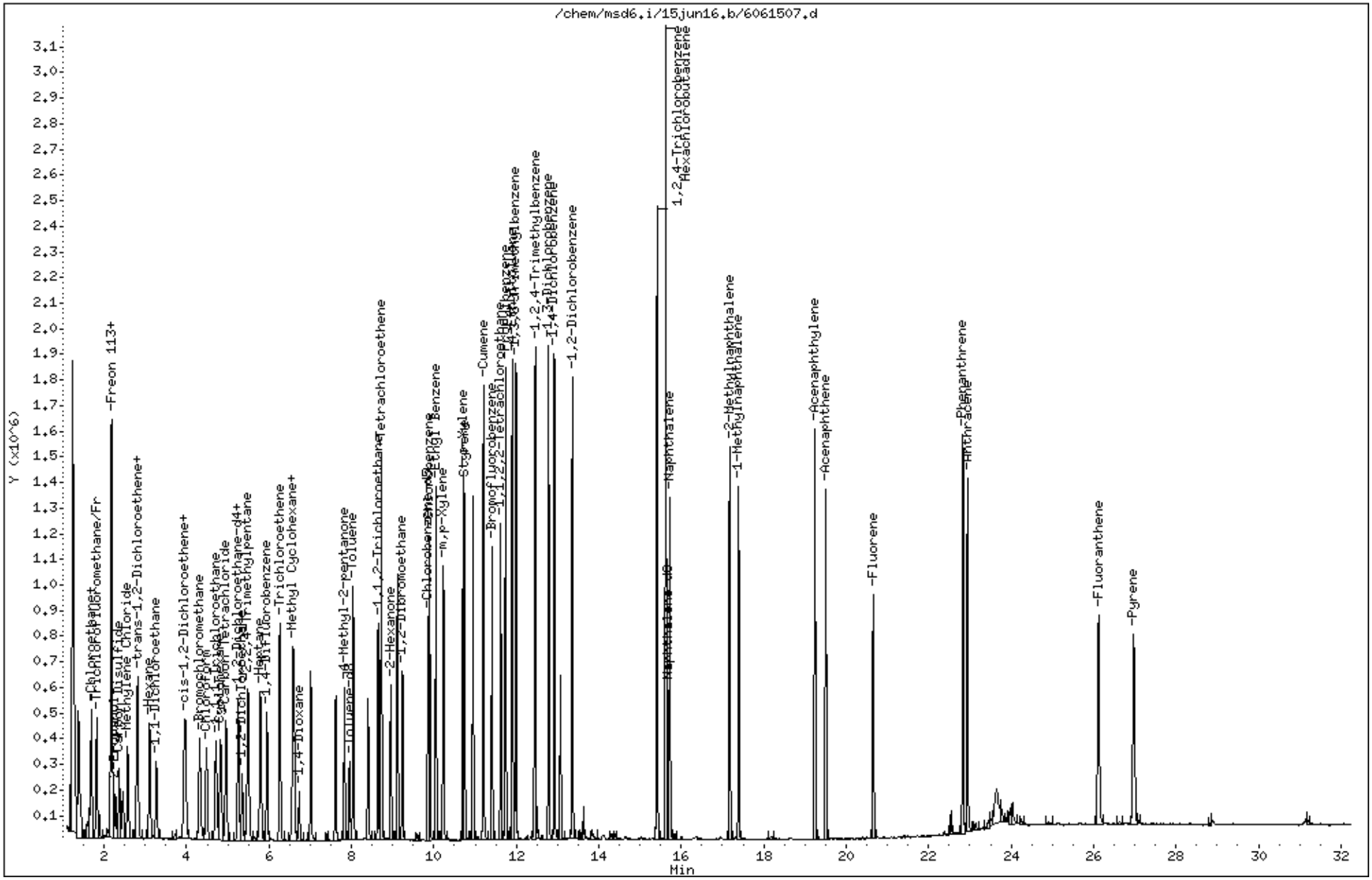
Data File: /chem/msd6.i/15jun16.b/6061507.d
Date : 15-JUN-2016 15:05
Client ID: LCSD
Sample Info: ;VI VOC+PAH LCSD;LCSD

Instrument: msd6.i

Operator: CT

Column phase: RTx-624

Column diameter: 0.53



Data File: /chem/msd6.i/15jun16.b/6061507.d

Date : 15-JUN-2016 15:05

Client ID: LCSD

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCSD;LCSD

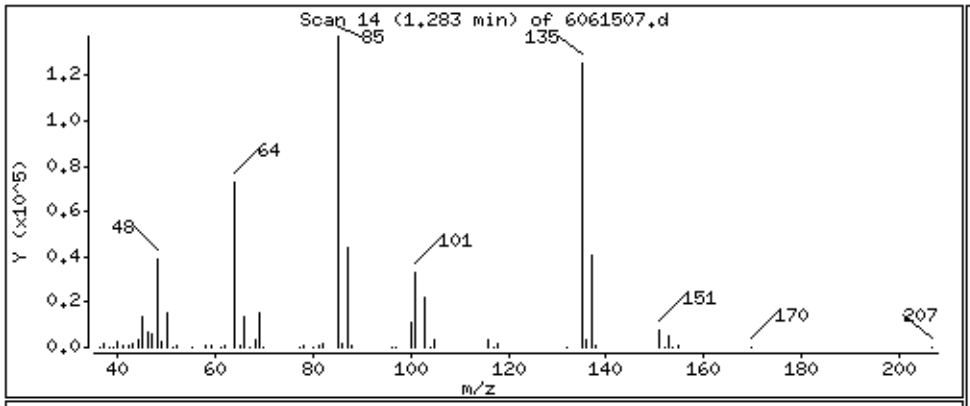
Operator: CT

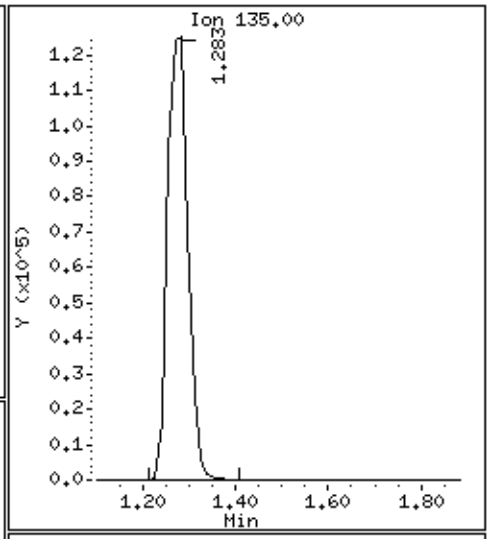
Column phase: RTx-624

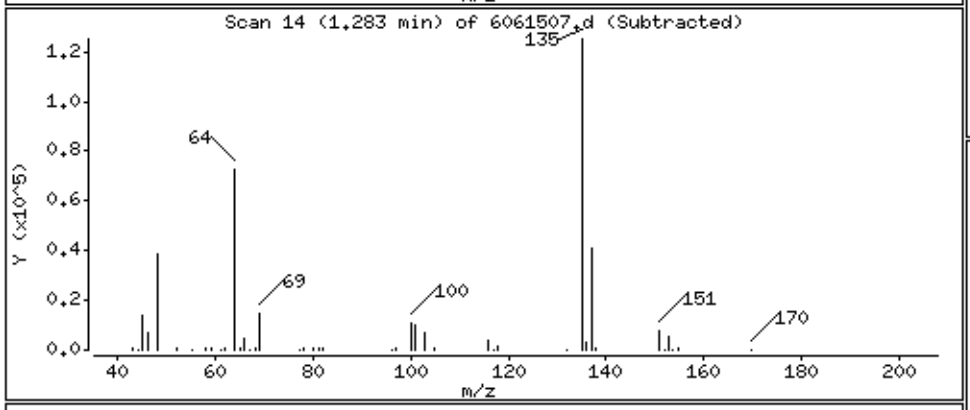
Column diameter: 0.53

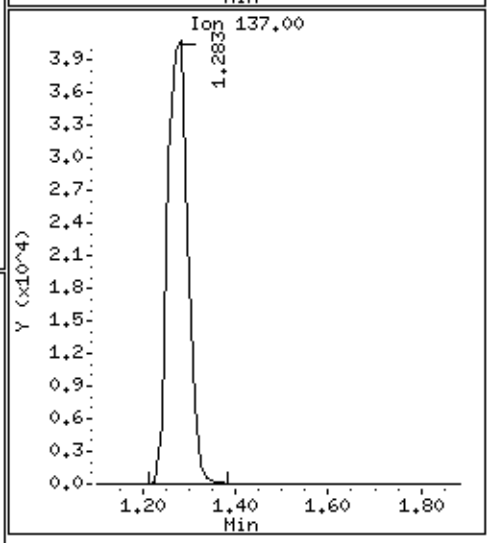
3 Freon 114

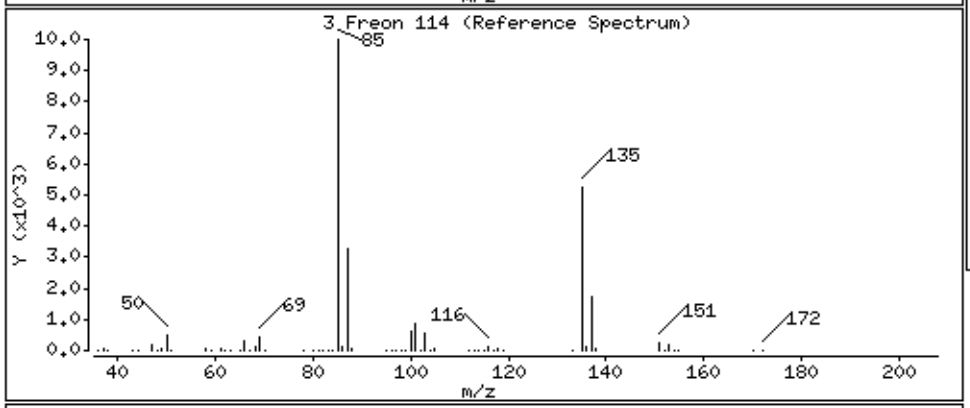
Concentration: 154.40 NG

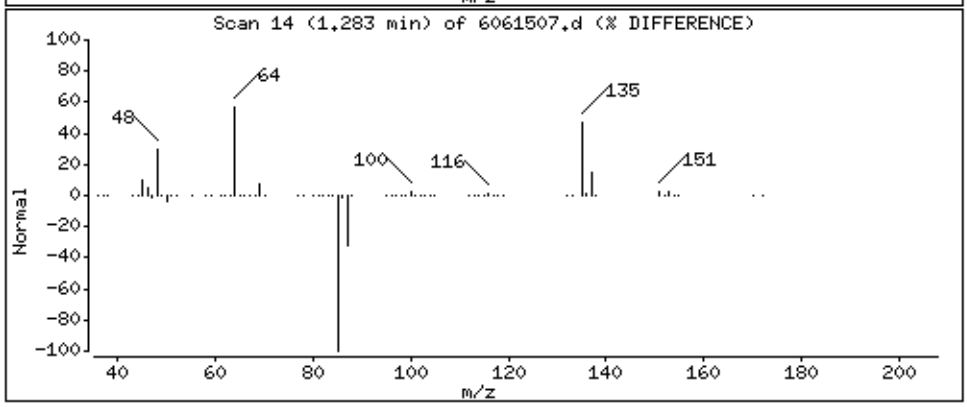












Data File: /chem/msd6.i/15jun16.b/6061507.d

Date : 15-JUN-2016 15:05

Client ID: LCSD

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCSD;LCSD

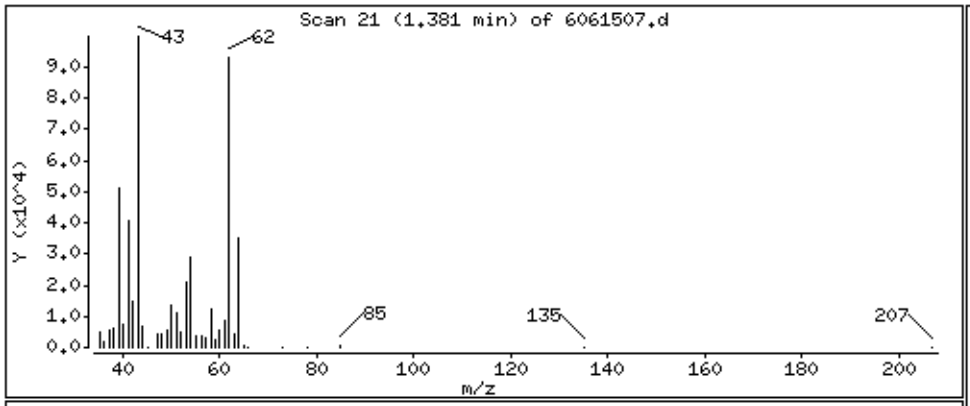
Operator: CT

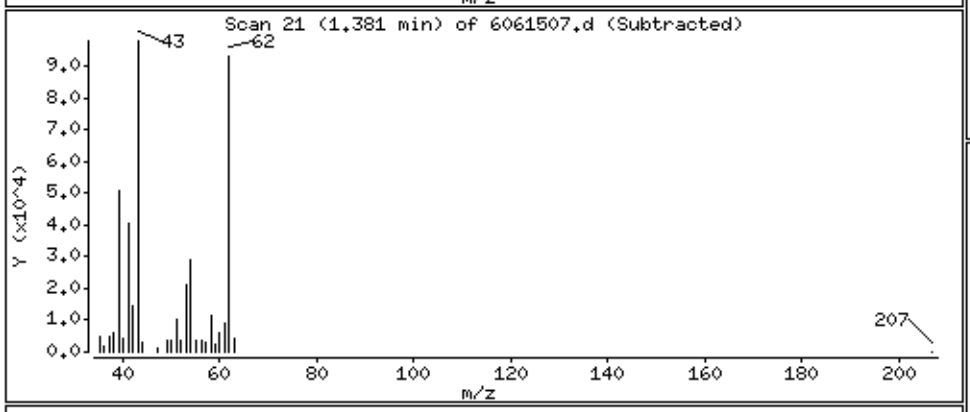
Column phase: RTx-624

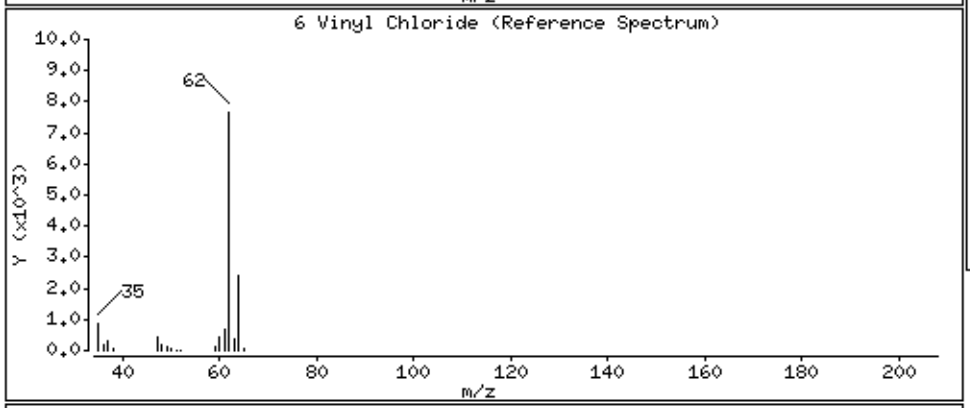
Column diameter: 0.53

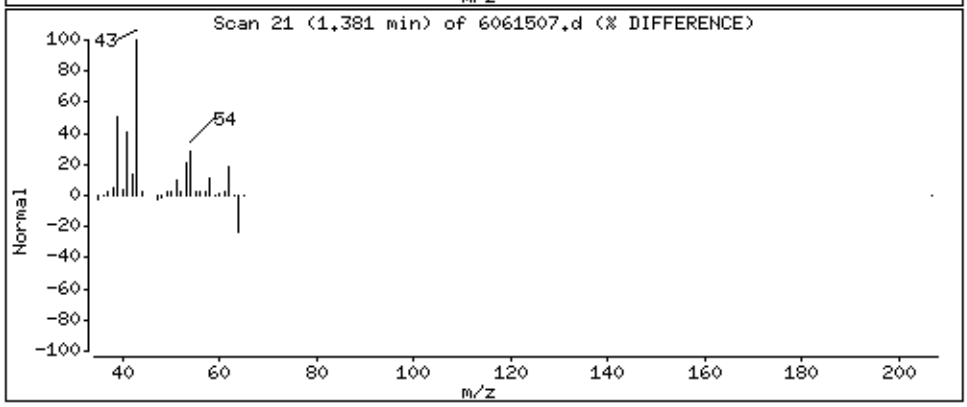
6 Vinyl Chloride

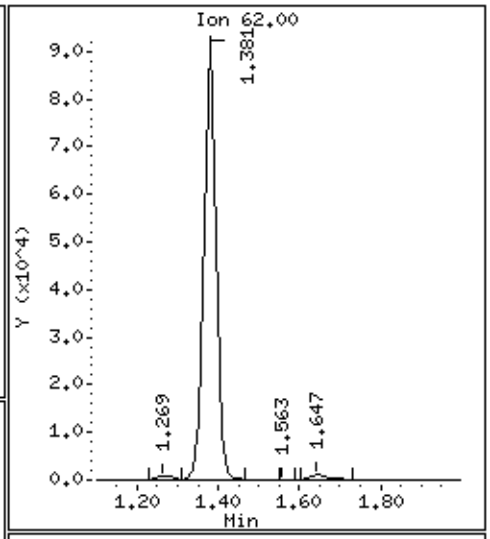
Concentration: 58.297 NG

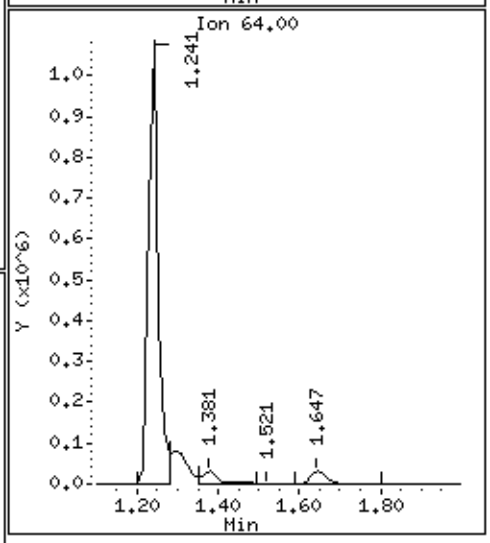












Data File: /chem/msd6.i/15jun16.b/6061507.d

Date : 15-JUN-2016 15:05

Client ID: LCSD

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCSD;LCSD

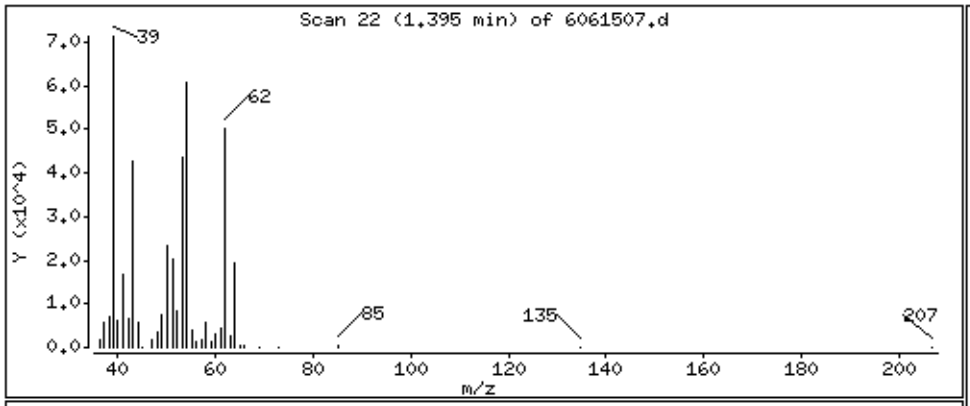
Operator: CT

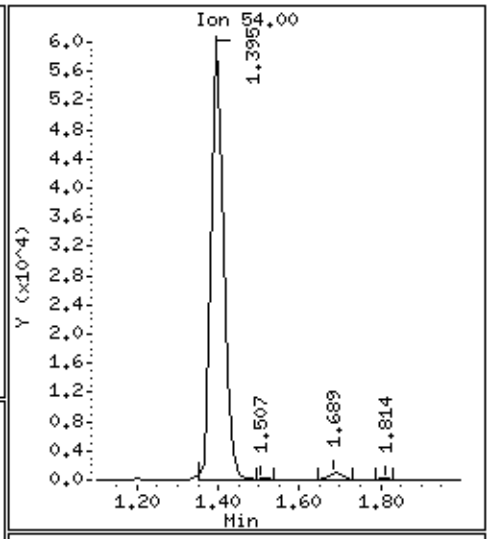
Column phase: RTx-624

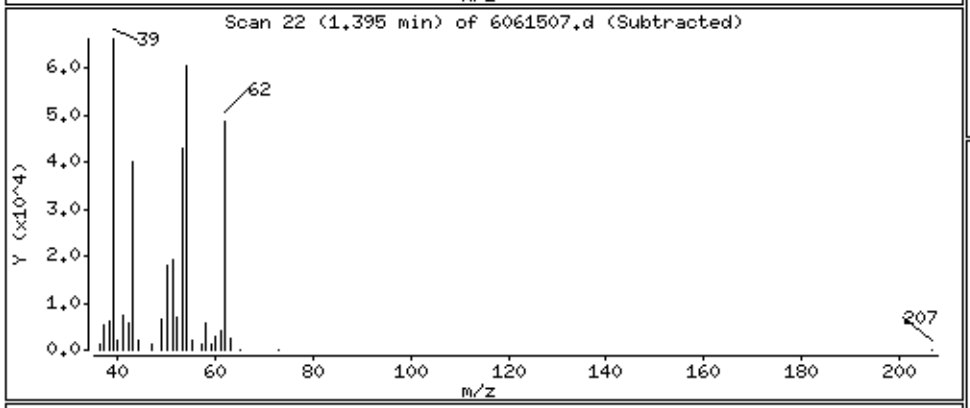
Column diameter: 0.53

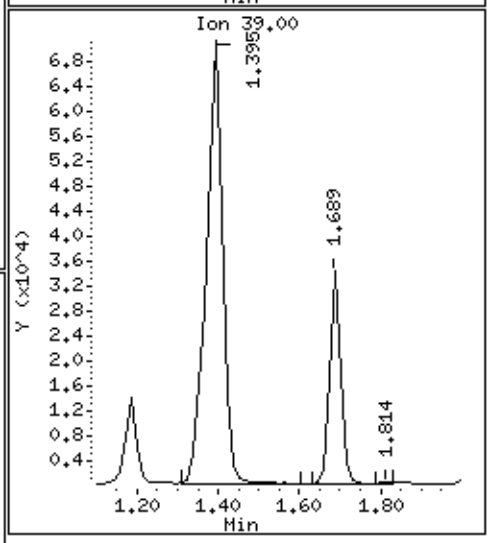
7 1,3-Butadiene

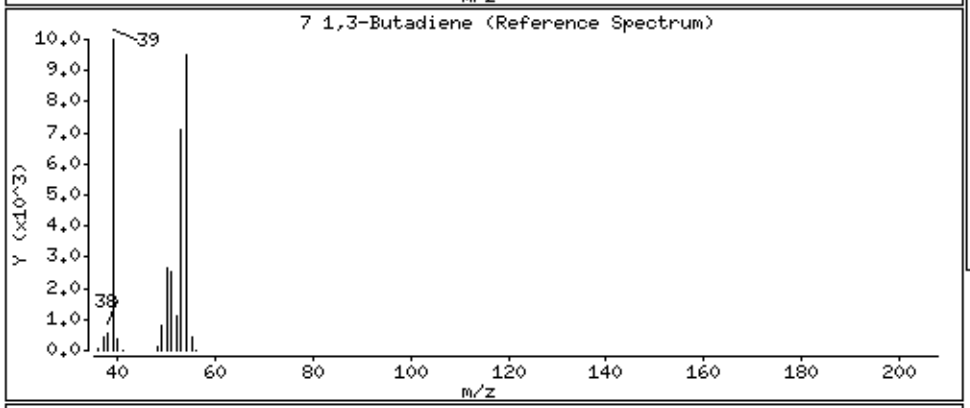
Concentration: 44.430 NG

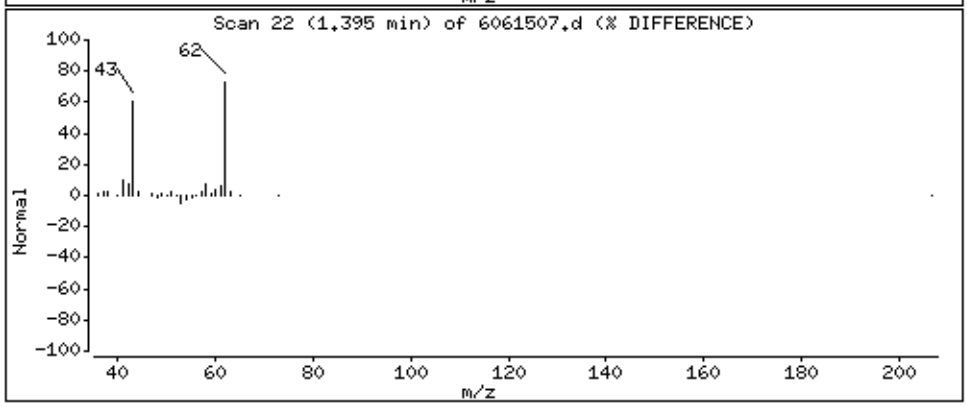












Data File: /chem/msd6.i/15jun16.b/6061507.d

Date : 15-JUN-2016 15:05

Client ID: LCSD

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCSD;LCSD

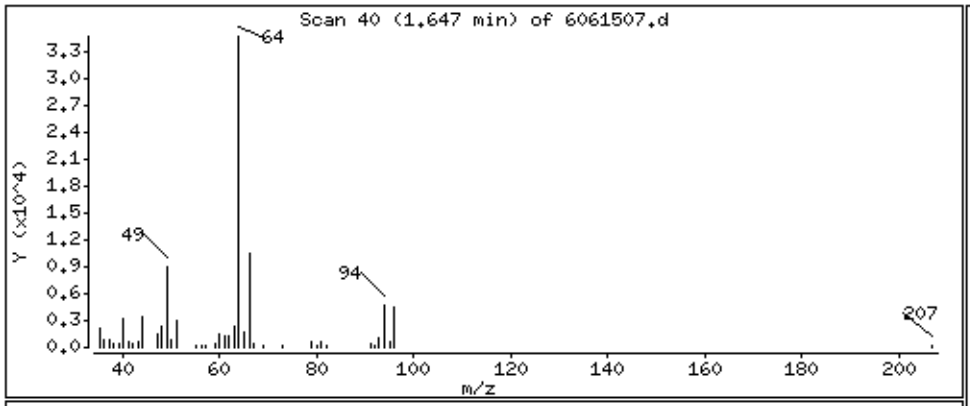
Operator: CT

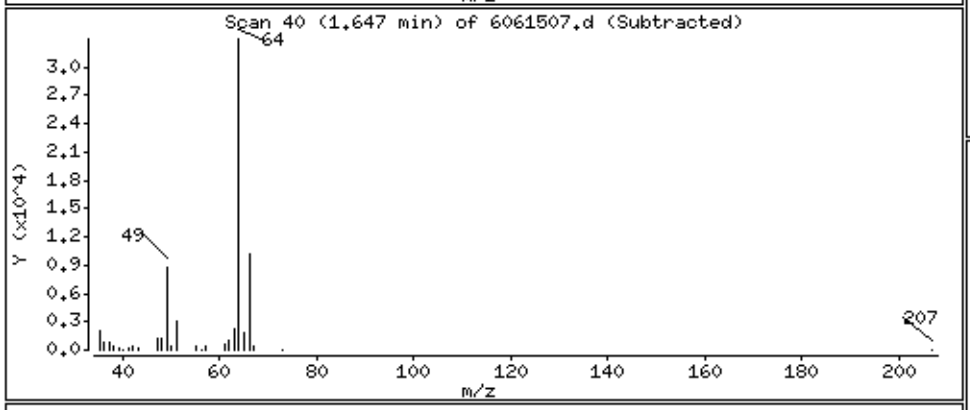
Column phase: RTx-624

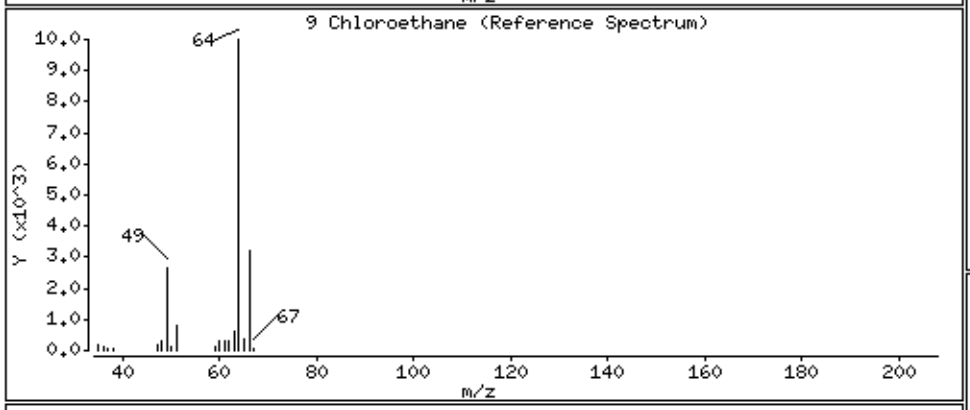
Column diameter: 0.53

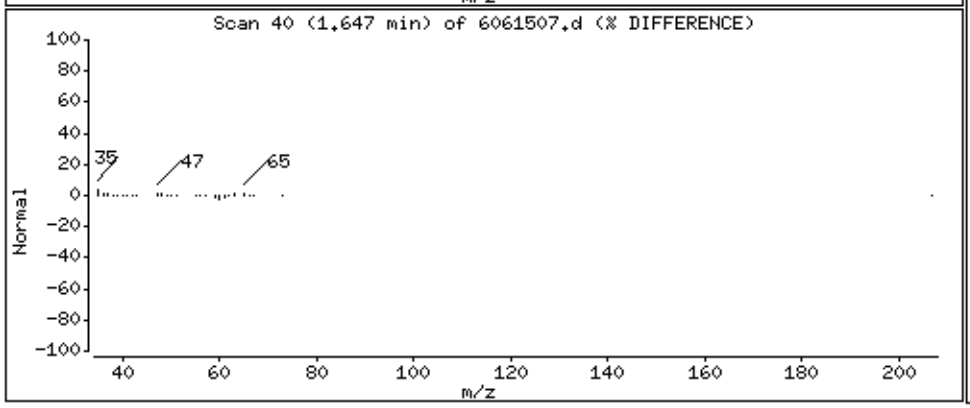
9 Chloroethane

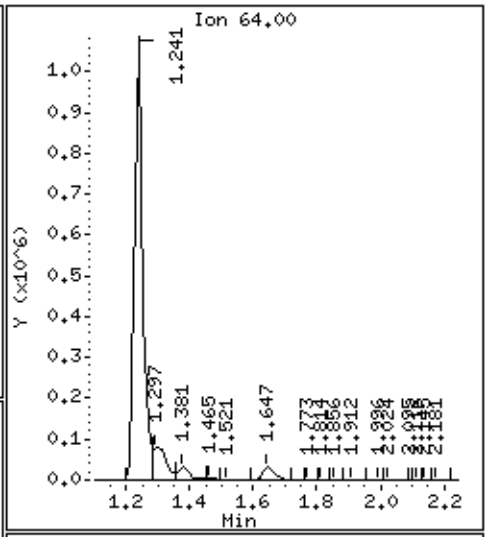
Concentration: 52.239 NG

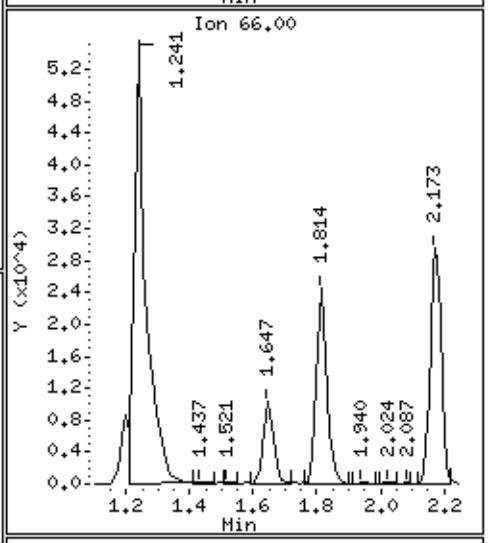


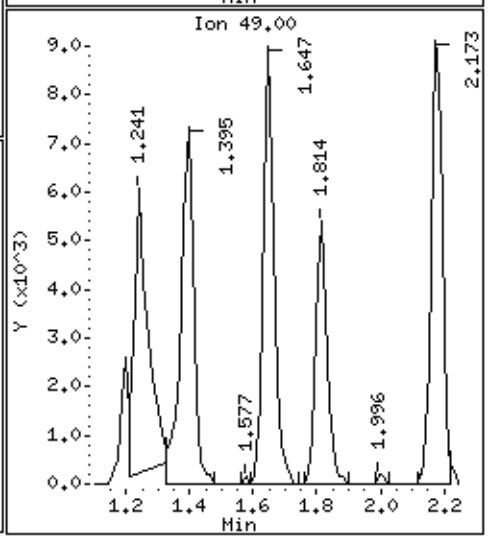












Data File: /chem/msd6.i/15jun16.b/6061507.d

Date : 15-JUN-2016 15:05

Client ID: LCSD

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCSD;LCSD

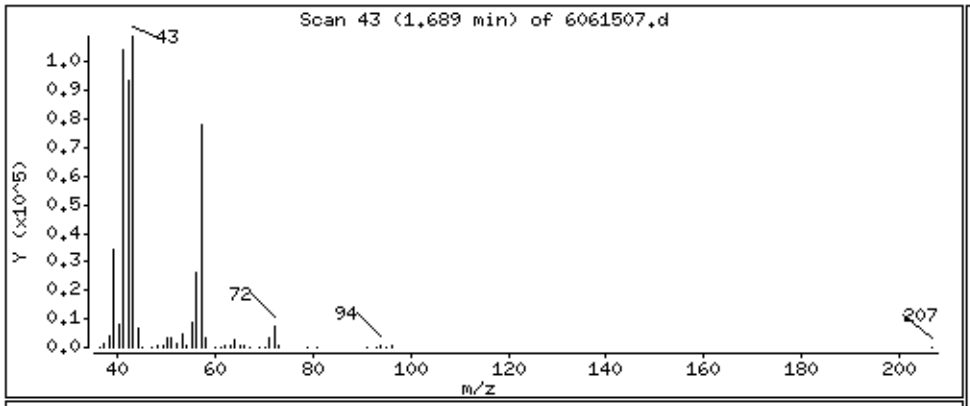
Operator: CT

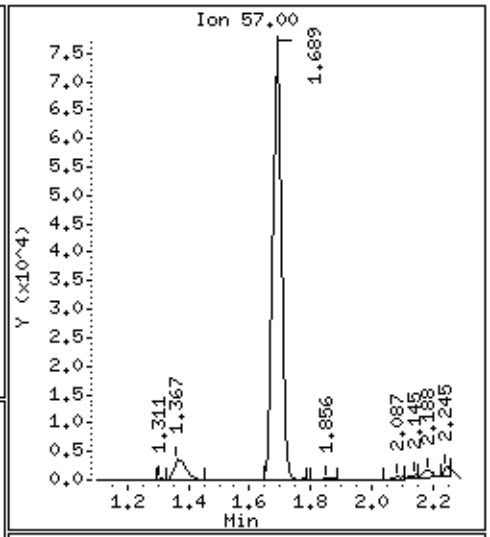
Column phase: RTx-624

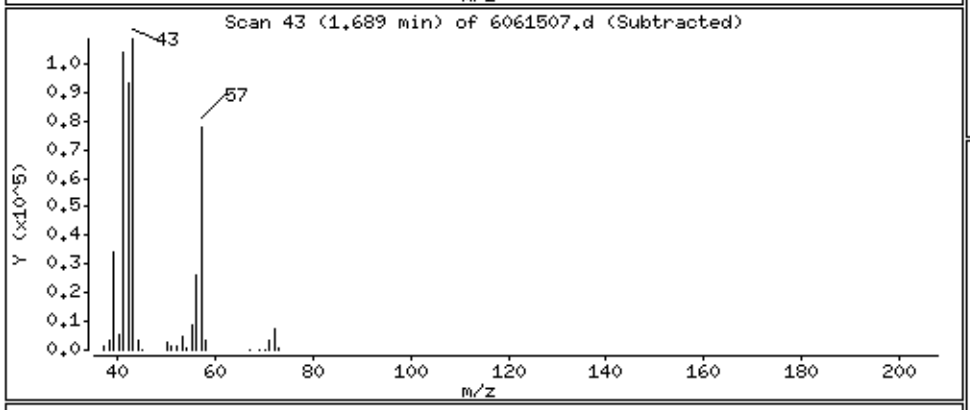
Column diameter: 0.53

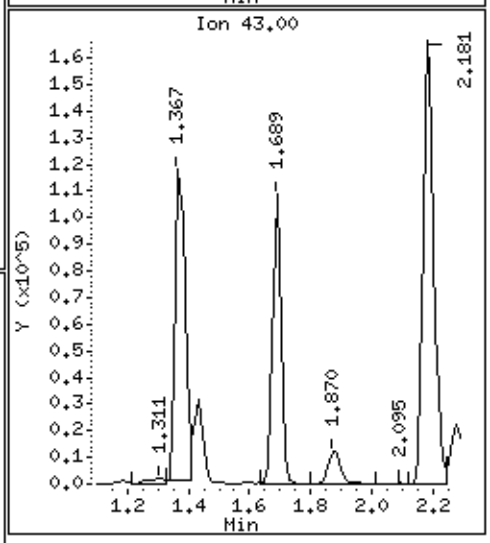
10 Isopentane

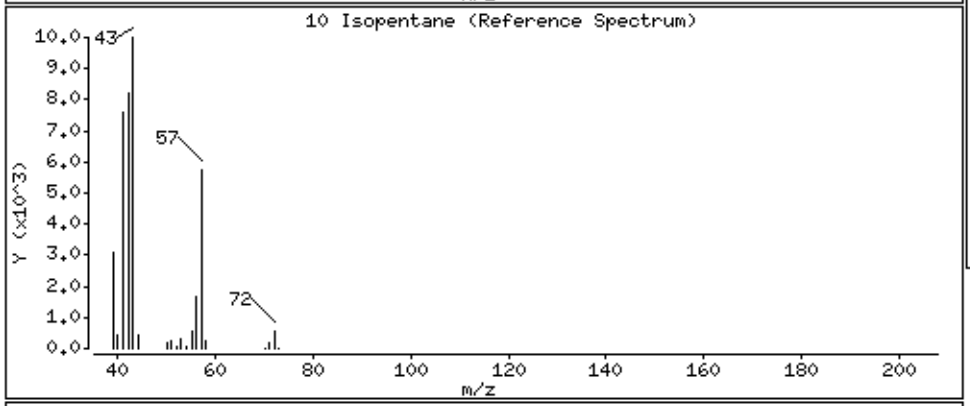
Concentration: 60.938 NG

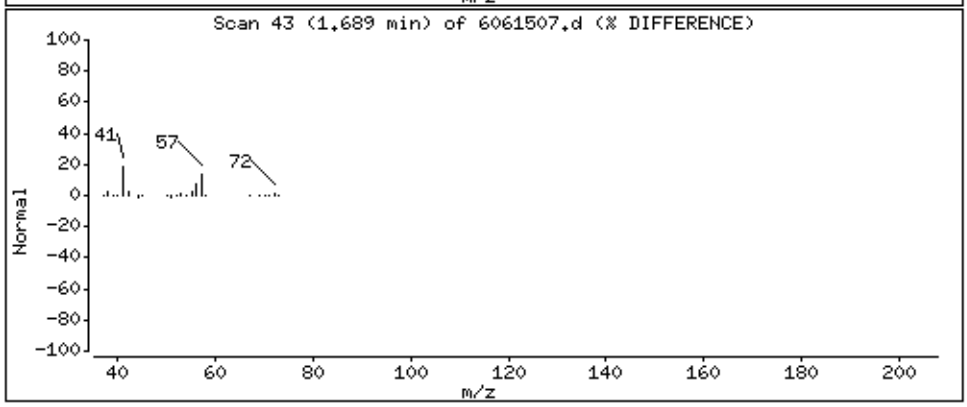












Data File: /chem/msd6.i/15jun16.b/6061507.d

Date : 15-JUN-2016 15:05

Client ID: LCSD

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCSD;LCSD

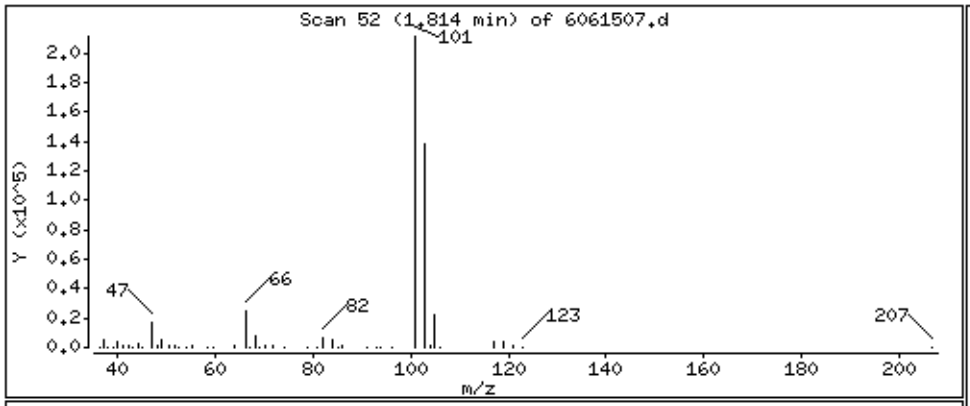
Operator: CT

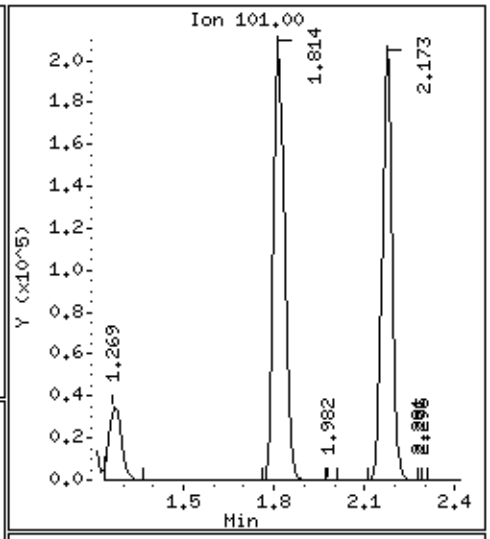
Column phase: RTx-624

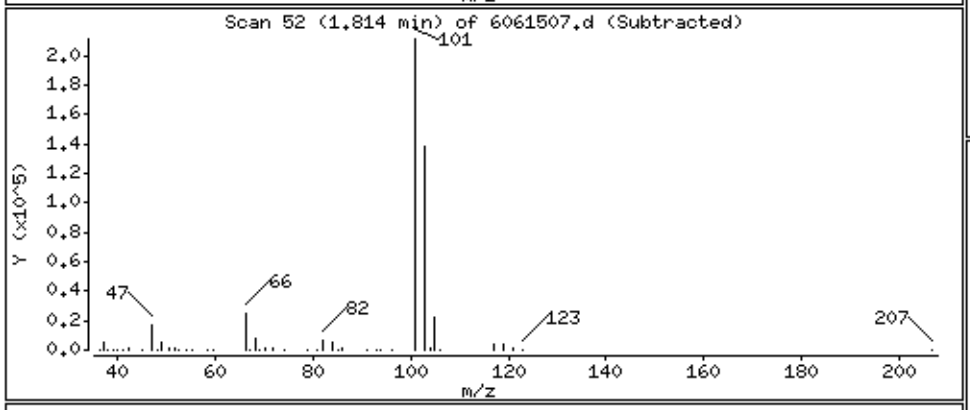
Column diameter: 0.53

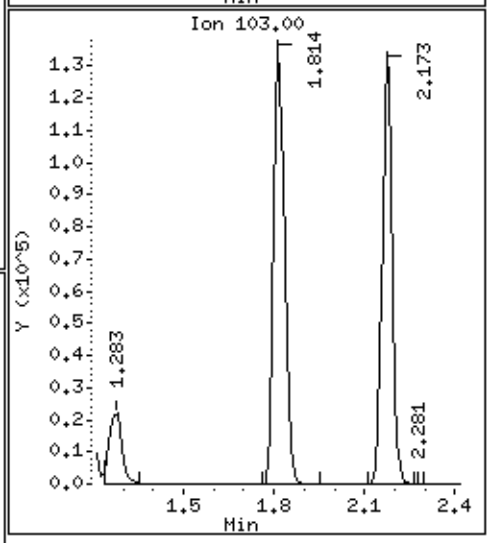
11 Trichlorofluoromethane/Fr11

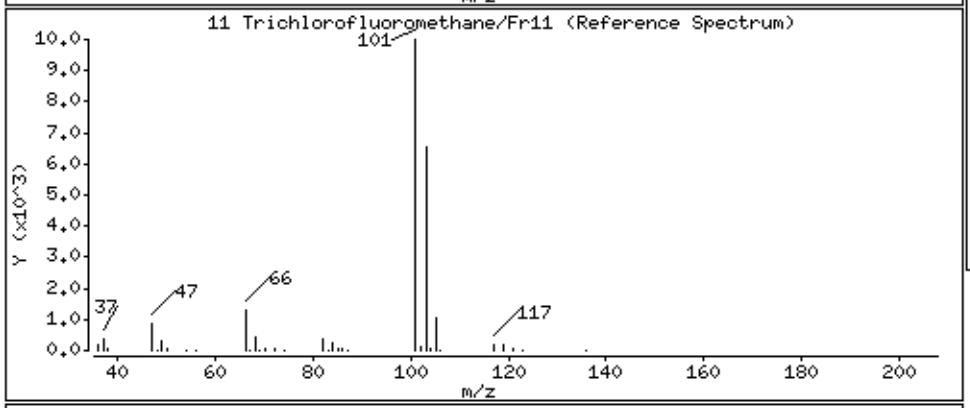
Concentration: 118.91 NG

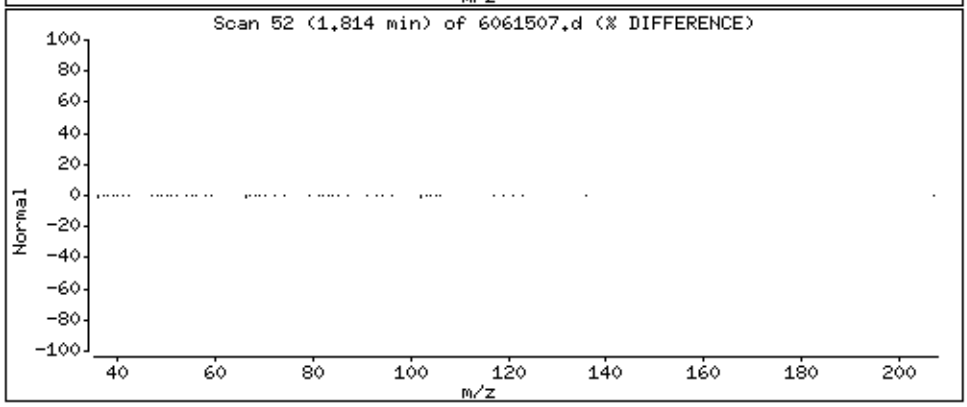












Data File: /chem/msd6.i/15jun16.b/6061507.d

Date : 15-JUN-2016 15:05

Client ID: LCSD

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCSD;LCSD

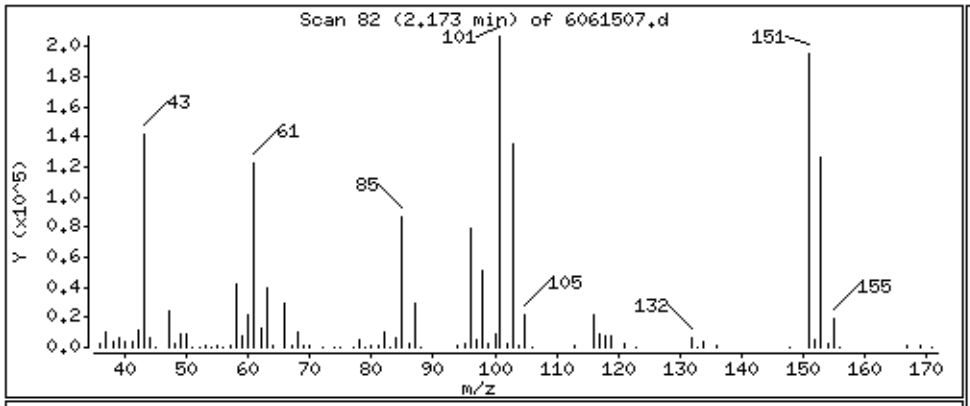
Operator: CT

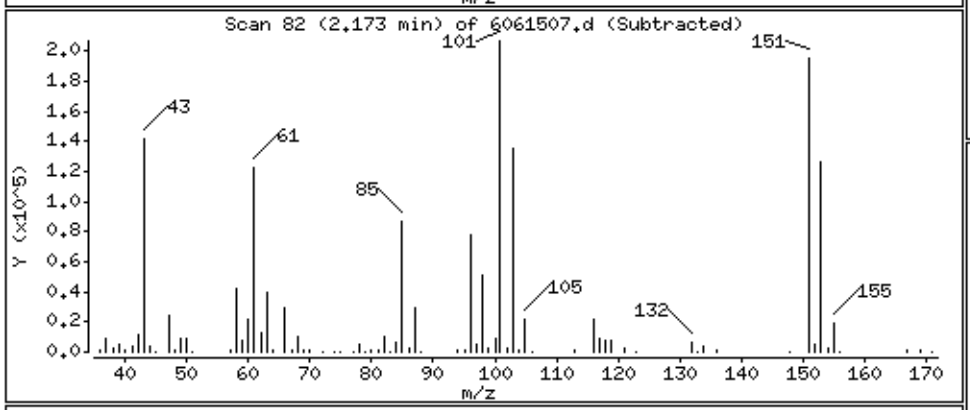
Column phase: RTx-624

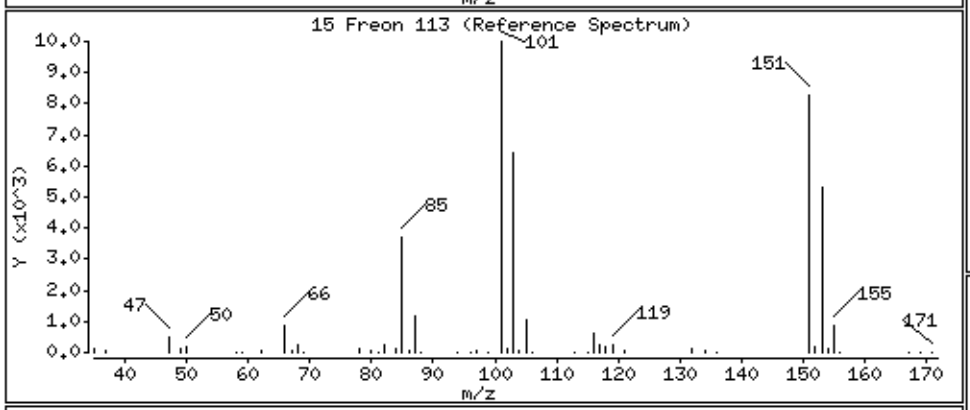
Column diameter: 0.53

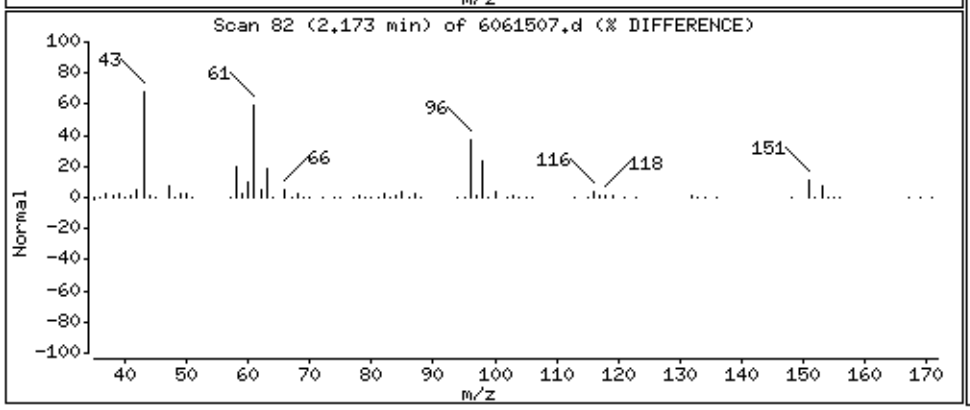
15 Freon 113

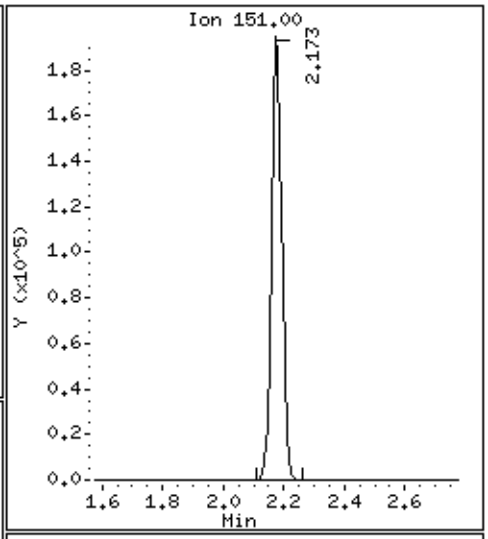
Concentration: 164.83 NG

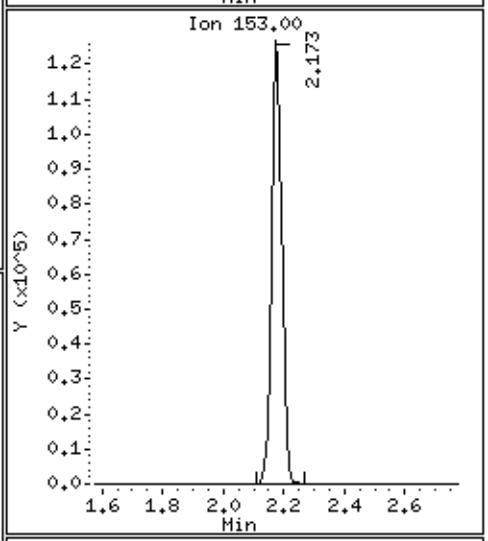


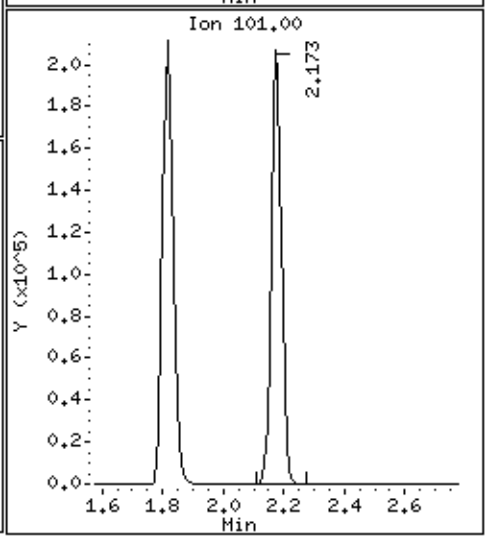












Data File: /chem/msd6.i/15jun16.b/6061507.d

Date : 15-JUN-2016 15:05

Client ID: LCSD

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCSD;LCSD

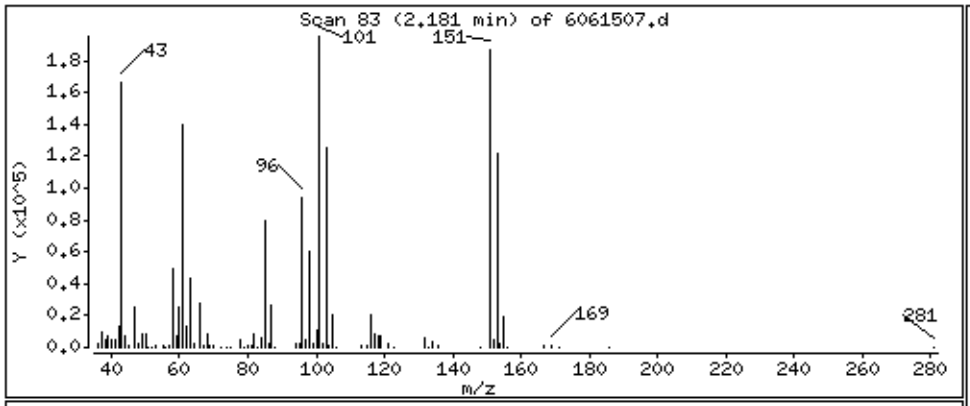
Operator: CT

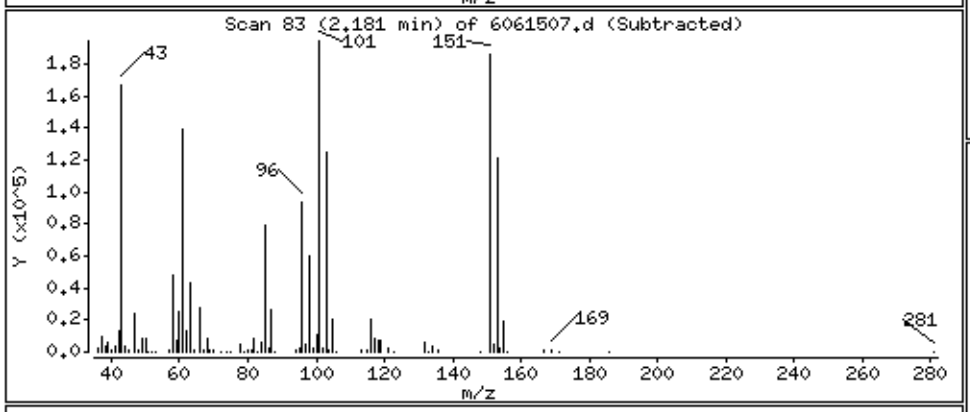
Column phase: RTx-624

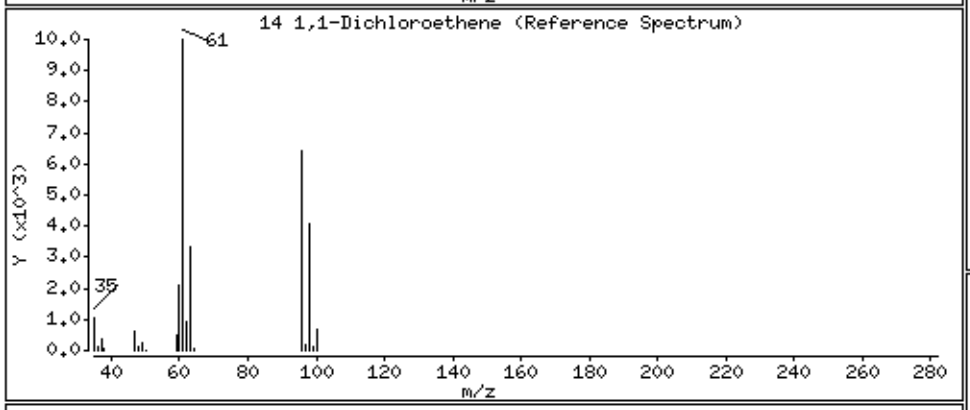
Column diameter: 0.53

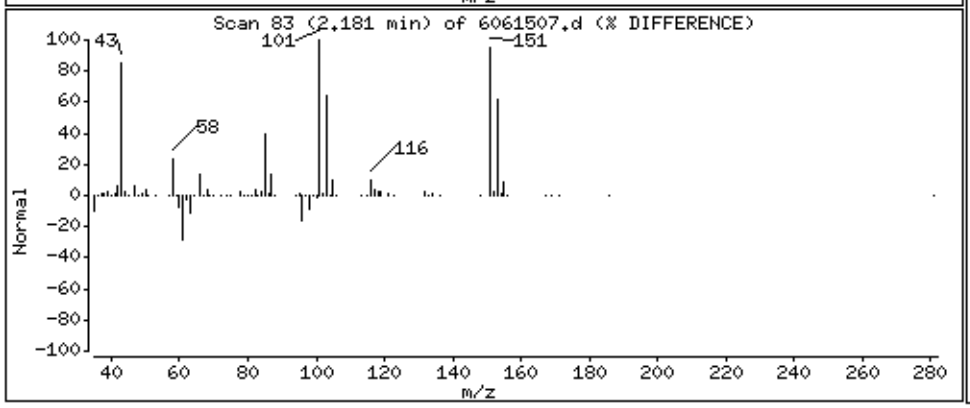
14 1,1-Dichloroethene

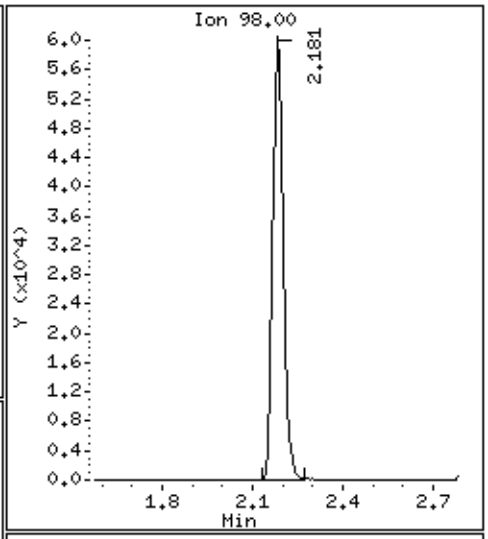
Concentration: 83.639 NG

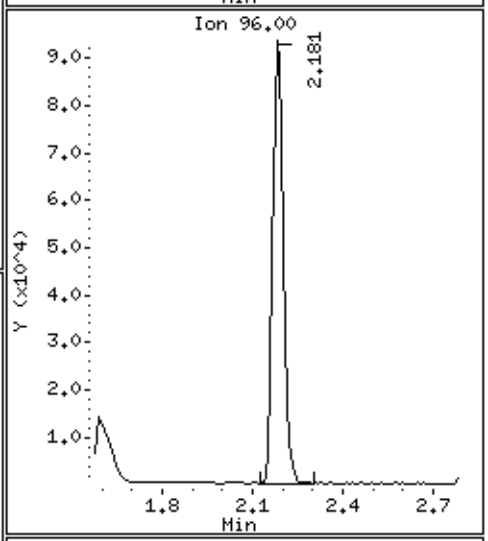


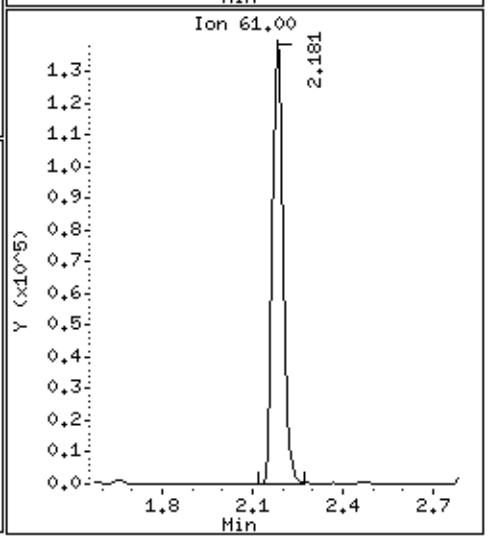












Data File: /chem/msd6.i/15jun16.b/6061507.d

Date : 15-JUN-2016 15:05

Client ID: LCSD

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCSD;LCSD

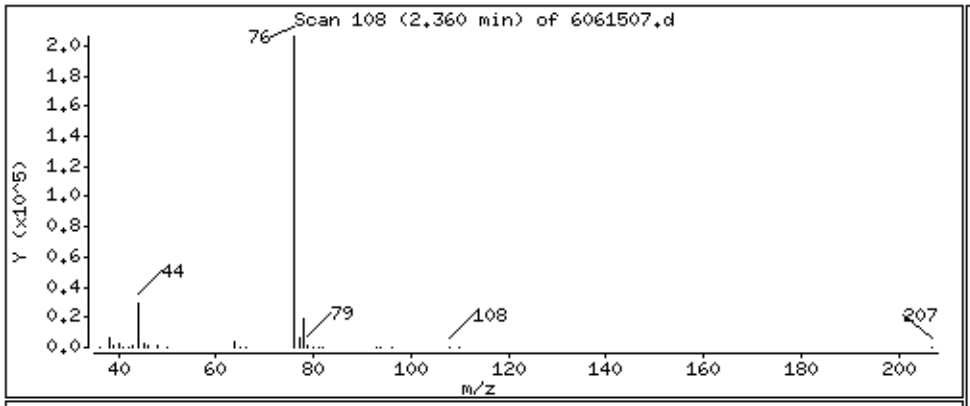
Operator: CT

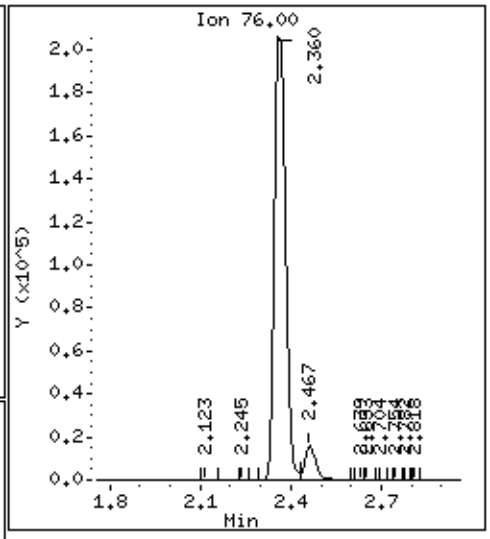
Column phase: RTx-624

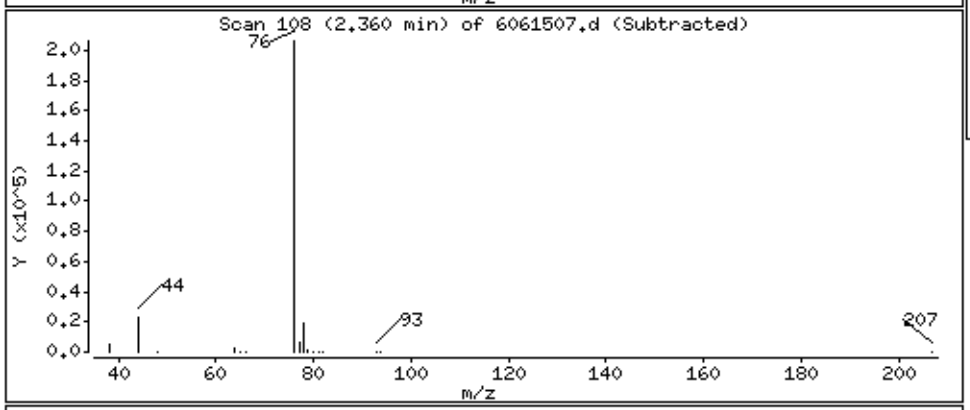
Column diameter: 0.53

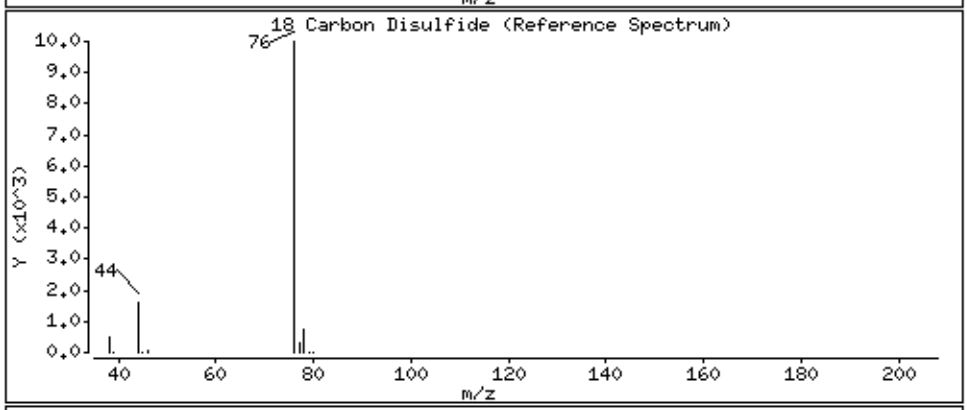
18 Carbon Disulfide

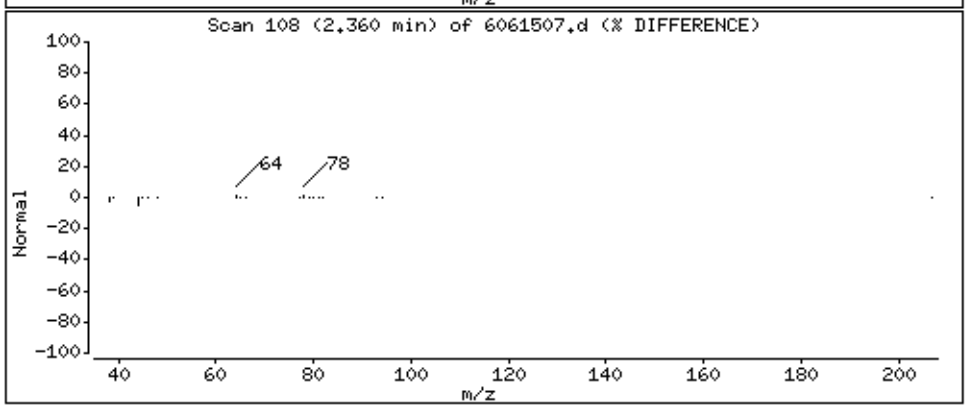
Concentration: 46.503 NG











Data File: /chem/msd6.i/15jun16.b/6061507.d

Date : 15-JUN-2016 15:05

Client ID: LCSD

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCSD;LCSD

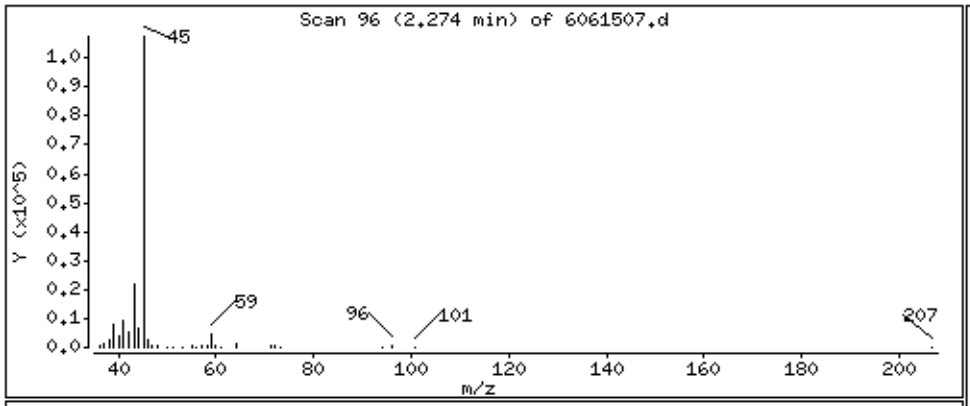
Operator: CT

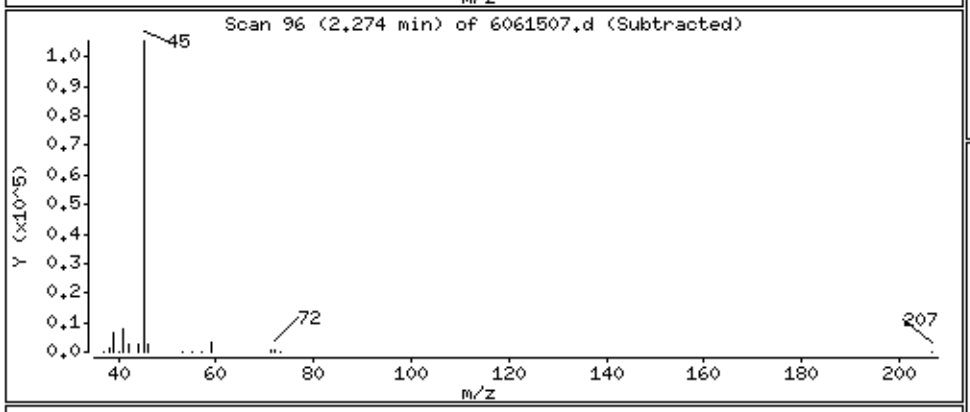
Column phase: RTx-624

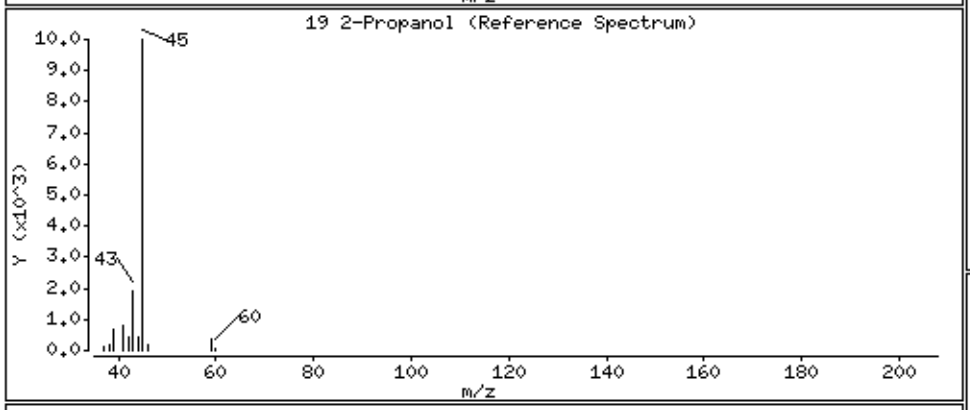
Column diameter: 0.53

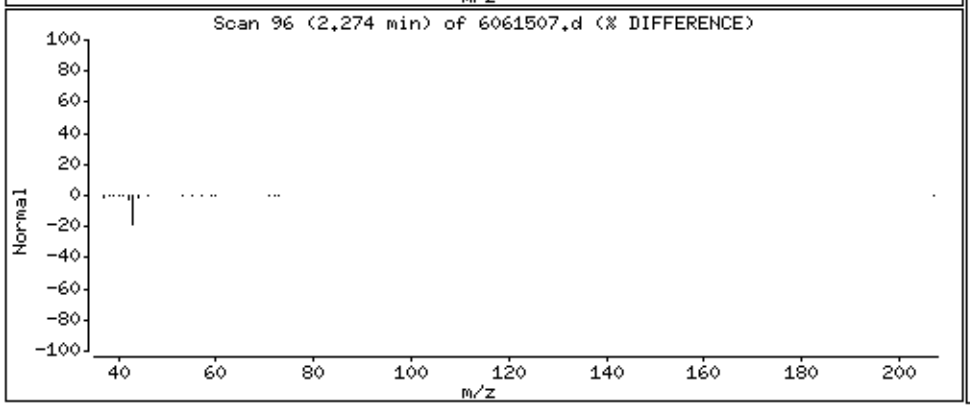
19 2-Propanol

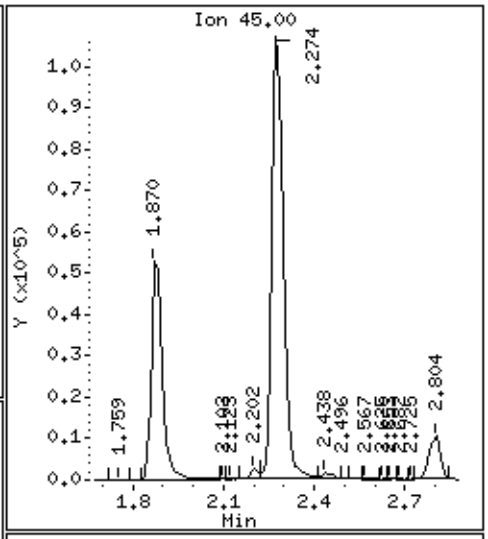
Concentration: 44.483 NG

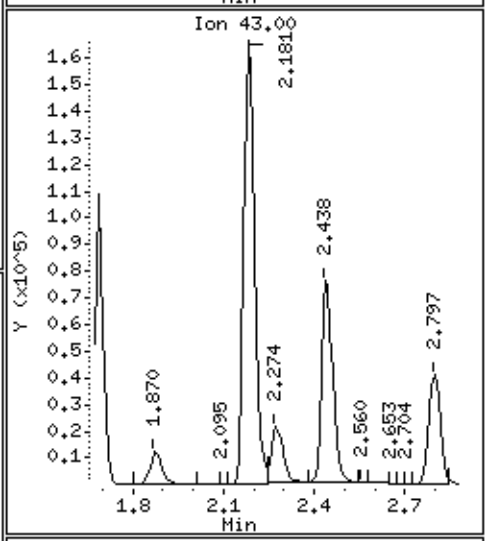


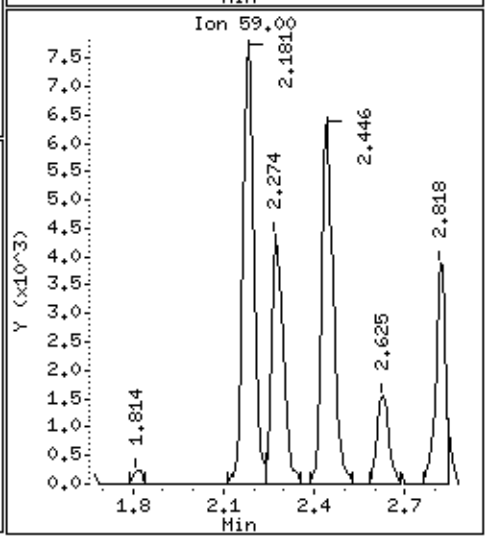












Data File: /chem/msd6.i/15jun16.b/6061507.d

Date : 15-JUN-2016 15:05

Client ID: LCSD

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCSD;LCSD

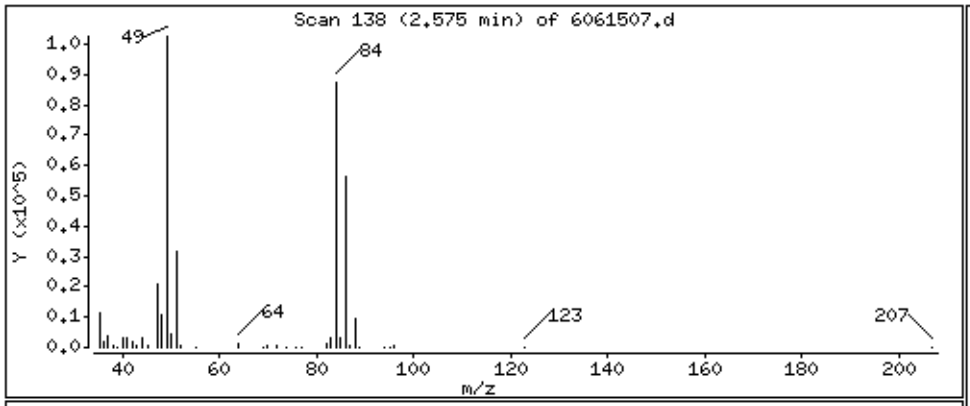
Operator: CT

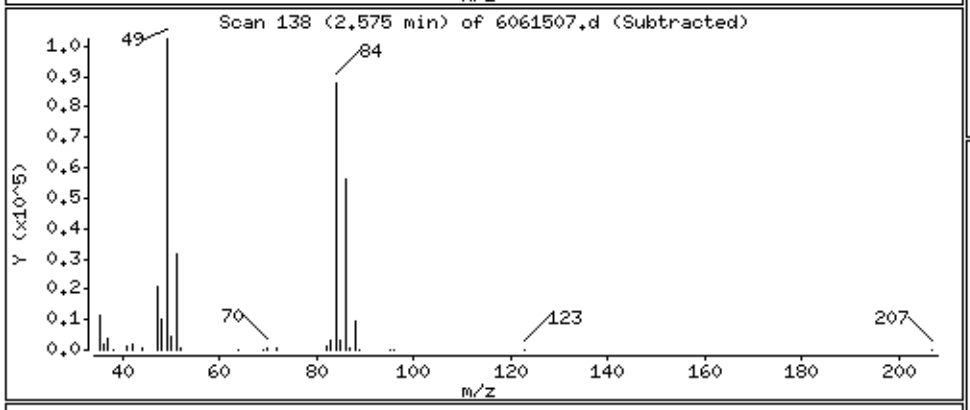
Column phase: RTx-624

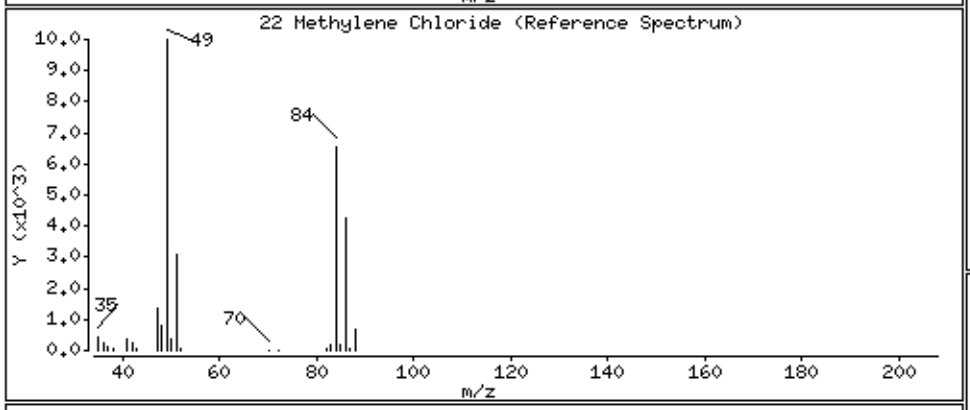
Column diameter: 0.53

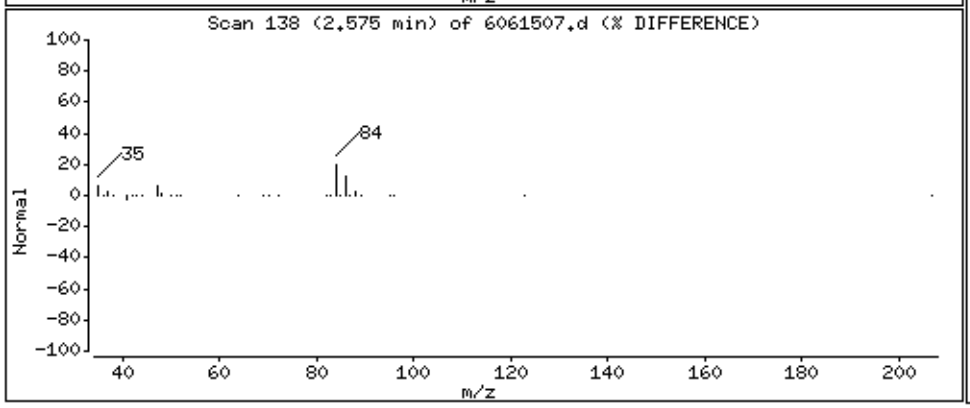
22 Methylene Chloride

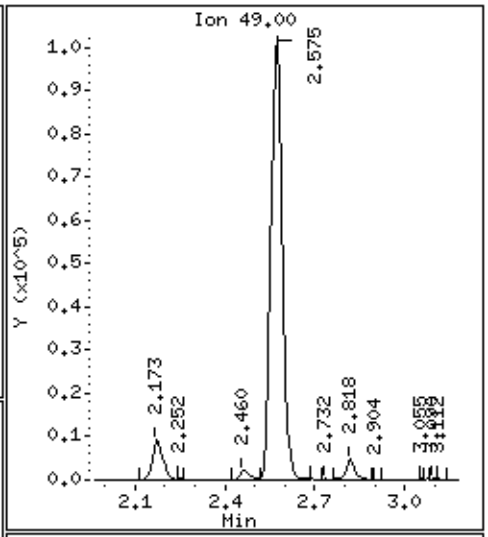
Concentration: 68.461 NG

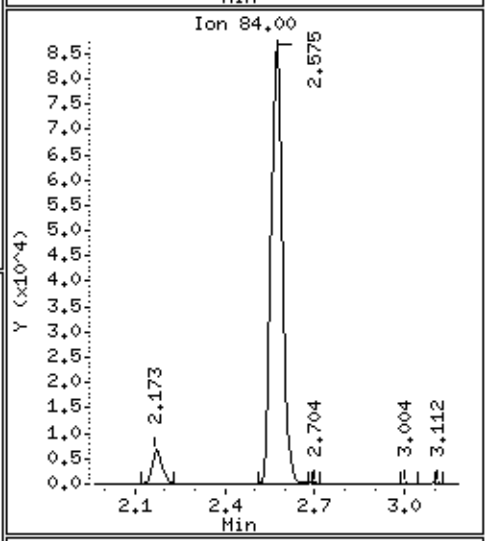


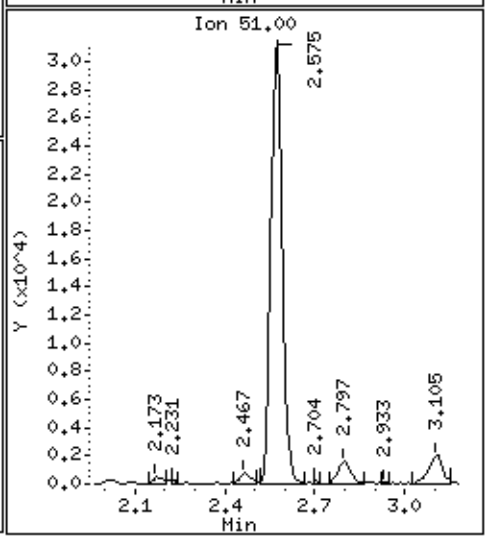












Data File: /chem/msd6.i/15jun16.b/6061507.d

Date : 15-JUN-2016 15:05

Client ID: LCSD

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCSD;LCSD

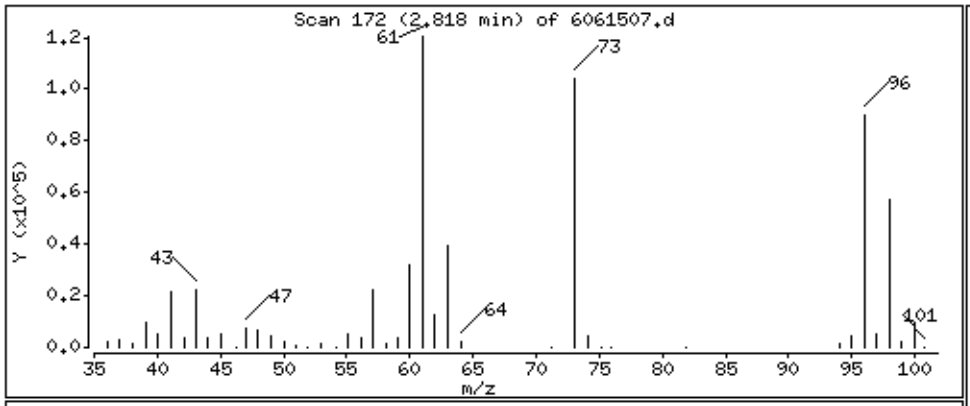
Operator: CT

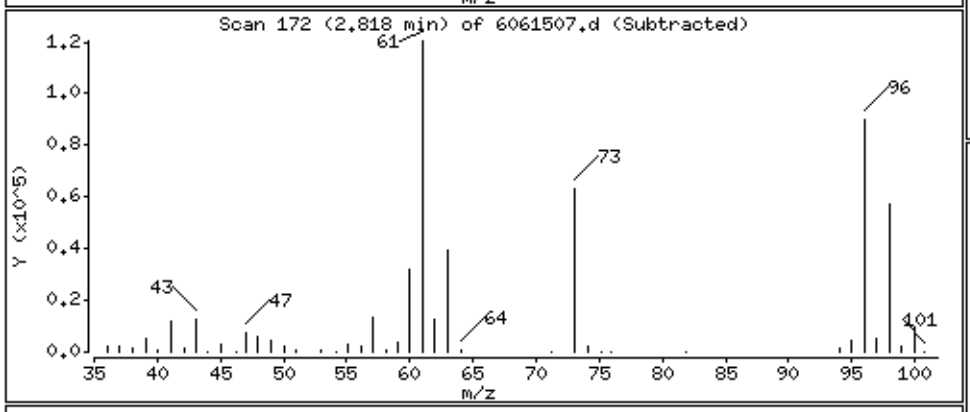
Column phase: RTx-624

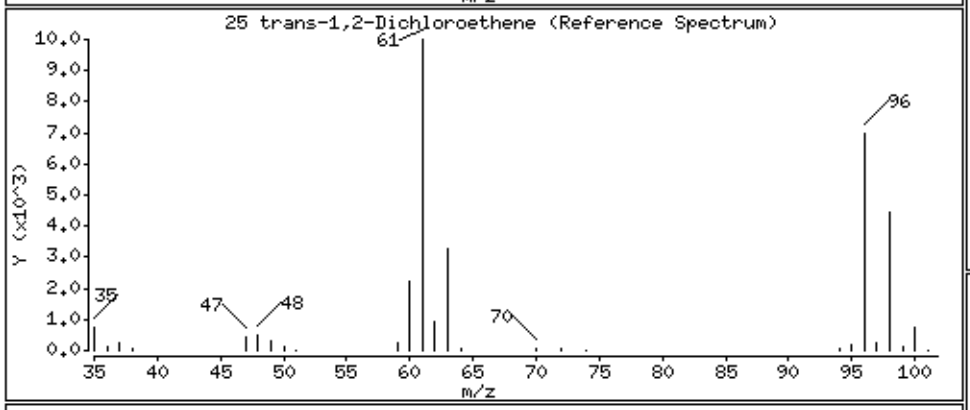
Column diameter: 0.53

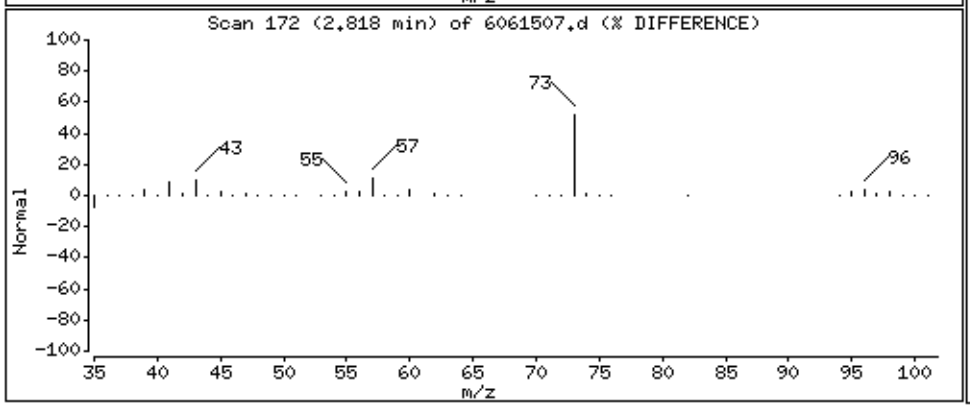
25 trans-1,2-Dichloroethene

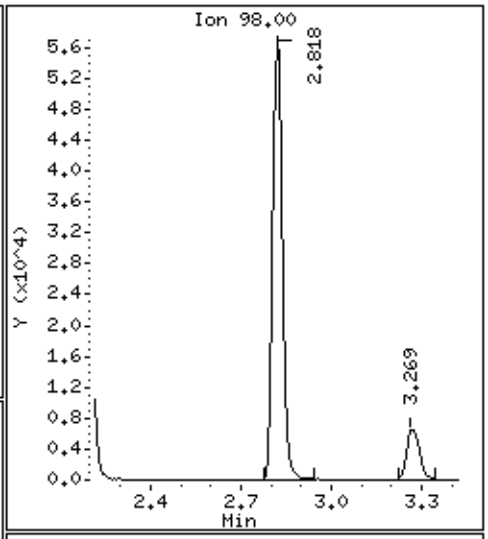
Concentration: 73.409 NG

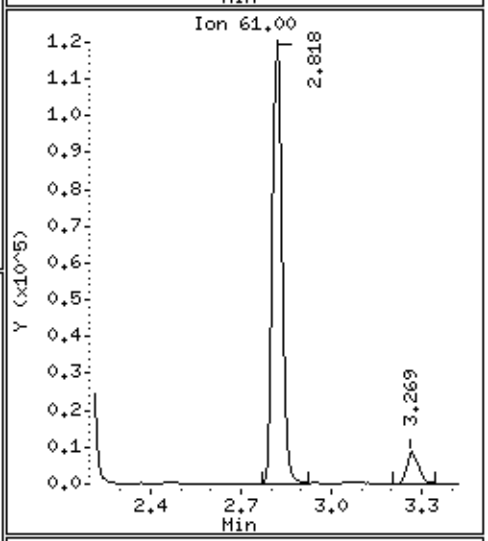


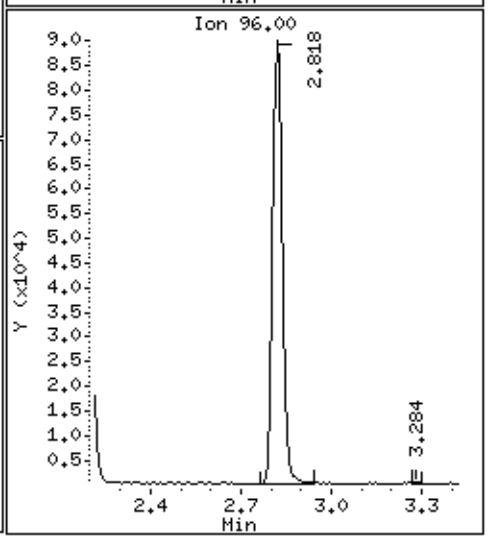












Data File: /chem/msd6.i/15jun16.b/6061507.d

Date : 15-JUN-2016 15:05

Client ID: LCSD

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCSD;LCSD

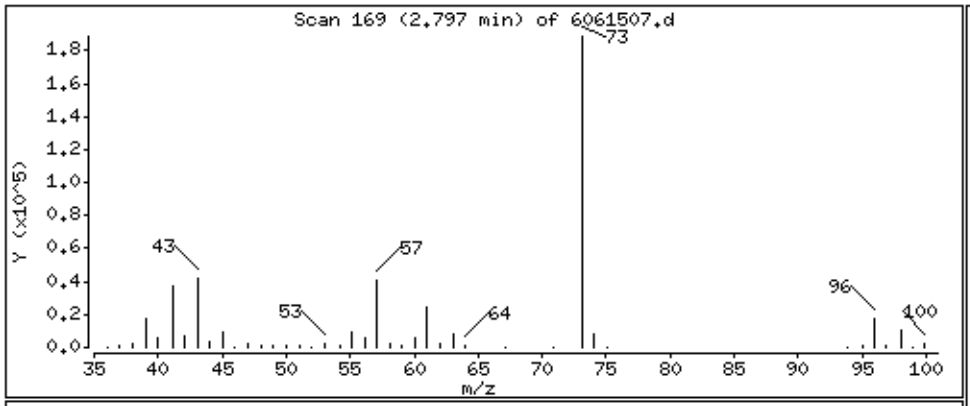
Operator: CT

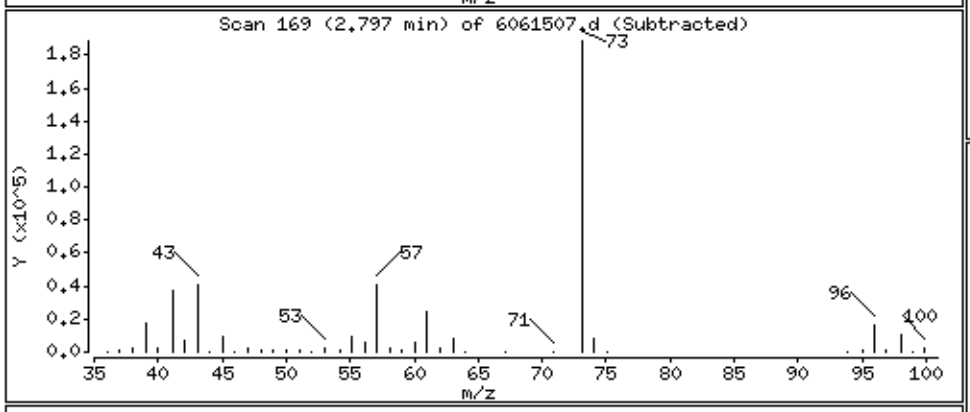
Column phase: RTx-624

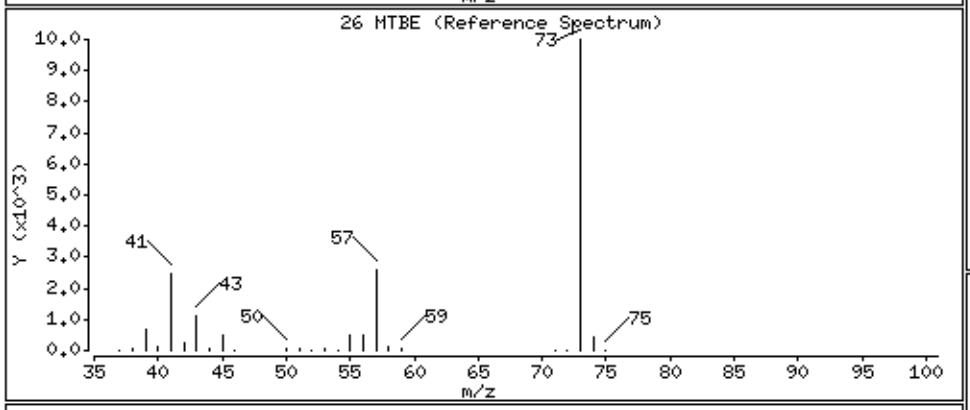
Column diameter: 0.53

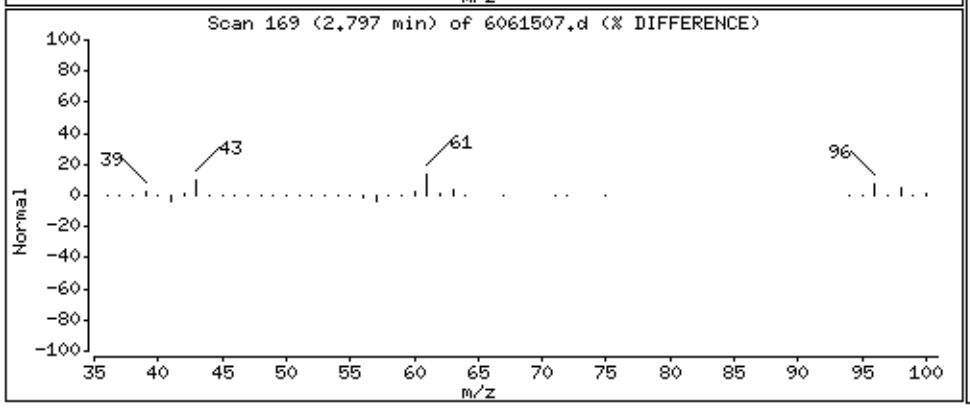
26 MTBE

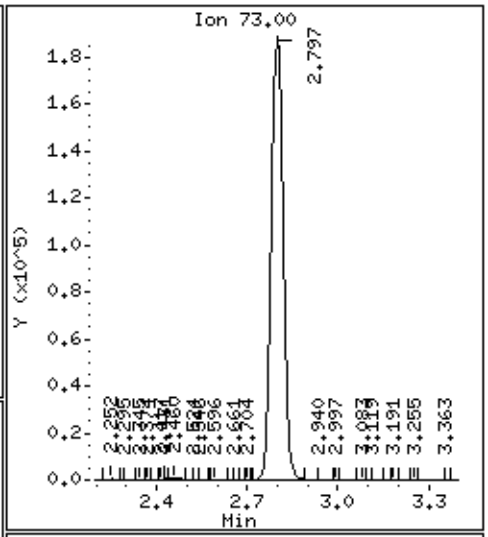
Concentration: 81.249 NG

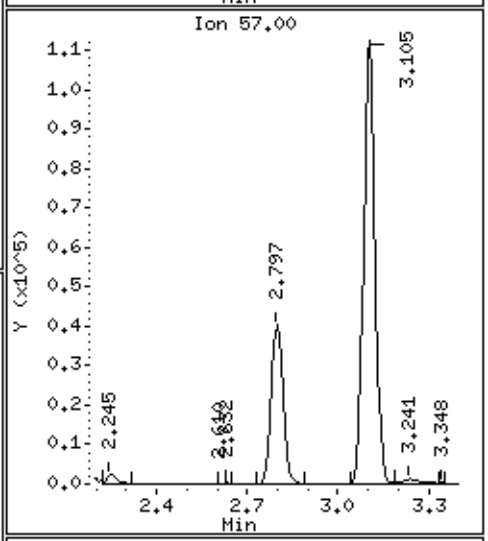


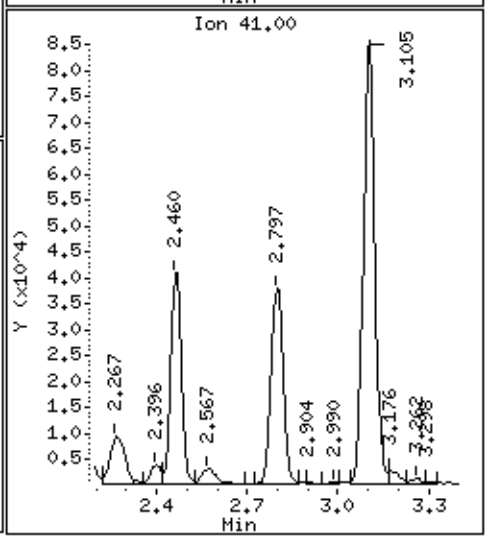












Data File: /chem/msd6.i/15jun16.b/6061507.d

Date : 15-JUN-2016 15:05

Client ID: LCSD

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCSD;LCSD

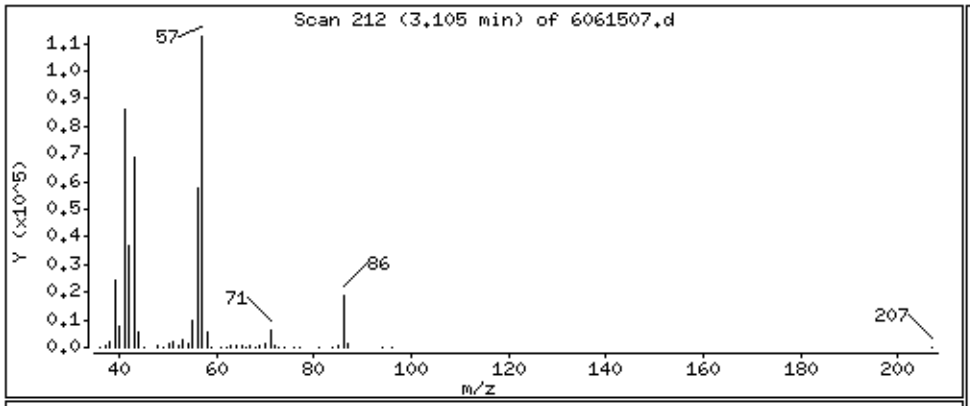
Operator: CT

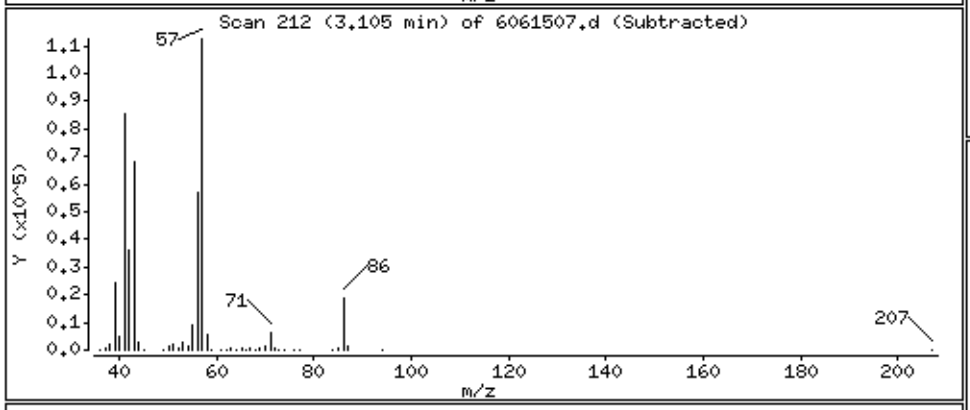
Column phase: RTx-624

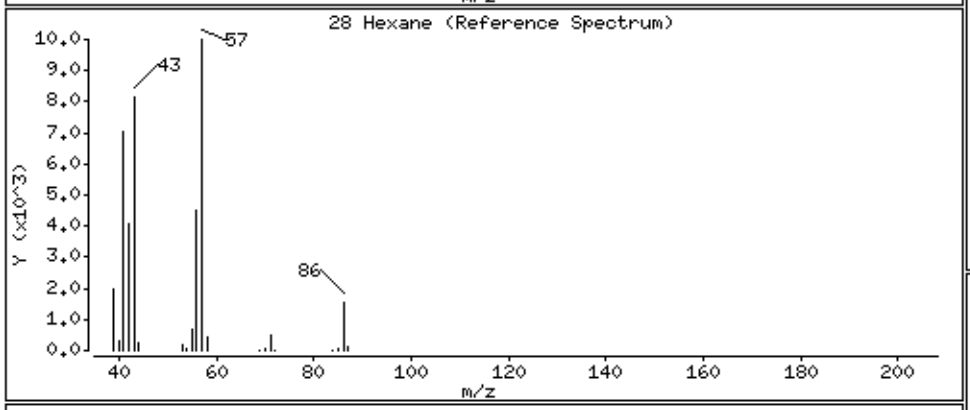
Column diameter: 0.53

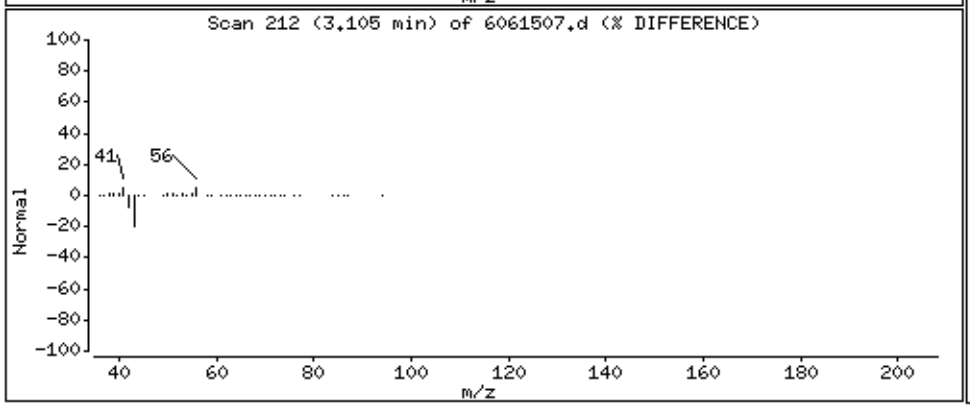
28 Hexane

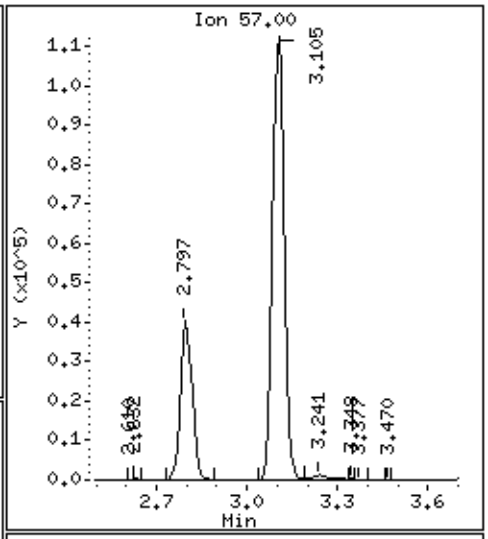
Concentration: 74.120 NG

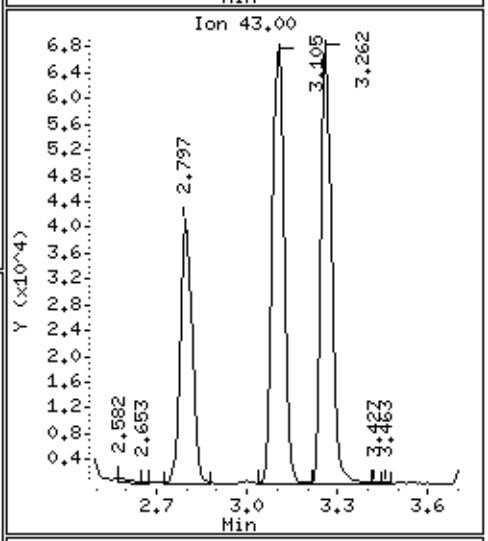


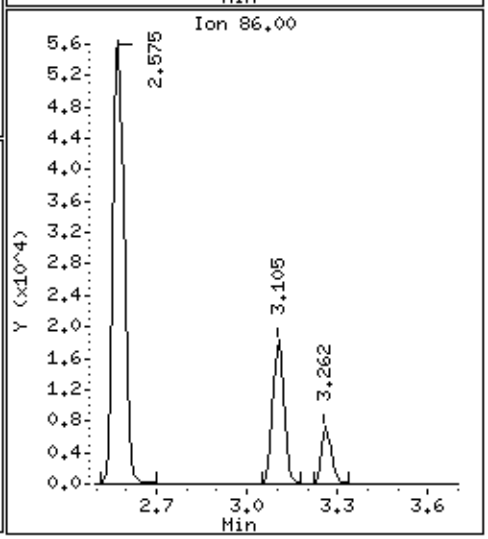












Data File: /chem/msd6.i/15jun16.b/6061507.d

Date : 15-JUN-2016 15:05

Client ID: LCSD

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCSD;LCSD

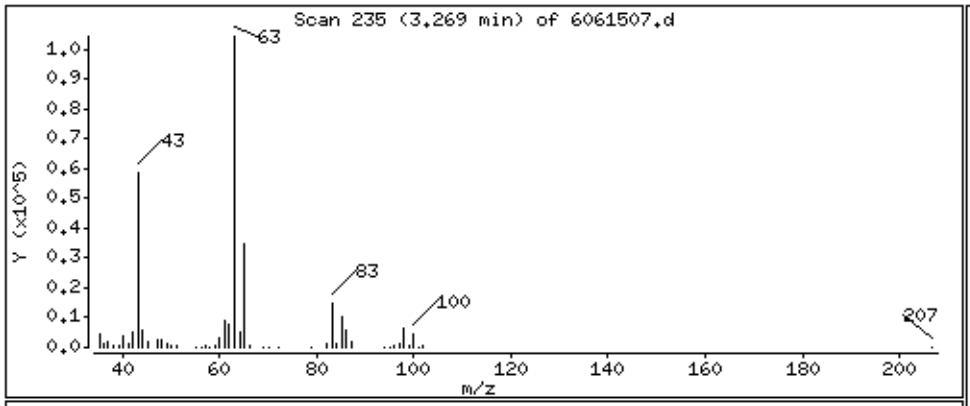
Operator: CT

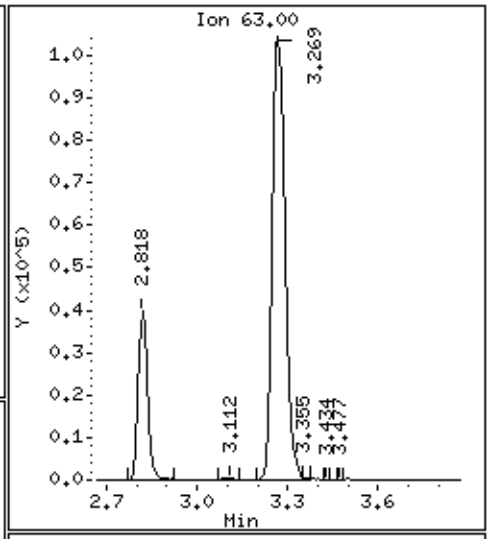
Column phase: RTx-624

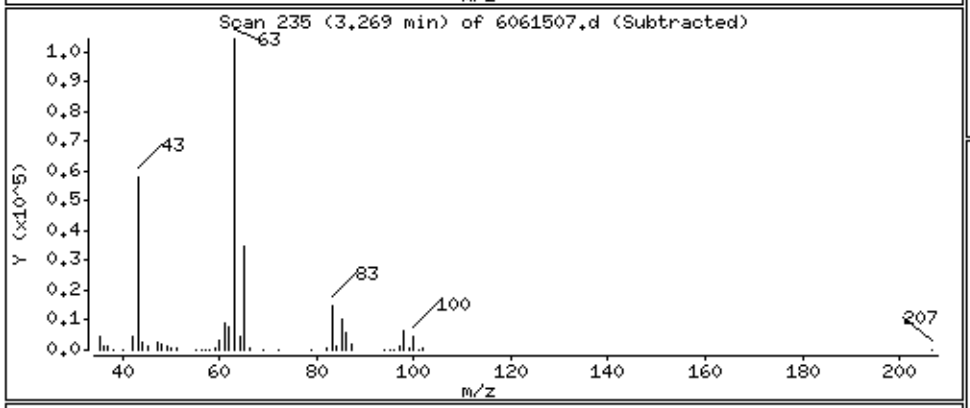
Column diameter: 0.53

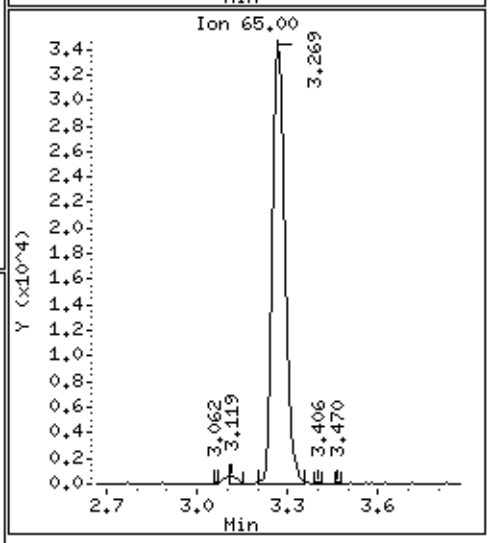
29 1,1-Dichloroethane

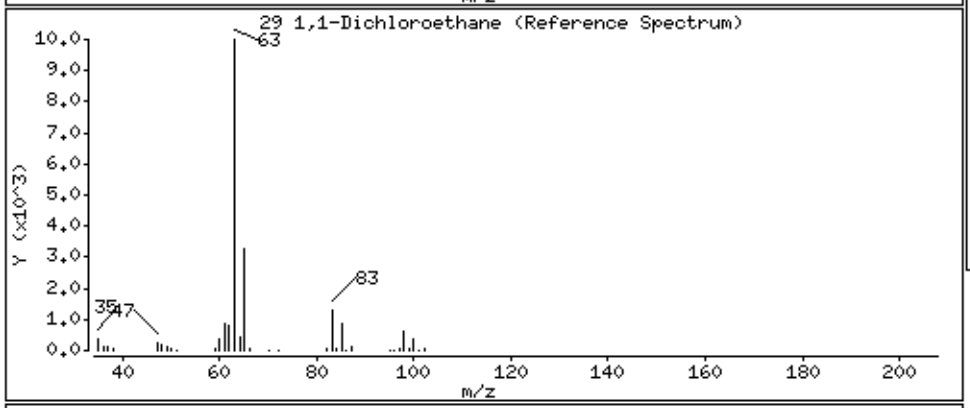
Concentration: 75.510 NG

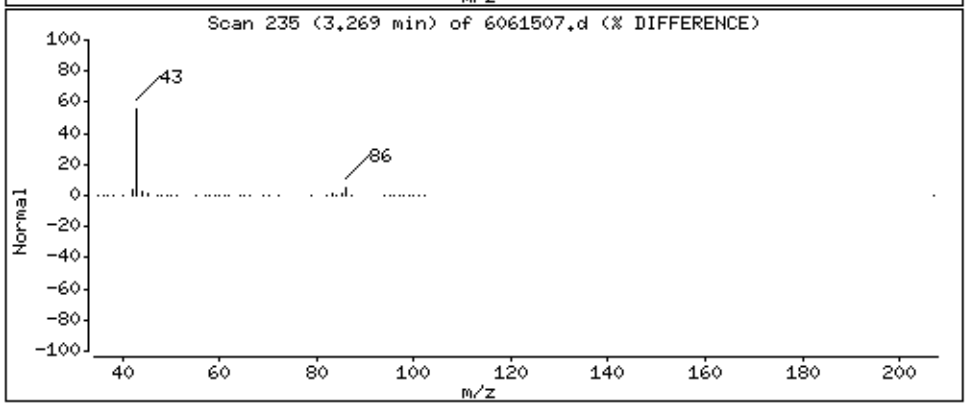












Data File: /chem/msd6.i/15jun16.b/6061507.d

Date : 15-JUN-2016 15:05

Client ID: LCSD

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCSD;LCSD

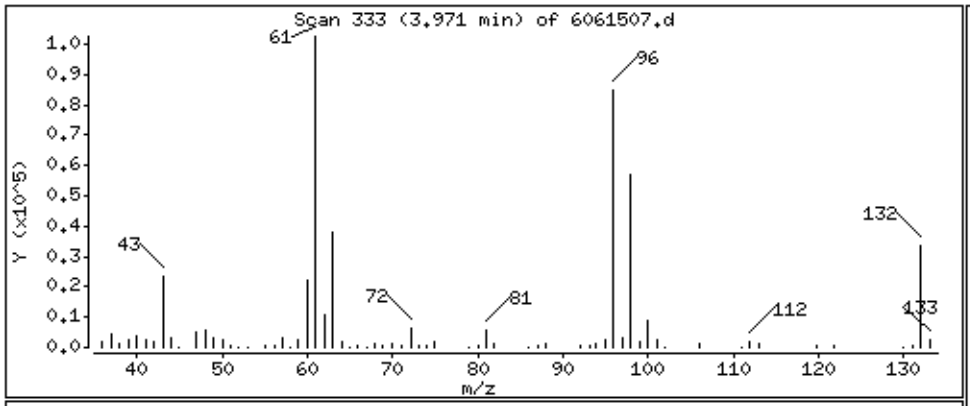
Operator: CT

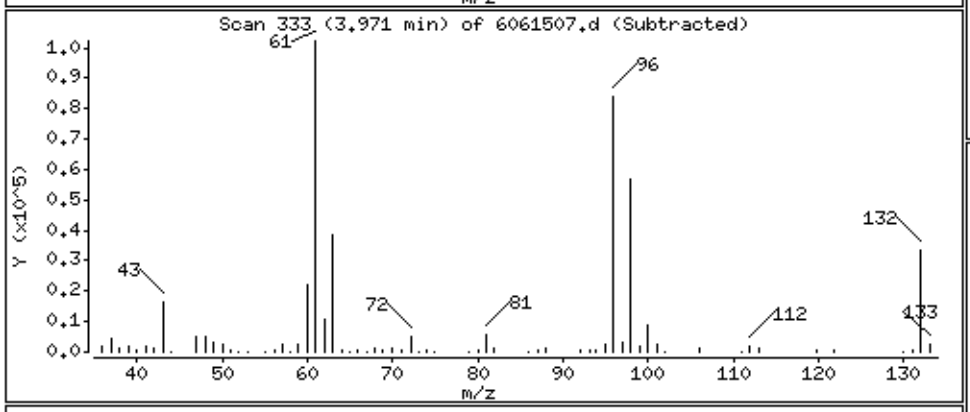
Column phase: RTx-624

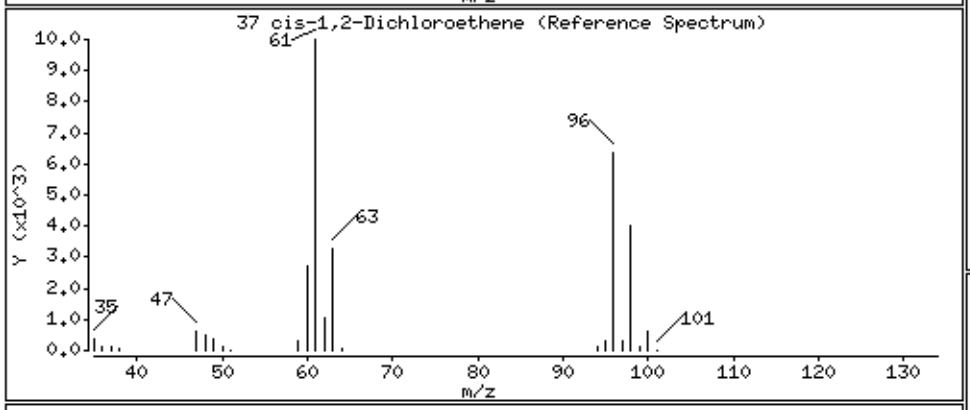
Column diameter: 0.53

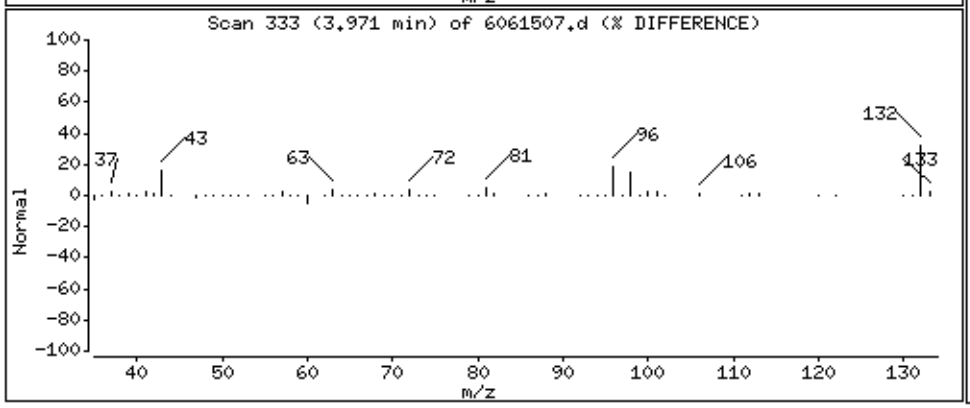
37 cis-1,2-Dichloroethene

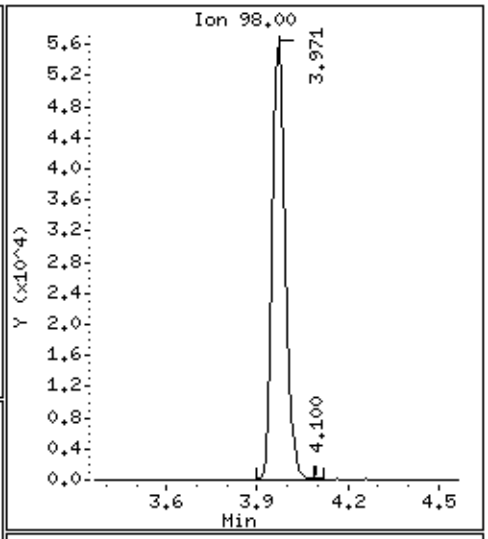
Concentration: 91.702 NG

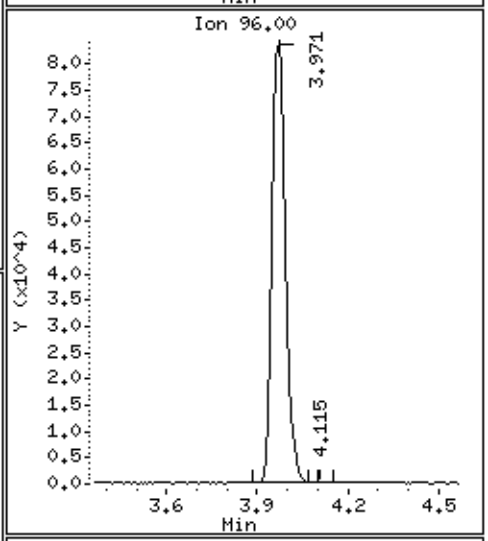


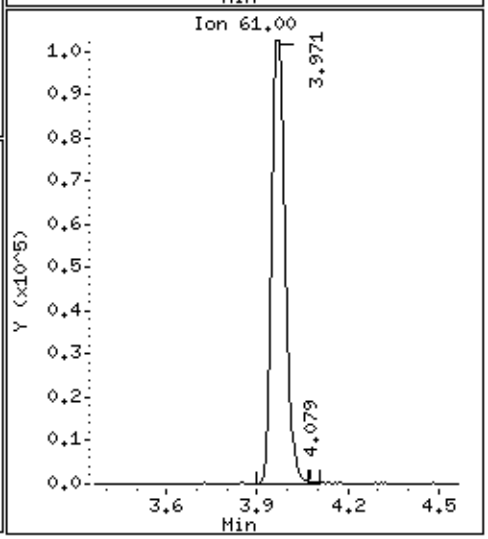












Data File: /chem/msd6.i/15jun16.b/6061507.d

Date : 15-JUN-2016 15:05

Client ID: LCSD

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCSD;LCSD

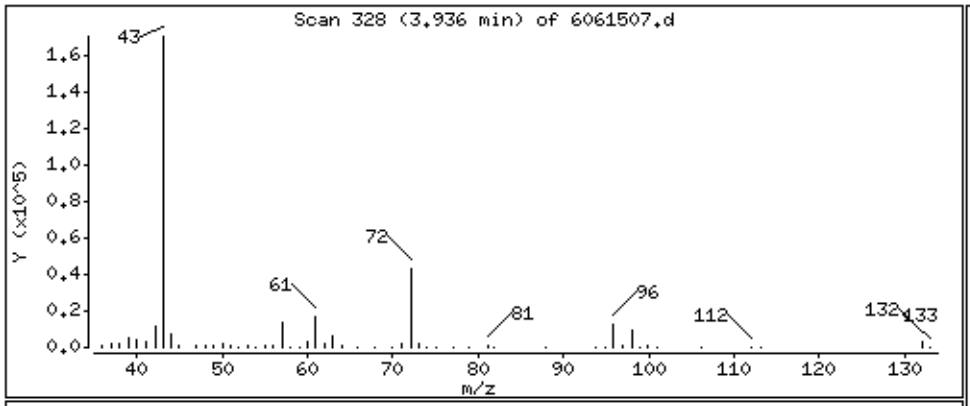
Operator: CT

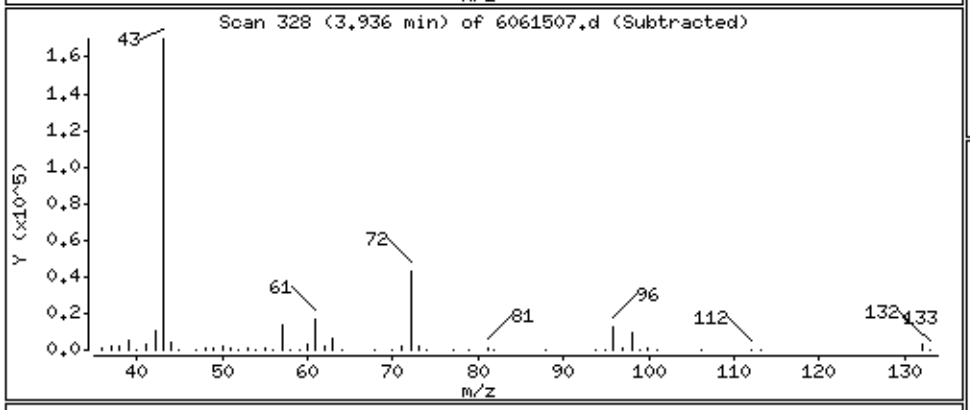
Column phase: RTx-624

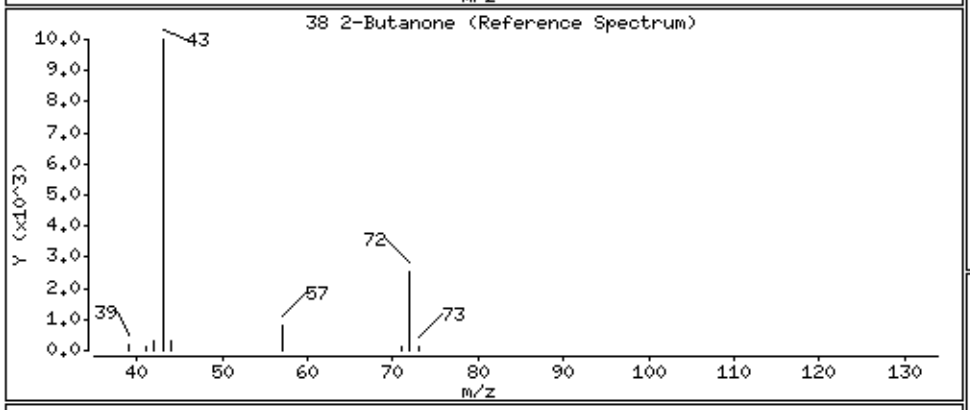
Column diameter: 0.53

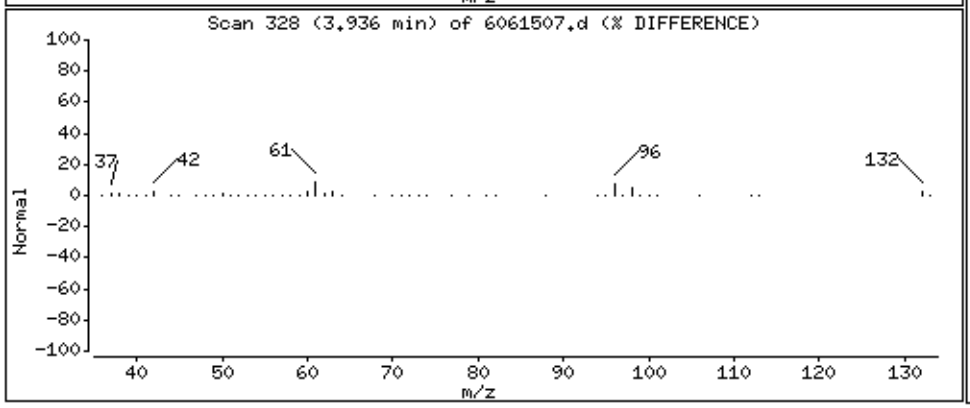
38 2-Butanone

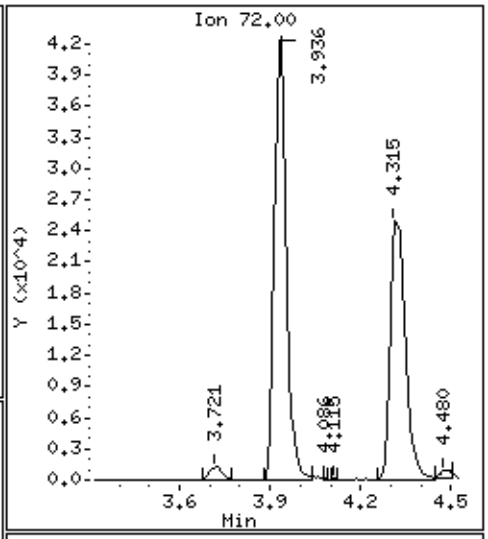
Concentration: 68.512 NG

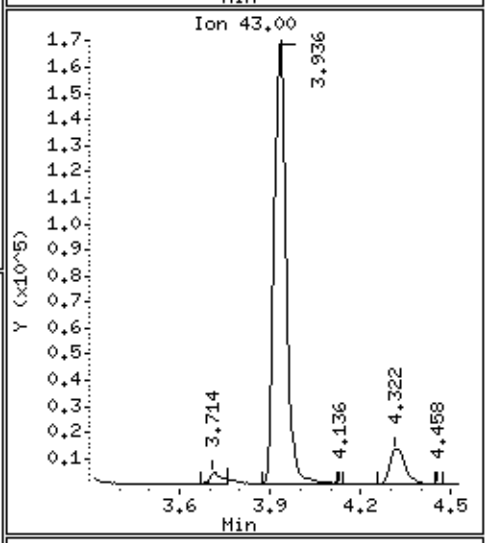


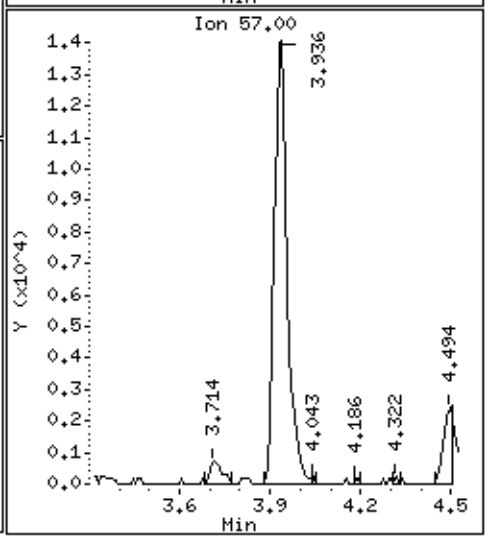












Data File: /chem/msd6.i/15jun16.b/6061507.d

Date : 15-JUN-2016 15:05

Client ID: LCSD

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCSD;LCSD

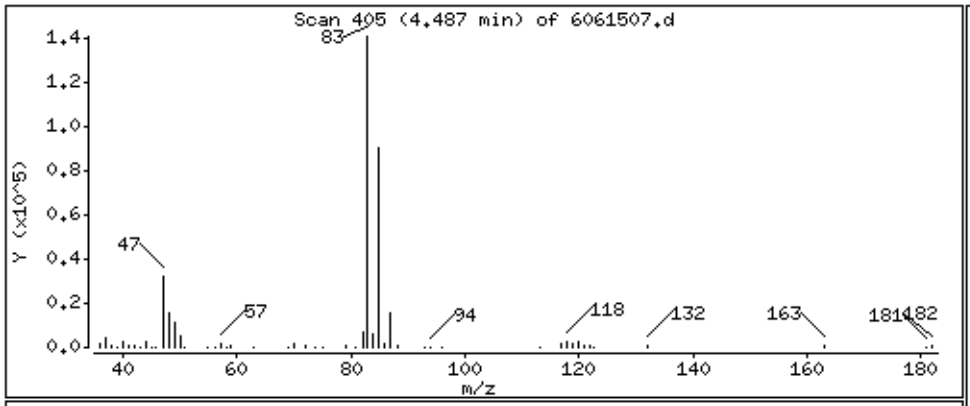
Operator: CT

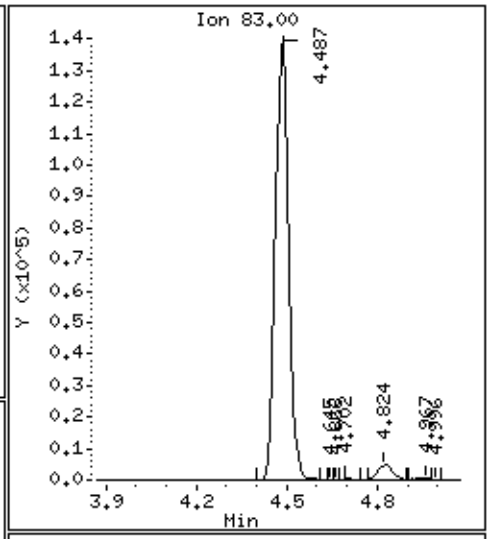
Column phase: RTx-624

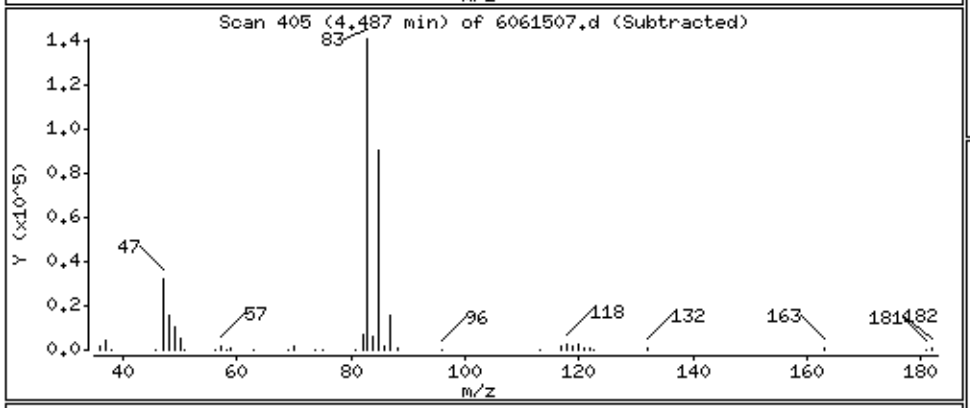
Column diameter: 0.53

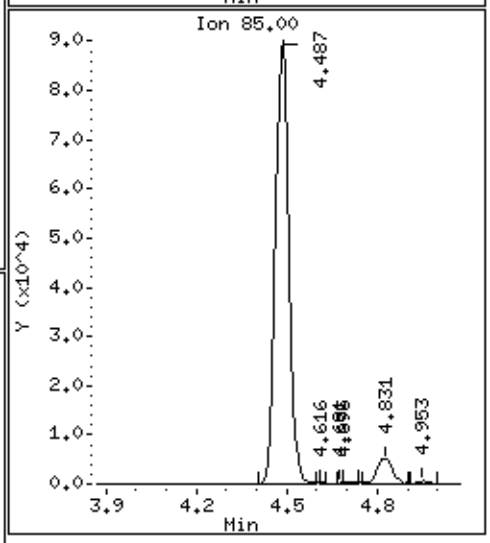
44 Chloroform

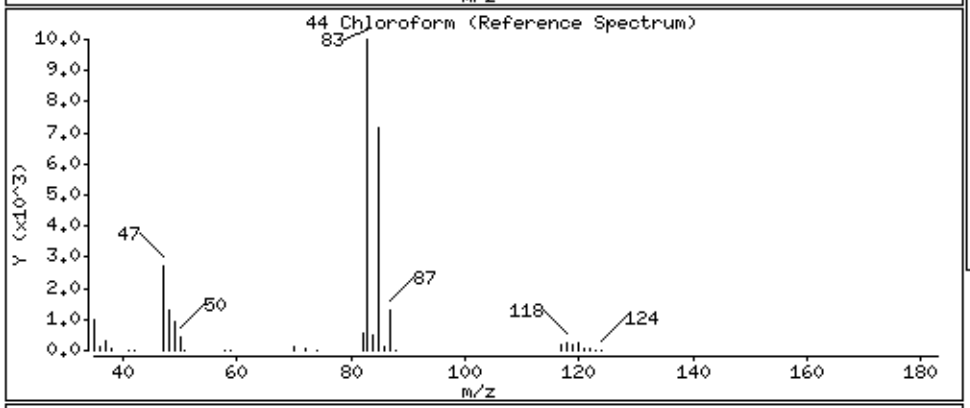
Concentration: 101.10 NG

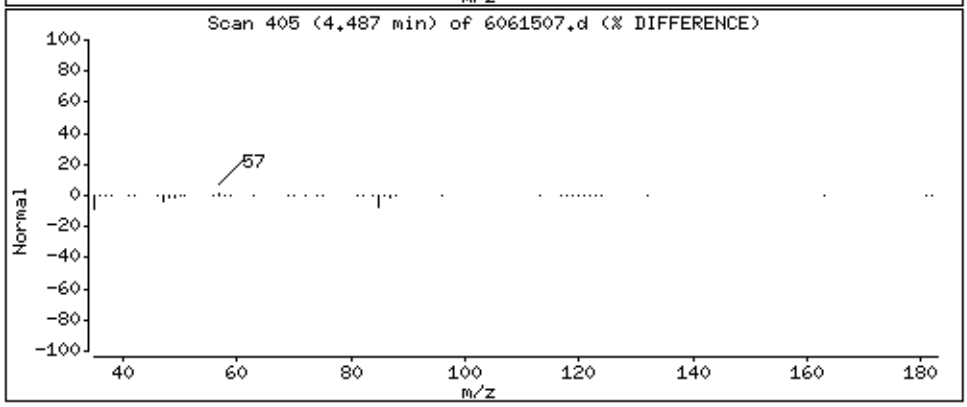












Data File: /chem/msd6.i/15jun16.b/6061507.d

Date : 15-JUN-2016 15:05

Client ID: LCSD

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCSD;LCSD

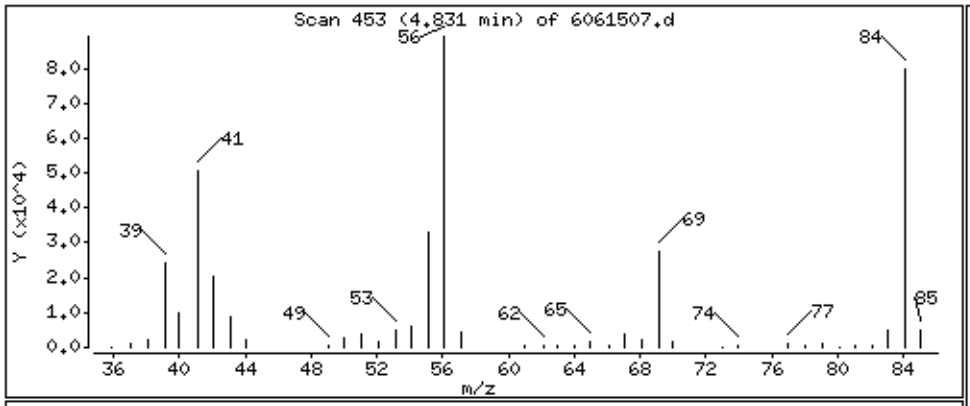
Operator: CT

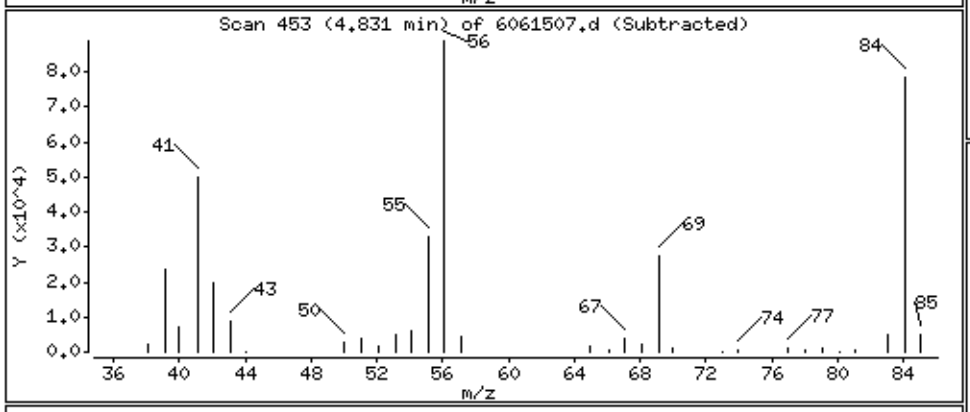
Column phase: RTx-624

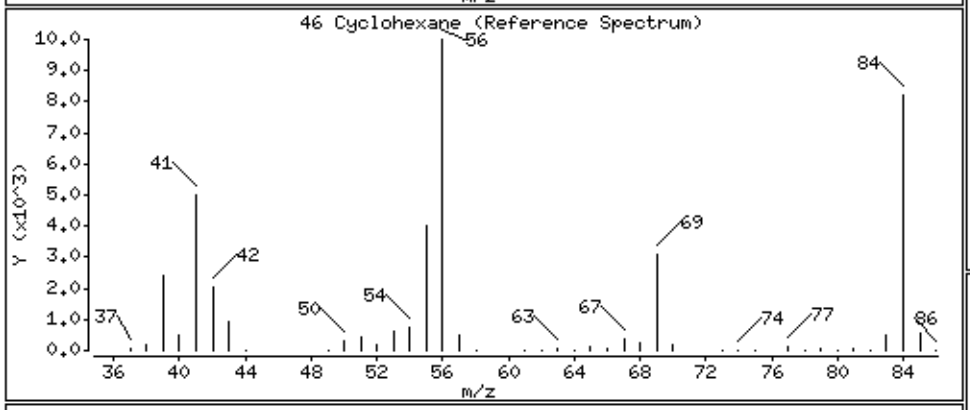
Column diameter: 0.53

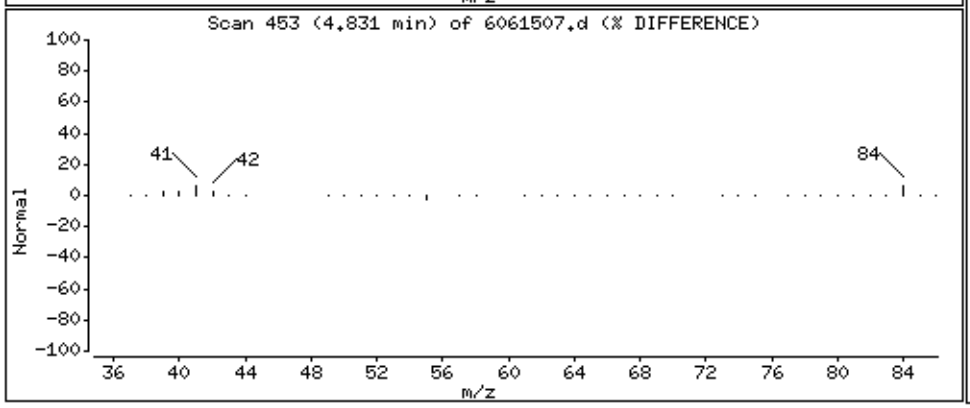
46 Cyclohexane

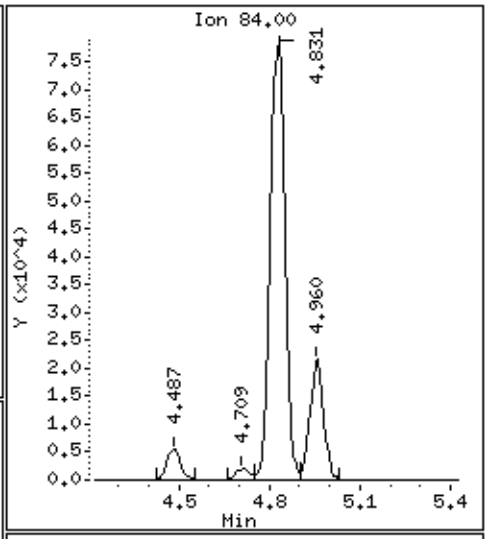
Concentration: 67.765 NG

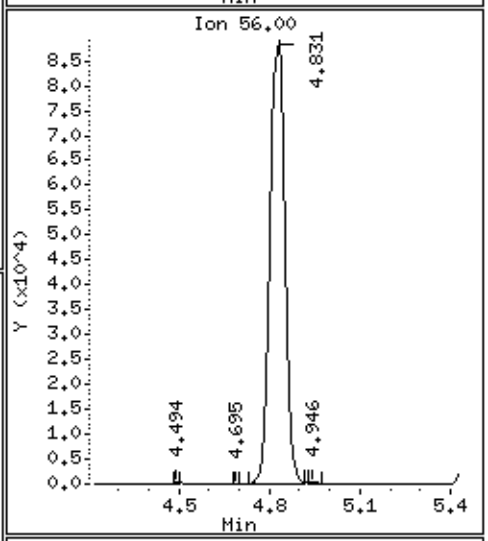


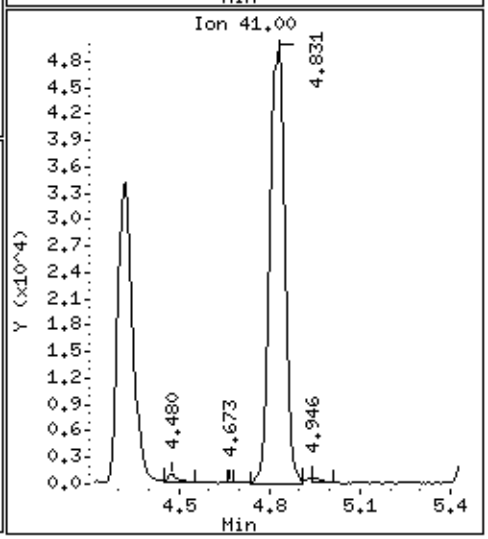












Data File: /chem/msd6.i/15jun16.b/6061507.d

Date : 15-JUN-2016 15:05

Client ID: LCSD

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCSD;LCSD

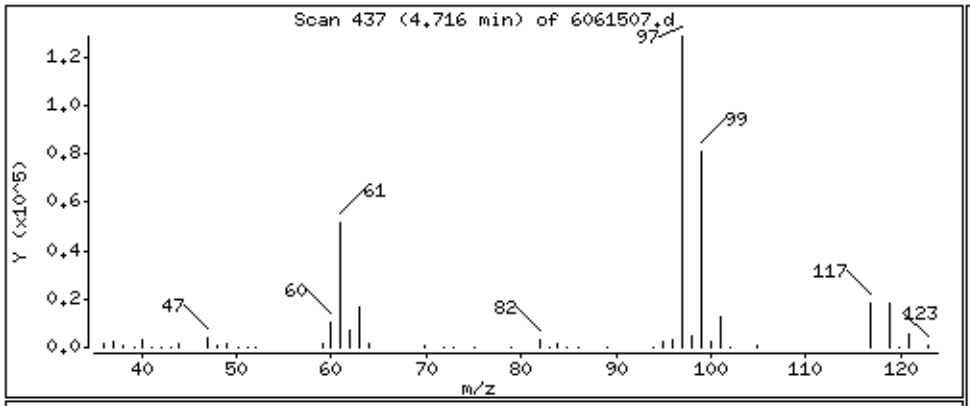
Operator: CT

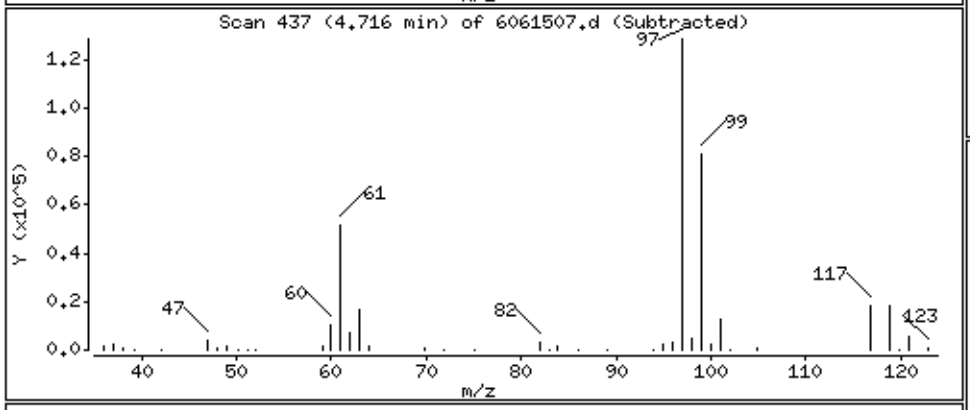
Column phase: RTx-624

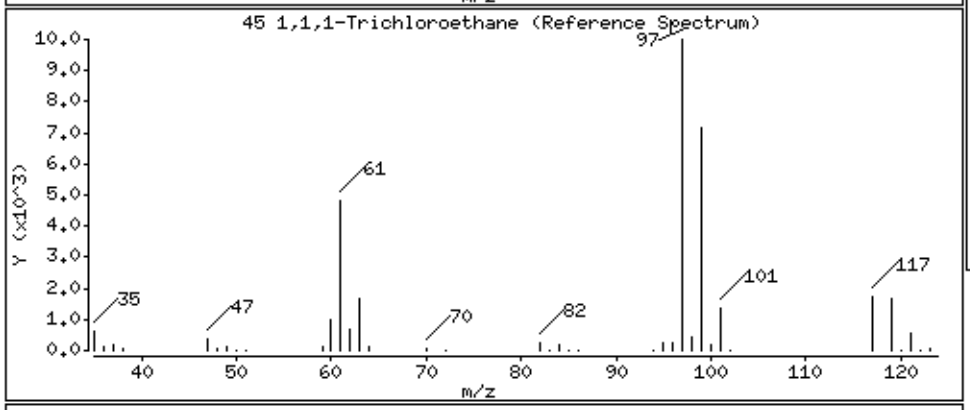
Column diameter: 0.53

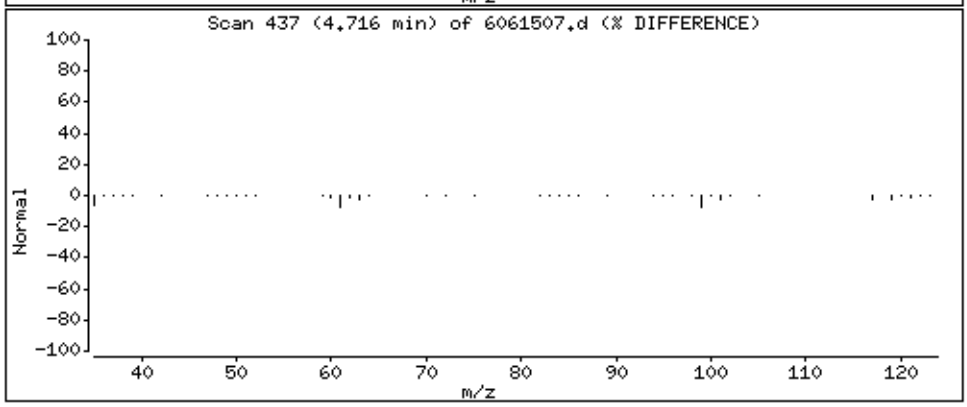
45 1,1,1-Trichloroethane

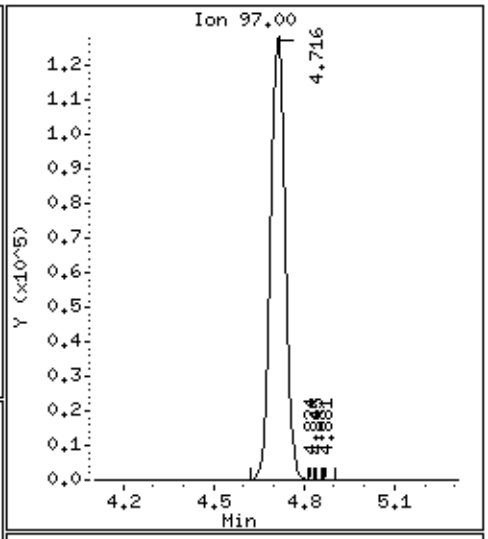
Concentration: 106.42 NG

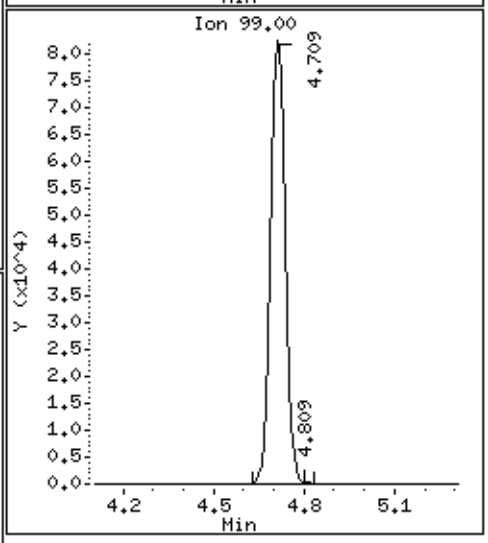












Data File: /chem/msd6.i/15jun16.b/6061507.d

Date : 15-JUN-2016 15:05

Client ID: LCSD

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCSD;LCSD

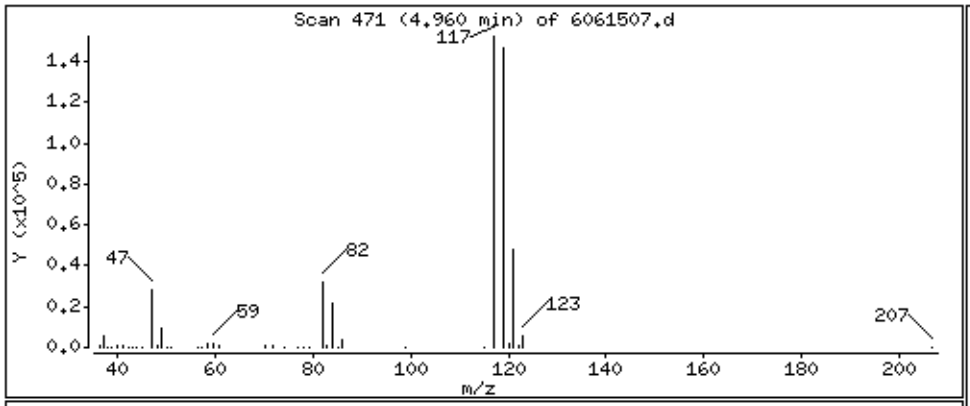
Operator: CT

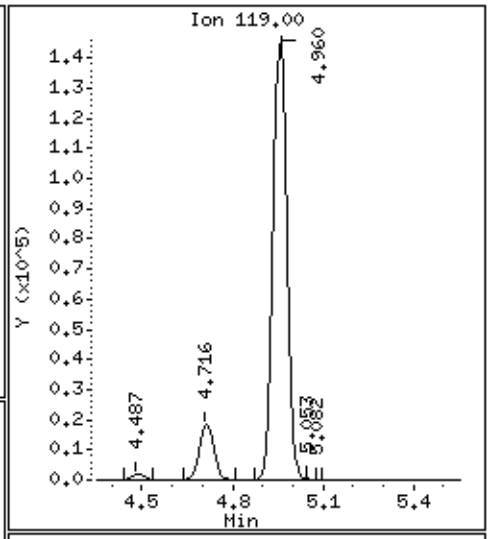
Column phase: RTx-624

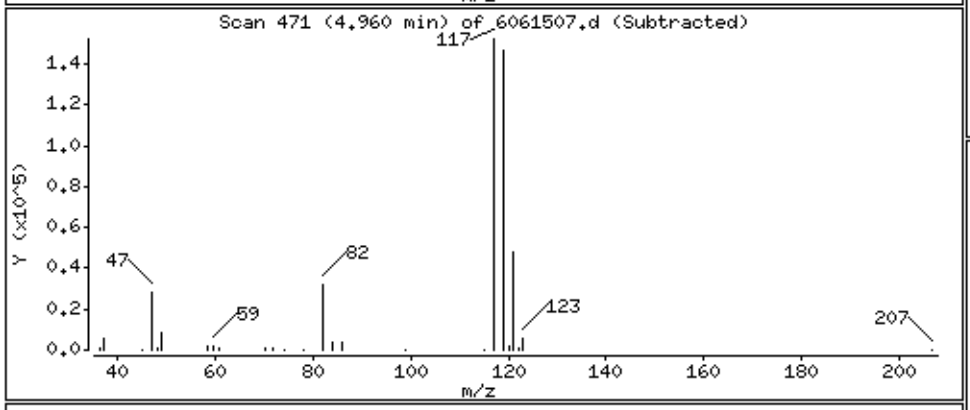
Column diameter: 0.53

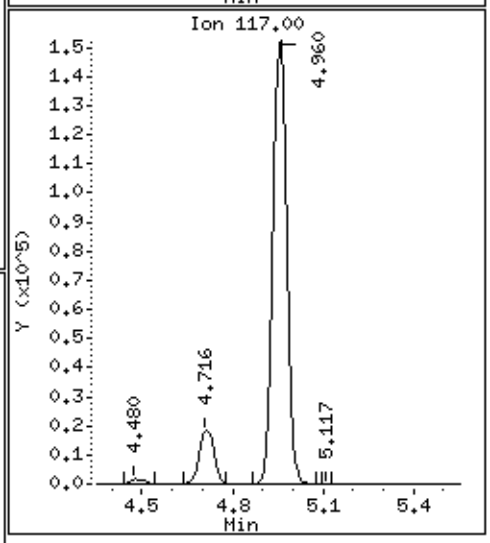
47 Carbon Tetrachloride

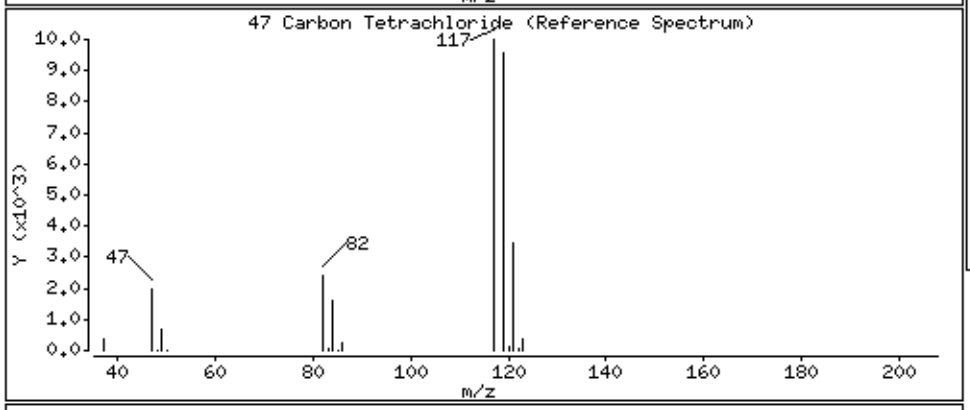
Concentration: 125.62 NG

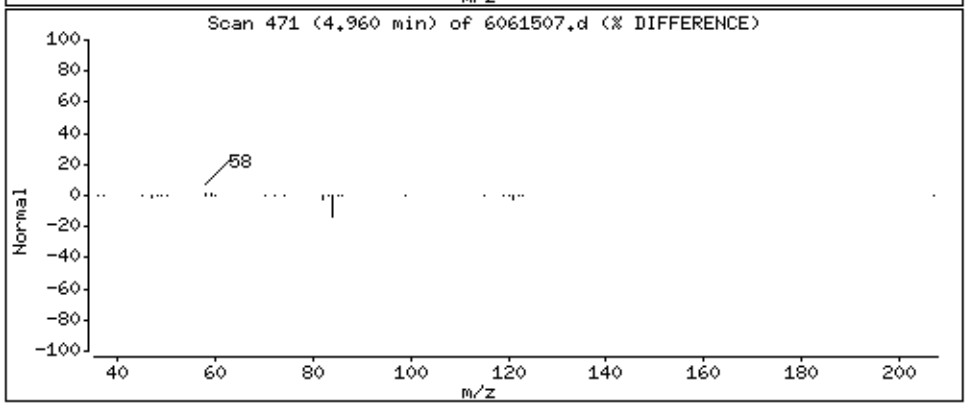












Data File: /chem/msd6.i/15jun16.b/6061507.d

Date : 15-JUN-2016 15:05

Client ID: LCSD

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCSD;LCSD

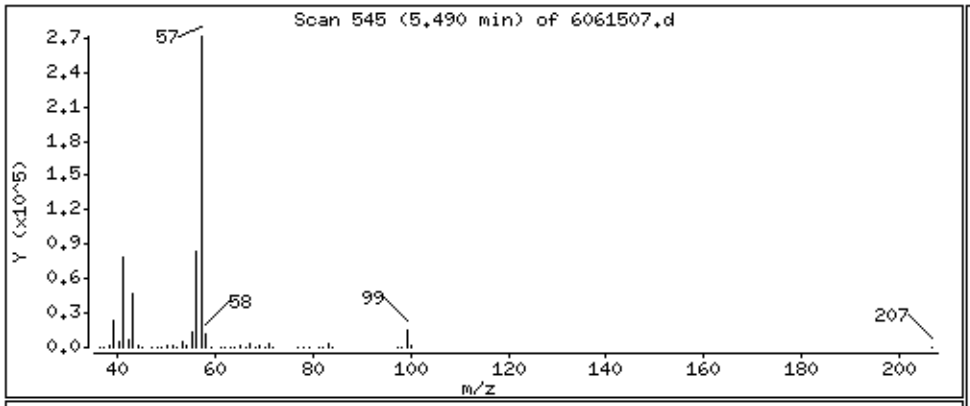
Operator: CT

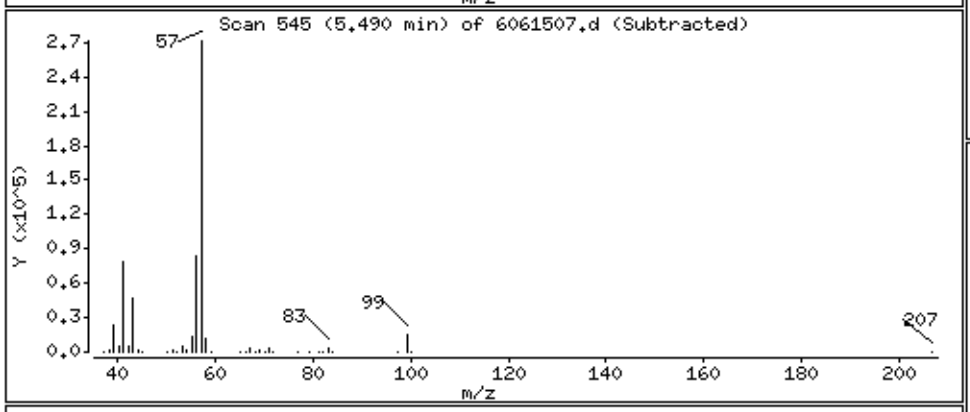
Column phase: RTx-624

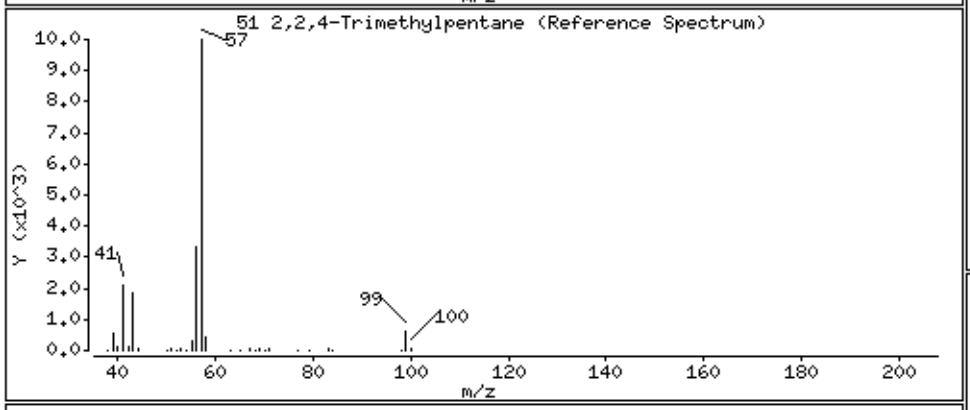
Column diameter: 0.53

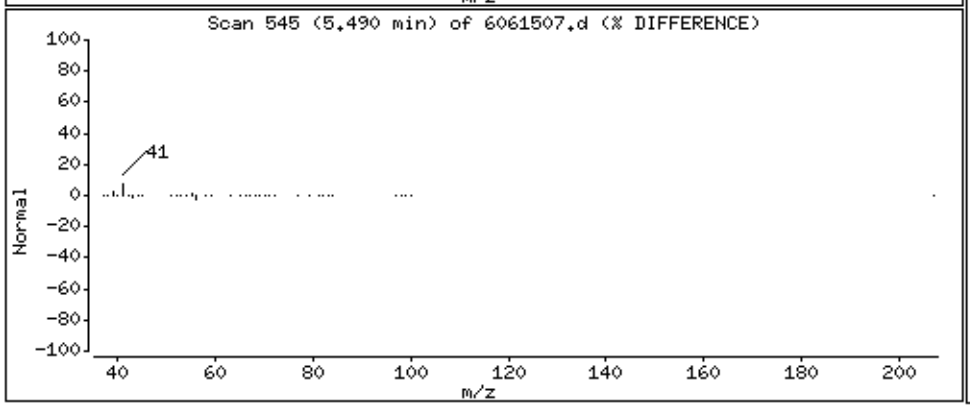
51 2,2,4-Trimethylpentane

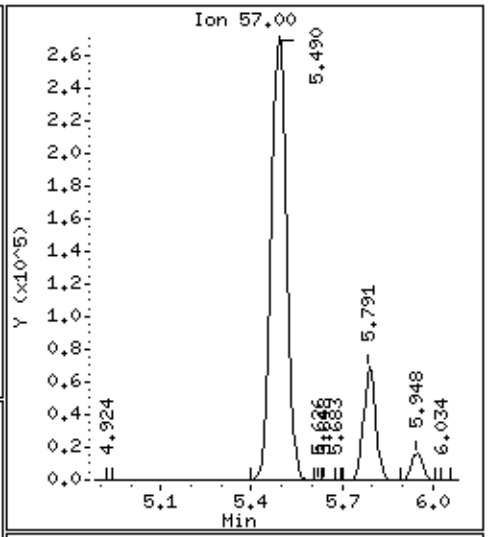
Concentration: 95.361 NG

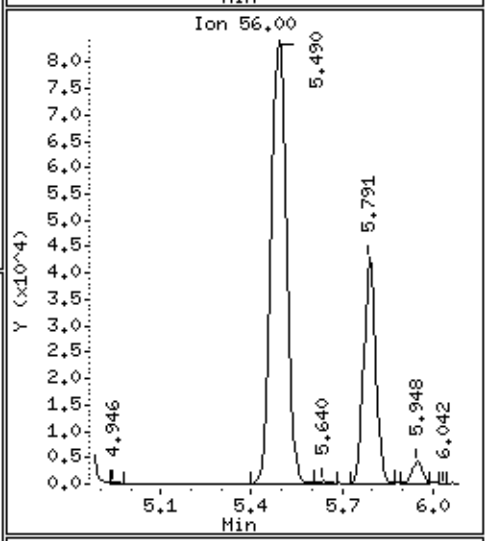


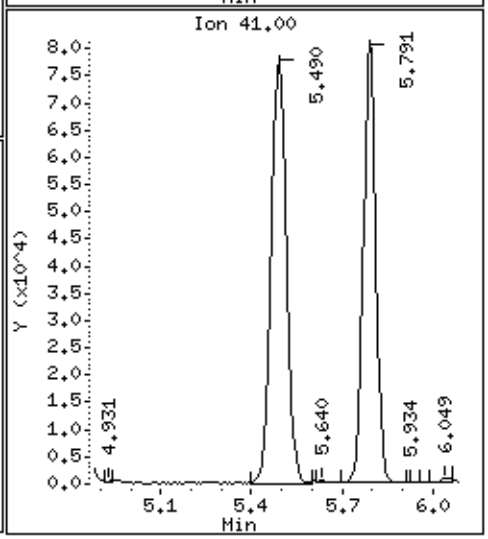












Data File: /chem/msd6.i/15jun16.b/6061507.d

Date : 15-JUN-2016 15:05

Client ID: LCSD

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCSD;LCSD

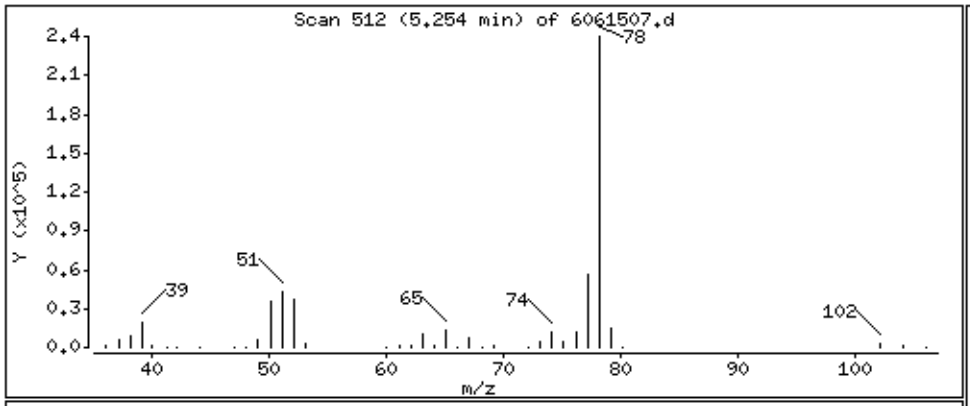
Operator: CT

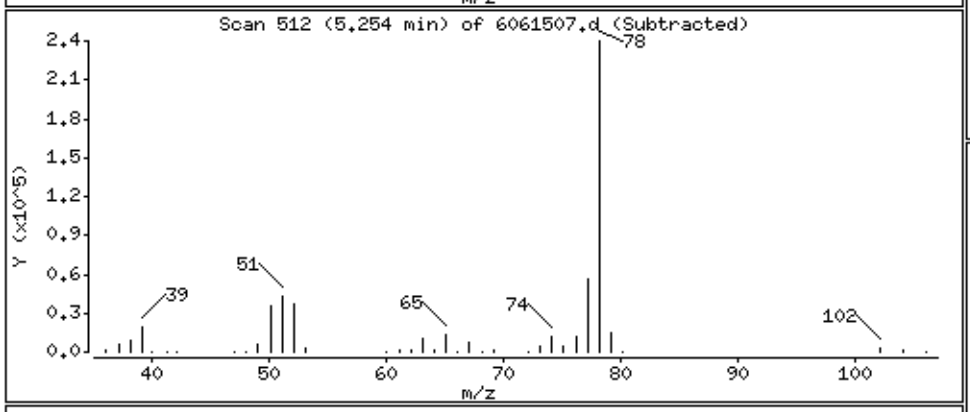
Column phase: RTx-624

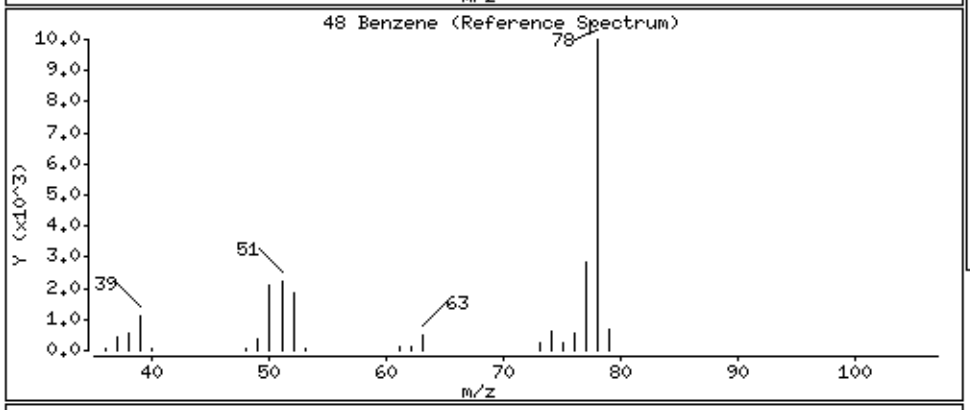
Column diameter: 0.53

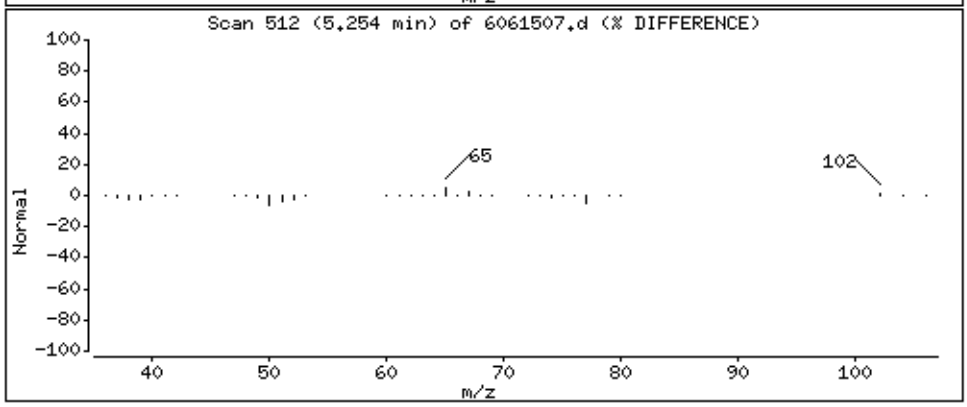
48 Benzene

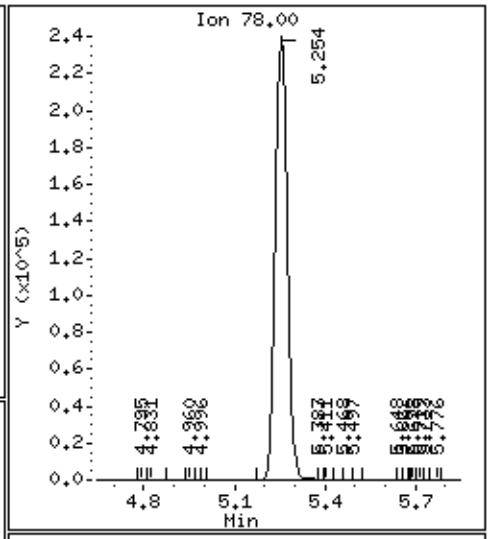
Concentration: 59.255 NG

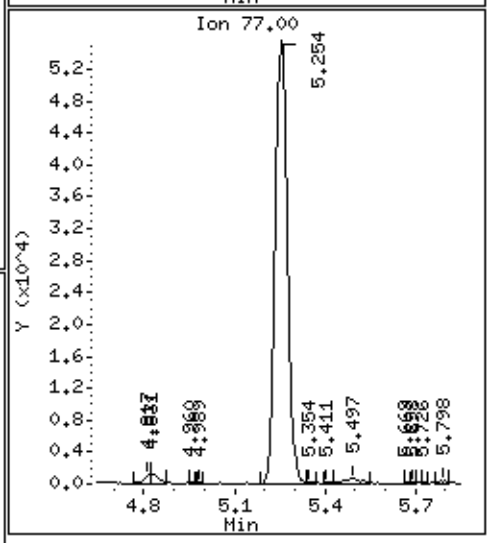












Data File: /chem/msd6.i/15jun16.b/6061507.d

Date : 15-JUN-2016 15:05

Client ID: LCSD

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCSD;LCSD

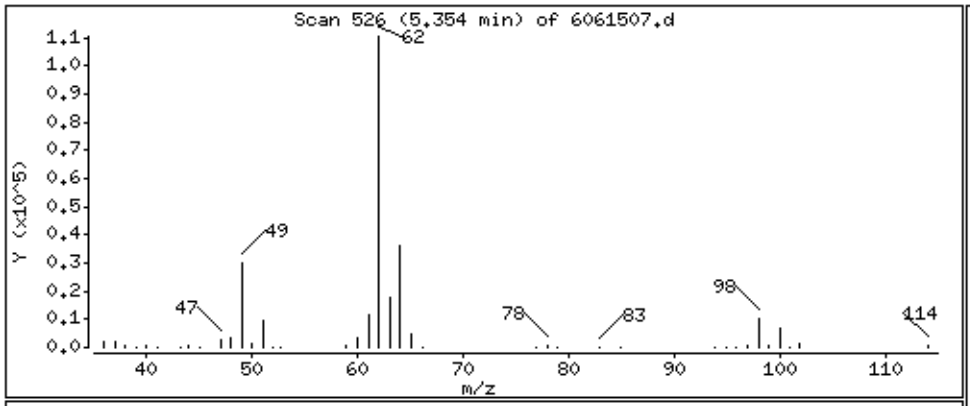
Operator: CT

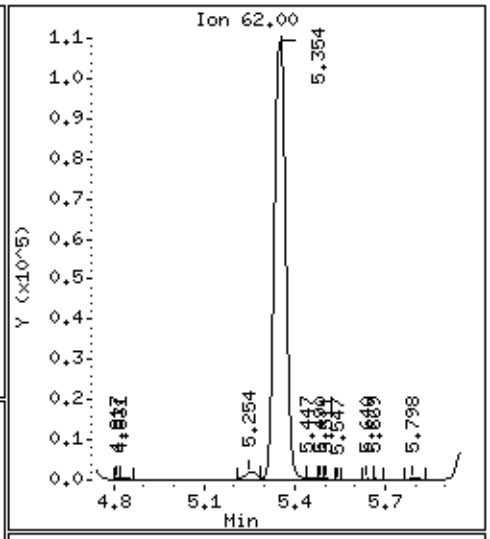
Column phase: RTx-624

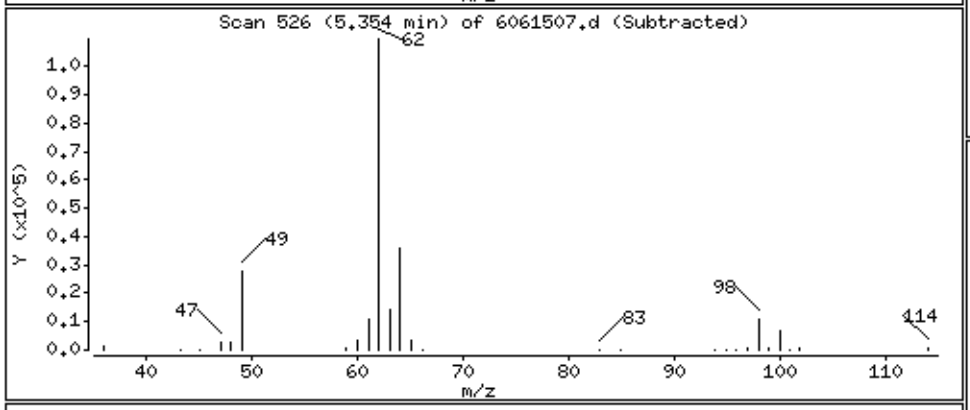
Column diameter: 0.53

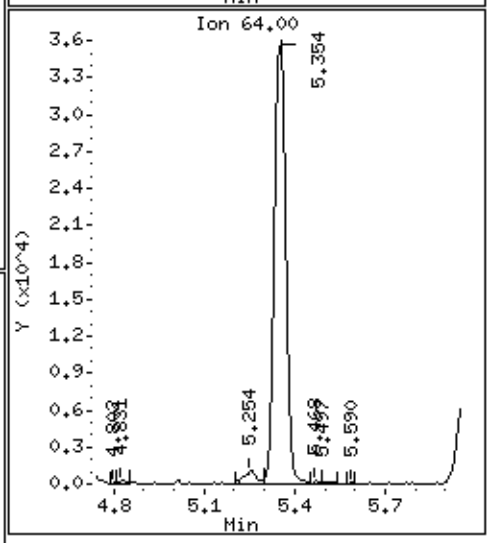
50 1,2-Dichloroethane

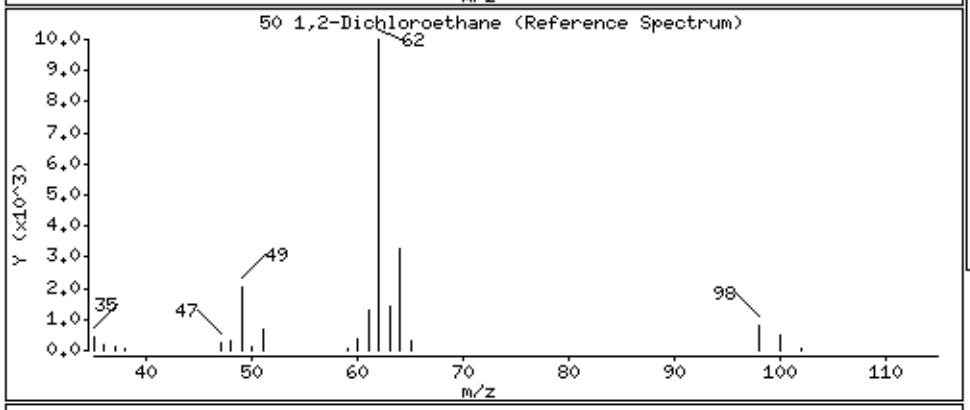
Concentration: 79.533 NG

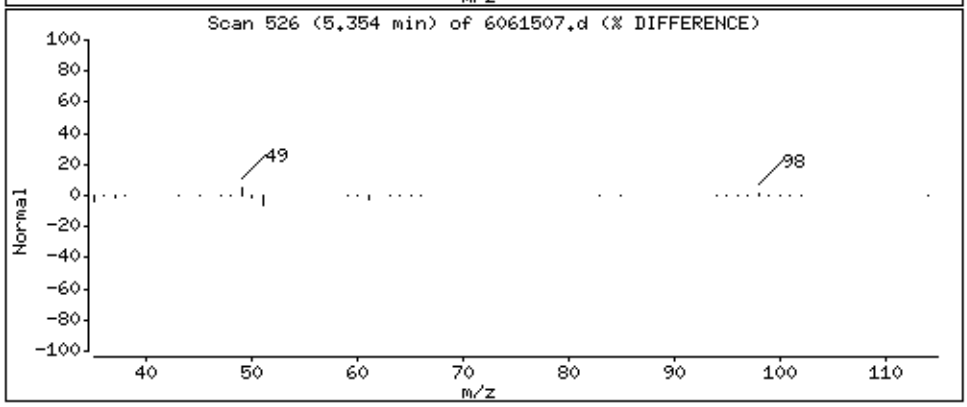












Data File: /chem/msd6.i/15jun16.b/6061507.d

Date : 15-JUN-2016 15:05

Client ID: LCSD

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCSD;LCSD

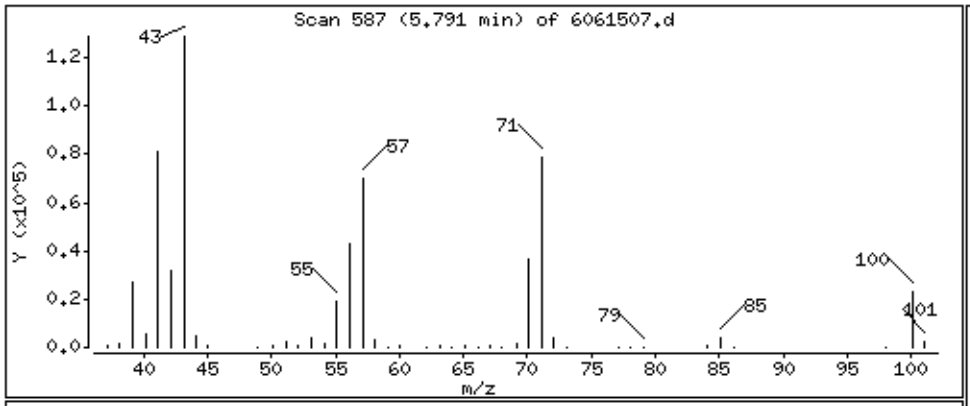
Operator: CT

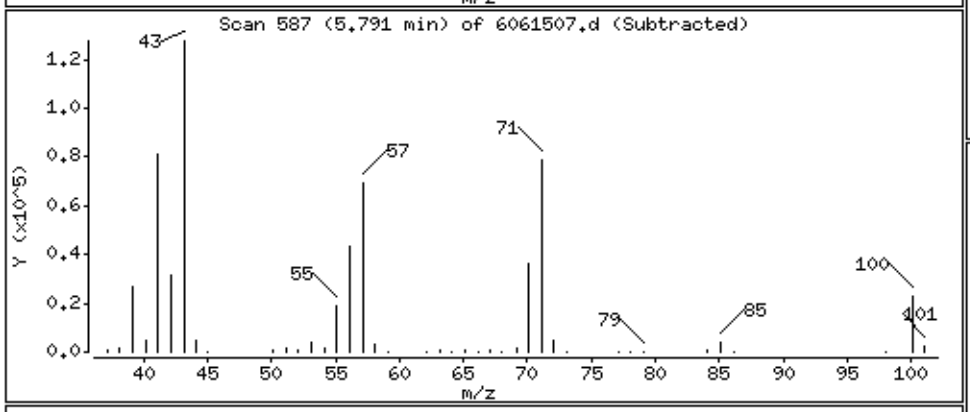
Column phase: RTx-624

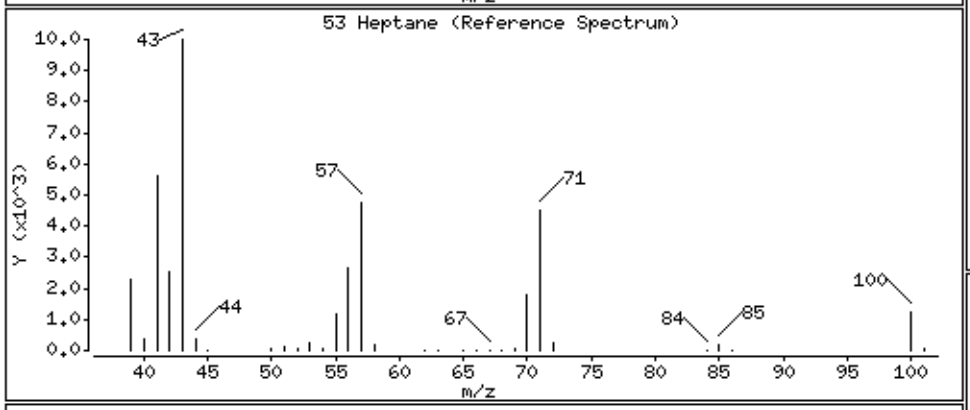
Column diameter: 0.53

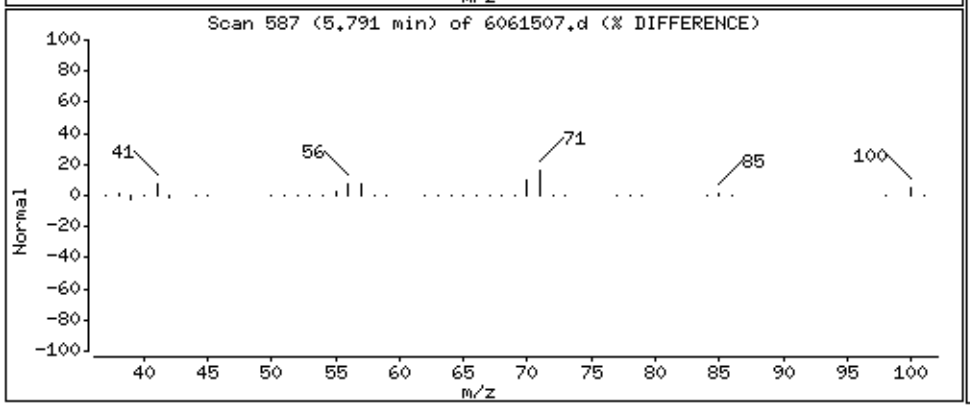
53 Heptane

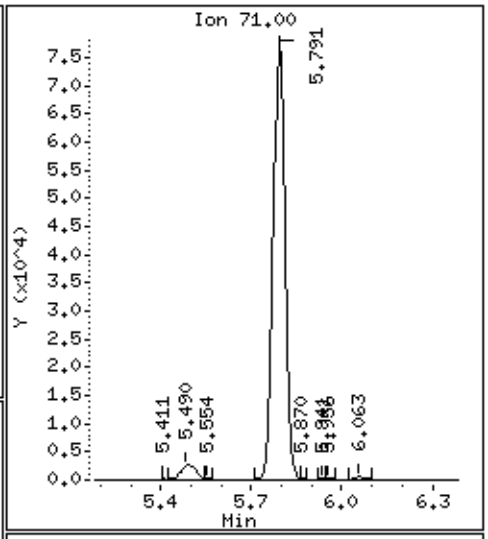
Concentration: 82.376 NG

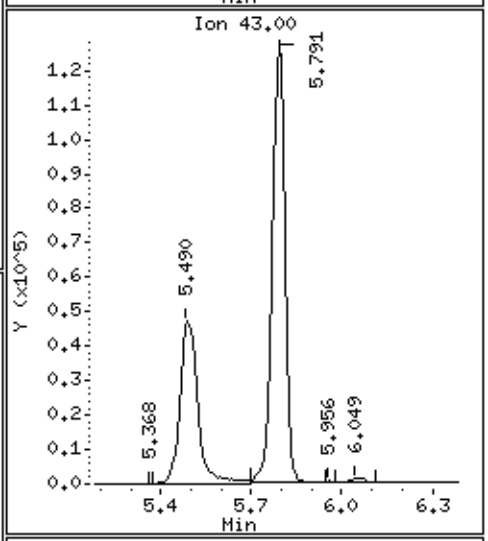


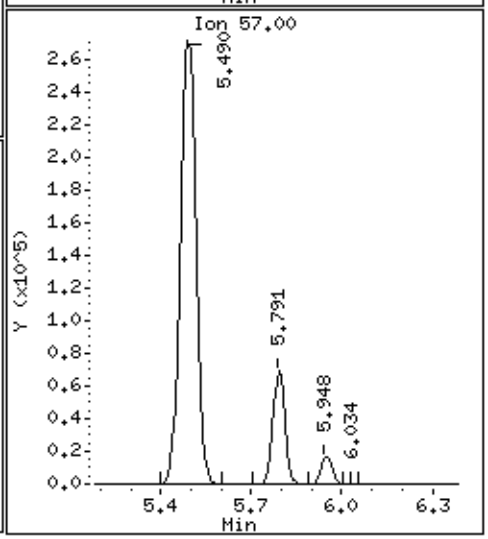












Data File: /chem/msd6.i/15jun16.b/6061507.d

Date : 15-JUN-2016 15:05

Client ID: LCSD

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCSD;LCSD

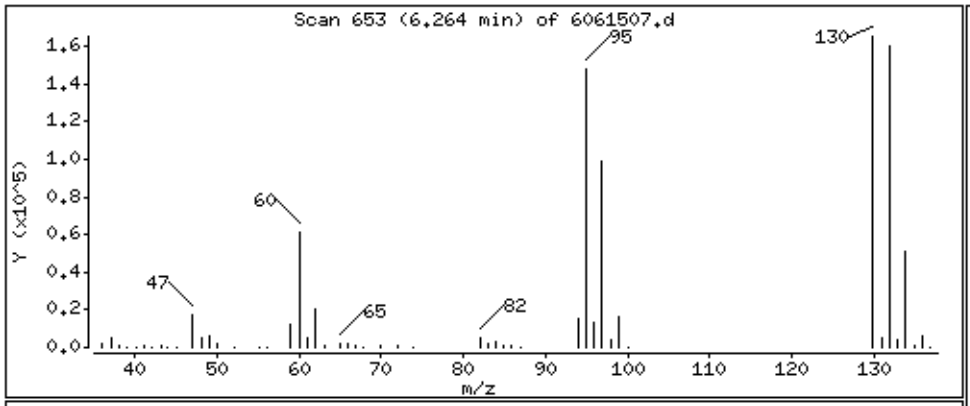
Operator: CT

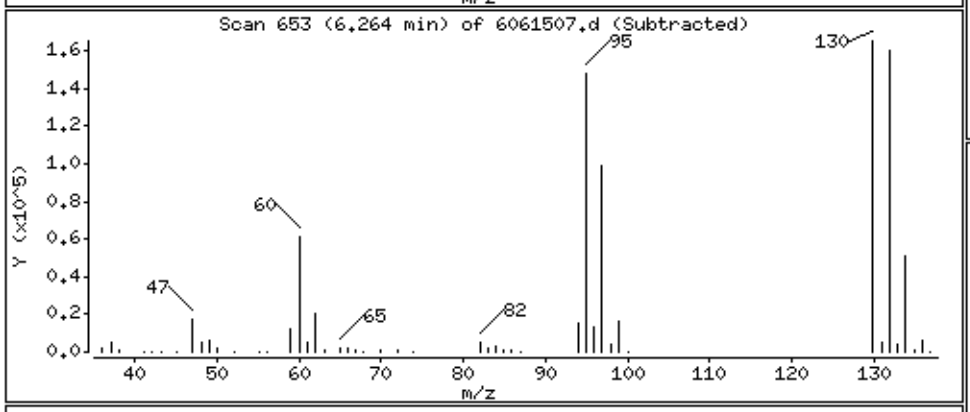
Column phase: RTx-624

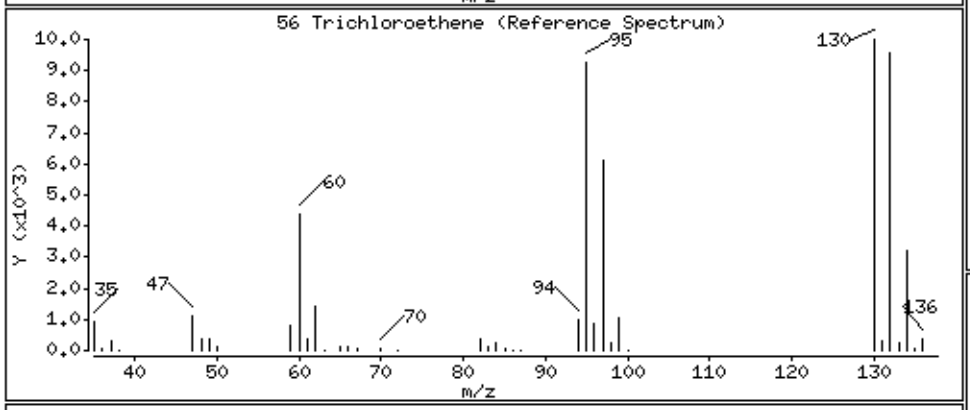
Column diameter: 0.53

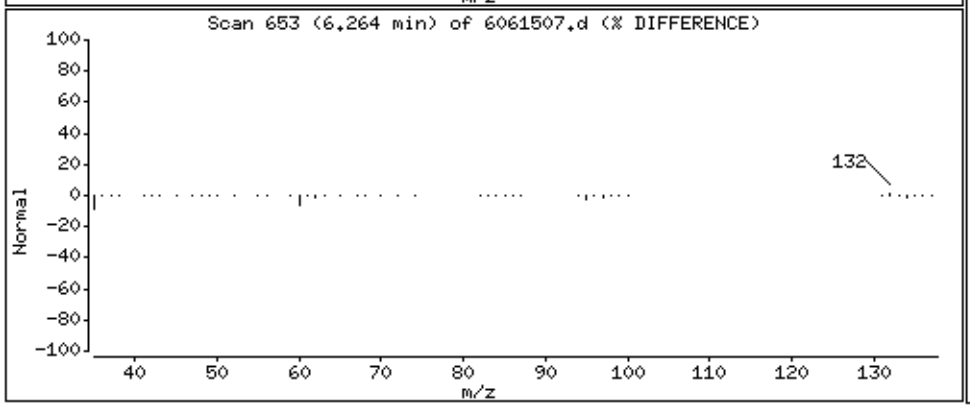
56 Trichloroethene

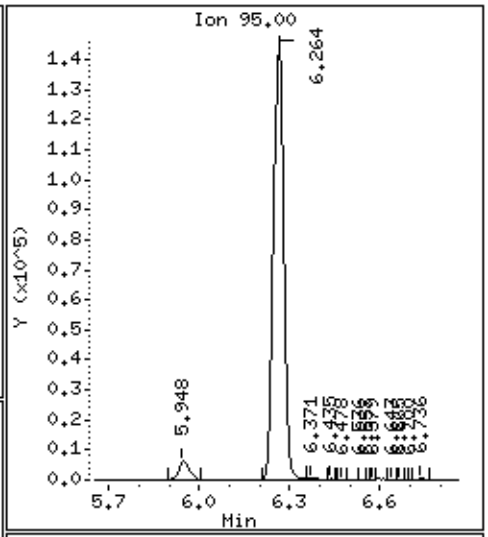
Concentration: 102.74 NG

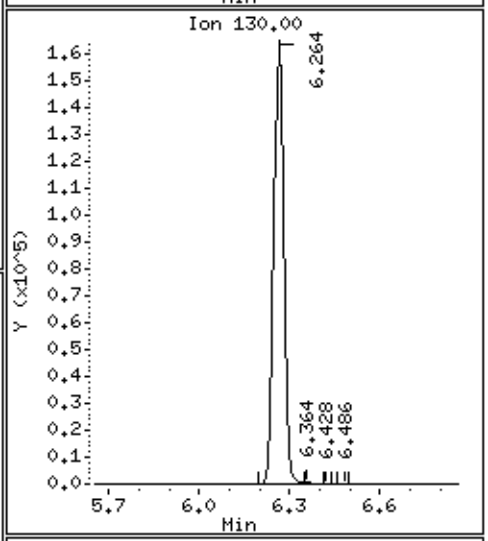


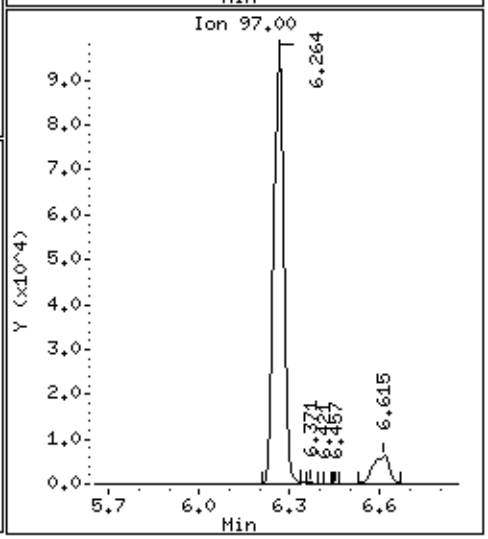












Data File: /chem/msd6.i/15jun16.b/6061507.d

Date : 15-JUN-2016 15:05

Client ID: LCSD

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCSD;LCSD

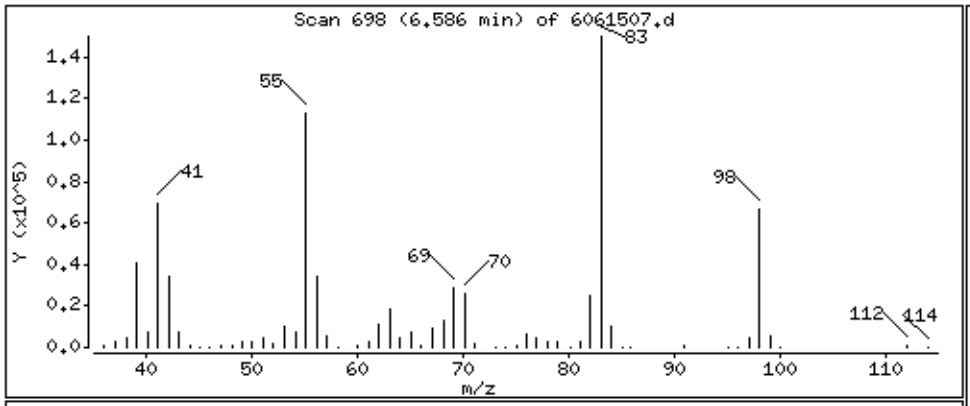
Operator: CT

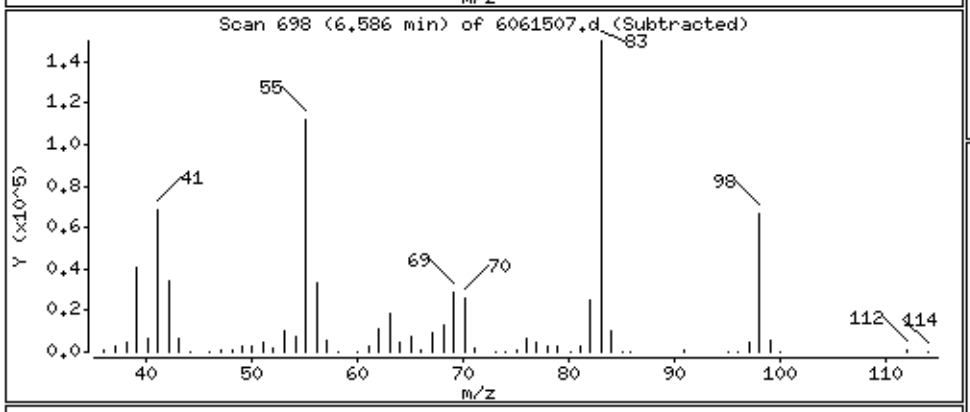
Column phase: RTx-624

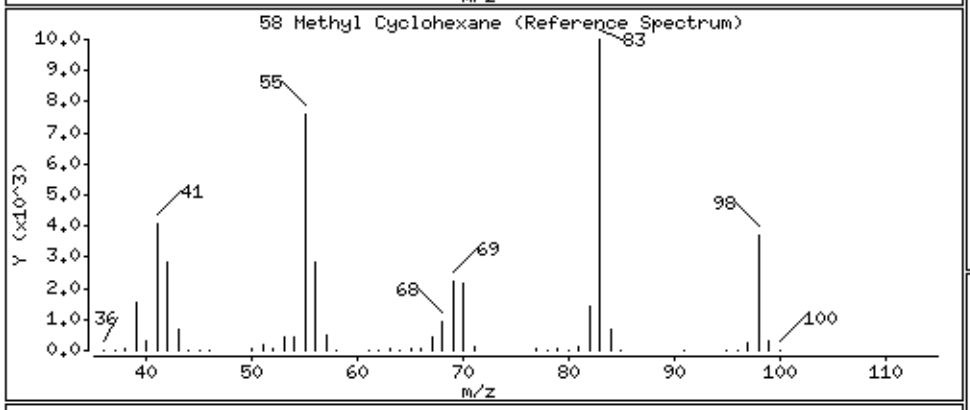
Column diameter: 0.53

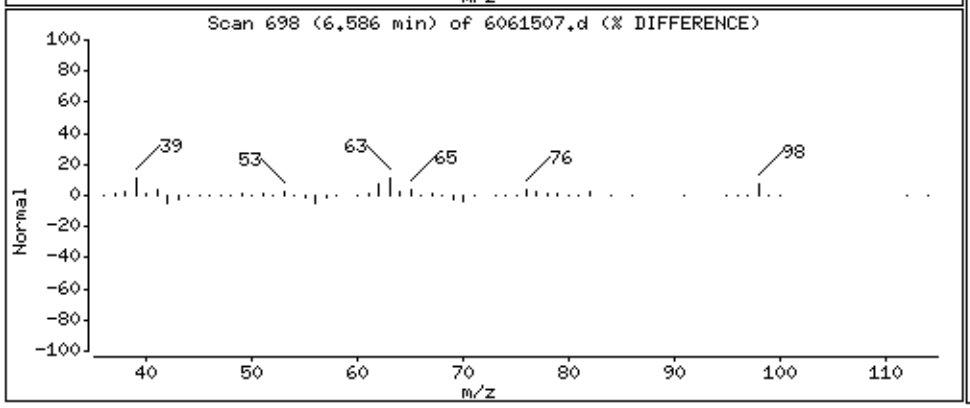
58 Methyl Cyclohexane

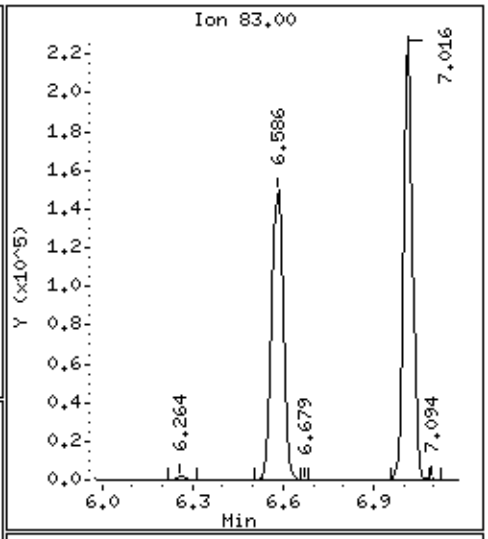
Concentration: 82.025 NG

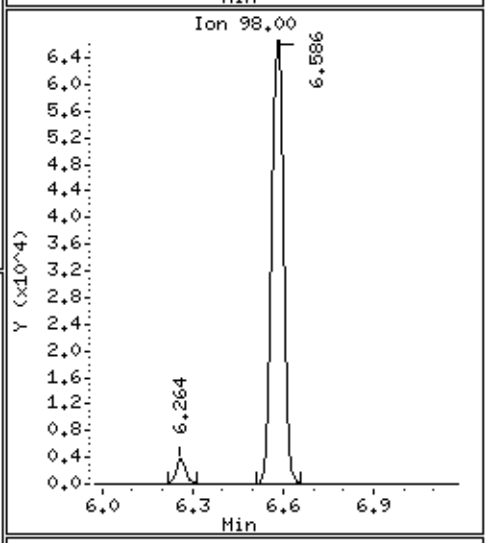


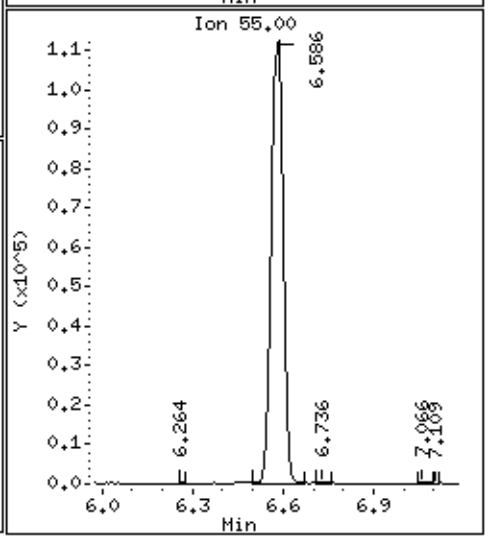












Data File: /chem/msd6.i/15jun16.b/6061507.d

Date : 15-JUN-2016 15:05

Client ID: LCSD

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCSD;LCSD

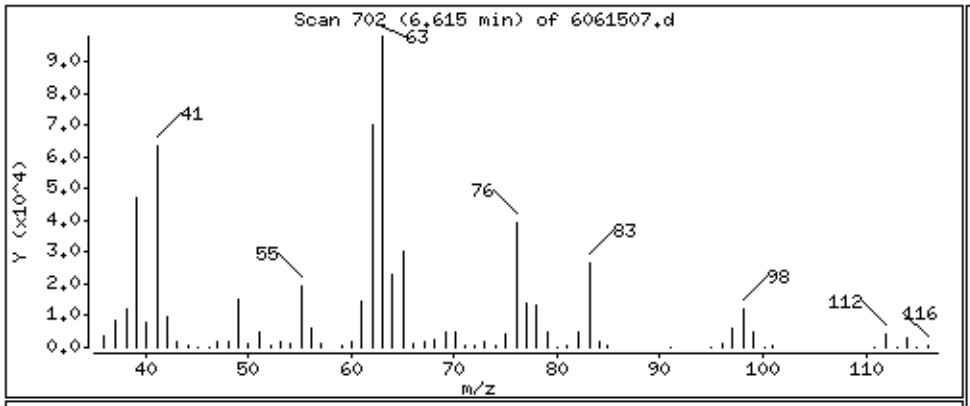
Operator: CT

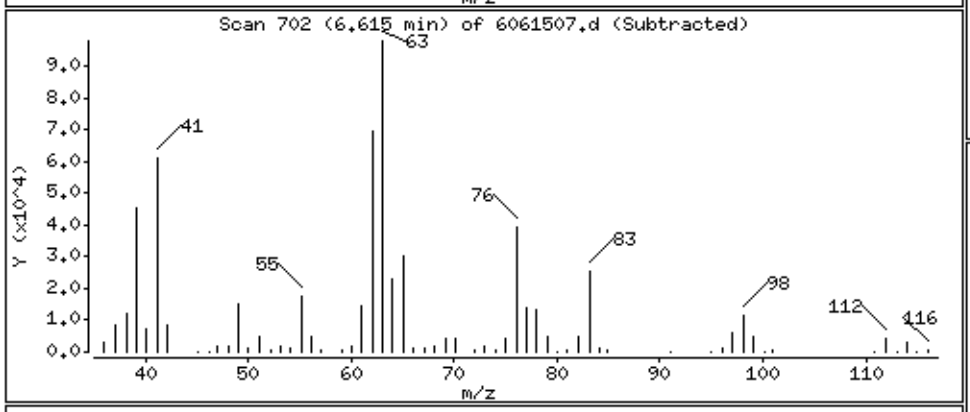
Column phase: RTx-624

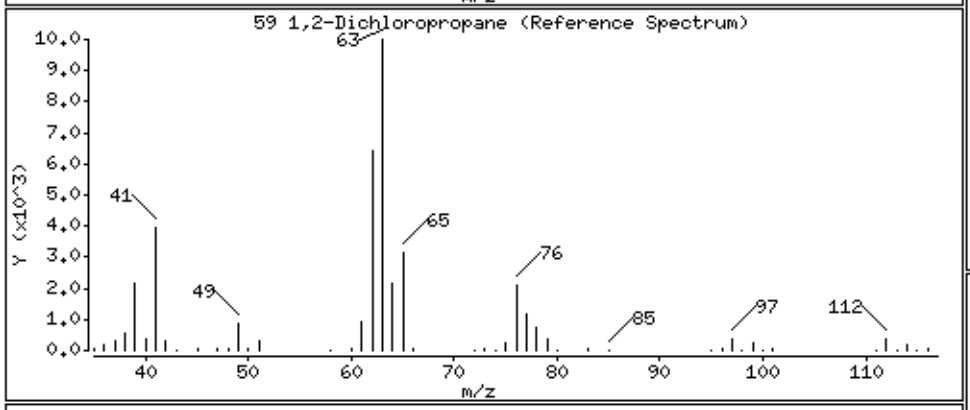
Column diameter: 0.53

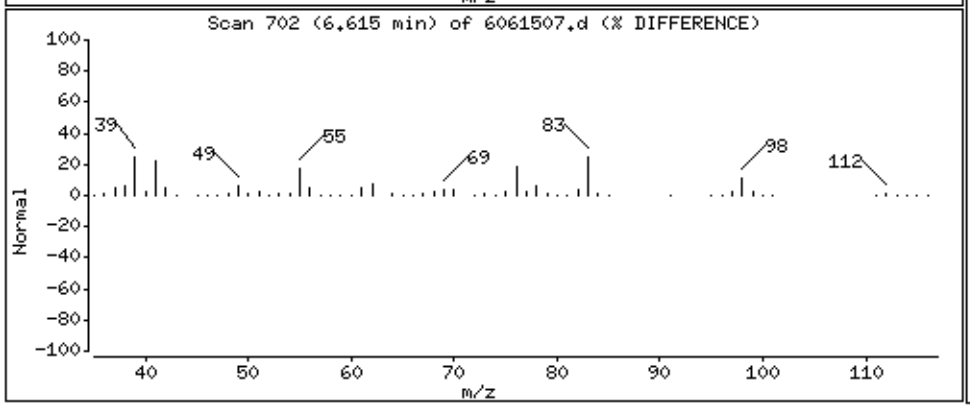
59 1,2-Dichloropropane

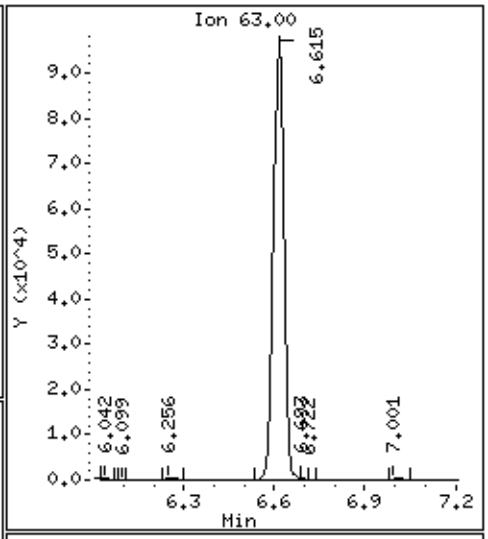
Concentration: 98.091 NG

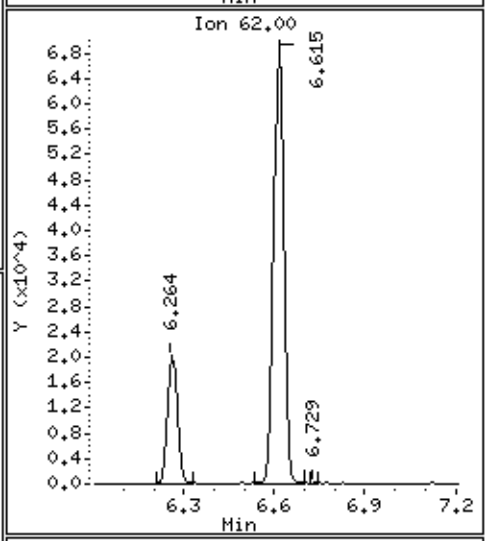


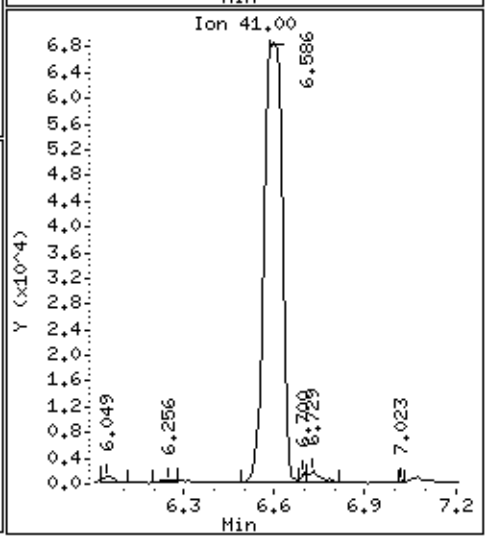












Data File: /chem/msd6.i/15jun16.b/6061507.d

Date : 15-JUN-2016 15:05

Client ID: LCSD

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCSD;LCSD

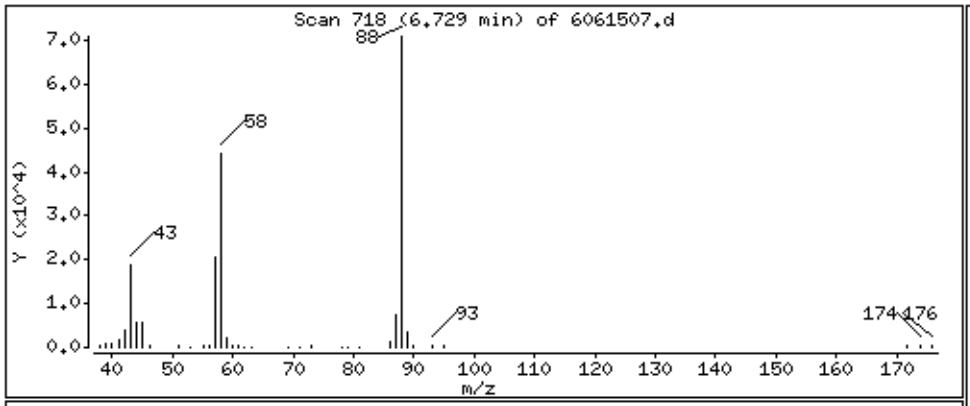
Operator: CT

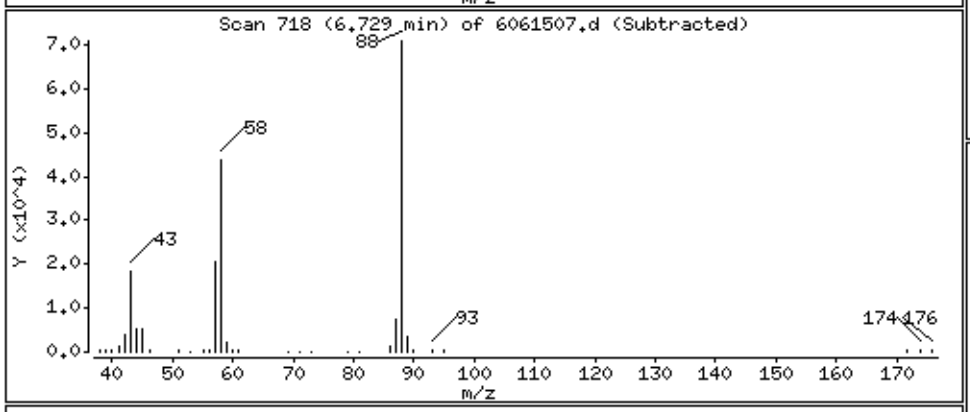
Column phase: RTx-624

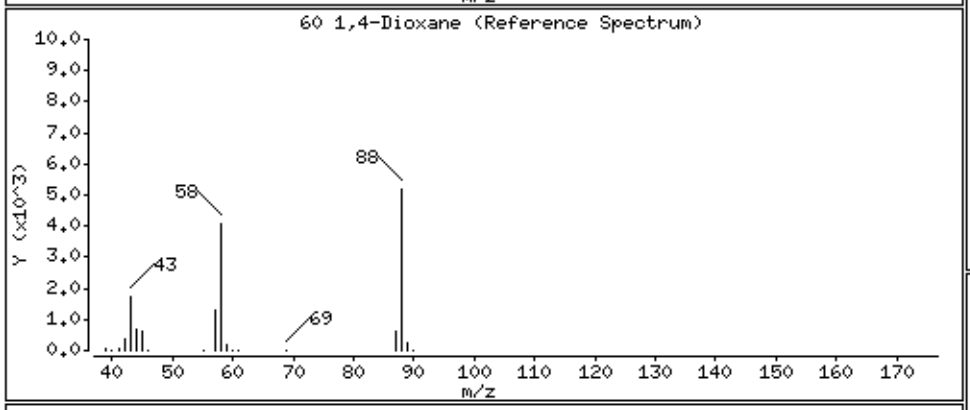
Column diameter: 0.53

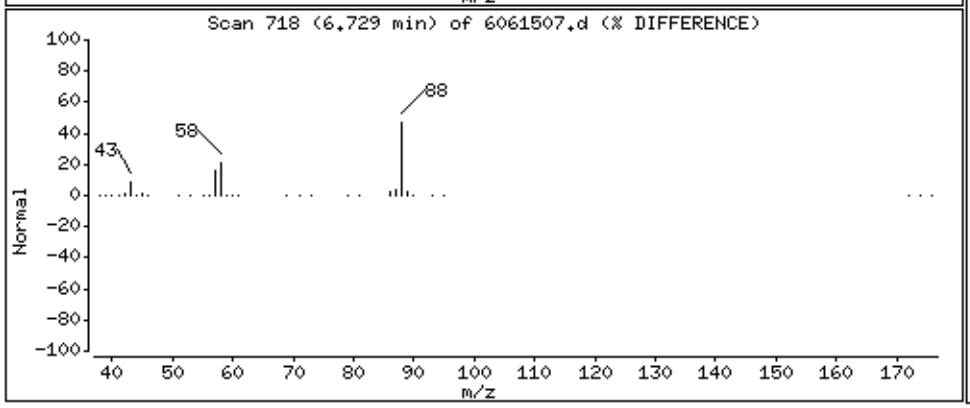
60 1,4-Dioxane

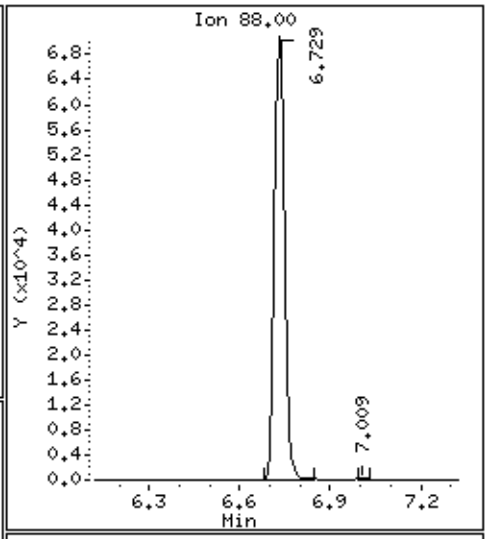
Concentration: 73.926 NG

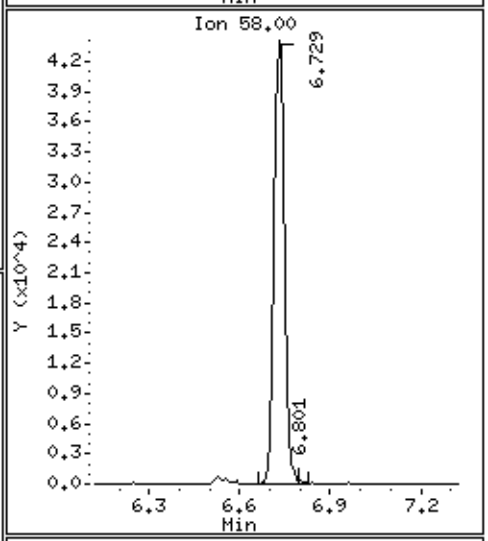


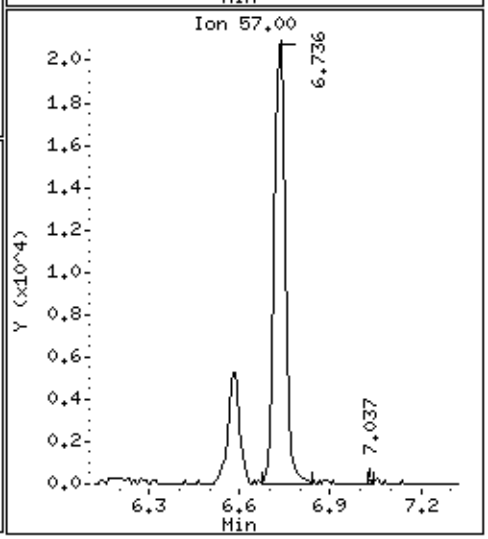












Data File: /chem/msd6.i/15jun16.b/6061507.d

Date : 15-JUN-2016 15:05

Client ID: LCSD

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCSD;LCSD

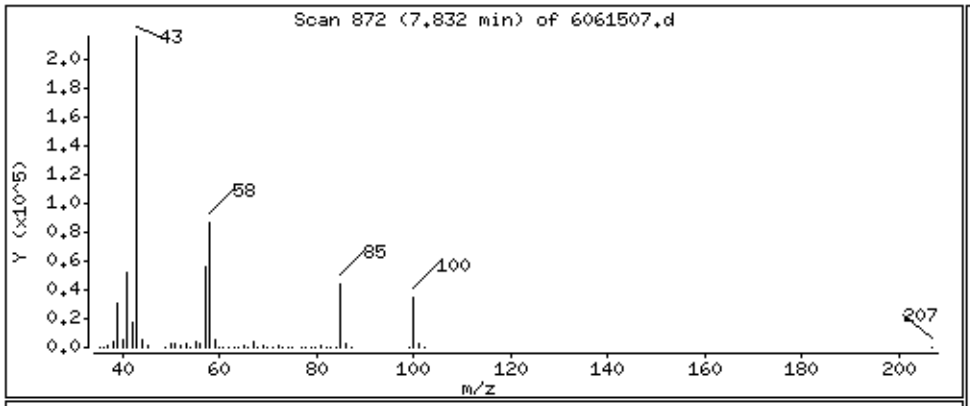
Operator: CT

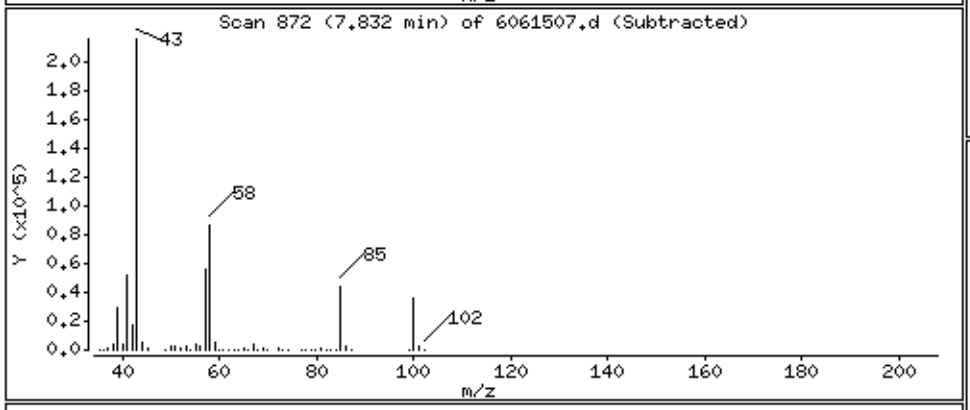
Column phase: RTx-624

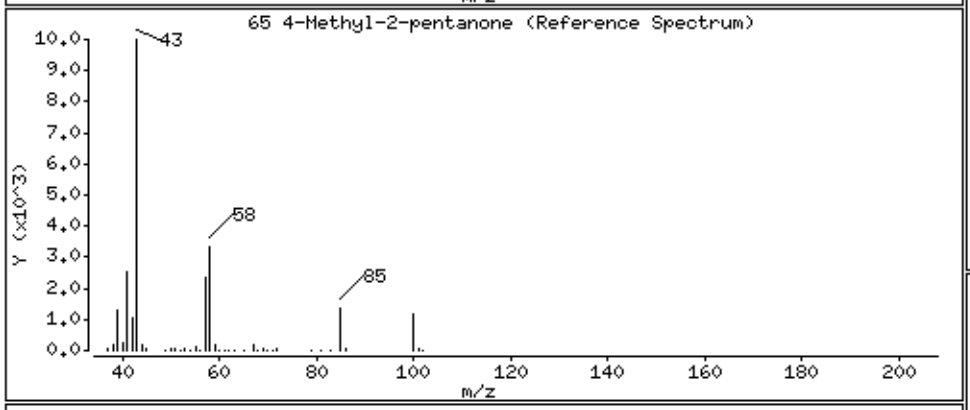
Column diameter: 0.53

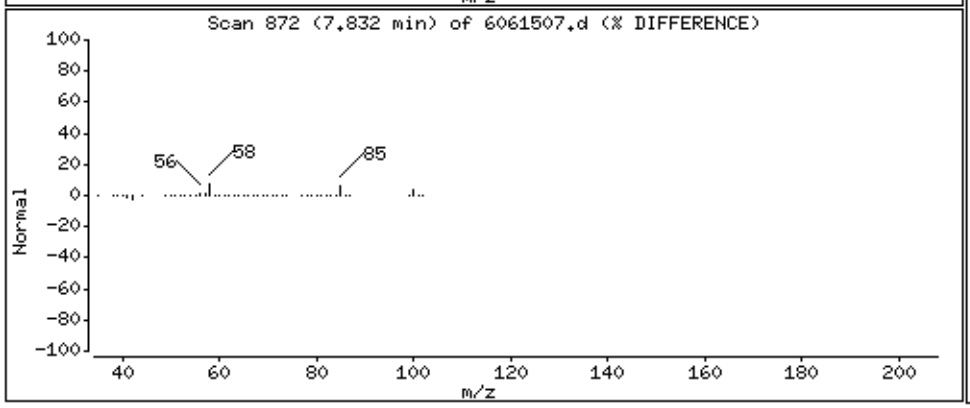
65 4-Methyl-2-pentanone

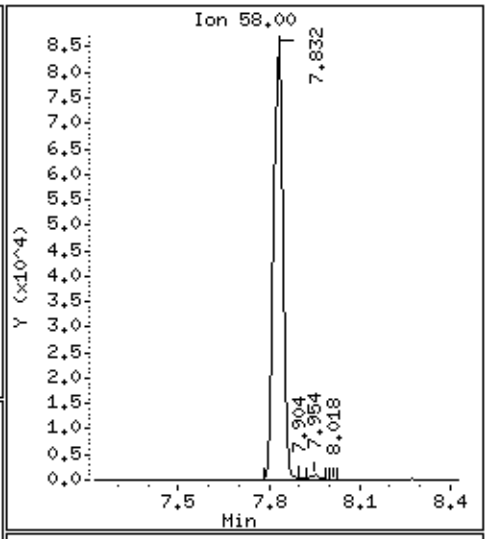
Concentration: 83.451 NG

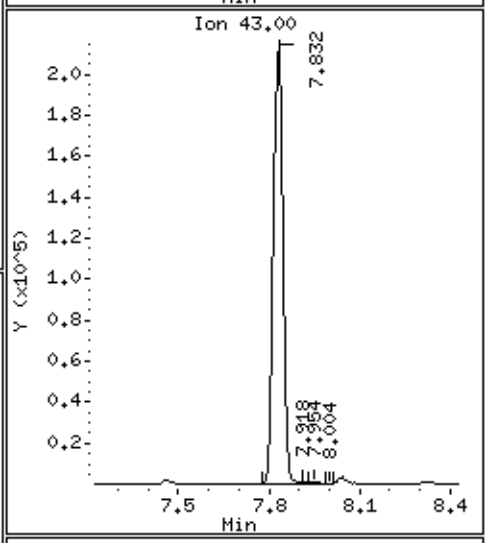


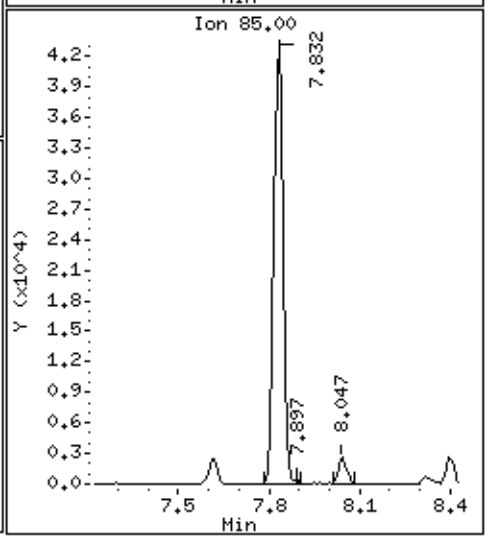












Data File: /chem/msd6.i/15jun16.b/6061507.d

Date : 15-JUN-2016 15:05

Client ID: LCSD

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCSD;LCSD

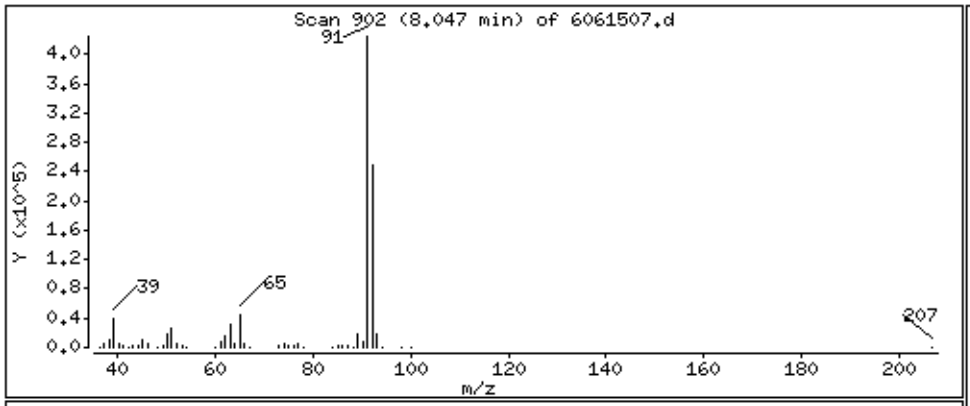
Operator: CT

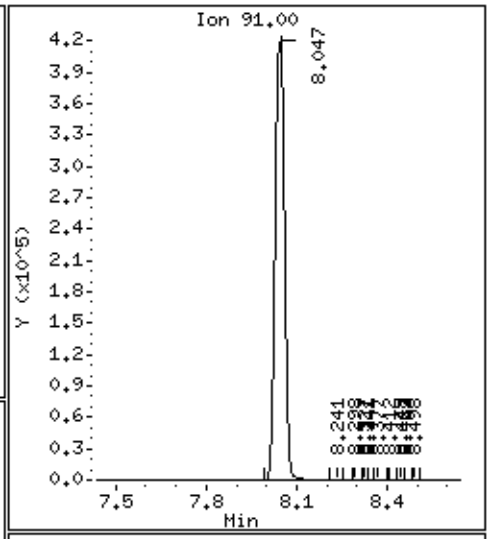
Column phase: RTx-624

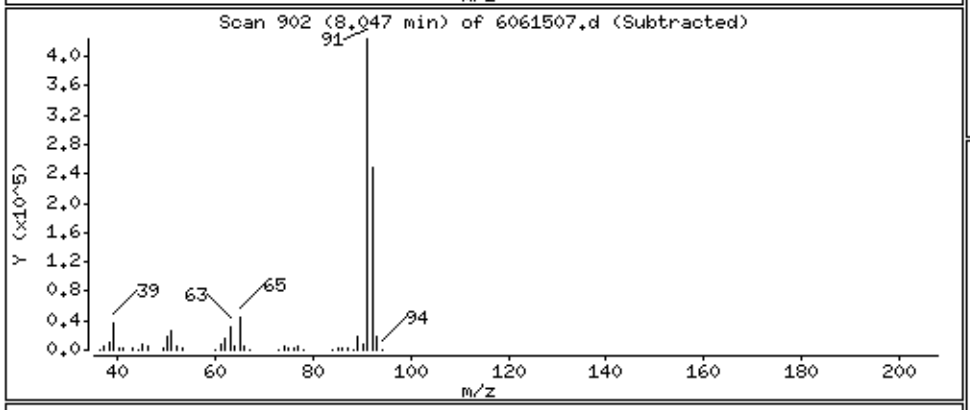
Column diameter: 0.53

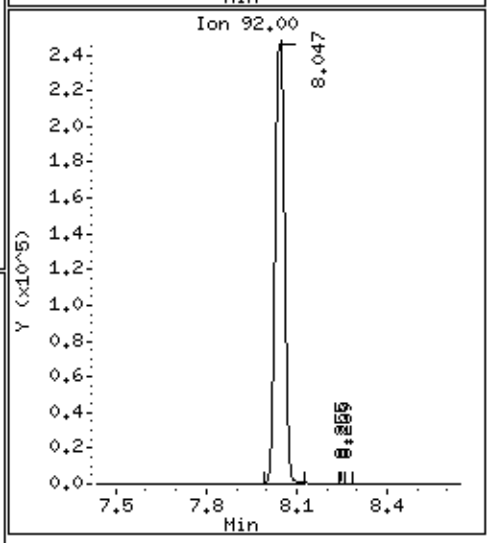
67 Toluene

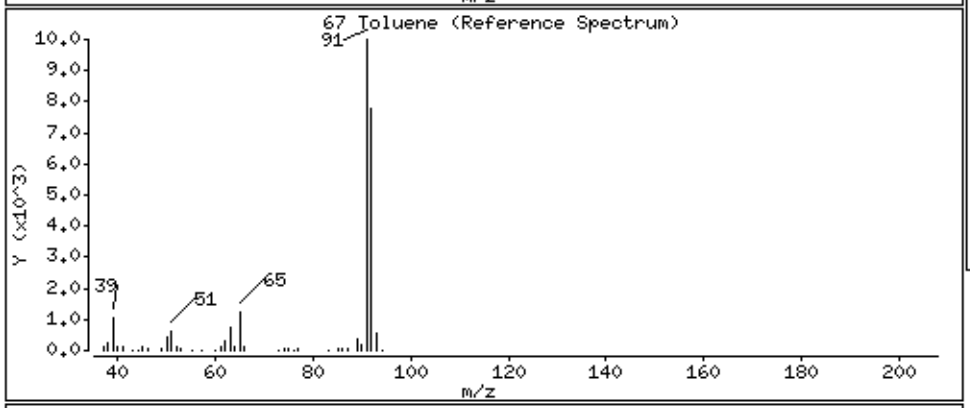
Concentration: 76.656 NG

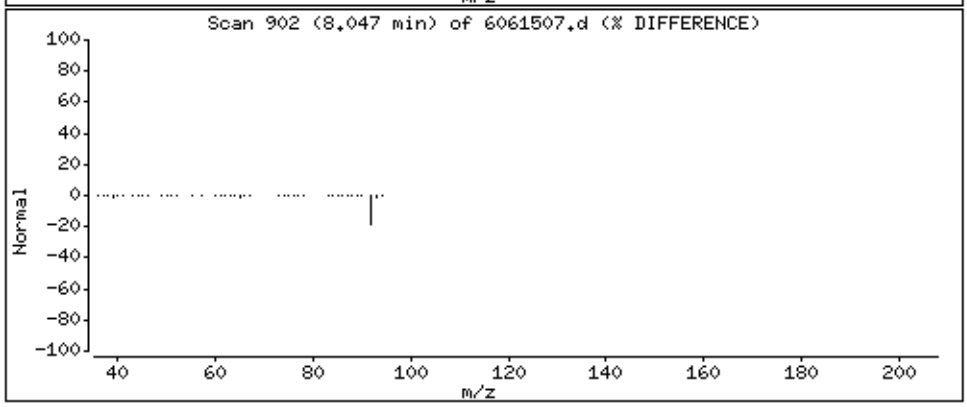












Data File: /chem/msd6.i/15jun16.b/6061507.d

Date : 15-JUN-2016 15:05

Client ID: LCSD

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCSD;LCSD

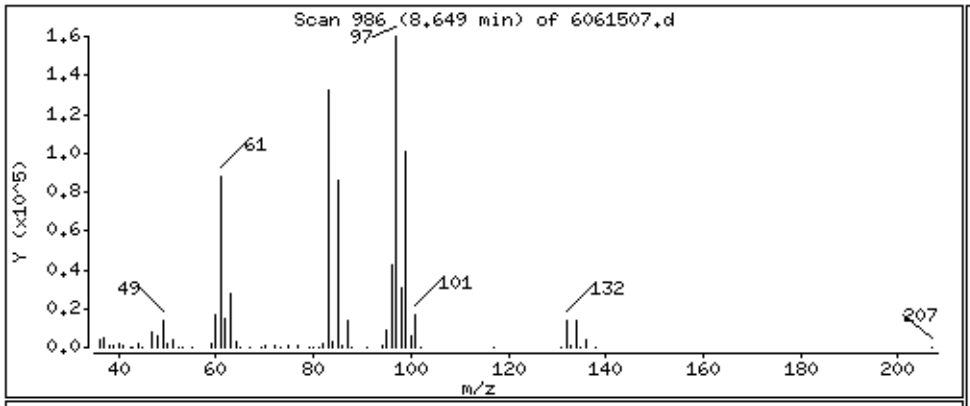
Operator: CT

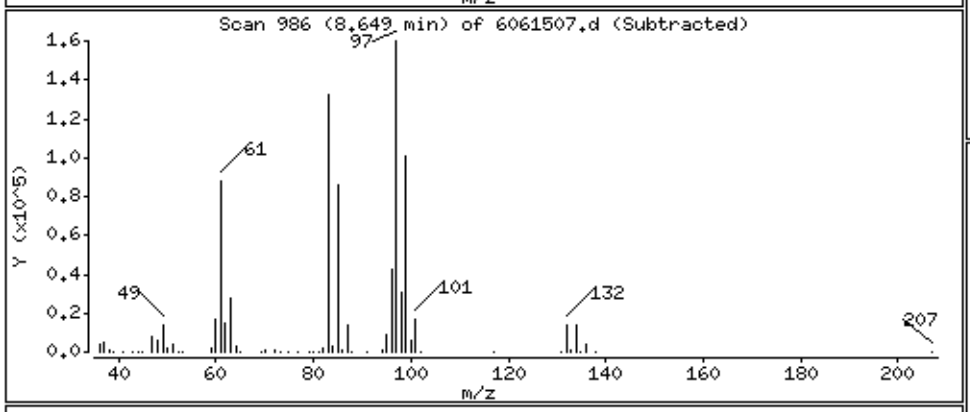
Column phase: RTx-624

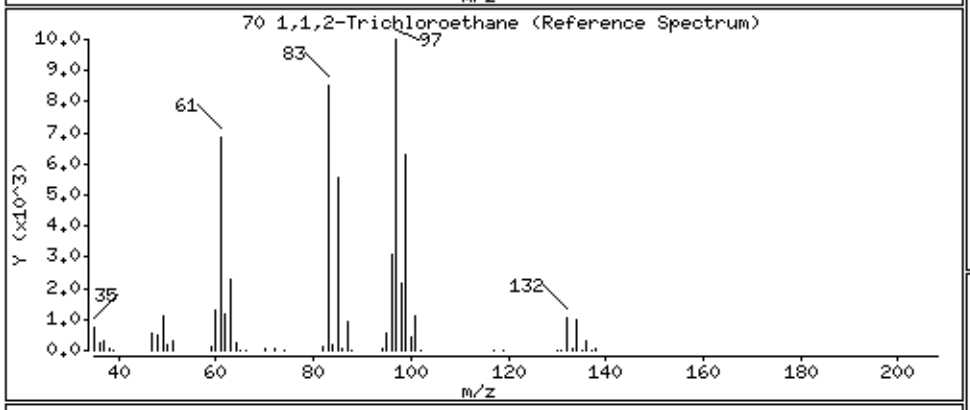
Column diameter: 0.53

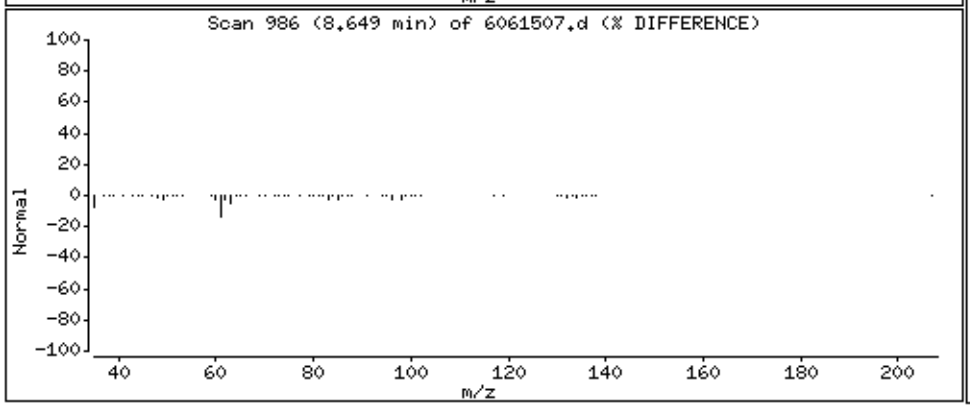
70 1,1,2-Trichloroethane

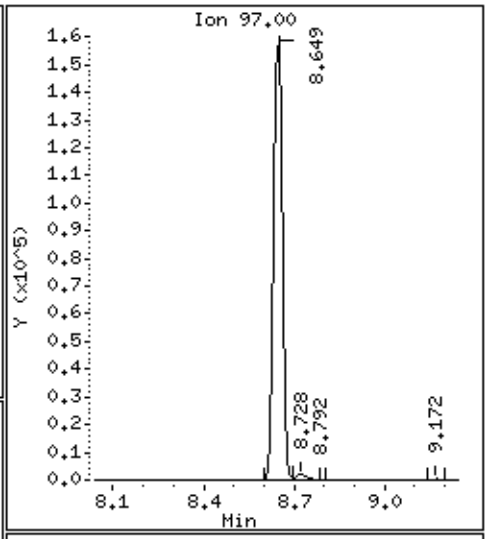
Concentration: 111.83 NG

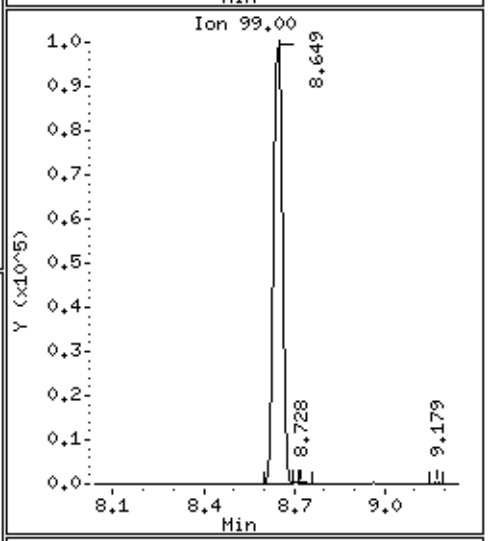


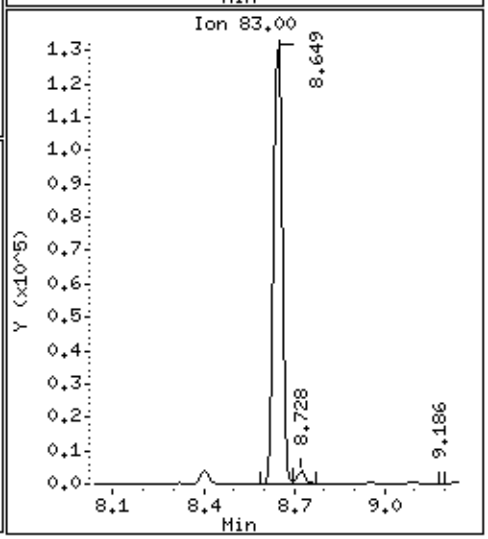












Data File: /chem/msd6.i/15jun16.b/6061507.d

Date : 15-JUN-2016 15:05

Client ID: LCSD

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCSD;LCSD

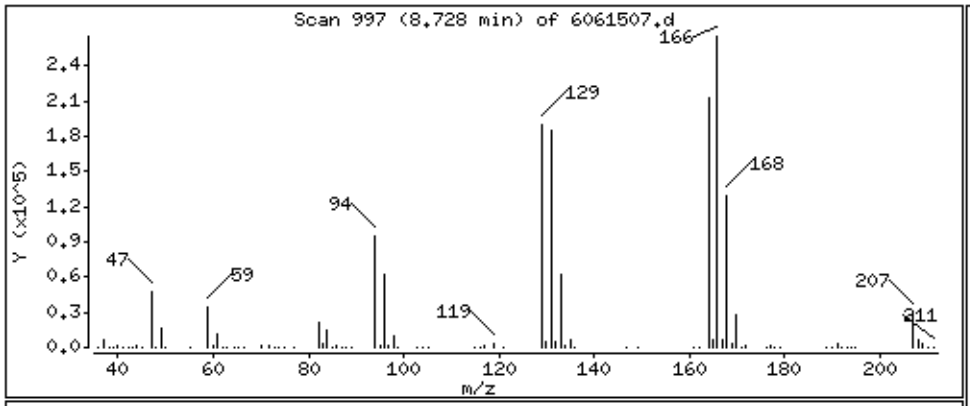
Operator: CT

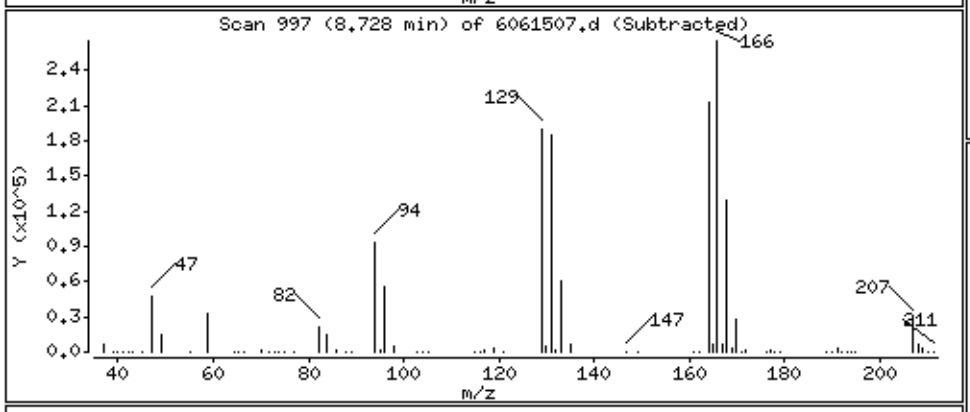
Column phase: RTx-624

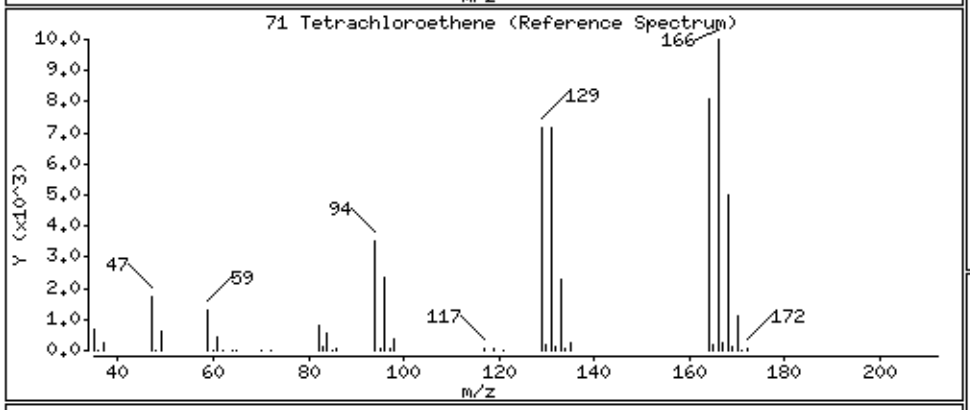
Column diameter: 0.53

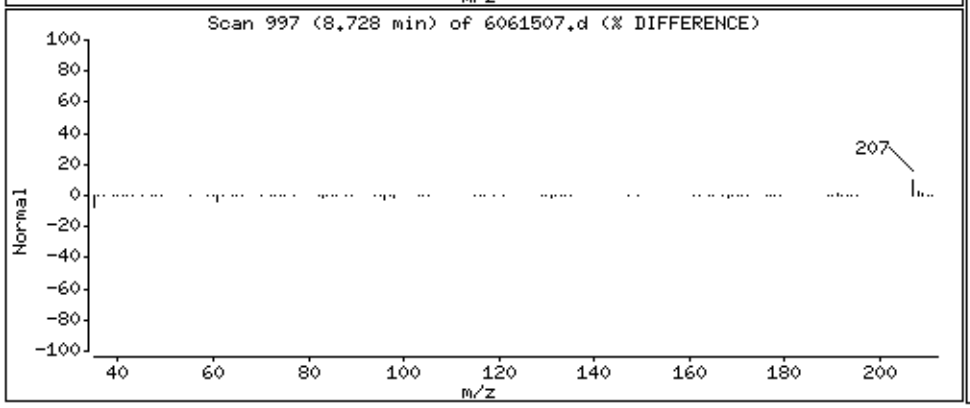
71 Tetrachloroethene

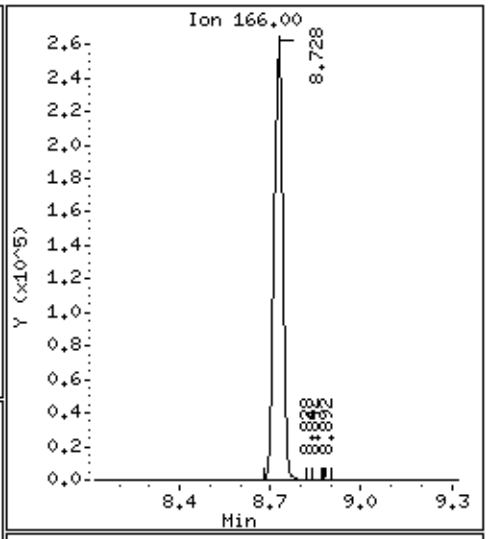
Concentration: 139.51 NG

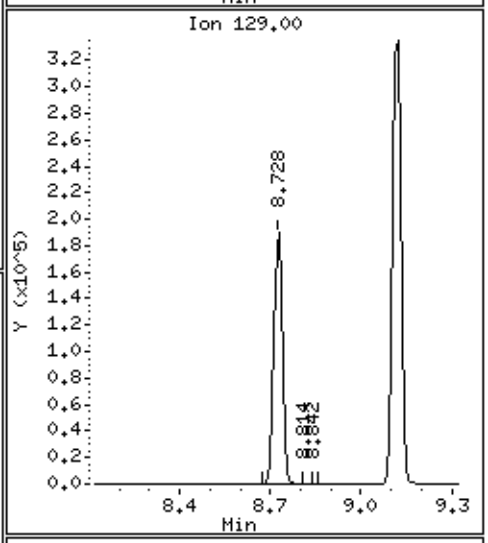


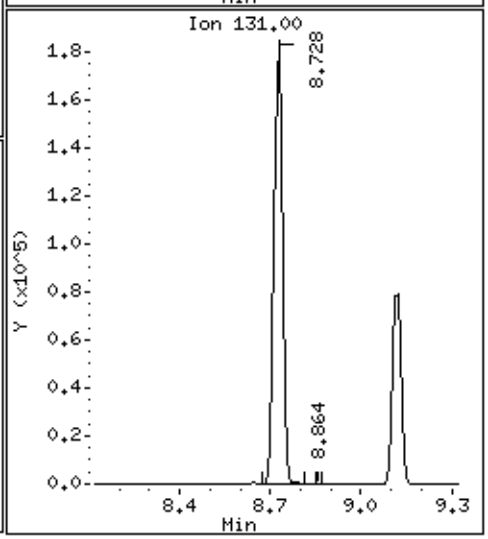












Data File: /chem/msd6.i/15jun16.b/6061507.d

Date : 15-JUN-2016 15:05

Client ID: LCSD

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCSD;LCSD

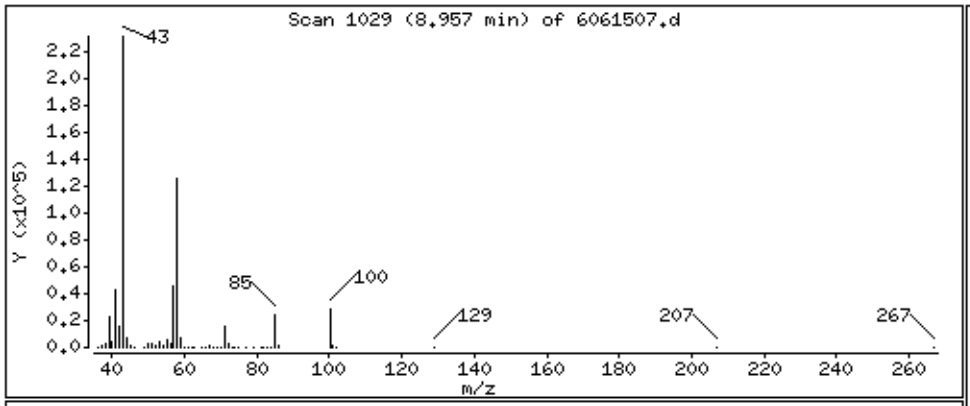
Operator: CT

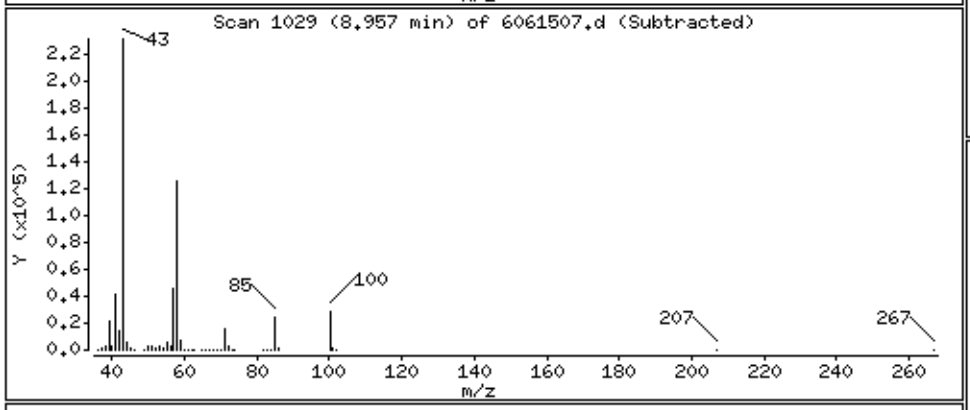
Column phase: RTx-624

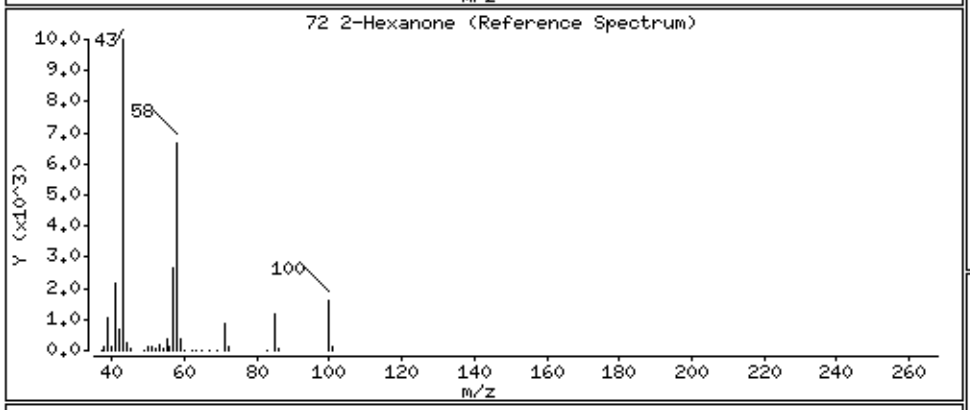
Column diameter: 0.53

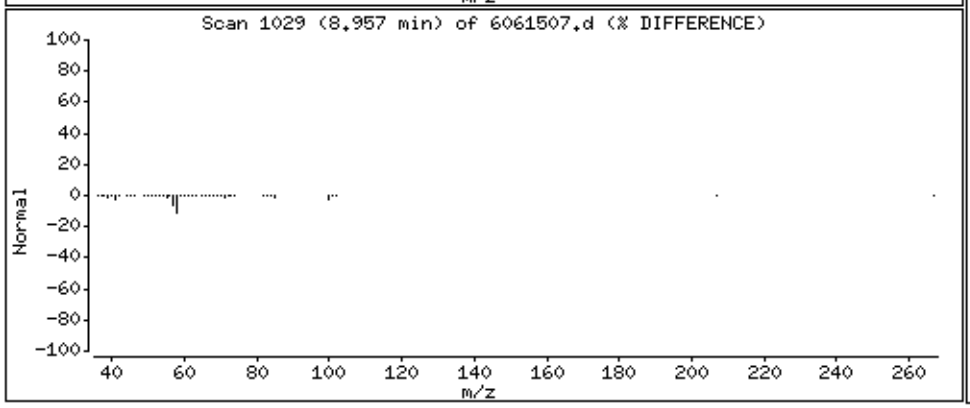
72 2-Hexanone

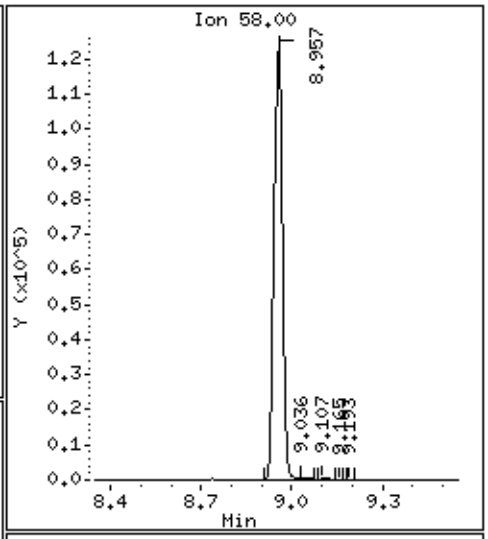
Concentration: 82.618 NG

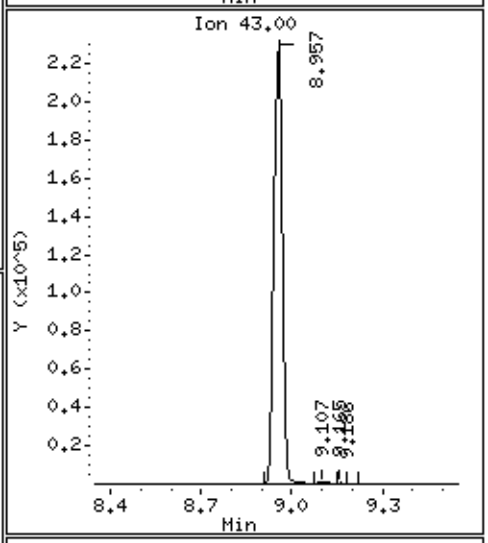


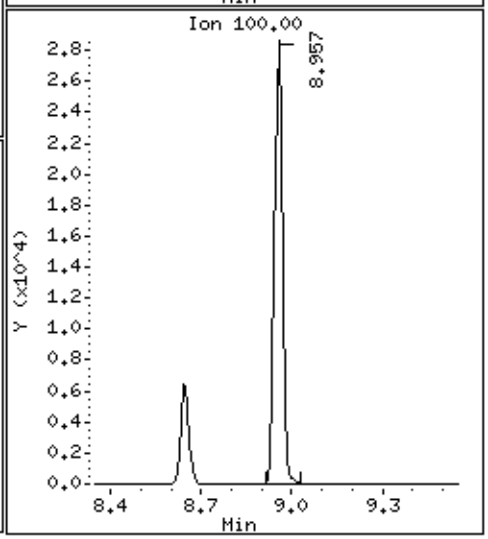












Data File: /chem/msd6.i/15jun16.b/6061507.d

Date : 15-JUN-2016 15:05

Client ID: LCSD

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCSD;LCSD

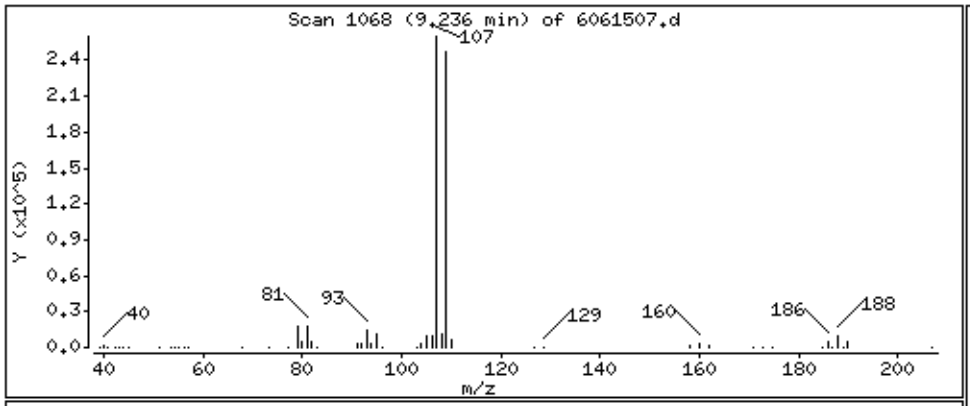
Operator: CT

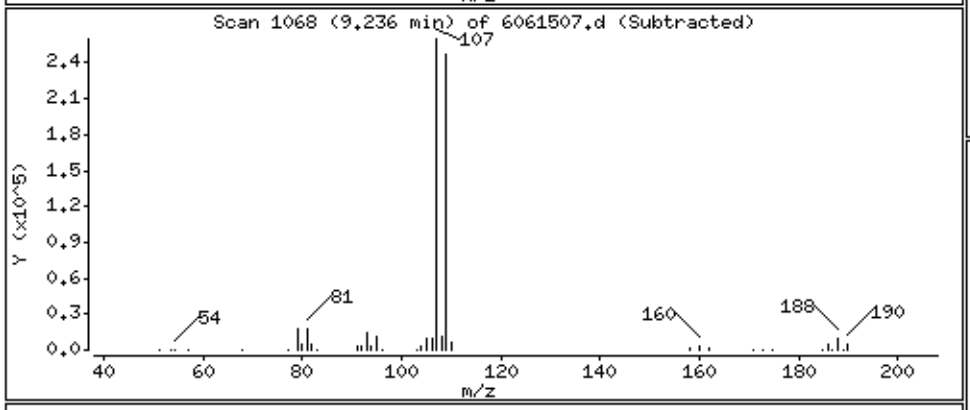
Column phase: RTx-624

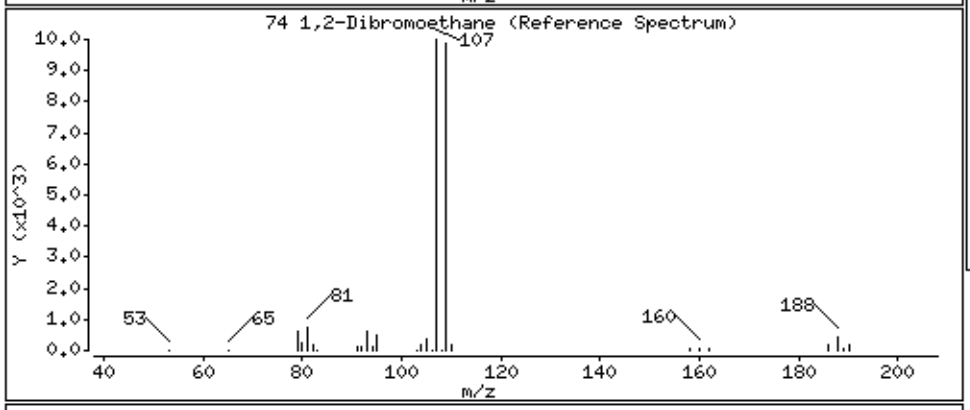
Column diameter: 0.53

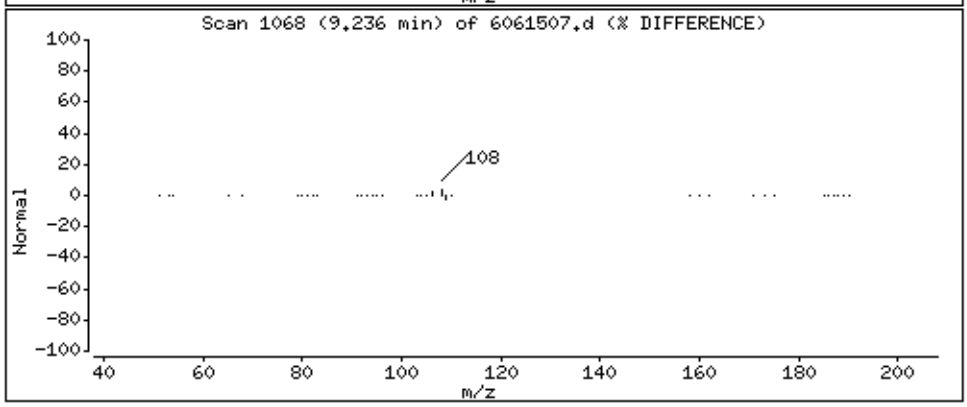
74 1,2-Dibromoethane

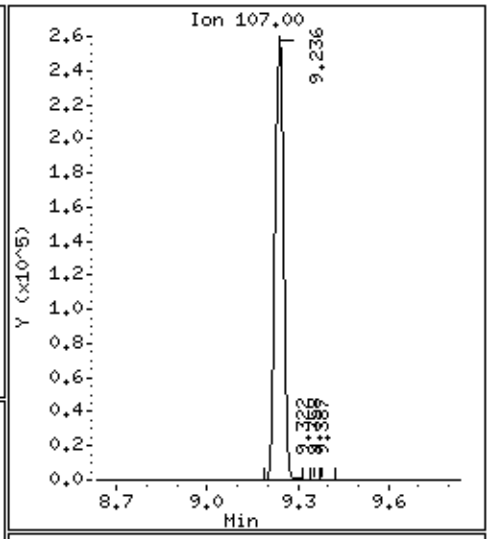
Concentration: 168.32 NG

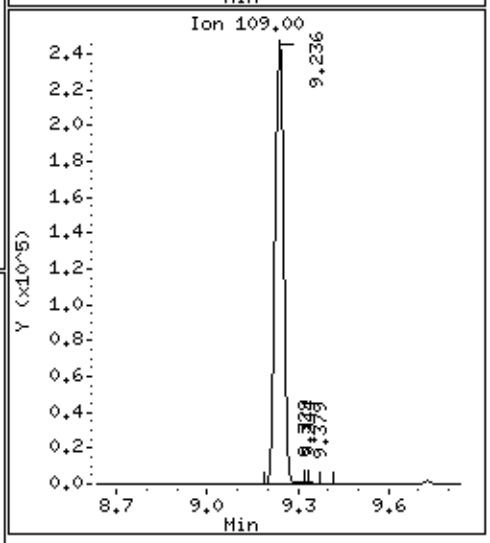












Data File: /chem/msd6.i/15jun16.b/6061507.d

Date : 15-JUN-2016 15:05

Client ID: LCSD

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCSD;LCSD

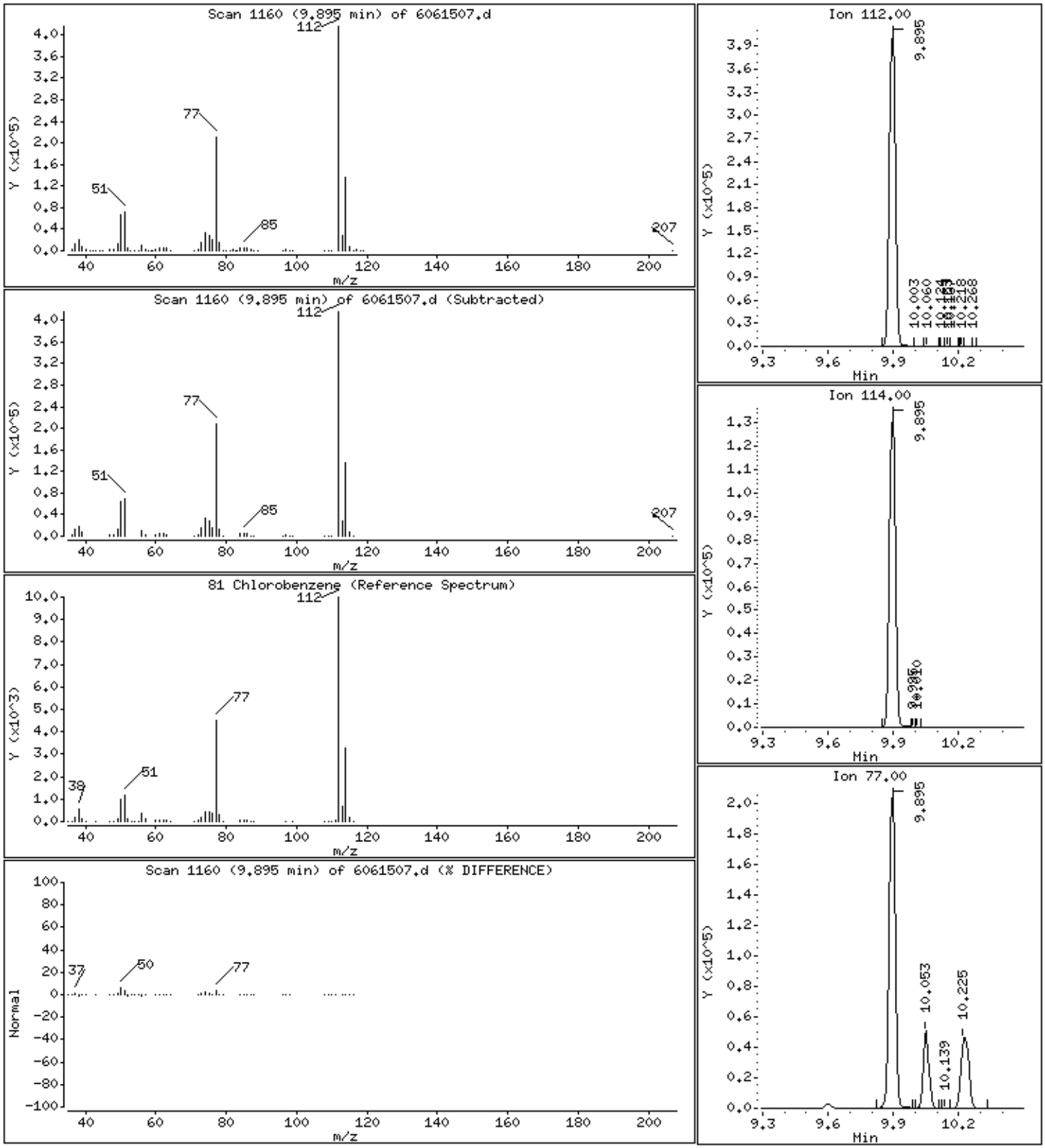
Operator: CT

Column phase: RTx-624

Column diameter: 0.53

81 Chlorobenzene

Concentration: 92.007 NG



Data File: /chem/msd6.i/15jun16.b/6061507.d

Date : 15-JUN-2016 15:05

Client ID: LCSD

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCSD;LCSD

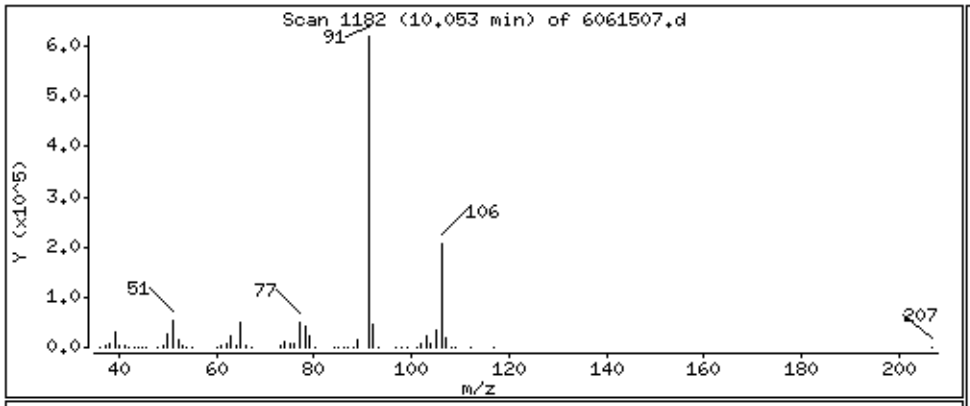
Operator: CT

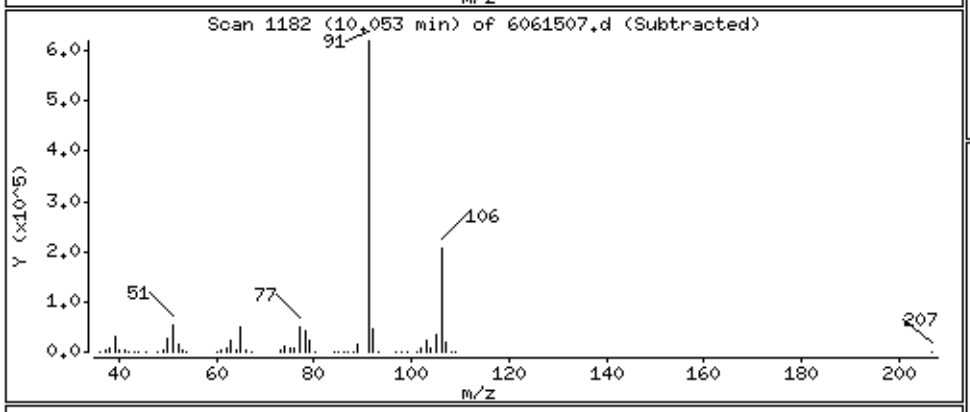
Column phase: RTx-624

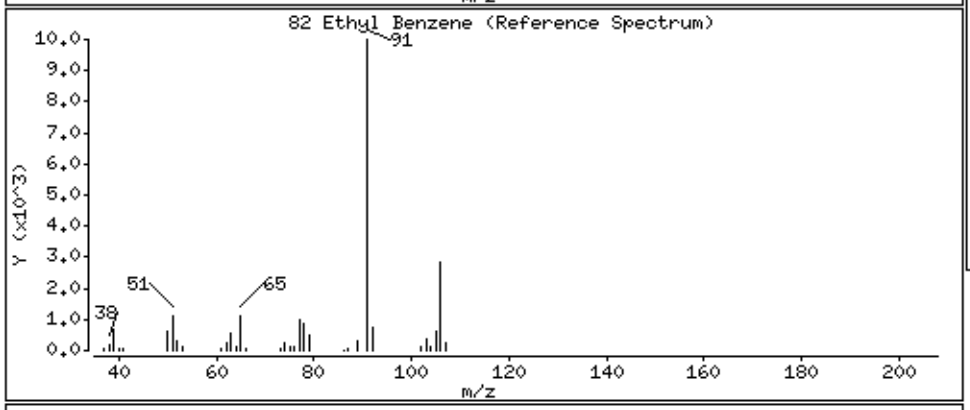
Column diameter: 0.53

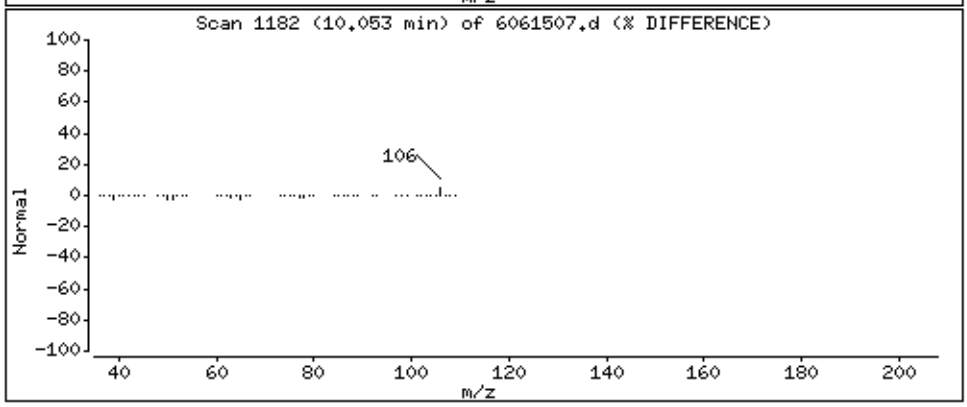
82 Ethyl Benzene

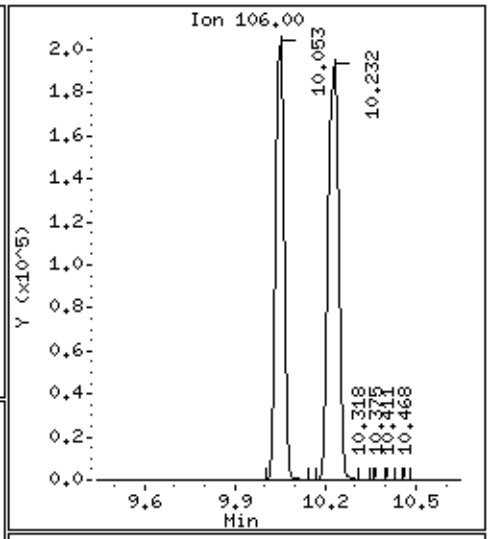
Concentration: 89.064 NG

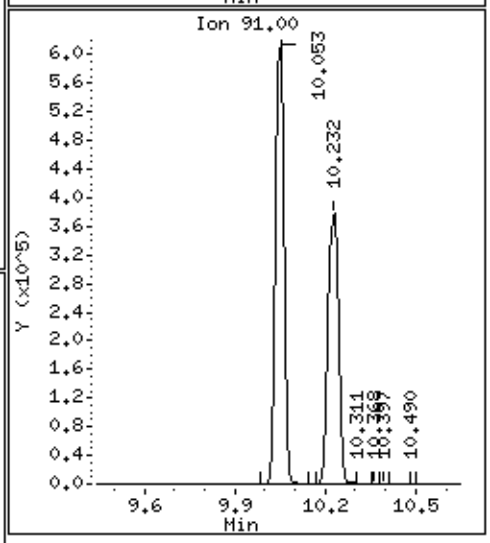












Data File: /chem/msd6.i/15jun16.b/6061507.d

Date : 15-JUN-2016 15:05

Client ID: LCSD

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCSD;LCSD

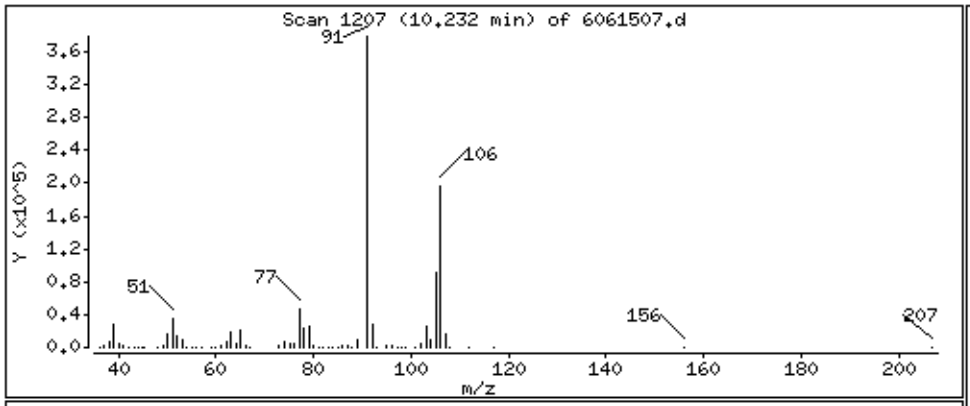
Operator: CT

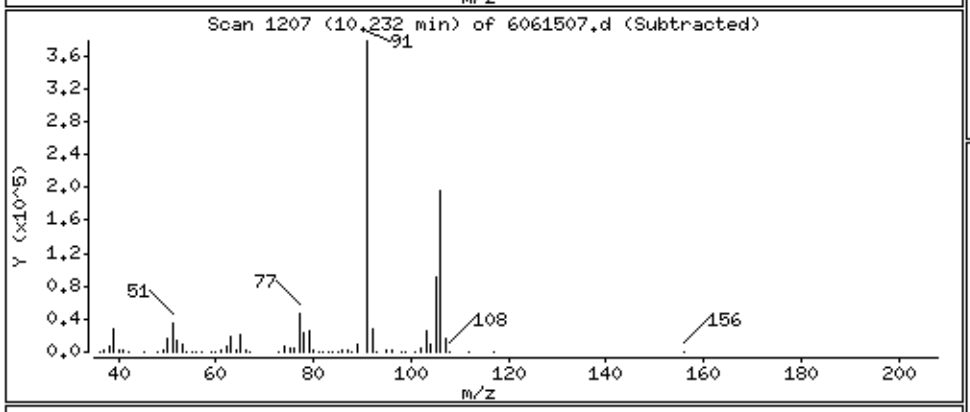
Column phase: RTx-624

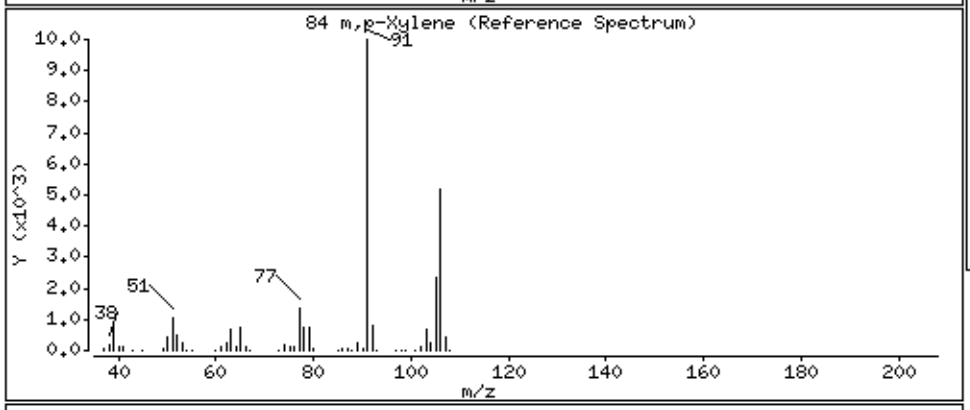
Column diameter: 0.53

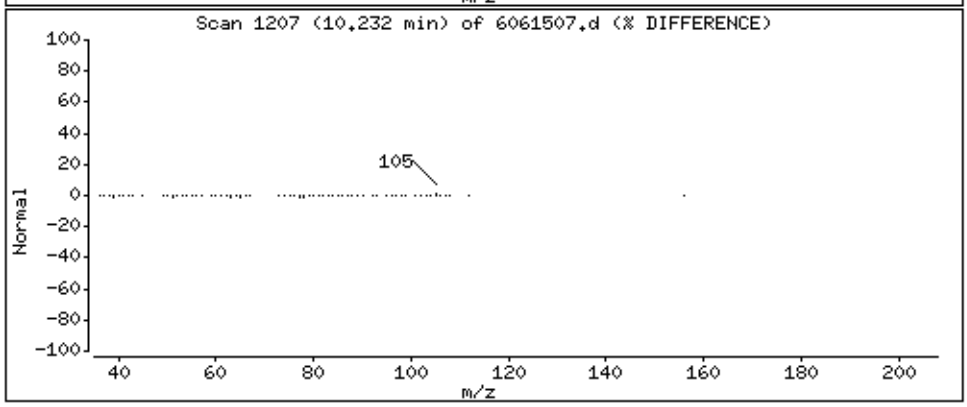
84 m,p-Xylene

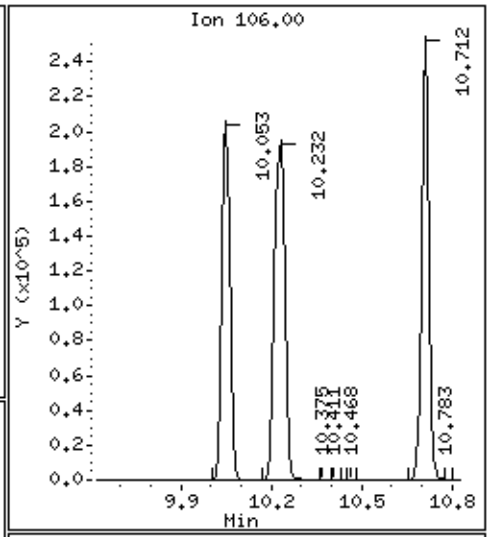
Concentration: 88.519 NG

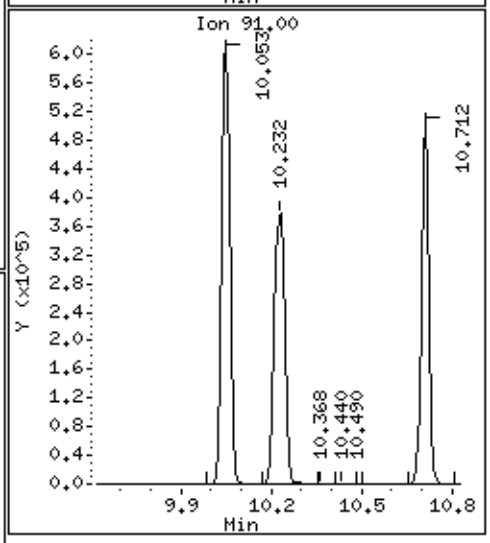












Data File: /chem/msd6.i/15jun16.b/6061507.d

Date : 15-JUN-2016 15:05

Client ID: LCSD

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCSD;LCSD

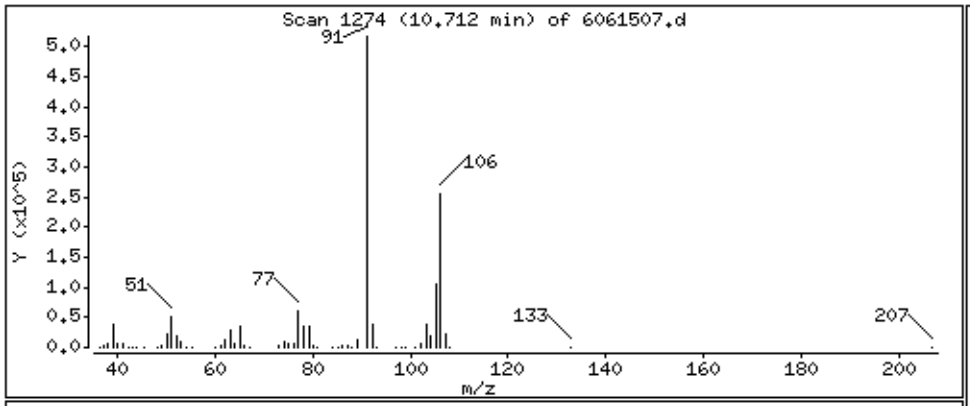
Operator: CT

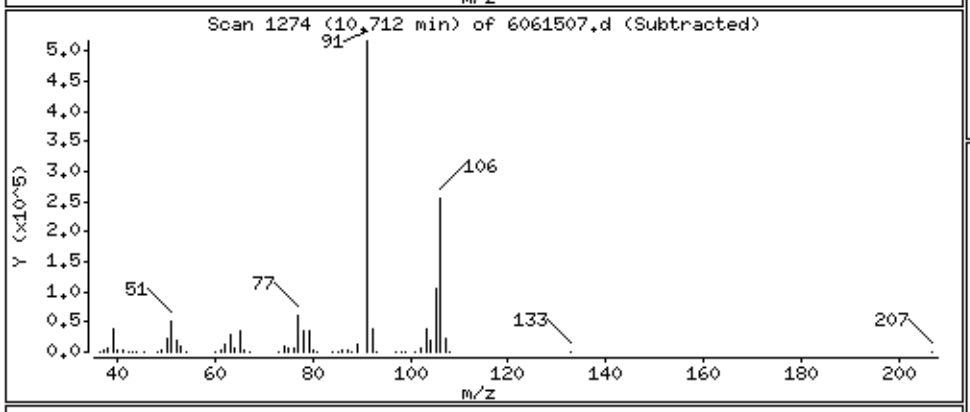
Column phase: RTx-624

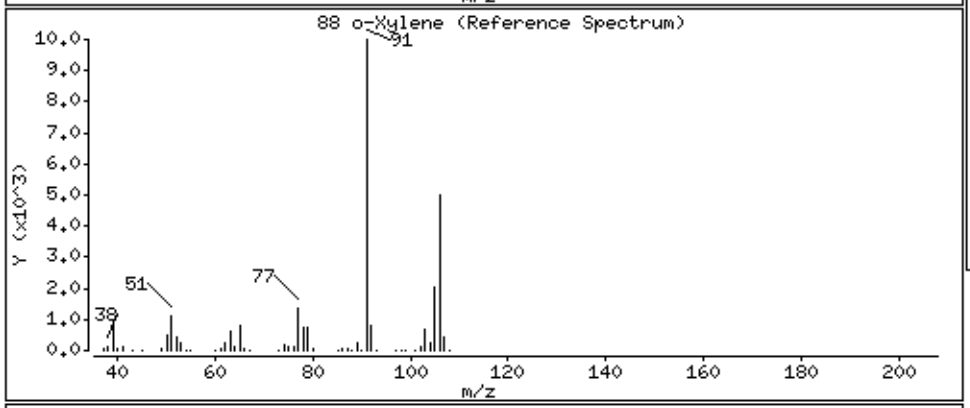
Column diameter: 0.53

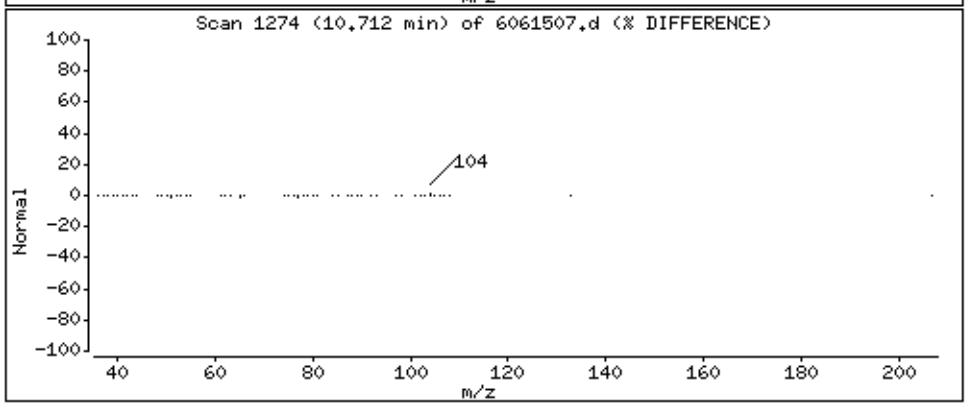
88 o-Xylene

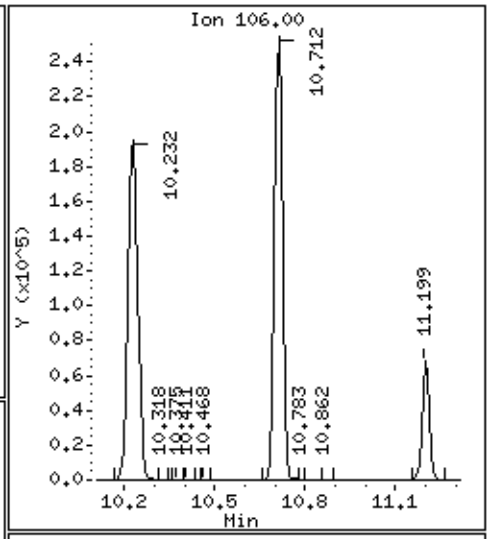
Concentration: 89.730 NG

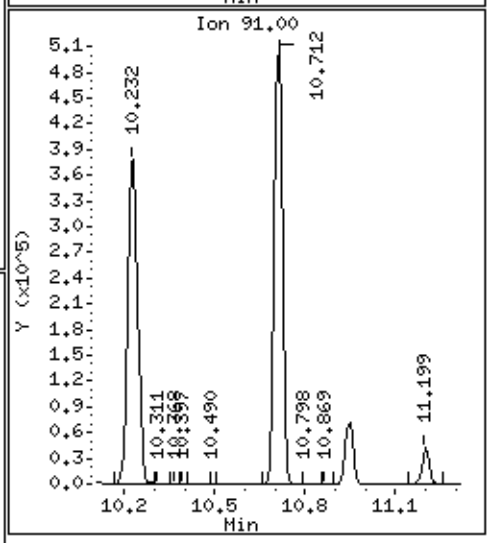












Data File: /chem/msd6.i/15jun16.b/6061507.d

Date : 15-JUN-2016 15:05

Client ID: LCSD

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCSD;LCSD

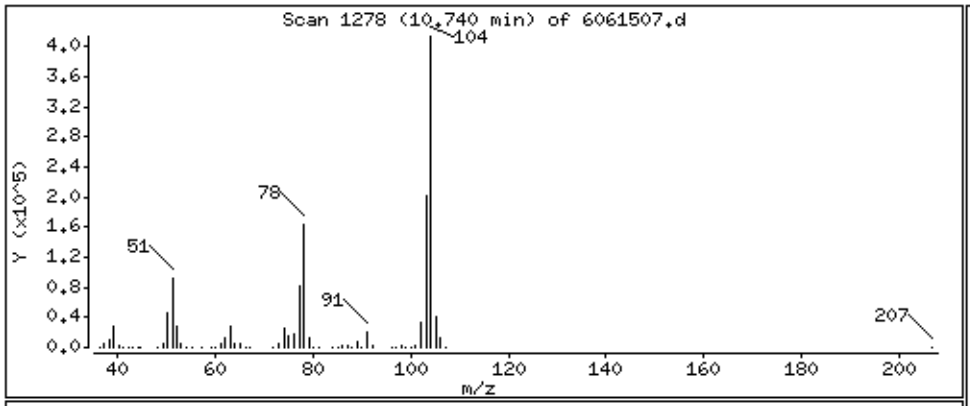
Operator: CT

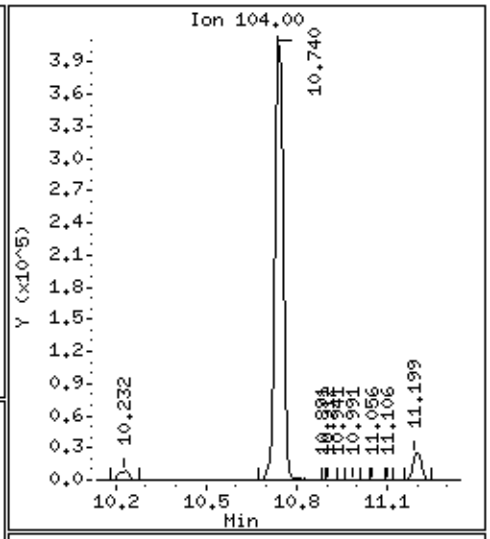
Column phase: RTx-624

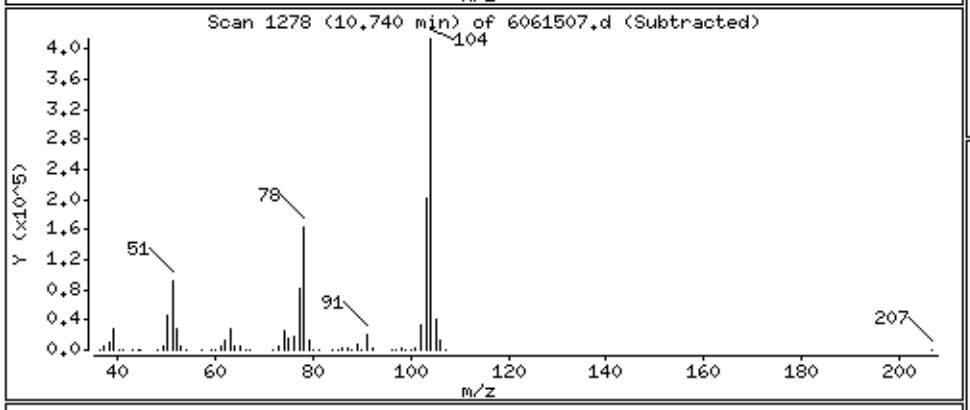
Column diameter: 0.53

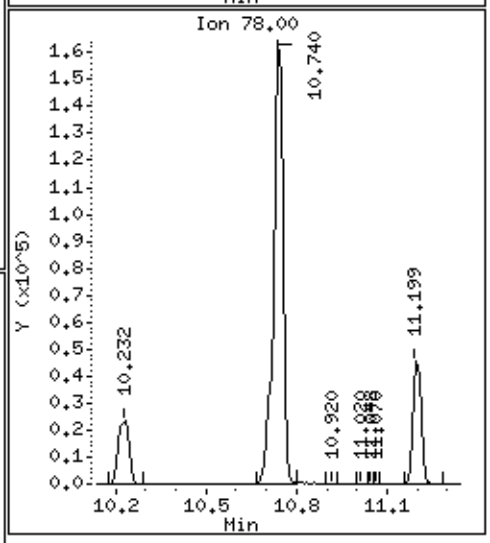
89 Styrene

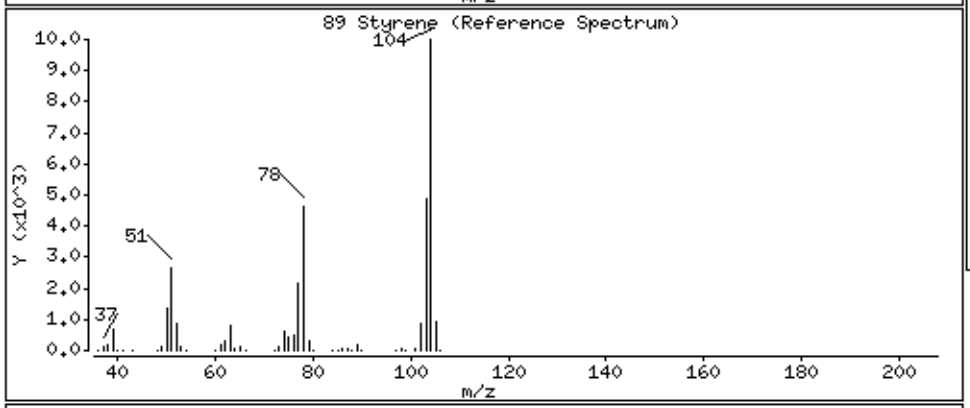
Concentration: 87.792 NG

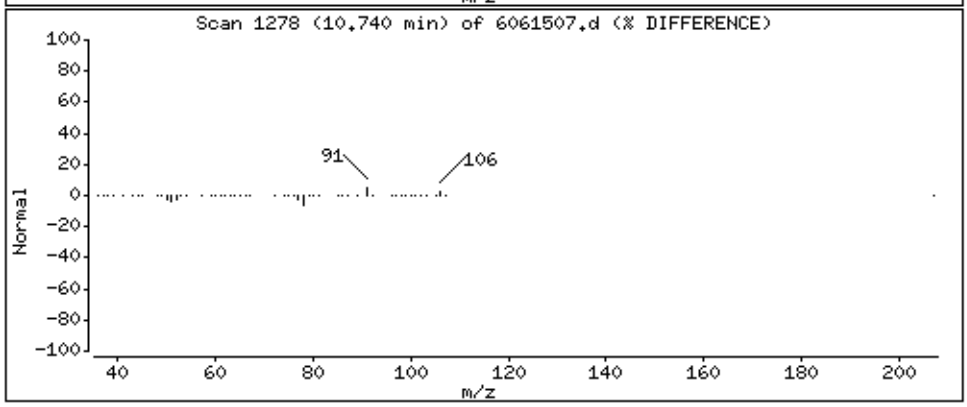












Data File: /chem/msd6.i/15jun16.b/6061507.d

Date : 15-JUN-2016 15:05

Client ID: LCSD

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCSD;LCSD

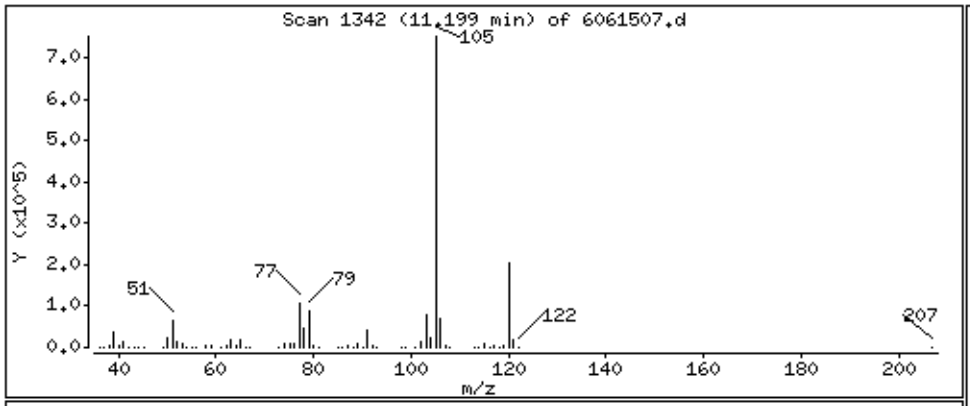
Operator: CT

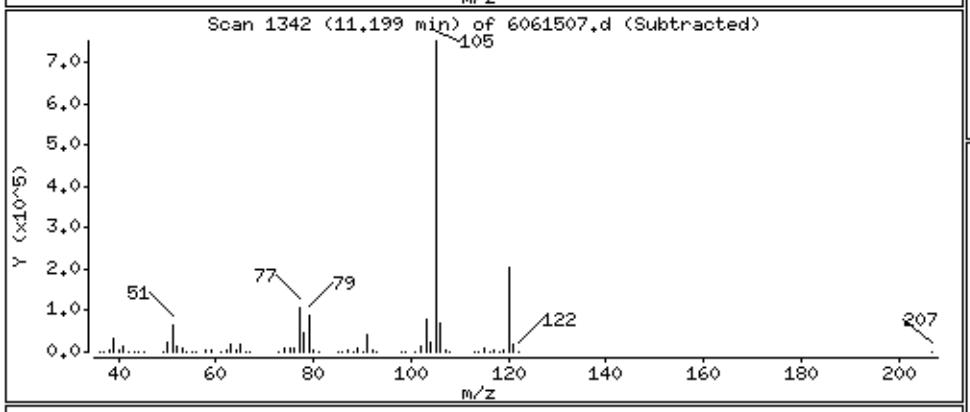
Column phase: RTx-624

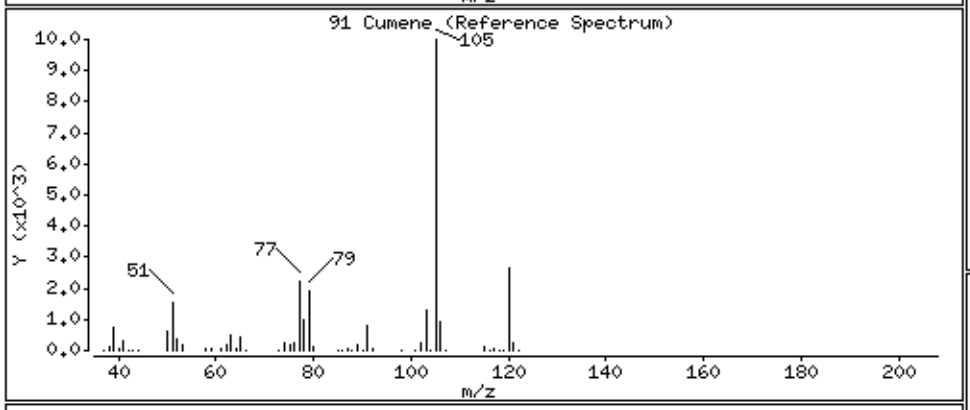
Column diameter: 0.53

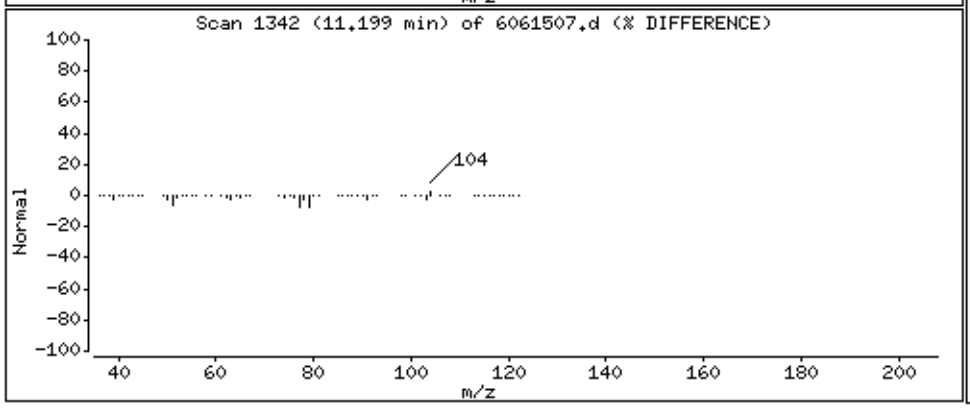
91 Cumene

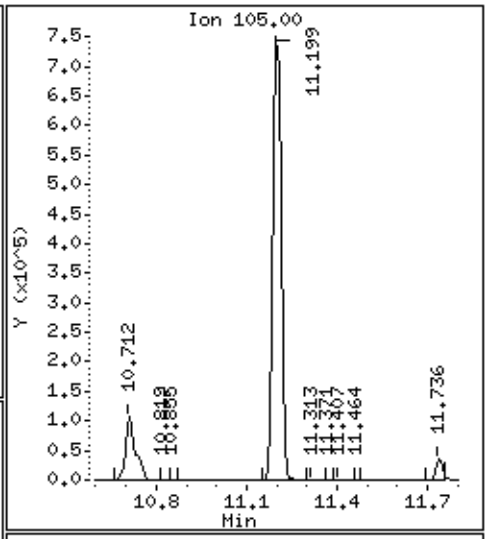
Concentration: 99.504 NG

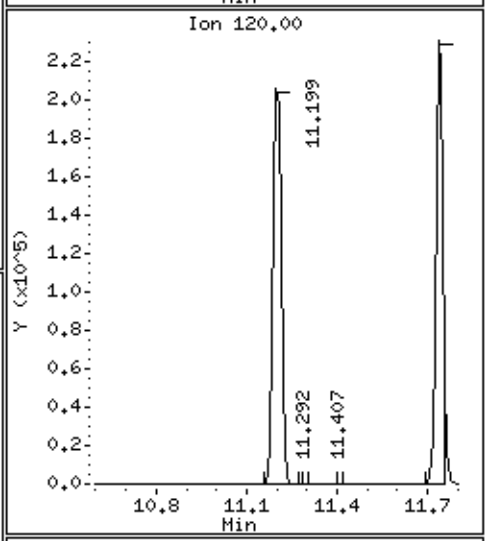


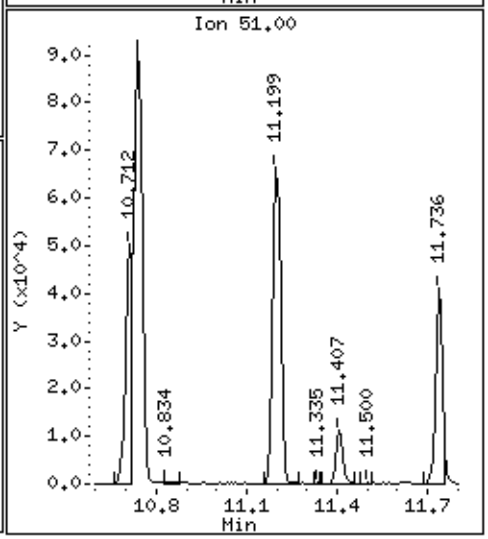












Data File: /chem/msd6.i/15jun16.b/6061507.d

Date : 15-JUN-2016 15:05

Client ID: LCSD

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCSD;LCSD

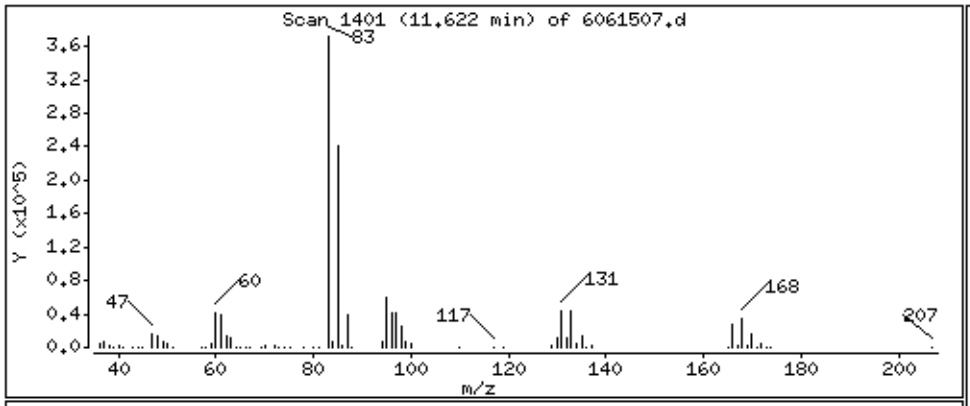
Operator: CT

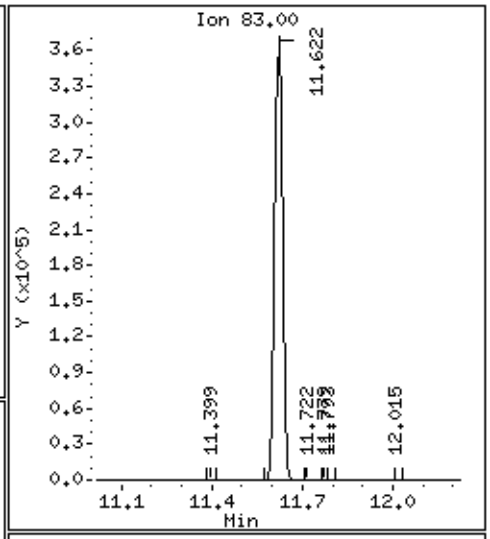
Column phase: RTx-624

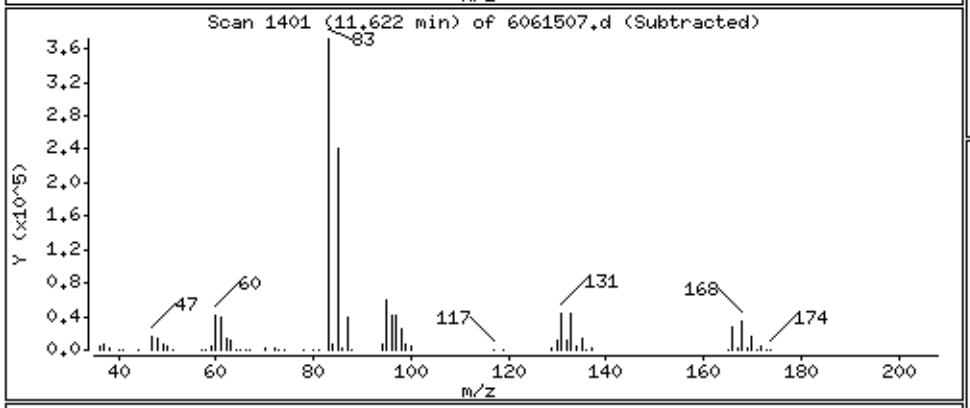
Column diameter: 0.53

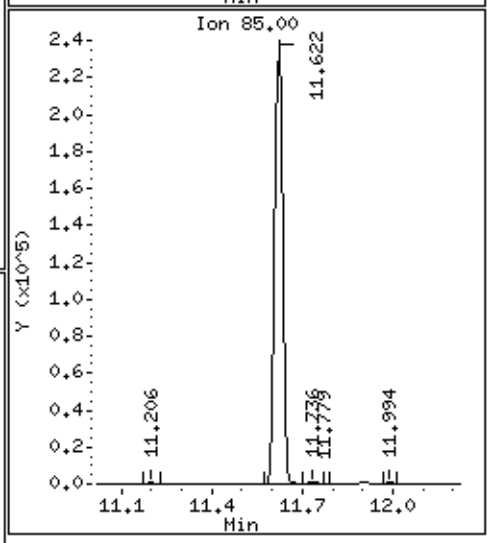
94 1,1,2,2-Tetrachloroethane

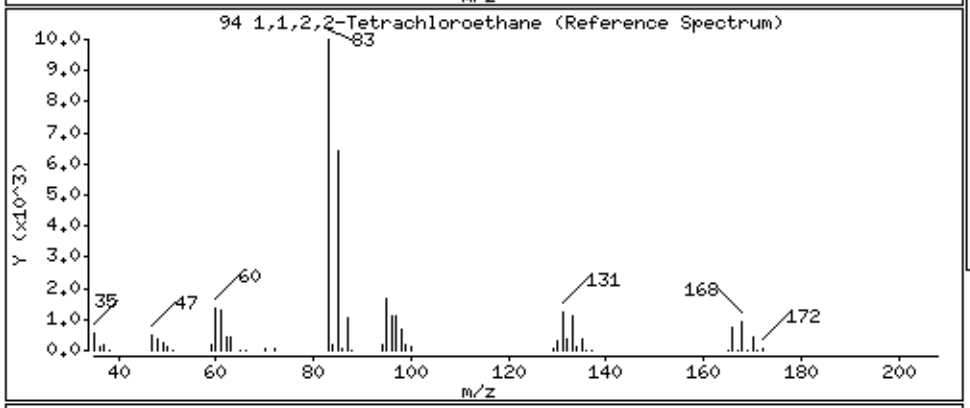
Concentration: 146.95 NG

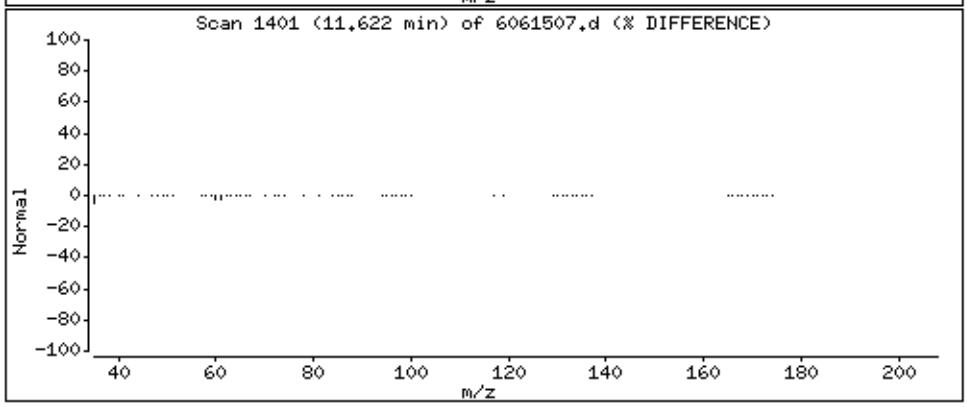












Data File: /chem/msd6.i/15jun16.b/6061507.d

Date : 15-JUN-2016 15:05

Client ID: LCSD

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCSD;LCSD

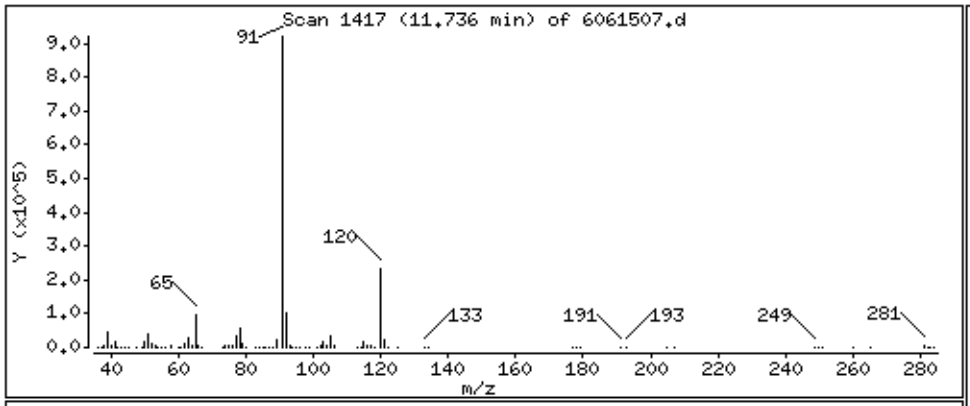
Operator: CT

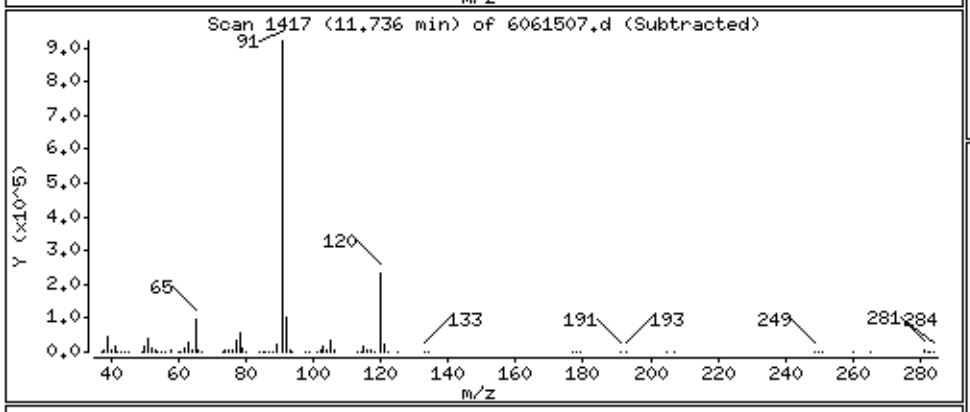
Column phase: RTx-624

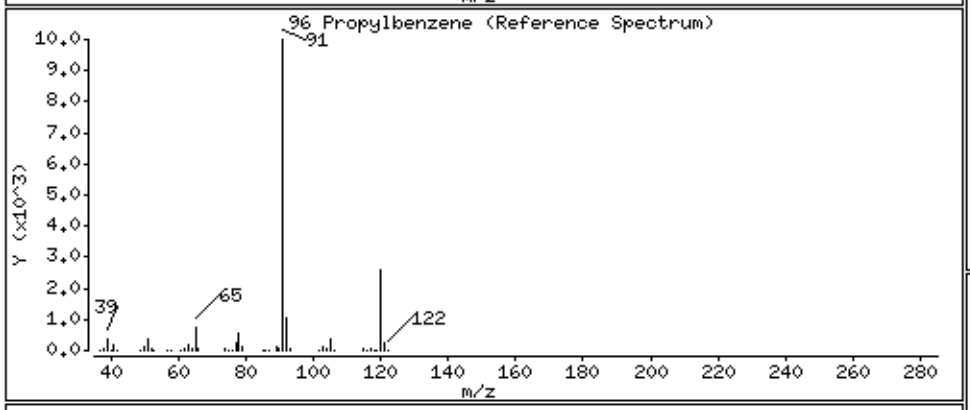
Column diameter: 0.53

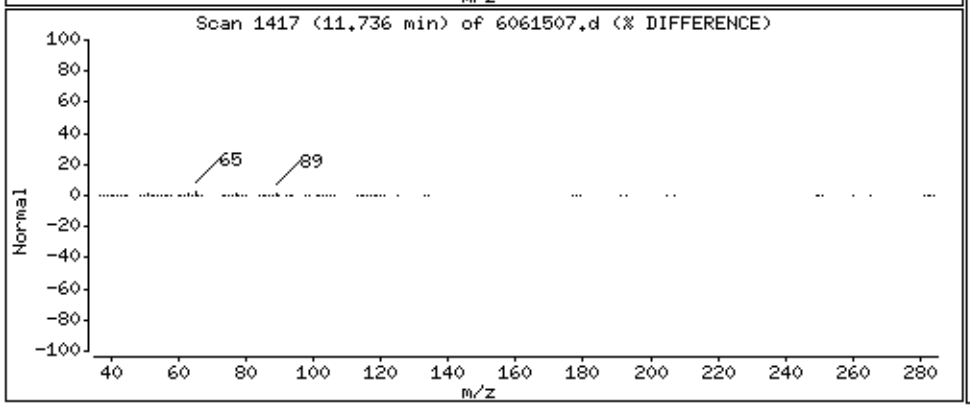
96 Propylbenzene

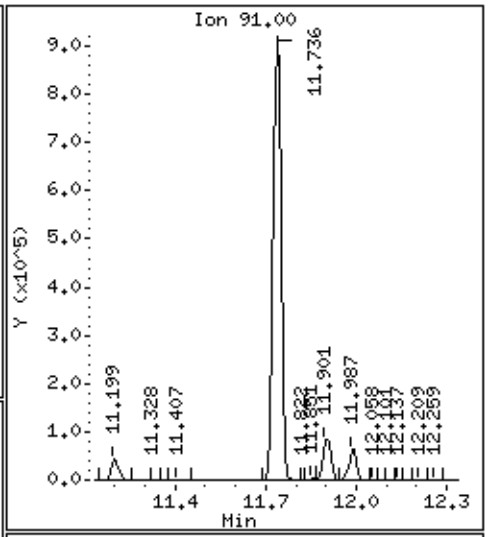
Concentration: 101.05 NG

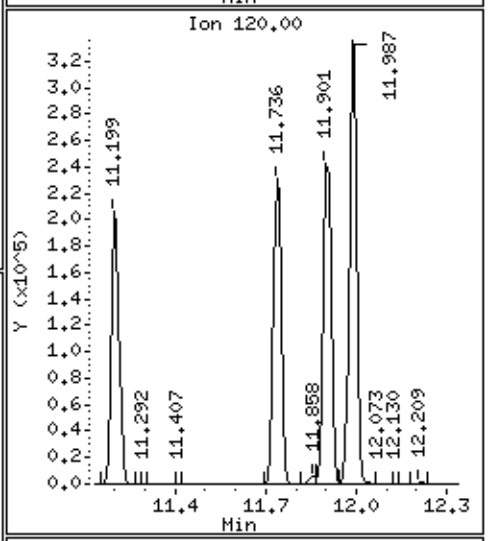


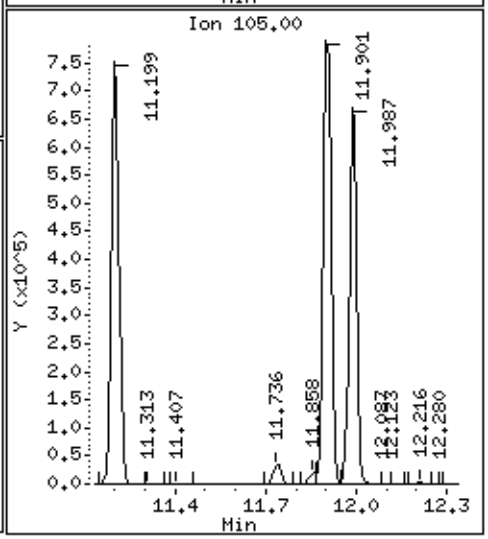












Data File: /chem/msd6.i/15jun16.b/6061507.d

Date : 15-JUN-2016 15:05

Client ID: LCSD

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCSD;LCSD

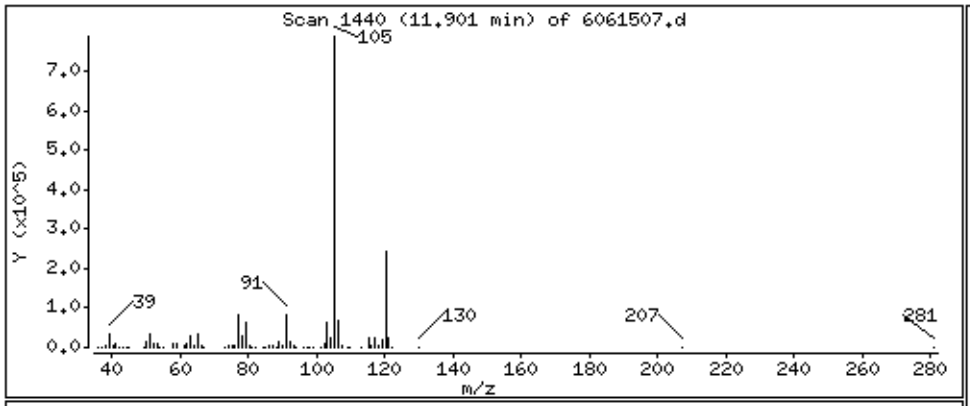
Operator: CT

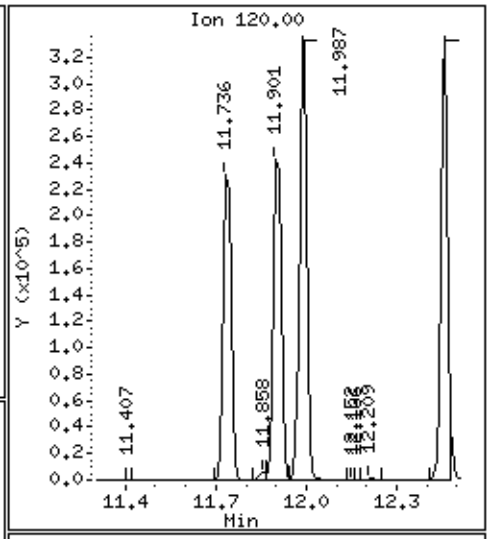
Column phase: RTx-624

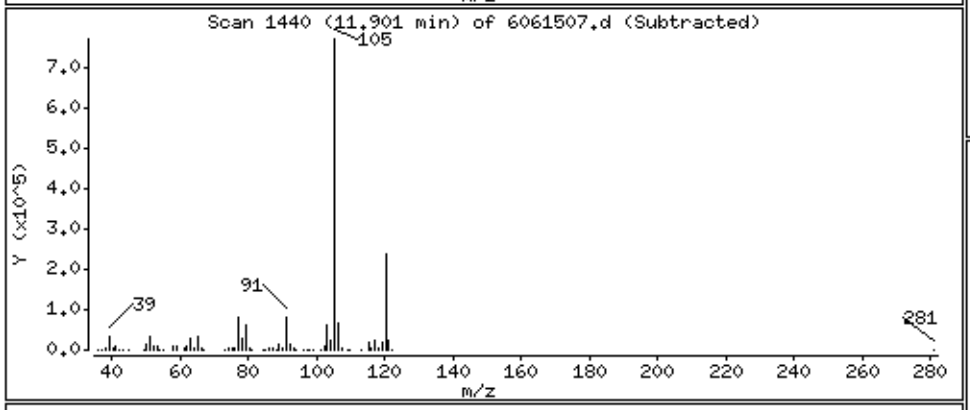
Column diameter: 0.53

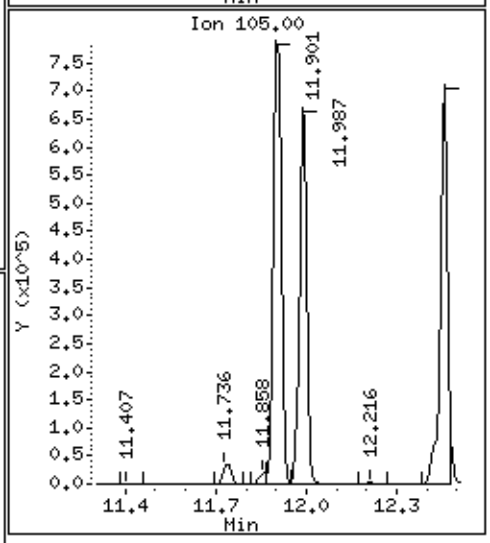
97 4-Ethyltoluene

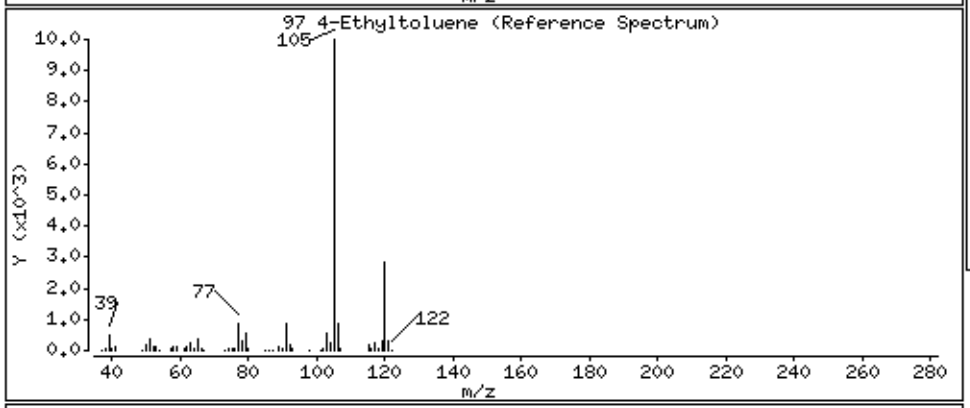
Concentration: 99.442 NG

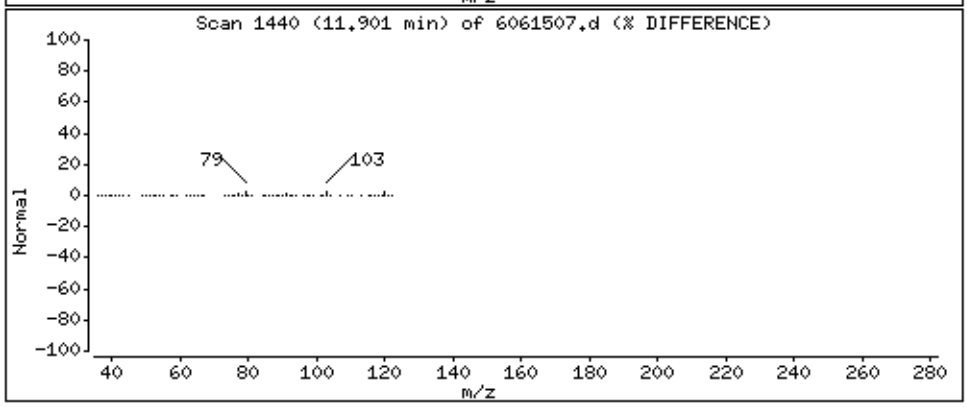












Data File: /chem/msd6.i/15jun16.b/6061507.d

Date : 15-JUN-2016 15:05

Client ID: LCSD

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCSD;LCSD

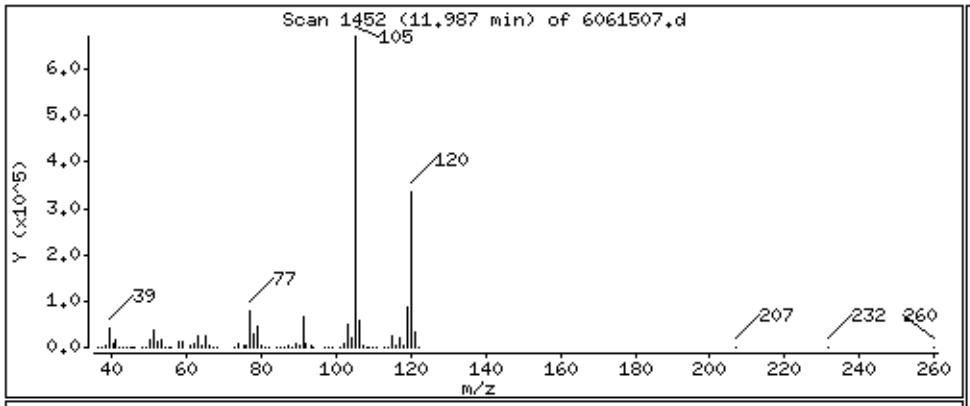
Operator: CT

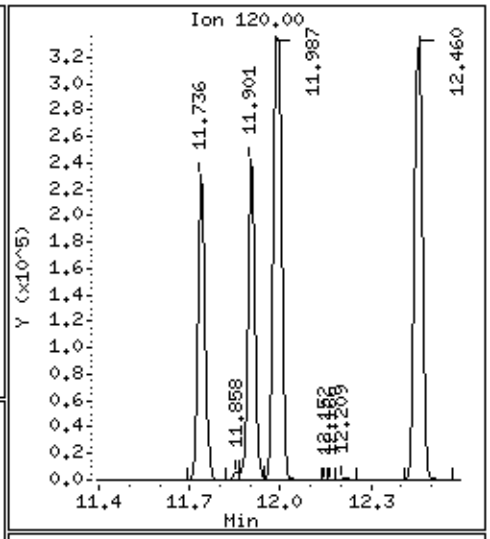
Column phase: RTx-624

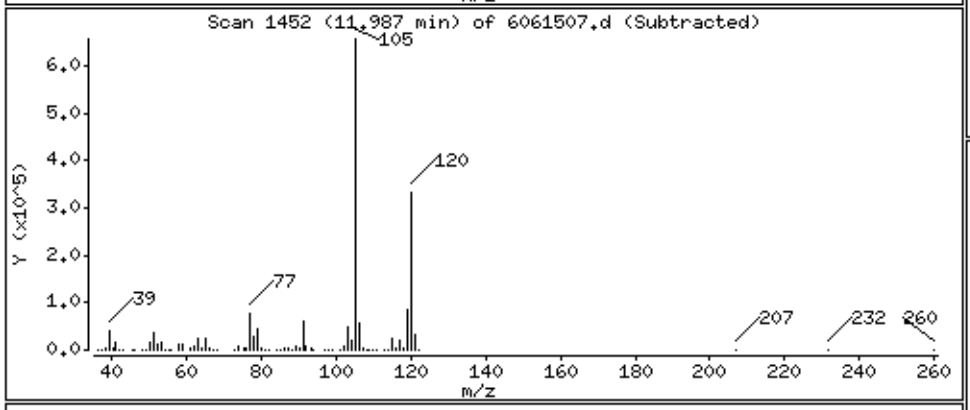
Column diameter: 0.53

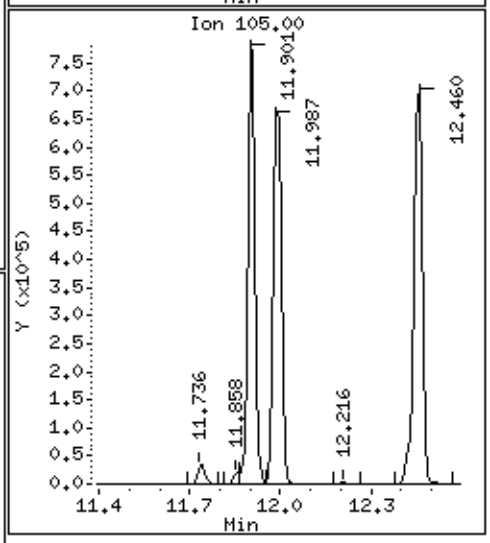
98 1,3,5-Trimethylbenzene

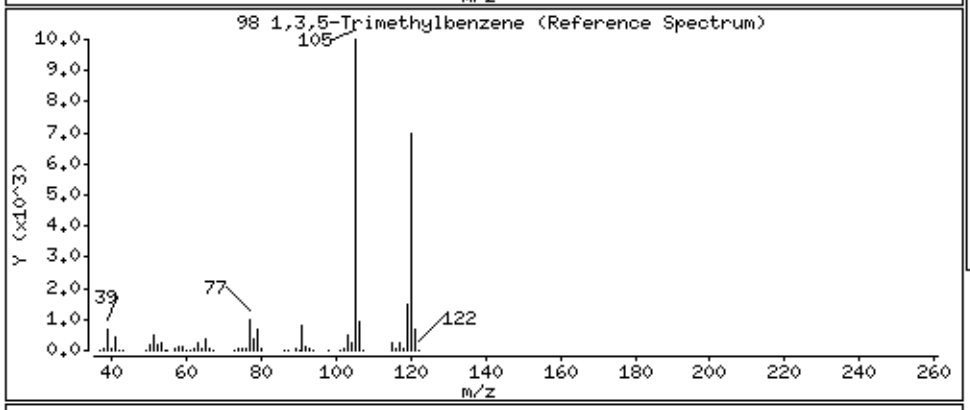
Concentration: 99.102 NG

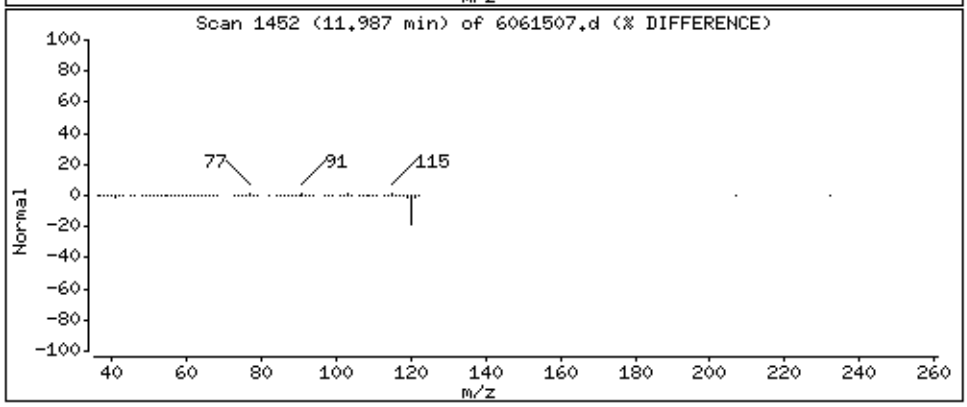












Data File: /chem/msd6.i/15jun16.b/6061507.d

Date : 15-JUN-2016 15:05

Client ID: LCSD

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCSD;LCSD

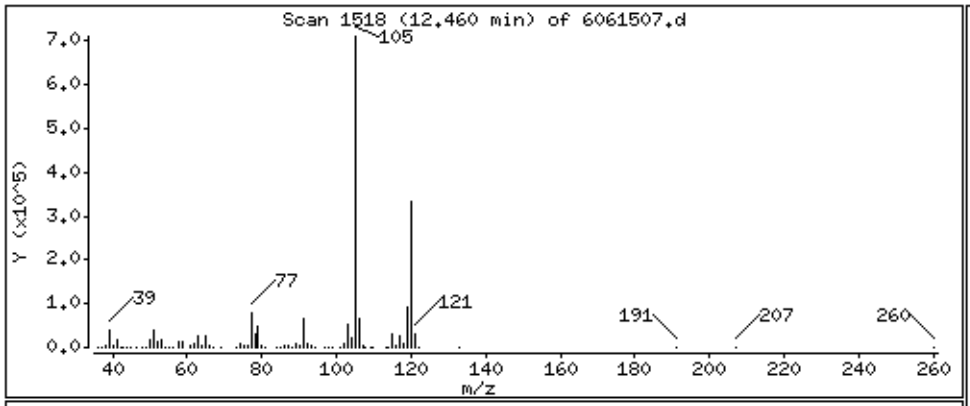
Operator: CT

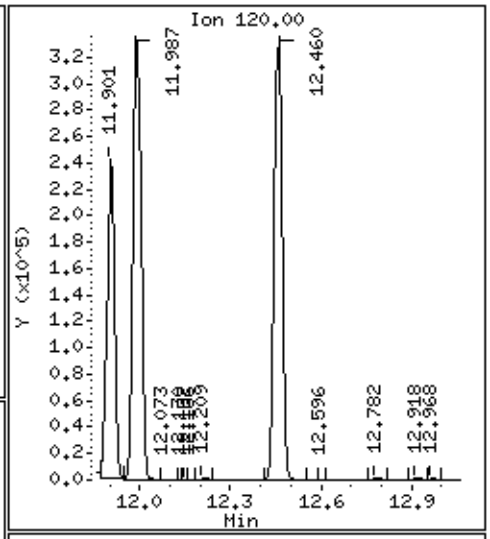
Column phase: RTx-624

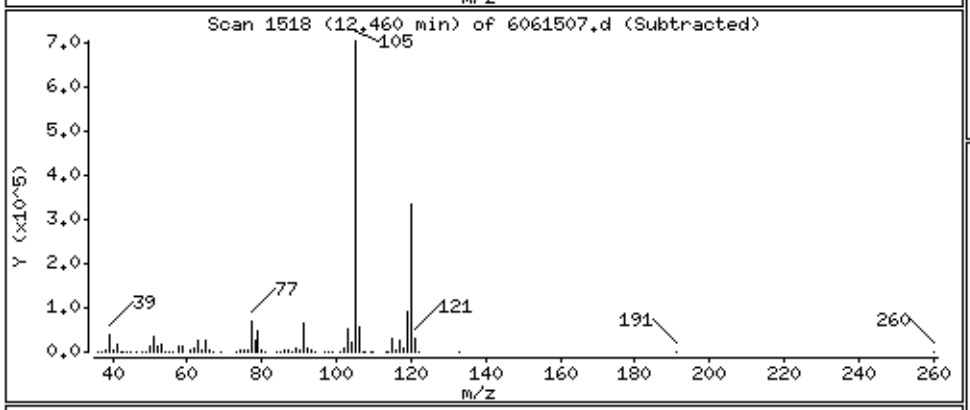
Column diameter: 0.53

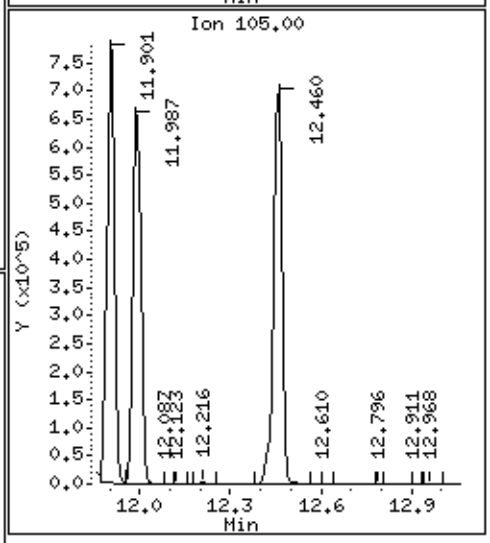
100 1,2,4-Trimethylbenzene

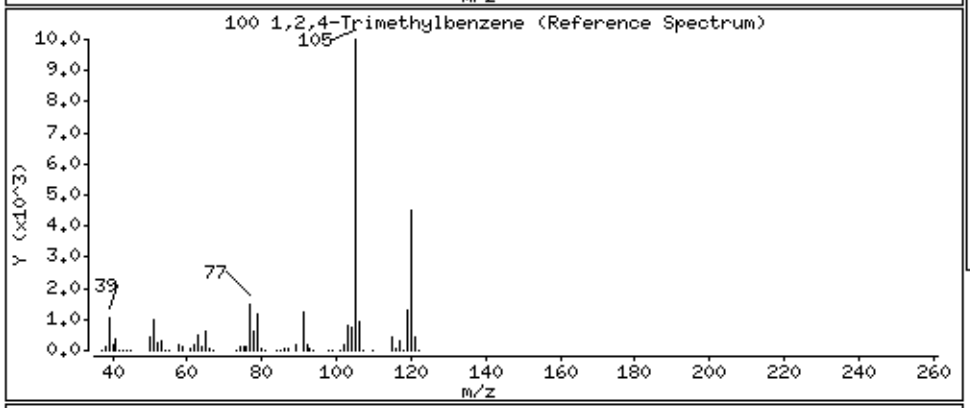
Concentration: 99.664 NG

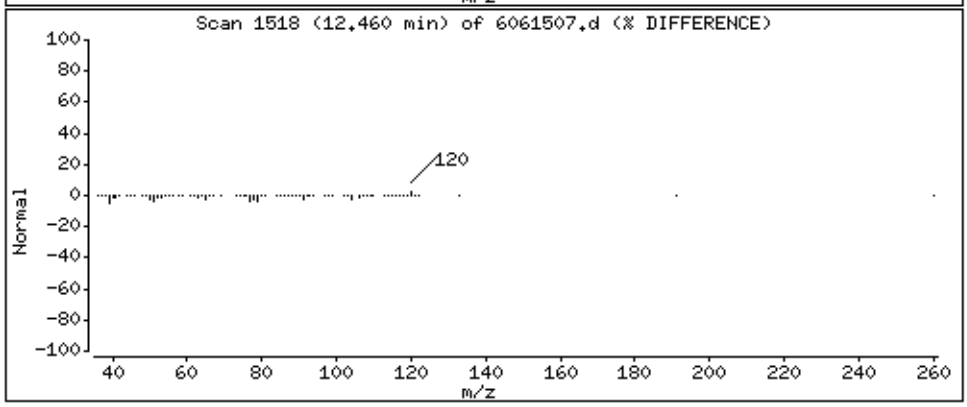












Data File: /chem/msd6.i/15jun16.b/6061507.d

Date : 15-JUN-2016 15:05

Client ID: LCSD

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCSD;LCSD

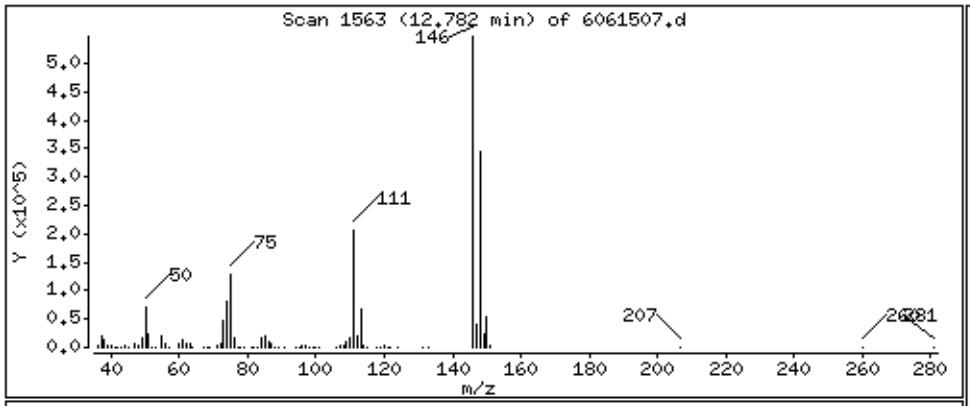
Operator: CT

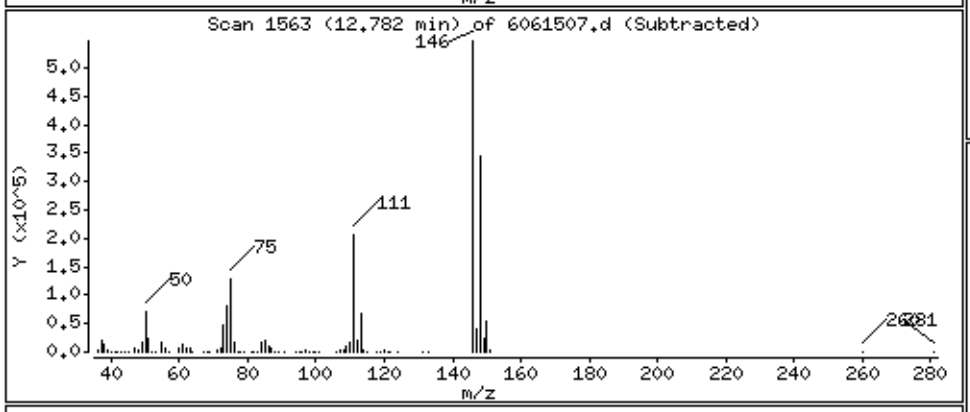
Column phase: RTx-624

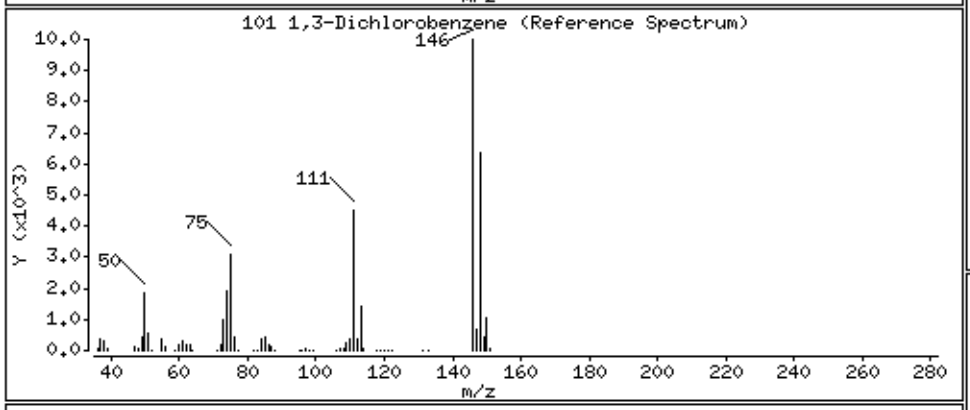
Column diameter: 0.53

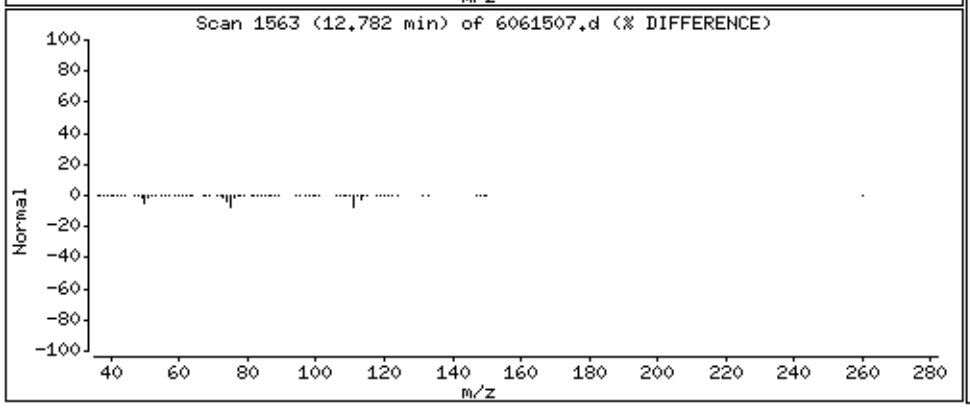
101 1,3-Dichlorobenzene

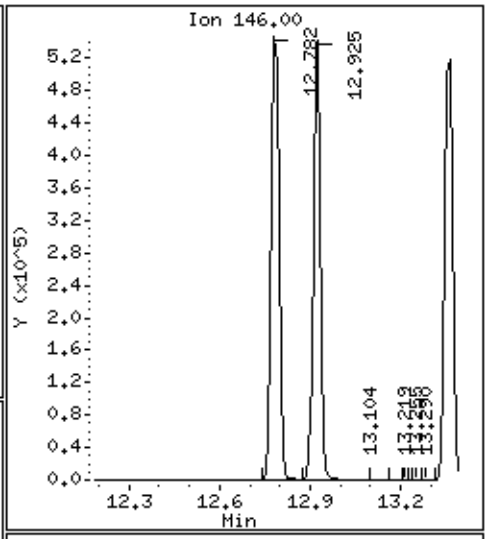
Concentration: 120.87 NG

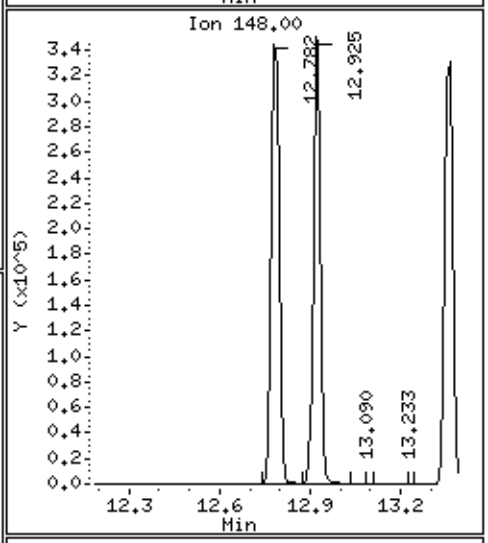


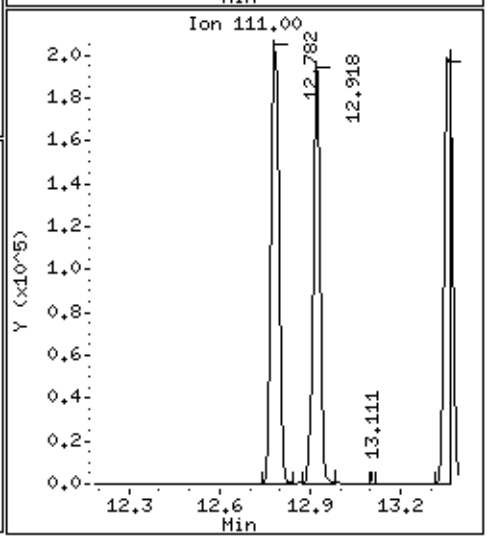












Data File: /chem/msd6.i/15jun16.b/6061507.d

Date : 15-JUN-2016 15:05

Client ID: LCSD

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCSD;LCSD

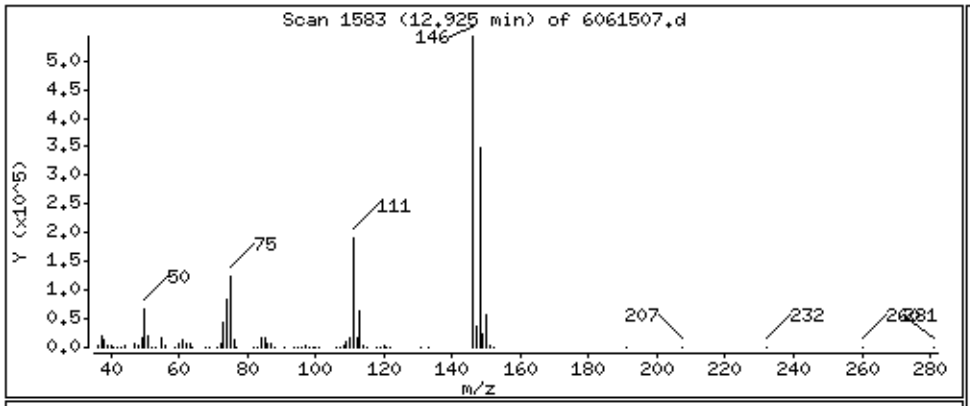
Operator: CT

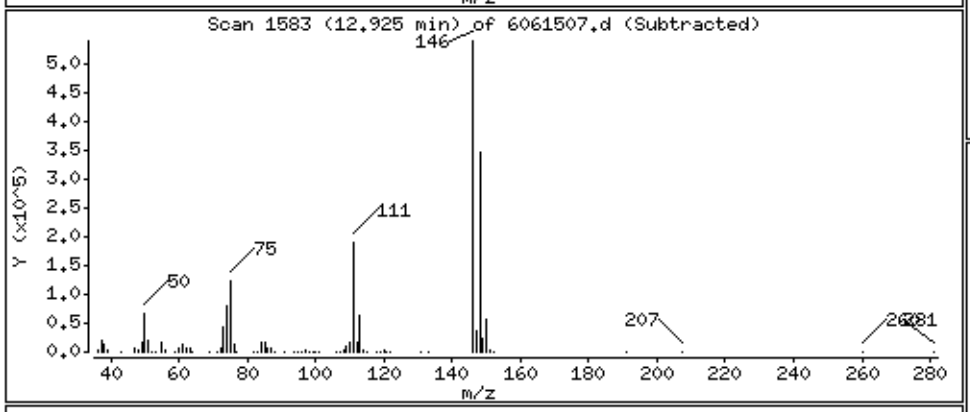
Column phase: RTx-624

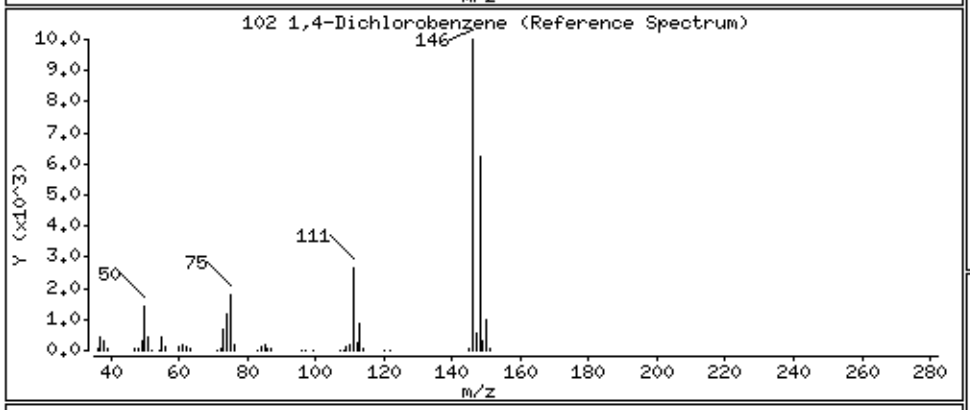
Column diameter: 0.53

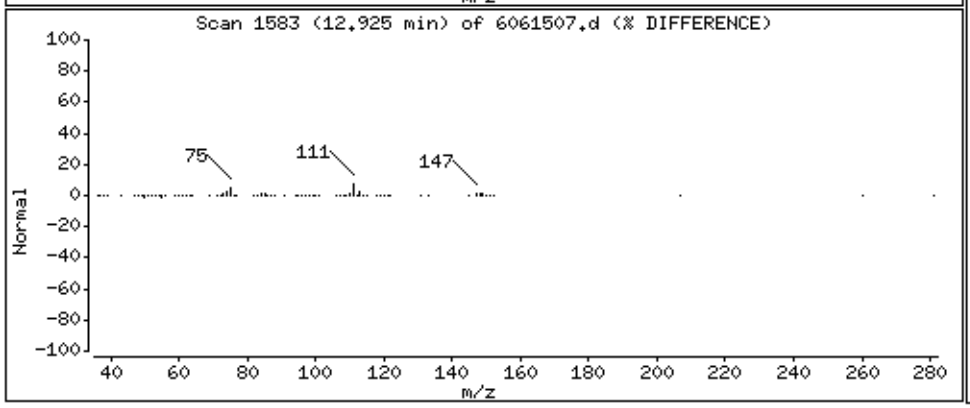
102 1,4-Dichlorobenzene

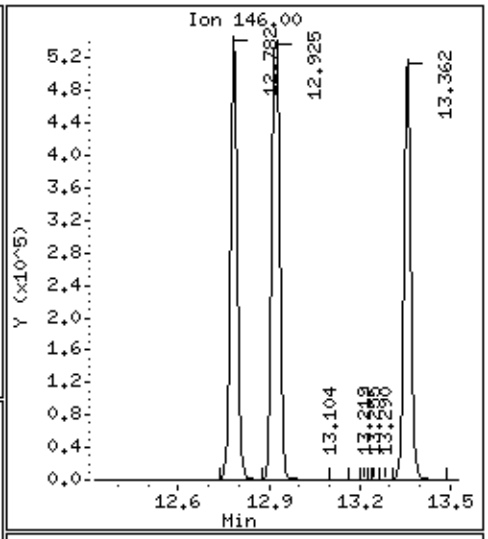
Concentration: 119.92 NG

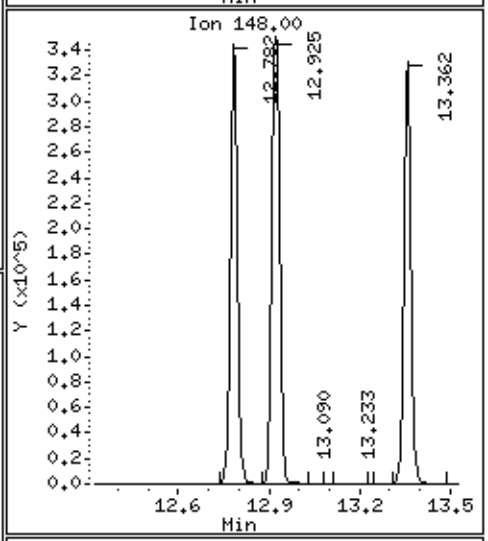


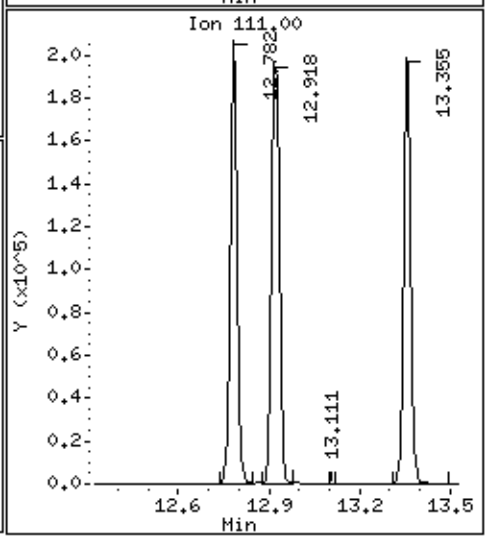












Data File: /chem/msd6.i/15jun16.b/6061507.d

Date : 15-JUN-2016 15:05

Client ID: LCSD

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCSD;LCSD

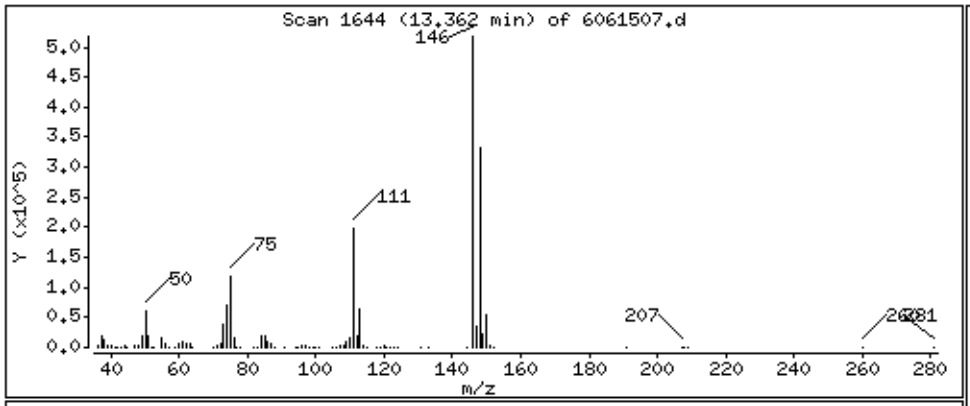
Operator: CT

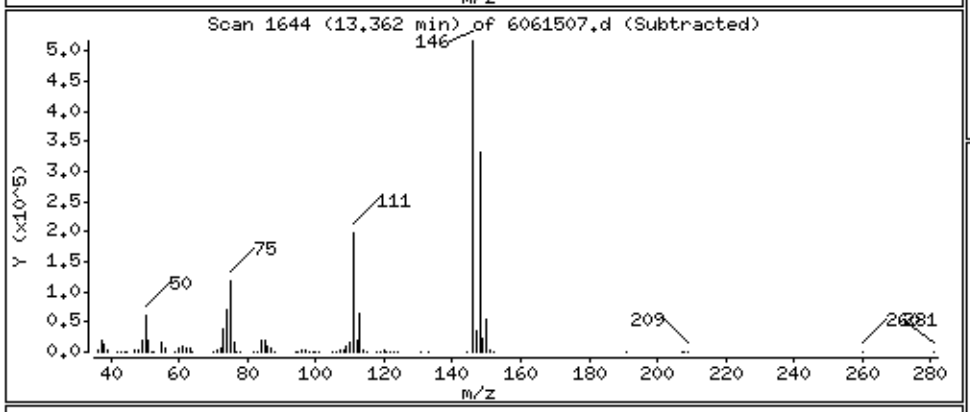
Column phase: RTx-624

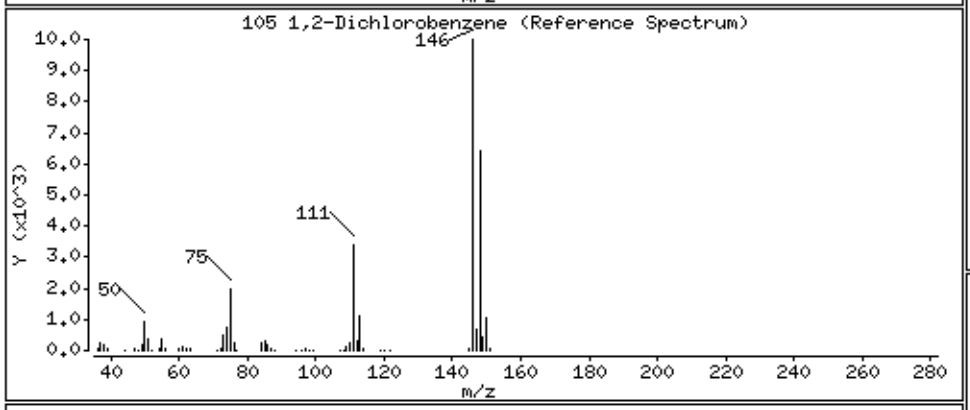
Column diameter: 0.53

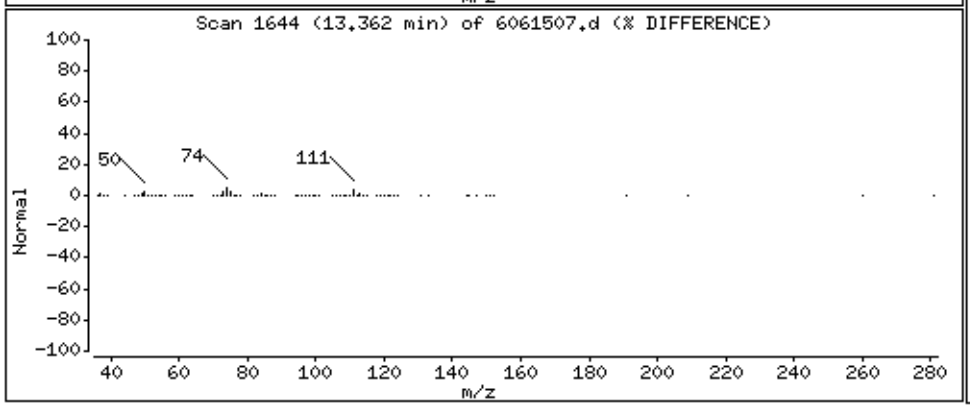
105 1,2-Dichlorobenzene

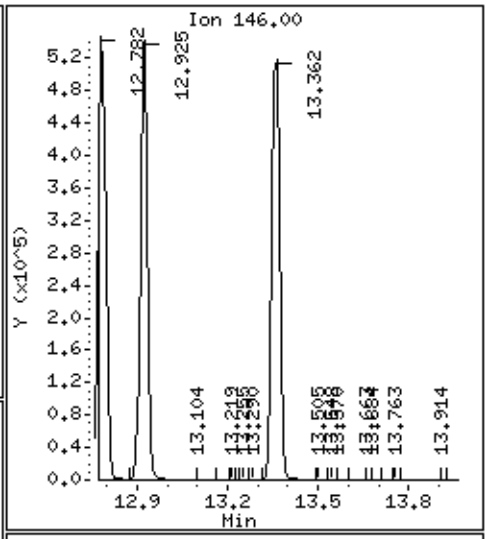
Concentration: 119.40 NG

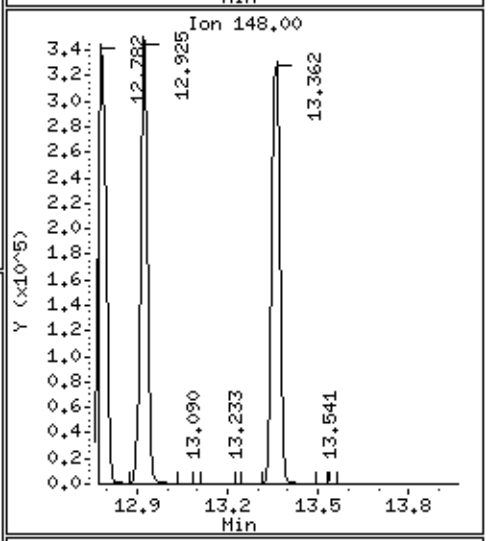


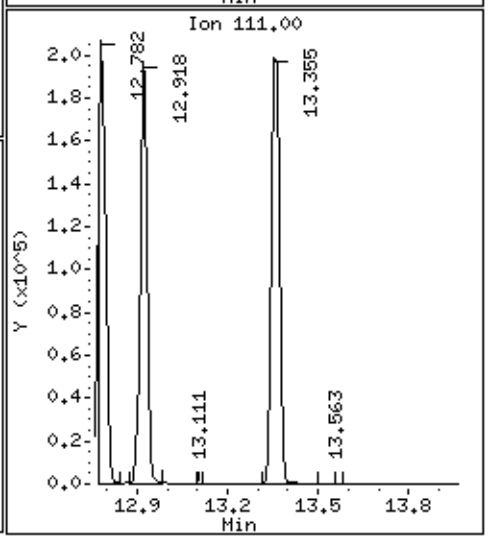












Data File: /chem/msd6.i/15jun16.b/6061507.d

Date : 15-JUN-2016 15:05

Client ID: LCSD

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCSD;LCSD

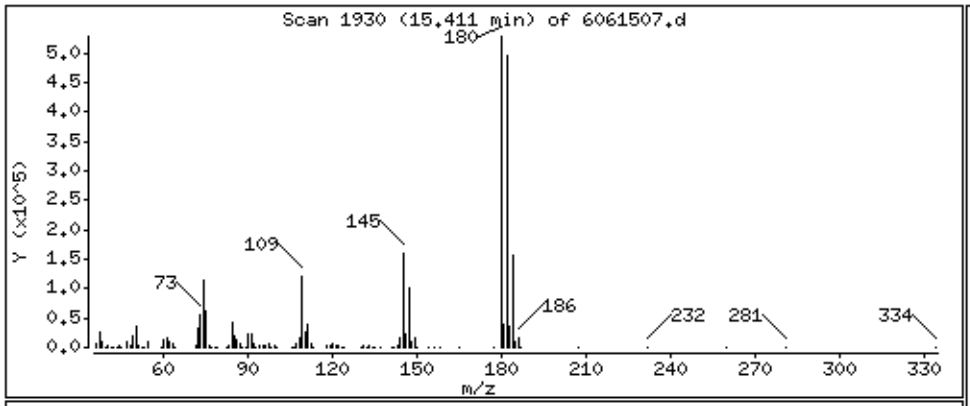
Operator: CT

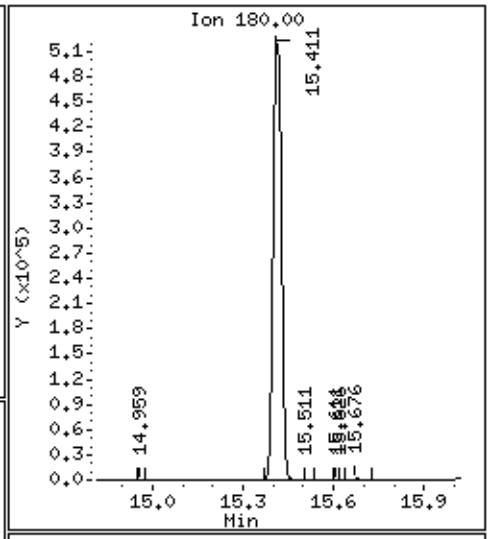
Column phase: RTx-624

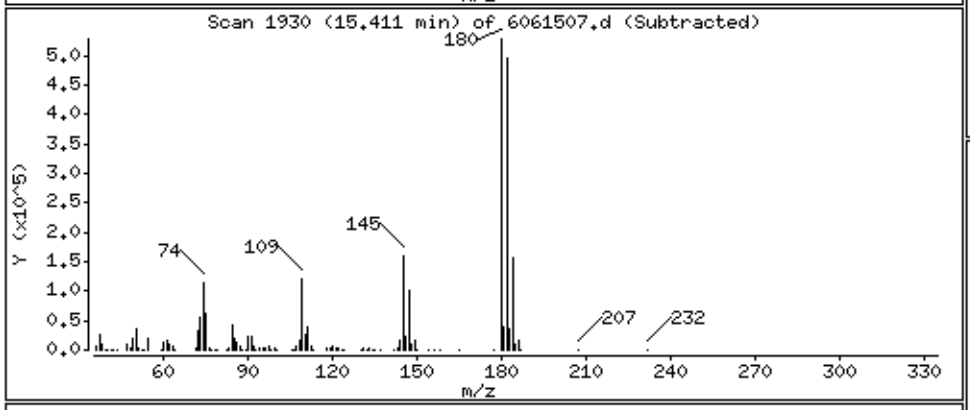
Column diameter: 0.53

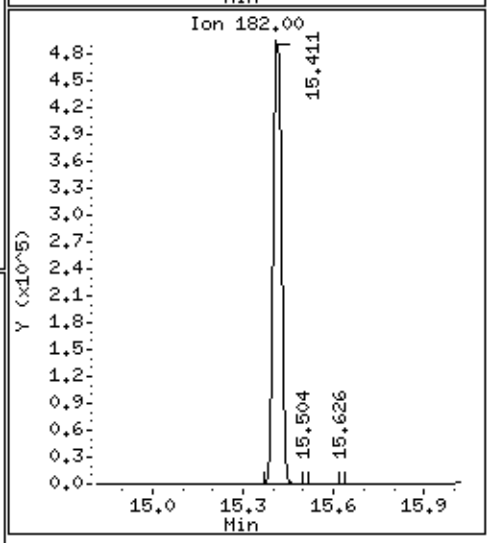
106 1,2,4-Trichlorobenzene

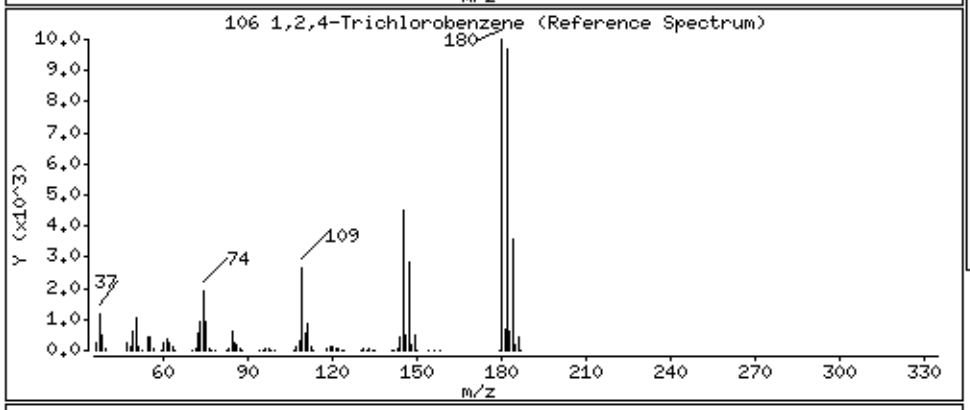
Concentration: 152.02 NG

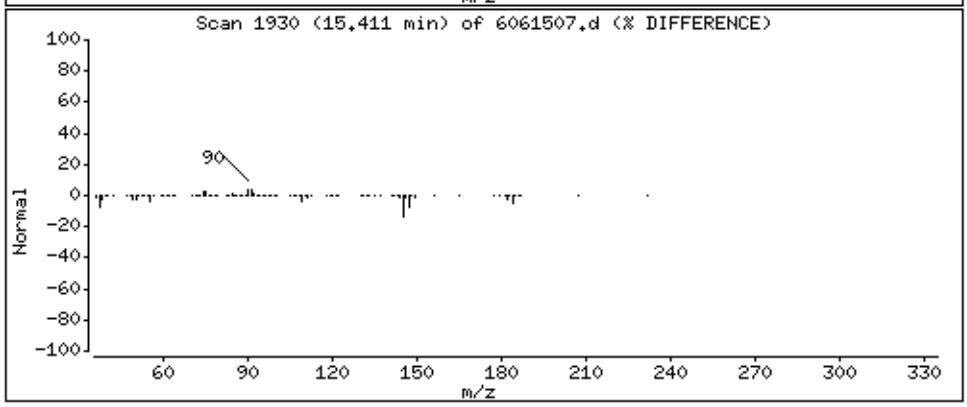












Data File: /chem/msd6.i/15jun16.b/6061507.d

Date : 15-JUN-2016 15:05

Client ID: LCSD

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCSD;LCSD

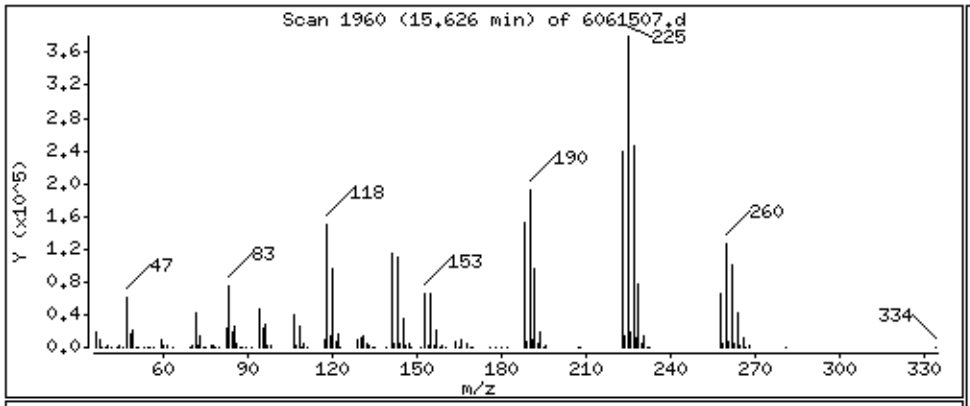
Operator: CT

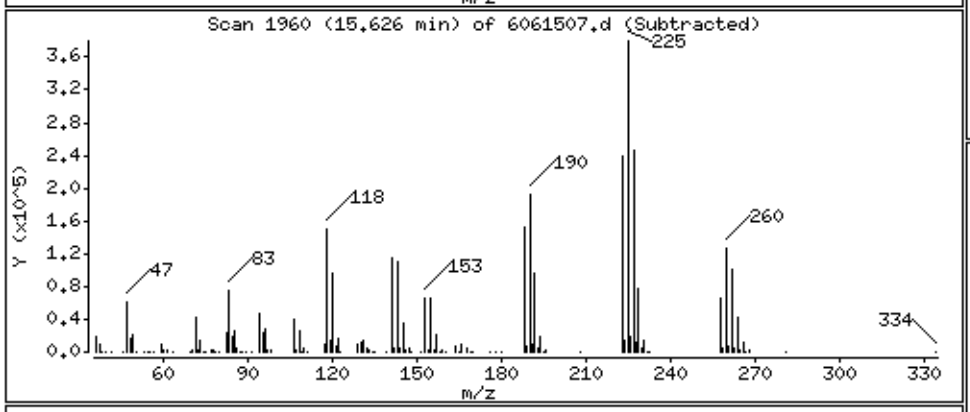
Column phase: RTx-624

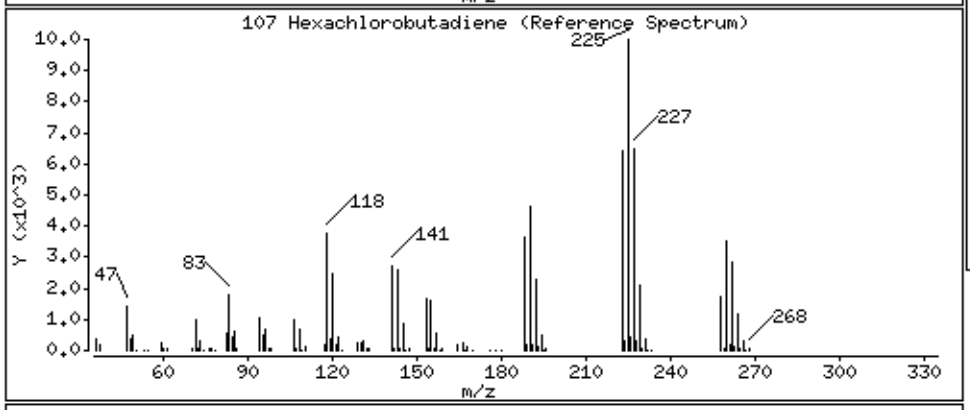
Column diameter: 0.53

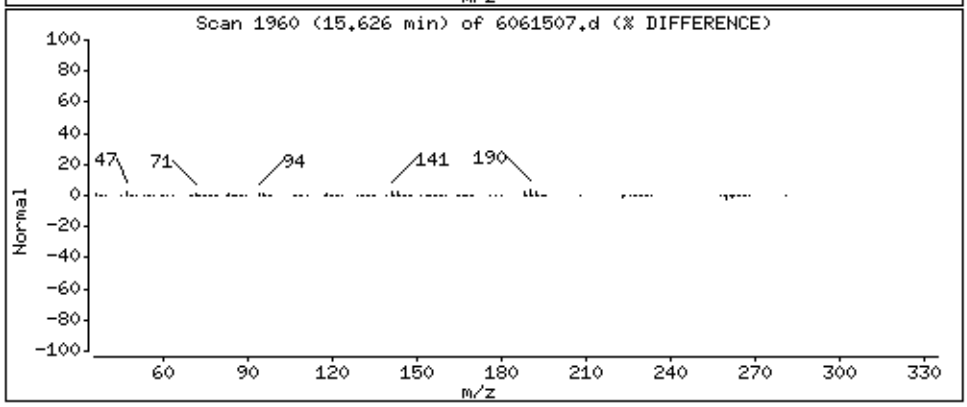
107 Hexachlorobutadiene

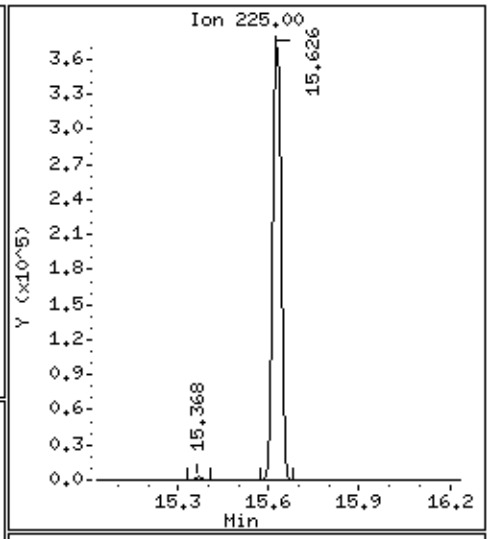
Concentration: 213.26 NG

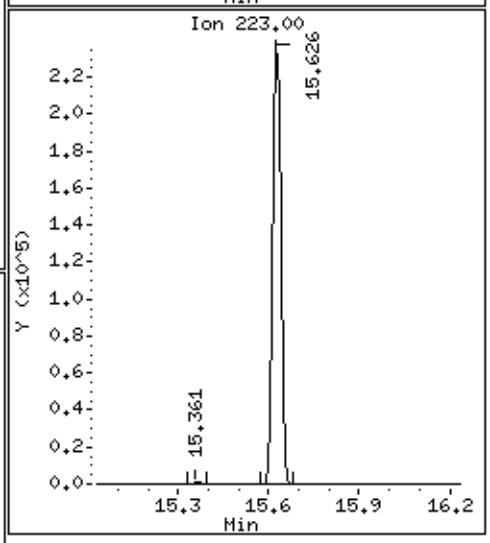












Data File: /chem/msd6.i/15jun16.b/6061507.d

Date : 15-JUN-2016 15:05

Client ID: LCSD

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCSD;LCSD

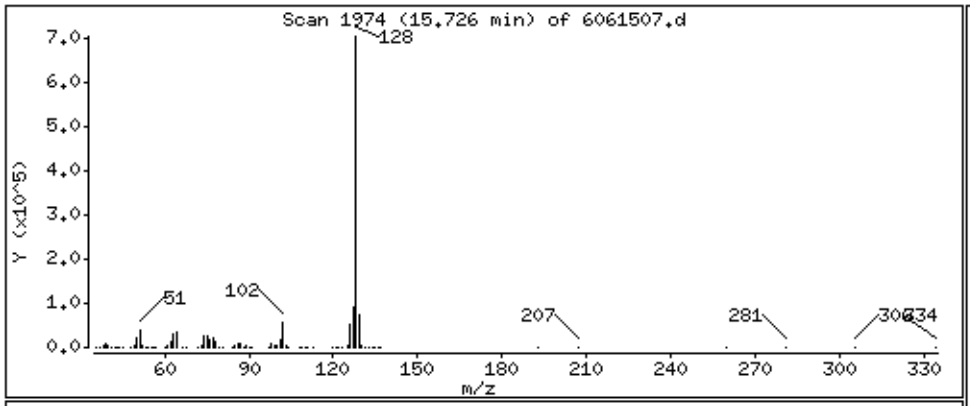
Operator: CT

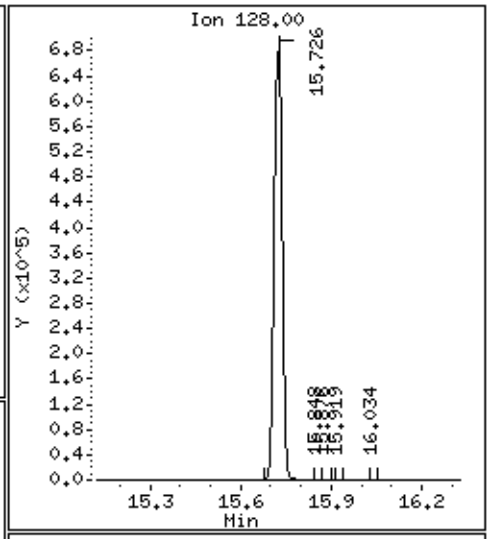
Column phase: RTx-624

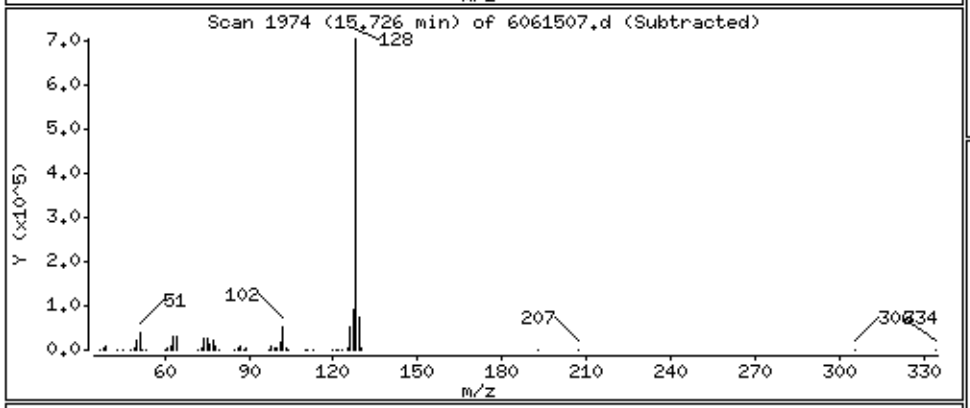
Column diameter: 0.53

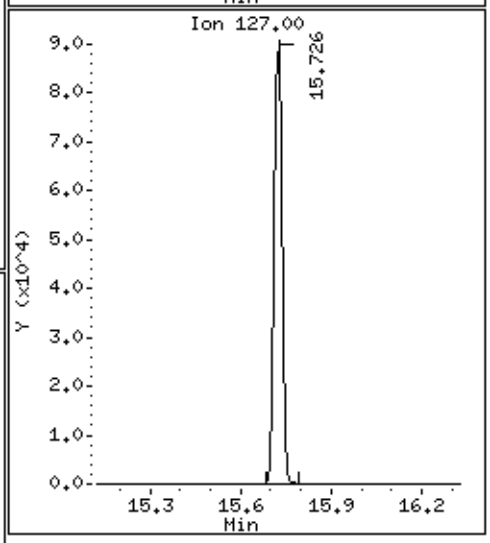
109 Naphthalene

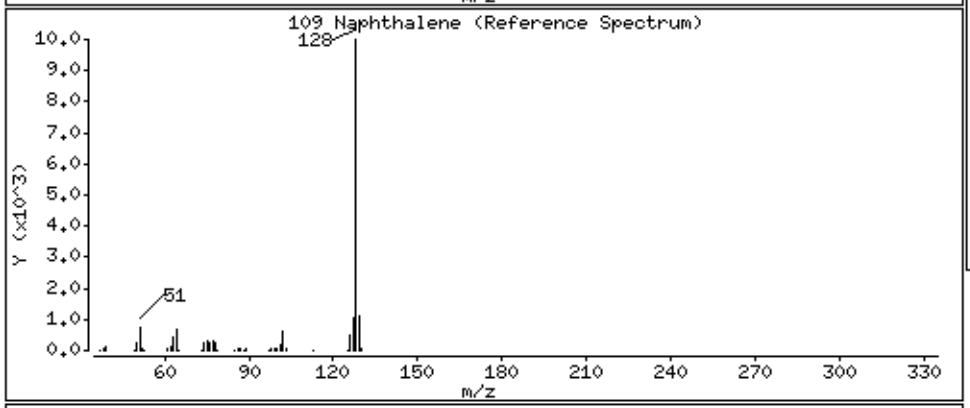
Concentration: 53.508 NG

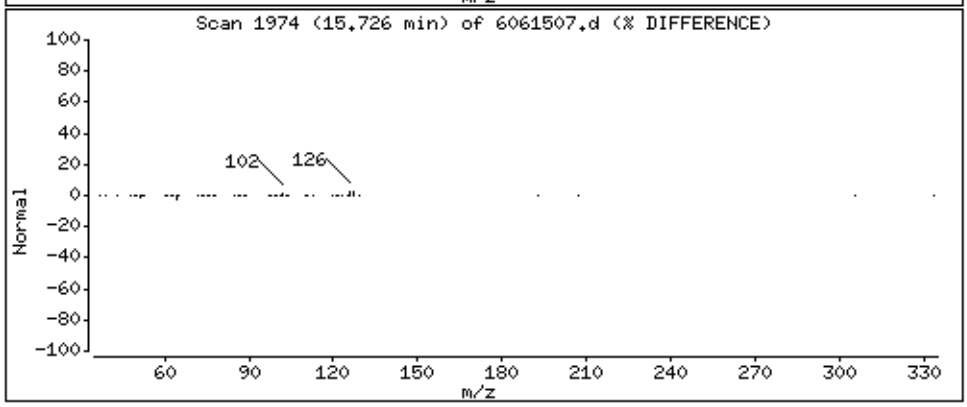












Data File: /chem/msd6.i/15jun16.b/6061507.d

Date : 15-JUN-2016 15:05

Client ID: LCSD

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCSD;LCSD

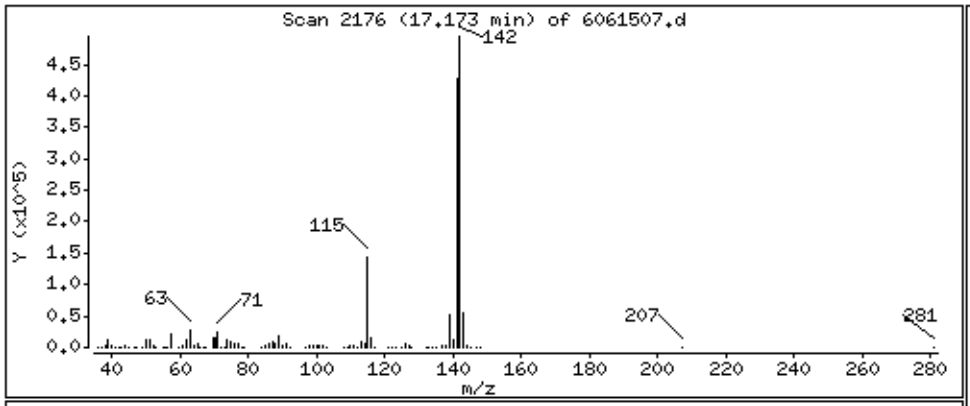
Operator: CT

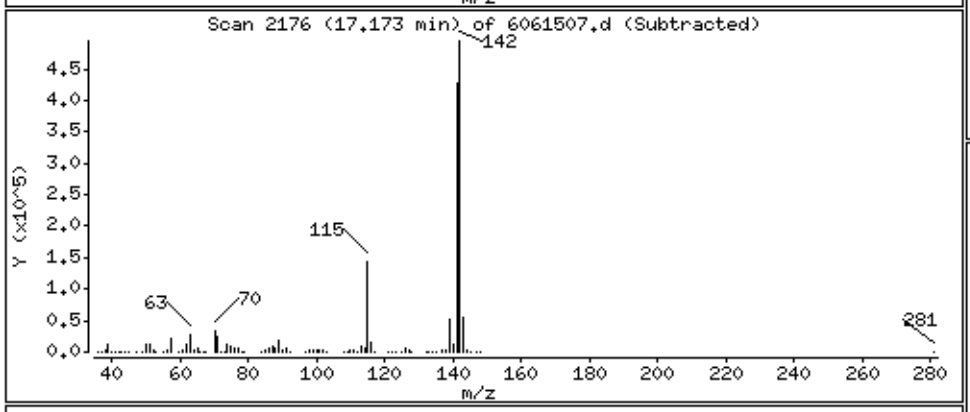
Column phase: RTx-624

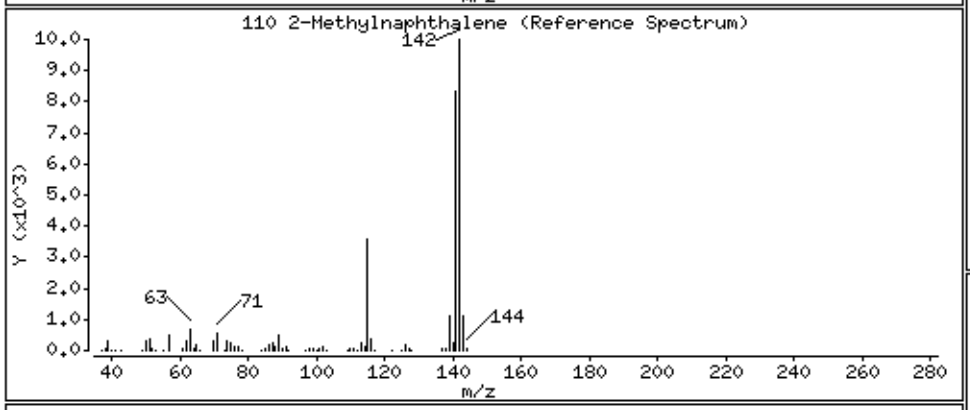
Column diameter: 0.53

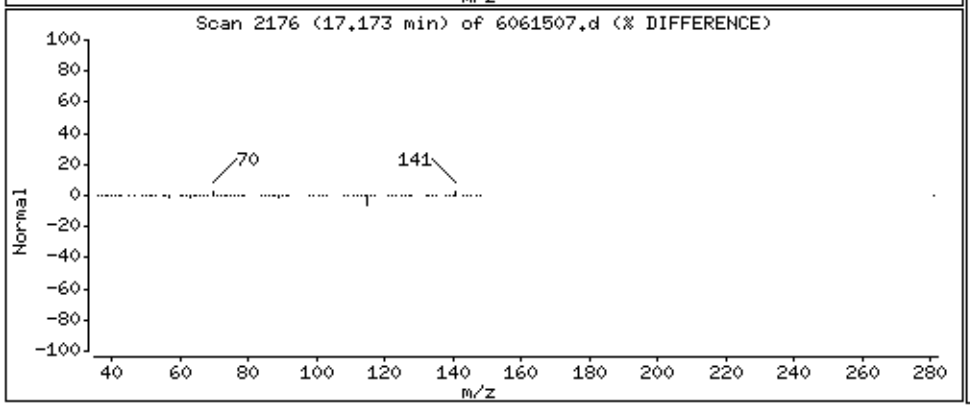
110 2-Methylnaphthalene

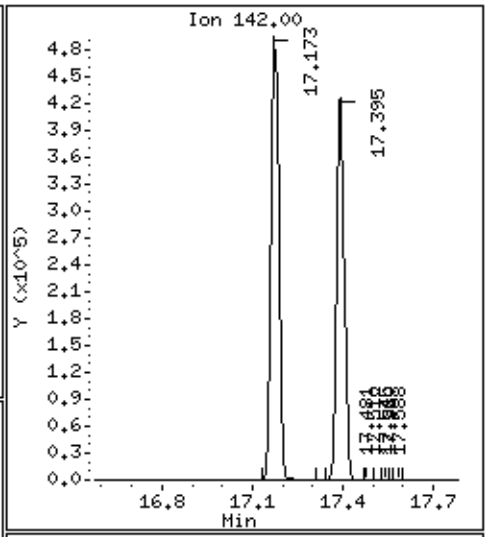
Concentration: 57.331 NG

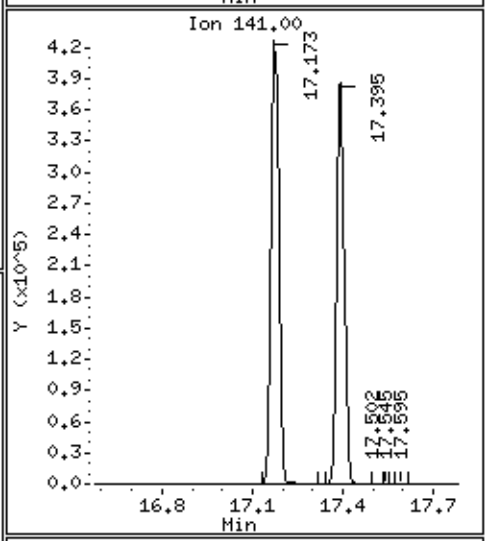


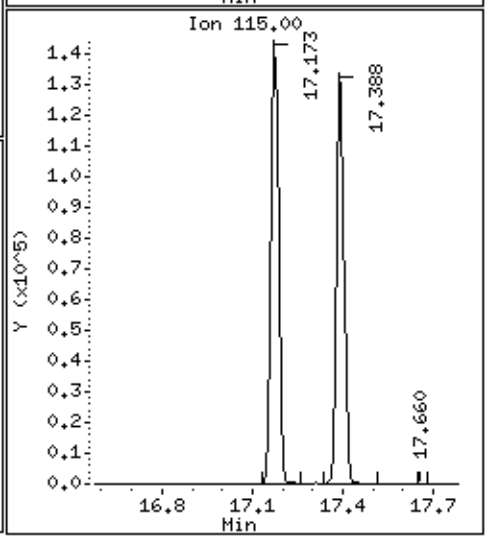












Data File: /chem/msd6.i/15jun16.b/6061507.d

Date : 15-JUN-2016 15:05

Client ID: LCSD

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCSD;LCSD

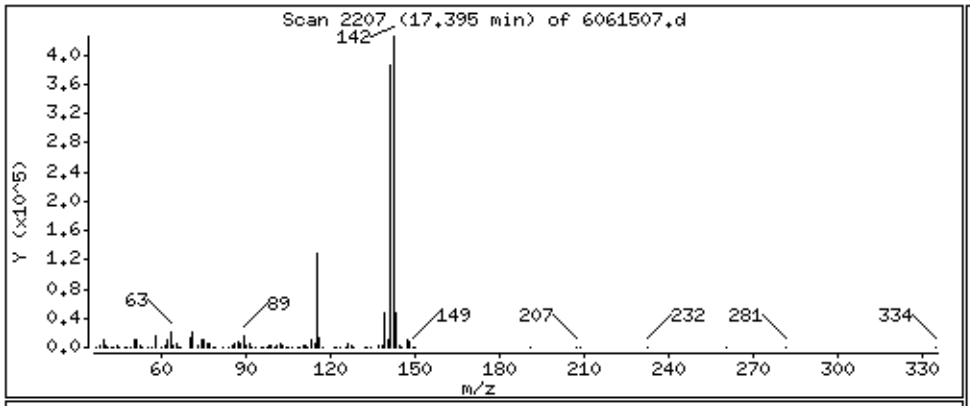
Operator: CT

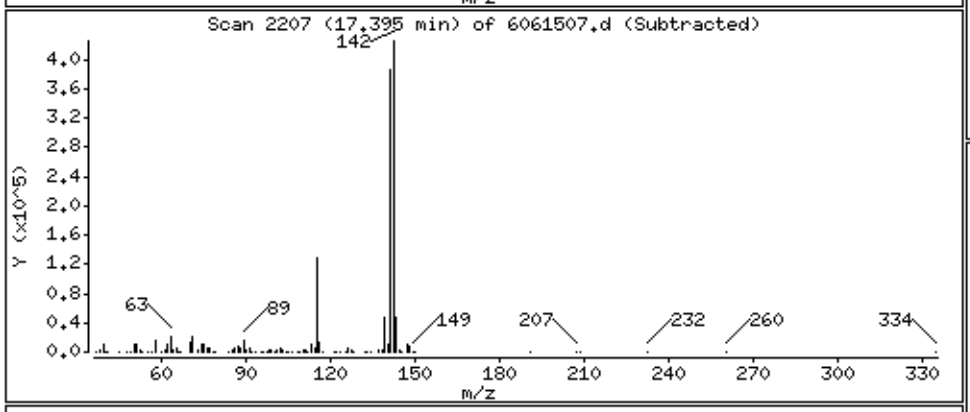
Column phase: RTx-624

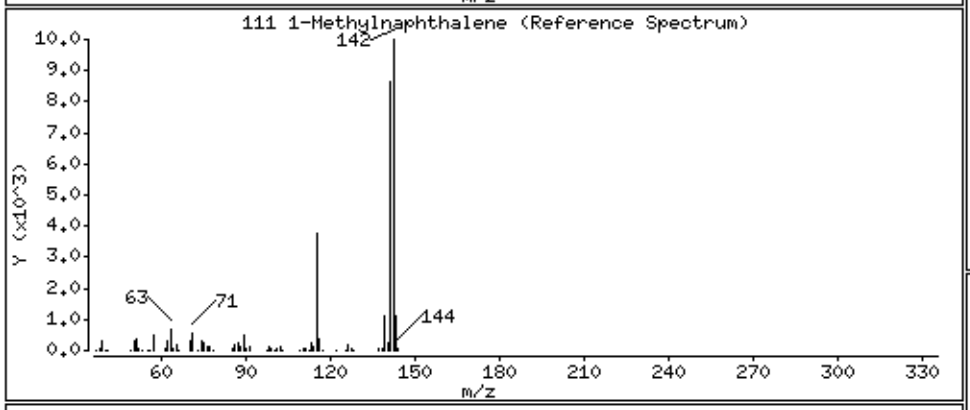
Column diameter: 0.53

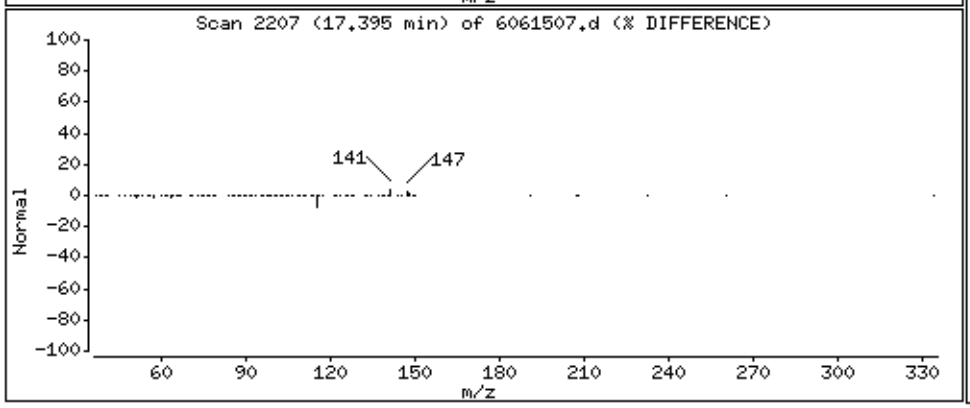
111 1-Methylnaphthalene

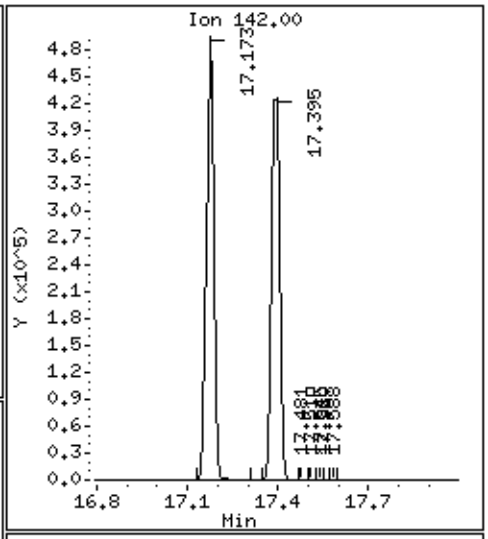
Concentration: 56.911 NG

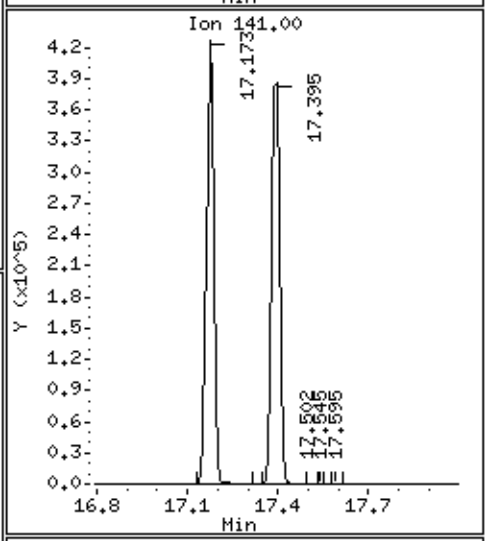


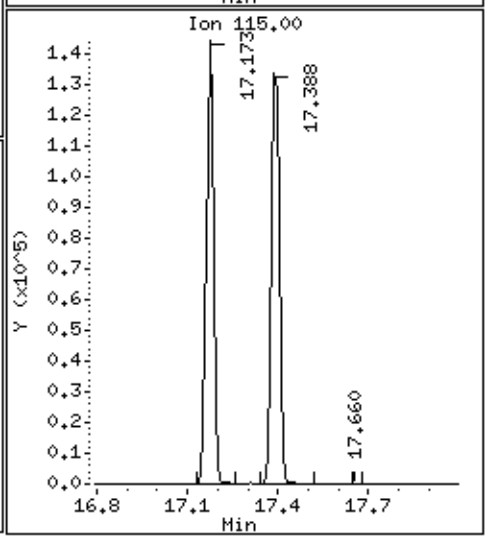












Data File: /chem/msd6.i/15jun16.b/6061507.d

Date : 15-JUN-2016 15:05

Client ID: LCSD

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCSD;LCSD

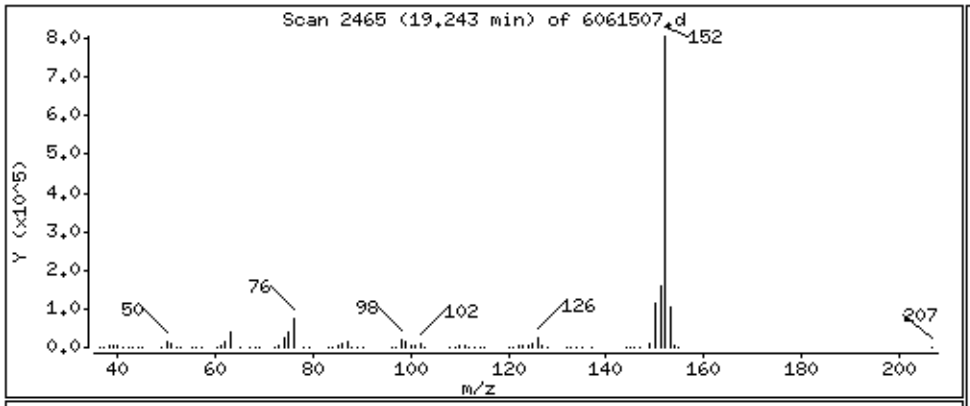
Operator: CT

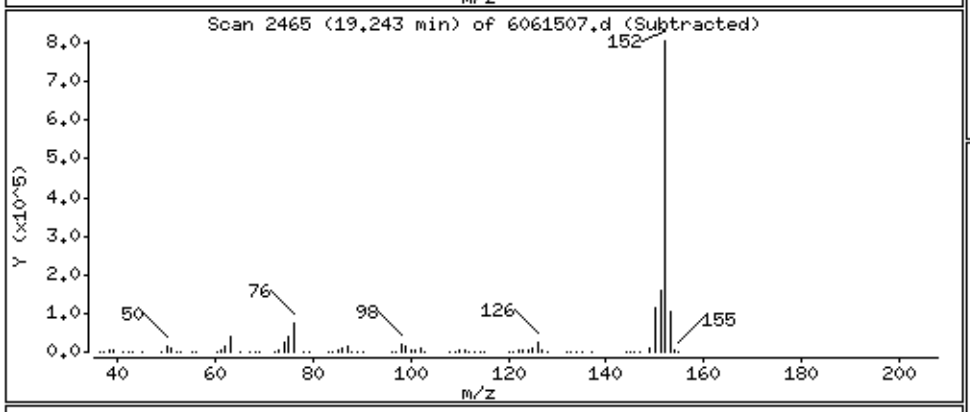
Column phase: RTx-624

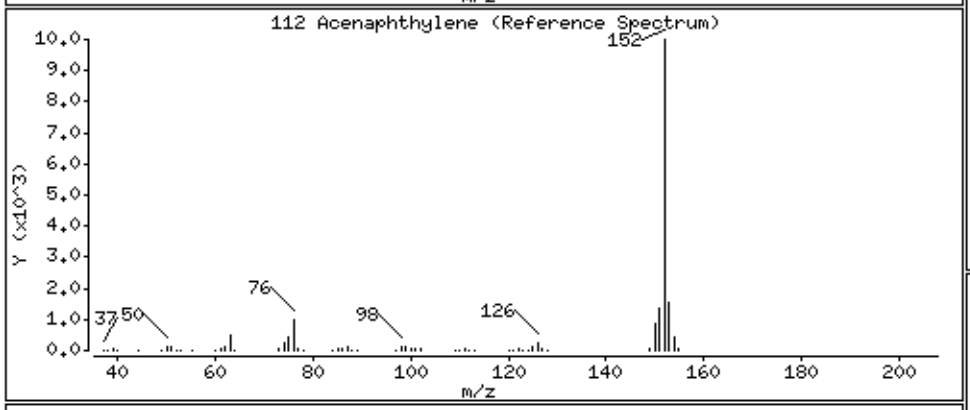
Column diameter: 0.53

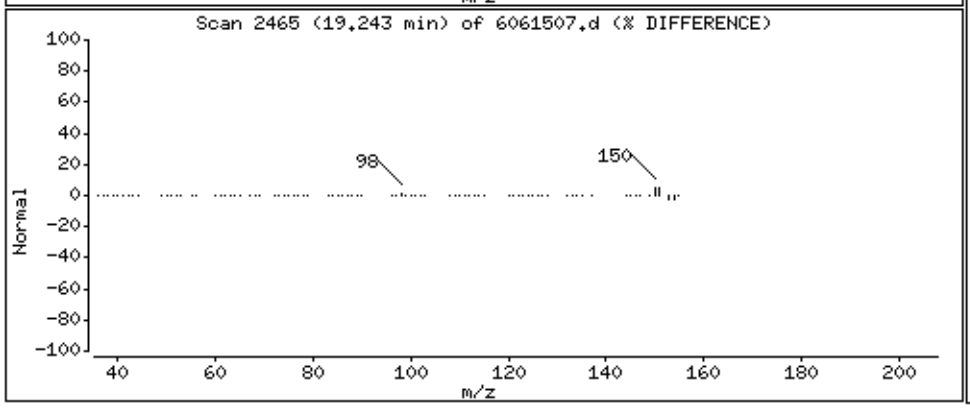
112 Acenaphthylene

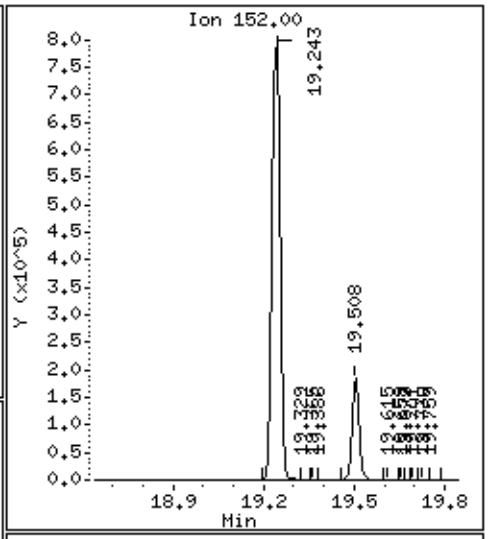
Concentration: 58.691 NG

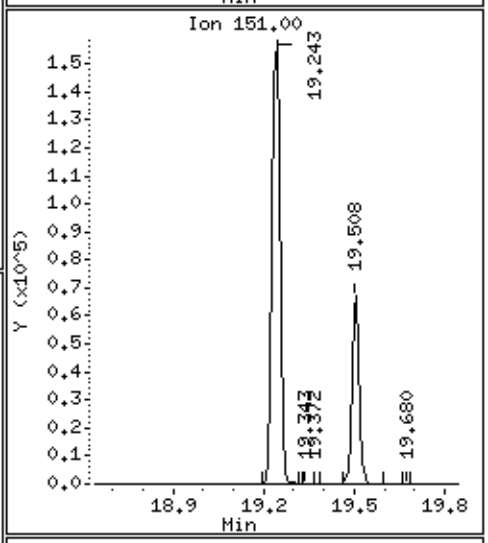


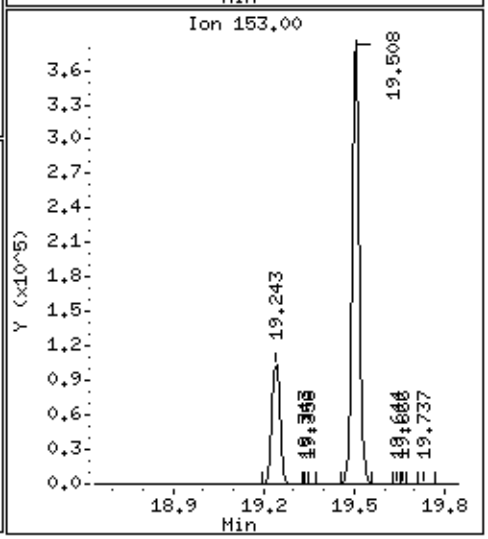












Data File: /chem/msd6.i/15jun16.b/6061507.d

Date : 15-JUN-2016 15:05

Client ID: LCSD

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCSD;LCSD

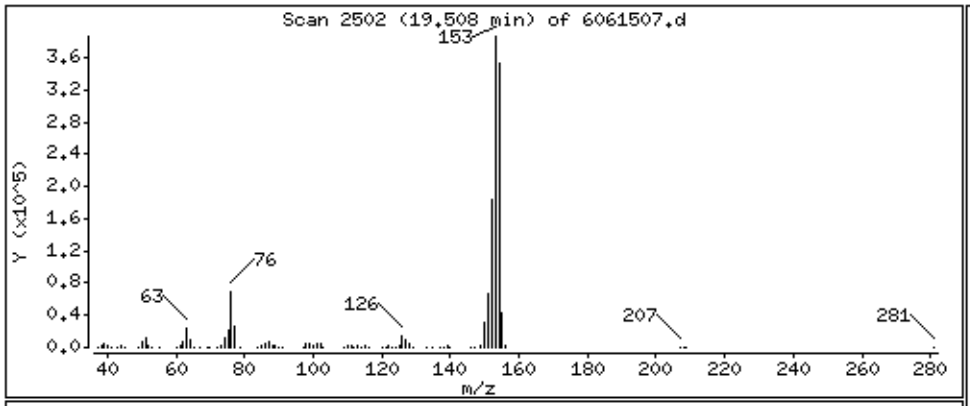
Operator: CT

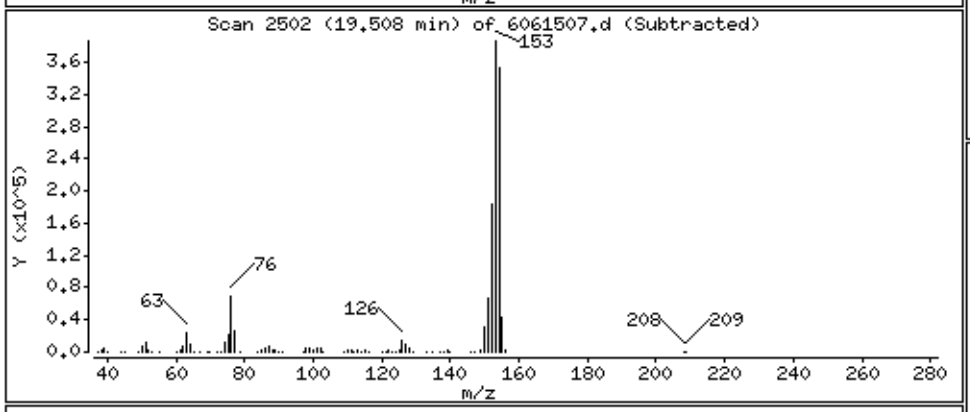
Column phase: RTx-624

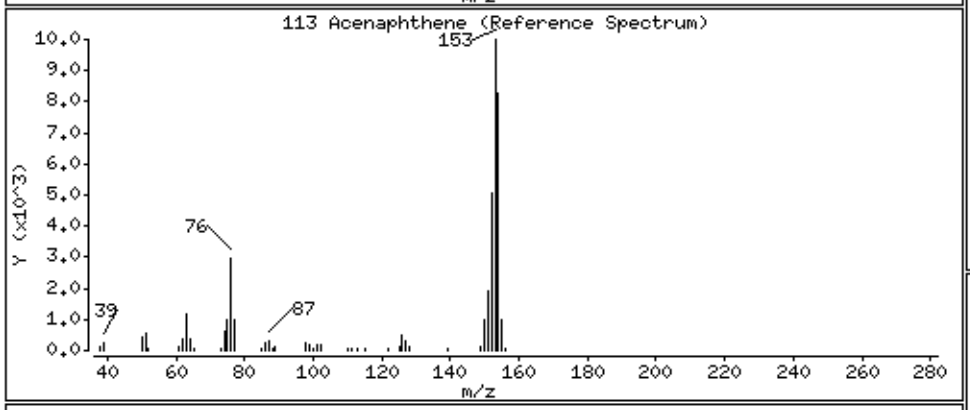
Column diameter: 0.53

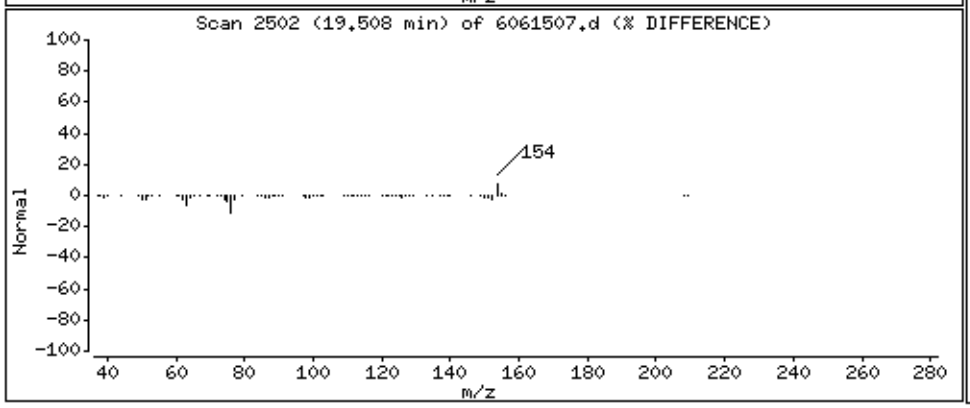
113 Acenaphthene

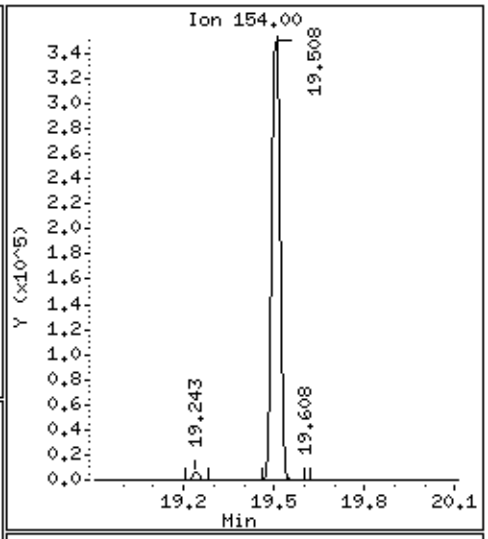
Concentration: 55.572 NG

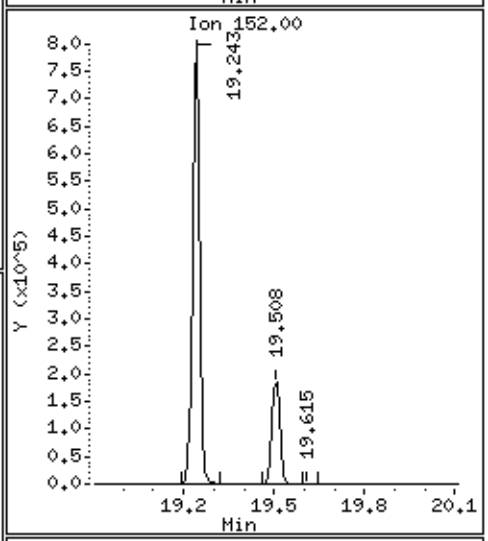


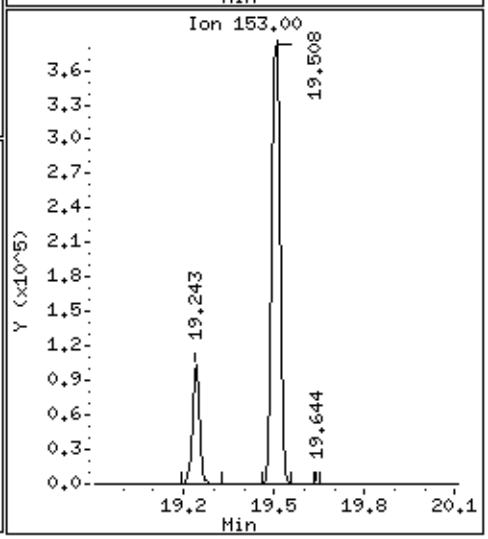












Data File: /chem/msd6.i/15jun16.b/6061507.d

Date : 15-JUN-2016 15:05

Client ID: LCSD

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCSD;LCSD

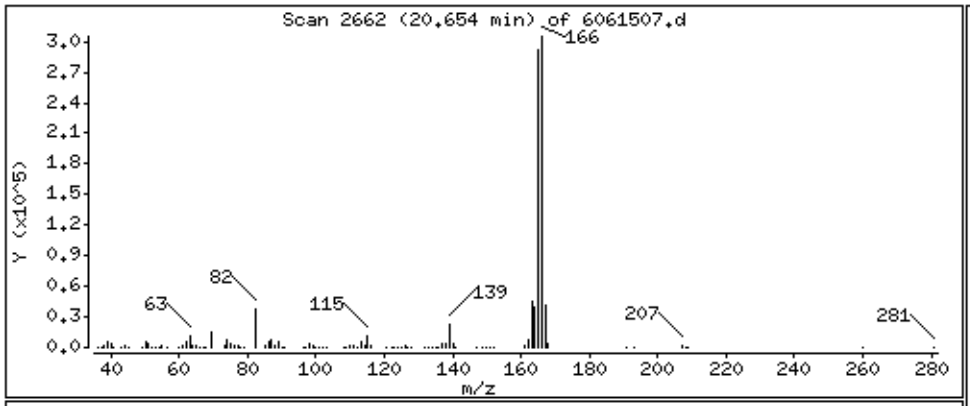
Operator: CT

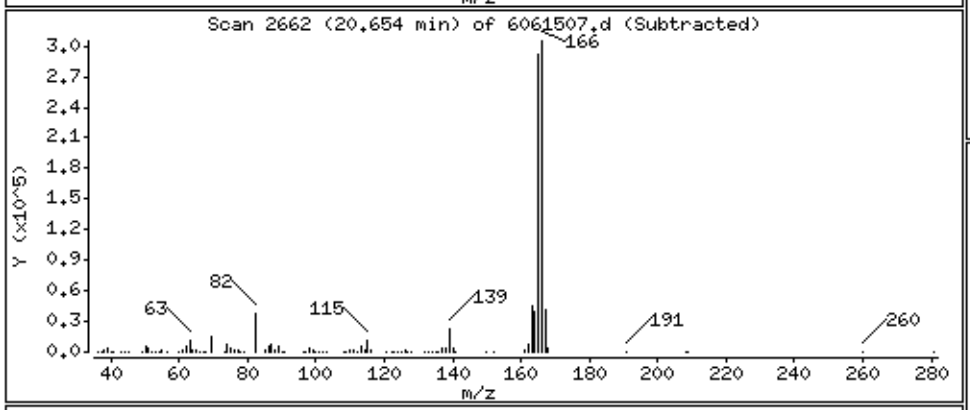
Column phase: RTx-624

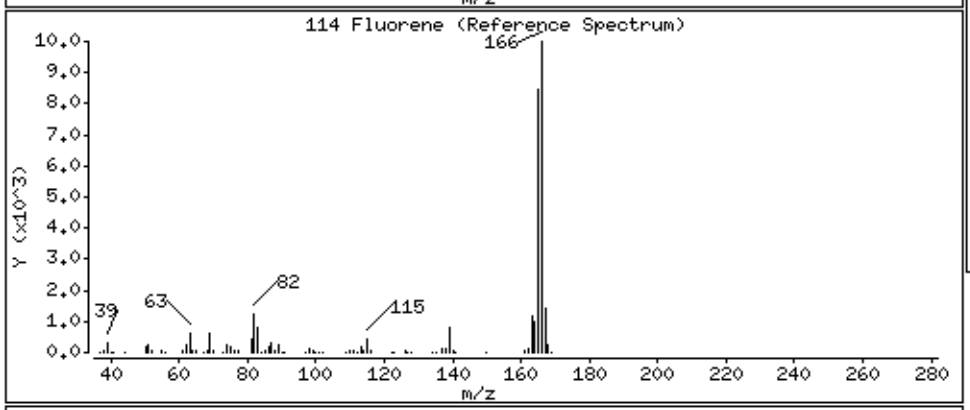
Column diameter: 0.53

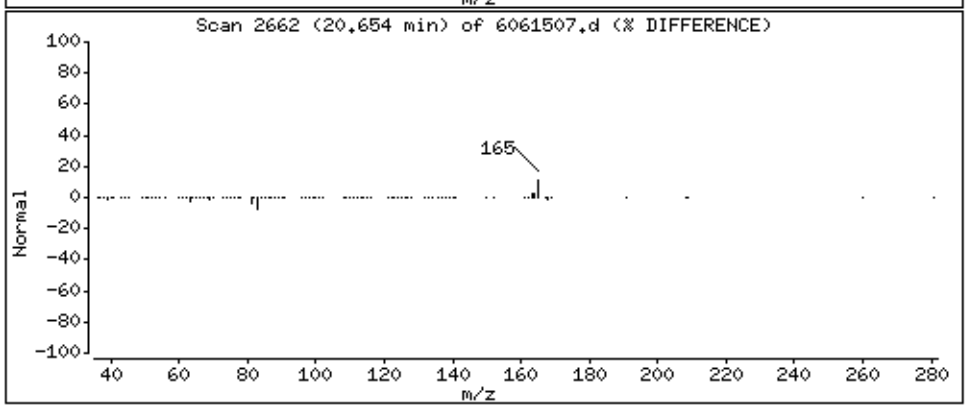
114 Fluorene

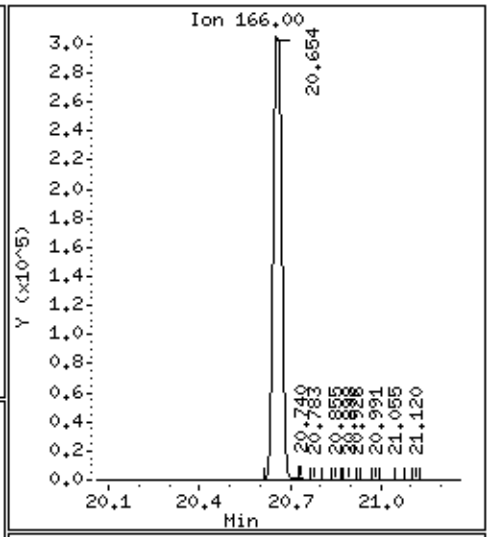
Concentration: 58.162 NG

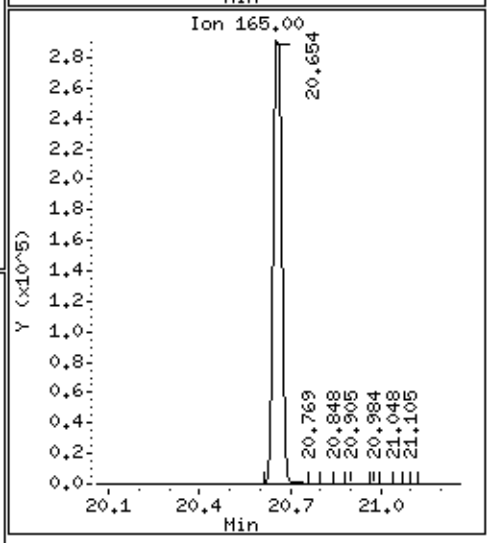












Data File: /chem/msd6.i/15jun16.b/6061507.d

Date : 15-JUN-2016 15:05

Client ID: LCSD

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCSD;LCSD

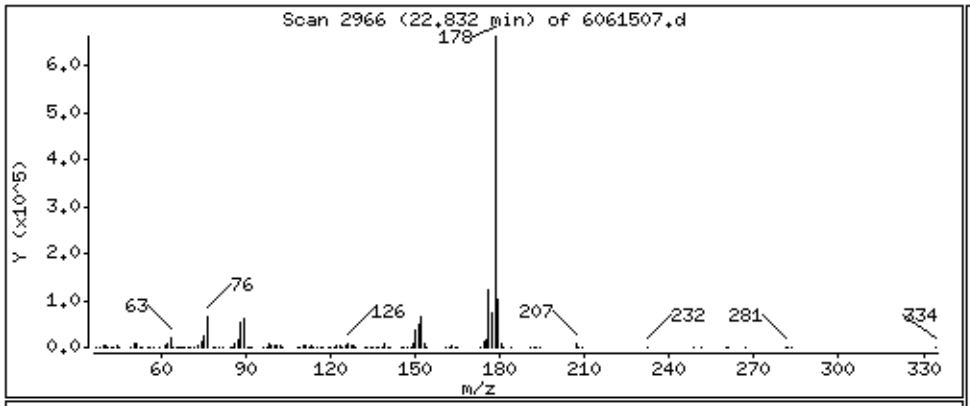
Operator: CT

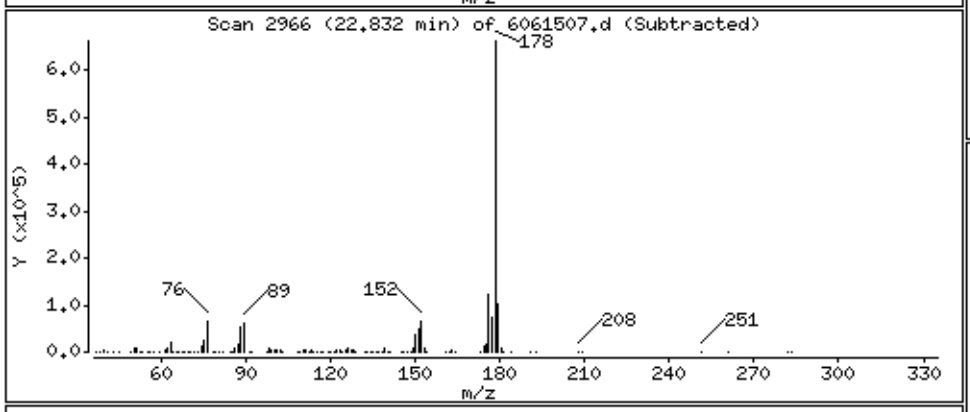
Column phase: RTx-624

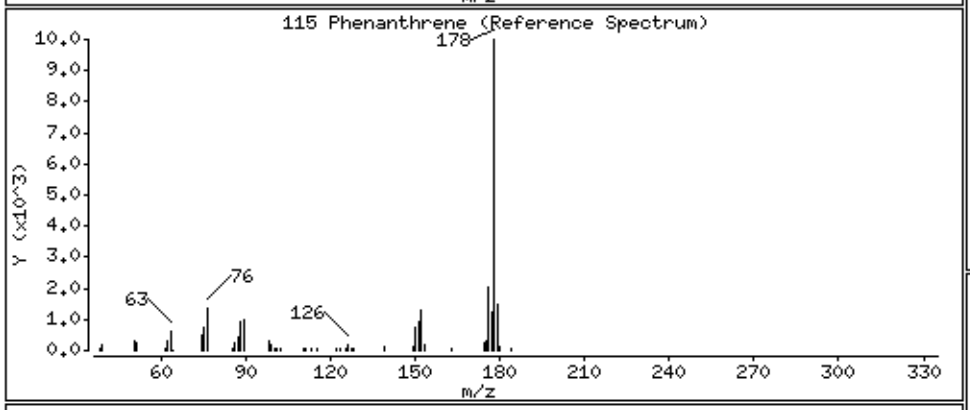
Column diameter: 0.53

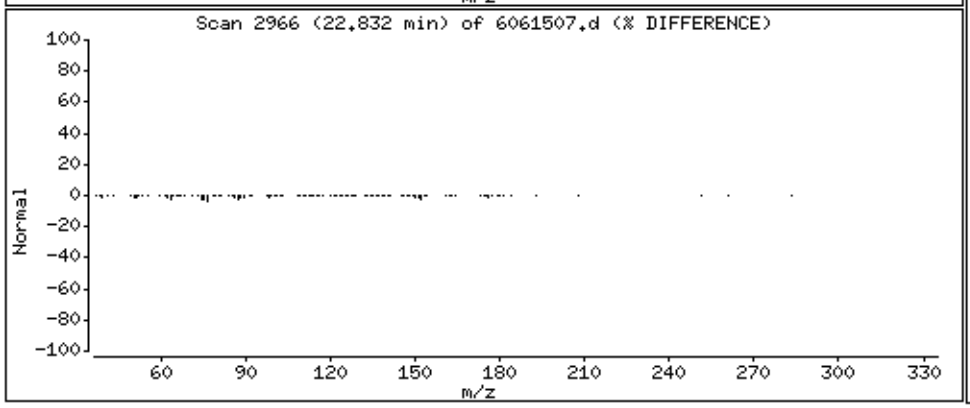
115 Phenanthrene

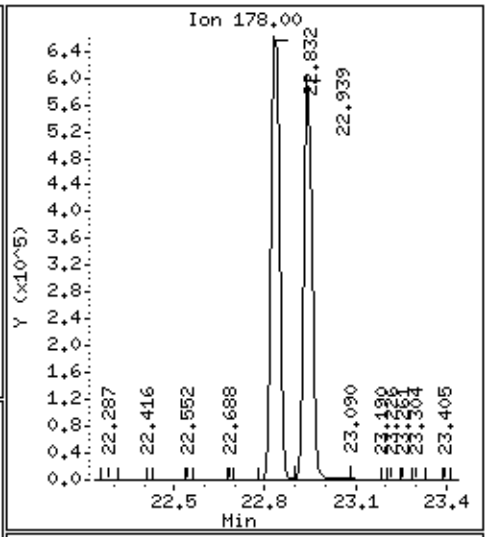
Concentration: 51.477 NG

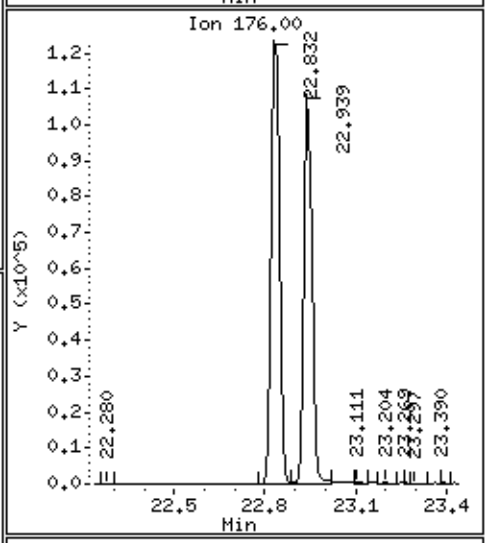


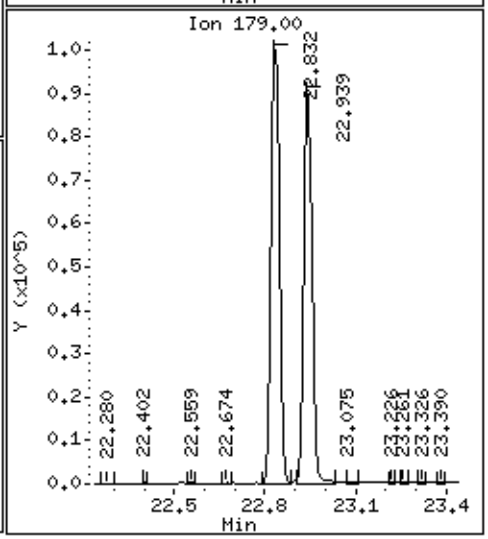












Data File: /chem/msd6.i/15jun16.b/6061507.d

Date : 15-JUN-2016 15:05

Client ID: LCSD

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCSD;LCSD

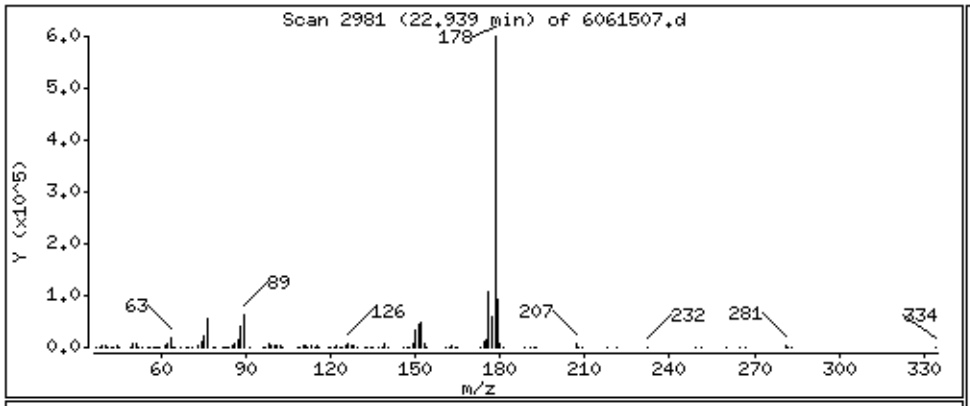
Operator: CT

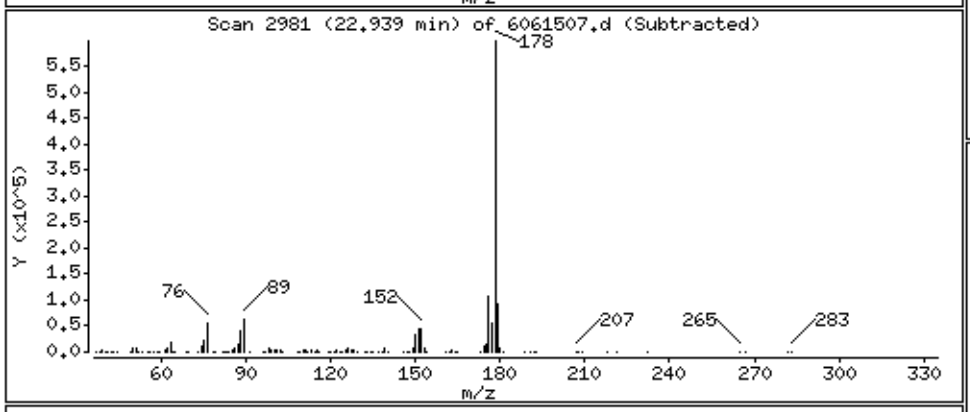
Column phase: RTx-624

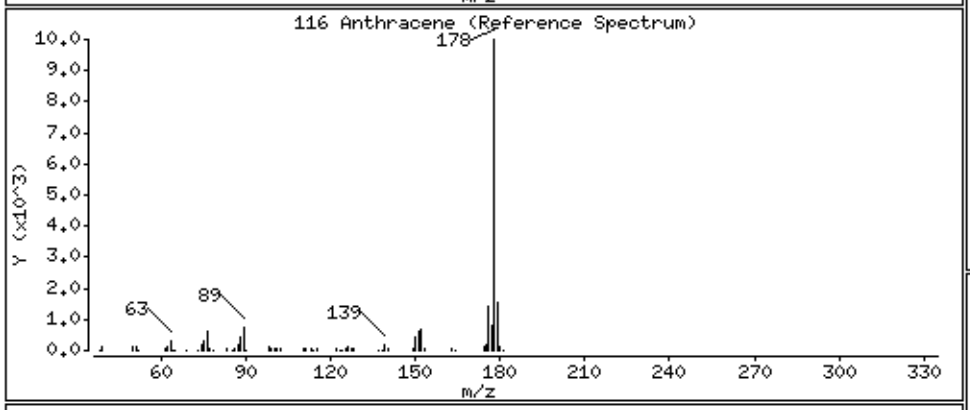
Column diameter: 0.53

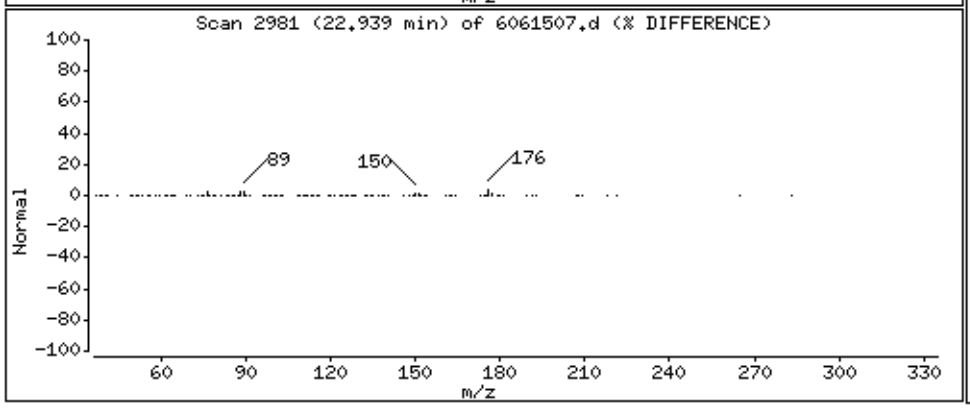
116 Anthracene

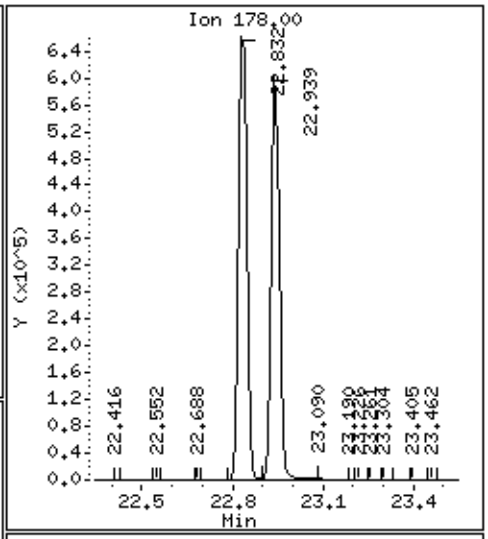
Concentration: 54.323 NG

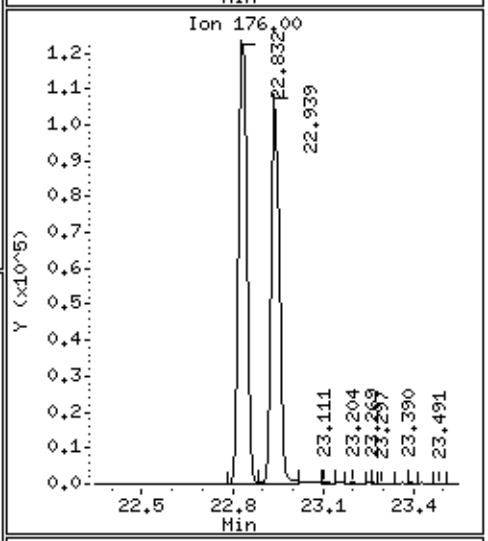


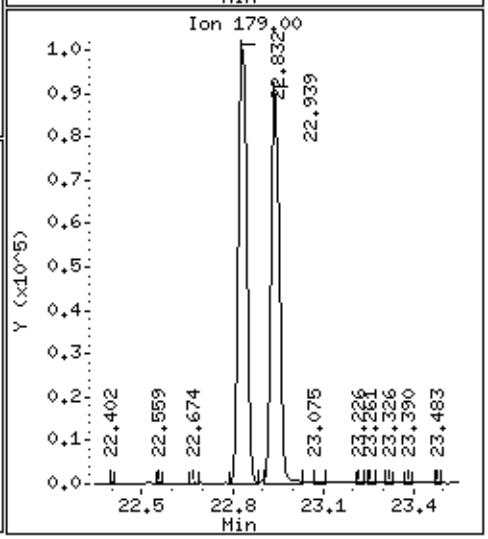












Data File: /chem/msd6.i/15jun16.b/6061507.d

Date : 15-JUN-2016 15:05

Client ID: LCSD

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCSD;LCSD

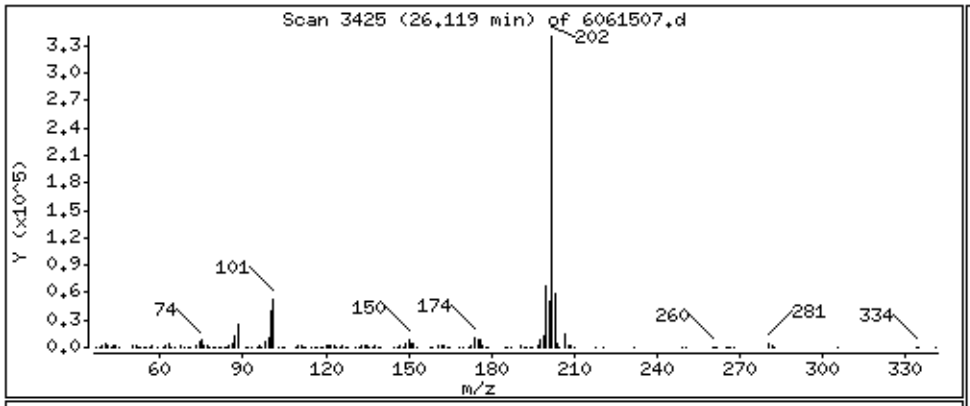
Operator: CT

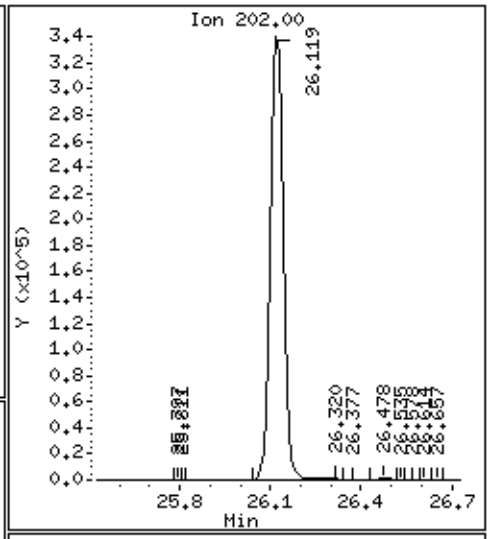
Column phase: RTx-624

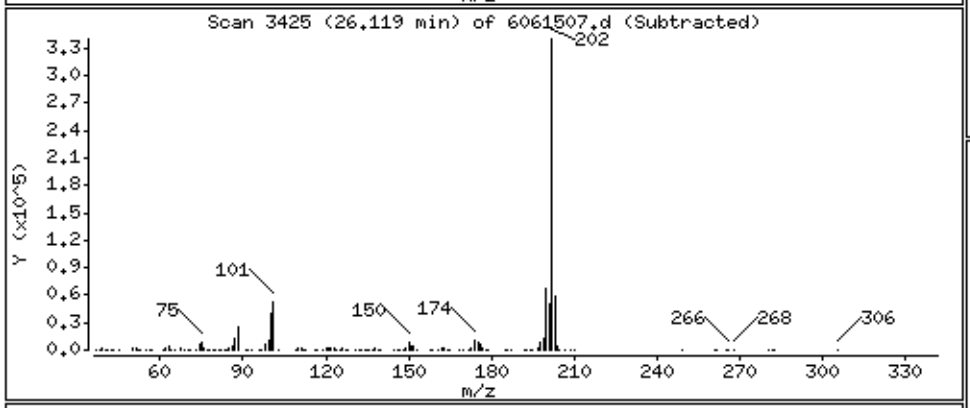
Column diameter: 0.53

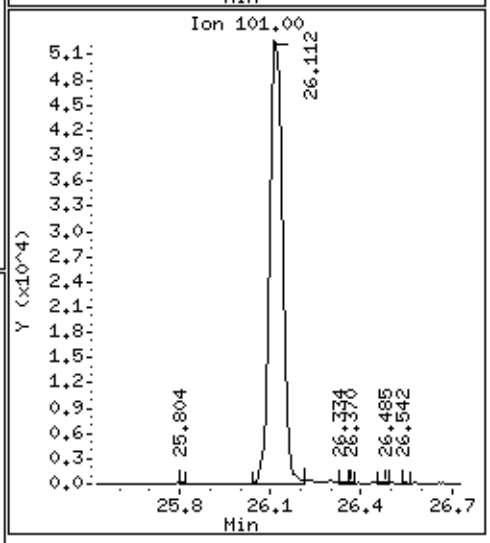
117 Fluoranthene

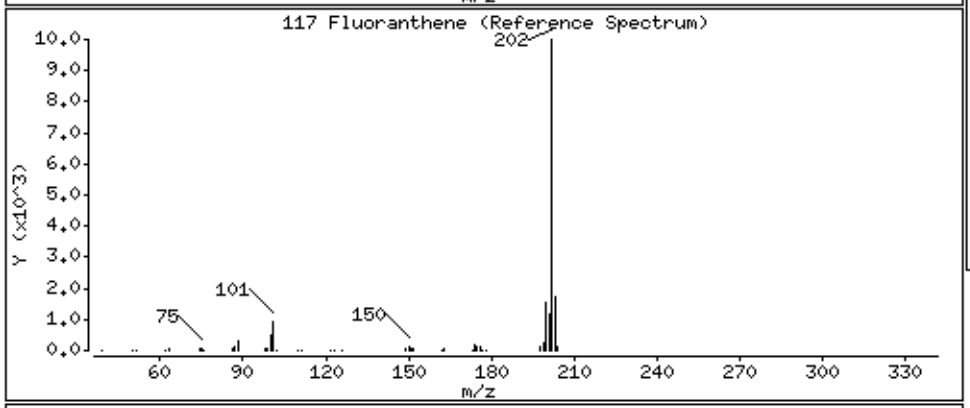
Concentration: 59.992 NG

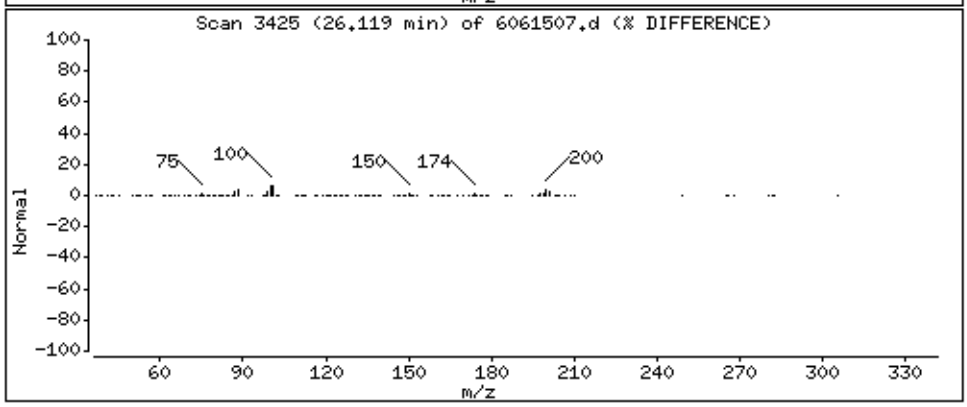












Data File: /chem/msd6.i/15jun16.b/6061507.d

Date : 15-JUN-2016 15:05

Client ID: LCSD

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCSD;LCSD

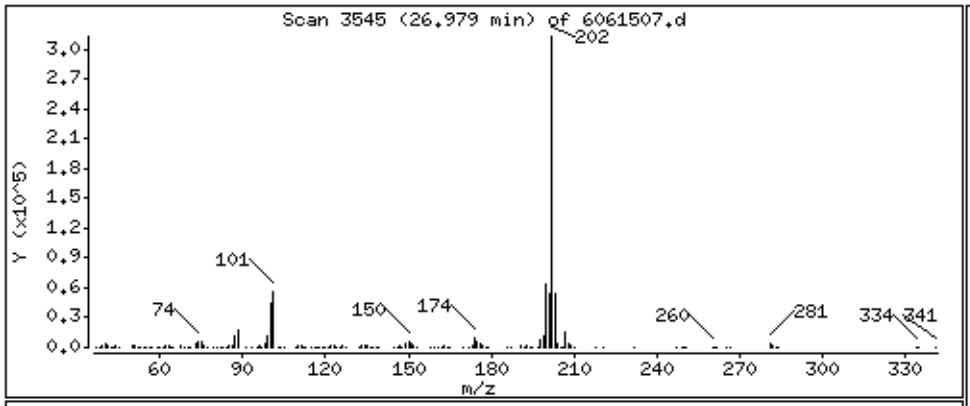
Operator: CT

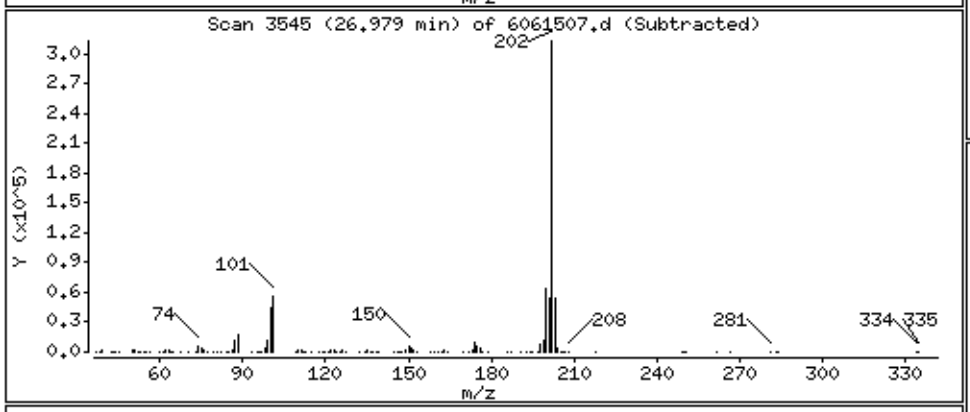
Column phase: RTx-624

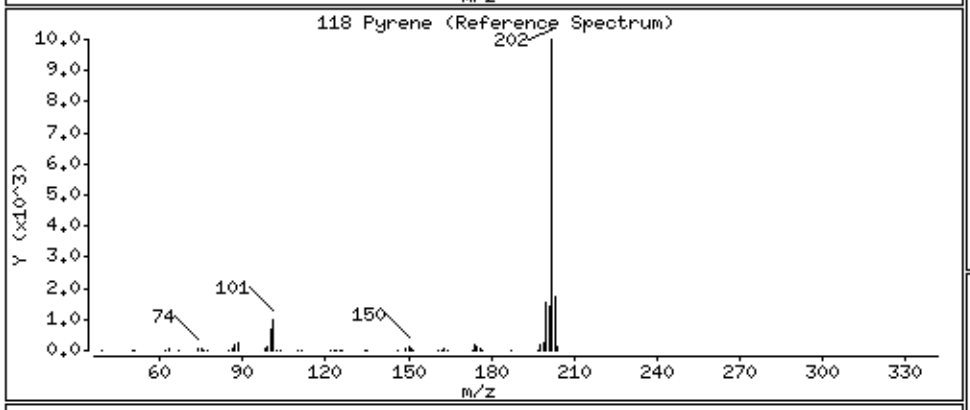
Column diameter: 0.53

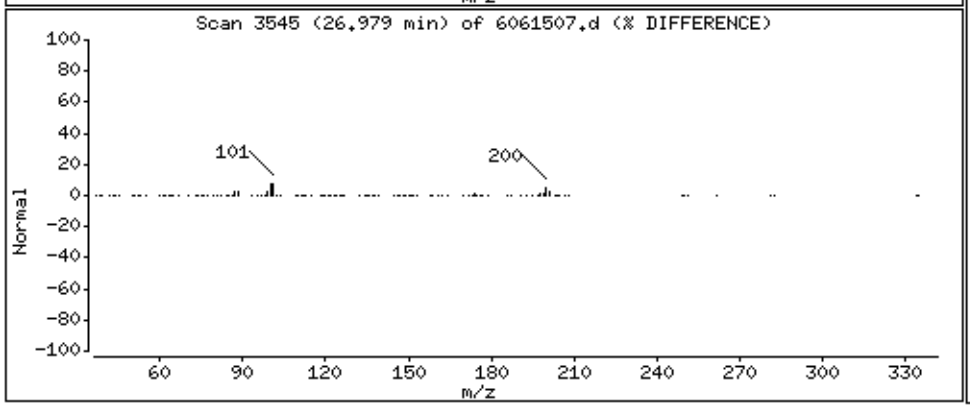
118 Pyrene

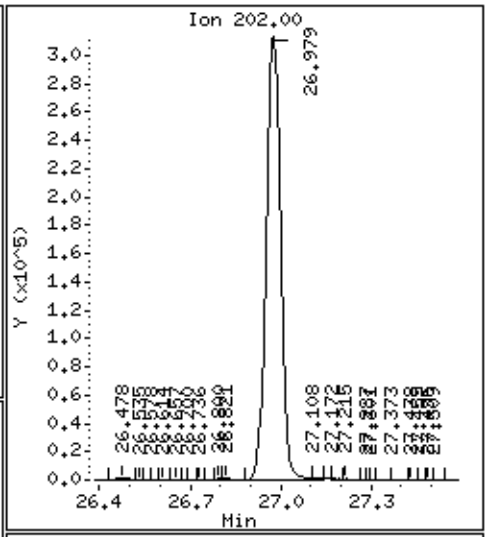
Concentration: 59.904 NG

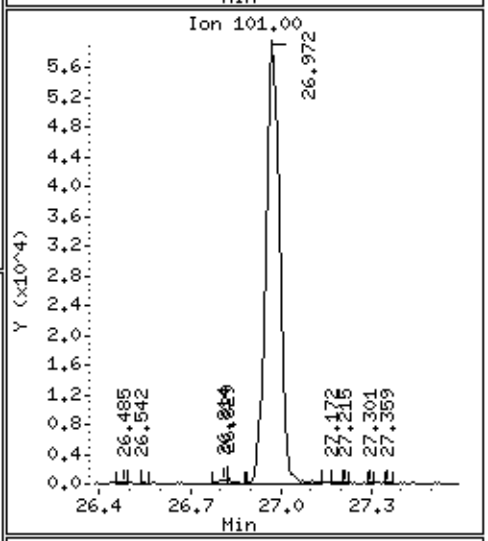


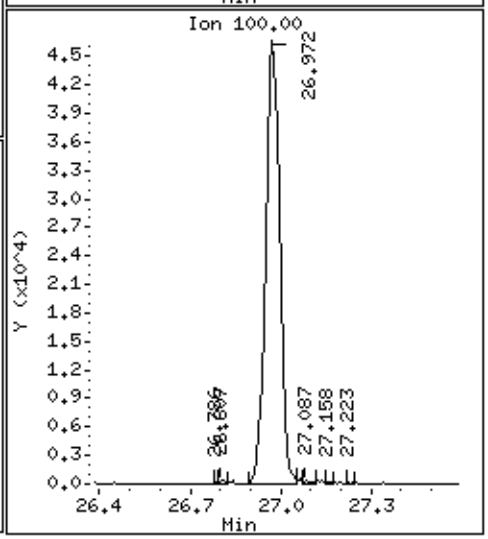












eurofins | Air Toxics

Client Sample ID: LCS
Lab ID#: 1606272-19B
EPA METHOD TO-17

File Name:	**6061703**	**Date of Extraction: NA**	**Date of Collection: NA**
Dil. Factor:	**1.00**		**Date of Analysis: 6/17/16 11:37 AM**

Compound	**%Recovery**	**Method Limits**
Naphthalene	119	70-130

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

Surrogates	**%Recovery**	**Method Limits**
Naphthalene-d8	94	50-150

Report Date: 20-Jun-2016 10:50

Eurofins Air Toxics Inc.

RECOVERY REPORT

Client Name:
Client SDG: 17jun16
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/17jun16.b/616z0614vi.m
Misc Info: 2516-245-20ml(9/7/16),2744-32-50(7/20/16)

SPIKE COMPOUND	CONC ADDED NG	CONC RECOVERED NG	% RECOVERED	LIMITS
3 Freon 114	139.80	147.10	105.22	70-130
6 Vinyl Chloride	51.100	64.099	125.44	70-130
7 1,3-Butadiene	44.200	52.158	118.01	70-130
9 Chloroethane	52.800	54.029	102.33	70-130
10 Isopentane	59.000	66.852	113.31	70-130
11 Trichlorofluoromet	112.40	115.82	103.04	70-130
14 1,1-Dichloroethene	79.300	84.533	106.60	70-130
15 Freon 113	153.30	151.09	98.56	70-130
18 Carbon Disulfide	62.300	48.558	77.94	70-130
19 2-Propanol	49.200	54.985	111.76	70-130
22 Methylene Chloride	69.500	77.169	111.04	70-130
25 trans-1,2-Dichloro	79.300	72.683	91.66	70-130
26 MTBE	72.100	82.763	114.79	70-130
28 Hexane	70.500	82.158	116.54	70-130
29 1,1-Dichloroethane	81.000	82.037	101.28	70-130
37 cis-1,2-Dichloroet	79.300	91.129	114.92	70-130
38 2-Butanone	59.000	71.116	120.54	70-130
44 Chloroform	97.700	97.947	100.25	70-130
45 1,1,1-Trichloroeth	109.10	102.21	93.69	70-130
46 Cyclohexane	68.800	70.914	103.07	70-130
47 Carbon Tetrachlori	125.80	129.11	102.63	70-130
48 Benzene	63.900	61.833	96.76	70-130
50 1,2-Dichloroethane	80.900	82.800	102.35	70-130
51 2,2,4-Trimethylpen	93.400	109.59	117.33	70-130
53 Heptane	82.000	84.631	103.21	70-130
56 Trichloroethene	107.50	104.69	97.39	70-130
58 Methyl Cyclohexane	80.300	86.206	107.35	70-130
59 1,2-Dichloropropan	92.400	110.36	119.44	70-130
60 1,4-Dioxane	72.100	75.148	104.23	70-130
65 4-Methyl-2-pentano	81.900	91.530	111.76	70-130
67 Toluene	75.400	83.058	110.16	70-130
70 1,1,2-Trichloroeth	109.10	115.15	105.54	70-130
71 Tetrachloroethene	135.70	138.12	101.78	70-130

SPIKE COMPOUND	CONC ADDED NG	CONC RECOVERED NG	% RECOVERED	LIMITS
72 2-Hexanone	81.900	97.024	118.47	70-130
74 1,2-Dibromoethane	153.70	184.27	119.89	70-130
81 Chlorobenzene	92.100	88.796	96.41	70-130
82 Ethyl Benzene	86.800	85.476	98.48	70-130
84 m,p-Xylene	86.800	94.322	108.67	70-130
88 o-Xylene	86.800	98.635	113.63	70-130
89 Styrene	85.200	98.469	115.57	70-130
91 Cumene	98.300	107.65	109.51	70-130
94 1,1,2,2-Tetrachlor	137.30	165.67	120.66	70-130
96 Propylbenzene	98.300	110.37	112.28	70-130
97 4-Ethyltoluene	98.300	105.49	107.32	70-130
98 1,3,5-Trimethylben	98.300	103.78	105.57	70-130
100 1,2,4-Trimethylben	98.300	103.98	105.77	70-130
101 1,3-Dichlorobenzen	120.30	121.60	101.08	70-130
102 1,4-Dichlorobenzen	120.30	121.14	100.70	70-130
105 1,2-Dichlorobenzen	120.30	119.94	99.70	70-130
106 1,2,4-Trichloroben	148.40	144.26	97.21	70-130
107 Hexachlorobutadien	213.30	197.40	92.54	70-130
109 Naphthalene	50.000	59.480	118.96	70-130
110 2-Methylnaphthalen	50.000	61.394	122.79	70-130
111 1-Methylnaphthalen	50.000	61.278	122.56	70-130
112 Acenaphthylene	50.000	62.793	125.59	70-130
113 Acenaphthene	50.000	57.593	115.19	70-130
114 Fluorene	50.000	57.116	114.23	60-140
115 Phenanthrene	50.000	52.956	105.91	60-140
116 Anthracene	50.000	55.287	110.57	60-140
117 Fluoranthene	50.000	59.884	119.77	60-140
118 Pyrene	50.000	57.635	115.27	60-140

SURROGATE COMPOUND	AMOUNT ADDED ng	AMOUNT RECOVERED ng	% RECOVERED	LIMITS
$ 49 1,2-Dichloroethane	25.000	22.650	90.60	50-150
$ 66 Toluene-d8	25.000	25.729	102.92	50-150
$ 108 Naphthalene-d8	25.000	23.639	94.55	50-150

Eurofins Air Toxics Inc.

EPA Method TO-17 GC/MS

Data file : /chem/msd6.i/17jun16.b/6061703.d
Lab Smp Id: VI VOC+PAH LCS Client Smp ID: LCS
Inj Date : 17-JUN-2016 11:37
Operator : CT Inst ID: msd6.i
Smp Info : ;VI VOC+PAH LCS;LCS
Misc Info : 2516-245-20ml(9/7/16),2744-32-50(7/20/16)
Comment :
Method : /chem/msd6.i/17jun16.b/616z0614vi.m
Meth Date : 17-Jun-2016 11:15 U5BT Quant Type: ISTD
Cal Date : 15-JUN-2016 11:01 Cal File: 6061502.d
Als bottle: 11 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	
4.301	4.308 (1.000)	130	221693	26.0000		80.00- 120.00	100.00
4.301	4.308 (1.000)	128	172903			47.94- 107.94	77.99
4.294	4.301 (1.000)	49	265176			68.24- 128.24	119.61
* 54 1,4-Difluorobenzene						CAS #: 540-36-3	
5.941	5.941 (1.000)	114	902598	23.0000		80.00- 120.00	100.00
5.934	5.941 (1.000)	88	138250			0.00- 45.46	15.32
* 79 Chlorobenzene-d5						CAS #: 3114-55-4	
9.866	9.867 (1.000)	117	800864	24.0000		80.00- 120.00	100.00
9.866	9.867 (1.000)	82	400374			19.06- 79.06	49.99
* 92 Bromofluorobenzene						CAS #: 460-00-4	
11.428	11.421 (1.000)	174	573759	36.0000		80.00- 120.00	100.00
11.428	11.421 (1.000)	95	633418			74.19- 134.19	110.40
11.428	11.421 (1.000)	176	557070			67.61- 127.61	97.09
$ 49 1,2-Dichloroethane-d4						CAS #: 17060-07-0	
5.225	5.225 (0.879)	65	105450	22.6501	22.650	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (ng)	FINAL (NG)	TARGET RANGE	RATIO
$ 49 1,2-Dichloroethane-d4 (continued)							
5.225	5.225 (0.879)	67	55751			21.94- 81.94	52.87
$ 66 Toluene-d8						CAS #: 2037-26-5	
7.954	7.954 (0.806)	98	384666	25.7288	25.729	80.00- 120.00	100.00
7.954	7.954 (0.806)	70	40032			0.00- 39.97	10.41
7.954	7.954 (0.806)	100	250771			35.51- 95.51	65.19
$ 108 Naphthalene-d8						CAS #: 1146-65-2	
15.690	15.683 (1.373)	136	702323	23.6387	23.639	80.00- 120.00	100.00
15.690	15.683 (1.373)	108	62665			0.00- 38.72	8.92
3 Freon 114						CAS #: 76-14-2	
1.283	1.283 (0.298)	135	608613	147.096	147.10	80.00- 120.00	100.00
1.283	1.283 (0.298)	137	197395			2.20- 62.20	32.43
6 Vinyl Chloride						CAS #: 75-01-4	
1.395	1.409 (0.324)	62	340023	64.0991	64.099	80.00- 120.00	100.00
1.395	1.409 (0.324)	64	134134			13.62- 73.62	39.45
7 1,3-Butadiene						CAS #: 106-99-0	
1.395	1.395 (0.324)	54	248111	52.1585	52.158	80.00- 120.00	100.00
1.395	1.395 (0.324)	39	369952			117.53- 177.53	149.11
9 Chloroethane						CAS #: 75-00-3	
1.646	1.647 (0.383)	64	139517	54.0291	54.029	80.00- 120.00	100.00
1.646	1.647 (0.383)	66	42951			1.59- 61.59	30.79
1.646	1.647 (0.383)	49	41439			0.00- 57.55	29.70
10 Isopentane						CAS #: 78-78-4	
1.688	1.689 (0.393)	57	264650	66.8515	66.852	80.00- 120.00	100.00
1.688	1.689 (0.393)	43	398334			107.36- 167.36	150.51
11 Trichlorofluoromethane/Fr11						CAS #: 75-69-4	
1.814	1.814 (0.422)	101	822916	115.817	115.82	80.00- 120.00	100.00
1.814	1.814 (0.422)	103	544672			35.47- 95.47	66.19
15 Freon 113						CAS #: 76-13-1	
2.173	2.173 (0.505)	151	686825	151.087	151.09	80.00- 120.00	100.00
2.173	2.181 (0.505)	153	439759			34.42- 94.42	64.03
2.173	2.173 (0.505)	101	771866			75.78- 135.78	112.38
14 1,1-Dichloroethene						CAS #: 75-35-4	
2.180	2.181 (0.507)	98	242623	84.5335	84.533	80.00- 120.00	100.00
2.180	2.181 (0.507)	96	382914			128.07- 188.07	157.82
2.180	2.181 (0.507)	61	601420			203.73- 263.73	247.88

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (ng)	FINAL (NG)	TARGET RANGE	RATIO
18 Carbon Disulfide					CAS #: 75-15-0		
2.360	2.360 (0.549)	76	882027	48.5585	48.558	80.00- 120.00	100.00
19 2-Propanol					CAS #: 67-63-0		
2.266	2.267 (0.527)	45	570734	54.9848	54.985	80.00- 120.00	100.00
2.266	2.267 (0.527)	43	115168			0.00- 50.21	20.18
2.274	2.267 (0.529)	59	21005			0.00- 34.19	3.68
22 Methylene Chloride					CAS #: 75-09-2		
2.574	2.575 (0.599)	49	497499	77.1694	77.169	80.00- 120.00	100.00
2.574	2.575 (0.599)	84	377332			55.25- 115.25	75.85
2.574	2.567 (0.599)	51	153042			0.48- 60.48	30.76
25 trans-1,2-Dichloroethene					CAS #: 156-60-5		
2.818	2.818 (0.655)	98	200543	72.6834	72.683	80.00- 120.00	100.00
2.818	2.818 (0.655)	61	444494			178.67- 238.67	221.65
2.818	2.818 (0.655)	96	313743			127.45- 187.45	156.45
26 MTBE					CAS #: 1634-04-4		
2.796	2.797 (0.650)	73	858323	82.7633	82.763	80.00- 120.00	100.00
2.789	2.797 (0.649)	57	203279			0.00- 51.21	23.68
2.796	2.797 (0.650)	41	202967			0.00- 50.32	23.65
28 Hexane					CAS #: 110-54-3		
3.097	3.098 (0.720)	57	548763	82.1576	82.158	80.00- 120.00	100.00
3.097	3.098 (0.720)	43	365395			30.98- 90.98	66.59
3.097	3.098 (0.720)	86	80282			0.00- 45.79	14.63
29 1,1-Dichloroethane					CAS #: 75-34-3		
3.262	3.262 (0.758)	63	542975	82.0367	82.037	80.00- 120.00	100.00
3.269	3.262 (0.760)	65	172256			1.92- 61.92	31.72
37 cis-1,2-Dichloroethene					CAS #: 156-59-2		
3.964	3.964 (0.922)	98	271550	91.1287	91.129	80.00- 120.00	100.00
3.964	3.964 (0.922)	96	423621			125.20- 185.20	156.00
3.964	3.964 (0.922)	61	537953			158.24- 218.24	198.10
38 2-Butanone					CAS #: 78-93-3		
3.921	3.928 (0.912)	72	200258	71.1162	71.116	80.00- 120.00	100.00
3.921	3.921 (0.912)	43	891679			364.90- 424.90	445.27
3.921	3.921 (0.912)	57	68131			4.40- 64.40	34.02
44 Chloroform					CAS #: 67-66-3		
4.473	4.480 (1.040)	83	685949	97.9470	97.947	80.00- 120.00	100.00
4.473	4.480 (1.040)	85	449351			35.45- 95.45	65.51

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (ng)	FINAL (NG)	TARGET RANGE	RATIO
46 Cyclohexane					CAS #: 110-82-7		
4.816	4.824 (0.811)	84	448247	70.9144	70.914	80.00- 120.00	100.00
4.809	4.824 (0.810)	56	557593			82.98- 142.98	124.39
4.824	4.817 (0.812)	41	323122			32.54- 92.54	72.09
45 1,1,1-Trichloroethane					CAS #: 71-55-6		
4.702	4.709 (0.791)	97	653805	102.214	102.21	80.00- 120.00	100.00
4.702	4.709 (0.791)	99	422743			34.83- 94.83	64.66
47 Carbon Tetrachloride					CAS #: 56-23-5		
4.945	4.953 (0.832)	119	766659	129.113	129.11	80.00- 120.00	100.00
4.945	4.953 (0.832)	117	793754			73.53- 133.53	103.53
51 2,2,4-Trimethylpentane					CAS #: 540-84-1		
5.483	5.483 (0.923)	57	1762113	109.586	109.59	80.00- 120.00	100.00
5.483	5.483 (0.923)	56	563461			1.12- 61.12	31.98
5.483	5.483 (0.923)	41	498303			0.00- 57.96	28.28
48 Benzene					CAS #: 71-43-2		
5.246	5.246 (0.883)	78	1074566	61.8327	61.833	80.00- 120.00	100.00
5.246	5.246 (0.883)	77	250304			0.00- 53.50	23.29
50 1,2-Dichloroethane					CAS #: 107-06-2		
5.339	5.340 (0.899)	62	457480	82.8003	82.800	80.00- 120.00	100.00
5.339	5.347 (0.899)	64	147903			2.93- 62.93	32.33
53 Heptane					CAS #: 142-82-5		
5.783	5.784 (0.973)	71	346341	84.6306	84.631	80.00- 120.00	100.00
5.783	5.784 (0.973)	43	676418			143.29- 203.29	195.30
5.783	5.784 (0.973)	57	330706			61.40- 121.40	95.49
56 Trichloroethene					CAS #: 79-01-6		
6.249	6.256 (1.052)	95	546887	104.691	104.69	80.00- 120.00	100.00
6.249	6.256 (1.052)	130	589587			81.46- 141.46	107.81
6.249	6.256 (1.052)	97	353536			34.92- 94.92	64.65
58 Methyl Cyclohexane					CAS #: 108-87-2		
6.571	6.579 (1.106)	83	664984	86.2057	86.206	80.00- 120.00	100.00
6.571	6.579 (1.106)	98	300060			15.14- 75.14	45.12
6.571	6.572 (1.106)	55	546589			45.62- 105.62	82.20
59 1,2-Dichloropropane					CAS #: 78-87-5		
6.607	6.607 (1.112)	63	418472	110.358	110.36	80.00- 120.00	100.00
6.607	6.607 (1.112)	62	288299			38.13- 98.13	68.89
6.579	6.586 (1.107)	41	534671			92.30- 152.30	127.77

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (ng)	FINAL (NG)	TARGET RANGE	RATIO
60 1,4-Dioxane					CAS #: 123-91-1		
6.722	6.722 (1.131)	88	259748	75.1478	75.148	80.00- 120.00	100.00
6.722	6.722 (1.131)	58	178354			31.73- 91.73	68.66
6.722	6.722 (1.131)	57	90121			1.20- 61.20	34.70
65 4-Methyl-2-pentanone					CAS #: 108-10-1		
7.832	7.832 (1.318)	58	311264	91.5305	91.530	80.00- 120.00	100.00
7.832	7.832 (1.318)	43	843343			221.14- 281.14	270.94
7.832	7.832 (1.318)	85	139350			20.58- 80.58	44.77
67 Toluene					CAS #: 108-88-3		
8.047	8.047 (0.816)	91	1375989	83.0586	83.058	80.00- 120.00	100.00
8.040	8.047 (0.815)	92	805455			28.32- 88.32	58.54
70 1,1,2-Trichloroethane					CAS #: 79-00-5		
8.641	8.649 (1.455)	97	491715	115.146	115.15	80.00- 120.00	100.00
8.641	8.649 (1.455)	99	305887			32.57- 92.57	62.21
8.641	8.649 (1.455)	83	409777			50.93- 110.93	83.34
71 Tetrachloroethene					CAS #: 127-18-4		
8.727	8.735 (0.885)	166	753560	138.121	138.12	80.00- 120.00	100.00
8.727	8.728 (0.885)	129	553386			41.03- 101.03	73.44
8.727	8.728 (0.885)	131	536103			38.99- 98.99	71.14
72 2-Hexanone					CAS #: 591-78-6		
8.957	8.964 (0.908)	58	409059	97.0240	97.024	80.00- 120.00	100.00
8.957	8.957 (0.908)	43	801968			155.38- 215.38	196.05
8.957	8.964 (0.908)	100	82679			0.00- 52.71	20.21
74 1,2-Dibromoethane					CAS #: 106-93-4		
9.243	9.243 (0.937)	107	789527	184.273	184.27	80.00- 120.00	100.00
9.243	9.243 (0.937)	109	751359			65.47- 125.47	95.17
81 Chlorobenzene					CAS #: 108-90-7		
9.902	9.902 (1.004)	112	1072060	88.7957	88.796	80.00- 120.00	100.00
9.902	9.902 (1.004)	114	347586			2.20- 62.20	32.42
9.902	9.902 (1.004)	77	557849			20.93- 80.93	52.04
82 Ethyl Benzene					CAS #: 100-41-4		
10.060	10.060 (1.020)	106	530326	85.4764	85.476	80.00- 120.00	100.00
10.060	10.060 (1.020)	91	1608334			272.45- 332.45	303.27
84 m,p-Xylene					CAS #: 108-38-3		
10.239	10.239 (1.038)	106	744456	94.3216	94.322	80.00- 120.00	100.00
10.239	10.239 (1.038)	91	1442850			164.06- 224.06	193.81

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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
 10.726  10.726 (0.939)   106    717143 98.6347   98.635  80.00- 120.00   100.00
 10.726  10.726 (0.939)    91   1463557                  174.12- 234.12   204.08
-------------------------------------------------------------------------------
   89 Styrene                                         CAS #: 100-42-5
 10.755  10.755 (0.941)   104   1186433 98.4686   98.469  80.00- 120.00   100.00
 10.755  10.755 (0.941)    78    549030                   16.31-  76.31    46.28
-------------------------------------------------------------------------------
   91 Cumene                                          CAS #: 98-82-8
 11.220  11.213 (0.982)   105   2129501 107.649   107.65  80.00- 120.00   100.00
 11.220  11.213 (0.982)   120    577546                    0.00-  57.22    27.12
 11.220  11.213 (0.982)    51    203384                    0.00-  38.43     9.55
-------------------------------------------------------------------------------
   94 1,1,2,2-Tetrachloroethane                       CAS #: 79-34-5
 11.643  11.636 (1.019)    83   1042296 165.673   165.67  80.00- 120.00   100.00
 11.643  11.636 (1.019)    85    679248                   35.83-  95.83    65.17
-------------------------------------------------------------------------------
   96 Propylbenzene                                   CAS #: 103-65-1
 11.757  11.750 (1.029)    91   2552174 110.369   110.37  80.00- 120.00   100.00
 11.757  11.750 (1.029)   120    625279                    0.00-  55.53    24.50
 11.757  11.750 (1.029)   105     97276                    0.00-  33.92     3.81
-------------------------------------------------------------------------------
   97 4-Ethyltoluene                                  CAS #: 622-96-8
 11.922  11.915 (1.043)   120    654531 105.495   105.49  80.00- 120.00   100.00
 11.922  11.915 (1.043)   105   2116545                  298.20- 358.20   323.37
-------------------------------------------------------------------------------
   98 1,3,5-Trimethylbenzene                          CAS #: 108-67-8
 12.008  12.001 (1.051)   120    919264 103.779   103.78  80.00- 120.00   100.00
 12.008  12.001 (1.051)   105   1821390                  167.68- 227.68   198.14
-------------------------------------------------------------------------------
  100 1,2,4-Trimethylbenzene                          CAS #: 95-63-6
 12.474  12.467 (1.091)   120    860921 103.977   103.98  80.00- 120.00   100.00
 12.474  12.467 (1.091)   105   2036997                  185.14- 245.14   236.61
-------------------------------------------------------------------------------
  101 1,3-Dichlorobenzene                             CAS #: 541-73-1
 12.796  12.789 (1.120)   146   1375312 121.598   121.60  80.00- 120.00   100.00
 12.796  12.789 (1.120)   148    879888                   34.46-  94.46    63.98
 12.796  12.789 (1.120)   111    525498                    7.45-  67.45    38.21
-------------------------------------------------------------------------------
  102 1,4-Dichlorobenzene                             CAS #: 106-46-7
 12.932  12.932 (1.132)   146   1374577 121.142   121.14  80.00- 120.00   100.00
 12.932  12.932 (1.132)   148    881181                   33.85-  93.85    64.11
 12.932  12.932 (1.132)   111    509263                    6.02-  66.02    37.05
-------------------------------------------------------------------------------
  105 1,2-Dichlorobenzene                             CAS #: 95-50-1
 13.369  13.362 (1.170)   146   1318894 119.942   119.94  80.00- 120.00   100.00
```

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (ng)	FINAL (NG)	TARGET RANGE	RATIO
105 1,2-Dichlorobenzene (continued)							
13.369	13.362 (1.170)	148	845973			34.29- 94.29	64.14
13.369	13.362 (1.170)	111	523260			8.63- 68.63	39.67
106 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
15.418	15.411 (1.349)	180	1273755	144.264	144.26	80.00- 120.00	100.00
15.418	15.411 (1.349)	182	1196793			64.63- 124.63	93.96
107 Hexachlorobutadiene					CAS #: 87-68-3		
15.633	15.626 (1.368)	225	910142	197.395	197.40	80.00- 120.00	100.00
15.633	15.626 (1.368)	223	566066			32.03- 92.03	62.20
109 Naphthalene					CAS #: 91-20-3		
15.733	15.726 (1.377)	128	1898028	59.4798	59.480	80.00- 120.00	100.00
15.733	15.726 (1.377)	127	247497			0.00- 42.99	13.04
110 2-Methylnaphthalene					CAS #: 91-57-6		
17.180	17.173 (1.503)	142	1295109	61.3941	61.394	80.00- 120.00	100.00
17.180	17.173 (1.503)	141	1123326			56.24- 116.24	86.74
17.180	17.173 (1.503)	115	396145			0.00- 58.81	30.59
111 1-Methylnaphthalene					CAS #: 90-12-0		
17.395	17.388 (1.522)	142	1182471	61.2785	61.278	80.00- 120.00	100.00
17.395	17.388 (1.522)	141	1069042			60.38- 120.38	90.41
17.395	17.388 (1.522)	115	376595			0.56- 60.56	31.85
112 Acenaphthylene					CAS #: 208-96-8		
19.243	19.236 (1.684)	152	2160115	62.7935	62.793	80.00- 120.00	100.00
19.243	19.236 (1.684)	151	430021			0.00- 49.78	19.91
19.243	19.236 (1.684)	153	283166			0.00- 43.07	13.11
113 Acenaphthene					CAS #: 83-32-9		
19.508	19.501 (1.707)	154	946532	57.5927	57.593	80.00- 120.00	100.00
19.508	19.501 (1.707)	152	496933			21.85- 81.85	52.50
19.508	19.501 (1.707)	153	1032748			79.23- 139.23	109.11
114 Fluorene					CAS #: 86-73-7		
20.661	20.654 (1.808)	166	788916	57.1162	57.116	80.00- 120.00	100.00
20.661	20.654 (1.808)	165	753221			65.14- 125.14	95.48
115 Phenanthrene					CAS #: 85-01-8		
22.839	22.832 (1.998)	178	1814319	52.9556	52.956	80.00- 120.00	100.00
22.839	22.832 (1.998)	176	341681			0.00- 48.56	18.83
22.839	22.832 (1.998)	179	275650			0.00- 45.19	15.19
116 Anthracene					CAS #: 120-12-7		
22.946	22.939 (2.008)	178	1621671	55.2872	55.287	80.00- 120.00	100.00

RT	EXP RT	(REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (ng)	FINAL (NG)	TARGET RANGE	RATIO
116 Anthracene (continued)								
22.946	22.939	(2.008)	176	295624			0.00- 47.98	18.23
22.946	22.939	(2.008)	179	247838			0.00- 45.18	15.28
117 Fluoranthene						CAS #: 206-44-0		
26.126	26.112	(2.286)	202	1467256	59.8844	59.884	80.00- 120.00	100.00
26.119	26.112	(2.286)	101	232371			0.00- 45.14	15.84
118 Pyrene						CAS #: 129-00-0		
26.979	26.965	(2.361)	202	1445829	57.6352	57.635	80.00- 120.00	100.00
26.972	26.965	(2.360)	101	267850			0.00- 48.11	18.53
26.979	26.965	(2.361)	100	216850			0.00- 44.51	15.00

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd6.i
Lab File ID: 6061703.d
Lab Smp Id: VI VOC+PAH LCS
Analysis Type: VOA
Quant Type: ISTD
Operator: CT
Method File: /chem/msd6.i/17jun16.b/616z0614vi.m
Misc Info: 2516-245-20ml(9/7/16),2744-32-50(7/20/16)

Calibration Date: 17-JUN-2016
Calibration Time: 09:49
Client Smp ID: LCS
Level: LOW
Sample Type: AIR

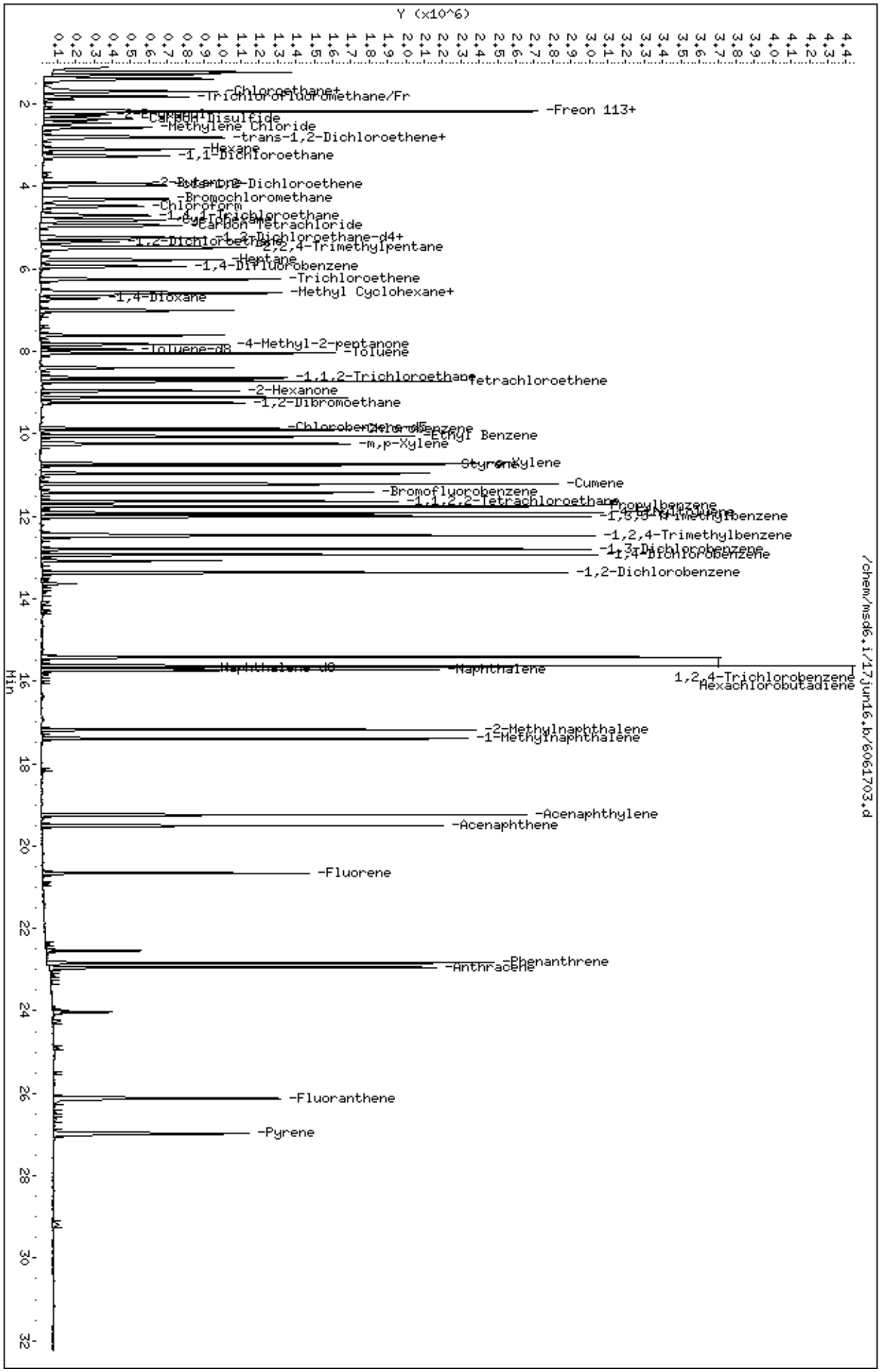
COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
40 Bromochloromethan	204967	122980	286954	221693	8.16
54 1,4-Difluorobenze	857366	514420	1200312	902598	5.28
79 Chlorobenzene-d5	655402	393241	917563	800864	22.19
92 Bromofluorobenzen	469803	281882	657724	573759	22.13

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
40 Bromochloromethan	4.31	3.98	4.64	4.30	-0.17
54 1,4-Difluorobenze	5.94	5.61	6.27	5.94	0.00
79 Chlorobenzene-d5	9.87	9.54	10.20	9.87	0.00
92 Bromofluorobenzen	11.42	11.09	11.75	11.43	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/17jun16.b/6061703.d
Date : 17-JUN-2016 11:37
Client ID: LCS
Sample Info: ;VI VOC+PAH LCS;LCS
Column phase: RTx-624

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



Page 1

Data File: /chem/msd6.i/17jun16.b/6061703.d

Date : 17-JUN-2016 11:37

Client ID: LCS

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCS;LCS

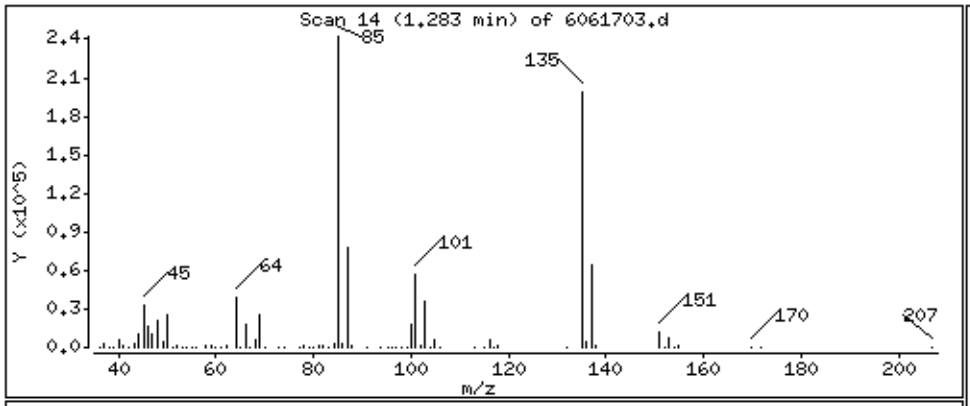
Operator: CT

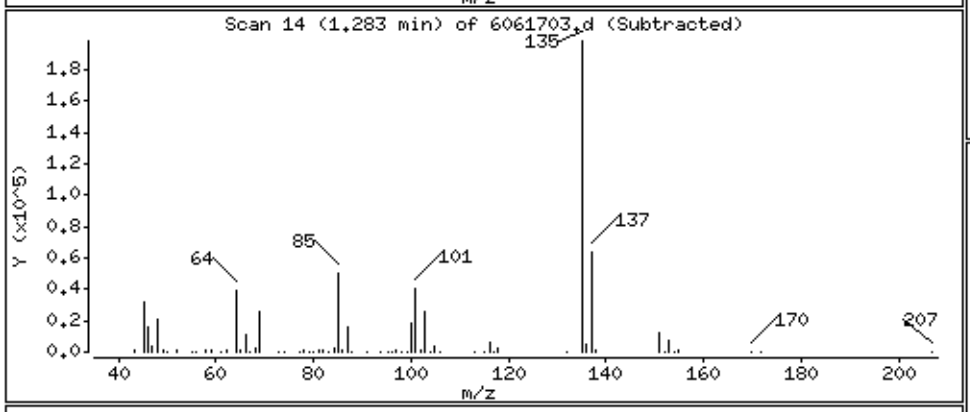
Column phase: RTx-624

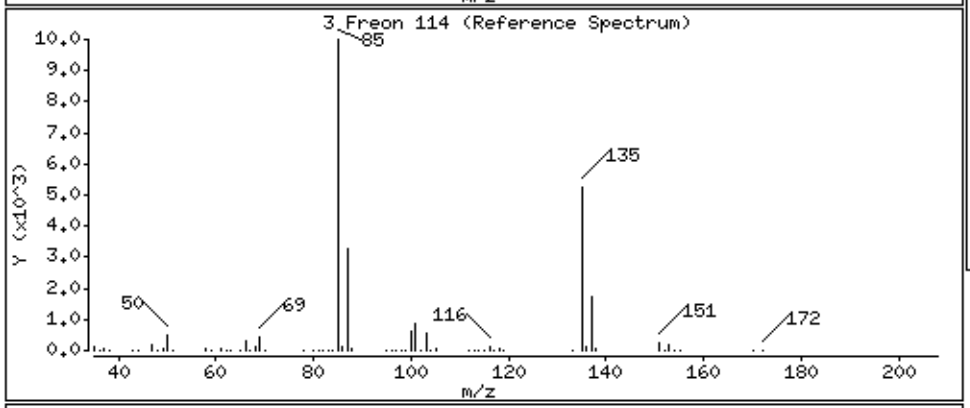
Column diameter: 0.53

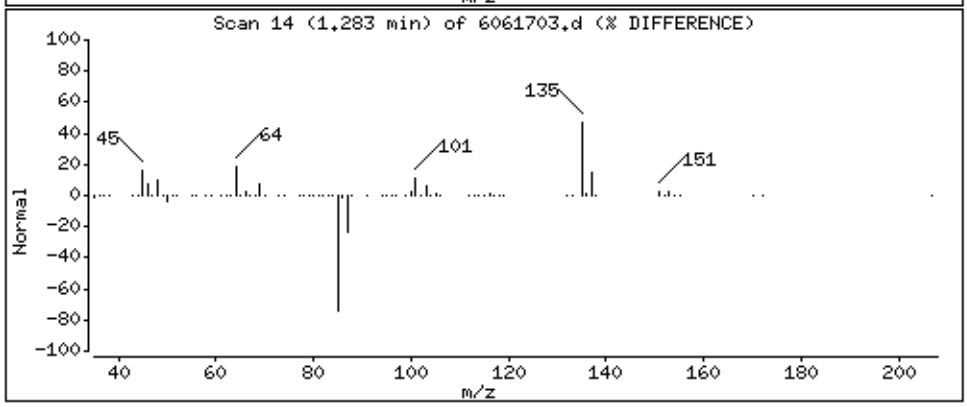
3 Freon 114

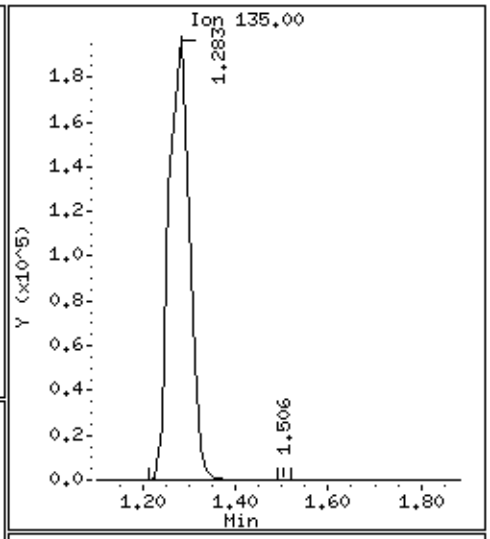
Concentration: 147.10 NG

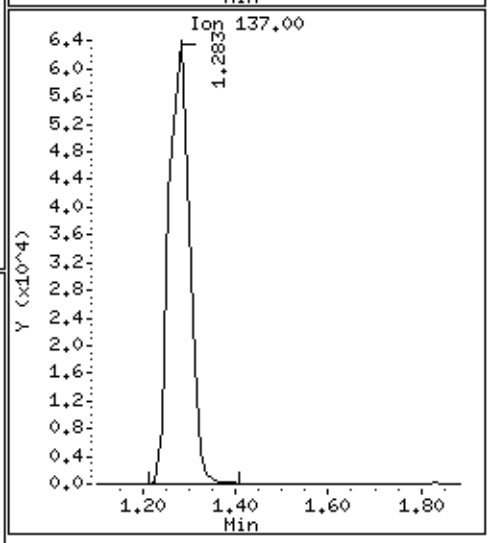












Data File: /chem/msd6.i/17jun16.b/6061703.d

Date : 17-JUN-2016 11:37

Client ID: LCS

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCS;LCS

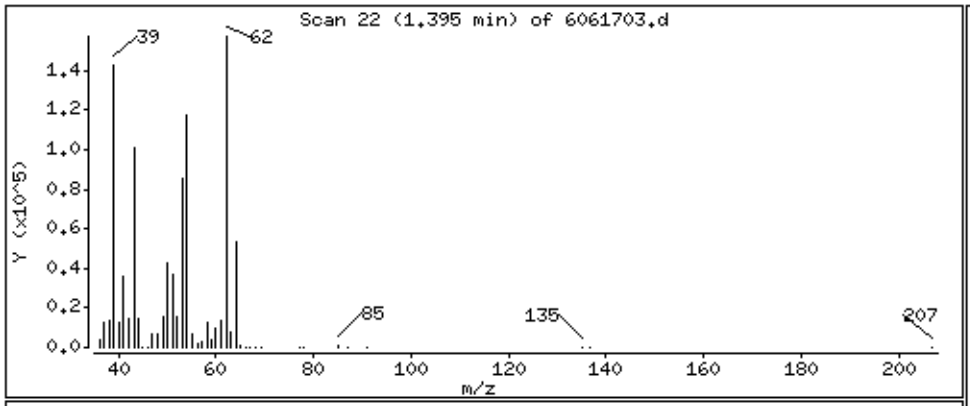
Operator: CT

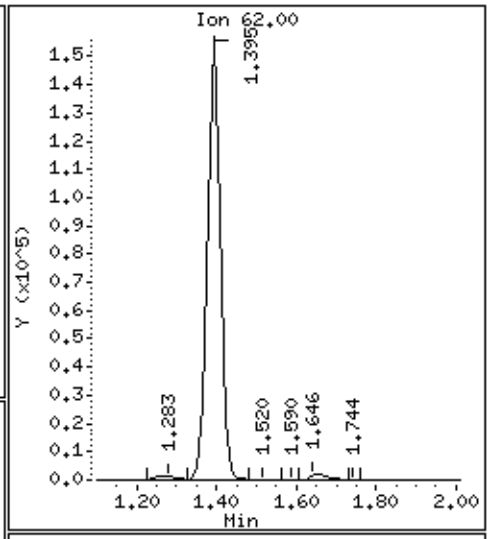
Column phase: RTx-624

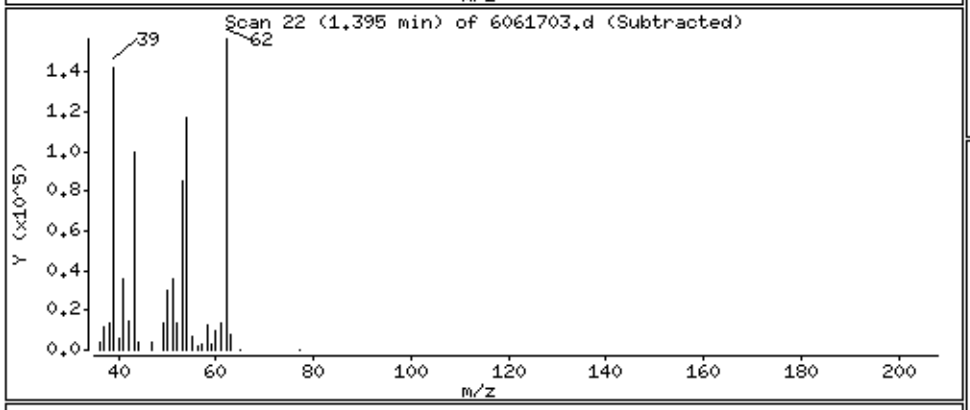
Column diameter: 0.53

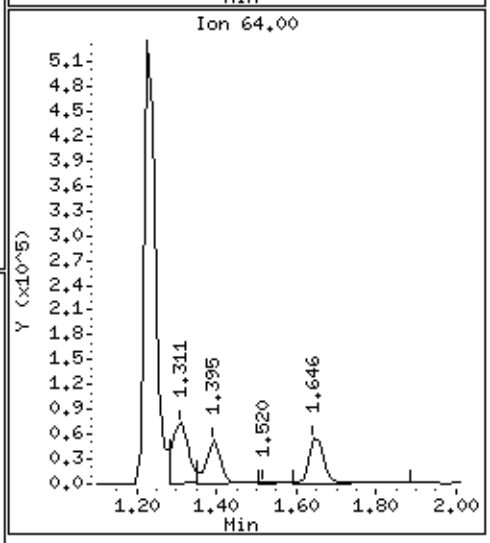
6 Vinyl Chloride

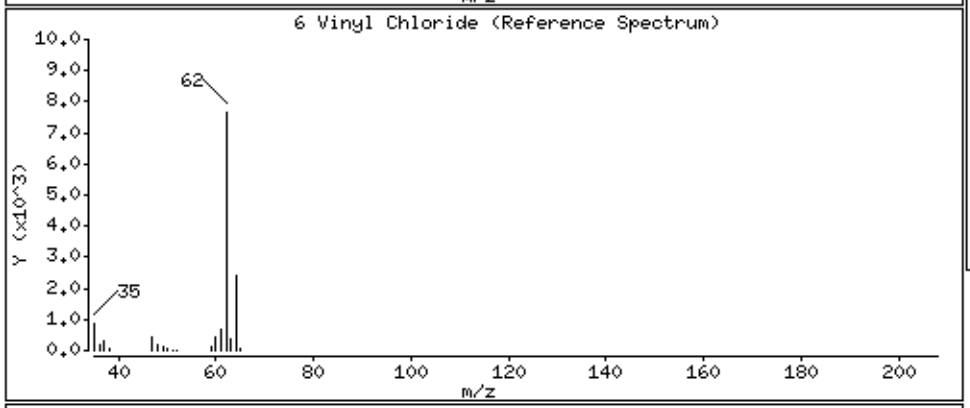
Concentration: 64.099 NG

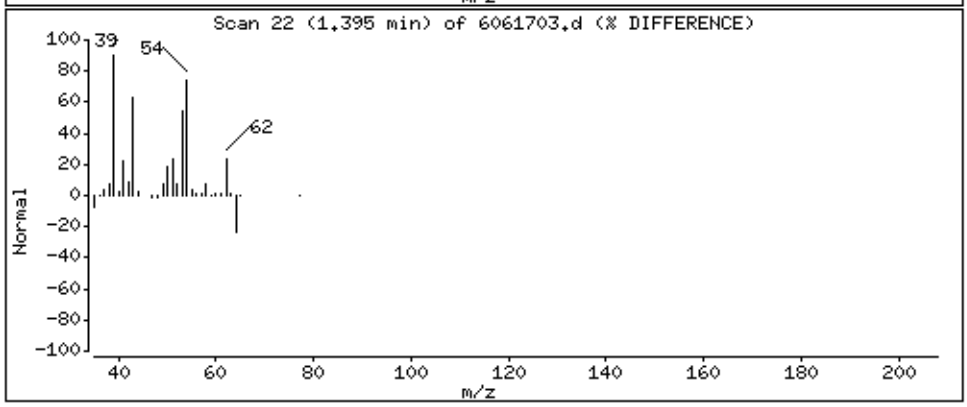












Data File: /chem/msd6.i/17jun16.b/6061703.d

Date : 17-JUN-2016 11:37

Client ID: LCS

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCS;LCS

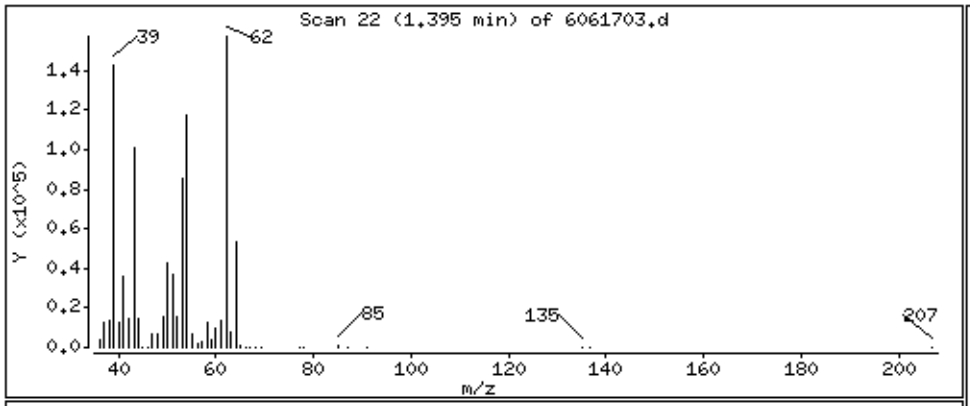
Operator: CT

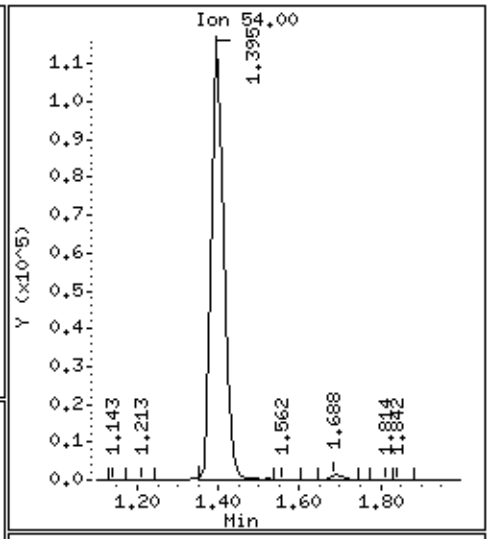
Column phase: RTx-624

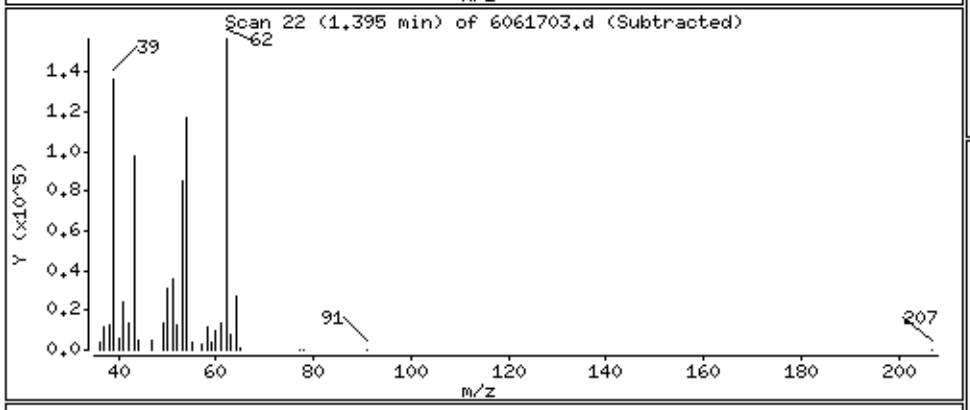
Column diameter: 0.53

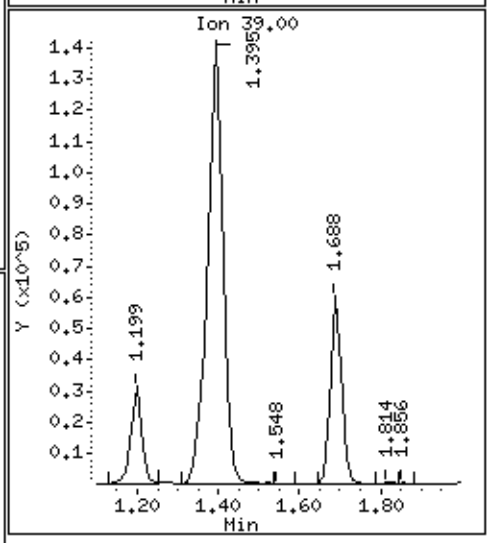
7 1,3-Butadiene

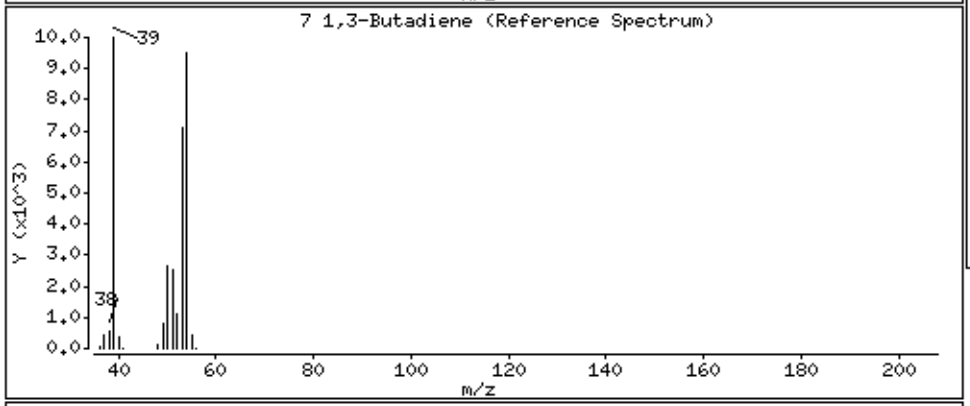
Concentration: 52.158 NG

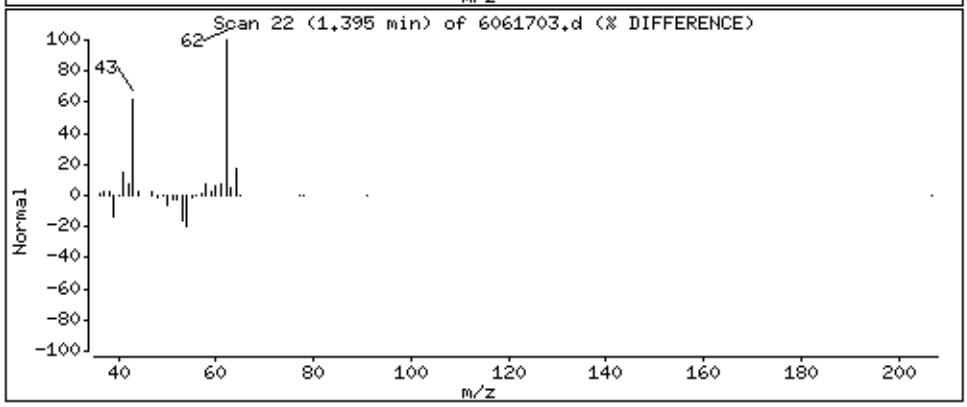












Data File: /chem/msd6.i/17jun16.b/6061703.d

Date : 17-JUN-2016 11:37

Client ID: LCS

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCS;LCS

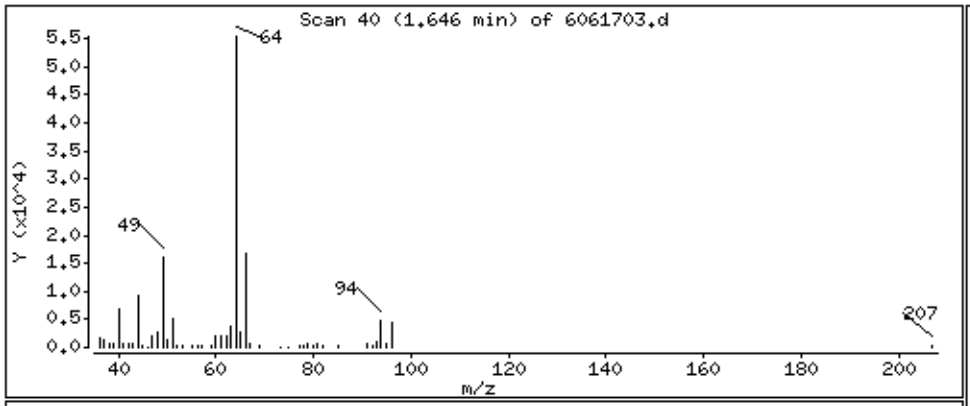
Operator: CT

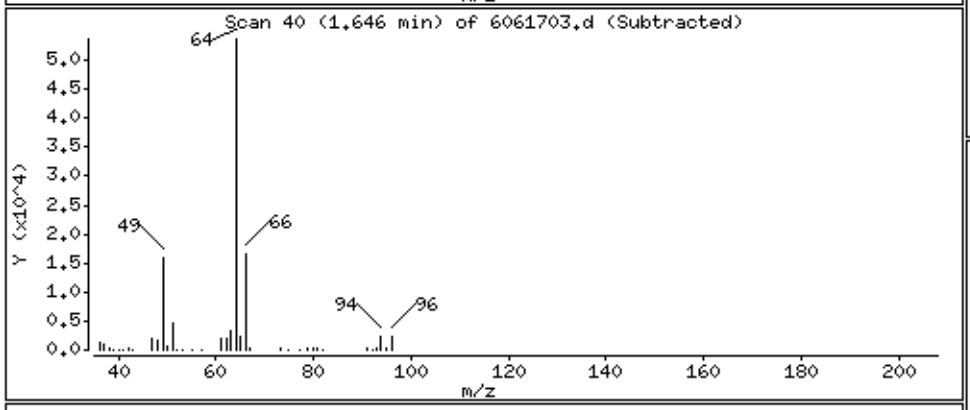
Column phase: RTx-624

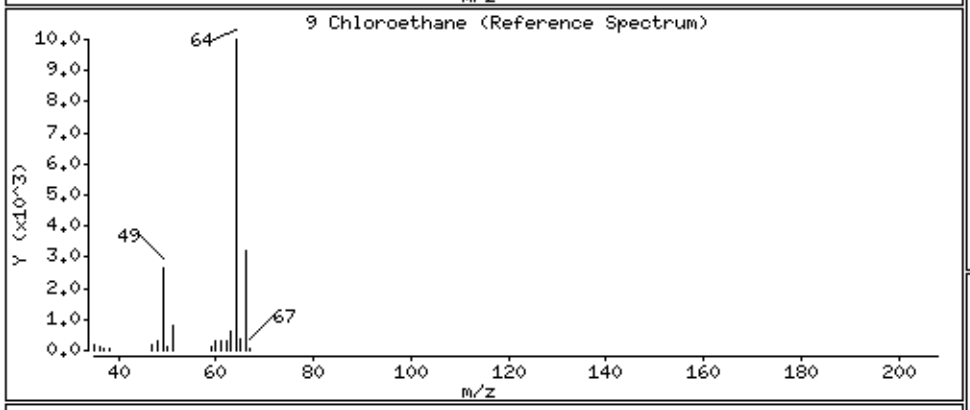
Column diameter: 0.53

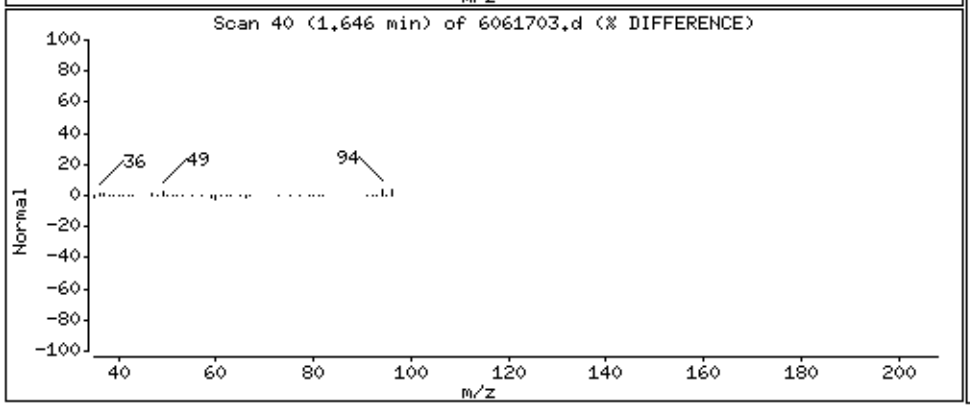
9 Chloroethane

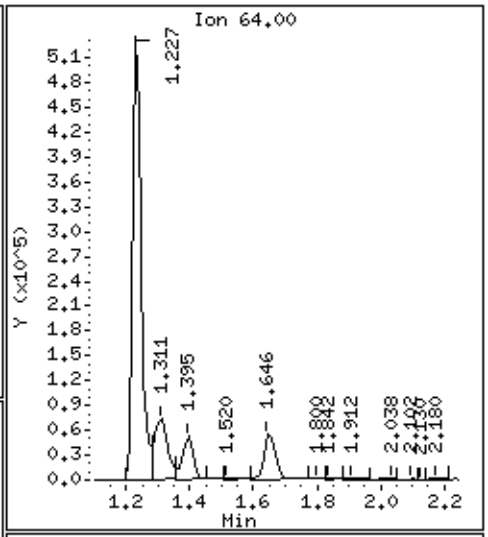
Concentration: 54.029 NG

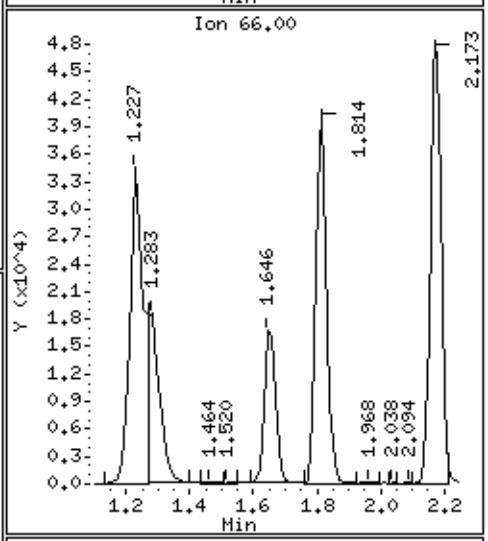


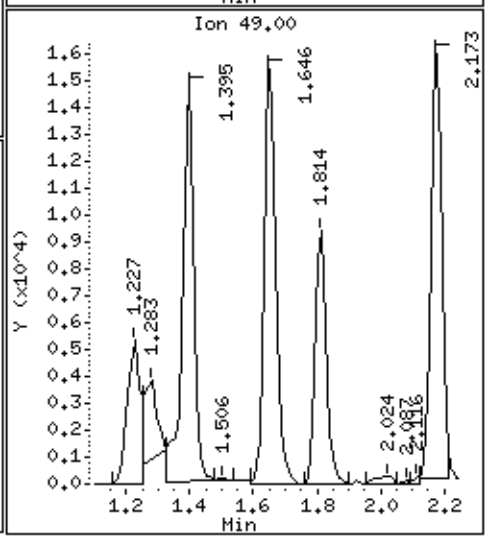












Data File: /chem/msd6.i/17jun16.b/6061703.d

Date : 17-JUN-2016 11:37

Client ID: LCS

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCS;LCS

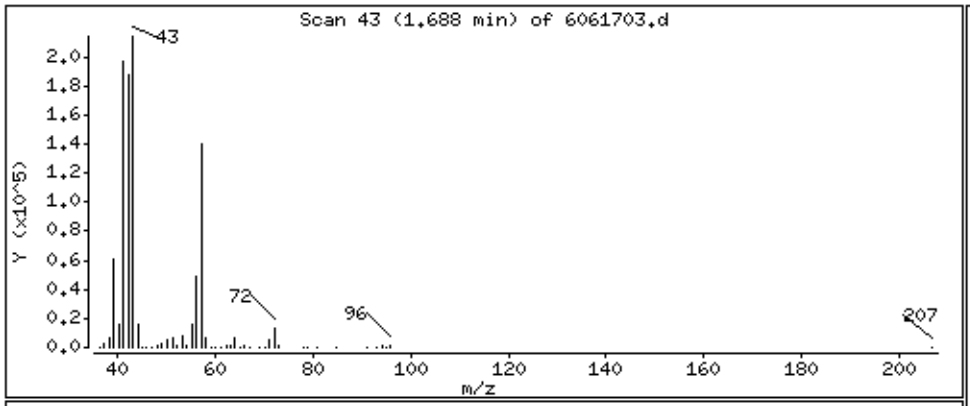
Operator: CT

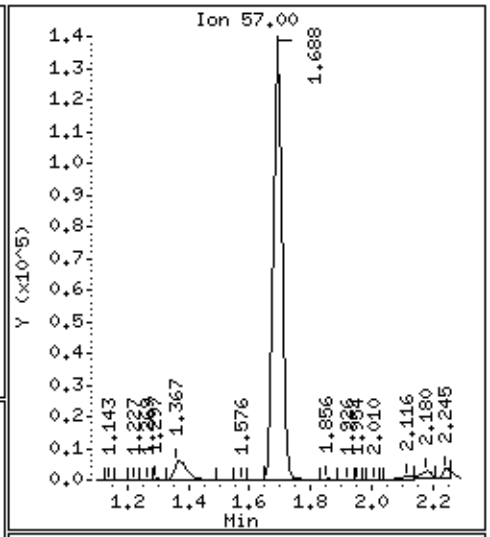
Column phase: RTx-624

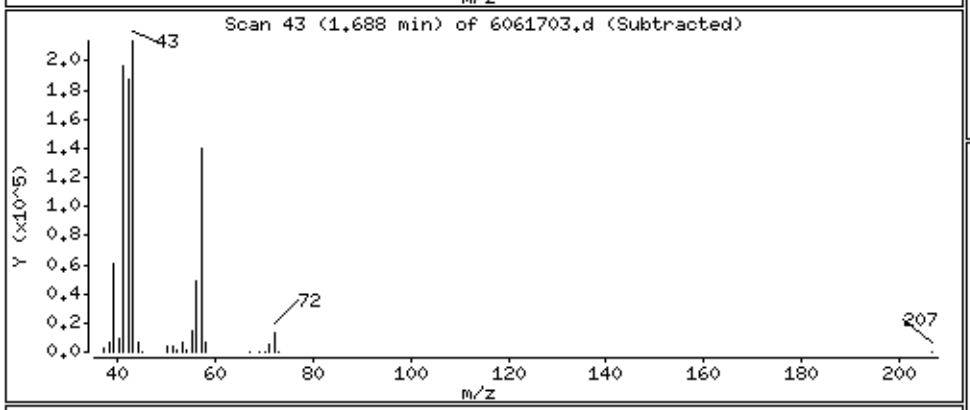
Column diameter: 0.53

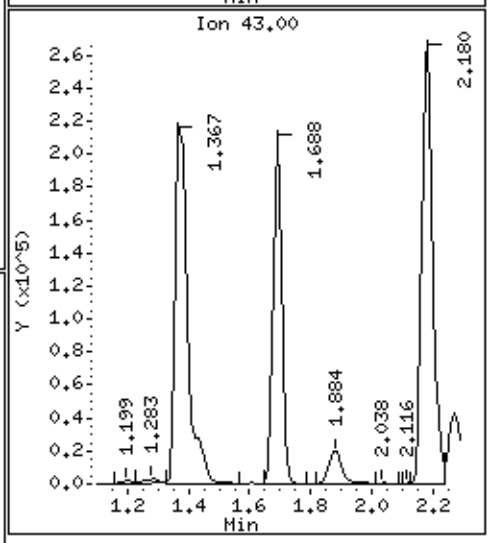
10 Isopentane

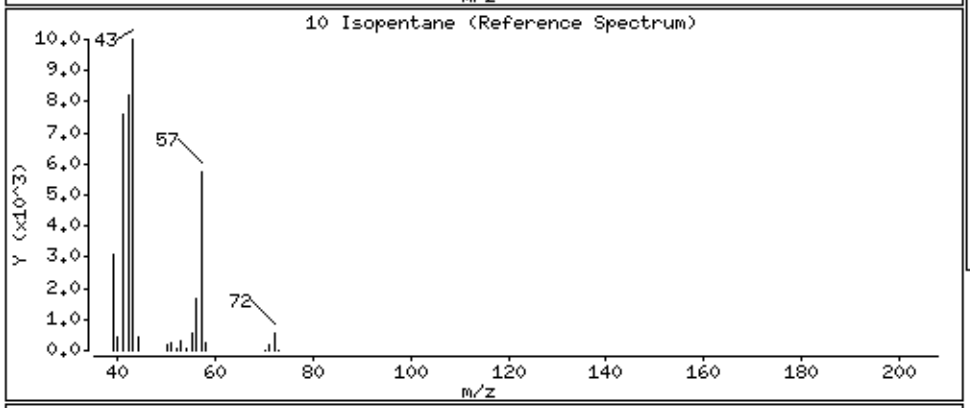
Concentration: 66.852 NG

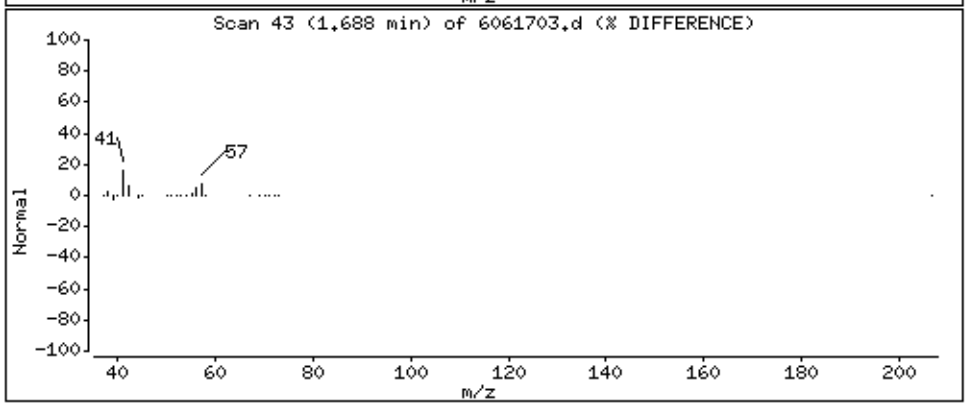












Data File: /chem/msd6.i/17jun16.b/6061703.d

Date : 17-JUN-2016 11:37

Client ID: LCS

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCS;LCS

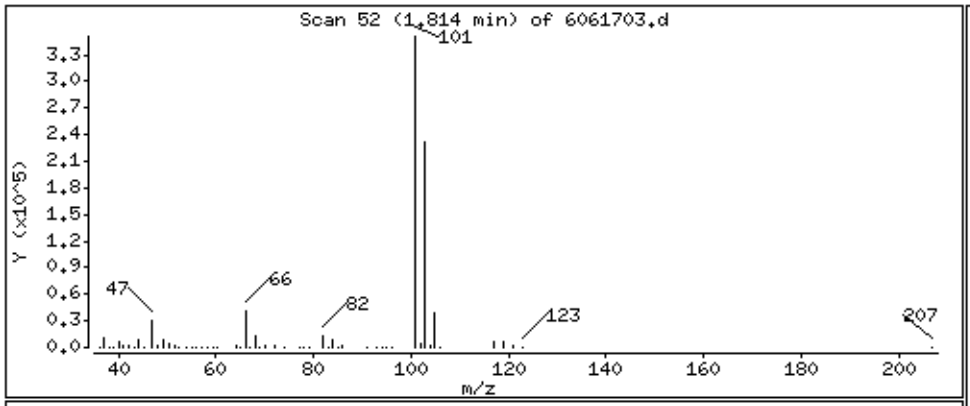
Operator: CT

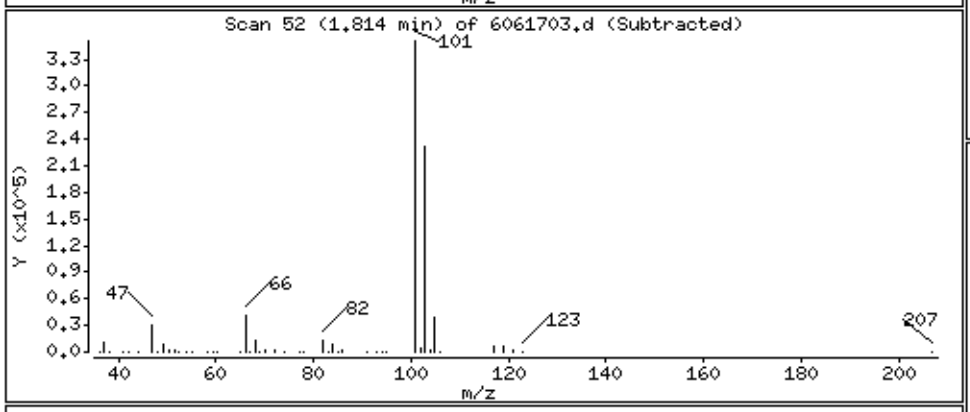
Column phase: RTx-624

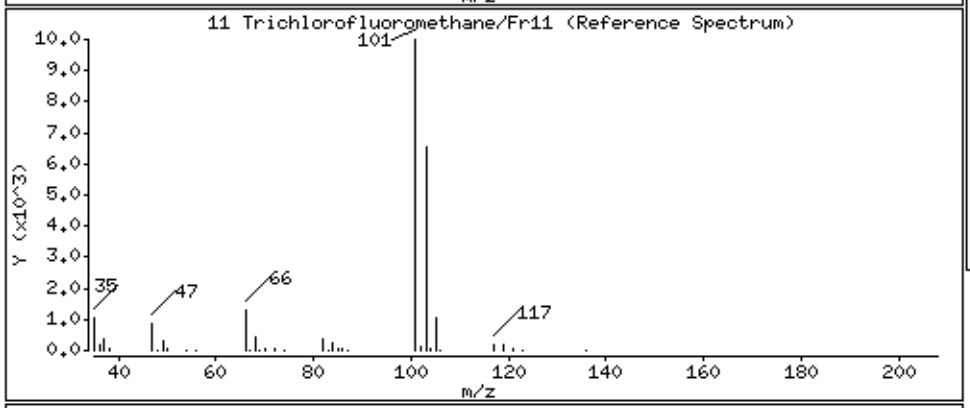
Column diameter: 0.53

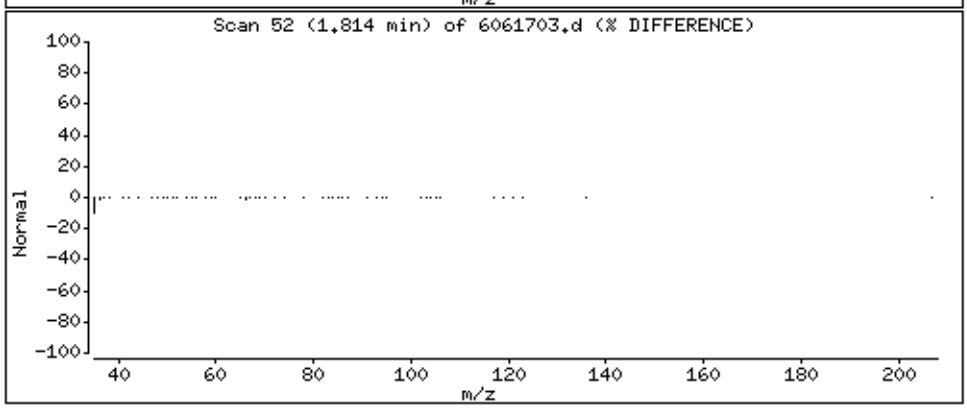
11 Trichlorofluoromethane/Fr11

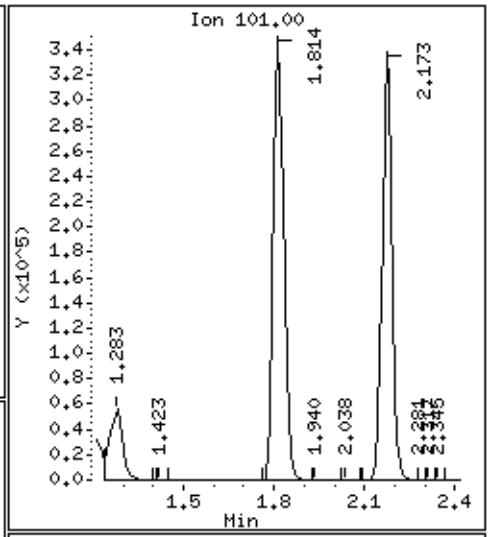
Concentration: 115.82 NG

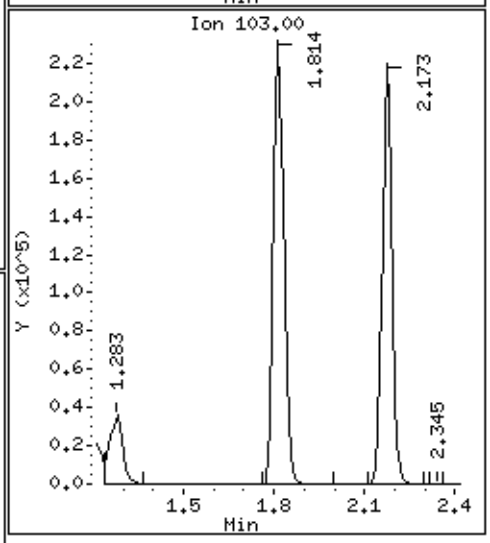












Data File: /chem/msd6.i/17jun16.b/6061703.d

Date : 17-JUN-2016 11:37

Client ID: LCS

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCS;LCS

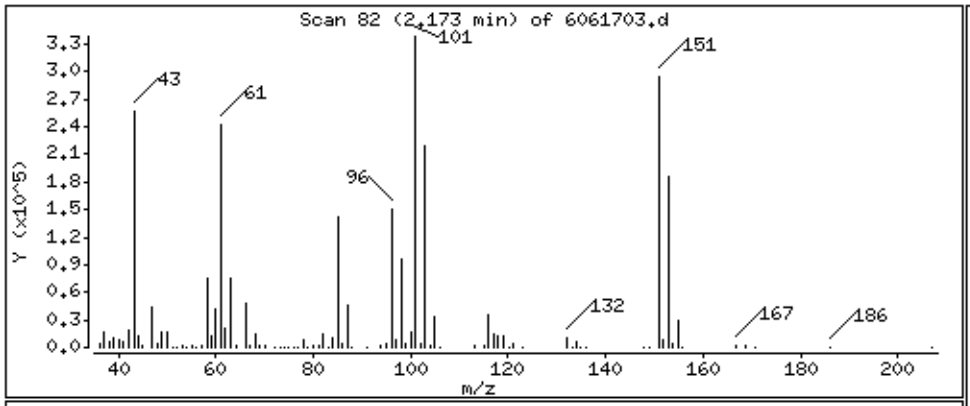
Operator: CT

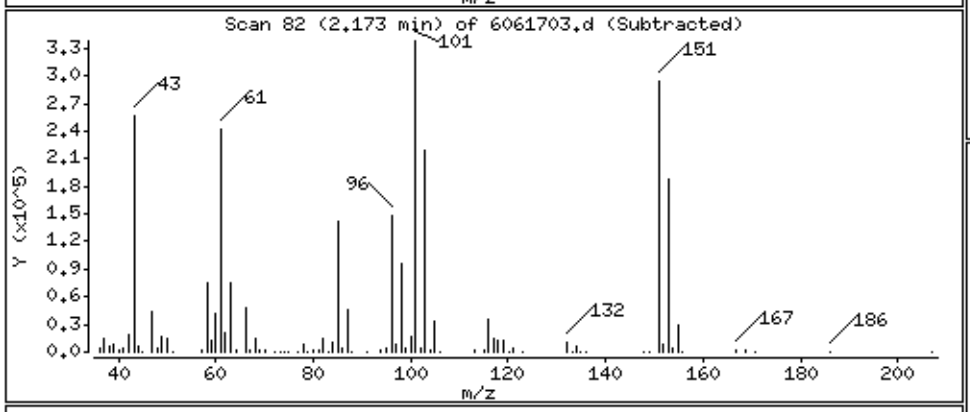
Column phase: RTx-624

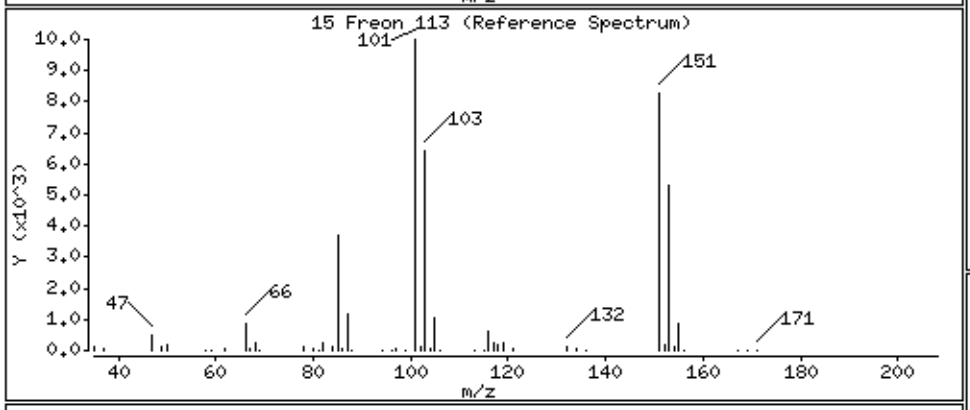
Column diameter: 0.53

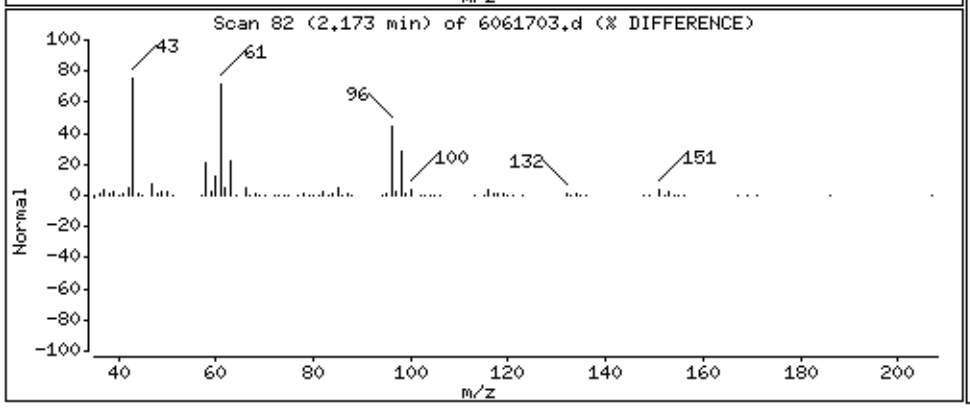
15 Freon 113

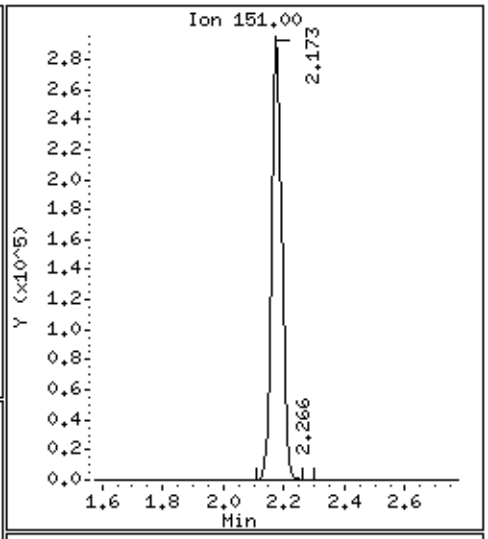
Concentration: 151.09 NG

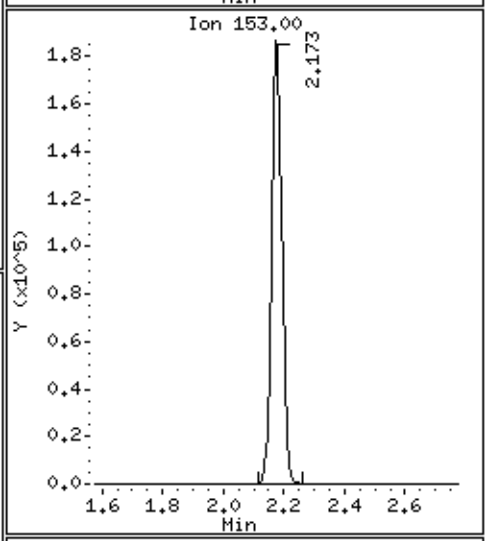


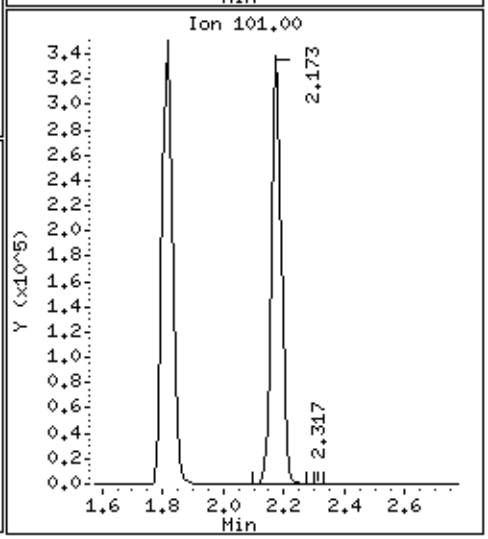












Data File: /chem/msd6.i/17jun16.b/6061703.d

Date : 17-JUN-2016 11:37

Client ID: LCS

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCS;LCS

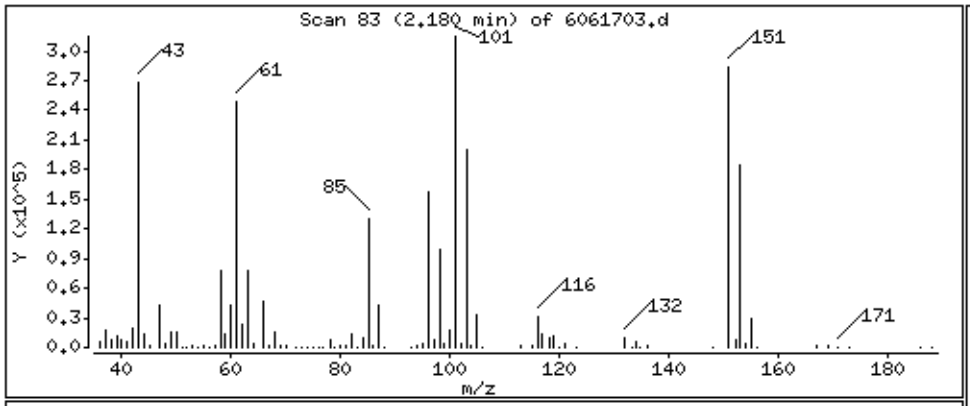
Operator: CT

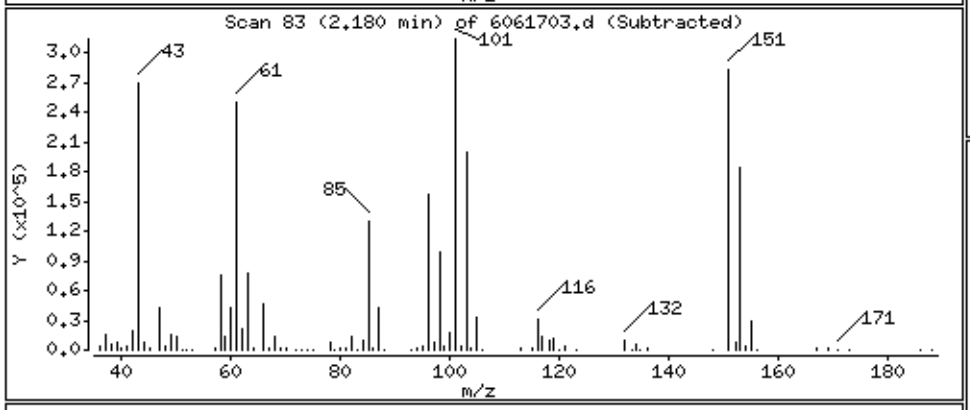
Column phase: RTx-624

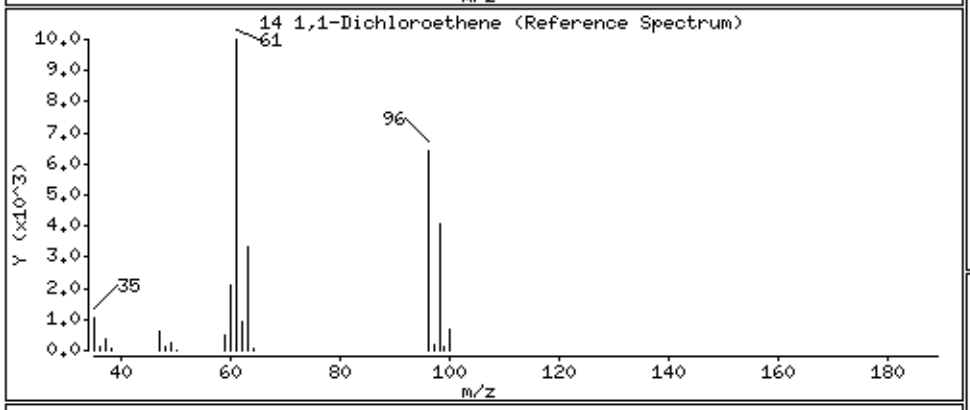
Column diameter: 0.53

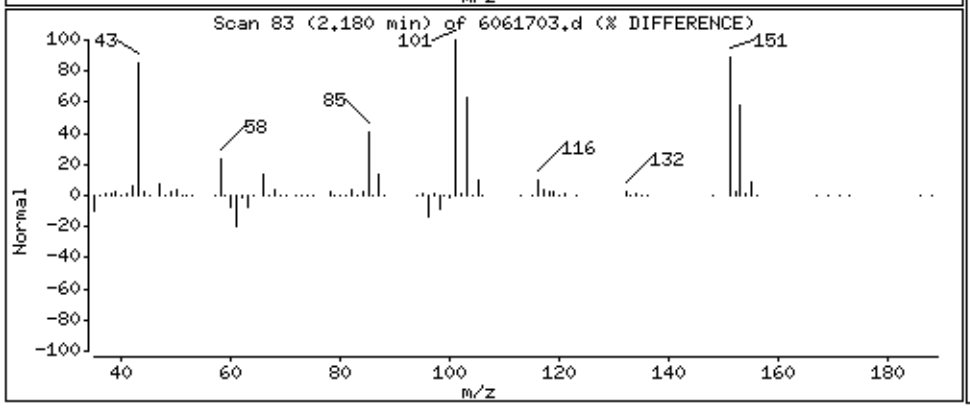
14 1,1-Dichloroethene

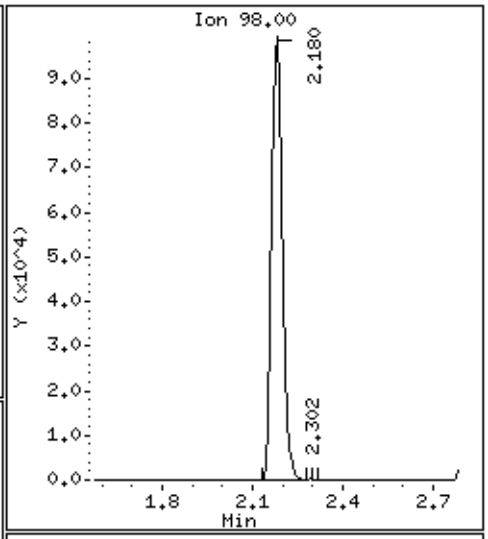
Concentration: 84.533 NG

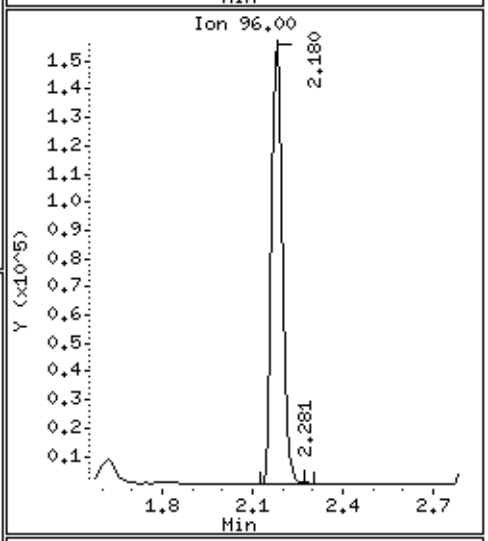


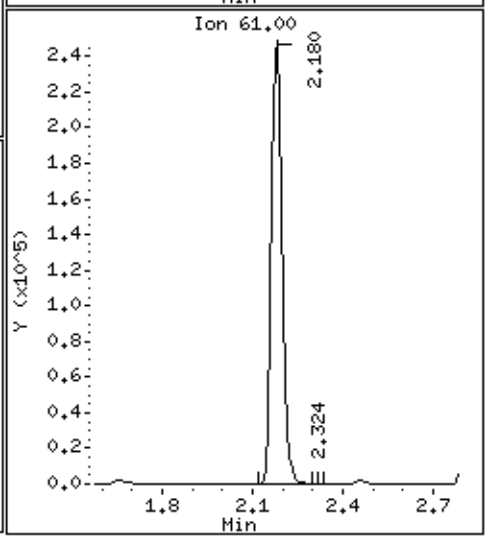












Data File: /chem/msd6.i/17jun16.b/6061703.d

Date : 17-JUN-2016 11:37

Client ID: LCS

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCS;LCS

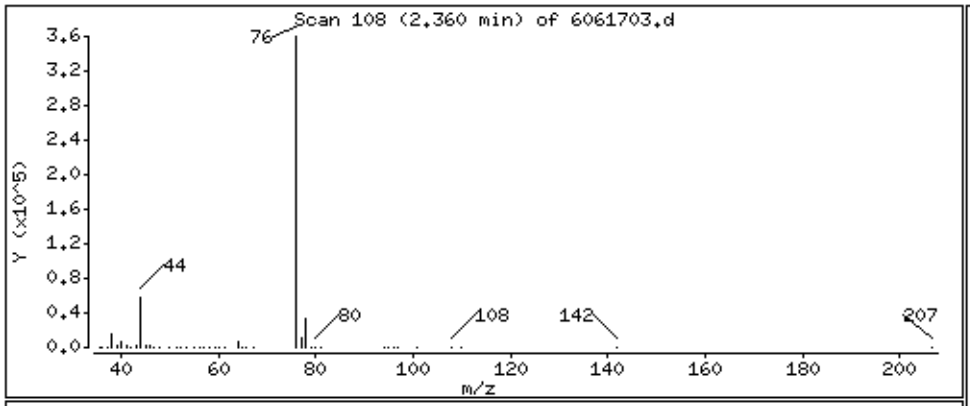
Operator: CT

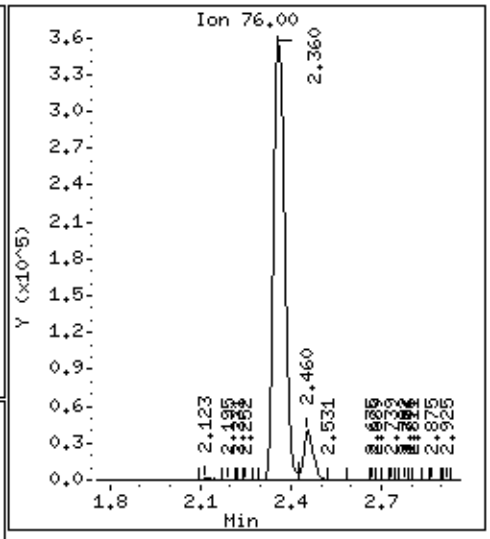
Column phase: RTx-624

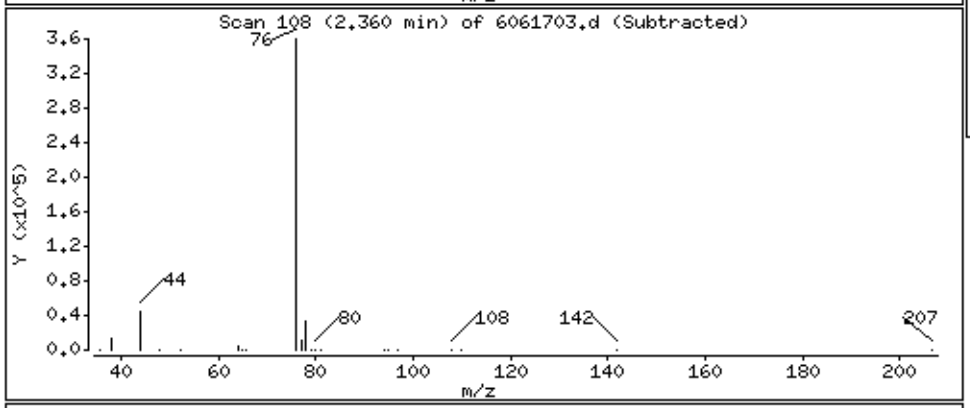
Column diameter: 0.53

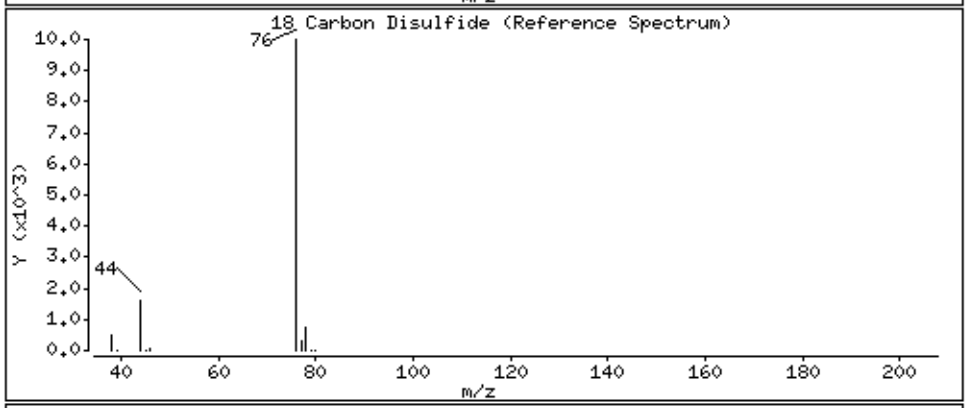
18 Carbon Disulfide

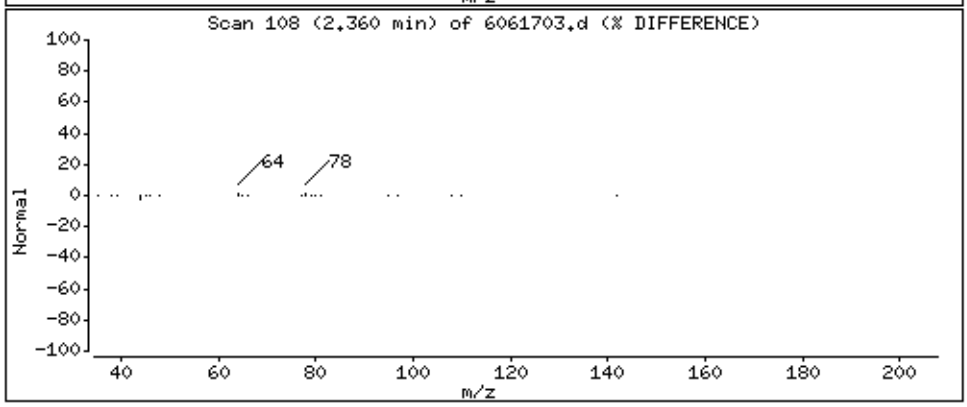
Concentration: 48.558 NG











Data File: /chem/msd6.i/17jun16.b/6061703.d

Date : 17-JUN-2016 11:37

Client ID: LCS

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCS;LCS

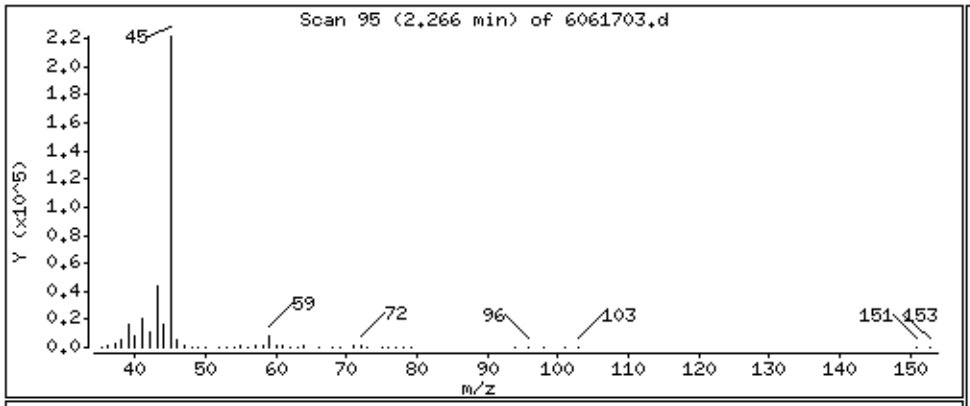
Operator: CT

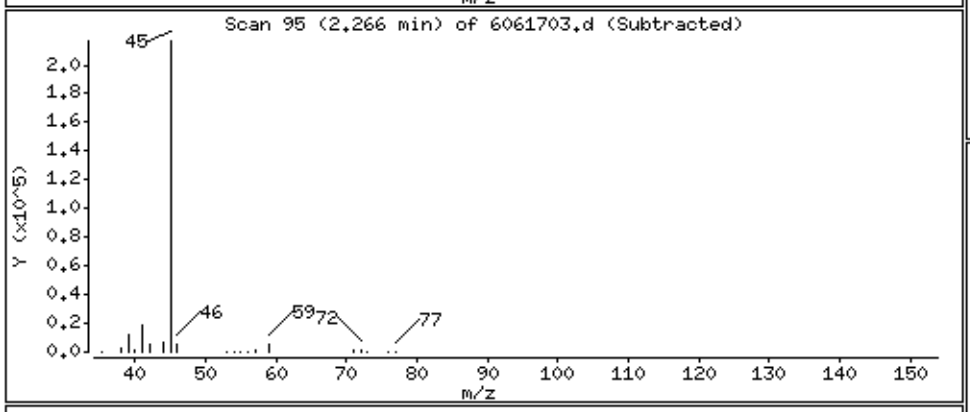
Column phase: RTx-624

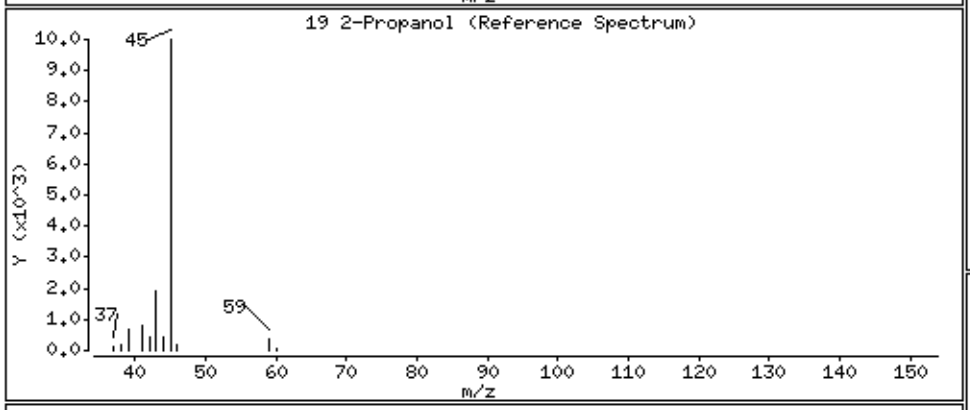
Column diameter: 0.53

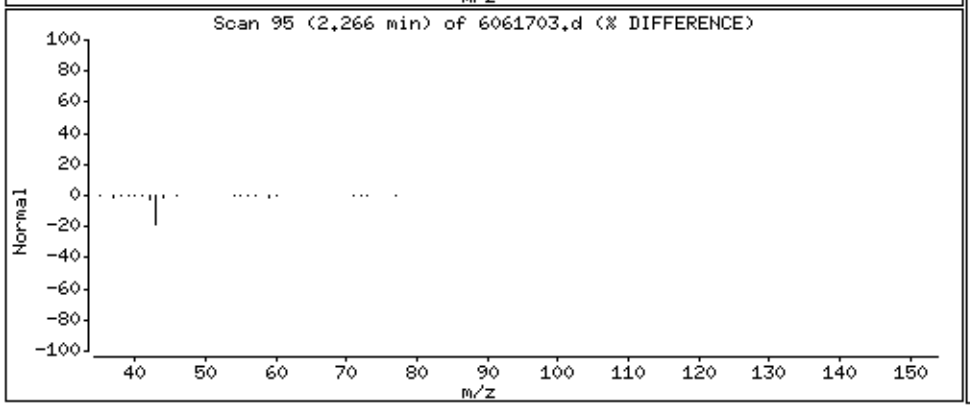
19 2-Propanol

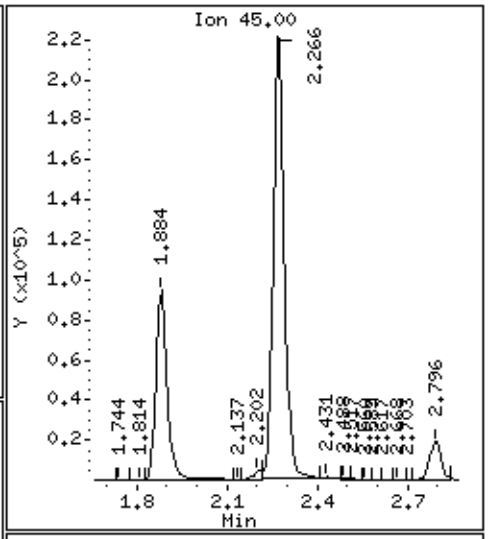
Concentration: 54.985 NG

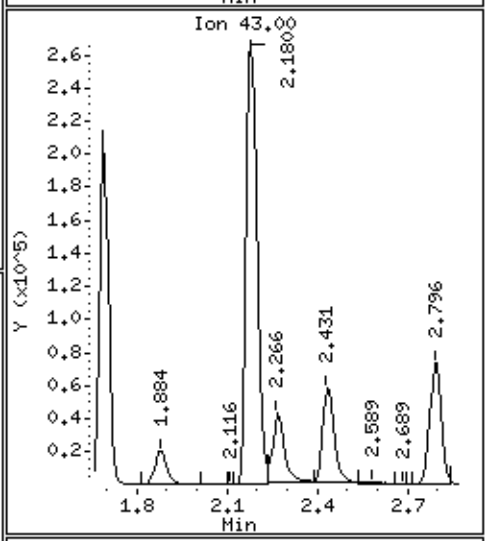


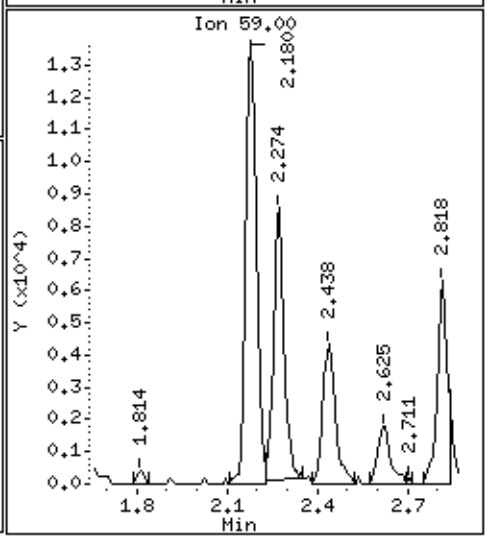












Data File: /chem/msd6.i/17jun16.b/6061703.d

Date : 17-JUN-2016 11:37

Client ID: LCS

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCS;LCS

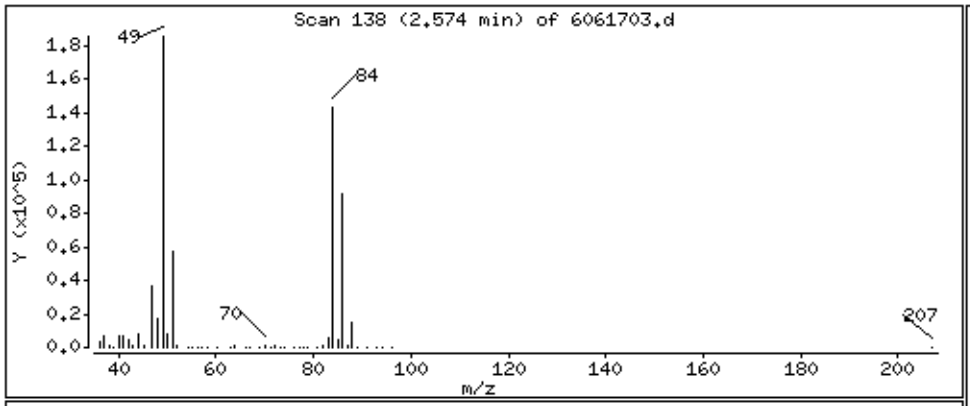
Operator: CT

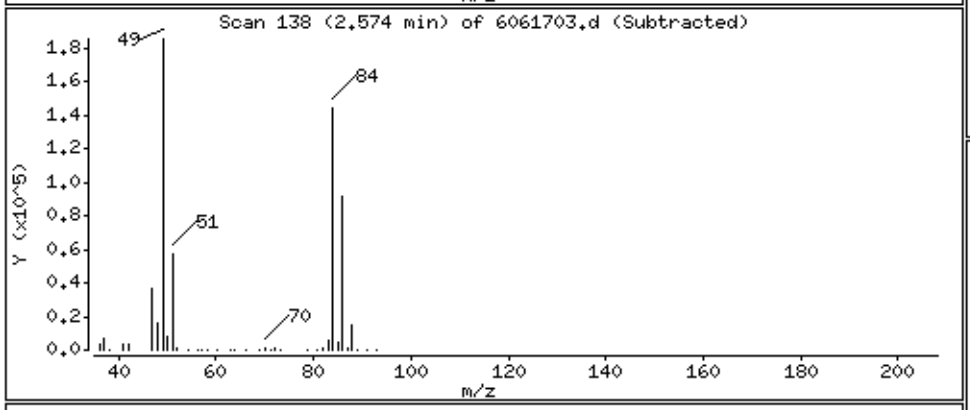
Column phase: RTx-624

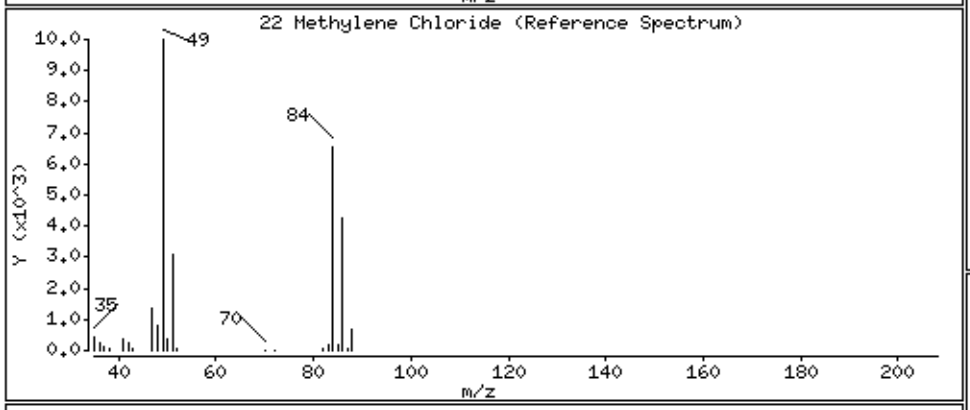
Column diameter: 0.53

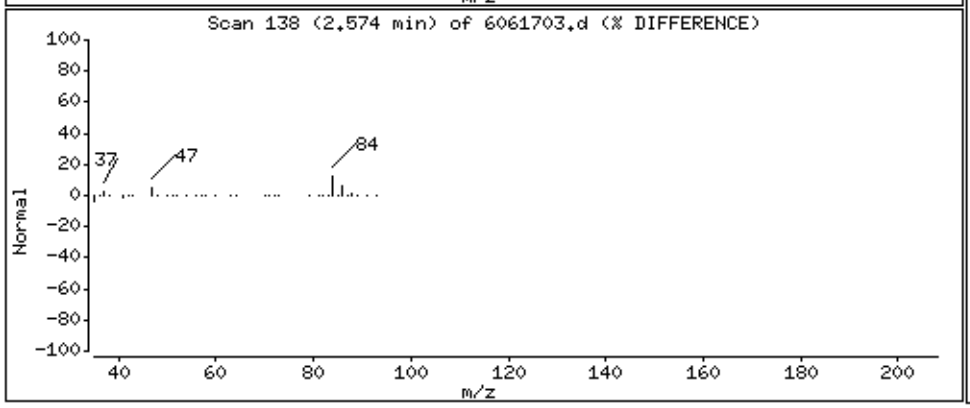
22 Methylene Chloride

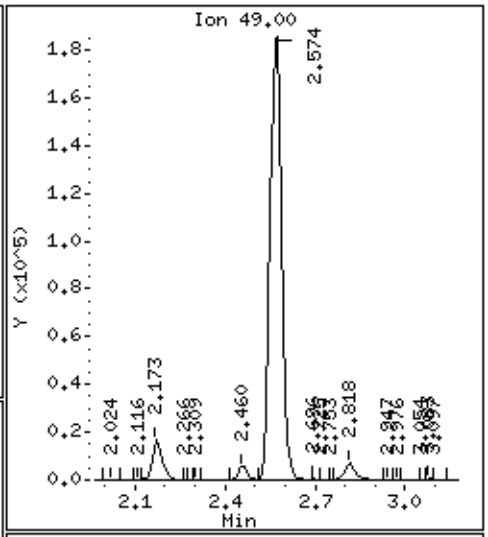
Concentration: 77.169 NG

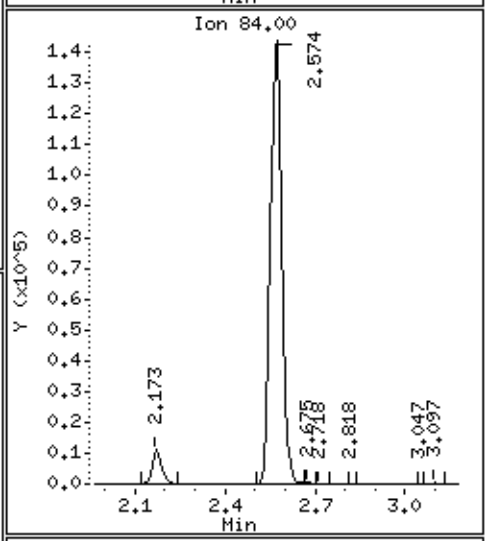


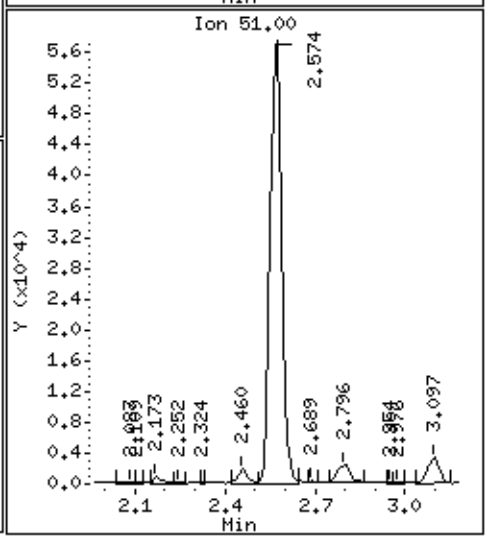












Data File: /chem/msd6.i/17jun16.b/6061703.d

Date : 17-JUN-2016 11:37

Client ID: LCS

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCS;LCS

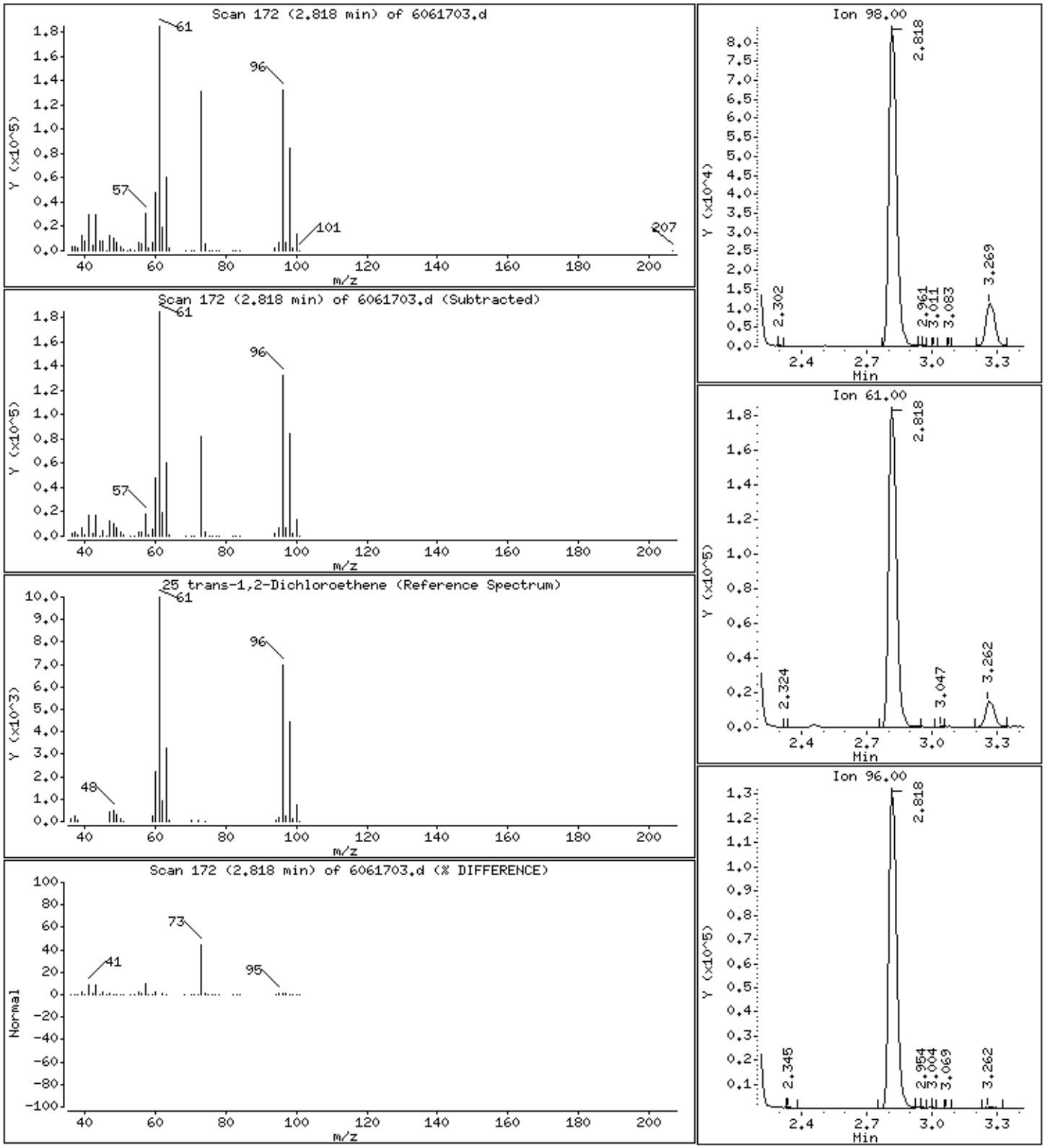
Operator: CT

Column phase: RTx-624

Column diameter: 0.53

25 trans-1,2-Dichloroethene

Concentration: 72.683 NG



Data File: /chem/msd6.i/17jun16.b/6061703.d

Date : 17-JUN-2016 11:37

Client ID: LCS

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCS;LCS

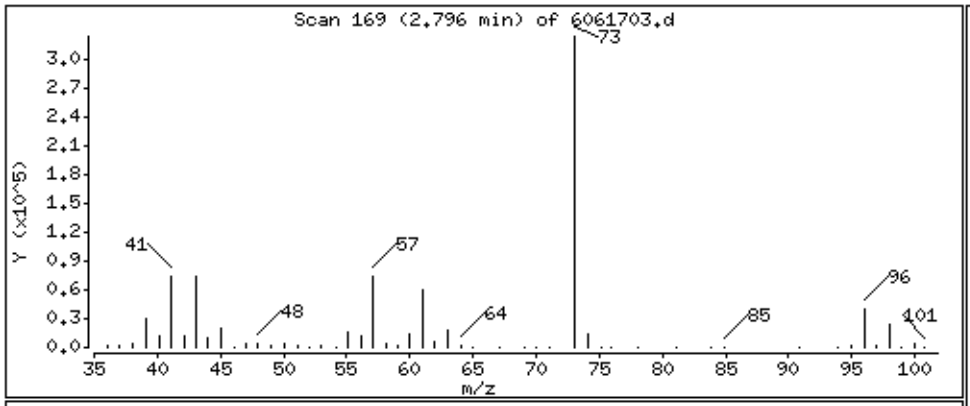
Operator: CT

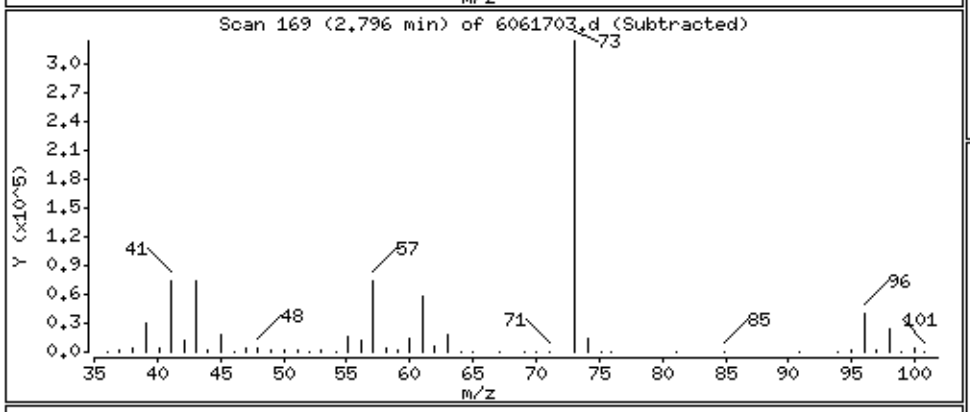
Column phase: RTx-624

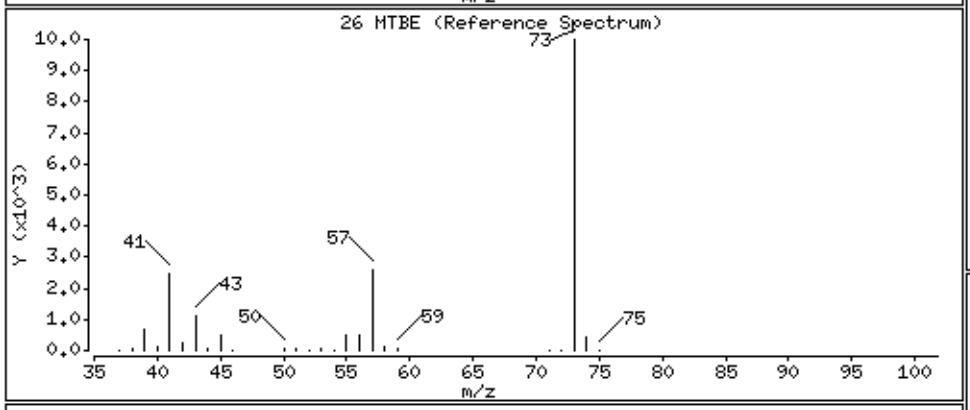
Column diameter: 0.53

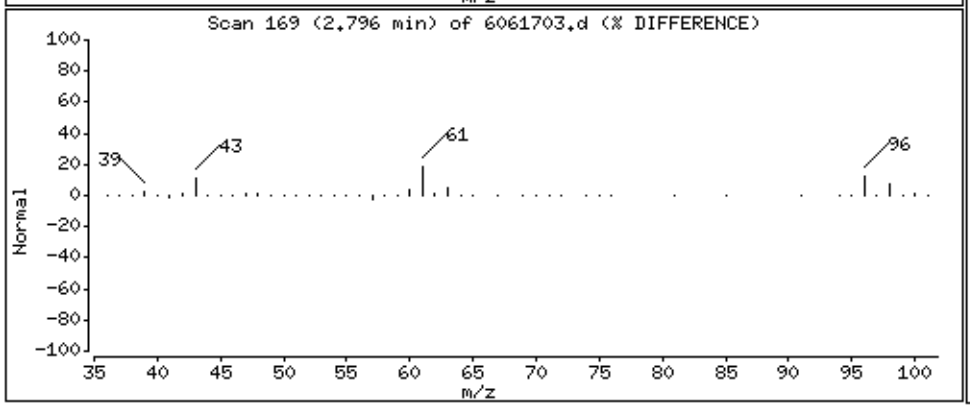
26 MTBE

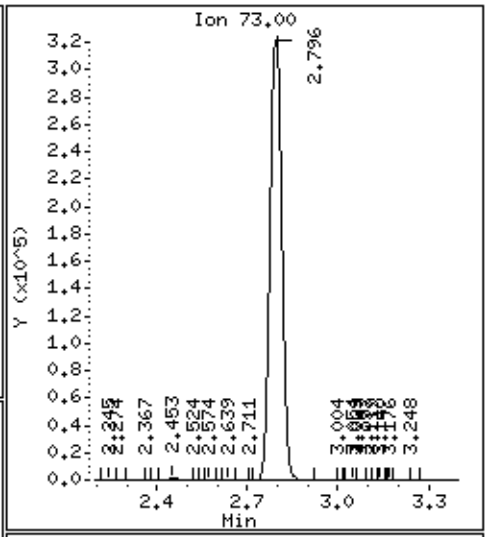
Concentration: 82.763 NG

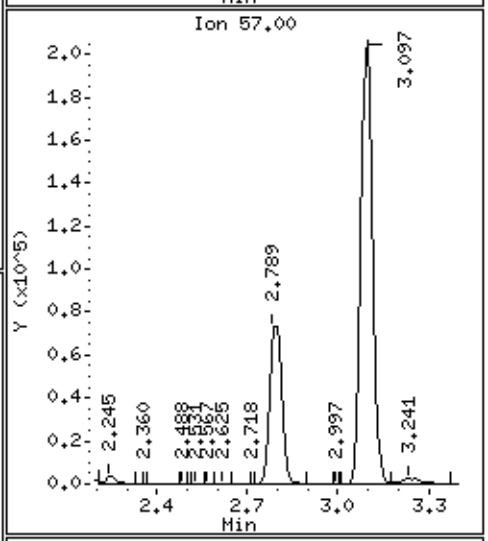


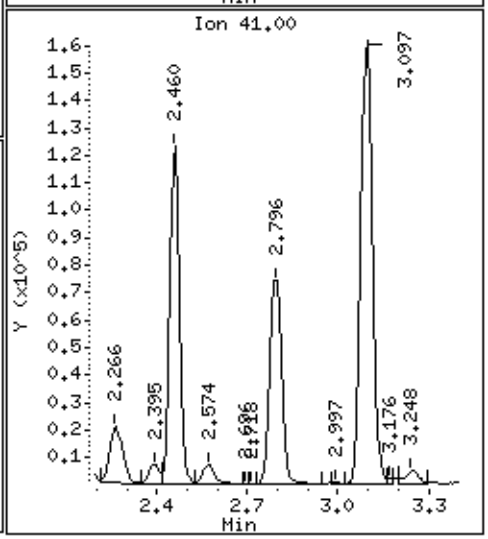












Data File: /chem/msd6.i/17jun16.b/6061703.d

Date : 17-JUN-2016 11:37

Client ID: LCS

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCS;LCS

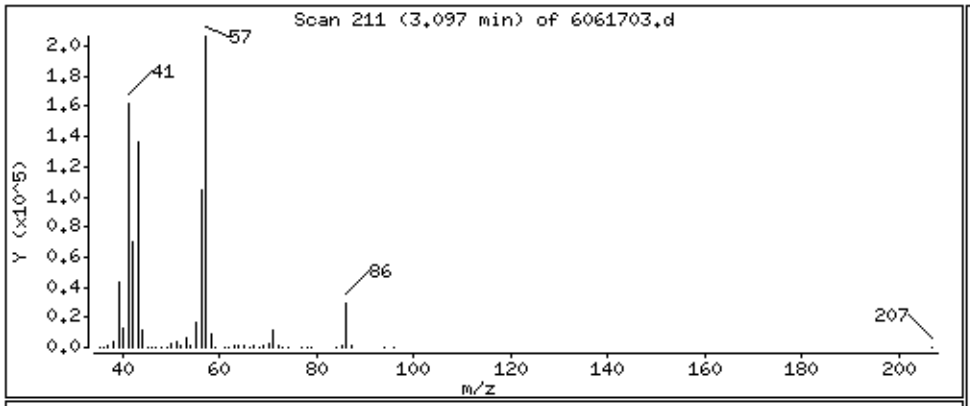
Operator: CT

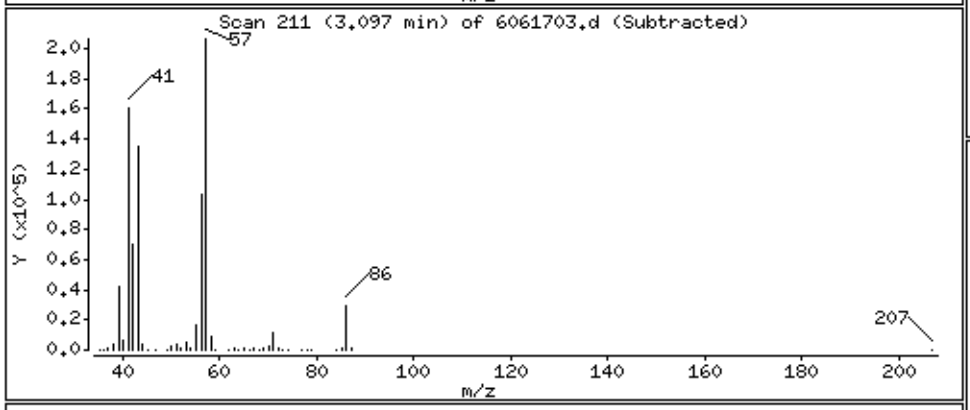
Column phase: RTx-624

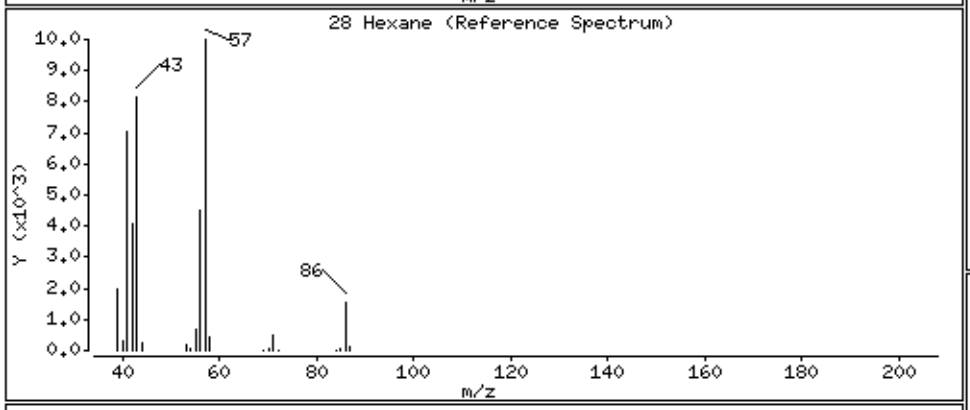
Column diameter: 0.53

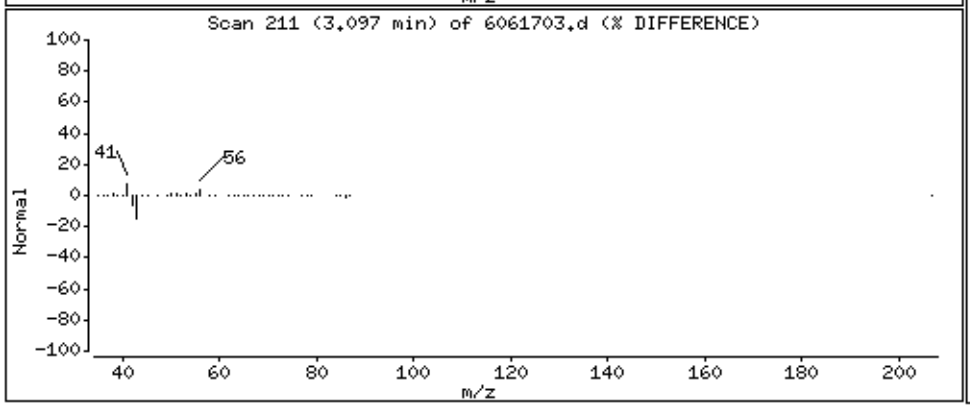
28 Hexane

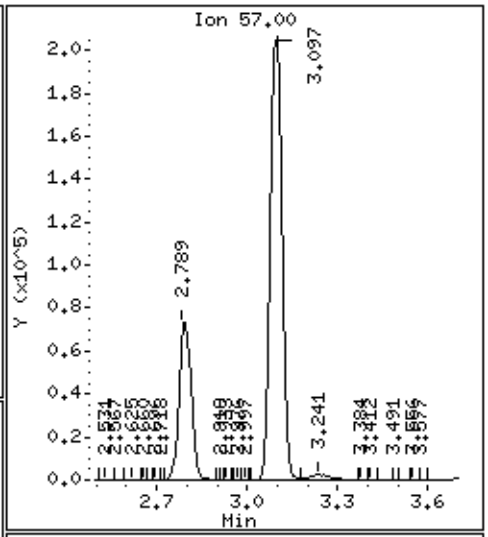
Concentration: 82.158 NG

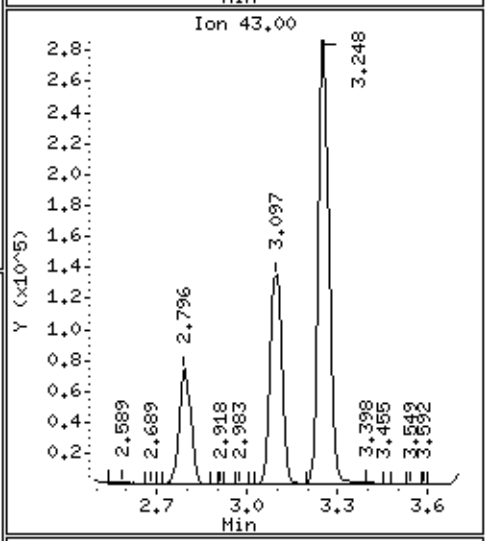


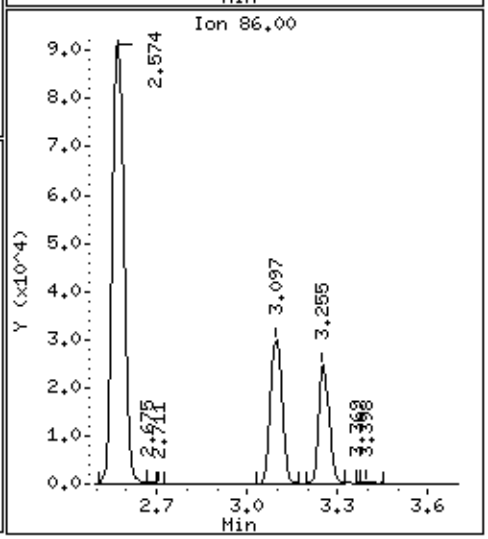












Data File: /chem/msd6.i/17jun16.b/6061703.d

Date : 17-JUN-2016 11:37

Client ID: LCS

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCS;LCS

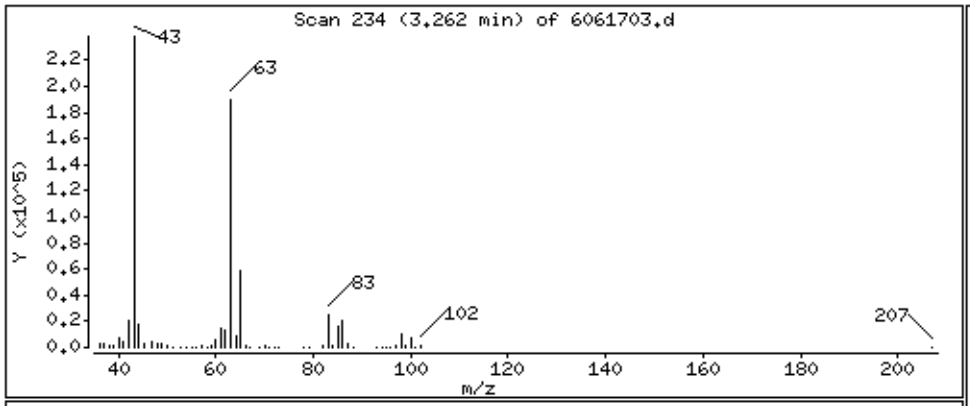
Operator: CT

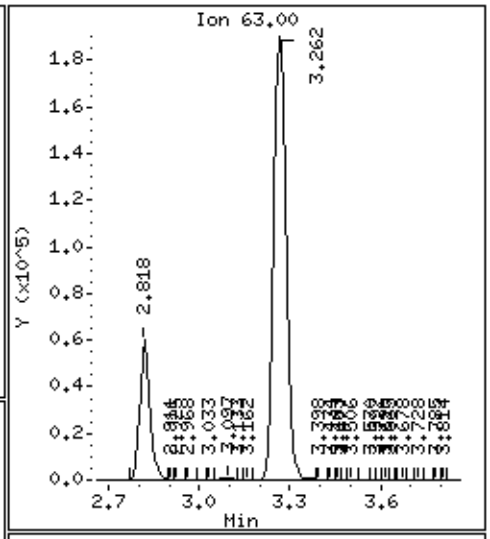
Column phase: RTx-624

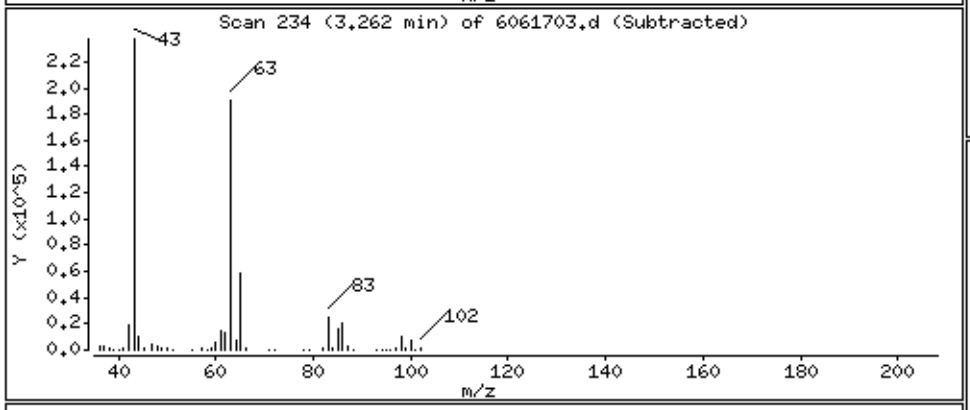
Column diameter: 0.53

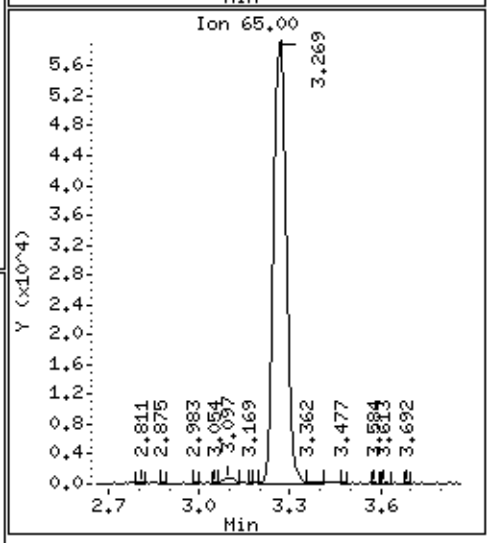
29 1,1-Dichloroethane

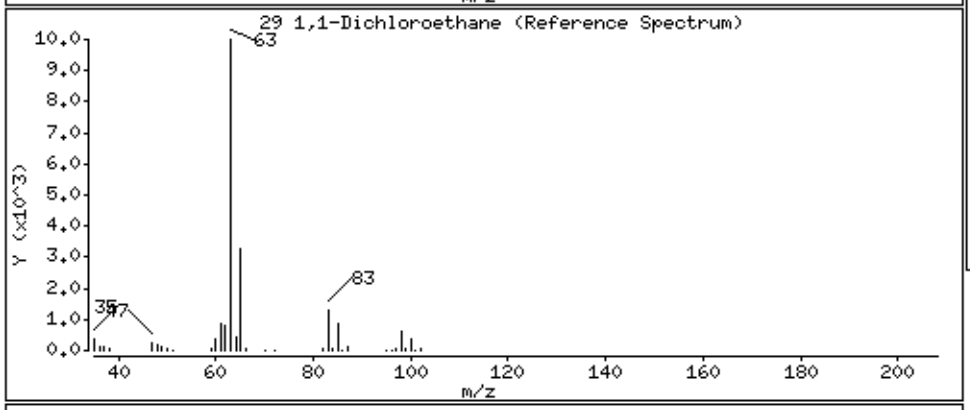
Concentration: 82.037 NG

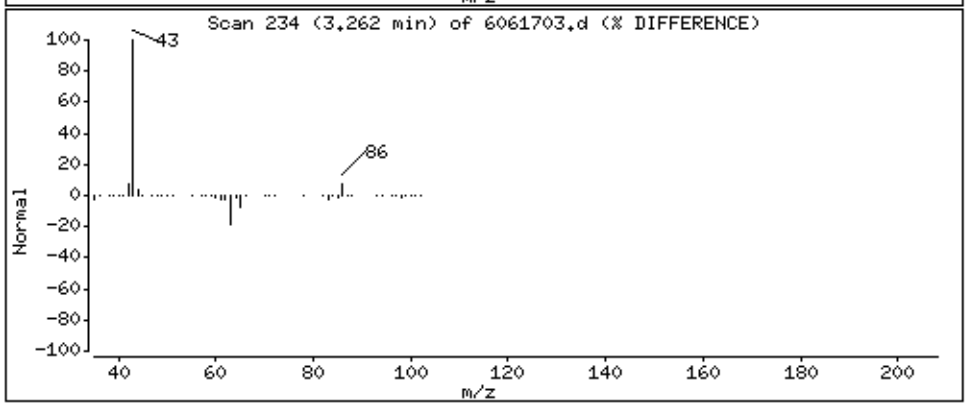












Data File: /chem/msd6.i/17jun16.b/6061703.d

Date : 17-JUN-2016 11:37

Client ID: LCS

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCS;LCS

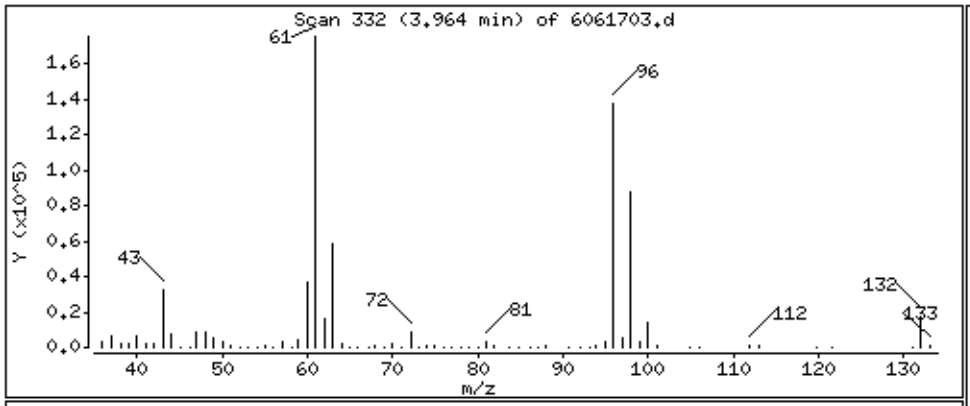
Operator: CT

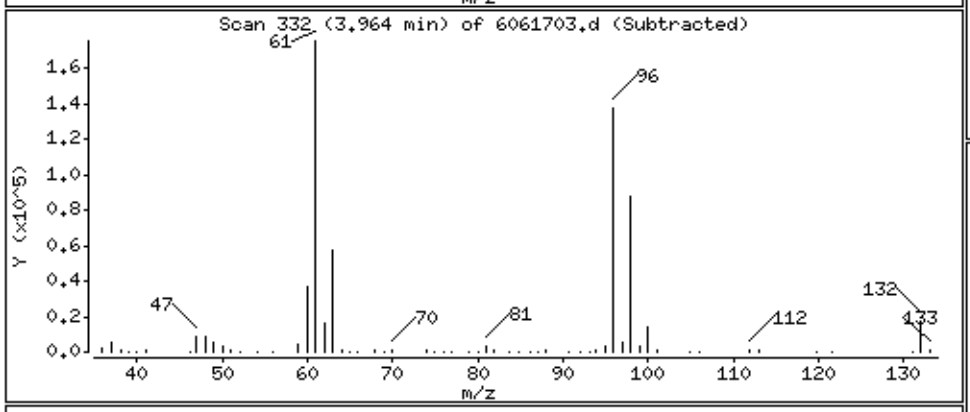
Column phase: RTx-624

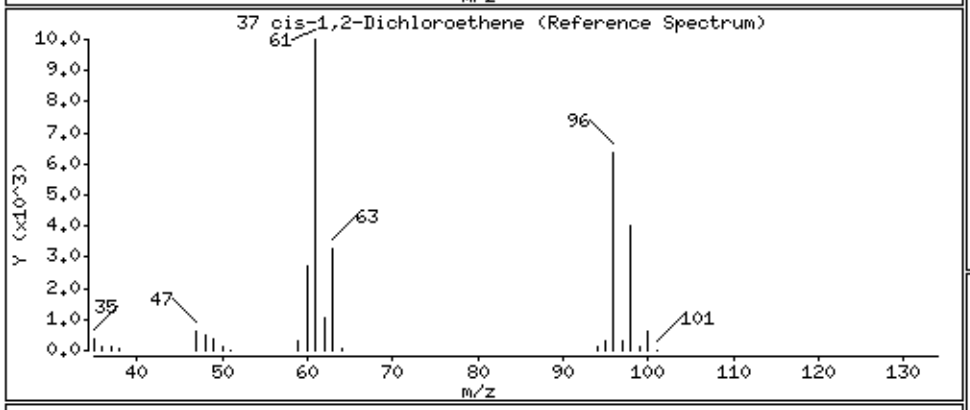
Column diameter: 0.53

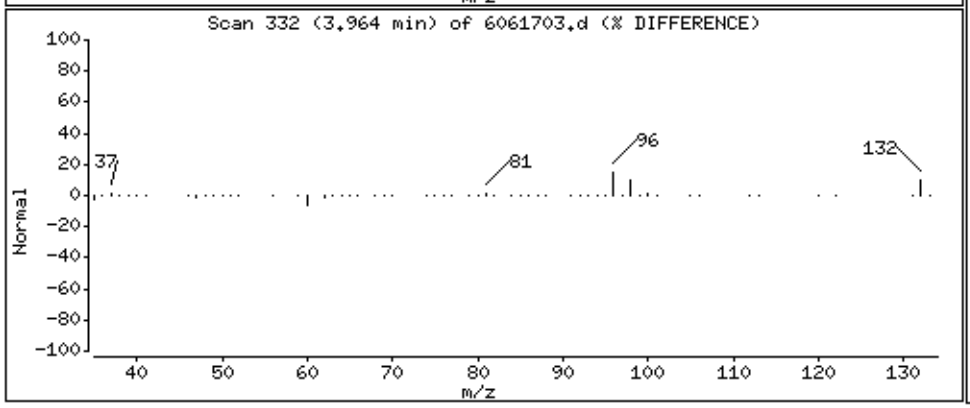
37 cis-1,2-Dichloroethene

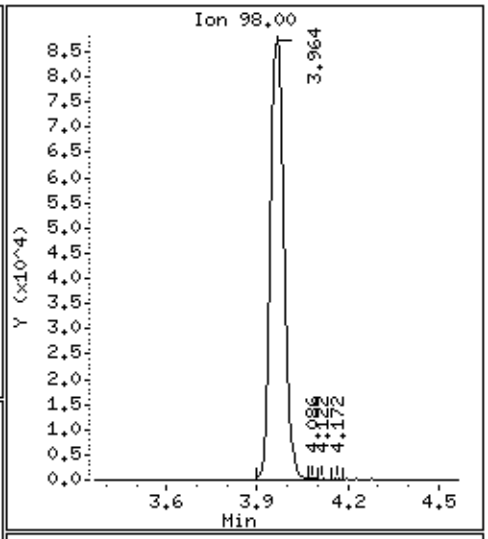
Concentration: 91.129 NG

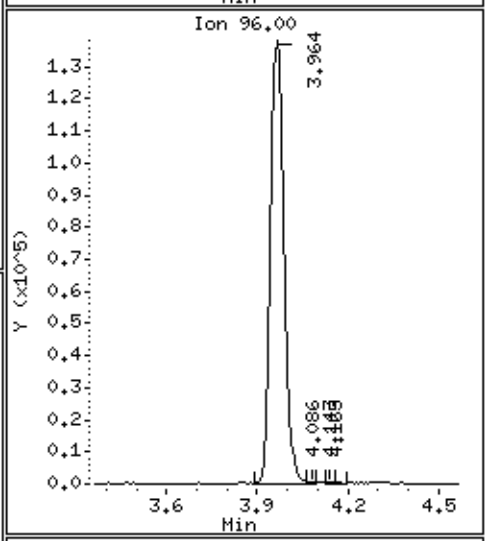


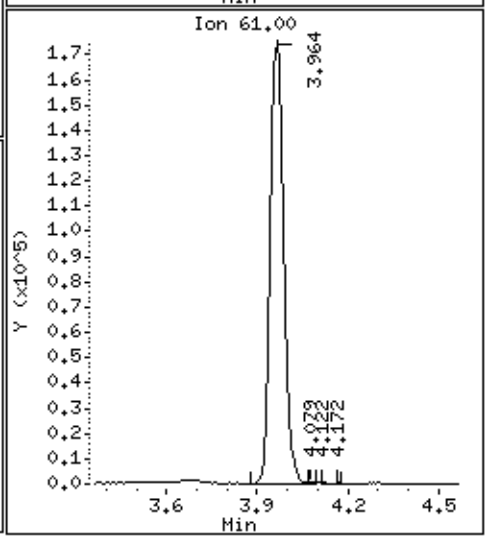












Data File: /chem/msd6.i/17jun16.b/6061703.d

Date : 17-JUN-2016 11:37

Client ID: LCS

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCS;LCS

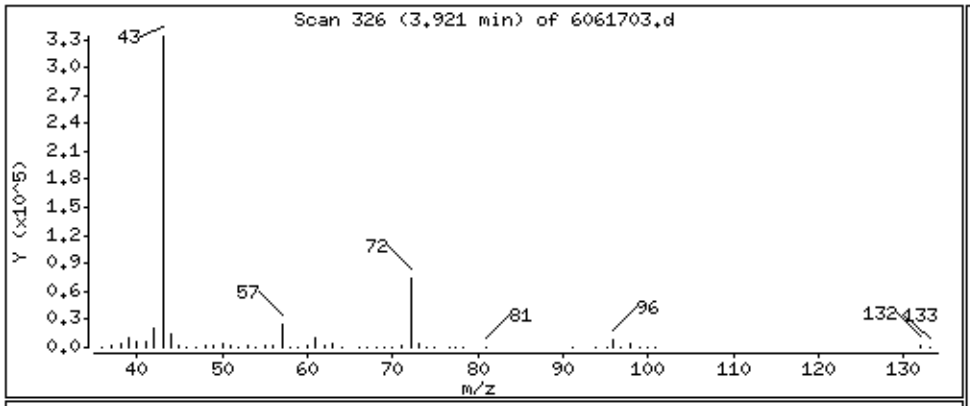
Operator: CT

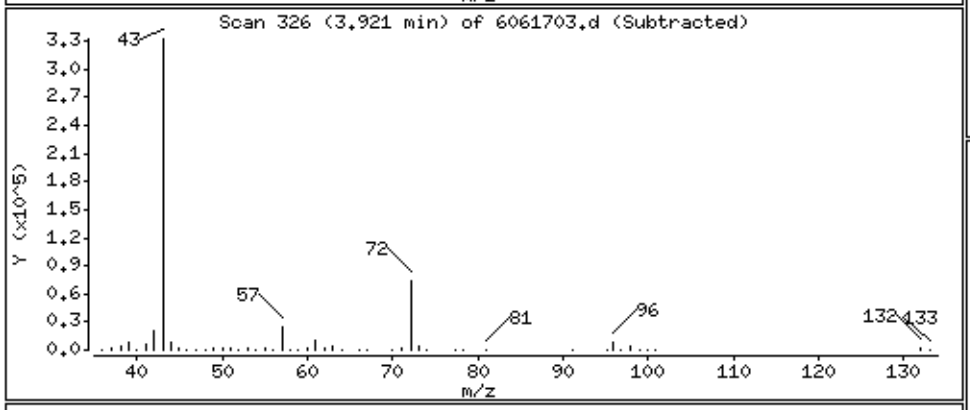
Column phase: RTx-624

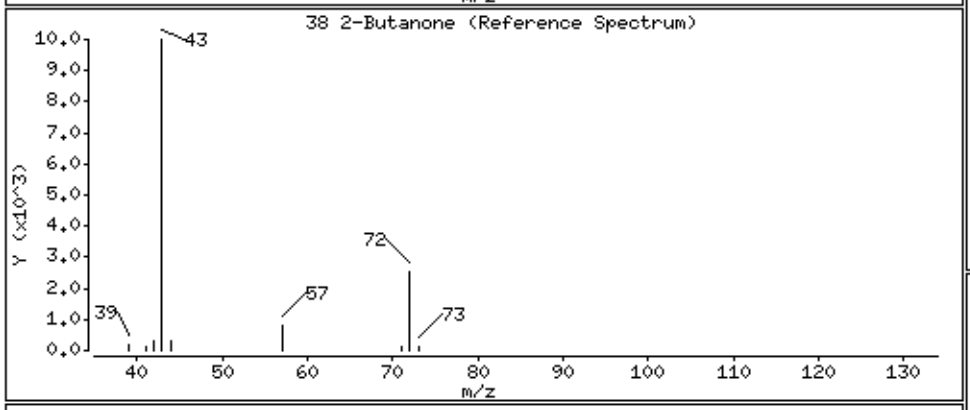
Column diameter: 0.53

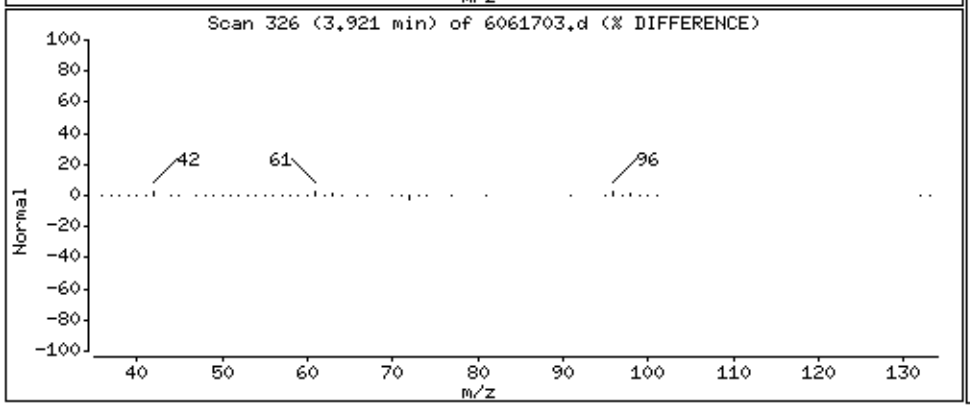
38 2-Butanone

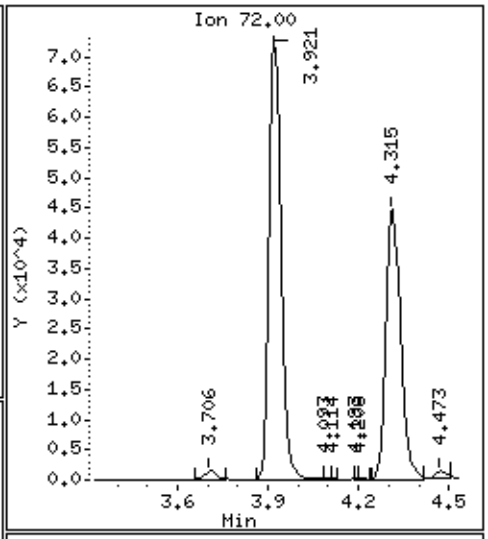
Concentration: 71.116 NG

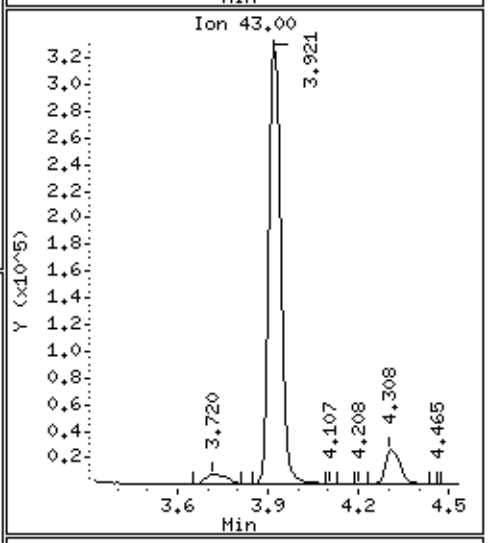


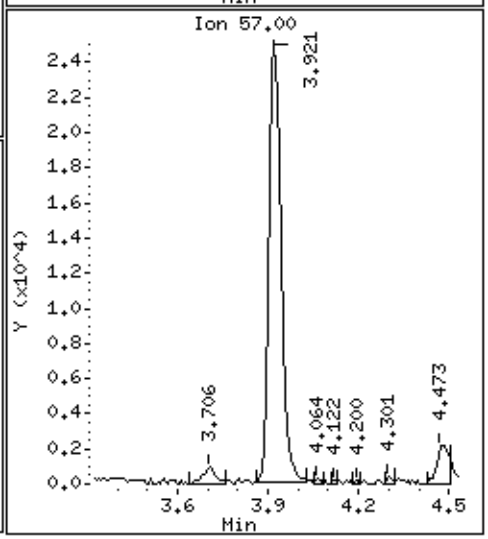












Data File: /chem/msd6.i/17jun16.b/6061703.d

Date : 17-JUN-2016 11:37

Client ID: LCS

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCS;LCS

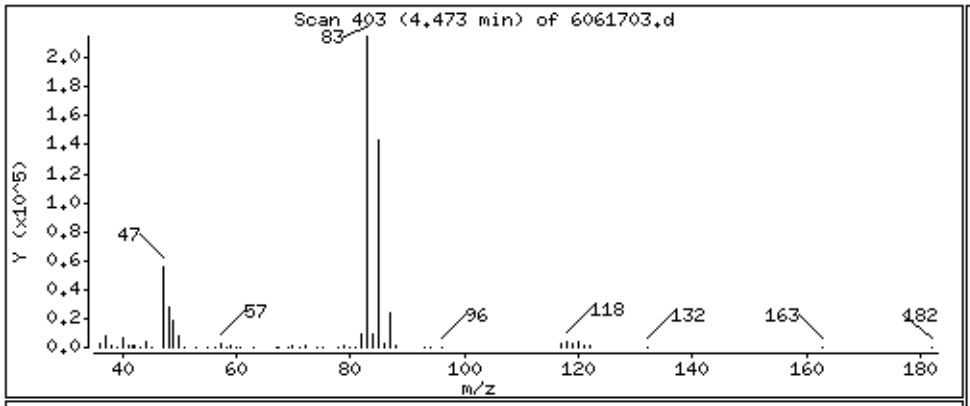
Operator: CT

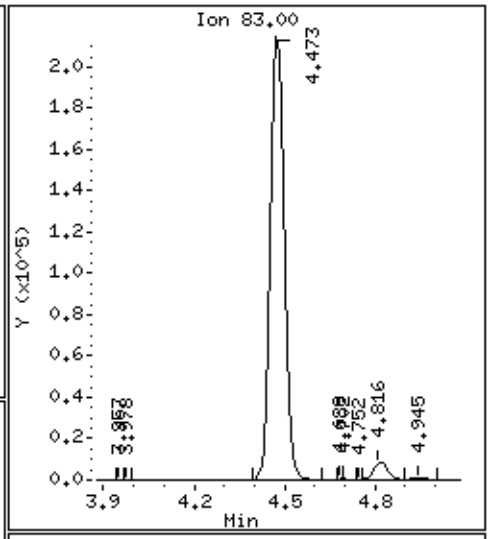
Column phase: RTx-624

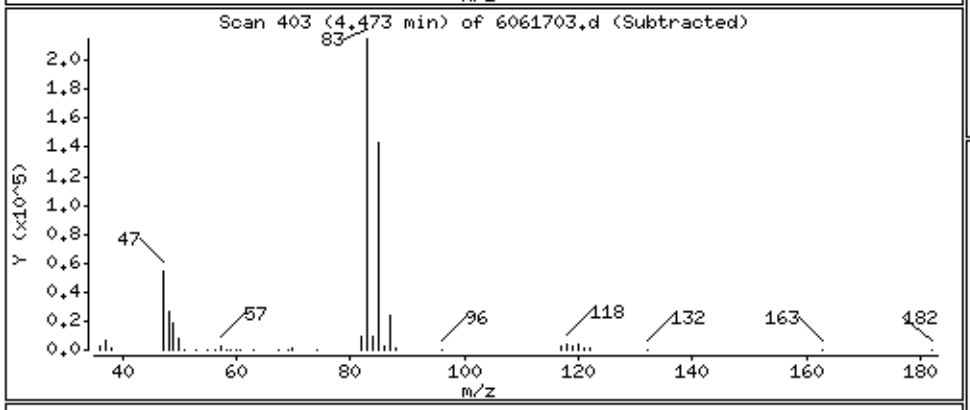
Column diameter: 0.53

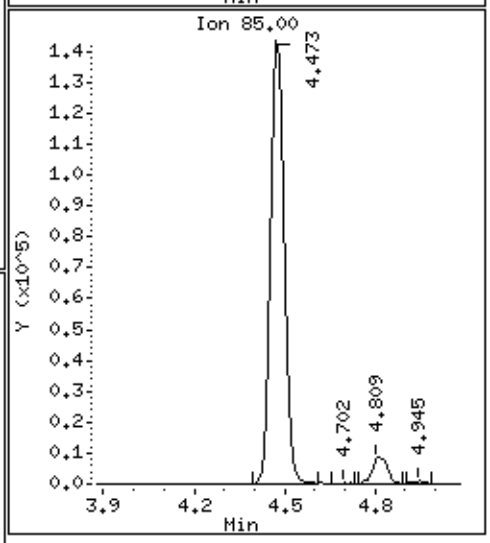
44 Chloroform

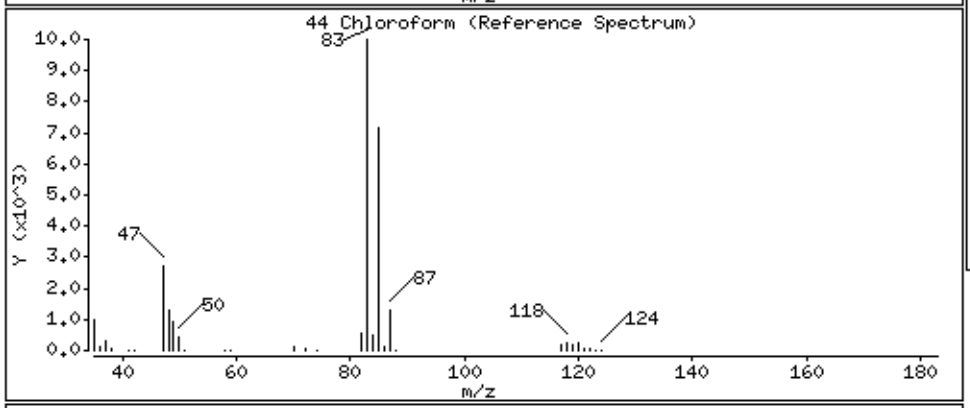
Concentration: 97.947 NG

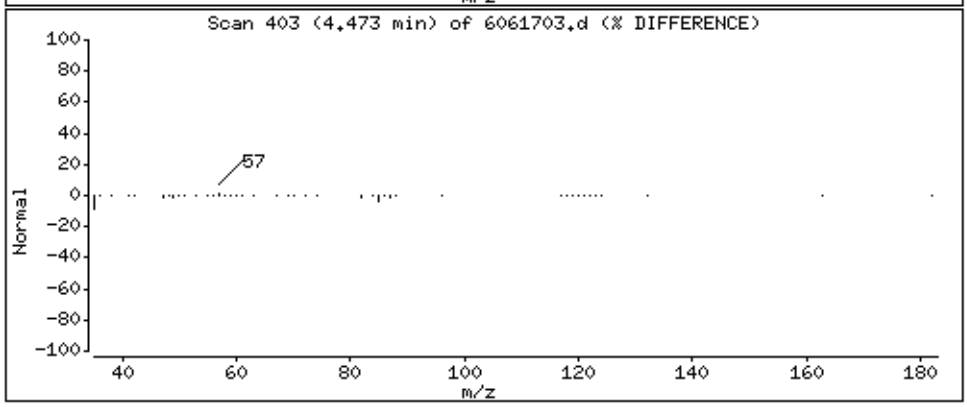












Data File: /chem/msd6.i/17jun16.b/6061703.d

Date : 17-JUN-2016 11:37

Client ID: LCS

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCS;LCS

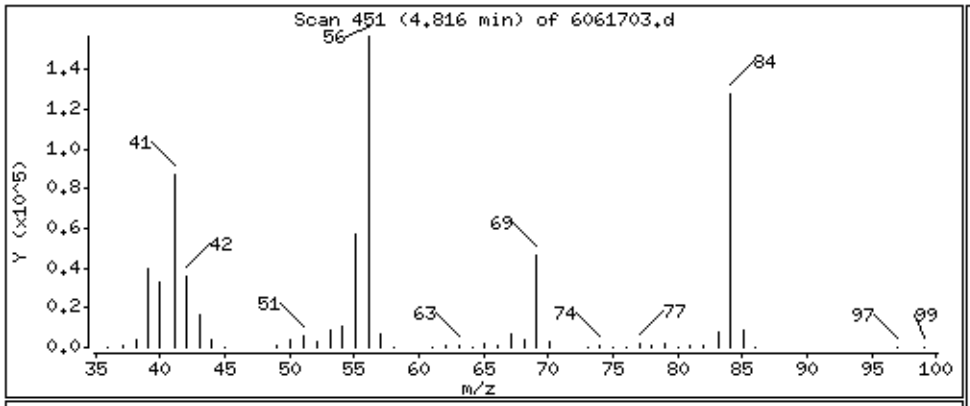
Operator: CT

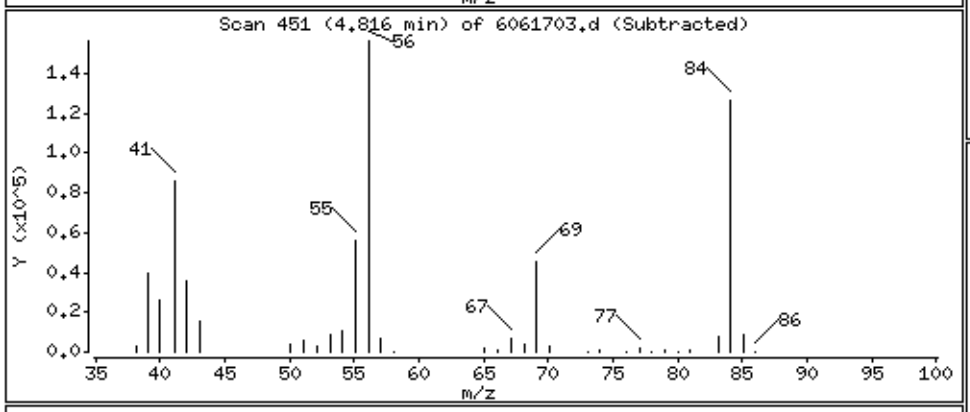
Column phase: RTx-624

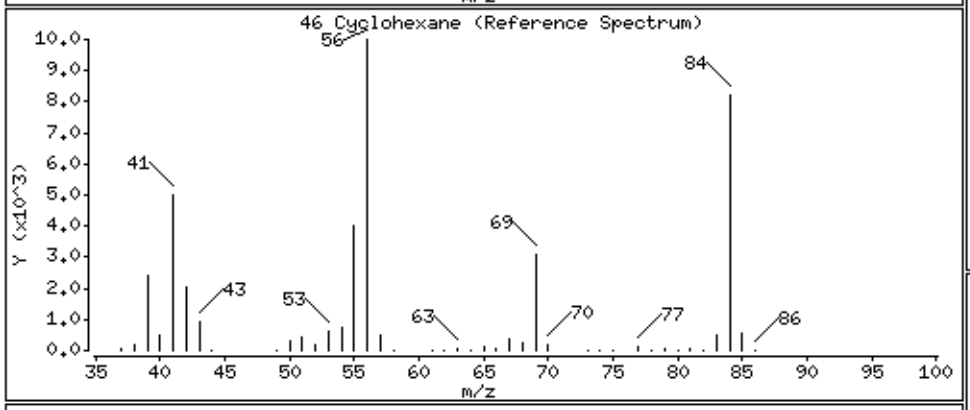
Column diameter: 0.53

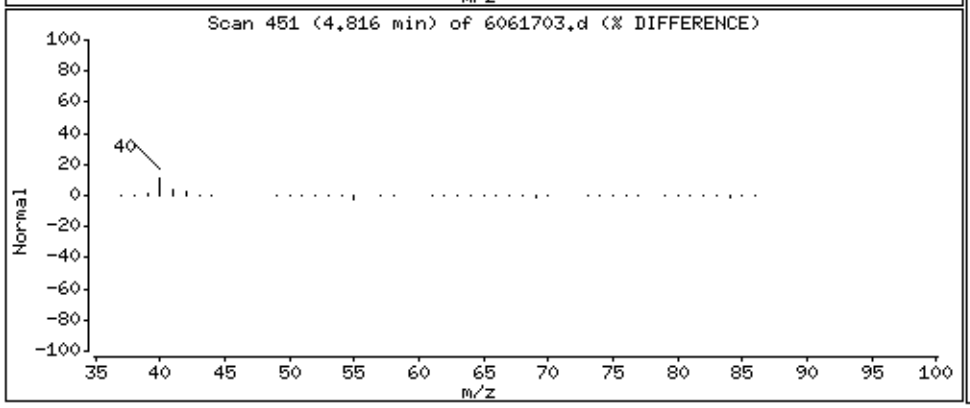
46 Cyclohexane

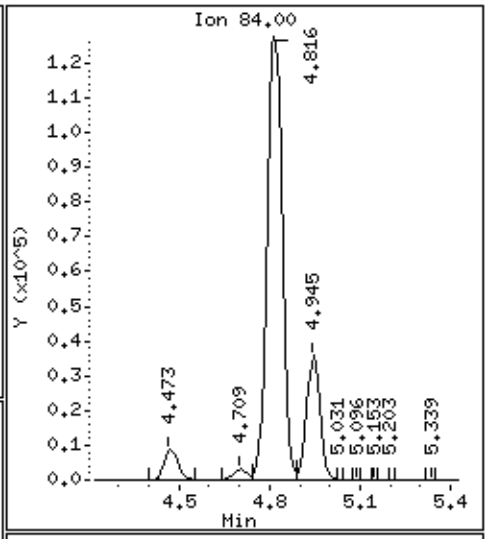
Concentration: 70.914 NG

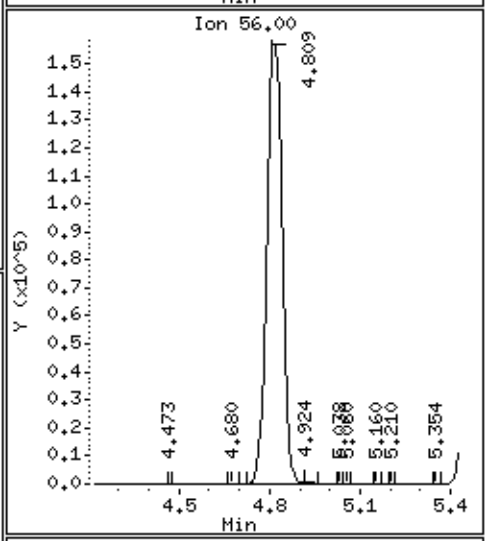


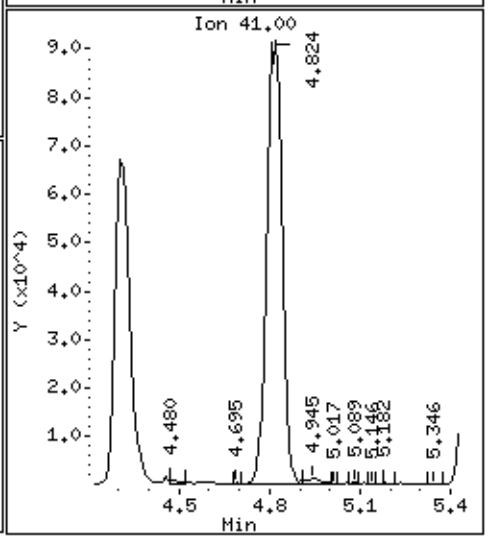












Data File: /chem/msd6.i/17jun16.b/6061703.d

Date : 17-JUN-2016 11:37

Client ID: LCS

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCS;LCS

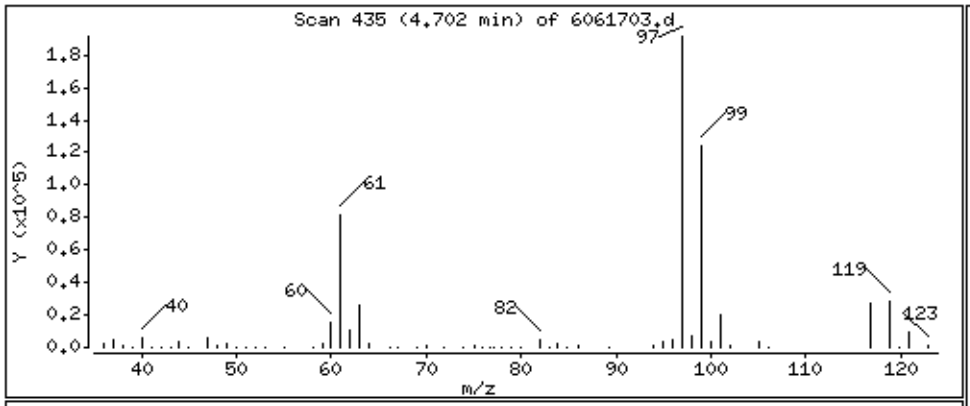
Operator: CT

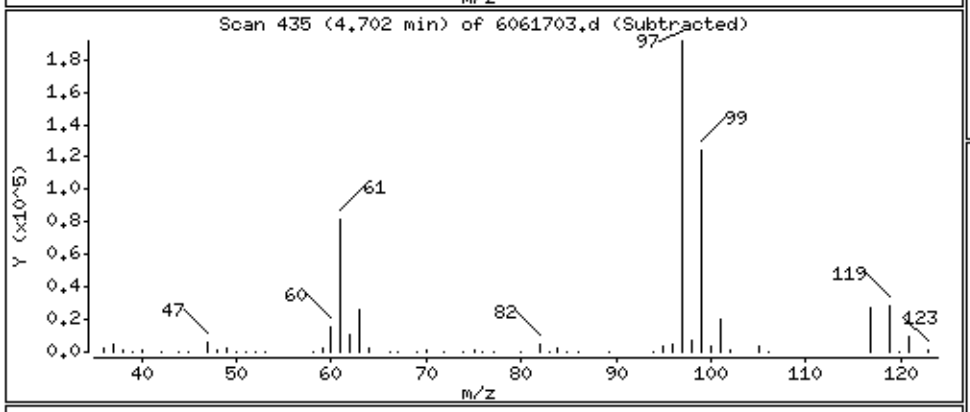
Column phase: RTx-624

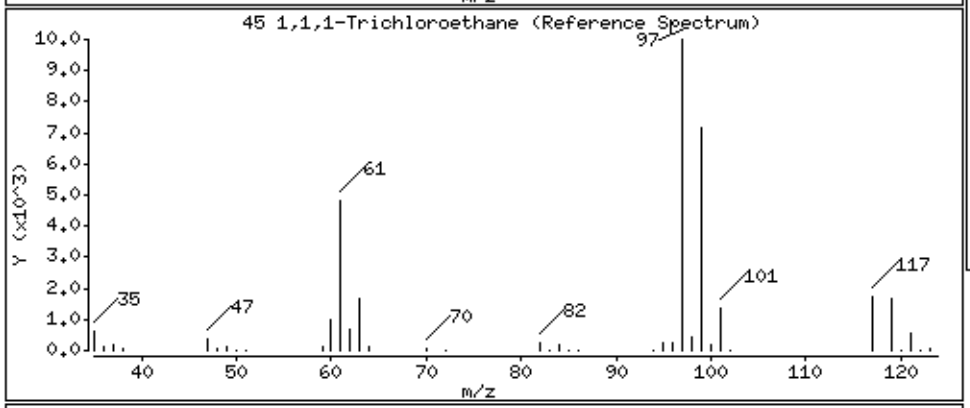
Column diameter: 0.53

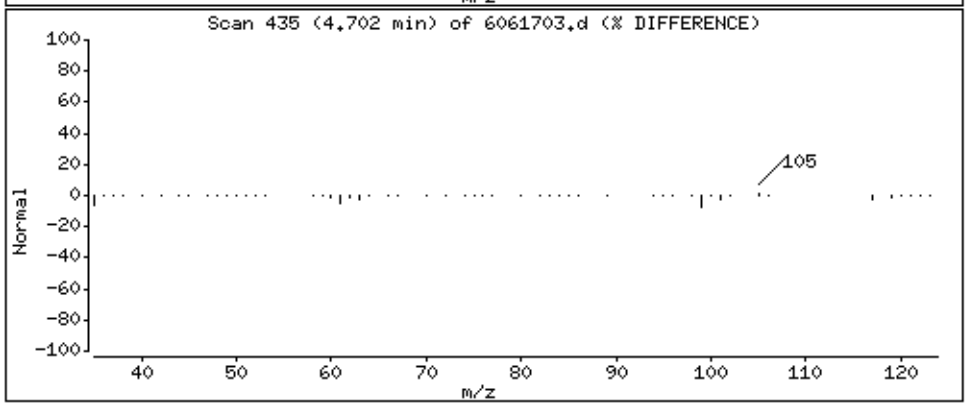
45 1,1,1-Trichloroethane

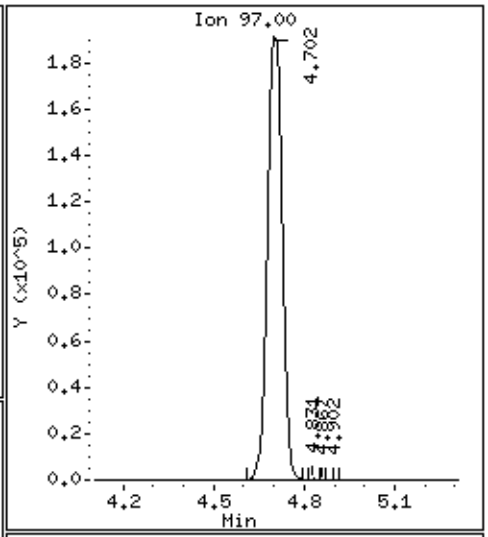
Concentration: 102.21 NG

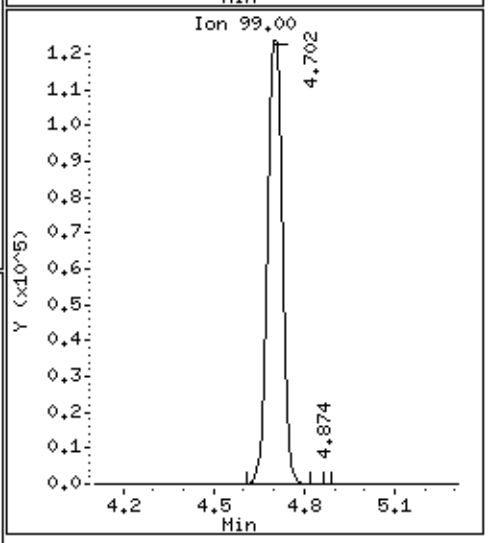












Data File: /chem/msd6.i/17jun16.b/6061703.d

Date : 17-JUN-2016 11:37

Client ID: LCS

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCS;LCS

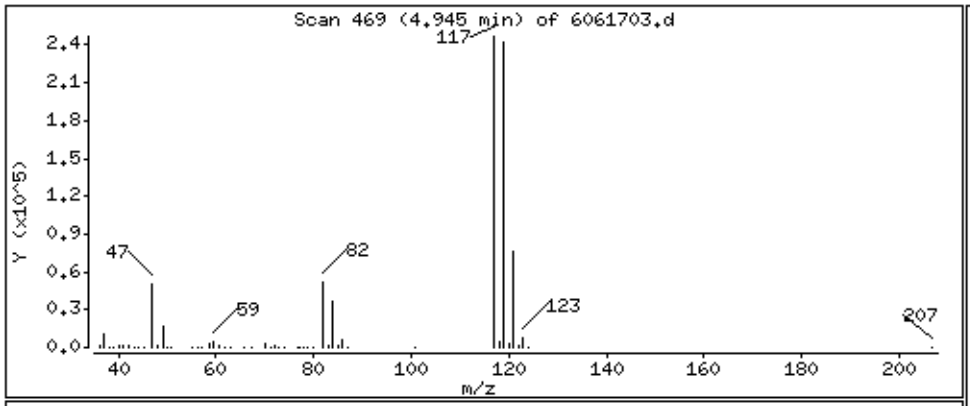
Operator: CT

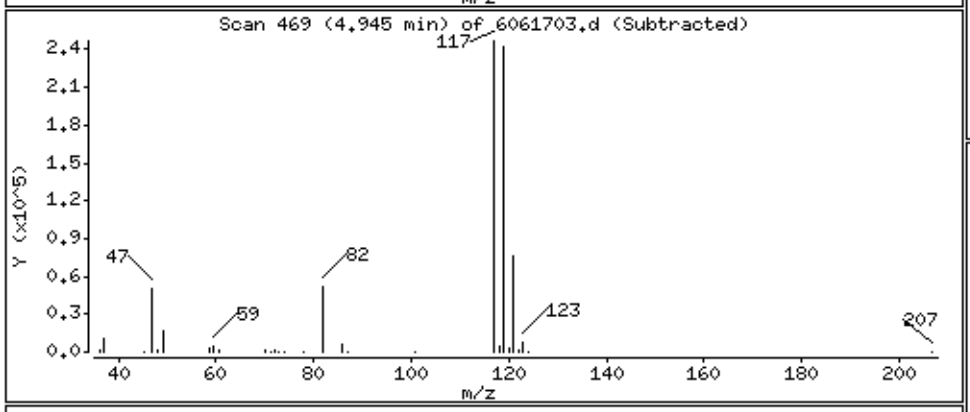
Column phase: RTx-624

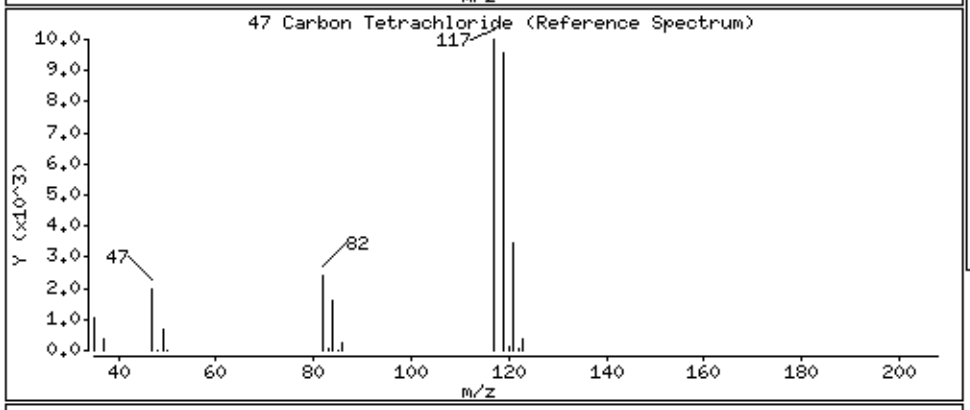
Column diameter: 0.53

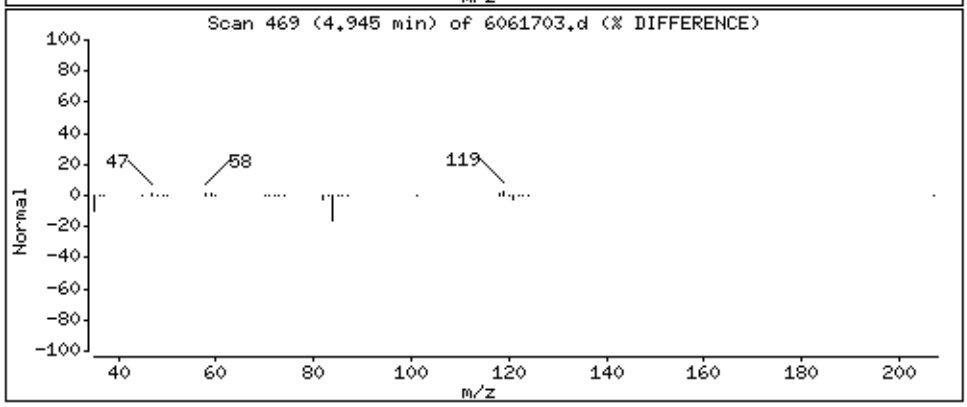
47 Carbon Tetrachloride

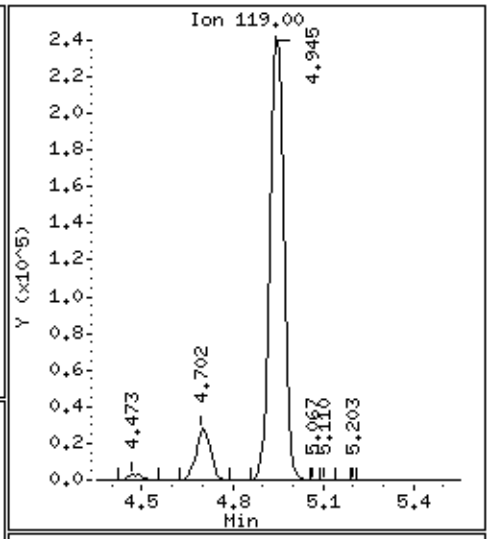
Concentration: 129.11 NG

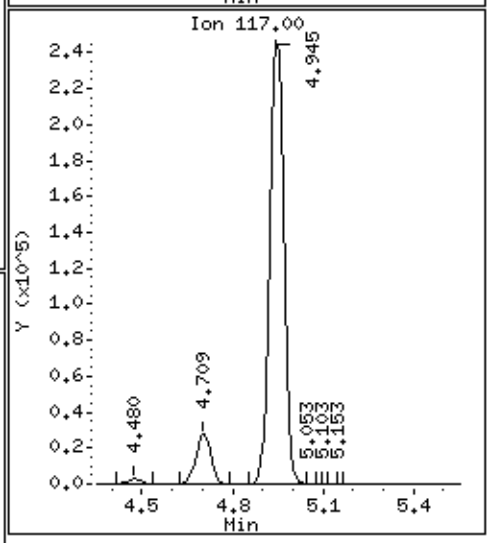












Data File: /chem/msd6.i/17jun16.b/6061703.d

Date : 17-JUN-2016 11:37

Client ID: LCS

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCS;LCS

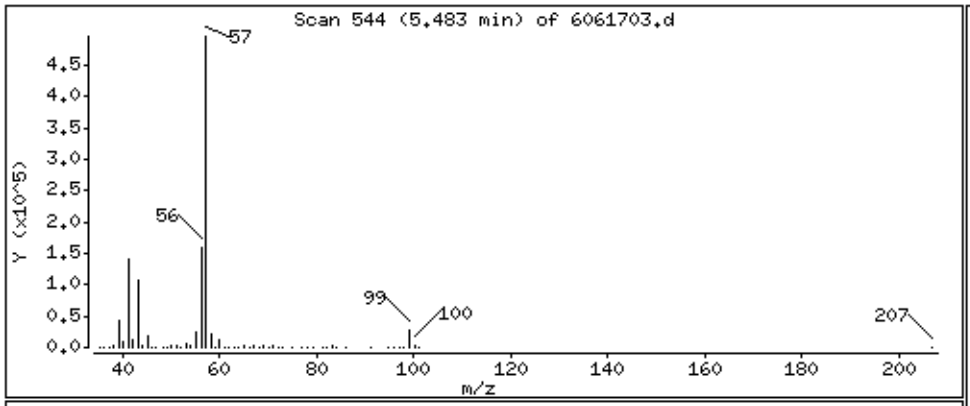
Operator: CT

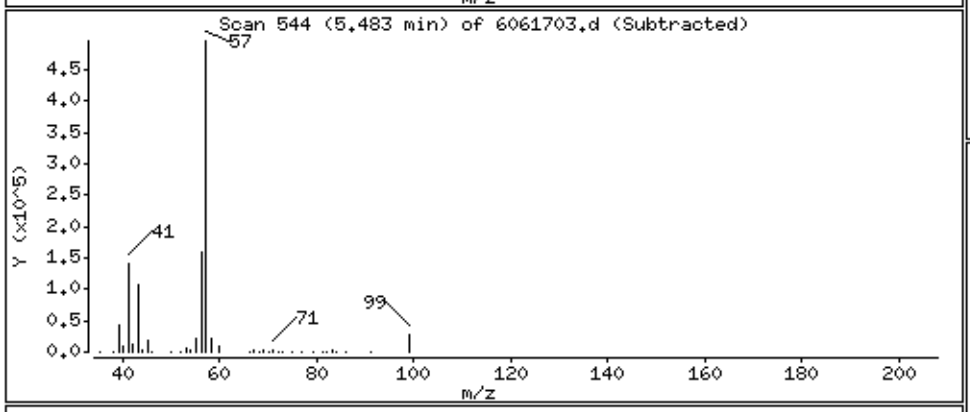
Column phase: RTx-624

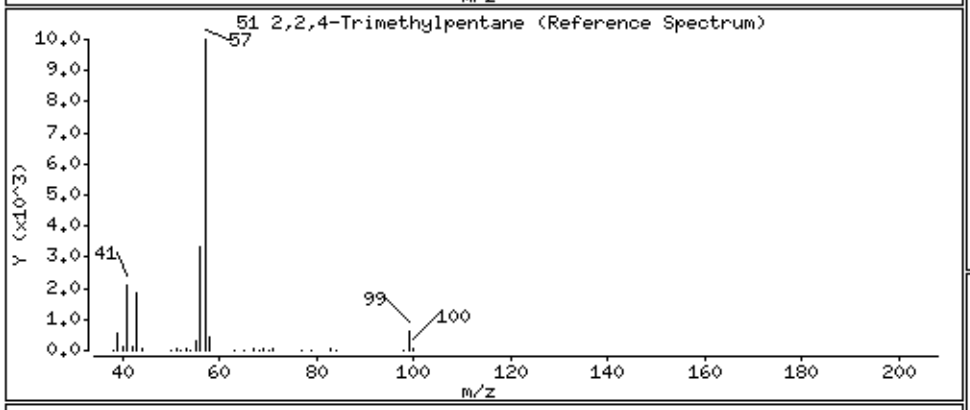
Column diameter: 0.53

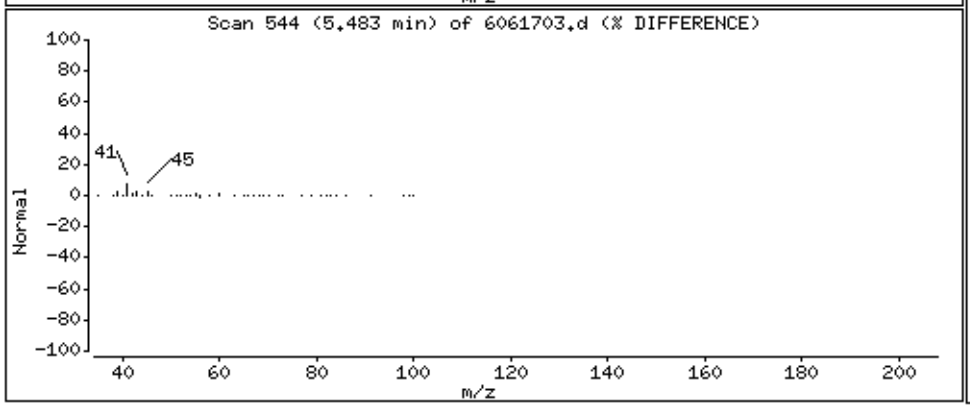
51 2,2,4-Trimethylpentane

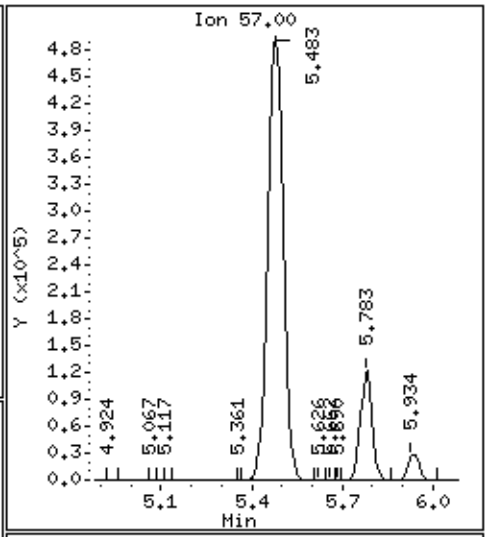
Concentration: 109.59 NG

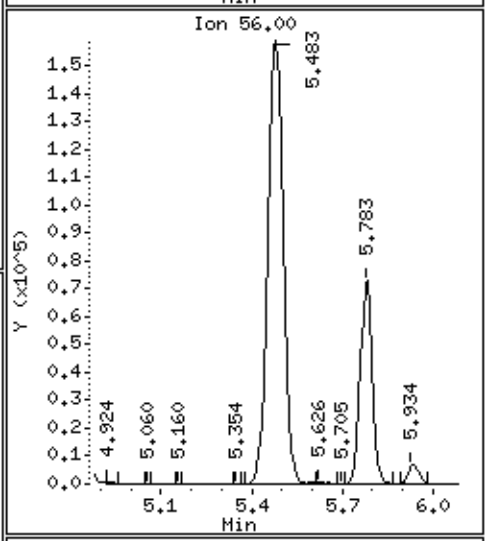


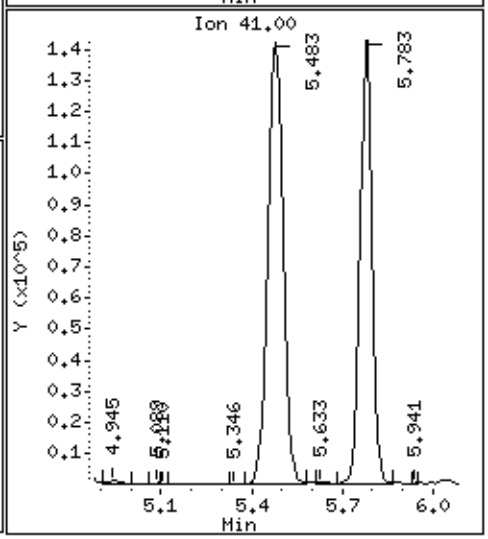












Data File: /chem/msd6.i/17jun16.b/6061703.d

Date : 17-JUN-2016 11:37

Client ID: LCS

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCS;LCS

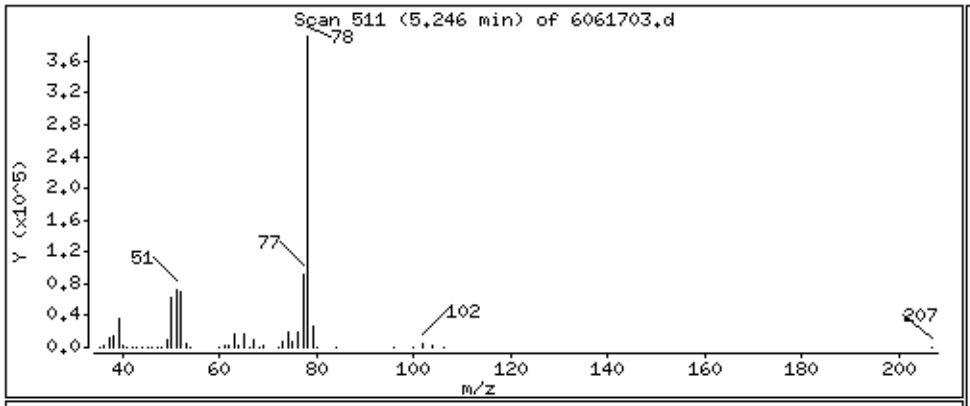
Operator: CT

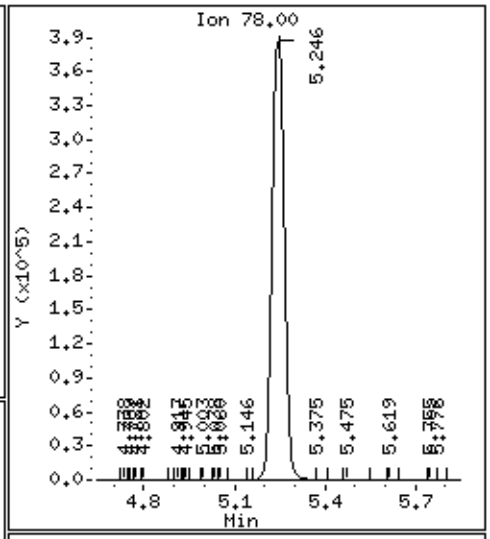
Column phase: RTx-624

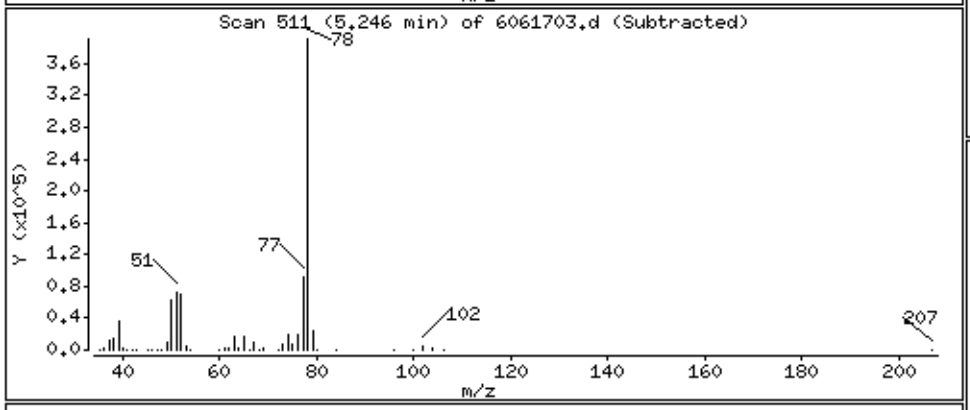
Column diameter: 0.53

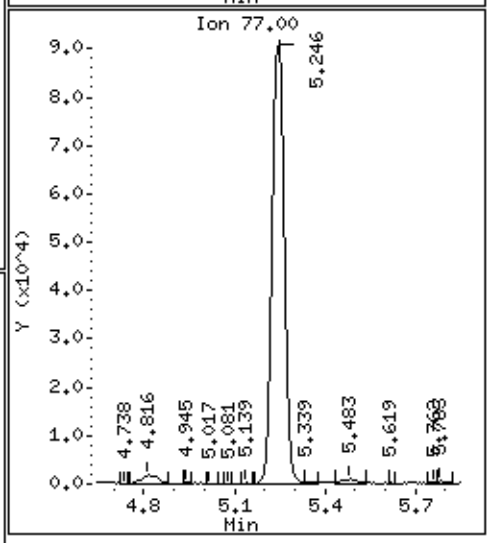
48 Benzene

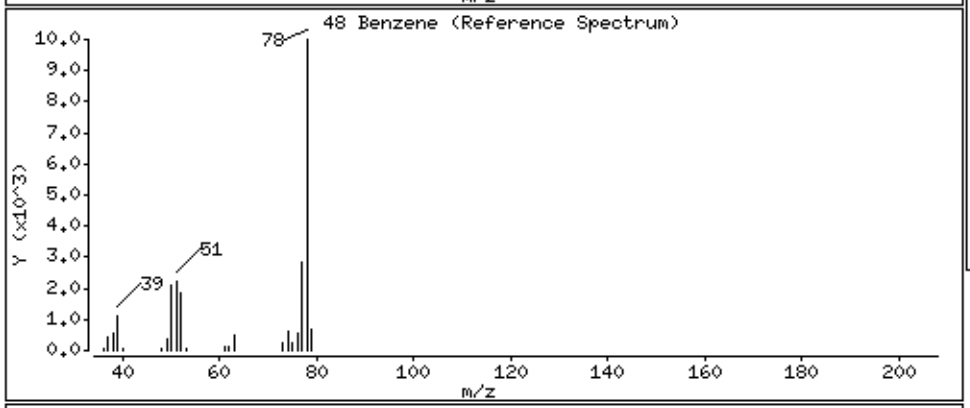
Concentration: 61.833 NG

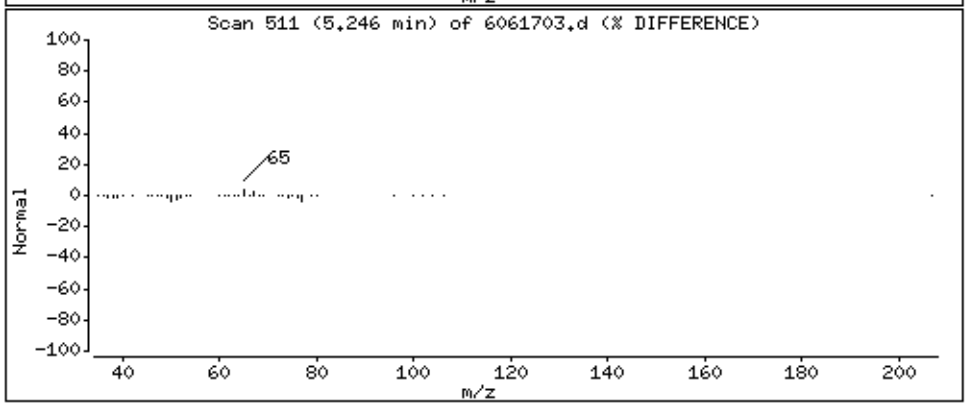












Data File: /chem/msd6.i/17jun16.b/6061703.d

Date : 17-JUN-2016 11:37

Client ID: LCS

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCS;LCS

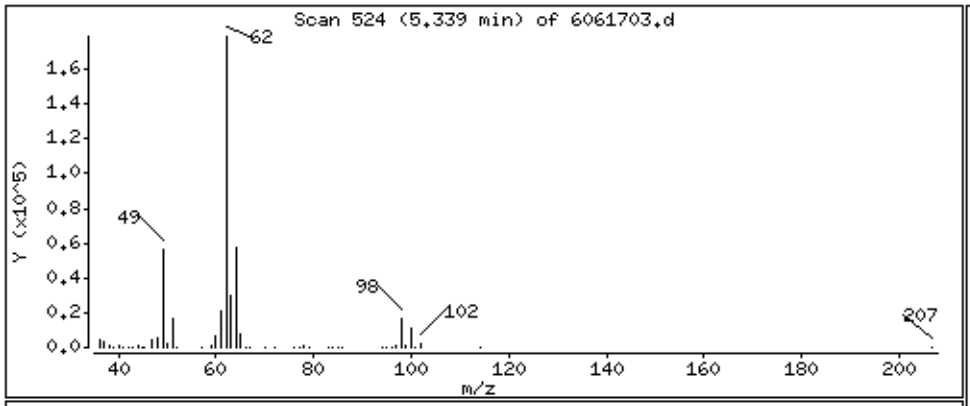
Operator: CT

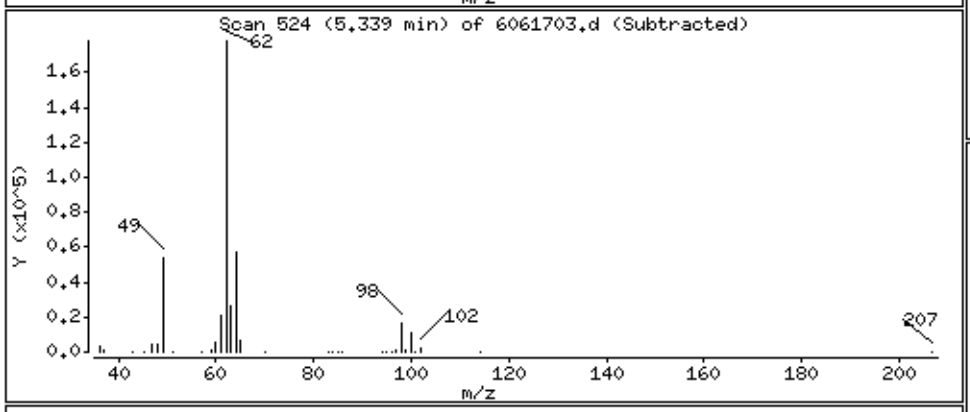
Column phase: RTx-624

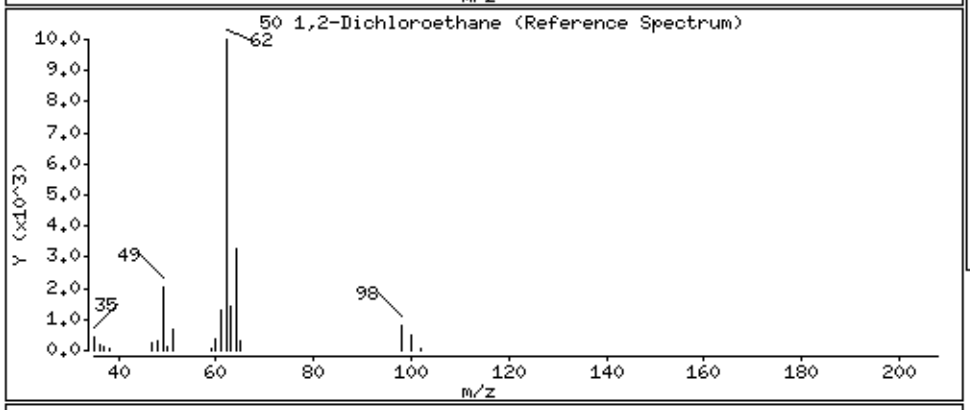
Column diameter: 0.53

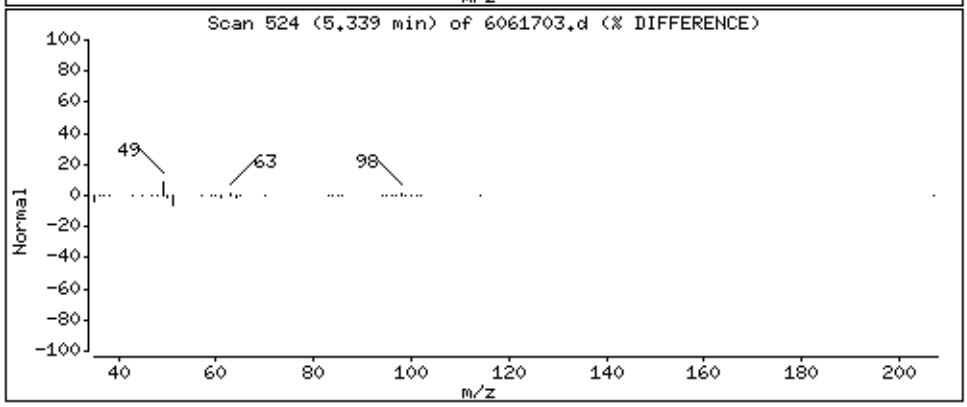
50 1,2-Dichloroethane

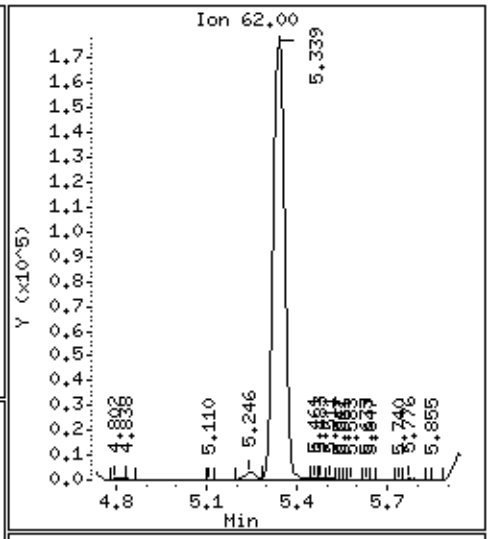
Concentration: 82.800 NG

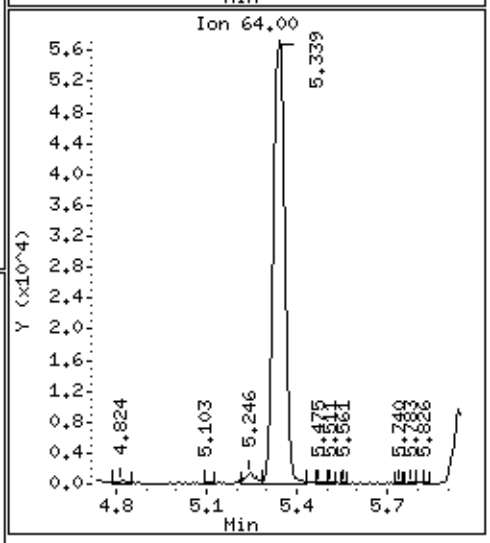












Data File: /chem/msd6.i/17jun16.b/6061703.d

Date : 17-JUN-2016 11:37

Client ID: LCS

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCS;LCS

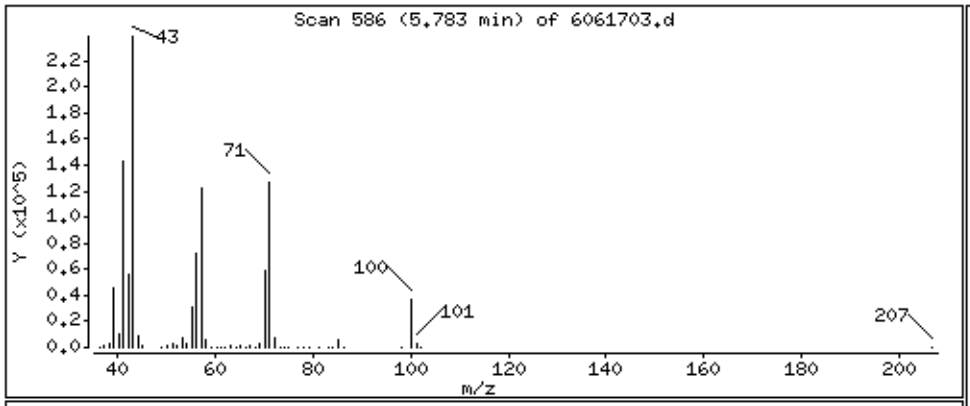
Operator: CT

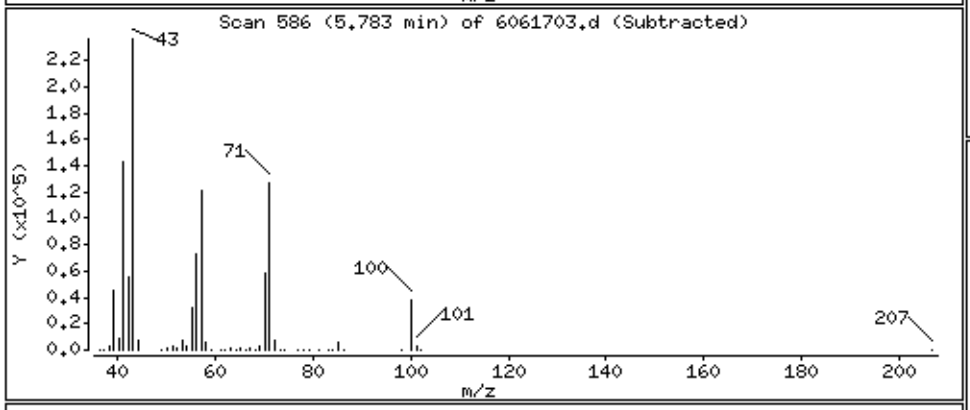
Column phase: RTx-624

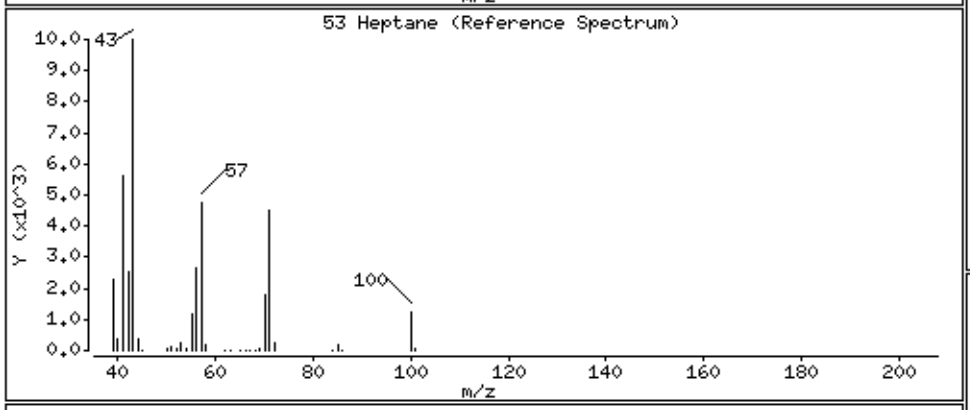
Column diameter: 0.53

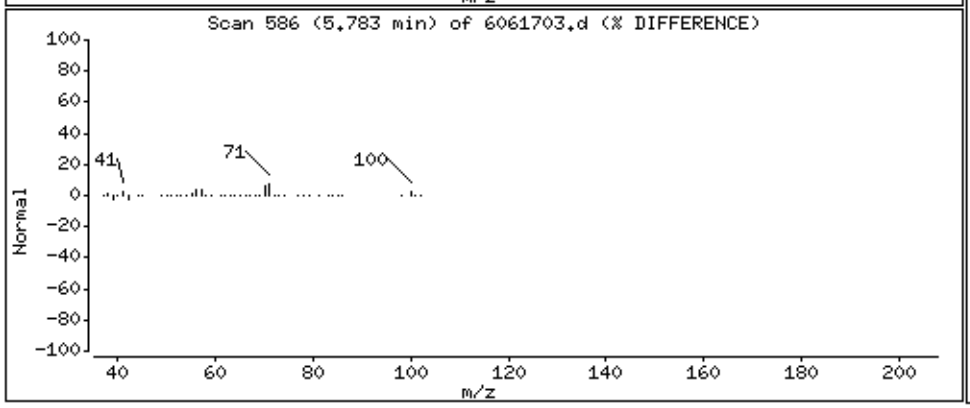
53 Heptane

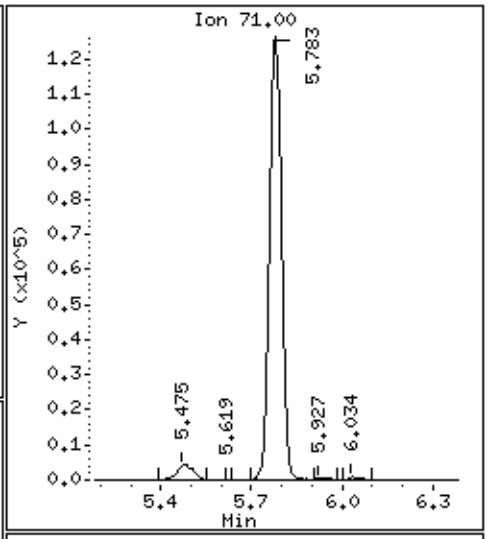
Concentration: 84.631 NG

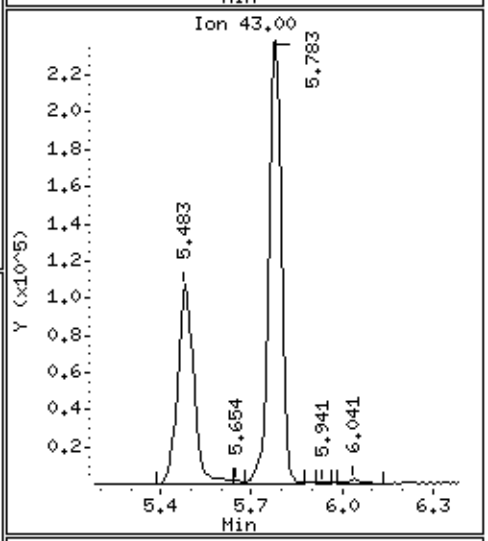


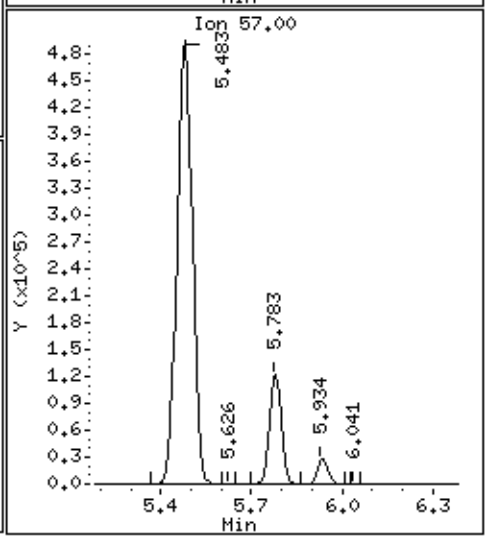












Data File: /chem/msd6.i/17jun16.b/6061703.d

Date : 17-JUN-2016 11:37

Client ID: LCS

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCS;LCS

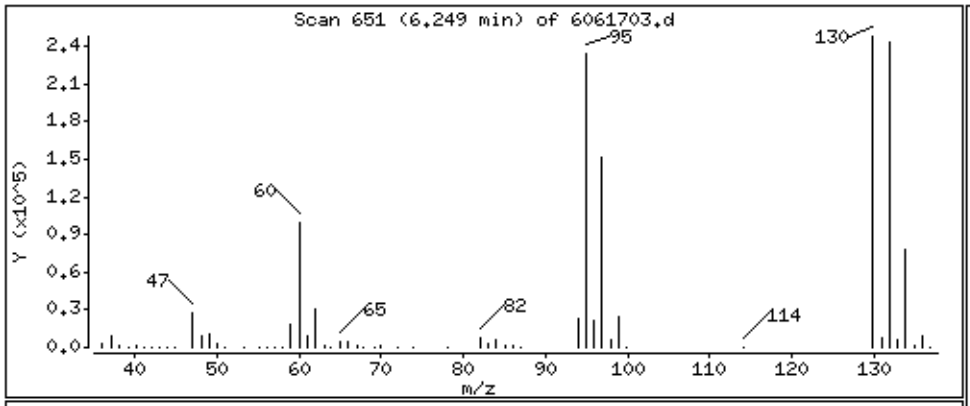
Operator: CT

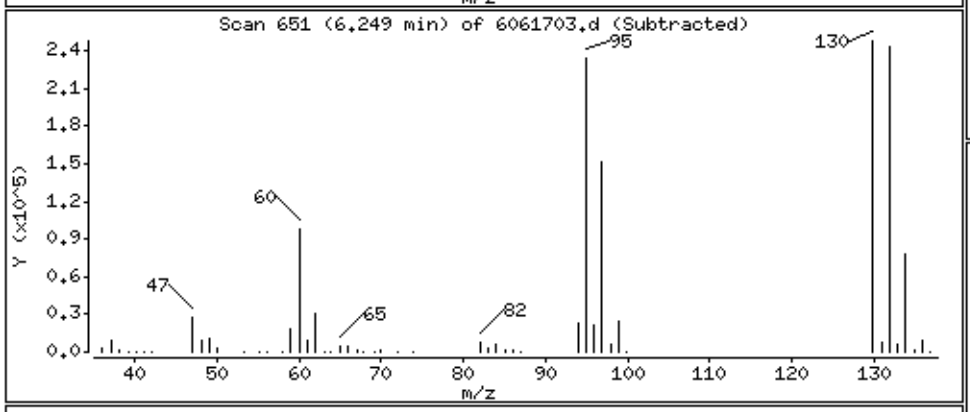
Column phase: RTx-624

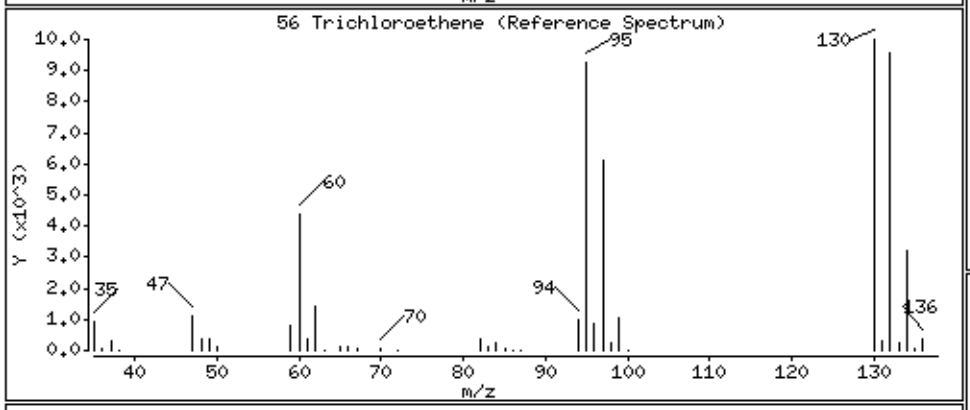
Column diameter: 0.53

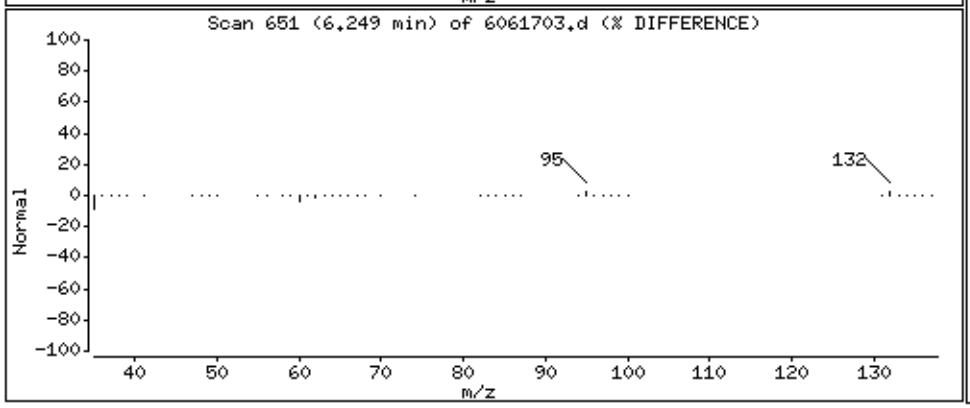
56 Trichloroethene

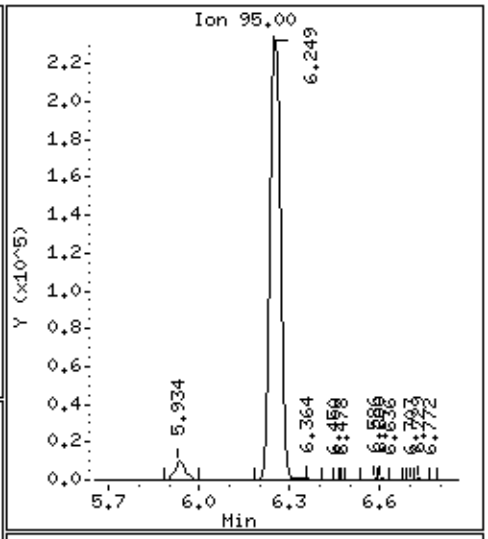
Concentration: 104.69 NG

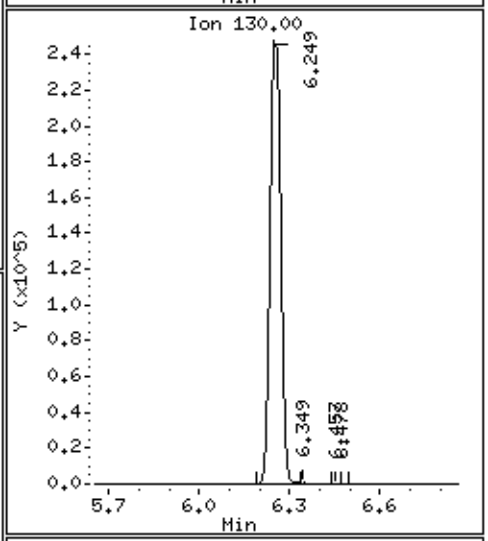


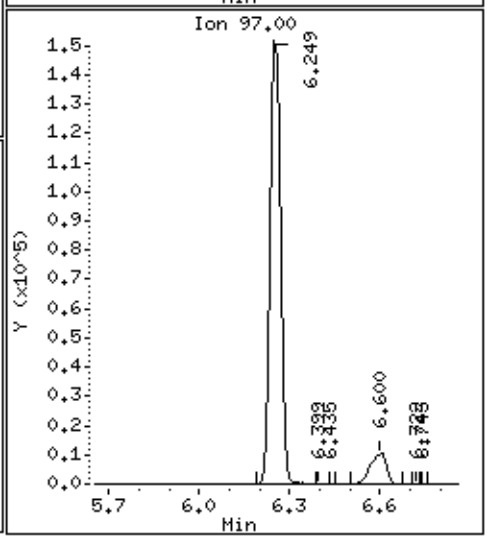












Data File: /chem/msd6.i/17jun16.b/6061703.d

Date : 17-JUN-2016 11:37

Client ID: LCS

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCS;LCS

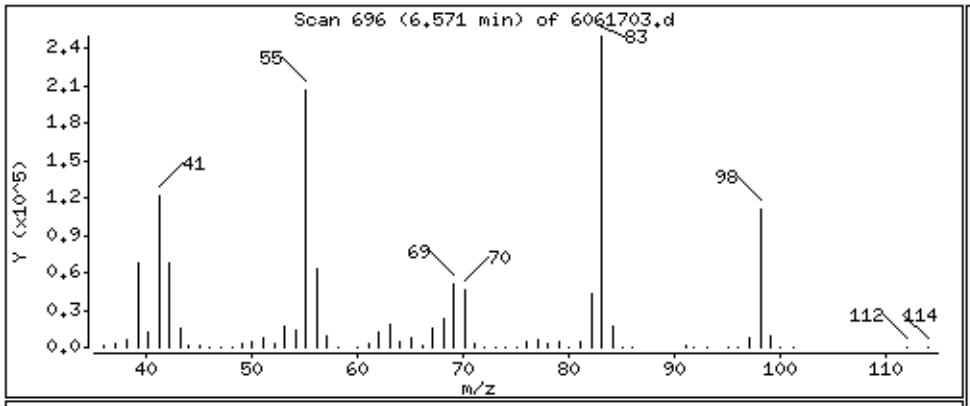
Operator: CT

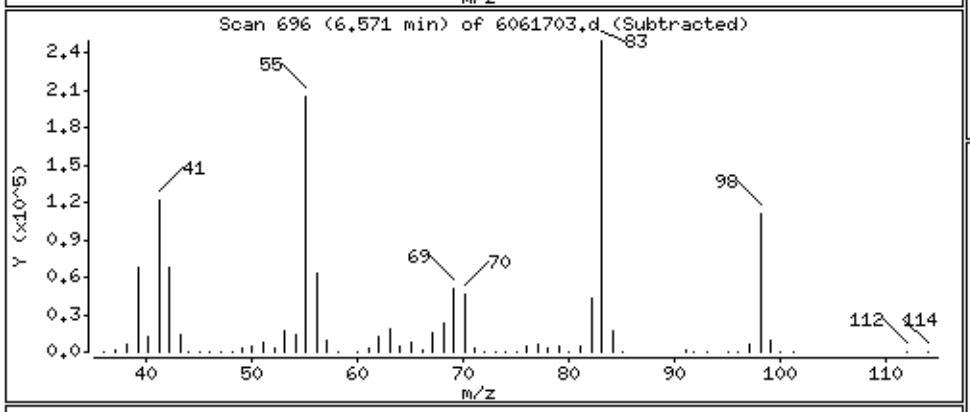
Column phase: RTx-624

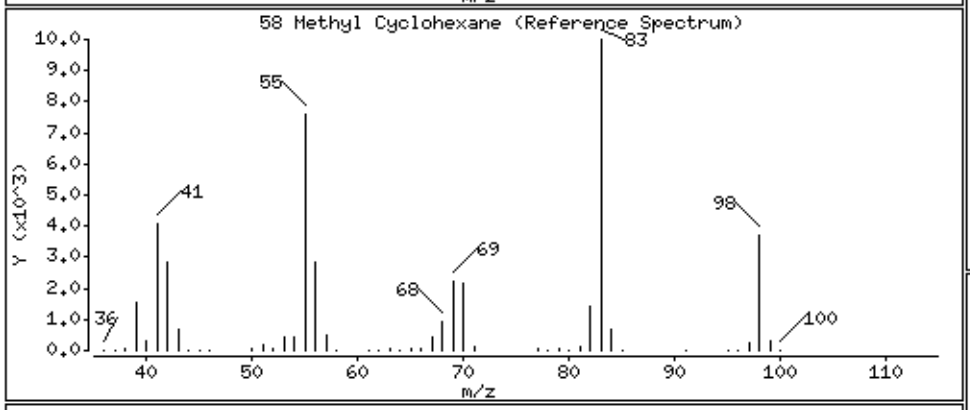
Column diameter: 0.53

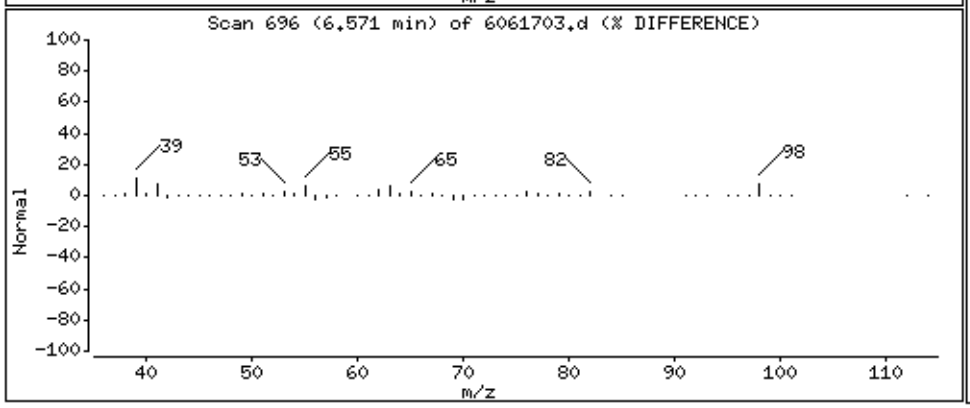
58 Methyl Cyclohexane

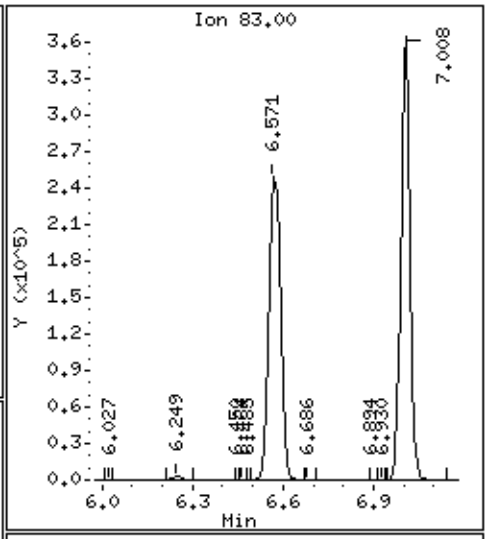
Concentration: 86.206 NG

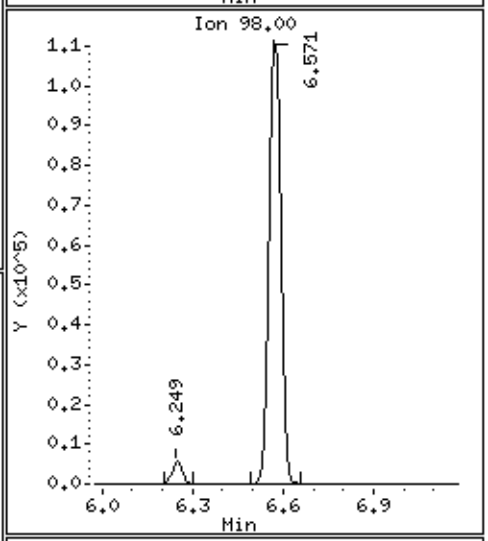


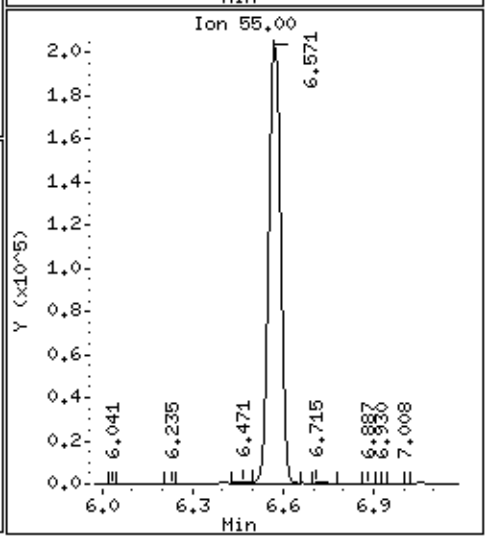












Data File: /chem/msd6.i/17jun16.b/6061703.d

Date : 17-JUN-2016 11:37

Client ID: LCS

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCS;LCS

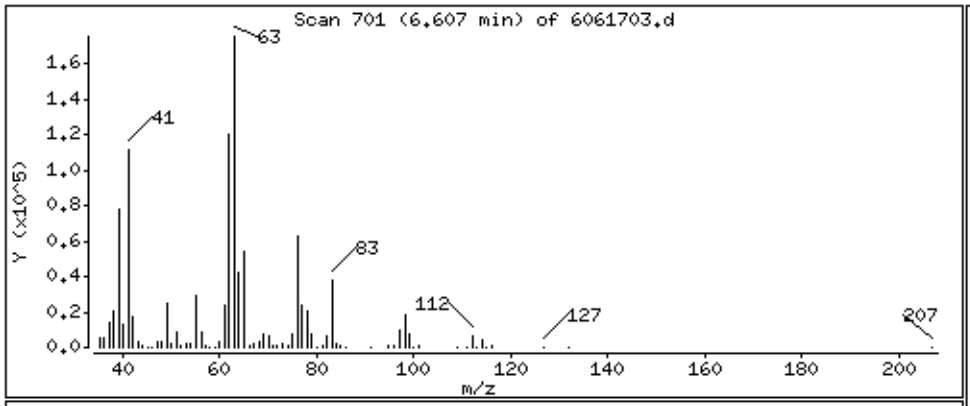
Operator: CT

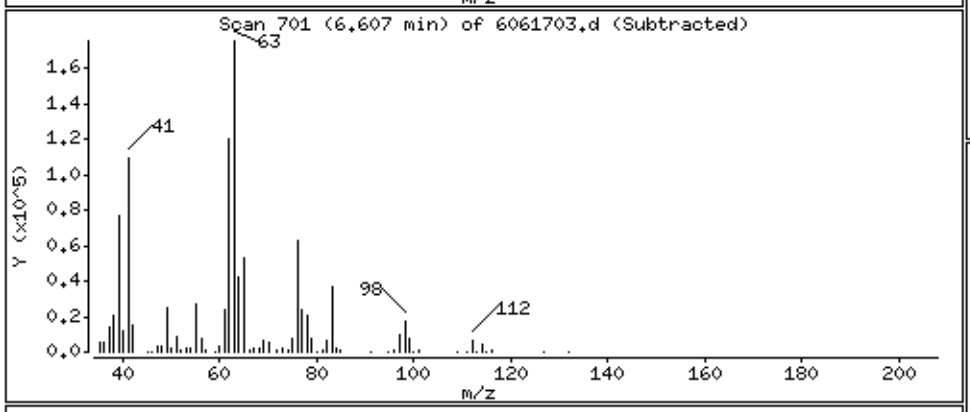
Column phase: RTx-624

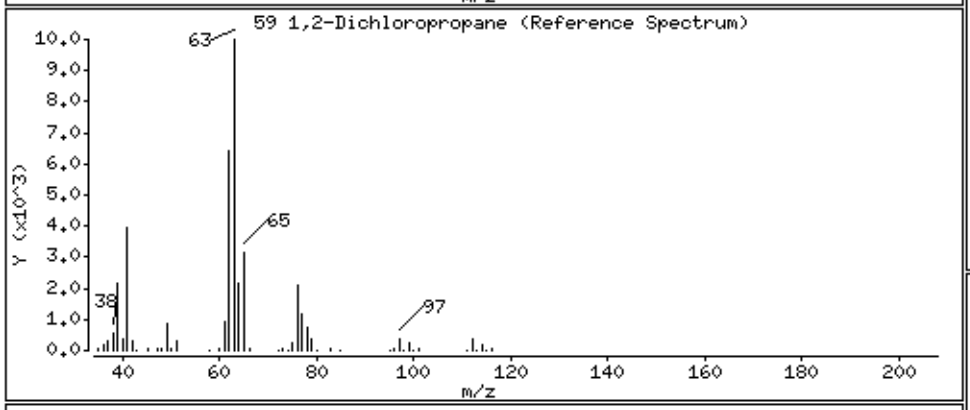
Column diameter: 0.53

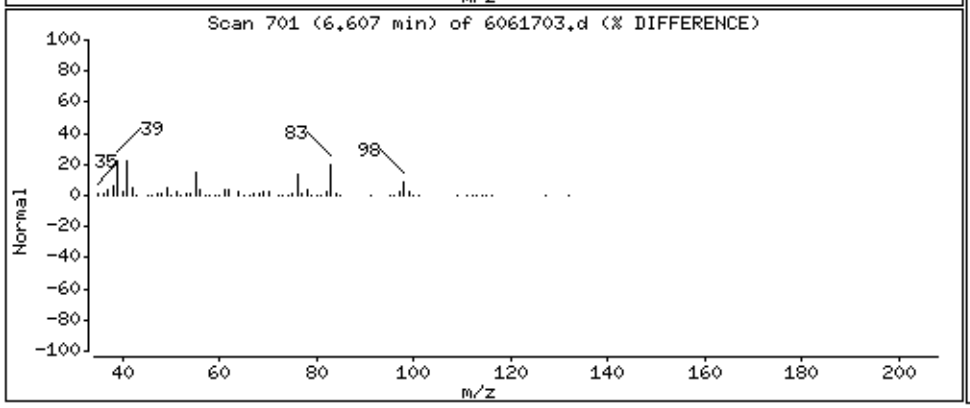
59 1,2-Dichloropropane

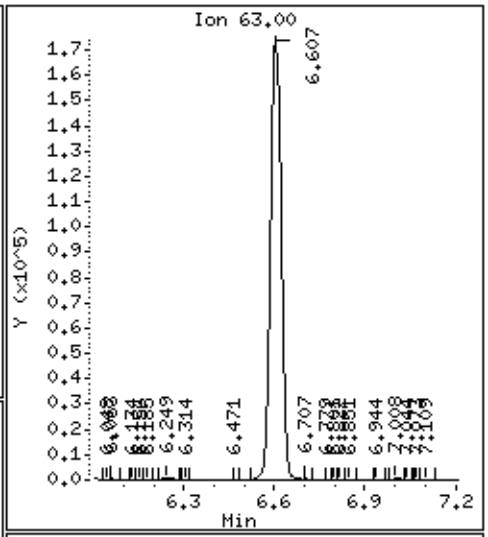
Concentration: 110.36 NG

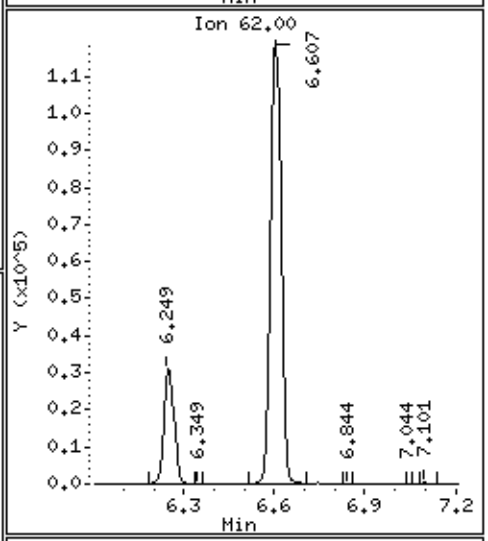


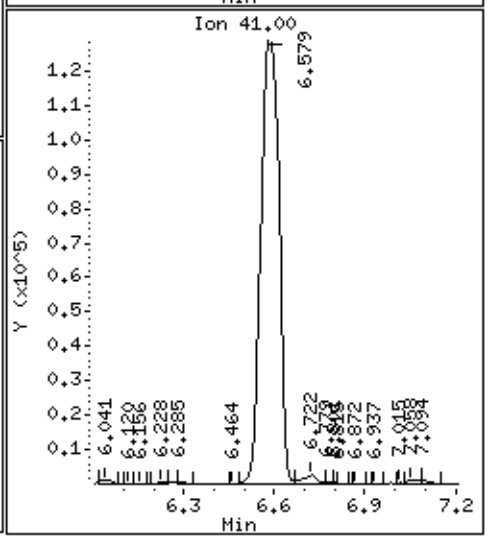












Data File: /chem/msd6.i/17jun16.b/6061703.d

Date : 17-JUN-2016 11:37

Client ID: LCS

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCS;LCS

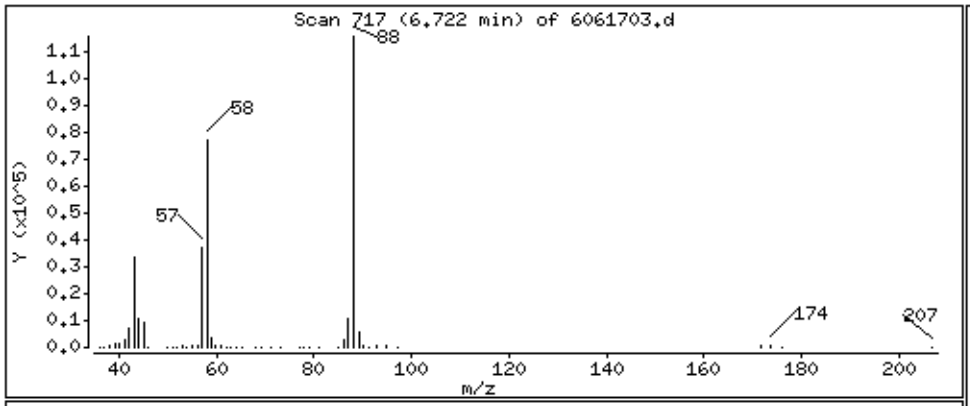
Operator: CT

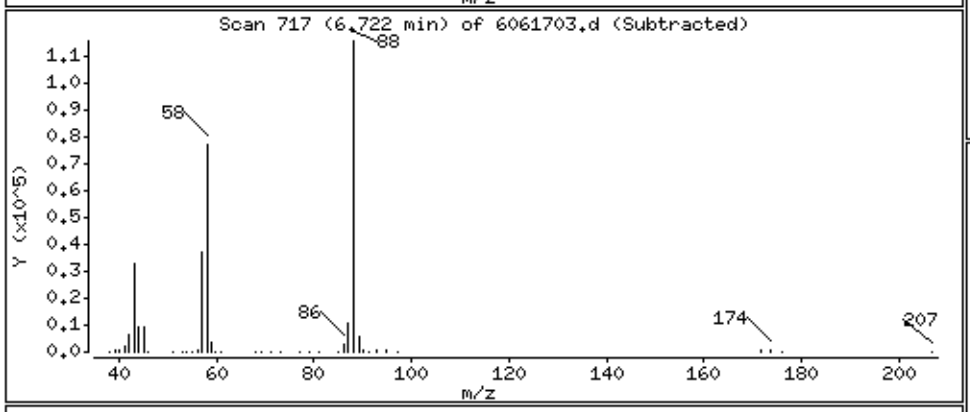
Column phase: RTx-624

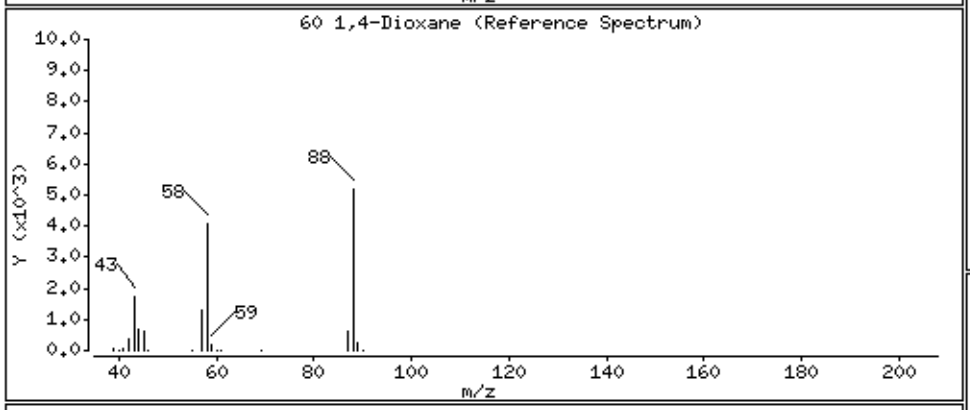
Column diameter: 0.53

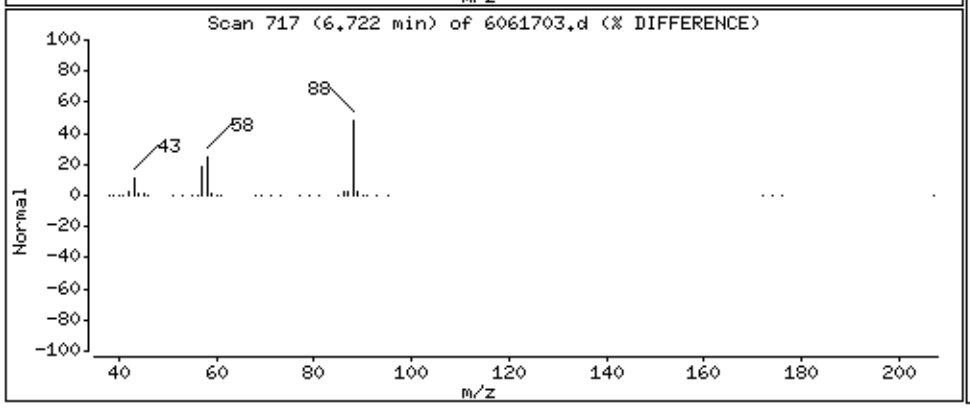
60 1,4-Dioxane

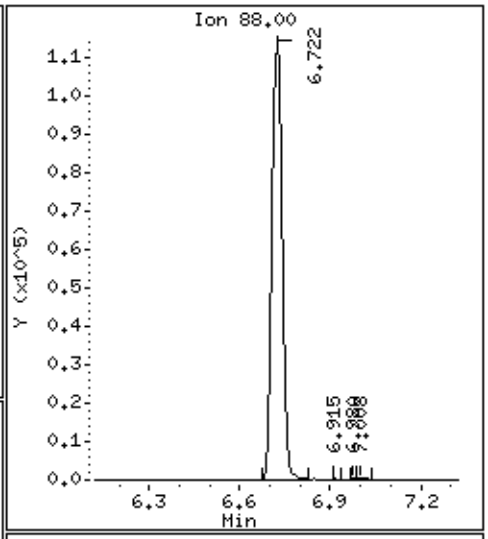
Concentration: 75.148 NG

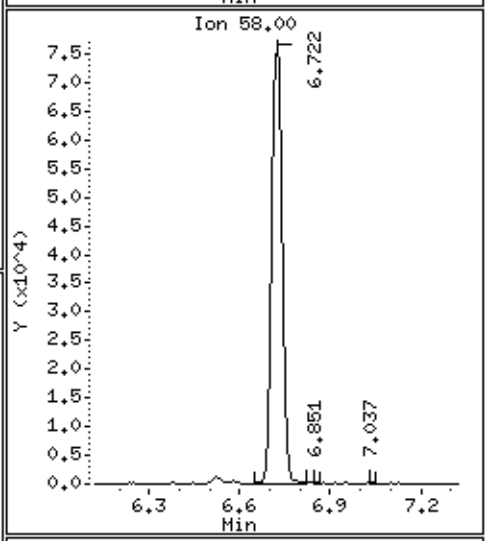


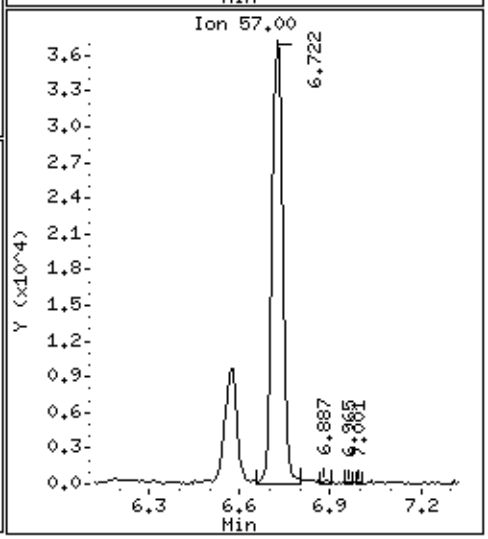












Data File: /chem/msd6.i/17jun16.b/6061703.d

Date : 17-JUN-2016 11:37

Client ID: LCS

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCS;LCS

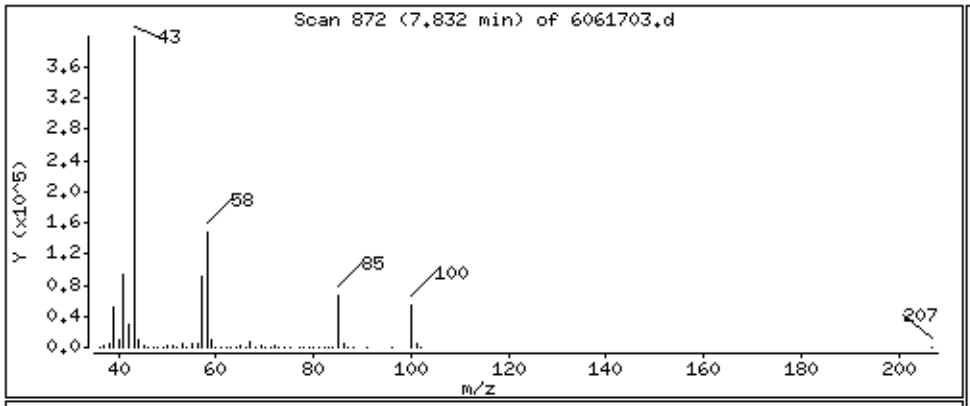
Operator: CT

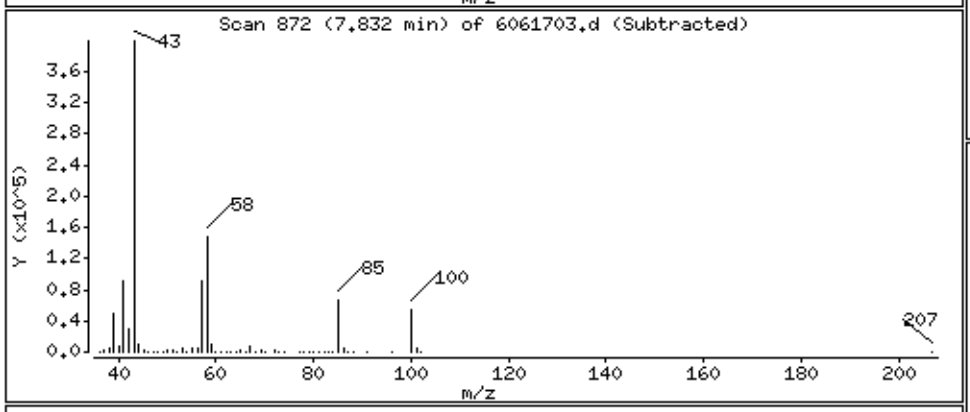
Column phase: RTx-624

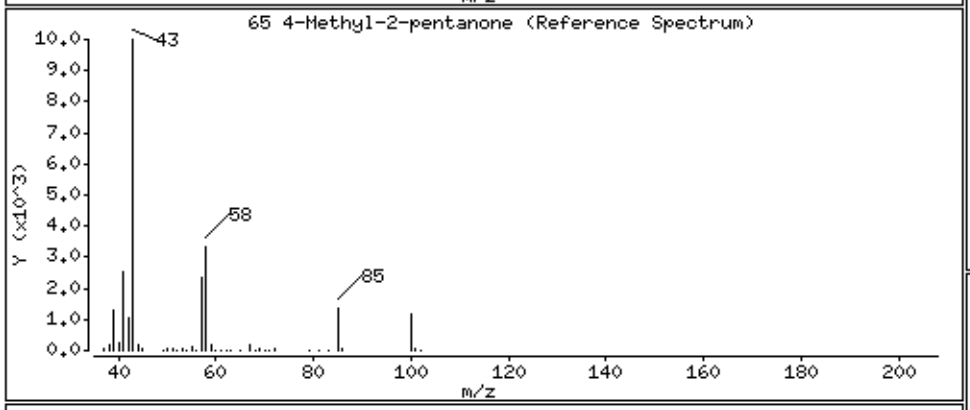
Column diameter: 0.53

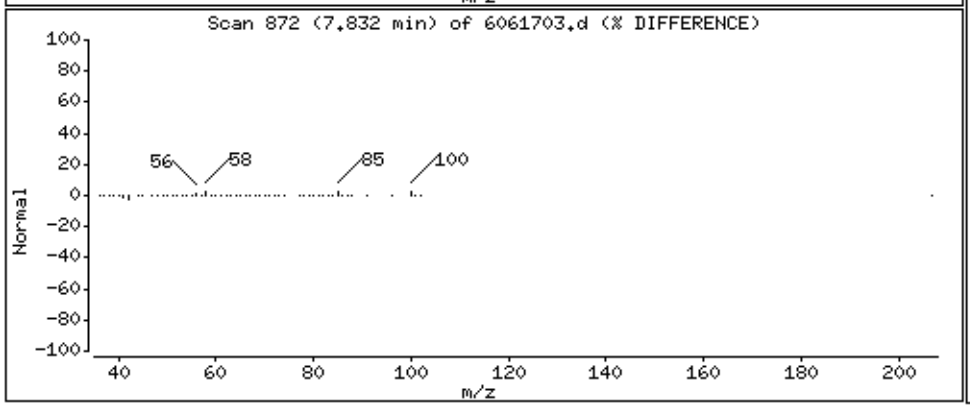
65 4-Methyl-2-pentanone

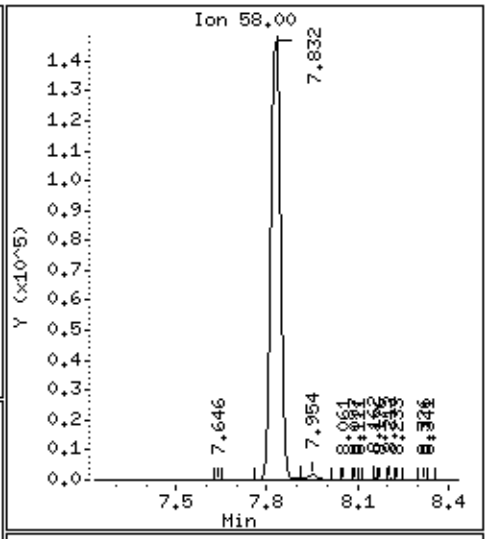
Concentration: 91.530 NG

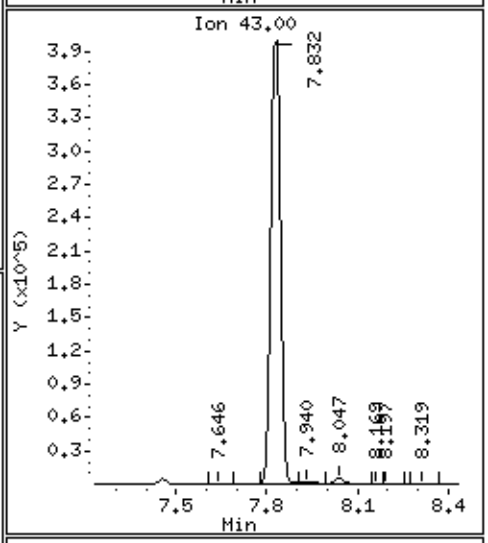


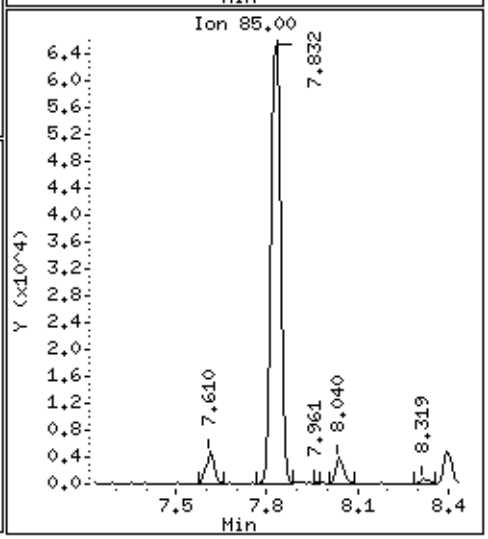












Data File: /chem/msd6.i/17jun16.b/6061703.d

Date : 17-JUN-2016 11:37

Client ID: LCS

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCS;LCS

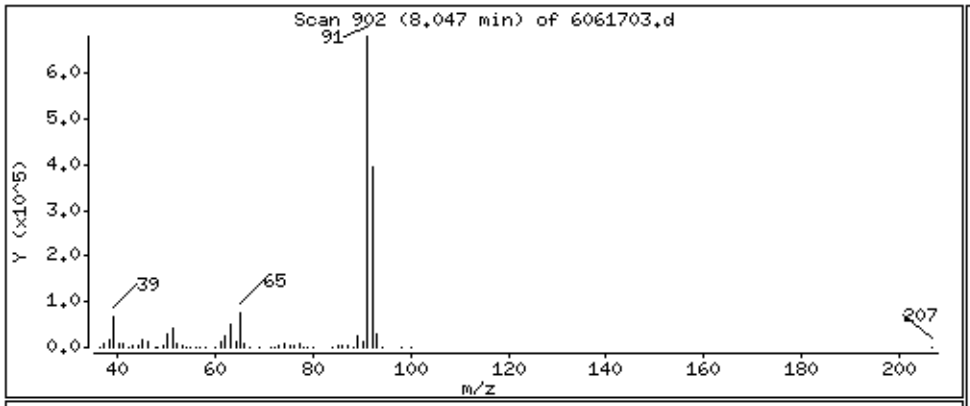
Operator: CT

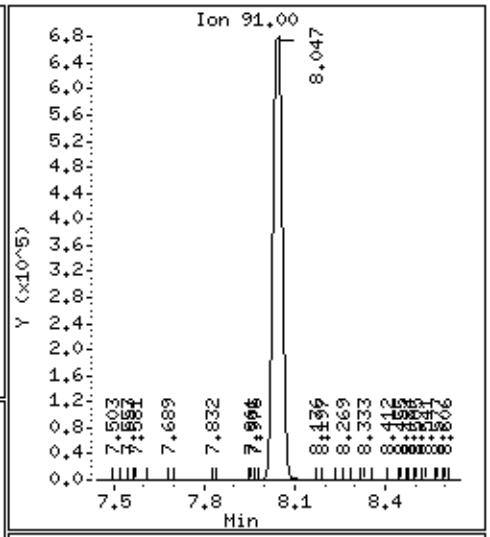
Column phase: RTx-624

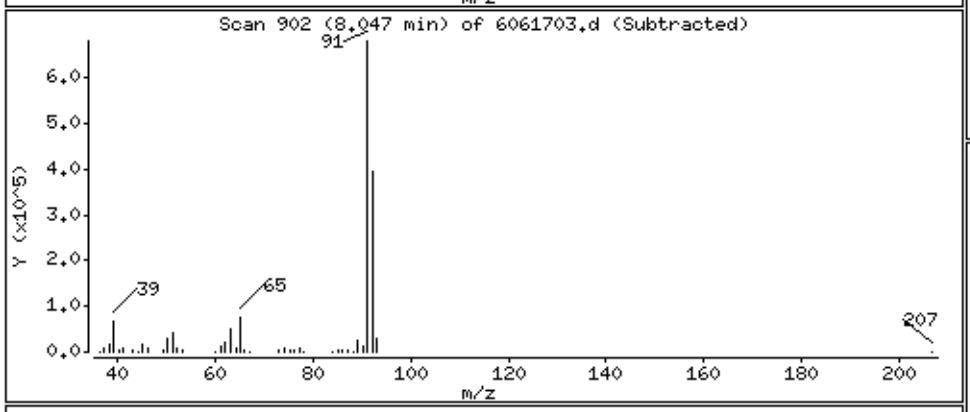
Column diameter: 0.53

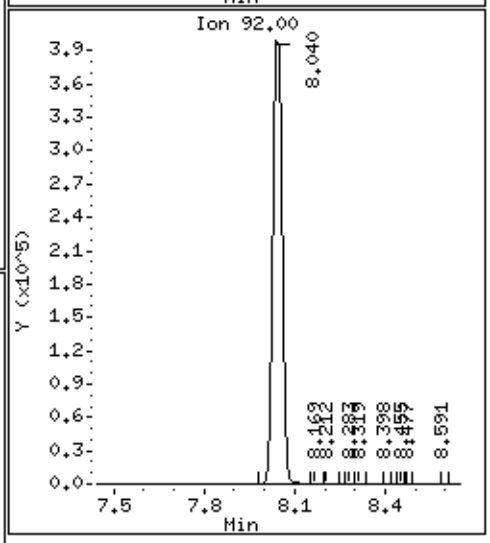
67 Toluene

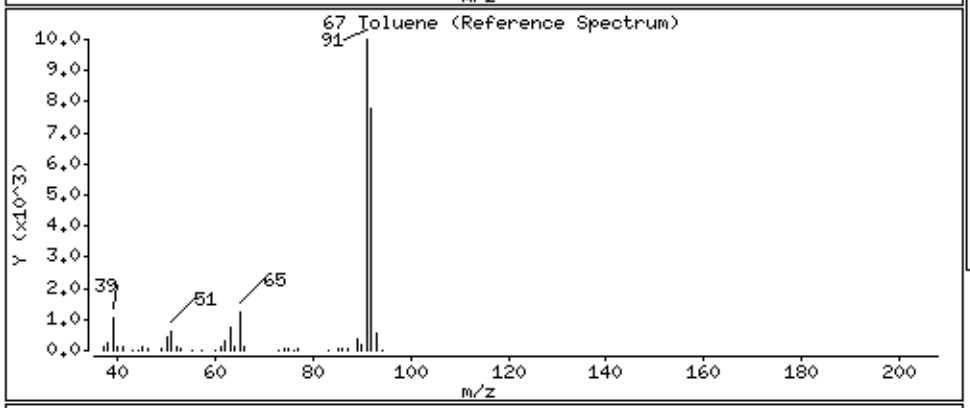
Concentration: 83.058 NG

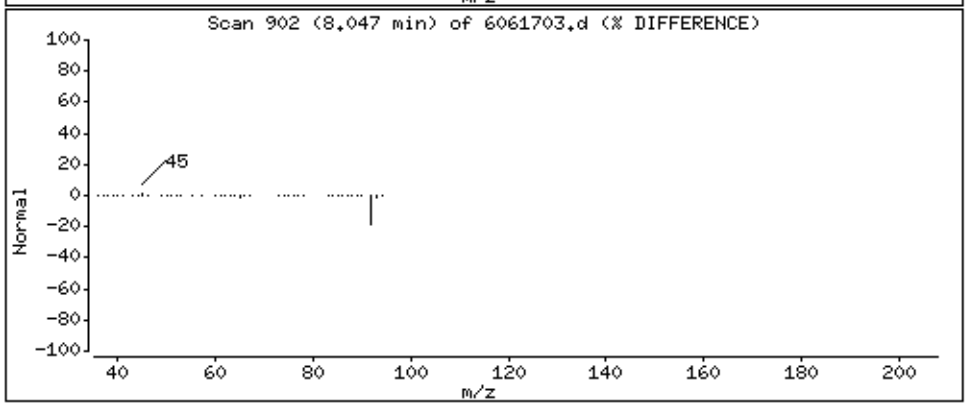












Data File: /chem/msd6.i/17jun16.b/6061703.d

Date : 17-JUN-2016 11:37

Client ID: LCS

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCS;LCS

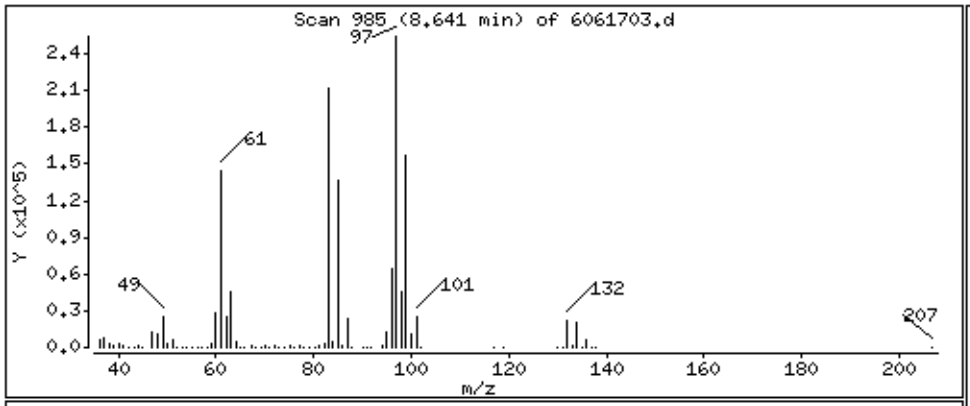
Operator: CT

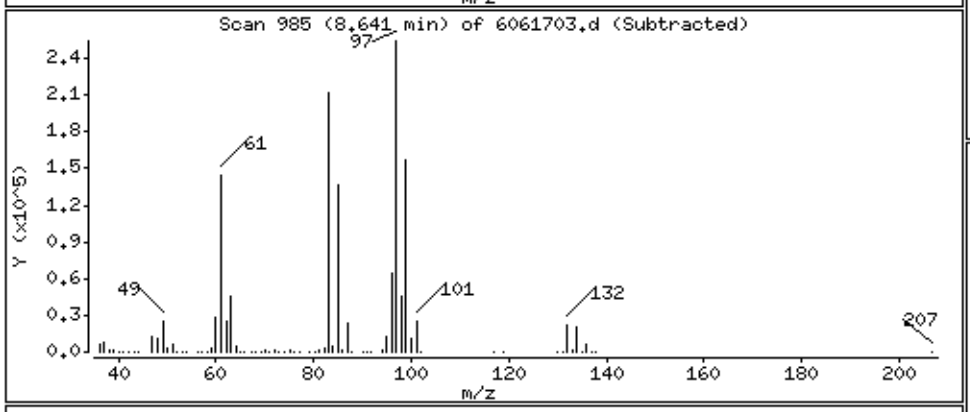
Column phase: RTx-624

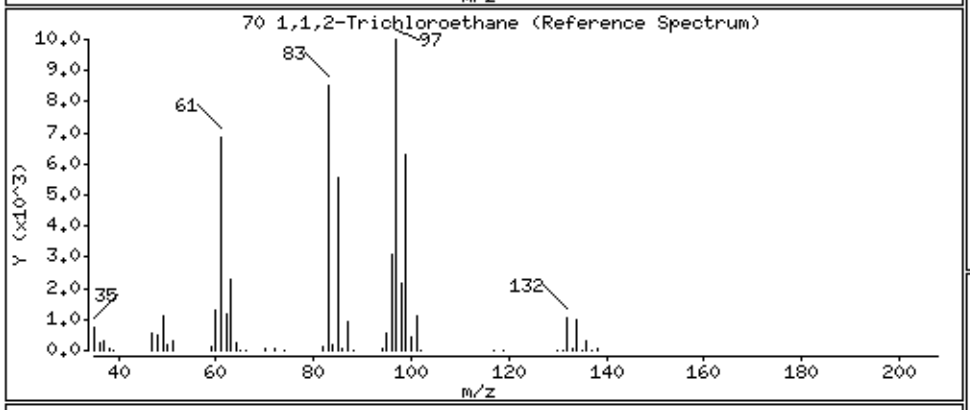
Column diameter: 0.53

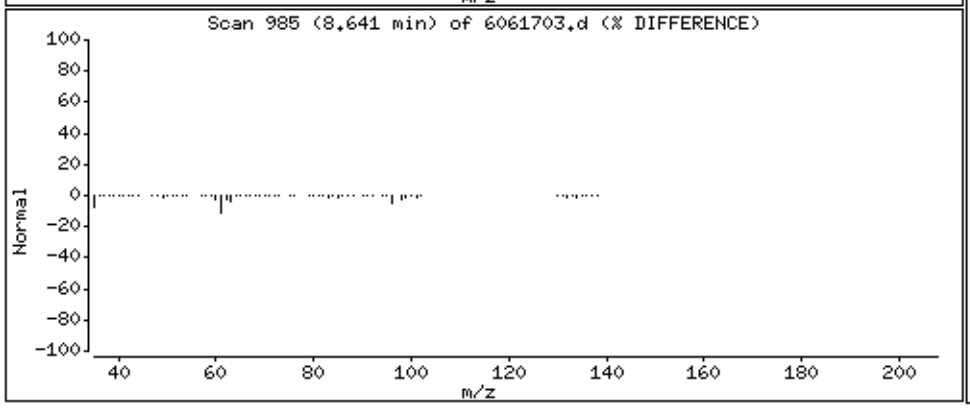
70 1,1,2-Trichloroethane

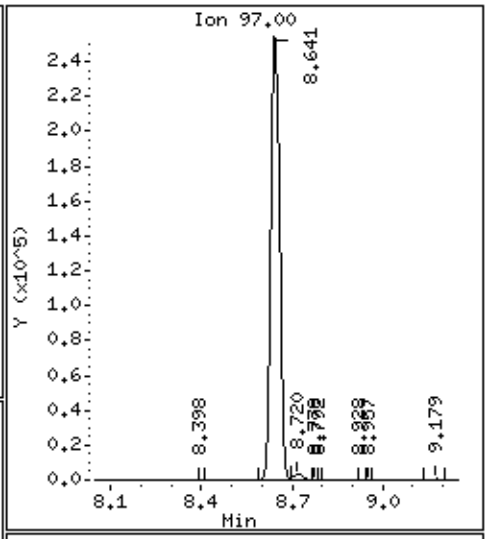
Concentration: 115.15 NG

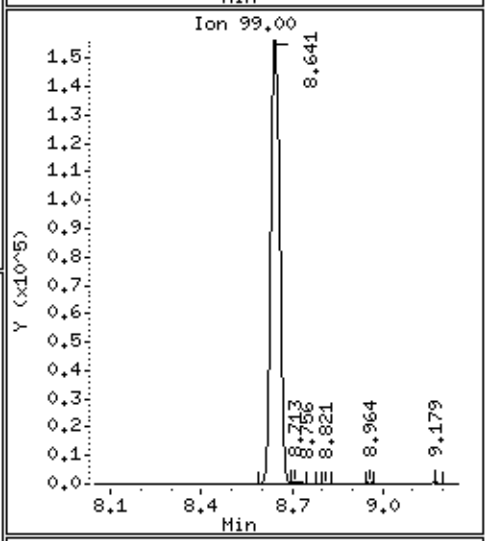


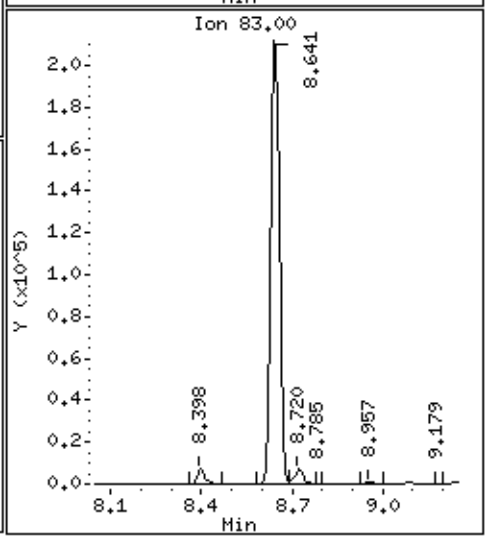












Data File: /chem/msd6.i/17jun16.b/6061703.d

Date : 17-JUN-2016 11:37

Client ID: LCS

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCS;LCS

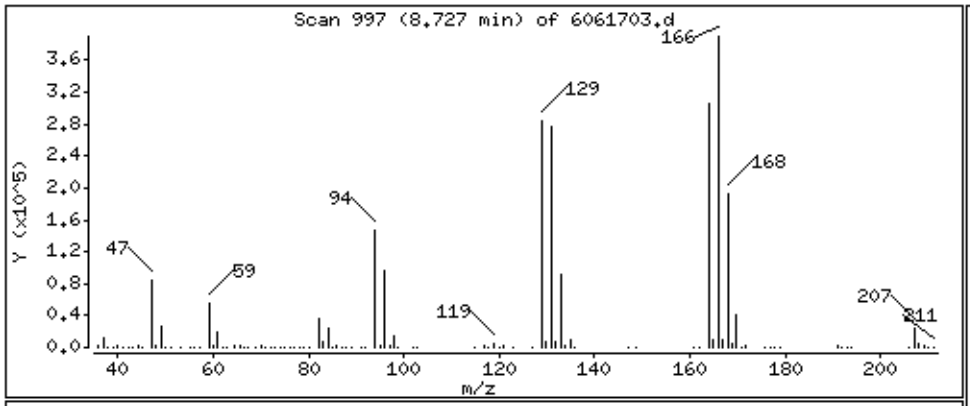
Operator: CT

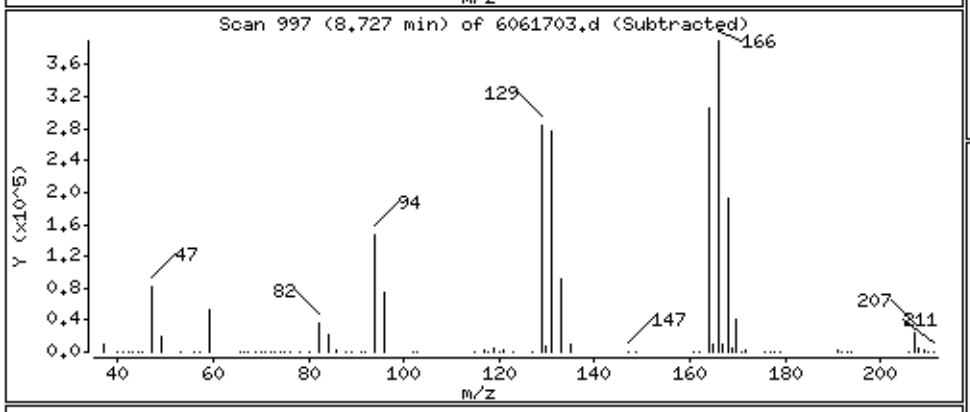
Column phase: RTx-624

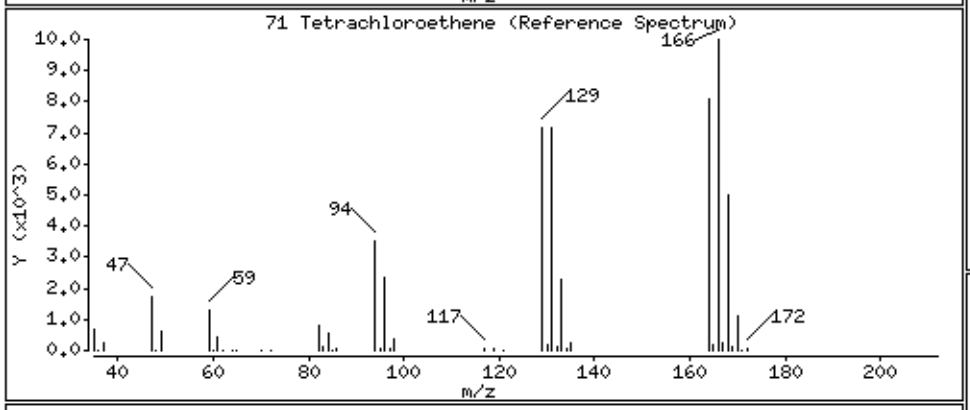
Column diameter: 0.53

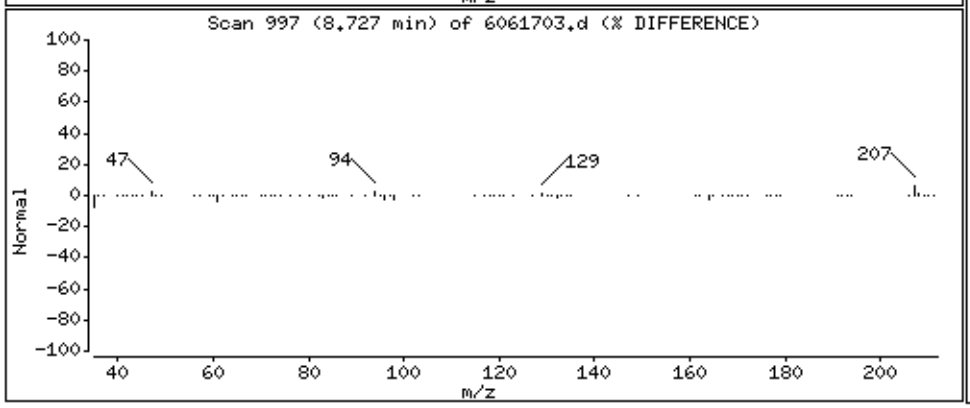
71 Tetrachloroethene

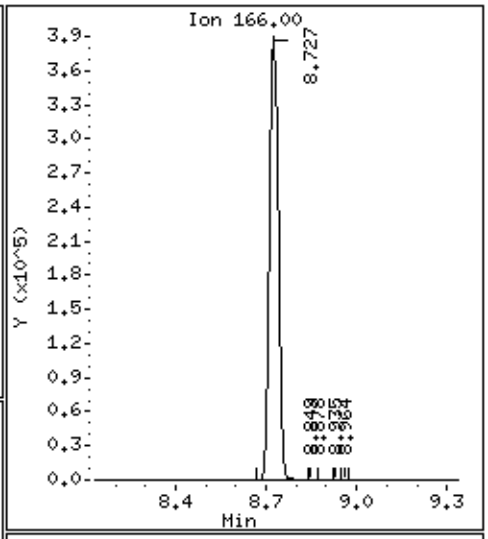
Concentration: 138.12 NG

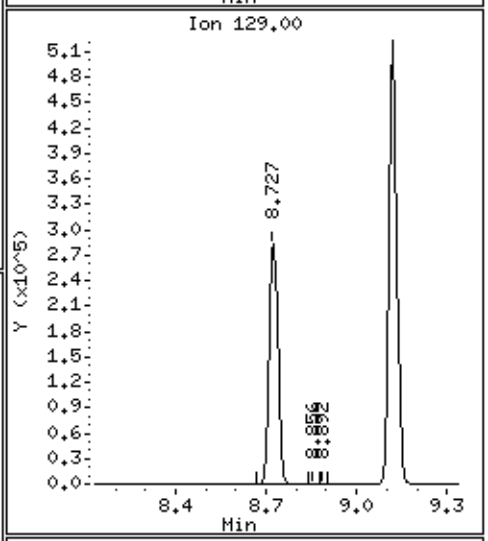


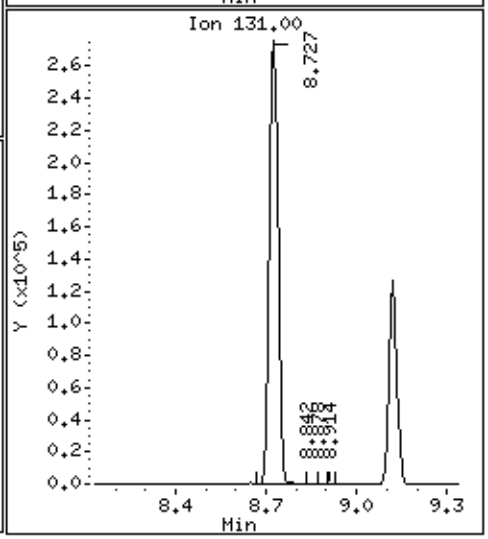












Data File: /chem/msd6.i/17jun16.b/6061703.d

Date : 17-JUN-2016 11:37

Client ID: LCS

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCS;LCS

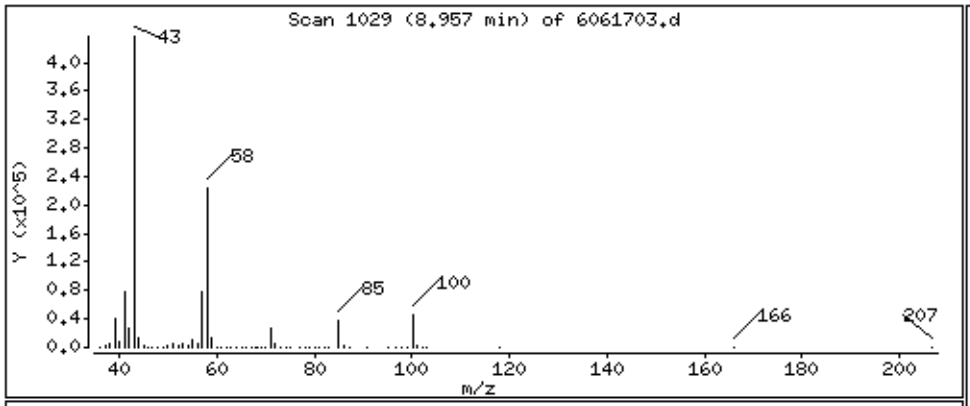
Operator: CT

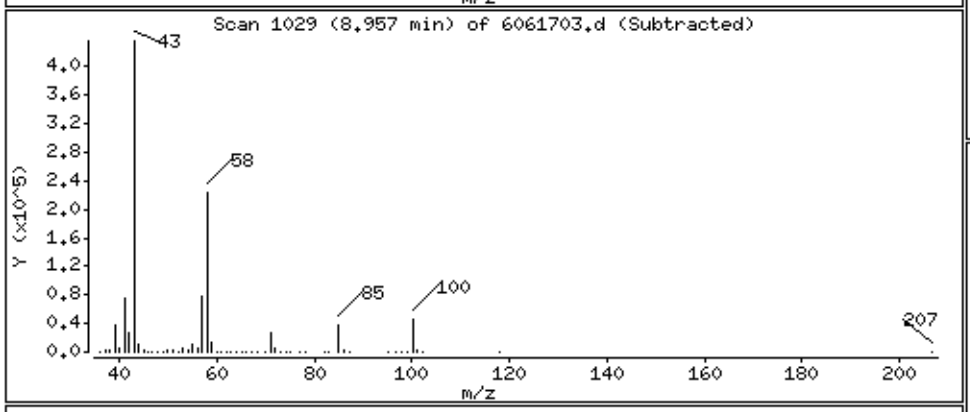
Column phase: RTx-624

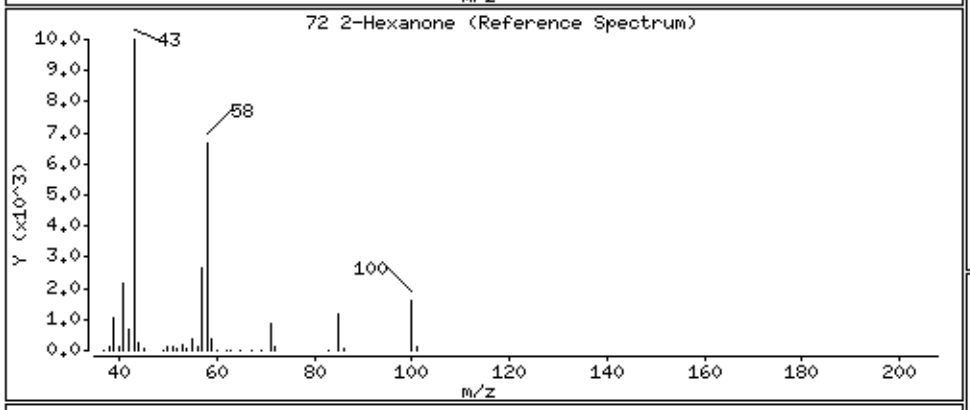
Column diameter: 0.53

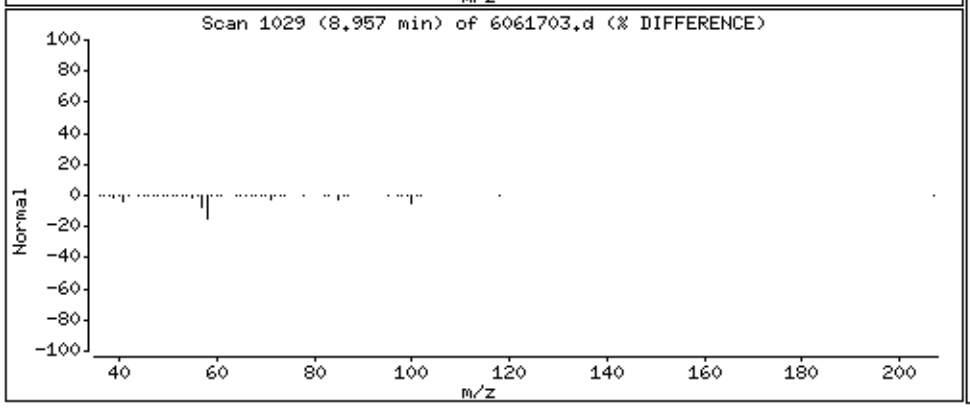
72 2-Hexanone

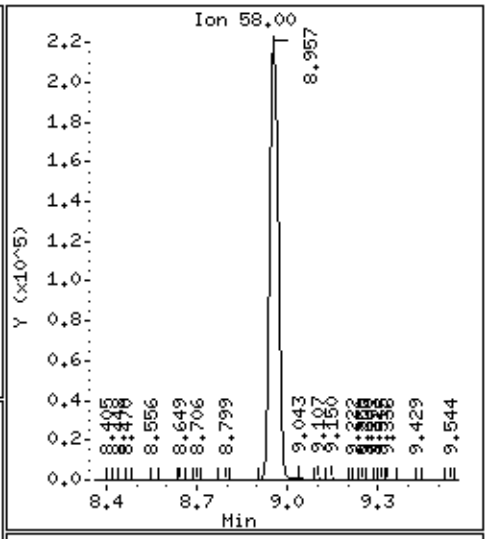
Concentration: 97.024 NG

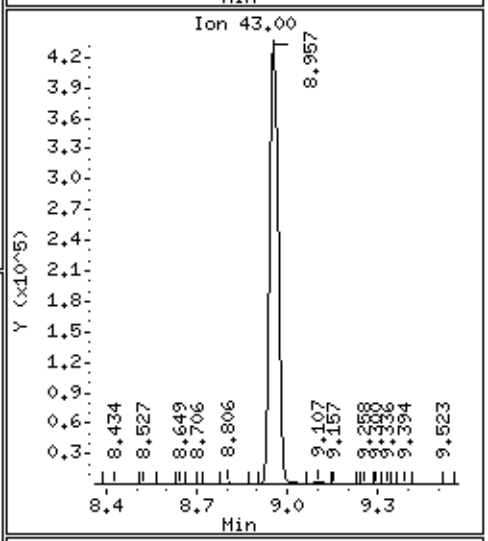


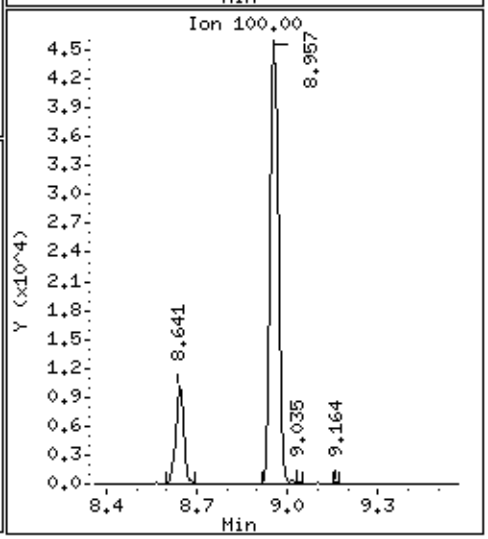












Data File: /chem/msd6.i/17jun16.b/6061703.d

Date : 17-JUN-2016 11:37

Client ID: LCS

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCS;LCS

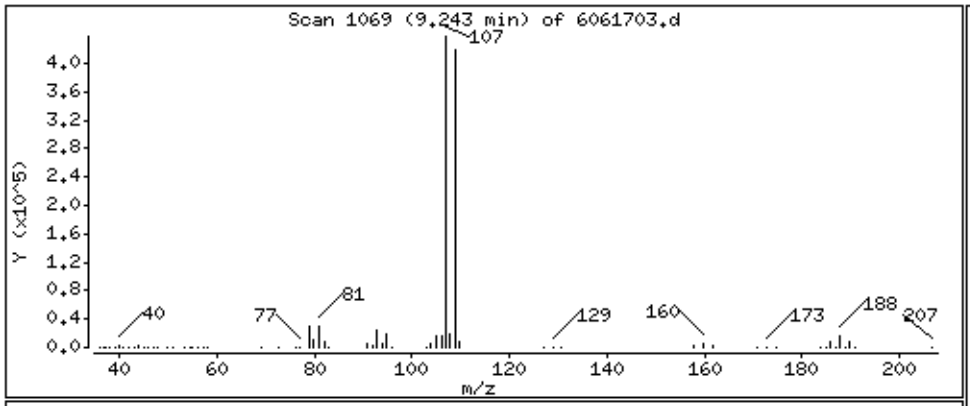
Operator: CT

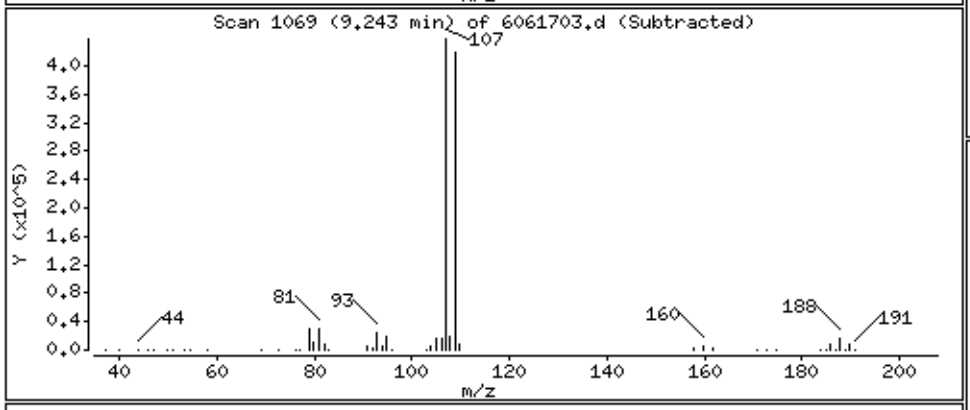
Column phase: RTx-624

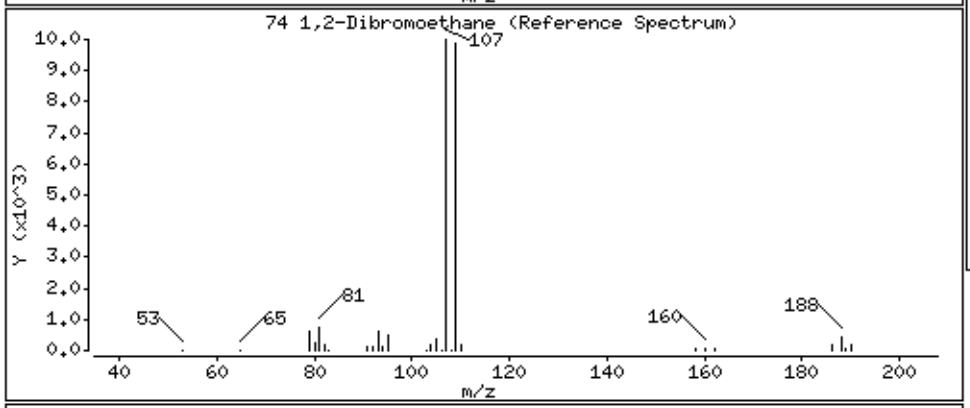
Column diameter: 0.53

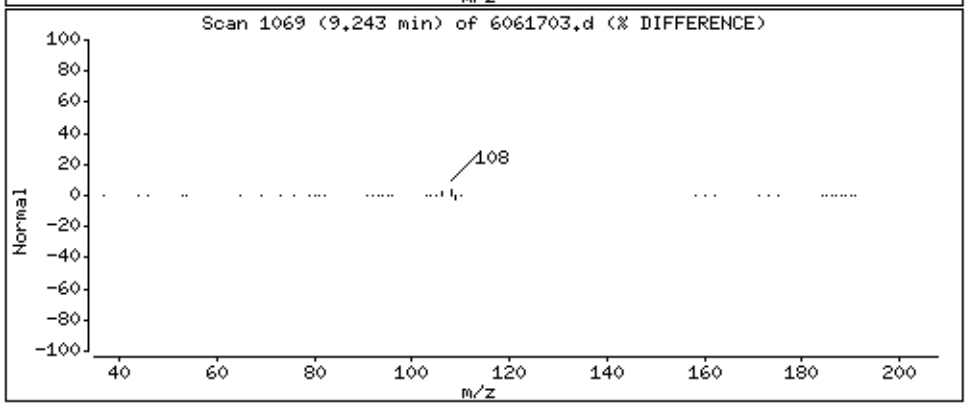
74 1,2-Dibromoethane

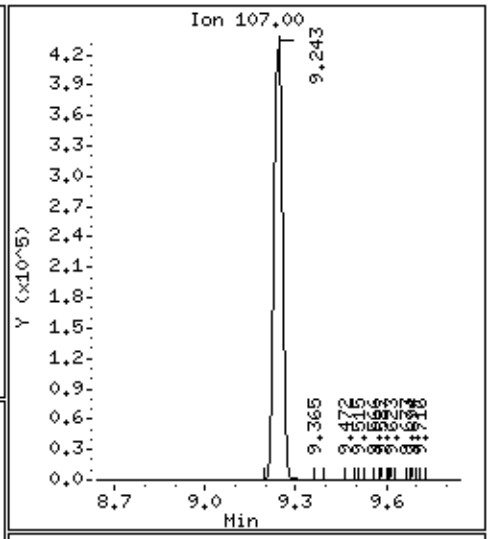
Concentration: 184.27 NG

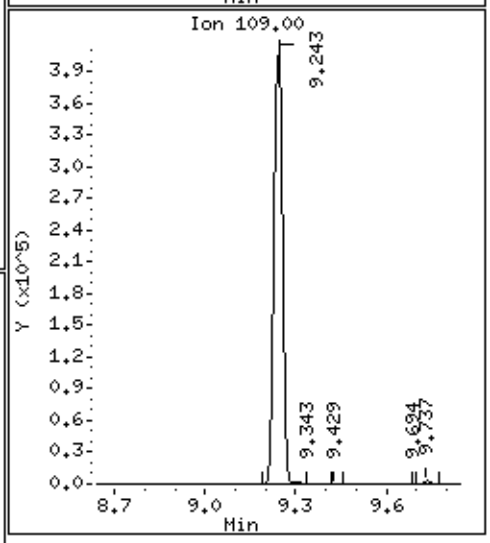












Data File: /chem/msd6.i/17jun16.b/6061703.d

Date : 17-JUN-2016 11:37

Client ID: LCS

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCS;LCS

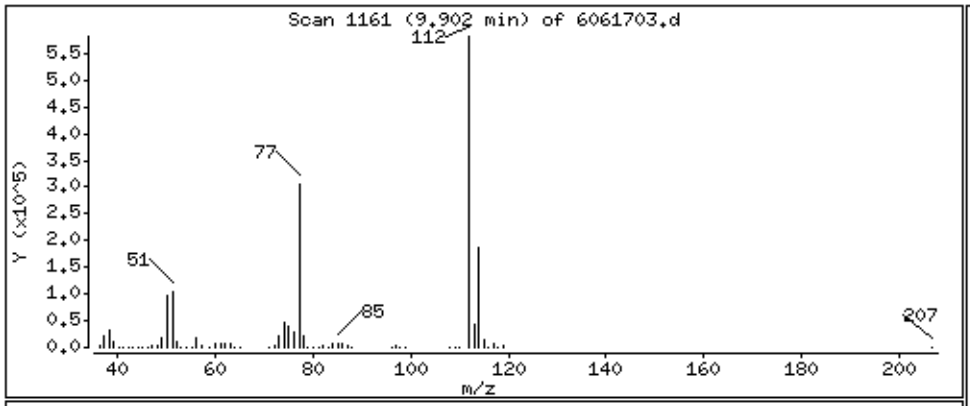
Operator: CT

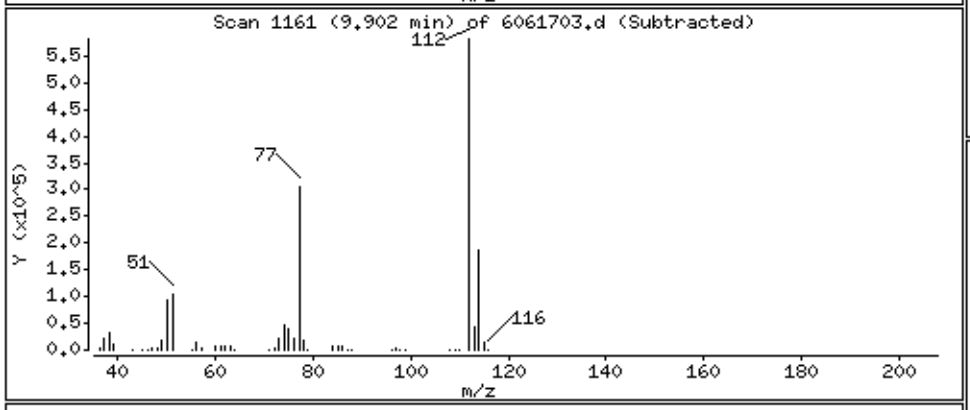
Column phase: RTx-624

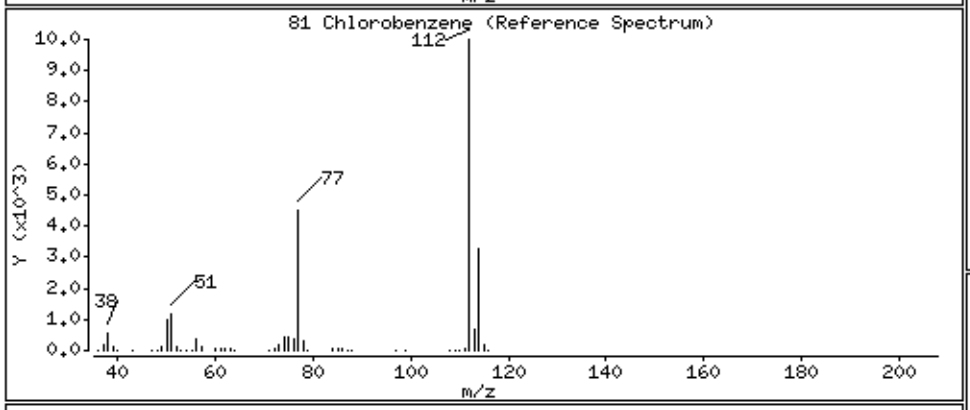
Column diameter: 0.53

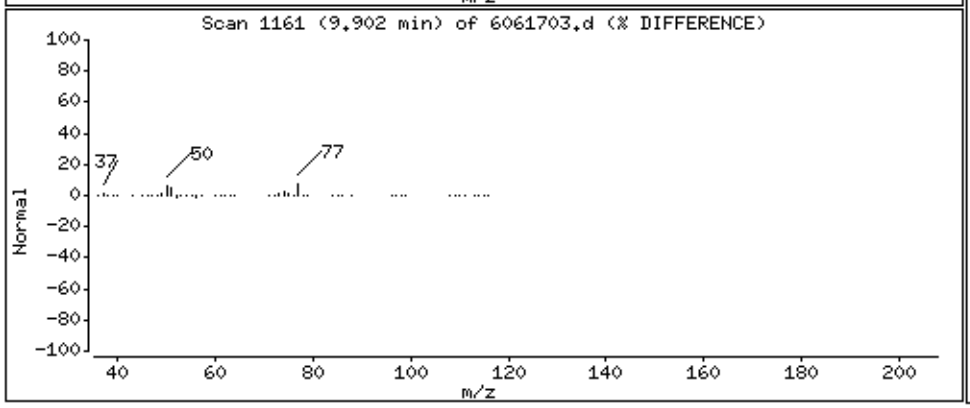
81 Chlorobenzene

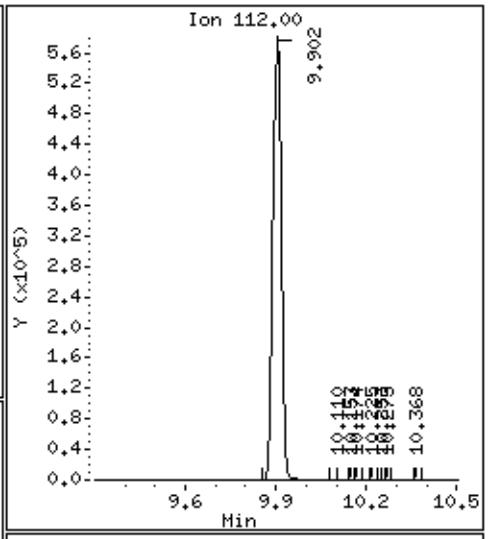
Concentration: 88.796 NG

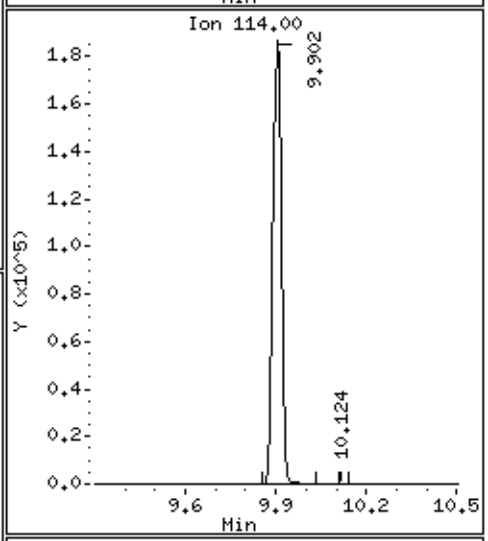


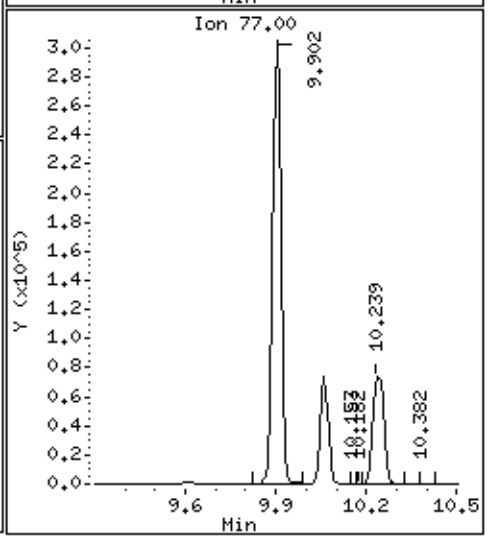












Data File: /chem/msd6.i/17jun16.b/6061703.d

Date : 17-JUN-2016 11:37

Client ID: LCS

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCS;LCS

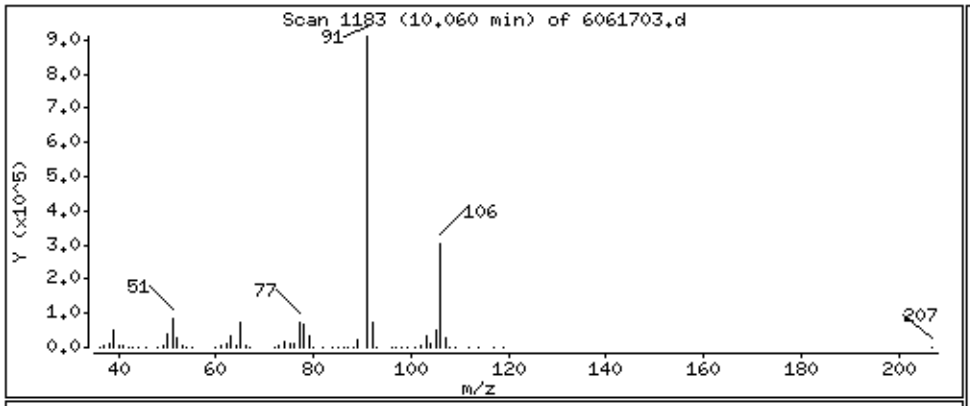
Operator: CT

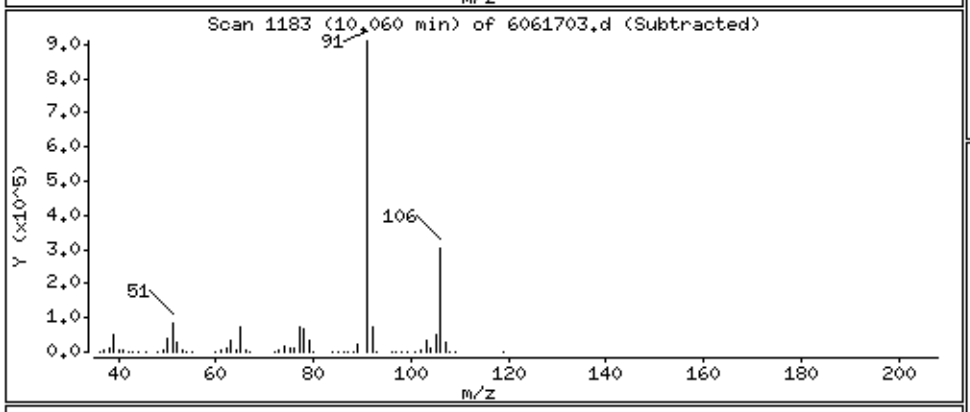
Column phase: RTx-624

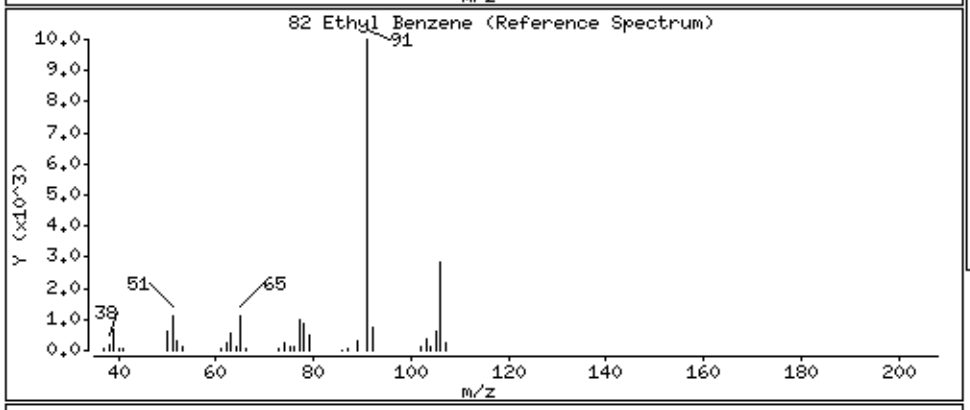
Column diameter: 0.53

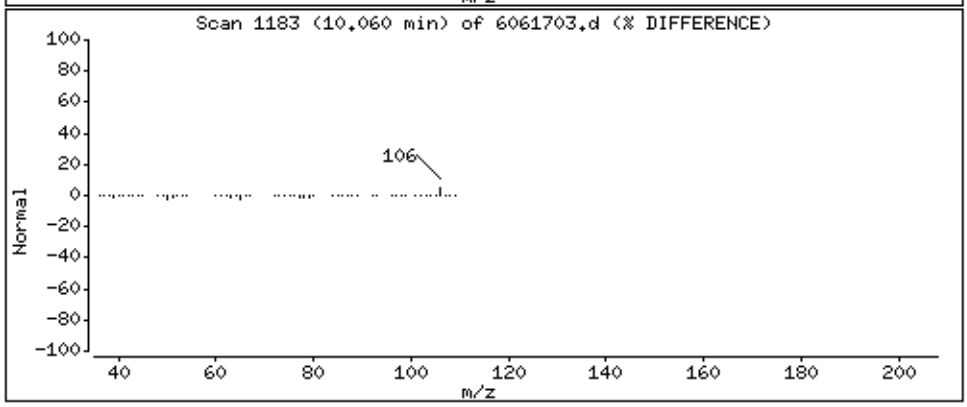
82 Ethyl Benzene

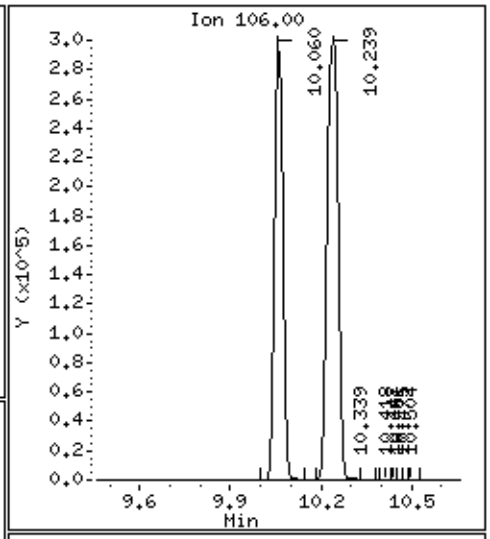
Concentration: 85.476 NG

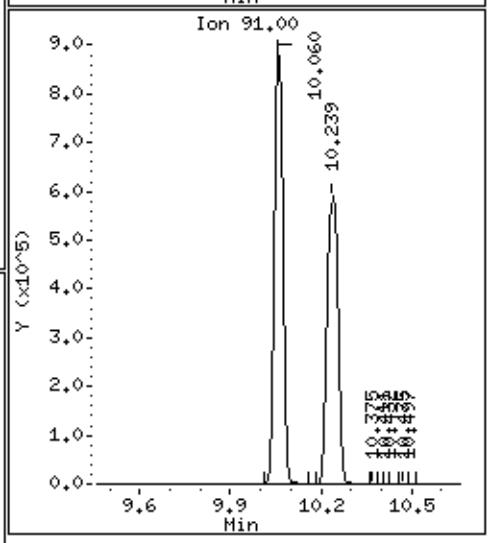












Data File: /chem/msd6.i/17jun16.b/6061703.d

Date : 17-JUN-2016 11:37

Client ID: LCS

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCS;LCS

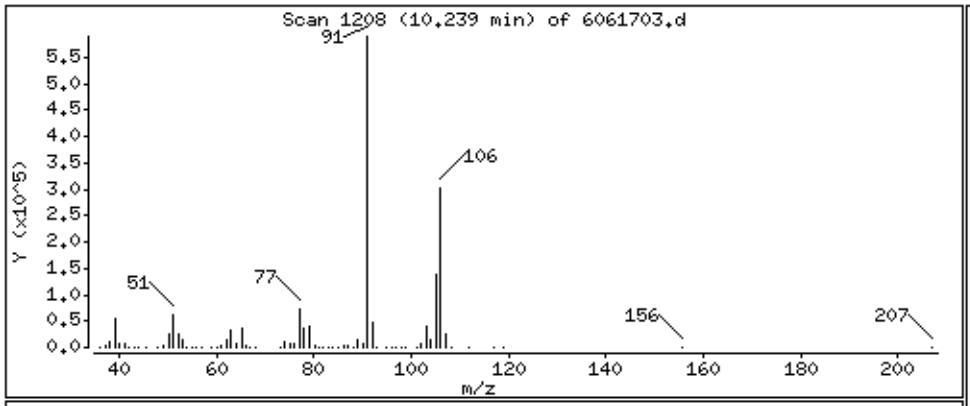
Operator: CT

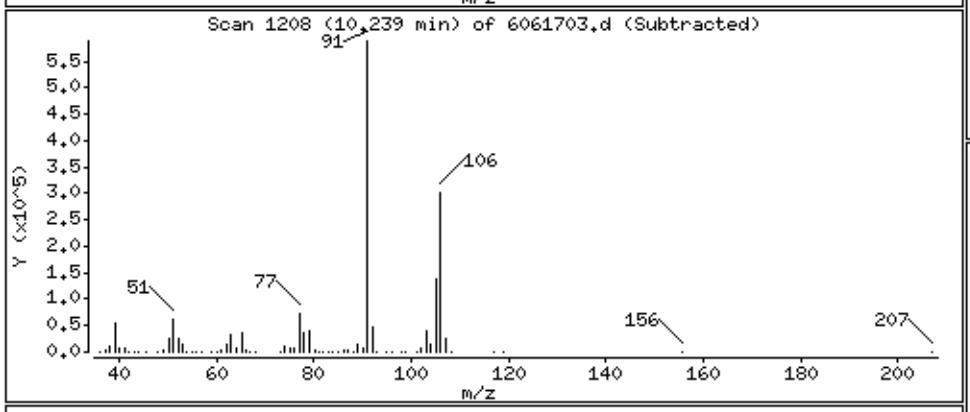
Column phase: RTx-624

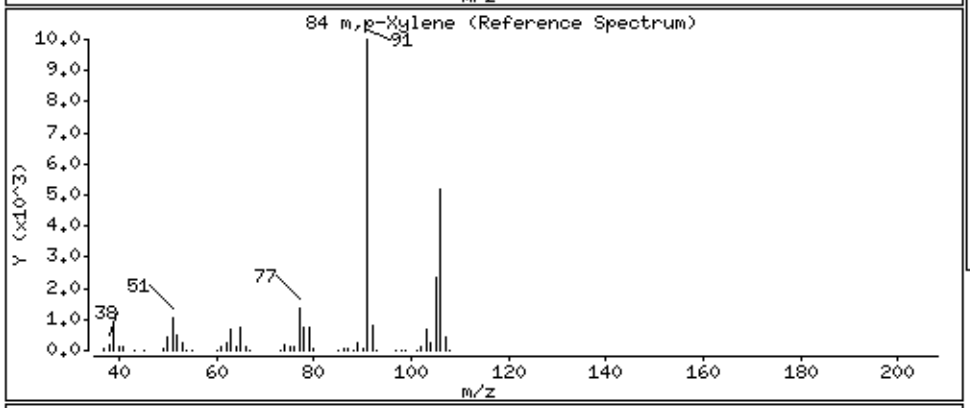
Column diameter: 0.53

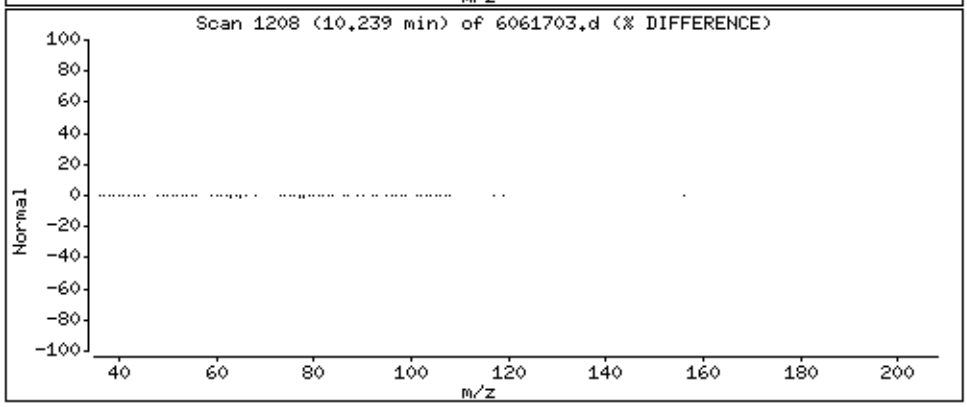
84 m,p-Xylene

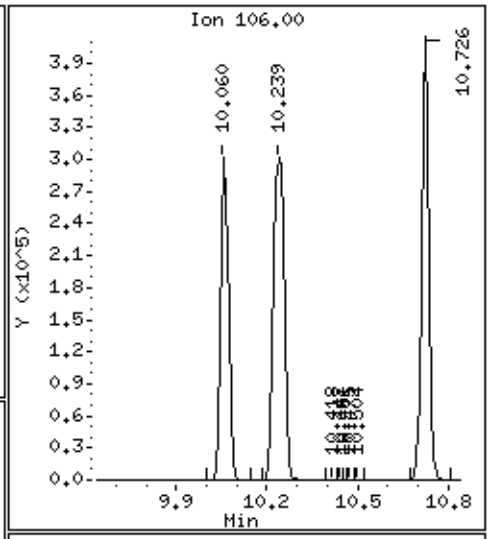
Concentration: 94.322 NG

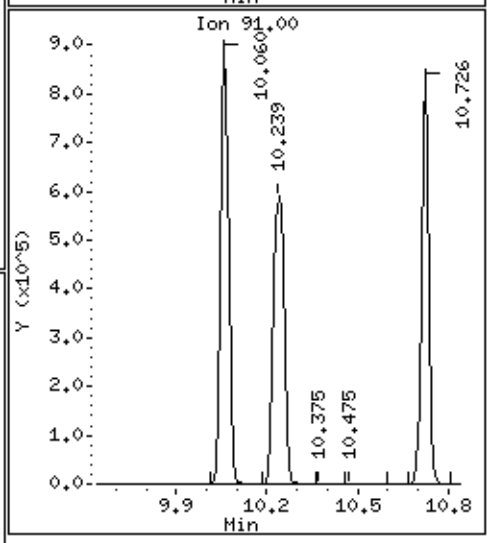












Data File: /chem/msd6.i/17jun16.b/6061703.d

Date : 17-JUN-2016 11:37

Client ID: LCS

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCS;LCS

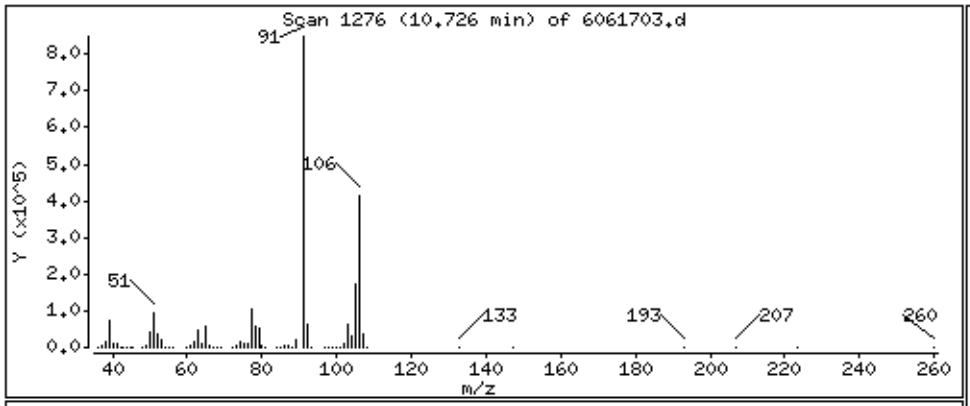
Operator: CT

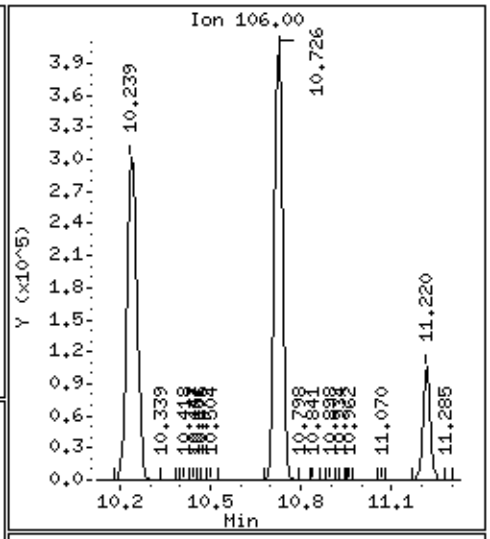
Column phase: RTx-624

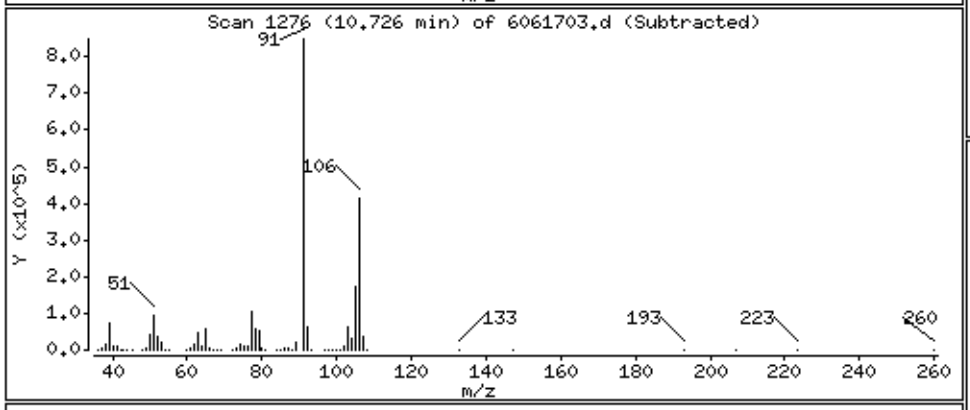
Column diameter: 0.53

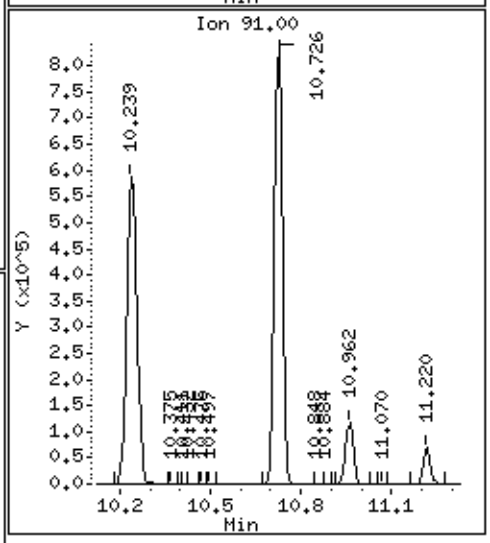
88 o-Xylene

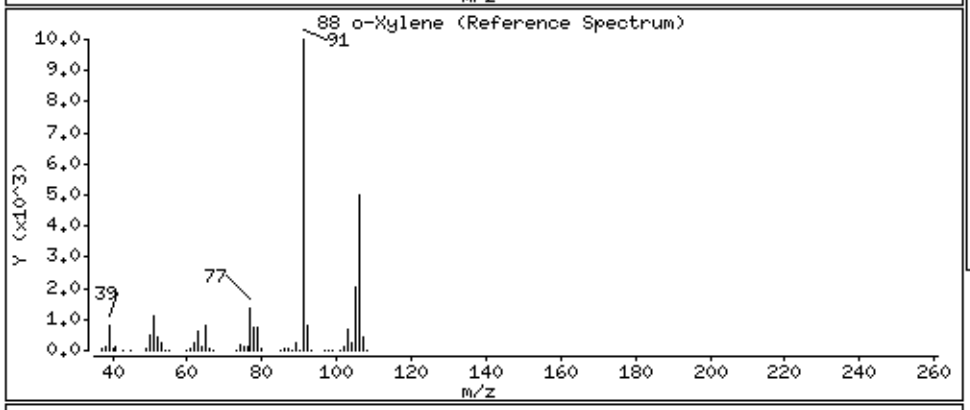
Concentration: 98.635 NG

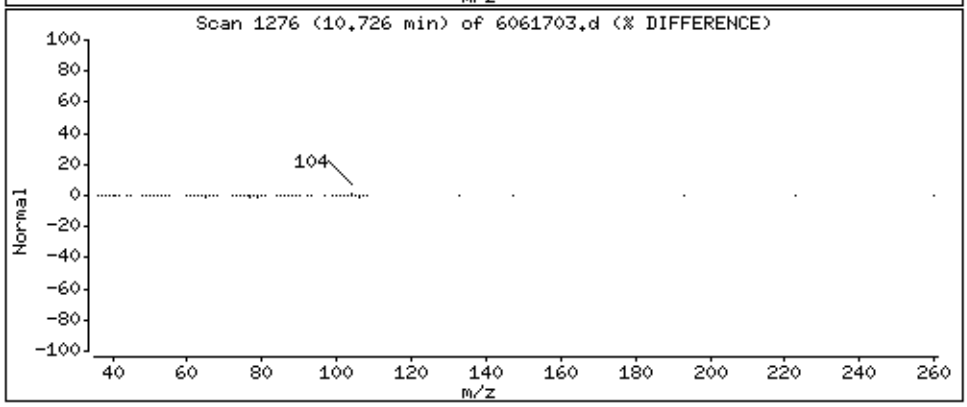












Data File: /chem/msd6.i/17jun16.b/6061703.d

Date : 17-JUN-2016 11:37

Client ID: LCS

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCS;LCS

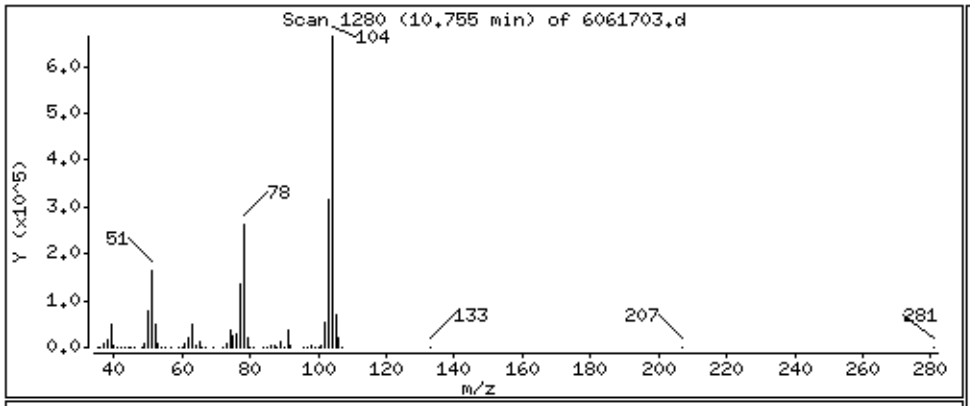
Operator: CT

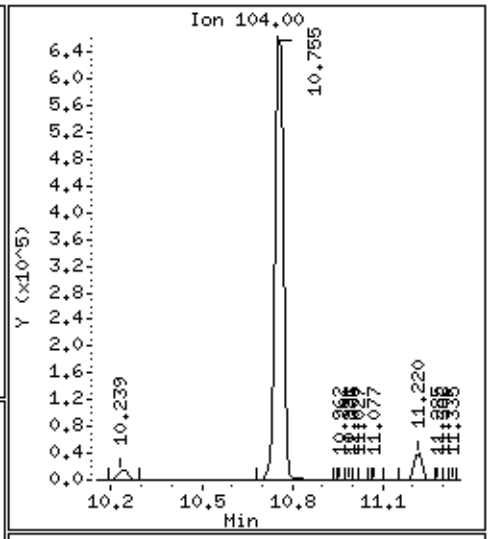
Column phase: RTx-624

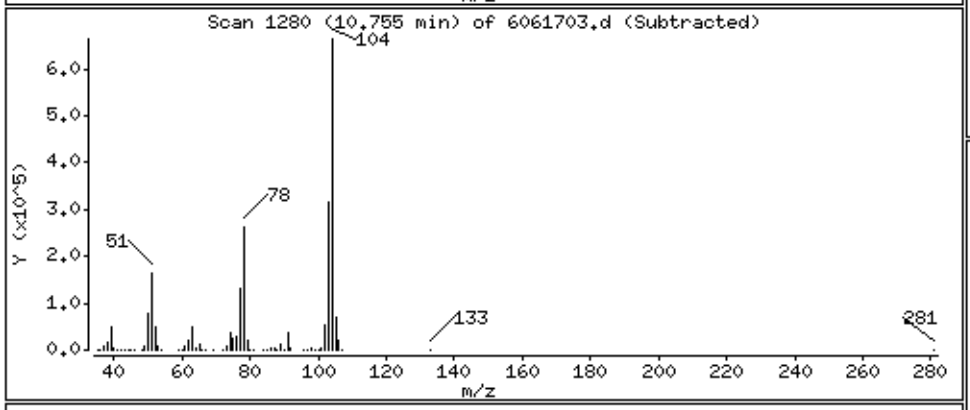
Column diameter: 0.53

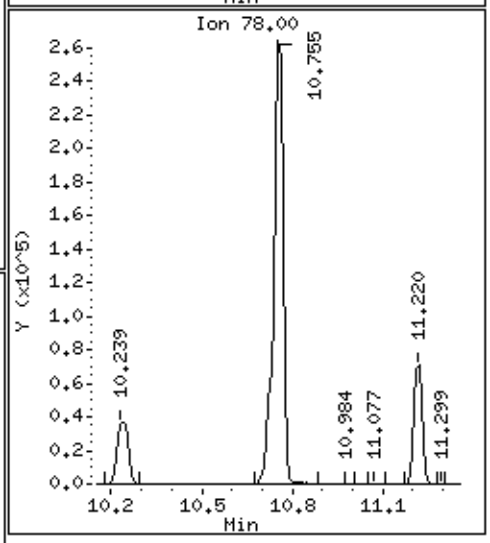
89 Styrene

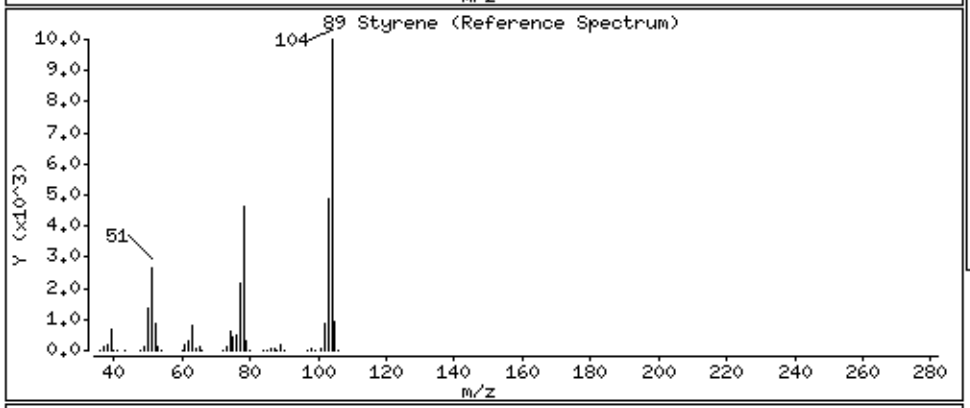
Concentration: 98.469 NG

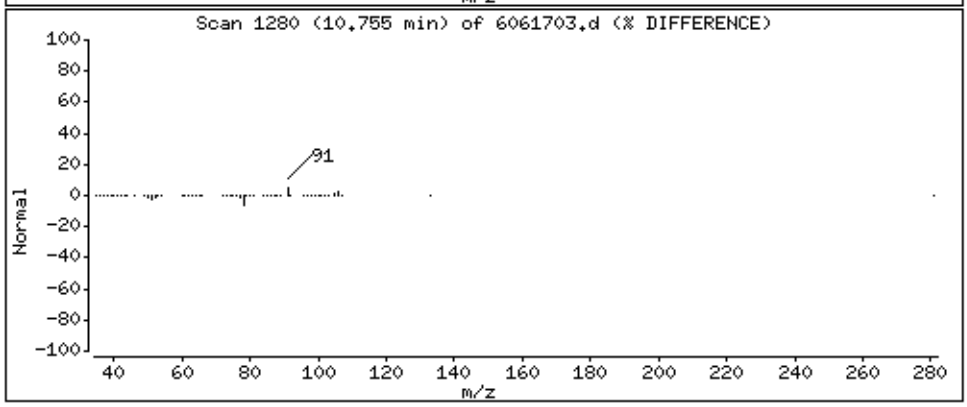












Data File: /chem/msd6.i/17jun16.b/6061703.d

Date : 17-JUN-2016 11:37

Client ID: LCS

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCS;LCS

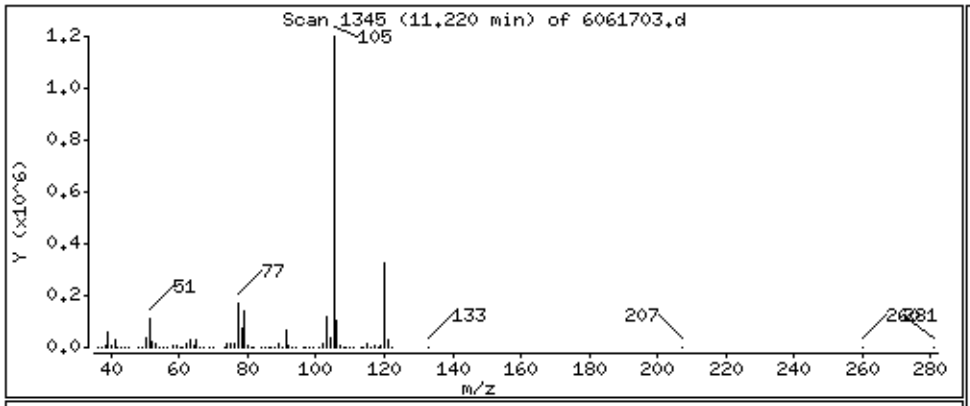
Operator: CT

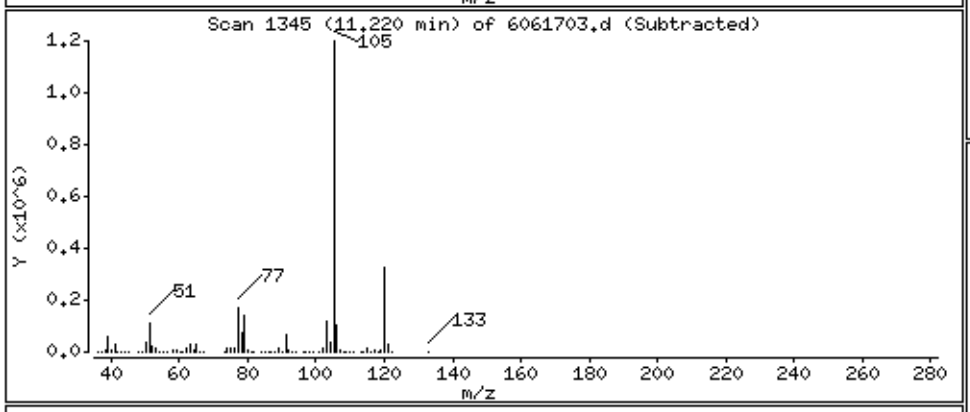
Column phase: RTx-624

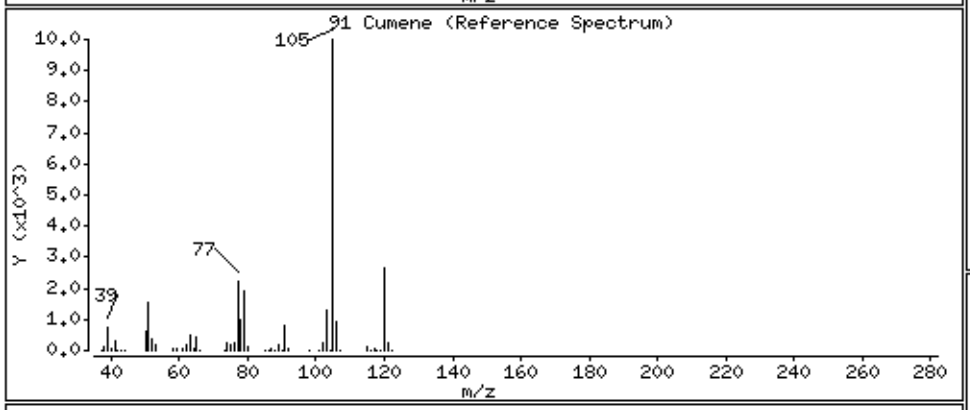
Column diameter: 0.53

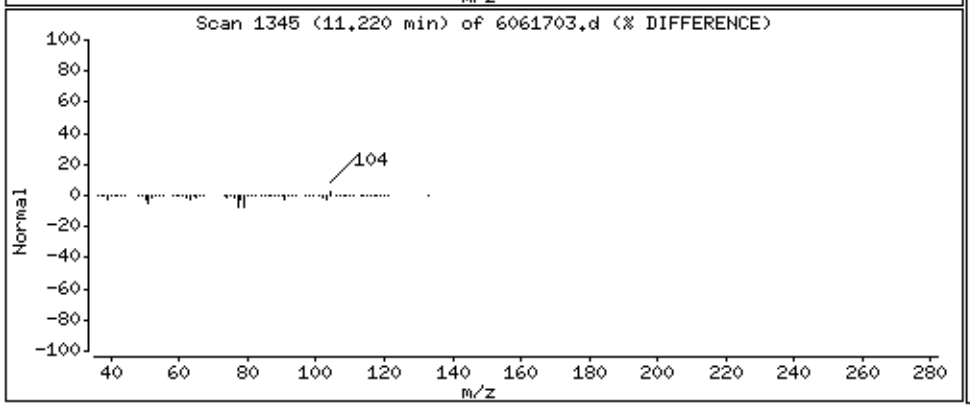
91 Cumene

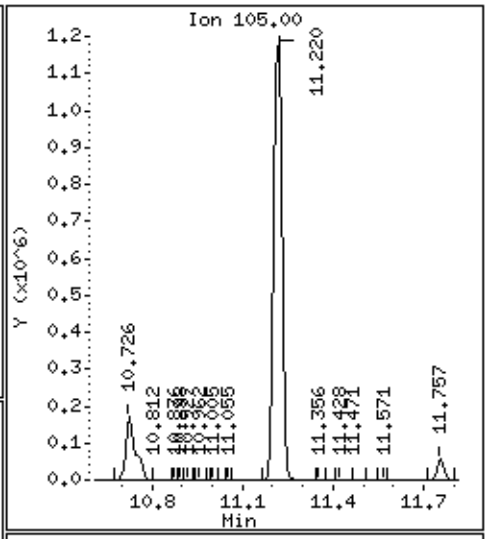
Concentration: 107.65 NG

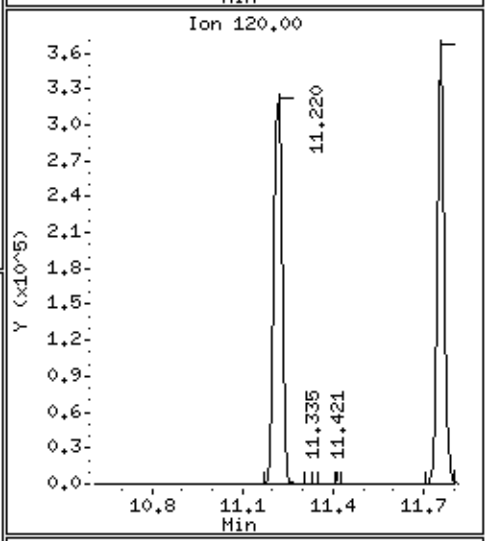


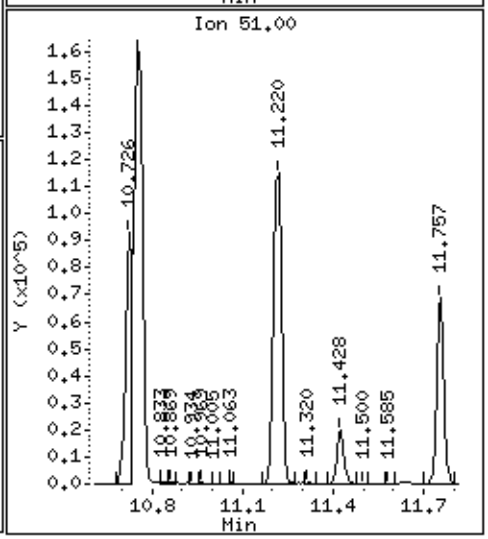












Data File: /chem/msd6.i/17jun16.b/6061703.d

Date : 17-JUN-2016 11:37

Client ID: LCS

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCS;LCS

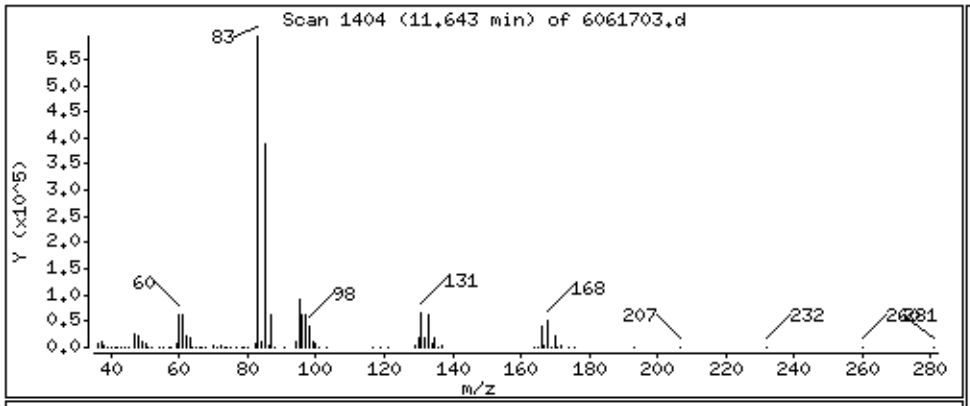
Operator: CT

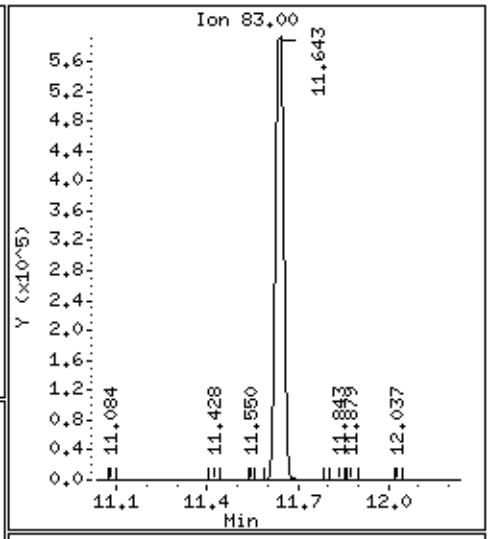
Column phase: RTx-624

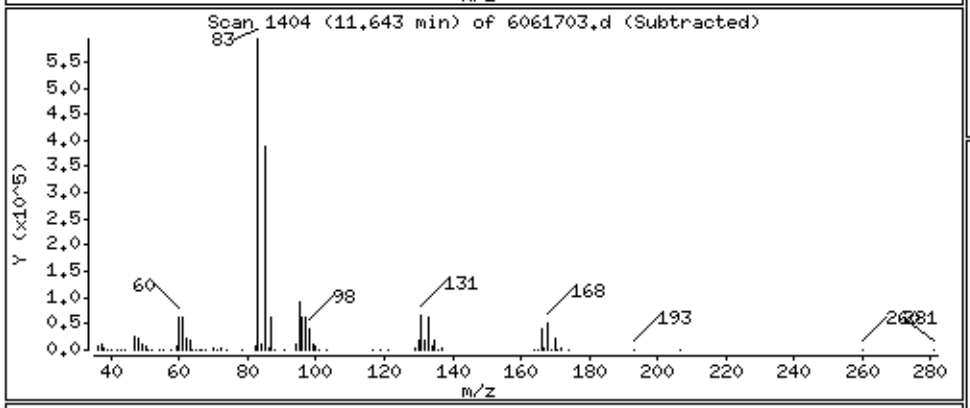
Column diameter: 0.53

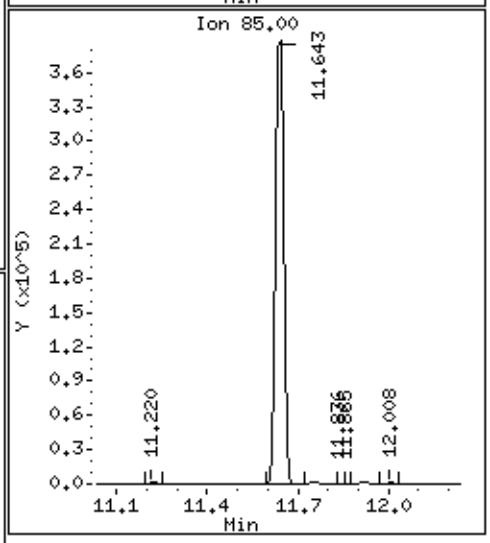
94 1,1,2,2-Tetrachloroethane

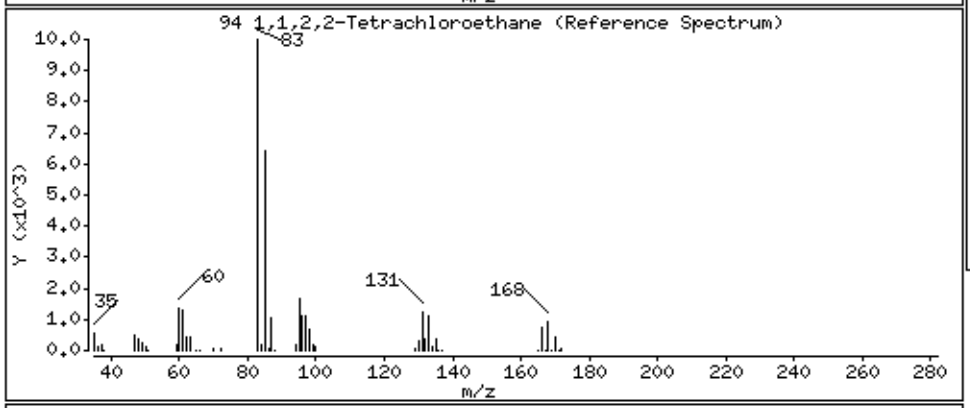
Concentration: 165.67 NG

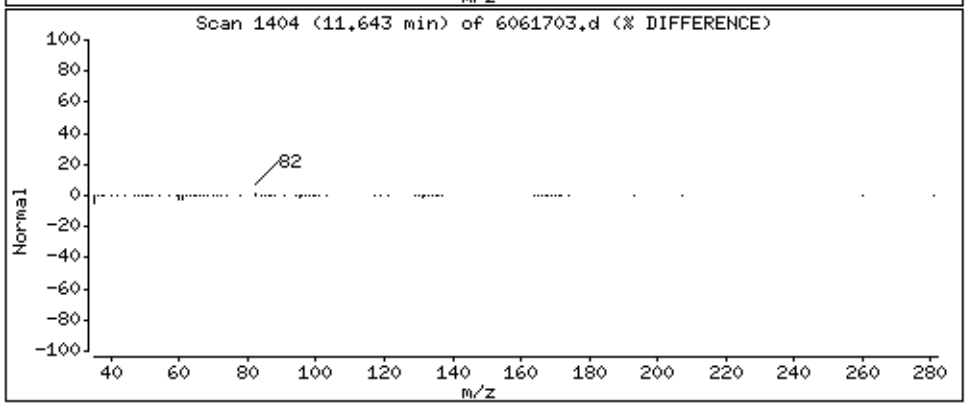












Data File: /chem/msd6.i/17jun16.b/6061703.d

Date : 17-JUN-2016 11:37

Client ID: LCS

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCS;LCS

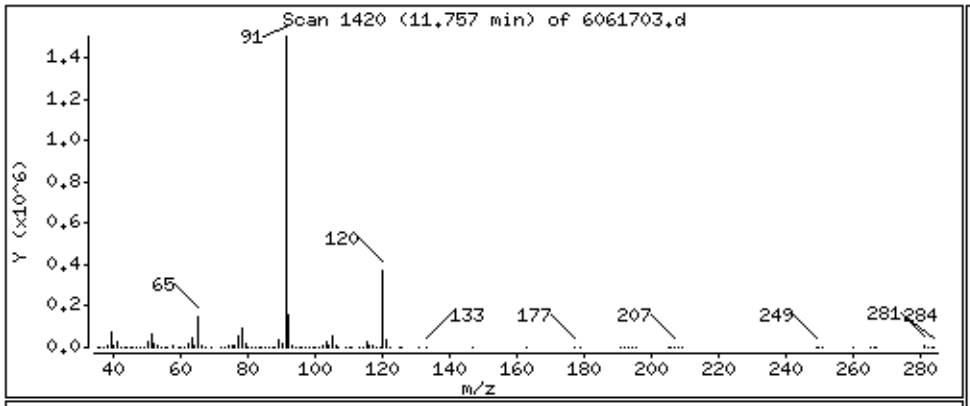
Operator: CT

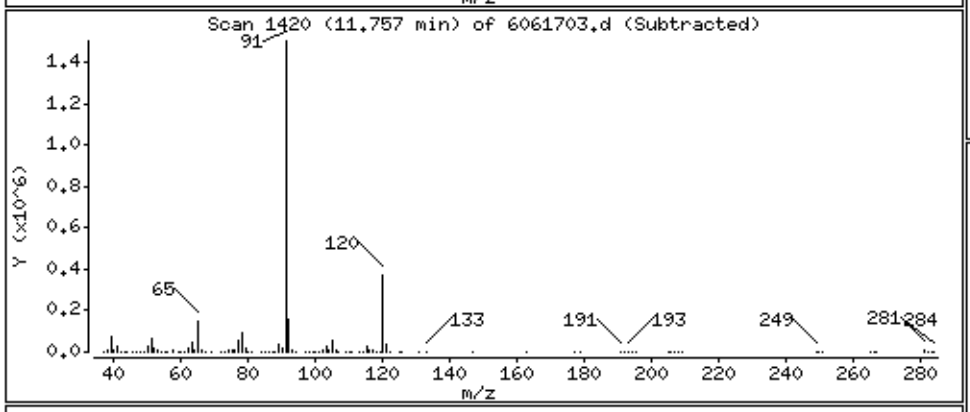
Column phase: RTx-624

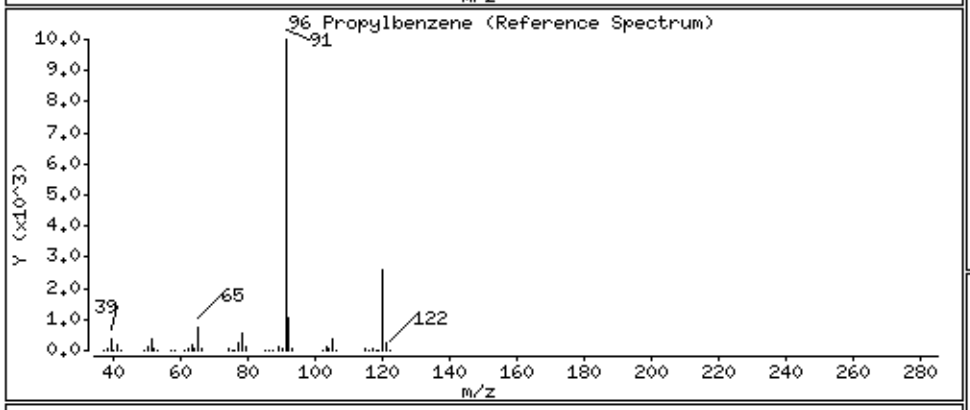
Column diameter: 0.53

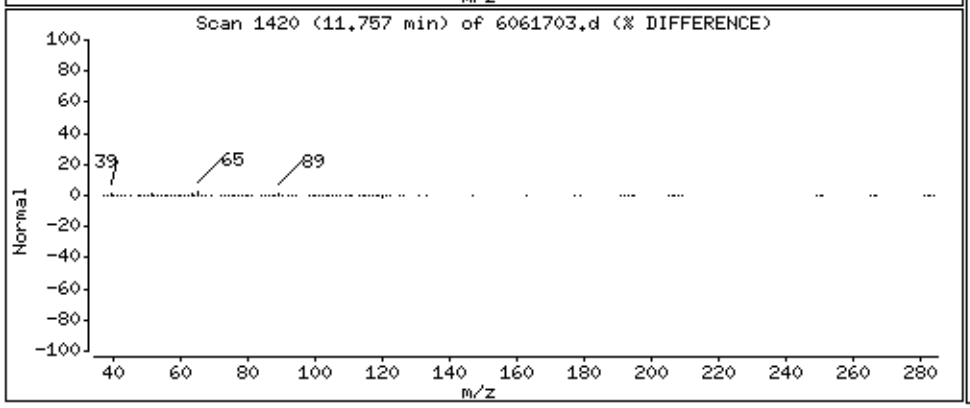
96 Propylbenzene

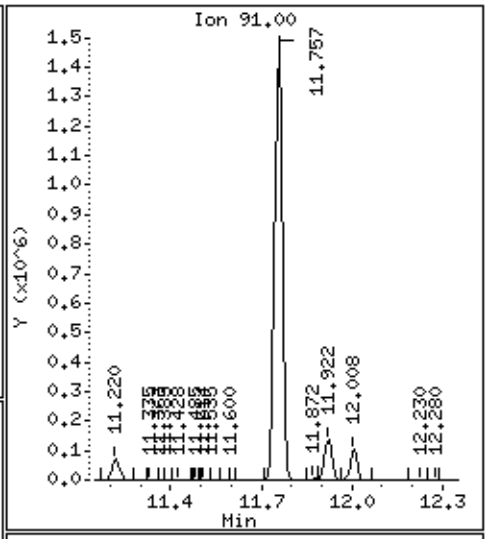
Concentration: 110.37 NG

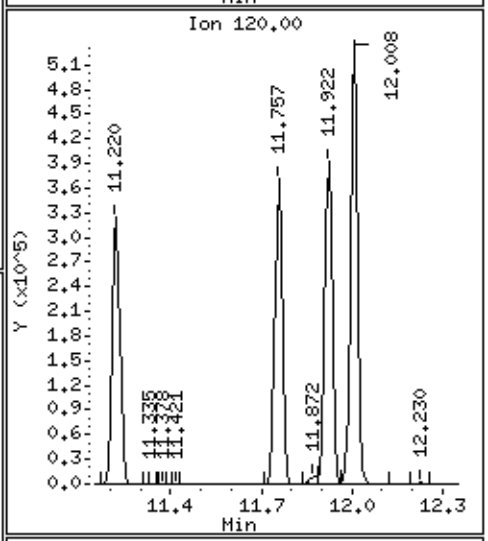


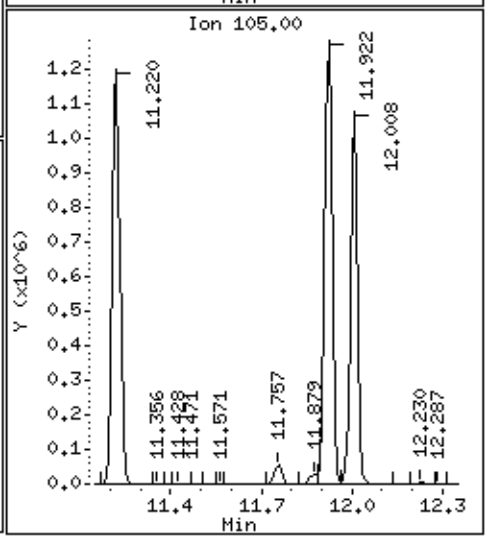












Data File: /chem/msd6.i/17jun16.b/6061703.d

Date : 17-JUN-2016 11:37

Client ID: LCS

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCS;LCS

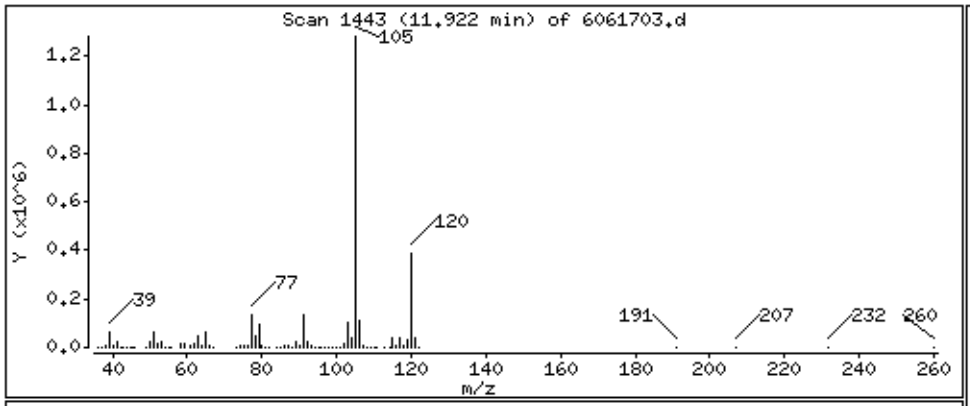
Operator: CT

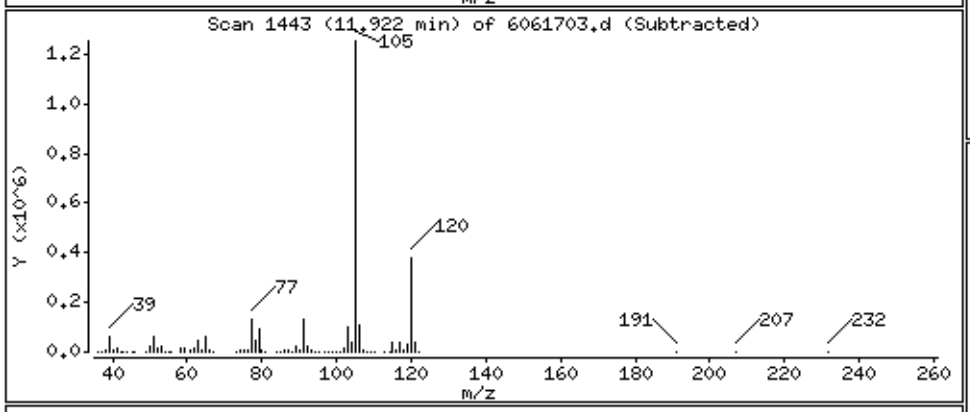
Column phase: RTx-624

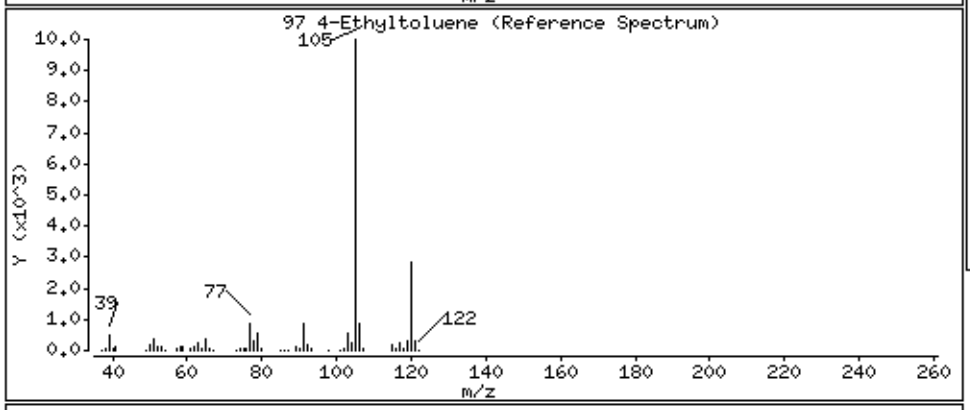
Column diameter: 0.53

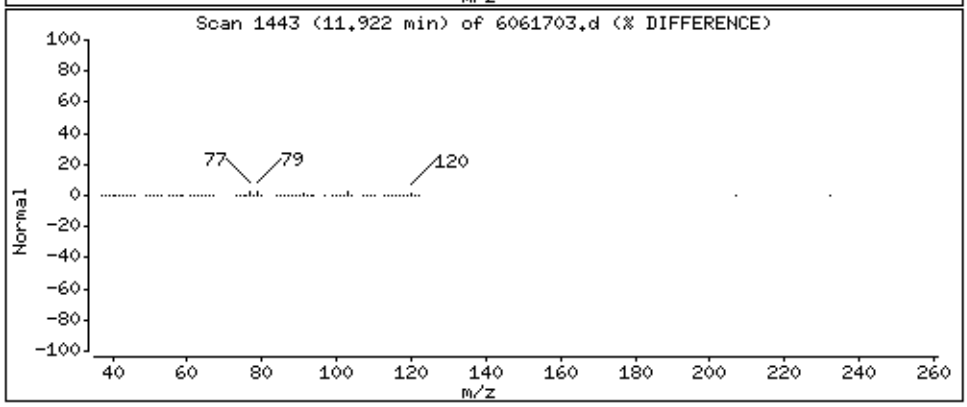
97 4-Ethyltoluene

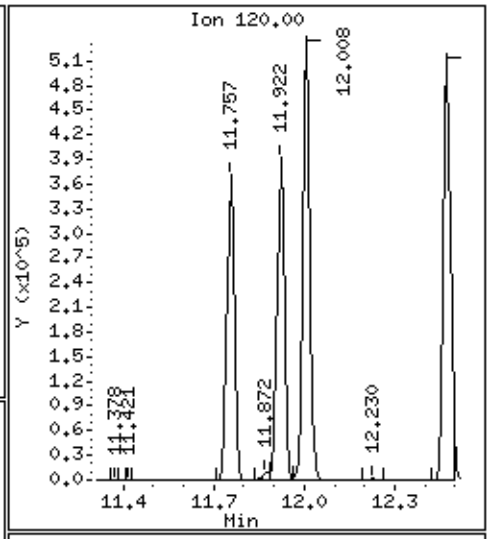
Concentration: 105.49 NG

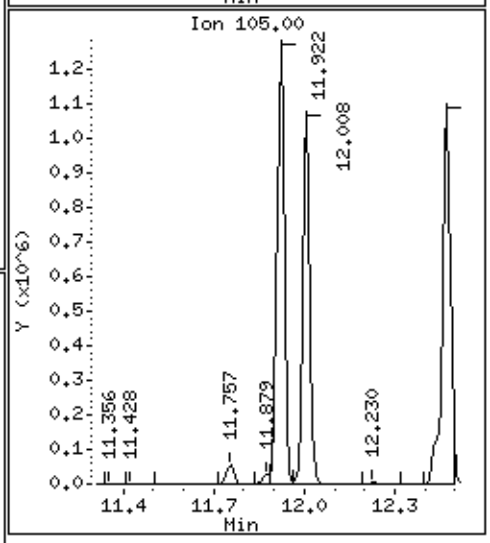












Data File: /chem/msd6.i/17jun16.b/6061703.d

Date : 17-JUN-2016 11:37

Client ID: LCS

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCS;LCS

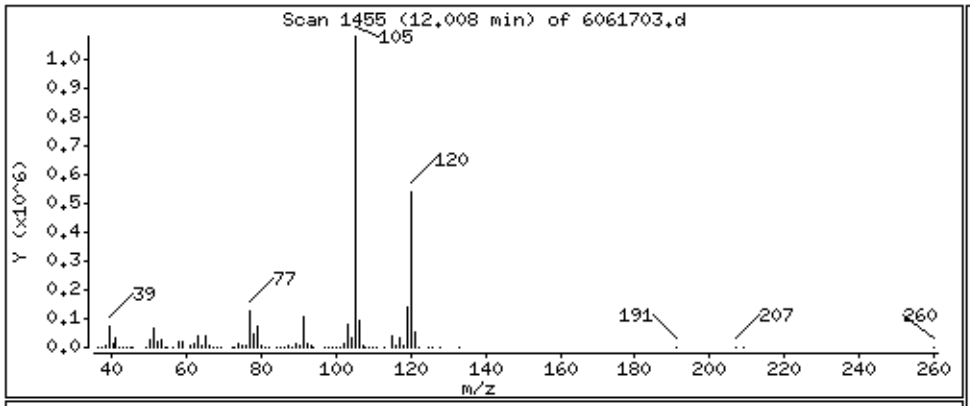
Operator: CT

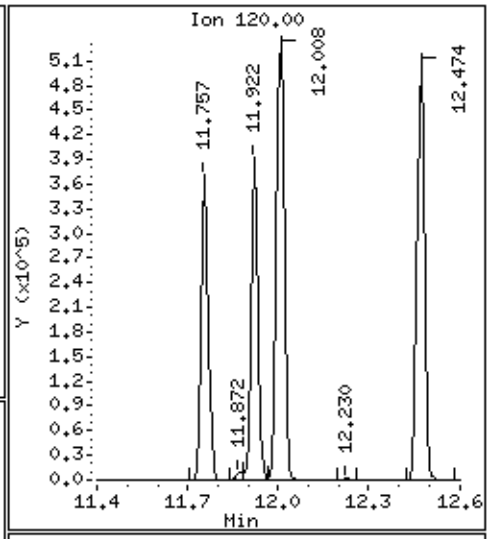
Column phase: RTx-624

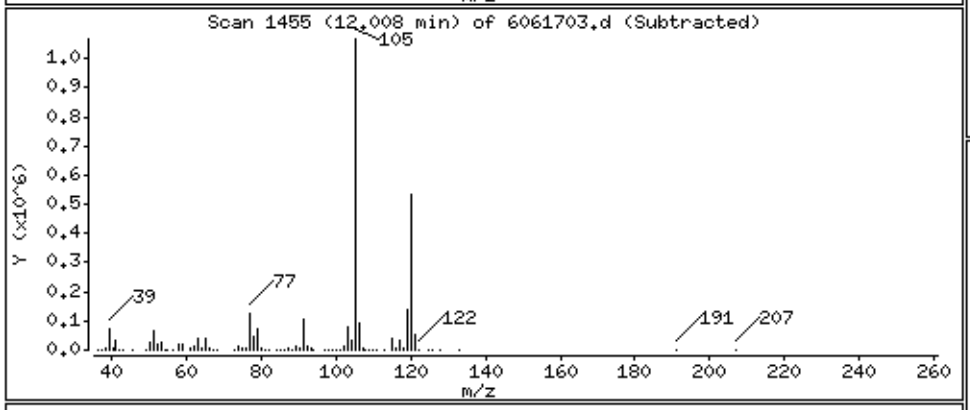
Column diameter: 0.53

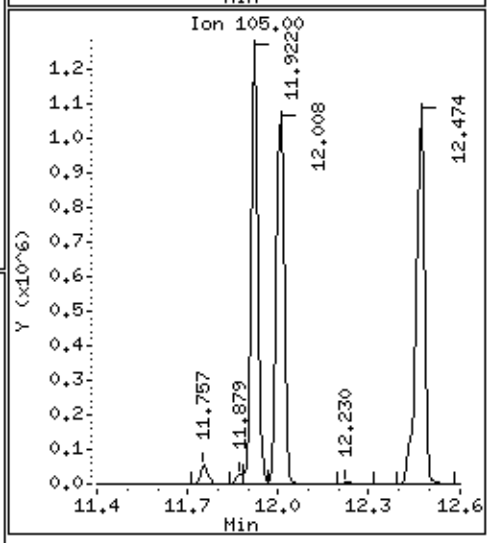
98 1,3,5-Trimethylbenzene

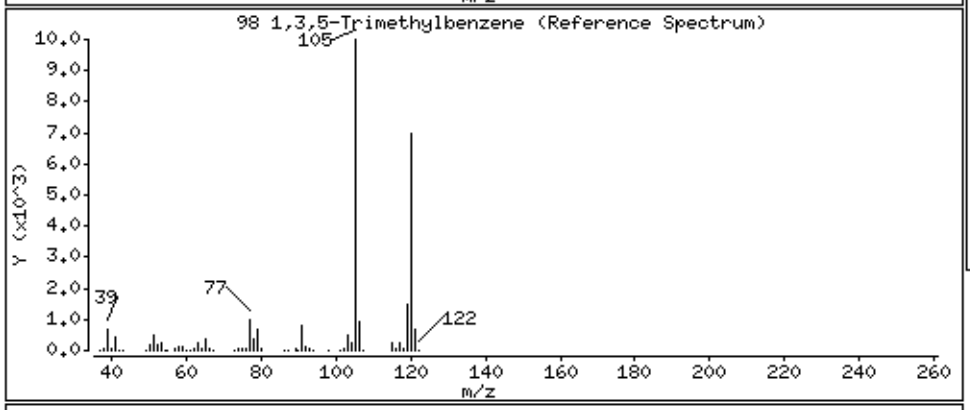
Concentration: 103.78 NG

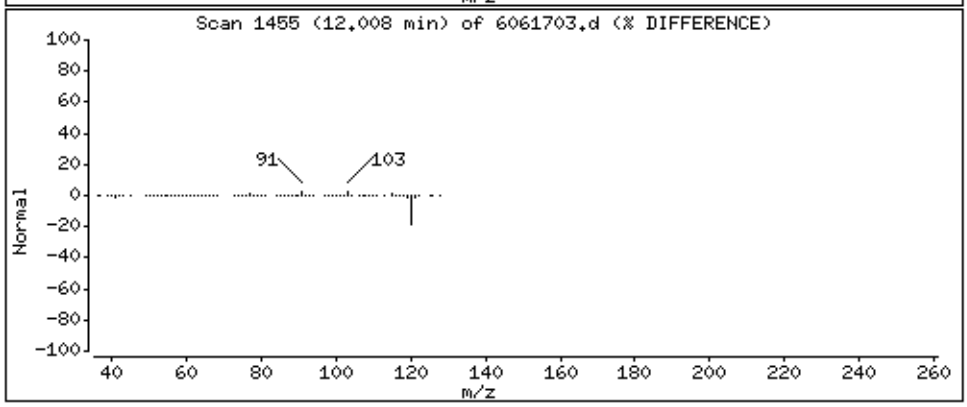












Data File: /chem/msd6.i/17jun16.b/6061703.d

Date : 17-JUN-2016 11:37

Client ID: LCS

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCS;LCS

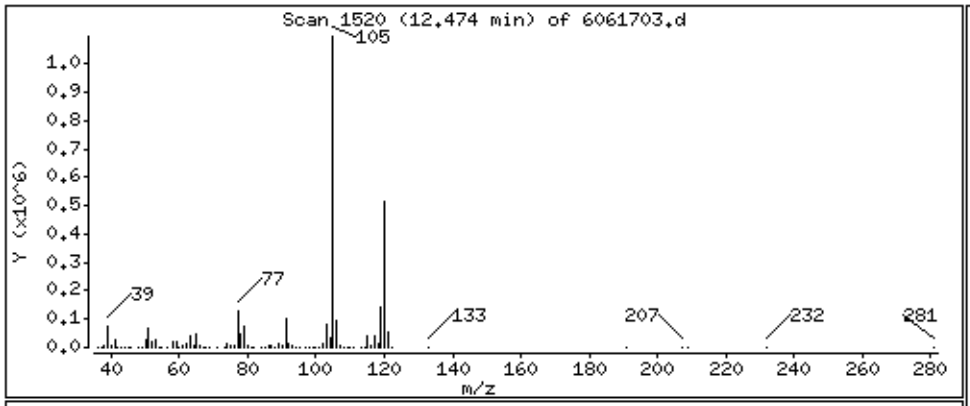
Operator: CT

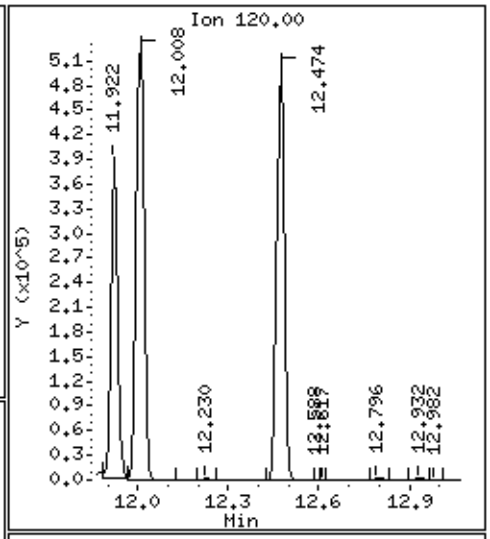
Column phase: RTx-624

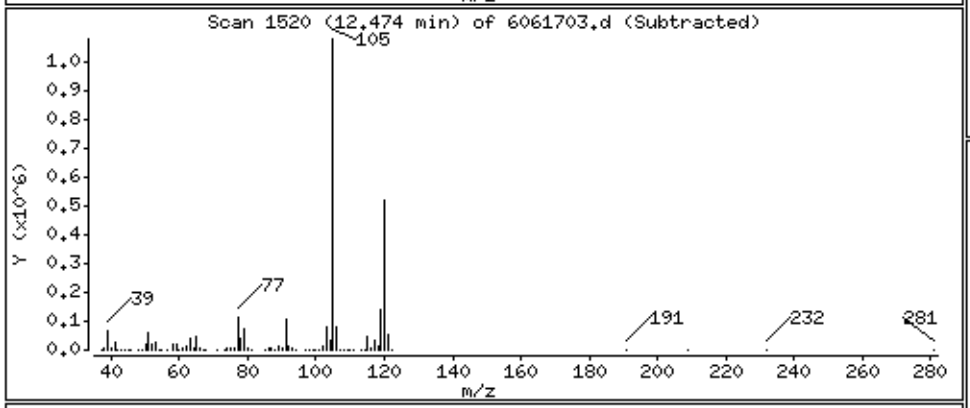
Column diameter: 0.53

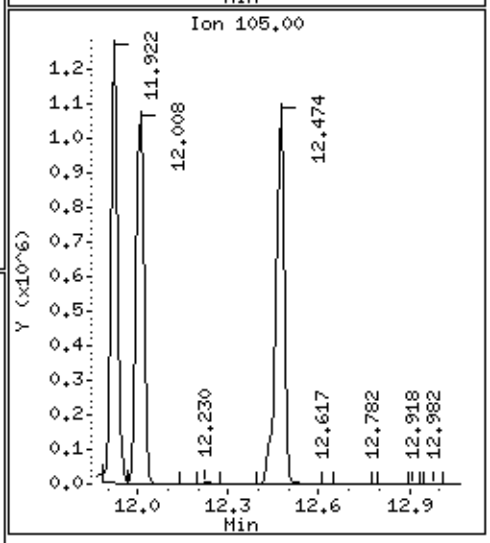
100 1,2,4-Trimethylbenzene

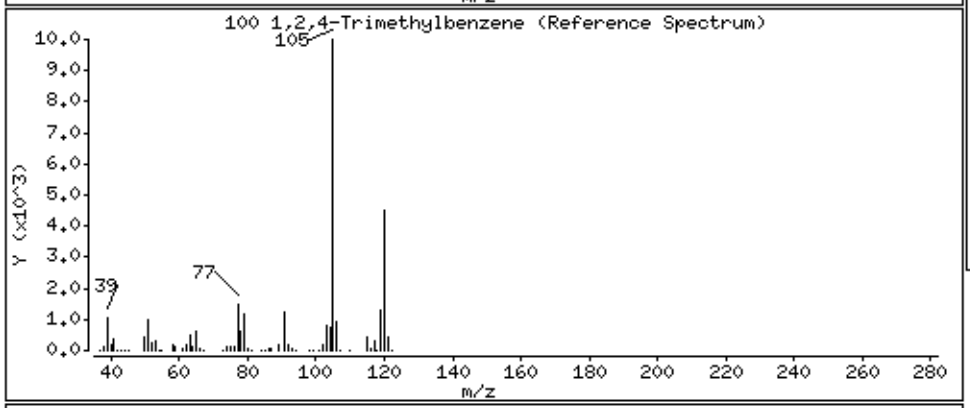
Concentration: 103.98 NG

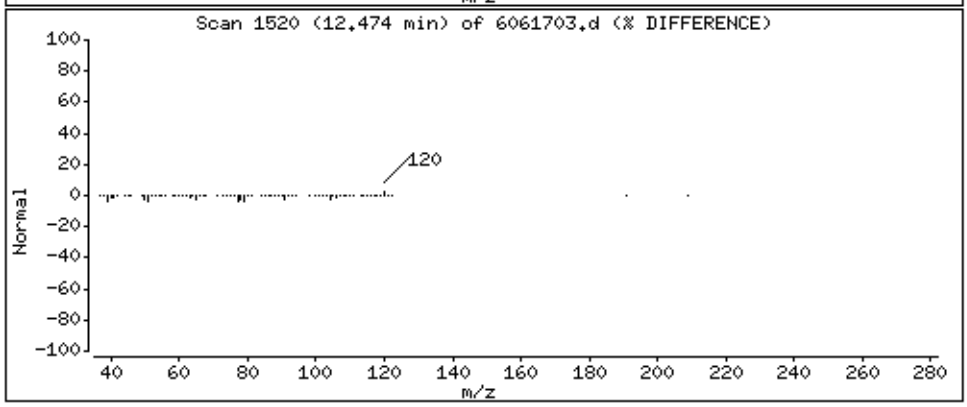












Data File: /chem/msd6.i/17jun16.b/6061703.d

Date : 17-JUN-2016 11:37

Client ID: LCS

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCS;LCS

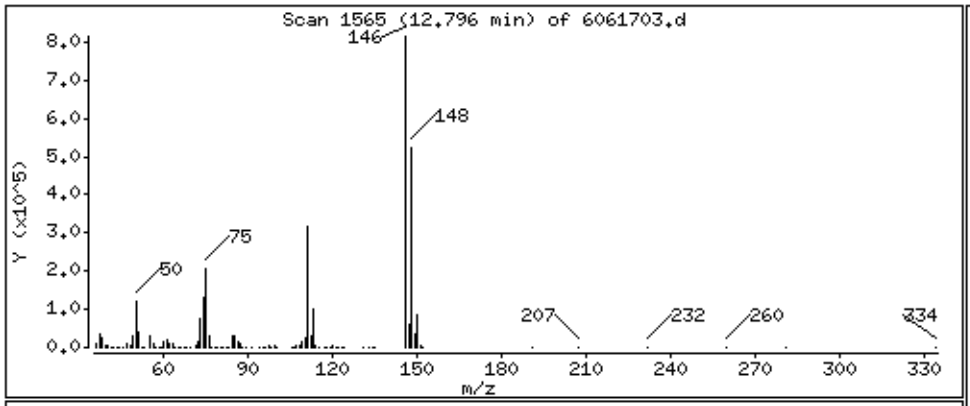
Operator: CT

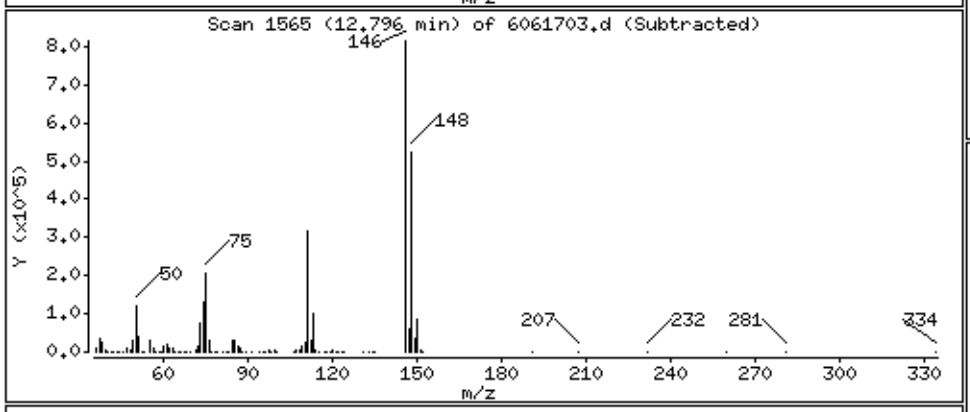
Column phase: RTx-624

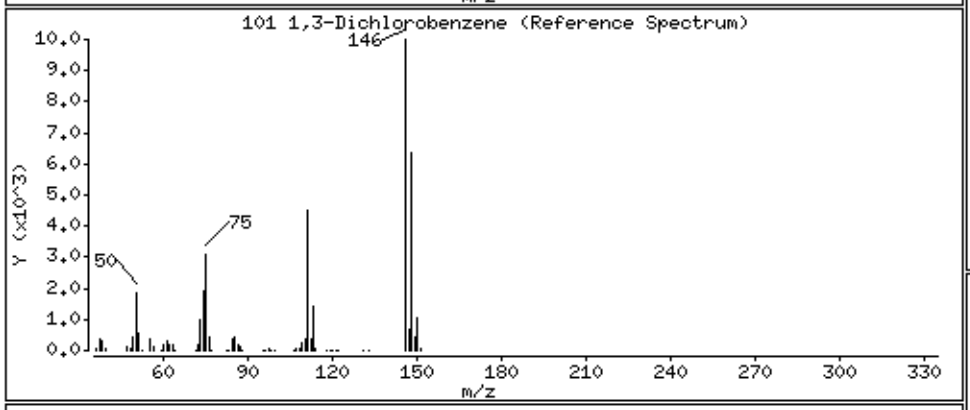
Column diameter: 0.53

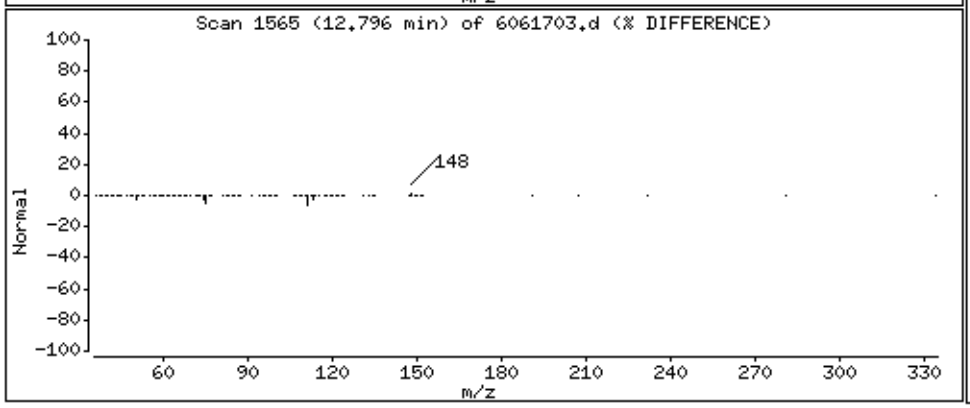
101 1,3-Dichlorobenzene

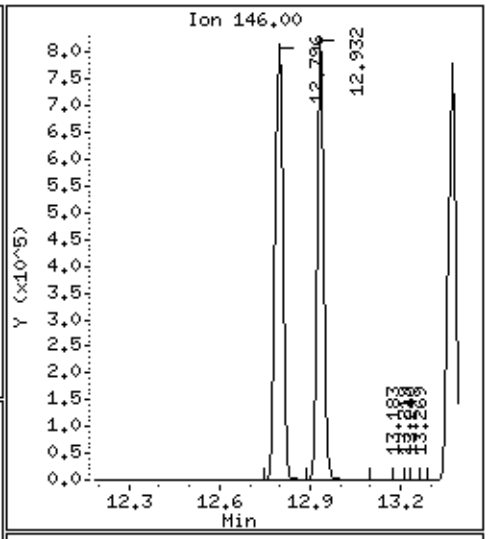
Concentration: 121.60 NG

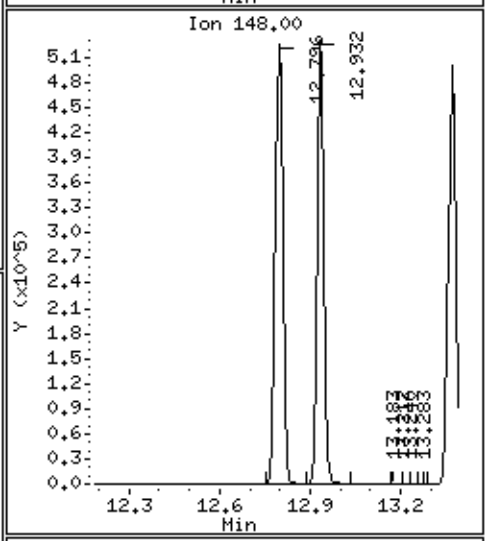


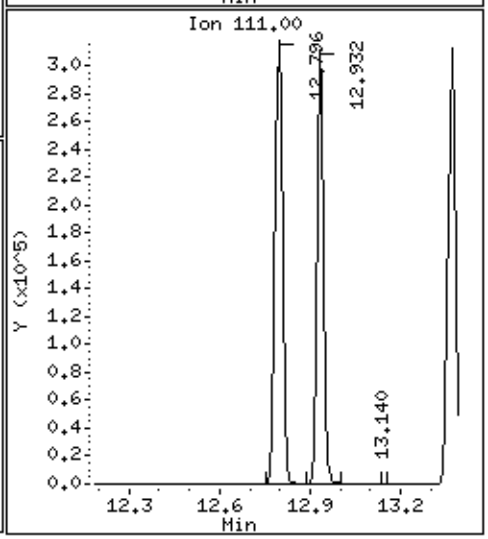












Data File: /chem/msd6.i/17jun16.b/6061703.d

Date : 17-JUN-2016 11:37

Client ID: LCS

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCS;LCS

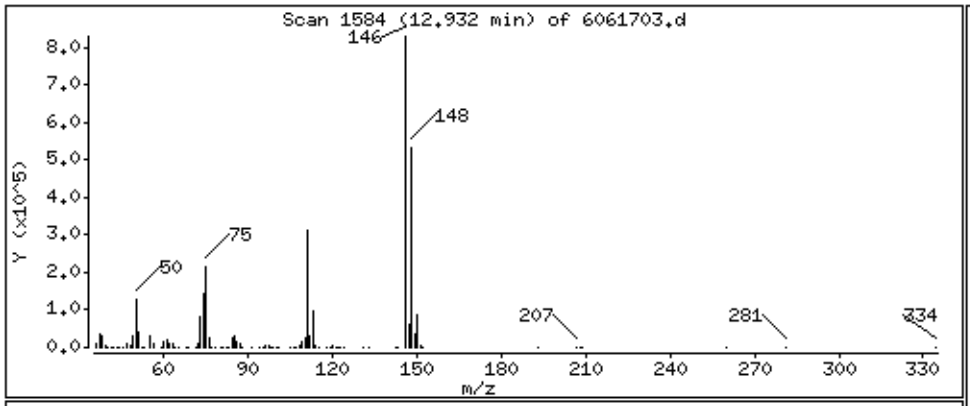
Operator: CT

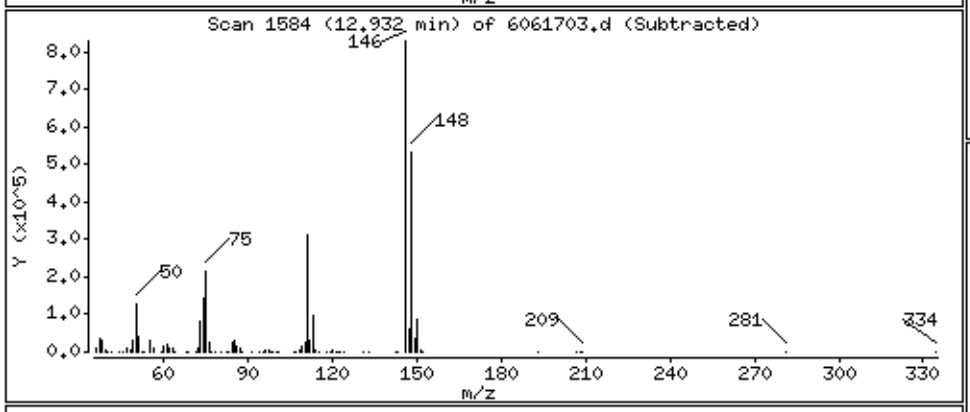
Column phase: RTx-624

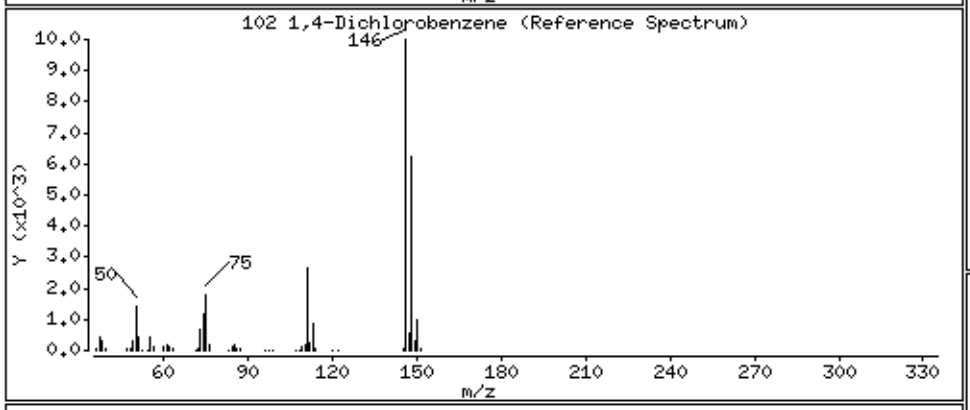
Column diameter: 0.53

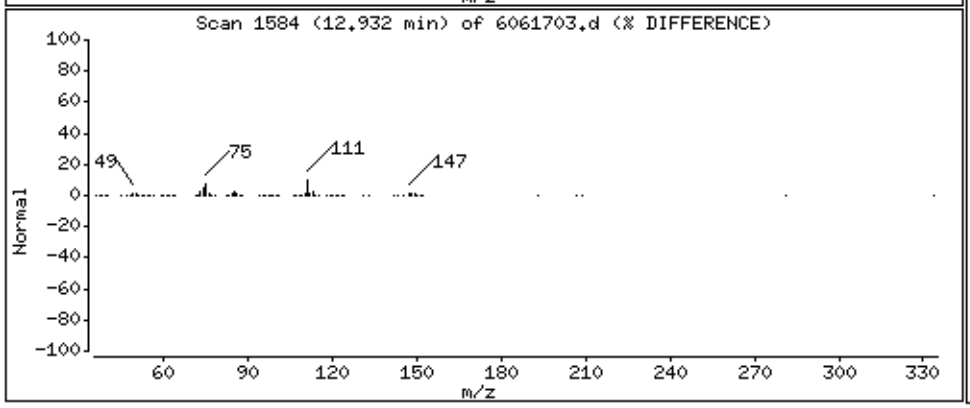
102 1,4-Dichlorobenzene

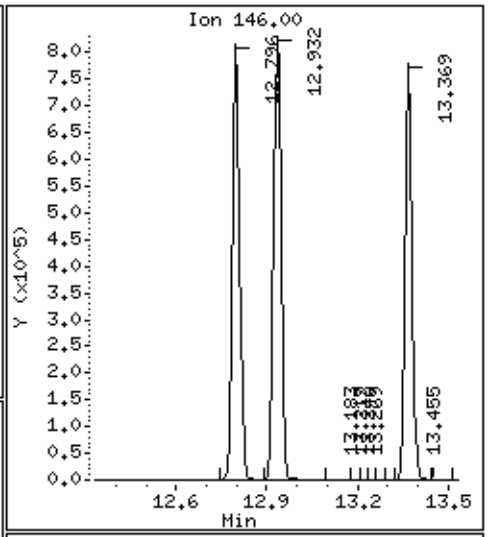
Concentration: 121.14 NG

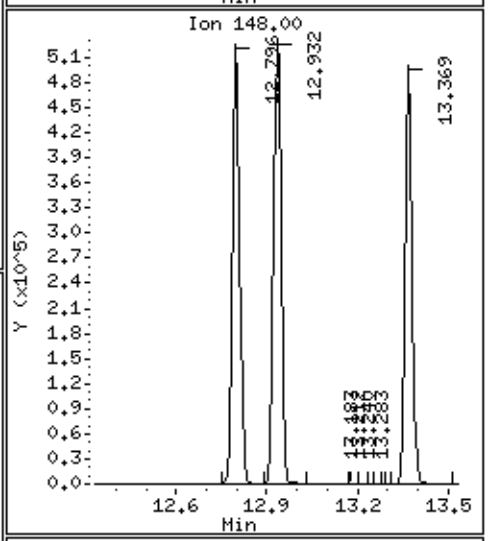


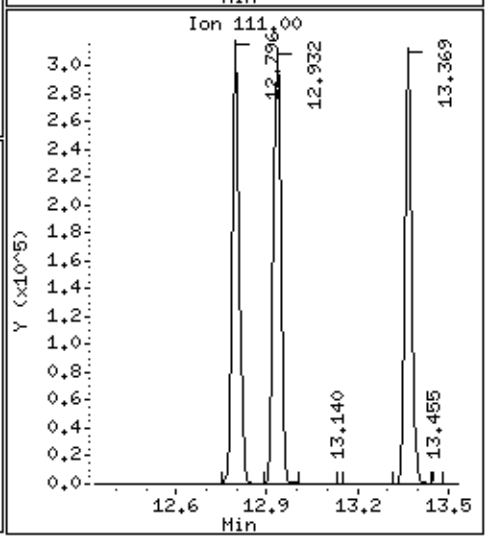












Data File: /chem/msd6.i/17jun16.b/6061703.d

Date : 17-JUN-2016 11:37

Client ID: LCS

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCS;LCS

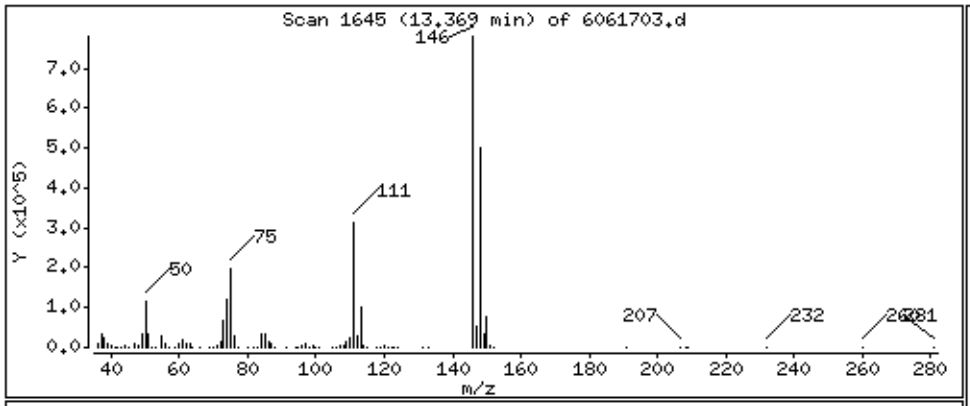
Operator: CT

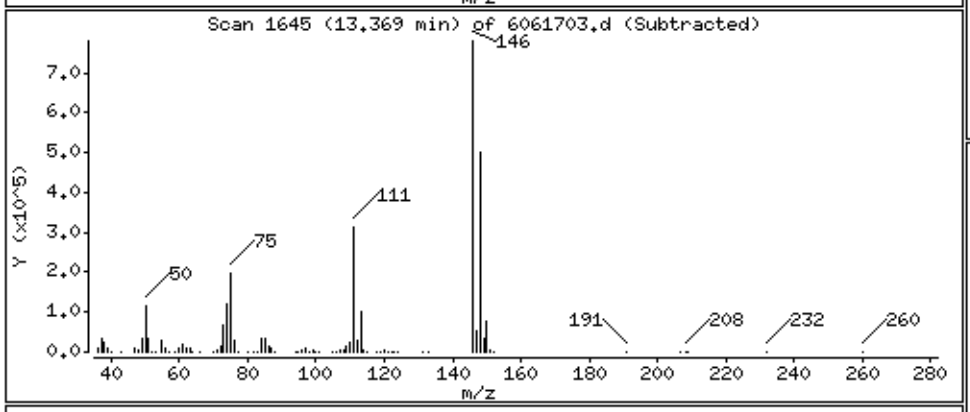
Column phase: RTx-624

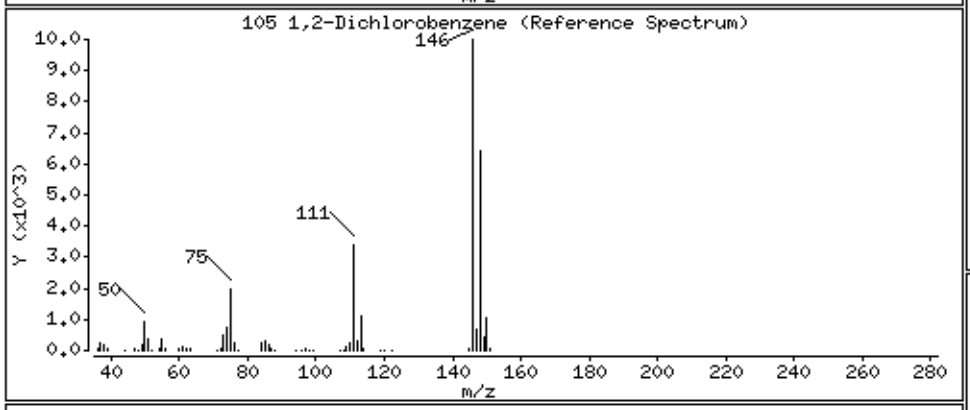
Column diameter: 0.53

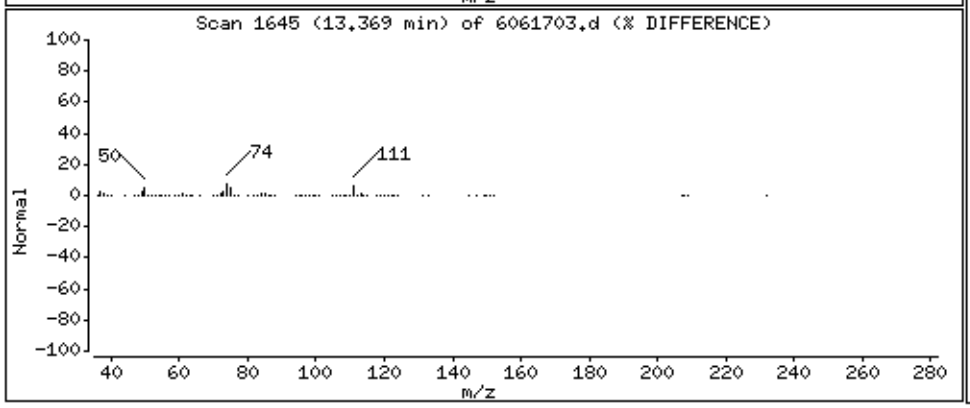
105 1,2-Dichlorobenzene

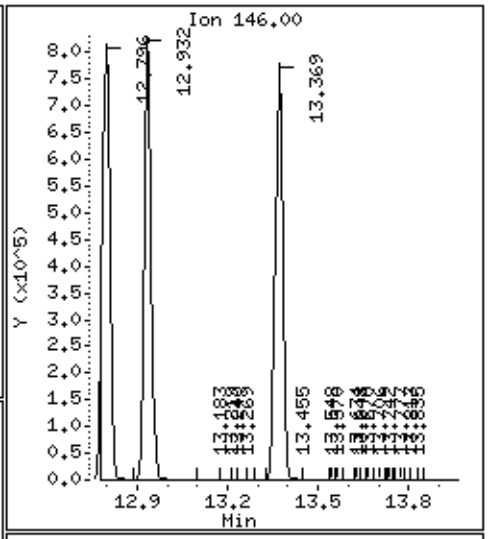
Concentration: 119.94 NG

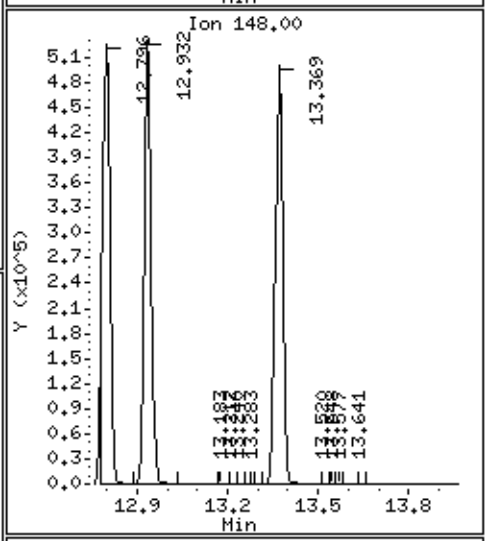


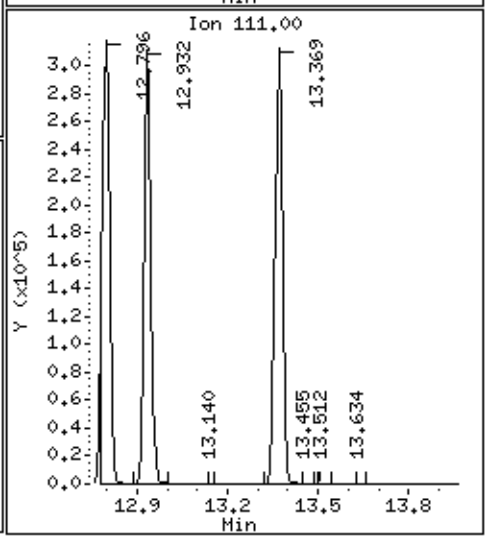












Data File: /chem/msd6.i/17jun16.b/6061703.d

Date : 17-JUN-2016 11:37

Client ID: LCS

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCS;LCS

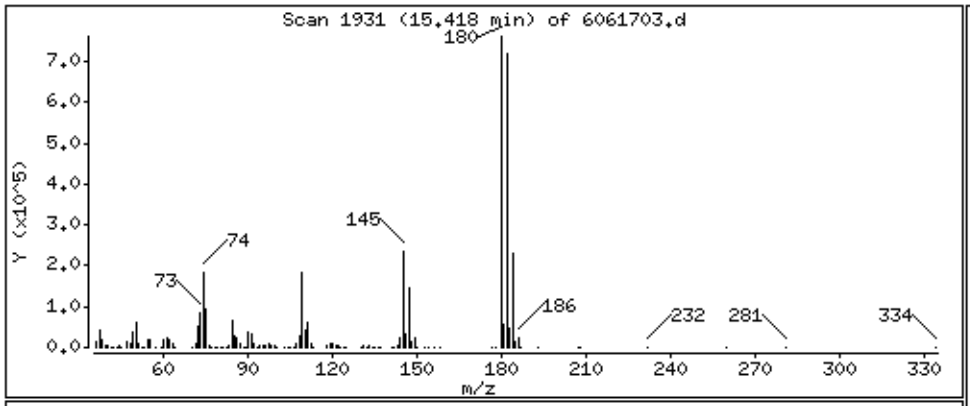
Operator: CT

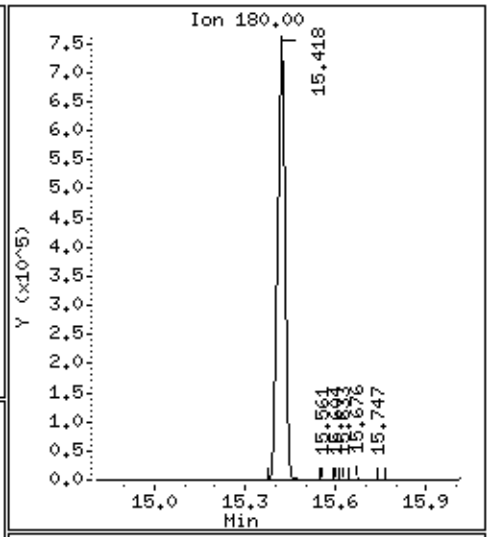
Column phase: RTx-624

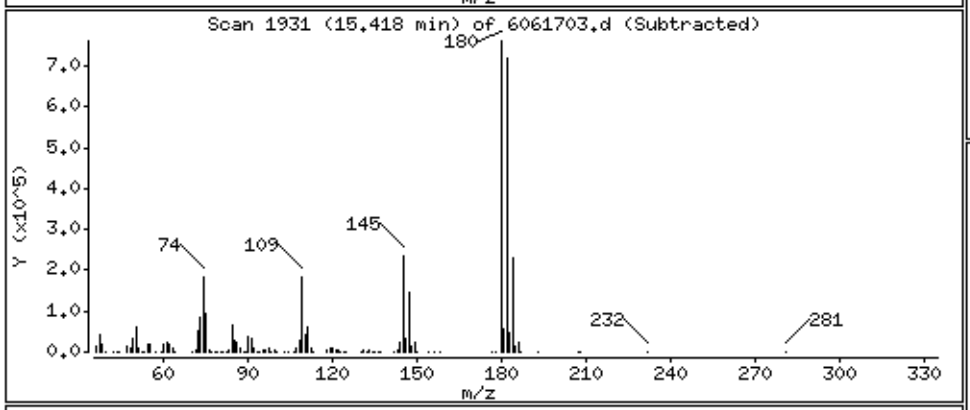
Column diameter: 0.53

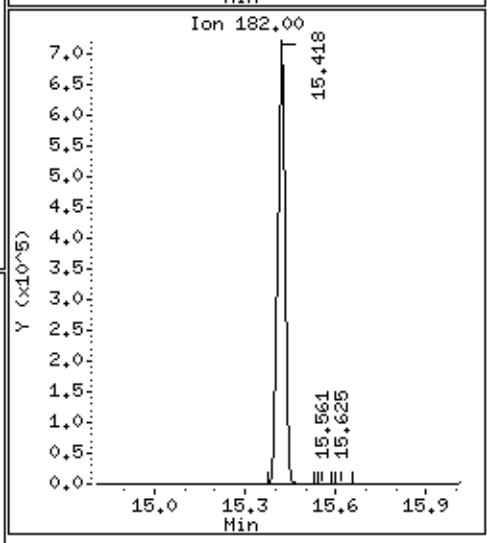
106 1,2,4-Trichlorobenzene

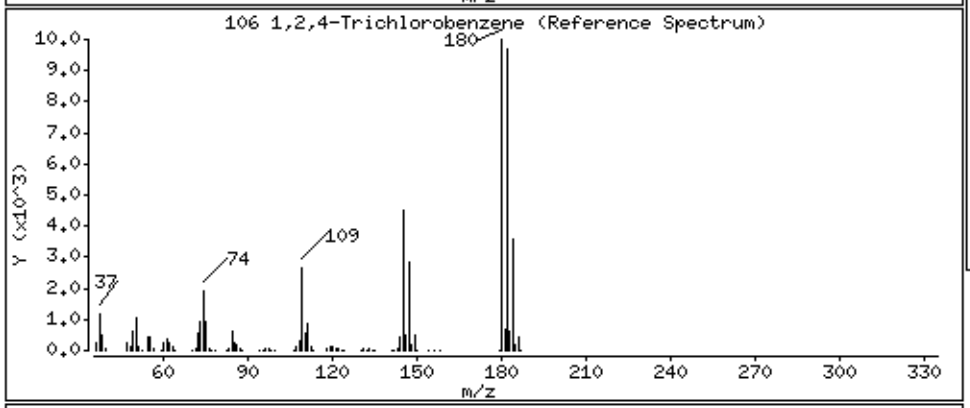
Concentration: 144.26 NG

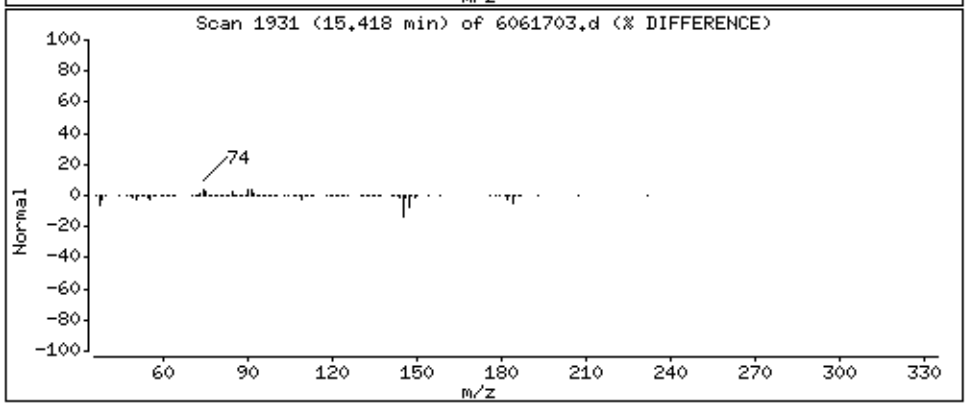












Data File: /chem/msd6.i/17jun16.b/6061703.d

Date : 17-JUN-2016 11:37

Client ID: LCS

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCS;LCS

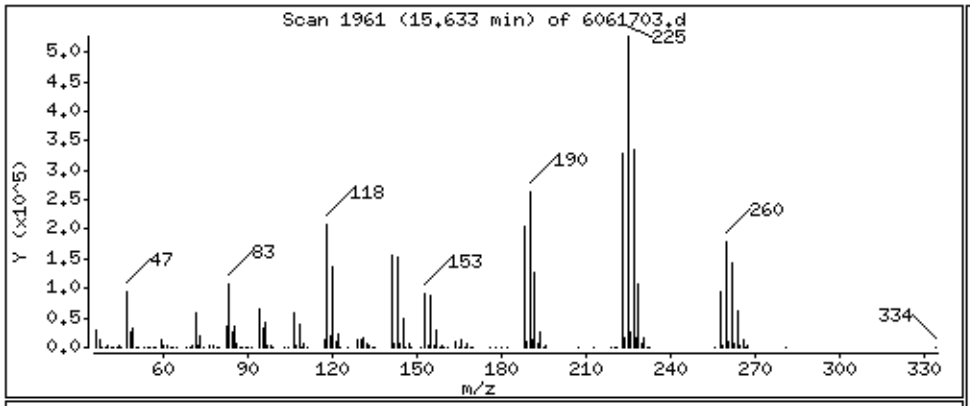
Operator: CT

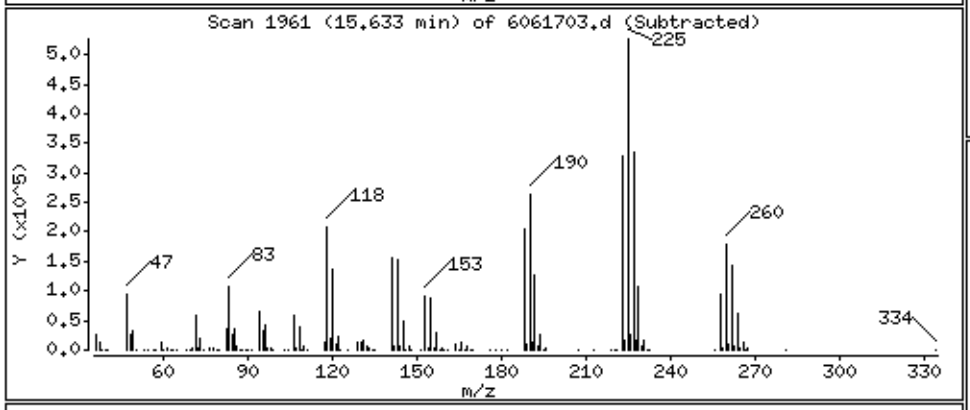
Column phase: RTx-624

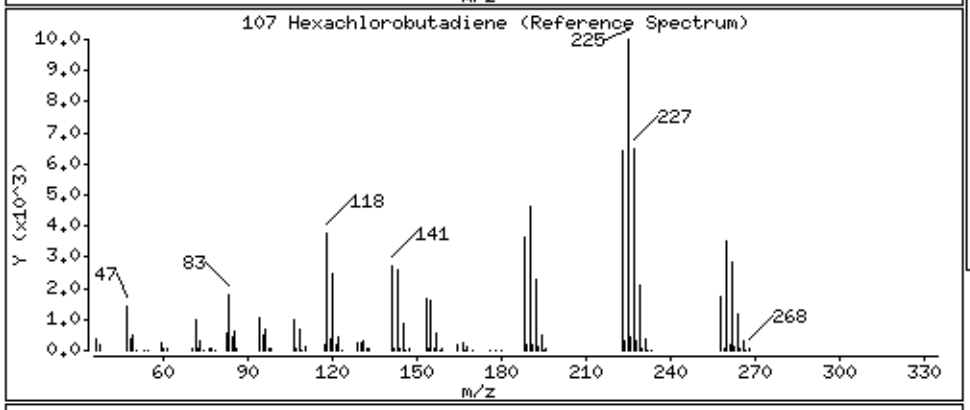
Column diameter: 0.53

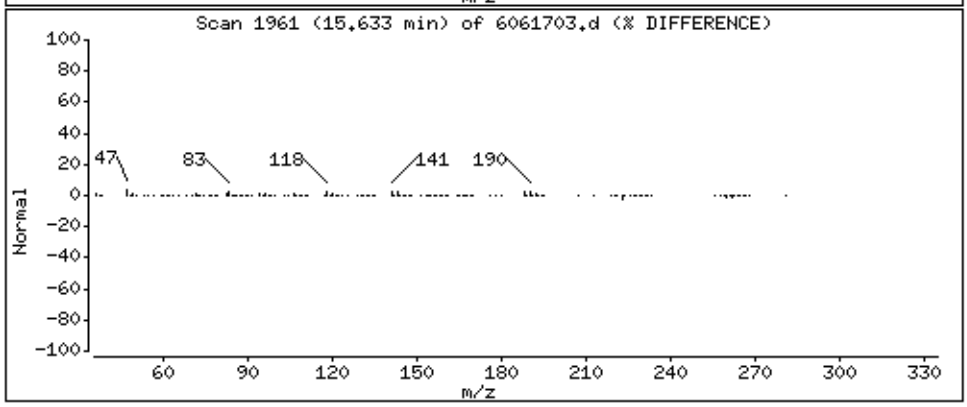
107 Hexachlorobutadiene

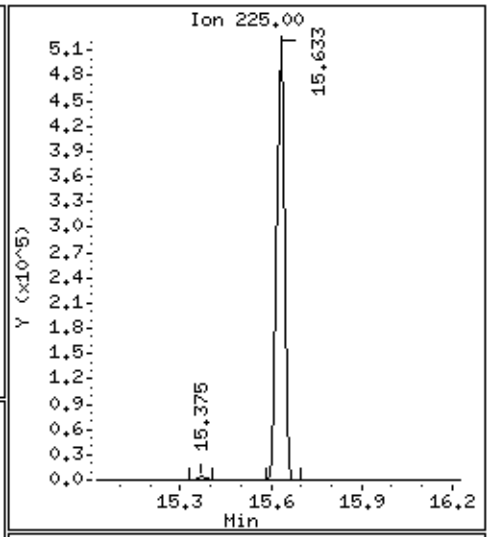
Concentration: 197.40 NG

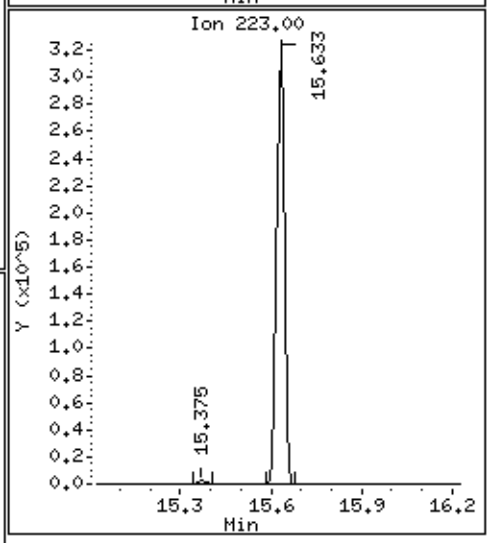












Data File: /chem/msd6.i/17jun16.b/6061703.d

Date : 17-JUN-2016 11:37

Client ID: LCS

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCS;LCS

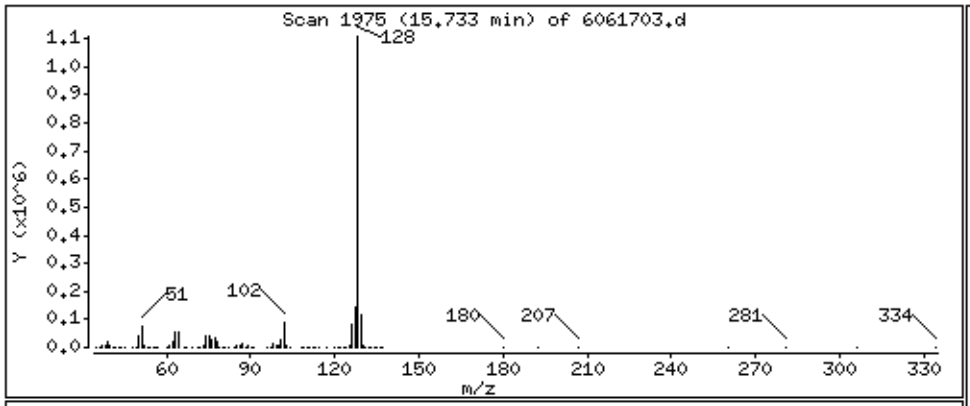
Operator: CT

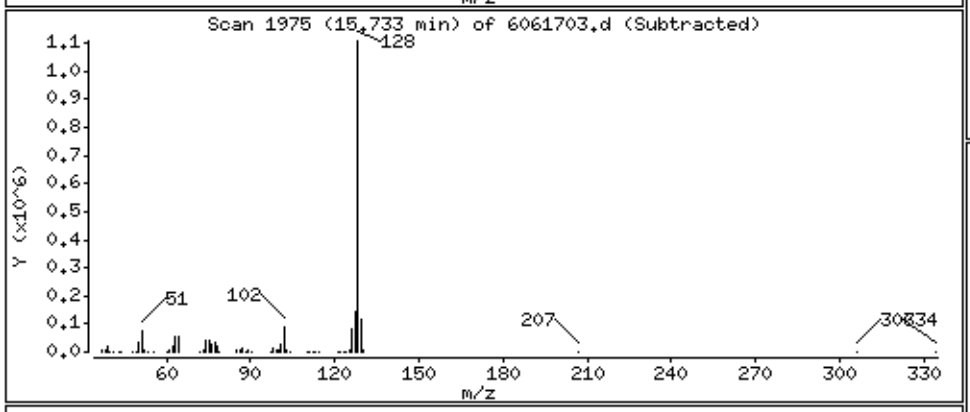
Column phase: RTx-624

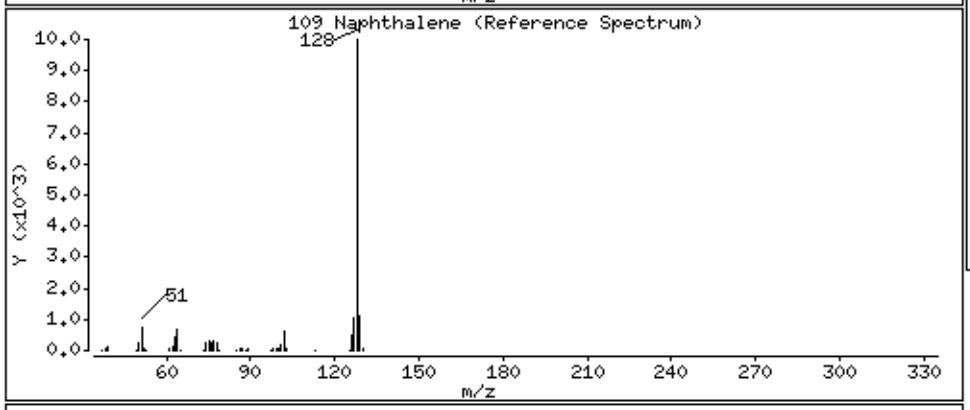
Column diameter: 0.53

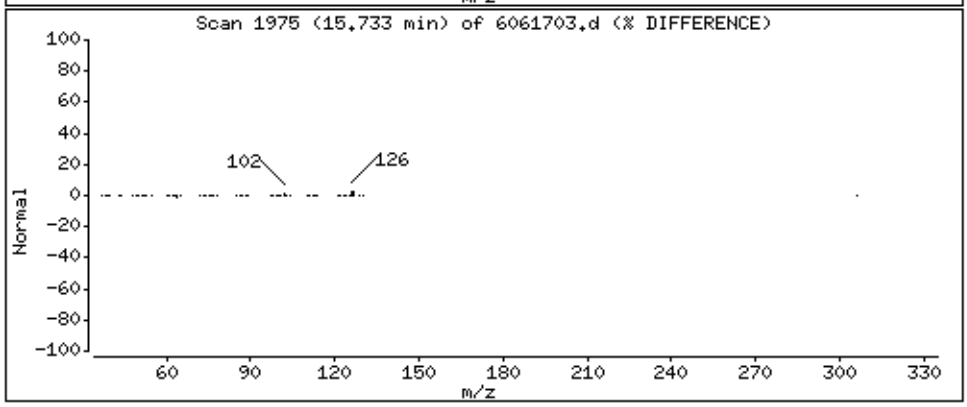
109 Naphthalene

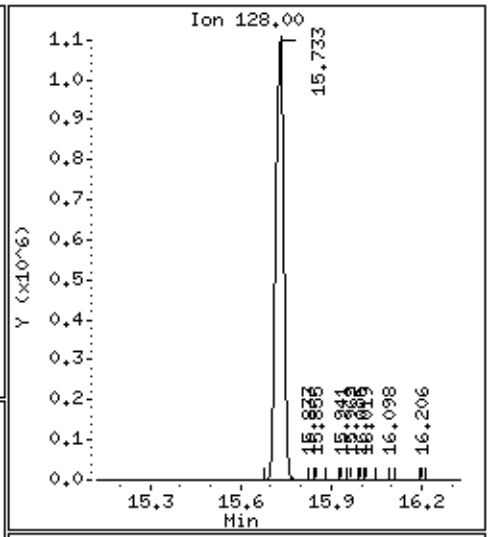
Concentration: 59.480 NG

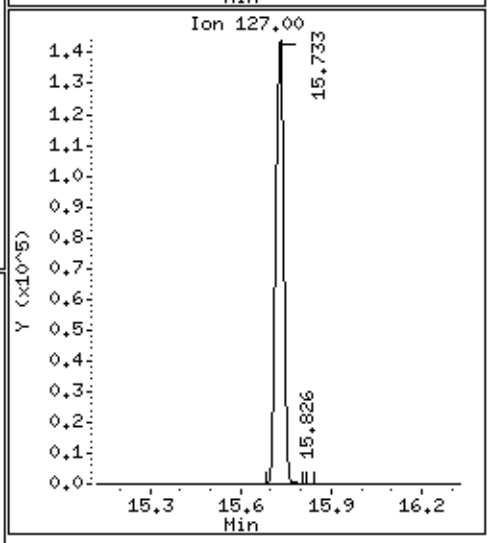












Data File: /chem/msd6.i/17jun16.b/6061703.d

Date : 17-JUN-2016 11:37

Client ID: LCS

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCS;LCS

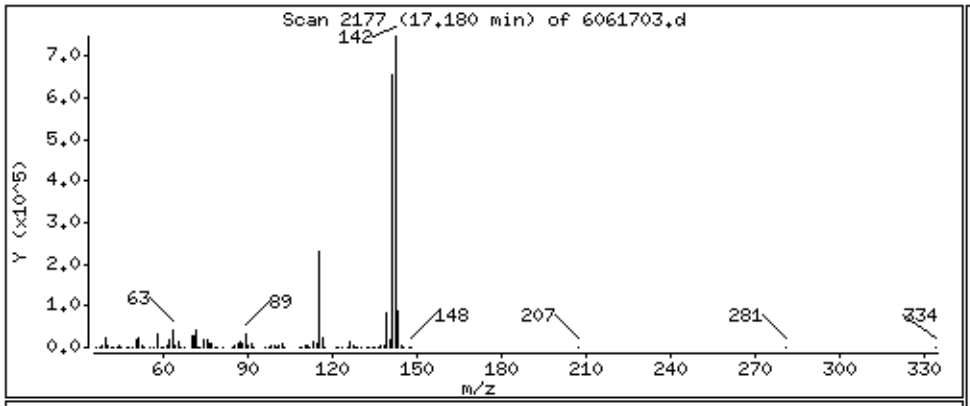
Operator: CT

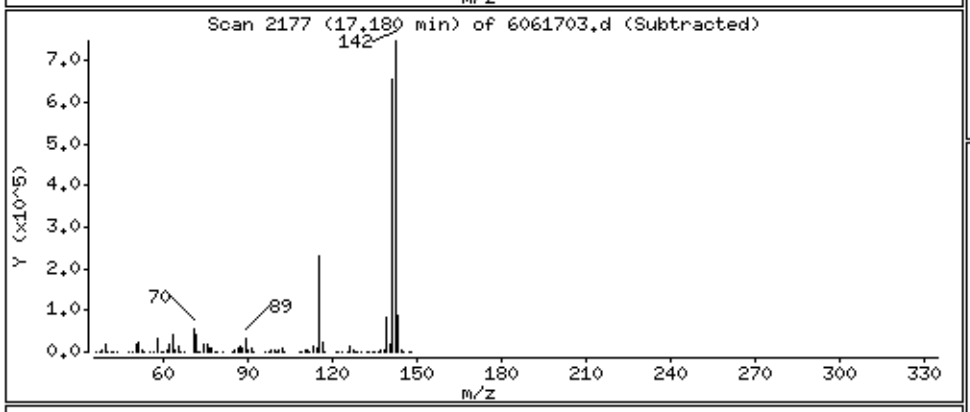
Column phase: RTx-624

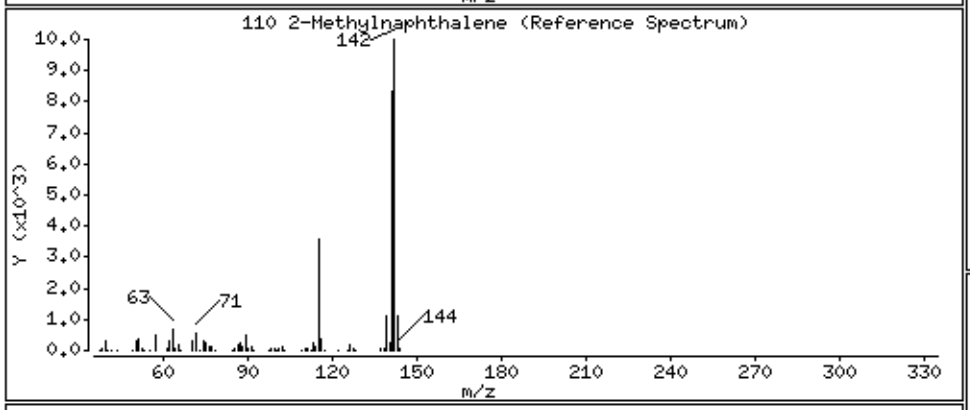
Column diameter: 0.53

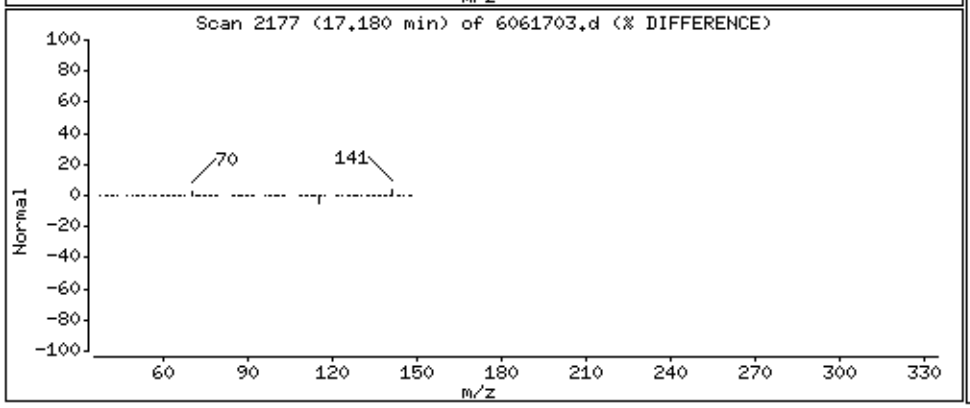
110 2-Methylnaphthalene

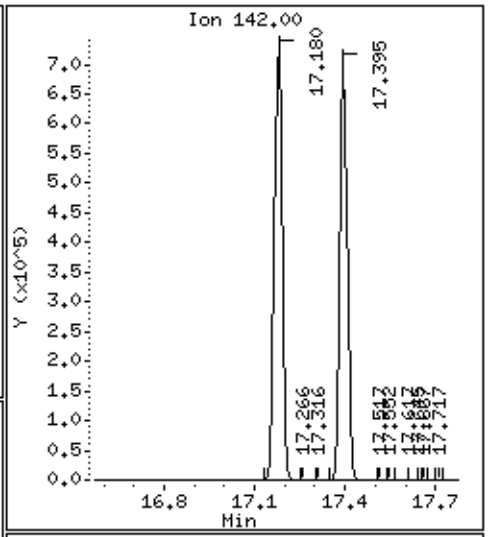
Concentration: 61.394 NG

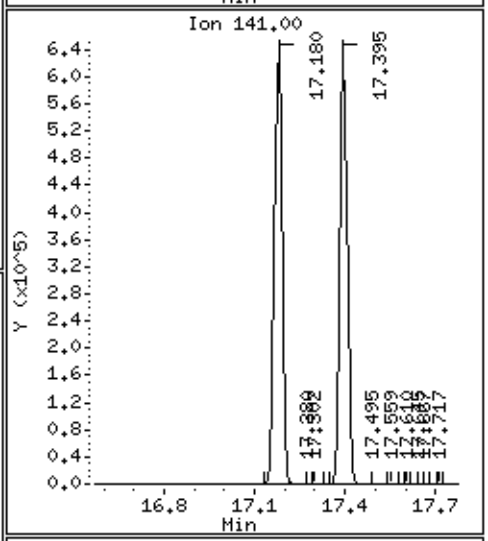


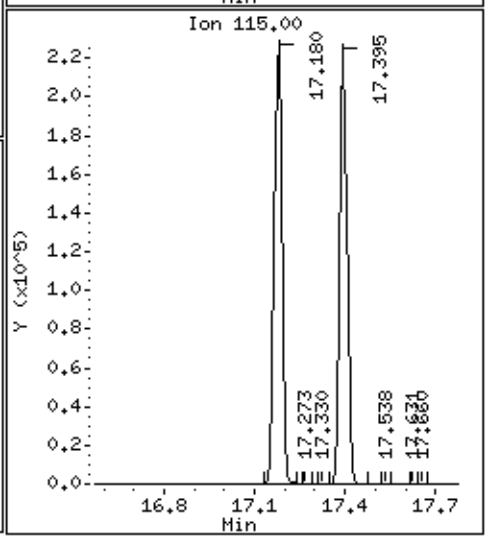












Data File: /chem/msd6.i/17jun16.b/6061703.d

Date : 17-JUN-2016 11:37

Client ID: LCS

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCS;LCS

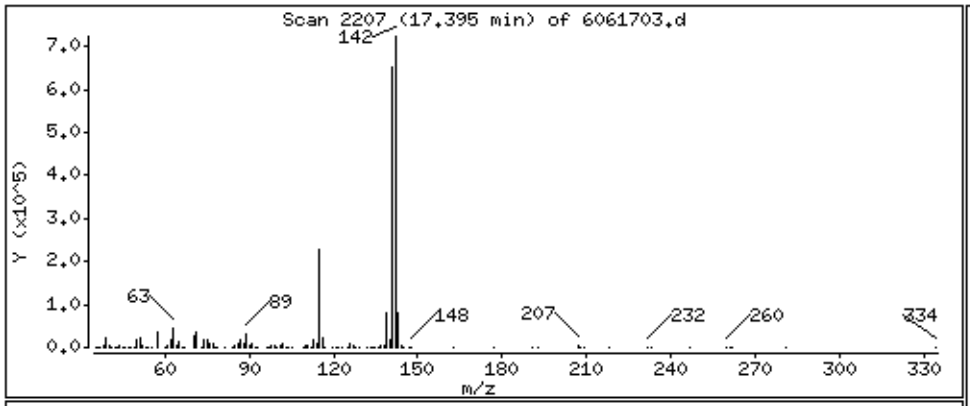
Operator: CT

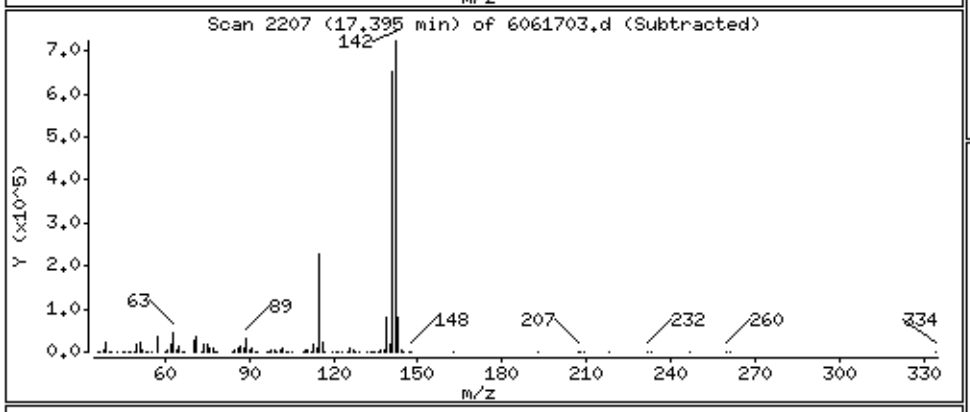
Column phase: RTx-624

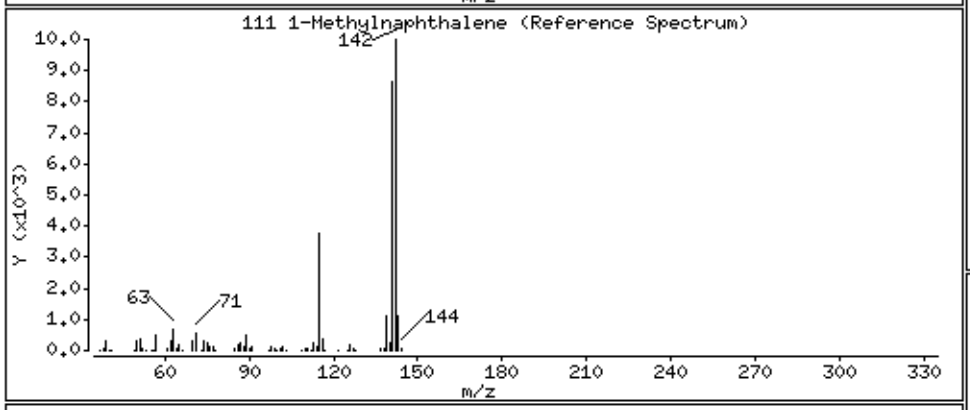
Column diameter: 0.53

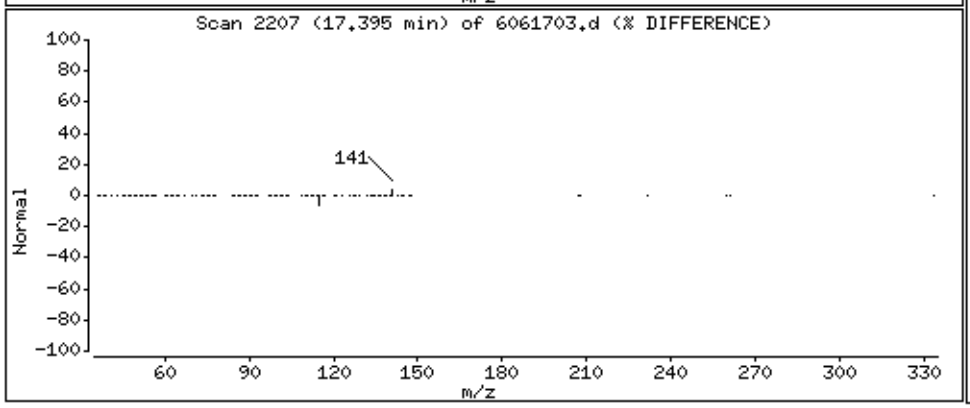
111 1-Methylnaphthalene

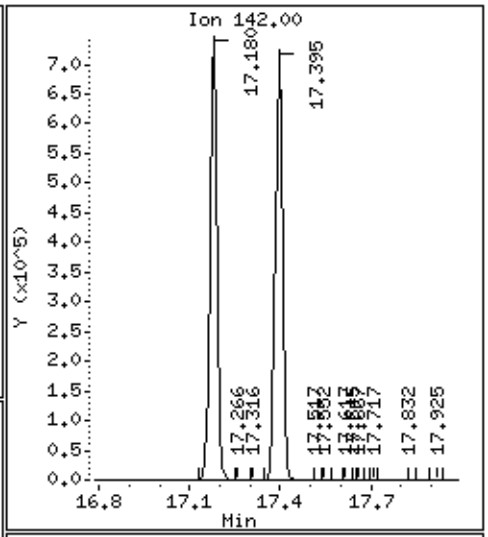
Concentration: 61.278 NG

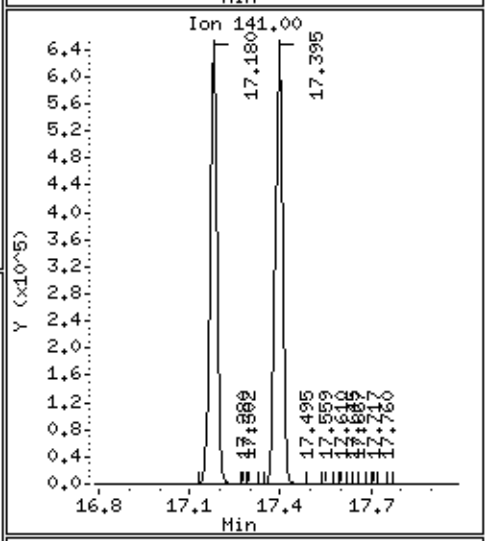


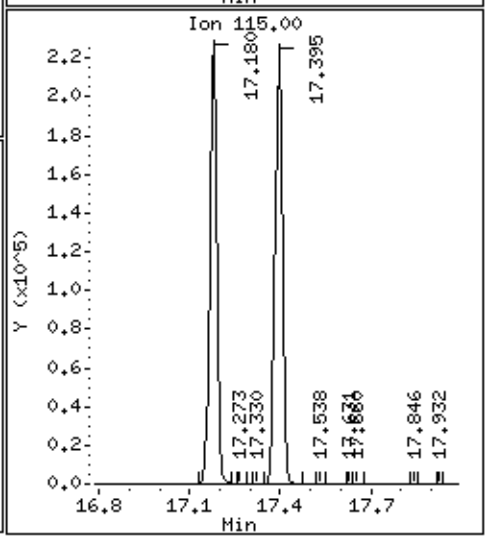












Data File: /chem/msd6.i/17jun16.b/6061703.d

Date : 17-JUN-2016 11:37

Client ID: LCS

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCS;LCS

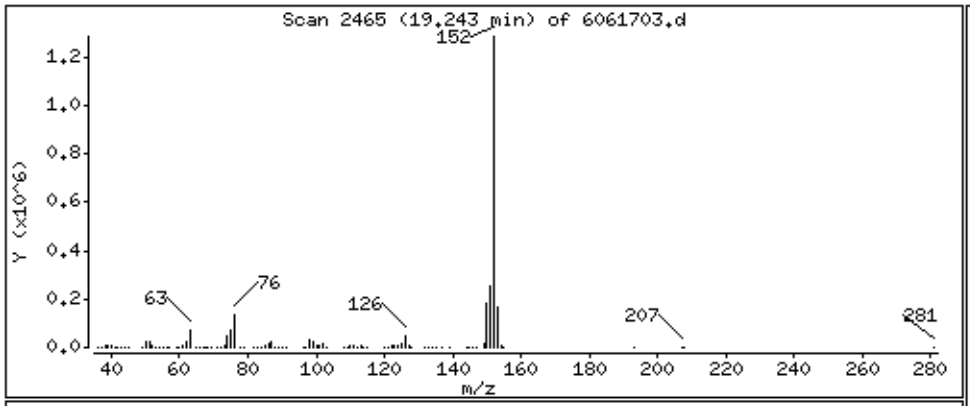
Operator: CT

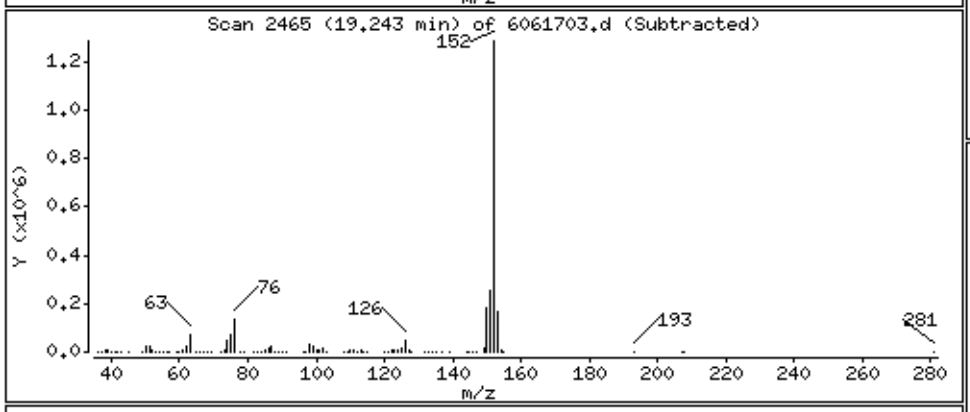
Column phase: RTx-624

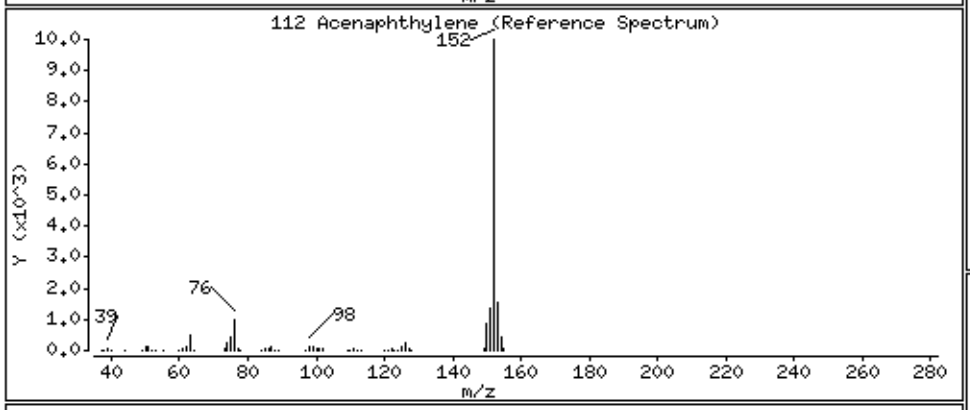
Column diameter: 0.53

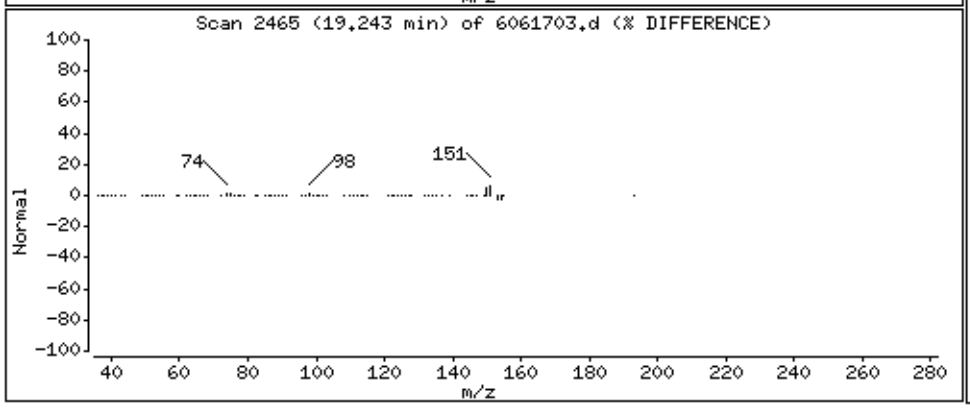
112 Acenaphthylene

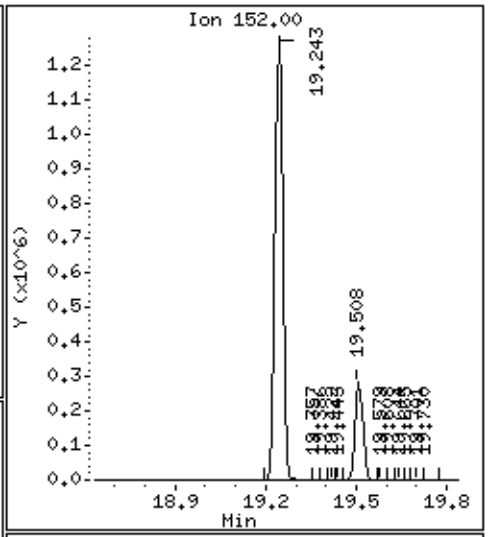
Concentration: 62.793 NG

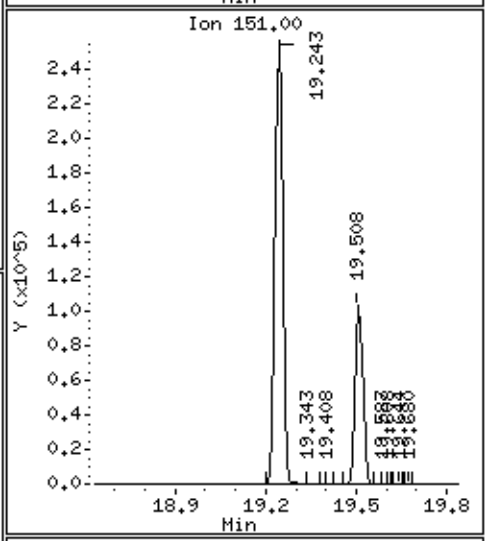


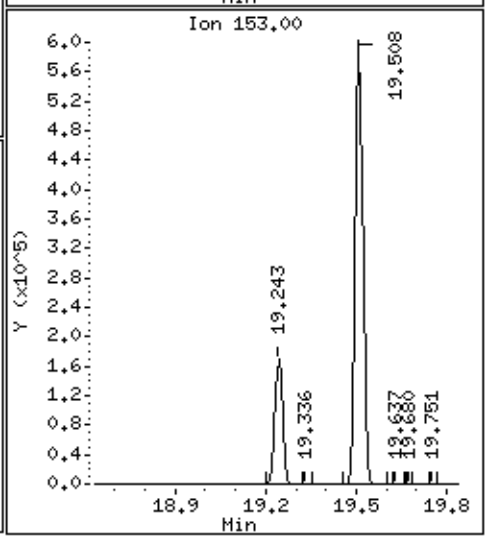












Data File: /chem/msd6.i/17jun16.b/6061703.d

Date : 17-JUN-2016 11:37

Client ID: LCS

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCS;LCS

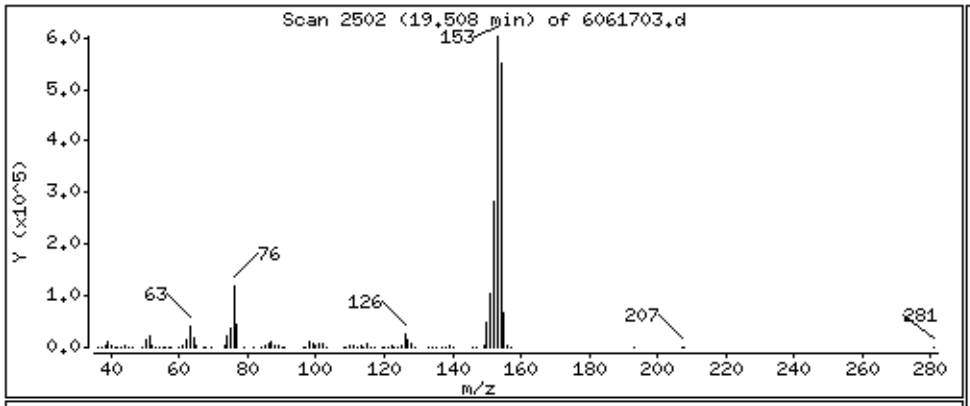
Operator: CT

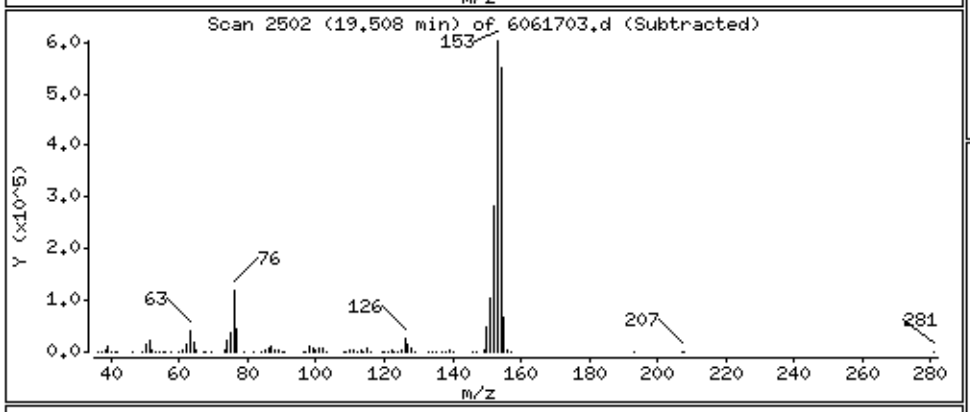
Column phase: RTx-624

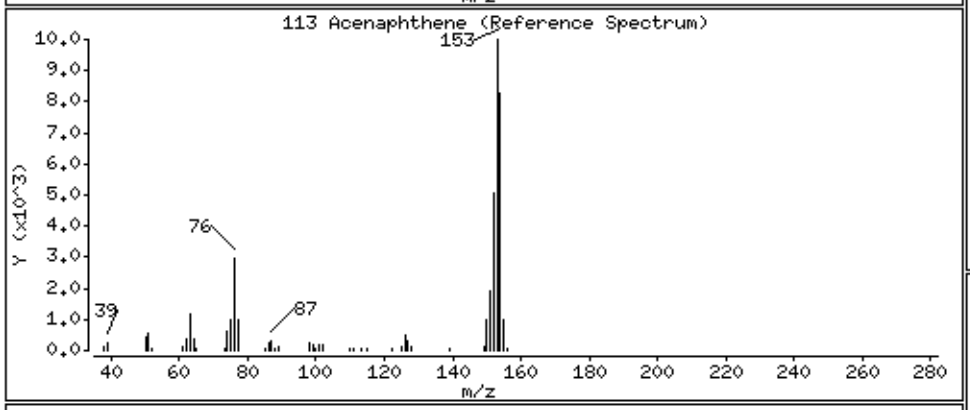
Column diameter: 0.53

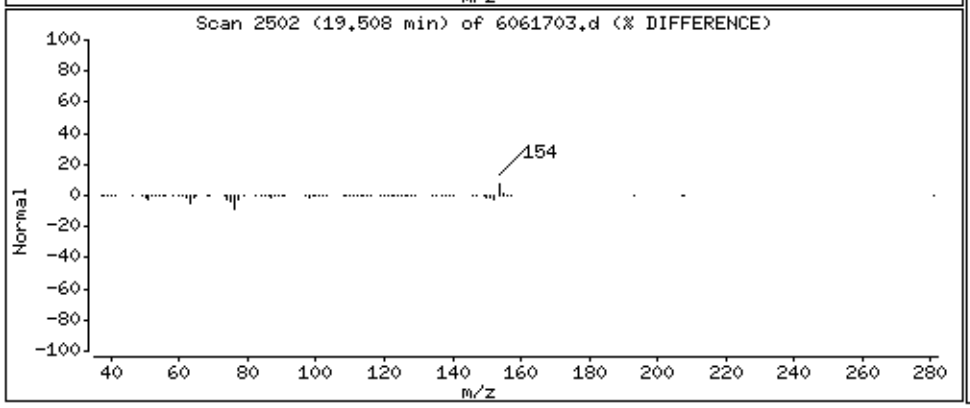
113 Acenaphthene

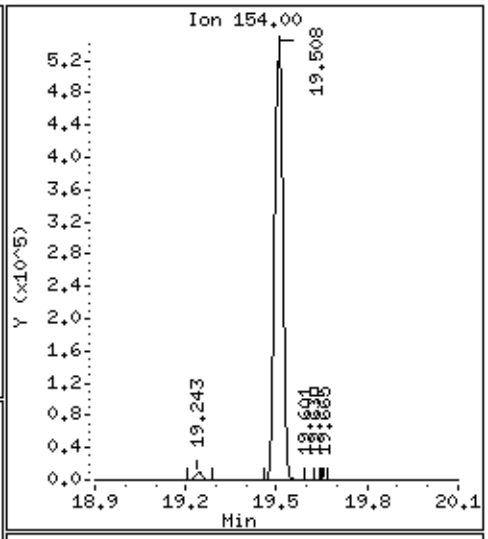
Concentration: 57.593 NG

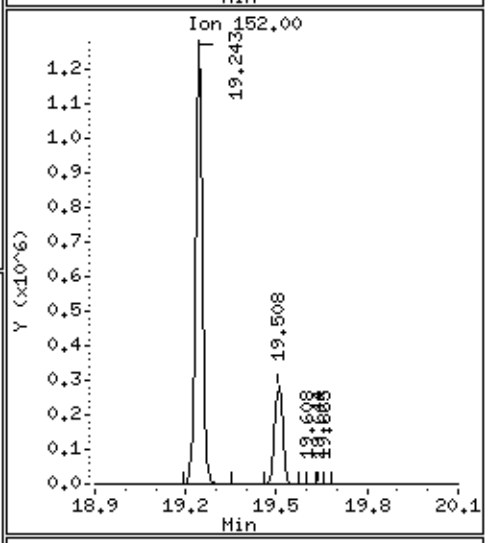


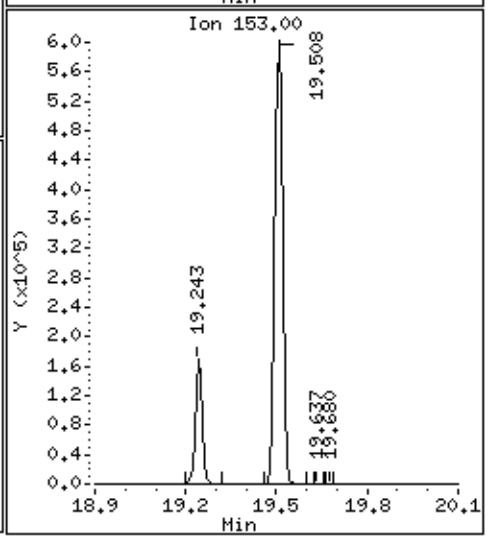












Data File: /chem/msd6.i/17jun16.b/6061703.d

Date : 17-JUN-2016 11:37

Client ID: LCS

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCS;LCS

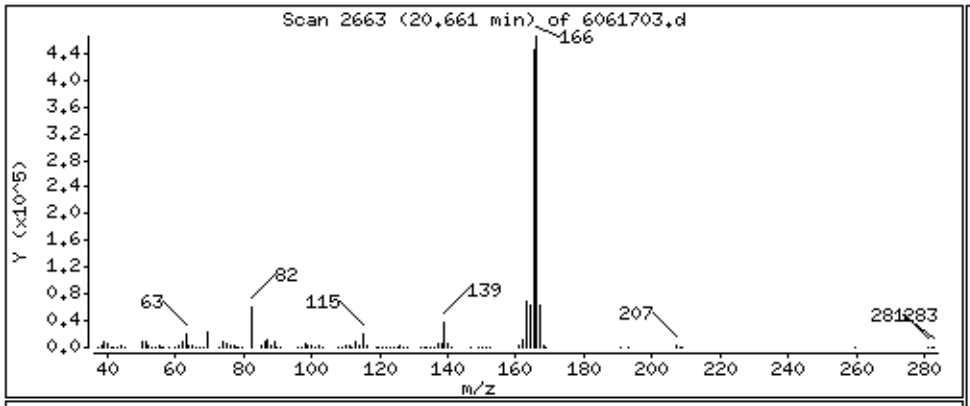
Operator: CT

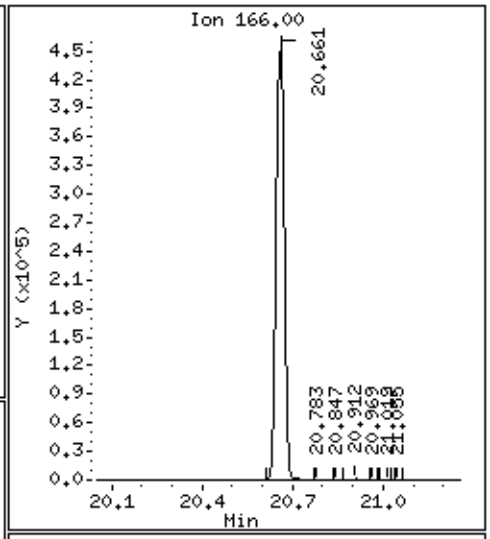
Column phase: RTx-624

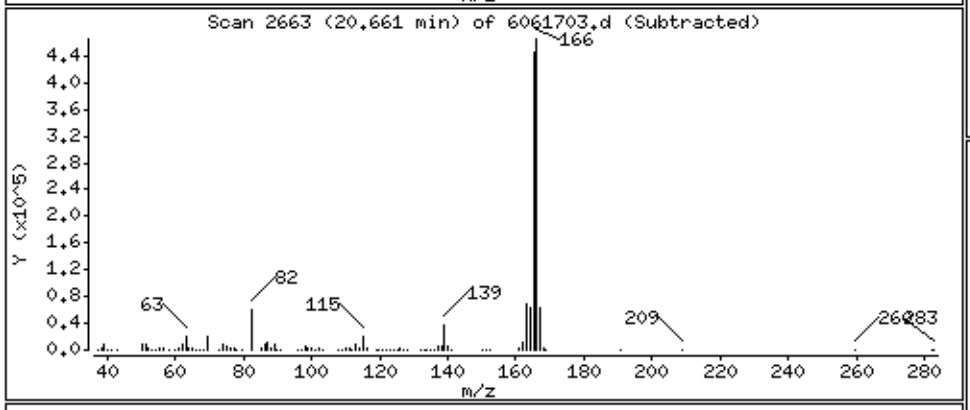
Column diameter: 0.53

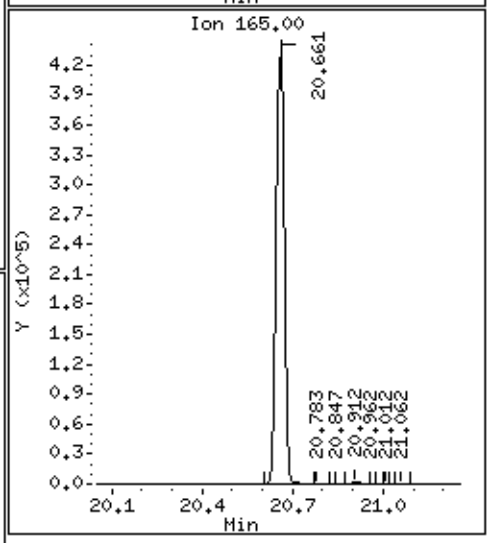
114 Fluorene

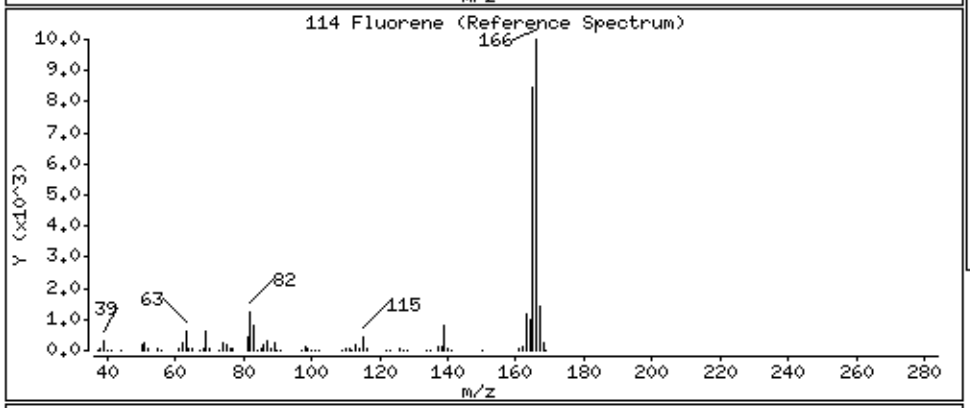
Concentration: 57.116 NG

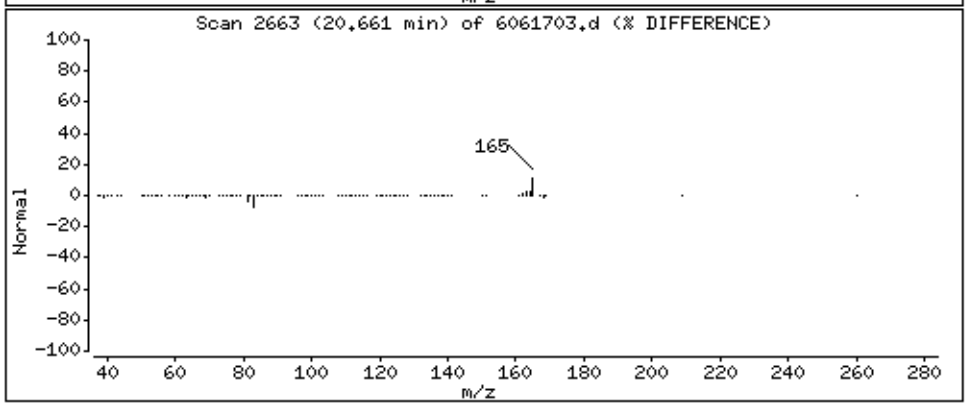












Data File: /chem/msd6.i/17jun16.b/6061703.d

Date : 17-JUN-2016 11:37

Client ID: LCS

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCS;LCS

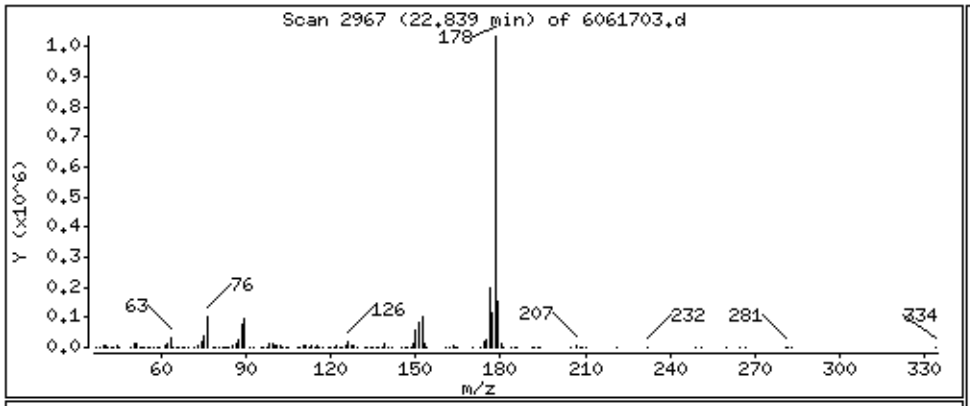
Operator: CT

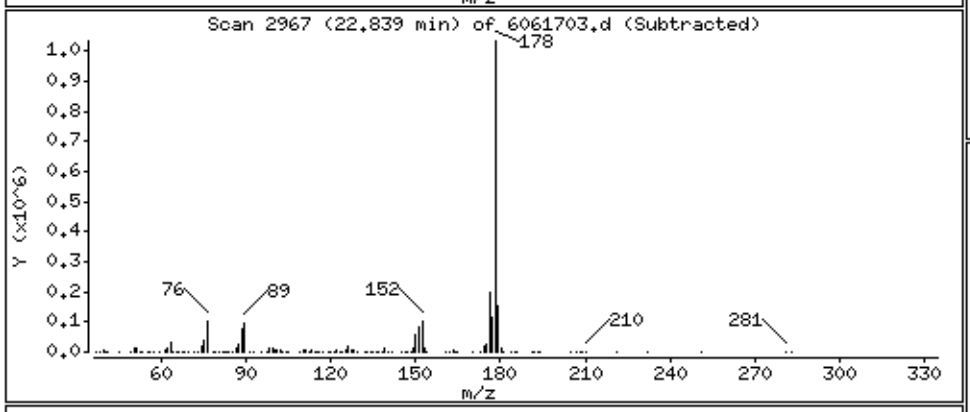
Column phase: RTx-624

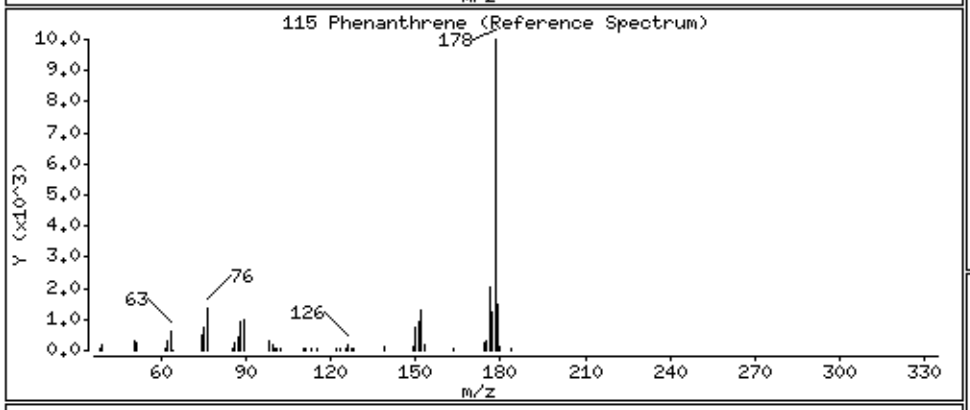
Column diameter: 0.53

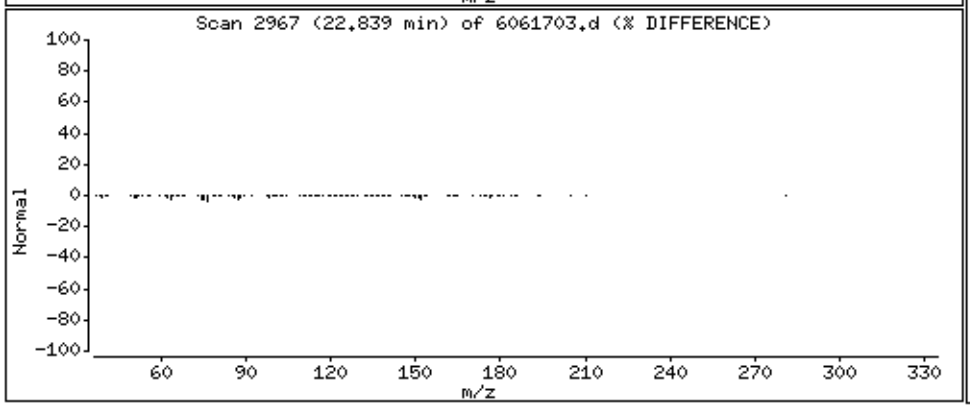
115 Phenanthrene

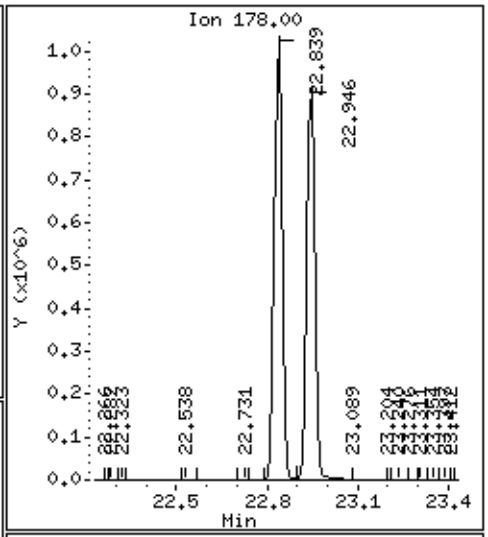
Concentration: 52.956 NG

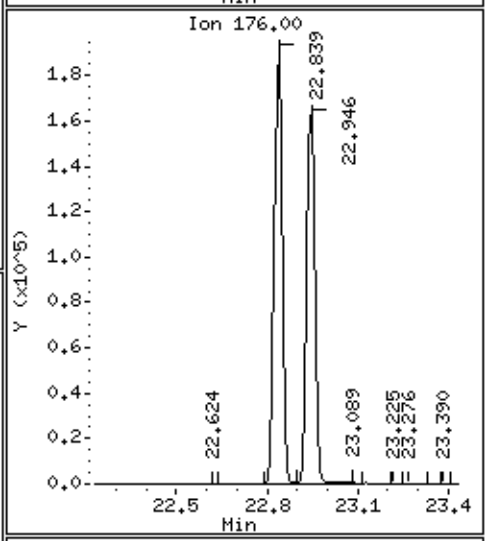


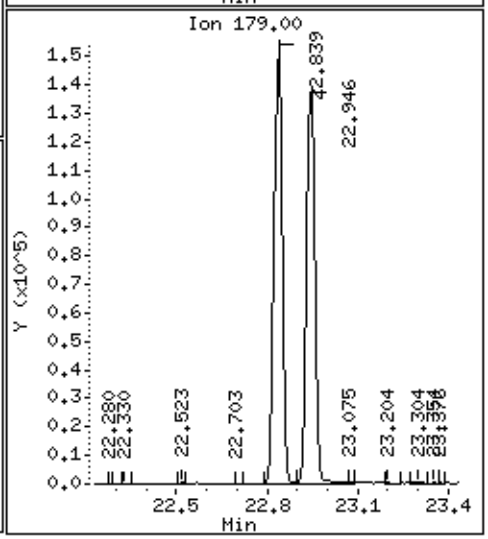












Data File: /chem/msd6.i/17jun16.b/6061703.d

Date : 17-JUN-2016 11:37

Client ID: LCS

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCS;LCS

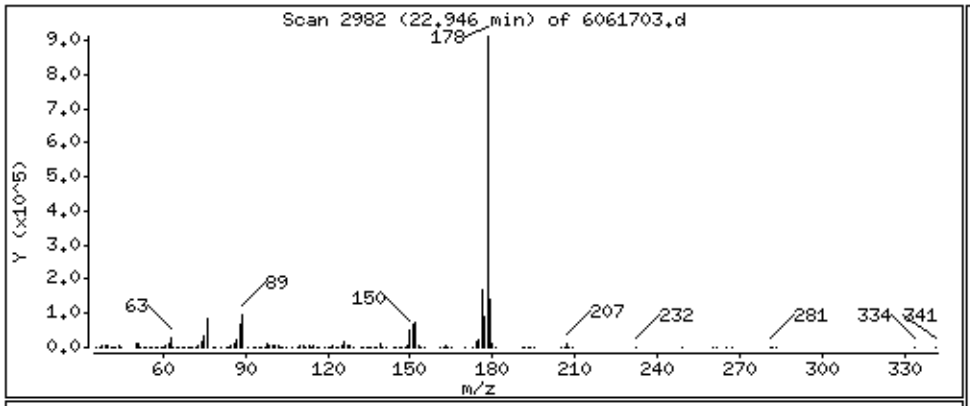
Operator: CT

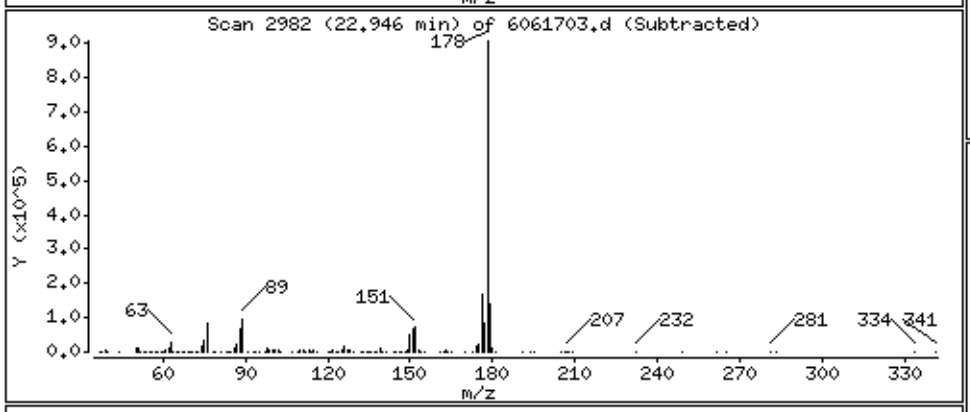
Column phase: RTx-624

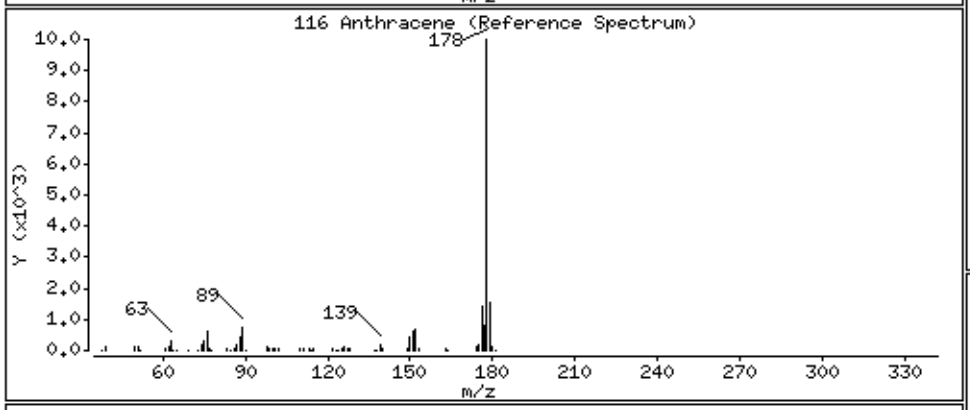
Column diameter: 0.53

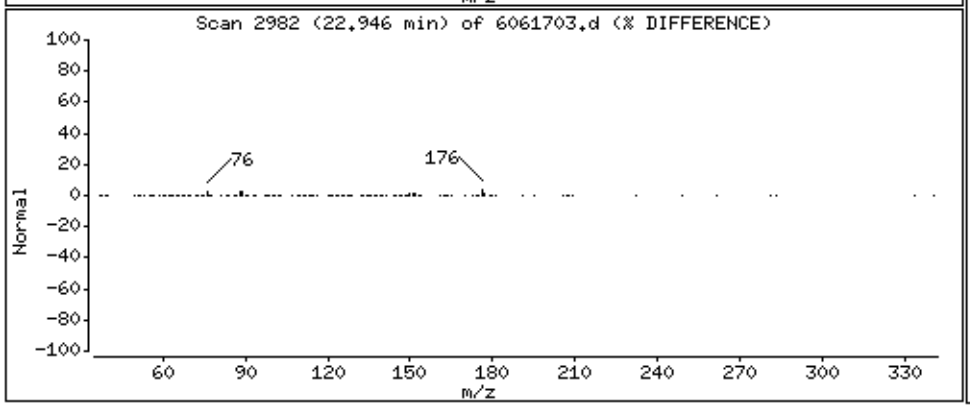
116 Anthracene

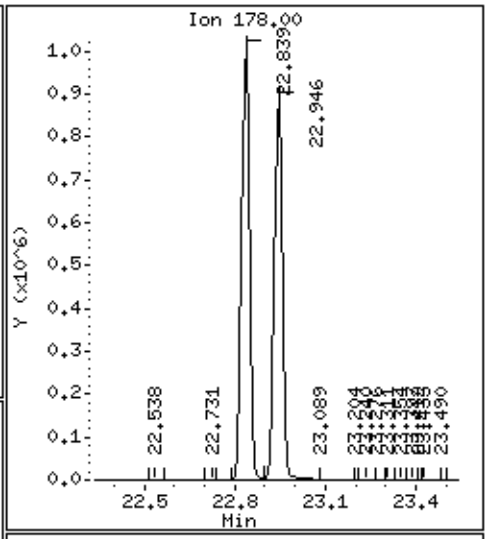
Concentration: 55.287 NG

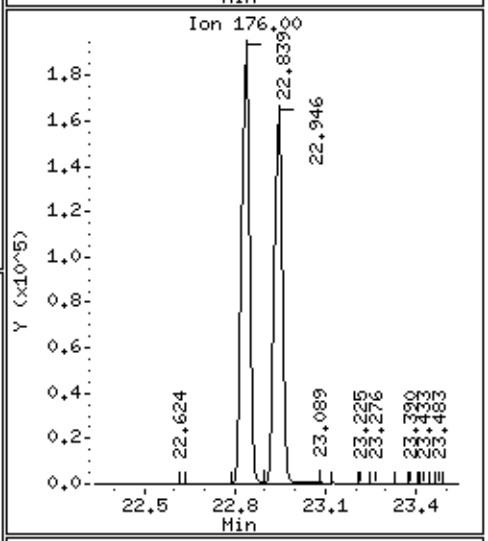


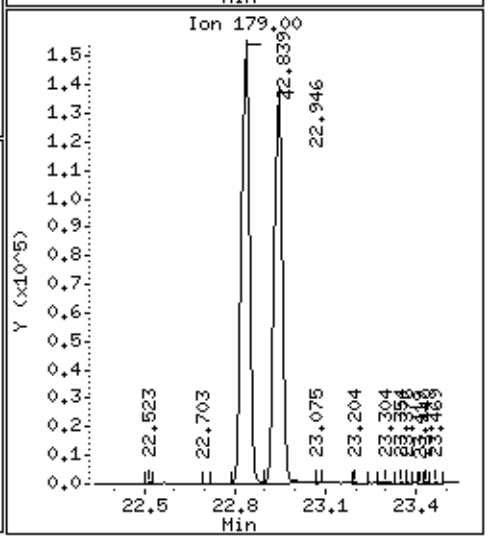












Data File: /chem/msd6.i/17jun16.b/6061703.d

Date : 17-JUN-2016 11:37

Client ID: LCS

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCS;LCS

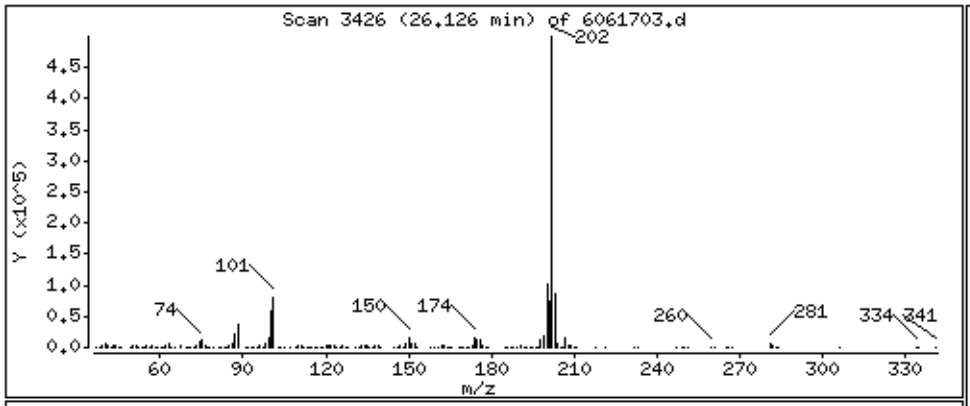
Operator: CT

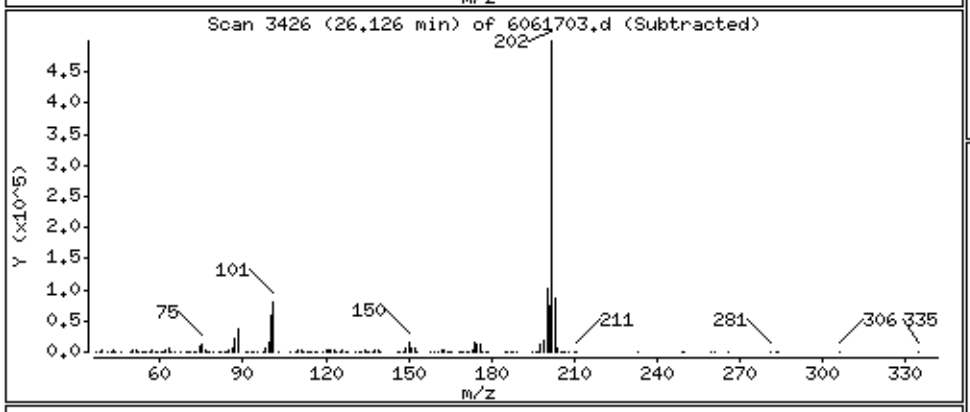
Column phase: RTx-624

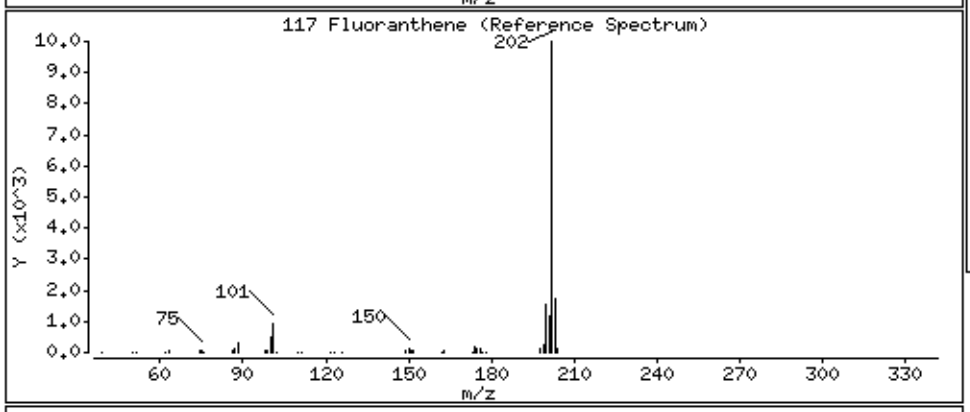
Column diameter: 0.53

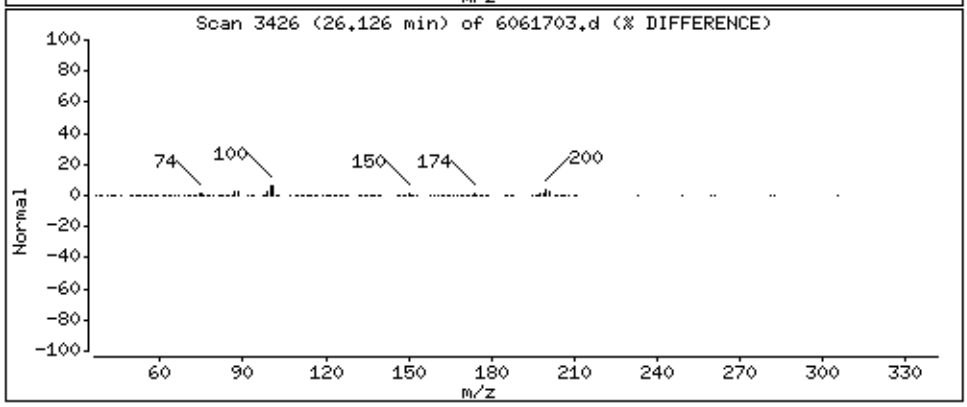
117 Fluoranthene

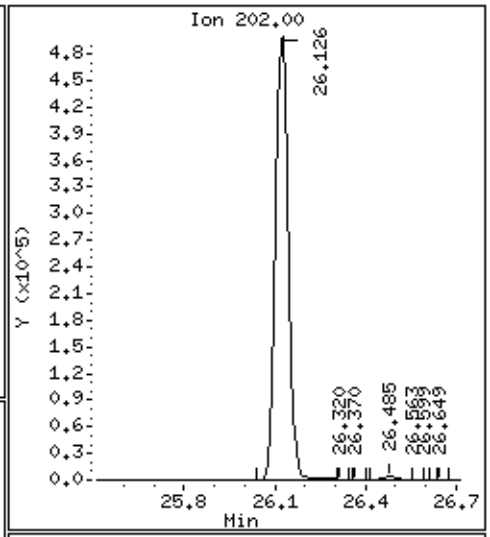
Concentration: 59.884 NG

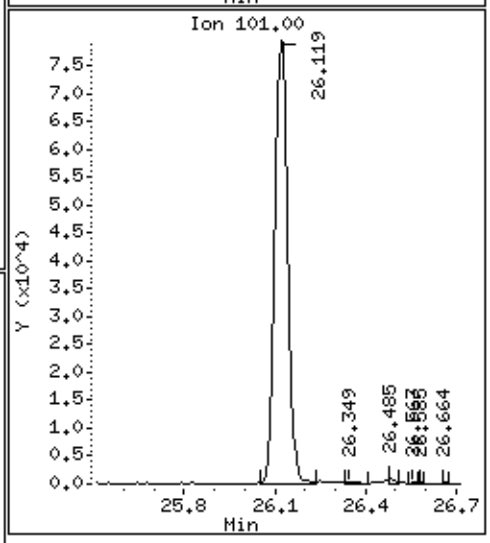












Data File: /chem/msd6.i/17jun16.b/6061703.d

Date : 17-JUN-2016 11:37

Client ID: LCS

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCS;LCS

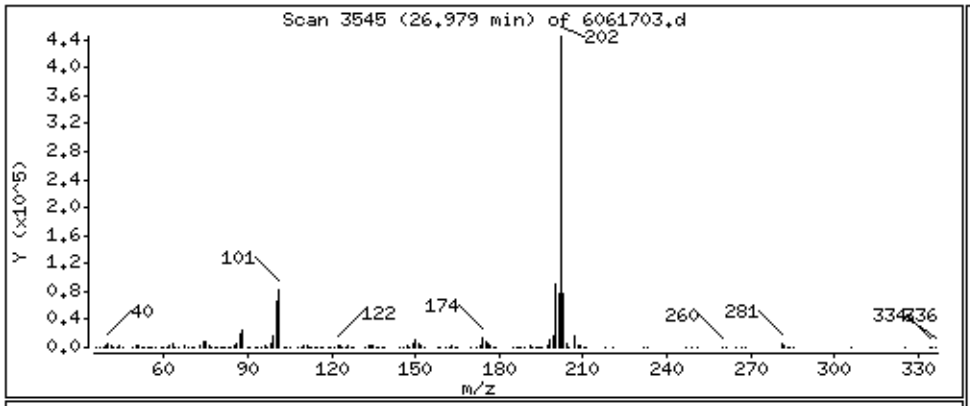
Operator: CT

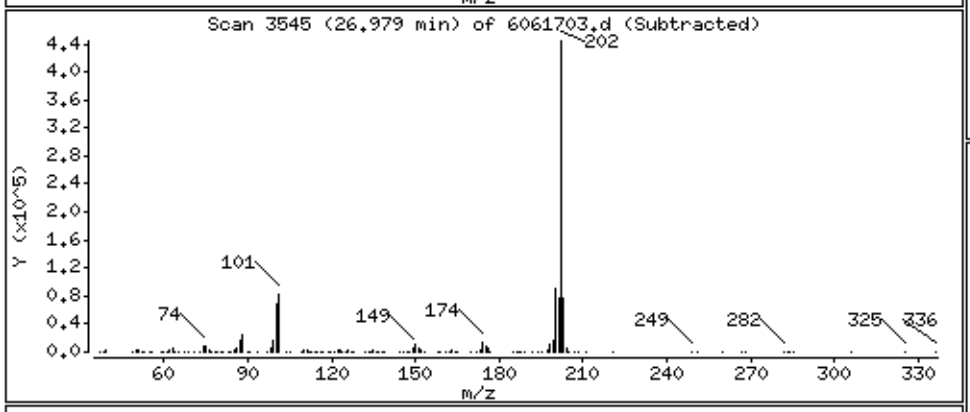
Column phase: RTx-624

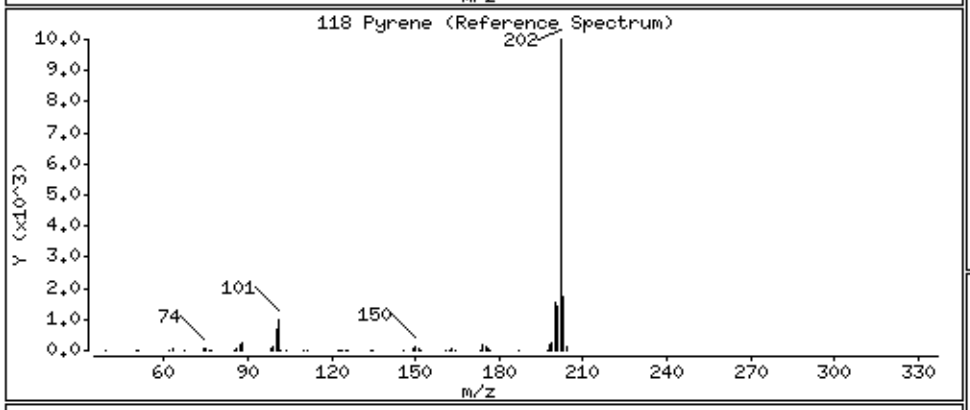
Column diameter: 0.53

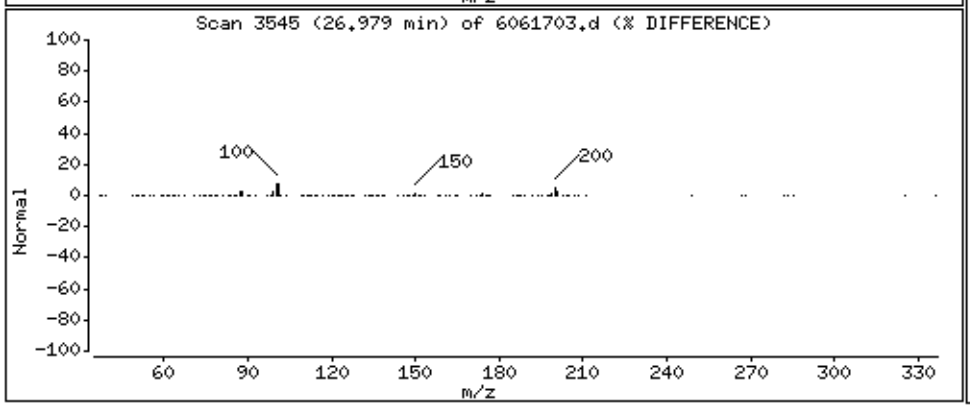
118 Pyrene

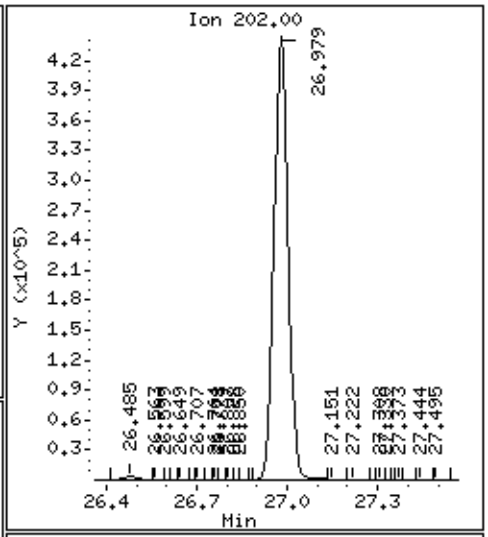
Concentration: 57.635 NG

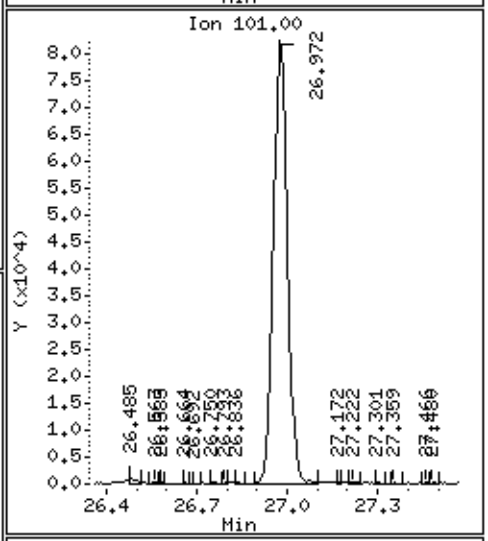


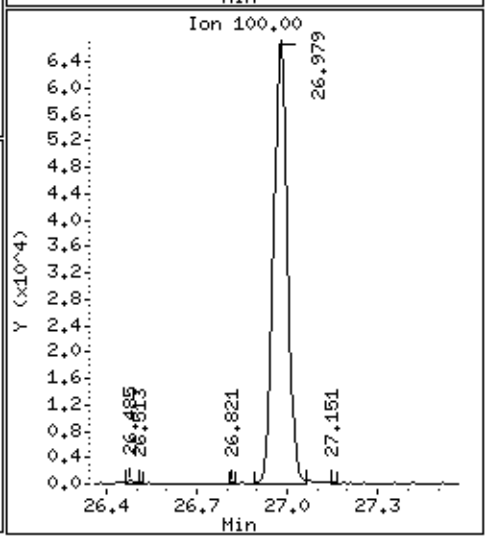












eurofins | Air Toxics

Client Sample ID: LCSD
Lab ID#: 1606272-19BB
EPA METHOD TO-17

File Name:	**6061704**	**Date of Extraction: NA**	**Date of Collection: NA**
Dil. Factor:	**1.00**		**Date of Analysis: 6/17/16 12:17 PM**

Compound	**%Recovery**	**Method Limits**
Naphthalene	116	70-130

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

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

Report Date: 17-Jun-2016 13:31

Eurofins Air Toxics Inc.

RECOVERY REPORT

Client Name:
Client SDG: 17jun16
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/17jun16.b/616z0614vi.m
Misc Info: 2516-245-20ml(9/7/16),2744-32-50(7/20/16)

SPIKE COMPOUND	CONC ADDED NG	CONC RECOVERED NG	% RECOVERED	LIMITS
3 Freon 114	139.80	153.63	109.89	70-130
6 Vinyl Chloride	51.100	66.959	131.03*	70-130
7 1,3-Butadiene	44.200	53.044	120.01	70-130
9 Chloroethane	52.800	55.315	104.76	70-130
10 Isopentane	59.000	69.501	117.80	70-130
11 Trichlorofluoromet	112.40	114.82	102.15	70-130
14 1,1-Dichloroethene	79.300	87.355	110.16	70-130
15 Freon 113	153.30	158.02	103.08	70-130
18 Carbon Disulfide	62.300	50.292	80.73	70-130
19 2-Propanol	49.200	46.293	94.09	70-130
22 Methylene Chloride	69.500	79.954	115.04	70-130
25 trans-1,2-Dichloro	79.300	75.190	94.82	70-130
26 MTBE	72.100	84.519	117.22	70-130
28 Hexane	70.500	86.106	122.14	70-130
29 1,1-Dichloroethane	81.000	77.640	95.85	70-130
37 cis-1,2-Dichloroet	79.300	94.545	119.22	70-130
38 2-Butanone	59.000	72.757	123.32	70-130
44 Chloroform	97.700	102.39	104.80	70-130
45 1,1,1-Trichloroeth	109.10	97.034	88.94	70-130
46 Cyclohexane	68.800	60.093	87.35	70-130
47 Carbon Tetrachlori	125.80	112.87	89.72	70-130
48 Benzene	63.900	62.971	98.55	70-130
50 1,2-Dichloroethane	80.900	82.346	101.79	70-130
51 2,2,4-Trimethylpen	93.400	110.28	118.07	70-130
53 Heptane	82.000	88.400	107.81	70-130
56 Trichloroethene	107.50	108.04	100.50	70-130
58 Methyl Cyclohexane	80.300	85.678	106.70	70-130
59 1,2-Dichloropropan	92.400	107.75	116.61	70-130
60 1,4-Dioxane	72.100	75.839	105.19	70-130
65 4-Methyl-2-pentano	81.900	89.861	109.72	70-130
67 Toluene	75.400	80.042	106.16	70-130
70 1,1,2-Trichloroeth	109.10	108.49	99.44	70-130
71 Tetrachloroethene	135.70	117.55	86.62	70-130

SPIKE COMPOUND	CONC ADDED NG	CONC RECOVERED NG	% RECOVERED	LIMITS
72 2-Hexanone	81.900	76.538	93.45	70-130
74 1,2-Dibromoethane	153.70	165.07	107.40	70-130
81 Chlorobenzene	92.100	92.896	100.86	70-130
82 Ethyl Benzene	86.800	89.907	103.58	70-130
84 m,p-Xylene	86.800	89.565	103.19	70-130
88 o-Xylene	86.800	97.892	112.78	70-130
89 Styrene	85.200	97.183	114.06	70-130
91 Cumene	98.300	107.88	109.74	70-130
94 1,1,2,2-Tetrachlor	137.30	160.01	116.54	70-130
96 Propylbenzene	98.300	110.87	112.79	70-130
97 4-Ethyltoluene	98.300	105.03	106.85	70-130
98 1,3,5-Trimethylben	98.300	103.62	105.41	70-130
100 1,2,4-Trimethylben	98.300	103.71	105.51	70-130
101 1,3-Dichlorobenzen	120.30	121.18	100.73	70-130
102 1,4-Dichlorobenzen	120.30	120.49	100.16	70-130
105 1,2-Dichlorobenzen	120.30	119.47	99.31	70-130
106 1,2,4-Trichloroben	148.40	142.88	96.28	70-130
107 Hexachlorobutadien	213.30	196.06	91.92	70-130
109 Naphthalene	50.000	58.211	116.42	70-130
110 2-Methylnaphthalen	50.000	56.424	112.85	70-130
111 1-Methylnaphthalen	50.000	55.533	111.07	70-130
112 Acenaphthylene	50.000	55.170	110.34	70-130
113 Acenaphthene	50.000	52.506	105.01	70-130
114 Fluorene	50.000	50.800	101.60	60-140
115 Phenanthrene	50.000	47.060	94.12	60-140
116 Anthracene	50.000	46.505	93.01	60-140
117 Fluoranthene	50.000	50.762	101.52	60-140
118 Pyrene	50.000	48.641	97.28	60-140

SURROGATE COMPOUND	AMOUNT ADDED ng	AMOUNT RECOVERED ng	% RECOVERED	LIMITS
$ 49 1,2-Dichloroethane	25.000	22.604	90.42	50-150
$ 66 Toluene-d8	25.000	24.533	98.13	50-150
$ 108 Naphthalene-d8	25.000	23.104	92.42	50-150

Eurofins Air Toxics Inc.

EPA Method TO-17 GC/MS

Data file : /chem/msd6.i/17jun16.b/6061704.d
Lab Smp Id: VI VOC+PAH LCSD Client Smp ID: LCSD
Inj Date : 17-JUN-2016 12:17
Operator : CT Inst ID: msd6.i
Smp Info : ;VI VOC+PAH LCSD;LCSD
Misc Info : 2516-245-20ml(9/7/16),2744-32-50(7/20/16)
Comment :
Method : /chem/msd6.i/17jun16.b/616z0614vi.m
Meth Date : 17-Jun-2016 11:15 U5BT Quant Type: ISTD
Cal Date : 15-JUN-2016 11:01 Cal File: 6061502.d
Als bottle: 11 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	
4.308	4.308 (1.000)	130	182981	26.0000		80.00- 120.00	100.00
4.308	4.308 (1.000)	128	141404			47.94- 107.94	77.28
4.308	4.301 (1.000)	49	217695			68.24- 128.24	118.97
* 54 1,4-Difluorobenzene						CAS #: 540-36-3	
5.948	5.941 (1.000)	114	779189	23.0000		80.00- 120.00	100.00
5.948	5.941 (1.000)	88	119722			0.00- 45.46	15.37
* 79 Chlorobenzene-d5						CAS #: 3114-55-4	
9.867	9.867 (1.000)	117	728072	24.0000		80.00- 120.00	100.00
9.867	9.867 (1.000)	82	369017			19.06- 79.06	50.68
* 92 Bromofluorobenzene						CAS #: 460-00-4	
11.421	11.421 (1.000)	174	495793	36.0000		80.00- 120.00	100.00
11.421	11.421 (1.000)	95	548918			74.19- 134.19	110.72
11.421	11.421 (1.000)	176	482500			67.61- 127.61	97.32
$ 49 1,2-Dichloroethane-d4						CAS #: 17060-07-0	
5.232	5.225 (0.880)	65	90848	22.6043	22.604	80.00- 120.00	100.00

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

$  49 1,2-Dichloroethane-d4 (continued)
  5.232   5.225 (0.880)    67     48821                    21.94-  81.94    53.74
-------------------------------------------------------------------------------
$  66 Toluene-d8                                   CAS #: 2037-26-5
  7.961   7.954 (0.807)    98    333455 24.5335   24.533  80.00- 120.00   100.00
  7.961   7.954 (0.807)    70     34802                     0.00-  39.97    10.44
  7.961   7.954 (0.807)   100    219747                    35.51-  95.51    65.90
-------------------------------------------------------------------------------
$ 108 Naphthalene-d8                               CAS #: 1146-65-2
 15.683  15.683 (1.373)   136    593156 23.1039   23.104  80.00- 120.00   100.00
 15.683  15.683 (1.373)   108     52063                     0.00-  38.72     8.78
-------------------------------------------------------------------------------
    3 Freon 114                                    CAS #: 76-14-2
  1.283   1.283 (0.298)   135    524642 153.627   153.63  80.00- 120.00   100.00
  1.269   1.283 (0.295)   137    172036                     2.20-  62.20    32.79
-------------------------------------------------------------------------------
    6 Vinyl Chloride                               CAS #: 75-01-4
  1.381   1.409 (0.320)    62    293169 66.9587   66.959  80.00- 120.00   100.00(R)
  1.381   1.409 (0.320)    64    123334                    13.62-  73.62    42.07
-------------------------------------------------------------------------------
    7 1,3-Butadiene                                CAS #: 106-99-0
  1.395   1.395 (0.324)    54    208264 53.0443   53.044  80.00- 120.00   100.00
  1.395   1.395 (0.324)    39    316443                   117.53- 177.53   151.94
-------------------------------------------------------------------------------
    9 Chloroethane                                 CAS #: 75-00-3
  1.647   1.647 (0.382)    64    117896 55.3153   55.315  80.00- 120.00   100.00
  1.647   1.647 (0.382)    66     35724                     1.59-  61.59    30.30
  1.647   1.647 (0.382)    49     33163                     0.00-  57.55    28.13
-------------------------------------------------------------------------------
   10 Isopentane                                   CAS #: 78-78-4
  1.689   1.689 (0.392)    57    227095 69.5012   69.501  80.00- 120.00   100.00
  1.689   1.689 (0.392)    43    346624                   107.36- 167.36   152.63
-------------------------------------------------------------------------------
   11 Trichlorofluoromethane/Fr11                  CAS #: 75-69-4
  1.814   1.814 (0.421)   101    673370 114.820   114.82  80.00- 120.00   100.00
  1.814   1.814 (0.421)   103    440870                    35.47-  95.47    65.47
-------------------------------------------------------------------------------
   15 Freon 113                                    CAS #: 76-13-1
  2.173   2.173 (0.504)   151    592896 158.017   158.02  80.00- 120.00   100.00
  2.173   2.181 (0.504)   153    381247                    34.42-  94.42    64.30
  2.173   2.173 (0.504)   101    664280                    75.78- 135.78   112.04
-------------------------------------------------------------------------------
   14 1,1-Dichloroethene                           CAS #: 75-35-4
  2.181   2.181 (0.506)    98    206941 87.3552   87.355  80.00- 120.00   100.00
  2.181   2.181 (0.506)    96    329023                   128.07- 188.07   158.99
  2.181   2.181 (0.506)    61    513568                   203.73- 263.73   248.17
-------------------------------------------------------------------------------
```

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (ng)	FINAL (NG)	TARGET RANGE	RATIO
18 Carbon Disulfide					CAS #: 75-15-0		
2.360	2.360 (0.548)	76	753998	50.2920	50.292	80.00- 120.00	100.00
19 2-Propanol					CAS #: 67-63-0		
2.274	2.267 (0.528)	45	396611	46.2935	46.293	80.00- 120.00	100.00(a)
2.274	2.267 (0.528)	43	77133			0.00- 50.21	19.45
2.274	2.267 (0.528)	59	15291			0.00- 34.19	3.86
22 Methylene Chloride					CAS #: 75-09-2		
2.575	2.575 (0.598)	49	425441	79.9535	79.954	80.00- 120.00	100.00
2.575	2.575 (0.598)	84	322909			55.25- 115.25	75.90
2.567	2.567 (0.596)	51	128812			0.48- 60.48	30.28
25 trans-1,2-Dichloroethene					CAS #: 156-60-5		
2.818	2.818 (0.654)	98	171231	75.1895	75.190	80.00- 120.00	100.00
2.818	2.818 (0.654)	61	382286			178.67- 238.67	223.26
2.818	2.818 (0.654)	96	270148			127.45- 187.45	157.77
26 MTBE					CAS #: 1634-04-4		
2.797	2.797 (0.649)	73	723468	84.5186	84.519	80.00- 120.00	100.00
2.797	2.797 (0.649)	57	171766			0.00- 51.21	23.74
2.797	2.797 (0.649)	41	171377			0.00- 50.32	23.69
28 Hexane					CAS #: 110-54-3		
3.097	3.098 (0.719)	57	474708	86.1064	86.106	80.00- 120.00	100.00
3.105	3.098 (0.721)	43	313288			30.98- 90.98	66.00
3.105	3.098 (0.721)	86	68847			0.00- 45.79	14.50
29 1,1-Dichloroethane					CAS #: 75-34-3		
3.269	3.262 (0.759)	63	424140	77.6396	77.640	80.00- 120.00	100.00
3.269	3.262 (0.759)	65	136067			1.92- 61.92	32.08
37 cis-1,2-Dichloroethene					CAS #: 156-59-2		
3.964	3.964 (0.920)	98	232534	94.5448	94.545	80.00- 120.00	100.00
3.964	3.964 (0.920)	96	367090			125.20- 185.20	157.87
3.964	3.964 (0.920)	61	466162			158.24- 218.24	200.47
38 2-Butanone					CAS #: 78-93-3		
3.928	3.928 (0.912)	72	169103	72.7572	72.757	80.00- 120.00	100.00
3.928	3.921 (0.912)	43	755588			364.90- 424.90	446.82
3.928	3.921 (0.912)	57	59046			4.40- 64.40	34.92
44 Chloroform					CAS #: 67-66-3		
4.480	4.480 (1.040)	83	591845	102.389	102.39	80.00- 120.00	100.00
4.480	4.480 (1.040)	85	389551			35.45- 95.45	65.82

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (ng)	FINAL (NG)	TARGET RANGE	RATIO
46 Cyclohexane					CAS #: 110-82-7		
4.824	4.824 (0.811)	84	327912	60.0934	60.093	80.00- 120.00	100.00
4.824	4.824 (0.811)	56	390235			82.98- 142.98	119.01
4.824	4.817 (0.811)	41	218590			32.54- 92.54	66.66
45 1,1,1-Trichloroethane					CAS #: 71-55-6		
4.709	4.709 (0.792)	97	535809	97.0340	97.034	80.00- 120.00	100.00
4.709	4.709 (0.792)	99	346456			34.83- 94.83	64.66
47 Carbon Tetrachloride					CAS #: 56-23-5		
4.960	4.953 (0.834)	119	578563	112.868	112.87	80.00- 120.00	100.00
4.953	4.953 (0.833)	117	592623			73.53- 133.53	102.43
51 2,2,4-Trimethylpentane					CAS #: 540-84-1		
5.490	5.483 (0.923)	57	1530826	110.281	110.28	80.00- 120.00	100.00
5.490	5.483 (0.923)	56	481295			1.12- 61.12	31.44
5.490	5.483 (0.923)	41	428549			0.00- 57.96	27.99
48 Benzene					CAS #: 71-43-2		
5.254	5.246 (0.883)	78	944727	62.9713	62.971	80.00- 120.00	100.00
5.254	5.246 (0.883)	77	220031			0.00- 53.50	23.29
50 1,2-Dichloroethane					CAS #: 107-06-2		
5.347	5.340 (0.899)	62	392766	82.3465	82.346	80.00- 120.00	100.00
5.347	5.347 (0.899)	64	127676			2.93- 62.93	32.51
53 Heptane					CAS #: 142-82-5		
5.791	5.784 (0.974)	71	312304	88.4002	88.400	80.00- 120.00	100.00
5.791	5.784 (0.974)	43	626801			143.29- 203.29	200.70
5.791	5.784 (0.974)	57	300815			61.40- 121.40	96.32
56 Trichloroethene					CAS #: 79-01-6		
6.256	6.256 (1.052)	95	487196	108.035	108.04	80.00- 120.00	100.00
6.264	6.256 (1.053)	130	524795			81.46- 141.46	107.72
6.264	6.256 (1.053)	97	318043			34.92- 94.92	65.28
58 Methyl Cyclohexane					CAS #: 108-87-2		
6.579	6.579 (1.106)	83	570547	85.6776	85.678	80.00- 120.00	100.00
6.579	6.579 (1.106)	98	255644			15.14- 75.14	44.81
6.579	6.572 (1.106)	55	471339			45.62- 105.62	82.61
59 1,2-Dichloropropane					CAS #: 78-87-5		
6.614	6.607 (1.112)	63	352714	107.749	107.75	80.00- 120.00	100.00
6.614	6.607 (1.112)	62	248545			38.13- 98.13	70.47
6.586	6.586 (1.107)	41	458571			92.30- 152.30	130.01

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (ng)	FINAL (NG)	TARGET RANGE	RATIO
60 1,4-Dioxane					CAS #: 123-91-1		
6.729	6.722 (1.131)	88	226296	75.8389	75.839	80.00- 120.00	100.00
6.729	6.722 (1.131)	58	152855			31.73- 91.73	67.55
6.729	6.722 (1.131)	57	77219			1.20- 61.20	34.12
65 4-Methyl-2-pentanone					CAS #: 108-10-1		
7.832	7.832 (1.317)	58	263804	89.8609	89.861	80.00- 120.00	100.00
7.832	7.832 (1.317)	43	711810			221.14- 281.14	269.82
7.832	7.832 (1.317)	85	118083			20.58- 80.58	44.76
67 Toluene					CAS #: 108-88-3		
8.047	8.047 (0.816)	91	1205491	80.0420	80.042	80.00- 120.00	100.00
8.047	8.047 (0.816)	92	705990			28.32- 88.32	58.56
70 1,1,2-Trichloroethane					CAS #: 79-00-5		
8.656	8.649 (1.455)	97	399952	108.492	108.49	80.00- 120.00	100.00
8.656	8.649 (1.455)	99	252771			32.57- 92.57	63.20
8.656	8.649 (1.455)	83	334787			50.93- 110.93	83.71
71 Tetrachloroethene					CAS #: 127-18-4		
8.735	8.735 (0.885)	166	583029	117.548	117.55	80.00- 120.00	100.00
8.735	8.728 (0.885)	129	412435			41.03- 101.03	70.74
8.735	8.728 (0.885)	131	401271			38.99- 98.99	68.83
72 2-Hexanone					CAS #: 591-78-6		
8.964	8.964 (0.909)	58	293361	76.5385	76.538	80.00- 120.00	100.00
8.964	8.957 (0.909)	43	552610			155.38- 215.38	188.37
8.964	8.964 (0.909)	100	61447			0.00- 52.71	20.95
74 1,2-Dibromoethane					CAS #: 106-93-4		
9.251	9.243 (0.938)	107	642953	165.067	165.07	80.00- 120.00	100.00
9.251	9.243 (0.938)	109	610089			65.47- 125.47	94.89
81 Chlorobenzene					CAS #: 108-90-7		
9.902	9.902 (1.004)	112	1019630	92.8966	92.896	80.00- 120.00	100.00
9.902	9.902 (1.004)	114	329720			2.20- 62.20	32.34
9.902	9.902 (1.004)	77	543148			20.93- 80.93	53.27
82 Ethyl Benzene					CAS #: 100-41-4		
10.060	10.060 (1.020)	106	507113	89.9068	89.907	80.00- 120.00	100.00
10.060	10.060 (1.020)	91	1570445			272.45- 332.45	309.68
84 m,p-Xylene					CAS #: 108-38-3		
10.239	10.239 (1.038)	106	642663	89.5653	89.565	80.00- 120.00	100.00
10.239	10.239 (1.038)	91	1250307			164.06- 224.06	194.55

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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
 10.726  10.726 (0.939)   106    615027 97.8919   97.892  80.00- 120.00   100.00
 10.726  10.726 (0.939)    91   1270423                  174.12- 234.12   206.56
-------------------------------------------------------------------------------
   89 Styrene                                         CAS #: 100-42-5
 10.755  10.755 (0.942)   104   1011828 97.1829   97.183  80.00- 120.00   100.00
 10.755  10.755 (0.942)    78    473554                   16.31-  76.31    46.80
-------------------------------------------------------------------------------
   91 Cumene                                          CAS #: 98-82-8
 11.213  11.213 (0.982)   105   1844045 107.877   107.88  80.00- 120.00   100.00
 11.213  11.213 (0.982)   120    499831                    0.00-  57.22    27.11
 11.213  11.213 (0.982)    51    174295                    0.00-  38.43     9.45
-------------------------------------------------------------------------------
   94 1,1,2,2-Tetrachloroethane                       CAS #: 79-34-5
 11.636  11.636 (1.019)    83    869885 160.011   160.01  80.00- 120.00   100.00
 11.636  11.636 (1.019)    85    565614                   35.83-  95.83    65.02
-------------------------------------------------------------------------------
   96 Propylbenzene                                   CAS #: 103-65-1
 11.750  11.750 (1.029)    91   2215462 110.874   110.87  80.00- 120.00   100.00
 11.750  11.750 (1.029)   120    540764                    0.00-  55.53    24.41
 11.750  11.750 (1.029)   105     84683                    0.00-  33.92     3.82
-------------------------------------------------------------------------------
   97 4-Ethyltoluene                                  CAS #: 622-96-8
 11.915  11.915 (1.043)   120    563112 105.032   105.03  80.00- 120.00   100.00
 11.915  11.915 (1.043)   105   1831689                  298.20- 358.20   325.28
-------------------------------------------------------------------------------
   98 1,3,5-Trimethylbenzene                          CAS #: 108-67-8
 12.001  12.001 (1.051)   120    793100 103.616   103.62  80.00- 120.00   100.00
 12.001  12.001 (1.051)   105   1572067                  167.68- 227.68   198.22
-------------------------------------------------------------------------------
  100 1,2,4-Trimethylbenzene                          CAS #: 95-63-6
 12.467  12.467 (1.092)   120    742051 103.714   103.71  80.00- 120.00   100.00
 12.467  12.467 (1.092)   105   1686946                  185.14- 245.14   227.34
-------------------------------------------------------------------------------
  101 1,3-Dichlorobenzene                             CAS #: 541-73-1
 12.789  12.789 (1.120)   146   1184375 121.183   121.18  80.00- 120.00   100.00
 12.789  12.789 (1.120)   148    758736                   34.46-  94.46    64.06
 12.789  12.789 (1.120)   111    453677                    7.45-  67.45    38.31
-------------------------------------------------------------------------------
  102 1,4-Dichlorobenzene                             CAS #: 106-46-7
 12.932  12.932 (1.132)   146   1181424 120.492   120.49  80.00- 120.00   100.00
 12.932  12.932 (1.132)   148    760655                   33.85-  93.85    64.38
 12.925  12.932 (1.132)   111    442081                    6.02-  66.02    37.42
-------------------------------------------------------------------------------
  105 1,2-Dichlorobenzene                             CAS #: 95-50-1
 13.362  13.362 (1.170)   146   1135176 119.468   119.47  80.00- 120.00   100.00
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RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (ng)	FINAL (NG)	TARGET RANGE	RATIO
105 1,2-Dichlorobenzene (continued)							
13.362	13.362 (1.170)	148	726815			34.29- 94.29	64.03
13.362	13.362 (1.170)	111	450672			8.63- 68.63	39.70
106 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
15.411	15.411 (1.349)	180	1090094	142.878	142.88	80.00- 120.00	100.00
15.411	15.411 (1.349)	182	1038217			64.63- 124.63	95.24
107 Hexachlorobutadiene					CAS #: 87-68-3		
15.626	15.626 (1.368)	225	781155	196.062	196.06	80.00- 120.00	100.00
15.626	15.626 (1.368)	223	488103			32.03- 92.03	62.48
109 Naphthalene					CAS #: 91-20-3		
15.726	15.726 (1.377)	128	1605128	58.2110	58.211	80.00- 120.00	100.00
15.726	15.726 (1.377)	127	208966			0.00- 42.99	13.02
110 2-Methylnaphthalene					CAS #: 91-57-6		
17.173	17.173 (1.504)	142	1028529	56.4242	56.424	80.00- 120.00	100.00
17.173	17.173 (1.504)	141	889840			56.24- 116.24	86.52
17.173	17.173 (1.504)	115	301344			0.00- 58.81	29.30
111 1-Methylnaphthalene					CAS #: 90-12-0		
17.388	17.388 (1.522)	142	925995	55.5335	55.533	80.00- 120.00	100.00
17.388	17.388 (1.522)	141	830835			60.38- 120.38	89.72
17.388	17.388 (1.522)	115	282851			0.56- 60.56	30.55
112 Acenaphthylene					CAS #: 208-96-8		
19.236	19.236 (1.684)	152	1639975	55.1700	55.170	80.00- 120.00	100.00
19.236	19.236 (1.684)	151	325601			0.00- 49.78	19.85
19.236	19.236 (1.684)	153	212289			0.00- 43.07	12.94
113 Acenaphthene					CAS #: 83-32-9		
19.501	19.501 (1.707)	154	745678	52.5064	52.506	80.00- 120.00	100.00
19.501	19.501 (1.707)	152	394453			21.85- 81.85	52.90
19.501	19.501 (1.707)	153	826432			79.23- 139.23	110.83
114 Fluorene					CAS #: 86-73-7		
20.654	20.654 (1.808)	166	606332	50.8005	50.800	80.00- 120.00	100.00
20.654	20.654 (1.808)	165	575076			65.14- 125.14	94.85
115 Phenanthrene					CAS #: 85-01-8		
22.832	22.832 (1.999)	178	1393251	47.0605	47.060	80.00- 120.00	100.00
22.832	22.832 (1.999)	176	261925			0.00- 48.56	18.80
22.832	22.832 (1.999)	179	214934			0.00- 45.19	15.43
116 Anthracene					CAS #: 120-12-7		
22.939	22.939 (2.009)	178	1178710	46.5048	46.505	80.00- 120.00	100.00

RT	EXP RT	(REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (ng)	FINAL (NG)	TARGET RANGE	RATIO
116 Anthracene (continued)								
22.939	22.939	(2.009)	176	218141			0.00- 47.98	18.51
22.939	22.939	(2.009)	179	180520			0.00- 45.18	15.32
117 Fluoranthene						CAS #: 206-44-0		
26.112	26.112	(2.286)	202	1074740	50.7621	50.762	80.00- 120.00	100.00
26.105	26.112	(2.286)	101	171617			0.00- 45.14	15.97
118 Pyrene						CAS #: 129-00-0		
26.965	26.965	(2.361)	202	1054395	48.6410	48.641	80.00- 120.00	100.00
26.965	26.965	(2.361)	101	194604			0.00- 48.11	18.46
26.965	26.965	(2.361)	100	159545			0.00- 44.51	15.13

QC Flag Legend

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

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd6.i
Lab File ID: 6061704.d
Lab Smp Id: VI VOC+PAH LCSD
Analysis Type: VOA
Quant Type: ISTD
Operator: CT
Method File: /chem/msd6.i/17jun16.b/616z0614vi.m
Misc Info: 2516-245-20ml(9/7/16),2744-32-50(7/20/16)

Calibration Date: 17-JUN-2016
Calibration Time: 09:49
Client Smp ID: LCSD
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
40 Bromochloromethan	204967	122980	286954	182981	-10.73
54 1,4-Difluorobenze	857366	514420	1200312	779189	-9.12
79 Chlorobenzene-d5	655402	393241	917563	728072	11.09
92 Bromofluorobenzen	469803	281882	657724	495793	5.53

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
40 Bromochloromethan	4.31	3.98	4.64	4.31	0.00
54 1,4-Difluorobenze	5.94	5.61	6.27	5.95	0.12
79 Chlorobenzene-d5	9.87	9.54	10.20	9.87	0.00
92 Bromofluorobenzen	11.42	11.09	11.75	11.42	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/17jun16.b/6061704.d

Date : 17-JUN-2016 12:17

Client ID: LCSD

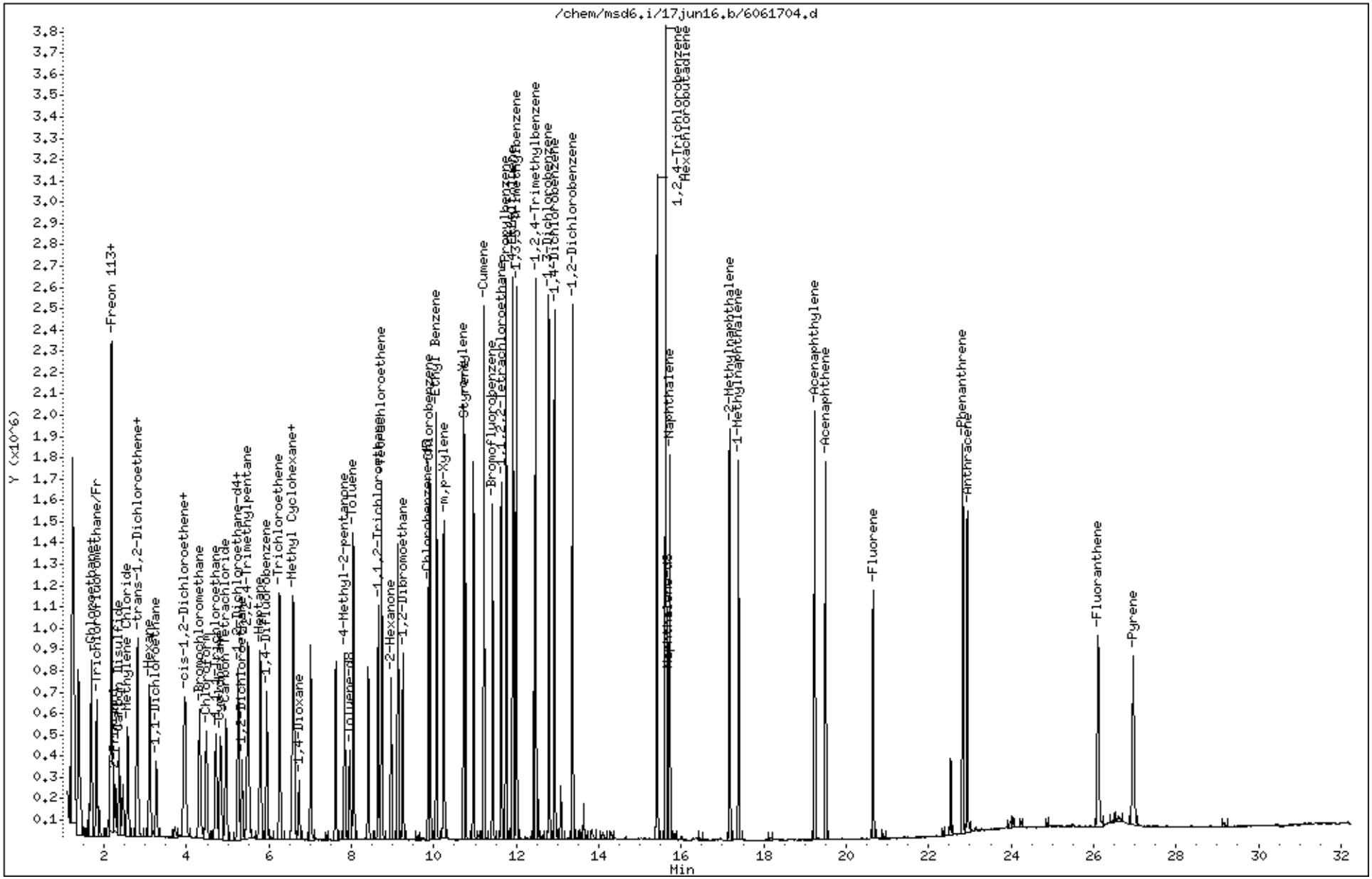
Sample Info: ;VI VOC+PAH LCSD;LCSD

Column phase: RTx-624

Instrument: msd6.i

Operator: CT

Column diameter: 0.53



Data File: /chem/msd6.i/17jun16.b/6061704.d

Date : 17-JUN-2016 12:17

Client ID: LCSD

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCSD;LCSD

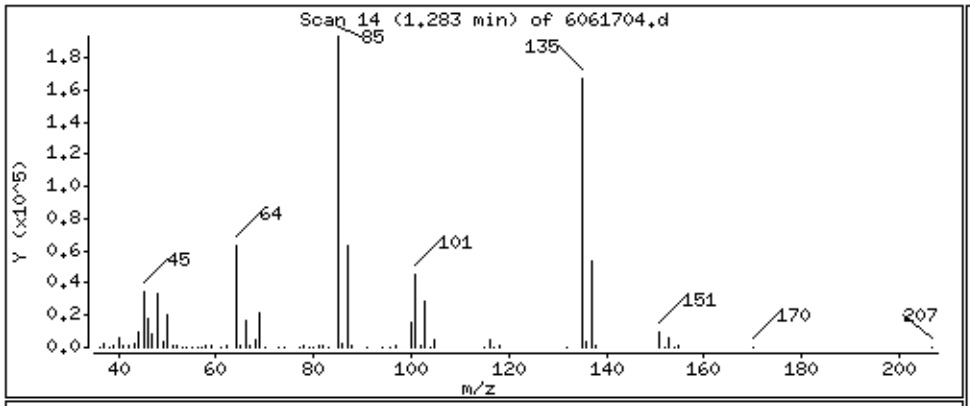
Operator: CT

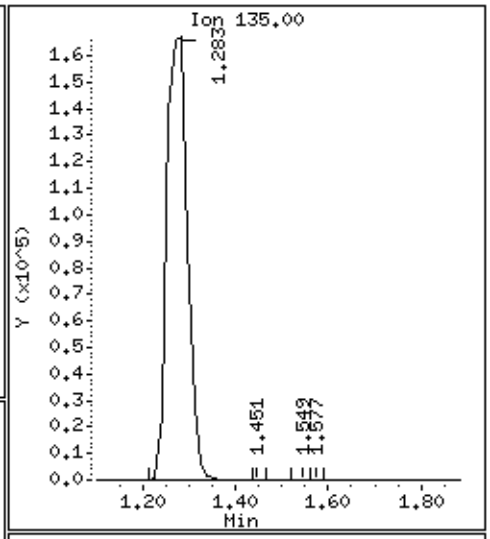
Column phase: RTx-624

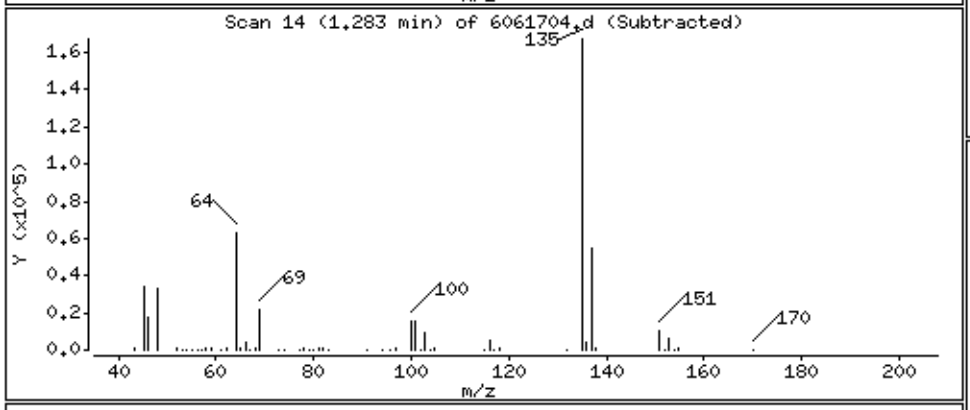
Column diameter: 0.53

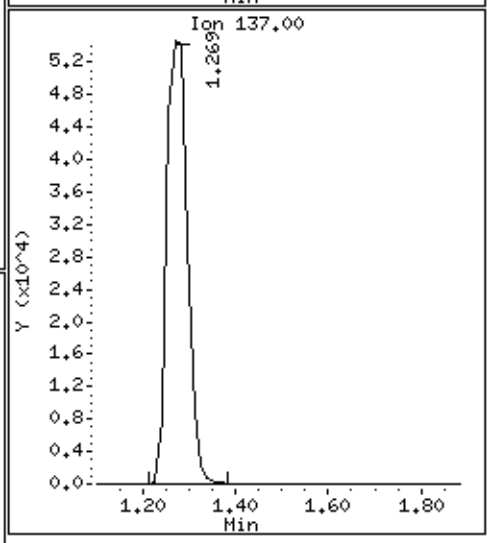
3 Freon 114

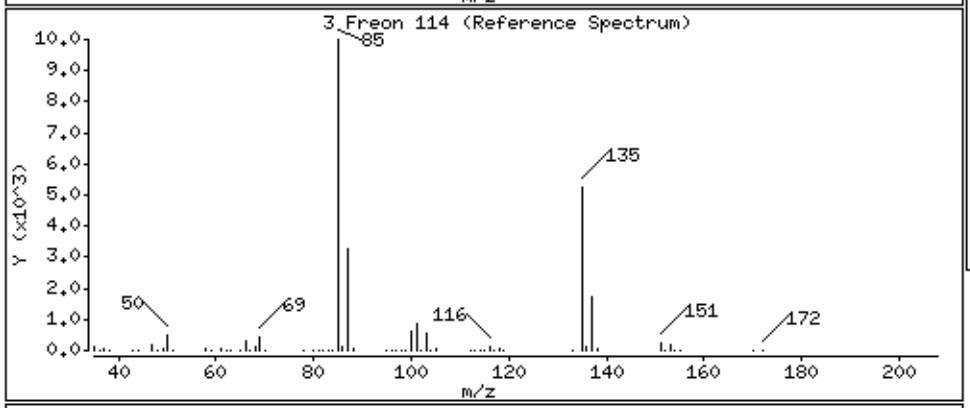
Concentration: 153.63 NG

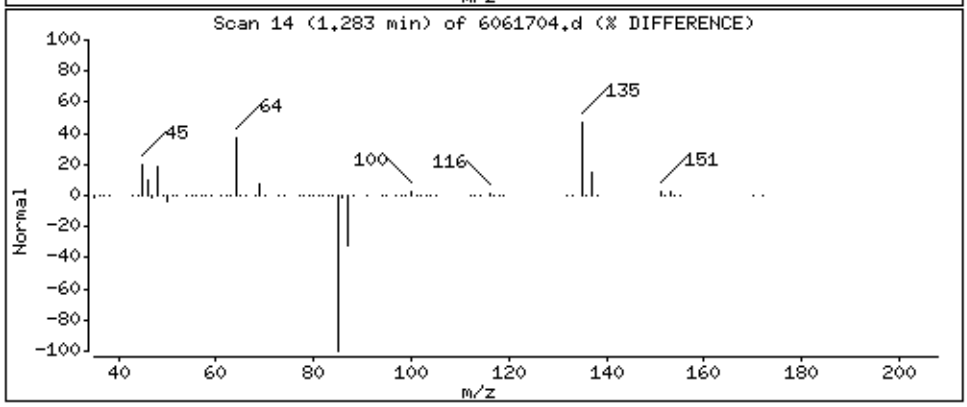












Data File: /chem/msd6.i/17jun16.b/6061704.d

Date : 17-JUN-2016 12:17

Client ID: LCSD

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCSD;LCSD

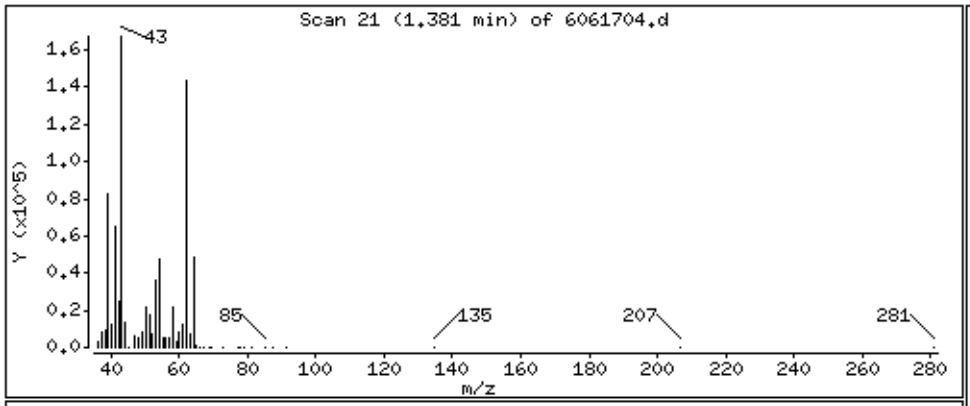
Operator: CT

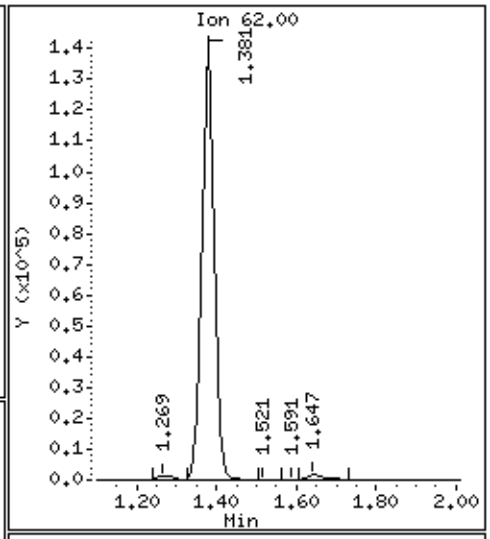
Column phase: RTx-624

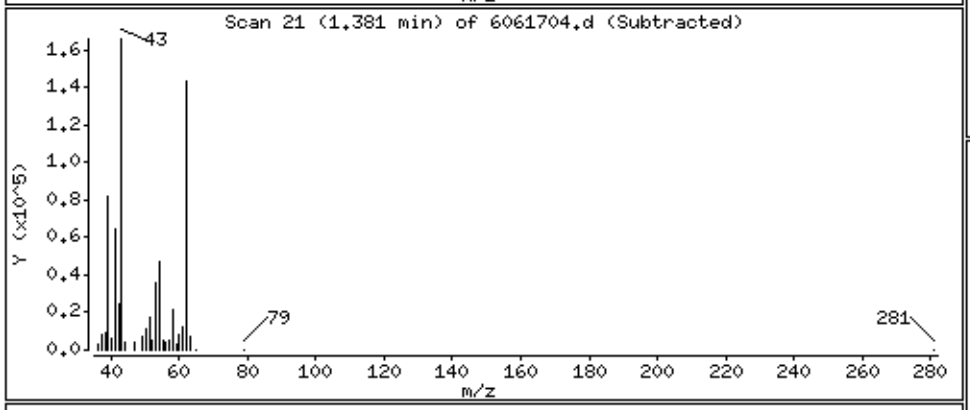
Column diameter: 0.53

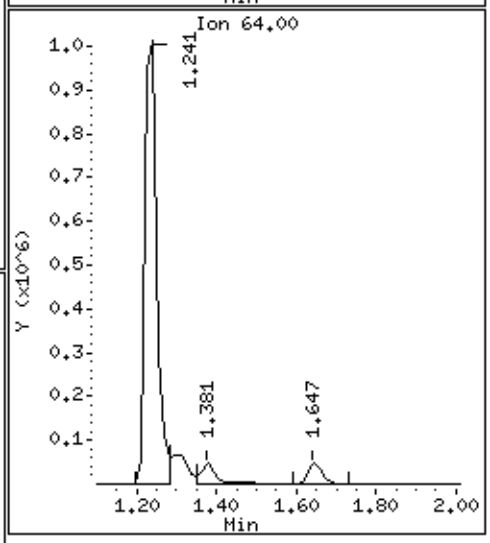
6 Vinyl Chloride

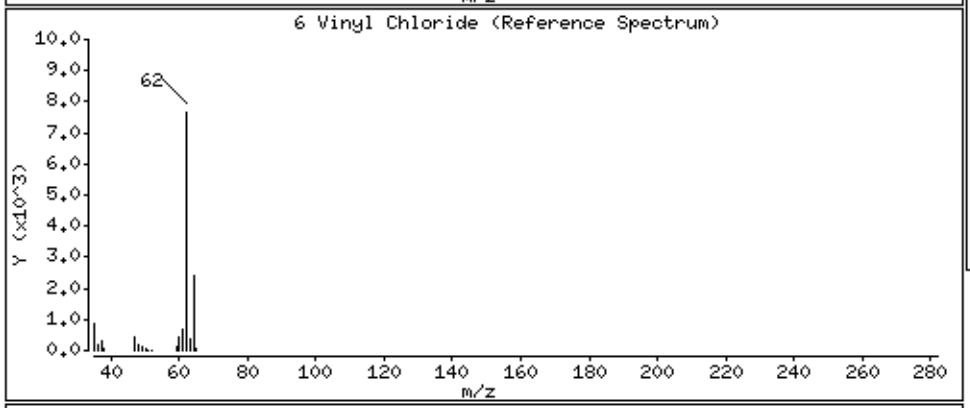
Concentration: 66.959 NG

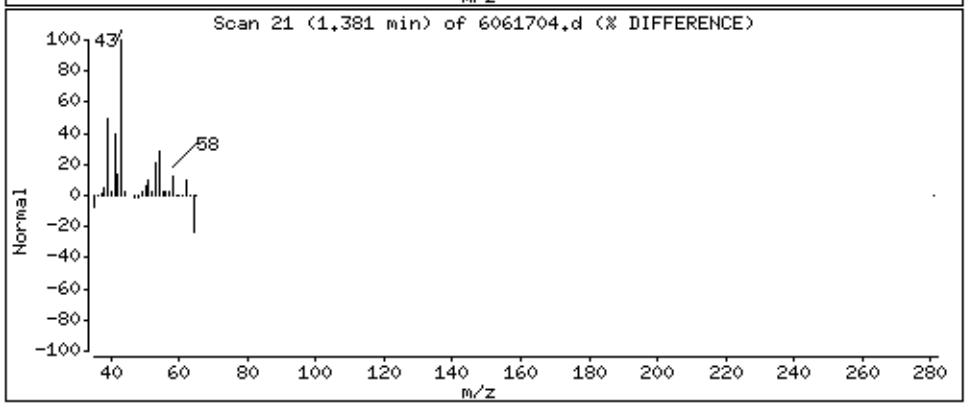












Data File: /chem/msd6.i/17jun16.b/6061704.d

Date : 17-JUN-2016 12:17

Client ID: LCSD

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCSD;LCSD

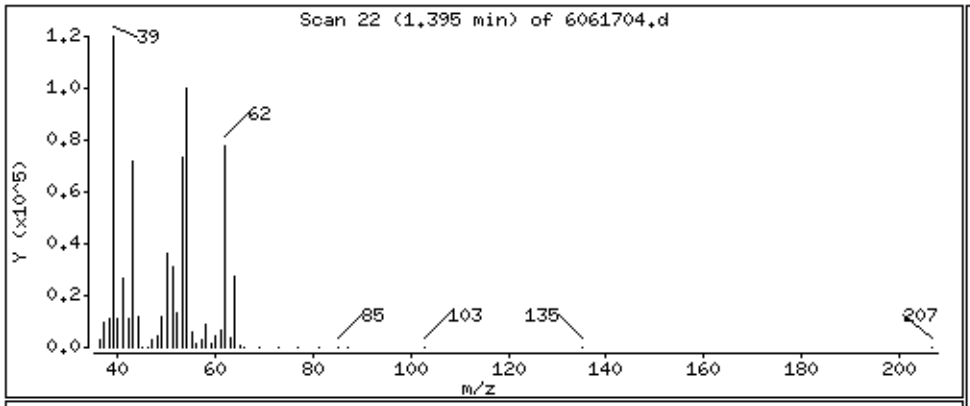
Operator: CT

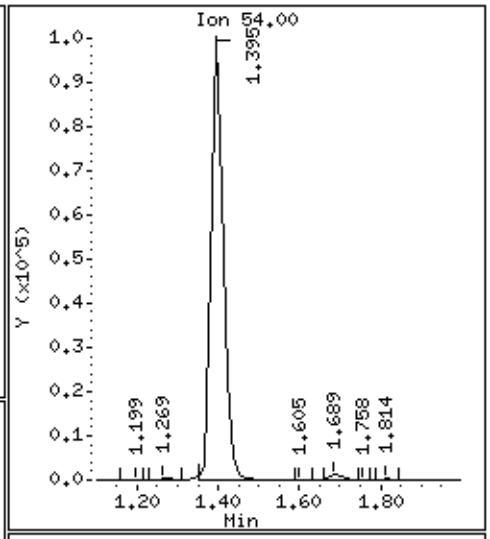
Column phase: RTx-624

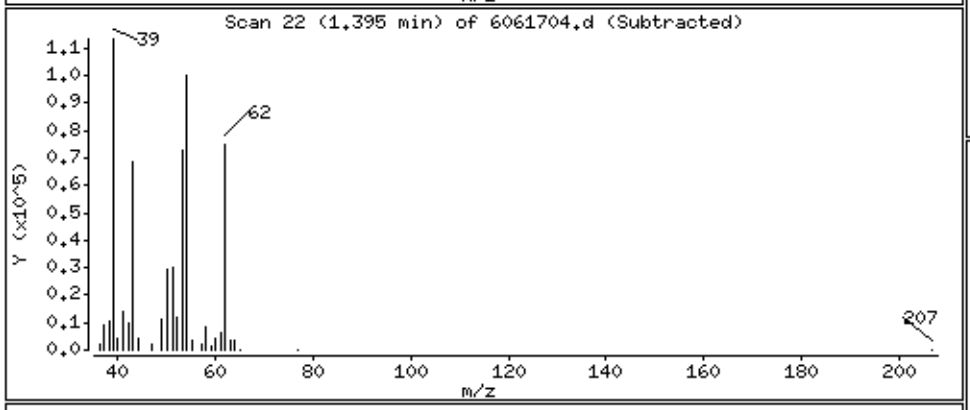
Column diameter: 0.53

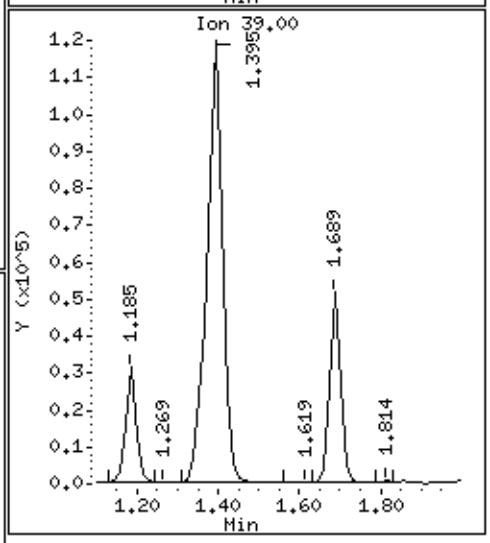
7 1,3-Butadiene

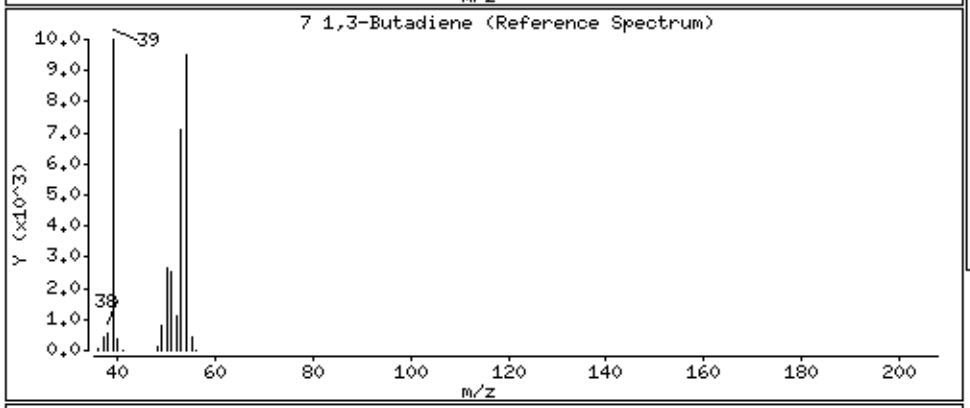
Concentration: 53.044 NG

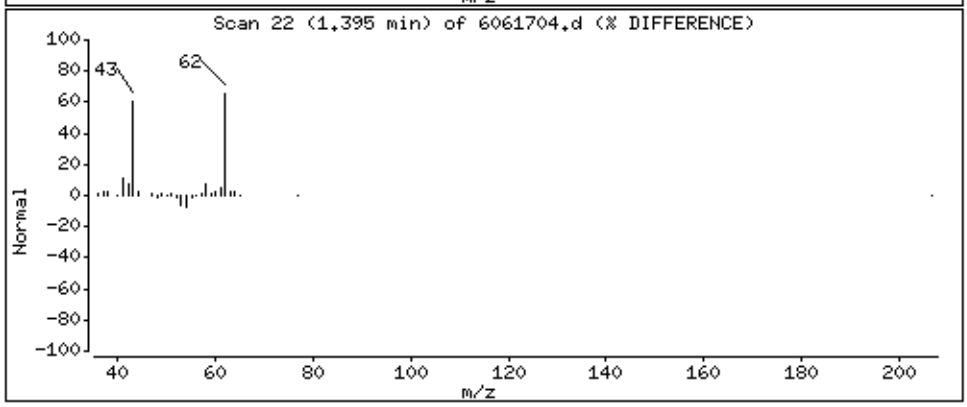












Data File: /chem/msd6.i/17jun16.b/6061704.d

Date : 17-JUN-2016 12:17

Client ID: LCSD

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCSD;LCSD

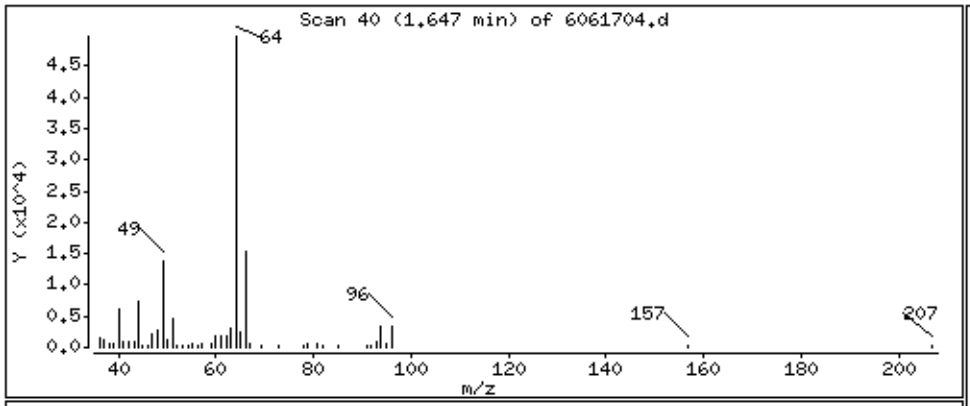
Operator: CT

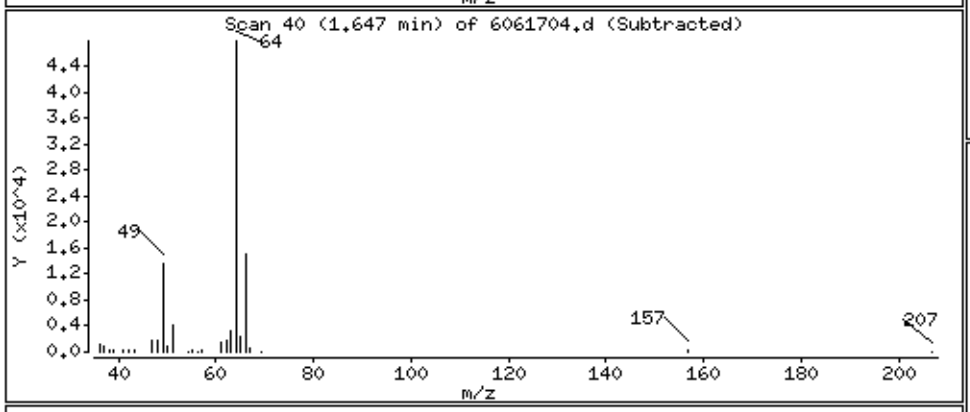
Column phase: RTx-624

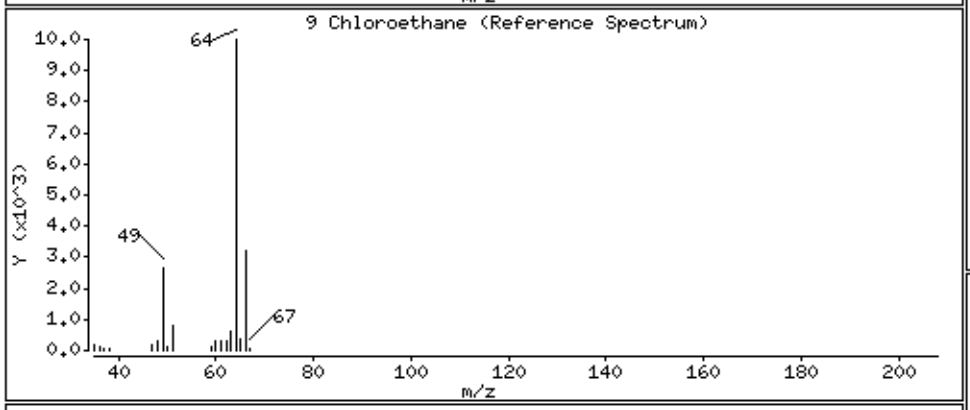
Column diameter: 0.53

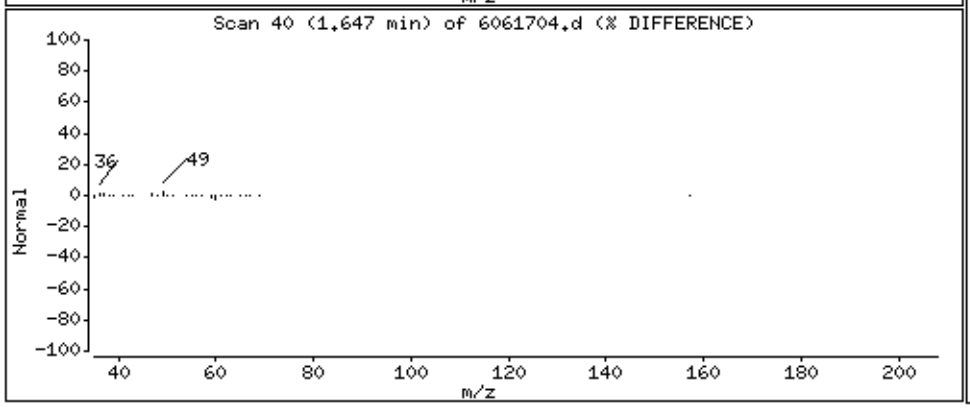
9 Chloroethane

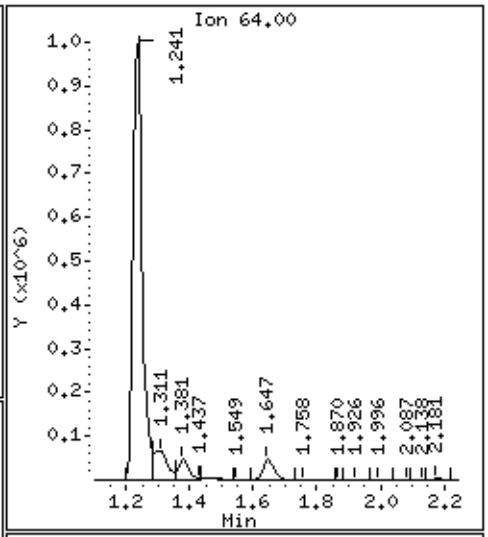
Concentration: 55.315 NG

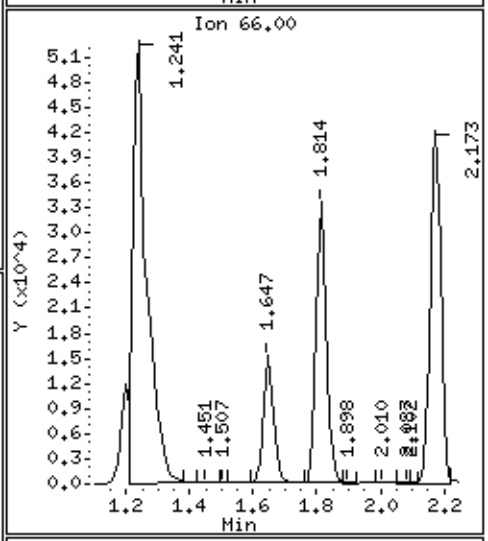


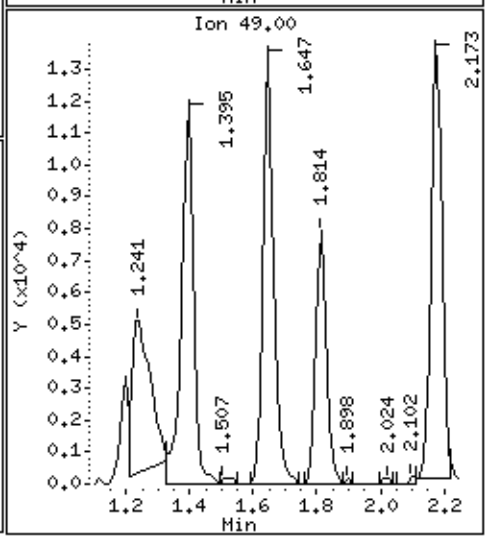












Data File: /chem/msd6.i/17jun16.b/6061704.d

Date : 17-JUN-2016 12:17

Client ID: LCSD

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCSD;LCSD

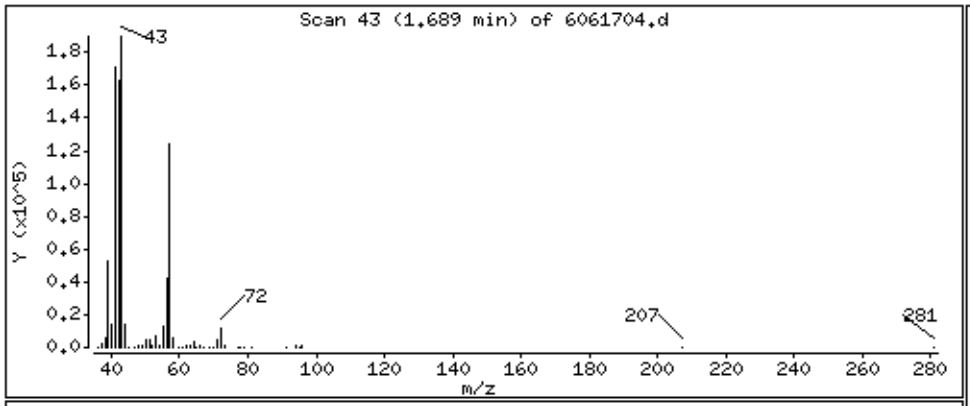
Operator: CT

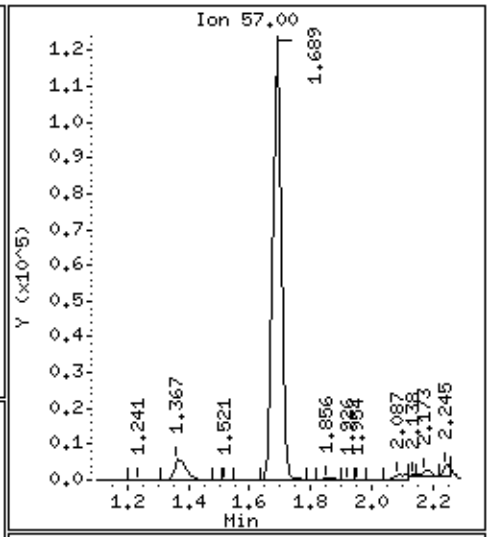
Column phase: RTx-624

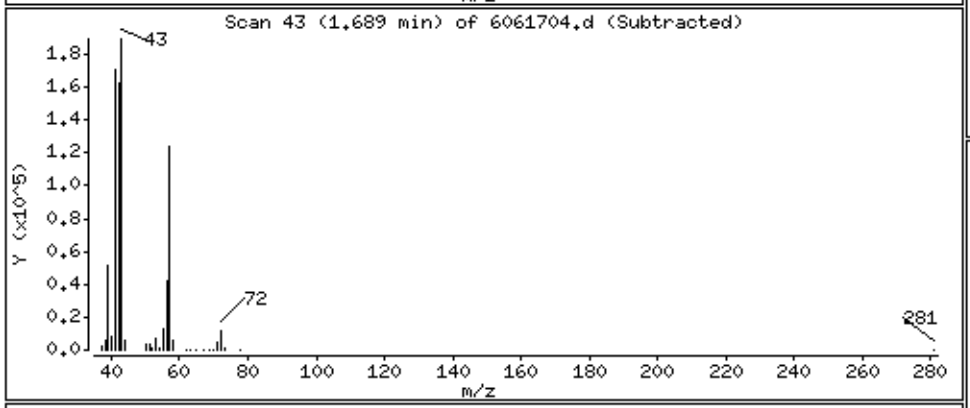
Column diameter: 0.53

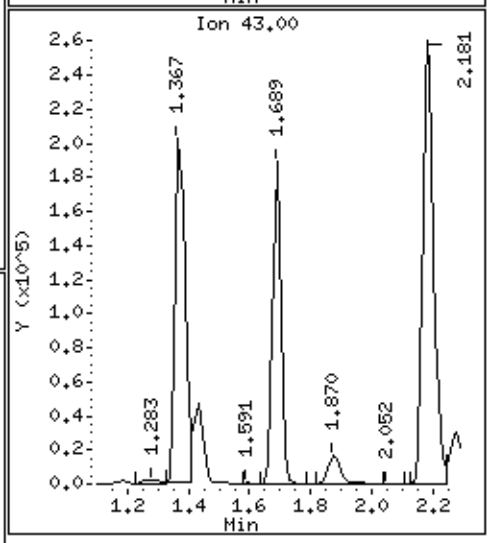
10 Isopentane

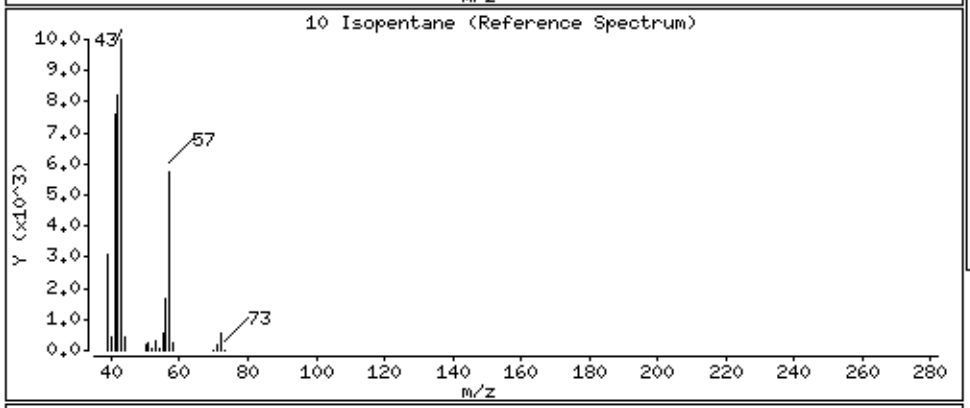
Concentration: 69.501 NG

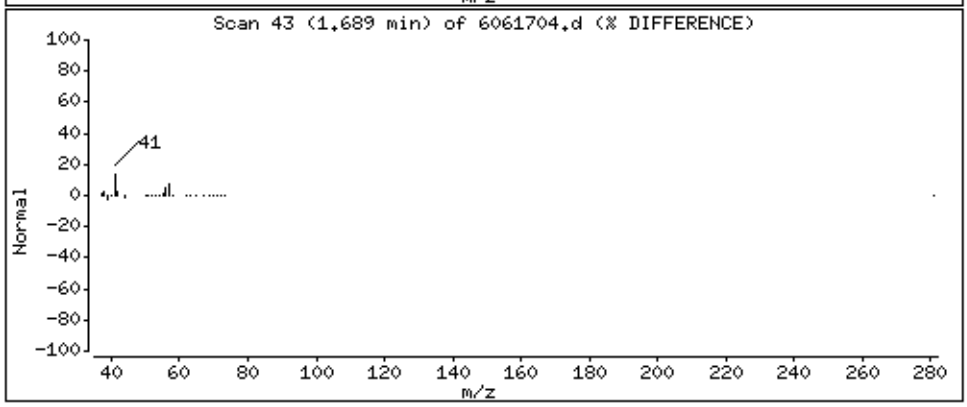












Data File: /chem/msd6.i/17jun16.b/6061704.d

Date : 17-JUN-2016 12:17

Client ID: LCSD

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCSD;LCSD

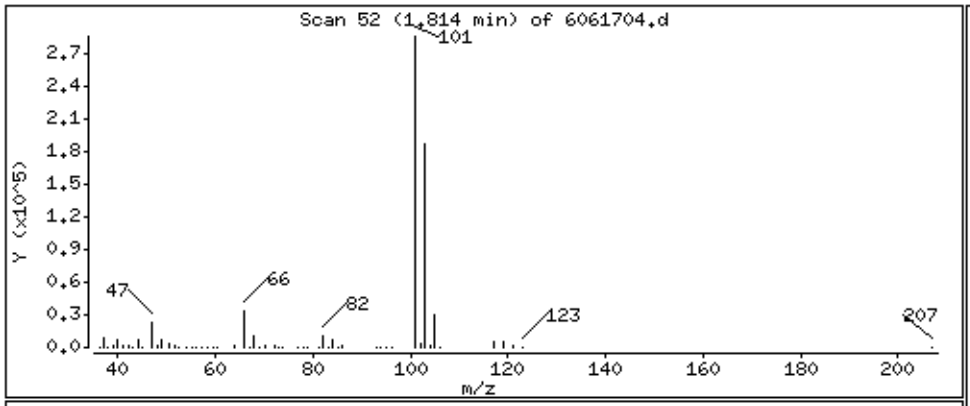
Operator: CT

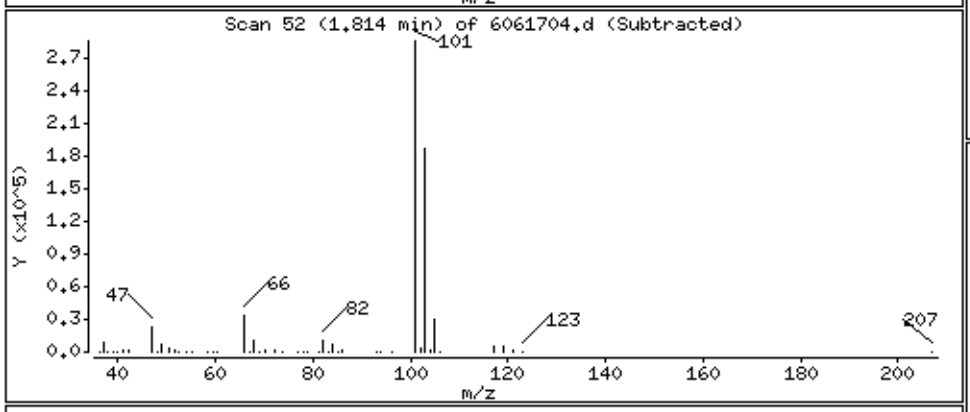
Column phase: RTx-624

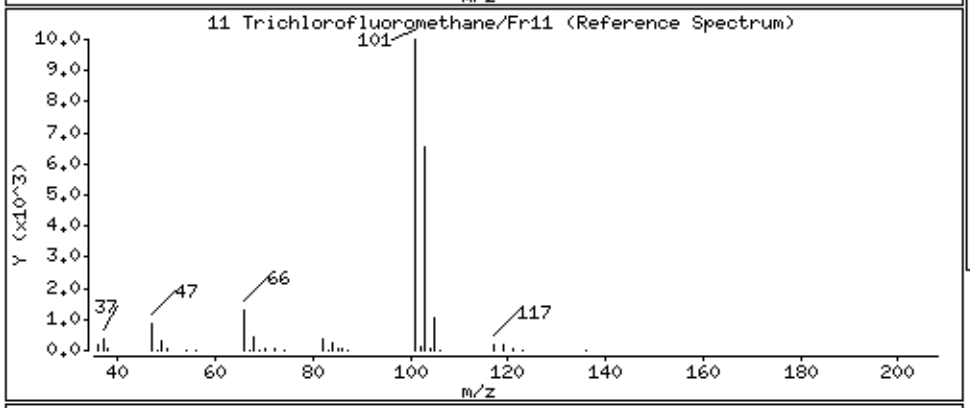
Column diameter: 0.53

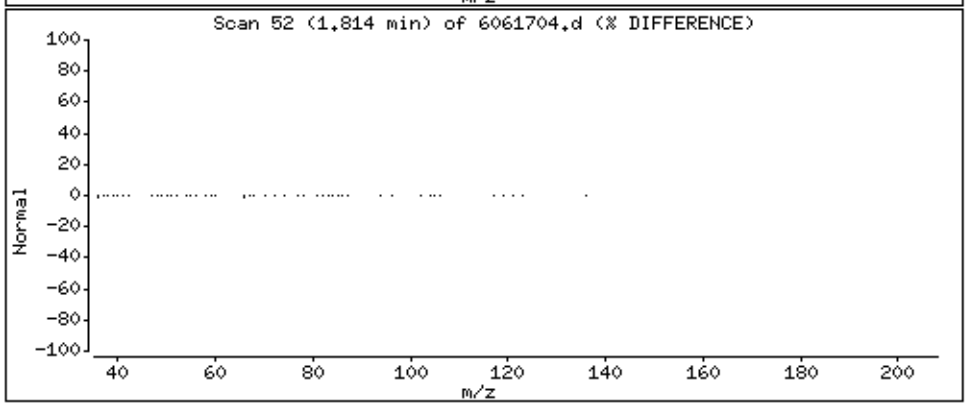
11 Trichlorofluoromethane/Fr11

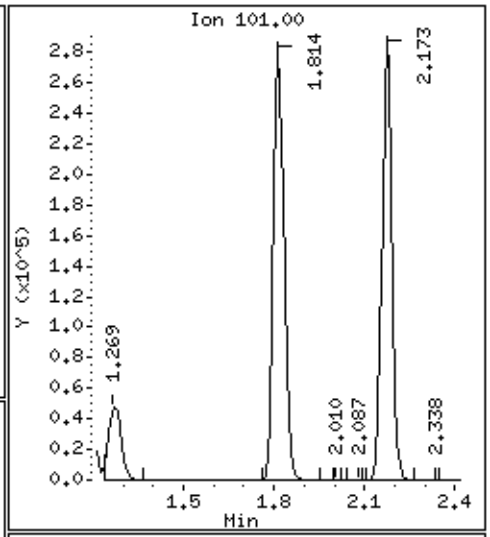
Concentration: 114.82 NG

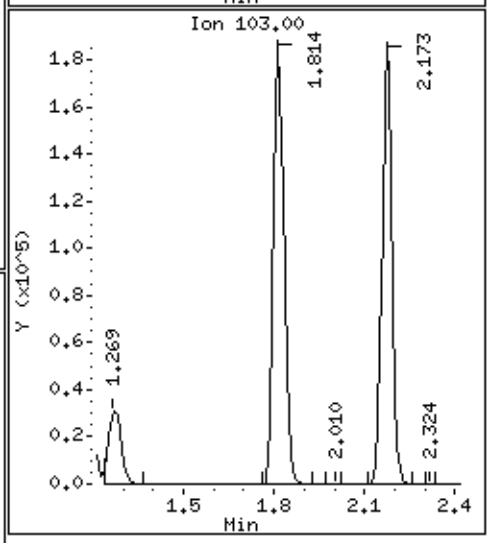












Data File: /chem/msd6.i/17jun16.b/6061704.d

Date : 17-JUN-2016 12:17

Client ID: LCSD

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCSD;LCSD

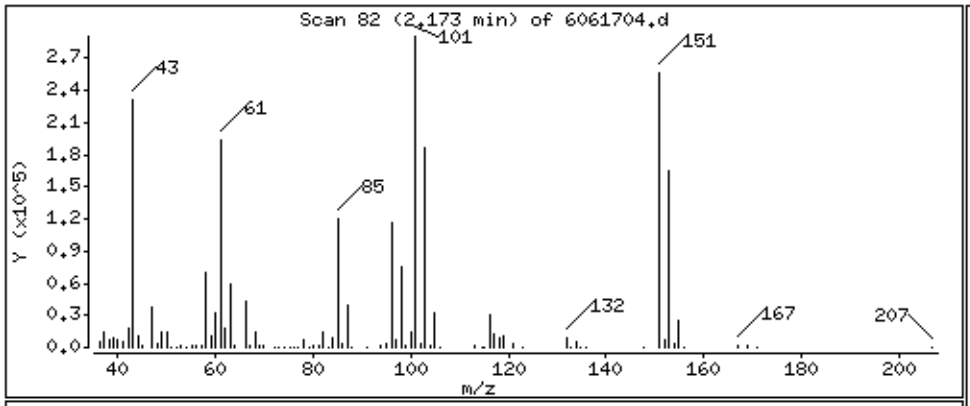
Operator: CT

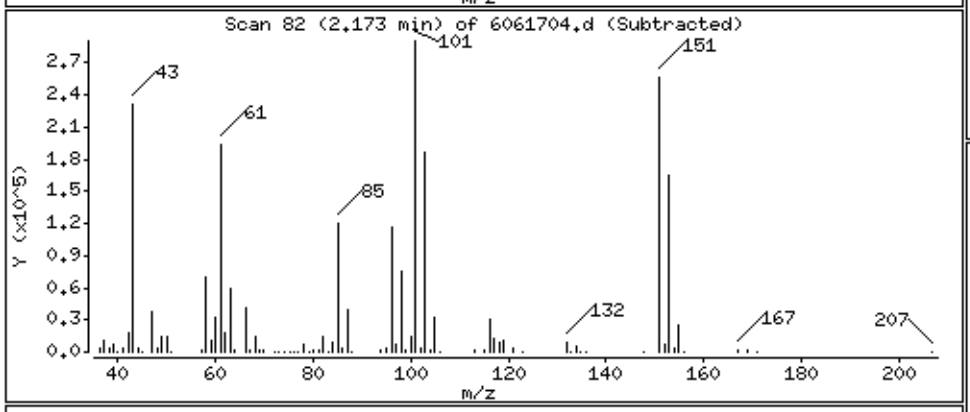
Column phase: RTx-624

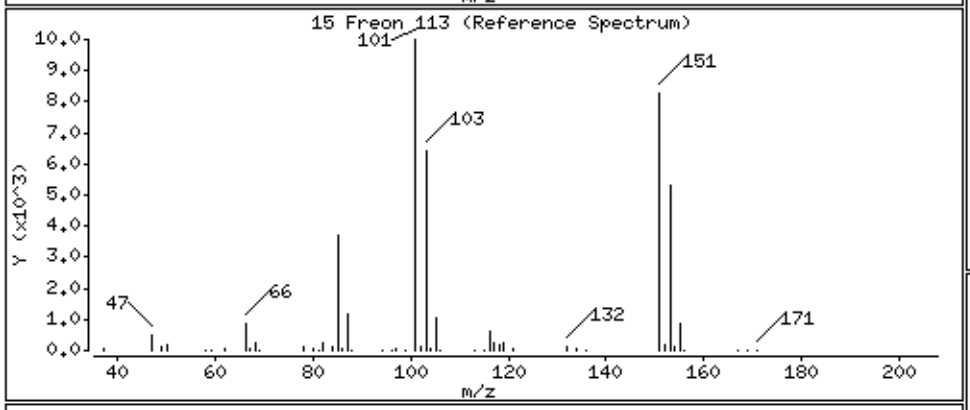
Column diameter: 0.53

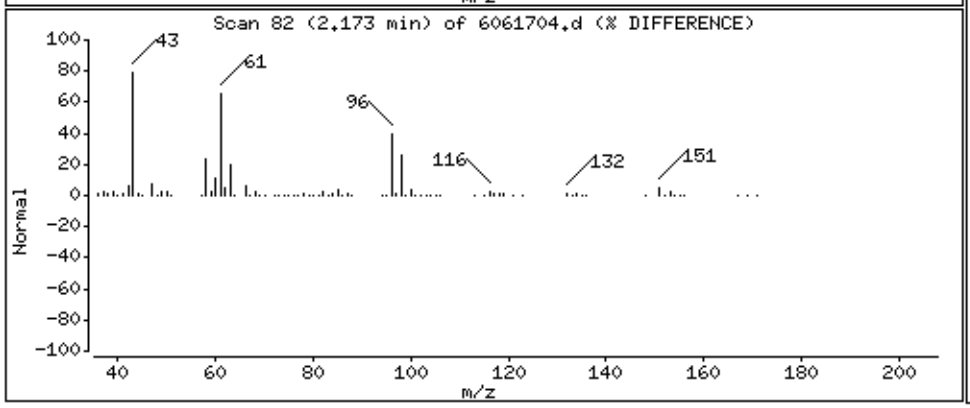
15 Freon 113

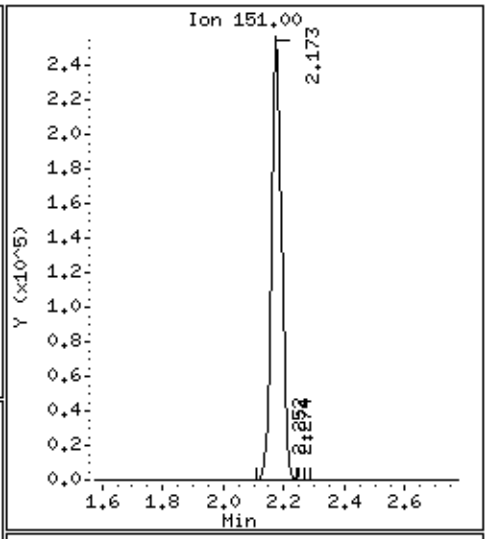
Concentration: 158.02 NG

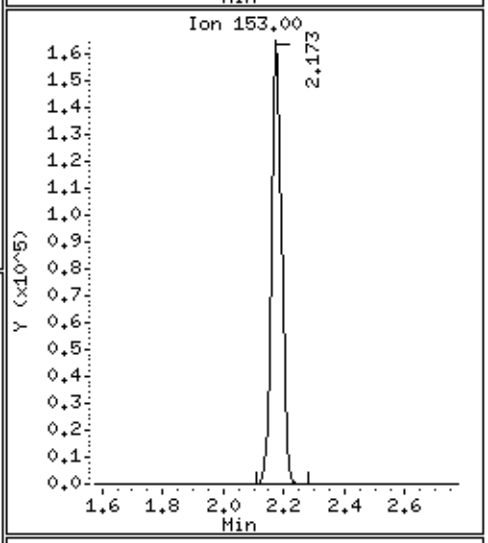


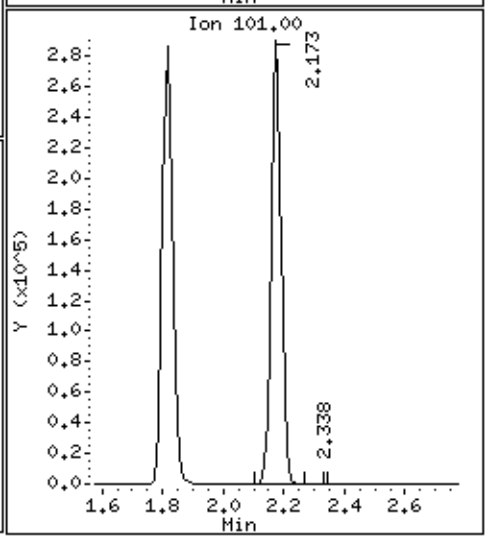












Data File: /chem/msd6.i/17jun16.b/6061704.d

Date : 17-JUN-2016 12:17

Client ID: LCSD

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCSD;LCSD

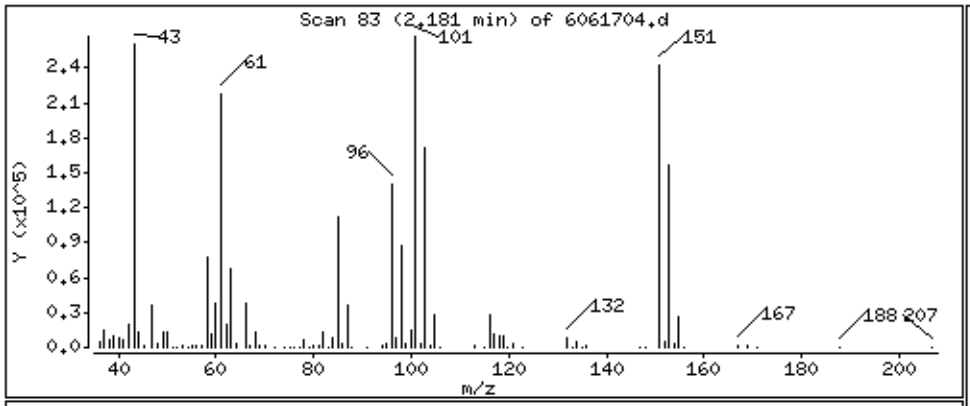
Operator: CT

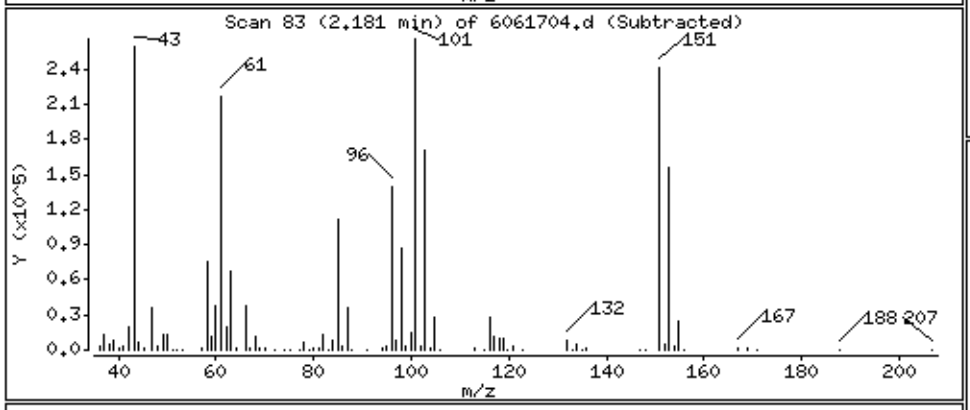
Column phase: RTx-624

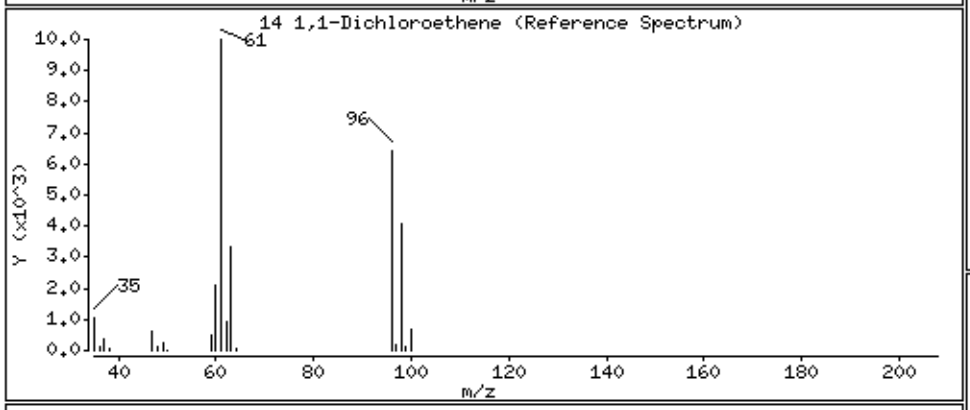
Column diameter: 0.53

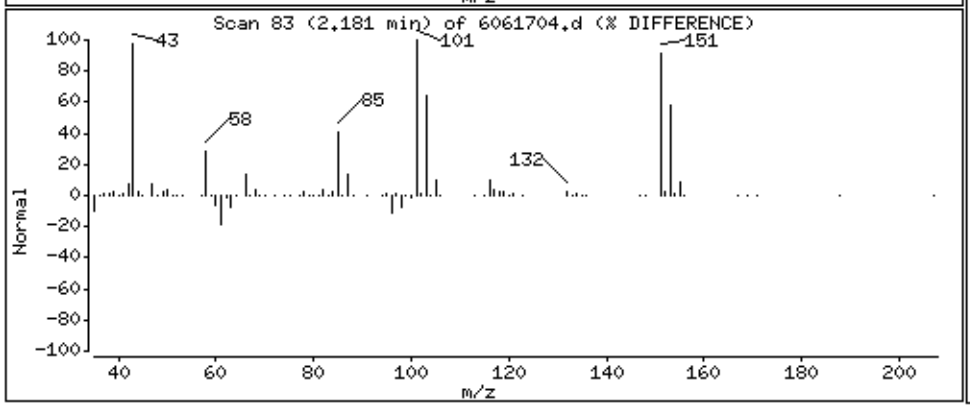
14 1,1-Dichloroethene

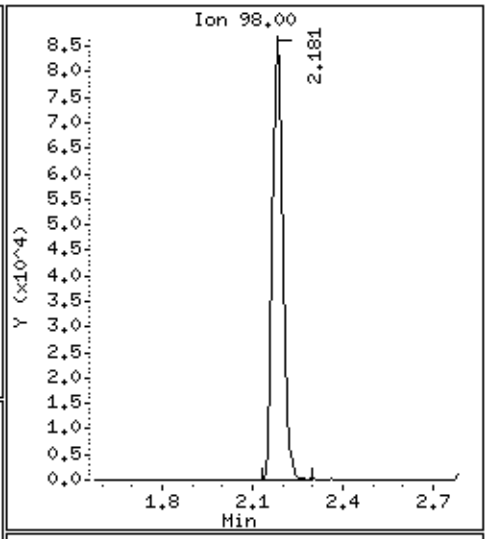
Concentration: 87.355 NG

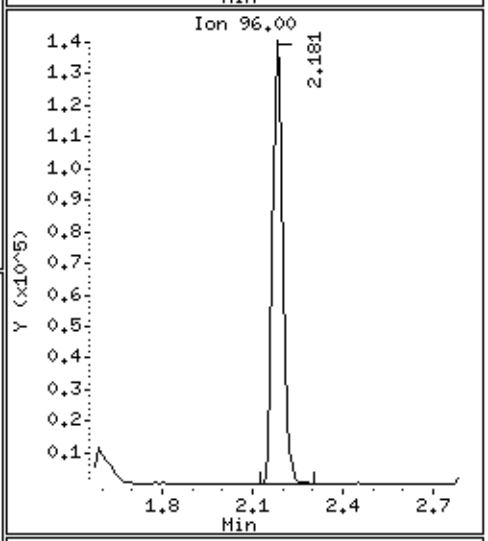


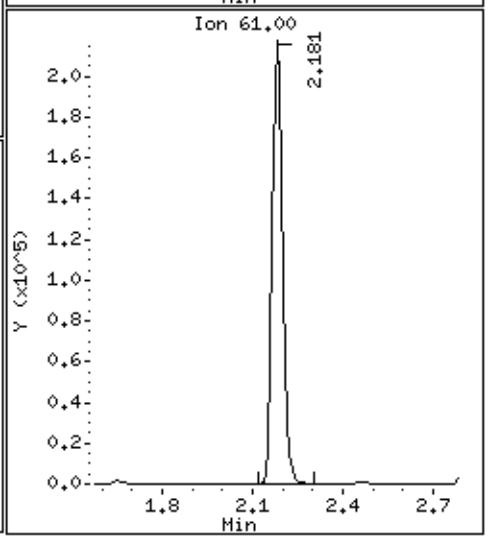












Data File: /chem/msd6.i/17jun16.b/6061704.d

Date : 17-JUN-2016 12:17

Client ID: LCSD

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCSD;LCSD

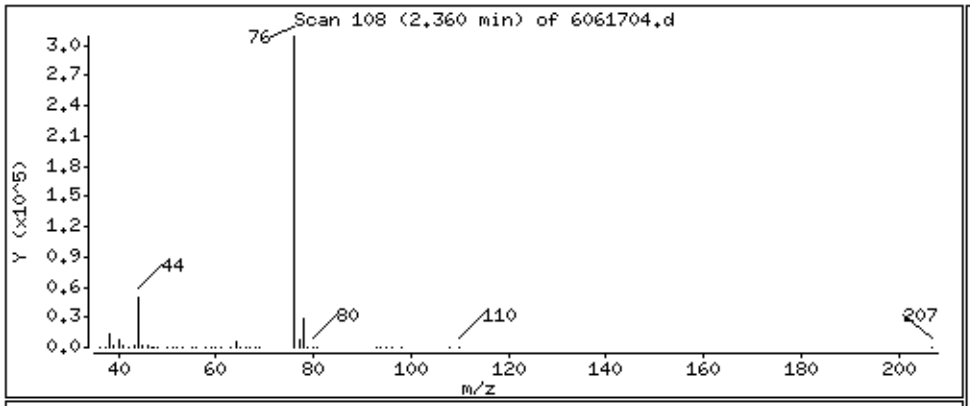
Operator: CT

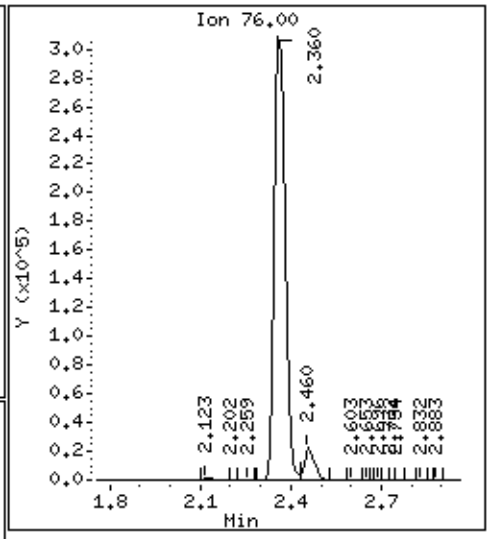
Column phase: RTx-624

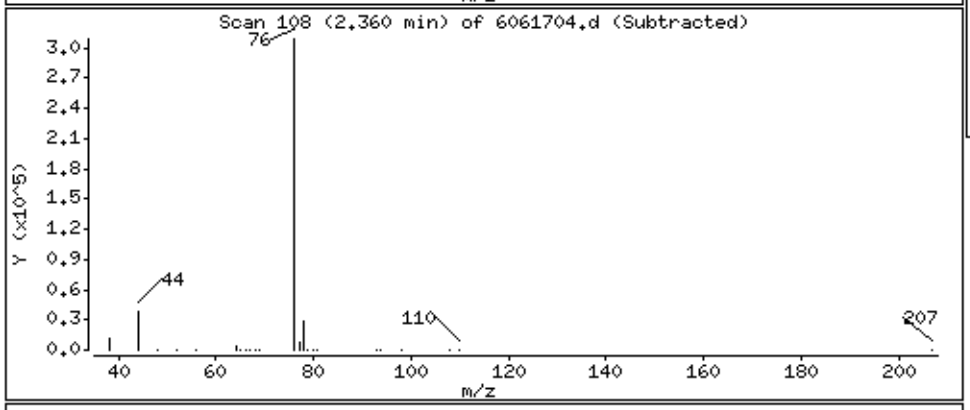
Column diameter: 0.53

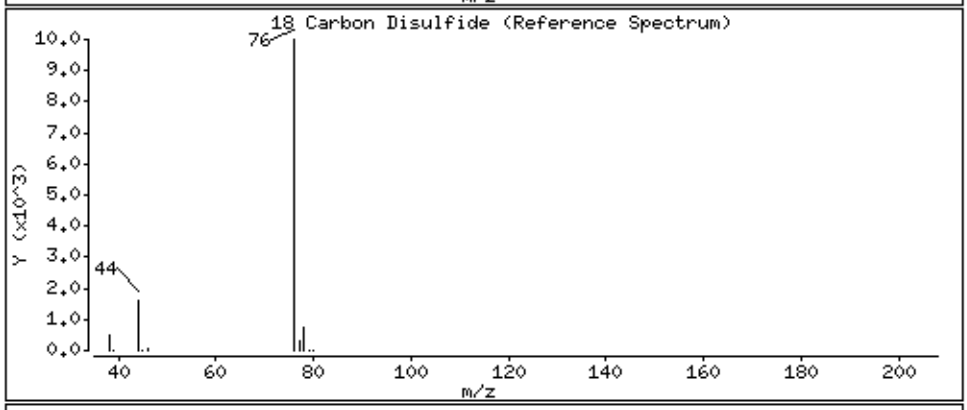
18 Carbon Disulfide

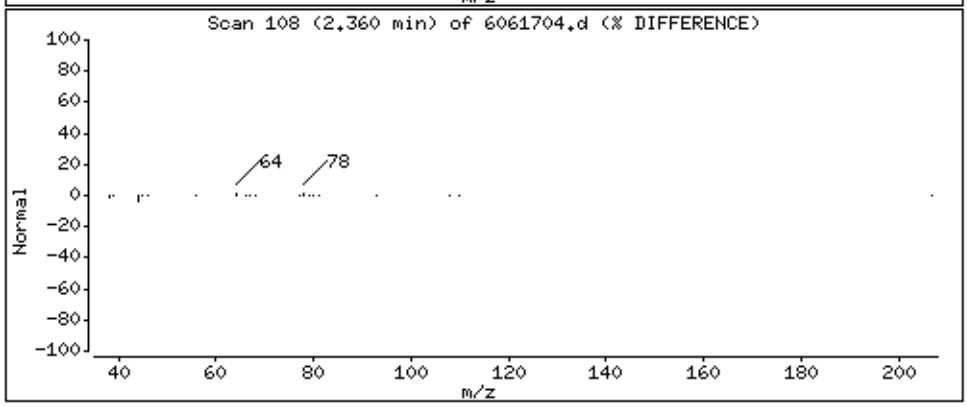
Concentration: 50.292 NG











Data File: /chem/msd6.i/17jun16.b/6061704.d

Date : 17-JUN-2016 12:17

Client ID: LCSD

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCSD;LCSD

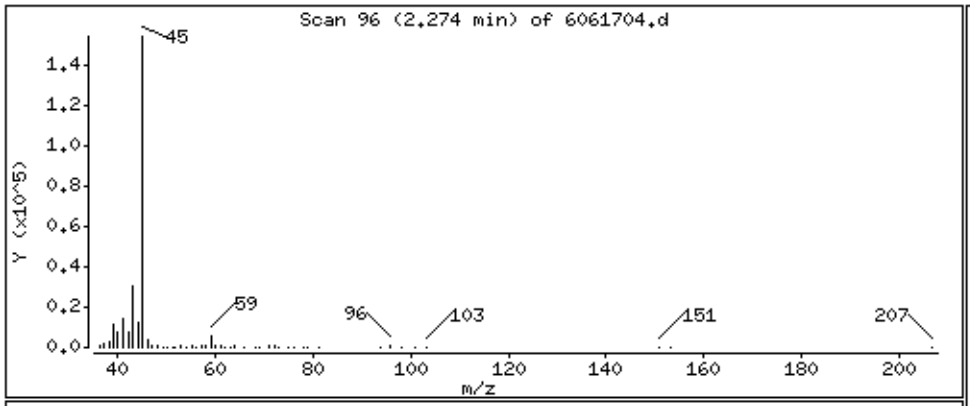
Operator: CT

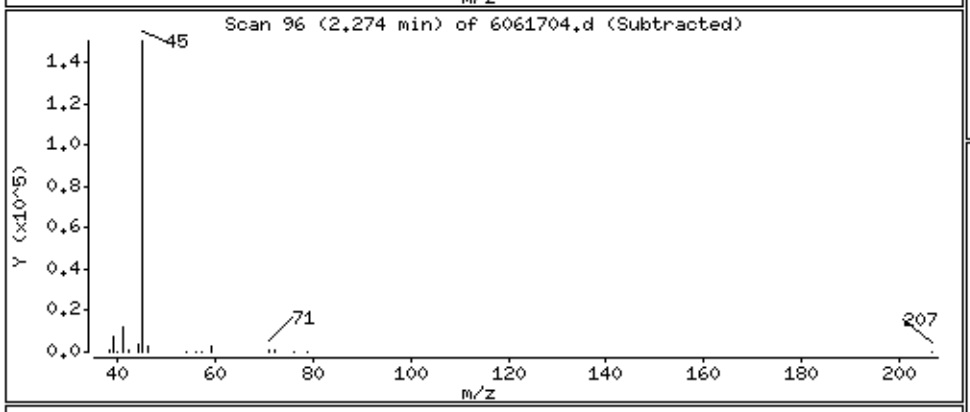
Column phase: RTx-624

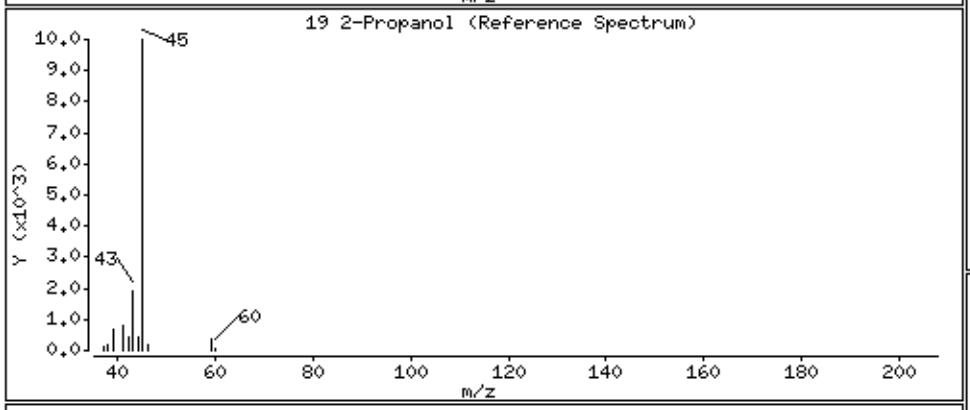
Column diameter: 0.53

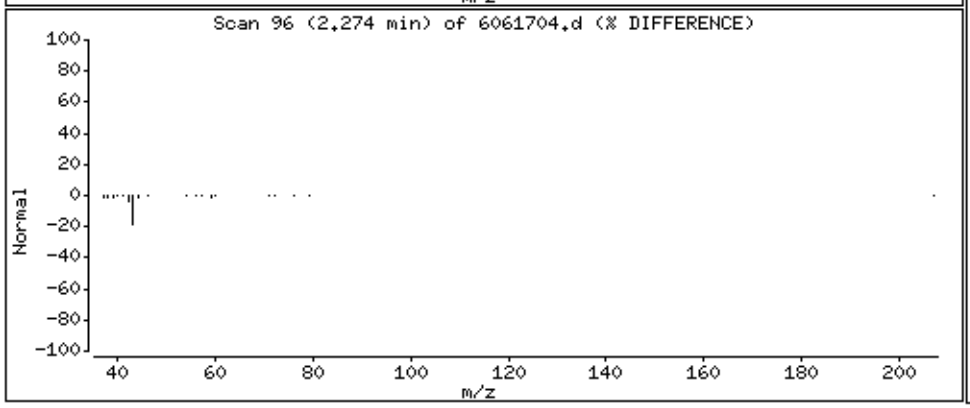
19 2-Propanol

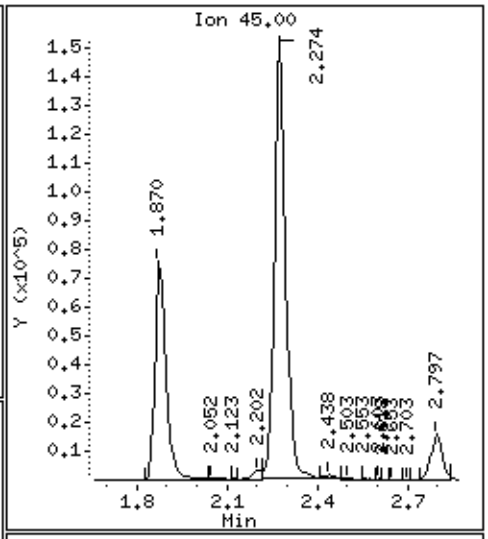
Concentration: 46.293 NG

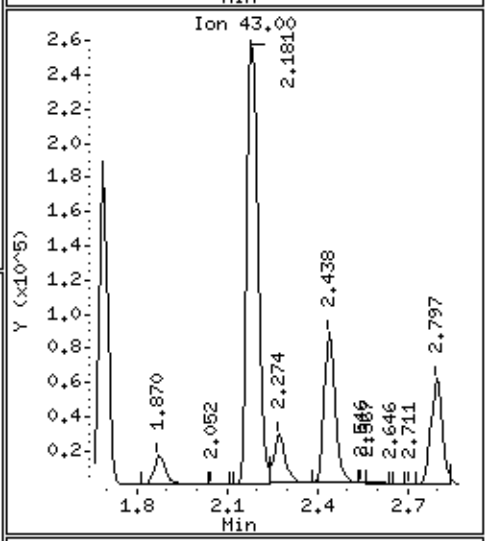


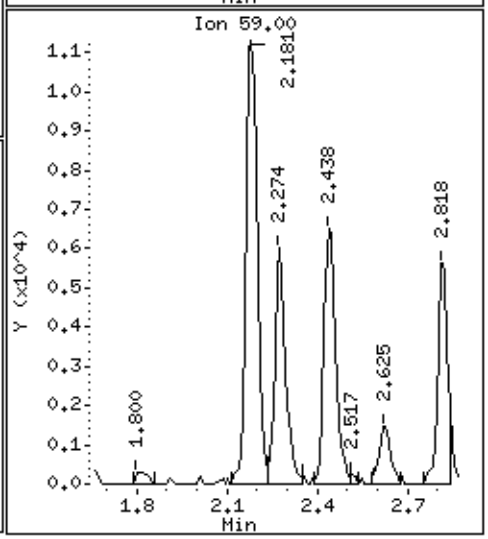












Data File: /chem/msd6.i/17jun16.b/6061704.d

Date : 17-JUN-2016 12:17

Client ID: LCSD

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCSD;LCSD

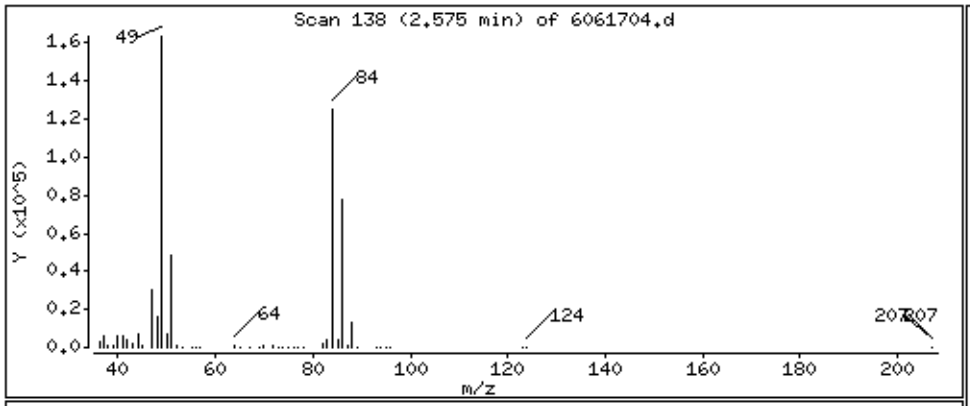
Operator: CT

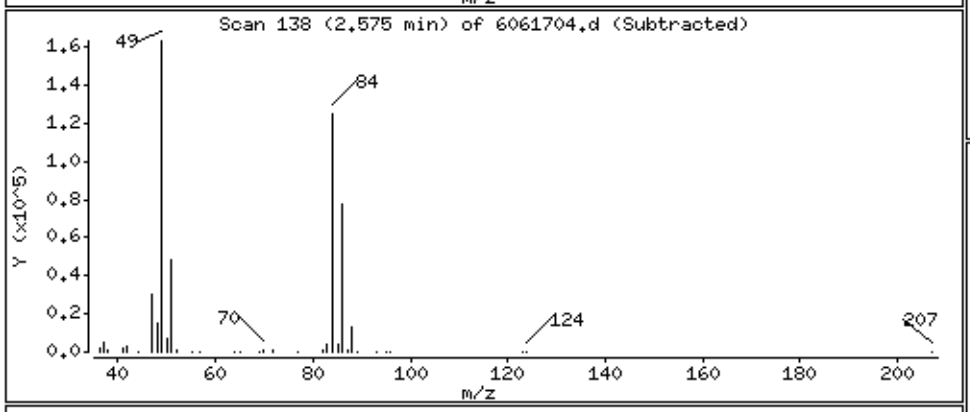
Column phase: RTx-624

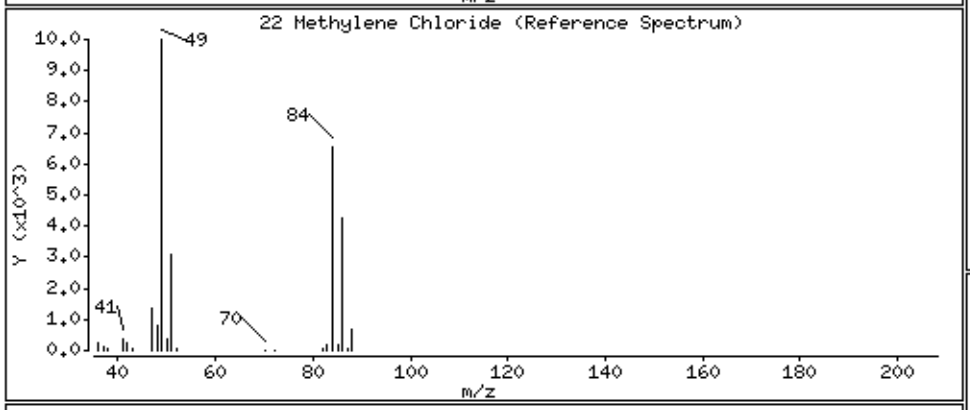
Column diameter: 0.53

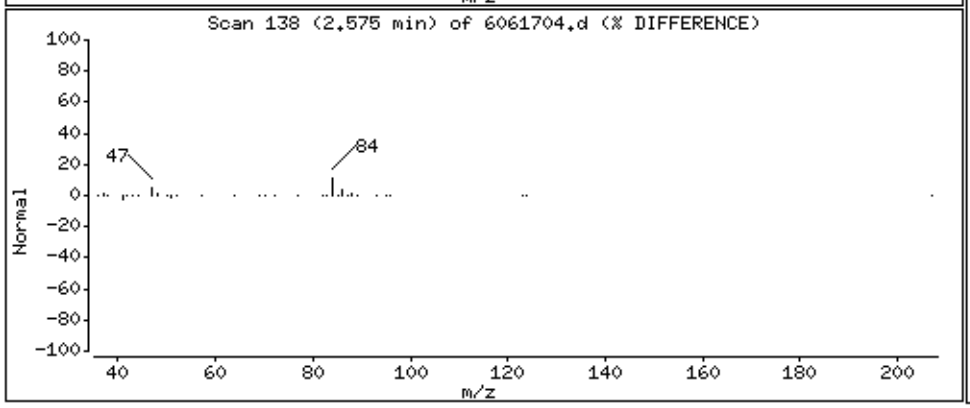
22 Methylene Chloride

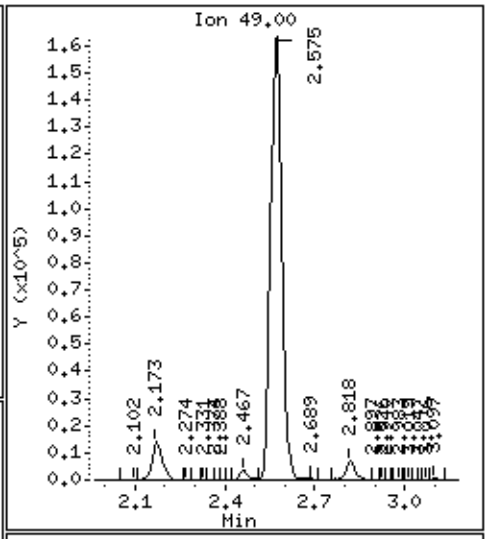
Concentration: 79.954 NG

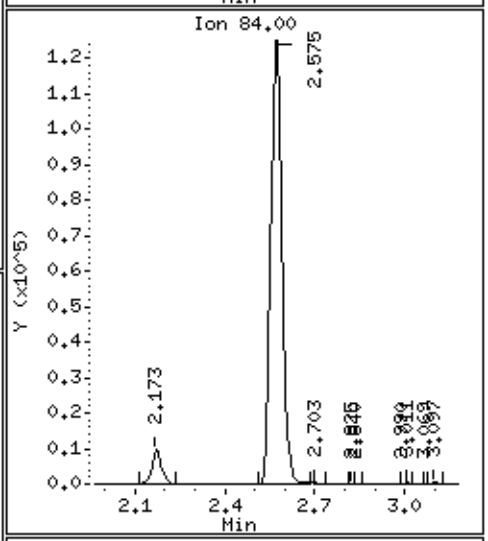


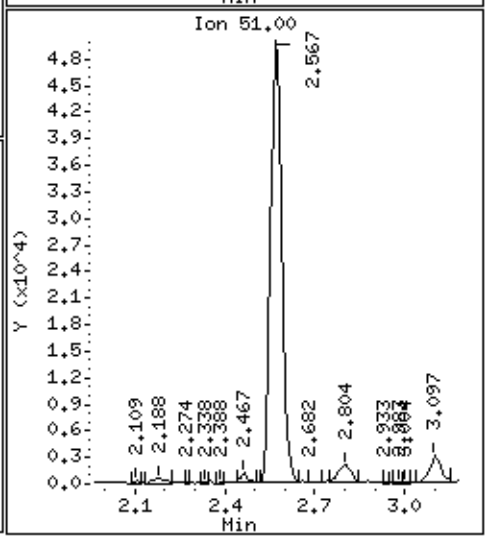












Data File: /chem/msd6.i/17jun16.b/6061704.d

Date : 17-JUN-2016 12:17

Client ID: LCSD

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCSD;LCSD

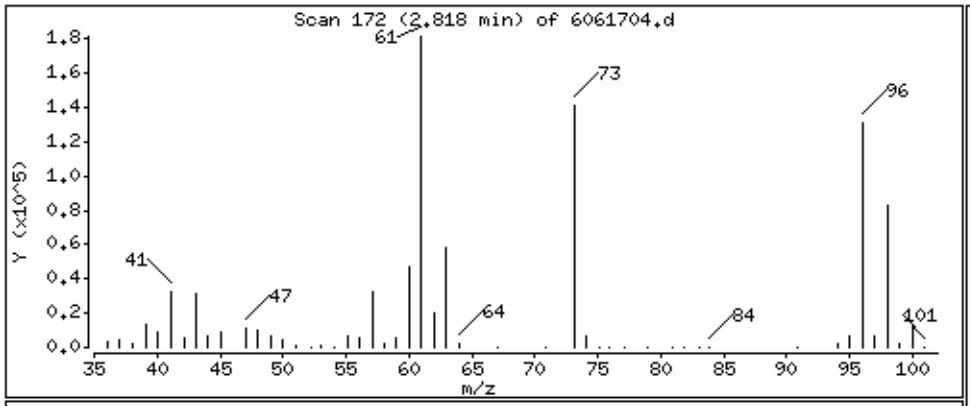
Operator: CT

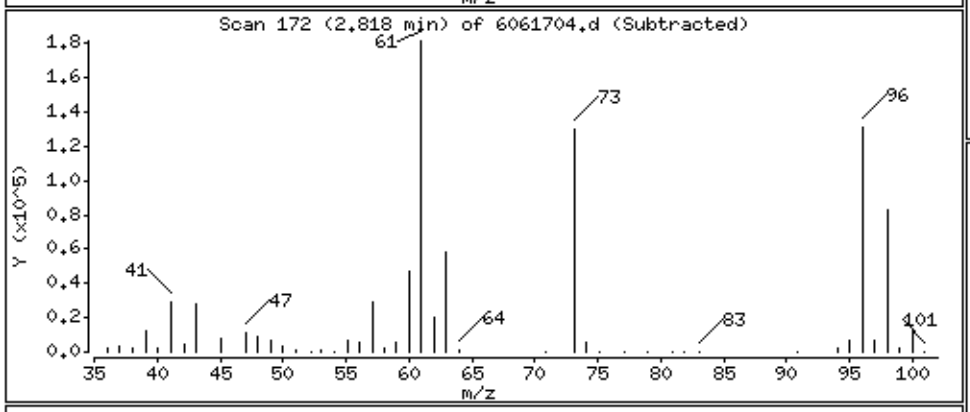
Column phase: RTx-624

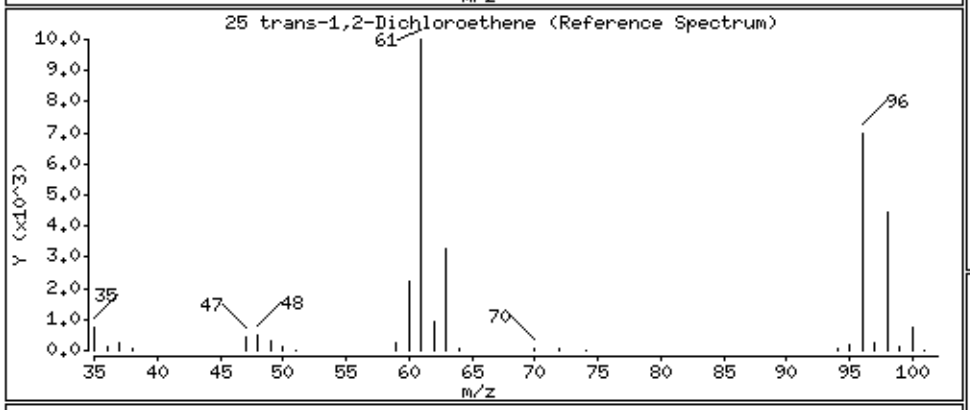
Column diameter: 0.53

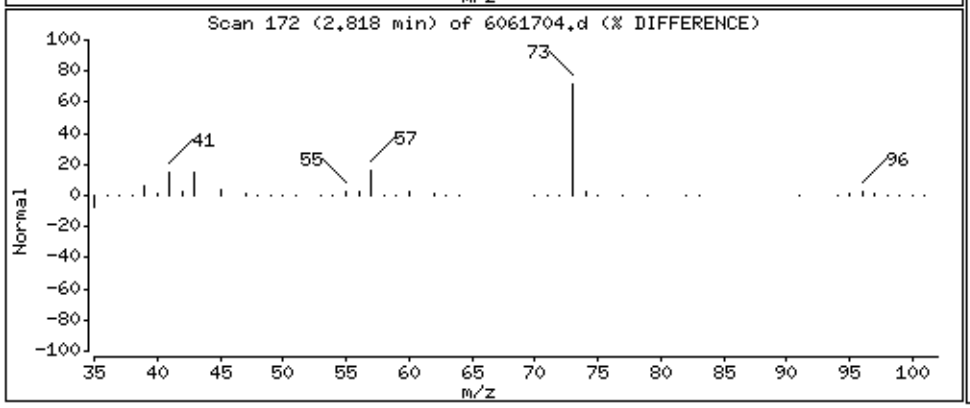
25 trans-1,2-Dichloroethene

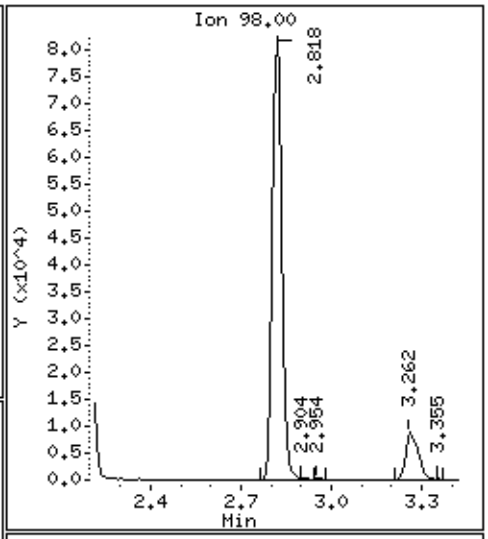
Concentration: 75.190 NG

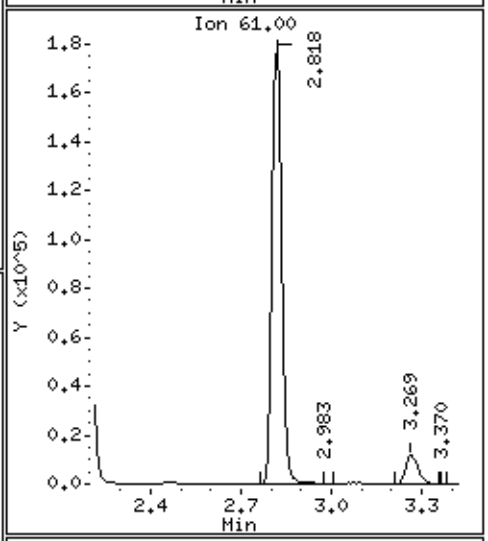


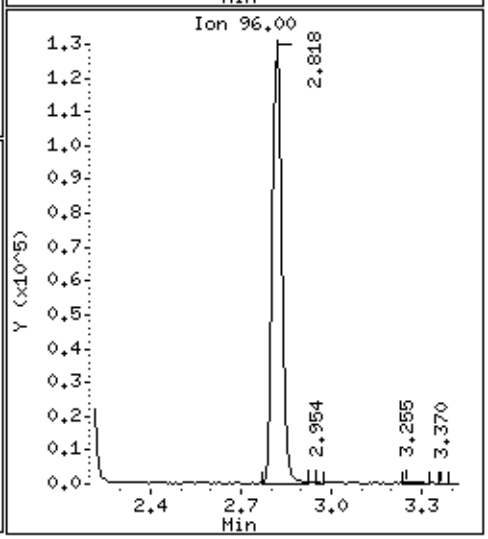












Data File: /chem/msd6.i/17jun16.b/6061704.d

Date : 17-JUN-2016 12:17

Client ID: LCSD

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCSD;LCSD

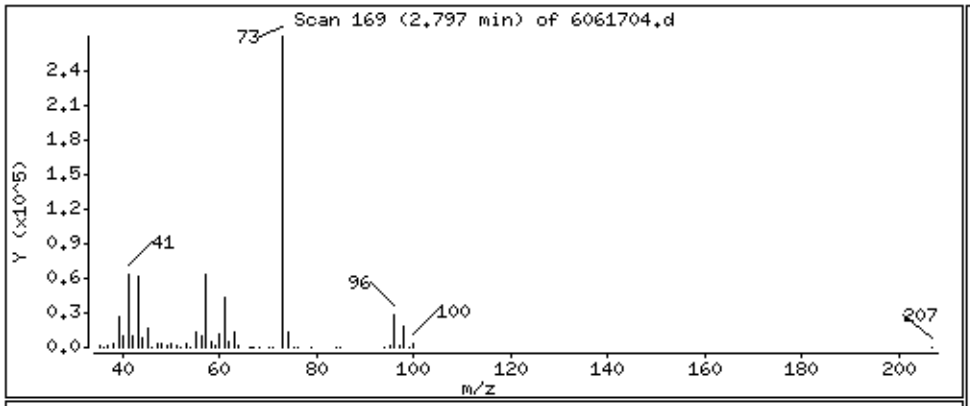
Operator: CT

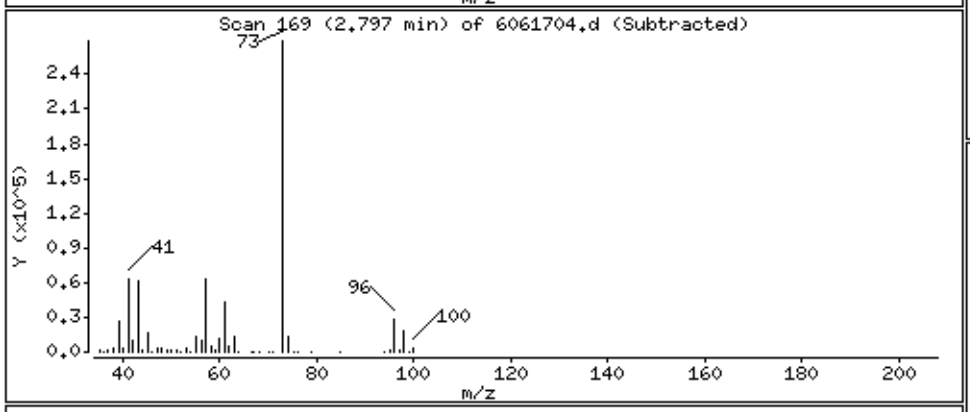
Column phase: RTx-624

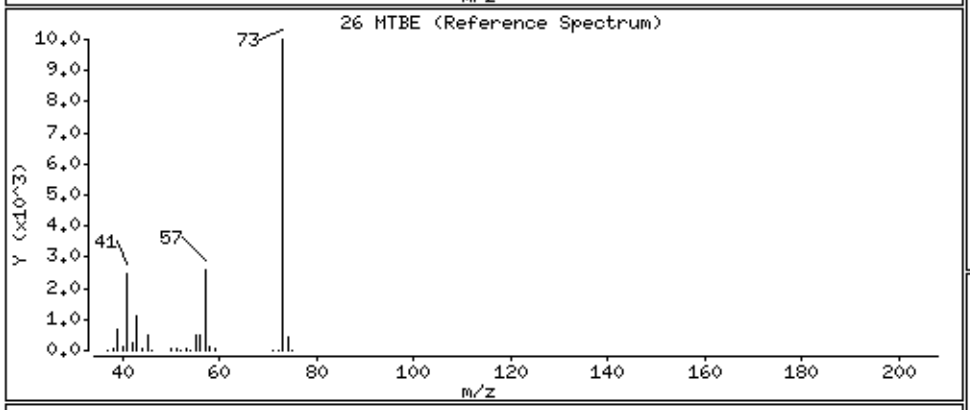
Column diameter: 0.53

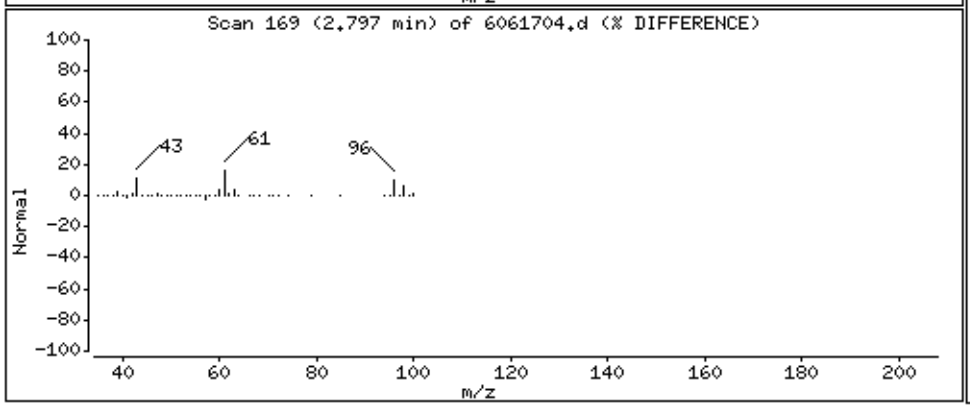
26 MTBE

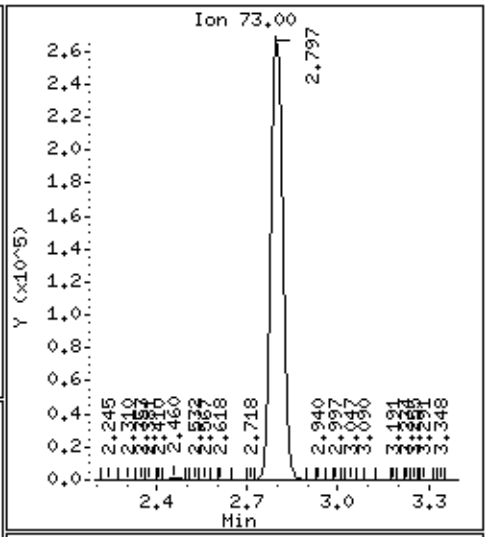
Concentration: 84.519 NG

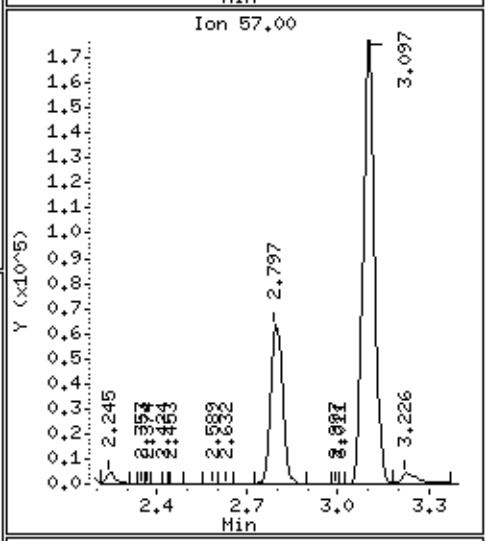


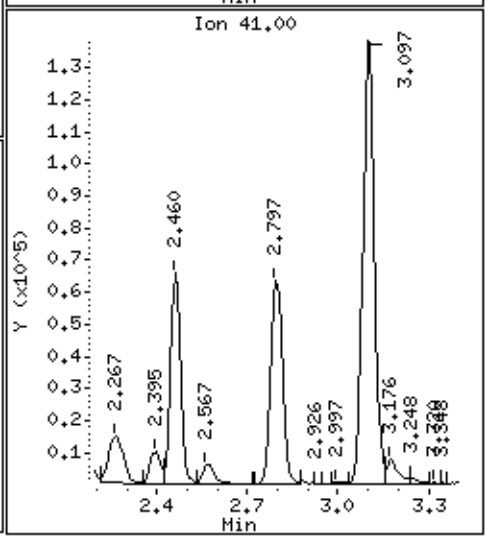












Data File: /chem/msd6.i/17jun16.b/6061704.d

Date : 17-JUN-2016 12:17

Client ID: LCSD

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCSD;LCSD

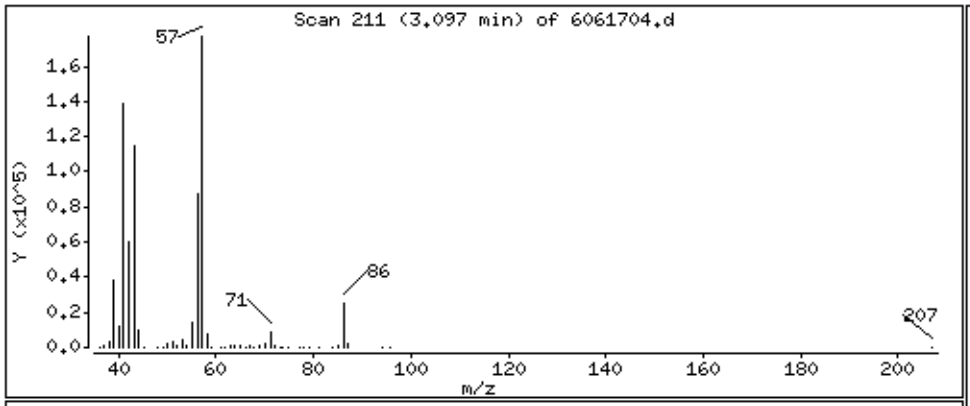
Operator: CT

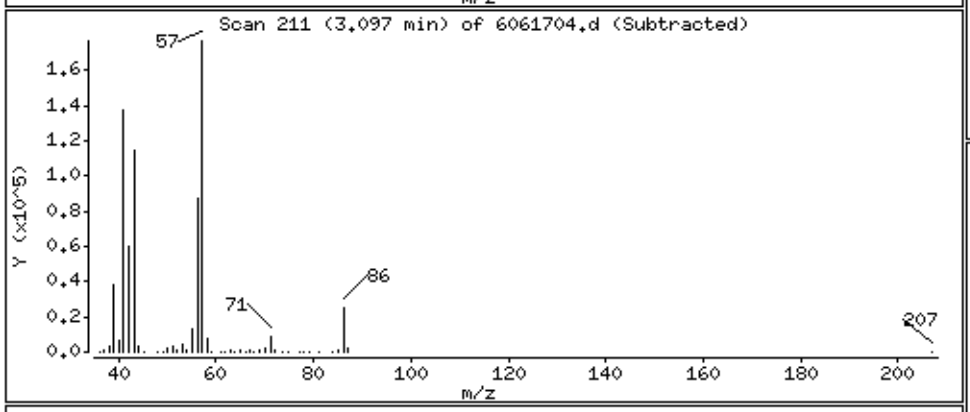
Column phase: RTx-624

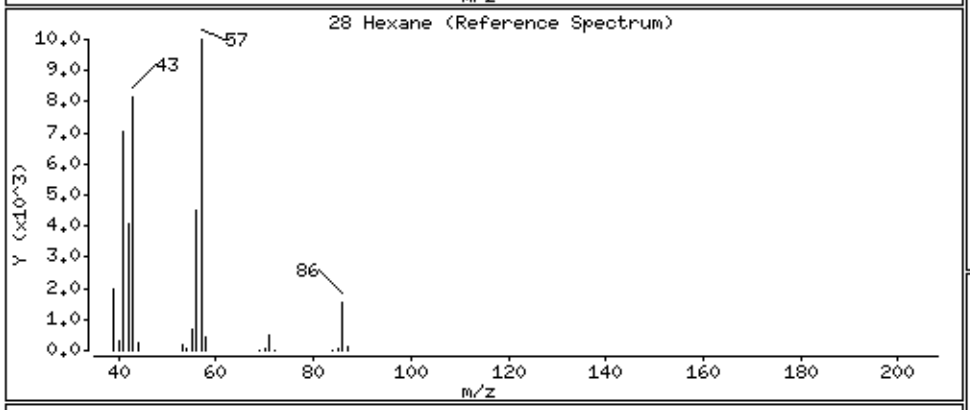
Column diameter: 0.53

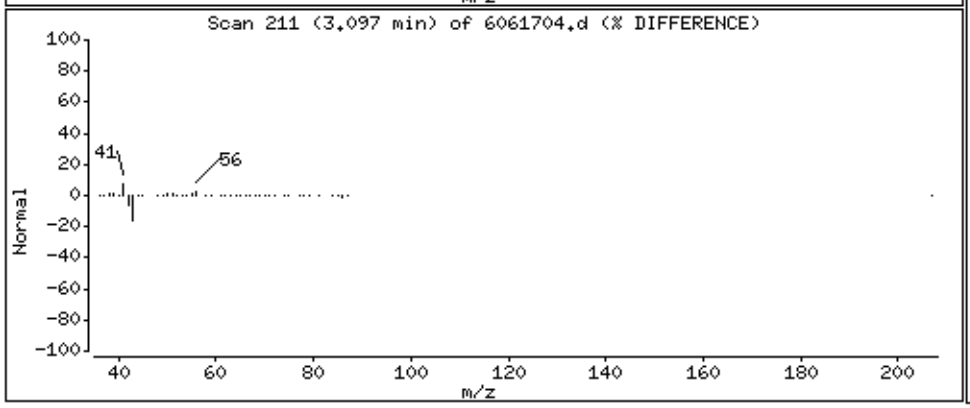
28 Hexane

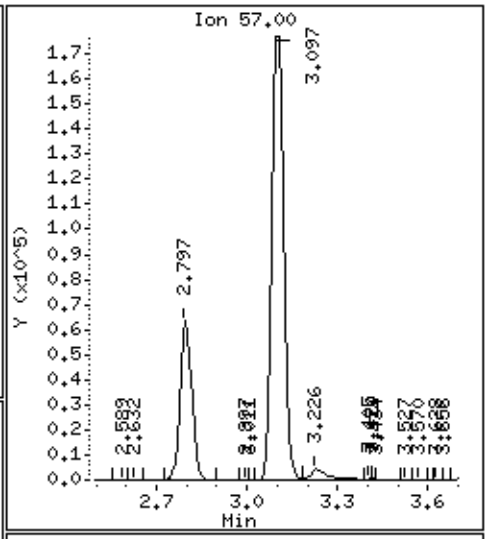
Concentration: 86.106 NG

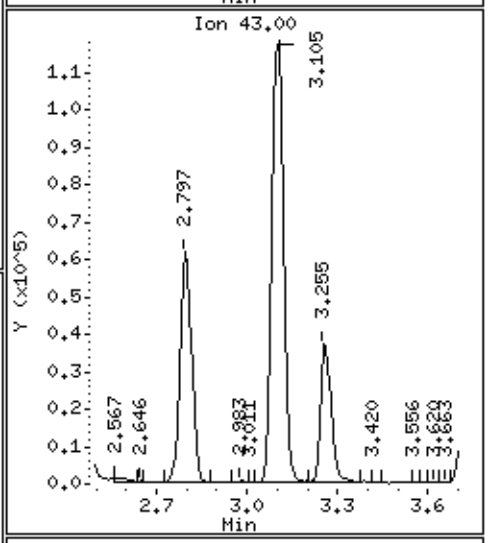


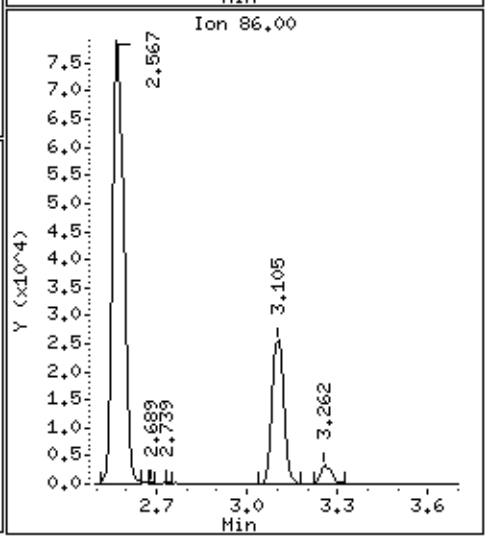












Data File: /chem/msd6.i/17jun16.b/6061704.d

Date : 17-JUN-2016 12:17

Client ID: LCSD

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCSD;LCSD

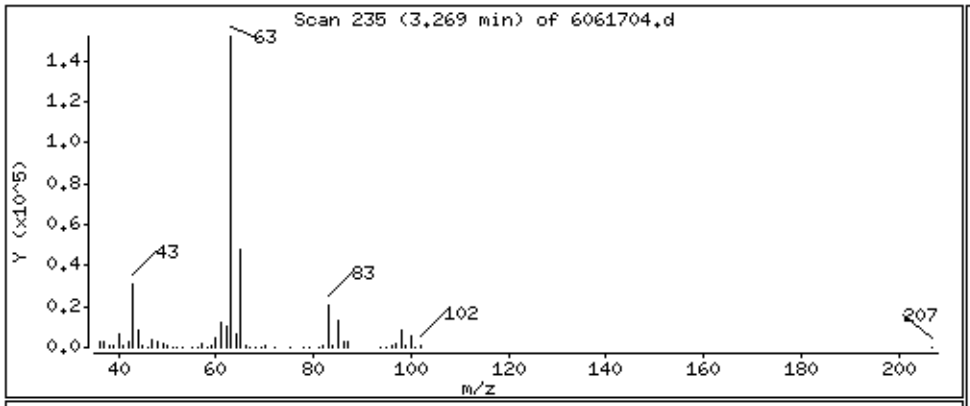
Operator: CT

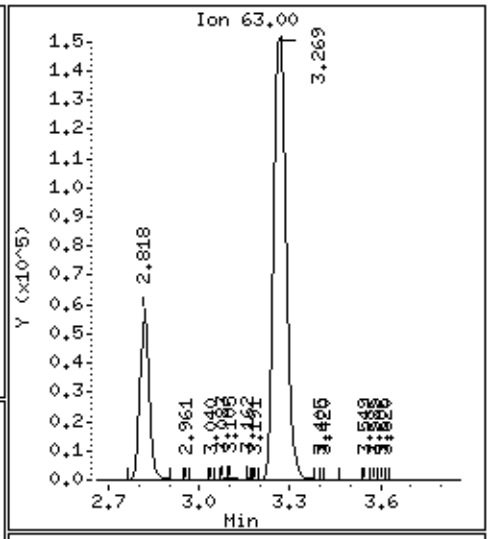
Column phase: RTx-624

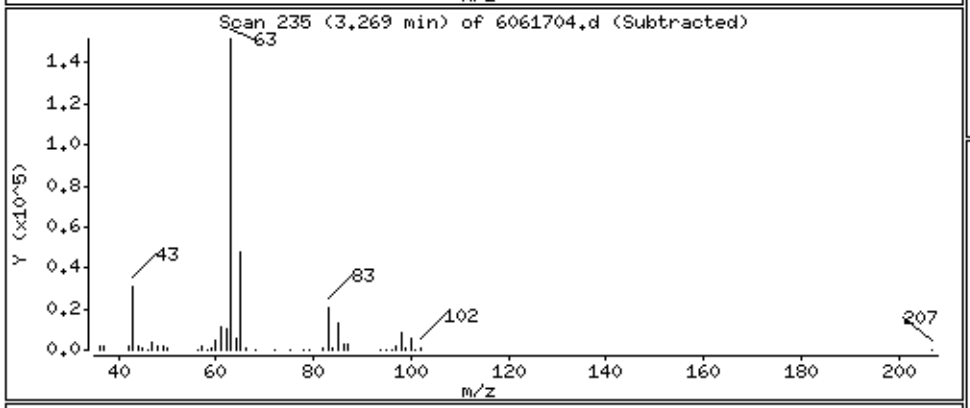
Column diameter: 0.53

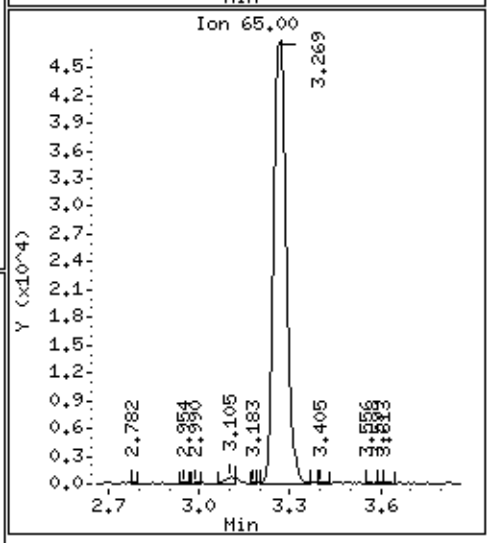
29 1,1-Dichloroethane

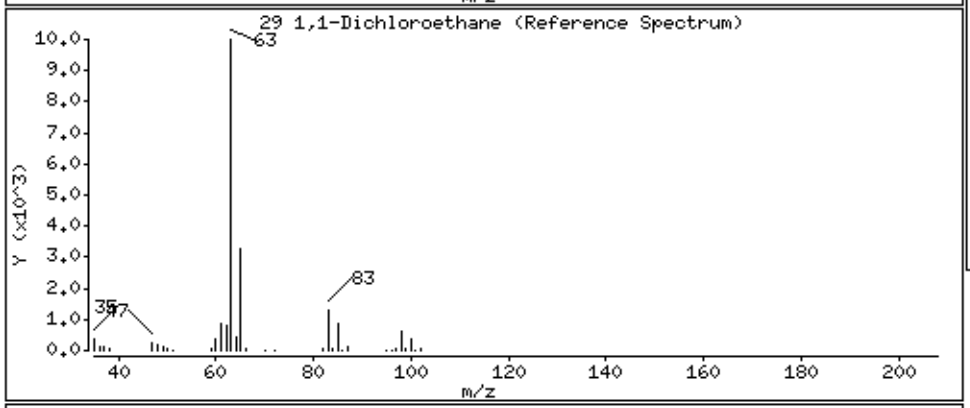
Concentration: 77.640 NG

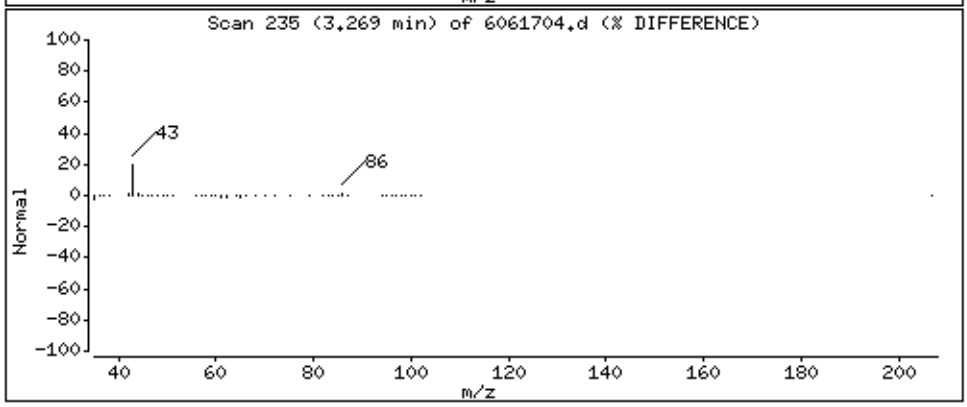












Data File: /chem/msd6.i/17jun16.b/6061704.d

Date : 17-JUN-2016 12:17

Client ID: LCSD

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCSD;LCSD

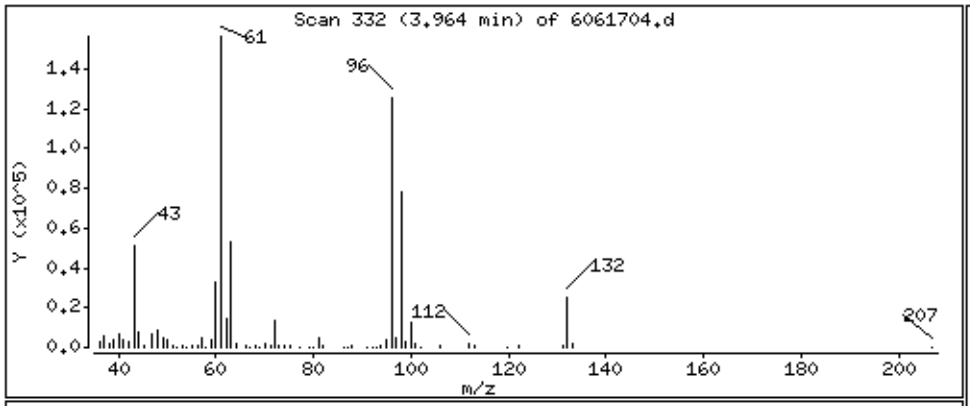
Operator: CT

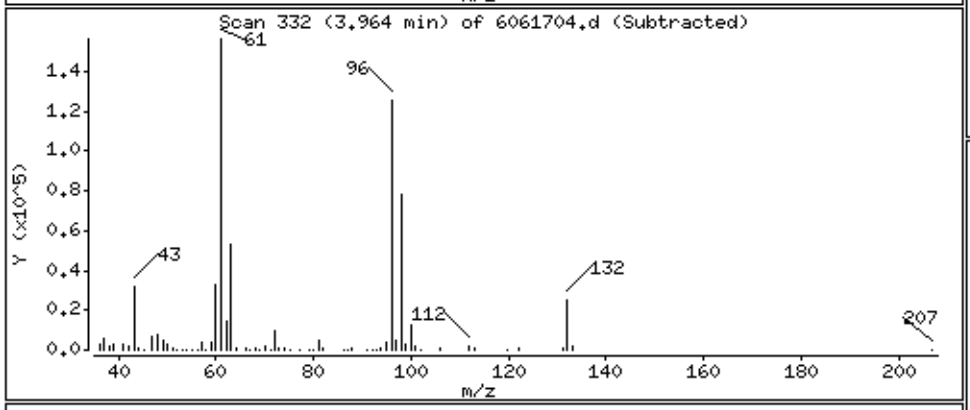
Column phase: RTx-624

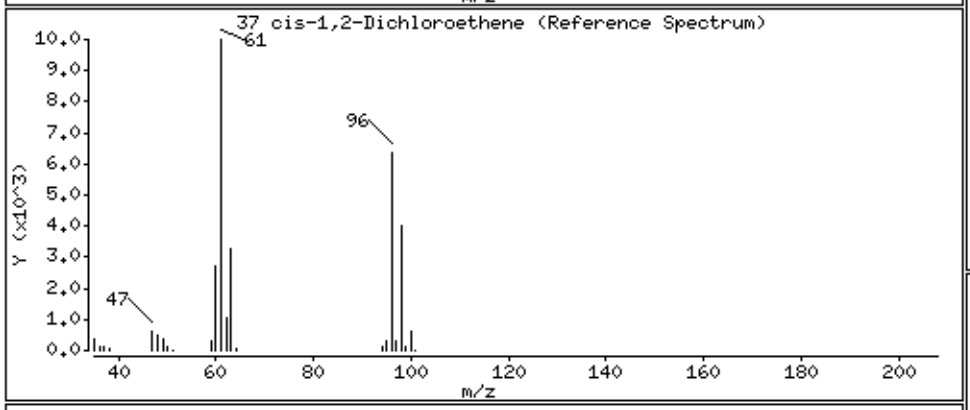
Column diameter: 0.53

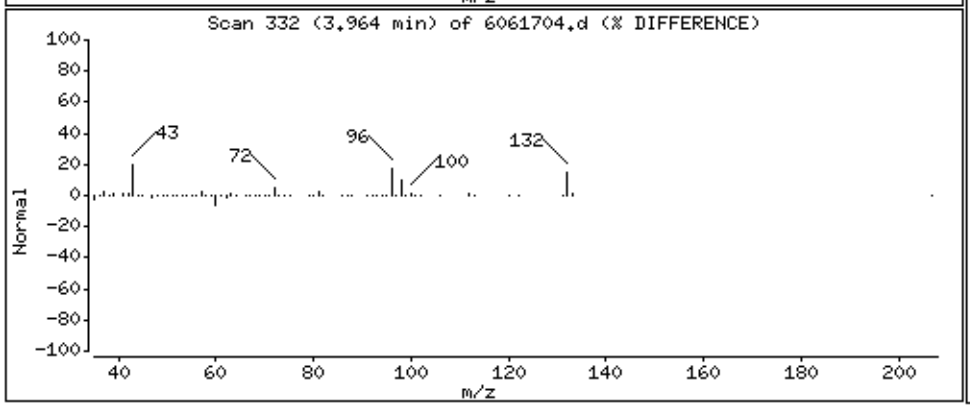
37 cis-1,2-Dichloroethene

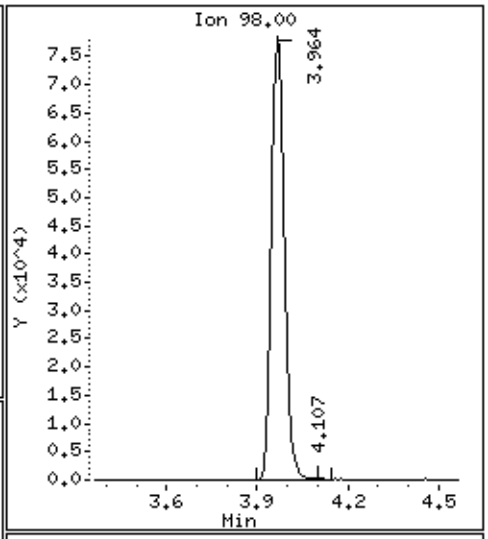
Concentration: 94.545 NG

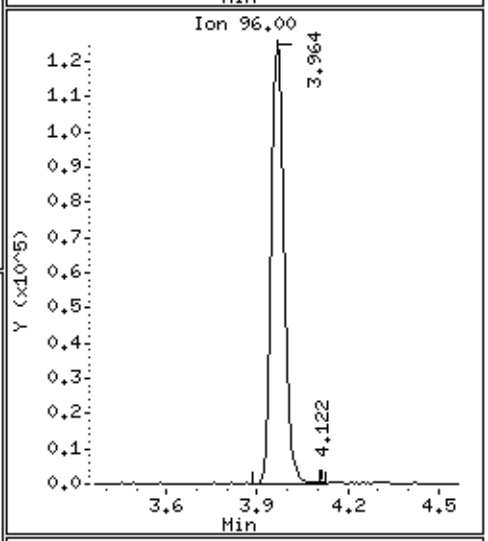


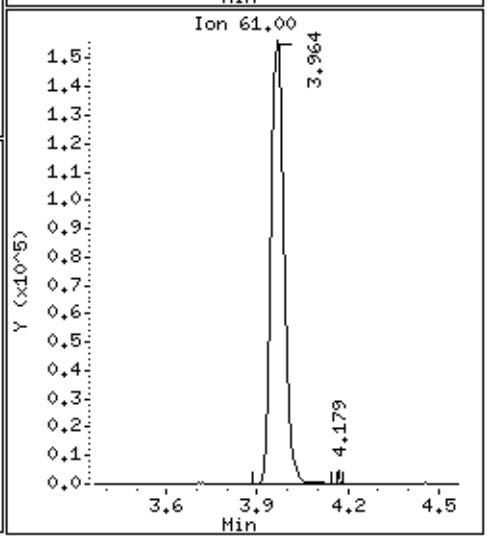












Data File: /chem/msd6.i/17jun16.b/6061704.d

Date : 17-JUN-2016 12:17

Client ID: LCSD

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCSD;LCSD

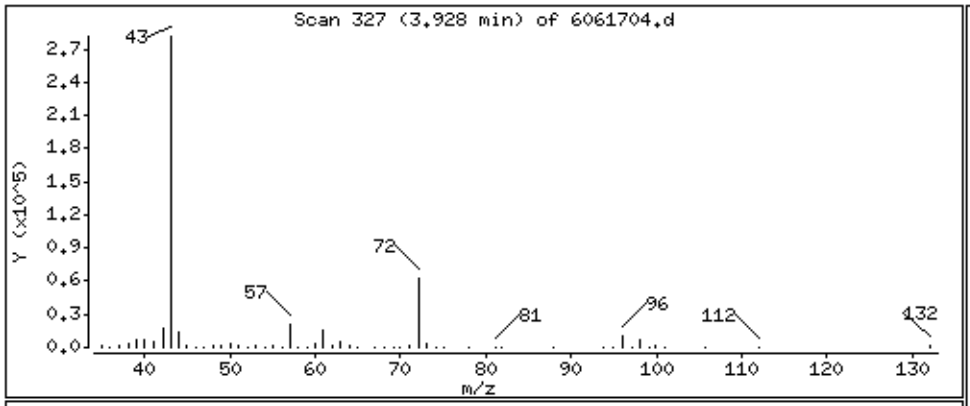
Operator: CT

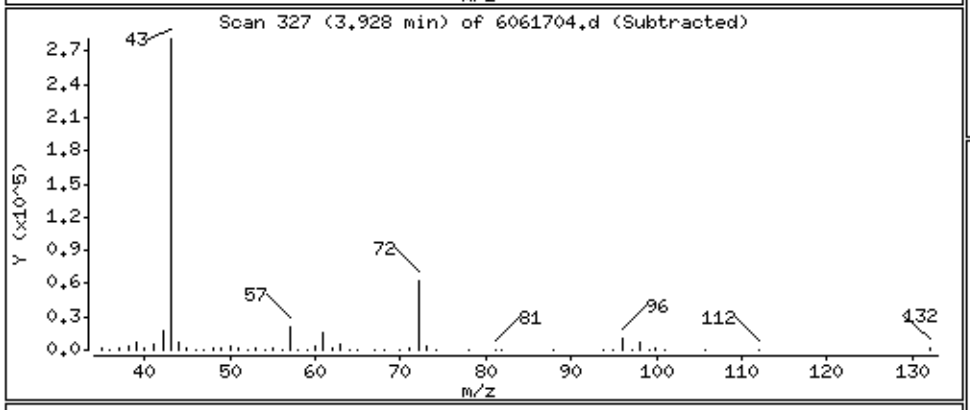
Column phase: RTx-624

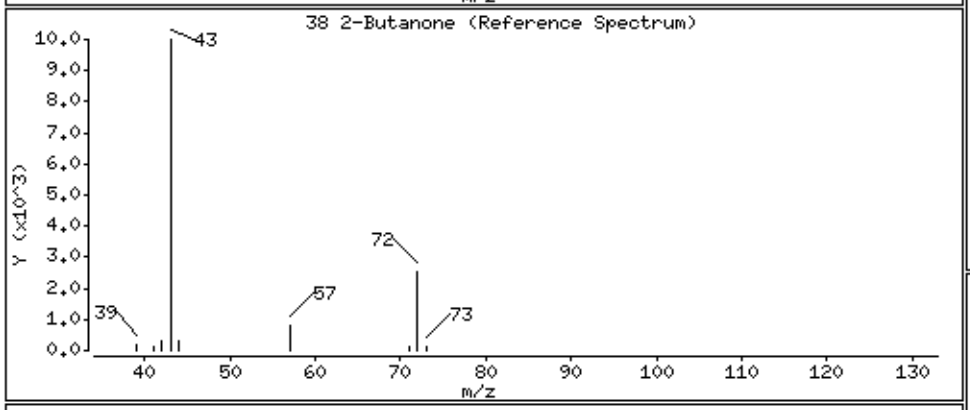
Column diameter: 0.53

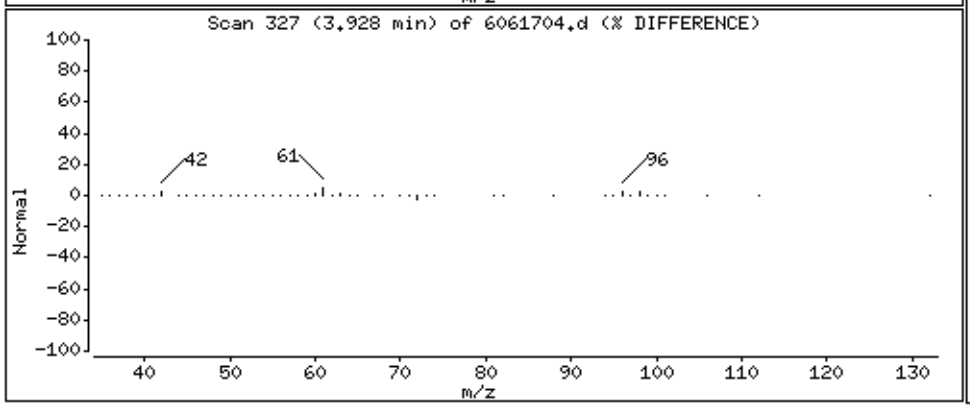
38 2-Butanone

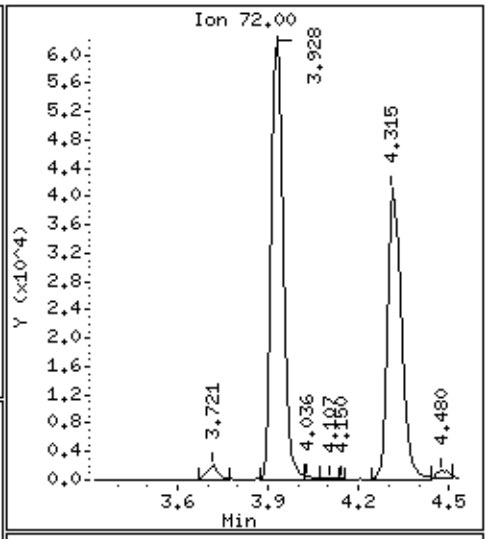
Concentration: 72.757 NG

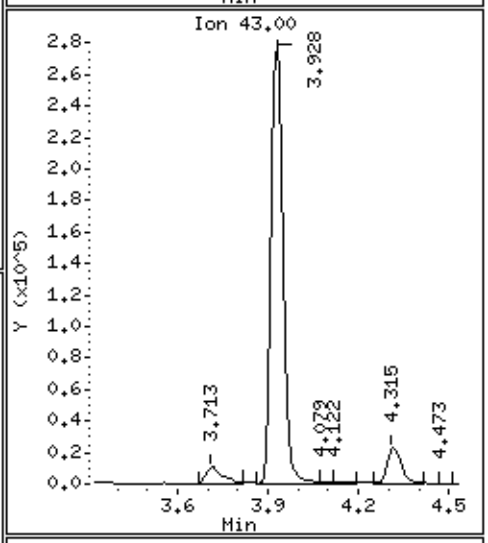


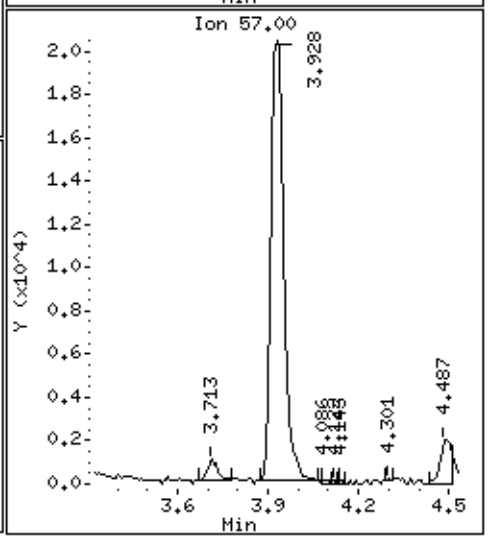












Data File: /chem/msd6.i/17jun16.b/6061704.d

Date : 17-JUN-2016 12:17

Client ID: LCSD

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCSD;LCSD

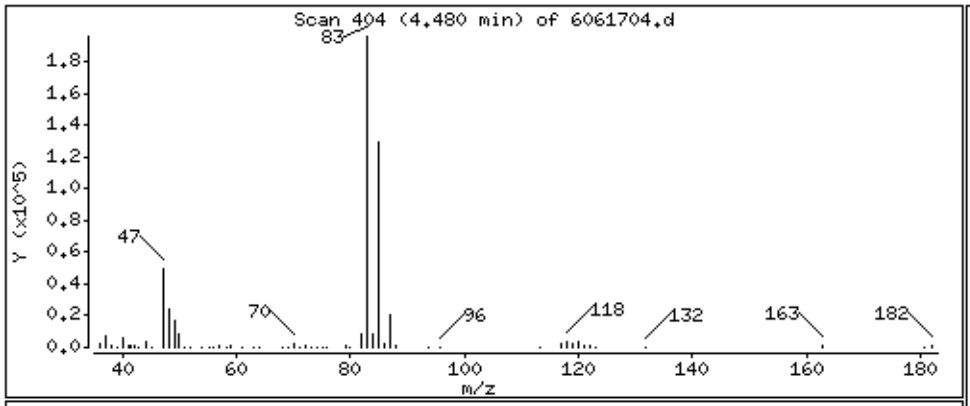
Operator: CT

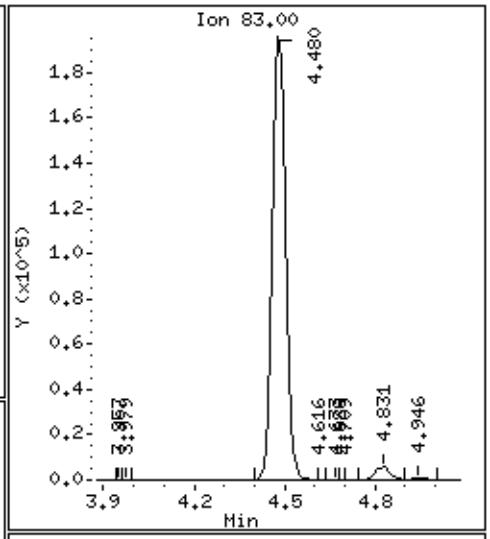
Column phase: RTx-624

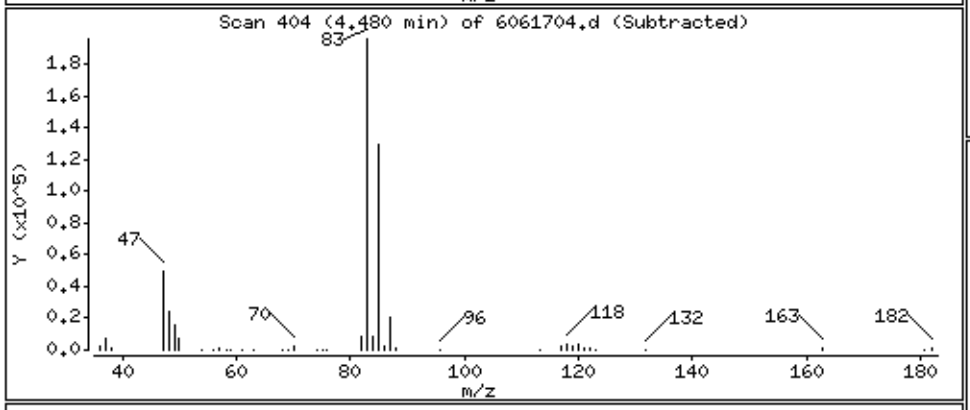
Column diameter: 0.53

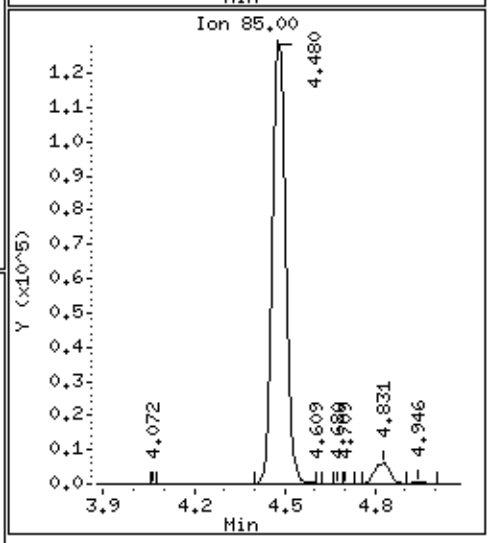
44 Chloroform

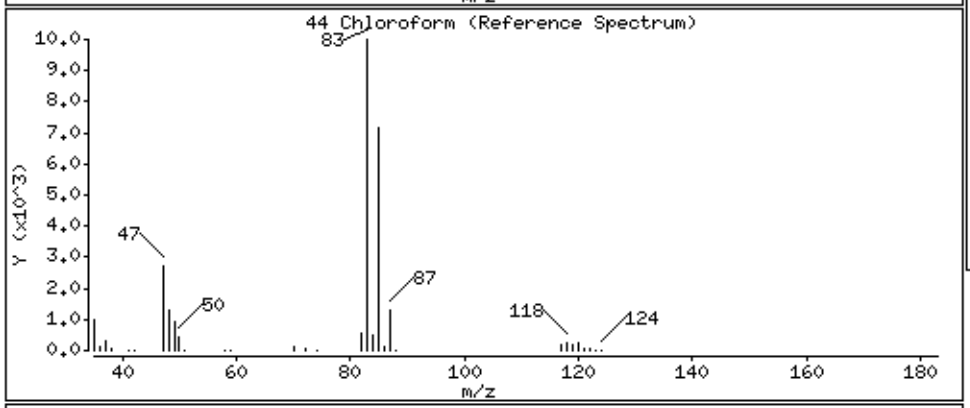
Concentration: 102.39 NG

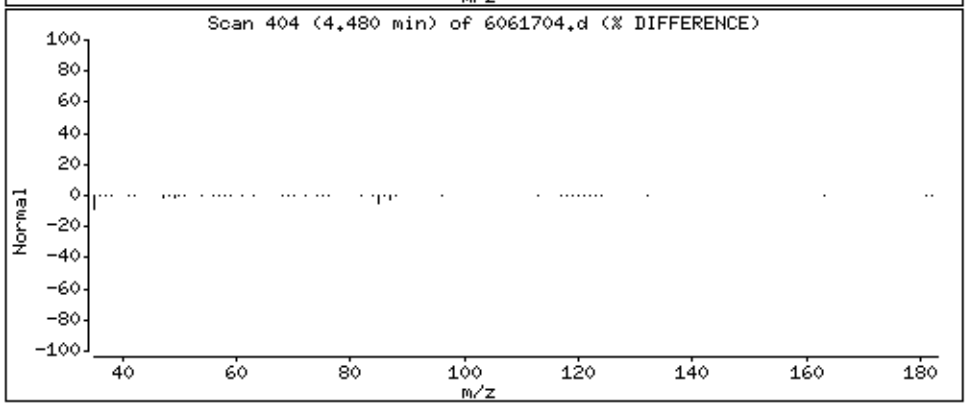












Data File: /chem/msd6.i/17jun16.b/6061704.d

Date : 17-JUN-2016 12:17

Client ID: LCSD

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCSD;LCSD

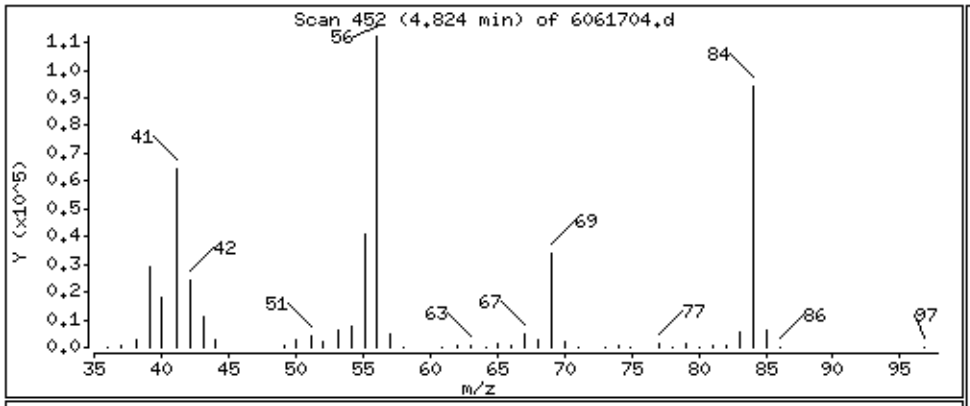
Operator: CT

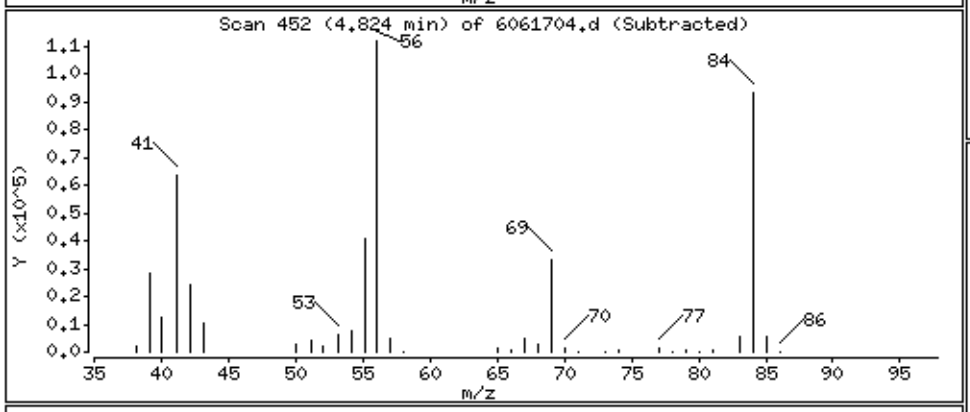
Column phase: RTx-624

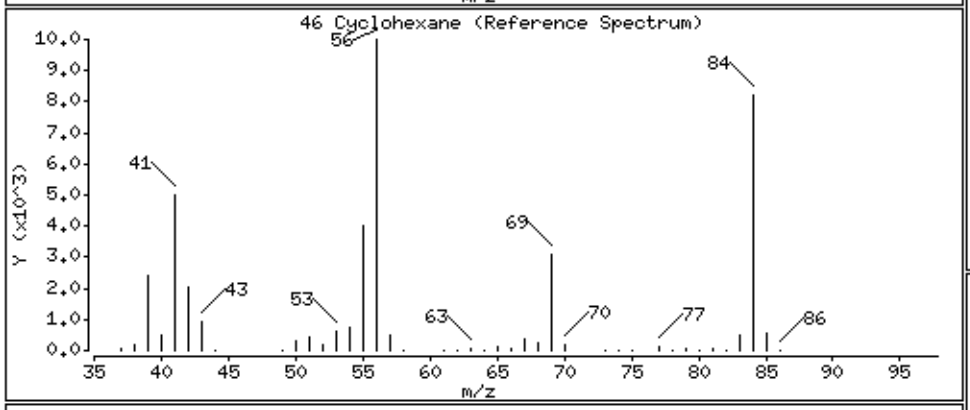
Column diameter: 0.53

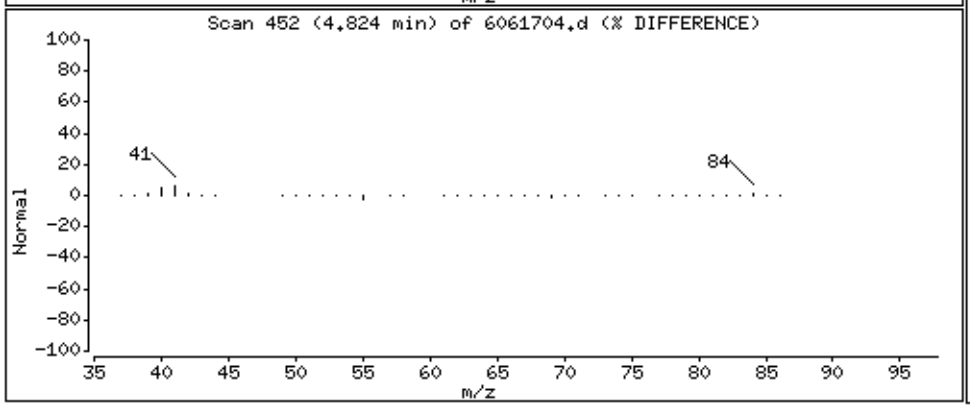
46 Cyclohexane

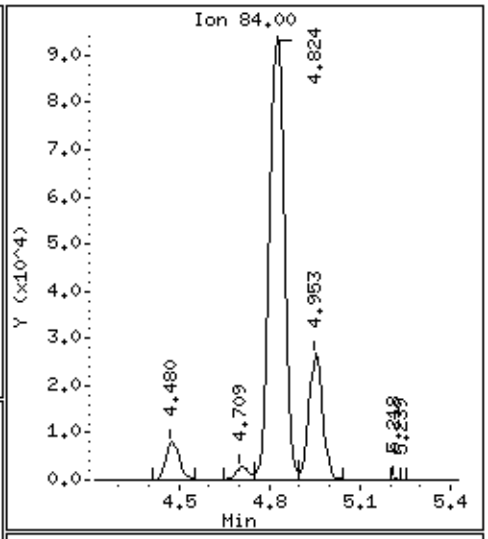
Concentration: 60.093 NG

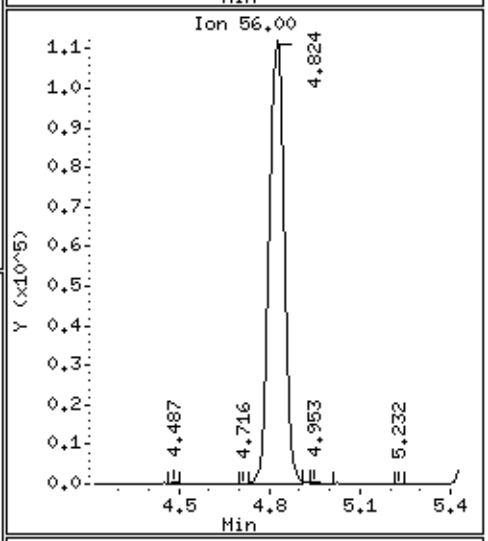


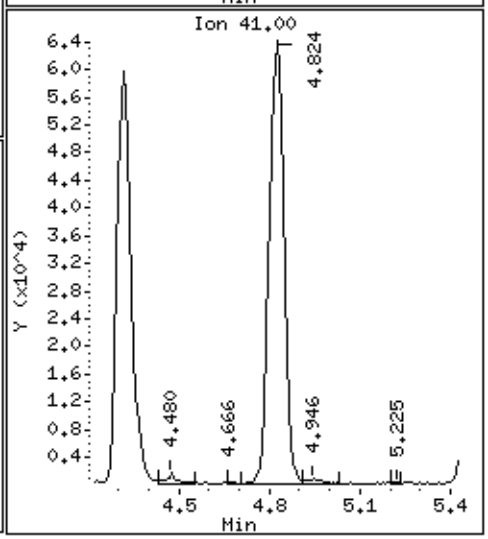












Data File: /chem/msd6.i/17jun16.b/6061704.d

Date : 17-JUN-2016 12:17

Client ID: LCSD

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCSD;LCSD

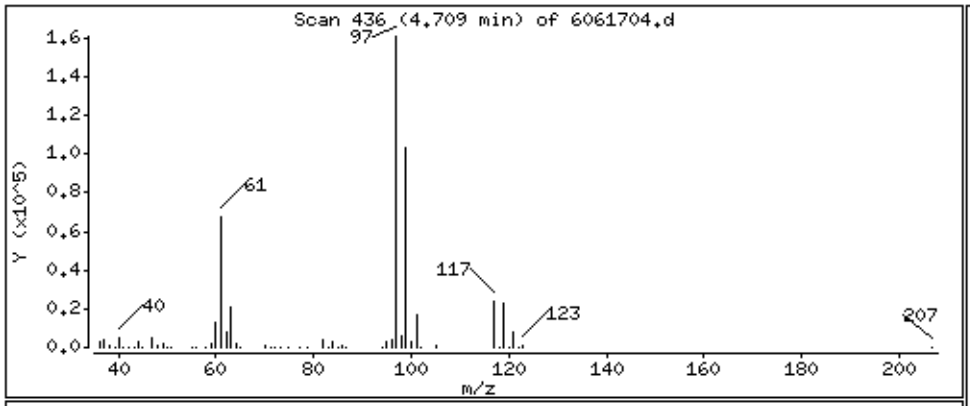
Operator: CT

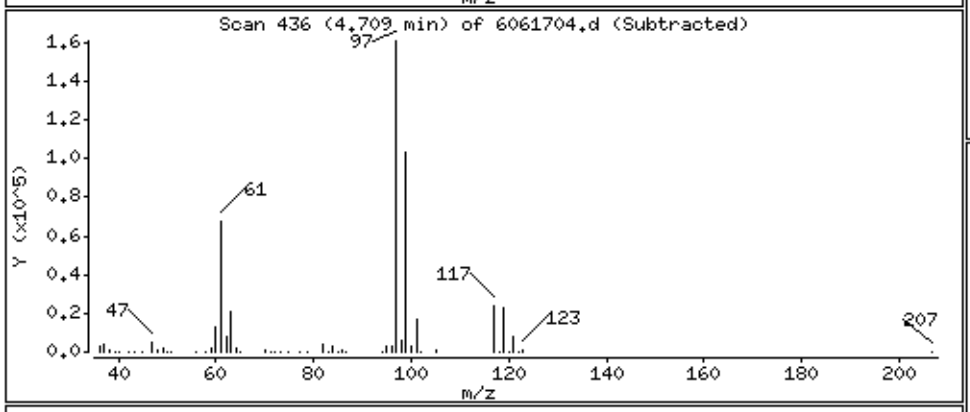
Column phase: RTx-624

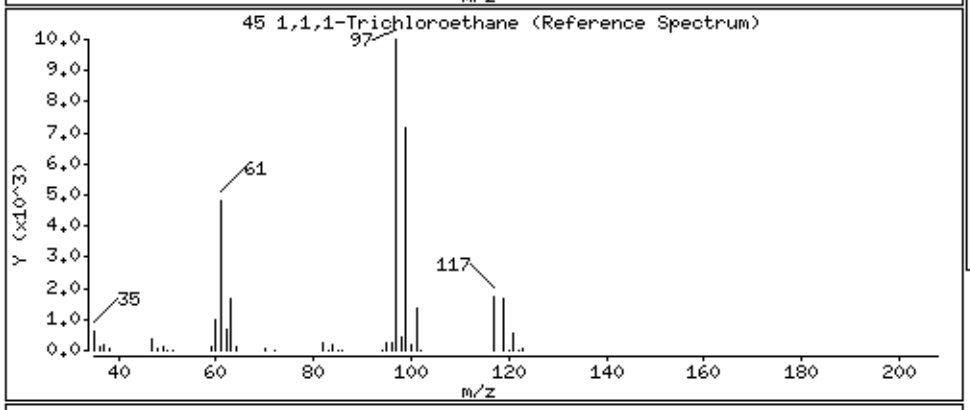
Column diameter: 0.53

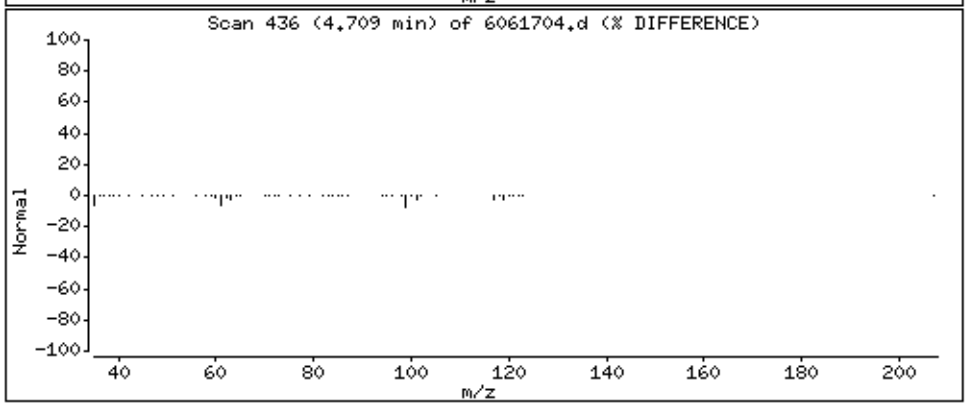
45 1,1,1-Trichloroethane

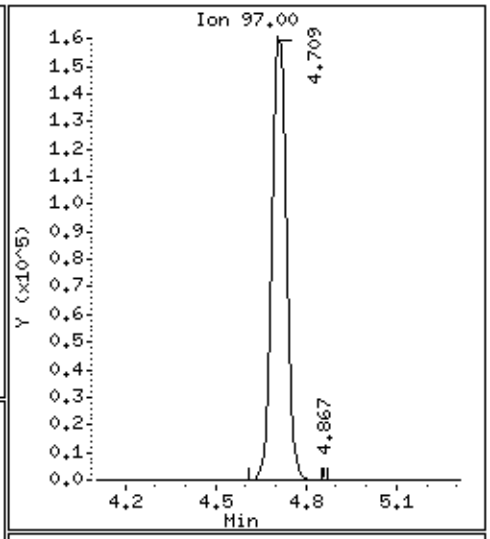
Concentration: 97.034 NG

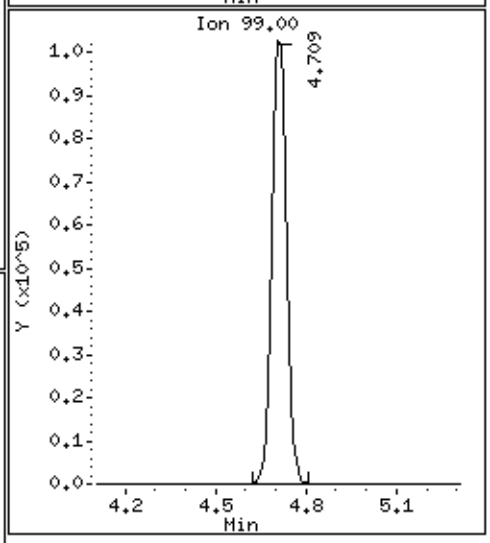












Data File: /chem/msd6.i/17jun16.b/6061704.d

Date : 17-JUN-2016 12:17

Client ID: LCSD

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCSD;LCSD

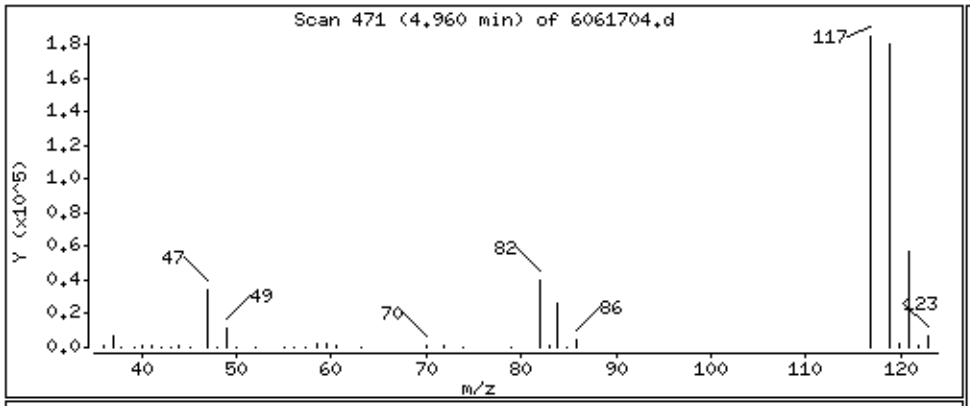
Operator: CT

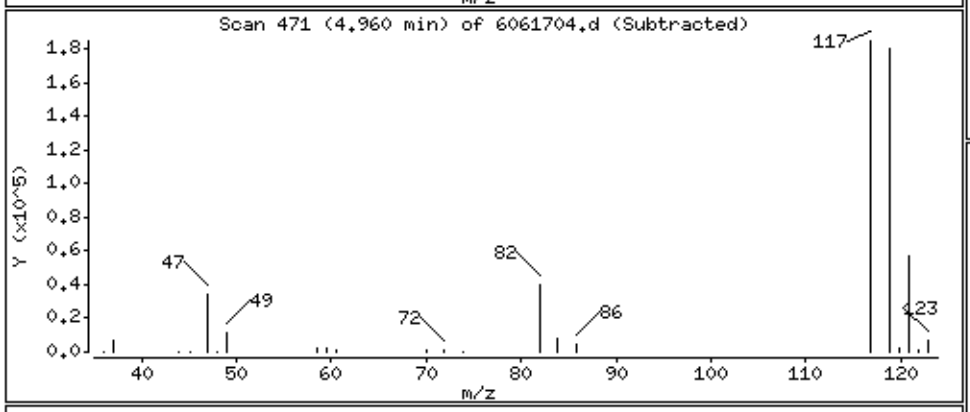
Column phase: RTx-624

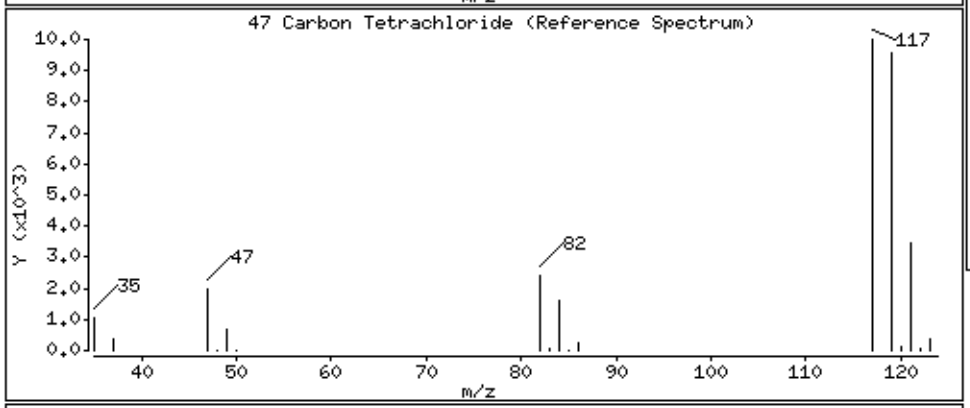
Column diameter: 0.53

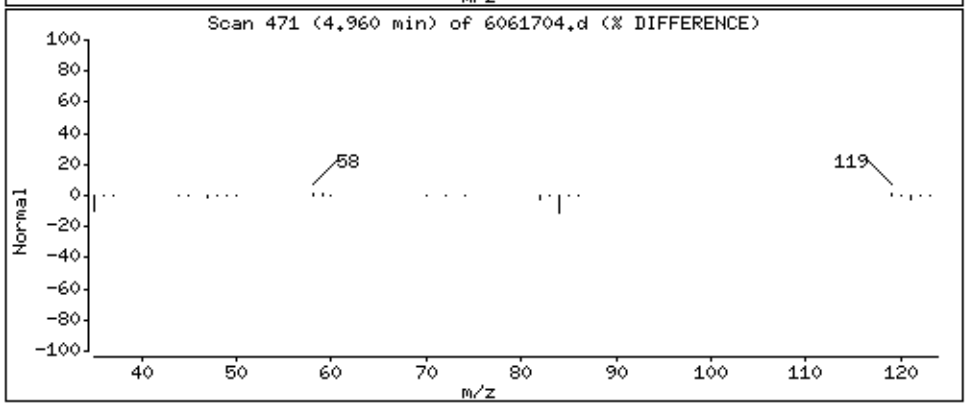
47 Carbon Tetrachloride

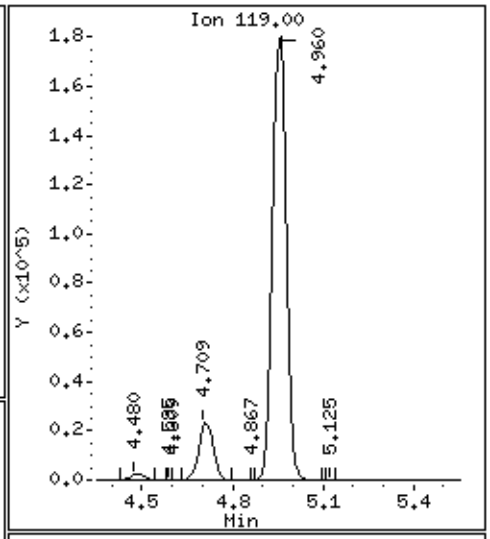
Concentration: 112.87 NG

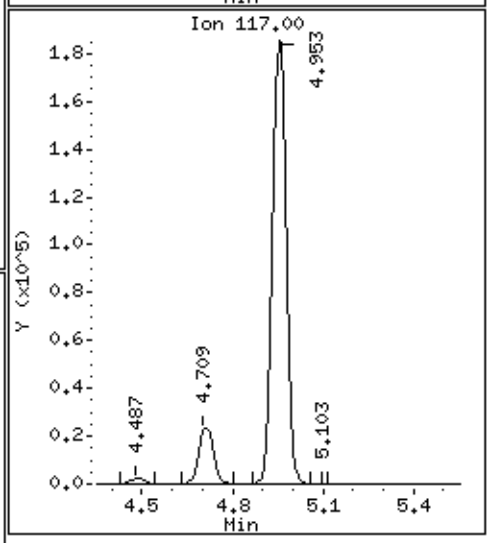












Data File: /chem/msd6.i/17jun16.b/6061704.d

Date : 17-JUN-2016 12:17

Client ID: LCSD

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCSD;LCSD

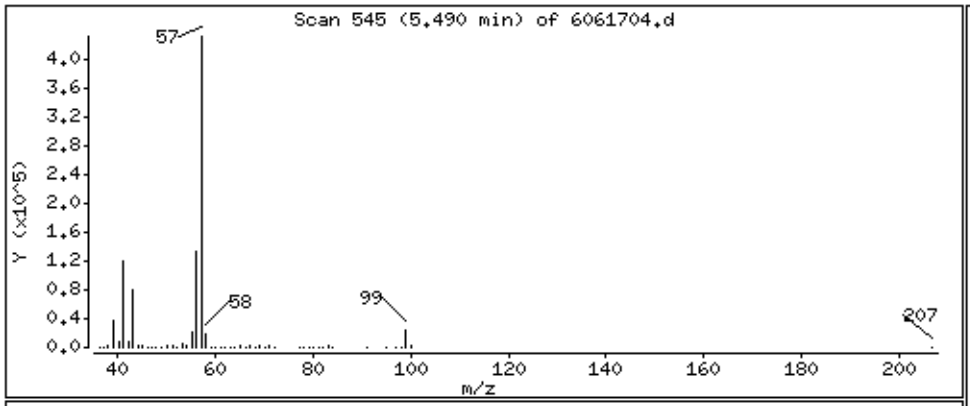
Operator: CT

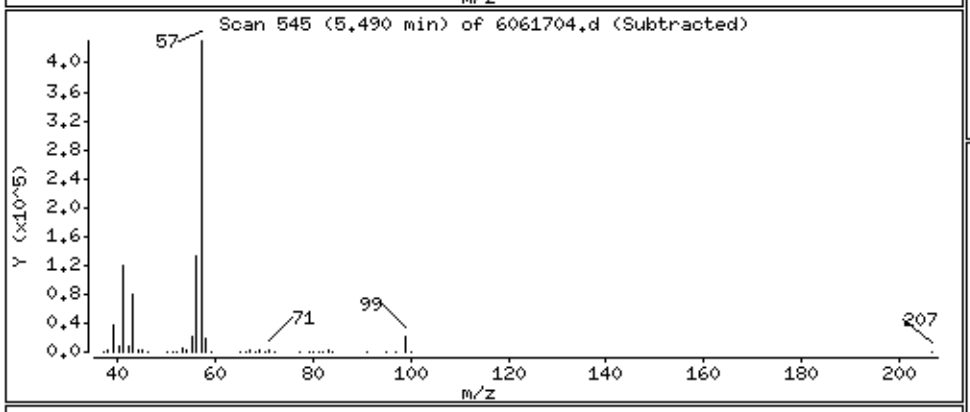
Column phase: RTx-624

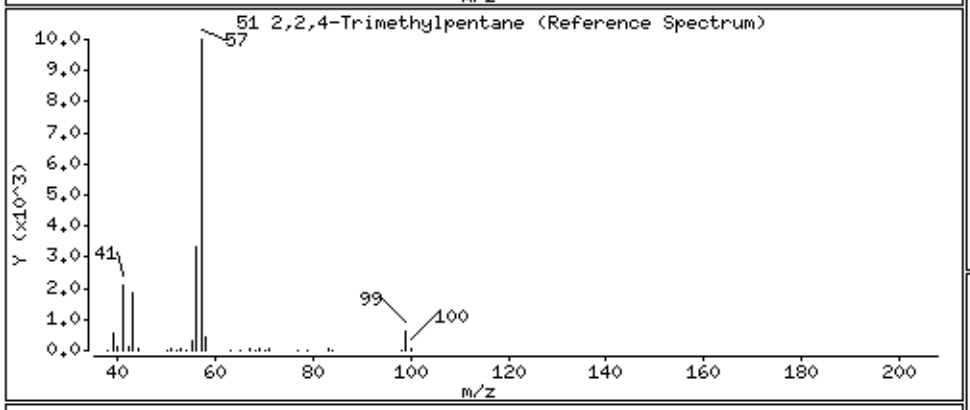
Column diameter: 0.53

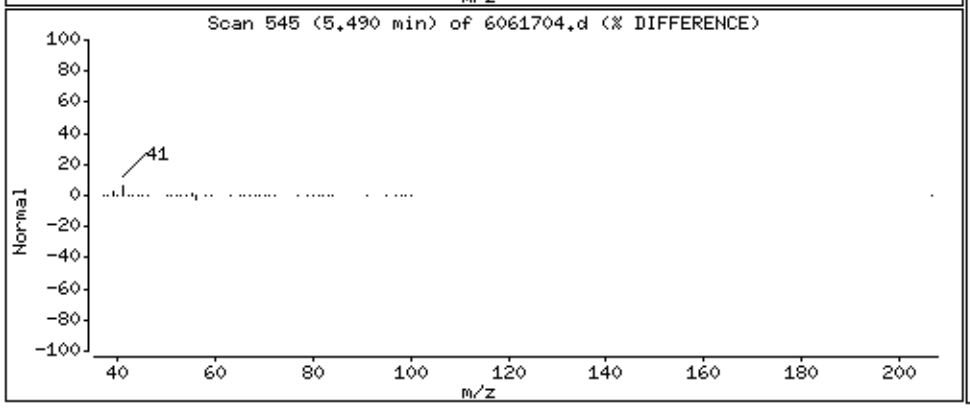
51 2,2,4-Trimethylpentane

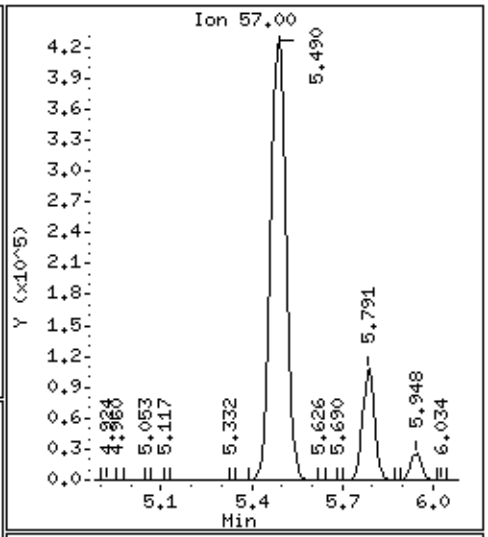
Concentration: 110.28 NG

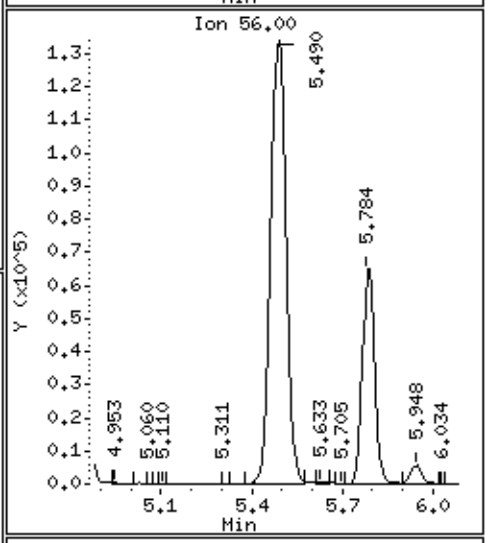


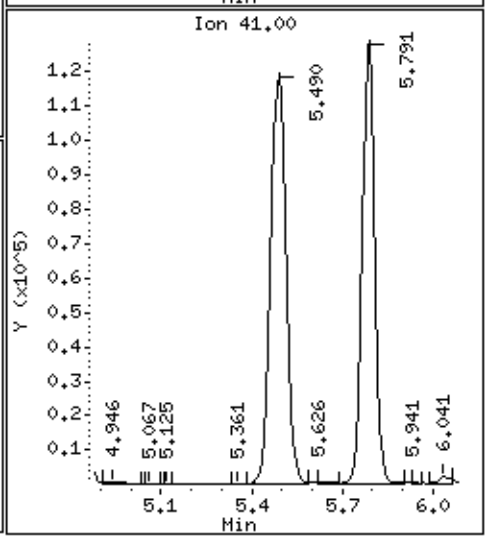












Data File: /chem/msd6.i/17jun16.b/6061704.d

Date : 17-JUN-2016 12:17

Client ID: LCSD

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCSD;LCSD

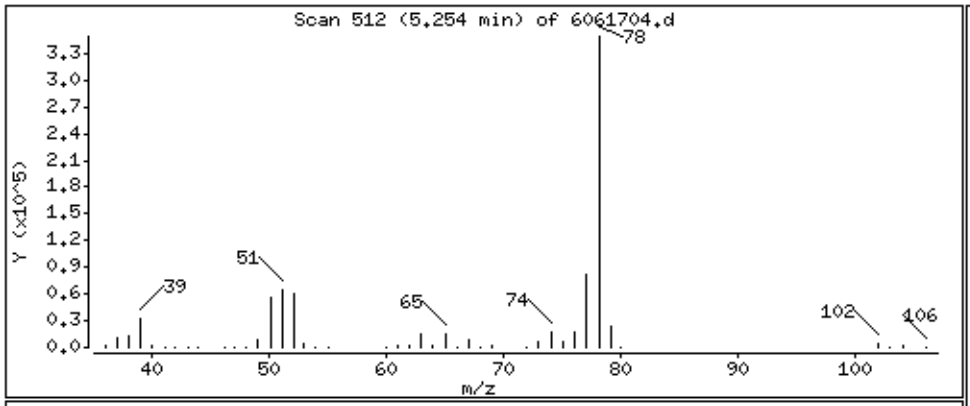
Operator: CT

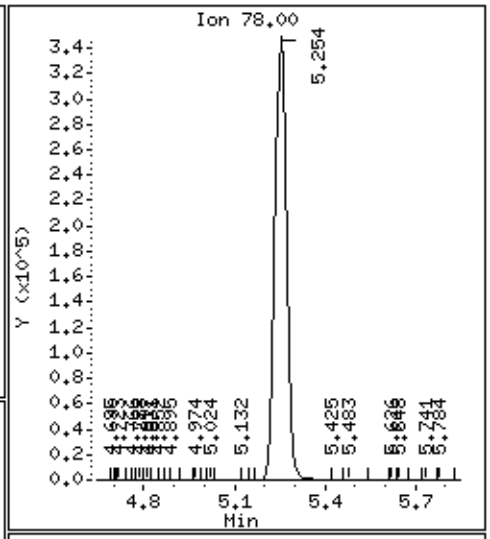
Column phase: RTx-624

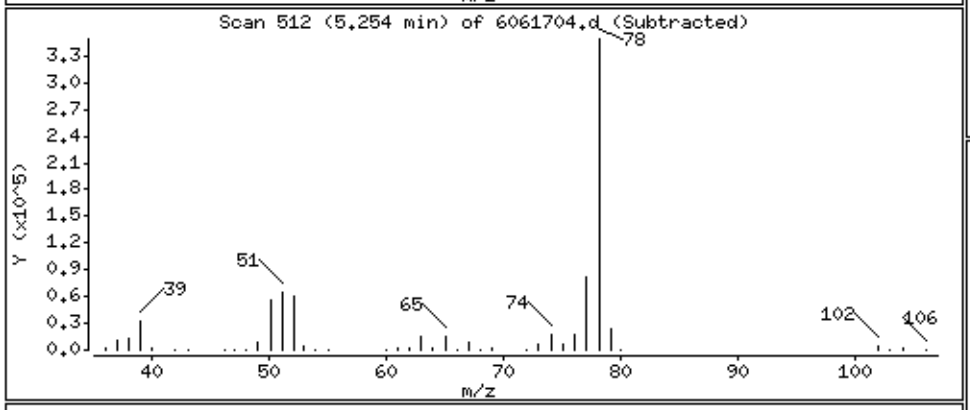
Column diameter: 0.53

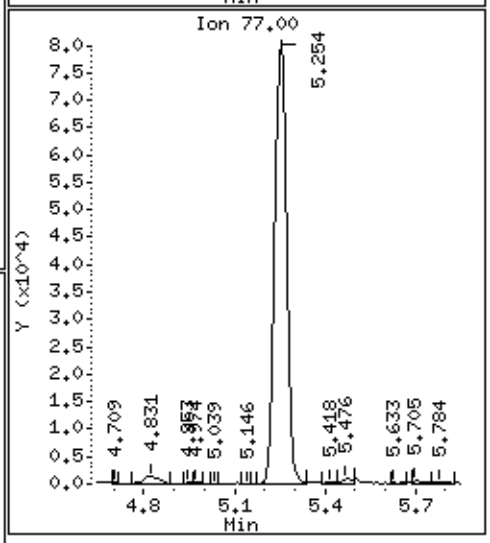
48 Benzene

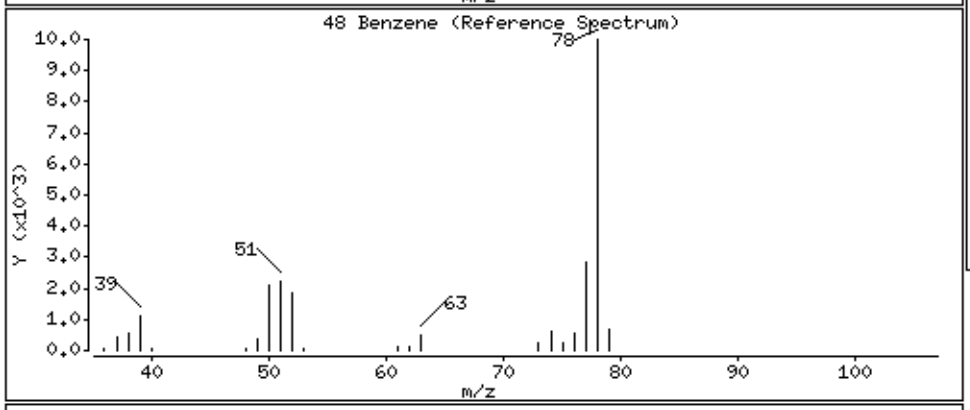
Concentration: 62.971 NG

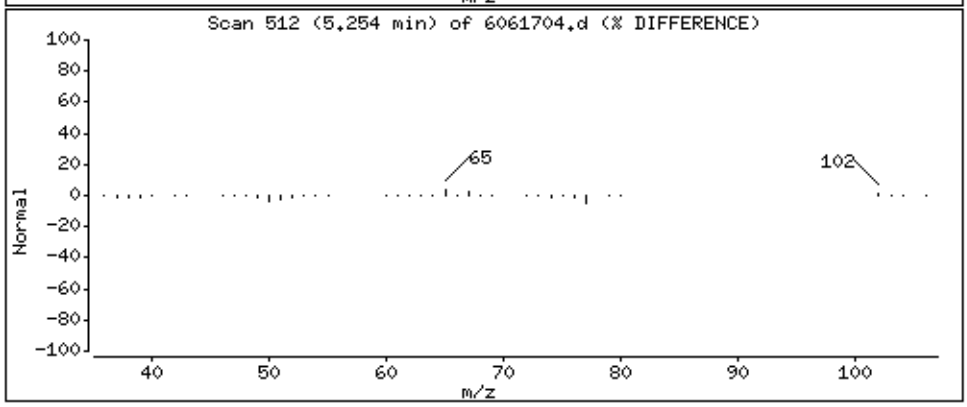












Data File: /chem/msd6.i/17jun16.b/6061704.d

Date : 17-JUN-2016 12:17

Client ID: LCSD

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCSD;LCSD

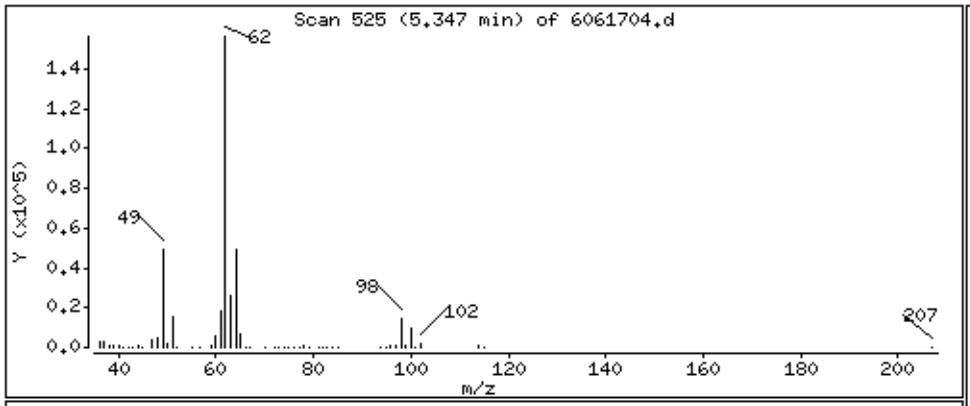
Operator: CT

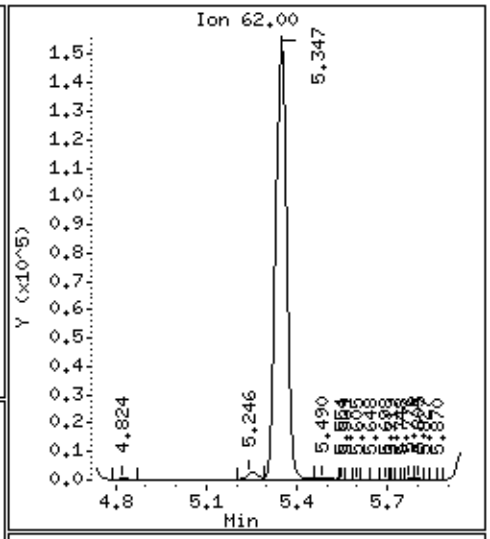
Column phase: RTx-624

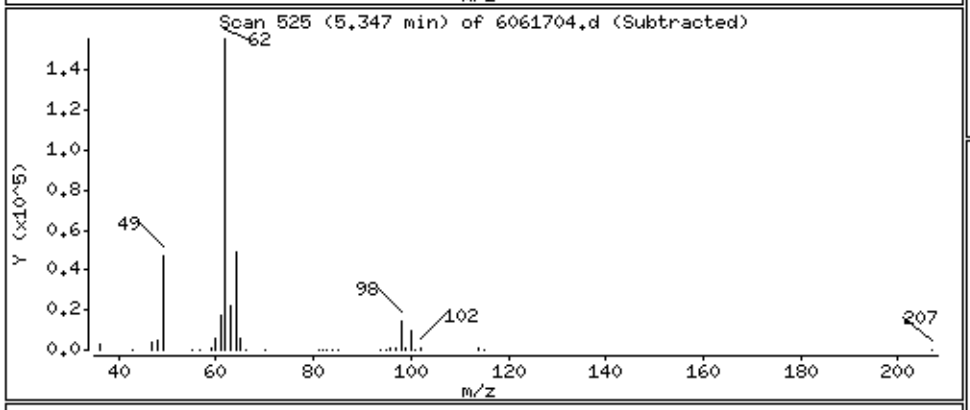
Column diameter: 0.53

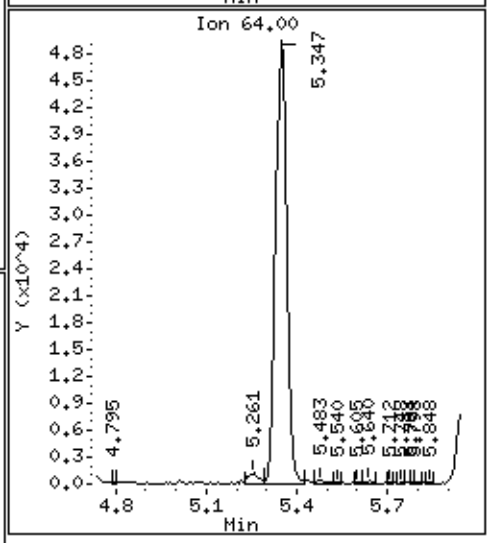
50 1,2-Dichloroethane

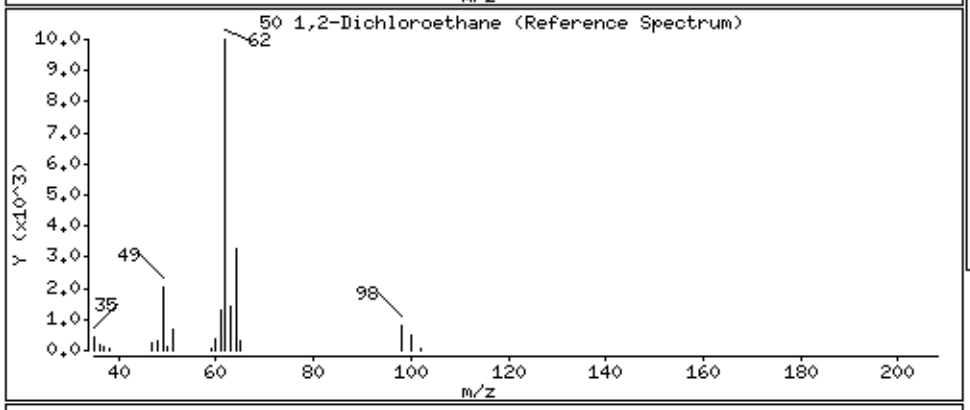
Concentration: 82.346 NG

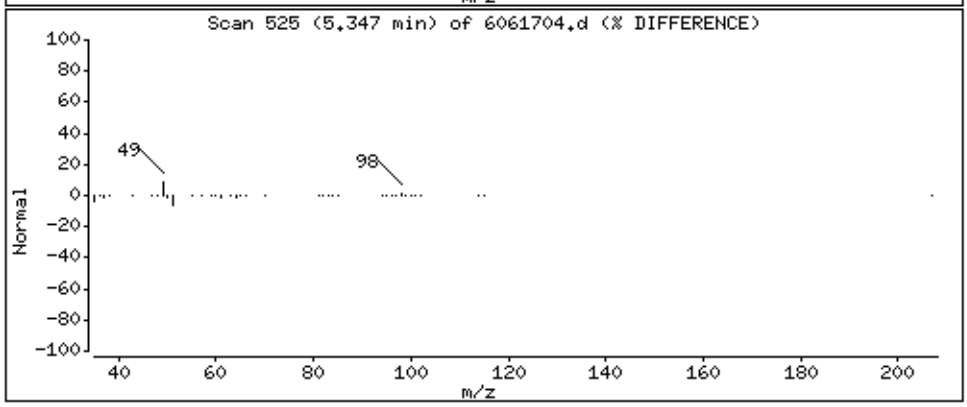












Data File: /chem/msd6.i/17jun16.b/6061704.d

Date : 17-JUN-2016 12:17

Client ID: LCSD

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCSD;LCSD

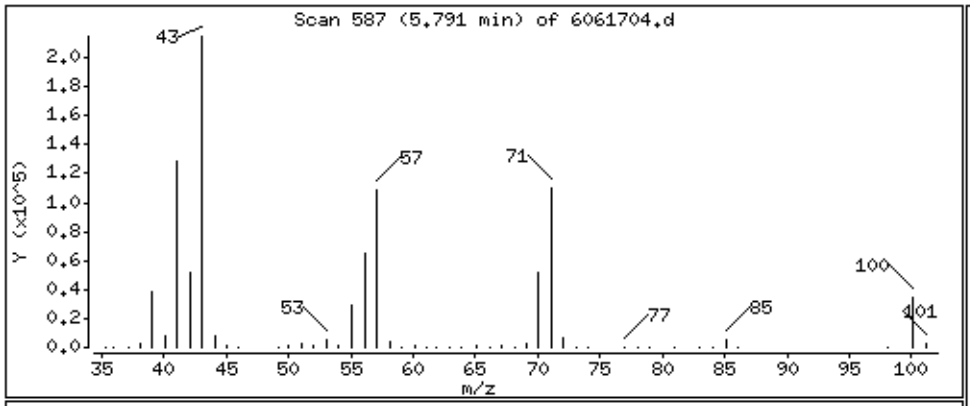
Operator: CT

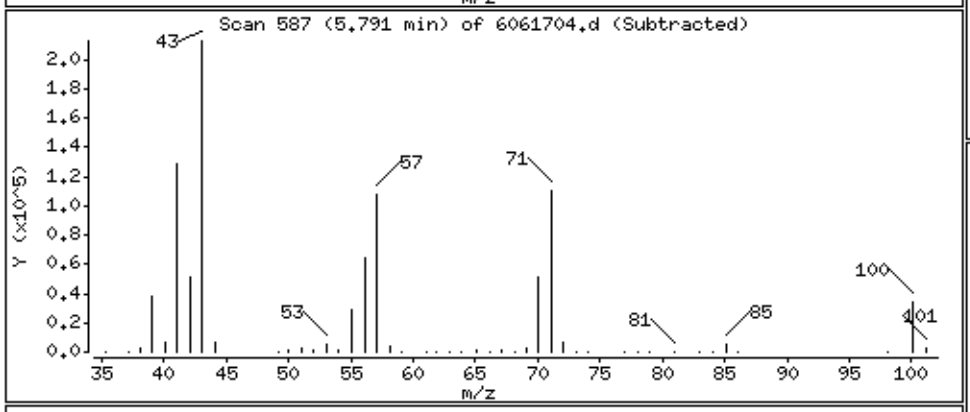
Column phase: RTx-624

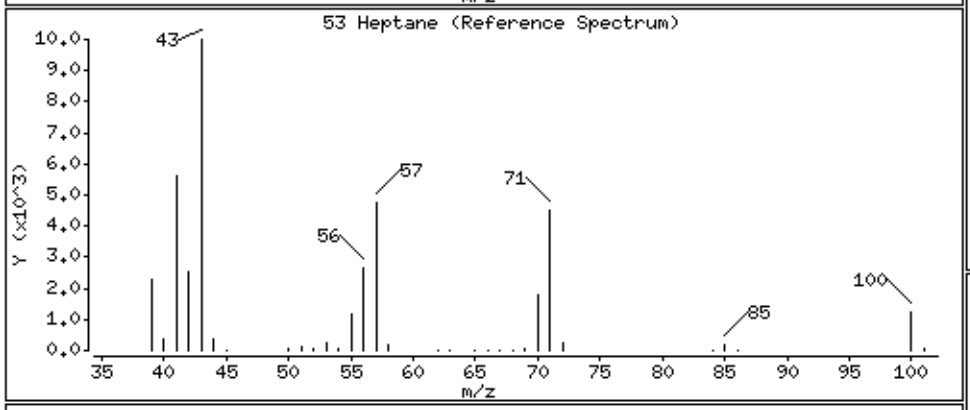
Column diameter: 0.53

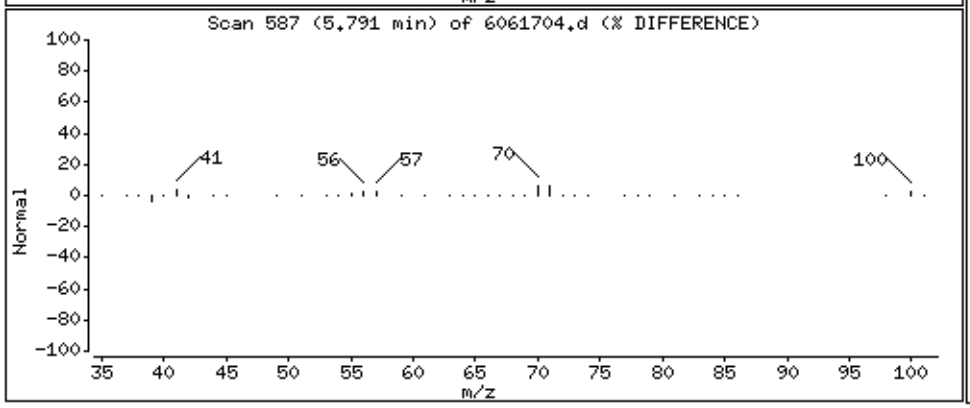
53 Heptane

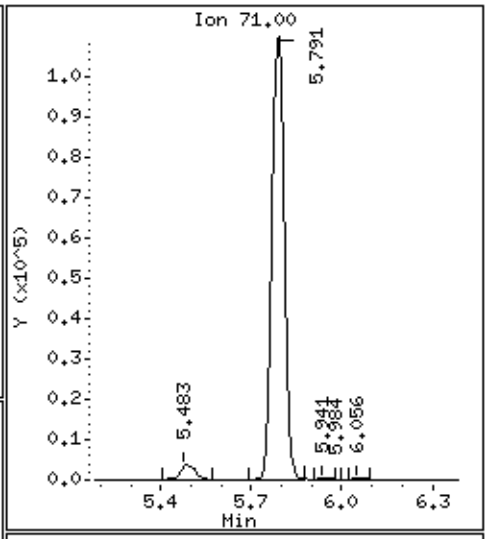
Concentration: 88.400 NG

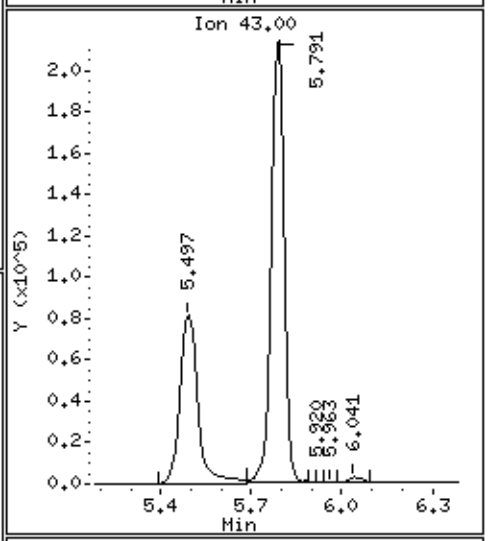


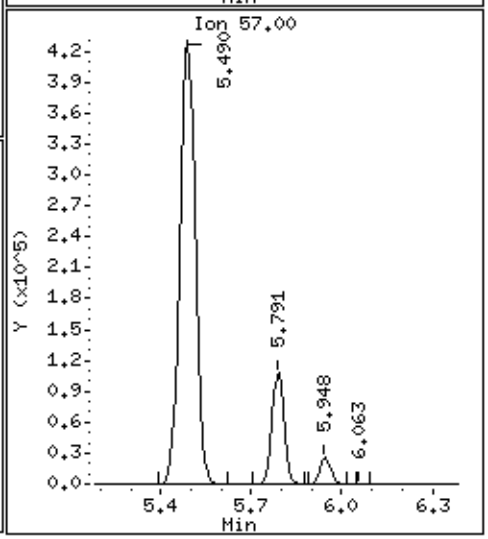












Data File: /chem/msd6.i/17jun16.b/6061704.d

Date : 17-JUN-2016 12:17

Client ID: LCSD

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCSD;LCSD

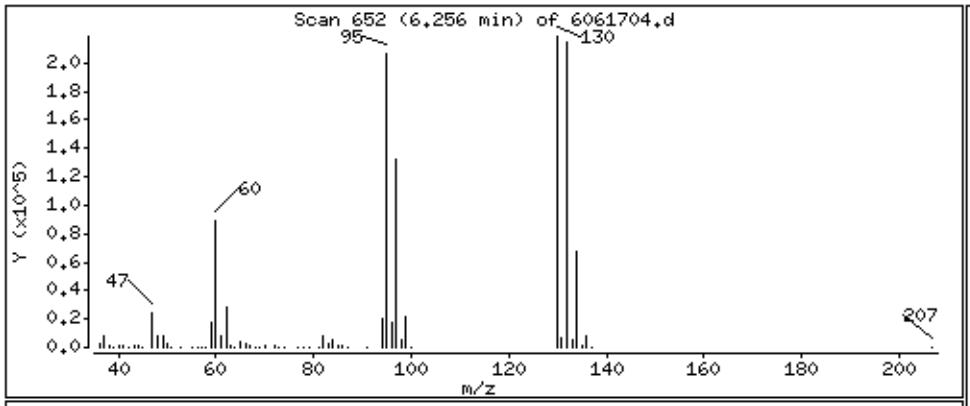
Operator: CT

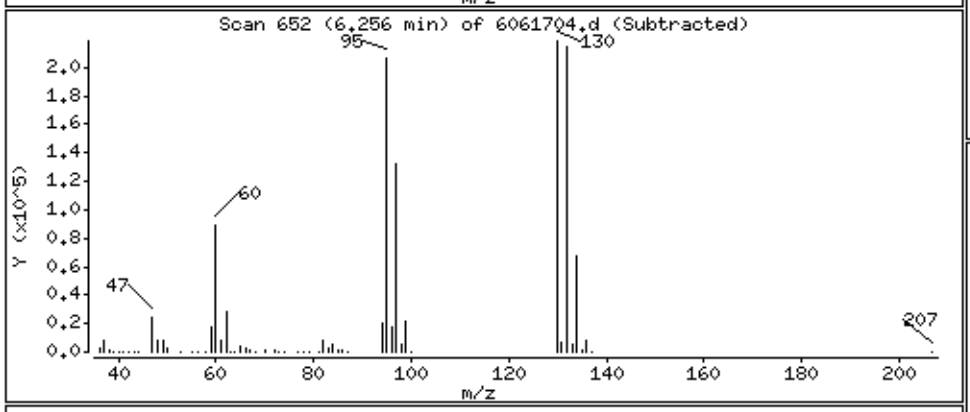
Column phase: RTx-624

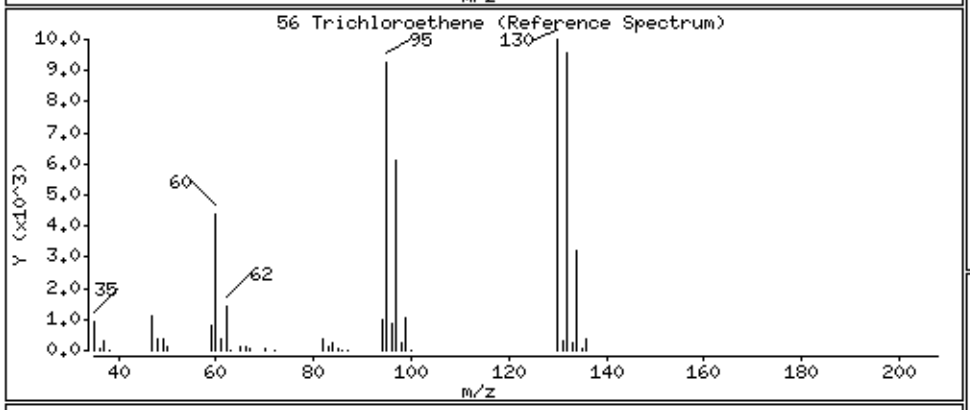
Column diameter: 0.53

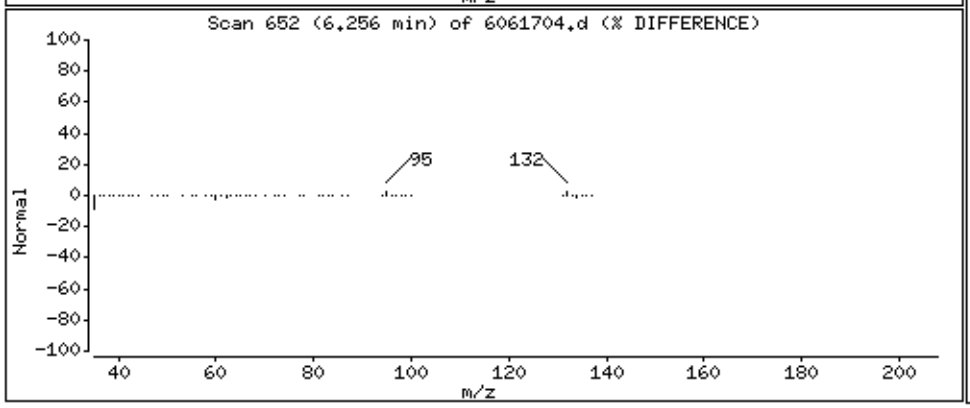
56 Trichloroethene

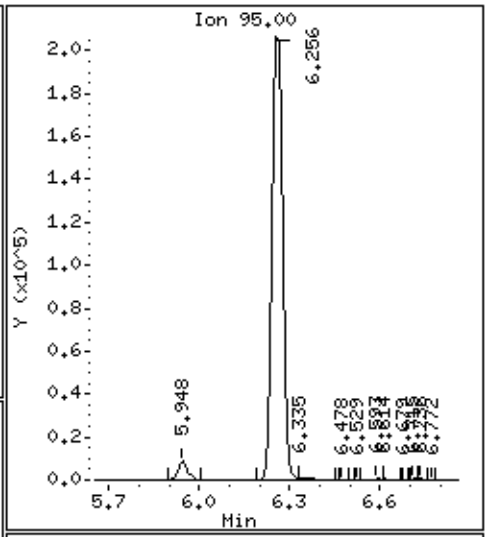
Concentration: 108.04 NG

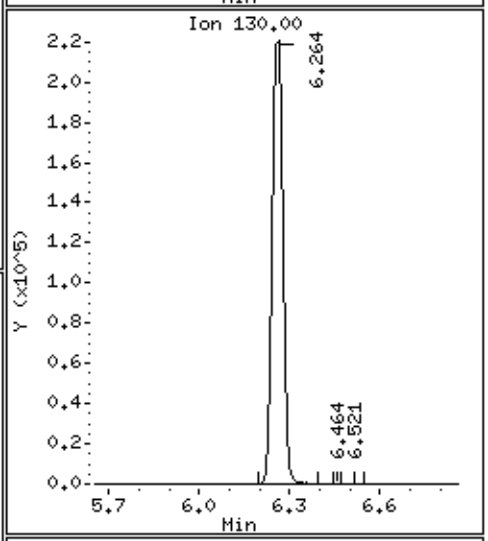


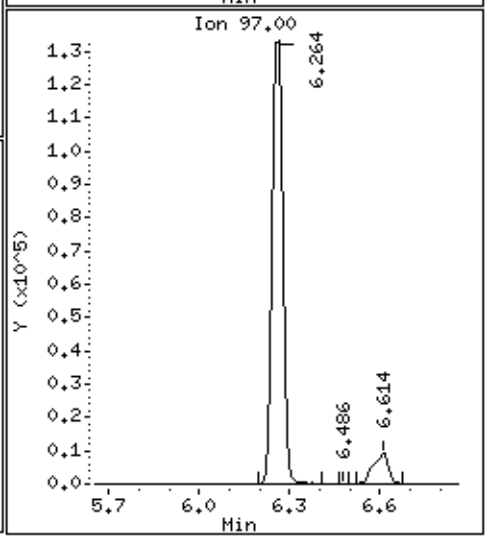












Data File: /chem/msd6.i/17jun16.b/6061704.d

Date : 17-JUN-2016 12:17

Client ID: LCSD

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCSD;LCSD

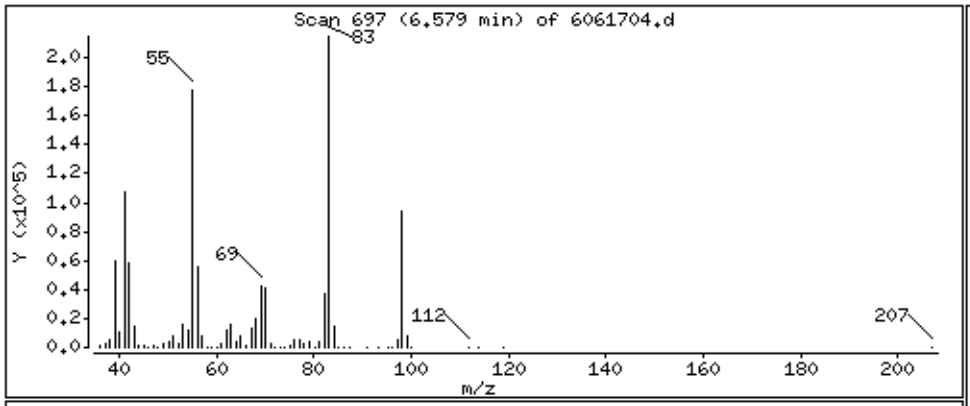
Operator: CT

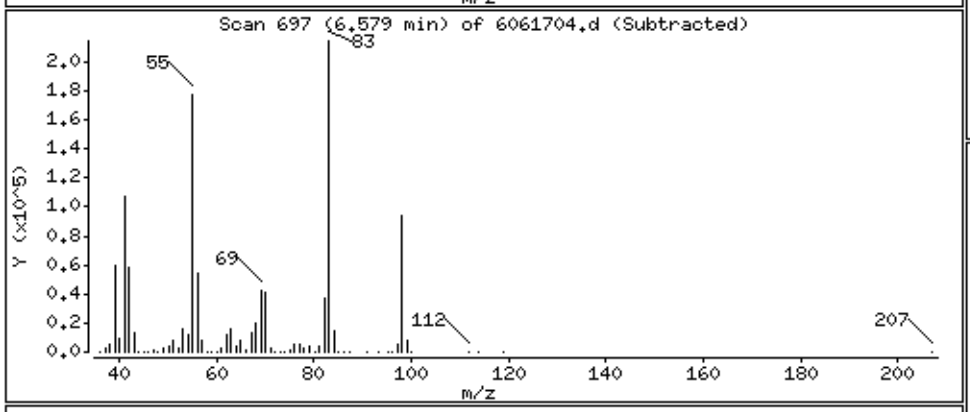
Column phase: RTx-624

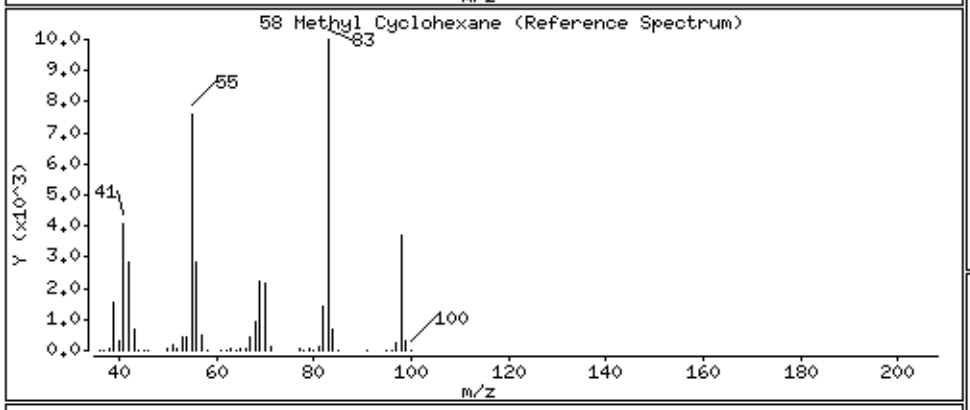
Column diameter: 0.53

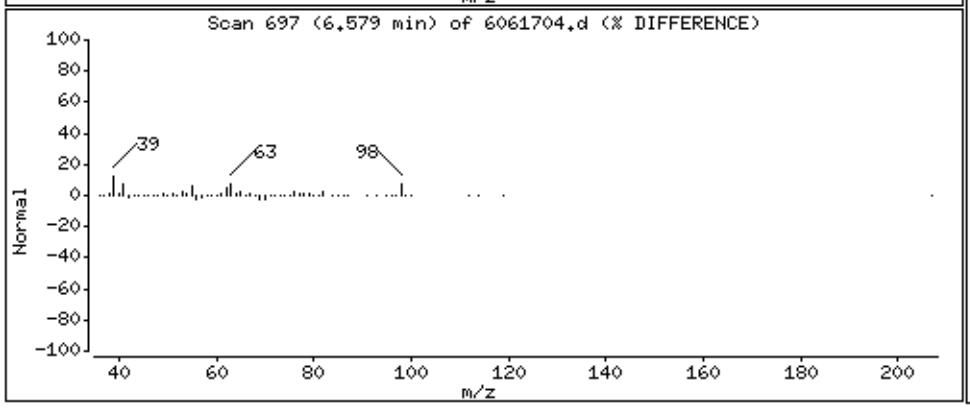
58 Methyl Cyclohexane

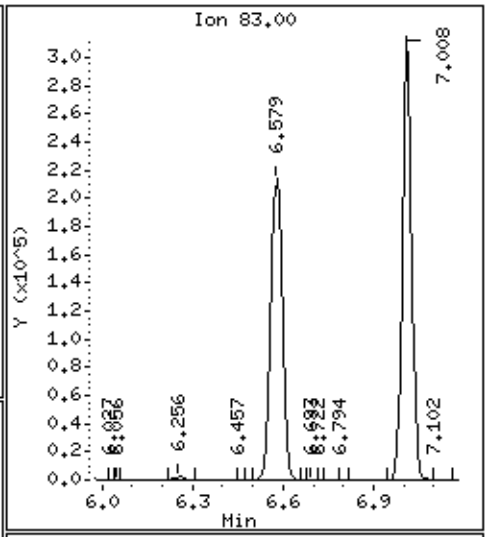
Concentration: 85.678 NG

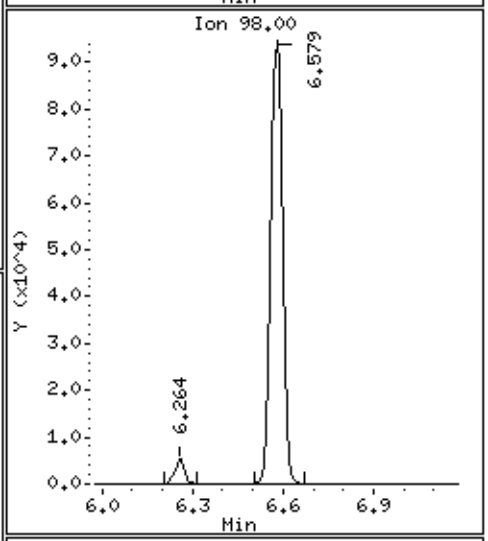


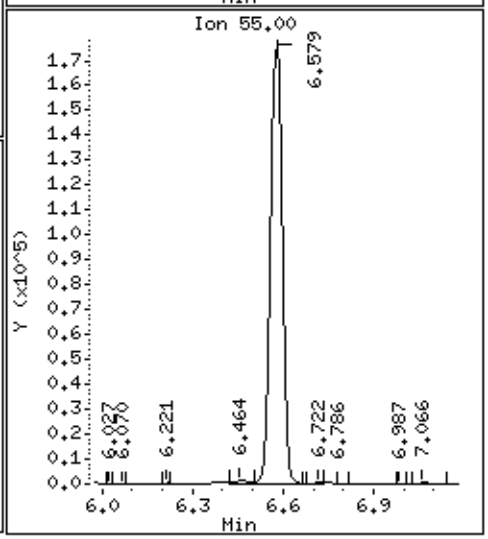












Data File: /chem/msd6.i/17jun16.b/6061704.d

Date : 17-JUN-2016 12:17

Client ID: LCSD

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCSD;LCSD

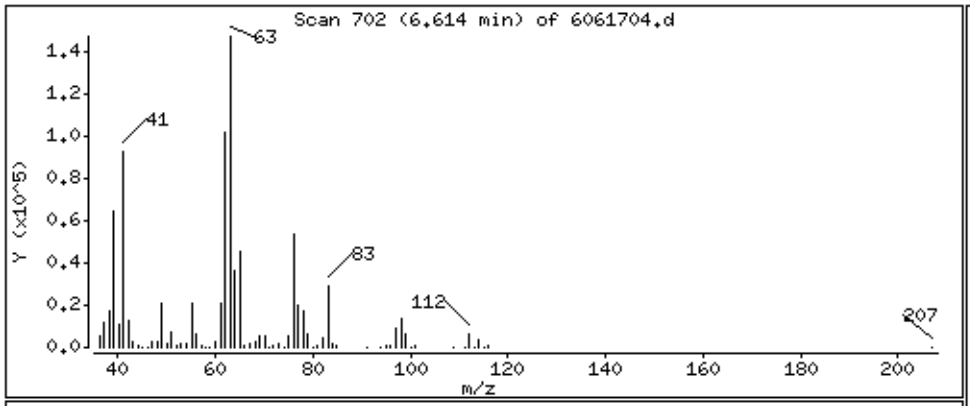
Operator: CT

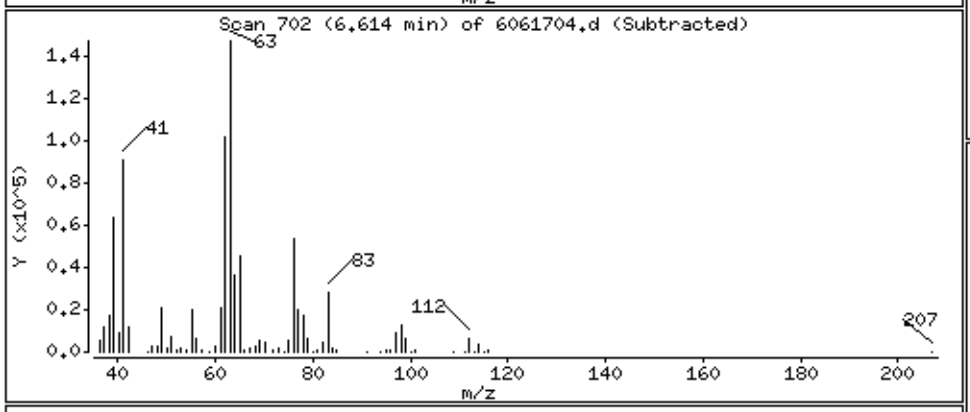
Column phase: RTx-624

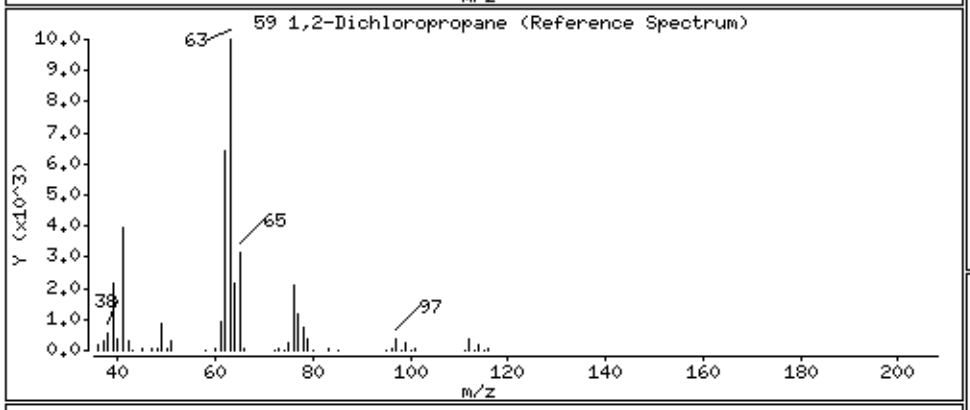
Column diameter: 0.53

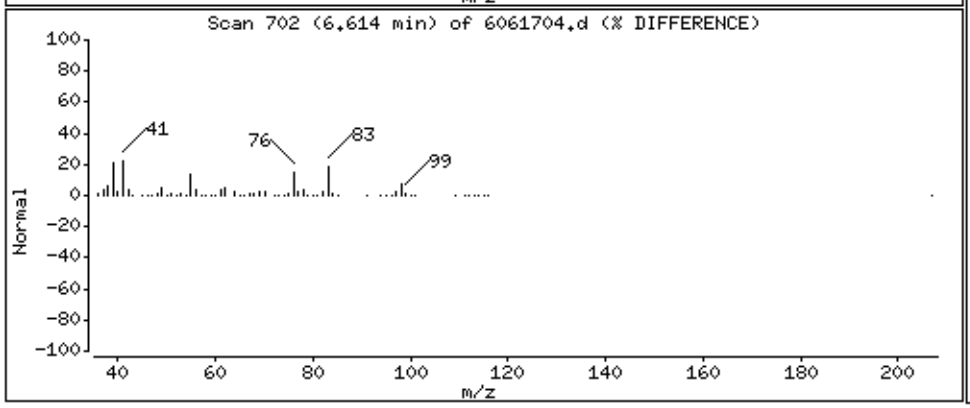
59 1,2-Dichloropropane

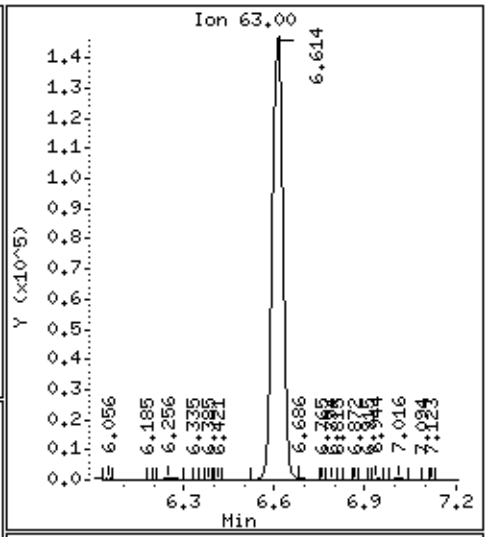
Concentration: 107.75 NG

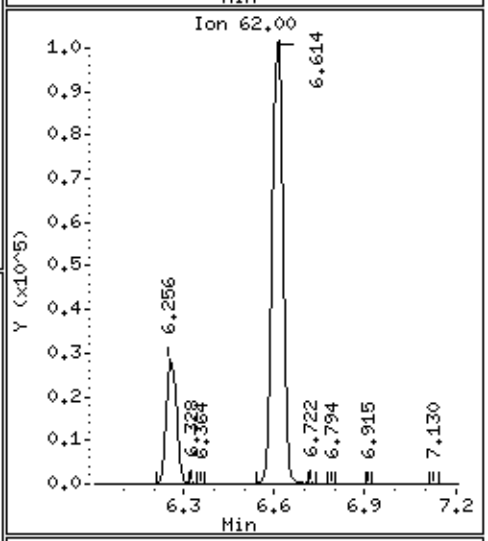


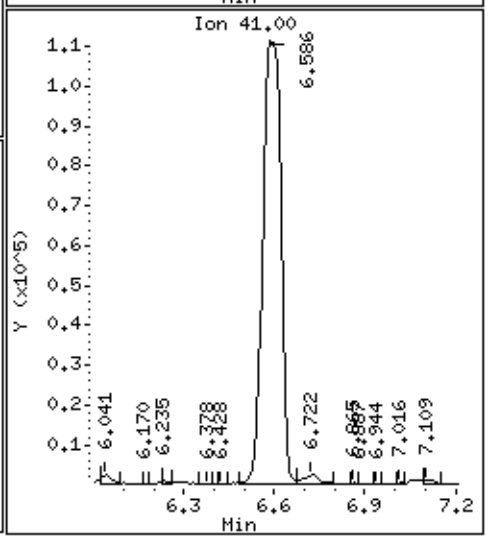












Data File: /chem/msd6.i/17jun16.b/6061704.d

Date : 17-JUN-2016 12:17

Client ID: LCSD

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCSD;LCSD

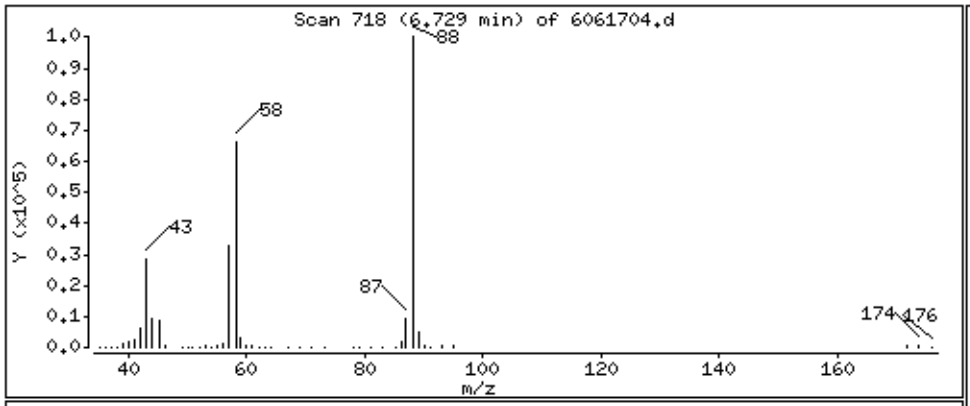
Operator: CT

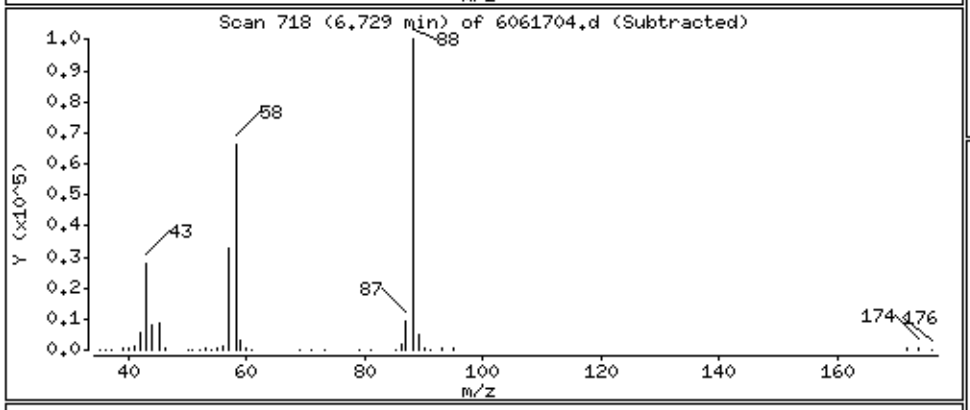
Column phase: RTx-624

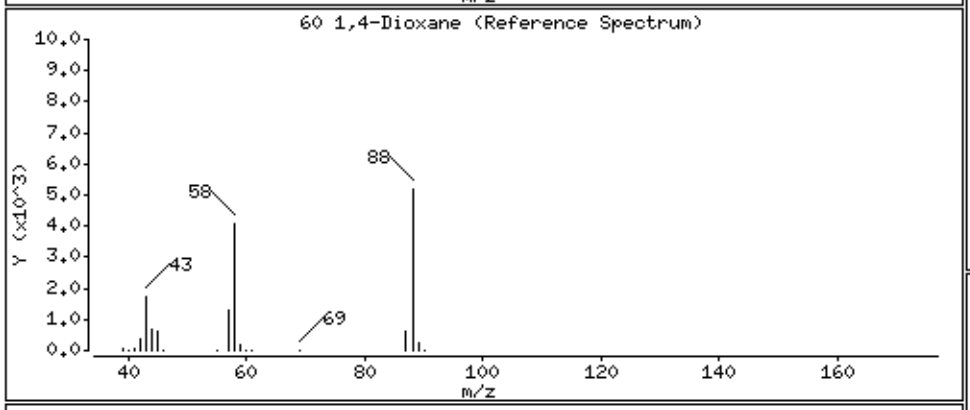
Column diameter: 0.53

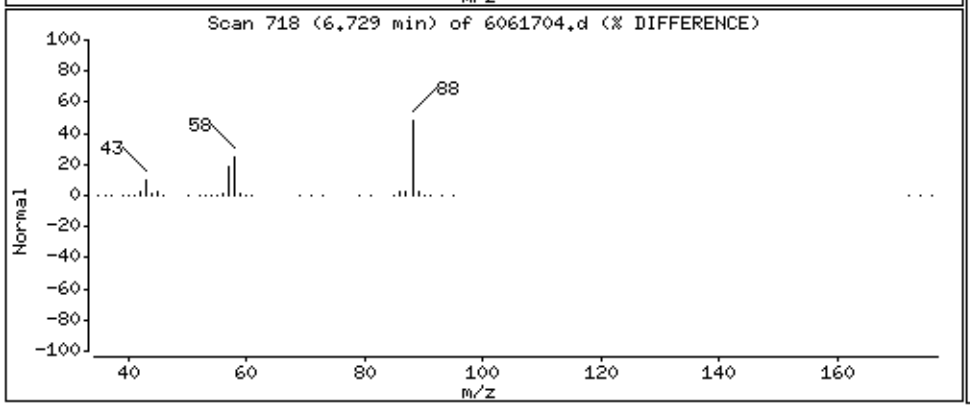
60 1,4-Dioxane

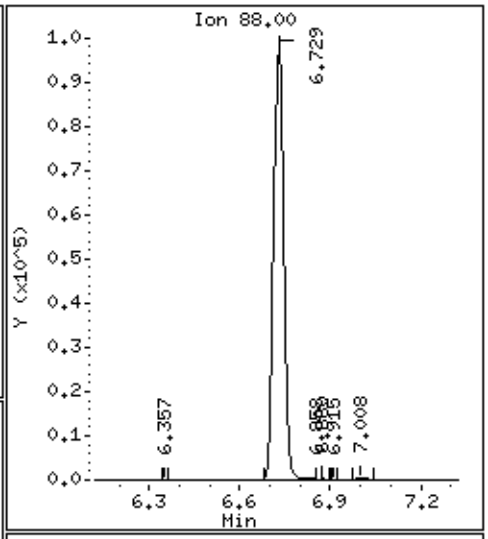
Concentration: 75.839 NG

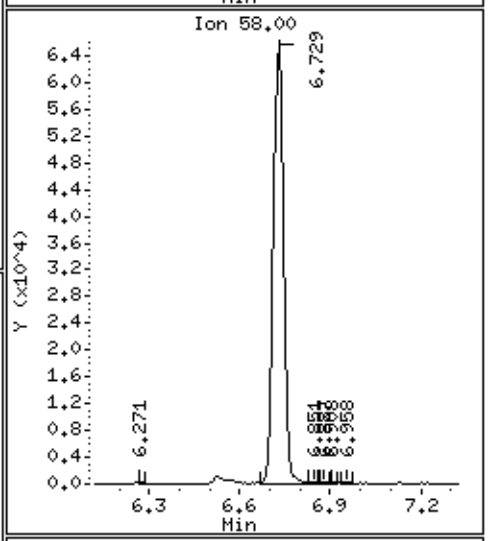


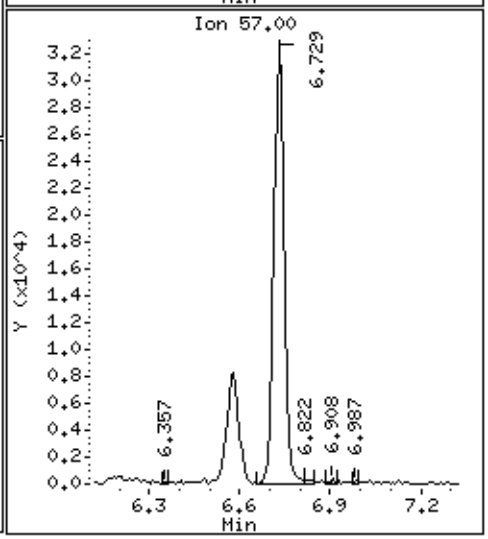












Data File: /chem/msd6.i/17jun16.b/6061704.d

Date : 17-JUN-2016 12:17

Client ID: LCSD

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCSD;LCSD

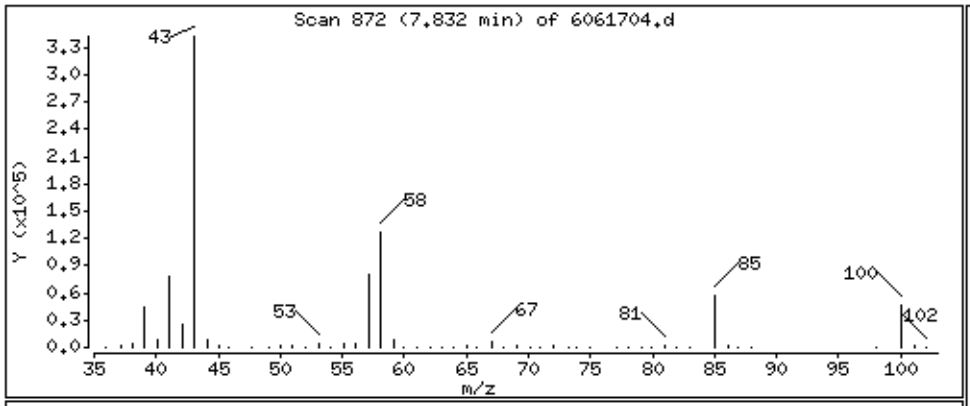
Operator: CT

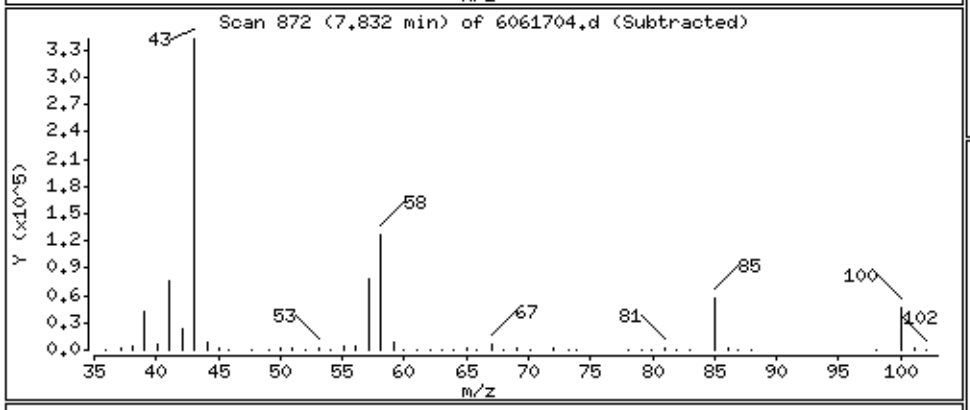
Column phase: RTx-624

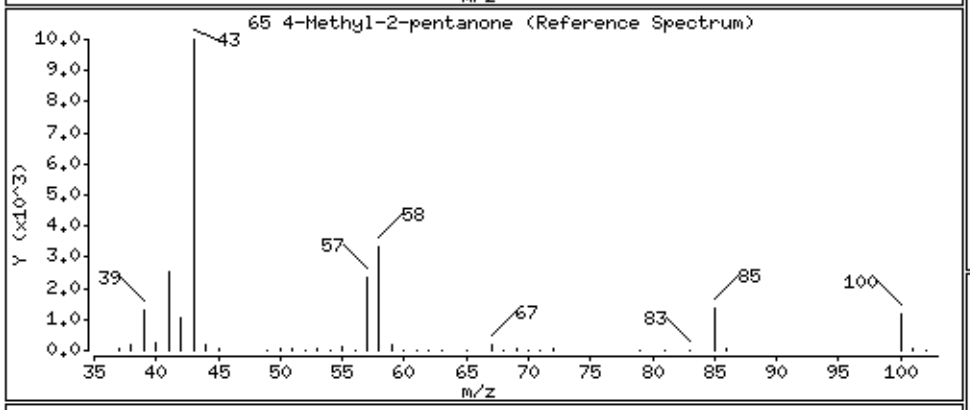
Column diameter: 0.53

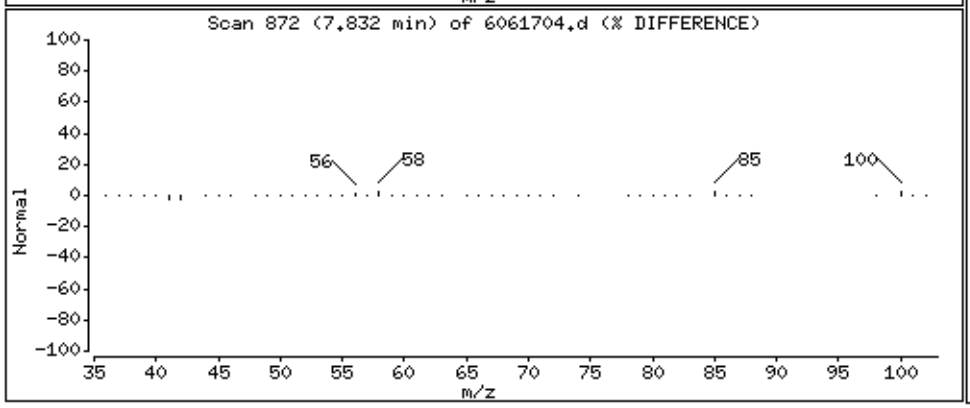
65 4-Methyl-2-pentanone

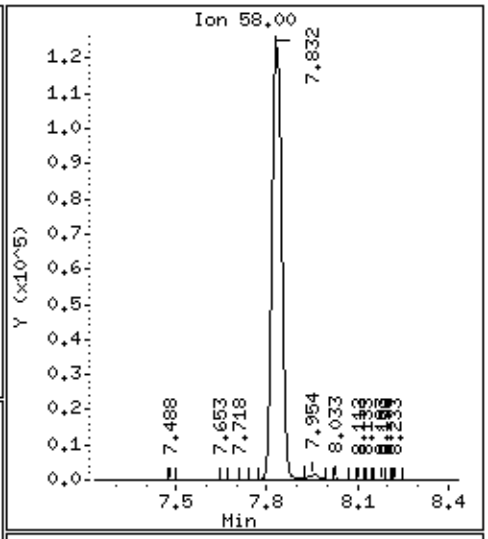
Concentration: 89.861 NG

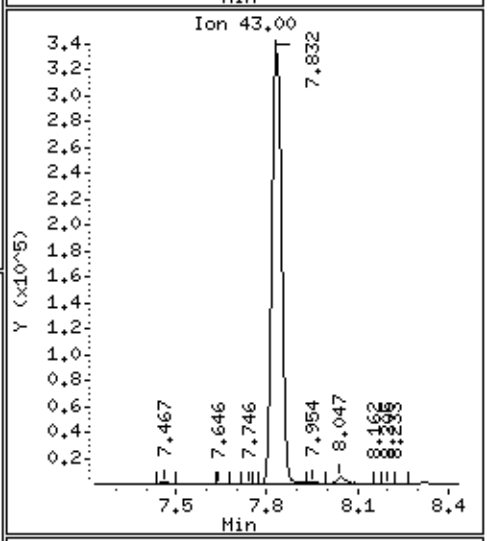


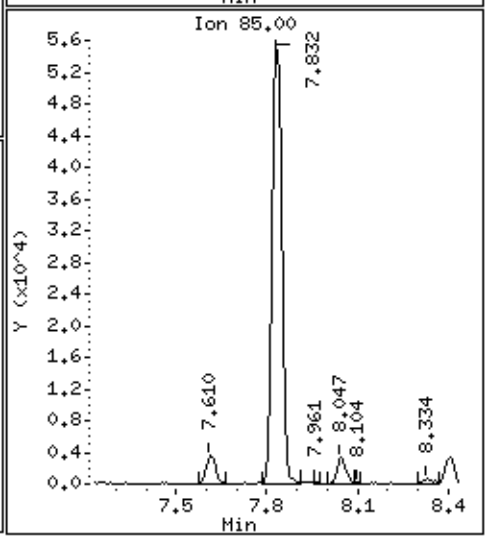












Data File: /chem/msd6.i/17jun16.b/6061704.d

Date : 17-JUN-2016 12:17

Client ID: LCSD

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCSD;LCSD

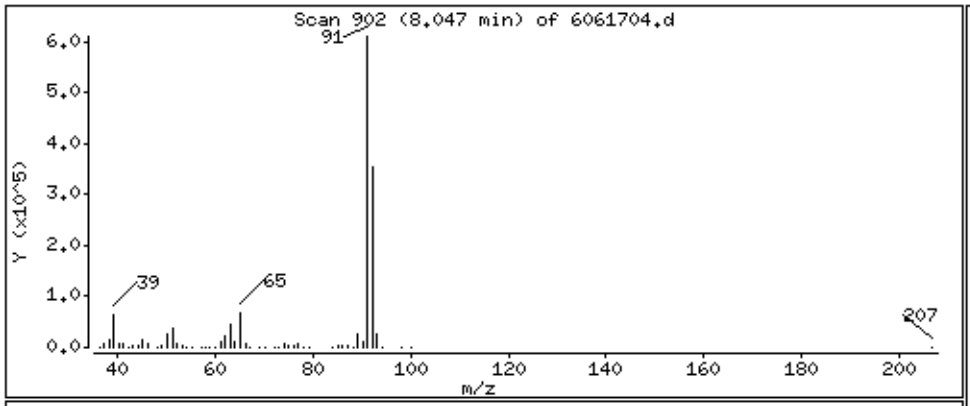
Operator: CT

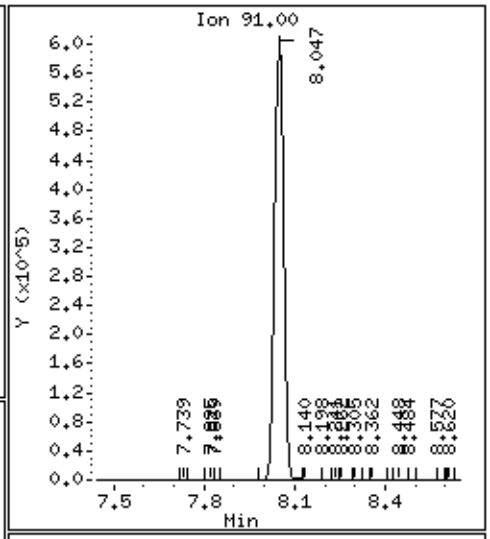
Column phase: RTx-624

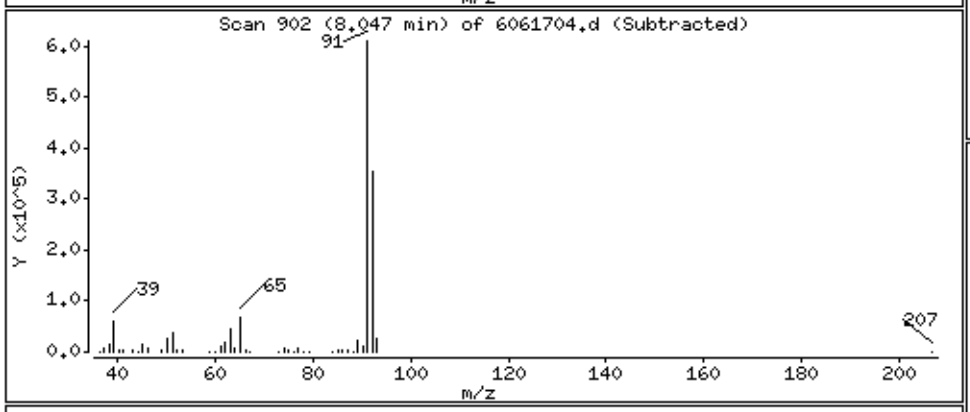
Column diameter: 0.53

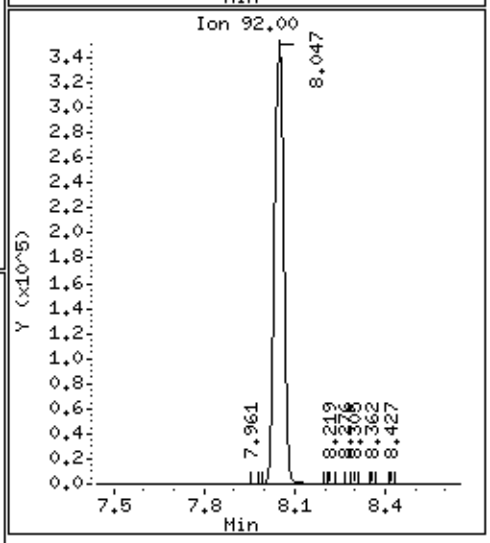
67 Toluene

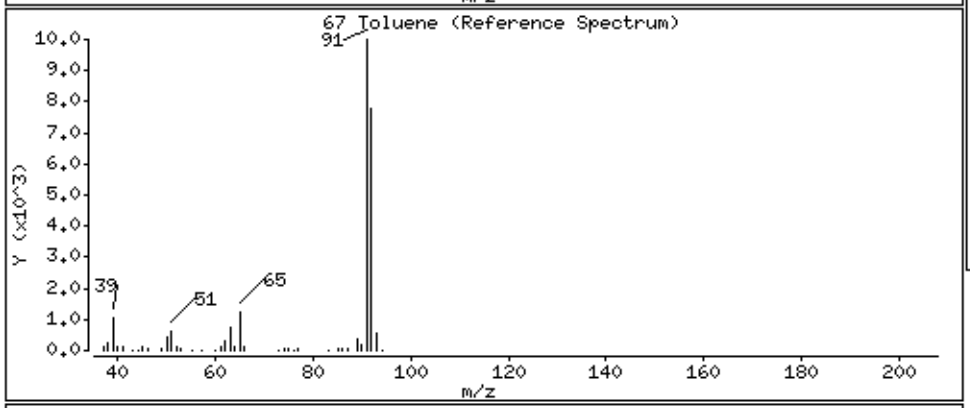
Concentration: 80.042 NG

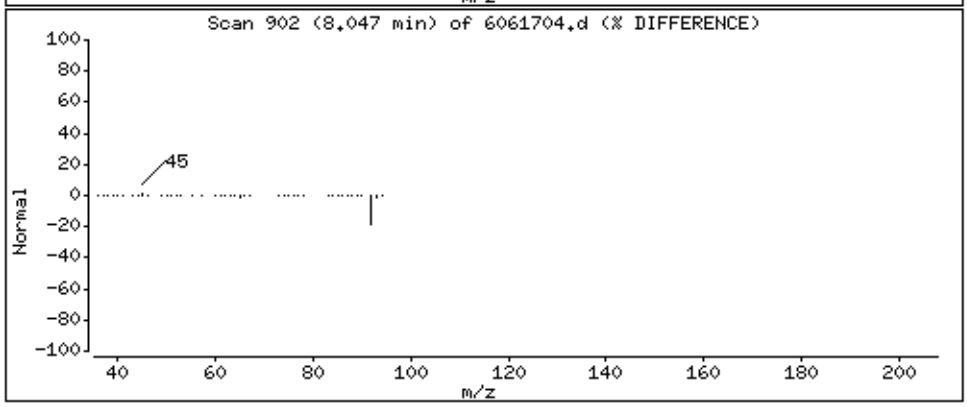












Data File: /chem/msd6.i/17jun16.b/6061704.d

Date : 17-JUN-2016 12:17

Client ID: LCSD

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCSD;LCSD

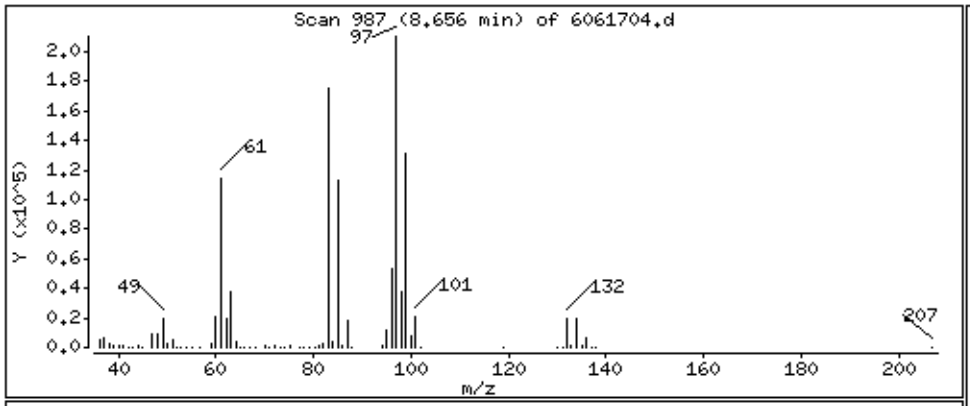
Operator: CT

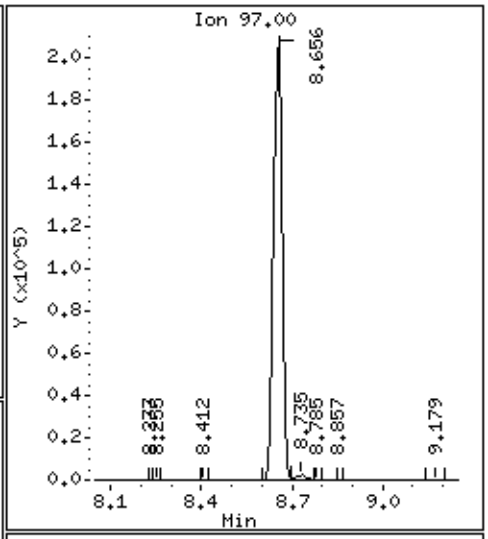
Column phase: RTx-624

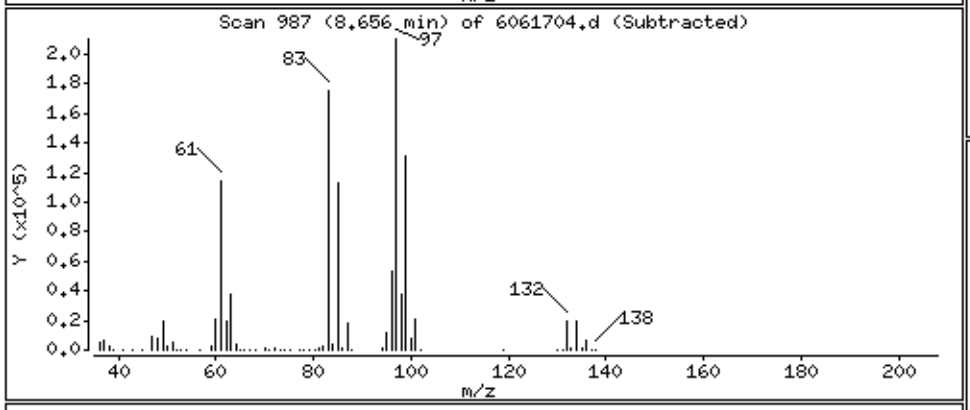
Column diameter: 0.53

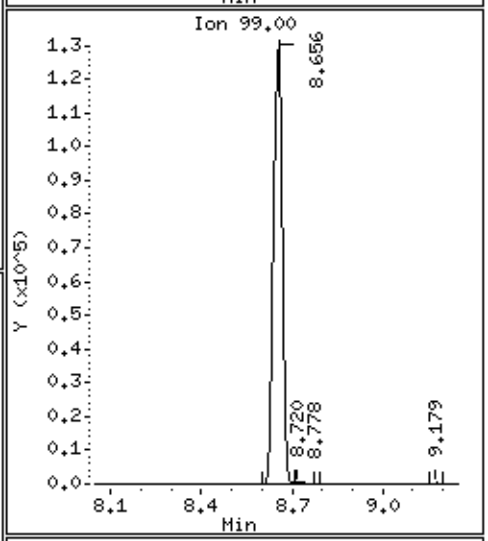
70 1,1,2-Trichloroethane

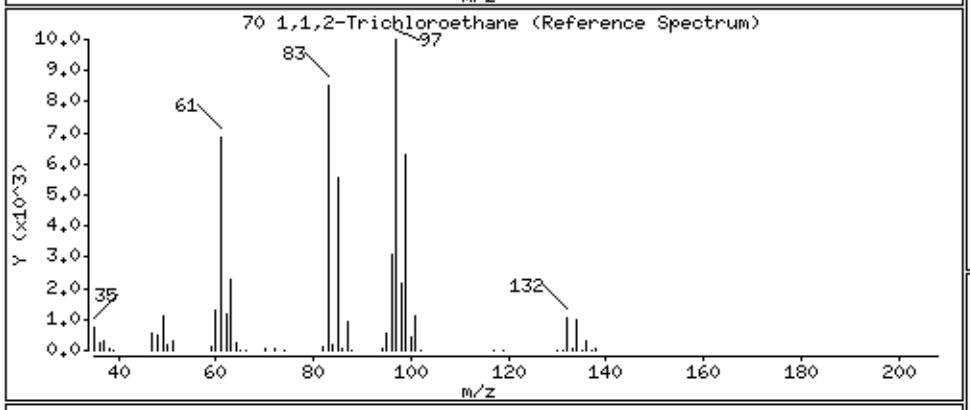
Concentration: 108.49 NG

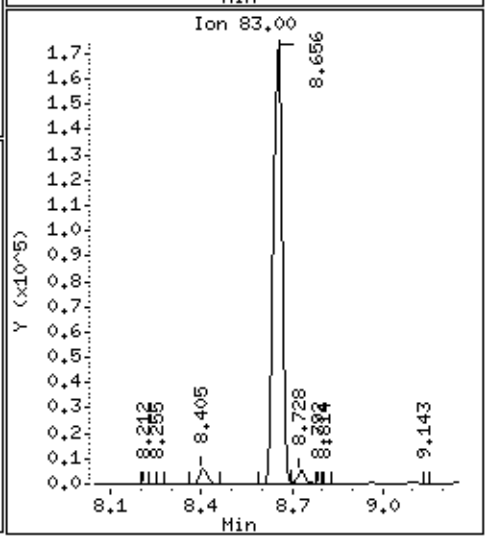


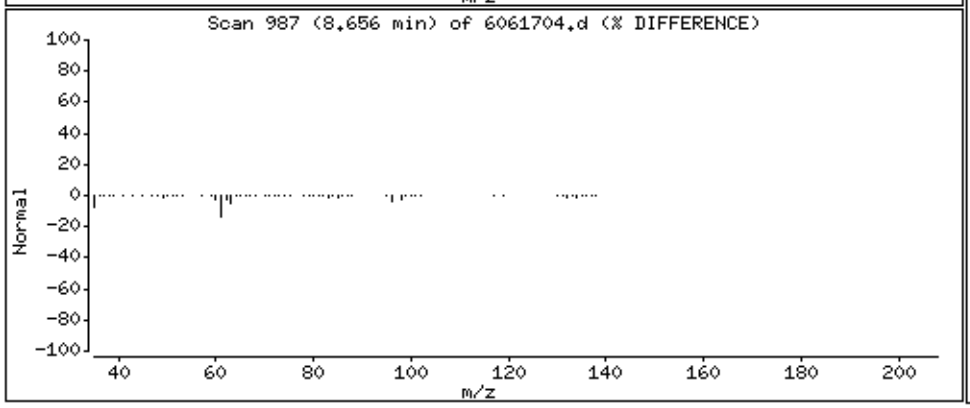












Data File: /chem/msd6.i/17jun16.b/6061704.d

Date : 17-JUN-2016 12:17

Client ID: LCSD

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCSD;LCSD

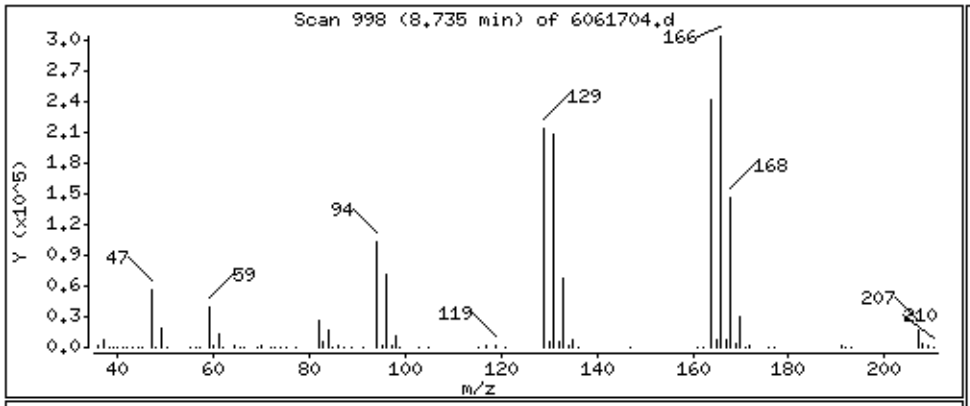
Operator: CT

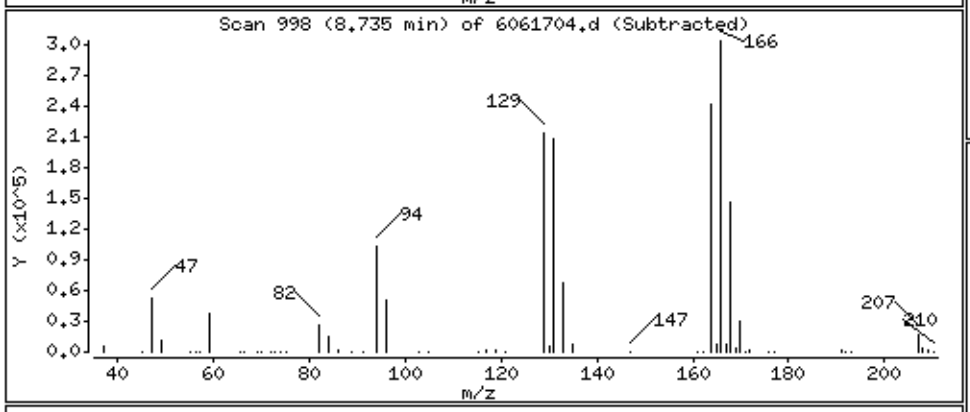
Column phase: RTx-624

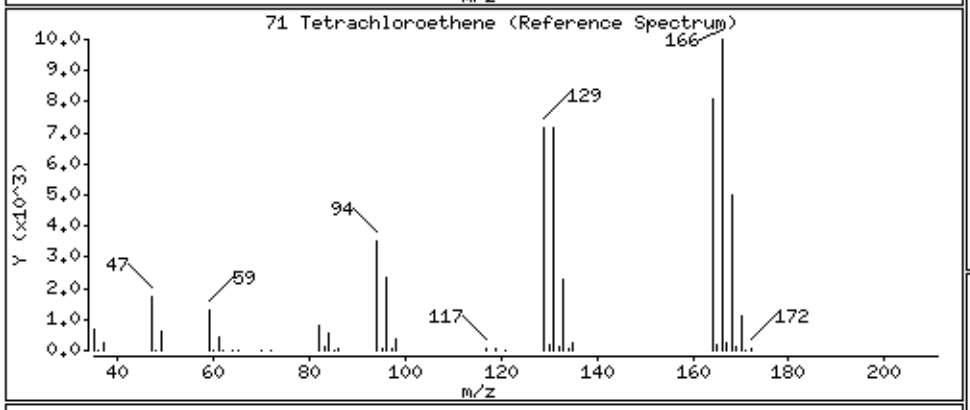
Column diameter: 0.53

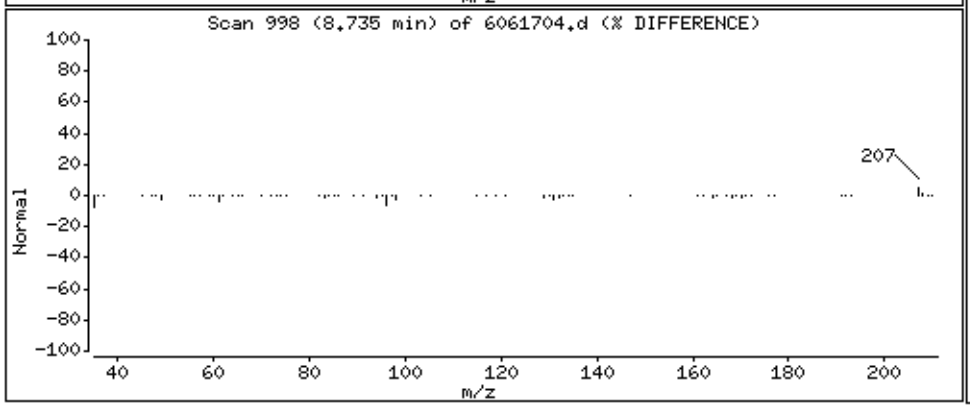
71 Tetrachloroethene

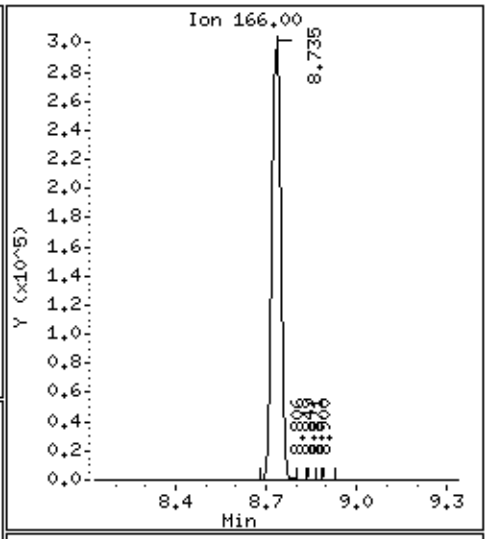
Concentration: 117.55 NG

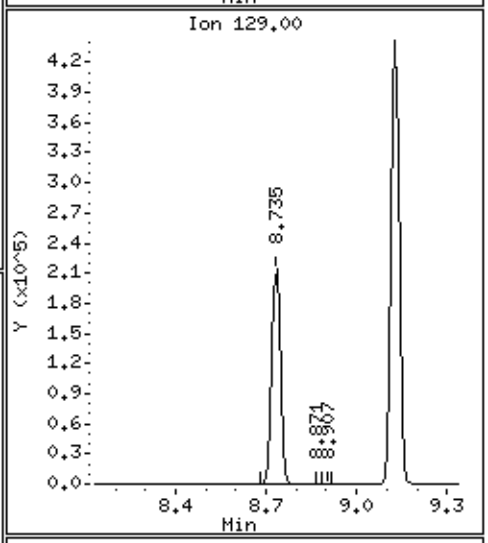


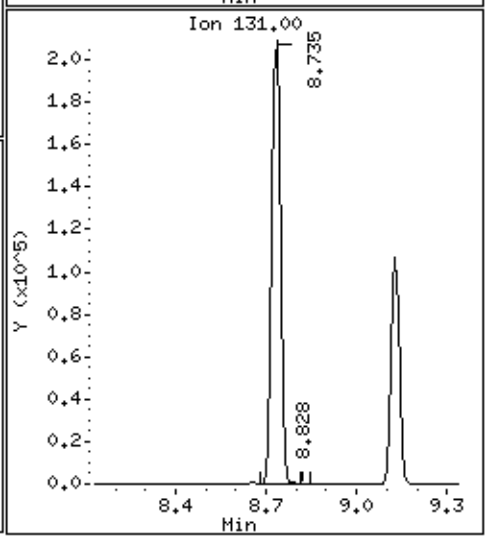












Data File: /chem/msd6.i/17jun16.b/6061704.d

Date : 17-JUN-2016 12:17

Client ID: LCSD

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCSD;LCSD

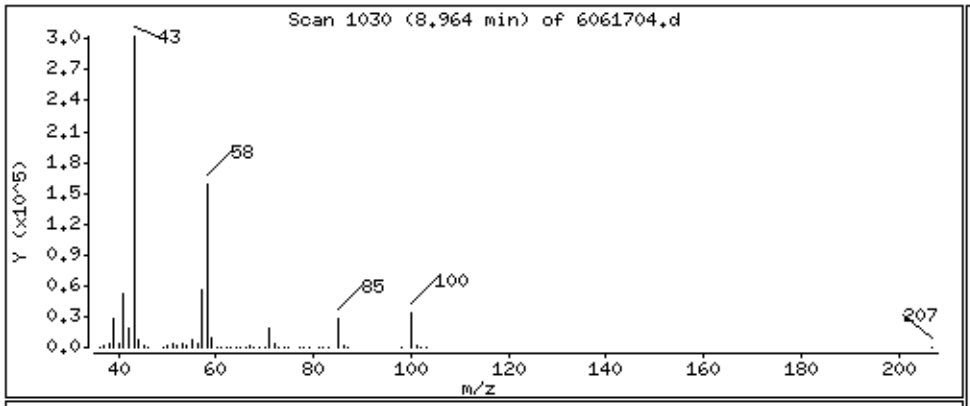
Operator: CT

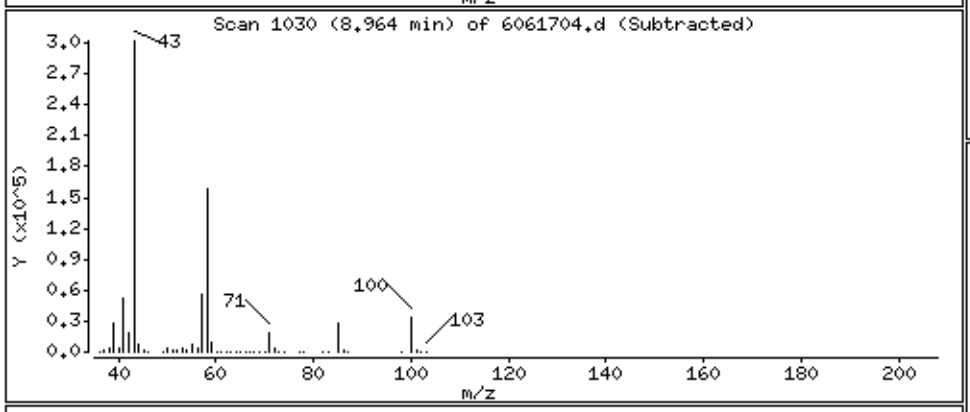
Column phase: RTx-624

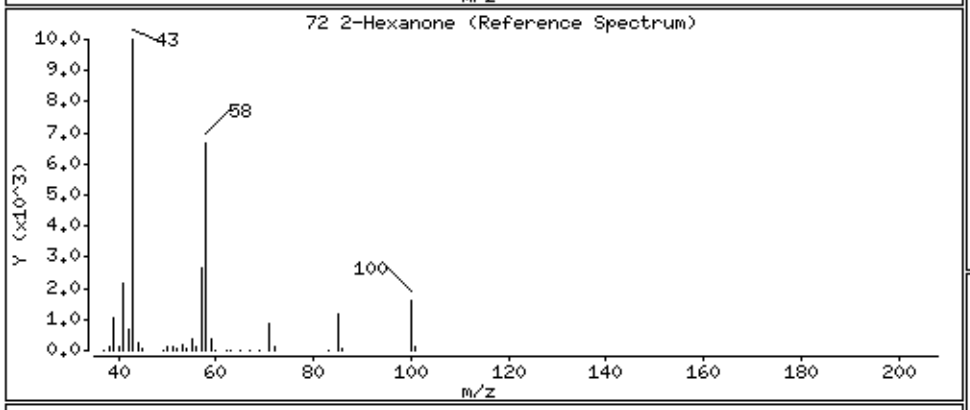
Column diameter: 0.53

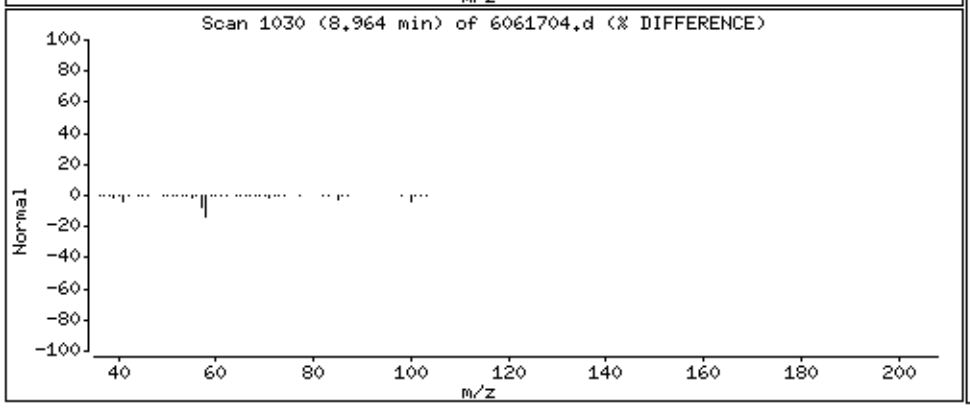
72 2-Hexanone

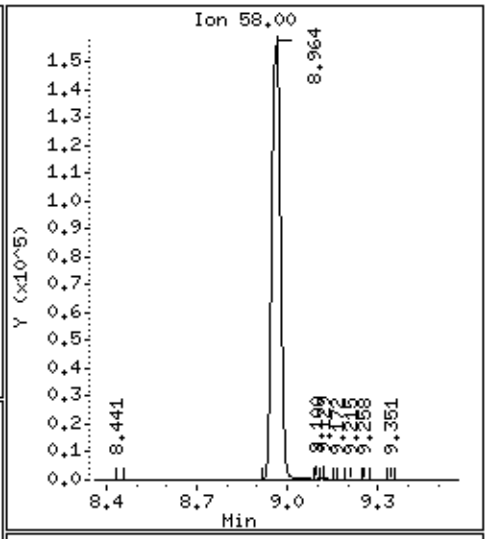
Concentration: 76.538 NG

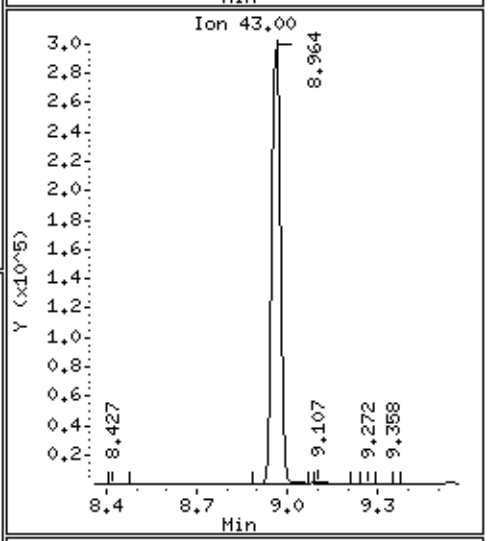


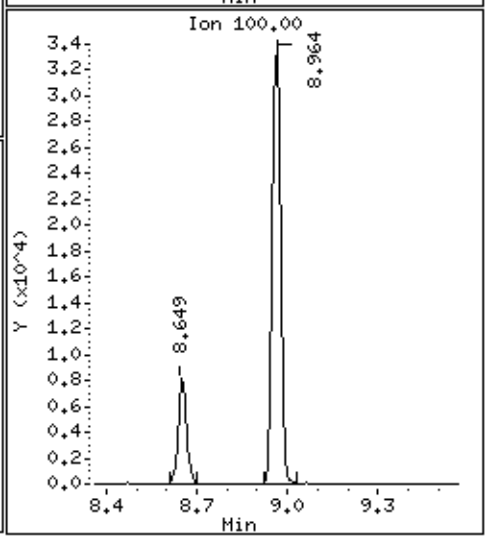












Data File: /chem/msd6.i/17jun16.b/6061704.d

Date : 17-JUN-2016 12:17

Client ID: LCSD

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCSD;LCSD

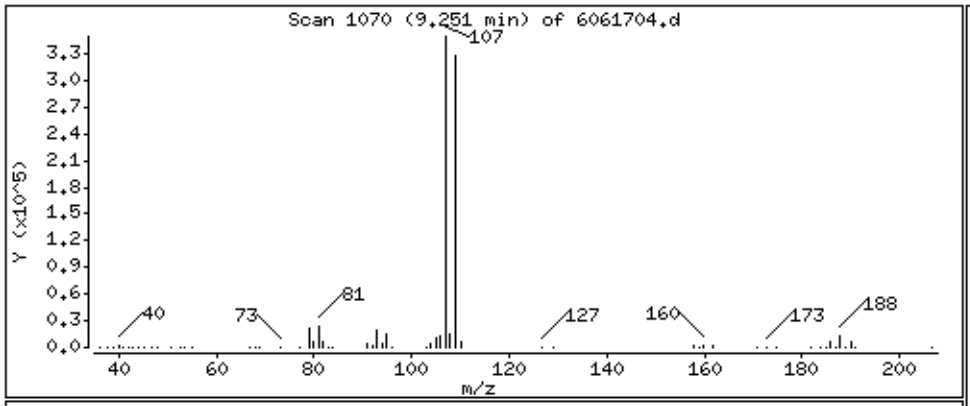
Operator: CT

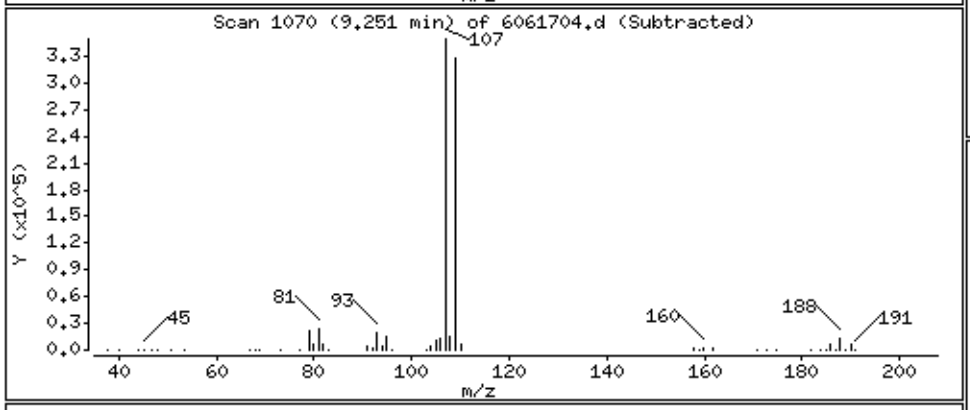
Column phase: RTx-624

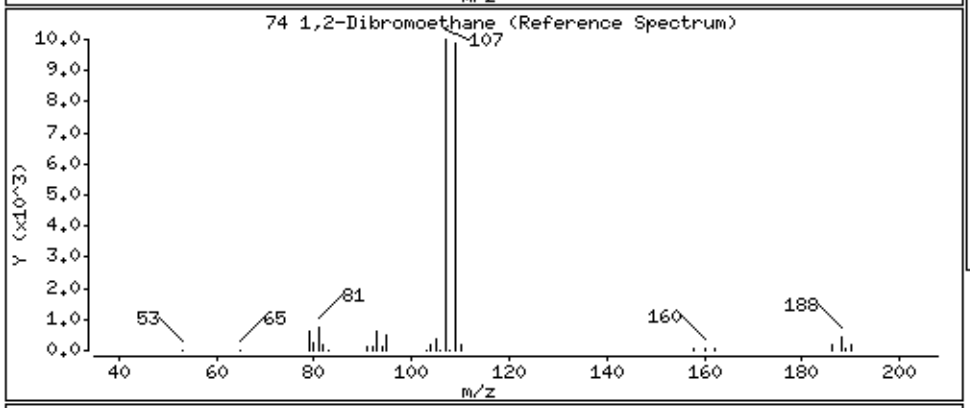
Column diameter: 0.53

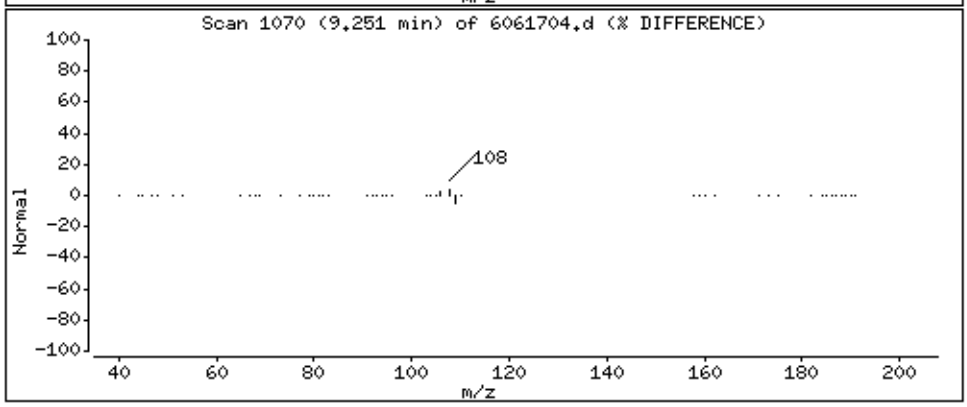
74 1,2-Dibromoethane

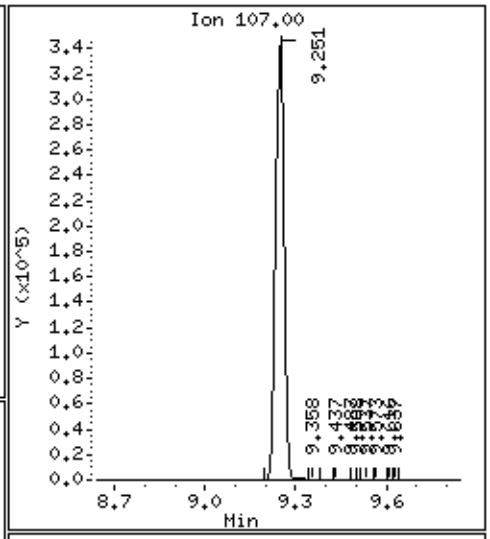
Concentration: 165.07 NG

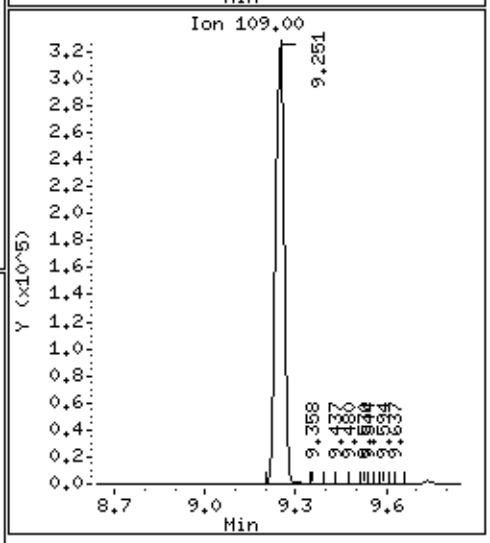












Data File: /chem/msd6.i/17jun16.b/6061704.d

Date : 17-JUN-2016 12:17

Client ID: LCSD

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCSD;LCSD

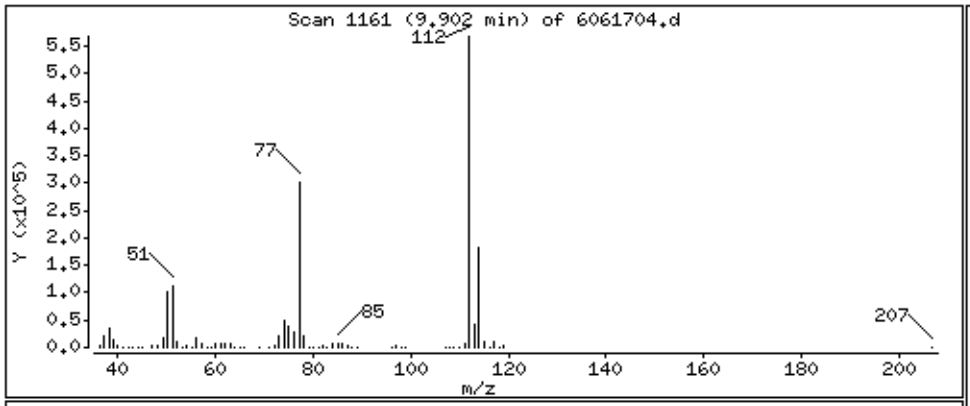
Operator: CT

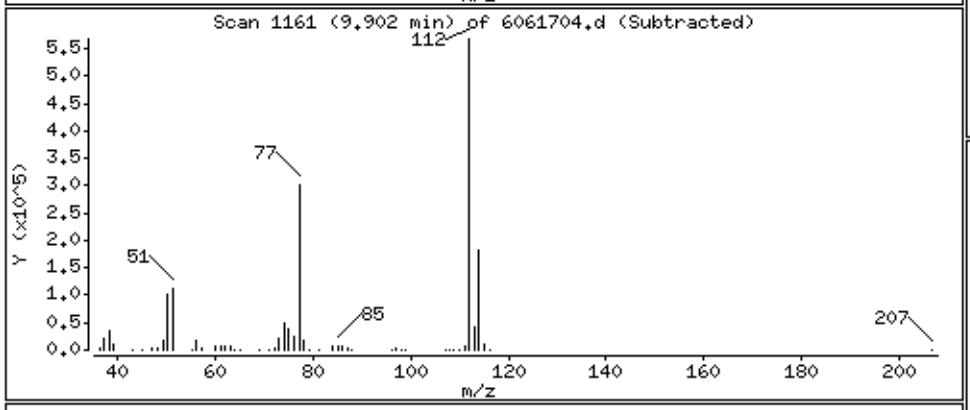
Column phase: RTx-624

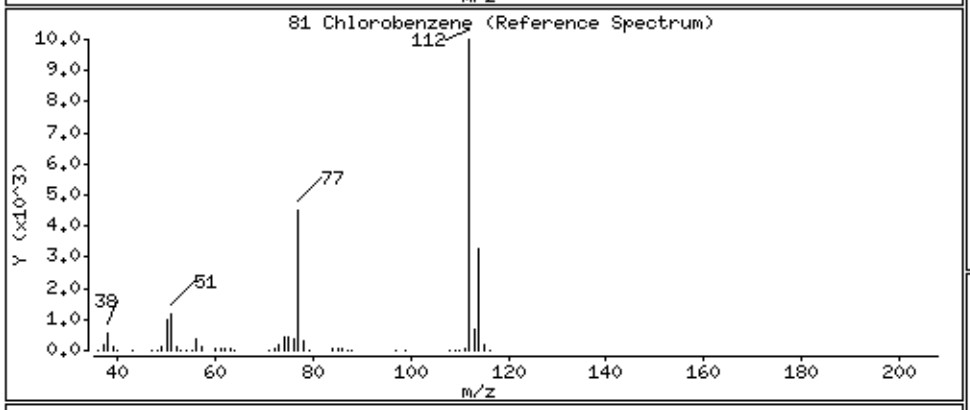
Column diameter: 0.53

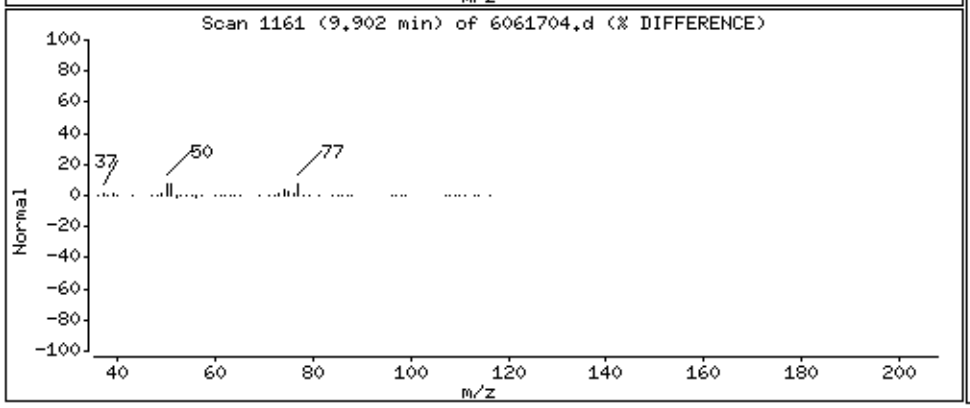
81 Chlorobenzene

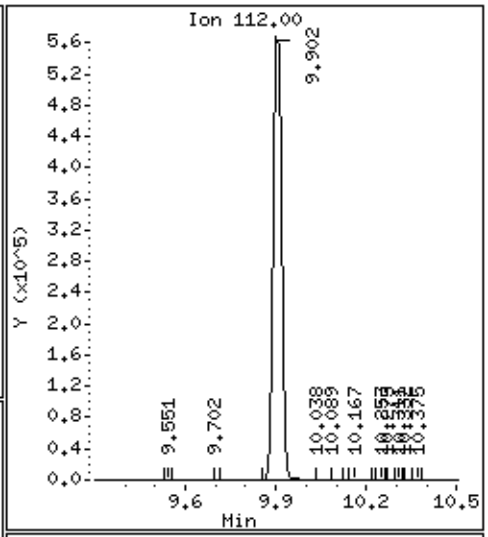
Concentration: 92.896 NG

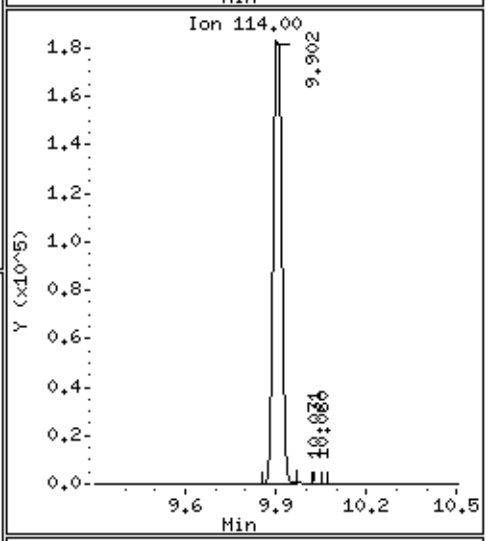


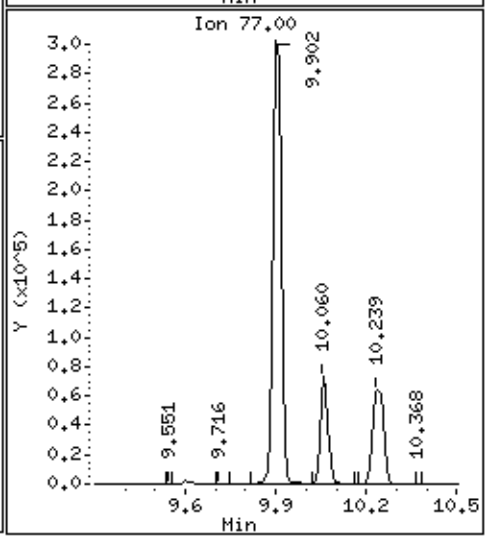












Data File: /chem/msd6.i/17jun16.b/6061704.d

Date : 17-JUN-2016 12:17

Client ID: LCSD

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCSD;LCSD

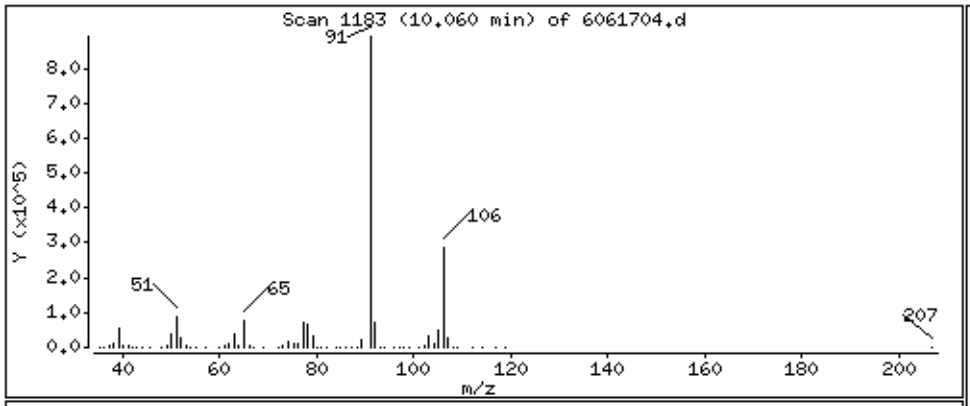
Operator: CT

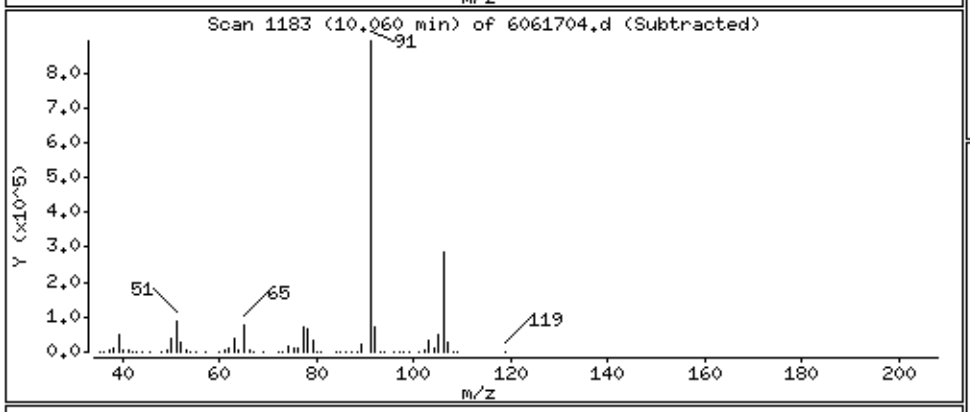
Column phase: RTx-624

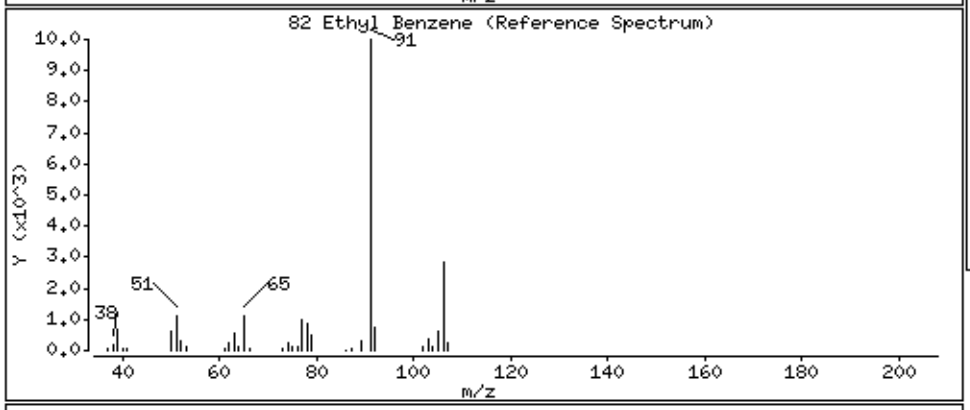
Column diameter: 0.53

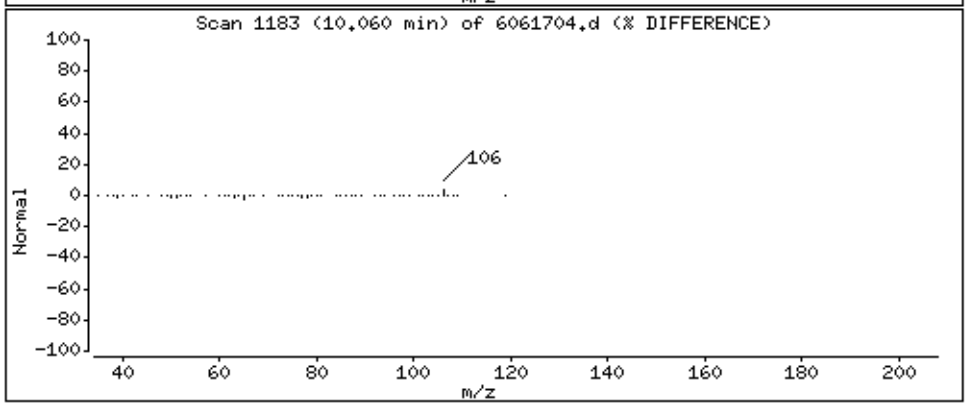
82 Ethyl Benzene

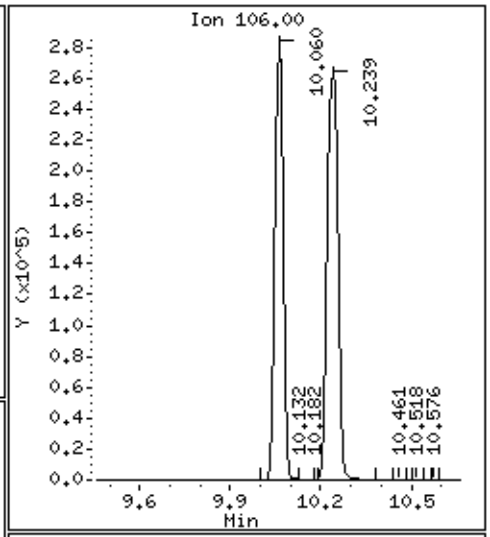
Concentration: 89.907 NG

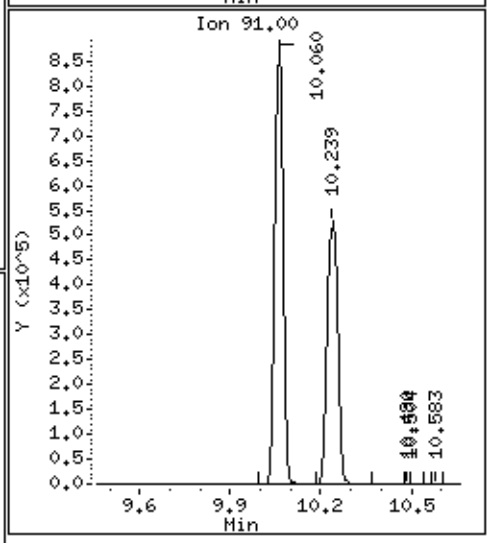












Data File: /chem/msd6.i/17jun16.b/6061704.d

Date : 17-JUN-2016 12:17

Client ID: LCSD

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCSD;LCSD

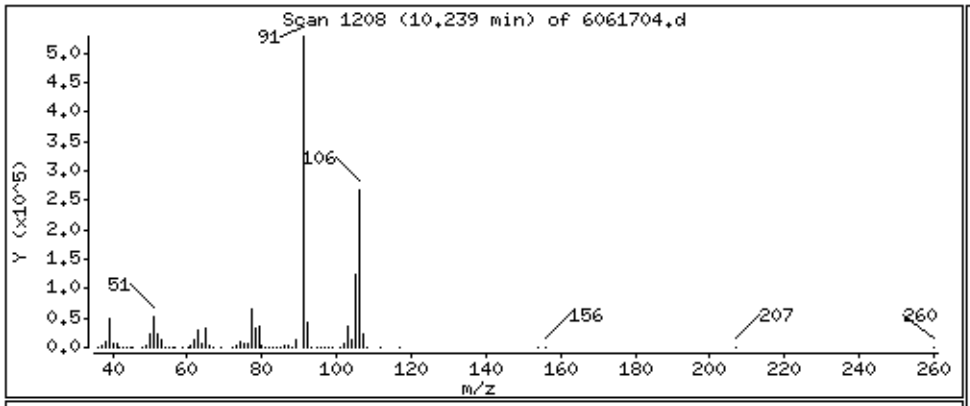
Operator: CT

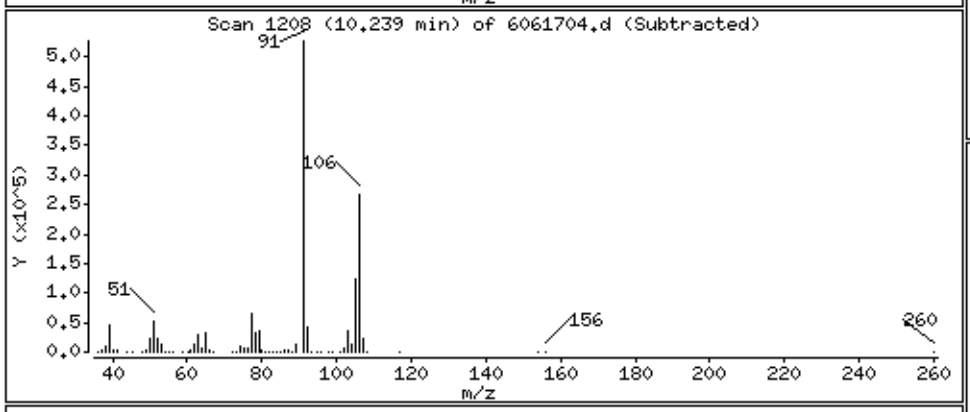
Column phase: RTx-624

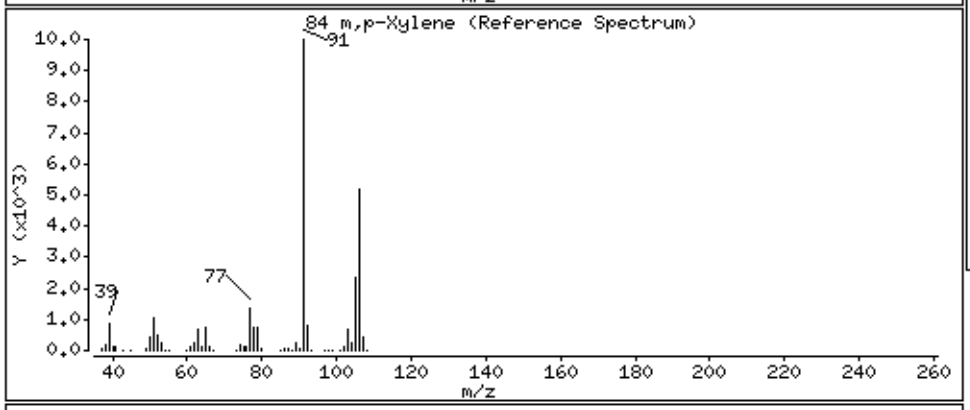
Column diameter: 0.53

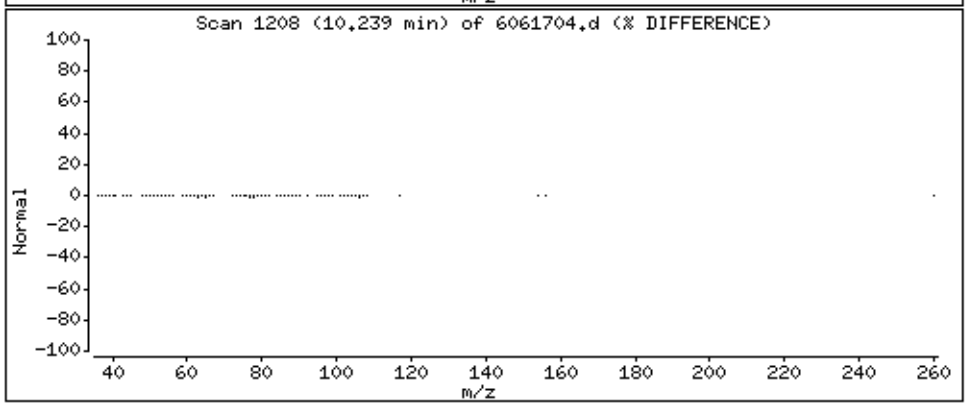
84 m,p-Xylene

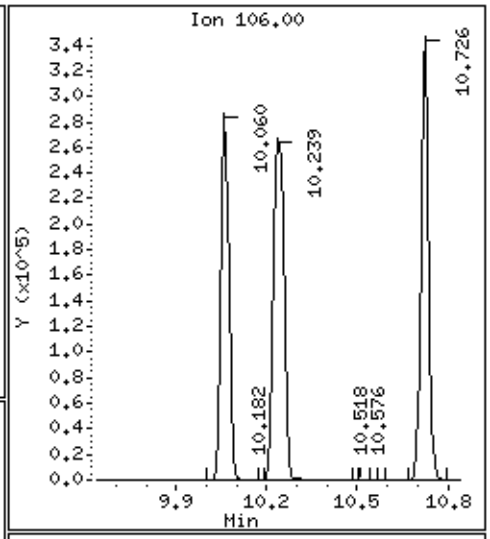
Concentration: 89.565 NG

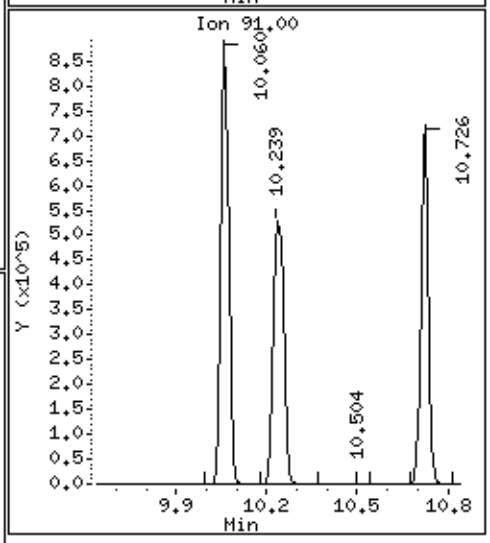












Data File: /chem/msd6.i/17jun16.b/6061704.d

Date : 17-JUN-2016 12:17

Client ID: LCSD

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCSD;LCSD

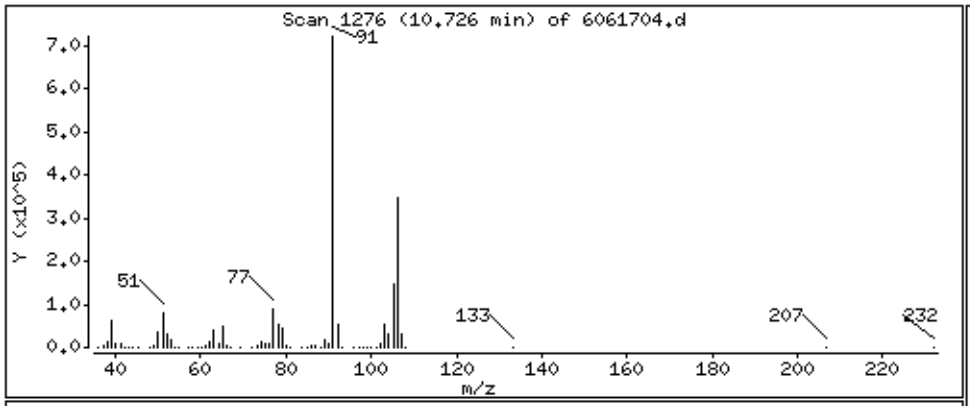
Operator: CT

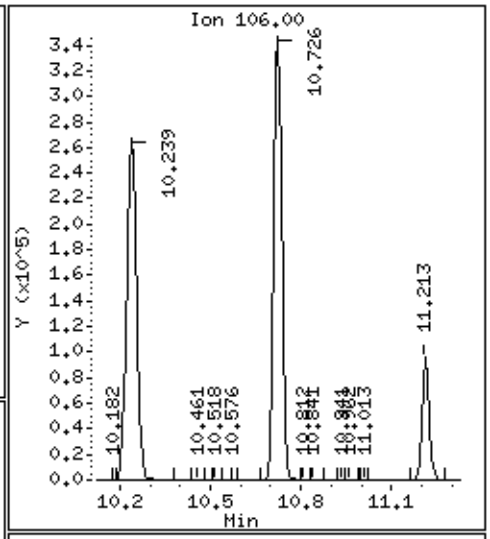
Column phase: RTx-624

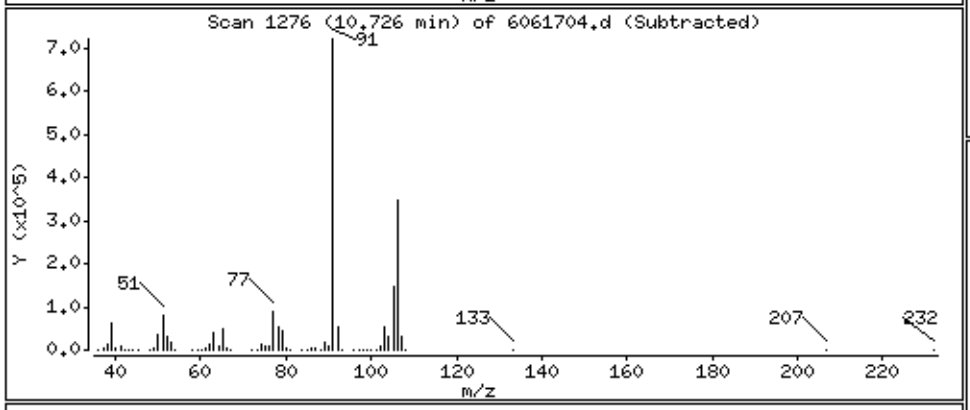
Column diameter: 0.53

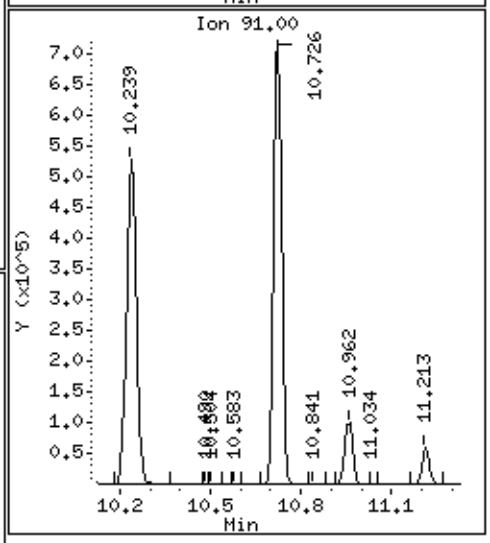
88 o-Xylene

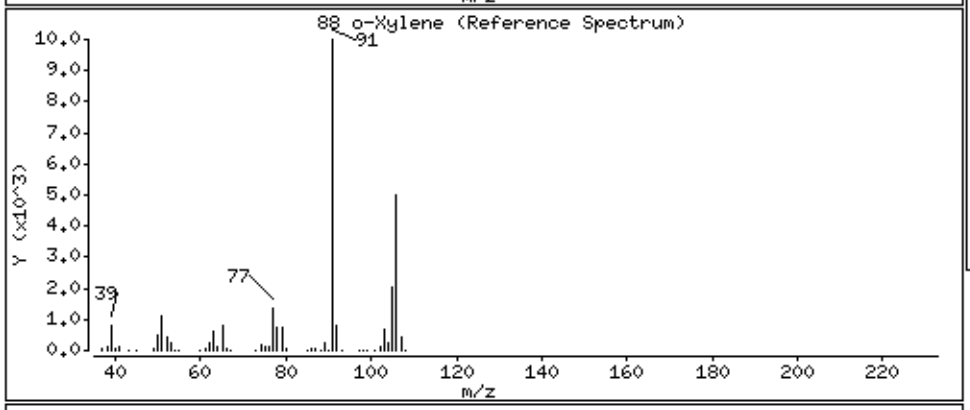
Concentration: 97.892 NG

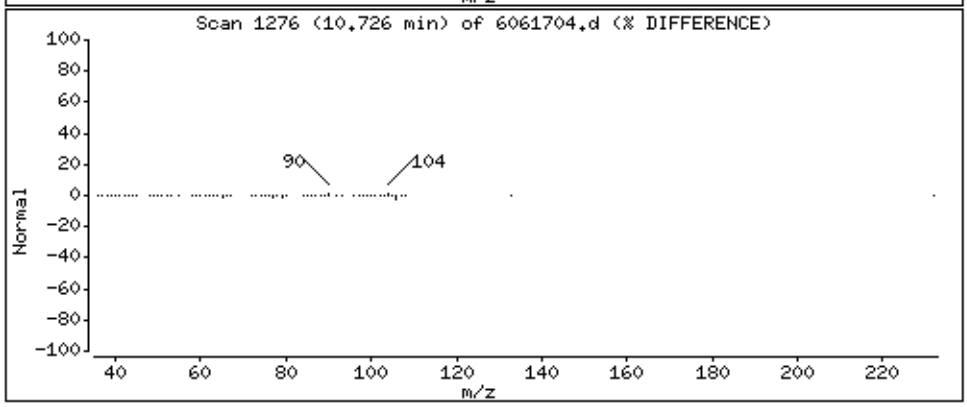












Data File: /chem/msd6.i/17jun16.b/6061704.d

Date : 17-JUN-2016 12:17

Client ID: LCSD

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCSD;LCSD

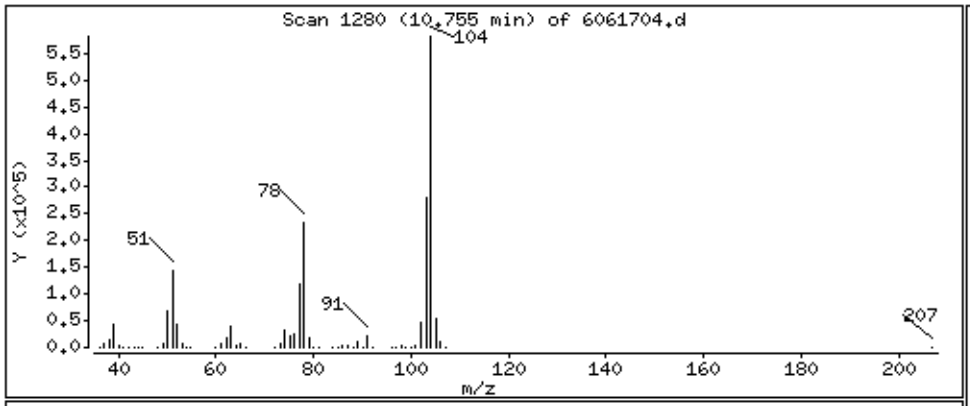
Operator: CT

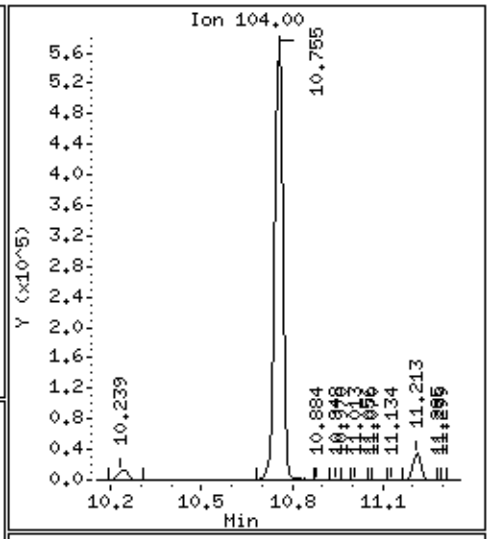
Column phase: RTx-624

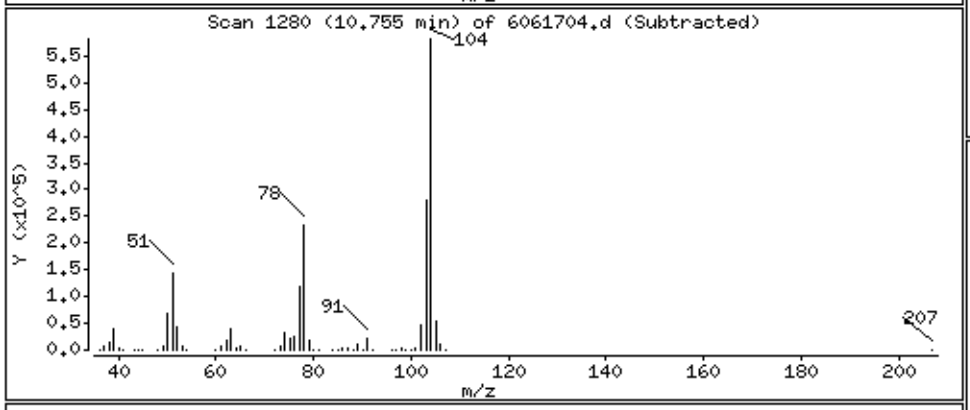
Column diameter: 0.53

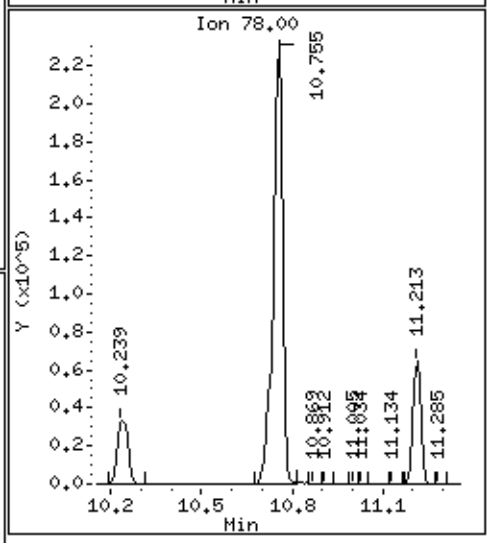
89 Styrene

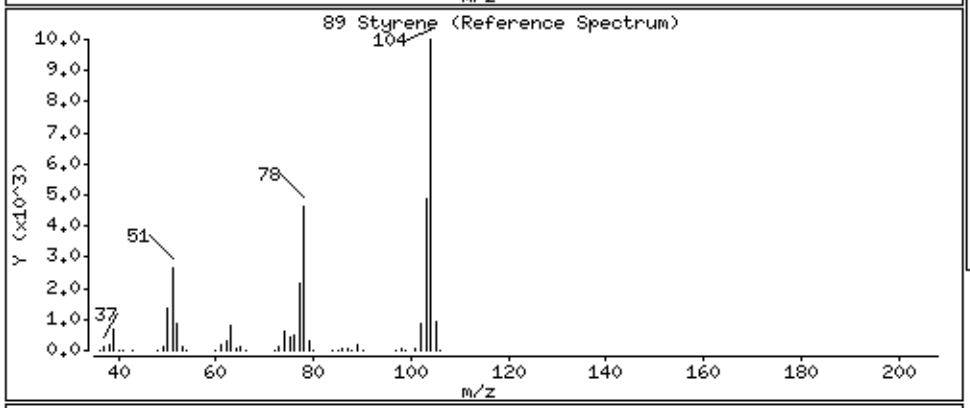
Concentration: 97.183 NG

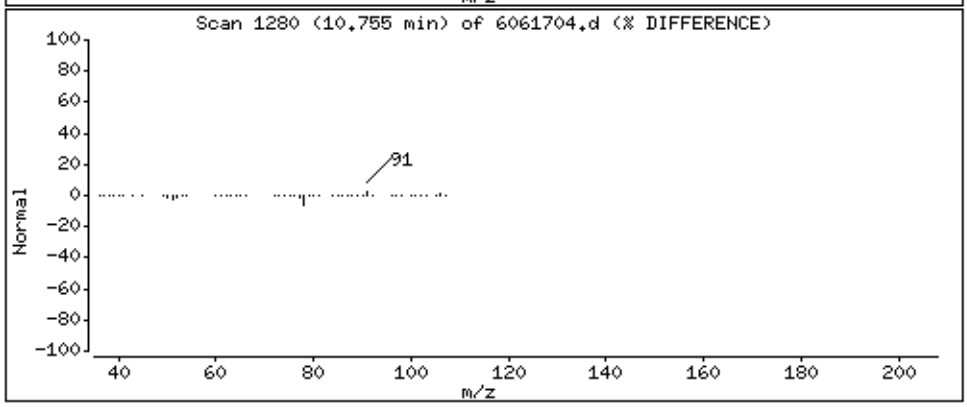












Data File: /chem/msd6.i/17jun16.b/6061704.d

Date : 17-JUN-2016 12:17

Client ID: LCSD

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCSD;LCSD

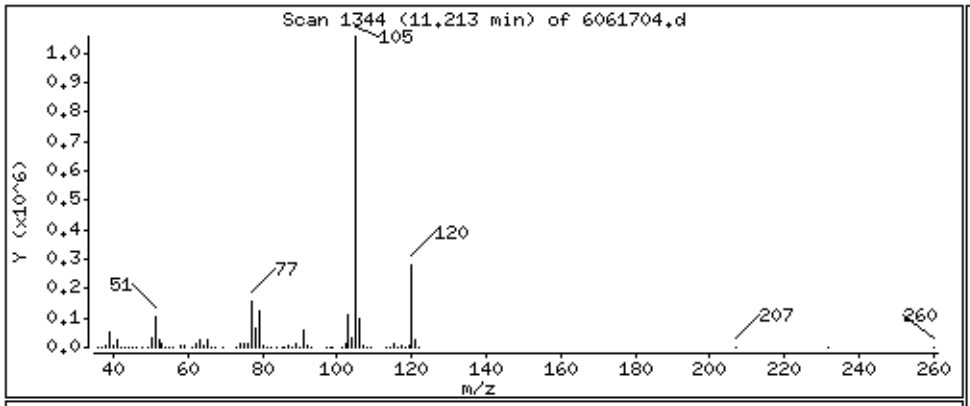
Operator: CT

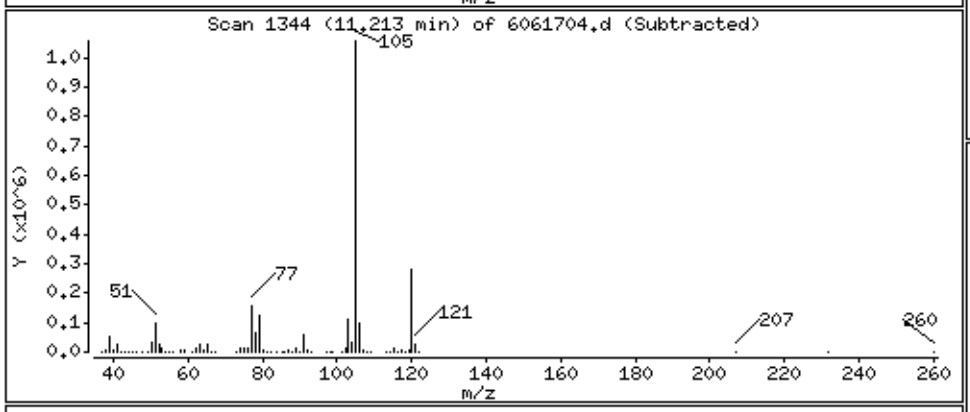
Column phase: RTx-624

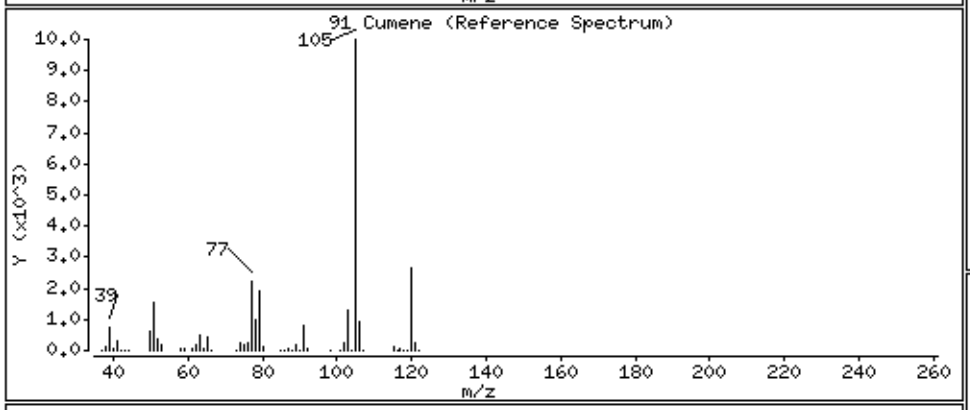
Column diameter: 0.53

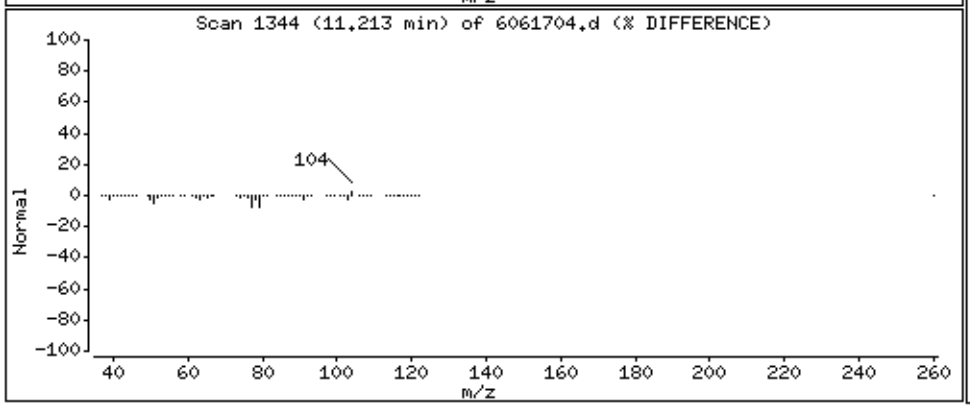
91 Cumene

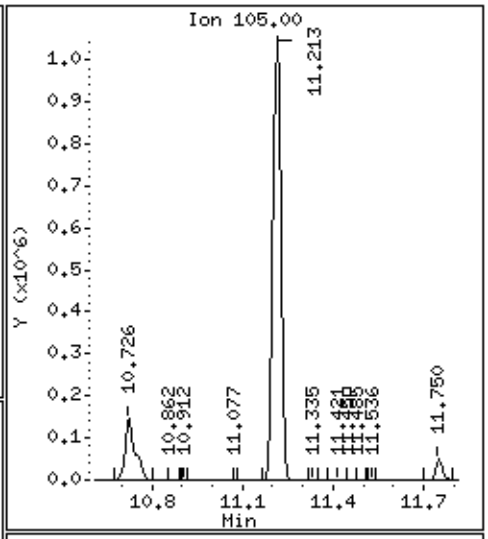
Concentration: 107.88 NG

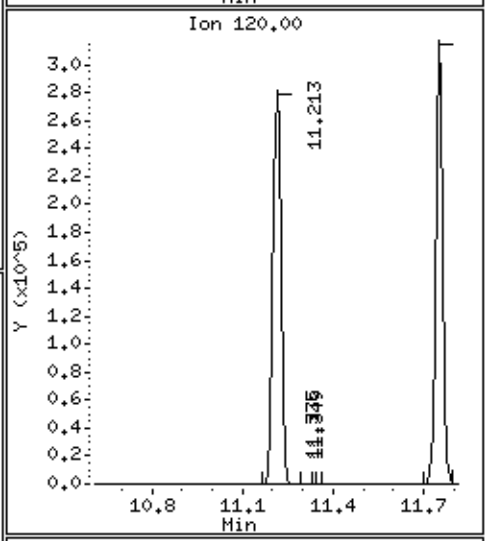


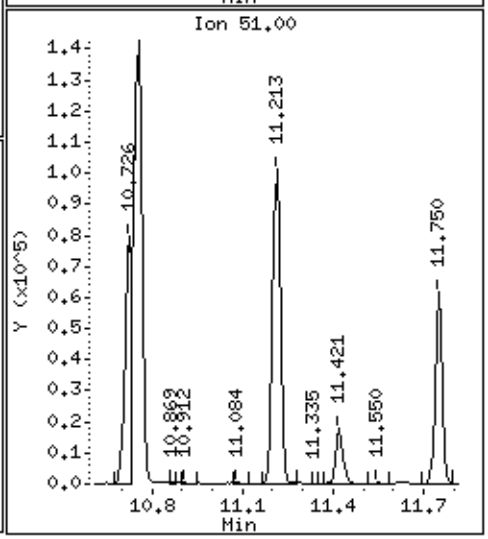












Data File: /chem/msd6.i/17jun16.b/6061704.d

Date : 17-JUN-2016 12:17

Client ID: LCSD

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCSD;LCSD

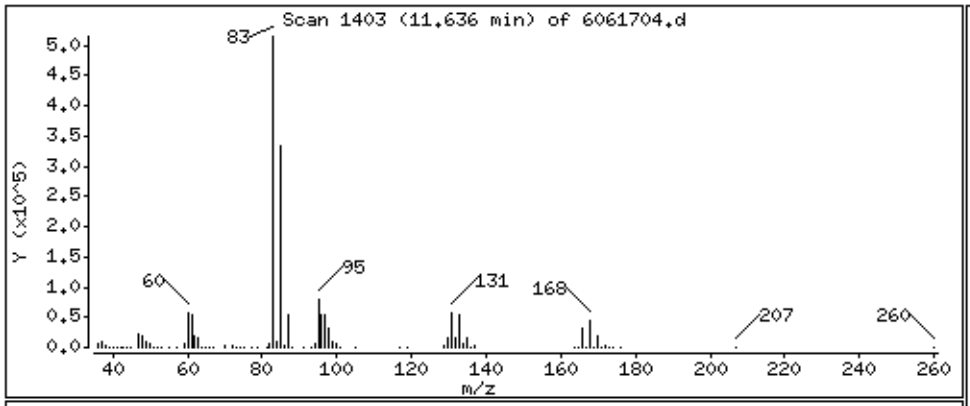
Operator: CT

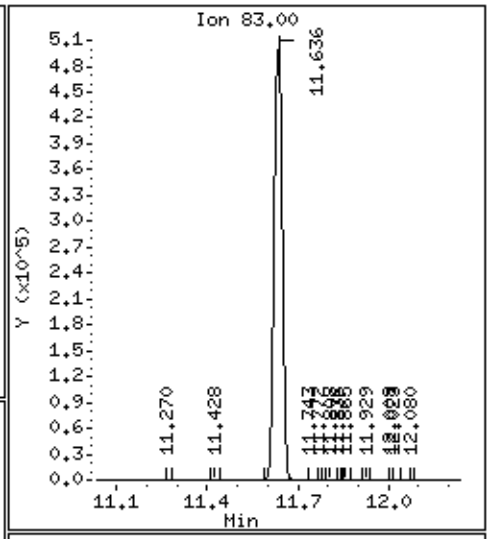
Column phase: RTx-624

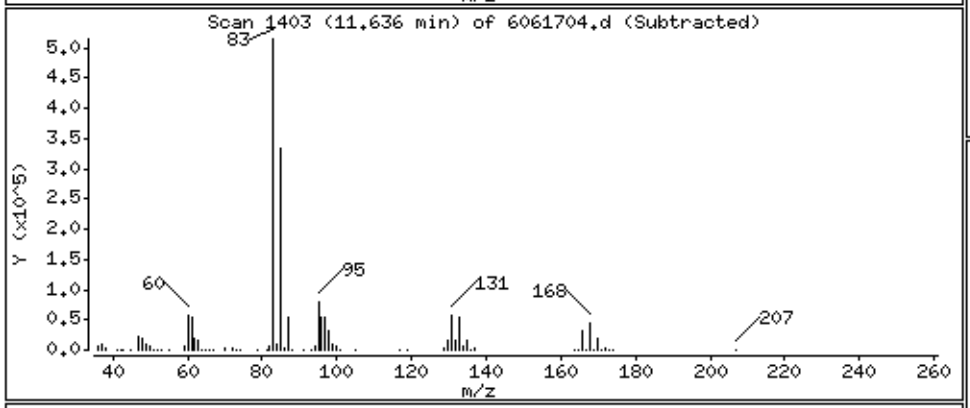
Column diameter: 0.53

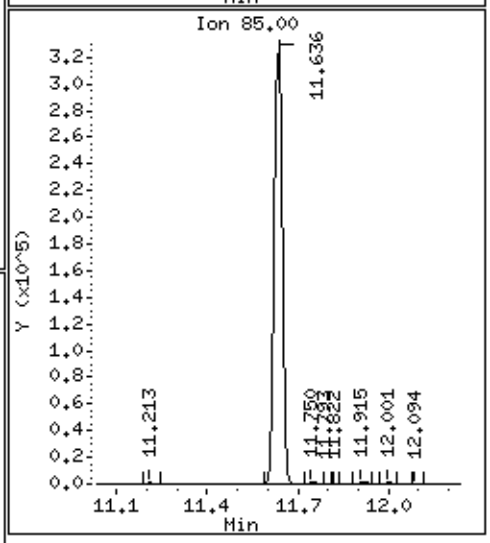
94 1,1,2,2-Tetrachloroethane

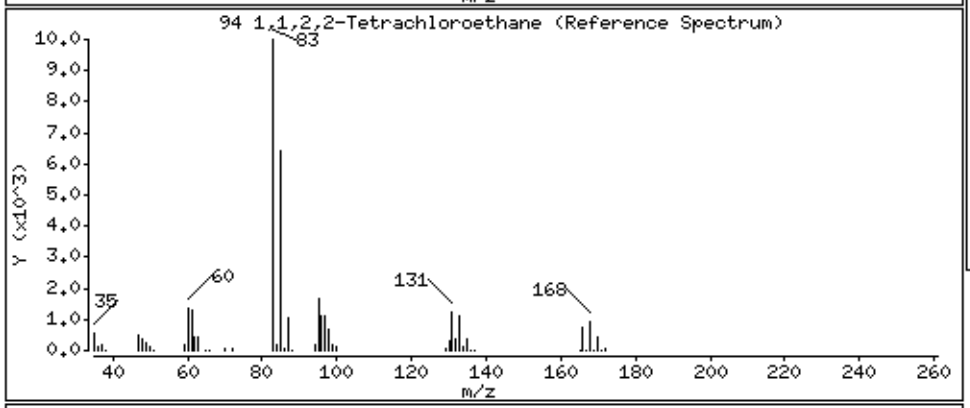
Concentration: 160.01 NG

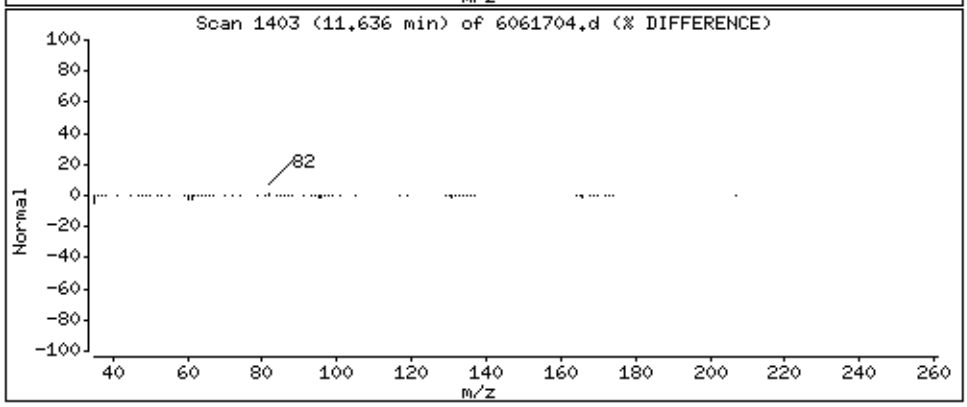












Data File: /chem/msd6.i/17jun16.b/6061704.d

Date : 17-JUN-2016 12:17

Client ID: LCSD

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCSD;LCSD

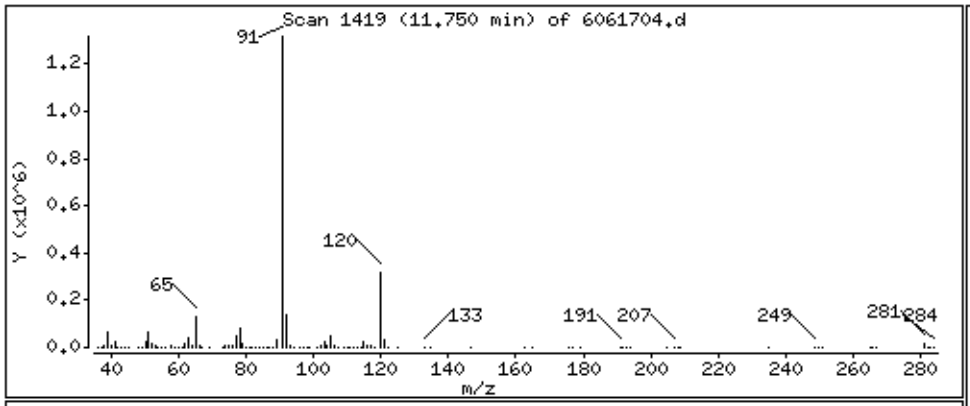
Operator: CT

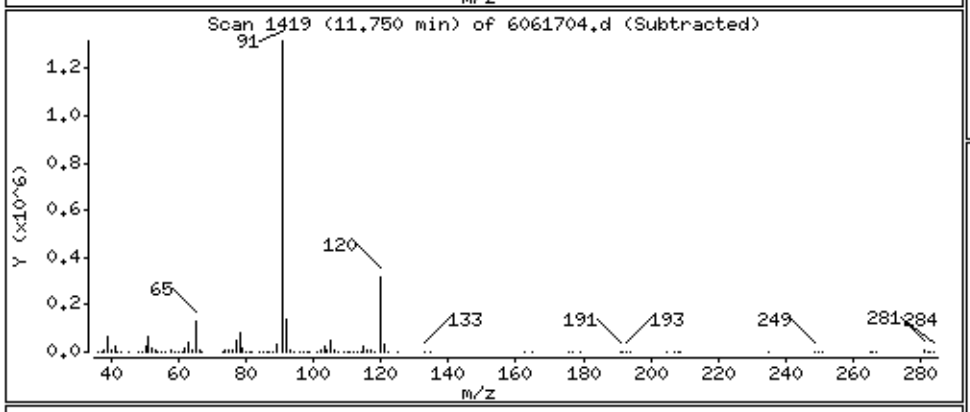
Column phase: RTx-624

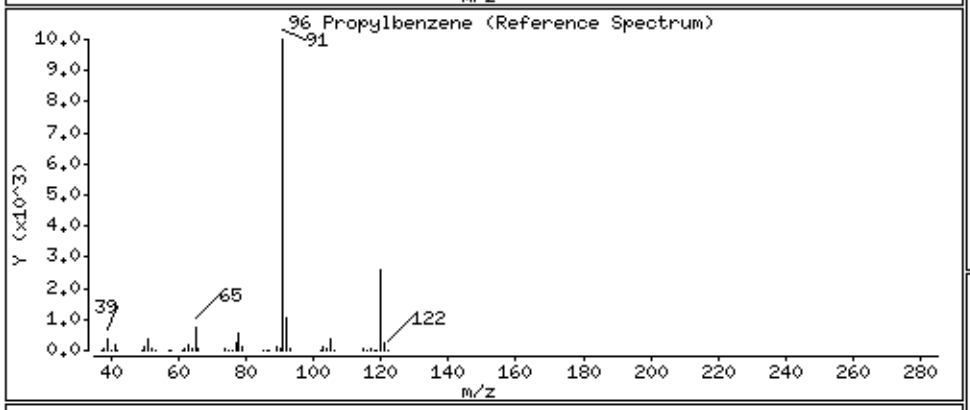
Column diameter: 0.53

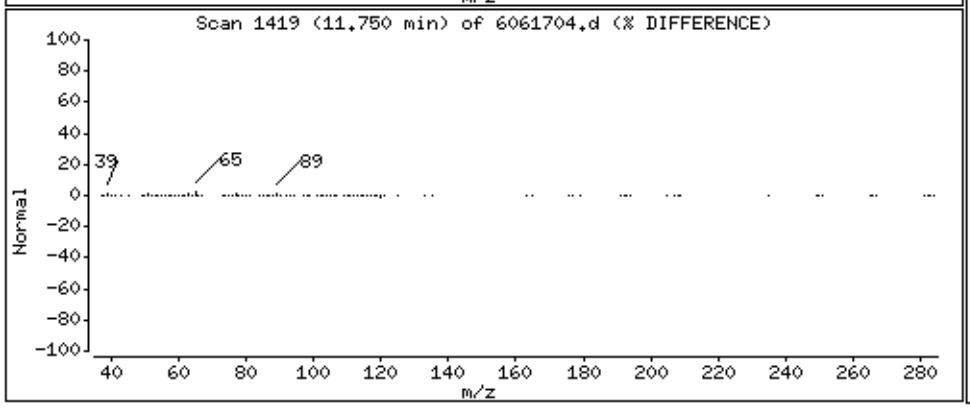
96 Propylbenzene

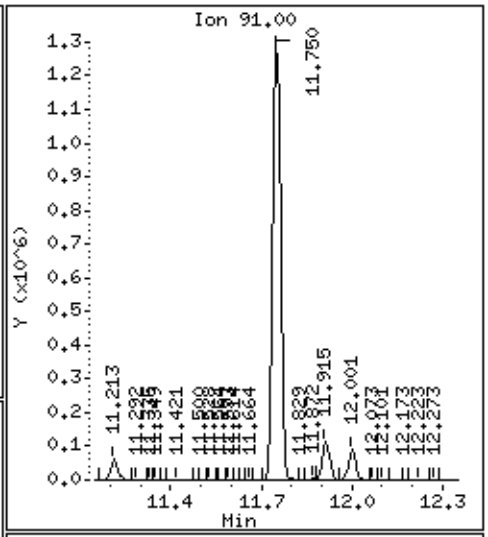
Concentration: 110.87 NG

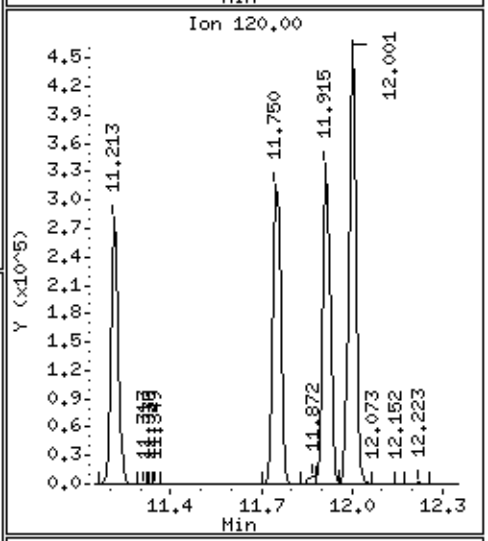


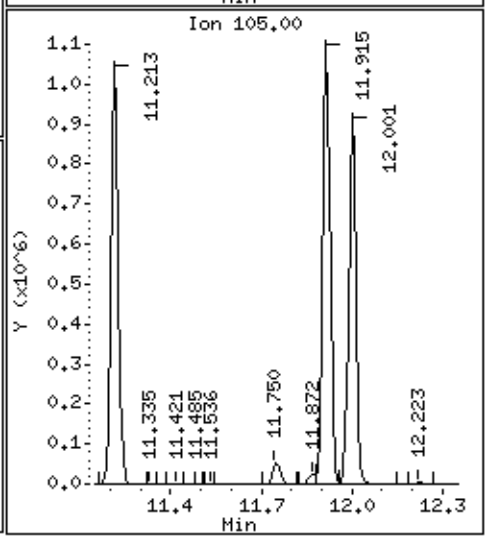












Data File: /chem/msd6.i/17jun16.b/6061704.d

Date : 17-JUN-2016 12:17

Client ID: LCSD

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCSD;LCSD

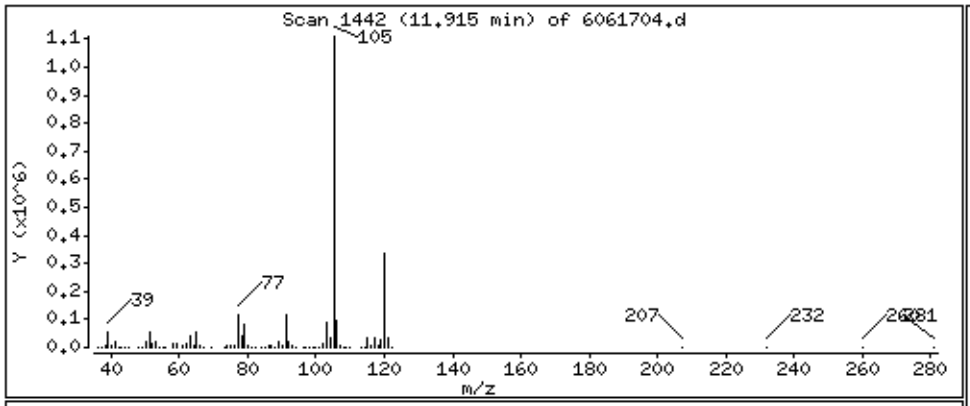
Operator: CT

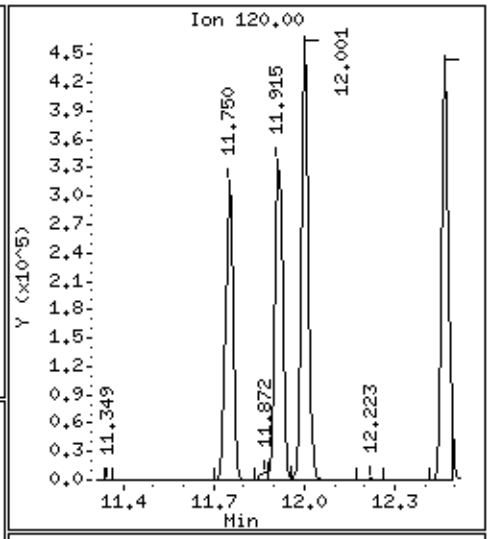
Column phase: RTx-624

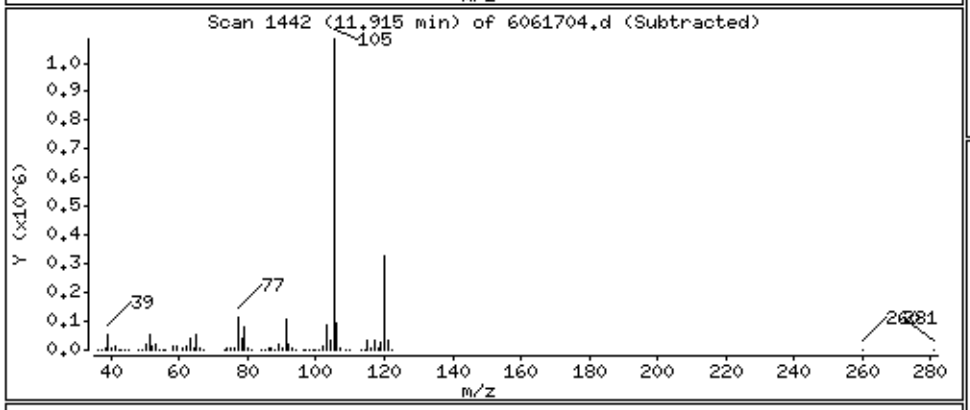
Column diameter: 0.53

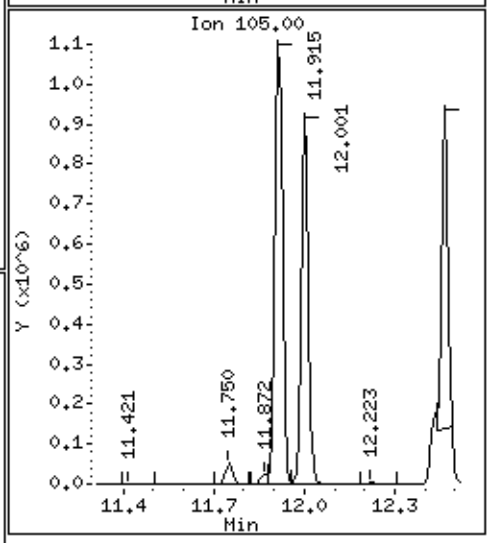
97 4-Ethyltoluene

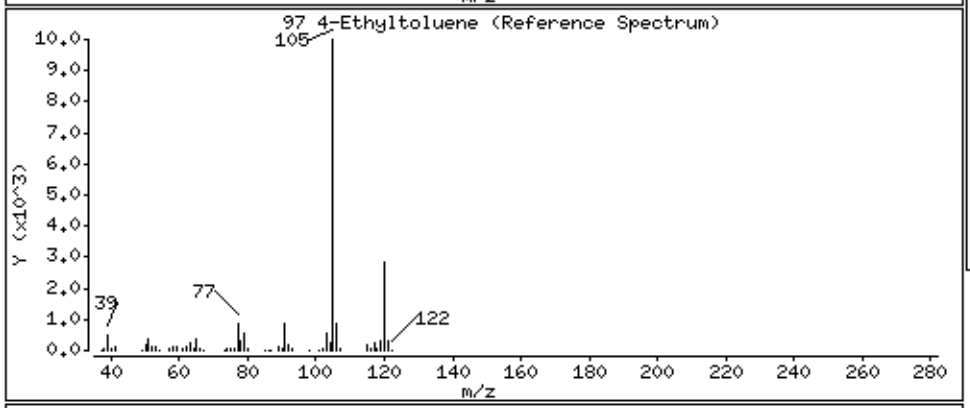
Concentration: 105.03 NG

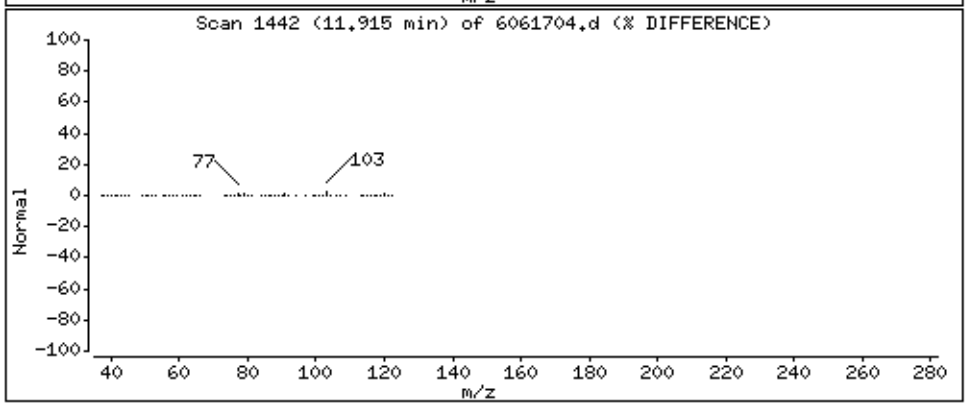












Data File: /chem/msd6.i/17jun16.b/6061704.d

Date : 17-JUN-2016 12:17

Client ID: LCSD

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCSD;LCSD

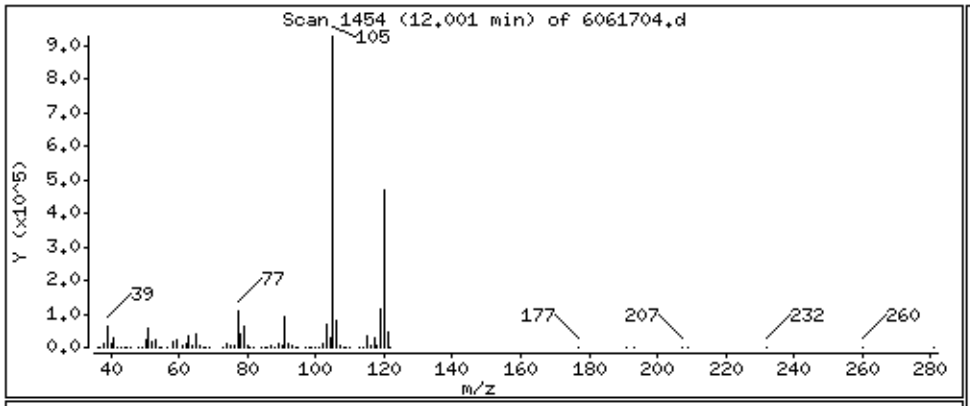
Operator: CT

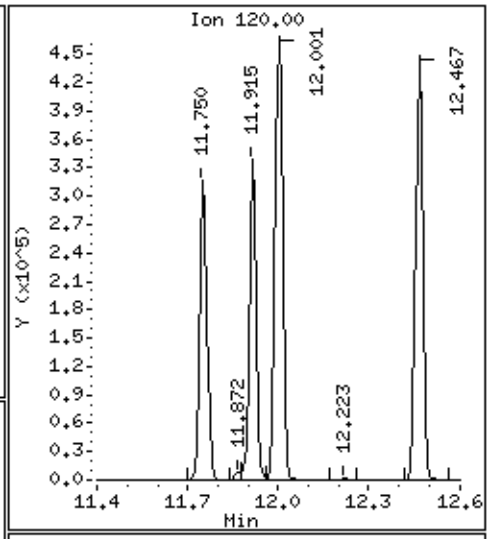
Column phase: RTx-624

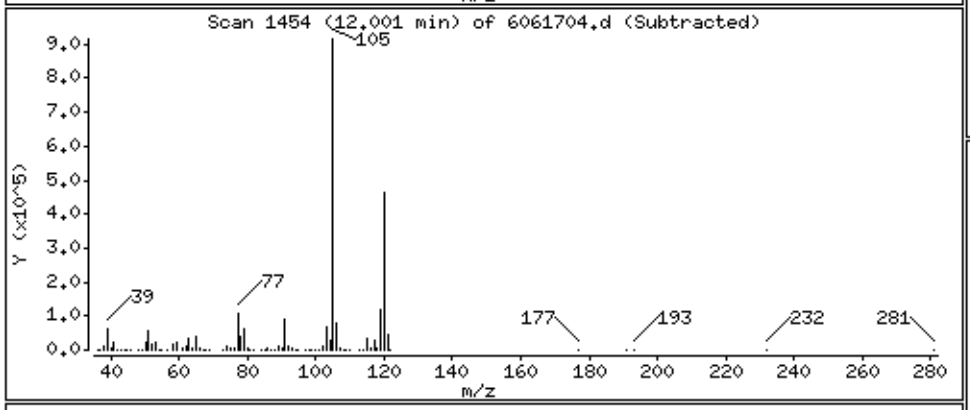
Column diameter: 0.53

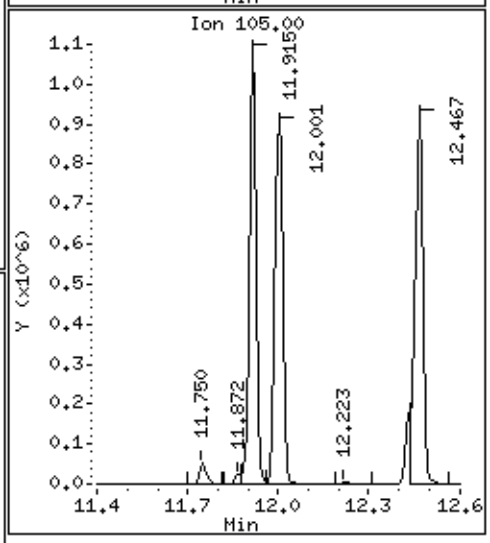
98 1,3,5-Trimethylbenzene

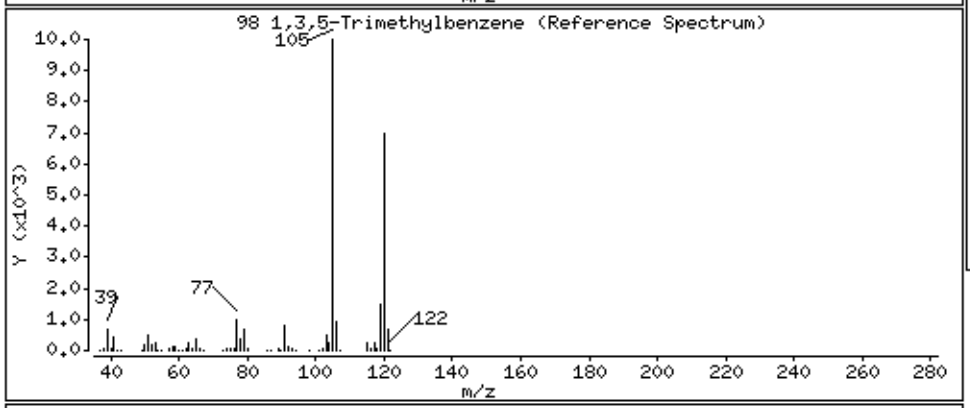
Concentration: 103.62 NG

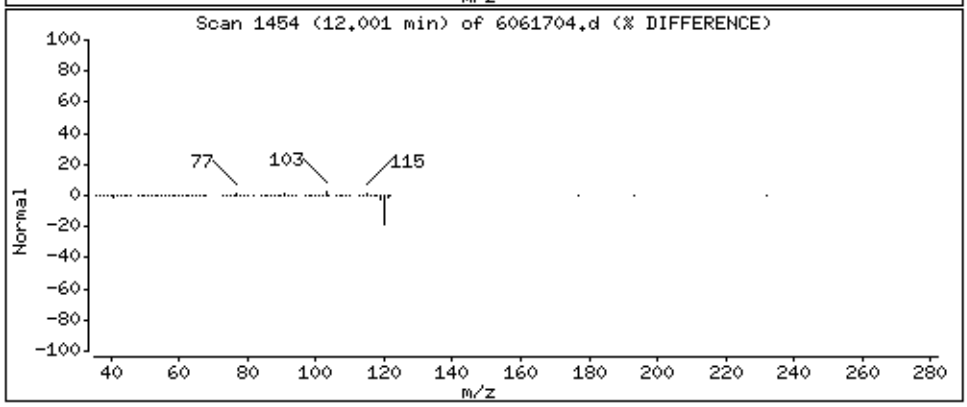












Data File: /chem/msd6.i/17jun16.b/6061704.d

Date : 17-JUN-2016 12:17

Client ID: LCSD

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCSD;LCSD

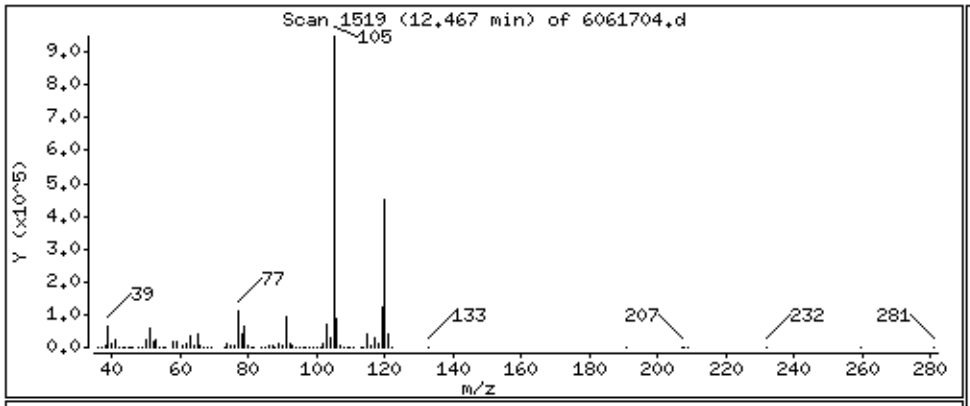
Operator: CT

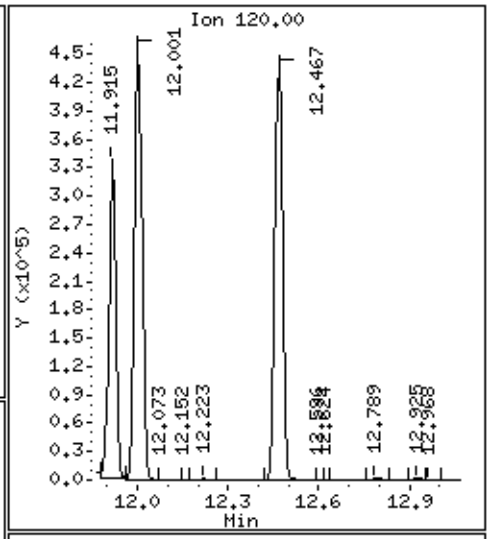
Column phase: RTx-624

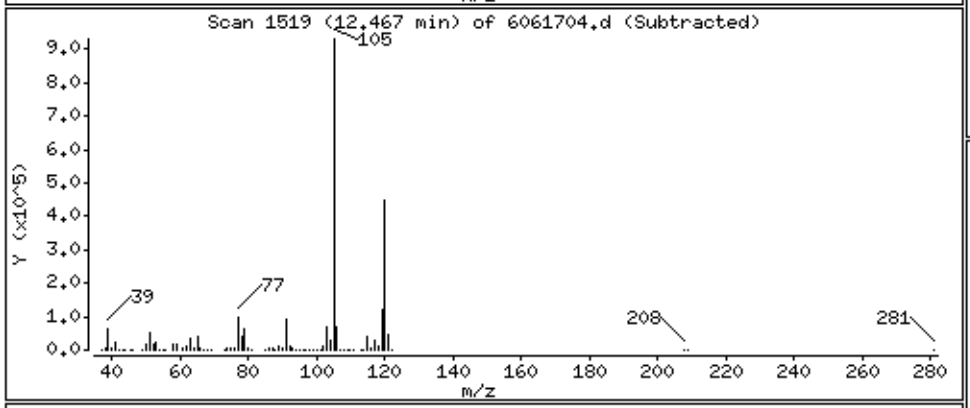
Column diameter: 0.53

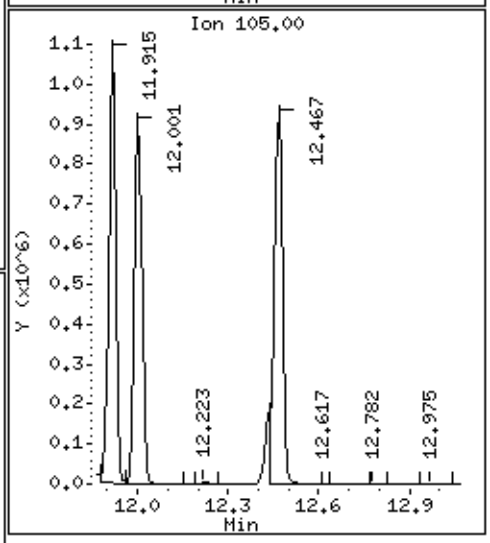
100 1,2,4-Trimethylbenzene

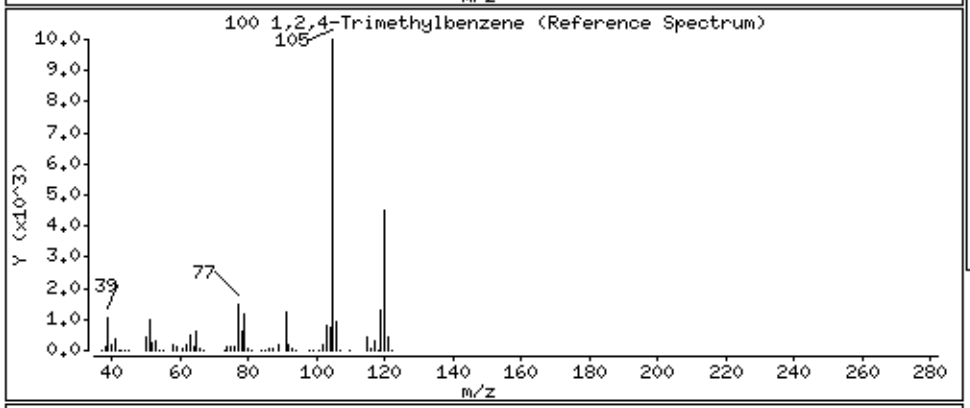
Concentration: 103.71 NG

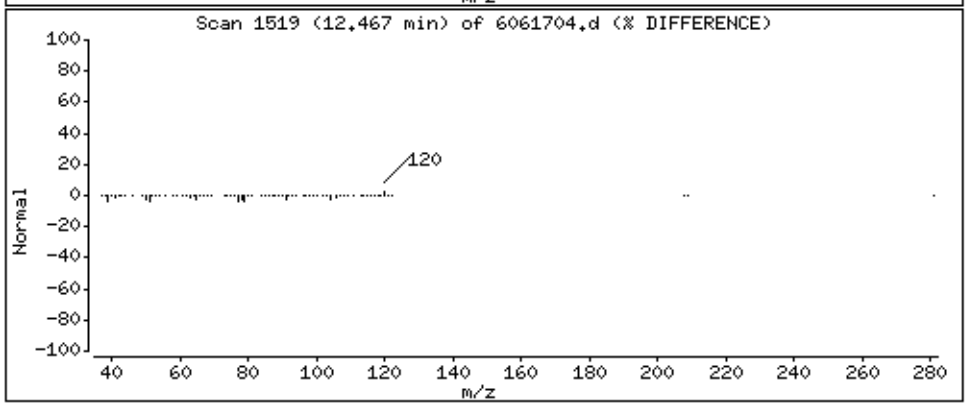












Data File: /chem/msd6.i/17jun16.b/6061704.d

Date : 17-JUN-2016 12:17

Client ID: LCSD

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCSD;LCSD

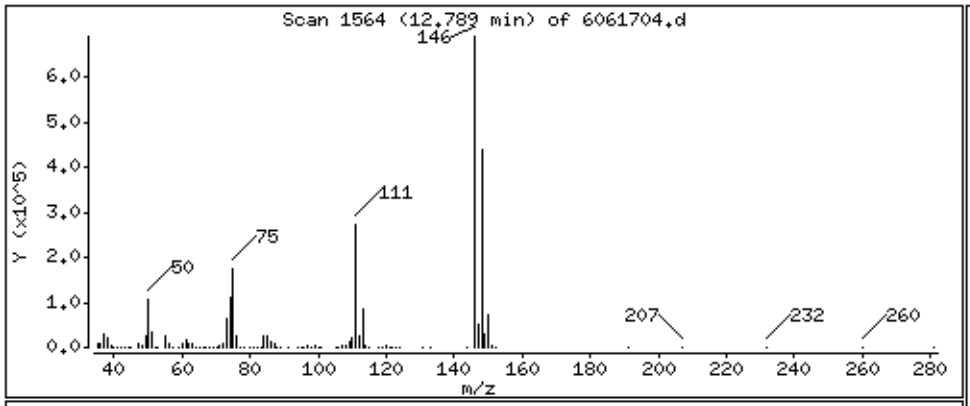
Operator: CT

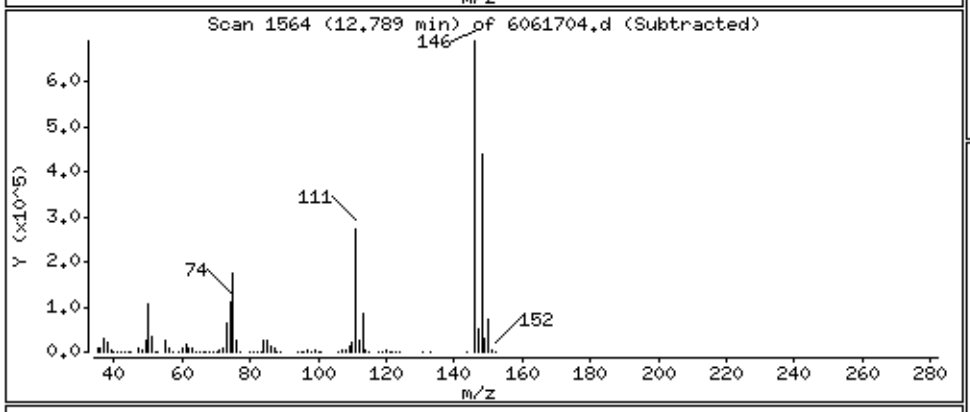
Column phase: RTx-624

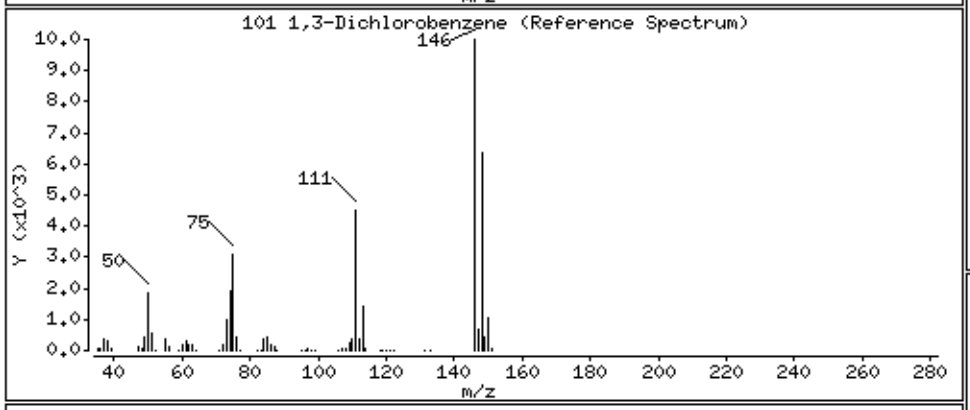
Column diameter: 0.53

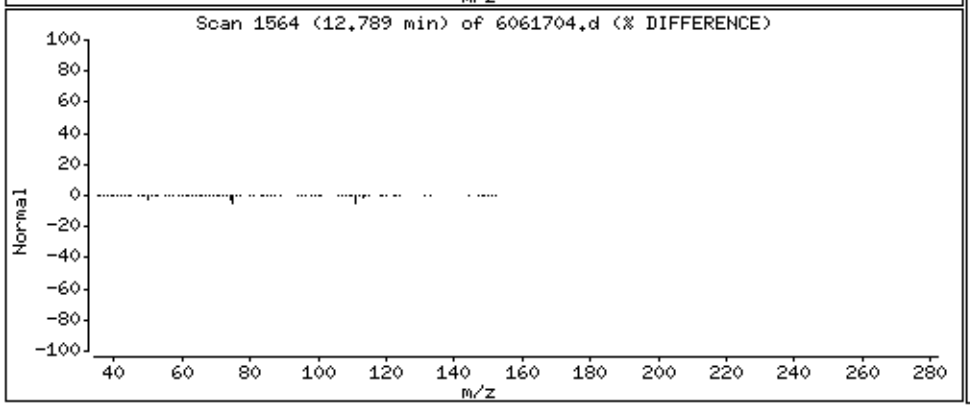
101 1,3-Dichlorobenzene

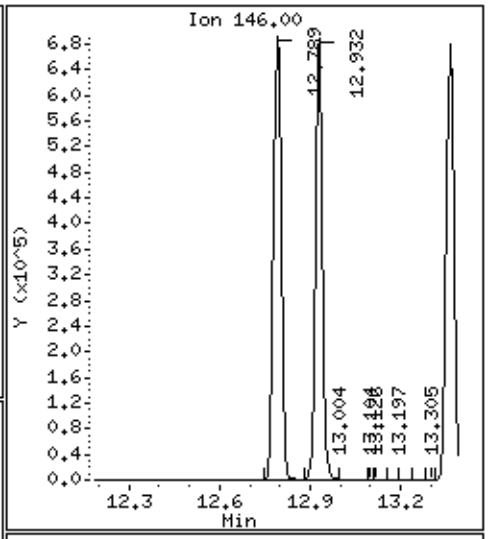
Concentration: 121.18 NG

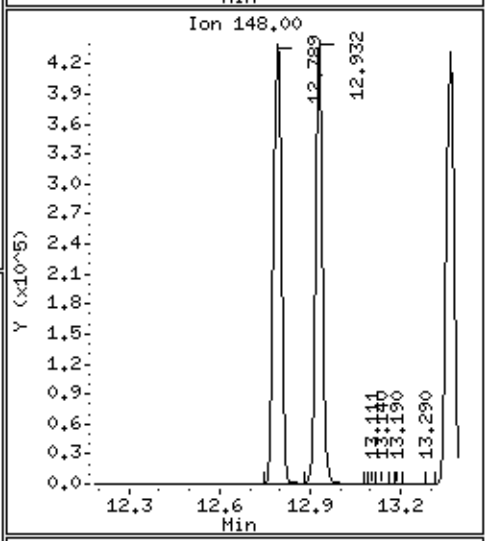


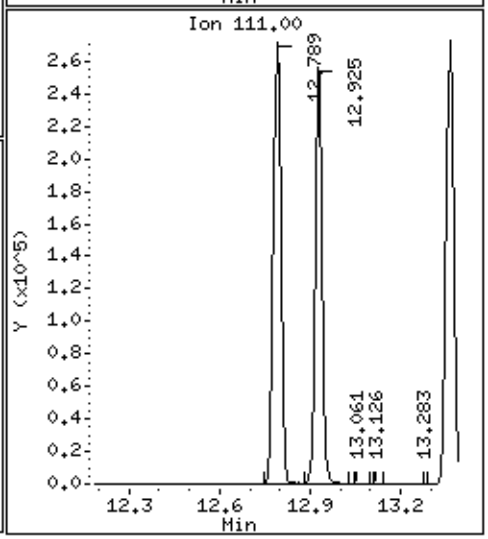












Data File: /chem/msd6.i/17jun16.b/6061704.d

Date : 17-JUN-2016 12:17

Client ID: LCSD

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCSD;LCSD

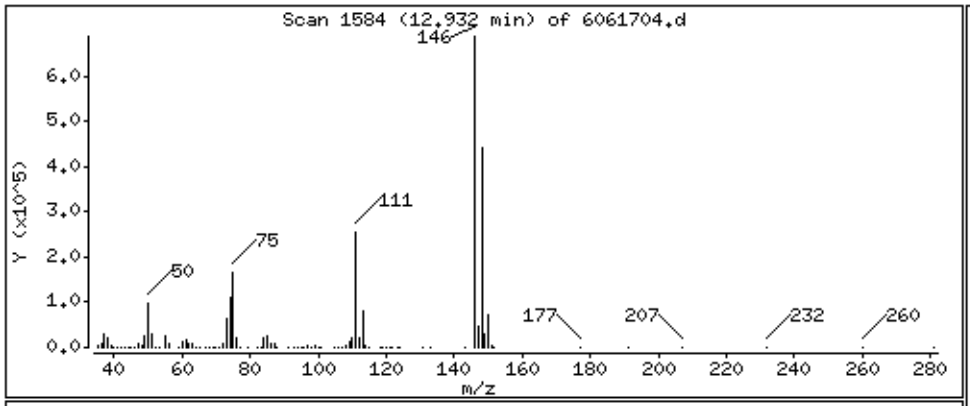
Operator: CT

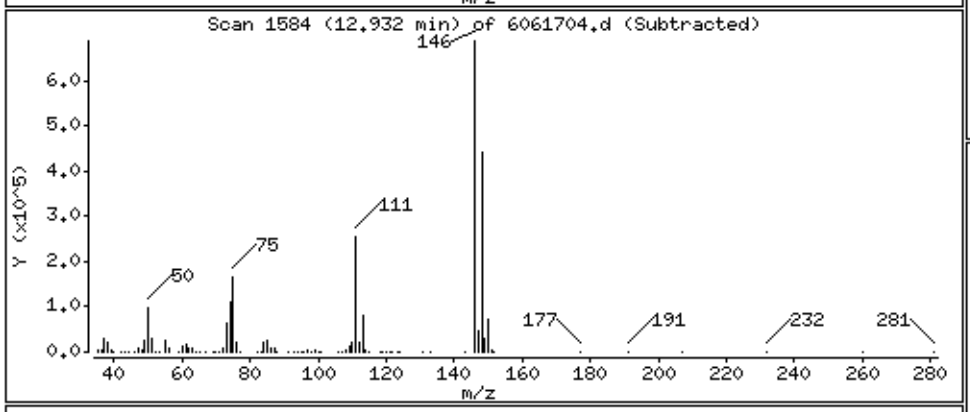
Column phase: RTx-624

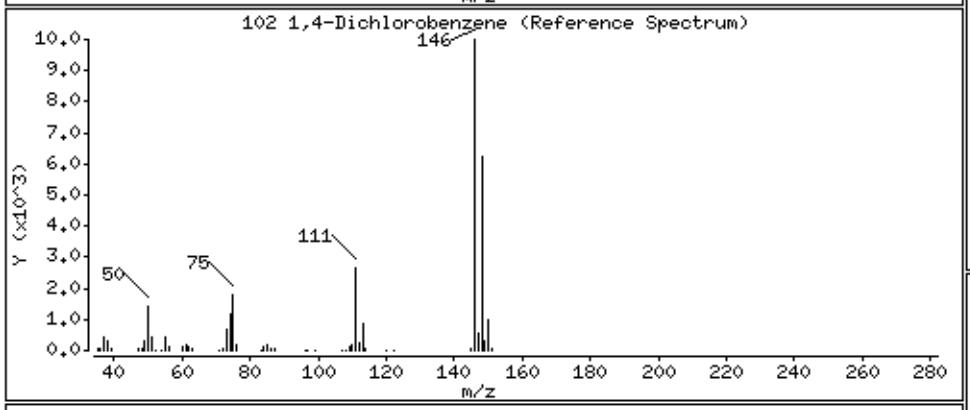
Column diameter: 0.53

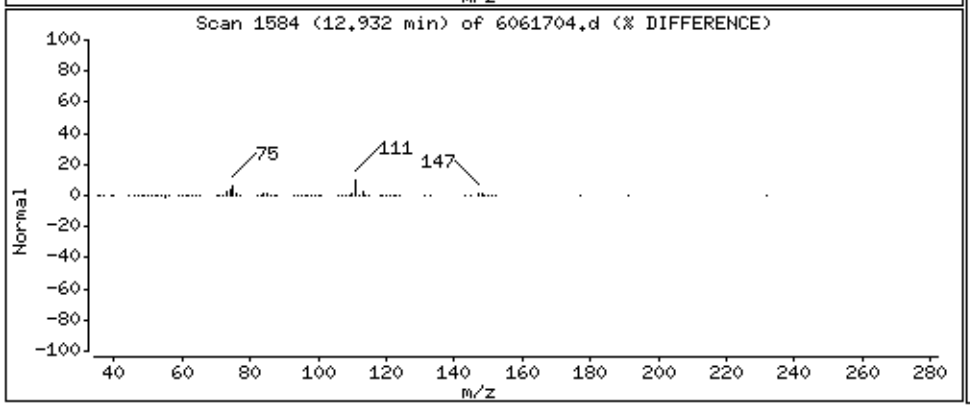
102 1,4-Dichlorobenzene

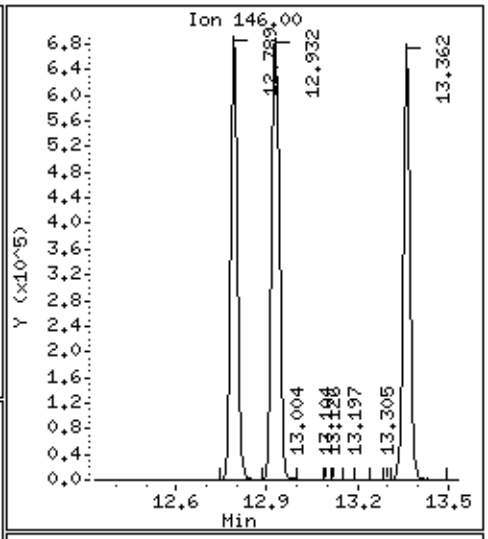
Concentration: 120.49 NG

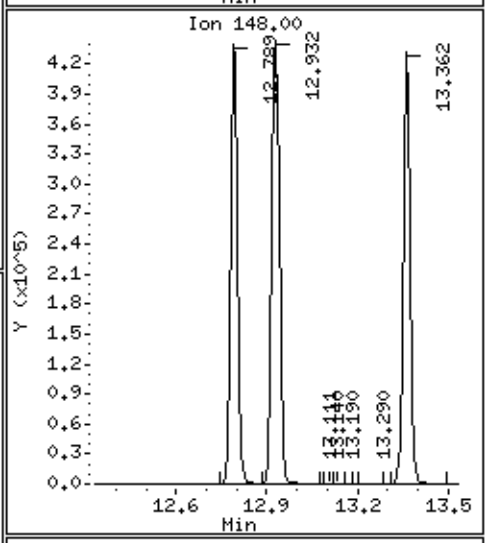


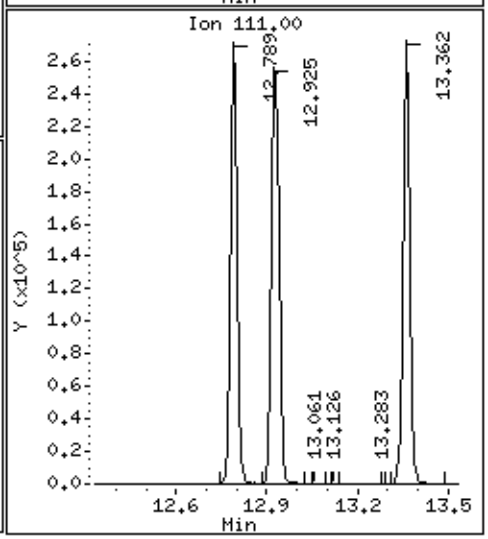












Data File: /chem/msd6.i/17jun16.b/6061704.d

Date : 17-JUN-2016 12:17

Client ID: LCSD

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCSD;LCSD

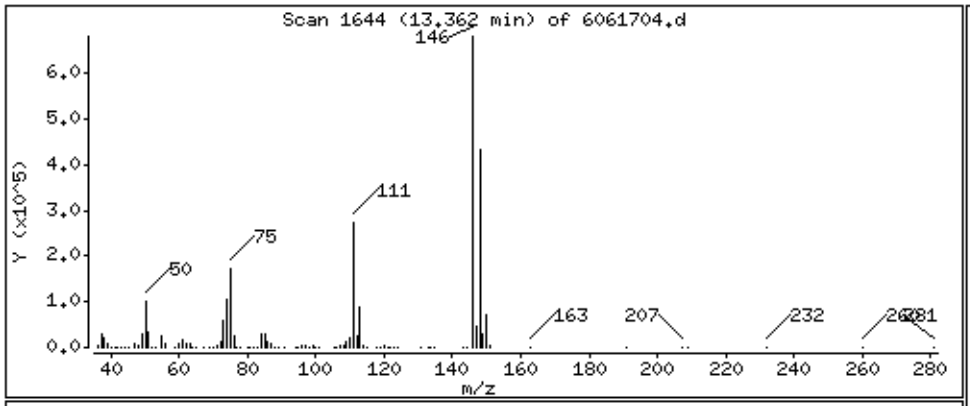
Operator: CT

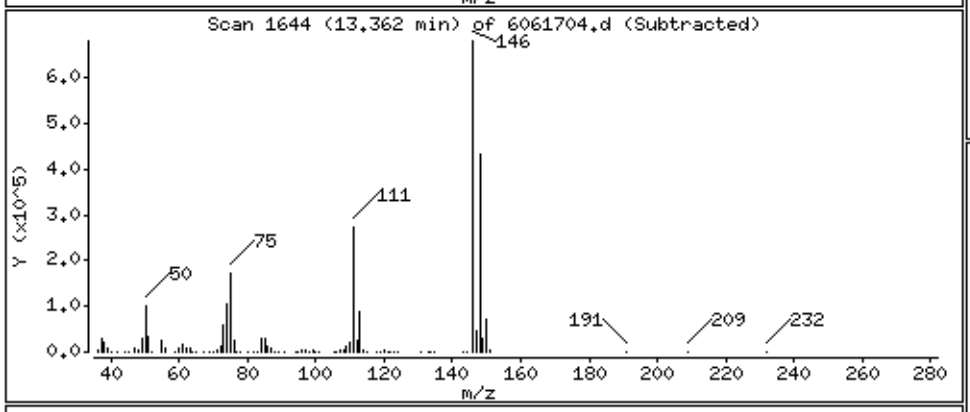
Column phase: RTx-624

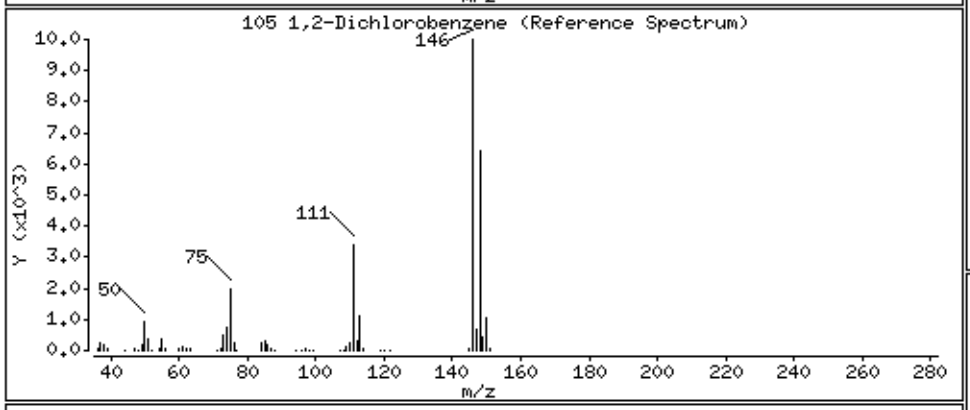
Column diameter: 0.53

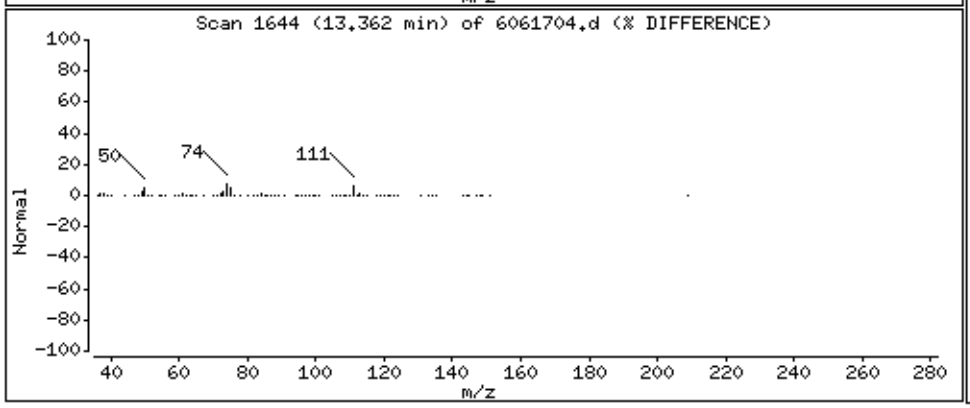
105 1,2-Dichlorobenzene

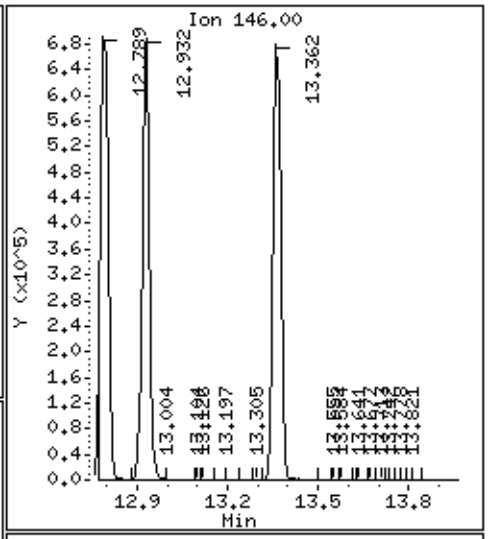
Concentration: 119.47 NG

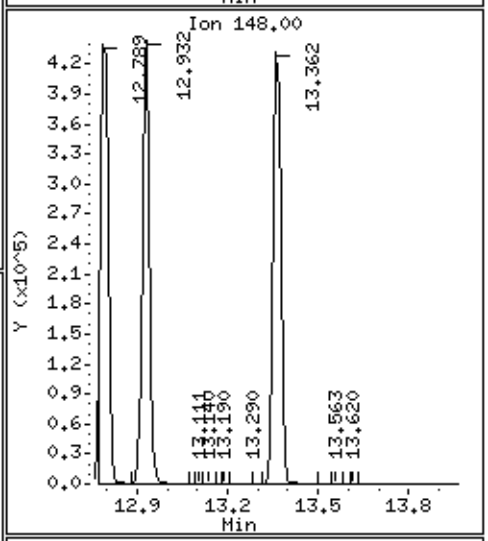


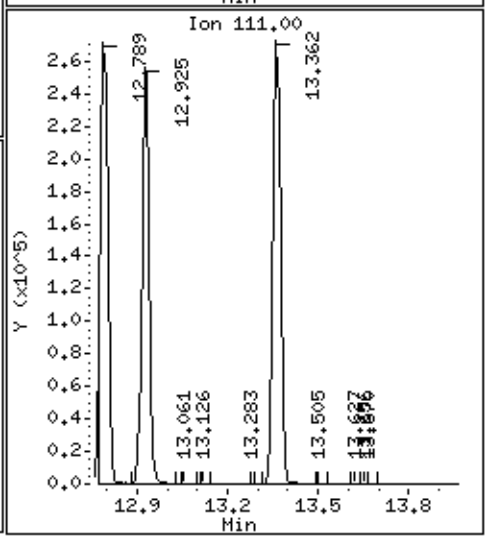












Data File: /chem/msd6.i/17jun16.b/6061704.d

Date : 17-JUN-2016 12:17

Client ID: LCSD

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCSD;LCSD

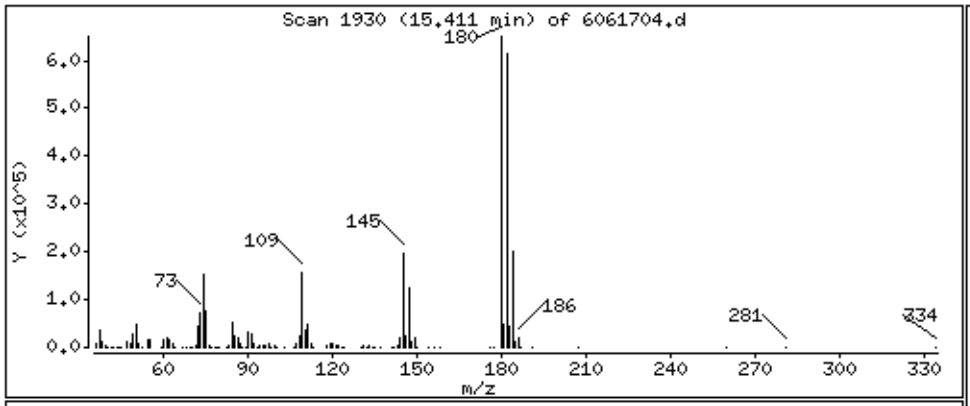
Operator: CT

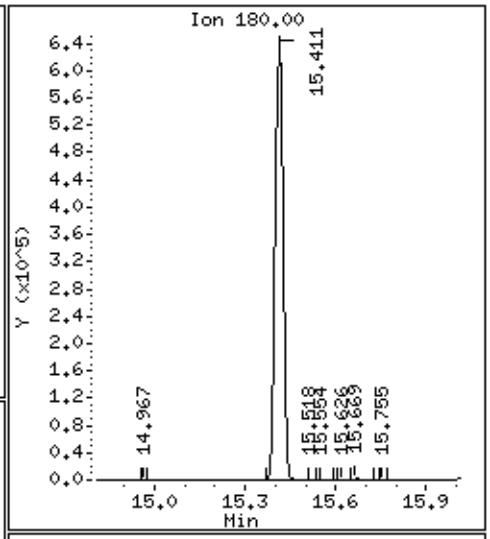
Column phase: RTx-624

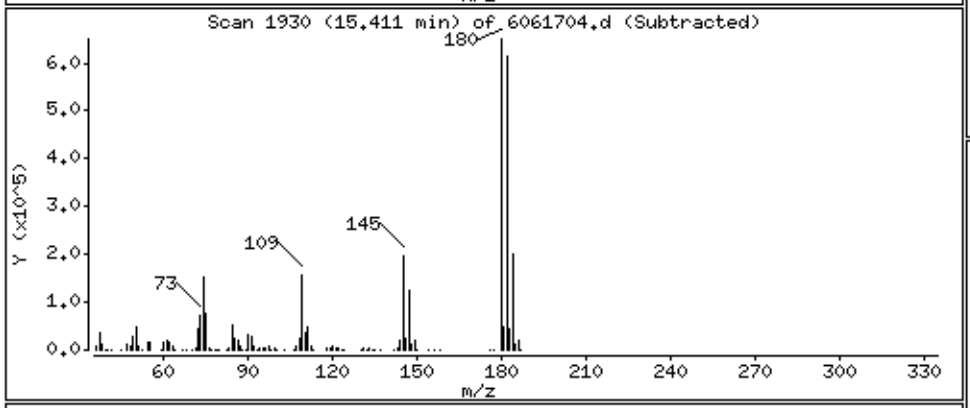
Column diameter: 0.53

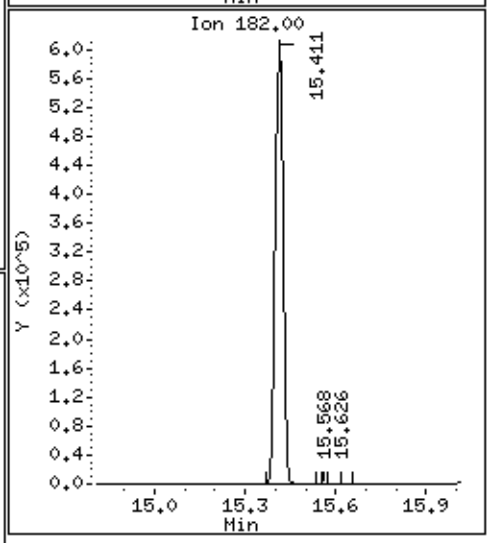
106 1,2,4-Trichlorobenzene

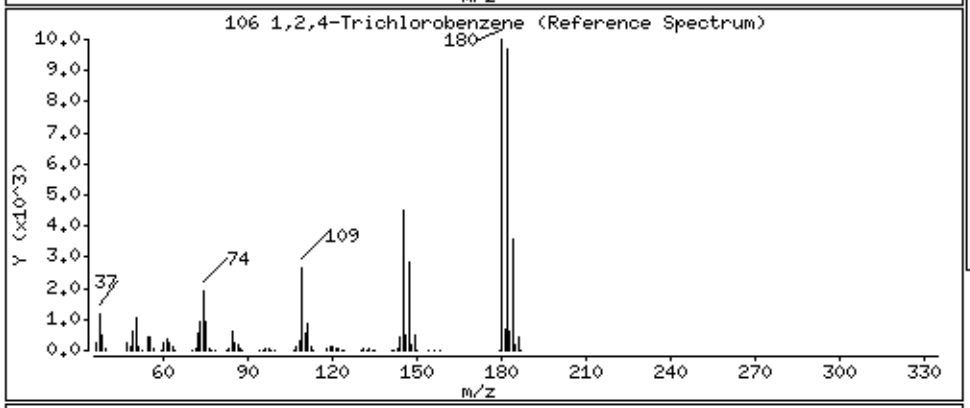
Concentration: 142.88 NG

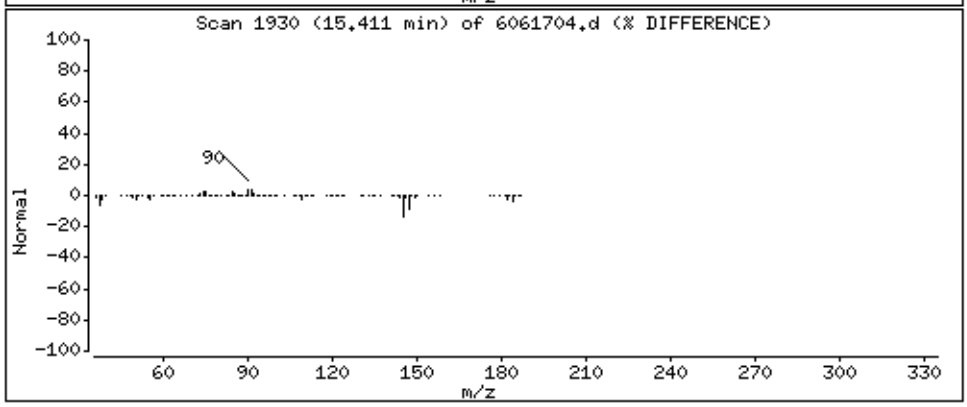












Data File: /chem/msd6.i/17jun16.b/6061704.d

Date : 17-JUN-2016 12:17

Client ID: LCSD

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCSD;LCSD

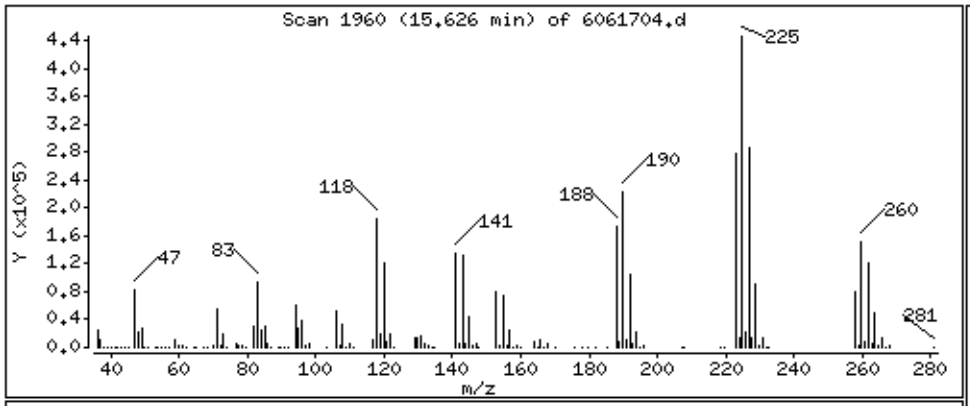
Operator: CT

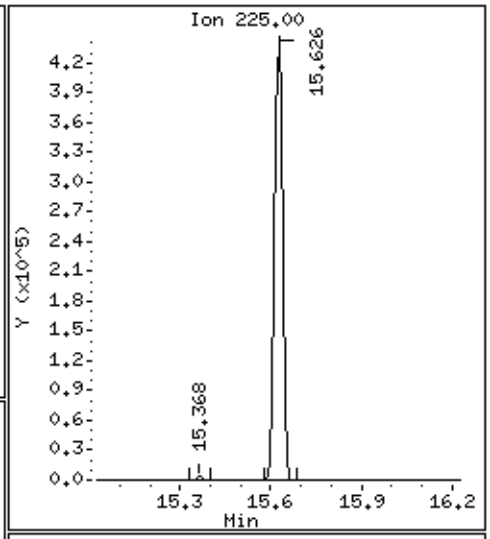
Column phase: RTx-624

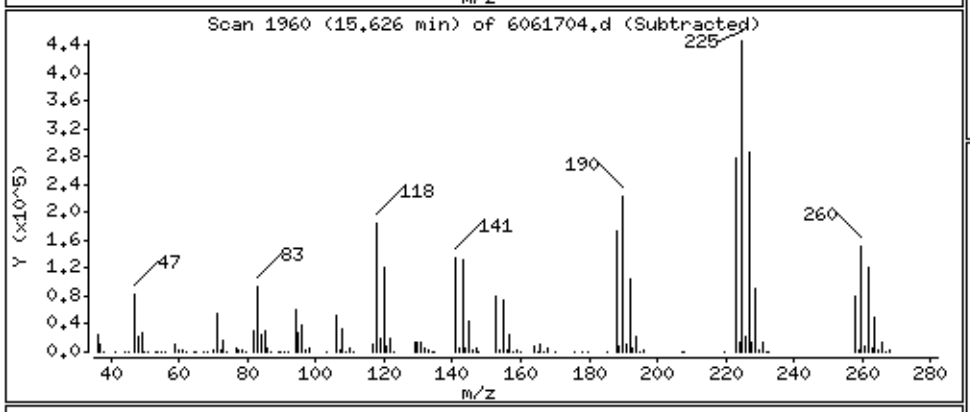
Column diameter: 0.53

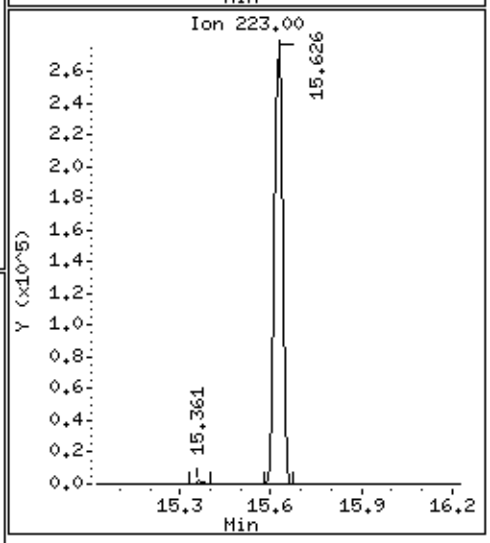
107 Hexachlorobutadiene

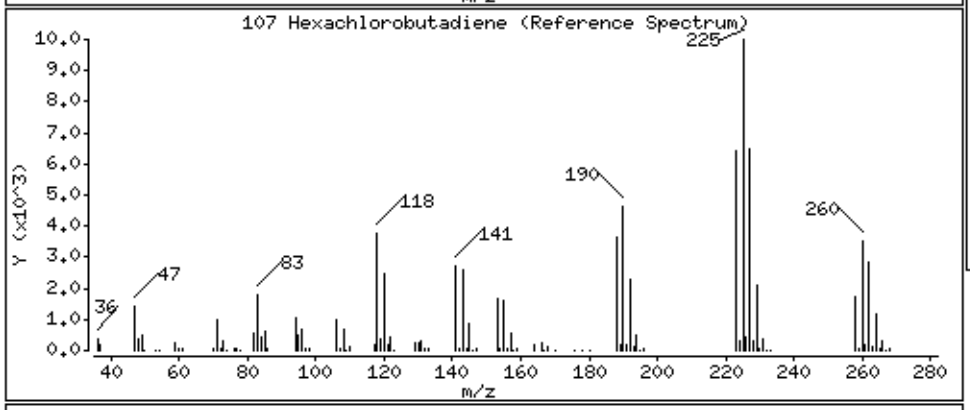
Concentration: 196.06 NG

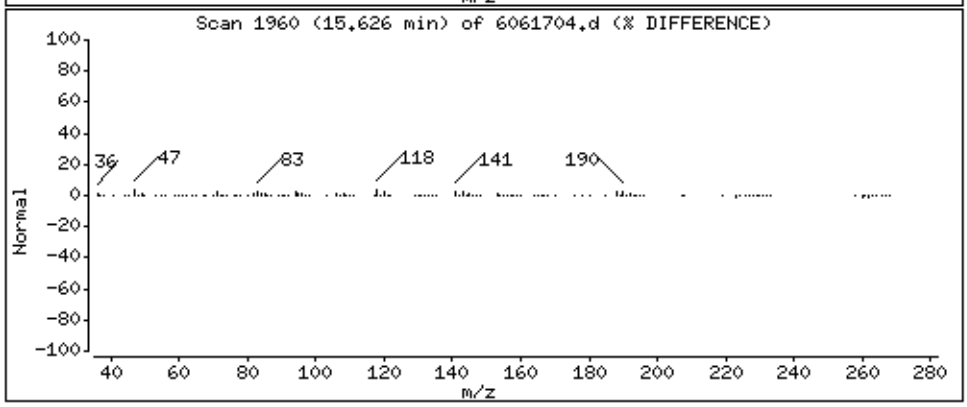












Data File: /chem/msd6.i/17jun16.b/6061704.d

Date : 17-JUN-2016 12:17

Client ID: LCSD

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCSD;LCSD

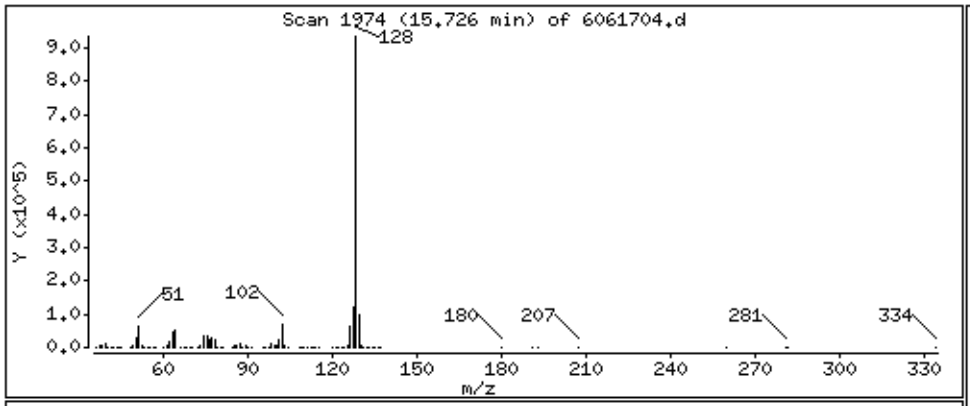
Operator: CT

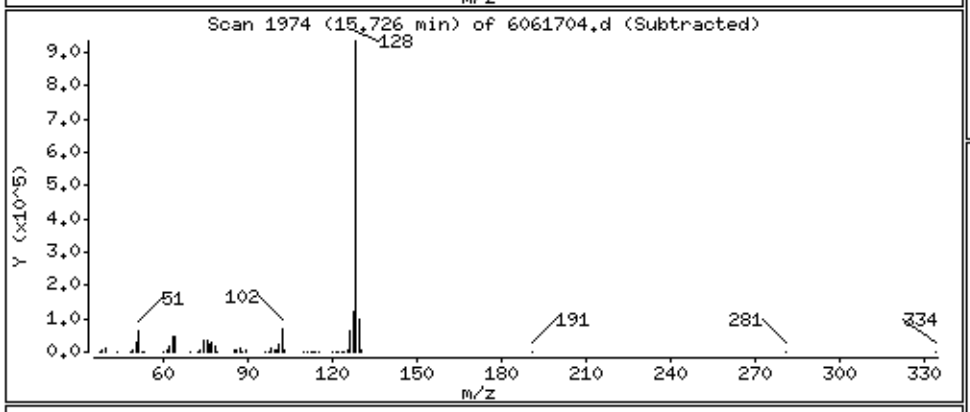
Column phase: RTx-624

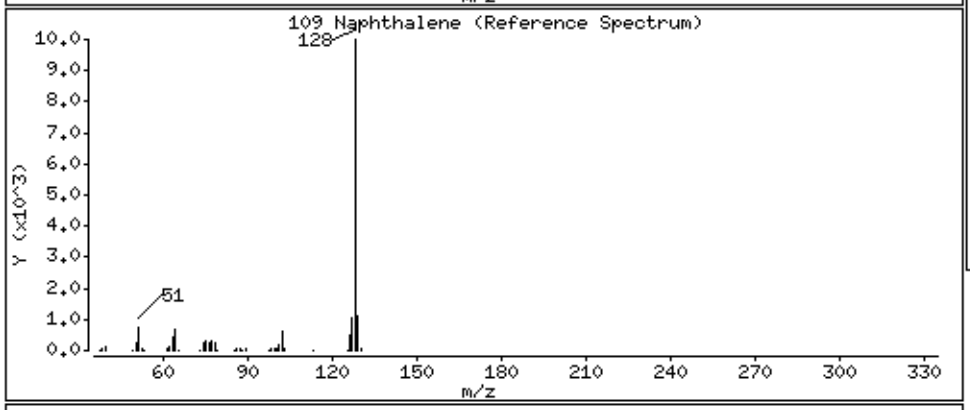
Column diameter: 0.53

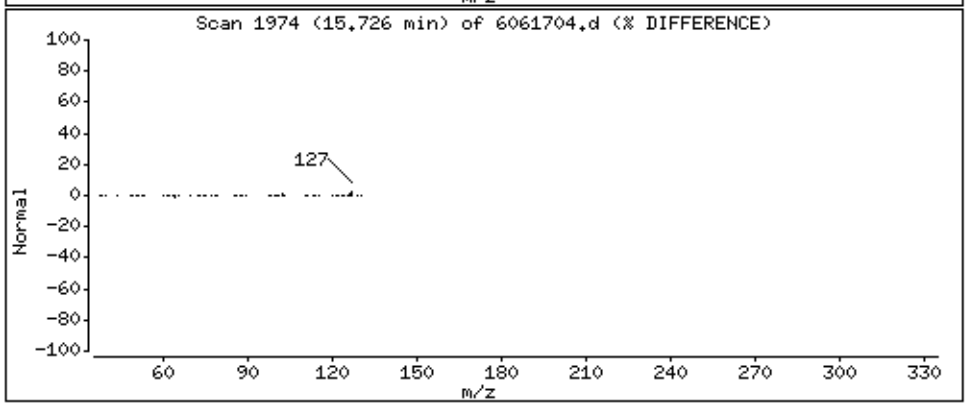
109 Naphthalene

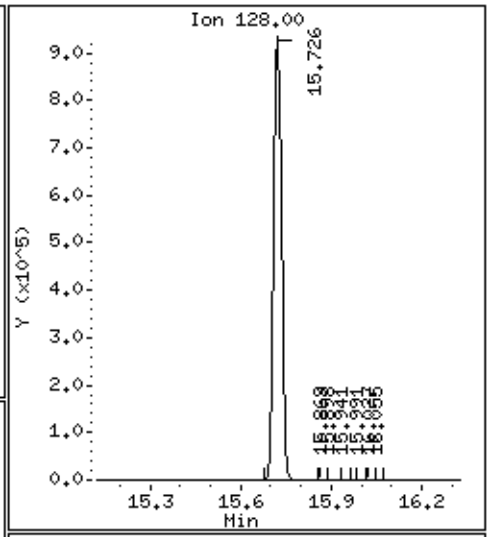
Concentration: 58.211 NG

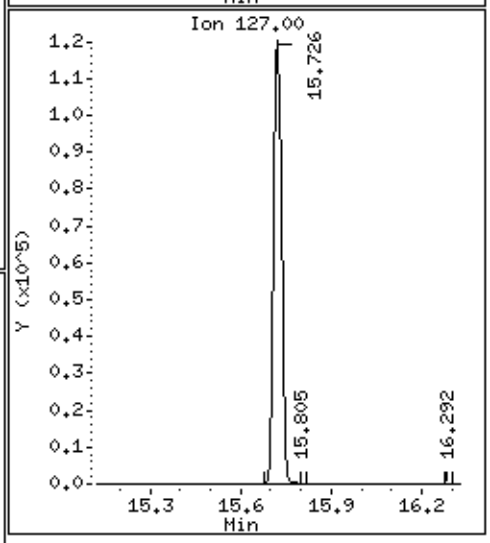












Data File: /chem/msd6.i/17jun16.b/6061704.d

Date : 17-JUN-2016 12:17

Client ID: LCSD

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCSD;LCSD

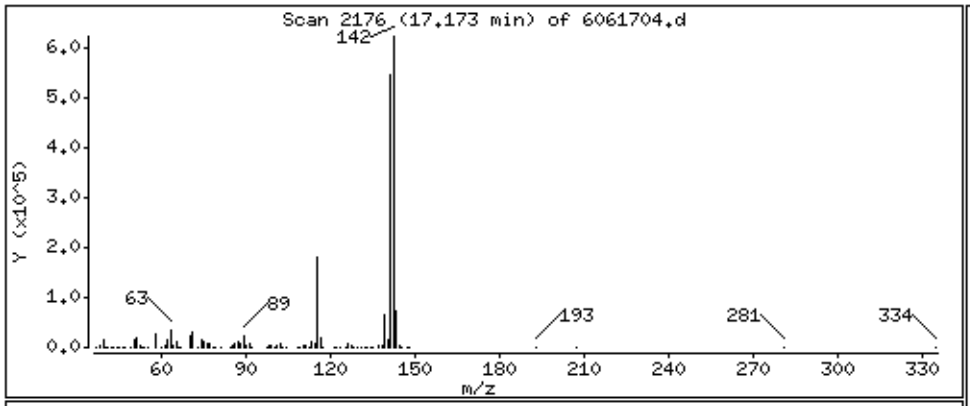
Operator: CT

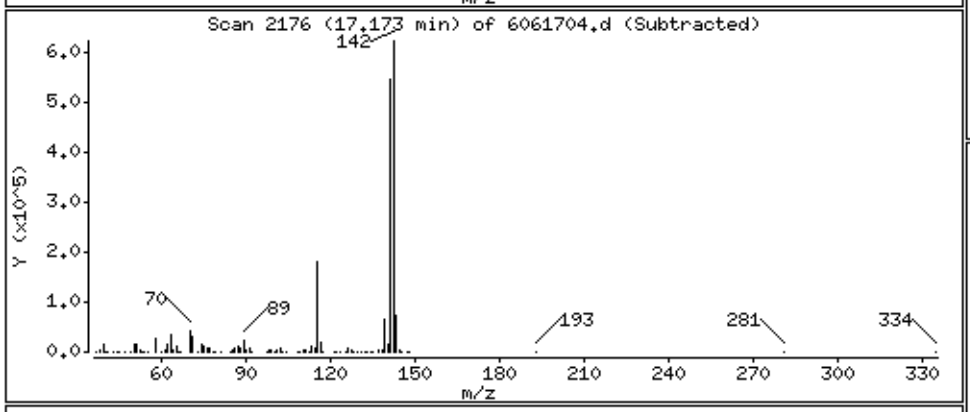
Column phase: RTx-624

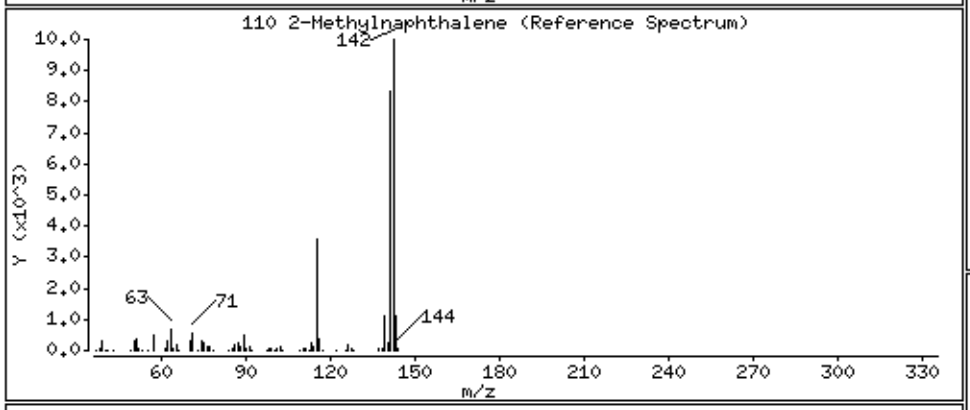
Column diameter: 0.53

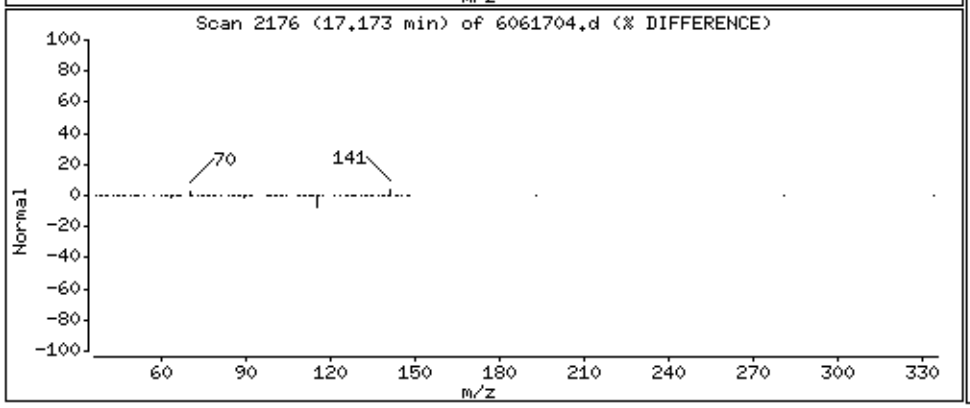
110 2-Methylnaphthalene

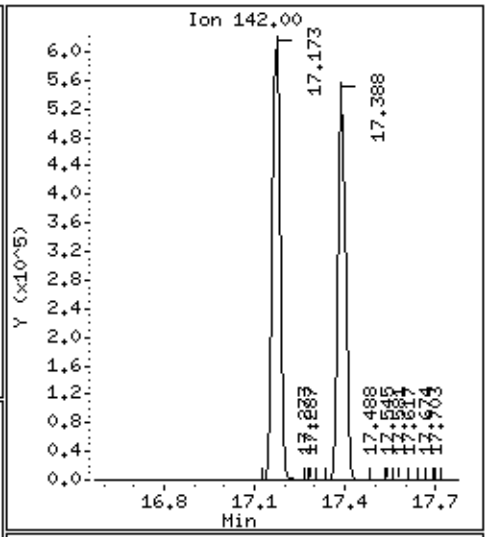
Concentration: 56.424 NG

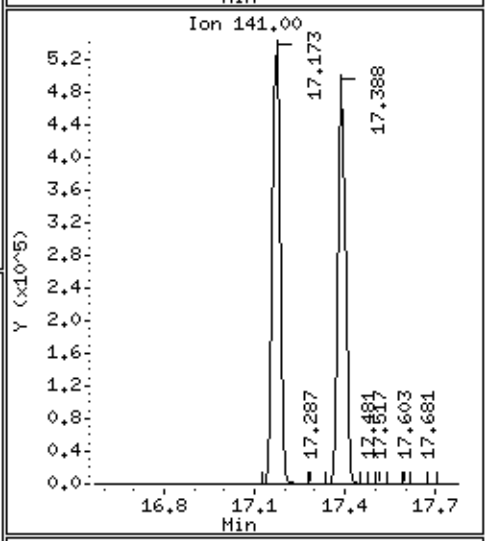


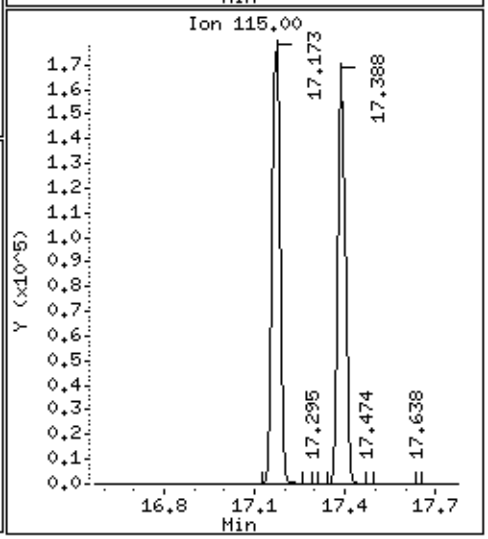












Data File: /chem/msd6.i/17jun16.b/6061704.d

Date : 17-JUN-2016 12:17

Client ID: LCSD

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCSD;LCSD

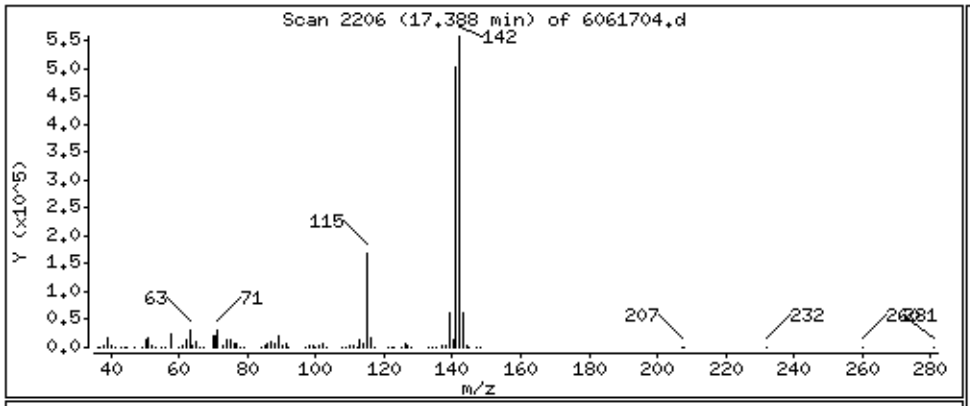
Operator: CT

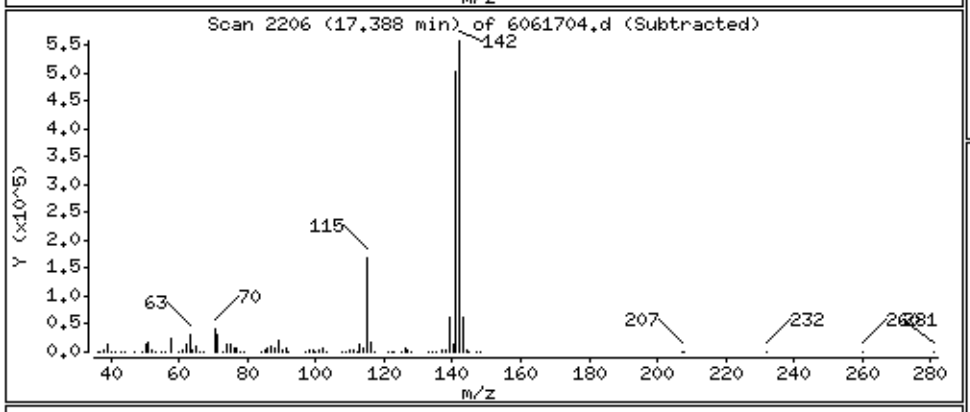
Column phase: RTx-624

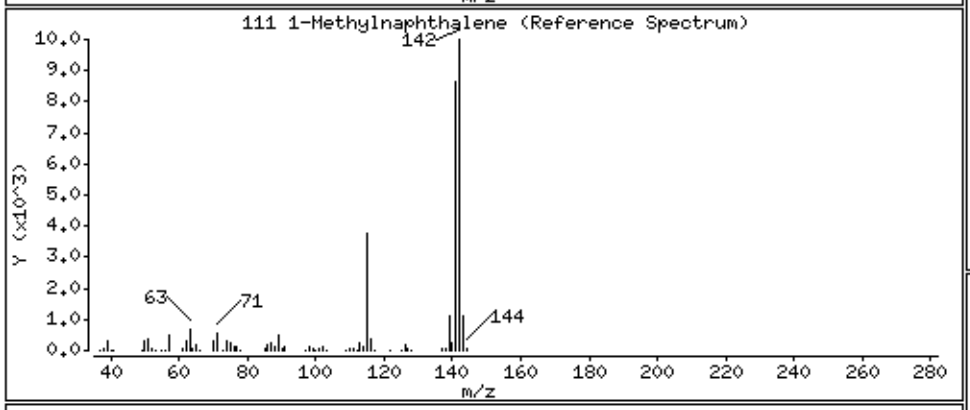
Column diameter: 0.53

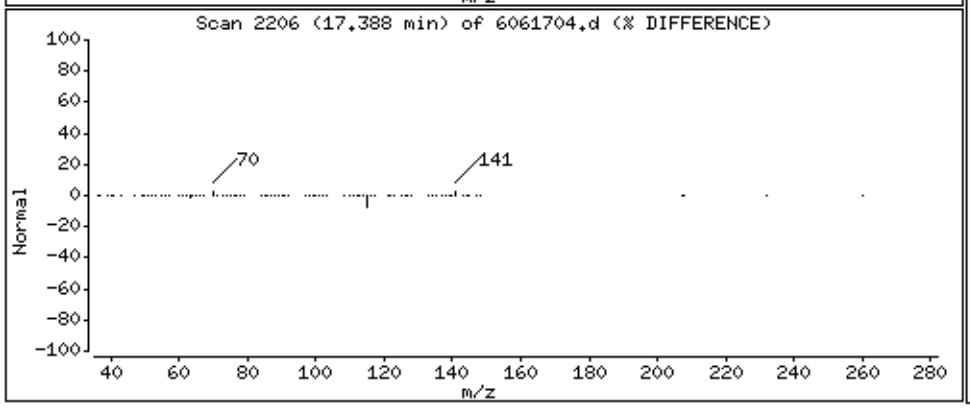
111 1-Methylnaphthalene

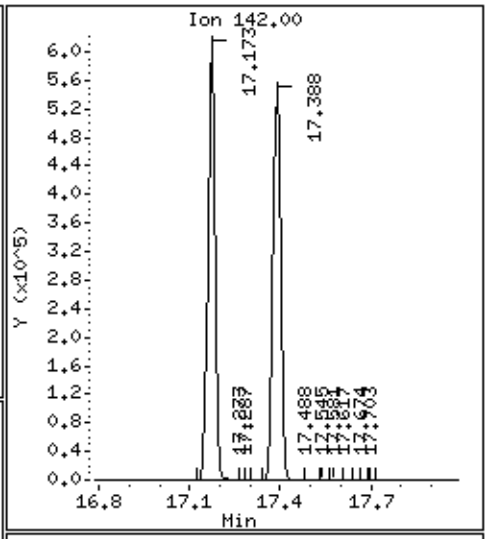
Concentration: 55.533 NG

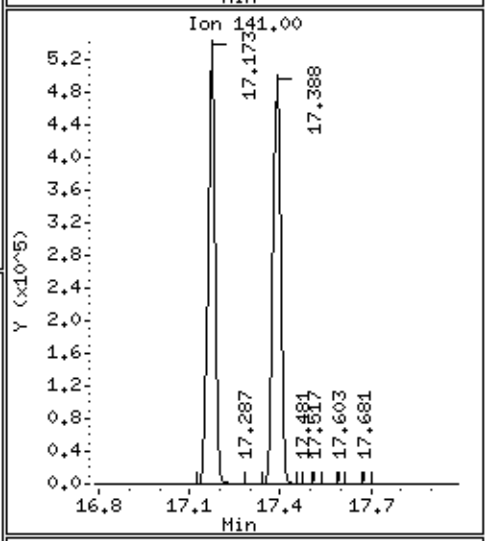


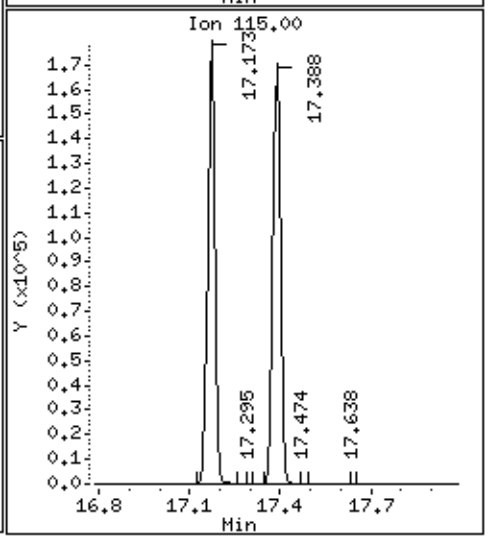












Data File: /chem/msd6.i/17jun16.b/6061704.d

Date : 17-JUN-2016 12:17

Client ID: LCSD

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCSD;LCSD

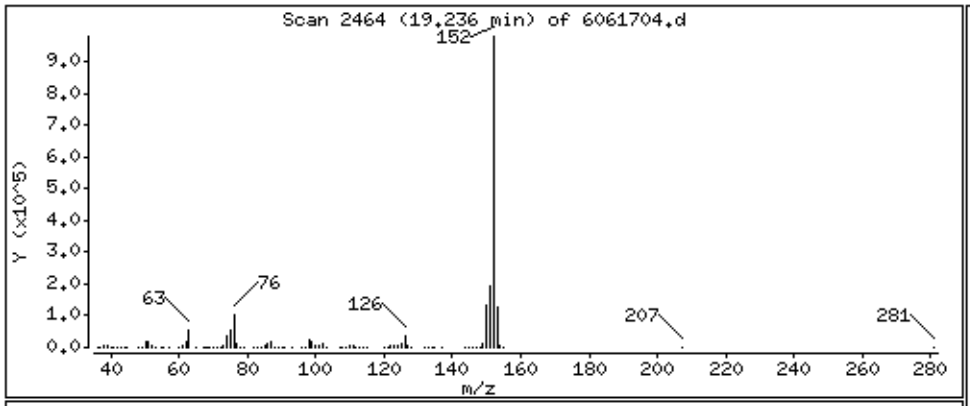
Operator: CT

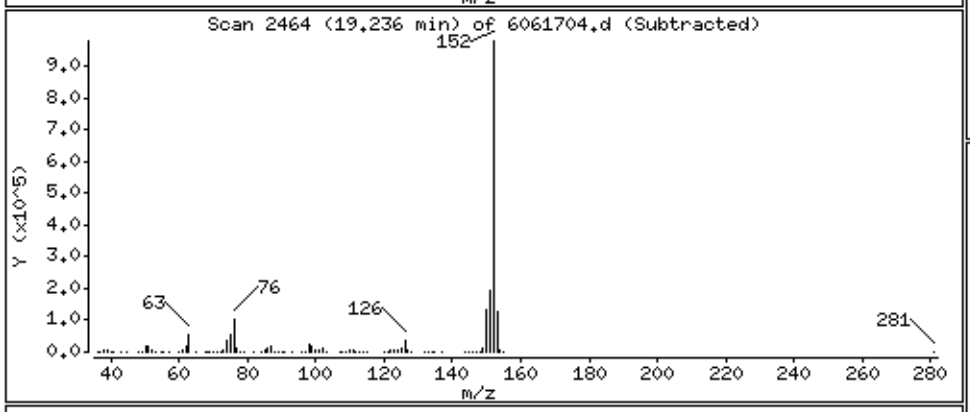
Column phase: RTx-624

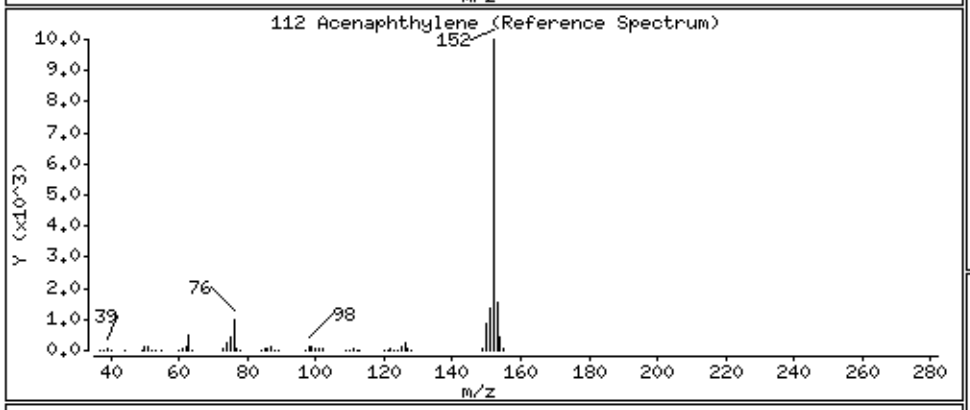
Column diameter: 0.53

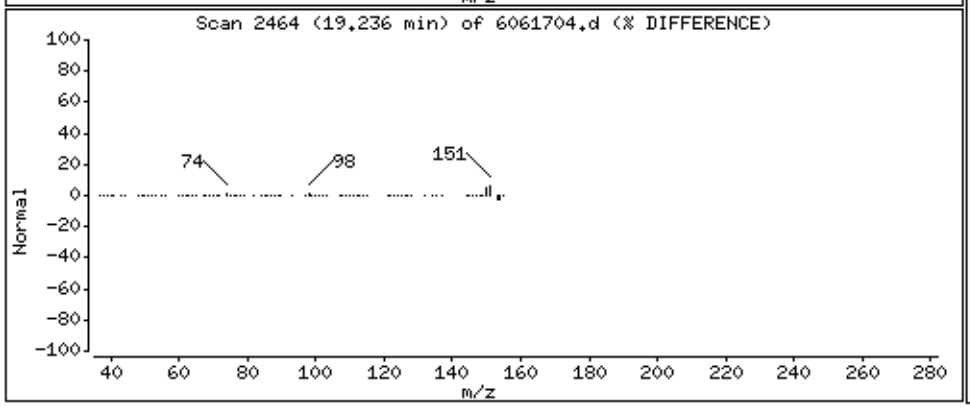
112 Acenaphthylene

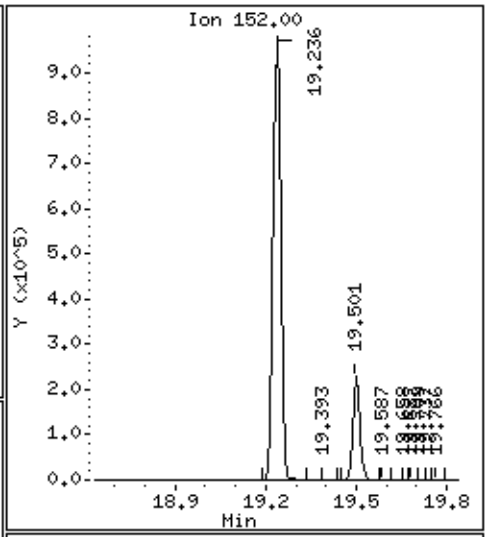
Concentration: 55.170 NG

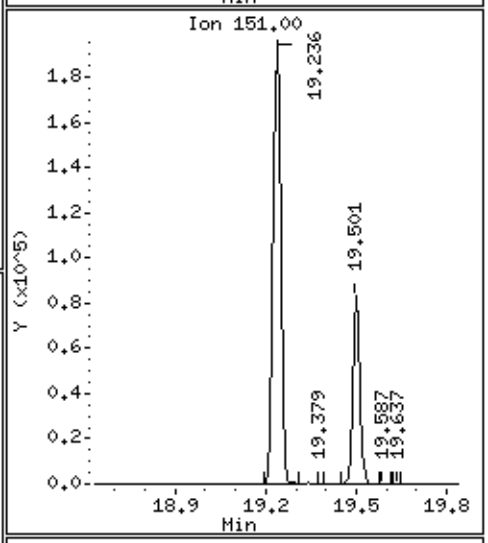


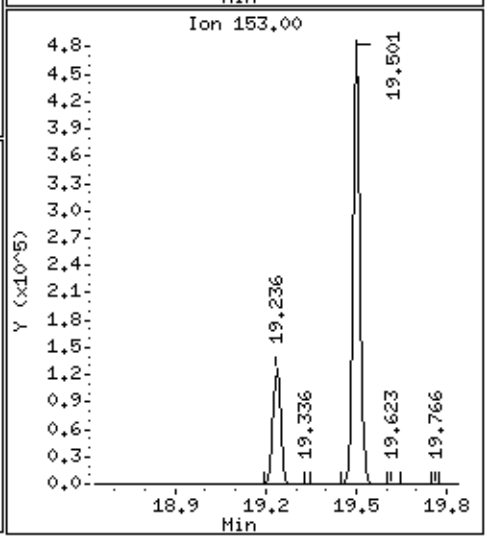












Data File: /chem/msd6.i/17jun16.b/6061704.d

Date : 17-JUN-2016 12:17

Client ID: LCSD

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCSD;LCSD

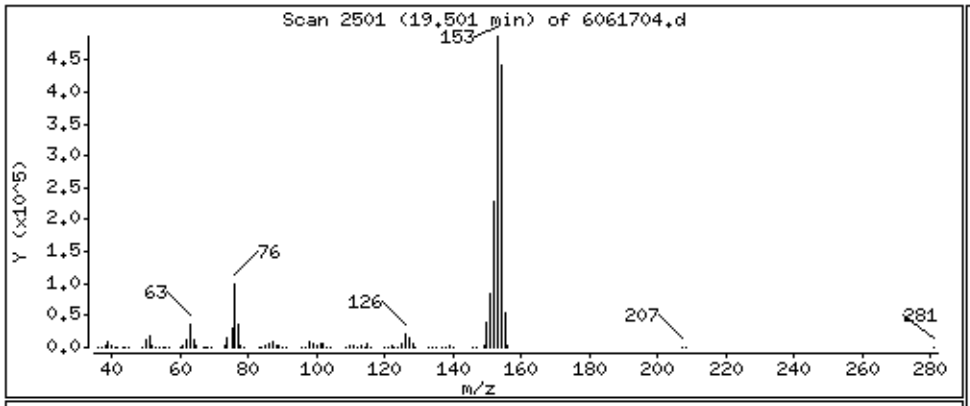
Operator: CT

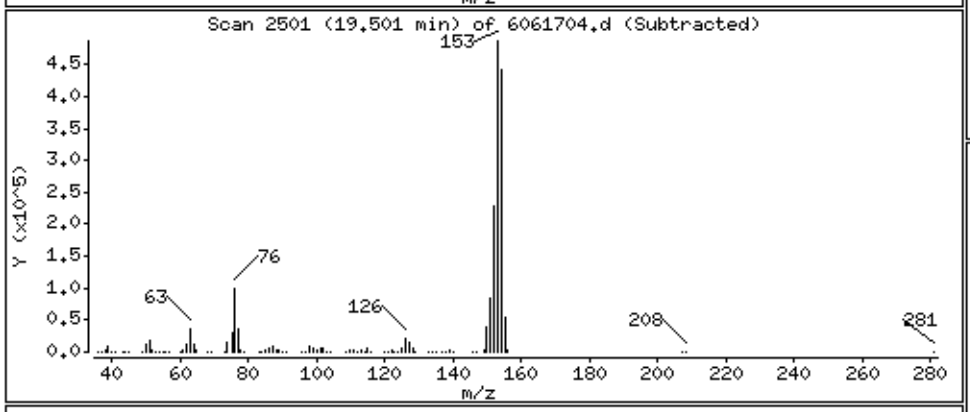
Column phase: RTx-624

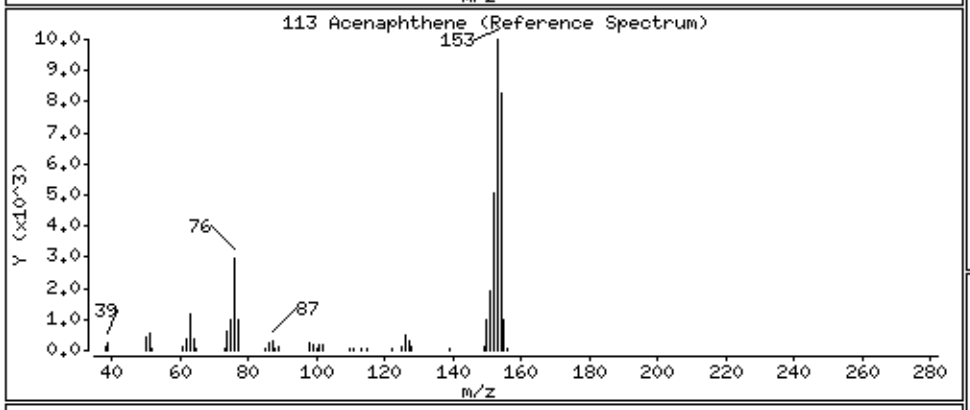
Column diameter: 0.53

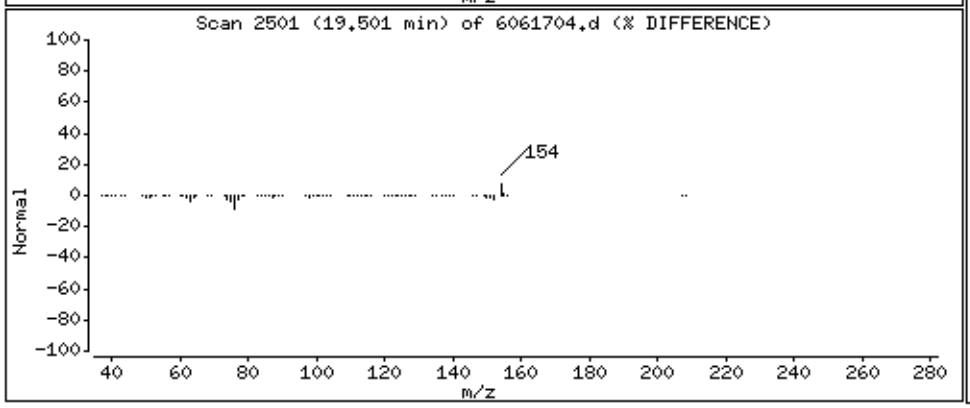
113 Acenaphthene

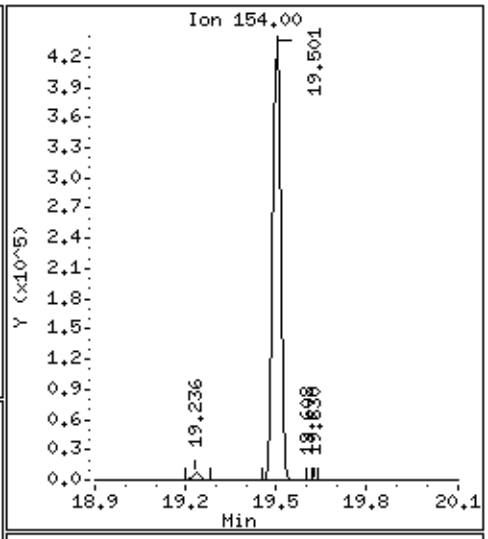
Concentration: 52.506 NG

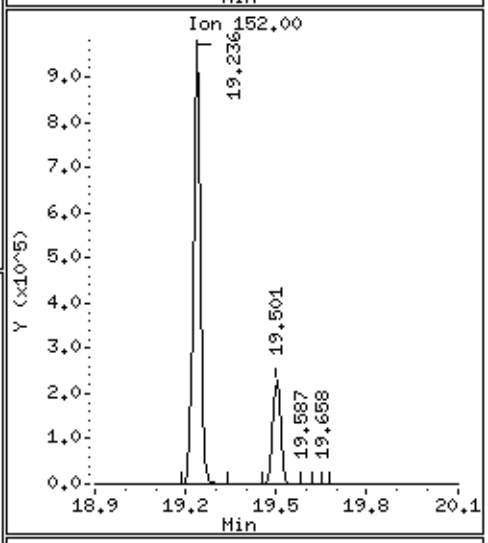


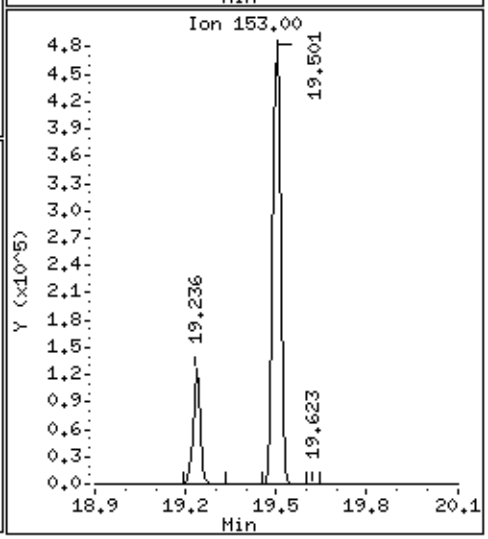












Data File: /chem/msd6.i/17jun16.b/6061704.d

Date : 17-JUN-2016 12:17

Client ID: LCSD

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCSD;LCSD

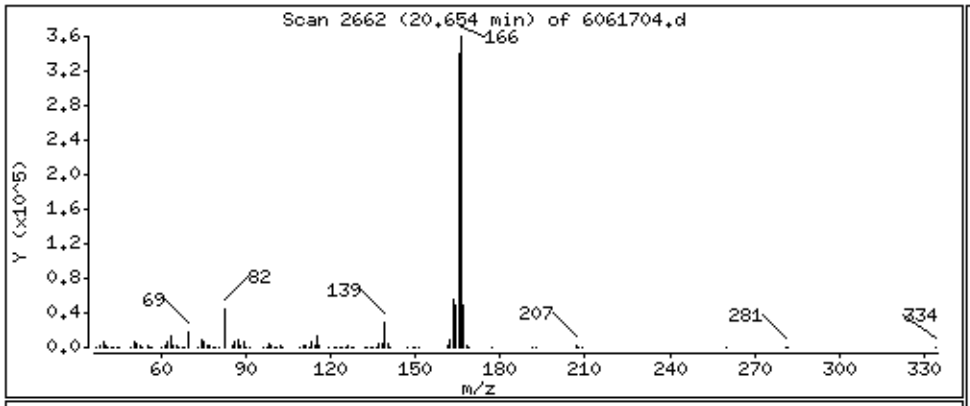
Operator: CT

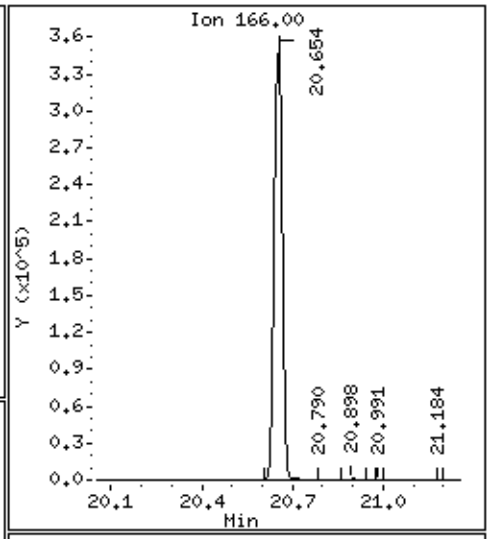
Column phase: RTx-624

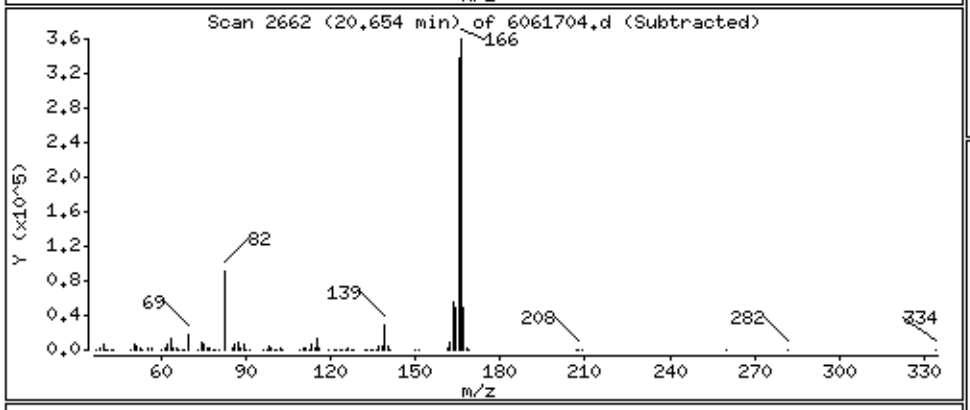
Column diameter: 0.53

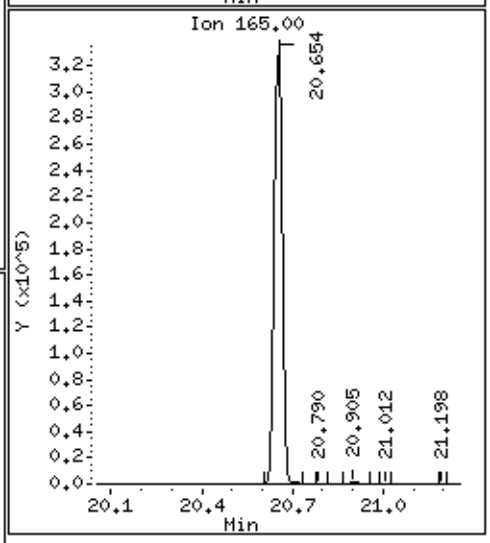
114 Fluorene

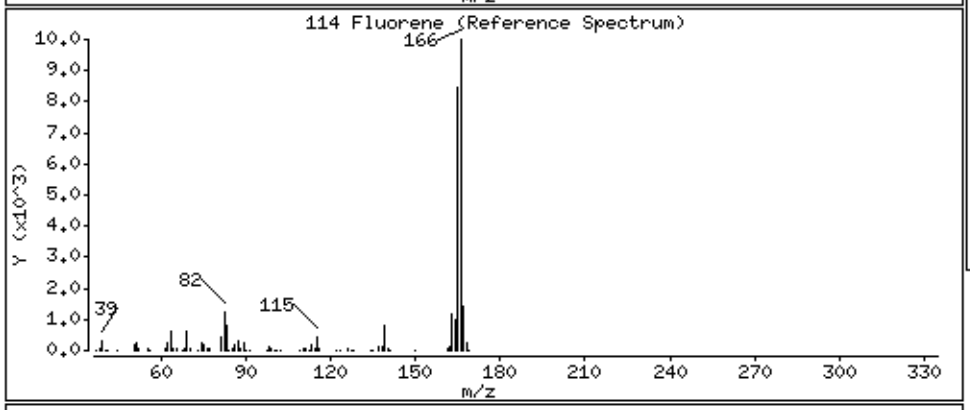
Concentration: 50.800 NG

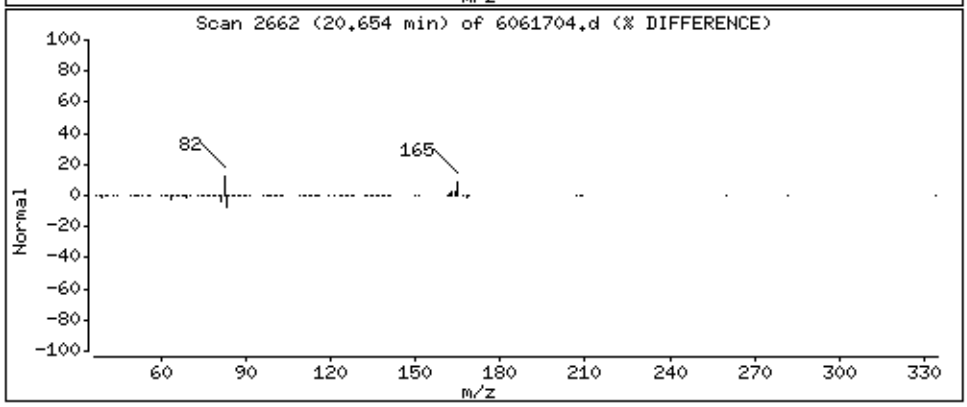












Data File: /chem/msd6.i/17jun16.b/6061704.d

Date : 17-JUN-2016 12:17

Client ID: LCSD

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCSD;LCSD

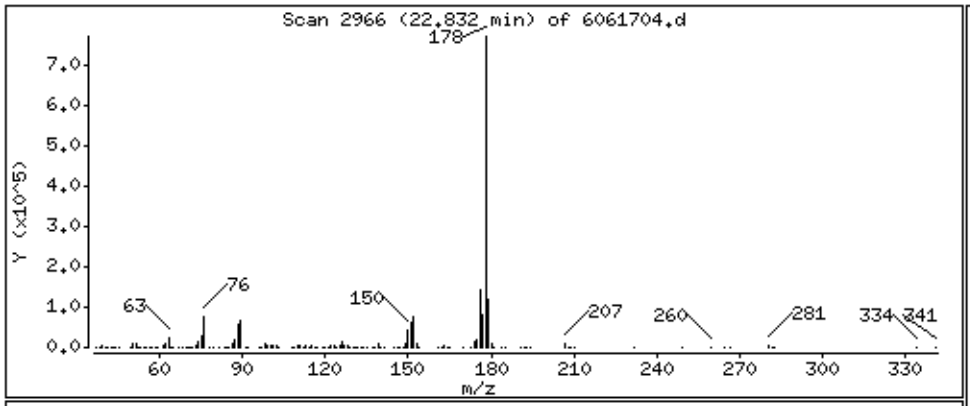
Operator: CT

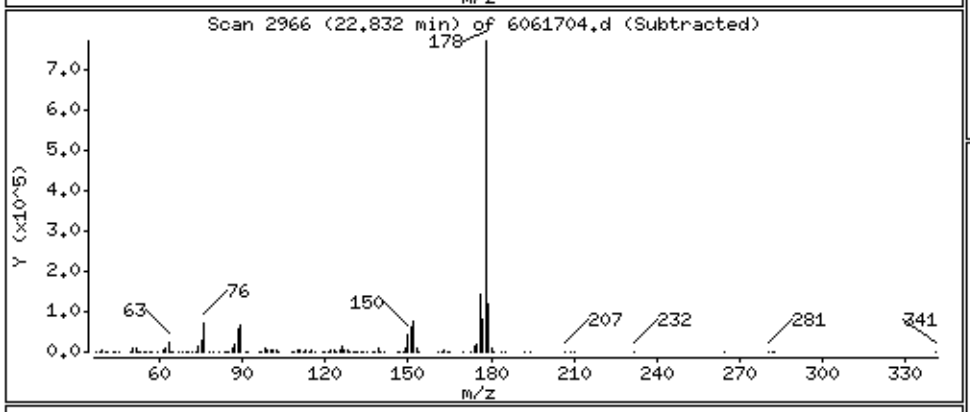
Column phase: RTx-624

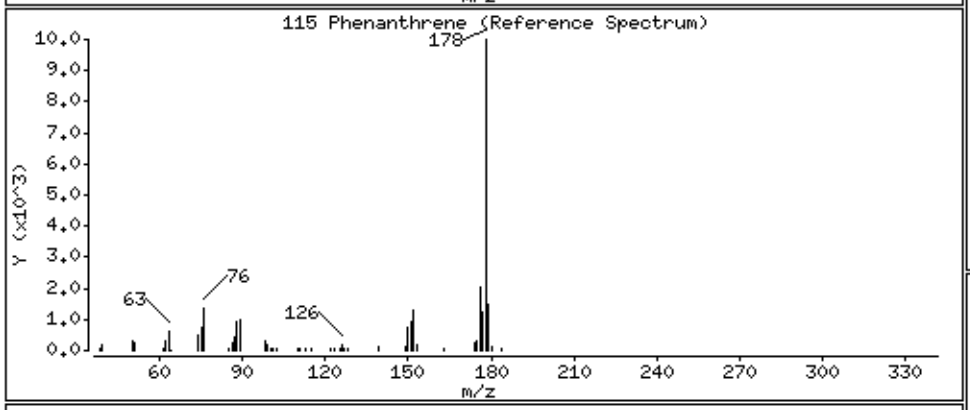
Column diameter: 0.53

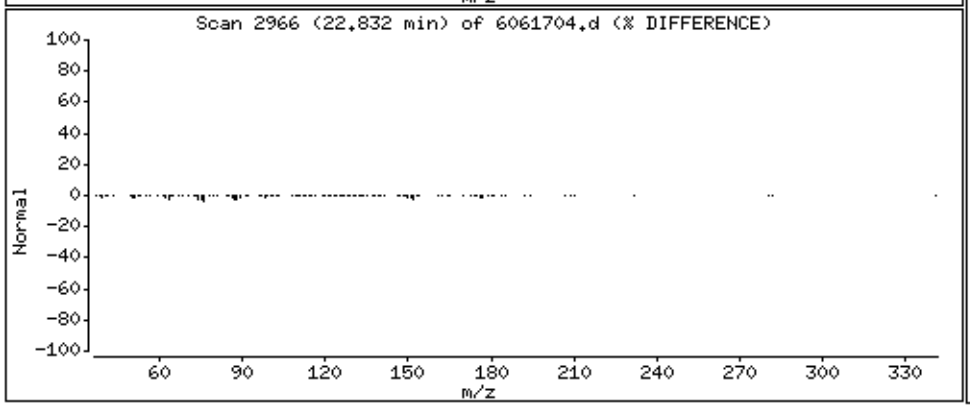
115 Phenanthrene

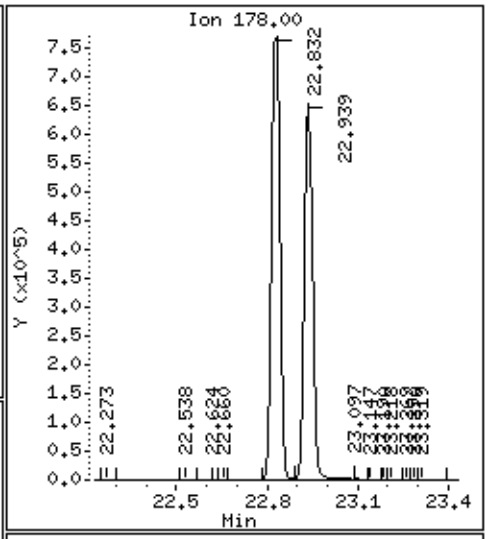
Concentration: 47.060 NG

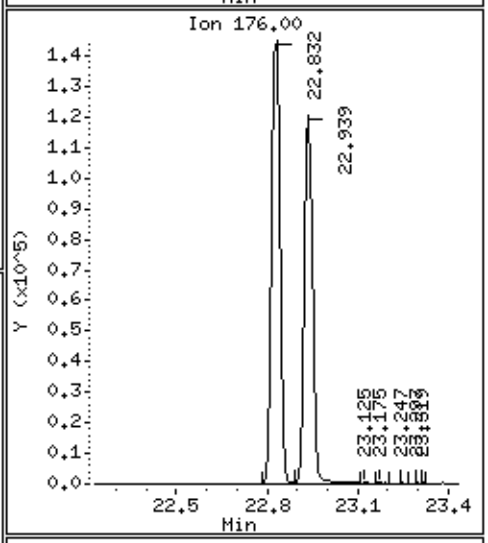


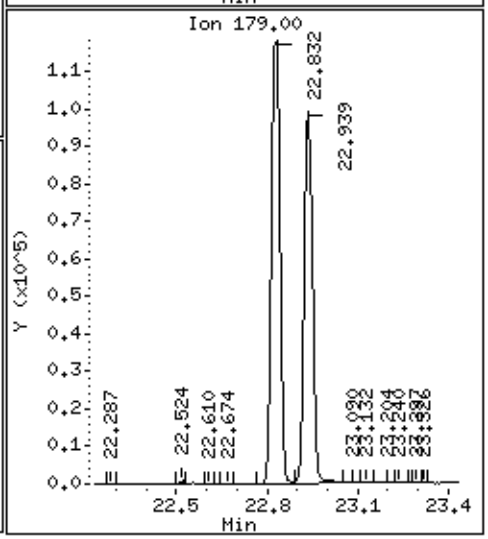












Data File: /chem/msd6.i/17jun16.b/6061704.d

Date : 17-JUN-2016 12:17

Client ID: LCSD

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCSD;LCSD

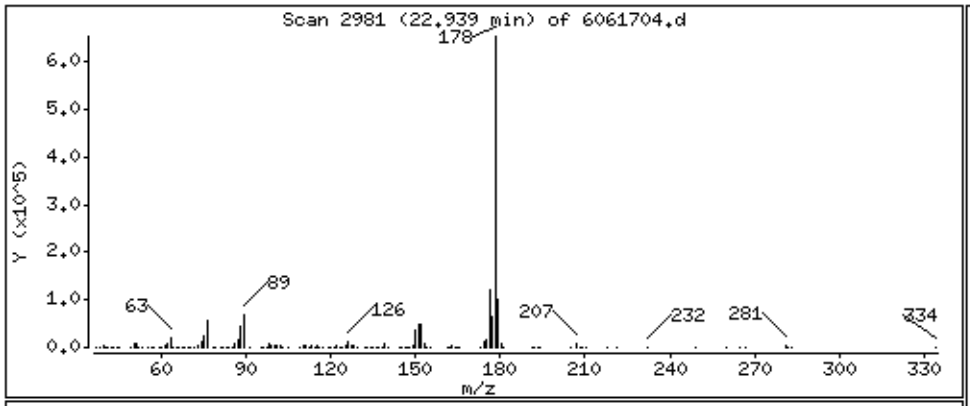
Operator: CT

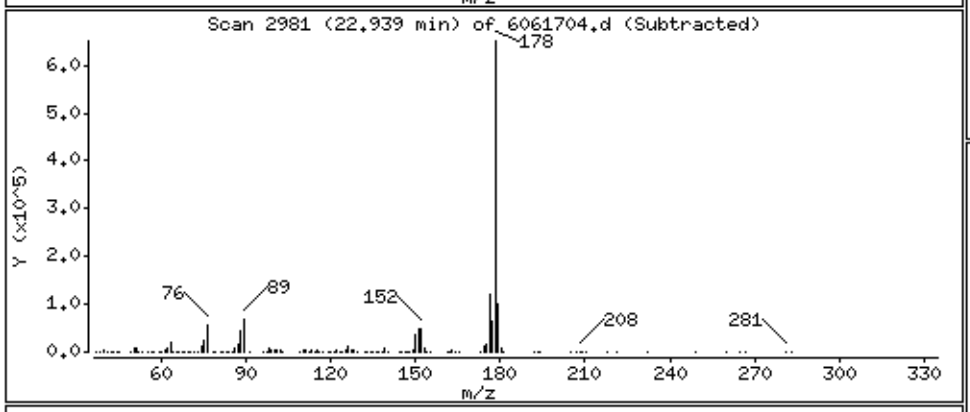
Column phase: RTx-624

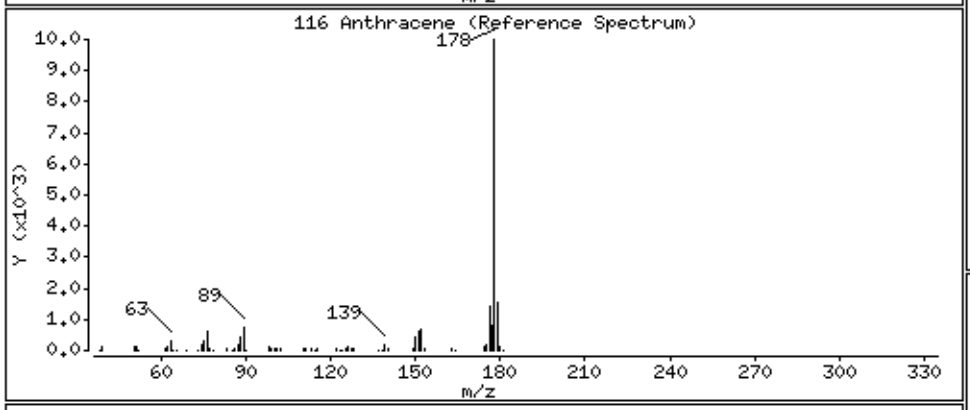
Column diameter: 0.53

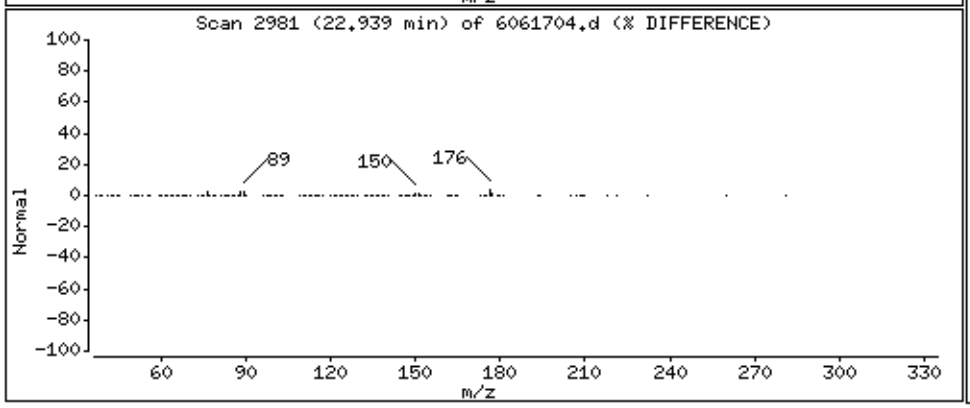
116 Anthracene

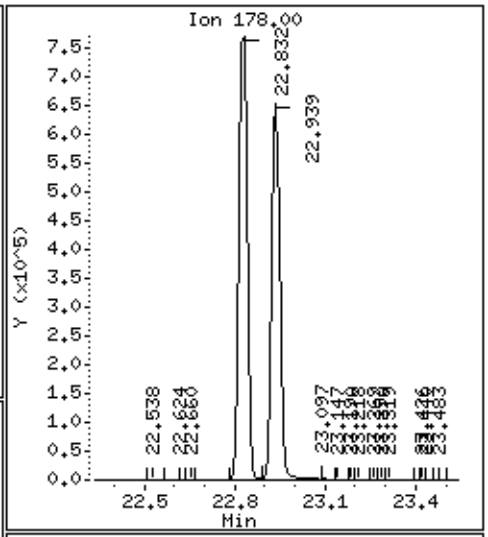
Concentration: 46.505 NG

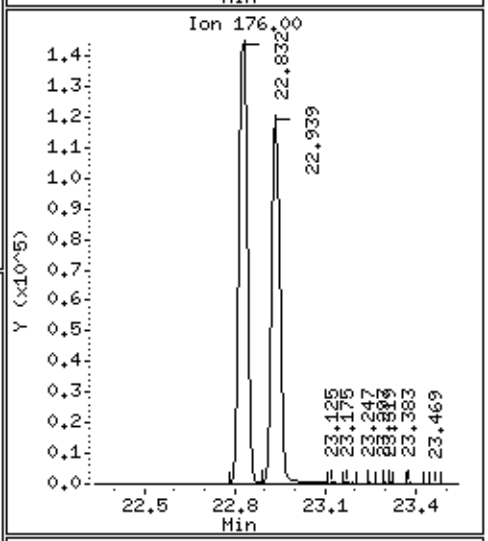


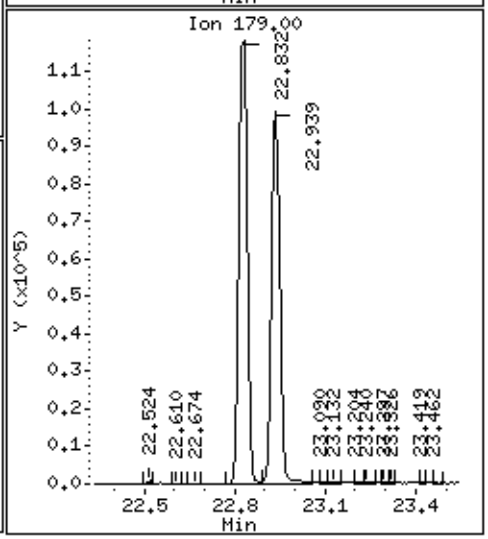












Data File: /chem/msd6.i/17jun16.b/6061704.d

Date : 17-JUN-2016 12:17

Client ID: LCSD

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCSD;LCSD

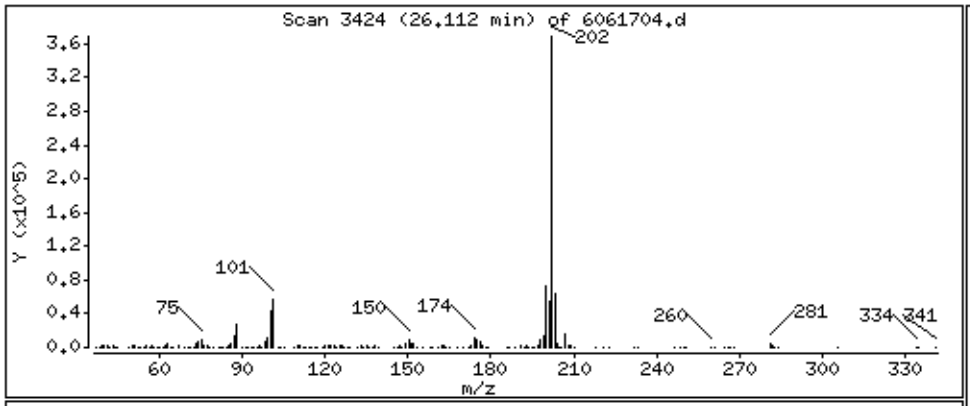
Operator: CT

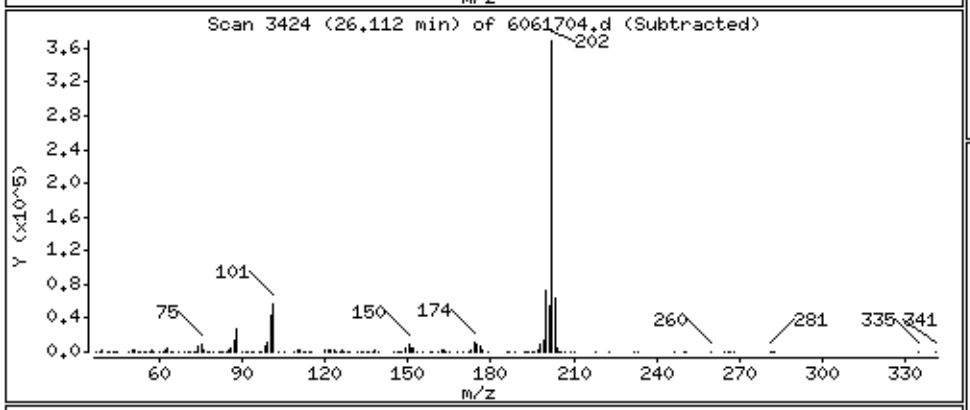
Column phase: RTx-624

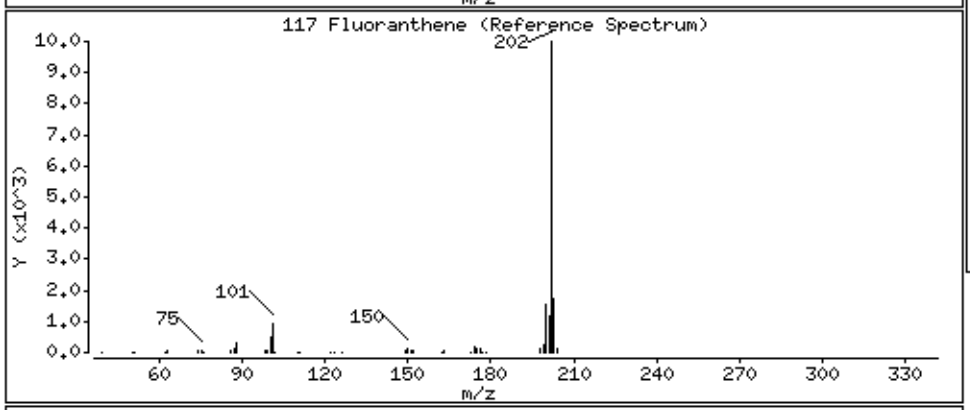
Column diameter: 0.53

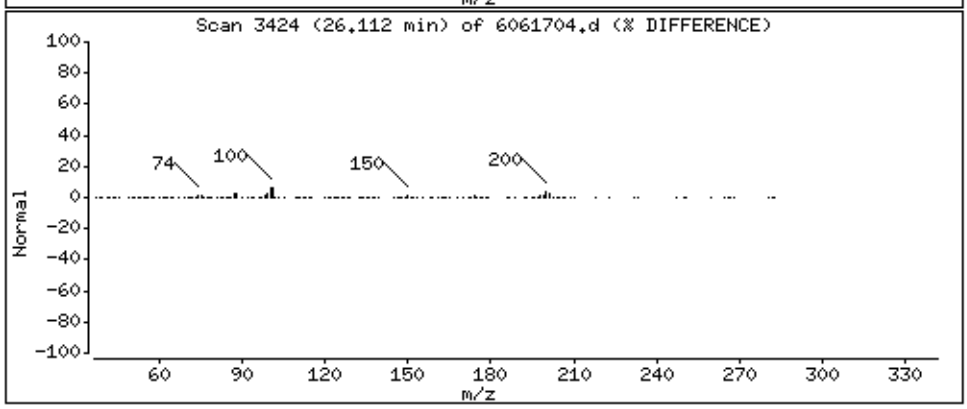
117 Fluoranthene

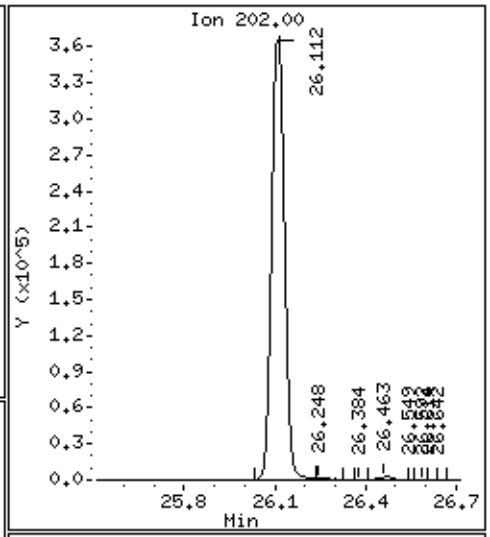
Concentration: 50.762 NG

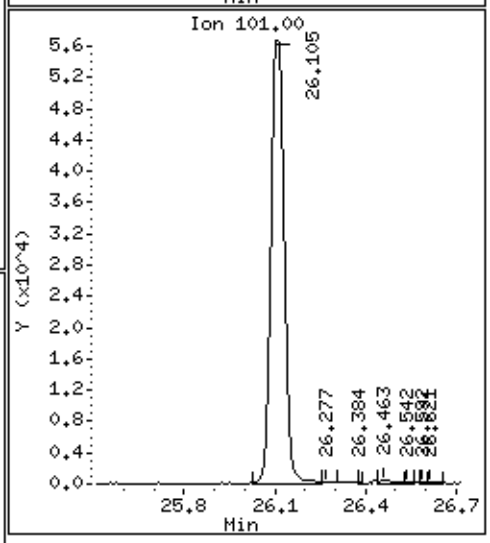












Data File: /chem/msd6.i/17jun16.b/6061704.d

Date : 17-JUN-2016 12:17

Client ID: LCSD

Instrument: msd6.i

Sample Info: ;VI VOC+PAH LCSD;LCSD

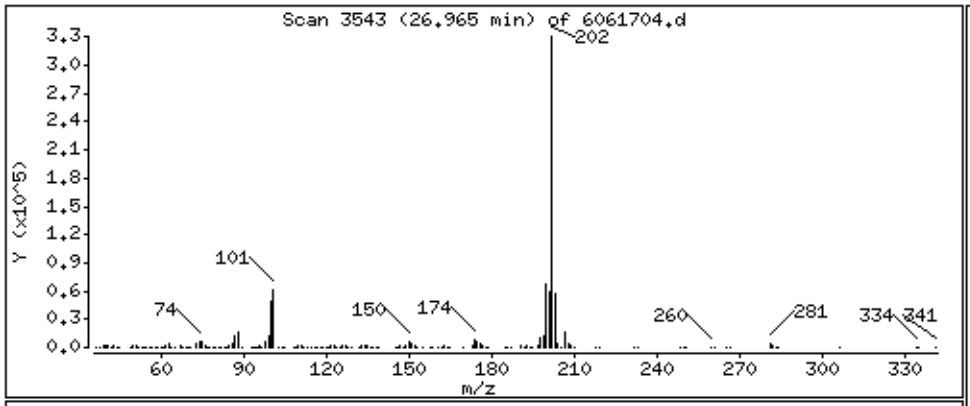
Operator: CT

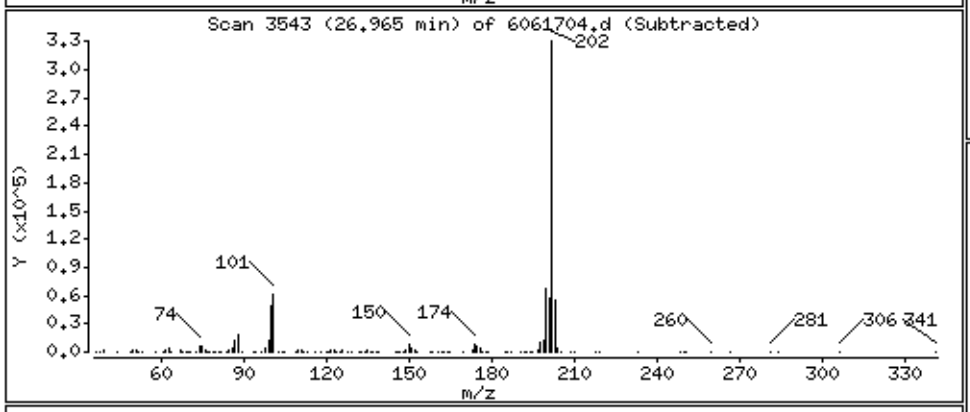
Column phase: RTx-624

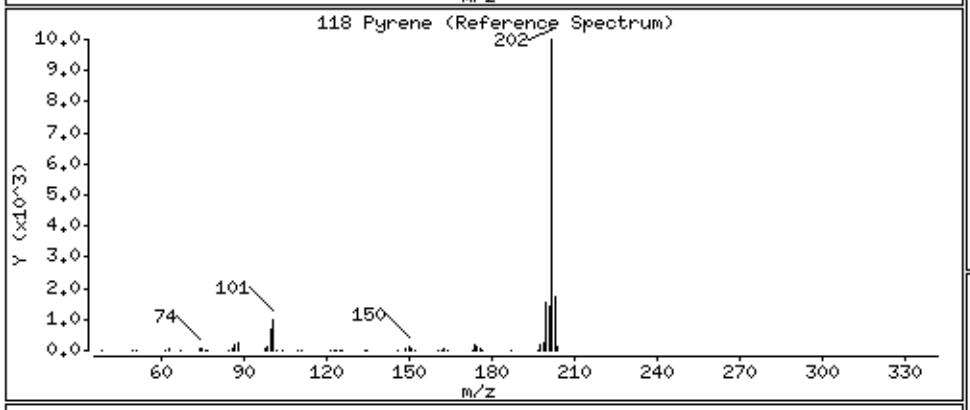
Column diameter: 0.53

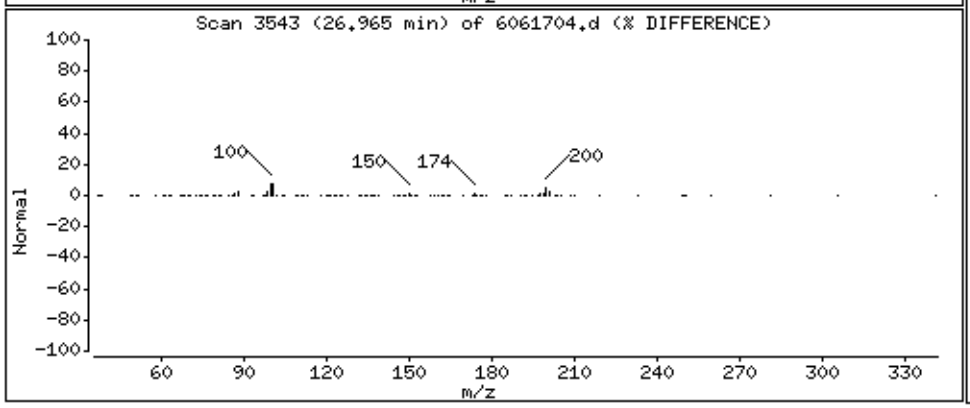
118 Pyrene

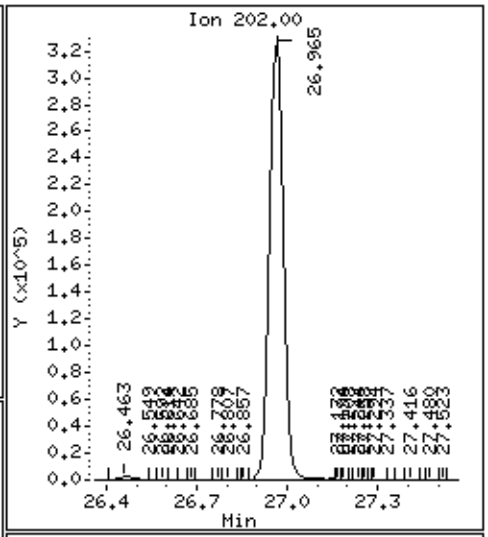
Concentration: 48.641 NG

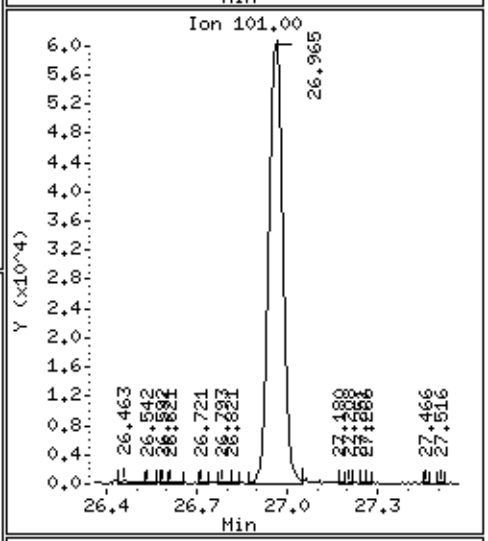


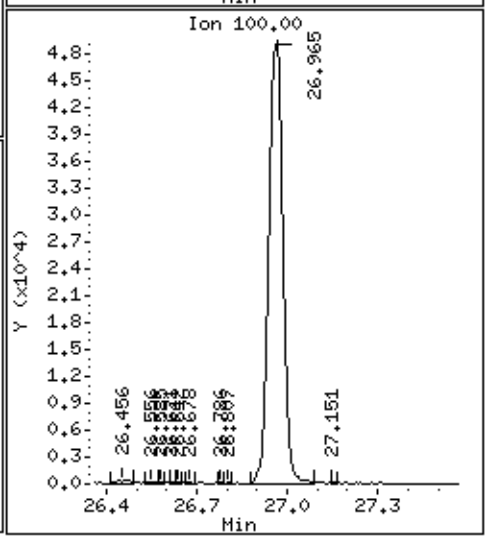












@ Air Toxics Ltd. Run Log for MSD-6 Method TO14 & TO15
BFB verification of 176/174 Ratio: (243392/252096)×100% = 96.55%
Standard ID 1476-2872 Exp. date 5/4/18
Bromochloromethane 155566 File ID: 6061503.d Bromofluorobenzene 417214
1,4-Difluorobenzene 608468 Compound: Naphthalene
Chlorobenzene-d5 578034 InitialIS: ct
Verification CCV IS vs ICAL mid-point (-40%)
Calculation Check:

$$\text{ppbv of compound} = \frac{\text{Area of sample}}{\text{Area of IS}} * \frac{\text{Concentration of IS}}{\text{RRF}} = \left(\frac{1292702}{417214}\right) * \left(\frac{36.0}{2.00219}\right) = 55.710$$

Method: 6168 0614 Vim

Data Directory: C:\msdchem\1\DATA\15JUN16.B\

Use	SampleName		Port pos.	Injection Time		Init.
1) ✓	6061501.D Comments					
;BFB;BFB		1476-2872, 36ng (5/4/18)	1	15 Jun 2016	9:38	ct
2) ✓	6061502.D Comments					
;VI ICAL1,1.0Surr		2516-246-1ml(9/10/16),274	12	15 Jun 2016	11:01	
3) ✓	6061503.D Comments					
;VI VOC+PAH CCV;CCV		2516-246-20ml(9/10/16),27	1	15 Jun 2016	12:15	
4) ✗	6061504.D Comments	%R of Fluorene > 150%				
;VI VOC+PAH LCS;LCS		2516-245-20ml(9/7/16),274	2	15 Jun 2016	12:54	
5) ✗	6061505.D Comments	not used, %R of Fluorene > 150%				
;VI VOC+PAH LCSD;LCSD		2516-245-20ml(9/7/16),274	2	15 Jun 2016	13:34	
6) ✓	6061506.D Comments	%R of Fluorene = 147.92%				
;VI VOC+PAH ICV/LCS;LCS		2516-245-20ml(9/7/16),274	12	15 Jun 2016	14:25	
7) ✓	6061507.D Comments					
;VI VOC+PAH LCSD;LCSD		2516-245-20ml(9/7/16),274	12	15 Jun 2016	15:05	
8) ✓	6061508.D Comments					
;Lab Blank;Lab Blank		G0139970	11	15 Jun 2016	15:45	
9) ✓	6061509.D Comments					
;1606243-01A		G0153248	31	15 Jun 2016	16:59	
10) ✓	6061510.D Comments					
;1606243-02A		G0143706	32	15 Jun 2016	17:41	
11) ✓	6061511.D Comments					
;1606243-03A		G0143404	33	15 Jun 2016	18:20	
12)	6061512.D Comments	IS (1,4-DFB and Chlorobenzene-d5) ↑				
;1606243-04A		G0160972	34	15 Jun 2016	19:00	
13) ✓	6061513.D Comments					
;1606243-05A		G0149175	35	15 Jun 2016	19:40	
14)	6061514.D Comments	IS (CB-d5) ↑				
;1606243-06A		G0153856	36	15 Jun 2016	20:20	
15)	6061515.D Comments	IS (1,4-DFB and CB-d5) ↑				
;1606243-07A		G0132057	37	15 Jun 2016	21:00	
16) ✓	6061516.D Comments					
;Blank		G0139970	11	15 Jun 2016	21:39	
17) ✓	6061517.D Comments					
;1606272-09A		G0141302	41	15 Jun 2016	22:19	

Clarissa 6/16/16

18) ✓	6061518.D	Comments				ct
;1606272-10A		G0148999	42	15 Jun 2016	22:59	
19) ✓	6061519.D	Comments				
;1606272-11A		G0143671	43	15 Jun 2016	23:39	
20) ✓	6061520.D	Comments				
;1606272-12A		G0143423	44	16 Jun 2016	00:19	
21) ✓	6061521.D	Comments				
;1606272-13A		G0153666	45	16 Jun 2016	00:58	
22) ✓	6061522.D	Comments				
;1606272-14A		G0153605	46	16 Jun 2016	1:38	
23) ✓	6061523.D	Comments				
;1606272-15A		G0147006	47	16 Jun 2016	2:18	
24) ✓	6061524.D	Comments				
;1606272-16A		G0147226	48	16 Jun 2016	2:58	
25) ✓	6061525.D	Comments				
;Blank		G0132038	12	16 Jun 2016	3:37	
26) ✓	6061526.D	Comments Not for TPH				
;VI Tube Cert		G0139970	11	16 Jun 2016	4:17	
27) ✓	6061527.D	Comments				
;VI Tube Cert		G0132038	12	16 Jun 2016	4:57	
28) ✓	6061528.D	Comments				
;VI Tube Cert		G0130921	13	16 Jun 2016	5:36	
29) ✓	6061529.D	Comments				
;VI Tube Cert		G0149287	14	16 Jun 2016	6:16	
30) ✓	6061530.D	Comments				
;VI Tube Cert		G0143406	15	16 Jun 2016	6:56	
31) ✓	6061531.D	Comments				
;VI Tube Cert		G0147011	16	16 Jun 2016	7:35	
	ct 6/16/16					
32) ✓	6061532.D	Comments	17			
;VI Tube Cert		~~G0147011~~ G0143723	~~16~~	16 Jun 2016	7:35	
		ct 6/16/16	ct 6/16/16			

33) 6061601a.D G0145582 18
VI tube cert

Claressat 6/16/16

@ Air Toxics Ltd. Run Log for MSD-6 Method TO14 & TO15

BFB verification of 176/174 Ratio: (277589/285461)x100% = 97.24%

Standard ID 1476-2872 Exp. date 5/4/18

Bromochloromethane 204967 File ID: 6061702

1,4-Difluorobenzene 857366 Compound: Naphthalene

Chlorobenzene-d5 655402 InitialIS: ct

Bromofluorobenzene 469803

Verification CCV IS vs ICAL mid-point (-40%)

Calculation Check:

$$\text{ppbv of compound} = \frac{\text{Area of sample}}{\text{Area of IS}} * \frac{\text{Concentration of IS}}{\text{RRF}} = \left(\frac{1276856}{469803}\right) * \left(\frac{36.0}{2.00219}\right) = 48.868$$

Method: 6167 0614Vi.m

Data Directory: C:\msdchem\1\DATA\17JUN16.B\

Use	SampleName		Port pos.	Injection Time		Init.
1) ✓	6061701.D Comments					
;BFB;BFB		1476-2872, 36ng (5/4/18)	1	17 Jun 2016	9:01	ct
2) ✓	6061702.D Comments	Toluene %D = -32.09988%, 2-Hexanone = -36%				
;VI VOC+PAH CCV;CCV		2516-246-20ml(9/10/16),27	2	17 Jun 2016	9:49	
3) ✓	6061703.D Comments					
;VI VOC+PAH LCS;LCS		2516-245-20ml(9/7/16),274	11	17 Jun 2016	11:37	
4) ✓	6061704.D Comments	%RPD of Styrene = 24% > 20%, ~~2 hexanone %D = 36%~~ 6/20/16 ct				
;VI VOC+PAH LCSD;LCSD		2516-245-20ml(9/7/16),274	11	17 Jun 2016	12:17	
5) ✓	6061705.D Comments					
;DP Lab Blank;Lab Blank		G0137108	3	17 Jun 2016	13:11	
6) ✓	6061706.D Comments					
;1606243-04A		G0160972, reanalysis	34	17 Jun 2016	14:40	
7) ✓	6061707.D Comments					
;1606243-06A		G0153856, reanalysis	36	17 Jun 2016	15:20	
8) ✓	6061708.D Comments					
;1606243-07A		G0132057, reanalysis	37	17 Jun 2016	16:00	
9) ✓	6061709.D Comments					
;Blank			1	17 Jun 2016	16:40	
10) ✓	6061710.D Comments					
;1606272-01A		G0150557	51	17 Jun 2016	17:19	
11) ✓	6061711.D Comments					
;1606272-02A		G0143596	52	17 Jun 2016	17:59	
12) ✓	6061712.D Comments					
;1606272-03A		G0145511	53	17 Jun 2016	18:39	
13) ✓	6061713.D Comments					
;1606272-04A		G0184971	54	17 Jun 2016	19:18	
14) ✓	6061714.D Comments					
;1606272-05A		G0154191	55	17 Jun 2016	19:58	
15) ✓	6061715.D Comments					
;1606272-06A		G0147322	56	17 Jun 2016	20:38	
16) ✓	6061716.D Comments					
;1606272-07A		G0143780	57	17 Jun 2016	21:17	
17) ✓	6061717.D Comments					
;1606272-08A		G0147216	58	17 Jun 2016	21:57	

Reviewed 6/20/16

Eurofins Air Toxics Inc.

Data file : /chem/msd6.i/14jun16a.b/6061407.d
Lab Smp Id: Client Smp ID: BFB
Inj Date : 14-JUN-2016 09:33
Operator : CT Inst ID: msd6.i
Smp Info : ;BFB;BFB
Misc Info : 1476-2872, 36ng (5/4/18)
Comment :
Method : /chem/msd6.i/14jun16a.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		
11.428	11.478	-0.050	95	217088			100.00- 100.00	100.00
11.428	11.478	-0.050	50	32709			8.00- 40.00	15.07
11.428	11.478	-0.050	75	92205			30.00- 66.00	42.47
11.428	11.478	-0.050	96	14425			5.00- 9.00	6.64
11.428	11.478	-0.050	173	0			0.00- 1.99	0.00
11.428	11.478	-0.050	174	215082			50.00- 120.00	99.08
11.428	11.478	-0.050	175	16080			4.00- 9.00	7.48
11.428	11.478	-0.050	176	209685			93.00- 101.00	97.49
11.428	11.478	-0.050	177	13417			5.00- 9.00	6.40

Data File: /chem/msd6.i/14jun16a.b/6061407.d

Date : 14-JUN-2016 09:33

Client ID: BFB

Instrument: msd6.i

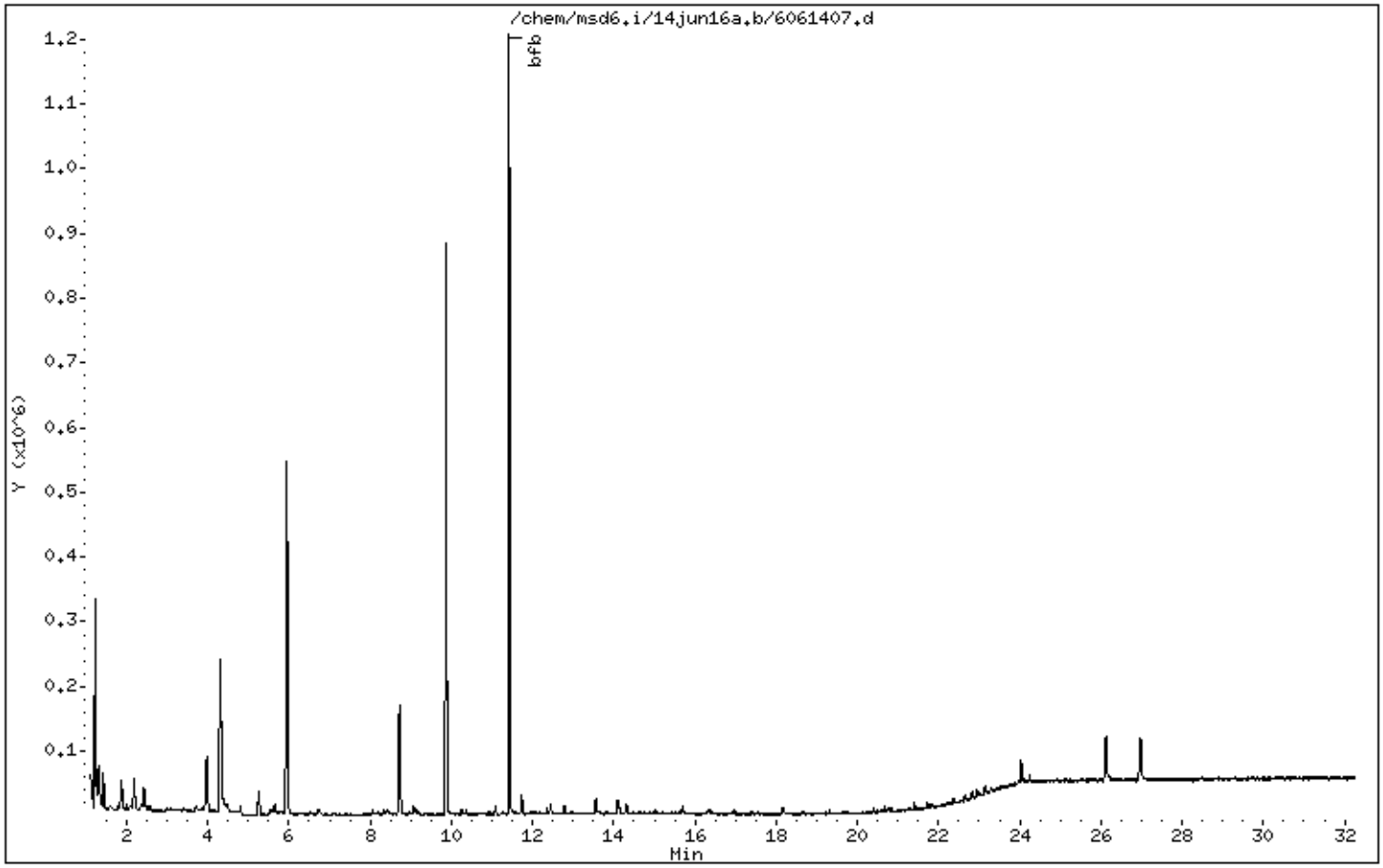
Sample Info: ;BFB;BFB

Volume Injected (uL): 1.0

Operator: CT

Column phase:

Column diameter: 2.00



Data File: /chem/msd6.i/14jun16a.b/6061407.d

Date : 14-JUN-2016 09:33

Client ID: BFB

Instrument: msd6.i

Sample Info: ;BFB;BFB

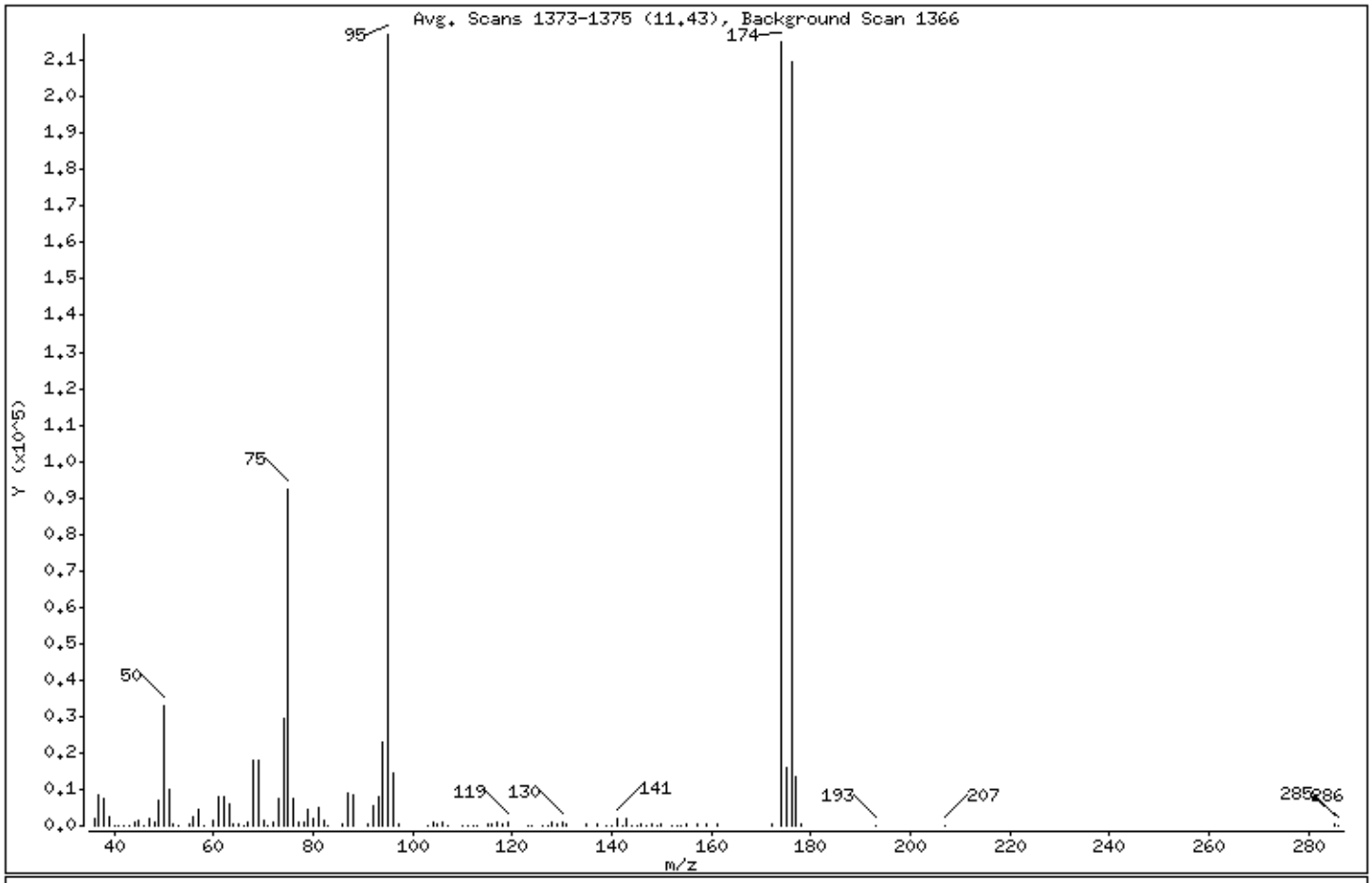
Volume Injected (uL): 1.0

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	15.07
75	30.00 - 66.00% of mass 95	42.47
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	99.08
175	4.00 - 9.00% of mass 174	7.41 (7.48)
176	93.00 - 101.00% of mass 174	96.59 (97.49)
177	5.00 - 9.00% of mass 176	6.18 (6.40)

Data File: /chem/msd6.i/14jun16a.b/6061407.d

Date : 14-JUN-2016 09:33

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: 6061407.d
Spectrum: Avg. Scans 1373-1375 (11.43), Background Scan 1366
Location of Maximum: 95.00
Number of points: 109

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	1772	66.00	101	103.00	52	143.00	2055
37.00	8299	67.00	777	104.00	805	144.00	135
38.00	7237	68.00	17728	105.00	334	145.00	122
39.00	2654	69.00	18080	106.00	893	146.00	342
40.00	153	70.00	1446	107.00	240	147.00	212
41.00	50	71.00	59	110.00	52	148.00	605
42.00	64	72.00	1029	111.00	191	149.00	123
43.00	134	73.00	7498	112.00	196	150.00	280
44.00	828	74.00	29320	113.00	144	152.00	64
45.00	1270	75.00	92200	115.00	308	153.00	60
46.00	197	76.00	7655	116.00	665	154.00	175
47.00	2231	77.00	1116	117.00	1193	155.00	632
48.00	1214	78.00	916	118.00	744	157.00	363
49.00	7191	79.00	4694	119.00	1231	159.00	274
50.00	32704	80.00	1798	123.00	55	161.00	311
51.00	10073	81.00	5145	124.00	119	172.00	547
52.00	483	82.00	1264	126.00	50	174.00	215040
53.00	131	83.00	120	127.00	115	175.00	16080
55.00	389	86.00	339	128.00	797	176.00	209664
56.00	2698	87.00	8945	129.00	428	177.00	13417
57.00	4640	88.00	8612	130.00	863	178.00	454
58.00	214	91.00	738	131.00	374	193.00	51
60.00	1617	92.00	5268	135.00	459	207.00	147
61.00	8233	93.00	7895	137.00	379	285.00	340
62.00	8025	94.00	22824	139.00	50	286.00	58
63.00	6222	95.00	217088	140.00	119		
64.00	646	96.00	14425	141.00	2077		
65.00	262	97.00	468	142.00	167		

Eurofins Air Toxics Inc.

Data file : /chem/msd6.i/15jun16.b/6061501.d
Lab Smp Id: Client Smp ID: BFB
Inj Date : 15-JUN-2016 09:38
Operator : CT Inst ID: msd6.i
Smp Info : ;BFB;BFB
Misc Info : 1476-2872, 36ng (5/4/18)
Comment :
Method : /chem/msd6.i/15jun16.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		
11.421	11.478	-0.057	95	287239		100.00	100.00- 100.00	100.00
11.421	11.478	-0.057	50	50461		8.00	40.00- 40.00	17.57
11.421	11.478	-0.057	75	125040		30.00	66.00- 66.00	43.53
11.421	11.478	-0.057	96	19066		5.00	9.00- 9.00	6.64
11.421	11.478	-0.057	173	0		0.00	1.99- 1.99	0.00
11.421	11.478	-0.057	174	252096		50.00	120.00- 120.00	87.77
11.421	11.478	-0.057	175	19530		4.00	9.00- 9.00	7.75
11.421	11.478	-0.057	176	243392		93.00	101.00- 101.00	96.55
11.421	11.478	-0.057	177	16065		5.00	9.00- 9.00	6.60

Data File: /chem/msd6.i/15jun16.b/6061501.d

Date : 15-JUN-2016 09:38

Client ID: BFB

Instrument: msd6.i

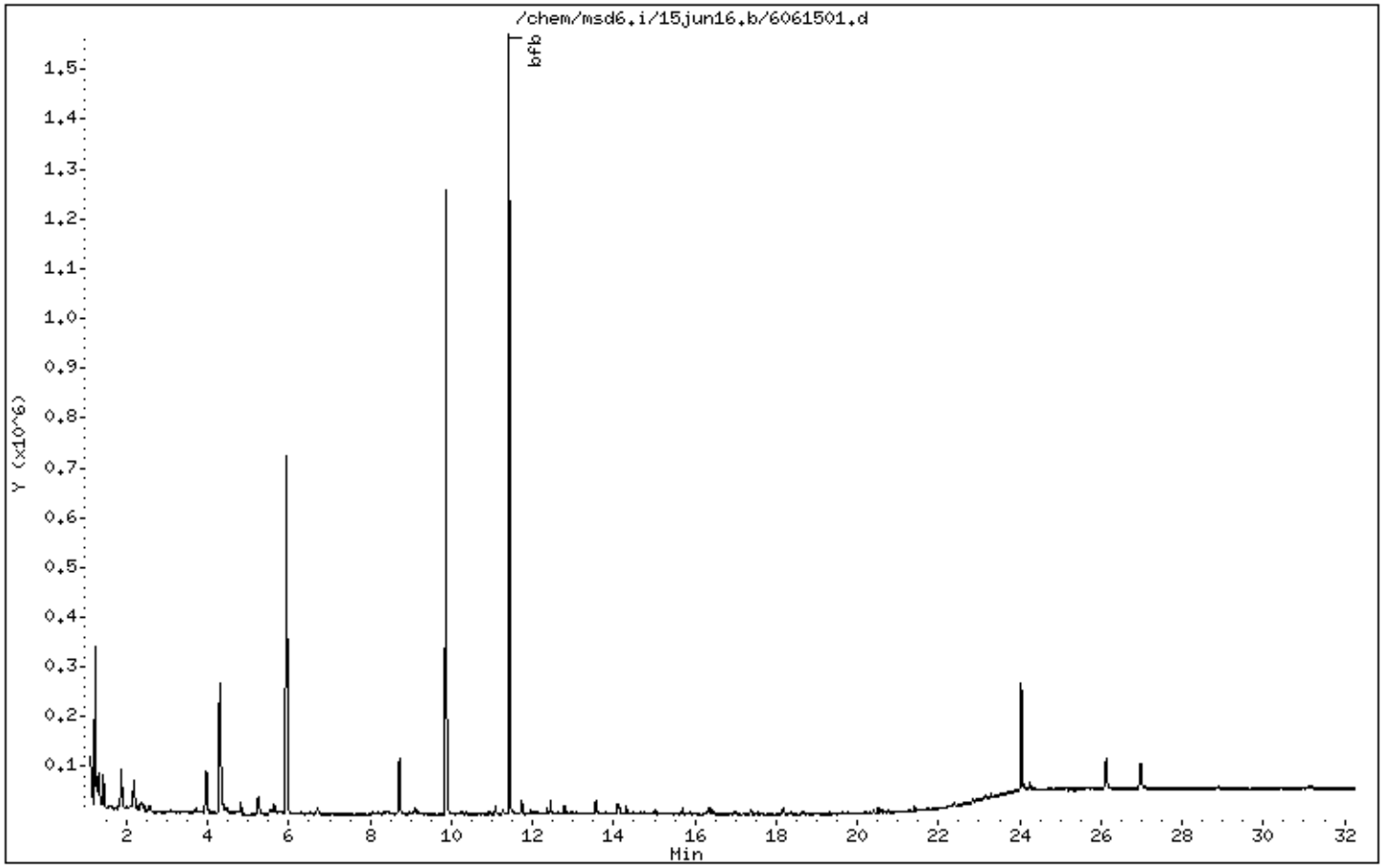
Sample Info: ;BFB;BFB

Volume Injected (uL): 1.0

Operator: CT

Column phase:

Column diameter: 2.00



Data File: /chem/msd6.i/15jun16.b/6061501.d

Date : 15-JUN-2016 09:38

Client ID: BFB

Instrument: msd6.i

Sample Info: ;BFB;BFB

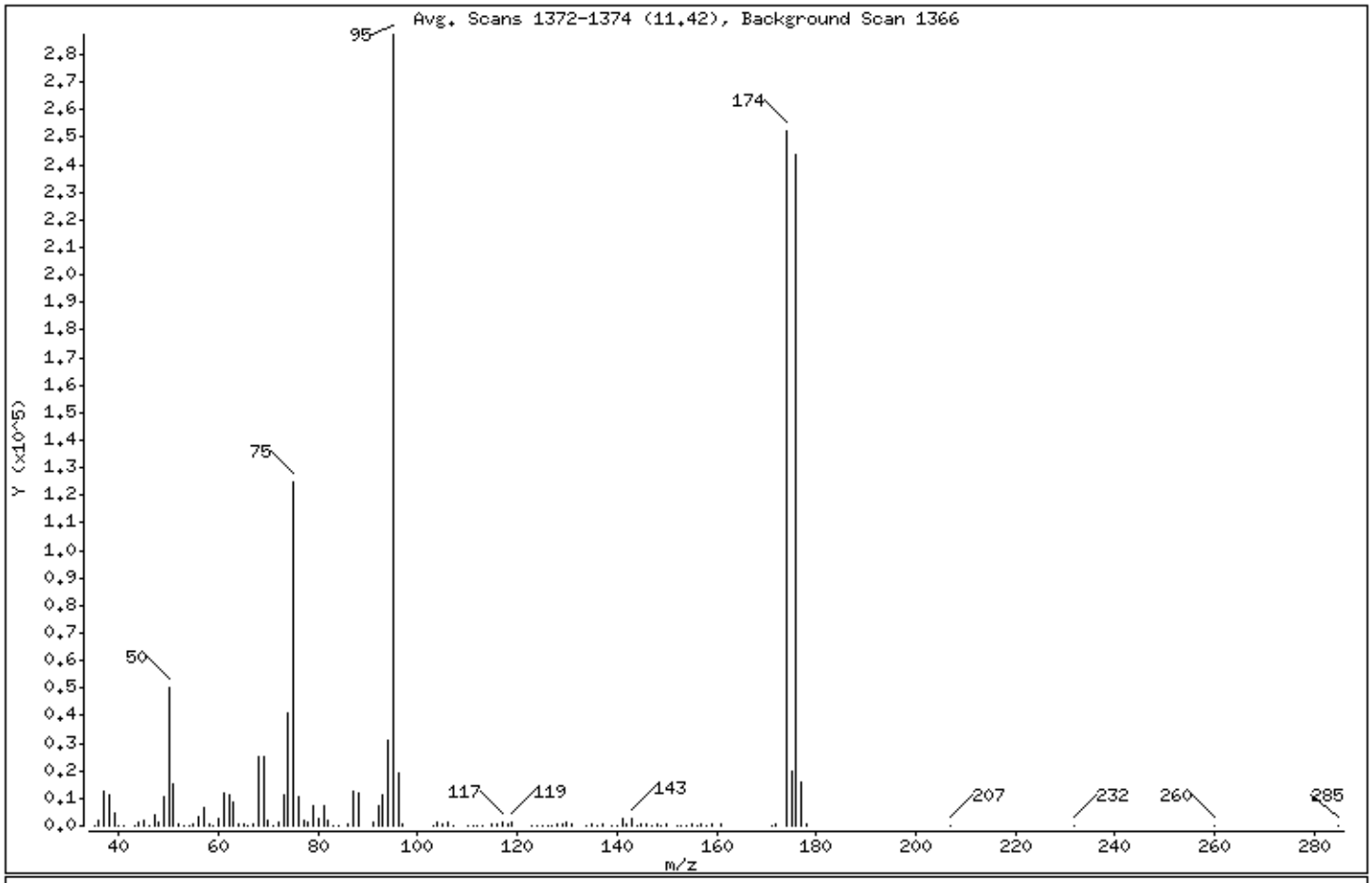
Volume Injected (uL): 1.0

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	17.57
75	30.00 - 66.00% of mass 95	43.53
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	87.77
175	4.00 - 9.00% of mass 174	6.80 (7.75)
176	93.00 - 101.00% of mass 174	84.74 (96.55)
177	5.00 - 9.00% of mass 176	5.59 (6.60)

Data File: /chem/msd6.i/15jun16.b/6061501.d

Date : 15-JUN-2016 09:38

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: 6061501.d
Spectrum: Avg. Scans 1372-1374 (11.42), Background Scan 1366
Location of Maximum: 95.00
Number of points: 118

m/z	Y	m/z	Y	m/z	Y	m/z	Y
35.00	54	66.00	56	104.00	1159	143.00	2603
36.00	2277	67.00	907	105.00	448	144.00	216
37.00	12658	68.00	25080	106.00	1196	145.00	361
38.00	11223	69.00	25272	107.00	299	146.00	469
39.00	4441	70.00	1986	110.00	158	147.00	256
40.00	184	71.00	55	111.00	302	148.00	730
41.00	81	72.00	1341	112.00	242	149.00	262
43.00	163	73.00	10922	113.00	299	150.00	356
44.00	1266	74.00	40904	115.00	406	152.00	106
45.00	2239	75.00	125040	116.00	953	153.00	303
46.00	290	76.00	10762	117.00	1630	154.00	225
47.00	3777	77.00	1821	118.00	939	155.00	788
48.00	1627	78.00	1239	119.00	1607	156.00	193
49.00	10820	79.00	7438	123.00	52	157.00	532
50.00	50456	80.00	2473	124.00	162	158.00	118
51.00	15362	81.00	7458	125.00	117	159.00	382
52.00	612	82.00	1971	126.00	131	161.00	351
53.00	253	83.00	254	127.00	61	171.00	58
54.00	145	84.00	51	128.00	938	172.00	966
55.00	591	86.00	460	129.00	496	174.00	252096
56.00	3601	87.00	12777	130.00	1127	175.00	19528
57.00	6784	88.00	12055	131.00	475	176.00	243392
58.00	356	91.00	1005	134.00	120	177.00	16065
59.00	164	92.00	7370	135.00	533	178.00	503
60.00	2379	93.00	11217	136.00	56	207.00	3
61.00	11873	94.00	31344	137.00	447	232.00	53
62.00	11289	95.00	287232	139.00	62	260.00	70
63.00	8370	96.00	19064	140.00	199	285.00	187
64.00	955	97.00	693	141.00	2469		
65.00	664	103.00	205	142.00	401		

Eurofins Air Toxics Inc.

Data file : /chem/msd6.i/17jun16.b/6061701.d
Lab Smp Id: Client Smp ID: BFB
Inj Date : 17-JUN-2016 09:01
Operator : CT Inst ID: msd6.i
Smp Info : ;BFB;BFB
Misc Info : 1476-2872, 36ng (5/4/18)
Comment :
Method : /chem/msd6.i/17jun16.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		
11.421	11.478	-0.057	95	318171			100.00- 100.00	100.00
11.421	11.478	-0.057	50	55336			8.00- 40.00	17.39
11.421	11.478	-0.057	75	137418			30.00- 66.00	43.19
11.421	11.478	-0.057	96	22794			5.00- 9.00	7.16
11.421	11.478	-0.057	173	0			0.00- 1.99	0.00
11.421	11.478	-0.057	174	285461			50.00- 120.00	89.72
11.421	11.478	-0.057	175	21229			4.00- 9.00	7.44
11.421	11.478	-0.057	176	277589			93.00- 101.00	97.24
11.421	11.478	-0.057	177	18252			5.00- 9.00	6.58

Data File: /chem/msd6.i/17jun16.b/6061701.d

Date : 17-JUN-2016 09:01

Client ID: BFB

Instrument: msd6.i

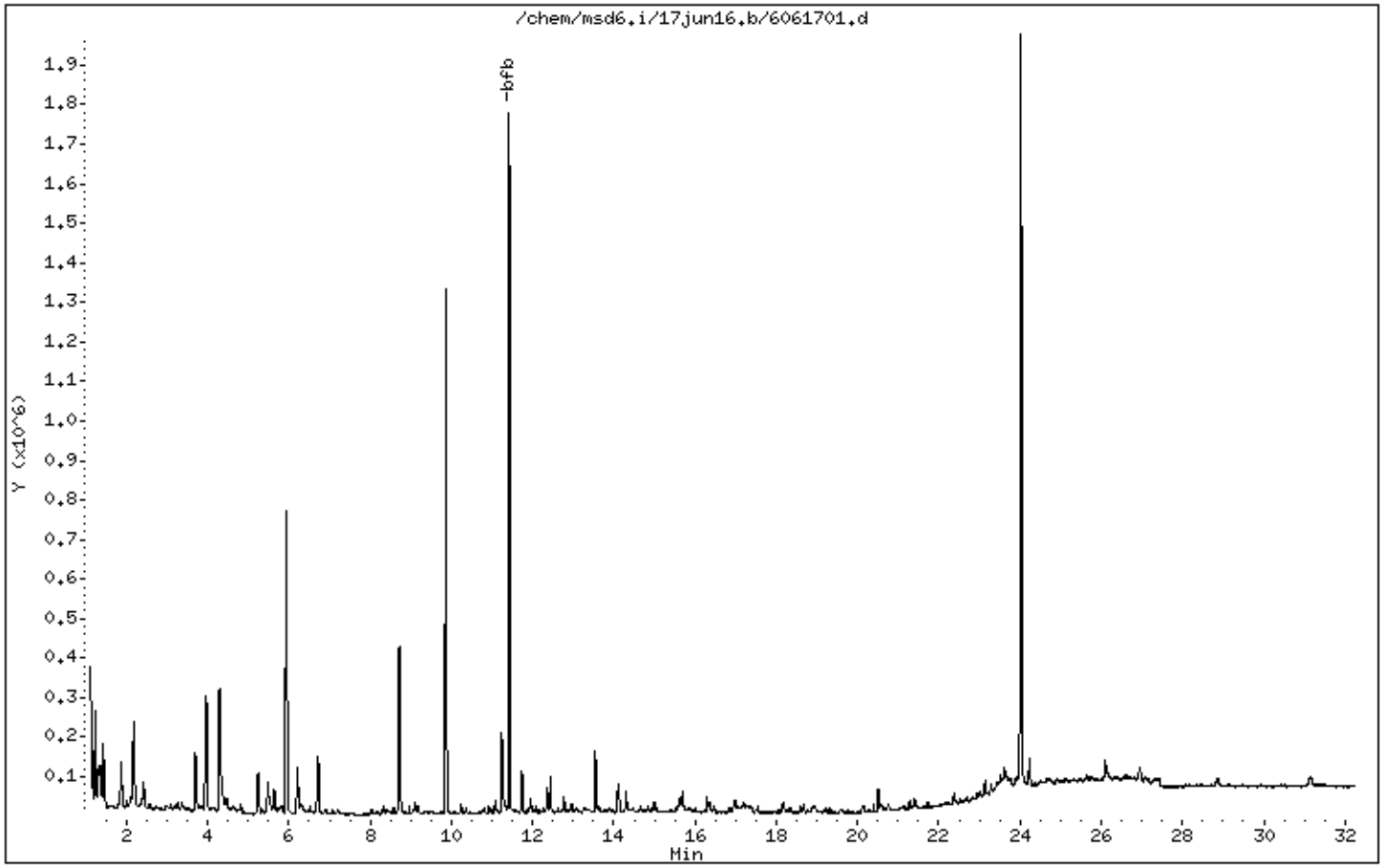
Sample Info: ;BFB;BFB

Volume Injected (uL): 1.0

Operator: CT

Column phase:

Column diameter: 2.00



Data File: /chem/msd6.i/17jun16.b/6061701.d

Date : 17-JUN-2016 09:01

Client ID: BFB

Instrument: msd6.i

Sample Info: ;BFB;BFB

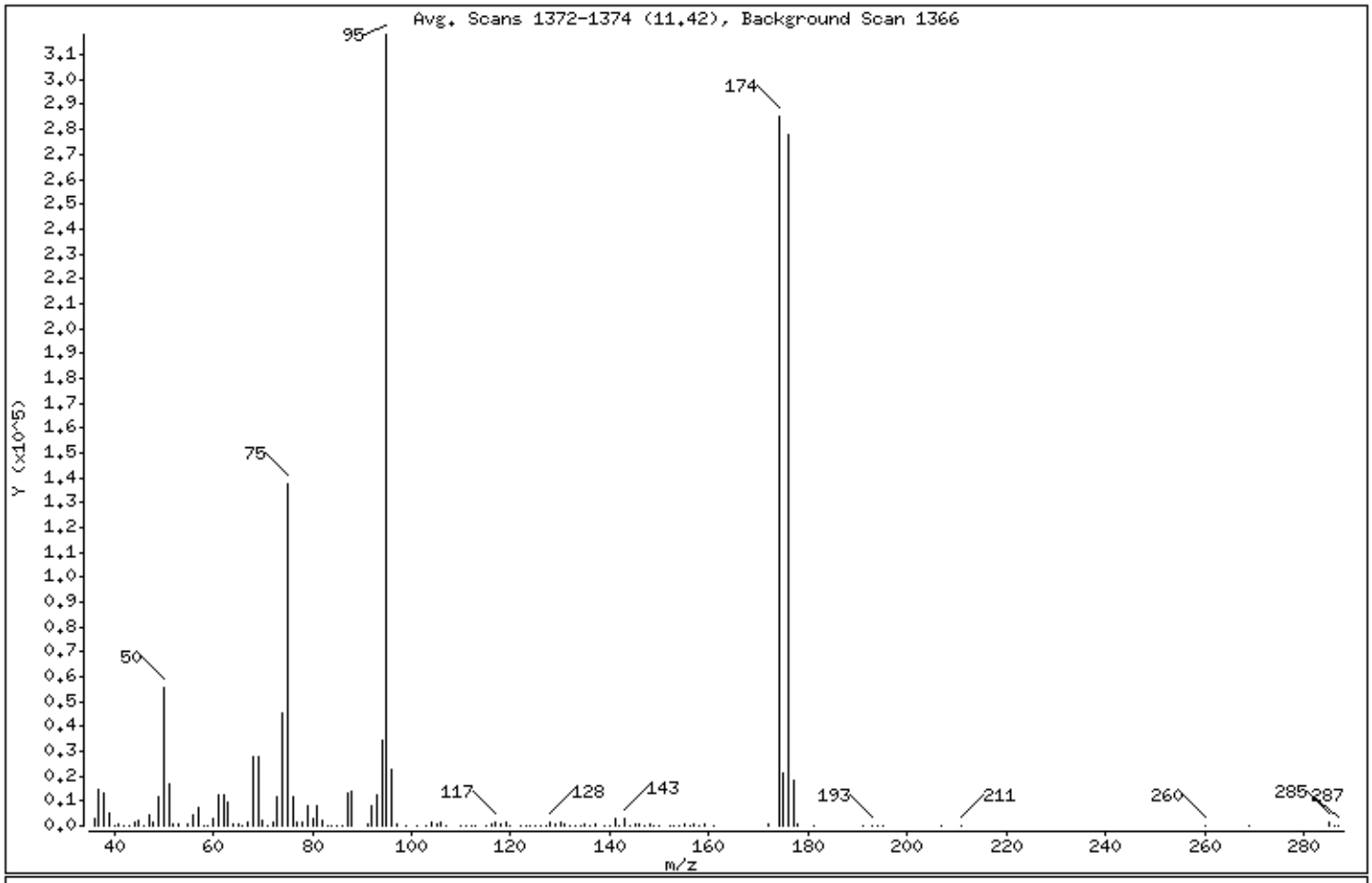
Volume Injected (uL): 1.0

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	17.39
75	30.00 - 66.00% of mass 95	43.19
96	5.00 - 9.00% of mass 95	7.16
173	Less than 1.99% of mass 174	0.00 (0.00)
174	50.00 - 120.00% of mass 95	89.72
175	4.00 - 9.00% of mass 174	6.67 (7.44)
176	93.00 - 101.00% of mass 174	87.25 (97.24)
177	5.00 - 9.00% of mass 176	5.74 (6.58)

Data File: /chem/msd6.i/17jun16.b/6061701.d

Date : 17-JUN-2016 09:01

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: 6061701.d
Spectrum: Avg. Scans 1372-1374 (11.42), Background Scan 1366
Location of Maximum: 95.00
Number of points: 131

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	2799	70.00	2286	110.00	245	146.00	476
37.00	14576	71.00	17	111.00	253	147.00	291
38.00	12860	72.00	1480	112.00	215	148.00	819
39.00	5172	73.00	11743	113.00	175	149.00	328
40.00	357	74.00	45024	115.00	225	150.00	334
41.00	440	75.00	137408	116.00	1066	152.00	179
42.00	151	76.00	11717	117.00	1764	153.00	264
43.00	119	77.00	1641	118.00	1006	154.00	279
44.00	1480	78.00	1308	119.00	1613	155.00	829
45.00	2278	79.00	7754	120.00	51	156.00	222
46.00	146	80.00	2593	122.00	56	157.00	647
47.00	4284	81.00	8309	123.00	121	158.00	124
48.00	1800	82.00	2216	124.00	271	159.00	401
49.00	11884	83.00	352	125.00	57	161.00	356
50.00	55336	84.00	63	126.00	250	172.00	628
51.00	16816	85.00	101	127.00	154	174.00	285440
52.00	789	86.00	348	128.00	1142	175.00	21224
53.00	553	87.00	13267	129.00	509	176.00	277568
55.00	859	88.00	13542	130.00	1131	177.00	18248
56.00	4194	91.00	994	131.00	562	178.00	517
57.00	7323	92.00	7981	132.00	58	181.00	51
58.00	202	93.00	12106	133.00	1	191.00	23
59.00	145	94.00	34064	134.00	52	193.00	237
60.00	2858	95.00	318144	135.00	695	194.00	53
61.00	12665	96.00	22792	136.00	50	195.00	50
62.00	12217	97.00	654	137.00	512	207.00	38
63.00	9708	99.00	62	139.00	120	211.00	56
64.00	975	101.00	56	140.00	250	260.00	110
65.00	420	103.00	223	141.00	2644	269.00	54
66.00	201	104.00	1272	142.00	353	285.00	1187
67.00	1756	105.00	454	143.00	2657	286.00	319
68.00	27840	106.00	1283	144.00	236	287.00	238
69.00	27496	107.00	352	145.00	391		

Shipping/ Receiving Documents

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Eurofins Air Toxics, Inc. Sample Receipt Confirmation Cover Page

Thank you for choosing Eurofins Air Toxics, Inc. (EATL). We have received your samples and have listed any Sample Receipt Descrepancies below.

In order to expedite analysis and reporting, please review the attached information for accuracy.

For corrections call: **Brian Whittaker at 916-985-1000**

EATL will proceed with the analysis as specified on the Chain of Custody (COC) and Sample Receipt Summary page.

Please note : The Sample Receipt Confirmation, including the total workorder charge, is subject to change upon secondary review. Our aim is to provide a confirmation to you in a timely manner. Sample Receipt Discrepancies, if any, may not include discrepancies regarding sample receipt pressure(s). Additionally, the COC will be provided with the final report.

180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 95630

(916) 985-1000 .FAX (916) 985-1020
Hours 6:30 A.M to 5:30 P.M. PST

TO-17 SAMPLE COLLECTION

Air Toxics LTD.

CHAIN-OF-CUSTODY RECORD

Sample Transportation Notice
Relinquishing signature on this document indicates that sample is being shipped in compliance with all applicable local, State, Federal, national, and international laws, regulations and ordinances of any kind. Air Toxics Limited assumes no liability with respect to the collection, handling or shipping of these samples. Relinquishing signature also indicates agreement to hold harmless, defend, and indemnify Air Toxics Limited against any claim, demand, or action, of any kind, related to the collection, handling, or shipping of samples. D.O.T. Hotline (800) 467-4922.

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

0647 of 0656

Project Manager: Terry Taylor
Collected by: (Print and Sign)
Company: AMAI Email:
Address: 2700 Westchester City: Purchase State: NY Zip: 10577
Phone: 914-251-0400 Fax:

Project Info:
P.O. #:
Project #: Building 7 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 ml/min	Post-Test Flow Rate ml/min	Volume l	Indoor/Outdoor % RH	Indoor/Outdoor Temp	Indoor Air	Outdoor Air	Soil Vapor	Other ( )
01A	B7IA-1(061016)	150557	6/11/16	1840	1840	36	35	17	77	83	☒	☐	☐	☐
02A	B7IA-1D(061016)	143596	6/11/16	1848	1843	35	35	16.6	77	83	☒	☐	☐	☐
03A	B7IA-2(061016)	145511	6/11/16	1950	1041	35	36	10.5	81	81	☒	☐	☐	☐
04A	B7IA-3(061016)	184971	6/11/16	1947	1947	36	30	15.8	79	81	☒	☐	☐	☐
05A	B7IA-4(061016)	154191	6/11/16	1920	1220	34	35	11.7	78	87	☒	☐	☐	☐
06A	B7IA-5(061016)	147322	6/11/16	1915	1925	35	28	11.3	88	88	☒	☐	☐	☐
07A	B7IA-6(061016)	143760	6/11/16	1936	1936	34	34	16.3	81	88	☒	☐	☐	☐
08A	B7AA(061016)	147216	6/11/16	1825	1825	34	35	16.6	84	85	☐	☒	☐	☐
											☐	☐	☐	☐
											☐	☐	☐	☐

Relinquished by: (signature) Date/Time: 13Jun16 1700
Received by: (signature) Date/Time: FedEx (Trk#7765060110 91)
Relinquished by: (signature) Date/Time:
Received by: (signature) Date/Time: 6/14/16 1000 Andrea Augustin EATL
Relinquished by: (signature) Date/Time:
Received by: (signature) Date/Time:

Notes: TO-17 Naphthalene Only

Lab Use Only	Shipper Name	Air Bill #	Temp (°C)	Condition	Custody Seals Intact?	Work Order #
	Fed Ex		3.4°C	Good	Yes No None	1606272

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)
Company: AMAI Email:
Address: 2700 Westchester City: Purchase State: NY Zip: 10577
Phone: 914-251-0400 Fax:

Project Info:
P.O. #:
Project #: Building 7 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 ml/min	Post-Test Flow Rate ml/min	Volume ml	Indoor/Outdoor % RH	Indoor/Outdoor Temp	Indoor Air	Outdoor Air	Soil Vapor	Other ( )
09A	B7SS-1(061216)	141302	6/12/16	1300	1303	133	133	400	84	83	☐	☐	☒	☐
10A	B7SS-1D(061216)	148999	6/12/16	1255	1258	133	133	400	89	83 78.5	☐	☐	☒	☐
11A	B7SS-2(061216)	143671	6/12/16	1349	1352	133	133	400	77	78.5	☐	☐	☒	☐
12A	B7SS-3(061216)	143423	6/12/16	1711	1714	133	133	400	82	80	☐	☐	☒	☐
13A	B7SS-4(061216)	163666	6/12/16	1622	1625	133	133	400	62	81	☐	☐	☒	☐
14A	B7SS-5(061216)	153605	6/12/16	1117	1120	133	133	400	90	85	☐	☐	☒	☐
15A	B7SS-6(061216)	147006	6/12/16	1750	1753	133	133	400	64	85	☐	☐	☒	☐
16A	B1SS-1(061216)	147226	6/12/16	2014	2017	133	133	400	58	77	☐	☐	☒	☐
											☐	☐	☐	☐
											☐	☐	☐	☐

Relinquished by: (signature)	Date/Time	Received by: (signature)	Date/Time
[signature]	13 Jun 16 1700	Fed Ex (Trk# 7765 0601 1091)	
Relinquished by: (signature)	Date/Time	Received by: (signature)	Date/Time
		Andrea [signature] EATL	6/14/16 1000
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		3.4°c	Good	Yes No None	1606272

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

Date: 6/17/16

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) N1866138102

Flow Meter: CS7476

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	G0137108	51.1	51.9	10:02	10:32	
2	Lab Blank		G0144403	50.4	50.8			
3	1606272-08A		G0147216	50.6	50.9			
4	-07A		G0143780	50.8	50.6			
5	-06A		G0147322	50.8	51.1			
6	-05A		G0154191	50.9	51.0			
ct 6/17/16 ~~7~~ 1	1606272-04A		G0184971	50.0	48.0	10:39	11:10	
2	-03A		G0145511	50.9	49.0			
3	-02A		G0143596	51.1	49.1			
4	-01A		G0150557	51.0	49.1			
								ct 6/17/16

Clarissa
Reviewed

6/17/16
Date

eurofins | Air Toxics

SAMPLE RECEIPT SUMMARY

WORKORDER 1606272

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: 06/27/16
Date Completed: 6/27/16
Date Received: 6/14/16
PO#:
Project#: Building 7 VI BMS

Total $: $ 2,430.08
Logged By: AA

Fraction	Sample #	Analysis	Collected	Amount$
01A	B7IA-1 (061016)	Modified TO-17 VI	6/11/2016	$100.00
02A	B7IA-1D (061016)	Modified TO-17 VI	6/11/2016	$100.00
03A	B7IA-2 (061016)	Modified TO-17 VI	6/11/2016	$100.00
04A	B7IA-3 (061016)	Modified TO-17 VI	6/11/2016	$100.00
05A	B7IA-4 (061016)	Modified TO-17 VI	6/11/2016	$100.00
06A	B7IA-5 (061016)	Modified TO-17 VI	6/11/2016	$100.00
07A	B7IA-6 (061016)	Modified TO-17 VI	6/11/2016	$100.00
08A	B7AA (061016)	Modified TO-17 VI	6/11/2016	$100.00
09A	B7SS-1 (061216)	Modified TO-17 VI	6/12/2016	$100.00
10A	B7SS-1D (061216)	Modified TO-17 VI	6/12/2016	$100.00
11A	B7SS-2 (061216)	Modified TO-17 VI	6/12/2016	$100.00
12A	B7SS-3 (061216)	Modified TO-17 VI	6/12/2016	$100.00
13A	B7SS-4 (061216)	Modified TO-17 VI	6/12/2016	$100.00
14A	B7SS-5 (061216)	Modified TO-17 VI	6/12/2016	$100.00
15A	B7SS-6 (061216)	Modified TO-17 VI	6/12/2016	$100.00
16A	B15SS-1 (061216)	Modified TO-17 VI	6/12/2016	$100.00
17A	Lab Blank	Modified TO-17 VI	NA	$0.00
17B	Lab Blank	Modified TO-17 VI	NA	$0.00
18A	CCV	Modified TO-17 VI	NA	$0.00
18B	CCV	Modified TO-17 VI	NA	$0.00

Note: Samples received after 3 P.M. PST are considered to be received on the following work day.
Atlas Project Name/Profile#: BMS/19256

BILL TO: Accounts Payable
Anderson Mulholland & Associates, Inc.
2700 Westchester Avenue
Suite 417
Purchase, NY 10577

Analysis Code: Other MS

TERMS:

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

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SAMPLE RECEIPT SUMMARY Continued

Client

Mr. Terry Taylor
Anderson Mulholland &
Associates, Inc.
2700 Westchester Avenue
Suite 417
Purchase, NY 10577
Sales Rep: N/A

Phone

(914) 251-0400

Fax

Date Promised: 06/27/16
Date Completed: 6/27/16
Date Received: 6/14/16
PO#:
Project#: Building 7 VI BMS
Total $: $ 2,430.08
Logged By: AA

Fraction	Sample #	Analysis	Collected	Amount$
19A	LCS	Modified TO-17 VI	NA	$0.00
19AA	LCSD	Modified TO-17 VI	NA	$0.00
19B	LCS	Modified TO-17 VI	NA	$0.00
19BB	LCSD	Modified TO-17 VI	NA	$0.00

Misc. Charges	Shipping Charges ()	$110.08
	TO-17 VI Tube (18) @ $40.00 each.	$720.00

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

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 # 1606272	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: AT MSD-6 6/21/16	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:

J-Flag to the MDL

A1	A2	A3	A4	D	Section 2 – Sample Analysis				
					Initials/Date	A1: AT 6/21/16	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: OA/OCA, 0941/0A possible 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: AT 6/21/16	D2:	D3:	D4:
NA						CAR # (if applicable)				
✓						Spectra Verified *(documentation of spectral defense included if applicable)*				
NA						TICs resemble reference spectra/ TICs between sample dups. are consistent *(if applicable)*				
✓						Lab Narrative is correct				
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: AT 6/21/16	3rd Tier: *(needed only for DOD or per client request)*	
NA		Sample Discrepancy Report (SDR) complete and approved *(if applicable)*		
NA		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. 17L used to report the LB.

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