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Electronic Comprehensive Validation Package (eCVP)

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COMPREHENSIVE VALIDATION PACKAGE

TO-15

INVENTORY SHEET

Work Order #: 1412216A

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Comments:

Completed by:

Kara McKiernan	Kara McKiernan / Document Control	1/5/15
(Signature)	(Print Name & Title)	(Date)

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WORK ORDER #: 1412216A

Work Order Summary

CLIENT:	Mr. Terry Taylor Anderson Mulholland & Associates, Inc. 110 Corporate Park Drive White Plains, NY 10604	**BILL TO:**	Accounts Payable Anderson Mulholland & Associates, Inc. 110 Corporate Park Drive White Plains, NY 10604
PHONE:	(914) 251-0400	**P.O. #**	
FAX:	(914) 251-1286	**PROJECT #**	Building 5 VI BMS Humacao
DATE RECEIVED:	12/12/2014	**CONTACT:**	Brian Whittaker
DATE COMPLETED:	12/24/2014		

FRACTION #	NAME	TEST	RECEIPT VAC./PRES.	FINAL PRESSURE
01A	B5SS-7 (2014)	TO-15	5.1 "Hg	14.9 psi
02A	B5SS-4 (2014)	TO-15	6.5 "Hg	14.9 psi
03A	B5SS-6 (2014)	TO-15	5.1 "Hg	15 psi
04A	B5SS-2 (2014)	TO-15	2.2 "Hg	14.8 psi
05A	B5SS-3 (2014)	TO-15	4.5 "Hg	14.8 psi
06A	B5SS-5 (2014)	TO-15	4.7 "Hg	14.9 psi
07A	B5SS-1 (2014)	TO-15	5.1 "Hg	14.7 psi
08A	B5SS-1D (2014)	TO-15	4.1 "Hg	14.9 psi
09A	Lab Blank	TO-15	NA	NA
09B	Lab Blank	TO-15	NA	NA
10A	CCV	TO-15	NA	NA
10B	CCV	TO-15	NA	NA
11A	LCS	TO-15	NA	NA
11AA	LCSD	TO-15	NA	NA
11B	LCS	TO-15	NA	NA
11BB	LCSD	TO-15	NA	NA

CERTIFIED BY: Heidi Mayo

Technical Director

DATE: 12/24/14

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

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180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 9563
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LABORATORY NARRATIVE
EPA Method TO-15
Anderson Mulholland & Associates, Inc.
Workorder# 1412216A

Eight 1 Liter Summa Canister (100% Certified) samples were received on December 12, 2014. The laboratory performed analysis via EPA Method TO-15 using GC/MS in the full scan mode.

This workorder was independently validated prior to submittal using 'USEPA National Functional Guidelines' as generally applied to the analysis of volatile organic compounds in air. A rules-based, logic driven, independent validation engine was employed to assess completeness, evaluate pass/fail of relevant project quality control requirements and verification of all quantified amounts.

Receiving Notes

There were no receiving discrepancies.

Analytical Notes

Dilution was performed on samples B5SS-3 (2014, B5SS-5 (2014), B5SS-1 (2014), and B5SS-1D (2014) due to the presence of high level target species.

Definition of Data Qualifying Flags

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

B - Compound present in laboratory blank greater than reporting limit (background subtraction not performed).

J - Estimated value.

E - Exceeds instrument calibration range.

S - Saturated peak.

Q - Exceeds quality control limits.

U - Compound analyzed for but not detected above the reporting limit, LOD, or MDL value. See data page for project specific U-flag definition.

UJ- Non-detected compound associated with low bias in the CCV

N - The identification is based on presumptive evidence.

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

a-File was requantified

b-File was quantified by a second column and detector

r1-File was requantified for the purpose of reissue

Table 1

Client Sample ID	Lab Sample ID	Date Collected	Date Received	Date Extracted	Sample Holding Time (Days)	Date Analyzed	Sample Extract Holding Time (Days)	Sample Condition
B5SS-7 (2014)	1412216A-01A	12/10/2014	12/12/2014	NA	12	12/22/2014	NA	Good
B5SS-4 (2014)	1412216A-02A	12/10/2014	12/12/2014	NA	12	12/22/2014	NA	Good
B5SS-6 (2014)	1412216A-03A	12/10/2014	12/12/2014	NA	12	12/22/2014	NA	Good
B5SS-2 (2014)	1412216A-04A	12/11/2014	12/12/2014	NA	11	12/22/2014	NA	Good
B5SS-3 (2014)	1412216A-05A	12/11/2014	12/12/2014	NA	8	12/19/2014	NA	Good
B5SS-5 (2014)	1412216A-06A	12/11/2014	12/12/2014	NA	8	12/19/2014	NA	Good
B5SS-1 (2014)	1412216A-07A	12/11/2014	12/12/2014	NA	8	12/19/2014	NA	Good
B5SS-1D (2014)	1412216A-08A	12/11/2014	12/12/2014	NA	8	12/19/2014	NA	Good
Lab Blank	1412216A-09A	NA	NA	NA	NA	12/18/2014	NA	Good
Lab Blank	1412216A-09B	NA	NA	NA	NA	12/22/2014	NA	Good
CCV	1412216A-10A	NA	NA	NA	NA	12/18/2014	NA	Good
CCV	1412216A-10B	NA	NA	NA	NA	12/22/2014	NA	Good
LCS	1412216A-11A	NA	NA	NA	NA	12/18/2014	NA	Good
LCSD	1412216A-11AA	NA	NA	NA	NA	12/18/2014	NA	Good
LCS	1412216A-11B	NA	NA	NA	NA	12/22/2014	NA	Good
LCSD	1412216A-11BB	NA	NA	NA	NA	12/22/2014	NA	Good

Sample Results and Raw Data

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Summary of Detected Compounds
EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: B5SS-7 (2014)

Lab ID#: 1412216A-01A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Ethyl Benzene	1.2	19	5.3	81
m,p-Xylene	1.2	75	5.3	320
o-Xylene	1.2	8.2	5.3	36
4-Methyl-2-pentanone	1.2	32	5.0	130
Acetone	12	47	29	110
Toluene	1.2	3.8	4.6	14

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Client Sample ID: B5SS-7 (2014)

Lab ID#: 1412216A-01A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p122206**	**Date of Collection:**	**12/10/14 12:02:00 P**
Dil. Factor:	**2.43**	**Date of Analysis:**	**12/22/14 12:31 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Benzene	1.2	Not Detected	3.9	Not Detected
2-Propanol	4.9	Not Detected	12	Not Detected
Ethyl Benzene	1.2	19	5.3	81
m,p-Xylene	1.2	75	5.3	320
o-Xylene	1.2	8.2	5.3	36
4-Methyl-2-pentanone	1.2	32	5.0	130
Acetone	12	47	29	110
Toluene	1.2	3.8	4.6	14

Container Type: 1 Liter Summa Canister (100% Certified)

Surrogates	%Recovery	Method Limits
Toluene-d8	100	70-130
1,2-Dichloroethane-d4	94	70-130
4-Bromofluorobenzene	100	70-130

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EPA TO-15/MODIFIED TO14A

Data file : /chem/msdp.i/22dec14.b/p122206.d
Lab Smp Id: 1412216A-01A
Inj Date : 22-DEC-2014 12:31
Operator : js Inst ID: msdp.i
Smp Info : 200ml 1L1685
Misc Info : 5.1 Hg->14.9 psi
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msdp.i/22dec14.b/p14q1217a.m
Meth Date : 24-Dec-2014 07:32 dbailey Quant Type: ISTD
Cal Date : 17-DEC-2014 21:17 Cal File: p121708.d
Als bottle: 1
Dil Factor: 2.43000
Integrator: HP RTE Compound Sublist: And19256.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Name	Value	Description
DF	2.43000	Dilution Factor

RT	EXP RT	(REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
* 98 Bromochloromethane							CAS #: 74-97-5	
5.448	5.455	(1.000)	130	118461	25.0000		80.00- 120.00	100.00
5.448	5.455	(1.000)	128	84407			0.00- 30.00	71.25
5.448	5.455	(1.000)	49	225663			0.00- 30.00	190.49
* 123 1,4-Difluorobenzene							CAS #: 540-36-3	
6.336	6.344	(1.000)	114	528182	25.0000		80.00- 120.00	100.00
6.336	6.344	(1.000)	88	86375			0.00- 30.00	16.35
* 163 Chlorobenzene-d5							CAS #: 3114-55-4	
8.779	8.779	(1.000)	117	568391	25.0000		80.00- 120.00	100.00
8.779	8.779	(1.000)	82	351581			0.00- 30.00	61.86
$ 117 1,2-Dichloroethane-d4							CAS #: 17060-07-0	
5.985	5.985	(1.099)	65	266343	23.5522	23.552	80.00- 120.00	100.00
5.985	5.985	(1.099)	67	127697			0.00- 30.00	47.94

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
$ 146 Toluene-d8					CAS #: 2037-26-5		
7.554	7.554 (1.192)	98	620896	24.9423	24.942	80.00- 120.00	100.00
7.554	7.554 (1.192)	70	77618			0.00- 30.00	12.50
7.554	7.554 (1.192)	100	399013			0.00- 30.00	64.26
$ 177 4-Bromofluorobenzene					CAS #: 460-00-4		
9.768	9.760 (1.113)	174	421565	25.0058	25.006	80.00- 120.00	100.00
9.760	9.760 (1.112)	95	468720			0.00- 30.00	111.19
9.768	9.760 (1.113)	176	401719			0.00- 30.00	95.29
147 Toluene					CAS #: 108-88-3		
7.604	7.611 (1.200)	91	53462	1.54589	3.756	80.00- 120.00	100.00
7.611	7.611 (1.201)	92	29057			0.00- 30.00	54.35
167 Ethyl Benzene					CAS #: 100-41-4		
8.851	8.858 (1.008)	106	111724	7.65841	18.610	80.00- 120.00	100.00
8.851	8.858 (1.008)	91	372969			0.00- 30.00	333.83
169 m,p-Xylene					CAS #: 108-38-3		
8.951	8.951 (1.020)	106	546446	30.8794	75.037	80.00- 120.00	100.00
8.951	8.951 (1.020)	91	1161997			0.00- 30.00	212.65
171 o-Xylene					CAS #: 95-47-6		
9.295	9.295 (1.059)	106	55880	3.37386	8.198	80.00- 120.00	100.00
9.288	9.295 (1.058)	91	131053			0.00- 30.00	234.53
145 4-Methyl-2-pentanone					CAS #: 108-10-1		
7.483	7.483 (1.181)	58	147689	12.9734	31.525	80.00- 120.00	100.00
7.483	7.483 (1.181)	43	409427			0.00- 30.00	277.22
7.483	7.483 (1.181)	85	56390			0.00- 30.00	38.18
52 Acetone					CAS #: 67-64-1		
3.407	3.385 (0.625)	58	91643	19.3222	46.953	80.00- 120.00	100.00
3.407	3.385 (0.625)	43	282083			0.00- 30.00	307.80

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INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdp.i
Lab File ID: p122206.d
Lab Smp Id: 1412216A-01A
Analysis Type: VOA
Quant Type: ISTD
Operator: js
Method File: /chem/msdp.i/22dec14.b/p14q1217a.m
Misc Info: 5.1 Hg->14.9 psi

Calibration Date: 22-DEC-2014
Calibration Time: 09:50

Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
98 Bromochloromethan	153275	91965	214585	118461	-22.71
123 1,4-Difluorobenze	654249	392549	915949	528182	-19.27
163 Chlorobenzene-d5	700329	420197	980461	568391	-18.84

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
98 Bromochloromethan	5.46	5.13	5.79	5.45	-0.13
123 1,4-Difluorobenze	6.34	6.01	6.67	6.34	-0.11
163 Chlorobenzene-d5	8.78	8.45	9.11	8.78	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: 24-Dec-2014 07:37

Eurofins Air Toxics Inc.

RECOVERY REPORT

Client Name: Client SDG: 22dec14
Sample Matrix: GAS Fraction: VOA
Lab Smp Id: 1412216A-01A
Level: LOW Operator: js
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: 2926Spectra.spk Quant Type: ISTD
Sublist File: And19256.sub
Method File: /chem/msdp.i/22dec14.b/p14q1217a.m
Misc Info: 5.1 Hg->14.9 psi

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 117 1,2-Dichloroethane	25.000	23.552	94.21	70-130
$ 146 Toluene-d8	25.000	24.942	99.77	70-130
$ 177 4-Bromofluorobenze	25.000	25.006	100.02	70-130

Data File: /chem/msdp.i/22dec14.b/p122206.d

Date : 22-DEC-2014 12:31

Client ID:

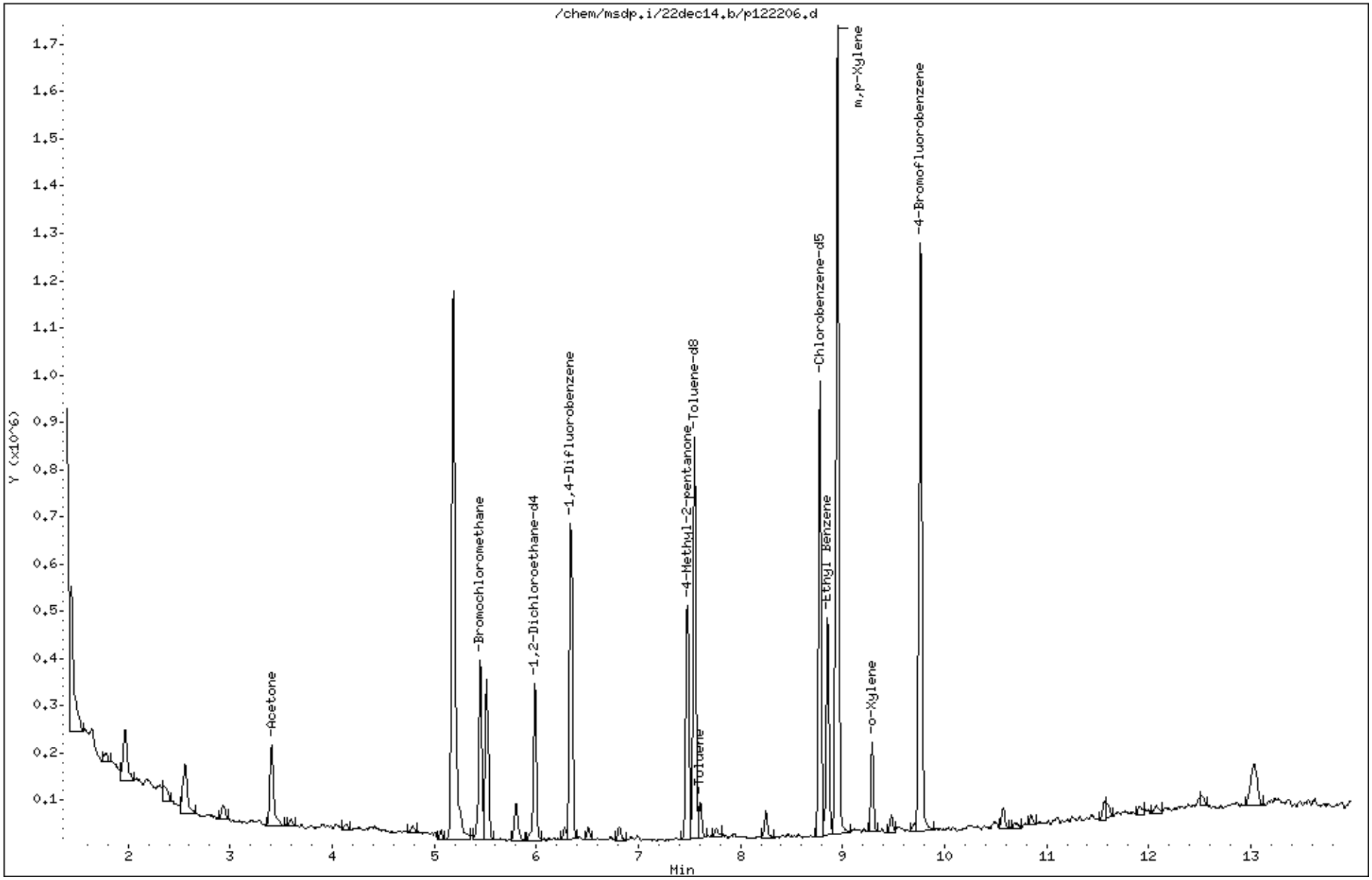
Instrument: msdp.i

Sample Info: 200ml 1L1685

Operator: js

Column phase: RTX-624

Column diameter: 0.25



Data File: /chem/msdp.i/22dec14.b/p122206.d

Date : 22-DEC-2014 12:31

Client ID:

Instrument: msdp.i

Sample Info: 200ml 1L1685

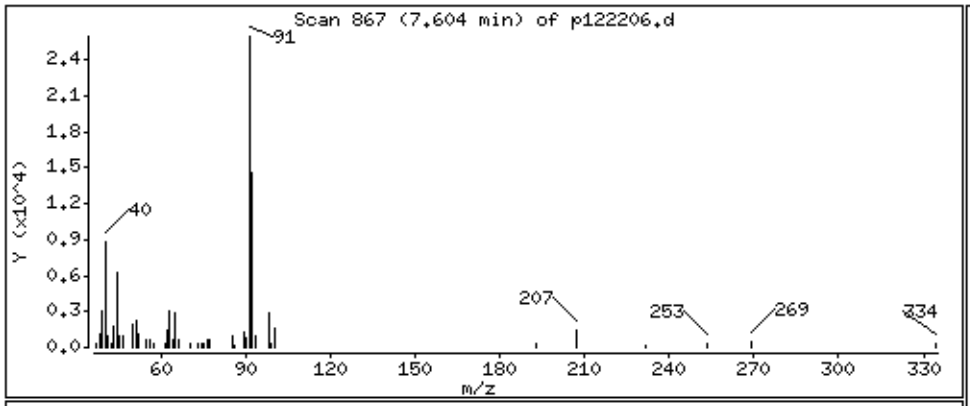
Operator: js

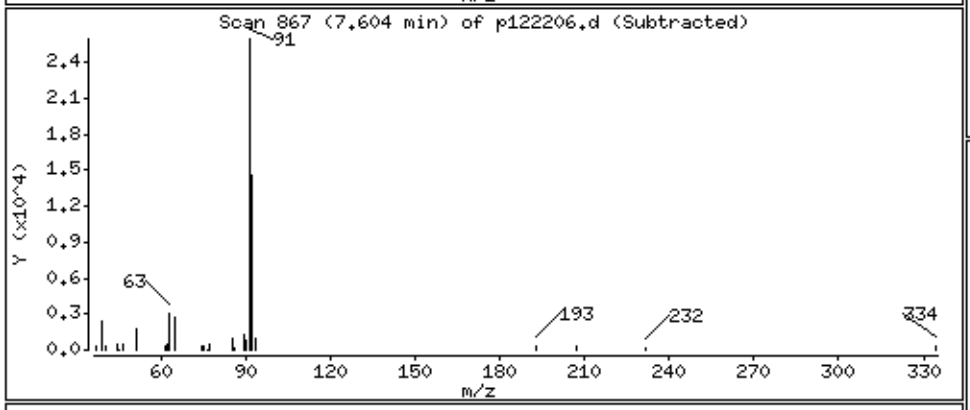
Column phase: RTX-624

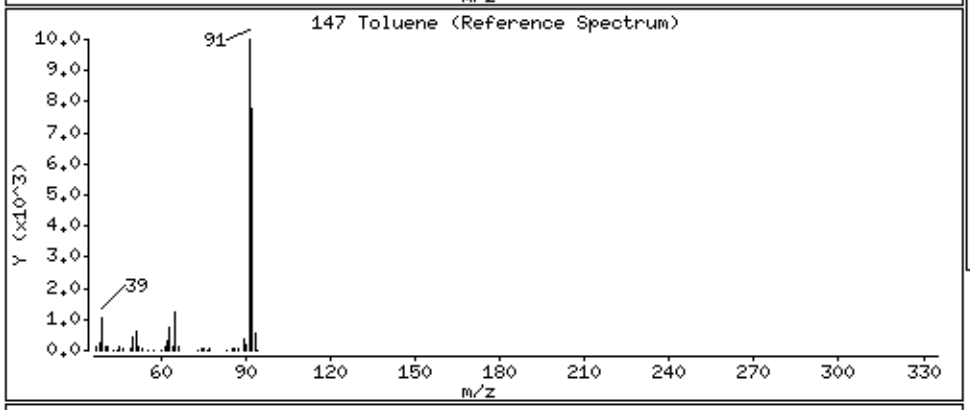
Column diameter: 0.25

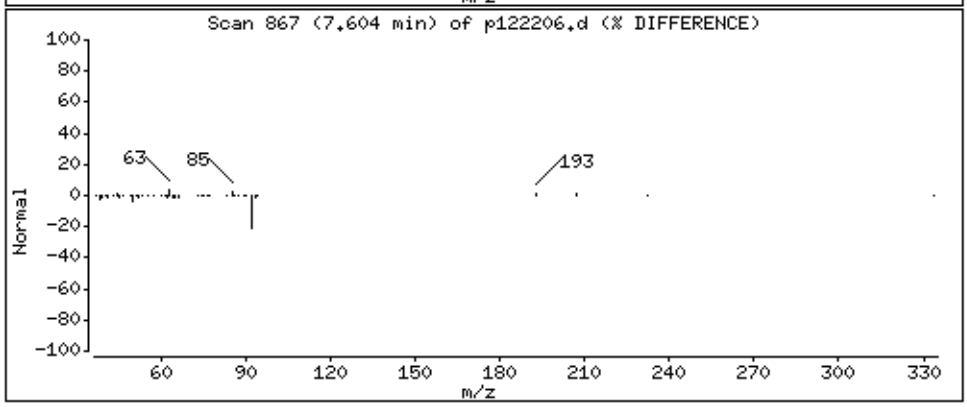
147 Toluene

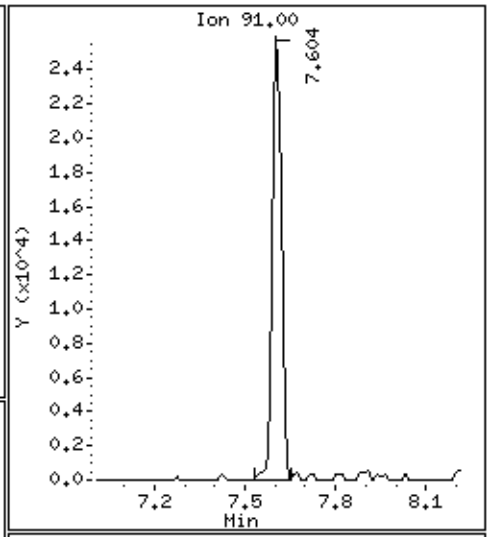
Concentration: 3.756 PPBV

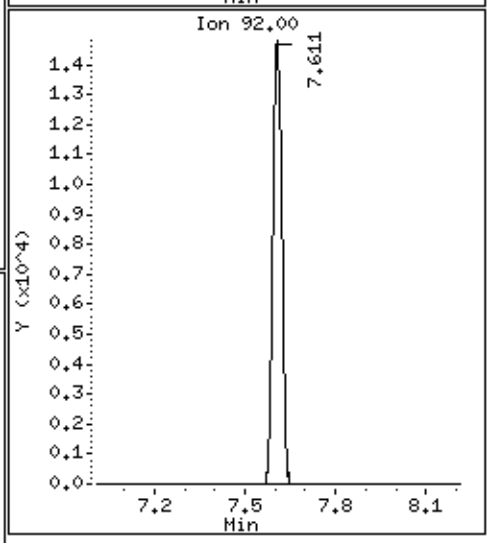












Data File: /chem/msdp.i/22dec14.b/p122206.d

Date : 22-DEC-2014 12:31

Client ID:

Instrument: msdp.i

Sample Info: 200ml 1L1685

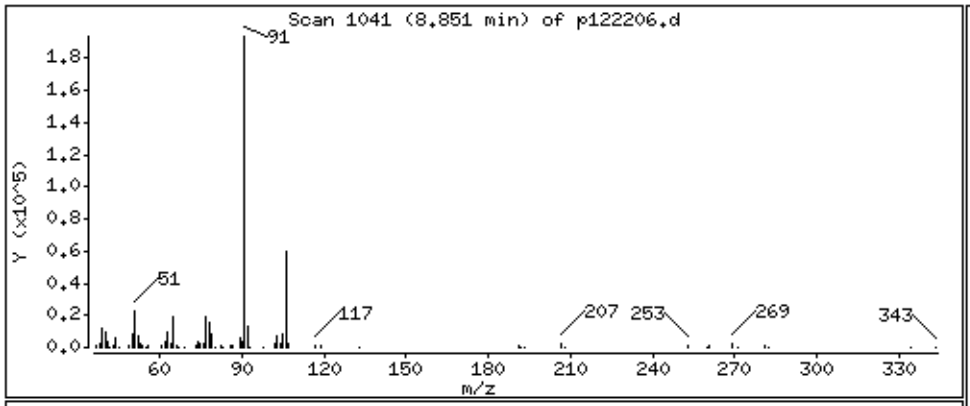
Operator: js

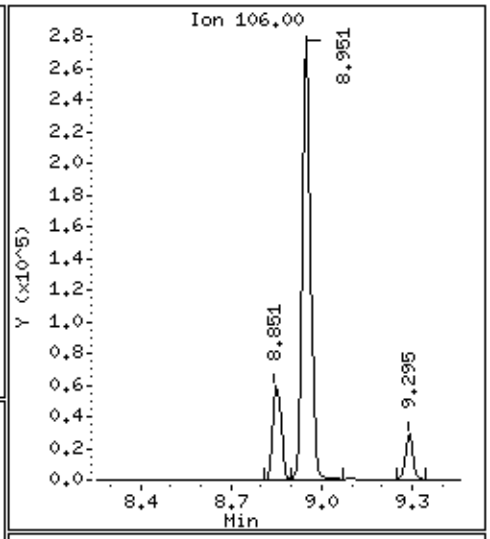
Column phase: RTX-624

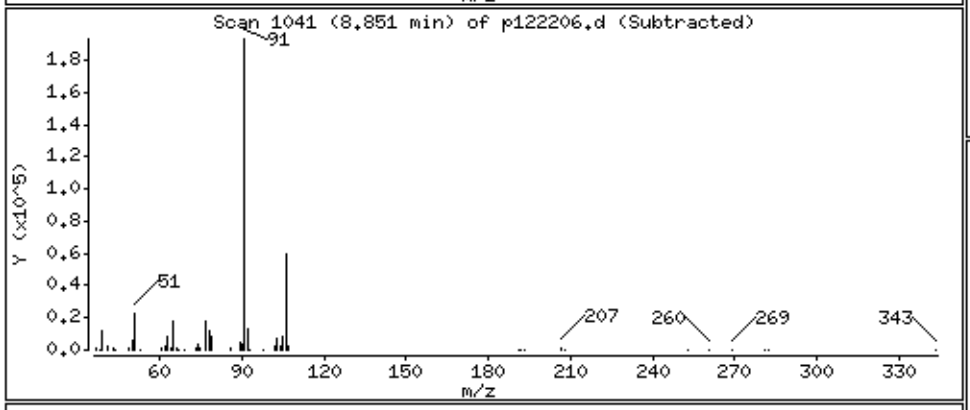
Column diameter: 0.25

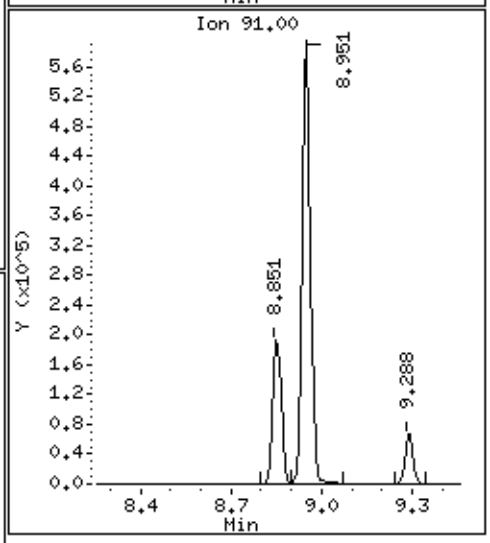
167 Ethyl Benzene

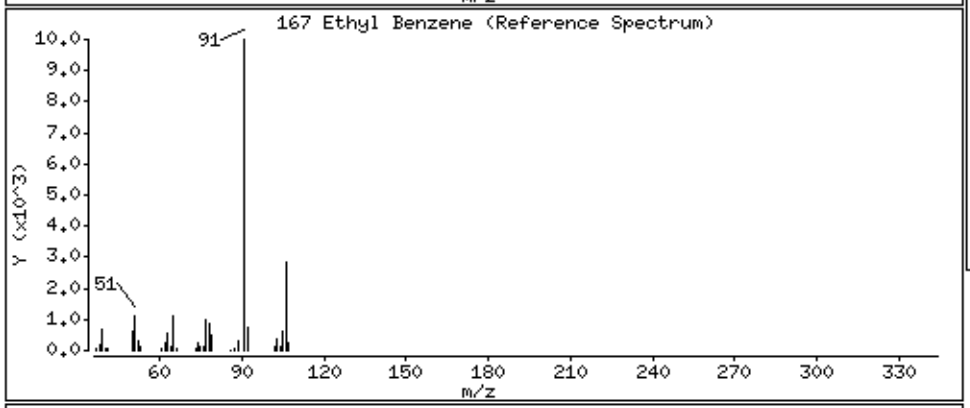
Concentration: 18.610 PPBV

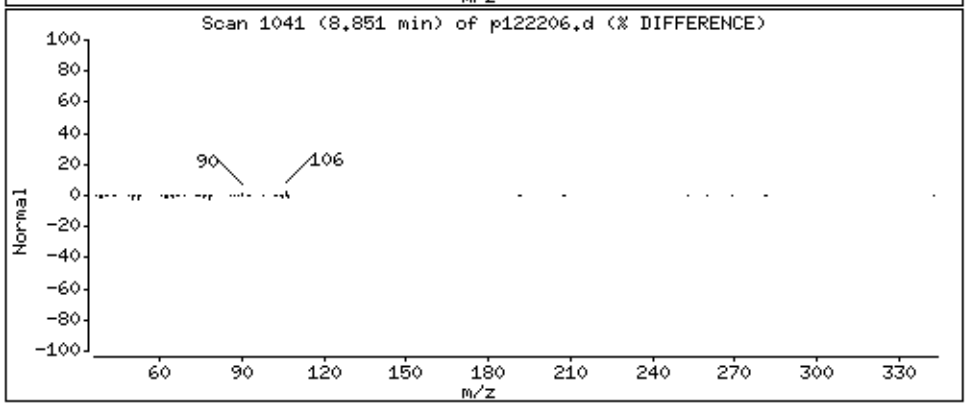












Data File: /chem/msdp.i/22dec14.b/p122206.d

Date : 22-DEC-2014 12:31

Client ID:

Instrument: msdp.i

Sample Info: 200ml 1L1685

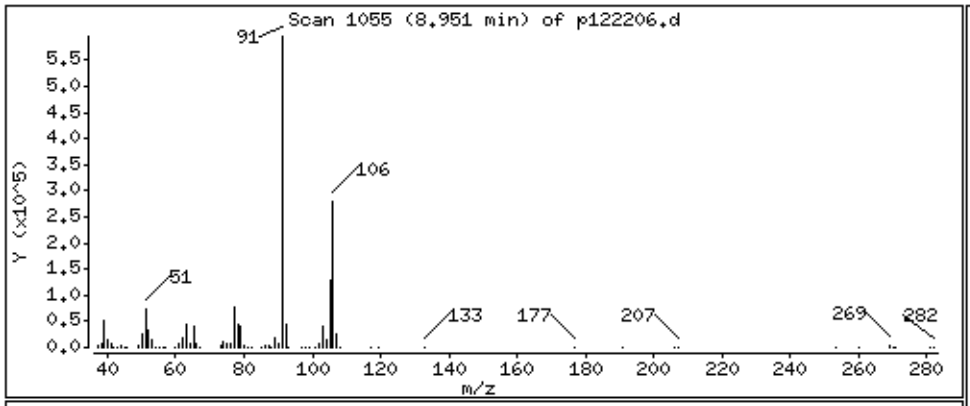
Operator: js

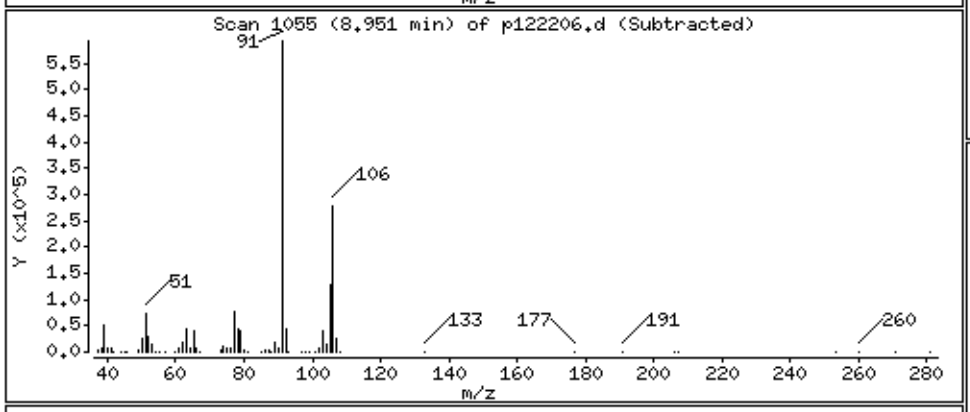
Column phase: RTX-624

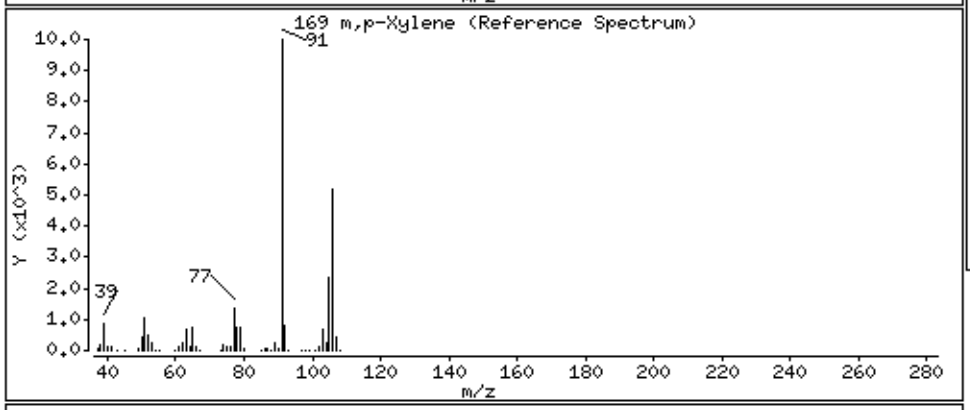
Column diameter: 0.25

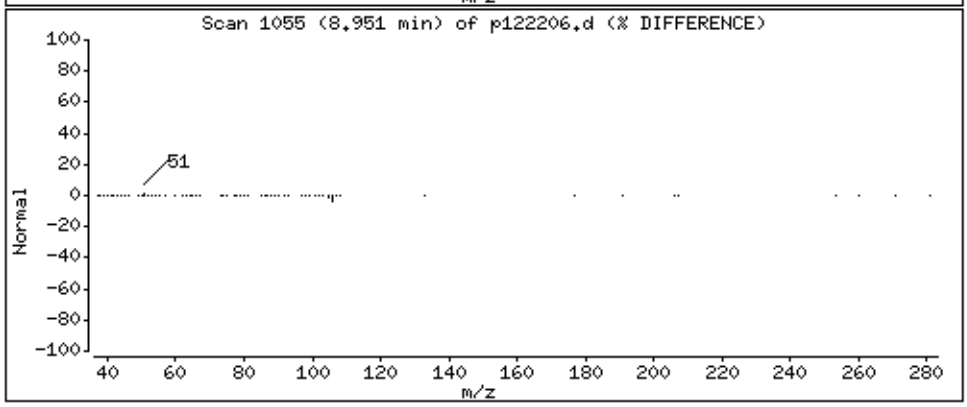
169 m,p-Xylene

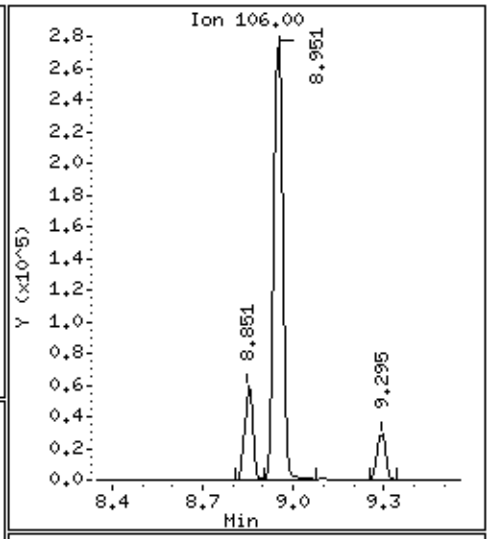
Concentration: 75.037 PPBV

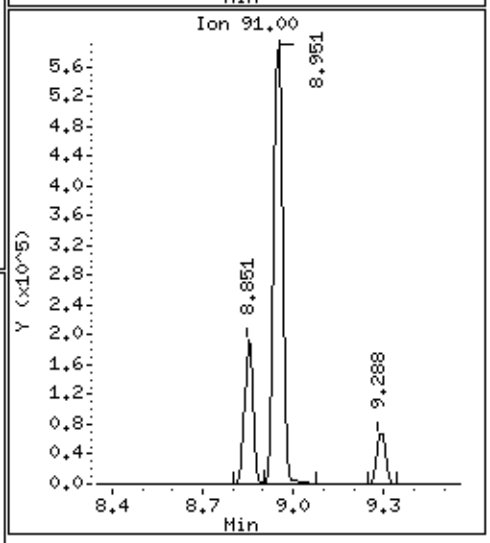












Data File: /chem/msdp.i/22dec14.b/p122206.d

Date : 22-DEC-2014 12:31

Client ID:

Instrument: msdp.i

Sample Info: 200ml 1L1685

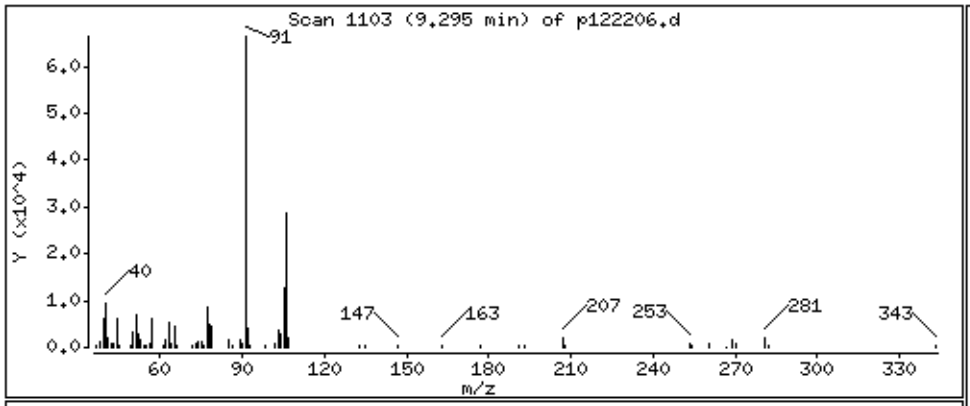
Operator: js

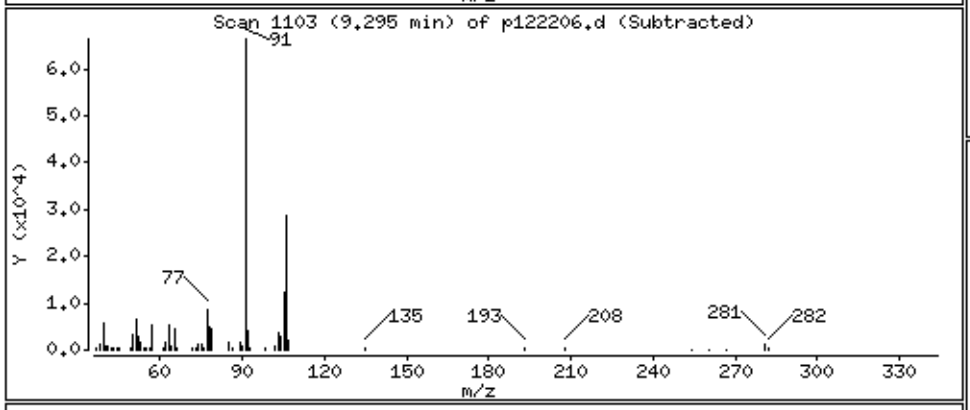
Column phase: RTX-624

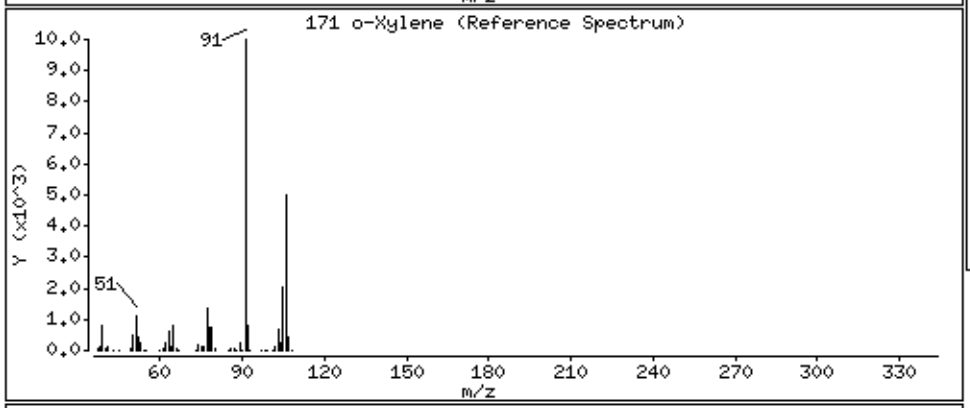
Column diameter: 0.25

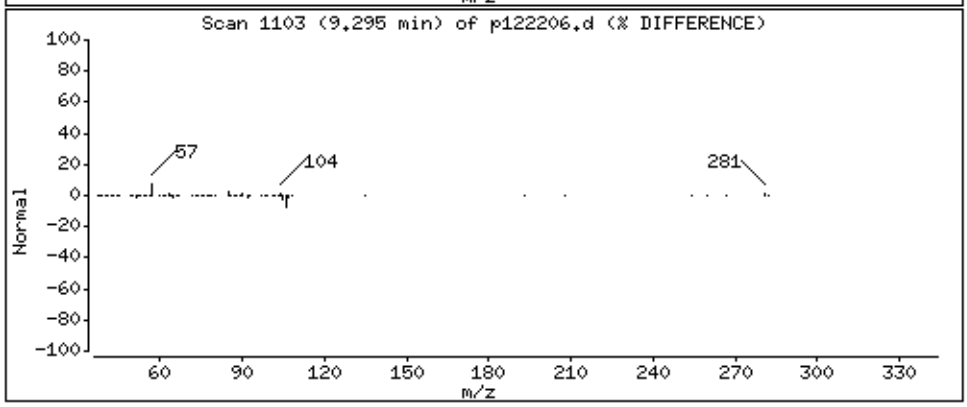
171 o-Xylene

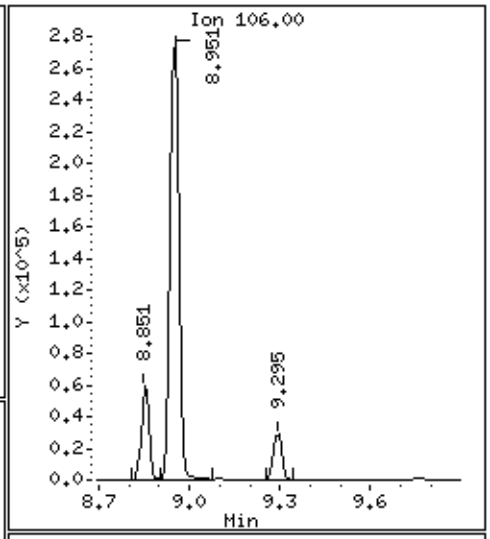
Concentration: 8.198 PPBV

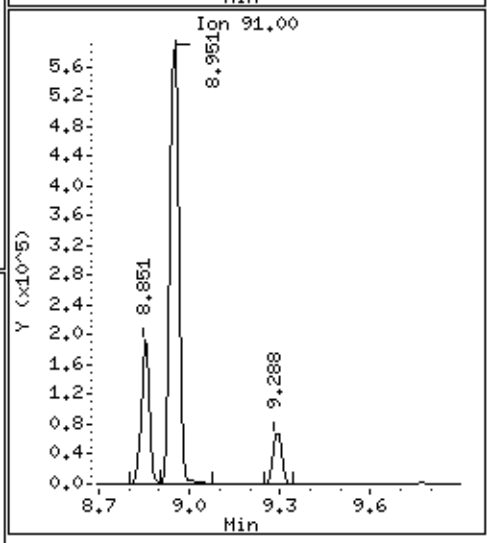












Data File: /chem/msdp.i/22dec14.b/p122206.d

Date : 22-DEC-2014 12:31

Client ID:

Instrument: msdp.i

Sample Info: 200ml 1L1685

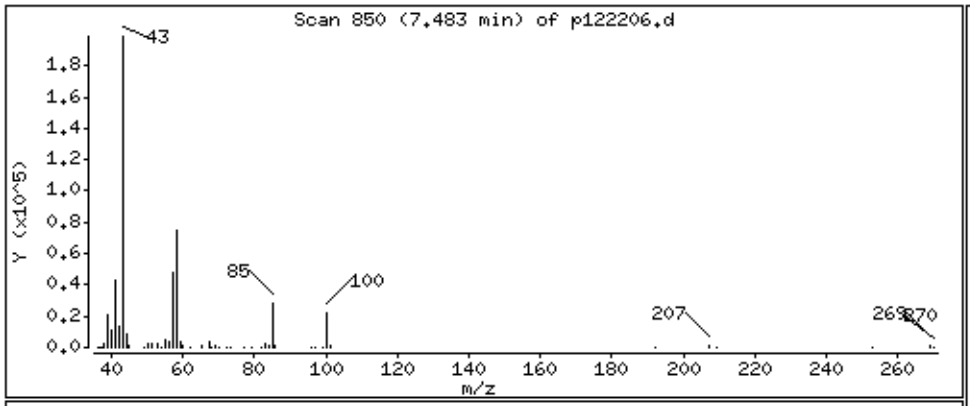
Operator: js

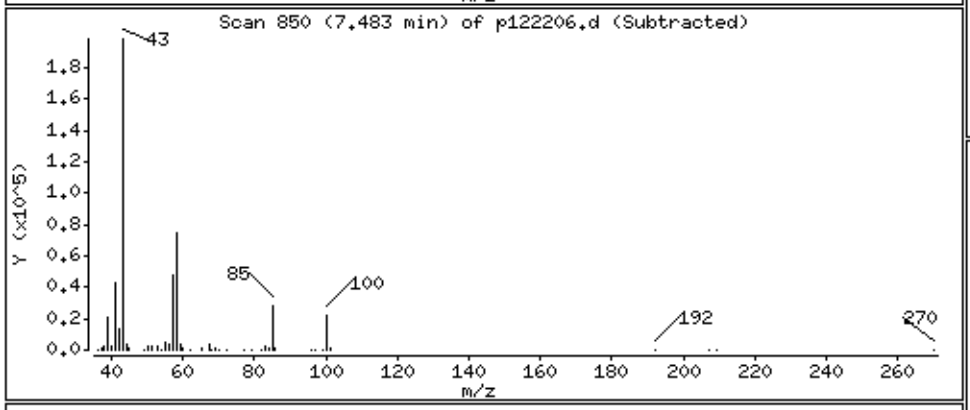
Column phase: RTX-624

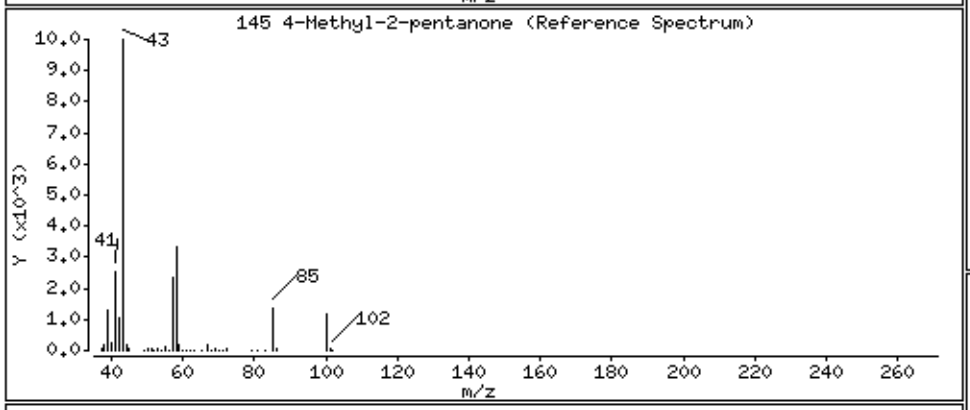
Column diameter: 0.25

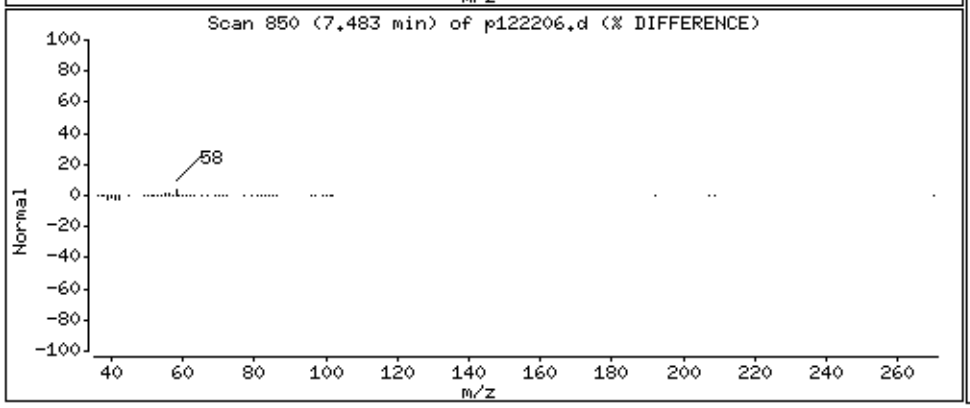
145 4-Methyl-2-pentanone

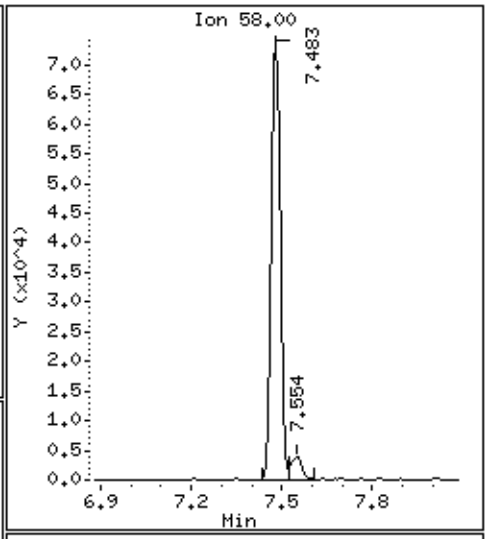
Concentration: 31.525 PPBV

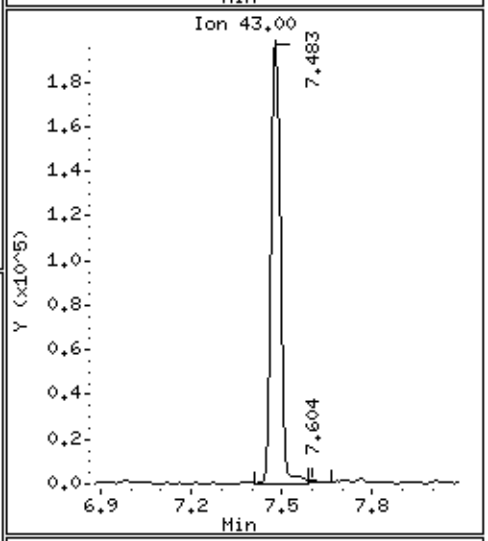


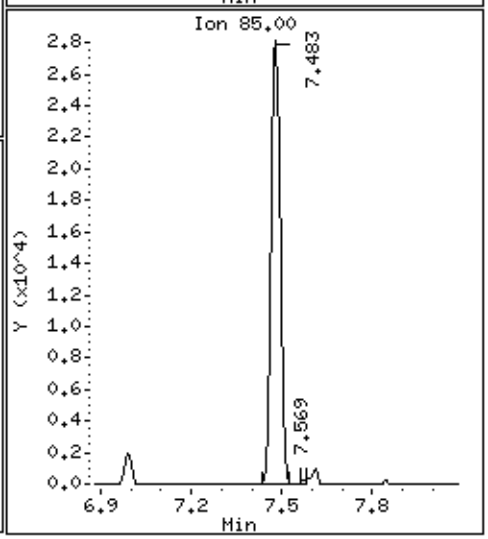












Data File: /chem/msdp.i/22dec14.b/p122206.d

Date : 22-DEC-2014 12:31

Client ID:

Instrument: msdp.i

Sample Info: 200ml 1L1685

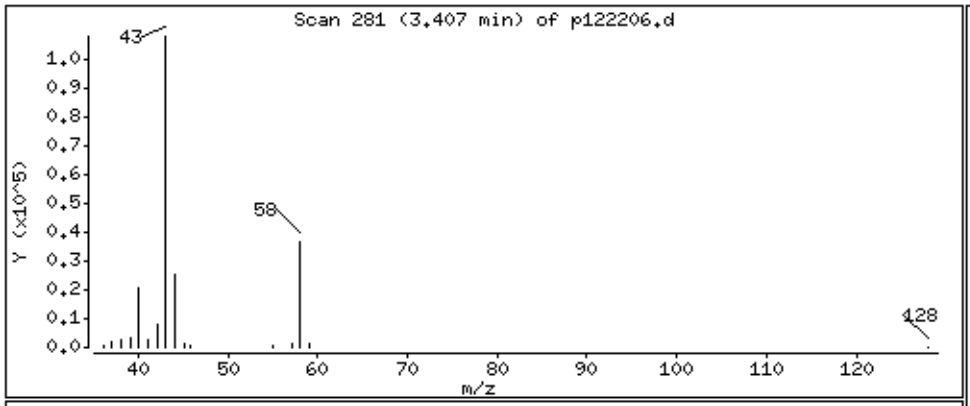
Operator: js

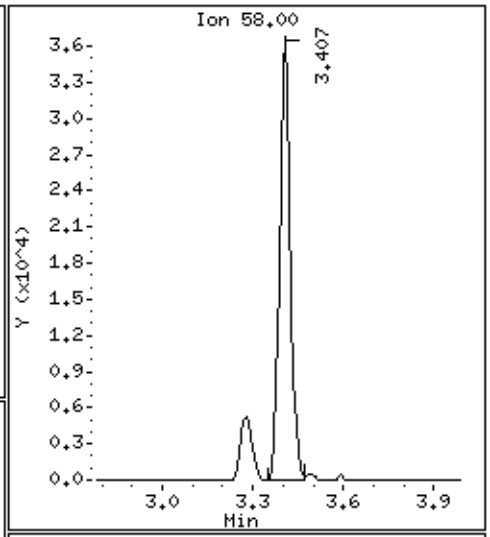
Column phase: RTX-624

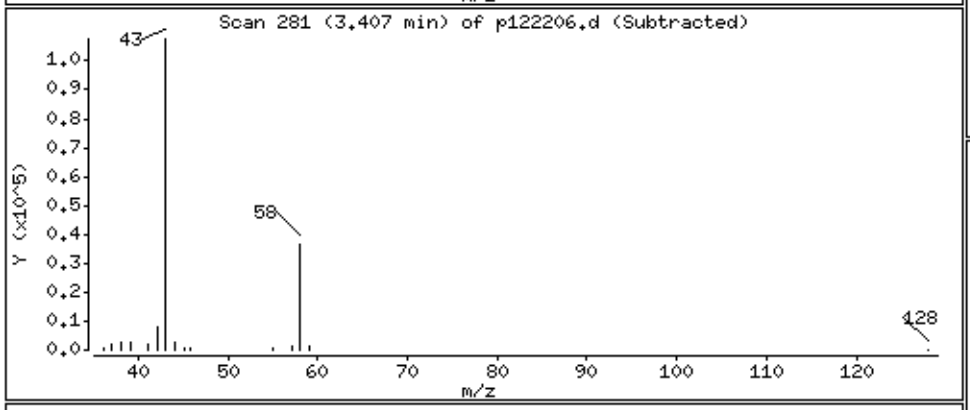
Column diameter: 0.25

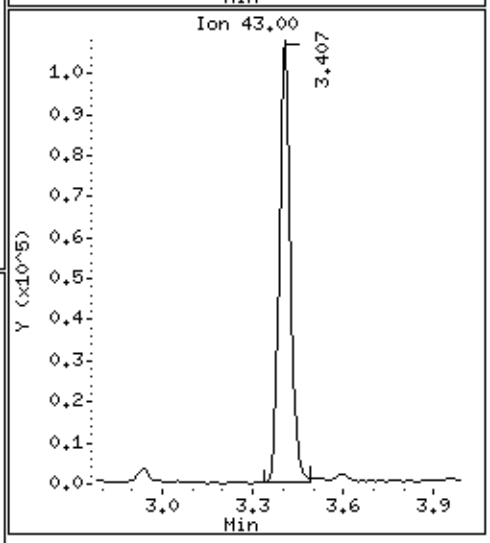
52 Acetone

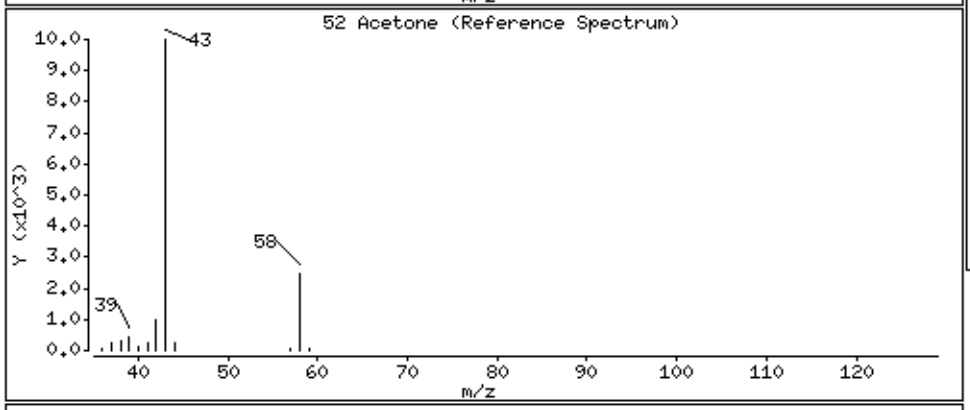
Concentration: 46.953 PPBV

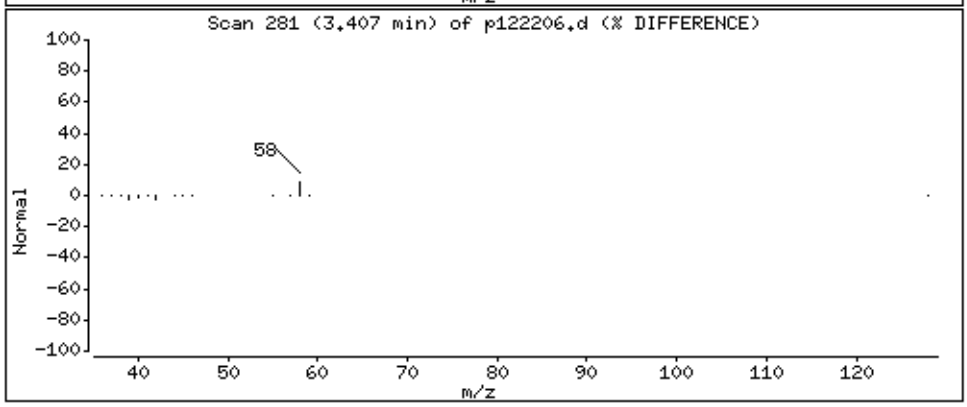












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Summary of Detected Compounds
EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: B5SS-4 (2014)

Lab ID#: 1412216A-02A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
2-Propanol	5.1	51	13	120
Ethyl Benzene	1.3	9.4	5.6	40
m,p-Xylene	1.3	36	5.6	160
o-Xylene	1.3	3.4	5.6	15
4-Methyl-2-pentanone	1.3	24	5.3	100
Acetone	13	130	30	300
Toluene	1.3	62	4.8	240

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Client Sample ID: B5SS-4 (2014)

Lab ID#: 1412216A-02A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p122207**	**Date of Collection:**	**12/10/14 2:12:00 PM**
Dil. Factor:	**2.57**	**Date of Analysis:**	**12/22/14 01:25 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Benzene	1.3	Not Detected	4.1	Not Detected
2-Propanol	5.1	51	13	120
Ethyl Benzene	1.3	9.4	5.6	40
m,p-Xylene	1.3	36	5.6	160
o-Xylene	1.3	3.4	5.6	15
4-Methyl-2-pentanone	1.3	24	5.3	100
Acetone	13	130	30	300
Toluene	1.3	62	4.8	240

Container Type: 1 Liter Summa Canister (100% Certified)

Surrogates	%Recovery	Method Limits
Toluene-d8	103	70-130
1,2-Dichloroethane-d4	98	70-130
4-Bromofluorobenzene	94	70-130

Eurofins Air Toxics Inc.

EPA TO-15/MODIFIED TO14A

Data file : /chem/msdp.i/22dec14.b/p122207.d
Lab Smp Id: 1412216A-02A
Inj Date : 22-DEC-2014 13:25
Operator : js Inst ID: msdp.i
Smp Info : 200ml 1L1681
Misc Info : 6.5 Hg->14.9 psi
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msdp.i/22dec14.b/p14q1217a.m
Meth Date : 24-Dec-2014 07:32 dbailey Quant Type: ISTD
Cal Date : 17-DEC-2014 21:17 Cal File: p121708.d
Als bottle: 2
Dil Factor: 2.57000
Integrator: HP RTE Compound Sublist: And19256.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Name	Value	Description
DF	2.57000	Dilution Factor

RT	EXP RT	(REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
* 98 Bromochloromethane							CAS #: 74-97-5	
5.448	5.455	(1.000)	130	111765	25.0000		80.00- 120.00	100.00
5.448	5.455	(1.000)	128	82272			0.00- 30.00	73.61
5.448	5.455	(1.000)	49	220354			0.00- 30.00	197.16
* 123 1,4-Difluorobenzene							CAS #: 540-36-3	
6.337	6.344	(1.000)	114	489620	25.0000		80.00- 120.00	100.00
6.344	6.344	(1.000)	88	86742			0.00- 30.00	17.72
* 163 Chlorobenzene-d5							CAS #: 3114-55-4	
8.779	8.779	(1.000)	117	554776	25.0000		80.00- 120.00	100.00
8.779	8.779	(1.000)	82	336014			0.00- 30.00	60.57
$ 117 1,2-Dichloroethane-d4							CAS #: 17060-07-0	
5.986	5.985	(1.099)	65	262985	24.6487	24.649	80.00- 120.00	100.00
5.986	5.985	(1.099)	67	115394			0.00- 30.00	43.88

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
$ 146 Toluene-d8					CAS #: 2037-26-5		
7.554	7.554 (1.192)	98	596075	25.8310	25.831	80.00- 120.00	100.00
7.554	7.554 (1.192)	70	73013			0.00- 30.00	12.25
7.554	7.554 (1.192)	100	373630			0.00- 30.00	62.68
$ 177 4-Bromofluorobenzene					CAS #: 460-00-4		
9.761	9.760 (1.112)	174	387344	23.5398	23.540	80.00- 120.00	100.00
9.753	9.760 (1.111)	95	445514			0.00- 30.00	115.02
9.761	9.760 (1.112)	176	370016			0.00- 30.00	95.53
147 Toluene					CAS #: 108-88-3		
7.604	7.611 (1.200)	91	778284	24.2770	62.392	80.00- 120.00	100.00
7.604	7.611 (1.200)	92	444267			0.00- 30.00	57.08
167 Ethyl Benzene					CAS #: 100-41-4		
8.851	8.858 (1.008)	106	51804	3.63821	9.350	80.00- 120.00	100.00
8.851	8.858 (1.008)	91	164342			0.00- 30.00	317.24
169 m,p-Xylene					CAS #: 108-38-3		
8.951	8.951 (1.020)	106	245133	14.1923	36.474	80.00- 120.00	100.00
8.951	8.951 (1.020)	91	572010			0.00- 30.00	233.35
171 o-Xylene					CAS #: 95-47-6		
9.288	9.295 (1.058)	106	21545	1.33276	3.425	80.00- 120.00	100.00
9.295	9.295 (1.059)	91	52376			0.00- 30.00	243.10
57 2-Propanol					CAS #: 67-63-0		
3.600	3.564 (0.661)	45	321868	19.9272	51.213	80.00- 120.00	100.00
3.600	3.564 (0.661)	43	69468			0.00- 30.00	21.58
3.600	3.564 (0.661)	59	14099			0.00- 30.00	4.38
145 4-Methyl-2-pentanone					CAS #: 108-10-1		
7.483	7.483 (1.181)	58	100137	9.48906	24.387	80.00- 120.00	100.00
7.483	7.483 (1.181)	43	281119			0.00- 30.00	280.73
7.483	7.483 (1.181)	85	38539			0.00- 30.00	38.49
52 Acetone					CAS #: 67-64-1		
3.407	3.385 (0.625)	58	220055	49.1763	126.38	80.00- 120.00	100.00
3.407	3.385 (0.625)	43	675709			0.00- 30.00	307.06

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdp.i
Lab File ID: p122207.d
Lab Smp Id: 1412216A-02A
Analysis Type: VOA
Quant Type: ISTD
Operator: js
Method File: /chem/msdp.i/22dec14.b/p14q1217a.m
Misc Info: 6.5 Hg->14.9 psi

Calibration Date: 22-DEC-2014
Calibration Time: 09:50

Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
98 Bromochloromethan	153275	91965	214585	111765	-27.08
123 1,4-Difluorobenze	654249	392549	915949	489620	-25.16
163 Chlorobenzene-d5	700329	420197	980461	554776	-20.78

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
98 Bromochloromethan	5.46	5.13	5.79	5.45	-0.13
123 1,4-Difluorobenze	6.34	6.01	6.67	6.34	-0.11
163 Chlorobenzene-d5	8.78	8.45	9.11	8.78	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: 24-Dec-2014 07:37

Eurofins Air Toxics Inc.

RECOVERY REPORT

Client Name: Client SDG: 22dec14
Sample Matrix: GAS Fraction: VOA
Lab Smp Id: 1412216A-02A
Level: LOW Operator: js
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: 2926Spectra.spk Quant Type: ISTD
Sublist File: And19256.sub
Method File: /chem/msdp.i/22dec14.b/p14q1217a.m
Misc Info: 6.5 Hg->14.9 psi

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 117 1,2-Dichloroethane	25.000	24.649	98.59	70-130
$ 146 Toluene-d8	25.000	25.831	103.32	70-130
$ 177 4-Bromofluorobenze	25.000	23.540	94.16	70-130

Data File: /chem/msdp.i/22dec14.b/p122207.d

Date : 22-DEC-2014 13:25

Client ID:

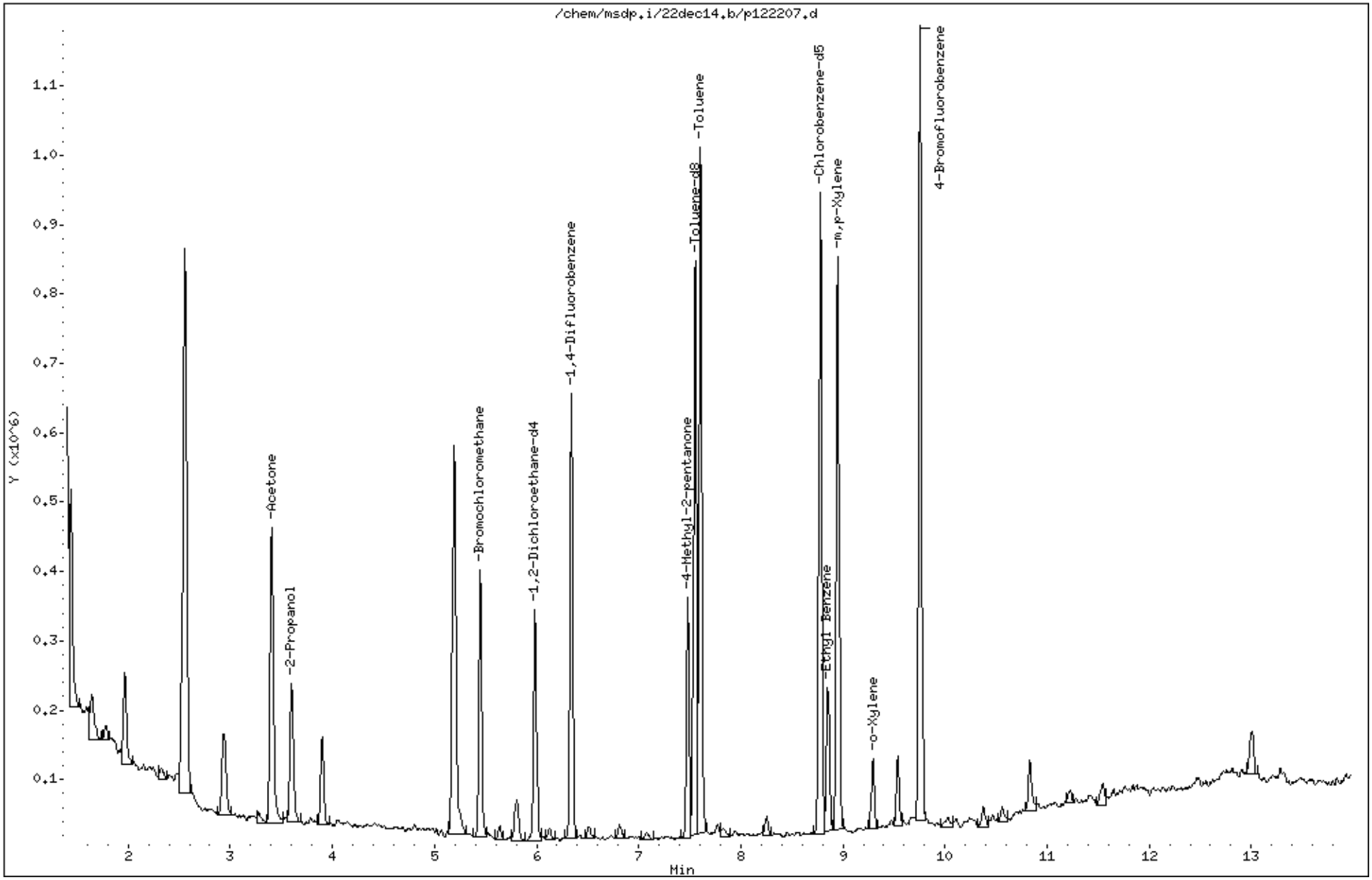
Sample Info: 200ml 1L1681

Column phase: RTX-624

Instrument: msdp.i

Operator: js

Column diameter: 0.25



Data File: /chem/msdp.i/22dec14.b/p122207.d

Date : 22-DEC-2014 13:25

Client ID:

Instrument: msdp.i

Sample Info: 200ml 1L1681

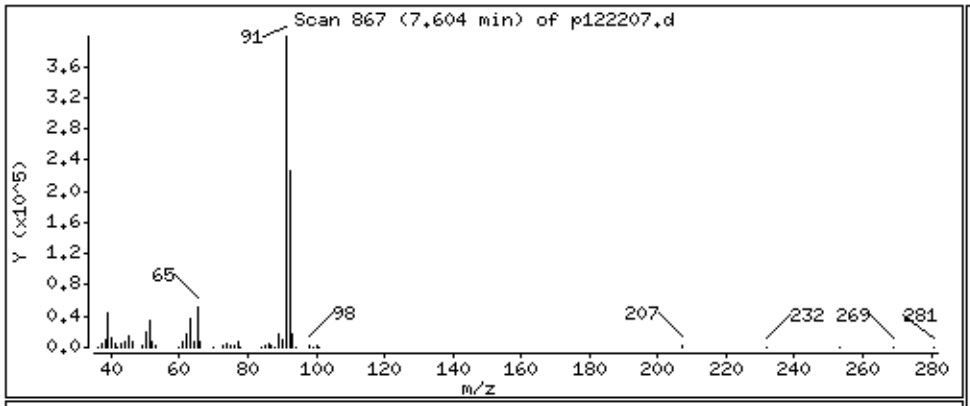
Operator: js

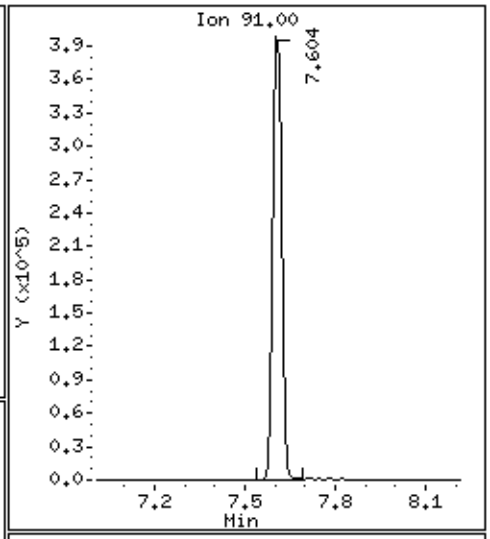
Column phase: RTX-624

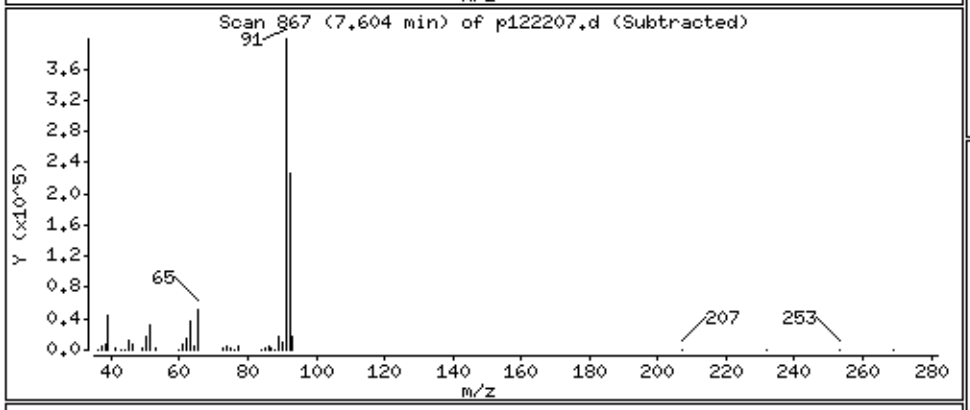
Column diameter: 0.25

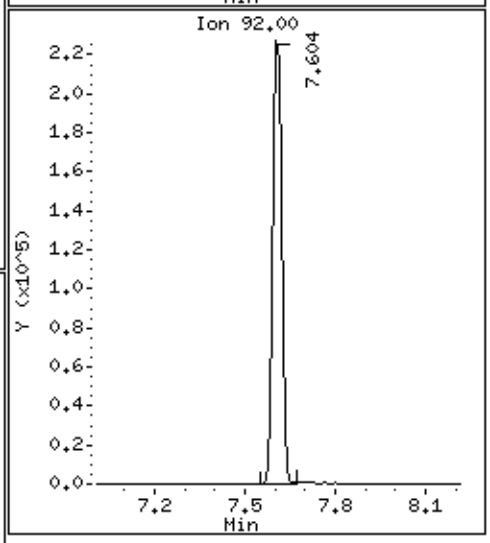
147 Toluene

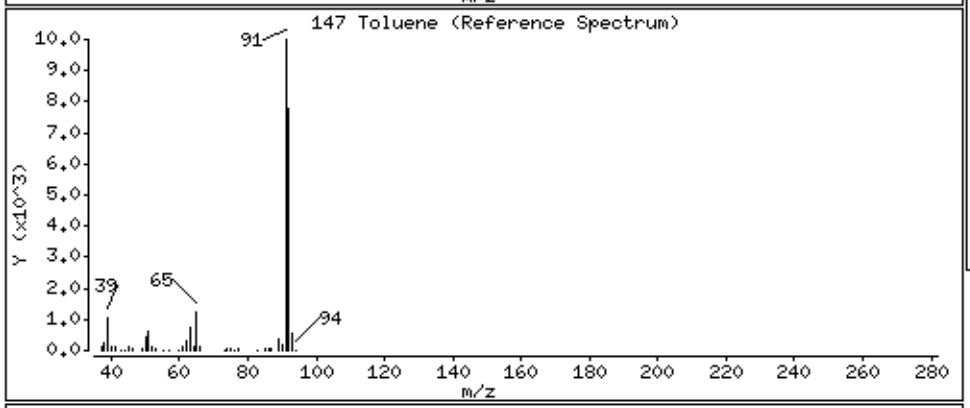
Concentration: 62.392 PPBV

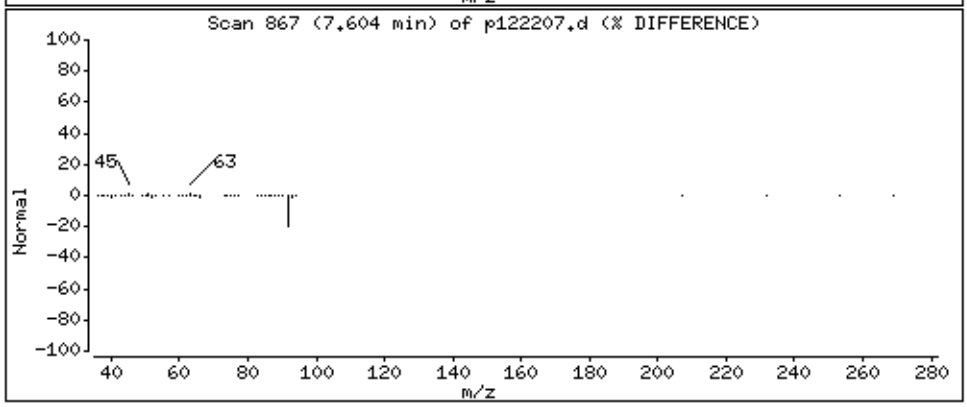












Data File: /chem/msdp.i/22dec14.b/p122207.d

Date : 22-DEC-2014 13:25

Client ID:

Instrument: msdp.i

Sample Info: 200ml 1L1681

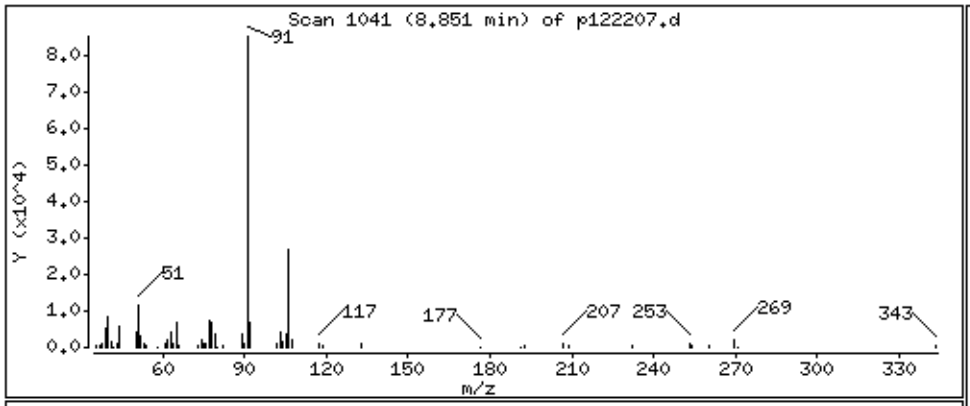
Operator: js

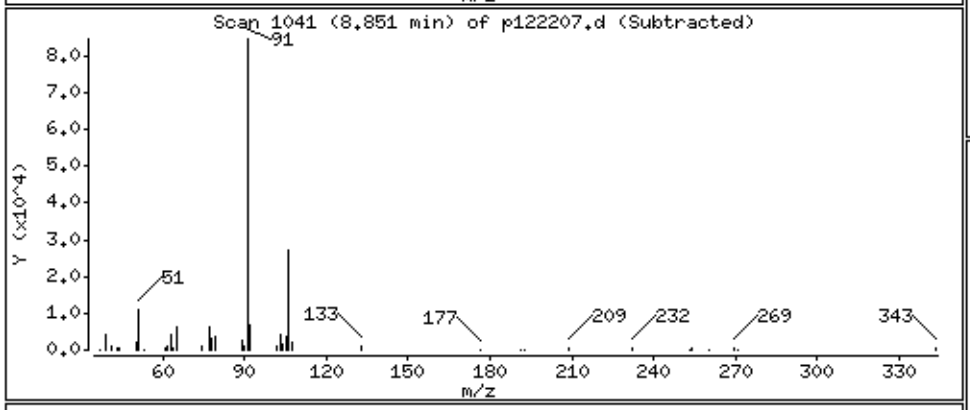
Column phase: RTX-624

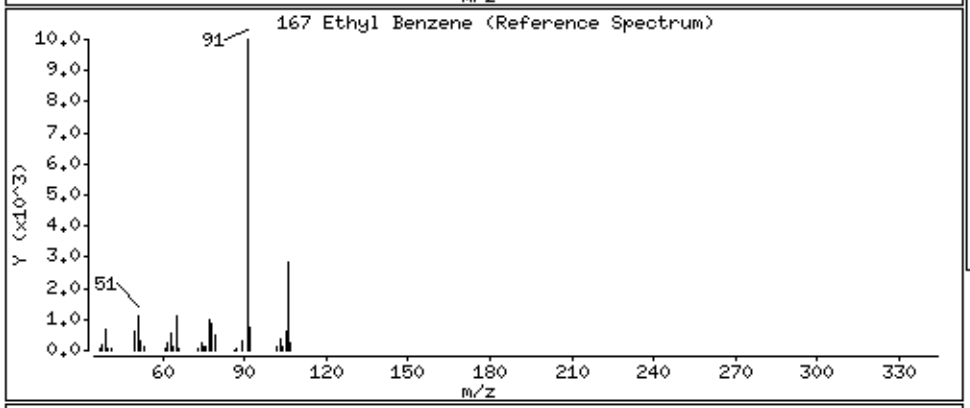
Column diameter: 0.25

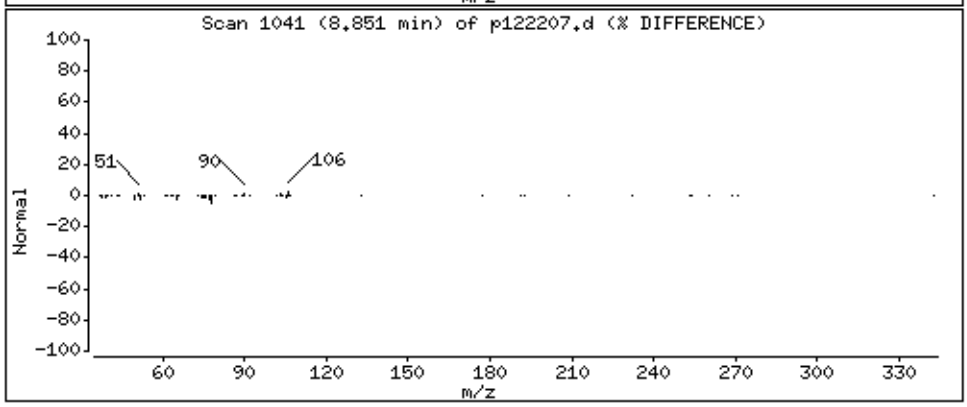
167 Ethyl Benzene

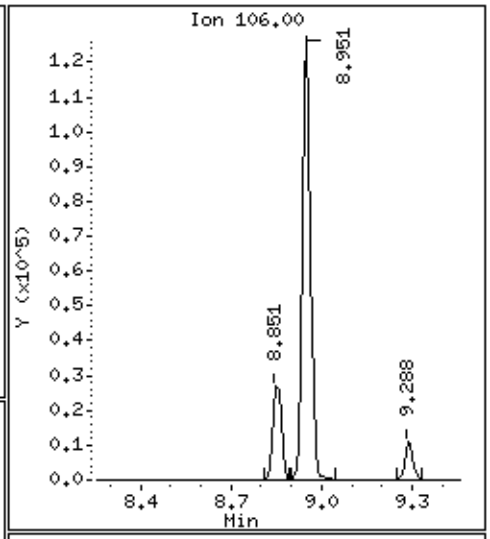
Concentration: 9.350 PPBV

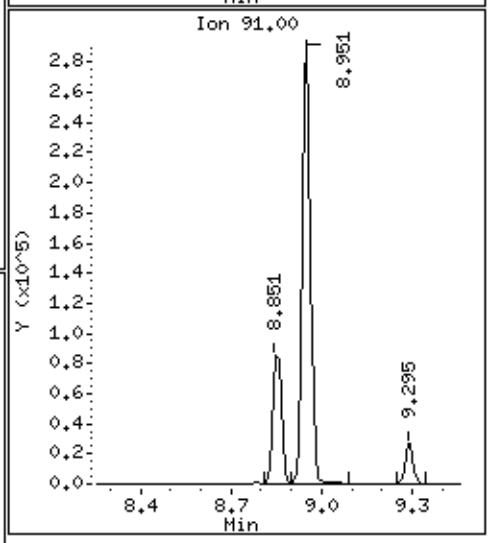












Data File: /chem/msdp.i/22dec14.b/p122207.d

Date : 22-DEC-2014 13:25

Client ID:

Instrument: msdp.i

Sample Info: 200ml 1L1681

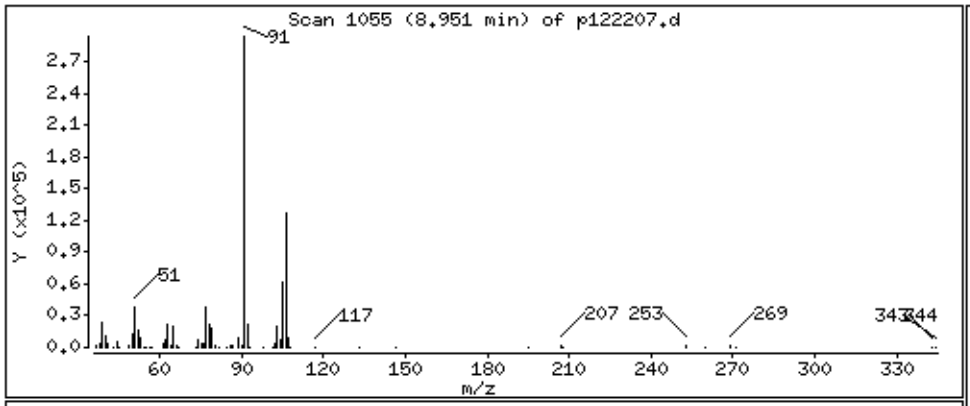
Operator: js

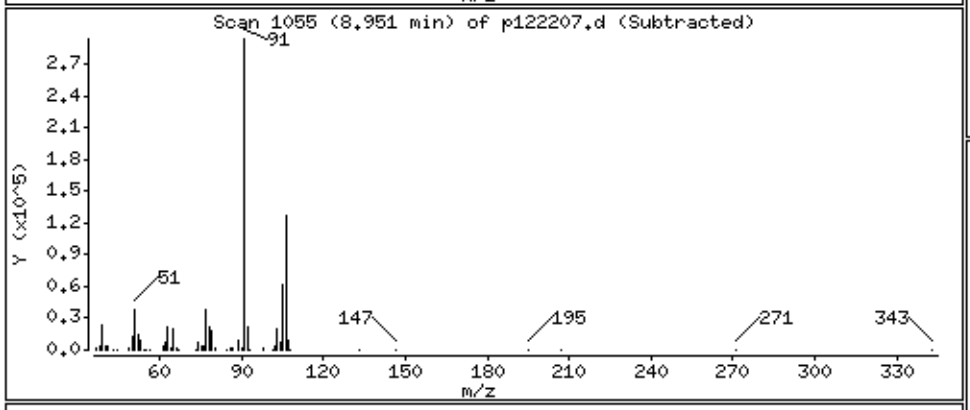
Column phase: RTX-624

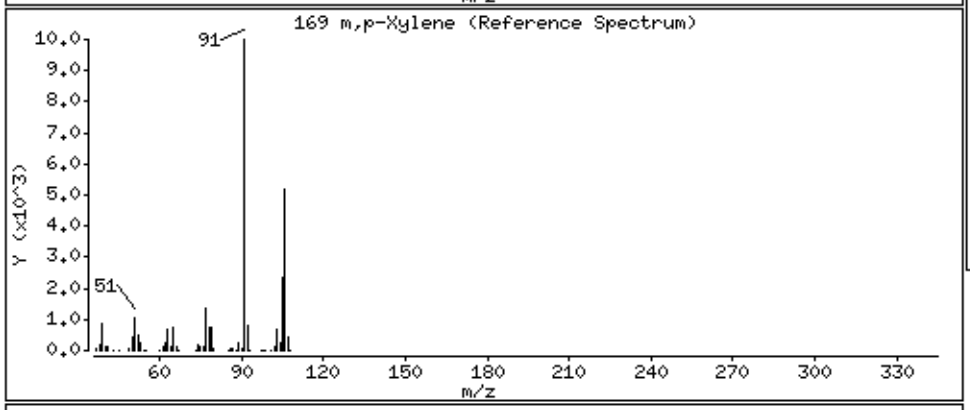
Column diameter: 0.25

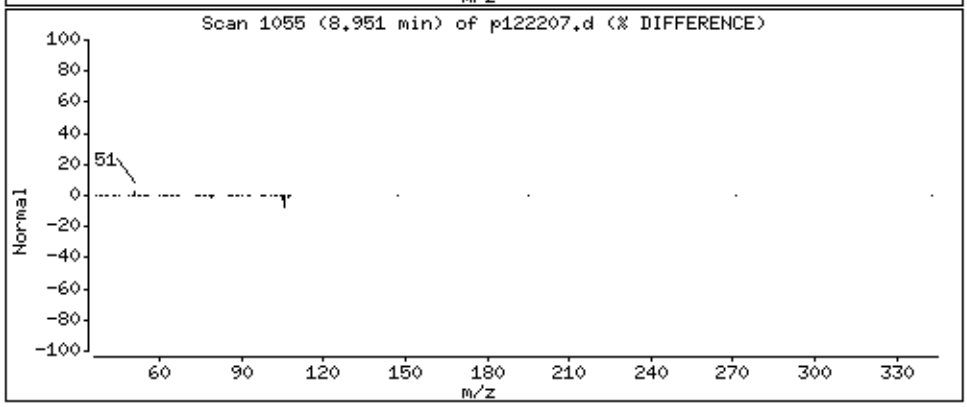
169 m,p-Xylene

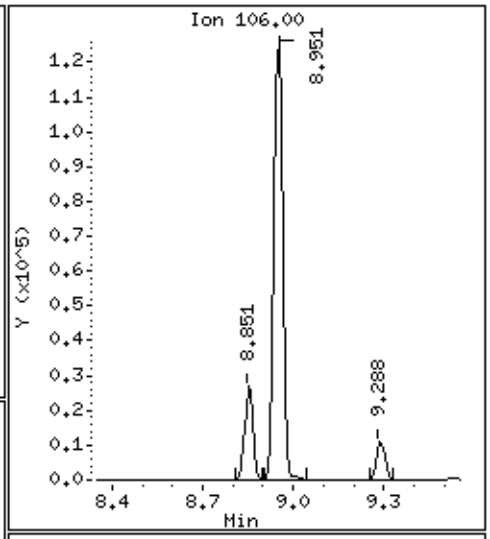
Concentration: 36.474 PPBV

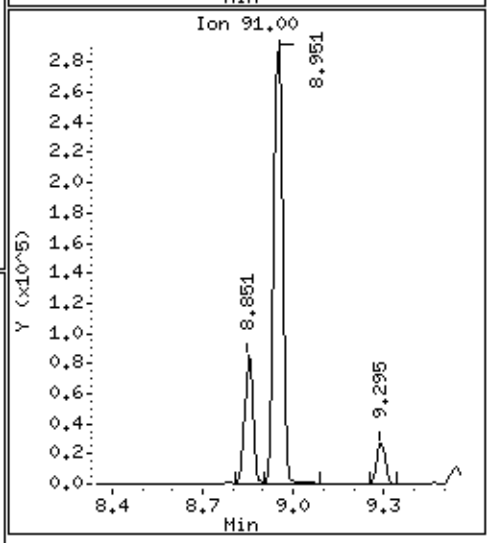












Data File: /chem/msdp.i/22dec14.b/p122207.d

Date : 22-DEC-2014 13:25

Client ID:

Instrument: msdp.i

Sample Info: 200ml 1L1681

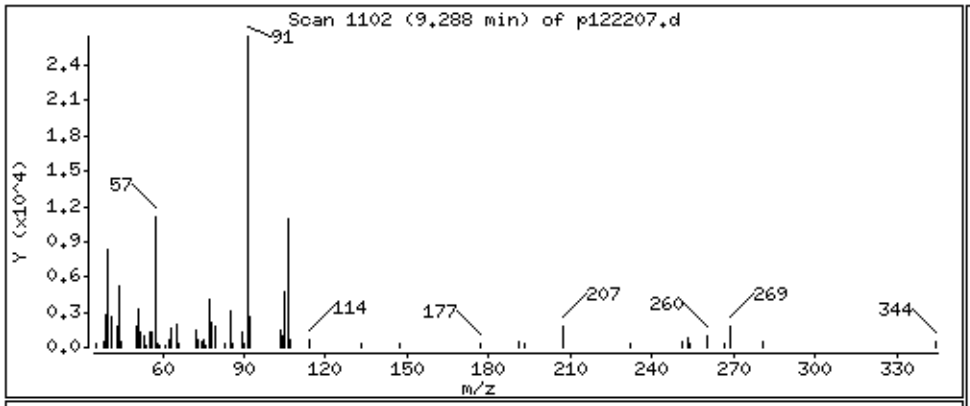
Operator: js

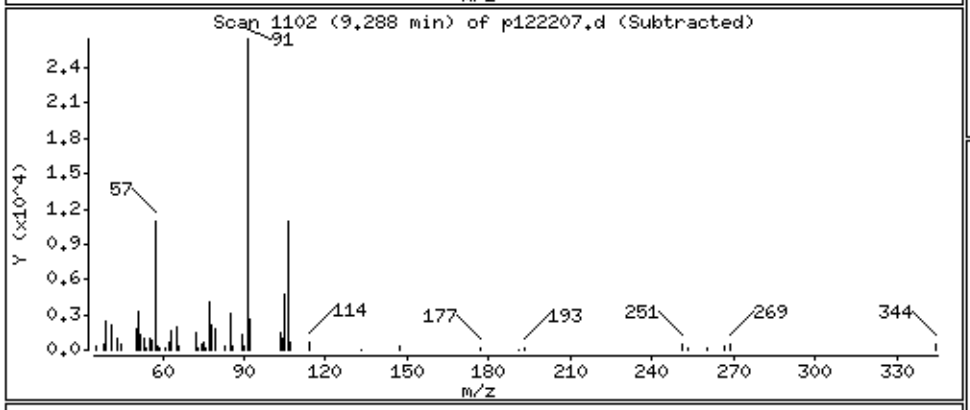
Column phase: RTX-624

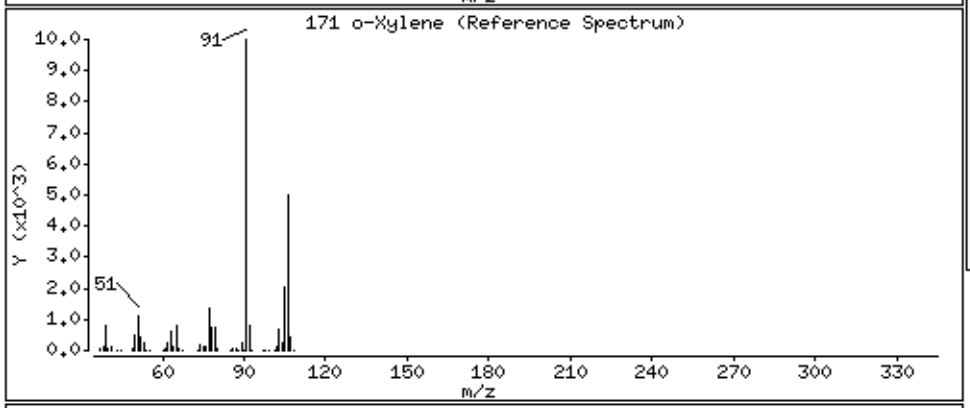
Column diameter: 0.25

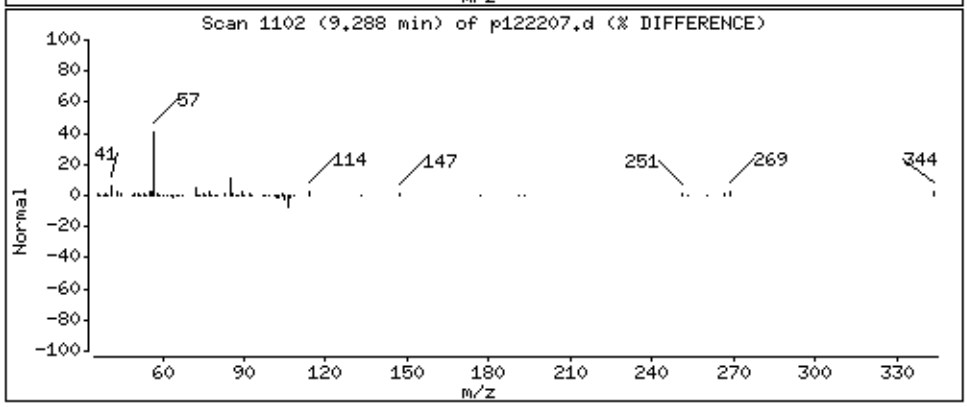
171 o-Xylene

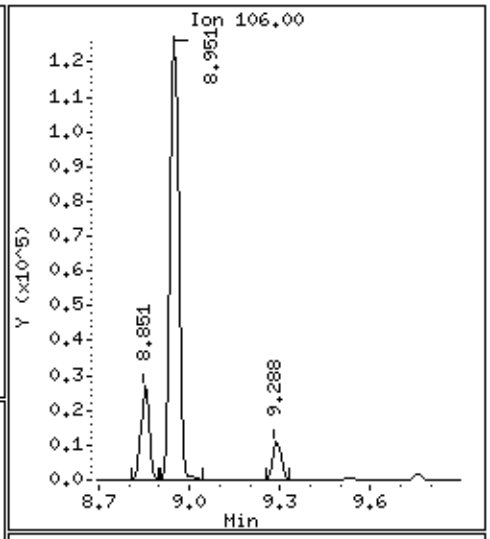
Concentration: 3.425 PPBV

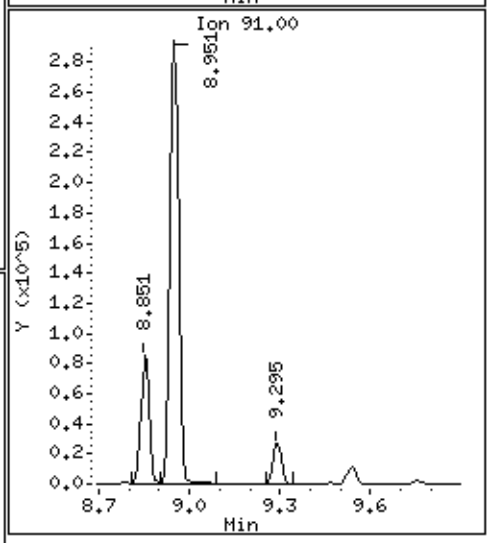












Data File: /chem/msdp.i/22dec14.b/p122207.d

Date : 22-DEC-2014 13:25

Client ID:

Instrument: msdp.i

Sample Info: 200ml 1L1681

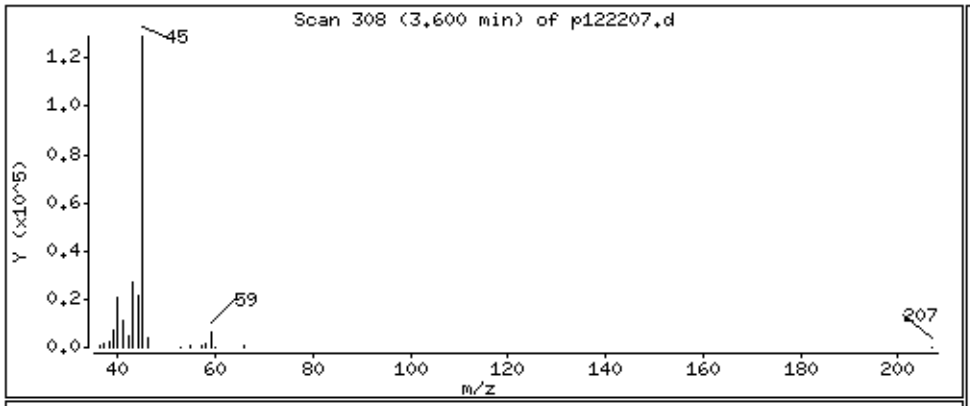
Operator: js

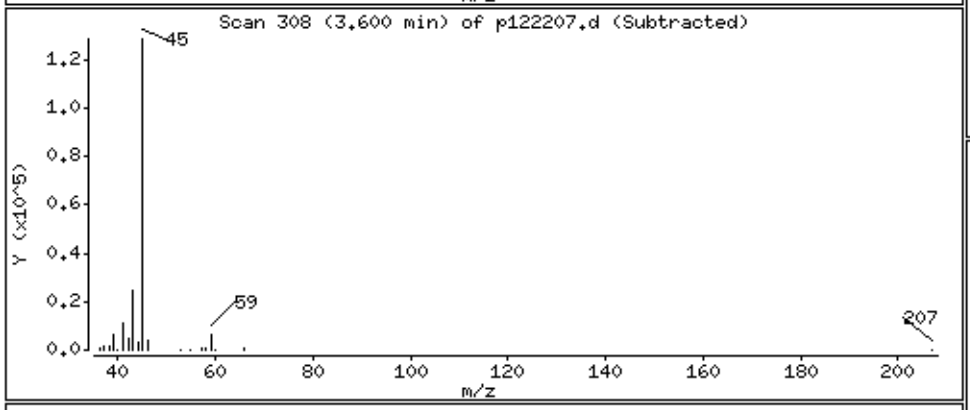
Column phase: RTX-624

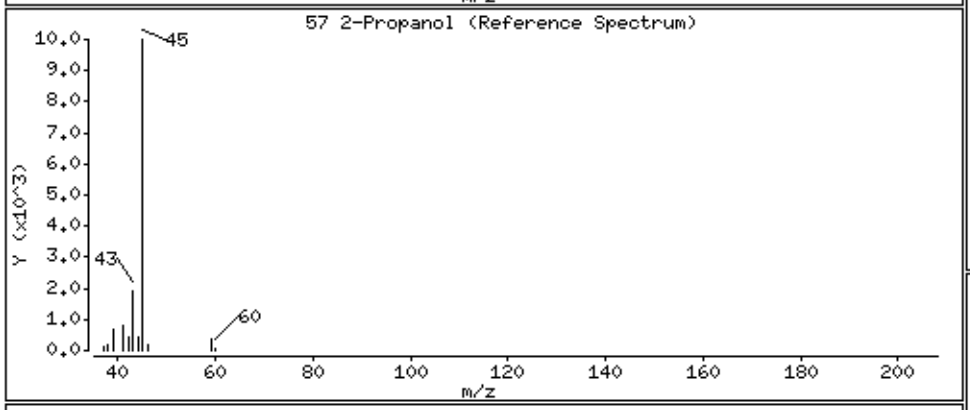
Column diameter: 0.25

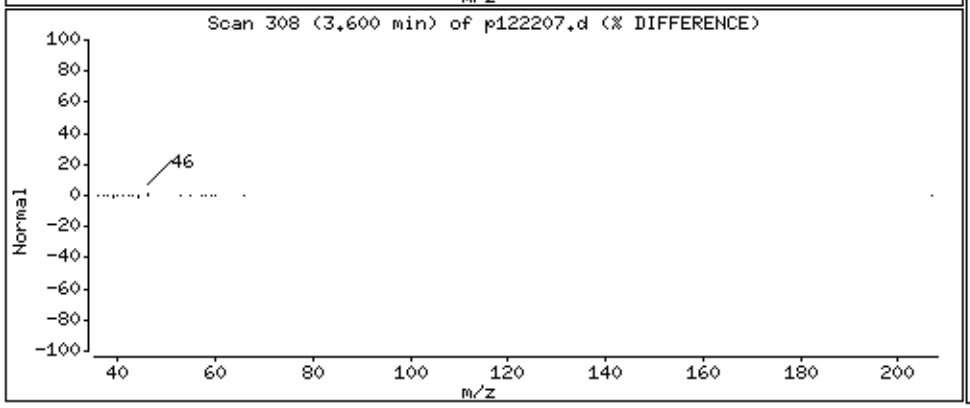
57 2-Propanol

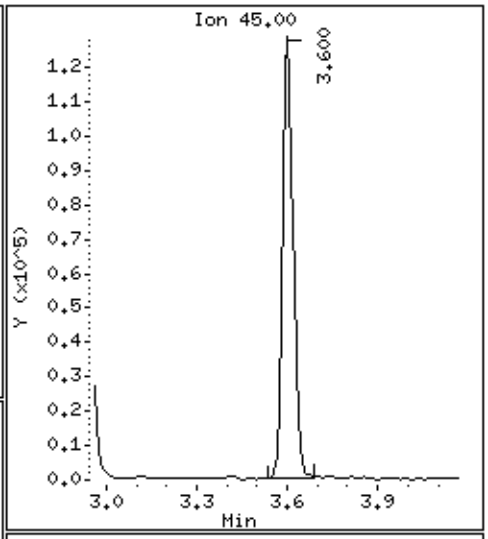
Concentration: 51.213 PPBV

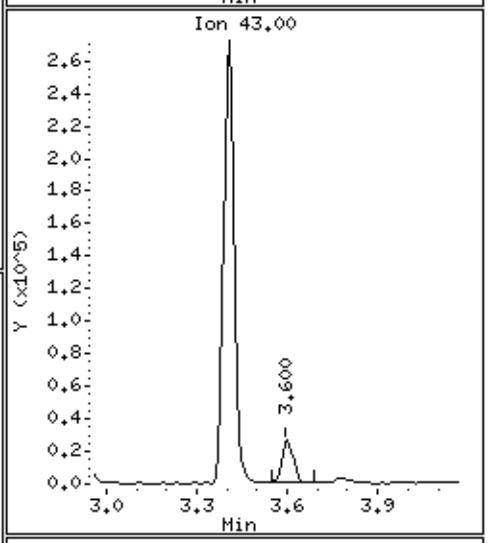


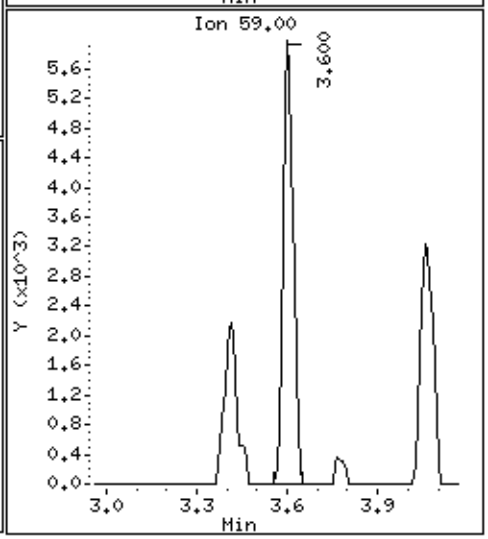












Data File: /chem/msdp.i/22dec14.b/p122207.d

Date : 22-DEC-2014 13:25

Client ID:

Instrument: msdp.i

Sample Info: 200ml 1L1681

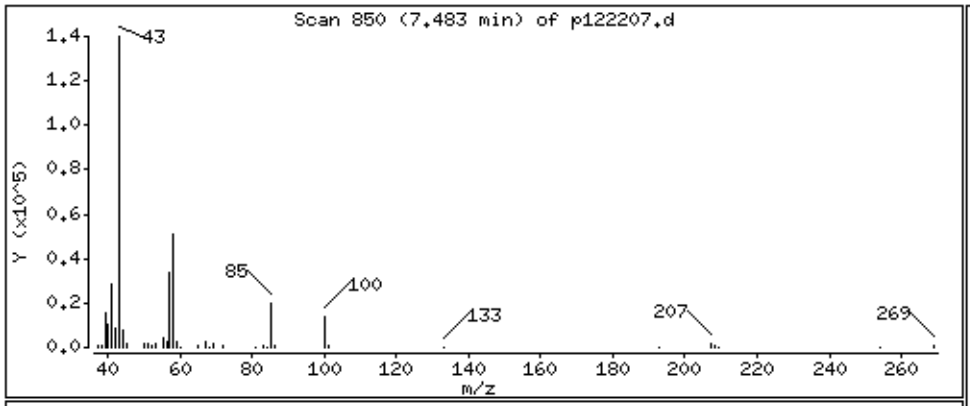
Operator: js

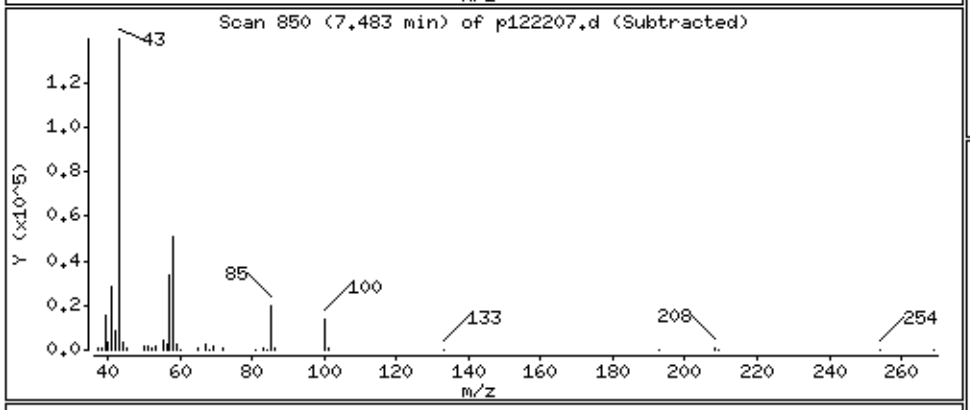
Column phase: RTX-624

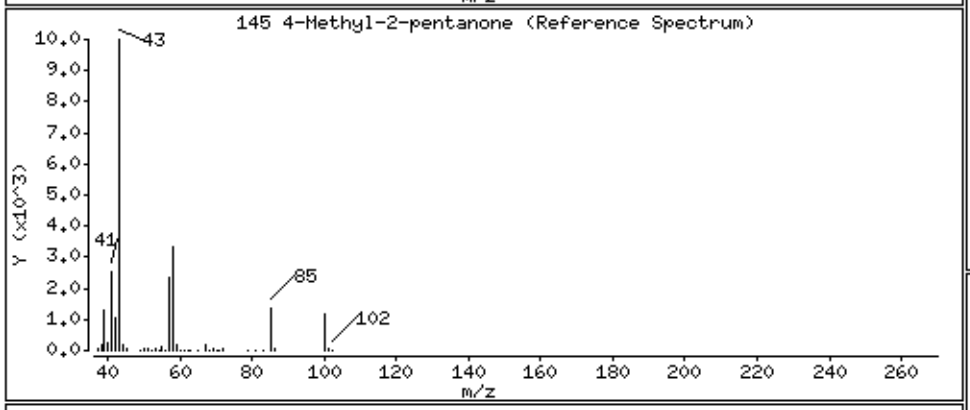
Column diameter: 0.25

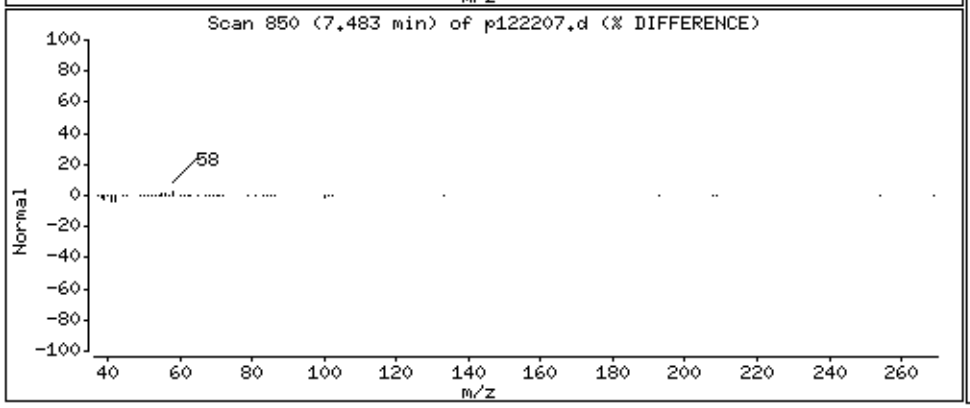
145 4-Methyl-2-pentanone

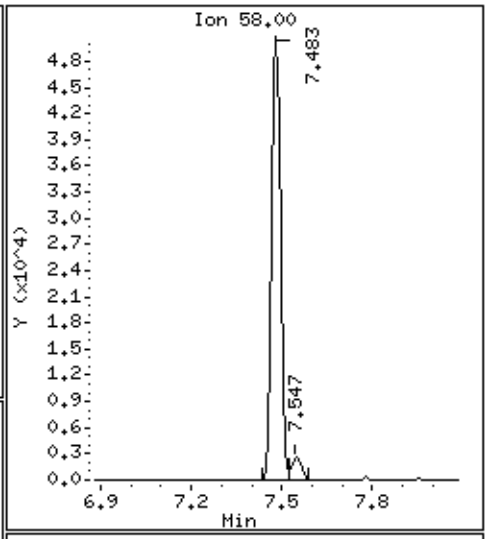
Concentration: 24.387 PPBV

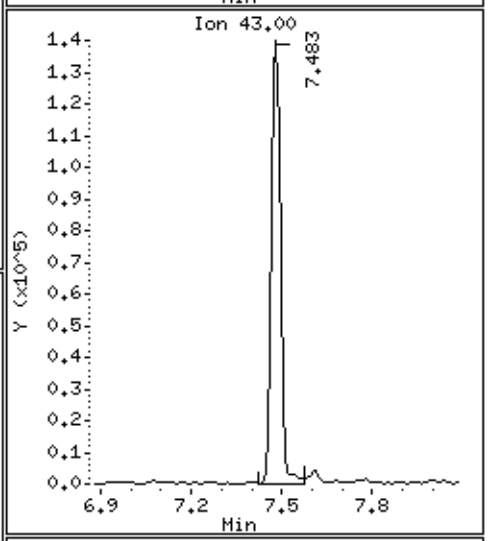


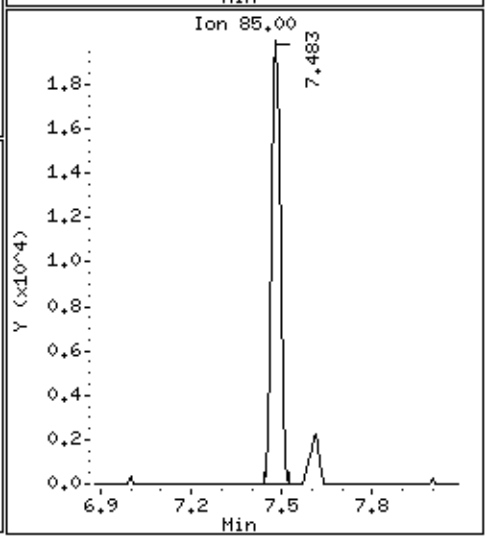












Data File: /chem/msdp.i/22dec14.b/p122207.d

Date : 22-DEC-2014 13:25

Client ID:

Instrument: msdp.i

Sample Info: 200ml 1L1681

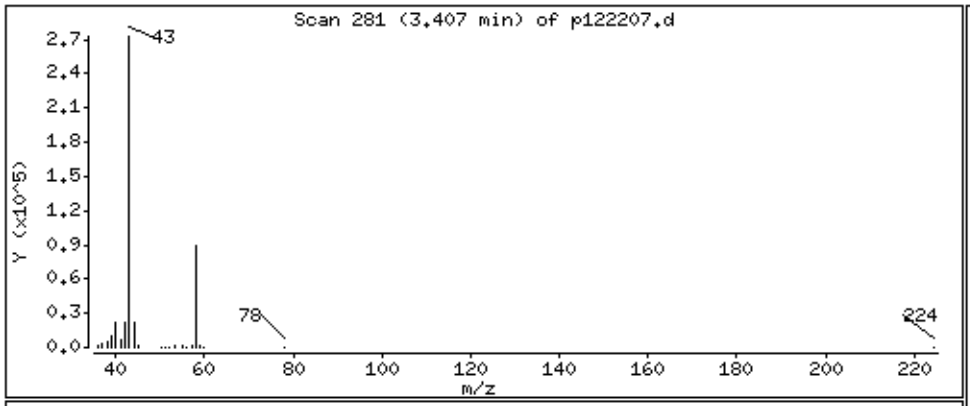
Operator: js

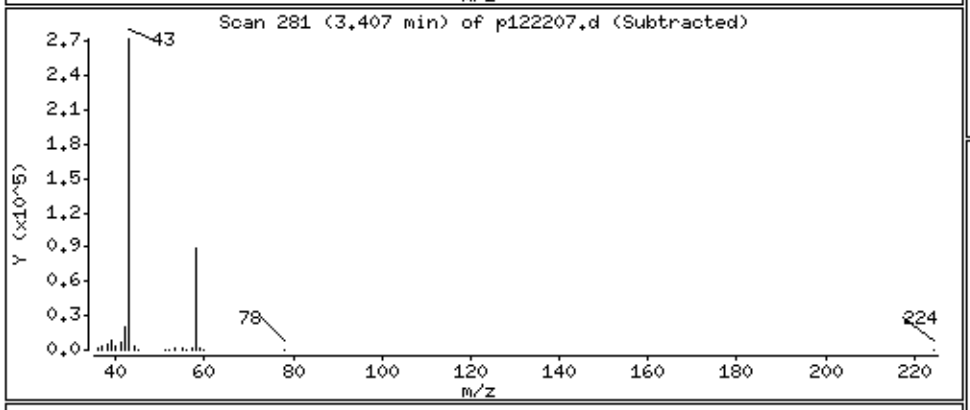
Column phase: RTX-624

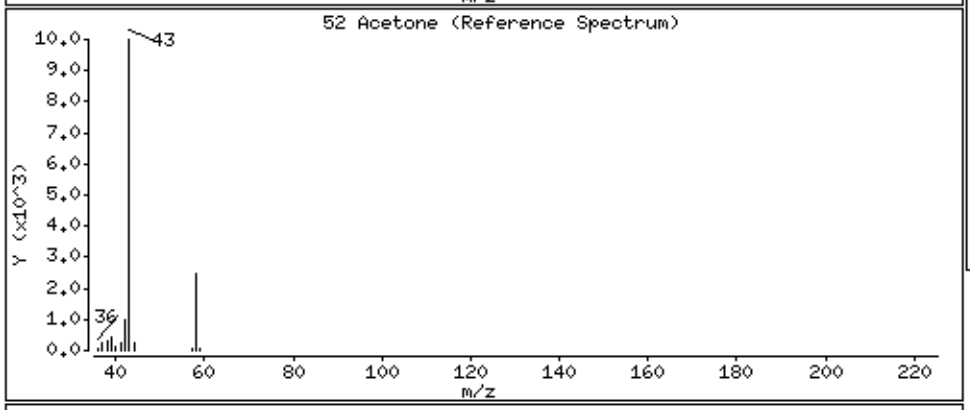
Column diameter: 0.25

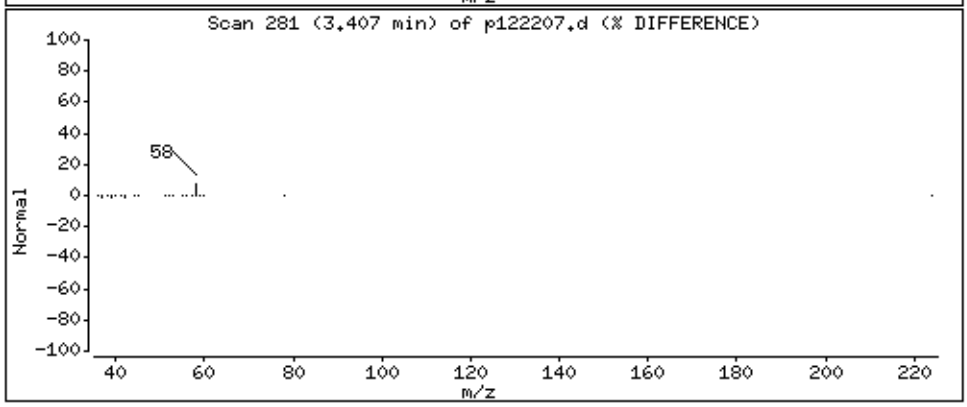
52 Acetone

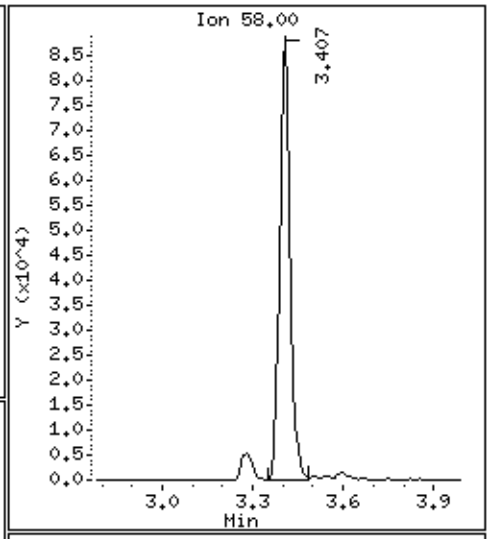
Concentration: 126.38 PPBV

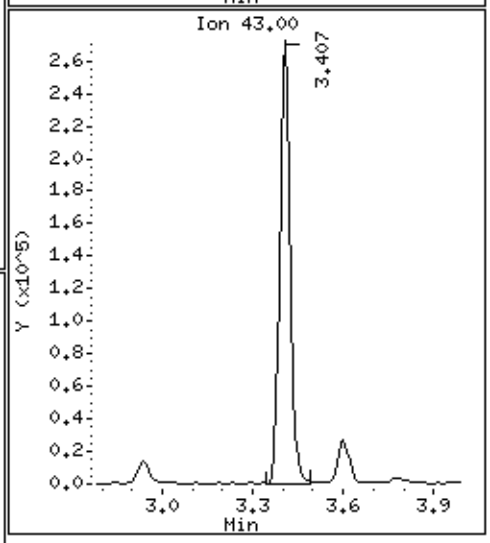












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Summary of Detected Compounds
EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: B5SS-6 (2014)

Lab ID#: 1412216A-03A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
2-Propanol	4.8	6.8	12	17
Ethyl Benzene	1.2	4.3	5.2	18
m,p-Xylene	1.2	3.5	5.2	15
4-Methyl-2-pentanone	1.2	4.0	4.9	16
Acetone	12	22	28	52
Toluene	1.2	5.1	4.5	19

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Client Sample ID: B5SS-6 (2014)

Lab ID#: 1412216A-03A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p122208**	**Date of Collection:**	**12/10/14 3:31:00 PM**
Dil. Factor:	**2.40**	**Date of Analysis:**	**12/22/14 01:51 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Benzene	1.2	Not Detected	3.8	Not Detected
2-Propanol	4.8	6.8	12	17
Ethyl Benzene	1.2	4.3	5.2	18
m,p-Xylene	1.2	3.5	5.2	15
o-Xylene	1.2	Not Detected	5.2	Not Detected
4-Methyl-2-pentanone	1.2	4.0	4.9	16
Acetone	12	22	28	52
Toluene	1.2	5.1	4.5	19

Container Type: 1 Liter Summa Canister (100% Certified)

Surrogates	%Recovery	Method Limits
Toluene-d8	102	70-130
1,2-Dichloroethane-d4	96	70-130
4-Bromofluorobenzene	100	70-130

Eurofins Air Toxics Inc.

EPA TO-15/MODIFIED TO14A

Data file : /chem/msdp.i/22dec14.b/p122208.d
Lab Smp Id: 1412216A-03A
Inj Date : 22-DEC-2014 13:51
Operator : js Inst ID: msdp.i
Smp Info : 200ml 1L1707
Misc Info : 5.1 Hg->15 psi
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msdp.i/22dec14.b/p14q1217a.m
Meth Date : 24-Dec-2014 07:32 dbailey Quant Type: ISTD
Cal Date : 17-DEC-2014 21:17 Cal File: p121708.d
Als bottle: 3
Dil Factor: 2.40000
Integrator: HP RTE Compound Sublist: And19256.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Name	Value	Description
DF	2.40000	Dilution Factor

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
* 98 Bromochloromethane						CAS #: 74-97-5	
5.448	5.455 (1.000)	130	102471	25.0000		80.00- 120.00	100.00
5.455	5.455 (1.000)	128	76559			0.00- 30.00	74.71
5.448	5.455 (1.000)	49	211616			0.00- 30.00	206.51
* 123 1,4-Difluorobenzene						CAS #: 540-36-3	
6.344	6.344 (1.000)	114	453391	25.0000		80.00- 120.00	100.00
6.344	6.344 (1.000)	88	78694			0.00- 30.00	17.36
* 163 Chlorobenzene-d5						CAS #: 3114-55-4	
8.779	8.779 (1.000)	117	496691	25.0000		80.00- 120.00	100.00
8.779	8.779 (1.000)	82	309511			0.00- 30.00	62.31
$ 117 1,2-Dichloroethane-d4						CAS #: 17060-07-0	
5.985	5.985 (1.099)	65	235639	24.0888	24.089	80.00- 120.00	100.00
5.985	5.985 (1.099)	67	115998			0.00- 30.00	49.23

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
$ 146 Toluene-d8					CAS #: 2037-26-5		
7.554	7.554 (1.191)	98	544286	25.4715	25.471	80.00- 120.00	100.00
7.547	7.554 (1.190)	70	68852			0.00- 30.00	12.65
7.554	7.554 (1.191)	100	341368			0.00- 30.00	62.72
$ 177 4-Bromofluorobenzene					CAS #: 460-00-4		
9.760	9.760 (1.112)	174	367903	24.9730	24.973	80.00- 120.00	100.00
9.753	9.760 (1.111)	95	427639			0.00- 30.00	116.24
9.760	9.760 (1.112)	176	348281			0.00- 30.00	94.67
147 Toluene					CAS #: 108-88-3		
7.604	7.611 (1.199)	91	63685	2.14526	5.149	80.00- 120.00	100.00
7.611	7.611 (1.200)	92	36057			0.00- 30.00	56.62
167 Ethyl Benzene					CAS #: 100-41-4		
8.951	8.858 (1.020)	106	22689	1.77979	4.271	80.00- 120.00	100.00
8.951	8.858 (1.020)	91	52195			0.00- 30.00	230.04
169 m,p-Xylene					CAS #: 108-38-3		
8.951	8.951 (1.020)	106	22689	1.46723	3.521	80.00- 120.00	100.00
8.951	8.951 (1.020)	91	52195			0.00- 30.00	230.04
57 2-Propanol					CAS #: 67-63-0		
3.614	3.564 (0.663)	45	41693	2.81538	6.757	80.00- 120.00	100.00
3.614	3.564 (0.663)	43	7615			0.00- 30.00	18.27
3.600	3.564 (0.661)	59	587			0.00- 30.00	1.41
145 4-Methyl-2-pentanone					CAS #: 108-10-1		
7.482	7.483 (1.180)	58	16386	1.67683	4.024	80.00- 120.00	100.00
7.482	7.483 (1.180)	43	38517			0.00- 30.00	235.05
7.482	7.483 (1.180)	85	5618			0.00- 30.00	34.29
52 Acetone					CAS #: 67-64-1		
3.414	3.385 (0.627)	58	37168	9.05940	21.742	80.00- 120.00	100.00
3.414	3.385 (0.627)	43	122196			0.00- 30.00	328.77

Report Date: 24-Dec-2014 07:39

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdp.i
Lab File ID: p122208.d
Lab Smp Id: 1412216A-03A
Analysis Type: VOA
Quant Type: ISTD
Operator: js
Method File: /chem/msdp.i/22dec14.b/p14q1217a.m
Misc Info: 5.1 Hg->15 psi

Calibration Date: 22-DEC-2014
Calibration Time: 09:50

Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
98 Bromochloromethan	153275	91965	214585	102471	-33.15
123 1,4-Difluorobenze	654249	392549	915949	453391	-30.70
163 Chlorobenzene-d5	700329	420197	980461	496691	-29.08

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
98 Bromochloromethan	5.46	5.13	5.79	5.45	-0.13
123 1,4-Difluorobenze	6.34	6.01	6.67	6.34	0.00
163 Chlorobenzene-d5	8.78	8.45	9.11	8.78	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: 24-Dec-2014 07:39

Eurofins Air Toxics Inc.

RECOVERY REPORT

Client Name: Client SDG: 22dec14
Sample Matrix: GAS Fraction: VOA
Lab Smp Id: 1412216A-03A
Level: LOW Operator: js
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: 2926Spectra.spk Quant Type: ISTD
Sublist File: And19256.sub
Method File: /chem/msdp.i/22dec14.b/p14q1217a.m
Misc Info: 5.1 Hg->15 psi

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 117 1,2-Dichloroethane	25.000	24.089	96.36	70-130
$ 146 Toluene-d8	25.000	25.471	101.89	70-130
$ 177 4-Bromofluorobenze	25.000	24.973	99.89	70-130

Data File: /chem/msdp.i/22dec14.b/p122208.d

Date : 22-DEC-2014 13:51

Client ID:

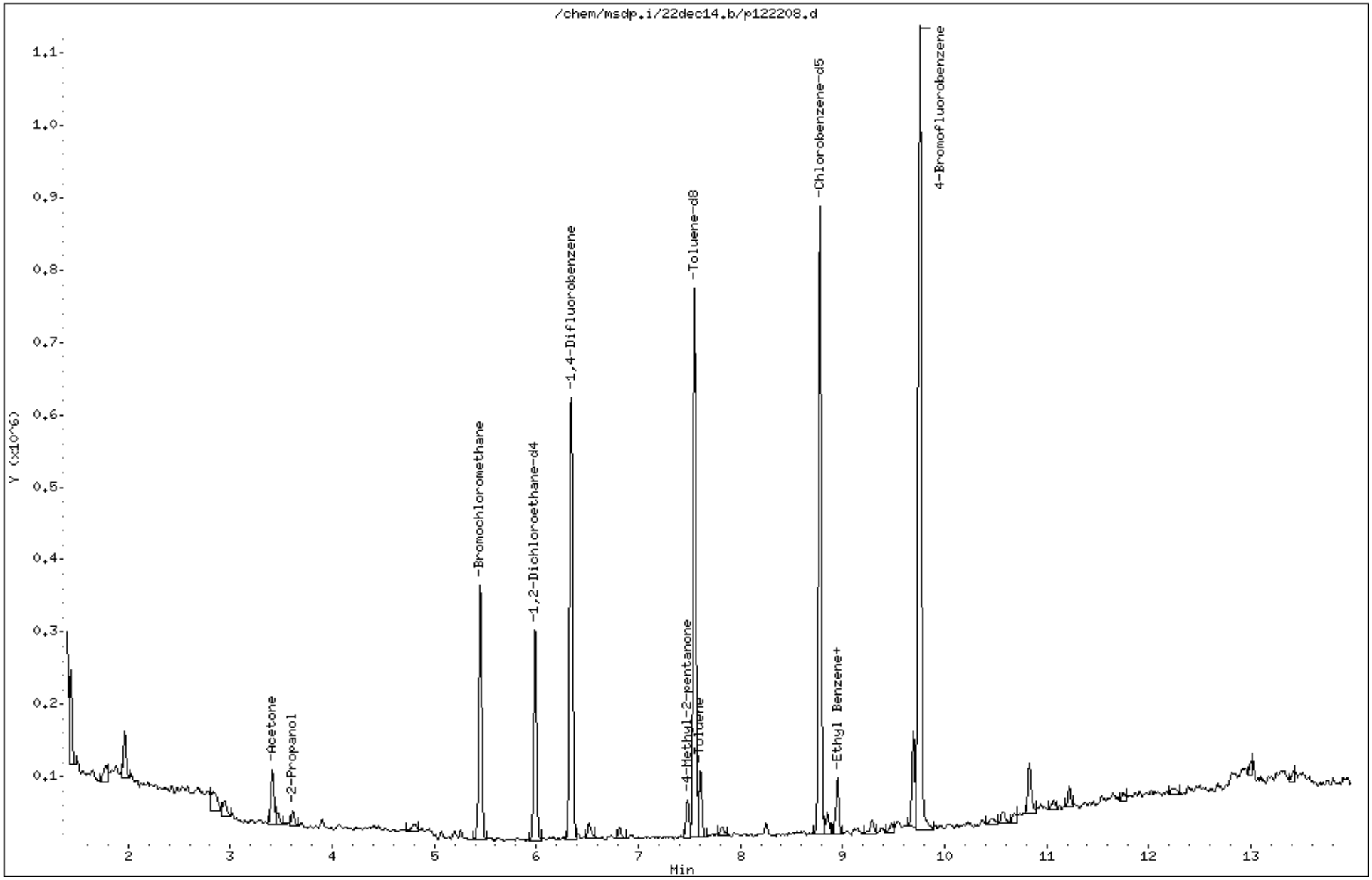
Sample Info: 200ml 1L1707

Column phase: RTX-624

Instrument: msdp.i

Operator: js

Column diameter: 0.25



Data File: /chem/msdp.i/22dec14.b/p122208.d

Date : 22-DEC-2014 13:51

Client ID:

Instrument: msdp.i

Sample Info: 200ml 1L1707

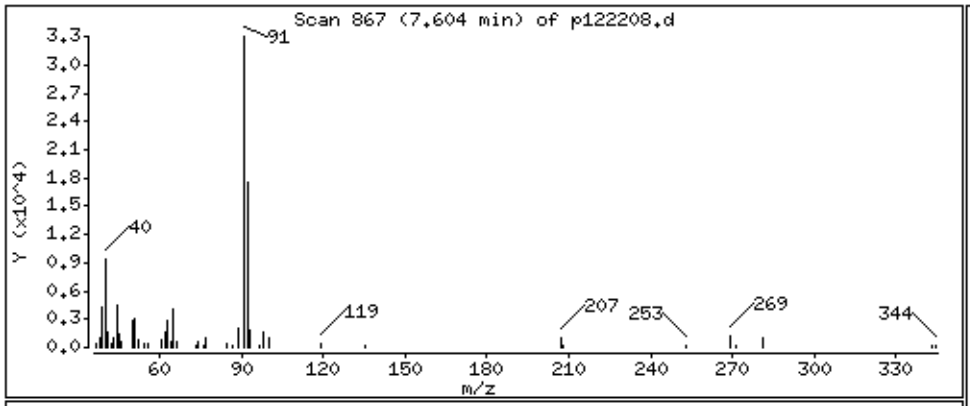
Operator: js

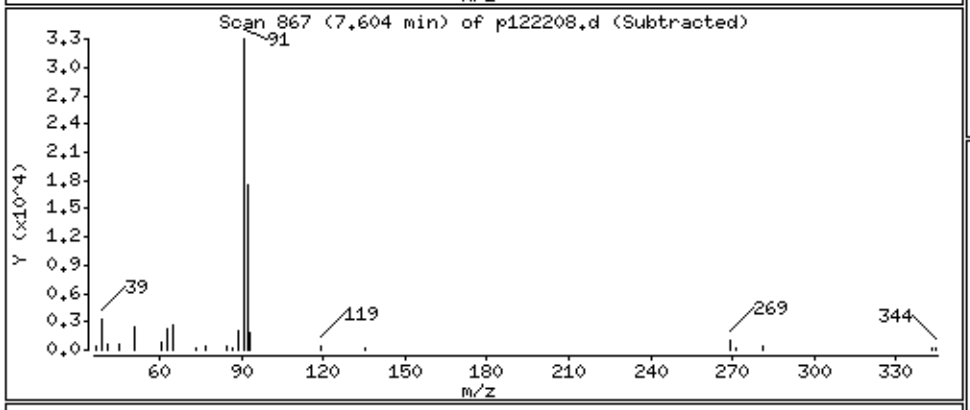
Column phase: RTX-624

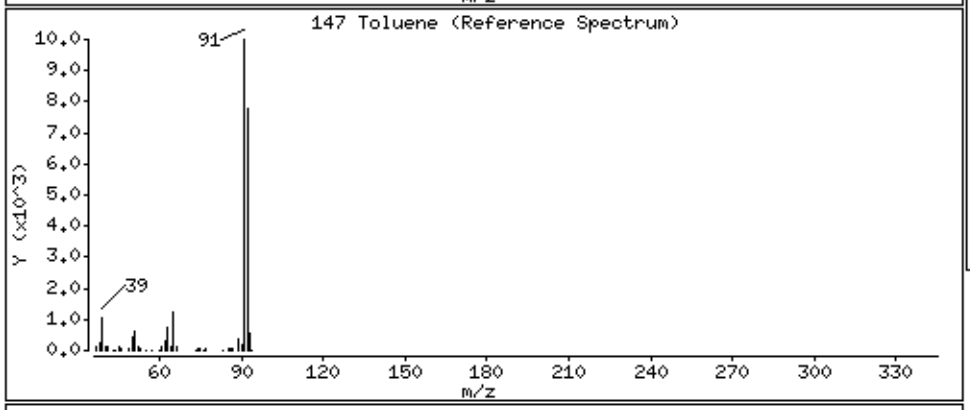
Column diameter: 0.25

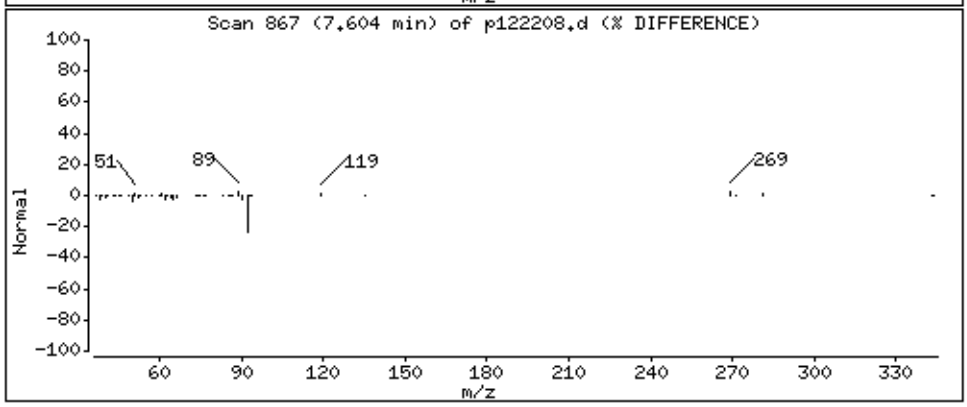
147 Toluene

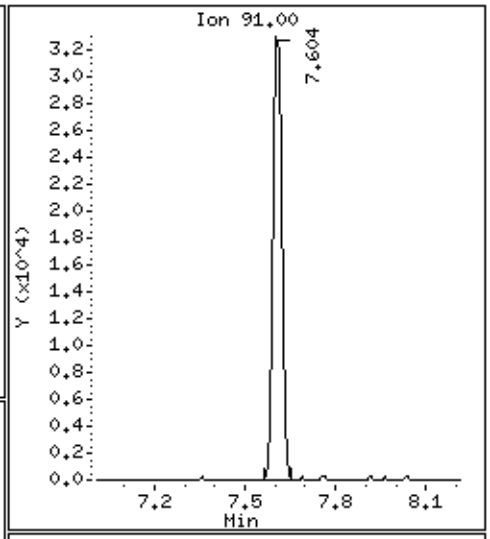
Concentration: 5.149 PPBV

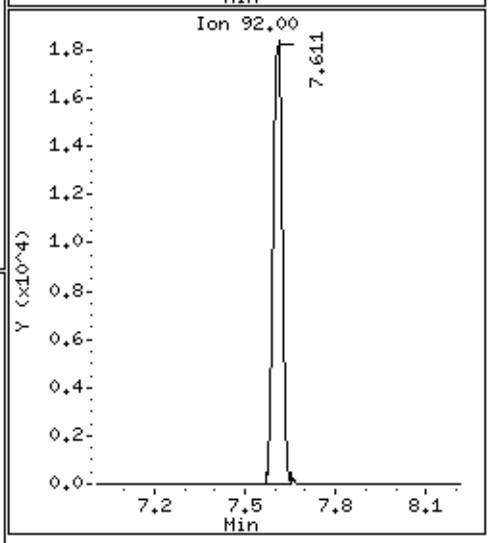












Data File: /chem/msdp.i/22dec14.b/p122208.d

Date : 22-DEC-2014 13:51

Client ID:

Instrument: msdp.i

Sample Info: 200ml 1L1707

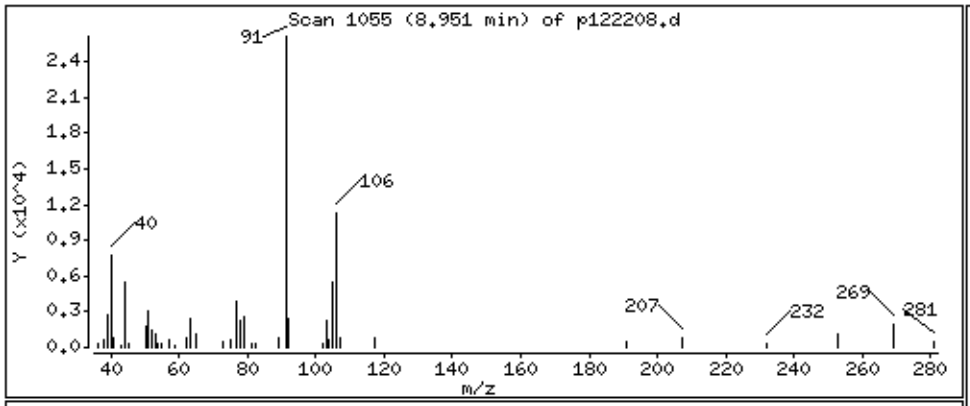
Operator: js

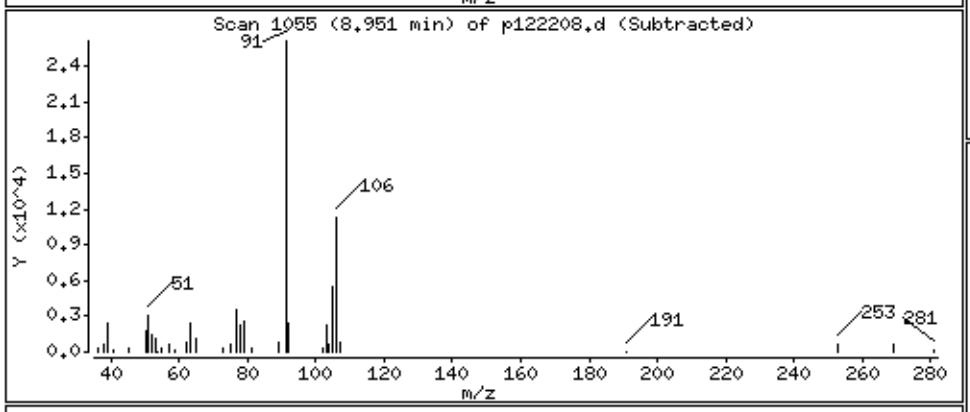
Column phase: RTX-624

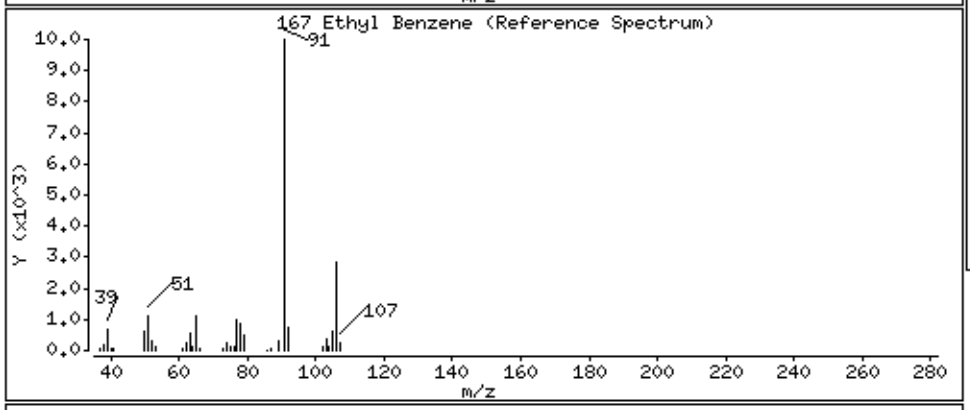
Column diameter: 0.25

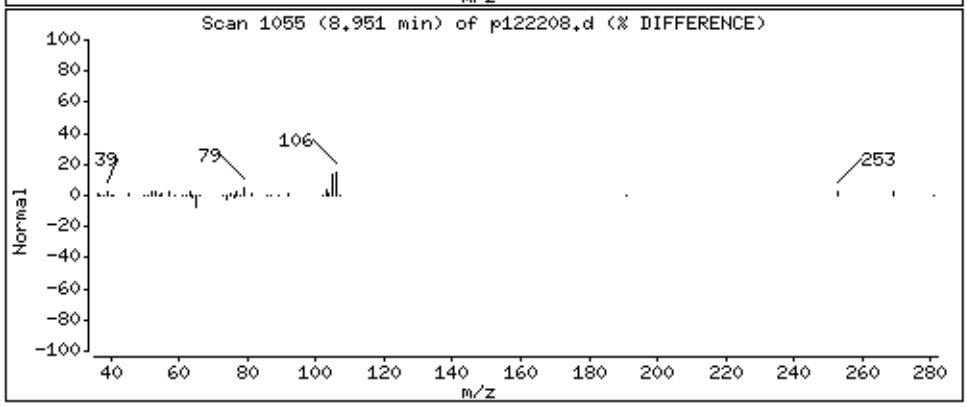
167 Ethyl Benzene

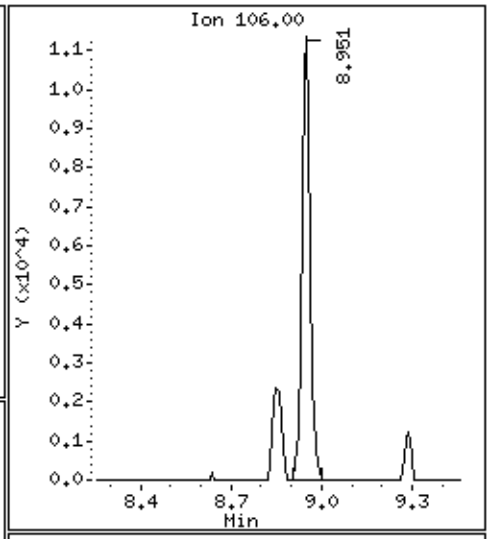
Concentration: 4.271 PPBV

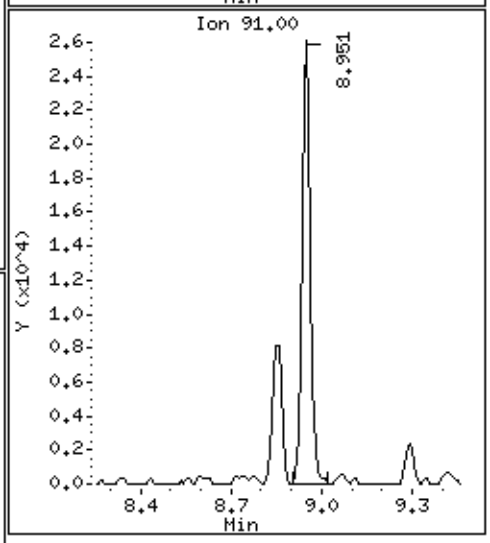












Data File: /chem/msdp.i/22dec14.b/p122208.d

Date : 22-DEC-2014 13:51

Client ID:

Instrument: msdp.i

Sample Info: 200ml 1L1707

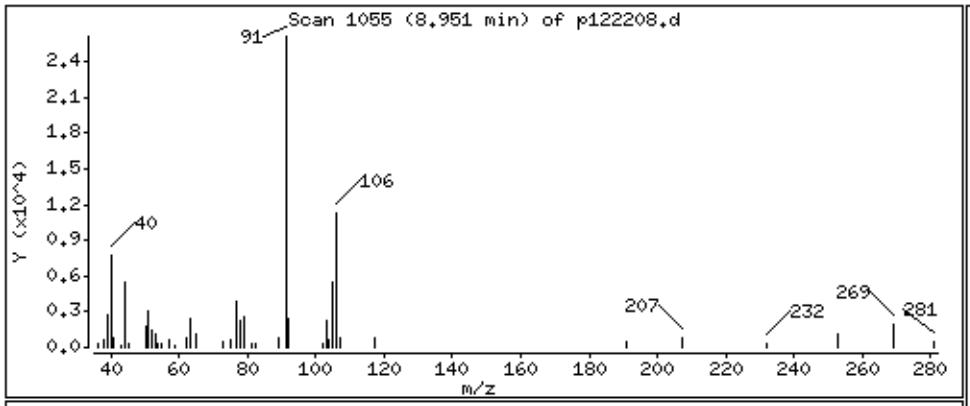
Operator: js

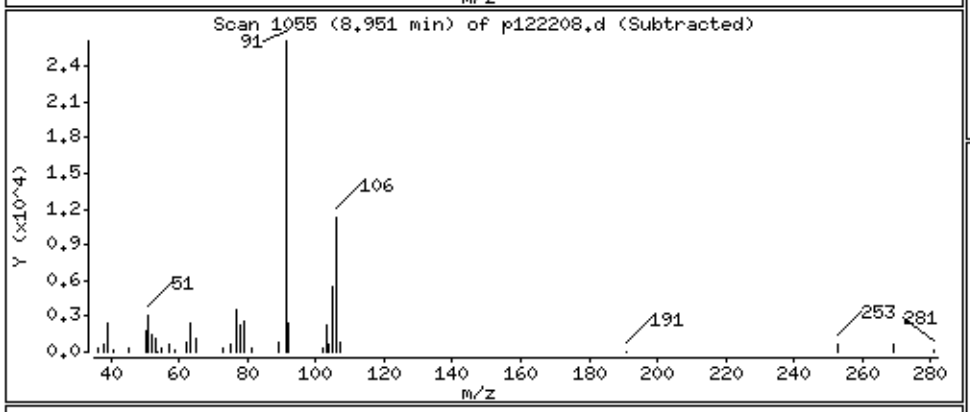
Column phase: RTX-624

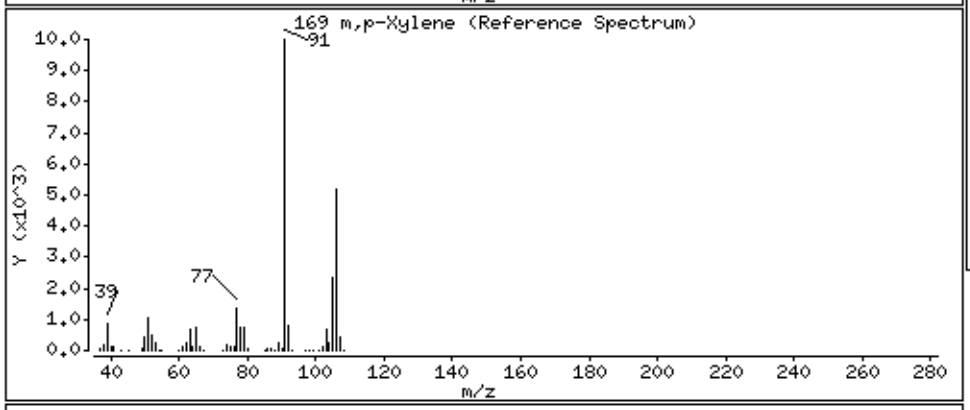
Column diameter: 0.25

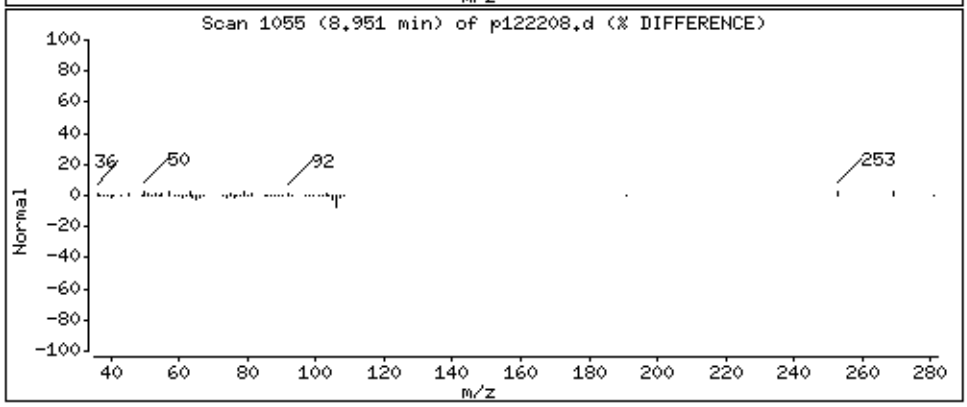
169 m,p-Xylene

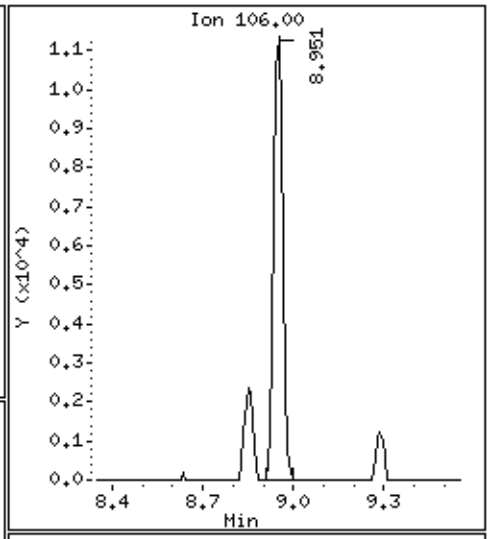
Concentration: 3.521 PPBV

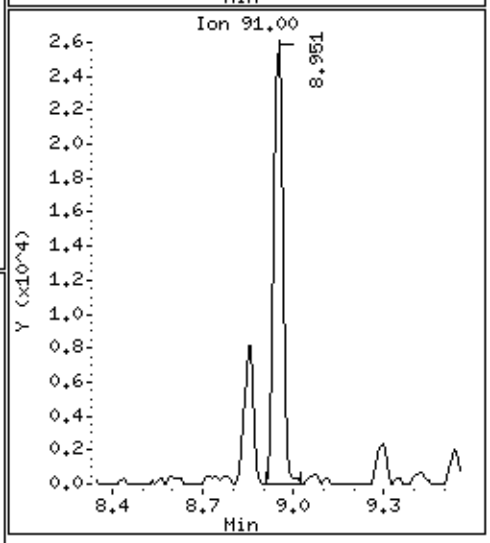












Data File: /chem/msdp.i/22dec14.b/p122208.d

Date : 22-DEC-2014 13:51

Client ID:

Instrument: msdp.i

Sample Info: 200ml 1L1707

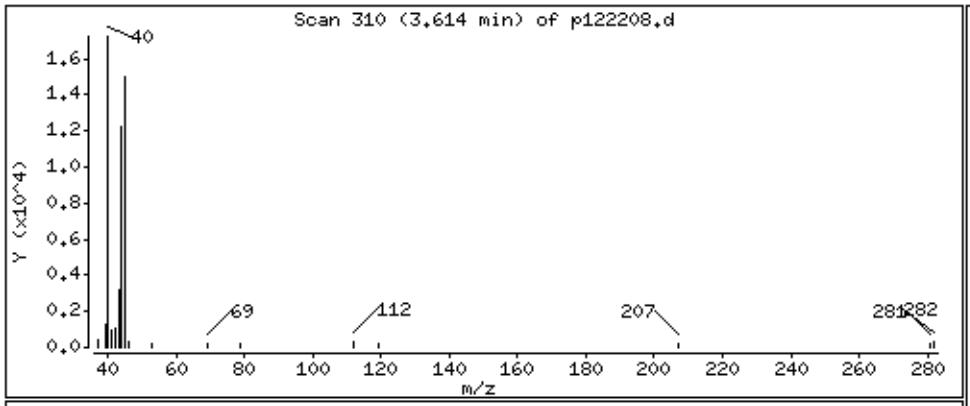
Operator: js

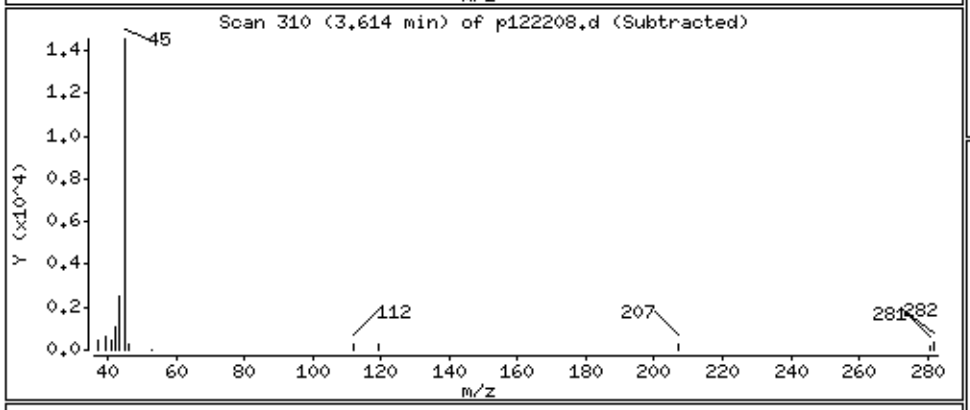
Column phase: RTX-624

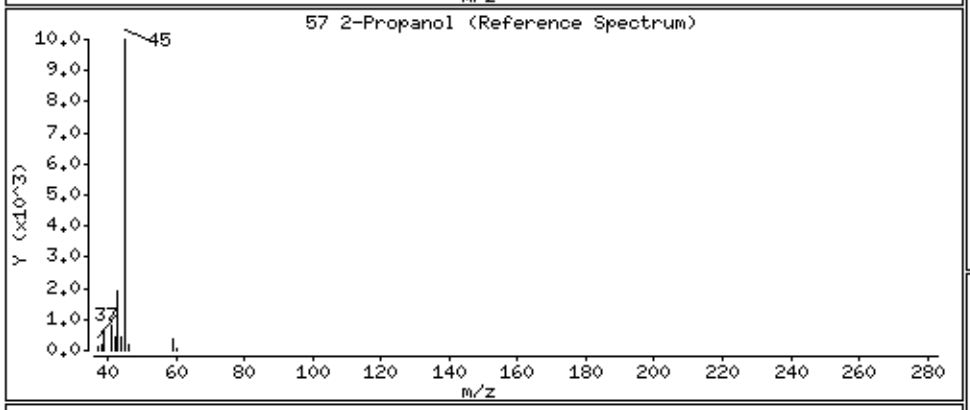
Column diameter: 0.25

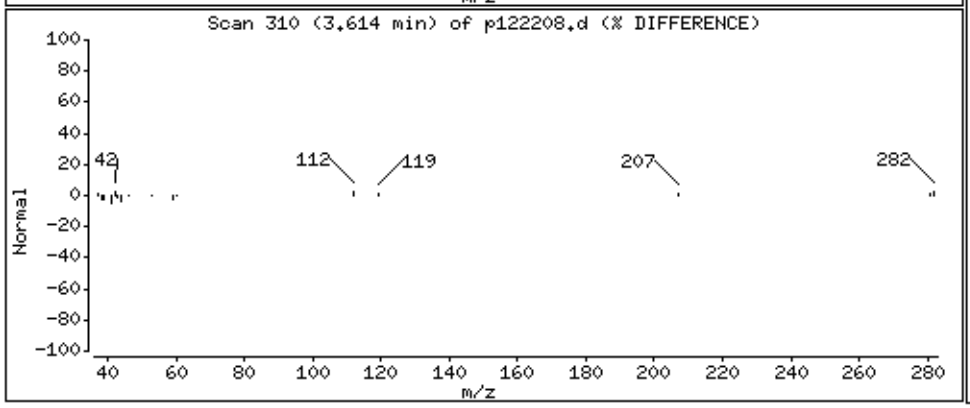
57 2-Propanol

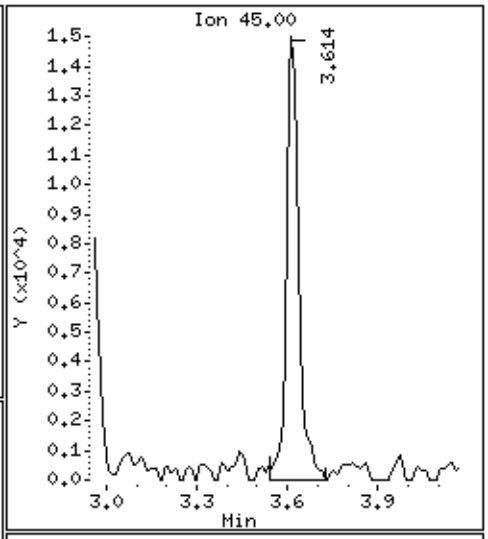
Concentration: 6.757 PPBV

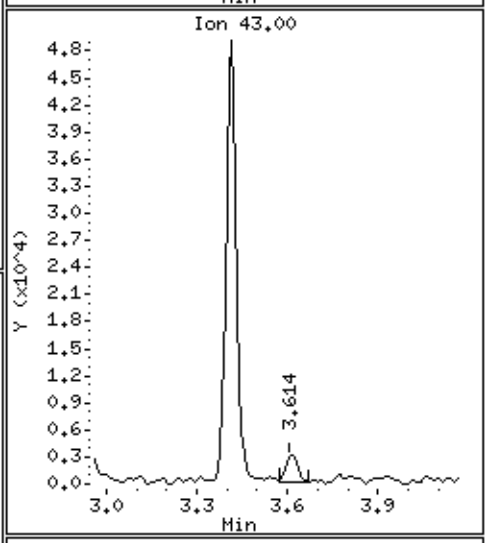


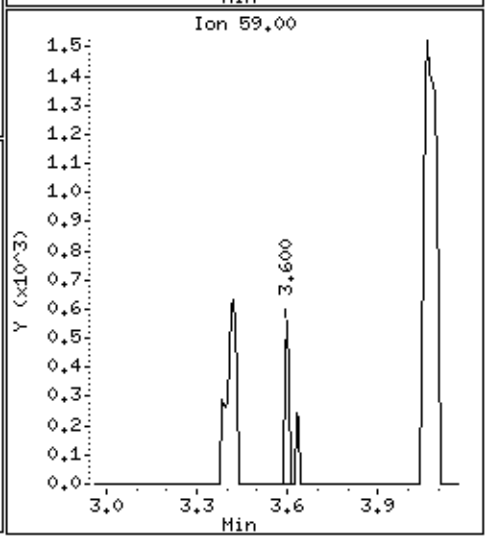












Data File: /chem/msdp.i/22dec14.b/p122208.d

Date : 22-DEC-2014 13:51

Client ID:

Instrument: msdp.i

Sample Info: 200ml 1L1707

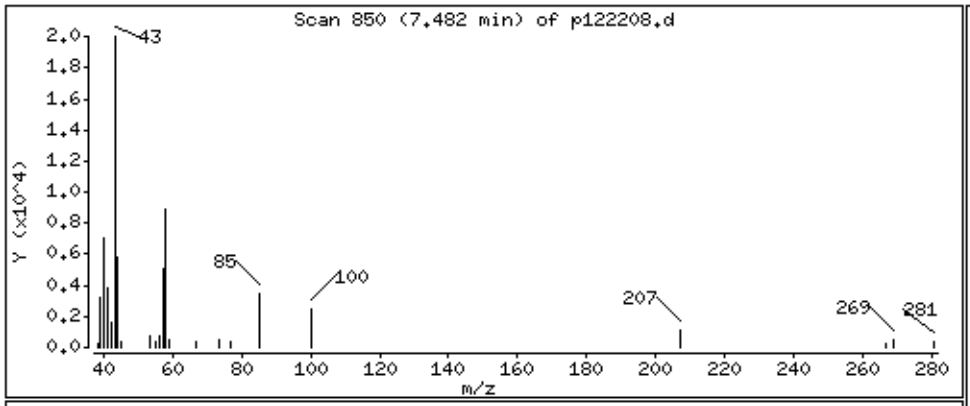
Operator: js

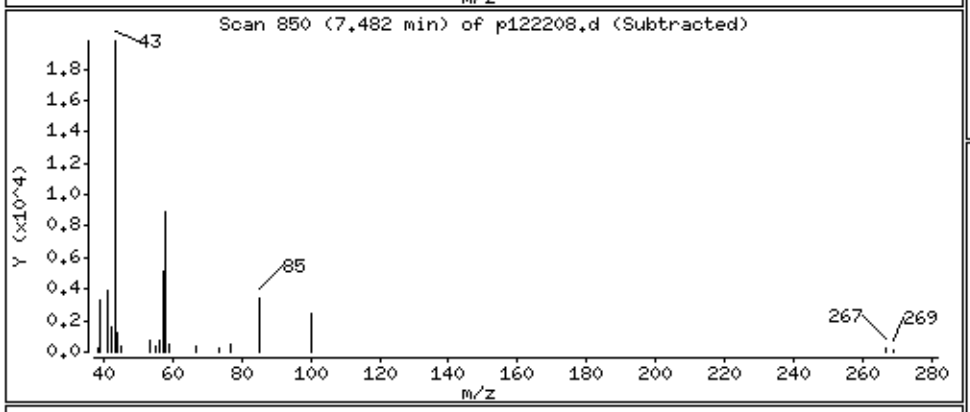
Column phase: RTX-624

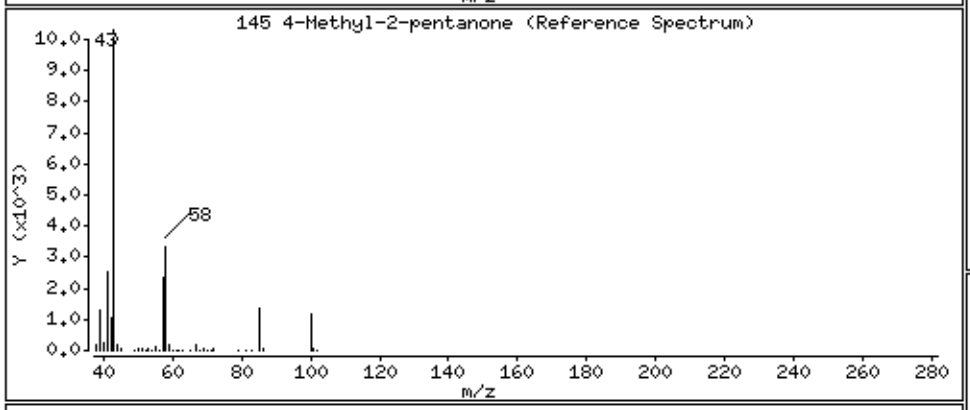
Column diameter: 0.25

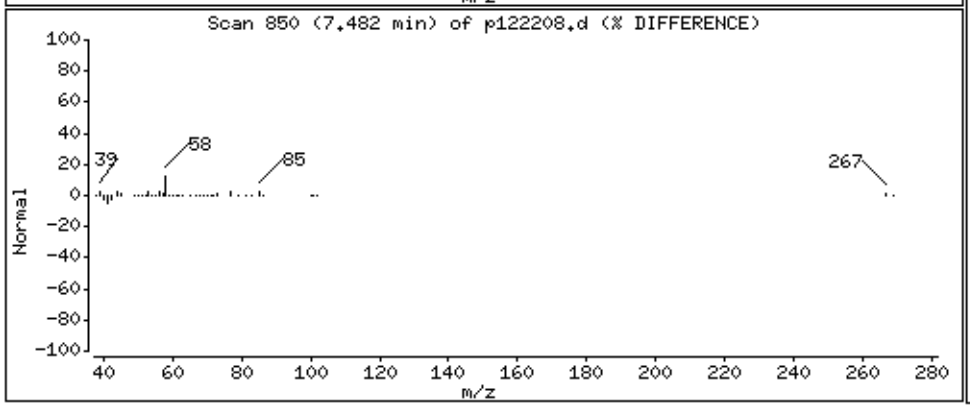
145 4-Methyl-2-pentanone

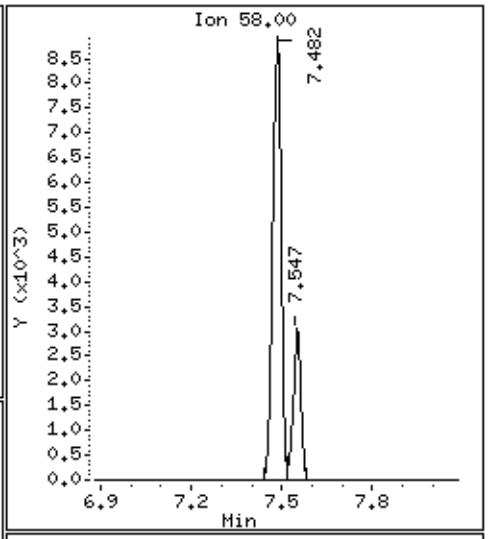
Concentration: 4.024 PPBV

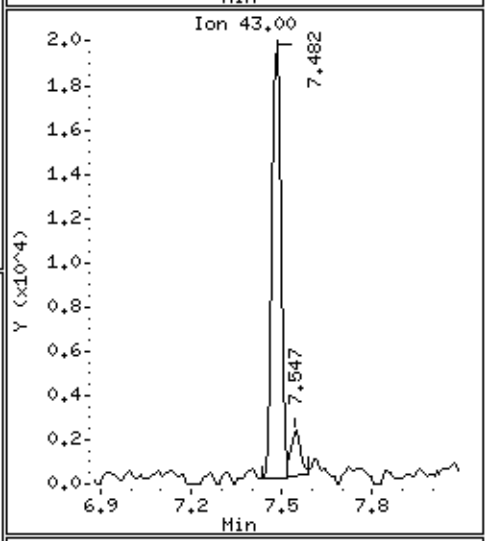


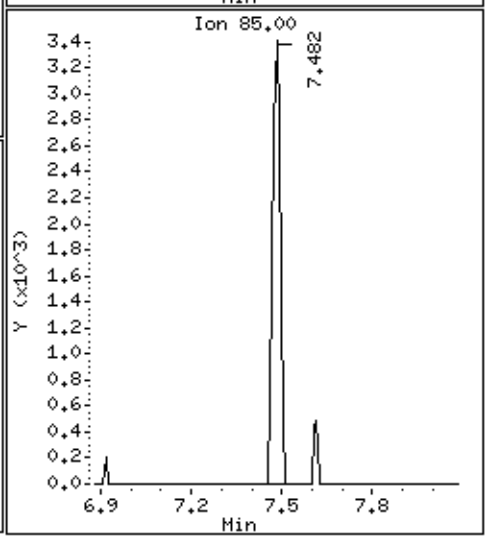












Data File: /chem/msdp.i/22dec14.b/p122208.d

Date : 22-DEC-2014 13:51

Client ID:

Instrument: msdp.i

Sample Info: 200ml 1L1707

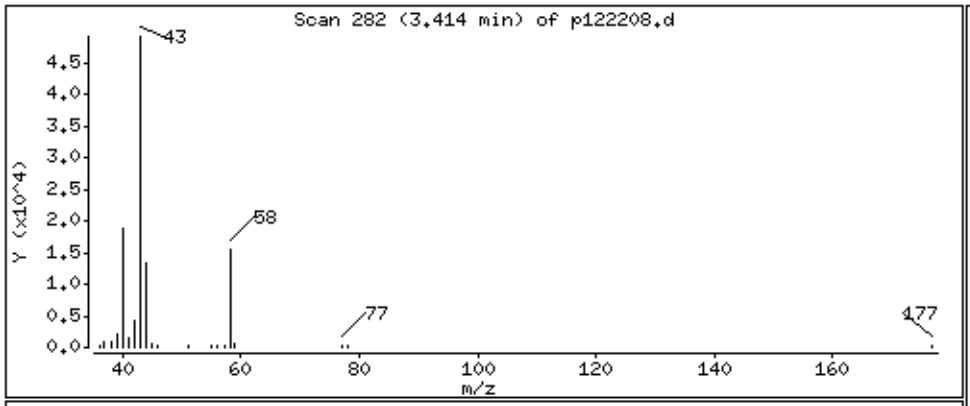
Operator: js

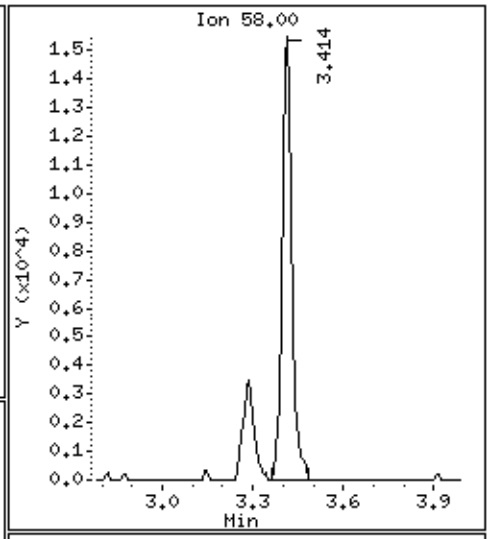
Column phase: RTX-624

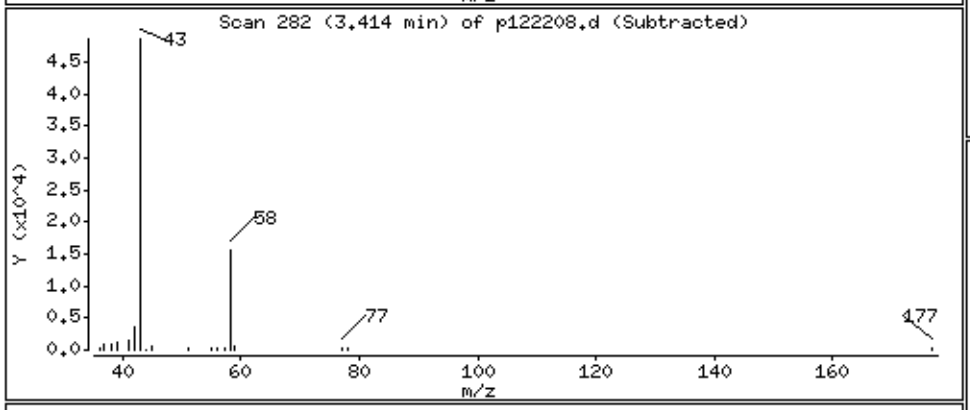
Column diameter: 0.25

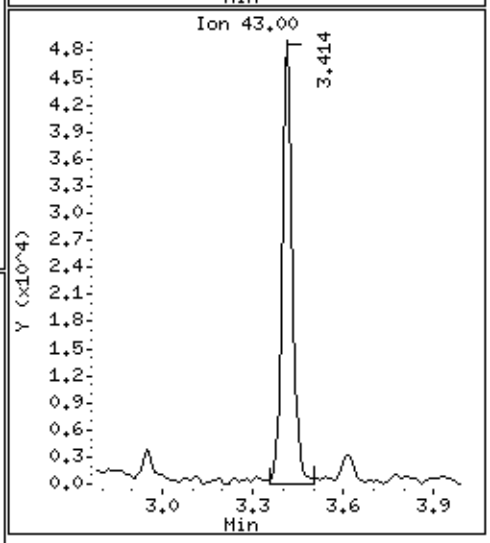
52 Acetone

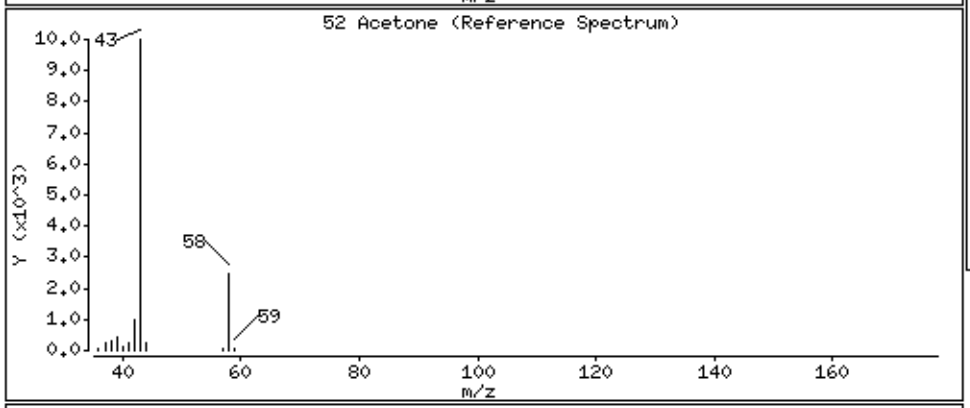
Concentration: 21.742 PPBV

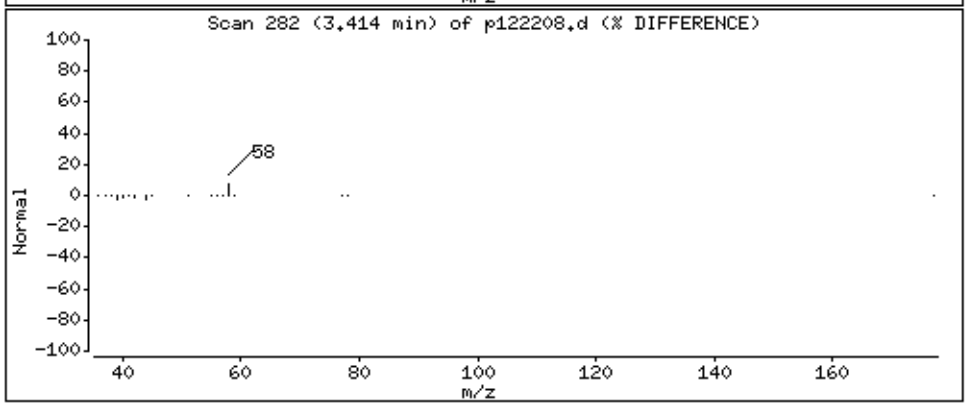












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Summary of Detected Compounds
EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: B5SS-2 (2014)

Lab ID#: 1412216A-04A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
2-Propanol	4.3	28	11	69
Ethyl Benzene	1.1	10	4.7	44
m,p-Xylene	1.1	21	4.7	90
4-Methyl-2-pentanone	1.1	5.2	4.4	21
Acetone	11	89	26	210
Toluene	1.1	6.3	4.1	24

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Client Sample ID: B5SS-2 (2014)

Lab ID#: 1412216A-04A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p122209**	**Date of Collection:**	**12/11/14 10:38:00 A**
Dil. Factor:	**2.16**	**Date of Analysis:**	**12/22/14 02:18 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Benzene	1.1	Not Detected	3.4	Not Detected
2-Propanol	4.3	28	11	69
Ethyl Benzene	1.1	10	4.7	44
m,p-Xylene	1.1	21	4.7	90
o-Xylene	1.1	Not Detected	4.7	Not Detected
4-Methyl-2-pentanone	1.1	5.2	4.4	21
Acetone	11	89	26	210
Toluene	1.1	6.3	4.1	24

Container Type: 1 Liter Summa Canister (100% Certified)

Surrogates	%Recovery	Method Limits
Toluene-d8	101	70-130
1,2-Dichloroethane-d4	98	70-130
4-Bromofluorobenzene	98	70-130

Eurofins Air Toxics Inc.

EPA TO-15/MODIFIED TO14A

Data file : /chem/msdp.i/22dec14.b/p122209.d
Lab Smp Id: 1412216A-04A
Inj Date : 22-DEC-2014 14:18
Operator : js Inst ID: msdp.i
Smp Info : 200ml 1L1680
Misc Info : 2.2 Hg->14.8 psi
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msdp.i/22dec14.b/p14q1217a.m
Meth Date : 24-Dec-2014 07:32 dbailey Quant Type: ISTD
Cal Date : 17-DEC-2014 21:17 Cal File: p121708.d
Als bottle: 4
Dil Factor: 2.16000
Integrator: HP RTE Compound Sublist: And19256.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Name	Value	Description
DF	2.16000	Dilution Factor

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
* 98 Bromochloromethane						CAS #: 74-97-5	
5.448	5.455 (1.000)	130	101183	25.0000		80.00- 120.00	100.00
5.448	5.455 (1.000)	128	78156			0.00- 30.00	77.24
5.448	5.455 (1.000)	49	200841			0.00- 30.00	198.49
* 123 1,4-Difluorobenzene						CAS #: 540-36-3	
6.344	6.344 (1.000)	114	413366	25.0000		80.00- 120.00	100.00
6.344	6.344 (1.000)	88	70681			0.00- 30.00	17.10
* 163 Chlorobenzene-d5						CAS #: 3114-55-4	
8.779	8.779 (1.000)	117	492274	25.0000		80.00- 120.00	100.00
8.779	8.779 (1.000)	82	304466			0.00- 30.00	61.85
$ 117 1,2-Dichloroethane-d4						CAS #: 17060-07-0	
5.986	5.985 (1.099)	65	236499	24.4845	24.484	80.00- 120.00	100.00
5.986	5.985 (1.099)	67	109111			0.00- 30.00	46.14

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
$ 146 Toluene-d8					CAS #: 2037-26-5		
7.554	7.554 (1.191)	98	491407	25.2236	25.224	80.00- 120.00	100.00
7.554	7.554 (1.191)	70	70347			0.00- 30.00	14.32
7.554	7.554 (1.191)	100	316281			0.00- 30.00	64.36
$ 177 4-Bromofluorobenzene					CAS #: 460-00-4		
9.760	9.760 (1.112)	174	358719	24.5681	24.568	80.00- 120.00	100.00
9.760	9.760 (1.112)	95	407114			0.00- 30.00	113.49
9.768	9.760 (1.113)	176	346476			0.00- 30.00	96.59
147 Toluene					CAS #: 108-88-3		
7.604	7.611 (1.199)	91	79056	2.92090	6.309	80.00- 120.00	100.00
7.604	7.611 (1.199)	92	44082			0.00- 30.00	55.76
167 Ethyl Benzene					CAS #: 100-41-4		
8.851	8.858 (1.008)	106	59107	4.67812	10.105	80.00- 120.00	100.00
8.851	8.858 (1.008)	91	236428			0.00- 30.00	400.00
169 m,p-Xylene					CAS #: 108-38-3		
8.951	8.951 (1.020)	106	146544	9.56158	20.653	80.00- 120.00	100.00
8.951	8.951 (1.020)	91	349999			0.00- 30.00	238.83
57 2-Propanol					CAS #: 67-63-0		
3.629	3.564 (0.666)	45	191080	13.0672	28.225	80.00- 120.00	100.00
3.622	3.564 (0.665)	43	39466			0.00- 30.00	20.65
3.629	3.564 (0.666)	59	7094			0.00- 30.00	3.71
145 4-Methyl-2-pentanone					CAS #: 108-10-1		
7.483	7.483 (1.180)	58	21629	2.42767	5.244	80.00- 120.00	100.00
7.483	7.483 (1.180)	43	68334			0.00- 30.00	315.93
7.483	7.483 (1.180)	85	9539			0.00- 30.00	44.10
52 Acetone					CAS #: 67-64-1		
3.421	3.385 (0.628)	58	166815	41.1774	88.943	80.00- 120.00	100.00
3.421	3.385 (0.628)	43	500035			0.00- 30.00	299.75

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdp.i
Lab File ID: p122209.d
Lab Smp Id: 1412216A-04A
Analysis Type: VOA
Quant Type: ISTD
Operator: js
Method File: /chem/msdp.i/22dec14.b/p14q1217a.m
Misc Info: 2.2 Hg->14.8 psi

Calibration Date: 22-DEC-2014
Calibration Time: 09:50

Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
98 Bromochloromethan	153275	91965	214585	101183	-33.99
123 1,4-Difluorobenze	654249	392549	915949	413366	-36.82
163 Chlorobenzene-d5	700329	420197	980461	492274	-29.71

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
98 Bromochloromethan	5.46	5.13	5.79	5.45	-0.13
123 1,4-Difluorobenze	6.34	6.01	6.67	6.34	0.00
163 Chlorobenzene-d5	8.78	8.45	9.11	8.78	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: 24-Dec-2014 07:40

Eurofins Air Toxics Inc.

RECOVERY REPORT

Client Name: Client SDG: 22dec14
Sample Matrix: GAS Fraction: VOA
Lab Smp Id: 1412216A-04A
Level: LOW Operator: js
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: 2926Spectra.spk Quant Type: ISTD
Sublist File: And19256.sub
Method File: /chem/msdp.i/22dec14.b/p14q1217a.m
Misc Info: 2.2 Hg->14.8 psi

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 117 1,2-Dichloroethane	25.000	24.484	97.94	70-130
$ 146 Toluene-d8	25.000	25.224	100.89	70-130
$ 177 4-Bromofluorobenze	25.000	24.568	98.27	70-130

Data File: /chem/msdp.i/22dec14.b/p122209.d

Date : 22-DEC-2014 14:18

Client ID:

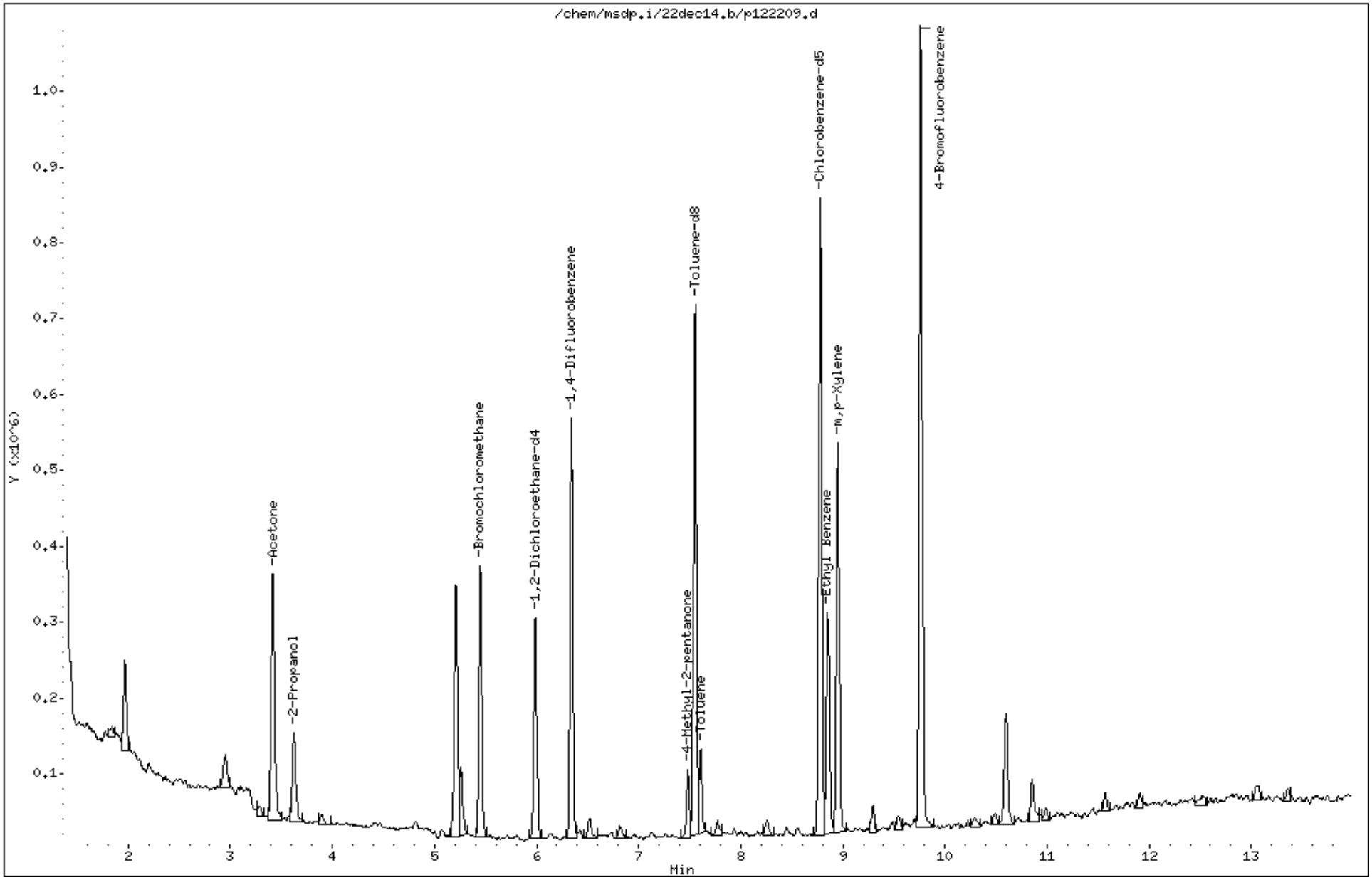
Sample Info: 200ml 1L1680

Column phase: RTX-624

Instrument: msdp.i

Operator: js

Column diameter: 0.25



Data File: /chem/msdp.i/22dec14.b/p122209.d

Date : 22-DEC-2014 14:18

Client ID:

Instrument: msdp.i

Sample Info: 200ml 1L1680

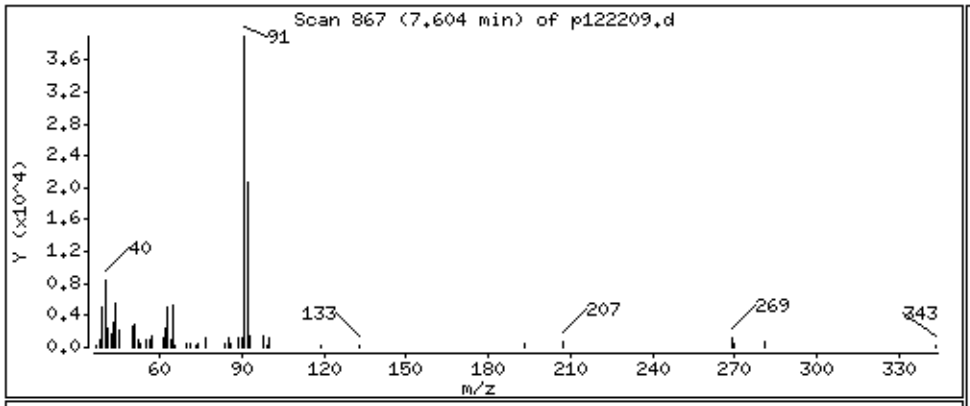
Operator: js

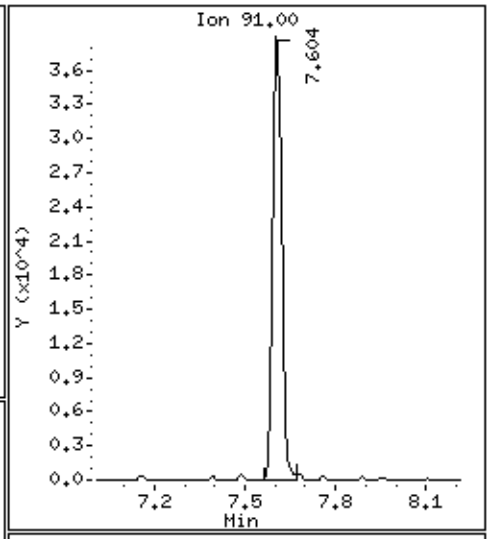
Column phase: RTX-624

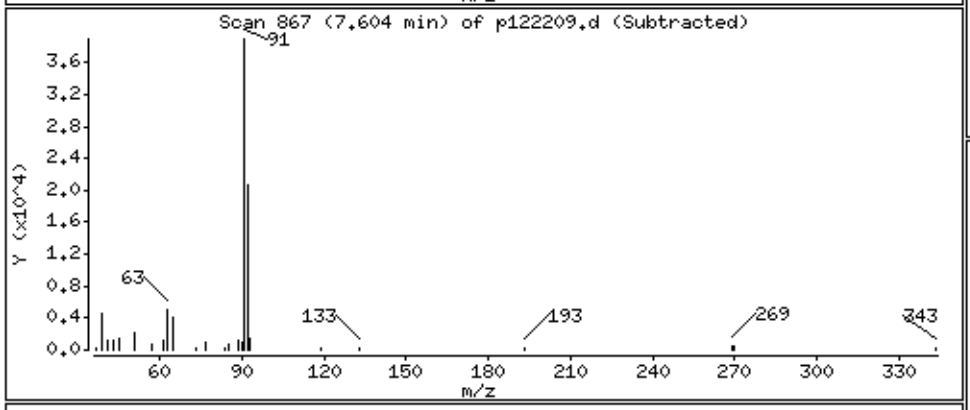
Column diameter: 0.25

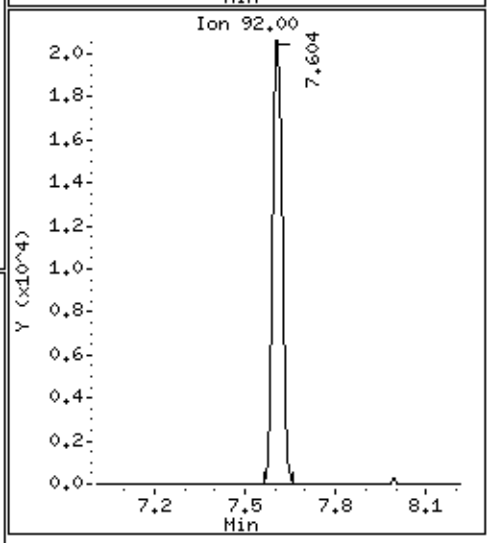
147 Toluene

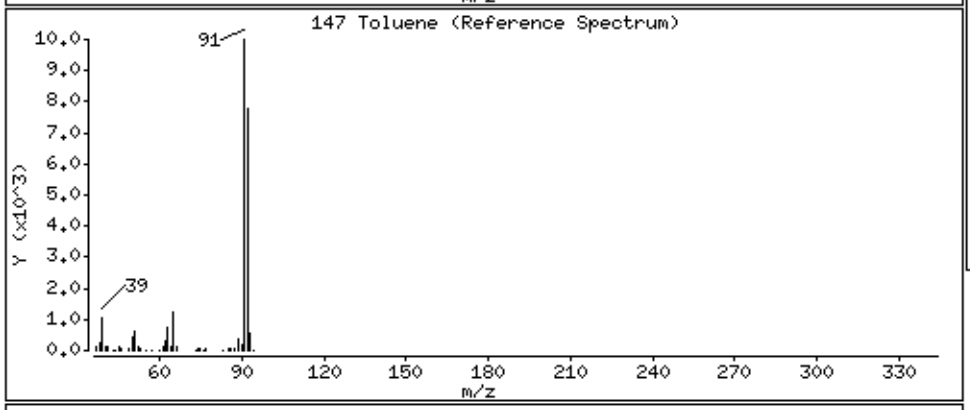
Concentration: 6.309 PPBV

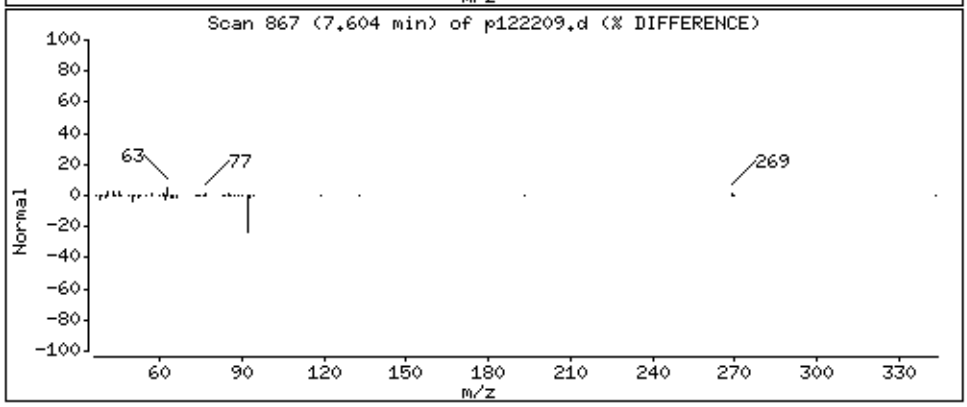












Data File: /chem/msdp.i/22dec14.b/p122209.d

Date : 22-DEC-2014 14:18

Client ID:

Instrument: msdp.i

Sample Info: 200ml 1L1680

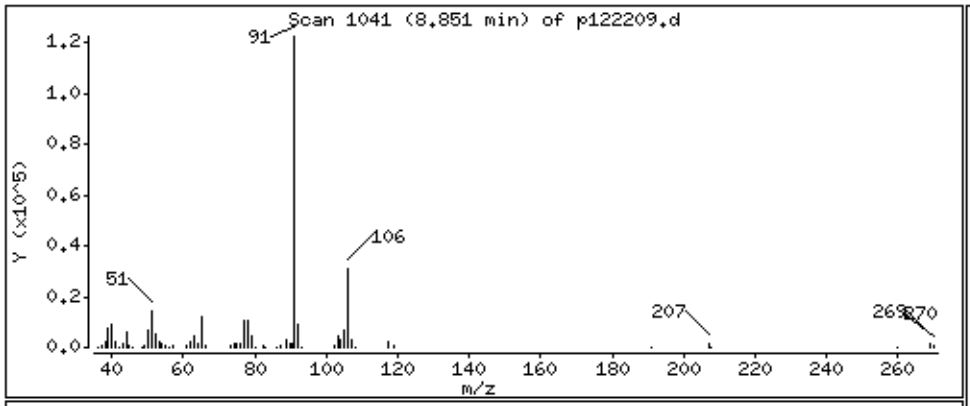
Operator: js

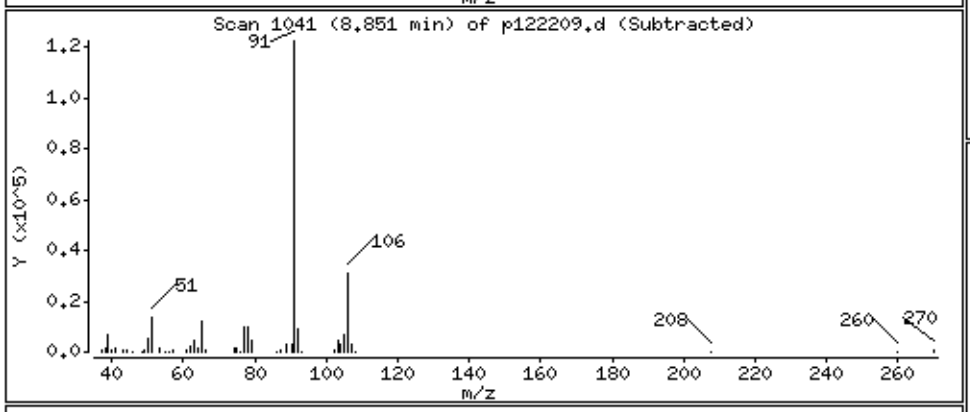
Column phase: RTX-624

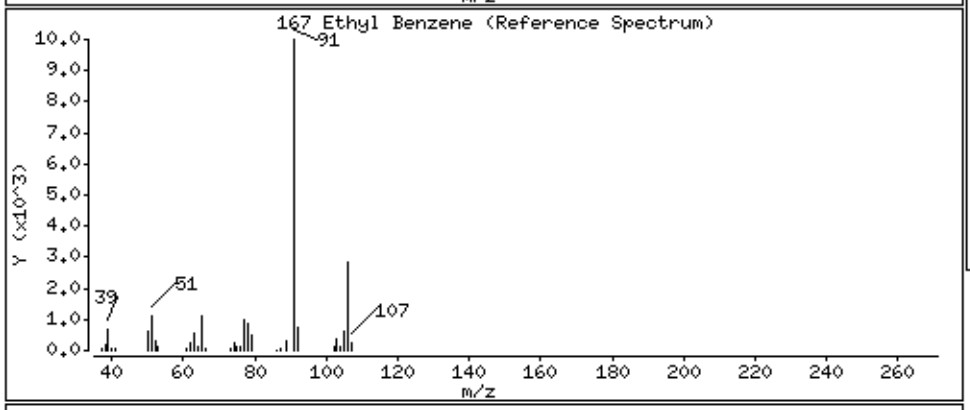
Column diameter: 0.25

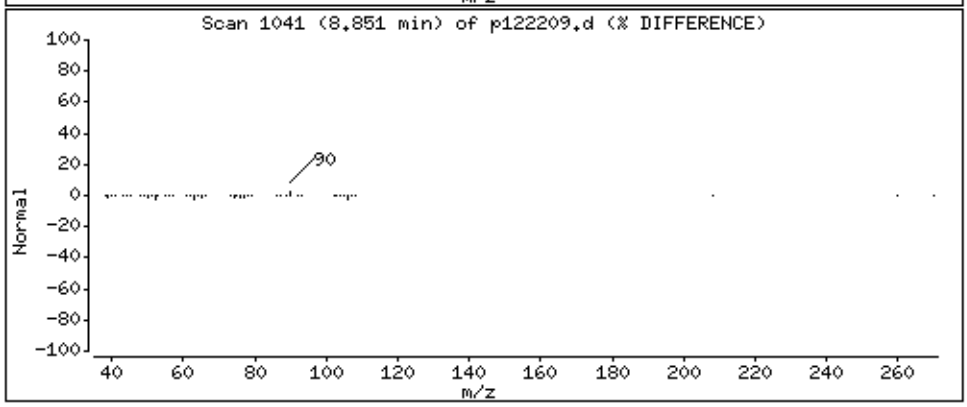
167 Ethyl Benzene

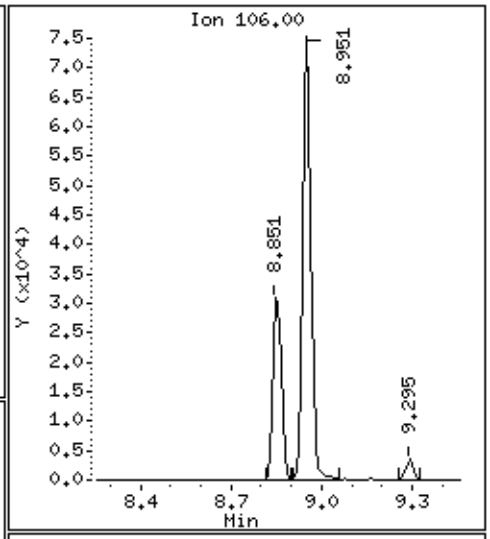
Concentration: 10.105 PPBV

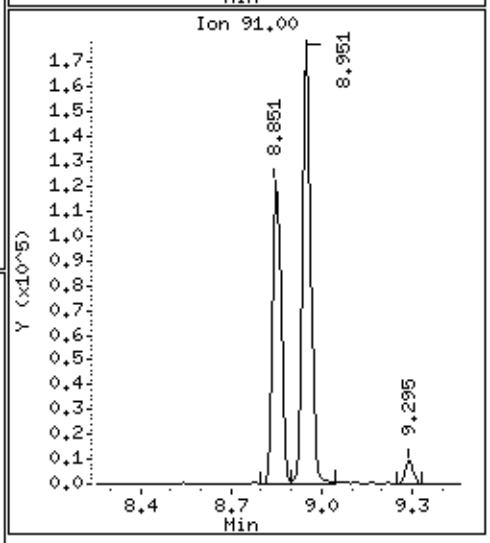












Data File: /chem/msdp.i/22dec14.b/p122209.d

Date : 22-DEC-2014 14:18

Client ID:

Instrument: msdp.i

Sample Info: 200ml 1L1680

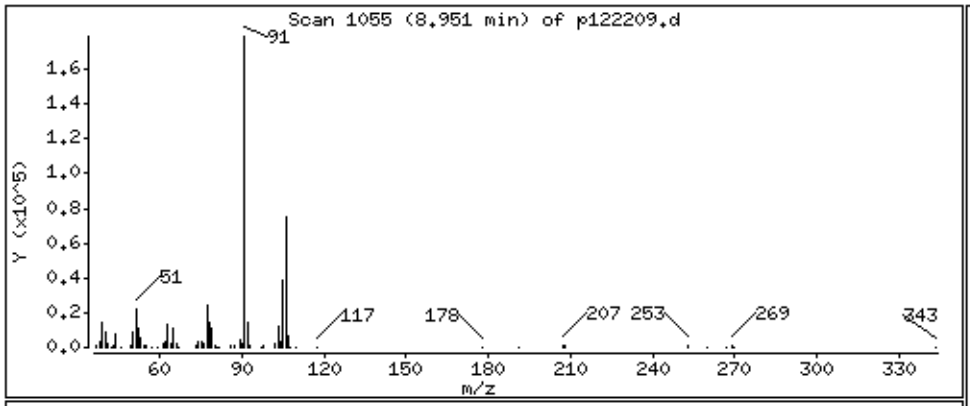
Operator: js

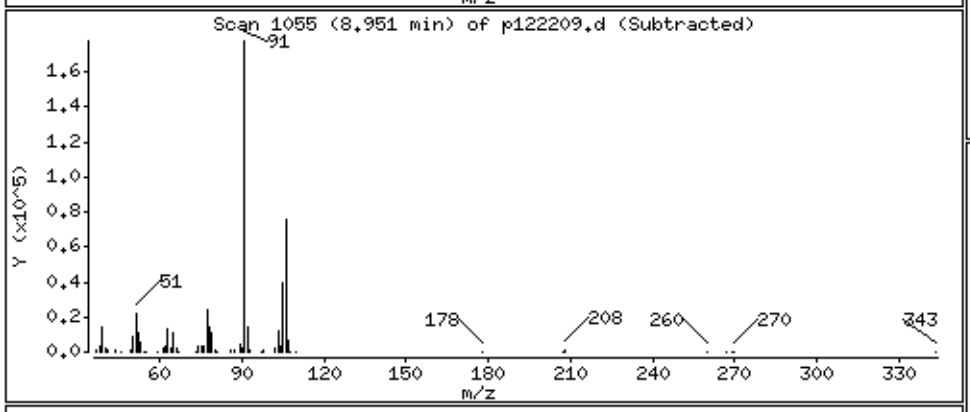
Column phase: RTX-624

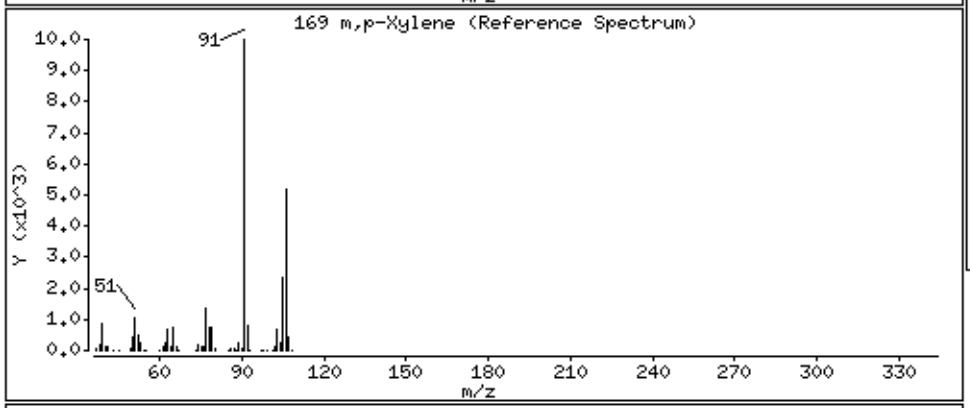
Column diameter: 0.25

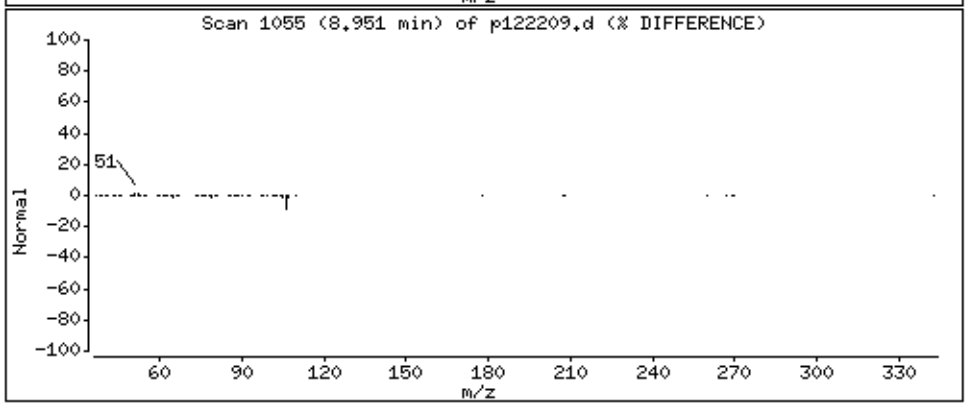
169 m,p-Xylene

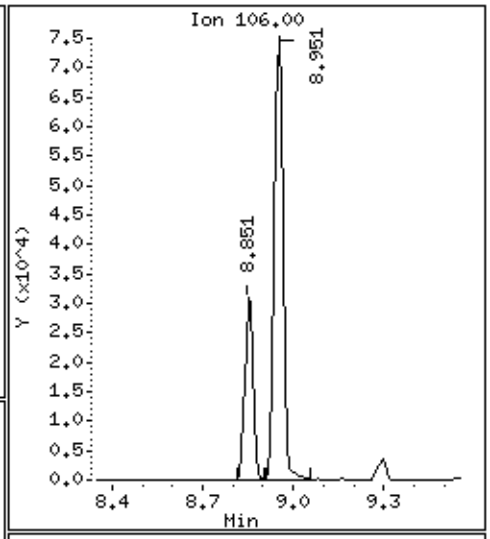
Concentration: 20.653 PPBV

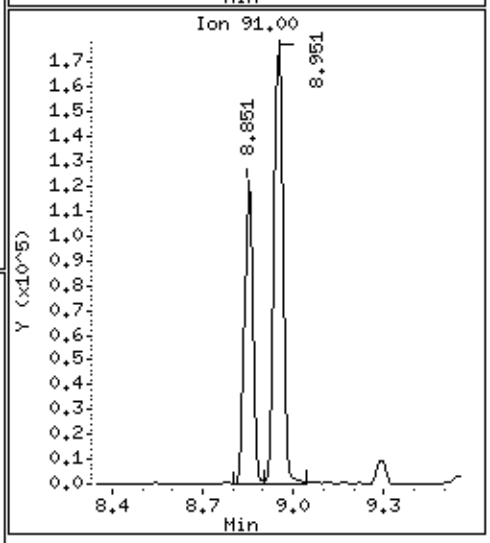












Data File: /chem/msdp.i/22dec14.b/p122209.d

Date : 22-DEC-2014 14:18

Client ID:

Instrument: msdp.i

Sample Info: 200ml 1L1680

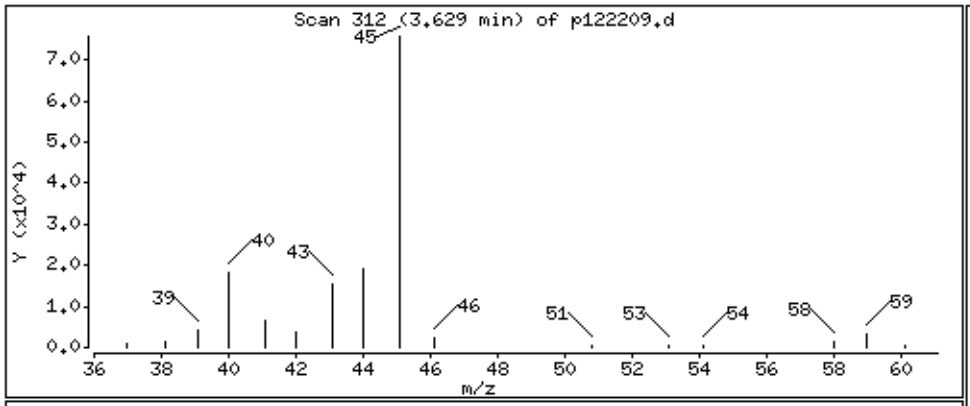
Operator: js

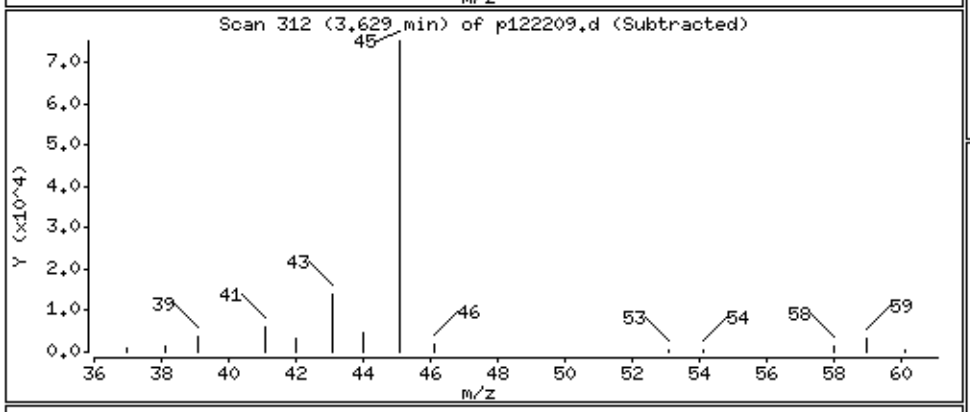
Column phase: RTX-624

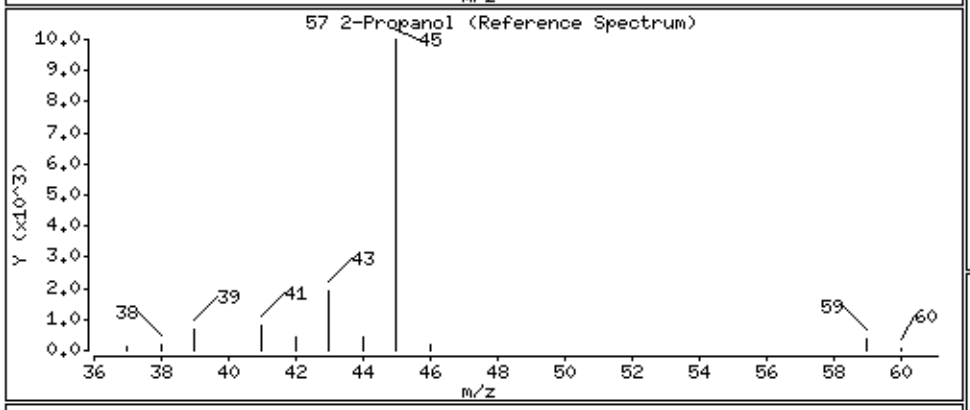
Column diameter: 0.25

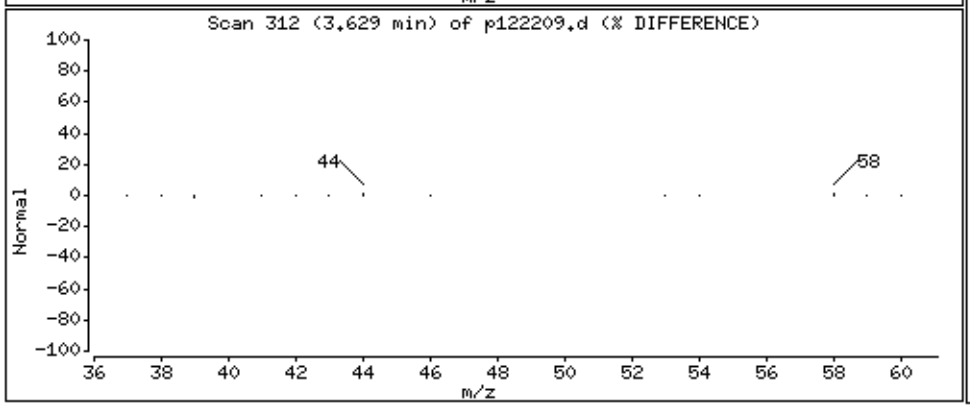
57 2-Propanol

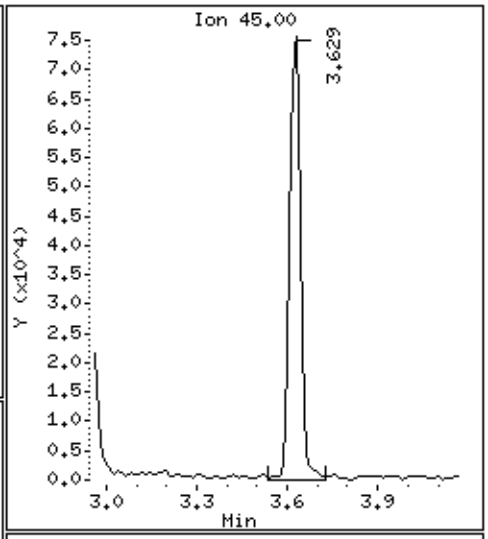
Concentration: 28.225 PPBV

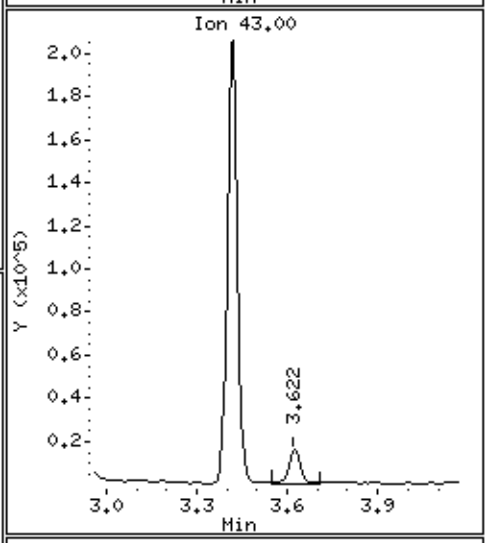


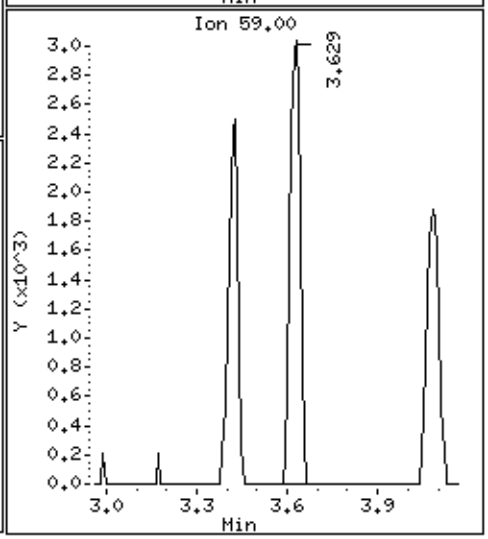












Data File: /chem/msdp.i/22dec14.b/p122209.d

Date : 22-DEC-2014 14:18

Client ID:

Instrument: msdp.i

Sample Info: 200ml 1L1680

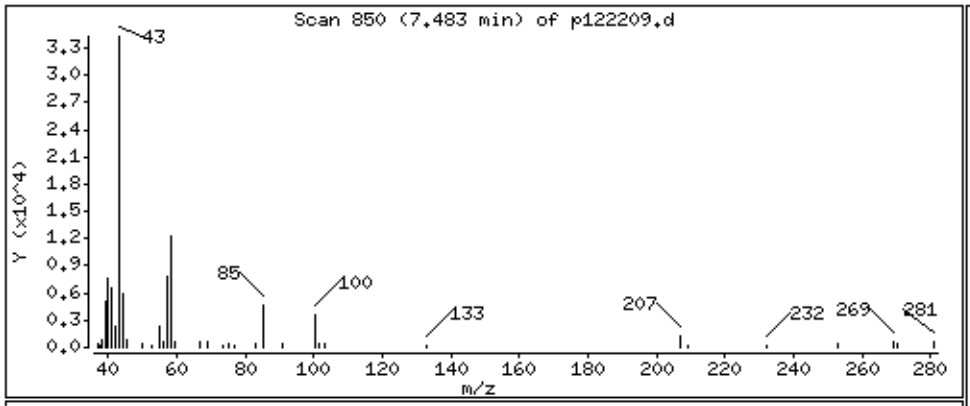
Operator: js

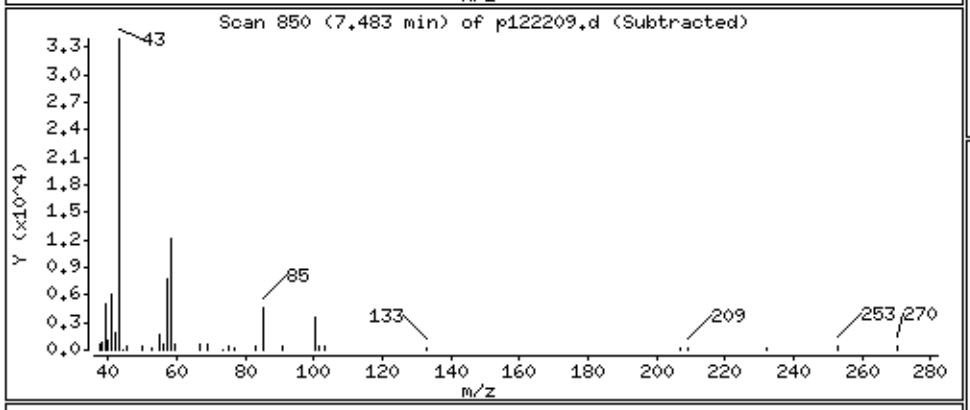
Column phase: RTX-624

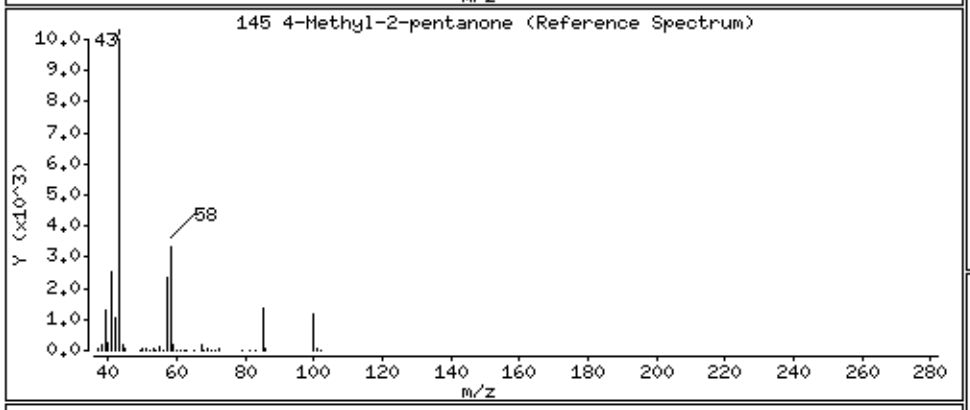
Column diameter: 0.25

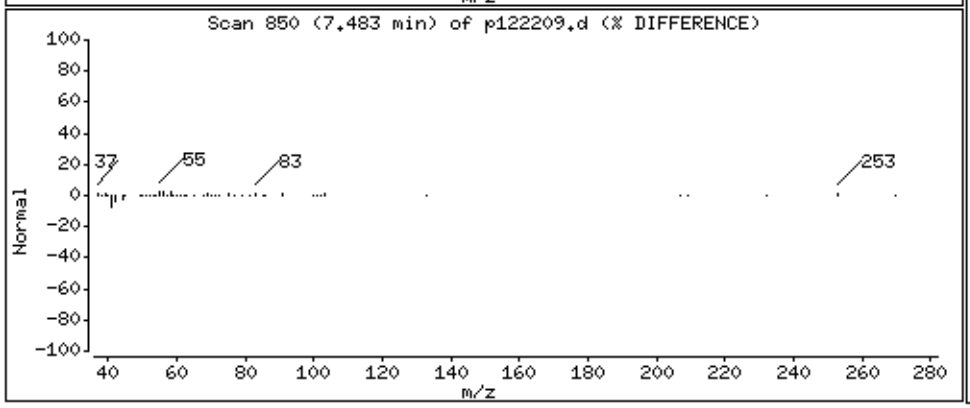
145 4-Methyl-2-pentanone

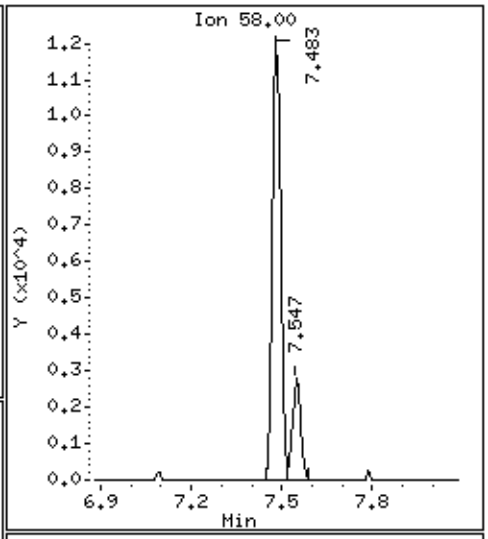
Concentration: 5.244 PPBV

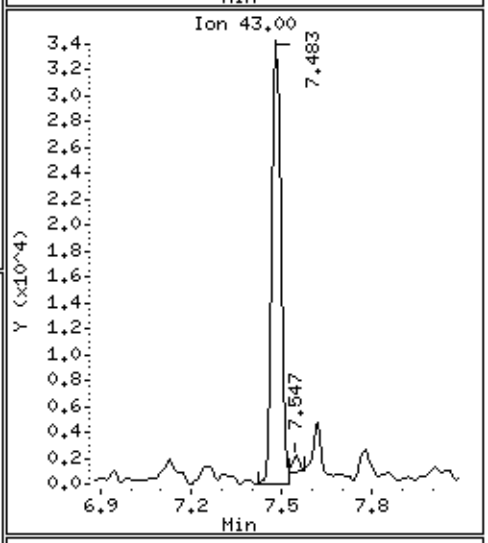


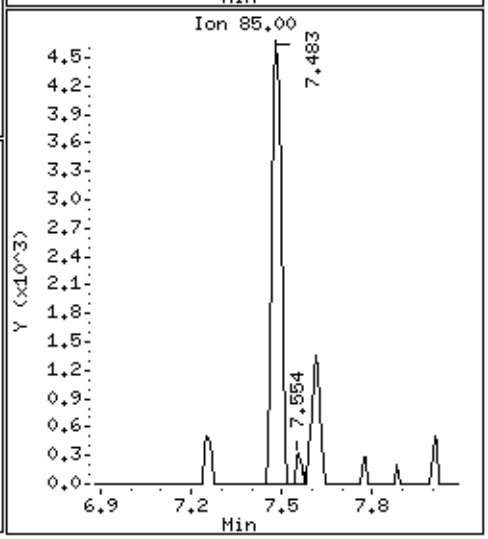












Data File: /chem/msdp.i/22dec14.b/p122209.d

Date : 22-DEC-2014 14:18

Client ID:

Instrument: msdp.i

Sample Info: 200ml 1L1680

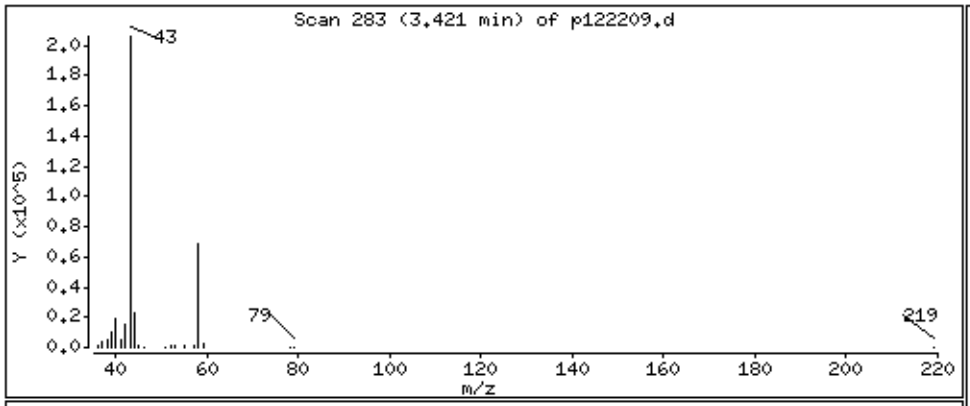
Operator: js

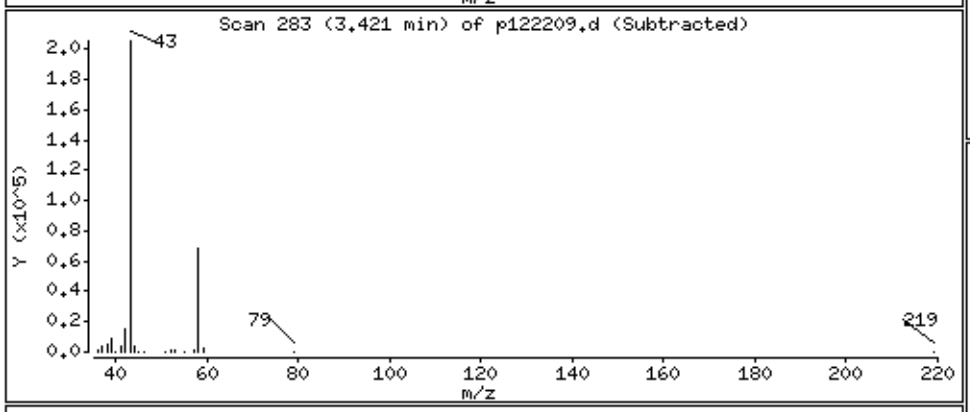
Column phase: RTX-624

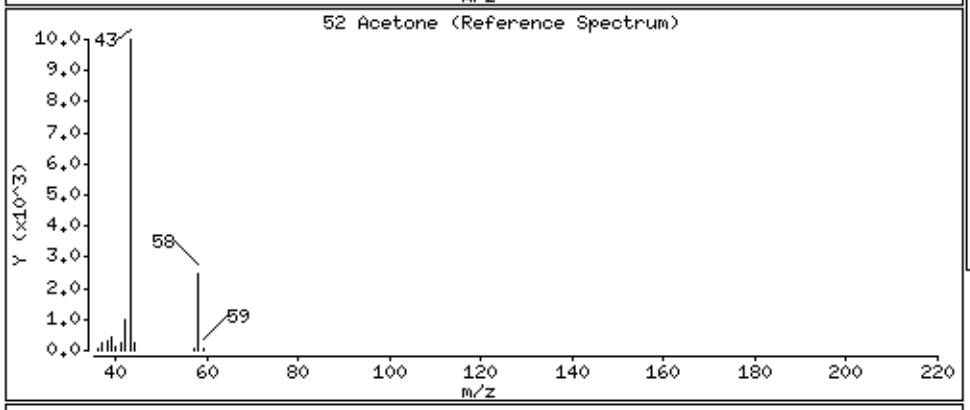
Column diameter: 0.25

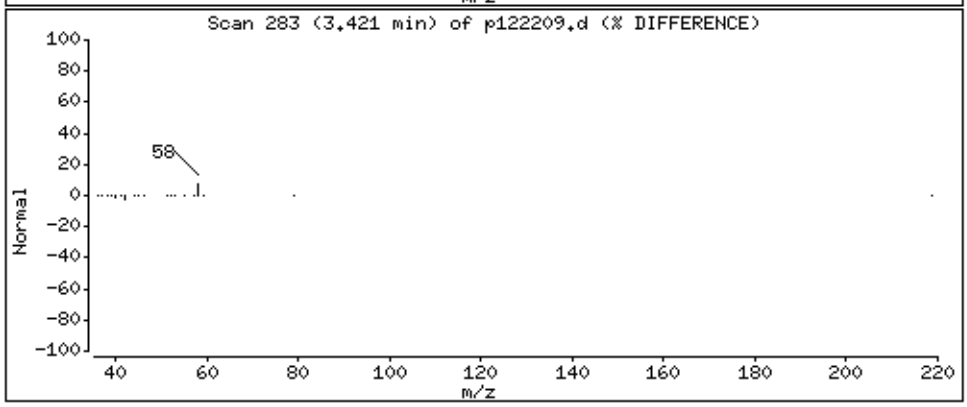
52 Acetone

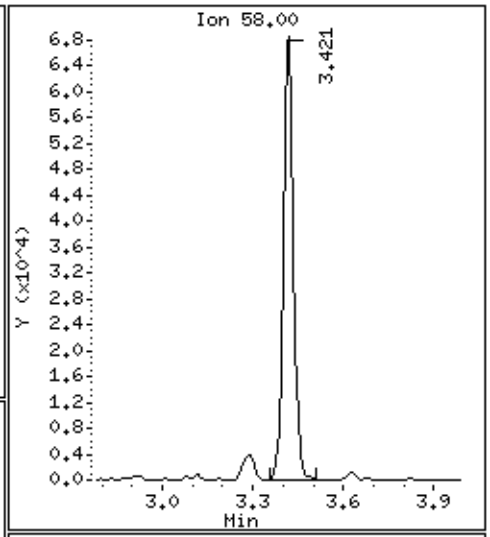
Concentration: 88.943 PPBV

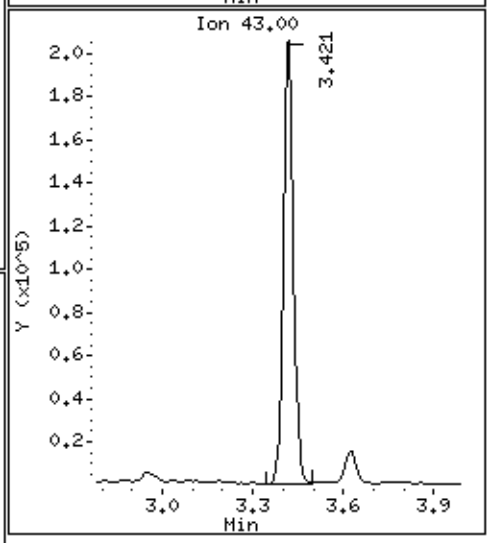












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Summary of Detected Compounds
EPA METHOD TO-15 GC/MS

Client Sample ID: B5SS-3 (2014)

Lab ID#: 1412216A-05A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Acetone	1200	39000	2800	93000
2-Propanol	1200	120000	2900	300000
Toluene	300	420	1100	1600
Ethyl Benzene	300	450	1300	2000
m,p-Xylene	300	2000	1300	8700
4-Methyl-2-pentanone	300	1200	1200	5100

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Client Sample ID: B5SS-3 (2014)

Lab ID#: 1412216A-05A

EPA METHOD TO-15 GC/MS

File Name:	**14121818**	**Date of Collection:**	**12/11/14 11:47:00 A**
Dil. Factor:	**59.0**	**Date of Analysis:**	**12/19/14 10:37 AM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Acetone	1200	39000	2800	93000
2-Propanol	1200	120000	2900	300000
Benzene	300	Not Detected	940	Not Detected
Toluene	300	420	1100	1600
Ethyl Benzene	300	450	1300	2000
m,p-Xylene	300	2000	1300	8700
o-Xylene	300	Not Detected	1300	Not Detected
4-Methyl-2-pentanone	300	1200	1200	5100

Container Type: 1 Liter Summa Canister (100% Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	99	70-130
Toluene-d8	99	70-130
4-Bromofluorobenzene	90	70-130

Eurofins Air Toxics Inc.

EPA METHOD TO14A/TO15

Data file : /chem/msd14.i/18dec14.b/14121818.d
Lab Smp Id: 1412216A-05A
Inj Date : 19-DEC-2014 10:37
Operator : act Inst ID: msd14.i
Smp Info : 2.0ml #1L1076
Misc Info : 4.5"Hg->14.8psi
Comment : (5&20) - GC/MS
Method : /chem/msd14.i/18dec14.b/14451124c.m
Meth Date : 24-Dec-2014 07:16 dbailey Quant Type: ISTD
Cal Date : 24-NOV-2014 18:25 Cal File: 14112421k.d
Als bottle: 1
Dil Factor: 59.00000
Integrator: HP RTE Compound Sublist: And19256.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
* 75 Bromochloromethane						CAS #: 74-97-5	
4.753	4.753 (1.000)	130	109019	400.000		80.00- 120.00	100.00
4.753	4.753 (1.000)	128	84518			0.00- 30.00	77.53
4.753	4.753 (1.000)	49	129386			0.00- 30.00	118.68
* 94 1,4-Difluorobenzene						CAS #: 540-36-3	
5.858	5.858 (1.000)	114	480825	400.000		80.00- 120.00	100.00
5.858	5.858 (1.000)	88	71382			0.00- 30.00	14.85
* 125 Chlorobenzene-d5						CAS #: 3114-55-4	
9.832	9.832 (1.000)	117	430684	400.000		80.00- 120.00	100.00
9.832	9.832 (1.000)	82	224122			0.00- 30.00	52.04
$ 86 1,2-Dichloroethane-d4						CAS #: 17060-07-0	
5.396	5.396 (1.135)	65	161078	397.206	397.21	80.00- 120.00	100.00
5.396	5.396 (1.135)	67	80550			0.00- 30.00	50.01
$ 110 Toluene-d8						CAS #: 2037-26-5	
7.635	7.635 (1.303)	98	473296	395.197	395.20	80.00- 120.00	100.00
7.635	7.635 (1.303)	70	49757			0.00- 30.00	10.51

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

$ 110 Toluene-d8 (continued)
  7.635   7.635 (1.303)   100    321018                     0.00-  30.00    67.83
-------------------------------------------------------------------------------
$ 139 Bromofluorobenzene                            CAS #: 460-00-4
 10.951  10.951 (1.114)   174    238879 360.153   360.15  80.00- 120.00   100.00
 10.951  10.951 (1.114)    95    298356                     0.00-  30.00   124.90
 10.951  10.951 (1.114)   176    226772                     0.00-  30.00    94.93
-------------------------------------------------------------------------------
   41 2-Propanol                                    CAS #: 67-63-0
  2.878   2.892 (0.605)    45   1095114 2074.16   122380  80.00- 120.00   100.00
  2.878   2.892 (0.605)    43    250593                     0.00-  30.00    22.88
  2.878   2.892 (0.605)    59     47519                     0.00-  30.00     4.34
-------------------------------------------------------------------------------
  128 Ethyl Benzene                                 CAS #: 100-41-4
  9.958   9.958 (1.013)   106      5075 7.65967   451.92  80.00- 120.00   100.00
  9.958   9.958 (1.013)    91     15371                     0.00-  30.00   302.86
-------------------------------------------------------------------------------
  131 m,p-Xylene                                    CAS #: 108-38-3
 10.083  10.084 (1.026)   106     26814 33.8481   1997.0  80.00- 120.00   100.00
 10.083  10.084 (1.026)    91     59752                     0.00-  30.00   222.83
-------------------------------------------------------------------------------
  109 4-Methyl-2-pentanone                          CAS #: 108-10-1
  7.579   7.579 (1.294)    85      3423 21.0651   1242.8  80.00- 120.00   100.00
  7.579   7.579 (1.294)    43     17317                     0.00-  30.00   505.81
  7.579   7.579 (1.294)    58     11368                     0.00-  30.00   332.05
-------------------------------------------------------------------------------
   38 Acetone                                       CAS #: 67-64-1
  2.738   2.752 (0.576)    58    122801 664.982    39234  80.00- 120.00   100.00
  2.738   2.752 (0.576)    43    377727                     0.00-  30.00   307.59
-------------------------------------------------------------------------------
  111 Toluene                                       CAS #: 108-88-3
  7.747   7.747 (1.322)    91     11956 7.04449   415.62  80.00- 120.00   100.00
  7.747   7.747 (1.322)    92      6666                     0.00-  30.00    55.75
-------------------------------------------------------------------------------
```

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd14.i
Lab File ID: 14121818.d
Lab Smp Id: 1412216A-05A
Analysis Type: VOA
Quant Type: ISTD
Operator: act
Method File: /chem/msd14.i/18dec14.b/14451124c.m
Misc Info: 4.5"Hg->14.8psi

Calibration Date: 18-DEC-2014
Calibration Time: 19:52

Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
75 Bromochloromethan	124906	74944	174868	109019	-12.72
94 1,4-Difluorobenze	570831	342499	799163	480825	-15.77
125 Chlorobenzene-d5	512999	307799	718199	430684	-16.05

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
75 Bromochloromethan	4.75	4.42	5.08	4.75	-0.01
94 1,4-Difluorobenze	5.86	5.53	6.19	5.86	0.00
125 Chlorobenzene-d5	9.83	9.50	10.16	9.83	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: 24-Dec-2014 07:25

Eurofins Air Toxics Inc.

RECOVERY REPORT

Client Name:
Client SDG: 18dec14
Sample Matrix: GAS
Fraction: VOA
Lab Smp Id: 1412216A-05A
Level: LOW
Operator: act
Data Type: MS DATA
SampleType: SAMPLE
SpikeList File: 200.spk
Quant Type: ISTD
Sublist File: And19256.sub
Method File: /chem/msd14.i/18dec14.b/14451124c.m
Misc Info: 4.5"Hg->14.8psi

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 86 1,2-Dichloroethane	400.00	397.21	99.30	70-130
$ 110 Toluene-d8	400.00	395.20	98.80	70-130
$ 139 Bromofluorobenzene	400.00	360.15	90.04	70-130

Data File: /chem/msd14.i/18dec14.b/14121818.d

Date : 19-DEC-2014 10:37

Client ID:

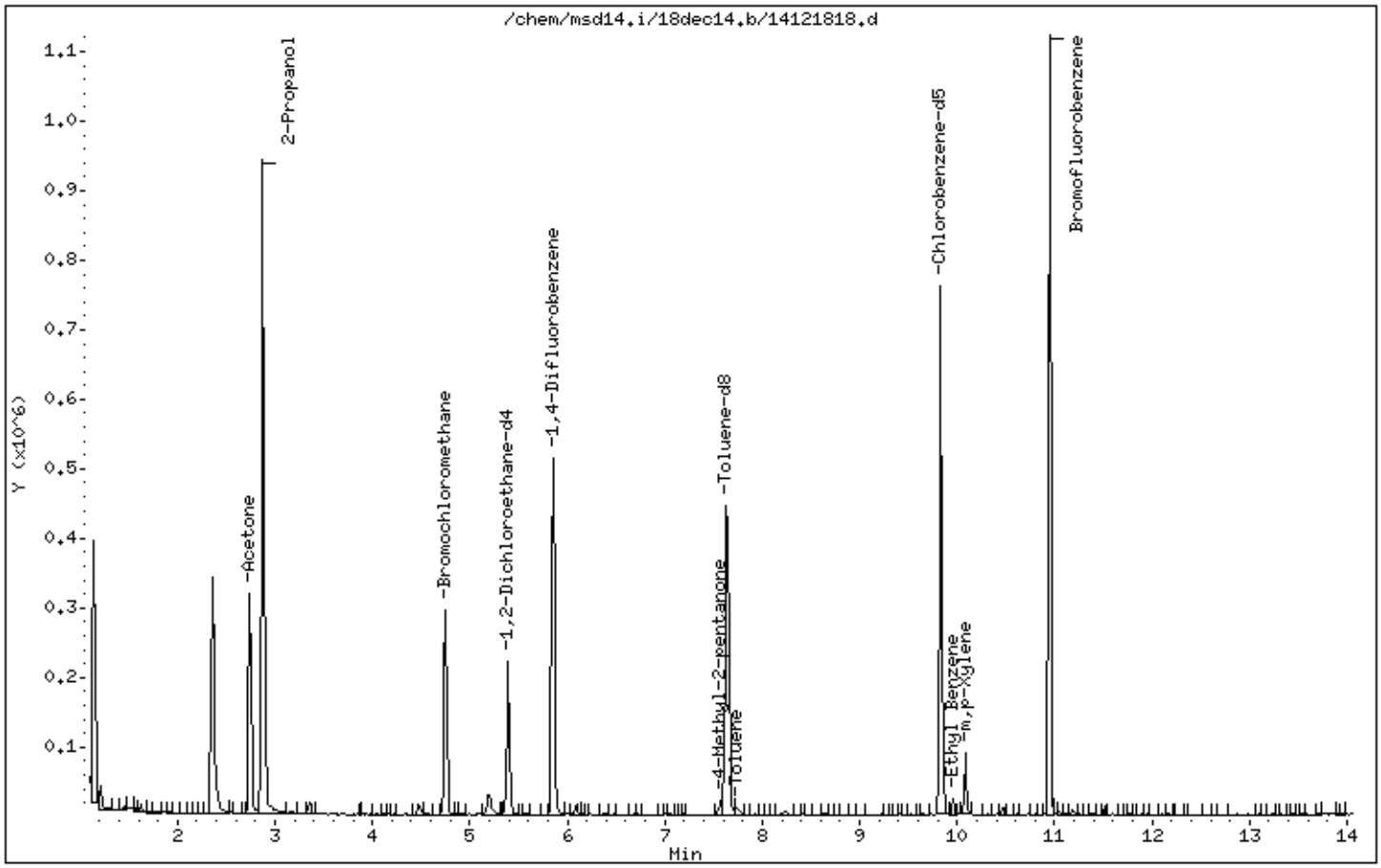
Instrument: msd14.i

Sample Info: 2.0ml #1L1076

Operator: act

Column phase: RTx-624

Column diameter: 0.53



Data File: /chem/msd14.i/18dec14.b/14121818.d

Date : 19-DEC-2014 10:37

Client ID:

Instrument: msd14.i

Sample Info: 2.0ml #1L1076

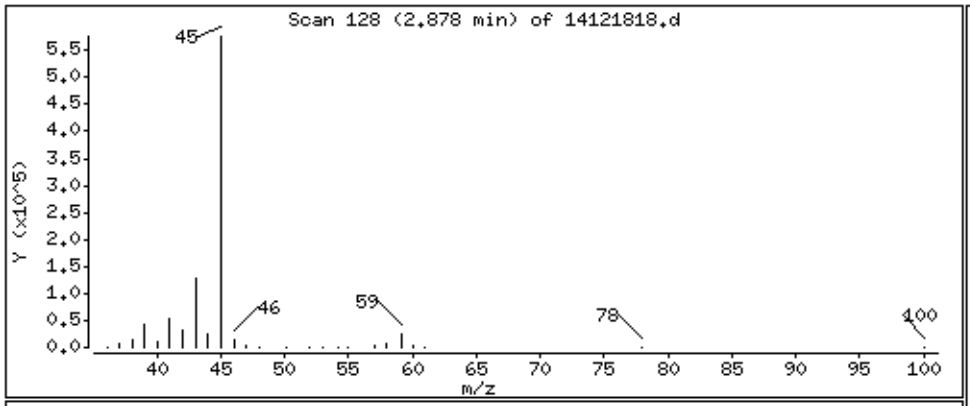
Operator: act

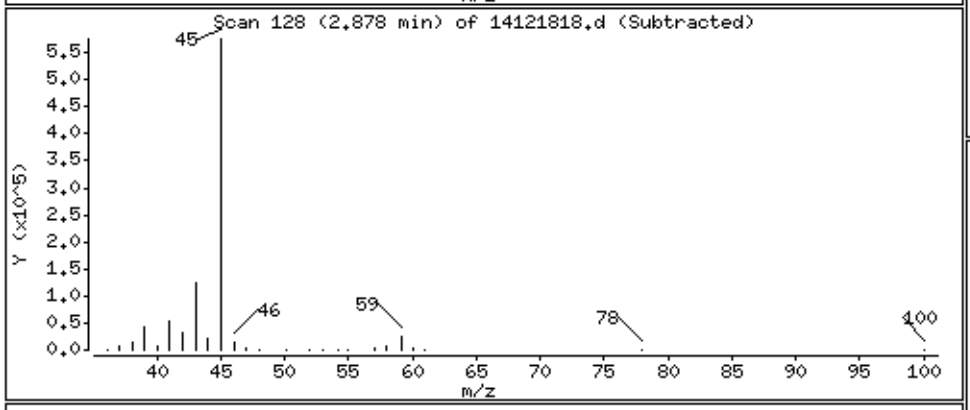
Column phase: RTx-624

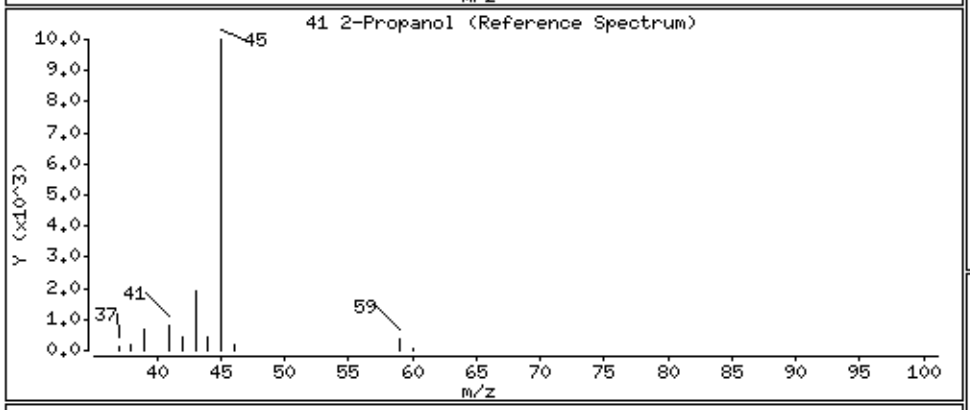
Column diameter: 0.53

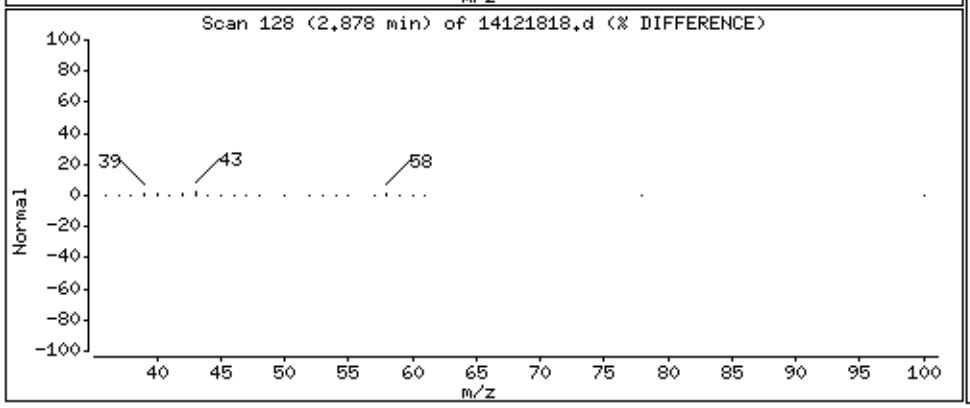
41 2-Propanol

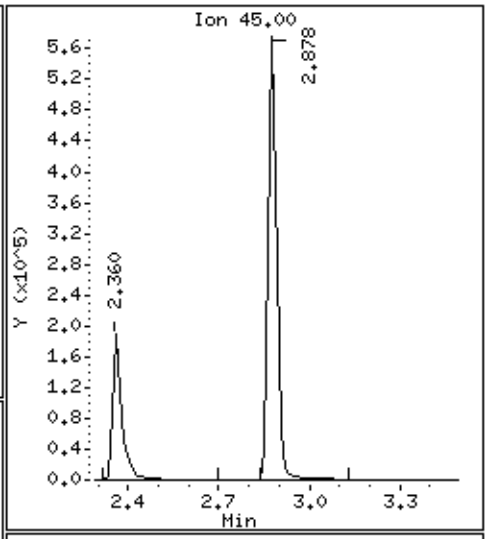
Concentration: 122380 PPBV

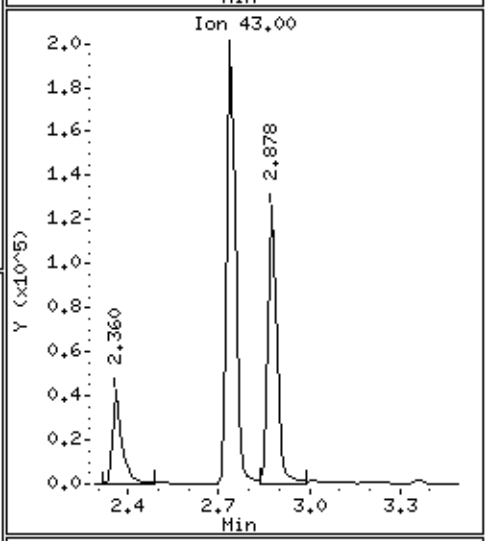


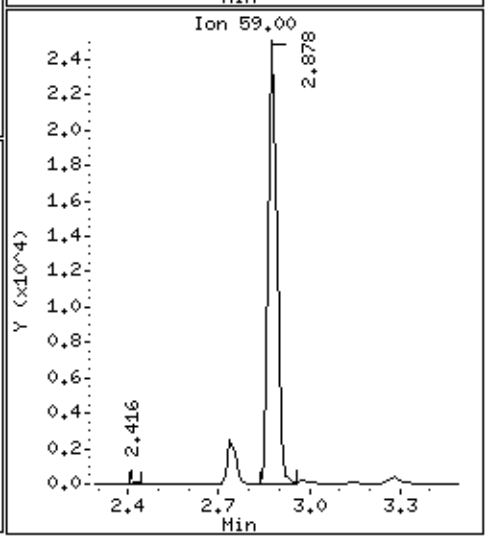












Data File: /chem/msd14.i/18dec14.b/14121818.d

Date : 19-DEC-2014 10:37

Client ID:

Instrument: msd14.i

Sample Info: 2.0ml #1L1076

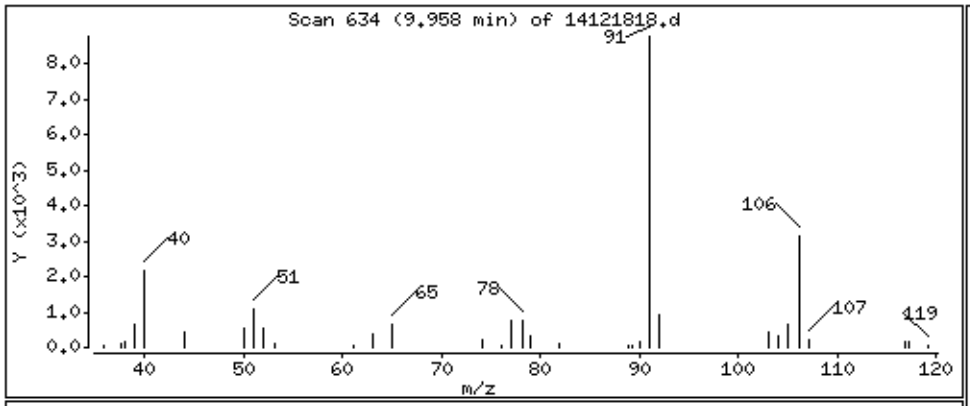
Operator: act

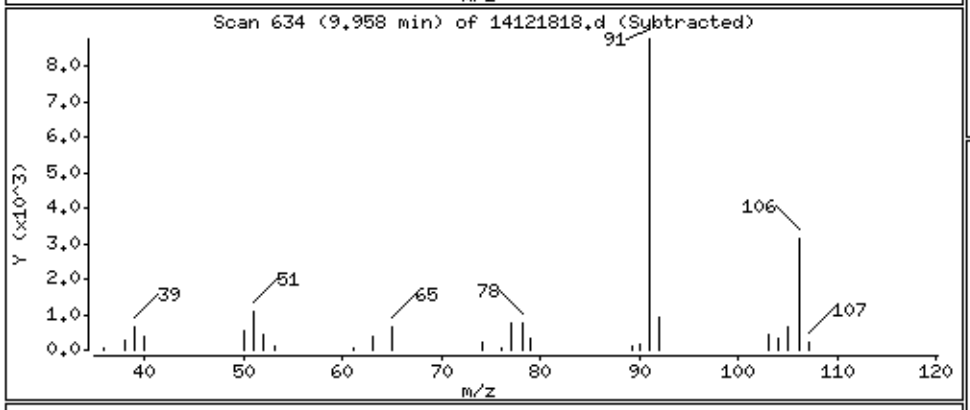
Column phase: RTx-624

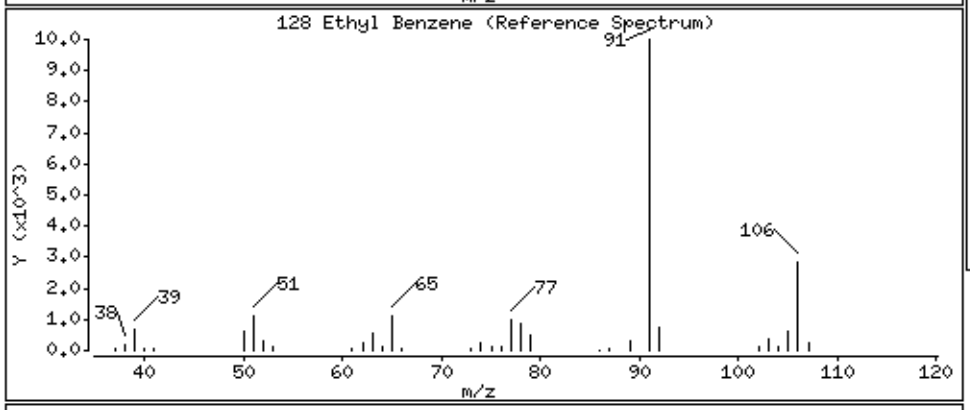
Column diameter: 0.53

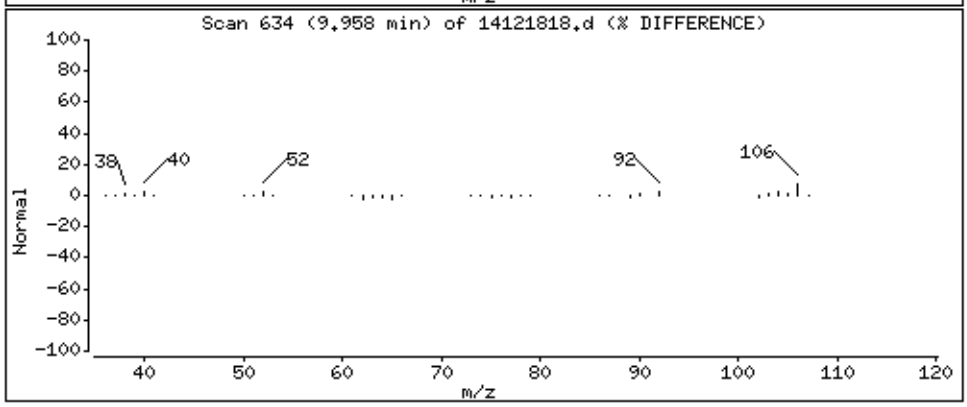
128 Ethyl Benzene

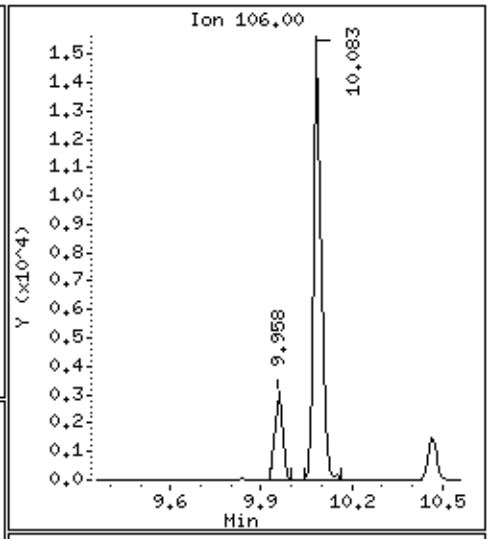
Concentration: 451.92 PPBV

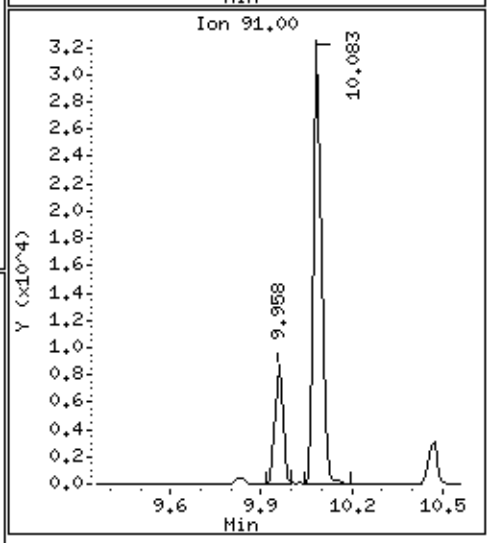












Data File: /chem/msd14.i/18dec14.b/14121818.d

Date : 19-DEC-2014 10:37

Client ID:

Instrument: msd14.i

Sample Info: 2.0ml #1L1076

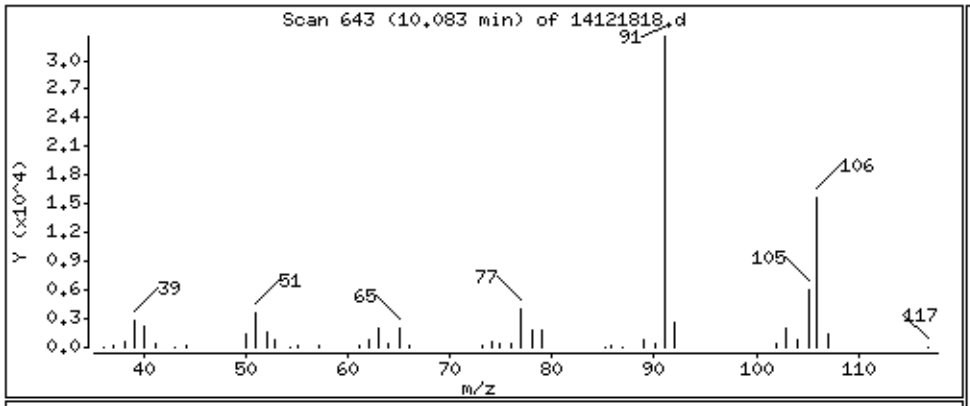
Operator: act

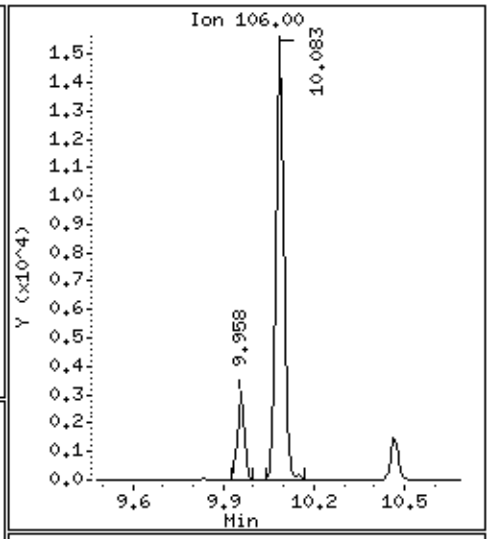
Column phase: RTx-624

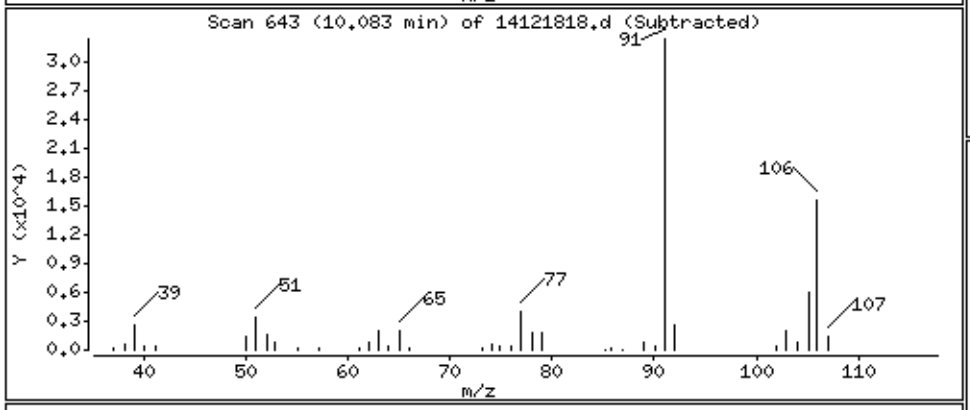
Column diameter: 0.53

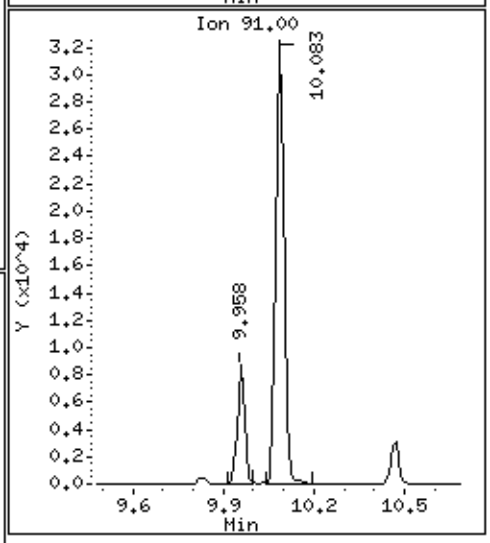
131 m,p-Xylene

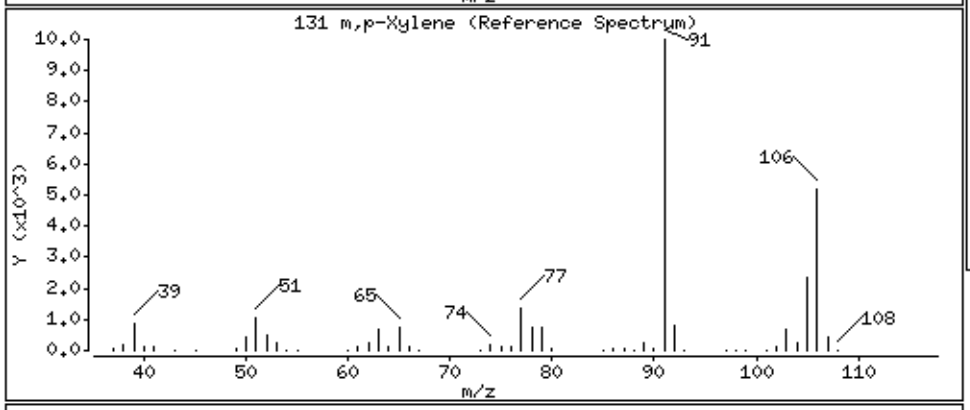
Concentration: 1997.0 PPBV

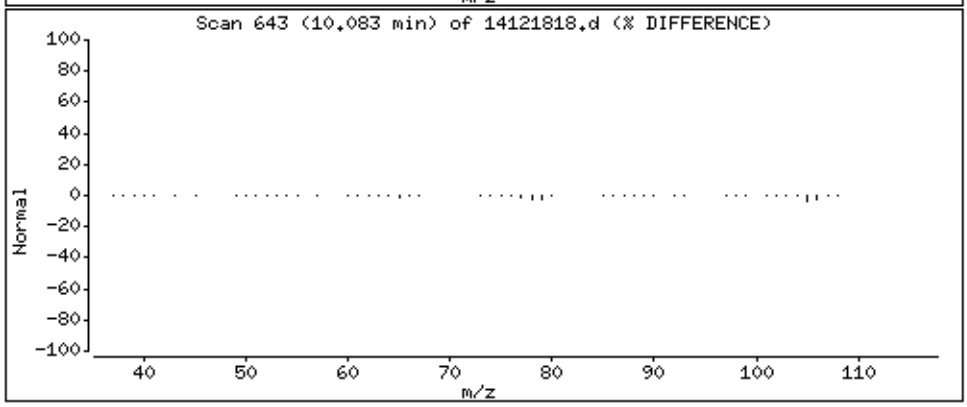












Data File: /chem/msd14.i/18dec14.b/14121818.d

Date : 19-DEC-2014 10:37

Client ID:

Instrument: msd14.i

Sample Info: 2.0ml #1L1076

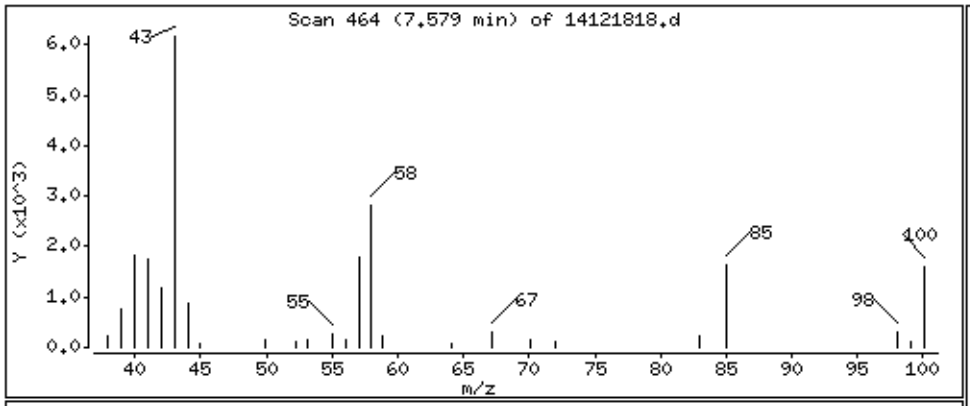
Operator: act

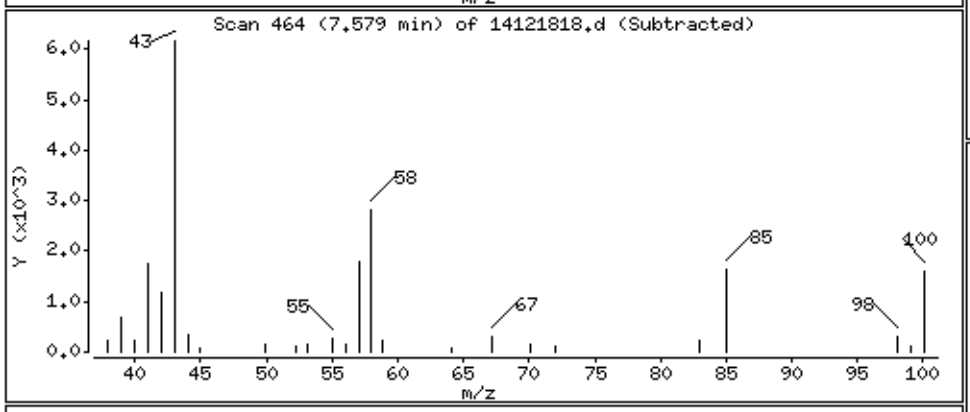
Column phase: RTx-624

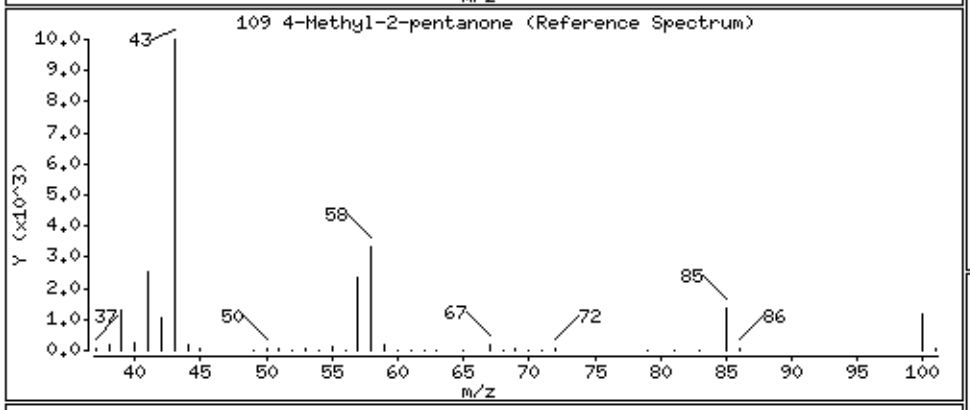
Column diameter: 0.53

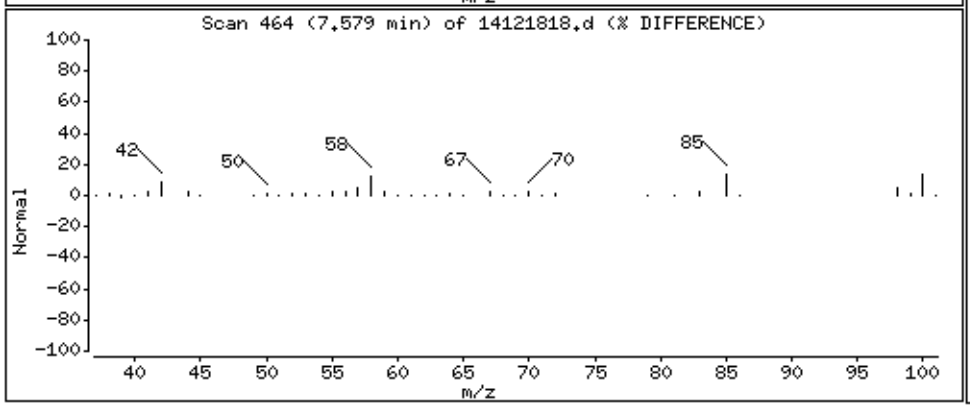
109 4-Methyl-2-pentanone

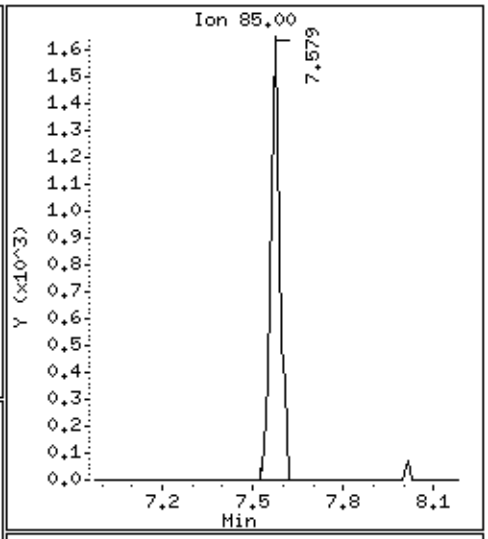
Concentration: 1242.8 PPBV

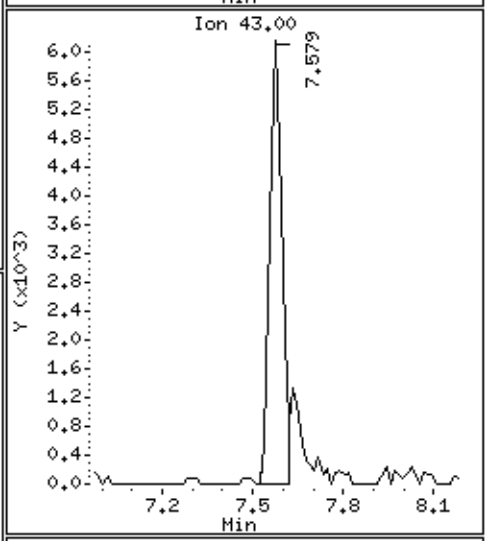


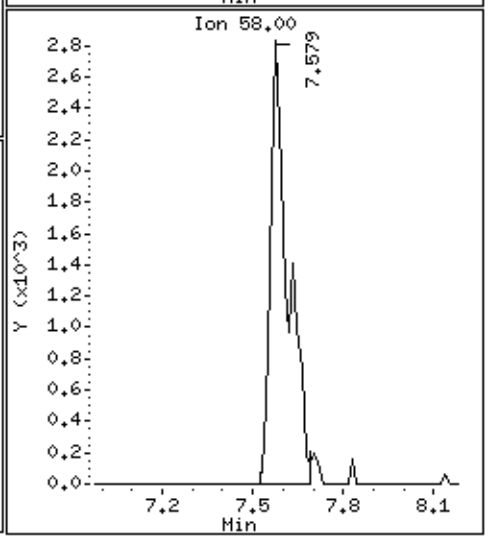












Data File: /chem/msd14.i/18dec14.b/14121818.d

Date : 19-DEC-2014 10:37

Client ID:

Instrument: msd14.i

Sample Info: 2.0ml #1L1076

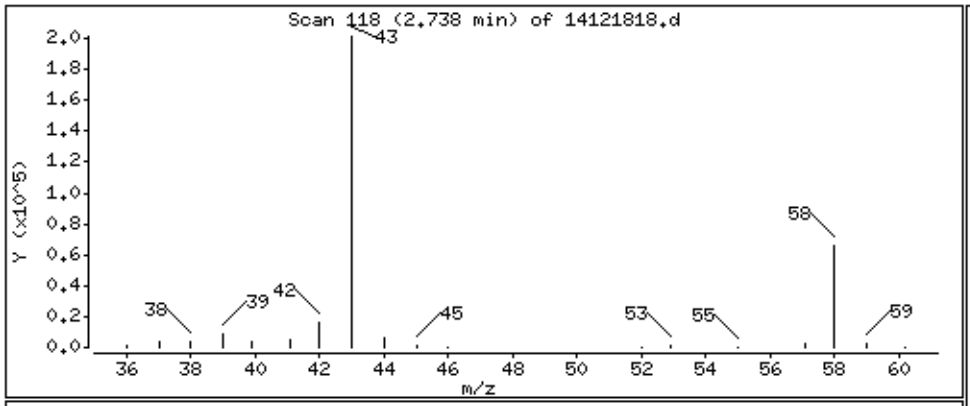
Operator: act

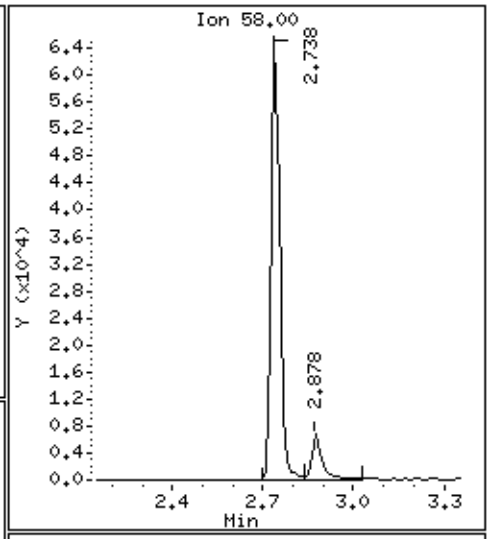
Column phase: RTx-624

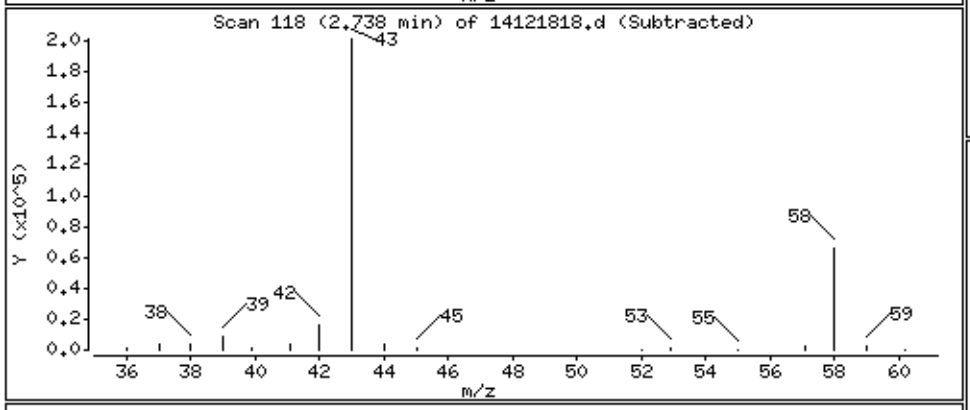
Column diameter: 0.53

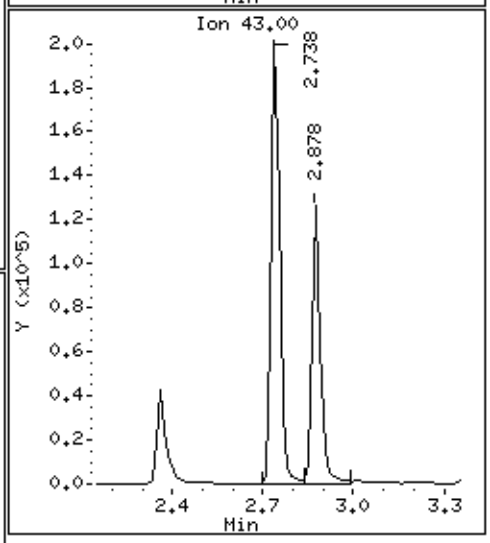
38 Acetone

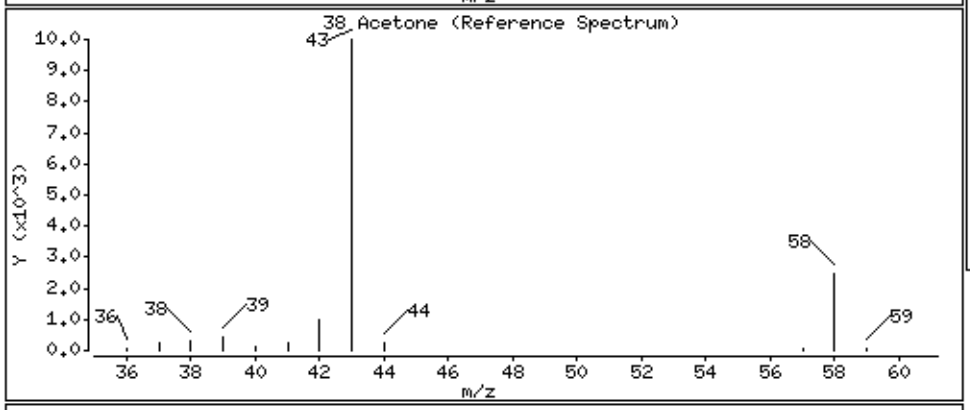
Concentration: 39234 PPBV

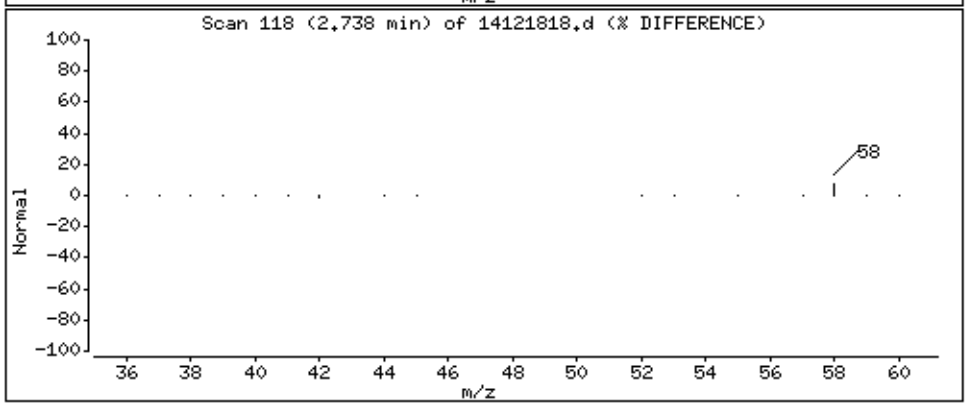












Data File: /chem/msd14.i/18dec14.b/14121818.d

Date : 19-DEC-2014 10:37

Client ID:

Instrument: msd14.i

Sample Info: 2.0ml #1L1076

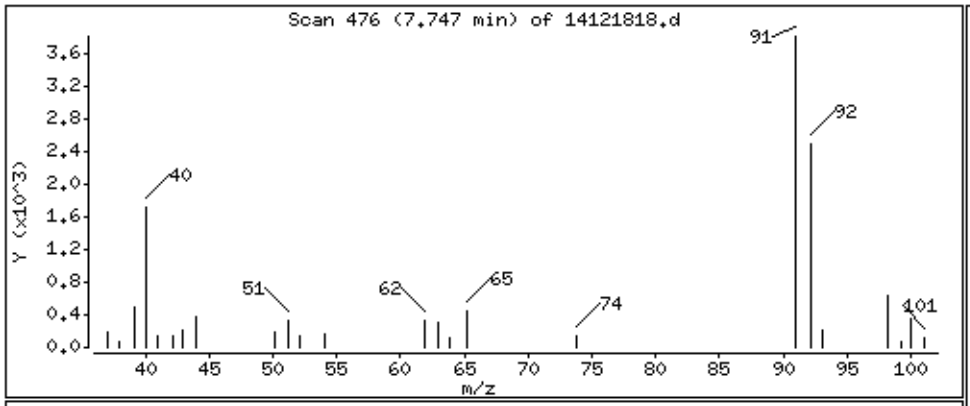
Operator: act

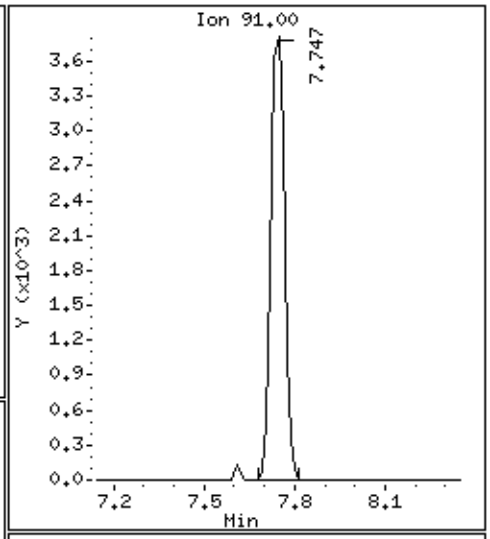
Column phase: RTx-624

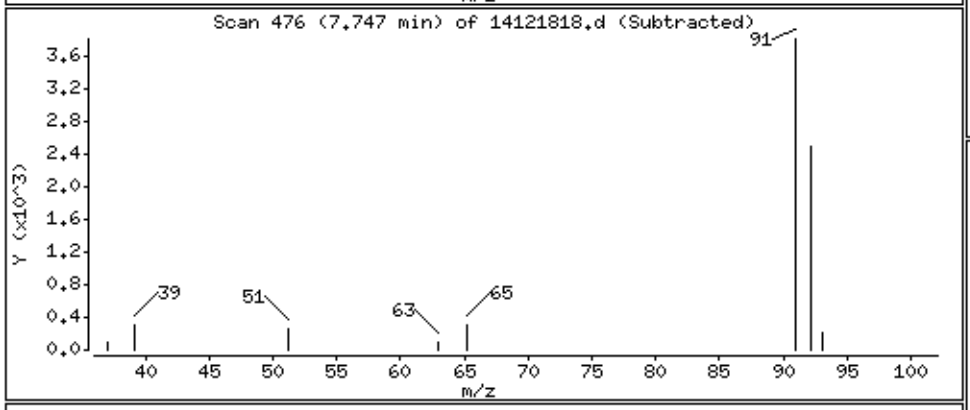
Column diameter: 0.53

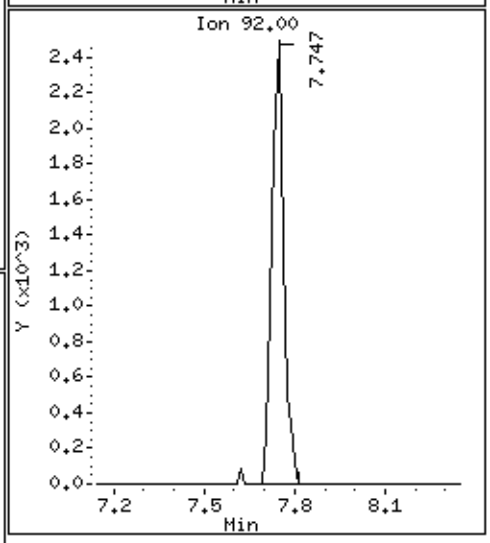
111 Toluene

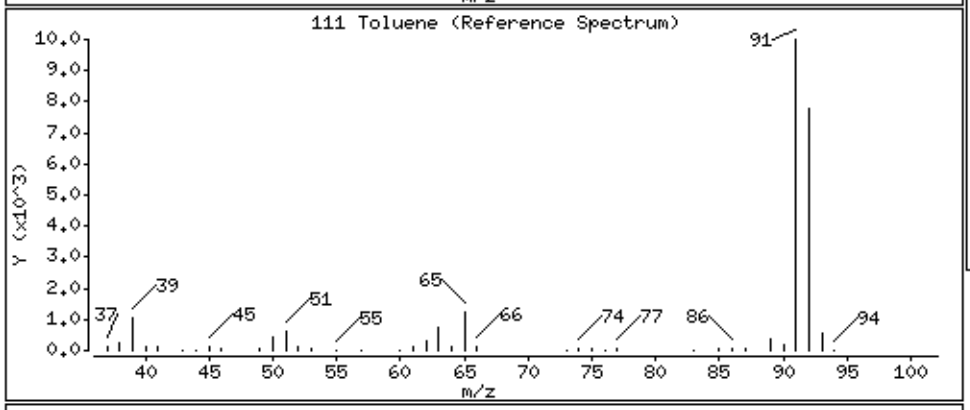
Concentration: 415.62 PPBV

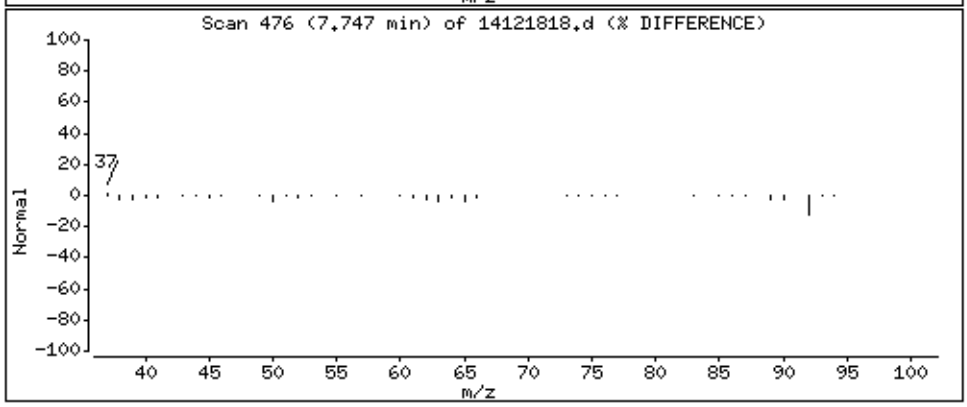












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Summary of Detected Compounds
EPA METHOD TO-15 GC/MS

Client Sample ID: B5SS-5 (2014)

Lab ID#: 1412216A-06A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Acetone	17000	2900000	40000	6800000
2-Propanol	17000	1800000	42000	4400000
Toluene	4300	2200000	16000	8300000
Ethyl Benzene	4300	400000	18000	1700000
m,p-Xylene	4300	1500000	18000	6500000
o-Xylene	4300	110000	18000	470000
4-Methyl-2-pentanone	4300	1200000	17000	5100000

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Client Sample ID: B5SS-5 (2014)

Lab ID#: 1412216A-06A

EPA METHOD TO-15 GC/MS

File Name:	**14121824**	**Date of Collection:**	**12/11/14 1:59:00 PM**
Dil. Factor:	**854**	**Date of Analysis:**	**12/19/14 01:43 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Acetone	17000	2900000	40000	6800000
2-Propanol	17000	1800000	42000	4400000
Benzene	4300	Not Detected	14000	Not Detected
Toluene	4300	2200000	16000	8300000
Ethyl Benzene	4300	400000	18000	1700000
m,p-Xylene	4300	1500000	18000	6500000
o-Xylene	4300	110000	18000	470000
4-Methyl-2-pentanone	4300	1200000	17000	5100000

Container Type: 1 Liter Summa Canister (100% Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	93	70-130
Toluene-d8	109	70-130
4-Bromofluorobenzene	97	70-130

Eurofins Air Toxics Inc.

EPA METHOD TO14A/TO15

Data file : /chem/msd14.i/18dec14.b/14121824.d
Lab Smp Id: 1412216A-06A
Inj Date : 19-DEC-2014 13:43
Operator : md Inst ID: msd14.i
Smp Info : 14ml #1L1702
Misc Info : 4.7"Hg->14.9psi (100x Bag)
Comment : (5&20) - GC/MS
Method : /chem/msd14.i/18dec14.b/14451124c.m
Meth Date : 24-Dec-2014 07:16 dbailey Quant Type: ISTD
Cal Date : 24-NOV-2014 18:25 Cal File: 14112421k.d
Als bottle: 1
Dil Factor: 854.00000
Integrator: HP RTE Compound Sublist: And19256.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
* 75 Bromochloromethane						CAS #: 74-97-5	
4.753	4.753 (1.000)	130	119290	400.000		80.00- 120.00	100.00
4.753	4.753 (1.000)	128	91435			0.00- 30.00	76.65
4.753	4.753 (1.000)	49	135706			0.00- 30.00	113.76
* 94 1,4-Difluorobenzene						CAS #: 540-36-3	
5.858	5.858 (1.000)	114	509608	400.000		80.00- 120.00	100.00
5.858	5.858 (1.000)	88	74299			0.00- 30.00	14.58
* 125 Chlorobenzene-d5						CAS #: 3114-55-4	
9.832	9.832 (1.000)	117	462917	400.000		80.00- 120.00	100.00
9.832	9.832 (1.000)	82	242079			0.00- 30.00	52.29
$ 86 1,2-Dichloroethane-d4						CAS #: 17060-07-0	
5.396	5.396 (1.135)	65	165137	372.152	372.15	80.00- 120.00	100.00(a)
5.396	5.396 (1.135)	67	80591			0.00- 30.00	48.80
$ 110 Toluene-d8						CAS #: 2037-26-5	
7.649	7.635 (1.306)	98	553741	436.253	436.25	80.00- 120.00	100.00(a)
7.649	7.635 (1.306)	70	56379			0.00- 30.00	10.18

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

$ 110 Toluene-d8 (continued)
  7.649   7.635 (1.306)   100    391001                     0.00-  30.00    70.61
-------------------------------------------------------------------------------
$ 139 Bromofluorobenzene                            CAS #: 460-00-4
 10.951  10.951 (1.114)   174    275642 386.642   386.64  80.00- 120.00   100.00(a)
 10.951  10.951 (1.114)    95    334299                     0.00-  30.00   121.28
 10.951  10.951 (1.114)   176    262172                     0.00-  30.00    95.11
-------------------------------------------------------------------------------
   41 2-Propanol                                    CAS #: 67-63-0
  2.878   2.892 (0.606)    45   1207515 2090.12  1785000  80.00- 120.00   100.00
  2.878   2.892 (0.606)    43    295889                     0.00-  30.00    24.50
  2.878   2.892 (0.606)    59     52902                     0.00-  30.00     4.38
-------------------------------------------------------------------------------
  128 Ethyl Benzene                                 CAS #: 100-41-4
  9.958   9.958 (1.013)   106    335428 471.009   402240  80.00- 120.00   100.00
  9.958   9.958 (1.013)    91   1040781                     0.00-  30.00   310.28
-------------------------------------------------------------------------------
  131 m,p-Xylene                                    CAS #: 108-38-3
 10.084  10.084 (1.026)   106   1500441 1762.16  1504900  80.00- 120.00   100.00
 10.084  10.084 (1.026)    91   2936632                     0.00-  30.00   195.72
-------------------------------------------------------------------------------
  132 o-Xylene                                      CAS #: 95-47-6
 10.461  10.461 (1.064)   106    107508 126.974   108440  80.00- 120.00   100.00
 10.461  10.461 (1.064)    91    222075                     0.00-  30.00   206.57
-------------------------------------------------------------------------------
  109 4-Methyl-2-pentanone                          CAS #: 108-10-1
  7.579   7.579 (1.294)    85    250727 1455.83  1243300  80.00- 120.00   100.00
  7.579   7.579 (1.294)    43   1242880                     0.00-  30.00   495.71
  7.579   7.579 (1.294)    58    533430                     0.00-  30.00   212.75
-------------------------------------------------------------------------------
   38 Acetone                                       CAS #: 67-64-1
  2.752   2.752 (0.579)    58    679104 3360.79  2870100  80.00- 120.00   100.00
  2.752   2.752 (0.579)    43   2029431                     0.00-  30.00   298.84
-------------------------------------------------------------------------------
  111 Toluene                                       CAS #: 108-88-3
  7.747   7.747 (1.322)    91   4640784 2579.92  2203200  80.00- 120.00   100.00
  7.747   7.747 (1.322)    92   2726124                     0.00-  30.00    58.74
-------------------------------------------------------------------------------
```

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: msd14.i
Lab File ID: 14121824.d
Lab Smp Id: 1412216A-06A
Analysis Type: VOA
Quant Type: ISTD
Operator: md
Method File: /chem/msd14.i/18dec14.b/14451124c.m
Misc Info: 4.7"Hg->14.9psi (100x Bag)

Calibration Date: 18-DEC-2014
Calibration Time: 19:52

Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
75 Bromochloromethan	124906	74944	174868	119290	-4.50
94 1,4-Difluorobenze	570831	342499	799163	509608	-10.73
125 Chlorobenzene-d5	512999	307799	718199	462917	-9.76

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
75 Bromochloromethan	4.75	4.42	5.08	4.75	0.00
94 1,4-Difluorobenze	5.86	5.53	6.19	5.86	0.00
125 Chlorobenzene-d5	9.83	9.50	10.16	9.83	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: 24-Dec-2014 07:24

Eurofins Air Toxics Inc.

RECOVERY REPORT

Client Name:
Client SDG: 18dec14
Sample Matrix: GAS
Fraction: VOA
Lab Smp Id: 1412216A-06A
Level: LOW
Operator: md
Data Type: MS DATA
SampleType: SAMPLE
SpikeList File: 200.spk
Quant Type: ISTD
Sublist File: And19256.sub
Method File: /chem/msd14.i/18dec14.b/14451124c.m
Misc Info: 4.7"Hg->14.9psi (100x Bag)

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 86 1,2-Dichloroethane	400.00	372.15	93.04	70-130
$ 110 Toluene-d8	400.00	436.25	109.06	70-130
$ 139 Bromofluorobenzene	400.00	386.64	96.66	70-130

Data File: /chem/msd14.i/18dec14.b/14121824.d

Date : 19-DEC-2014 13:43

Client ID:

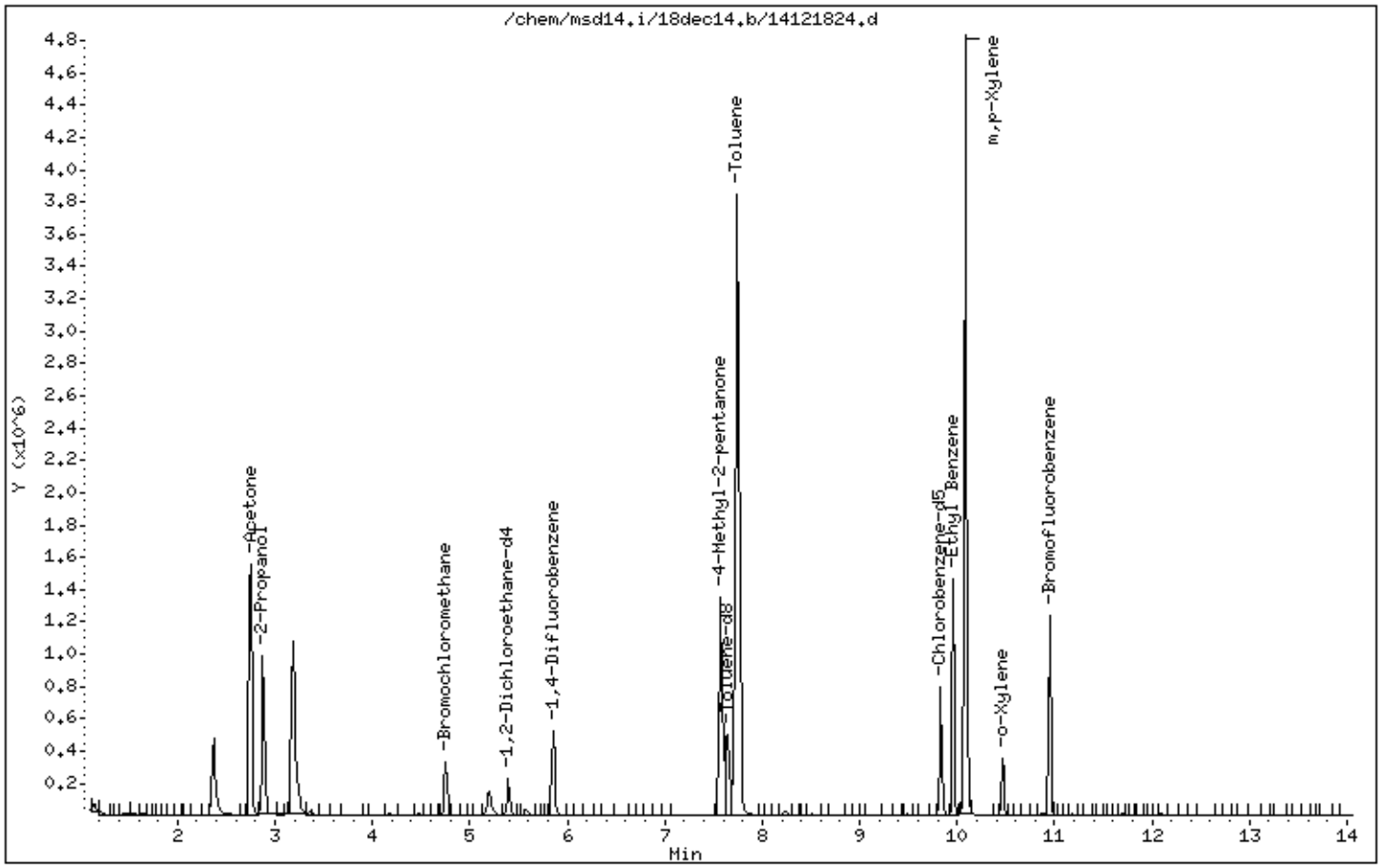
Instrument: msd14.i

Sample Info: 14ml #1L1702

Operator: md

Column phase: RTx-624

Column diameter: 0.53



Data File: /chem/msd14.i/18dec14.b/14121824.d

Date : 19-DEC-2014 13:43

Client ID:

Instrument: msd14.i

Sample Info: 14ml #1L1702

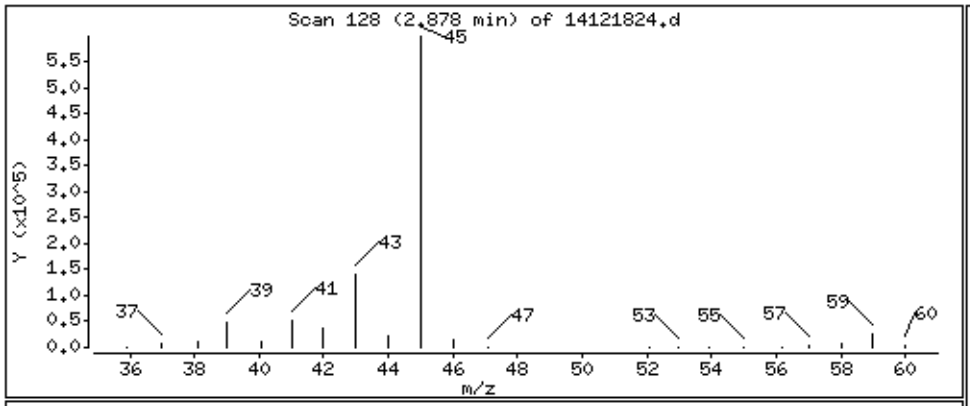
Operator: md

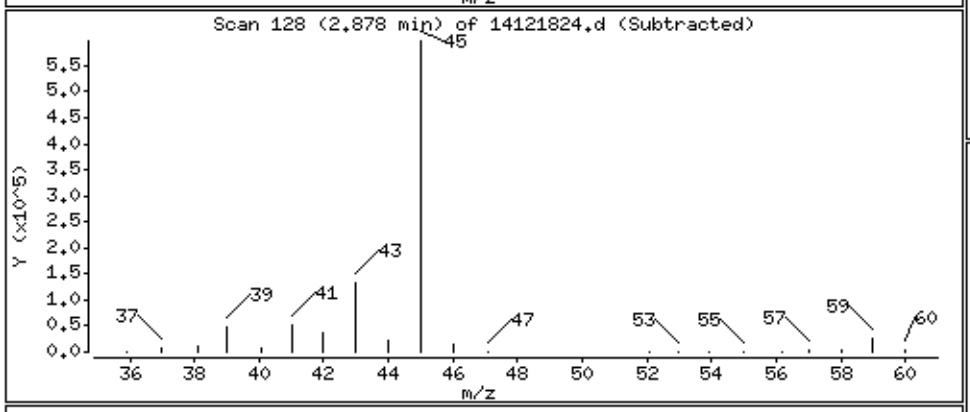
Column phase: RTx-624

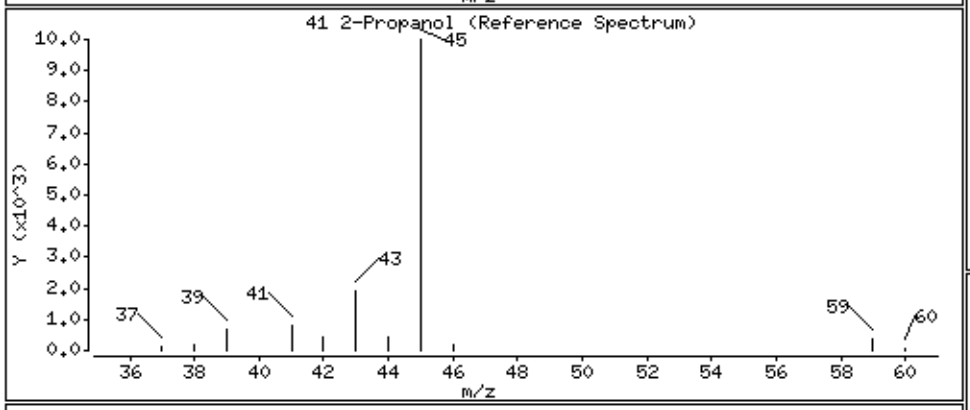
Column diameter: 0.53

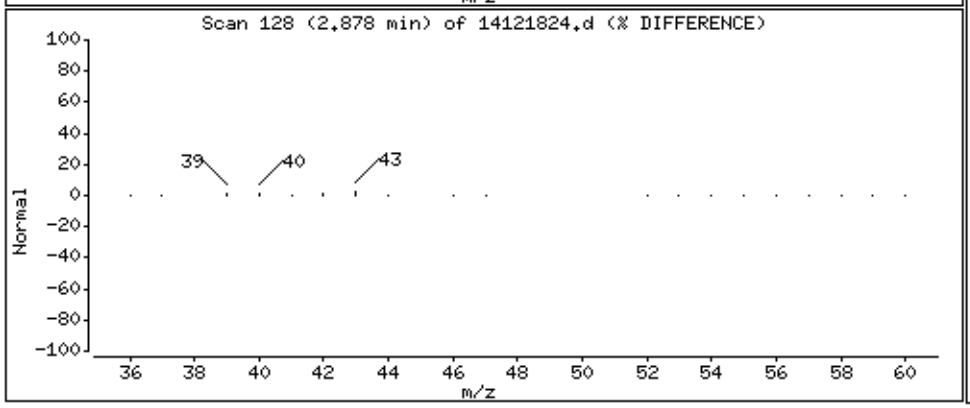
41 2-Propanol

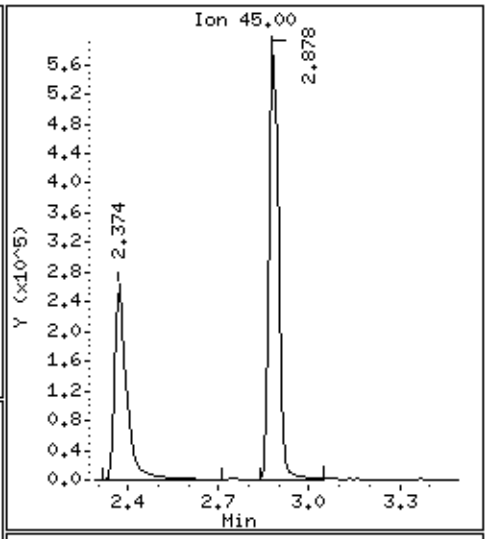
Concentration: 1785000 PPBV

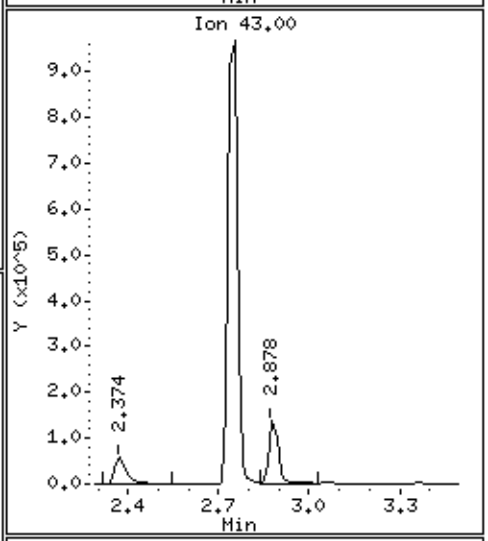


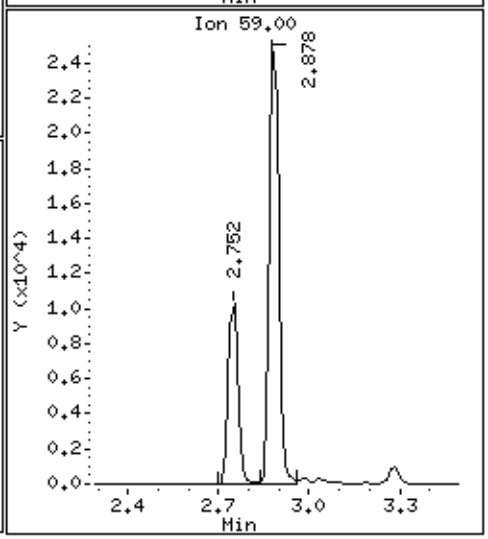












Data File: /chem/msd14.i/18dec14.b/14121824.d

Date : 19-DEC-2014 13:43

Client ID:

Instrument: msd14.i

Sample Info: 14ml #1L1702

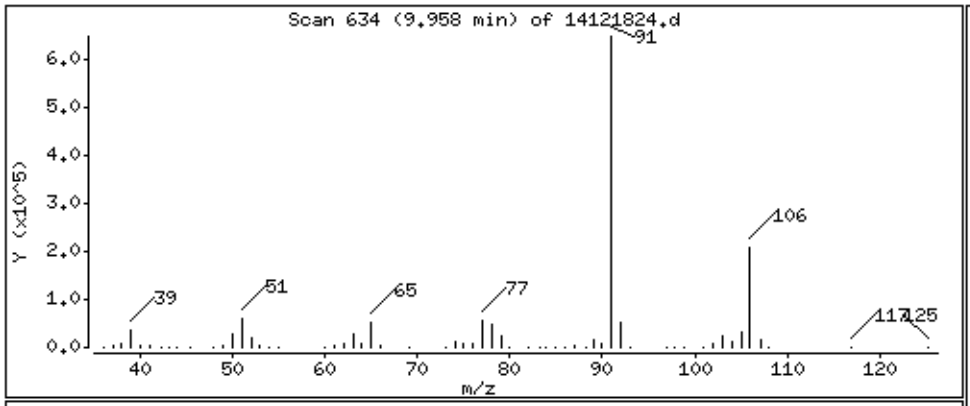
Operator: md

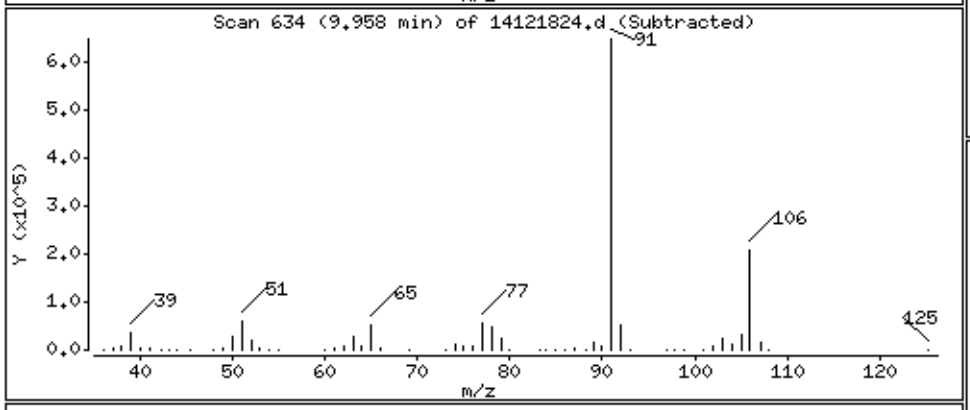
Column phase: RTx-624

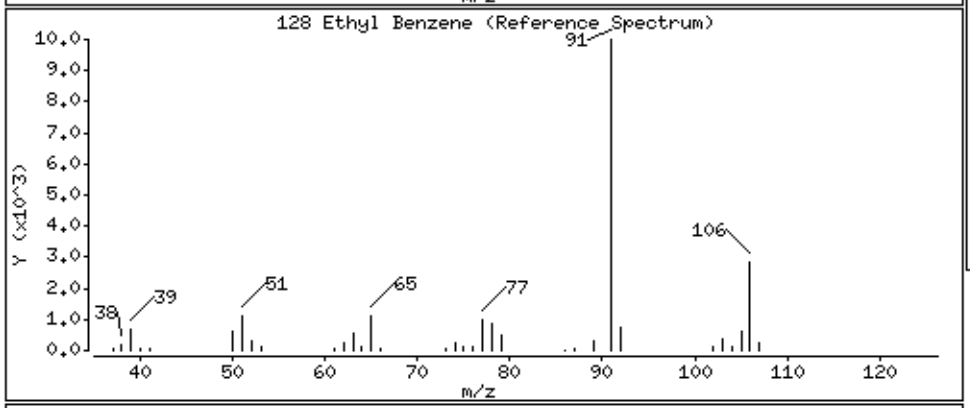
Column diameter: 0.53

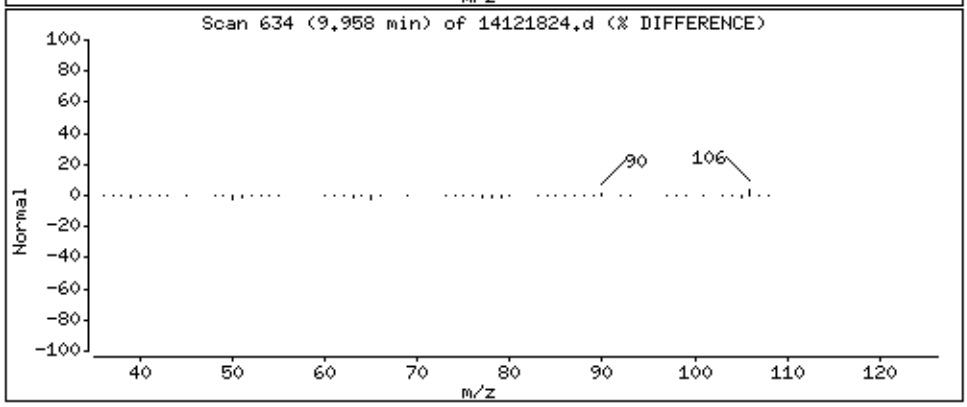
128 Ethyl Benzene

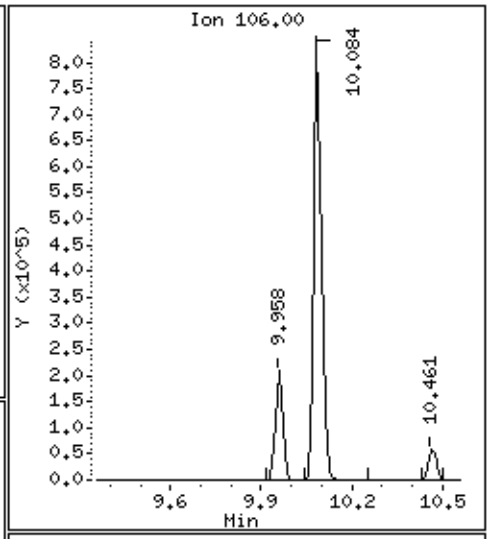
Concentration: 402240 PPBV

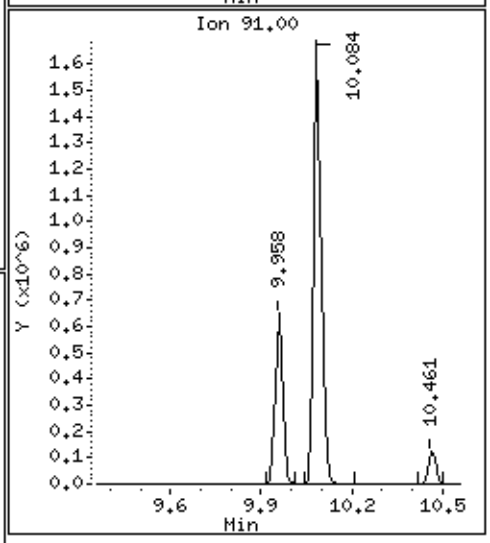












Data File: /chem/msd14.i/18dec14.b/14121824.d

Date : 19-DEC-2014 13:43

Client ID:

Instrument: msd14.i

Sample Info: 14ml #1L1702

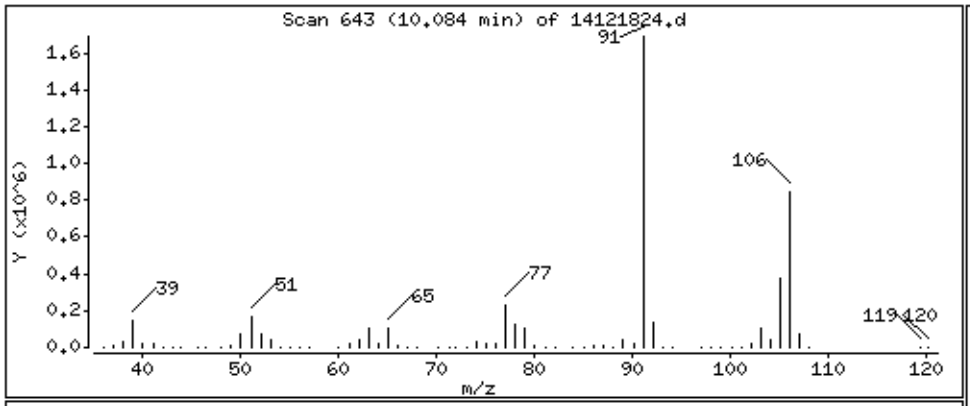
Operator: md

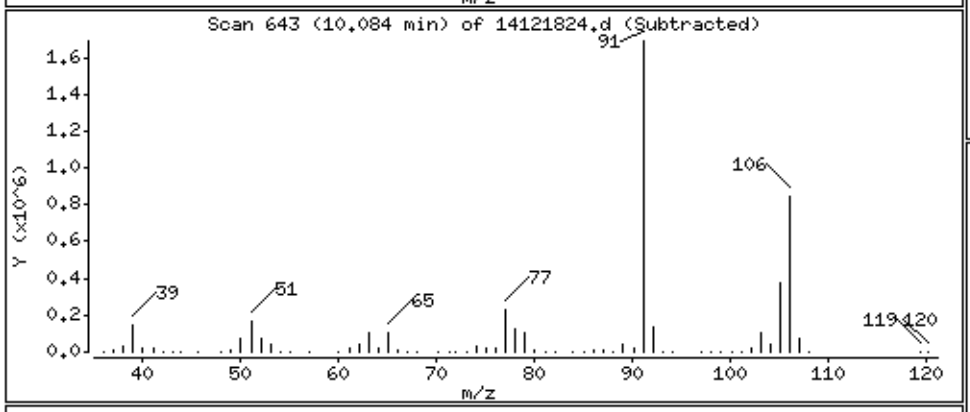
Column phase: RTx-624

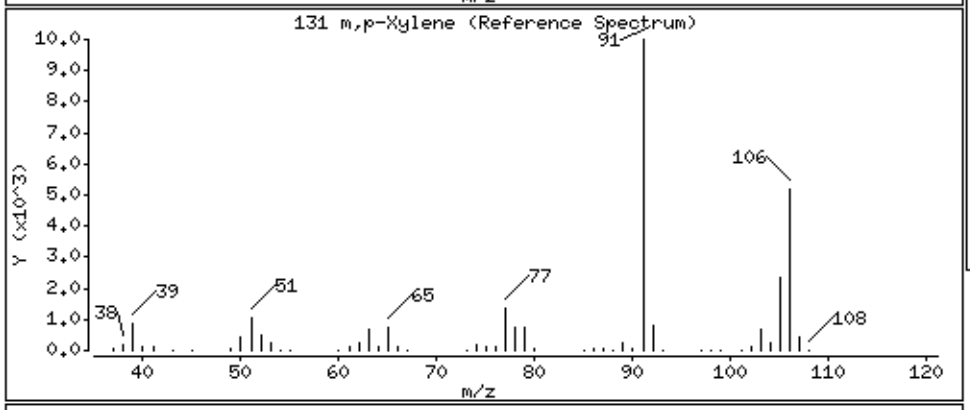
Column diameter: 0.53

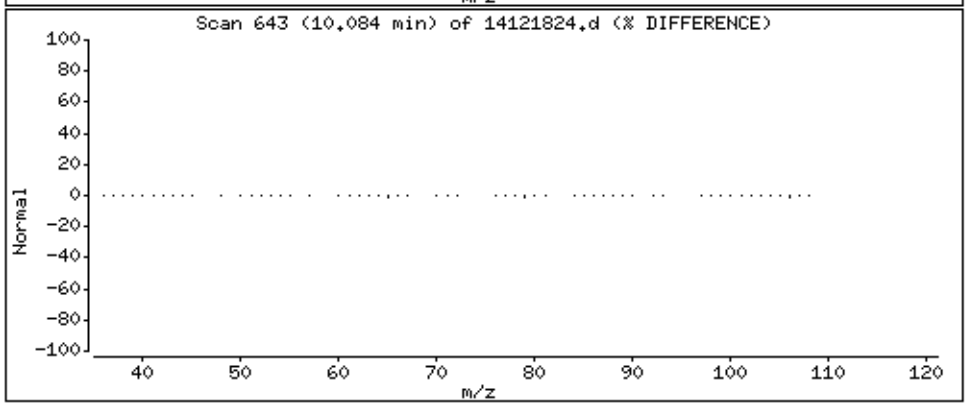
131 m,p-Xylene

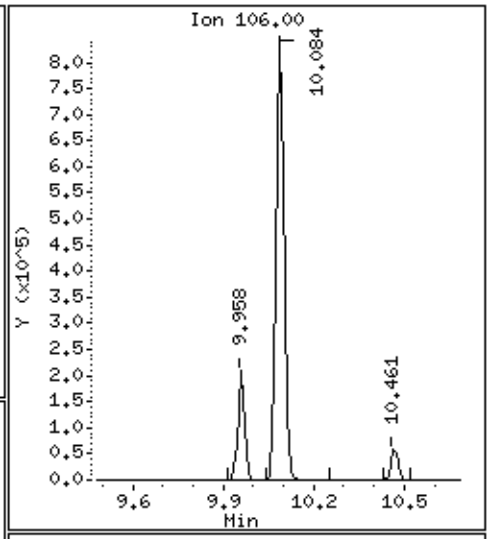
Concentration: 1504900 PPBV

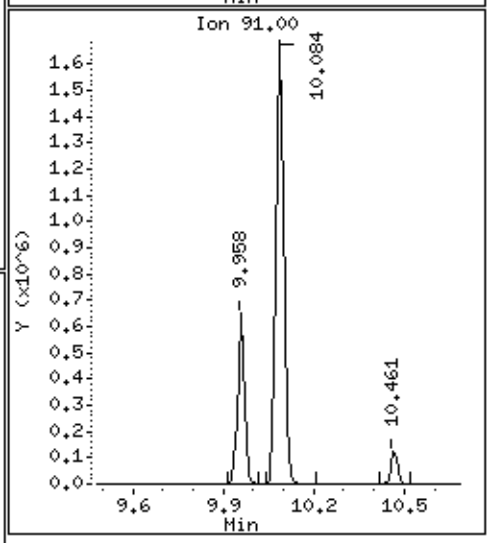












Data File: /chem/msd14.i/18dec14.b/14121824.d

Date : 19-DEC-2014 13:43

Client ID:

Instrument: msd14.i

Sample Info: 14ml #1L1702

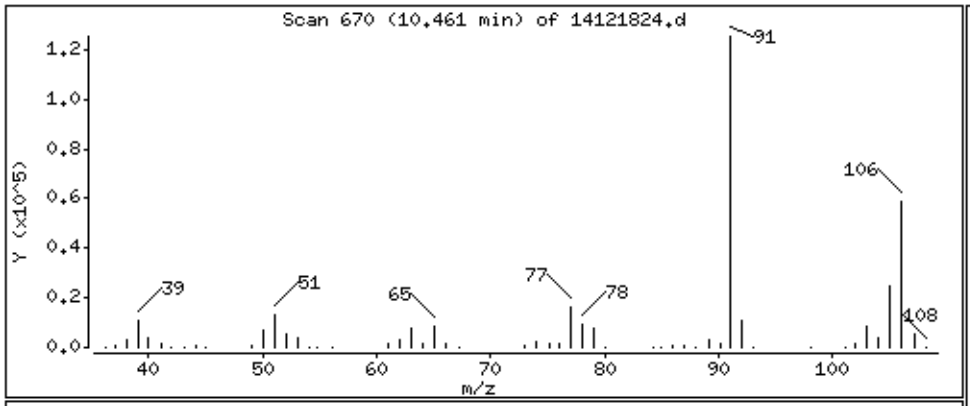
Operator: md

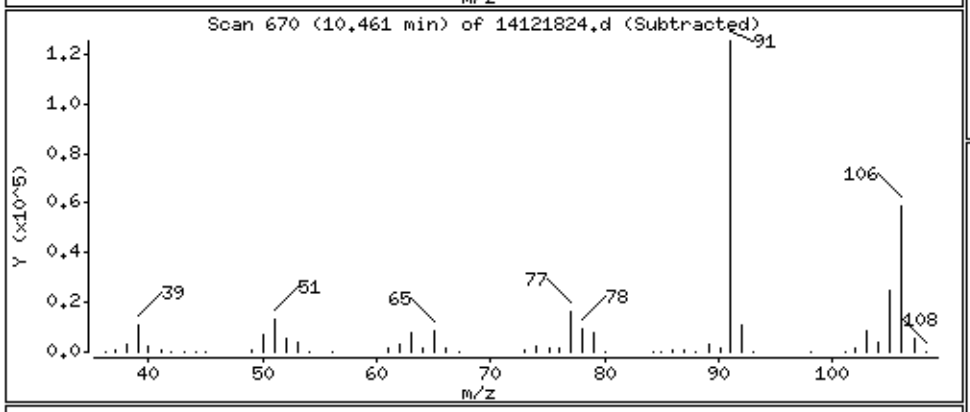
Column phase: RTx-624

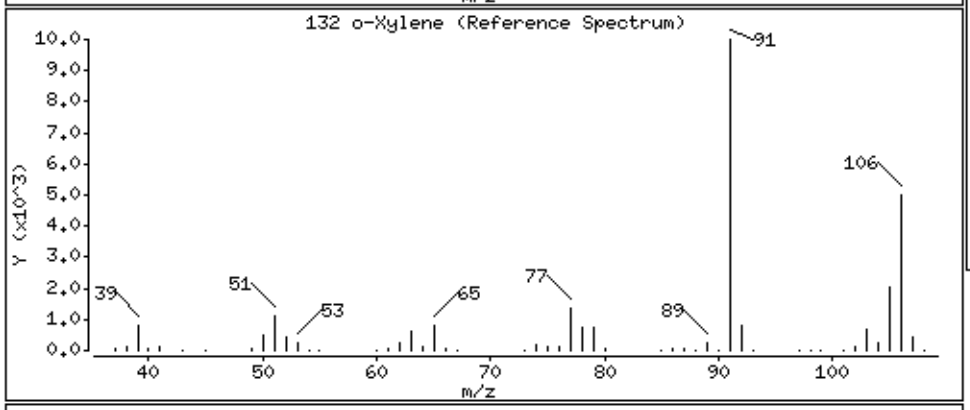
Column diameter: 0.53

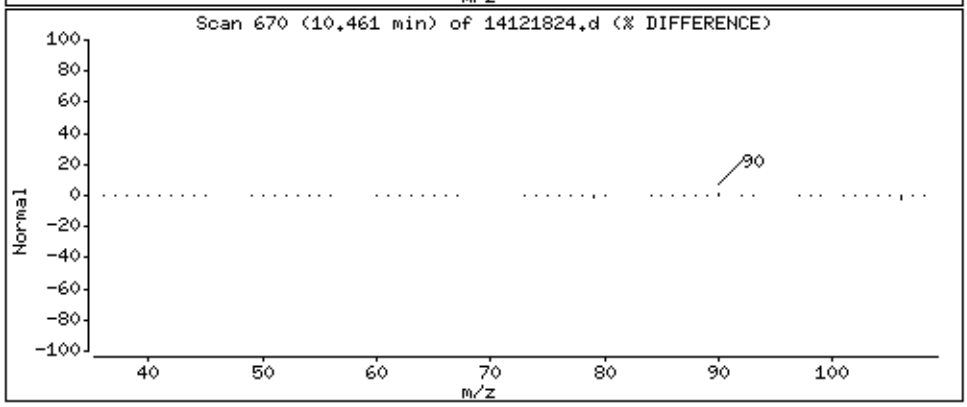
132 o-Xylene

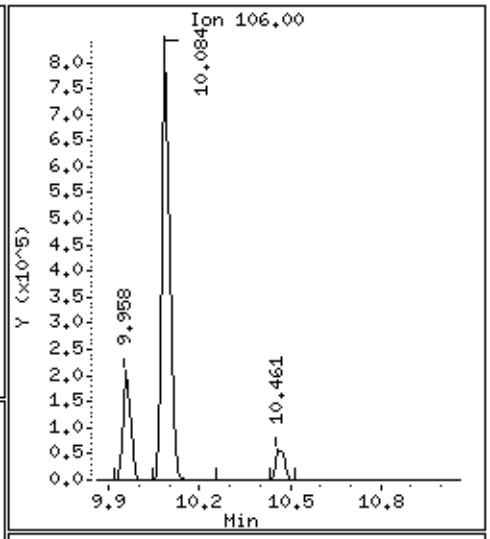
Concentration: 108440 PPBV

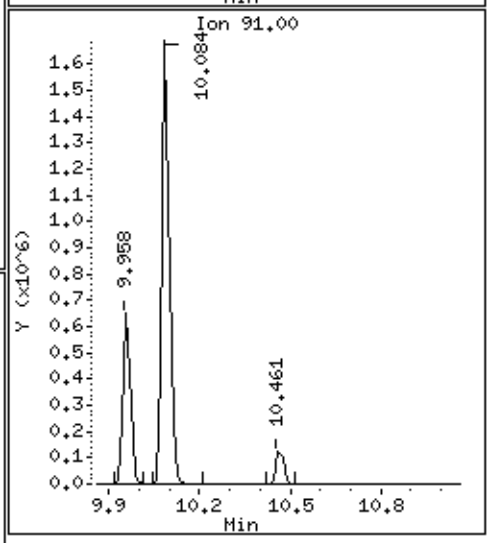












Data File: /chem/msd14.i/18dec14.b/14121824.d

Date : 19-DEC-2014 13:43

Client ID:

Instrument: msd14.i

Sample Info: 14ml #1L1702

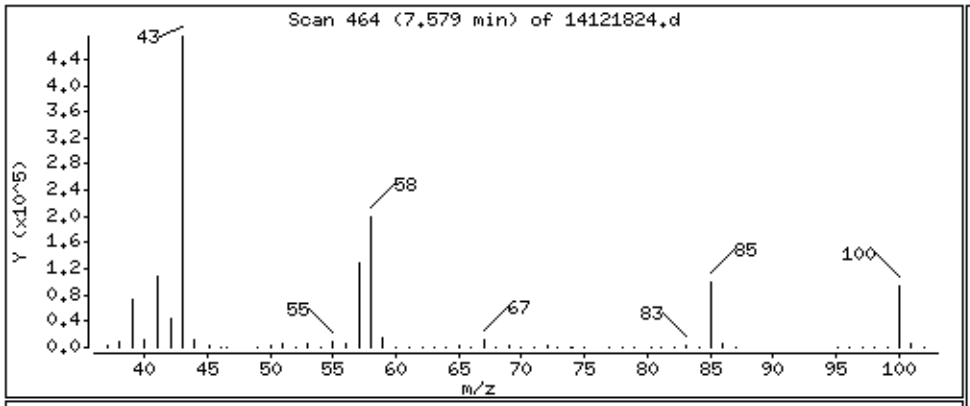
Operator: md

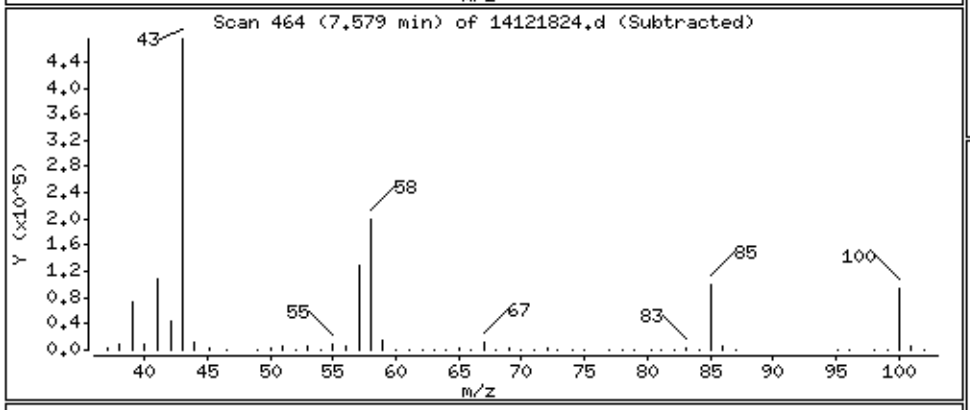
Column phase: RTx-624

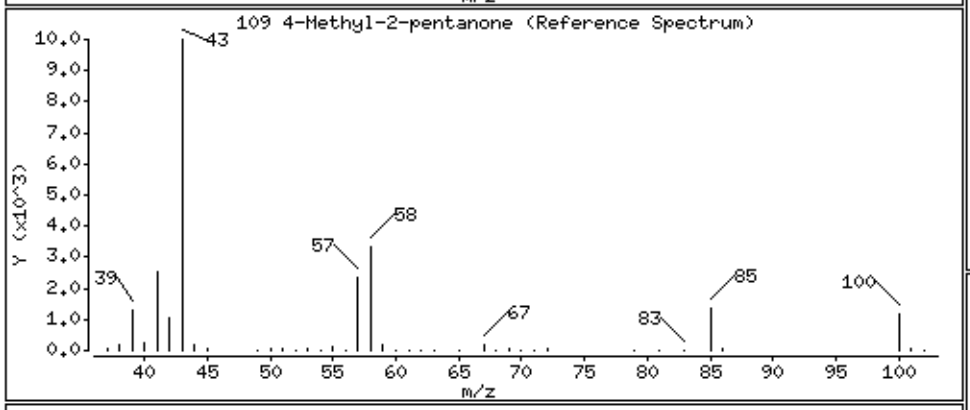
Column diameter: 0.53

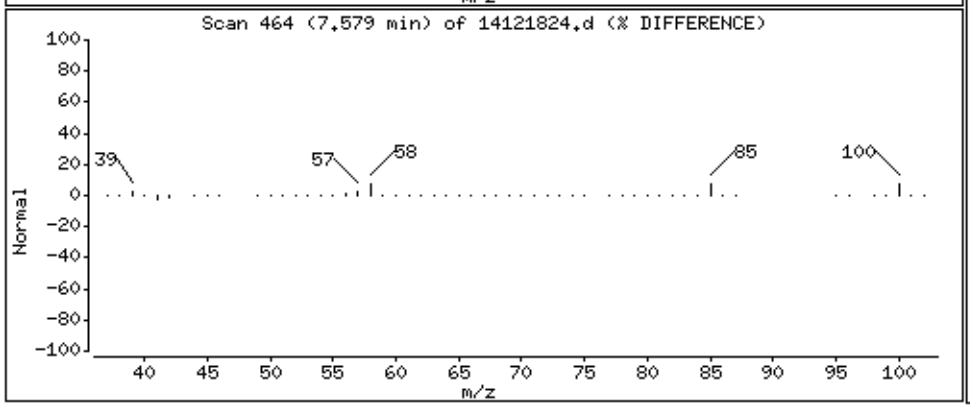
109 4-Methyl-2-pentanone

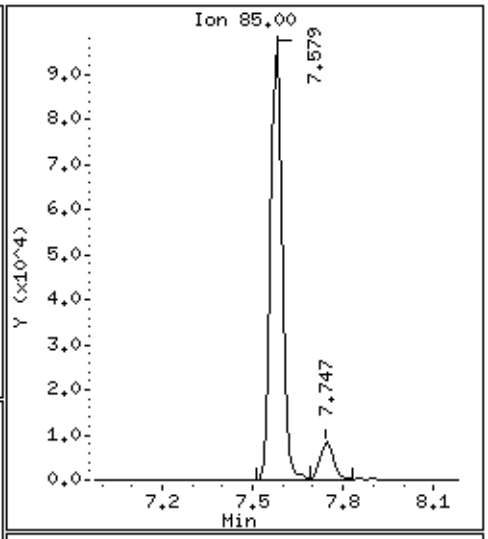
Concentration: 1243300 PPBV

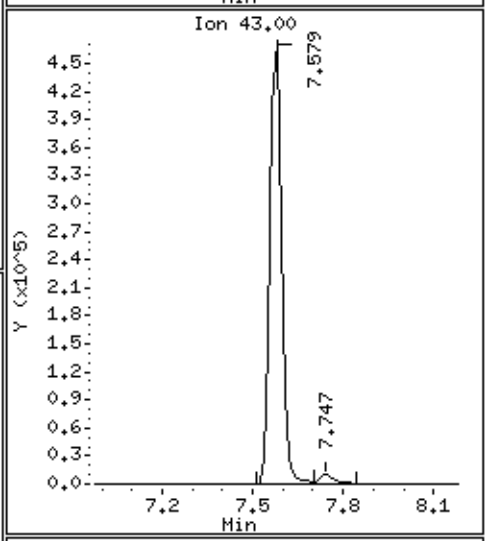


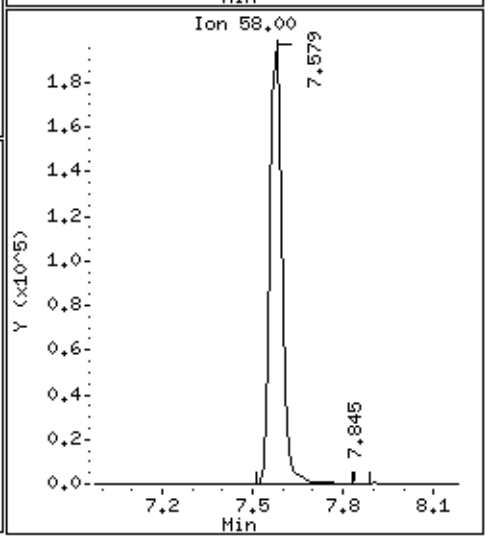












Data File: /chem/msd14.i/18dec14.b/14121824.d

Date : 19-DEC-2014 13:43

Client ID:

Instrument: msd14.i

Sample Info: 14ml #1L1702

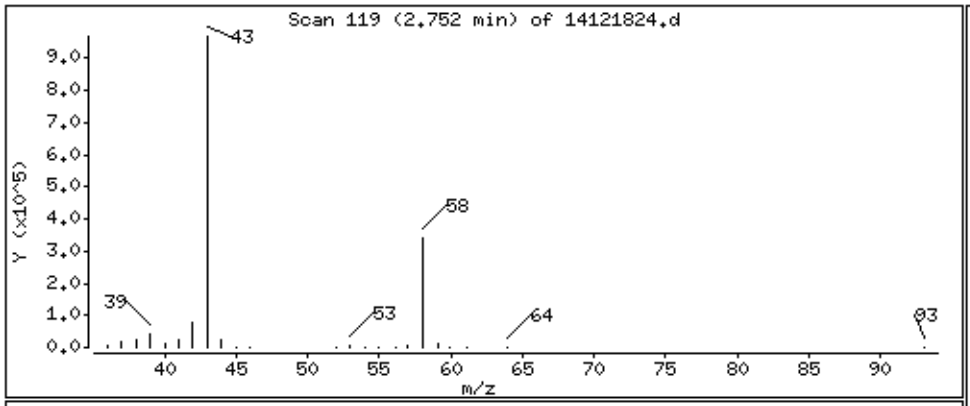
Operator: md

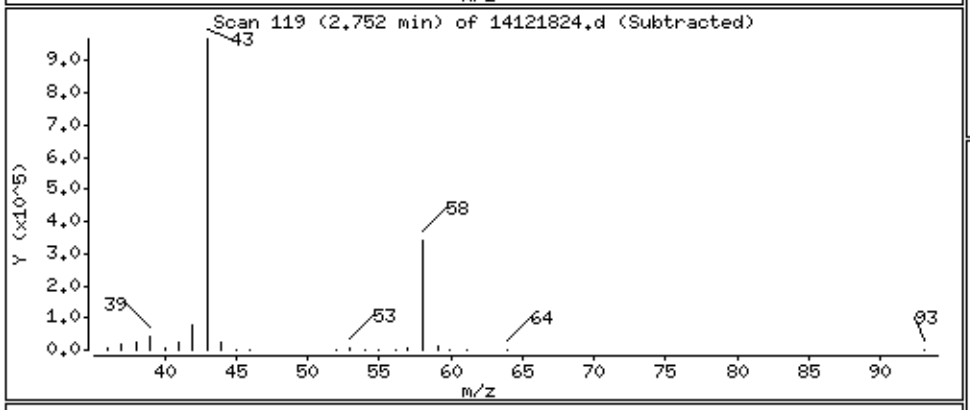
Column phase: RTx-624

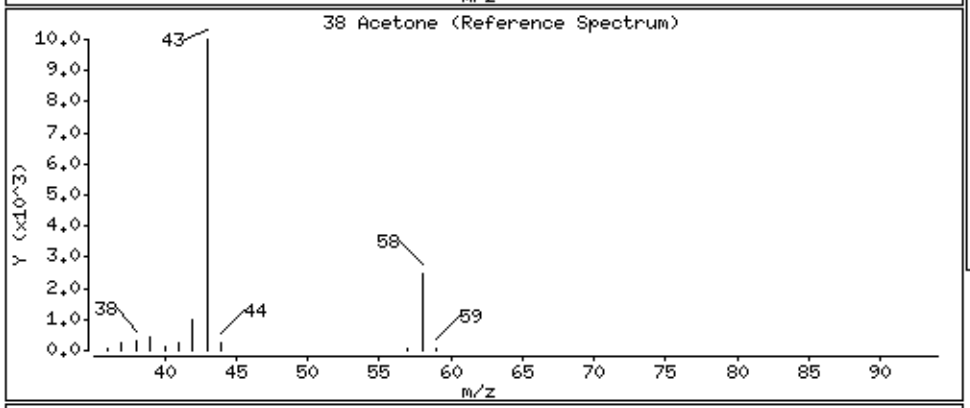
Column diameter: 0.53

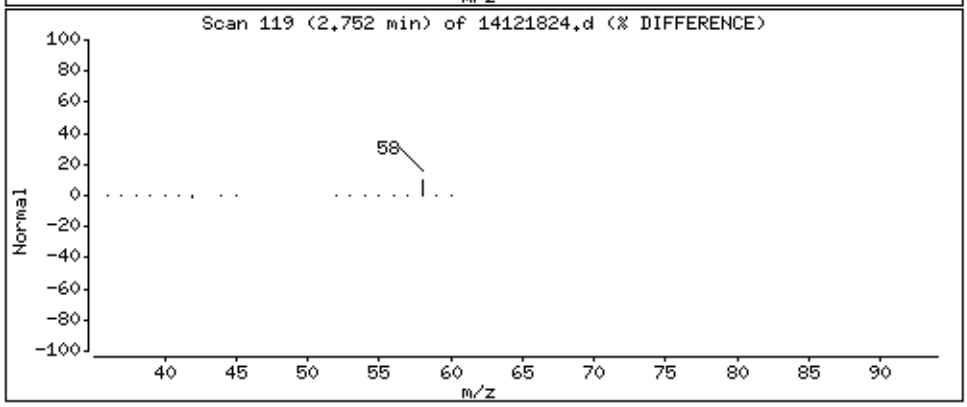
38 Acetone

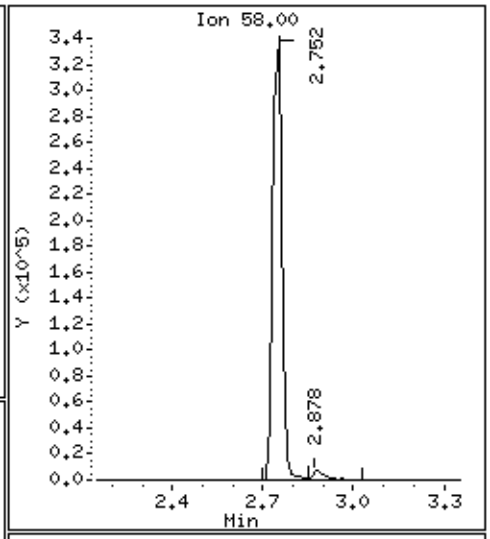
Concentration: 2870100 PPBV

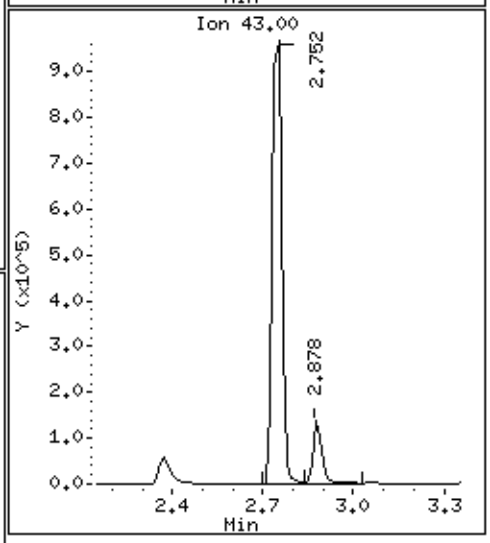












Data File: /chem/msd14.i/18dec14.b/14121824.d

Date : 19-DEC-2014 13:43

Client ID:

Instrument: msd14.i

Sample Info: 14ml #1L1702

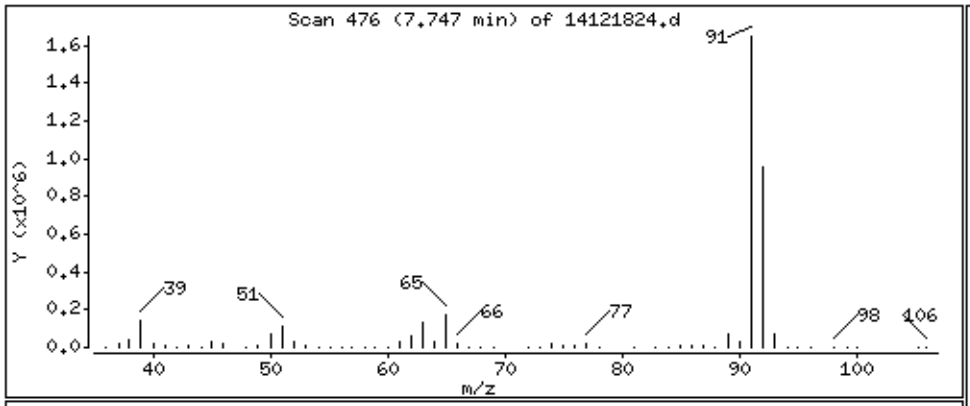
Operator: md

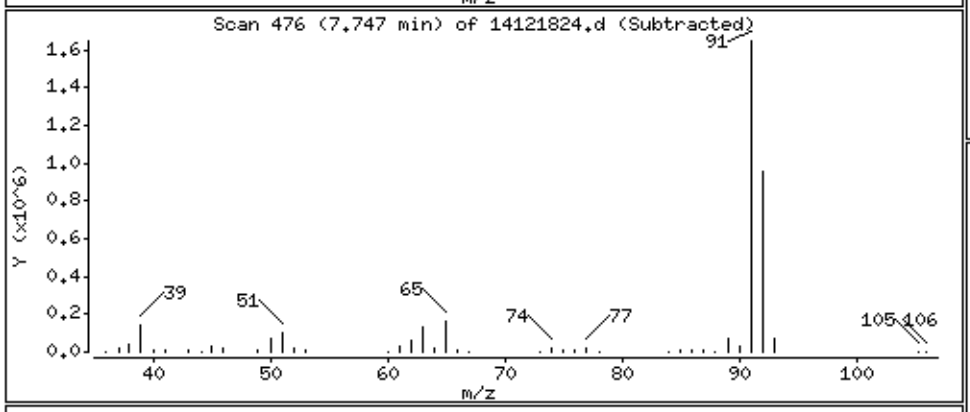
Column phase: RTx-624

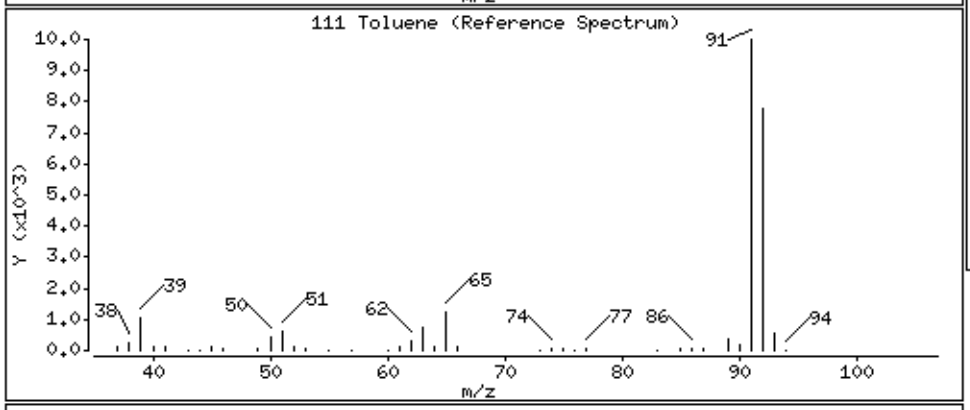
Column diameter: 0.53

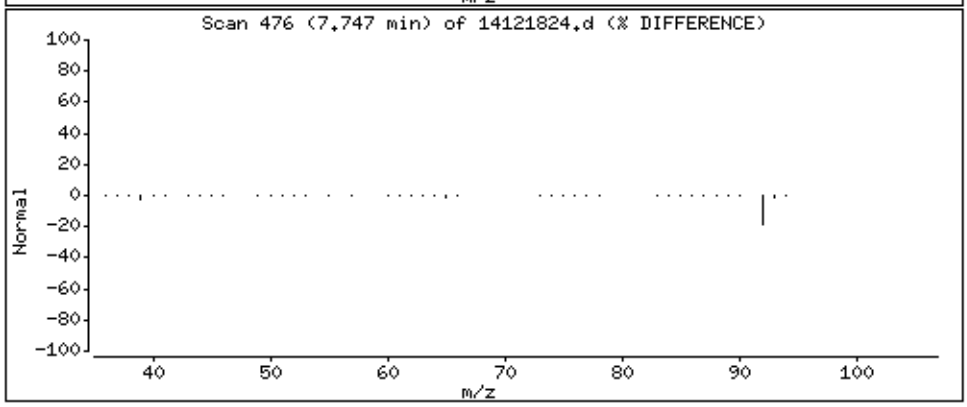
111 Toluene

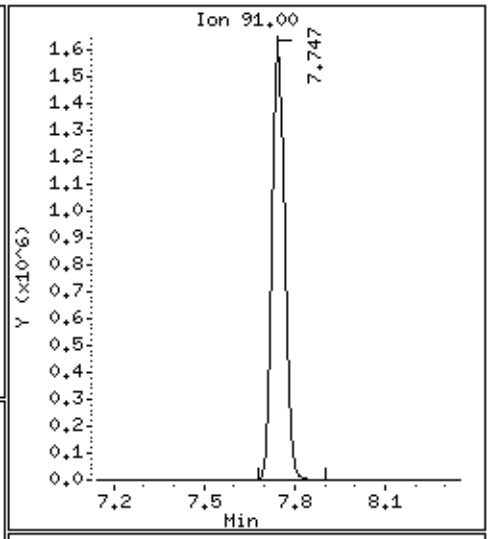
Concentration: 2203200 PPBV

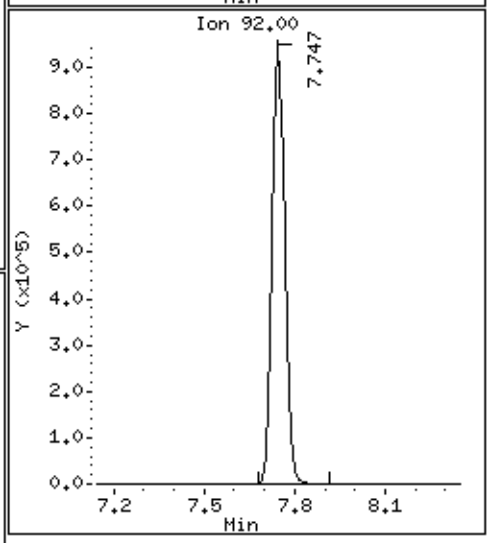












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Summary of Detected Compounds
EPA METHOD TO-15 GC/MS

Client Sample ID: B5SS-1 (2014)

Lab ID#: 1412216A-07A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Acetone	12000	1800000	29000	4300000
2-Propanol	12000	2600000	30000	6500000
Toluene	3000	160000	11000	600000
Ethyl Benzene	3000	30000	13000	130000
m,p-Xylene	3000	170000	13000	740000
o-Xylene	3000	28000	13000	120000
4-Methyl-2-pentanone	3000	280000	12000	1200000

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Client Sample ID: B5SS-1 (2014)

Lab ID#: 1412216A-07A

EPA METHOD TO-15 GC/MS

File Name:	**14121823**	**Date of Collection:**	**12/11/14 3:13:00 PM**
Dil. Factor:	**602**	**Date of Analysis:**	**12/19/14 01:20 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Acetone	12000	1800000	29000	4300000
2-Propanol	12000	2600000	30000	6500000
Benzene	3000	Not Detected	9600	Not Detected
Toluene	3000	160000	11000	600000
Ethyl Benzene	3000	30000	13000	130000
m,p-Xylene	3000	170000	13000	740000
o-Xylene	3000	28000	13000	120000
4-Methyl-2-pentanone	3000	280000	12000	1200000

Container Type: 1 Liter Summa Canister (100% Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	96	70-130
Toluene-d8	108	70-130
4-Bromofluorobenzene	91	70-130

Eurofins Air Toxics Inc.

EPA METHOD TO14A/TO15

Data file : /chem/msd14.i/18dec14.b/14121823.d
Lab Smp Id: 1412216A-07A
Inj Date : 19-DEC-2014 13:20
Operator : md Inst ID: msd14.i
Smp Info : 10ml #1L1556
Misc Info : 5.1"Hg->14.7psi (50x Bag)
Comment : (5&20) - GC/MS
Method : /chem/msd14.i/18dec14.b/14451124c.m
Meth Date : 24-Dec-2014 07:16 dbailey Quant Type: ISTD
Cal Date : 24-NOV-2014 18:25 Cal File: 14112421k.d
Als bottle: 1
Dil Factor: 602.00000
Integrator: HP RTE Compound Sublist: And19256.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
* 75 Bromochloromethane						CAS #: 74-97-5	
4.753	4.753 (1.000)	130	116188	400.000		80.00- 120.00	100.00
4.753	4.753 (1.000)	128	90900			0.00- 30.00	78.24
4.753	4.753 (1.000)	49	130184			0.00- 30.00	112.05
* 94 1,4-Difluorobenzene						CAS #: 540-36-3	
5.858	5.858 (1.000)	114	501497	400.000		80.00- 120.00	100.00
5.858	5.858 (1.000)	88	77105			0.00- 30.00	15.38
* 125 Chlorobenzene-d5						CAS #: 3114-55-4	
9.832	9.832 (1.000)	117	468155	400.000		80.00- 120.00	100.00
9.832	9.832 (1.000)	82	233972			0.00- 30.00	49.98
$ 86 1,2-Dichloroethane-d4						CAS #: 17060-07-0	
5.396	5.396 (1.135)	65	165800	383.623	383.62	80.00- 120.00	100.00(a)
5.396	5.396 (1.135)	67	82099			0.00- 30.00	49.52
$ 110 Toluene-d8						CAS #: 2037-26-5	
7.635	7.635 (1.303)	98	542213	434.080	434.08	80.00- 120.00	100.00(a)
7.649	7.635 (1.306)	70	56680			0.00- 30.00	10.45

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
$ 110 Toluene-d8 (continued)							
7.635	7.635 (1.303)	100	380412			0.00- 30.00	70.16
$ 139 Bromofluorobenzene					CAS #: 460-00-4		
10.951	10.951 (1.114)	174	261542	362.760	362.76	80.00- 120.00	100.00(a)
10.951	10.951 (1.114)	95	332498			0.00- 30.00	127.13
10.951	10.951 (1.114)	176	252339			0.00- 30.00	96.48
41 2-Propanol					CAS #: 67-63-0		
2.878	2.892 (0.606)	45	2461755	4374.89	2633700	80.00- 120.00	100.00
2.878	2.892 (0.606)	43	556787			0.00- 30.00	22.62
2.878	2.892 (0.606)	59	105876			0.00- 30.00	4.30
128 Ethyl Benzene					CAS #: 100-41-4		
9.958	9.958 (1.013)	106	35919	49.8740	30024	80.00- 120.00	100.00
9.958	9.958 (1.013)	91	116875			0.00- 30.00	325.38
131 m,p-Xylene					CAS #: 108-38-3		
10.084	10.084 (1.026)	106	242771	281.929	169720	80.00- 120.00	100.00
10.084	10.084 (1.026)	91	478107			0.00- 30.00	196.94
132 o-Xylene					CAS #: 95-47-6		
10.461	10.461 (1.064)	106	40205	46.9536	28266	80.00- 120.00	100.00
10.461	10.461 (1.064)	91	85095			0.00- 30.00	211.65
109 4-Methyl-2-pentanone					CAS #: 108-10-1		
7.579	7.579 (1.294)	85	80183	473.108	284810	80.00- 120.00	100.00
7.579	7.579 (1.294)	43	414443			0.00- 30.00	516.87
7.579	7.579 (1.294)	58	181805			0.00- 30.00	226.74
38 Acetone					CAS #: 67-64-1		
2.738	2.752 (0.576)	58	587163	2983.37	1796000	80.00- 120.00	100.00
2.738	2.752 (0.576)	43	1777423			0.00- 30.00	302.71
111 Toluene					CAS #: 108-88-3		
7.747	7.747 (1.322)	91	472283	266.800	160610	80.00- 120.00	100.00
7.747	7.747 (1.322)	92	279074			0.00- 30.00	59.09

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: msd14.i
Lab File ID: 14121823.d
Lab Smp Id: 1412216A-07A
Analysis Type: VOA
Quant Type: ISTD
Operator: md
Method File: /chem/msd14.i/18dec14.b/14451124c.m
Misc Info: 5.1"Hg->14.7psi (50x Bag)

Calibration Date: 18-DEC-2014
Calibration Time: 19:52

Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
75 Bromochloromethan	124906	74944	174868	116188	-6.98
94 1,4-Difluorobenze	570831	342499	799163	501497	-12.15
125 Chlorobenzene-d5	512999	307799	718199	468155	-8.74

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
75 Bromochloromethan	4.75	4.42	5.08	4.75	0.00
94 1,4-Difluorobenze	5.86	5.53	6.19	5.86	0.00
125 Chlorobenzene-d5	9.83	9.50	10.16	9.83	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: 24-Dec-2014 07:24

Eurofins Air Toxics Inc.

RECOVERY REPORT

Client Name:
Client SDG: 18dec14
Sample Matrix: GAS
Fraction: VOA
Lab Smp Id: 1412216A-07A
Level: LOW
Operator: md
Data Type: MS DATA
SampleType: SAMPLE
SpikeList File: 200.spk
Quant Type: ISTD
Sublist File: And19256.sub
Method File: /chem/msd14.i/18dec14.b/14451124c.m
Misc Info: 5.1"Hg->14.7psi (50x Bag)

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 86 1,2-Dichloroethane	400.00	383.62	95.91	70-130
$ 110 Toluene-d8	400.00	434.08	108.52	70-130
$ 139 Bromofluorobenzene	400.00	362.76	90.69	70-130

Data File: /chem/msd14.i/18dec14.b/14121823.d

Date : 19-DEC-2014 13:20

Client ID:

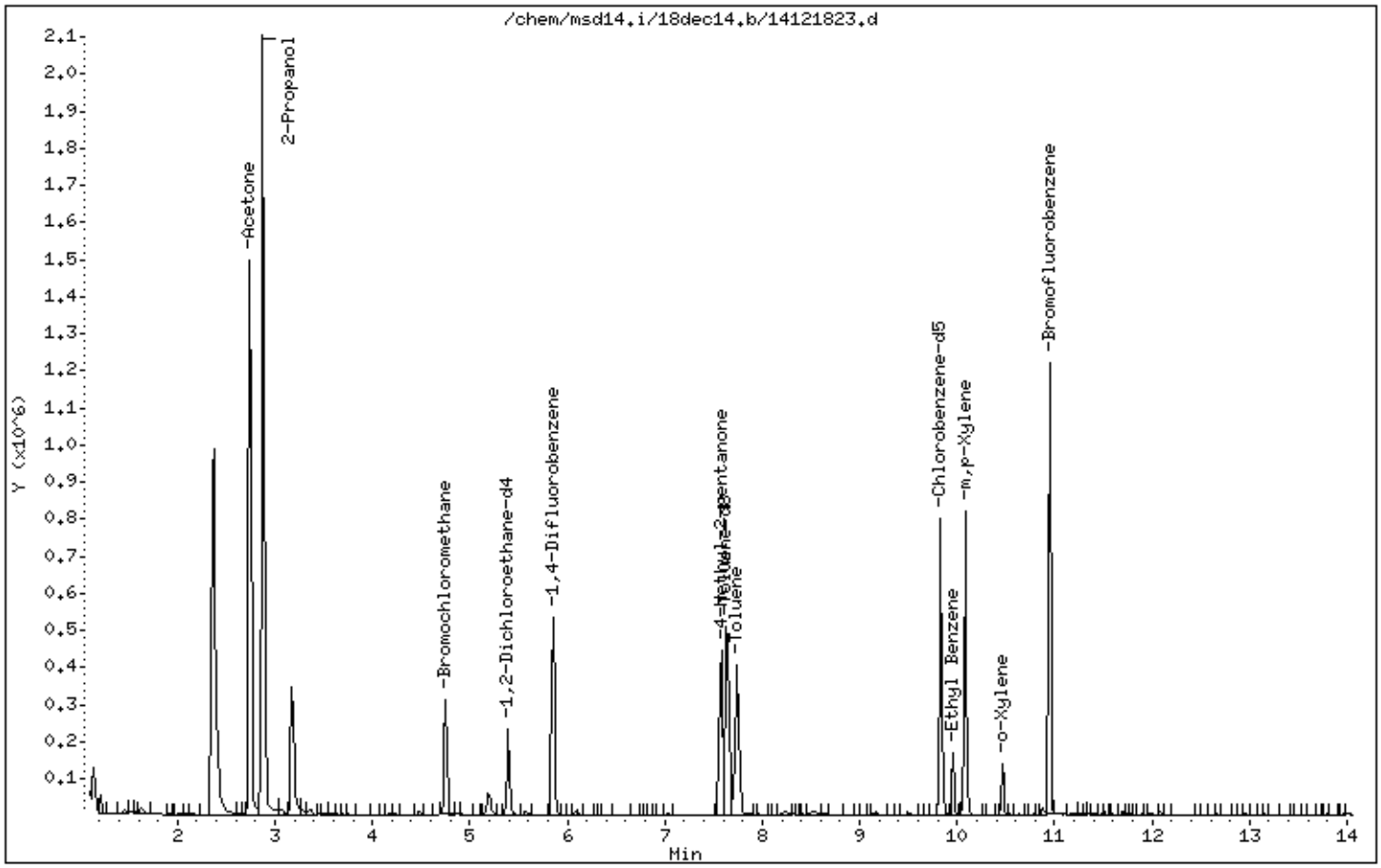
Instrument: msd14.i

Sample Info: 10ml #1L1556

Operator: md

Column phase: RTx-624

Column diameter: 0.53



Data File: /chem/msd14.i/18dec14.b/14121823.d

Date : 19-DEC-2014 13:20

Client ID:

Instrument: msd14.i

Sample Info: 10ml #1L1556

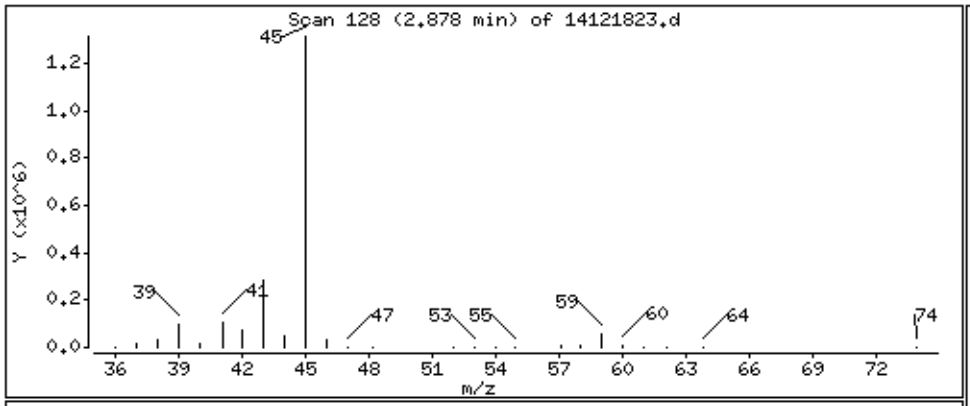
Operator: md

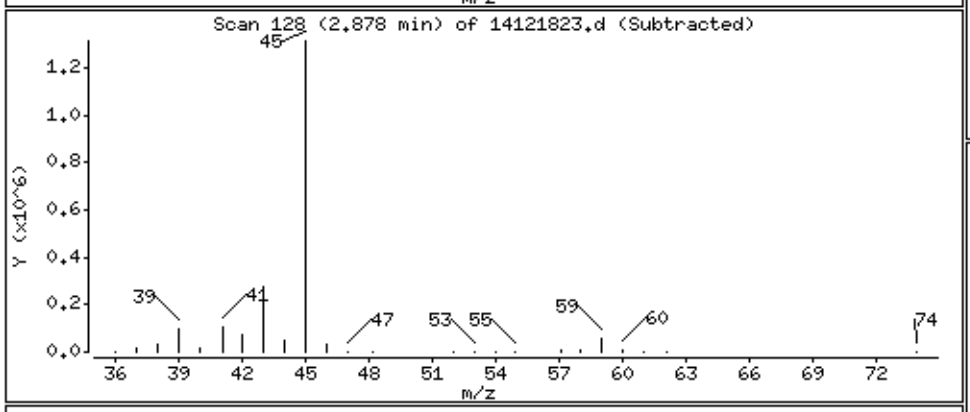
Column phase: RTx-624

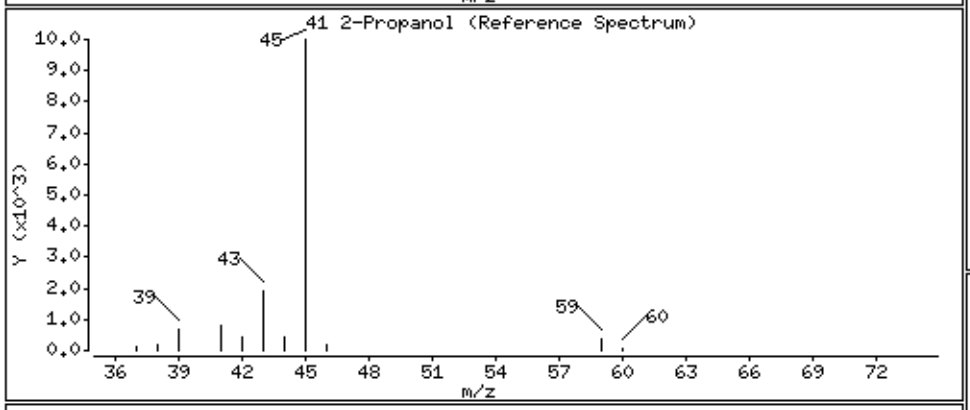
Column diameter: 0.53

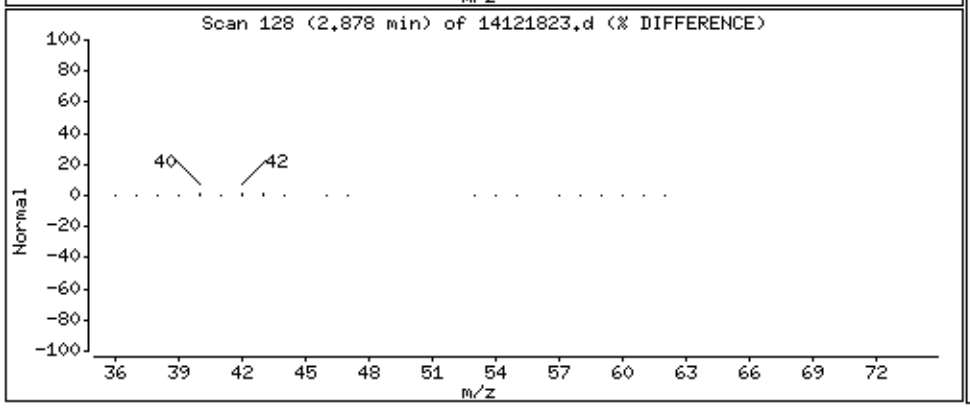
41 2-Propanol

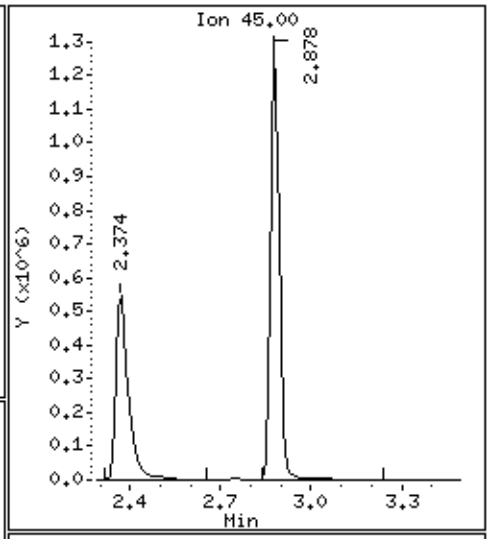
Concentration: 2633700 PPBV

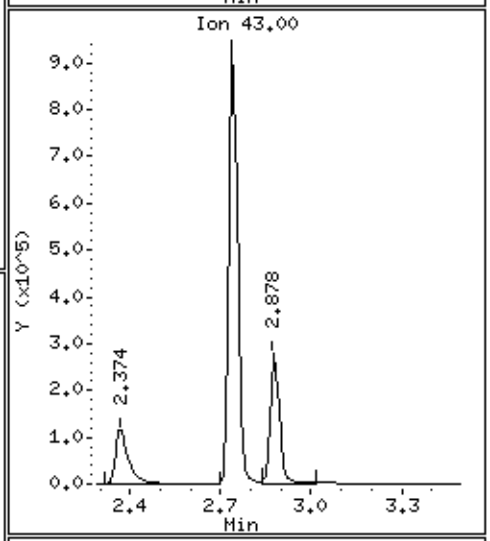


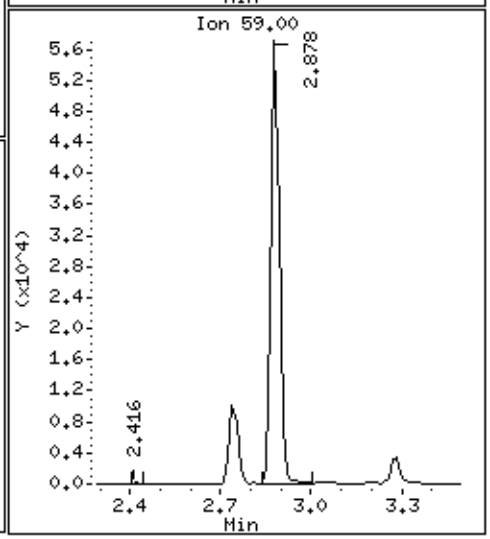












Data File: /chem/msd14.i/18dec14.b/14121823.d

Date : 19-DEC-2014 13:20

Client ID:

Instrument: msd14.i

Sample Info: 10ml #1L1556

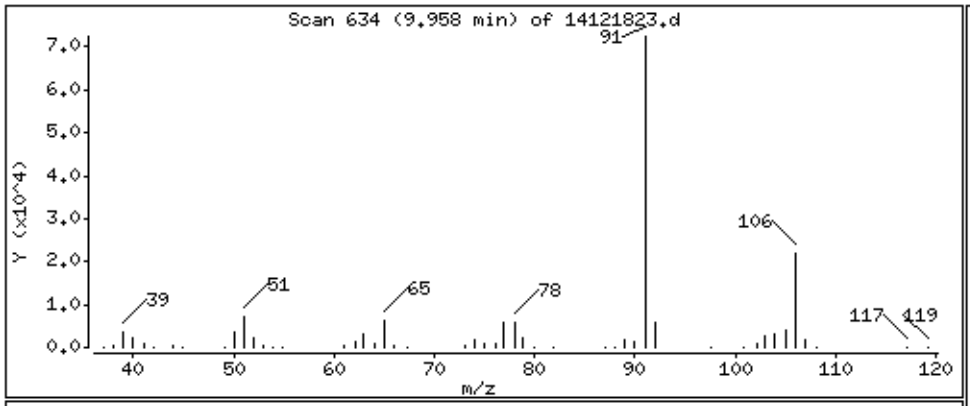
Operator: md

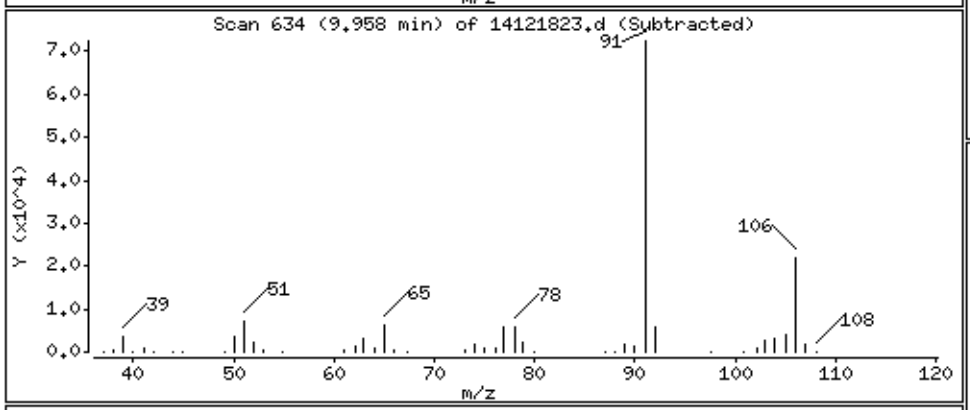
Column phase: RTx-624

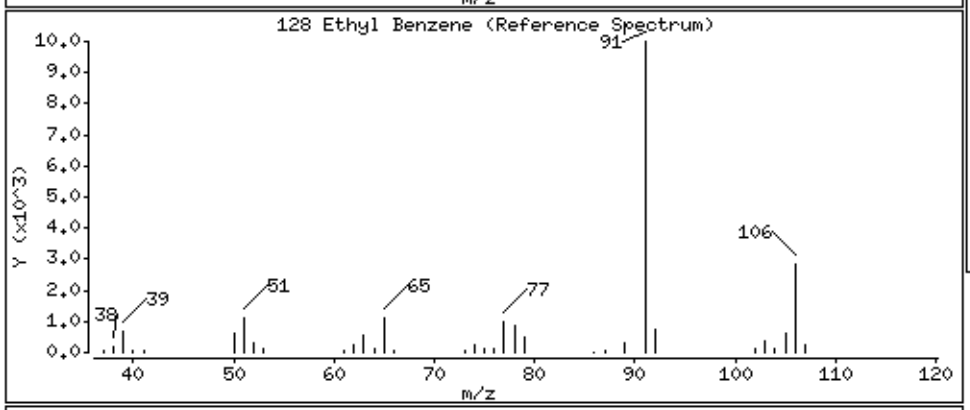
Column diameter: 0.53

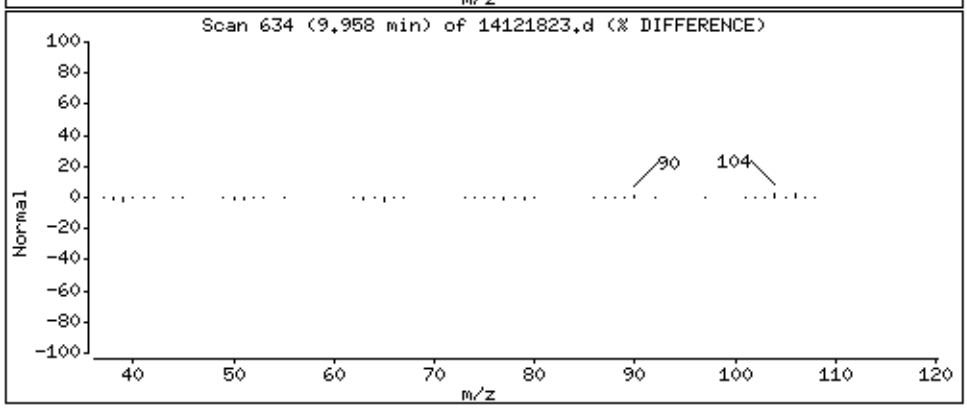
128 Ethyl Benzene

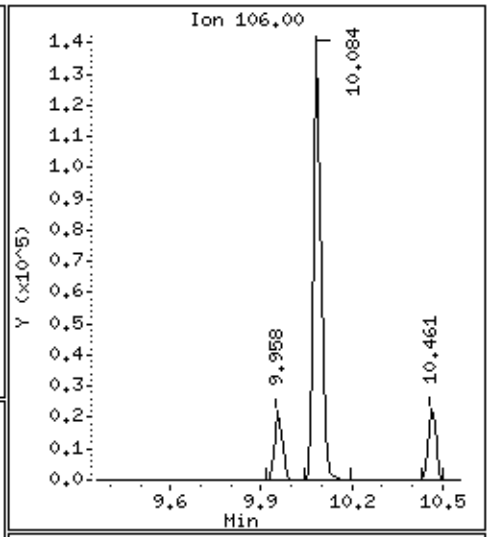
Concentration: 30024 PPBV

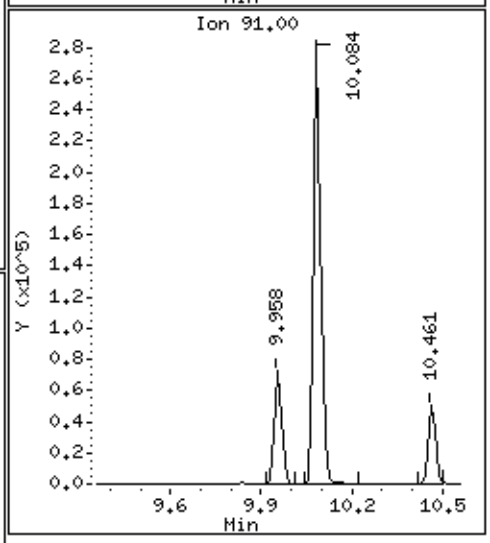












Data File: /chem/msd14.i/18dec14.b/14121823.d

Date : 19-DEC-2014 13:20

Client ID:

Instrument: msd14.i

Sample Info: 10ml #1L1556

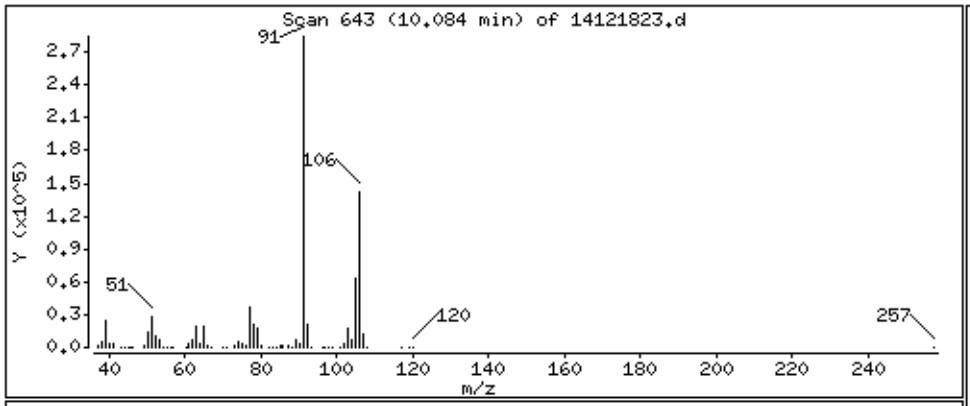
Operator: md

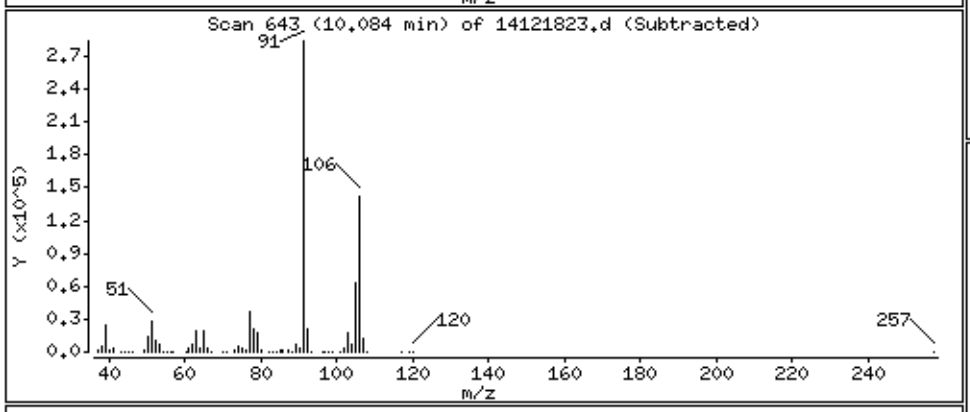
Column phase: RTx-624

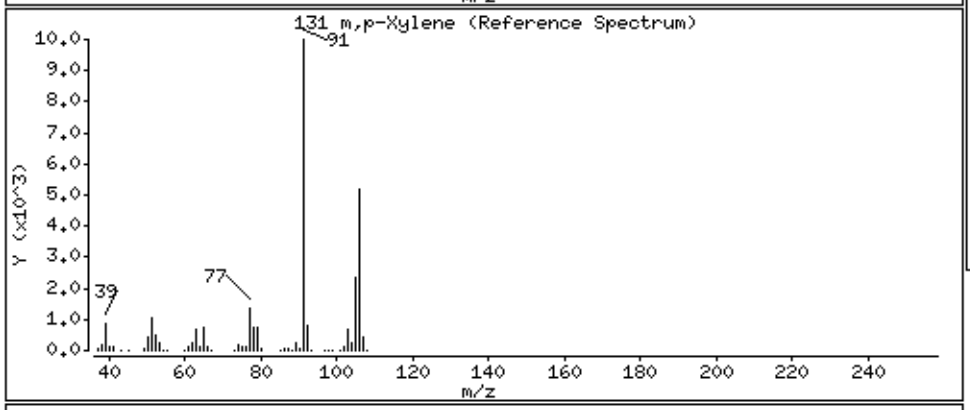
Column diameter: 0.53

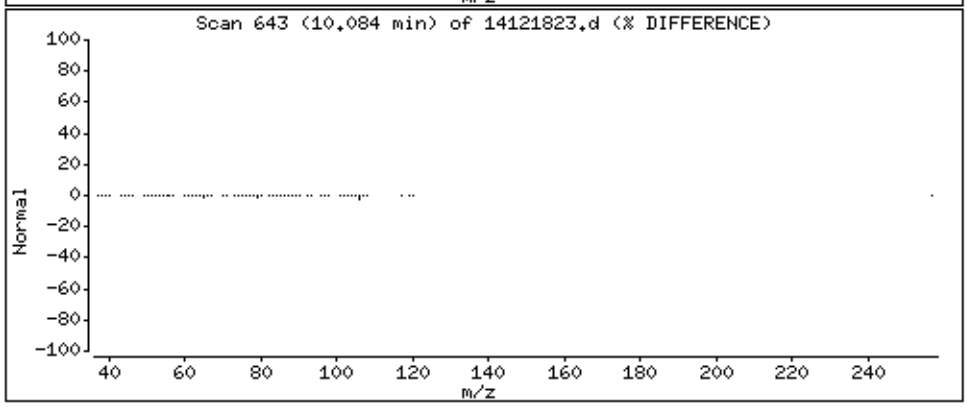
131 m,p-Xylene

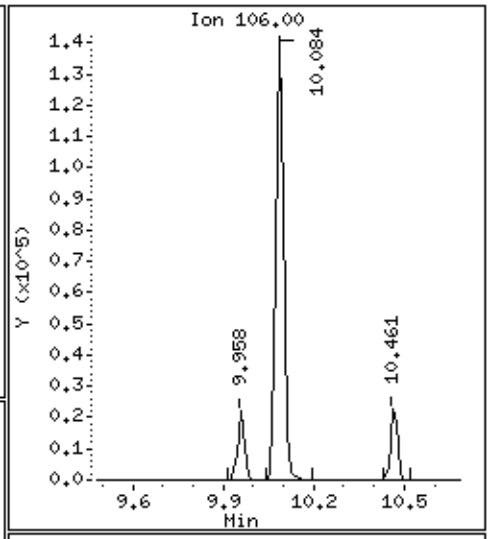
Concentration: 169720 PPBV

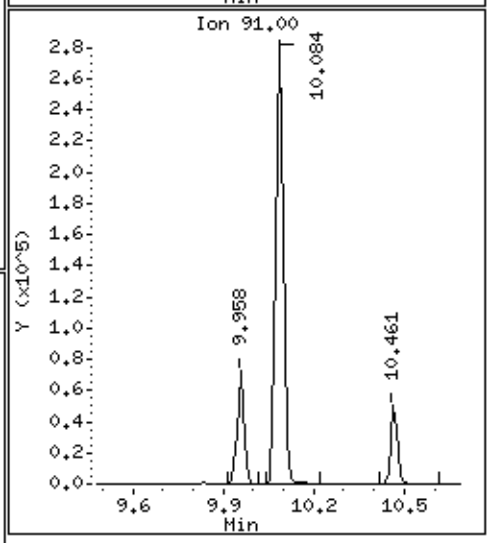












Data File: /chem/msd14.i/18dec14.b/14121823.d

Date : 19-DEC-2014 13:20

Client ID:

Instrument: msd14.i

Sample Info: 10ml #1L1556

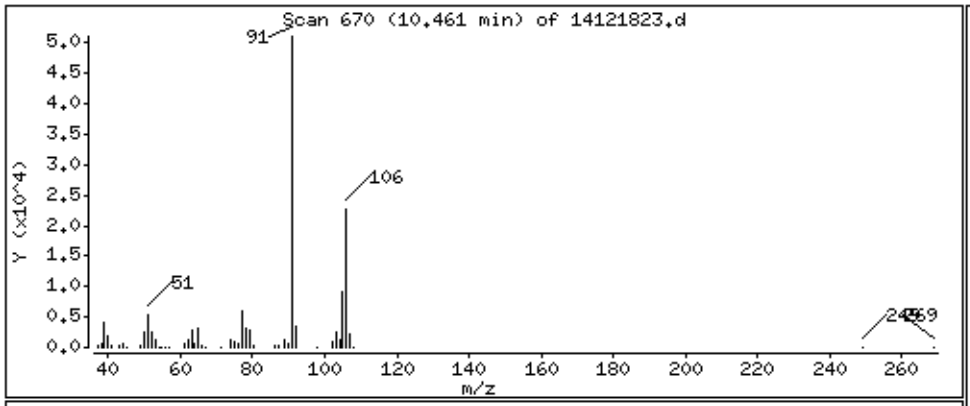
Operator: md

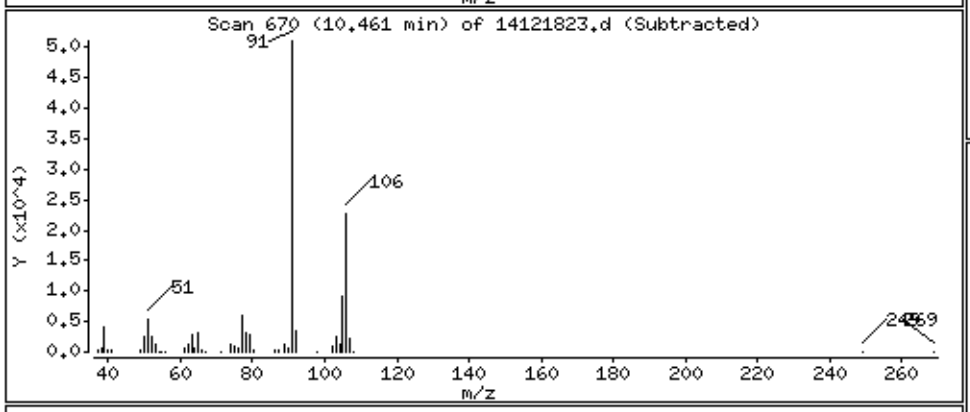
Column phase: RTx-624

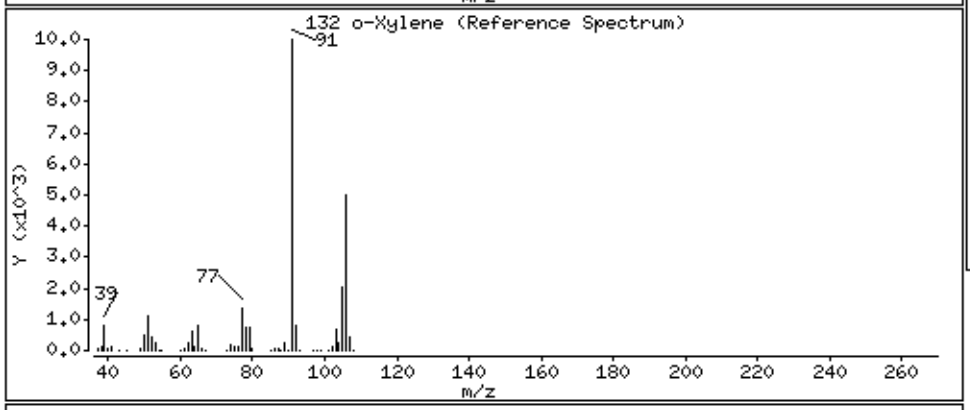
Column diameter: 0.53

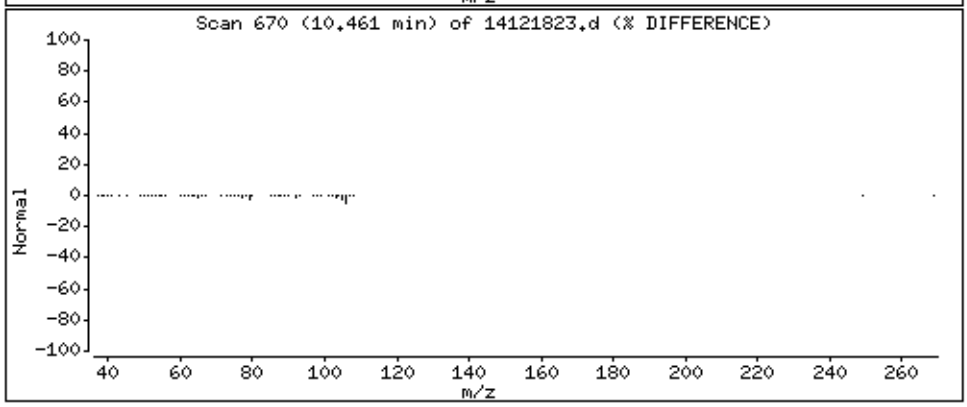
132 o-Xylene

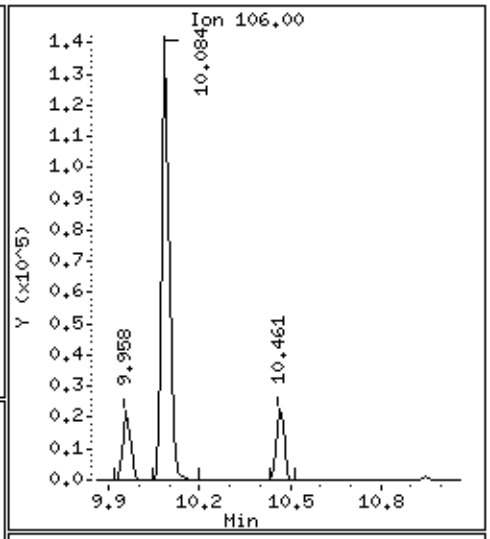
Concentration: 28266 PPBV

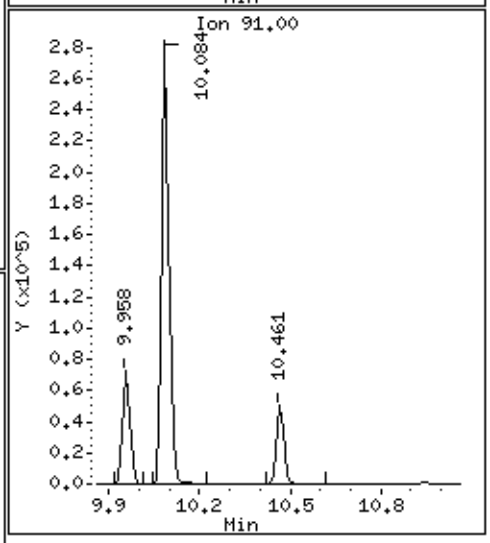












Data File: /chem/msd14.i/18dec14.b/14121823.d

Date : 19-DEC-2014 13:20

Client ID:

Instrument: msd14.i

Sample Info: 10ml #1L1556

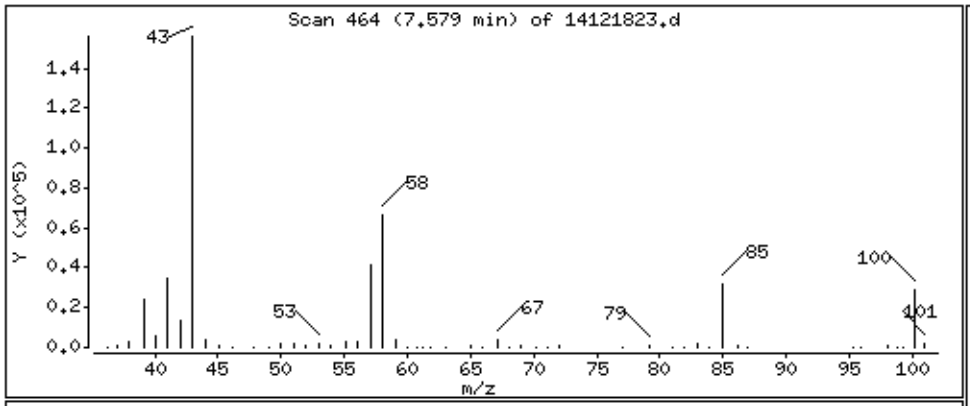
Operator: md

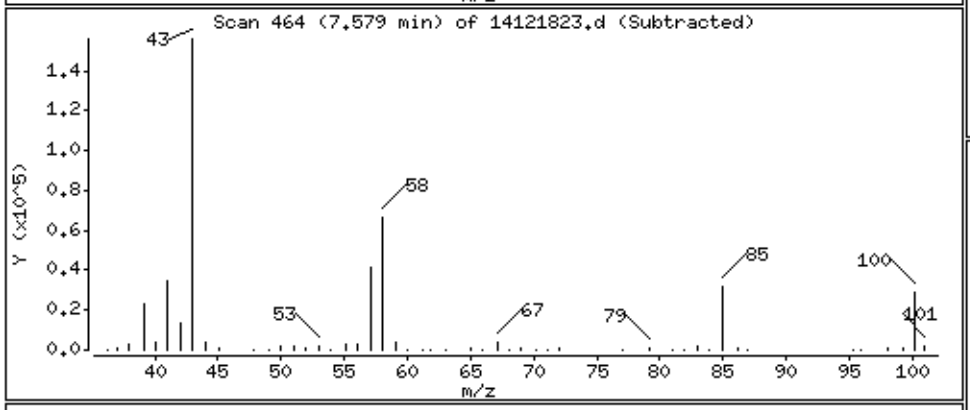
Column phase: RTx-624

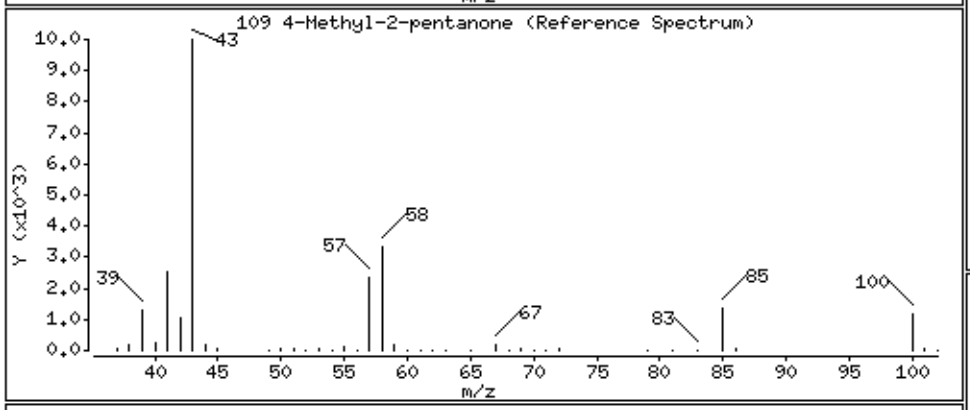
Column diameter: 0.53

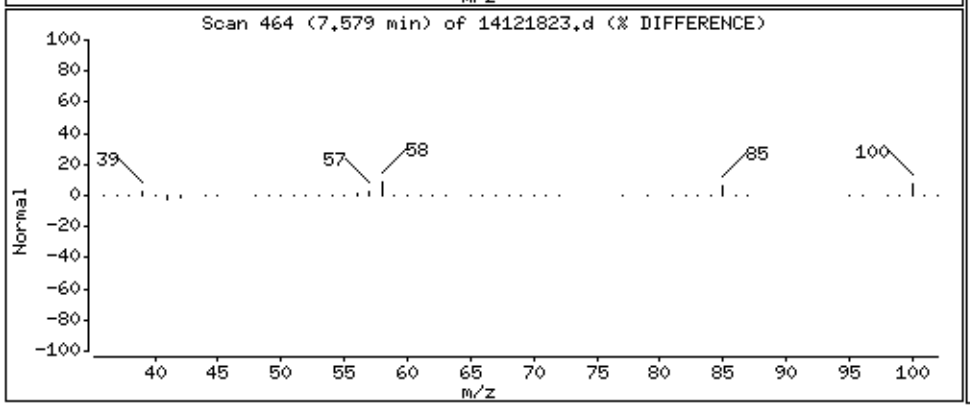
109 4-Methyl-2-pentanone

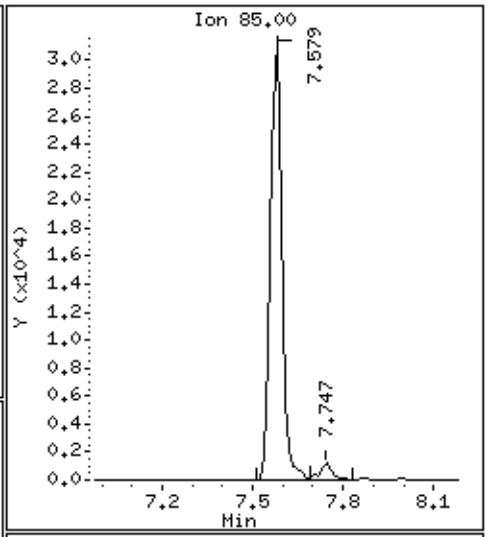
Concentration: 284810 PPBV

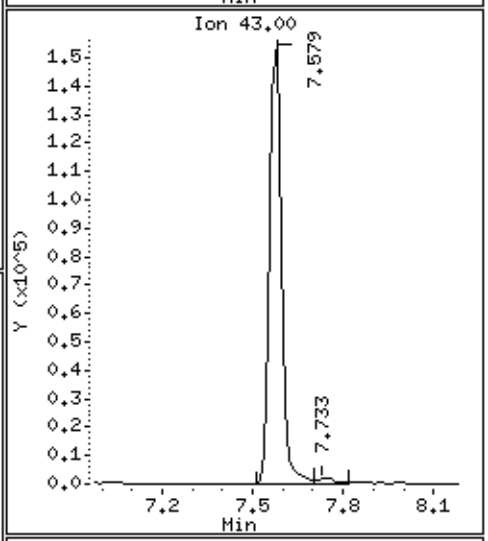


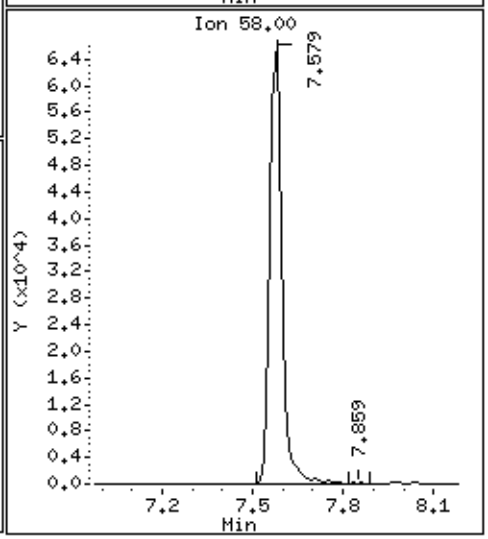












Data File: /chem/msd14.i/18dec14.b/14121823.d

Date : 19-DEC-2014 13:20

Client ID:

Instrument: msd14.i

Sample Info: 10ml #1L1556

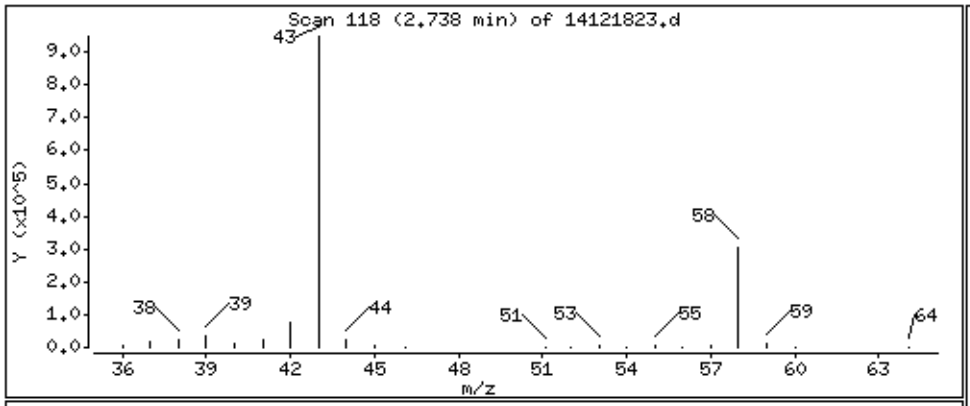
Operator: md

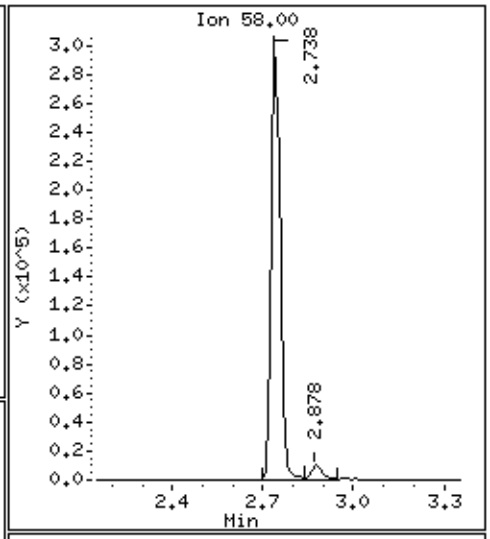
Column phase: RTx-624

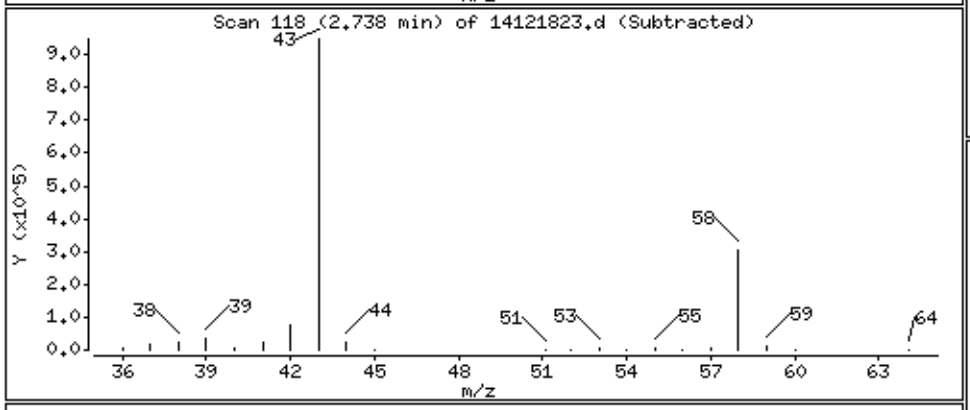
Column diameter: 0.53

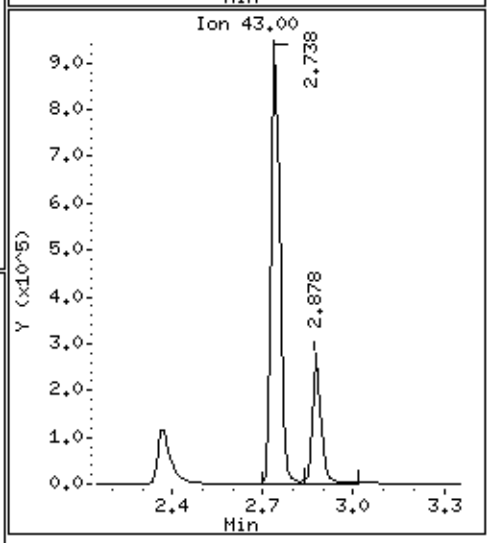
38 Acetone

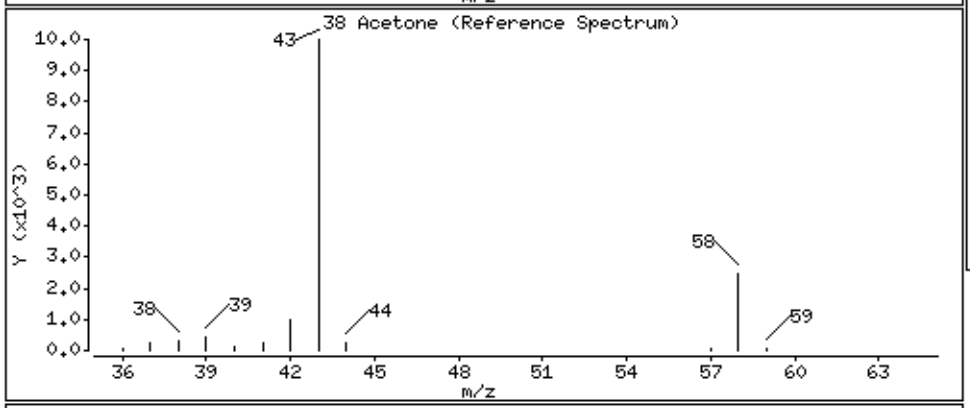
Concentration: 1796000 PPBV

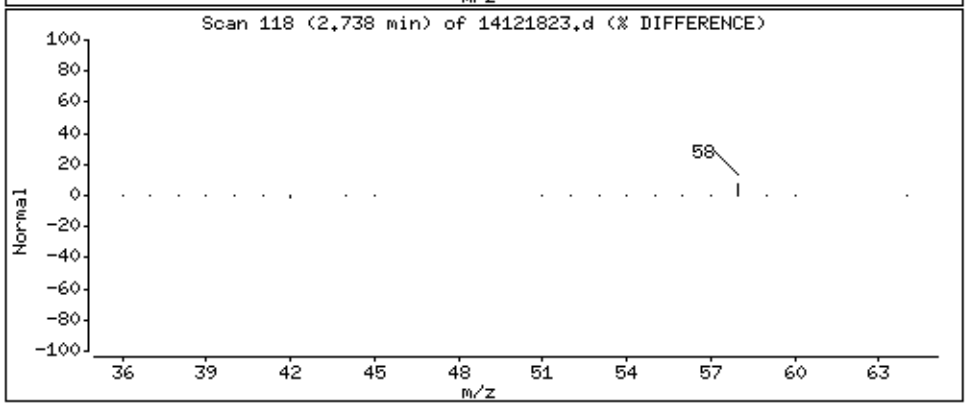












Data File: /chem/msd14.i/18dec14.b/14121823.d

Date : 19-DEC-2014 13:20

Client ID:

Instrument: msd14.i

Sample Info: 10ml #1L1556

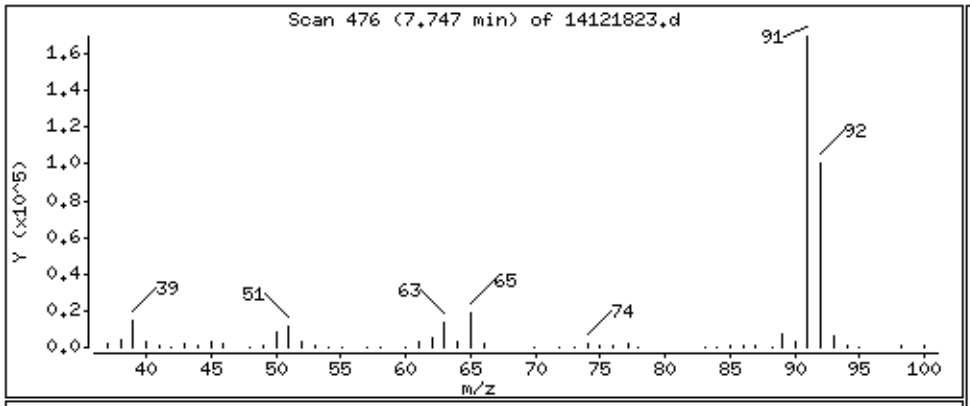
Operator: md

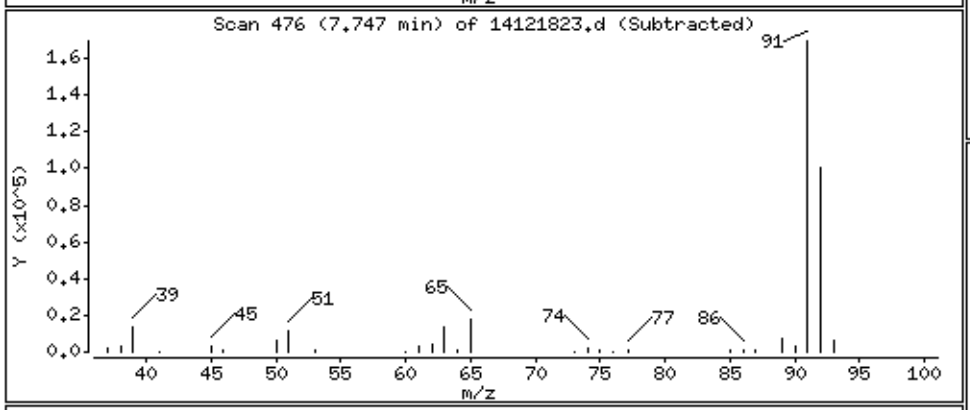
Column phase: RTx-624

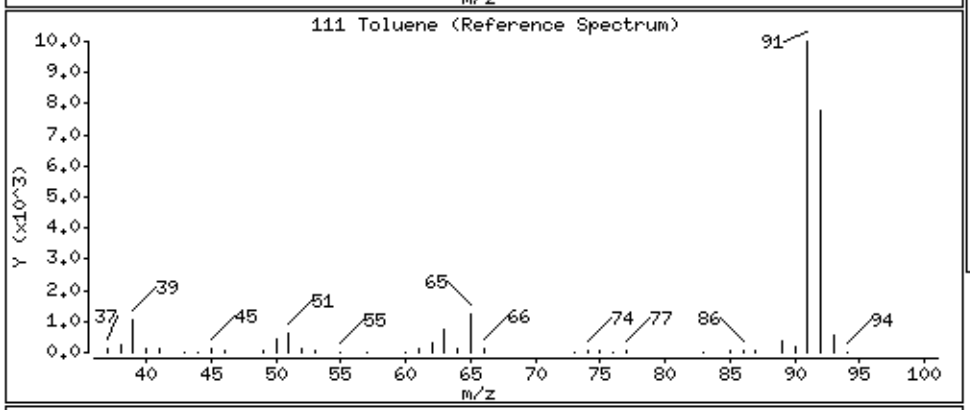
Column diameter: 0.53

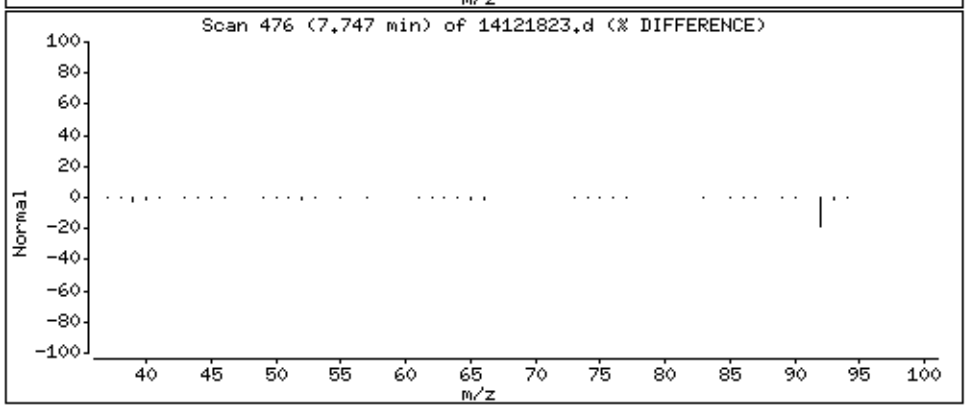
111 Toluene

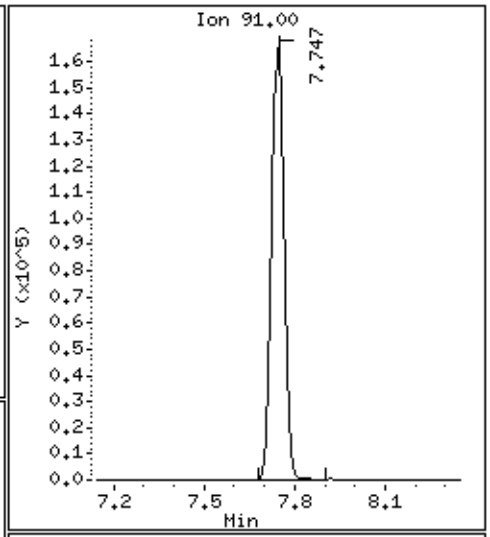
Concentration: 160610 PPBV

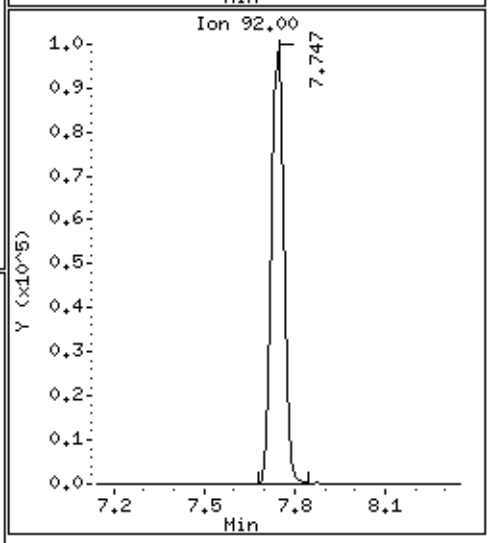












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Summary of Detected Compounds
EPA METHOD TO-15 GC/MS

Client Sample ID: B5SS-1D (2014)

Lab ID#: 1412216A-08A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Acetone	12000	900000	28000	2100000
2-Propanol	12000	1300000	29000	3200000
Toluene	2900	57000	11000	210000
Ethyl Benzene	2900	9500	13000	41000
m,p-Xylene	2900	50000	13000	220000
o-Xylene	2900	8200	13000	36000
4-Methyl-2-pentanone	2900	110000	12000	460000

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Client Sample ID: B5SS-1D (2014)

Lab ID#: 1412216A-08A

EPA METHOD TO-15 GC/MS

File Name:	**14121826**	**Date of Collection:**	**12/11/14 3:19:00 PM**
Dil. Factor:	**583**	**Date of Analysis:**	**12/19/14 02:26 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Acetone	12000	900000	28000	2100000
2-Propanol	12000	1300000	29000	3200000
Benzene	2900	Not Detected	9300	Not Detected
Toluene	2900	57000	11000	210000
Ethyl Benzene	2900	9500	13000	41000
m,p-Xylene	2900	50000	13000	220000
o-Xylene	2900	8200	13000	36000
4-Methyl-2-pentanone	2900	110000	12000	460000

Container Type: 1 Liter Summa Canister (100% Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	95	70-130
Toluene-d8	104	70-130
4-Bromofluorobenzene	94	70-130

Eurofins Air Toxics Inc.

EPA METHOD TO14A/TO15

Data file : /chem/msd14.i/18dec14.b/14121826.d
Lab Smp Id: 1412216A-08A
Inj Date : 19-DEC-2014 14:26
Operator : md Inst ID: msd14.i
Smp Info : 50ml #2034
Misc Info : 4.1"Hg->14.7psi (250x Bag)
Comment : (5&20) - GC/MS
Method : /chem/msd14.i/18dec14.b/14451124c.m
Meth Date : 24-Dec-2014 07:16 dbailey Quant Type: ISTD
Cal Date : 24-NOV-2014 18:25 Cal File: 14112421k.d
Als bottle: 1
Dil Factor: 583.00000
Integrator: HP RTE Compound Sublist: And19256.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
* 75 Bromochloromethane						CAS #: 74-97-5	
4.753	4.753 (1.000)	130	120745	400.000		80.00- 120.00	100.00
4.753	4.753 (1.000)	128	94356			0.00- 30.00	78.14
4.753	4.753 (1.000)	49	138159			0.00- 30.00	114.42
* 94 1,4-Difluorobenzene						CAS #: 540-36-3	
5.858	5.858 (1.000)	114	529536	400.000		80.00- 120.00	100.00
5.858	5.858 (1.000)	88	75361			0.00- 30.00	14.23
* 125 Chlorobenzene-d5						CAS #: 3114-55-4	
9.832	9.832 (1.000)	117	479014	400.000		80.00- 120.00	100.00
9.832	9.832 (1.000)	82	247838			0.00- 30.00	51.74
$ 86 1,2-Dichloroethane-d4						CAS #: 17060-07-0	
5.396	5.396 (1.135)	65	170278	379.115	379.12	80.00- 120.00	100.00(a)
5.396	5.396 (1.135)	67	85688			0.00- 30.00	50.32
$ 110 Toluene-d8						CAS #: 2037-26-5	
7.649	7.635 (1.306)	98	546127	414.063	414.06	80.00- 120.00	100.00(a)
7.635	7.635 (1.303)	70	56925			0.00- 30.00	10.42

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
$ 110 Toluene-d8 (continued)							
7.635	7.635 (1.303)	100	375074			0.00- 30.00	68.68
$ 139 Bromofluorobenzene					CAS #: 460-00-4		
10.951	10.951 (1.114)	174	276105	374.278	374.28	80.00- 120.00	100.00(a)
10.951	10.951 (1.114)	95	345015			0.00- 30.00	124.96
10.951	10.951 (1.114)	176	269137			0.00- 30.00	97.48
41 2-Propanol					CAS #: 67-63-0		
2.892	2.892 (0.608)	45	1291917	2209.28	1288000	80.00- 120.00	100.00
2.892	2.892 (0.608)	43	288524			0.00- 30.00	22.33
2.892	2.892 (0.608)	59	52732			0.00- 30.00	4.08
128 Ethyl Benzene					CAS #: 100-41-4		
9.958	9.958 (1.013)	106	12043	16.3429	9527.9	80.00- 120.00	100.00
9.958	9.958 (1.013)	91	40729			0.00- 30.00	338.20
131 m,p-Xylene					CAS #: 108-38-3		
10.083	10.084 (1.026)	106	75333	85.5008	49847	80.00- 120.00	100.00
10.083	10.084 (1.026)	91	149888			0.00- 30.00	198.97
132 o-Xylene					CAS #: 95-47-6		
10.461	10.461 (1.064)	106	12294	14.0324	8180.9	80.00- 120.00	100.00
10.461	10.461 (1.064)	91	29362			0.00- 30.00	238.83
109 4-Methyl-2-pentanone					CAS #: 108-10-1		
7.579	7.579 (1.294)	85	34436	192.429	112180	80.00- 120.00	100.00
7.579	7.579 (1.294)	43	181859			0.00- 30.00	528.10
7.579	7.579 (1.294)	58	76994			0.00- 30.00	223.58
38 Acetone					CAS #: 67-64-1		
2.752	2.752 (0.579)	58	314322	1536.80	895950	80.00- 120.00	100.00
2.752	2.752 (0.579)	43	929924			0.00- 30.00	295.85
111 Toluene					CAS #: 108-88-3		
7.747	7.747 (1.322)	91	182760	97.7773	57004	80.00- 120.00	100.00
7.747	7.747 (1.322)	92	109207			0.00- 30.00	59.75

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: msd14.i
Lab File ID: 14121826.d
Lab Smp Id: 1412216A-08A
Analysis Type: VOA
Quant Type: ISTD
Operator: md
Method File: /chem/msd14.i/18dec14.b/14451124c.m
Misc Info: 4.1"Hg->14.7psi (250x Bag)

Calibration Date: 18-DEC-2014
Calibration Time: 19:52

Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
75 Bromochloromethan	124906	74944	174868	120745	-3.33
94 1,4-Difluorobenze	570831	342499	799163	529536	-7.23
125 Chlorobenzene-d5	512999	307799	718199	479014	-6.62

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
75 Bromochloromethan	4.75	4.42	5.08	4.75	0.00
94 1,4-Difluorobenze	5.86	5.53	6.19	5.86	0.00
125 Chlorobenzene-d5	9.83	9.50	10.16	9.83	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: 24-Dec-2014 07:24

Eurofins Air Toxics Inc.

RECOVERY REPORT

Client Name:
Client SDG: 18dec14
Sample Matrix: GAS
Fraction: VOA
Lab Smp Id: 1412216A-08A
Level: LOW
Operator: md
Data Type: MS DATA
SampleType: SAMPLE
SpikeList File: 200.spk
Quant Type: ISTD
Sublist File: And19256.sub
Method File: /chem/msd14.i/18dec14.b/14451124c.m
Misc Info: 4.1"Hg->14.7psi (250x Bag)

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 86 1,2-Dichloroethane	400.00	379.12	94.78	70-130
$ 110 Toluene-d8	400.00	414.06	103.52	70-130
$ 139 Bromofluorobenzene	400.00	374.28	93.57	70-130

Data File: /chem/msd14.i/18dec14.b/14121826.d

Date : 19-DEC-2014 14:26

Client ID:

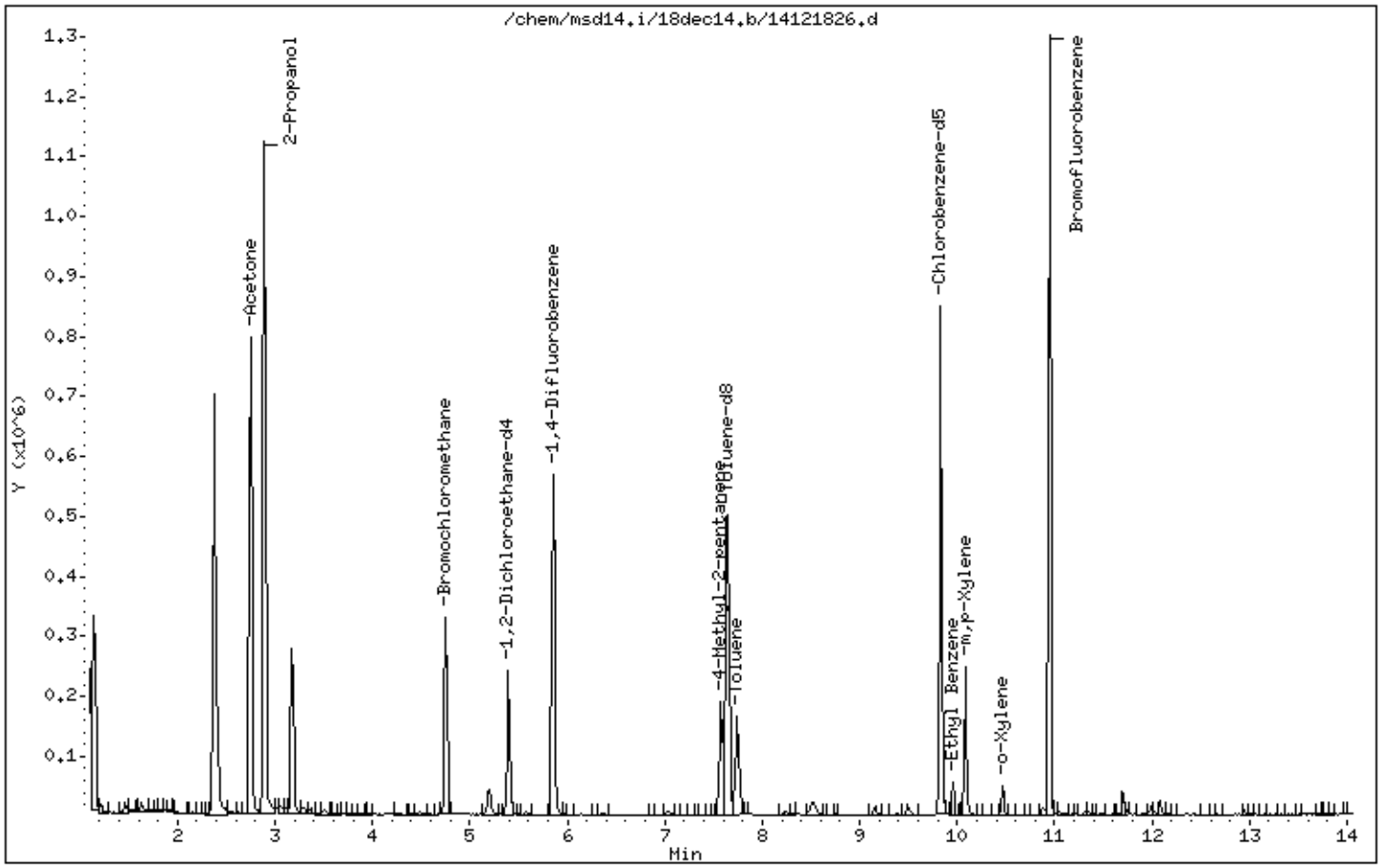
Instrument: msd14.i

Sample Info: 50ml #2034

Operator: md

Column phase: RTx-624

Column diameter: 0.53



Data File: /chem/msd14.i/18dec14.b/14121826.d

Date : 19-DEC-2014 14:26

Client ID:

Instrument: msd14.i

Sample Info: 50ml #2034

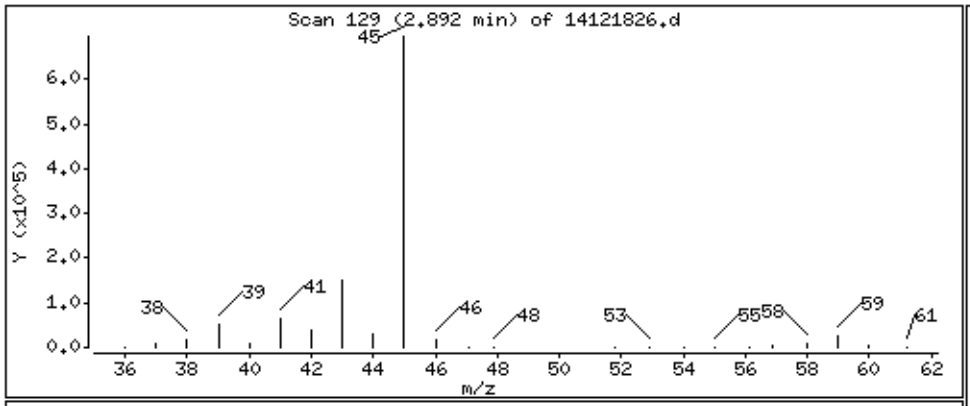
Operator: md

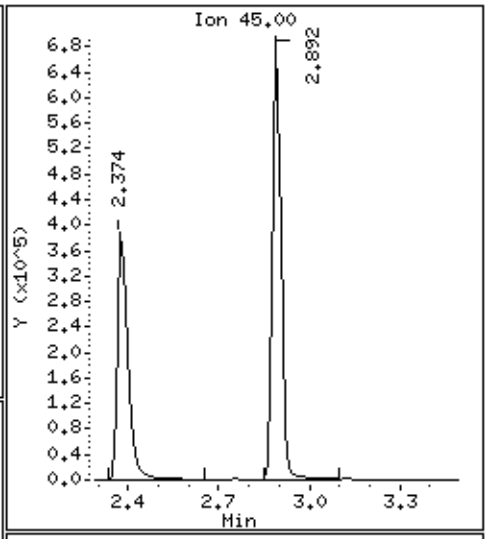
Column phase: RTx-624

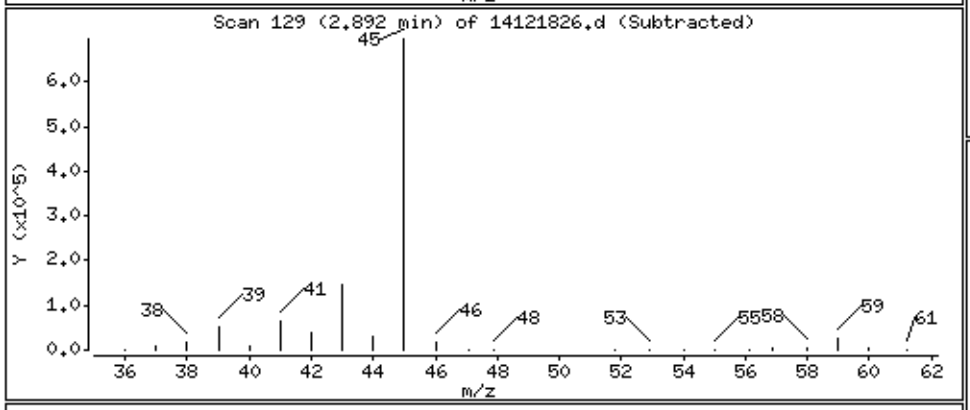
Column diameter: 0.53

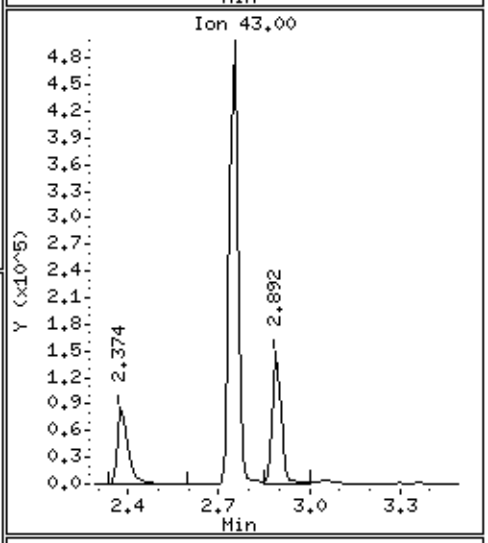
41 2-Propanol

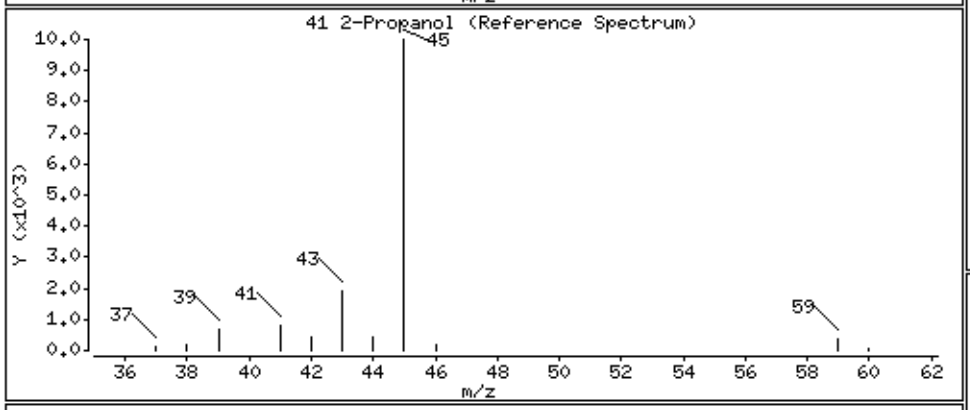
Concentration: 1288000 PPBV

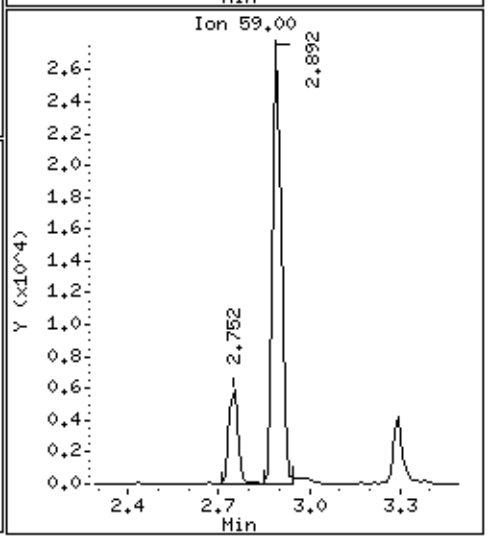


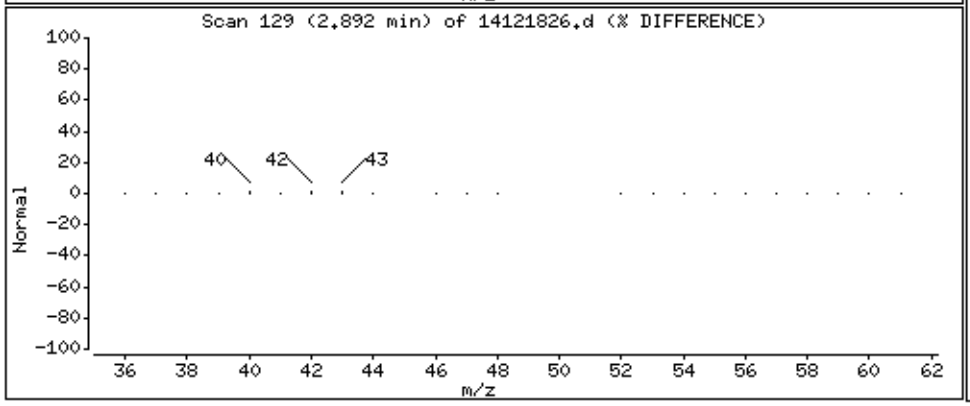












Data File: /chem/msd14.i/18dec14.b/14121826.d

Date : 19-DEC-2014 14:26

Client ID:

Instrument: msd14.i

Sample Info: 50ml #2034

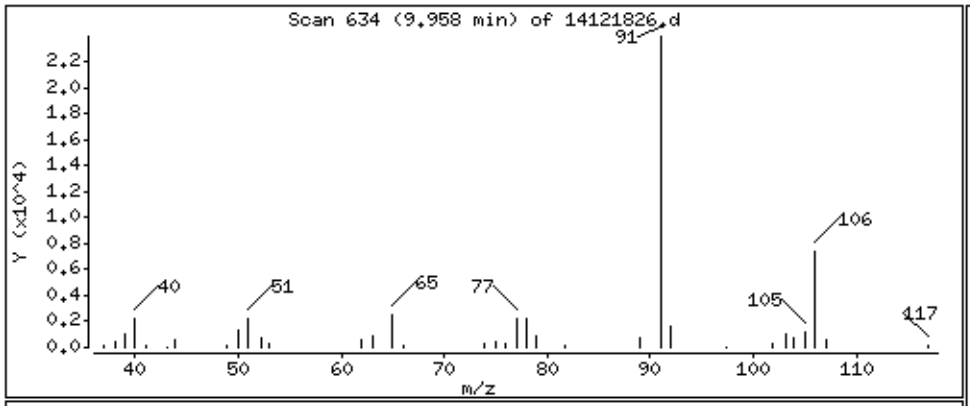
Operator: md

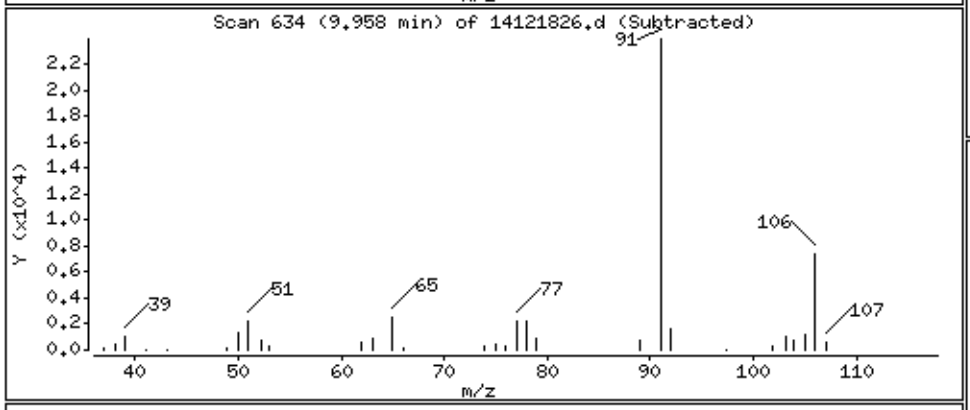
Column phase: RTx-624

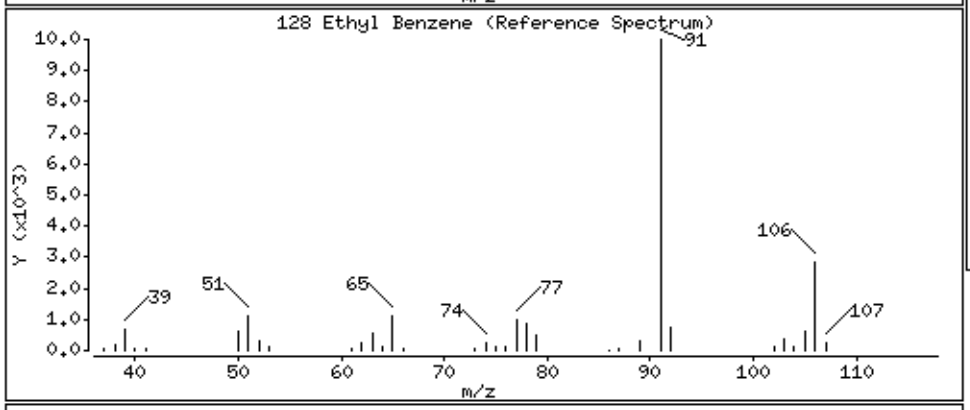
Column diameter: 0.53

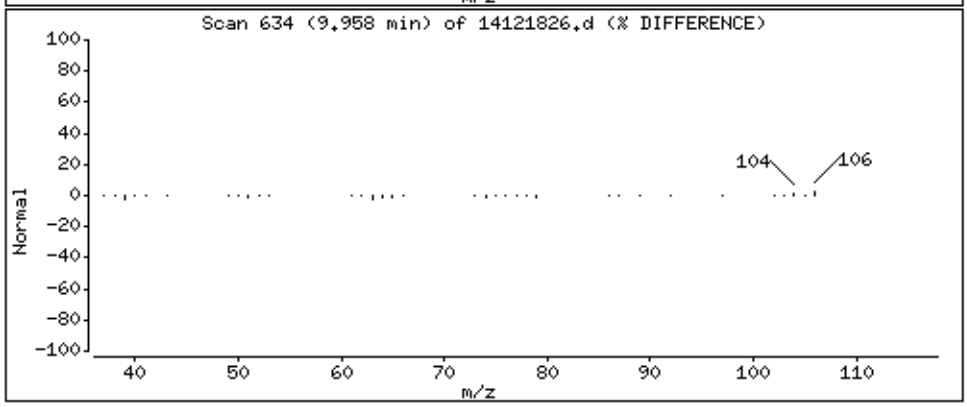
128 Ethyl Benzene

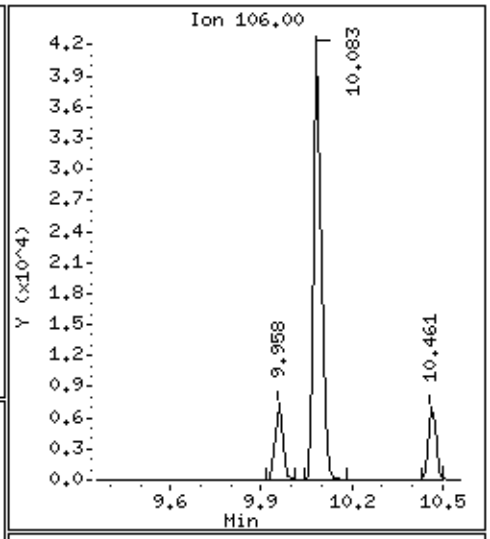
Concentration: 9527.9 PPBV

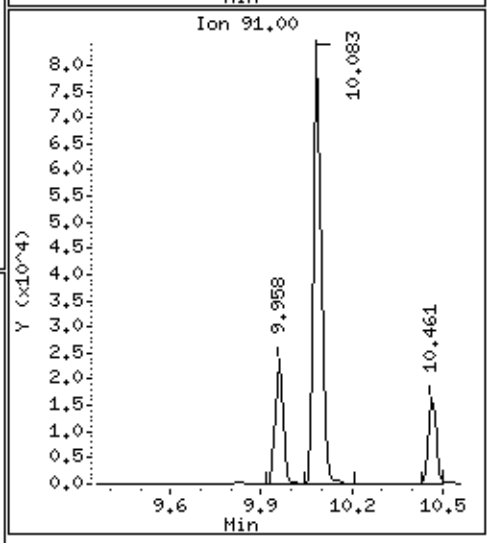












Data File: /chem/msd14.i/18dec14.b/14121826.d

Date : 19-DEC-2014 14:26

Client ID:

Instrument: msd14.i

Sample Info: 50ml #2034

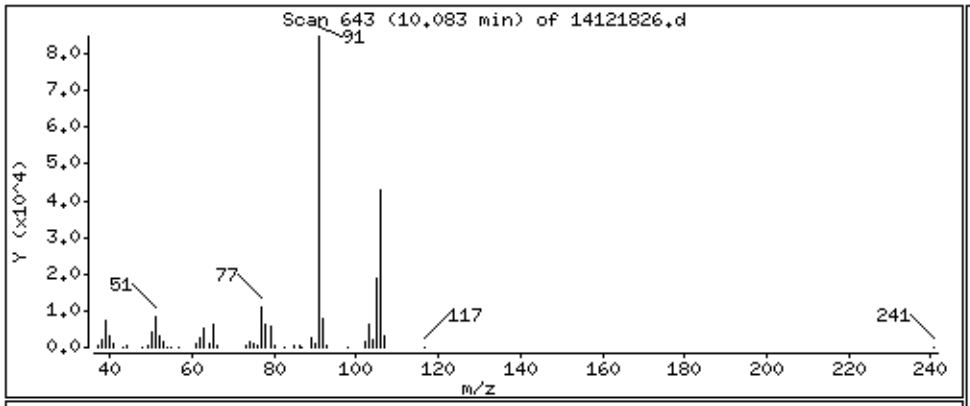
Operator: md

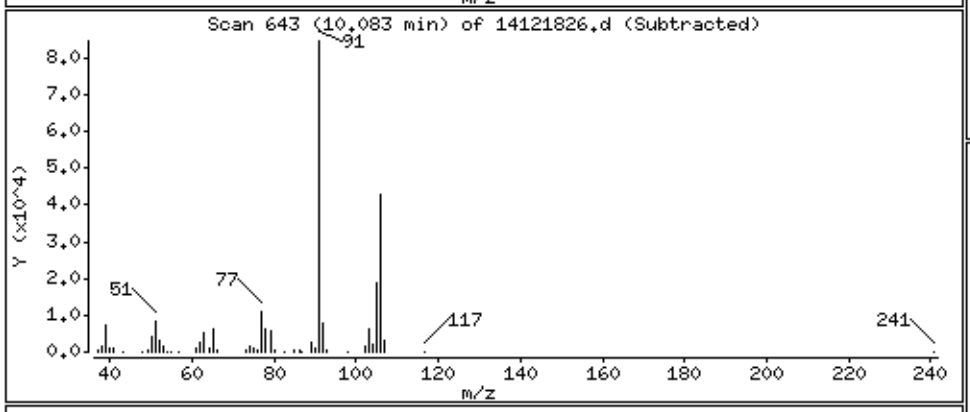
Column phase: RTx-624

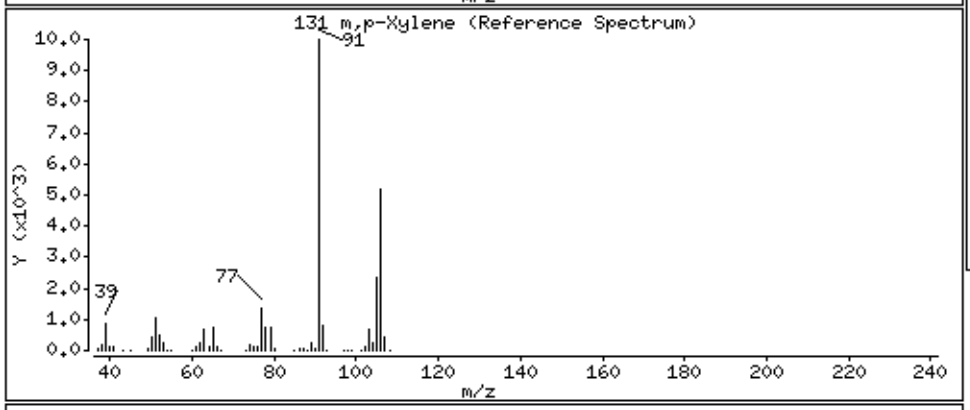
Column diameter: 0.53

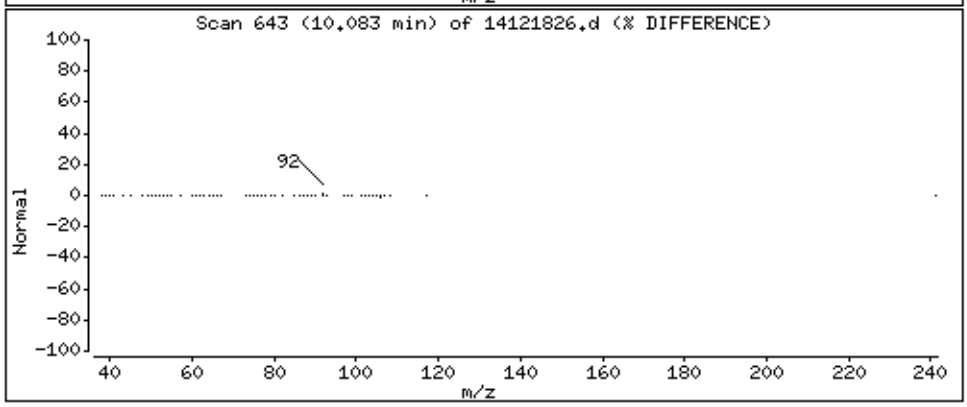
131 m,p-Xylene

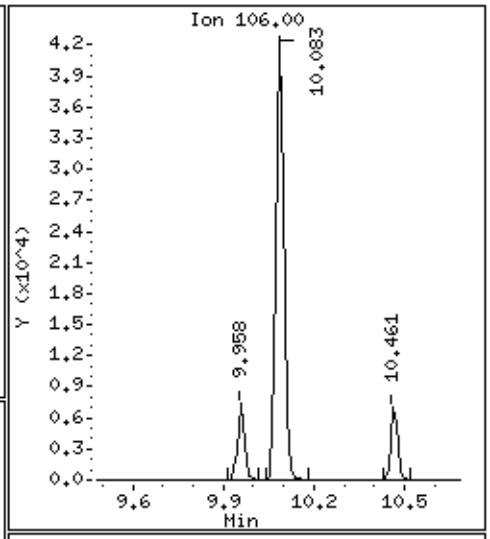
Concentration: 49847 PPBV

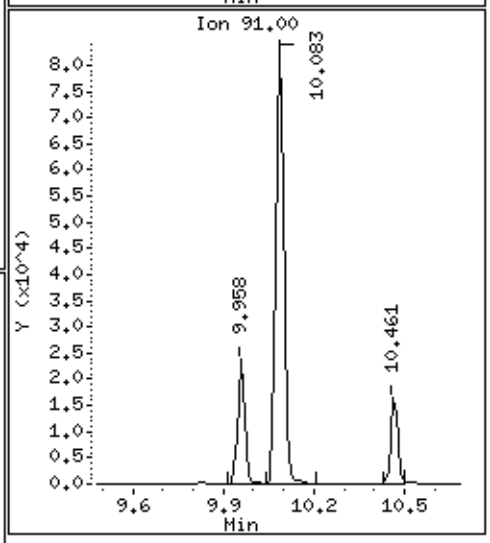












Data File: /chem/msd14.i/18dec14.b/14121826.d

Date : 19-DEC-2014 14:26

Client ID:

Instrument: msd14.i

Sample Info: 50ml #2034

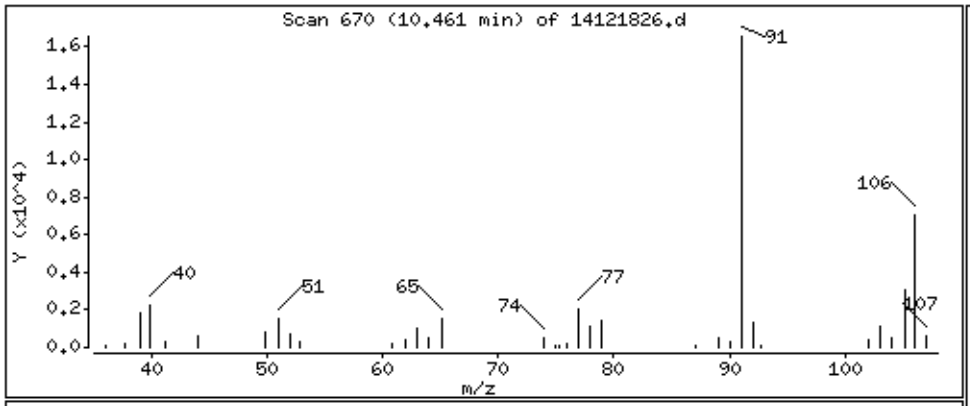
Operator: md

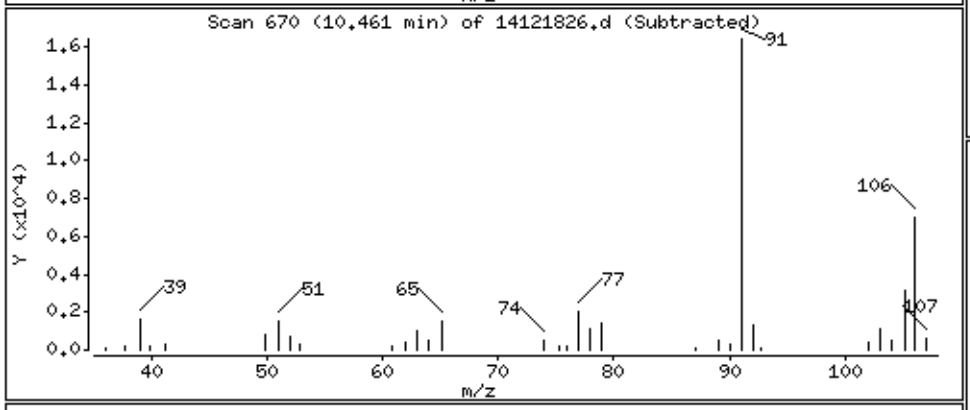
Column phase: RTx-624

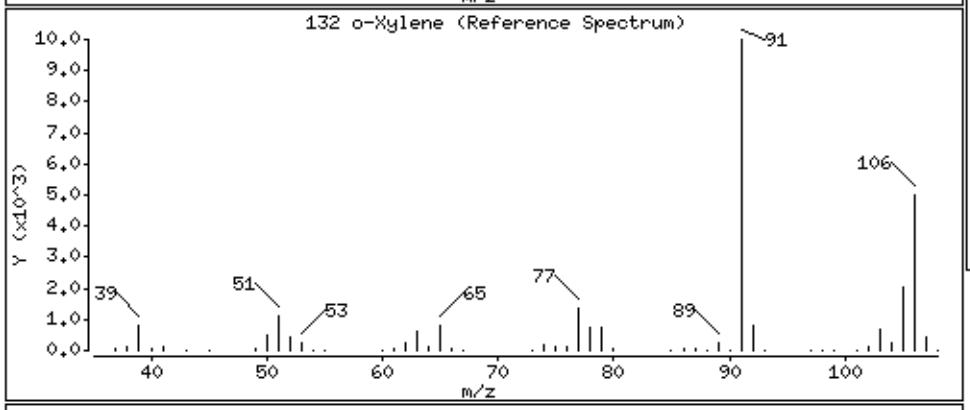
Column diameter: 0.53

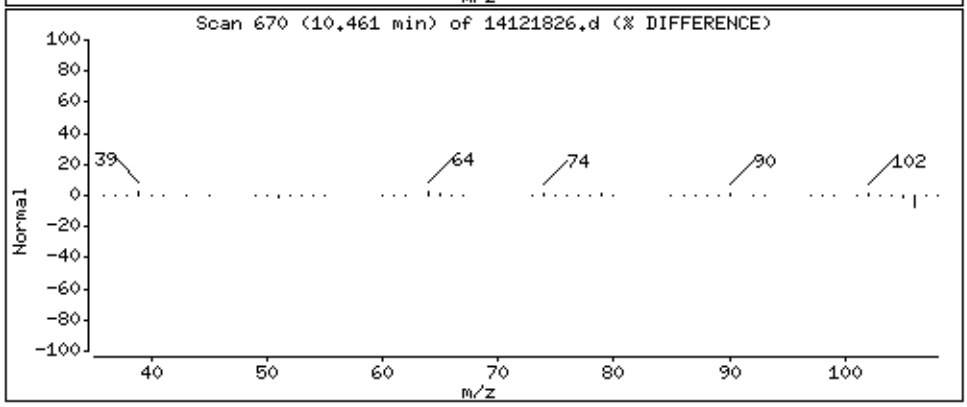
132 o-Xylene

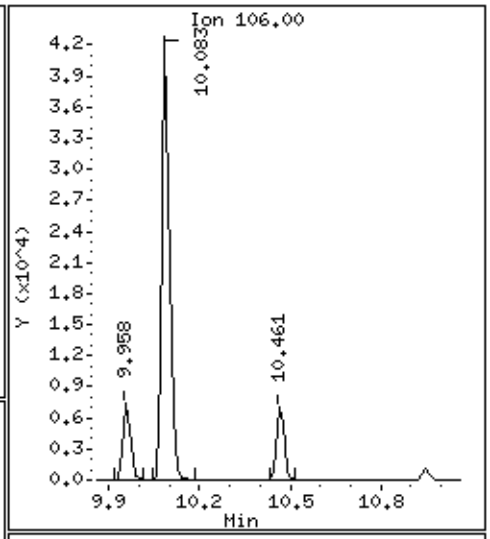
Concentration: 8180.9 PPBV

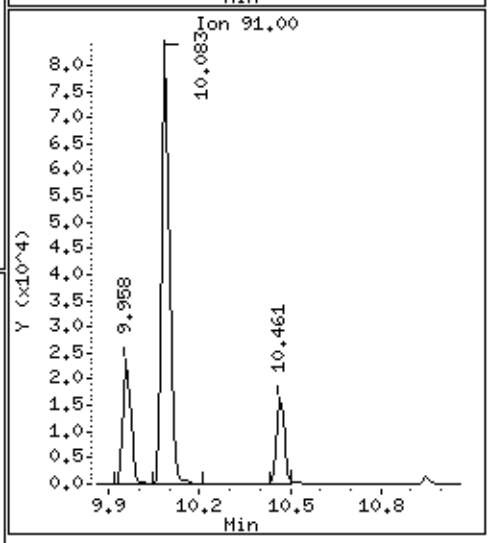












Data File: /chem/msd14.i/18dec14.b/14121826.d

Date : 19-DEC-2014 14:26

Client ID:

Instrument: msd14.i

Sample Info: 50ml #2034

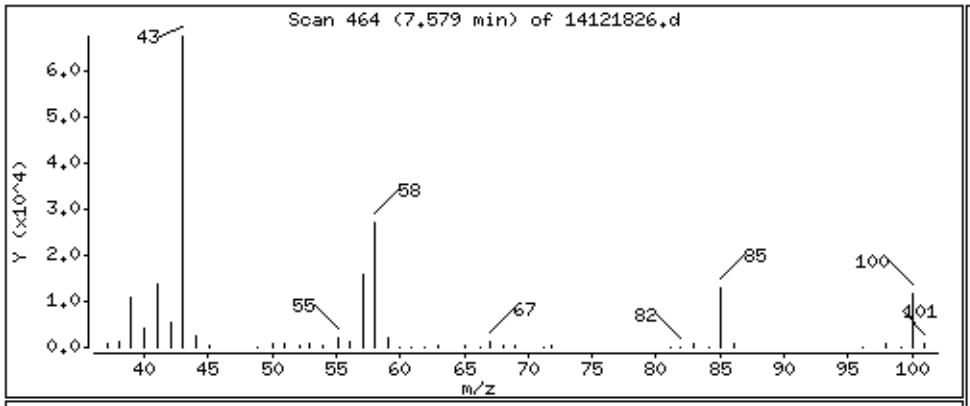
Operator: md

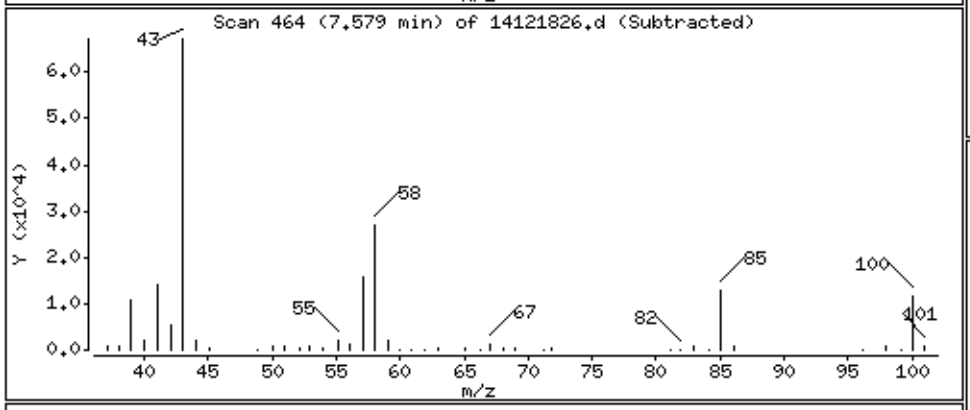
Column phase: RTx-624

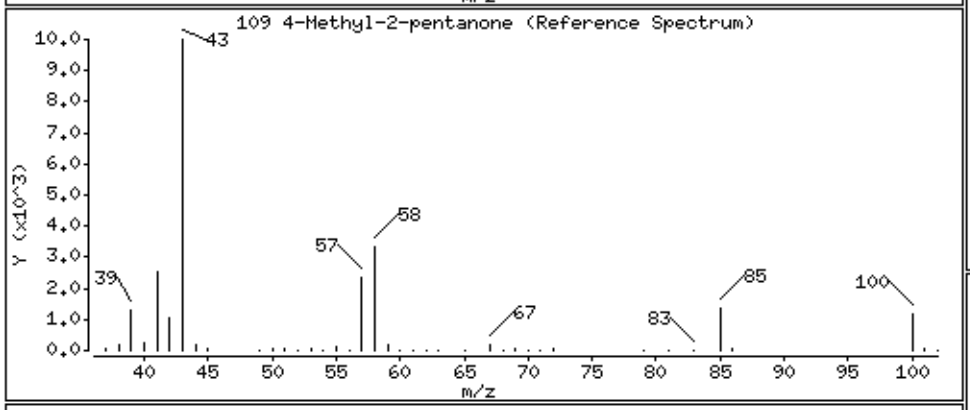
Column diameter: 0.53

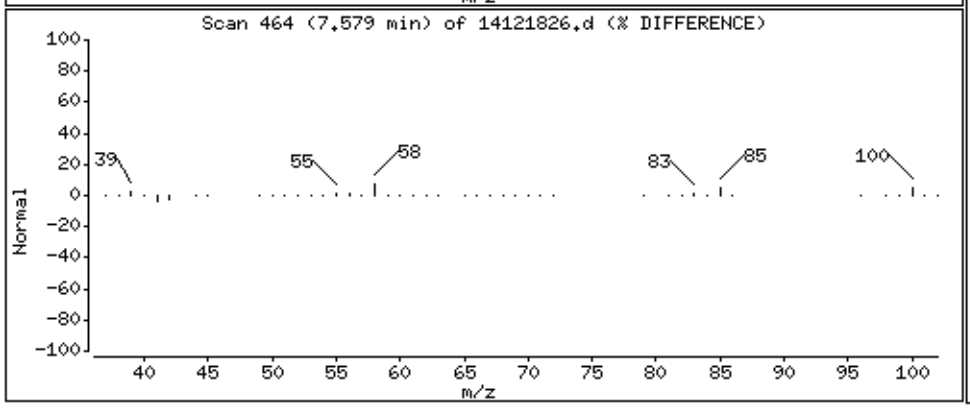
109 4-Methyl-2-pentanone

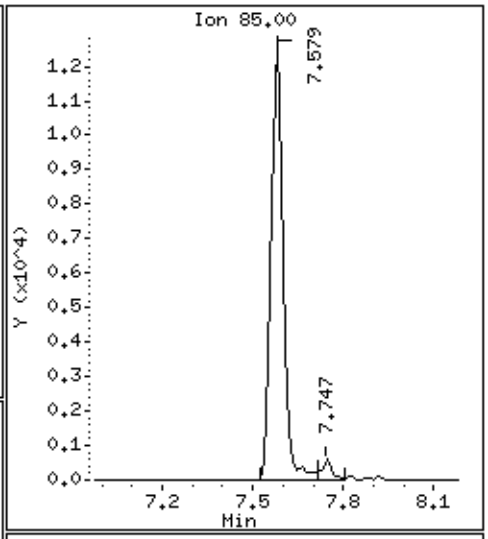
Concentration: 112180 PPBV

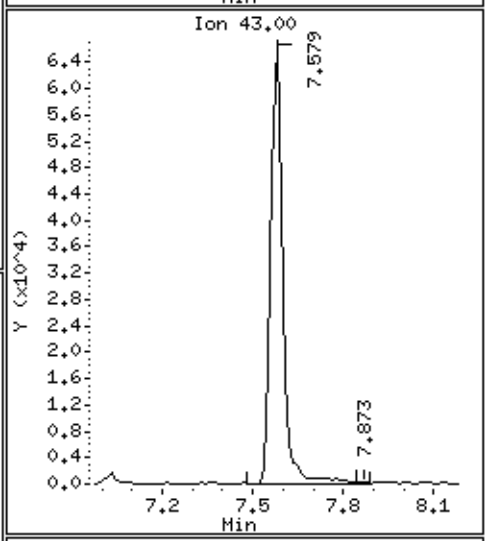


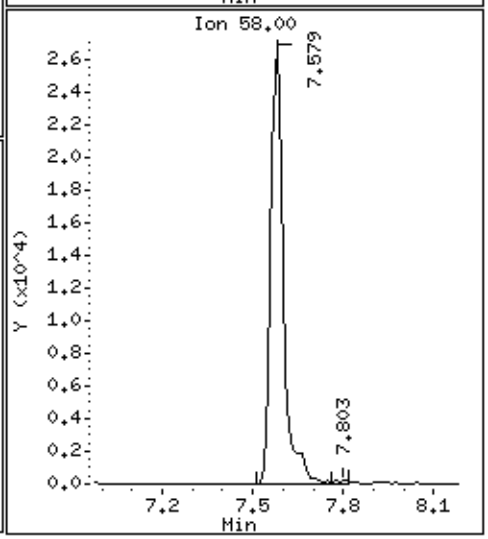












Data File: /chem/msd14.i/18dec14.b/14121826.d

Date : 19-DEC-2014 14:26

Client ID:

Instrument: msd14.i

Sample Info: 50ml #2034

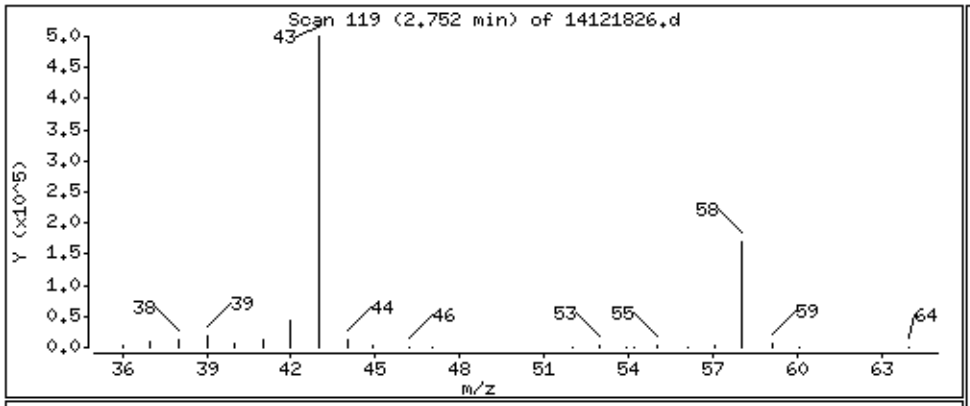
Operator: md

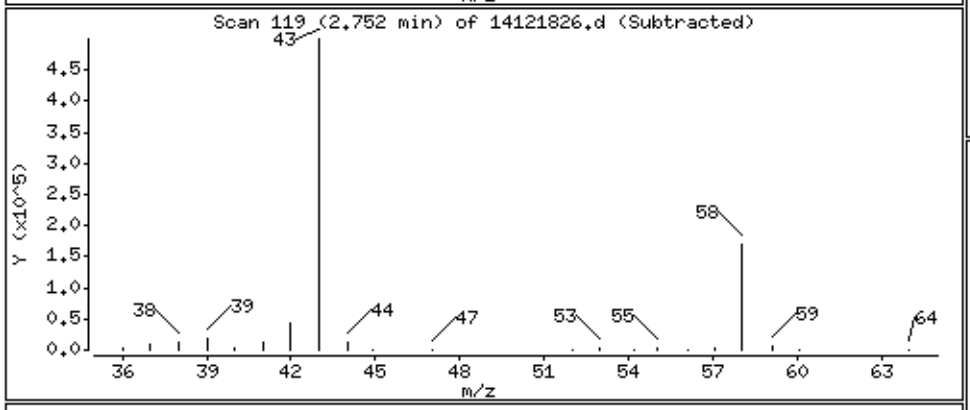
Column phase: RTx-624

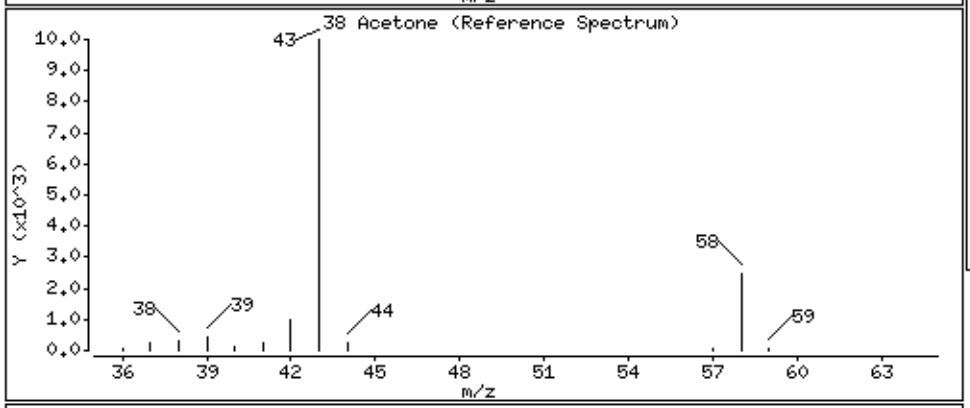
Column diameter: 0.53

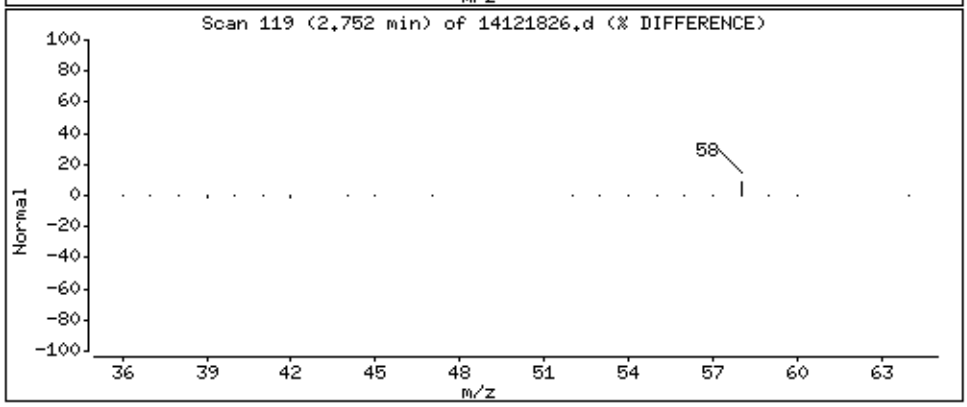
38 Acetone

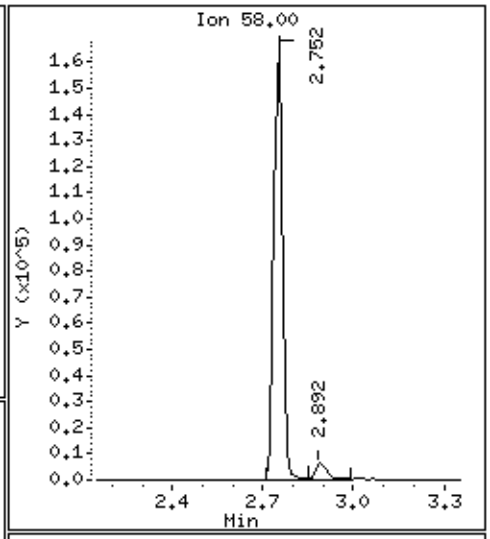
Concentration: 895950 PPBV

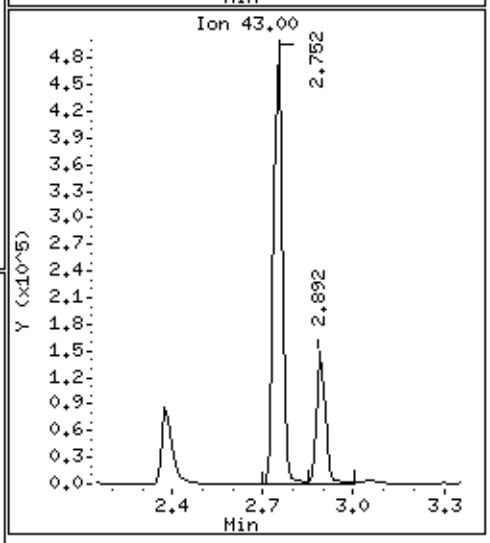












Data File: /chem/msd14.i/18dec14.b/14121826.d

Date : 19-DEC-2014 14:26

Client ID:

Instrument: msd14.i

Sample Info: 50ml #2034

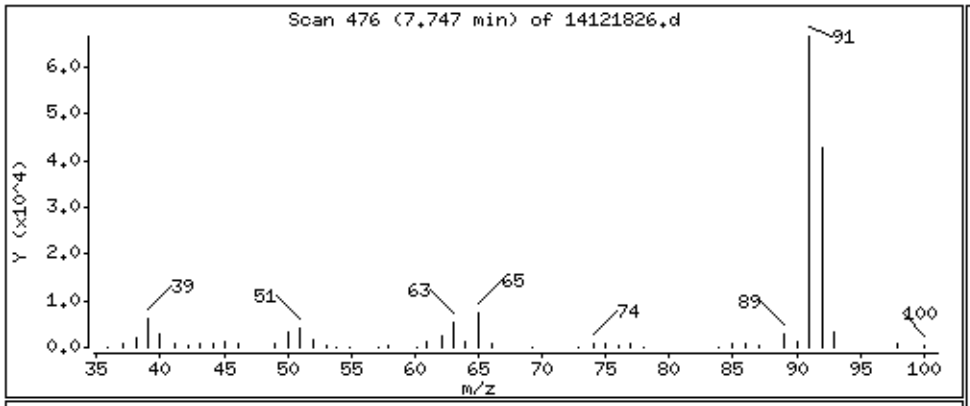
Operator: md

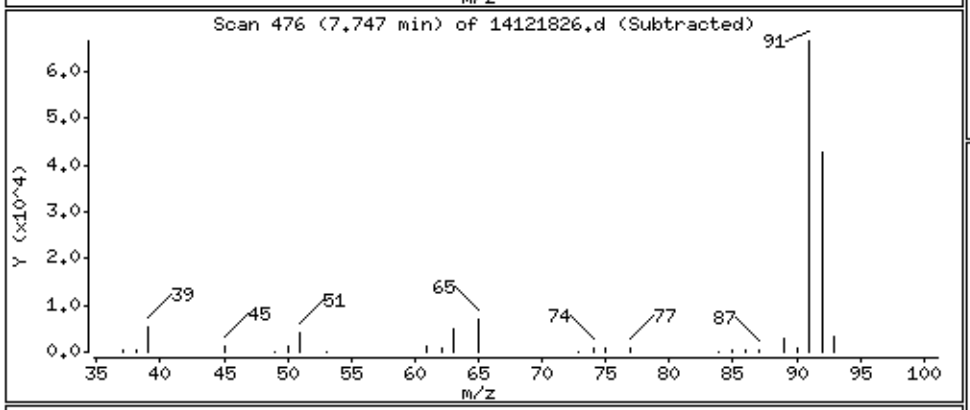
Column phase: RTx-624

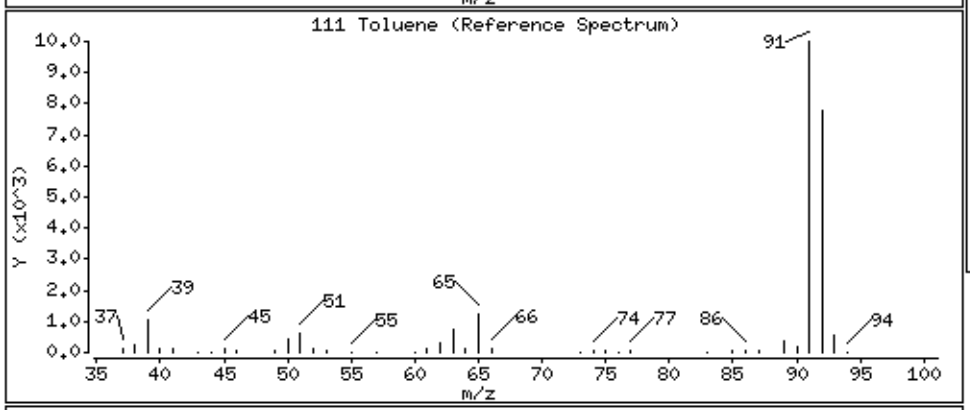
Column diameter: 0.53

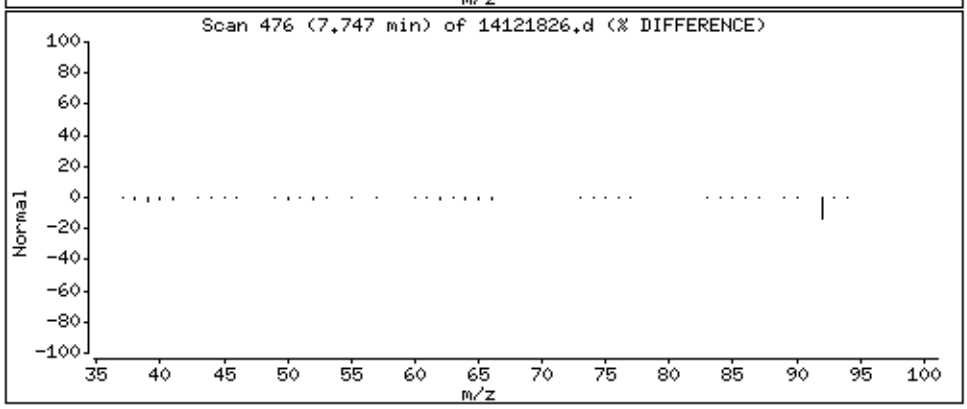
111 Toluene

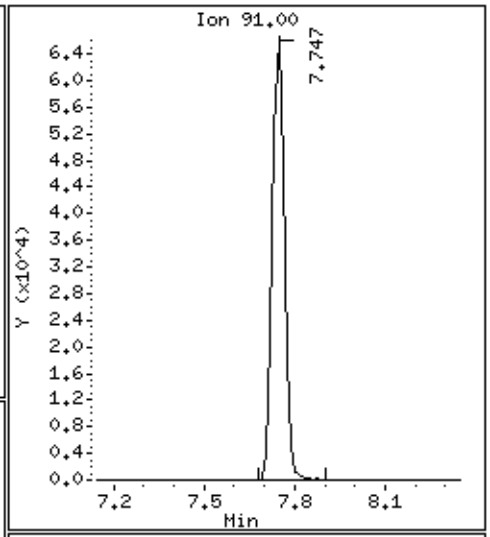
Concentration: 57004 PPBV

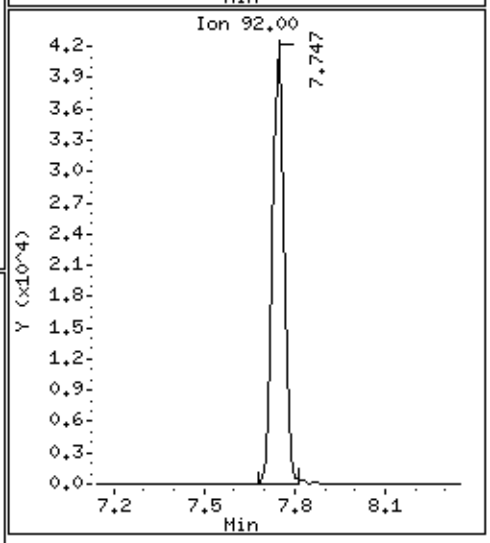












QC Results and Raw Data

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Client Sample ID: Lab Blank

Lab ID#: 1412216A-09A

EPA METHOD TO-15 GC/MS

File Name:	**14121807**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 12/18/14 10:00 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Acetone	20	Not Detected	48	Not Detected
2-Propanol	20	Not Detected	49	Not Detected
Benzene	5.0	Not Detected	16	Not Detected
Toluene	5.0	Not Detected	19	Not Detected
Ethyl Benzene	5.0	Not Detected	22	Not Detected
m,p-Xylene	5.0	Not Detected	22	Not Detected
o-Xylene	5.0	Not Detected	22	Not Detected
4-Methyl-2-pentanone	5.0	Not Detected	20	Not Detected

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	96	70-130
Toluene-d8	99	70-130
4-Bromofluorobenzene	89	70-130

Eurofins Air Toxics Inc.

EPA METHOD TO14A/TO15

Data file : /chem/msd14.i/18dec14.b/14121807.d
Lab Smp Id: Lab Blank Client Smp ID: Lab Blank
Inj Date : 18-DEC-2014 22:00
Operator : sn Inst ID: msd14.i
Smp Info : 50ml #34496
Misc Info : Humid
Comment : (5&20) - GC/MS
Method : /var/chem/msd14.i/18dec14.b/14451124c.m
Meth Date : 18-Dec-2014 21:36 snguyen Quant Type: ISTD
Cal Date : 24-NOV-2014 18:25 Cal File: 14112421k.d
Als bottle: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT09.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 (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
* 75 Bromochloromethane						CAS #: 74-97-5	
4.753	4.753 (1.000)	130	115975	400.000		80.00- 120.00	100.00
4.753	4.753 (1.000)	128	91823			0.00- 30.00	79.17
4.753	4.753 (1.000)	49	126685			0.00- 30.00	109.23
* 94 1,4-Difluorobenzene						CAS #: 540-36-3	
5.858	5.858 (1.000)	114	505416	400.000		80.00- 120.00	100.00
5.858	5.858 (1.000)	88	74762			0.00- 30.00	14.79
* 125 Chlorobenzene-d5						CAS #: 3114-55-4	
9.832	9.832 (1.000)	117	475190	400.000		80.00- 120.00	100.00
9.832	9.832 (1.000)	82	238904			0.00- 30.00	50.28
$ 86 1,2-Dichloroethane-d4						CAS #: 17060-07-0	
5.396	5.396 (1.135)	65	166566	386.104	386.10	80.00- 120.00	100.00
5.396	5.396 (1.135)	67	83733			0.00- 30.00	50.27
$ 110 Toluene-d8						CAS #: 2037-26-5	
7.649	7.635 (1.306)	98	499211	396.555	396.56	80.00- 120.00	100.00
7.635	7.635 (1.303)	70	52351			0.00- 30.00	10.49

RT	EXP RT	(REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
$ 110 Toluene-d8 (continued)								
7.635	7.635	(1.303)	100	325192			0.00- 30.00	65.14
$ 139 Bromofluorobenzene						CAS #: 460-00-4		
10.951	10.951	(1.114)	174	261661	357.552	357.55	80.00- 120.00	100.00
10.951	10.951	(1.114)	95	329874			0.00- 30.00	126.07
10.951	10.951	(1.114)	176	251637			0.00- 30.00	96.17

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd14.i
Lab File ID: 14121807.d
Lab Smp Id: Lab Blank
Analysis Type: VOA
Quant Type: ISTD
Operator: sn
Method File: /var/chem/msd14.i/18dec14.b/14451124c.m
Misc Info: Humid

Calibration Date: 18-DEC-2014
Calibration Time: 19:52
Client Smp ID: Lab Blank
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
75 Bromochloromethan	124906	74944	174868	115975	-7.15
94 1,4-Difluorobenze	570831	342499	799163	505416	-11.46
125 Chlorobenzene-d5	512999	307799	718199	475190	-7.37

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
75 Bromochloromethan	4.75	4.42	5.08	4.75	0.00
94 1,4-Difluorobenze	5.86	5.53	6.19	5.86	0.00
125 Chlorobenzene-d5	9.83	9.50	10.16	9.83	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: 18-Dec-2014 22:21

Eurofins Air Toxics Inc.

RECOVERY REPORT

Client Name:
Client SDG: 18dec14
Sample Matrix: GAS
Fraction: VOA
Lab Smp Id: Lab Blank
Client Smp ID: Lab Blank
Level: LOW
Operator: sn
Data Type: MS DATA
SampleType: SAMPLE
SpikeList File: 200.spk
Quant Type: ISTD
Sublist File: AT09.sub
Method File: /var/chem/msd14.i/18dec14.b/14451124c.m
Misc Info: Humid

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 86 1,2-Dichloroethane	400.00	386.10	96.53	70-130
$ 110 Toluene-d8	400.00	396.56	99.14	70-130
$ 139 Bromofluorobenzene	400.00	357.55	89.39	70-130

Data File: /chem/msd14.i/18dec14.b/14121807.d

Date : 18-DEC-2014 22:00

Client ID: Lab Blank

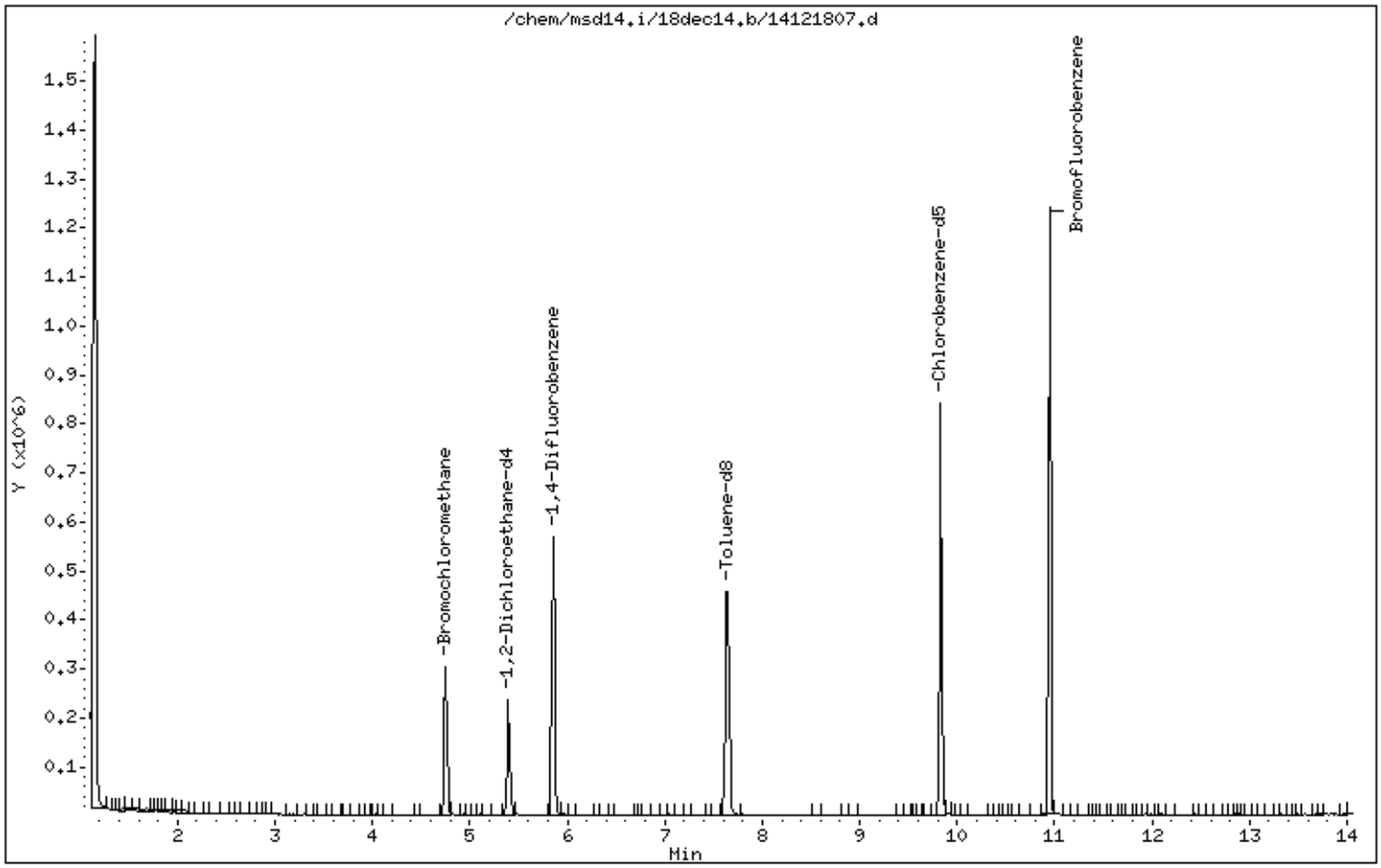
Instrument: msd14.i

Sample Info: 50ml #34496

Operator: sn

Column phase: RTx-624

Column diameter: 0.53



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Client Sample ID: Lab Blank

Lab ID#: 1412216A-09B

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p122205d**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 12/22/14 11:12 AM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Benzene	0.50	Not Detected	1.6	Not Detected
2-Propanol	2.0	Not Detected	4.9	Not Detected
Ethyl Benzene	0.50	Not Detected	2.2	Not Detected
m,p-Xylene	0.50	Not Detected	2.2	Not Detected
o-Xylene	0.50	Not Detected	2.2	Not Detected
4-Methyl-2-pentanone	0.50	Not Detected	2.0	Not Detected
Acetone	5.0	Not Detected	12	Not Detected
Toluene	0.50	Not Detected	1.9	Not Detected

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	101	70-130
1,2-Dichloroethane-d4	98	70-130
4-Bromofluorobenzene	107	70-130

Eurofins Air Toxics Inc.

EPA TO-15/MODIFIED TO14A

Data file : /chem/msdp.i/22dec14.b/p122205d.d
Lab Smp Id: Lab blank Client Smp ID: Lab blank
Inj Date : 22-DEC-2014 11:12
Operator : js Inst ID: msdp.i
Smp Info : 200ml #33329
Misc Info : Humid
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msdp.i/22dec14.b/p14q1217a.m
Meth Date : 24-Dec-2014 07:32 dbailey Quant Type: ISTD
Cal Date : 17-DEC-2014 21:17 Cal File: p121708.d
Als bottle: 12
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: And19256.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
* 98 Bromochloromethane						CAS #: 74-97-5	
5.455	5.455 (1.000)	130	104644	25.0000		80.00- 120.00	100.00
5.455	5.455 (1.000)	128	80323			0.00- 30.00	76.76
5.448	5.455 (1.000)	49	207047			0.00- 30.00	197.86
* 123 1,4-Difluorobenzene						CAS #: 540-36-3	
6.344	6.344 (1.000)	114	473941	25.0000		80.00- 120.00	100.00
6.344	6.344 (1.000)	88	86479			0.00- 30.00	18.25
* 163 Chlorobenzene-d5						CAS #: 3114-55-4	
8.779	8.779 (1.000)	117	537679	25.0000		80.00- 120.00	100.00
8.779	8.779 (1.000)	82	335863			0.00- 30.00	62.47
$ 117 1,2-Dichloroethane-d4						CAS #: 17060-07-0	
5.985	5.985 (1.097)	65	243589	24.3844	24.384	80.00- 120.00	100.00
5.985	5.985 (1.097)	67	115351			0.00- 30.00	47.35

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
$ 146 Toluene-d8					CAS #: 2037-26-5		
7.554	7.554 (1.191)	98	564444	25.2695	25.269	80.00- 120.00	100.00
7.554	7.554 (1.191)	70	69700			0.00- 30.00	12.35
7.554	7.554 (1.191)	100	362362			0.00- 30.00	64.20
$ 177 4-Bromofluorobenzene					CAS #: 460-00-4		
9.768	9.760 (1.113)	174	425755	26.6968	26.697	80.00- 120.00	100.00
9.768	9.760 (1.113)	95	460565			0.00- 30.00	108.18
9.768	9.760 (1.113)	176	381047			0.00- 30.00	89.50

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdp.i
Lab File ID: p122205d.d
Lab Smp Id: Lab blank
Analysis Type: VOA
Quant Type: ISTD
Operator: js
Method File: /chem/msdp.i/22dec14.b/p14q1217a.m
Misc Info: Humid

Calibration Date: 22-DEC-2014
Calibration Time: 09:50
Client Smp ID: Lab blank
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
98 Bromochloromethan	153275	91965	214585	104644	-31.73
123 1,4-Difluorobenze	654249	392549	915949	473941	-27.56
163 Chlorobenzene-d5	700329	420197	980461	537679	-23.22

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
98 Bromochloromethan	5.46	5.13	5.79	5.46	0.00
123 1,4-Difluorobenze	6.34	6.01	6.67	6.34	0.00
163 Chlorobenzene-d5	8.78	8.45	9.11	8.78	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: 24-Dec-2014 07:38

Eurofins Air Toxics Inc.

RECOVERY REPORT

Client Name:
Client SDG: 22dec14
Sample Matrix: GAS
Fraction: VOA
Lab Smp Id: Lab blank
Client Smp ID: Lab blank
Level: LOW
Operator: js
Data Type: MS DATA
SampleType: SAMPLE
SpikeList File: 2926Spectra.spk
Quant Type: ISTD
Sublist File: And19256.sub
Method File: /chem/msdp.i/22dec14.b/p14q1217a.m
Misc Info: Humid

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 117 1,2-Dichloroethane	25.000	24.384	97.54	70-130
$ 146 Toluene-d8	25.000	25.269	101.08	70-130
$ 177 4-Bromofluorobenze	25.000	26.697	106.79	70-130

Data File: /chem/msdp.i/22dec14.b/p122205d.d

Date : 22-DEC-2014 11:12

Client ID: Lab blank

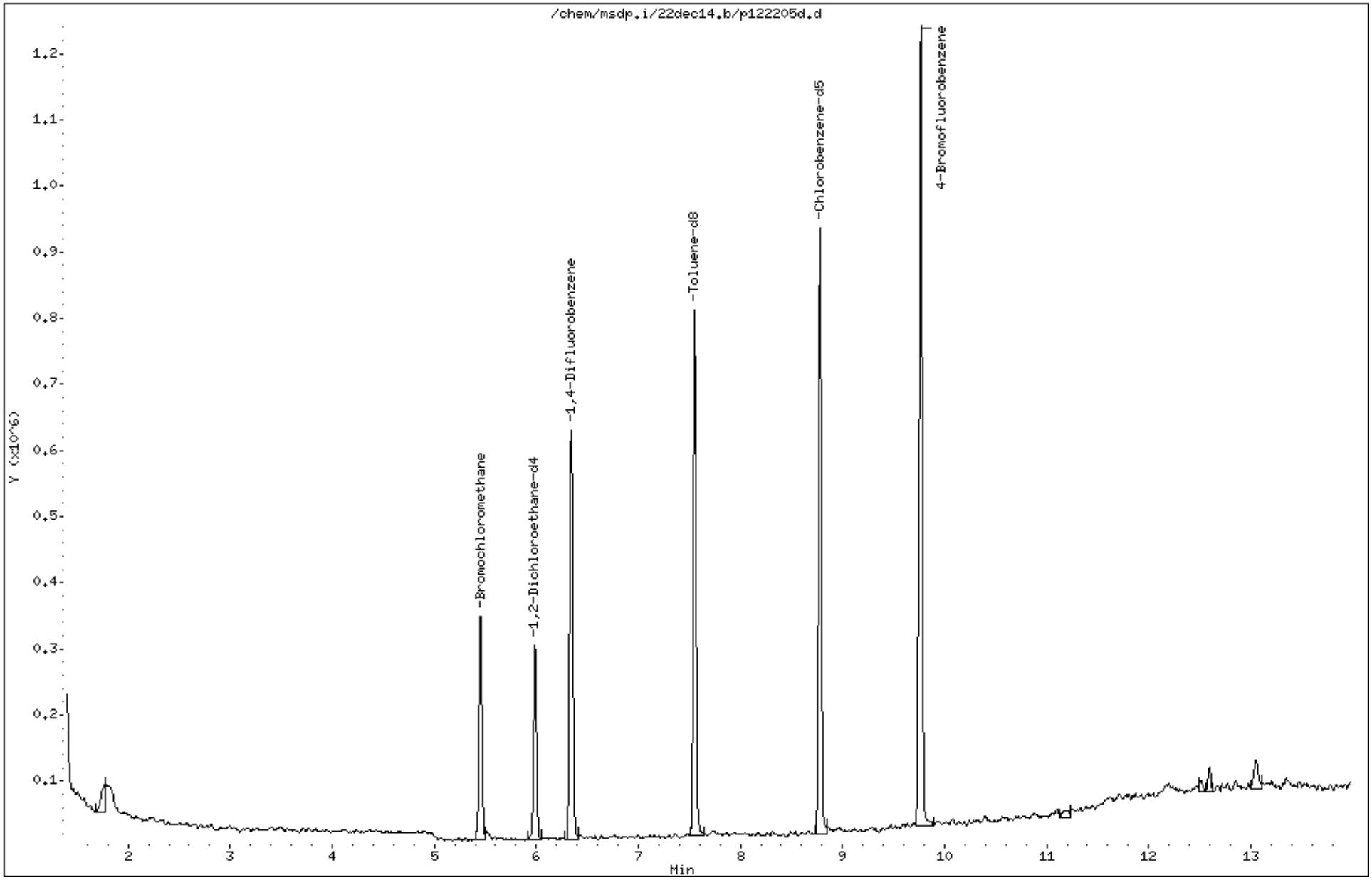
Instrument: msdp.i

Sample Info: 200ml #33329

Operator: js

Column phase: RTX-624

Column diameter: 0.25



LEVEL-IV VALIDATABLE

EPA METHOD TO-15 GC/MS FULL SCAN

SURROGATE RECOVERY FORM

Lab Name: AIR TOXICS LIMITED. SDG No.: 1412216A

	CLIENT SAMPLE NO.	SURROGATE % RECOVERY								
		1,2-Dichloroethane-d4	#	Toluene-d8	#	4-Bromofluorobenzene	#		#	TOTAL OUT
01	B5SS-7 (2014)	94		100		100				0
02	B5SS-4 (2014)	98		103		94				0
03	B5SS-6 (2014)	96		102		100				0
04	B5SS-2 (2014)	98		101		98				0
05	B5SS-3 (2014)	99		99		90				0
06	B5SS-5 (2014)	93		109		97				0
07	B5SS-1 (2014)	96		108		91				0
08	B5SS-1D (2014)	95		104		94				0
09	Lab Blank	96		99		89				0
10	Lab Blank	98		101		107				0
11	CCV	92		100		98				0
12	CCV	88		104		99				0
13	LCS	96		99		98				0
14	LCSD	92		98		99				0
15	LCS	92		104		102				0
16	LCSD	98		105		100				0
17										0
18										0
19										0
20										0
21										0
22										0
23										0
24										0

Surrogate Recovery Limits

1,2-Dichloroethane-d4 70 - 130
Toluene-d8 70 - 130
4-Bromofluorobenzene 70 - 130

* Designates values outside of QC limits

LEVEL-IV VALIDATABLE

EPA Method TO-15 GC/MS Full Scan

INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name:	AIR TOXICS, LTD	SDG No:	1412216A
Lab File ID:	14121802.d	Date Analyzed:	12/18/2014
Instrument ID:	msd14.i	Time Analyzed:	07:52 PM

		Chlorobenzene-d5 Area	#	RT	#	1,4-Difluorobenzene Area	#	RT	#	Bromochloromethane Area	#	RT	#
	24-HOUR STD	512999		9.83		570831		5.86		124906		4.75	
	UPPER LIMIT	718199		10.16		799163		06.19		174868		05.08	
	LOWER LIMIT	307799		09.50		342499		05.53		74944		04.42	
	CLIENT SAMPLE NO												
01	B5SS-3 (2014)	430684		9.83		480825		5.86		109019		4.75	
02	B5SS-5 (2014)	462917		9.83		509608		5.86		119290		4.75	
03	B5SS-1 (2014)	468155		9.83		501497		5.86		116188		4.75	
04	B5SS-1D (2014)	479014		9.83		529536		5.86		120745		4.75	
05	Lab Blank	475190		9.83		505416		5.86		115975		4.75	
06	CCV	512999		9.83		570831		5.86		124906		4.75	
07	LCS	523880		9.83		575011		5.86		125878		4.75	
08	LCSD	528961		9.83		593558		5.86		132393		4.75	
09													
10													
11													
12													
13													
14													
15													
16													
17													
18													
19													
20													
21													
22													

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

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

* Designates values outside of QC limits

LEVEL-IV VALIDATABLE

EPA Method TO-15 GC/MS Full Scan

INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: AIR TOXICS, LTD

SDG No: 1412216A

Lab File ID: p122202.d

Date Analyzed: 12/22/2014

Instrument ID: msdp.i

Time Analyzed: 09:50 AM

		Chlorobenzene-d5 Area	#	RT	#	1,4-Difluorobenzene Area	#	RT	#	Bromochloromethane Area	#	RT	#
	24-HOUR STD	700329		8.78		654249		6.34		153275		5.46	
	UPPER LIMIT	980461		09.11		915949		06.67		214585		05.79	
	LOWER LIMIT	420197		08.45		392549		06.01		91965		05.13	
	CLIENT SAMPLE NO												
01	B5SS-7 (2014)	568391		8.78		528182		6.34		118461		5.45	
02	B5SS-4 (2014)	554776		8.78		489620		6.34		111765		5.45	
03	B5SS-6 (2014)	496691		8.78		453391		6.34		102471		5.45	
04	B5SS-2 (2014)	492274		8.78		413366		6.34		101183		5.45	
05	Lab Blank	537679		8.78		473941		6.34		104644		5.46	
06	CCV	700329		8.78		654249		6.34		153275		5.46	
07	LCS	632500		8.78		570885		6.34		130367		5.45	
08	LCSD	617199		8.78		560824		6.34		116622		5.46	
09													
10													
11													
12													
13													
14													
15													
16													
17													
18													
19													
20													
21													
22													

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

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

RT Upper Limit=+0.33 minutes of internal standard RT

RT Lower Limit=-0.33 minutes of internal standard RT

* Designates values outside of QC limits

SAMPLE RESULTS/SAMPLE RESULTS DUPLICATE

Lab Name: Air Toxics Ltd.

Lab File ID: 14121804.d & 14121803.d

Lab Sample ID: &

Dilution: 1.00 & 1.00

Client Sample ID: LCS & LCSD

Date Analyzed: 12/18/14 & 12/18/14

CAS Number	Compound	Original Amount	Original Flags	Duplicate Amount	Duplicate Flags	RPD	Result Less Than 5X RL
67-63-0	2-Propanol	80		83		3.7	Y
108-10-1	4-Methyl-2-pentanone	85		86		1.2	
67-64-1	Acetone	88		86		2.3	Y
71-43-2	Benzene	86		85		1.2	
100-41-4	Ethyl Benzene	91		94		3.2	
108-38-3	m,p-Xylene	93		99		6.2	
95-47-6	o-Xylene	89		95		6.5	
108-88-3	Toluene	90		90		0	

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

SAMPLE RESULTS/SAMPLE RESULTS DUPLICATE

Lab Name: Air Toxics Ltd.

Lab File ID: p122204.d & p122203.d

Lab Sample ID: &

Dilution: 1.00 & 1.00

Client Sample ID: LCS & LCSD

Date Analyzed: 12/22/14 & 12/22/14

CAS Number	Compound	Original Amount	Original Flags	Duplicate Amount	Duplicate Flags	RPD	Result Less Than 5X RL
67-63-0	2-Propanol	90		97		7.5	
108-10-1	4-Methyl-2-pentanone	94		90		4.3	
67-64-1	Acetone	88		95		7.6	
71-43-2	Benzene	107		100		6.8	
100-41-4	Ethyl Benzene	100		95		5.1	
108-38-3	m,p-Xylene	104		101		2.9	
95-47-6	o-Xylene	108		105		2.8	
108-88-3	Toluene	104		98		5.9	

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 : 17-DEC-2014 19:11
End Cal Date : 17-DEC-2014 21:17
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msdp.i/17dec14.b/p14q1217a.m
Cal Date : 18-Dec-2014 12:02 jscarbro
Curve Type : Average

Calibration File Names:
Level 2: /chem/msdp.i/17dec14.b/p121703.d
Level 3: /chem/msdp.i/17dec14.b/p121704.d
Level 5: /chem/msdp.i/17dec14.b/p121705.d
Level 6: /chem/msdp.i/17dec14.b/p121706.d
Level 7: /chem/msdp.i/17dec14.b/p121707.d
Level 8: /chem/msdp.i/17dec14.b/p121708.d

Compound	0.50000 Level 2	2.000 Level 3	20.000 Level 5	50.000 Level 6	100.000 Level 7	200.000 Level 8	___ RRF	% RSD
1 Dimethyl Ether	++++++	++++++	++++++	++++++	++++++	++++++	++++++	++++++
2 Freon 14	++++++	++++++	++++++	++++++	++++++	++++++	++++++	++++++
3 Acetaldehyde	++++++	++++++	++++++	++++++	++++++	++++++	++++++	++++++
4 Hexafluoropropene	++++++	++++++	++++++	++++++	++++++	++++++	++++++	++++++
5 Freon 13	++++++	++++++	++++++	++++++	++++++	++++++	++++++	++++++
6 Freon 143a	++++++	++++++	++++++	++++++	++++++	++++++	++++++	++++++
7 Freon 134a	++++++	++++++	++++++	++++++	++++++	++++++	++++++	++++++
8 Propane	++++++	++++++	++++++	++++++	++++++	++++++	++++++	++++++
9 Propylene	++++++	2.11495	2.07784	1.99137	2.03334	2.34420	2.11234	6.518
10 1,1-Difluoroethane	++++++	++++++	++++++	++++++	++++++	++++++	++++++	++++++
11 Freon 12	6.57207	6.70347	6.87173	6.59496	6.59997	7.41714	6.79322	4.788
12 Vinyl Fluoride	++++++	++++++	++++++	++++++	++++++	++++++	++++++	++++++
13 Chlorodifluoromethane	++++++	++++++	++++++	++++++	++++++	++++++	++++++	++++++
14 Ethylene Oxide	++++++	++++++	++++++	++++++	++++++	++++++	++++++	++++++
15 Freon 114	5.19720	4.45098	3.99390	4.16990	4.43831	4.92018	4.52841	10.018
16 Freon 142b	++++++	++++++	++++++	++++++	++++++	++++++	++++++	++++++
17 Chloromethane	++++++	2.48605	2.04403	1.91624	1.78353	2.14814	2.07560	12.870
18 Isobutane	++++++	++++++	++++++	++++++	++++++	++++++	++++++	++++++
19 Isobutylene	++++++	++++++	++++++	++++++	++++++	++++++	++++++	++++++
20 2-Butene	++++++	++++++	++++++	++++++	++++++	++++++	++++++	++++++
21 trans-2-butene	++++++	++++++	++++++	++++++	++++++	++++++	++++++	++++++
22 1-Butene	++++++	++++++	++++++	++++++	++++++	++++++	++++++	++++++
23 Butane	++++++	0.41291	0.52583	0.45840	0.47009	0.52157	0.47776	9.856
24 cis-2-Butene	++++++	++++++	++++++	++++++	++++++	++++++	++++++	++++++
25 Vinyl Chloride	2.62514	2.13534	2.33204	2.21582	1.93815	2.22442	2.24515	10.148

Eurofins Air Toxics Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 17-DEC-2014 19:11
End Cal Date : 17-DEC-2014 21:17
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msdp.i/17dec14.b/p14q1217a.m
Cal Date : 18-Dec-2014 12:02 jscarbro
Curve Type : Average

Compound	0.50000 Level 2	2.000 Level 3	20.000 Level 5	50.000 Level 6	100.000 Level 7	200.000 Level 8	___ RRF	% RSD
26 1,3-Butadiene	1.98627	1.94416	2.04683	2.20492	1.87678	2.04989	2.01814	5.570
27 3-Methyl-1-butene	++++++	++++++	++++++	++++++	++++++	++++++	++++++	++++++
28 Methanol	++++++	++++++	++++++	++++++	++++++	++++++	++++++	++++++
29 Bromomethane	++++++	1.64858	1.32852	1.38064	1.39342	1.53332	1.45690	9.009
30 Chloroethane	++++++	1.03433	1.03746	1.09928	1.06770	0.97769	1.04329	4.326
31 Isopentane	++++++	2.74950	2.56635	2.51588	2.59778	2.81618	2.64914	4.820
32 Vinyl Bromide	++++++	++++++	++++++	++++++	++++++	++++++	++++++	++++++
33 2-Chloropropane	++++++	++++++	++++++	++++++	++++++	++++++	++++++	++++++
34 Pentane	++++++	++++++	++++++	++++++	++++++	++++++	++++++	++++++
35 Freon 11	7.37546	6.45371	6.30002	6.22685	6.52755	7.53505	6.73644	8.449
36 1-Pentene	++++++	++++++	++++++	++++++	++++++	++++++	++++++	++++++
37 Dichlorofluoromethane	++++++	++++++	++++++	++++++	++++++	++++++	++++++	++++++
38 2,3-Dimethylbutane	++++++	++++++	++++++	++++++	++++++	++++++	++++++	++++++
39 Isoprene	++++++	++++++	++++++	++++++	++++++	++++++	++++++	++++++
40 2-Methyl-2-butene	++++++	++++++	++++++	++++++	++++++	++++++	++++++	++++++
41 trans-2-Pentene	++++++	++++++	++++++	++++++	++++++	++++++	++++++	++++++
42 Ethanol	++++++	1.09291	0.65050	0.69290	0.68663	0.81847	0.78828	23.056
43 1,2-Dichloro-1-fluoroethane	++++++	++++++	++++++	++++++	++++++	++++++	++++++	++++++
44 Ethyl Ether	++++++	++++++	++++++	++++++	++++++	++++++	++++++	++++++
45 cis-2-Pentene	++++++	++++++	++++++	++++++	++++++	++++++	++++++	++++++
46 Acrolein	++++++	++++++	++++++	++++++	++++++	++++++	++++++	++++++
47 Freon 123a	++++++	++++++	++++++	++++++	++++++	++++++	++++++	++++++
48 Freon 123	++++++	++++++	++++++	++++++	++++++	++++++	++++++	++++++
49 Freon 113	2.54495	2.80081	2.78706	2.62260	2.74077	3.20470	2.78348	8.229
50 1,1-Dichloroethene	0.72320	0.95024	0.80373	0.91460	0.90613	1.02749	0.88756	12.200
51 2,2-Dimethylbutane	++++++	++++++	++++++	++++++	++++++	++++++	++++++	++++++
52 Acetone	++++++	1.07158	0.88761	0.97912	1.00851	1.05788	1.00094	7.343
53 Iodomethane	++++++	++++++	++++++	++++++	++++++	++++++	++++++	++++++
54 Bromoethane	++++++	++++++	++++++	++++++	++++++	++++++	++++++	++++++
55 4-Methyl-1-pentene	++++++	++++++	++++++	++++++	++++++	++++++	++++++	++++++
56 Carbon Disulfide	++++++	4.56058	4.04131	4.13966	4.22005	4.57020	4.30636	5.685
57 2-Propanol	++++++	3.59842	3.28321	3.42791	3.71338	4.04196	3.61298	8.038
58 3-Chloropropene	0.63360	0.78057	0.71630	0.72923	0.71747	0.79009	0.72788	7.718

Eurofins Air Toxics Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 17-DEC-2014 19:11
End Cal Date : 17-DEC-2014 21:17
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msdp.i/17dec14.b/p14q1217a.m
Cal Date : 18-Dec-2014 12:02 jscarbro
Curve Type : Average

Compound	0.50000 Level 2	2.000 Level 3	20.000 Level 5	50.000 Level 6	100.000 Level 7	200.000 Level 8	___ RRF	% RSD
59 Cyclopentene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
60 2-Methylpentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
61 Methyl Acetate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
62 3-Methylpentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
63 Acetonitrile	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
64 Cyclopentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
65 1-Chloropropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
66 Methylene Chloride	2.19408	2.26004	2.26491	2.29351	2.30075	2.33350	2.27446	2.090
67 2-Methyl-1-pentene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
68 2,4-Dimethylpentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
69 2,3-Dimethylpentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
70 tert-Butyl chloride	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
71 tert-Butyl alcohol	+++++	3.90238	4.00132	3.99257	4.23106	5.02468	4.23040	10.881
72 Methyl tert-butyl ether	4.80077	4.50564	4.70281	4.72229	4.90309	5.91679	4.92523	10.216
73 trans-1,2-Dichloroethene	0.60876	1.01887	0.84875	0.85197	0.90577	0.96377	0.86631	16.420
74 Acrylonitrile	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
75 trans-2-Hexene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
76 1-Hexene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
77 cis-2-Hexene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
78 Hexane	3.54787	2.71271	3.20763	3.03130	3.04692	3.53267	3.17985	10.128
79 Methylcyclopentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
80 sec-Butyl chloride	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
81 2,3,4-Trimethylpentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
82 1,1-Dichloroethane	3.59568	3.72423	3.61957	3.57090	3.59627	3.96171	3.67806	4.050
83 Isopropyl ether	+++++	5.23434	6.36964	5.71969	5.63113	6.76245	5.94345	10.313
84 1-Propanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
85 Chloroprene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
86 Vinyl Acetate	+++++	0.34745	0.36840	0.42761	0.45150	0.49152	0.41730	14.205
87 Butanal	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
88 Ethyl-tert-butyl ether	+++++	5.01429	5.91693	5.64892	5.79746	7.08432	5.89238	12.758
89 Isobutyl chloride	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
90 2,2-Dichloropropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
91 cis-1,2-Dichloroethene	0.88847	1.11712	1.12798	1.16209	1.17599	1.26227	1.12232	11.185

Eurofins Air Toxics Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 17-DEC-2014 19:11
End Cal Date : 17-DEC-2014 21:17
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msdp.i/17dec14.b/p14q1217a.m
Cal Date : 18-Dec-2014 12:02 jscarbro
Curve Type : Average

Compound	0.50000 Level 2	2.000 Level 3	20.000 Level 5	50.000 Level 6	100.000 Level 7	200.000 Level 8	___ RRF	% RSD
92 2-Butanone	+++++	0.80301	0.81895	0.89928	0.91323	0.96465	0.87982	7.687
93 Methyl Acrylate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
94 Ethyl Acetate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
95 Methacrylonitrile	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
96 2-Chloropentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
97 2-Butanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
99 Tetrahydrofuran	3.32839	2.31610	2.39835	2.44249	2.47189	2.76754	2.62079	14.464
100 Chloroform	4.18147	4.16015	4.20609	4.09660	4.08435	4.45656	4.19754	3.228
101 1-Bromopropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
102 Cyclohexane	1.99191	1.98085	2.21453	2.13114	2.09275	2.47055	2.14696	8.438
103 1,1,1-Trichloroethane	4.80642	4.71759	4.63923	4.39446	4.47124	5.21255	4.70691	6.183
104 Chloroacetonitrile	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
105 n-Butylchloride	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
106 Carbon Tetrachloride	5.42421	4.16508	4.96580	4.59490	4.49245	5.43397	4.84607	10.707
107 1,1-Dichloropropene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
108 Thiophene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
109 2-Methylhexane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
110 3-Methylhexane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
111 Cyclohexene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
113 2,2,4-Trimethylpentane	9.77886	8.03580	10.54552	9.51289	8.57354	10.15634	9.43382	10.143
114 1-Methoxy-2-propanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
115 Isobutanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
116 Benzene	1.15134	1.03314	1.15811	1.15863	1.12009	1.13478	1.12601	4.254
118 1-Heptene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
119 tert-Amyl methyl ether	+++++	0.21320	0.26848	0.26924	0.25152	0.28431	0.25735	10.598
120 1,2-Dichloroethane	0.76021	0.73216	0.72419	0.74223	0.71731	0.70554	0.73027	2.641
121 Heptane	0.28150	0.30510	0.40356	0.41572	0.38977	0.39606	0.36528	15.582
122 2,3-Dichloro-1-propene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
124 n-Butanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
125 Trichloroethene	0.50487	0.52377	0.53845	0.54396	0.53656	0.52726	0.52915	2.650
126 Bromodichloroethene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
127 Methylcyclohexane	0.59261	0.53528	0.64485	0.65199	0.57381	0.64178	0.60672	7.772
128 Ethyl acrylate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

Eurofins Air Toxics Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 17-DEC-2014 19:11
End Cal Date : 17-DEC-2014 21:17
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msdp.i/17dec14.b/p14q1217a.m
Cal Date : 18-Dec-2014 12:02 jscarbro
Curve Type : Average

Compound	0.50000 Level 2	2.000 Level 3	20.000 Level 5	50.000 Level 6	100.000 Level 7	200.000 Level 8	___ RRF	% RSD
129 2-Methylheptane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
130 3-Methylheptane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
131 2-Pentanone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
132 1,2-Dichloropropane	0.58851	0.52042	0.55058	0.56036	0.52675	0.53487	0.54691	4.610
133 1-Bromo-2-Chloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
134 Methyl Methacrylate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
135 Diethyl Ketone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
136 1,4-Dioxane	+++++	0.28364	0.28463	0.29517	0.29183	0.29559	0.29017	1.968
137 Dibromomethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
138 Bromodichloromethane	1.14707	0.98270	1.05955	1.07978	1.03170	1.03749	1.05638	5.216
139 2-Nitropropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
140 bis(chloromethyl) Ether	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
141 1-Octene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
142 Epichlorohydrin	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
143 2-Chloroethyl Vinyl Ether	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
144 cis-1,3-Dichloropropene	0.86043	0.73456	0.72637	0.78146	0.75342	0.75343	0.76828	6.377
145 4-Methyl-2-pentanone	0.54013	0.48193	0.55064	0.56312	0.53343	0.56373	0.53883	5.641
147 Toluene	1.55479	1.56993	1.69326	1.73048	1.61125	1.66174	1.63691	4.271
148 Octane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
149 Vinyl Cyclohexene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
150 trans-1,3-Dichloropropene	0.84506	0.82004	0.77337	0.82084	0.85882	0.82251	0.82344	3.539
151 Ethyl Methacrylate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
152 1-Chloro-2-Bromopropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
153 1-Nitropropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
154 Bromodichloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
155 1,1,2-Trichloroethane	0.58161	0.45671	0.52979	0.52233	0.53931	0.51361	0.52389	7.742
156 Tetrachloroethene	0.76371	0.70550	0.76531	0.77401	0.76674	0.74453	0.75330	3.371
157 1,3-Dichloropropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
158 2-Hexanone	0.73389	0.59119	0.69111	0.76707	0.80974	0.80496	0.73300	11.266
159 Butyl Acetate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
160 Dibromochloromethane	0.97985	0.89550	1.01402	1.01055	1.02878	1.01915	0.99131	5.019
161 1,2-Dibromoethane (EDB)	0.81782	0.70613	0.78199	0.79921	0.80845	0.78004	0.78227	5.126
162 1-Nonene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

Eurofins Air Toxics Inc.

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Integrator : HP RTE
Method file : /chem/msdp.i/17dec14.b/p14q1217a.m
Cal Date : 18-Dec-2014 12:02 jscarbro
Curve Type : Average

Compound	0.50000 Level 2	2.000 Level 3	20.000 Level 5	50.000 Level 6	100.000 Level 7	200.000 Level 8	___ RRF	% RSD
164 1-Chlorohexane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
165 Chlorobenzene	1.13760	1.15125	1.23155	1.24256	1.22987	1.20825	1.20018	3.733
166 Butyl Ether	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
167 Ethyl Benzene	0.65026	0.58939	0.64249	0.65941	0.65184	0.65654	0.64165	4.092
168 1,1,1,2-Tetrachloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
169 m,p-Xylene	0.75272	0.66257	0.79829	0.81915	0.82160	0.81574	0.77834	8.001
170 Nonane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
171 o-Xylene	0.60722	0.63339	0.78323	0.78237	0.77972	0.78499	0.72849	11.561
172 Styrene	1.26973	1.01451	1.31370	1.32813	1.31647	1.34003	1.26376	9.845
173 2-Heptanone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
174 Bromoform	1.30361	1.06542	1.16692	1.16709	1.17068	1.17153	1.17421	6.453
175 Cumene	2.66540	2.20963	2.63121	2.58830	2.58365	2.63970	2.55298	6.702
176 Cyclohexanone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
178 1-Decene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
179 alpha-Pinene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
180 Bromobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
181 1,1,2,2-Tetrachloroethane	1.50934	1.17880	1.32670	1.27592	1.24994	1.27480	1.30258	8.611
182 Propylbenzene	3.20817	2.67037	3.22565	3.24023	3.19344	3.28760	3.13758	7.368
183 1,4-Dichloro-2-Butene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
184 trans-1,4-Dichloro-2-butene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
185 1,2,3-Trichloropropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
186 3-Ethyltoluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
187 Decane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
188 4-Ethyltoluene	0.63977	0.56407	0.73868	0.72657	0.67623	0.69786	0.67387	9.566
189 2-Chlorotoluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
190 1,3,5-Trimethylbenzene	0.87267	0.77335	0.85683	0.87091	0.88540	0.90567	0.86081	5.330
191 4-Chlorotoluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
192 beta-Pinene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
193 Diisobutyl Ketone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
194 alpha Methyl Styrene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
195 tert-Butylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
196 1,2,4-Trimethylbenzene	0.73854	0.63674	0.81087	0.84057	0.80488	0.82273	0.77572	9.851
197 Pentachloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

Eurofins Air Toxics Inc.

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Cal Date : 18-Dec-2014 12:02 jscarbro
Curve Type : Average

Compound	0.50000 Level 2	2.000 Level 3	20.000 Level 5	50.000 Level 6	100.000 Level 7	200.000 Level 8	___ RRF	% RSD
198 Limonene	#####	#####	#####	#####	#####	#####	#####	#####
199 D-Limonene	#####	#####	#####	#####	#####	#####	#####	#####
200 Benzaldehyde	#####	#####	#####	#####	#####	#####	#####	#####
201 Indan	#####	#####	#####	#####	#####	#####	#####	#####
202 Indene	#####	#####	#####	#####	#####	#####	#####	#####
203 sec-Butylbenzene	#####	#####	#####	#####	#####	#####	#####	#####
204 Isobutylbenzene	#####	#####	#####	#####	#####	#####	#####	#####
205 2-Ethyltoluene	#####	#####	#####	#####	#####	#####	#####	#####
206 bis(2-Chloroethyl) Ether	#####	#####	#####	#####	#####	#####	#####	#####
207 p-Cymene	#####	#####	#####	#####	#####	#####	#####	#####
208 1,3-Dichlorobenzene	1.44778	1.18740	1.38301	1.33904	1.32304	1.32825	1.33475	6.446
209 1,4-Dichlorobenzene	1.44748	1.08516	1.36146	1.34058	1.33116	1.33073	1.31609	9.224
210 1,2,3-Trimethylbenzene	#####	#####	#####	#####	#####	#####	#####	#####
211 1-Undecene	#####	#####	#####	#####	#####	#####	#####	#####
212 alpha-Chlorotoluene	1.55659	1.15852	1.29692	1.26882	1.28681	1.33660	1.31738	9.986
213 Butylbenzene	#####	#####	#####	#####	#####	#####	#####	#####
214 1,2-Dichlorobenzene	1.19968	1.03794	1.28456	1.21285	1.17621	1.21191	1.18719	6.874
215 Undecane	#####	#####	#####	#####	#####	#####	#####	#####
216 4-Ethyl-1,2-dimethylbenzene	#####	#####	#####	#####	#####	#####	#####	#####
217 Hexachloroethane	#####	#####	#####	#####	#####	#####	#####	#####
218 1,3-Diethylbenzene	#####	#####	#####	#####	#####	#####	#####	#####
219 1,4-Diethylbenzene	#####	#####	#####	#####	#####	#####	#####	#####
220 1,2,4,5-tetramethylbenzene	#####	#####	#####	#####	#####	#####	#####	#####
221 1,2-Dibromo-3-chloropropane	#####	#####	#####	#####	#####	#####	#####	#####
222 1-Dodecene	#####	#####	#####	#####	#####	#####	#####	#####
223 Nitrobenzene	#####	#####	#####	#####	#####	#####	#####	#####
224 1,3,5-Trichlorobenzene	#####	#####	#####	#####	#####	#####	#####	#####
225 Dodecane	#####	#####	#####	#####	#####	#####	#####	#####
226 1,2,4-Trichlorobenzene	#####	0.65989	0.69346	0.77778	0.79756	0.82918	0.75157	9.550
227 Hexachlorobutadiene	#####	0.76916	0.78485	0.90951	0.97128	0.99239	0.88544	11.713
228 Naphthalene	#####	2.65076	2.31069	2.65476	2.73703	2.90986	2.65262	8.221
229 1,2,3-Trichlorobenzene	#####	#####	#####	#####	#####	#####	#####	#####
230 Tridecane	#####	#####	#####	#####	#####	#####	#####	#####

Eurofins Air Toxics Inc.

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Cal Date : 18-Dec-2014 12:02 jscarbro
Curve Type : Average

	Compound	0.50000 Level 2	2.000 Level 3	20.000 Level 5	50.000 Level 6	100.000 Level 7	200.000 Level 8	___ RRF	% RSD
	231 Quinoline	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	232 2-Methylnaphthalene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	233 1,3,5-Triethylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	234 Acenaphthylene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	235 Phenanthrene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	236 Anthracene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
M	237 1,2-Dichloroethene (Total)	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
M	238 Chlorobutane (Total)	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
M	239 Total Xylene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
M	240 3 and 4-Ethyltoluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	241 Total Volatile Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	242 TPH reference to Hexane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	243 TPH reference to Heptane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	244 TPH reference to Gasoline	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	245 TPH reference MineralSpirits	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	246 TPH reference to Stoddard	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	247 TVOC reference to Hexane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	248 TVOC reference to Heptane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	249 TVOC reference to Toluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	250 TVOC reference to Toluene-d8	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	251 NMOC reference to Hexane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	252 NMOC reference to Heptane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	253 NMOC reference to Toluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	254 C3 - C4 Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	255 C4 - C5 Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	256 C5 - C6 Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	257 C6 - C7 Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	258 C7 - C8 Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	259 C8 - C9 Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	260 C9 - C10 Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	261 C10+ Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	262 C5 - C6 Aliphatic ref C5 + C6	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	263 C6-C8 Aliphatic ref Heptane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

Eurofins Air Toxics Inc.

INITIAL CALIBRATION DATA

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Cal Date : 18-Dec-2014 12:02 jscarbro
Curve Type : Average

Compound	0.50000 Level 2	2.000 Level 3	20.000 Level 5	50.000 Level 6	100.000 Level 7	200.000 Level 8	___ RRF	% RSD
264 C8-C10 Aliphatic ref Decane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
265 C10-C12 Aliphatic ref Dodecan	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
266 C8-C10 Aromatic	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
267 C8-C10 Aromatic ref 1,2,3-TMB	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
268 C10-C12 Aromatic	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
269 C10-C12 Aromatic 1,2,4,5-TMB	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
270 C10-C12 Aromatic Naphthalene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
$ 112 Benzene-d6	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
$ 117 1,2-Dichloroethane-d4	2.19808	2.33133	2.26527	2.36775	2.42122	2.73568	2.38655	7.878
$ 146 Toluene-d8	1.14455	1.12436	1.23484	1.21230	1.16706	1.18642	1.17826	3.519
$ 177 4-Bromofluorobenzene	0.75969	0.68868	0.72806	0.74038	0.75098	0.78127	0.74151	4.254

Calibration History

Method : /chem/msdp.i/17dec14.b/p14q1217a.m
Start Cal Date: 17-DEC-2014 19:11
End Cal Date : 17-DEC-2014 21:17

Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 2 , Cal Amount: 0.50000		
17-DEC-2014 19:11	AT12low	/chem/msdp.i/17dec14.b/p121703.d
Cal Level: 3 , Cal Amount: 2.00000		
17-DEC-2014 19:35	AT12curve	/chem/msdp.i/17dec14.b/p121704.d
Cal Level: 5 , Cal Amount: 20.00000		
17-DEC-2014 20:00	AT12curve	/chem/msdp.i/17dec14.b/p121705.d
Cal Level: 6 , Cal Amount: 50.00000		
17-DEC-2014 20:25	AT12curve	/chem/msdp.i/17dec14.b/p121706.d
Cal Level: 7 , Cal Amount: 100.00000		
17-DEC-2014 20:50	AT12curve	/chem/msdp.i/17dec14.b/p121707.d
Cal Level: 8 , Cal Amount: 200.00000		
17-DEC-2014 21:17	AT12curve	/chem/msdp.i/17dec14.b/p121708.d

Continuing Calibration
Ccal Level Mode: GLOBAL LEVEL 6

Ccal Level: 6 , Ccal Amount: 50.000		
17-DEC-2014 20:25	AT12curve	/chem/msdp.i/17dec14.b/p121706.d

Eurofins Air Toxics Inc.

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Cal Date : 18-Dec-2014 12:02 jscarbro
Curve Type : Average

Calibration File Names:
Level 2: /chem/msdp.i/17dec14.b/p121703.d
Level 3: /chem/msdp.i/17dec14.b/p121704.d
Level 5: /chem/msdp.i/17dec14.b/p121705.d
Level 6: /chem/msdp.i/17dec14.b/p121706.d
Level 7: /chem/msdp.i/17dec14.b/p121707.d
Level 8: /chem/msdp.i/17dec14.b/p121708.d

Please see Calibration History page(s) for all the calibration files.

JL 12/18/14

Compound	0.50000 Level 2	2.000 Level 3	20.000 Level 5	50.000 Level 6	100.000 Level 7	200.000 Level 8	___ RRF	% RSD
1 Dimethyl Ether	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
2 Freon 14	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
3 Acetaldehyde	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
4 Hexafluoropropene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
5 Freon 13	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
6 Freon 143a	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
7 Freon 134a	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
8 Propane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
9 Propylene	+++++	2.11495	2.07784	1.99137	2.03334	2.34420	2.11234	6.518
10 1,1-Difluoroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
11 Freon 12	6.57207	6.70347	6.87173	6.59496	6.59997	7.41714	6.79322	4.788
12 Vinyl Fluoride	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
13 Chlorodifluoromethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
14 Ethylene Oxide	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
15 Freon 114	5.19720	4.45098	3.99390	4.16990	4.43831	4.92018	4.52841	10.018
16 Freon 142b	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
17 Chloromethane	+++++	2.48605	2.04403	1.91624	1.78353	2.14814	2.07560	12.870
18 Isobutane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
19 Isobutylene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
20 2-Butene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
21 trans-2-butene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
22 1-Butene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
23 Butane	+++++	0.41291	0.52583	0.45840	0.47009	0.52157	0.47776	9.856
24 cis-2-Butene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
25 Vinyl Chloride	2.62514	2.13534	2.33204	2.21582	1.93815	2.22442	2.24515	10.148

Initial Calibration Narrative

P14Q1217A.m

A multi-point initial calibration was analyzed on MSD-P on 12/17/14.

ICAL: Zero (0) out

Naphthalene is calibrated at 0.2ppbv, 2.0ppbv, 5.0ppbv, 10ppbv, and 20ppbv.

ICV: Two (2) out:
1, 2, 4 Trichlorobenzene @ 151.4% MUST BE NON DETECT
Alpha-Chlorotoluene: 160% MUST BE NON DETECT

ICV File: P121804; 50mL: #2687-143 (50ppbv→200ppbv)
No DOD or J Flagged WOs

MDL:
The TO-15 0.5ppbv MDL analyzed on 1/31/14.
The TO-15 2.0ppbv MDL analyzed on 2/06/14.
No MDL for Oxygenates and Vinyl Acetate.

MSDP

~~186474 / 191421(100) = 97.44% 12/18/14~~

BFB verification of 176/174 ratio: (/)*100= % 220245/ 235349(100)= 93.58%.			
IS/Surr Std#	2687-116	Exp. Date:	2/25/2015
BCM	131003		
1,4-DFB	594926		
CB-d5	646102		

Method TO-15/TO-14			
SOP# 6			
Vacuum:	NA		
Please check all standards			
Surrogate#	NA	Exp. Date:	NA
Surrogate#	NA	Exp. Date:	NA

Verified CCV vs ICAL mid-point(-40%): NA

Method: p14Q1217a.m

Use	File #	Enter/Scan Sample IDs	Canister#	Cart Pos.	Pressure	ml	DF	Verify Load	Loaded Init	Date Analyzed	Time Analyzed	Review Init	Comments
✓	P121702	BFB Tune Check	2687-116	12	36ng	50ml	1.00	OK	sn	12/17/14	~~1552~~ 1847	OK	
✓	P121703	ICAL Level #2	#2687-169	1	0.5ppbv (5.0ppbv)	20ml	1.00	OK	sn	12/17/14	1911	OK	Exp: 3/17/15
✓	P121704	ICAL Level #3	#2687-169	1	2.0ppbv (5.0ppbv)	80ml	1.00	OK	sn	12/17/14	~~2000~~ 1935	OK	
✓	P121705	ICAL Level #5	#2687-162	13	20ppbv (200ppbv)	20ml	1.00	OK	sn	12/17/14	~~2025~~ 2000	OK	Exp: 3/17/15 ;
✓	P121706	ICAL Level #6	#2687-162	13	50ppbv (200ppbv)	50ml	1.00	OK	sn	12/17/14	~~2050~~ 2025	OK	; CCV
✓	P121707	ICAL Level #7	#2687-162	13	100ppbv (200ppbv)	100ml	1.00	OK	sn	12/17/14	~~2117~~ 2050	OK	
✓	P121708	ICAL Level #8	#2687-162	13	200ppbv (200ppbv)	200ml	1.00	OK	sn	12/17/14	2117	OK	
✓	P121709	System Blank	#33329	12	Humid	200ml	1.00	OK	sn	12/17/14	2143	OK	
✓	P121710	System Blank	#33329	12	Humid	200ml	1.00	OK	sn	12/17/14	2236	OK	
X	P121711	ICV	#2687-110A	14	50ppbv (100ppbv)	100ml	1.00	OK	sn	12/17/14	2302	OK	Exp: 2/21/15 ; bad standard

12/18/14

MSDP

BFB verification of 176/174 ratio: (218218/222805)*100= 97.94 %

IS/Surr Std#	2687-116	Exp. Date:	2/25/2015
BCM	129,447		
1,4-DFB	592,059		
CB-d5	618,743		

Method TO-15/TO-14

SOP# 6

Vacuum: NA

Please check all standards

Surrogate#	NA	Exp. Date:	NA
Surrogate#	NA	Exp. Date:	NA

Verified CCV vs ICAL mid-point(-40%):

Method: p14Q1217a.m

Use	File #	Enter/Scan Sample IDs	Canister#	Cart Pos.	Pressure	ml	DF	Verify Load	Loaded Init	Date Analyzed	Time Analyzed	Review Init	Comments
✓	P121801	BFB Tune Check	2687-116	12	36ng	50ml	1.00	js	js	12/18/14	0816	js	
✓	P121802	CCV	#2687-162	13	50ppbv (200ppbv)	50ml	1.00	js	js	12/18/14	0843	js	exp. 3/17/15; 0 out
✗	P121803	ICV	#2687-110A	13	50ppbv (100ppbv)	100ml	1.00	js	js	12/18/14	0909	js	exp. 2/21/15; 3 out > 150%; bad standard
✓	P121804	ICV/LCS	#2687-143	2	50ppbv (200ppbv)	50ml	1.00	js	js	12/18/14	1004	js	exp. 3/10/15; 3 out; alpha CT and 1,2,4 Trichlorobenzene must be ND
✓	P121805	LCSD	#2687-143	2	50ppbv (200ppbv)	50ml	1.00	js	js	12/18/14	1042	js	
✓	P121806	Lab Blank	#33329	12	Humid	200ml	1.00	js	js	12/18/14	1108	js	
	~~P121807~~	~~1412235-01A~~	~~15763~~	~~3~~	~~3.7 Hg->14.9 psi~~	~~200ml~~	~~2.30~~		~~js~~	~~12/18/14~~			
	P121808	1412235-02A	8023	4	3.1 Hg->14.9 psi	200ml	2.24		js	12/18/14			
	P121809	1412235-03A	11,1644	5	3.7 Hg->15 psi	30ml	15.4		js	12/18/14			
	P121810	1412235-04A	37353	6	1.6 Hg->14.9 psi	200ml	2.13		js	12/18/14			
	P121811	1412235-05A	3997	7	1.4 Hg->14.9 psi	200ml	2.11		js	12/18/14			
	P121812	1412235-06A	15730	8	1 Hg->14.7 psi	200ml	2.07		js	12/18/14			

JS 12/18/14

Modified EPA Methods TO-14A/TO-15
Internal Standard and Associated Target Compounds and Surrogates

Bromochloromethane
Target Compounds:
Freon 12
Freon 114
Chloromethane
Vinyl Chloride
1,3-Butadiene
Bromomethane
Chloroethane
Freon 11
Ethanol
Freon 113
1,1-Dichloroethene
Acetone
2-Propanol
Carbon Disulfide
3-Chloropropene
Methylene Chloride
Methyl tert-butyl ether
trans-1,2-Dichloroethene
Hexane
1,1-Dichloroethane
2-Butanone (Methyl Ethyl Ketone)
cis-1,2-Dichloroethene
Tetrahydrofuran
Chloroform
1,1,1-Trichloroethane
Cyclohexane
Carbon Tetrachloride
2,2,4-Trimethylpentane
Surrogates:
1,2-Dichloroethane-d4

1,4-Difluorobenzene
Target Compounds:
Benzene
1,2-Dichloroethane
Heptane
Trichloroethene
1,2-Dichloropropane
1,4-Dioxane
Bromodichloromethane
cis-1,3-Dichloropropene
4-Methyl-2-pentanone
Toluene
Surrogates:
Toluene-d8

Chlorobenzene-d5
Target Compounds:
trans-1,3-Dichloropropene
1,1,2-Trichloroethane
Tetrachloroethene
2-Hexanone
Dibromochloromethane
1,2-Dibromoethane (EDB)
Chlorobenzene
Ethyl Benzene
m,p-Xylene
o-Xylene
Styrene
Bromoform
Cumene
1,1,2,2-Tetrachloroethane
Propylbenzene
4-Ethyltoluene
1,3,5-Trimethylbenzene
1,2,4-Trimethylbenzene
1,3-Dichlorobenzene
1,4-Dichlorobenzene
alpha-Chlorotoluene
1,2-Dichlorobenzene
1,2,4-Trichlorobenzene
Hexachlorobutadiene
Surrogates:
Bromofluorobenzene

Eurofins Air Toxics Inc.

EPA TO-15/MODIFIED TO14A

Data file : /chem/msdp.i/18dec14.b/p121804.d
Lab Smp Id: ICV Client Smp ID: ICV
Inj Date : 18-DEC-2014 10:04
Operator : js Inst ID: msdp.i
Smp Info : 50mL #2687-143
Misc Info : 50ppbv(200ppbv)
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msdp.i/18dec14.b/p14q1217a.m
Meth Date : 18-Dec-2014 12:04 jscarbro Quant Type: ISTD
Cal Date : 17-DEC-2014 21:17 Cal File: p121708.d
Als bottle: 2 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT12.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
* 98 Bromochloromethane						CAS #: 74-97-5	
5.448	5.448 (1.000)	130	116698	25.0000		80.00- 120.00	100.00
5.448	5.448 (1.000)	128	91371			0.00- 30.00	78.30
5.448	5.448 (1.000)	49	238968			0.00- 30.00	204.77
* 123 1,4-Difluorobenzene						CAS #: 540-36-3	
6.344	6.344 (1.000)	114	575618	25.0000		80.00- 120.00	100.00
6.337	6.344 (1.000)	88	101225			0.00- 30.00	17.59
* 163 Chlorobenzene-d5						CAS #: 3114-55-4	
8.779	8.779 (1.000)	117	638508	25.0000		80.00- 120.00	100.00
8.779	8.779 (1.000)	82	389118			0.00- 30.00	60.94
$ 117 1,2-Dichloroethane-d4						CAS #: 17060-07-0	
5.986	5.985 (1.099)	65	277018	24.8664	24.866	80.00- 120.00	100.00
5.986	5.985 (1.099)	67	158233			0.00- 30.00	57.12

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
$ 146 Toluene-d8					CAS #: 2037-26-5		
7.554	7.554 (1.191)	98	708192	26.1046	26.104	80.00- 120.00	100.00
7.554	7.554 (1.191)	70	80445			0.00- 30.00	11.36
7.554	7.554 (1.191)	100	447309			0.00- 30.00	63.16
$ 177 4-Bromofluorobenzene					CAS #: 460-00-4		
9.768	9.760 (1.113)	174	479250	25.3057	25.306	80.00- 120.00	100.00
9.768	9.760 (1.113)	95	545994			0.00- 30.00	113.93
9.768	9.760 (1.113)	176	475902			0.00- 30.00	99.30
9 Propylene					CAS #: 115-07-1		
1.473	1.473 (0.270)	41	564266	57.2264	57.226	80.00- 120.00	100.00
1.473	1.473 (0.270)	42	368885			0.00- 30.00	65.37
1.473	1.473 (0.270)	39	367803			0.00- 30.00	65.18
11 Freon 12					CAS #: 75-71-8		
1.501	1.509 (0.276)	85	1822345	57.4687	57.469	80.00- 120.00	100.00
1.509	1.509 (0.277)	87	598759			0.00- 30.00	32.86
15 Freon 114					CAS #: 76-14-2		
1.623	1.630 (0.298)	135	1113105	52.6583	52.658	80.00- 120.00	100.00
1.623	1.630 (0.298)	137	353186			0.00- 30.00	31.73
17 Chloromethane					CAS #: 74-87-3		
1.702	1.702 (0.312)	50	571695	59.0063	59.006	80.00- 120.00	100.00
1.702	1.702 (0.312)	52	198526			0.00- 30.00	34.73
23 Butane					CAS #: 106-97-8		
1.788	1.781 (0.328)	58	134531	60.3237	60.324	80.00- 120.00	100.00
1.781	1.781 (0.327)	43	1070299			0.00- 30.00	795.58
25 Vinyl Chloride					CAS #: 75-01-4		
1.817	1.809 (0.333)	62	654106	62.4136	62.414	80.00- 120.00	100.00
1.817	1.817 (0.333)	64	197840			0.00- 30.00	30.25
26 1,3-Butadiene					CAS #: 106-99-0		
1.845	1.845 (0.339)	54	548189	58.1910	58.191	80.00- 120.00	100.00
1.845	1.845 (0.339)	39	490076			0.00- 30.00	89.40
29 Bromomethane					CAS #: 74-83-9		
2.196	2.196 (0.403)	94	372144	54.7216	54.722	80.00- 120.00	100.00
2.196	2.189 (0.403)	96	361860			0.00- 30.00	97.24
30 Chloroethane					CAS #: 75-00-3		
2.304	2.311 (0.423)	64	267916	55.0135	55.014	80.00- 120.00	100.00
2.304	2.311 (0.423)	66	85487			0.00- 30.00	31.91

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
30 Chloroethane (continued)							
2.304	2.311 (0.423)	49	82807			0.00- 30.00	30.91
31 Isopentane					CAS #: 78-78-4		
2.340	2.339 (0.429)	43	639726	51.7328	51.733	80.00- 120.00	100.00
2.340	2.347 (0.429)	57	469222			0.00- 30.00	73.35
35 Freon 11					CAS #: 75-69-4		
2.569	2.569 (0.471)	101	1537868	48.9063	48.906	80.00- 120.00	100.00
2.569	2.569 (0.471)	103	1000846			0.00- 30.00	65.08
42 Ethanol					CAS #: 64-17-5		
2.884	2.891 (0.529)	45	190431	51.7527	51.753	80.00- 120.00	100.00
2.884	2.891 (0.529)	43	36016			0.00- 30.00	18.91
2.884	2.884 (0.529)	46	77596			0.00- 30.00	40.75
49 Freon 113					CAS #: 76-13-1		
3.213	3.213 (0.590)	151	681922	52.4835	52.483	80.00- 120.00	100.00
3.213	3.213 (0.590)	153	453935			0.00- 30.00	66.57
3.213	3.213 (0.590)	101	839996			0.00- 30.00	123.18
50 1,1-Dichloroethene					CAS #: 75-35-4		
3.242	3.242 (0.595)	98	227775	54.9772	54.977	80.00- 120.00	100.00
3.242	3.242 (0.595)	96	351819			0.00- 30.00	154.46
3.242	3.242 (0.595)	61	778382			0.00- 30.00	341.73
52 Acetone					CAS #: 67-64-1		
3.385	3.385 (0.621)	58	226304	48.4351	48.435	80.00- 120.00	100.00
3.385	3.385 (0.621)	43	654074			0.00- 30.00	289.02
56 Carbon Disulfide					CAS #: 75-15-0		
3.478	3.478 (0.638)	76	938566	46.6908	46.691	80.00- 120.00	100.00
57 2-Propanol					CAS #: 67-63-0		
3.557	3.564 (0.653)	45	812640	48.1847	48.185	80.00- 120.00	100.00
3.557	3.564 (0.653)	43	173890			0.00- 30.00	21.40
3.564	3.557 (0.654)	59	32484			0.00- 30.00	4.00
58 3-Chloropropene					CAS #: 107-05-1		
3.722	3.722 (0.683)	76	167408	49.2714	49.271	80.00- 120.00	100.00
3.722	3.722 (0.683)	41	558242			0.00- 30.00	333.46
66 Methylene Chloride					CAS #: 75-09-2		
3.894	3.901 (0.715)	49	550032	51.8066	51.807	80.00- 120.00	100.00
3.901	3.901 (0.716)	84	314684			0.00- 30.00	57.21
3.901	3.901 (0.716)	51	168654			0.00- 30.00	30.66

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
72 Methyl tert-butyl ether					CAS #: 1634-04-4		
4.123	4.130 (0.757)	73	1094890	47.6234	47.623	80.00- 120.00	100.00
4.130	4.130 (0.758)	57	286649			0.00- 30.00	26.18
4.123	4.130 (0.757)	41	266730			0.00- 30.00	24.36
73 trans-1,2-Dichloroethene					CAS #: 156-60-5		
4.152	4.152 (0.762)	98	180690	44.6823	44.682	80.00- 120.00	100.00
4.152	4.152 (0.762)	61	571362			0.00- 30.00	316.21
4.152	4.152 (0.762)	96	301530			0.00- 30.00	166.88
78 Hexane					CAS #: 110-54-3		
4.367	4.367 (0.801)	57	715589	48.2096	48.210	80.00- 120.00	100.00
4.367	4.367 (0.801)	43	453343			0.00- 30.00	63.35
4.367	4.367 (0.801)	86	87896			0.00- 30.00	12.28
82 1,1-Dichloroethane					CAS #: 75-34-3		
4.639	4.639 (0.851)	63	821157	47.8282	47.828	80.00- 120.00	100.00
4.639	4.639 (0.851)	65	237155			0.00- 30.00	28.88
86 Vinyl Acetate					CAS #: 108-05-4		
4.689	4.689 (0.861)	86	84391	43.3241	43.324	80.00- 120.00	100.00
4.682	4.682 (0.859)	43	1249178			0.00- 30.00	1480.23
91 cis-1,2-Dichloroethene					CAS #: 156-59-2		
5.219	5.219 (0.958)	98	267715	51.1013	51.101	80.00- 120.00	100.00
5.219	5.219 (0.958)	96	398400			0.00- 30.00	148.81
5.219	5.219 (0.958)	61	709476			0.00- 30.00	265.01
92 2-Butanone					CAS #: 78-93-3		
5.248	5.248 (0.963)	72	174736	42.5464	42.546	80.00- 120.00	100.00
5.248	5.248 (0.963)	43	933758			0.00- 30.00	534.38
5.248	5.248 (0.963)	57	74379			0.00- 30.00	42.57
99 Tetrahydrofuran					CAS #: 109-99-9		
5.448	5.448 (1.000)	42	507125	41.4533	41.453	80.00- 120.00	100.00
5.448	5.448 (1.000)	71	159559			0.00- 30.00	31.46
5.448	5.448 (1.000)	72	177525			0.00- 30.00	35.01
100 Chloroform					CAS #: 67-66-3		
5.513	5.513 (1.012)	83	906898	46.2850	46.285	80.00- 120.00	100.00
5.513	5.513 (1.012)	85	604727			0.00- 30.00	66.68
102 Cyclohexane					CAS #: 110-82-7		
5.627	5.627 (1.033)	84	501654	50.0562	50.056	80.00- 120.00	100.00
5.627	5.627 (1.033)	56	791590			0.00- 30.00	157.80
5.627	5.627 (1.033)	41	397490			0.00- 30.00	79.24

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
103 1,1,1-Trichloroethane						CAS #: 71-55-6	
5.642	5.642 (1.035)	97	1039400	47.3067	47.307	80.00- 120.00	100.00
5.642	5.642 (1.035)	99	669439			0.00- 30.00	64.41
106 Carbon Tetrachloride						CAS #: 56-23-5	
5.756	5.756 (1.057)	119	1099603	48.6097	48.610	80.00- 120.00	100.00
5.756	5.756 (1.057)	117	1158739			0.00- 30.00	105.38
113 2,2,4-Trimethylpentane						CAS #: 540-84-1	
5.957	5.957 (1.093)	57	2427946	55.1351	55.135	80.00- 120.00	100.00
5.957	5.957 (1.093)	56	801609			0.00- 30.00	33.02
5.957	5.957 (1.093)	41	592876			0.00- 30.00	24.42
116 Benzene						CAS #: 71-43-2	
5.971	5.971 (0.941)	78	1228061	47.3676	47.368	80.00- 120.00	100.00
5.971	5.971 (0.941)	77	297790			0.00- 30.00	24.25
120 1,2-Dichloroethane						CAS #: 107-06-2	
6.057	6.057 (0.955)	62	756659	45.0008	45.001	80.00- 120.00	100.00
6.057	6.057 (0.955)	64	233670			0.00- 30.00	30.88
121 Heptane						CAS #: 142-82-5	
6.129	6.129 (0.966)	71	426562	50.7173	50.717	80.00- 120.00	100.00
6.129	6.129 (0.966)	43	981187			0.00- 30.00	230.02
6.129	6.129 (0.966)	57	542097			0.00- 30.00	127.09
125 Trichloroethene						CAS #: 79-01-6	
6.537	6.537 (1.030)	95	566772	46.5199	46.520	80.00- 120.00	100.00
6.537	6.537 (1.030)	130	512595			0.00- 30.00	90.44
6.537	6.537 (1.030)	97	353664			0.00- 30.00	62.40
127 Methylcyclohexane						CAS #: 108-87-2	
6.645	6.644 (1.047)	83	721143	51.6225	51.622	80.00- 120.00	100.00
6.637	6.644 (1.046)	98	317813			0.00- 30.00	44.07
6.637	6.637 (1.046)	55	807155			0.00- 30.00	111.93
132 1,2-Dichloropropane						CAS #: 78-87-5	
6.766	6.766 (1.067)	63	573608	45.5514	45.551	80.00- 120.00	100.00
6.766	6.766 (1.067)	62	417084			0.00- 30.00	72.71
6.766	6.766 (1.067)	41	313193			0.00- 30.00	54.60
136 1,4-Dioxane						CAS #: 123-91-1	
6.859	6.859 (1.081)	88	285387	42.7153	42.715	80.00- 120.00	100.00
6.852	6.852 (1.080)	58	272113			0.00- 30.00	95.35
6.852	6.852 (1.080)	57	86821			0.00- 30.00	30.42

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
138 Bromodichloromethane						CAS #: 75-27-4	
6.996	6.995 (1.103)	83	1085863	44.6437	44.644	80.00- 120.00	100.00
6.996	6.995 (1.103)	85	707486			0.00- 30.00	65.15
144 cis-1,3-Dichloropropene						CAS #: 10061-01-5	
7.368	7.368 (1.161)	75	827377	46.7726	46.773	80.00- 120.00	100.00
7.368	7.368 (1.161)	77	257217			0.00- 30.00	31.09
7.368	7.368 (1.161)	39	429282			0.00- 30.00	51.88
145 4-Methyl-2-pentanone						CAS #: 108-10-1	
7.483	7.483 (1.180)	58	511200	41.2045	41.204	80.00- 120.00	100.00
7.475	7.475 (1.178)	43	1354494			0.00- 30.00	264.96
7.483	7.483 (1.180)	85	183580			0.00- 30.00	35.91
147 Toluene						CAS #: 108-88-3	
7.612	7.611 (1.200)	91	1718357	45.5927	45.593	80.00- 120.00	100.00
7.612	7.611 (1.200)	92	983406			0.00- 30.00	57.23
150 trans-1,3-Dichloropropene						CAS #: 10061-02-6	
7.848	7.848 (0.894)	75	853795	40.5971	40.597	80.00- 120.00	100.00
7.848	7.848 (0.894)	77	273813			0.00- 30.00	32.07
7.848	7.848 (0.894)	39	399212			0.00- 30.00	46.76
155 1,1,2-Trichloroethane						CAS #: 79-00-5	
7.998	7.998 (0.911)	97	560229	41.8693	41.869	80.00- 120.00	100.00
7.998	7.998 (0.911)	99	348929			0.00- 30.00	62.28
7.998	7.998 (0.911)	83	495107			0.00- 30.00	88.38
156 Tetrachloroethene						CAS #: 127-18-4	
8.049	8.048 (0.917)	166	842554	43.7928	43.793	80.00- 120.00	100.00
8.049	8.048 (0.917)	129	571149			0.00- 30.00	67.79
8.049	8.048 (0.917)	131	581747			0.00- 30.00	69.05
158 2-Hexanone						CAS #: 591-78-6	
8.163	8.163 (0.930)	58	764032	40.8116	40.812	80.00- 120.00	100.00
8.163	8.163 (0.930)	43	1386481			0.00- 30.00	181.47
8.170	8.170 (0.931)	100	116281			0.00- 30.00	15.22
160 Dibromochloromethane						CAS #: 124-48-1	
8.314	8.313 (0.947)	129	1133162	44.7566	44.756	80.00- 120.00	100.00
8.314	8.313 (0.947)	127	876938			0.00- 30.00	77.39
161 1,2-Dibromoethane (EDB)						CAS #: 106-93-4	
8.428	8.428 (0.960)	107	867991	43.4441	43.444	80.00- 120.00	100.00
8.428	8.428 (0.960)	109	839099			0.00- 30.00	96.67

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
165 Chlorobenzene						CAS #: 108-90-7	
8.808	8.808 (1.003)	112	1386571	45.2344	45.234	80.00- 120.00	100.00
8.808	8.808 (1.003)	114	434508			0.00- 30.00	31.34
8.801	8.800 (1.002)	77	925082			0.00- 30.00	66.72
167 Ethyl Benzene						CAS #: 100-41-4	
8.858	8.858 (1.009)	106	718954	43.8706	43.871	80.00- 120.00	100.00
8.858	8.858 (1.009)	91	2515972			0.00- 30.00	349.95
169 m,p-Xylene						CAS #: 108-38-3	
8.951	8.951 (1.020)	106	933121	46.9397	46.940	80.00- 120.00	100.00
8.951	8.951 (1.020)	91	2073506			0.00- 30.00	222.21
171 o-Xylene						CAS #: 95-47-6	
9.295	9.295 (1.059)	106	900291	48.3877	48.388	80.00- 120.00	100.00
9.295	9.295 (1.059)	91	2089622			0.00- 30.00	232.11
172 Styrene						CAS #: 100-42-5	
9.309	9.309 (1.060)	104	1587420	49.1813	49.181	80.00- 120.00	100.00
9.309	9.309 (1.060)	78	885429			0.00- 30.00	55.78
174 Bromoform						CAS #: 75-25-2	
9.510	9.510 (1.083)	173	1378584	45.9687	45.969	80.00- 120.00	100.00
9.510	9.510 (1.083)	171	703283			0.00- 30.00	51.01
175 Cumene						CAS #: 98-82-8	
9.581	9.581 (1.091)	105	3089112	47.3762	47.376	80.00- 120.00	100.00
9.581	9.581 (1.091)	120	712855			0.00- 30.00	23.08
9.581	9.574 (1.091)	51	363463			0.00- 30.00	11.77
181 1,1,2,2-Tetrachloroethane						CAS #: 79-34-5	
9.889	9.882 (1.126)	83	1495088	44.9401	44.940	80.00- 120.00	100.00
9.889	9.882 (1.126)	85	977887			0.00- 30.00	65.41
182 Propylbenzene						CAS #: 103-65-1	
9.925	9.918 (1.131)	91	3869031	48.2816	48.282	80.00- 120.00	100.00
9.925	9.918 (1.131)	120	761631			0.00- 30.00	19.69
9.925	9.918 (1.131)	105	132972			0.00- 30.00	3.44
188 4-Ethyltoluene						CAS #: 622-96-8	
10.018	10.011 (1.141)	120	857219	49.8072	49.807	80.00- 120.00	100.00
10.018	10.011 (1.141)	105	3223949			0.00- 30.00	376.09
190 1,3,5-Trimethylbenzene						CAS #: 108-67-8	
10.076	10.061 (1.148)	120	1204517	54.7875	54.788	80.00- 120.00	100.00
10.076	10.061 (1.148)	105	2860257			0.00- 30.00	237.46

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
196 1,2,4-Trimethylbenzene						CAS #: 95-63-6	
10.398	10.384 (1.184)	120	1071374	54.0765	54.076	80.00- 120.00	100.00
10.398	10.384 (1.184)	105	2642456			0.00- 30.00	246.64
208 1,3-Dichlorobenzene						CAS #: 541-73-1	
10.692	10.670 (1.218)	146	1700549	49.8842	49.884	80.00- 120.00	100.00
10.692	10.670 (1.218)	148	1079505			0.00- 30.00	63.48
10.684	10.670 (1.217)	111	719486			0.00- 30.00	42.31
209 1,4-Dichlorobenzene						CAS #: 106-46-7	
10.770	10.749 (1.227)	146	1744629	51.9027	51.903	80.00- 120.00	100.00
10.770	10.749 (1.227)	148	1085246			0.00- 30.00	62.20
10.770	10.749 (1.227)	111	699840			0.00- 30.00	40.11
212 alpha-Chlorotoluene						CAS #: 100-44-7	
10.885	10.863 (1.240)	91	2975974	88.4490	88.449	80.00- 120.00	100.00(R)
10.885	10.863 (1.240)	126	529159			0.00- 30.00	17.78
214 1,2-Dichlorobenzene						CAS #: 95-50-1	
11.100	11.078 (1.264)	146	1708137	56.3346	56.334	80.00- 120.00	100.00
11.100	11.078 (1.264)	148	1069678			0.00- 30.00	62.62
11.100	11.071 (1.264)	111	739734			0.00- 30.00	43.31
226 1,2,4-Trichlorobenzene						CAS #: 120-82-1	
12.504	12.468 (1.424)	180	1452676	75.6781	75.678	80.00- 120.00	100.00(R)
12.504	12.468 (1.424)	182	1392365			0.00- 30.00	95.85
227 Hexachlorobutadiene						CAS #: 87-68-3	
12.597	12.561 (1.435)	225	1421872	62.8747	62.875	80.00- 120.00	100.00
12.597	12.561 (1.435)	223	894458			0.00- 30.00	62.91
228 Naphthalene						CAS #: 91-20-3	
12.769	12.726 (1.454)	128	211951	3.12849	3.128	80.00- 120.00	100.00(R)
12.769	12.733 (1.454)	127	24958			0.00- 30.00	11.78

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdp.i
Lab File ID: p121804.d
Lab Smp Id: ICV
Analysis Type: VOA
Quant Type: ISTD
Operator: js
Method File: /chem/msdp.i/18dec14.b/p14q1217a.m
Misc Info: 50ppbv(200ppbv)

Calibration Date: 18-DEC-2014
Calibration Time: 08:43
Client Smp ID: ICV
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
98 Bromochloromethan	129447	77668	181226	116698	-9.85
123 1,4-Difluorobenze	592059	355235	828883	575618	-2.78
163 Chlorobenzene-d5	618743	371246	866240	638508	3.19

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
98 Bromochloromethan	5.45	5.12	5.78	5.45	0.00
123 1,4-Difluorobenze	6.34	6.01	6.67	6.34	0.00
163 Chlorobenzene-d5	8.78	8.45	9.11	8.78	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: 18-Dec-2014 13:08

Eurofins Air Toxics Inc.

RECOVERY REPORT

Client Name:
Client SDG: 18dec14
Sample Matrix: GAS
Fraction: VOA
Lab Smp Id: ICV
Client Smp ID: ICV
Level: LOW
Operator: js
Data Type: MS DATA
SampleType: LCS
SpikeList File: 2926Spectra.spk
Quant Type: ISTD
Sublist File: AT12.sub
Method File: /chem/msdp.i/18dec14.b/p14q1217a.m
Misc Info: 50ppbv(200ppbv)

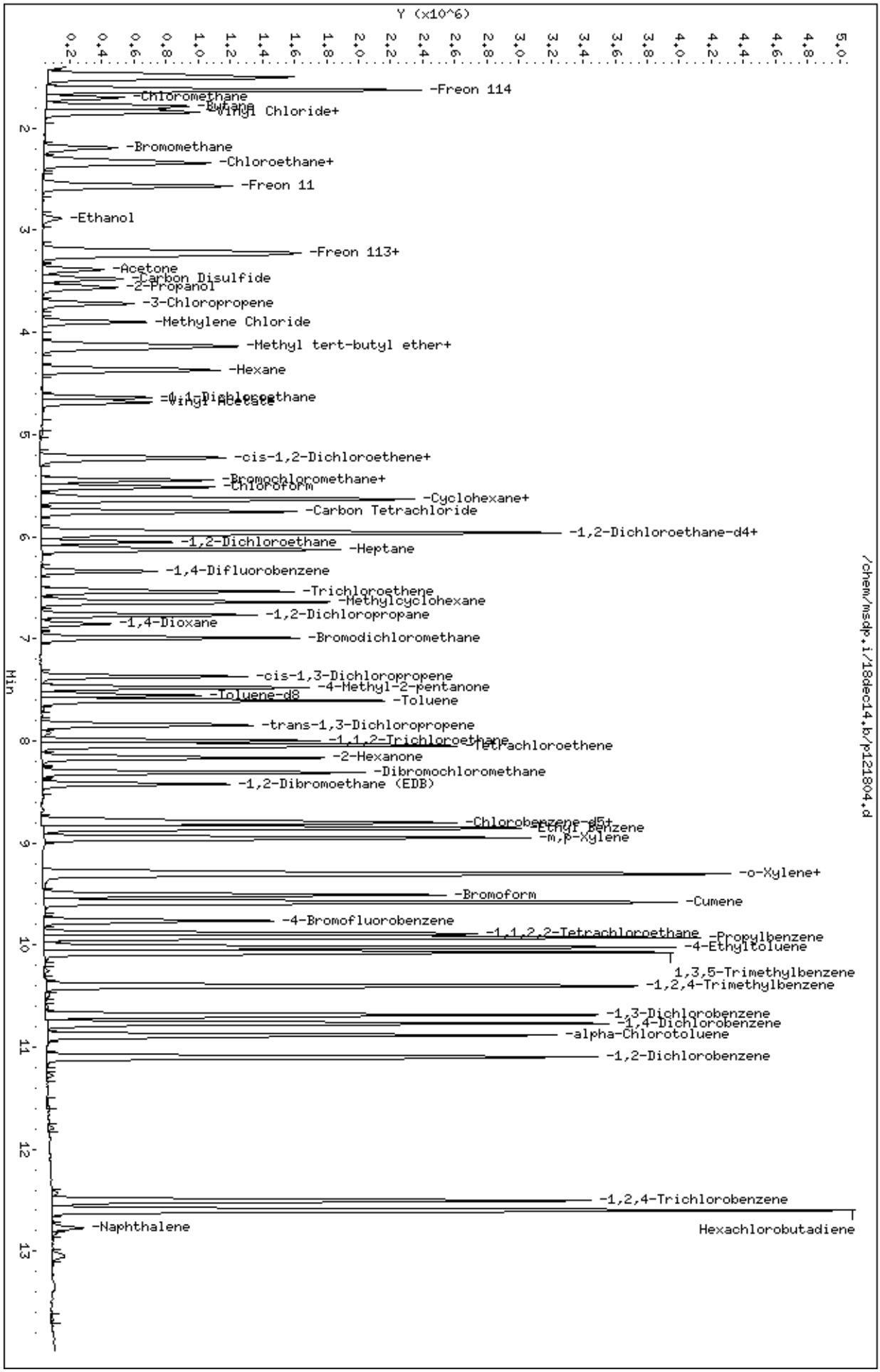
SPIKE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
9 Propylene	50.000	57.226	114.45	70-130
11 Freon 12	50.000	57.469	114.94	70-130
15 Freon 114	50.000	52.658	105.32	70-130
17 Chloromethane	50.000	59.006	118.01	70-130
23 Butane	50.000	60.324	120.65	70-130
25 Vinyl Chloride	50.000	62.414	124.83	70-130
26 1,3-Butadiene	50.000	58.191	116.38	70-130
29 Bromomethane	50.000	54.722	109.44	70-130
30 Chloroethane	50.000	55.014	110.03	70-130
31 Isopentane	50.000	51.733	103.47	70-130
35 Freon 11	50.000	48.906	97.81	70-130
42 Ethanol	50.000	51.753	103.51	70-130
49 Freon 113	50.000	52.483	104.97	70-130
50 1,1-Dichloroethene	50.000	54.977	109.95	70-130
52 Acetone	50.000	48.435	96.87	70-130
56 Carbon Disulfide	50.000	46.691	93.38	70-130
57 2-Propanol	50.000	48.185	96.37	70-130
58 3-Chloropropene	50.000	49.271	98.54	70-130
66 Methylene Chloride	50.000	51.807	103.61	70-130
72 Methyl tert-butyl	50.000	47.623	95.25	70-130
73 trans-1,2-Dichloro	50.000	44.682	89.36	70-130
78 Hexane	50.000	48.210	96.42	70-130
82 1,1-Dichloroethane	50.000	47.828	95.66	70-130
86 Vinyl Acetate	50.000	43.324	86.65	70-130
91 cis-1,2-Dichloroet	50.000	51.101	102.20	70-130
92 2-Butanone	50.000	42.546	85.09	70-130
99 Tetrahydrofuran	50.000	41.453	82.91	70-130
100 Chloroform	50.000	46.285	92.57	70-130
103 1,1,1-Trichloroeth	50.000	47.307	94.61	70-130
106 Carbon Tetrachlori	50.000	48.610	97.22	70-130
102 Cyclohexane	50.000	50.056	100.11	70-130
113 2,2,4-Trimethylpen	50.000	55.135	110.27	70-130
116 Benzene	50.000	47.368	94.74	70-130

SPIKE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
120 1,2-Dichloroethane	50.000	45.001	90.00	70-130
121 Heptane	50.000	50.717	101.43	70-130
125 Trichloroethene	50.000	46.520	93.04	70-130
127 Methylcyclohexane	50.000	51.622	103.25	70-130
132 1,2-Dichloropropan	50.000	45.551	91.10	70-130
136 1,4-Dioxane	50.000	42.715	85.43	70-130
138 Bromodichlorometha	50.000	44.644	89.29	70-130
144 cis-1,3-Dichloropr	50.000	46.773	93.55	70-130
145 4-Methyl-2-pentano	50.000	41.204	82.41	70-130
147 Toluene	50.000	45.593	91.19	70-130
150 trans-1,3-Dichloro	50.000	40.597	81.19	70-130
155 1,1,2-Trichloroeth	50.000	41.869	83.74	70-130
156 Tetrachloroethene	50.000	43.793	87.59	70-130
158 2-Hexanone	50.000	40.812	81.62	70-130
160 Dibromochlorometha	50.000	44.756	89.51	70-130
161 1,2-Dibromoethane	50.000	43.444	86.89	70-130
165 Chlorobenzene	50.000	45.234	90.47	70-130
167 Ethyl Benzene	50.000	43.871	87.74	70-130
169 m,p-Xylene	50.000	46.940	93.88	70-130
171 o-Xylene	50.000	48.388	96.78	70-130
172 Styrene	50.000	49.181	98.36	70-130
174 Bromoform	50.000	45.969	91.94	70-130
175 Cumene	50.000	47.376	94.75	70-130
181 1,1,2,2-Tetrachlor	50.000	44.940	89.88	70-130
182 Propylbenzene	50.000	48.282	96.56	70-130
188 4-Ethyltoluene	50.000	49.807	99.61	70-130
190 1,3,5-Trimethylben	50.000	54.788	109.58	70-130
196 1,2,4-Trimethylben	50.000	54.076	108.15	70-130
208 1,3-Dichlorobenzen	50.000	49.884	99.77	70-130
209 1,4-Dichlorobenzen	50.000	51.903	103.81	70-130
212 alpha-Chlorotoluen	50.000	88.449	176.90*	70-130
214 1,2-Dichlorobenzen	50.000	56.334	112.67	70-130
226 1,2,4-Trichloroben	50.000	75.678	151.36*	70-130
227 Hexachlorobutadien	50.000	62.875	125.75	70-130
228 Naphthalene	5.000	3.128	62.57*	70-130

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 117 1,2-Dichloroethane	25.000	24.866	99.47	70-130
$ 146 Toluene-d8	25.000	26.104	104.42	70-130
$ 177 4-Bromofluorobenze	25.000	25.306	101.22	70-130

Data File: /chem/msdp.i/18dec14.b/p121804.d
Date : 18-DEC-2014 10:04
Client ID: ICV
Sample Info: 50mL #2687-143
Column phase: RTX-624

Instrument: msdp.i
Operator: js
Column diameter: 0.25



Data File: /chem/msdp.i/18dec14.b/p121804.d

Date : 18-DEC-2014 10:04

Client ID: ICV

Instrument: msdp.i

Sample Info: 50mL #2687-143

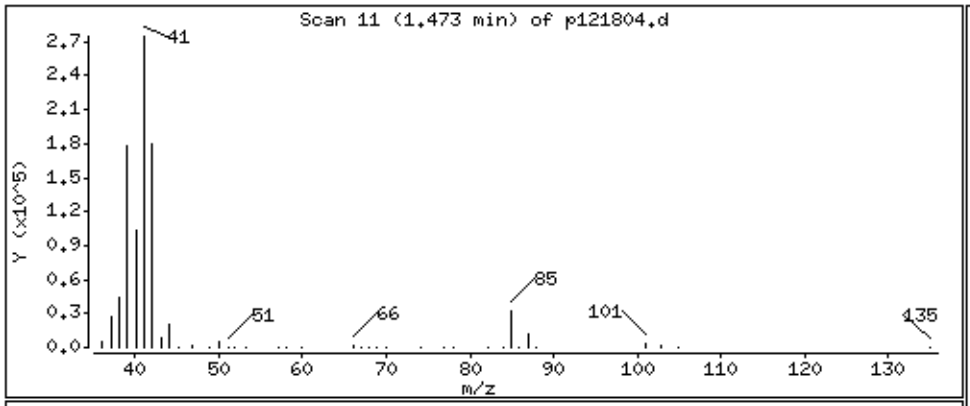
Operator: js

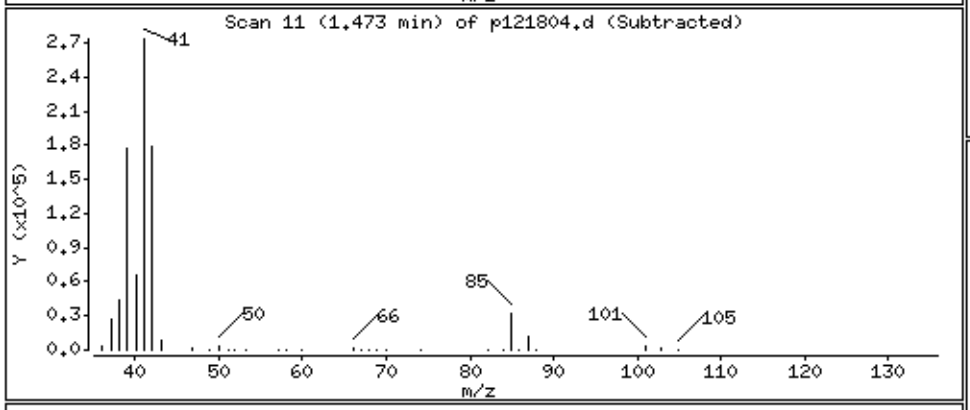
Column phase: RTX-624

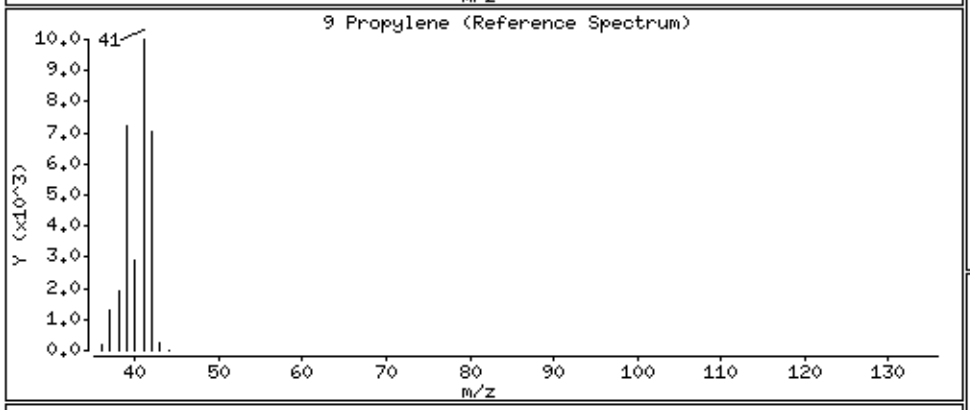
Column diameter: 0.25

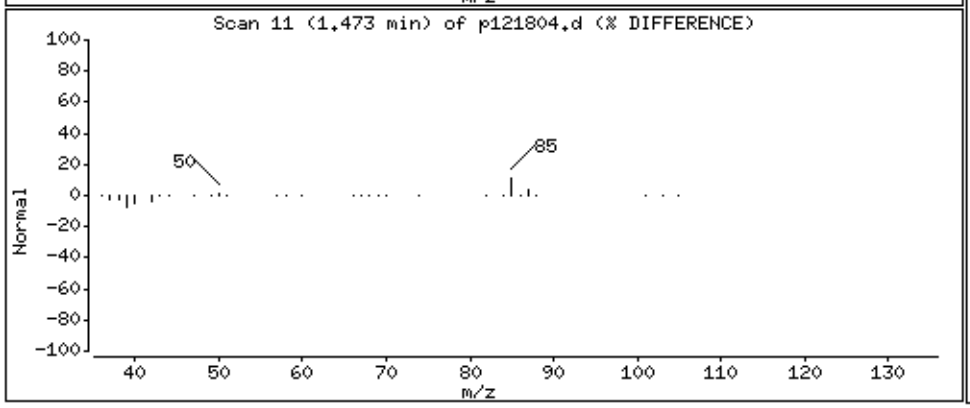
9 Propylene

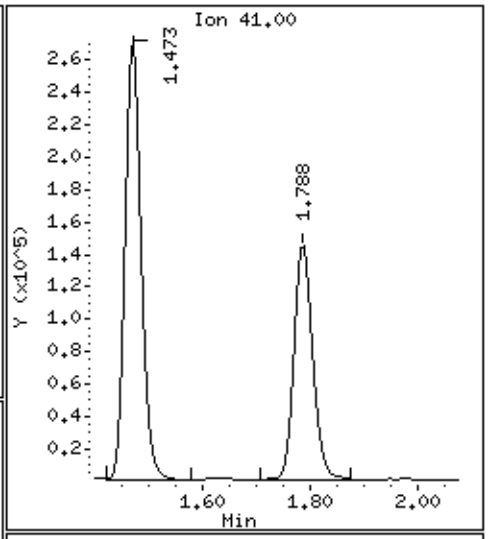
Concentration: 57.226 PPBV

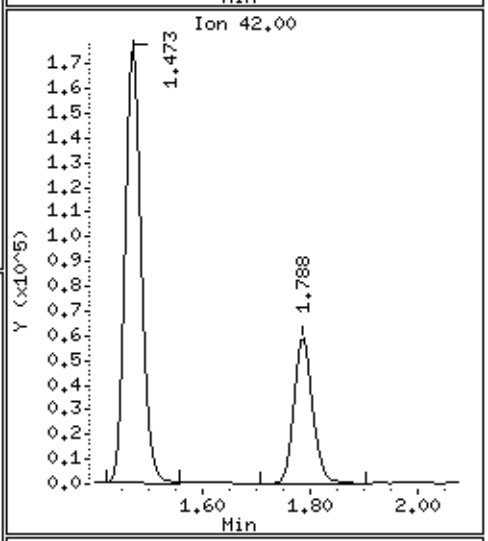


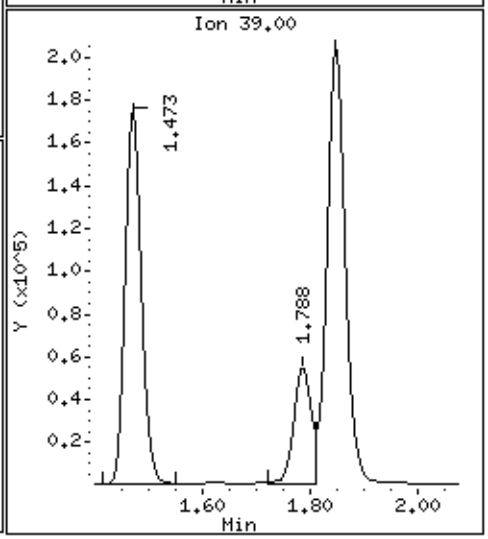












Data File: /chem/msdp.i/18dec14.b/p121804.d

Date : 18-DEC-2014 10:04

Client ID: ICV

Instrument: msdp.i

Sample Info: 50mL #2687-143

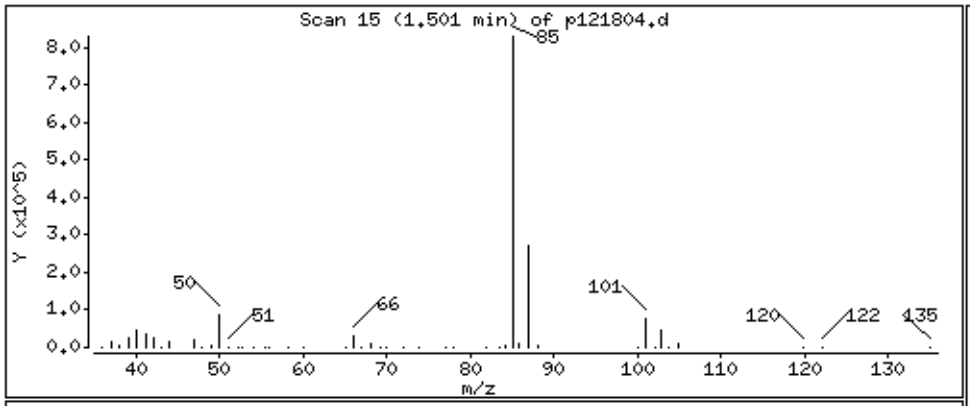
Operator: js

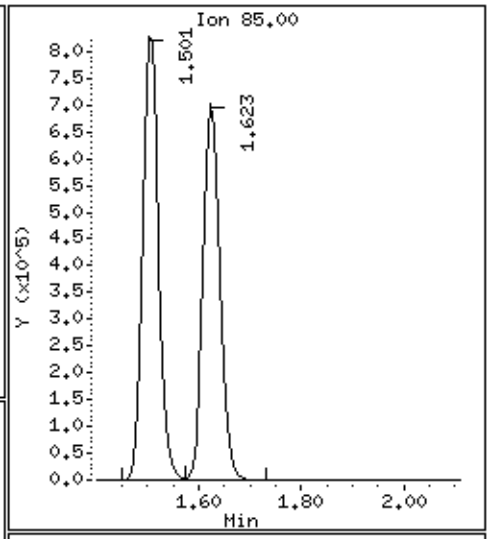
Column phase: RTX-624

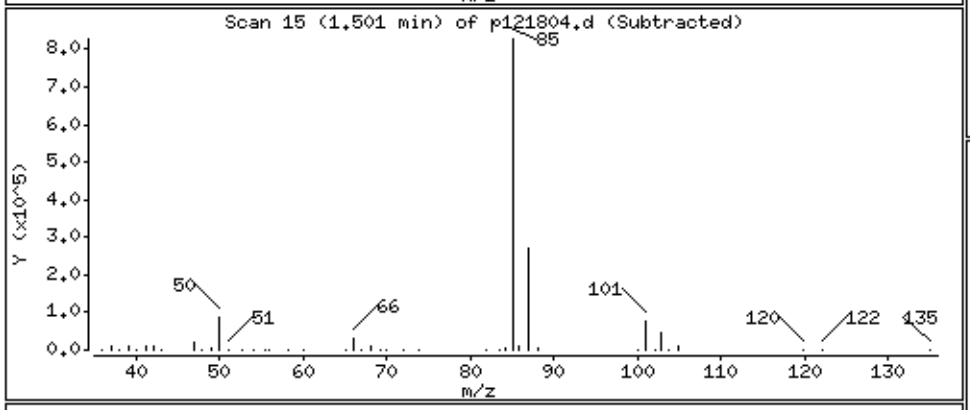
Column diameter: 0.25

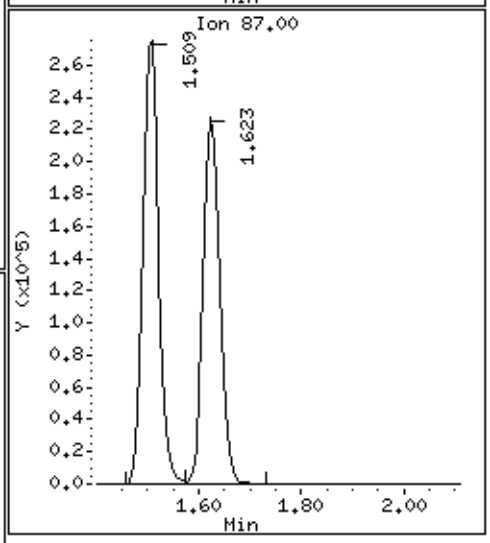
11 Freon 12

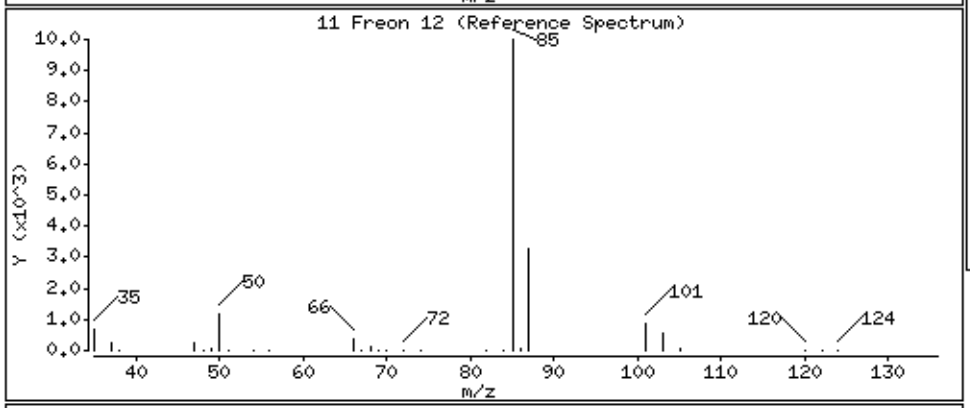
Concentration: 57.469 PPBV

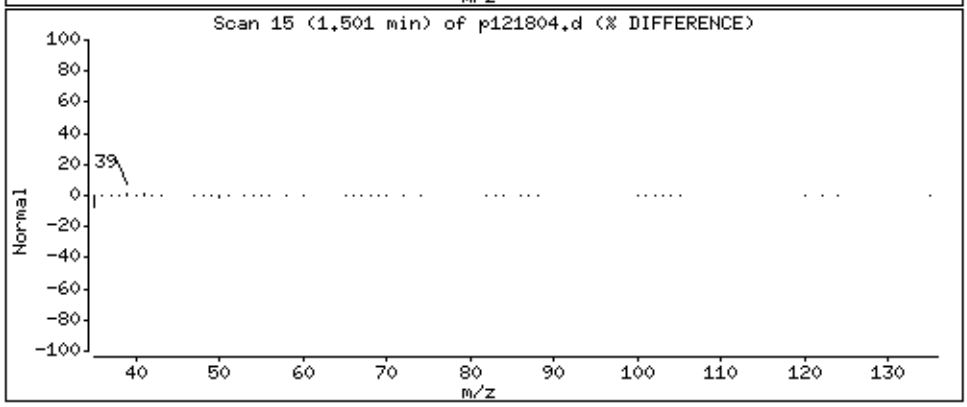












Data File: /chem/msdp.i/18dec14.b/p121804.d

Date : 18-DEC-2014 10:04

Client ID: ICV

Instrument: msdp.i

Sample Info: 50mL #2687-143

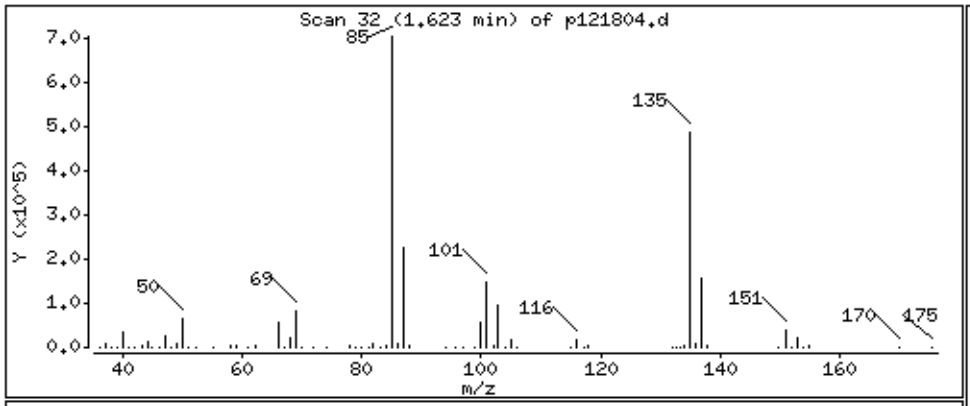
Operator: js

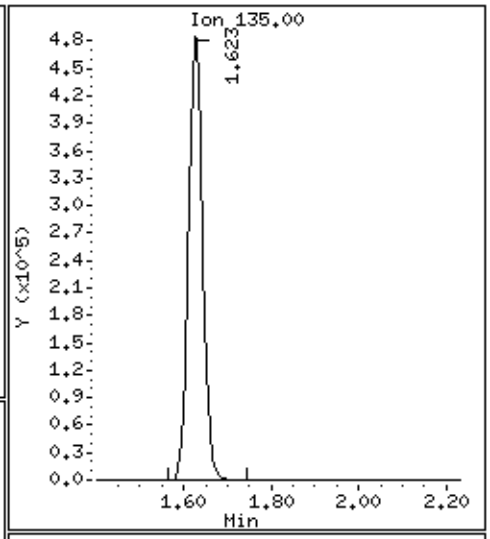
Column phase: RTX-624

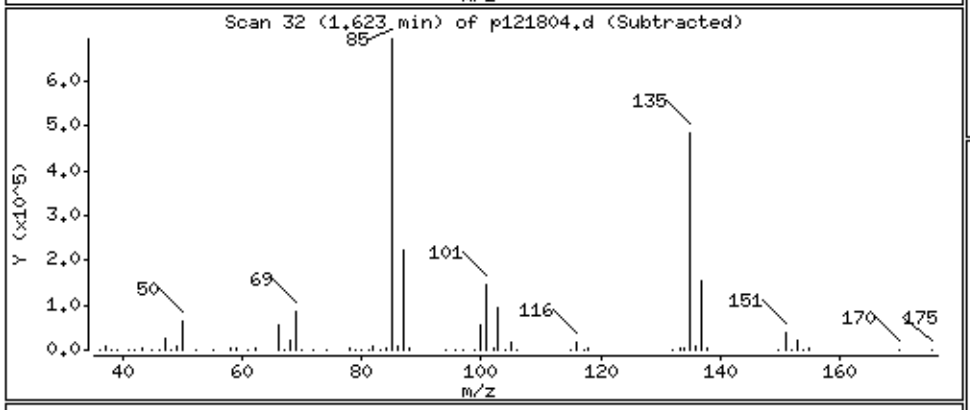
Column diameter: 0.25

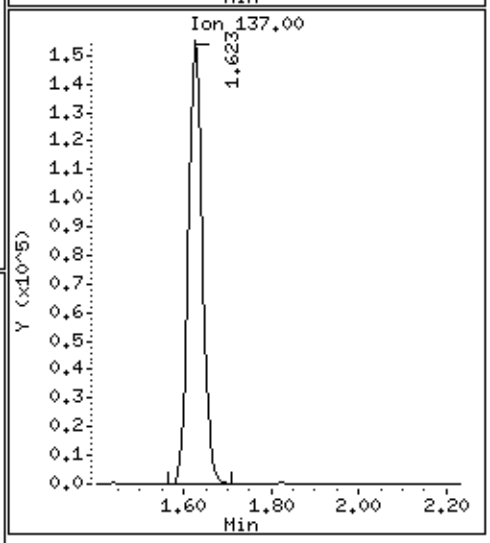
15 Freon 114

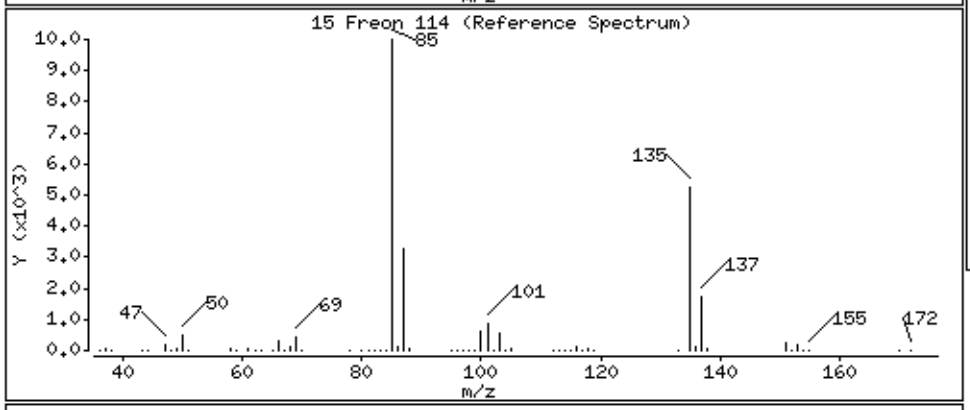
Concentration: 52.658 PPBV

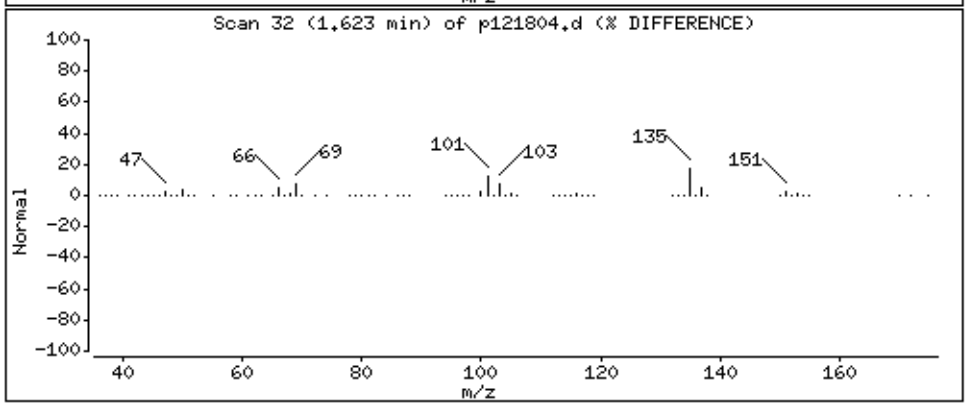












Data File: /chem/msdp.i/18dec14.b/p121804.d

Date : 18-DEC-2014 10:04

Client ID: ICV

Instrument: msdp.i

Sample Info: 50mL #2687-143

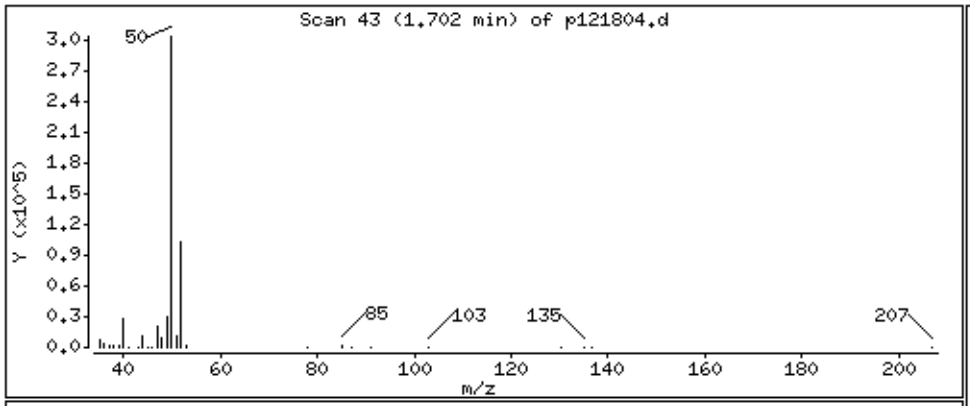
Operator: js

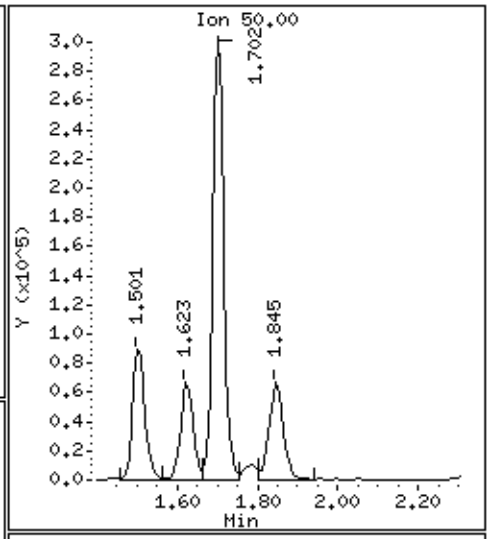
Column phase: RTX-624

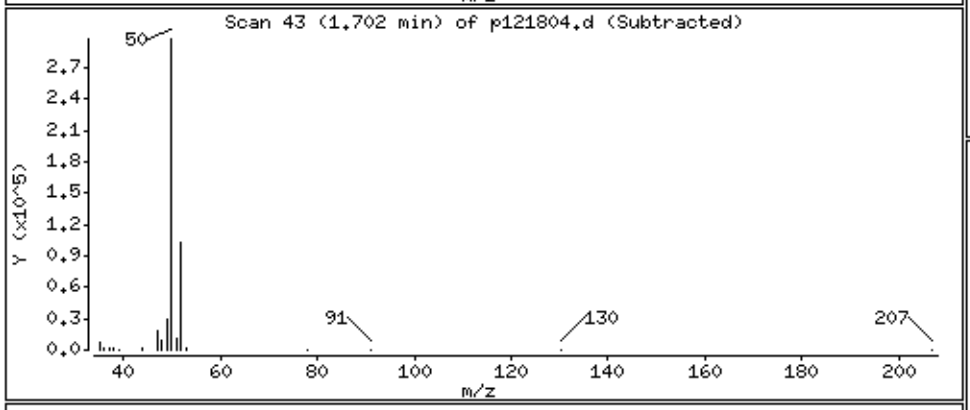
Column diameter: 0.25

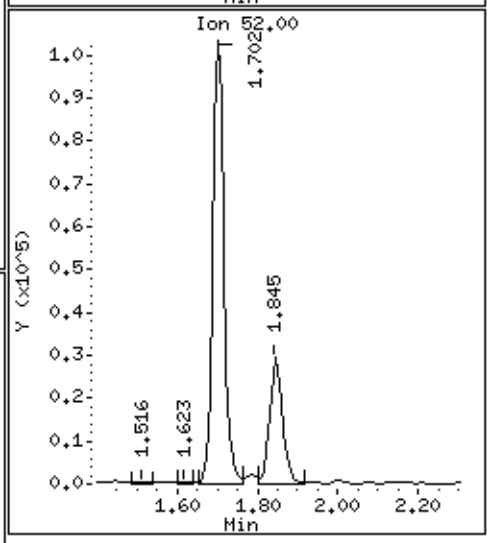
17 Chloromethane

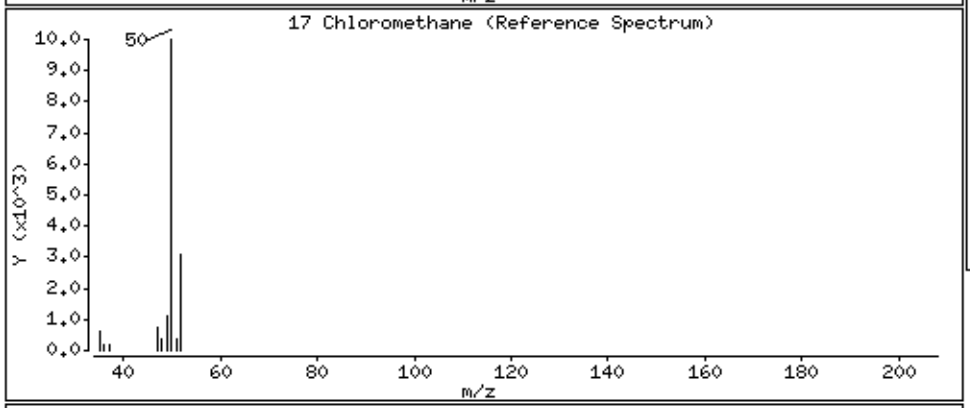
Concentration: 59.006 PPBV

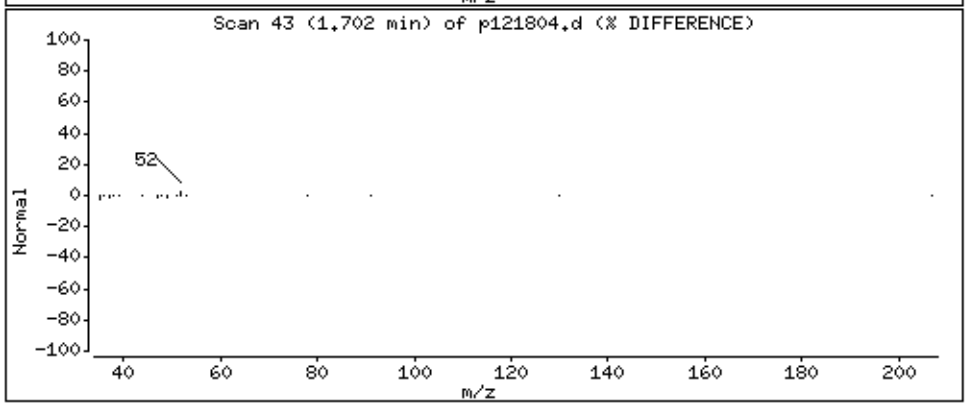












Data File: /chem/msdp.i/18dec14.b/p121804.d

Date : 18-DEC-2014 10:04

Client ID: ICV

Instrument: msdp.i

Sample Info: 50mL #2687-143

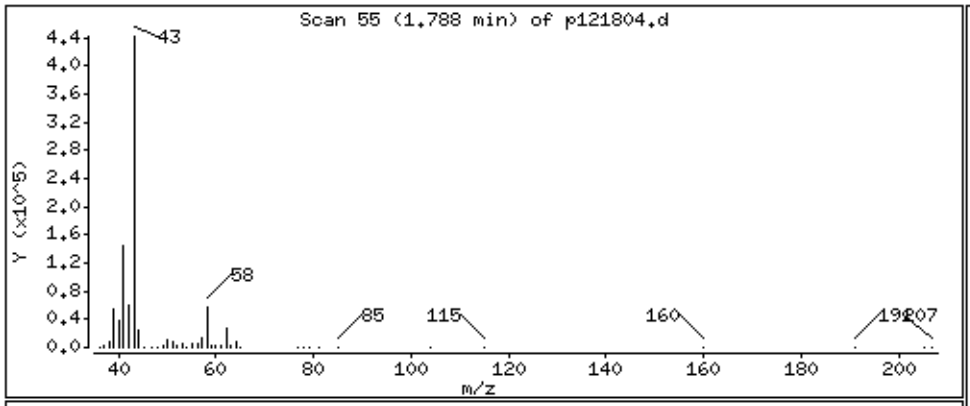
Operator: js

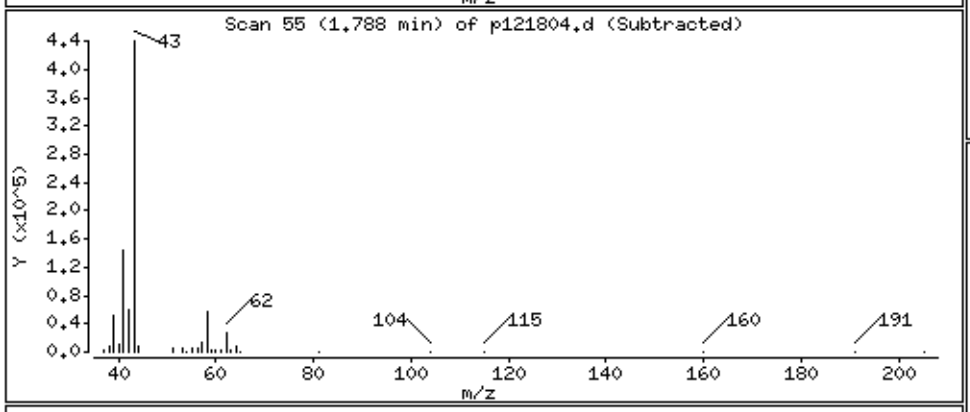
Column phase: RTX-624

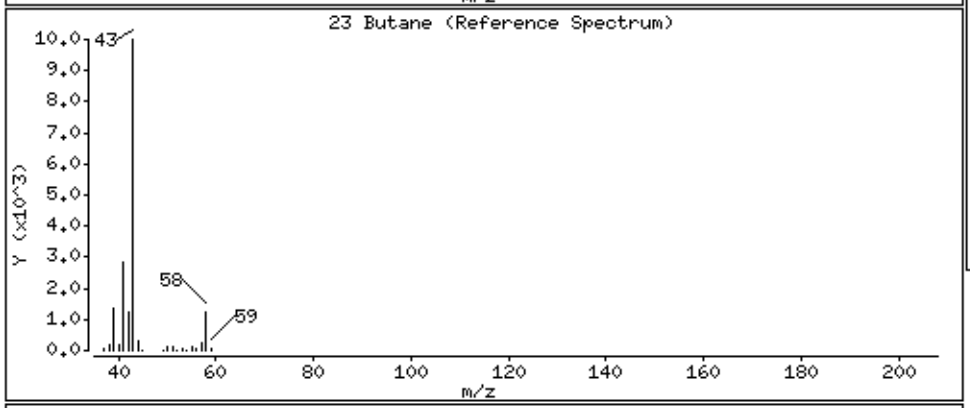
Column diameter: 0.25

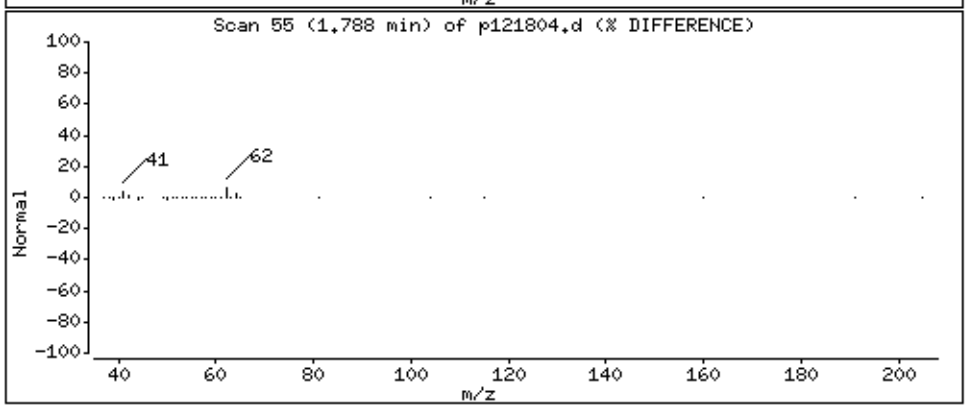
23 Butane

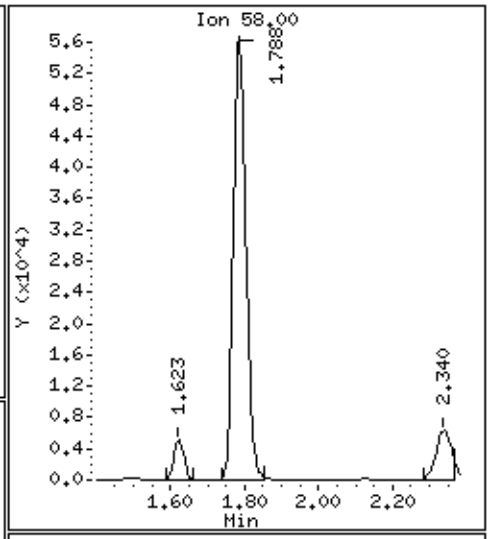
Concentration: 60.324 PPBV

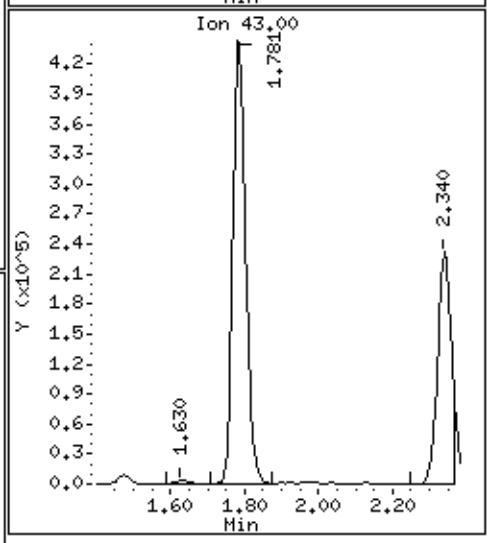












Data File: /chem/msdp.i/18dec14.b/p121804.d

Date : 18-DEC-2014 10:04

Client ID: ICV

Instrument: msdp.i

Sample Info: 50mL #2687-143

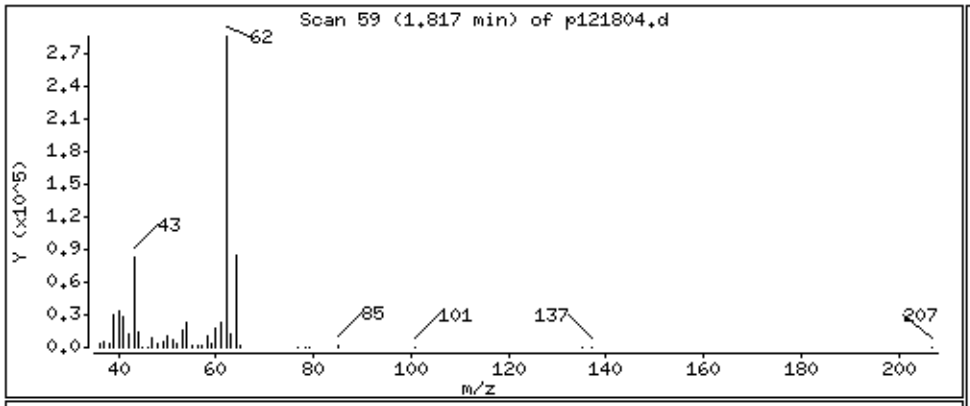
Operator: js

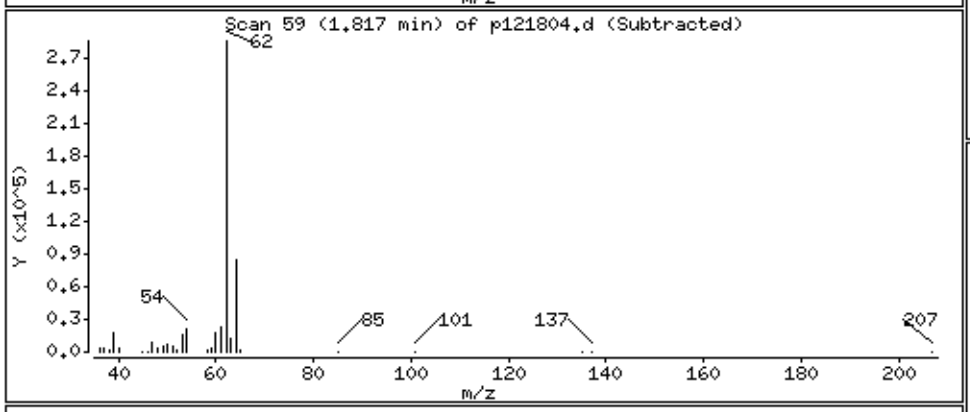
Column phase: RTX-624

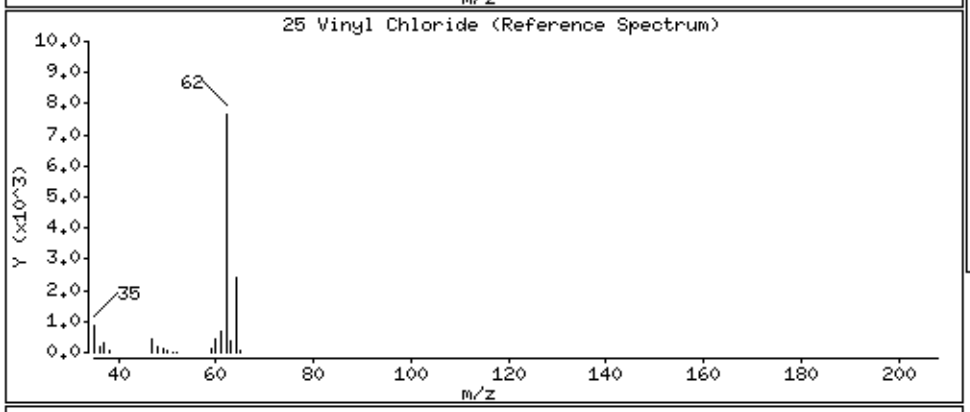
Column diameter: 0.25

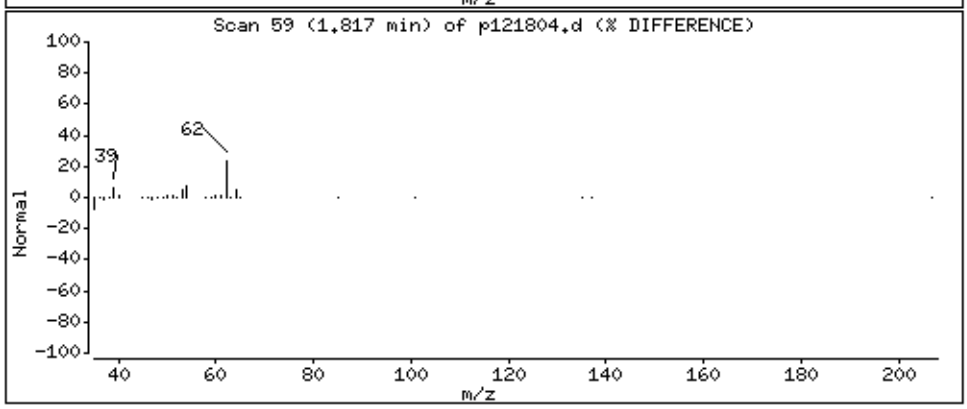
25 Vinyl Chloride

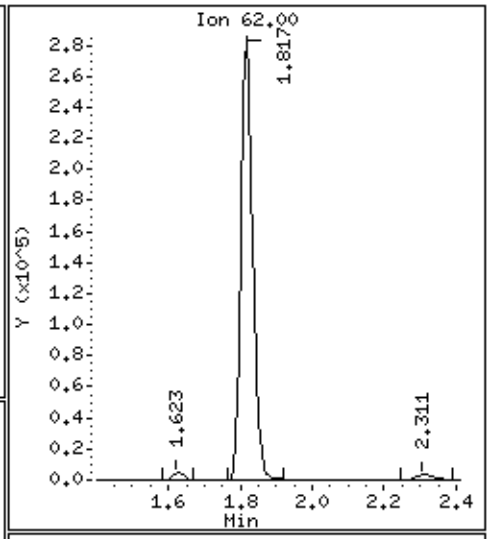
Concentration: 62.414 PPBV

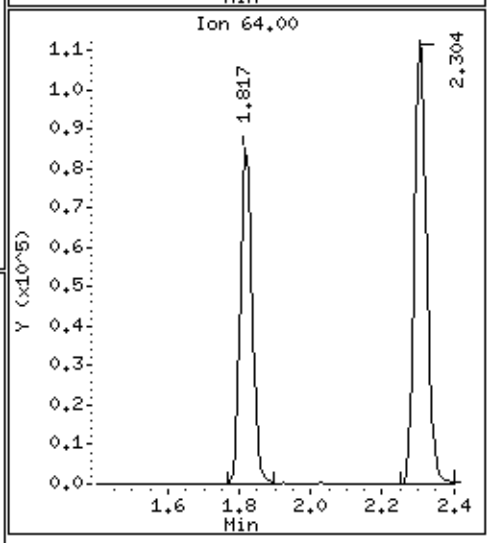












Data File: /chem/msdp.i/18dec14.b/p121804.d

Date : 18-DEC-2014 10:04

Client ID: ICV

Instrument: msdp.i

Sample Info: 50mL #2687-143

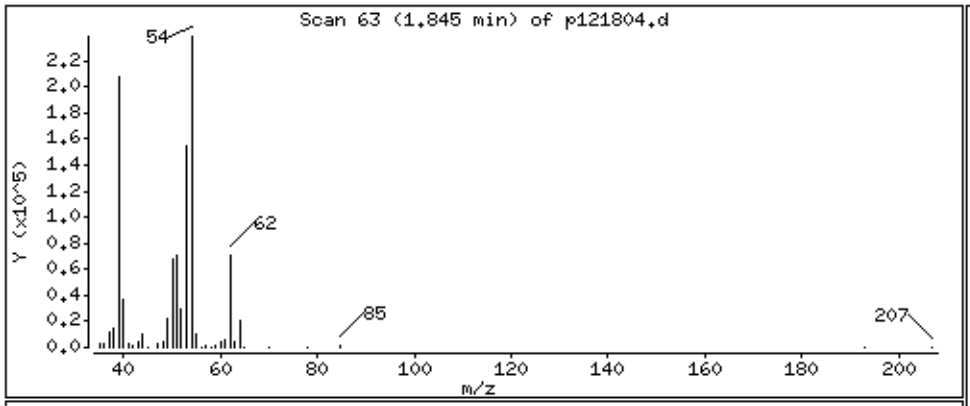
Operator: js

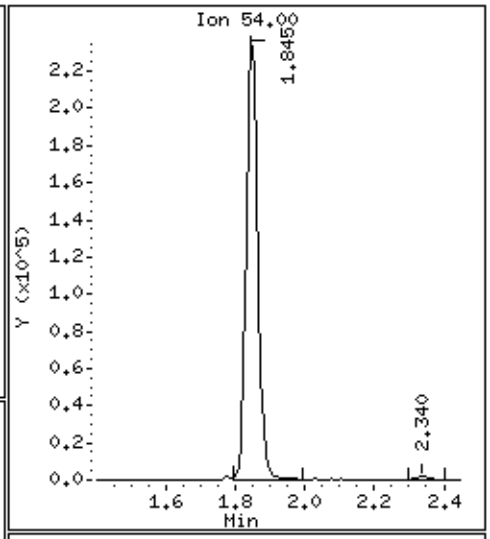
Column phase: RTX-624

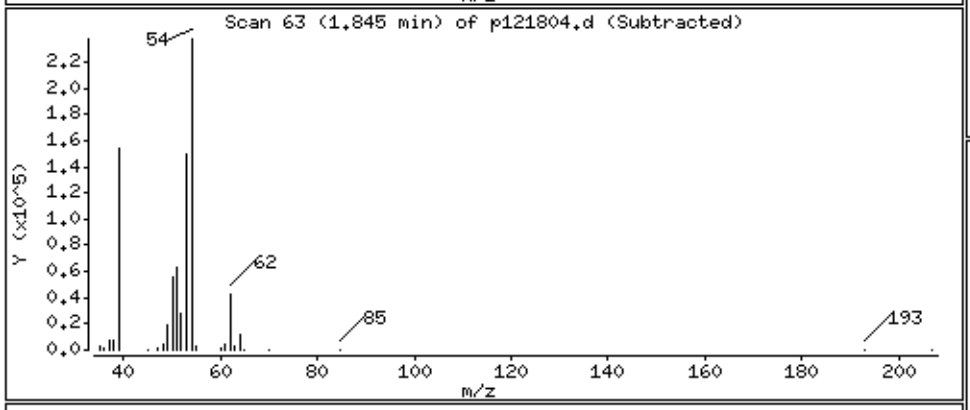
Column diameter: 0.25

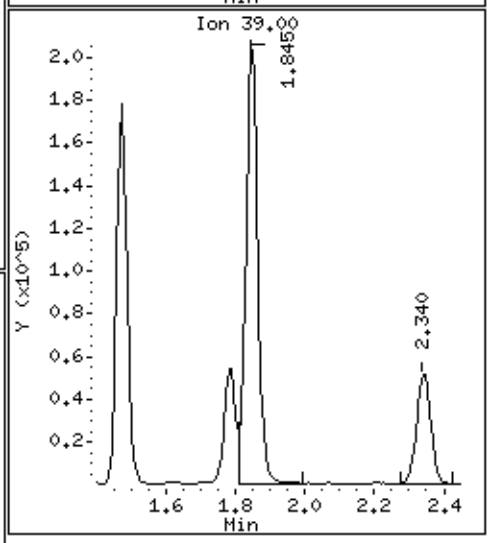
26 1,3-Butadiene

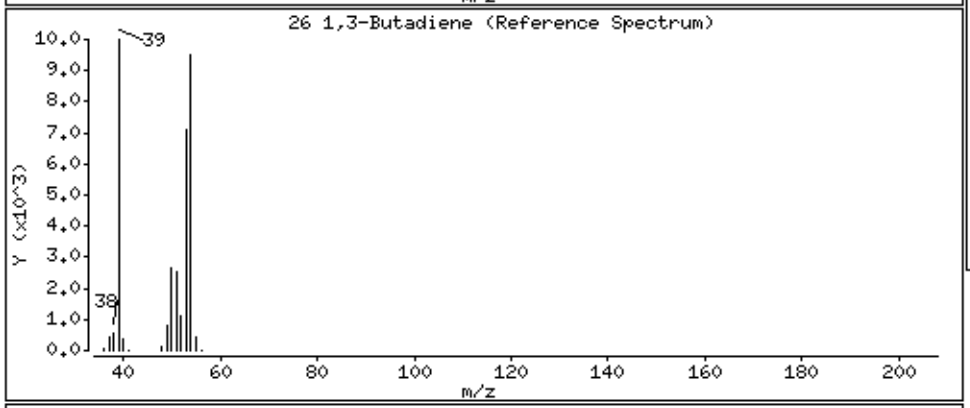
Concentration: 58.191 PPBV

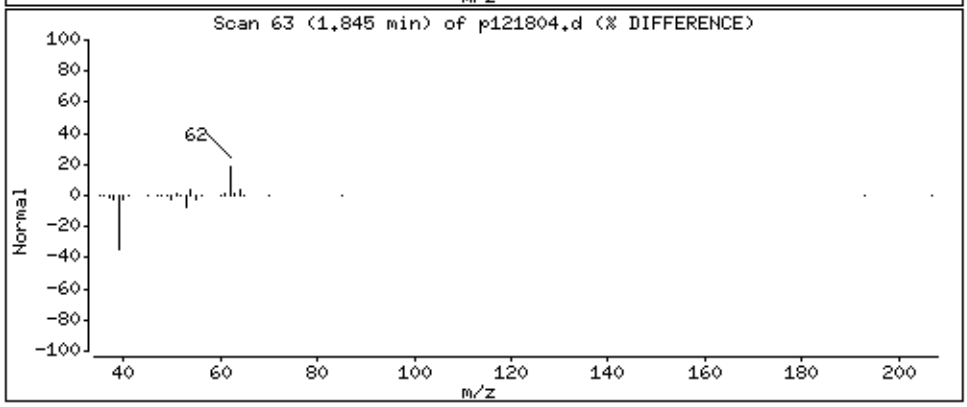












Data File: /chem/msdp.i/18dec14.b/p121804.d

Date : 18-DEC-2014 10:04

Client ID: ICV

Instrument: msdp.i

Sample Info: 50mL #2687-143

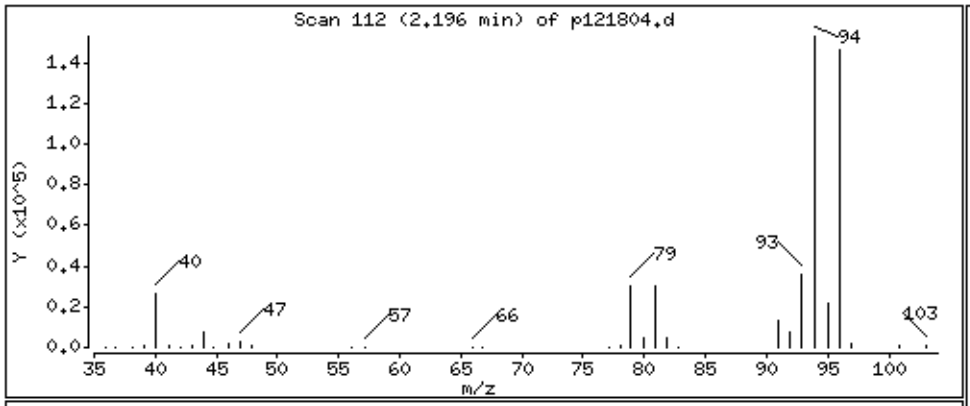
Operator: js

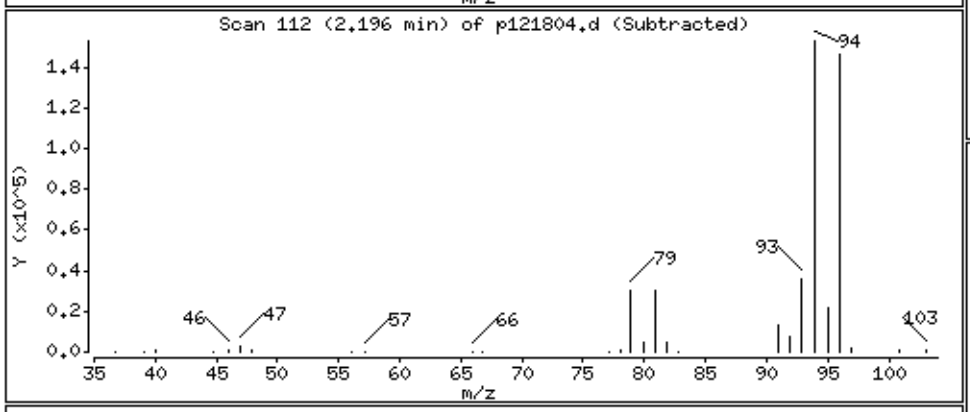
Column phase: RTX-624

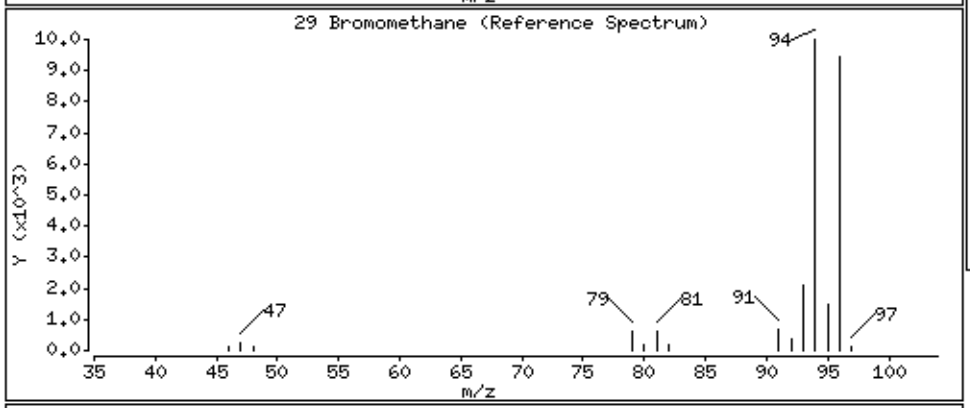
Column diameter: 0.25

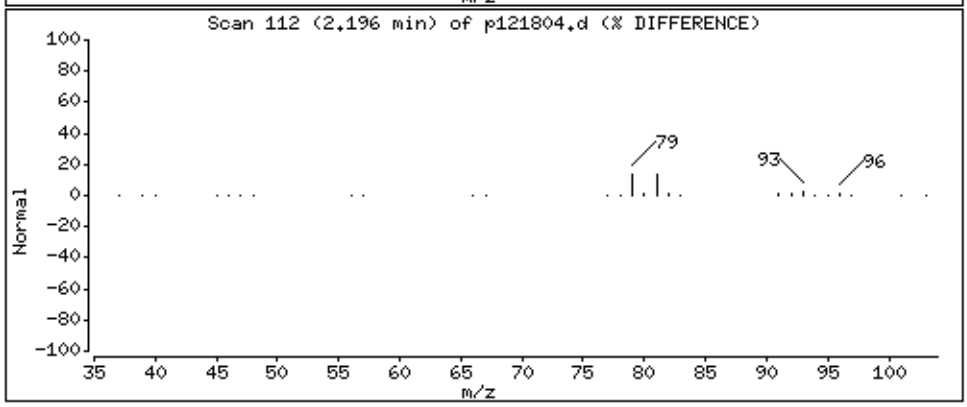
29 Bromomethane

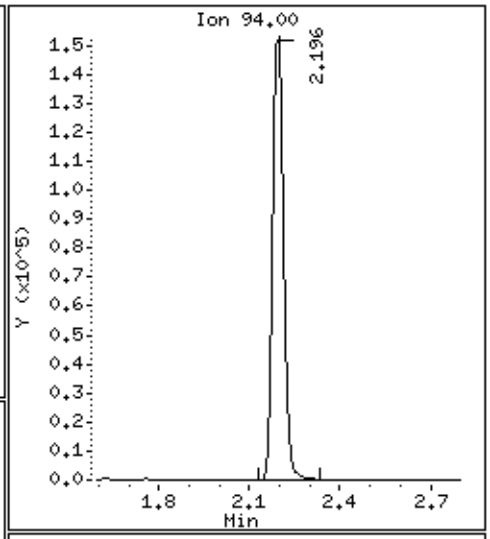
Concentration: 54.722 PPBV

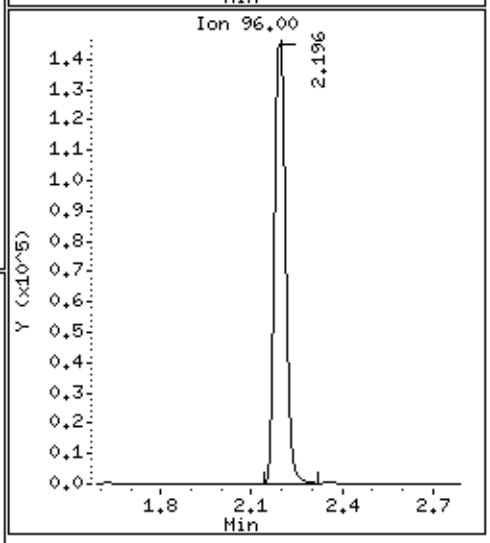












Data File: /chem/msdp.i/18dec14.b/p121804.d

Date : 18-DEC-2014 10:04

Client ID: ICV

Instrument: msdp.i

Sample Info: 50mL #2687-143

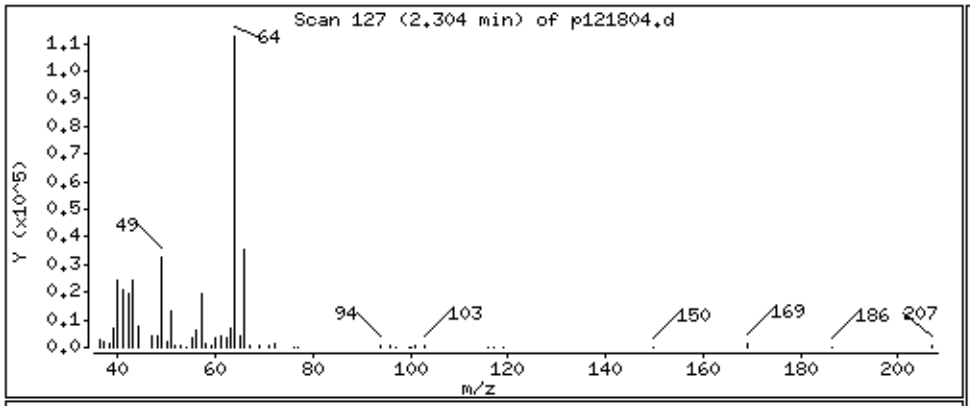
Operator: js

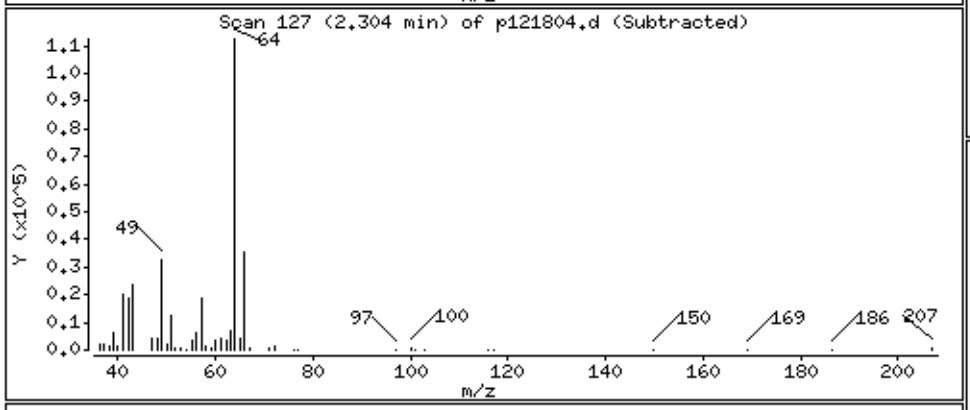
Column phase: RTX-624

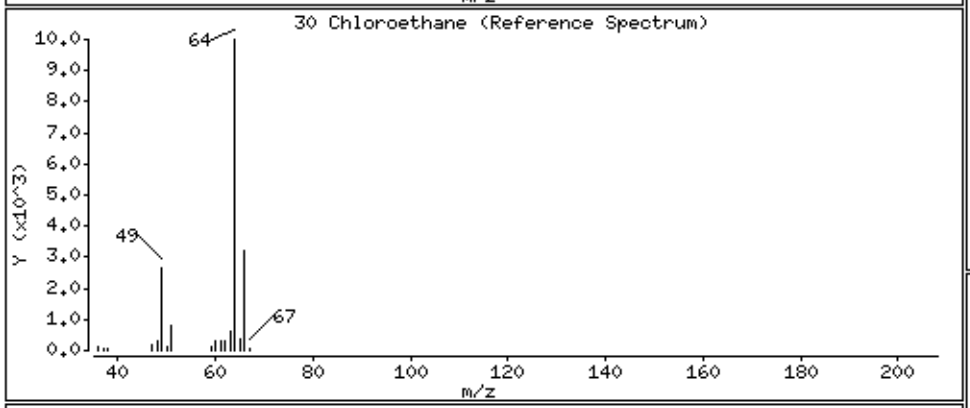
Column diameter: 0.25

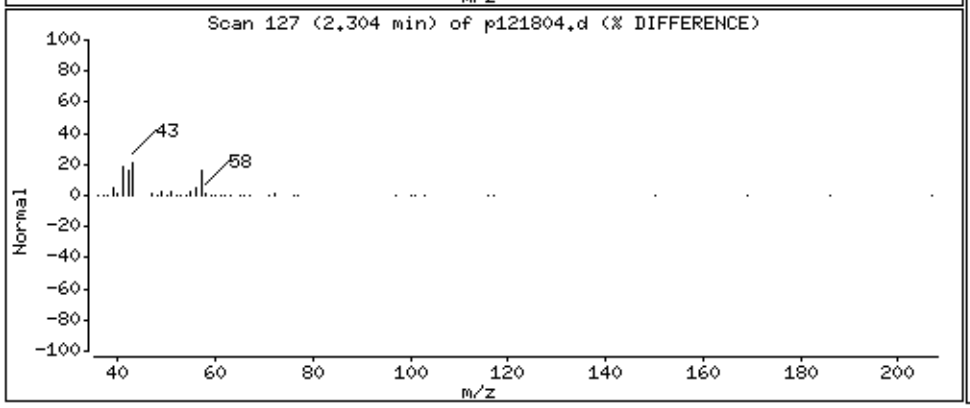
30 Chloroethane

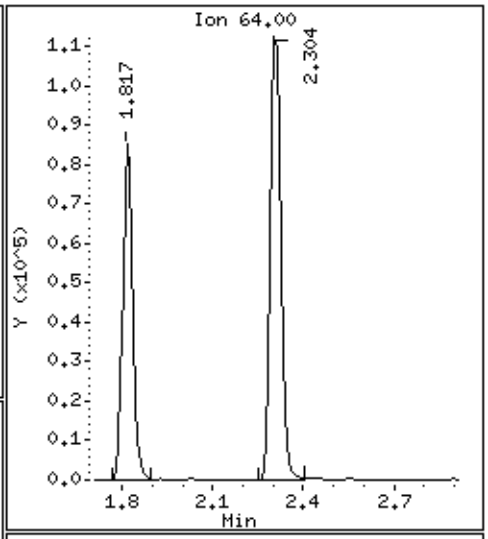
Concentration: 55.014 PPBV

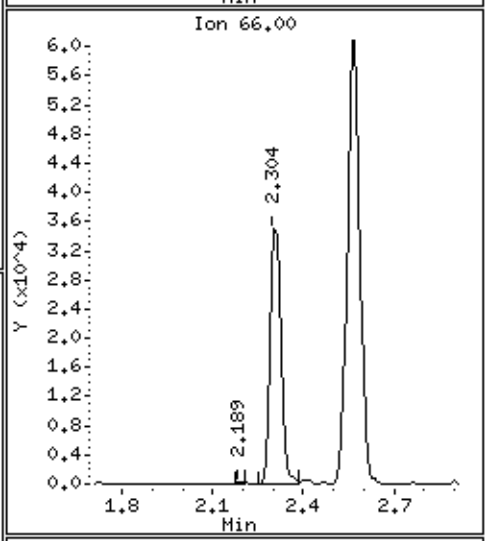


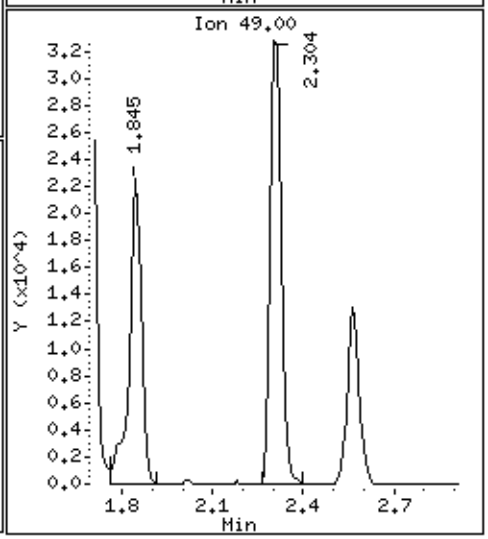












Data File: /chem/msdp.i/18dec14.b/p121804.d

Date : 18-DEC-2014 10:04

Client ID: ICV

Instrument: msdp.i

Sample Info: 50mL #2687-143

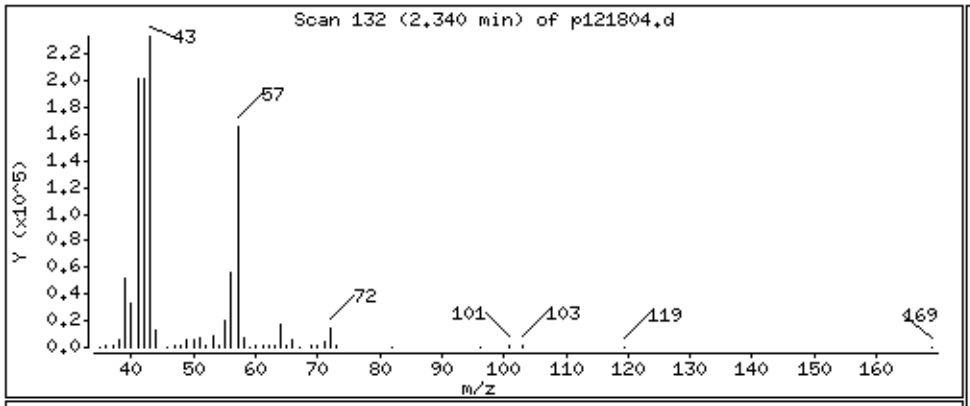
Operator: js

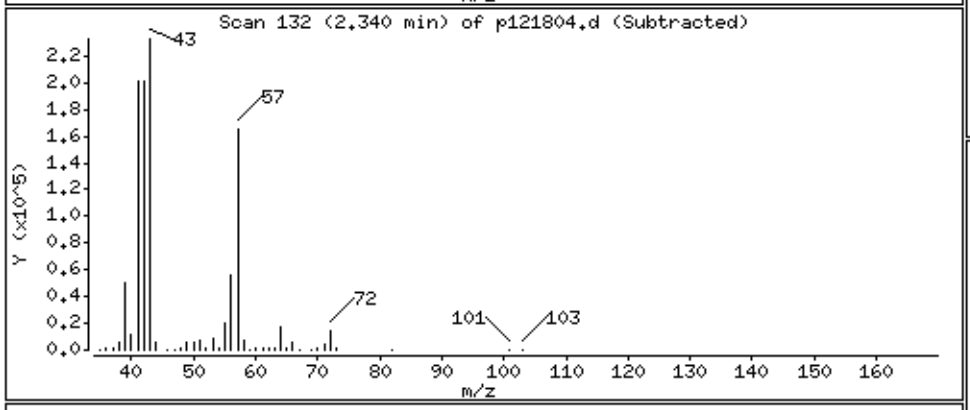
Column phase: RTX-624

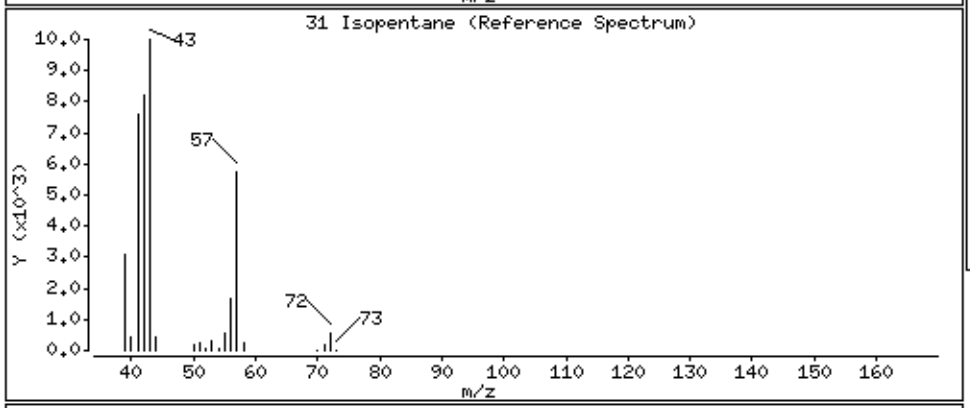
Column diameter: 0.25

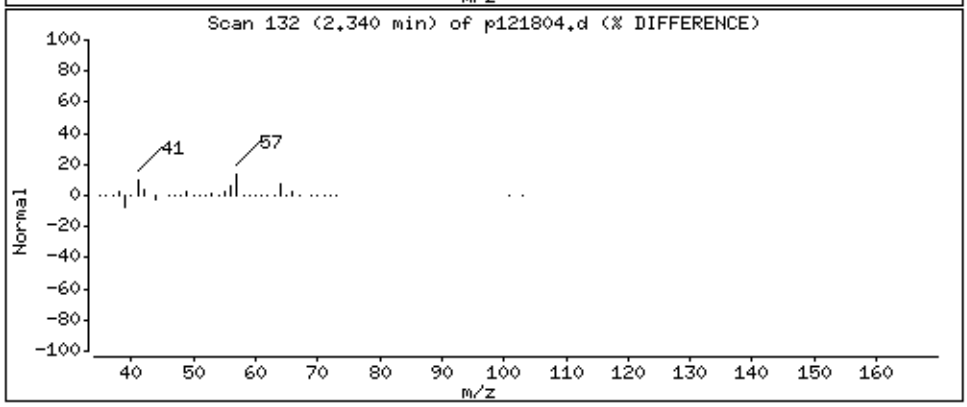
31 Isopentane

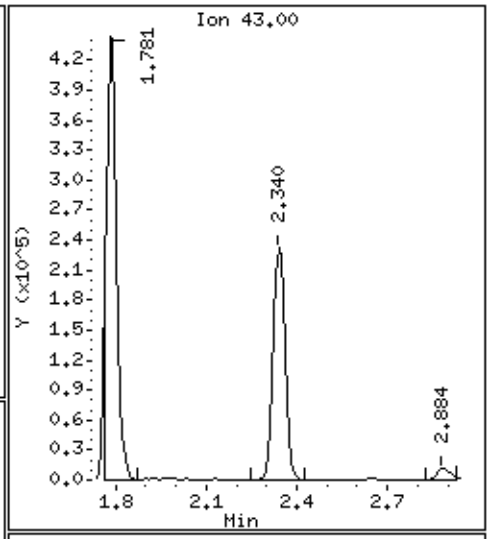
Concentration: 51.733 PPBV

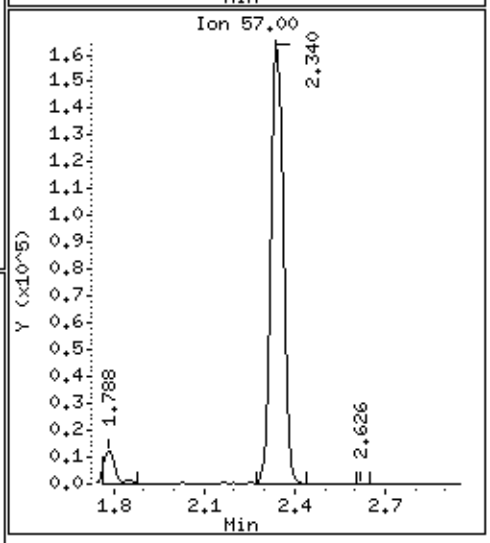












Data File: /chem/msdp.i/18dec14.b/p121804.d

Date : 18-DEC-2014 10:04

Client ID: ICV

Instrument: msdp.i

Sample Info: 50mL #2687-143

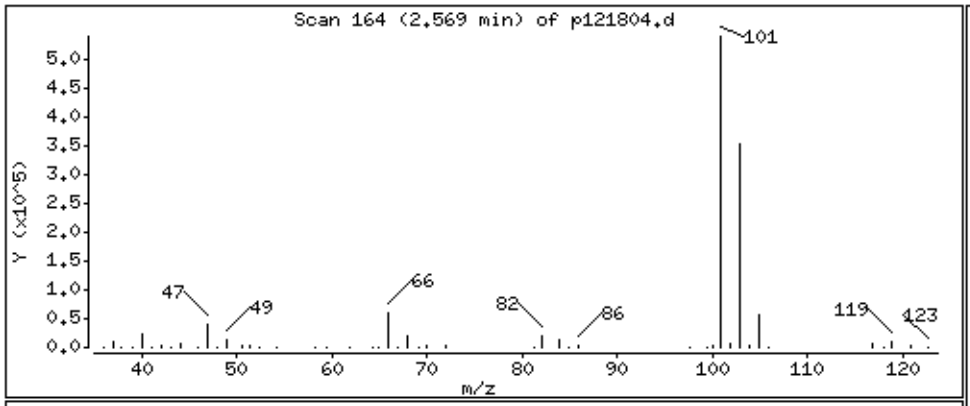
Operator: js

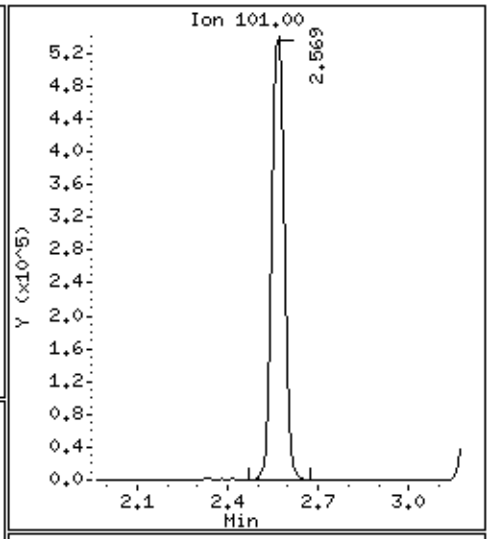
Column phase: RTX-624

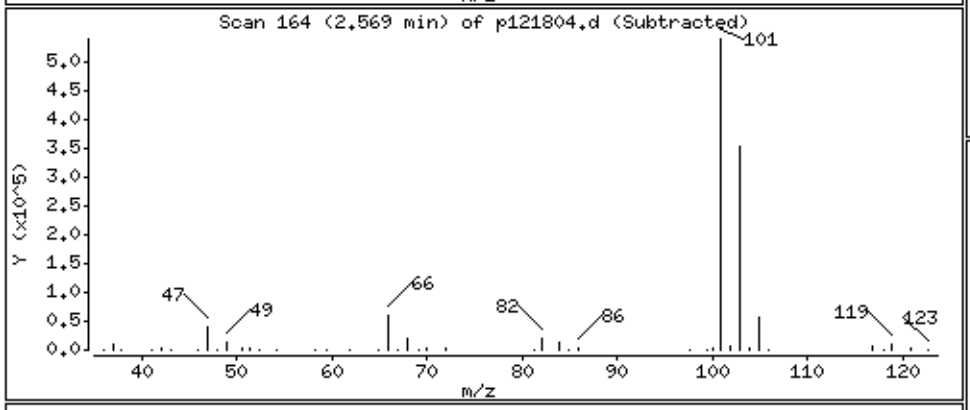
Column diameter: 0.25

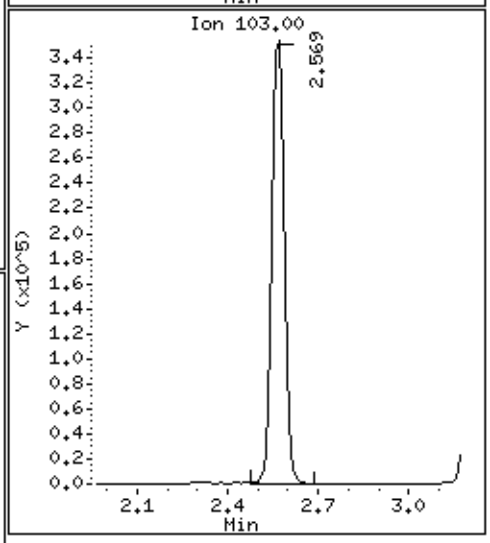
35 Freon 11

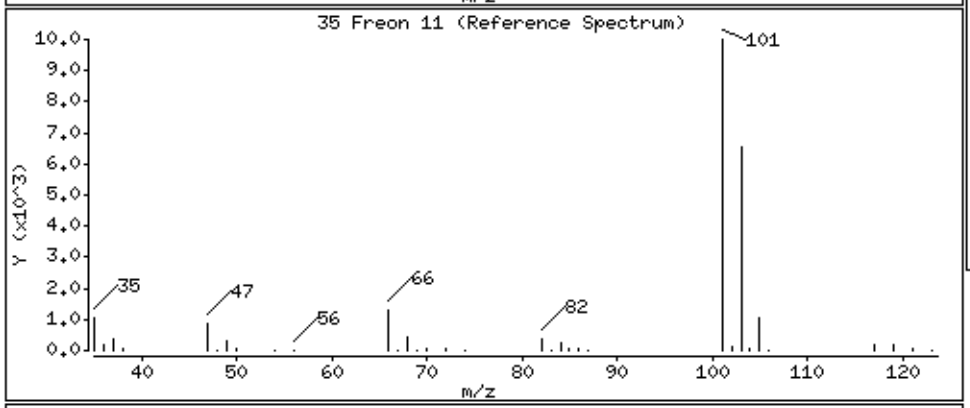
Concentration: 48.906 PPBV

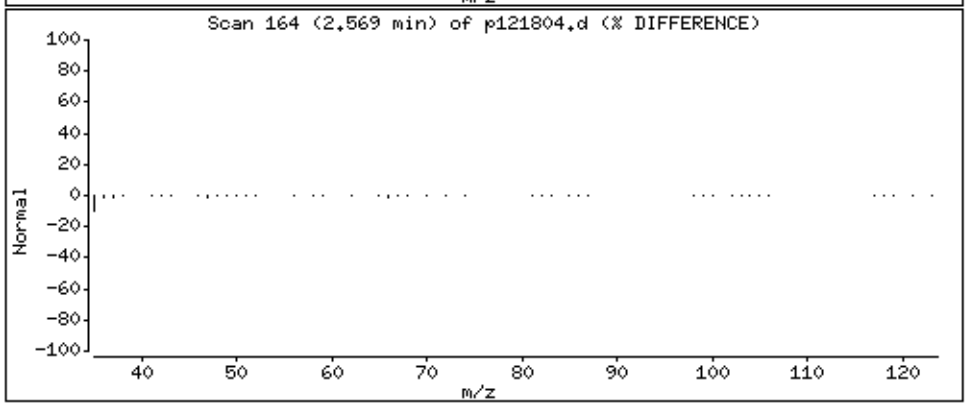












Data File: /chem/msdp.i/18dec14.b/p121804.d

Date : 18-DEC-2014 10:04

Client ID: ICV

Instrument: msdp.i

Sample Info: 50mL #2687-143

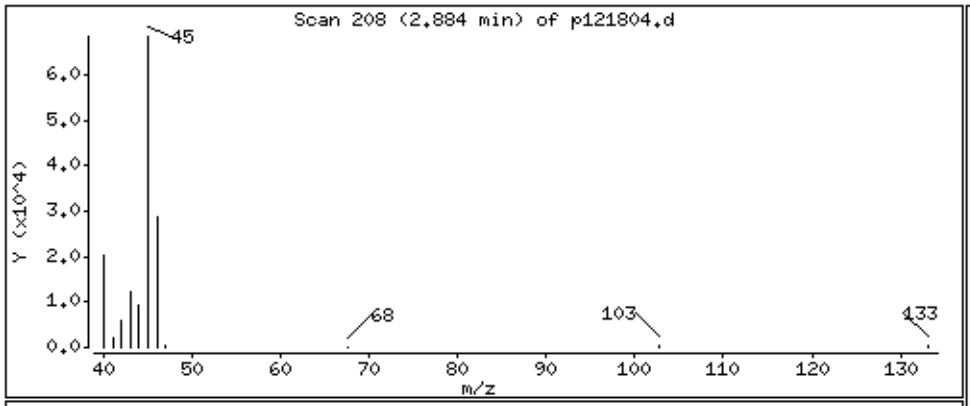
Operator: js

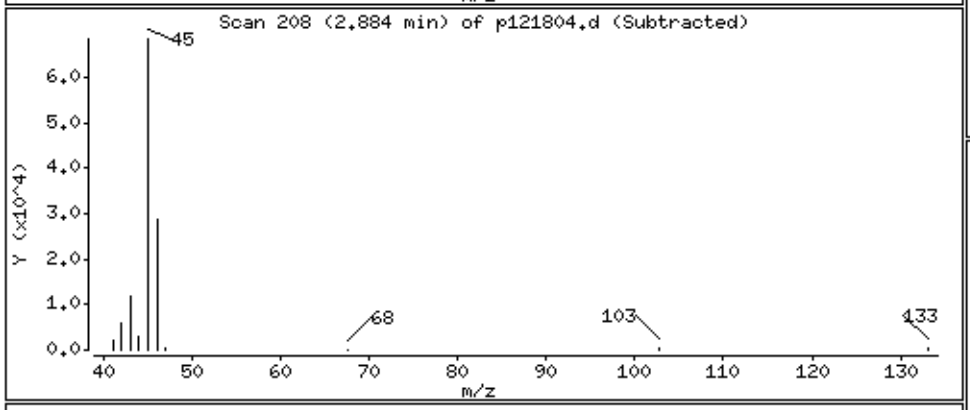
Column phase: RTX-624

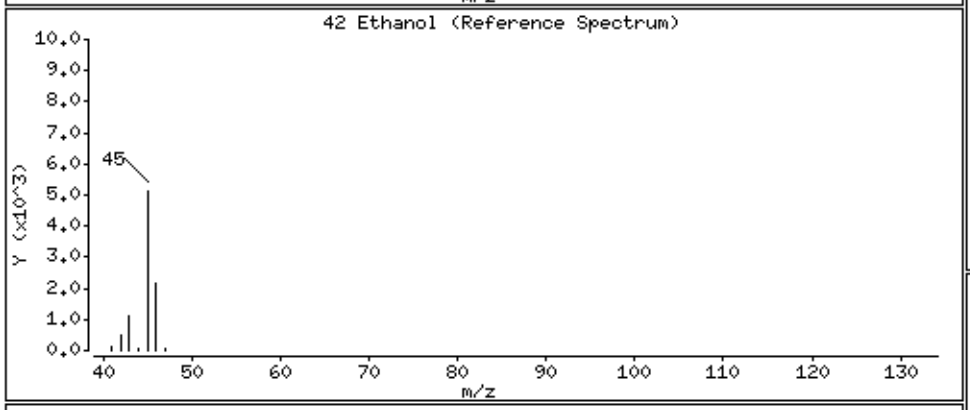
Column diameter: 0.25

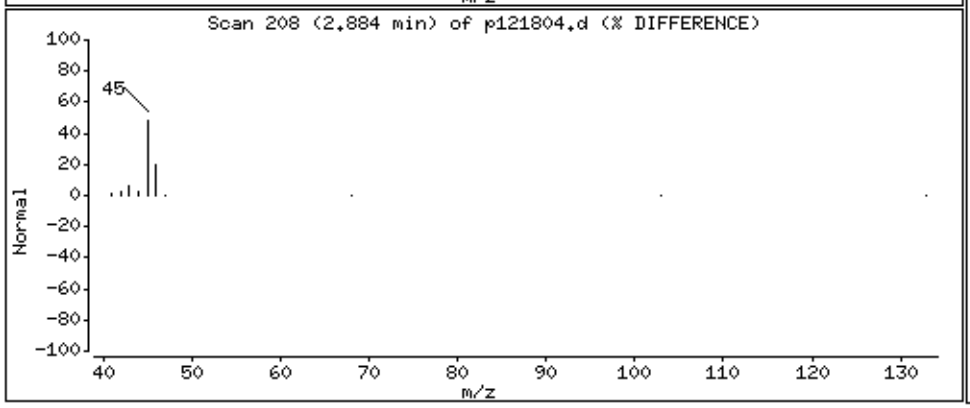
42 Ethanol

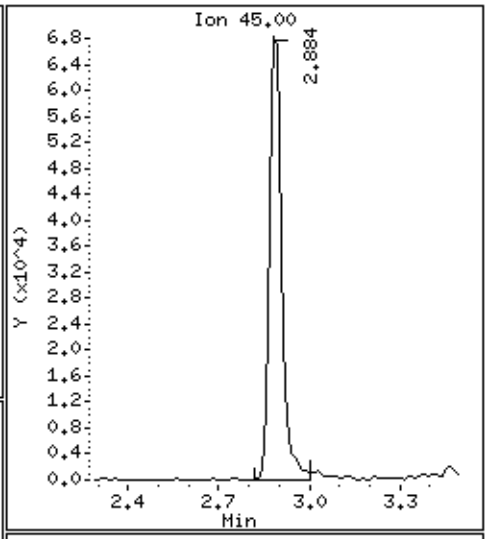
Concentration: 51.753 PPBV

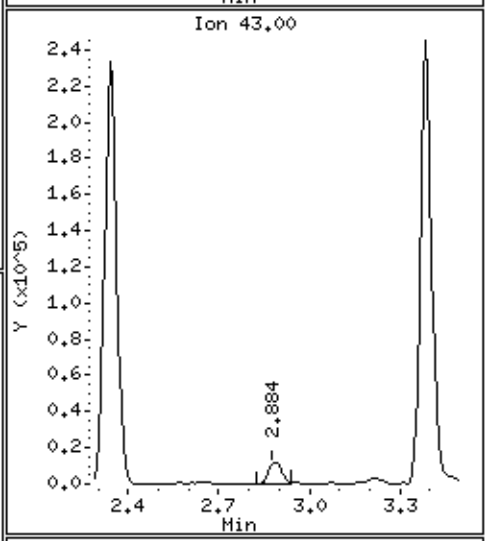


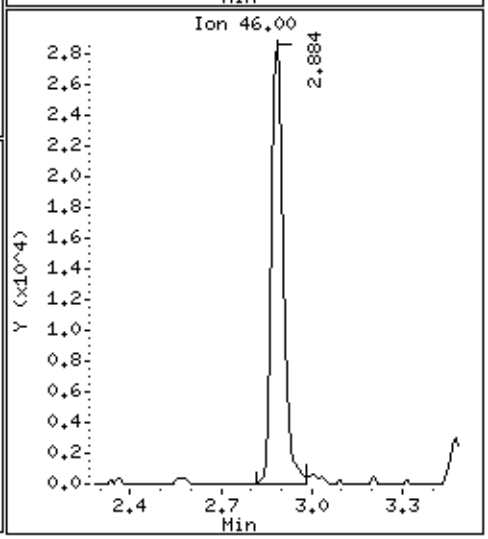












Data File: /chem/msdp.i/18dec14.b/p121804.d

Date : 18-DEC-2014 10:04

Client ID: ICV

Instrument: msdp.i

Sample Info: 50mL #2687-143

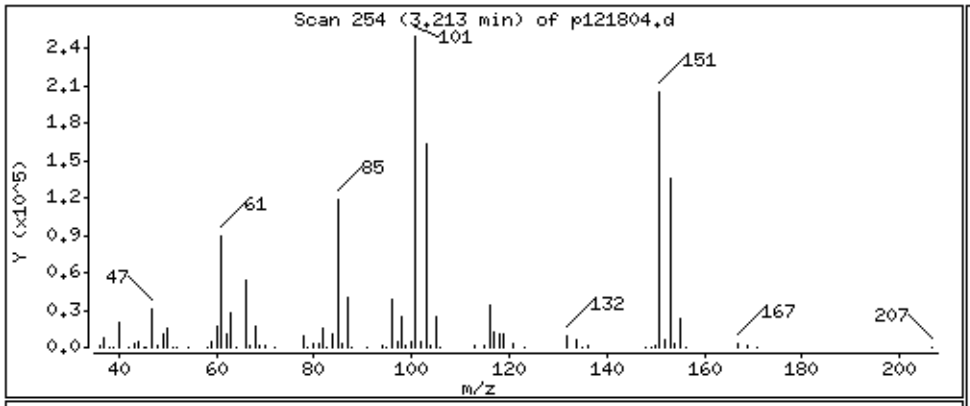
Operator: js

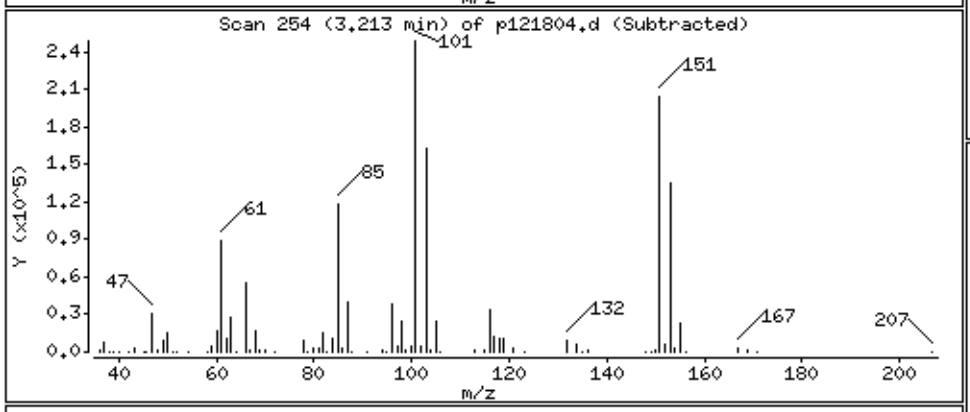
Column phase: RTX-624

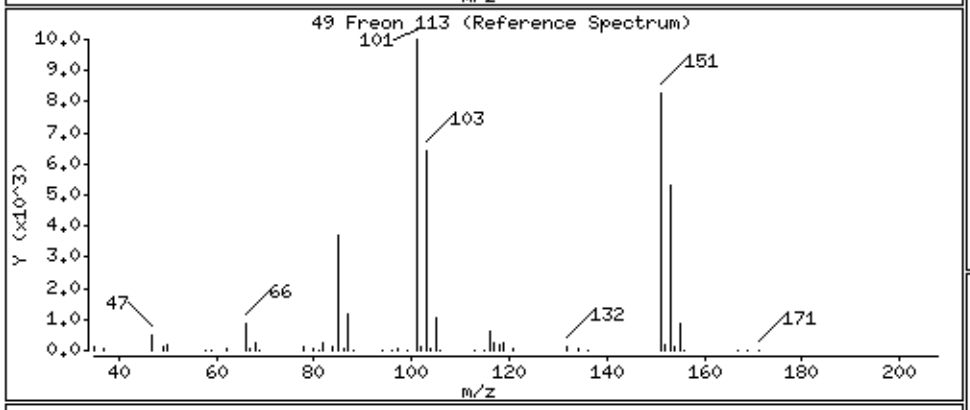
Column diameter: 0.25

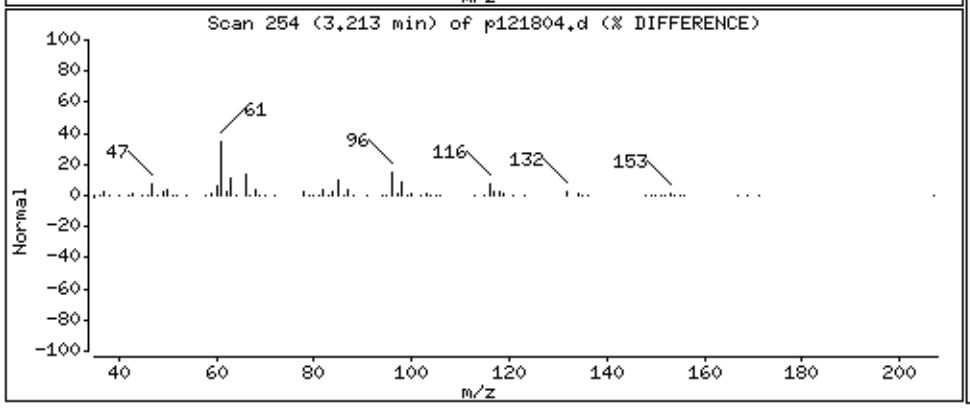
49 Freon 113

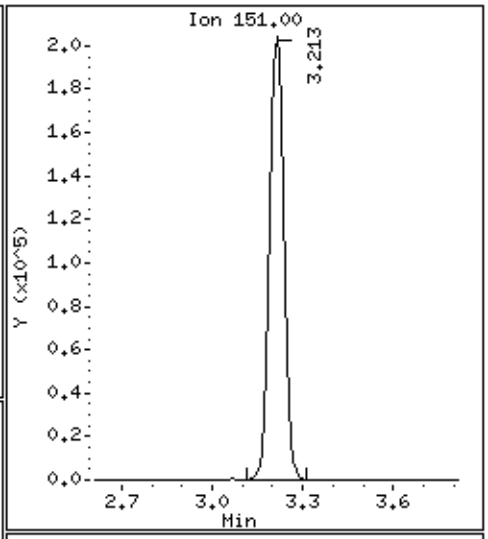
Concentration: 52.483 PPBV

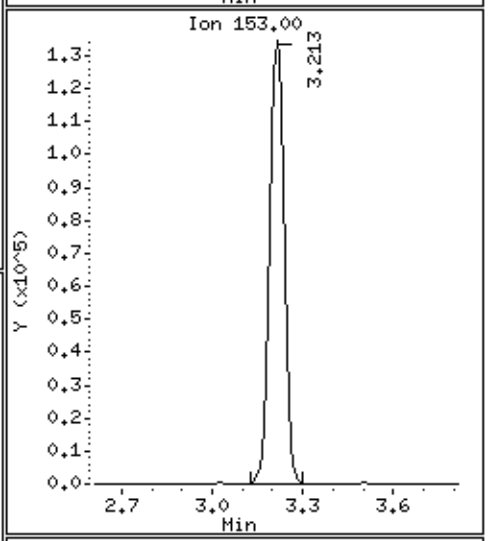


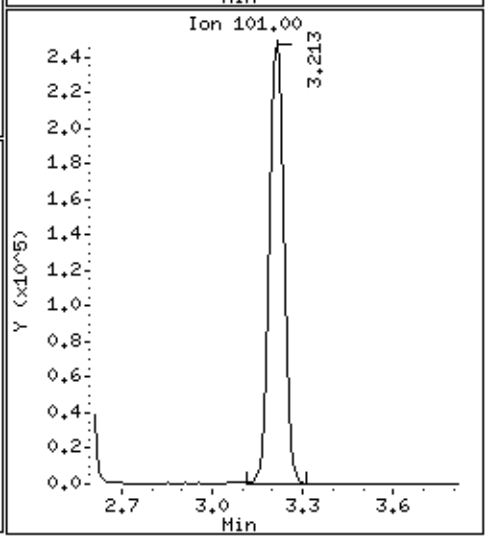












Data File: /chem/msdp.i/18dec14.b/p121804.d

Date : 18-DEC-2014 10:04

Client ID: ICV

Instrument: msdp.i

Sample Info: 50mL #2687-143

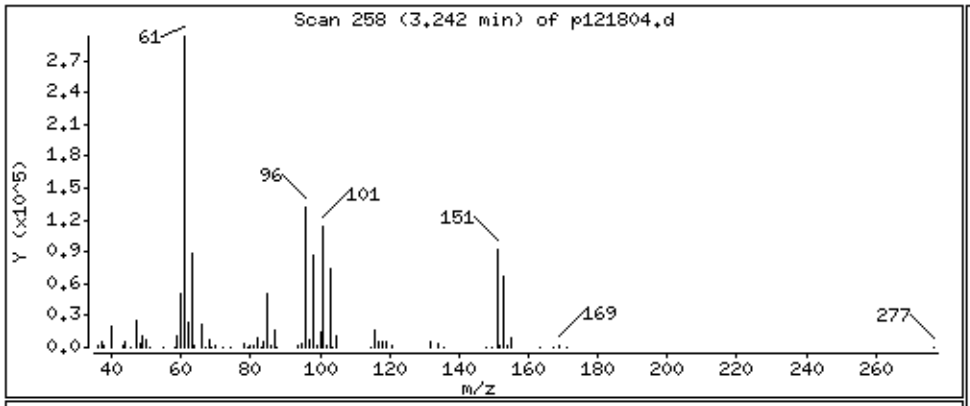
Operator: js

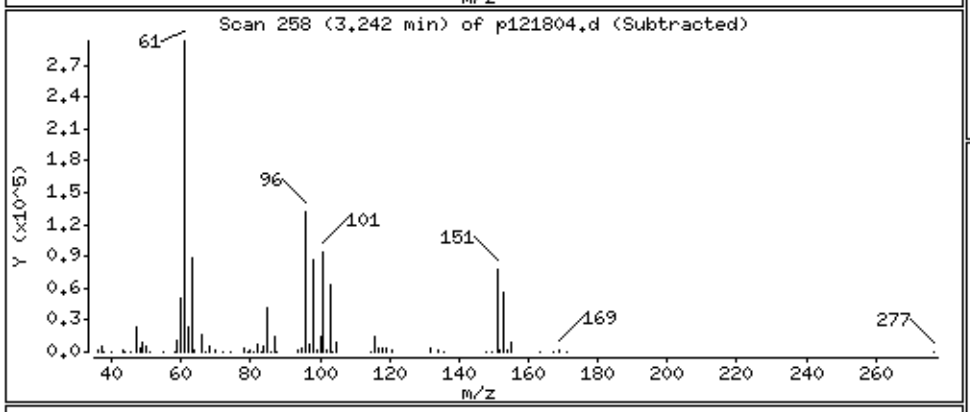
Column phase: RTX-624

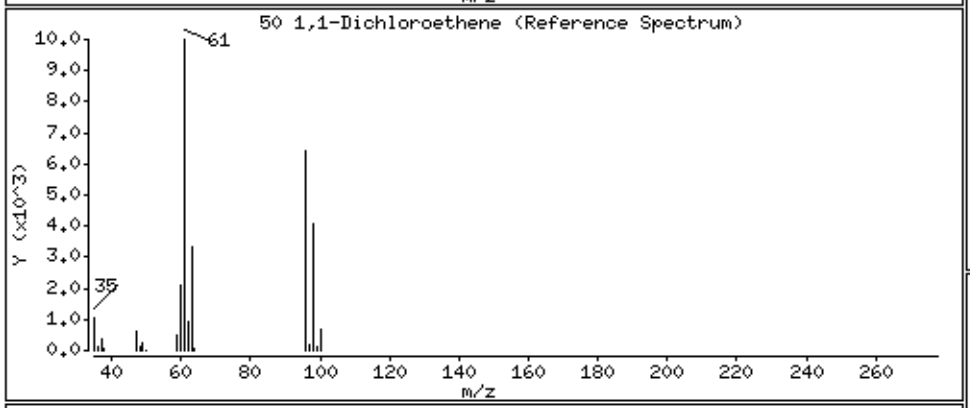
Column diameter: 0.25

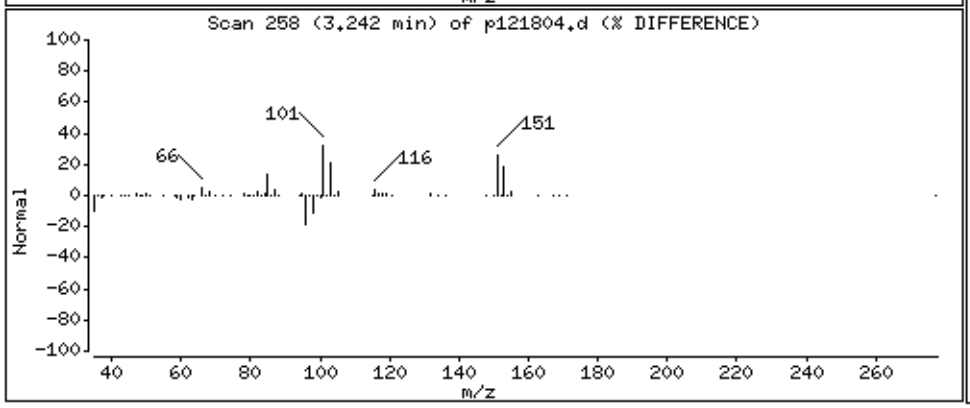
50 1,1-Dichloroethene

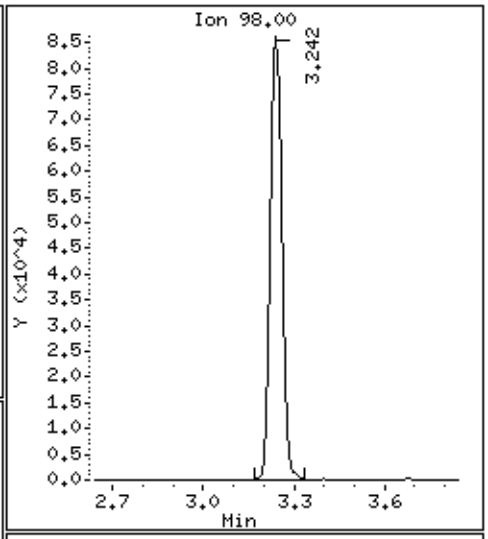
Concentration: 54.977 PPBV

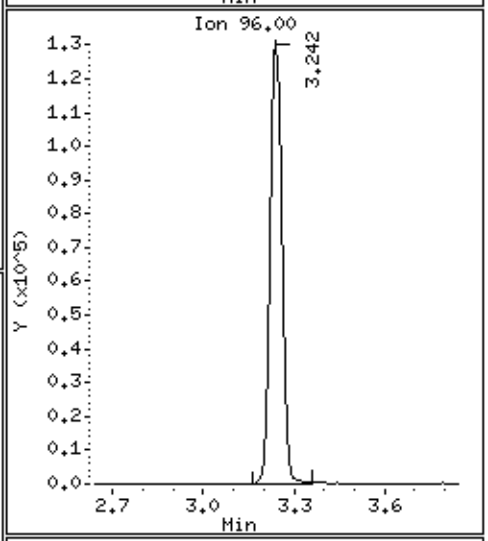


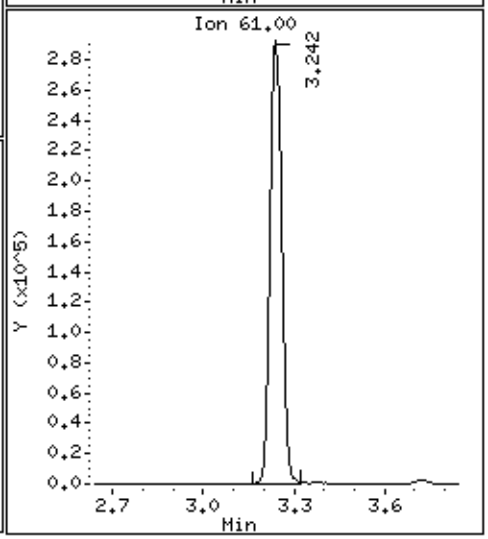












Data File: /chem/msdp.i/18dec14.b/p121804.d

Date : 18-DEC-2014 10:04

Client ID: ICV

Instrument: msdp.i

Sample Info: 50mL #2687-143

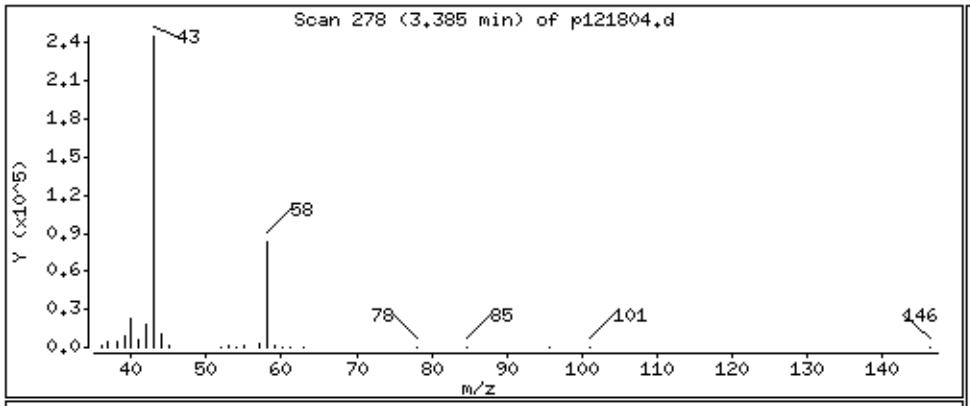
Operator: js

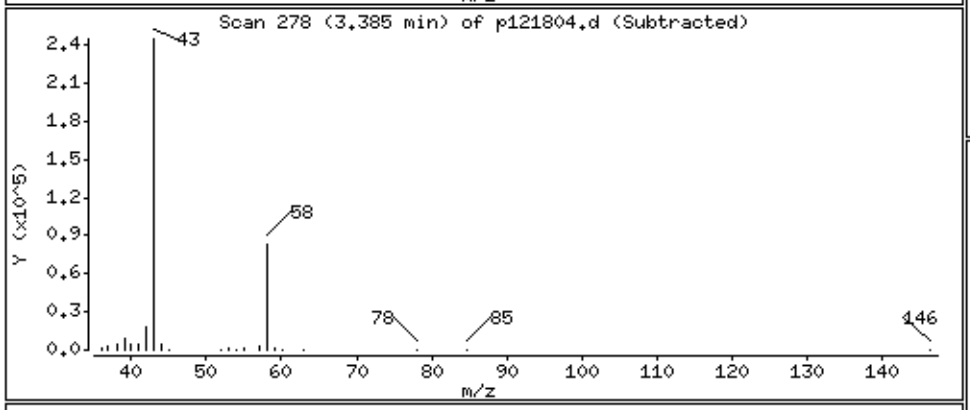
Column phase: RTX-624

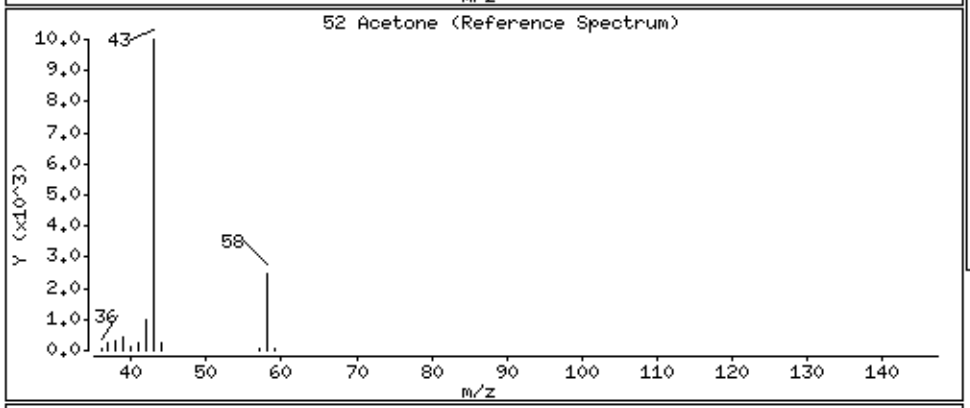
Column diameter: 0.25

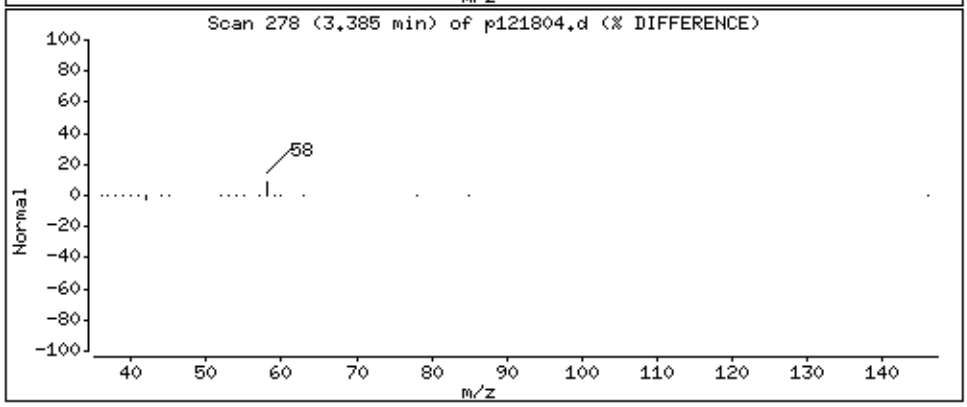
52 Acetone

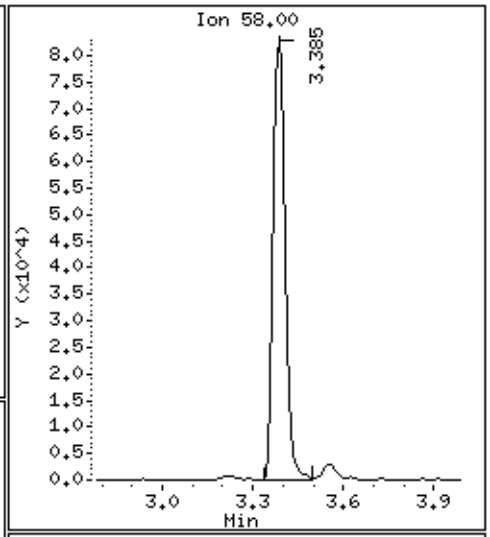
Concentration: 48.435 PPBV

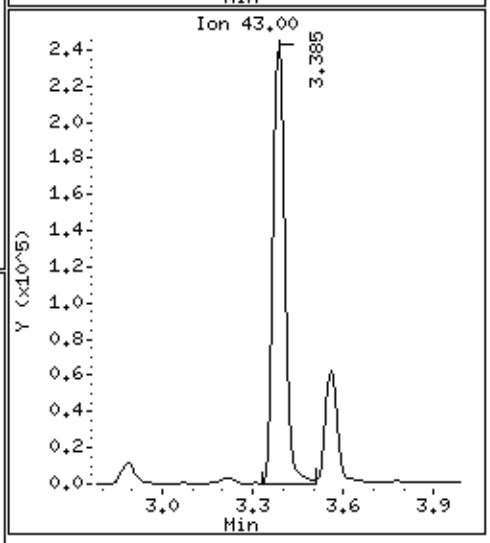












Data File: /chem/msdp.i/18dec14.b/p121804.d

Date : 18-DEC-2014 10:04

Client ID: ICV

Instrument: msdp.i

Sample Info: 50mL #2687-143

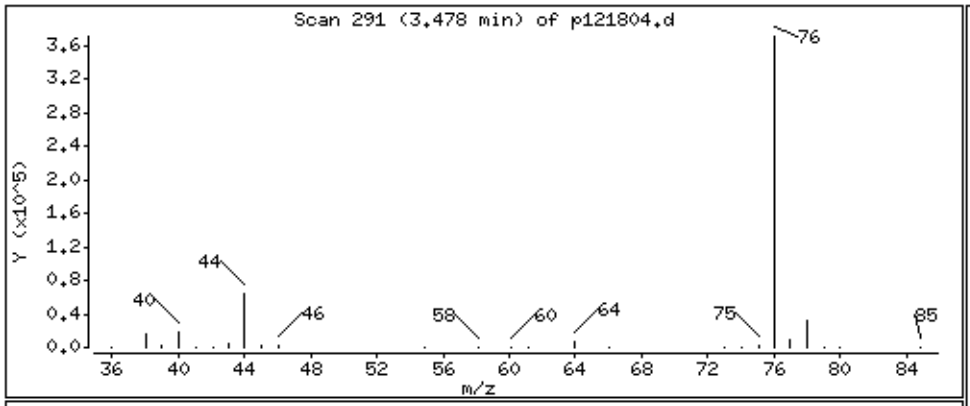
Operator: js

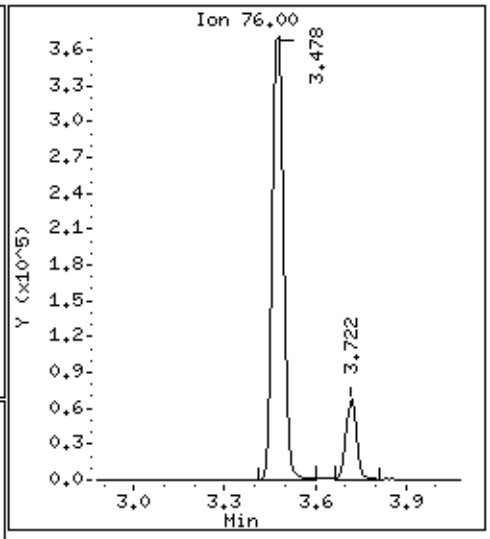
Column phase: RTX-624

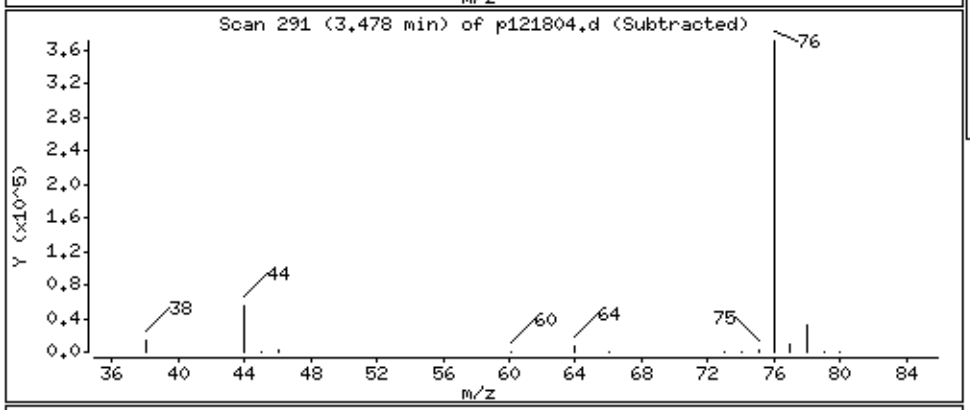
Column diameter: 0.25

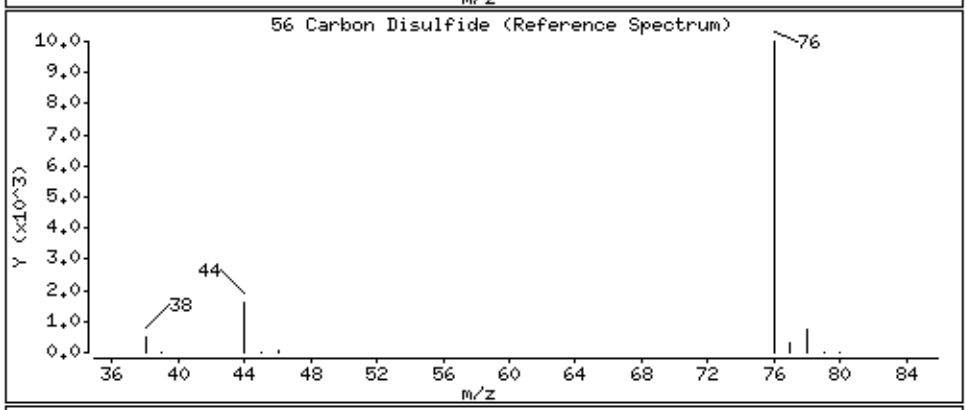
56 Carbon Disulfide

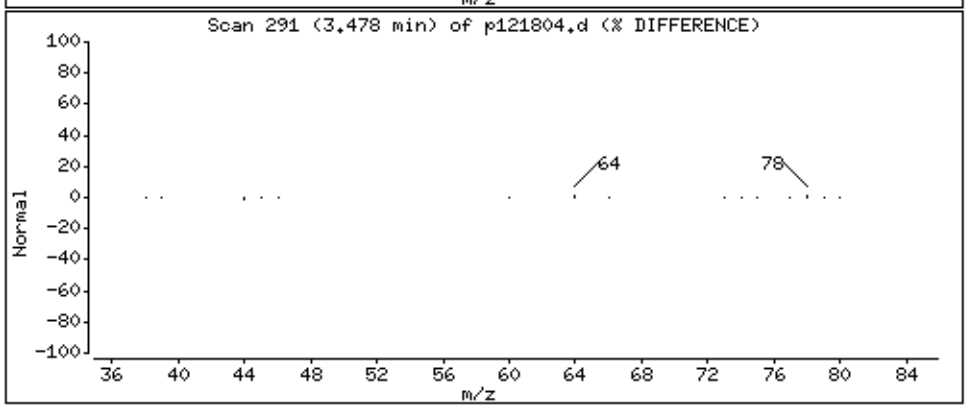
Concentration: 46.691 PPBV











Data File: /chem/msdp.i/18dec14.b/p121804.d

Date : 18-DEC-2014 10:04

Client ID: ICV

Instrument: msdp.i

Sample Info: 50mL #2687-143

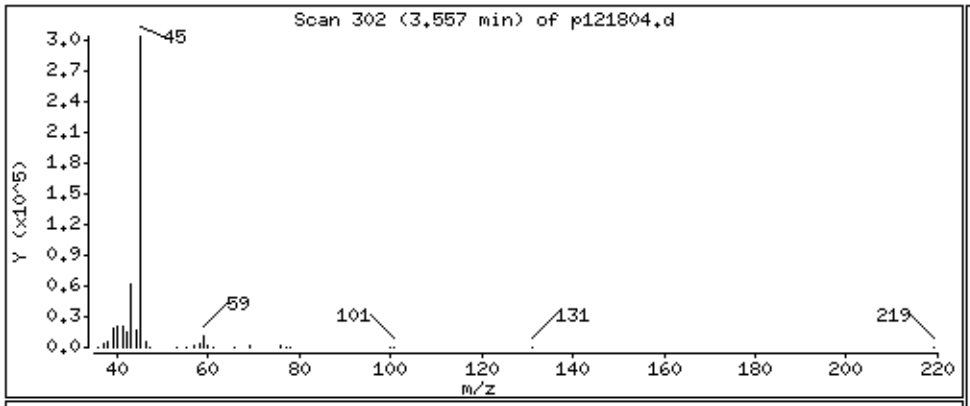
Operator: js

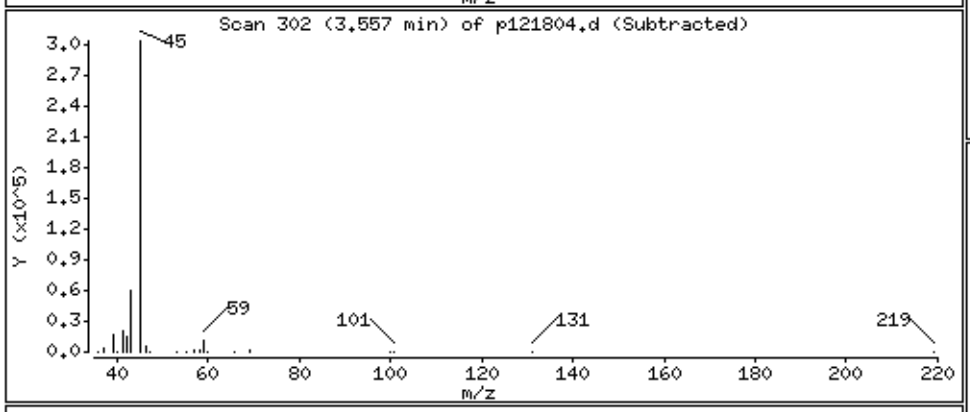
Column phase: RTX-624

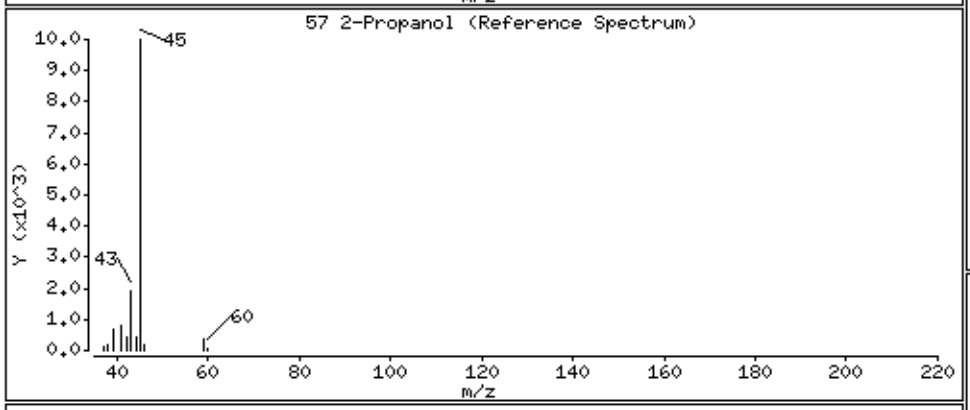
Column diameter: 0.25

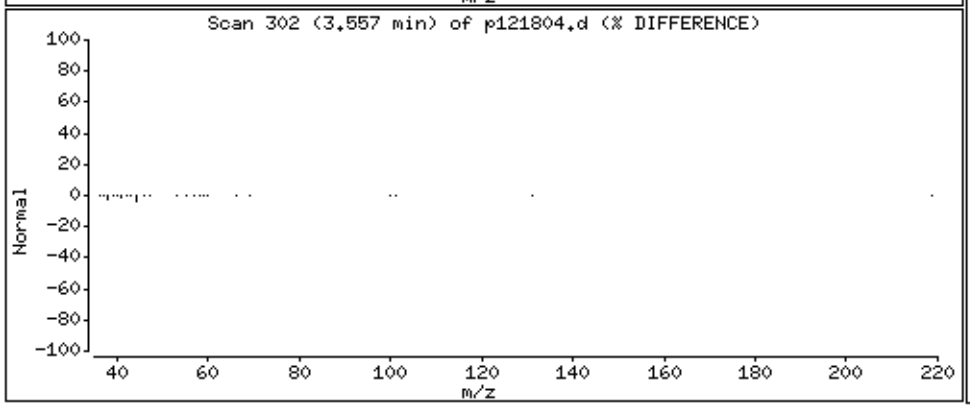
57 2-Propanol

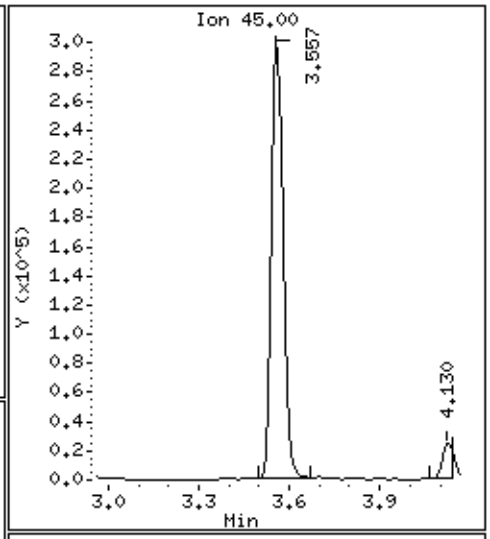
Concentration: 48.185 PPBV

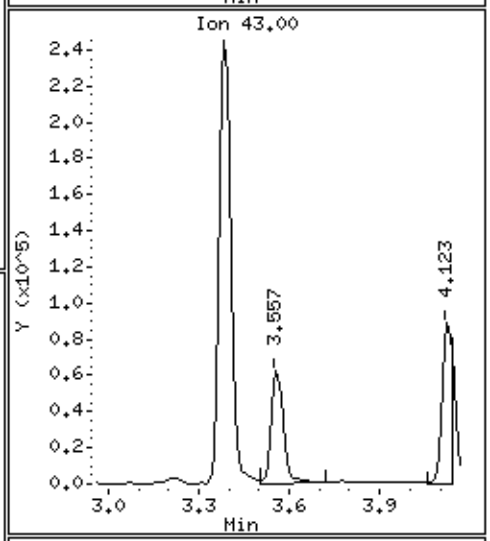


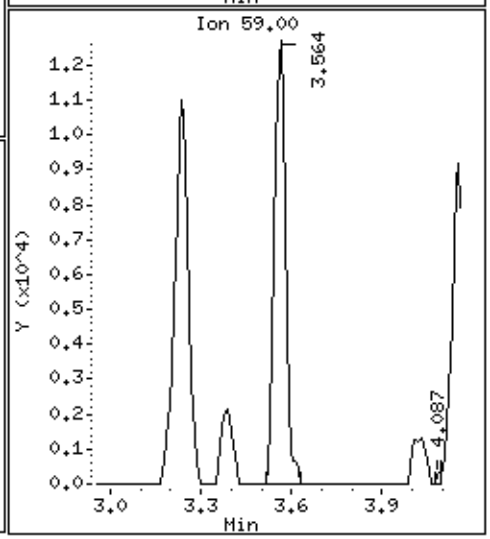












Data File: /chem/msdp.i/18dec14.b/p121804.d

Date : 18-DEC-2014 10:04

Client ID: ICV

Instrument: msdp.i

Sample Info: 50mL #2687-143

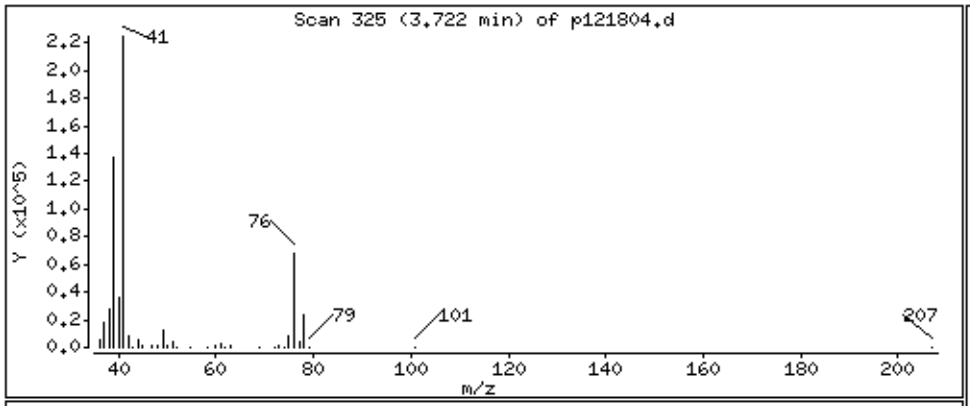
Operator: js

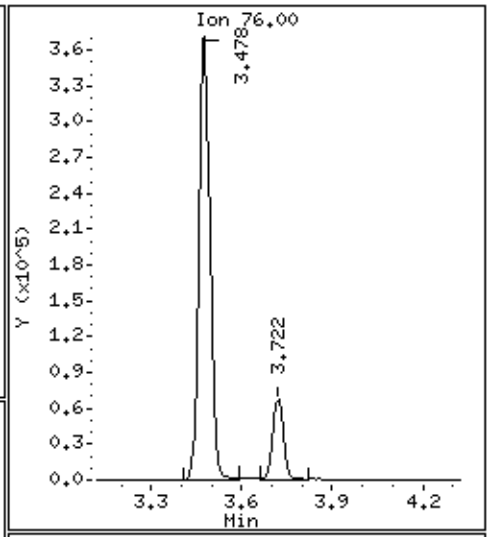
Column phase: RTX-624

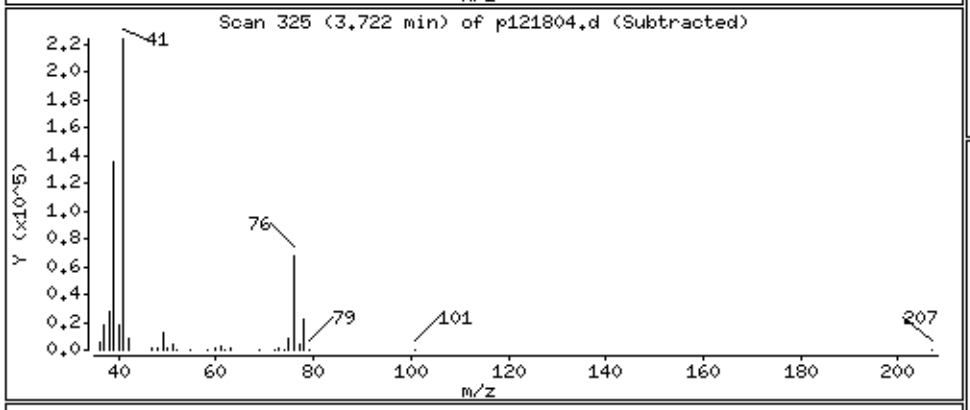
Column diameter: 0.25

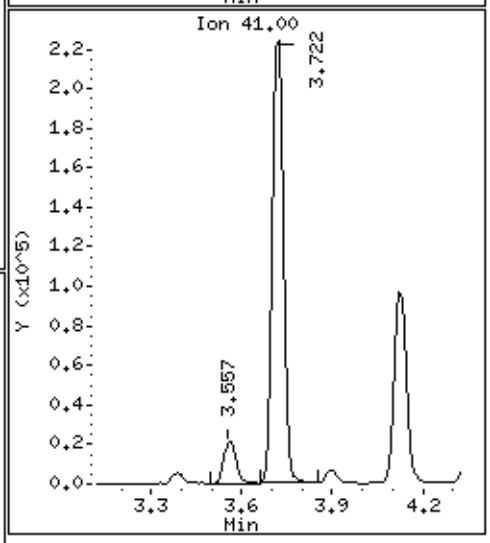
58 3-Chloropropene

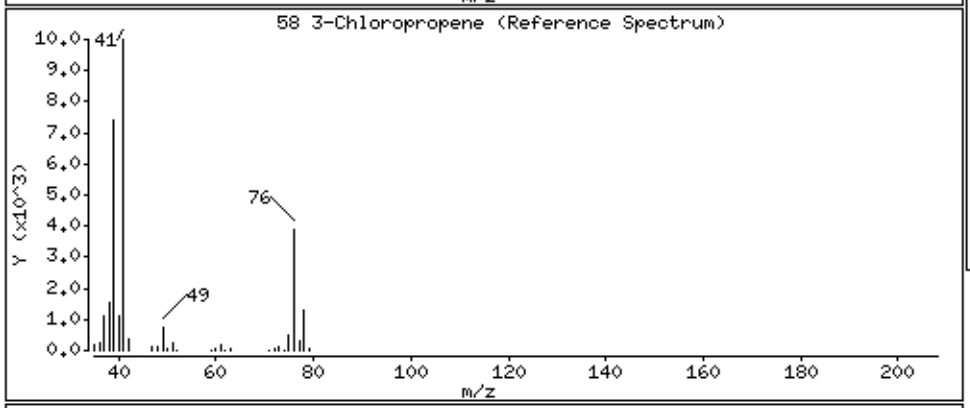
Concentration: 49.271 PPBV

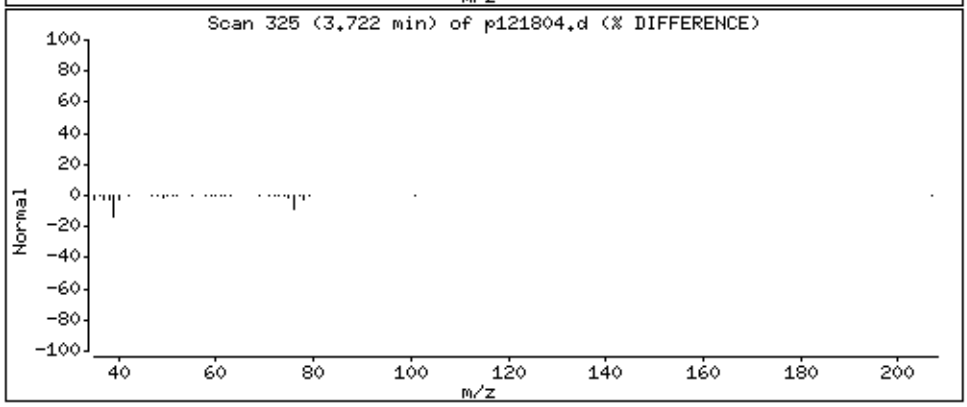












Data File: /chem/msdp.i/18dec14.b/p121804.d

Date : 18-DEC-2014 10:04

Client ID: ICV

Instrument: msdp.i

Sample Info: 50mL #2687-143

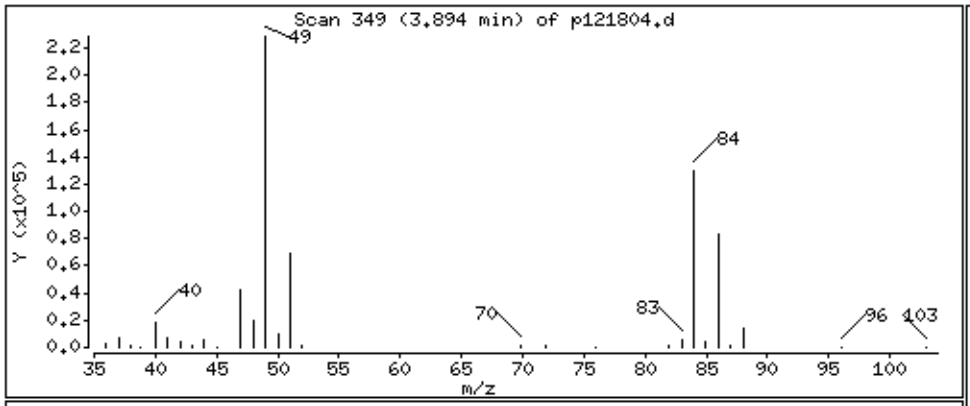
Operator: js

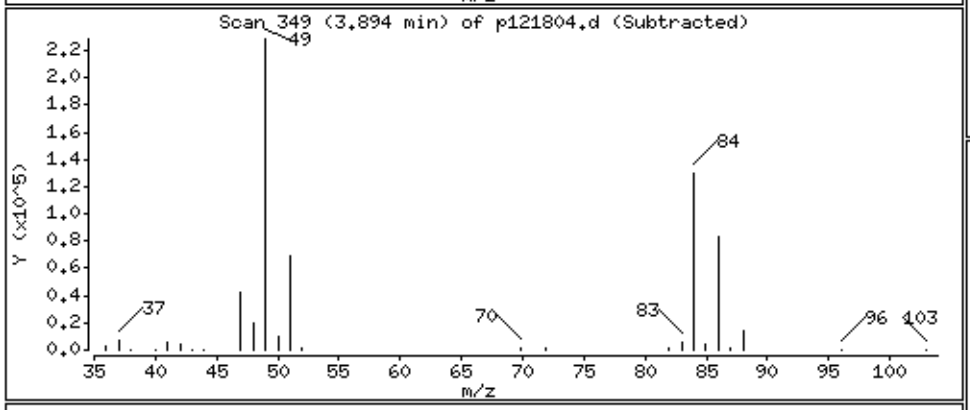
Column phase: RTX-624

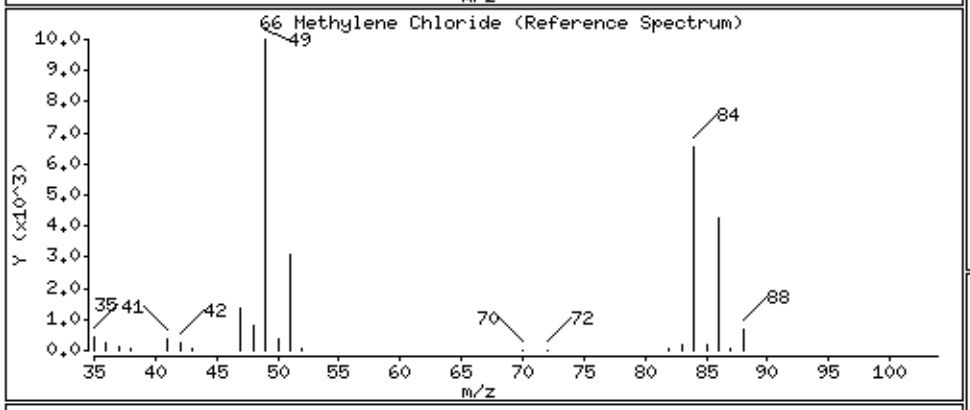
Column diameter: 0.25

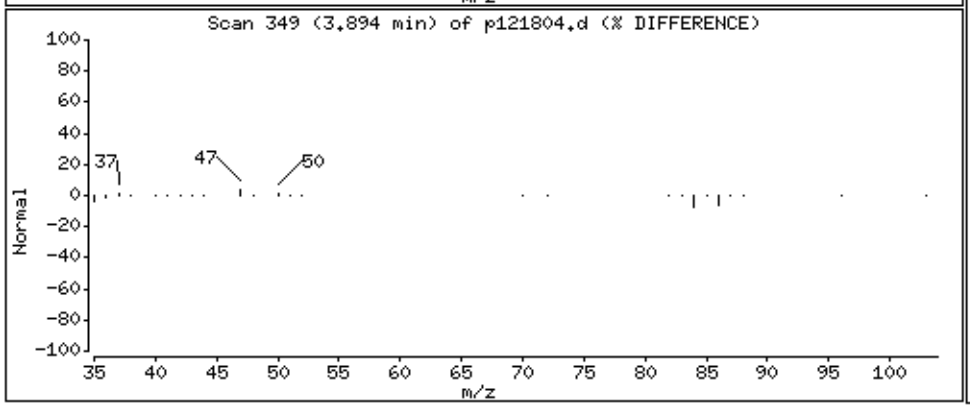
66 Methylene Chloride

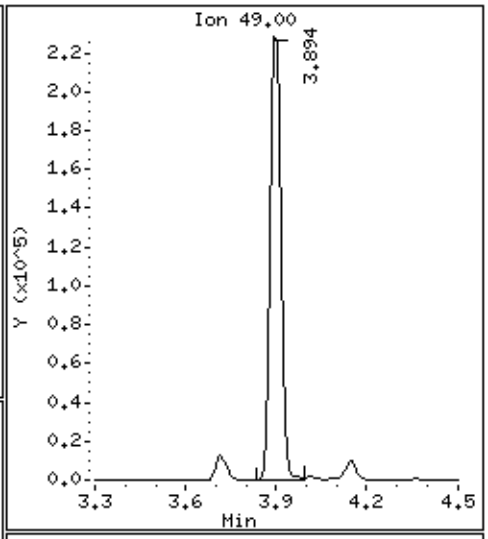
Concentration: 51.807 PPBV

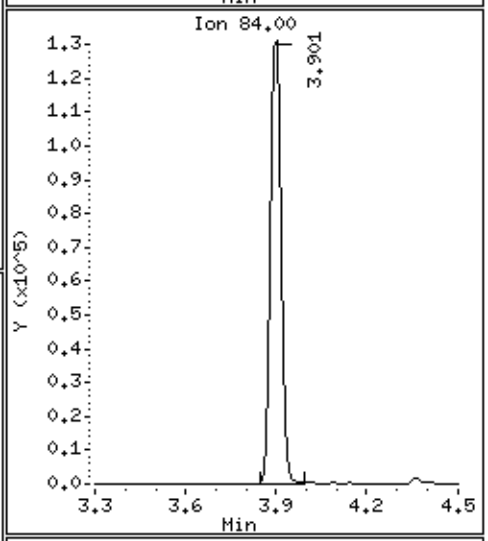


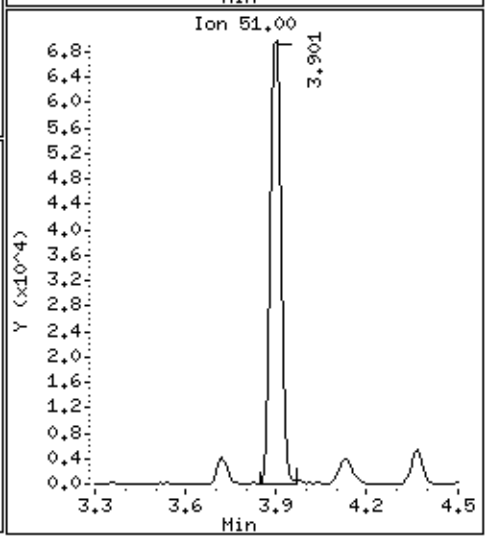












Data File: /chem/msdp.i/18dec14.b/p121804.d

Date : 18-DEC-2014 10:04

Client ID: ICV

Instrument: msdp.i

Sample Info: 50mL #2687-143

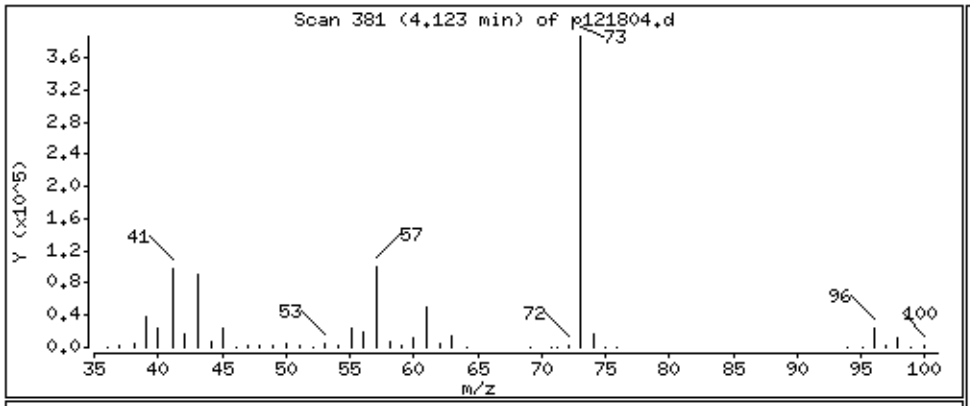
Operator: js

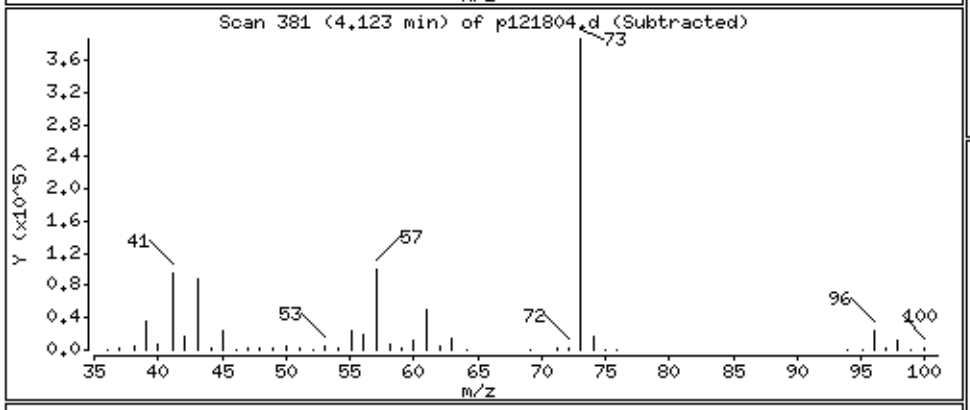
Column phase: RTX-624

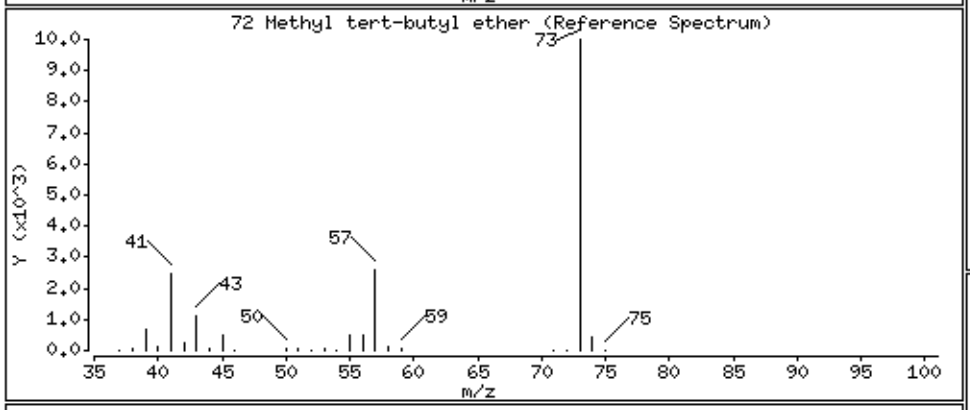
Column diameter: 0.25

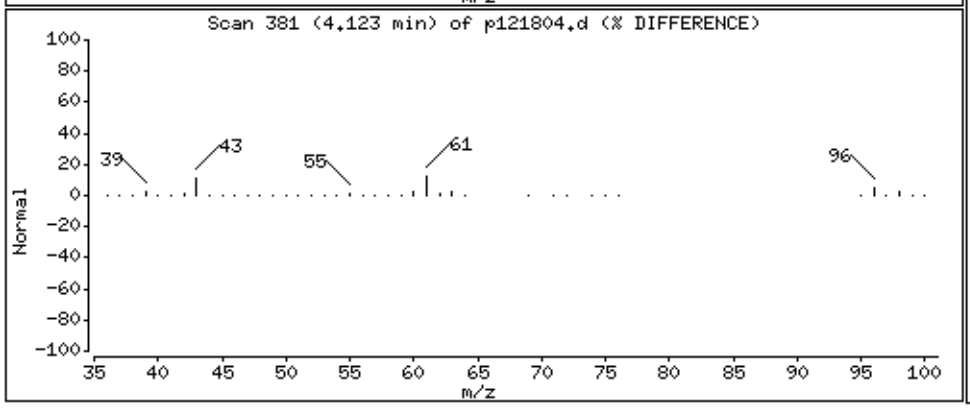
72 Methyl tert-butyl ether

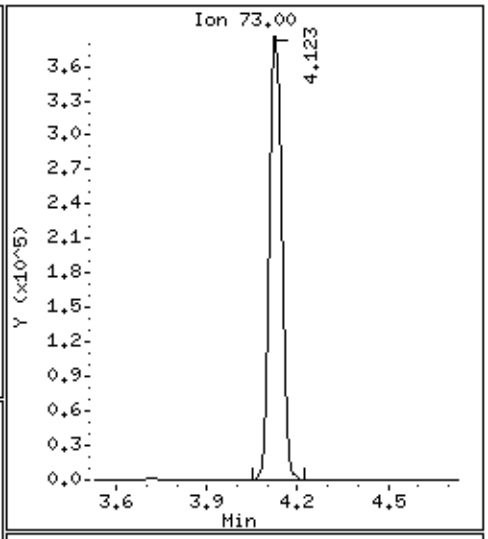
Concentration: 47.623 PPBV

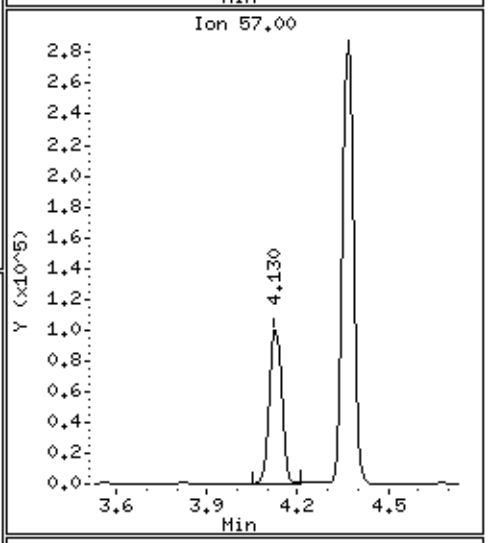


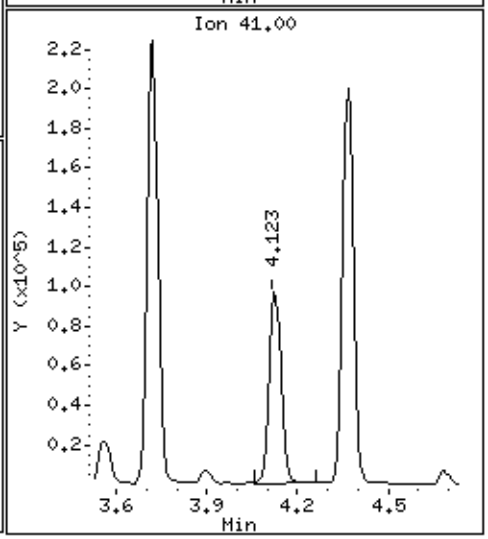












Data File: /chem/msdp.i/18dec14.b/p121804.d

Date : 18-DEC-2014 10:04

Client ID: ICV

Instrument: msdp.i

Sample Info: 50mL #2687-143

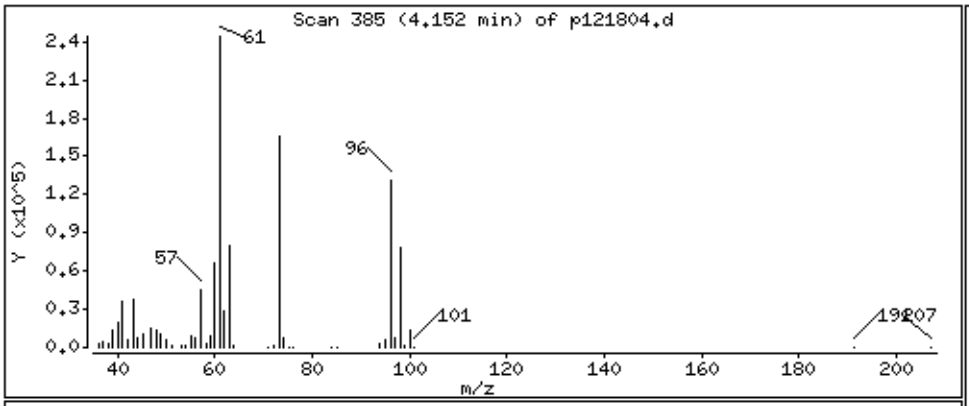
Operator: js

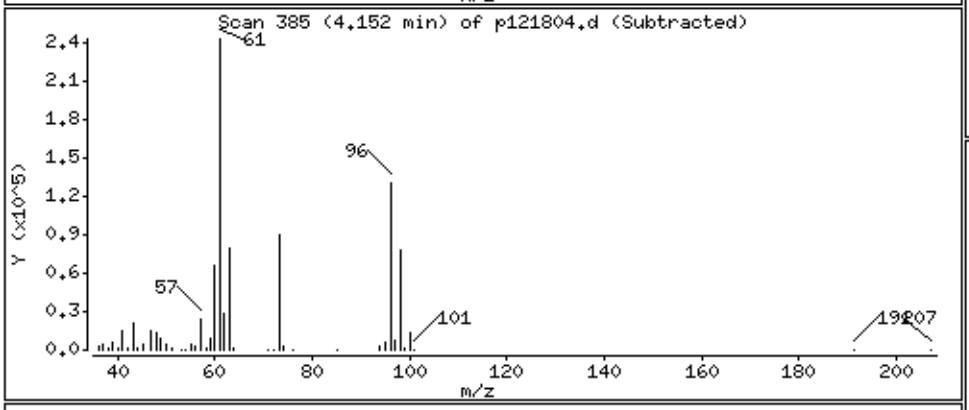
Column phase: RTX-624

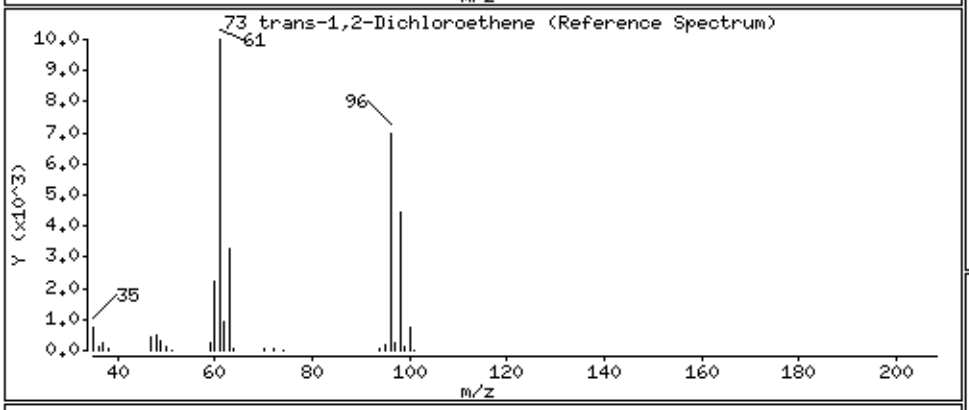
Column diameter: 0.25

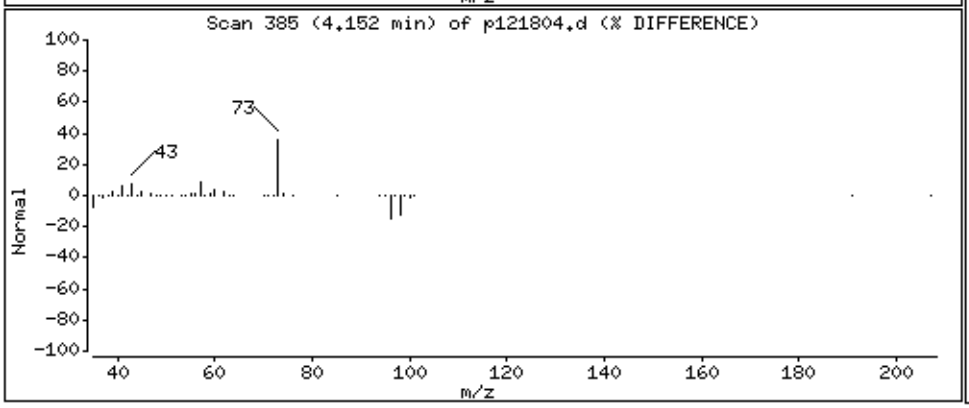
73 trans-1,2-Dichloroethene

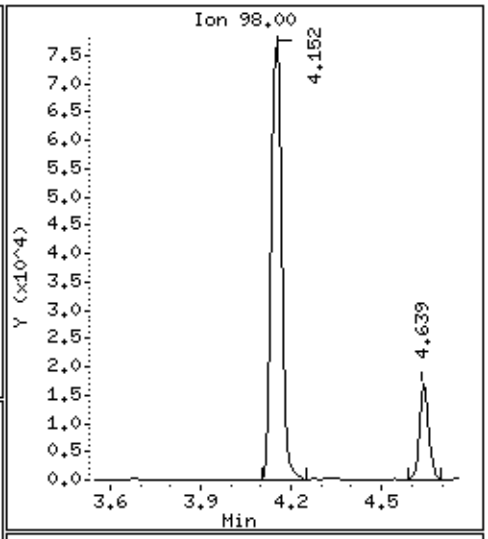
Concentration: 44.682 PPBV

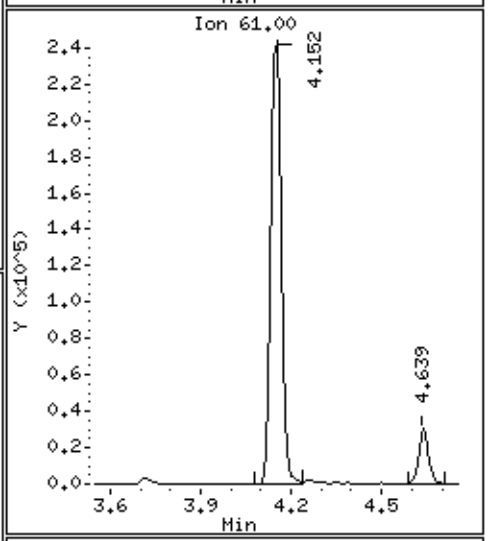


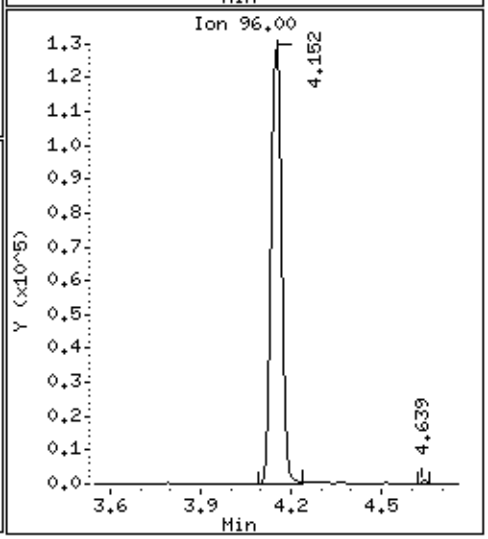












Data File: /chem/msdp.i/18dec14.b/p121804.d

Date : 18-DEC-2014 10:04

Client ID: ICV

Instrument: msdp.i

Sample Info: 50mL #2687-143

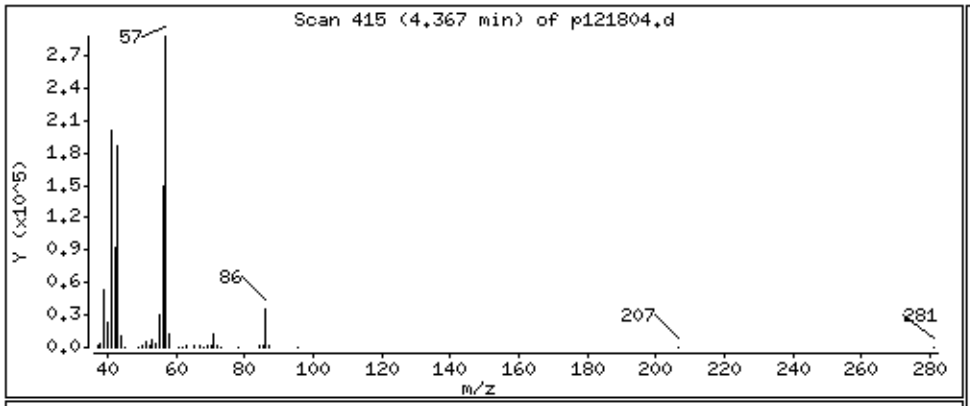
Operator: js

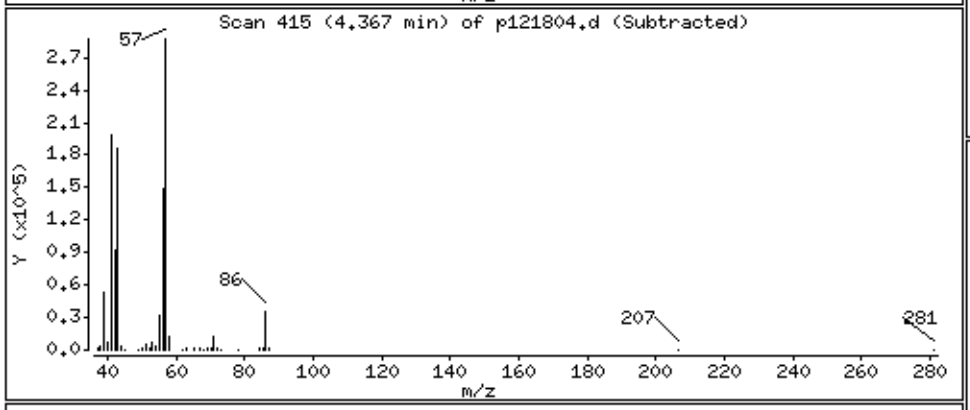
Column phase: RTX-624

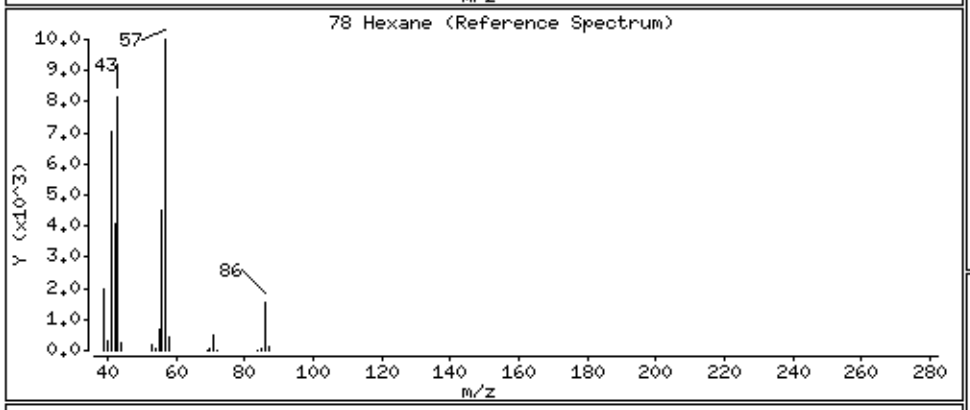
Column diameter: 0.25

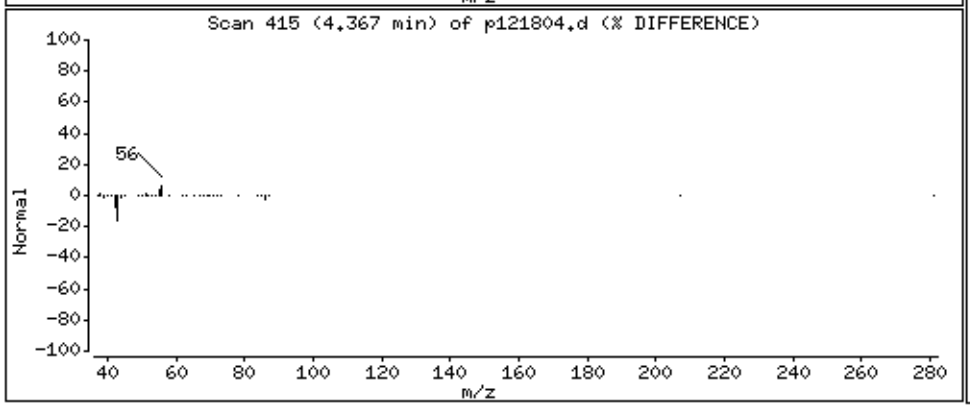
78 Hexane

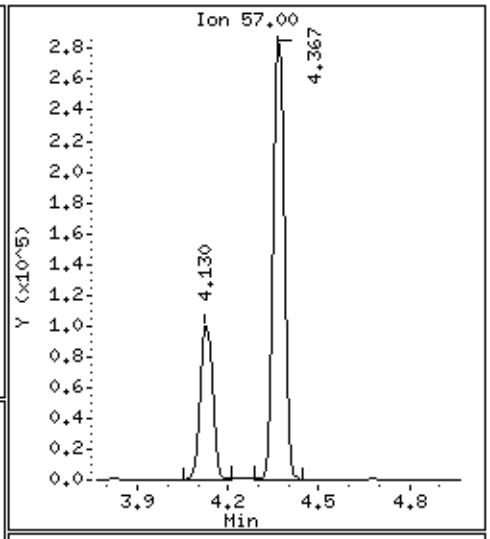
Concentration: 48.210 PPBV

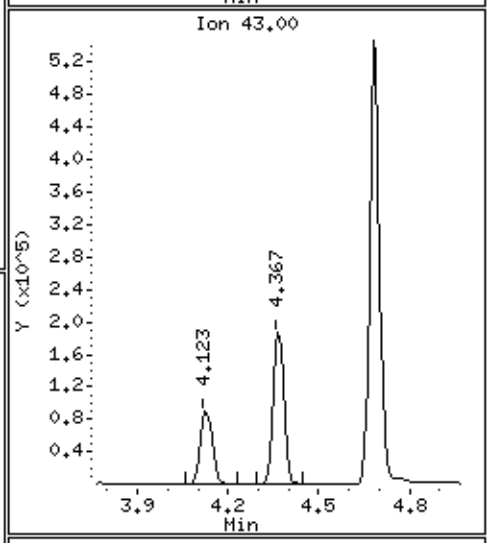


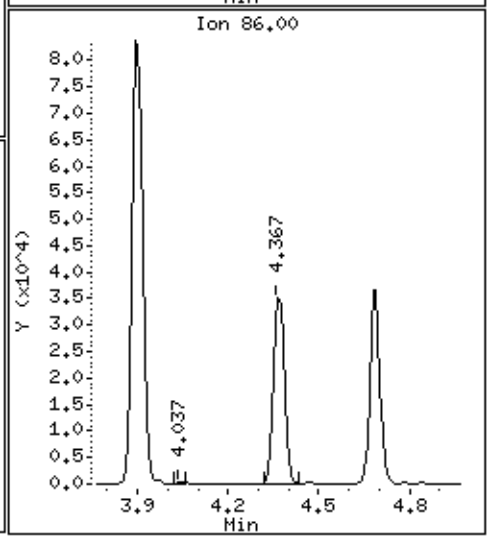












Data File: /chem/msdp.i/18dec14.b/p121804.d

Date : 18-DEC-2014 10:04

Client ID: ICV

Instrument: msdp.i

Sample Info: 50mL #2687-143

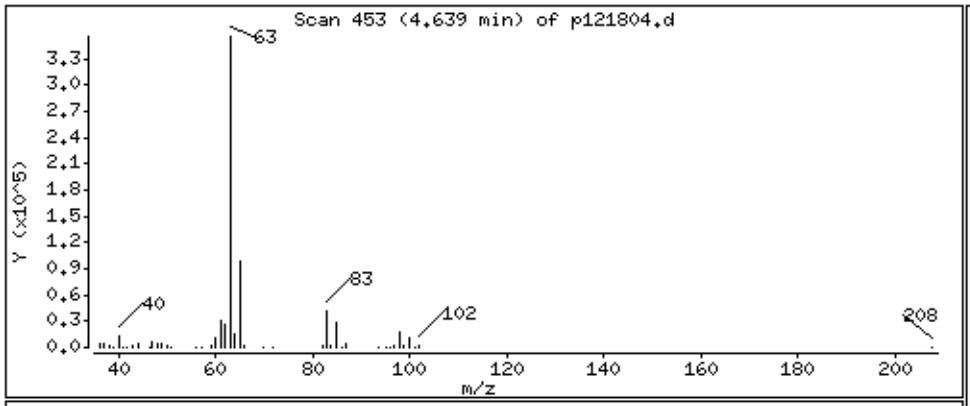
Operator: js

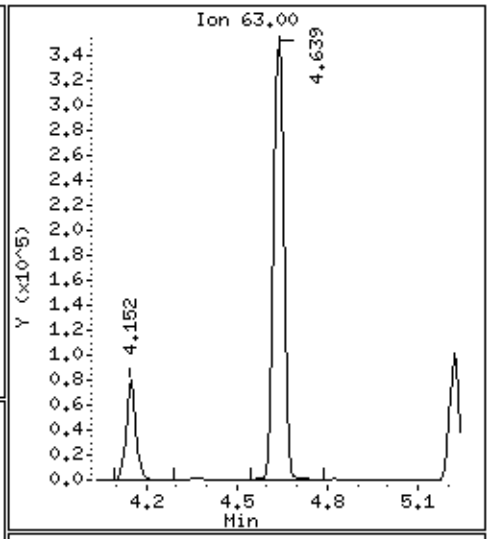
Column phase: RTX-624

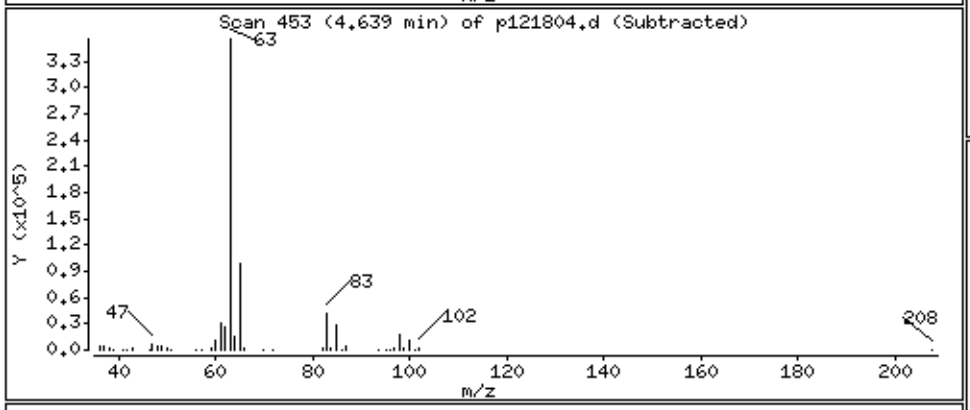
Column diameter: 0.25

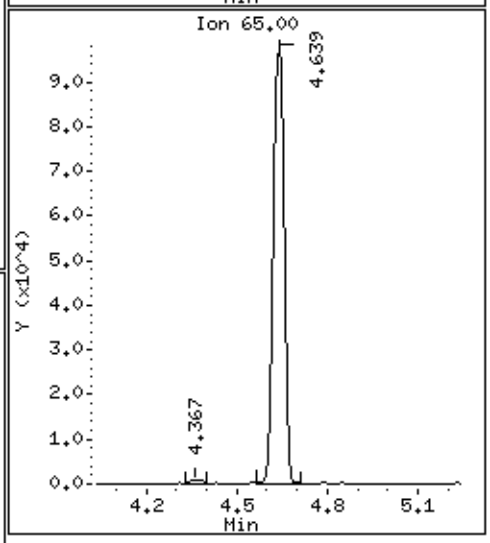
82 1,1-Dichloroethane

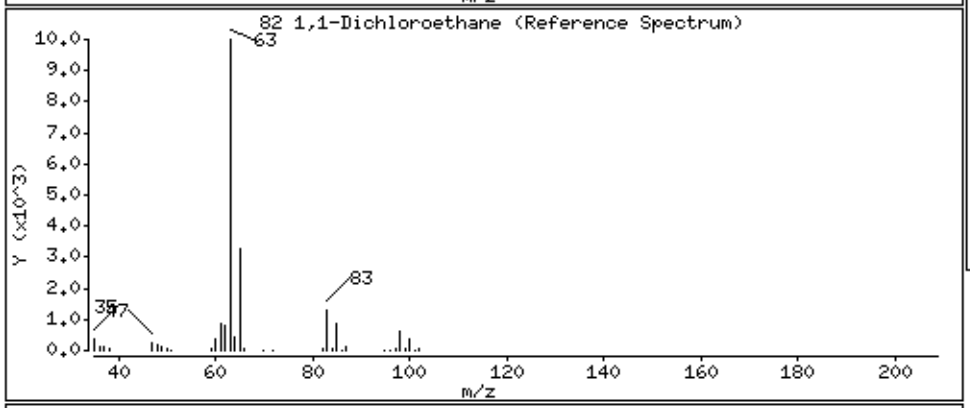
Concentration: 47.828 PPBV

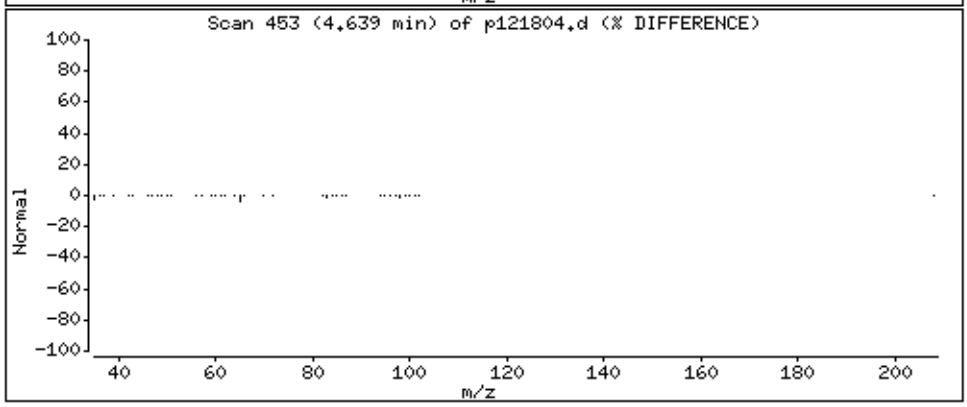












Data File: /chem/msdp.i/18dec14.b/p121804.d

Date : 18-DEC-2014 10:04

Client ID: ICV

Instrument: msdp.i

Sample Info: 50mL #2687-143

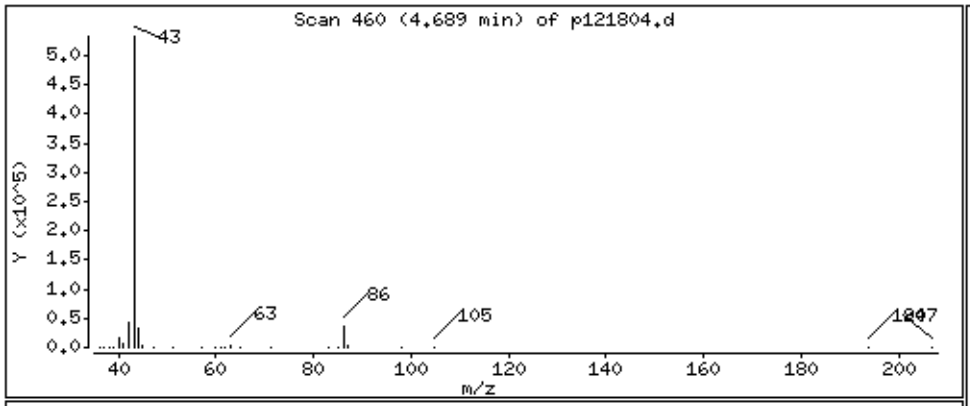
Operator: js

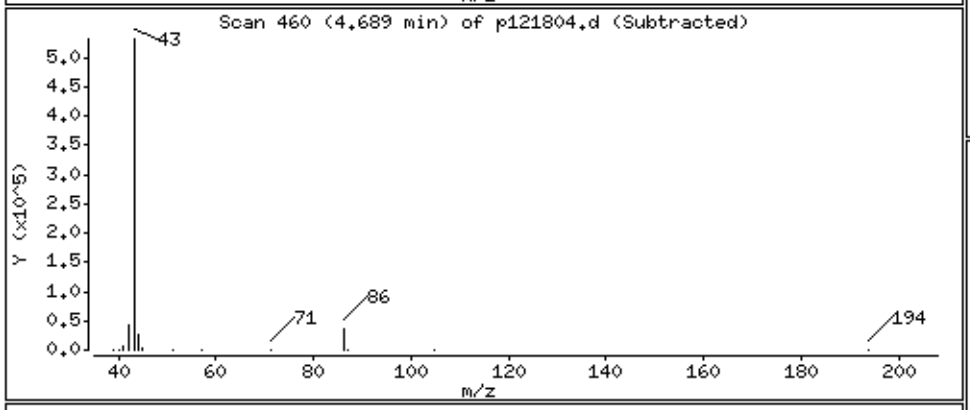
Column phase: RTX-624

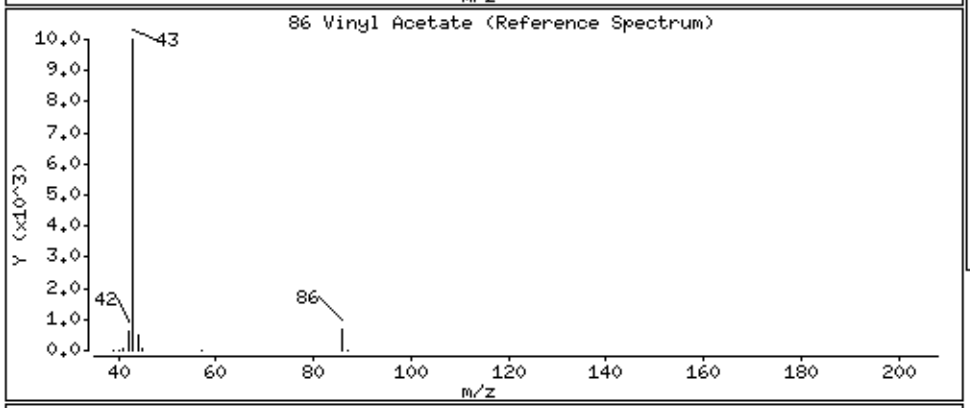
Column diameter: 0.25

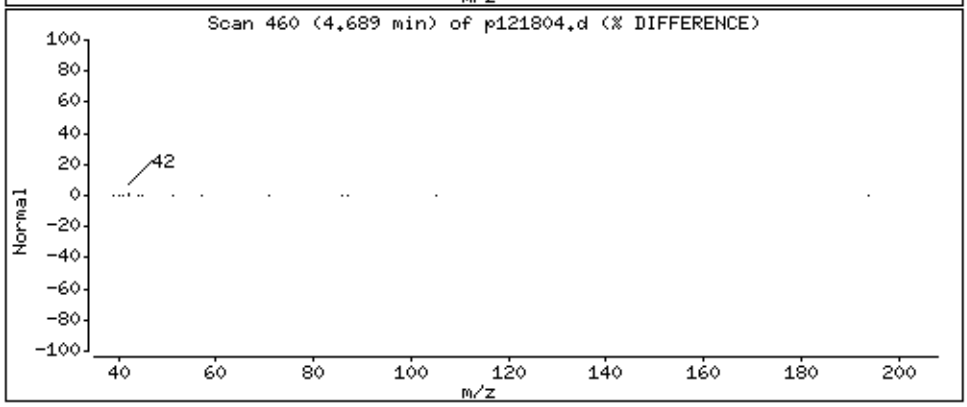
86 Vinyl Acetate

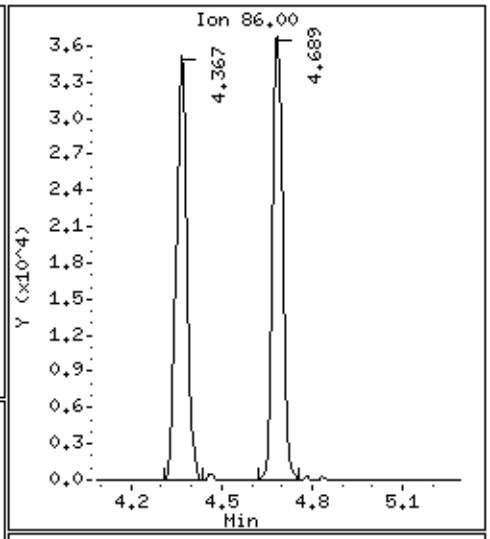
Concentration: 43.324 PPBV

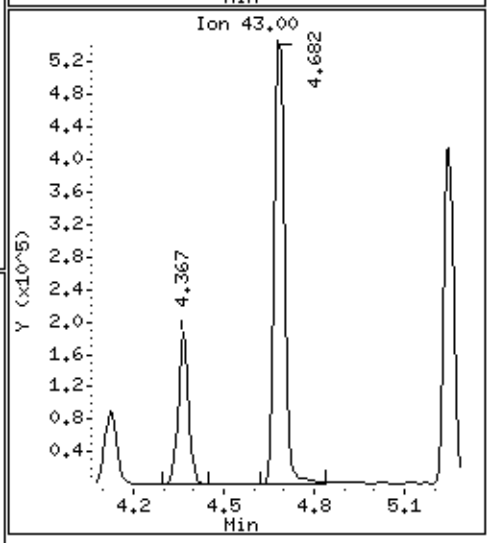












Data File: /chem/msdp.i/18dec14.b/p121804.d

Date : 18-DEC-2014 10:04

Client ID: ICV

Instrument: msdp.i

Sample Info: 50mL #2687-143

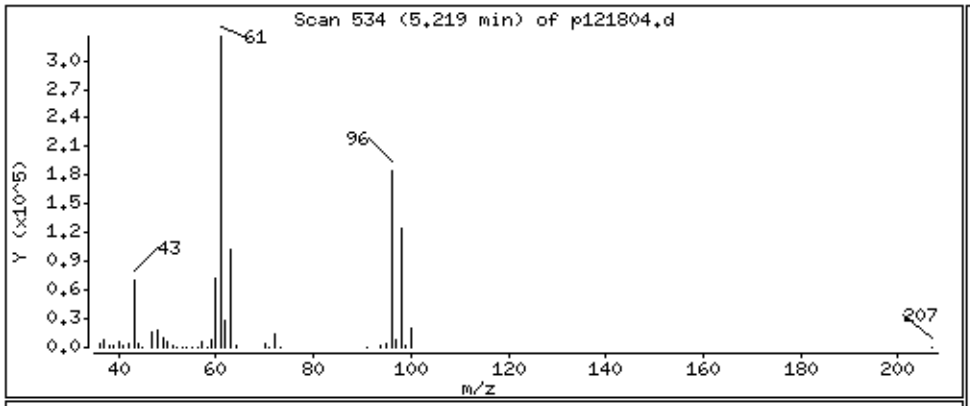
Operator: js

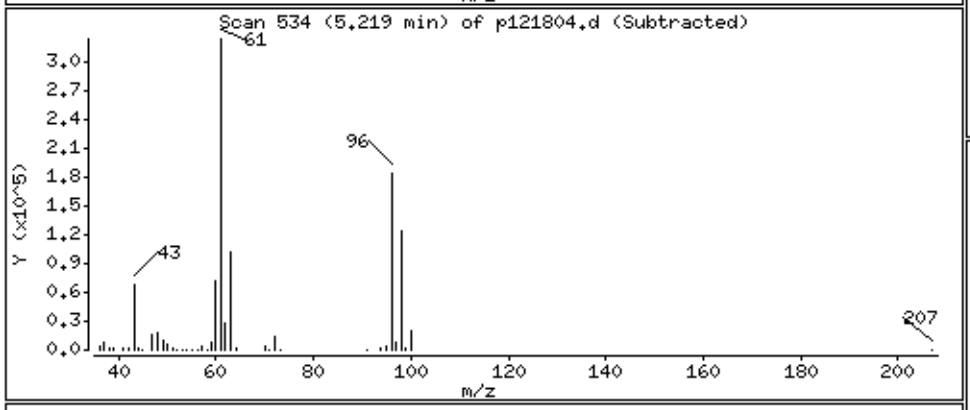
Column phase: RTX-624

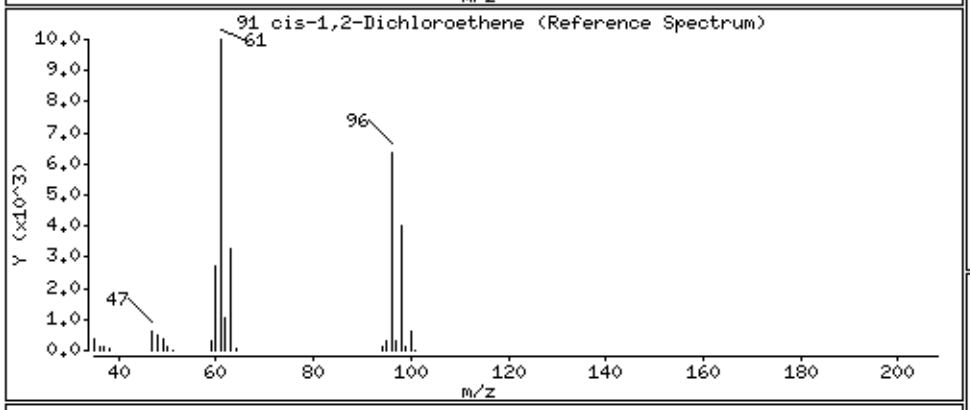
Column diameter: 0.25

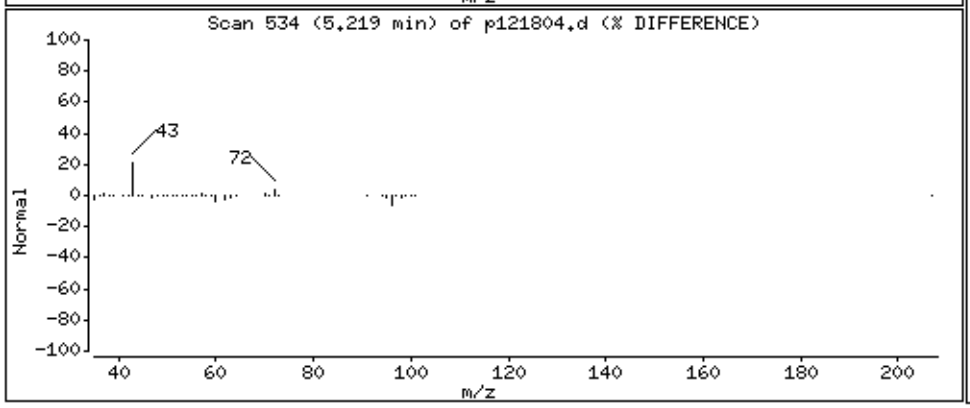
91 cis-1,2-Dichloroethene

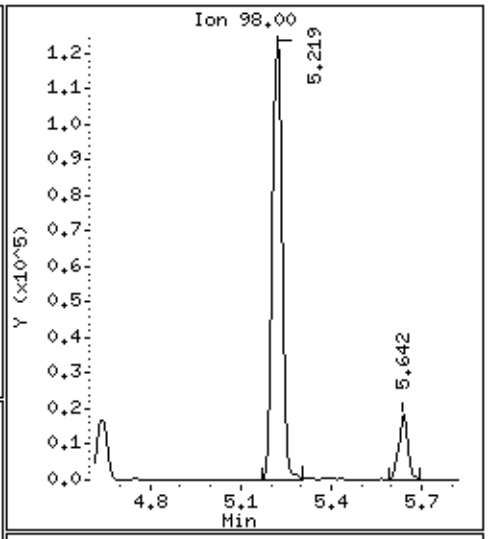
Concentration: 51.101 PPBV

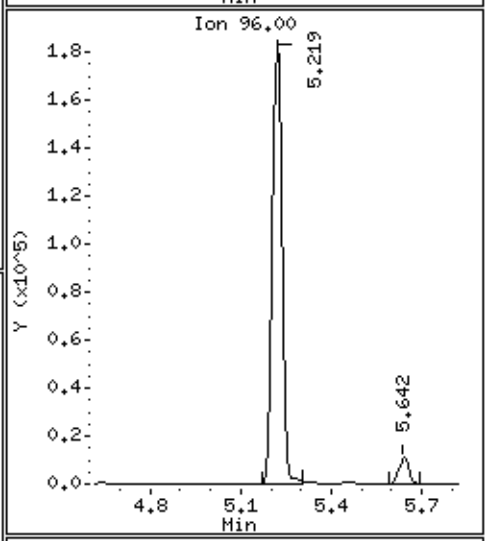


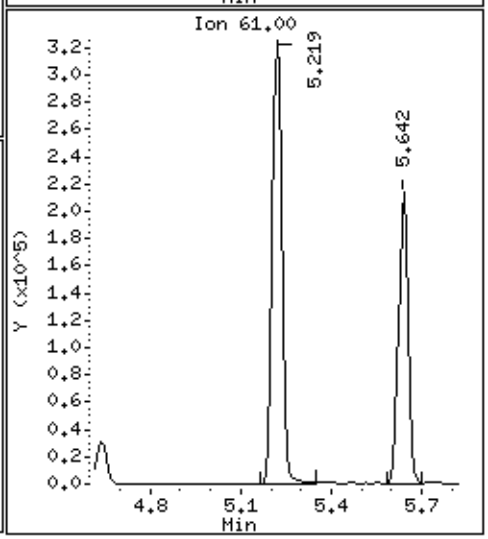












Data File: /chem/msdp.i/18dec14.b/p121804.d

Date : 18-DEC-2014 10:04

Client ID: ICV

Instrument: msdp.i

Sample Info: 50mL #2687-143

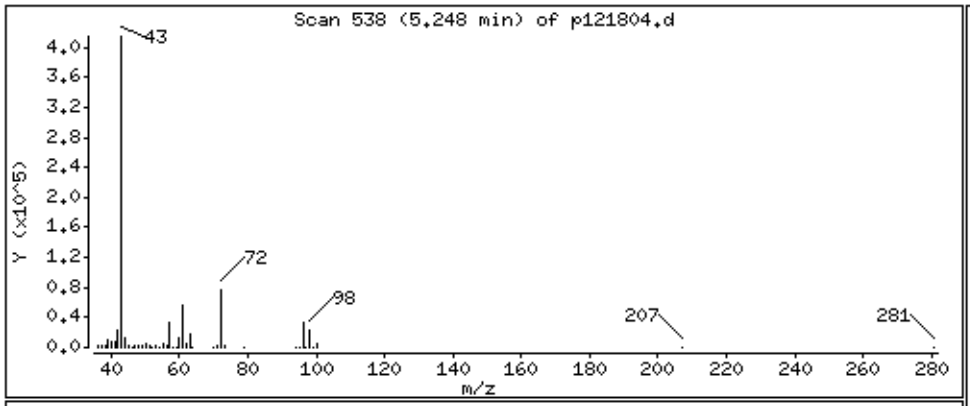
Operator: js

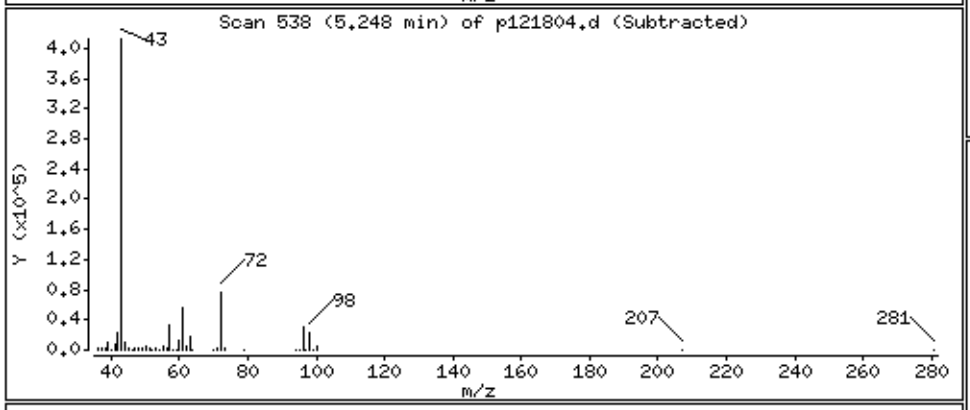
Column phase: RTX-624

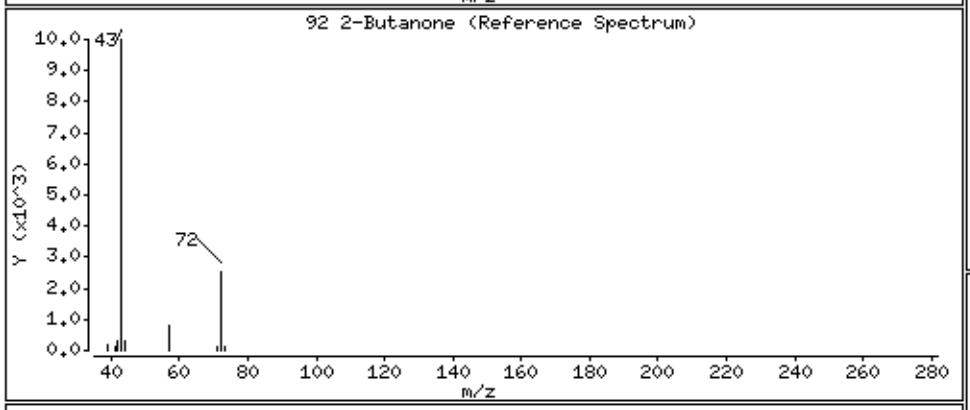
Column diameter: 0.25

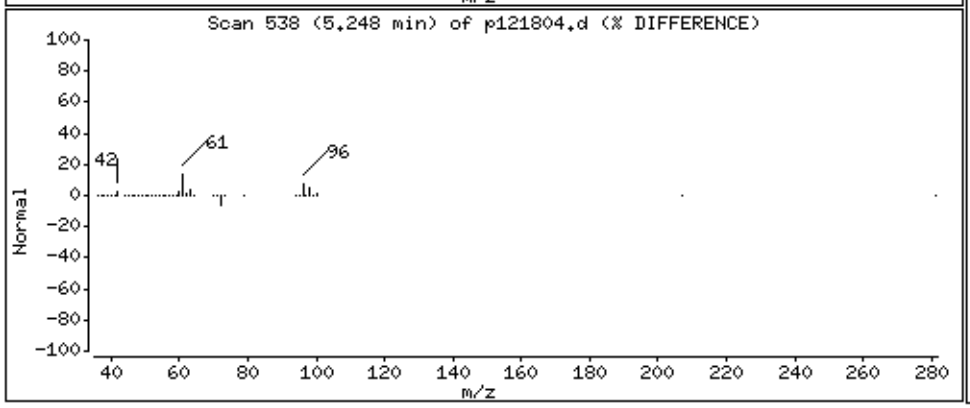
92 2-Butanone

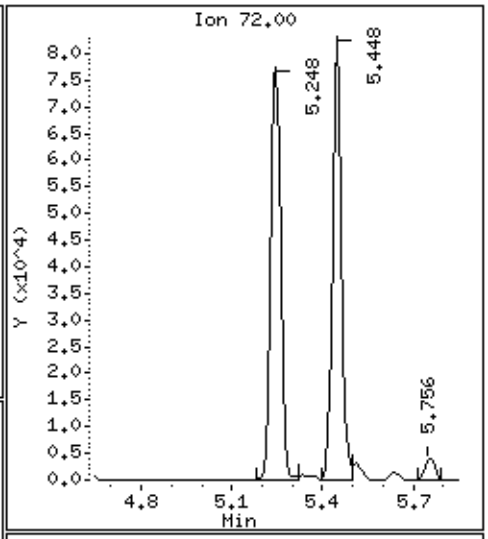
Concentration: 42.546 PPBV

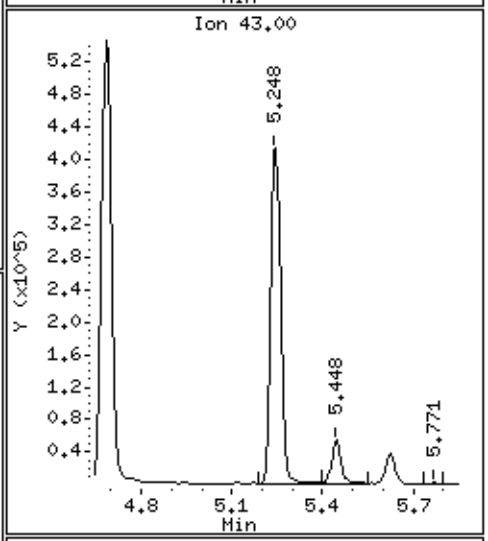


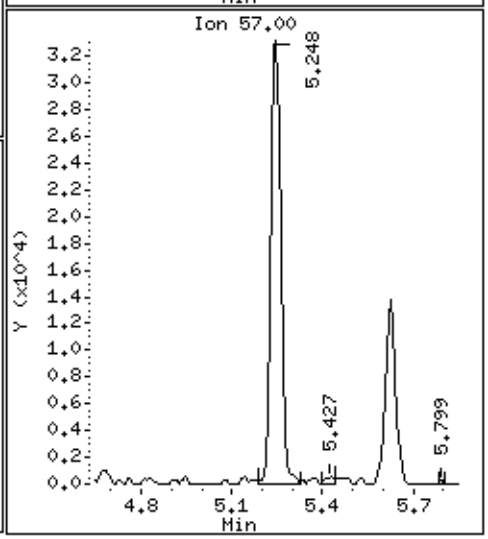












Data File: /chem/msdp.i/18dec14.b/p121804.d

Date : 18-DEC-2014 10:04

Client ID: ICV

Instrument: msdp.i

Sample Info: 50mL #2687-143

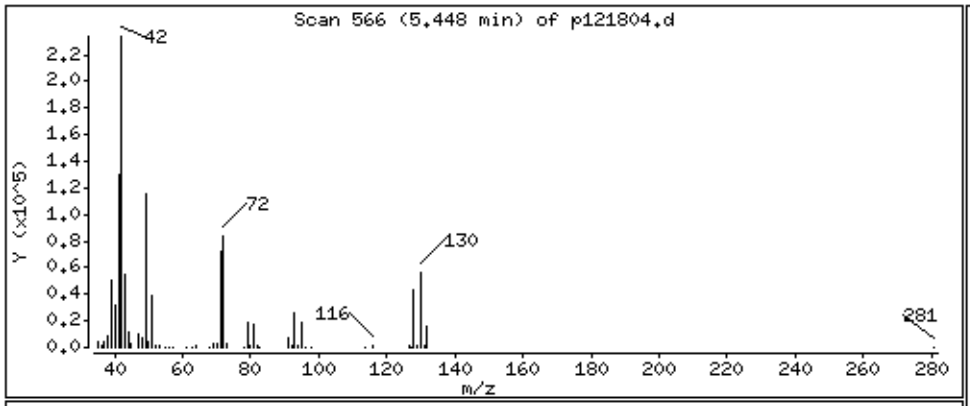
Operator: js

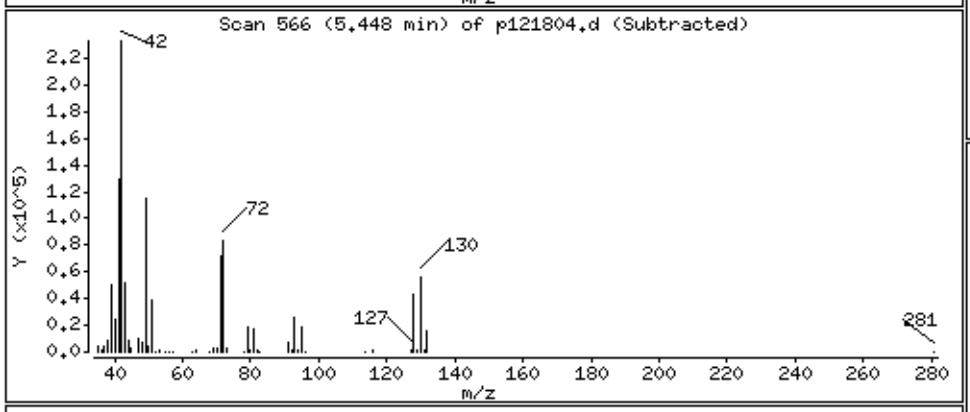
Column phase: RTX-624

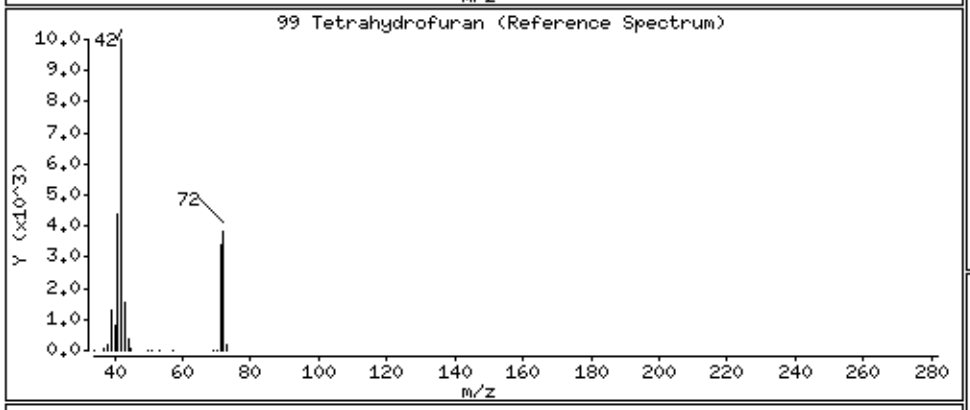
Column diameter: 0.25

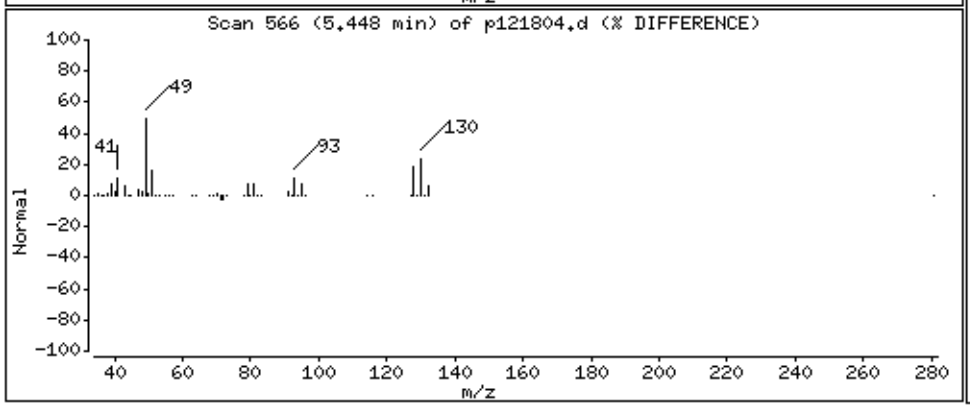
99 Tetrahydrofuran

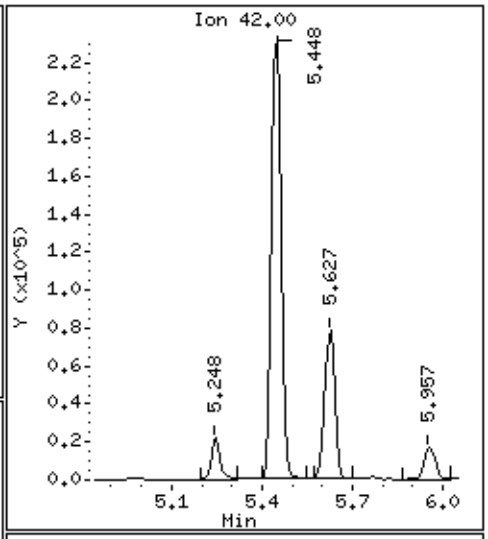
Concentration: 41.453 PPBV

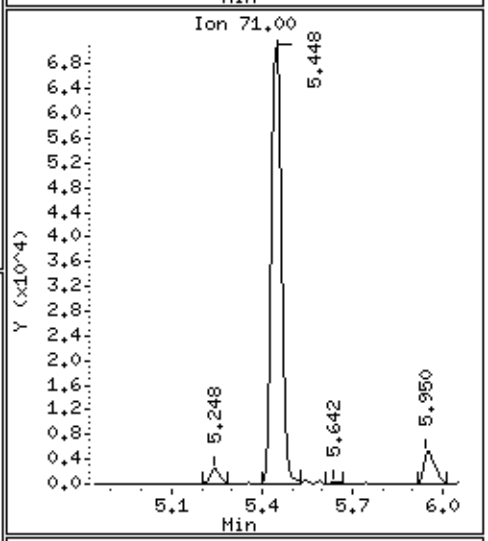


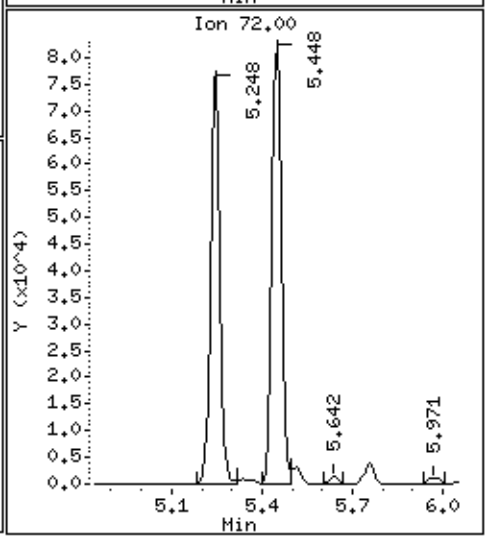












Data File: /chem/msdp.i/18dec14.b/p121804.d

Date : 18-DEC-2014 10:04

Client ID: ICV

Instrument: msdp.i

Sample Info: 50mL #2687-143

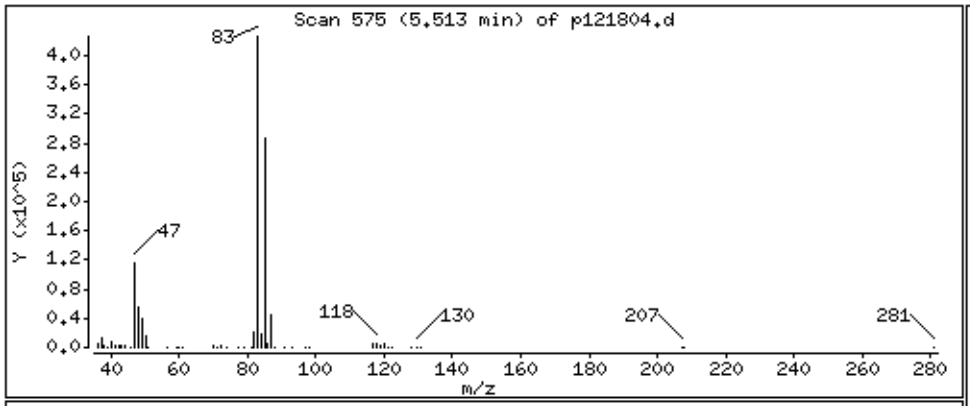
Operator: js

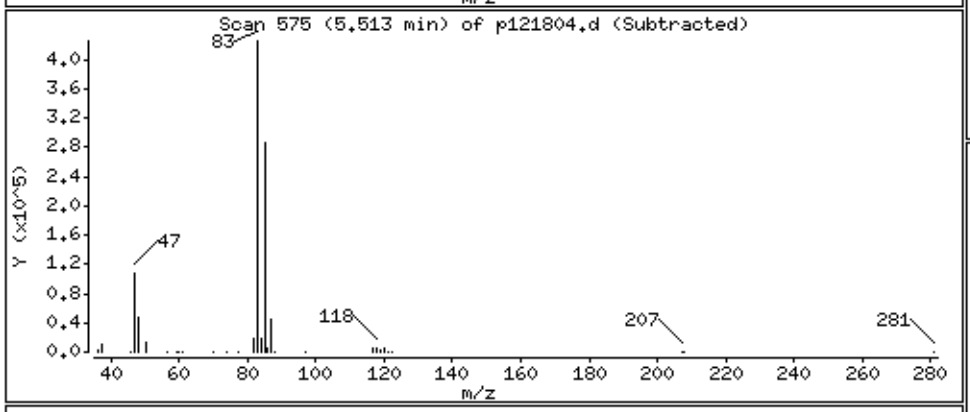
Column phase: RTX-624

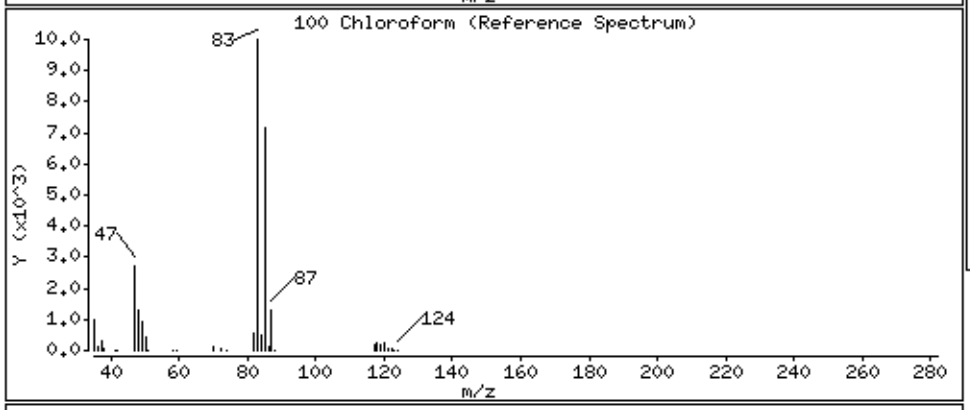
Column diameter: 0.25

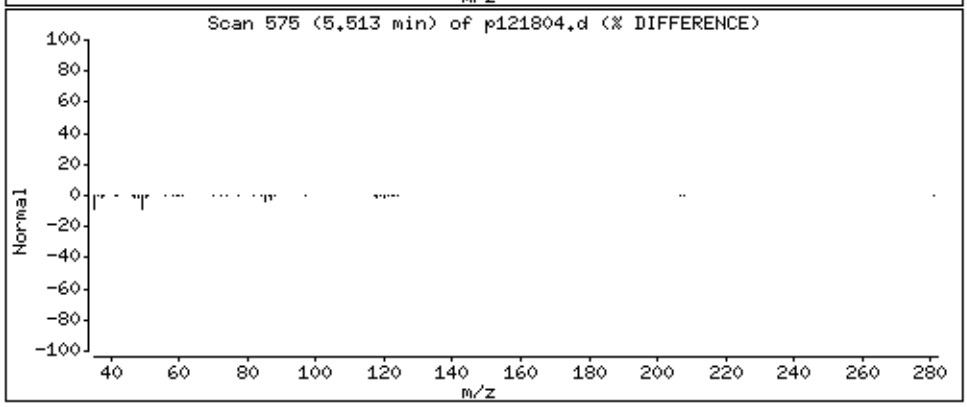
100 Chloroform

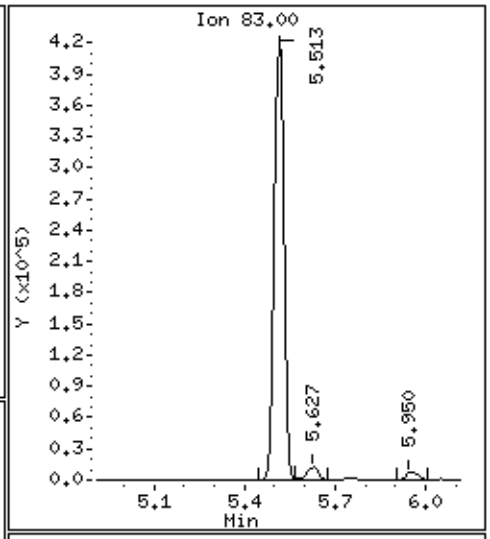
Concentration: 46.285 PPBV

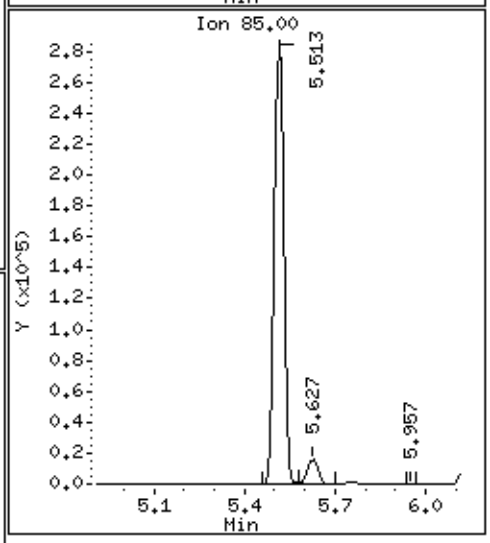












Data File: /chem/msdp.i/18dec14.b/p121804.d

Date : 18-DEC-2014 10:04

Client ID: ICV

Instrument: msdp.i

Sample Info: 50mL #2687-143

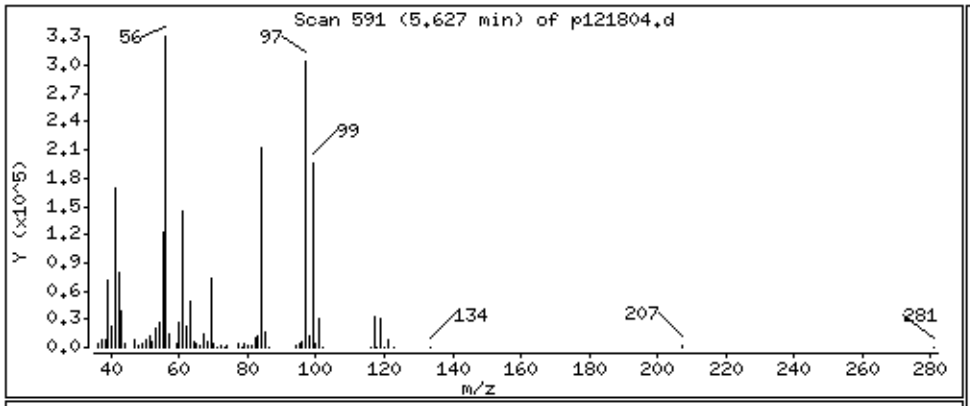
Operator: js

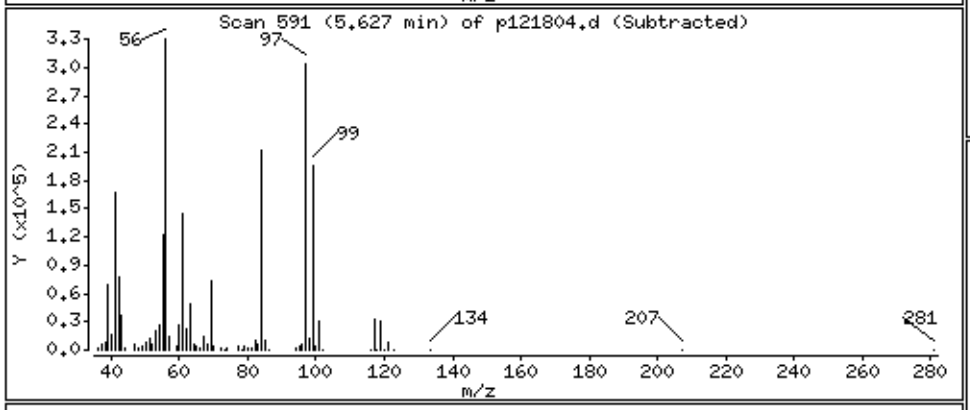
Column phase: RTX-624

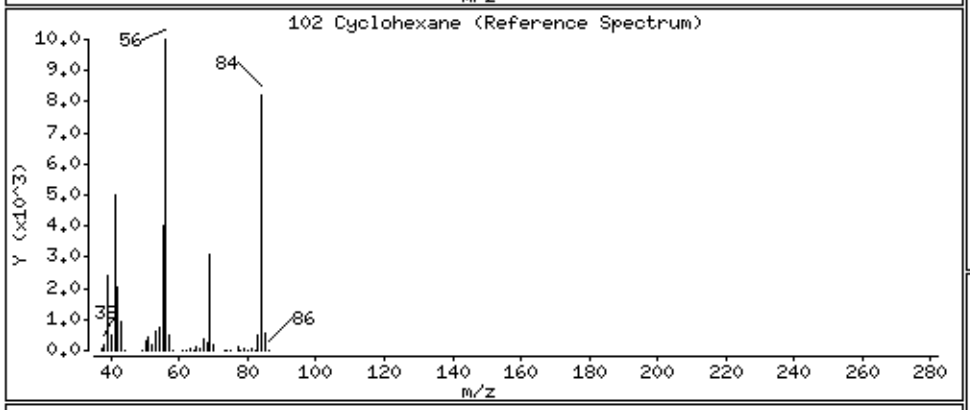
Column diameter: 0.25

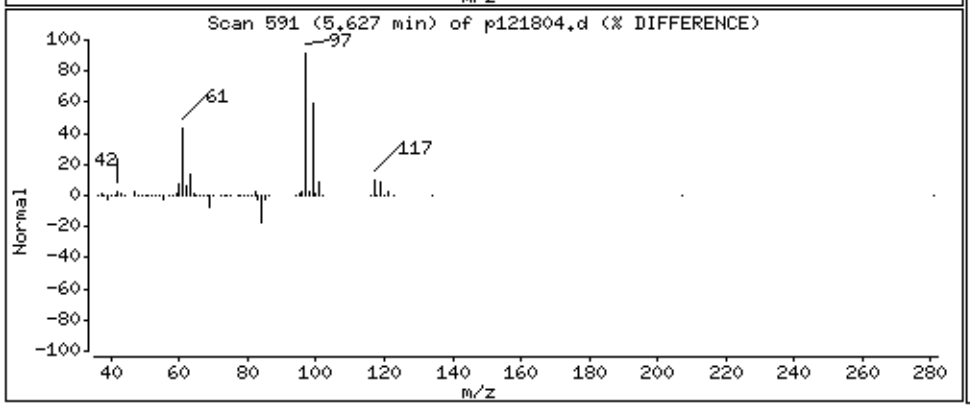
102 Cyclohexane

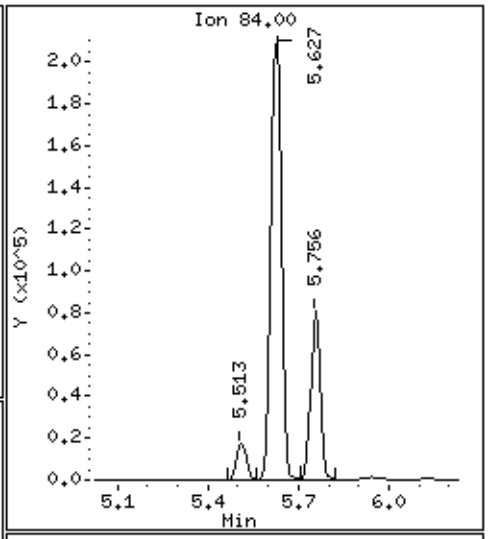
Concentration: 50.056 PPBV

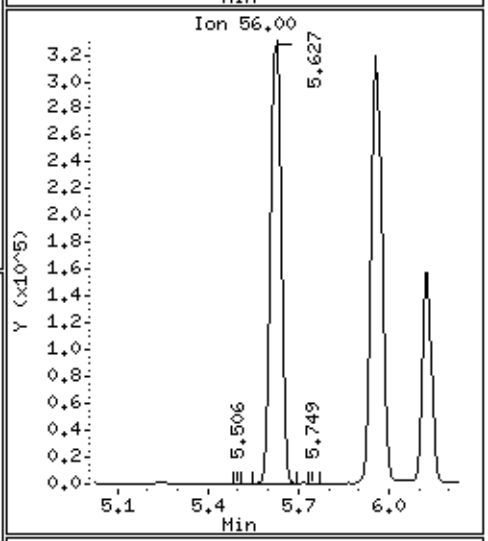


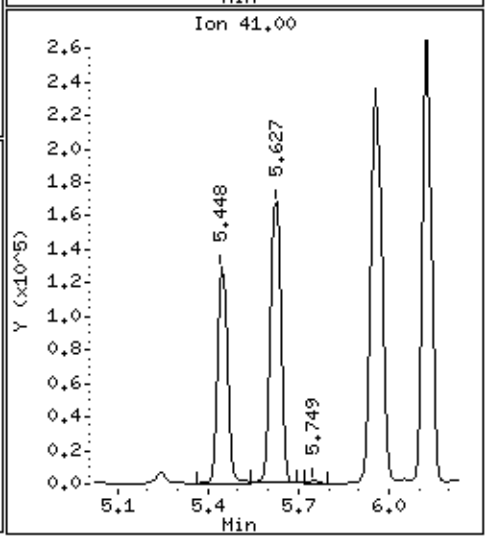












Data File: /chem/msdp.i/18dec14.b/p121804.d

Date : 18-DEC-2014 10:04

Client ID: ICV

Instrument: msdp.i

Sample Info: 50mL #2687-143

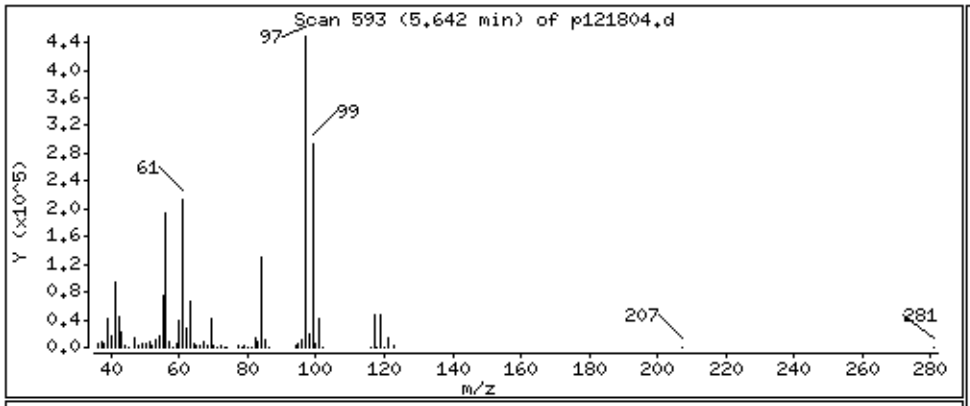
Operator: js

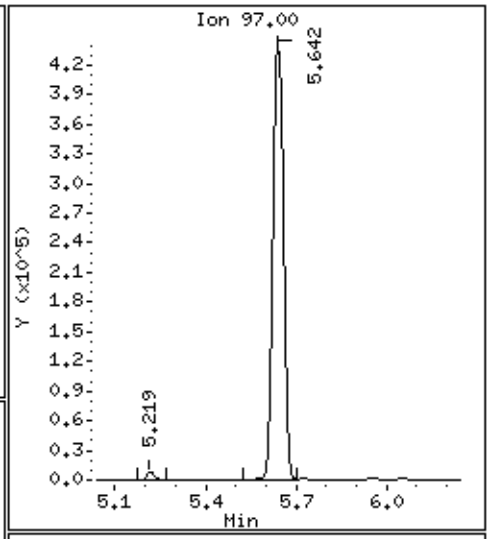
Column phase: RTX-624

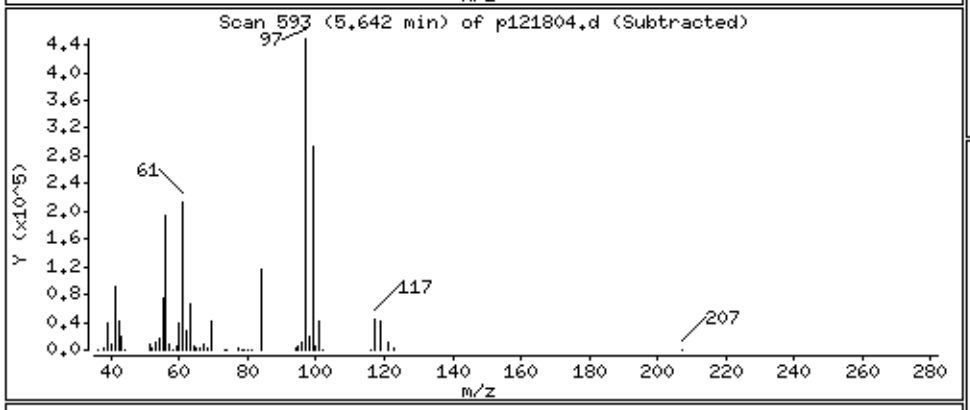
Column diameter: 0.25

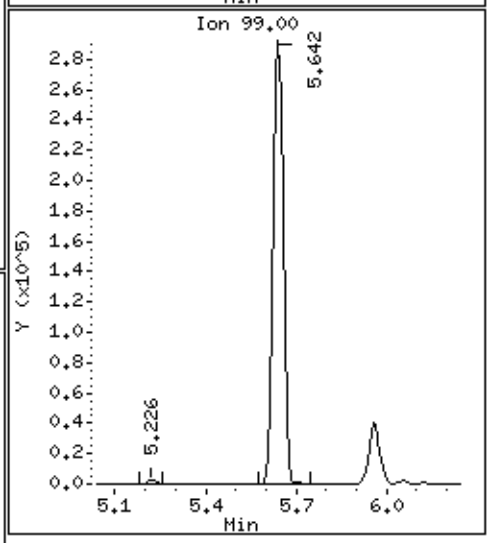
103 1,1,1-Trichloroethane

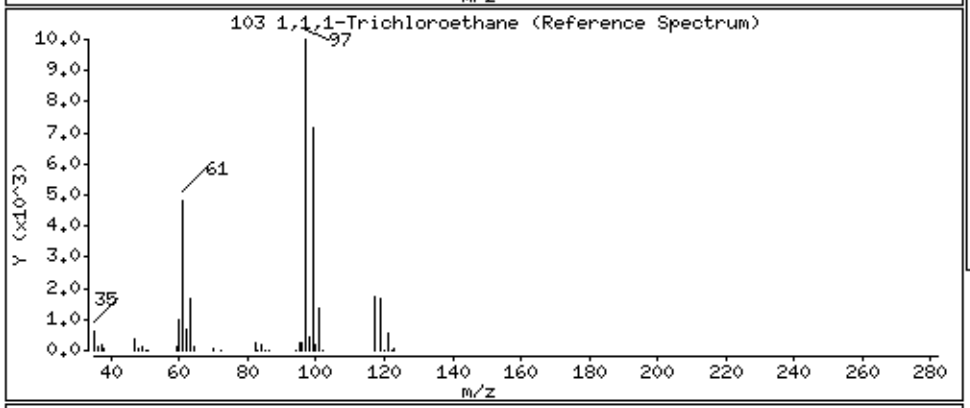
Concentration: 47.307 PPBV

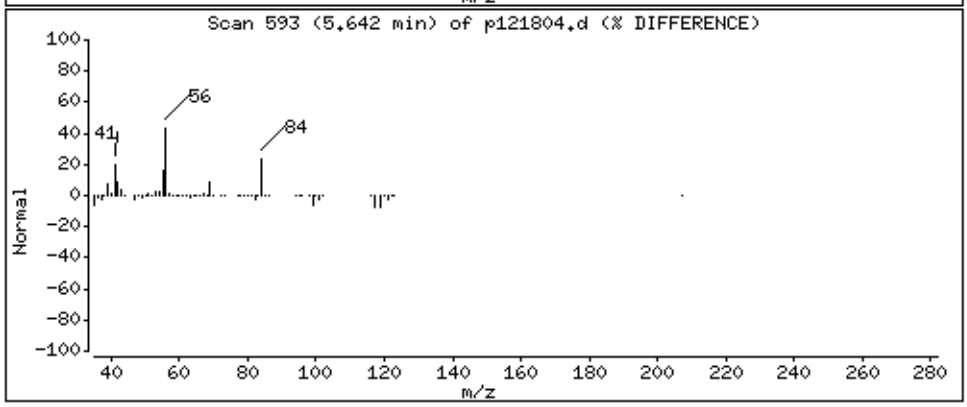












Data File: /chem/msdp.i/18dec14.b/p121804.d

Date : 18-DEC-2014 10:04

Client ID: ICV

Instrument: msdp.i

Sample Info: 50mL #2687-143

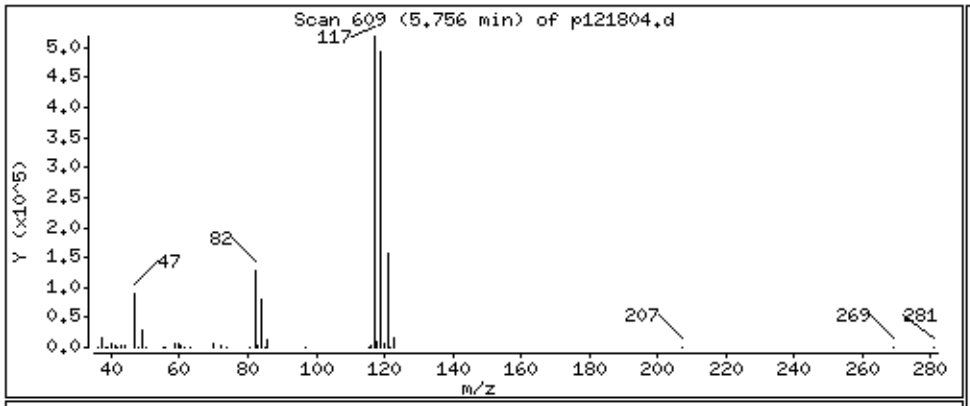
Operator: js

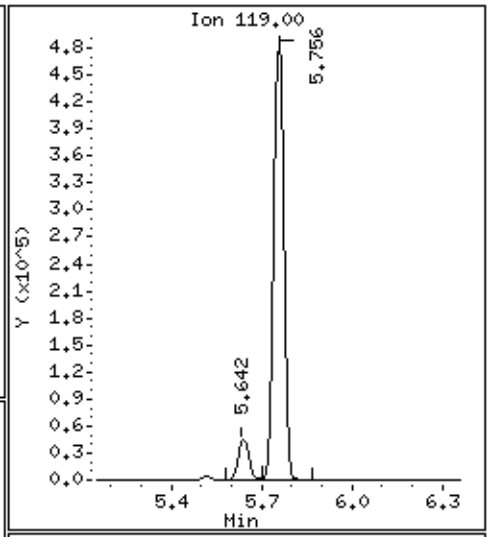
Column phase: RTX-624

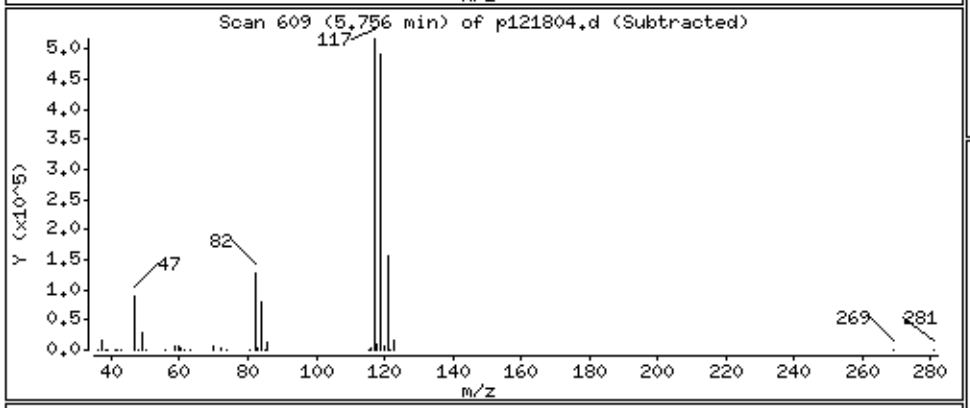
Column diameter: 0.25

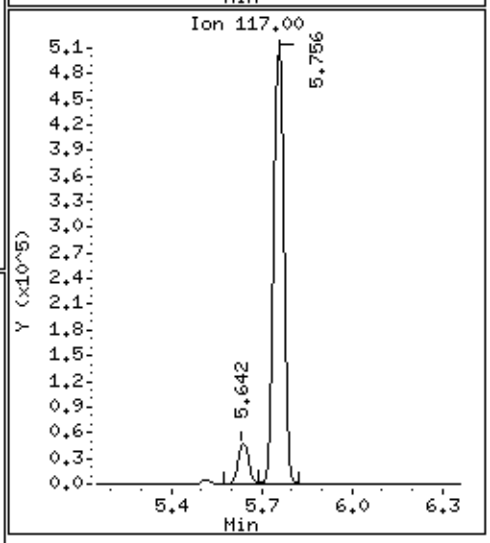
106 Carbon Tetrachloride

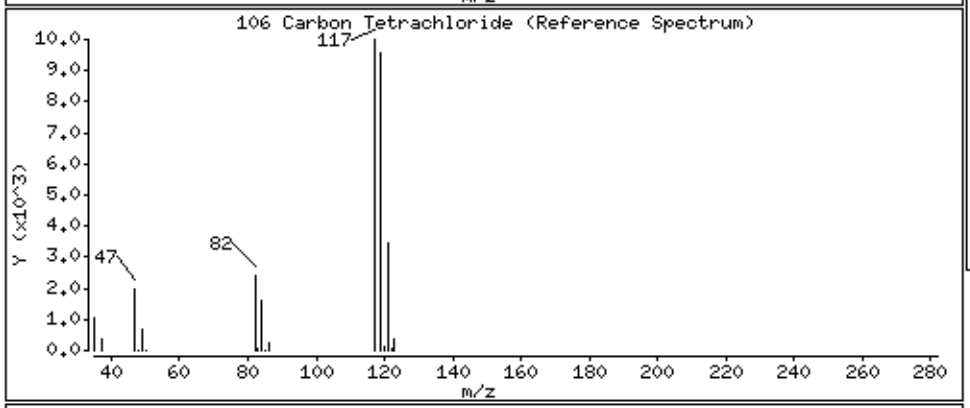
Concentration: 48.610 PPBV

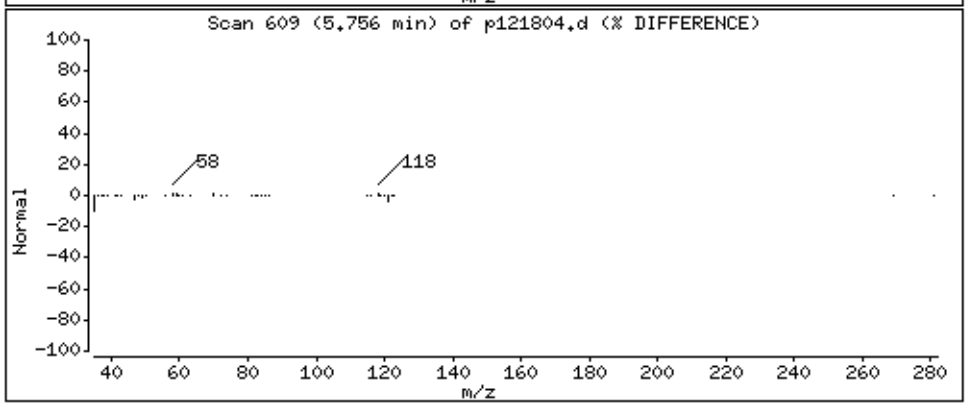












Data File: /chem/msdp.i/18dec14.b/p121804.d

Date : 18-DEC-2014 10:04

Client ID: ICV

Instrument: msdp.i

Sample Info: 50mL #2687-143

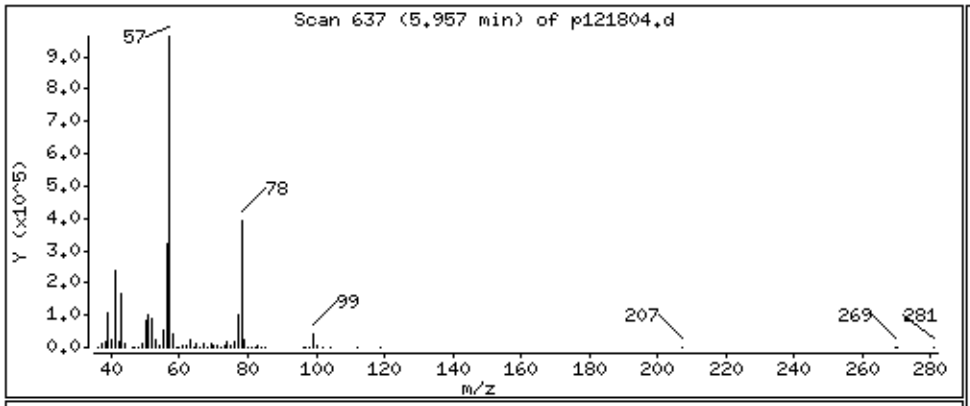
Operator: js

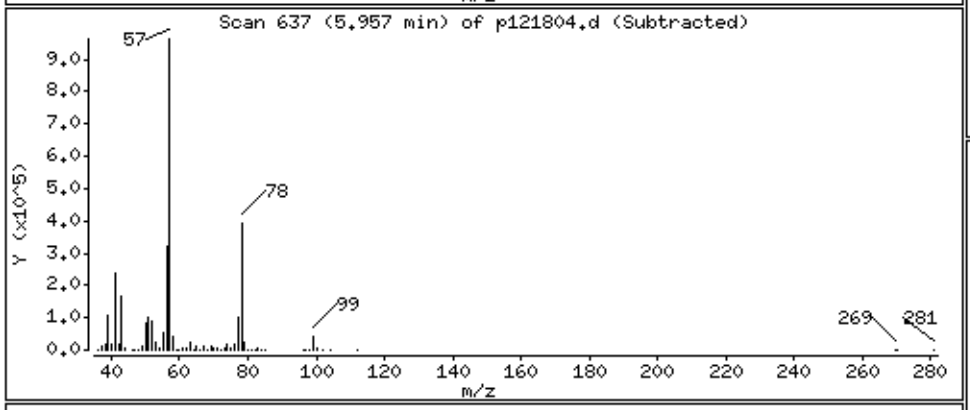
Column phase: RTX-624

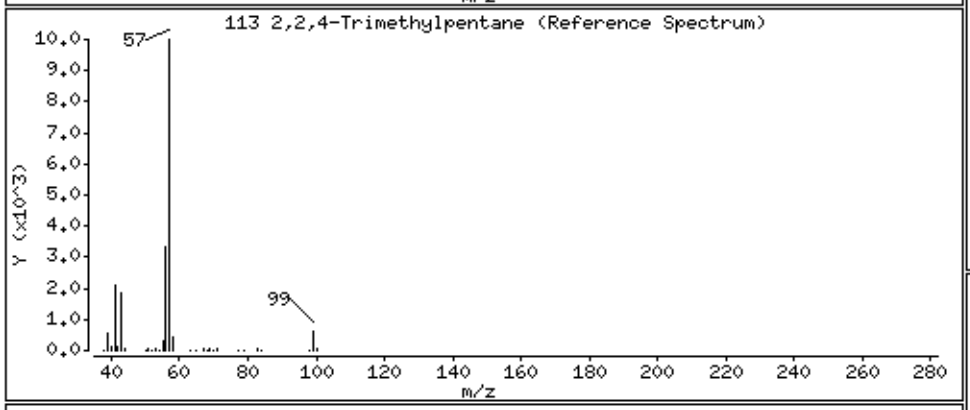
Column diameter: 0.25

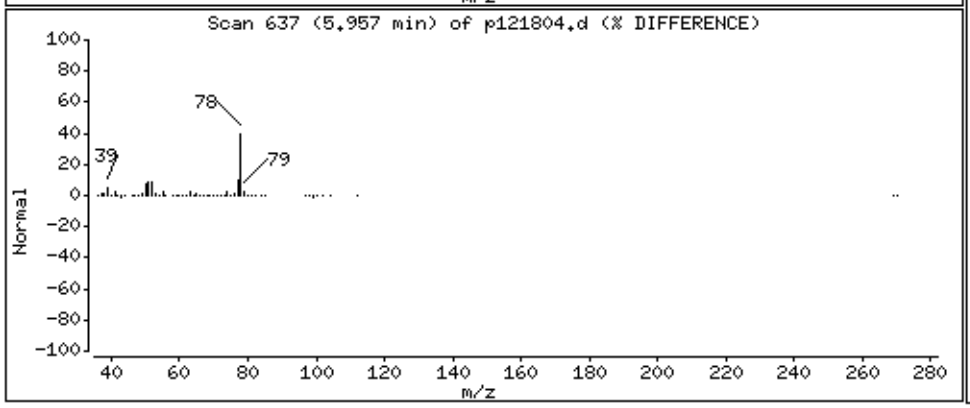
113 2,2,4-Trimethylpentane

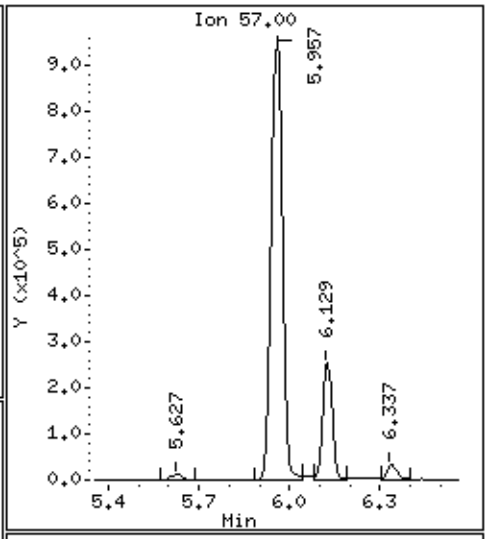
Concentration: 55.135 PPBV

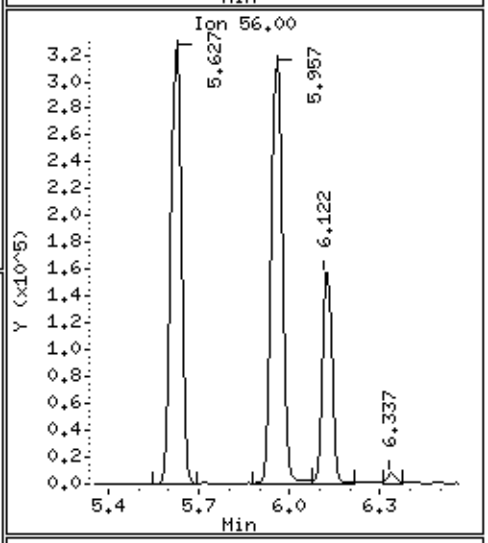


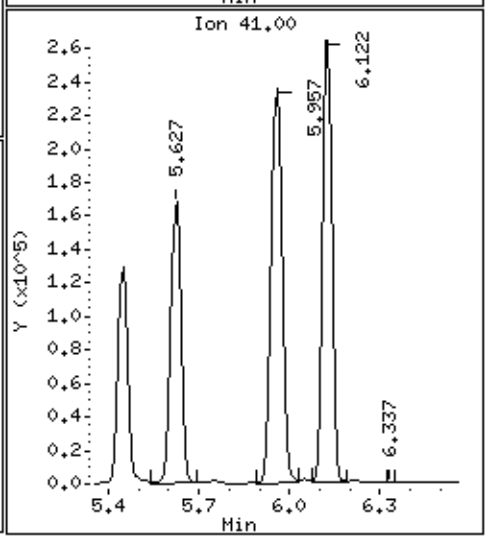












Data File: /chem/msdp.i/18dec14.b/p121804.d

Date : 18-DEC-2014 10:04

Client ID: ICV

Instrument: msdp.i

Sample Info: 50mL #2687-143

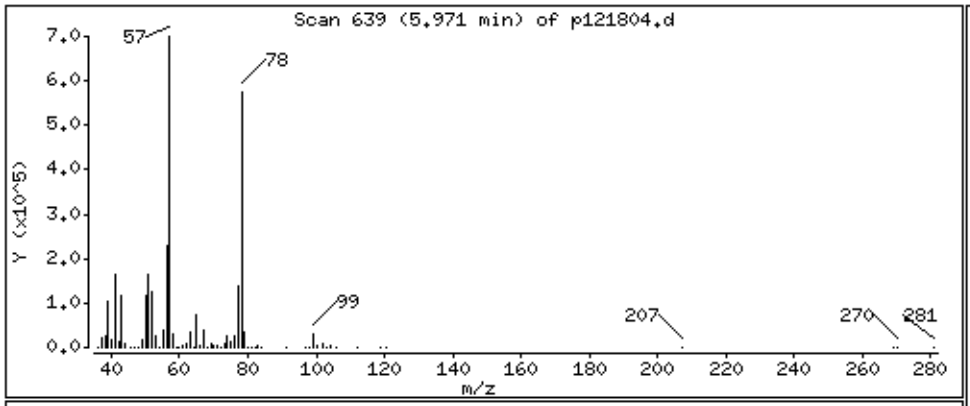
Operator: js

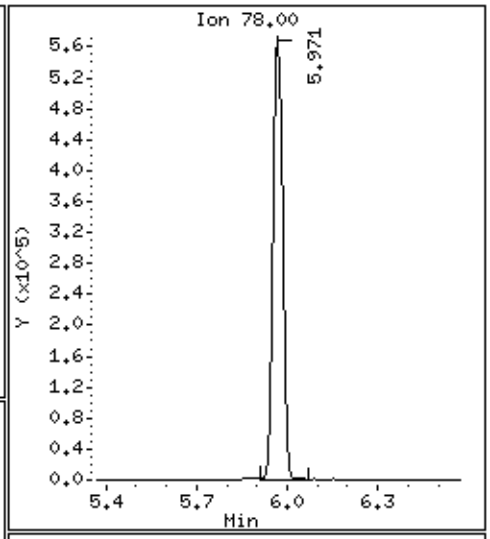
Column phase: RTX-624

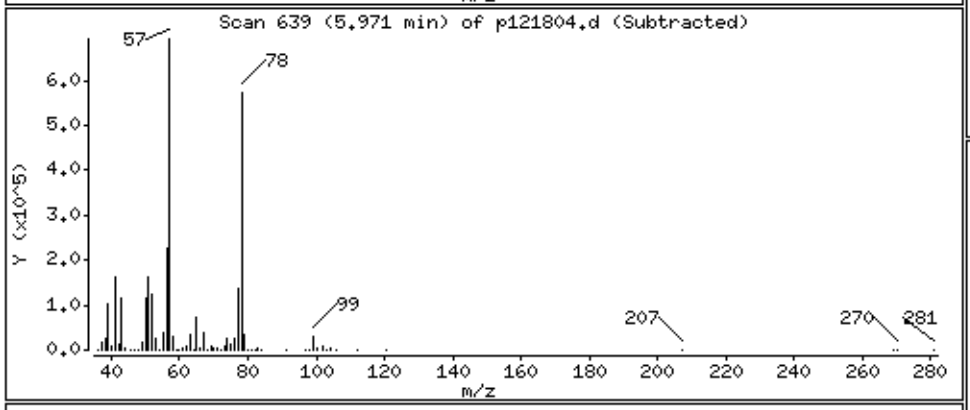
Column diameter: 0.25

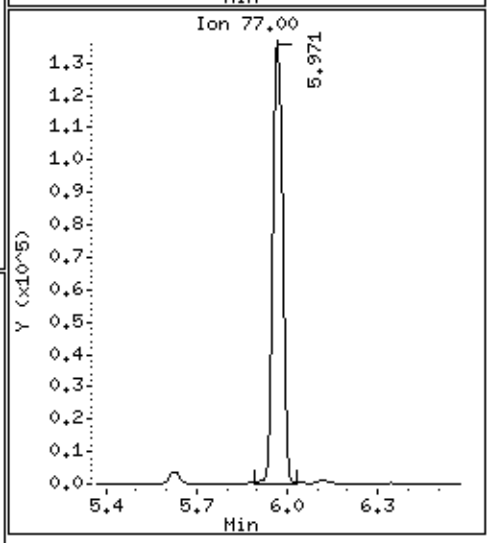
116 Benzene

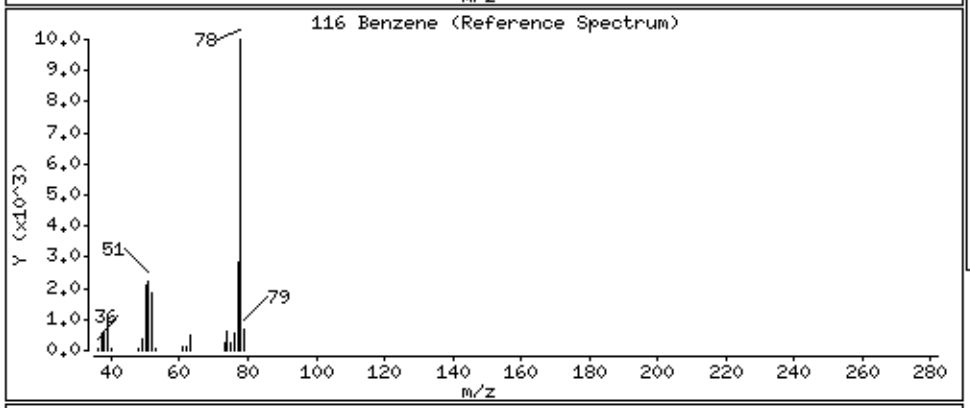
Concentration: 47.368 PPBV

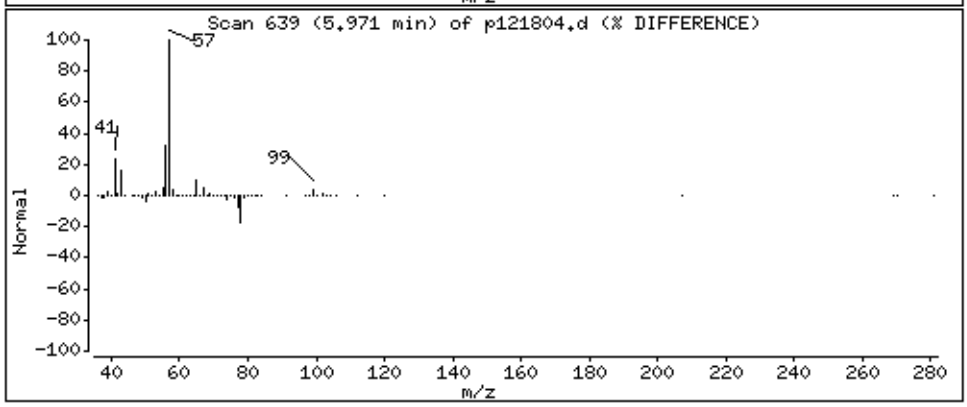












Data File: /chem/msdp.i/18dec14.b/p121804.d

Date : 18-DEC-2014 10:04

Client ID: ICV

Instrument: msdp.i

Sample Info: 50mL #2687-143

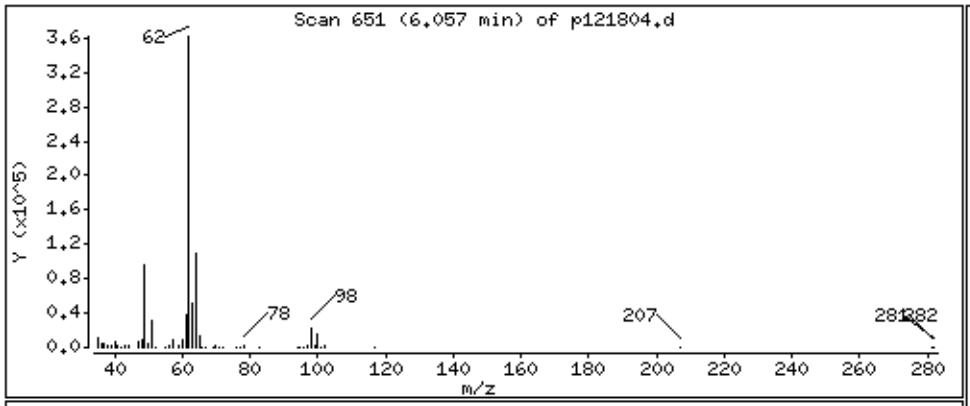
Operator: js

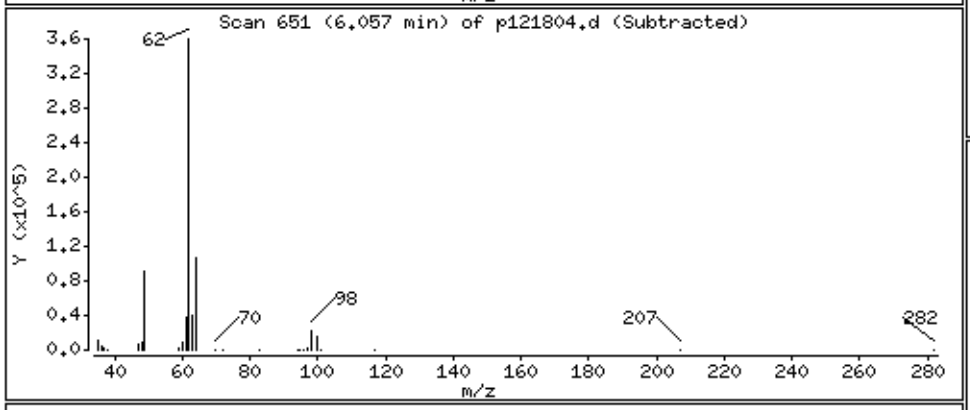
Column phase: RTX-624

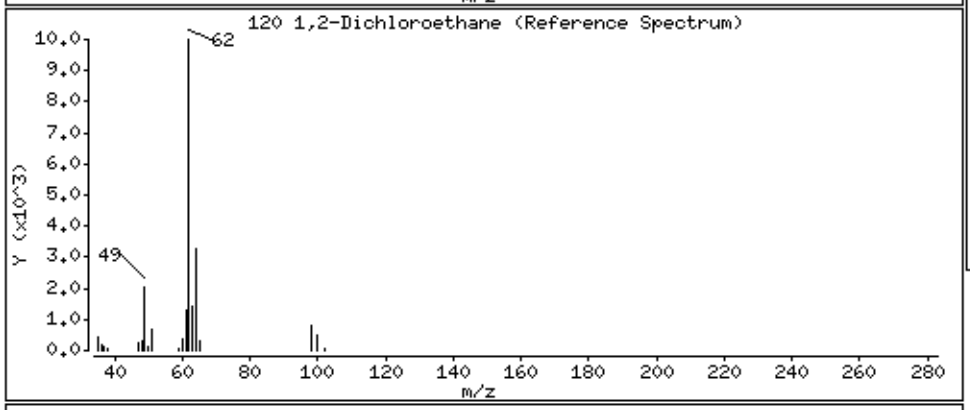
Column diameter: 0.25

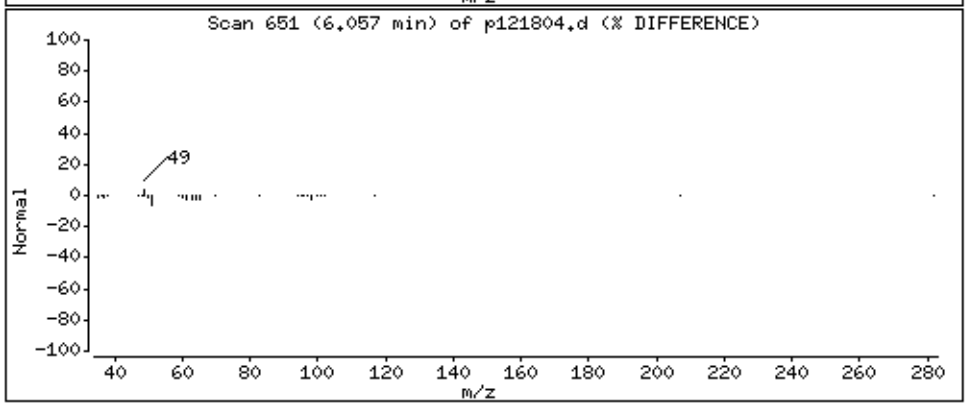
120 1,2-Dichloroethane

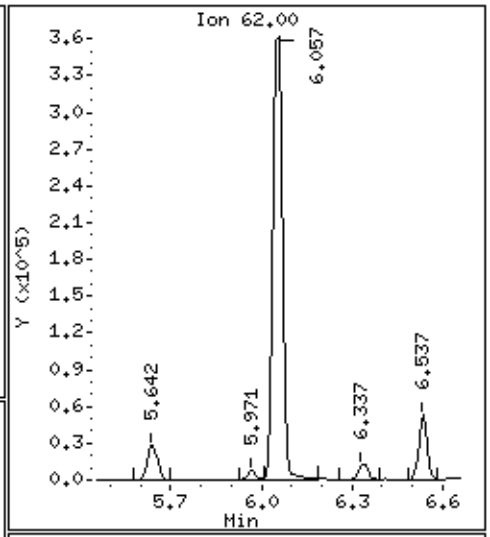
Concentration: 45.001 PPBV

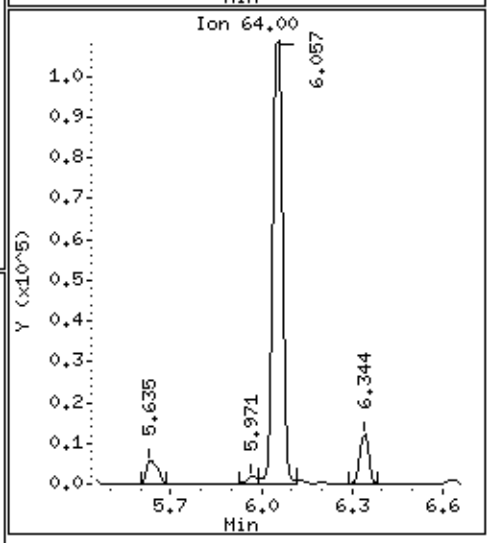












Data File: /chem/msdp.i/18dec14.b/p121804.d

Date : 18-DEC-2014 10:04

Client ID: ICV

Instrument: msdp.i

Sample Info: 50mL #2687-143

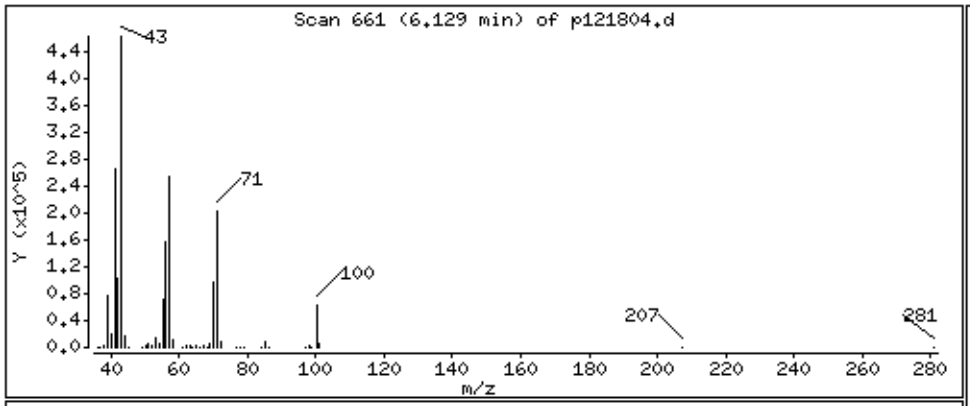
Operator: js

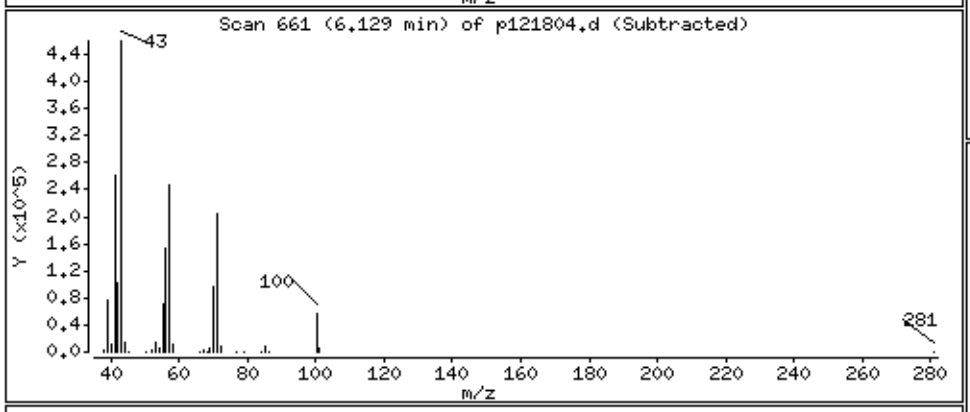
Column phase: RTX-624

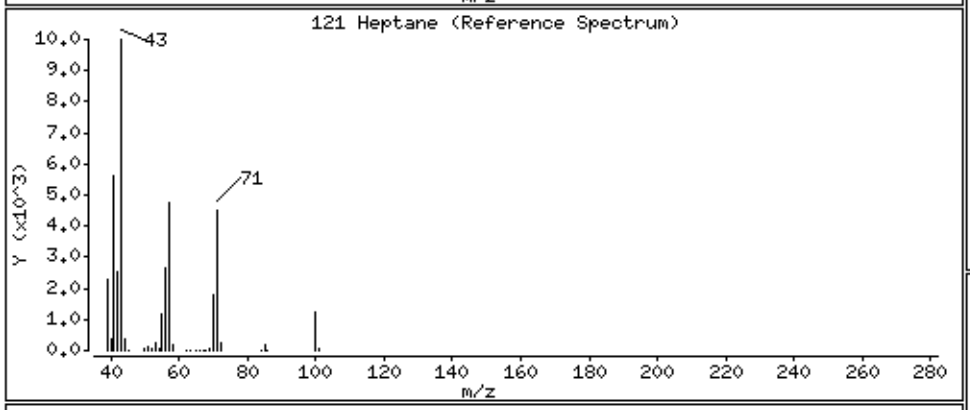
Column diameter: 0.25

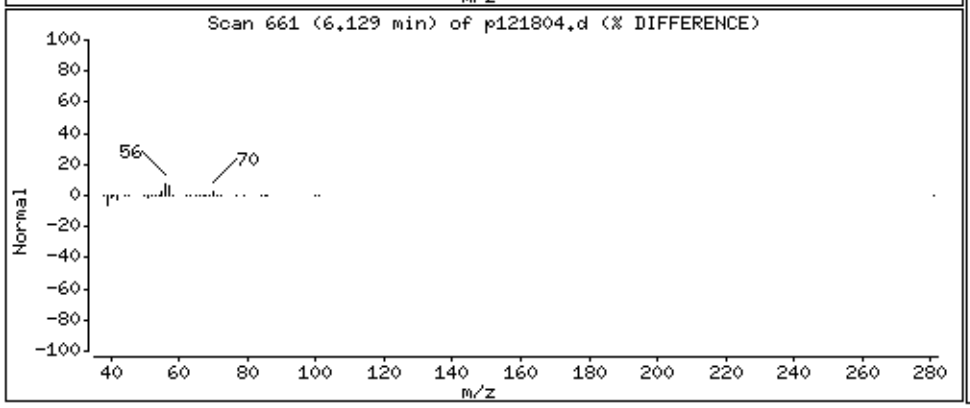
121 Heptane

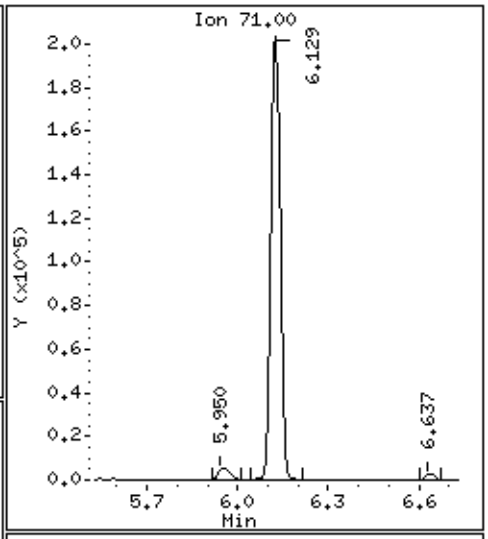
Concentration: 50.717 PPBV

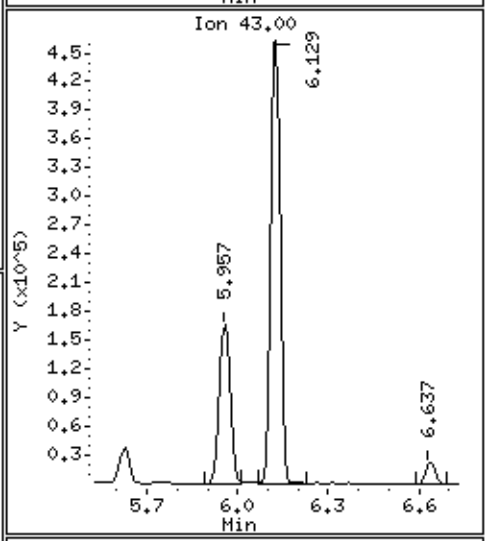


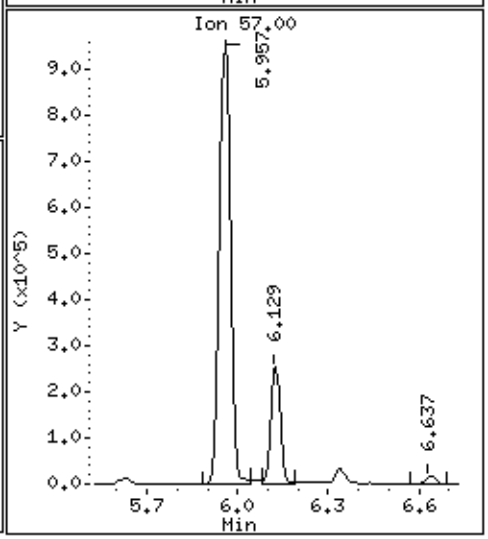












Data File: /chem/msdp.i/18dec14.b/p121804.d

Date : 18-DEC-2014 10:04

Client ID: ICV

Instrument: msdp.i

Sample Info: 50mL #2687-143

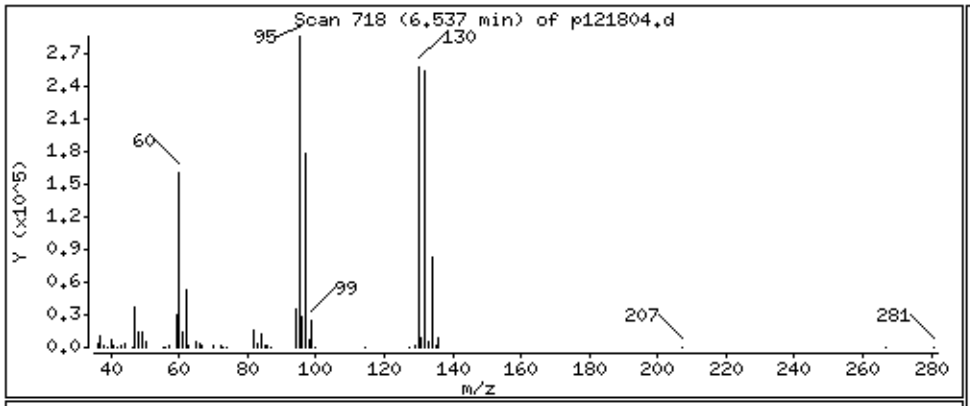
Operator: js

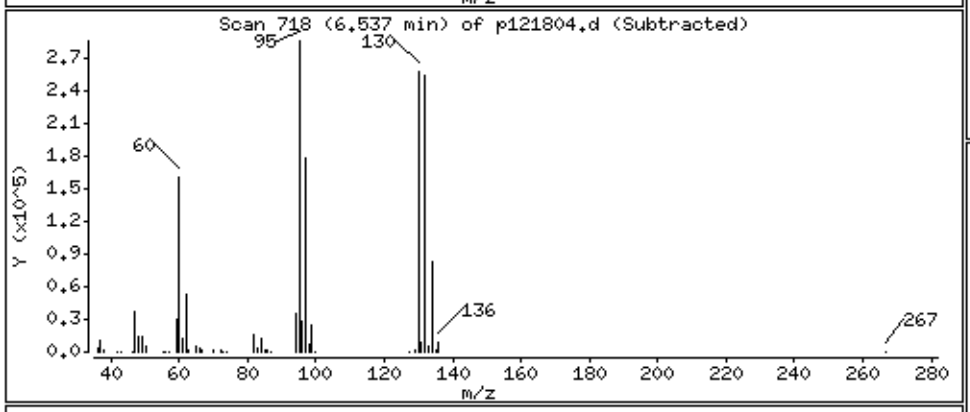
Column phase: RTX-624

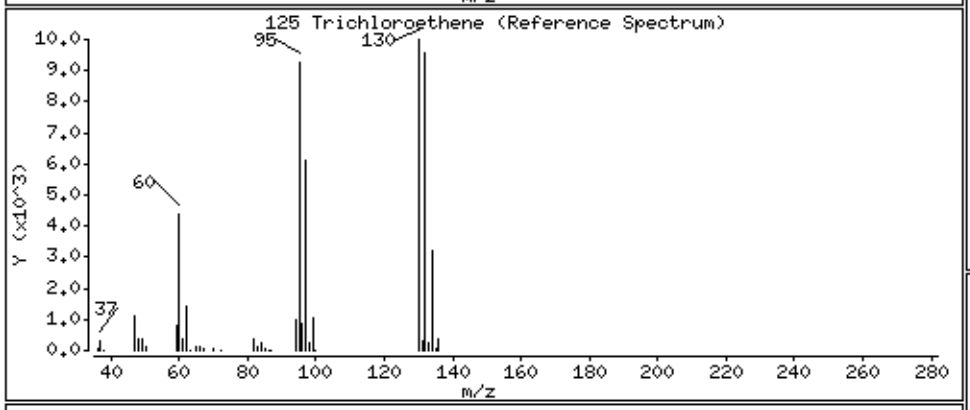
Column diameter: 0.25

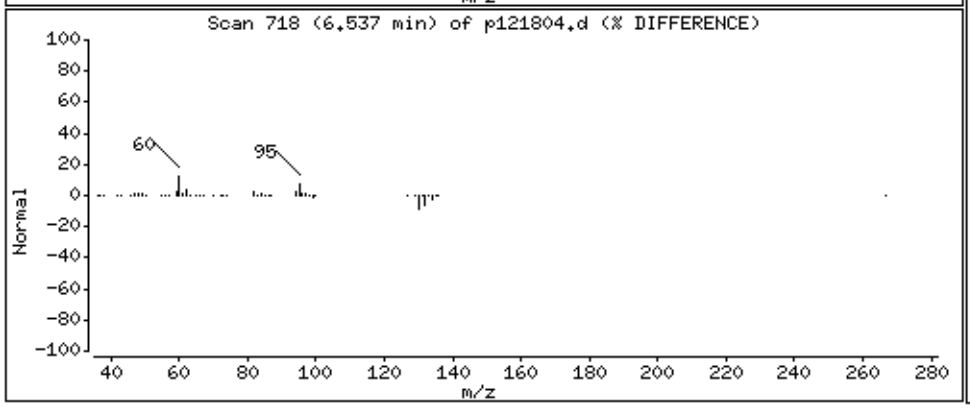
125 Trichloroethene

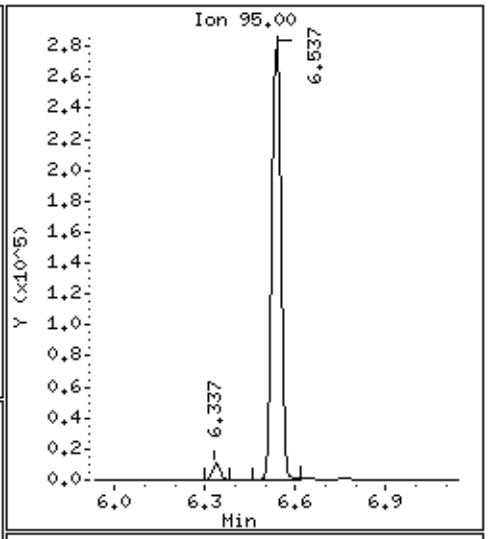
Concentration: 46.520 PPBV

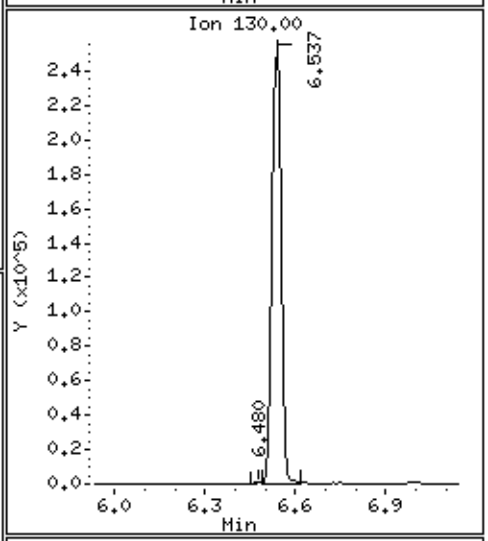


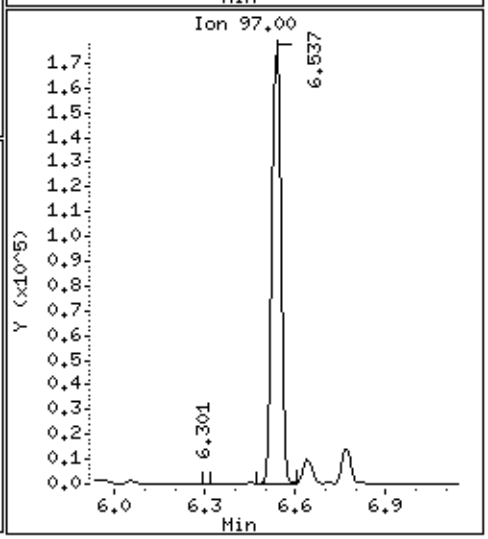












Data File: /chem/msdp.i/18dec14.b/p121804.d

Date : 18-DEC-2014 10:04

Client ID: ICV

Instrument: msdp.i

Sample Info: 50mL #2687-143

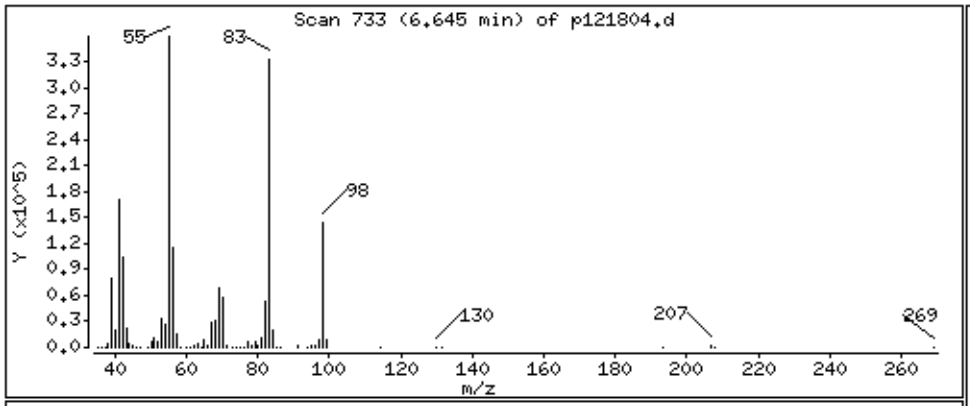
Operator: js

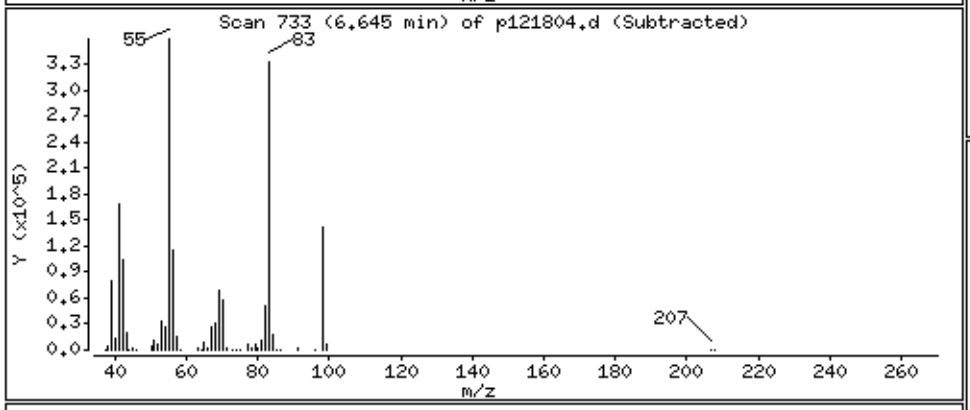
Column phase: RTX-624

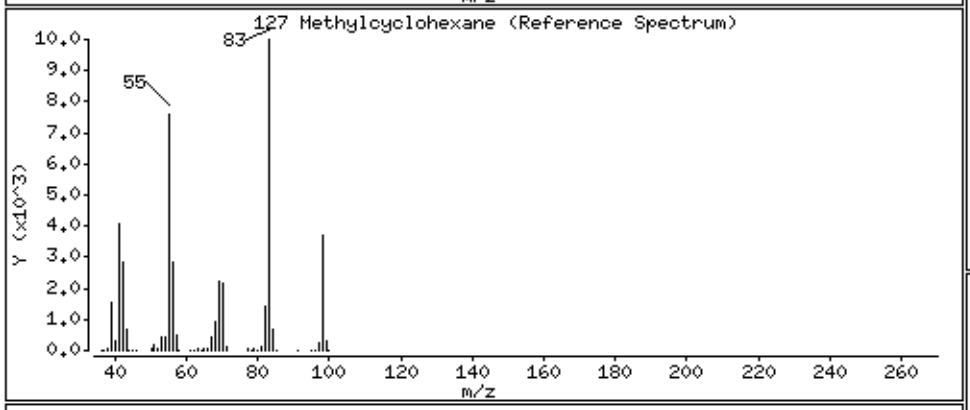
Column diameter: 0.25

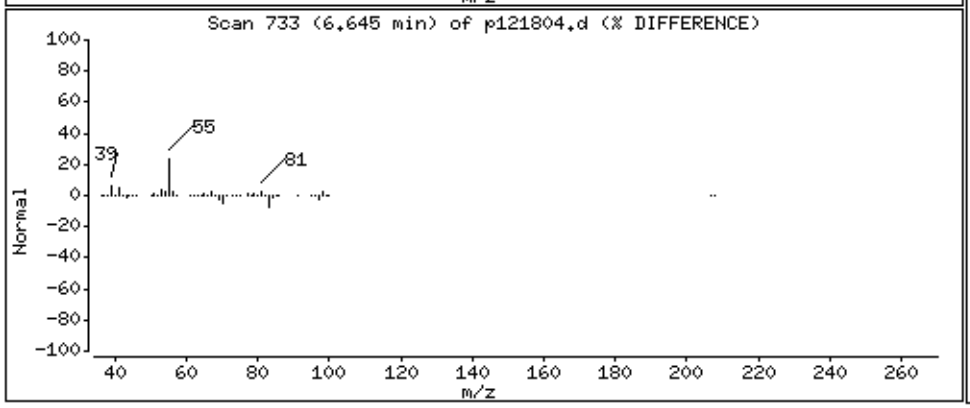
127 Methylcyclohexane

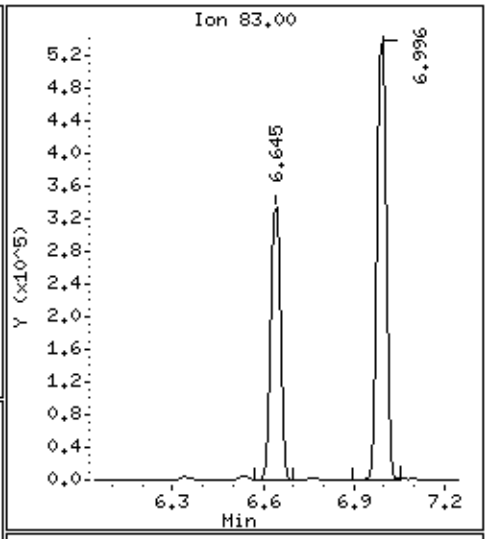
Concentration: 51.622 PPBV

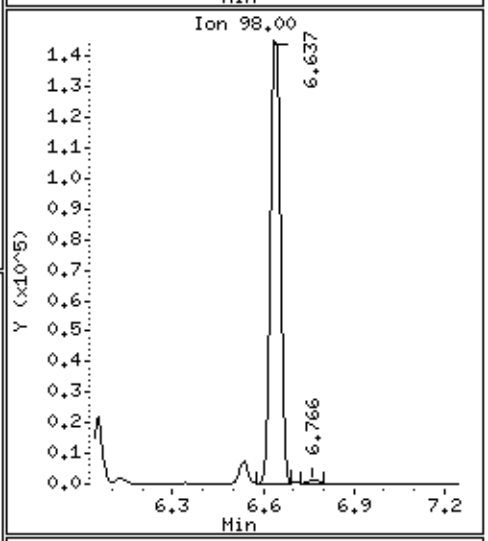


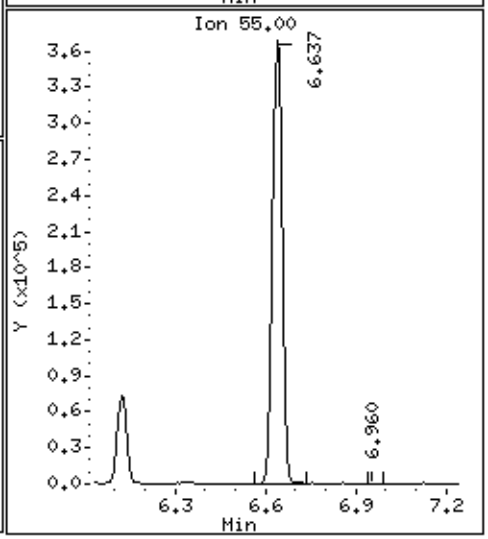












Data File: /chem/msdp.i/18dec14.b/p121804.d

Date : 18-DEC-2014 10:04

Client ID: ICV

Instrument: msdp.i

Sample Info: 50mL #2687-143

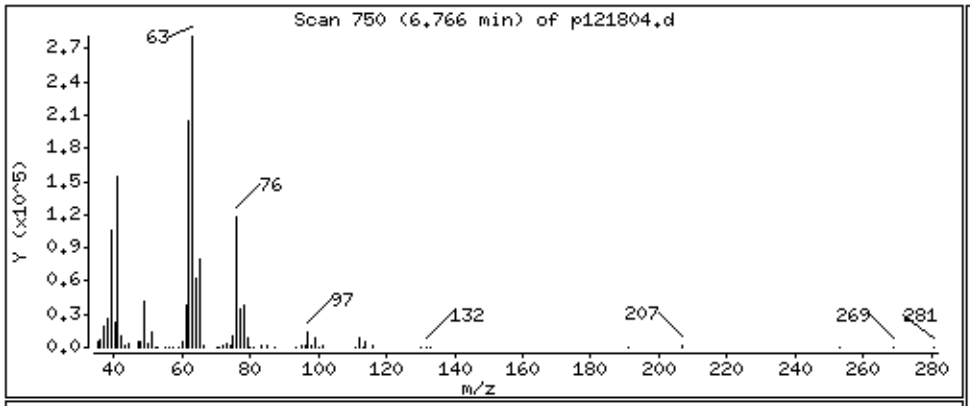
Operator: js

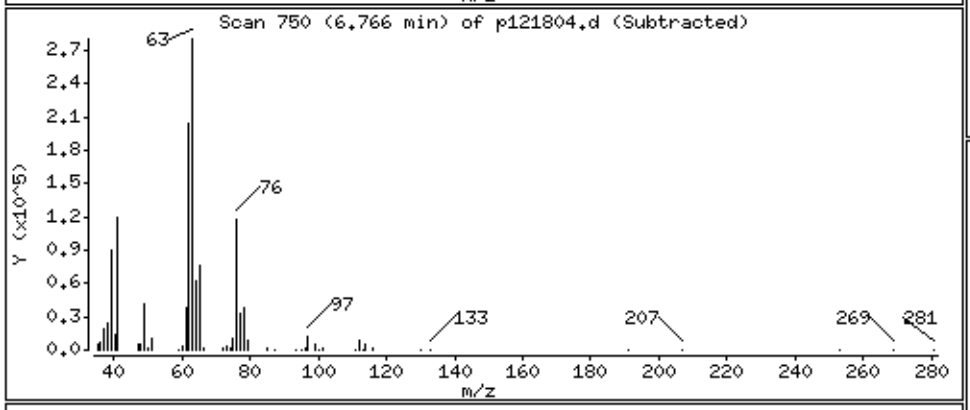
Column phase: RTX-624

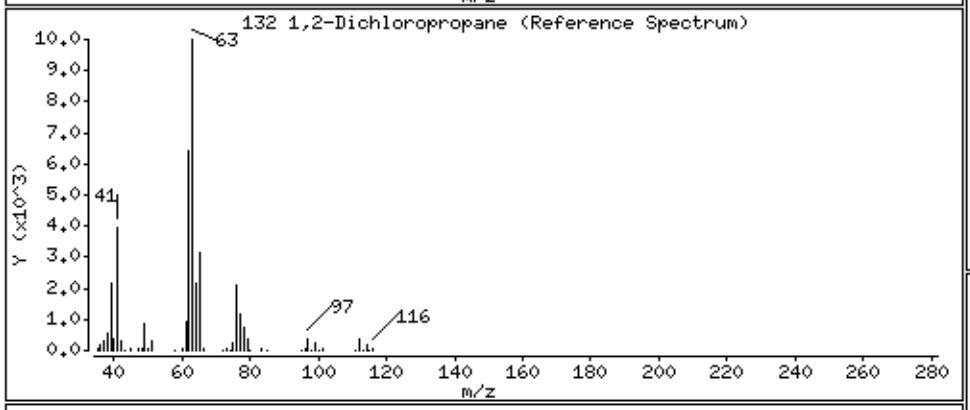
Column diameter: 0.25

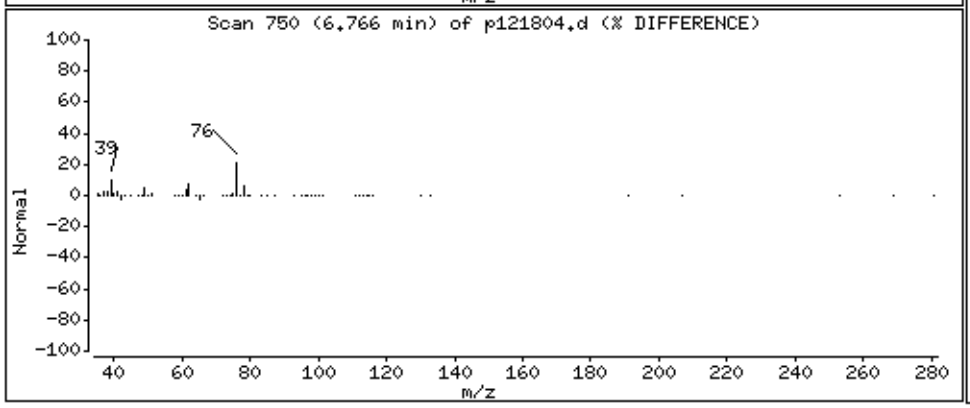
132 1,2-Dichloropropane

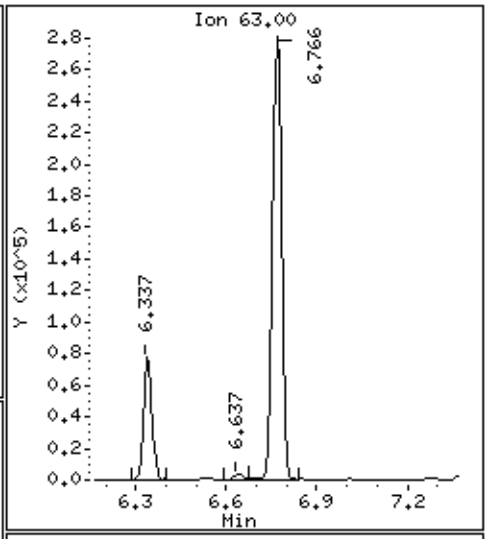
Concentration: 45.551 PPBV

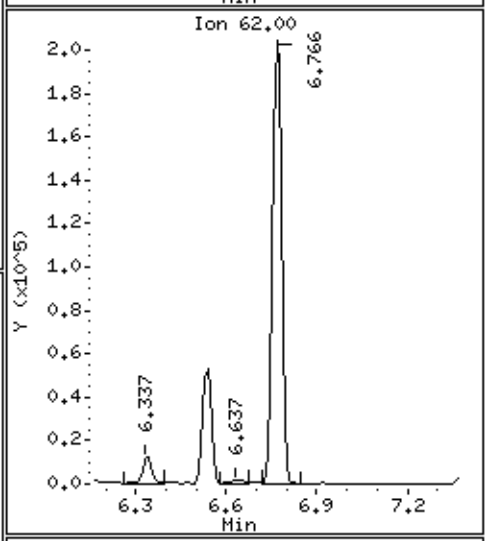


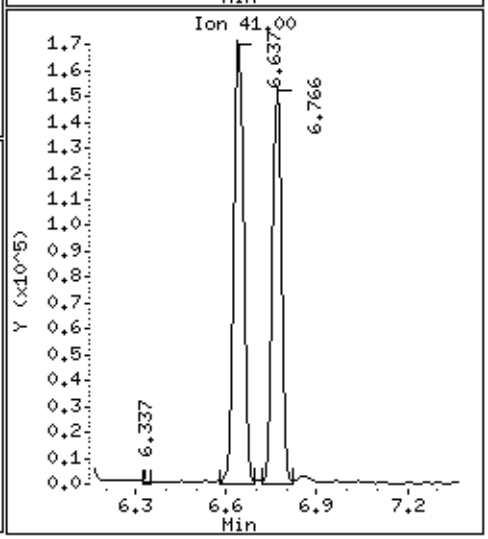












Data File: /chem/msdp.i/18dec14.b/p121804.d

Date : 18-DEC-2014 10:04

Client ID: ICV

Instrument: msdp.i

Sample Info: 50mL #2687-143

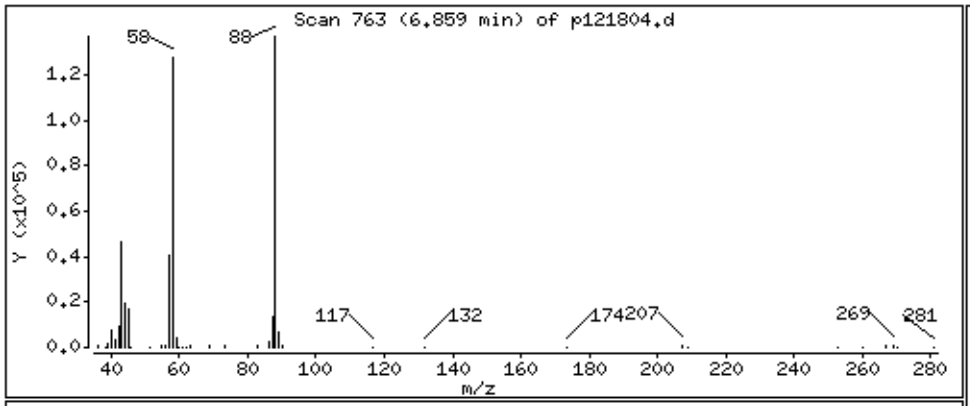
Operator: js

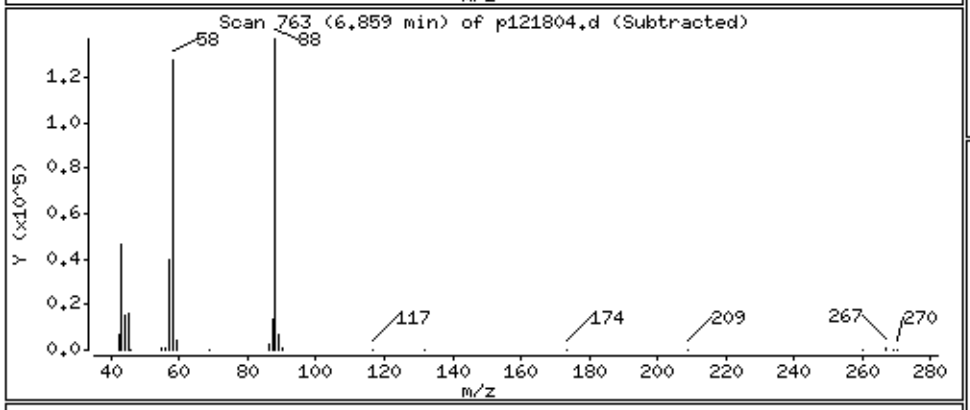
Column phase: RTX-624

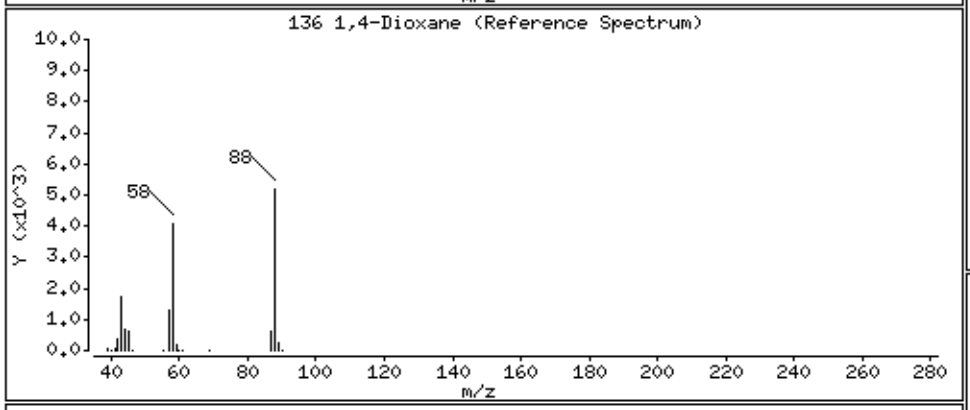
Column diameter: 0.25

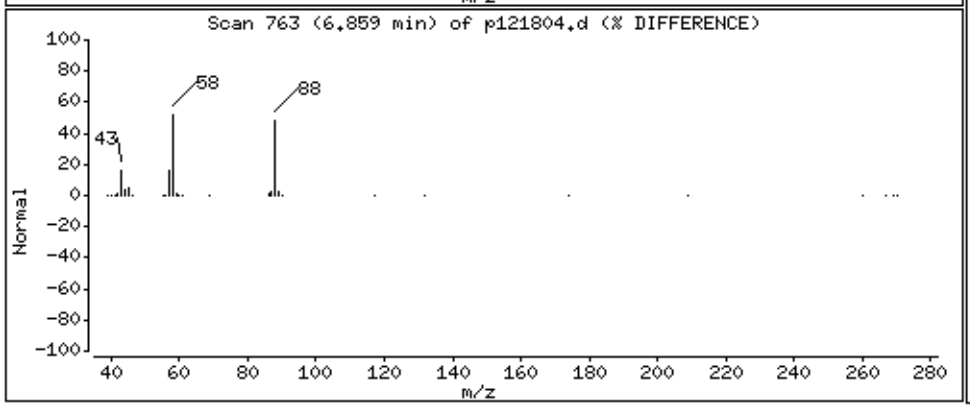
136 1,4-Dioxane

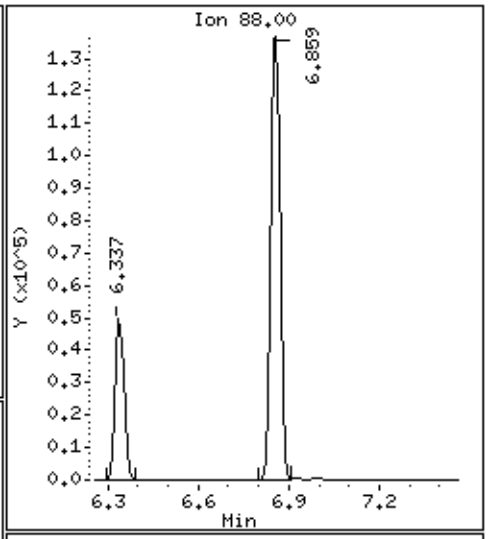
Concentration: 42.715 PPBV

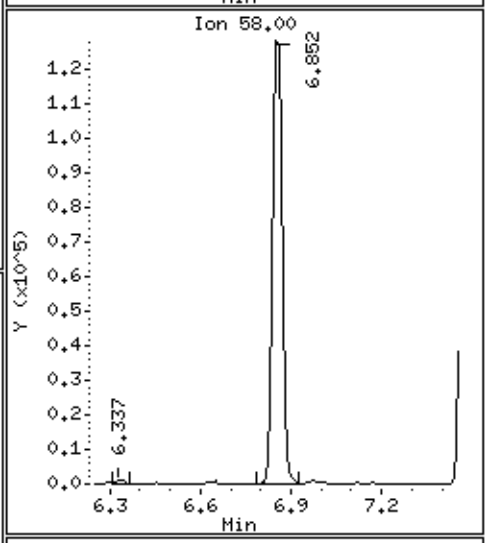


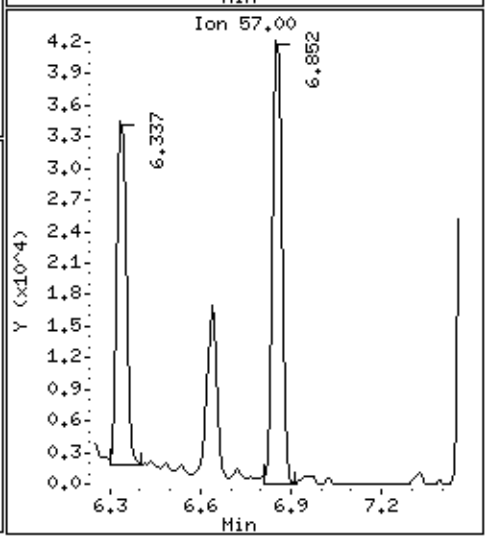












Data File: /chem/msdp.i/18dec14.b/p121804.d

Date : 18-DEC-2014 10:04

Client ID: ICV

Instrument: msdp.i

Sample Info: 50mL #2687-143

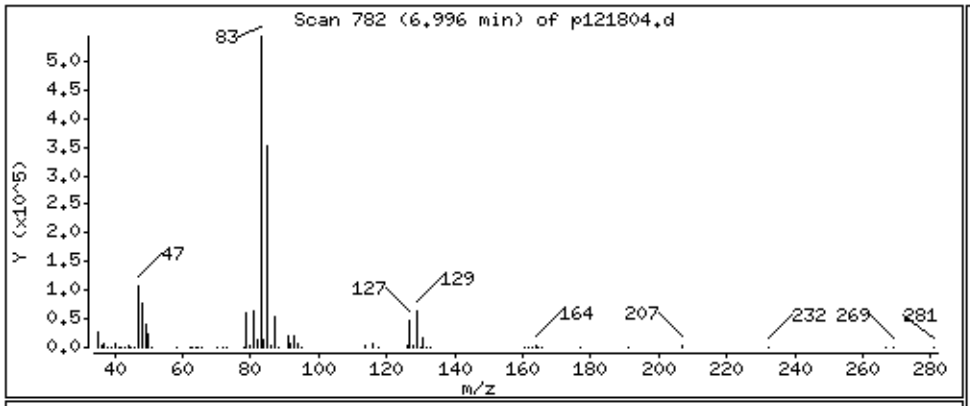
Operator: js

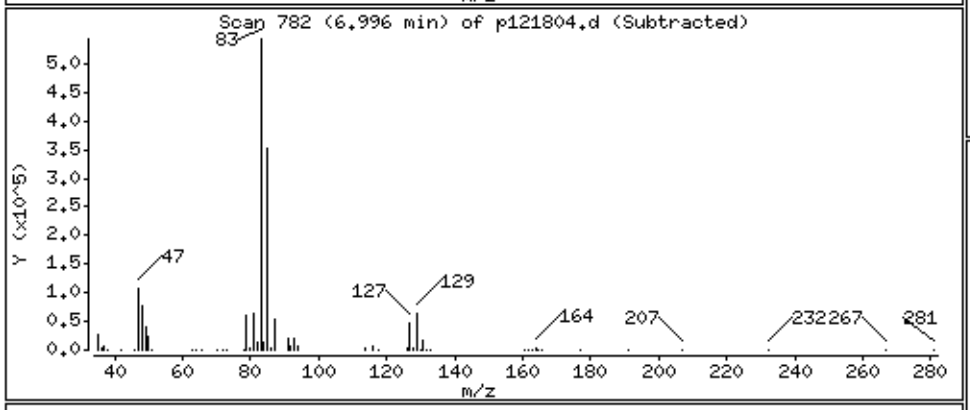
Column phase: RTX-624

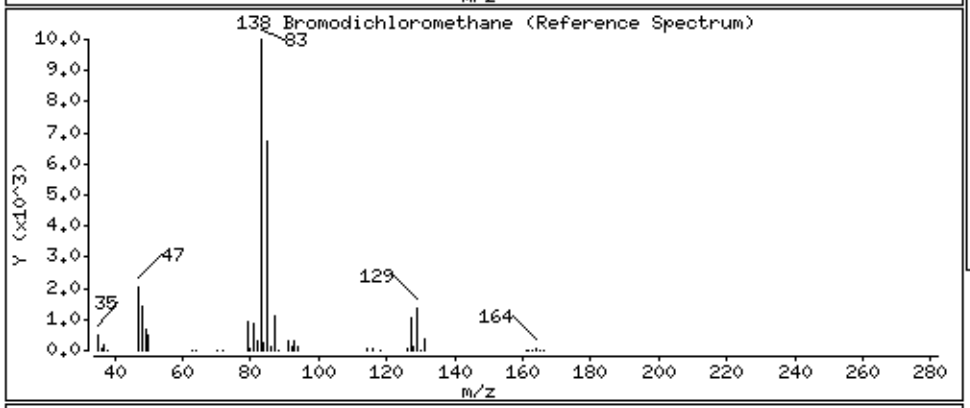
Column diameter: 0.25

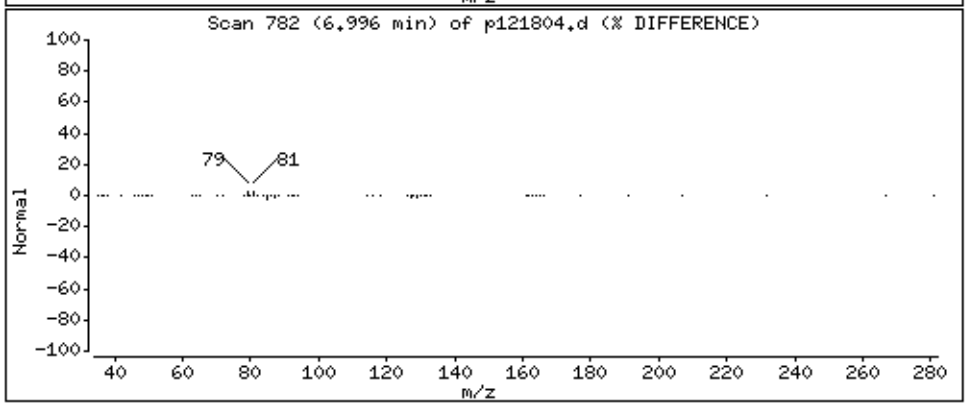
138 Bromodichloromethane

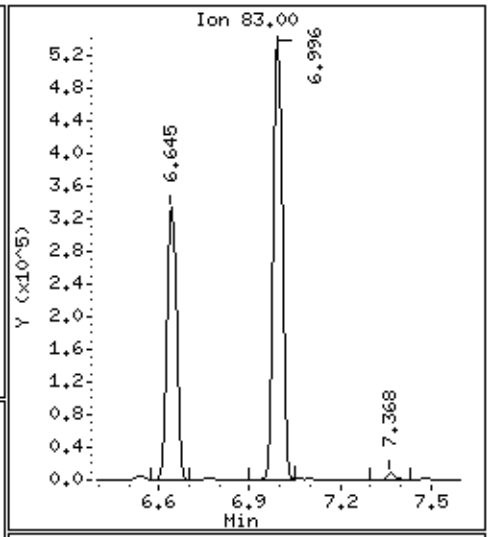
Concentration: 44.644 PPBV

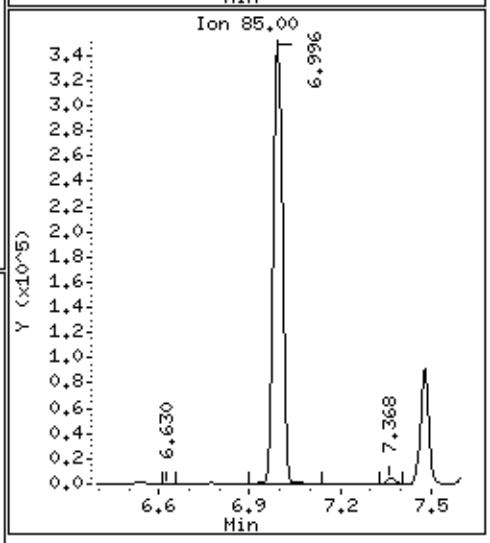












Data File: /chem/msdp.i/18dec14.b/p121804.d

Date : 18-DEC-2014 10:04

Client ID: ICV

Instrument: msdp.i

Sample Info: 50mL #2687-143

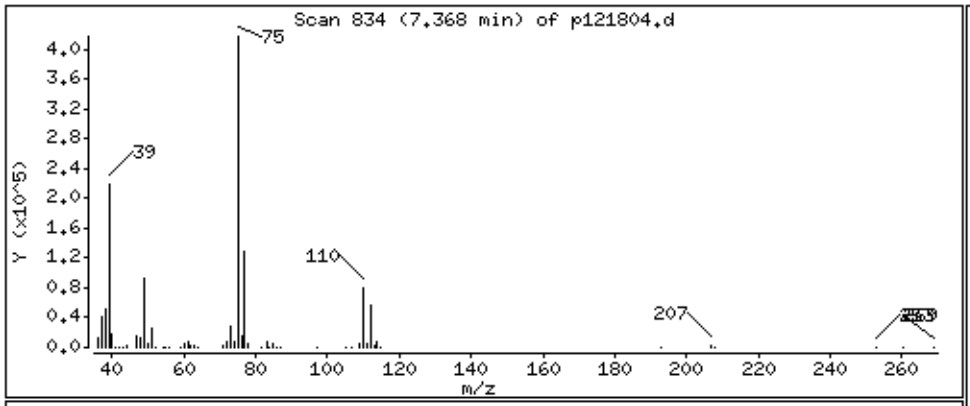
Operator: js

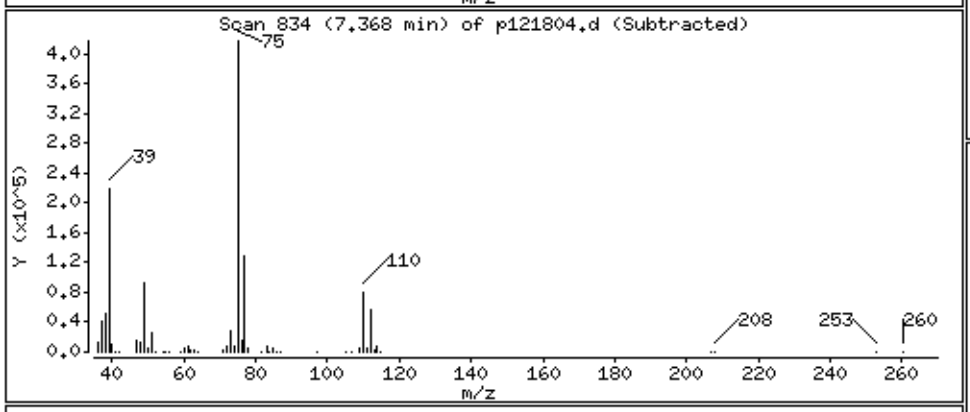
Column phase: RTX-624

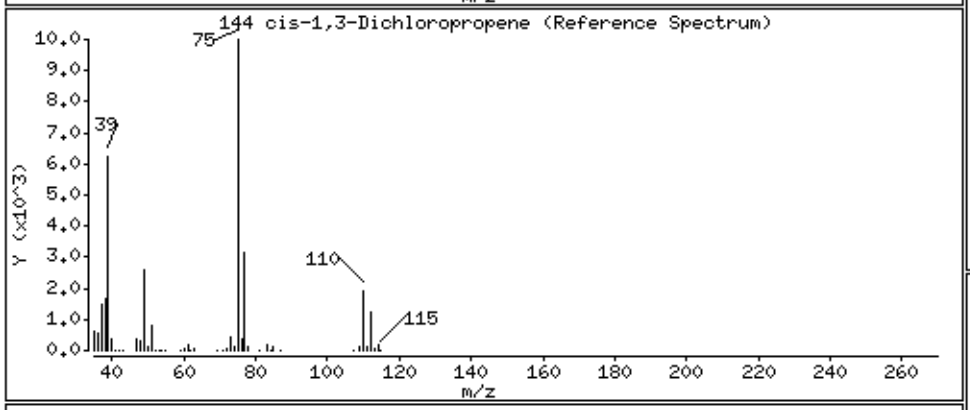
Column diameter: 0.25

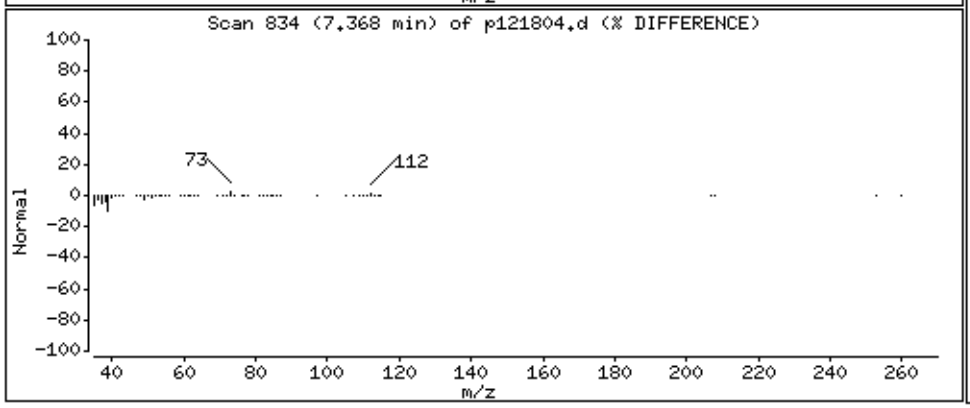
144 cis-1,3-Dichloropropene

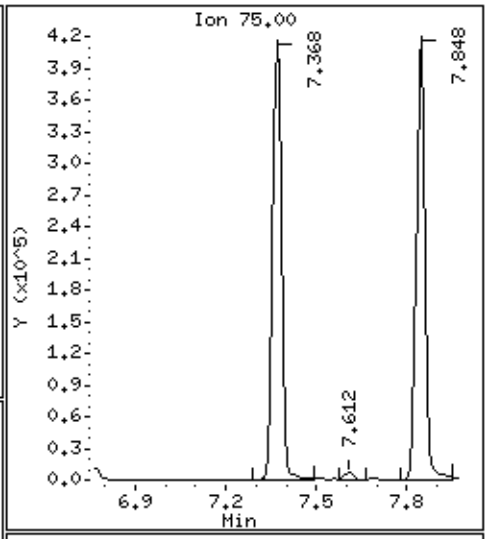
Concentration: 46.773 PPBV

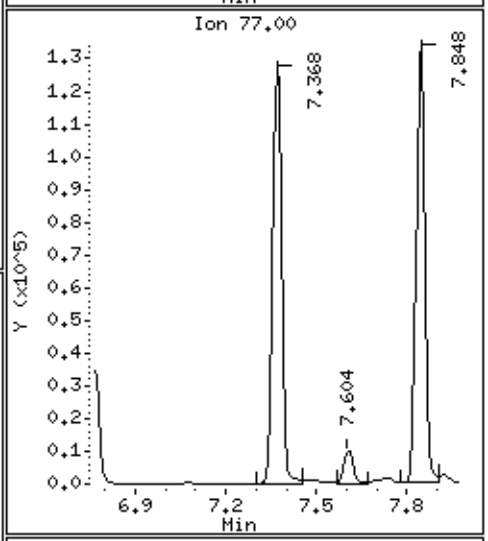


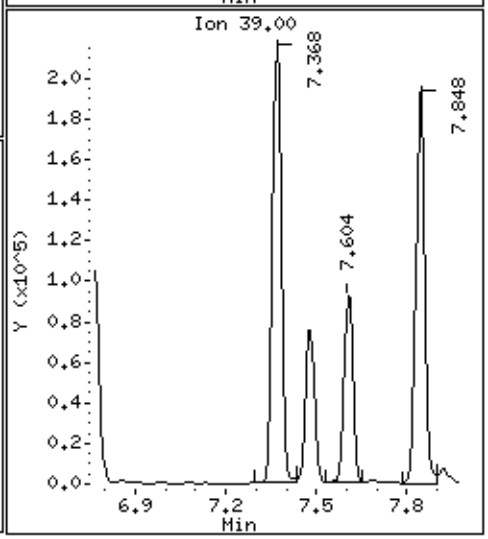












Data File: /chem/msdp.i/18dec14.b/p121804.d

Date : 18-DEC-2014 10:04

Client ID: ICV

Instrument: msdp.i

Sample Info: 50mL #2687-143

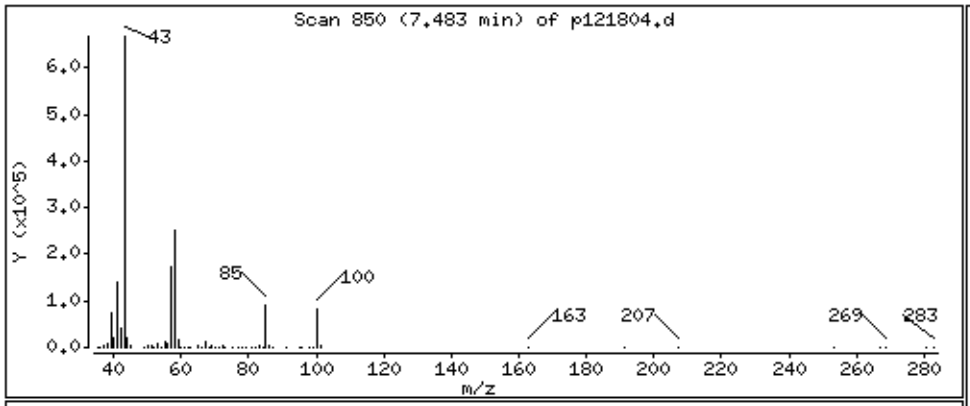
Operator: js

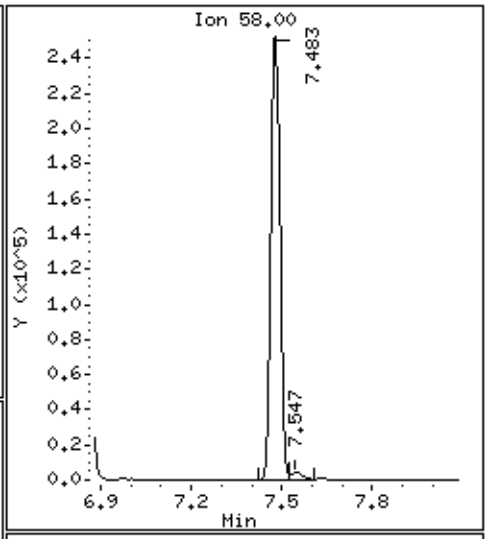
Column phase: RTX-624

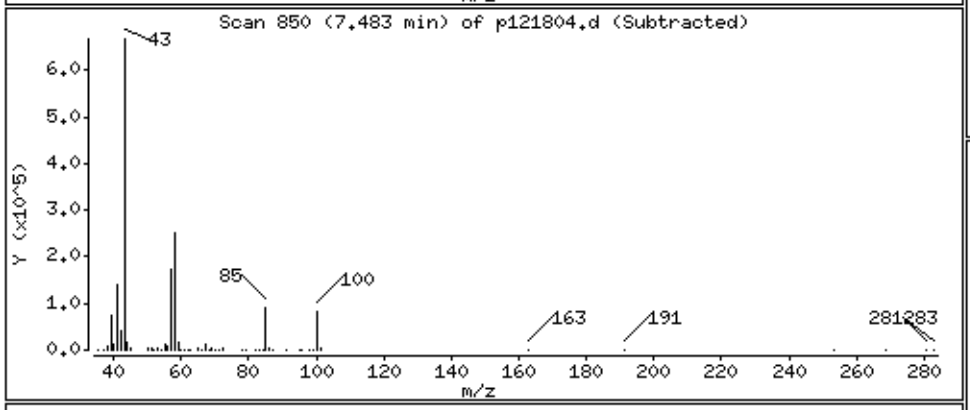
Column diameter: 0.25

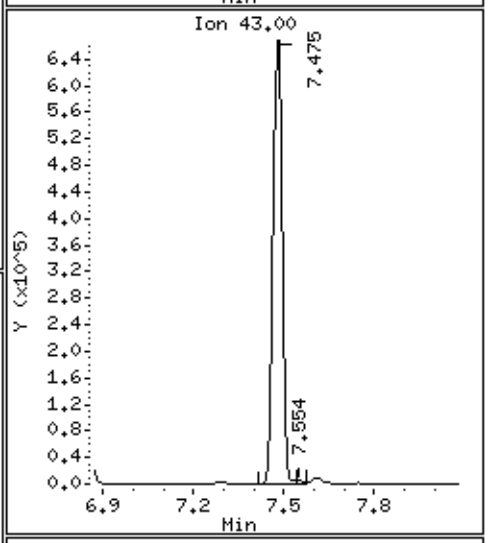
145 4-Methyl-2-pentanone

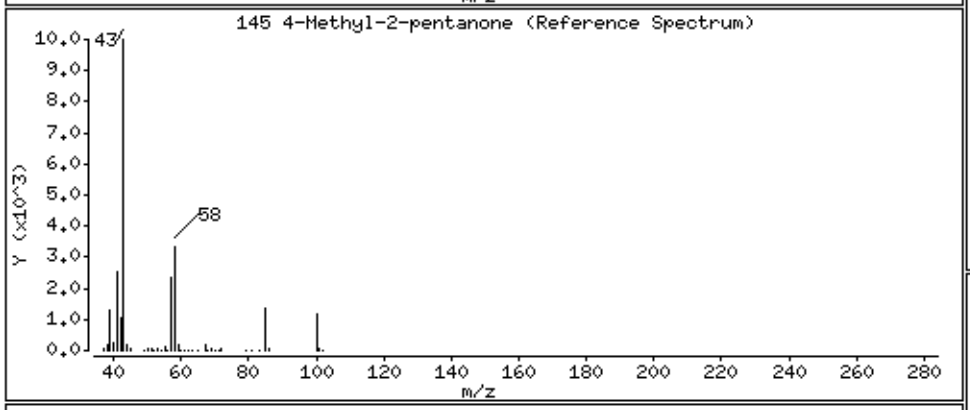
Concentration: 41.204 PPBV

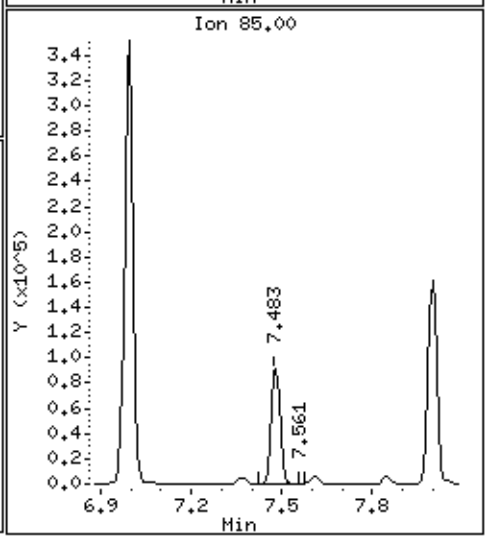


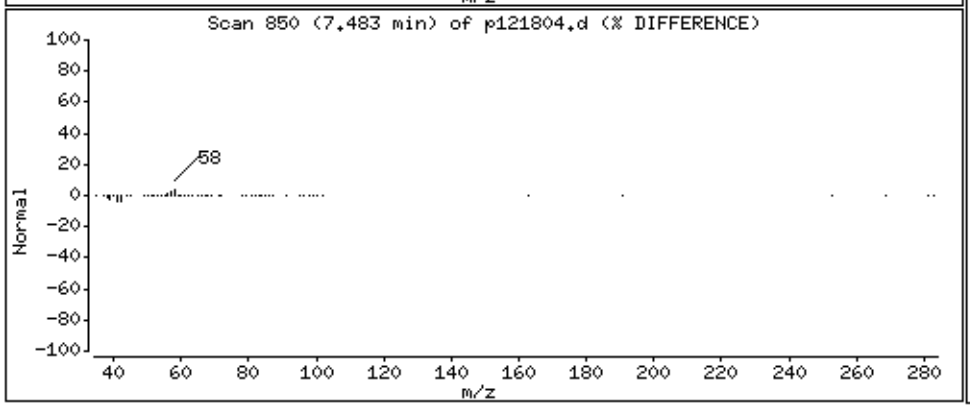












Data File: /chem/msdp.i/18dec14.b/p121804.d

Date : 18-DEC-2014 10:04

Client ID: ICV

Instrument: msdp.i

Sample Info: 50mL #2687-143

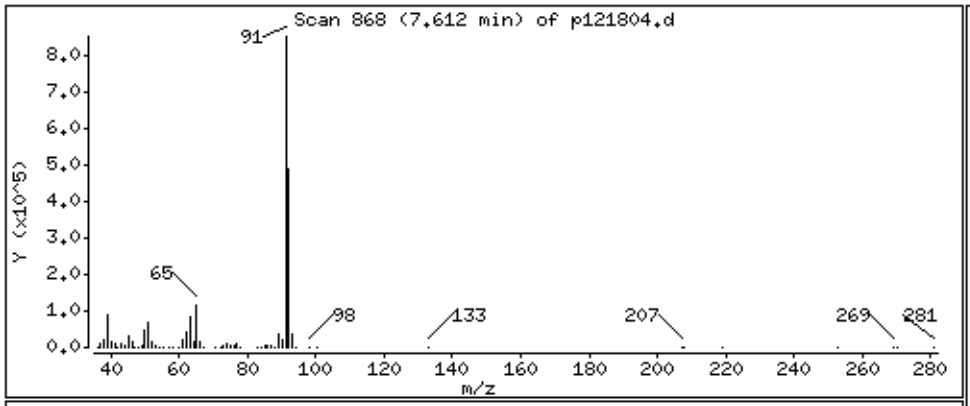
Operator: js

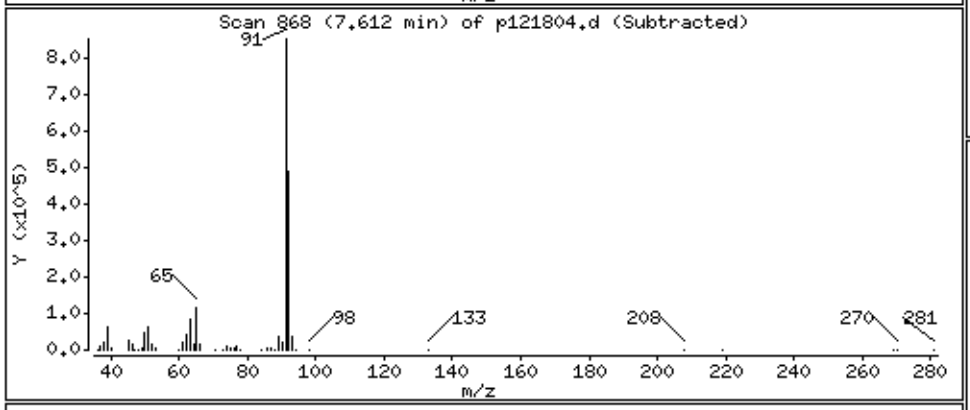
Column phase: RTX-624

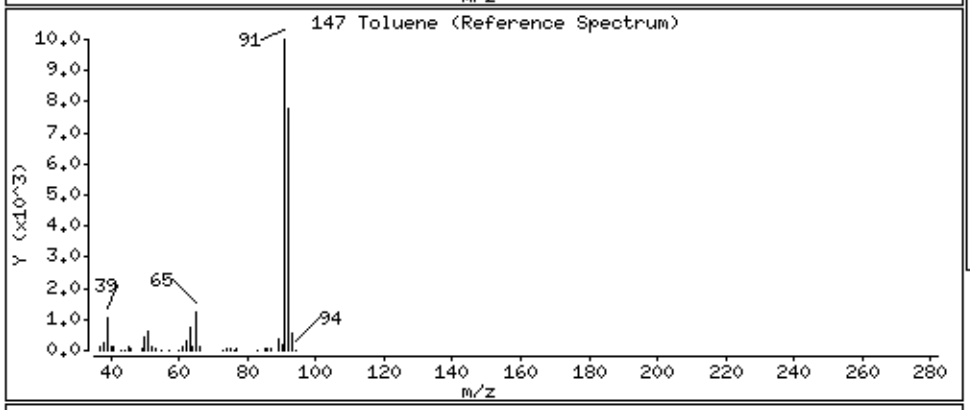
Column diameter: 0.25

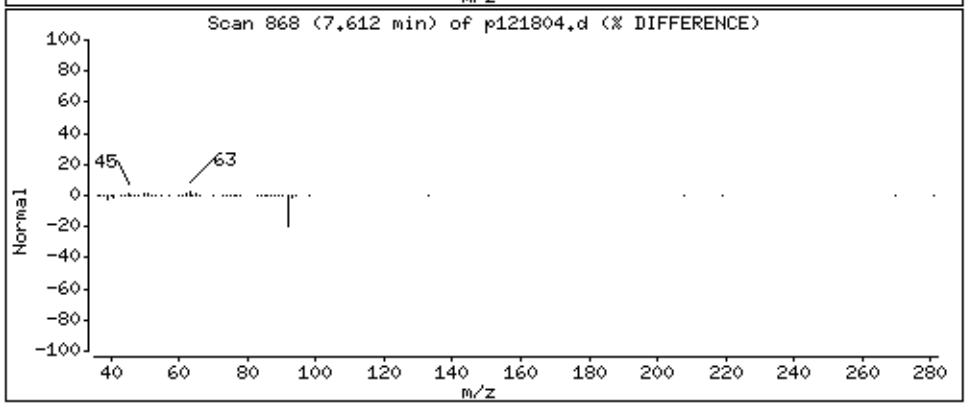
147 Toluene

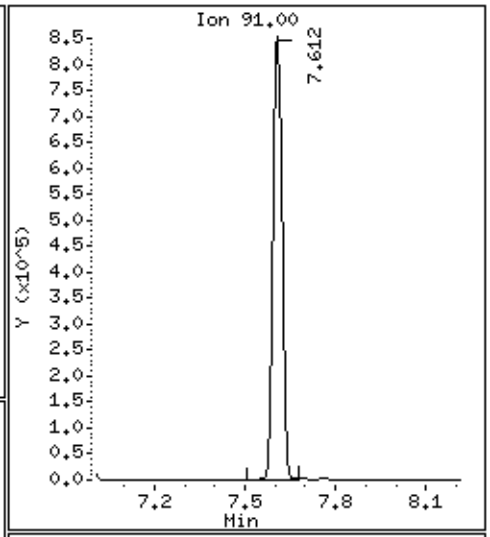
Concentration: 45.593 PPBV

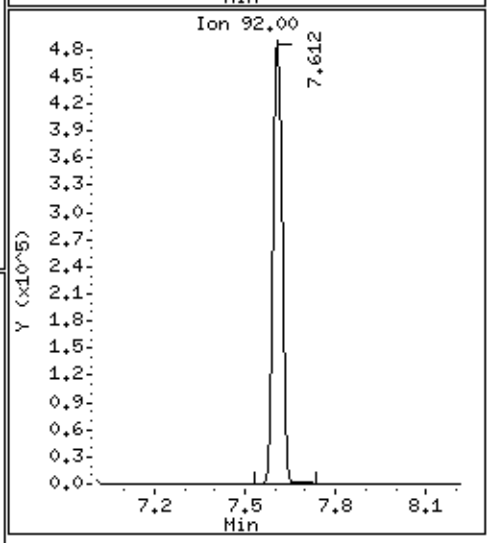












Data File: /chem/msdp.i/18dec14.b/p121804.d

Date : 18-DEC-2014 10:04

Client ID: ICV

Instrument: msdp.i

Sample Info: 50mL #2687-143

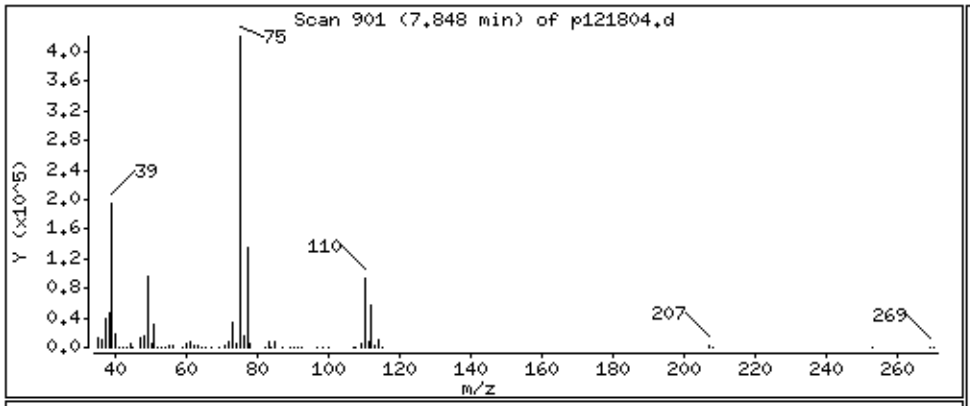
Operator: js

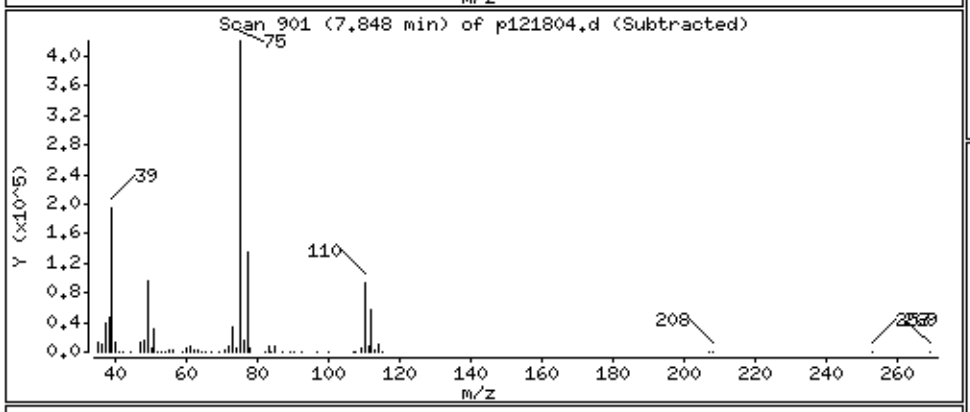
Column phase: RTX-624

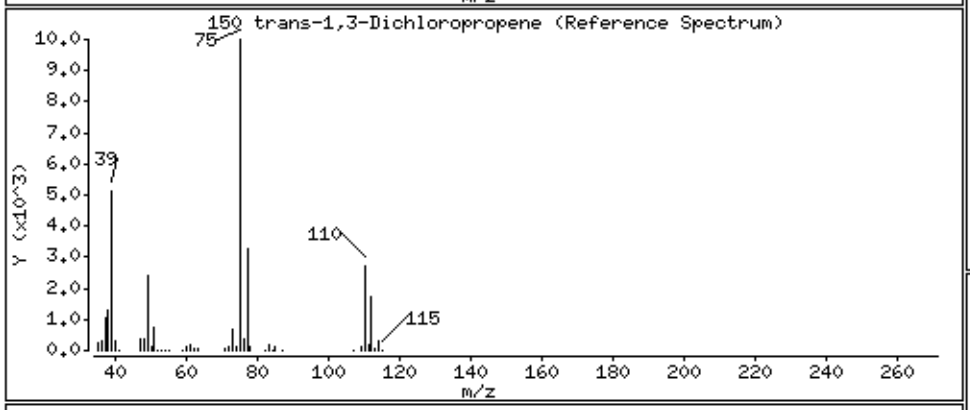
Column diameter: 0.25

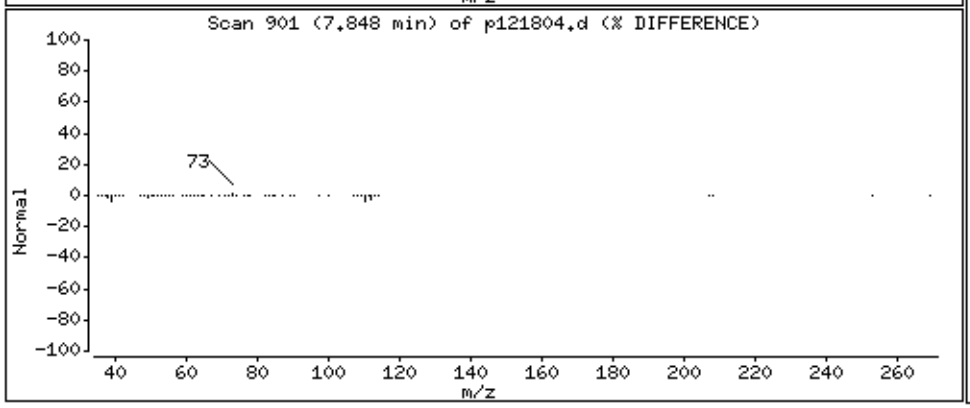
150 trans-1,3-Dichloropropene

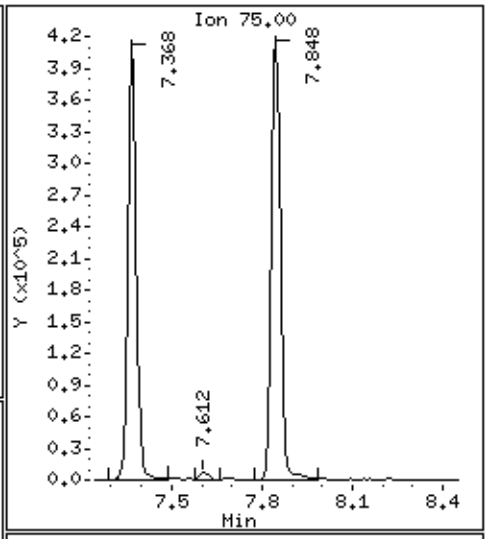
Concentration: 40.597 PPBV

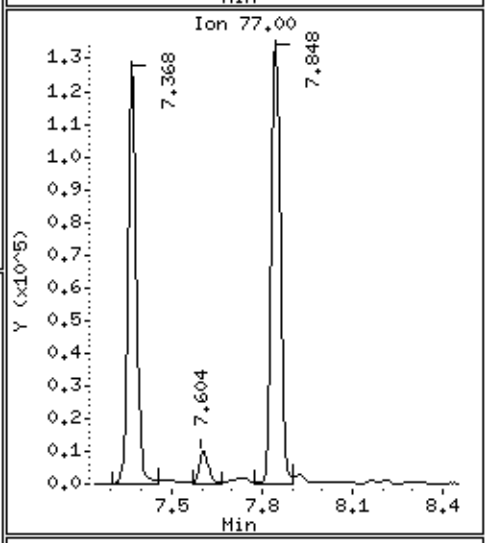


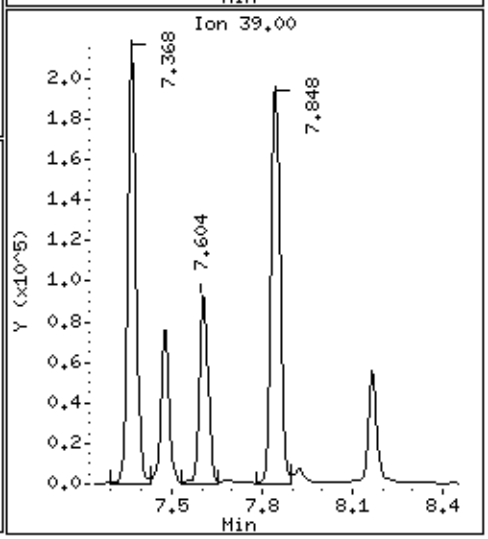












Data File: /chem/msdp.i/18dec14.b/p121804.d

Date : 18-DEC-2014 10:04

Client ID: ICV

Instrument: msdp.i

Sample Info: 50mL #2687-143

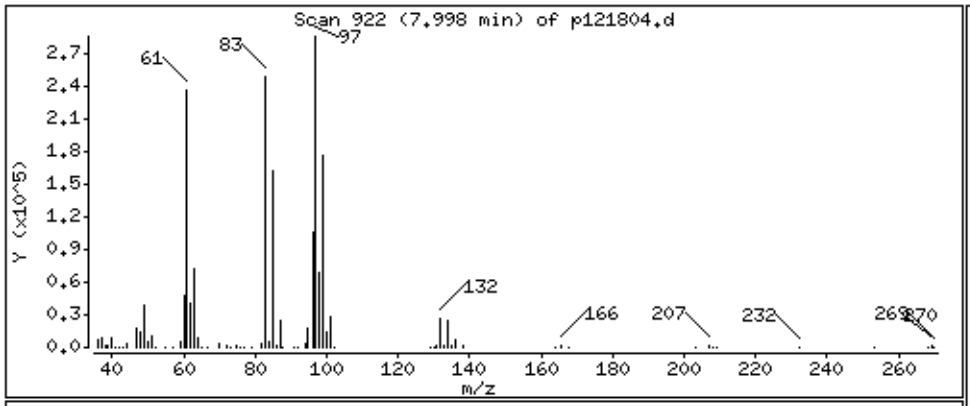
Operator: js

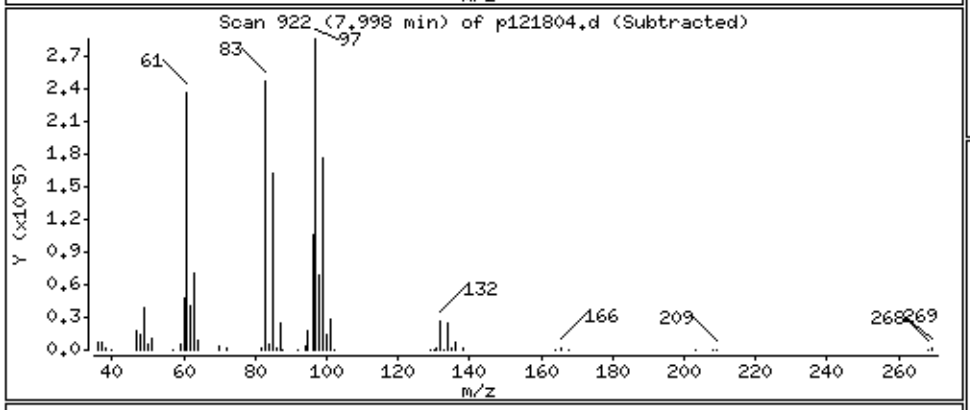
Column phase: RTX-624

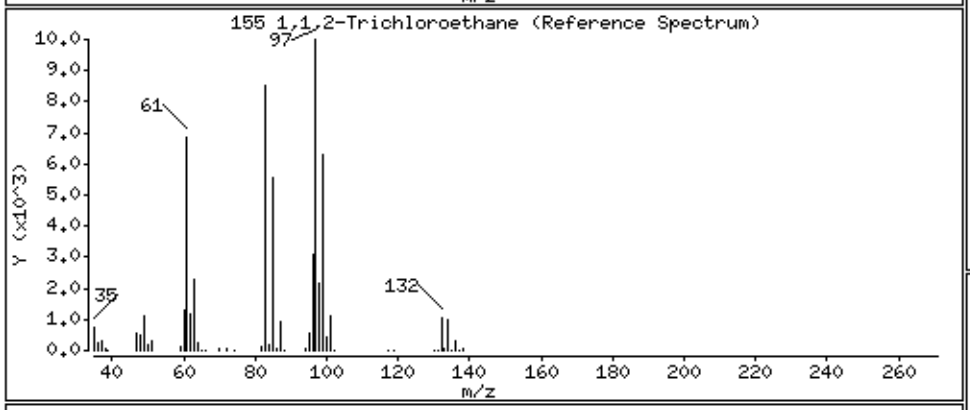
Column diameter: 0.25

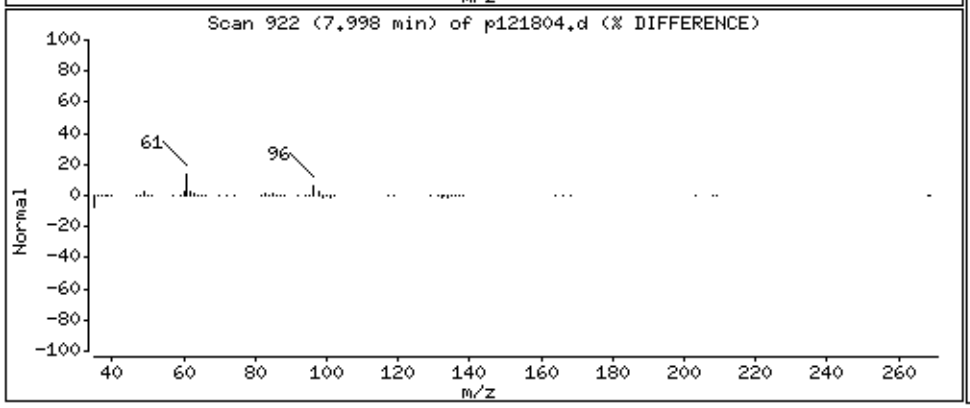
155 1,1,2-Trichloroethane

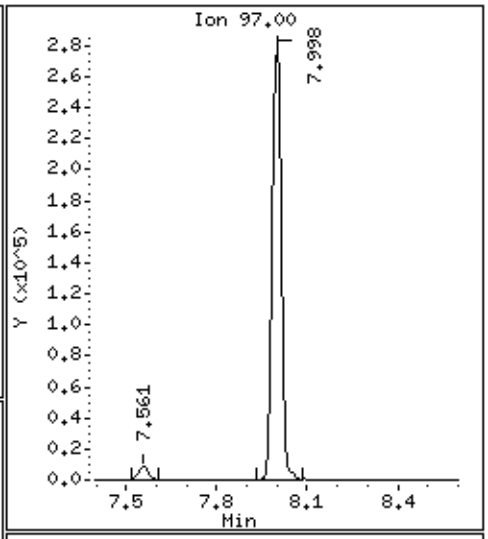
Concentration: 41.869 PPBV

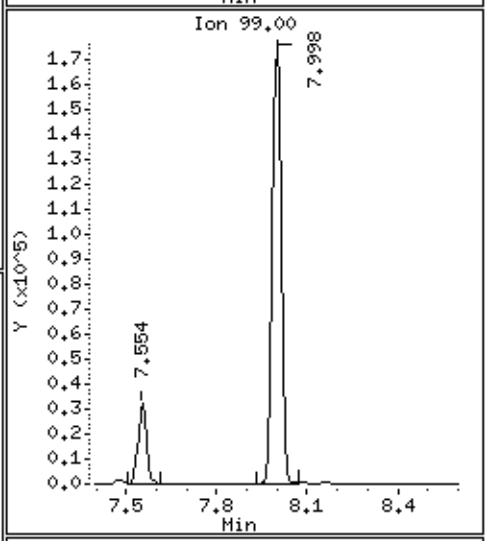


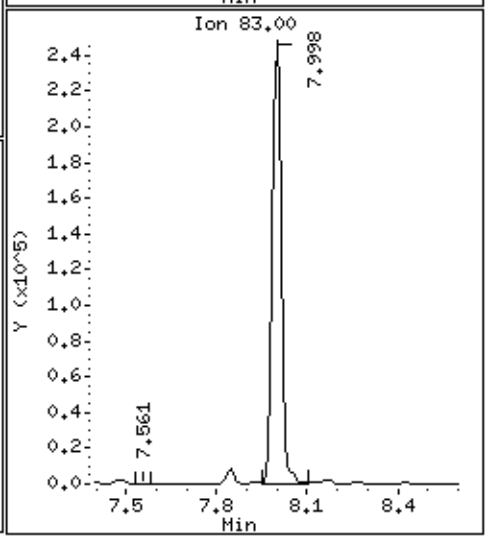












Data File: /chem/msdp.i/18dec14.b/p121804.d

Date : 18-DEC-2014 10:04

Client ID: ICV

Instrument: msdp.i

Sample Info: 50mL #2687-143

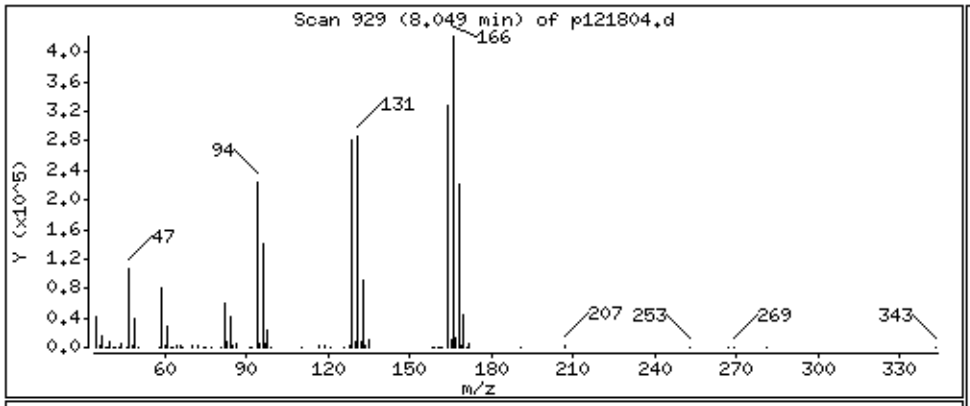
Operator: js

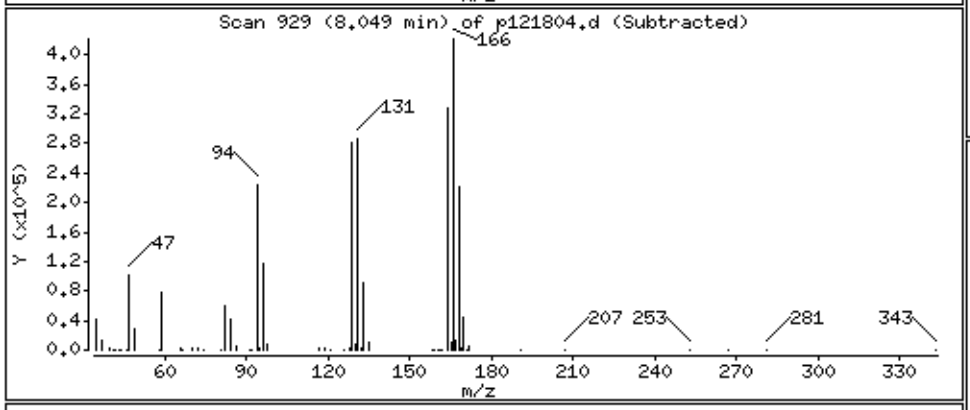
Column phase: RTX-624

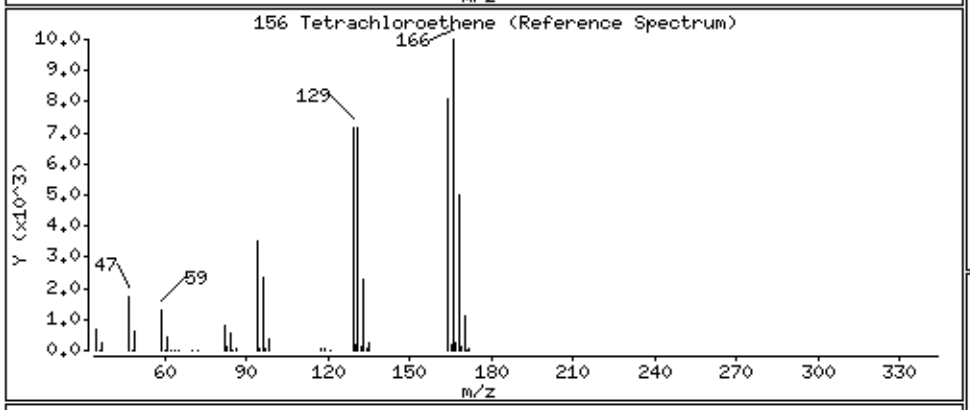
Column diameter: 0.25

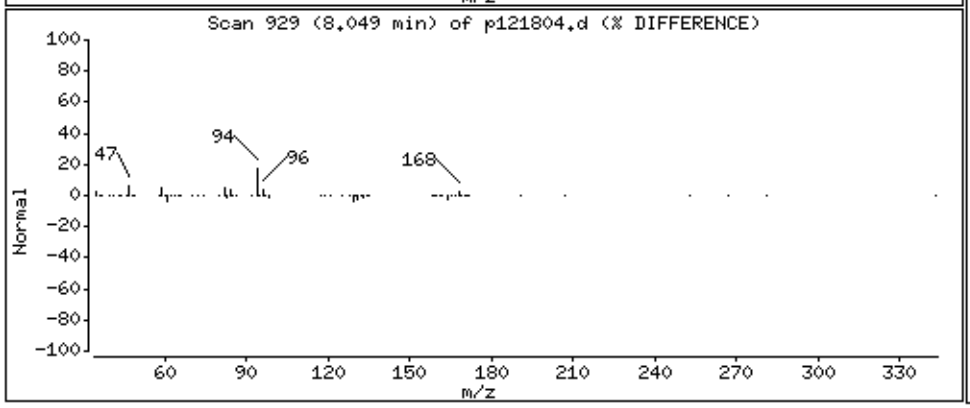
156 Tetrachloroethene

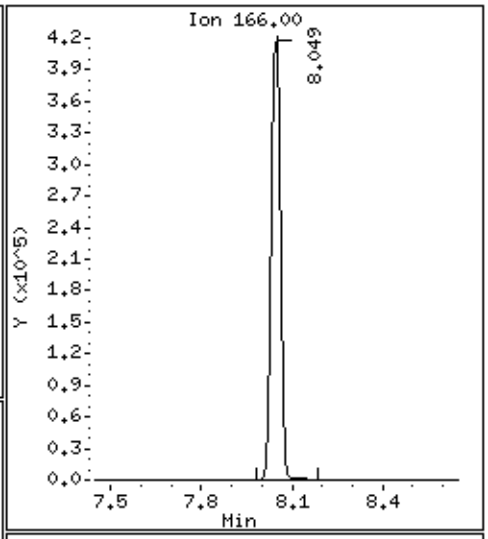
Concentration: 43.793 PPBV

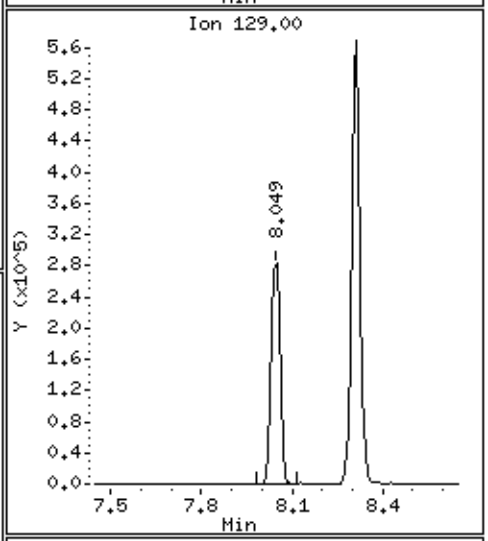


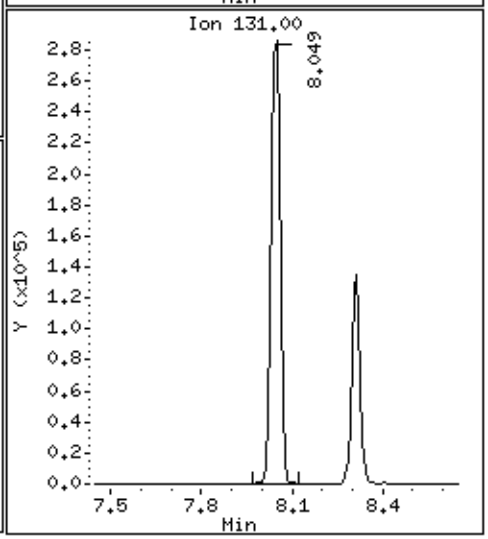












Data File: /chem/msdp.i/18dec14.b/p121804.d

Date : 18-DEC-2014 10:04

Client ID: ICV

Instrument: msdp.i

Sample Info: 50mL #2687-143

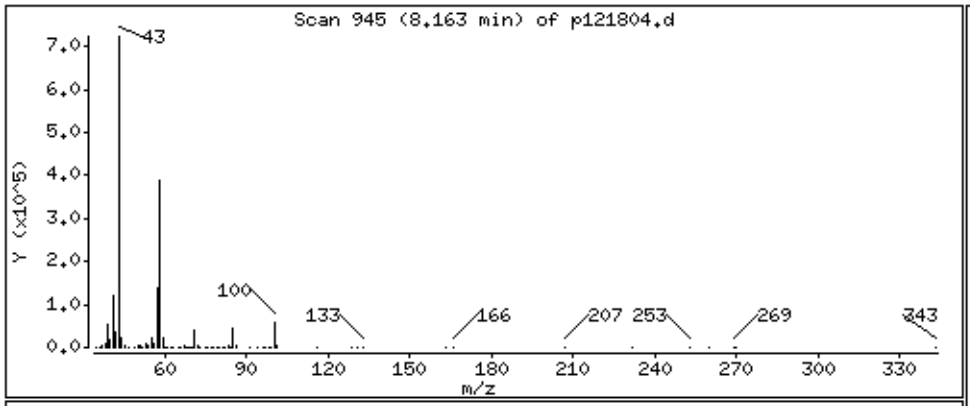
Operator: js

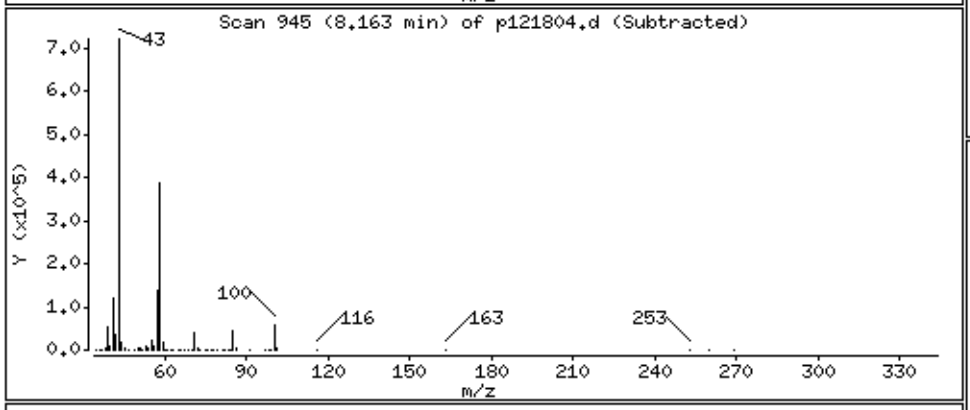
Column phase: RTX-624

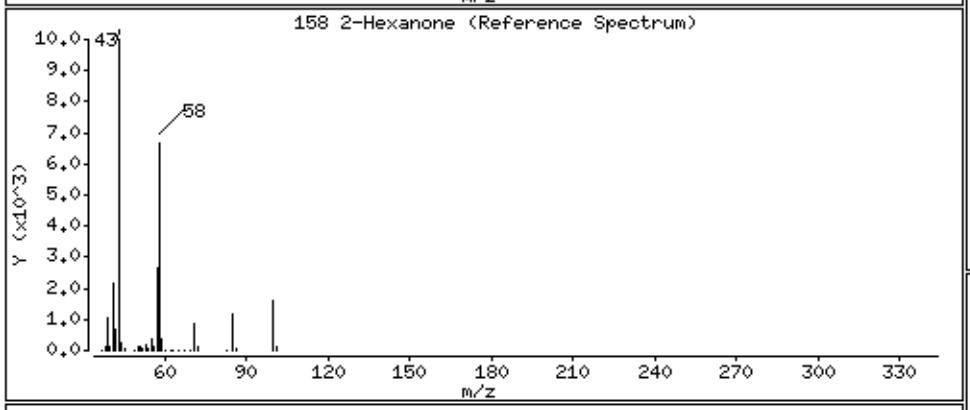
Column diameter: 0.25

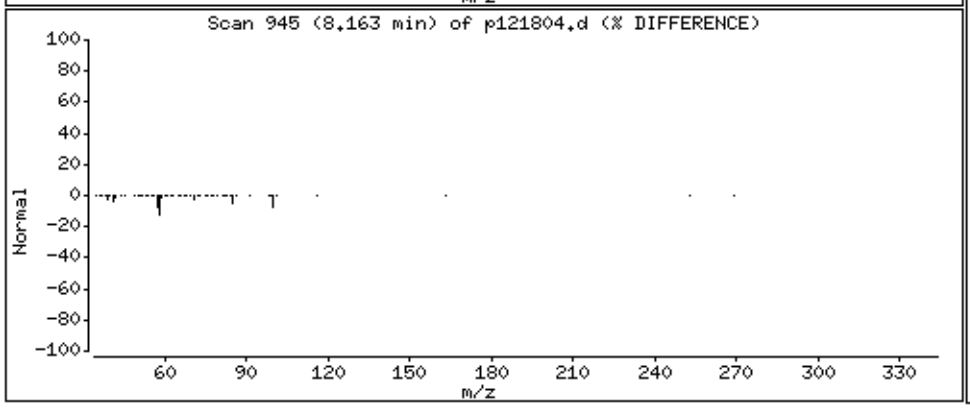
158 2-Hexanone

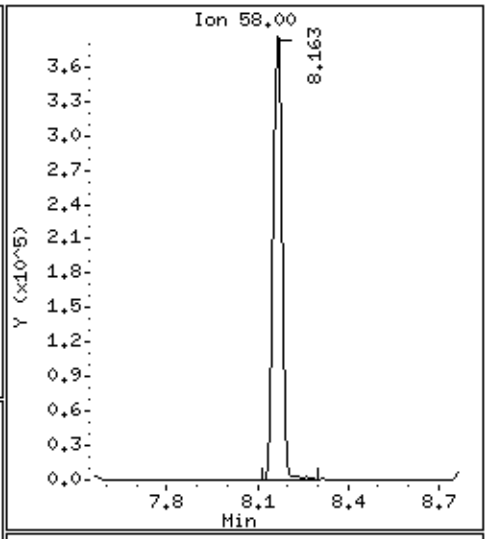
Concentration: 40.812 PPBV

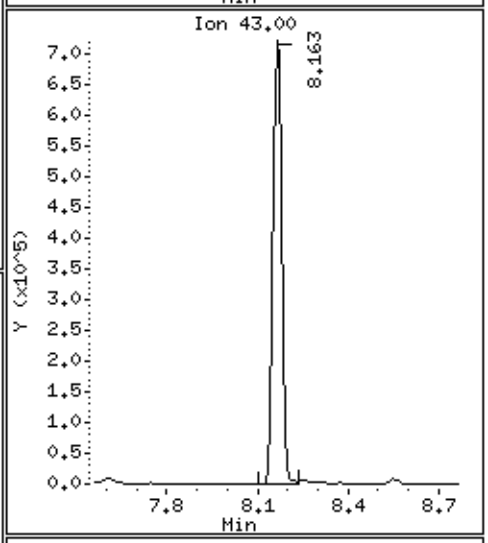


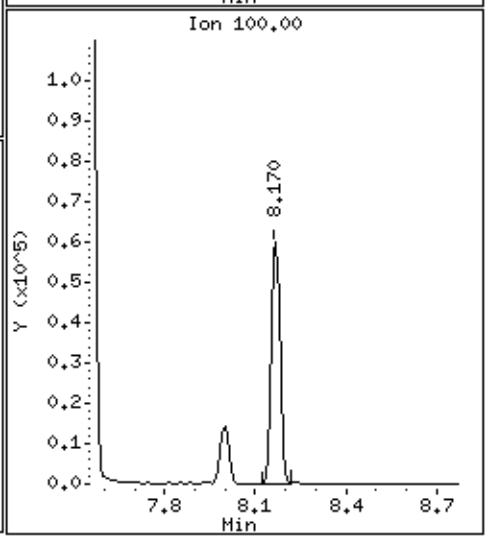












Data File: /chem/msdp.i/18dec14.b/p121804.d

Date : 18-DEC-2014 10:04

Client ID: ICV

Instrument: msdp.i

Sample Info: 50mL #2687-143

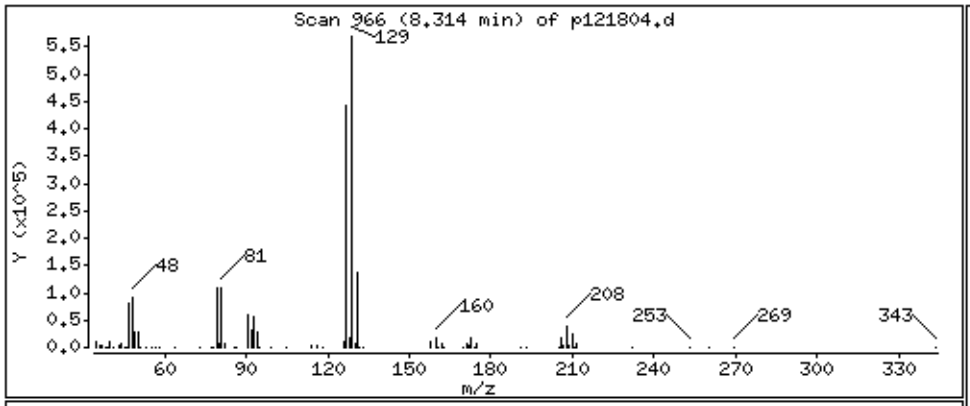
Operator: js

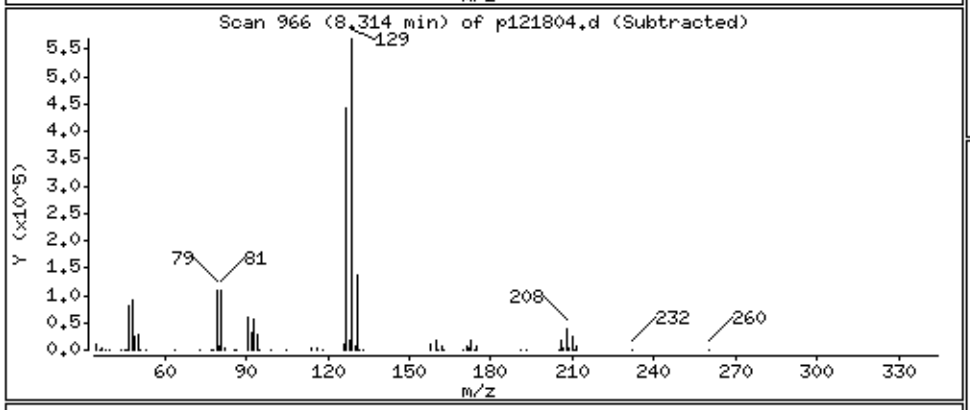
Column phase: RTX-624

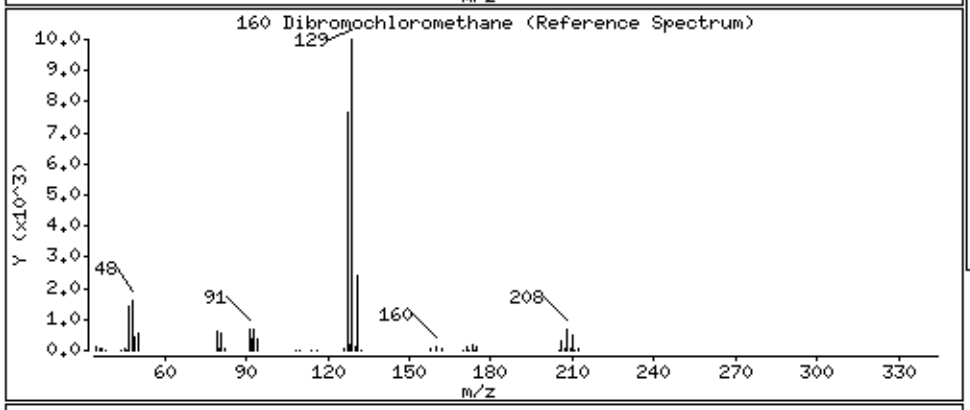
Column diameter: 0.25

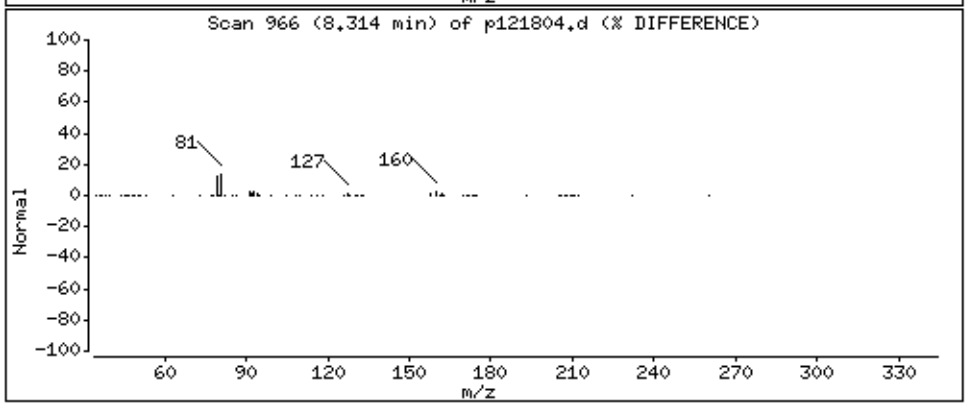
160 Dibromochloromethane

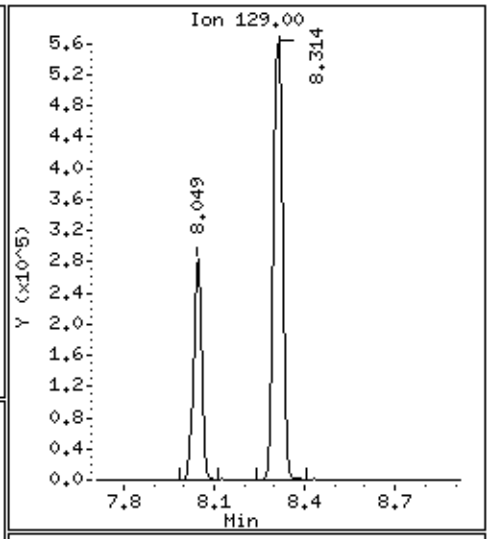
Concentration: 44.756 PPBV

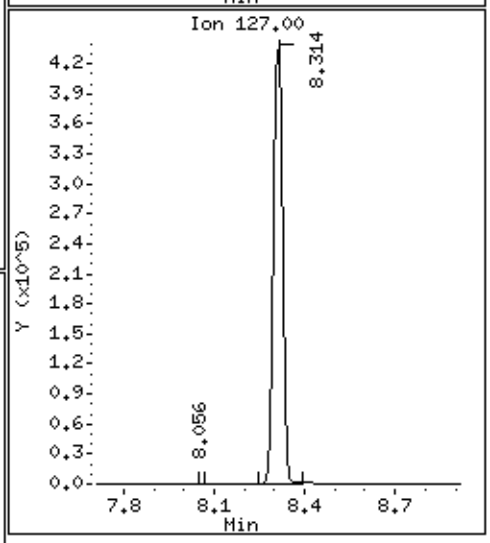












Data File: /chem/msdp.i/18dec14.b/p121804.d

Date : 18-DEC-2014 10:04

Client ID: ICV

Instrument: msdp.i

Sample Info: 50mL #2687-143

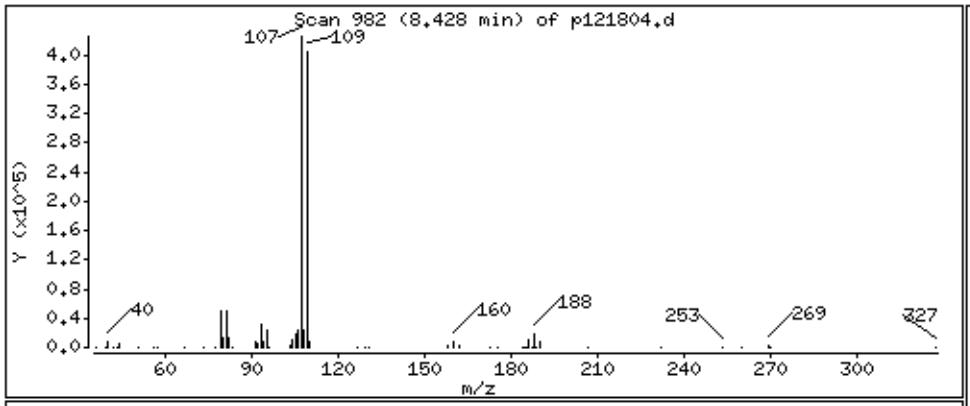
Operator: js

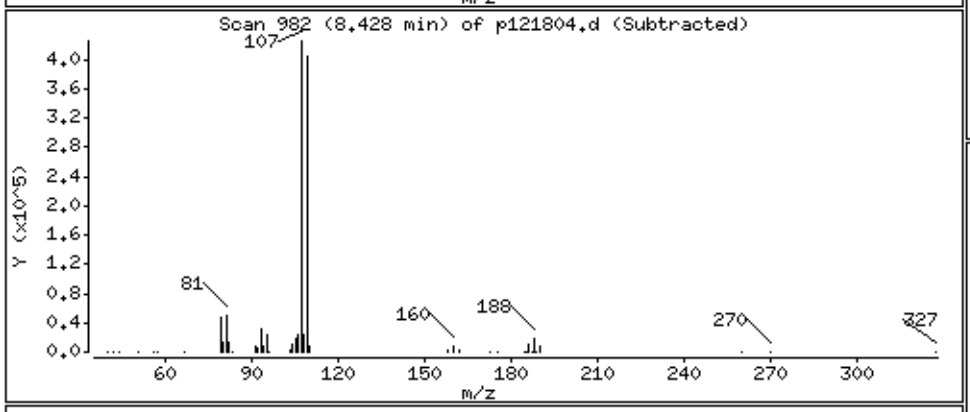
Column phase: RTX-624

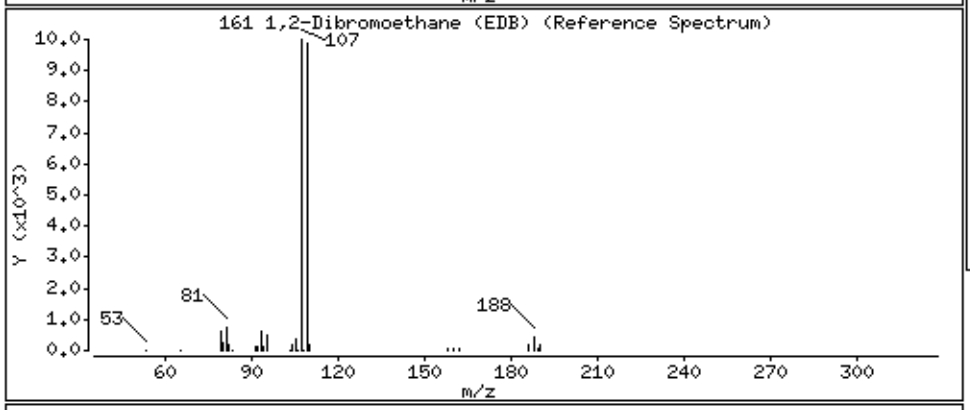
Column diameter: 0.25

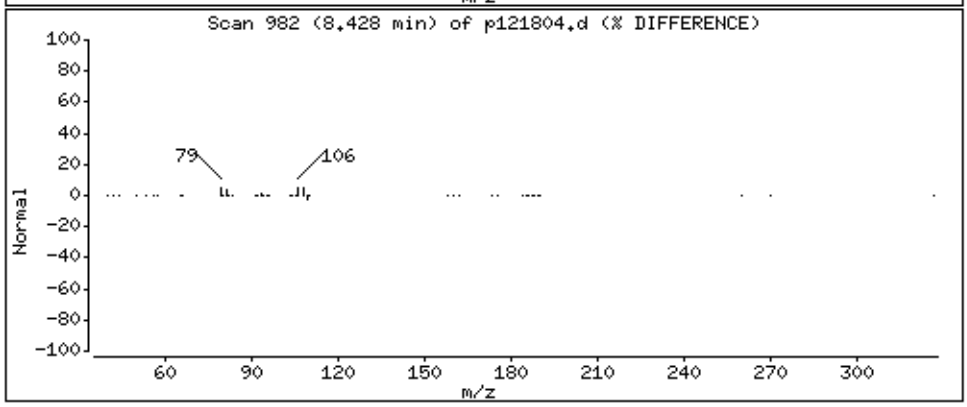
161 1,2-Dibromoethane (EDB)

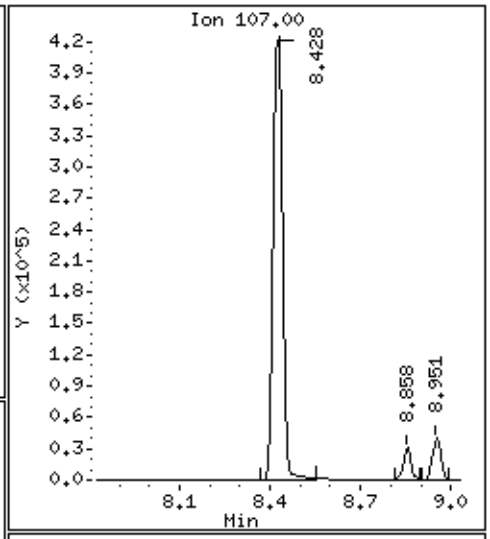
Concentration: 43.444 PPBV

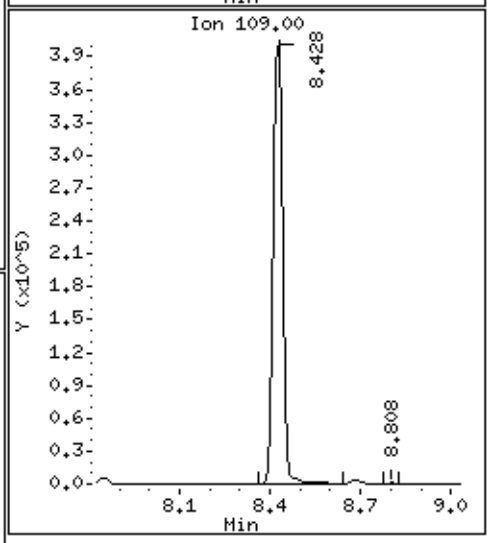












Data File: /chem/msdp.i/18dec14.b/p121804.d

Date : 18-DEC-2014 10:04

Client ID: ICV

Instrument: msdp.i

Sample Info: 50mL #2687-143

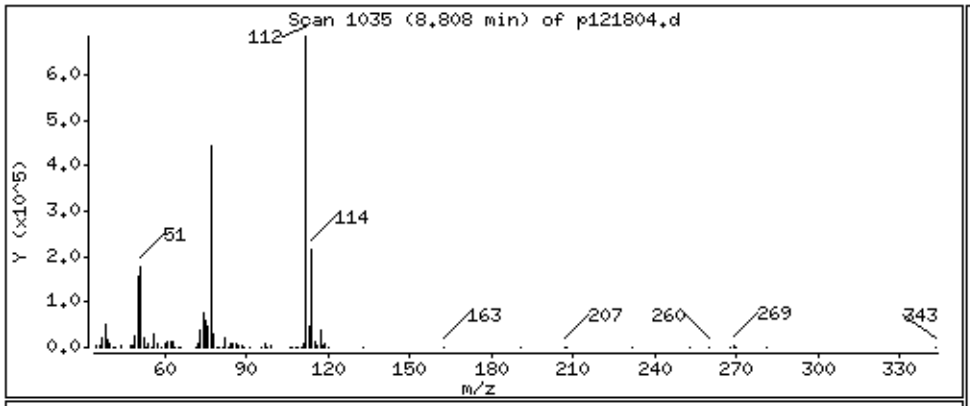
Operator: js

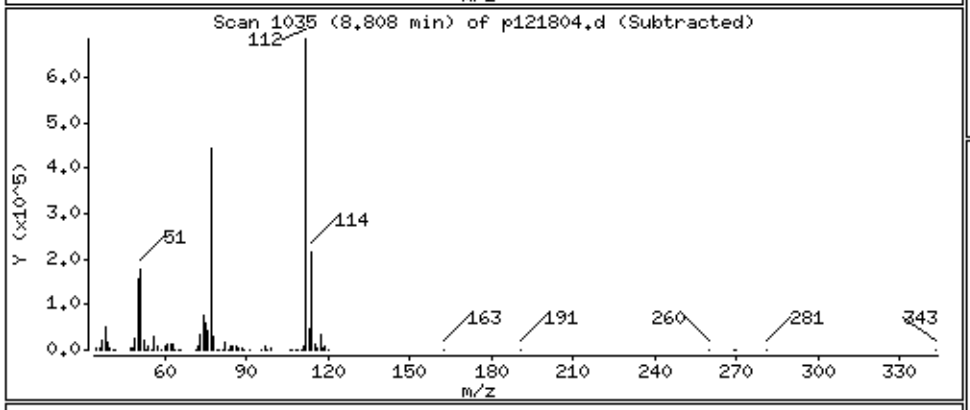
Column phase: RTX-624

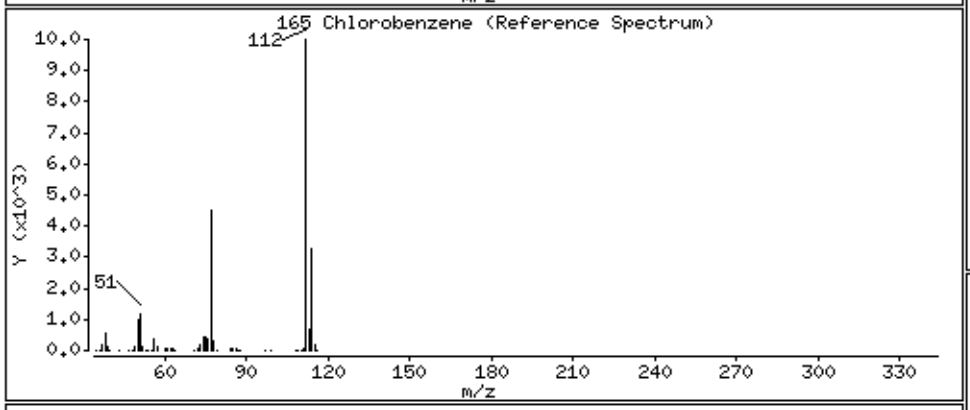
Column diameter: 0.25

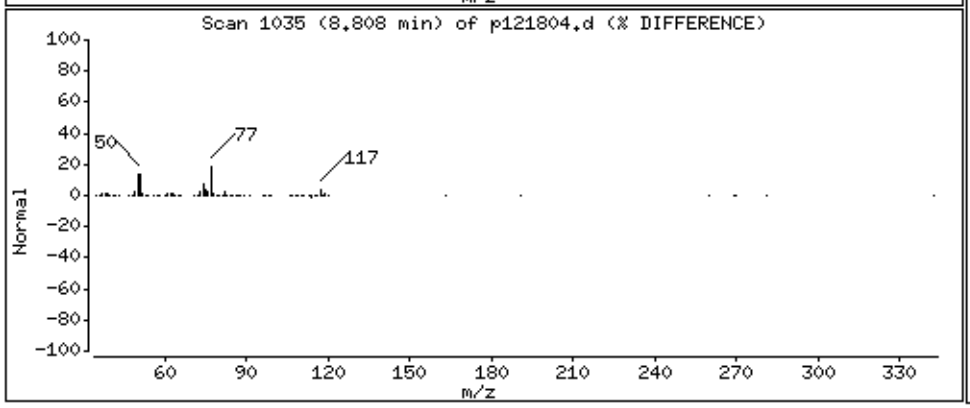
165 Chlorobenzene

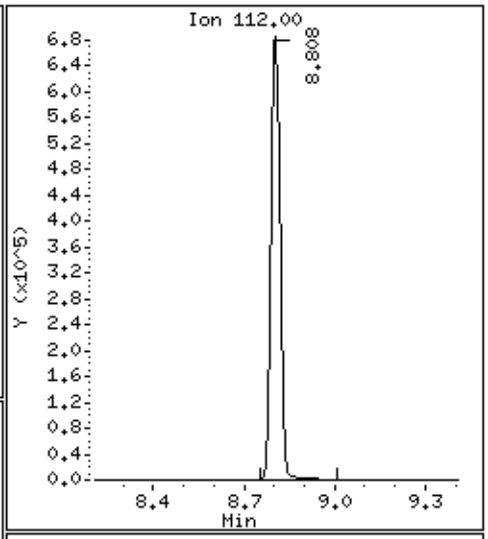
Concentration: 45.234 PPBV

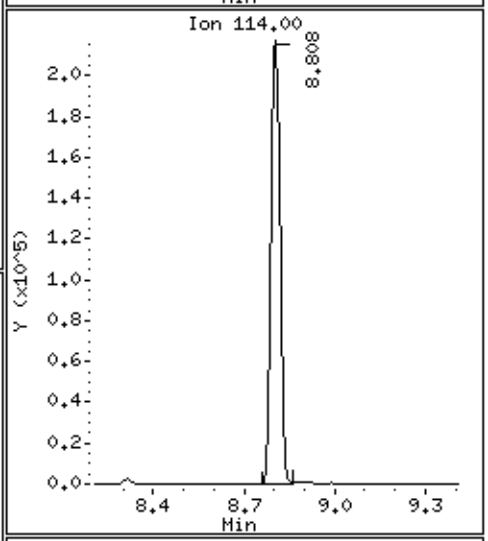


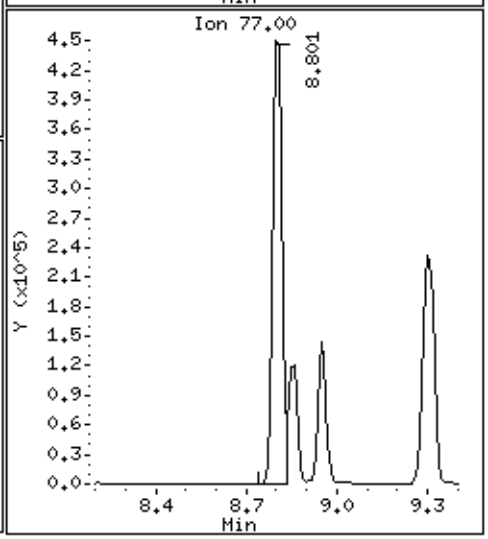












Data File: /chem/msdp.i/18dec14.b/p121804.d

Date : 18-DEC-2014 10:04

Client ID: ICV

Instrument: msdp.i

Sample Info: 50mL #2687-143

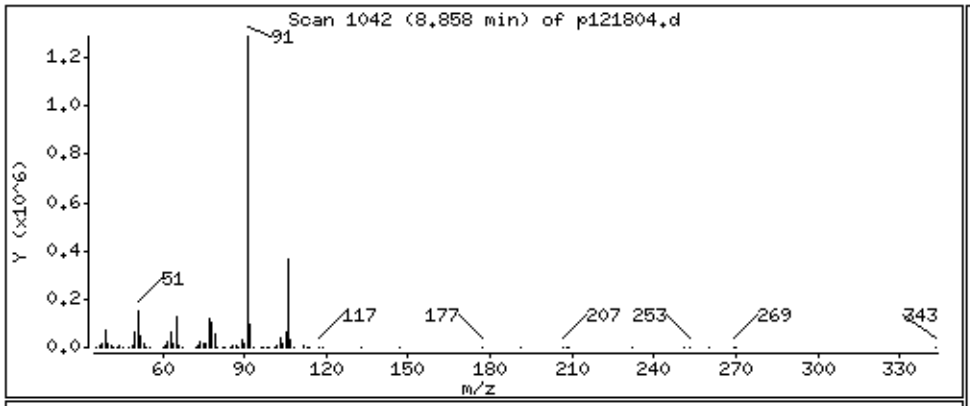
Operator: js

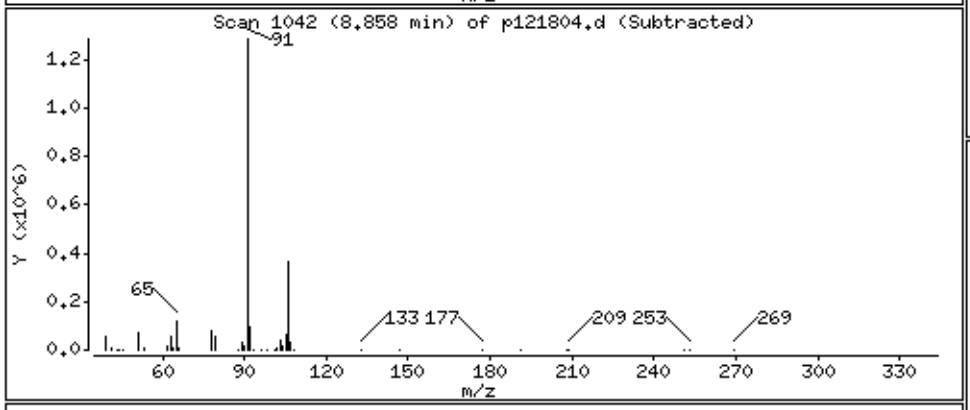
Column phase: RTX-624

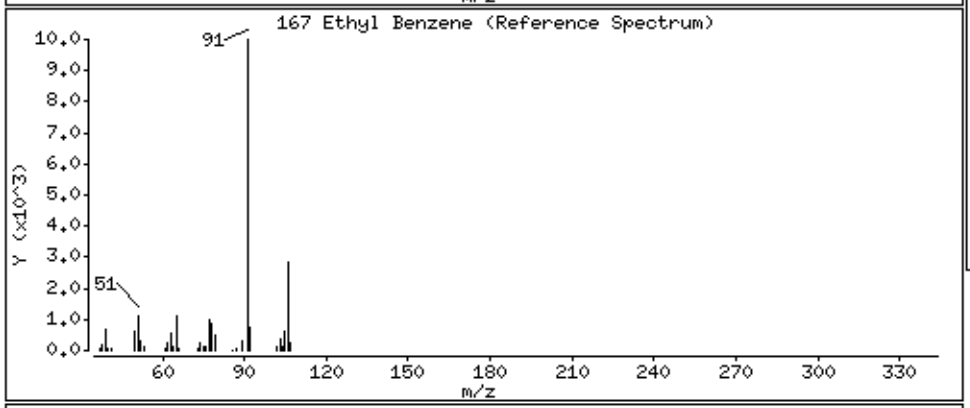
Column diameter: 0.25

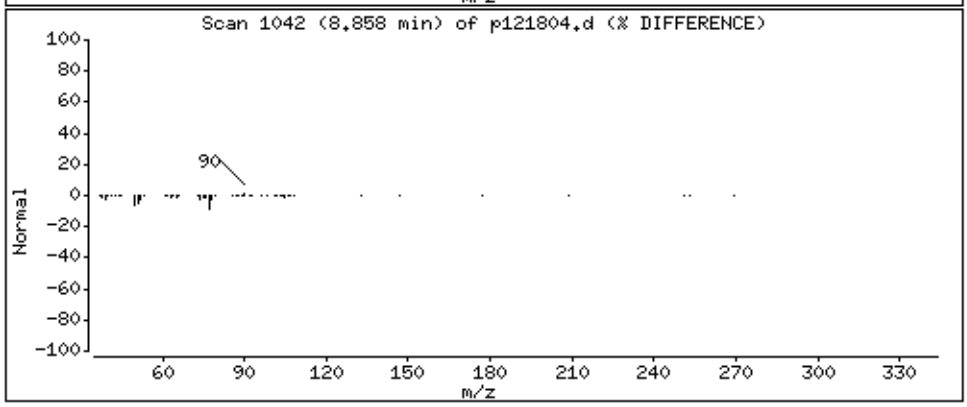
167 Ethyl Benzene

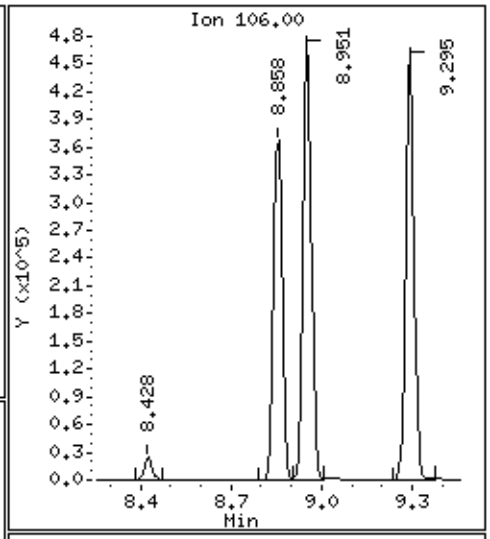
Concentration: 43.871 PPBV

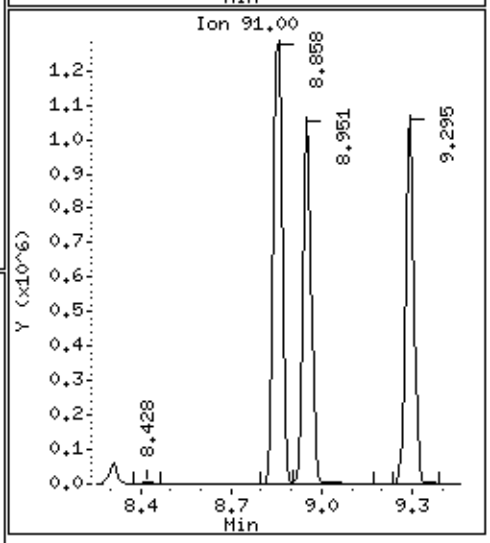












Data File: /chem/msdp.i/18dec14.b/p121804.d

Date : 18-DEC-2014 10:04

Client ID: ICV

Instrument: msdp.i

Sample Info: 50mL #2687-143

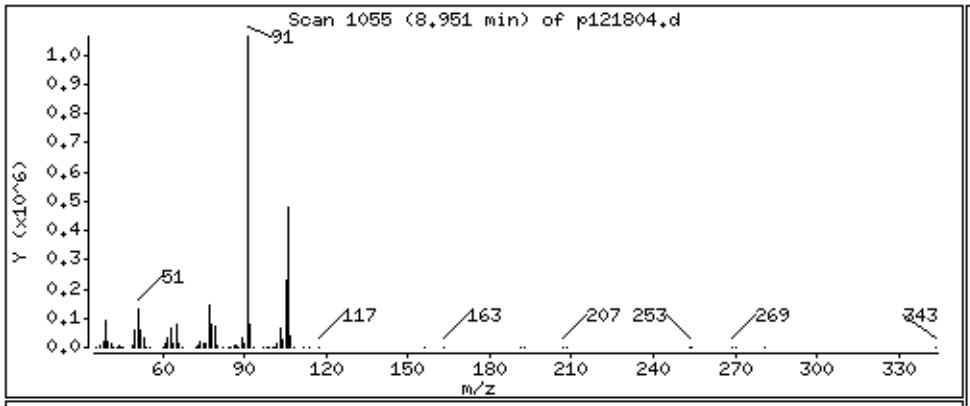
Operator: js

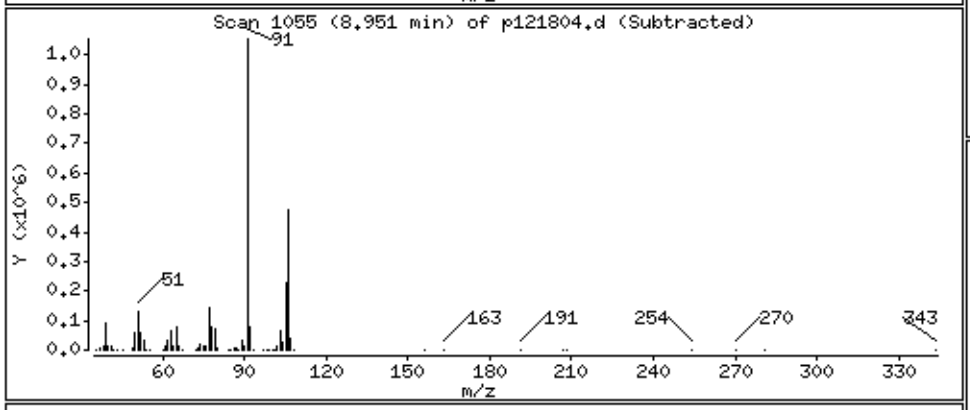
Column phase: RTX-624

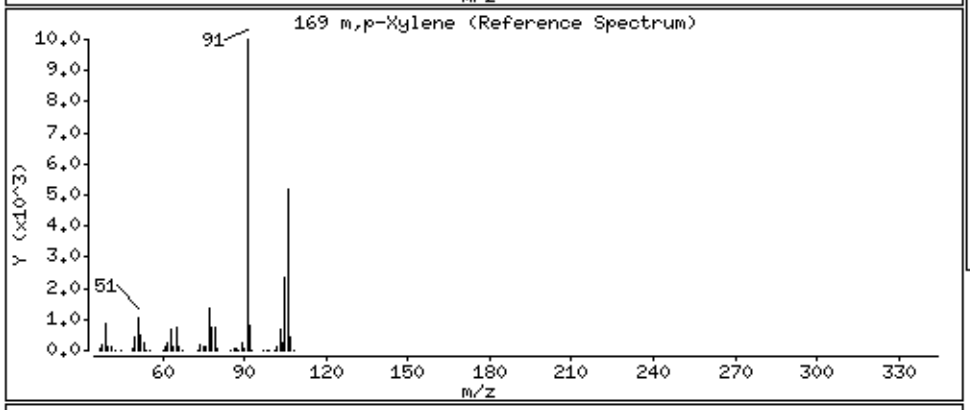
Column diameter: 0.25

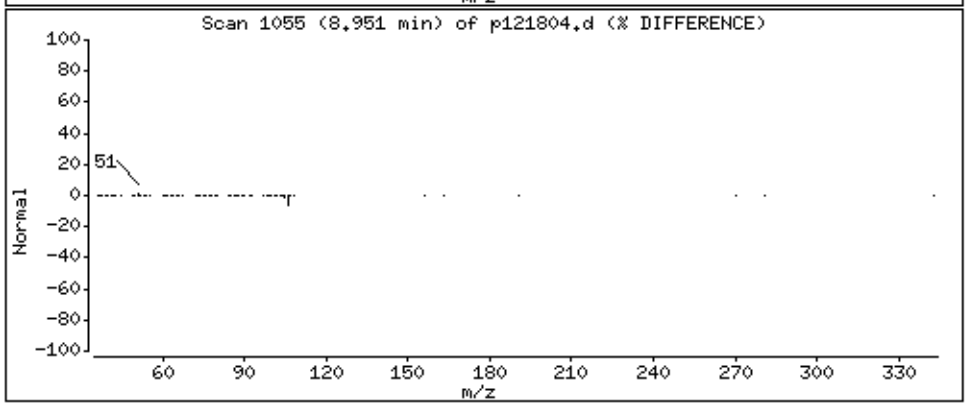
169 m,p-Xylene

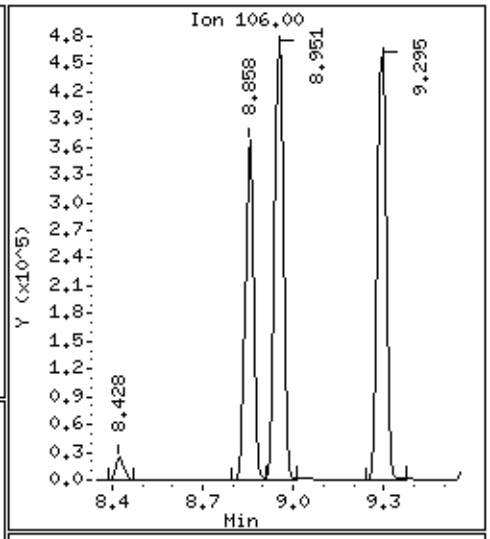
Concentration: 46.940 PPBV

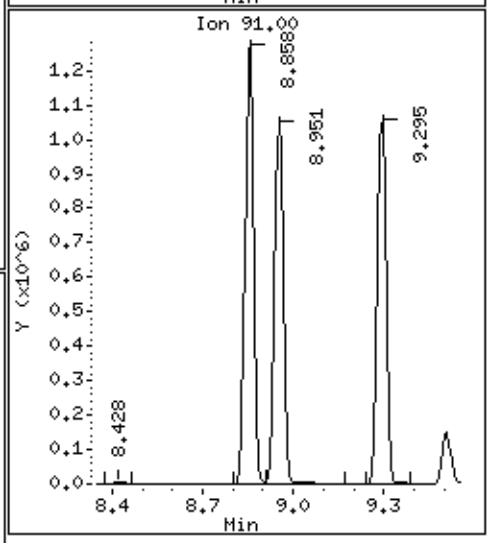












Data File: /chem/msdp.i/18dec14.b/p121804.d

Date : 18-DEC-2014 10:04

Client ID: ICV

Instrument: msdp.i

Sample Info: 50mL #2687-143

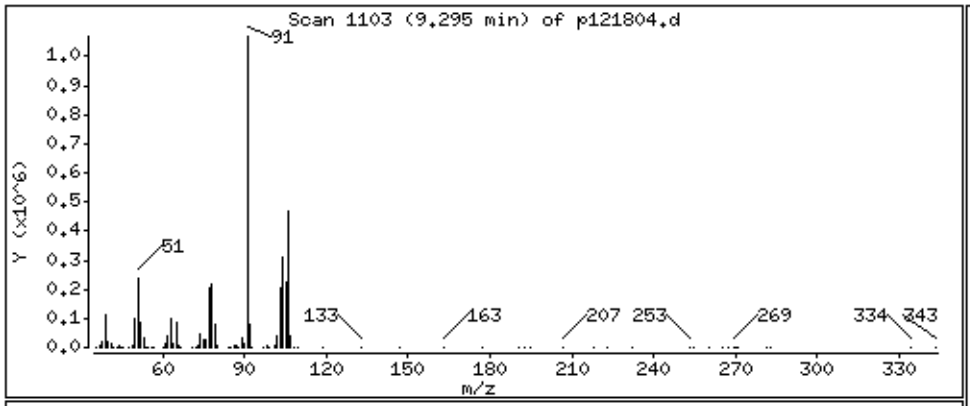
Operator: js

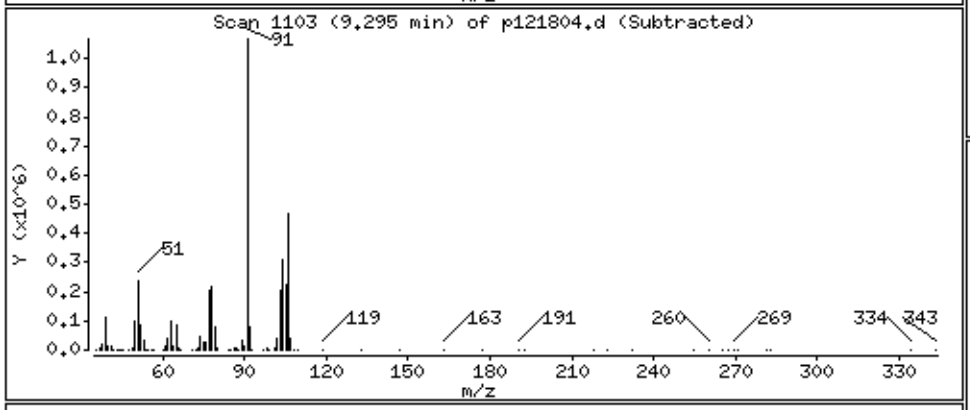
Column phase: RTX-624

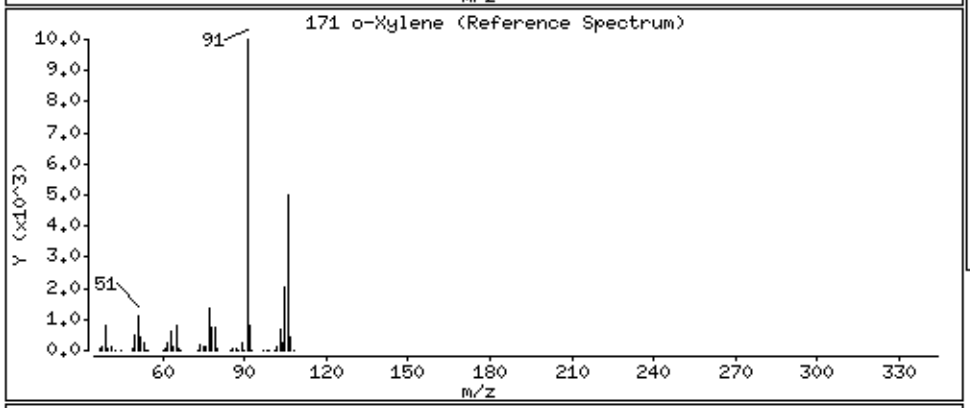
Column diameter: 0.25

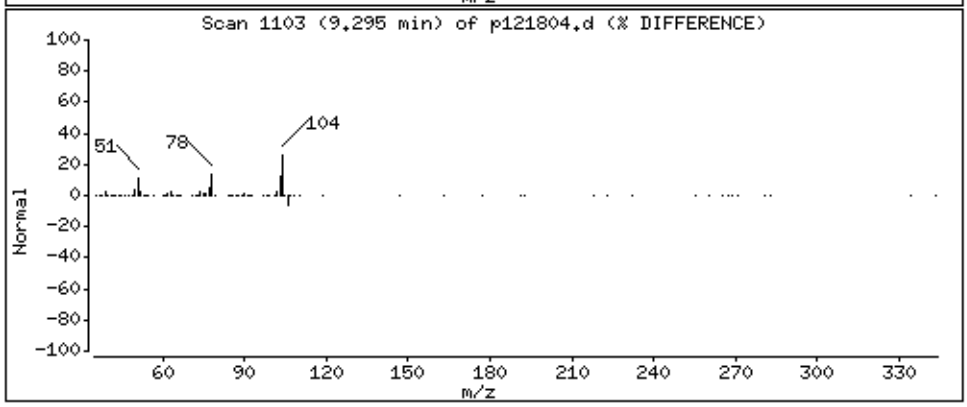
171 o-Xylene

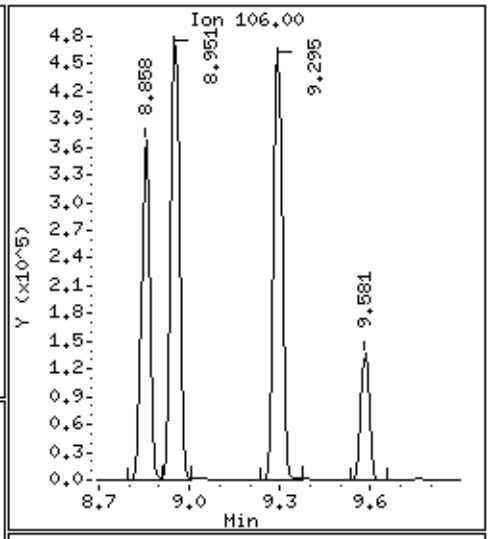
Concentration: 48.388 PPBV

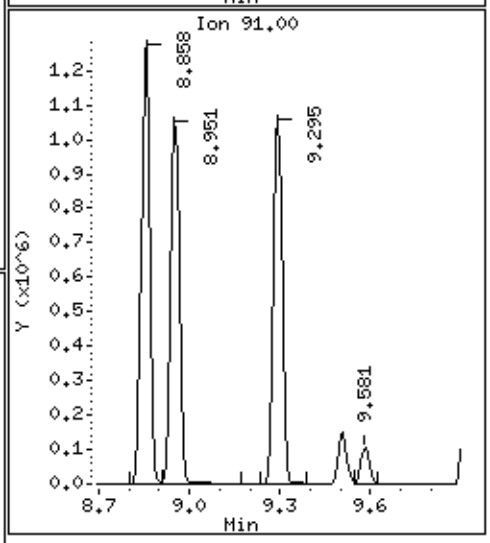












Data File: /chem/msdp.i/18dec14.b/p121804.d

Date : 18-DEC-2014 10:04

Client ID: ICV

Instrument: msdp.i

Sample Info: 50mL #2687-143

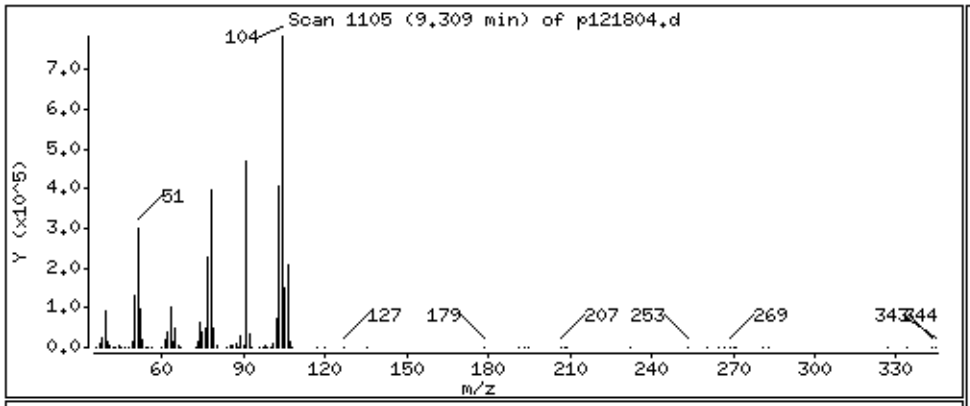
Operator: js

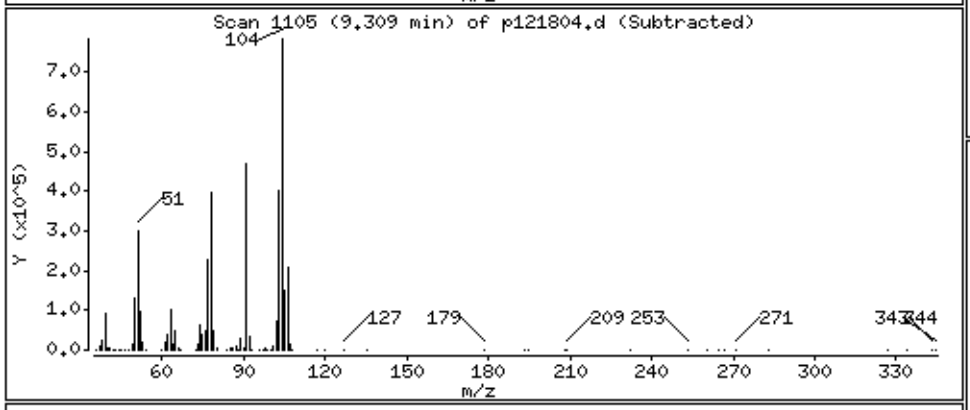
Column phase: RTX-624

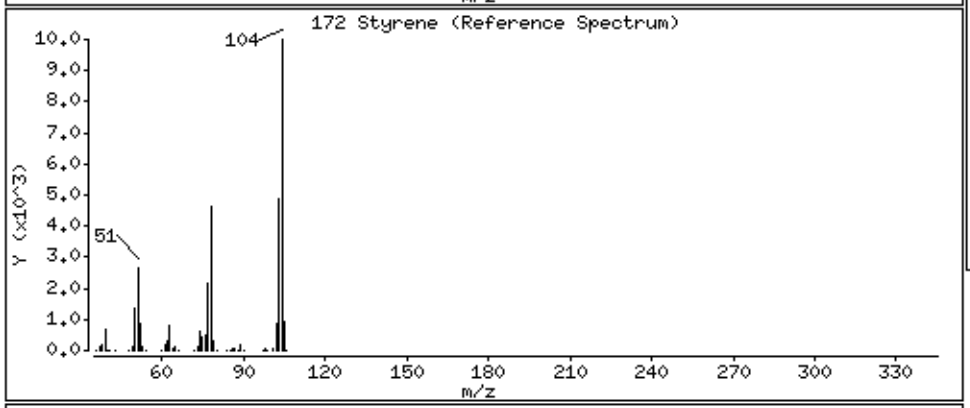
Column diameter: 0.25

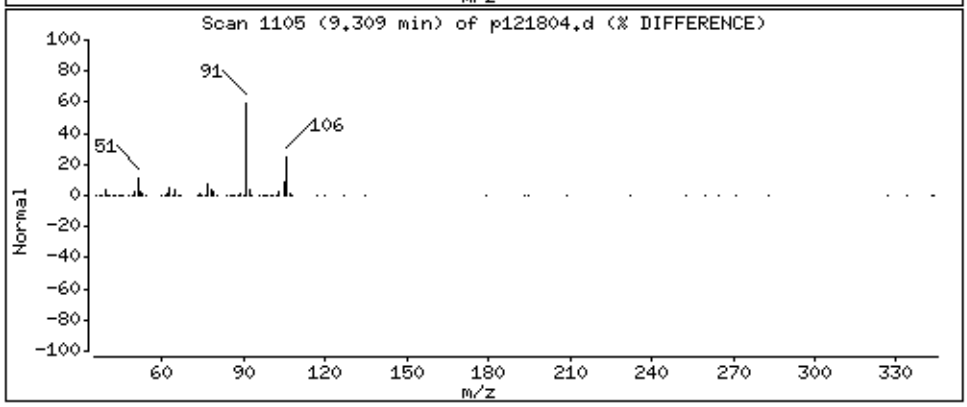
172 Styrene

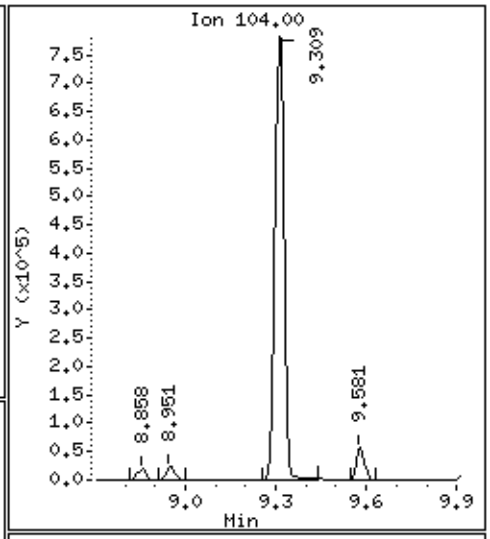
Concentration: 49.181 PPBV

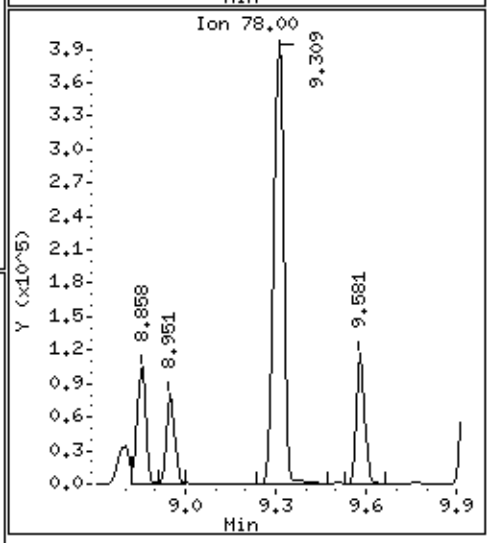












Data File: /chem/msdp.i/18dec14.b/p121804.d

Date : 18-DEC-2014 10:04

Client ID: ICV

Instrument: msdp.i

Sample Info: 50mL #2687-143

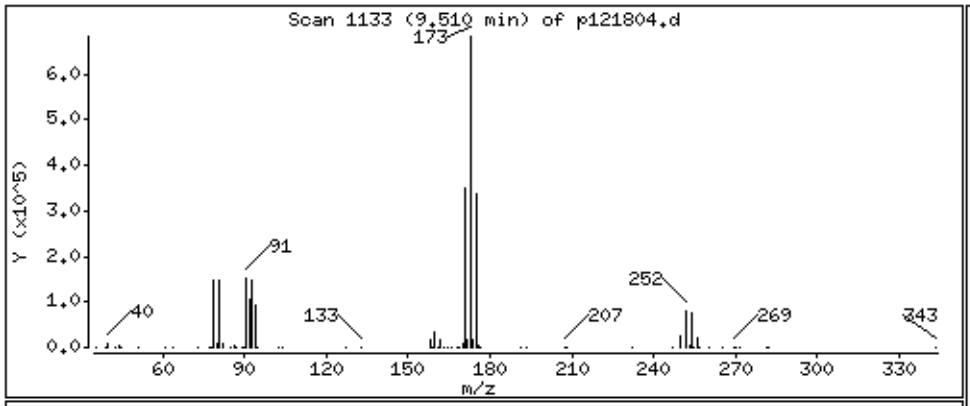
Operator: js

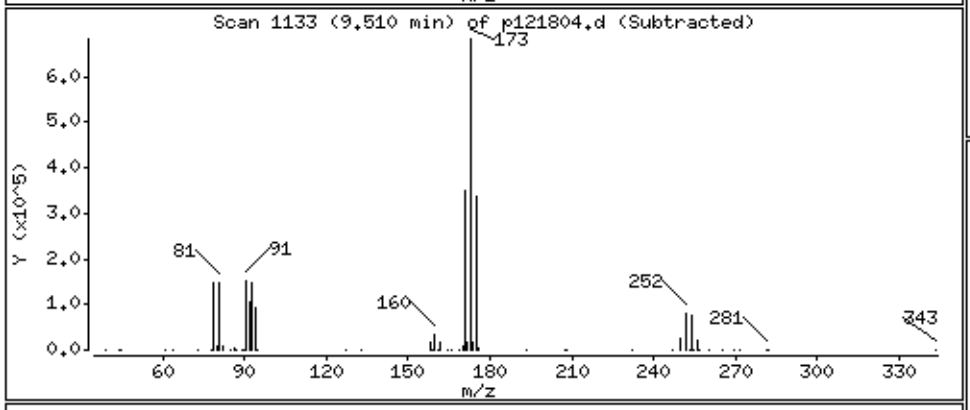
Column phase: RTX-624

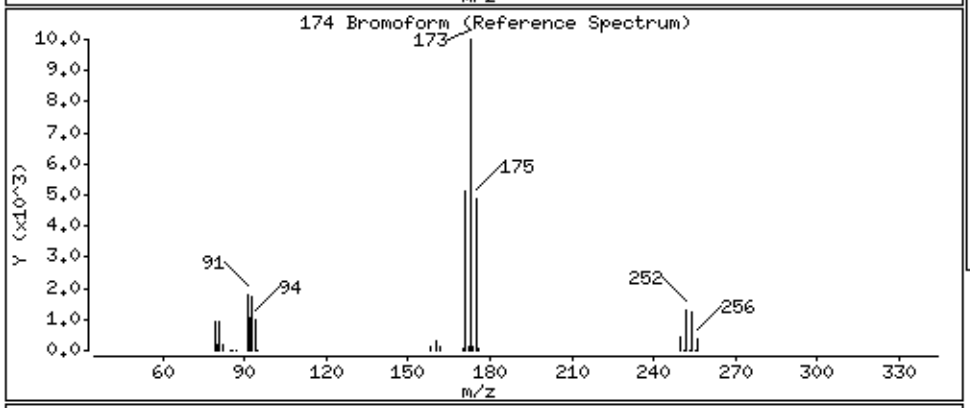
Column diameter: 0.25

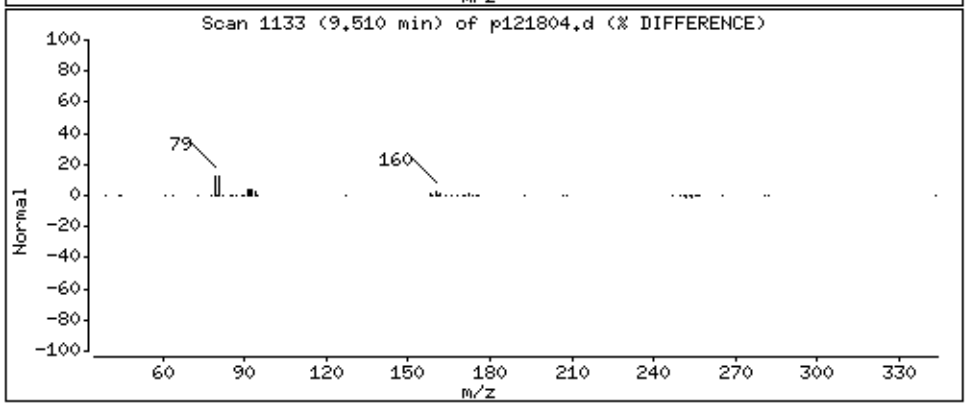
174 Bromoform

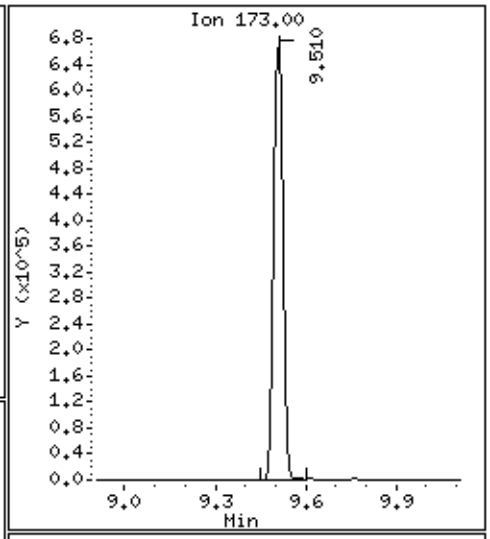
Concentration: 45.969 PPBV

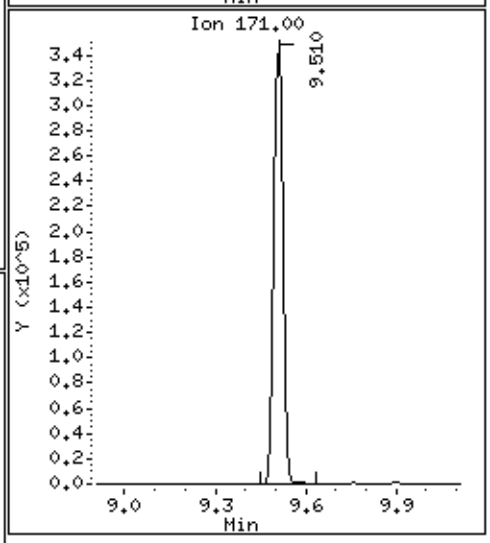












Data File: /chem/msdp.i/18dec14.b/p121804.d

Date : 18-DEC-2014 10:04

Client ID: ICV

Instrument: msdp.i

Sample Info: 50mL #2687-143

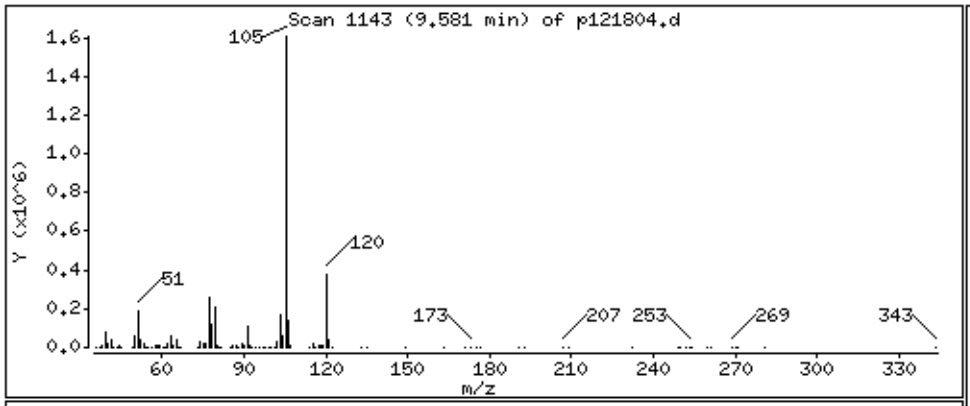
Operator: js

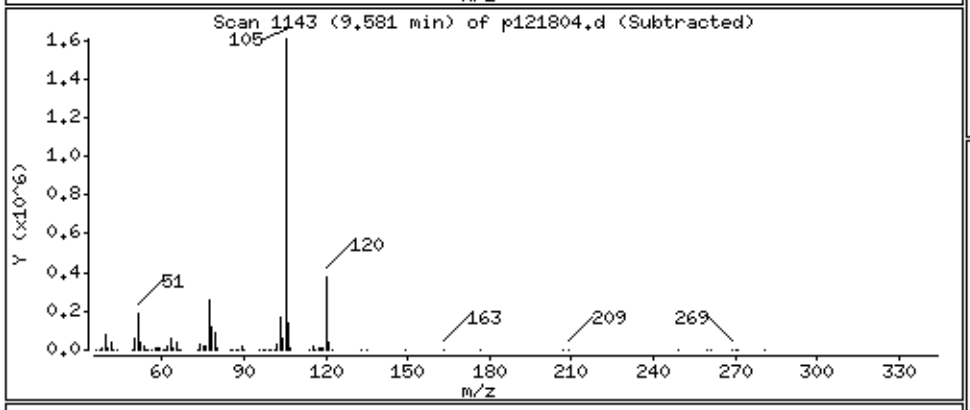
Column phase: RTX-624

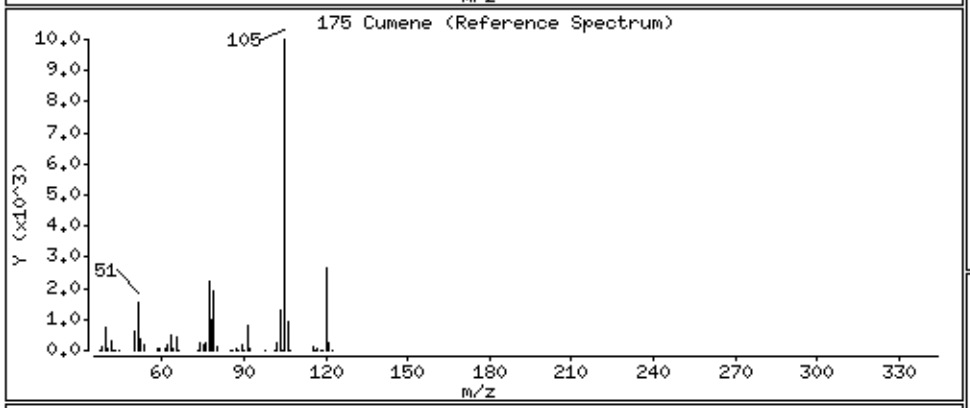
Column diameter: 0.25

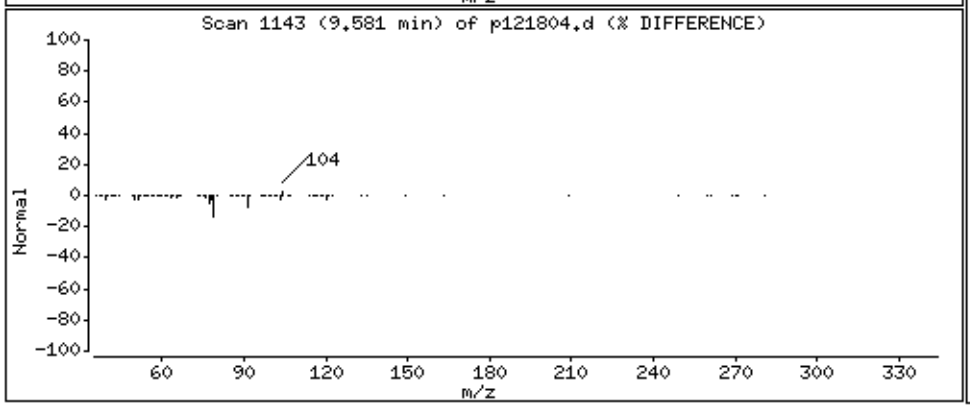
175 Cumene

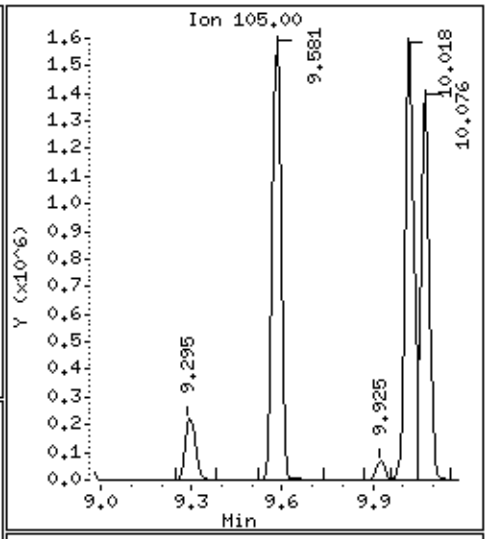
Concentration: 47.376 PPBV

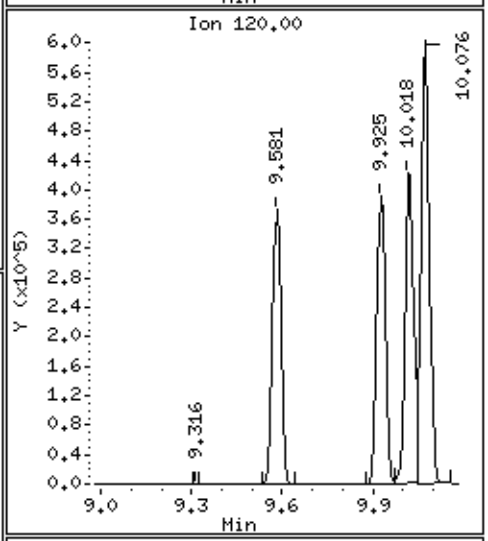


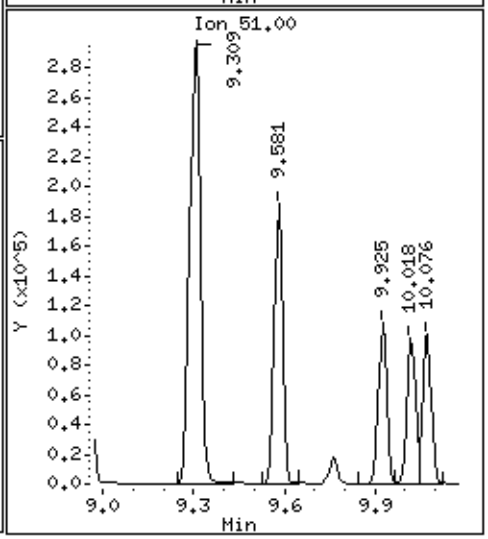












Data File: /chem/msdp.i/18dec14.b/p121804.d

Date : 18-DEC-2014 10:04

Client ID: ICV

Instrument: msdp.i

Sample Info: 50mL #2687-143

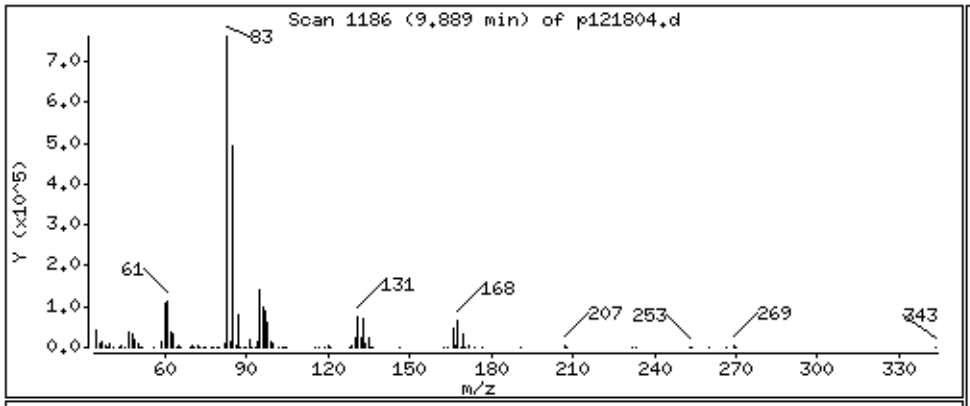
Operator: js

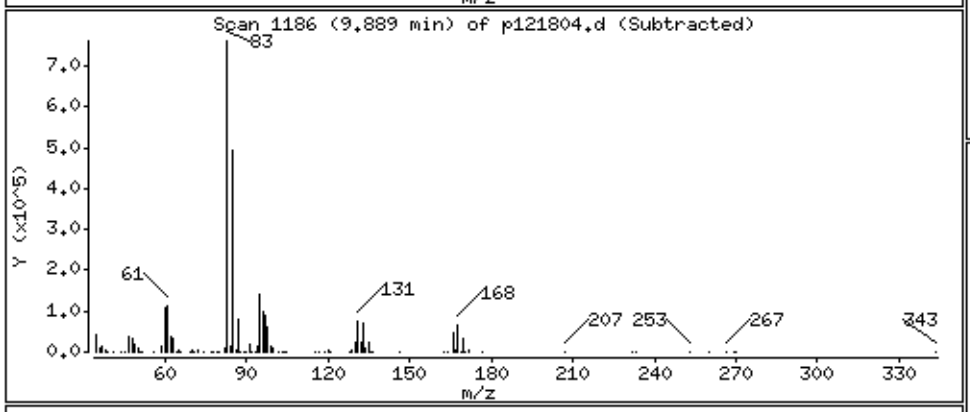
Column phase: RTX-624

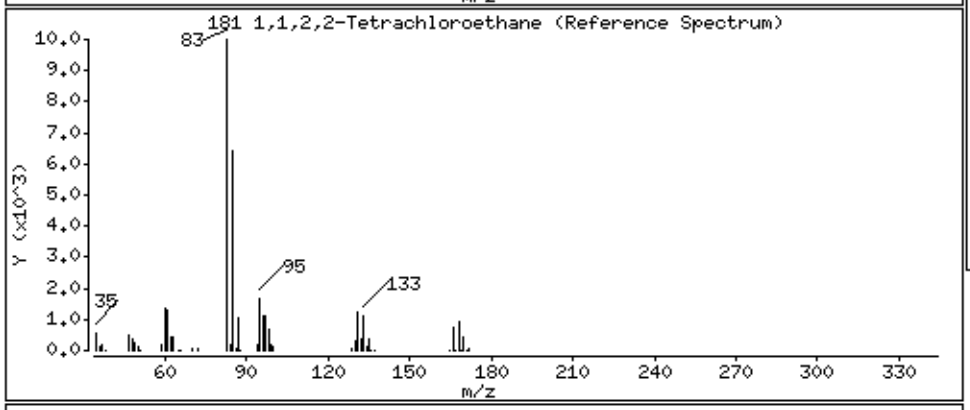
Column diameter: 0.25

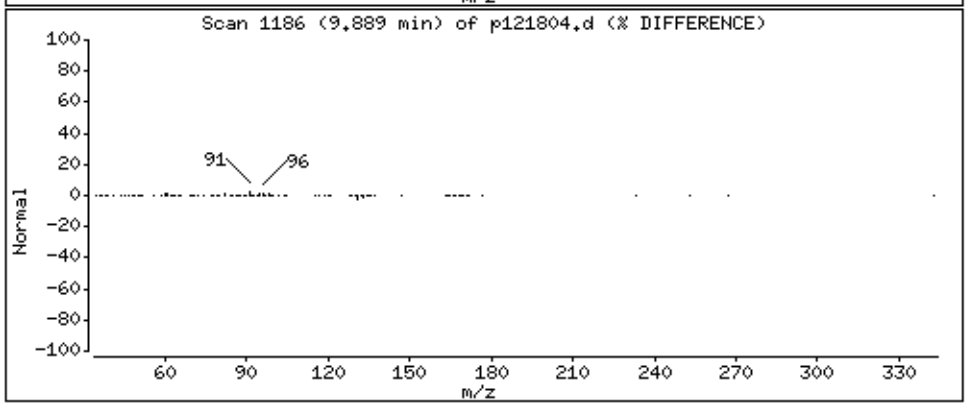
181 1,1,2,2-Tetrachloroethane

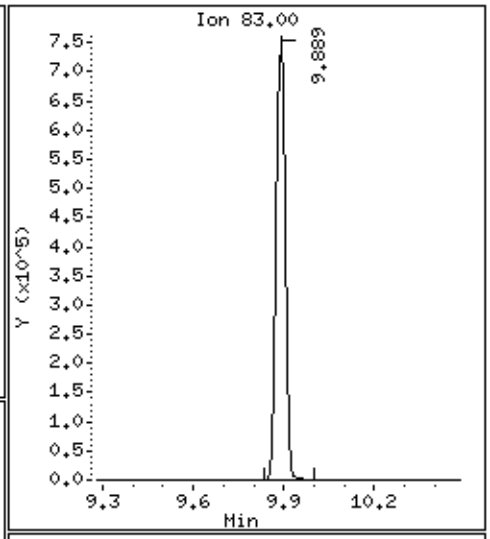
Concentration: 44.940 PPBV

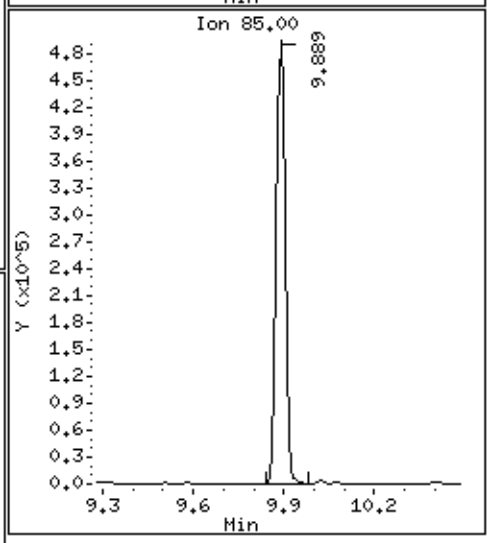












Data File: /chem/msdp.i/18dec14.b/p121804.d

Date : 18-DEC-2014 10:04

Client ID: ICV

Instrument: msdp.i

Sample Info: 50mL #2687-143

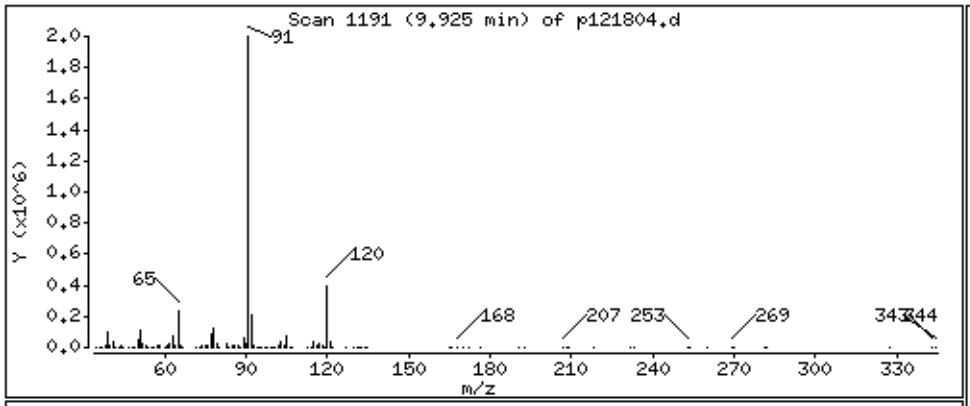
Operator: js

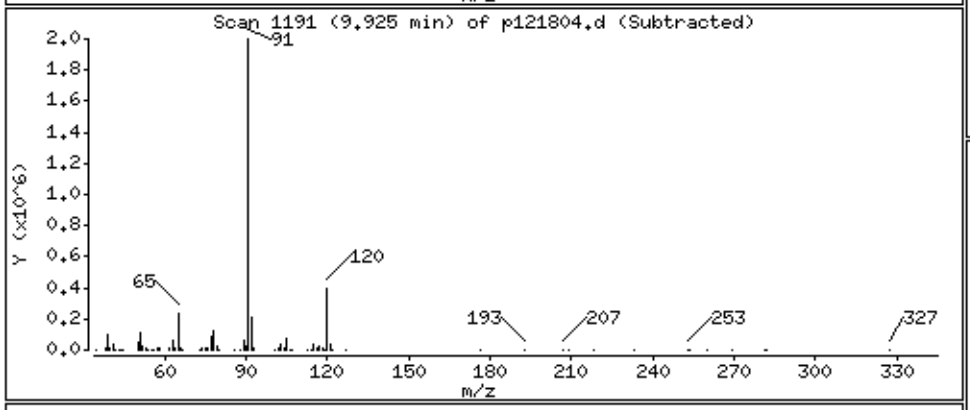
Column phase: RTX-624

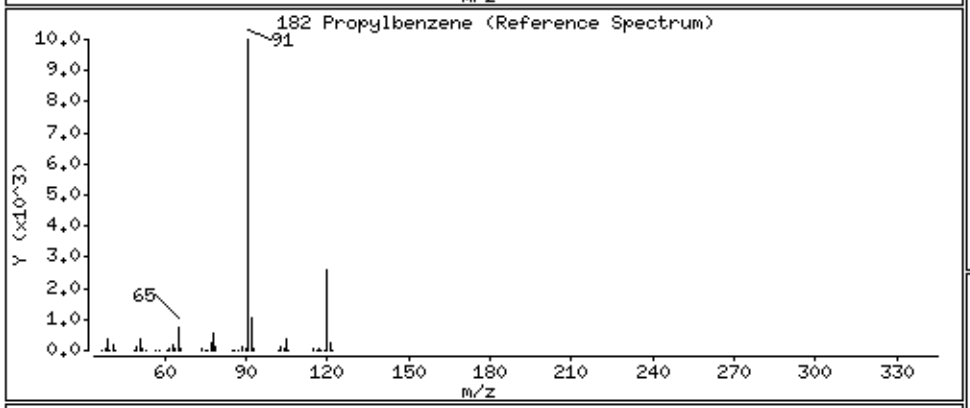
Column diameter: 0.25

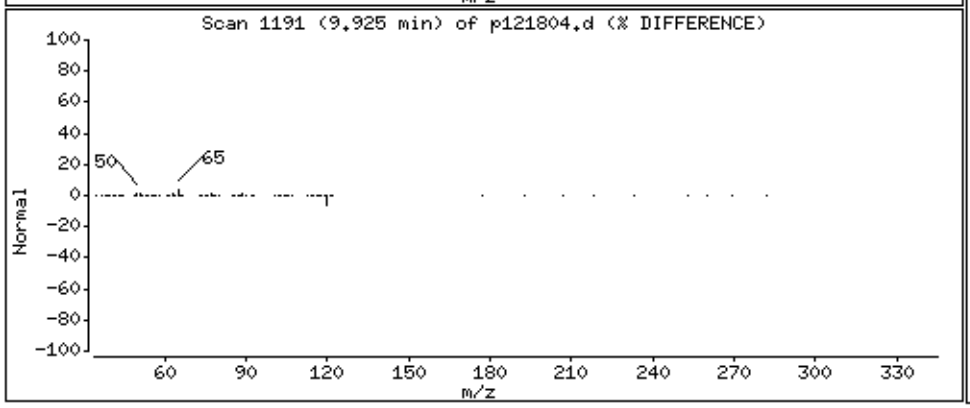
182 Propylbenzene

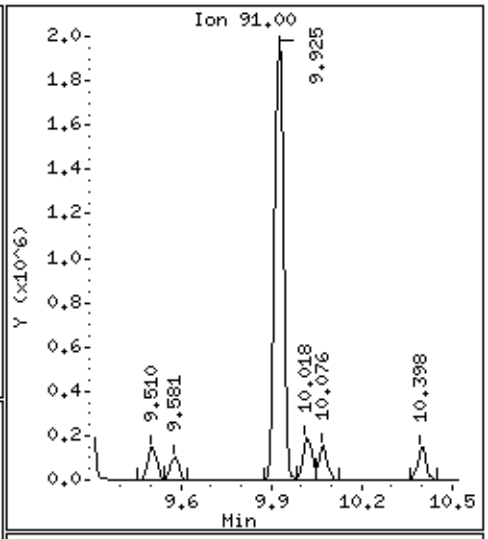
Concentration: 48.282 PPBV

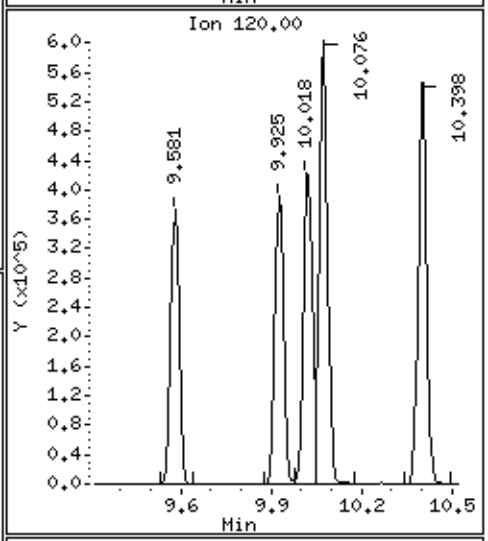


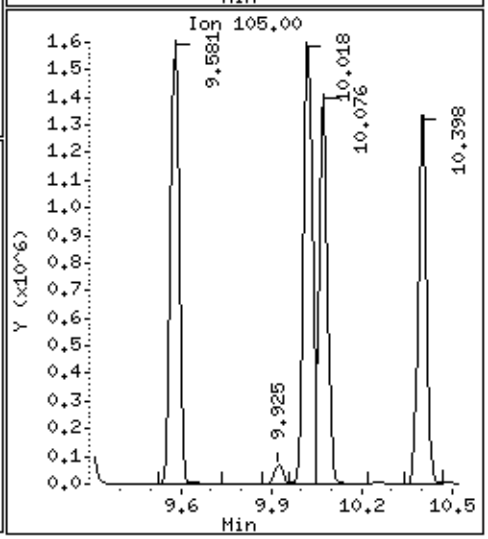












Data File: /chem/msdp.i/18dec14.b/p121804.d

Date : 18-DEC-2014 10:04

Client ID: ICV

Instrument: msdp.i

Sample Info: 50mL #2687-143

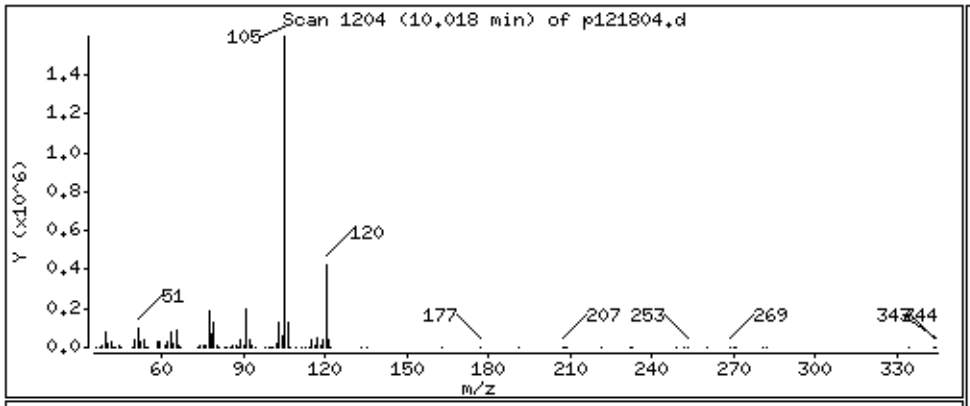
Operator: js

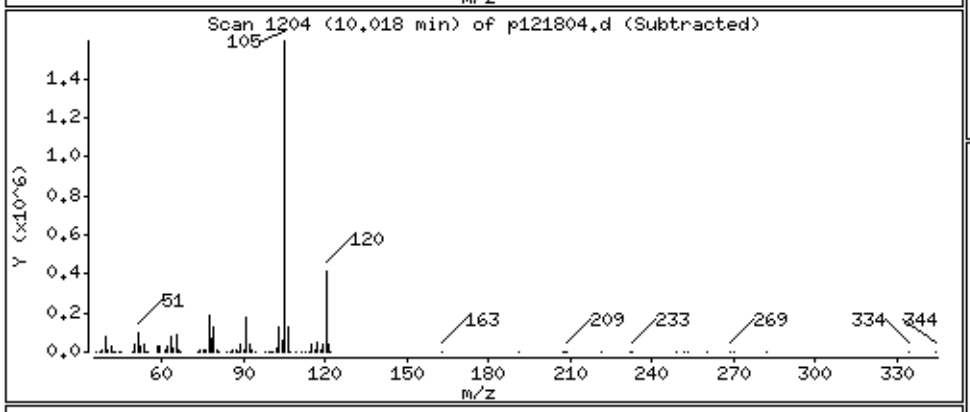
Column phase: RTX-624

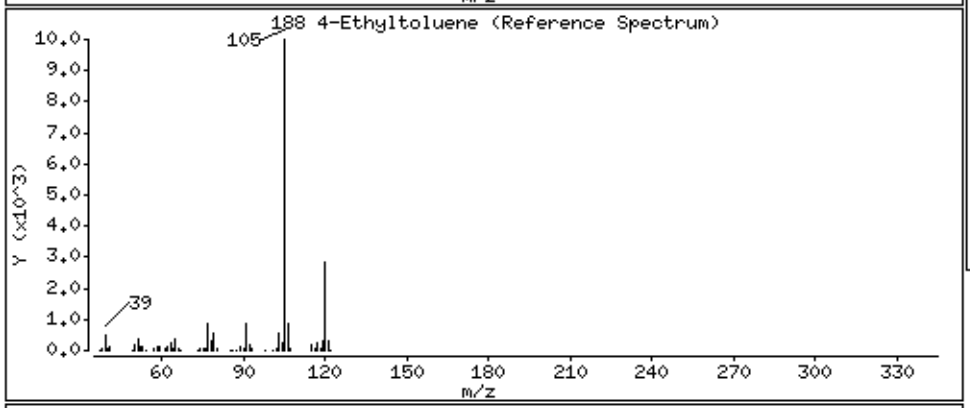
Column diameter: 0.25

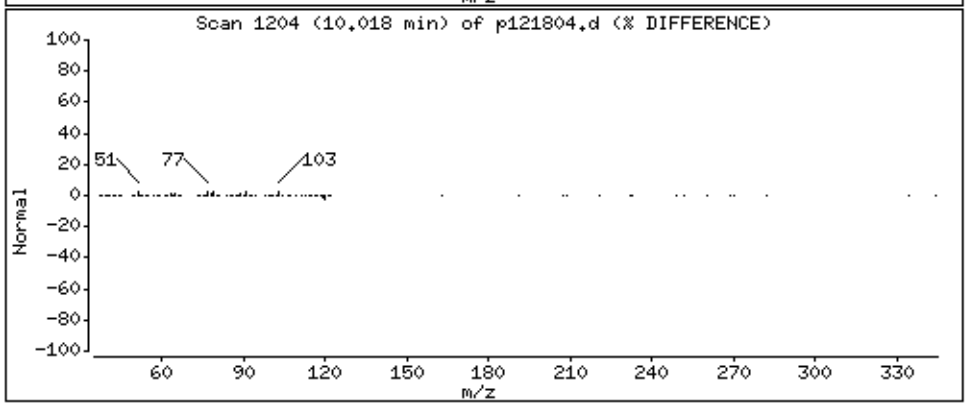
188 4-Ethyltoluene

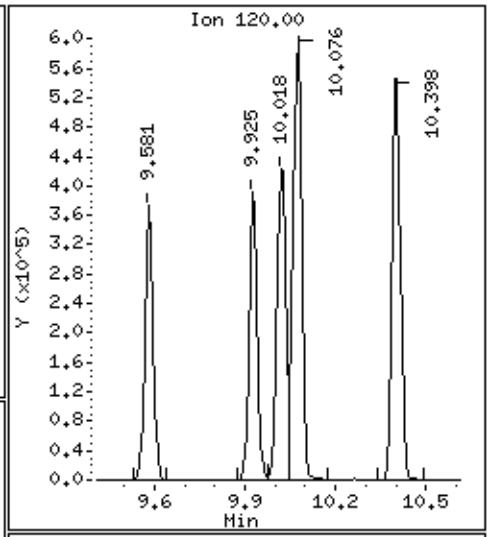
Concentration: 49.807 PPBV

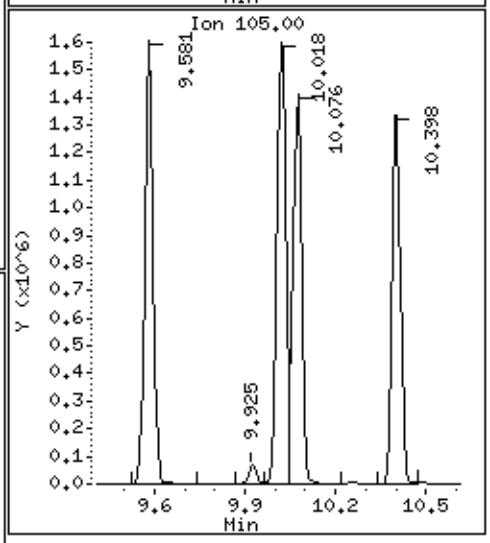












Data File: /chem/msdp.i/18dec14.b/p121804.d

Date : 18-DEC-2014 10:04

Client ID: ICV

Instrument: msdp.i

Sample Info: 50mL #2687-143

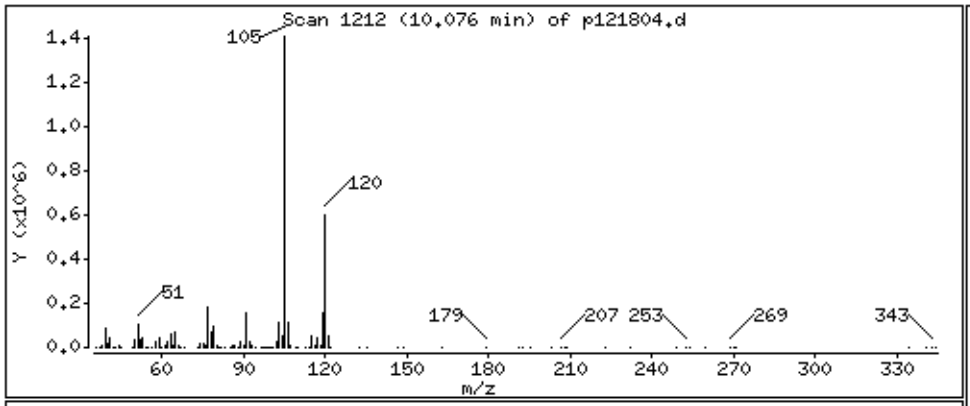
Operator: js

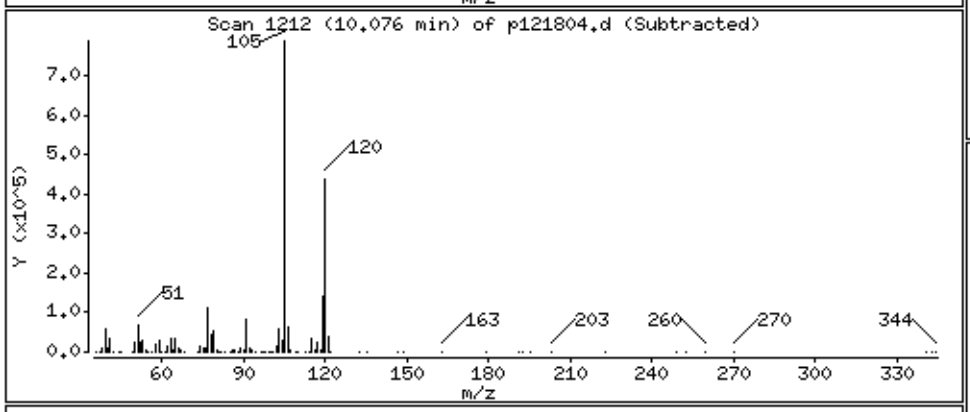
Column phase: RTX-624

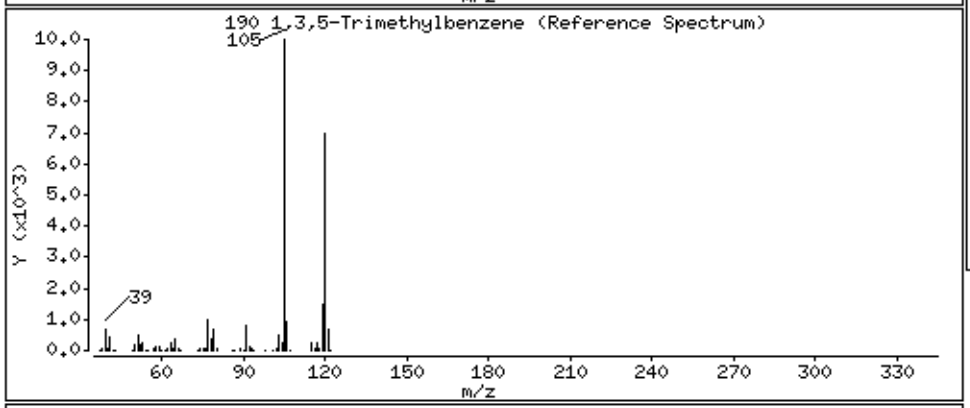
Column diameter: 0.25

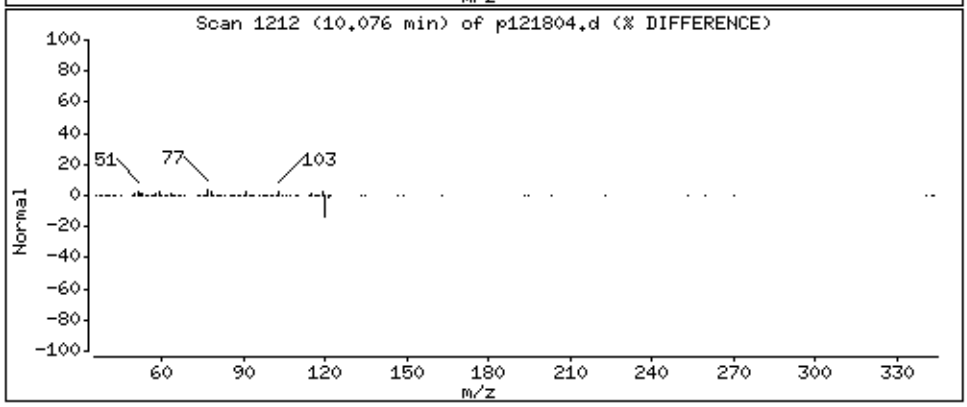
190 1,3,5-Trimethylbenzene

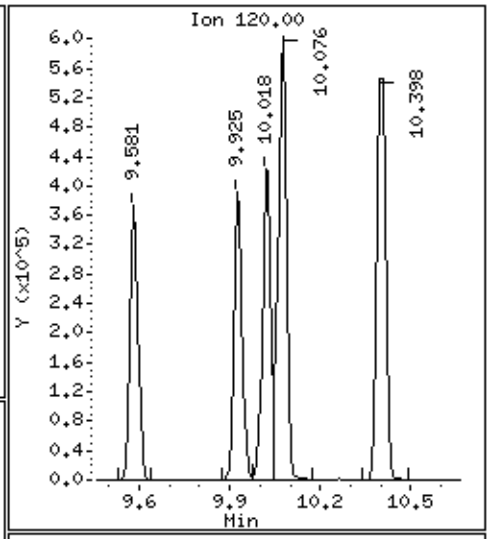
Concentration: 54.788 PPBV

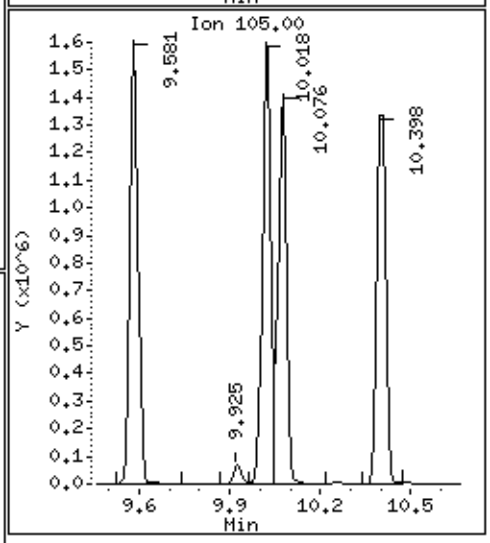












Data File: /chem/msdp.i/18dec14.b/p121804.d

Date : 18-DEC-2014 10:04

Client ID: ICV

Instrument: msdp.i

Sample Info: 50mL #2687-143

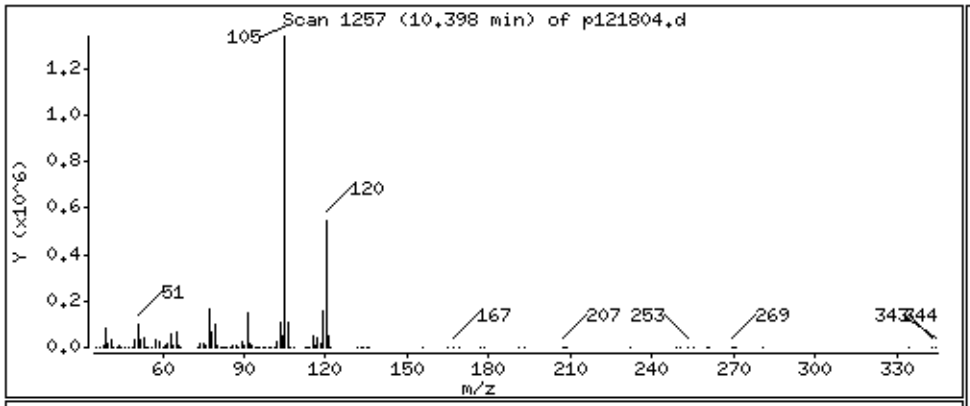
Operator: js

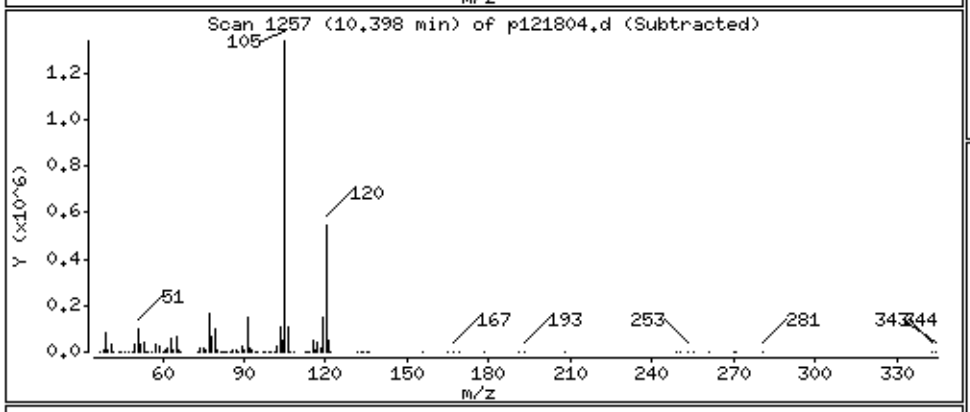
Column phase: RTX-624

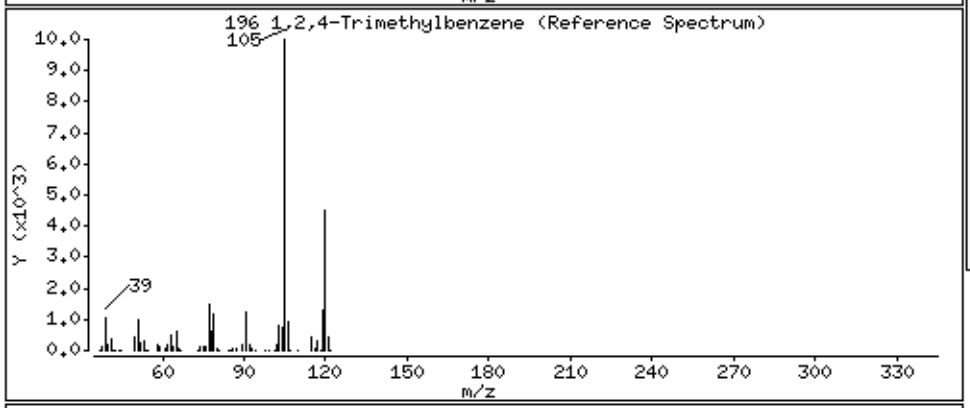
Column diameter: 0.25

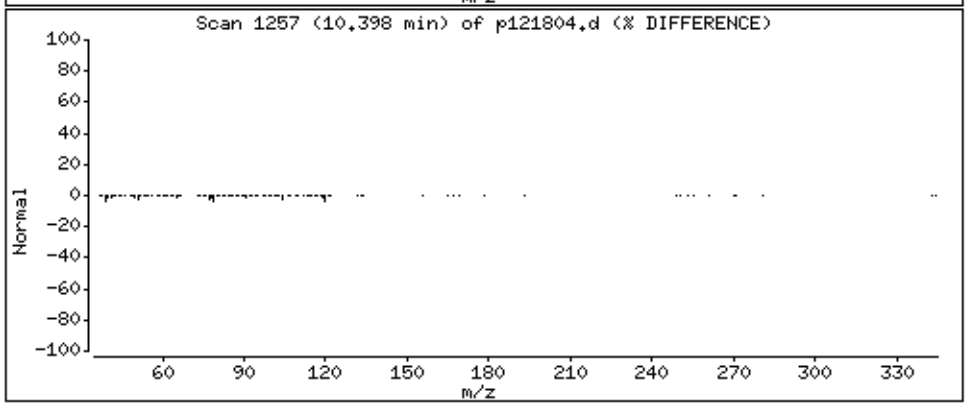
196 1,2,4-Trimethylbenzene

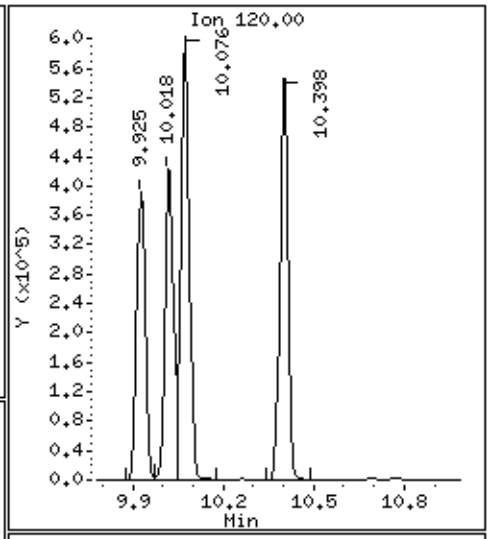
Concentration: 54.076 PPBV

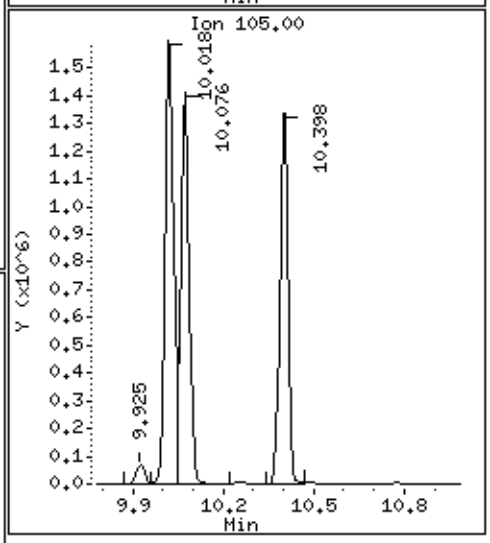












Data File: /chem/msdp.i/18dec14.b/p121804.d

Date : 18-DEC-2014 10:04

Client ID: ICV

Instrument: msdp.i

Sample Info: 50mL #2687-143

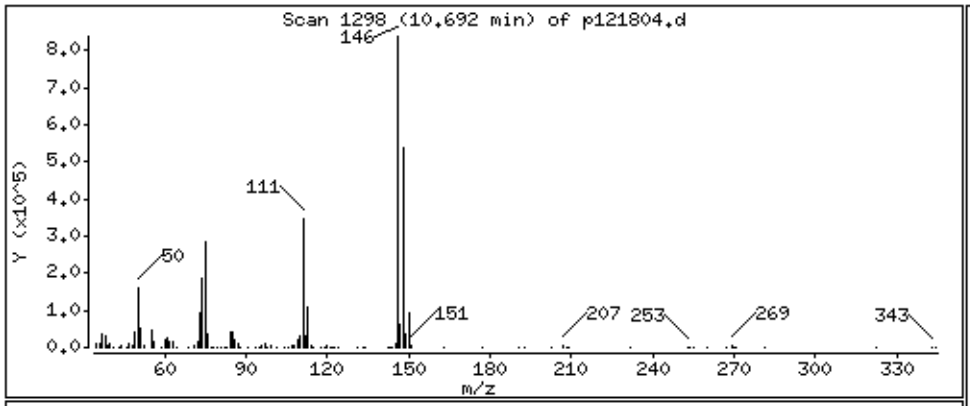
Operator: js

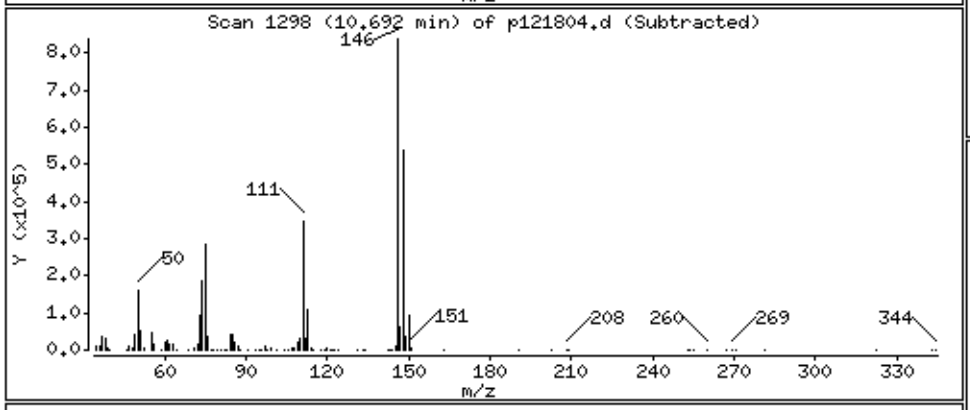
Column phase: RTX-624

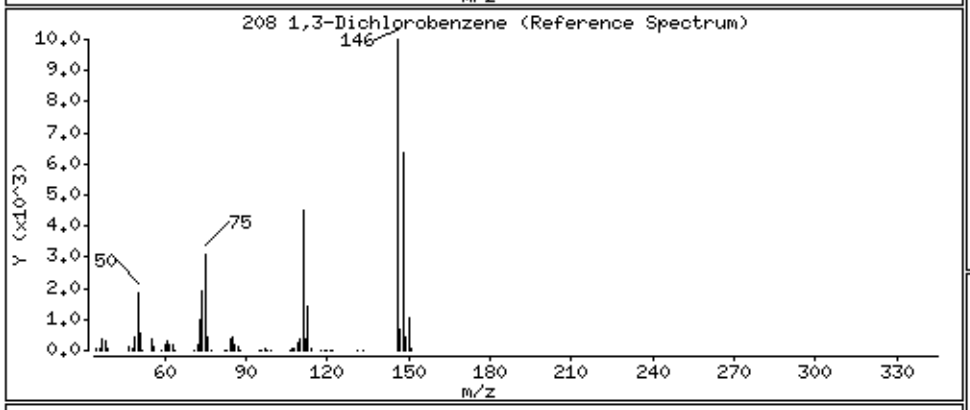
Column diameter: 0.25

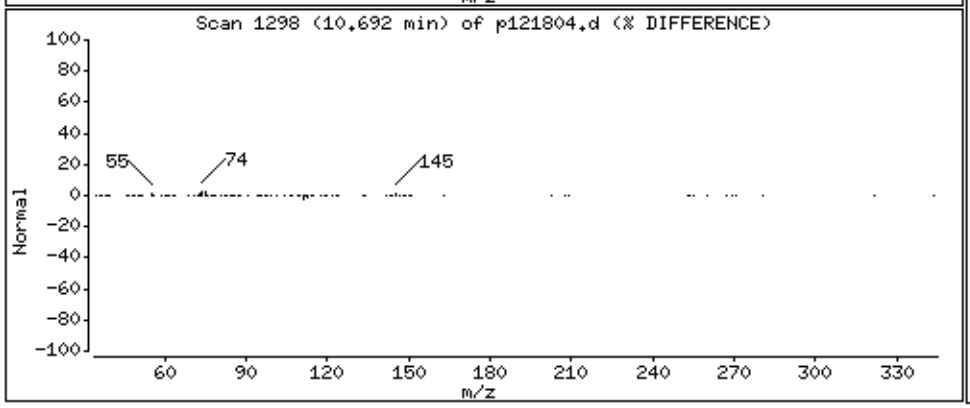
208 1,3-Dichlorobenzene

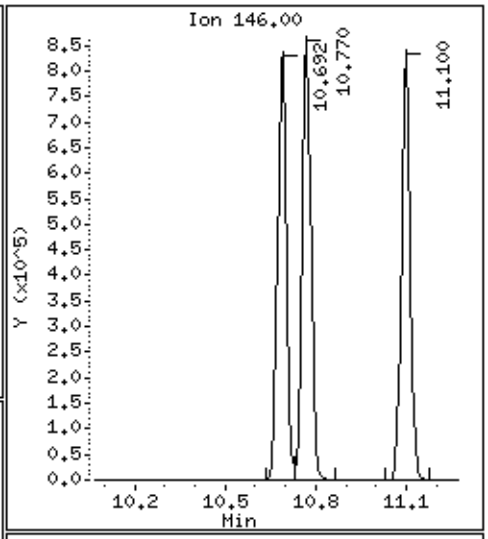
Concentration: 49.884 PPBV

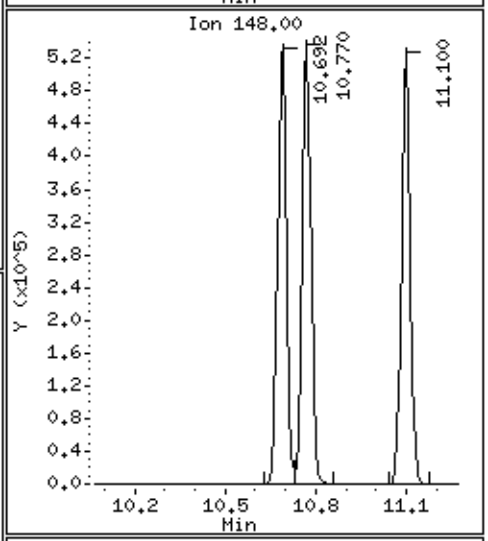


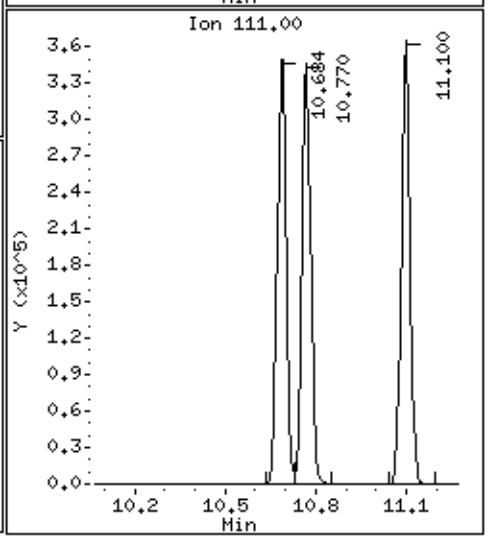












Data File: /chem/msdp.i/18dec14.b/p121804.d

Date : 18-DEC-2014 10:04

Client ID: ICV

Instrument: msdp.i

Sample Info: 50mL #2687-143

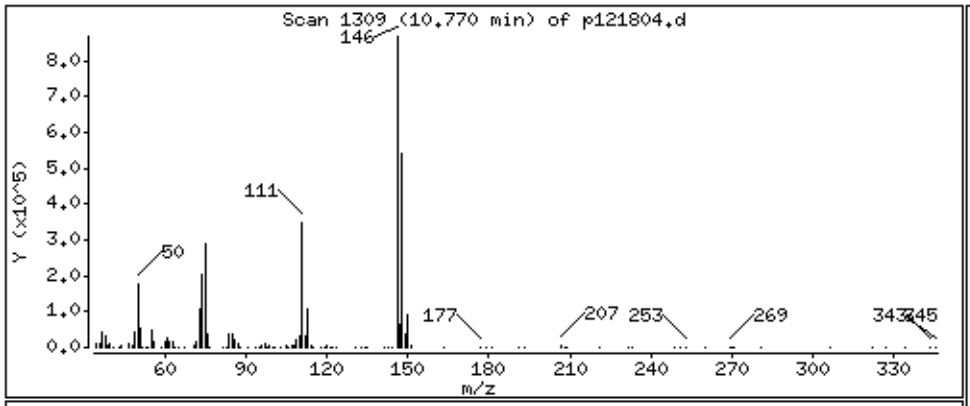
Operator: js

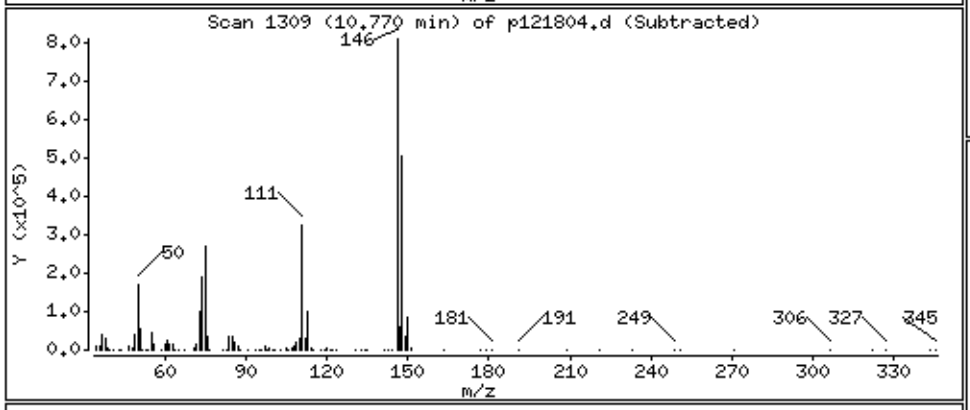
Column phase: RTX-624

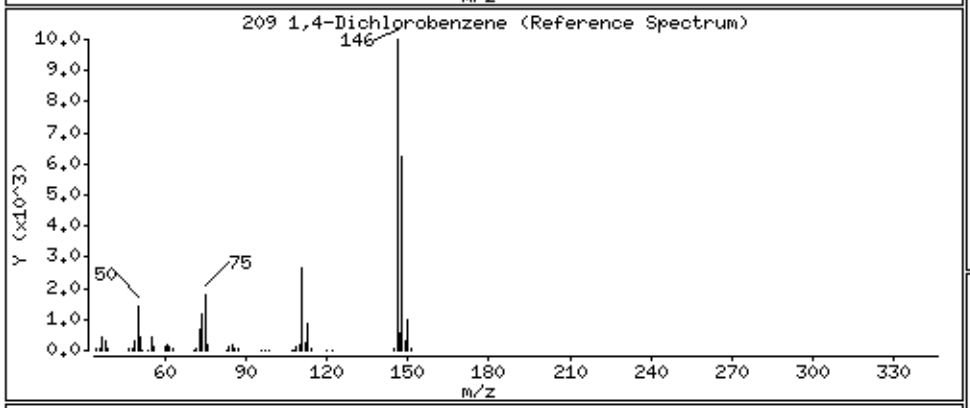
Column diameter: 0.25

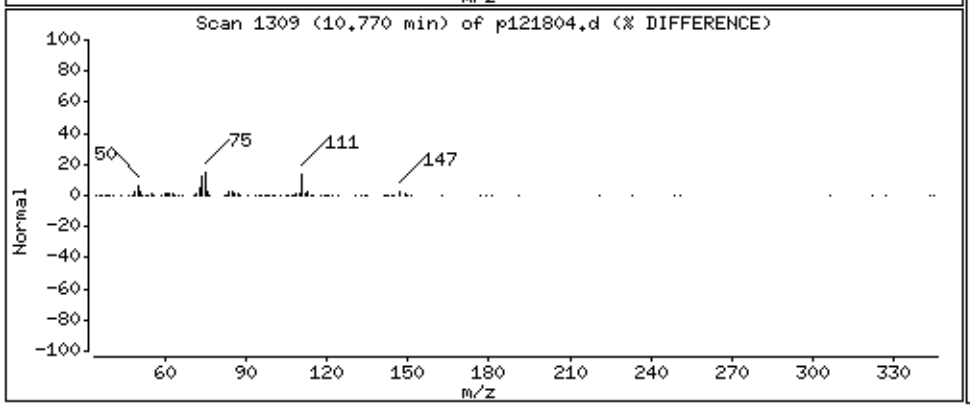
209 1,4-Dichlorobenzene

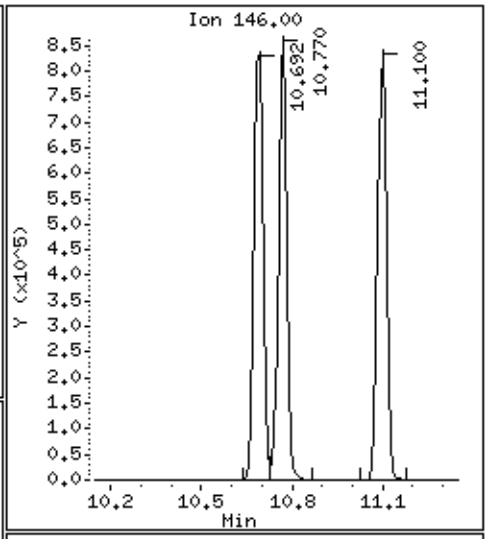
Concentration: 51.903 PPBV

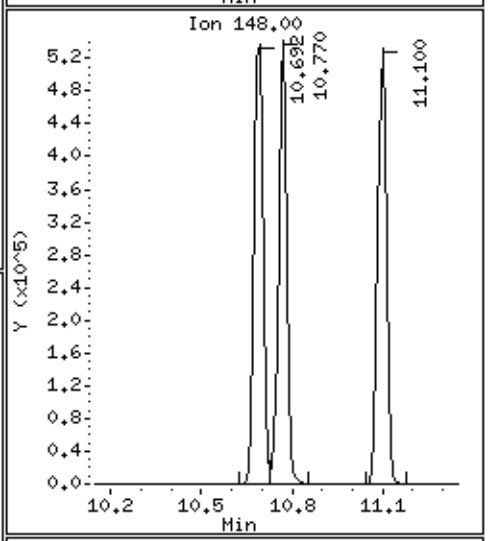


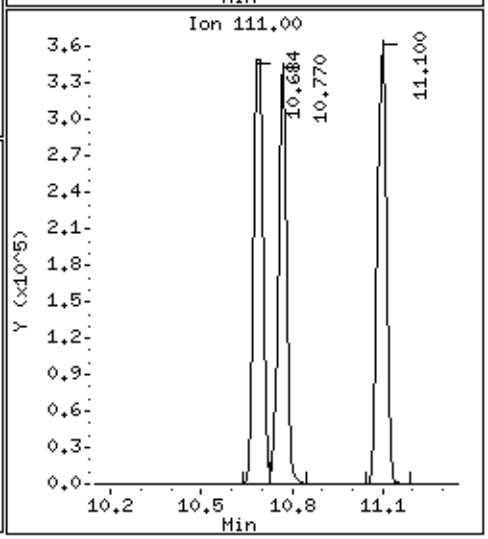












Data File: /chem/msdp.i/18dec14.b/p121804.d

Date : 18-DEC-2014 10:04

Client ID: ICV

Instrument: msdp.i

Sample Info: 50mL #2687-143

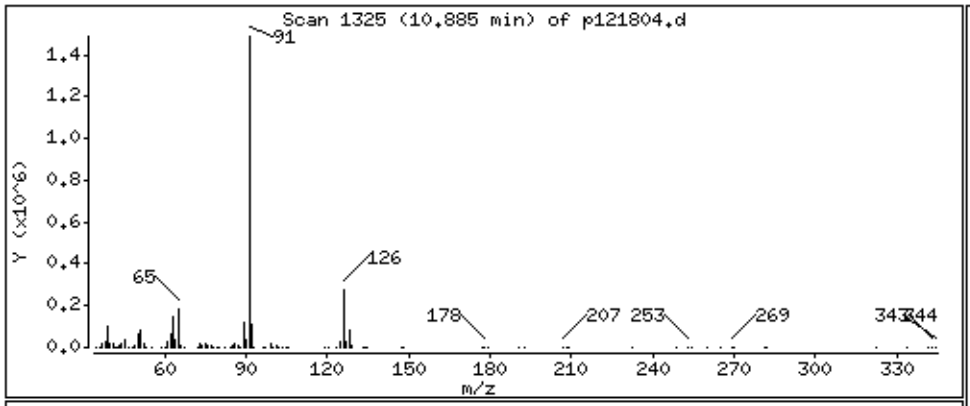
Operator: js

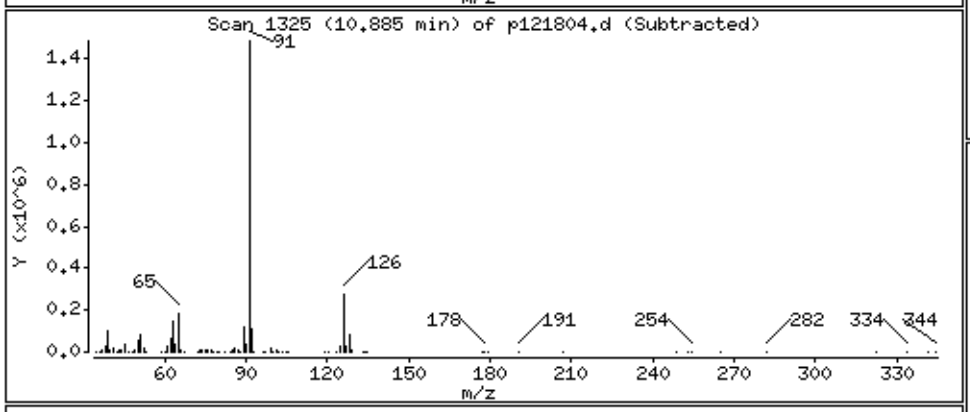
Column phase: RTX-624

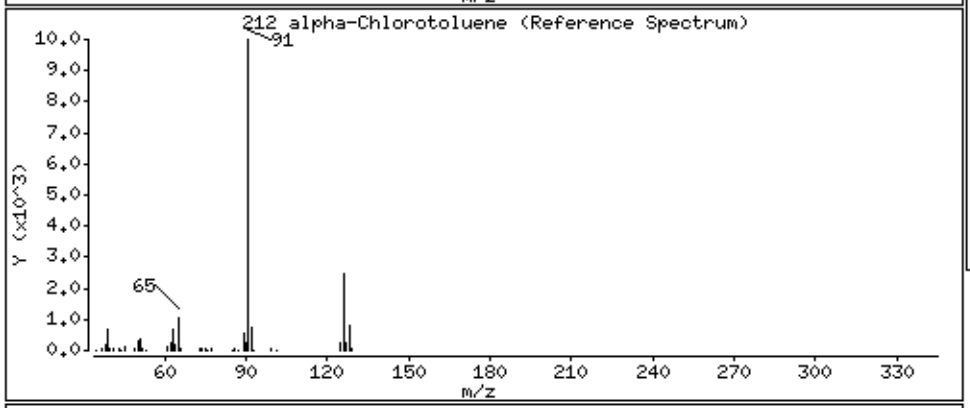
Column diameter: 0.25

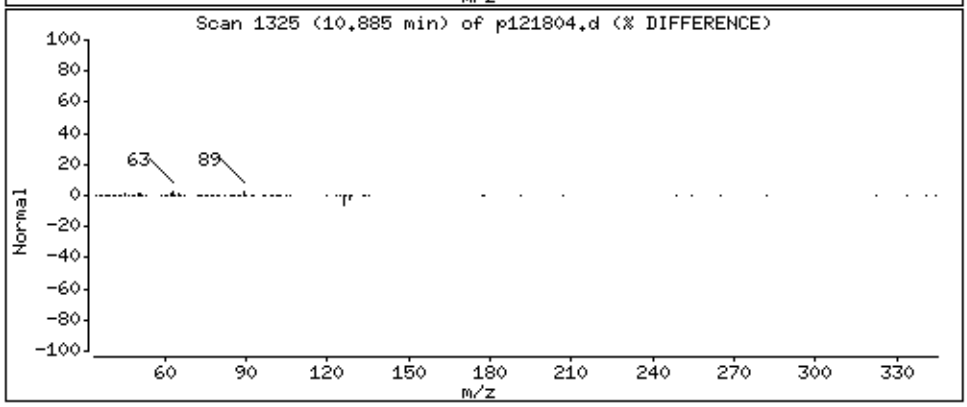
212 alpha-Chlorotoluene

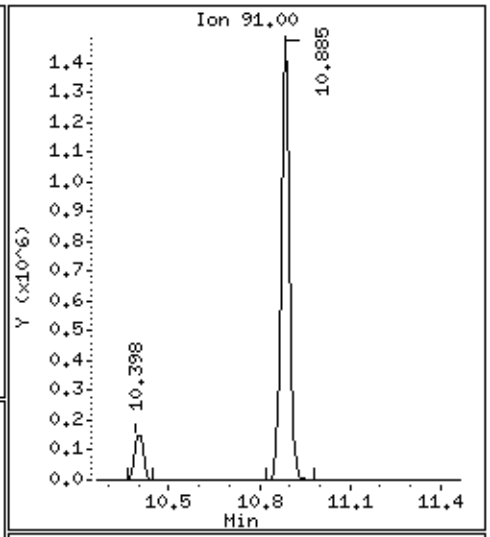
Concentration: 88.449 PPBV

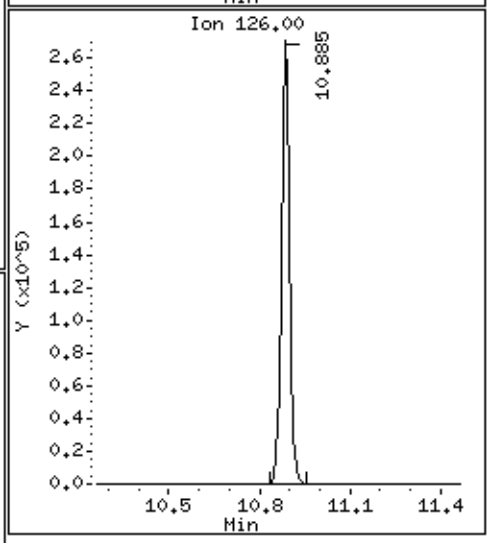












Data File: /chem/msdp.i/18dec14.b/p121804.d

Date : 18-DEC-2014 10:04

Client ID: ICV

Instrument: msdp.i

Sample Info: 50mL #2687-143

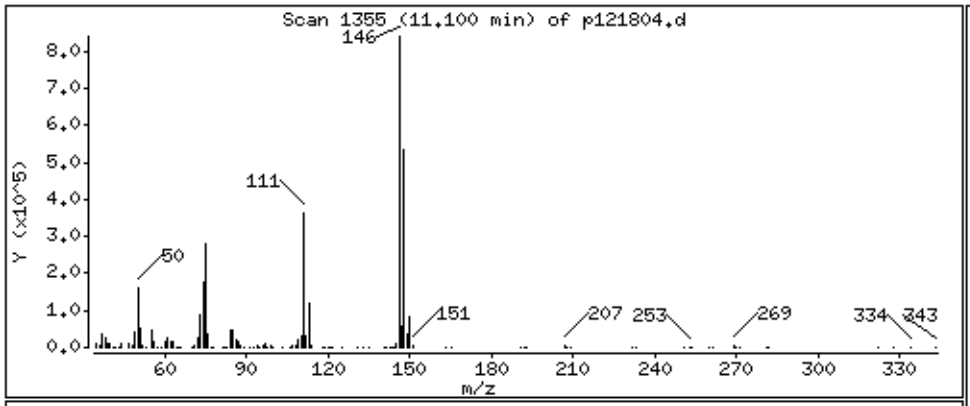
Operator: js

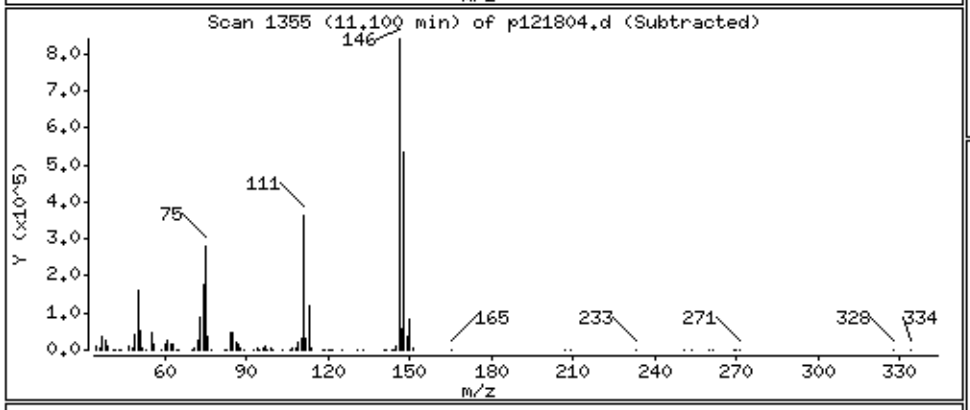
Column phase: RTX-624

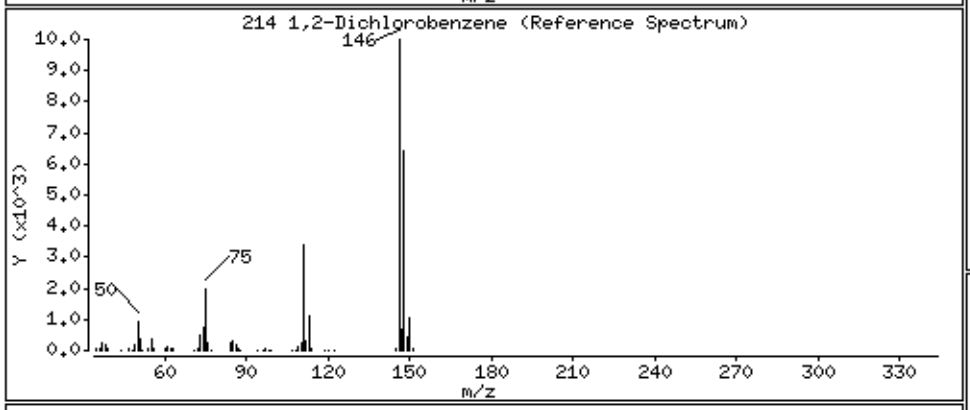
Column diameter: 0.25

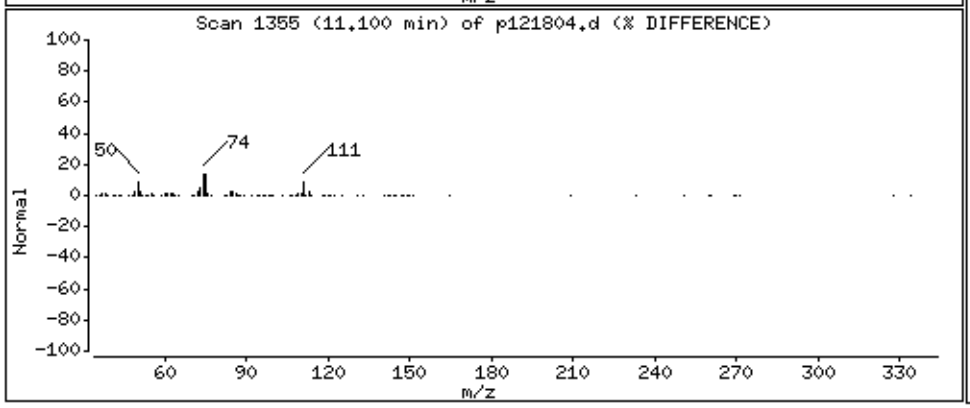
214 1,2-Dichlorobenzene

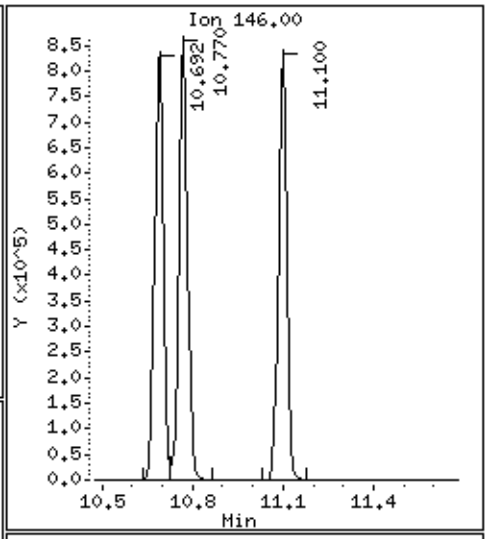
Concentration: 56.334 PPBV

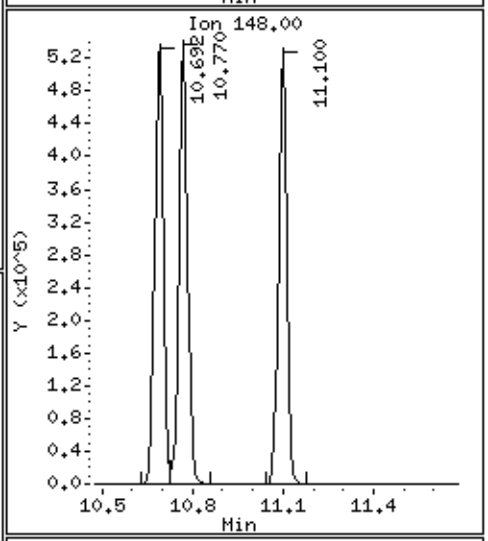


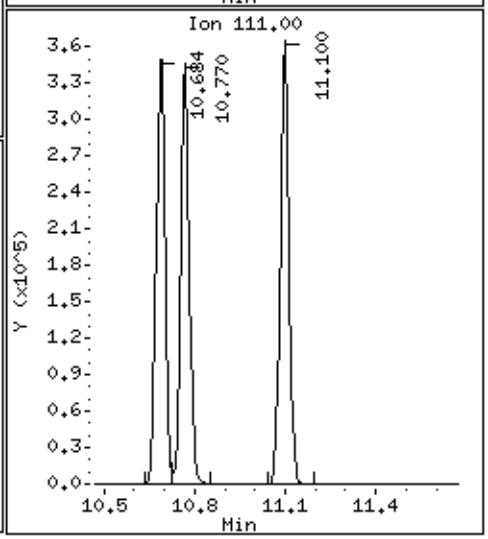












Data File: /chem/msdp.i/18dec14.b/p121804.d

Date : 18-DEC-2014 10:04

Client ID: ICV

Instrument: msdp.i

Sample Info: 50mL #2687-143

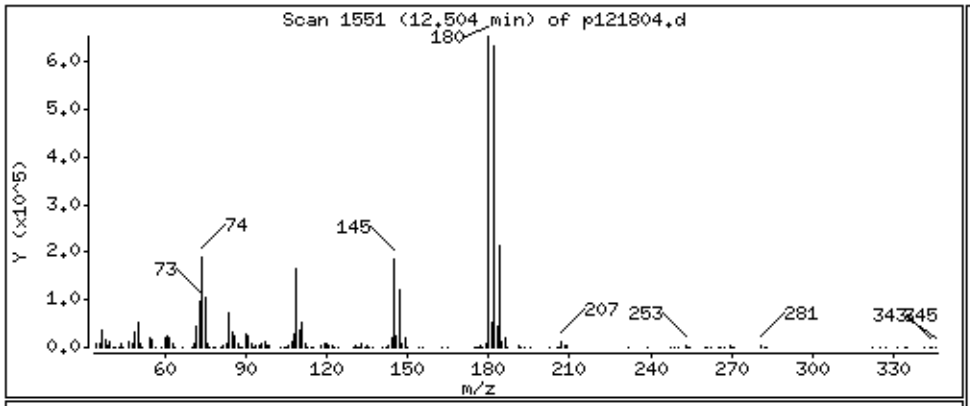
Operator: js

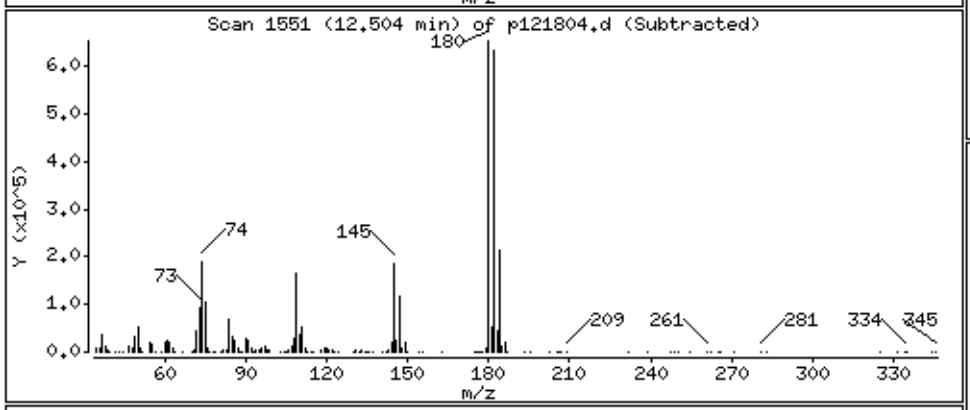
Column phase: RTX-624

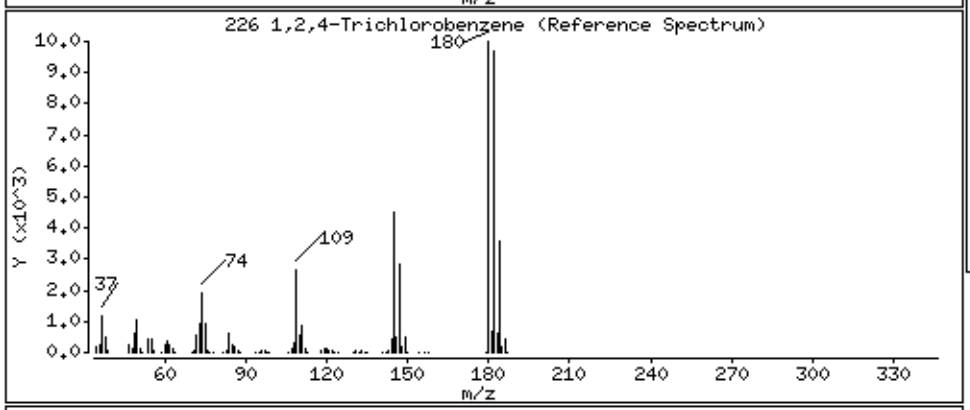
Column diameter: 0.25

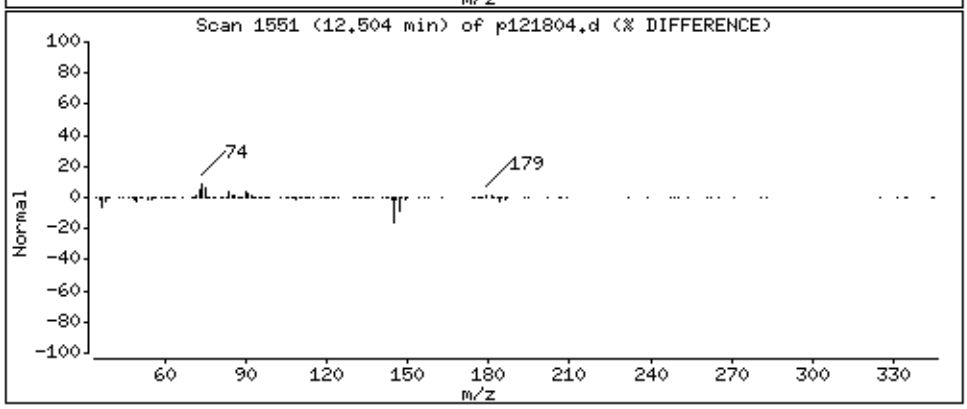
226 1,2,4-Trichlorobenzene

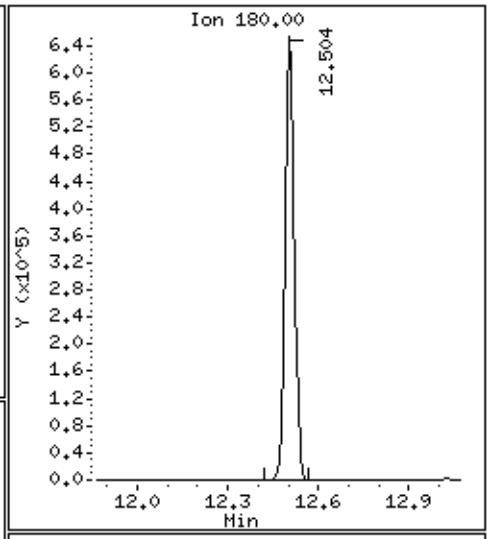
Concentration: 75.678 PPBV

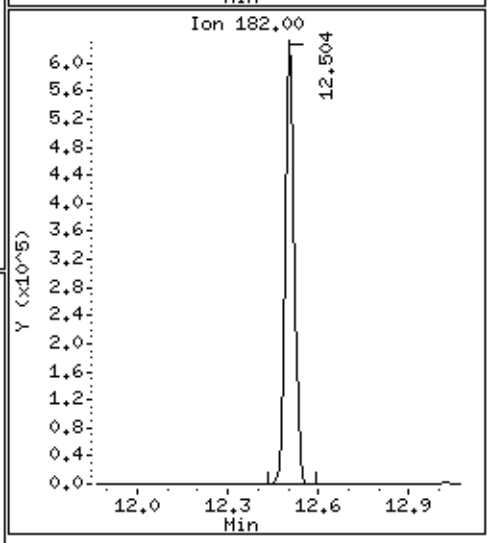












Data File: /chem/msdp.i/18dec14.b/p121804.d

Date : 18-DEC-2014 10:04

Client ID: ICV

Instrument: msdp.i

Sample Info: 50mL #2687-143

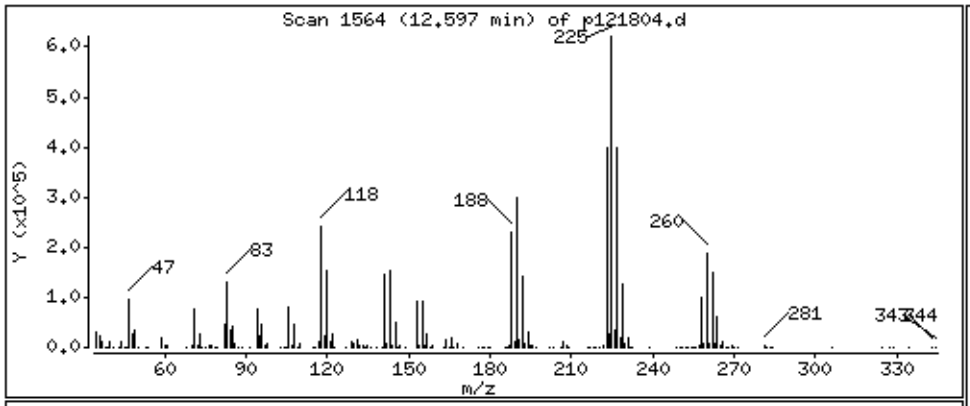
Operator: js

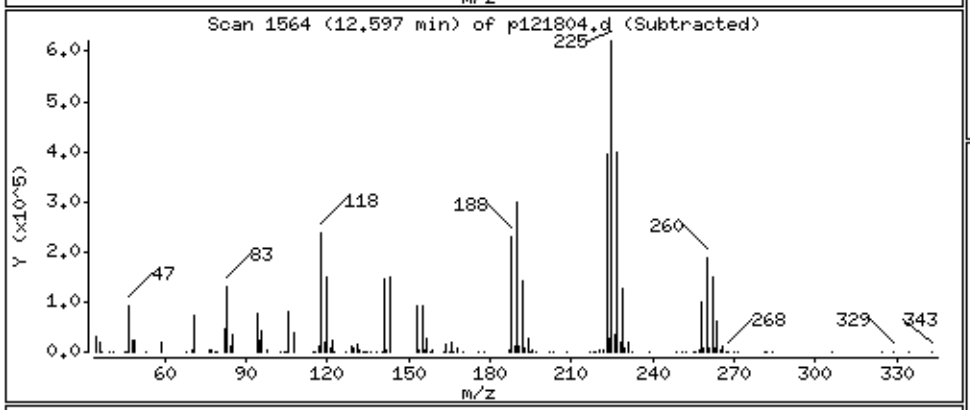
Column phase: RTX-624

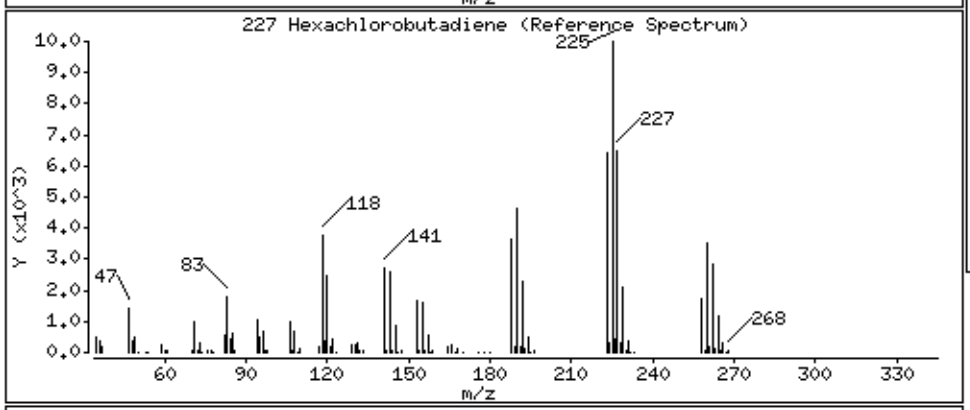
Column diameter: 0.25

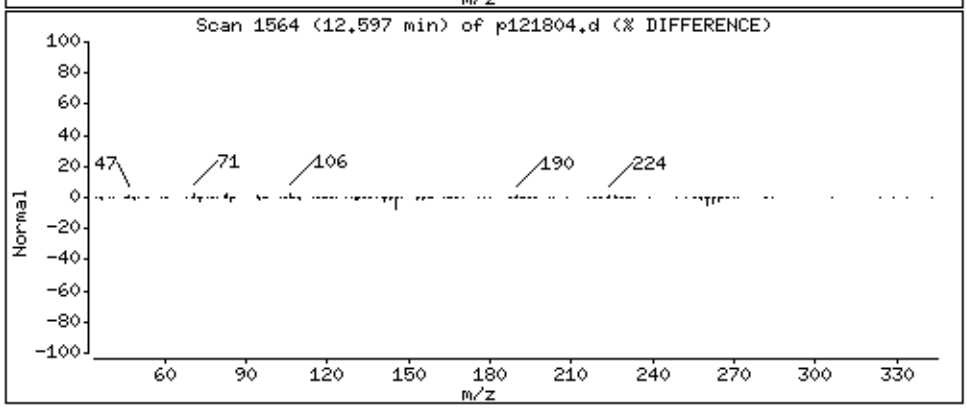
227 Hexachlorobutadiene

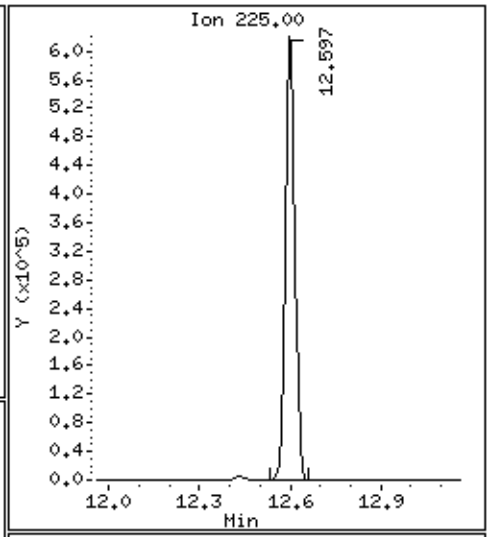
Concentration: 62.875 PPBV

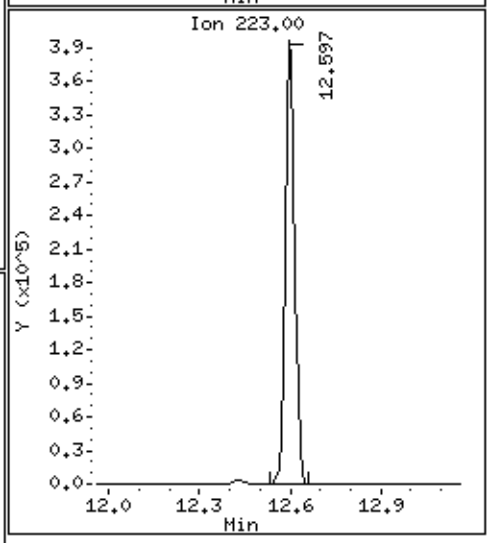












Data File: /chem/msdp.i/18dec14.b/p121804.d

Date : 18-DEC-2014 10:04

Client ID: ICV

Instrument: msdp.i

Sample Info: 50mL #2687-143

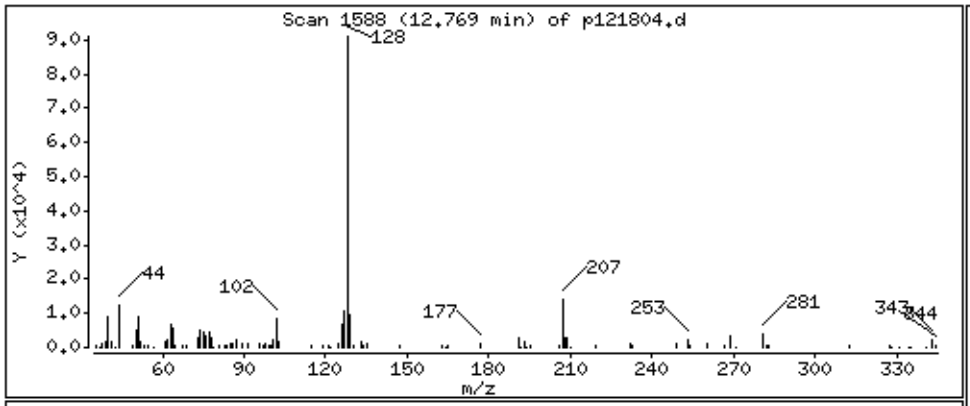
Operator: js

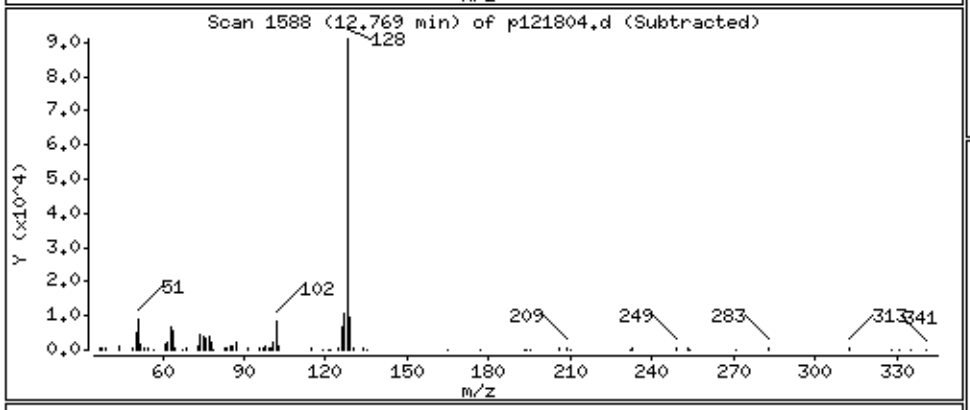
Column phase: RTX-624

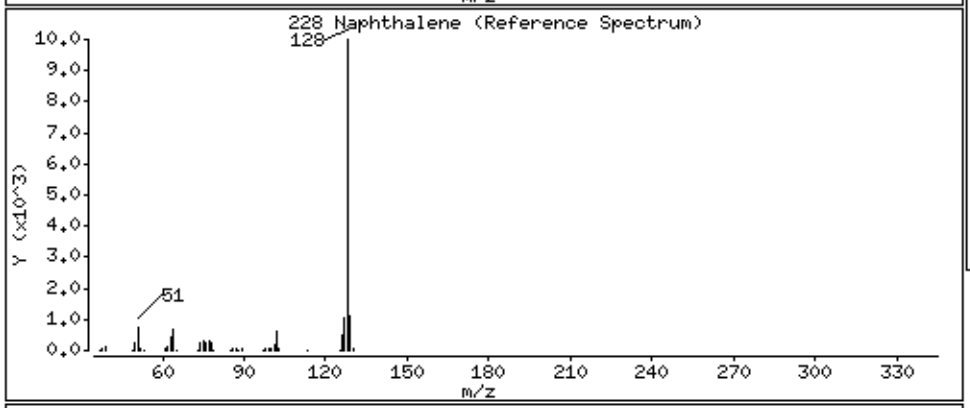
Column diameter: 0.25

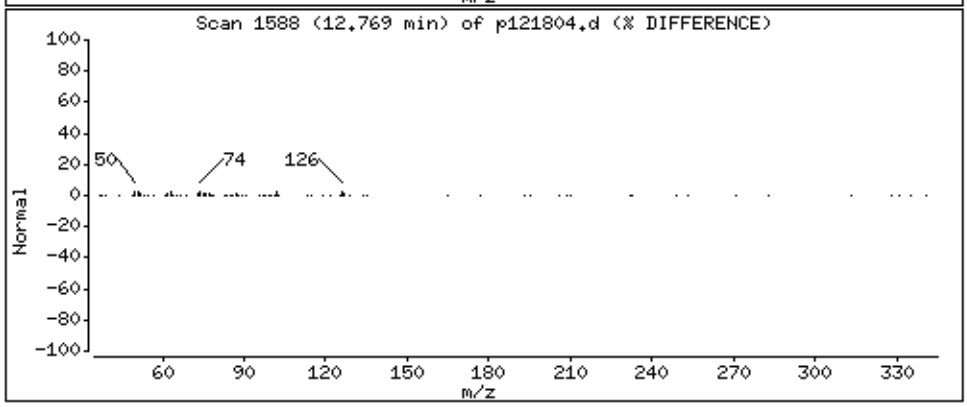
228 Naphthalene

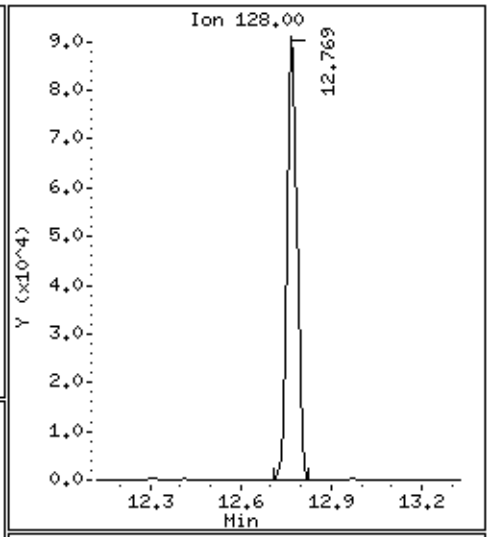
Concentration: 3.128 PPBV

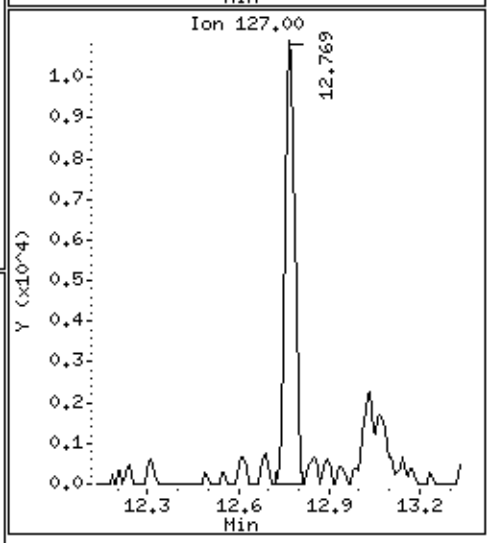












Eurofins Air Toxics Inc.

EPA TO-15/MODIFIED TO14A

Data file : /chem/msdp.i/17dec14.b/p121703.d
Lab Smp Id: ICAL Level #2
Inj Date : 17-DEC-2014 19:11
Operator : sn Inst ID: msdp.i
Smp Info : 20ml #2687-169
Misc Info : 0.5ppbv (5.0ppbv)
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msdp.i/17dec14.b/p14q1217a.m
Meth Date : 18-Dec-2014 13:10 jscarbro Quant Type: ISTD
Cal Date : 17-DEC-2014 19:11 Cal File: p121703.d
Als bottle: 1 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT12low.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
11 Freon 12					CAS #: 75-71-8		
1.502	1.502 (0.276)	85	17457	0.50000	0.4837	70.00- 130.00	100.00(a)
1.509	1.509 (0.277)	87	5800			0.00- 30.00	33.22
15 Freon 114					CAS #: 76-14-2		
1.623	1.623 (0.298)	135	13805	0.50000	0.5738	70.00- 130.00	100.00
1.616	1.616 (0.297)	137	2163			0.00- 30.00	15.67
25 Vinyl Chloride					CAS #: 75-01-4		
1.810	1.810 (0.332)	62	6973	0.50000	0.5846	70.00- 130.00	100.00
1.817	1.817 (0.333)	64	1937			0.00- 30.00	27.78
26 1,3-Butadiene					CAS #: 106-99-0		
1.845	1.845 (0.339)	54	5276	0.50000	0.4921	70.00- 130.00	100.00(a)
1.845	1.845 (0.339)	39	8686			0.00- 30.00	164.63
29 Bromomethane					CAS #: 74-83-9		
2.204	2.204 (0.404)	94	5212	0.50000	0.6734	70.00- 130.00	100.00(a)

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

   29 Bromomethane (continued)
  2.189   2.189 (0.402)    96      5728                     0.00-  30.00   109.90
-------------------------------------------------------------------------------
   35 Freon 11                                     CAS #: 75-69-4
  2.569   2.569 (0.471)   101     19591 0.50000   0.5474  70.00- 130.00   100.00
  2.576   2.576 (0.473)   103     12051                     0.00-  30.00    61.51
-------------------------------------------------------------------------------
   49 Freon 113                                    CAS #: 76-13-1
  3.214   3.214 (0.590)   151      6760 0.50000   0.4572  70.00- 130.00   100.00(a)
  3.206   3.206 (0.588)   153      5555                     0.00-  30.00    82.17
  3.221   3.221 (0.591)   101      8931                     0.00-  30.00   132.12
-------------------------------------------------------------------------------
   50 1,1-Dichloroethene                           CAS #: 75-35-4
  3.235   3.235 (0.594)    98      1921 0.50000   0.4074  70.00- 130.00   100.00(aH)
  3.235   3.235 (0.594)    96      3546                     0.00-  30.00   184.59
  3.242   3.242 (0.595)    61      7499                     0.00-  30.00   390.37
-------------------------------------------------------------------------------
   58 3-Chloropropene                              CAS #: 107-05-1
  3.722   3.722 (0.683)    76      1683 0.50000   0.4352  70.00- 130.00   100.00(a)
  3.722   3.722 (0.683)    41      7358                     0.00-  30.00   437.20
-------------------------------------------------------------------------------
   66 Methylene Chloride                           CAS #: 75-09-2
  3.901   3.901 (0.716)    49      5828 0.50000   0.4823  70.00- 130.00   100.00(a)
  3.894   3.894 (0.715)    84      2521                     0.00-  30.00    43.26
  3.887   3.887 (0.713)    51      1986                     0.00-  30.00    34.08
-------------------------------------------------------------------------------
   72 Methyl tert-butyl ether                      CAS #: 1634-04-4
  4.130   4.130 (0.758)    73     12752 0.50000   0.4874  70.00- 130.00   100.00(a)
  4.145   4.145 (0.761)    57      4512                     0.00-  30.00    35.38
  4.123   4.123 (0.757)    41      3456                     0.00-  30.00    27.10
-------------------------------------------------------------------------------
   73 trans-1,2-Dichloroethene                     CAS #: 156-60-5
  4.152   4.152 (0.762)    98      1617 0.50000   0.3513  70.00- 130.00   100.00(a)
  4.152   4.152 (0.762)    61      7568                     0.00-  30.00   468.03
  4.145   4.145 (0.761)    96      2798                     0.00-  30.00   173.04
-------------------------------------------------------------------------------
   78 Hexane                                       CAS #: 110-54-3
  4.367   4.367 (0.801)    57      9424 0.50000   0.5579  70.00- 130.00   100.00
  4.367   4.367 (0.801)    43      7407                     0.00-  30.00    78.60
  4.367   4.367 (0.801)    86      1120                     0.00-  30.00    11.88
-------------------------------------------------------------------------------
   82 1,1-Dichloroethane                           CAS #: 75-34-3
  4.639   4.639 (0.851)    63      9551 0.50000   0.4888  70.00- 130.00   100.00(a)
  4.646   4.646 (0.853)    65      2522                     0.00-  30.00    26.41
-------------------------------------------------------------------------------
   91 cis-1,2-Dichloroethene                       CAS #: 156-59-2
  5.219   5.219 (0.958)    98      2360 0.50000   0.3958  70.00- 130.00   100.00(a)
```

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

   91 cis-1,2-Dichloroethene (continued)
  5.219   5.219 (0.958)    96      4867                     0.00-  30.00   206.23
  5.219   5.219 (0.958)    61      7937                     0.00-  30.00   336.31
-------------------------------------------------------------------------------
   99 Tetrahydrofuran                                CAS #: 109-99-9
  5.456   5.456 (1.001)    42      8841 0.50000   0.6350  70.00- 130.00   100.00
  5.441   5.441 (0.999)    71       527                     0.00-  30.00     5.96
  5.456   5.456 (1.001)    72      2167                     0.00-  30.00    24.51
-------------------------------------------------------------------------------
*  98 Bromochloromethane                            CAS #: 74-97-5
  5.448   5.448 (1.000)   130    132812 25.0000           70.00- 130.00   100.00
  5.448   5.448 (1.000)   128     98613                     0.00-  30.00    74.25
  5.448   5.448 (1.000)    49    253556                     0.00-  30.00   190.91
-------------------------------------------------------------------------------
  100 Chloroform                                    CAS #: 67-66-3
  5.513   5.513 (1.012)    83     11107 0.50000   0.4981  70.00- 130.00   100.00(a)
  5.513   5.513 (1.012)    85      7261                     0.00-  30.00    65.37
-------------------------------------------------------------------------------
  102 Cyclohexane                                   CAS #: 110-82-7
  5.620   5.620 (1.032)    84      5291 0.50000   0.4639  70.00- 130.00   100.00(a)
  5.628   5.628 (1.033)    56      8870                     0.00-  30.00   167.64
  5.628   5.628 (1.033)    41      6537                     0.00-  30.00   123.55
-------------------------------------------------------------------------------
  103 1,1,1-Trichloroethane                         CAS #: 71-55-6
  5.642   5.642 (1.035)    97     12767 0.50000   0.5106  70.00- 130.00   100.00
  5.642   5.642 (1.035)    99      9937                     0.00-  30.00    77.83
-------------------------------------------------------------------------------
  106 Carbon Tetrachloride                          CAS #: 56-23-5
  5.756   5.756 (1.057)   119     14408 0.50000   0.5596  70.00- 130.00   100.00
  5.756   5.756 (1.057)   117     13928                     0.00-  30.00    96.67
-------------------------------------------------------------------------------
  113 2,2,4-Trimethylpentane                        CAS #: 540-84-1
  5.957   5.957 (1.093)    57     25975 0.50000   0.5183  70.00- 130.00   100.00
  5.950   5.950 (1.092)    56     10534                     0.00-  30.00    40.55
  5.964   5.964 (1.095)    41      9436                     0.00-  30.00    36.33
-------------------------------------------------------------------------------
  116 Benzene                                       CAS #: 71-43-2
  5.971   5.971 (0.941)    78     14303 0.50000   0.5112  70.00- 130.00   100.00
  5.964   5.964 (0.940)    77      4302                     0.00-  30.00    30.08
-------------------------------------------------------------------------------
$ 117 1,2-Dichloroethane-d4                         CAS #: 17060-07-0
  5.986   5.986 (1.099)    65    291932 25.0000   23.026  70.00- 130.00   100.00
  5.986   5.986 (1.099)    67    139784                     0.00-  30.00    47.88
-------------------------------------------------------------------------------
  120 1,2-Dichloroethane                            CAS #: 107-06-2
  6.057   6.057 (0.955)    62      9444 0.50000   0.5205  70.00- 130.00   100.00
```

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

  120 1,2-Dichloroethane (continued)
  6.057   6.057 (0.955)    64      2861                     0.00-  30.00    30.29
-------------------------------------------------------------------------------
  121 Heptane                                      CAS #: 142-82-5
  6.122   6.122 (0.965)    71      3497 0.50000   0.3853  70.00- 130.00   100.00(a)
  6.129   6.129 (0.966)    43      9771                     0.00-  30.00   279.41
  6.122   6.122 (0.965)    57      5940                     0.00-  30.00   169.86
-------------------------------------------------------------------------------
* 123 1,4-Difluorobenzene                          CAS #: 540-36-3
  6.344   6.344 (1.000)   114    621146 25.0000           70.00- 130.00   100.00
  6.344   6.344 (1.000)    88    107990                     0.00-  30.00    17.39
-------------------------------------------------------------------------------
  125 Trichloroethene                              CAS #: 79-01-6
  6.537   6.537 (1.030)    95      6272 0.50000   0.4771  70.00- 130.00   100.00(a)
  6.537   6.537 (1.030)   130      6538                     0.00-  30.00   104.24
  6.537   6.537 (1.030)    97      4709                     0.00-  30.00    75.08
-------------------------------------------------------------------------------
  127 Methylcyclohexane                            CAS #: 108-87-2
  6.637   6.637 (1.046)    83      7362 0.50000   0.4884  70.00- 130.00   100.00(a)
  6.637   6.637 (1.046)    98      3915                     0.00-  30.00    53.18
  6.645   6.645 (1.047)    55      9644                     0.00-  30.00   131.00
-------------------------------------------------------------------------------
  132 1,2-Dichloropropane                          CAS #: 78-87-5
  6.774   6.774 (1.068)    63      7311 0.50000   0.5380  70.00- 130.00   100.00
  6.774   6.774 (1.068)    62      4612                     0.00-  30.00    63.08
  6.766   6.766 (1.067)    41      4747                     0.00-  30.00    64.93
-------------------------------------------------------------------------------
  138 Bromodichloromethane                         CAS #: 75-27-4
  6.996   6.996 (1.103)    83     14250 0.50000   0.5429  70.00- 130.00   100.00
  6.996   6.996 (1.103)    85     10549                     0.00-  30.00    74.03
-------------------------------------------------------------------------------
  144 cis-1,3-Dichloropropene                      CAS #: 10061-01-5
  7.368   7.368 (1.161)    75     10689 0.50000   0.5600  70.00- 130.00   100.00
  7.375   7.375 (1.163)    77      5477                     0.00-  30.00    51.24
  7.368   7.368 (1.161)    39      7463                     0.00-  30.00    69.82
-------------------------------------------------------------------------------
  145 4-Methyl-2-pentanone                         CAS #: 108-10-1
  7.476   7.476 (1.178)    58      6710 0.50000   0.5012  70.00- 130.00   100.00
  7.476   7.476 (1.178)    43     18057                     0.00-  30.00   269.11
  7.476   7.476 (1.178)    85      1794                     0.00-  30.00    26.74
-------------------------------------------------------------------------------
$ 146 Toluene-d8                                   CAS #: 2037-26-5
  7.554   7.554 (1.191)    98    710931 25.0000   24.285  70.00- 130.00   100.00
  7.554   7.554 (1.191)    70     84275                     0.00-  30.00    11.85
  7.554   7.554 (1.191)   100    468153                     0.00-  30.00    65.85
-------------------------------------------------------------------------------
```

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

  147 Toluene                                        CAS #: 108-88-3
  7.612   7.612 (1.200)    91     19315 0.50000   0.4749  70.00- 130.00   100.00(a)
  7.612   7.612 (1.200)    92     11290                    0.00-  30.00    58.45
-------------------------------------------------------------------------------
  150 trans-1,3-Dichloropropene                      CAS #: 10061-02-6
  7.841   7.841 (0.893)    75     11448 0.50000   0.5131  70.00- 130.00   100.00
  7.841   7.841 (0.893)    77      6913                    0.00-  30.00    60.39
  7.841   7.841 (0.893)    39      5475                    0.00-  30.00    47.82
-------------------------------------------------------------------------------
  155 1,1,2-Trichloroethane                          CAS #: 79-00-5
  7.998   7.998 (0.911)    97      7879 0.50000   0.5551  70.00- 130.00   100.00
  7.998   7.998 (0.911)    99      5335                    0.00-  30.00    67.71
  7.998   7.998 (0.911)    83      8299                    0.00-  30.00   105.33
-------------------------------------------------------------------------------
  156 Tetrachloroethene                              CAS #: 127-18-4
  8.041   8.041 (0.916)   166     10346 0.50000   0.5069  70.00- 130.00   100.00
  8.049   8.049 (0.917)   129      6977                    0.00-  30.00    67.44
  8.049   8.049 (0.917)   131      7920                    0.00-  30.00    76.55
-------------------------------------------------------------------------------
  158 2-Hexanone                                     CAS #: 591-78-6
  8.170   8.170 (0.931)    58      9942 0.50000   0.5006  70.00- 130.00   100.00(a)
  8.163   8.163 (0.930)    43     20357                    0.00-  30.00   204.76
  8.170   8.170 (0.931)   100      1126                    0.00-  30.00    11.33
-------------------------------------------------------------------------------
  160 Dibromochloromethane                           CAS #: 124-48-1
  8.314   8.314 (0.947)   129     13274 0.50000   0.4942  70.00- 130.00   100.00(a)
  8.314   8.314 (0.947)   127     13451                    0.00-  30.00   101.33
-------------------------------------------------------------------------------
  161 1,2-Dibromoethane (EDB)                        CAS #: 106-93-4
  8.428   8.428 (0.960)   107     11079 0.50000   0.5227  70.00- 130.00   100.00
  8.428   8.428 (0.960)   109     10552                    0.00-  30.00    95.24
-------------------------------------------------------------------------------
* 163 Chlorobenzene-d5                               CAS #: 3114-55-4
  8.779   8.779 (1.000)   117    677348 25.0000           70.00- 130.00   100.00
  8.779   8.779 (1.000)    82    425137                    0.00-  30.00    62.76
-------------------------------------------------------------------------------
  165 Chlorobenzene                                  CAS #: 108-90-7
  8.808   8.808 (1.003)   112     15411 0.50000   0.4739  70.00- 130.00   100.00(a)
  8.801   8.801 (1.002)   114      4708                    0.00-  30.00    30.55
  8.801   8.801 (1.002)    77     23363                    0.00-  30.00   151.60
-------------------------------------------------------------------------------
  167 Ethyl Benzene                                  CAS #: 100-41-4
  8.858   8.858 (1.009)   106      8809 0.50000   0.5067  70.00- 130.00   100.00
  8.851   8.851 (1.008)    91     30298                    0.00-  30.00   343.94
-------------------------------------------------------------------------------
  169 m,p-Xylene                                     CAS #: 108-38-3
  8.951   8.951 (1.020)   106     10197 0.50000   0.4835  70.00- 130.00   100.00(a)
```

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

  169 m,p-Xylene (continued)
  8.951   8.951 (1.020)    91     23929                     0.00-  30.00   234.67
-------------------------------------------------------------------------------
  171 o-Xylene                                     CAS #: 95-47-6
  9.295   9.295 (1.059)   106      8226 0.50000   0.4168  70.00- 130.00   100.00(a)
  9.288   9.288 (1.058)    91     26333                     0.00-  30.00   320.12
-------------------------------------------------------------------------------
  172 Styrene                                      CAS #: 100-42-5
  9.309   9.309 (1.060)   104     17201 0.50000   0.5024  70.00- 130.00   100.00
  9.309   9.309 (1.060)    78      8785                     0.00-  30.00    51.07
-------------------------------------------------------------------------------
  174 Bromoform                                    CAS #: 75-25-2
  9.503   9.503 (1.082)   173     17660 0.50000   0.5551  70.00- 130.00   100.00
  9.503   9.503 (1.082)   171      7588                     0.00-  30.00    42.97
-------------------------------------------------------------------------------
  175 Cumene                                       CAS #: 98-82-8
  9.574   9.574 (1.091)   105     36108 0.50000   0.5220  70.00- 130.00   100.00
  9.574   9.574 (1.091)   120      8785                     0.00-  30.00    24.33
  9.574   9.574 (1.091)    51      3965                     0.00-  30.00    10.98
-------------------------------------------------------------------------------
$ 177 4-Bromofluorobenzene                         CAS #: 460-00-4
  9.761   9.761 (1.112)   174    514574 25.0000   25.613  70.00- 130.00   100.00
  9.761   9.761 (1.112)    95    584740                     0.00-  30.00   113.64
  9.761   9.761 (1.112)   176    485228                     0.00-  30.00    94.30
-------------------------------------------------------------------------------
  181 1,1,2,2-Tetrachloroethane                    CAS #: 79-34-5
  9.882   9.882 (1.126)    83     20447 0.50000   0.5794  70.00- 130.00   100.00
  9.882   9.882 (1.126)    85     11506                     0.00-  30.00    56.27
-------------------------------------------------------------------------------
  182 Propylbenzene                                CAS #: 103-65-1
  9.918   9.918 (1.130)    91     43461 0.50000   0.5112  70.00- 130.00   100.00
  9.918   9.918 (1.130)   120      8652                     0.00-  30.00    19.91
  9.925   9.925 (1.131)   105      1610                     0.00-  30.00     3.70
-------------------------------------------------------------------------------
  188 4-Ethyltoluene                               CAS #: 622-96-8
 10.011  10.011 (1.140)   120      8667 0.50000   0.4747  70.00- 130.00   100.00(a)
 10.011  10.011 (1.140)   105     36393                     0.00-  30.00   419.90
-------------------------------------------------------------------------------
  190 1,3,5-Trimethylbenzene                       CAS #: 108-67-8
 10.061  10.061 (1.146)   120     11822 0.50000   0.5069  70.00- 130.00   100.00
 10.061  10.061 (1.146)   105     27069                     0.00-  30.00   228.97
-------------------------------------------------------------------------------
  196 1,2,4-Trimethylbenzene                       CAS #: 95-63-6
 10.384  10.384 (1.183)   120     10005 0.50000   0.4760  70.00- 130.00   100.00(a)
 10.384  10.384 (1.183)   105     29526                     0.00-  30.00   295.11
-------------------------------------------------------------------------------
```

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
208 1,3-Dichlorobenzene					CAS #: 541-73-1		
10.670	10.670 (1.215)	146	19613	0.50000	0.5423	70.00- 130.00	100.00
10.670	10.670 (1.215)	148	12758			0.00- 30.00	65.05
10.670	10.670 (1.215)	111	10759			0.00- 30.00	54.86
209 1,4-Dichlorobenzene					CAS #: 106-46-7		
10.749	10.749 (1.224)	146	19609	0.50000	0.5499	70.00- 130.00	100.00
10.749	10.749 (1.224)	148	11015			0.00- 30.00	56.17
10.742	10.742 (1.224)	111	7733			0.00- 30.00	39.44
212 alpha-Chlorotoluene					CAS #: 100-44-7		
10.864	10.864 (1.237)	91	21087	0.50000	0.5908	70.00- 130.00	100.00
10.864	10.864 (1.237)	126	3396			0.00- 30.00	16.10
214 1,2-Dichlorobenzene					CAS #: 95-50-1		
11.071	11.071 (1.261)	146	16252	0.50000	0.5052	70.00- 130.00	100.00
11.071	11.071 (1.261)	148	10900			0.00- 30.00	67.07
11.071	11.071 (1.261)	111	8265			0.00- 30.00	50.86

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).
H - Operator selected an alternate compound hit.

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdp.i
Lab File ID: p121703.d
Lab Smp Id: ICAL Level #2
Analysis Type: VOA
Quant Type: ISTD
Operator: sn
Method File: /chem/msdp.i/17dec14.b/p14q1217a.m
Misc Info: 0.5ppbv (5.0ppbv)

Calibration Date: 17-DEC-2014
Calibration Time: 20:25

Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
98 Bromochloromethan	131003	78602	183404	132812	1.38
123 1,4-Difluorobenze	594926	356956	832896	621146	4.41
163 Chlorobenzene-d5	646102	387661	904543	677348	4.84

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
98 Bromochloromethan	5.45	5.12	5.78	5.45	0.00
123 1,4-Difluorobenze	6.34	6.01	6.67	6.34	0.00
163 Chlorobenzene-d5	8.78	8.45	9.11	8.78	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/msdp.i/17dec14.b/p121703.d

Date : 17-DEC-2014 19:11

Client ID:

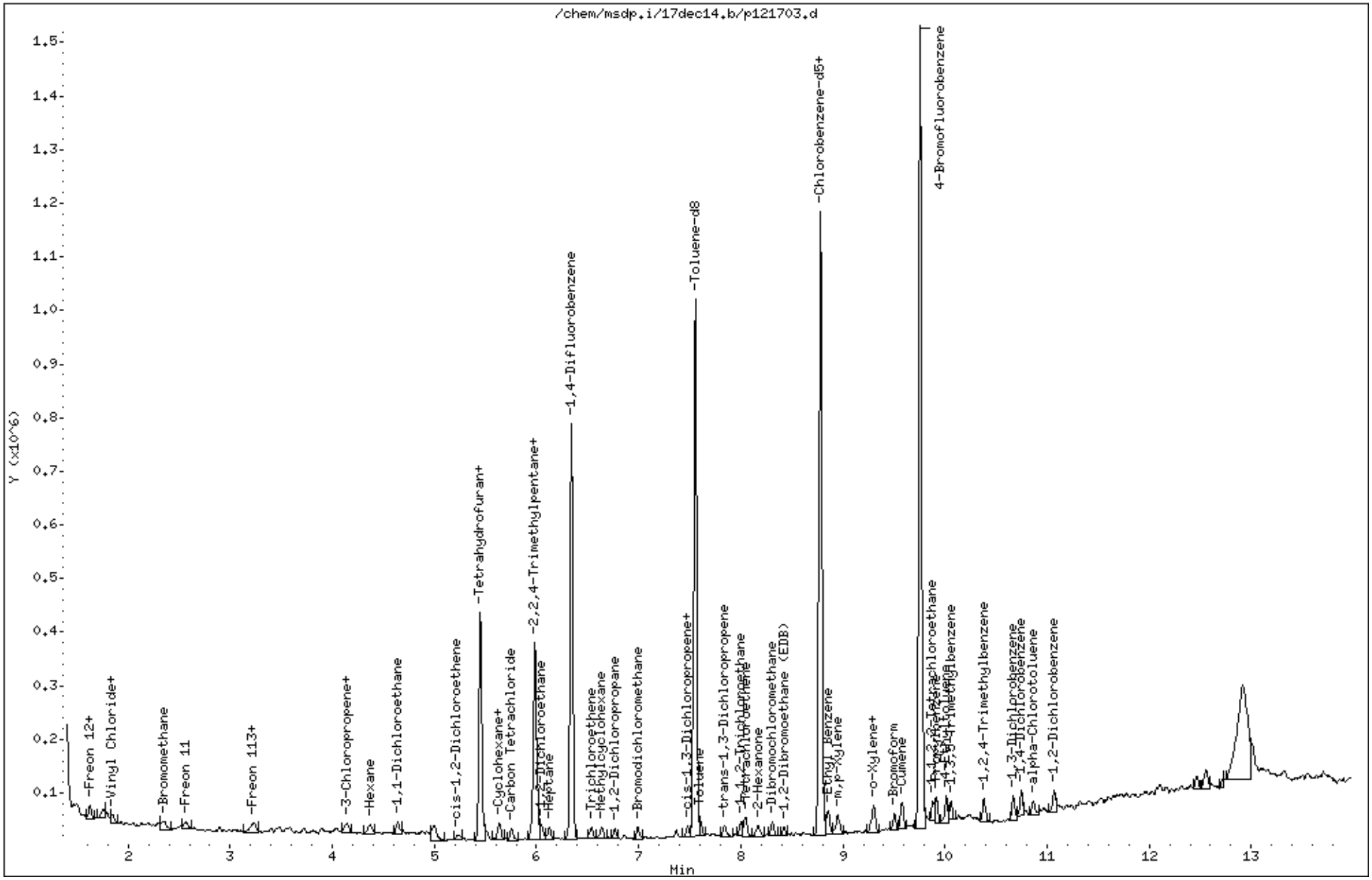
Sample Info: 20ml #2687-169

Column phase: RTX-624

Instrument: msdp.i

Operator: sn

Column diameter: 0.25



Eurofins Air Toxics Inc.

EPA TO-15/MODIFIED TO14A

Data file : /chem/msdp.i/17dec14.b/p121704.d
Lab Smp Id: ICAL Level #3
Inj Date : 17-DEC-2014 19:35
Operator : sn Inst ID: msdp.i
Smp Info : 80ml #2687-169
Misc Info : 2.0ppbv (5.0ppbv)
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msdp.i/17dec14.b/p14q1217a.m
Meth Date : 18-Dec-2014 13:10 jscarbro Quant Type: ISTD
Cal Date : 17-DEC-2014 19:35 Cal File: p121704.d
Als bottle: 1 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT12curve.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
* 98 Bromochloromethane						CAS #: 74-97-5	
5.448	5.448 (1.000)	130	134229	25.0000		70.00- 130.00	100.00
5.448	5.448 (1.000)	128	102899			0.00- 30.00	76.66
5.448	5.448 (1.000)	49	268237			0.00- 30.00	199.84
* 123 1,4-Difluorobenzene						CAS #: 540-36-3	
6.344	6.344 (1.000)	114	626757	25.0000		70.00- 130.00	100.00
6.344	6.344 (1.000)	88	107615			0.00- 30.00	17.17
* 163 Chlorobenzene-d5						CAS #: 3114-55-4	
8.779	8.779 (1.000)	117	667403	25.0000		70.00- 130.00	100.00
8.779	8.779 (1.000)	82	397769			0.00- 30.00	59.60
$ 117 1,2-Dichloroethane-d4						CAS #: 17060-07-0	
5.986	5.986 (1.099)	65	312932	25.0000	24.421	70.00- 130.00	100.00
5.986	5.986 (1.099)	67	148964			0.00- 30.00	47.60

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
$ 146 Toluene-d8					CAS #: 2037-26-5		
7.554	7.554 (1.191)	98	704701	25.0000	23.856	70.00- 130.00	100.00
7.554	7.554 (1.191)	70	84524			0.00- 30.00	11.99
7.554	7.554 (1.191)	100	450184			0.00- 30.00	63.88
$ 177 4-Bromofluorobenzene					CAS #: 460-00-4		
9.761	9.761 (1.112)	174	459625	25.0000	23.219	70.00- 130.00	100.00
9.761	9.761 (1.112)	95	520580			0.00- 30.00	113.26
9.761	9.761 (1.112)	176	447140			0.00- 30.00	97.28
9 Propylene					CAS #: 115-07-1		
1.473	1.473 (0.270)	41	22711	2.00000	2.002	70.00- 130.00	100.00
1.473	1.473 (0.270)	42	16393			0.00- 30.00	72.18
1.473	1.473 (0.270)	39	14143			0.00- 30.00	62.27
11 Freon 12					CAS #: 75-71-8		
1.509	1.509 (0.277)	85	71984	2.00000	1.974	70.00- 130.00	100.00(a)
1.509	1.509 (0.277)	87	20172			0.00- 30.00	28.02
15 Freon 114					CAS #: 76-14-2		
1.623	1.623 (0.298)	135	47796	2.00000	1.966	70.00- 130.00	100.00(a)
1.631	1.631 (0.299)	137	15632			0.00- 30.00	32.71
17 Chloromethane					CAS #: 74-87-3		
1.702	1.702 (0.312)	50	26696	2.00000	2.396	70.00- 130.00	100.00
1.702	1.702 (0.312)	52	11121			0.00- 30.00	41.66
23 Butane					CAS #: 106-97-8		
1.774	1.774 (0.326)	58	4434	2.00000	1.728	70.00- 130.00	100.00(a)
1.774	1.774 (0.326)	43	34162			0.00- 30.00	770.46
25 Vinyl Chloride					CAS #: 75-01-4		
1.810	1.810 (0.332)	62	22930	2.00000	1.902	70.00- 130.00	100.00(a)
1.810	1.810 (0.332)	64	7206			0.00- 30.00	31.43
26 1,3-Butadiene					CAS #: 106-99-0		
1.838	1.838 (0.337)	54	20877	2.00000	1.927	70.00- 130.00	100.00(a)
1.838	1.838 (0.337)	39	29245			0.00- 30.00	140.08
29 Bromomethane					CAS #: 74-83-9		
2.196	2.196 (0.403)	94	17703	2.00000	2.263	70.00- 130.00	100.00
2.189	2.189 (0.402)	96	15639			0.00- 30.00	88.34
30 Chloroethane					CAS #: 75-00-3		
2.311	2.311 (0.424)	64	11107	2.00000	1.983	70.00- 130.00	100.00(a)
2.311	2.311 (0.424)	66	3589			0.00- 30.00	32.31

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
30 Chloroethane (continued)							
2.304	2.304 (0.423)	49	3364			0.00- 30.00	30.29
31 Isopentane					CAS #: 78-78-4		
2.347	2.347 (0.431)	43	29525	2.00000	2.076	70.00- 130.00	100.00
2.347	2.347 (0.431)	57	18412			0.00- 30.00	62.36
35 Freon 11					CAS #: 75-69-4		
2.569	2.569 (0.471)	101	69302	2.00000	1.916	70.00- 130.00	100.00(a)
2.569	2.569 (0.471)	103	42453			0.00- 30.00	61.26
42 Ethanol					CAS #: 64-17-5		
2.898	2.898 (0.532)	45	11736	2.00000	2.773	70.00- 130.00	100.00
2.906	2.906 (0.533)	43	1623			0.00- 30.00	13.83
2.913	2.913 (0.535)	46	3068			0.00- 30.00	26.14
49 Freon 113					CAS #: 76-13-1		
3.214	3.214 (0.590)	151	30076	2.00000	2.012	70.00- 130.00	100.00
3.221	3.221 (0.591)	153	18241			0.00- 30.00	60.65
3.214	3.214 (0.590)	101	34784			0.00- 30.00	115.65
50 1,1-Dichloroethene					CAS #: 75-35-4		
3.242	3.242 (0.595)	98	10204	2.00000	2.141	70.00- 130.00	100.00
3.242	3.242 (0.595)	96	15987			0.00- 30.00	156.67
3.235	3.235 (0.594)	61	35355			0.00- 30.00	346.48
52 Acetone					CAS #: 67-64-1		
3.393	3.393 (0.623)	58	11507	2.00000	2.141	70.00- 130.00	100.00
3.400	3.400 (0.624)	43	33555			0.00- 30.00	291.61
56 Carbon Disulfide					CAS #: 75-15-0		
3.479	3.479 (0.638)	76	48973	2.00000	2.118	70.00- 130.00	100.00
57 2-Propanol					CAS #: 67-63-0		
3.579	3.579 (0.657)	45	38641	2.00000	1.992	70.00- 130.00	100.00(a)
3.579	3.579 (0.657)	43	11073			0.00- 30.00	28.66
3.557	3.557 (0.653)	59	516			0.00- 30.00	1.34
58 3-Chloropropene					CAS #: 107-05-1		
3.722	3.722 (0.683)	76	8382	2.00000	2.145	70.00- 130.00	100.00
3.722	3.722 (0.683)	41	24816			0.00- 30.00	296.06
66 Methylene Chloride					CAS #: 75-09-2		
3.901	3.901 (0.716)	49	24269	2.00000	1.987	70.00- 130.00	100.00(a)
3.901	3.901 (0.716)	84	14688			0.00- 30.00	60.52
3.901	3.901 (0.716)	51	8880			0.00- 30.00	36.59

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

   71 tert-Butyl alcohol                           CAS #: 75-65-0
  4.037   4.037 (0.741)    59     41905 2.00000    1.845  70.00- 130.00   100.00(a)
  4.037   4.037 (0.741)    41     10366                    0.00-  30.00    24.74
  4.037   4.037 (0.741)    57      5359                    0.00-  30.00    12.79
-------------------------------------------------------------------------------
   72 Methyl tert-butyl ether                      CAS #: 1634-04-4
  4.130   4.130 (0.758)    73     48383 2.00000    1.830  70.00- 130.00   100.00(a)
  4.130   4.130 (0.758)    57     12453                    0.00-  30.00    25.74
  4.138   4.138 (0.759)    41     14352                    0.00-  30.00    29.66
-------------------------------------------------------------------------------
   73 trans-1,2-Dichloroethene                     CAS #: 156-60-5
  4.152   4.152 (0.762)    98     10941 2.00000    2.352  70.00- 130.00   100.00
  4.152   4.152 (0.762)    61     26675                    0.00-  30.00   243.81
  4.152   4.152 (0.762)    96     15244                    0.00-  30.00   139.33
-------------------------------------------------------------------------------
   78 Hexane                                       CAS #: 110-54-3
  4.367   4.367 (0.801)    57     29130 2.00000    1.706  70.00- 130.00   100.00(a)
  4.374   4.374 (0.803)    43     20991                    0.00-  30.00    72.06
  4.374   4.374 (0.803)    86      4090                    0.00-  30.00    14.04
-------------------------------------------------------------------------------
   82 1,1-Dichloroethane                           CAS #: 75-34-3
  4.646   4.646 (0.853)    63     39992 2.00000    2.025  70.00- 130.00   100.00
  4.646   4.646 (0.853)    65     10855                    0.00-  30.00    27.14
-------------------------------------------------------------------------------
   83 Isopropyl ether                              CAS #: 108-20-3
  4.639   4.639 (0.851)    45     56208 2.00000    1.761  70.00- 130.00   100.00(a)
  4.639   4.639 (0.851)    87     10026                    0.00-  30.00    17.84
  4.639   4.639 (0.851)    59      6277                    0.00-  30.00    11.17
-------------------------------------------------------------------------------
   86 Vinyl Acetate                                CAS #: 108-05-4
  4.696   4.696 (0.862)    86      3731 2.00000    1.665  70.00- 130.00   100.00(a)
  4.689   4.689 (0.861)    43     85754                    0.00-  30.00  2298.42
-------------------------------------------------------------------------------
   88 Ethyl-tert-butyl ether                       CAS #: 637-92-3
  4.997   4.997 (0.917)    59     53845 2.00000    1.702  70.00- 130.00   100.00(a)
  4.997   4.997 (0.917)    87     19388                    0.00-  30.00    36.01
  4.997   4.997 (0.917)    41     12863                    0.00-  30.00    23.89
-------------------------------------------------------------------------------
   91 cis-1,2-Dichloroethene                       CAS #: 156-59-2
  5.226   5.226 (0.959)    98     11996 2.00000    1.991  70.00- 130.00   100.00(a)
  5.226   5.226 (0.959)    96     18194                    0.00-  30.00   151.67
  5.219   5.219 (0.958)    61     31547                    0.00-  30.00   262.98
-------------------------------------------------------------------------------
   92 2-Butanone                                   CAS #: 78-93-3
  5.255   5.255 (0.964)    72      8623 2.00000    1.825  70.00- 130.00   100.00(a)
  5.255   5.255 (0.964)    43     47403                    0.00-  30.00   549.73
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                                        AMOUNTS
                                     CAL-AMT   ON-COL
   RT   EXP RT (REL RT)  MASS  RESPONSE ( PPBV)  ( PPBV)   TARGET RANGE    RATIO
   ==   ====== ========  ====  ======== =======  =======   ============    =====

   92 2-Butanone (continued)
  5.248   5.248 (0.963)    57      3970                     0.00-  30.00    46.04
-------------------------------------------------------------------------------
   99 Tetrahydrofuran                                CAS #: 109-99-9
  5.456   5.456 (1.001)    42     24871 2.00000    1.767  70.00- 130.00   100.00(a)
  5.456   5.456 (1.001)    71      7186                     0.00-  30.00    28.89
  5.456   5.456 (1.001)    72      6747                     0.00-  30.00    27.13
-------------------------------------------------------------------------------
  100 Chloroform                                     CAS #: 67-66-3
  5.513   5.513 (1.012)    83     44673 2.00000    1.982  70.00- 130.00   100.00(a)
  5.513   5.513 (1.012)    85     31053                     0.00-  30.00    69.51
-------------------------------------------------------------------------------
  102 Cyclohexane                                    CAS #: 110-82-7
  5.627   5.627 (1.033)    84     21271 2.00000    1.845  70.00- 130.00   100.00(a)
  5.627   5.627 (1.033)    56     31290                     0.00-  30.00   147.10
  5.627   5.627 (1.033)    41     15875                     0.00-  30.00    74.63
-------------------------------------------------------------------------------
  103 1,1,1-Trichloroethane                          CAS #: 71-55-6
  5.642   5.642 (1.035)    97     50659 2.00000    2.004  70.00- 130.00   100.00
  5.642   5.642 (1.035)    99     29107                     0.00-  30.00    57.46
-------------------------------------------------------------------------------
  106 Carbon Tetrachloride                           CAS #: 56-23-5
  5.756   5.756 (1.057)   119     44726 2.00000    1.719  70.00- 130.00   100.00(a)
  5.756   5.756 (1.057)   117     53801                     0.00-  30.00   120.29
-------------------------------------------------------------------------------
  113 2,2,4-Trimethylpentane                         CAS #: 540-84-1
  5.957   5.957 (1.093)    57     86291 2.00000    1.704  70.00- 130.00   100.00(a)
  5.957   5.957 (1.093)    56     31696                     0.00-  30.00    36.73
  5.957   5.957 (1.093)    41     25011                     0.00-  30.00    28.98
-------------------------------------------------------------------------------
  116 Benzene                                        CAS #: 71-43-2
  5.971   5.971 (0.941)    78     51802 2.00000    1.835  70.00- 130.00   100.00(a)
  5.971   5.971 (0.941)    77     13599                     0.00-  30.00    26.25
-------------------------------------------------------------------------------
  119 tert-Amyl methyl ether                         CAS #: 994-05-8
  6.043   6.043 (0.953)    87     10690 2.00000    1.657  70.00- 130.00   100.00(a)
  6.043   6.043 (0.953)    73     45921                     0.00-  30.00   429.57
  6.043   6.043 (0.953)    55     16984                     0.00-  30.00   158.88
-------------------------------------------------------------------------------
  120 1,2-Dichloroethane                             CAS #: 107-06-2
  6.057   6.057 (0.955)    62     36711 2.00000    2.005  70.00- 130.00   100.00
  6.057   6.057 (0.955)    64     12058                     0.00-  30.00    32.85
-------------------------------------------------------------------------------
  121 Heptane                                        CAS #: 142-82-5
  6.129   6.129 (0.966)    71     15298 2.00000    1.670  70.00- 130.00   100.00(a)
  6.129   6.129 (0.966)    43     40267                     0.00-  30.00   263.22
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RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
121 Heptane (continued)							
6.129	6.129 (0.966)	57	22935			0.00- 30.00	149.92
125 Trichloroethene					CAS #: 79-01-6		
6.537	6.537 (1.030)	95	26262	2.00000	1.980	70.00- 130.00	100.00(a)
6.537	6.537 (1.030)	130	21329			0.00- 30.00	81.22
6.537	6.537 (1.030)	97	15116			0.00- 30.00	57.56
127 Methylcyclohexane					CAS #: 108-87-2		
6.645	6.645 (1.047)	83	26839	2.00000	1.764	70.00- 130.00	100.00(a)
6.645	6.645 (1.047)	98	12068			0.00- 30.00	44.96
6.637	6.637 (1.046)	55	34612			0.00- 30.00	128.96
132 1,2-Dichloropropane					CAS #: 78-87-5		
6.766	6.766 (1.067)	63	26094	2.00000	1.903	70.00- 130.00	100.00(a)
6.766	6.766 (1.067)	62	17494			0.00- 30.00	67.04
6.766	6.766 (1.067)	41	18114			0.00- 30.00	69.42
136 1,4-Dioxane					CAS #: 123-91-1		
6.860	6.860 (1.081)	88	14222	2.00000	1.955	70.00- 130.00	100.00(a)
6.860	6.860 (1.081)	58	14331			0.00- 30.00	100.77
6.860	6.860 (1.081)	57	3684			0.00- 30.00	25.90
138 Bromodichloromethane					CAS #: 75-27-4		
6.996	6.996 (1.103)	83	49273	2.00000	1.860	70.00- 130.00	100.00(a)
6.996	6.996 (1.103)	85	31642			0.00- 30.00	64.22
144 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
7.368	7.368 (1.161)	75	36831	2.00000	1.912	70.00- 130.00	100.00(a)
7.368	7.368 (1.161)	77	12658			0.00- 30.00	34.37
7.368	7.368 (1.161)	39	17785			0.00- 30.00	48.29
145 4-Methyl-2-pentanone					CAS #: 108-10-1		
7.483	7.483 (1.180)	58	24164	2.00000	1.789	70.00- 130.00	100.00(a)
7.483	7.483 (1.180)	43	65055			0.00- 30.00	269.22
7.476	7.476 (1.178)	85	7793			0.00- 30.00	32.25
147 Toluene					CAS #: 108-88-3		
7.612	7.612 (1.200)	91	78717	2.00000	1.918	70.00- 130.00	100.00(a)
7.604	7.604 (1.199)	92	46249			0.00- 30.00	58.75
150 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
7.848	7.848 (0.894)	75	43784	2.00000	1.992	70.00- 130.00	100.00(a)
7.848	7.848 (0.894)	77	16685			0.00- 30.00	38.11
7.841	7.841 (0.893)	39	22011			0.00- 30.00	50.27

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

  155 1,1,2-Trichloroethane                        CAS #: 79-00-5
  7.998   7.998 (0.911)    97     24385 2.00000    1.744  70.00- 130.00   100.00(a)
  7.998   7.998 (0.911)    99     17566                    0.00-  30.00    72.04
  7.998   7.998 (0.911)    83     22013                    0.00-  30.00    90.27
-------------------------------------------------------------------------------
  156 Tetrachloroethene                            CAS #: 127-18-4
  8.049   8.049 (0.917)   166     37668 2.00000    1.873  70.00- 130.00   100.00(a)
  8.049   8.049 (0.917)   129     25663                    0.00-  30.00    68.13
  8.049   8.049 (0.917)   131     26852                    0.00-  30.00    71.29
-------------------------------------------------------------------------------
  158 2-Hexanone                                   CAS #: 591-78-6
  8.170   8.170 (0.931)    58     31565 2.00000    1.613  70.00- 130.00   100.00(a)
  8.163   8.163 (0.930)    43     57445                    0.00-  30.00   181.99
  8.163   8.163 (0.930)   100      5638                    0.00-  30.00    17.86
-------------------------------------------------------------------------------
  160 Dibromochloromethane                         CAS #: 124-48-1
  8.314   8.314 (0.947)   129     47813 2.00000    1.807  70.00- 130.00   100.00(a)
  8.314   8.314 (0.947)   127     42836                    0.00-  30.00    89.59
-------------------------------------------------------------------------------
  161 1,2-Dibromoethane (EDB)                      CAS #: 106-93-4
  8.428   8.428 (0.960)   107     37702 2.00000    1.805  70.00- 130.00   100.00(a)
  8.428   8.428 (0.960)   109     39025                    0.00-  30.00   103.51
-------------------------------------------------------------------------------
  165 Chlorobenzene                                CAS #: 108-90-7
  8.808   8.808 (1.003)   112     61468 2.00000    1.918  70.00- 130.00   100.00(a)
  8.801   8.801 (1.002)   114     20705                    0.00-  30.00    33.68
  8.801   8.801 (1.002)    77     51247                    0.00-  30.00    83.37
-------------------------------------------------------------------------------
  167 Ethyl Benzene                                CAS #: 100-41-4
  8.858   8.858 (1.009)   106     31469 2.00000    1.837  70.00- 130.00   100.00(a)
  8.858   8.858 (1.009)    91    105504                    0.00-  30.00   335.26
-------------------------------------------------------------------------------
  169 m,p-Xylene                                   CAS #: 108-38-3
  8.951   8.951 (1.020)   106     35376 2.00000    1.702  70.00- 130.00   100.00(a)
  8.951   8.951 (1.020)    91     81816                    0.00-  30.00   231.28
-------------------------------------------------------------------------------
  171 o-Xylene                                     CAS #: 95-47-6
  9.295   9.295 (1.059)   106     33818 2.00000    1.739  70.00- 130.00   100.00(a)
  9.295   9.295 (1.059)    91     94792                    0.00-  30.00   280.30
-------------------------------------------------------------------------------
  172 Styrene                                      CAS #: 100-42-5
  9.309   9.309 (1.060)   104     54167 2.00000    1.606  70.00- 130.00   100.00(a)
  9.309   9.309 (1.060)    78     31303                    0.00-  30.00    57.79
-------------------------------------------------------------------------------
  174 Bromoform                                    CAS #: 75-25-2
  9.503   9.503 (1.082)   173     56885 2.00000    1.815  70.00- 130.00   100.00(a)
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                                        AMOUNTS
                                     CAL-AMT   ON-COL
   RT   EXP RT (REL RT)  MASS  RESPONSE ( PPBV)  ( PPBV)   TARGET RANGE    RATIO
   ==   ====== ========  ====  ======== =======  =======   ============    =====

  174 Bromoform (continued)
  9.510   9.510 (1.083)   171     28713                     0.00-  30.00    50.48
-------------------------------------------------------------------------------
  175 Cumene                                        CAS #: 98-82-8
  9.581   9.581 (1.091)   105    117977 2.00000    1.731  70.00- 130.00   100.00(a)
  9.581   9.581 (1.091)   120     28437                     0.00-  30.00    24.10
  9.574   9.574 (1.091)    51     12472                     0.00-  30.00    10.57
-------------------------------------------------------------------------------
  181 1,1,2,2-Tetrachloroethane                     CAS #: 79-34-5
  9.882   9.882 (1.126)    83     62939 2.00000    1.810  70.00- 130.00   100.00(a)
  9.882   9.882 (1.126)    85     43660                     0.00-  30.00    69.37
-------------------------------------------------------------------------------
  182 Propylbenzene                                 CAS #: 103-65-1
  9.918   9.918 (1.130)    91    142577 2.00000    1.702  70.00- 130.00   100.00(a)
  9.918   9.918 (1.130)   120     27462                     0.00-  30.00    19.26
  9.918   9.918 (1.130)   105      4926                     0.00-  30.00     3.45
-------------------------------------------------------------------------------
  188 4-Ethyltoluene                                CAS #: 622-96-8
 10.011  10.011 (1.140)   120     30117 2.00000    1.674  70.00- 130.00   100.00(a)
 10.011  10.011 (1.140)   105    119413                     0.00-  30.00   396.50
-------------------------------------------------------------------------------
  190 1,3,5-Trimethylbenzene                        CAS #: 108-67-8
 10.061  10.061 (1.146)   120     41291 2.00000    1.797  70.00- 130.00   100.00(a)
 10.061  10.061 (1.146)   105     90696                     0.00-  30.00   219.65
-------------------------------------------------------------------------------
  196 1,2,4-Trimethylbenzene                        CAS #: 95-63-6
 10.384  10.384 (1.183)   120     33997 2.00000    1.642  70.00- 130.00   100.00(a)
 10.384  10.384 (1.183)   105     94815                     0.00-  30.00   278.89
-------------------------------------------------------------------------------
  208 1,3-Dichlorobenzene                           CAS #: 541-73-1
 10.670  10.670 (1.215)   146     63398 2.00000    1.779  70.00- 130.00   100.00(a)
 10.670  10.670 (1.215)   148     34717                     0.00-  30.00    54.76
 10.670  10.670 (1.215)   111     26297                     0.00-  30.00    41.48
-------------------------------------------------------------------------------
  209 1,4-Dichlorobenzene                           CAS #: 106-46-7
 10.749  10.749 (1.224)   146     57939 2.00000    1.649  70.00- 130.00   100.00(a)
 10.749  10.749 (1.224)   148     40603                     0.00-  30.00    70.08
 10.749  10.749 (1.224)   111     24140                     0.00-  30.00    41.66
-------------------------------------------------------------------------------
  212 alpha-Chlorotoluene                           CAS #: 100-44-7
 10.864  10.864 (1.237)    91     61856 2.00000    1.759  70.00- 130.00   100.00(a)
 10.864  10.864 (1.237)   126      7671                     0.00-  30.00    12.40
-------------------------------------------------------------------------------
  214 1,2-Dichlorobenzene                           CAS #: 95-50-1
 11.071  11.071 (1.261)   146     55418 2.00000    1.748  70.00- 130.00   100.00(a)
 11.071  11.071 (1.261)   148     36454                     0.00-  30.00    65.78
```

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
214 1,2-Dichlorobenzene (continued)							
11.071	11.071 (1.261)	111	21574			0.00- 30.00	38.93
226 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
12.468	12.468 (1.420)	180	35233	2.00000	1.756	70.00- 130.00	100.00(a)
12.461	12.461 (1.419)	182	32041			0.00- 30.00	90.94
227 Hexachlorobutadiene					CAS #: 87-68-3		
12.561	12.561 (1.431)	225	41067	2.00000	1.737	70.00- 130.00	100.00(a)
12.554	12.554 (1.430)	223	25938			0.00- 30.00	63.16
228 Naphthalene					CAS #: 91-20-3		
12.726	12.726 (1.450)	128	14153	0.20000	0.1998	70.00- 130.00	100.00(a)
12.726	12.726 (1.450)	127	3602			0.00- 30.00	25.45

QC Flag Legend

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

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdp.i
Lab File ID: p121704.d
Lab Smp Id: ICAL Level #3
Analysis Type: VOA
Quant Type: ISTD
Operator: sn
Method File: /chem/msdp.i/17dec14.b/p14q1217a.m
Misc Info: 2.0ppbv (5.0ppbv)

Calibration Date: 17-DEC-2014
Calibration Time: 20:25

Level: LOW
Sample Type: AIR

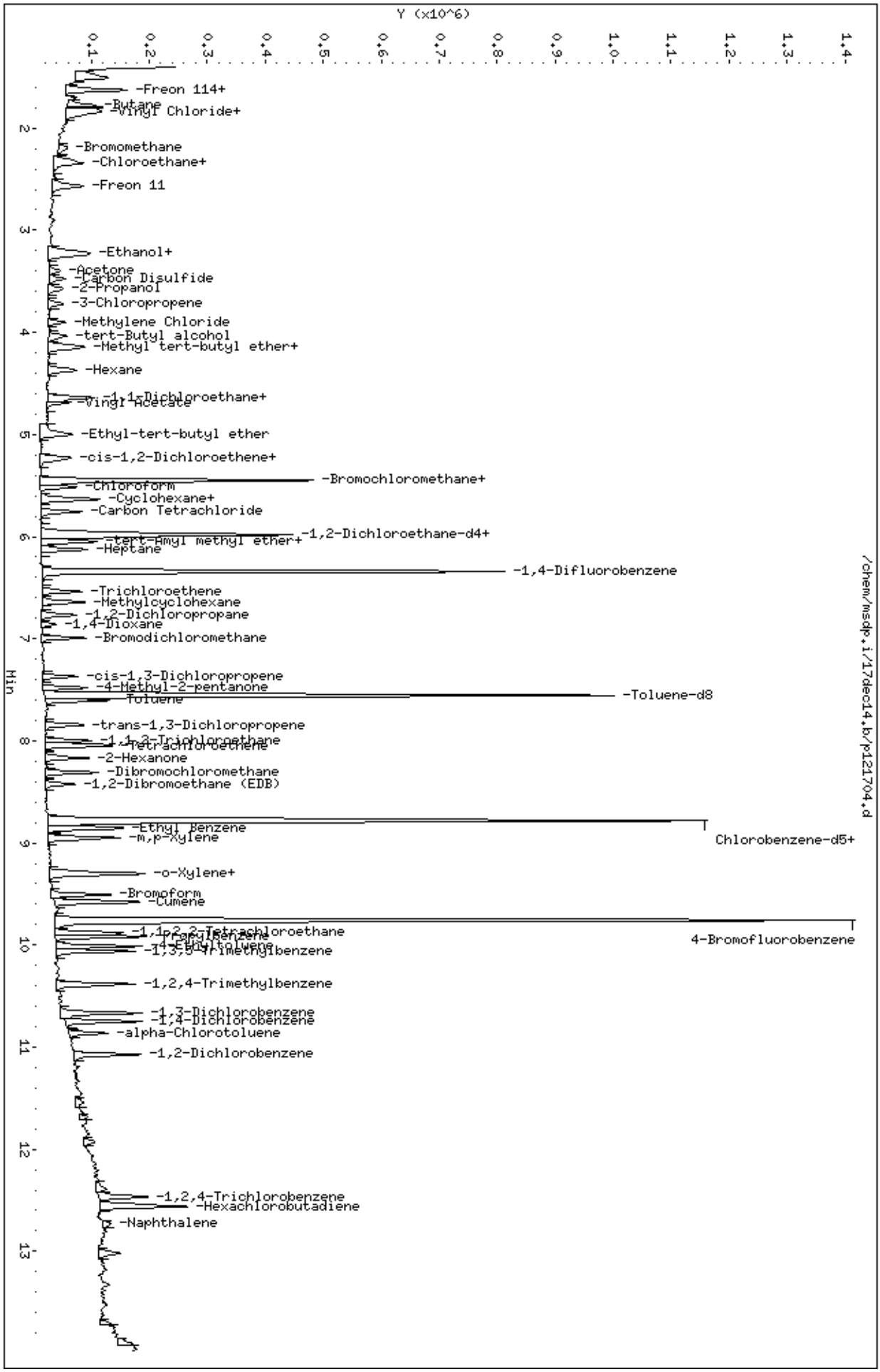
COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
98 Bromochloromethan	131003	78602	183404	134229	2.46
123 1,4-Difluorobenze	594926	356956	832896	626757	5.35
163 Chlorobenzene-d5	646102	387661	904543	667403	3.30

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
98 Bromochloromethan	5.45	5.12	5.78	5.45	0.00
123 1,4-Difluorobenze	6.34	6.01	6.67	6.34	0.00
163 Chlorobenzene-d5	8.78	8.45	9.11	8.78	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/msdp.i/17dec14.b/p121704.d
Date : 17-DEC-2014 19:35
Client ID:
Sample Info: 80ml #2687-169
Column phase: RTX-624

Instrument: msdp.i
Operator: sn
Column diameter: 0.25



Column diameter: 0.25

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Eurofins Air Toxics Inc.

EPA TO-15/MODIFIED TO14A

Data file : /chem/msdp.i/17dec14.b/p121705.d
Lab Smp Id: ICAL Level #5
Inj Date : 17-DEC-2014 20:00
Operator : sn Inst ID: msdp.i
Smp Info : 20ml #2687-162
Misc Info : 20ppbv (200ppbv)
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msdp.i/17dec14.b/p14q1217a.m
Meth Date : 18-Dec-2014 13:10 jscarbro Quant Type: ISTD
Cal Date : 17-DEC-2014 20:00 Cal File: p121705.d
Als bottle: 13 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT12curve.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
* 98 Bromochloromethane						CAS #: 74-97-5	
5.456	5.456 (1.000)	130	120958	25.0000		70.00- 130.00	100.00
5.448	5.448 (1.000)	128	99699			0.00- 30.00	82.42
5.448	5.448 (1.000)	49	253569			0.00- 30.00	209.63
* 123 1,4-Difluorobenzene						CAS #: 540-36-3	
6.344	6.344 (1.000)	114	601295	25.0000		70.00- 130.00	100.00
6.344	6.344 (1.000)	88	102582			0.00- 30.00	17.06
* 163 Chlorobenzene-d5						CAS #: 3114-55-4	
8.779	8.779 (1.000)	117	660355	25.0000		70.00- 130.00	100.00
8.779	8.779 (1.000)	82	411852			0.00- 30.00	62.37
$ 117 1,2-Dichloroethane-d4						CAS #: 17060-07-0	
5.986	5.986 (1.097)	65	274002	25.0000	23.729	70.00- 130.00	100.00
5.986	5.986 (1.097)	67	150761			0.00- 30.00	55.02

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
$ 146 Toluene-d8					CAS #: 2037-26-5		
7.554	7.554 (1.191)	98	742506	25.0000	26.201	70.00- 130.00	100.00
7.554	7.554 (1.191)	70	86066			0.00- 30.00	11.59
7.554	7.554 (1.191)	100	460193			0.00- 30.00	61.98
$ 177 4-Bromofluorobenzene					CAS #: 460-00-4		
9.761	9.761 (1.112)	174	480776	25.0000	24.546	70.00- 130.00	100.00
9.761	9.761 (1.112)	95	561813			0.00- 30.00	116.86
9.761	9.761 (1.112)	176	473423			0.00- 30.00	98.47
9 Propylene					CAS #: 115-07-1		
1.473	1.473 (0.270)	41	201065	20.0000	19.673	70.00- 130.00	100.00
1.466	1.466 (0.269)	42	132445			0.00- 30.00	65.87
1.473	1.473 (0.270)	39	142047			0.00- 30.00	70.65
11 Freon 12					CAS #: 75-71-8		
1.502	1.502 (0.275)	85	664953	20.0000	20.231	70.00- 130.00	100.00
1.502	1.502 (0.275)	87	199779			0.00- 30.00	30.04
15 Freon 114					CAS #: 76-14-2		
1.623	1.623 (0.298)	135	386475	20.0000	17.639	70.00- 130.00	100.00
1.623	1.623 (0.298)	137	126377			0.00- 30.00	32.70
17 Chloromethane					CAS #: 74-87-3		
1.702	1.702 (0.312)	50	197793	20.0000	19.696	70.00- 130.00	100.00
1.702	1.702 (0.312)	52	67709			0.00- 30.00	34.23
23 Butane					CAS #: 106-97-8		
1.781	1.781 (0.326)	58	50883	20.0000	22.012	70.00- 130.00	100.00
1.781	1.781 (0.326)	43	392489			0.00- 30.00	771.36
25 Vinyl Chloride					CAS #: 75-01-4		
1.817	1.817 (0.333)	62	225663	20.0000	20.774	70.00- 130.00	100.00
1.810	1.810 (0.332)	64	67632			0.00- 30.00	29.97
26 1,3-Butadiene					CAS #: 106-99-0		
1.845	1.845 (0.338)	54	198064	20.0000	20.284	70.00- 130.00	100.00
1.845	1.845 (0.338)	39	176353			0.00- 30.00	89.04
29 Bromomethane					CAS #: 74-83-9		
2.189	2.189 (0.401)	94	128556	20.0000	18.238	70.00- 130.00	100.00
2.189	2.189 (0.401)	96	129092			0.00- 30.00	100.42
30 Chloroethane					CAS #: 75-00-3		
2.304	2.304 (0.422)	64	100391	20.0000	19.888	70.00- 130.00	100.00
2.304	2.304 (0.422)	66	30649			0.00- 30.00	30.53

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
30 Chloroethane (continued)							
2.304	2.304 (0.422)	49	28530			0.00- 30.00	28.42
31 Isopentane					CAS #: 78-78-4		
2.347	2.347 (0.430)	43	248336	20.0000	19.375	70.00- 130.00	100.00
2.340	2.340 (0.429)	57	175837			0.00- 30.00	70.81
35 Freon 11					CAS #: 75-69-4		
2.569	2.569 (0.471)	101	609630	20.0000	18.704	70.00- 130.00	100.00
2.569	2.569 (0.471)	103	400581			0.00- 30.00	65.71
42 Ethanol					CAS #: 64-17-5		
2.884	2.884 (0.529)	45	62947	20.0000	16.504	70.00- 130.00	100.00
2.884	2.884 (0.529)	43	12392			0.00- 30.00	19.69
2.884	2.884 (0.529)	46	22308			0.00- 30.00	35.44
49 Freon 113					CAS #: 76-13-1		
3.221	3.221 (0.590)	151	269694	20.0000	20.026	70.00- 130.00	100.00
3.214	3.214 (0.589)	153	169570			0.00- 30.00	62.87
3.214	3.214 (0.589)	101	315825			0.00- 30.00	117.10
50 1,1-Dichloroethene					CAS #: 75-35-4		
3.242	3.242 (0.594)	98	77774	20.0000	18.111	70.00- 130.00	100.00
3.242	3.242 (0.594)	96	131581			0.00- 30.00	169.18
3.242	3.242 (0.594)	61	298379			0.00- 30.00	383.65
52 Acetone					CAS #: 67-64-1		
3.385	3.385 (0.621)	58	85891	20.0000	17.736	70.00- 130.00	100.00
3.385	3.385 (0.621)	43	256690			0.00- 30.00	298.86
56 Carbon Disulfide					CAS #: 75-15-0		
3.479	3.479 (0.638)	76	391063	20.0000	18.769	70.00- 130.00	100.00
57 2-Propanol					CAS #: 67-63-0		
3.565	3.565 (0.653)	45	317704	20.0000	18.174	70.00- 130.00	100.00
3.565	3.565 (0.653)	43	67242			0.00- 30.00	21.16
3.572	3.572 (0.655)	59	11578			0.00- 30.00	3.64
58 3-Chloropropene					CAS #: 107-05-1		
3.722	3.722 (0.682)	76	69314	20.0000	19.682	70.00- 130.00	100.00
3.722	3.722 (0.682)	41	233610			0.00- 30.00	337.03
66 Methylene Chloride					CAS #: 75-09-2		
3.894	3.894 (0.714)	49	219167	20.0000	19.916	70.00- 130.00	100.00
3.901	3.901 (0.715)	84	117908			0.00- 30.00	53.80
3.901	3.901 (0.715)	51	65892			0.00- 30.00	30.06

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
71 tert-Butyl alcohol					CAS #: 75-65-0		
4.023	4.023 (0.737)	59	387193	20.0000	18.917	70.00- 130.00	100.00
4.030	4.030 (0.739)	41	82218			0.00- 30.00	21.23
4.023	4.023 (0.737)	57	40671			0.00- 30.00	10.50
72 Methyl tert-butyl ether					CAS #: 1634-04-4		
4.130	4.130 (0.757)	73	455074	20.0000	19.097	70.00- 130.00	100.00
4.130	4.130 (0.757)	57	117523			0.00- 30.00	25.83
4.130	4.130 (0.757)	41	105451			0.00- 30.00	23.17
73 trans-1,2-Dichloroethene					CAS #: 156-60-5		
4.152	4.152 (0.761)	98	82130	20.0000	19.594	70.00- 130.00	100.00
4.152	4.152 (0.761)	61	244802			0.00- 30.00	298.07
4.152	4.152 (0.761)	96	127261			0.00- 30.00	154.95
78 Hexane					CAS #: 110-54-3		
4.367	4.367 (0.800)	57	310391	20.0000	20.175	70.00- 130.00	100.00
4.367	4.367 (0.800)	43	197429			0.00- 30.00	63.61
4.367	4.367 (0.800)	86	35194			0.00- 30.00	11.34
82 1,1-Dichloroethane					CAS #: 75-34-3		
4.639	4.639 (0.850)	63	350253	20.0000	19.682	70.00- 130.00	100.00
4.639	4.639 (0.850)	65	100050			0.00- 30.00	28.57
83 Isopropyl ether					CAS #: 108-20-3		
4.639	4.639 (0.850)	45	616367	20.0000	21.434	70.00- 130.00	100.00
4.639	4.639 (0.850)	87	123079			0.00- 30.00	19.97
4.639	4.639 (0.850)	59	70192			0.00- 30.00	11.39
86 Vinyl Acetate					CAS #: 108-05-4		
4.689	4.689 (0.860)	86	35649	20.0000	17.657	70.00- 130.00	100.00
4.682	4.682 (0.858)	43	555051			0.00- 30.00	1556.99
88 Ethyl-tert-butyl ether					CAS #: 637-92-3		
4.997	4.997 (0.916)	59	572560	20.0000	20.083	70.00- 130.00	100.00
4.997	4.997 (0.916)	87	201323			0.00- 30.00	35.16
4.997	4.997 (0.916)	41	105940			0.00- 30.00	18.50
91 cis-1,2-Dichloroethene					CAS #: 156-59-2		
5.226	5.226 (0.958)	98	109151	20.0000	20.101	70.00- 130.00	100.00
5.219	5.219 (0.957)	96	167367			0.00- 30.00	153.34
5.219	5.219 (0.957)	61	300559			0.00- 30.00	275.36
92 2-Butanone					CAS #: 78-93-3		
5.248	5.248 (0.962)	72	79247	20.0000	18.616	70.00- 130.00	100.00
5.248	5.248 (0.962)	43	439549			0.00- 30.00	554.66

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
92 2-Butanone (continued)							
5.248	5.248 (0.962)	57	34453			0.00- 30.00	43.48
99 Tetrahydrofuran					CAS #: 109-99-9		
5.448	5.448 (0.999)	42	232080	20.0000	18.302	70.00- 130.00	100.00
5.448	5.448 (0.999)	71	72974			0.00- 30.00	31.44
5.448	5.448 (0.999)	72	77501			0.00- 30.00	33.39
100 Chloroform					CAS #: 67-66-3		
5.513	5.513 (1.010)	83	407008	20.0000	20.041	70.00- 130.00	100.00
5.513	5.513 (1.010)	85	259644			0.00- 30.00	63.79
102 Cyclohexane					CAS #: 110-82-7		
5.627	5.627 (1.032)	84	214292	20.0000	20.629	70.00- 130.00	100.00
5.627	5.627 (1.032)	56	327705			0.00- 30.00	152.92
5.627	5.627 (1.032)	41	177503			0.00- 30.00	82.83
103 1,1,1-Trichloroethane					CAS #: 71-55-6		
5.642	5.642 (1.034)	97	448922	20.0000	19.712	70.00- 130.00	100.00
5.642	5.642 (1.034)	99	293105			0.00- 30.00	65.29
106 Carbon Tetrachloride					CAS #: 56-23-5		
5.756	5.756 (1.055)	119	480523	20.0000	20.494	70.00- 130.00	100.00
5.756	5.756 (1.055)	117	507232			0.00- 30.00	105.56
113 2,2,4-Trimethylpentane					CAS #: 540-84-1		
5.957	5.957 (1.092)	57	1020452	20.0000	22.357	70.00- 130.00	100.00
5.957	5.957 (1.092)	56	353290			0.00- 30.00	34.62
5.957	5.957 (1.092)	41	262562			0.00- 30.00	25.73
116 Benzene					CAS #: 71-43-2		
5.971	5.971 (0.941)	78	557093	20.0000	20.570	70.00- 130.00	100.00
5.971	5.971 (0.941)	77	131922			0.00- 30.00	23.68
119 tert-Amyl methyl ether					CAS #: 994-05-8		
6.043	6.043 (0.953)	87	129148	20.0000	20.865	70.00- 130.00	100.00
6.043	6.043 (0.953)	73	509788			0.00- 30.00	394.73
6.043	6.043 (0.953)	55	174170			0.00- 30.00	134.86
120 1,2-Dichloroethane					CAS #: 107-06-2		
6.057	6.057 (0.955)	62	348360	20.0000	19.833	70.00- 130.00	100.00
6.057	6.057 (0.955)	64	106669			0.00- 30.00	30.62
121 Heptane					CAS #: 142-82-5		
6.129	6.129 (0.966)	71	194126	20.0000	22.096	70.00- 130.00	100.00
6.129	6.129 (0.966)	43	440877			0.00- 30.00	227.11

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
121 Heptane (continued)							
6.129	6.129 (0.966)	57	255664			0.00- 30.00	131.70
125 Trichloroethene					CAS #: 79-01-6		
6.537	6.537 (1.030)	95	259015	20.0000	20.352	70.00- 130.00	100.00
6.537	6.537 (1.030)	130	240680			0.00- 30.00	92.92
6.537	6.537 (1.030)	97	162456			0.00- 30.00	62.72
127 Methylcyclohexane					CAS #: 108-87-2		
6.637	6.637 (1.046)	83	310194	20.0000	21.257	70.00- 130.00	100.00
6.645	6.645 (1.047)	98	142158			0.00- 30.00	45.83
6.637	6.637 (1.046)	55	358063			0.00- 30.00	115.43
132 1,2-Dichloropropane					CAS #: 78-87-5		
6.766	6.766 (1.067)	63	264847	20.0000	20.134	70.00- 130.00	100.00
6.766	6.766 (1.067)	62	194876			0.00- 30.00	73.58
6.766	6.766 (1.067)	41	143128			0.00- 30.00	54.04
136 1,4-Dioxane					CAS #: 123-91-1		
6.860	6.860 (1.081)	88	136918	20.0000	19.618	70.00- 130.00	100.00
6.860	6.860 (1.081)	58	126209			0.00- 30.00	92.18
6.860	6.860 (1.081)	57	45283			0.00- 30.00	33.07
138 Bromodichloromethane					CAS #: 75-27-4		
6.996	6.996 (1.103)	83	509681	20.0000	20.060	70.00- 130.00	100.00
6.996	6.996 (1.103)	85	317242			0.00- 30.00	62.24
144 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
7.368	7.368 (1.161)	75	349408	20.0000	18.909	70.00- 130.00	100.00
7.368	7.368 (1.161)	77	114782			0.00- 30.00	32.85
7.368	7.368 (1.161)	39	180461			0.00- 30.00	51.65
145 4-Methyl-2-pentanone					CAS #: 108-10-1		
7.476	7.476 (1.178)	58	264878	20.0000	20.438	70.00- 130.00	100.00
7.476	7.476 (1.178)	43	668395			0.00- 30.00	252.34
7.483	7.483 (1.180)	85	92487			0.00- 30.00	34.92
147 Toluene					CAS #: 108-88-3		
7.612	7.612 (1.200)	91	814518	20.0000	20.688	70.00- 130.00	100.00
7.612	7.612 (1.200)	92	468418			0.00- 30.00	57.51
150 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
7.848	7.848 (0.894)	75	408558	20.0000	18.784	70.00- 130.00	100.00
7.848	7.848 (0.894)	77	124144			0.00- 30.00	30.39
7.841	7.841 (0.893)	39	182175			0.00- 30.00	44.59

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

  155 1,1,2-Trichloroethane                        CAS #: 79-00-5
  7.998   7.998 (0.911)    97    279881 20.0000   20.225  70.00- 130.00   100.00
  7.998   7.998 (0.911)    99    173317                    0.00-  30.00    61.93
  7.998   7.998 (0.911)    83    240193                    0.00-  30.00    85.82
-------------------------------------------------------------------------------
  156 Tetrachloroethene                            CAS #: 127-18-4
  8.049   8.049 (0.917)   166    404303 20.0000   20.319  70.00- 130.00   100.00
  8.041   8.041 (0.916)   129    282154                    0.00-  30.00    69.79
  8.049   8.049 (0.917)   131    261068                    0.00-  30.00    64.57
-------------------------------------------------------------------------------
  158 2-Hexanone                                   CAS #: 591-78-6
  8.163   8.163 (0.930)    58    365103 20.0000   18.857  70.00- 130.00   100.00
  8.163   8.163 (0.930)    43    705690                    0.00-  30.00   193.29
  8.170   8.170 (0.931)   100     61400                    0.00-  30.00    16.82
-------------------------------------------------------------------------------
  160 Dibromochloromethane                         CAS #: 124-48-1
  8.314   8.314 (0.947)   129    535689 20.0000   20.458  70.00- 130.00   100.00
  8.314   8.314 (0.947)   127    417931                    0.00-  30.00    78.02
-------------------------------------------------------------------------------
  161 1,2-Dibromoethane (EDB)                      CAS #: 106-93-4
  8.428   8.428 (0.960)   107    413111 20.0000   19.993  70.00- 130.00   100.00
  8.428   8.428 (0.960)   109    384561                    0.00-  30.00    93.09
-------------------------------------------------------------------------------
  165 Chlorobenzene                                CAS #: 108-90-7
  8.801   8.801 (1.002)   112    650607 20.0000   20.523  70.00- 130.00   100.00
  8.801   8.801 (1.002)   114    210375                    0.00-  30.00    32.34
  8.801   8.801 (1.002)    77    443694                    0.00-  30.00    68.20
-------------------------------------------------------------------------------
  167 Ethyl Benzene                                CAS #: 100-41-4
  8.858   8.858 (1.009)   106    339417 20.0000   20.026  70.00- 130.00   100.00
  8.858   8.858 (1.009)    91   1176501                    0.00-  30.00   346.62
-------------------------------------------------------------------------------
  169 m,p-Xylene                                   CAS #: 108-38-3
  8.951   8.951 (1.020)   106    421725 20.0000   20.512  70.00- 130.00   100.00
  8.951   8.951 (1.020)    91    946003                    0.00-  30.00   224.32
-------------------------------------------------------------------------------
  171 o-Xylene                                     CAS #: 95-47-6
  9.295   9.295 (1.059)   106    413768 20.0000   21.503  70.00- 130.00   100.00
  9.295   9.295 (1.059)    91    984645                    0.00-  30.00   237.97
-------------------------------------------------------------------------------
  172 Styrene                                      CAS #: 100-42-5
  9.309   9.309 (1.060)   104    694006 20.0000   20.790  70.00- 130.00   100.00
  9.309   9.309 (1.060)    78    380484                    0.00-  30.00    54.82
-------------------------------------------------------------------------------
  174 Bromoform                                    CAS #: 75-25-2
  9.510   9.510 (1.083)   173    616464 20.0000   19.876  70.00- 130.00   100.00
```

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
174 Bromoform (continued)							
9.510	9.510 (1.083)	171	312792			0.00- 30.00	50.74
175 Cumene					CAS #: 98-82-8		
9.574	9.574 (1.091)	105	1390026	20.0000	20.613	70.00- 130.00	100.00
9.574	9.574 (1.091)	120	329405			0.00- 30.00	23.70
9.574	9.574 (1.091)	51	164349			0.00- 30.00	11.82
181 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
9.882	9.882 (1.126)	83	700874	20.0000	20.370	70.00- 130.00	100.00
9.882	9.882 (1.126)	85	447259			0.00- 30.00	63.81
182 Propylbenzene					CAS #: 103-65-1		
9.918	9.918 (1.130)	91	1704059	20.0000	20.561	70.00- 130.00	100.00
9.918	9.918 (1.130)	120	349964			0.00- 30.00	20.54
9.918	9.918 (1.130)	105	54785			0.00- 30.00	3.21
188 4-Ethyltoluene					CAS #: 622-96-8		
10.011	10.011 (1.140)	120	390235	20.0000	21.924	70.00- 130.00	100.00
10.011	10.011 (1.140)	105	1421006			0.00- 30.00	364.14
190 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
10.061	10.061 (1.146)	120	452648	20.0000	19.908	70.00- 130.00	100.00
10.061	10.061 (1.146)	105	1088468			0.00- 30.00	240.47
196 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
10.384	10.384 (1.183)	120	428371	20.0000	20.906	70.00- 130.00	100.00
10.384	10.384 (1.183)	105	1044924			0.00- 30.00	243.93
208 1,3-Dichlorobenzene					CAS #: 541-73-1		
10.670	10.670 (1.215)	146	730620	20.0000	20.723	70.00- 130.00	100.00
10.670	10.670 (1.215)	148	477659			0.00- 30.00	65.38
10.670	10.670 (1.215)	111	298754			0.00- 30.00	40.89
209 1,4-Dichlorobenzene					CAS #: 106-46-7		
10.749	10.749 (1.224)	146	719237	20.0000	20.689	70.00- 130.00	100.00
10.749	10.749 (1.224)	148	455332			0.00- 30.00	63.31
10.749	10.749 (1.224)	111	286643			0.00- 30.00	39.85
212 alpha-Chlorotoluene					CAS #: 100-44-7		
10.864	10.864 (1.237)	91	685144	20.0000	19.689	70.00- 130.00	100.00
10.864	10.864 (1.237)	126	125135			0.00- 30.00	18.26
214 1,2-Dichlorobenzene					CAS #: 95-50-1		
11.071	11.071 (1.261)	146	678615	20.0000	21.640	70.00- 130.00	100.00
11.071	11.071 (1.261)	148	420932			0.00- 30.00	62.03

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
214 1,2-Dichlorobenzene (continued)							
11.071	11.071 (1.261)	111	286603			0.00- 30.00	42.23
226 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
12.468	12.468 (1.420)	180	366344	20.0000	18.454	70.00- 130.00	100.00
12.468	12.468 (1.420)	182	349064			0.00- 30.00	95.28
227 Hexachlorobutadiene					CAS #: 87-68-3		
12.561	12.561 (1.431)	225	414624	20.0000	17.728	70.00- 130.00	100.00
12.561	12.561 (1.431)	223	267383			0.00- 30.00	64.49
228 Naphthalene					CAS #: 91-20-3		
12.726	12.726 (1.450)	128	122070	2.00000	1.742	70.00- 130.00	100.00(a)
12.726	12.726 (1.450)	127	16970			0.00- 30.00	13.90

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: msdp.i
Lab File ID: p121705.d
Lab Smp Id: ICAL Level #5
Analysis Type: VOA
Quant Type: ISTD
Operator: sn
Method File: /chem/msdp.i/17dec14.b/p14q1217a.m
Misc Info: 20ppbv (200ppbv)

Calibration Date: 17-DEC-2014
Calibration Time: 20:25

Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
98 Bromochloromethan	131003	78602	183404	120958	-7.67
123 1,4-Difluorobenze	594926	356956	832896	601295	1.07
163 Chlorobenzene-d5	646102	387661	904543	660355	2.21

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
98 Bromochloromethan	5.45	5.12	5.78	5.46	0.13
123 1,4-Difluorobenze	6.34	6.01	6.67	6.34	0.00
163 Chlorobenzene-d5	8.78	8.45	9.11	8.78	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.

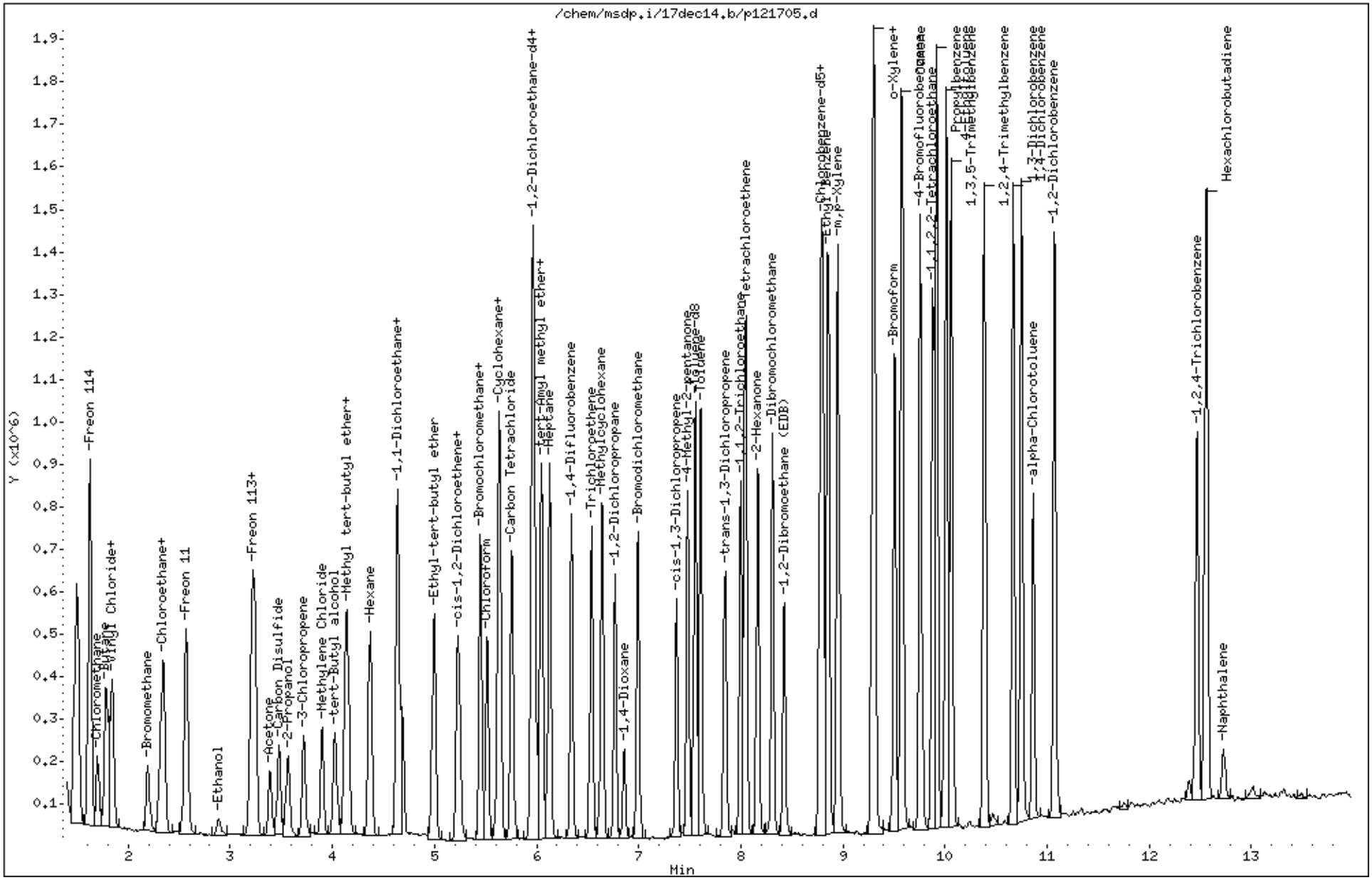
Data File: /chem/msdp.i/17dec14.b/p121705.d
Date : 17-DEC-2014 20:00
Client ID:
Sample Info: 20ml #2687-162

Instrument: msdp.i

Operator: sn

Column phase: RTX-624

Column diameter: 0.25



Eurofins Air Toxics Inc.

EPA TO-15/MODIFIED TO14A

Data file : /chem/msdp.i/17dec14.b/p121706.d
Lab Smp Id: ICAL Level #6
Inj Date : 17-DEC-2014 20:25
Operator : sn Inst ID: msdp.i
Smp Info : 50ml #2687-162
Misc Info : 50ppbv (200ppbv)
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msdp.i/17dec14.b/p14q1217a.m
Meth Date : 18-Dec-2014 12:02 jscarbro Quant Type: ISTD
Cal Date : 17-DEC-2014 20:25 Cal File: p121706.d
Als bottle: 13 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT12curve.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
* 98 Bromochloromethane						CAS #: 74-97-5	
5.448	5.448 (1.000)	130	131003	25.0000		80.00- 120.00	100.00
5.448	5.448 (1.000)	128	97280			44.26- 104.26	74.26
5.448	5.448 (1.000)	49	253095			163.20- 223.20	193.20
* 123 1,4-Difluorobenzene						CAS #: 540-36-3	
6.344	6.344 (1.000)	114	594926	25.0000		80.00- 120.00	100.00
6.344	6.344 (1.000)	88	100180			0.00- 46.84	16.84
* 163 Chlorobenzene-d5						CAS #: 3114-55-4	
8.779	8.779 (1.000)	117	646102	25.0000		80.00- 120.00	100.00
8.779	8.779 (1.000)	82	398799			31.72- 91.72	61.72
$ 117 1,2-Dichloroethane-d4						CAS #: 17060-07-0	
5.986	5.986 (1.099)	65	310182	25.0000	25.842	80.00- 120.00	100.00
5.986	5.986 (1.099)	67	164349			22.98- 82.98	52.98

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
$ 146 Toluene-d8					CAS #: 2037-26-5		
7.554	7.554 (1.191)	98	721231	25.0000	25.706	80.00- 120.00	100.00
7.554	7.554 (1.191)	70	82077			0.00- 41.38	11.38
7.554	7.554 (1.191)	100	470254			35.20- 95.20	65.20
$ 177 4-Bromofluorobenzene					CAS #: 460-00-4		
9.760	9.760 (1.112)	174	478362	25.0000	25.383	80.00- 120.00	100.00
9.760	9.760 (1.112)	95	536151			82.08- 142.08	112.08
9.760	9.760 (1.112)	176	460339			66.23- 126.23	96.23
9 Propylene					CAS #: 115-07-1		
1.473	1.473 (0.270)	41	521750	50.0000	48.302	80.00- 120.00	100.00
1.473	1.473 (0.270)	42	351581			37.38- 97.38	67.38
1.473	1.473 (0.270)	39	357703			38.56- 98.56	68.56
11 Freon 12					CAS #: 75-71-8		
1.509	1.509 (0.277)	85	1727918	50.0000	49.322	80.00- 120.00	100.00
1.509	1.509 (0.277)	87	561822			2.51- 62.51	32.51
15 Freon 114					CAS #: 76-14-2		
1.630	1.630 (0.299)	135	1092539	50.0000	46.821	80.00- 120.00	100.00
1.630	1.630 (0.299)	137	340387			1.16- 61.16	31.16
17 Chloromethane					CAS #: 74-87-3		
1.702	1.702 (0.312)	50	502067	50.0000	44.589	80.00- 120.00	100.00
1.702	1.702 (0.312)	52	159627			1.79- 61.79	31.79
23 Butane					CAS #: 106-97-8		
1.781	1.781 (0.327)	58	120104	50.0000	49.215	80.00- 120.00	100.00
1.781	1.781 (0.327)	43	837976			667.71- 727.71	697.71
25 Vinyl Chloride					CAS #: 75-01-4		
1.809	1.809 (0.332)	62	580558	50.0000	47.609	80.00- 120.00	100.00
1.809	1.809 (0.332)	64	173473			0.00- 59.88	29.88
26 1,3-Butadiene					CAS #: 106-99-0		
1.838	1.838 (0.337)	54	577701	50.0000	53.896	80.00- 120.00	100.00
1.838	1.838 (0.337)	39	514228			59.01- 119.01	89.01
29 Bromomethane					CAS #: 74-83-9		
2.189	2.189 (0.402)	94	361736	50.0000	47.524	80.00- 120.00	100.00
2.196	2.196 (0.403)	96	337852			63.40- 123.40	93.40
30 Chloroethane					CAS #: 75-00-3		
2.304	2.304 (0.423)	64	288017	50.0000	51.999	80.00- 120.00	100.00
2.304	2.304 (0.423)	66	84636			0.00- 59.39	29.39

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
30 Chloroethane (continued)							
2.304	2.304 (0.423)	49	83203			0.00- 58.89	28.89
31 Isopentane					CAS #: 78-78-4		
2.340	2.340 (0.429)	43	659176	50.0000	48.186	80.00- 120.00	100.00
2.340	2.340 (0.429)	57	470828			41.43- 101.43	71.43
35 Freon 11					CAS #: 75-69-4		
2.569	2.569 (0.471)	101	1631471	50.0000	47.252	80.00- 120.00	100.00
2.569	2.569 (0.471)	103	1069861			35.58- 95.58	65.58
42 Ethanol					CAS #: 64-17-5		
2.891	2.891 (0.531)	45	181543	50.0000	42.661	80.00- 120.00	100.00
2.891	2.891 (0.531)	43	36433			0.00- 50.07	20.07
2.891	2.891 (0.531)	46	73225			10.33- 70.33	40.33
49 Freon 113					CAS #: 76-13-1		
3.213	3.213 (0.590)	151	687136	50.0000	48.768	80.00- 120.00	100.00
3.221	3.221 (0.591)	153	447719			35.16- 95.16	65.16
3.213	3.213 (0.590)	101	833634			91.32- 151.32	121.32
50 1,1-Dichloroethene					CAS #: 75-35-4		
3.242	3.242 (0.595)	98	239630	50.0000	53.930	80.00- 120.00	100.00
3.242	3.242 (0.595)	96	376336			127.05- 187.05	157.05
3.242	3.242 (0.595)	61	846377			323.20- 383.20	353.20
52 Acetone					CAS #: 67-64-1		
3.385	3.385 (0.621)	58	256536	50.0000	49.984	80.00- 120.00	100.00
3.385	3.385 (0.621)	43	767820			269.30- 329.30	299.30
56 Carbon Disulfide					CAS #: 75-15-0		
3.478	3.478 (0.638)	76	1084615	50.0000	48.734	80.00- 120.00	100.00
57 2-Propanol					CAS #: 67-63-0		
3.564	3.564 (0.654)	45	898133	50.0000	49.875	80.00- 120.00	100.00
3.564	3.564 (0.654)	43	178864			0.00- 49.92	19.92
3.564	3.564 (0.654)	59	36328			0.00- 34.04	4.04
58 3-Chloropropene					CAS #: 107-05-1		
3.722	3.722 (0.683)	76	191063	50.0000	51.000	80.00- 120.00	100.00
3.722	3.722 (0.683)	41	641427			305.71- 365.71	335.71
66 Methylene Chloride					CAS #: 75-09-2		
3.901	3.901 (0.716)	49	600913	50.0000	50.896	80.00- 120.00	100.00
3.901	3.901 (0.716)	84	346178			27.61- 87.61	57.61
3.901	3.901 (0.716)	51	179786			0.00- 59.92	29.92

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
71 tert-Butyl alcohol					CAS #: 75-65-0		
4.030	4.030 (0.740)	59	1046076	50.0000	50.342	80.00- 120.00	100.00
4.030	4.030 (0.740)	41	225718			0.00- 51.58	21.58
4.030	4.030 (0.740)	57	116106			0.00- 41.10	11.10
72 Methyl tert-butyl ether					CAS #: 1634-04-4		
4.130	4.130 (0.758)	73	1237269	50.0000	50.421	80.00- 120.00	100.00
4.130	4.130 (0.758)	57	325543			0.00- 56.31	26.31
4.130	4.130 (0.758)	41	298667			0.00- 54.14	24.14
73 trans-1,2-Dichloroethene					CAS #: 156-60-5		
4.152	4.152 (0.762)	98	223222	50.0000	51.195	80.00- 120.00	100.00
4.152	4.152 (0.762)	61	712440			289.16- 349.16	319.16
4.152	4.152 (0.762)	96	368193			134.94- 194.94	164.94
78 Hexane					CAS #: 110-54-3		
4.367	4.367 (0.801)	57	794220	50.0000	48.503	80.00- 120.00	100.00
4.367	4.367 (0.801)	43	486890			31.30- 91.30	61.30
4.367	4.367 (0.801)	86	105910			0.00- 43.34	13.34
82 1,1-Dichloroethane					CAS #: 75-34-3		
4.639	4.639 (0.851)	63	935598	50.0000	49.218	80.00- 120.00	100.00
4.639	4.639 (0.851)	65	274630			0.00- 59.35	29.35
83 Isopropyl ether					CAS #: 108-20-3		
4.639	4.639 (0.851)	45	1498592	50.0000	49.525	80.00- 120.00	100.00
4.639	4.639 (0.851)	87	323468			0.00- 51.58	21.58
4.639	4.639 (0.851)	59	166825			0.00- 41.13	11.13
86 Vinyl Acetate					CAS #: 108-05-4		
4.689	4.689 (0.861)	86	112036	50.0000	56.094	80.00- 120.00	100.00
4.689	4.689 (0.861)	43	2162049			1899.78-1959.78	1929.78
88 Ethyl-tert-butyl ether					CAS #: 637-92-3		
4.997	4.997 (0.917)	59	1480050	50.0000	51.106	80.00- 120.00	100.00
4.997	4.997 (0.917)	87	484099			2.71- 62.71	32.71
4.997	4.997 (0.917)	41	264202			0.00- 47.85	17.85
91 cis-1,2-Dichloroethene					CAS #: 156-59-2		
5.219	5.219 (0.958)	98	304474	50.0000	54.105	80.00- 120.00	100.00
5.219	5.219 (0.958)	96	469907			124.33- 184.33	154.33
5.219	5.219 (0.958)	61	821389			239.77- 299.77	269.77
92 2-Butanone					CAS #: 78-93-3		
5.248	5.248 (0.963)	72	235617	50.0000	53.502	80.00- 120.00	100.00
5.248	5.248 (0.963)	43	1157881			461.43- 521.43	491.43

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

   92 2-Butanone (continued)
  5.248   5.248 (0.963)    57     90338                     8.34-  68.34    38.34
-------------------------------------------------------------------------------
   99 Tetrahydrofuran                                CAS #: 109-99-9
  5.448   5.448 (1.000)    42    639947 50.0000   46.589  80.00- 120.00   100.00
  5.448   5.448 (1.000)    71    192658                     0.11-  60.11    30.11
  5.448   5.448 (1.000)    72    203473                     1.80-  61.80    31.80
-------------------------------------------------------------------------------
  100 Chloroform                                     CAS #: 67-66-3
  5.513   5.513 (1.012)    83   1073333 50.0000   49.225  80.00- 120.00   100.00
  5.513   5.513 (1.012)    85    685635                    33.88-  93.88    63.88
-------------------------------------------------------------------------------
  102 Cyclohexane                                    CAS #: 110-82-7
  5.627   5.627 (1.033)    84    558371 50.0000   51.239  80.00- 120.00   100.00
  5.627   5.627 (1.033)    56    893448                   130.01- 190.01   160.01
  5.627   5.627 (1.033)    41    455393                    51.56- 111.56    81.56
-------------------------------------------------------------------------------
  103 1,1,1-Trichloroethane                          CAS #: 71-55-6
  5.642   5.642 (1.035)    97   1151374 50.0000   47.360  80.00- 120.00   100.00
  5.642   5.642 (1.035)    99    734650                    33.81-  93.81    63.81
-------------------------------------------------------------------------------
  106 Carbon Tetrachloride                           CAS #: 56-23-5
  5.756   5.756 (1.057)   119   1203892 50.0000   47.988  80.00- 120.00   100.00
  5.756   5.756 (1.057)   117   1301314                    78.09- 138.09   108.09
-------------------------------------------------------------------------------
  113 2,2,4-Trimethylpentane                         CAS #: 540-84-1
  5.957   5.957 (1.093)    57   2492434 50.0000   50.236  80.00- 120.00   100.00
  5.957   5.957 (1.093)    56    822577                     3.00-  63.00    33.00
  5.957   5.957 (1.093)    41    617858                     0.00-  54.79    24.79
-------------------------------------------------------------------------------
  116 Benzene                                        CAS #: 71-43-2
  5.971   5.971 (0.941)    78   1378597 50.0000   51.481  80.00- 120.00   100.00
  5.971   5.971 (0.941)    77    328992                     0.00-  53.86    23.86
-------------------------------------------------------------------------------
  119 tert-Amyl methyl ether                         CAS #: 994-05-8
  6.043   6.043 (0.953)    87    320357 50.0000   53.782  80.00- 120.00   100.00
  6.043   6.043 (0.953)    73   1263027                   364.26- 424.26   394.26
  6.043   6.043 (0.953)    55    418543                   100.65- 160.65   130.65
-------------------------------------------------------------------------------
  120 1,2-Dichloroethane                             CAS #: 107-06-2
  6.057   6.057 (0.955)    62    883140 50.0000   50.171  80.00- 120.00   100.00
  6.057   6.057 (0.955)    64    275045                     1.14-  61.14    31.14
-------------------------------------------------------------------------------
  121 Heptane                                        CAS #: 142-82-5
  6.129   6.129 (0.966)    71    494642 50.0000   59.140  80.00- 120.00   100.00
  6.129   6.129 (0.966)    43   1108140                   194.03- 254.03   224.03
```

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
121 Heptane (continued)							
6.129	6.129 (0.966)	57	655129			102.45- 162.45	132.45
125 Trichloroethene					CAS #: 79-01-6		
6.537	6.537 (1.030)	95	647236	50.0000	51.535	80.00- 120.00	100.00
6.537	6.537 (1.030)	130	614819			64.99- 124.99	94.99
6.537	6.537 (1.030)	97	429120			36.30- 96.30	66.30
127 Methylcyclohexane					CAS #: 108-87-2		
6.645	6.645 (1.047)	83	775770	50.0000	53.778	80.00- 120.00	100.00
6.645	6.645 (1.047)	98	350400			15.17- 75.17	45.17
6.637	6.637 (1.046)	55	869118			82.03- 142.03	112.03
132 1,2-Dichloropropane					CAS #: 78-87-5		
6.766	6.766 (1.067)	63	666746	50.0000	50.486	80.00- 120.00	100.00
6.766	6.766 (1.067)	62	471367			40.70- 100.70	70.70
6.766	6.766 (1.067)	41	359273			23.88- 83.88	53.88
136 1,4-Dioxane					CAS #: 123-91-1		
6.859	6.859 (1.081)	88	351205	50.0000	51.277	80.00- 120.00	100.00
6.859	6.859 (1.081)	58	318332			60.64- 120.64	90.64
6.852	6.852 (1.080)	57	113324			2.27- 62.27	32.27
138 Bromodichloromethane					CAS #: 75-27-4		
6.996	6.996 (1.103)	83	1284777	50.0000	50.586	80.00- 120.00	100.00
6.996	6.996 (1.103)	85	820897			33.89- 93.89	63.89
144 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
7.368	7.368 (1.161)	75	929823	50.0000	50.371	80.00- 120.00	100.00
7.368	7.368 (1.161)	77	296974			1.94- 61.94	31.94
7.368	7.368 (1.161)	39	490223			22.72- 82.72	52.72
145 4-Methyl-2-pentanone					CAS #: 108-10-1		
7.483	7.483 (1.180)	58	670035	50.0000	52.731	80.00- 120.00	100.00
7.483	7.483 (1.180)	43	1692331			222.57- 282.57	252.57
7.483	7.483 (1.180)	85	230732			4.44- 64.44	34.44
147 Toluene					CAS #: 108-88-3		
7.612	7.612 (1.200)	91	2059020	50.0000	52.852	80.00- 120.00	100.00
7.612	7.612 (1.200)	92	1188631			27.73- 87.73	57.73
150 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
7.848	7.848 (0.894)	75	1060693	50.0000	50.369	80.00- 120.00	100.00
7.848	7.848 (0.894)	77	326017			0.74- 60.74	30.74
7.848	7.848 (0.894)	39	493544			16.53- 76.53	46.53

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

  155 1,1,2-Trichloroethane                        CAS #: 79-00-5
  7.998   7.998 (0.911)    97    674962 50.0000   49.973  80.00- 120.00   100.00
  7.998   7.998 (0.911)    99    426918                   33.25-  93.25    63.25
  7.998   7.998 (0.911)    83    592053                   57.72- 117.72    87.72
-------------------------------------------------------------------------------
  156 Tetrachloroethene                            CAS #: 127-18-4
  8.048   8.048 (0.917)   166   1000184 50.0000   51.454  80.00- 120.00   100.00
  8.048   8.048 (0.917)   129    681083                   38.10-  98.10    68.10
  8.048   8.048 (0.917)   131    666648                   36.65-  96.65    66.65
-------------------------------------------------------------------------------
  158 2-Hexanone                                   CAS #: 591-78-6
  8.163   8.163 (0.930)    58    991216 50.0000   55.120  80.00- 120.00   100.00
  8.163   8.163 (0.930)    43   1853697                  157.01- 217.01   187.01
  8.170   8.170 (0.931)   100    158712                    0.00-  46.01    16.01
-------------------------------------------------------------------------------
  160 Dibromochloromethane                         CAS #: 124-48-1
  8.314   8.314 (0.947)   129   1305834 50.0000   51.824  80.00- 120.00   100.00
  8.314   8.314 (0.947)   127   1008138                   47.20- 107.20    77.20
-------------------------------------------------------------------------------
  161 1,2-Dibromoethane (EDB)                      CAS #: 106-93-4
  8.428   8.428 (0.960)   107   1032743 50.0000   51.476  80.00- 120.00   100.00
  8.428   8.428 (0.960)   109    956634                   62.63- 122.63    92.63
-------------------------------------------------------------------------------
  165 Chlorobenzene                                CAS #: 108-90-7
  8.801   8.801 (1.002)   112   1605638 50.0000   52.176  80.00- 120.00   100.00
  8.808   8.808 (1.003)   114    512469                    1.92-  61.92    31.92
  8.801   8.801 (1.002)    77   1071760                   36.75-  96.75    66.75
-------------------------------------------------------------------------------
  167 Ethyl Benzene                                CAS #: 100-41-4
  8.858   8.858 (1.009)   106    852086 50.0000   51.890  80.00- 120.00   100.00
  8.858   8.858 (1.009)    91   2914536                  312.05- 372.05   342.05
-------------------------------------------------------------------------------
  169 m,p-Xylene                                   CAS #: 108-38-3
  8.951   8.951 (1.020)   106   1058510 50.0000   54.021  80.00- 120.00   100.00
  8.951   8.951 (1.020)    91   2349368                  191.95- 251.95   221.95
-------------------------------------------------------------------------------
  171 o-Xylene                                     CAS #: 95-47-6
  9.295   9.295 (1.059)   106   1010985 50.0000   55.760  80.00- 120.00   100.00
  9.295   9.295 (1.059)    91   2363722                  203.80- 263.80   233.80
-------------------------------------------------------------------------------
  172 Styrene                                      CAS #: 100-42-5
  9.309   9.309 (1.060)   104   1716213 50.0000   53.922  80.00- 120.00   100.00
  9.309   9.309 (1.060)    78    961841                   26.04-  86.04    56.04
-------------------------------------------------------------------------------
  174 Bromoform                                    CAS #: 75-25-2
  9.510   9.510 (1.083)   173   1508112 50.0000   49.631  80.00- 120.00   100.00
```

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

  174 Bromoform (continued)
  9.510   9.510 (1.083)   171    759702                    20.37-  80.37    50.37
-------------------------------------------------------------------------------
  175 Cumene                                        CAS #: 98-82-8
  9.581   9.581 (1.091)   105   3344607 50.0000   51.281  80.00- 120.00   100.00
  9.581   9.581 (1.091)   120    783081                     0.00-  53.41    23.41
  9.574   9.574 (1.091)    51    377353                     0.00-  41.28    11.28
-------------------------------------------------------------------------------
  181 1,1,2,2-Tetrachloroethane                     CAS #: 79-34-5
  9.882   9.882 (1.126)    83   1648747 50.0000   48.232  80.00- 120.00   100.00
  9.882   9.882 (1.126)    85   1051264                    33.76-  93.76    63.76
-------------------------------------------------------------------------------
  182 Propylbenzene                                 CAS #: 103-65-1
  9.918   9.918 (1.130)    91   4187034 50.0000   52.497  80.00- 120.00   100.00
  9.918   9.918 (1.130)   120    843492                     0.00-  50.15    20.15
  9.918   9.918 (1.130)   105    148473                     0.00-  33.55     3.55
-------------------------------------------------------------------------------
  188 4-Ethyltoluene                                CAS #: 622-96-8
 10.011  10.011 (1.140)   120    938881 50.0000   54.443  80.00- 120.00   100.00
 10.011  10.011 (1.140)   105   3488996                   341.61- 401.61   371.61
-------------------------------------------------------------------------------
  190 1,3,5-Trimethylbenzene                        CAS #: 108-67-8
 10.061  10.061 (1.146)   120   1125390 50.0000   51.628  80.00- 120.00   100.00
 10.061  10.061 (1.146)   105   2645010                   205.03- 265.03   235.03
-------------------------------------------------------------------------------
  196 1,2,4-Trimethylbenzene                        CAS #: 95-63-6
 10.384  10.384 (1.183)   120   1086190 50.0000   55.543  80.00- 120.00   100.00
 10.384  10.384 (1.183)   105   2602234                   209.57- 269.57   239.57
-------------------------------------------------------------------------------
  208 1,3-Dichlorobenzene                           CAS #: 541-73-1
 10.670  10.670 (1.215)   146   1730308 50.0000   49.990  80.00- 120.00   100.00
 10.670  10.670 (1.215)   148   1099714                    33.56-  93.56    63.56
 10.670  10.670 (1.215)   111    718820                    11.54-  71.54    41.54
-------------------------------------------------------------------------------
  209 1,4-Dichlorobenzene                           CAS #: 106-46-7
 10.749  10.749 (1.224)   146   1732305 50.0000   51.219  80.00- 120.00   100.00
 10.749  10.749 (1.224)   148   1099544                    33.47-  93.47    63.47
 10.749  10.749 (1.224)   111    716161                    11.34-  71.34    41.34
-------------------------------------------------------------------------------
  212 alpha-Chlorotoluene                           CAS #: 100-44-7
 10.864  10.864 (1.237)    91   1639575 50.0000   48.054  80.00- 120.00   100.00
 10.864  10.864 (1.237)   126    310799                     0.00-  48.96    18.96
-------------------------------------------------------------------------------
  214 1,2-Dichlorobenzene                           CAS #: 95-50-1
 11.071  11.071 (1.261)   146   1567252 50.0000   51.229  80.00- 120.00   100.00
 11.071  11.071 (1.261)   148   1010573                    34.48-  94.48    64.48
```

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
214 1,2-Dichlorobenzene (continued)							
11.071	11.071 (1.261)	111	697363			14.50- 74.50	44.50
226 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
12.468	12.468 (1.420)	180	1005054	50.0000	54.744	80.00- 120.00	100.00
12.468	12.468 (1.420)	182	958891			65.41- 125.41	95.41
227 Hexachlorobutadiene					CAS #: 87-68-3		
12.561	12.561 (1.431)	225	1175276	50.0000	55.379	80.00- 120.00	100.00
12.561	12.561 (1.431)	223	763459			34.96- 94.96	64.96
228 Naphthalene					CAS #: 91-20-3		
12.726	12.726 (1.450)	128	343049	5.00000	5.228	80.00- 120.00	100.00
12.726	12.726 (1.450)	127	48429			0.00- 44.12	14.12

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdp.i
Lab File ID: p121706.d
Lab Smp Id: ICAL Level #6
Analysis Type: VOA
Quant Type: ISTD
Operator: sn
Method File: /chem/msdp.i/17dec14.b/p14q1217a.m
Misc Info: 50ppbv (200ppbv)

Calibration Date: 17-DEC-2014
Calibration Time: 20:25

Level: LOW
Sample Type: AIR

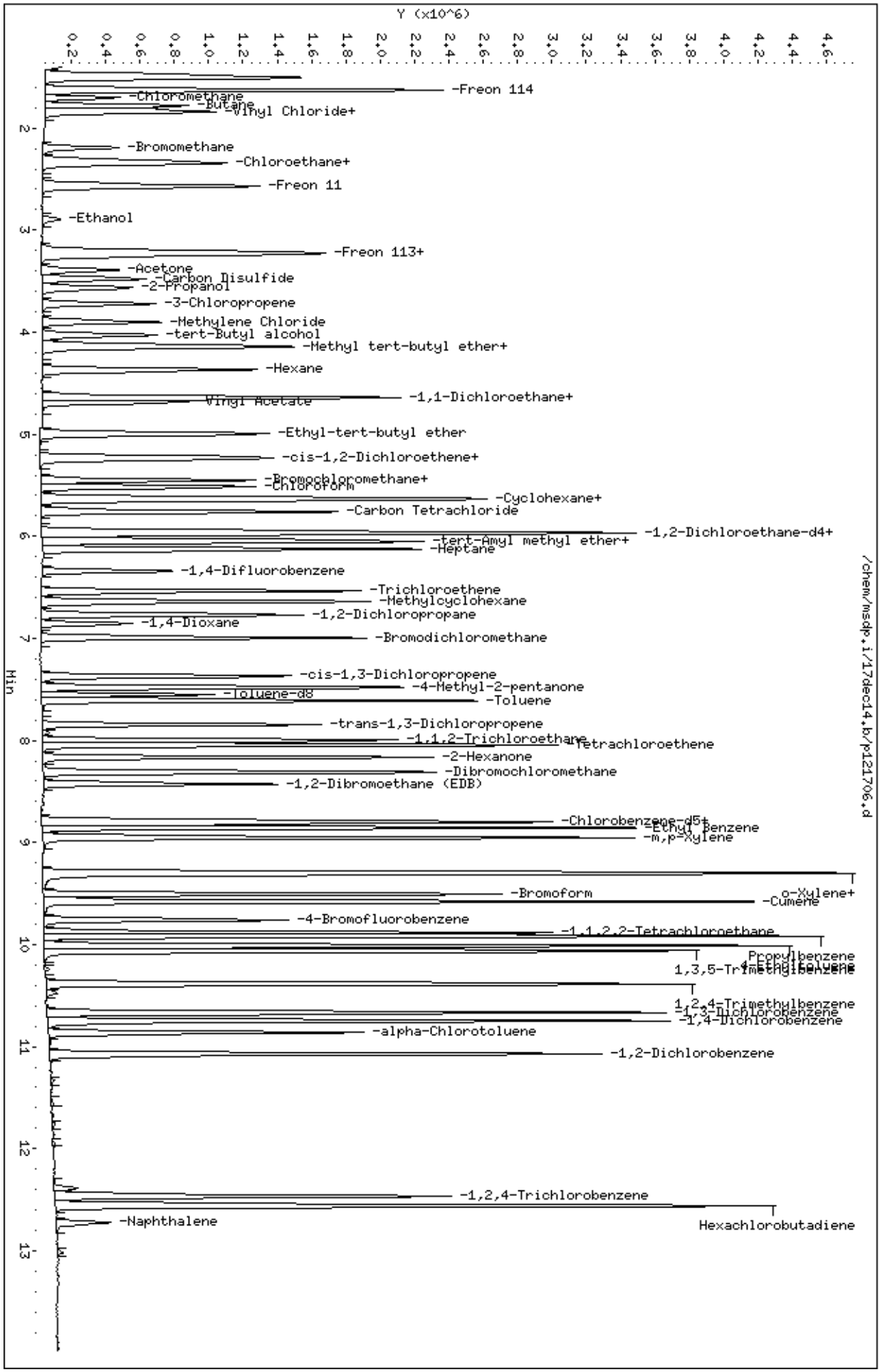
COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
98 Bromochloromethan	131003	78602	183404	131003	0.00
123 1,4-Difluorobenze	594926	356956	832896	594926	0.00
163 Chlorobenzene-d5	646102	387661	904543	646102	0.00

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
98 Bromochloromethan	5.45	5.12	5.78	5.45	0.00
123 1,4-Difluorobenze	6.34	6.01	6.67	6.34	0.00
163 Chlorobenzene-d5	8.78	8.45	9.11	8.78	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/msdp.i/17dec14.b/p121706.d
Date : 17-DEC-2014 20:25
Client ID:
Sample Info: 50ml #2687-162
Column phase: RTX-624

Instrument: msdp.i
Operator: sn
Column diameter: 0.25



Eurofins Air Toxics Inc.

EPA TO-15/MODIFIED TO14A

Data file : /chem/msdp.i/17dec14.b/p121707.d
Lab Smp Id: ICAL Level #7
Inj Date : 17-DEC-2014 20:50
Operator : sn Inst ID: msdp.i
Smp Info : 100ml #2687-162
Misc Info : 100ppbv (200ppbv)
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msdp.i/17dec14.b/p14q1217a.m
Meth Date : 18-Dec-2014 12:02 jscarbro Quant Type: ISTD
Cal Date : 17-DEC-2014 20:50 Cal File: p121707.d
Als bottle: 13 Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT12curve.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
* 98 Bromochloromethane						CAS #: 74-97-5	
5.455	5.455 (1.000)	130	129756	25.0000		70.00- 130.00	100.00
5.448	5.448 (1.000)	128	101924			0.00- 30.00	78.55
5.448	5.448 (1.000)	49	266162			0.00- 30.00	205.13
* 123 1,4-Difluorobenzene						CAS #: 540-36-3	
6.344	6.344 (1.000)	114	617998	25.0000		70.00- 130.00	100.00
6.344	6.344 (1.000)	88	104969			0.00- 30.00	16.99
* 163 Chlorobenzene-d5						CAS #: 3114-55-4	
8.779	8.779 (1.000)	117	626759	25.0000		70.00- 130.00	100.00
8.779	8.779 (1.000)	82	396003			0.00- 30.00	63.18
$ 117 1,2-Dichloroethane-d4						CAS #: 17060-07-0	
5.985	5.985 (1.097)	65	314168	25.0000	26.128	70.00- 130.00	100.00
5.985	5.985 (1.097)	67	181418			0.00- 30.00	57.75

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
$ 146 Toluene-d8						CAS #: 2037-26-5	
7.554	7.554 (1.191)	98	721242	25.0000	24.797	70.00- 130.00	100.00
7.554	7.554 (1.191)	70	86997			0.00- 30.00	12.06
7.554	7.554 (1.191)	100	467868			0.00- 30.00	64.87
$ 177 4-Bromofluorobenzene						CAS #: 460-00-4	
9.760	9.760 (1.112)	174	470684	25.0000	25.594	70.00- 130.00	100.00
9.753	9.753 (1.111)	95	536770			0.00- 30.00	114.04
9.760	9.760 (1.112)	176	457033			0.00- 30.00	97.10
9 Propylene						CAS #: 115-07-1	
1.473	1.473 (0.270)	41	1055353	100.000	98.976	70.00- 130.00	100.00
1.473	1.473 (0.270)	42	706560			0.00- 30.00	66.95
1.473	1.473 (0.270)	39	730337			0.00- 30.00	69.20
11 Freon 12						CAS #: 75-71-8	
1.508	1.508 (0.277)	85	3425544	100.000	98.973	70.00- 130.00	100.00
1.508	1.508 (0.277)	87	1084005			0.00- 30.00	31.64
15 Freon 114						CAS #: 76-14-2	
1.630	1.630 (0.299)	135	2303591	100.000	99.736	70.00- 130.00	100.00
1.630	1.630 (0.299)	137	734474			0.00- 30.00	31.88
17 Chloromethane						CAS #: 74-87-3	
1.702	1.702 (0.312)	50	925693	100.000	86.686	70.00- 130.00	100.00
1.702	1.702 (0.312)	52	297481			0.00- 30.00	32.14
23 Butane						CAS #: 106-97-8	
1.781	1.781 (0.326)	58	243989	100.000	100.70	70.00- 130.00	100.00
1.781	1.781 (0.326)	43	1684627			0.00- 30.00	690.45
25 Vinyl Chloride						CAS #: 75-01-4	
1.809	1.809 (0.332)	62	1005946	100.000	86.167	70.00- 130.00	100.00
1.809	1.809 (0.332)	64	307913			0.00- 30.00	30.61
26 1,3-Butadiene						CAS #: 106-99-0	
1.838	1.838 (0.337)	54	974092	100.000	93.289	70.00- 130.00	100.00
1.838	1.838 (0.337)	39	875648			0.00- 30.00	89.89
29 Bromomethane						CAS #: 74-83-9	
2.196	2.196 (0.403)	94	723221	100.000	96.914	70.00- 130.00	100.00
2.196	2.196 (0.403)	96	661983			0.00- 30.00	91.53
30 Chloroethane						CAS #: 75-00-3	
2.311	2.311 (0.424)	64	554162	100.000	100.76	70.00- 130.00	100.00
2.311	2.311 (0.424)	66	171599			0.00- 30.00	30.97

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
30 Chloroethane (continued)							
2.311	2.311 (0.424)	49	159069			0.00- 30.00	28.70
31 Isopentane					CAS #: 78-78-4		
2.339	2.339 (0.429)	43	1348312	100.000	99.632	70.00- 130.00	100.00
2.339	2.339 (0.429)	57	966226			0.00- 30.00	71.66
35 Freon 11					CAS #: 75-69-4		
2.569	2.569 (0.471)	101	3387955	100.000	99.252	70.00- 130.00	100.00
2.569	2.569 (0.471)	103	2184073			0.00- 30.00	64.47
42 Ethanol					CAS #: 64-17-5		
2.905	2.905 (0.533)	45	356376	100.000	87.946	70.00- 130.00	100.00
2.905	2.905 (0.533)	43	74503			0.00- 30.00	20.91
2.905	2.905 (0.533)	46	134857			0.00- 30.00	37.84
49 Freon 113					CAS #: 76-13-1		
3.213	3.213 (0.589)	151	1422528	100.000	101.54	70.00- 130.00	100.00
3.213	3.213 (0.589)	153	904364			0.00- 30.00	63.57
3.213	3.213 (0.589)	101	1686035			0.00- 30.00	118.52
50 1,1-Dichloroethene					CAS #: 75-35-4		
3.242	3.242 (0.594)	98	470302	100.000	105.42	70.00- 130.00	100.00
3.242	3.242 (0.594)	96	761979			0.00- 30.00	162.02
3.242	3.242 (0.594)	61	1700186			0.00- 30.00	361.51
52 Acetone					CAS #: 67-64-1		
3.392	3.392 (0.622)	58	523442	100.000	102.21	70.00- 130.00	100.00
3.392	3.392 (0.622)	43	1581100			0.00- 30.00	302.06
56 Carbon Disulfide					CAS #: 75-15-0		
3.478	3.478 (0.638)	76	2190309	100.000	99.520	70.00- 130.00	100.00
57 2-Propanol					CAS #: 67-63-0		
3.571	3.571 (0.655)	45	1927335	100.000	105.92	70.00- 130.00	100.00
3.571	3.571 (0.655)	43	361175			0.00- 30.00	18.74
3.571	3.571 (0.655)	59	80854			0.00- 30.00	4.20
58 3-Chloropropene					CAS #: 107-05-1		
3.722	3.722 (0.682)	76	372382	100.000	100.28	70.00- 130.00	100.00
3.722	3.722 (0.682)	41	1286487			0.00- 30.00	345.48
66 Methylene Chloride					CAS #: 75-09-2		
3.901	3.901 (0.715)	49	1194143	100.000	101.68	70.00- 130.00	100.00
3.901	3.901 (0.715)	84	667301			0.00- 30.00	55.88
3.901	3.901 (0.715)	51	370905			0.00- 30.00	31.06

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
71 tert-Butyl alcohol					CAS #: 75-65-0		
4.030	4.030 (0.739)	59	2196021	100.000	104.94	70.00- 130.00	100.00
4.030	4.030 (0.739)	41	443899			0.00- 30.00	20.21
4.030	4.030 (0.739)	57	232131			0.00- 30.00	10.57
72 Methyl tert-butyl ether					CAS #: 1634-04-4		
4.130	4.130 (0.757)	73	2544823	100.000	103.73	70.00- 130.00	100.00
4.130	4.130 (0.757)	57	656723			0.00- 30.00	25.81
4.130	4.130 (0.757)	41	589728			0.00- 30.00	23.17
73 trans-1,2-Dichloroethene					CAS #: 156-60-5		
4.152	4.152 (0.761)	98	470117	100.000	106.96	70.00- 130.00	100.00
4.152	4.152 (0.761)	61	1391469			0.00- 30.00	295.98
4.152	4.152 (0.761)	96	737881			0.00- 30.00	156.96
78 Hexane					CAS #: 110-54-3		
4.367	4.367 (0.800)	57	1581426	100.000	97.994	70.00- 130.00	100.00
4.367	4.367 (0.800)	43	970699			0.00- 30.00	61.38
4.367	4.367 (0.800)	86	187135			0.00- 30.00	11.83
82 1,1-Dichloroethane					CAS #: 75-34-3		
4.639	4.639 (0.850)	63	1866553	100.000	99.308	70.00- 130.00	100.00
4.639	4.639 (0.850)	65	543937			0.00- 30.00	29.14
83 Isopropyl ether					CAS #: 108-20-3		
4.639	4.639 (0.850)	45	2922691	100.000	98.126	70.00- 130.00	100.00
4.639	4.639 (0.850)	87	621931			0.00- 30.00	21.28
4.639	4.639 (0.850)	59	327195			0.00- 30.00	11.19
86 Vinyl Acetate					CAS #: 108-05-4		
4.689	4.689 (0.860)	86	234339	100.000	113.23	70.00- 130.00	100.00
4.689	4.689 (0.860)	43	4354254			0.00- 30.00	1858.10
88 Ethyl-tert-butyl ether					CAS #: 637-92-3		
4.997	4.997 (0.916)	59	3009019	100.000	103.63	70.00- 130.00	100.00
4.997	4.997 (0.916)	87	983467			0.00- 30.00	32.68
4.997	4.997 (0.916)	41	530096			0.00- 30.00	17.62
91 cis-1,2-Dichloroethene					CAS #: 156-59-2		
5.226	5.226 (0.958)	98	610368	100.000	107.46	70.00- 130.00	100.00
5.226	5.226 (0.958)	96	938003			0.00- 30.00	153.68
5.219	5.219 (0.957)	61	1674264			0.00- 30.00	274.30
92 2-Butanone					CAS #: 78-93-3		
5.248	5.248 (0.962)	72	473987	100.000	106.36	70.00- 130.00	100.00
5.248	5.248 (0.962)	43	2335556			0.00- 30.00	492.75

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
92 2-Butanone (continued)							
5.248	5.248 (0.962)	57	184522			0.00- 30.00	38.93
99 Tetrahydrofuran					CAS #: 109-99-9		
5.448	5.448 (0.999)	42	1282972	100.000	95.387	70.00- 130.00	100.00
5.448	5.448 (0.999)	71	387974			0.00- 30.00	30.24
5.448	5.448 (0.999)	72	425140			0.00- 30.00	33.14
100 Chloroform					CAS #: 67-66-3		
5.520	5.520 (1.012)	83	2119875	100.000	98.519	70.00- 130.00	100.00
5.520	5.520 (1.012)	85	1382320			0.00- 30.00	65.21
102 Cyclohexane					CAS #: 110-82-7		
5.627	5.627 (1.032)	84	1086189	100.000	100.50	70.00- 130.00	100.00
5.627	5.627 (1.032)	56	1739135			0.00- 30.00	160.11
5.627	5.627 (1.032)	41	874977			0.00- 30.00	80.55
103 1,1,1-Trichloroethane					CAS #: 71-55-6		
5.642	5.642 (1.034)	97	2320680	100.000	97.079	70.00- 130.00	100.00
5.642	5.642 (1.034)	99	1453174			0.00- 30.00	62.62
106 Carbon Tetrachloride					CAS #: 56-23-5		
5.756	5.756 (1.055)	119	2331687	100.000	95.008	70.00- 130.00	100.00
5.756	5.756 (1.055)	117	2576992			0.00- 30.00	110.52
113 2,2,4-Trimethylpentane					CAS #: 540-84-1		
5.957	5.957 (1.092)	57	4449874	100.000	92.294	70.00- 130.00	100.00
5.957	5.957 (1.092)	56	1434001			0.00- 30.00	32.23
5.957	5.957 (1.092)	41	1118571			0.00- 30.00	25.14
116 Benzene					CAS #: 71-43-2		
5.971	5.971 (0.941)	78	2768849	100.000	99.629	70.00- 130.00	100.00
5.971	5.971 (0.941)	77	642619			0.00- 30.00	23.21
119 tert-Amyl methyl ether					CAS #: 994-05-8		
6.043	6.043 (0.953)	87	621752	100.000	100.36	70.00- 130.00	100.00
6.043	6.043 (0.953)	73	2474229			0.00- 30.00	397.94
6.043	6.043 (0.953)	55	802629			0.00- 30.00	129.09
120 1,2-Dichloroethane					CAS #: 107-06-2		
6.057	6.057 (0.955)	62	1773194	100.000	97.564	70.00- 130.00	100.00
6.057	6.057 (0.955)	64	563410			0.00- 30.00	31.77
121 Heptane					CAS #: 142-82-5		
6.129	6.129 (0.966)	71	963510	100.000	108.53	70.00- 130.00	100.00
6.129	6.129 (0.966)	43	2193952			0.00- 30.00	227.70

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
121 Heptane (continued)							
6.129	6.129 (0.966)	57	1235968			0.00- 30.00	128.28
125 Trichloroethene					CAS #: 79-01-6		
6.537	6.537 (1.030)	95	1326371	100.000	101.33	70.00- 130.00	100.00
6.537	6.537 (1.030)	130	1184263			0.00- 30.00	89.29
6.537	6.537 (1.030)	97	841048			0.00- 30.00	63.41
127 Methylcyclohexane					CAS #: 108-87-2		
6.644	6.644 (1.047)	83	1418454	100.000	95.682	70.00- 130.00	100.00
6.644	6.644 (1.047)	98	677728			0.00- 30.00	47.78
6.644	6.644 (1.047)	55	1658250			0.00- 30.00	116.91
132 1,2-Dichloropropane					CAS #: 78-87-5		
6.766	6.766 (1.067)	63	1302132	100.000	95.891	70.00- 130.00	100.00
6.766	6.766 (1.067)	62	920880			0.00- 30.00	70.72
6.766	6.766 (1.067)	41	688890			0.00- 30.00	52.90
136 1,4-Dioxane					CAS #: 123-91-1		
6.859	6.859 (1.081)	88	721407	100.000	101.04	70.00- 130.00	100.00
6.859	6.859 (1.081)	58	650015			0.00- 30.00	90.10
6.859	6.859 (1.081)	57	213658			0.00- 30.00	29.62
138 Bromodichloromethane					CAS #: 75-27-4		
6.995	6.995 (1.103)	83	2550345	100.000	97.315	70.00- 130.00	100.00
6.995	6.995 (1.103)	85	1616232			0.00- 30.00	63.37
144 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
7.368	7.368 (1.161)	75	1862445	100.000	97.689	70.00- 130.00	100.00
7.368	7.368 (1.161)	77	569946			0.00- 30.00	30.60
7.368	7.368 (1.161)	39	957395			0.00- 30.00	51.41
145 4-Methyl-2-pentanone					CAS #: 108-10-1		
7.482	7.482 (1.180)	58	1318628	100.000	99.921	70.00- 130.00	100.00
7.482	7.482 (1.180)	43	3359237			0.00- 30.00	254.75
7.482	7.482 (1.180)	85	458205			0.00- 30.00	34.75
147 Toluene					CAS #: 108-88-3		
7.611	7.611 (1.200)	91	3982987	100.000	98.732	70.00- 130.00	100.00
7.611	7.611 (1.200)	92	2293738			0.00- 30.00	57.59
150 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
7.848	7.848 (0.894)	75	2153095	100.000	104.27	70.00- 130.00	100.00
7.848	7.848 (0.894)	77	675439			0.00- 30.00	31.37
7.848	7.848 (0.894)	39	951257			0.00- 30.00	44.18

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
155 1,1,2-Trichloroethane					CAS #: 79-00-5		
7.998	7.998 (0.911)	97	1352077	100.000	102.54	70.00- 130.00	100.00
7.998	7.998 (0.911)	99	820526			0.00- 30.00	60.69
7.998	7.998 (0.911)	83	1166706			0.00- 30.00	86.29
156 Tetrachloroethene					CAS #: 127-18-4		
8.048	8.048 (0.917)	166	1922252	100.000	101.55	70.00- 130.00	100.00
8.048	8.048 (0.917)	129	1351580			0.00- 30.00	70.31
8.048	8.048 (0.917)	131	1311862			0.00- 30.00	68.25
158 2-Hexanone					CAS #: 591-78-6		
8.163	8.163 (0.930)	58	2030056	100.000	112.68	70.00- 130.00	100.00
8.163	8.163 (0.930)	43	3659989			0.00- 30.00	180.29
8.170	8.170 (0.931)	100	312438			0.00- 30.00	15.39
160 Dibromochloromethane					CAS #: 124-48-1		
8.313	8.313 (0.947)	129	2579198	100.000	104.37	70.00- 130.00	100.00
8.313	8.313 (0.947)	127	1985750			0.00- 30.00	76.99
161 1,2-Dibromoethane (EDB)					CAS #: 106-93-4		
8.428	8.428 (0.960)	107	2026817	100.000	103.29	70.00- 130.00	100.00
8.428	8.428 (0.960)	109	1904698			0.00- 30.00	93.97
165 Chlorobenzene					CAS #: 108-90-7		
8.808	8.808 (1.003)	112	3083338	100.000	102.61	70.00- 130.00	100.00
8.808	8.808 (1.003)	114	994301			0.00- 30.00	32.25
8.800	8.800 (1.002)	77	2034819			0.00- 30.00	65.99
167 Ethyl Benzene					CAS #: 100-41-4		
8.858	8.858 (1.009)	106	1634193	100.000	102.06	70.00- 130.00	100.00
8.858	8.858 (1.009)	91	5625309			0.00- 30.00	344.23
169 m,p-Xylene					CAS #: 108-38-3		
8.951	8.951 (1.020)	106	2059771	100.000	106.58	70.00- 130.00	100.00
8.951	8.951 (1.020)	91	4524112			0.00- 30.00	219.64
171 o-Xylene					CAS #: 95-47-6		
9.295	9.295 (1.059)	106	1954786	100.000	108.72	70.00- 130.00	100.00
9.295	9.295 (1.059)	91	4537746			0.00- 30.00	232.14
172 Styrene					CAS #: 100-42-5		
9.309	9.309 (1.060)	104	3300448	100.000	105.44	70.00- 130.00	100.00
9.309	9.309 (1.060)	78	1854998			0.00- 30.00	56.20
174 Bromoform					CAS #: 75-25-2		
9.502	9.502 (1.082)	173	2934936	100.000	99.654	70.00- 130.00	100.00

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

  174 Bromoform (continued)
  9.502   9.502 (1.082)   171   1470237                     0.00-  30.00    50.09
-------------------------------------------------------------------------------
  175 Cumene                                        CAS #: 98-82-8
  9.574   9.574 (1.091)   105   6477305 100.000   101.89  70.00- 130.00   100.00
  9.574   9.574 (1.091)   120   1478159                     0.00-  30.00    22.82
  9.574   9.574 (1.091)    51    732817                     0.00-  30.00    11.31
-------------------------------------------------------------------------------
  181 1,1,2,2-Tetrachloroethane                     CAS #: 79-34-5
  9.882   9.882 (1.126)    83   3133645 100.000   95.551  70.00- 130.00   100.00
  9.882   9.882 (1.126)    85   2018034                     0.00-  30.00    64.40
-------------------------------------------------------------------------------
  182 Propylbenzene                                 CAS #: 103-65-1
  9.918   9.918 (1.130)    91   8006069 100.000   102.76  70.00- 130.00   100.00
  9.918   9.918 (1.130)   120   1598646                     0.00-  30.00    19.97
  9.918   9.918 (1.130)   105    271542                     0.00-  30.00     3.39
-------------------------------------------------------------------------------
  188 4-Ethyltoluene                                CAS #: 622-96-8
 10.011  10.011 (1.140)   120   1695336 100.000   101.07  70.00- 130.00   100.00
 10.011  10.011 (1.140)   105   6668070                     0.00-  30.00   393.32
-------------------------------------------------------------------------------
  190 1,3,5-Trimethylbenzene                        CAS #: 108-67-8
 10.061  10.061 (1.146)   120   2219739 100.000   103.94  70.00- 130.00   100.00
 10.061  10.061 (1.146)   105   4999314                     0.00-  30.00   225.22
-------------------------------------------------------------------------------
  196 1,2,4-Trimethylbenzene                        CAS #: 95-63-6
 10.383  10.383 (1.183)   120   2017872 100.000   105.03  70.00- 130.00   100.00
 10.383  10.383 (1.183)   105   4979048                     0.00-  30.00   246.75
-------------------------------------------------------------------------------
  208 1,3-Dichlorobenzene                           CAS #: 541-73-1
 10.670  10.670 (1.215)   146   3316898 100.000   99.026  70.00- 130.00   100.00
 10.670  10.670 (1.215)   148   2115276                     0.00-  30.00    63.77
 10.670  10.670 (1.215)   111   1375286                     0.00-  30.00    41.46
-------------------------------------------------------------------------------
  209 1,4-Dichlorobenzene                           CAS #: 106-46-7
 10.749  10.749 (1.224)   146   3337264 100.000   101.37  70.00- 130.00   100.00
 10.749  10.749 (1.224)   148   2097442                     0.00-  30.00    62.85
 10.749  10.749 (1.224)   111   1328560                     0.00-  30.00    39.81
-------------------------------------------------------------------------------
  212 alpha-Chlorotoluene                           CAS #: 100-44-7
 10.863  10.863 (1.237)    91   3226079 100.000   97.966  70.00- 130.00   100.00
 10.863  10.863 (1.237)   126    570950                     0.00-  30.00    17.70
-------------------------------------------------------------------------------
  214 1,2-Dichlorobenzene                           CAS #: 95-50-1
 11.071  11.071 (1.261)   146   2948805 100.000   99.489  70.00- 130.00   100.00
 11.071  11.071 (1.261)   148   1894791                     0.00-  30.00    64.26
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RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
214 1,2-Dichlorobenzene (continued)							
11.071	11.071 (1.261)	111	1286231			0.00- 30.00	43.62
226 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
12.468	12.468 (1.420)	180	1999521	100.000	108.93	70.00- 130.00	100.00
12.468	12.468 (1.420)	182	1899380			0.00- 30.00	94.99
227 Hexachlorobutadiene					CAS #: 87-68-3		
12.561	12.561 (1.431)	225	2435027	100.000	113.11	70.00- 130.00	100.00
12.561	12.561 (1.431)	223	1541988			0.00- 30.00	63.33
228 Naphthalene					CAS #: 91-20-3		
12.726	12.726 (1.450)	128	686184	10.0000	10.574	70.00- 130.00	100.00
12.726	12.726 (1.450)	127	94414			0.00- 30.00	13.76

Report Date: 18-Dec-2014 12:02

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdp.i
Lab File ID: p121707.d
Lab Smp Id: ICAL Level #7
Analysis Type: VOA
Quant Type: ISTD
Operator: sn
Method File: /chem/msdp.i/17dec14.b/p14q1217a.m
Misc Info: 100ppbv (200ppbv)

Calibration Date: 17-DEC-2014
Calibration Time: 20:25

Level: LOW
Sample Type: AIR

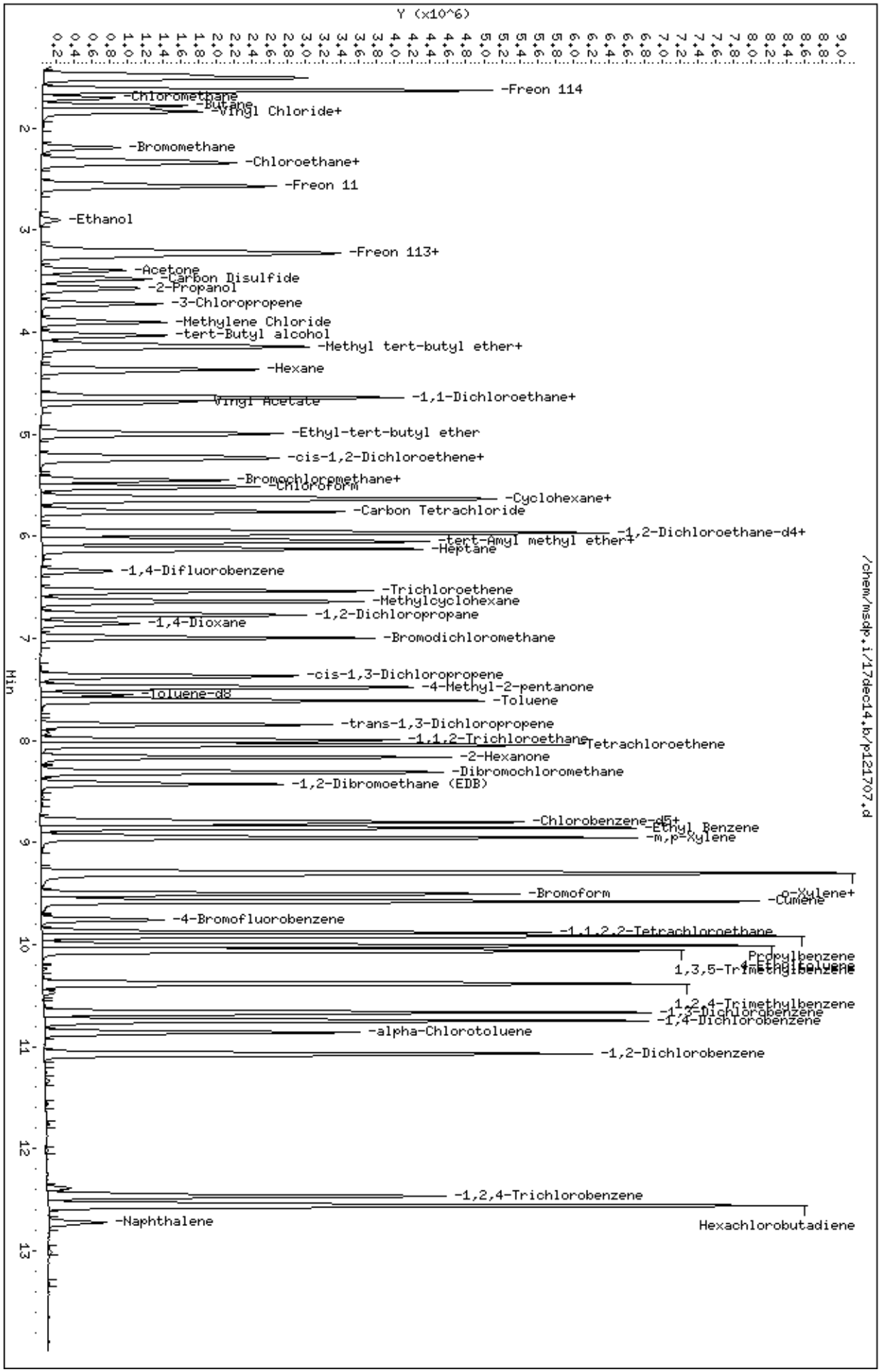
COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
98 Bromochloromethan	131003	78602	183404	129756	-0.95
123 1,4-Difluorobenze	594926	356956	832896	617998	3.88
163 Chlorobenzene-d5	646102	387661	904543	626759	-2.99

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
98 Bromochloromethan	5.45	5.12	5.78	5.46	0.13
123 1,4-Difluorobenze	6.34	6.01	6.67	6.34	0.00
163 Chlorobenzene-d5	8.78	8.45	9.11	8.78	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/msdp.i/17dec14.b/p121707.d
Date : 17-DEC-2014 20:50
Client ID:
Sample Info: 100ml #2687-162
Column phase: RTX-624

Instrument: msdp.i
Operator: sn
Column diameter: 0.25



Eurofins Air Toxics Inc.

EPA TO-15/MODIFIED TO14A

Data file : /chem/msdp.i/17dec14.b/p121708.d
Lab Smp Id: ICAL Level #8
Inj Date : 17-DEC-2014 21:17
Operator : sn Inst ID: msdp.i
Smp Info : 200ml #2687-162
Misc Info : 200ppbv (200ppbv)
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msdp.i/17dec14.b/p14q1217a.m
Meth Date : 18-Dec-2014 12:02 jscarbro Quant Type: ISTD
Cal Date : 17-DEC-2014 21:17 Cal File: p121708.d
Als bottle: 13 Calibration Sample, Level: 8
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT12curve.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
* 98 Bromochloromethane						CAS #: 74-97-5	
5.448	5.448 (1.000)	130	107222	25.0000		70.00- 130.00	100.00
5.455	5.455 (1.000)	128	92272			0.00- 30.00	86.06
5.448	5.448 (1.000)	49	233083			0.00- 30.00	217.38
* 123 1,4-Difluorobenzene						CAS #: 540-36-3	
6.344	6.344 (1.000)	114	562174	25.0000		70.00- 130.00	100.00
6.336	6.336 (1.000)	88	94860			0.00- 30.00	16.87
* 163 Chlorobenzene-d5						CAS #: 3114-55-4	
8.779	8.779 (1.000)	117	596031	25.0000		70.00- 130.00	100.00
8.779	8.779 (1.000)	82	378447			0.00- 30.00	63.49
$ 117 1,2-Dichloroethane-d4						CAS #: 17060-07-0	
5.985	5.985 (1.099)	65	293325	25.0000	28.657	70.00- 130.00	100.00
5.985	5.985 (1.099)	67	219043			0.00- 30.00	74.68

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
$ 146 Toluene-d8					CAS #: 2037-26-5		
7.554	7.554 (1.191)	98	666976	25.0000	25.173	70.00- 130.00	100.00
7.554	7.554 (1.191)	70	81625			0.00- 30.00	12.24
7.554	7.554 (1.191)	100	443641			0.00- 30.00	66.52
$ 177 4-Bromofluorobenzene					CAS #: 460-00-4		
9.760	9.760 (1.112)	174	465662	25.0000	26.340	70.00- 130.00	100.00
9.753	9.753 (1.111)	95	534660			0.00- 30.00	114.82
9.760	9.760 (1.112)	176	438013			0.00- 30.00	94.06
9 Propylene					CAS #: 115-07-1		
1.480	1.480 (0.272)	41	2010800	200.000	221.95	70.00- 130.00	100.00(A)
1.480	1.480 (0.272)	42	1353324			0.00- 30.00	67.30
1.480	1.480 (0.272)	39	1354004			0.00- 30.00	67.34
11 Freon 12					CAS #: 75-71-8		
1.508	1.508 (0.277)	85	6362248	200.000	218.37	70.00- 130.00	100.00(A)
1.508	1.508 (0.277)	87	2061445			0.00- 30.00	32.40
15 Freon 114					CAS #: 76-14-2		
1.630	1.630 (0.299)	135	4220411	200.000	217.30	70.00- 130.00	100.00(A)
1.630	1.630 (0.299)	137	1359674			0.00- 30.00	32.22
17 Chloromethane					CAS #: 74-87-3		
1.709	1.709 (0.314)	50	1842621	200.000	206.99	70.00- 130.00	100.00(A)
1.709	1.709 (0.314)	52	572878			0.00- 30.00	31.09
23 Butane					CAS #: 106-97-8		
1.781	1.781 (0.327)	58	447387	200.000	218.34	70.00- 130.00	100.00(A)
1.781	1.781 (0.327)	43	3061207			0.00- 30.00	684.24
25 Vinyl Chloride					CAS #: 75-01-4		
1.816	1.816 (0.333)	62	1908054	200.000	198.15	70.00- 130.00	100.00
1.816	1.816 (0.333)	64	579781			0.00- 30.00	30.39
26 1,3-Butadiene					CAS #: 106-99-0		
1.845	1.845 (0.339)	54	1758347	200.000	203.15	70.00- 130.00	100.00(A)
1.845	1.845 (0.339)	39	1561390			0.00- 30.00	88.80
29 Bromomethane					CAS #: 74-83-9		
2.189	2.189 (0.402)	94	1315247	200.000	210.49	70.00- 130.00	100.00(A)
2.189	2.189 (0.402)	96	1246734			0.00- 30.00	94.79
30 Chloroethane					CAS #: 75-00-3		
2.304	2.304 (0.423)	64	838641	200.000	187.42	70.00- 130.00	100.00
2.304	2.304 (0.423)	66	261797			0.00- 30.00	31.22

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

   30 Chloroethane (continued)
  2.304   2.304 (0.423)    49    244955                     0.00-  30.00    29.21
-------------------------------------------------------------------------------
   31 Isopentane                                   CAS #: 78-78-4
  2.332   2.332 (0.428)    43   2415655 200.000   212.61  70.00- 130.00   100.00(A)
  2.332   2.332 (0.428)    57   1791292                     0.00-  30.00    74.15
-------------------------------------------------------------------------------
   35 Freon 11                                     CAS #: 75-69-4
  2.561   2.561 (0.470)   101   6463387 200.000   223.71  70.00- 130.00   100.00(A)
  2.561   2.561 (0.470)   103   4224684                     0.00-  30.00    65.36
-------------------------------------------------------------------------------
   42 Ethanol                                      CAS #: 64-17-5
  2.927   2.927 (0.537)    45    702062 200.000   207.66  70.00- 130.00   100.00(A)
  2.927   2.927 (0.537)    43    132442                     0.00-  30.00    18.86
  2.927   2.927 (0.537)    46    264767                     0.00-  30.00    37.71
-------------------------------------------------------------------------------
   49 Freon 113                                    CAS #: 76-13-1
  3.213   3.213 (0.590)   151   2748916 200.000   230.26  70.00- 130.00   100.00(A)
  3.213   3.213 (0.590)   153   1750910                     0.00-  30.00    63.69
  3.213   3.213 (0.590)   101   3292879                     0.00-  30.00   119.79
-------------------------------------------------------------------------------
   50 1,1-Dichloroethene                           CAS #: 75-35-4
  3.242   3.242 (0.595)    98    881357 200.000   231.53  70.00- 130.00   100.00(A)
  3.242   3.242 (0.595)    96   1415839                     0.00-  30.00   160.64
  3.242   3.242 (0.595)    61   3080697                     0.00-  30.00   349.54
-------------------------------------------------------------------------------
   52 Acetone                                      CAS #: 67-64-1
  3.400   3.400 (0.624)    58    907425 200.000   211.38  70.00- 130.00   100.00(A)
  3.400   3.400 (0.624)    43   2845875                     0.00-  30.00   313.62
-------------------------------------------------------------------------------
   56 Carbon Disulfide                             CAS #: 75-15-0
  3.471   3.471 (0.637)    76   3920212 200.000   212.25  70.00- 130.00   100.00(A)
-------------------------------------------------------------------------------
   57 2-Propanol                                   CAS #: 67-63-0
  3.593   3.593 (0.659)    45   3467100 200.000   223.75  70.00- 130.00   100.00(A)
  3.593   3.593 (0.659)    43    648814                     0.00-  30.00    18.71
  3.593   3.593 (0.659)    59    139617                     0.00-  30.00     4.03
-------------------------------------------------------------------------------
   58 3-Chloropropene                              CAS #: 107-05-1
  3.722   3.722 (0.683)    76    677723 200.000   217.10  70.00- 130.00   100.00(A)
  3.722   3.722 (0.683)    41   2335407                     0.00-  30.00   344.60
-------------------------------------------------------------------------------
   66 Methylene Chloride                           CAS #: 75-09-2
  3.901   3.901 (0.716)    49   2001624 200.000   205.19  70.00- 130.00   100.00(A)
  3.901   3.901 (0.716)    84   1134980                     0.00-  30.00    56.70
  3.901   3.901 (0.716)    51    634320                     0.00-  30.00    31.69
-------------------------------------------------------------------------------
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RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
71 tert-Butyl alcohol					CAS #: 75-65-0		
4.051	4.051 (0.744)	59	4310052	200.000	237.55	70.00- 130.00	100.00(A)
4.051	4.051 (0.744)	41	854963			0.00- 30.00	19.84
4.051	4.051 (0.744)	57	450557			0.00- 30.00	10.45
72 Methyl tert-butyl ether					CAS #: 1634-04-4		
4.130	4.130 (0.758)	73	5075278	200.000	240.26	70.00- 130.00	100.00(A)
4.130	4.130 (0.758)	57	1306750			0.00- 30.00	25.75
4.130	4.130 (0.758)	41	1180198			0.00- 30.00	23.25
73 trans-1,2-Dichloroethene					CAS #: 156-60-5		
4.152	4.152 (0.762)	98	826697	200.000	222.50	70.00- 130.00	100.00(A)
4.152	4.152 (0.762)	61	2479967			0.00- 30.00	299.99
4.152	4.152 (0.762)	96	1323643			0.00- 30.00	160.11
78 Hexane					CAS #: 110-54-3		
4.367	4.367 (0.801)	57	3030237	200.000	222.19	70.00- 130.00	100.00(A)
4.367	4.367 (0.801)	43	1876531			0.00- 30.00	61.93
4.367	4.367 (0.801)	86	375791			0.00- 30.00	12.40
82 1,1-Dichloroethane					CAS #: 75-34-3		
4.639	4.639 (0.851)	63	3398256	200.000	215.42	70.00- 130.00	100.00(A)
4.639	4.639 (0.851)	65	998228			0.00- 30.00	29.37
83 Isopropyl ether					CAS #: 108-20-3		
4.639	4.639 (0.851)	45	5800668	200.000	227.56	70.00- 130.00	100.00(A)
4.646	4.646 (0.853)	87	1208007			0.00- 30.00	20.83
4.646	4.646 (0.853)	59	654786			0.00- 30.00	11.29
86 Vinyl Acetate					CAS #: 108-05-4		
4.689	4.689 (0.861)	86	421613	200.000	235.57	70.00- 130.00	100.00(A)
4.689	4.689 (0.861)	43	6523816			0.00- 30.00	1547.35
88 Ethyl-tert-butyl ether					CAS #: 637-92-3		
4.997	4.997 (0.917)	59	6076762	200.000	240.46	70.00- 130.00	100.00(A)
4.997	4.997 (0.917)	87	2041600			0.00- 30.00	33.60
4.997	4.997 (0.917)	41	1031726			0.00- 30.00	16.98
91 cis-1,2-Dichloroethene					CAS #: 156-59-2		
5.226	5.226 (0.959)	98	1082747	200.000	224.94	70.00- 130.00	100.00(A)
5.226	5.226 (0.959)	96	1698973			0.00- 30.00	156.91
5.219	5.219 (0.958)	61	2975000			0.00- 30.00	274.76
92 2-Butanone					CAS #: 78-93-3		
5.255	5.255 (0.964)	72	827453	200.000	219.28	70.00- 130.00	100.00(A)
5.248	5.248 (0.963)	43	4288470			0.00- 30.00	518.27

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

   92 2-Butanone (continued)
  5.248   5.248 (0.963)    57    351596                     0.00-  30.00    42.49
-------------------------------------------------------------------------------
   99 Tetrahydrofuran                                CAS #: 109-99-9
  5.448   5.448 (1.000)    42   2373932 200.000   211.20  70.00- 130.00   100.00(A)
  5.455   5.455 (1.001)    71    726082                     0.00-  30.00    30.59
  5.455   5.455 (1.001)    72    763456                     0.00-  30.00    32.16
-------------------------------------------------------------------------------
  100 Chloroform                                     CAS #: 67-66-3
  5.513   5.513 (1.012)    83   3822729 200.000   212.34  70.00- 130.00   100.00(A)
  5.520   5.520 (1.013)    85   2488582                     0.00-  30.00    65.10
-------------------------------------------------------------------------------
  102 Cyclohexane                                    CAS #: 110-82-7
  5.627   5.627 (1.033)    84   2119180 200.000   230.14  70.00- 130.00   100.00(A)
  5.620   5.620 (1.032)    56   3355841                     0.00-  30.00   158.36
  5.620   5.620 (1.032)    41   1693179                     0.00-  30.00    79.90
-------------------------------------------------------------------------------
  103 1,1,1-Trichloroethane                          CAS #: 71-55-6
  5.642   5.642 (1.035)    97   4471197 200.000   221.48  70.00- 130.00   100.00(A)
  5.642   5.642 (1.035)    99   2856426                     0.00-  30.00    63.89
-------------------------------------------------------------------------------
  106 Carbon Tetrachloride                           CAS #: 56-23-5
  5.756   5.756 (1.057)   119   4661127 200.000   224.26  70.00- 130.00   100.00(A)
  5.756   5.756 (1.057)   117   5011877                     0.00-  30.00   107.53
-------------------------------------------------------------------------------
  113 2,2,4-Trimethylpentane                         CAS #: 540-84-1
  5.957   5.957 (1.093)    57   8711861 200.000   215.32  70.00- 130.00   100.00(A)
  5.957   5.957 (1.093)    56   2844082                     0.00-  30.00    32.65
  5.957   5.957 (1.093)    41   2140821                     0.00-  30.00    24.57
-------------------------------------------------------------------------------
  116 Benzene                                        CAS #: 71-43-2
  5.971   5.971 (0.941)    78   5103560 200.000   201.56  70.00- 130.00   100.00(A)
  5.971   5.971 (0.941)    77   1201598                     0.00-  30.00    23.54
-------------------------------------------------------------------------------
  119 tert-Amyl methyl ether                         CAS #: 994-05-8
  6.043   6.043 (0.953)    87   1278674 200.000   220.95  70.00- 130.00   100.00(A)
  6.043   6.043 (0.953)    73   4981764                     0.00-  30.00   389.60
  6.043   6.043 (0.953)    55   1615132                     0.00-  30.00   126.31
-------------------------------------------------------------------------------
  120 1,2-Dichloroethane                             CAS #: 107-06-2
  6.057   6.057 (0.955)    62   3173095 200.000   193.23  70.00- 130.00   100.00
  6.057   6.057 (0.955)    64    991474                     0.00-  30.00    31.25
-------------------------------------------------------------------------------
  121 Heptane                                        CAS #: 142-82-5
  6.129   6.129 (0.966)    71   1781250 200.000   216.85  70.00- 130.00   100.00(A)
  6.122   6.122 (0.965)    43   4080087                     0.00-  30.00   229.06
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                                        AMOUNTS
                                     CAL-AMT   ON-COL
   RT   EXP RT (REL RT)  MASS  RESPONSE ( PPBV)  ( PPBV)   TARGET RANGE    RATIO
   ==   ====== ========  ====  ======== =======  =======   ============    =====

  121 Heptane (continued)
  6.129   6.129 (0.966)    57   2296261                     0.00-  30.00   128.91
-------------------------------------------------------------------------------
  125 Trichloroethene                                CAS #: 79-01-6
  6.537   6.537 (1.030)    95   2371291 200.000   199.29  70.00- 130.00   100.00
  6.537   6.537 (1.030)   130   2206646                     0.00-  30.00    93.06
  6.537   6.537 (1.030)    97   1514200                     0.00-  30.00    63.86
-------------------------------------------------------------------------------
  127 Methylcyclohexane                              CAS #: 108-87-2
  6.637   6.637 (1.046)    83   2886340 200.000   211.56  70.00- 130.00   100.00(A)
  6.637   6.637 (1.046)    98   1324884                     0.00-  30.00    45.90
  6.637   6.637 (1.046)    55   3253884                     0.00-  30.00   112.73
-------------------------------------------------------------------------------
  132 1,2-Dichloropropane                            CAS #: 78-87-5
  6.766   6.766 (1.067)    63   2405519 200.000   195.60  70.00- 130.00   100.00
  6.766   6.766 (1.067)    62   1748744                     0.00-  30.00    72.70
  6.766   6.766 (1.067)    41   1297124                     0.00-  30.00    53.92
-------------------------------------------------------------------------------
  136 1,4-Dioxane                                    CAS #: 123-91-1
  6.859   6.859 (1.081)    88   1329381 200.000   203.73  70.00- 130.00   100.00(A)
  6.859   6.859 (1.081)    58   1205797                     0.00-  30.00    90.70
  6.859   6.859 (1.081)    57    388223                     0.00-  30.00    29.20
-------------------------------------------------------------------------------
  138 Bromodichloromethane                           CAS #: 75-27-4
  6.995   6.995 (1.103)    83   4666001 200.000   196.42  70.00- 130.00   100.00
  6.995   6.995 (1.103)    85   3041507                     0.00-  30.00    65.18
-------------------------------------------------------------------------------
  144 cis-1,3-Dichloropropene                        CAS #: 10061-01-5
  7.368   7.368 (1.161)    75   3388468 200.000   196.14  70.00- 130.00   100.00
  7.368   7.368 (1.161)    77   1054996                     0.00-  30.00    31.13
  7.368   7.368 (1.161)    39   1782586                     0.00-  30.00    52.61
-------------------------------------------------------------------------------
  145 4-Methyl-2-pentanone                           CAS #: 108-10-1
  7.482   7.482 (1.180)    58   2535330 200.000   209.24  70.00- 130.00   100.00(A)
  7.482   7.482 (1.180)    43   6349236                     0.00-  30.00   250.43
  7.482   7.482 (1.180)    85    878793                     0.00-  30.00    34.66
-------------------------------------------------------------------------------
  147 Toluene                                        CAS #: 108-88-3
  7.611   7.611 (1.200)    91   7473510 200.000   203.03  70.00- 130.00   100.00(A)
  7.604   7.604 (1.199)    92   4255732                     0.00-  30.00    56.94
-------------------------------------------------------------------------------
  150 trans-1,3-Dichloropropene                      CAS #: 10061-02-6
  7.848   7.848 (0.894)    75   3921945 200.000   199.77  70.00- 130.00   100.00
  7.848   7.848 (0.894)    77   1237003                     0.00-  30.00    31.54
  7.848   7.848 (0.894)    39   1777110                     0.00-  30.00    45.31
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                                        AMOUNTS
                                     CAL-AMT   ON-COL
   RT   EXP RT (REL RT)  MASS  RESPONSE ( PPBV)  ( PPBV)   TARGET RANGE    RATIO
   ==   ====== ========  ====  ======== =======  =======   ============    =====

  155 1,1,2-Trichloroethane                        CAS #: 79-00-5
  7.998   7.998 (0.911)    97   2448999 200.000   196.07  70.00- 130.00   100.00
  7.998   7.998 (0.911)    99   1528791                    0.00-  30.00    62.43
  7.998   7.998 (0.911)    83   2187029                    0.00-  30.00    89.30
-------------------------------------------------------------------------------
  156 Tetrachloroethene                            CAS #: 127-18-4
  8.048   8.048 (0.917)   166   3550082 200.000   197.67  70.00- 130.00   100.00
  8.048   8.048 (0.917)   129   2471404                    0.00-  30.00    69.62
  8.048   8.048 (0.917)   131   2432682                    0.00-  30.00    68.52
-------------------------------------------------------------------------------
  158 2-Hexanone                                   CAS #: 591-78-6
  8.170   8.170 (0.931)    58   3838271 200.000   219.64  70.00- 130.00   100.00(A)
  8.170   8.170 (0.931)    43   6887246                    0.00-  30.00   179.44
  8.170   8.170 (0.931)   100    626352                    0.00-  30.00    16.32
-------------------------------------------------------------------------------
  160 Dibromochloromethane                         CAS #: 124-48-1
  8.313   8.313 (0.947)   129   4859557 200.000   205.62  70.00- 130.00   100.00(A)
  8.313   8.313 (0.947)   127   3753354                    0.00-  30.00    77.24
-------------------------------------------------------------------------------
  161 1,2-Dibromoethane (EDB)                      CAS #: 106-93-4
  8.428   8.428 (0.960)   107   3719409 200.000   199.43  70.00- 130.00   100.00
  8.428   8.428 (0.960)   109   3502836                    0.00-  30.00    94.18
-------------------------------------------------------------------------------
  165 Chlorobenzene                                CAS #: 108-90-7
  8.808   8.808 (1.003)   112   5761243 200.000   201.34  70.00- 130.00   100.00(A)
  8.808   8.808 (1.003)   114   1854073                    0.00-  30.00    32.18
  8.800   8.800 (1.002)    77   3808548                    0.00-  30.00    66.11
-------------------------------------------------------------------------------
  167 Ethyl Benzene                                CAS #: 100-41-4
  8.858   8.858 (1.009)   106   3130528 200.000   204.64  70.00- 130.00   100.00(A)
  8.858   8.858 (1.009)    91  10866957                    0.00-  30.00   347.13
-------------------------------------------------------------------------------
  169 m,p-Xylene                                   CAS #: 108-38-3
  8.951   8.951 (1.020)   106   3889649 200.000   209.61  70.00- 130.00   100.00(A)
  8.951   8.951 (1.020)    91   8762680                    0.00-  30.00   225.28
-------------------------------------------------------------------------------
  171 o-Xylene                                     CAS #: 95-47-6
  9.295   9.295 (1.059)   106   3743005 200.000   215.51  70.00- 130.00   100.00(A)
  9.295   9.295 (1.059)    91   8822760                    0.00-  30.00   235.71
-------------------------------------------------------------------------------
  172 Styrene                                      CAS #: 100-42-5
  9.309   9.309 (1.060)   104   6389580 200.000   212.07  70.00- 130.00   100.00(A)
  9.309   9.309 (1.060)    78   3577388                    0.00-  30.00    55.99
-------------------------------------------------------------------------------
  174 Bromoform                                    CAS #: 75-25-2
  9.502   9.502 (1.082)   173   5586162 200.000   199.54  70.00- 130.00   100.00
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                                        AMOUNTS
                                     CAL-AMT   ON-COL
   RT   EXP RT (REL RT)  MASS  RESPONSE ( PPBV)  ( PPBV)   TARGET RANGE    RATIO
   ==   ====== ========  ====  ======== =======  =======   ============    =====

  174 Bromoform (continued)
  9.502   9.502 (1.082)   171   2827765                     0.00-  30.00    50.62
-------------------------------------------------------------------------------
  175 Cumene                                        CAS #: 98-82-8
  9.574   9.574 (1.091)   105  12586746 200.000   206.79  70.00- 130.00   100.00(A)
  9.574   9.574 (1.091)   120   2881221                     0.00-  30.00    22.89
  9.574   9.574 (1.091)    51   1395979                     0.00-  30.00    11.09
-------------------------------------------------------------------------------
  181 1,1,2,2-Tetrachloroethane                     CAS #: 79-34-5
  9.882   9.882 (1.126)    83   6078577 200.000   195.73  70.00- 130.00   100.00
  9.882   9.882 (1.126)    85   3886902                     0.00-  30.00    63.94
-------------------------------------------------------------------------------
  182 Propylbenzene                                 CAS #: 103-65-1
  9.918   9.918 (1.130)    91  15676096 200.000   209.56  70.00- 130.00   100.00(A)
  9.918   9.918 (1.130)   120   3102905                     0.00-  30.00    19.79
  9.918   9.918 (1.130)   105    530446                     0.00-  30.00     3.38
-------------------------------------------------------------------------------
  188 4-Ethyltoluene                                CAS #: 622-96-8
 10.011  10.011 (1.140)   120   3327565 200.000   207.12  70.00- 130.00   100.00(A)
 10.011  10.011 (1.140)   105  13174463                     0.00-  30.00   395.92
-------------------------------------------------------------------------------
  190 1,3,5-Trimethylbenzene                        CAS #: 108-67-8
 10.061  10.061 (1.146)   120   4318482 200.000   210.42  70.00- 130.00   100.00(A)
 10.061  10.061 (1.146)   105   9826322                     0.00-  30.00   227.54
-------------------------------------------------------------------------------
  196 1,2,4-Trimethylbenzene                        CAS #: 95-63-6
 10.383  10.383 (1.183)   120   3922963 200.000   212.12  70.00- 130.00   100.00(A)
 10.383  10.383 (1.183)   105   9869399                     0.00-  30.00   251.58
-------------------------------------------------------------------------------
  208 1,3-Dichlorobenzene                           CAS #: 541-73-1
 10.670  10.670 (1.215)   146   6333409 200.000   199.02  70.00- 130.00   100.00
 10.670  10.670 (1.215)   148   4007434                     0.00-  30.00    63.27
 10.670  10.670 (1.215)   111   2640582                     0.00-  30.00    41.69
-------------------------------------------------------------------------------
  209 1,4-Dichlorobenzene                           CAS #: 106-46-7
 10.749  10.749 (1.224)   146   6345228 200.000   202.22  70.00- 130.00   100.00(A)
 10.749  10.749 (1.224)   148   4013020                     0.00-  30.00    63.24
 10.749  10.749 (1.224)   111   2578155                     0.00-  30.00    40.63
-------------------------------------------------------------------------------
  212 alpha-Chlorotoluene                           CAS #: 100-44-7
 10.863  10.863 (1.237)    91   6373236 200.000   202.92  70.00- 130.00   100.00(A)
 10.863  10.863 (1.237)   126   1138215                     0.00-  30.00    17.86
-------------------------------------------------------------------------------
  214 1,2-Dichlorobenzene                           CAS #: 95-50-1
 11.071  11.071 (1.261)   146   5778675 200.000   204.16  70.00- 130.00   100.00(A)
 11.071  11.071 (1.261)   148   3624755                     0.00-  30.00    62.73
```

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

  214 1,2-Dichlorobenzene (continued)
 11.071  11.071 (1.261)   111   2496184                     0.00-  30.00    43.20
-------------------------------------------------------------------------------
  226 1,2,4-Trichlorobenzene                        CAS #: 120-82-1
 12.468  12.468 (1.420)   180   3953721 200.000   220.65  70.00- 130.00   100.00(AH)
 12.468  12.468 (1.420)   182   3773278                     0.00-  30.00    95.44
-------------------------------------------------------------------------------
  227 Hexachlorobutadiene                           CAS #: 87-68-3
 12.561  12.561 (1.431)   225   4731981 200.000   224.16  70.00- 130.00   100.00(A)
 12.561  12.561 (1.431)   223   2958563                     0.00-  30.00    62.52
-------------------------------------------------------------------------------
  228 Naphthalene                                   CAS #: 91-20-3
 12.726  12.726 (1.450)   128   1387492 20.0000   21.939  70.00- 130.00   100.00
 12.726  12.726 (1.450)   127    184075                     0.00-  30.00    13.27
-------------------------------------------------------------------------------
```

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
H - Operator selected an alternate compound hit.

Report Date: 18-Dec-2014 12:02

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdp.i
Lab File ID: p121708.d
Lab Smp Id: ICAL Level #8
Analysis Type: VOA
Quant Type: ISTD
Operator: sn
Method File: /chem/msdp.i/17dec14.b/p14q1217a.m
Misc Info: 200ppbv (200ppbv)

Calibration Date: 17-DEC-2014
Calibration Time: 20:25

Level: LOW
Sample Type: AIR

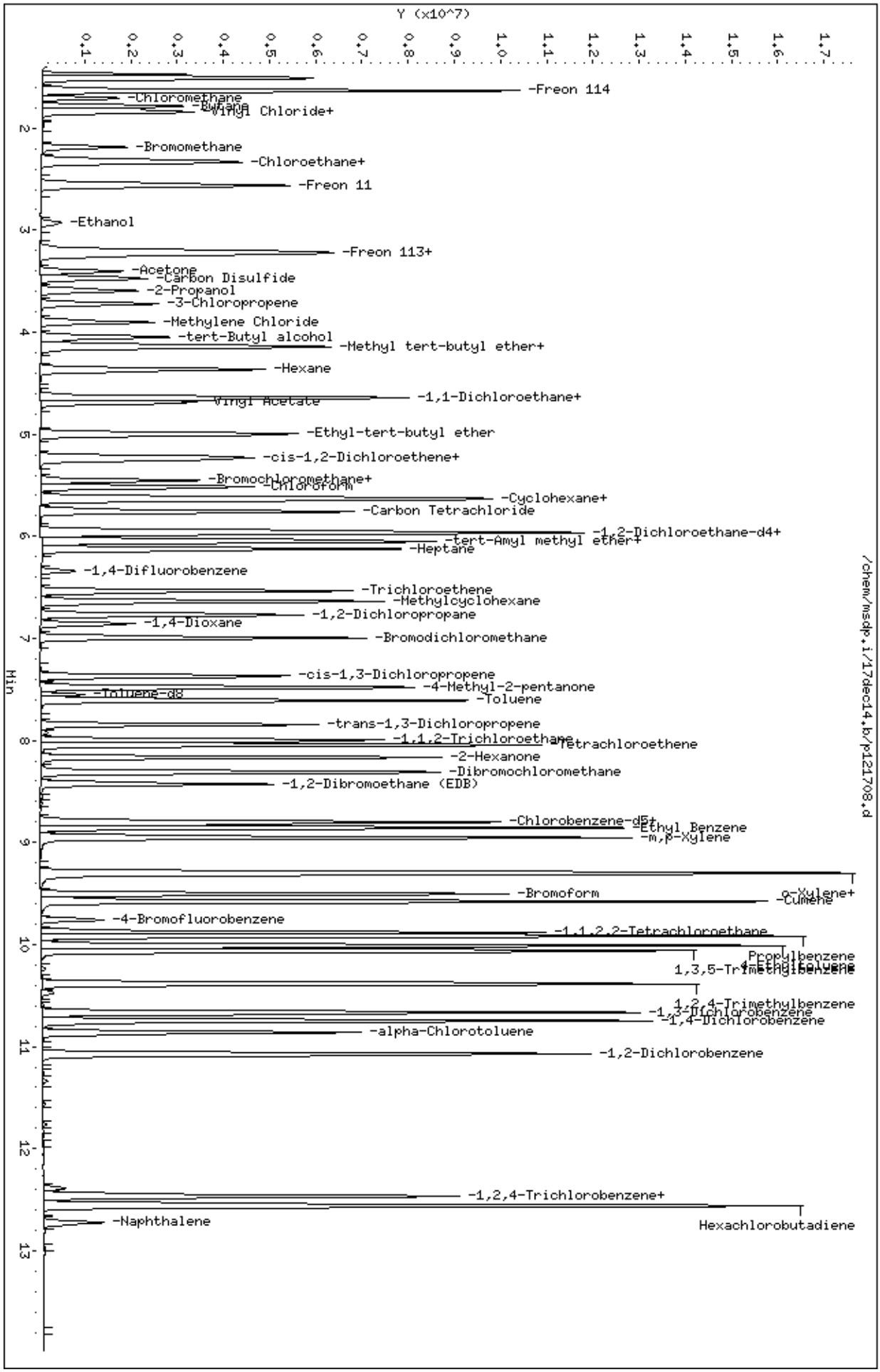
COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
98 Bromochloromethan	131003	78602	183404	107222	-18.15
123 1,4-Difluorobenze	594926	356956	832896	562174	-5.51
163 Chlorobenzene-d5	646102	387661	904543	596031	-7.75

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
98 Bromochloromethan	5.45	5.12	5.78	5.45	0.00
123 1,4-Difluorobenze	6.34	6.01	6.67	6.34	0.00
163 Chlorobenzene-d5	8.78	8.45	9.11	8.78	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/msdp.i/17dec14.b/p121708.d
Date : 17-DEC-2014 21:17
Client ID:
Sample Info: 200ml #2687-162
Column phase: RTX-624

Instrument: msdp.i
Operator: sn
Column diameter: 0.25



Page 1

Eurofins Air Toxics Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 24-NOV-2014 09:14
End Cal Date : 24-NOV-2014 18:25
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msd14.i/15dec14.b/14451124c.m
Cal Date : 15-Dec-2014 17:07 snguyen
Curve Type : Average

Calibration File Names:
Level 1: /chem/msd14.i/24nov14.b/14112403.d
Level 2: /chem1/msd14.i/24nov14.b/14112404a.d
Level 3: /chem/msd14.i/15dec14.b/14112415k.d
Level 4: /chem1/msd14.i/24nov14.b/14112406a.d
Level 5: /chem1/msd14.i/24nov14.b/14112407a.d
Level 6: /chem/msd14.i/15dec14.b/14112420k.d
Level 7: /chem/msd14.i/15dec14.b/14112421k.d
Level 8: /chem/msd14.i/24nov14.b/14112413.d
Level 9: /chem/msd14.i/24nov14.b/14112414.d

Compound	3.000 Level 1	5.000 Level 2	20.000 Level 3	50.000 Level 4	100.000 Level 5	200.000 Level 6	___ RRF	% RSD
	1000.000 Level 7	2500.000 Level 8	5000.000 Level 9					
M 1 1,2-Dichloroethene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
199 Indene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
3 Propane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
4 Freon134a	+++++	+++++	0.60376	+++++	+++++	0.73171		
	0.69051	+++++	+++++				0.67533	9.672
5 Propylene	+++++	+++++	0.88265	0.77377	0.75396	0.71696		
	0.74498	0.86253	0.76017				0.78500	7.970
6 Freon 152a	+++++	+++++	0.42169	+++++	+++++	0.39635		
	0.37448	+++++	+++++				0.39751	5.944
7 Dichlorodifluoromethane/Fr12	+++++	4.54269	3.67913	3.31931	3.40944	3.35014		
	3.20706	3.80575	3.33025				3.58047	12.215

Eurofins Air Toxics Inc.

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Cal Date : 15-Dec-2014 17:07 snguyen
Curve Type : Average

Compound	3.000 Level 1	5.000 Level 2	20.000 Level 3	50.000 Level 4	100.000 Level 5	200.000 Level 6	___ RRF	% RSD
	1000.000 Level 7	2500.000 Level 8	5000.000 Level 9					
8 Freon 22	+++++	+++++	0.17770	+++++	+++++	0.21961		
	0.20353	+++++	+++++				0.20028	10.556
9 Freon 114	+++++	4.24162	2.35277	2.18438	2.36235	2.25199		
	2.21748	2.87102	2.49157				2.62165	26.325
10 Isobutane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
11 Freon142b	+++++	+++++	1.87676	+++++	+++++	2.02459		
	1.89456	+++++	+++++				1.93197	4.177
12 Chloromethane	+++++	+++++	1.22720	1.11076	1.10976	1.14096		
	0.95376	1.06258	0.94716				1.07888	9.353
13 Butane	+++++	+++++	0.40176	0.33677	0.34670	0.31561		
	0.27216	0.30367	0.27426				0.32156	14.097
14 Isobutylene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
15 Vinyl Chloride	+++++	1.83944	1.71324	1.50494	1.42654	1.41924		
	1.25488	1.37633	1.23506				1.47121	14.340
16 1,3-Butadiene	+++++	1.60239	1.07333	1.04326	1.04226	1.01463		
	0.90171	1.00628	0.90295				1.07335	20.779
17 Methanol	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++

Eurofins Air Toxics Inc.

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Cal Date : 15-Dec-2014 17:07 snguyen
Curve Type : Average

Compound	3.000 Level 1	5.000 Level 2	20.000 Level 3	50.000 Level 4	100.000 Level 5	200.000 Level 6	___ RRF	% RSD
	1000.000 Level 7	2500.000 Level 8	5000.000 Level 9					
18 Bromomethane	+++++	1.32102	0.86415	0.79270	0.88626	0.90964		
	0.83298	1.26742	1.17480				1.00612	21.092
19 Chloroethane	+++++	+++++	1.01078	0.70162	0.53572	0.54360		
	0.59881	0.73745	0.68390				0.68741	23.669
20 Isopentane	+++++	+++++	1.60799	1.44112	1.55064	1.45910		
	1.24634	1.42233	1.28560				1.43045	9.108
21 Pentane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
22 Vinyl Bromide	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
23 Trichlorofluoromethane/Fr11	+++++	6.61778	4.40027	4.05431	4.50326	4.35516		
	3.63010	4.30738	3.84825				4.46456	20.604
24 1-Pentene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
25 Dichlorofluoromethane/Fr21	+++++	+++++	1.95712	+++++	+++++	2.41923		
	2.46096	+++++	+++++				2.27910	12.269
26 1,3-Dichloropropane	+++++	+++++	1.84426	+++++	+++++	2.18867		
	2.39445	+++++	+++++				2.14246	12.975
27 Dimethyl Ether	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++

Eurofins Air Toxics Inc.

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Cal Date : 15-Dec-2014 17:07 snguyen
Curve Type : Average

Compound	3.000 Level 1	5.000 Level 2	20.000 Level 3	50.000 Level 4	100.000 Level 5	200.000 Level 6	___ RRF	% RSD
	1000.000 Level 7	2500.000 Level 8	5000.000 Level 9					
28 Freon 13	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
29 Freon123	+++++	+++++	2.38108	+++++	+++++	2.75728		
	2.78371	+++++	+++++				2.64069	8.529
30 Ethanol	+++++	+++++	0.62123	0.40420	0.46095	0.43121		
	0.35453	0.43528	0.40317				0.44437	19.093
31 Acrolein	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
32 Ethyl Ether	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
33 Freon123a	+++++	+++++	1.58943	+++++	+++++	1.92888		
	1.90390	+++++	+++++				1.80740	10.467
34 Freon 113	+++++	3.50514	2.86245	2.53242	2.62800	2.60694		
	2.18645	2.60102	2.37134				2.66172	14.801
35 Acetaldehyde	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
36 1,1-Dichloroethene	+++++	3.67185	2.54936	2.32911	2.33174	2.37773		
	2.06112	2.38013	2.11074				2.47647	20.489
37 Freon143a	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++

Eurofins Air Toxics Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 24-NOV-2014 09:14
End Cal Date : 24-NOV-2014 18:25
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Integrator : HP RTE
Method file : /chem/msd14.i/15dec14.b/14451124c.m
Cal Date : 15-Dec-2014 17:07 snguyen
Curve Type : Average

Compound	3.000 Level 1	5.000 Level 2	20.000 Level 3	50.000 Level 4	100.000 Level 5	200.000 Level 6	RRF	% RSD	
	1000.000 Level 7	2500.000 Level 8	5000.000 Level 9						
38 Acetone	+++++	+++++	0.82983	0.65947	0.72983	0.68119			
	0.58258	0.66113	0.59891				0.67756	12.309	
39 Carbon Disulfide	+++++	5.75328	4.63709	4.08320	4.05729	4.06659			
	3.64269	4.06761	3.70450				4.25153	15.923	
40 Iodomethane	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++	+++++	+++++				+++++	+++++	
41 2-Propanol	+++++	+++++	2.31006	1.67664	1.91166	1.88560			
	1.63638	2.13905	2.00101				1.93720	12.388	
42 3-Chloropropene	+++++	+++++	0.26638	0.23338	0.42396	0.40115			
	0.37508	0.62355	0.56672				0.41289	34.737	<-
43 Cyclopentene	+++++	+++++	1.63454	+++++	+++++	2.03610			
	2.10455	+++++	+++++				1.92506	13.190	
44 Methyl Acetate	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++	+++++	+++++				+++++	+++++	
45 Cyclopentane	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++	+++++	+++++				+++++	+++++	
46 Acetonitrile	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++	+++++	+++++				+++++	+++++	
47 2-Methyl-1-Butene	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++	+++++	+++++				+++++	+++++	

Eurofins Air Toxics Inc.

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Cal Date : 15-Dec-2014 17:07 snguyen
Curve Type : Average

Compound	3.000 Level 1 / 1000.000 Level 7	5.000 Level 2 / 2500.000 Level 8	20.000 Level 3 / 5000.000 Level 9	50.000 Level 4	100.000 Level 5	200.000 Level 6	___ RRF	% RSD
48 Methylene Chloride	+++++	2.98250	1.93328	1.68939	1.65969	1.71107		
	1.43058	1.61016	1.44227				1.80737	27.712
49 tert-Butyl-Alcohol	+++++	2.23828	1.51570	1.44805	1.49292	1.29483		
	+++++	+++++	+++++				1.59796	23.040
50 MTBE	+++++	5.32278	3.25754	2.99256	3.25979	3.37181		
	2.58464	3.93275	3.45843				3.52254	23.350
51 Ethanol-high	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
52 trans-1,2-Dichloroethene	+++++	2.38952	1.49663	1.37752	1.52618	1.49313		
	1.32140	1.50455	1.34896				1.55724	22.186
53 Propanal	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
54 Acrylonitrile	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
55 Hexane	+++++	3.26879	2.61114	2.18998	2.36675	2.34157		
	2.07646	2.36966	2.11980				2.41802	15.860
56 Bromoethane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
57 2,3-Dimethylbutane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++

Eurofins Air Toxics Inc.

INITIAL CALIBRATION DATA

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Cal Date : 15-Dec-2014 17:07 snguyen
Curve Type : Average

Compound	3.000 Level 1	5.000 Level 2	20.000 Level 3	50.000 Level 4	100.000 Level 5	200.000 Level 6	___ RRF	% RSD
	1000.000 Level 7	2500.000 Level 8	5000.000 Level 9					
58 Isopropyl ether	+++++	5.29957	4.27156	3.98976	4.33692	4.29570		
	+++++	+++++	+++++				4.43870	11.272
59 1,1-Dichloroethane	+++++	4.09531	2.54879	2.47730	2.72040	2.65563		
	2.32688	2.73991	2.43828				2.75031	20.434
60 Vinyl Acetate	+++++	+++++	0.41053	0.41032	0.44743	0.43831		
	0.39288	0.49545	0.45305				0.43542	7.915
61 Chloroprene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
62 1-Propanol	+++++	+++++	0.08392	+++++	+++++	0.14758		
	0.16198	+++++	+++++				0.13116	31.672
63 1-Hexene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
64 Ethyl-tert-butyl Ether	+++++	4.95911	3.73919	3.44186	3.84843	3.89114		
	+++++	+++++	+++++				3.97595	14.510
65 Methyl Acrylate	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
66 2,4-Dimethylpentane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
67 Butanal	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++

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Compound	3.000 Level 1	5.000 Level 2	20.000 Level 3	50.000 Level 4	100.000 Level 5	200.000 Level 6	___ RRF	% RSD
	1000.000 Level 7	2500.000 Level 8	5000.000 Level 9					
68 cis-1,2-Dichloroethene	+++++	3.33351	2.37565	2.20693	2.30474	2.29045		
	1.96657	2.37338	2.12034				2.37145	17.391
69 2,2-Dichloropropane	+++++	+++++	1.19280	+++++	+++++	0.97099		
	1.71308	+++++	+++++				1.29229	29.476
70 2-Butanone	+++++	+++++	0.72724	0.65947	0.71823	0.71973		
	0.62410	0.79616	0.71765				0.70894	7.697
71 2-Butanol	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
72 Ethyl Acetate	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
73 3-Methyl-1-Hexene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
74 Tetrahydrofuran	+++++	2.26431	1.47947	1.29329	1.39871	1.48337		
	1.27226	1.55523	1.42263				1.52116	20.717
76 Chloroform	+++++	5.48879	3.65949	3.26146	3.49608	3.44818		
	2.97015	3.50832	3.15255				3.62313	21.684
77 Cyclohexane	+++++	3.10490	2.37756	2.06839	2.32407	2.23771		
	2.00032	2.29732	2.08327				2.31169	15.053
78 1,1,1-Trichloroethane	+++++	4.82124	3.31741	3.30405	3.48084	3.49254		
	3.12114	3.77672	3.38083				3.58685	14.872

Eurofins Air Toxics Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 24-NOV-2014 09:14
End Cal Date : 24-NOV-2014 18:25
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msd14.i/15dec14.b/14451124c.m
Cal Date : 15-Dec-2014 17:07 snguyen
Curve Type : Average

Compound	3.000 Level 1	5.000 Level 2	20.000 Level 3	50.000 Level 4	100.000 Level 5	200.000 Level 6	___ RRF	% RSD
	1000.000 Level 7	2500.000 Level 8	5000.000 Level 9					
79 Carbon Tetrachloride	+++++	4.32885	2.87733	2.77296	3.19698	3.22199		
	2.91539	3.86224	3.47251				3.33103	16.118
80 1,1-Dichloropropene	+++++	+++++	0.62995	+++++	+++++	0.71265		
	0.75142	+++++	+++++				0.69801	8.889
81 2,3-Dimethylpentane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
82 2,2,4-Trimethylpentane	+++++	9.23380	7.28427	7.12837	7.64722	7.54542		
	6.81123	7.68730	6.88940				7.52838	10.154
83 Benzene	1.84696	1.40546	1.01543	0.91828	1.11532	1.05647		
	0.95203	1.14659	1.08124				1.17086	24.768
84 1-Methoxy-2-Propanol	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
85 2,3,4-Trimethylpentane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
87 Isobutanol	+++++	+++++	0.12723	+++++	+++++	0.14654		
	0.17981	+++++	+++++				0.15120	17.590
88 tert-amyl-Methyl Ether	+++++	4.11853	3.24286	3.38592	3.74943	3.76537		
	+++++	+++++	+++++				3.65242	9.466
89 1,2-Dichloroethane	+++++	0.64892	0.40087	0.40733	0.51046	0.48864		
	0.41900	0.53300	0.49384				0.48776	16.857

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Compound	3.000 Level 1	5.000 Level 2	20.000 Level 3	50.000 Level 4	100.000 Level 5	200.000 Level 6	___ RRF	% RSD
	1000.000 Level 7	2500.000 Level 8	5000.000 Level 9					
90 Pentanal	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
91 Ethyl Acrylate	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
92 1-Heptene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
93 Heptane	+++++	0.47872	0.31021	0.31345	0.38902	0.37721		
	0.33468	0.40735	0.38397				0.37433	14.872
95 Trichloroethene	+++++	0.72247	0.47344	0.43768	0.52457	0.48511		
	0.43394	0.53627	0.50636				0.51498	17.802
96 1-Butanol	+++++	+++++	0.14793	+++++	+++++	0.19813		
	0.28036	+++++	+++++				0.20881	32.018
97 Methyl Cyclohexane	+++++	0.88944	0.58584	0.56111	0.66748	0.63701		
	0.58005	0.71254	0.66974				0.66290	15.892
98 Methyl Methacrylate	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
99 1,2-Dichloropropane	+++++	0.52713	0.36967	0.32515	0.39726	0.38041		
	0.33359	0.41129	0.38574				0.39128	15.933
100 1-Nitropropane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++

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End Cal Date : 24-NOV-2014 18:25
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Method file : /chem/msd14.i/15dec14.b/14451124c.m
Cal Date : 15-Dec-2014 17:07 snguyen
Curve Type : Average

Compound	3.000 Level 1	5.000 Level 2	20.000 Level 3	50.000 Level 4	100.000 Level 5	200.000 Level 6	___ RRF	% RSD
	1000.000 Level 7	2500.000 Level 8	5000.000 Level 9					
101 2-Pentanone	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
102 1,4-Dioxane	+++++	+++++	0.23389	0.19463	0.24956	0.24168		
	0.22279	0.28141	0.26700				0.24157	11.846
103 Dibromomethane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
104 Bromodichloromethane	+++++	1.17482	0.79570	0.73995	0.86054	0.83561		
	0.74347	0.93786	0.88507				0.87163	16.076
105 2-Chloroethyl Vinyl Ether	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
106 1-Methoxy-2-propyl acetate	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
107 Epichlorohydrin	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
108 cis-1,3-Dichloropropene	+++++	0.60545	0.45655	0.40254	0.52364	0.51303		
	0.49865	0.65743	0.62757				0.53561	16.421
109 4-Methyl-2-pentanone	+++++	0.15017	0.11582	0.10718	0.13500	0.12320		
	0.12734	0.16677	0.15598				0.13518	15.363
111 Toluene	+++++	1.86815	1.29928	1.17278	1.46849	1.33565		
	1.22278	1.51309	1.41513				1.41192	15.449

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Compound	3.000 Level 1	5.000 Level 2	20.000 Level 3	50.000 Level 4	100.000 Level 5	200.000 Level 6	___ RRF	% RSD
	1000.000 Level 7	2500.000 Level 8	5000.000 Level 9					
112 alpha-Pinene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
113 Octane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
114 trans-1,3-Dichloropropene	+++++	0.53008	0.38754	0.36817	0.50537	0.52604		
	0.54631	0.74403	0.72859				0.54202	25.284
115 1,1,2-Trichloroethane	+++++	0.81191	0.56446	0.46795	0.52979	0.53090		
	0.45849	0.56628	0.53757				0.55842	19.680
116 Tetrachloroethene	+++++	1.02914	0.73139	0.65570	0.77996	0.69074		
	0.64702	0.79182	0.75046				0.75953	15.986
117 beta-Pinene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
118 Dicyclopentadiene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
119 Alphamethylstyrene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
120 2-Hexanone	+++++	+++++	0.33602	0.28990	0.37675	0.38714		
	0.40145	0.52732	0.51136				0.40428	21.519
121 Dibromochloromethane	+++++	1.26343	0.87437	0.89038	0.97550	0.97932		
	0.86230	1.07707	1.05138				0.99672	13.443

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Compound	3.000 Level 1	5.000 Level 2	20.000 Level 3	50.000 Level 4	100.000 Level 5	200.000 Level 6	___ RRF	% RSD
	1000.000 Level 7	2500.000 Level 8	5000.000 Level 9					
122 Butyl Acetate	+++++	+++++	0.08510	+++++	+++++	0.13182		
	0.17426	+++++	+++++				0.13040	34.200
123 D-Limonene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
124 1,2-Dibromoethane	+++++	1.06049	0.75470	0.70448	0.84595	0.79612		
	0.70703	0.89244	0.84722				0.82605	14.114
126 Undecane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
127 Chlorobenzene	+++++	1.83416	1.26653	1.13143	1.30145	1.21858		
	1.10204	1.33891	1.25999				1.30664	17.439
128 Ethyl Benzene	+++++	0.72698	0.59111	0.51401	0.61438	0.59175		
	0.55089	0.68076	0.65297				0.61536	11.280
129 1,1,1,2-Tetrachloroethane	+++++	+++++	0.41254	+++++	+++++	0.50515		
	0.57489	+++++	+++++				0.49752	16.370
130 Nonane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
131 m,p-Xylene	+++++	0.78297	0.67847	0.62041	0.74268	0.72173		
	0.68207	0.85397	0.80368				0.73575	10.342
132 o-Xylene	+++++	0.84257	0.66738	0.62516	0.73692	0.70148		
	0.66081	0.82822	0.79040				0.73162	11.141

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Compound	3.000 Level 1	5.000 Level 2	20.000 Level 3	50.000 Level 4	100.000 Level 5	200.000 Level 6	___ RRF	% RSD
	1000.000 Level 7	2500.000 Level 8	5000.000 Level 9					
133 1-chloro-2-Bromopropane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
M 200 Total Xylenes	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
134 Styrene	+++++	1.26377	0.91883	0.90352	1.07514	1.07415		
	1.05738	1.37091	1.30725				1.12137	15.594
135 2-Heptanone	+++++	+++++	0.17777	+++++	+++++	0.37280		
	0.59352	+++++	+++++				0.38136	54.544 <-
136 Bromoform	+++++	1.28651	0.90788	0.82493	0.90615	0.89411		
	0.84421	1.09865	1.08380				0.98078	16.319
137 Dodecane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
138 Cumene	+++++	2.37664	2.05367	1.80758	2.20880	2.11764		
	2.04922	2.57600	+++++				2.16994	11.463
140 Cyclohexanone	+++++	+++++	0.20273	+++++	+++++	0.25937		
	0.37509	+++++	+++++				0.27906	31.480
141 Diisobutyl Ketone	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
142 1,1,2,2-Tetrachloroethane	+++++	1.62933	1.27029	1.06874	1.12978	1.09017		
	1.01429	1.26868	1.23715				1.21355	15.960

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Compound	3.000 Level 1	5.000 Level 2	20.000 Level 3	50.000 Level 4	100.000 Level 5	200.000 Level 6	___ RRF	% RSD
	1000.000 Level 7	2500.000 Level 8	5000.000 Level 9					
143 Propylbenzene	+++++	3.11499	2.60298	2.31947	2.57239	2.51446		
	2.38640	3.03673	2.21716				2.59557	12.482
144 Bromobenzene	+++++	+++++	0.35931	+++++	+++++	0.50073		
	0.63118	+++++	+++++				0.49707	27.355
145 trans-1,4-dichloro-2-butene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
146 1,2,3-Trichloropropane	+++++	+++++	0.18106	+++++	+++++	0.24997		
	0.31819	+++++	+++++				0.24974	27.454
147 4-Ethyltoluene	+++++	2.42384	2.03413	1.87416	2.11613	2.03884		
	1.99213	2.51631	1.69340				2.08612	12.976
148 Decane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
149 1,3,5-Trimethylbenzene	+++++	1.79747	1.52636	1.34724	1.55802	1.50512		
	1.46884	1.86356	1.68463				1.59390	10.934
150 2-Chlorotoluene	+++++	+++++	0.24164	+++++	+++++	0.38629		
	0.49006	+++++	+++++				0.37267	33.480
151 4-Chlorotoluene	+++++	+++++	0.24647	+++++	+++++	0.34925		
	0.48717	+++++	+++++				0.36096	33.459
152 1,2,4-Trimethylbenzene	+++++	1.67739	1.62560	1.32183	1.46881	1.47607		
	1.51285	1.97861	1.50730				1.57106	12.488

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	1000.000 Level 7	2500.000 Level 8	5000.000 Level 9					
153 tert-Butylbenzene	+++++	+++++	0.82487	+++++	+++++	1.22696		
	1.70657	+++++	+++++				1.25280	35.234
154 Pentachloroethane	+++++	+++++	0.25117	+++++	+++++	0.36740		
	0.50717	+++++	+++++				0.37525	34.159
155 sec-Butylbenzene	+++++	+++++	1.07214	+++++	+++++	1.63735		
	2.39676	+++++	+++++				1.70208	39.051
156 1,3-Dichlorobenzene	+++++	1.58420	1.37043	1.05243	1.14513	1.13751		
	1.13354	+++++	+++++				1.23720	16.224
157 Bis(2-chloroethyl) ether	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
158 p-Cymene	+++++	+++++	0.89562	+++++	+++++	1.31485		
	2.04992	+++++	+++++				1.42013	41.144 <-
159 1,4-Dichlorobenzene	+++++	1.51942	1.34834	0.97770	1.09279	1.09943		
	1.06885	+++++	+++++				1.18442	17.336
160 1,2,3-Trimethylbenzene	+++++	+++++	0.30540	+++++	+++++	0.49387		
	0.75003	+++++	+++++				0.51643	43.214 <-
161 alpha-Chlorotoluene	+++++	0.81019	0.69573	0.52380	0.60109	0.65723		
	0.80416	+++++	+++++				0.68203	16.553
162 Butylbenzene	+++++	+++++	0.21230	+++++	+++++	0.28798		
	0.48106	+++++	+++++				0.32711	42.368 <-

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Compound	3.000 Level 1 / 1000.000 Level 7	5.000 Level 2 / 2500.000 Level 8	20.000 Level 3 / 5000.000 Level 9	50.000 Level 4	100.000 Level 5	200.000 Level 6	___ RRF	% RSD
163 1,2-Dichlorobenzene	+++++	1.42657	1.32893	0.92280	0.95972	0.98726		
	0.97174	+++++	+++++				1.09950	19.897
164 Aniline	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
165 Isooctyl Alcohol	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
166 Hexachloroethane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
167 1,2-Dibromo-3-Chloropropane	+++++	+++++	0.30355	+++++	+++++	0.27998		
	0.53599	+++++	+++++				0.37317	37.916
168 1,3,5-Trichlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
169 1,2,4-Trichlorobenzene	+++++	+++++	+++++	0.47739	0.31220	0.53003		
	0.49094	0.47654	+++++				0.45742	18.372
170 Hexachlorobutadiene	+++++	+++++	+++++	0.34098	0.30917	0.46281		
	0.29493	0.40484	+++++				0.36255	19.370
171 Naphthalene	+++++	+++++	+++++	0.92596	0.56706	1.04441		
	+++++	0.63555	1.45881				0.92636	38.588
172 1,2,3-Trichlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++

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	1000.000 Level 7	2500.000 Level 8	5000.000 Level 9					
173 2-Methylnaphthalene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
174 Isooctyl Acrylate	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
$ 86 1,2-Dichloroethane-d4	1.46722	1.46104	1.59332	1.57865	1.40358	1.42759		
	1.49921	1.53554	1.42508				1.48791	4.607
$ 110 Toluene-d8	0.98942	0.98055	0.98720	0.94896	0.99523	1.00520		
	1.00595	1.03484	1.01939				0.99630	2.461
$ 139 Bromofluorobenzene	0.59169	0.59850	0.59881	0.59716	0.60411	0.63132		
	0.61519	0.65098	0.65639				0.61602	3.968

Calibration History

Method : /chem/msd14.i/15dec14.b/14451124c.m
Start Cal Date: 24-NOV-2014 09:14
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Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 1 , Cal Amount: 3.00000		
24-NOV-2014 09:14	Benzene	/chem/msd14.i/24nov14.b/14112403.d
Cal Level: 2 , Cal Amount: 5.00000		
24-NOV-2014 09:39	Oxyscurve	/chem1/msd14.i/24nov14.b/14112404a.d
24-NOV-2014 09:39	Level2	/chem/msd14.i/24nov14.b/14112404.d
Cal Level: 3 , Cal Amount: 20.00000		
24-NOV-2014 15:07	spAT1	/chem/msd14.i/15dec14.b/14112415k.d
24-NOV-2014 10:03	Oxyscurve	/chem1/msd14.i/24nov14.b/14112405a.d
24-NOV-2014 10:03	AT09mdlNoOxys	/chem/msd14.i/24nov14.b/14112405.d
Cal Level: 4 , Cal Amount: 50.00000		
24-NOV-2014 10:35	Oxyscurve	/chem1/msd14.i/24nov14.b/14112406a.d
24-NOV-2014 10:35	AT09mdlNoOxys	/chem/msd14.i/24nov14.b/14112406.d
Cal Level: 5 , Cal Amount: 100.00000		
24-NOV-2014 10:54	Oxyscurve	/chem1/msd14.i/24nov14.b/14112407a.d
24-NOV-2014 10:54	AT09mdlNoOxys	/chem/msd14.i/24nov14.b/14112407.d
Cal Level: 6 , Cal Amount: 200.00000		
24-NOV-2014 17:39	spAT1	/chem/msd14.i/15dec14.b/14112420k.d
24-NOV-2014 11:17	Oxyscurve	/chem1/msd14.i/24nov14.b/14112408c.d
24-NOV-2014 11:17	AT09noOxy	/chem/msd14.i/24nov14.b/14112408.d
Cal Level: 7 , Cal Amount: 1000.00000		

24-NOV-2014 18:25	spAT1	/chem/msd14.i/15dec14.b/14112421k.d
24-NOV-2014 12:08	AT09noOxyNaph	/chem/msd14.i/24nov14.b/14112409.d

Cal Level: 8 , Cal Amount: 2500.00000		
24-NOV-2014 13:59	NapthICAL	/chem/msd14.i/24nov14.b/14112413.d
24-NOV-2014 12:31	AT09noOxyNaph	/chem/msd14.i/24nov14.b/14112410.d

Cal Level: 9 , Cal Amount: 5000.00000		
24-NOV-2014 14:22	NapthICAL	/chem/msd14.i/24nov14.b/14112414.d
24-NOV-2014 13:41	AT09noOxyNaph	/chem/msd14.i/24nov14.b/14112412.d

Continuing Calibration
Ccal Level Mode: GLOBAL LEVEL 6

Ccal Level: 6 , Ccal Amount: 200.00		
15-DEC-2014 07:00	AT09	/chem/msd14.i/15dec14.b/14121502.d

Ccal Level: 6 , Ccal Amount: 200.00		
15-DEC-2014 08:26	spAT1CCV	/chem/msd14.i/15dec14.b/14121505.d

Ccal Level: 6 , Ccal Amount: 200.00		
24-NOV-2014 17:39	spAT1CCV	/chem/msd14.i/15dec14.b/14112420ak.d

Ccal Level: 6 , Ccal Amount: 200.00		
24-NOV-2014 11:17	AT09noOxy	/chem/msd14.i/15dec14.b/14112408ak.d

Ccal Level: 6 , Ccal Amount: 200.00		
24-NOV-2014 17:39	spAT1	/chem/msd14.i/15dec14.b/14112420k.d

Eurofins Air Toxics Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 24-NOV-2014 09:14
End Cal Date : 24-NOV-2014 18:25
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msd14.i/15dec14.b/14451124c.m
Cal Date : 15-Dec-2014 17:07 snguyen
Curve Type : Average

Calibration File Names:
Level 1: /chem/msd14.i/24nov14.b/14112403.d
Level 2: /chem1/msd14.i/24nov14.b/14112404a.d
Level 3: /chem/msd14.i/15dec14.b/14112415k.d
Level 4: /chem1/msd14.i/24nov14.b/14112406a.d
Level 5: /chem1/msd14.i/24nov14.b/14112407a.d
Level 6: /chem/msd14.i/15dec14.b/14112420k.d
Level 7: /chem/msd14.i/15dec14.b/14112421k.d
Level 8: /chem/msd14.i/24nov14.b/14112413.d
Level 9: /chem/msd14.i/24nov14.b/14112414.d

Please see Calibration History page(s) for all the calibration files.

12/15/14

12/16/14

Compound	3.000 Level 1 / 1000.000 Level 7	5.000 Level 2 / 2500.000 Level 8	20.000 Level 3 / 5000.000 Level 9	50.000 Level 4	100.000 Level 5	200.000 Level 6	___ RRF	% RSD
M 1 1,2-Dichloroethene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
199 Indene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
3 Propane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++				+++++	+++++
4 Freon134a	+++++	+++++	0.60376	+++++	+++++	0.73171		
	0.69051	+++++	+++++				0.67533	9.672
5 Propylene	+++++	+++++	0.88265	0.77377	0.75396	0.71696		
	0.74498	0.86253	0.76017				0.78500	7.970
6 Freon 152a	+++++	+++++	0.42169	+++++	+++++	0.39635		
	0.37448	+++++	+++++				0.39751	5.944
7 Dichlorodifluoromethane/Fr12	+++++	4.54269	3.67913	3.31931	3.40944	3.35014		
	3.20706	3.80575	3.33025				3.58047	12.215

144511124C.M
Initial Calibration Narrative

A calibration curve was performed 11/24/14

ICAL: **1 out: 3-Chloroprene @ 34.7 % RSD**

ICV: **3 Out: Chloroethane @ 63.5%, Alpha Chlorotoluene @ 165%, Hexachlorobutadiene@137%** (File: #14112418)

Alpha-Chlorotoluene must be Non-Detect in Samples.

For AFCEE 3.1, AFCEE 4.0, and DOD, evaluate per project.

MDL: 5/22/14; Naphthalene MDL analyzed 6/3/14.

1,2,4-Trichlorobenzene and Hexachlorobutadiene have reporting limits raised from 20ppbv to 50ppbv.

1,3-Dichlorobenzene, 1,4-Dichlorobenzene, 1,2-Dichlorobenzene, and alpha-Chlorotoluene were calibrated to 1000ppbv.

Cumene, 1,2,4-Trichlorobenzene, and Hexachlorobutadiene were calibrated to 2500ppbv.

Naphthalene calibrated at 5, 10, 20, 250, and 500ppbv.

A three-point AT-1 calibration was analyzed on 11/24/14.

On 12/15/14 the AT-1 ICAL was corrected to add the 1000 ppbv level that had been mistakenly left out.

No 2-Heptanone, p- Cymene, 1,2,3-Trimethylbenzene, Butylbenzene

Oxygenates compounds added on 12/09/14 calibrated at 5, 20, 50, 100, and 200 ppbv on 11/24/14

Eurofins Air Toxics, Inc. **MSD-14** **Logbook #2696**

BFB Verification of 176/174 m/z Ratio:	(33146/35128) x 100 = 94.86%
Tekmar Purge Flow:	NA
Vacuum:	3.89×10^{-6}

IS/S Std. #: 2687-99	Exp. Date: 2/18/14
BCM	117767
1,4-DFB	544303
CB-d5	496681

Verified CCV IS vs ICAL mid-point (-40%D): MB

File ID:	14112418
Compound:	Toluene-d8
Initials:	MB

Calculation Check:

ppbv of compound = $\frac{\text{Area}_{\text{Sample}}}{\text{Area}_{\text{IS}}} \times \frac{\text{Conc}_{\text{IS}}}{\text{RRF}} = \frac{(523592)}{(527749)} \times \frac{(400.00)}{(0.99630)} = 398.32$

SOP# (Circle one): 6 / 83 / 38 / 91 / 109

Method (Circle one): TO-14A/TO-15/TO-17

Reported Result: 398.32

Method Name: 1445112418.m

	Use	File	Lab ID#	Can#	Pressure	Amt. Loaded	DF	Loaded By Initials	Date Analyzed	Time Analyzed	Reviewed By Initials	Comments/Standard Expiration Date
1	X	14112401	BFB tune check	2299-789	50ng	2µL	1.00	MB	11/24/14	—	MB	FILE NOT COLLECTED
2	✓	14112402	BFB tune check	2299-789	50ng	2µL	1.00	MB		0858	MB/MB	
3	✓	14112403	1cal level #1	2687-103	3.0 ppbv	30mL	1.00	MB		0914	MB/MB	Exp 12/4/14
4	✓	14112404	#2	↓	5.00 ppbv	50mL	1.00	MB		0939	MB/MB	Exp 12/4/14
5	✓	05	#3	2687-64	20 ppbv	5.0mL	1.00	MB		1003	MB/MB	Exp 12/4/14
6	✓	06	#4		50 ppbv	12.5mL	1.00	MB		1035	MB/MB	Exp 12/4/14
7	✓	07	#5		100 ppbv	25.0mL	1.00	MB		1054	MB/MB	Exp 12/4/14
8	✓	08	#6	↓	200 ppbv	50 mL	1.00	MB		1117	MB/MB	Exp 12/4/14
9	✓	09	#7	2687-62	1000 ppbv	10mL	1.00	MB		1208	MB/MB	Exp 12/4/14
10	✓	10	#8	↓	2500 ppbv	25mL	1.00	MB		1231	MB/MB	Exp 12/4/14
11	✓	11	System Blank	33329	Humid	50mL	1.00	MB		1257	MB/MB	
12	✓	12	1cal level #9	2687-62	5000 ppbv	50mL	1.00	MB		1341	MB/MB	Exp 12/4/14
13	✓	13	~~Naph~~ MB 11/24/14 1cal level #8	2677-289	~~250~~ 500 MB 11/24/14 ppbv	25mL	1.00	MB		1359	MB/MB	Naph. only
14	✓	14	~~Naph~~ MB 11/24/14 1cal level #9	↓	500 ppbv	50mL	1.00	MB	↓	1422	MB/MB	↓

MB
Reviewed

11/24/14
Date

0314 of 0722

	Use	File	Lab ID#	Can#	Pressure	Amt. Loaded	DF	Loaded By Initials	Date Analyzed	Time Analyzed	Reviewed By Initials	Comments/Standard Expiration Date
15	✓	14112415	1cal level #3	2687-32	20ppbv (1000ppbv)	1.0mL	1.00	MB	11/24/14	1507	MB	
16	✗	16	System Blank	33329	Humid	50mL	1.00	MB		1548	MB	1,2,4-TCB >R.L.
17	✓	17	↓	↓	↓	↓	↓	↓		1611	MB	
18	✓	18	ICV (100ppbv)	2687-17A	100ppbv	50mL	1.00	MB		1633	MB	Exp. 1/21/15 30+
19	✓	19	LCSD ↓	↓	↓	↓	↓	↓		1701	MB	10+ 11
20	✓	20	ICAL Level #6	2687-32	200ppbv	10mL	1.00	MB		1739	MB	AT-1
21	✓	21	ICAL Level #7	↓	1000ppbv	50mL	↓	↓		1825	MB	↓
22	✓	22	CCVsp (100ppmv)	2516-105	4000ppbv	2.0mL	1.00	MB		1906	MB	TPHg Exp. 1/13/15
23	✓	23	Lab Blank	33329	Humid	50mL	1.00	MB		1934	MB	
24		24	1411080A-01A	33533	3.5"Hg-5.0psi	25mL	3.04	MB				
25												
26												
27												
28												
29												
30												
31												
32												
33												
34												
35								MB	11/24/14			
36												

MB
Reviewed

11/24/14
Date

Eurofins Air Toxics, Inc. **MSD-14** **Logbook #2696**

BFB Verification of 176/174 m/z Ratio:	(168855/172365) x100 = 97.80%
Tekmar Purge Flow:	NA
Vacuum:	3.88 x10⁻⁶

IS/S Std. #: 2687-99	Exp. Date: 2/18/15
BCM	90127
1,4-DFB	402233
CB-d5	362019

Verified CCV IS vs ICAL mid-point (-40%D): ACT

File ID:	1412502
Compound:	Tol-d8
Initials:	ACT

Calculation Check:

ppbv of compound = $\frac{\text{Area}_{\text{Sample}}}{\text{Area}_{\text{IS}}} \times \frac{\text{Conc}_{\text{IS}}}{\text{RRF}}$ = (409932) x (400.00) = 409.17
(402233) (0.99630)

SOP# (Circle one): 6 / 83 / 38 / 91 / 109 Method (Circle one): TO-14A/TO-15/TO-17 Reported Result: 409.17

Method Name: 1445 1124.B

	Use	File	Lab ID#	Can#	Pressure	Amt. Loaded	DF	Loaded By Initials	Date Analyzed	Time Analyzed	Reviewed By Initials	Comments/Standard Expiration Date
1	✓	1412501	BFB Tune Check	2299-789	50ng	2.0 µl	100	ACT	12/15/14	0648	ACT	
2	✓	02	CCV (200ppbv)	2687-34	200ppbv	50mL		ACT		0700	ACT	Exp 1/23/15 Ø out
3	✓	03	LCS	2687-105				ACT		0734	ACT	Exp 2/21/15 1 out α-CT MS/MSD ND
4	✓	04	LCSD					ACT		0758	ACT	
5	✓	05	CCVsp (500ppbv)	2687-32A	200ppbv	20mL		ACT		0826	/	Exp 1/23/15 Fri 52a OK
6	✓	06	Lab blank	36041	Humid	50mL				0859	/	
7	✓	07	1412029-01A	3217	20"Hg - 15.0psi	50mL	~~6.00~~ 2.16			0940	/	
8	✓	08	-02A	3608	3.0"Hg-15psi	50mL	224			1003	/	
9	✓	09	-03A	2909	3.5"Hg-15.0psi	50mL	2.29			1023	/	
10	✗	10	1412027-01A	9503	0.41"Hg-15.0psi	0.5mL	205			1057	/	overrange
11	✗ ✓ OK	11	~~1412168-10A~~ 1412189-01A	3555	2.0"Hg-14.7psi	50mL	2.15			1132	/	~~15 out~~ OK
12	✓	12	1412206-01A	3428	6.5"Hg-15.0psi	50mL	2.58			1154	/	
13	✓	13	-02A	3086	6.0"Hg-15.0psi	50mL	2.52			1213	/	
14	✓	14	-03A	3318	5.0"Hg-15.0psi	50mL	2.42			1236	/	

Reviewed 12/15/14 Date

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Air Toxics Ltd.
Modified EPA Methods TO-14A/TO-15
Internal Standard and Associated Target Compounds and Surrogates

Bromochloromethane
Target Compounds:
Freon 12
Freon 114
Chloromethane
Vinyl Chloride
1,3-Butadiene
Bromomethane
Chloroethane
Freon 11
Ethanol
Freon 113
1,1-Dichloroethene
Acetone
2-Propanol
Carbon Disulfide
3-Chloropropene
Methylene Chloride
Methyl tert-butyl ether
trans-1,2-Dichloroethene
Hexane
1,1-Dichloroethane
2-Butanone (Methyl Ethyl Ketone)
cis-1,2-Dichloroethene
Tetrahydrofuran
Chloroform
1,1,1-Trichloroethane
Cyclohexane
Carbon Tetrachloride
2,2,4-Trimethylpentane
Surrogates:
1,2-Dichloroethane-d4

1,4-Difluorobenzene
Target Compounds:
Benzene
1,2-Dichloroethane
Heptane
Trichloroethene
1,2-Dichloropropane
1,4-Dioxane
Bromodichloromethane
cis-1,3-Dichloropropene
4-Methyl-2-pentanone
Toluene
Surrogates:
Toluene-d8

Chlorobenzene-d5
Target Compounds:
trans-1,3-Dichloropropene
1,1,2-Trichloroethane
Tetrachloroethene
2-Hexanone
Dibromochloromethane
1,2-Dibromoethane (EDB)
Chlorobenzene
Ethyl Benzene
m,p-Xylene
o-Xylene
Styrene
Bromoform
Cumene
1,1,2,2-Tetrachloroethane
Propylbenzene
4-Ethyltoluene
1,3,5-Trimethylbenzene
1,2,4-Trimethylbenzene
1,3-Dichlorobenzene
1,4-Dichlorobenzene
alpha-Chlorotoluene
1,2-Dichlorobenzene
1,2,4-Trichlorobenzene
Hexachlorobutadiene
Surrogates:
Bromofluorobenzene

Eurofins Air Toxics Inc.

EPA METHOD TO14A/TO15

Data file : /chem/msd14.i/24nov14.b/14112418.d
Lab Smp Id: ICV Client Smp ID: ICV
Inj Date : 24-NOV-2014 16:33
Operator : mjs Inst ID: msd14.i
Smp Info : 50mL #2687-17A
Misc Info : 100ppbv (100ppbv)
Comment : (5&20) - GC/MS
Method : /chem/msd14.i/24nov14.b/14451124a.m
Meth Date : 24-Nov-2014 19:15 mskidmor Quant Type: ISTD
Cal Date : 24-NOV-2014 15:07 Cal File: 14112415.d
Als bottle: 1 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT09.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 (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
* 75 Bromochloromethane					CAS #: 74-97-5		
4.753	4.753 (1.000)	130	111664	400.000		70.00- 130.00	100.00
4.753	4.753 (1.000)	128	88219			0.00- 30.00	79.00
4.753	4.753 (1.000)	49	131930			0.00- 30.00	118.15
* 94 1,4-Difluorobenzene					CAS #: 540-36-3		
5.858	5.858 (1.000)	114	527749	400.000		70.00- 130.00	100.00
5.858	5.858 (1.000)	88	77399			0.00- 30.00	14.67
* 125 Chlorobenzene-d5					CAS #: 3114-55-4		
9.832	9.832 (1.000)	117	472378	400.000		70.00- 130.00	100.00
9.832	9.832 (1.000)	82	247492			0.00- 30.00	52.39
$ 86 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
5.396	5.396 (1.135)	65	166084	399.850	399.85	70.00- 130.00	100.00
5.396	5.396 (1.135)	67	83821			0.00- 30.00	50.47
$ 110 Toluene-d8					CAS #: 2037-26-5		
7.649	7.635 (1.306)	98	523592	398.322	398.32	70.00- 130.00	100.00
7.635	7.635 (1.303)	70	57355			0.00- 30.00	10.95

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

$ 110 Toluene-d8 (continued)
  7.649   7.635 (1.306)   100    354294                     0.00-  30.00    67.67
-------------------------------------------------------------------------------
$ 139 Bromofluorobenzene                            CAS #: 460-00-4
 10.951  10.951 (1.114)   174    294288 404.530   404.53  70.00- 130.00   100.00
 10.951  10.951 (1.114)    95    343140                     0.00-  30.00   116.60
 10.951  10.951 (1.114)   176    284481                     0.00-  30.00    96.67
-------------------------------------------------------------------------------
    5 Propylene                                     CAS #: 115-07-1
  1.241   1.227 (0.261)    41     19680 89.8051   89.805  70.00- 130.00   100.00
  1.241   1.227 (0.261)    42     12600                     0.00-  30.00    64.02
  1.241   1.227 (0.261)    39     14771                     0.00-  30.00    75.06
-------------------------------------------------------------------------------
    7 Dichlorodifluoromethane/Fr12                  CAS #: 75-71-8
  1.269   1.269 (0.267)    85     98616 98.6630   98.663  70.00- 130.00   100.00
  1.269   1.269 (0.267)    87     31529                     0.00-  30.00    31.97
-------------------------------------------------------------------------------
    9 Freon 114                                     CAS #: 76-14-2
  1.353   1.367 (0.285)   135     68302 93.3267   93.327  70.00- 130.00   100.00
  1.353   1.367 (0.285)   137     21206                     0.00-  30.00    31.05
-------------------------------------------------------------------------------
   12 Chloromethane                                 CAS #: 74-87-3
  1.423   1.423 (0.299)    50     31523 104.665   104.66  70.00- 130.00   100.00
  1.423   1.423 (0.299)    52     10623                     0.00-  30.00    33.70
-------------------------------------------------------------------------------
   13 Butane                                        CAS #: 106-97-8
  1.478   1.479 (0.311)    58      8851 98.5998   98.600  70.00- 130.00   100.00
  1.478   1.479 (0.311)    43     54783                     0.00-  30.00   618.95
-------------------------------------------------------------------------------
   15 Vinyl Chloride                                CAS #: 75-01-4
  1.506   1.507 (0.317)    62     42592 103.705   103.70  70.00- 130.00   100.00
  1.506   1.521 (0.317)    64     13573                     0.00-  30.00    31.87
-------------------------------------------------------------------------------
   16 1,3-Butadiene                                 CAS #: 106-99-0
  1.520   1.535 (0.320)    54     29073 97.0276   97.028  70.00- 130.00   100.00
  1.520   1.535 (0.320)    39     27953                     0.00-  30.00    96.15
-------------------------------------------------------------------------------
   18 Bromomethane                                  CAS #: 74-83-9
  1.814   1.814 (0.382)    94     25663 91.3699   91.370  70.00- 130.00   100.00
  1.814   1.814 (0.382)    96     23641                     0.00-  30.00    92.12
-------------------------------------------------------------------------------
   19 Chloroethane                                  CAS #: 75-00-3
  1.898   1.912 (0.399)    64     12183 63.4869   63.487  70.00- 130.00   100.00(R)
  1.898   1.912 (0.399)    66      3783                     0.00-  30.00    31.05
  1.898   1.912 (0.399)    49      3585                     0.00-  30.00    29.43
-------------------------------------------------------------------------------
```

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
20 Isopentane					CAS #: 78-78-4		
1.912	1.926 (0.402)	43	42135	105.516	105.52	70.00- 130.00	100.00
1.912	1.926 (0.402)	57	31316			0.00- 30.00	74.32
1.912	1.926 (0.402)	72	4892			0.00- 30.00	11.61
23 Trichlorofluoromethane/Fr11					CAS #: 75-69-4		
2.108	2.108 (0.444)	101	124398	99.8116	99.812	70.00- 130.00	100.00
2.108	2.108 (0.444)	103	79119			0.00- 30.00	63.60
30 Ethanol					CAS #: 64-17-5		
2.374	2.374 (0.500)	45	15780	127.208	127.21	70.00- 130.00	100.00
2.374	2.374 (0.500)	43	3452			0.00- 30.00	21.88
2.374	2.374 (0.500)	46	5988			0.00- 30.00	37.95
34 Freon 113					CAS #: 76-13-1		
2.598	2.598 (0.547)	151	80857	108.818	108.82	70.00- 130.00	100.00
2.598	2.598 (0.547)	153	51116			0.00- 30.00	63.22
2.598	2.598 (0.547)	101	105002			0.00- 30.00	129.86
36 1,1-Dichloroethene					CAS #: 75-35-4		
2.612	2.626 (0.550)	61	71204	102.995	103.00	70.00- 130.00	100.00
2.626	2.626 (0.552)	96	44546			0.00- 30.00	62.56
2.626	2.626 (0.552)	98	28062			0.00- 30.00	39.41
38 Acetone					CAS #: 67-64-1		
2.752	2.752 (0.579)	58	20383	107.762	107.76	70.00- 130.00	100.00
2.752	2.752 (0.579)	43	60415			0.00- 30.00	296.40
39 Carbon Disulfide					CAS #: 75-15-0		
2.808	2.822 (0.591)	76	111218	93.7080	93.708	70.00- 130.00	100.00
41 2-Propanol					CAS #: 67-63-0		
2.892	2.892 (0.608)	45	57901	107.068	107.07	70.00- 130.00	100.00
2.892	2.892 (0.608)	43	14514			0.00- 30.00	25.07
2.892	2.892 (0.608)	59	2488			0.00- 30.00	4.30
42 3-Chloropropene					CAS #: 107-05-1		
3.018	3.018 (0.635)	76	9917	86.0389	86.039	70.00- 130.00	100.00
3.004	3.018 (0.632)	41	22916			0.00- 30.00	231.08
48 Methylene Chloride					CAS #: 75-09-2		
3.171	3.172 (0.667)	49	49041	97.1985	97.198	70.00- 130.00	100.00
3.171	3.186 (0.667)	84	37788			0.00- 30.00	77.05
3.171	3.172 (0.667)	51	15255			0.00- 30.00	31.11
50 MTBE					CAS #: 1634-04-4		
3.367	3.368 (0.709)	73	87819	89.3058	89.306	70.00- 130.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
50 MTBE (continued)							
3.367	3.368 (0.709)	57	19616			0.00- 30.00	22.34
3.367	3.368 (0.709)	41	22251			0.00- 30.00	25.34
52 trans-1,2-Dichloroethene					CAS #: 156-60-5		
3.395	3.396 (0.714)	96	41001	94.3162	94.316	70.00- 130.00	100.00
3.395	3.396 (0.714)	61	53660			0.00- 30.00	130.87
3.395	3.396 (0.714)	98	25564			0.00- 30.00	62.35
55 Hexane					CAS #: 110-54-3		
3.591	3.591 (0.756)	57	66207	98.0823	98.082	70.00- 130.00	100.00
3.591	3.591 (0.756)	43	36184			0.00- 30.00	54.65
3.591	3.591 (0.756)	86	14032			0.00- 30.00	21.19
59 1,1-Dichloroethane					CAS #: 75-34-3		
3.871	3.885 (0.815)	63	74637	97.2117	97.212	70.00- 130.00	100.00
3.871	3.885 (0.815)	65	24269			0.00- 30.00	32.52
60 Vinyl Acetate					CAS #: 108-05-4		
3.927	3.927 (0.826)	86	11655	95.8843	95.884	70.00- 130.00	100.00
3.927	3.927 (0.826)	43	98930			0.00- 30.00	848.82
3.927	3.927 (0.826)	42	10566			0.00- 30.00	90.66
68 cis-1,2-Dichloroethene					CAS #: 156-59-2		
4.487	4.501 (0.944)	61	65346	98.7080	98.708	70.00- 130.00	100.00
4.487	4.501 (0.944)	96	54565			0.00- 30.00	83.50
4.501	4.501 (0.947)	98	35427			0.00- 30.00	54.21
70 2-Butanone					CAS #: 78-93-3		
4.529	4.529 (0.953)	72	17690	89.3850	89.385	70.00- 130.00	100.00
4.529	4.529 (0.953)	43	71694			0.00- 30.00	405.28
4.529	4.529 (0.953)	57	5907			0.00- 30.00	33.39
74 Tetrahydrofuran					CAS #: 109-99-9		
4.739	4.739 (0.997)	42	38402	90.4328	90.433	70.00- 130.00	100.00
4.739	4.739 (0.997)	71	18666			0.00- 30.00	48.61
4.739	4.739 (0.997)	72	18487			0.00- 30.00	48.14
76 Chloroform					CAS #: 67-66-3		
4.837	4.837 (1.018)	83	95186	94.1101	94.110	70.00- 130.00	100.00
4.837	4.837 (1.018)	85	64492			0.00- 30.00	67.75
77 Cyclohexane					CAS #: 110-82-7		
4.934	4.935 (1.038)	84	61854	95.8484	95.848	70.00- 130.00	100.00
4.920	4.935 (1.035)	56	65050			0.00- 30.00	105.17
4.920	4.935 (1.035)	41	36576			0.00- 30.00	59.13

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
78 1,1,1-Trichloroethane					CAS #: 71-55-6		
4.962	4.963 (1.044)	97	99337	99.2076	99.208	70.00- 130.00	100.00
4.962	4.963 (1.044)	99	62589			0.00- 30.00	63.01
79 Carbon Tetrachloride					CAS #: 56-23-5		
5.088	5.103 (1.071)	119	90150	96.9469	96.947	70.00- 130.00	100.00
5.088	5.103 (1.071)	117	92524			0.00- 30.00	102.63
82 2,2,4-Trimethylpentane					CAS #: 540-84-1		
5.340	5.340 (1.124)	57	210073	99.9576	99.958	70.00- 130.00	100.00
5.340	5.340 (1.124)	56	71283			0.00- 30.00	33.93
5.340	5.340 (1.124)	41	60845			0.00- 30.00	28.96
83 Benzene					CAS #: 71-43-2		
5.354	5.354 (0.914)	78	140514	90.9590	90.959	70.00- 130.00	100.00
5.354	5.354 (0.914)	77	34002			0.00- 30.00	24.20
89 1,2-Dichloroethane					CAS #: 107-06-2		
5.480	5.480 (0.936)	62	63522	98.7081	98.708	70.00- 130.00	100.00
5.480	5.480 (0.936)	64	21261			0.00- 30.00	33.47
93 Heptane					CAS #: 142-82-5		
5.578	5.578 (0.952)	71	47416	96.0082	96.008	70.00- 130.00	100.00
5.578	5.578 (0.952)	43	67522			0.00- 30.00	142.40
5.578	5.578 (0.952)	100	18800			0.00- 30.00	39.65
95 Trichloroethene					CAS #: 79-01-6		
6.096	6.096 (1.041)	95	65732	96.7431	96.743	70.00- 130.00	100.00
6.096	6.096 (1.041)	130	67666			0.00- 30.00	102.94
6.096	6.096 (1.041)	97	40068			0.00- 30.00	60.96
97 Methyl Cyclohexane					CAS #: 108-87-2		
6.208	6.208 (1.060)	83	83026	94.9286	94.929	70.00- 130.00	100.00
6.208	6.208 (1.060)	98	42220			0.00- 30.00	50.85
6.208	6.208 (1.060)	55	59623			0.00- 30.00	71.81
99 1,2-Dichloropropane					CAS #: 78-87-5		
6.404	6.404 (1.093)	63	46253	89.5951	89.595	70.00- 130.00	100.00
6.404	6.404 (1.093)	62	34431			0.00- 30.00	74.44
6.404	6.404 (1.093)	41	27955			0.00- 30.00	60.44
102 1,4-Dioxane					CAS #: 123-91-1		
6.544	6.544 (1.117)	88	29555	92.7313	92.731	70.00- 130.00	100.00
6.544	6.544 (1.117)	58	20834			0.00- 30.00	70.49
6.544	6.544 (1.117)	57	7383			0.00- 30.00	24.98

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
104 Bromodichloromethane					CAS #: 75-27-4		
6.739	6.740 (1.150)	83	107984	93.8992	93.899	70.00- 130.00	100.00
6.739	6.740 (1.150)	85	72347			0.00- 30.00	67.00
108 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
7.341	7.341 (1.253)	75	67513	95.5378	95.538	70.00- 130.00	100.00
7.341	7.341 (1.253)	77	21321			0.00- 30.00	31.58
7.341	7.341 (1.253)	39	34571			0.00- 30.00	51.21
109 4-Methyl-2-pentanone					CAS #: 108-10-1		
7.579	7.579 (1.294)	85	17174	96.2916	96.292	70.00- 130.00	100.00
7.579	7.579 (1.294)	43	91526			0.00- 30.00	532.93
7.579	7.579 (1.294)	58	38400			0.00- 30.00	223.59
111 Toluene					CAS #: 108-88-3		
7.747	7.747 (1.322)	91	176986	95.0084	95.008	70.00- 130.00	100.00
7.747	7.747 (1.322)	92	105318			0.00- 30.00	59.51
114 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
8.306	8.307 (0.845)	75	55778	87.1407	87.141	70.00- 130.00	100.00
8.306	8.307 (0.845)	77	18045			0.00- 30.00	32.35
8.306	8.307 (0.845)	39	28871			0.00- 30.00	51.76
115 1,1,2-Trichloroethane					CAS #: 79-00-5		
8.628	8.628 (0.878)	97	61817	93.7386	93.739	70.00- 130.00	100.00
8.628	8.628 (0.878)	99	39209			0.00- 30.00	63.43
8.628	8.628 (0.878)	83	52131			0.00- 30.00	84.33
116 Tetrachloroethene					CAS #: 127-18-4		
8.628	8.642 (0.878)	166	87194	97.2106	97.210	70.00- 130.00	100.00
8.642	8.642 (0.879)	129	64555			0.00- 30.00	74.04
8.642	8.642 (0.879)	131	60593			0.00- 30.00	69.49
120 2-Hexanone					CAS #: 591-78-6		
9.020	9.020 (0.917)	58	46027	96.4063	96.406	70.00- 130.00	100.00
9.020	9.020 (0.917)	43	80986			0.00- 30.00	175.95
9.020	9.020 (0.917)	100	11209			0.00- 30.00	24.35
121 Dibromochloromethane					CAS #: 124-48-1		
9.160	9.174 (0.932)	129	112717	95.7607	95.761	70.00- 130.00	100.00
9.160	9.160 (0.932)	127	90992			0.00- 30.00	80.73
124 1,2-Dibromoethane					CAS #: 106-93-4		
9.300	9.314 (0.946)	107	94563	96.9355	96.936	70.00- 130.00	100.00
9.300	9.314 (0.946)	109	89017			0.00- 30.00	94.14

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
127 Chlorobenzene						CAS #: 108-90-7	
9.860	9.860 (1.003)	112	143421	92.9455	92.946	70.00- 130.00	100.00
9.860	9.860 (1.003)	114	45395			0.00- 30.00	31.65
9.860	9.860 (1.003)	77	84467			0.00- 30.00	58.89
128 Ethyl Benzene						CAS #: 100-41-4	
9.958	9.958 (1.013)	106	71888	98.9235	98.924	70.00- 130.00	100.00
9.958	9.958 (1.013)	91	226947			0.00- 30.00	315.70
131 m,p-Xylene						CAS #: 108-38-3	
10.083	10.084 (1.026)	106	88441	101.788	101.79	70.00- 130.00	100.00
10.083	10.084 (1.026)	91	176687			0.00- 30.00	199.78
132 o-Xylene						CAS #: 95-47-6	
10.461	10.461 (1.064)	106	80218	92.8447	92.845	70.00- 130.00	100.00
10.461	10.461 (1.064)	91	171388			0.00- 30.00	213.65
134 Styrene						CAS #: 100-42-5	
10.503	10.503 (1.068)	104	132958	100.401	100.40	70.00- 130.00	100.00
10.503	10.503 (1.068)	78	67527			0.00- 30.00	50.79
136 Bromoform						CAS #: 75-25-2	
10.671	10.671 (1.085)	173	109158	94.2442	94.244	70.00- 130.00	100.00
10.671	10.671 (1.085)	171	56368			0.00- 30.00	51.64
138 Cumene						CAS #: 98-82-8	
10.783	10.783 (1.097)	105	257777	100.593	100.59	70.00- 130.00	100.00
10.783	10.783 (1.097)	120	67464			0.00- 30.00	26.17
10.783	10.783 (1.097)	51	24947			0.00- 30.00	9.68
142 1,1,2,2-Tetrachloroethane						CAS #: 79-34-5	
11.105	11.105 (1.129)	83	132992	92.7976	92.798	70.00- 130.00	100.00
11.105	11.105 (1.129)	85	86974			0.00- 30.00	65.40
143 Propylbenzene						CAS #: 103-65-1	
11.119	11.119 (1.131)	91	314664	102.656	102.66	70.00- 130.00	100.00
11.119	11.119 (1.131)	120	71831			0.00- 30.00	22.83
11.119	11.119 (1.131)	105	11989			0.00- 30.00	3.81
147 4-Ethyltoluene						CAS #: 622-96-8	
11.203	11.203 (1.139)	105	259027	105.142	105.14	70.00- 130.00	100.00
11.203	11.203 (1.139)	120	80119			0.00- 30.00	30.93
149 1,3,5-Trimethylbenzene						CAS #: 108-67-8	
11.259	11.259 (1.145)	105	210541	111.852	111.85	70.00- 130.00	100.00
11.259	11.259 (1.145)	120	104824			0.00- 30.00	49.79

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
152 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
11.511	11.511 (1.171)	105	199486	107.520	107.52	70.00- 130.00	100.00
11.511	11.511 (1.171)	120	92531			0.00- 30.00	46.38
156 1,3-Dichlorobenzene					CAS #: 541-73-1		
11.707	11.707 (1.191)	146	148472	101.619	101.62	70.00- 130.00	100.00
11.707	11.707 (1.191)	148	94359			0.00- 30.00	63.55
11.707	11.707 (1.191)	111	56540			0.00- 30.00	38.08
159 1,4-Dichlorobenzene					CAS #: 106-46-7		
11.776	11.777 (1.198)	146	144853	103.560	103.56	70.00- 130.00	100.00
11.776	11.777 (1.198)	148	93039			0.00- 30.00	64.23
11.762	11.763 (1.196)	111	52898			0.00- 30.00	36.52
161 alpha-Chlorotoluene					CAS #: 100-44-7		
11.860	11.861 (1.206)	91	132896	164.997	165.00	70.00- 130.00	100.00(R)
11.860	11.861 (1.206)	126	26440			0.00- 30.00	19.90
163 1,2-Dichlorobenzene					CAS #: 95-50-1		
12.000	12.001 (1.221)	146	129490	99.7266	99.727	70.00- 130.00	100.00
12.000	12.001 (1.221)	148	85146			0.00- 30.00	65.75
11.986	12.001 (1.219)	111	50520			0.00- 30.00	39.01
169 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
12.854	12.854 (1.307)	180	68514	126.834	126.83	70.00- 130.00	100.00
12.854	12.854 (1.307)	182	62306			0.00- 30.00	90.94
170 Hexachlorobutadiene					CAS #: 87-68-3		
12.896	12.896 (1.312)	225	58723	137.156	137.16	70.00- 130.00	100.00(R)
12.896	12.896 (1.312)	223	37423			0.00- 30.00	63.73
171 Naphthalene					CAS #: 91-20-3		
12.980	12.980 (1.320)	128	9906	9.05502	9.055	70.00- 130.00	100.00(a)
12.980	12.980 (1.320)	127	1460			0.00- 30.00	14.74

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: msd14.i
Lab File ID: 14112418.d
Lab Smp Id: ICV
Analysis Type: VOA
Quant Type: ISTD
Operator: mjs
Method File: /chem/msd14.i/24nov14.b/14451124a.m
Misc Info: 100ppbv (100ppbv)

Calibration Date: 24-NOV-2014
Calibration Time: 11:17
Client Smp ID: ICV
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
75 Bromochloromethan	117767	70660	164874	111664	-5.18
94 1,4-Difluorobenze	544303	326582	762024	527749	-3.04
125 Chlorobenzene-d5	496681	298009	695353	472378	-4.89

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
75 Bromochloromethan	4.75	4.42	5.08	4.75	0.00
94 1,4-Difluorobenze	5.86	5.53	6.19	5.86	0.00
125 Chlorobenzene-d5	9.83	9.50	10.16	9.83	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: 24-Nov-2014 19:15

Eurofins Air Toxics Inc.

RECOVERY REPORT

Client Name:
Client SDG: 24nov14
Sample Matrix: GAS
Fraction: VOA
Lab Smp Id: ICV
Client Smp ID: ICV
Level: LOW
Operator: mjs
Data Type: MS DATA
SampleType: LCS
SpikeList File: 200.spk
Quant Type: ISTD
Sublist File: AT09.sub
Method File: /chem/msd14.i/24nov14.b/14451124a.m
Misc Info: 100ppbv (100ppbv)

SPIKE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
5 Propylene	100.00	89.805	89.81	60-140
7 Dichlorodifluorome	100.00	98.663	98.66	70-130
9 Freon 114	100.00	93.327	93.33	70-130
12 Chloromethane	100.00	104.66	104.66	70-130
13 Butane	100.00	98.600	98.60	60-140
15 Vinyl Chloride	100.00	103.70	103.71	70-130
16 1,3-Butadiene	100.00	97.028	97.03	70-130
18 Bromomethane	100.00	91.370	91.37	70-130
19 Chloroethane	100.00	63.487	63.49*	70-130
20 Isopentane	100.00	105.52	105.52	60-140
23 Trichlorofluoromet	100.00	99.812	99.81	70-130
30 Ethanol	100.00	127.21	127.21	70-130
34 Freon 113	100.00	108.82	108.82	70-130
36 1,1-Dichloroethene	100.00	103.00	103.00	70-130
38 Acetone	100.00	107.76	107.76	70-130
39 Carbon Disulfide	100.00	93.708	93.71	70-130
41 2-Propanol	100.00	107.07	107.07	70-130
42 3-Chloropropene	100.00	86.039	86.04	70-130
48 Methylene Chloride	100.00	97.198	97.20	70-130
50 MTBE	100.00	89.306	89.31	70-130
52 trans-1,2-Dichloro	100.00	94.316	94.32	70-130
55 Hexane	100.00	98.082	98.08	70-130
59 1,1-Dichloroethane	100.00	97.212	97.21	70-130
60 Vinyl Acetate	100.00	95.884	95.88	70-130
68 cis-1,2-Dichloroet	100.00	98.708	98.71	70-130
70 2-Butanone	100.00	89.385	89.38	70-130
74 Tetrahydrofuran	100.00	90.433	90.43	70-130
76 Chloroform	100.00	94.110	94.11	70-130
77 Cyclohexane	100.00	95.848	95.85	70-130
78 1,1,1-Trichloroeth	100.00	99.208	99.21	70-130
79 Carbon Tetrachlori	100.00	96.947	96.95	70-130
82 2,2,4-Trimethylpen	100.00	99.958	99.96	70-130
83 Benzene	100.00	90.959	90.96	70-130

SPIKE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
89 1,2-Dichloroethane	100.00	98.708	98.71	70-130
93 Heptane	100.00	96.008	96.01	70-130
95 Trichloroethene	100.00	96.743	96.74	70-130
97 Methyl Cyclohexane	100.00	94.929	94.93	60-140
99 1,2-Dichloropropan	100.00	89.595	89.60	70-130
102 1,4-Dioxane	100.00	92.731	92.73	70-130
104 Bromodichlorometha	100.00	93.899	93.90	70-130
108 cis-1,3-Dichloropr	100.00	95.538	95.54	70-130
109 4-Methyl-2-pentano	100.00	96.292	96.29	70-130
111 Toluene	100.00	95.008	95.01	70-130
114 trans-1,3-Dichloro	100.00	87.141	87.14	70-130
115 1,1,2-Trichloroeth	100.00	93.739	93.74	70-130
116 Tetrachloroethene	100.00	97.210	97.21	70-130
120 2-Hexanone	100.00	96.406	96.41	70-130
121 Dibromochlorometha	100.00	95.761	95.76	70-130
124 1,2-Dibromoethane	100.00	96.936	96.94	70-130
127 Chlorobenzene	100.00	92.946	92.95	70-130
128 Ethyl Benzene	100.00	98.924	98.92	70-130
131 m,p-Xylene	100.00	101.79	101.79	70-130
132 o-Xylene	100.00	92.845	92.84	70-130
134 Styrene	100.00	100.40	100.40	70-130
136 Bromoform	100.00	94.244	94.24	70-130
138 Cumene	100.00	100.59	100.59	70-130
142 1,1,2,2-Tetrachlor	100.00	92.798	92.80	70-130
143 Propylbenzene	100.00	102.66	102.66	70-130
147 4-Ethyltoluene	100.00	105.14	105.14	70-130
149 1,3,5-Trimethylben	100.00	111.85	111.85	70-130
152 1,2,4-Trimethylben	100.00	107.52	107.52	70-130
156 1,3-Dichlorobenzen	100.00	101.62	101.62	70-130
159 1,4-Dichlorobenzen	100.00	103.56	103.56	70-130
161 alpha-Chlorotoluen	100.00	165.00	165.00*	70-130
163 1,2-Dichlorobenzen	100.00	99.727	99.73	70-130
169 1,2,4-Trichloroben	100.00	126.83	126.83	70-130
170 Hexachlorobutadien	100.00	137.16	137.16*	70-130
171 Naphthalene	10.000	9.055	90.55	60-140

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 86 1,2-Dichloroethane	400.00	399.85	99.96	70-130
$ 110 Toluene-d8	400.00	398.32	99.58	70-130
$ 139 Bromofluorobenzene	400.00	404.53	101.13	70-130

Data File: /chem/msd14.i/24nov14.b/14112418.d

Date : 24-NOV-2014 16:33

Client ID: ICV

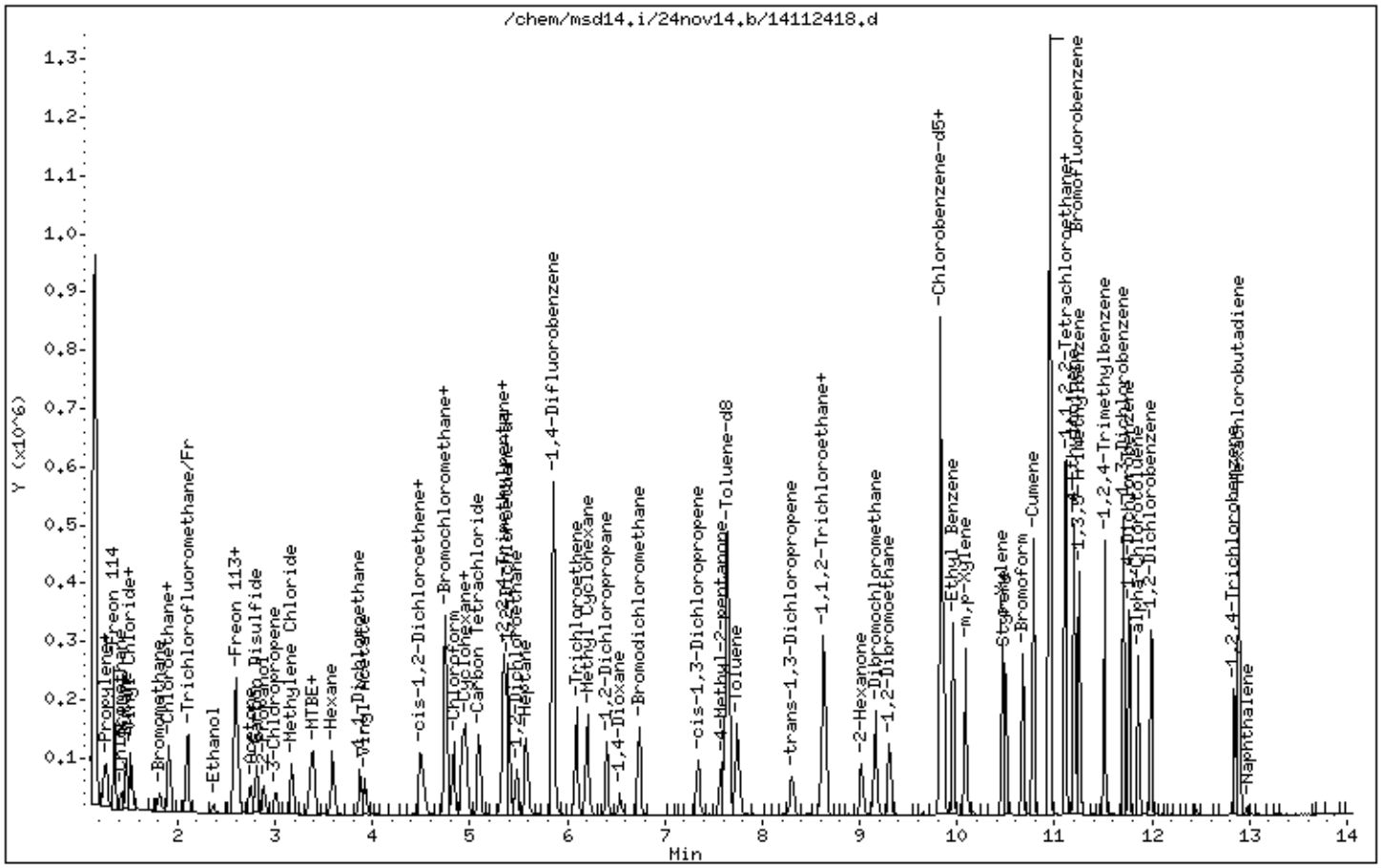
Instrument: msd14.i

Sample Info: 50mL #2687-17A

Operator: mjs

Column phase: RTx-624

Column diameter: 0.53



Data File: /chem/msd14.i/24nov14.b/14112418.d

Date : 24-NOV-2014 16:33

Client ID: ICV

Instrument: msd14.i

Sample Info: 50mL #2687-17A

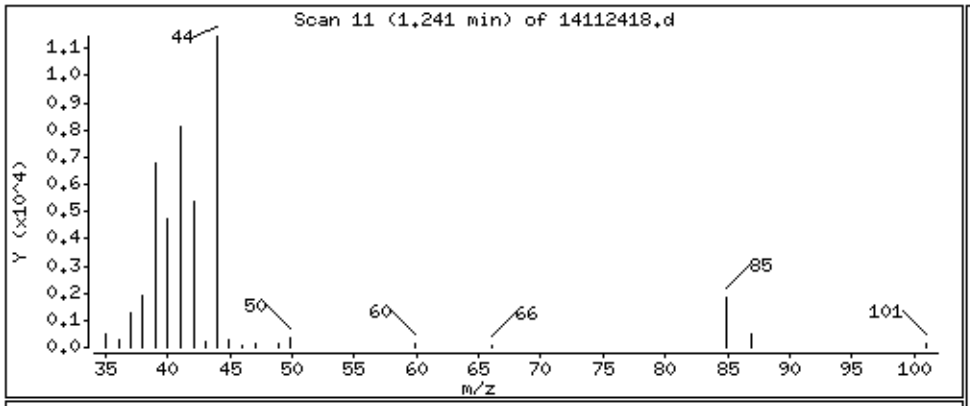
Operator: mjs

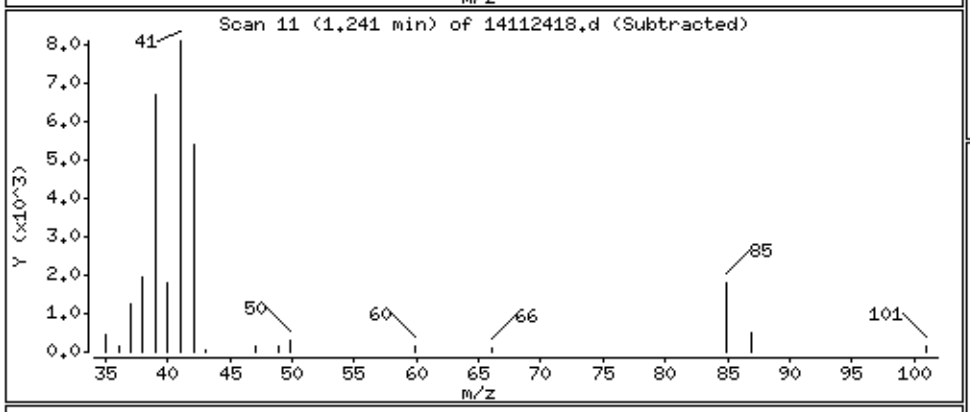
Column phase: RTx-624

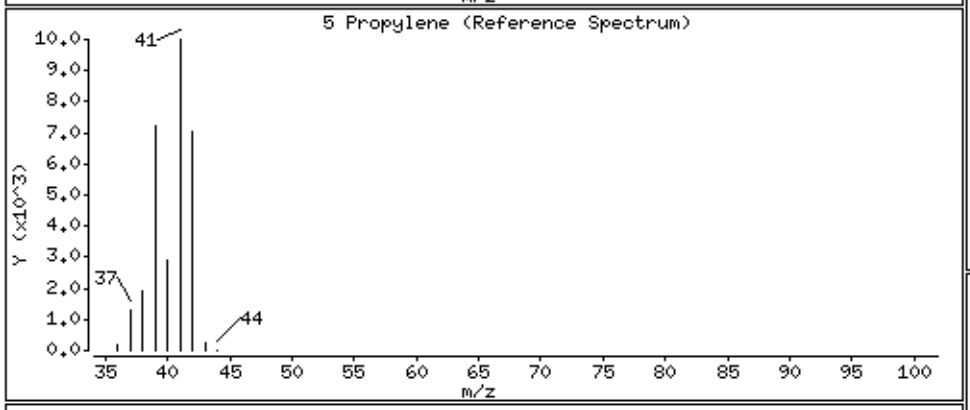
Column diameter: 0.53

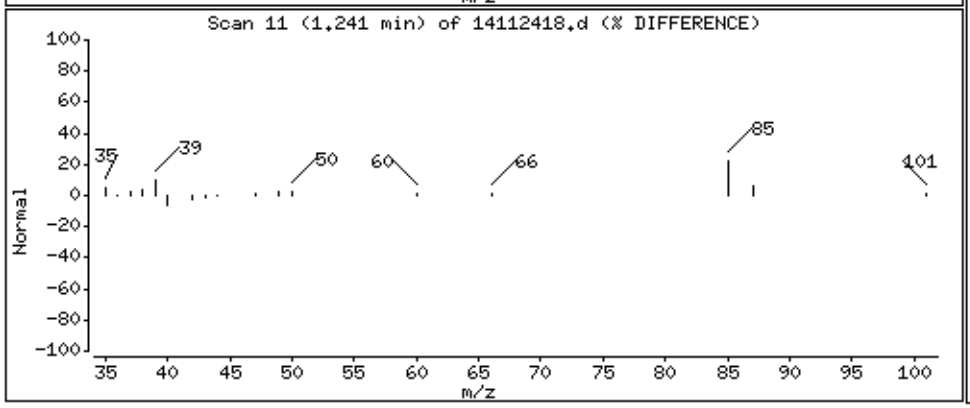
5 Propylene

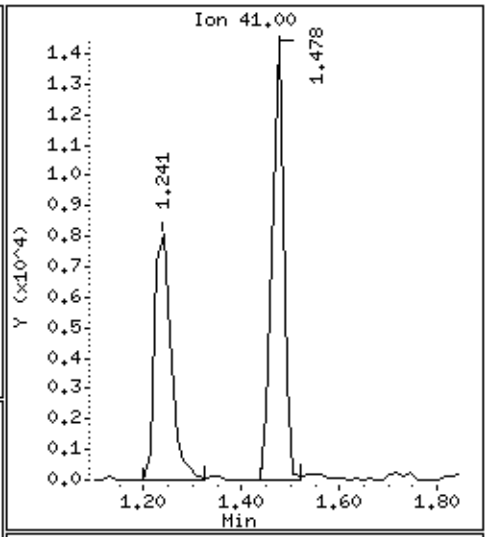
Concentration: 89.805 PPBV

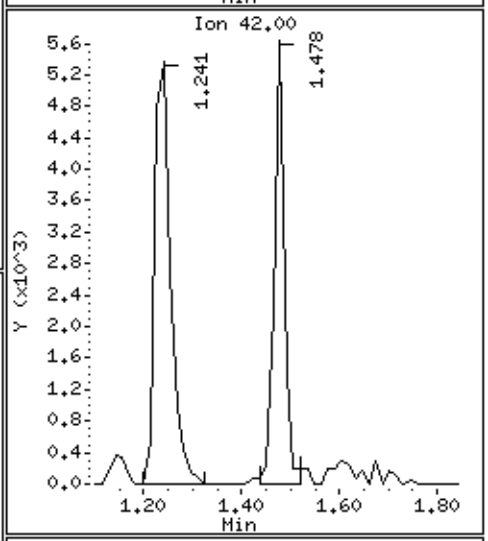


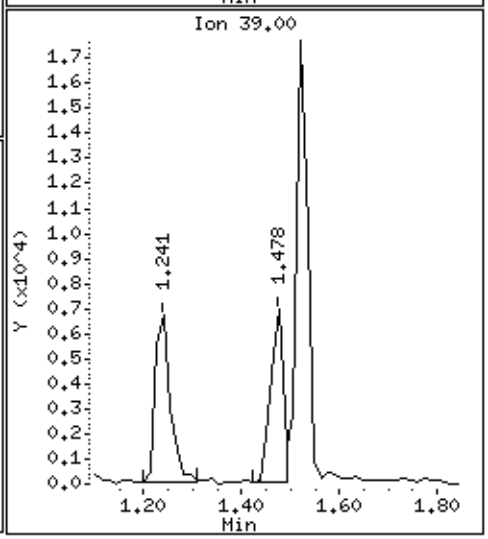












Data File: /chem/msd14.i/24nov14.b/14112418.d

Date : 24-NOV-2014 16:33

Client ID: ICV

Instrument: msd14.i

Sample Info: 50mL #2687-17A

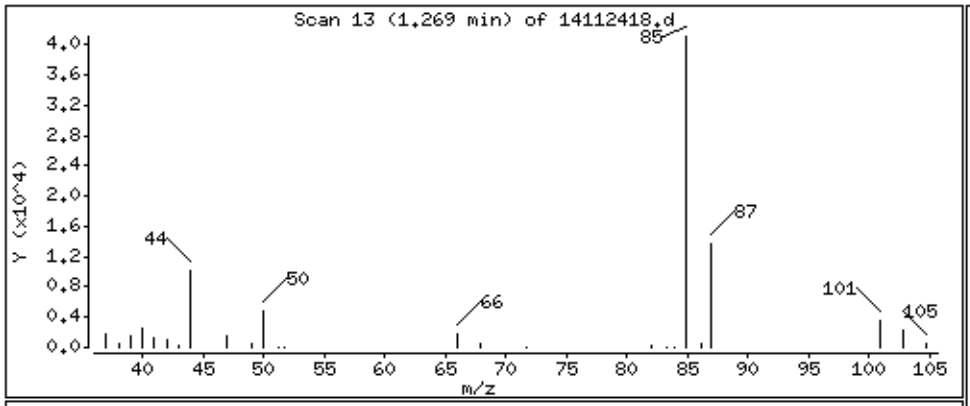
Operator: mjs

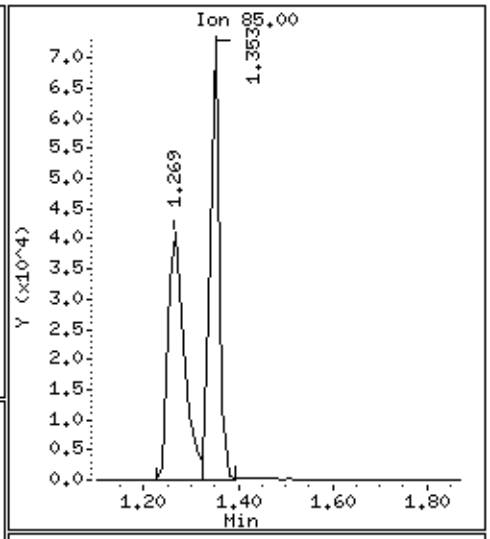
Column phase: RTx-624

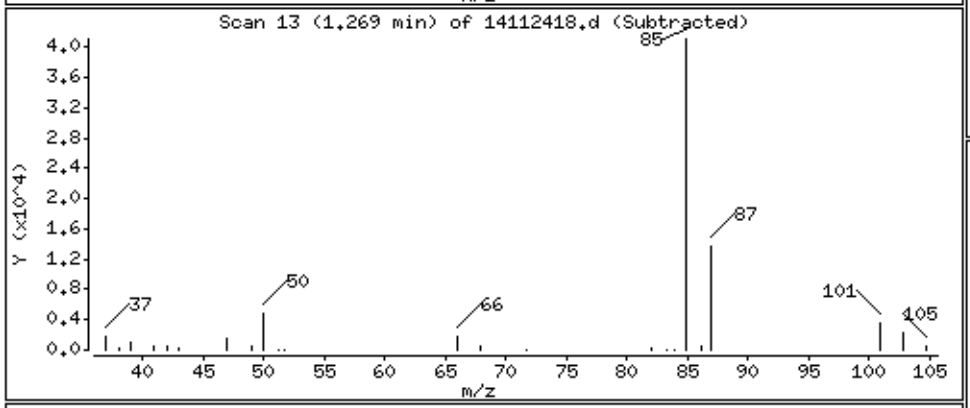
Column diameter: 0.53

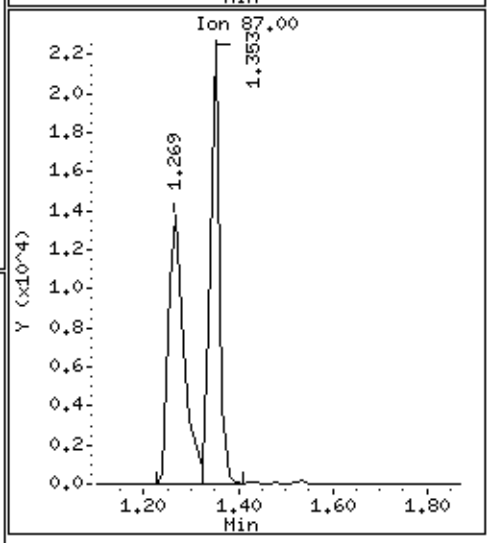
7 Dichlorodifluoromethane/Fr12

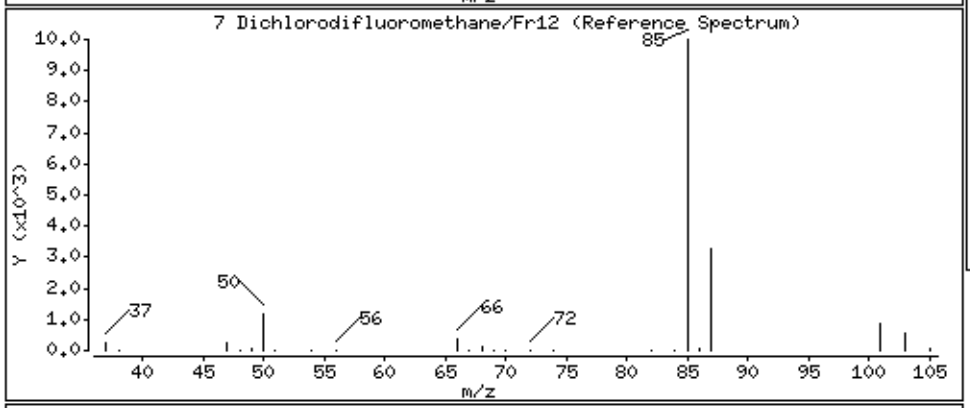
Concentration: 98.663 PPBV

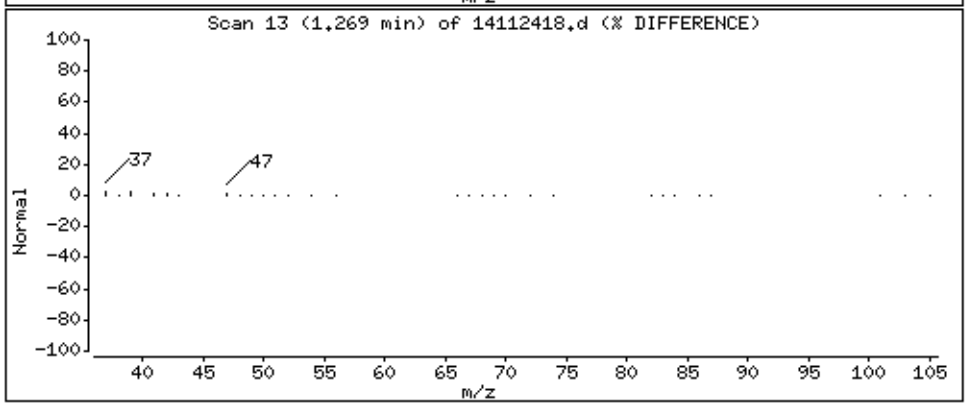












Data File: /chem/msd14.i/24nov14.b/14112418.d

Date : 24-NOV-2014 16:33

Client ID: ICV

Instrument: msd14.i

Sample Info: 50mL #2687-17A

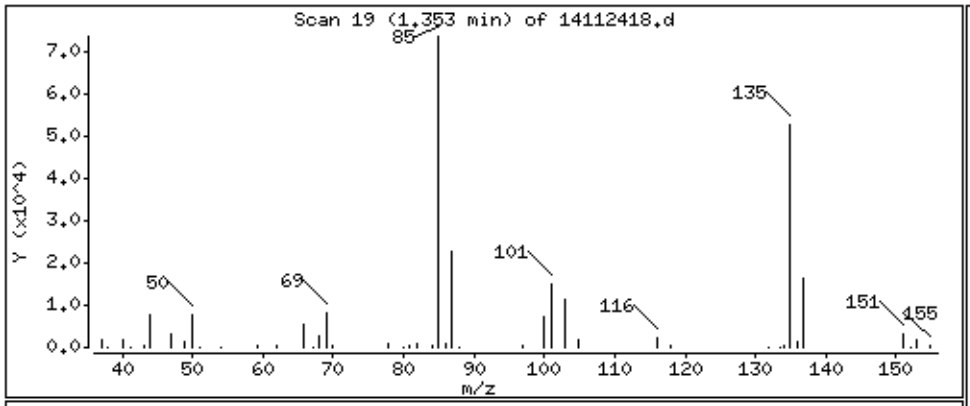
Operator: mjs

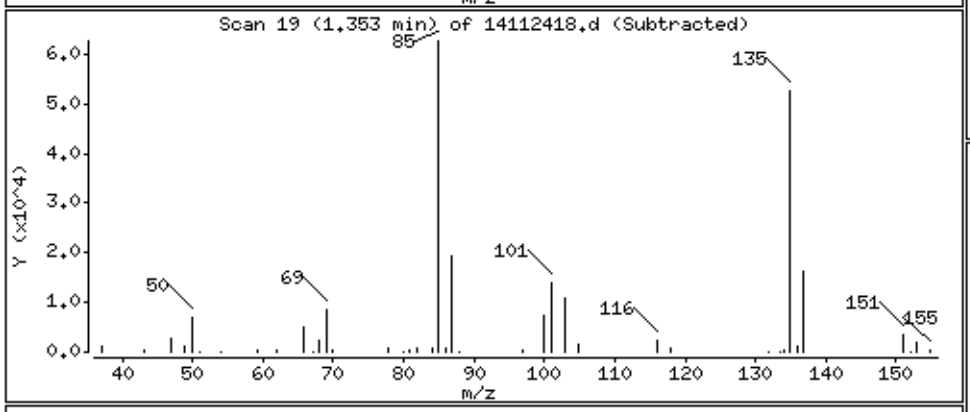
Column phase: RTx-624

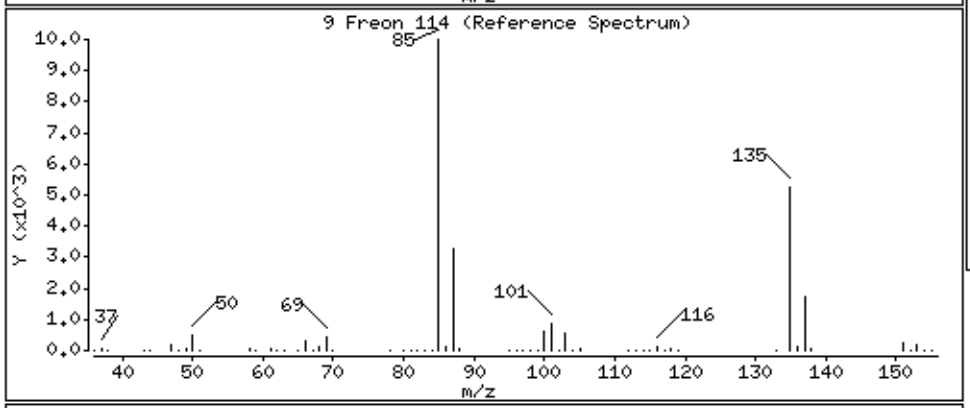
Column diameter: 0.53

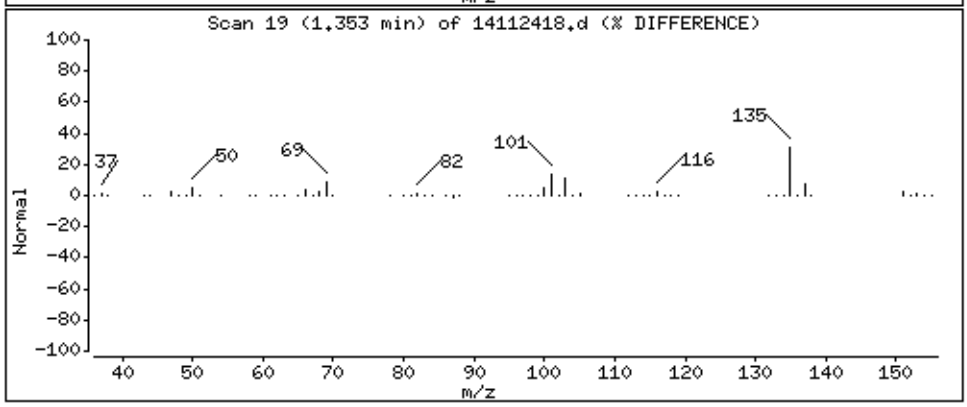
9 Freon 114

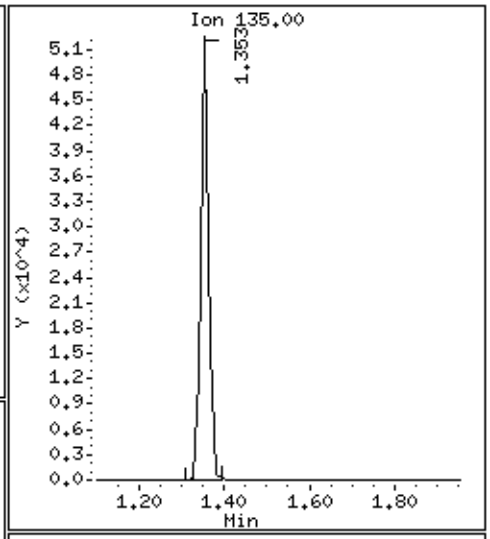
Concentration: 93.327 PPBV

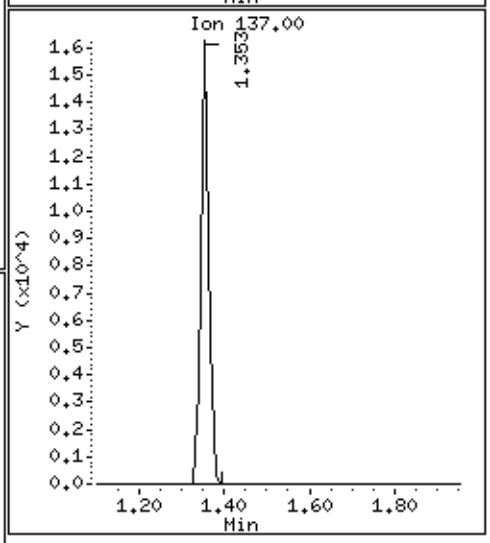












Data File: /chem/msd14.i/24nov14.b/14112418.d

Date : 24-NOV-2014 16:33

Client ID: ICV

Instrument: msd14.i

Sample Info: 50mL #2687-17A

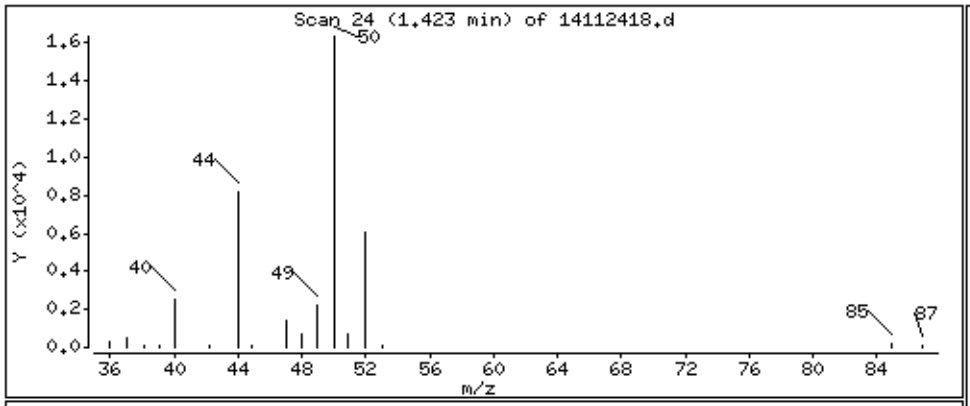
Operator: mjs

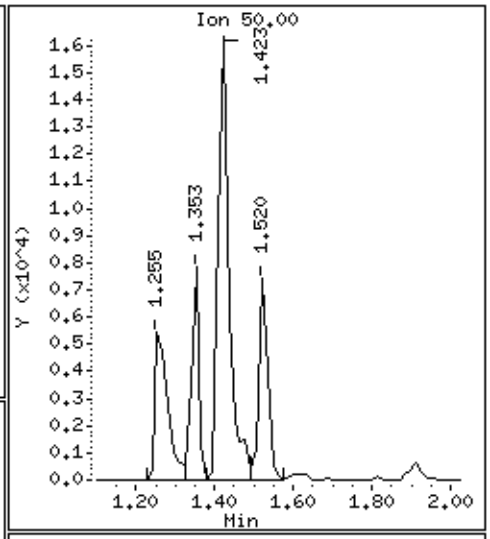
Column phase: RTx-624

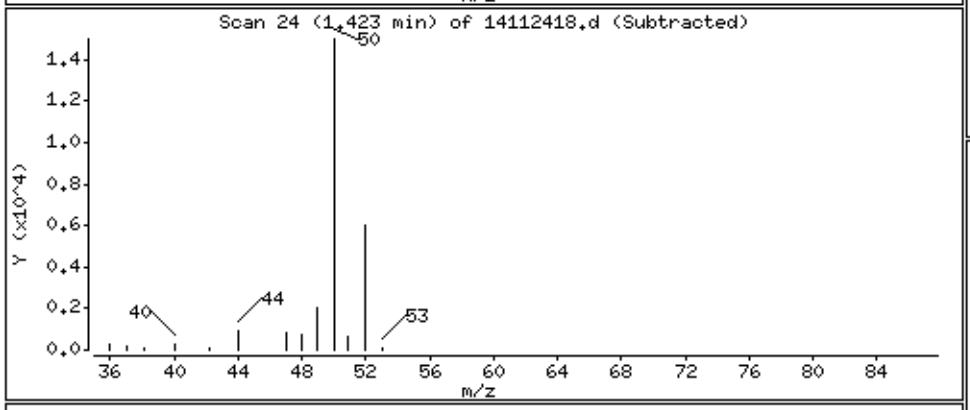
Column diameter: 0.53

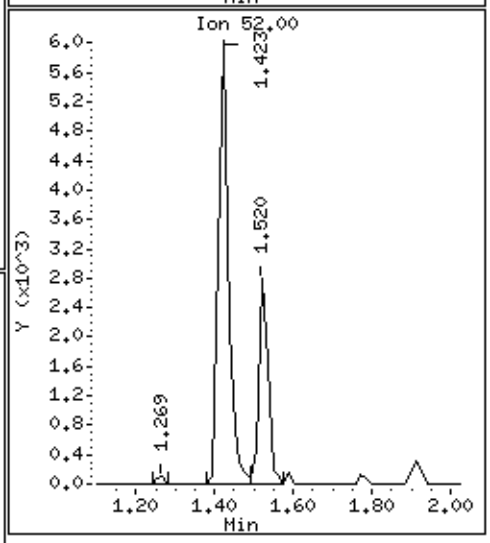
12 Chloromethane

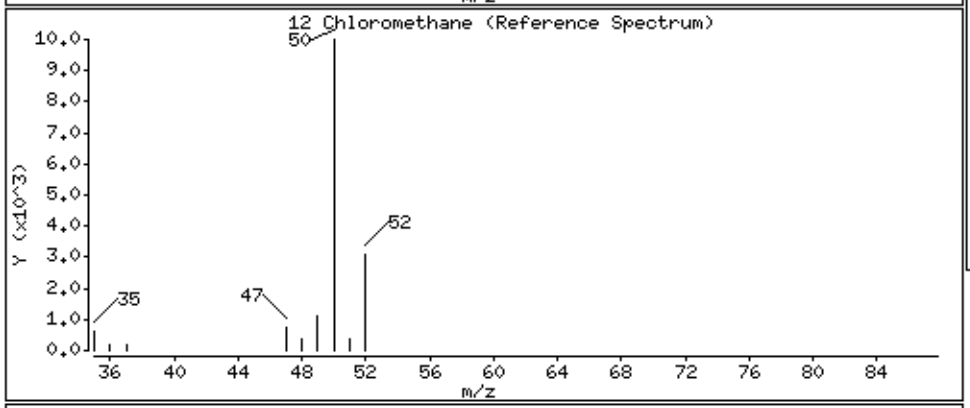
Concentration: 104.66 PPBV

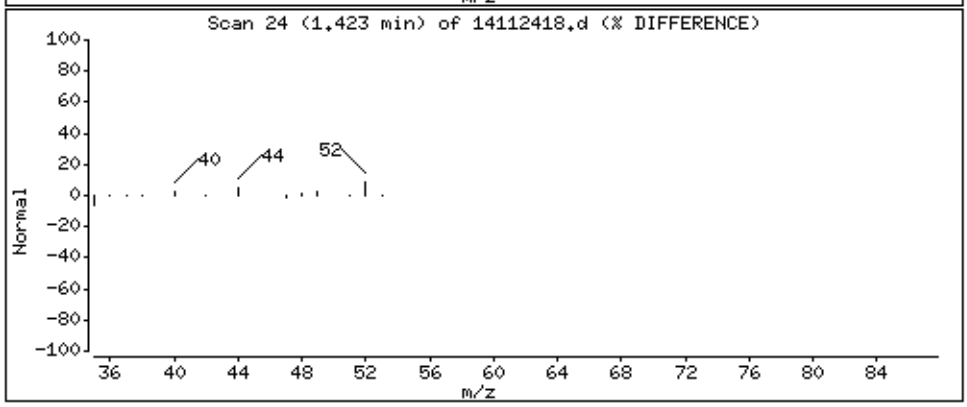












Data File: /chem/msd14.i/24nov14.b/14112418.d

Date : 24-NOV-2014 16:33

Client ID: ICV

Instrument: msd14.i

Sample Info: 50mL #2687-17A

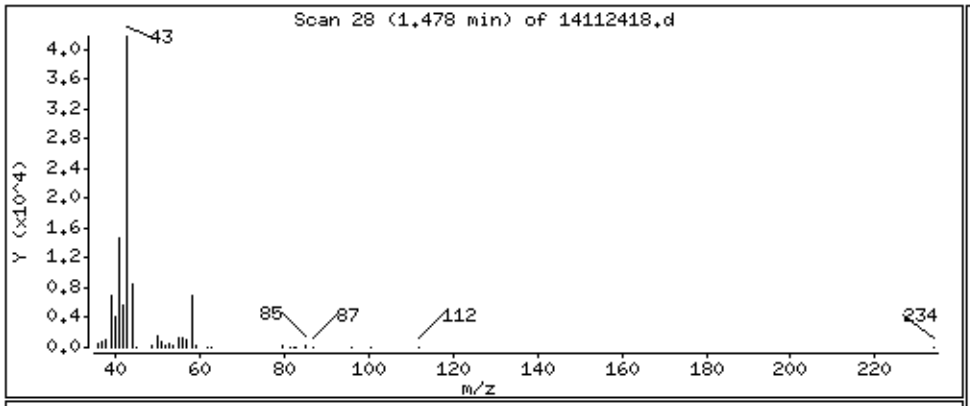
Operator: mjs

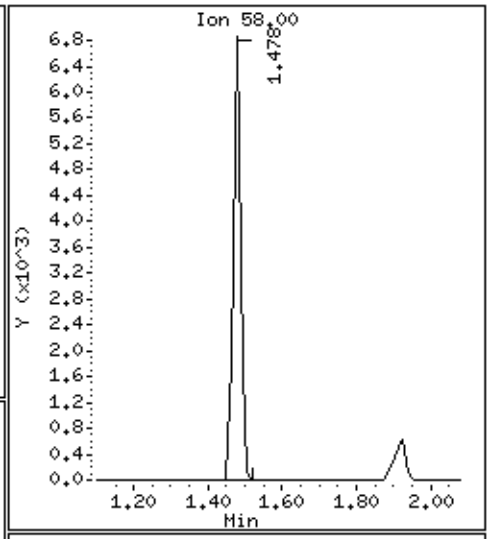
Column phase: RTx-624

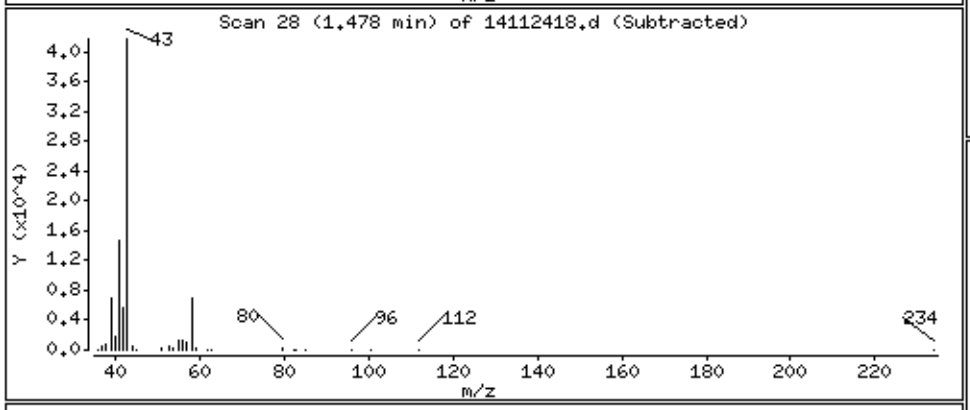
Column diameter: 0.53

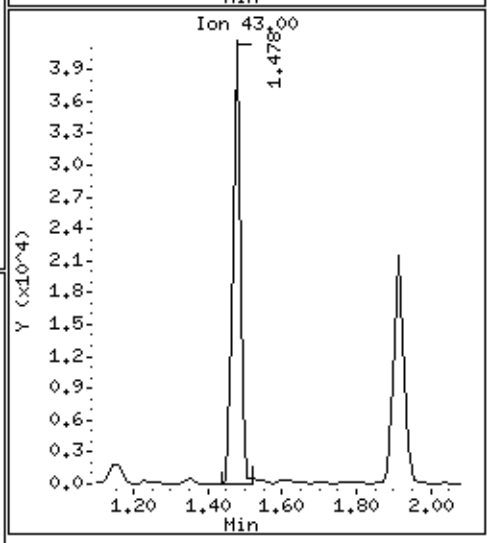
13 Butane

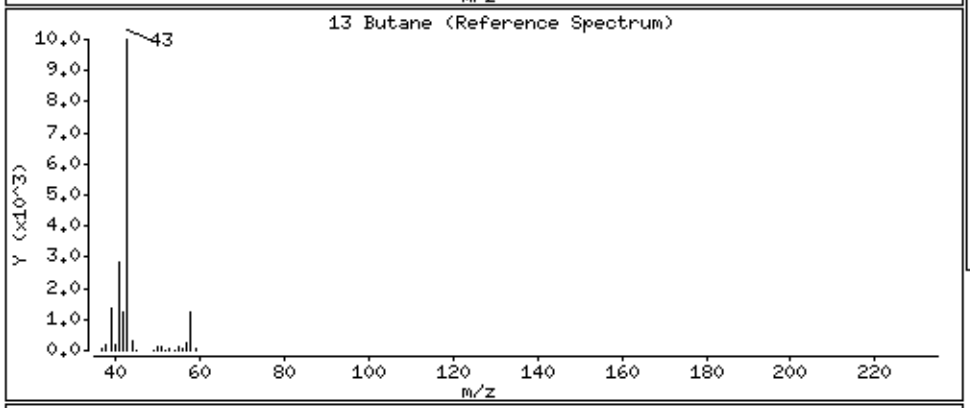
Concentration: 98.600 PPBV

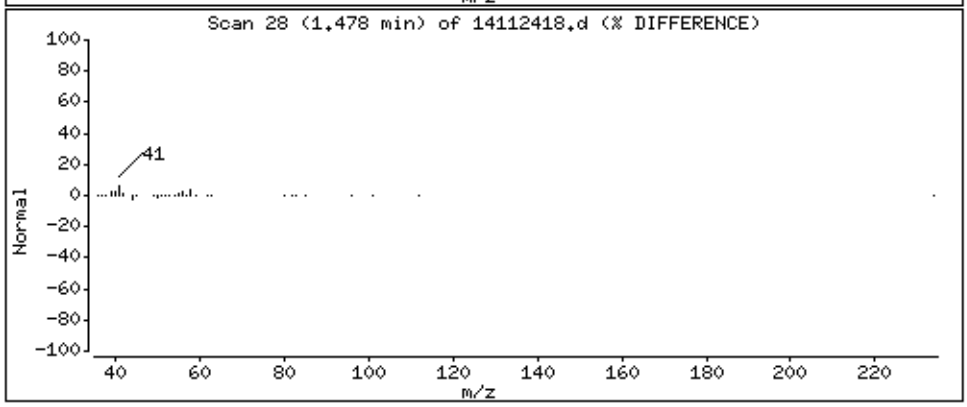












Data File: /chem/msd14.i/24nov14.b/14112418.d

Date : 24-NOV-2014 16:33

Client ID: ICV

Instrument: msd14.i

Sample Info: 50mL #2687-17A

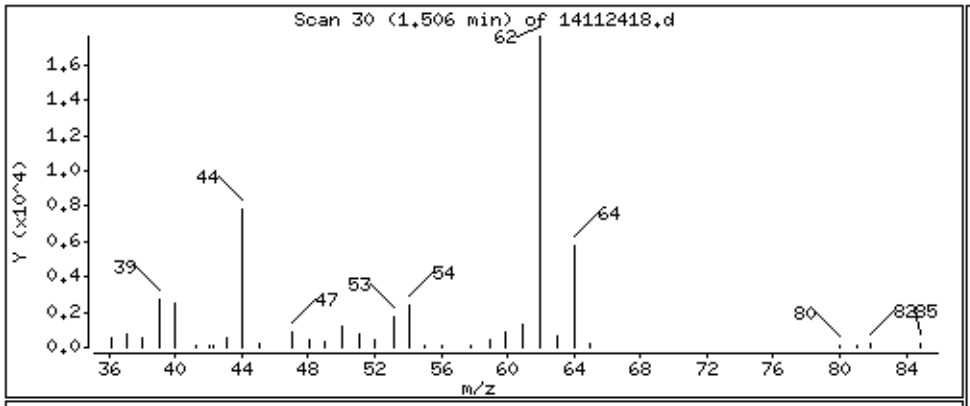
Operator: mjs

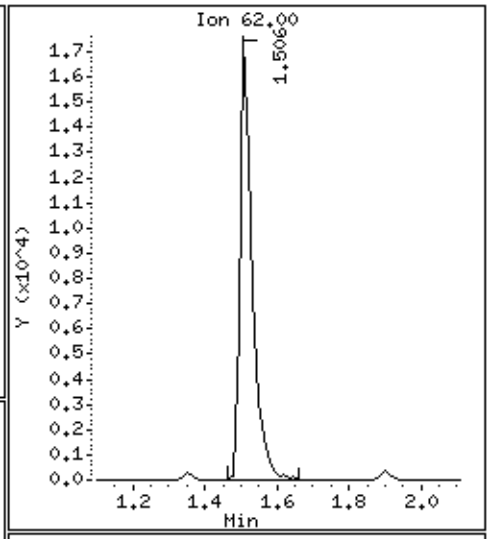
Column phase: RTx-624

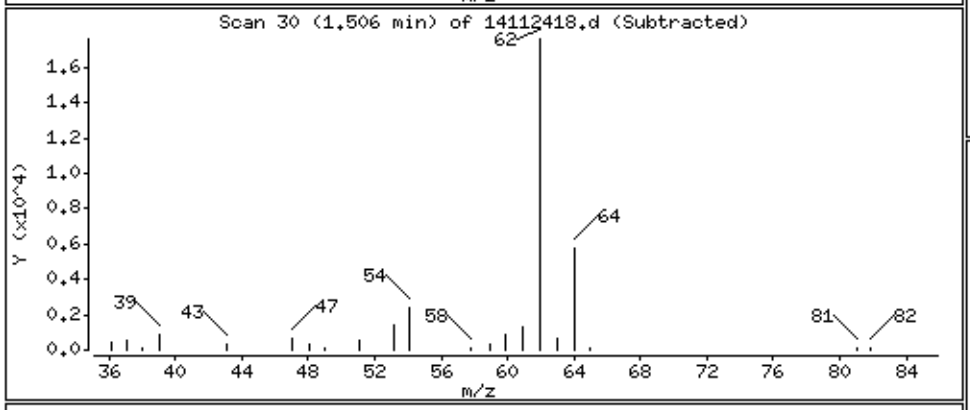
Column diameter: 0.53

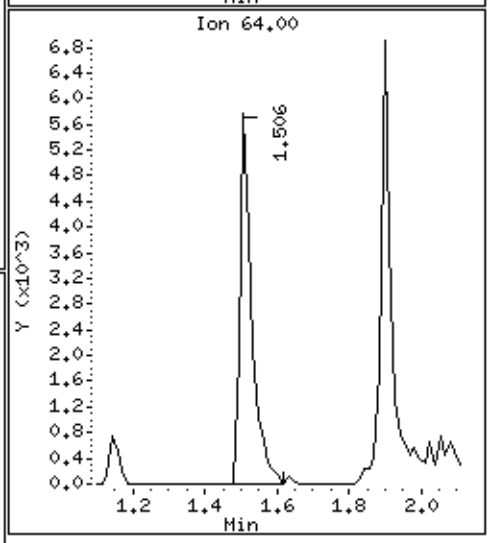
15 Vinyl Chloride

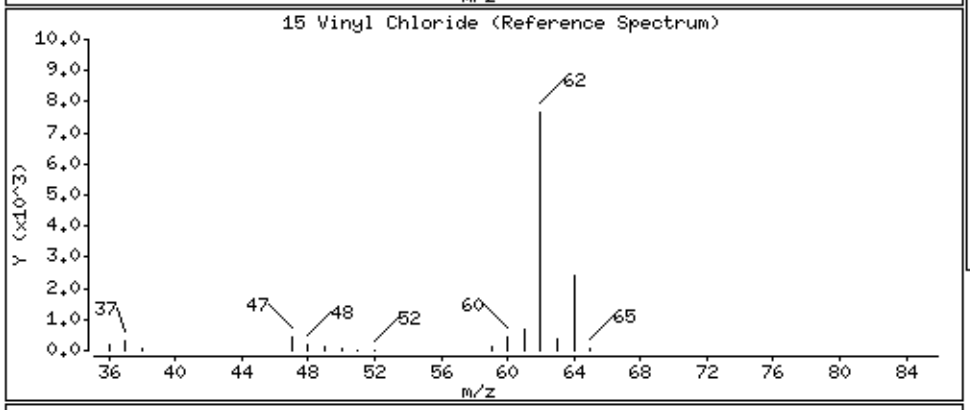
Concentration: 103.70 PPBV

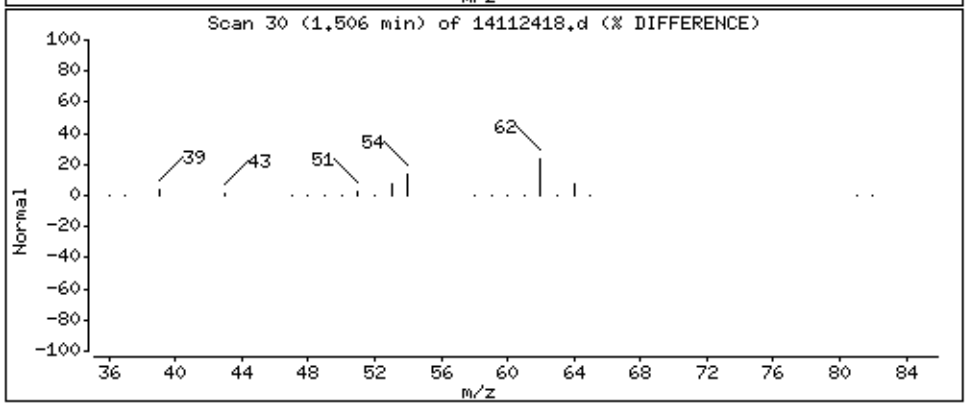












Data File: /chem/msd14.i/24nov14.b/14112418.d

Date : 24-NOV-2014 16:33

Client ID: ICV

Instrument: msd14.i

Sample Info: 50mL #2687-17A

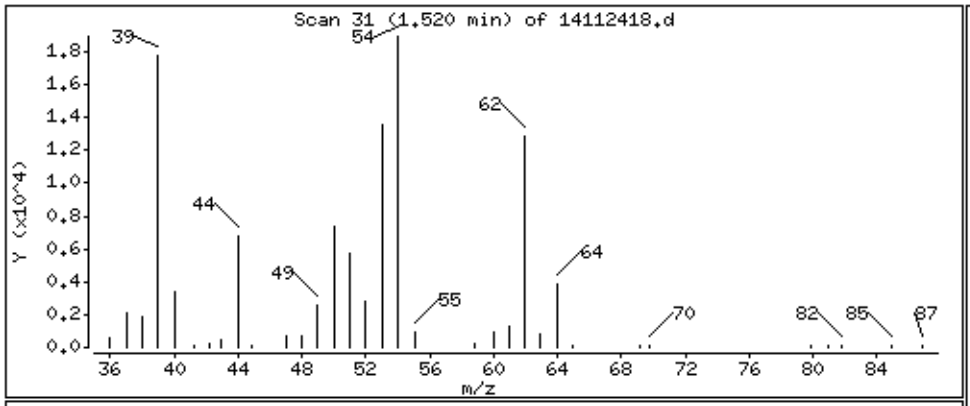
Operator: mjs

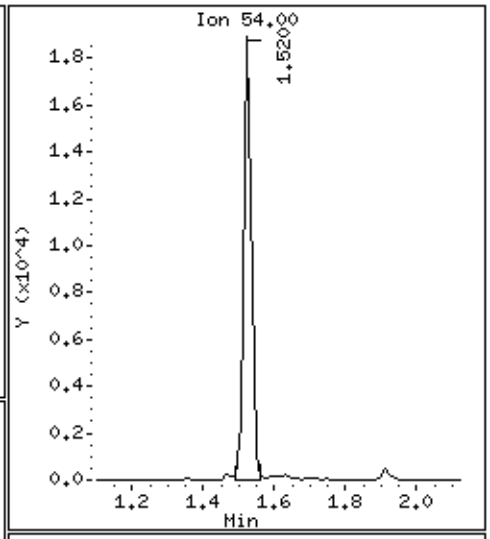
Column phase: RTx-624

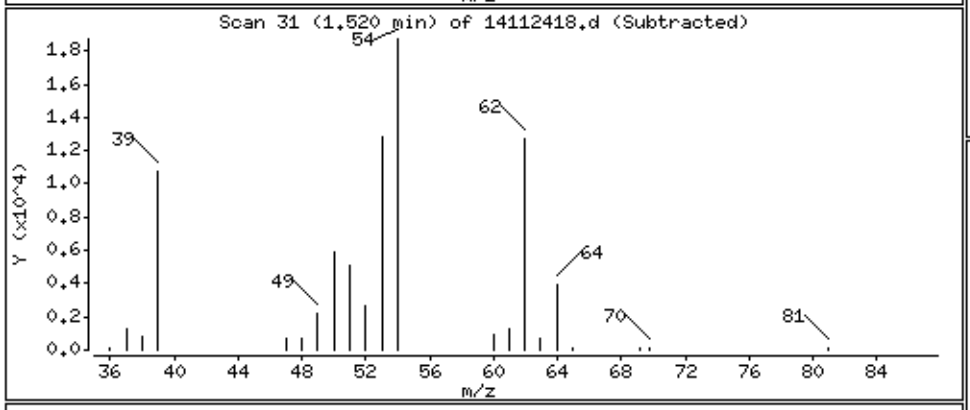
Column diameter: 0.53

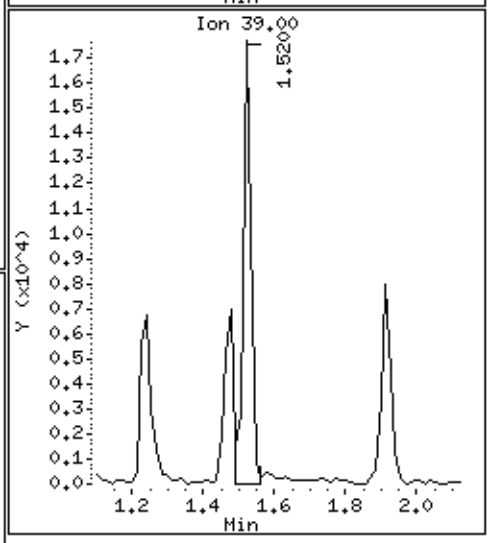
16 1,3-Butadiene

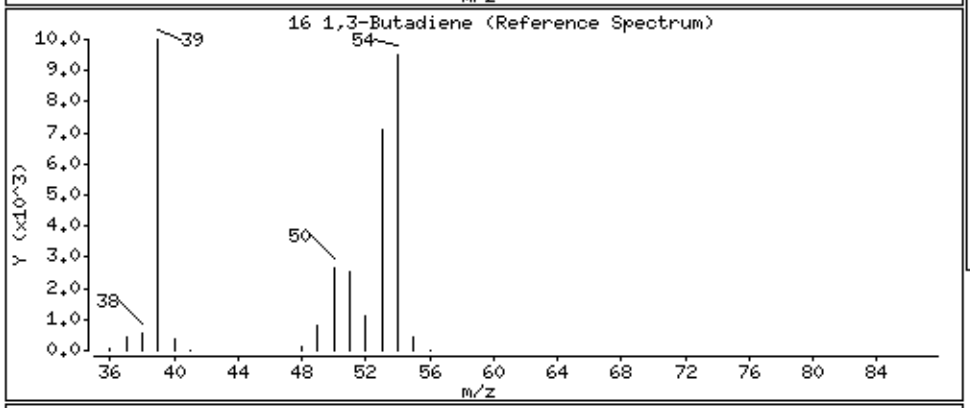
Concentration: 97.028 PPBV

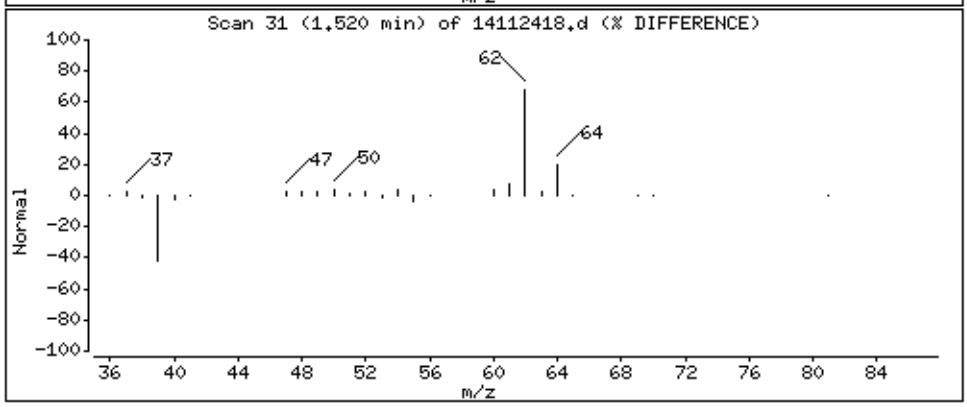












Data File: /chem/msd14.i/24nov14.b/14112418.d

Date : 24-NOV-2014 16:33

Client ID: ICV

Instrument: msd14.i

Sample Info: 50mL #2687-17A

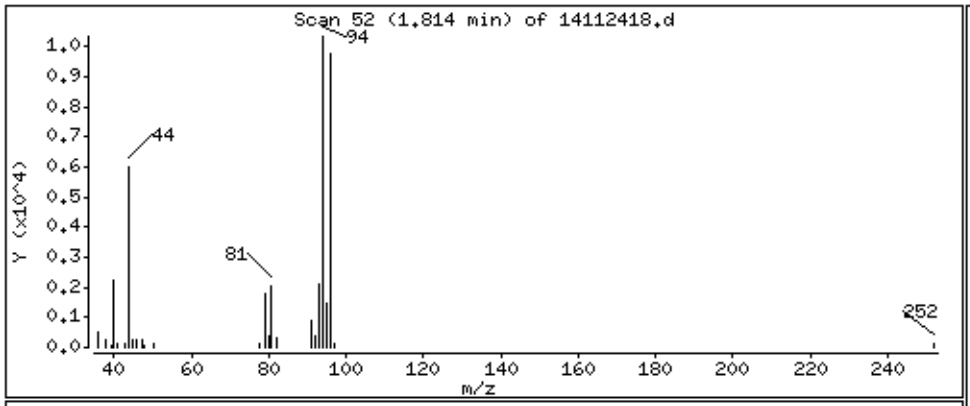
Operator: mjs

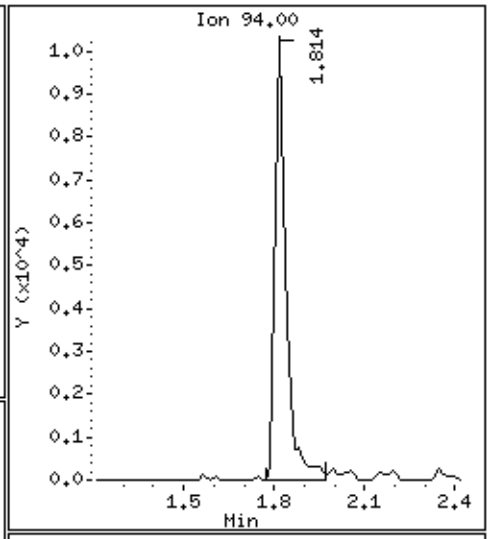
Column phase: RTx-624

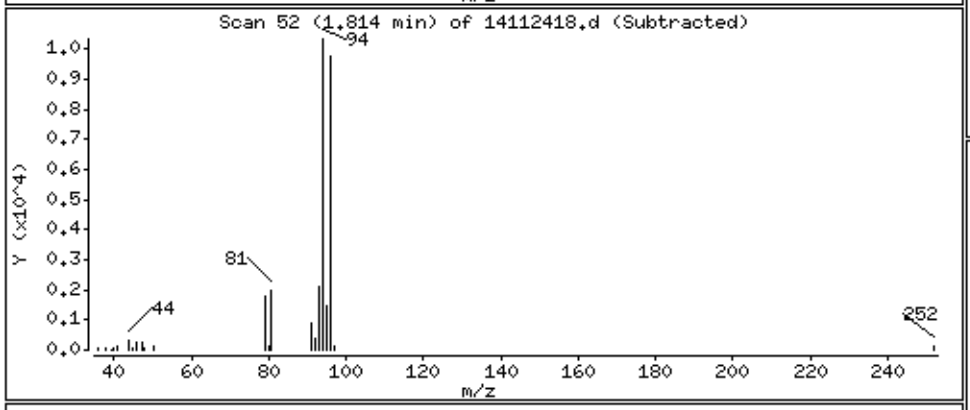
Column diameter: 0.53

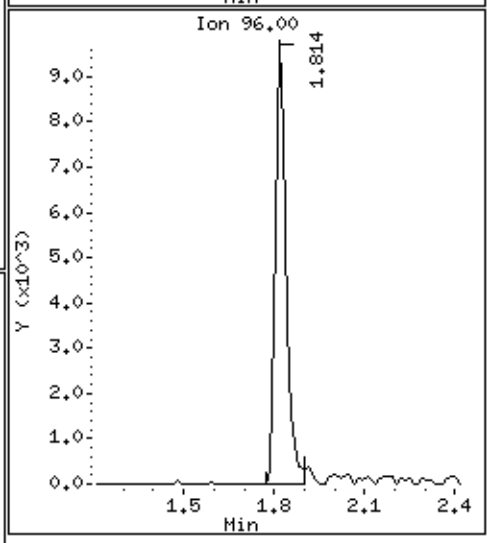
18 Bromomethane

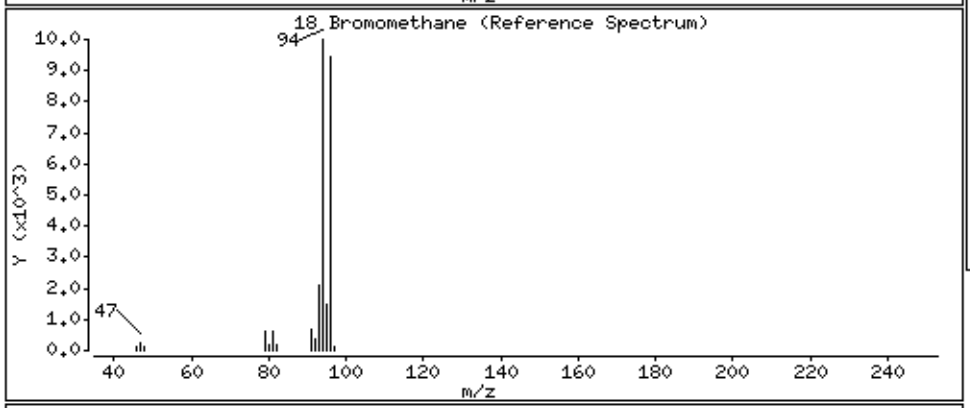
Concentration: 91.370 PPBV

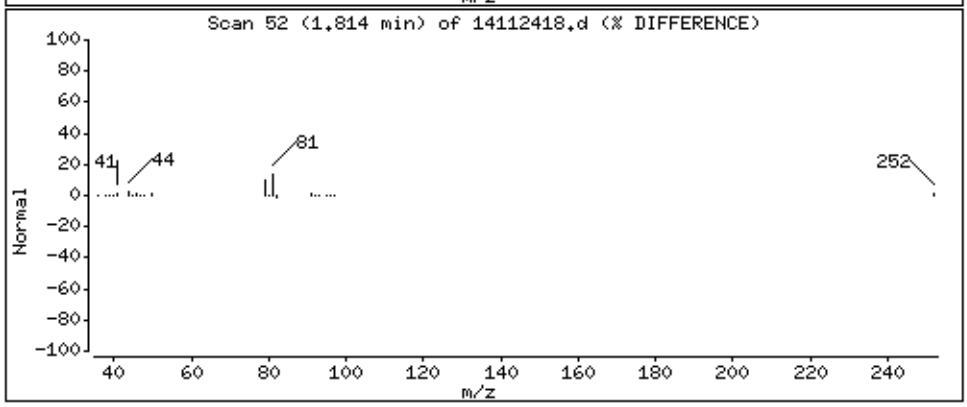












Data File: /chem/msd14.i/24nov14.b/14112418.d

Date : 24-NOV-2014 16:33

Client ID: ICV

Instrument: msd14.i

Sample Info: 50mL #2687-17A

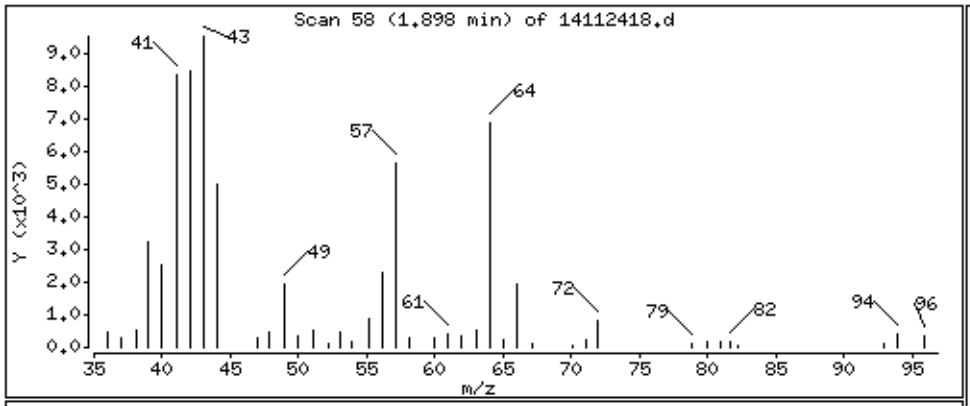
Operator: mjs

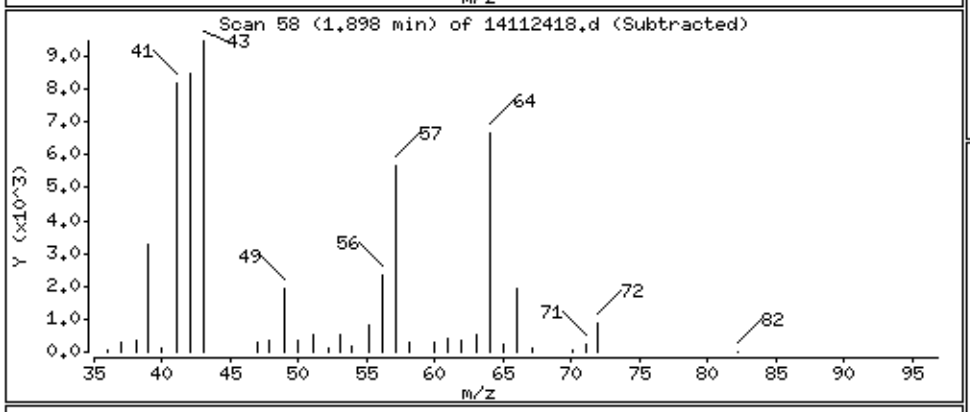
Column phase: RTx-624

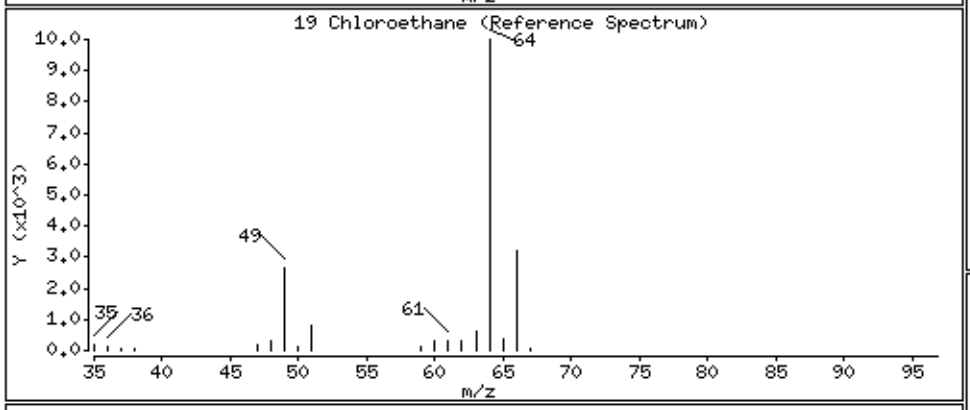
Column diameter: 0.53

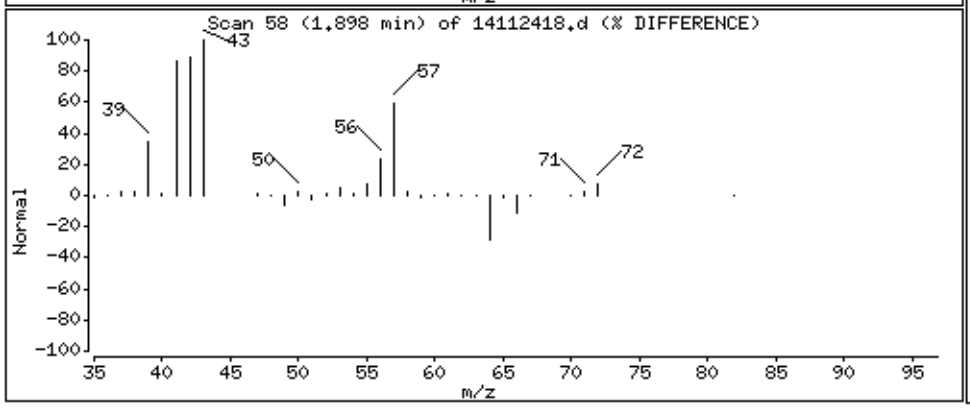
19 Chloroethane

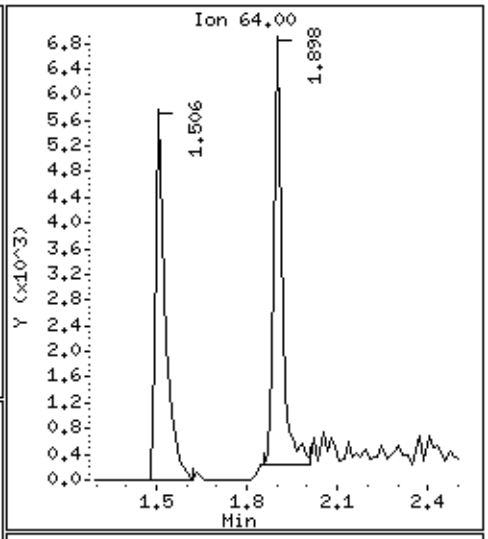
Concentration: 63.487 PPBV

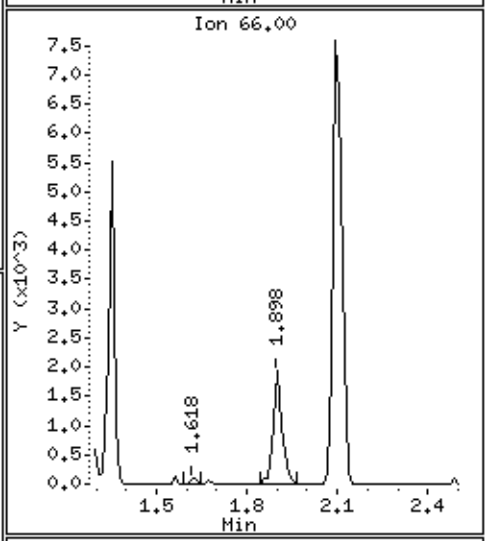


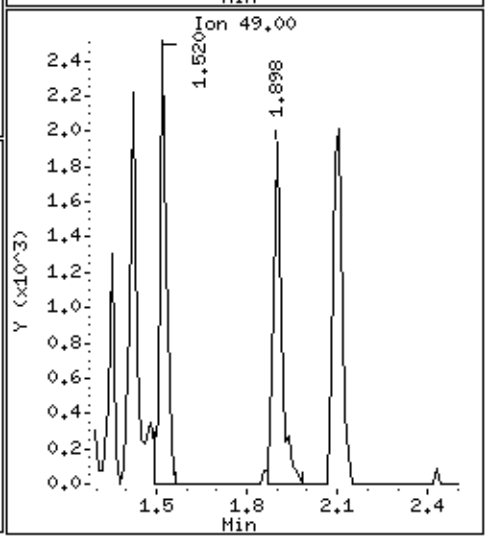












Data File: /chem/msd14.i/24nov14.b/14112418.d

Date : 24-NOV-2014 16:33

Client ID: ICV

Instrument: msd14.i

Sample Info: 50mL #2687-17A

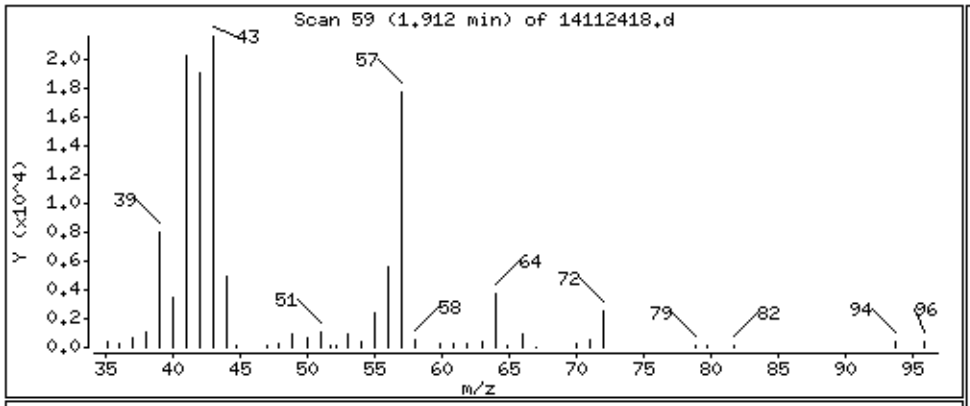
Operator: mjs

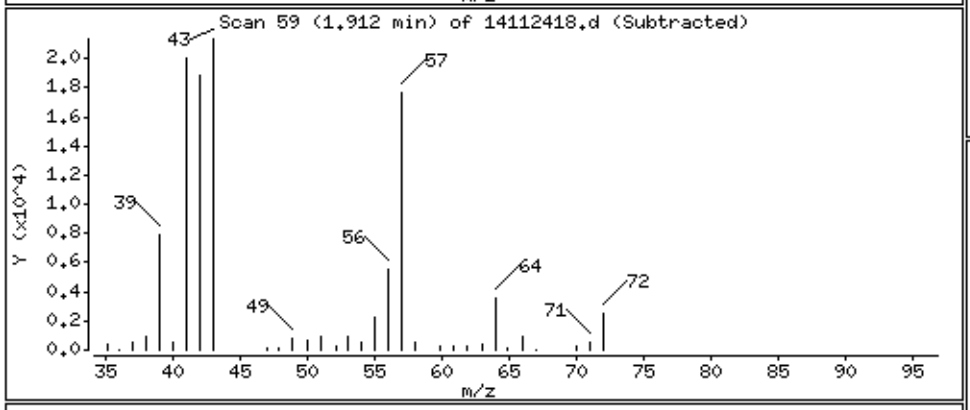
Column phase: RTx-624

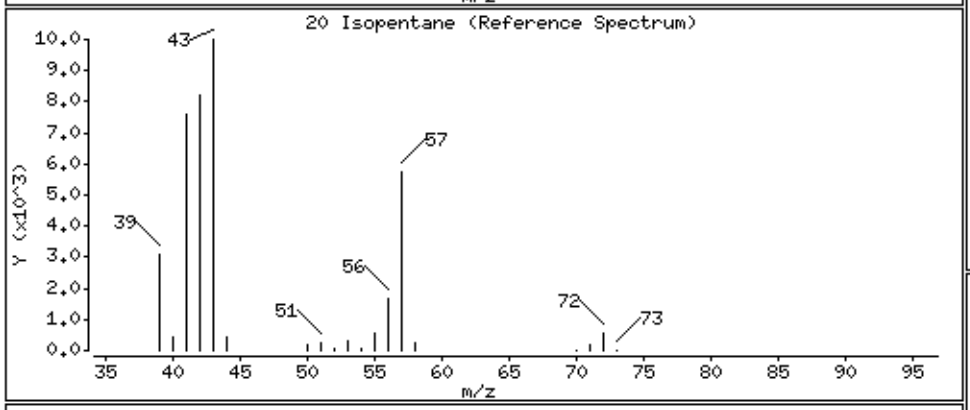
Column diameter: 0.53

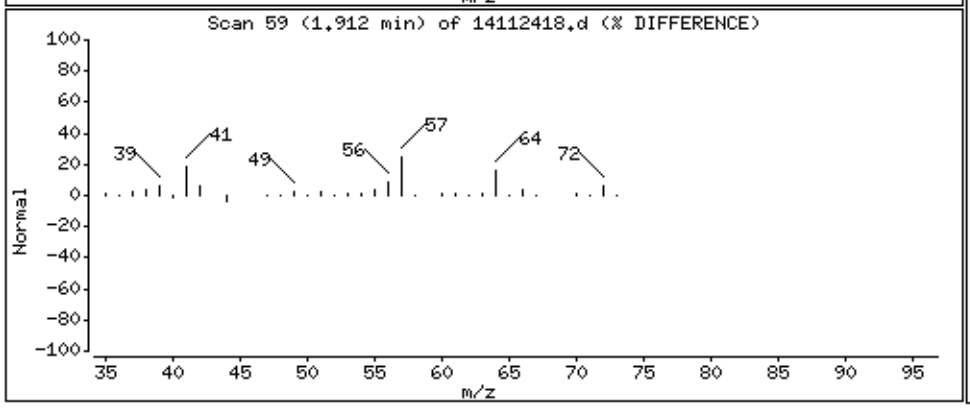
20 Isopentane

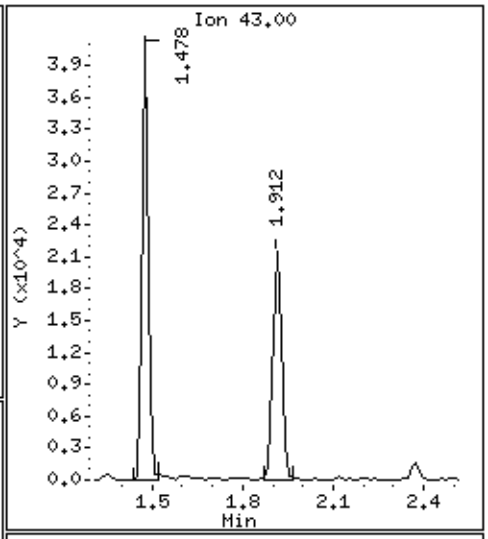
Concentration: 105.52 PPBV

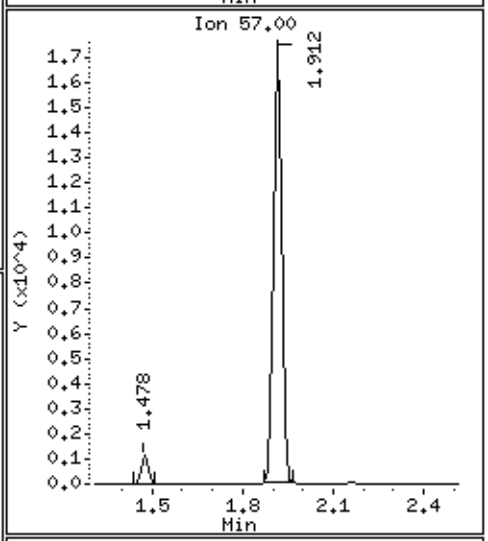


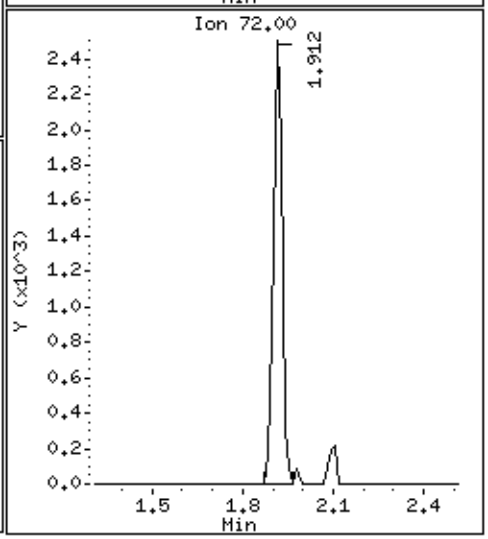












Data File: /chem/msd14.i/24nov14.b/14112418.d

Date : 24-NOV-2014 16:33

Client ID: ICV

Instrument: msd14.i

Sample Info: 50mL #2687-17A

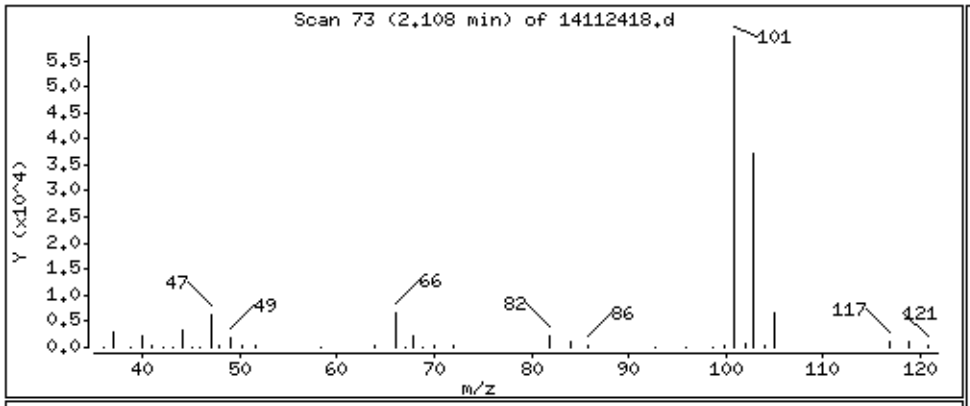
Operator: mjs

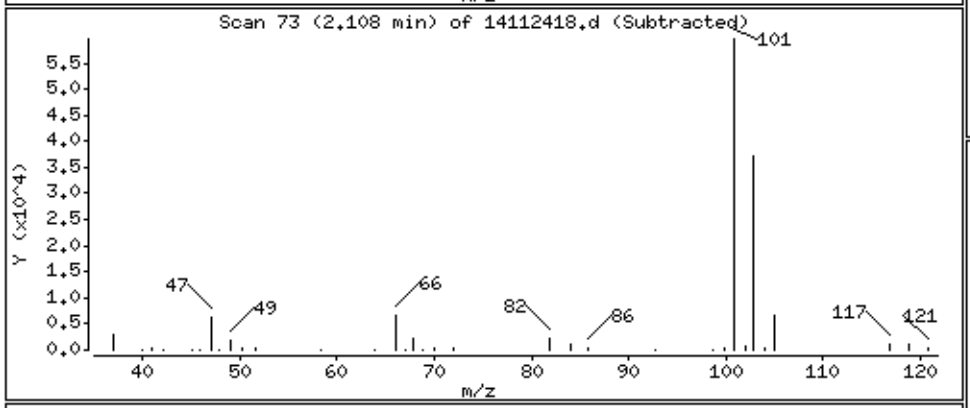
Column phase: RTx-624

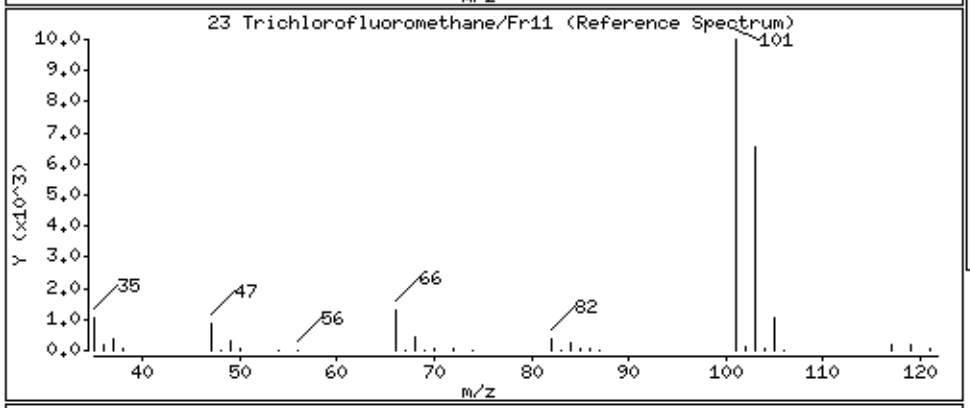
Column diameter: 0.53

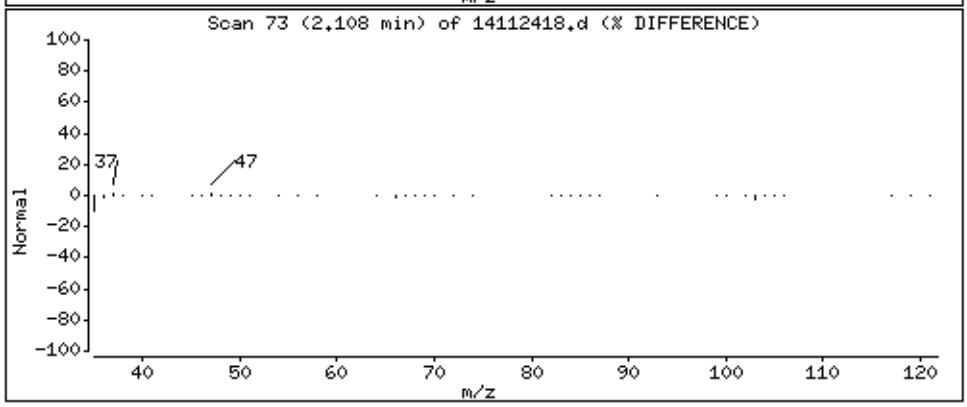
23 Trichlorofluoromethane/Fr11

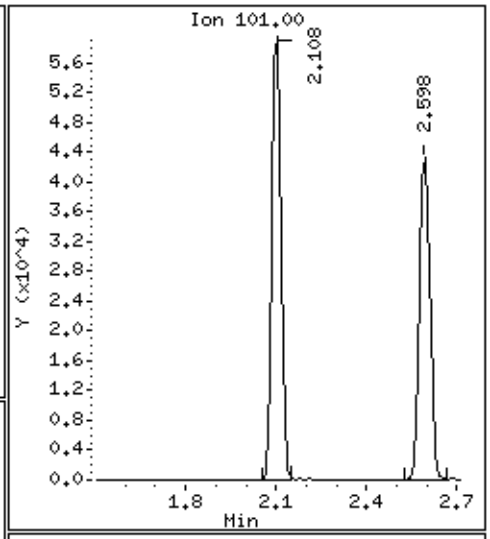
Concentration: 99.812 PPBV

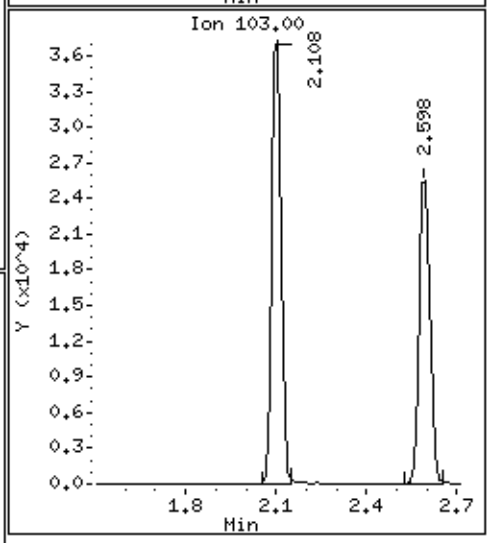












Data File: /chem/msd14.i/24nov14.b/14112418.d

Date : 24-NOV-2014 16:33

Client ID: ICV

Instrument: msd14.i

Sample Info: 50mL #2687-17A

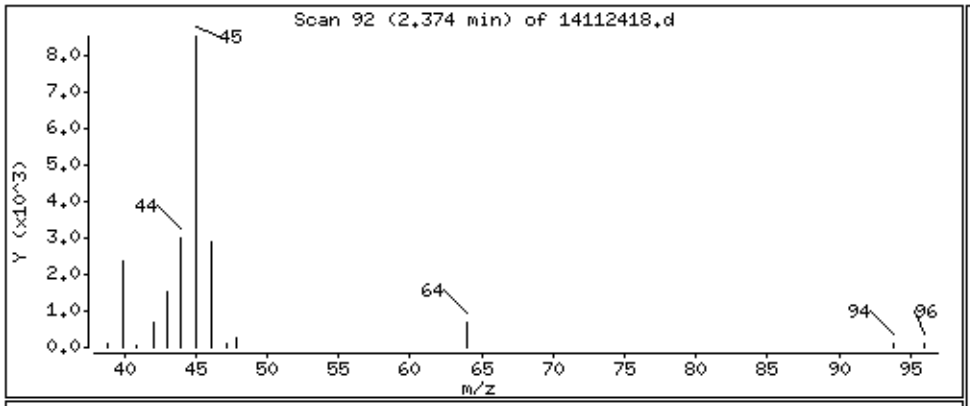
Operator: mjs

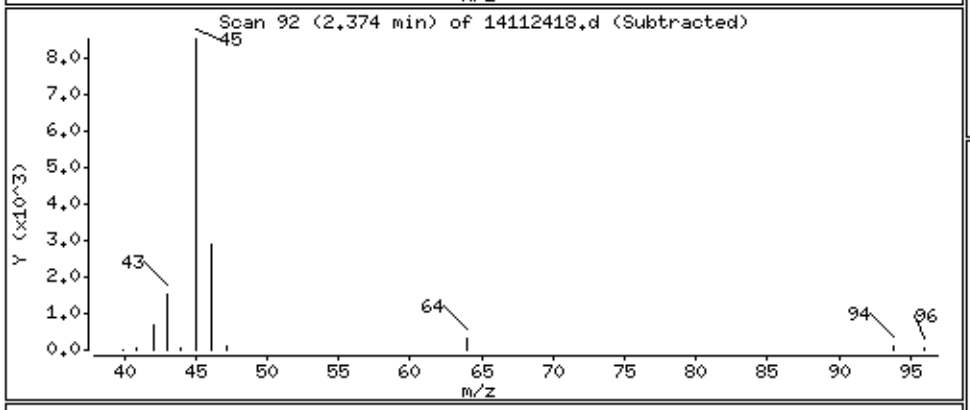
Column phase: RTx-624

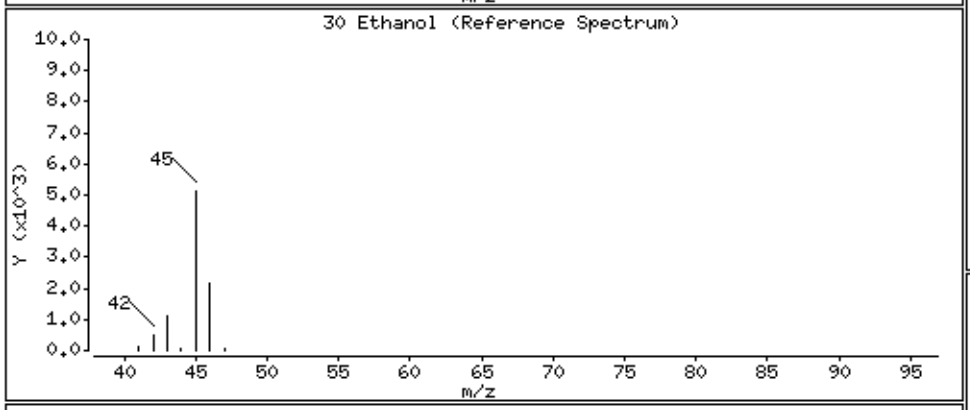
Column diameter: 0.53

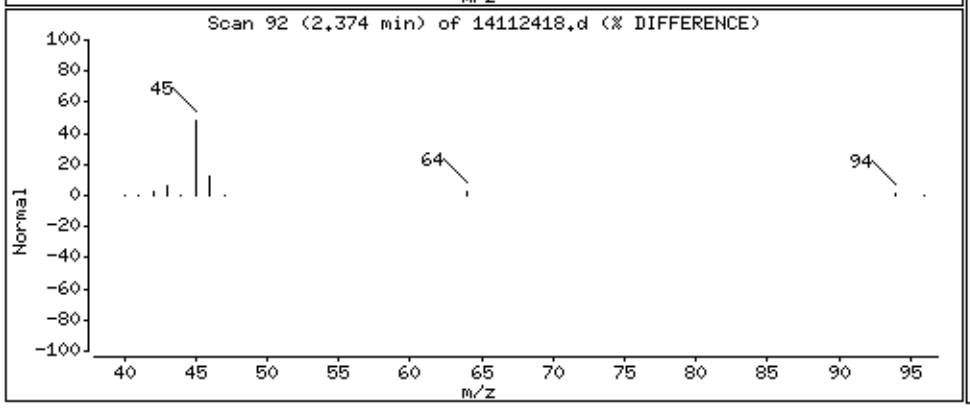
30 Ethanol

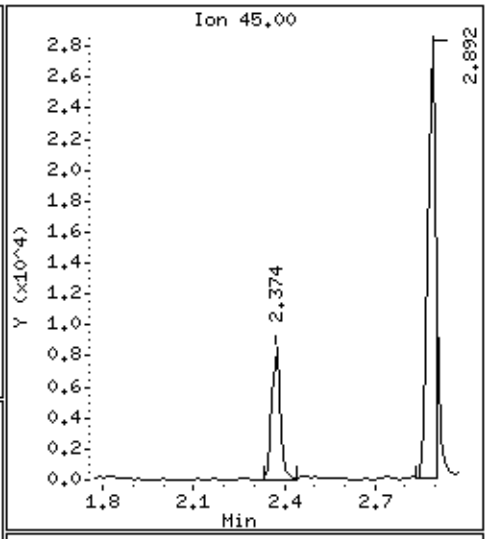
Concentration: 127.21 PPBV

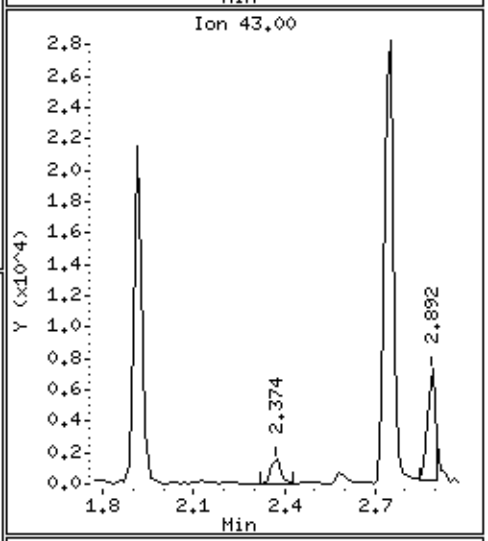


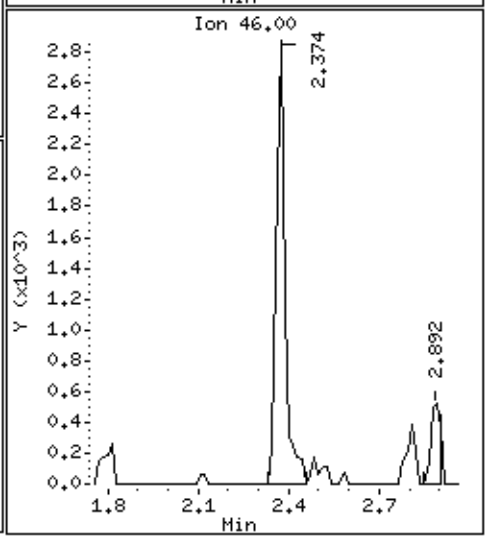












Data File: /chem/msd14.i/24nov14.b/14112418.d

Date : 24-NOV-2014 16:33

Client ID: ICV

Instrument: msd14.i

Sample Info: 50mL #2687-17A

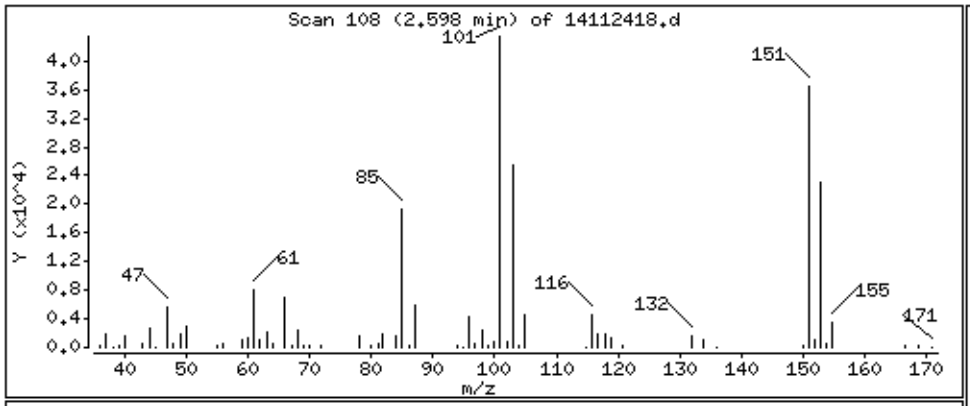
Operator: mjs

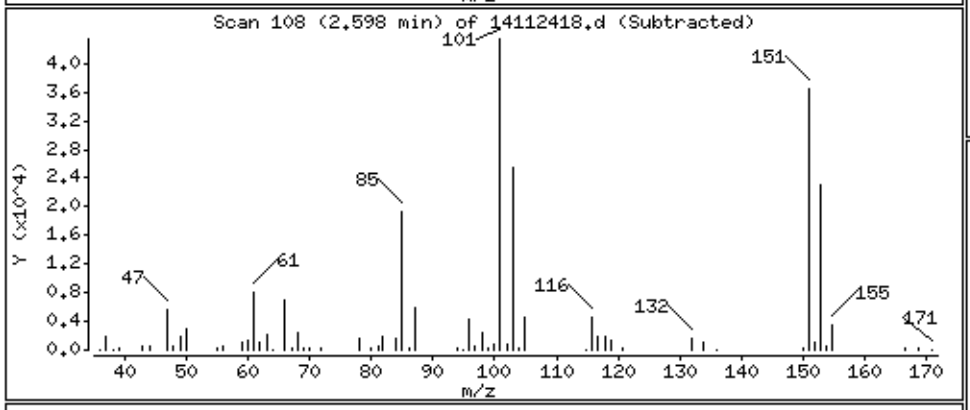
Column phase: RTx-624

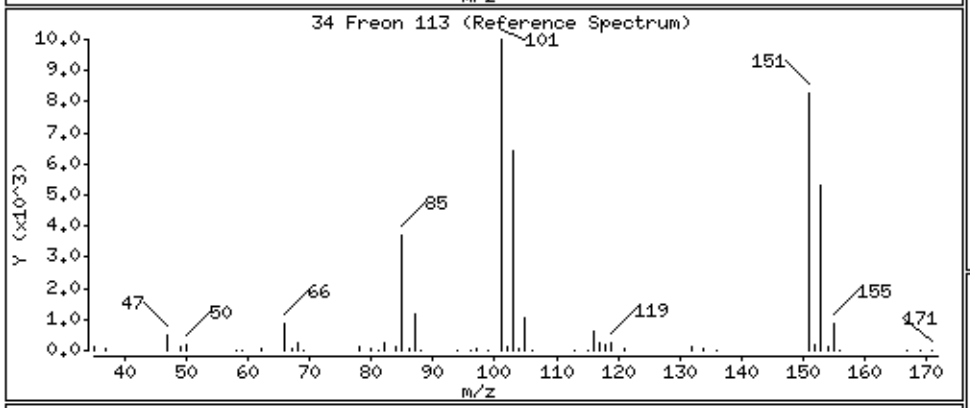
Column diameter: 0.53

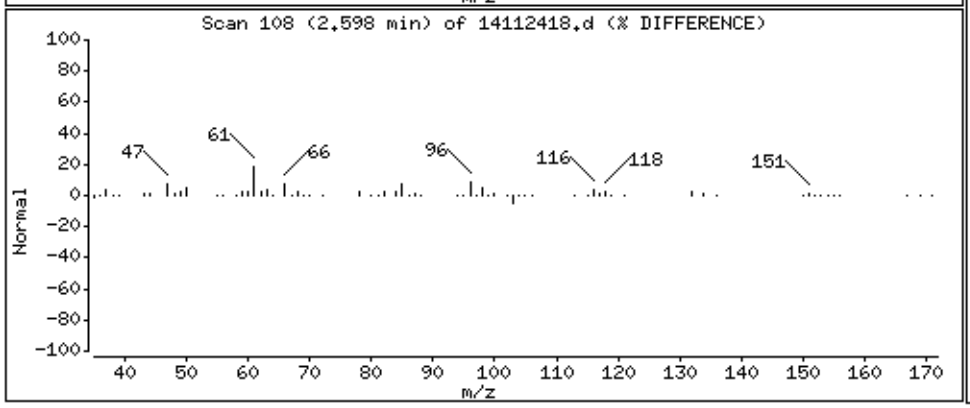
34 Freon 113

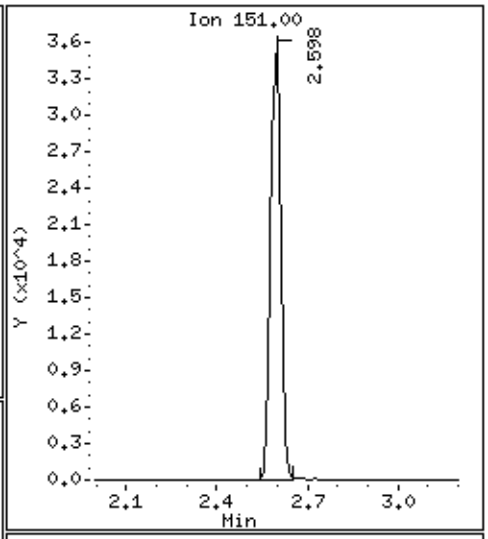
Concentration: 108.82 PPBV

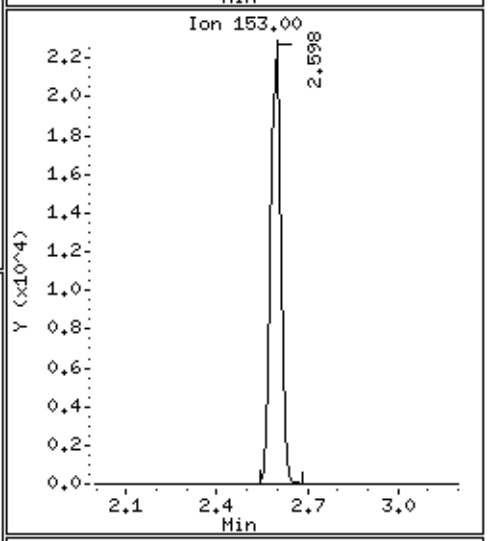


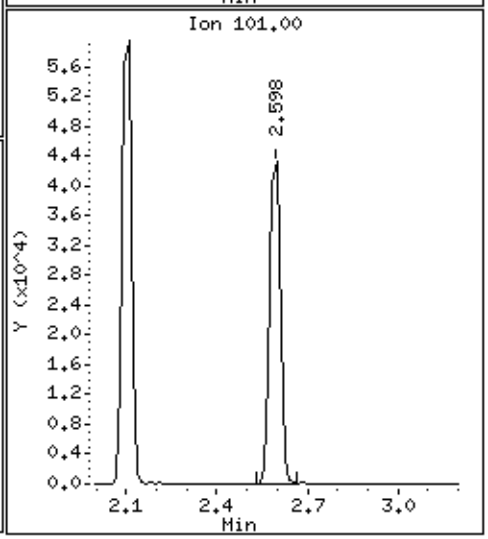












Data File: /chem/msd14.i/24nov14.b/14112418.d

Date : 24-NOV-2014 16:33

Client ID: ICV

Instrument: msd14.i

Sample Info: 50mL #2687-17A

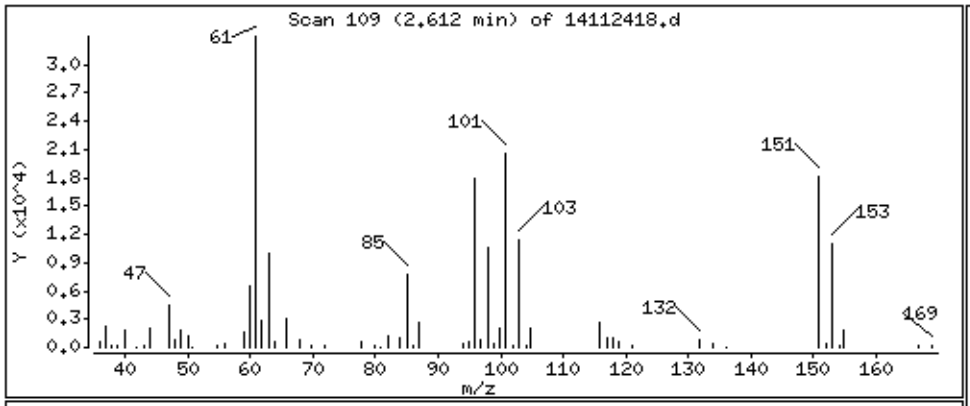
Operator: mjs

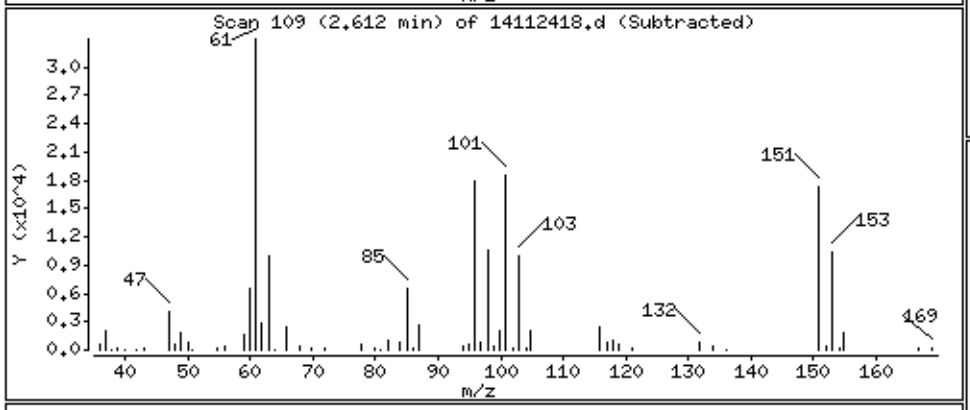
Column phase: RTx-624

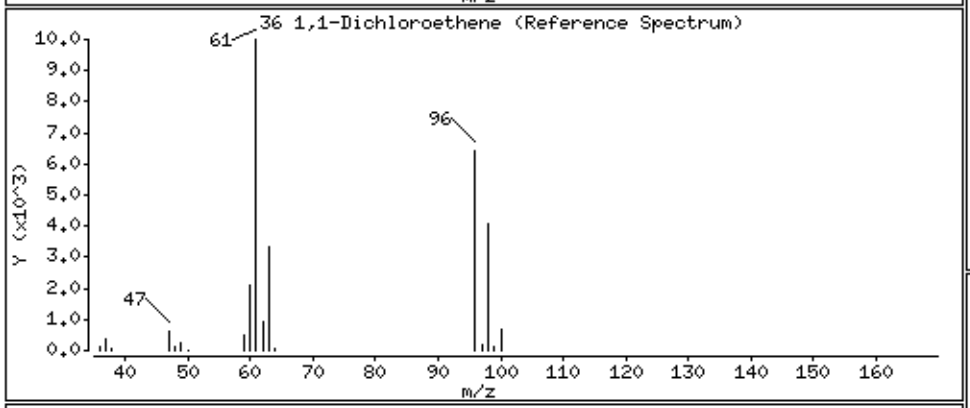
Column diameter: 0.53

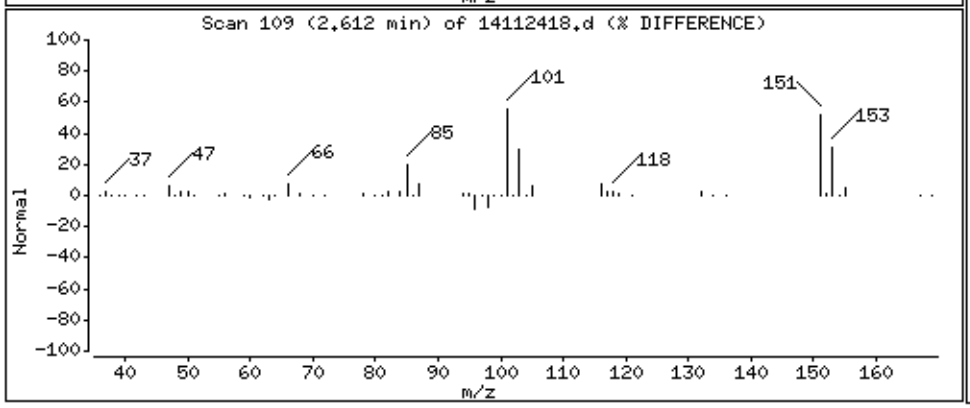
36 1,1-Dichloroethene

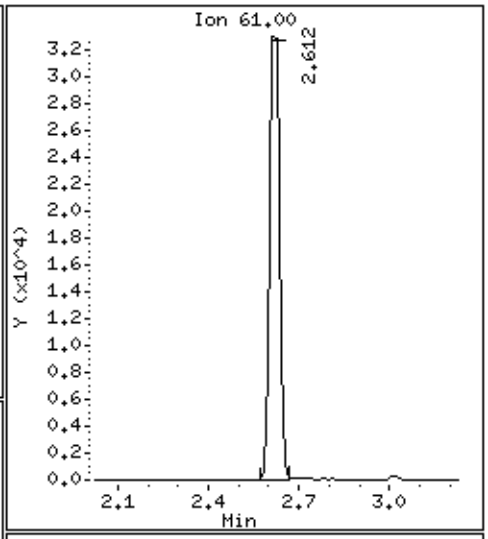
Concentration: 103.00 PPBV

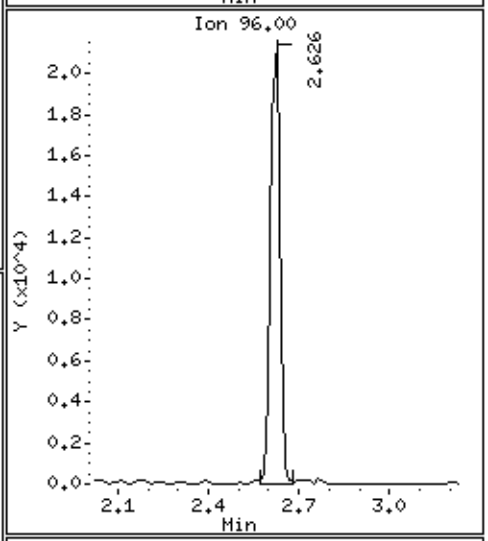


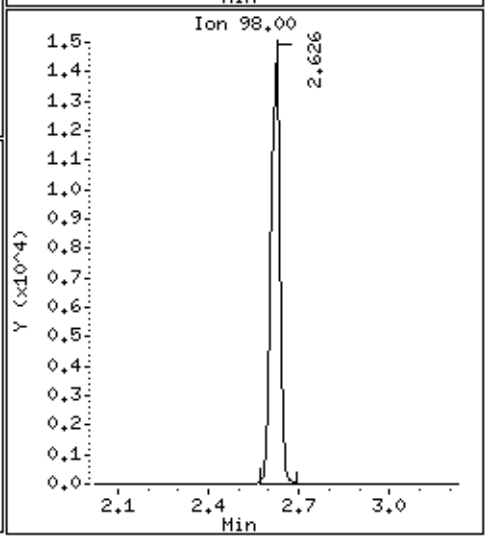












Data File: /chem/msd14.i/24nov14.b/14112418.d

Date : 24-NOV-2014 16:33

Client ID: ICV

Instrument: msd14.i

Sample Info: 50mL #2687-17A

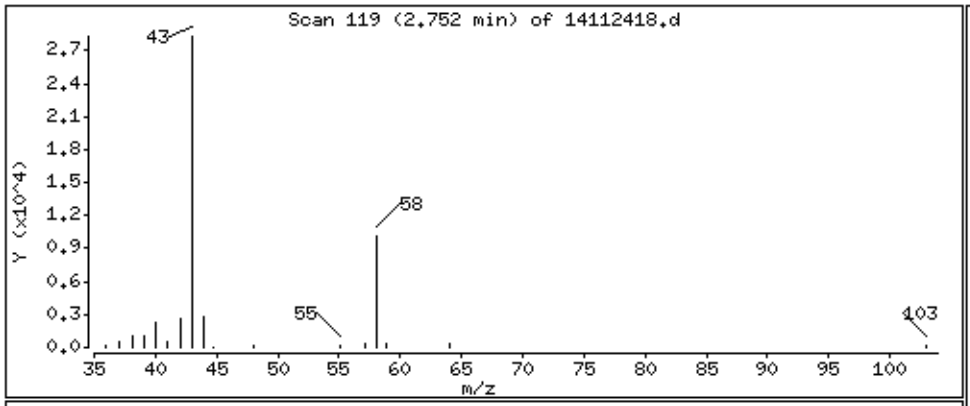
Operator: mjs

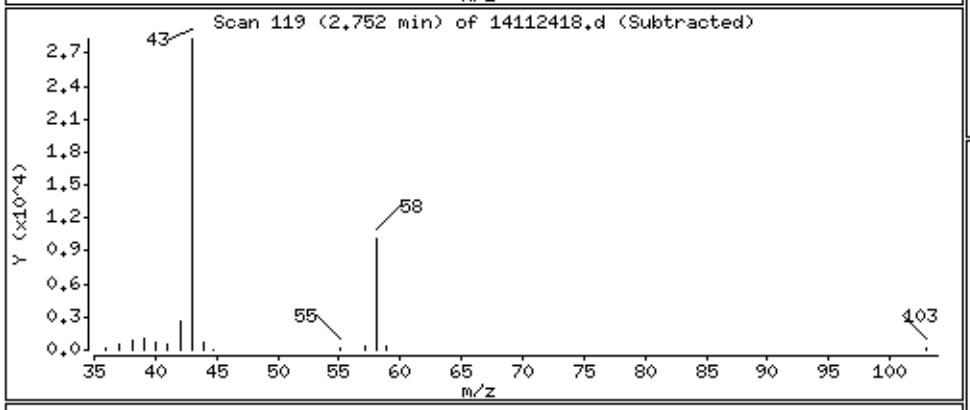
Column phase: RTx-624

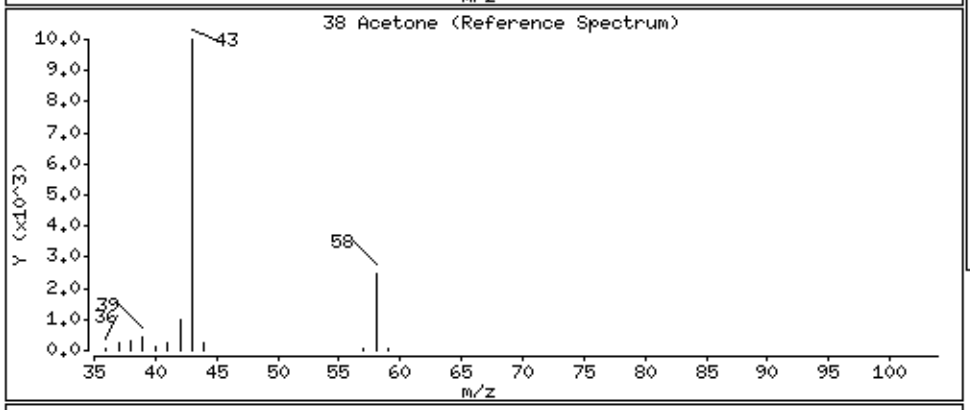
Column diameter: 0.53

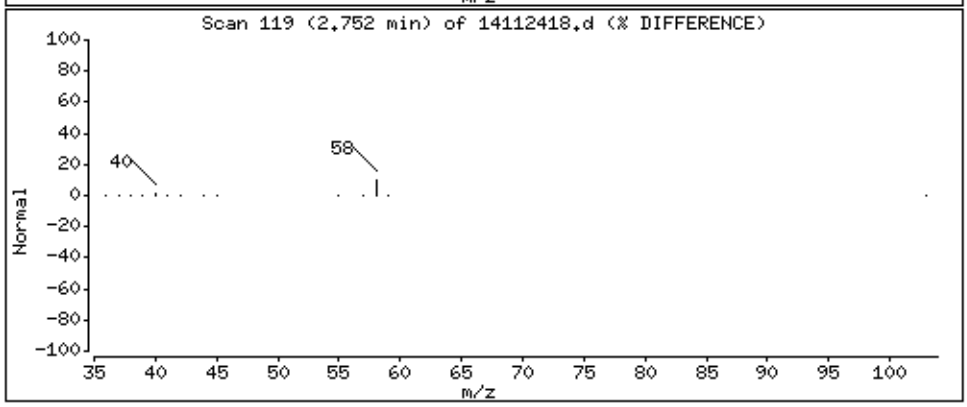
38 Acetone

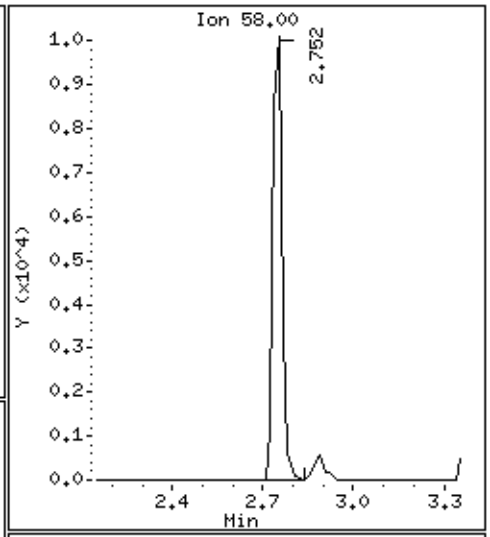
Concentration: 107.76 PPBV

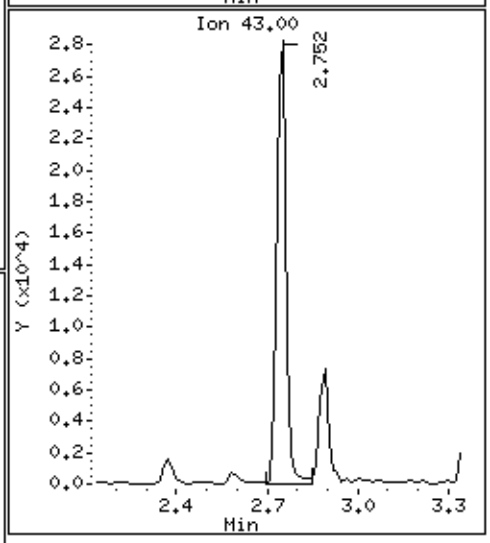












Data File: /chem/msd14.i/24nov14.b/14112418.d

Date : 24-NOV-2014 16:33

Client ID: ICV

Instrument: msd14.i

Sample Info: 50mL #2687-17A

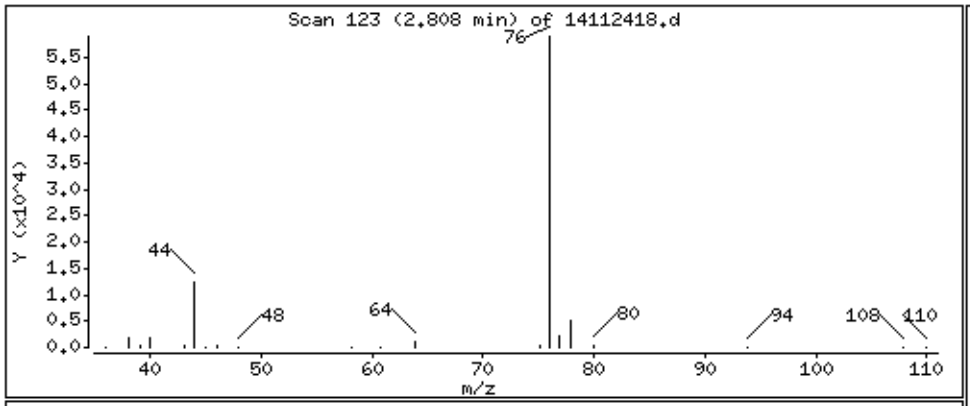
Operator: mjs

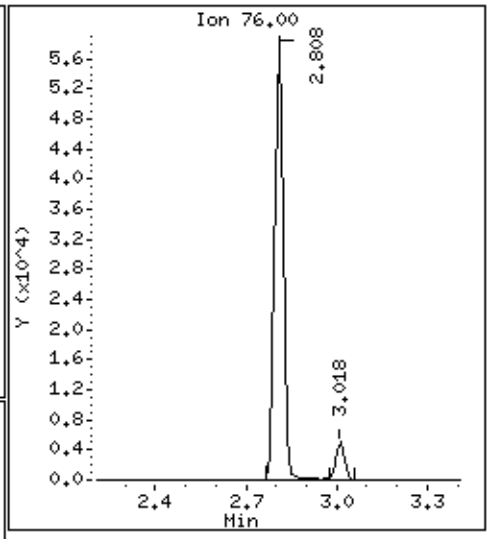
Column phase: RTx-624

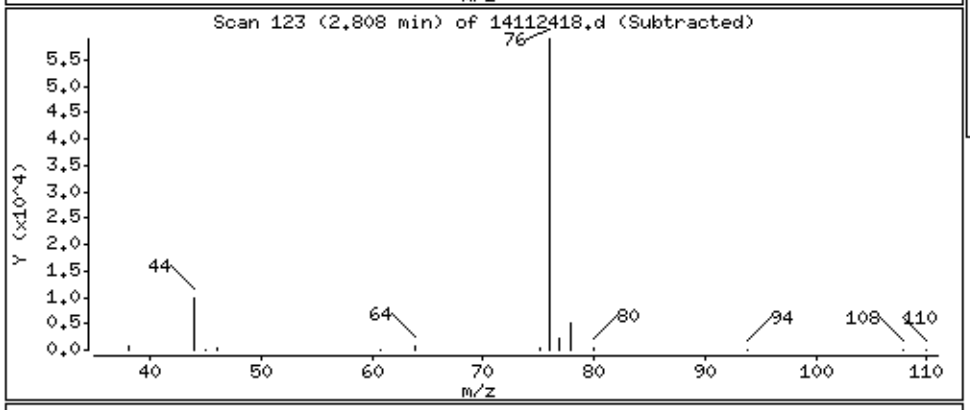
Column diameter: 0.53

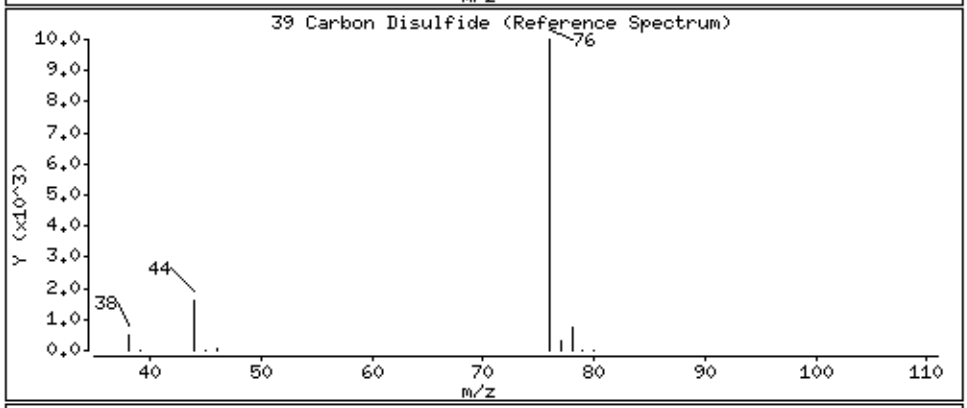
39 Carbon Disulfide

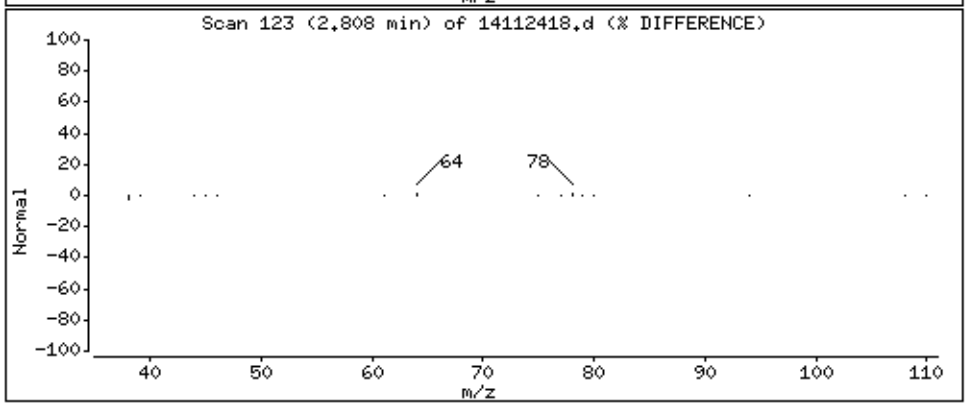
Concentration: 93.708 PPBV











Data File: /chem/msd14.i/24nov14.b/14112418.d

Date : 24-NOV-2014 16:33

Client ID: ICV

Instrument: msd14.i

Sample Info: 50mL #2687-17A

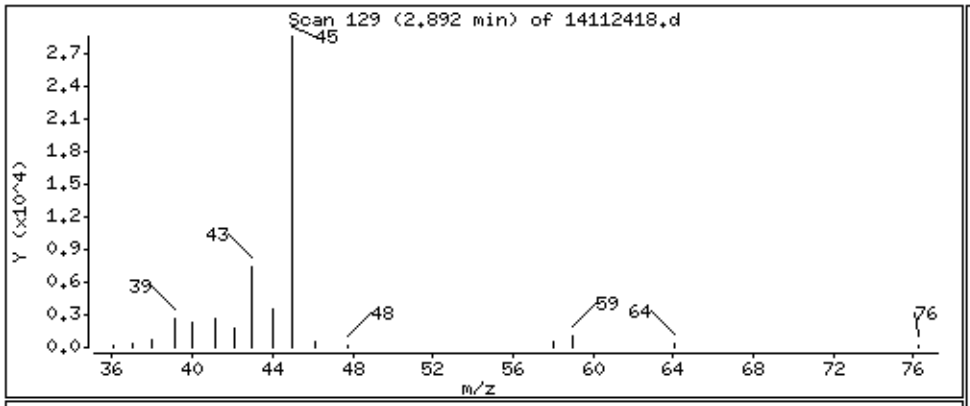
Operator: mjs

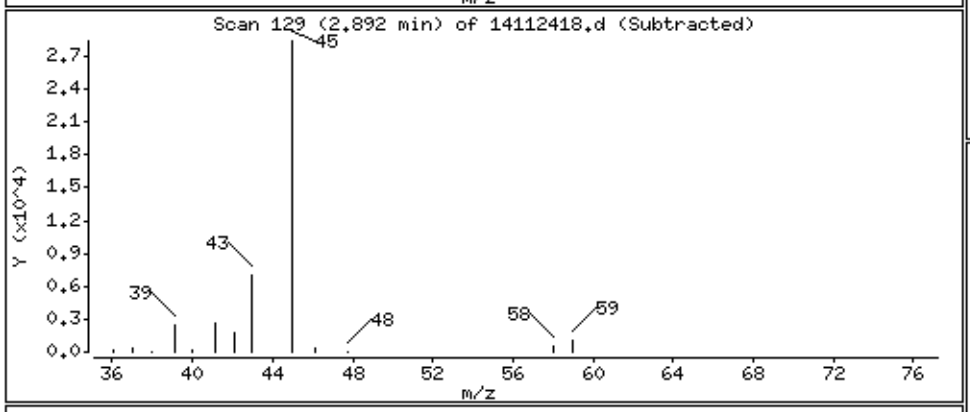
Column phase: RTx-624

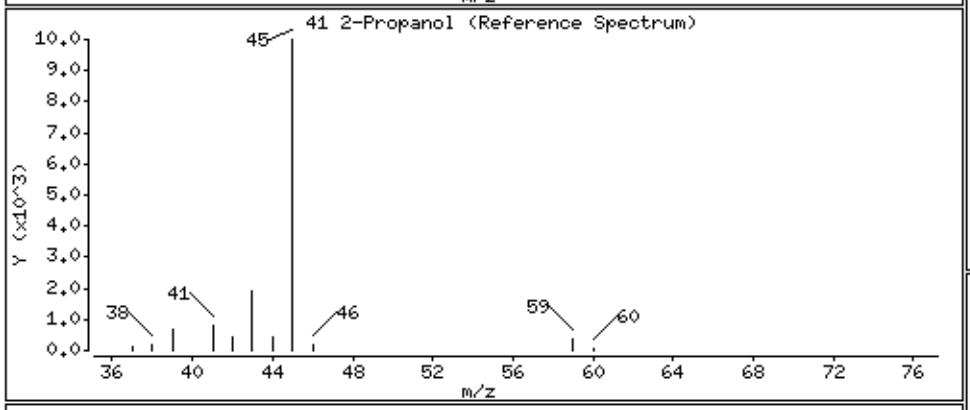
Column diameter: 0.53

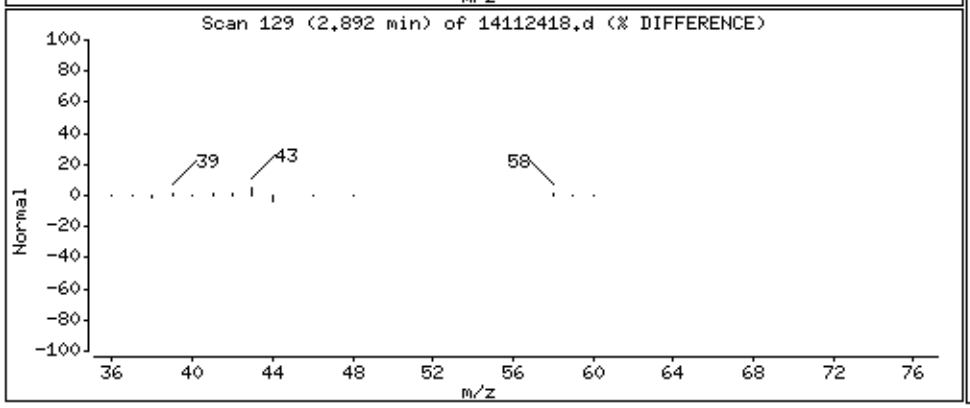
41 2-Propanol

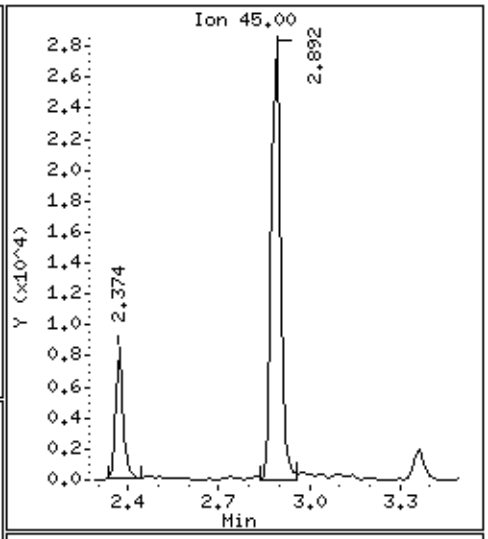
Concentration: 107.07 PPBV

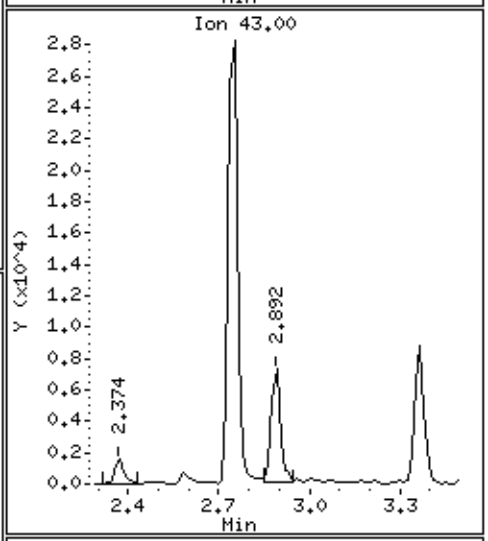


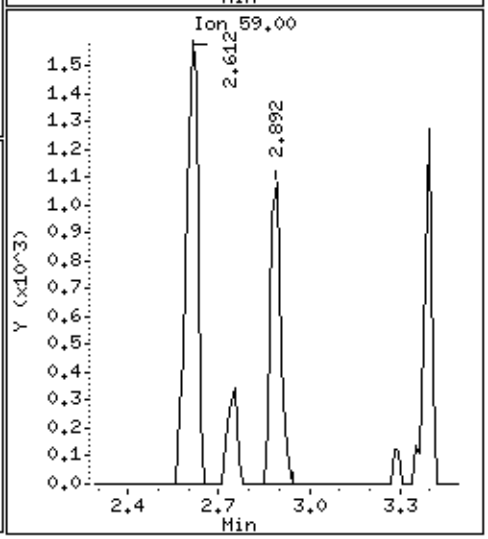












Data File: /chem/msd14.i/24nov14.b/14112418.d

Date : 24-NOV-2014 16:33

Client ID: ICV

Instrument: msd14.i

Sample Info: 50mL #2687-17A

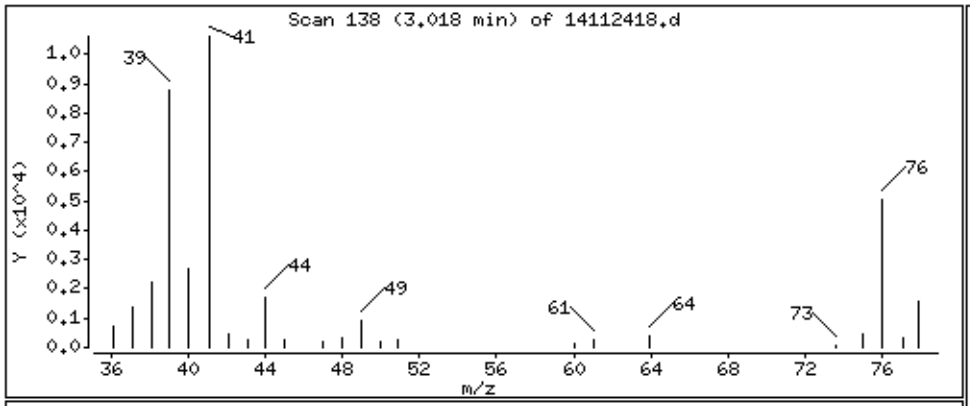
Operator: mjs

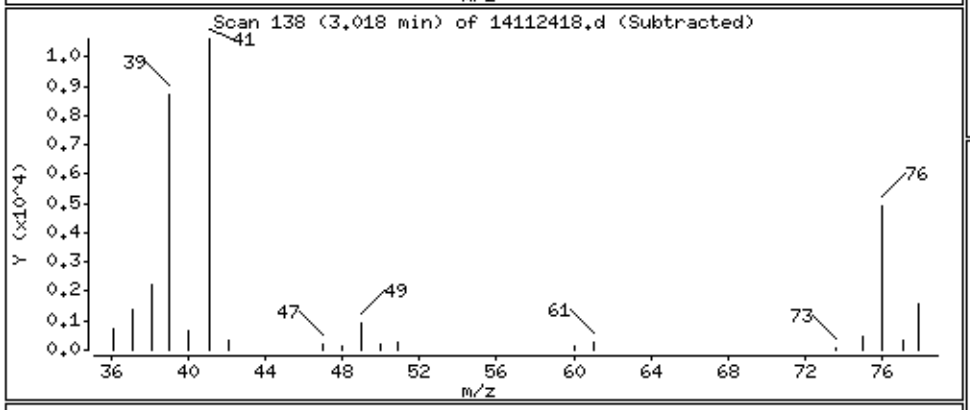
Column phase: RTx-624

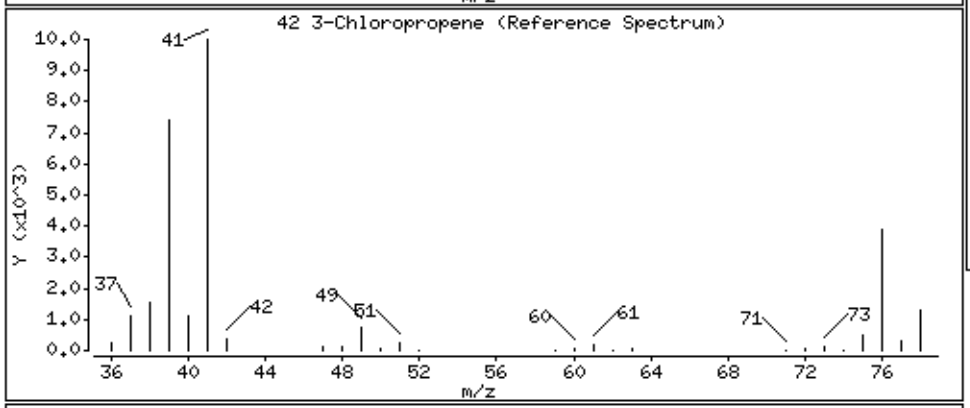
Column diameter: 0.53

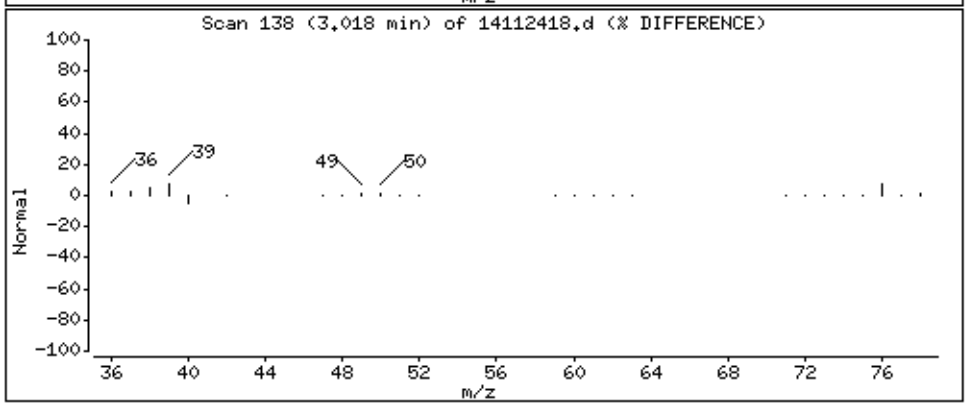
42 3-Chloropropene

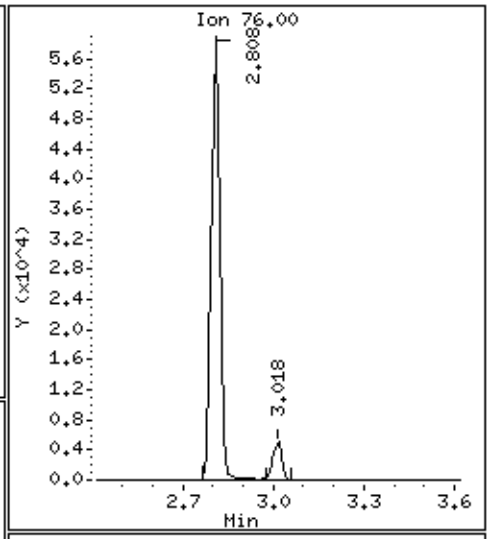
Concentration: 86.039 PPBV

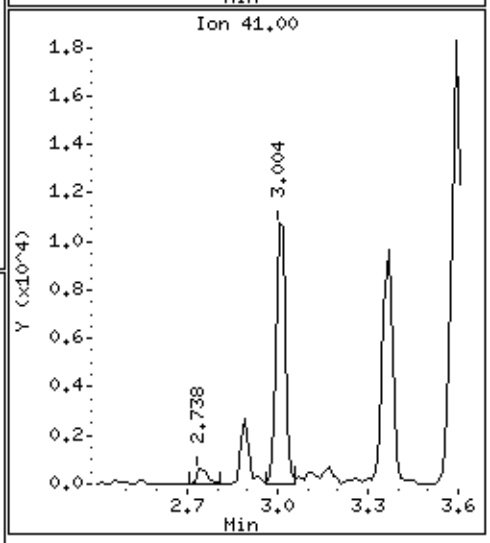












Data File: /chem/msd14.i/24nov14.b/14112418.d

Date : 24-NOV-2014 16:33

Client ID: ICV

Instrument: msd14.i

Sample Info: 50mL #2687-17A

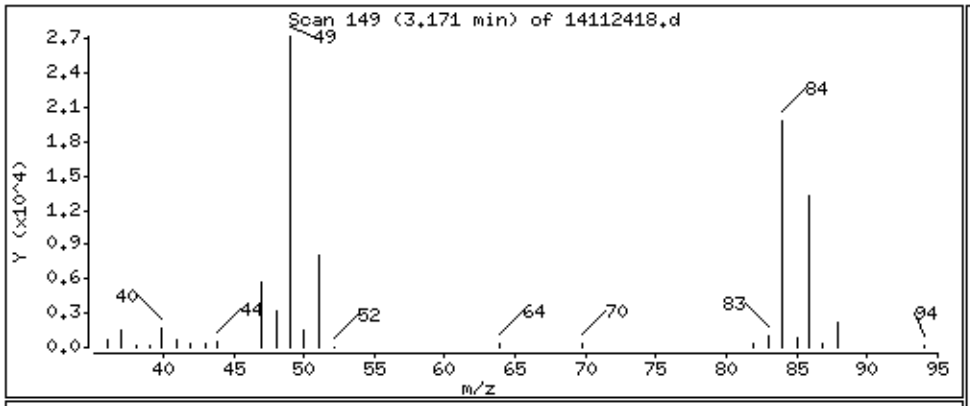
Operator: mjs

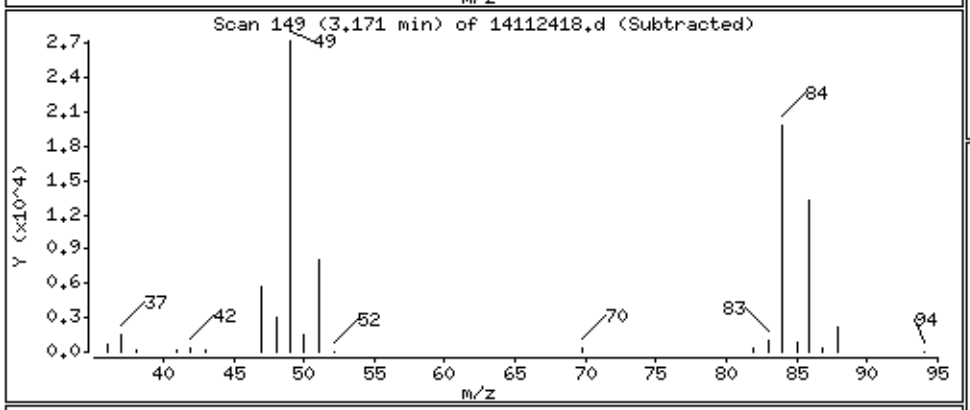
Column phase: RTx-624

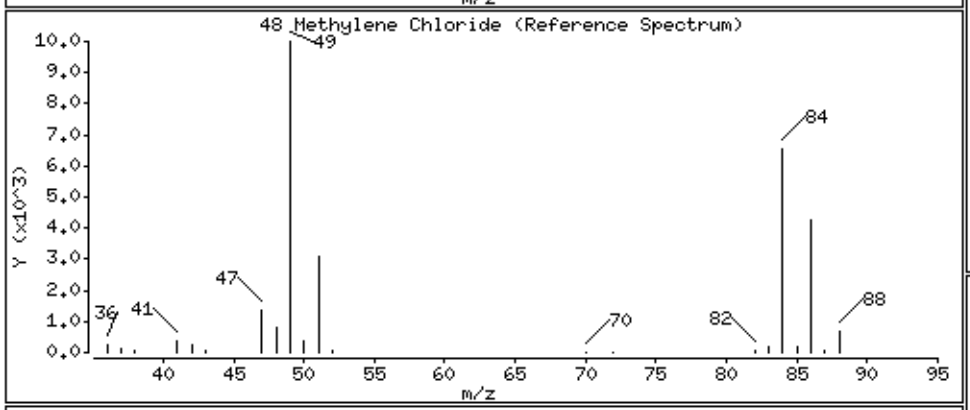
Column diameter: 0.53

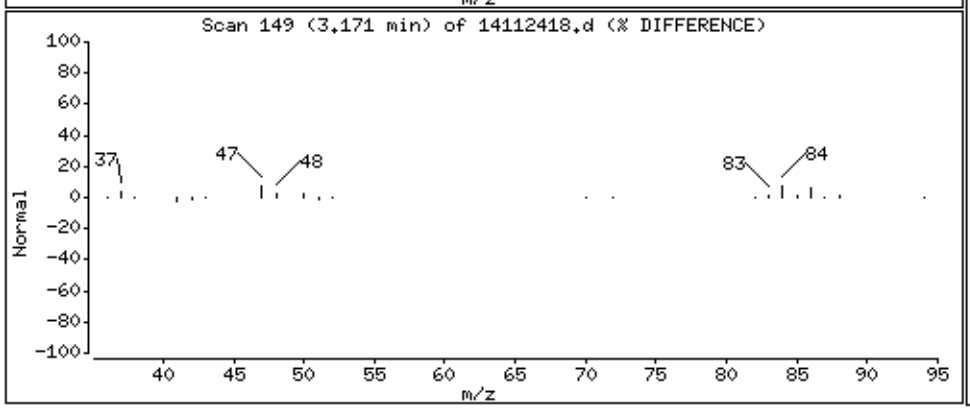
48 Methylene Chloride

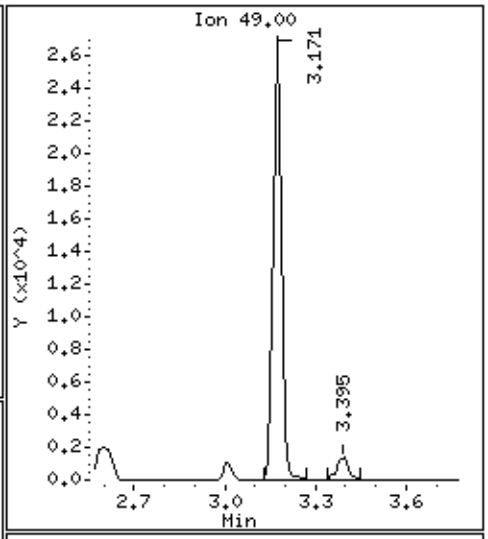
Concentration: 97.198 PPBV

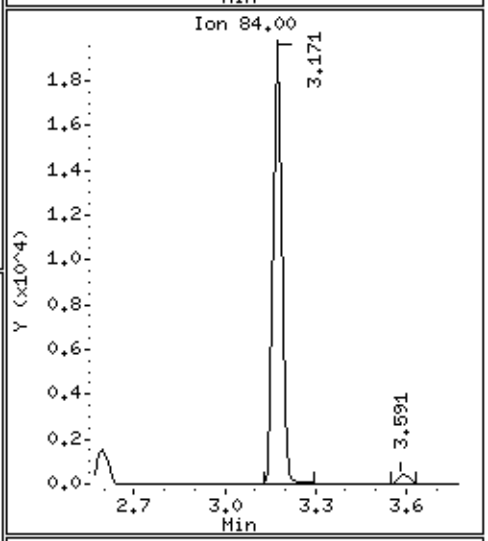


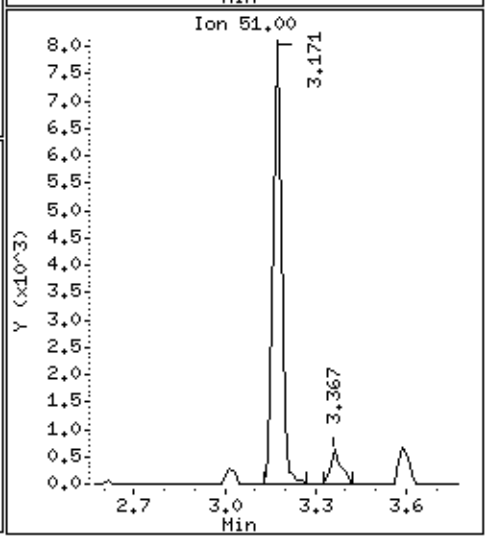












Data File: /chem/msd14.i/24nov14.b/14112418.d

Date : 24-NOV-2014 16:33

Client ID: ICV

Instrument: msd14.i

Sample Info: 50mL #2687-17A

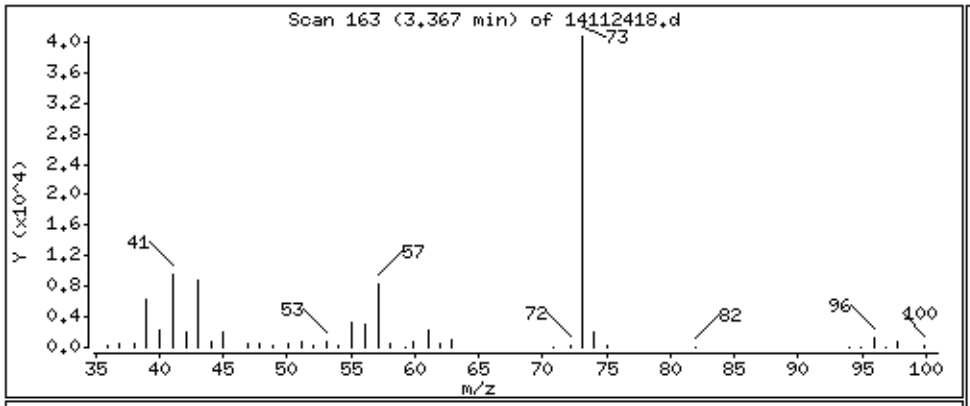
Operator: mjs

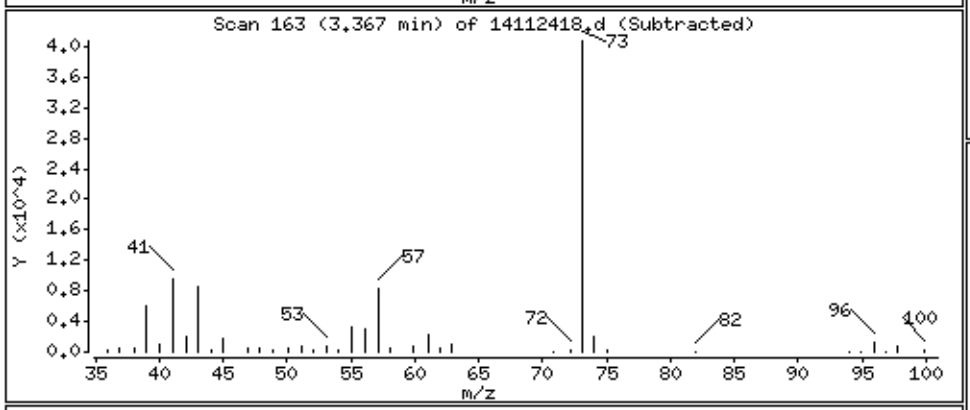
Column phase: RTx-624

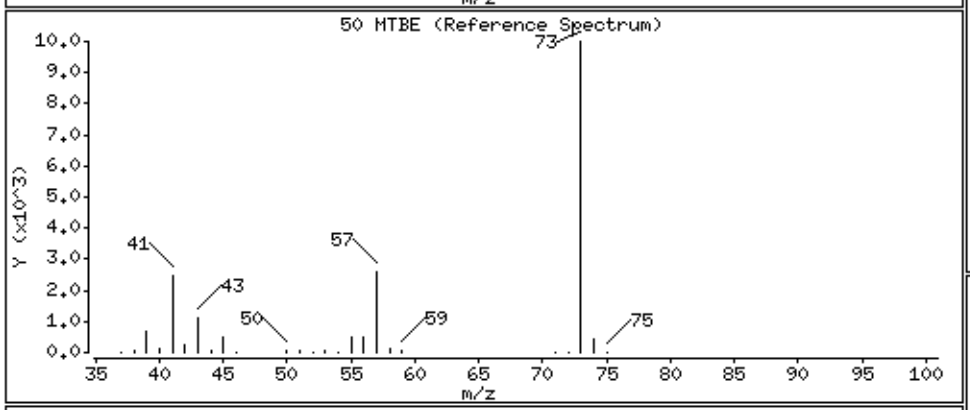
Column diameter: 0.53

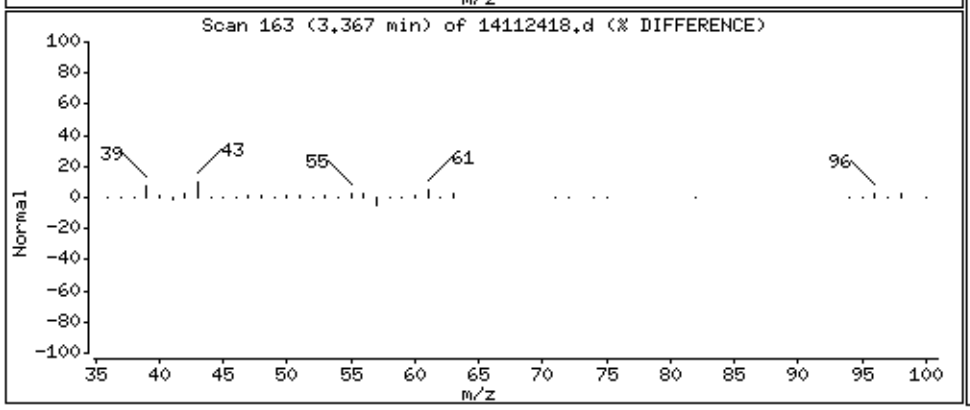
50 MTBE

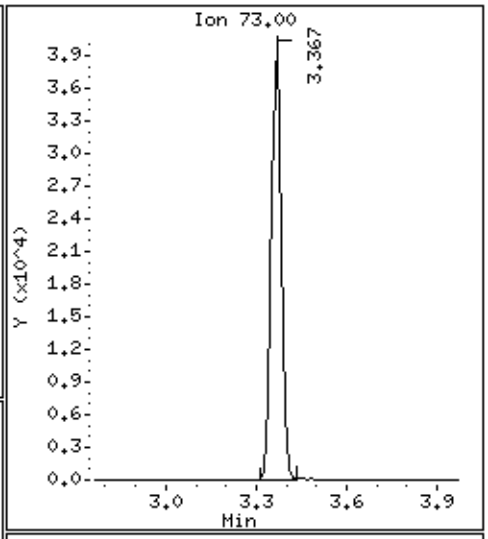
Concentration: 89.306 PPBV

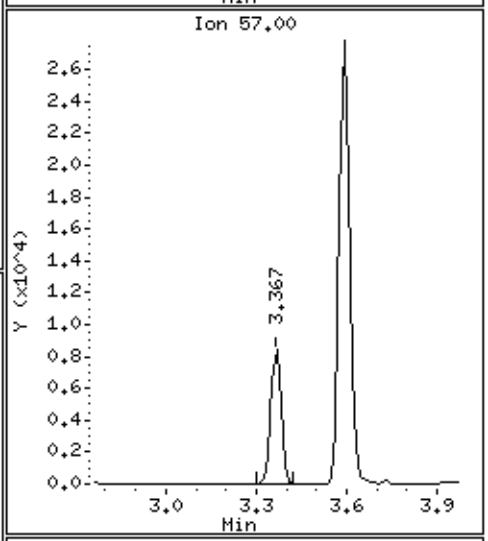


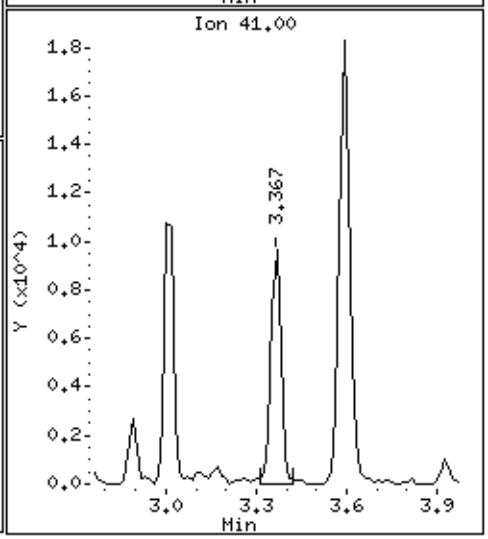












Data File: /chem/msd14.i/24nov14.b/14112418.d

Date : 24-NOV-2014 16:33

Client ID: ICV

Instrument: msd14.i

Sample Info: 50mL #2687-17A

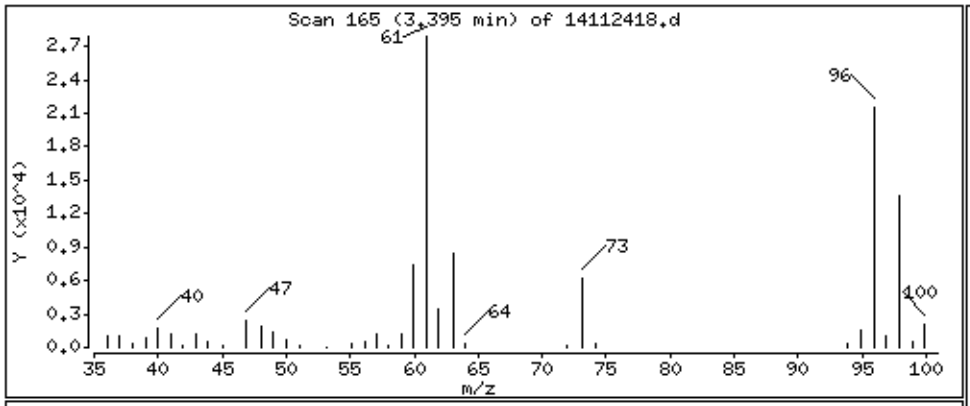
Operator: mjs

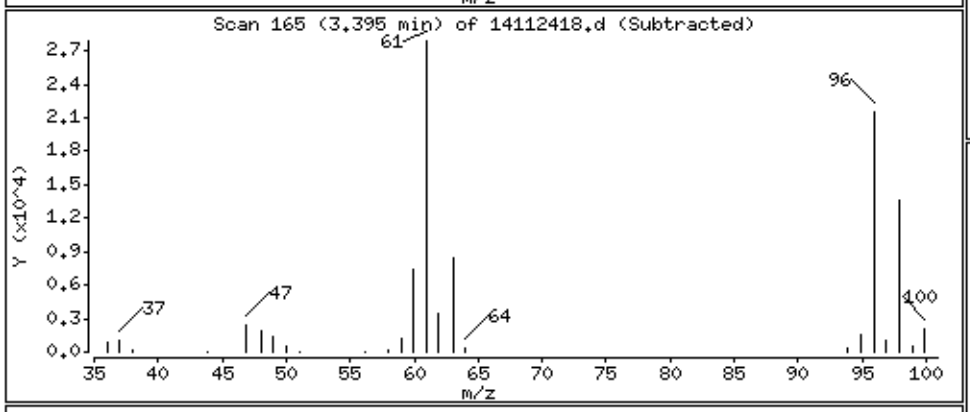
Column phase: RTx-624

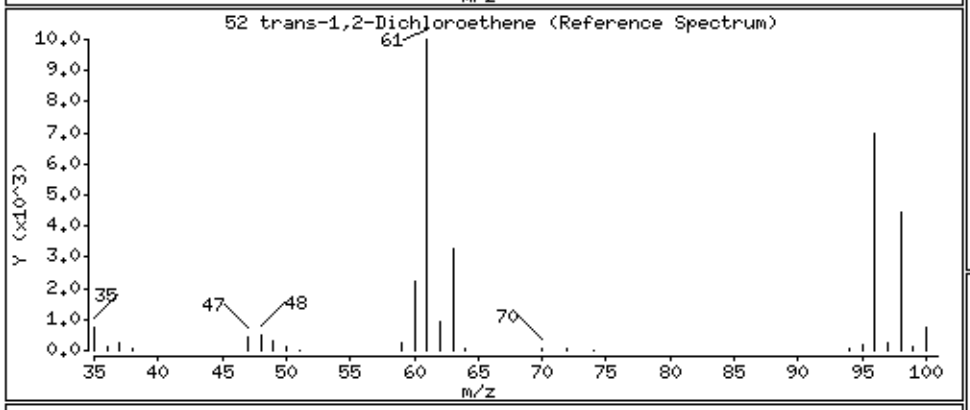
Column diameter: 0.53

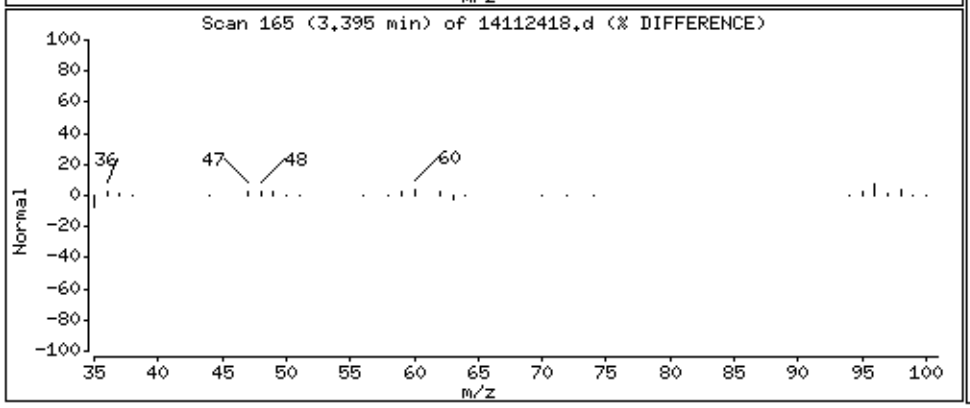
52 trans-1,2-Dichloroethene

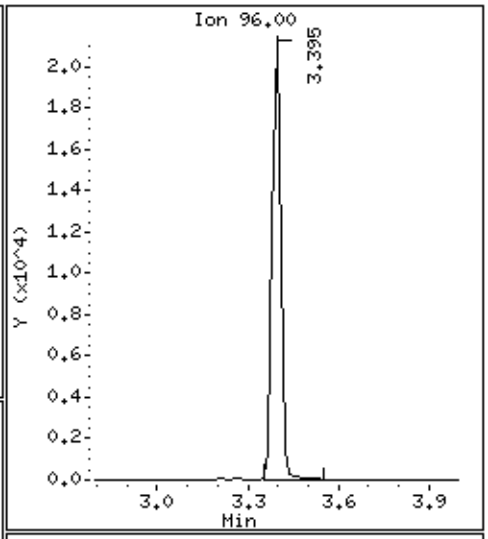
Concentration: 94.316 PPBV

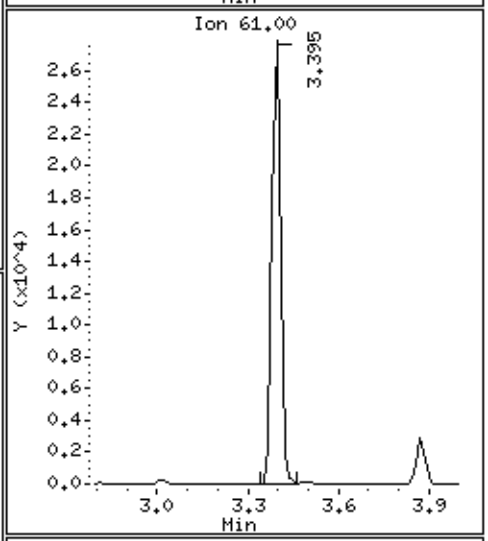


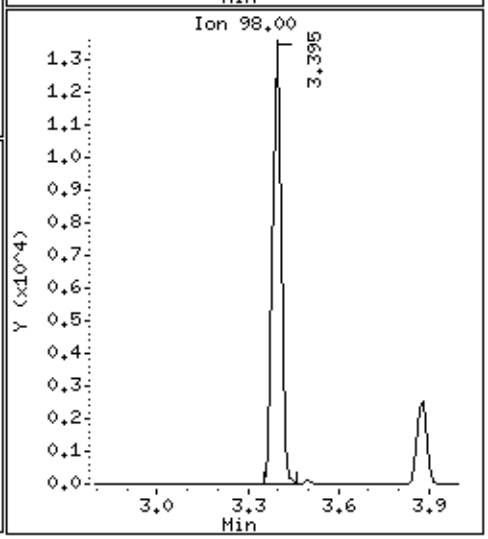












Data File: /chem/msd14.i/24nov14.b/14112418.d

Date : 24-NOV-2014 16:33

Client ID: ICV

Instrument: msd14.i

Sample Info: 50mL #2687-17A

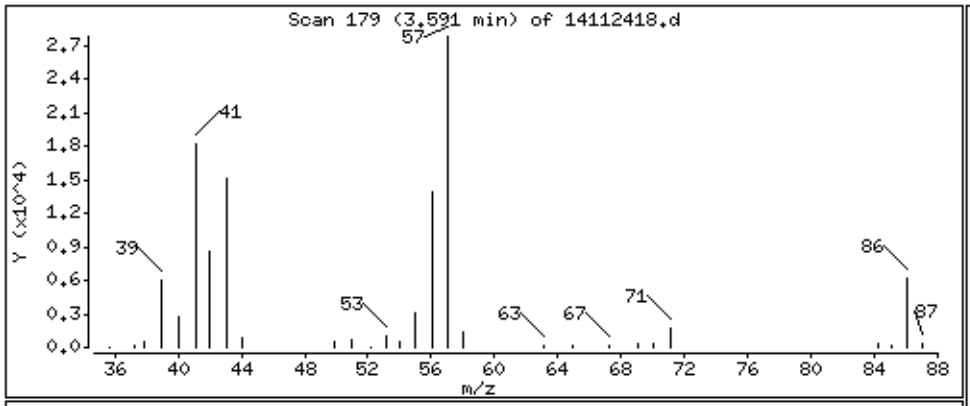
Operator: mjs

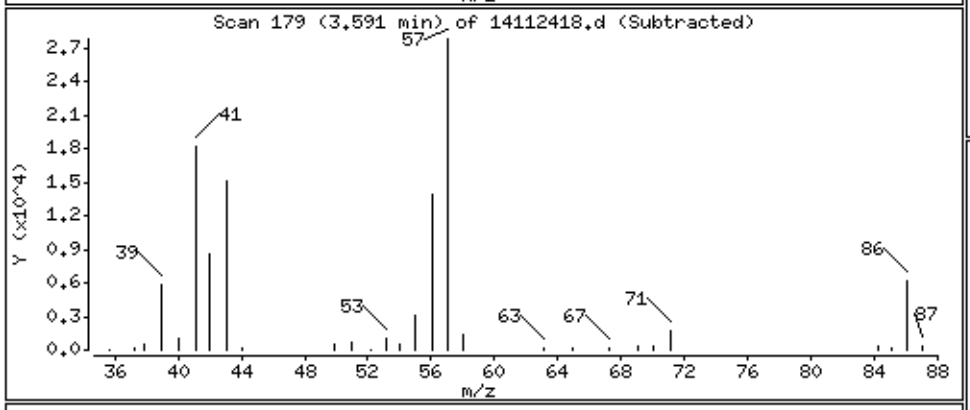
Column phase: RTx-624

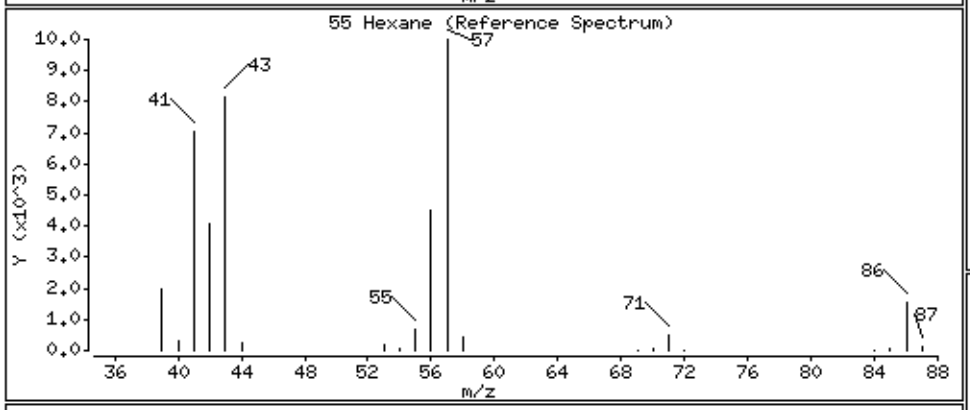
Column diameter: 0.53

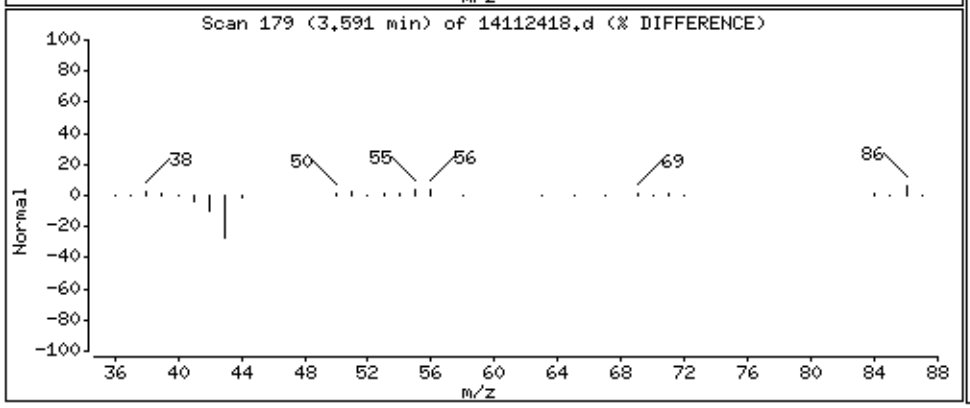
55 Hexane

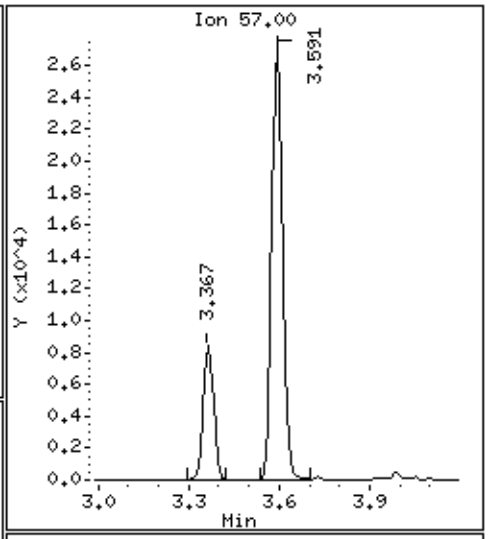
Concentration: 98.082 PPBV

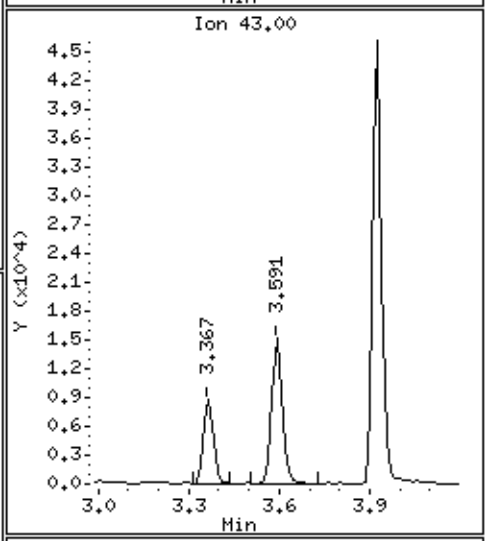


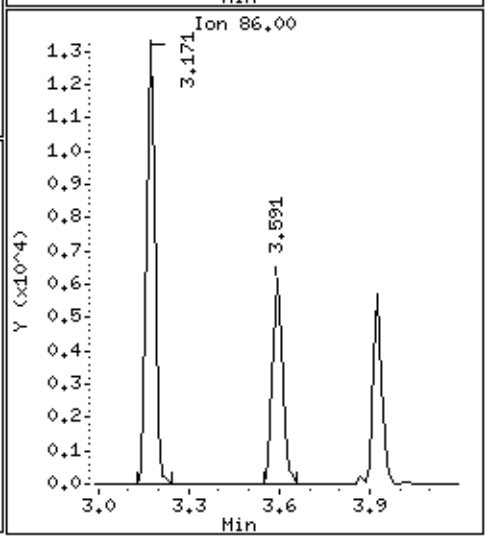












Data File: /chem/msd14.i/24nov14.b/14112418.d

Date : 24-NOV-2014 16:33

Client ID: ICV

Instrument: msd14.i

Sample Info: 50mL #2687-17A

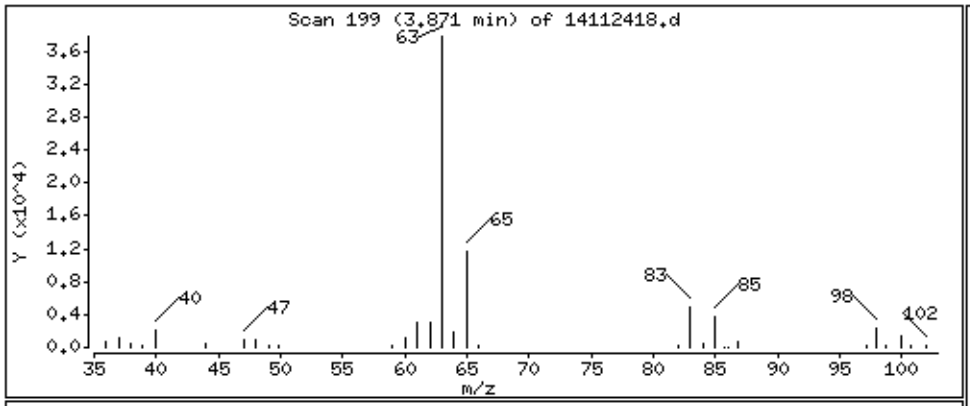
Operator: mjs

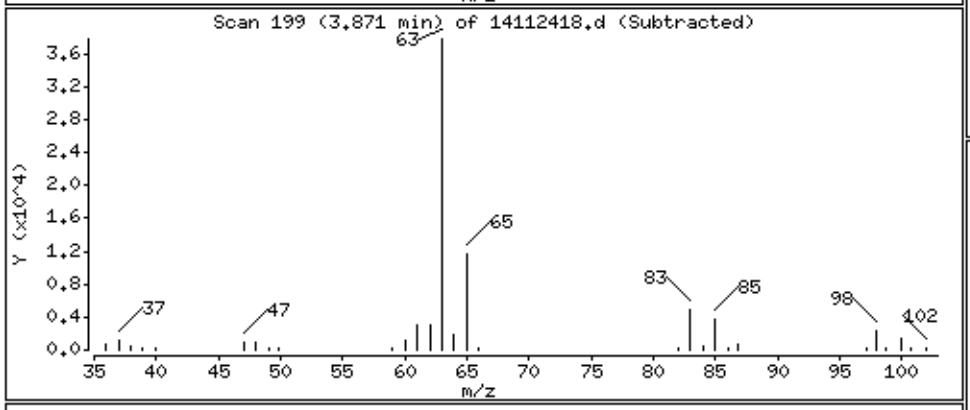
Column phase: RTx-624

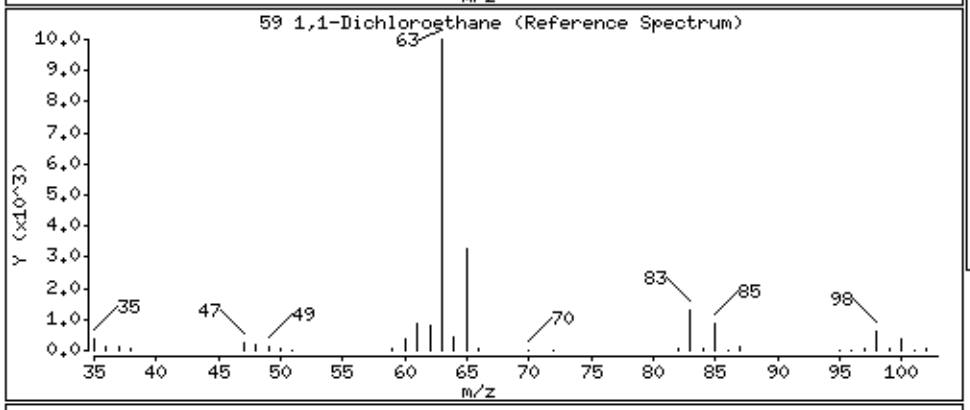
Column diameter: 0.53

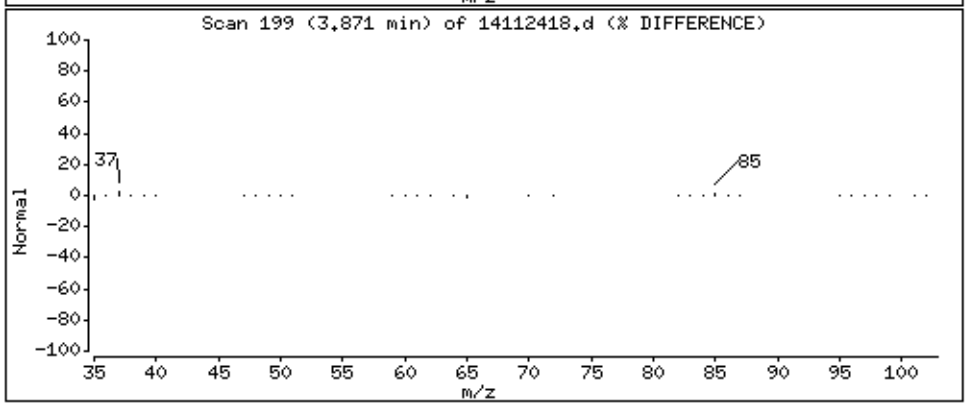
59 1,1-Dichloroethane

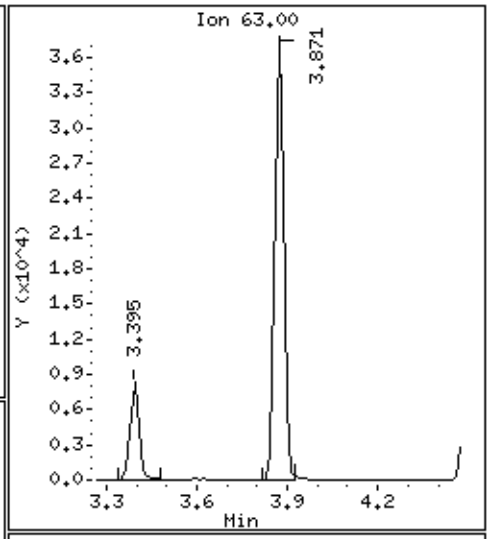
Concentration: 97.212 PPBV

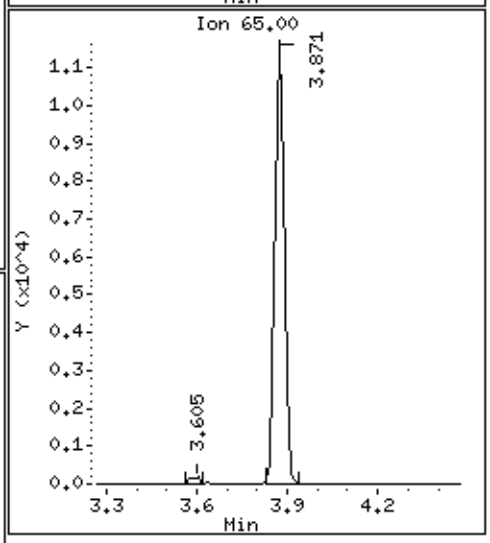












Data File: /chem/msd14.i/24nov14.b/14112418.d

Date : 24-NOV-2014 16:33

Client ID: ICV

Instrument: msd14.i

Sample Info: 50mL #2687-17A

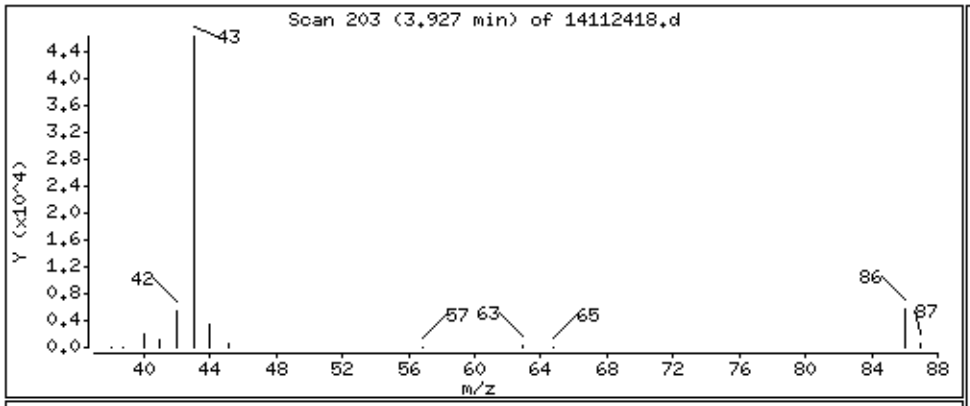
Operator: mjs

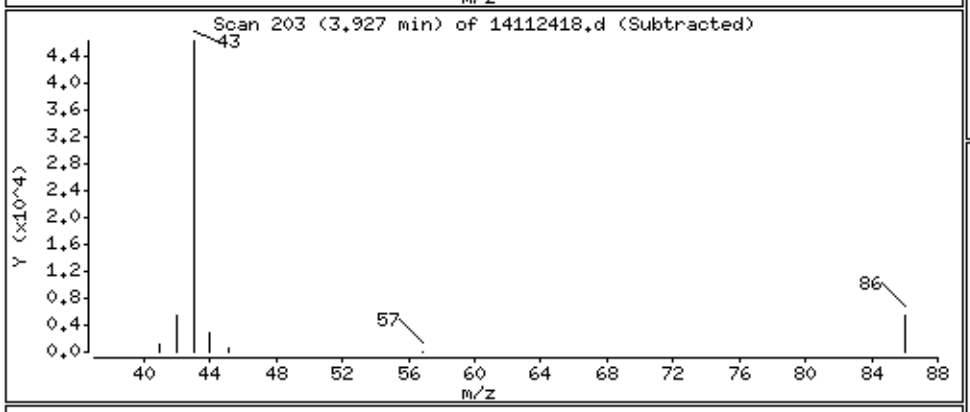
Column phase: RTx-624

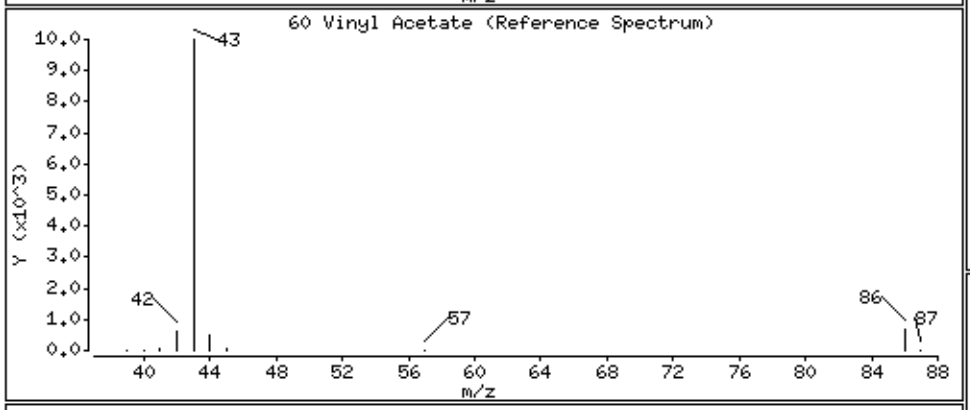
Column diameter: 0.53

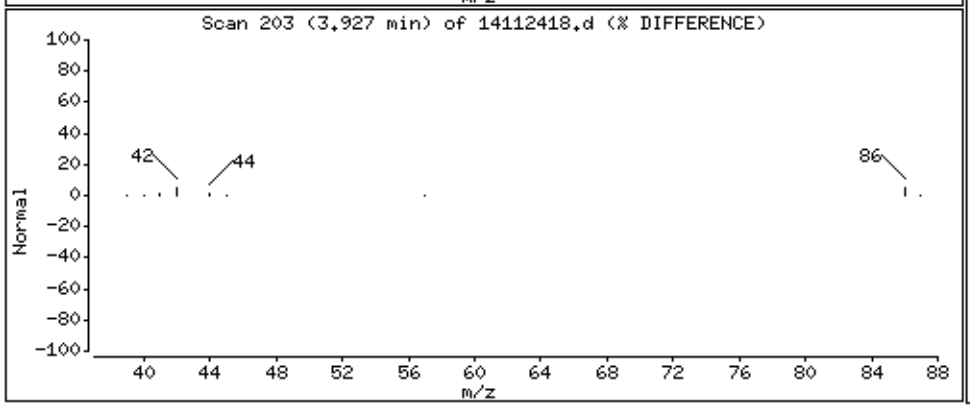
60 Vinyl Acetate

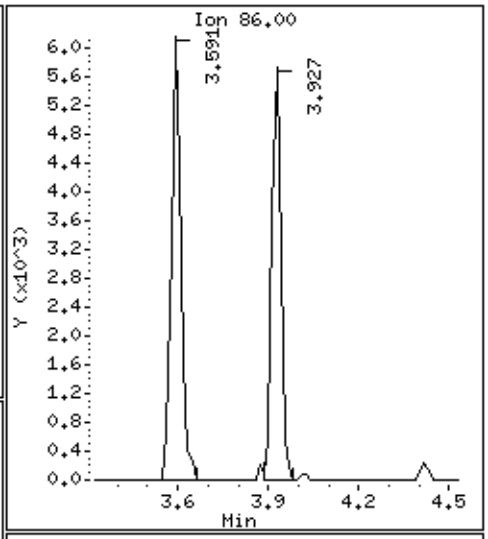
Concentration: 95.884 PPBV

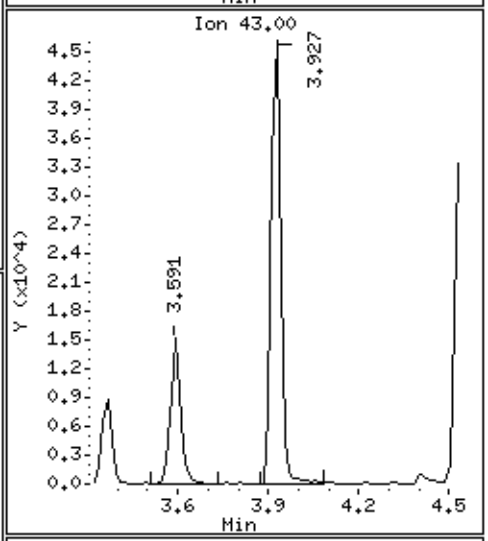


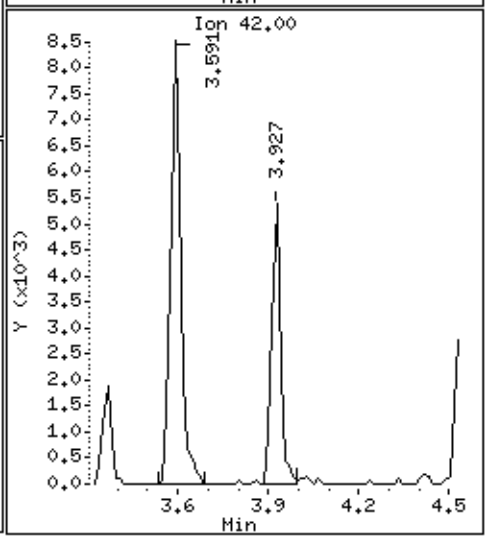












Data File: /chem/msd14.i/24nov14.b/14112418.d

Date : 24-NOV-2014 16:33

Client ID: ICV

Instrument: msd14.i

Sample Info: 50mL #2687-17A

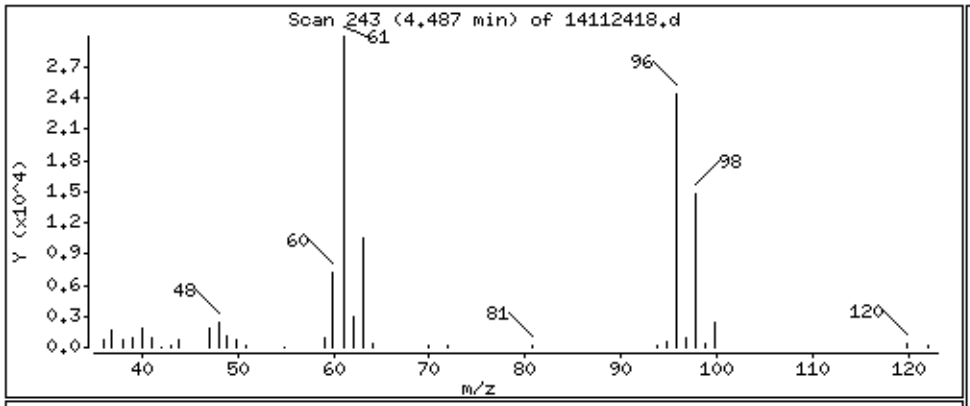
Operator: mjs

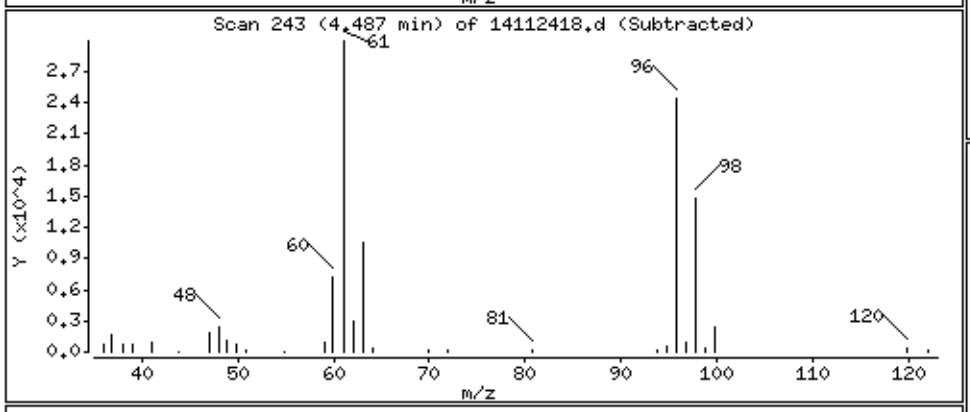
Column phase: RTx-624

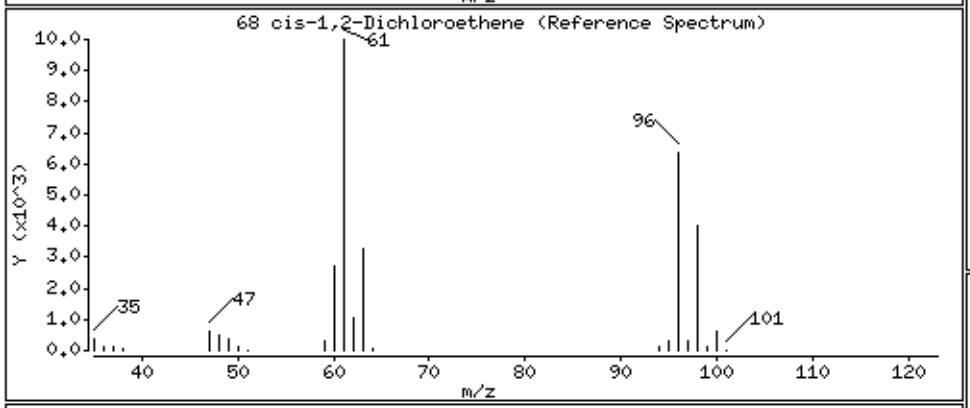
Column diameter: 0.53

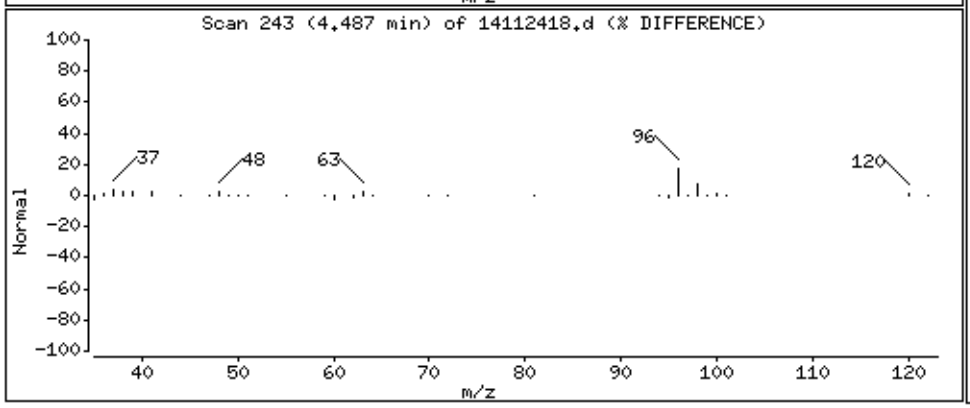
68 cis-1,2-Dichloroethene

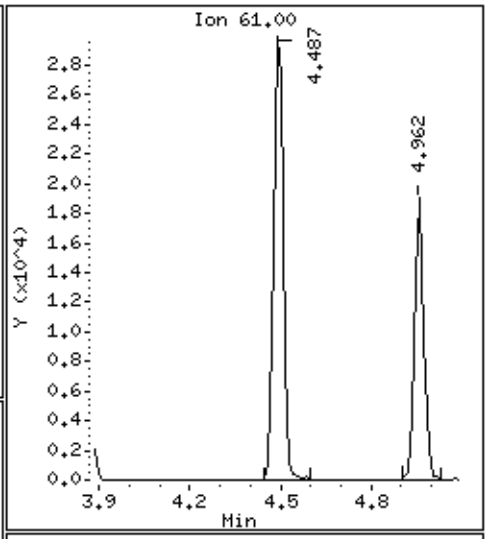
Concentration: 98.708 PPBV

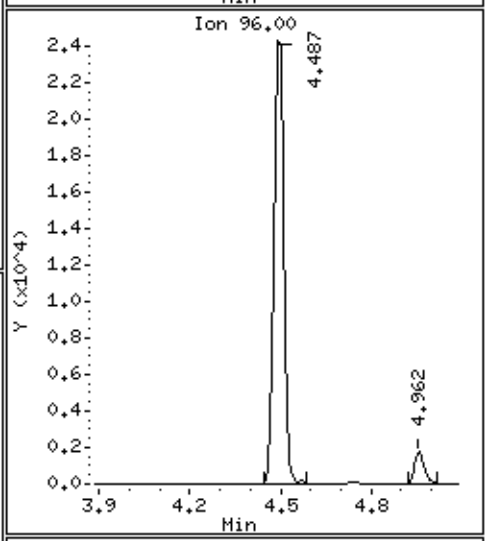


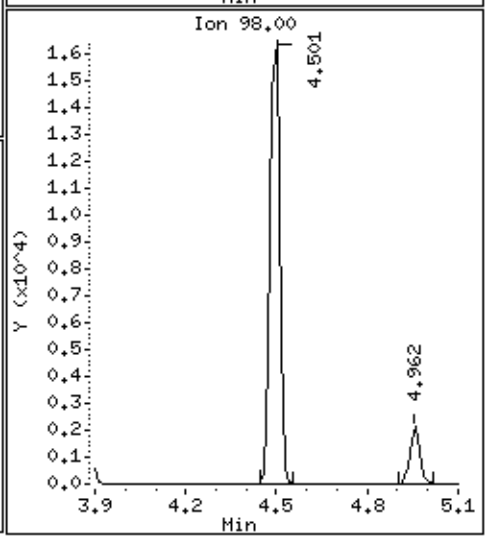












Data File: /chem/msd14.i/24nov14.b/14112418.d

Date : 24-NOV-2014 16:33

Client ID: ICV

Instrument: msd14.i

Sample Info: 50mL #2687-17A

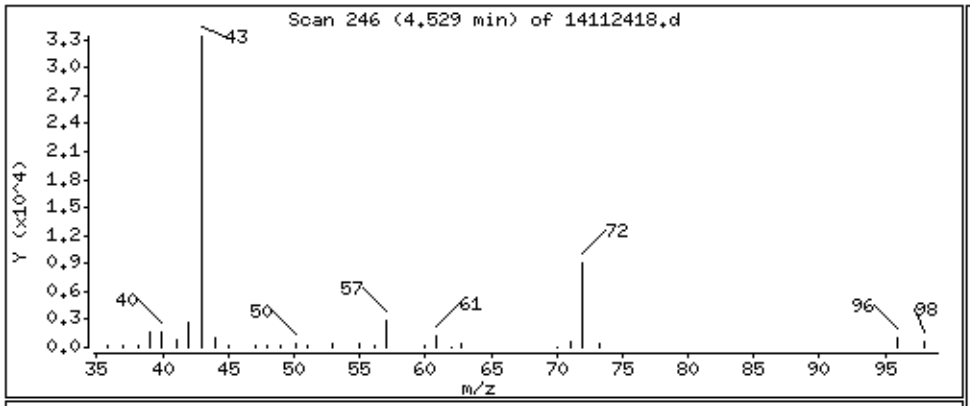
Operator: mjs

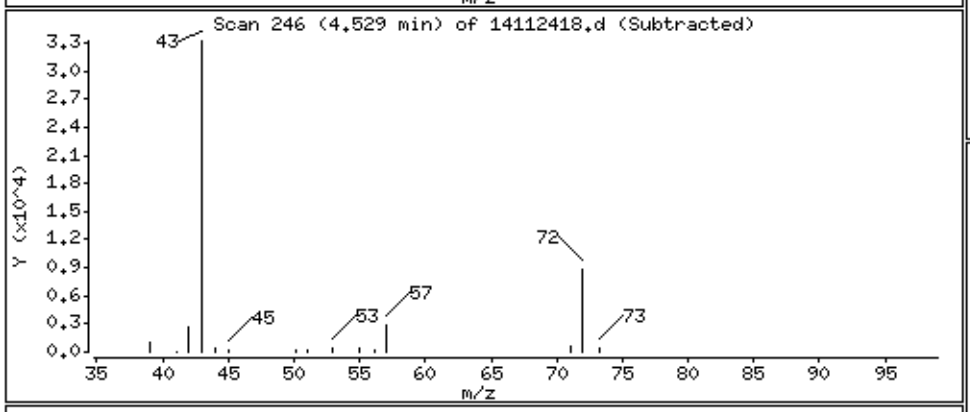
Column phase: RTx-624

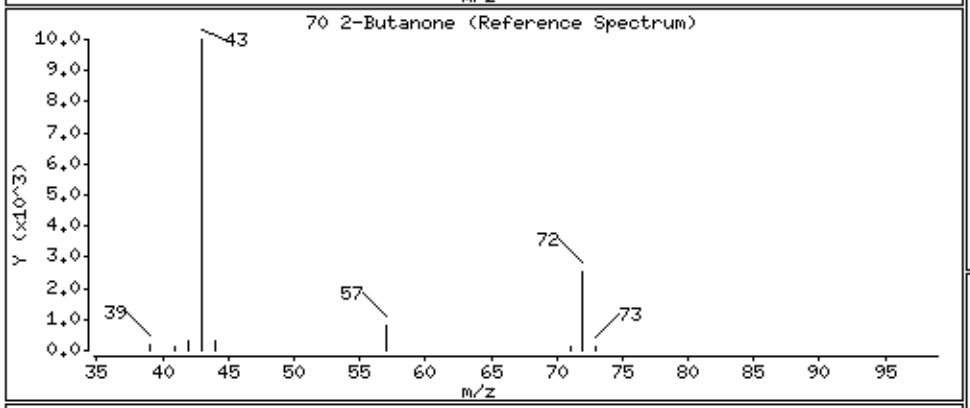
Column diameter: 0.53

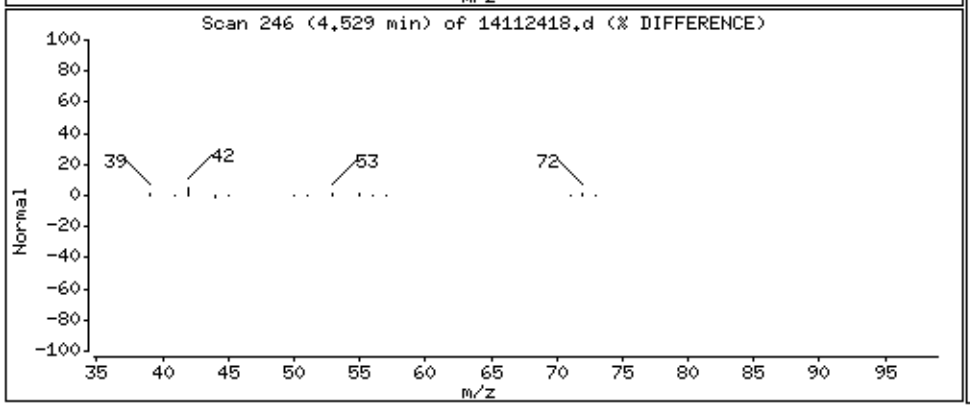
70 2-Butanone

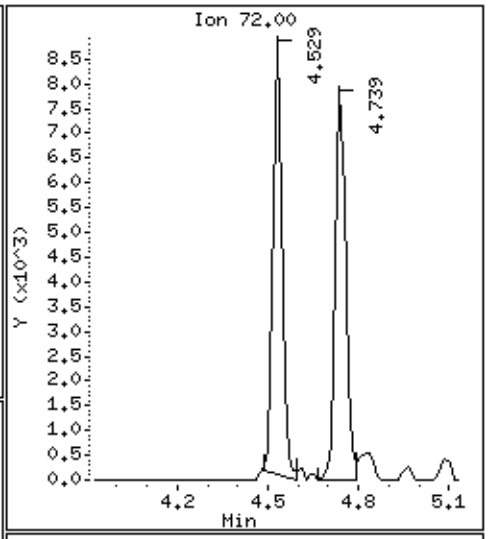
Concentration: 89.385 PPBV

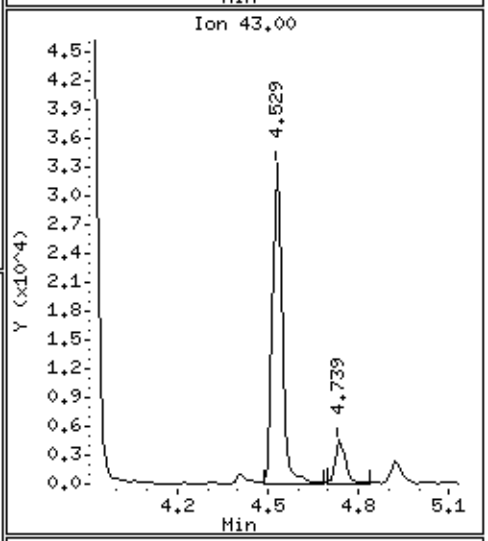


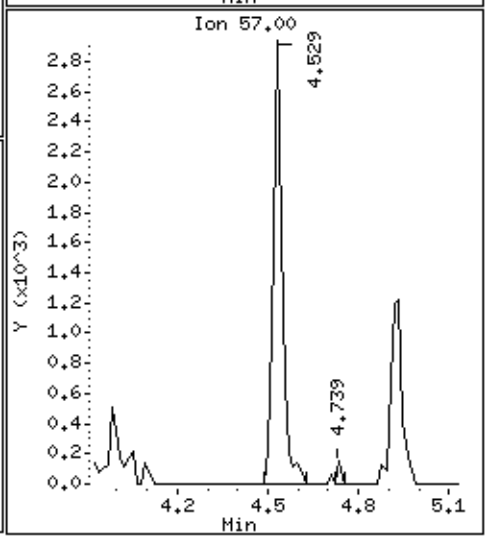












Data File: /chem/msd14.i/24nov14.b/14112418.d

Date : 24-NOV-2014 16:33

Client ID: ICV

Instrument: msd14.i

Sample Info: 50mL #2687-17A

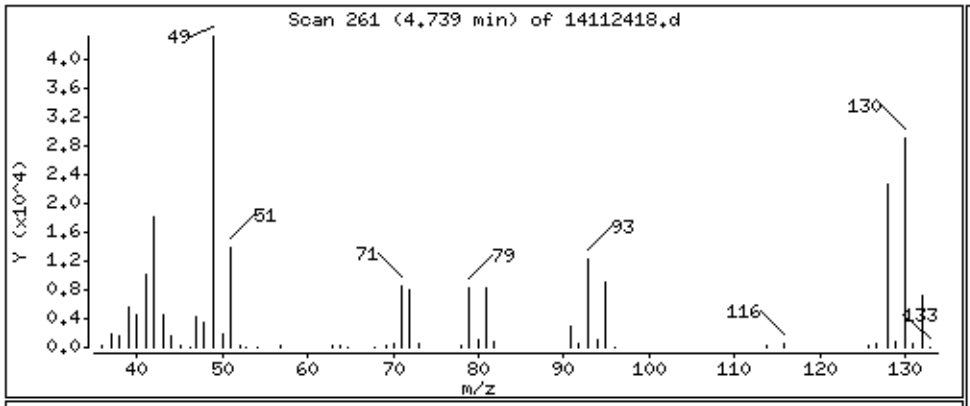
Operator: mjs

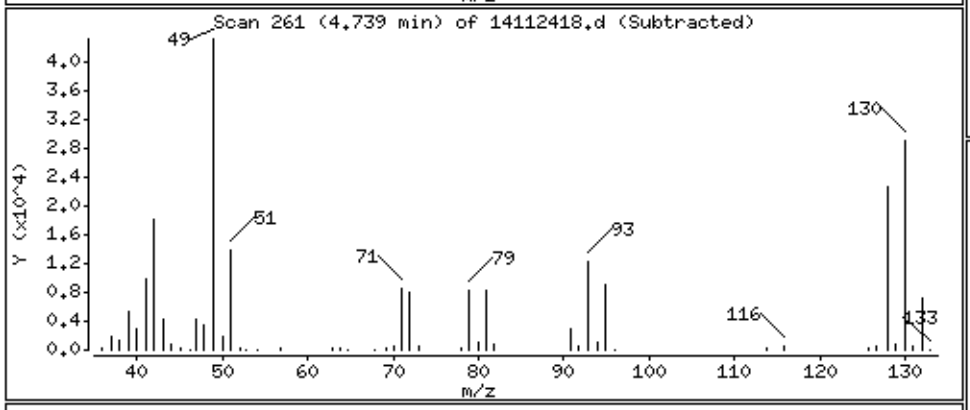
Column phase: RTx-624

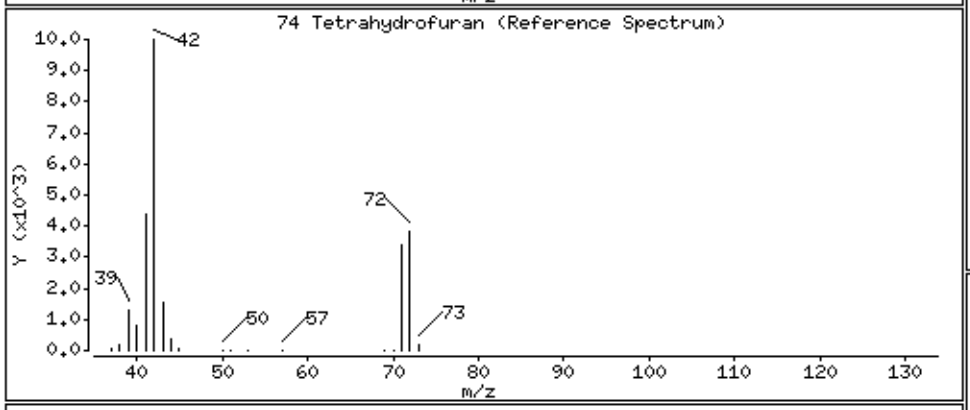
Column diameter: 0.53

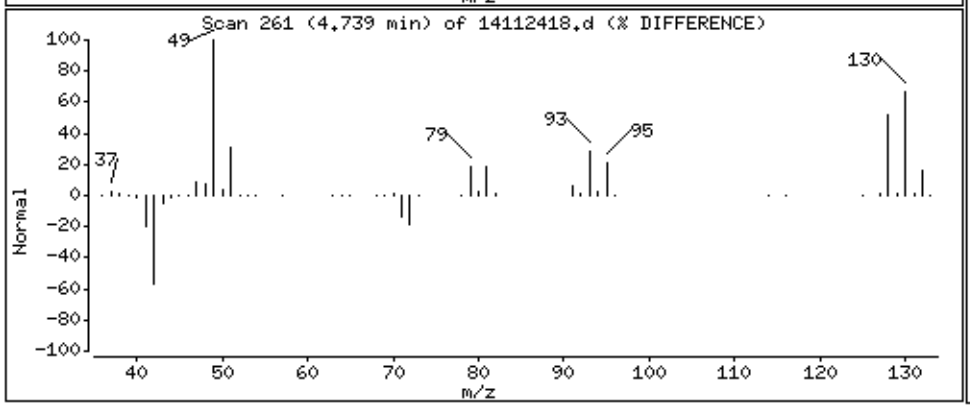
74 Tetrahydrofuran

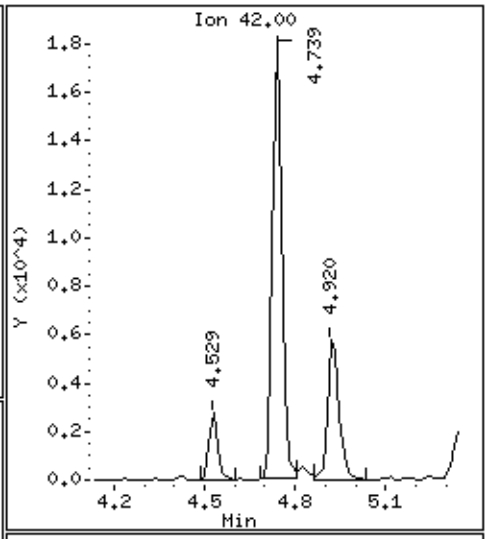
Concentration: 90.433 PPBV

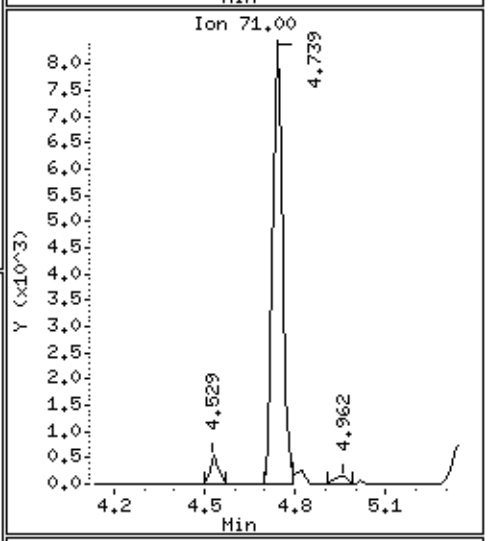


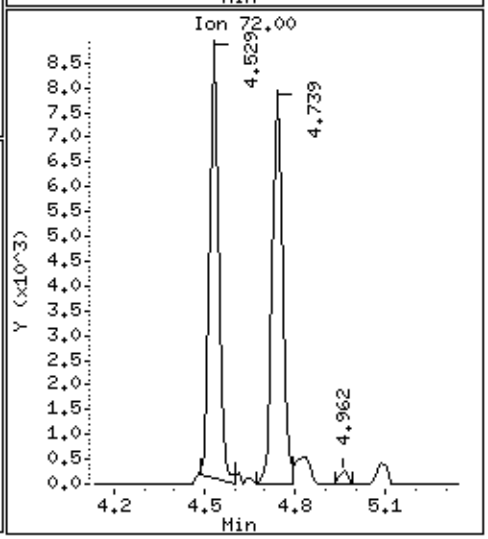












Data File: /chem/msd14.i/24nov14.b/14112418.d

Date : 24-NOV-2014 16:33

Client ID: ICV

Instrument: msd14.i

Sample Info: 50mL #2687-17A

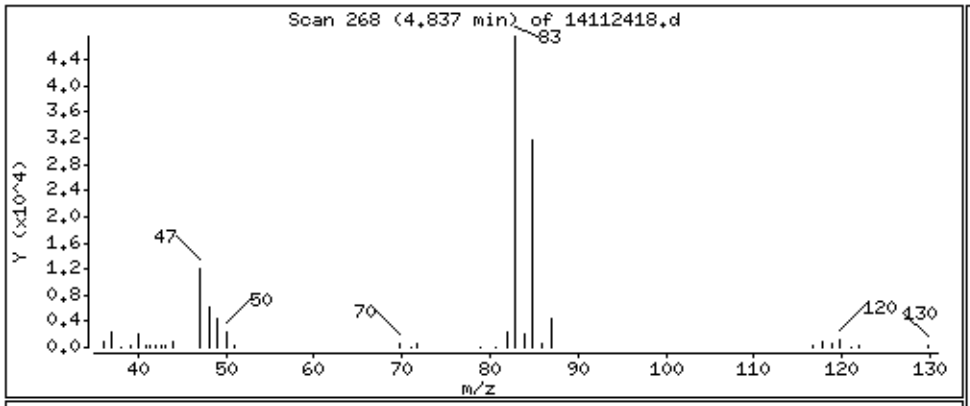
Operator: mjs

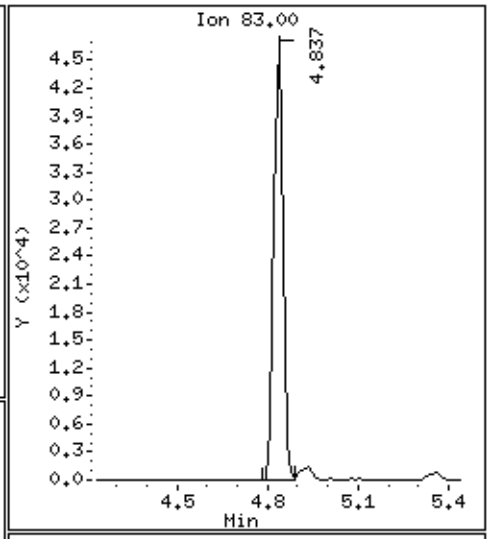
Column phase: RTx-624

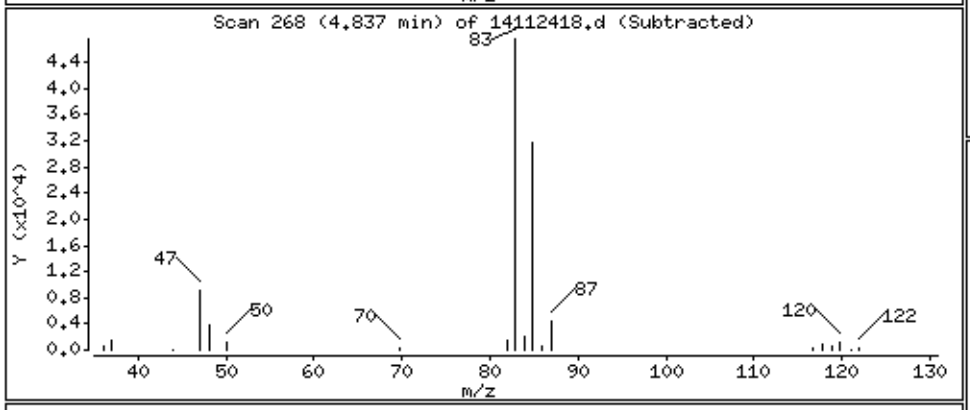
Column diameter: 0.53

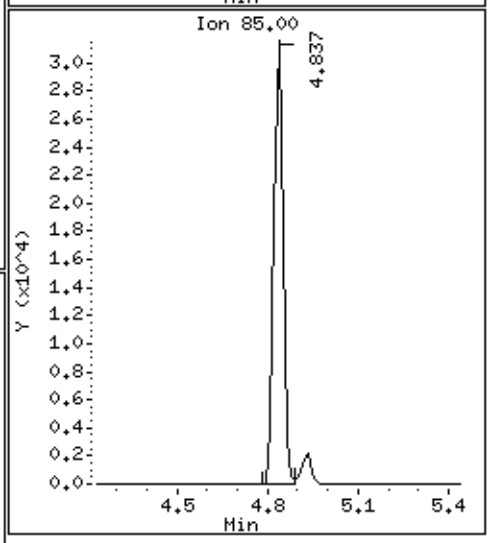
76 Chloroform

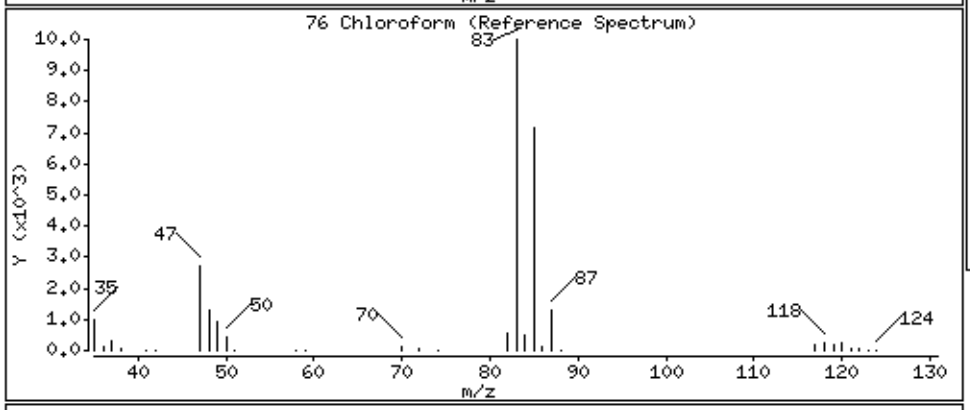
Concentration: 94.110 PPBV

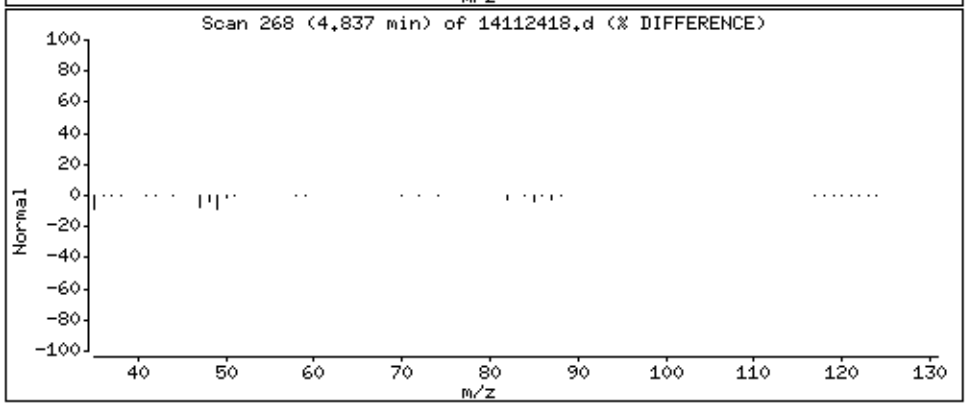












Data File: /chem/msd14.i/24nov14.b/14112418.d

Date : 24-NOV-2014 16:33

Client ID: ICV

Instrument: msd14.i

Sample Info: 50mL #2687-17A

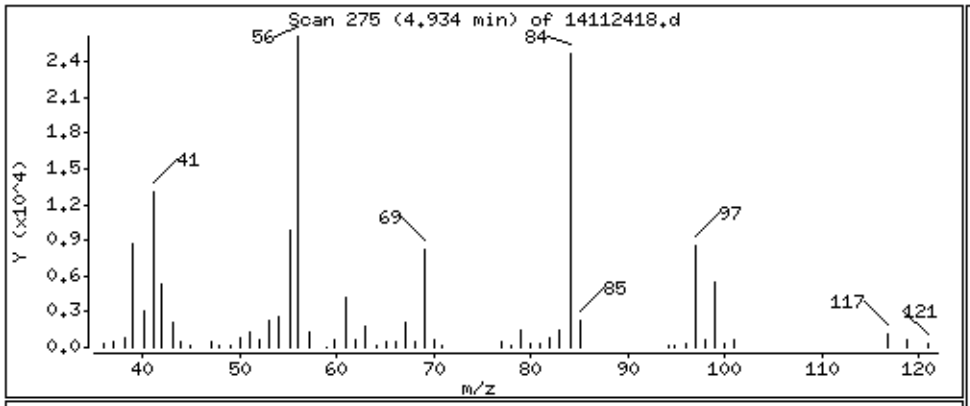
Operator: mjs

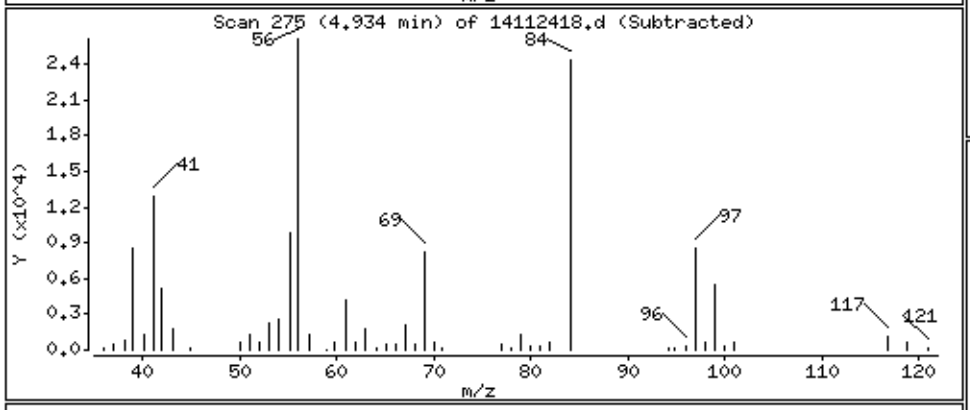
Column phase: RTx-624

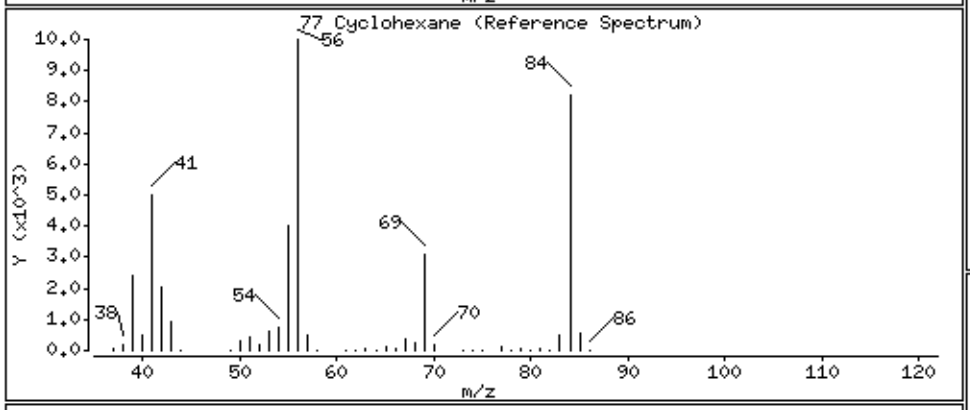
Column diameter: 0.53

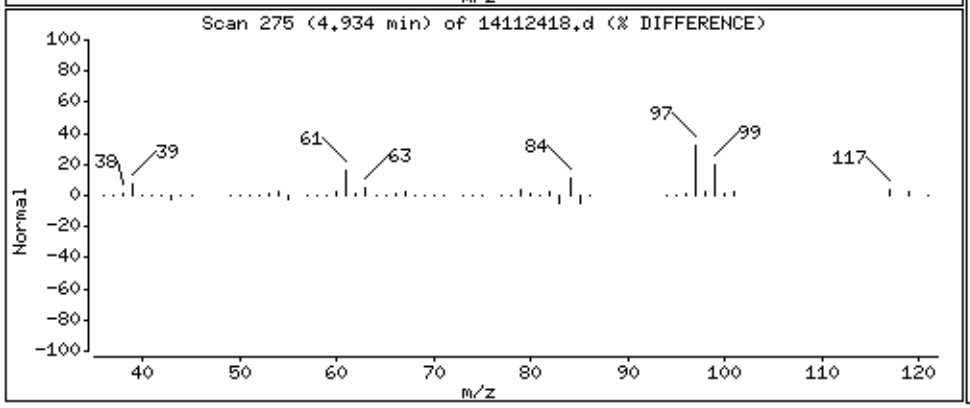
77 Cyclohexane

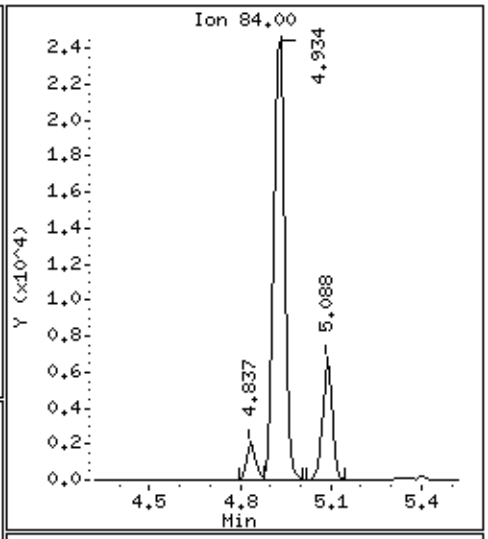
Concentration: 95.848 PPBV

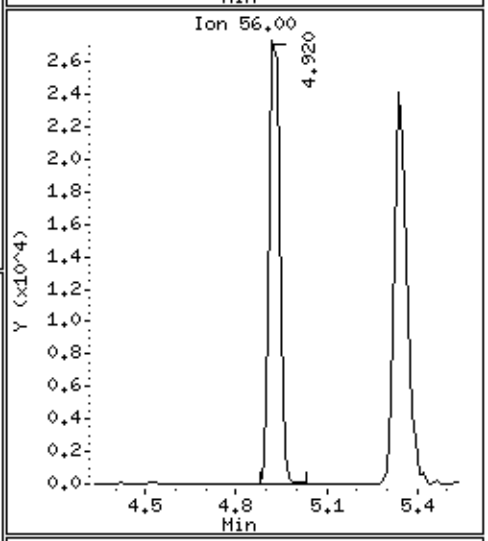


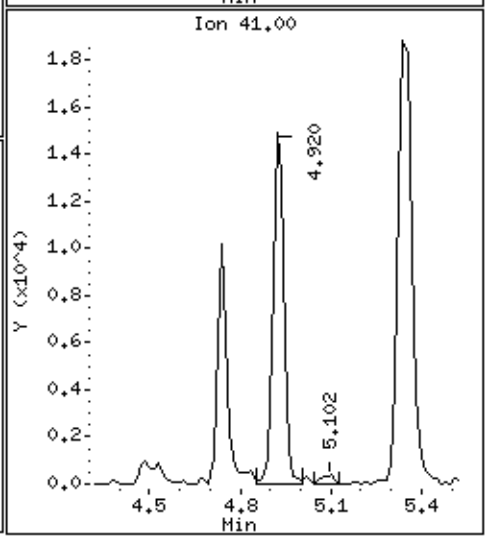












Data File: /chem/msd14.i/24nov14.b/14112418.d

Date : 24-NOV-2014 16:33

Client ID: ICV

Instrument: msd14.i

Sample Info: 50mL #2687-17A

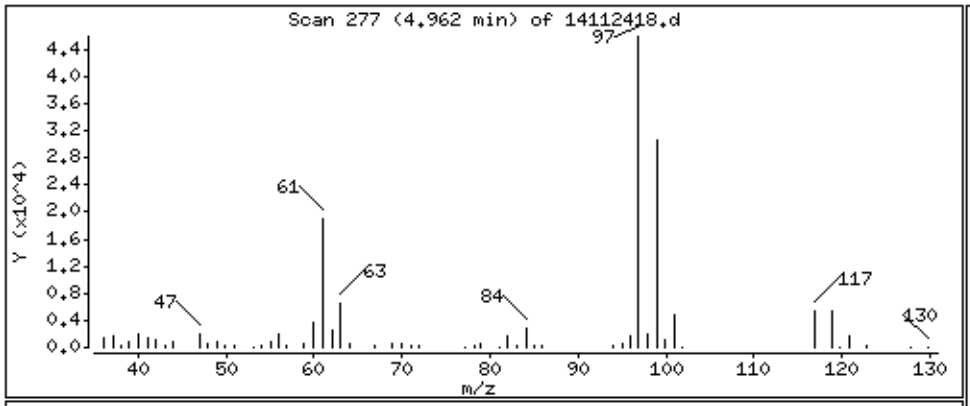
Operator: mjs

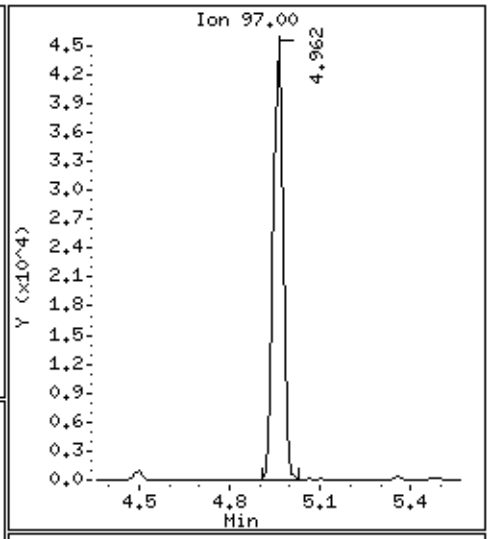
Column phase: RTx-624

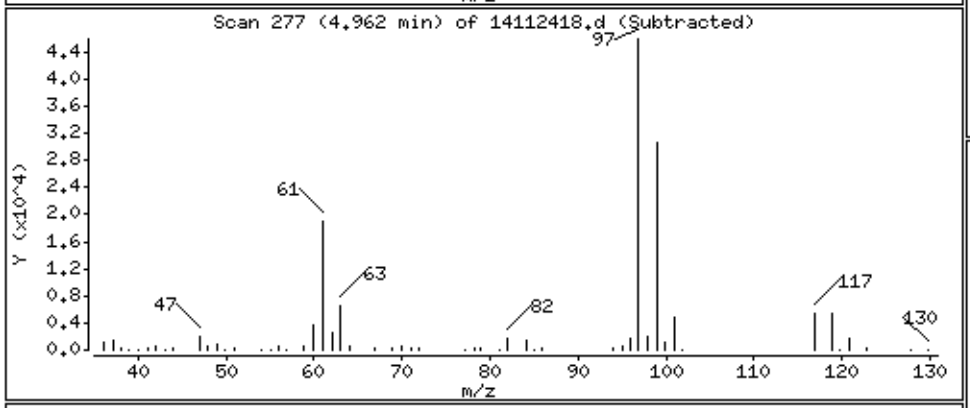
Column diameter: 0.53

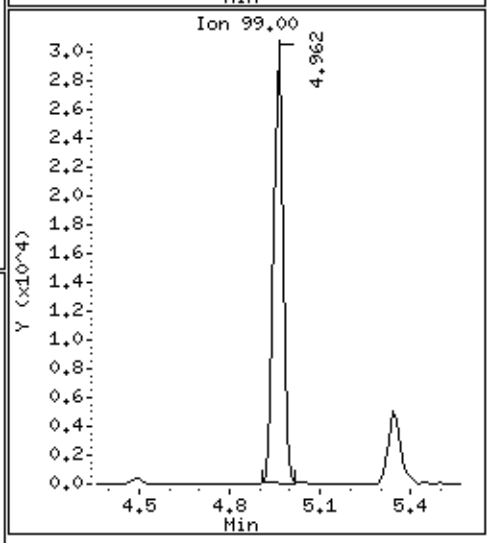
78 1,1,1-Trichloroethane

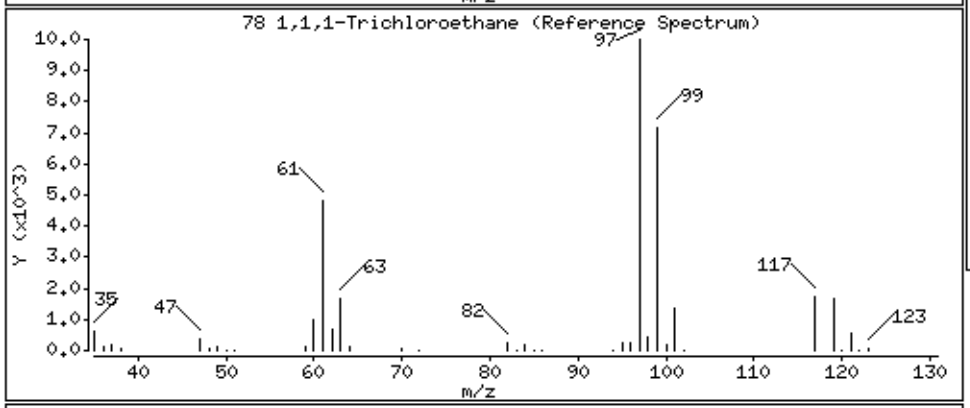
Concentration: 99.208 PPBV

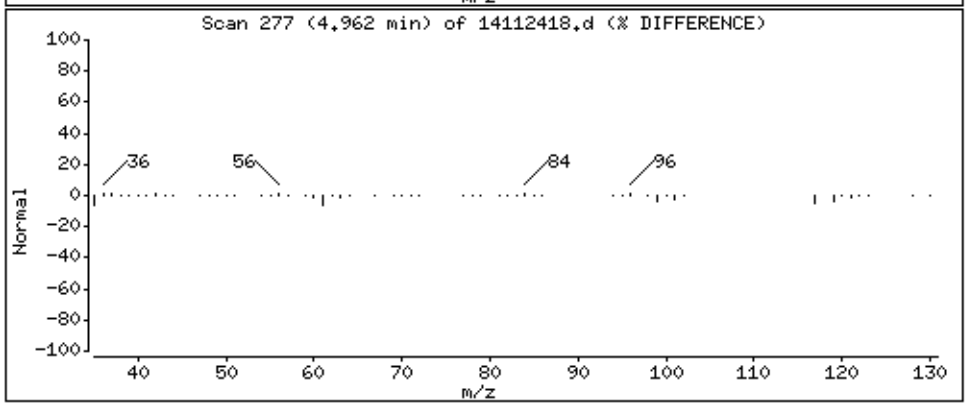












Data File: /chem/msd14.i/24nov14.b/14112418.d

Date : 24-NOV-2014 16:33

Client ID: ICV

Instrument: msd14.i

Sample Info: 50mL #2687-17A

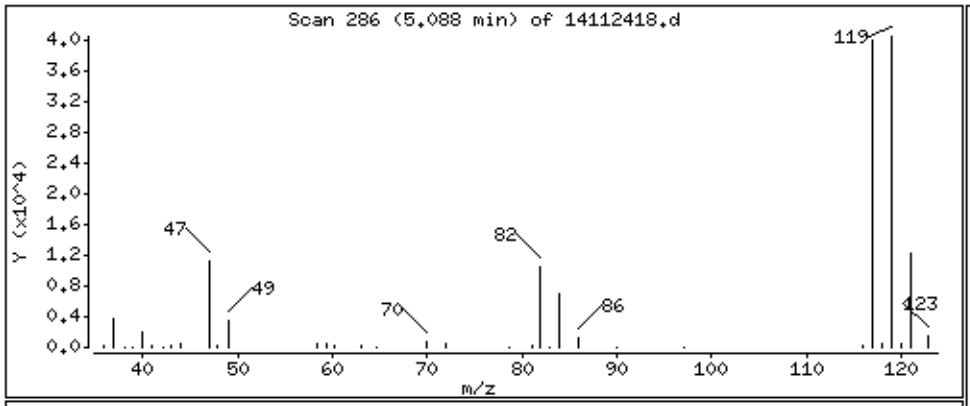
Operator: mjs

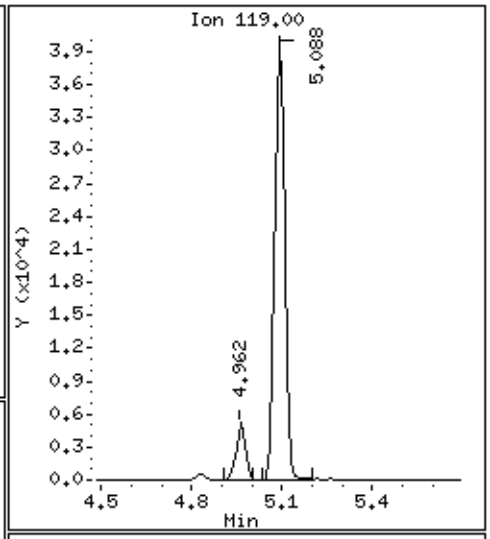
Column phase: RTx-624

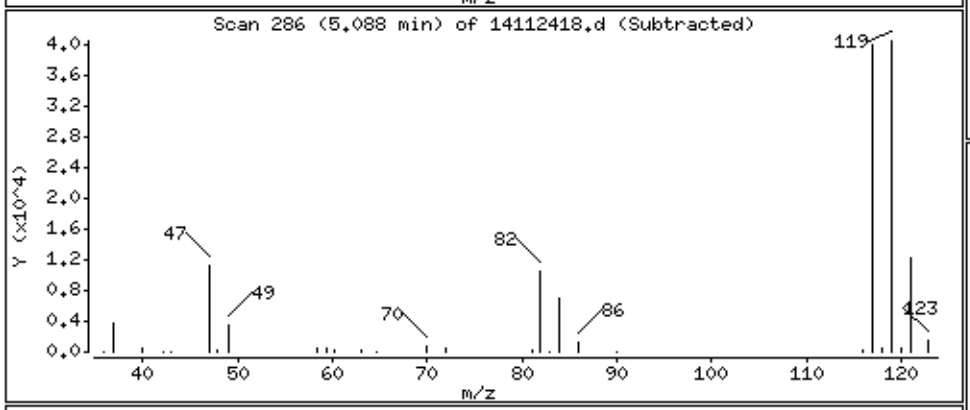
Column diameter: 0.53

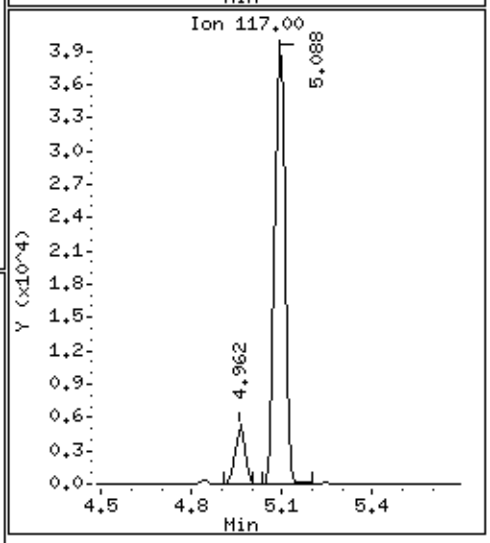
79 Carbon Tetrachloride

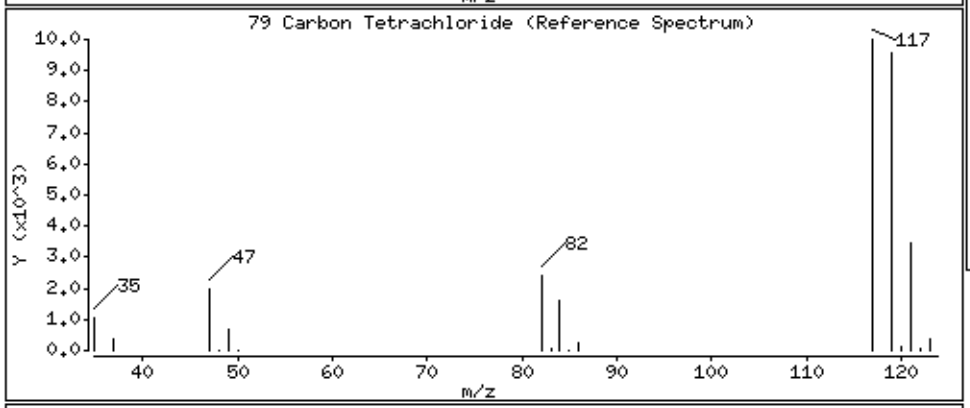
Concentration: 96.947 PPBV

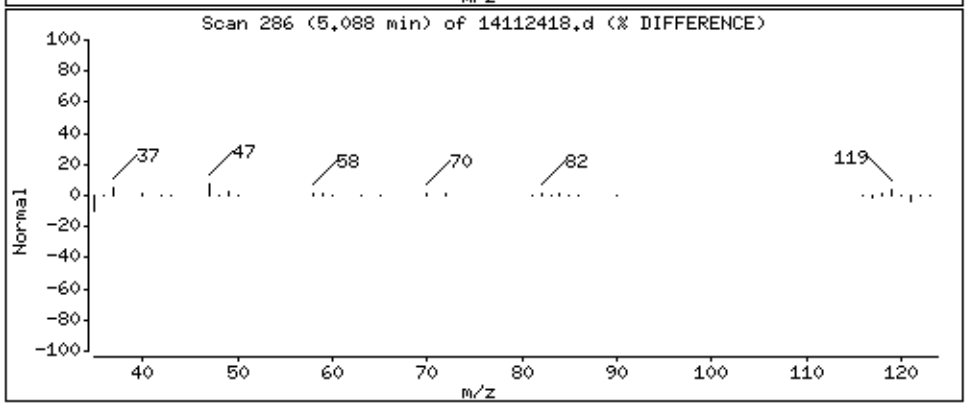












Data File: /chem/msd14.i/24nov14.b/14112418.d

Date : 24-NOV-2014 16:33

Client ID: ICV

Instrument: msd14.i

Sample Info: 50mL #2687-17A

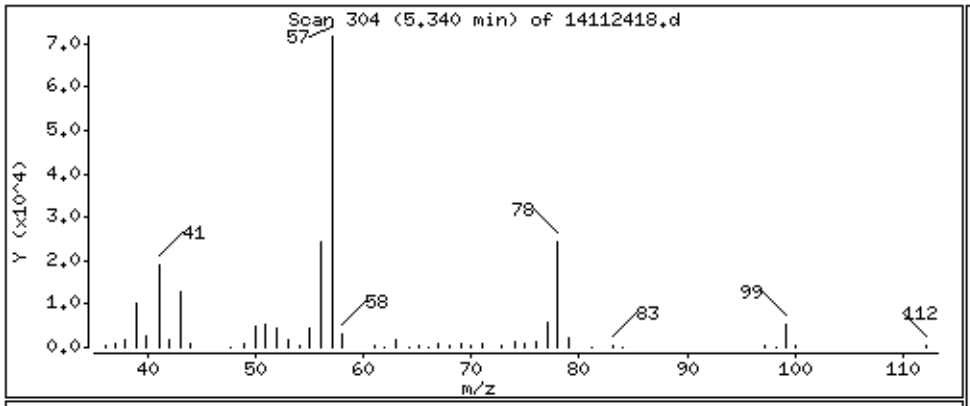
Operator: mjs

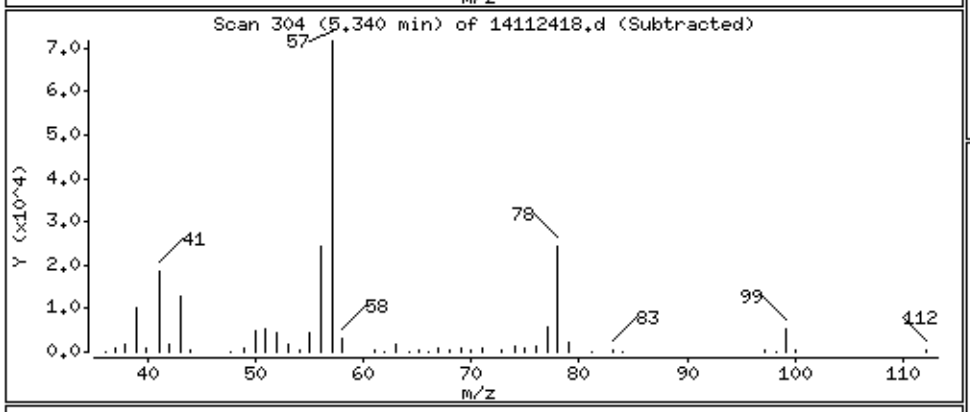
Column phase: RTx-624

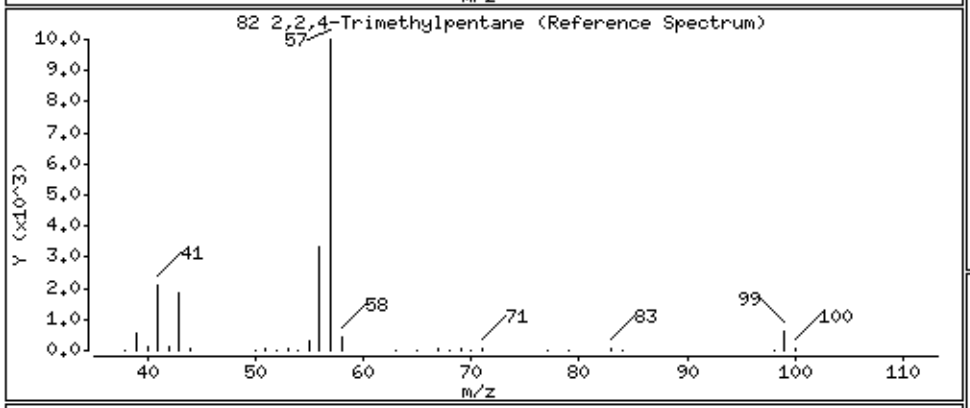
Column diameter: 0.53

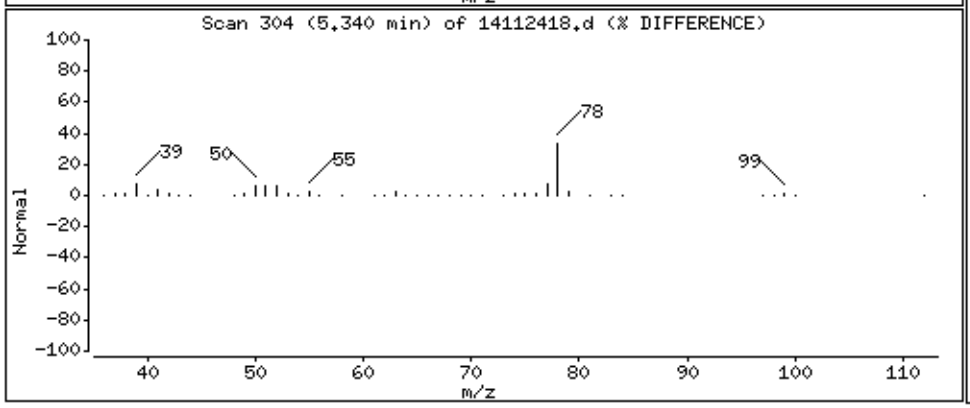
82 2,2,4-Trimethylpentane

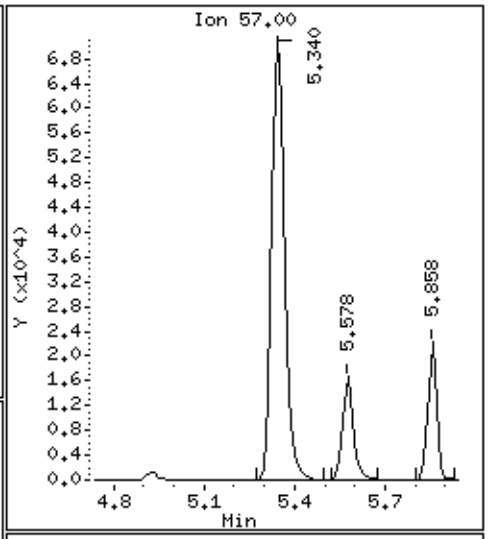
Concentration: 99.958 PPBV

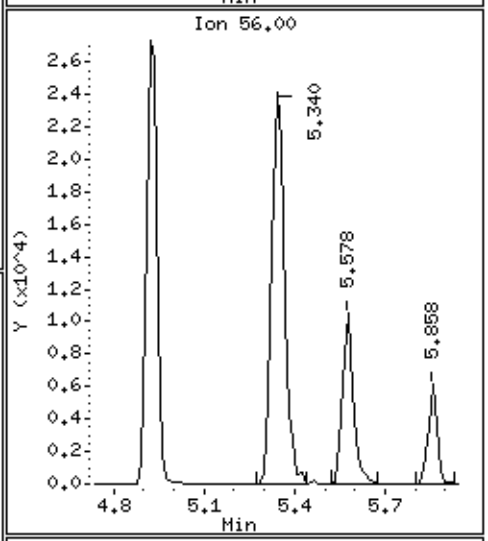


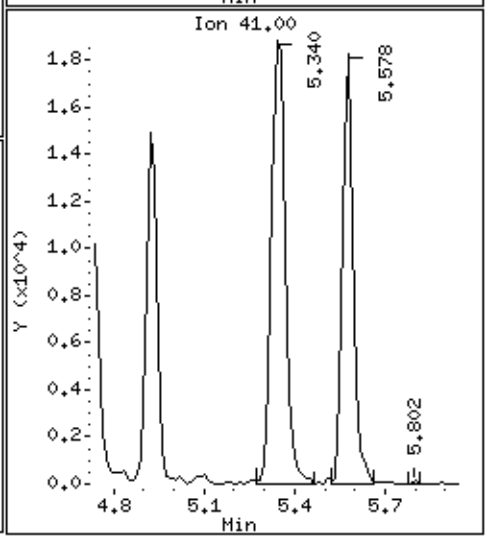












Data File: /chem/msd14.i/24nov14.b/14112418.d

Date : 24-NOV-2014 16:33

Client ID: ICV

Instrument: msd14.i

Sample Info: 50mL #2687-17A

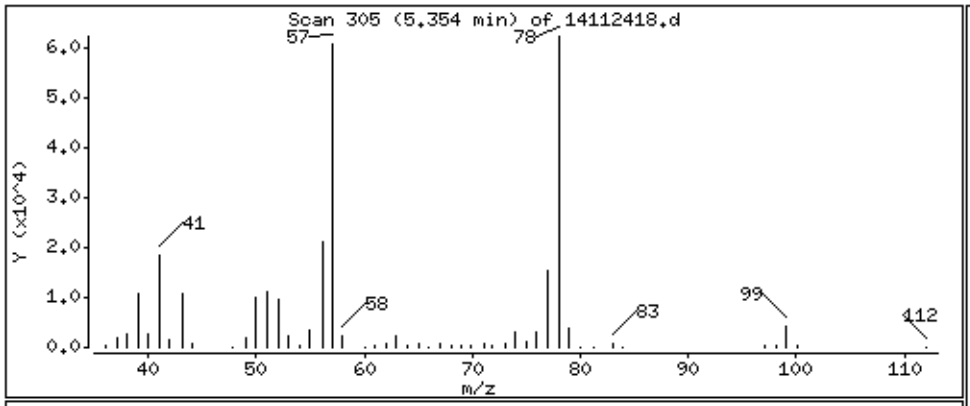
Operator: mjs

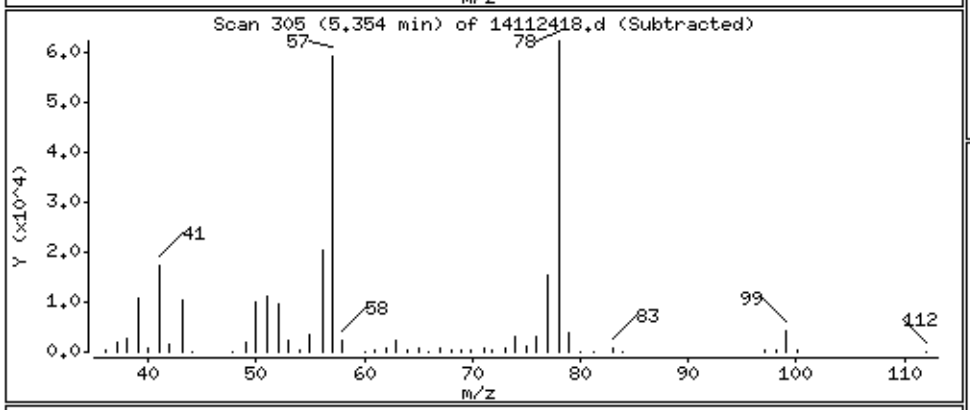
Column phase: RTx-624

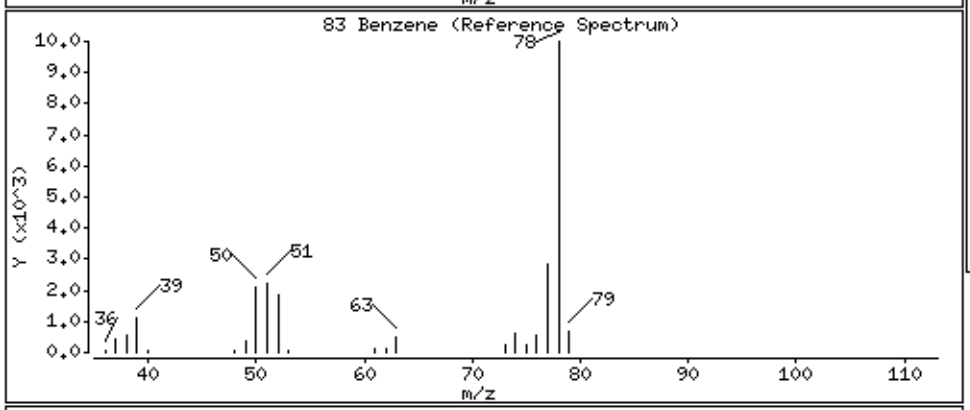
Column diameter: 0.53

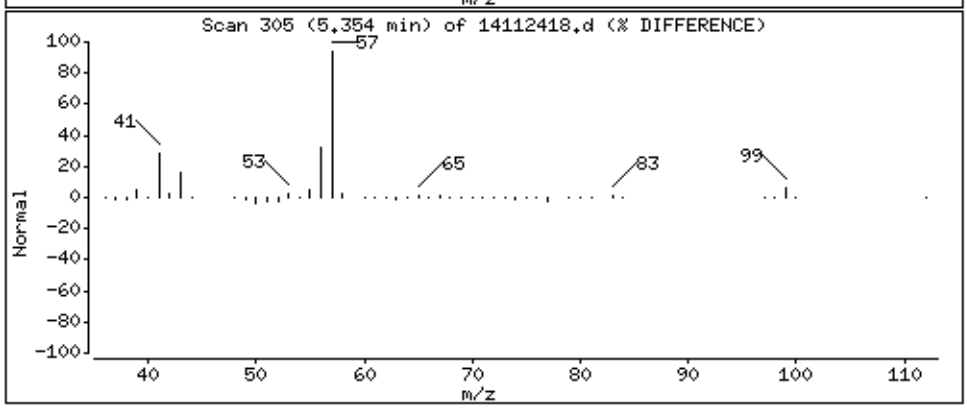
83 Benzene

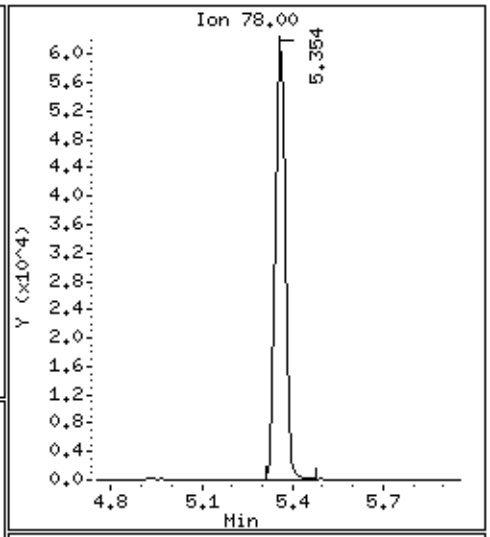
Concentration: 90.959 PPBV

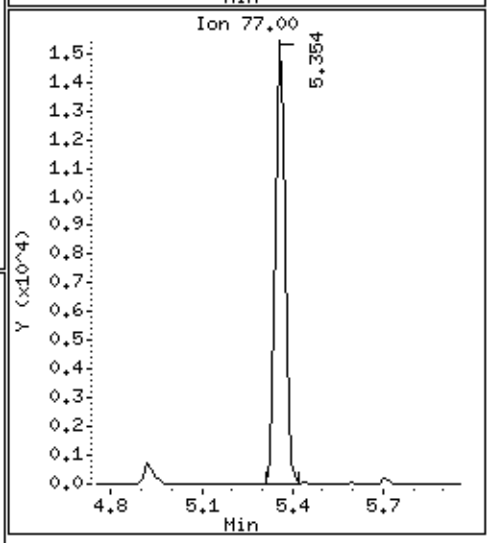












Data File: /chem/msd14.i/24nov14.b/14112418.d

Date : 24-NOV-2014 16:33

Client ID: ICV

Instrument: msd14.i

Sample Info: 50mL #2687-17A

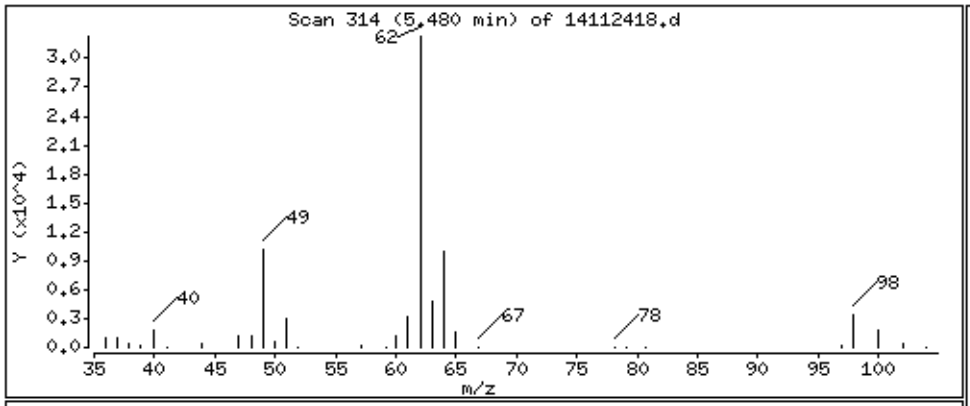
Operator: mjs

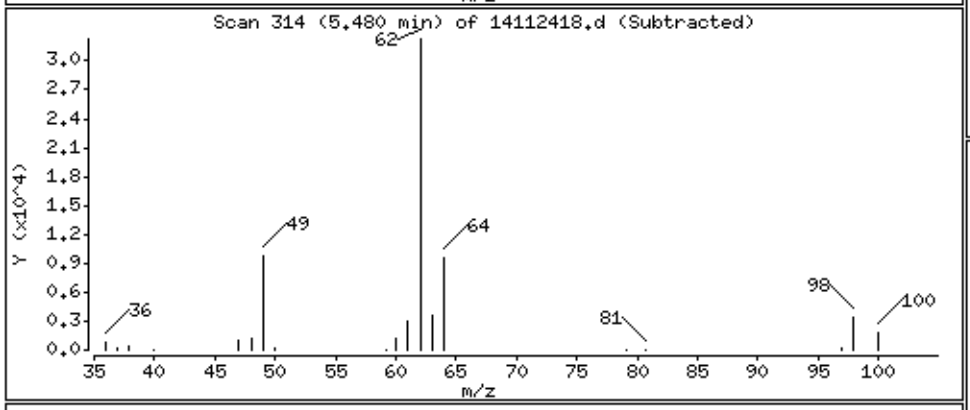
Column phase: RTx-624

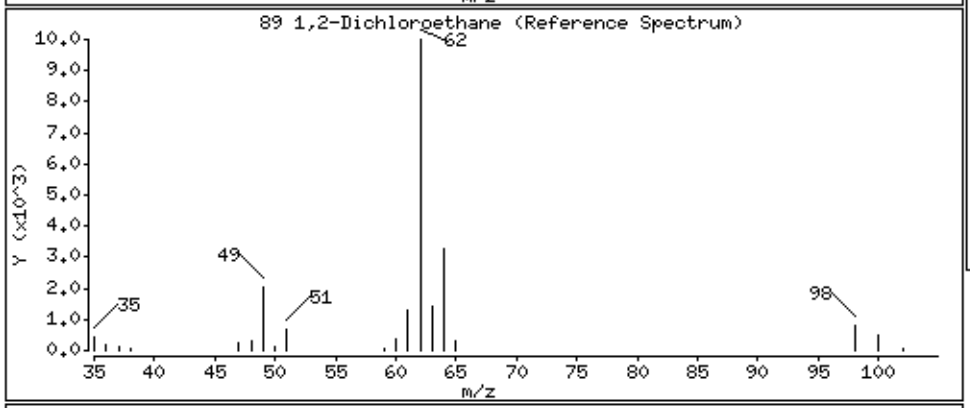
Column diameter: 0.53

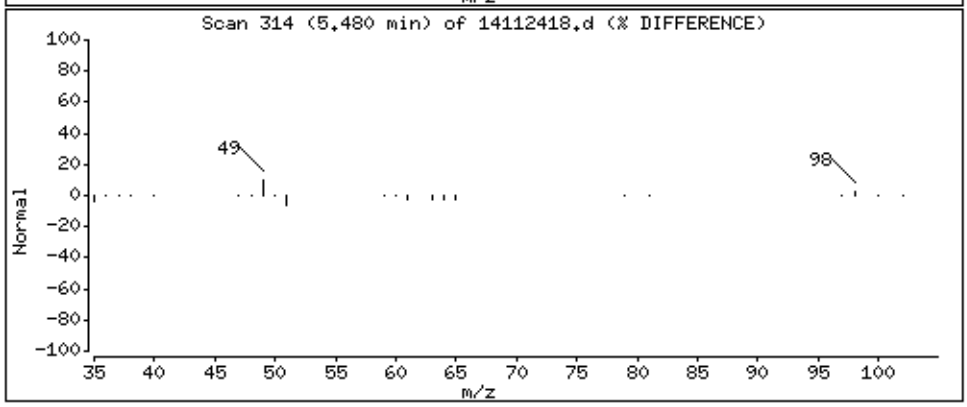
89 1,2-Dichloroethane

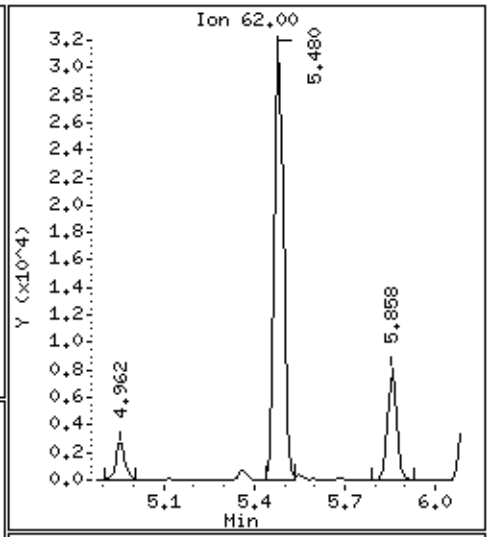
Concentration: 98.708 PPBV

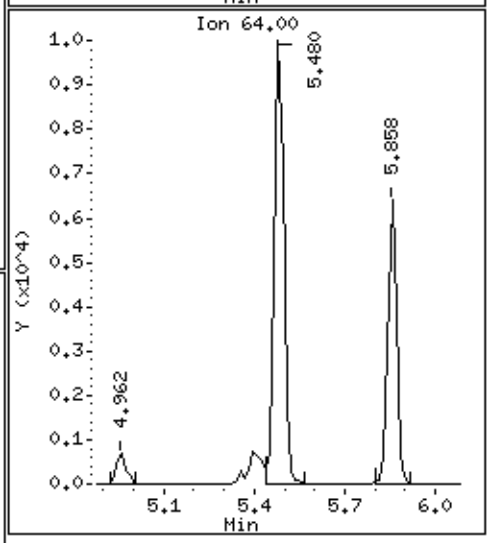












Data File: /chem/msd14.i/24nov14.b/14112418.d

Date : 24-NOV-2014 16:33

Client ID: ICV

Instrument: msd14.i

Sample Info: 50mL #2687-17A

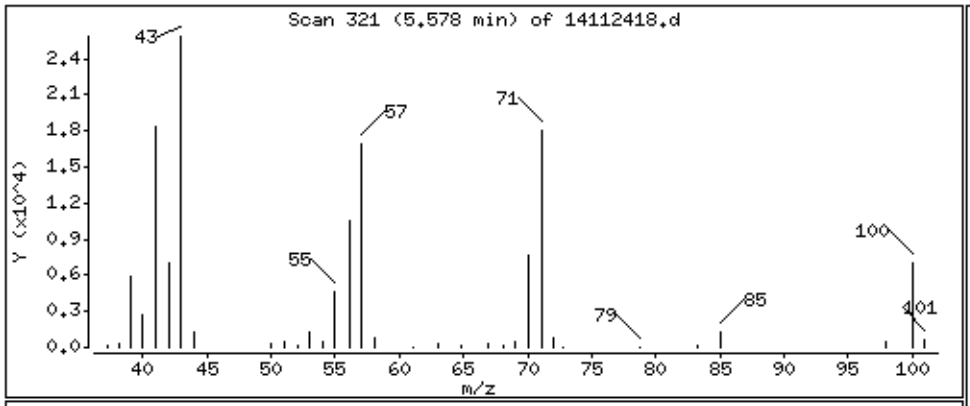
Operator: mjs

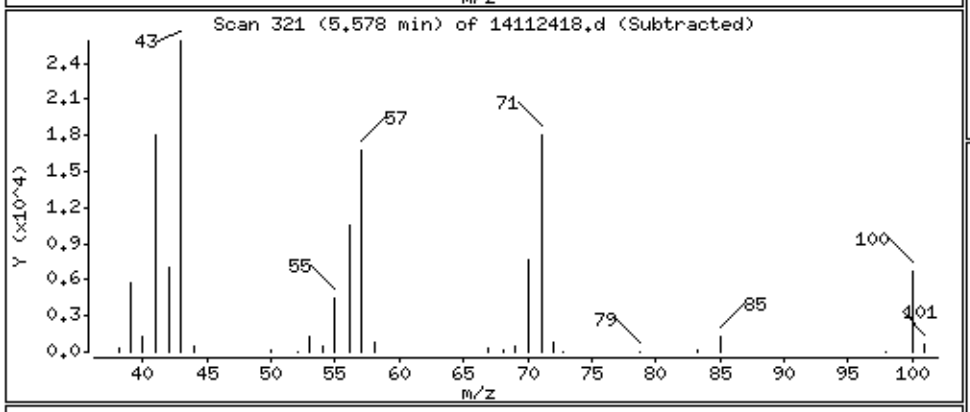
Column phase: RTx-624

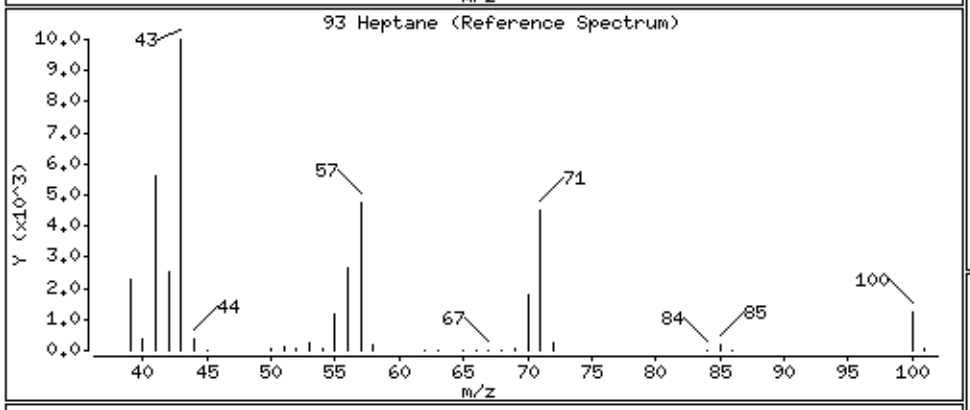
Column diameter: 0.53

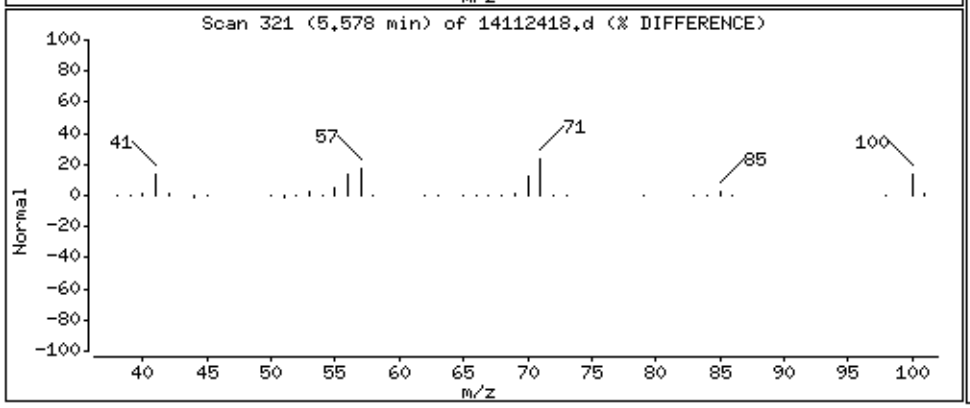
93 Heptane

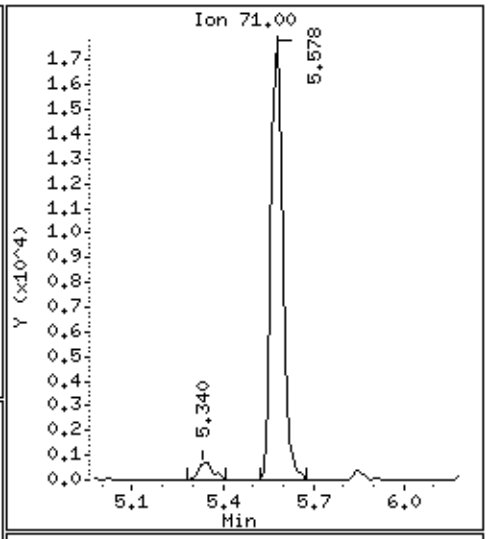
Concentration: 96.008 PPBV

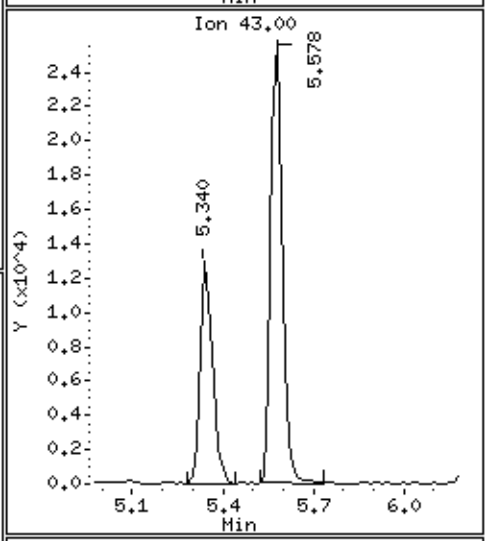


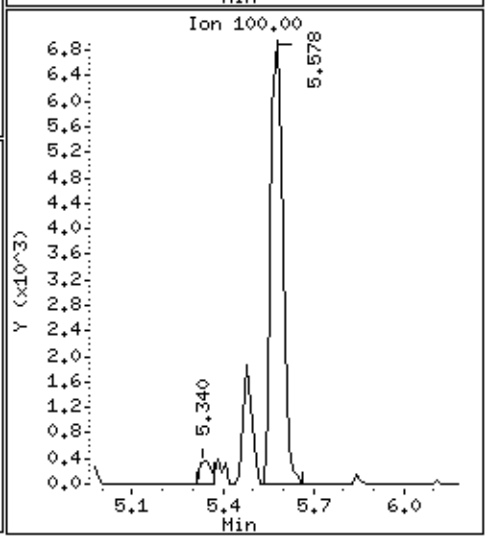












Data File: /chem/msd14.i/24nov14.b/14112418.d

Date : 24-NOV-2014 16:33

Client ID: ICV

Instrument: msd14.i

Sample Info: 50mL #2687-17A

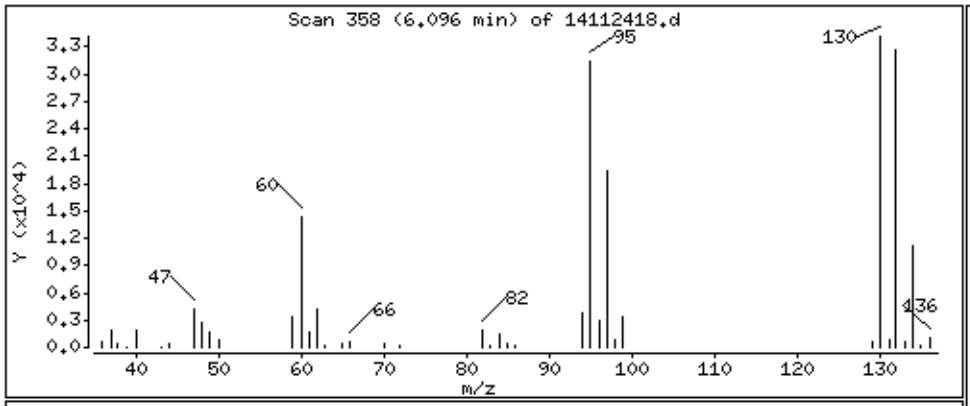
Operator: mjs

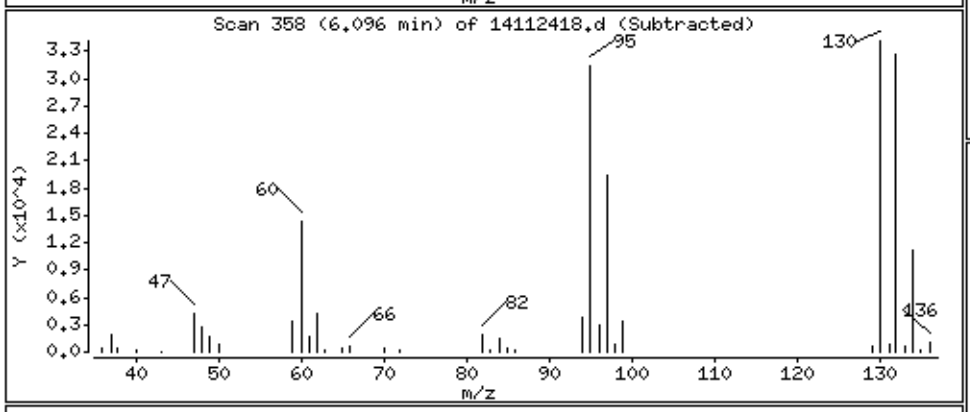
Column phase: RTx-624

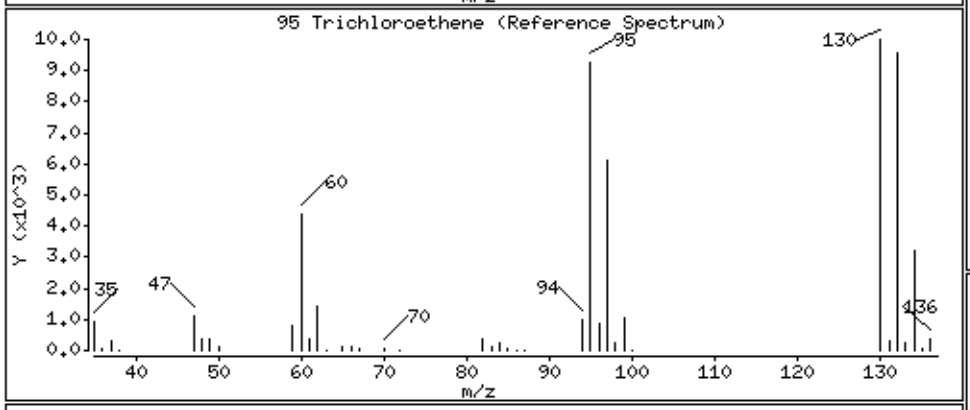
Column diameter: 0.53

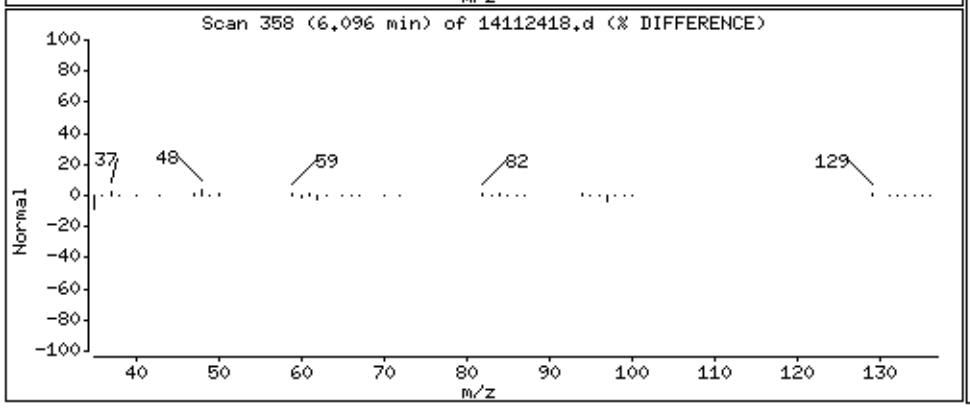
95 Trichloroethene

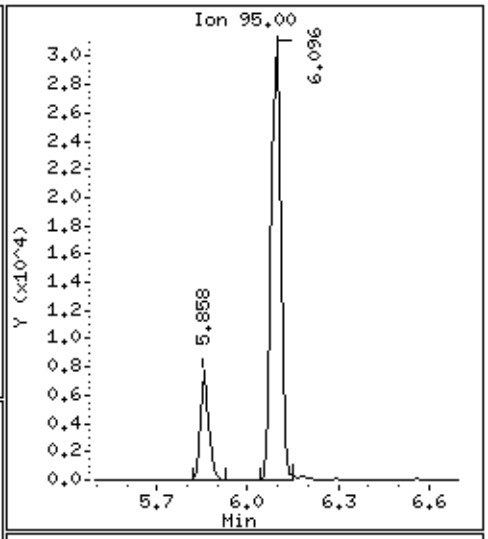
Concentration: 96.743 PPBV

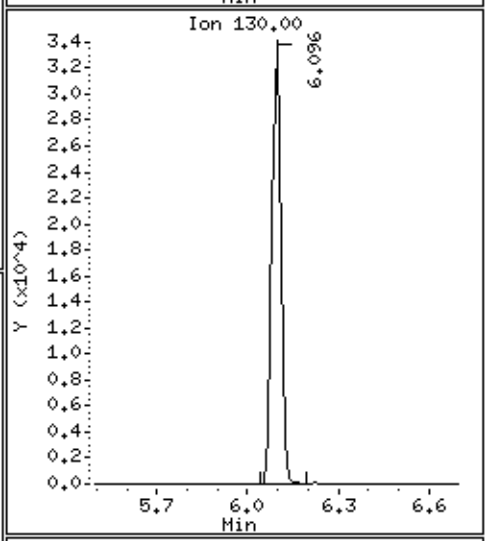


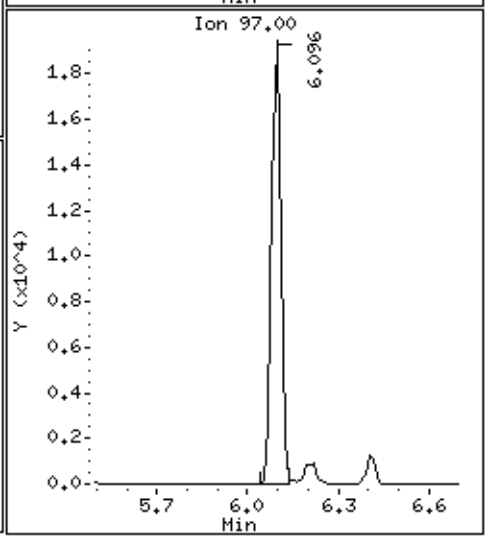












Data File: /chem/msd14.i/24nov14.b/14112418.d

Date : 24-NOV-2014 16:33

Client ID: ICV

Instrument: msd14.i

Sample Info: 50mL #2687-17A

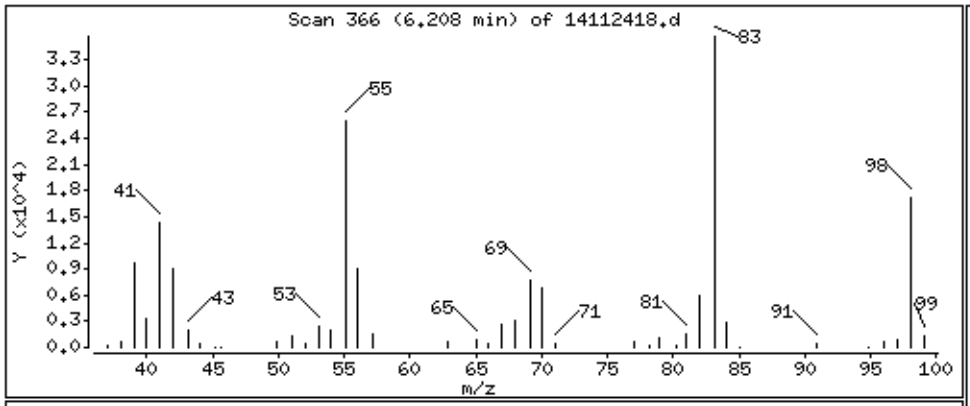
Operator: mjs

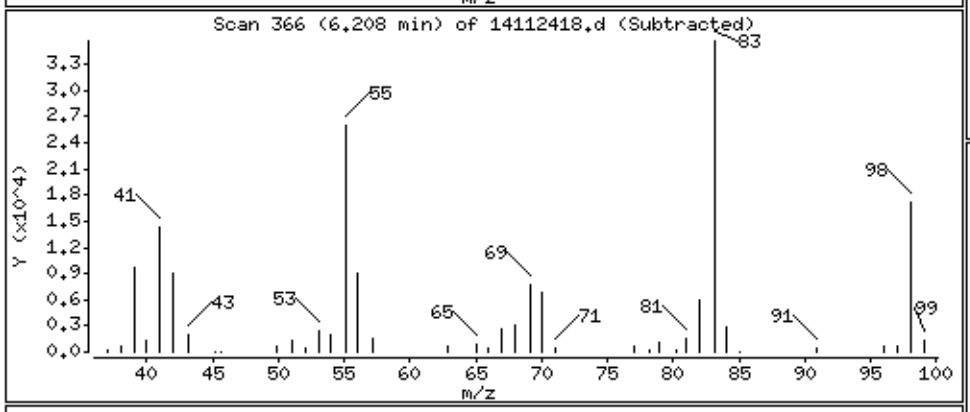
Column phase: RTx-624

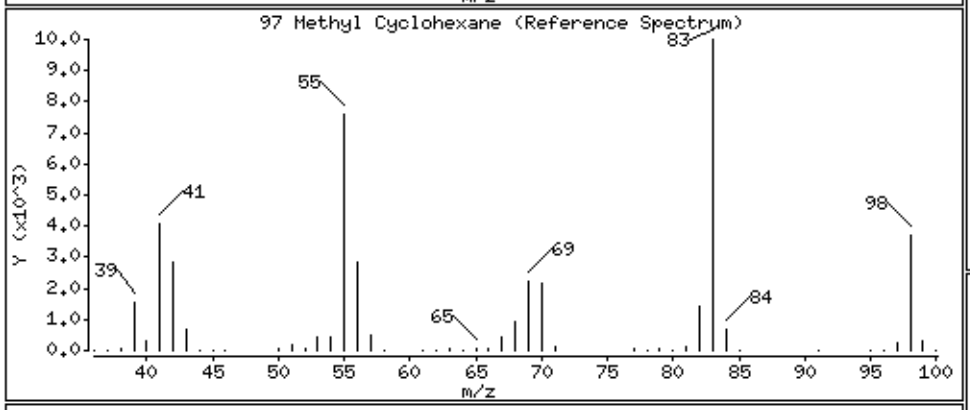
Column diameter: 0.53

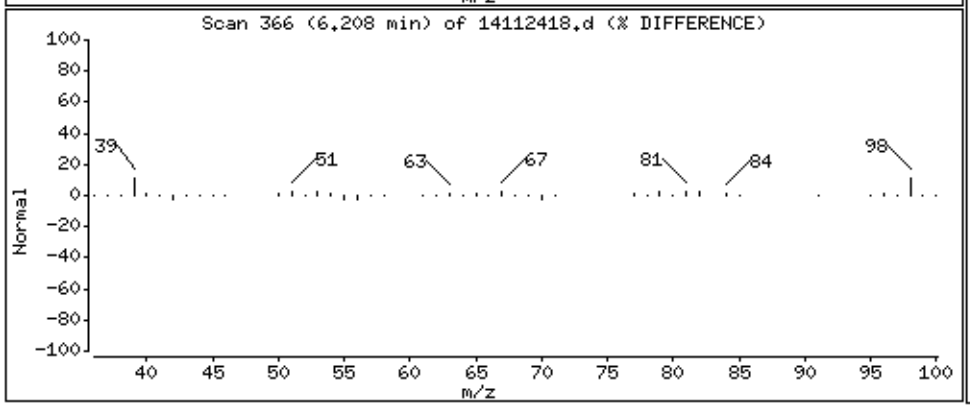
97 Methyl Cyclohexane

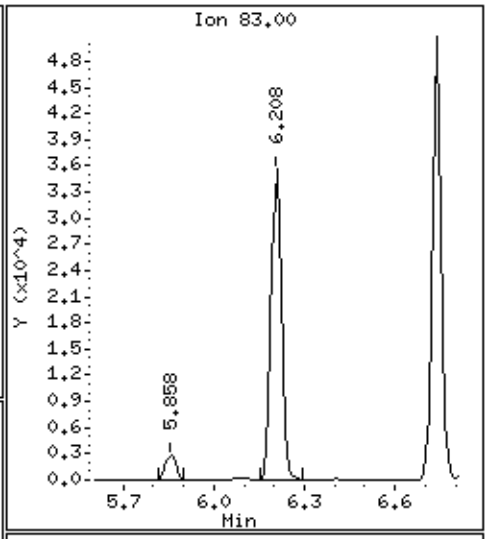
Concentration: 94.929 PPBV

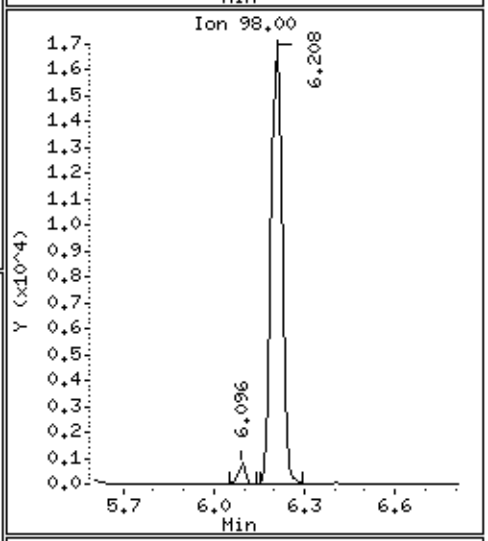


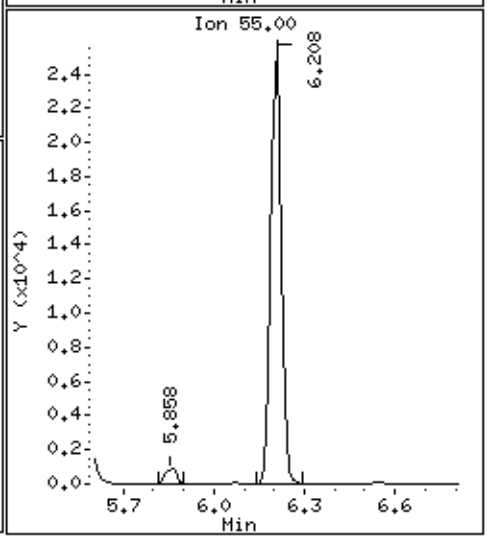












Data File: /chem/msd14.i/24nov14.b/14112418.d

Date : 24-NOV-2014 16:33

Client ID: ICV

Instrument: msd14.i

Sample Info: 50mL #2687-17A

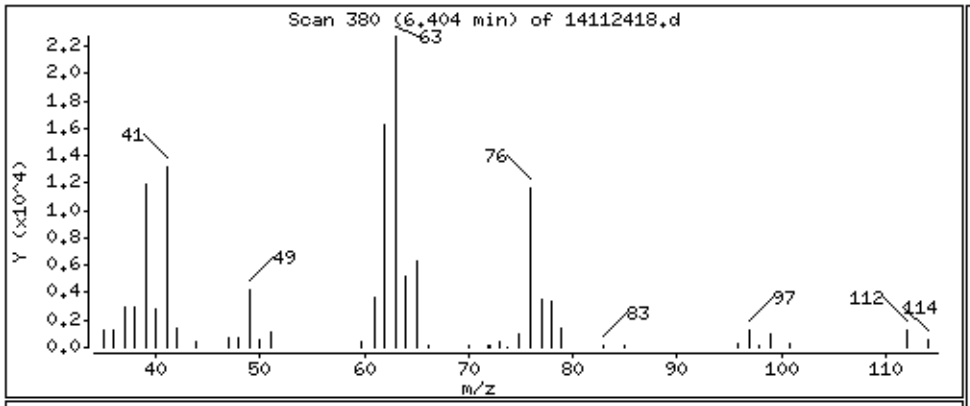
Operator: mjs

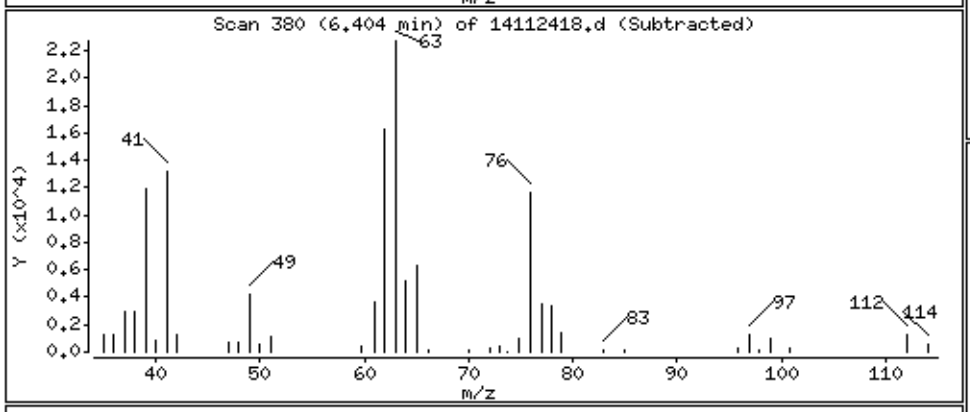
Column phase: RTx-624

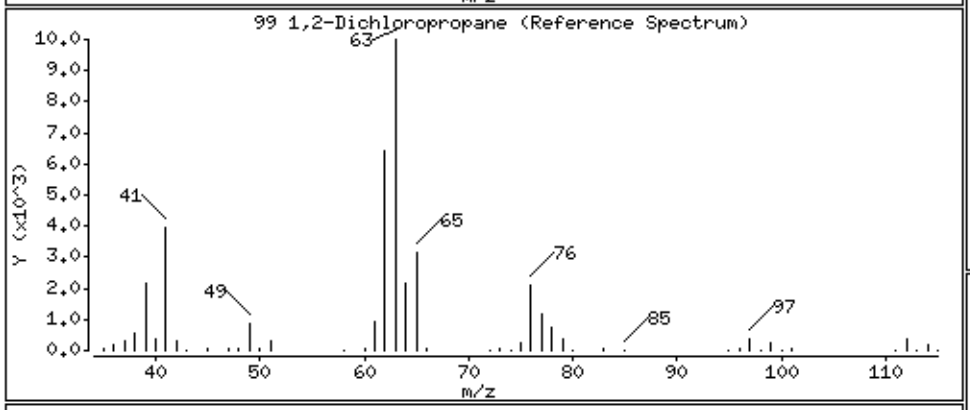
Column diameter: 0.53

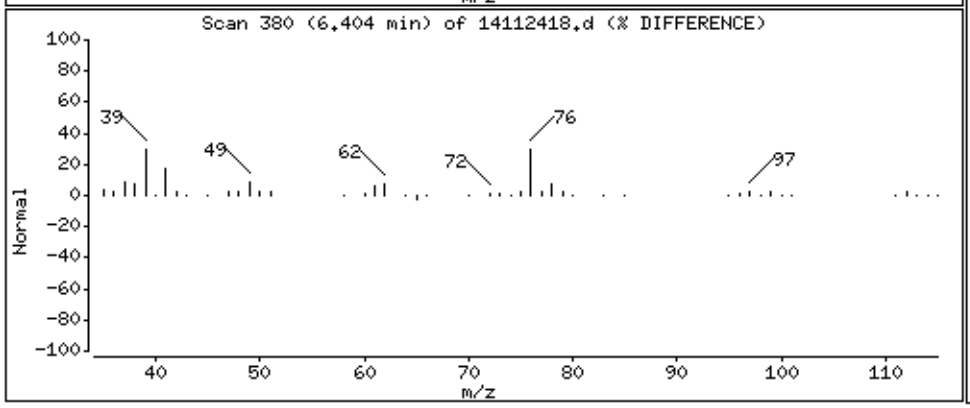
99 1,2-Dichloropropane

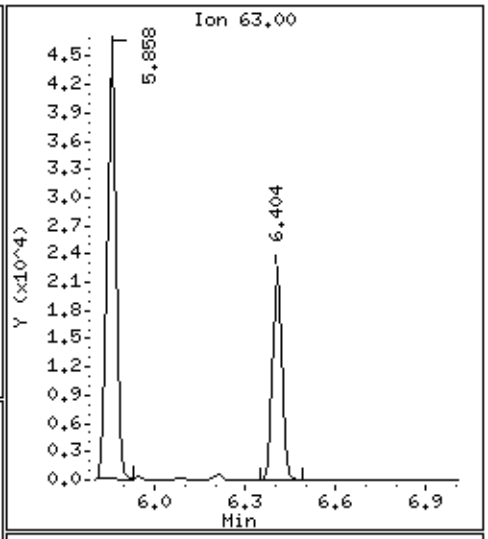
Concentration: 89.595 PPBV

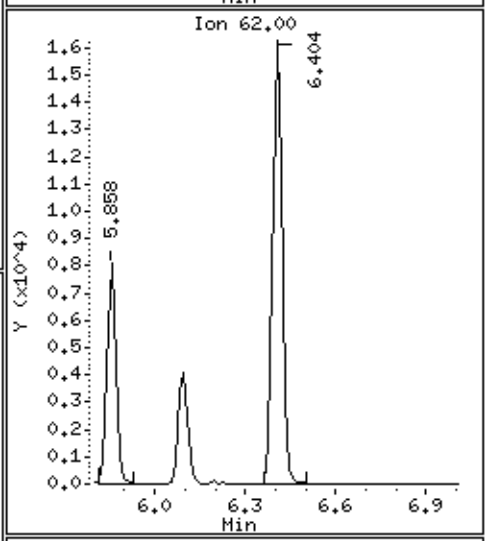


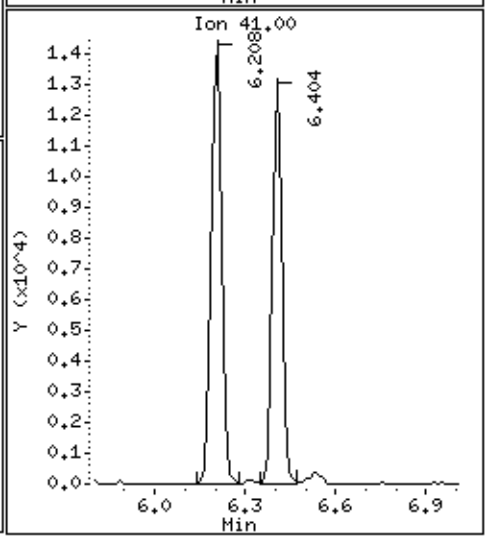












Data File: /chem/msd14.i/24nov14.b/14112418.d

Date : 24-NOV-2014 16:33

Client ID: ICV

Instrument: msd14.i

Sample Info: 50mL #2687-17A

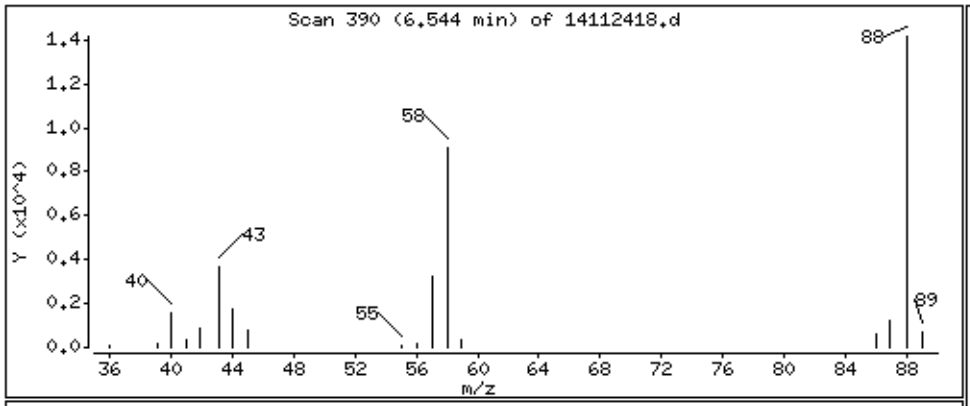
Operator: mjs

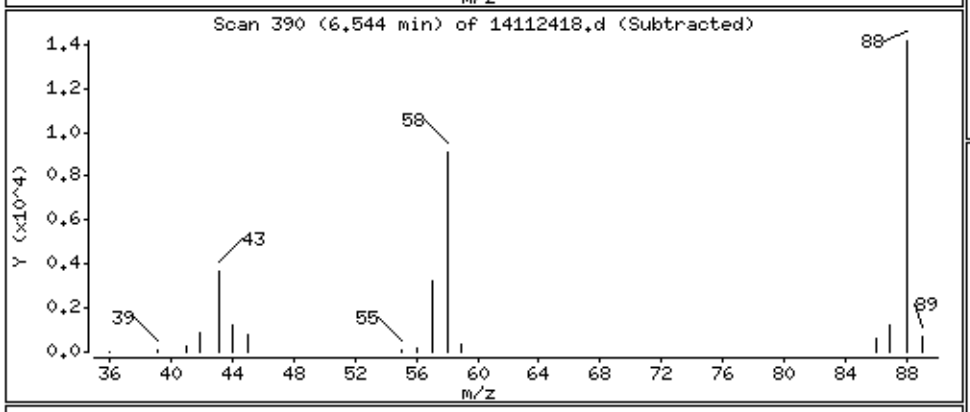
Column phase: RTx-624

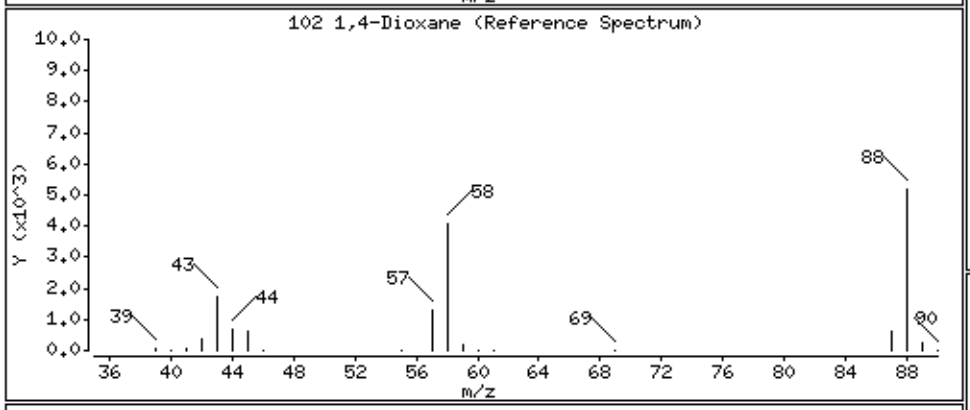
Column diameter: 0.53

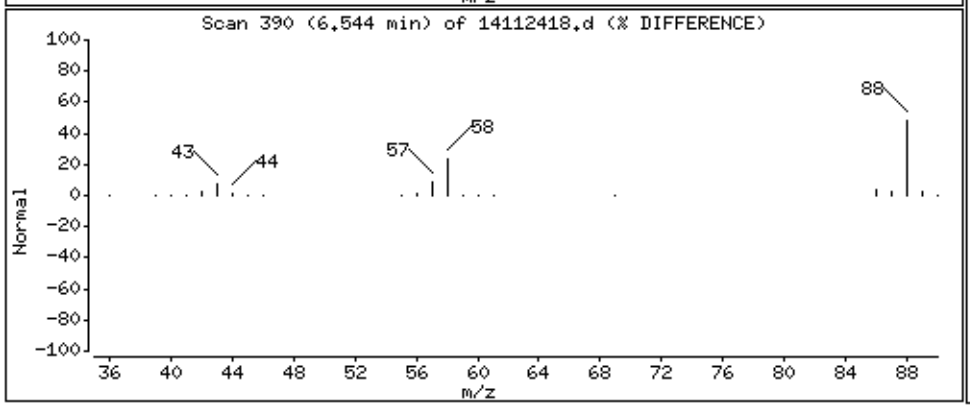
102 1,4-Dioxane

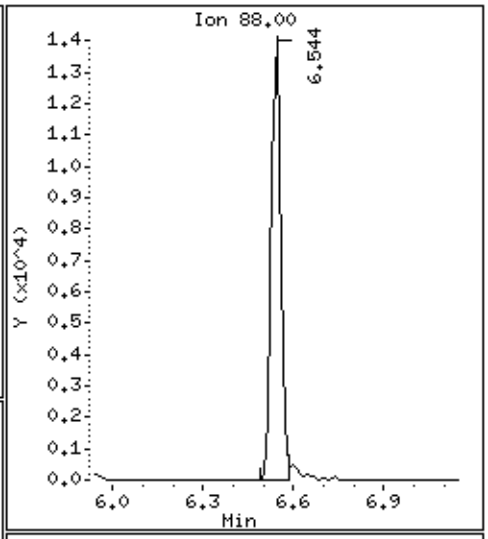
Concentration: 92.731 PPBV

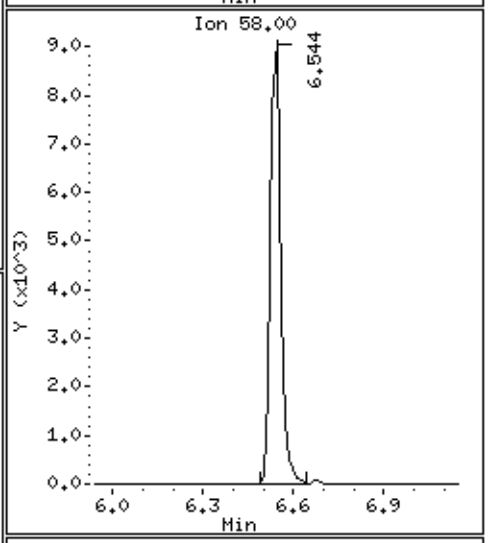


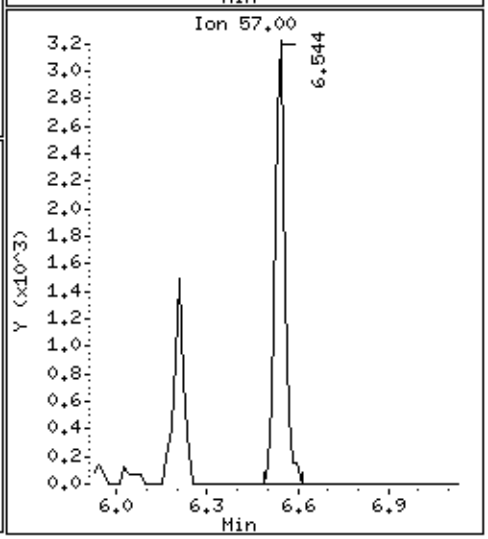












Data File: /chem/msd14.i/24nov14.b/14112418.d

Date : 24-NOV-2014 16:33

Client ID: ICV

Instrument: msd14.i

Sample Info: 50mL #2687-17A

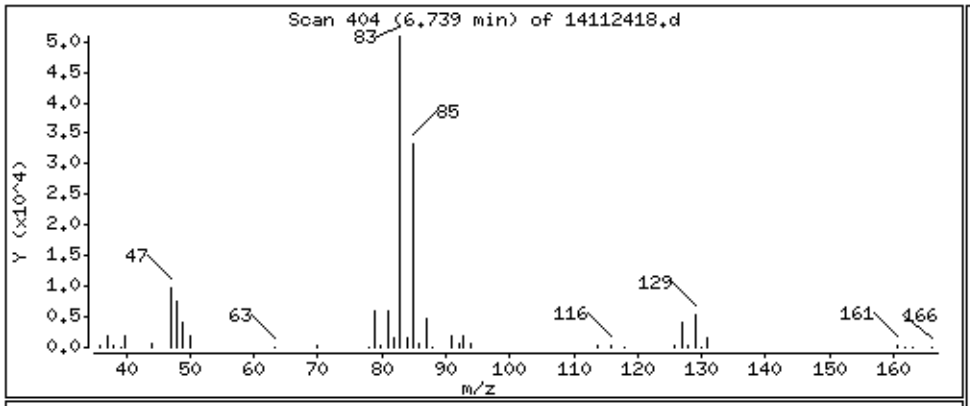
Operator: mjs

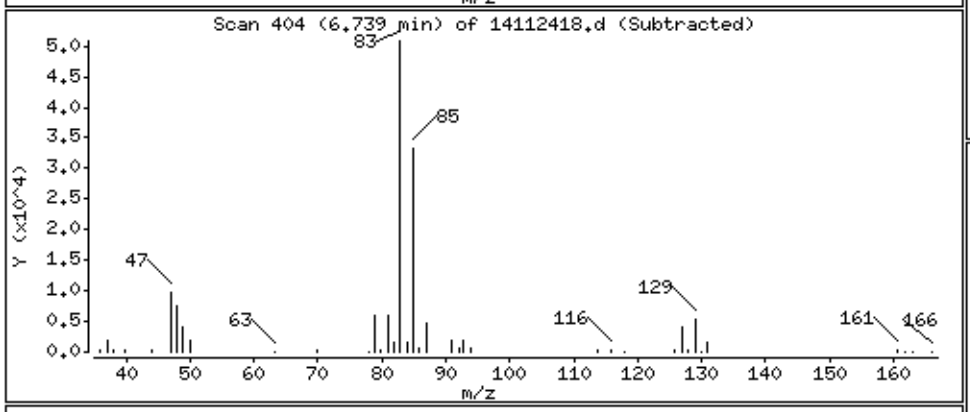
Column phase: RTx-624

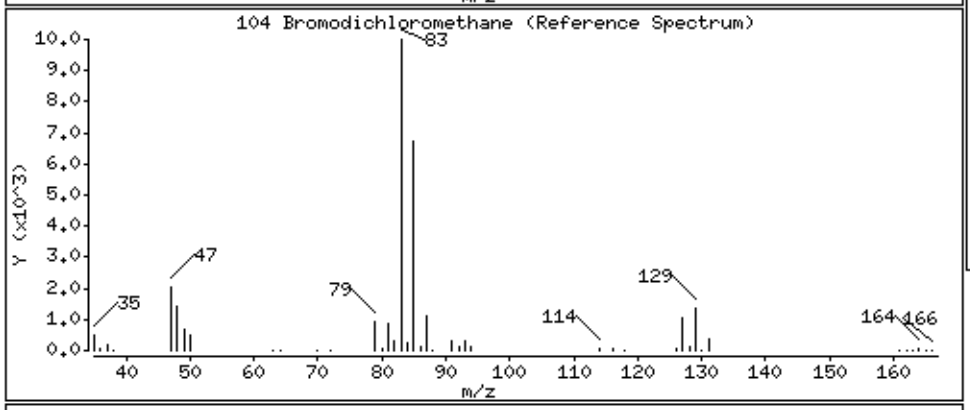
Column diameter: 0.53

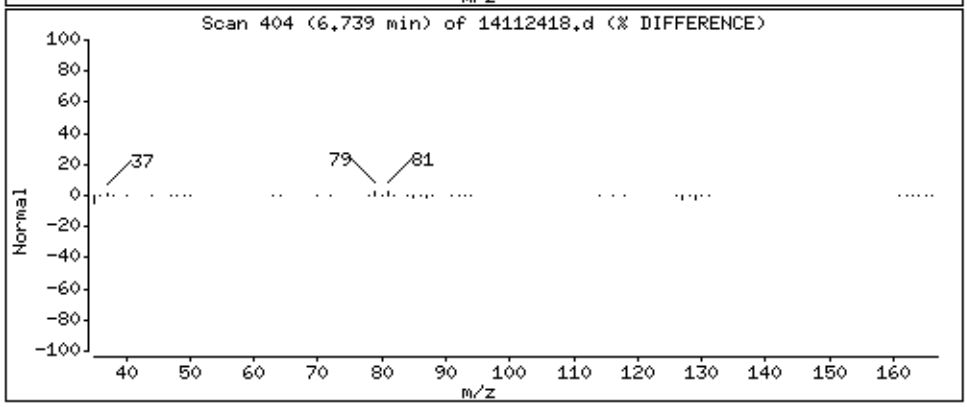
104 Bromodichloromethane

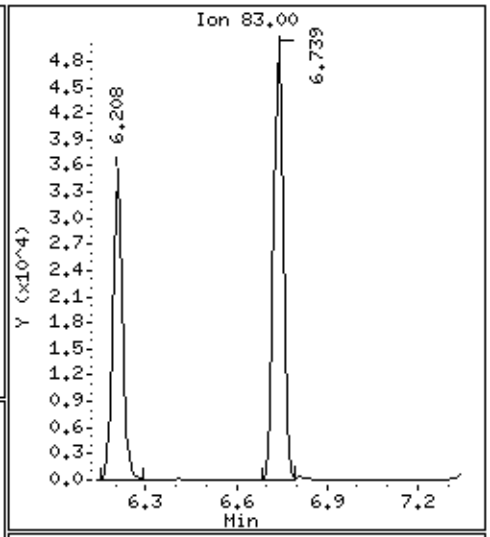
Concentration: 93.899 PPBV

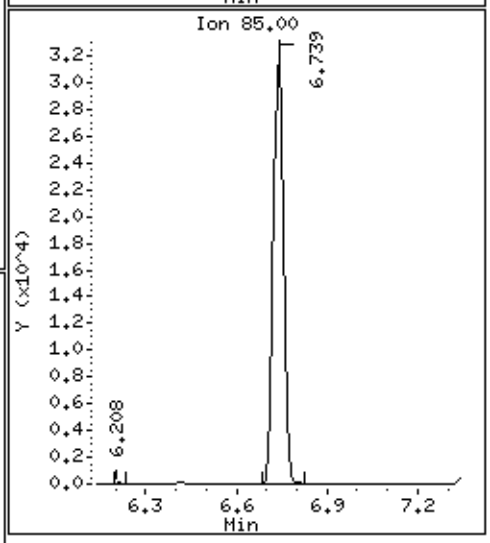












Data File: /chem/msd14.i/24nov14.b/14112418.d

Date : 24-NOV-2014 16:33

Client ID: ICV

Instrument: msd14.i

Sample Info: 50mL #2687-17A

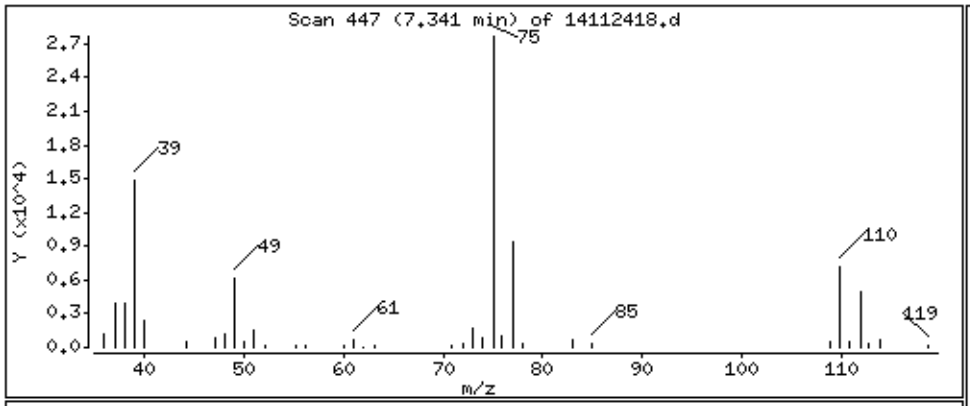
Operator: mjs

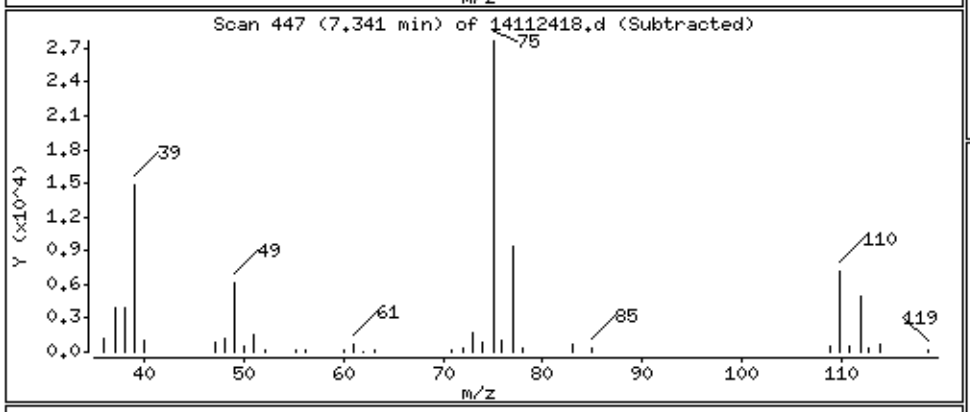
Column phase: RTx-624

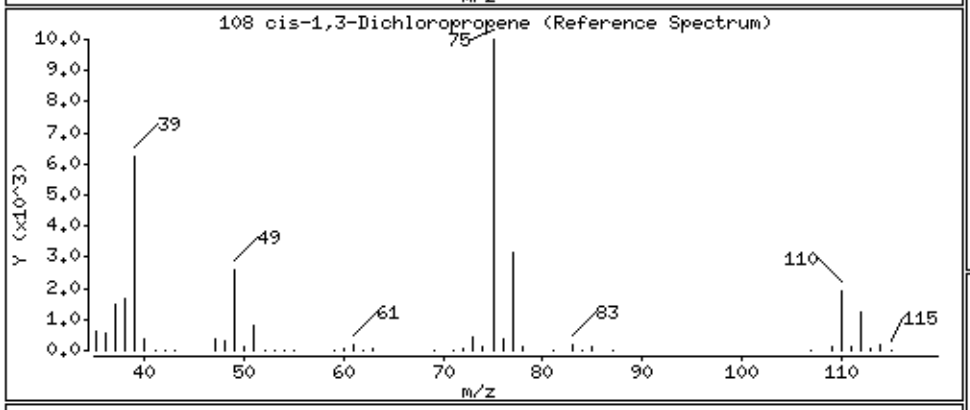
Column diameter: 0.53

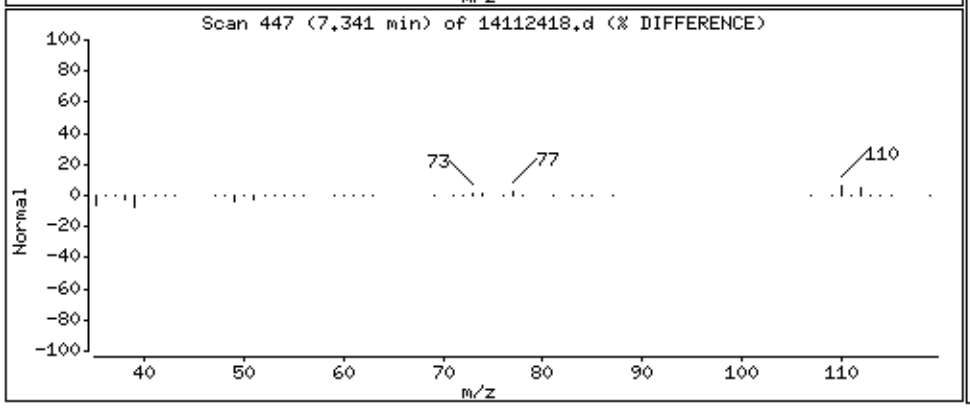
108 cis-1,3-Dichloropropene

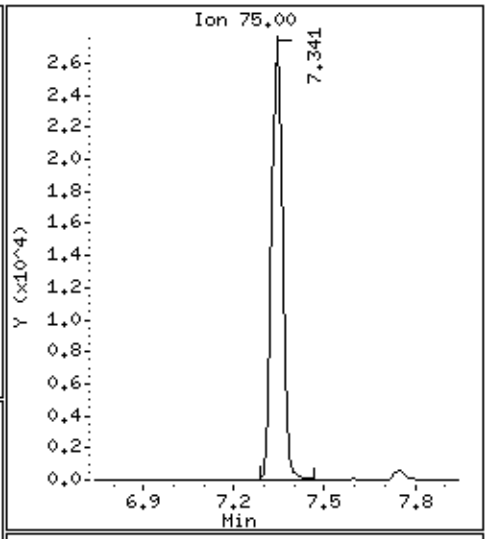
Concentration: 95.538 PPBV

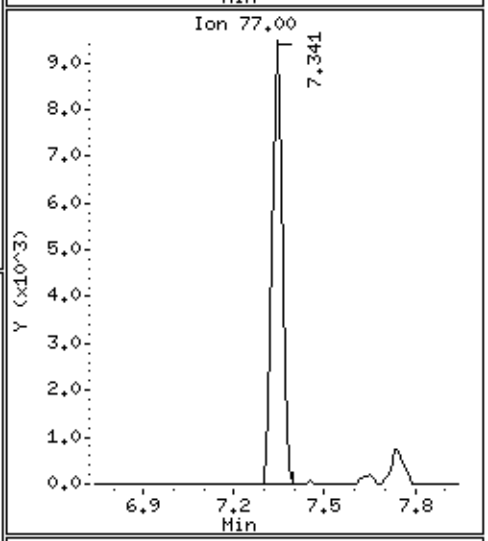


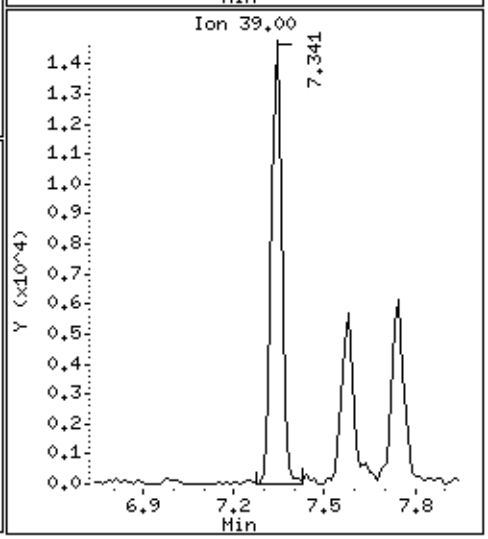












Data File: /chem/msd14.i/24nov14.b/14112418.d

Date : 24-NOV-2014 16:33

Client ID: ICV

Instrument: msd14.i

Sample Info: 50mL #2687-17A

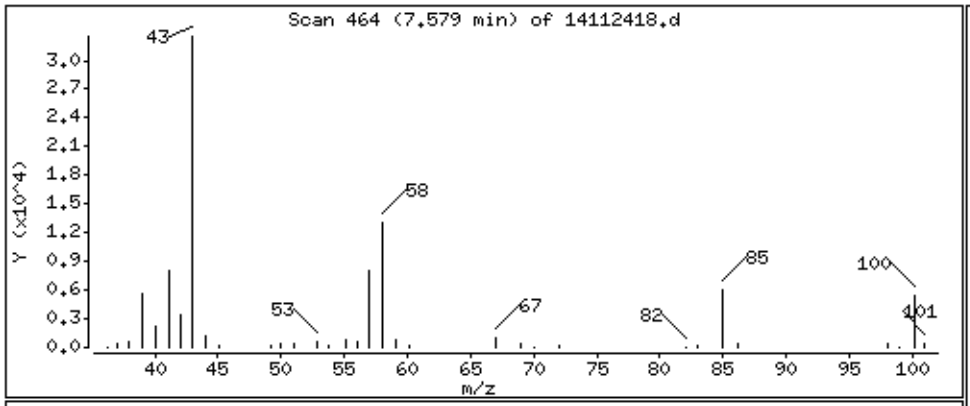
Operator: mjs

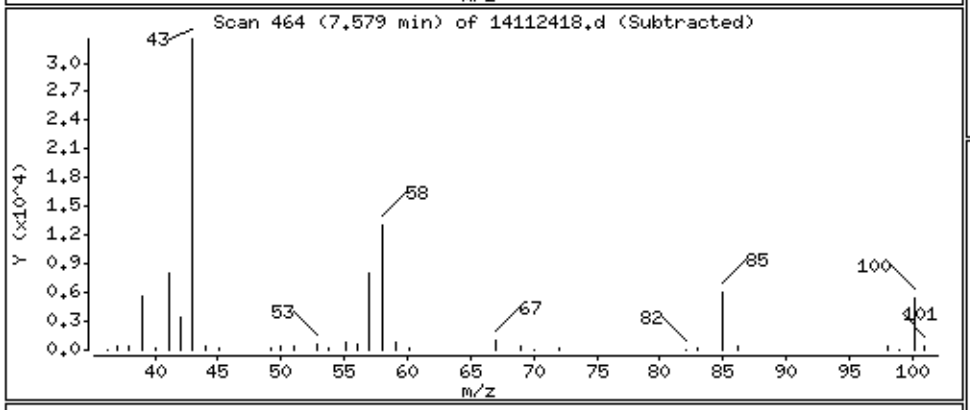
Column phase: RTx-624

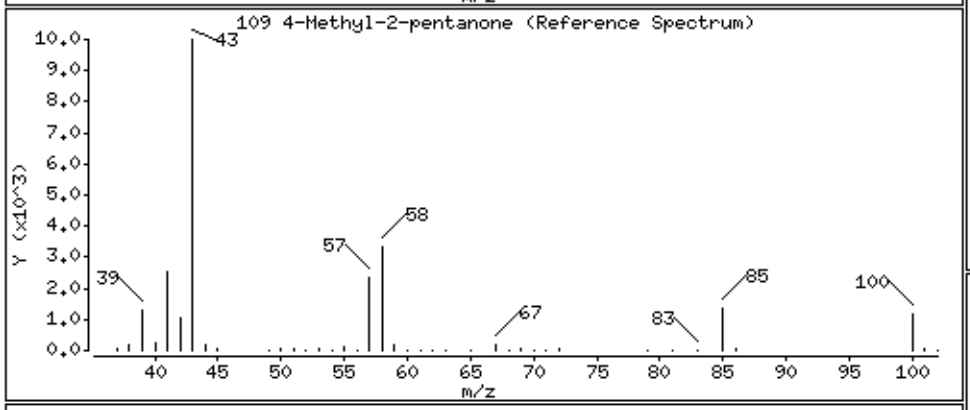
Column diameter: 0.53

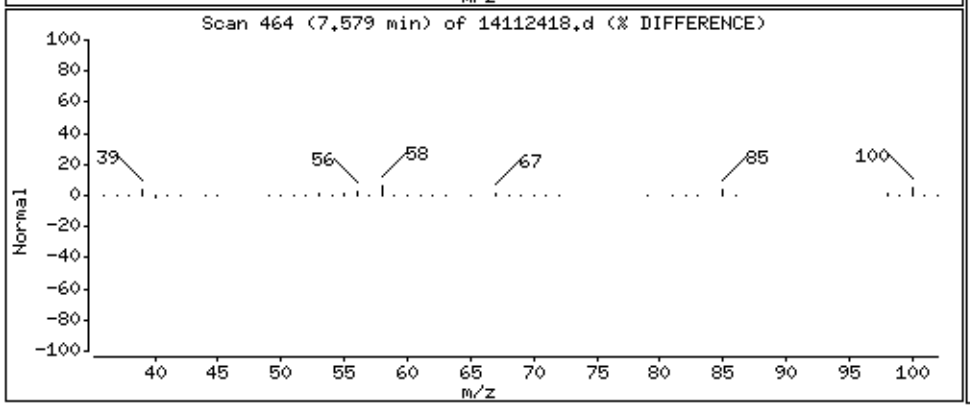
109 4-Methyl-2-pentanone

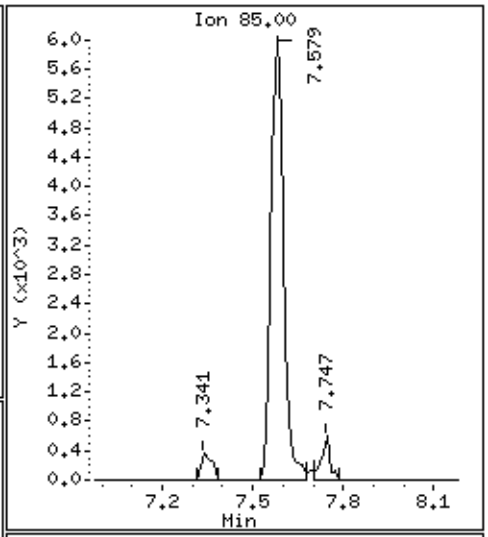
Concentration: 96.292 PPBV

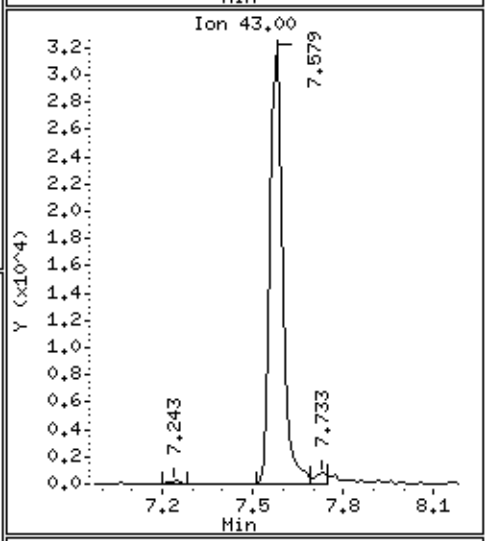


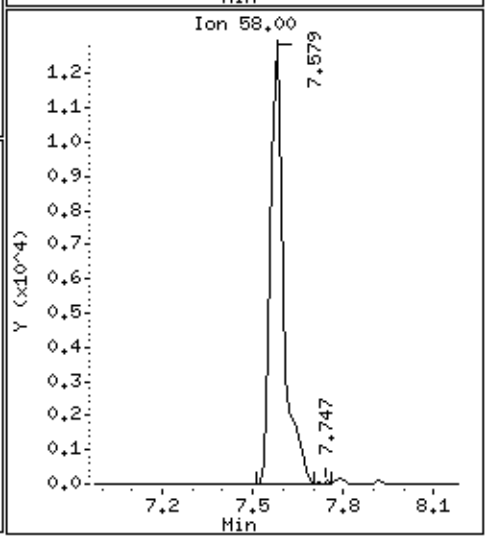












Data File: /chem/msd14.i/24nov14.b/14112418.d

Date : 24-NOV-2014 16:33

Client ID: ICV

Instrument: msd14.i

Sample Info: 50mL #2687-17A

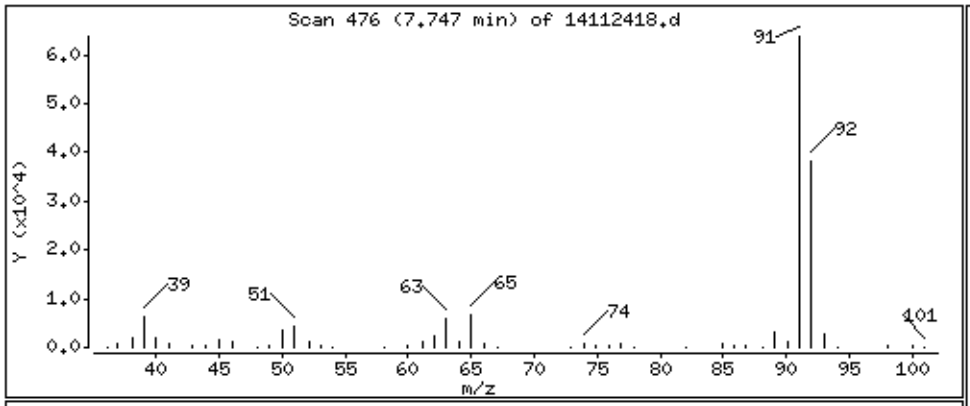
Operator: mjs

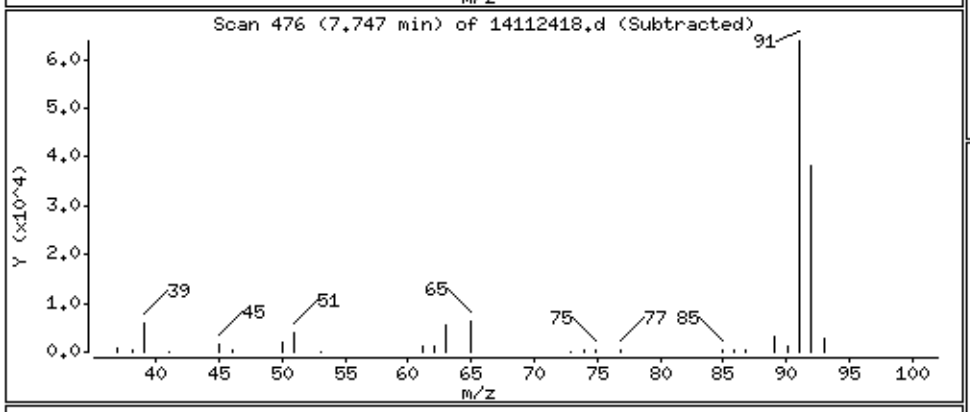
Column phase: RTx-624

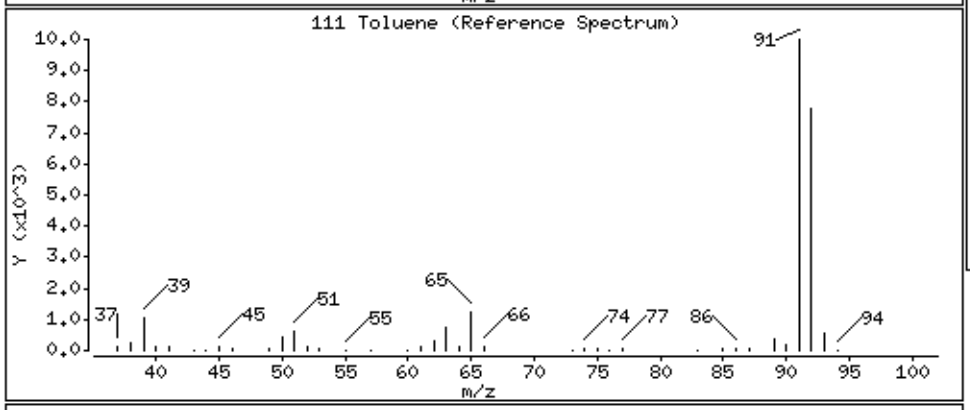
Column diameter: 0.53

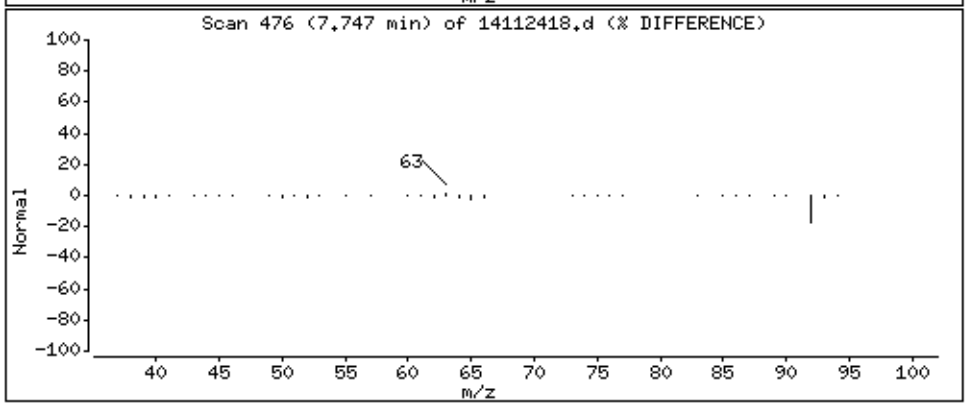
111 Toluene

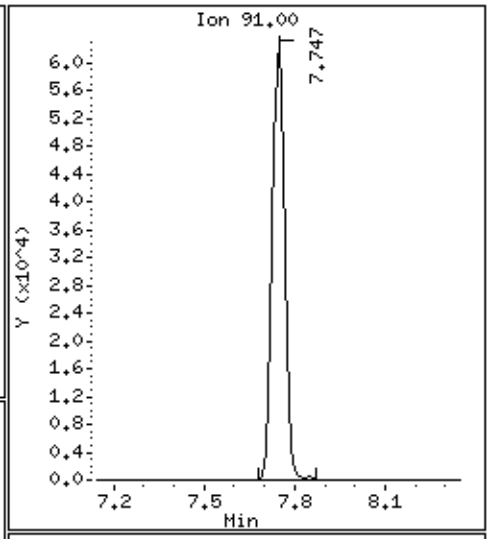
Concentration: 95.008 PPBV

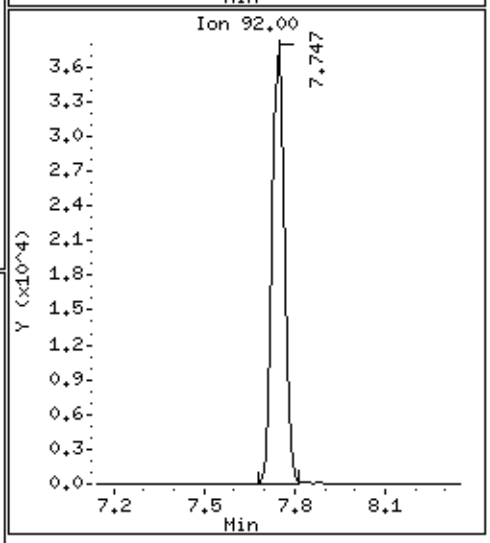












Data File: /chem/msd14.i/24nov14.b/14112418.d

Date : 24-NOV-2014 16:33

Client ID: ICV

Instrument: msd14.i

Sample Info: 50mL #2687-17A

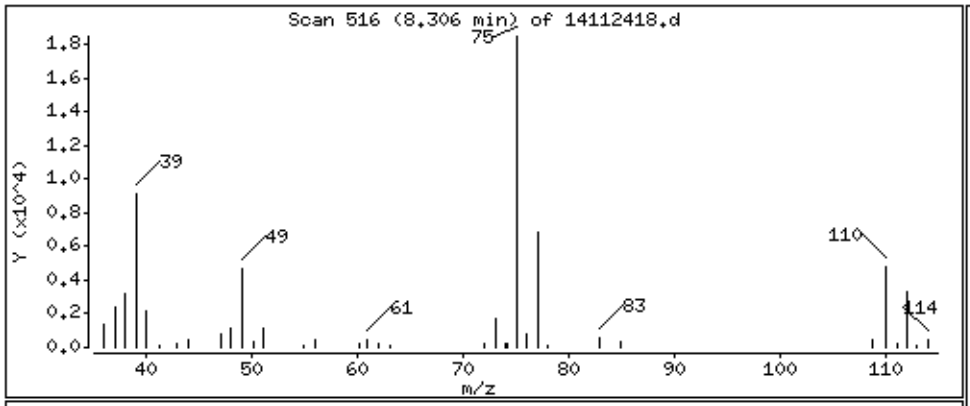
Operator: mjs

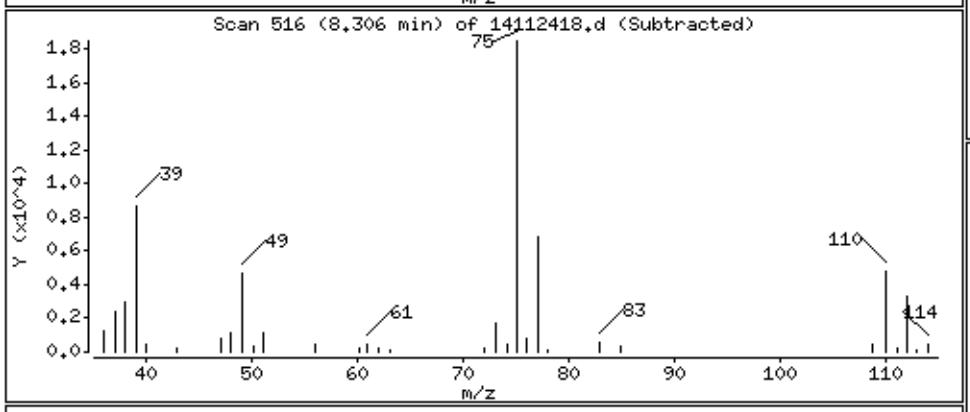
Column phase: RTx-624

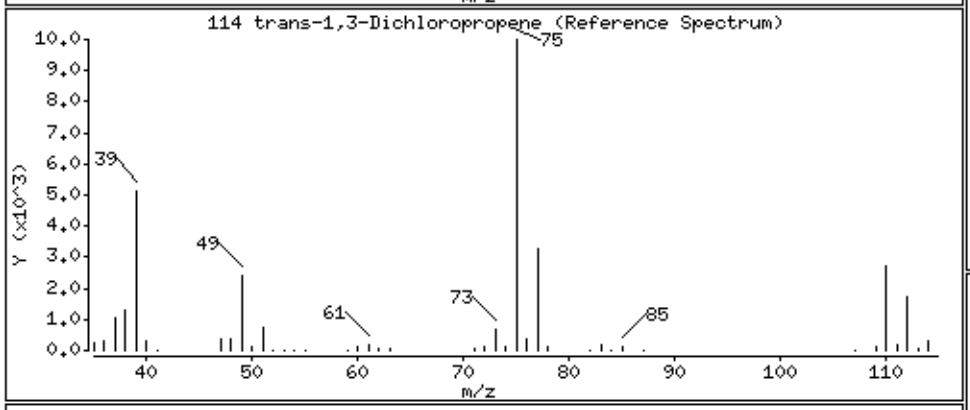
Column diameter: 0.53

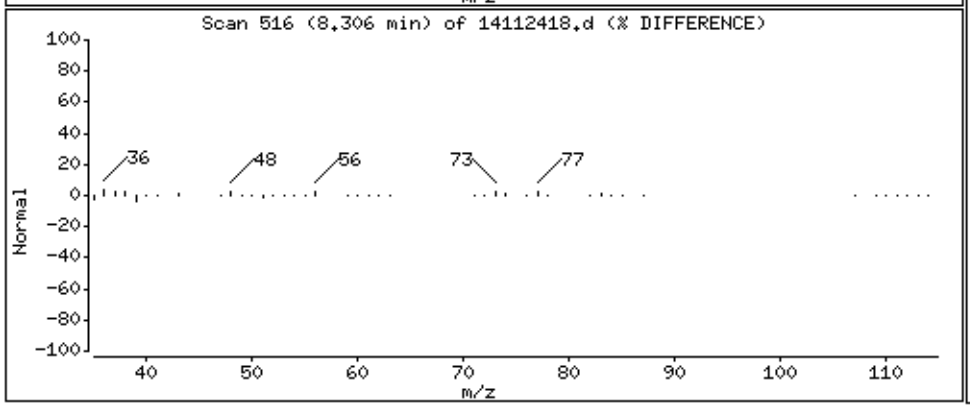
114 trans-1,3-Dichloropropene

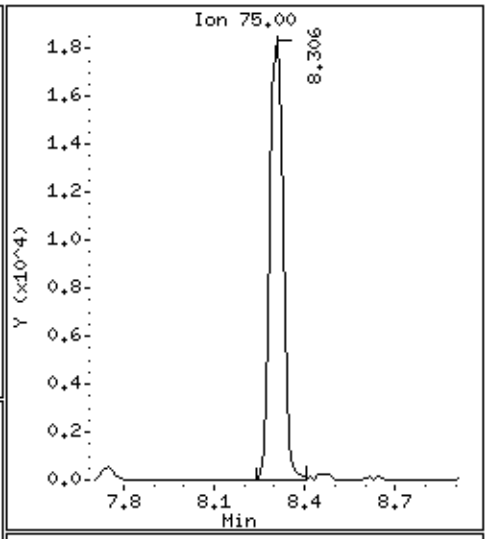
Concentration: 87.141 PPBV

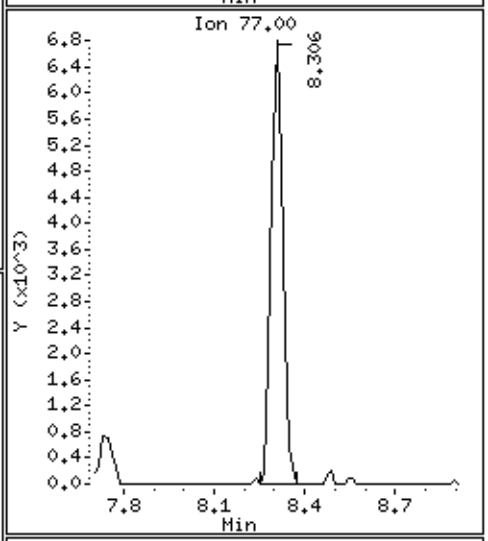


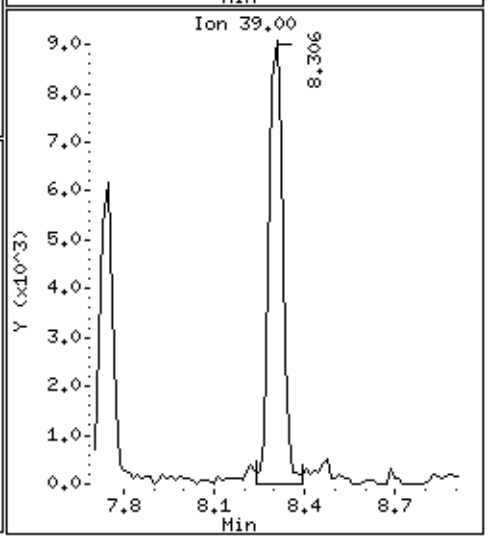












Data File: /chem/msd14.i/24nov14.b/14112418.d

Date : 24-NOV-2014 16:33

Client ID: ICV

Instrument: msd14.i

Sample Info: 50mL #2687-17A

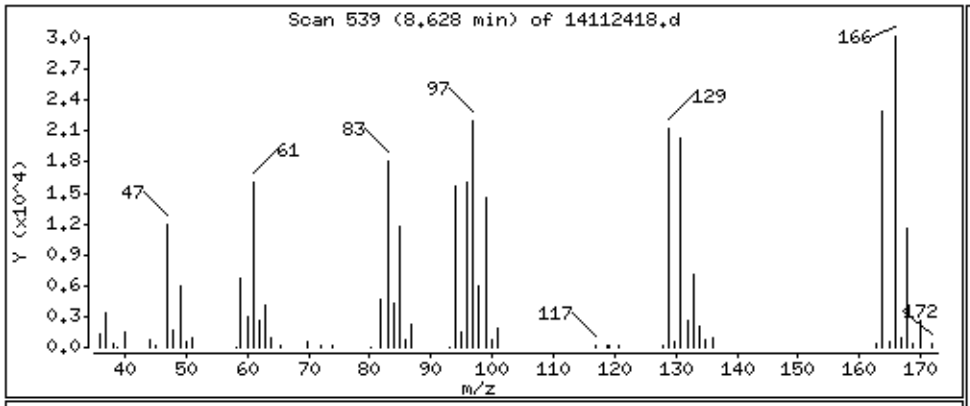
Operator: mjs

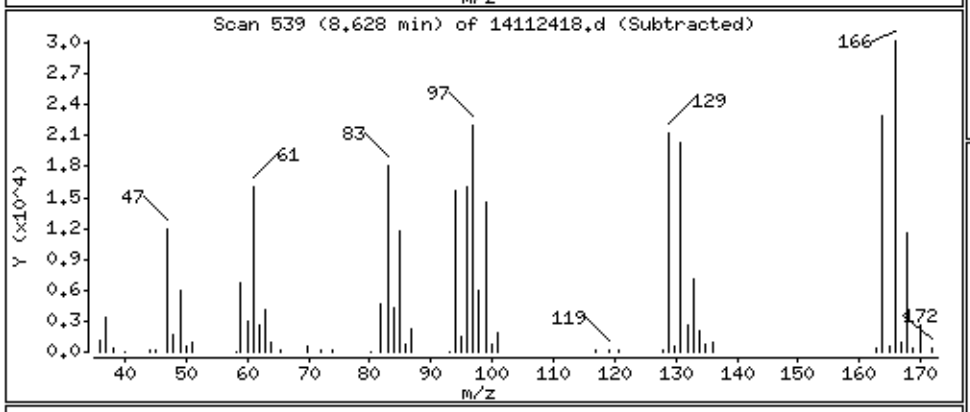
Column phase: RTx-624

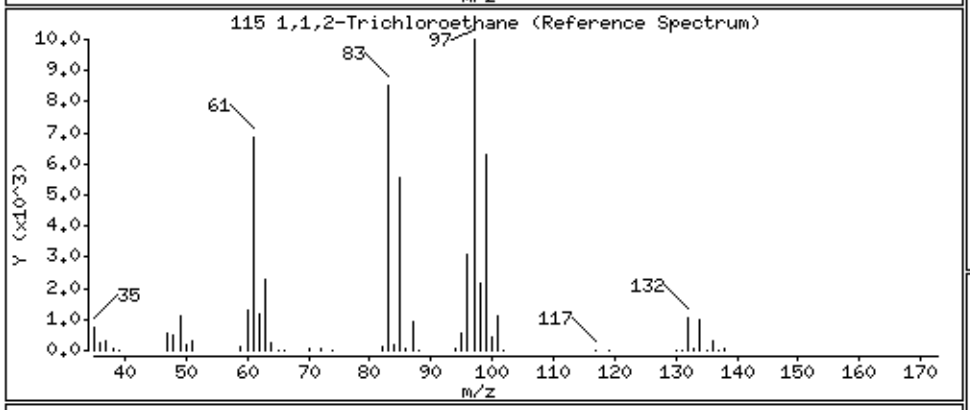
Column diameter: 0.53

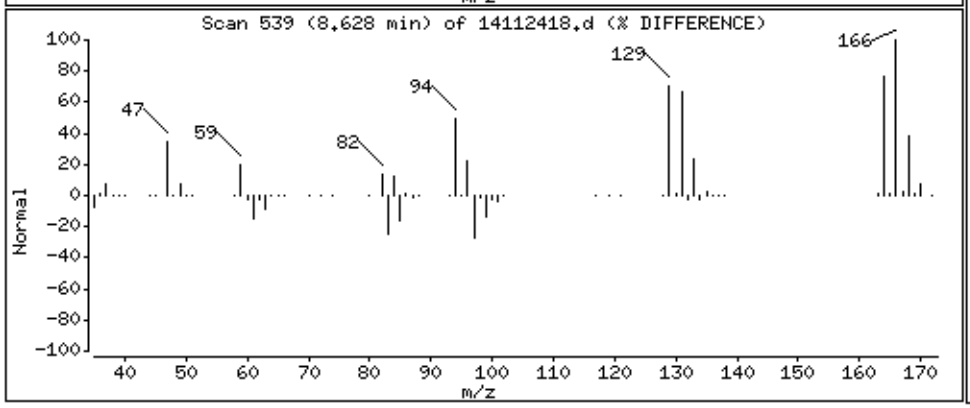
115 1,1,2-Trichloroethane

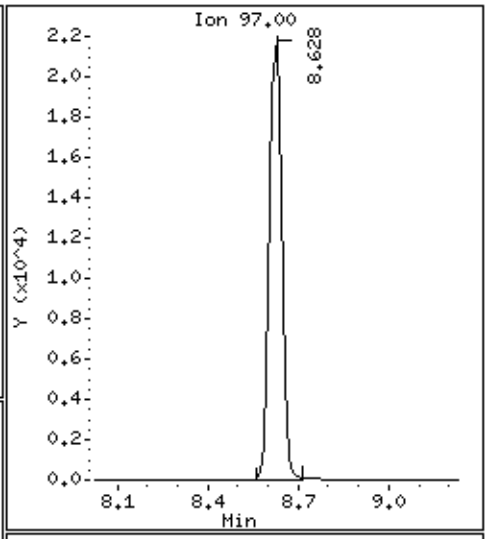
Concentration: 93.739 PPBV

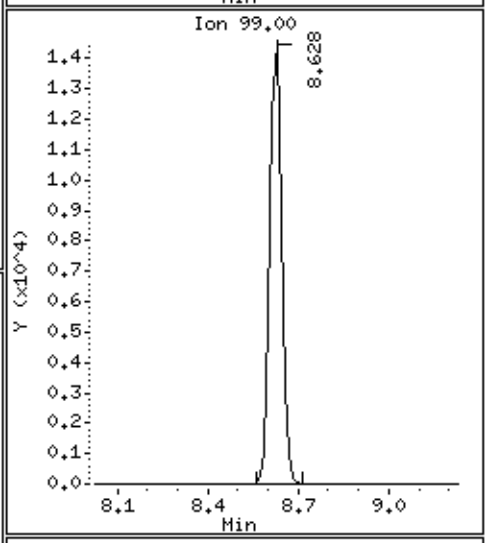


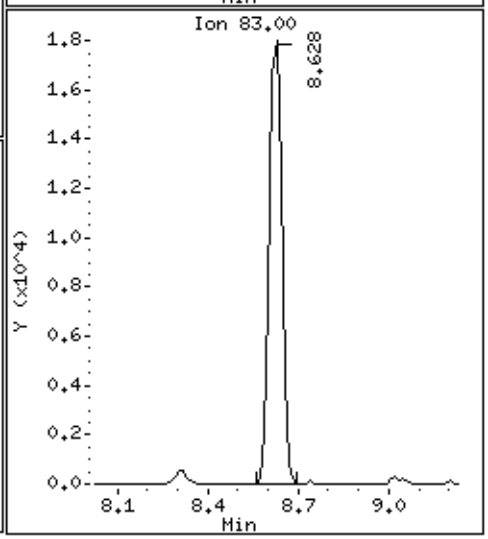












Data File: /chem/msd14.i/24nov14.b/14112418.d

Date : 24-NOV-2014 16:33

Client ID: ICV

Instrument: msd14.i

Sample Info: 50mL #2687-17A

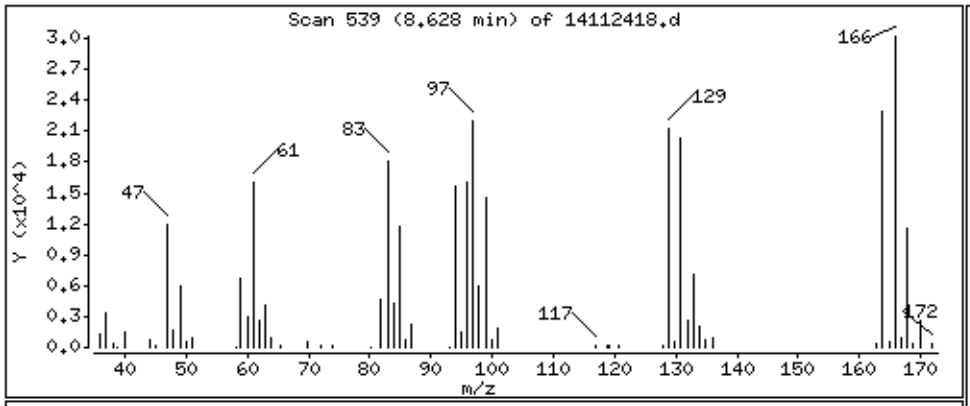
Operator: mjs

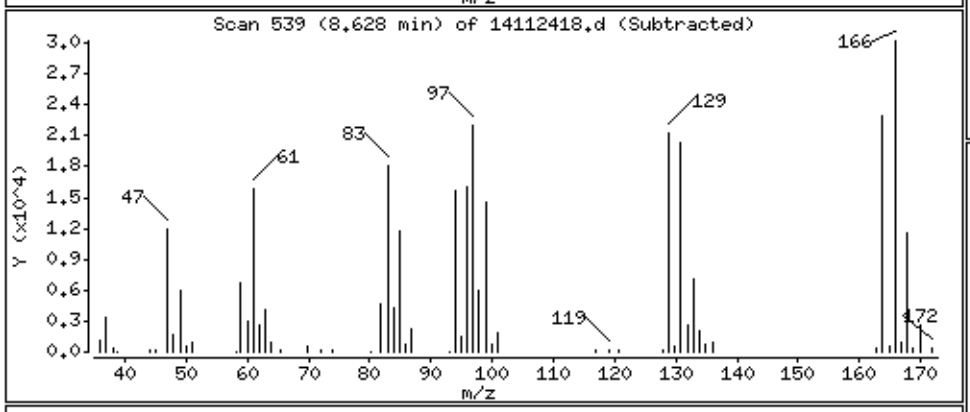
Column phase: RTx-624

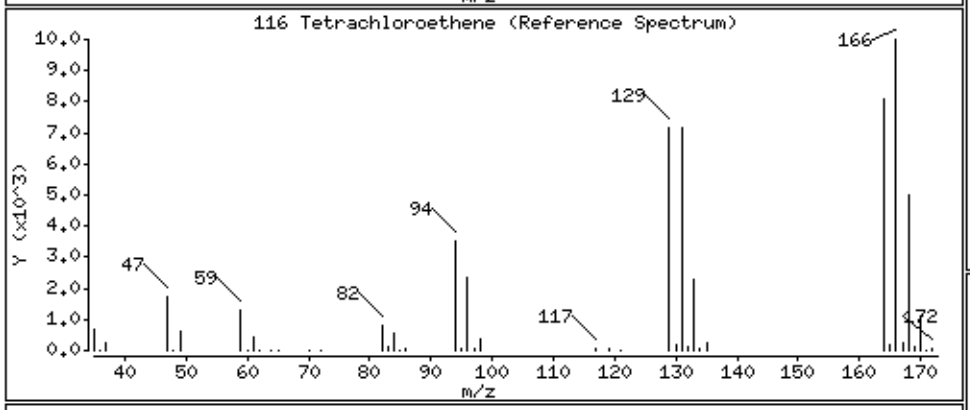
Column diameter: 0.53

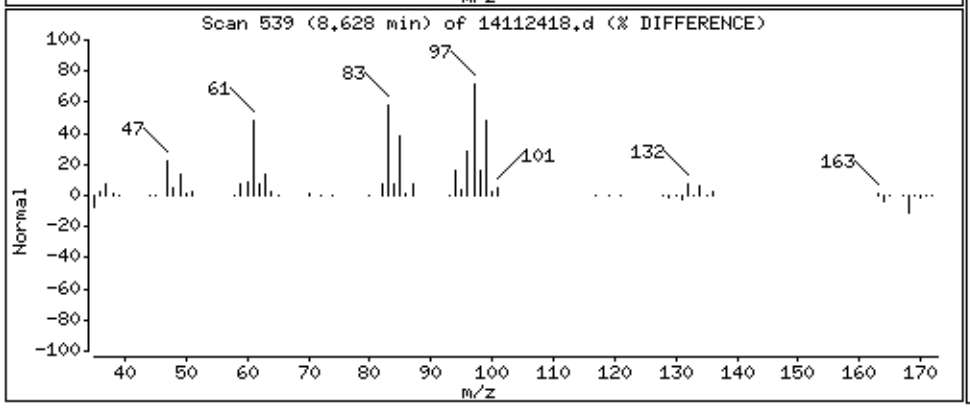
116 Tetrachloroethene

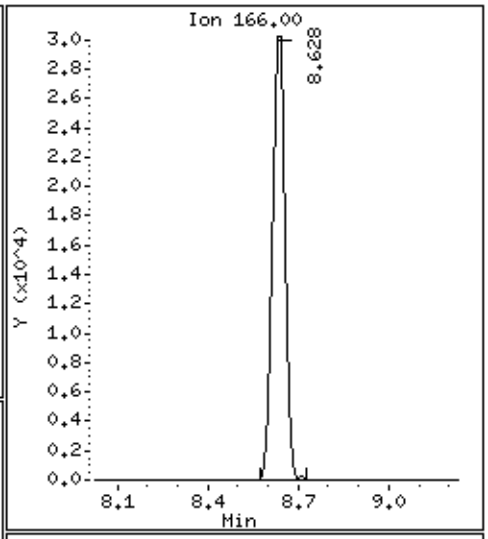
Concentration: 97.210 PPBV

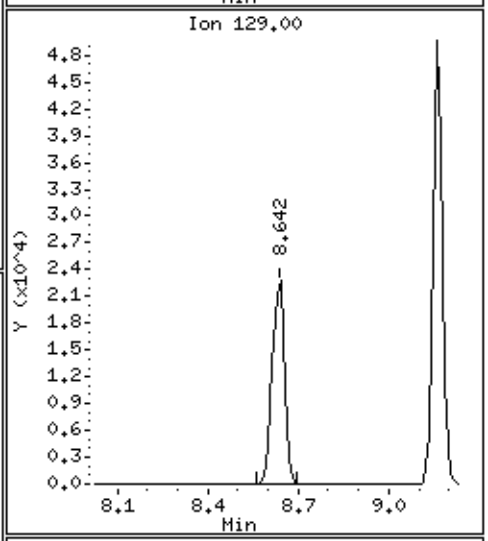


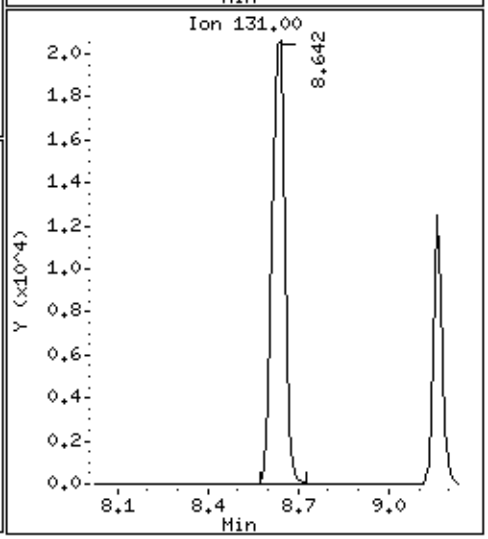












Data File: /chem/msd14.i/24nov14.b/14112418.d

Date : 24-NOV-2014 16:33

Client ID: ICV

Instrument: msd14.i

Sample Info: 50mL #2687-17A

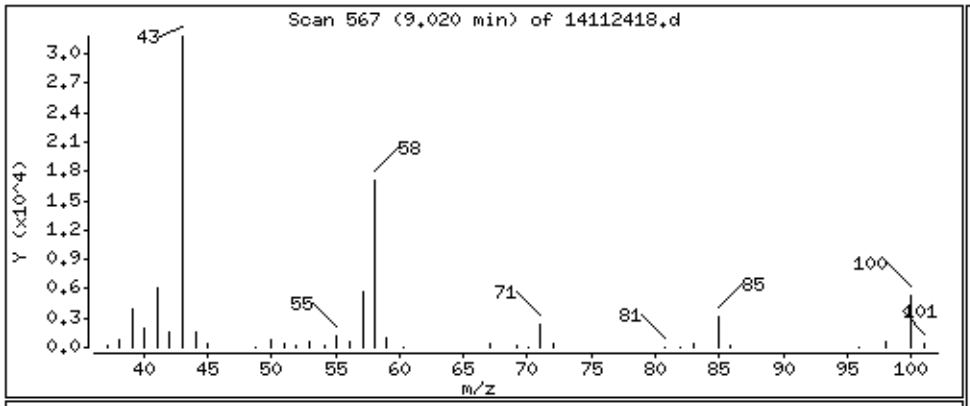
Operator: mjs

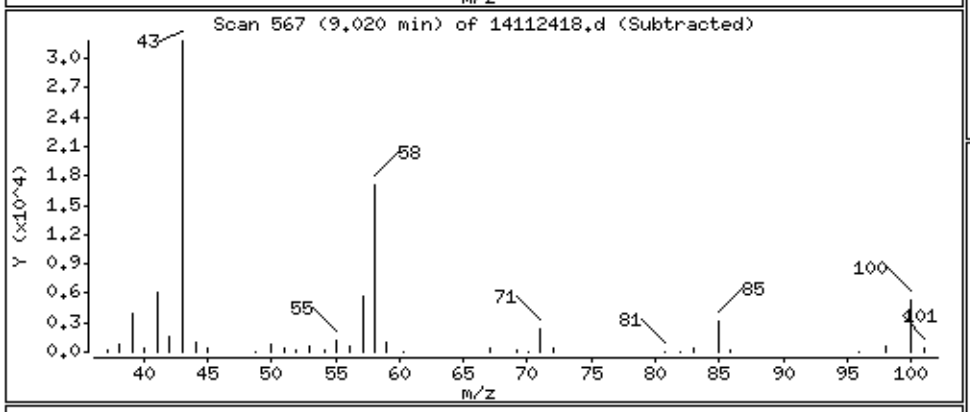
Column phase: RTx-624

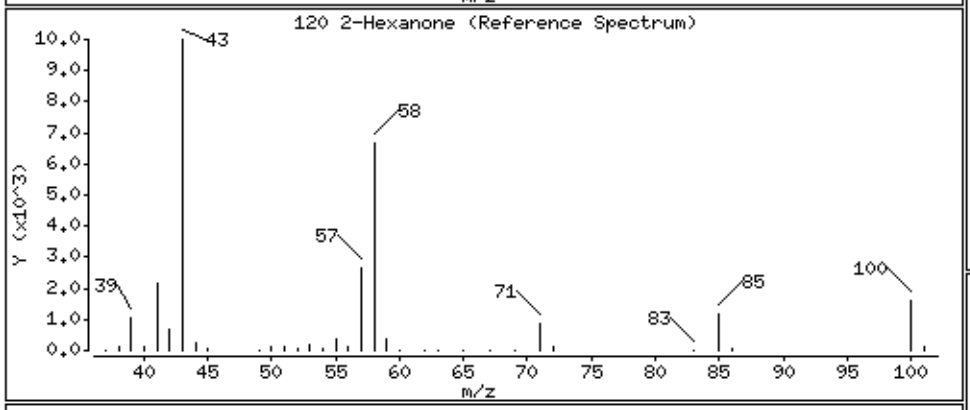
Column diameter: 0.53

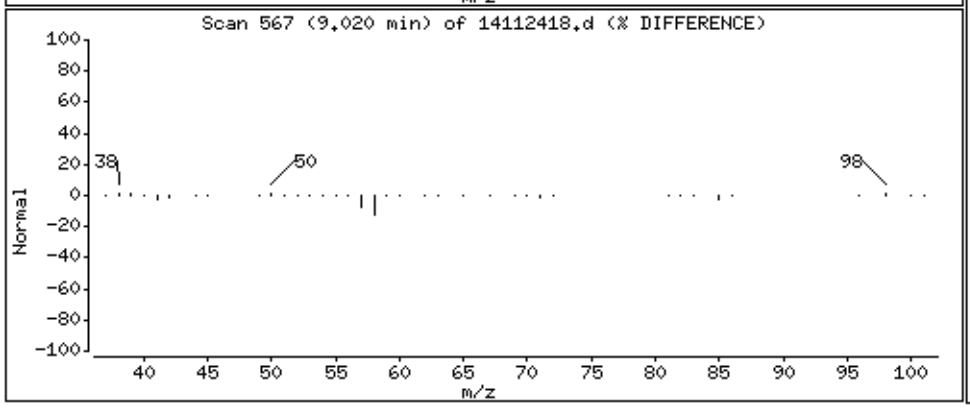
120 2-Hexanone

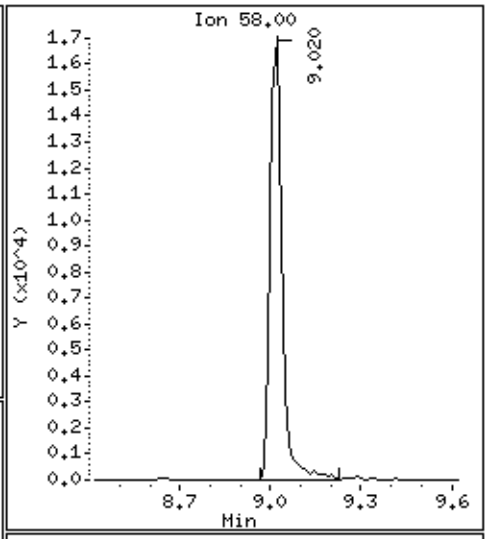
Concentration: 96.406 PPBV

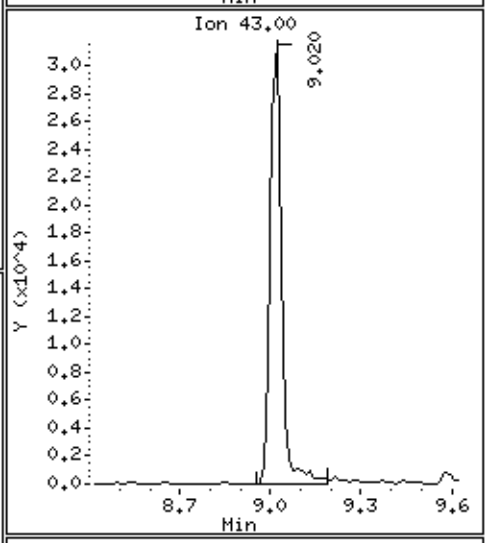


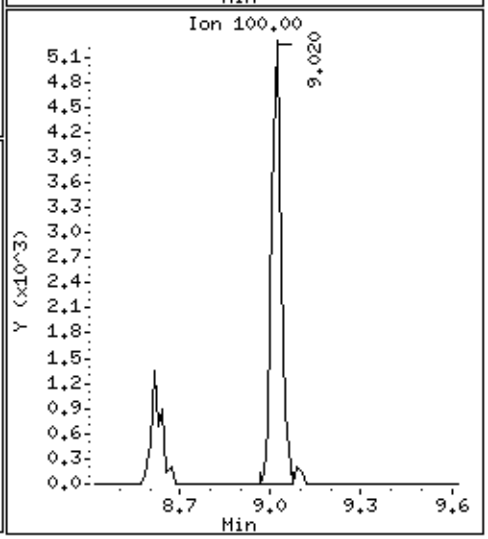












Data File: /chem/msd14.i/24nov14.b/14112418.d

Date : 24-NOV-2014 16:33

Client ID: ICV

Instrument: msd14.i

Sample Info: 50mL #2687-17A

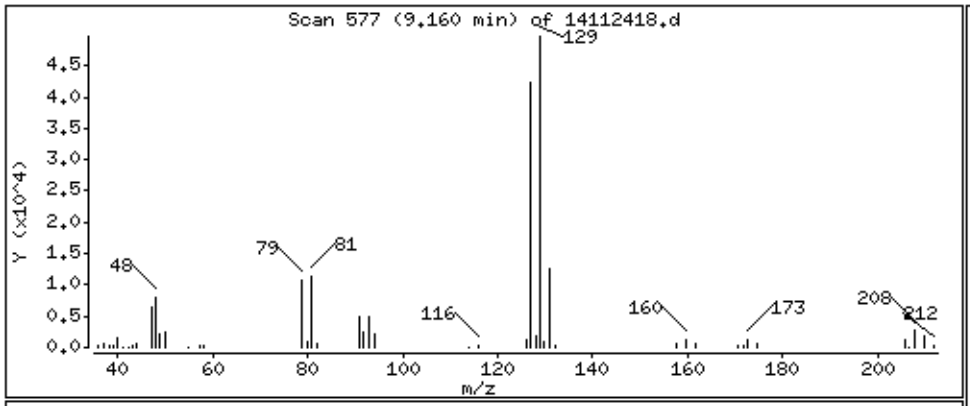
Operator: mjs

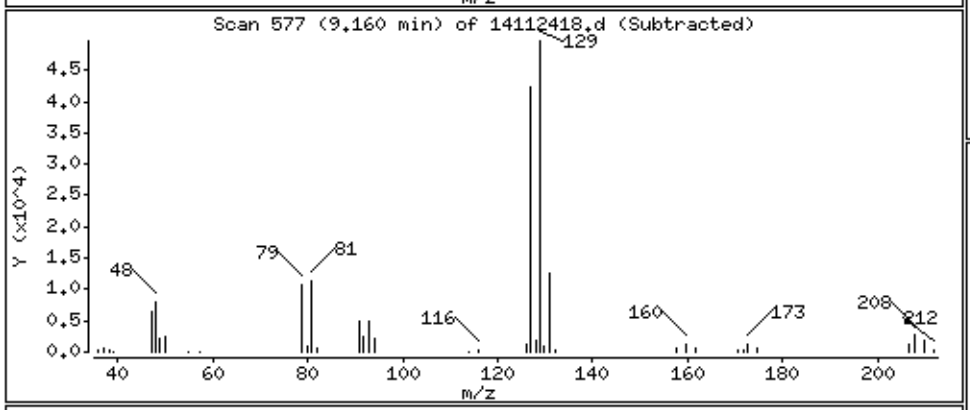
Column phase: RTx-624

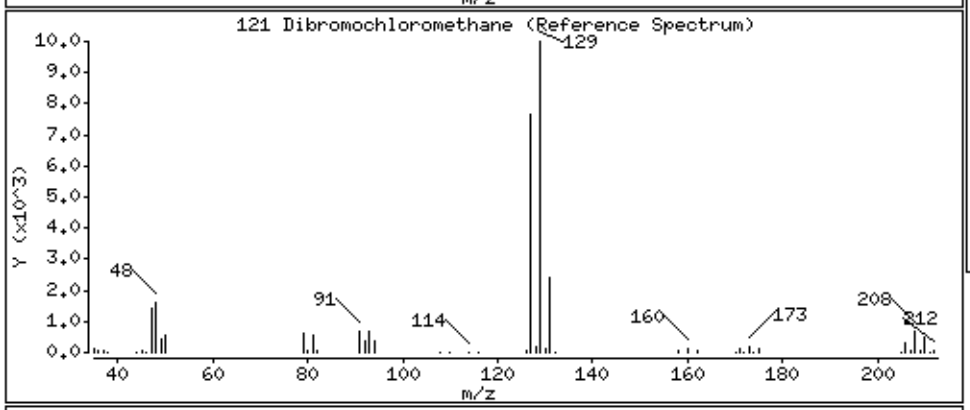
Column diameter: 0.53

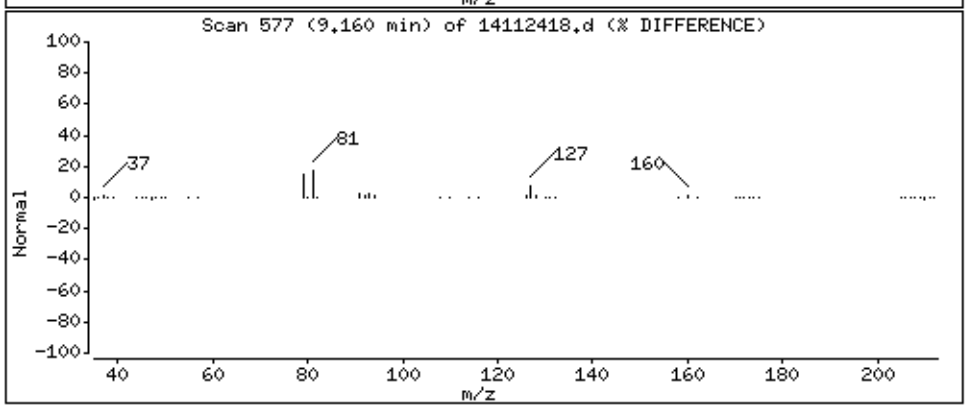
121 Dibromochloromethane

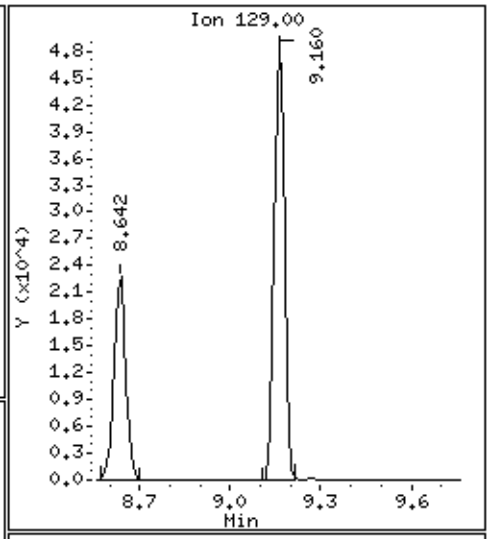
Concentration: 95.761 PPBV

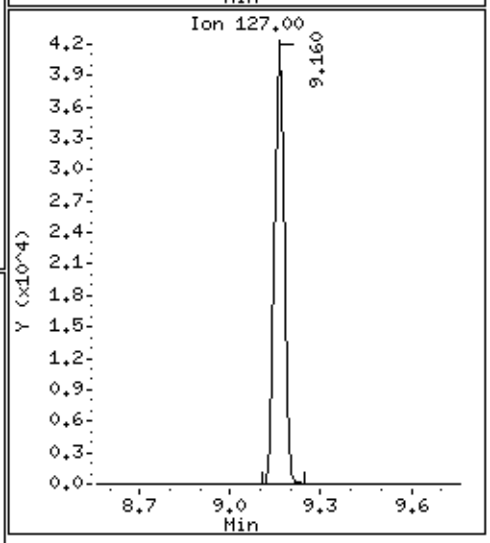












Data File: /chem/msd14.i/24nov14.b/14112418.d

Date : 24-NOV-2014 16:33

Client ID: ICV

Instrument: msd14.i

Sample Info: 50mL #2687-17A

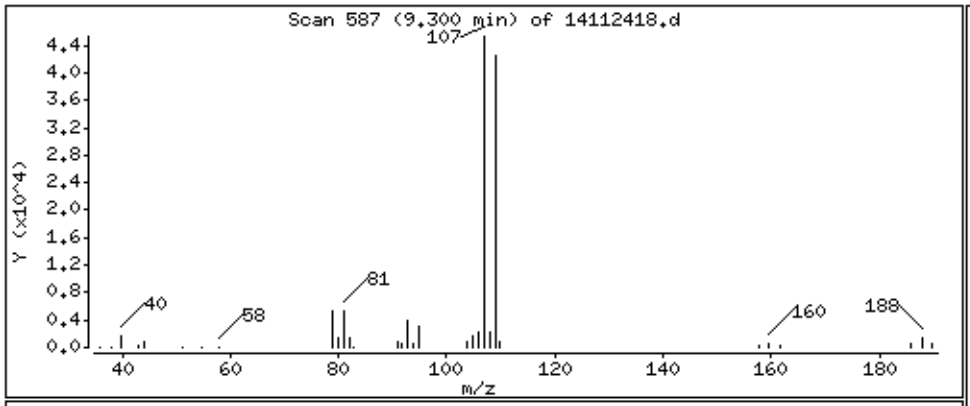
Operator: mjs

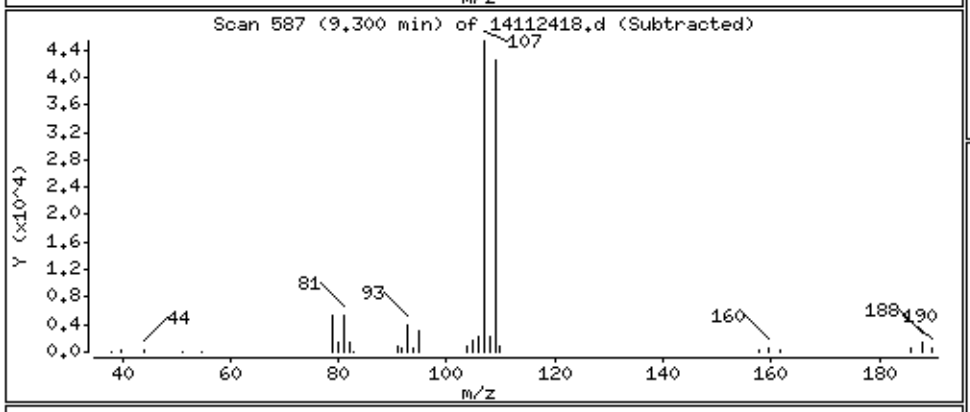
Column phase: RTx-624

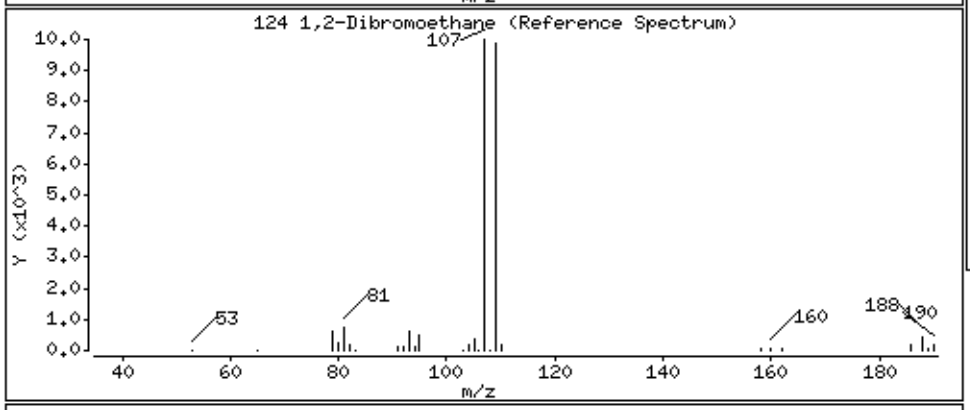
Column diameter: 0.53

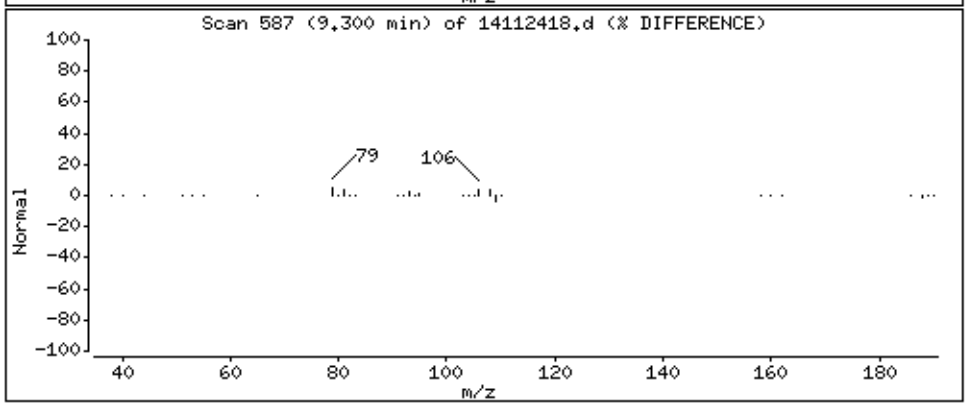
124 1,2-Dibromoethane

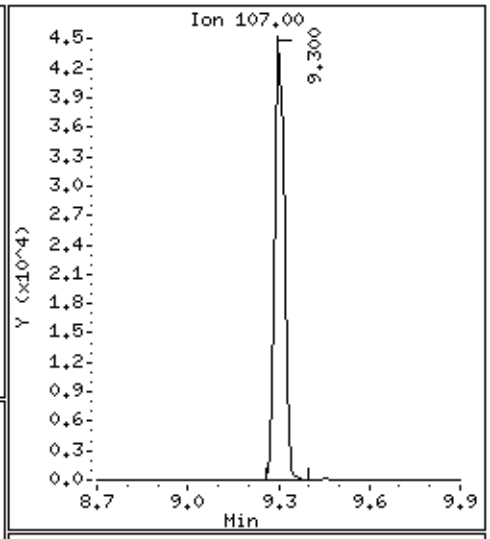
Concentration: 96.936 PPBV

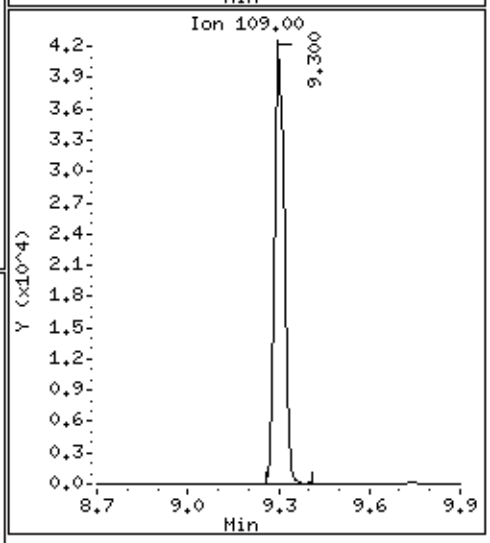












Data File: /chem/msd14.i/24nov14.b/14112418.d

Date : 24-NOV-2014 16:33

Client ID: ICV

Instrument: msd14.i

Sample Info: 50mL #2687-17A

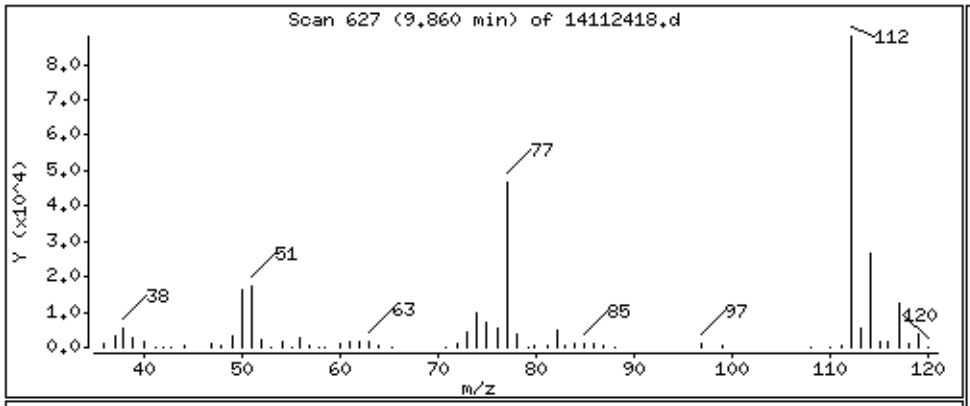
Operator: mjs

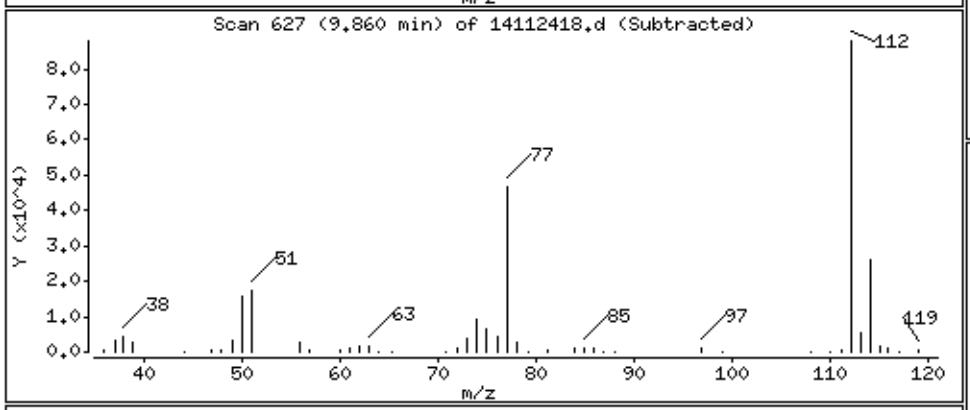
Column phase: RTx-624

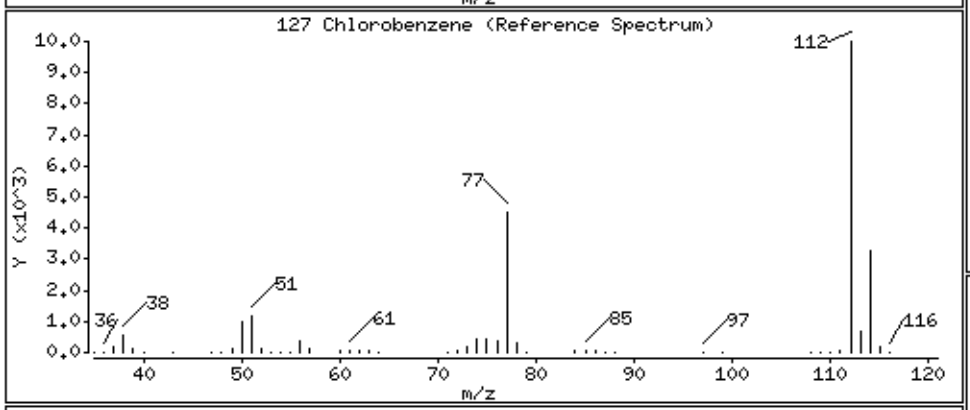
Column diameter: 0.53

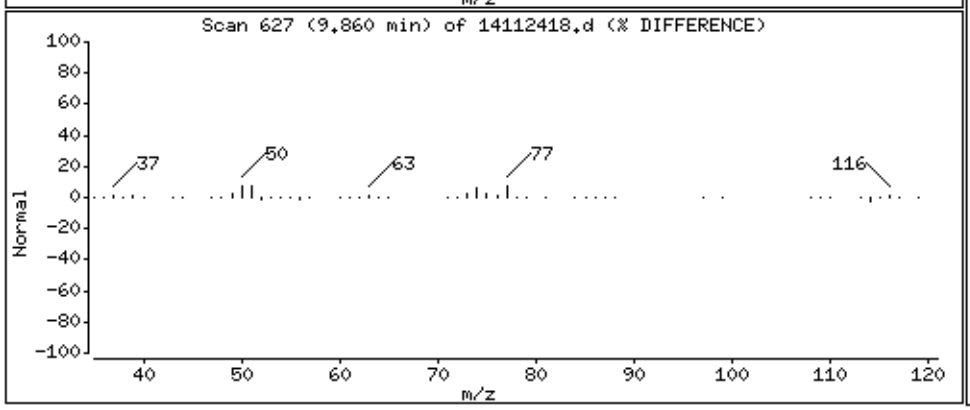
127 Chlorobenzene

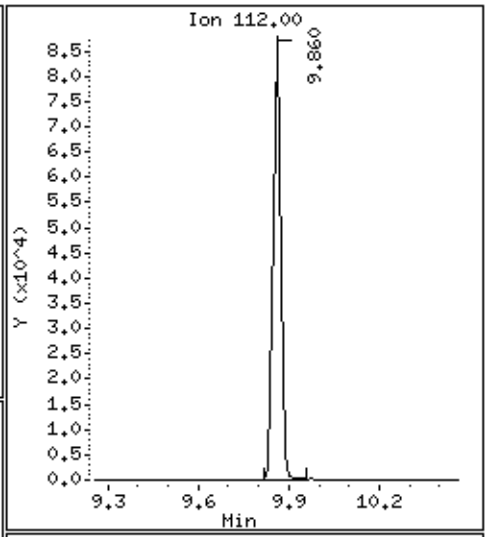
Concentration: 92.946 PPBV

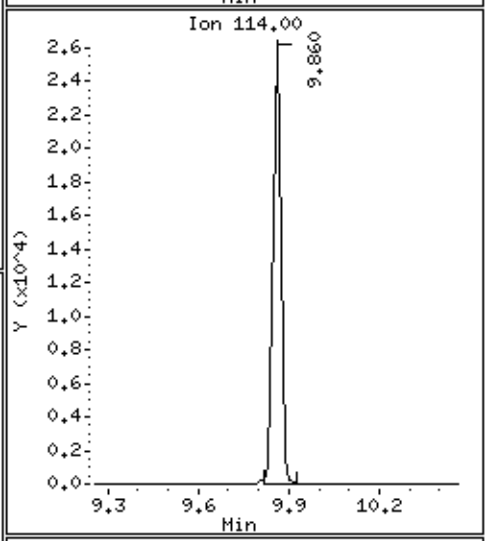


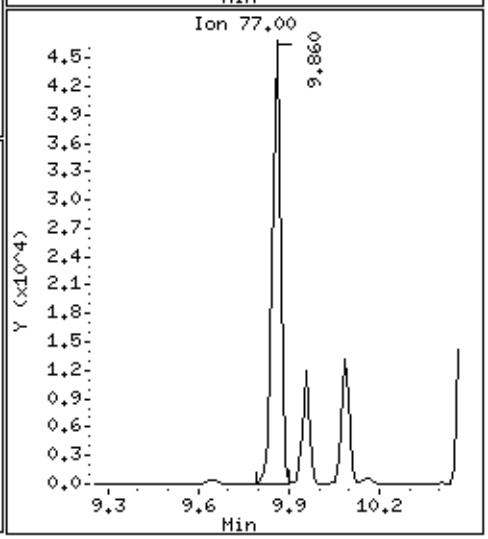












Data File: /chem/msd14.i/24nov14.b/14112418.d

Date : 24-NOV-2014 16:33

Client ID: ICV

Instrument: msd14.i

Sample Info: 50mL #2687-17A

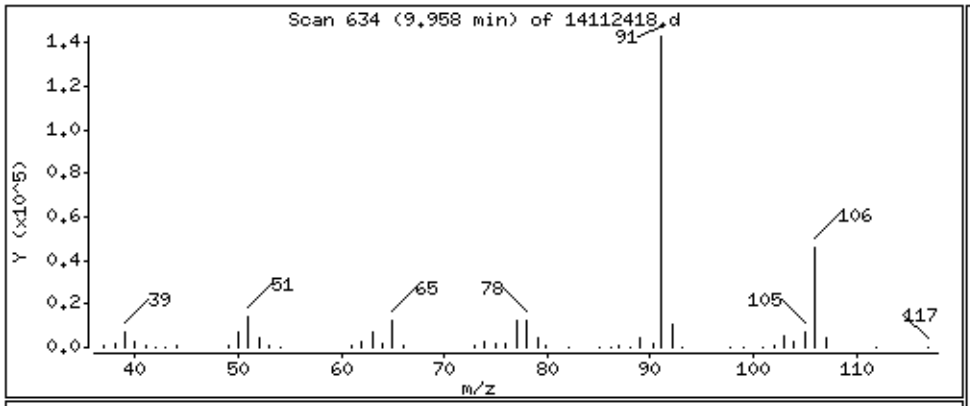
Operator: mjs

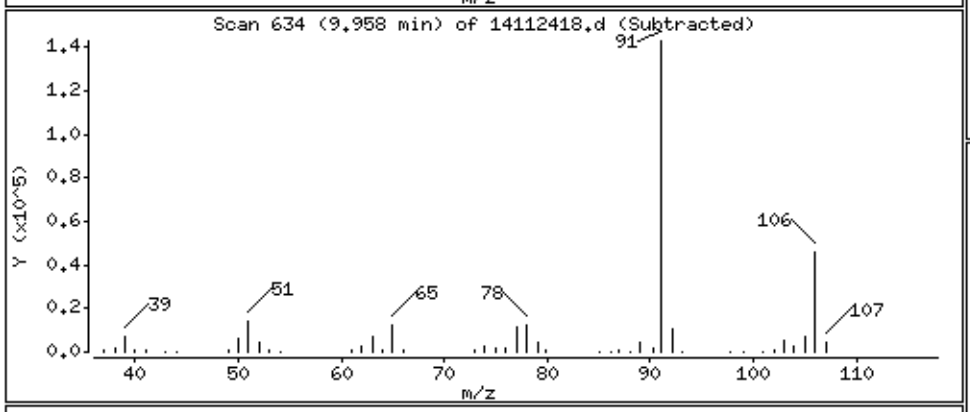
Column phase: RTx-624

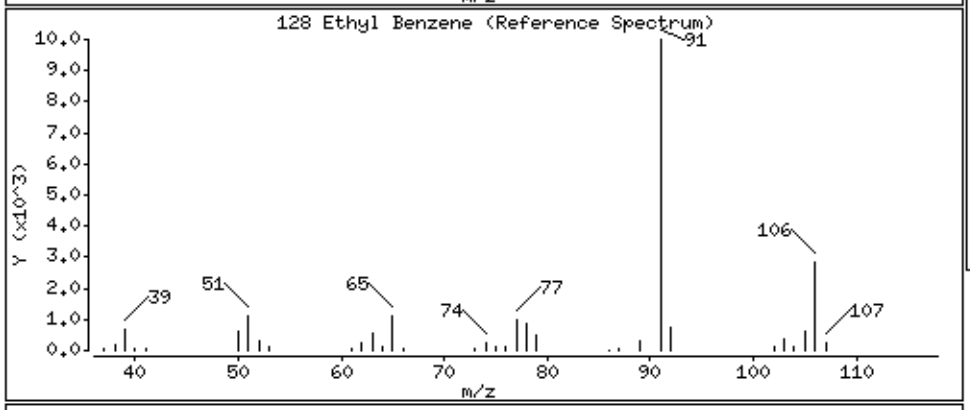
Column diameter: 0.53

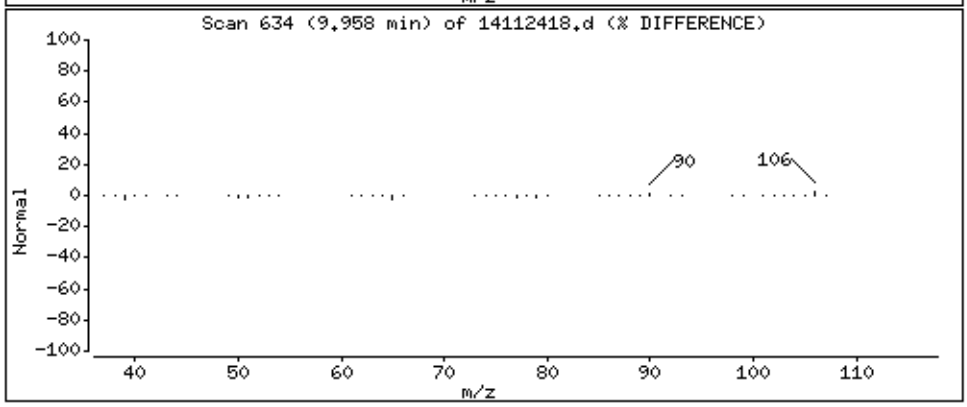
128 Ethyl Benzene

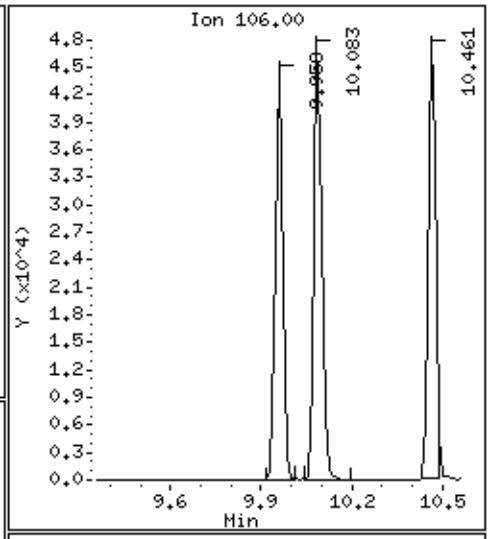
Concentration: 98.924 PPBV

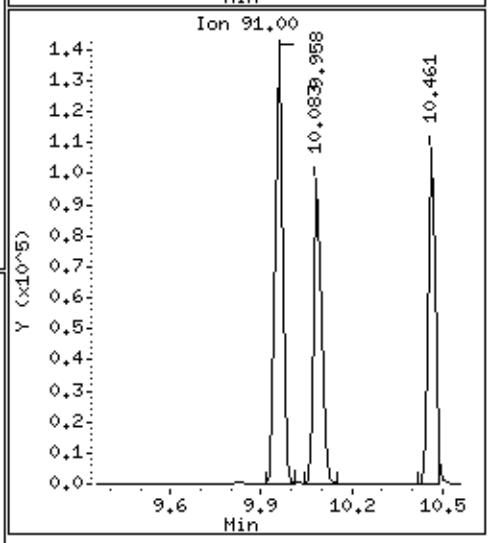












Data File: /chem/msd14.i/24nov14.b/14112418.d

Date : 24-NOV-2014 16:33

Client ID: ICV

Instrument: msd14.i

Sample Info: 50mL #2687-17A

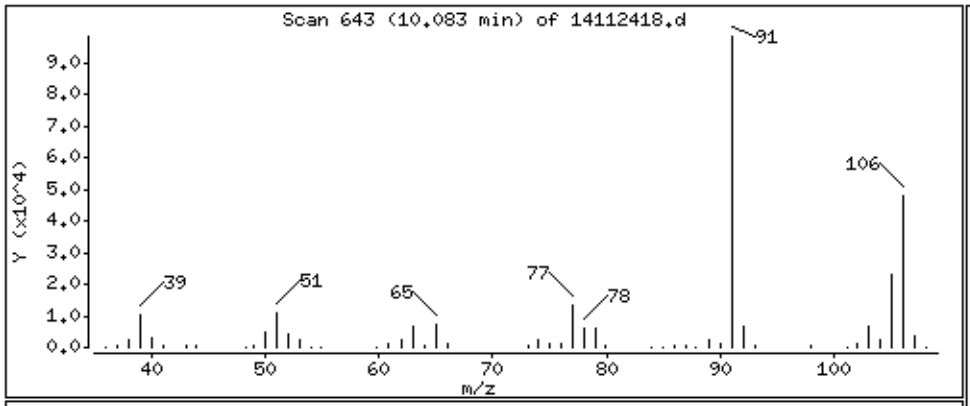
Operator: mjs

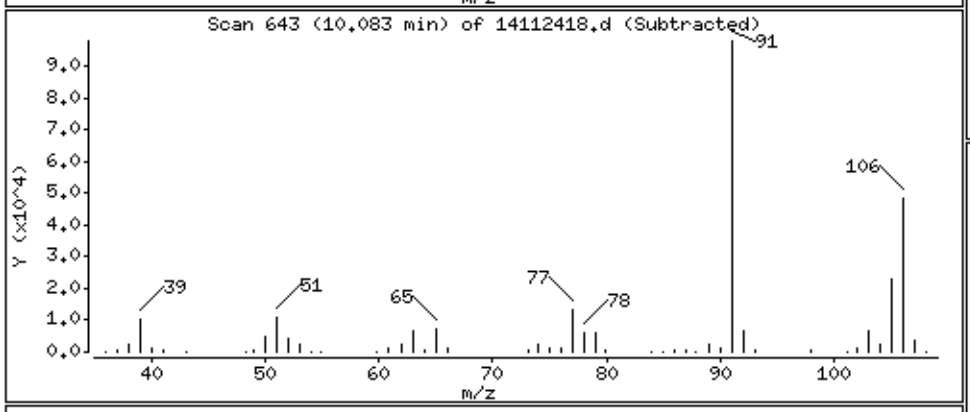
Column phase: RTx-624

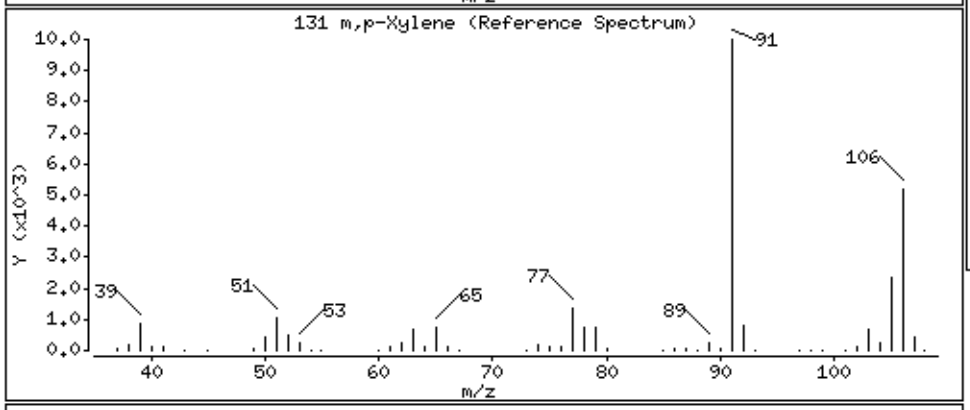
Column diameter: 0.53

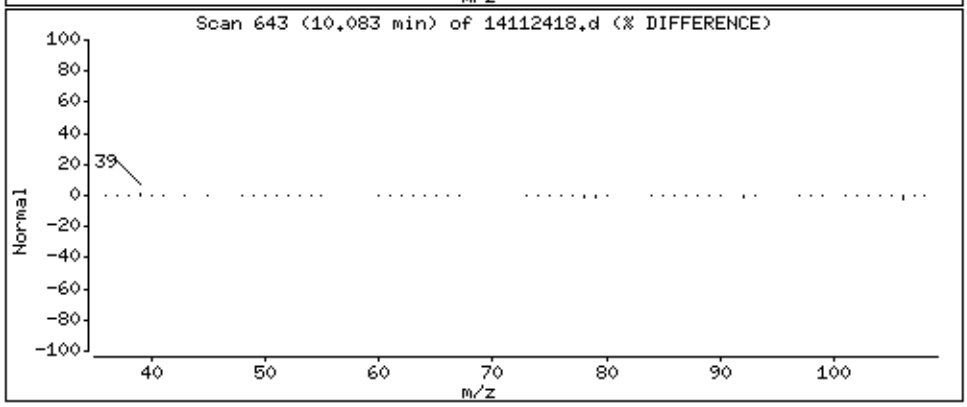
131 m,p-Xylene

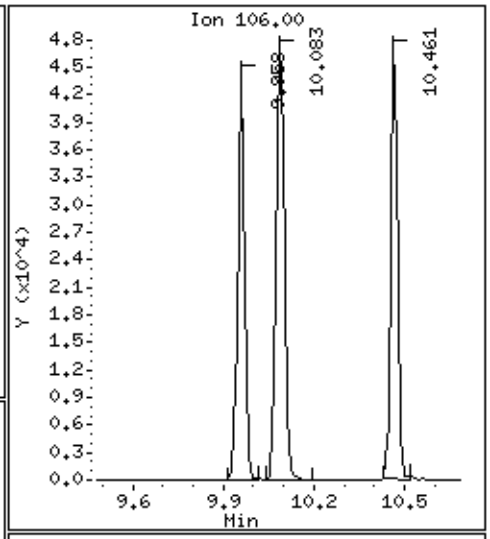
Concentration: 101.79 PPBV

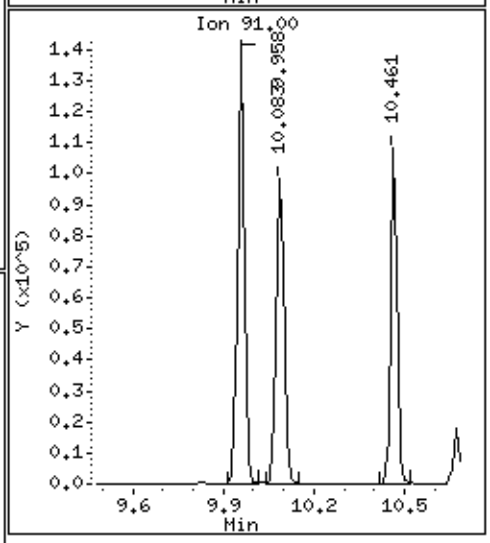












Data File: /chem/msd14.i/24nov14.b/14112418.d

Date : 24-NOV-2014 16:33

Client ID: ICV

Instrument: msd14.i

Sample Info: 50mL #2687-17A

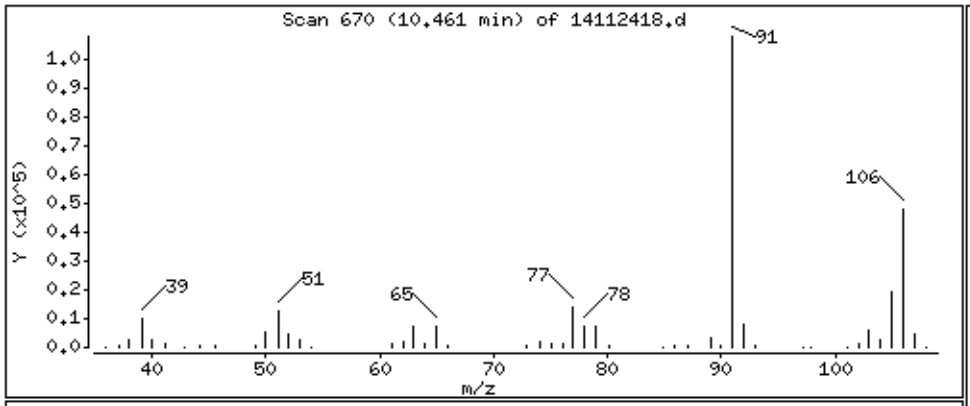
Operator: mjs

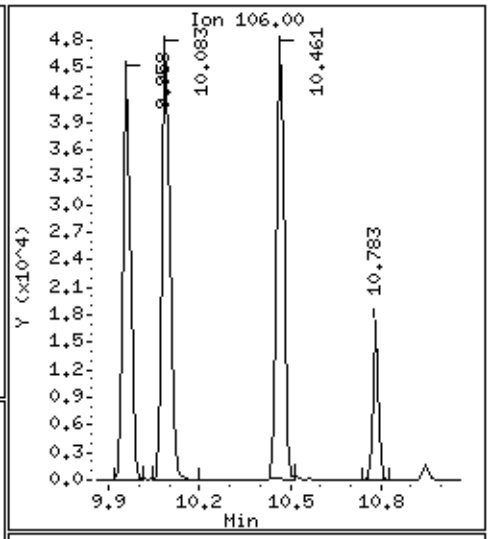
Column phase: RTx-624

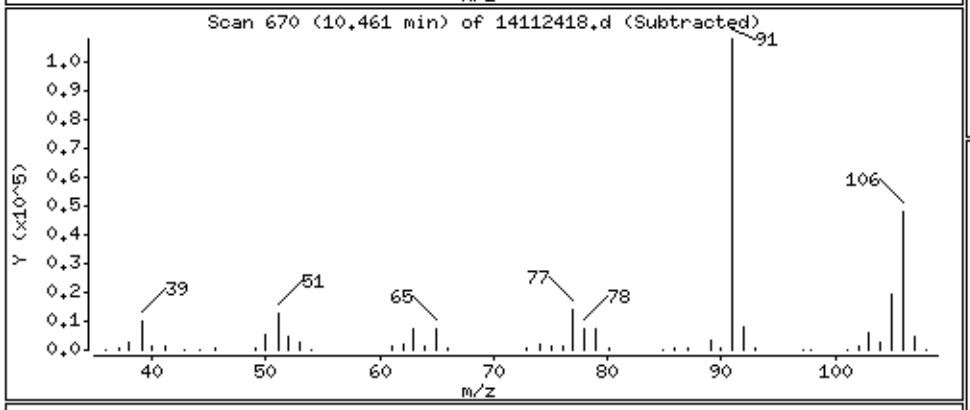
Column diameter: 0.53

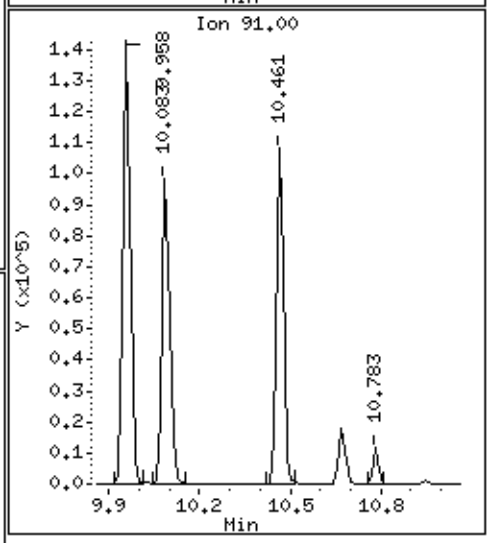
132 o-Xylene

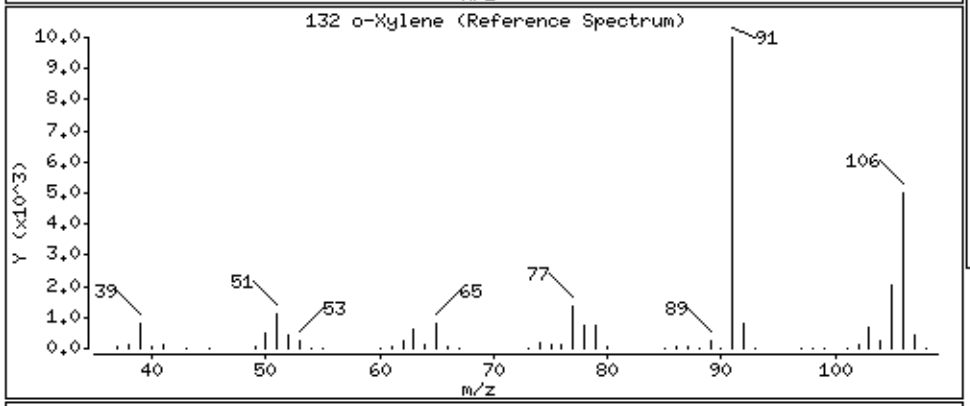
Concentration: 92.845 PPBV

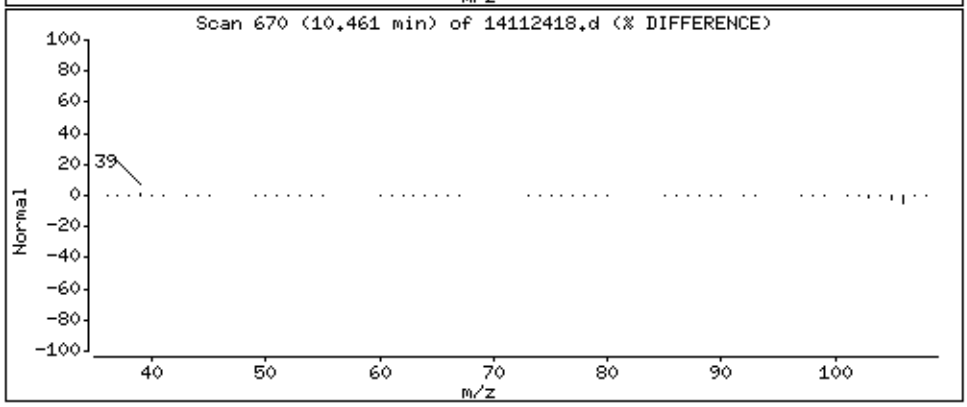












Data File: /chem/msd14.i/24nov14.b/14112418.d

Date : 24-NOV-2014 16:33

Client ID: ICV

Instrument: msd14.i

Sample Info: 50mL #2687-17A

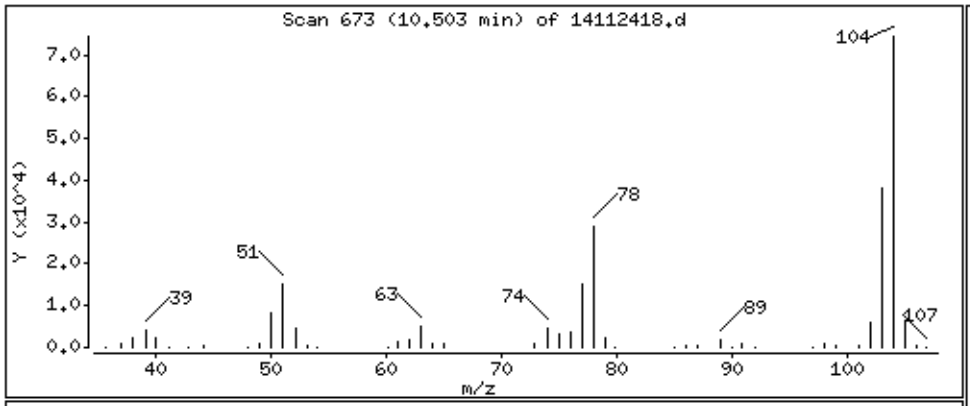
Operator: mjs

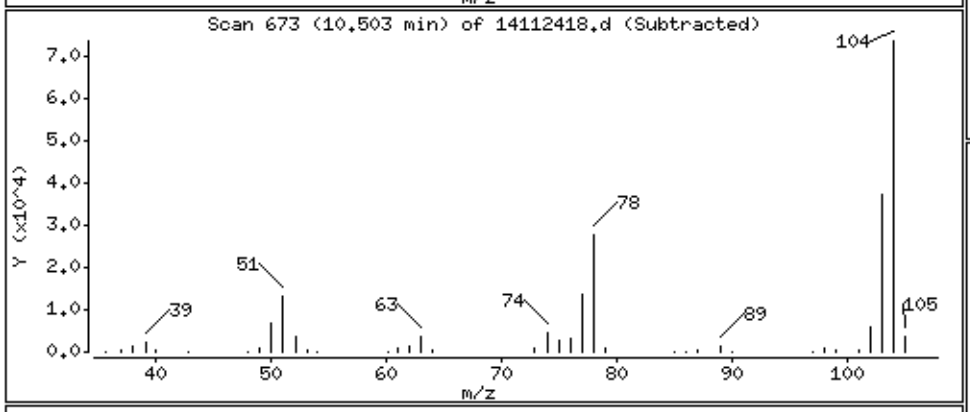
Column phase: RTx-624

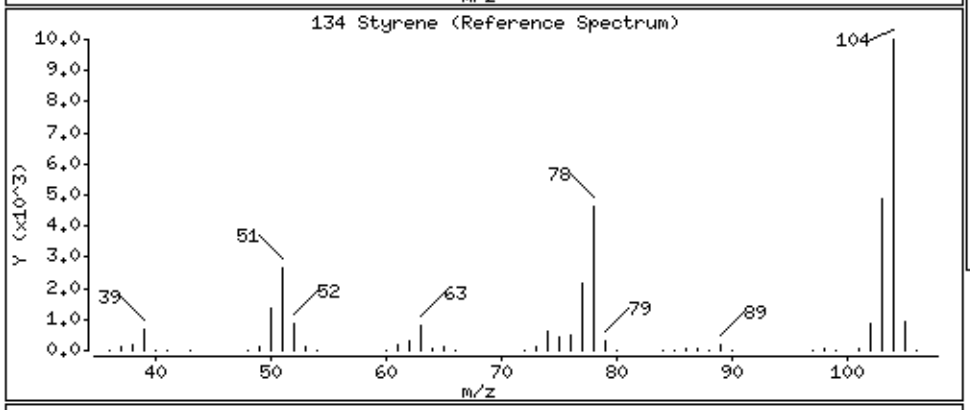
Column diameter: 0.53

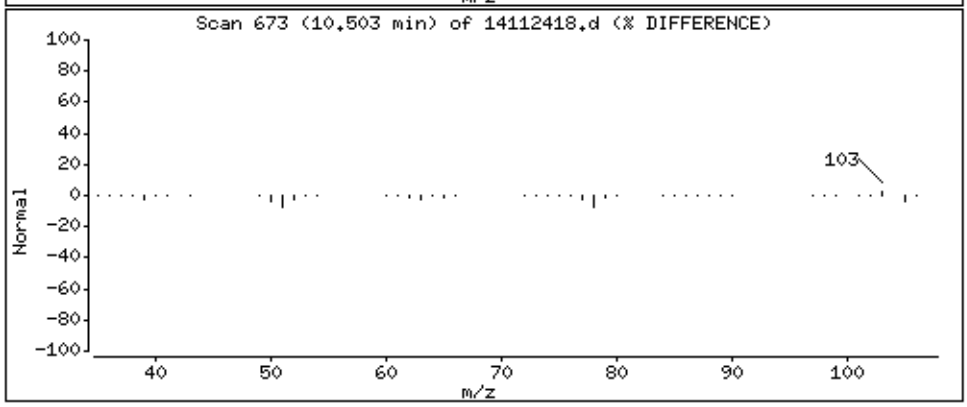
134 Styrene

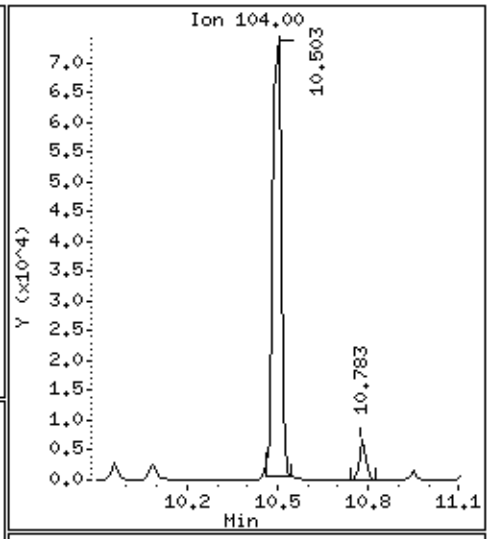
Concentration: 100.40 PPBV

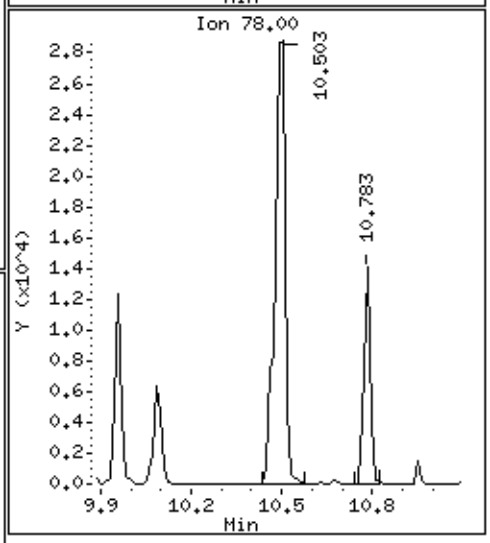












Data File: /chem/msd14.i/24nov14.b/14112418.d

Date : 24-NOV-2014 16:33

Client ID: ICV

Instrument: msd14.i

Sample Info: 50mL #2687-17A

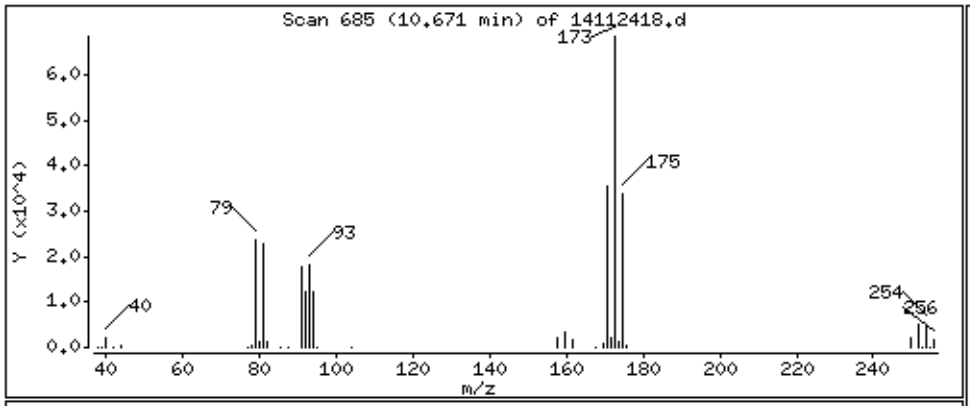
Operator: mjs

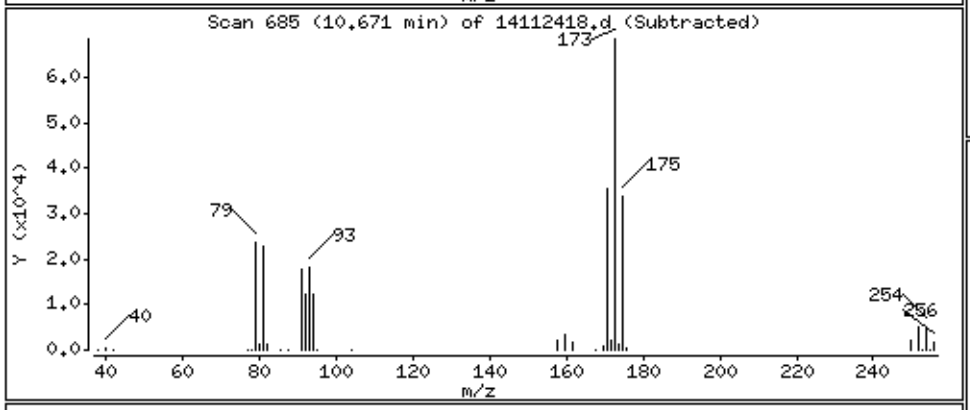
Column phase: RTx-624

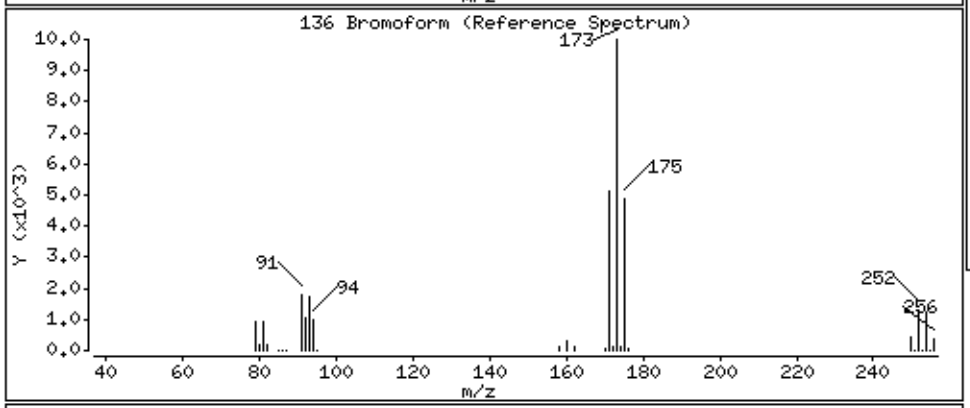
Column diameter: 0.53

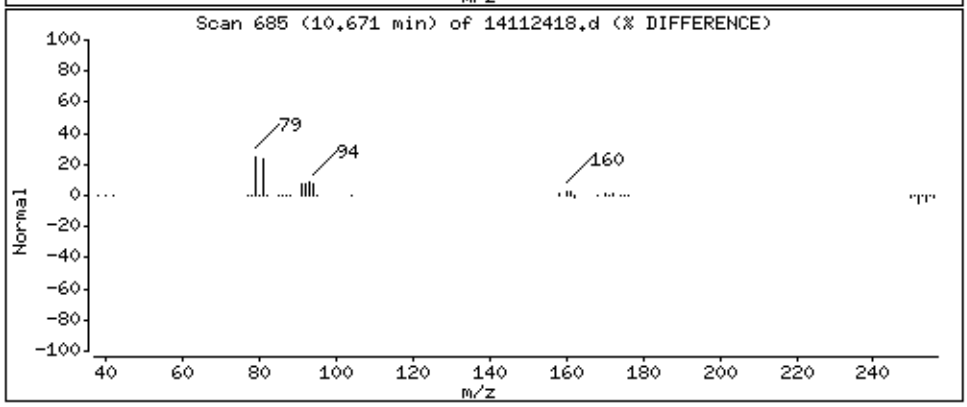
136 Bromoform

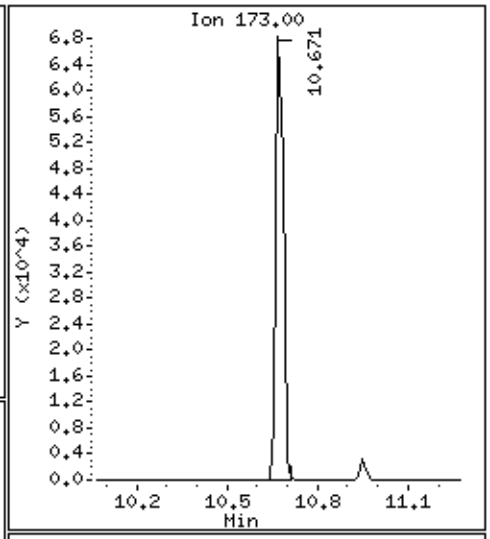
Concentration: 94.244 PPBV

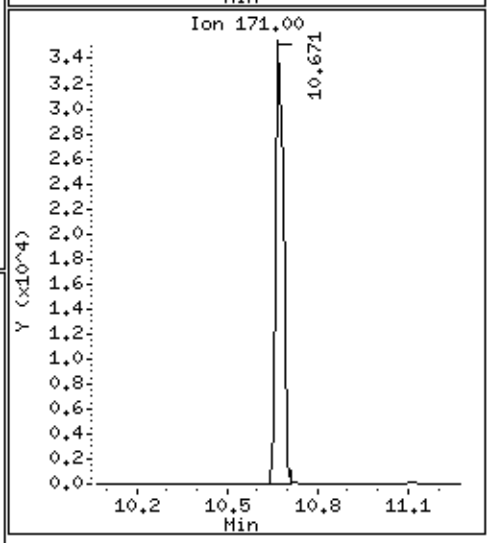












Data File: /chem/msd14.i/24nov14.b/14112418.d

Date : 24-NOV-2014 16:33

Client ID: ICV

Instrument: msd14.i

Sample Info: 50mL #2687-17A

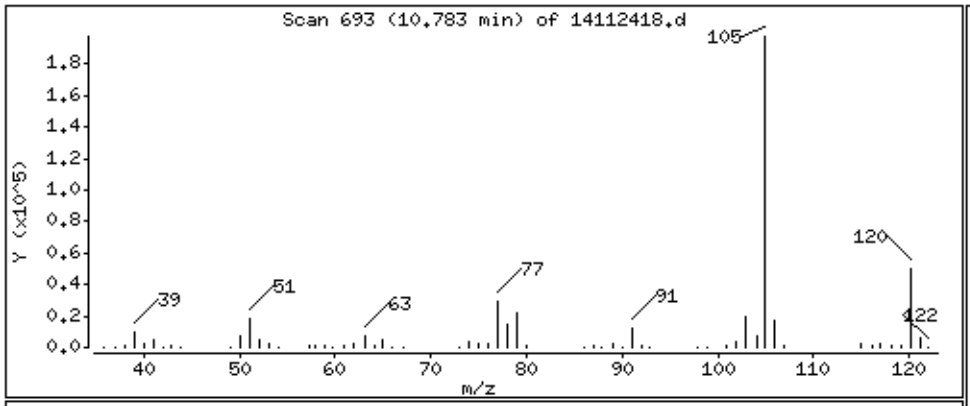
Operator: mjs

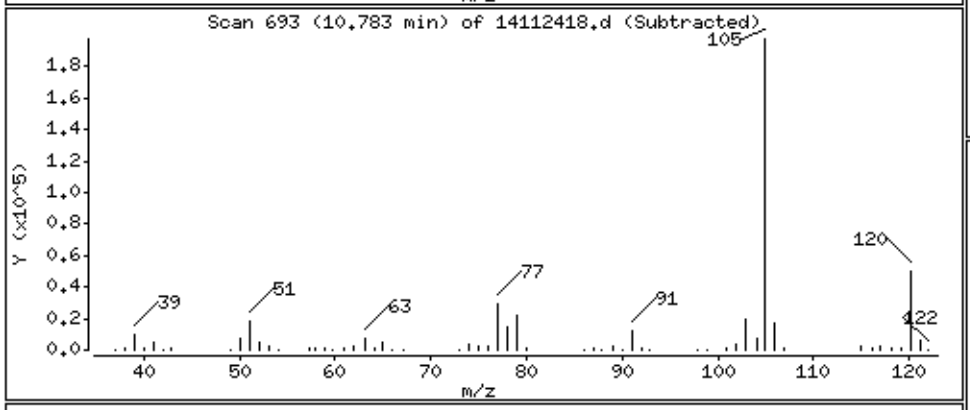
Column phase: RTx-624

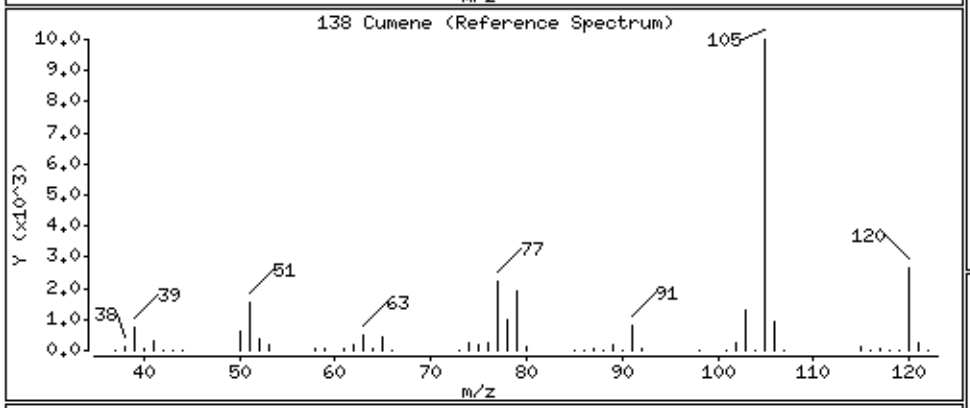
Column diameter: 0.53

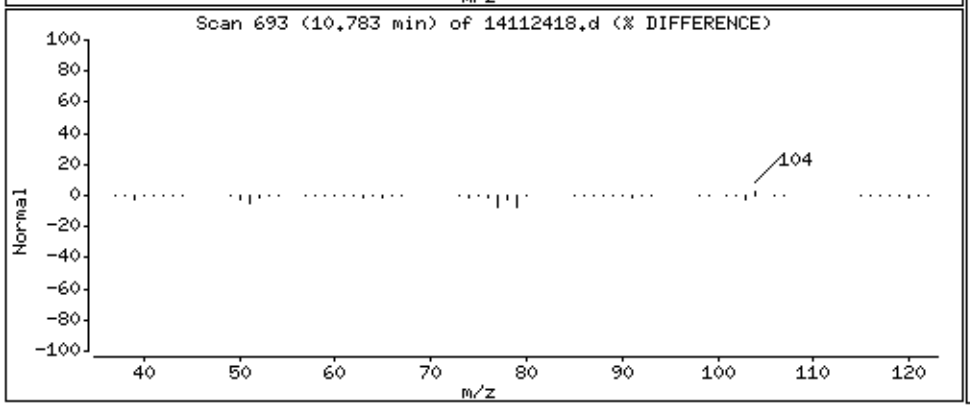
138 Cumene

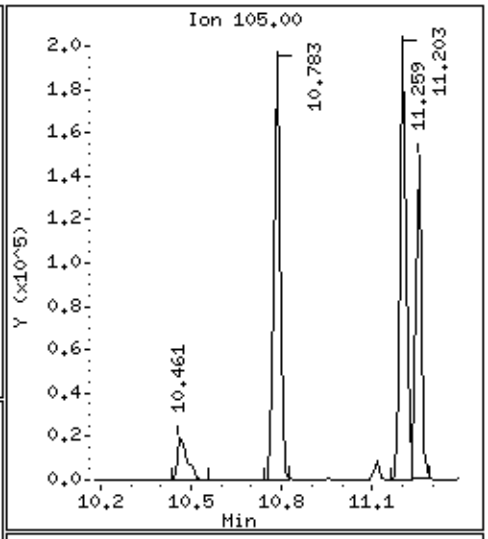
Concentration: 100.59 PPBV

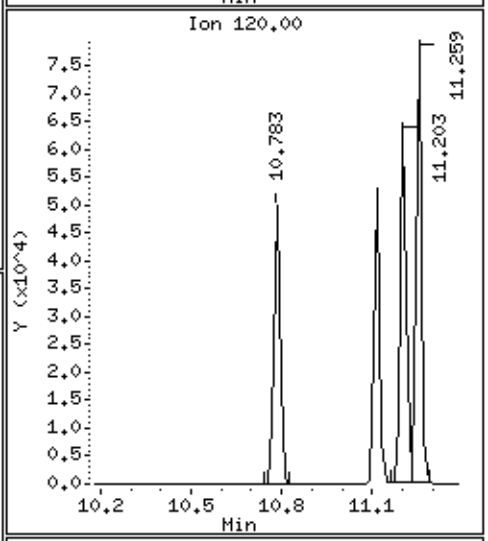


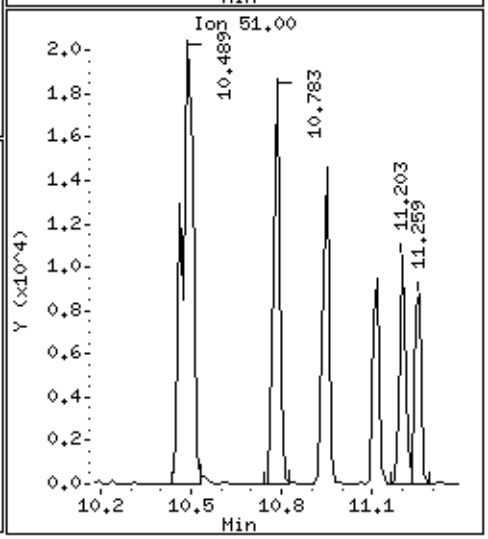












Data File: /chem/msd14.i/24nov14.b/14112418.d

Date : 24-NOV-2014 16:33

Client ID: ICV

Instrument: msd14.i

Sample Info: 50mL #2687-17A

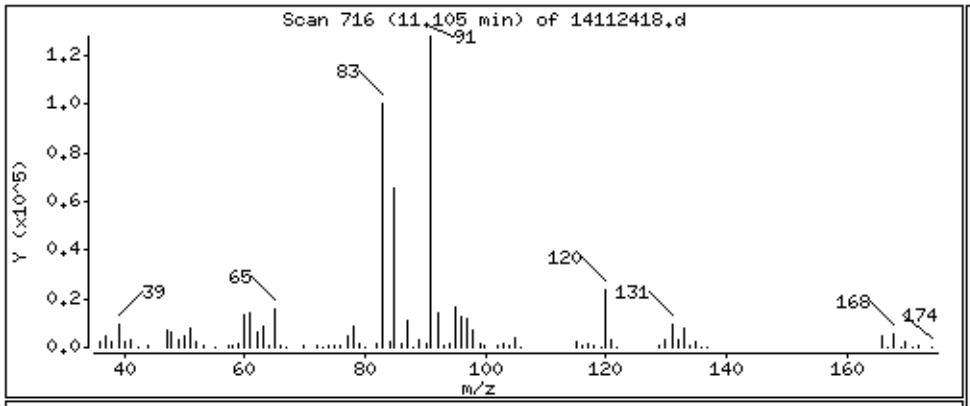
Operator: mjs

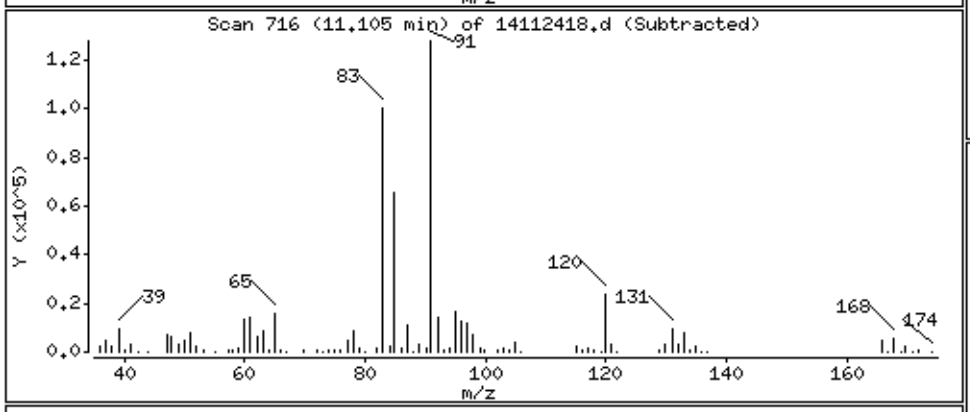
Column phase: RTx-624

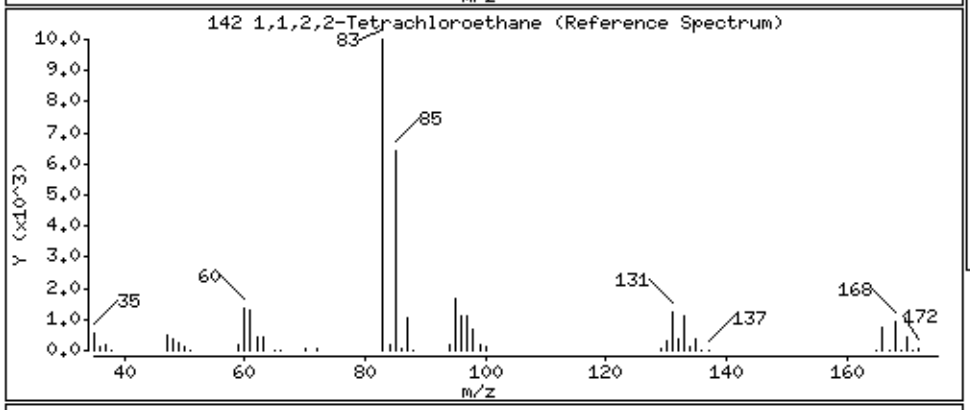
Column diameter: 0.53

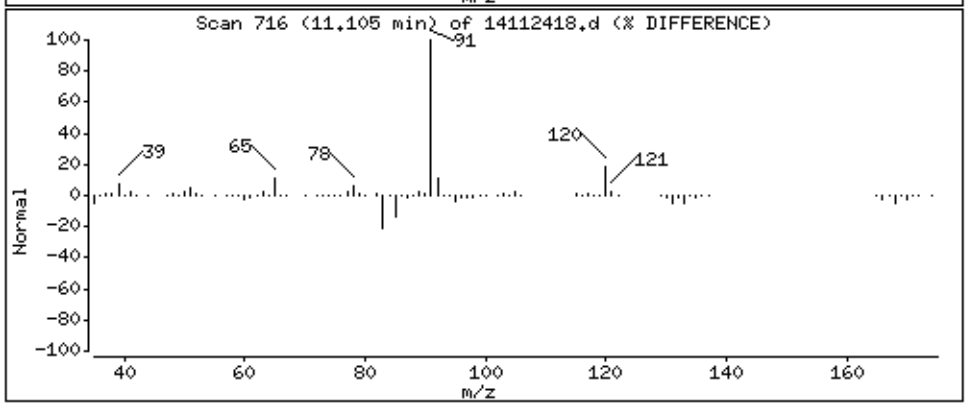
142 1,1,2,2-Tetrachloroethane

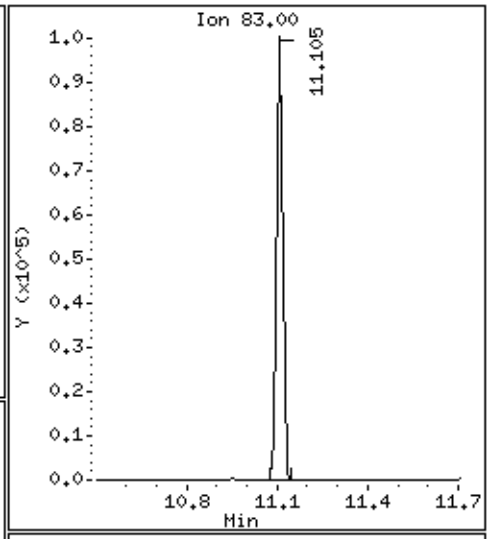
Concentration: 92.798 PPBV

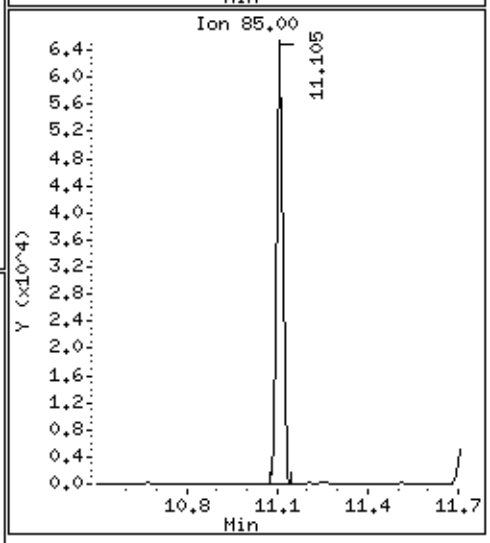












Data File: /chem/msd14.i/24nov14.b/14112418.d

Date : 24-NOV-2014 16:33

Client ID: ICV

Instrument: msd14.i

Sample Info: 50mL #2687-17A

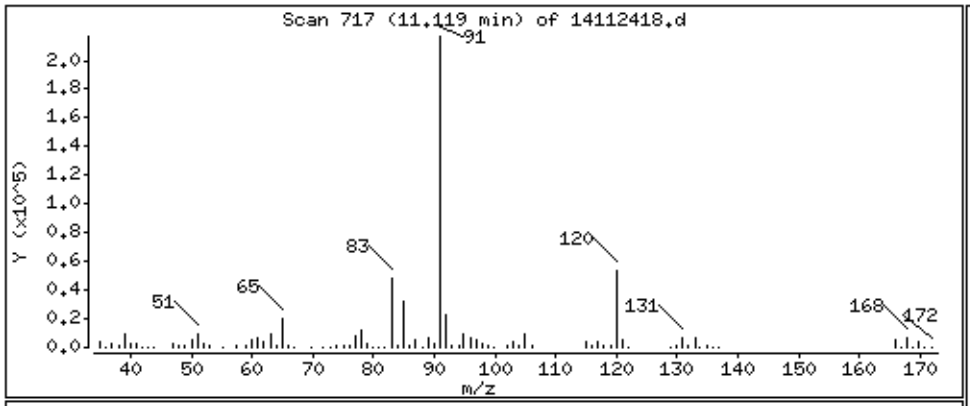
Operator: mjs

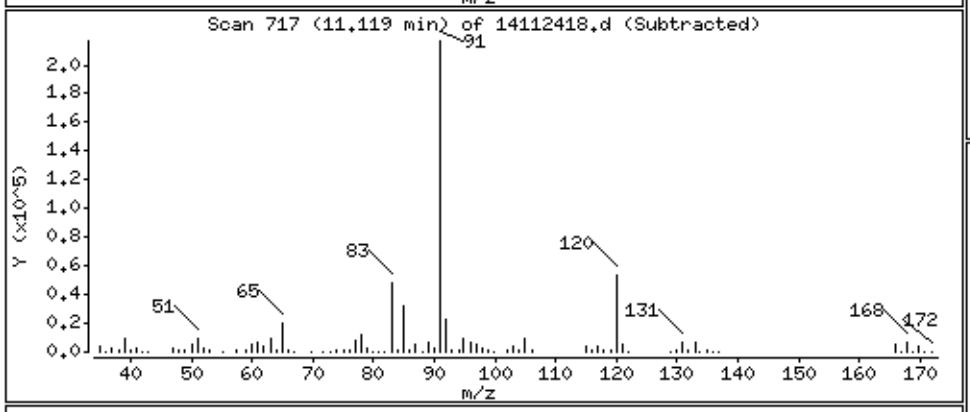
Column phase: RTx-624

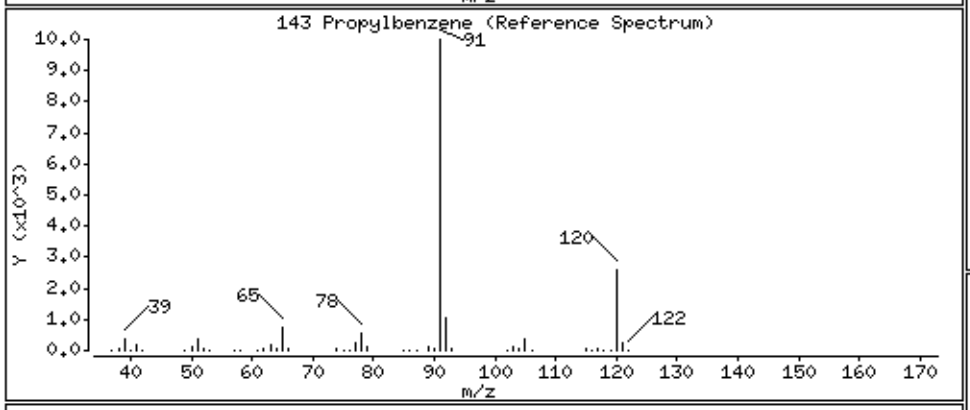
Column diameter: 0.53

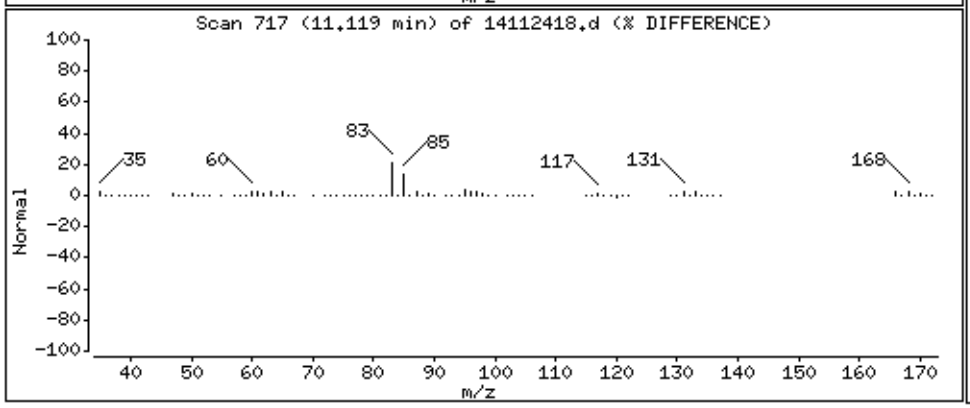
143 Propylbenzene

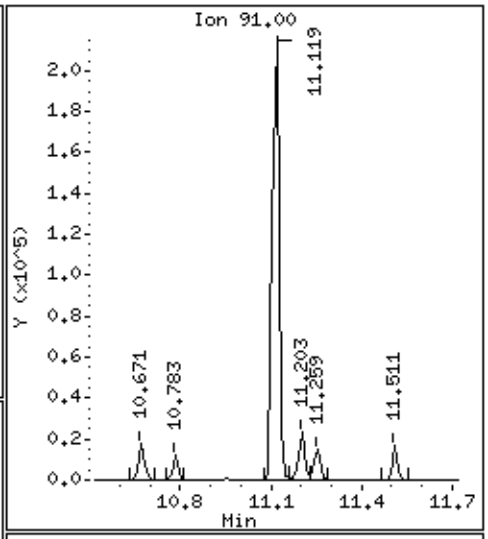
Concentration: 102.66 PPBV

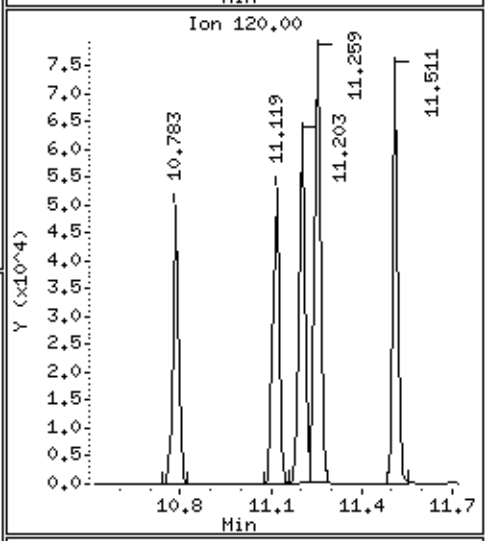


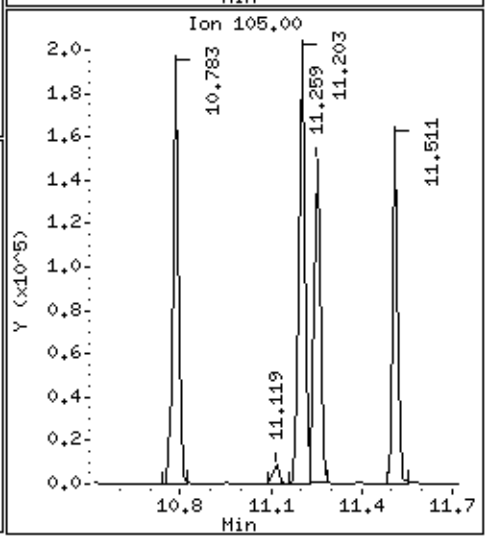












Data File: /chem/msd14.i/24nov14.b/14112418.d

Date : 24-NOV-2014 16:33

Client ID: ICV

Instrument: msd14.i

Sample Info: 50mL #2687-17A

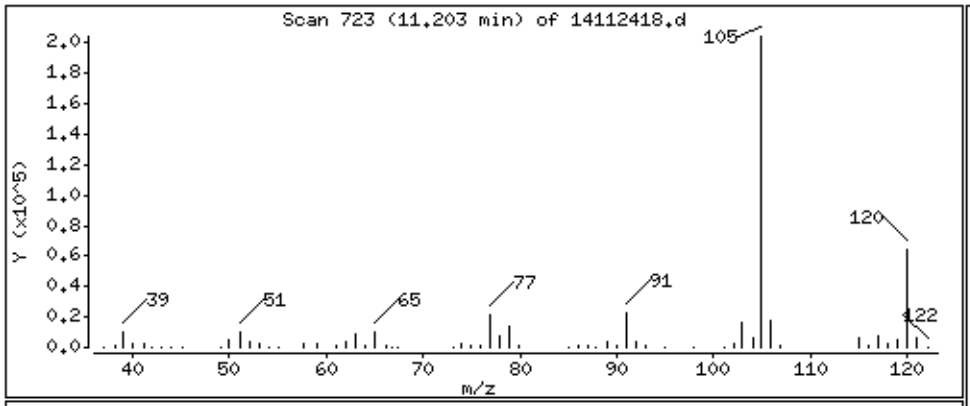
Operator: mjs

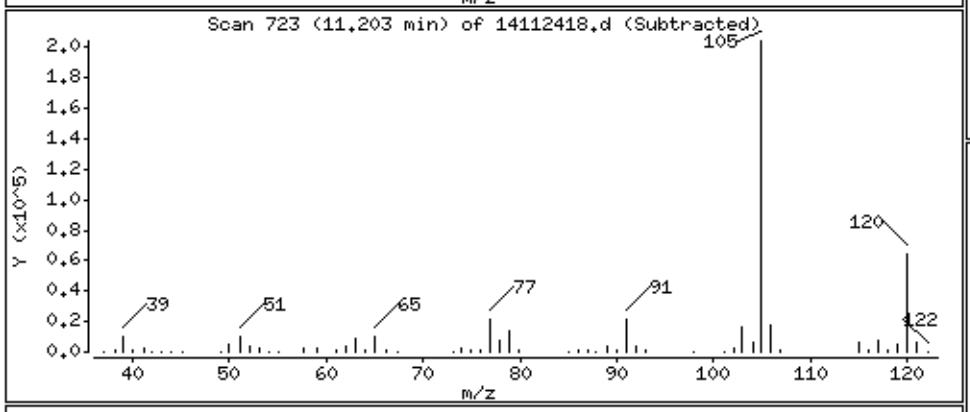
Column phase: RTx-624

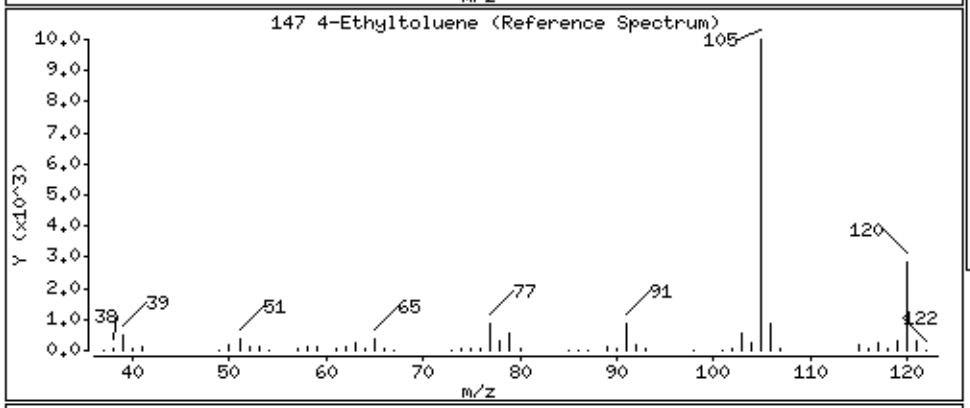
Column diameter: 0.53

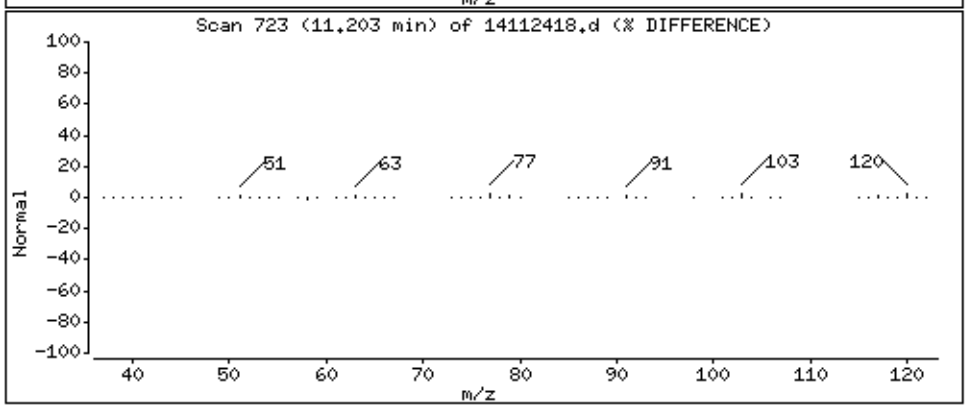
147 4-Ethyltoluene

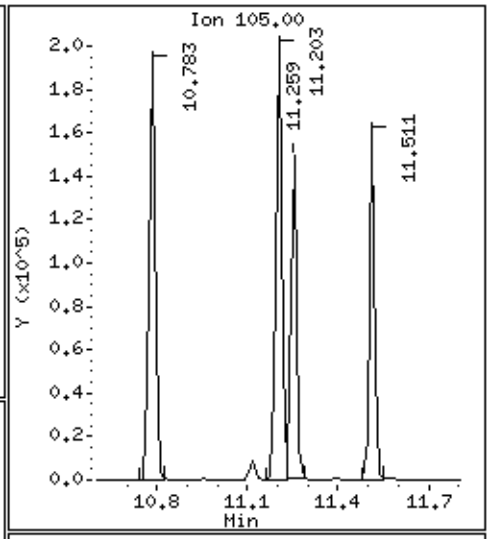
Concentration: 105.14 PPBV

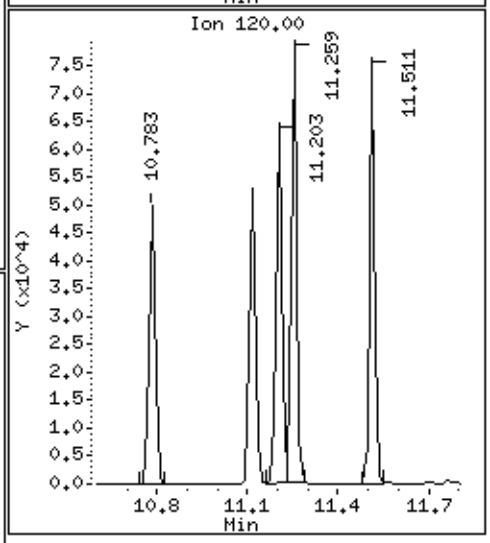












Data File: /chem/msd14.i/24nov14.b/14112418.d

Date : 24-NOV-2014 16:33

Client ID: ICV

Instrument: msd14.i

Sample Info: 50mL #2687-17A

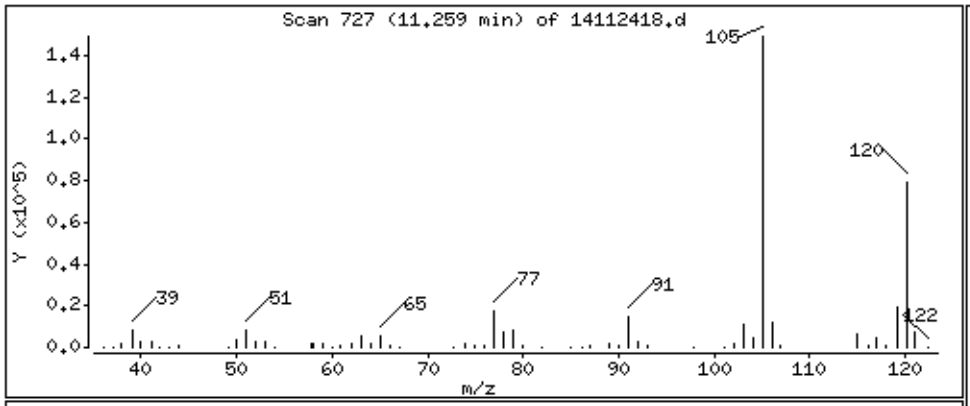
Operator: mjs

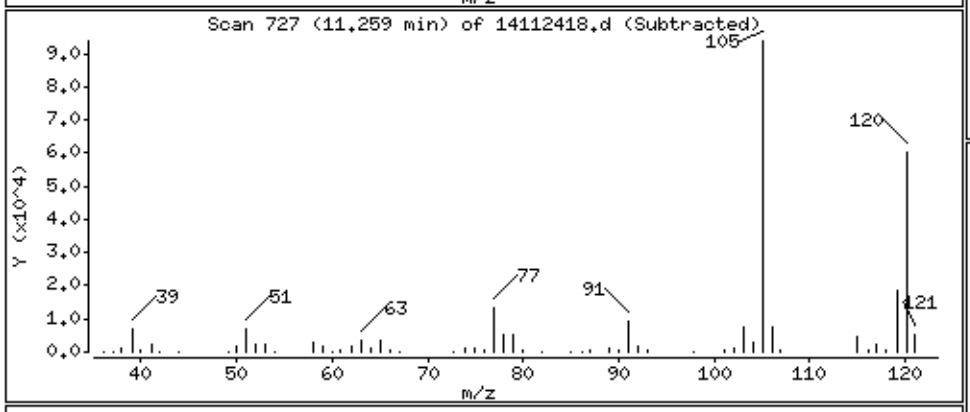
Column phase: RTx-624

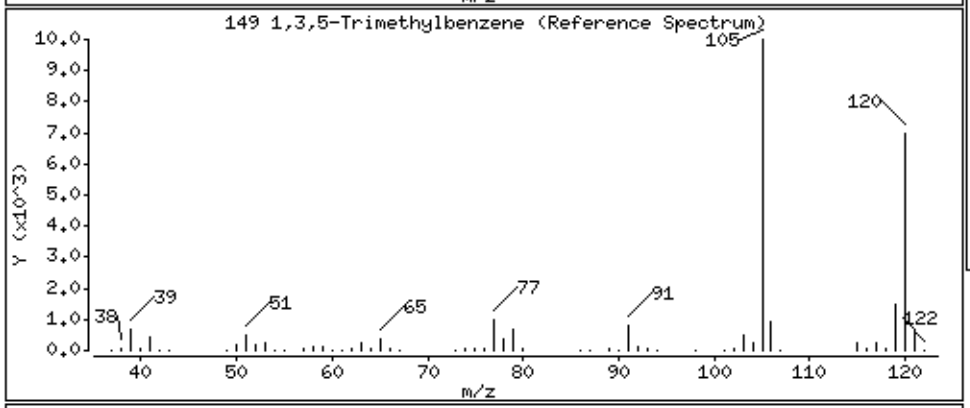
Column diameter: 0.53

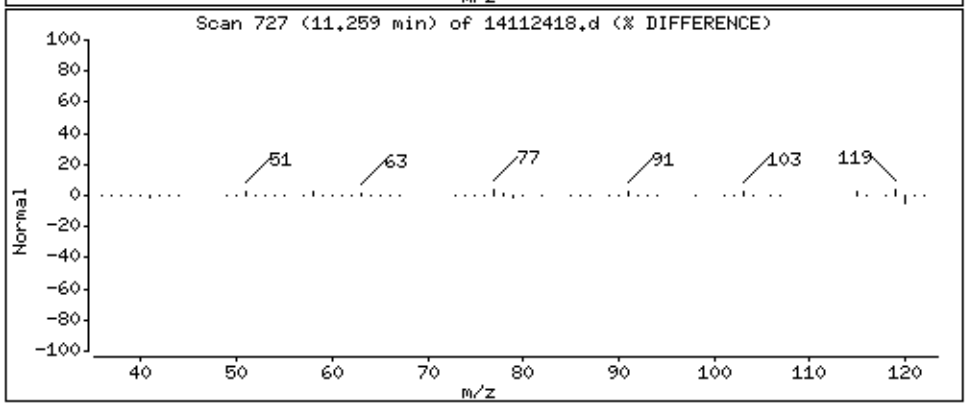
149 1,3,5-Trimethylbenzene

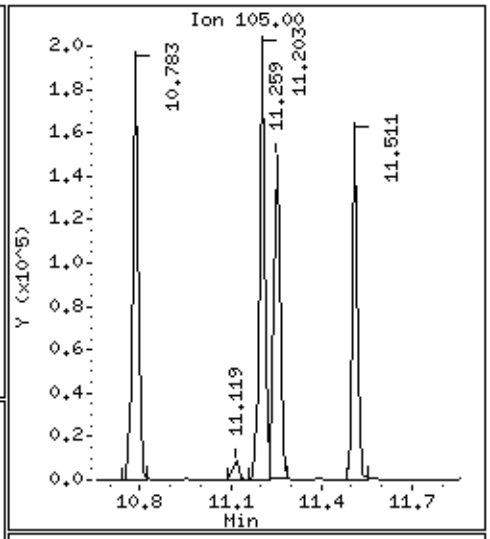
Concentration: 111.85 PPBV

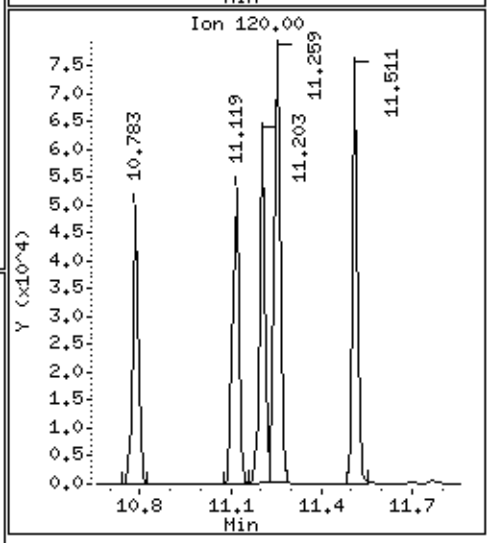












Data File: /chem/msd14.i/24nov14.b/14112418.d

Date : 24-NOV-2014 16:33

Client ID: ICV

Instrument: msd14.i

Sample Info: 50mL #2687-17A

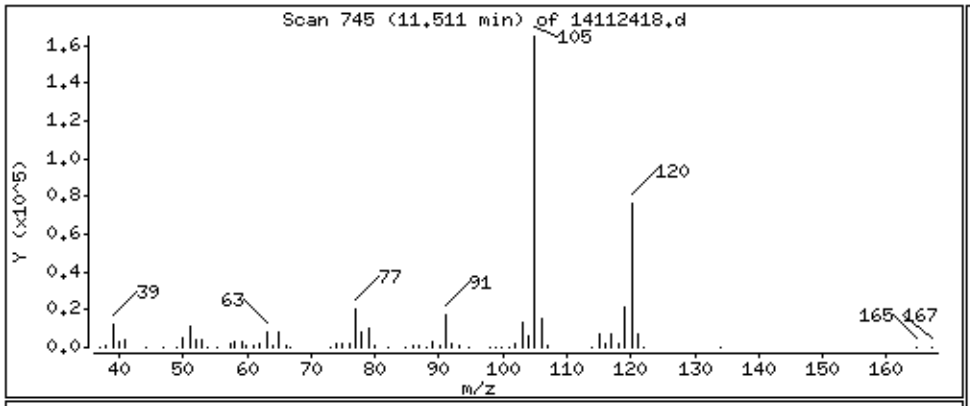
Operator: mjs

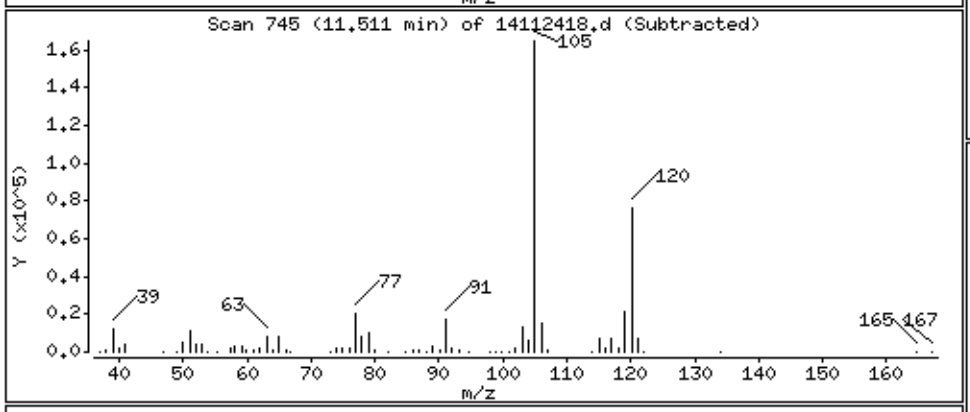
Column phase: RTx-624

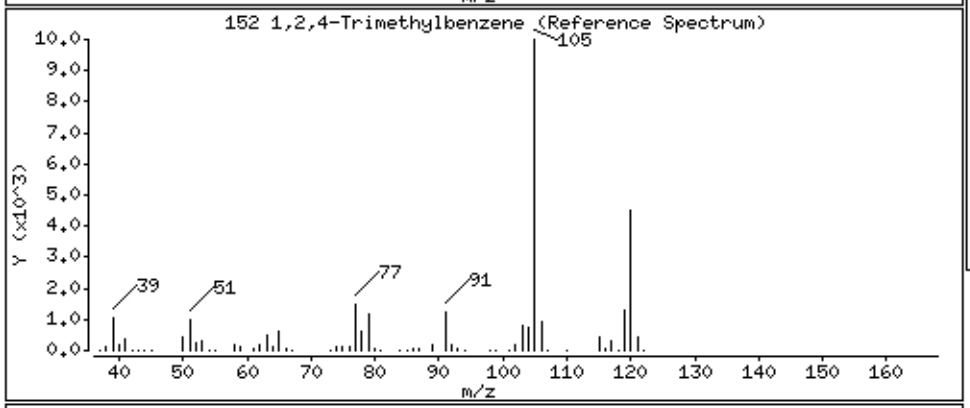
Column diameter: 0.53

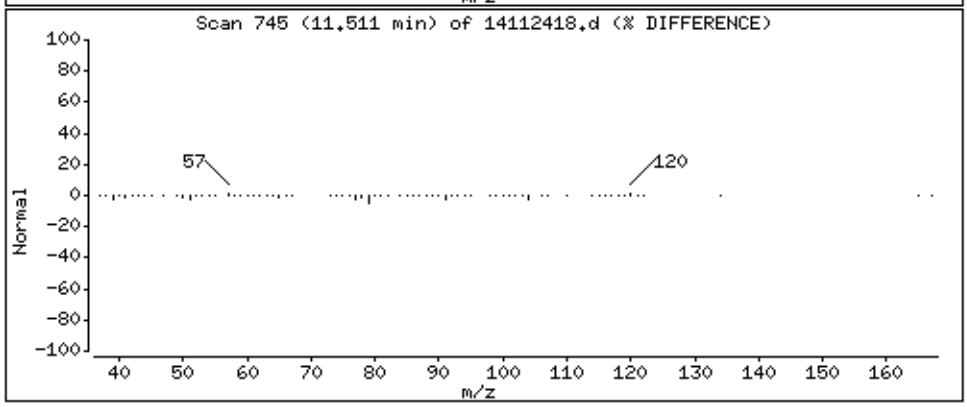
152 1,2,4-Trimethylbenzene

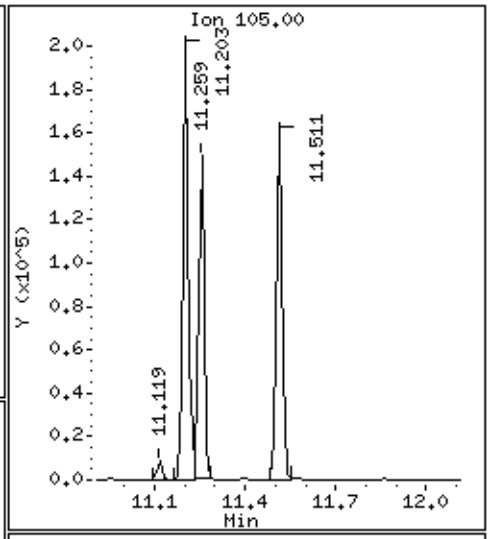
Concentration: 107.52 PPBV

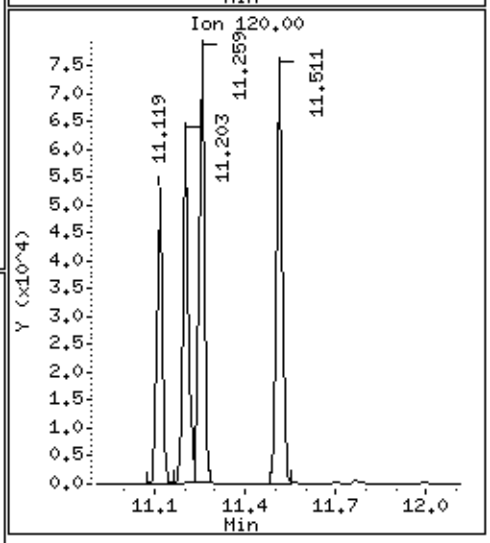












Data File: /chem/msd14.i/24nov14.b/14112418.d

Date : 24-NOV-2014 16:33

Client ID: ICV

Instrument: msd14.i

Sample Info: 50mL #2687-17A

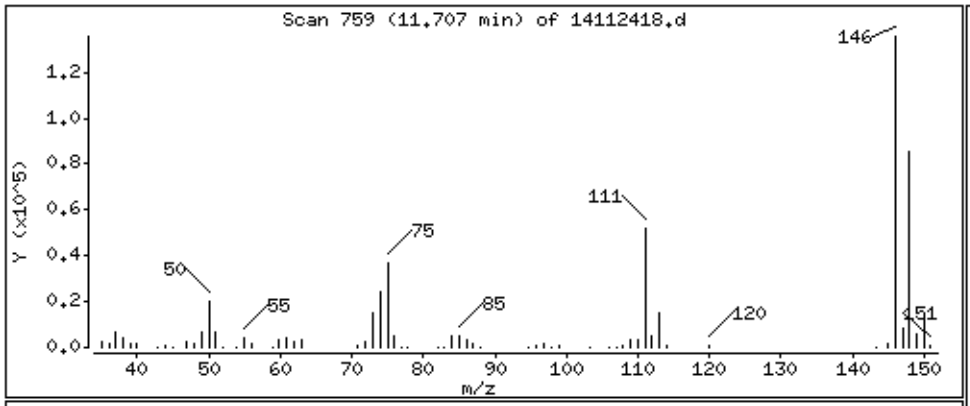
Operator: mjs

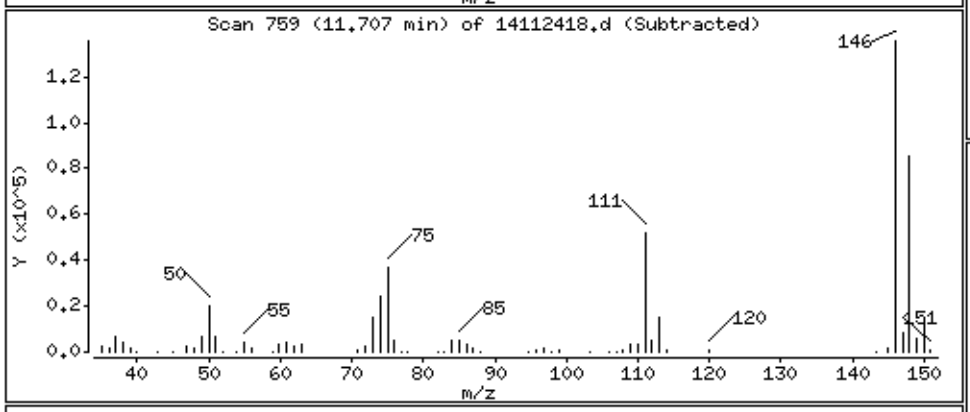
Column phase: RTx-624

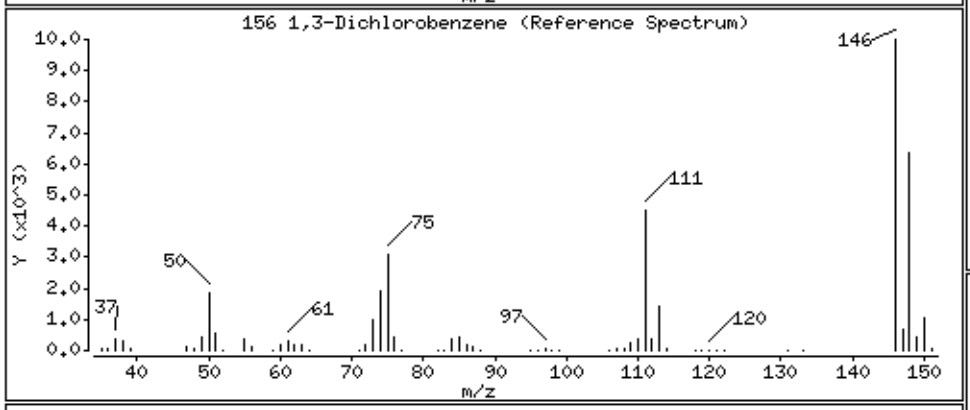
Column diameter: 0.53

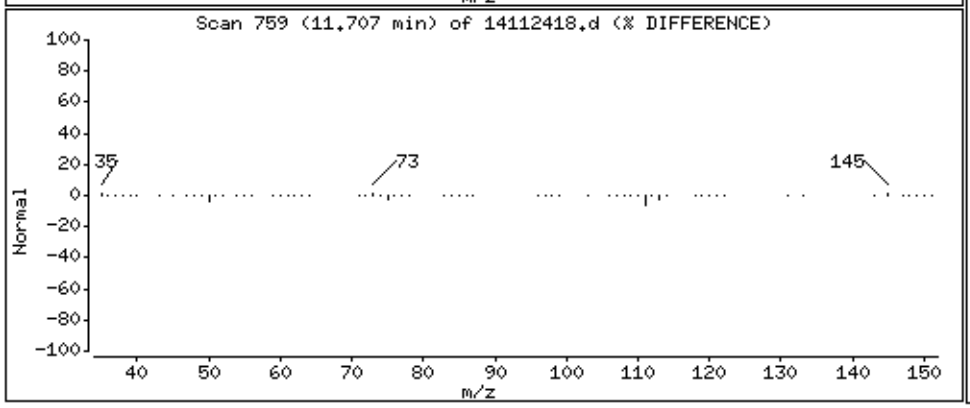
156 1,3-Dichlorobenzene

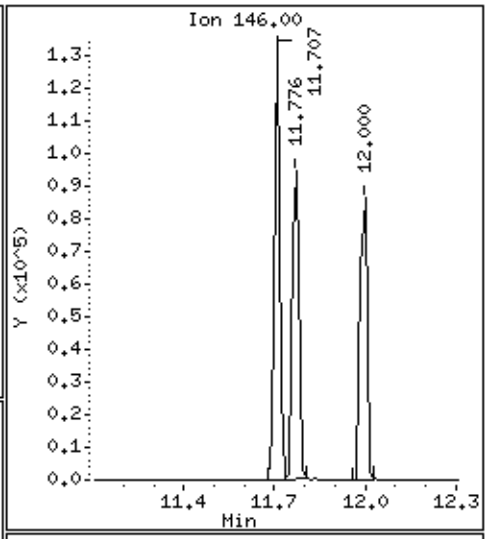
Concentration: 101.62 PPBV

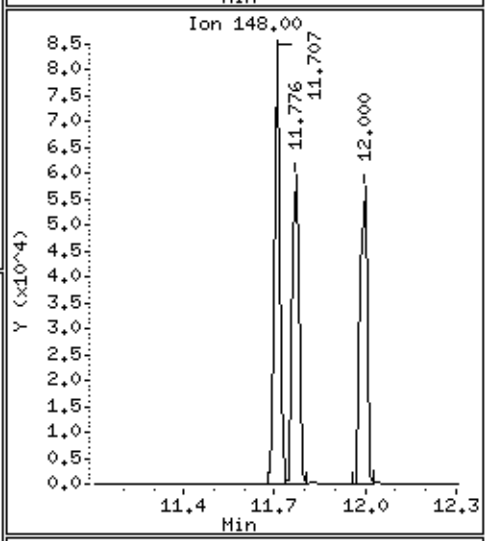


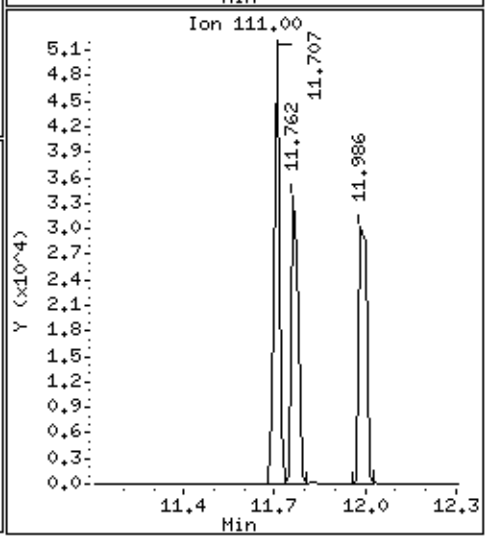












Data File: /chem/msd14.i/24nov14.b/14112418.d

Date : 24-NOV-2014 16:33

Client ID: ICV

Instrument: msd14.i

Sample Info: 50mL #2687-17A

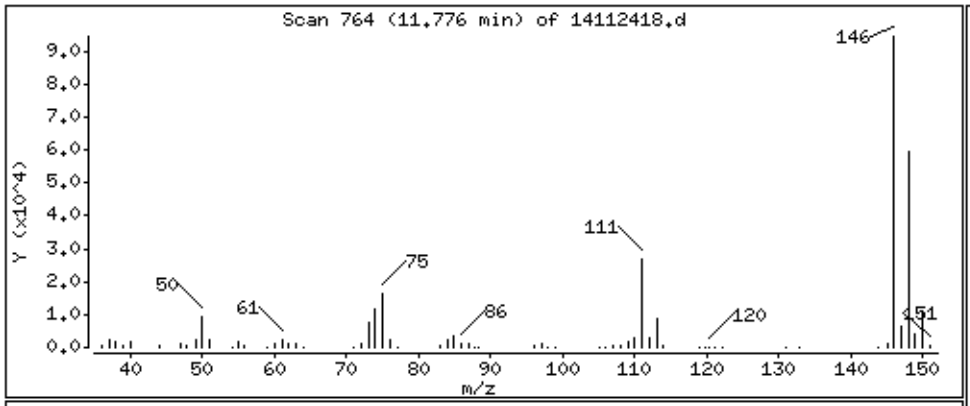
Operator: mjs

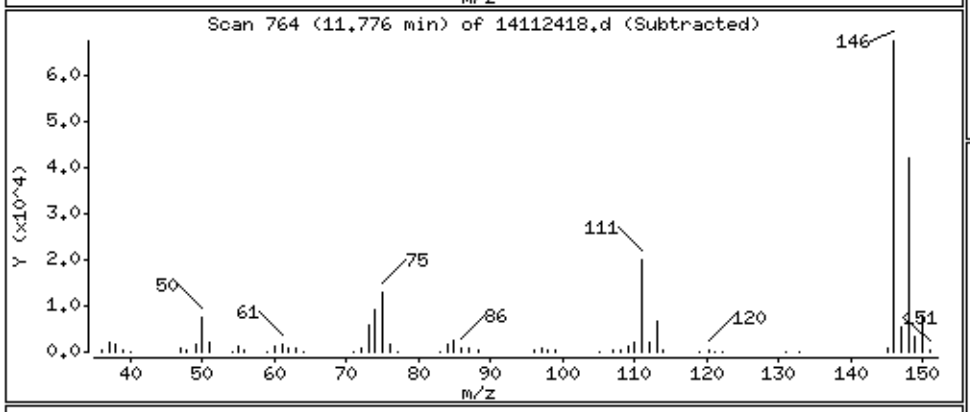
Column phase: RTx-624

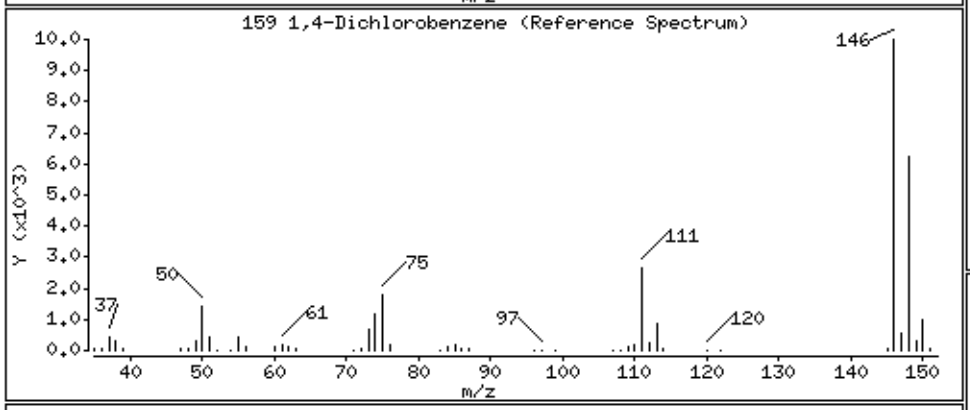
Column diameter: 0.53

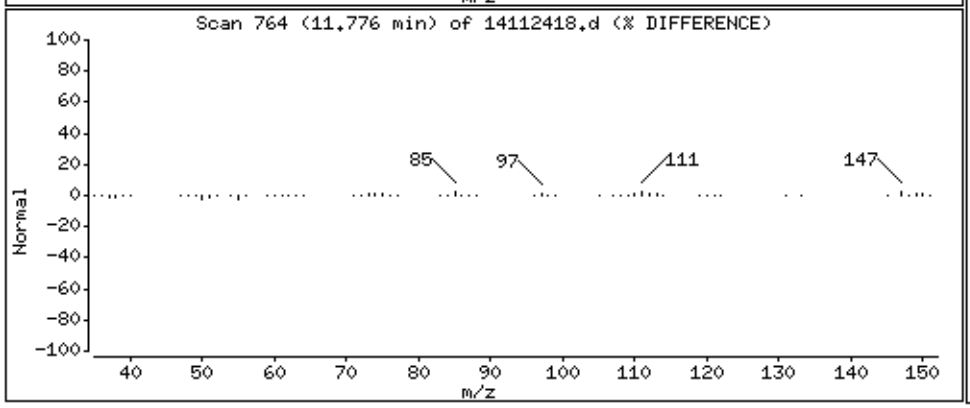
159 1,4-Dichlorobenzene

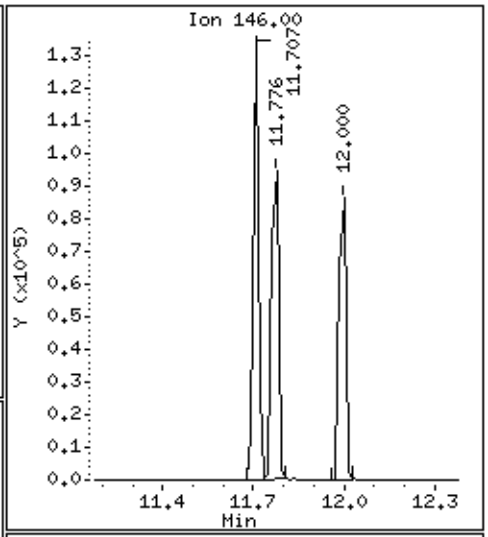
Concentration: 103.56 PPBV

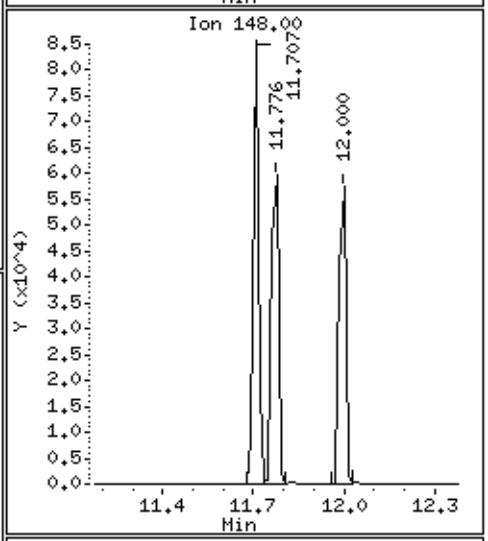


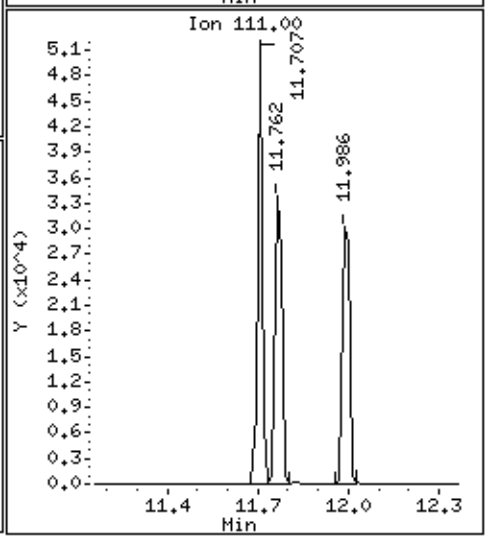












Data File: /chem/msd14.i/24nov14.b/14112418.d

Date : 24-NOV-2014 16:33

Client ID: ICV

Instrument: msd14.i

Sample Info: 50mL #2687-17A

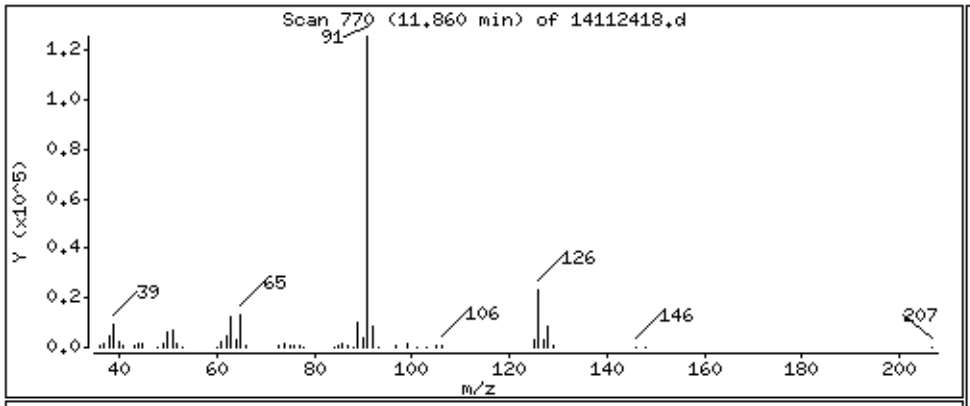
Operator: mjs

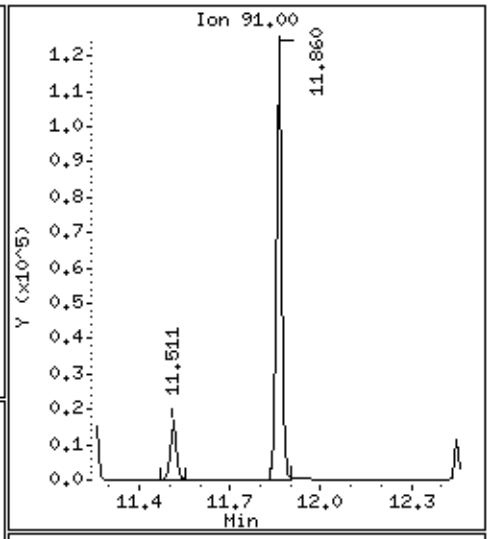
Column phase: RTx-624

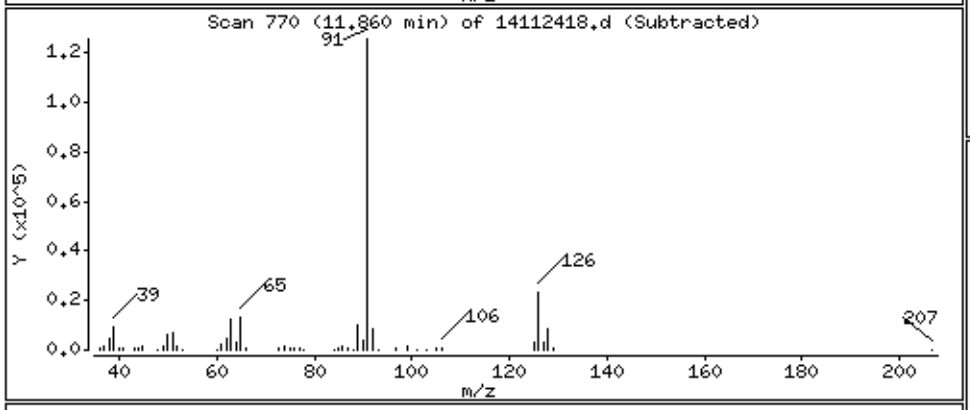
Column diameter: 0.53

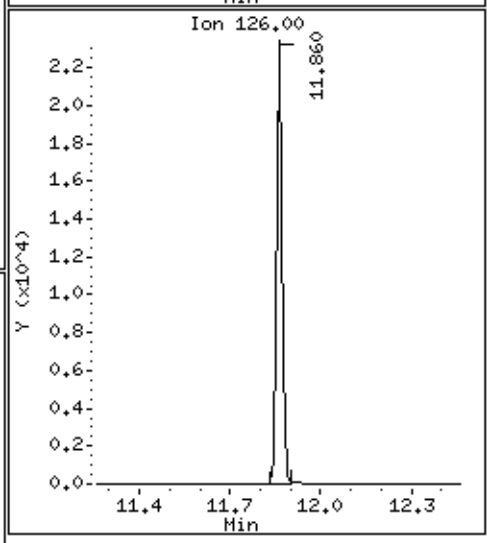
161 alpha-Chlorotoluene

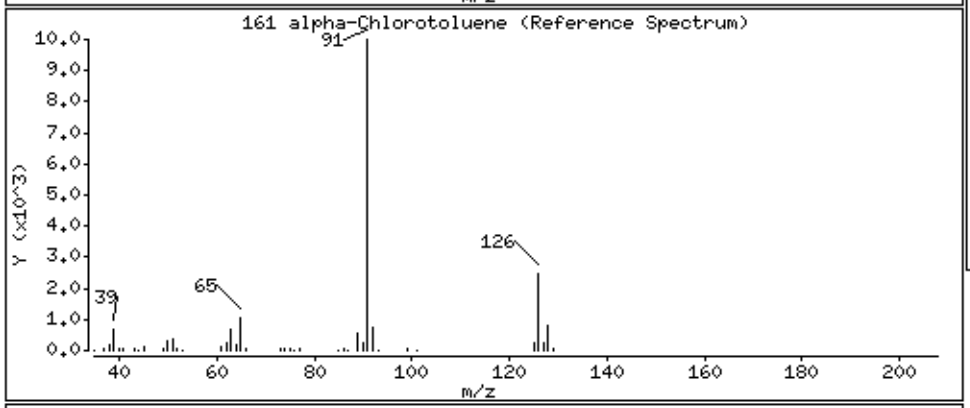
Concentration: 165.00 PPBV

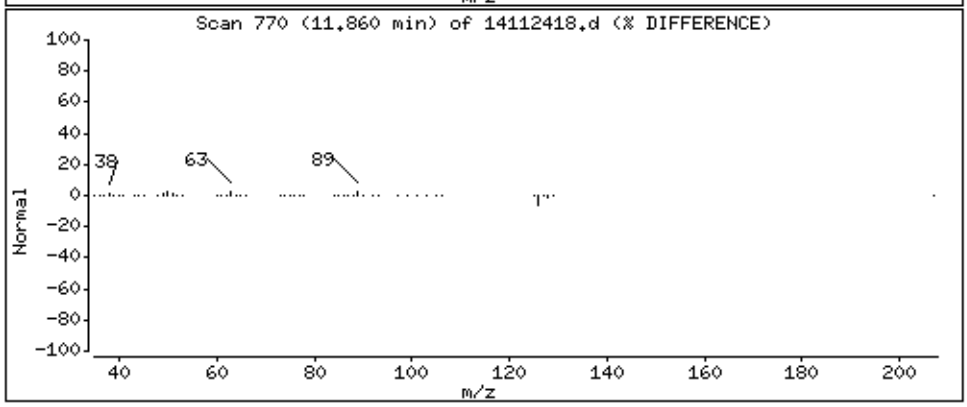












Data File: /chem/msd14.i/24nov14.b/14112418.d

Date : 24-NOV-2014 16:33

Client ID: ICV

Instrument: msd14.i

Sample Info: 50mL #2687-17A

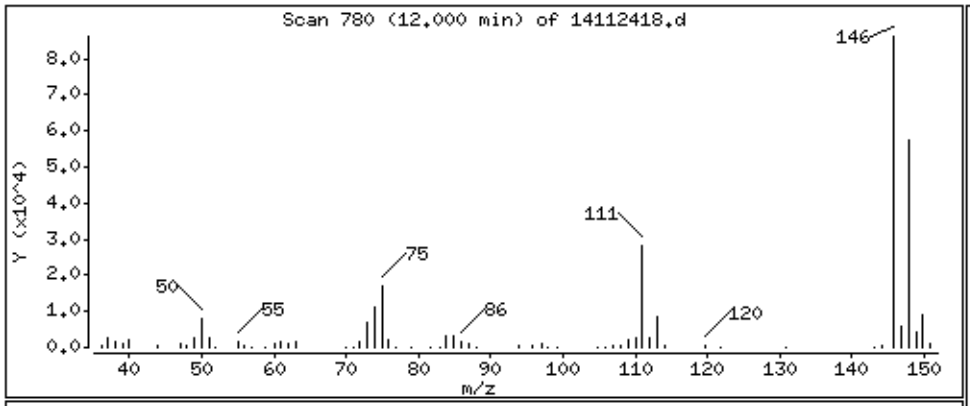
Operator: mjs

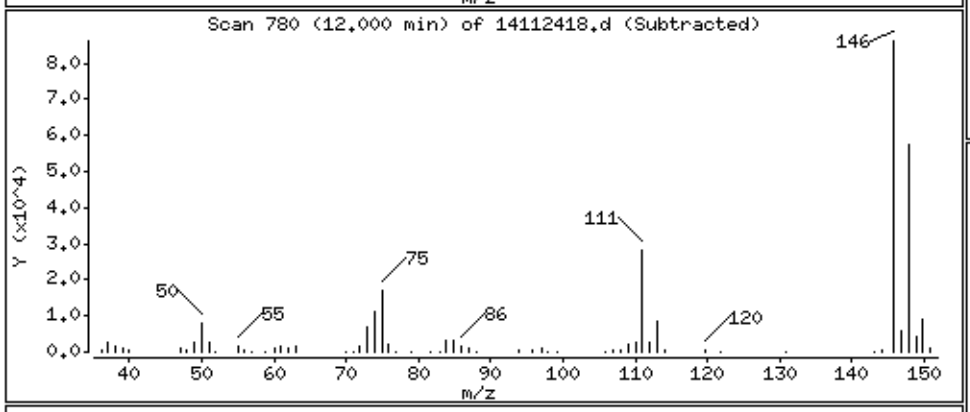
Column phase: RTx-624

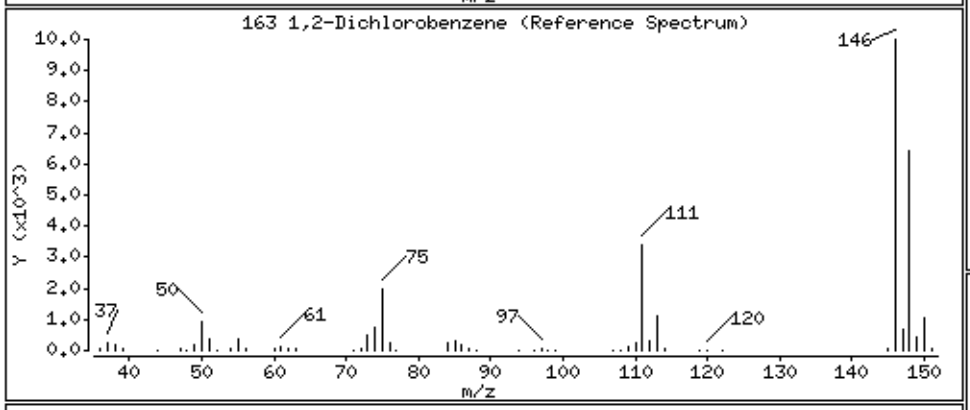
Column diameter: 0.53

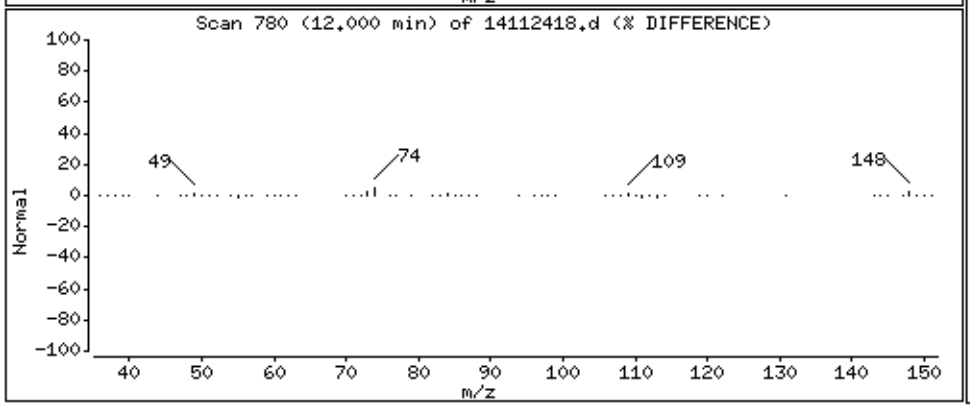
163 1,2-Dichlorobenzene

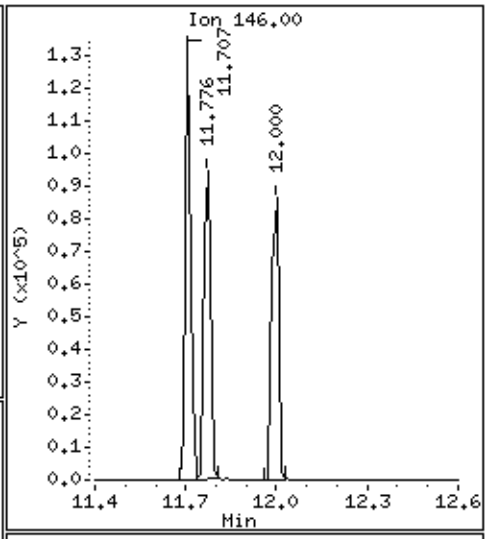
Concentration: 99.727 PPBV

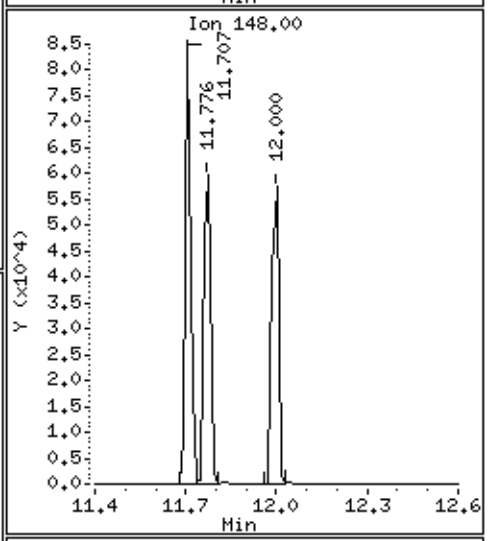


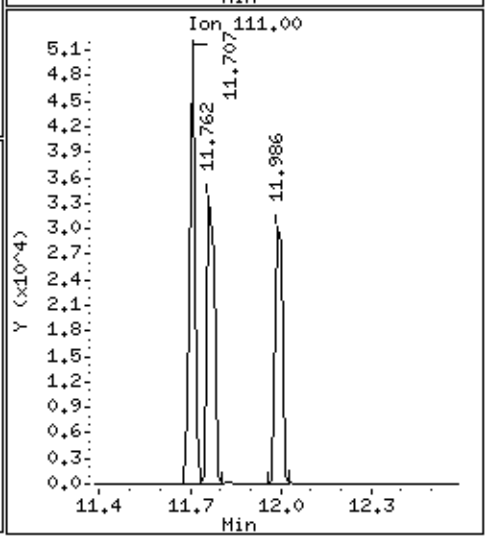












Data File: /chem/msd14.i/24nov14.b/14112418.d

Date : 24-NOV-2014 16:33

Client ID: ICV

Instrument: msd14.i

Sample Info: 50mL #2687-17A

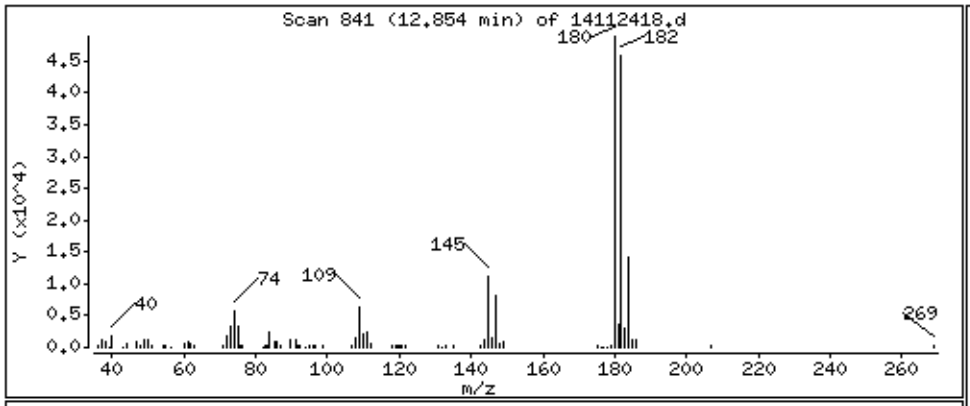
Operator: mjs

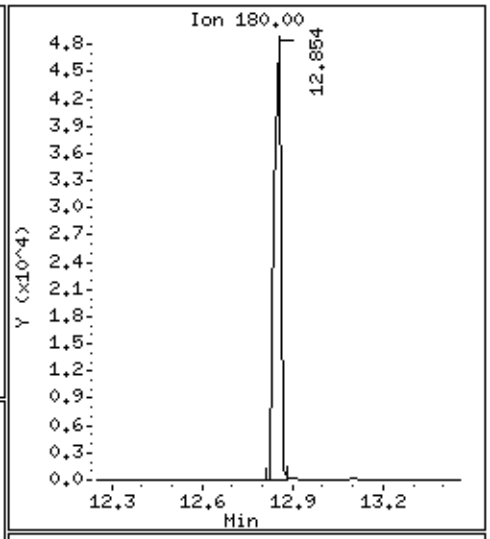
Column phase: RTx-624

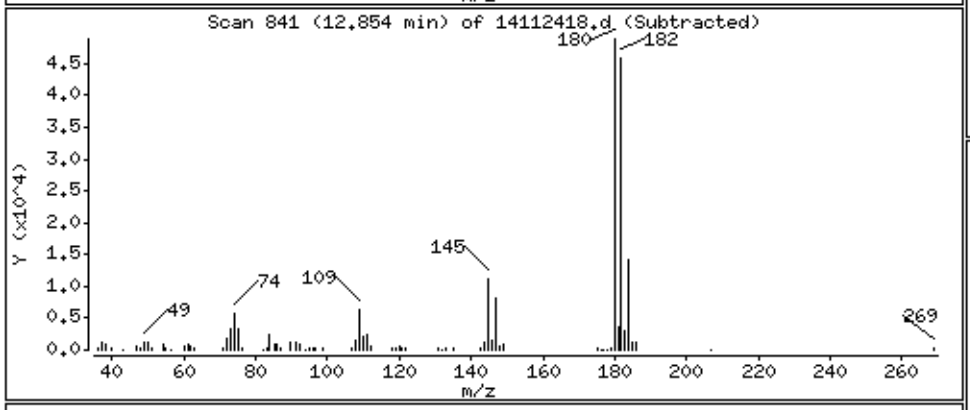
Column diameter: 0.53

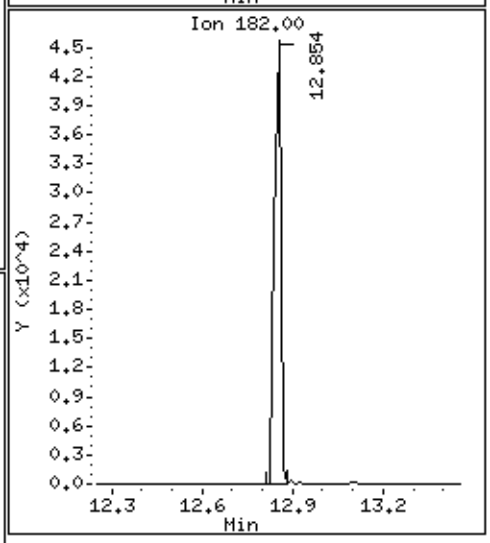
169 1,2,4-Trichlorobenzene

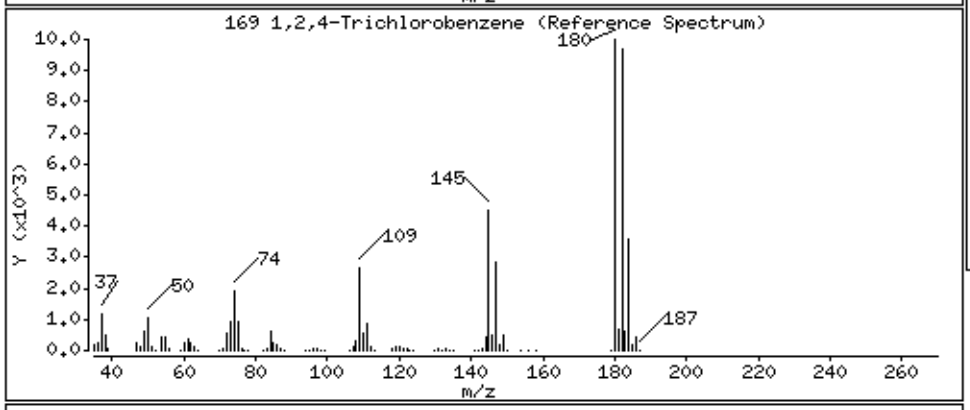
Concentration: 126.83 PPBV

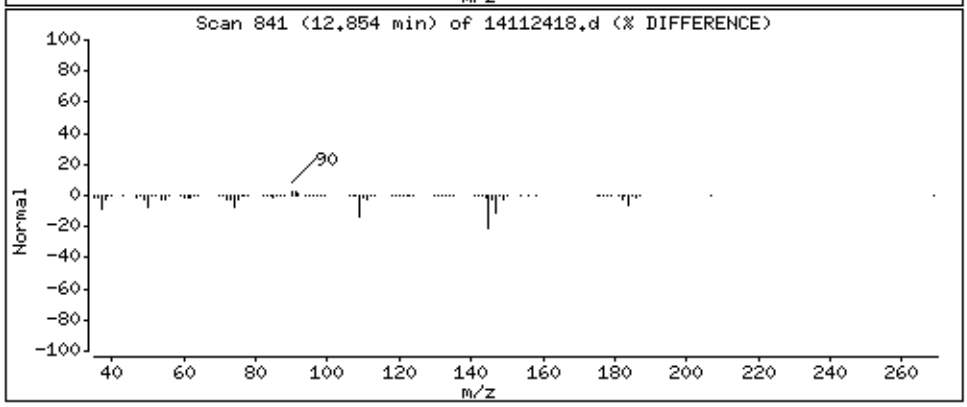












Data File: /chem/msd14.i/24nov14.b/14112418.d

Date : 24-NOV-2014 16:33

Client ID: ICV

Instrument: msd14.i

Sample Info: 50mL #2687-17A

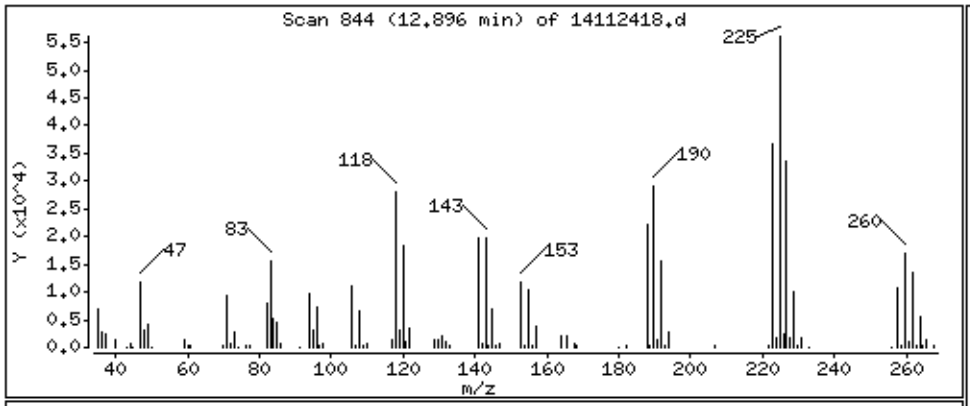
Operator: mjs

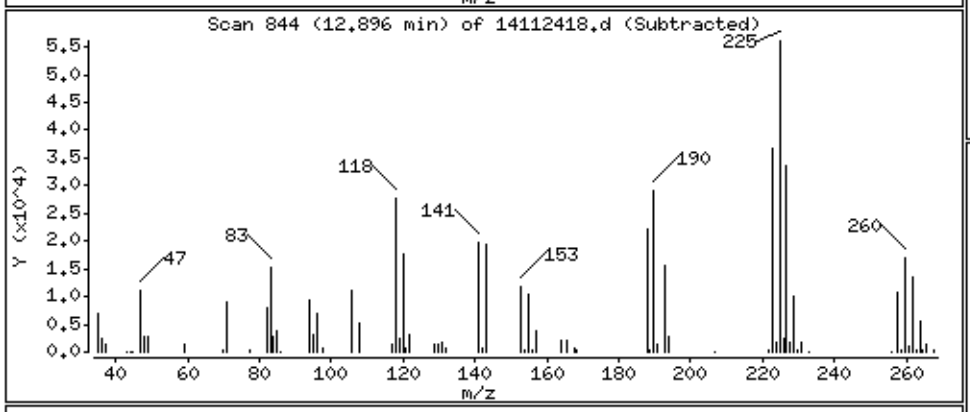
Column phase: RTx-624

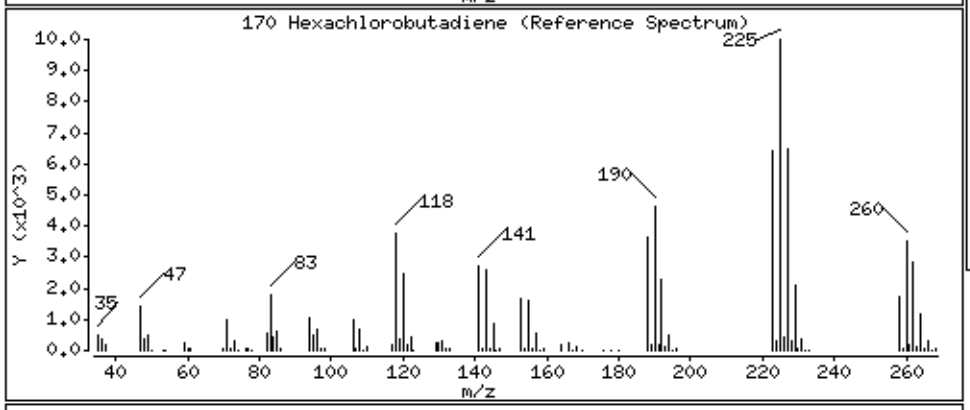
Column diameter: 0.53

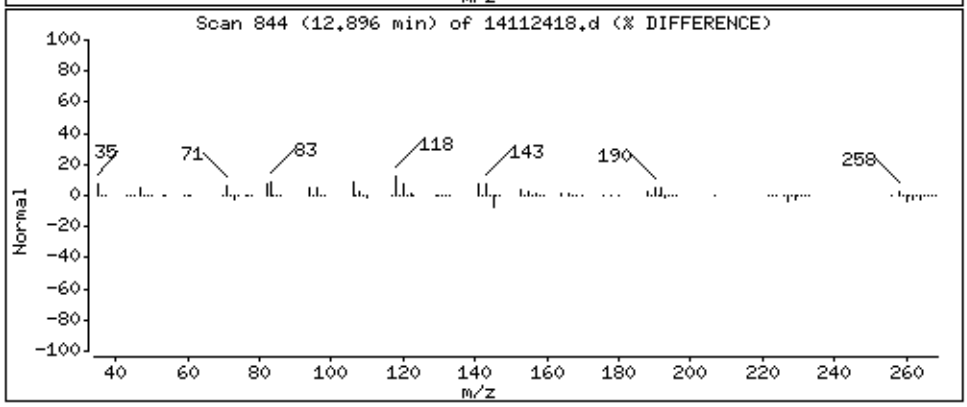
170 Hexachlorobutadiene

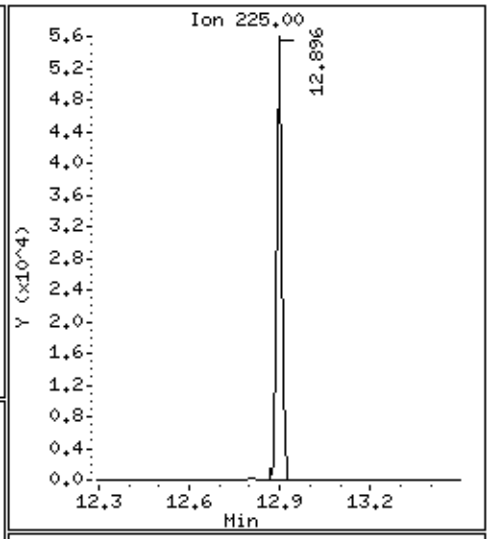
Concentration: 137.16 PPBV

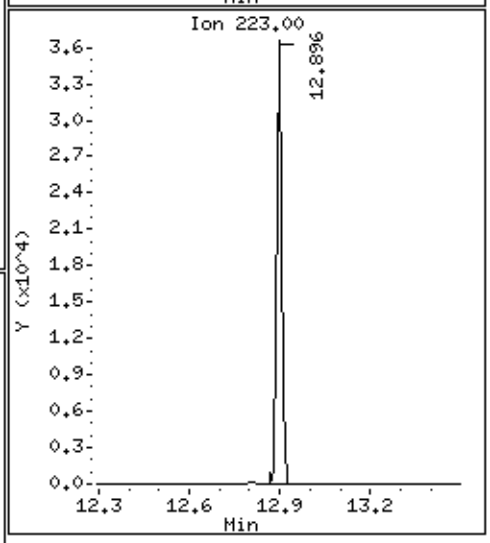












Data File: /chem/msd14.i/24nov14.b/14112418.d

Date : 24-NOV-2014 16:33

Client ID: ICV

Instrument: msd14.i

Sample Info: 50mL #2687-17A

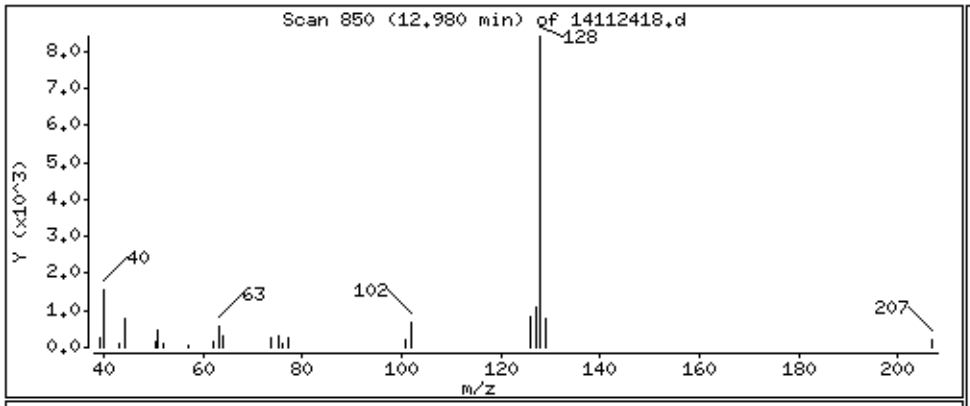
Operator: mjs

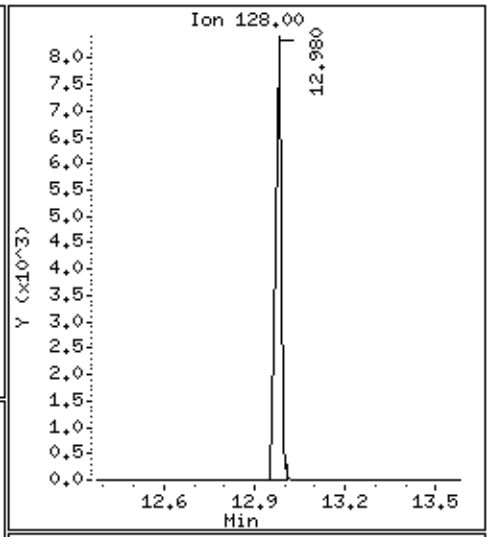
Column phase: RTx-624

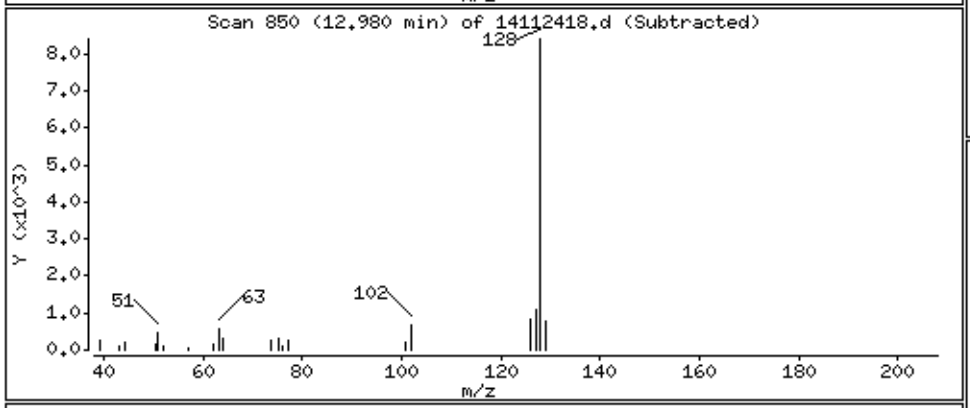
Column diameter: 0.53

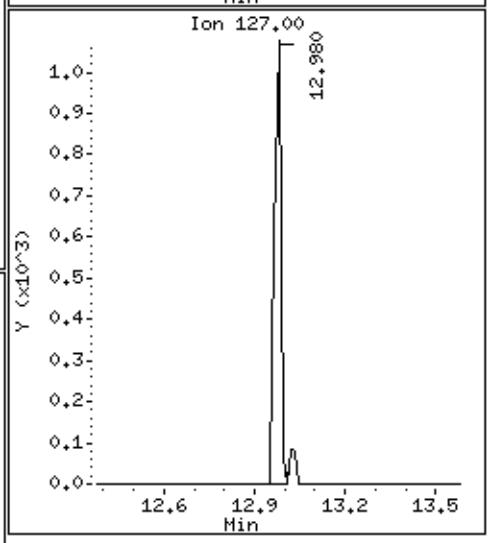
171 Naphthalene

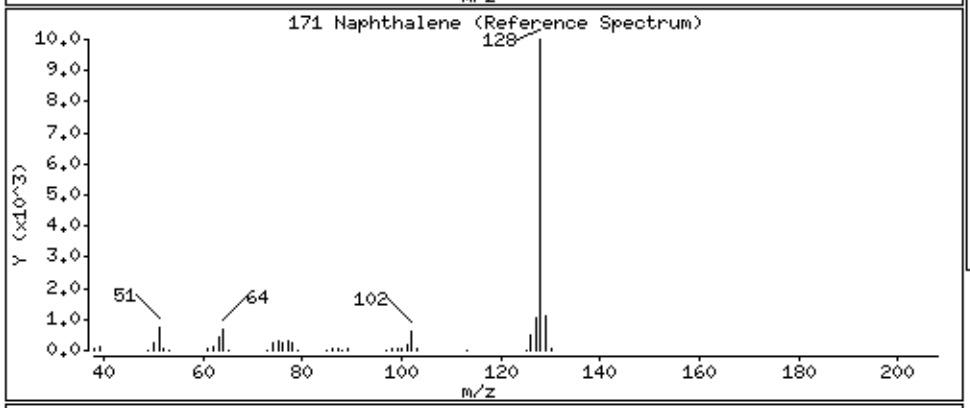
Concentration: 9.055 PPBV

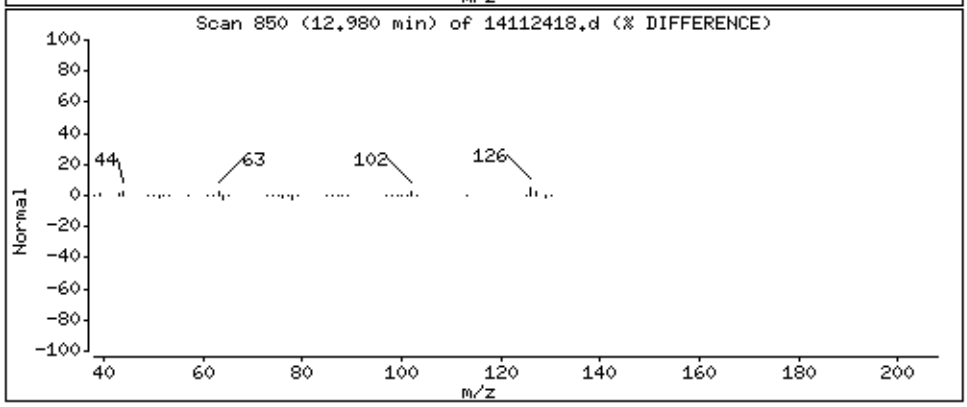












Eurofins Air Toxics Inc.

EPA METHOD TO14A/TO15

Data file : /chem/msd14.i/24nov14.b/14112403.d
Lab Smp Id: ICAL Level 1 Client Smp ID: ICAL Level 1
Inj Date : 24-NOV-2014 09:14
Operator : md Inst ID: msd14.i
Smp Info : 30ml #2687-103
Misc Info : 3.0ppbv (5.0ppbv)
Comment : (5&20) - GC/MS
Method : /chem/msd14.i/24nov14.b/14451124a.m
Meth Date : 24-Nov-2014 15:17 HR8M Quant Type: ISTD
Cal Date : 24-NOV-2014 09:14 Cal File: 14112403.d
Als bottle: 1 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: Benzene.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 (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
* 75 Bromochloromethane					CAS #: 74-97-5		
4.753	4.753 (1.000)	130	119676	400.000		70.00- 130.00	100.00
4.753	4.753 (1.000)	128	93032			0.00- 30.00	77.74
4.753	4.753 (1.000)	49	150324			0.00- 30.00	125.61
* 94 1,4-Difluorobenzene					CAS #: 540-36-3		
5.858	5.858 (1.000)	114	527642	400.000		70.00- 130.00	100.00
5.858	5.858 (1.000)	88	79830			0.00- 30.00	15.13
* 125 Chlorobenzene-d5					CAS #: 3114-55-4		
9.832	9.832 (1.000)	117	478049	400.000		70.00- 130.00	100.00
9.832	9.832 (1.000)	82	249234			0.00- 30.00	52.14
$ 86 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
5.396	5.396 (1.135)	65	175591	400.000	405.48	70.00- 130.00	100.00
5.396	5.396 (1.135)	67	87288			0.00- 30.00	49.71
$ 110 Toluene-d8					CAS #: 2037-26-5		
7.649	7.649 (1.306)	98	522059	400.000	396.83	70.00- 130.00	100.00
7.649	7.649 (1.306)	70	56560			0.00- 30.00	10.83

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
$ 110 Toluene-d8 (continued)							
7.649	7.649 (1.306)	100	342458			0.00- 30.00	65.60
$ 139 Bromofluorobenzene					CAS #: 460-00-4		
10.951	10.951 (1.114)	174	282859	400.000	387.04	70.00- 130.00	100.00
10.951	10.951 (1.114)	95	335323			0.00- 30.00	118.55
10.951	10.951 (1.114)	176	268718			0.00- 30.00	95.00
83 Benzene					CAS #: 71-43-2		
5.354	5.354 (0.914)	78	7309	3.00000	3.817	70.00- 130.00	100.00(a)
5.354	5.354 (0.914)	77	1746			0.00- 30.00	23.89

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: msd14.i
Lab File ID: 14112403.d
Lab Smp Id: ICAL Level 1
Analysis Type: VOA
Quant Type: ISTD
Operator: md
Method File: /chem/msd14.i/24nov14.b/14451124a.m
Misc Info: 3.0ppbv (5.0ppbv)

Calibration Date: 24-NOV-2014
Calibration Time: 11:17
Client Smp ID: ICAL Level 1
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
75 Bromochloromethan	117767	70660	164874	119676	1.62
94 1,4-Difluorobenze	544303	326582	762024	527642	-3.06
125 Chlorobenzene-d5	496681	298009	695353	478049	-3.75

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
75 Bromochloromethan	4.75	4.42	5.08	4.75	0.00
94 1,4-Difluorobenze	5.86	5.53	6.19	5.86	0.00
125 Chlorobenzene-d5	9.83	9.50	10.16	9.83	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/msd14.i/24nov14.b/14112403.d

Date : 24-NOV-2014 09:14

Client ID: ICAL Level 1

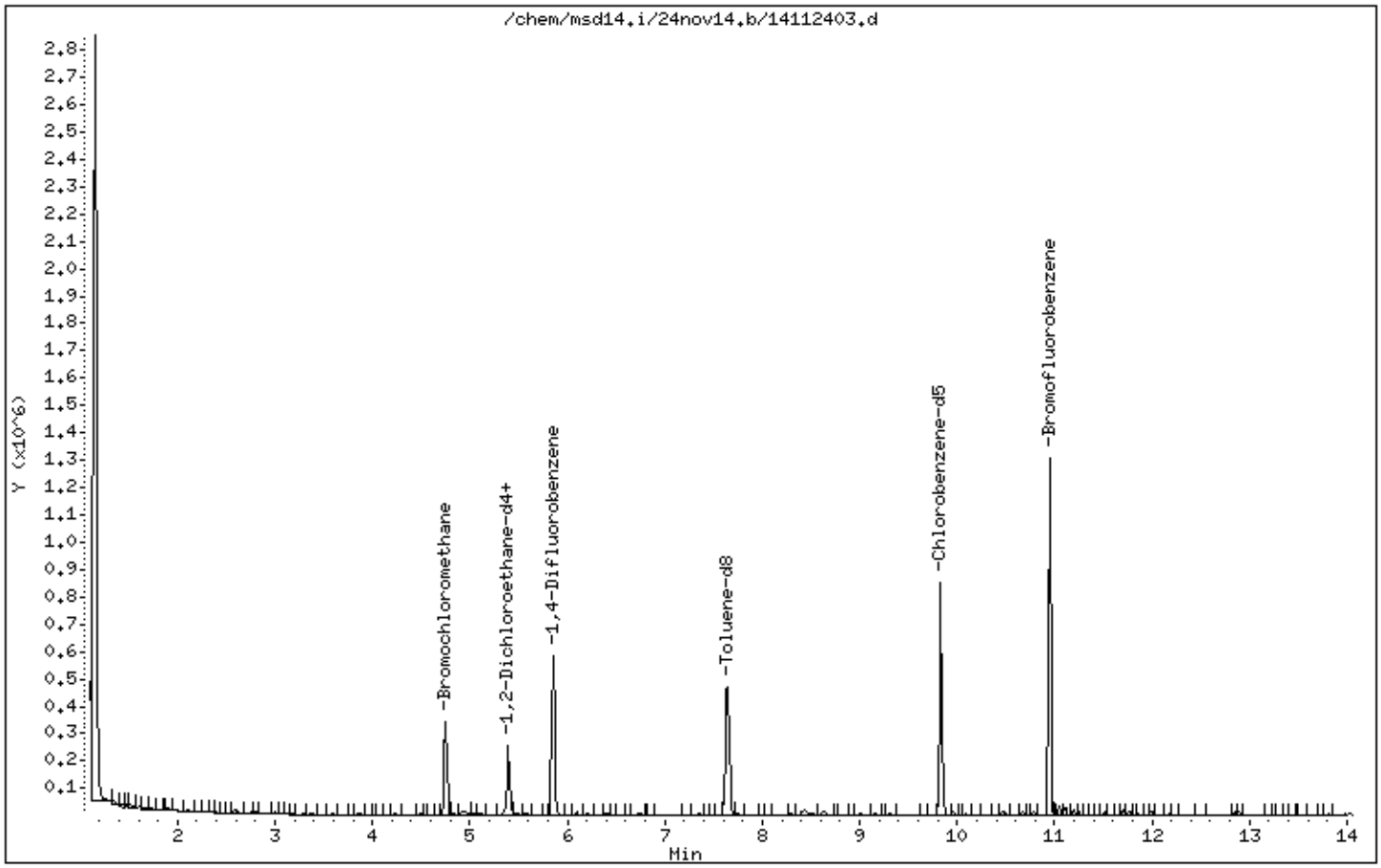
Instrument: msd14.i

Sample Info: 30ml #2687-103

Operator: md

Column phase: RTx-624

Column diameter: 0.53



Eurofins Air Toxics Inc.

EPA METHOD TO14A/TO15

Data file : /chem1/msd14.i/24nov14.b/14112404a.d
Lab Smp Id: ICAL Level 2 Client Smp ID: ICAL Level 2
Inj Date : 24-NOV-2014 09:39
Operator : md Inst ID: msd14.i
Smp Info : 50ml #2687-103
Misc Info : 5.0ppbv (5.0ppbv)
Comment : (5&20) - GC/MS
Method : /chem1/msd14.i/09dec14.b/14451124b.m
Meth Date : 09-Dec-2014 10:36 HR8M Quant Type: ISTD
Cal Date : 24-NOV-2014 09:39 Cal File: 14112404a.d
Als bottle: 1 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: Oxyscurve.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 (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
* 75 Bromochloromethane					CAS #: 74-97-5		
4.753	4.753 (1.000)	130	113730	400.000		70.00- 130.00	100.00
4.753	4.753 (1.000)	128	87888			0.00- 30.00	77.28
4.753	4.753 (1.000)	49	135758			0.00- 30.00	119.37
* 94 1,4-Difluorobenzene					CAS #: 540-36-3		
5.858	5.858 (1.000)	114	518889	400.000		70.00- 130.00	100.00
5.858	5.858 (1.000)	88	74745			0.00- 30.00	14.40
* 125 Chlorobenzene-d5					CAS #: 3114-55-4		
9.832	9.832 (1.000)	117	464387	400.000		70.00- 130.00	100.00
9.832	9.832 (1.000)	82	241543			0.00- 30.00	52.01
49 tert-Butyl-Alcohol					CAS #: 75-65-0		
3.297	3.297 (0.694)	59	3182	5.00000	5.000	70.00- 130.00	100.00(a)
3.297	3.297 (0.694)	41	1250			0.00- 30.00	39.28
3.367	3.367 (0.709)	57	1868			0.00- 30.00	58.71
58 Isopropyl ether					CAS #: 108-20-3		
3.871	3.871 (0.815)	45	7534	5.00000	5.000	70.00- 130.00	100.00(a)

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
58 Isopropyl ether (continued)							
3.871	3.871 (0.815)	87	2461			0.00- 30.00	32.67
3.885	3.885 (0.817)	59	1058			0.00- 30.00	14.04
64 Ethyl-tert-butyl Ether					CAS #: 637-92-3		
4.235	4.235 (0.891)	59	7050	5.00000	5.000	70.00- 130.00	100.00(a)
4.235	4.235 (0.891)	87	2845			0.00- 30.00	40.35
4.235	4.235 (0.891)	41	2234			0.00- 30.00	31.69
88 tert-amyl-Methyl Ether					CAS #: 994-05-8		
5.466	5.466 (1.150)	73	5855	5.00000	5.000	70.00- 130.00	100.00(a)
5.452	5.452 (1.147)	87	1966			0.00- 30.00	33.58
5.466	5.466 (1.150)	55	2809			0.00- 30.00	47.98

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: msd14.i
Lab File ID: 14112404a.d
Lab Smp Id: ICAL Level 2
Analysis Type: VOA
Quant Type: ISTD
Operator: md
Method File: /chem1/msd14.i/09dec14.b/14451124b.m
Misc Info: 5.0ppbv (5.0ppbv)

Calibration Date: 24-NOV-2014
Calibration Time: 09:39
Client Smp ID: ICAL Level 2
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
75 Bromochloromethan	113730	68238	159222	113730	0.00
94 1,4-Difluorobenze	518889	311333	726445	518889	0.00
125 Chlorobenzene-d5	464387	278632	650142	464387	0.00

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
75 Bromochloromethan	4.75	4.42	5.08	4.75	0.00
94 1,4-Difluorobenze	5.86	5.53	6.19	5.86	0.00
125 Chlorobenzene-d5	9.83	9.50	10.16	9.83	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/msd14.i/24nov14.b/14112404a.d

Date : 24-NOV-2014 09:39

Client ID: ICAL Level 2

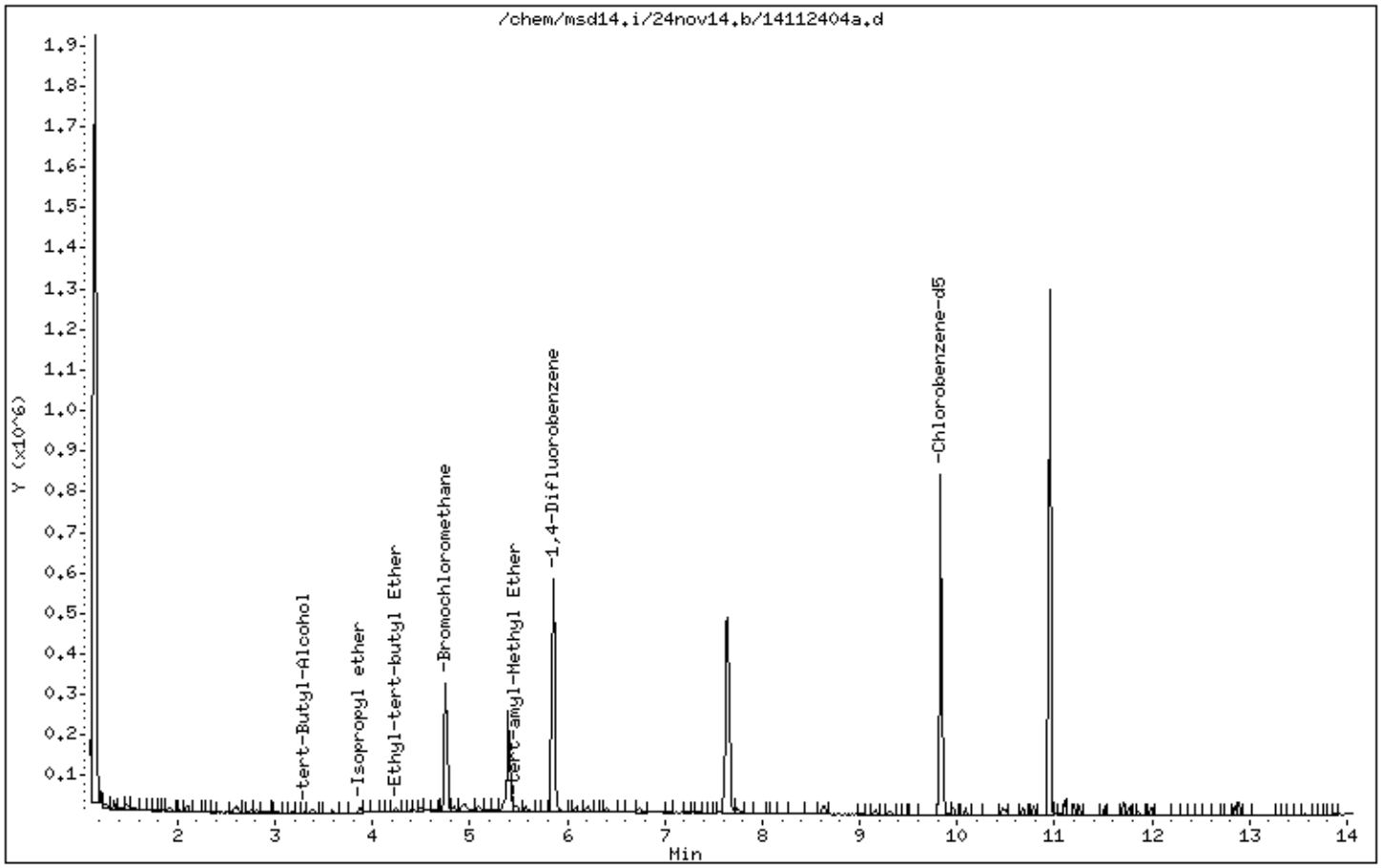
Instrument: msd14.i

Sample Info: 50ml #2687-103

Operator: md

Column phase: RTx-624

Column diameter: 0.53



Eurofins Air Toxics Inc.

EPA METHOD TO14A/TO15

Data file : /chem/msd14.i/24nov14.b/14112404.d
Lab Smp Id: ICAL Level 2 Client Smp ID: ICAL Level 2
Inj Date : 24-NOV-2014 09:39
Operator : md Inst ID: msd14.i
Smp Info : 50ml #2687-103
Misc Info : 5.0ppbv (5.0ppbv)
Comment : (5&20) - GC/MS
Method : /chem/msd14.i/24nov14.b/14451124a.m
Meth Date : 24-Nov-2014 15:17 HR8M Quant Type: ISTD
Cal Date : 24-NOV-2014 09:39 Cal File: 14112404.d
Als bottle: 1 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: Level2.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 (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
* 75 Bromochloromethane					CAS #: 74-97-5		
4.753	4.753 (1.000)	130	113730	400.000		70.00- 130.00	100.00
4.753	4.753 (1.000)	128	87888			0.00- 30.00	77.28
4.753	4.753 (1.000)	49	135758			0.00- 30.00	119.37
* 94 1,4-Difluorobenzene					CAS #: 540-36-3		
5.858	5.858 (1.000)	114	518889	400.000		70.00- 130.00	100.00
5.858	5.858 (1.000)	88	74745			0.00- 30.00	14.40
* 125 Chlorobenzene-d5					CAS #: 3114-55-4		
9.832	9.832 (1.000)	117	464387	400.000		70.00- 130.00	100.00
9.832	9.832 (1.000)	82	241543			0.00- 30.00	52.01
$ 86 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
5.396	5.396 (1.135)	65	166164	400.000	402.50	70.00- 130.00	100.00
5.396	5.396 (1.135)	67	87322			0.00- 30.00	52.55
$ 110 Toluene-d8					CAS #: 2037-26-5		
7.649	7.649 (1.306)	98	508798	400.000	395.49	70.00- 130.00	100.00
7.635	7.635 (1.303)	70	55908			0.00- 30.00	10.99

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
$ 110 Toluene-d8 (continued)							
7.649	7.649 (1.306)	100	335878			0.00- 30.00	66.01
$ 139 Bromofluorobenzene					CAS #: 460-00-4		
10.951	10.951 (1.114)	174	277936	400.000	394.29	70.00- 130.00	100.00
10.951	10.951 (1.114)	95	326274			0.00- 30.00	117.39
10.951	10.951 (1.114)	176	266515			0.00- 30.00	95.89
7 Dichlorodifluoromethane/Fr12					CAS #: 75-71-8		
1.269	1.269 (0.267)	85	6458	5.00000	5.755	70.00- 130.00	100.00
1.269	1.269 (0.267)	87	2423			0.00- 30.00	37.52
9 Freon 114					CAS #: 76-14-2		
1.353	1.353 (0.285)	135	6030	5.00000	6.532	70.00- 130.00	100.00
1.353	1.353 (0.285)	137	1987			0.00- 30.00	32.95
15 Vinyl Chloride					CAS #: 75-01-4		
1.506	1.506 (0.317)	62	2615	5.00000	5.645	70.00- 130.00	100.00
1.506	1.506 (0.317)	64	1155			0.00- 30.00	44.17
16 1,3-Butadiene					CAS #: 106-99-0		
1.520	1.520 (0.320)	54	2278	5.00000	6.123	70.00- 130.00	100.00
1.520	1.520 (0.320)	39	2942			0.00- 30.00	129.15
18 Bromomethane					CAS #: 74-83-9		
1.814	1.814 (0.382)	94	1878	5.00000	5.922	70.00- 130.00	100.00
1.814	1.814 (0.382)	96	2193			0.00- 30.00	116.77
23 Trichlorofluoromethane/Fr11					CAS #: 75-69-4		
2.094	2.094 (0.441)	101	9408	5.00000	6.031	70.00- 130.00	100.00
2.108	2.108 (0.444)	103	7224			0.00- 30.00	76.79
34 Freon 113					CAS #: 76-13-1		
2.598	2.598 (0.547)	151	4983	5.00000	5.735	70.00- 130.00	100.00
2.598	2.598 (0.547)	153	3884			0.00- 30.00	77.95
2.598	2.598 (0.547)	101	6855			0.00- 30.00	137.57
36 1,1-Dichloroethene					CAS #: 75-35-4		
2.626	2.626 (0.552)	61	5220	5.00000	6.070	70.00- 130.00	100.00
2.626	2.626 (0.552)	96	2956			0.00- 30.00	56.63
2.626	2.626 (0.552)	98	1984			0.00- 30.00	38.01
39 Carbon Disulfide					CAS #: 75-15-0		
2.808	2.808 (0.591)	76	8179	5.00000	5.859	70.00- 130.00	100.00
48 Methylene Chloride					CAS #: 75-09-2		
3.171	3.171 (0.667)	49	4240	5.00000	6.354	70.00- 130.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
48 Methylene Chloride (continued)							
3.171	3.171 (0.667)	84	2870			0.00- 30.00	67.69
3.171	3.171 (0.667)	51	1512			0.00- 30.00	35.66
50 MTBE					CAS #: 1634-04-4		
3.367	3.367 (0.709)	73	7567	5.00000	6.122	70.00- 130.00	100.00
3.367	3.367 (0.709)	57	1868			0.00- 30.00	24.69
3.367	3.367 (0.709)	41	2050			0.00- 30.00	27.09
52 trans-1,2-Dichloroethene					CAS #: 156-60-5		
3.395	3.395 (0.714)	96	3397	5.00000	6.154	70.00- 130.00	100.00
3.395	3.395 (0.714)	61	3961			0.00- 30.00	116.60
3.395	3.395 (0.714)	98	1783			0.00- 30.00	52.49
55 Hexane					CAS #: 110-54-3		
3.591	3.591 (0.756)	57	4647	5.00000	5.826	70.00- 130.00	100.00
3.591	3.591 (0.756)	43	2341			0.00- 30.00	50.38
3.591	3.591 (0.756)	86	956			0.00- 30.00	20.57
59 1,1-Dichloroethane					CAS #: 75-34-3		
3.871	3.871 (0.815)	63	5822	5.00000	6.066	70.00- 130.00	100.00
3.871	3.871 (0.815)	65	1907			0.00- 30.00	32.76
68 cis-1,2-Dichloroethene					CAS #: 156-59-2		
4.501	4.501 (0.947)	61	4739	5.00000	5.927	70.00- 130.00	100.00
4.487	4.487 (0.944)	96	3267			0.00- 30.00	68.94
4.487	4.487 (0.944)	98	1974			0.00- 30.00	41.65
74 Tetrahydrofuran					CAS #: 109-99-9		
4.753	4.753 (1.000)	42	3219	5.00000	6.042	70.00- 130.00	100.00
4.739	4.739 (0.997)	71	1368			0.00- 30.00	42.50
4.753	4.753 (1.000)	72	1071			0.00- 30.00	33.27
76 Chloroform					CAS #: 67-66-3		
4.837	4.837 (1.018)	83	7803	5.00000	6.142	70.00- 130.00	100.00
4.837	4.837 (1.018)	85	4949			0.00- 30.00	63.42
77 Cyclohexane					CAS #: 110-82-7		
4.920	4.920 (1.035)	84	4414	5.00000	5.812	70.00- 130.00	100.00
4.920	4.920 (1.035)	56	4371			0.00- 30.00	99.03
4.934	4.934 (1.038)	41	3149			0.00- 30.00	71.34
78 1,1,1-Trichloroethane					CAS #: 71-55-6		
4.962	4.962 (1.044)	97	6854	5.00000	5.799	70.00- 130.00	100.00
4.962	4.962 (1.044)	99	4292			0.00- 30.00	62.62

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
79 Carbon Tetrachloride					CAS #: 56-23-5		
5.088	5.088 (1.071)	119	6154	5.00000	5.733	70.00- 130.00	100.00
5.088	5.088 (1.071)	117	6015			0.00- 30.00	97.74
82 2,2,4-Trimethylpentane					CAS #: 540-84-1		
5.340	5.340 (1.124)	57	13127	5.00000	5.503	70.00- 130.00	100.00
5.340	5.340 (1.124)	56	5286			0.00- 30.00	40.27
5.340	5.340 (1.124)	41	5012			0.00- 30.00	38.18
83 Benzene					CAS #: 71-43-2		
5.354	5.354 (0.914)	78	9116	5.00000	4.893	70.00- 130.00	100.00
5.368	5.368 (0.916)	77	2383			0.00- 30.00	26.14
89 1,2-Dichloroethane					CAS #: 107-06-2		
5.480	5.480 (0.936)	62	4209	5.00000	5.704	70.00- 130.00	100.00
5.480	5.480 (0.936)	64	1673			0.00- 30.00	39.75
93 Heptane					CAS #: 142-82-5		
5.578	5.578 (0.952)	71	3105	5.00000	5.593	70.00- 130.00	100.00
5.578	5.578 (0.952)	43	4791			0.00- 30.00	154.30
5.578	5.578 (0.952)	100	978			0.00- 30.00	31.50
95 Trichloroethene					CAS #: 79-01-6		
6.096	6.096 (1.041)	95	4686	5.00000	5.983	70.00- 130.00	100.00
6.096	6.096 (1.041)	130	4813			0.00- 30.00	102.71
6.096	6.096 (1.041)	97	2870			0.00- 30.00	61.25
97 Methyl Cyclohexane					CAS #: 108-87-2		
6.208	6.208 (1.060)	83	5769	5.00000	5.827	70.00- 130.00	100.00
6.208	6.208 (1.060)	98	3019			0.00- 30.00	52.33
6.208	6.208 (1.060)	55	4260			0.00- 30.00	73.84
99 1,2-Dichloropropane					CAS #: 78-87-5		
6.404	6.404 (1.093)	63	3419	5.00000	5.808	70.00- 130.00	100.00
6.404	6.404 (1.093)	62	2482			0.00- 30.00	72.59
6.404	6.404 (1.093)	41	1971			0.00- 30.00	57.65
104 Bromodichloromethane					CAS #: 75-27-4		
6.739	6.739 (1.150)	83	7620	5.00000	5.844	70.00- 130.00	100.00
6.739	6.739 (1.150)	85	4633			0.00- 30.00	60.80
108 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
7.341	7.341 (1.253)	75	3927	5.00000	5.413	70.00- 130.00	100.00
7.341	7.341 (1.253)	77	1094			0.00- 30.00	27.86
7.355	7.355 (1.256)	39	3092			0.00- 30.00	78.74

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
109 4-Methyl-2-pentanone					CAS #: 108-10-1		
7.579	7.579 (1.294)	85	974	5.00000	5.493	70.00- 130.00	100.00
7.579	7.579 (1.294)	43	5526			0.00- 30.00	567.35
7.579	7.579 (1.294)	58	2126			0.00- 30.00	218.28
111 Toluene					CAS #: 108-88-3		
7.747	7.747 (1.322)	91	12117	5.00000	5.831	70.00- 130.00	100.00
7.747	7.747 (1.322)	92	7041			0.00- 30.00	58.11
114 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
8.306	8.306 (0.845)	75	3077	5.00000	5.019	70.00- 130.00	100.00
8.306	8.306 (0.845)	77	1024			0.00- 30.00	33.28
8.320	8.320 (0.846)	39	2362			0.00- 30.00	76.76
115 1,1,2-Trichloroethane					CAS #: 79-00-5		
8.628	8.628 (0.878)	97	4713	5.00000	6.046	70.00- 130.00	100.00
8.628	8.628 (0.878)	99	2830			0.00- 30.00	60.05
8.628	8.628 (0.878)	83	3868			0.00- 30.00	82.07
116 Tetrachloroethene					CAS #: 127-18-4		
8.642	8.642 (0.879)	166	5974	5.00000	5.984	70.00- 130.00	100.00
8.628	8.628 (0.878)	129	4196			0.00- 30.00	70.24
8.628	8.628 (0.878)	131	4143			0.00- 30.00	69.35
121 Dibromochloromethane					CAS #: 124-48-1		
9.160	9.160 (0.932)	129	7334	5.00000	5.633	70.00- 130.00	100.00
9.160	9.160 (0.932)	127	6435			0.00- 30.00	87.74
124 1,2-Dibromoethane					CAS #: 106-93-4		
9.300	9.300 (0.946)	107	6156	5.00000	5.712	70.00- 130.00	100.00
9.314	9.314 (0.947)	109	5985			0.00- 30.00	97.22
127 Chlorobenzene					CAS #: 108-90-7		
9.860	9.860 (1.003)	112	10647	5.00000	6.008	70.00- 130.00	100.00
9.860	9.860 (1.003)	114	4342			0.00- 30.00	40.78
9.860	9.860 (1.003)	77	10665			0.00- 30.00	100.17
128 Ethyl Benzene					CAS #: 100-41-4		
9.958	9.958 (1.013)	106	4220	5.00000	5.513	70.00- 130.00	100.00
9.958	9.958 (1.013)	91	15181			0.00- 30.00	359.74
131 m,p-Xylene					CAS #: 108-38-3		
10.083	10.083 (1.026)	106	4545	5.00000	5.203	70.00- 130.00	100.00
10.083	10.083 (1.026)	91	10346			0.00- 30.00	227.63
132 o-Xylene					CAS #: 95-47-6		
10.461	10.461 (1.064)	106	4891	5.00000	5.457	70.00- 130.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
132 o-Xylene (continued)							
10.461	10.461 (1.064)	91	11379			0.00- 30.00	232.65
134 Styrene					CAS #: 100-42-5		
10.503	10.503 (1.068)	104	7336	5.00000	5.406	70.00- 130.00	100.00
10.503	10.503 (1.068)	78	3535			0.00- 30.00	48.19
136 Bromoform					CAS #: 75-25-2		
10.671	10.671 (1.085)	173	7468	5.00000	5.900	70.00- 130.00	100.00
10.671	10.671 (1.085)	171	4210			0.00- 30.00	56.37
138 Cumene					CAS #: 98-82-8		
10.783	10.783 (1.097)	105	13796	5.00000	5.288	70.00- 130.00	100.00
10.783	10.783 (1.097)	120	3725			0.00- 30.00	27.00
10.783	10.783 (1.097)	51	1466			0.00- 30.00	10.63
142 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
11.105	11.105 (1.129)	83	9458	5.00000	5.991	70.00- 130.00	100.00
11.105	11.105 (1.129)	85	5938			0.00- 30.00	62.78
143 Propylbenzene					CAS #: 103-65-1		
11.119	11.119 (1.131)	91	18082	5.00000	5.533	70.00- 130.00	100.00
11.119	11.119 (1.131)	120	4358			0.00- 30.00	24.10
11.119	11.119 (1.131)	105	864			0.00- 30.00	4.78
147 4-Ethyltoluene					CAS #: 622-96-8		
11.203	11.203 (1.139)	105	14070	5.00000	5.431	70.00- 130.00	100.00
11.203	11.203 (1.139)	120	4137			0.00- 30.00	29.40
149 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
11.259	11.259 (1.145)	105	10434	5.00000	5.442	70.00- 130.00	100.00
11.259	11.259 (1.145)	120	6301			0.00- 30.00	60.39
152 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
11.511	11.511 (1.171)	105	9737	5.00000	5.319	70.00- 130.00	100.00
11.511	11.511 (1.171)	120	5052			0.00- 30.00	51.88
156 1,3-Dichlorobenzene					CAS #: 541-73-1		
11.707	11.707 (1.191)	146	9196	5.00000	5.820	70.00- 130.00	100.00
11.707	11.707 (1.191)	148	6014			0.00- 30.00	65.40
11.707	11.707 (1.191)	111	3600			0.00- 30.00	39.15
159 1,4-Dichlorobenzene					CAS #: 106-46-7		
11.776	11.776 (1.198)	146	8820	5.00000	5.802	70.00- 130.00	100.00
11.776	11.776 (1.198)	148	5849			0.00- 30.00	66.32
11.776	11.776 (1.198)	111	3507			0.00- 30.00	39.76

RT	EXP RT	(REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
161 alpha-Chlorotoluene						CAS #: 100-44-7		
11.860	11.860	(1.206)	91	4703	5.00000	5.521	70.00- 130.00	100.00
11.860	11.860	(1.206)	126	669			0.00- 30.00	14.22
163 1,2-Dichlorobenzene						CAS #: 95-50-1		
12.000	12.000	(1.221)	146	8281	5.00000	5.910	70.00- 130.00	100.00
12.000	12.000	(1.221)	148	5246			0.00- 30.00	63.35
11.986	11.986	(1.219)	111	3201			0.00- 30.00	38.65

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd14.i
Lab File ID: 14112404.d
Lab Smp Id: ICAL Level 2
Analysis Type: VOA
Quant Type: ISTD
Operator: md
Method File: /chem/msd14.i/24nov14.b/14451124a.m
Misc Info: 5.0ppbv (5.0ppbv)

Calibration Date: 24-NOV-2014
Calibration Time: 11:17
Client Smp ID: ICAL Level 2
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
75 Bromochloromethan	117767	70660	164874	113730	-3.43
94 1,4-Difluorobenze	544303	326582	762024	518889	-4.67
125 Chlorobenzene-d5	496681	298009	695353	464387	-6.50

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
75 Bromochloromethan	4.75	4.42	5.08	4.75	0.00
94 1,4-Difluorobenze	5.86	5.53	6.19	5.86	0.00
125 Chlorobenzene-d5	9.83	9.50	10.16	9.83	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/msd14.i/24nov14.b/14112404.d

Date : 24-NOV-2014 09:39

Client ID: ICAL Level 2

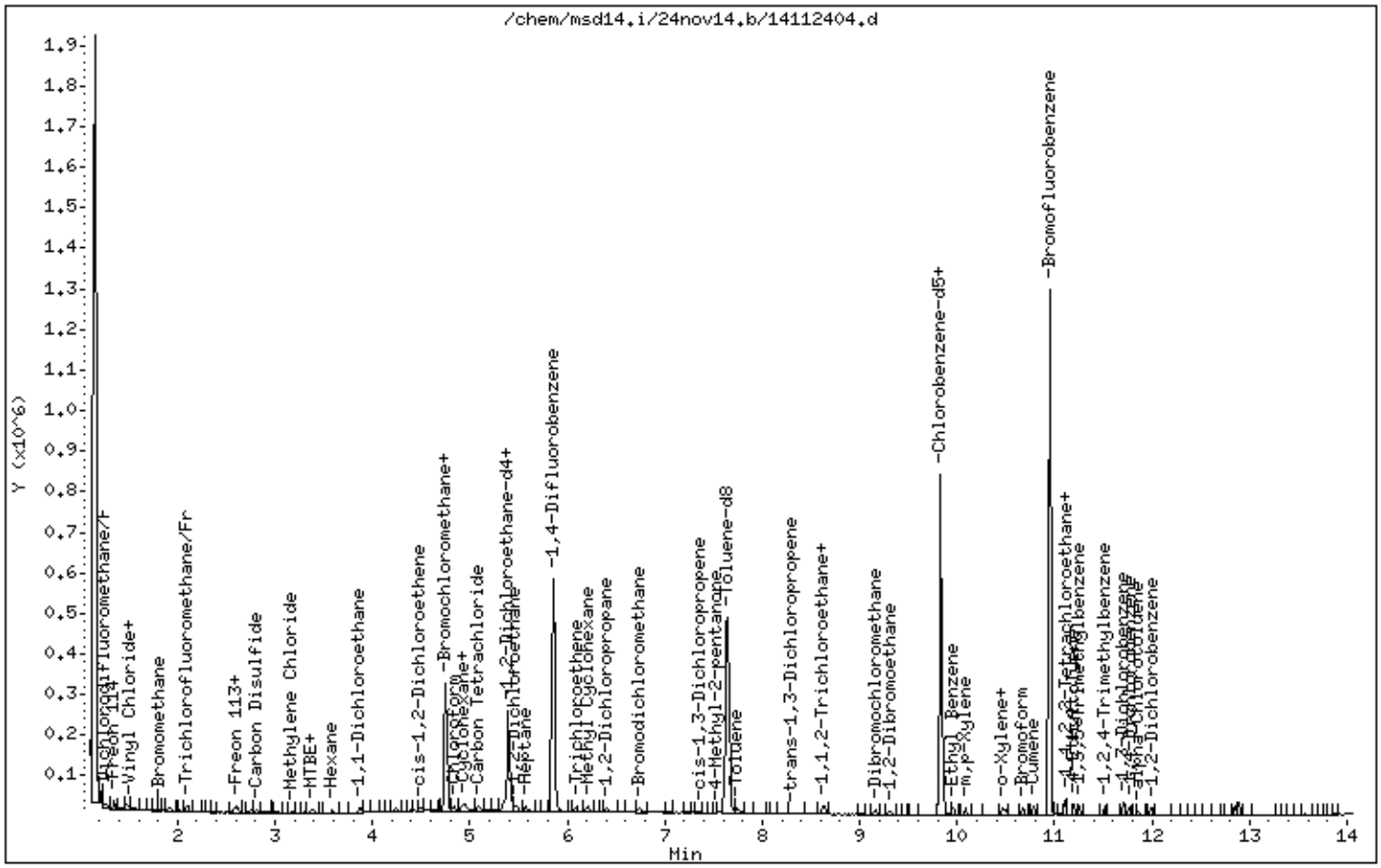
Instrument: msd14.i

Sample Info: 50ml #2687-103

Operator: md

Column phase: RTx-624

Column diameter: 0.53



Eurofins Air Toxics Inc.

EPA METHOD TO14A/TO15

Data file : /chem/msd14.i/15dec14.b/14112415k.d
Lab Smp Id: ICAL 3 Client Smp ID: Level 3
Inj Date : 24-NOV-2014 15:07
Operator : md Inst ID: msd14.i
Smp Info : 1.0ml #2677-23
Misc Info : 20ppbv (1000ppbv)
Comment : (5&20) - GC/MS
Method : /chem/msd14.i/15dec14.b/14451124c.m
Meth Date : 15-Dec-2014 16:47 snguyen Quant Type: ISTD
Cal Date : 24-NOV-2014 15:07 Cal File: 14112415k.d
Als bottle: 1 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: spAT1.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 (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
* 75 Bromochloromethane						CAS #: 74-97-5	
4.753	4.753 (1.000)	130	123692	400.000		70.00- 130.00	100.00
4.753	4.753 (1.000)	128	95073			0.00- 30.00	76.86
4.753	4.753 (1.000)	49	142916			0.00- 30.00	115.54
* 94 1,4-Difluorobenzene						CAS #: 540-36-3	
5.858	5.858 (1.000)	114	544038	400.000		70.00- 130.00	100.00
5.858	5.858 (1.000)	88	80310			0.00- 30.00	14.76
* 125 Chlorobenzene-d5						CAS #: 3114-55-4	
9.832	9.832 (1.000)	117	497508	400.000		70.00- 130.00	100.00
9.832	9.832 (1.000)	82	254804			0.00- 30.00	51.22
4 Freon134a						CAS #: 811-97-2	
1.199	1.199 (0.252)	83	3734	20.0000	17.880	70.00- 130.00	100.00
1.199	1.199 (0.252)	69	3643			0.00- 30.00	97.56
6 Freon 152a						CAS #: 75-37-6	
1.227	1.227 (0.258)	65	2608	20.0000	21.217	70.00- 130.00	100.00
1.241	1.241 (0.261)	51	3992			0.00- 30.00	153.07

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
8 Freon 22					CAS #: 75-45-6		
1.283	1.283 (0.270)	67	1099	20.0000	17.745	70.00- 130.00	100.00
1.283	1.283 (0.270)	51	7298			0.00- 30.00	664.06
11 Freon142b					CAS #: 75-68-3		
1.395	1.395 (0.293)	65	11607	20.0000	19.428	70.00- 130.00	100.00
1.395	1.395 (0.293)	45	4411			0.00- 30.00	38.00
25 Dichlorofluoromethane/Fr21					CAS #: 75-43-4		
2.108	2.108 (0.444)	67	12104	20.0000	15.905	70.00- 130.00	100.00
2.108	2.108 (0.444)	69	4485			0.00- 30.00	37.05
1.758	1.758 (0.370)	35	131			0.00- 30.00	1.08
29 Freon123					CAS #: 306-83-2		
2.542	2.542 (0.535)	83	14726	20.0000	18.034	70.00- 130.00	100.00
2.542	2.542 (0.535)	133	2742			0.00- 30.00	18.62
2.542	2.542 (0.535)	85	9555			0.00- 30.00	64.89
33 Freon123a					CAS #: 354-23-4		
2.472	2.472 (0.520)	117	9830	20.0000	17.588	70.00- 130.00	100.00
2.472	2.472 (0.520)	67	12642			0.00- 30.00	128.61
43 Cyclopentene					CAS #: 142-29-0		
3.018	3.018 (0.635)	67	10109	20.0000	16.982	70.00- 130.00	100.00
3.018	3.018 (0.635)	68	3897			0.00- 30.00	38.55
3.018	3.018 (0.635)	53	2460			0.00- 30.00	24.33
62 1-Propanol					CAS #: 71-23-8		
4.025	4.025 (0.847)	42	519	20.0000	12.796	70.00- 130.00	100.00
4.025	4.025 (0.847)	59	890			0.00- 30.00	171.48
4.025	4.025 (0.847)	41	786			0.00- 30.00	151.45
69 2,2-Dichloropropane					CAS #: 594-20-7		
4.445	4.445 (0.935)	77	7377	20.0000	18.460	70.00- 130.00	100.00
4.445	4.445 (0.935)	79	2310			0.00- 30.00	31.31
4.445	4.445 (0.935)	97	1552			0.00- 30.00	21.04
80 1,1-Dichloropropene					CAS #: 563-58-6		
5.144	5.144 (1.082)	110	3896	20.0000	18.050	70.00- 130.00	100.00
5.144	5.144 (1.082)	75	11039			0.00- 30.00	283.34
87 Isobutanol					CAS #: 78-83-1		
5.368	5.368 (0.916)	43	3461	20.0000	16.830	70.00- 130.00	100.00
5.368	5.368 (0.916)	41	3642			0.00- 30.00	105.23
96 1-Butanol					CAS #: 71-36-3		
6.124	6.124 (1.045)	56	4024	20.0000	14.169	70.00- 130.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
96 1-Butanol (continued)							
6.124	6.124 (1.045)	41	2204			0.00- 30.00	54.77
6.124	6.124 (1.045)	43	2174			0.00- 30.00	54.03
26 1,3-Dichloropropane					CAS #: 142-28-9		
8.894	8.894 (1.871)	76	11406	20.0000	17.216	70.00- 130.00	100.00
8.894	8.894 (1.871)	41	5715			0.00- 30.00	50.11
8.894	8.894 (1.871)	78	4022			0.00- 30.00	35.26
122 Butyl Acetate					CAS #: 123-86-4		
9.174	9.174 (1.566)	56	2315	20.0000	13.053	70.00- 130.00	100.00
9.174	9.174 (1.566)	73	896			0.00- 30.00	38.70
9.174	9.174 (1.566)	43	4451			0.00- 30.00	192.27
129 1,1,1,2-Tetrachloroethane					CAS #: 630-20-6		
9.972	9.972 (1.014)	131	10262	20.0000	16.584	70.00- 130.00	100.00
9.972	9.972 (1.014)	117	8012			0.00- 30.00	78.07
9.972	9.972 (1.014)	95	3506			0.00- 30.00	34.16
135 2-Heptanone					CAS #: 110-43-0		
10.643	10.643 (1.083)	58	4422	20.0000	9.323	70.00- 130.00	100.00
10.643	10.643 (1.083)	43	6994			0.00- 30.00	158.16
140 Cyclohexanone					CAS #: 108-94-1		
10.909	10.909 (1.110)	55	5043	20.0000	14.529	70.00- 130.00	100.00
10.909	10.909 (1.110)	98	1741			0.00- 30.00	34.52
10.909	10.909 (1.110)	42	2557			0.00- 30.00	50.70
144 Bromobenzene					CAS #: 108-86-1		
11.049	11.049 (1.124)	156	8938	20.0000	14.457	70.00- 130.00	100.00
11.049	11.049 (1.124)	77	12449			0.00- 30.00	139.28
11.049	11.049 (1.124)	158	8571			0.00- 30.00	95.89
146 1,2,3-Trichloropropane					CAS #: 96-18-4		
11.133	11.133 (1.132)	110	4504	20.0000	14.500	70.00- 130.00	100.00
11.133	11.133 (1.132)	61	2895			0.00- 30.00	64.28
11.133	11.133 (1.132)	112	2701			0.00- 30.00	59.97
150 2-Chlorotoluene					CAS #: 95-49-8		
11.189	11.189 (1.138)	126	6011	20.0000	12.968	70.00- 130.00	100.00
11.189	11.189 (1.138)	91	18485			0.00- 30.00	307.52
11.189	11.189 (1.138)	65	1845			0.00- 30.00	30.69
151 4-Chlorotoluene					CAS #: 106-43-4		
11.287	11.287 (1.148)	126	6131	20.0000	13.656	70.00- 130.00	100.00
11.273	11.273 (1.147)	91	16201			0.00- 30.00	264.25

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
151 4-Chlorotoluene (continued)							
11.273	11.273 (1.147)	63	2915			0.00- 30.00	47.55
153 tert-Butylbenzene					CAS #: 98-06-6		
11.469	11.469 (1.167)	119	20519	20.0000	13.168	70.00- 130.00	100.00
11.469	11.469 (1.167)	134	5775			0.00- 30.00	28.14
11.469	11.469 (1.167)	91	11895			0.00- 30.00	57.97
154 Pentachloroethane					CAS #: 76-01-7		
11.511	11.511 (1.171)	167	6248	20.0000	13.387	70.00- 130.00	100.00
11.511	11.511 (1.171)	117	7033			0.00- 30.00	112.56
155 sec-Butylbenzene					CAS #: 135-98-8		
11.609	11.609 (1.181)	105	26670	20.0000	12.598	70.00- 130.00	100.00
11.609	11.609 (1.181)	134	5753			0.00- 30.00	21.57
11.609	11.609 (1.181)	91	4370			0.00- 30.00	16.39
158 p-Cymene					CAS #: 99-87-6		
11.707	11.707 (1.191)	119	22279	20.0000	12.613	70.00- 130.00	100.00
11.707	11.707 (1.191)	134	6017			0.00- 30.00	27.01
11.707	11.707 (1.191)	91	5113			0.00- 30.00	22.95
160 1,2,3-Trimethylbenzene					CAS #: 526-73-8		
11.777	11.777 (1.198)	120	7597	20.0000	11.827	70.00- 130.00	100.00
11.777	11.777 (1.198)	105	17815			0.00- 30.00	234.50
11.777	11.777 (1.198)	77	2309			0.00- 30.00	30.39
162 Butylbenzene					CAS #: 104-51-8		
11.959	11.959 (1.216)	134	5281	20.0000	12.980	70.00- 130.00	100.00
11.959	11.959 (1.216)	91	19220			0.00- 30.00	363.95
11.959	11.959 (1.216)	92	10950			0.00- 30.00	207.35
167 1,2-Dibromo-3-Chloropropane					CAS #: 96-12-8		
12.448	12.448 (1.266)	157	7551	20.0000	16.269	70.00- 130.00	100.00
12.448	12.448 (1.266)	75	6606			0.00- 30.00	87.49
12.448	12.448 (1.266)	155	6117			0.00- 30.00	81.01

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd14.i
Lab File ID: 14112415k.d
Lab Smp Id: ICAL 3
Analysis Type: VOA
Quant Type: ISTD
Operator: md
Method File: /chem/msd14.i/15dec14.b/14451124c.m
Misc Info: 20ppbv (1000ppbv)

Calibration Date: 24-NOV-2014
Calibration Time: 11:17
Client Smp ID: Level 3
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
75 Bromochloromethan	117767	70660	164874	123692	5.03
94 1,4-Difluorobenze	544303	326582	762024	544038	-0.05
125 Chlorobenzene-d5	496681	298009	695353	497508	0.17

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
75 Bromochloromethan	4.75	4.42	5.08	4.75	0.00
94 1,4-Difluorobenze	5.86	5.53	6.19	5.86	0.00
125 Chlorobenzene-d5	9.83	9.50	10.16	9.83	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/msd14.i/15dec14.b/14112415k.d

Date : 24-NOV-2014 15:07

Client ID: Level 3

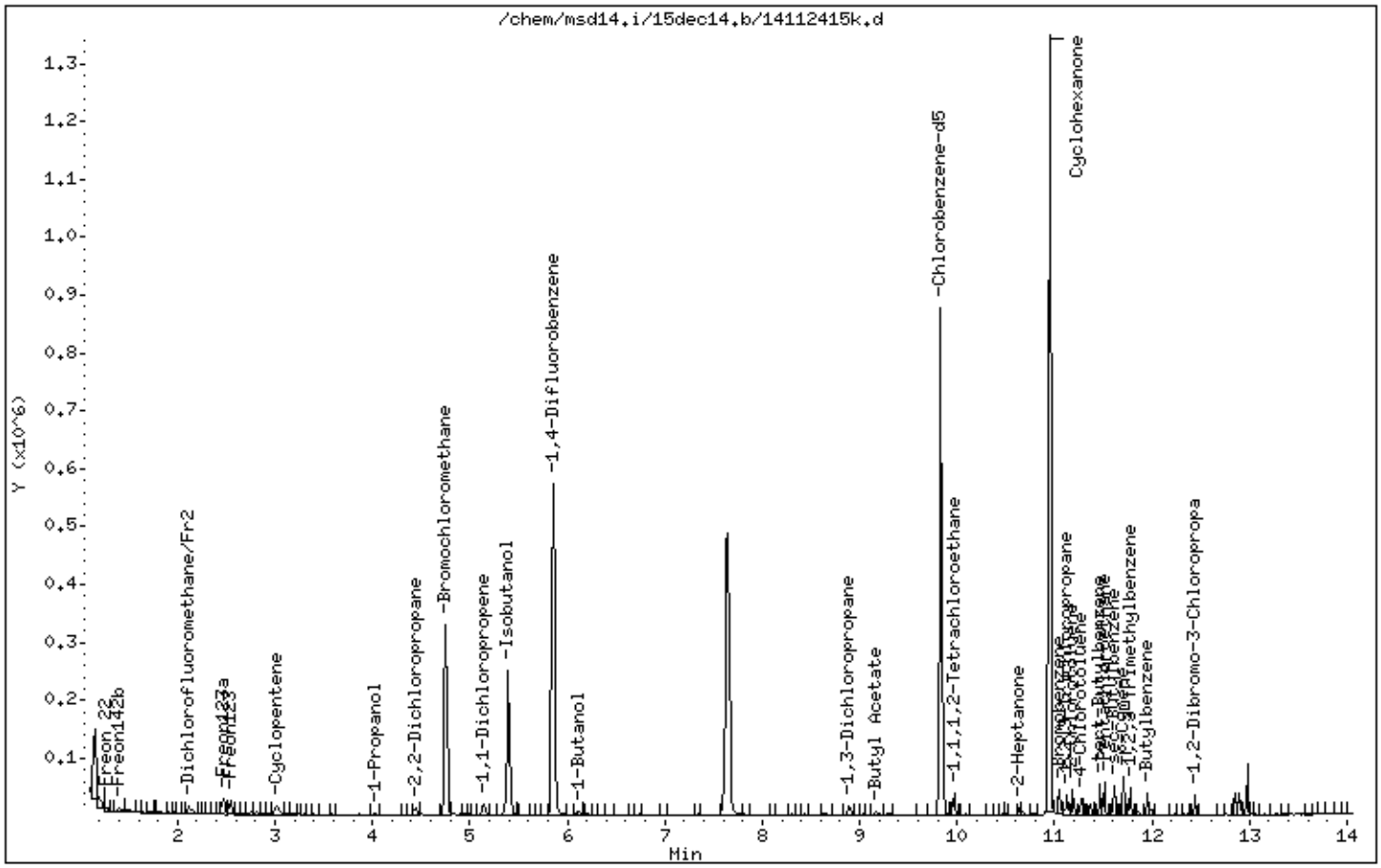
Instrument: msd14.i

Sample Info: 1.0ml #2677-23

Operator: md

Column phase: RTx-624

Column diameter: 0.53



Eurofins Air Toxics Inc.

EPA METHOD TO14A/TO15

Data file : /chem1/msd14.i/24nov14.b/14112405a.d
Lab Smp Id: ICAL Level 3 Client Smp ID: ICAL Level 3
Inj Date : 24-NOV-2014 10:03
Operator : md Inst ID: msd14.i
Smp Info : 5.0ml #2687-64
Misc Info : 20ppbv (200ppbv)
Comment : (5&20) - GC/MS
Method : /chem1/msd14.i/09dec14.b/14451124b.m
Meth Date : 09-Dec-2014 10:36 HR8M Quant Type: ISTD
Cal Date : 24-NOV-2014 15:07 Cal File: 14112415.d
Als bottle: 1 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: Oxyscurve.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 (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
* 75 Bromochloromethane						CAS #: 74-97-5	
4.753	4.753 (1.000)	130	104889	400.000		70.00- 130.00	100.00
4.753	4.753 (1.000)	128	83422			0.00- 30.00	79.53
4.753	4.753 (1.000)	49	125862			0.00- 30.00	120.00
* 94 1,4-Difluorobenzene						CAS #: 540-36-3	
5.858	5.858 (1.000)	114	532740	400.000		70.00- 130.00	100.00
5.858	5.858 (1.000)	88	80802			0.00- 30.00	15.17
* 125 Chlorobenzene-d5						CAS #: 3114-55-4	
9.832	9.832 (1.000)	117	472773	400.000		70.00- 130.00	100.00
9.832	9.832 (1.000)	82	238306			0.00- 30.00	50.41
49 tert-Butyl-Alcohol						CAS #: 75-65-0	
3.284	3.284 (0.691)	59	7949	20.0000	13.543	70.00- 130.00	100.00(a)
3.284	3.284 (0.691)	41	3811			0.00- 30.00	47.94
3.284	3.284 (0.691)	57	1354			0.00- 30.00	17.03
58 Isopropyl ether						CAS #: 108-20-3	
3.857	3.857 (0.812)	45	22402	20.0000	16.120	70.00- 130.00	100.00(a)

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
58 Isopropyl ether (continued)							
3.857	3.857 (0.812)	87	6073			0.00- 30.00	27.11
3.857	3.857 (0.812)	59	3116			0.00- 30.00	13.91
64 Ethyl-tert-butyl Ether					CAS #: 637-92-3		
4.235	4.235 (0.891)	59	19610	20.0000	15.080	70.00- 130.00	100.00(a)
4.235	4.235 (0.891)	87	8966			0.00- 30.00	45.72
4.235	4.235 (0.891)	41	5063			0.00- 30.00	25.82
88 tert-amyl-Methyl Ether					CAS #: 994-05-8		
5.452	5.452 (1.147)	73	17007	20.0000	15.748	70.00- 130.00	100.00(a)
5.466	5.466 (1.150)	87	4528			0.00- 30.00	26.62
5.452	5.452 (1.147)	55	7048			0.00- 30.00	41.44

QC Flag Legend

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

Report Date: 09-Dec-2014 10:36

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd14.i
Lab File ID: 14112405a.d
Lab Smp Id: ICAL Level 3
Analysis Type: VOA
Quant Type: ISTD
Operator: md
Method File: /chem1/msd14.i/09dec14.b/14451124b.m
Misc Info: 20ppbv (200ppbv)

Calibration Date: 24-NOV-2014
Calibration Time: 15:07
Client Smp ID: ICAL Level 3
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
75 Bromochloromethan	104889	62933	146845	104889	0.00
94 1,4-Difluorobenze	532740	319644	745836	532740	0.00
125 Chlorobenzene-d5	472773	283664	661882	472773	0.00

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
75 Bromochloromethan	4.75	4.42	5.08	4.75	0.00
94 1,4-Difluorobenze	5.86	5.53	6.19	5.86	0.00
125 Chlorobenzene-d5	9.83	9.50	10.16	9.83	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/msd14.i/24nov14.b/14112405a.d

Date : 24-NOV-2014 10:03

Client ID: ICAL Level 3

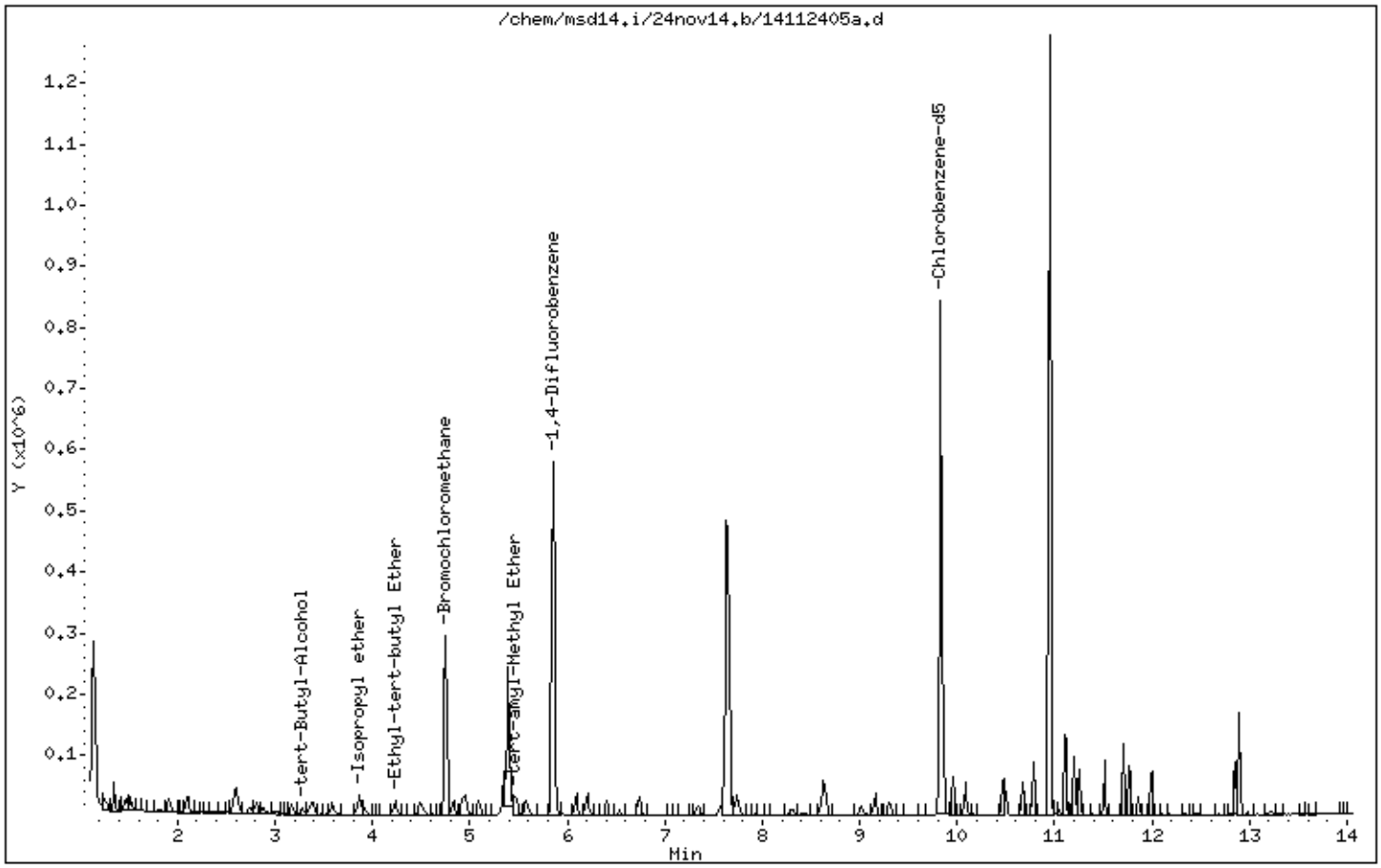
Instrument: msd14.i

Sample Info: 5.0ml #2687-64

Operator: md

Column phase: RTx-624

Column diameter: 0.53



Eurofins Air Toxics Inc.

EPA METHOD TO14A/TO15

Data file : /chem/msd14.i/24nov14.b/14112405.d
Lab Smp Id: ICAL Level 3 Client Smp ID: ICAL Level 3
Inj Date : 24-NOV-2014 10:03
Operator : md Inst ID: msd14.i
Smp Info : 5.0ml #2687-64
Misc Info : 20ppbv (200ppbv)
Comment : (5&20) - GC/MS
Method : /chem/msd14.i/24nov14.b/14451124a.m
Meth Date : 24-Nov-2014 15:17 HR8M Quant Type: ISTD
Cal Date : 24-NOV-2014 10:03 Cal File: 14112405.d
Als bottle: 1 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT09mdlNoOxys.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 (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
* 75 Bromochloromethane					CAS #: 74-97-5		
4.753	4.753 (1.000)	130	104889	400.000		70.00- 130.00	100.00
4.753	4.753 (1.000)	128	83422			0.00- 30.00	79.53
4.753	4.753 (1.000)	49	125862			0.00- 30.00	120.00
* 94 1,4-Difluorobenzene					CAS #: 540-36-3		
5.858	5.858 (1.000)	114	532740	400.000		70.00- 130.00	100.00
5.858	5.858 (1.000)	88	80802			0.00- 30.00	15.17
* 125 Chlorobenzene-d5					CAS #: 3114-55-4		
9.832	9.832 (1.000)	117	472773	400.000		70.00- 130.00	100.00
9.832	9.832 (1.000)	82	238306			0.00- 30.00	50.41
$ 86 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
5.396	5.396 (1.135)	65	167122	400.000	428.52	70.00- 130.00	100.00
5.396	5.396 (1.135)	67	82433			0.00- 30.00	49.33
$ 110 Toluene-d8					CAS #: 2037-26-5		
7.635	7.635 (1.303)	98	525921	400.000	398.63	70.00- 130.00	100.00
7.635	7.635 (1.303)	70	55511			0.00- 30.00	10.56

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

$ 110 Toluene-d8 (continued)
  7.649   7.649 (1.306)   100    346533                     0.00-  30.00    65.89
-------------------------------------------------------------------------------
$ 139 Bromofluorobenzene                            CAS #: 460-00-4
 10.951  10.951 (1.114)   174    283101 400.000   395.85  70.00- 130.00   100.00
 10.951  10.951 (1.114)    95    324443                     0.00-  30.00   114.60
 10.951  10.951 (1.114)   176    276626                     0.00-  30.00    97.71
-------------------------------------------------------------------------------
    5 Propylene                                     CAS #: 115-07-1
  1.241   1.241 (0.261)    41      4629 20.0000   22.072  70.00- 130.00   100.00
  1.227   1.227 (0.258)    42      3012                     0.00-  30.00    65.07
  1.227   1.227 (0.258)    39      4062                     0.00-  30.00    87.75
-------------------------------------------------------------------------------
    7 Dichlorodifluoromethane/Fr12                  CAS #: 75-71-8
  1.255   1.255 (0.264)    85     19295 20.0000   19.076  70.00- 130.00   100.00
  1.255   1.255 (0.264)    87      6890                     0.00-  30.00    35.71
-------------------------------------------------------------------------------
    9 Freon 114                                     CAS #: 76-14-2
  1.353   1.353 (0.285)   135     12339 20.0000   15.958  70.00- 130.00   100.00
  1.353   1.353 (0.285)   137      4499                     0.00-  30.00    36.46
-------------------------------------------------------------------------------
   12 Chloromethane                                 CAS #: 74-87-3
  1.409   1.409 (0.296)    50      6436 20.0000   20.728  70.00- 130.00   100.00
  1.409   1.409 (0.296)    52      2190                     0.00-  30.00    34.03
-------------------------------------------------------------------------------
   13 Butane                                        CAS #: 106-97-8
  1.479   1.479 (0.311)    58      2107 20.0000   22.402  70.00- 130.00   100.00
  1.479   1.479 (0.311)    43     11879                     0.00-  30.00   563.79
-------------------------------------------------------------------------------
   15 Vinyl Chloride                                CAS #: 75-01-4
  1.507   1.507 (0.317)    62      8985 20.0000   20.675  70.00- 130.00   100.00
  1.521   1.521 (0.320)    64      3263                     0.00-  30.00    36.32
-------------------------------------------------------------------------------
   16 1,3-Butadiene                                 CAS #: 106-99-0
  1.521   1.521 (0.320)    54      5629 20.0000   17.451  70.00- 130.00   100.00
  1.521   1.521 (0.320)    39      5665                     0.00-  30.00   100.64
-------------------------------------------------------------------------------
   18 Bromomethane                                  CAS #: 74-83-9
  1.814   1.814 (0.382)    94      4532 20.0000   16.754  70.00- 130.00   100.00
  1.814   1.814 (0.382)    96      4074                     0.00-  30.00    89.89
-------------------------------------------------------------------------------
   19 Chloroethane                                  CAS #: 75-00-3
  1.912   1.912 (0.402)    64      5301 20.0000   26.011  70.00- 130.00   100.00
  1.912   1.912 (0.402)    66      1070                     0.00-  30.00    20.18
  1.912   1.912 (0.402)    49      1202                     0.00-  30.00    22.67
-------------------------------------------------------------------------------
```

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
20 Isopentane					CAS #: 78-78-4		
1.912	1.912 (0.402)	43	8433	20.0000	20.971	70.00- 130.00	100.00
1.912	1.912 (0.402)	57	6618			0.00- 30.00	78.48
1.912	1.912 (0.402)	72	1049			0.00- 30.00	12.44
23 Trichlorofluoromethane/Fr11					CAS #: 75-69-4		
2.108	2.108 (0.444)	101	23077	20.0000	17.174	70.00- 130.00	100.00
2.108	2.108 (0.444)	103	15210			0.00- 30.00	65.91
30 Ethanol					CAS #: 64-17-5		
2.360	2.360 (0.497)	45	3258	20.0000	23.611	70.00- 130.00	100.00
2.360	2.360 (0.497)	43	662			0.00- 30.00	20.32
2.360	2.360 (0.497)	46	1246			0.00- 30.00	38.24
34 Freon 113					CAS #: 76-13-1		
2.598	2.598 (0.547)	151	15012	20.0000	19.137	70.00- 130.00	100.00
2.598	2.598 (0.547)	153	8723			0.00- 30.00	58.11
2.598	2.598 (0.547)	101	17548			0.00- 30.00	116.89
36 1,1-Dichloroethene					CAS #: 75-35-4		
2.612	2.612 (0.550)	61	13370	20.0000	17.788	70.00- 130.00	100.00
2.612	2.612 (0.550)	96	9102			0.00- 30.00	68.08
2.626	2.626 (0.553)	98	5759			0.00- 30.00	43.07
38 Acetone					CAS #: 67-64-1		
2.738	2.738 (0.576)	58	4352	20.0000	21.967	70.00- 130.00	100.00
2.738	2.738 (0.576)	43	13324			0.00- 30.00	306.16
39 Carbon Disulfide					CAS #: 75-15-0		
2.808	2.808 (0.591)	76	24319	20.0000	19.245	70.00- 130.00	100.00
41 2-Propanol					CAS #: 67-63-0		
2.878	2.878 (0.606)	45	12115	20.0000	22.023	70.00- 130.00	100.00
2.878	2.878 (0.606)	43	2998			0.00- 30.00	24.75
2.892	2.892 (0.608)	59	769			0.00- 30.00	6.35
42 3-Chloropropene					CAS #: 107-05-1		
3.004	3.004 (0.632)	76	1397	20.0000	15.962	70.00- 130.00	100.00(a)
3.004	3.004 (0.632)	41	2789			0.00- 30.00	199.64
48 Methylene Chloride					CAS #: 75-09-2		
3.172	3.172 (0.667)	49	10139	20.0000	17.504	70.00- 130.00	100.00
3.172	3.172 (0.667)	84	8199			0.00- 30.00	80.87
3.172	3.172 (0.667)	51	3185			0.00- 30.00	31.41
50 MTBE					CAS #: 1634-04-4		
3.368	3.368 (0.709)	73	17084	20.0000	16.353	70.00- 130.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
50 MTBE (continued)							
3.354	3.354 (0.706)	57	3414			0.00- 30.00	19.98
3.354	3.354 (0.706)	41	4884			0.00- 30.00	28.59
52 trans-1,2-Dichloroethene					CAS #: 156-60-5		
3.396	3.396 (0.714)	96	7849	20.0000	16.693	70.00- 130.00	100.00
3.396	3.396 (0.714)	61	10563			0.00- 30.00	134.58
3.396	3.396 (0.714)	98	5228			0.00- 30.00	66.61
55 Hexane					CAS #: 110-54-3		
3.591	3.591 (0.756)	57	13694	20.0000	19.056	70.00- 130.00	100.00
3.591	3.591 (0.756)	43	7126			0.00- 30.00	52.04
3.591	3.591 (0.756)	86	2571			0.00- 30.00	18.77
59 1,1-Dichloroethane					CAS #: 75-34-3		
3.871	3.871 (0.815)	63	13367	20.0000	16.444	70.00- 130.00	100.00
3.871	3.871 (0.815)	65	4658			0.00- 30.00	34.85
60 Vinyl Acetate					CAS #: 108-05-4		
3.927	3.927 (0.826)	86	2153	20.0000	19.346	70.00- 130.00	100.00(a)
3.927	3.927 (0.826)	43	18745			0.00- 30.00	870.65
3.913	3.913 (0.823)	42	2046			0.00- 30.00	95.03
68 cis-1,2-Dichloroethene					CAS #: 156-59-2		
4.487	4.487 (0.944)	61	12459	20.0000	17.818	70.00- 130.00	100.00
4.501	4.501 (0.947)	96	10433			0.00- 30.00	83.74
4.487	4.487 (0.944)	98	6534			0.00- 30.00	52.44
70 2-Butanone					CAS #: 78-93-3		
4.529	4.529 (0.953)	72	3814	20.0000	20.104	70.00- 130.00	100.00
4.529	4.529 (0.953)	43	12930			0.00- 30.00	339.01
4.529	4.529 (0.953)	57	1251			0.00- 30.00	32.80
74 Tetrahydrofuran					CAS #: 109-99-9		
4.739	4.739 (0.997)	42	7759	20.0000	16.982	70.00- 130.00	100.00
4.739	4.739 (0.997)	71	3341			0.00- 30.00	43.06
4.739	4.739 (0.997)	72	3390			0.00- 30.00	43.69
76 Chloroform					CAS #: 67-66-3		
4.837	4.837 (1.018)	83	19192	20.0000	17.431	70.00- 130.00	100.00
4.837	4.837 (1.018)	85	11505			0.00- 30.00	59.95
77 Cyclohexane					CAS #: 110-82-7		
4.921	4.921 (1.035)	84	12469	20.0000	18.478	70.00- 130.00	100.00
4.921	4.921 (1.035)	56	11769			0.00- 30.00	94.39
4.935	4.935 (1.038)	41	7542			0.00- 30.00	60.49

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
78 1,1,1-Trichloroethane					CAS #: 71-55-6		
4.963	4.963 (1.044)	97	17398	20.0000	17.113	70.00- 130.00	100.00
4.963	4.963 (1.044)	99	12104			0.00- 30.00	69.57
79 Carbon Tetrachloride					CAS #: 56-23-5		
5.089	5.089 (1.071)	119	15090	20.0000	16.555	70.00- 130.00	100.00
5.089	5.089 (1.071)	117	15502			0.00- 30.00	102.73
82 2,2,4-Trimethylpentane					CAS #: 540-84-1		
5.340	5.340 (1.124)	57	38202	20.0000	18.163	70.00- 130.00	100.00
5.340	5.340 (1.124)	56	13546			0.00- 30.00	35.46
5.340	5.340 (1.124)	41	11350			0.00- 30.00	29.71
83 Benzene					CAS #: 71-43-2		
5.354	5.354 (0.914)	78	27048	20.0000	15.257	70.00- 130.00	100.00
5.354	5.354 (0.914)	77	6219			0.00- 30.00	22.99
89 1,2-Dichloroethane					CAS #: 107-06-2		
5.480	5.480 (0.936)	62	10678	20.0000	15.634	70.00- 130.00	100.00
5.480	5.480 (0.936)	64	3956			0.00- 30.00	37.05
93 Heptane					CAS #: 142-82-5		
5.578	5.578 (0.952)	71	8263	20.0000	15.961	70.00- 130.00	100.00
5.578	5.578 (0.952)	43	13635			0.00- 30.00	165.01
5.578	5.578 (0.952)	100	3055			0.00- 30.00	36.97
95 Trichloroethene					CAS #: 79-01-6		
6.096	6.096 (1.041)	95	12611	20.0000	16.898	70.00- 130.00	100.00
6.096	6.096 (1.041)	130	13695			0.00- 30.00	108.60
6.096	6.096 (1.041)	97	7299			0.00- 30.00	57.88
97 Methyl Cyclohexane					CAS #: 108-87-2		
6.208	6.208 (1.060)	83	15605	20.0000	16.641	70.00- 130.00	100.00
6.208	6.208 (1.060)	98	8728			0.00- 30.00	55.93
6.208	6.208 (1.060)	55	11635			0.00- 30.00	74.56
99 1,2-Dichloropropane					CAS #: 78-87-5		
6.404	6.404 (1.093)	63	9847	20.0000	17.366	70.00- 130.00	100.00
6.404	6.404 (1.093)	62	6454			0.00- 30.00	65.54
6.404	6.404 (1.093)	41	6119			0.00- 30.00	62.14
102 1,4-Dioxane					CAS #: 123-91-1		
6.544	6.544 (1.117)	88	6230	20.0000	19.672	70.00- 130.00	100.00(a)
6.544	6.544 (1.117)	58	4362			0.00- 30.00	70.02
6.544	6.544 (1.117)	57	1250			0.00- 30.00	20.06

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
104 Bromodichloromethane					CAS #: 75-27-4		
6.740	6.740 (1.150)	83	21195	20.0000	17.013	70.00- 130.00	100.00
6.740	6.740 (1.150)	85	14817			0.00- 30.00	69.91
108 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
7.341	7.341 (1.253)	75	12161	20.0000	17.392	70.00- 130.00	100.00
7.341	7.341 (1.253)	77	3959			0.00- 30.00	32.55
7.341	7.341 (1.253)	39	6278			0.00- 30.00	51.62
109 4-Methyl-2-pentanone					CAS #: 108-10-1		
7.579	7.579 (1.294)	85	3085	20.0000	17.855	70.00- 130.00	100.00
7.579	7.579 (1.294)	43	18321			0.00- 30.00	593.87
7.579	7.579 (1.294)	58	5891			0.00- 30.00	190.96
111 Toluene					CAS #: 108-88-3		
7.747	7.747 (1.322)	91	34609	20.0000	17.312	70.00- 130.00	100.00
7.747	7.747 (1.322)	92	19126			0.00- 30.00	55.26
114 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
8.307	8.307 (0.845)	75	9161	20.0000	16.107	70.00- 130.00	100.00
8.293	8.293 (0.843)	77	2512			0.00- 30.00	27.42
8.307	8.307 (0.845)	39	4955			0.00- 30.00	54.09
115 1,1,2-Trichloroethane					CAS #: 79-00-5		
8.628	8.628 (0.878)	97	13343	20.0000	17.757	70.00- 130.00	100.00
8.628	8.628 (0.878)	99	7345			0.00- 30.00	55.05
8.628	8.628 (0.878)	83	10272			0.00- 30.00	76.98
116 Tetrachloroethene					CAS #: 127-18-4		
8.642	8.642 (0.879)	166	17289	20.0000	17.902	70.00- 130.00	100.00
8.628	8.628 (0.878)	129	12619			0.00- 30.00	72.99
8.628	8.628 (0.878)	131	10772			0.00- 30.00	62.31
120 2-Hexanone					CAS #: 591-78-6		
9.020	9.020 (0.917)	58	7943	20.0000	18.586	70.00- 130.00	100.00(a)
9.020	9.020 (0.917)	43	13390			0.00- 30.00	168.58
9.006	9.006 (0.916)	100	1419			0.00- 30.00	17.86
121 Dibromochloromethane					CAS #: 124-48-1		
9.160	9.160 (0.932)	129	20669	20.0000	16.830	70.00- 130.00	100.00
9.160	9.160 (0.932)	127	16186			0.00- 30.00	78.31
124 1,2-Dibromoethane					CAS #: 106-93-4		
9.300	9.300 (0.946)	107	17840	20.0000	17.340	70.00- 130.00	100.00
9.300	9.300 (0.946)	109	16564			0.00- 30.00	92.85

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
127 Chlorobenzene					CAS #: 108-90-7		
9.860	9.860 (1.003)	112	29939	20.0000	17.594	70.00- 130.00	100.00
9.860	9.860 (1.003)	114	9901			0.00- 30.00	33.07
9.860	9.860 (1.003)	77	20609			0.00- 30.00	68.84
128 Ethyl Benzene					CAS #: 100-41-4		
9.958	9.958 (1.013)	106	13973	20.0000	18.570	70.00- 130.00	100.00
9.958	9.958 (1.013)	91	41660			0.00- 30.00	298.15
131 m,p-Xylene					CAS #: 108-38-3		
10.084	10.084 (1.026)	106	16038	20.0000	18.646	70.00- 130.00	100.00
10.084	10.084 (1.026)	91	32737			0.00- 30.00	204.12
132 o-Xylene					CAS #: 95-47-6		
10.461	10.461 (1.064)	106	15776	20.0000	18.107	70.00- 130.00	100.00
10.461	10.461 (1.064)	91	34087			0.00- 30.00	216.07
134 Styrene					CAS #: 100-42-5		
10.503	10.503 (1.068)	104	21720	20.0000	16.928	70.00- 130.00	100.00
10.503	10.503 (1.068)	78	10801			0.00- 30.00	49.73
136 Bromoform					CAS #: 75-25-2		
10.671	10.671 (1.085)	173	21461	20.0000	17.637	70.00- 130.00	100.00
10.671	10.671 (1.085)	171	10662			0.00- 30.00	49.68
138 Cumene					CAS #: 98-82-8		
10.783	10.783 (1.097)	105	48546	20.0000	18.818	70.00- 130.00	100.00
10.783	10.783 (1.097)	120	12689			0.00- 30.00	26.14
10.783	10.783 (1.097)	51	5046			0.00- 30.00	10.39
142 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
11.105	11.105 (1.129)	83	30028	20.0000	19.103	70.00- 130.00	100.00
11.105	11.105 (1.129)	85	19229			0.00- 30.00	64.04
143 Propylbenzene					CAS #: 103-65-1		
11.119	11.119 (1.131)	91	61531	20.0000	18.971	70.00- 130.00	100.00
11.119	11.119 (1.131)	120	14410			0.00- 30.00	23.42
11.119	11.119 (1.131)	105	2043			0.00- 30.00	3.32
147 4-Ethyltoluene					CAS #: 622-96-8		
11.203	11.203 (1.139)	105	48084	20.0000	18.786	70.00- 130.00	100.00
11.203	11.203 (1.139)	120	15682			0.00- 30.00	32.61
149 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
11.259	11.259 (1.145)	105	36081	20.0000	18.965	70.00- 130.00	100.00
11.259	11.259 (1.145)	120	18648			0.00- 30.00	51.68

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
152 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
11.511	11.511 (1.171)	105	38427	20.0000	20.409	70.00- 130.00	100.00
11.511	11.511 (1.171)	120	18544			0.00- 30.00	48.26
156 1,3-Dichlorobenzene					CAS #: 541-73-1		
11.707	11.707 (1.191)	146	32395	20.0000	20.094	70.00- 130.00	100.00
11.707	11.707 (1.191)	148	22024			0.00- 30.00	67.99
11.707	11.707 (1.191)	111	13086			0.00- 30.00	40.40
159 1,4-Dichlorobenzene					CAS #: 106-46-7		
11.777	11.777 (1.198)	146	31873	20.0000	20.392	70.00- 130.00	100.00
11.777	11.777 (1.198)	148	20427			0.00- 30.00	64.09
11.763	11.763 (1.196)	111	13169			0.00- 30.00	41.32
161 alpha-Chlorotoluene					CAS #: 100-44-7		
11.861	11.861 (1.206)	91	16446	20.0000	19.298	70.00- 130.00	100.00
11.861	11.861 (1.206)	126	3135			0.00- 30.00	19.06
163 1,2-Dichlorobenzene					CAS #: 95-50-1		
12.001	12.001 (1.221)	146	31414	20.0000	21.304	70.00- 130.00	100.00
12.001	12.001 (1.221)	148	18091			0.00- 30.00	57.59
12.001	12.001 (1.221)	111	12277			0.00- 30.00	39.08
169 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
12.854	12.854 (1.307)	180	22749	20.0000	36.313	70.00- 130.00	100.00
12.854	12.854 (1.307)	182	23086			0.00- 30.00	101.48
170 Hexachlorobutadiene					CAS #: 87-68-3		
12.896	12.896 (1.312)	225	18102	20.0000	33.093	70.00- 130.00	100.00
12.896	12.896 (1.312)	223	12263			0.00- 30.00	67.74
171 Naphthalene					CAS #: 91-20-3		
12.980	12.980 (1.320)	128	5126	2.00000	4.152	70.00- 130.00	100.00(Ta)
0.000	1.000 (0.000)	127	0			0.00- 30.00	0.00

QC Flag Legend

T - Target compound detected outside RT window.
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: msd14.i
Lab File ID: 14112405.d
Lab Smp Id: ICAL Level 3
Analysis Type: VOA
Quant Type: ISTD
Operator: md
Method File: /chem/msd14.i/24nov14.b/14451124a.m
Misc Info: 20ppbv (200ppbv)

Calibration Date: 24-NOV-2014
Calibration Time: 11:17
Client Smp ID: ICAL Level 3
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
75 Bromochloromethan	117767	70660	164874	104889	-10.94
94 1,4-Difluorobenze	544303	326582	762024	532740	-2.12
125 Chlorobenzene-d5	496681	298009	695353	472773	-4.81

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
75 Bromochloromethan	4.75	4.42	5.08	4.75	0.00
94 1,4-Difluorobenze	5.86	5.53	6.19	5.86	0.00
125 Chlorobenzene-d5	9.83	9.50	10.16	9.83	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/msd14.i/24nov14.b/14112405.d

Date : 24-NOV-2014 10:03

Client ID: ICAL Level 3

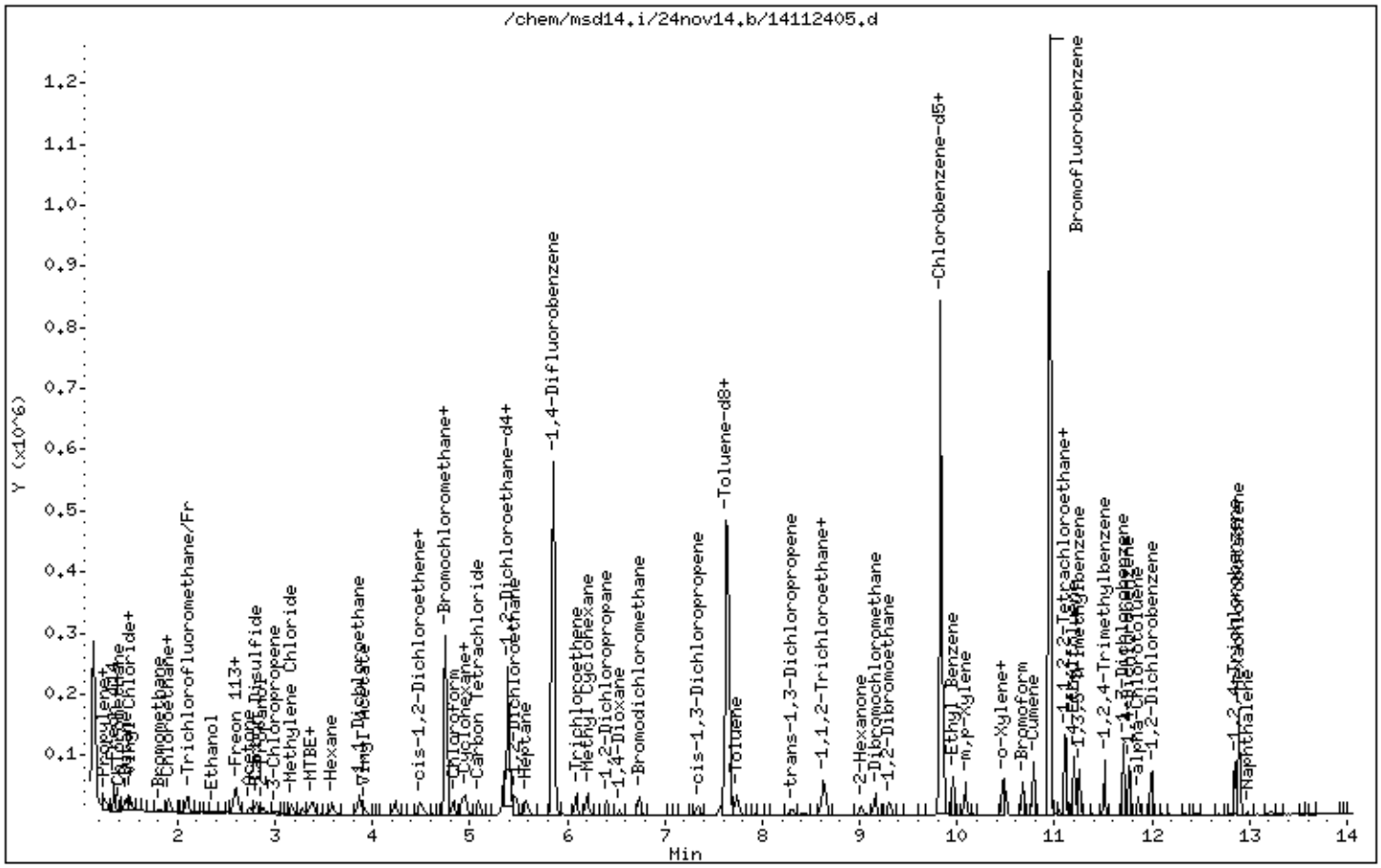
Instrument: msd14.i

Sample Info: 5.0ml #2687-64

Operator: md

Column phase: RTx-624

Column diameter: 0.53



Eurofins Air Toxics Inc.

EPA METHOD TO14A/TO15

Data file : /chem1/msd14.i/24nov14.b/14112406a.d
Lab Smp Id: ICAL Level 4 Client Smp ID: ICAL Level 4
Inj Date : 24-NOV-2014 10:35
Operator : md Inst ID: msd14.i
Smp Info : 12.5ml #2687-64
Misc Info : 50ppbv (200ppbv)
Comment : (5&20) - GC/MS
Method : /chem1/msd14.i/09dec14.b/14451124b.m
Meth Date : 09-Dec-2014 10:36 HR8M Quant Type: ISTD
Cal Date : 24-NOV-2014 10:35 Cal File: 14112406a.d
Als bottle: 1 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: Oxyscurve.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 (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
* 75 Bromochloromethane					CAS #: 74-97-5		
4.753	4.753 (1.000)	130	108560	400.000		70.00- 130.00	100.00
4.753	4.753 (1.000)	128	87013			0.00- 30.00	80.15
4.753	4.753 (1.000)	49	133035			0.00- 30.00	122.55
* 94 1,4-Difluorobenzene					CAS #: 540-36-3		
5.858	5.858 (1.000)	114	551692	400.000		70.00- 130.00	100.00
5.858	5.858 (1.000)	88	79760			0.00- 30.00	14.46
* 125 Chlorobenzene-d5					CAS #: 3114-55-4		
9.832	9.832 (1.000)	117	473109	400.000		70.00- 130.00	100.00
9.832	9.832 (1.000)	82	248879			0.00- 30.00	52.61
49 tert-Butyl-Alcohol					CAS #: 75-65-0		
3.284	3.284 (0.691)	59	19650	50.0000	32.347	70.00- 130.00	100.00
3.284	3.284 (0.691)	41	7315			0.00- 30.00	37.23
3.270	3.270 (0.688)	57	2193			0.00- 30.00	11.16
58 Isopropyl ether					CAS #: 108-20-3		
3.857	3.857 (0.812)	45	54141	50.0000	37.642	70.00- 130.00	100.00

RT	EXP RT	(REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
58 Isopropyl ether (continued)								
3.857	3.857	(0.812)	87	17260			0.00- 30.00	31.88
3.857	3.857	(0.812)	59	6886			0.00- 30.00	12.72
64 Ethyl-tert-butyl Ether						CAS #: 637-92-3		
4.235	4.235	(0.891)	59	46706	50.0000	34.702	70.00- 130.00	100.00
4.235	4.235	(0.891)	87	21779			0.00- 30.00	46.63
4.235	4.235	(0.891)	41	11963			0.00- 30.00	25.61
88 tert-amyl-Methyl Ether						CAS #: 994-05-8		
5.452	5.452	(1.147)	73	45947	50.0000	41.106	70.00- 130.00	100.00
5.466	5.466	(1.150)	87	11716			0.00- 30.00	25.50
5.452	5.452	(1.147)	55	16805			0.00- 30.00	36.57

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd14.i
Lab File ID: 14112406a.d
Lab Smp Id: ICAL Level 4
Analysis Type: VOA
Quant Type: ISTD
Operator: md
Method File: /chem1/msd14.i/09dec14.b/14451124b.m
Misc Info: 50ppbv (200ppbv)

Calibration Date: 24-NOV-2014
Calibration Time: 10:35
Client Smp ID: ICAL Level 4
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
75 Bromochloromethan	108560	65136	151984	108560	0.00
94 1,4-Difluorobenze	551692	331015	772369	551692	0.00
125 Chlorobenzene-d5	473109	283865	662353	473109	0.00

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
75 Bromochloromethan	4.75	4.42	5.08	4.75	0.00
94 1,4-Difluorobenze	5.86	5.53	6.19	5.86	0.00
125 Chlorobenzene-d5	9.83	9.50	10.16	9.83	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/msd14.i/24nov14.b/14112406a.d

Date : 24-NOV-2014 10:35

Client ID: ICAL Level 4

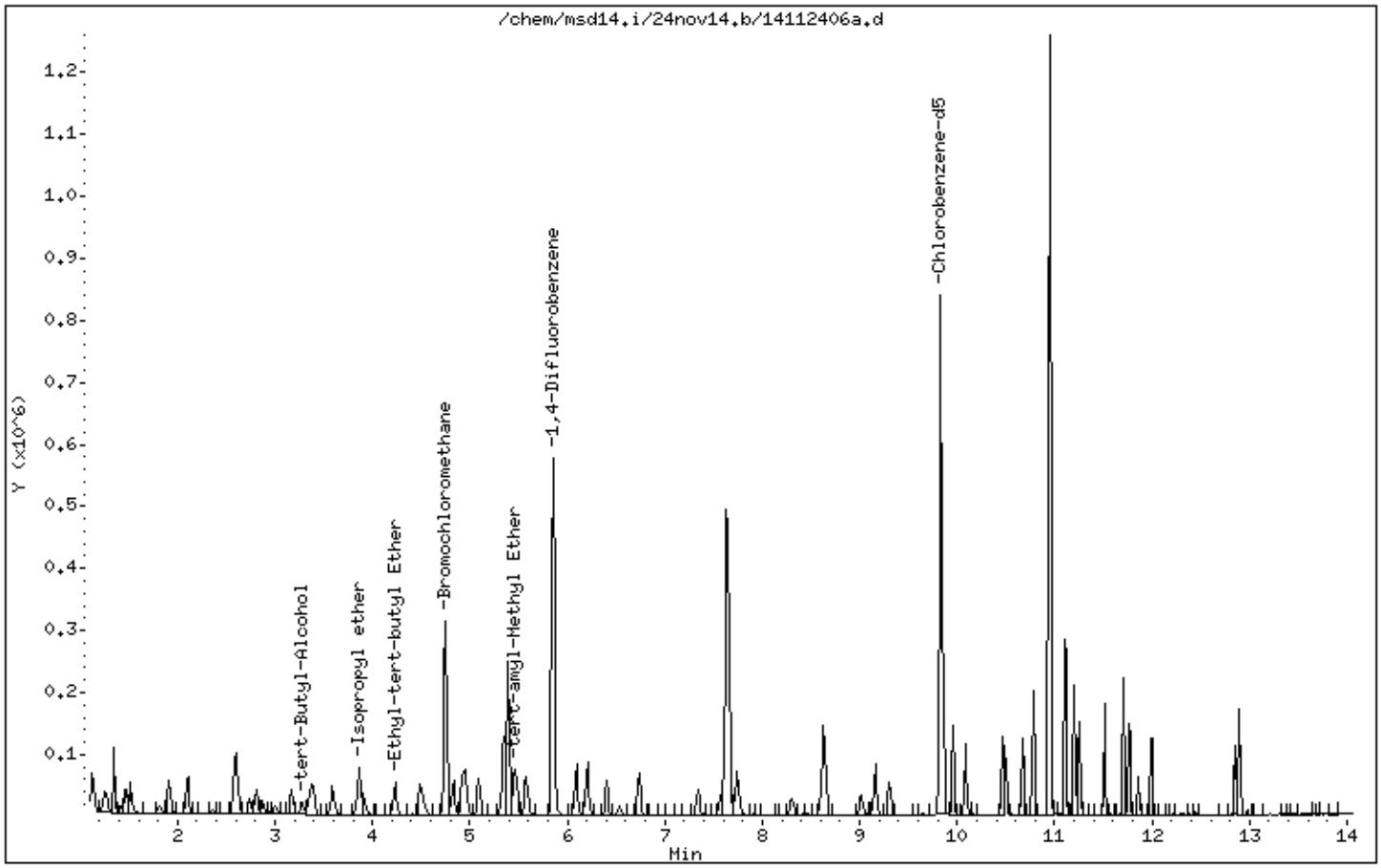
Instrument: msd14.i

Sample Info: 12.5ml #2687-64

Operator: md

Column phase: RTx-624

Column diameter: 0.53



Eurofins Air Toxics Inc.

EPA METHOD TO14A/TO15

Data file : /chem/msd14.i/24nov14.b/14112406.d
Lab Smp Id: ICAL Level 4 Client Smp ID: ICAL Level 4
Inj Date : 24-NOV-2014 10:35
Operator : md Inst ID: msd14.i
Smp Info : 12.5ml #2687-64
Misc Info : 50ppbv (200ppbv)
Comment : (5&20) - GC/MS
Method : /chem/msd14.i/24nov14.b/14451124a.m
Meth Date : 24-Nov-2014 15:17 HR8M Quant Type: ISTD
Cal Date : 24-NOV-2014 10:35 Cal File: 14112406.d
Als bottle: 1 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT09mdlNoOxys.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 (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
* 75 Bromochloromethane						CAS #: 74-97-5	
4.753	4.753 (1.000)	130	108560	400.000		70.00- 130.00	100.00
4.753	4.753 (1.000)	128	87013			0.00- 30.00	80.15
4.753	4.753 (1.000)	49	133035			0.00- 30.00	122.55
* 94 1,4-Difluorobenzene						CAS #: 540-36-3	
5.858	5.858 (1.000)	114	551692	400.000		70.00- 130.00	100.00
5.858	5.858 (1.000)	88	79760			0.00- 30.00	14.46
* 125 Chlorobenzene-d5						CAS #: 3114-55-4	
9.832	9.832 (1.000)	117	473109	400.000		70.00- 130.00	100.00
9.832	9.832 (1.000)	82	248879			0.00- 30.00	52.61
$ 86 1,2-Dichloroethane-d4						CAS #: 17060-07-0	
5.396	5.396 (1.135)	65	171378	400.000	419.42	70.00- 130.00	100.00
5.396	5.396 (1.135)	67	87954			0.00- 30.00	51.32
$ 110 Toluene-d8						CAS #: 2037-26-5	
7.635	7.635 (1.303)	98	523534	400.000	386.44	70.00- 130.00	100.00
7.635	7.635 (1.303)	70	56867			0.00- 30.00	10.86

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
$ 110 Toluene-d8 (continued)							
7.635	7.635 (1.303)	100	354029			0.00- 30.00	67.62
$ 139 Bromofluorobenzene					CAS #: 460-00-4		
10.951	10.951 (1.114)	174	282524	400.000	395.80	70.00- 130.00	100.00
10.951	10.951 (1.114)	95	331662			0.00- 30.00	117.39
10.951	10.951 (1.114)	176	275585			0.00- 30.00	97.54
5 Propylene					CAS #: 115-07-1		
1.227	1.227 (0.258)	41	10500	50.0000	48.903	70.00- 130.00	100.00
1.227	1.227 (0.258)	42	6683			0.00- 30.00	63.65
1.227	1.227 (0.258)	39	8185			0.00- 30.00	77.95
7 Dichlorodifluoromethane/Fr12					CAS #: 75-71-8		
1.269	1.269 (0.267)	85	45043	50.0000	44.580	70.00- 130.00	100.00
1.255	1.255 (0.264)	87	14882			0.00- 30.00	33.04
9 Freon 114					CAS #: 76-14-2		
1.353	1.353 (0.285)	135	29642	50.0000	39.605	70.00- 130.00	100.00
1.353	1.353 (0.285)	137	9770			0.00- 30.00	32.96
12 Chloromethane					CAS #: 74-87-3		
1.409	1.409 (0.296)	50	15073	50.0000	47.892	70.00- 130.00	100.00
1.409	1.409 (0.296)	52	4963			0.00- 30.00	32.93
13 Butane					CAS #: 106-97-8		
1.479	1.479 (0.311)	58	4570	50.0000	47.922	70.00- 130.00	100.00
1.479	1.479 (0.311)	43	26900			0.00- 30.00	588.62
15 Vinyl Chloride					CAS #: 75-01-4		
1.507	1.507 (0.317)	62	20422	50.0000	46.471	70.00- 130.00	100.00
1.521	1.521 (0.320)	64	10631			0.00- 30.00	52.06
16 1,3-Butadiene					CAS #: 106-99-0		
1.521	1.521 (0.320)	54	14157	50.0000	44.079	70.00- 130.00	100.00
1.521	1.521 (0.320)	39	14415			0.00- 30.00	101.82
18 Bromomethane					CAS #: 74-83-9		
1.814	1.814 (0.382)	94	10757	50.0000	40.782	70.00- 130.00	100.00
1.814	1.814 (0.382)	96	9438			0.00- 30.00	87.74
19 Chloroethane					CAS #: 75-00-3		
1.912	1.912 (0.402)	64	9521	50.0000	46.650	70.00- 130.00	100.00
1.912	1.912 (0.402)	66	2277			0.00- 30.00	23.92
1.912	1.912 (0.402)	49	2339			0.00- 30.00	24.57

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
20 Isopentane					CAS #: 78-78-4		
1.912	1.912 (0.402)	43	19556	50.0000	47.950	70.00- 130.00	100.00
1.912	1.912 (0.402)	57	14328			0.00- 30.00	73.27
1.912	1.912 (0.402)	72	2200			0.00- 30.00	11.25
23 Trichlorofluoromethane/Fr11					CAS #: 75-69-4		
2.108	2.108 (0.444)	101	55017	50.0000	41.738	70.00- 130.00	100.00
2.108	2.108 (0.444)	103	35399			0.00- 30.00	64.34
30 Ethanol					CAS #: 64-17-5		
2.360	2.360 (0.497)	45	5485	50.0000	41.623	70.00- 130.00	100.00
2.360	2.360 (0.497)	43	1506			0.00- 30.00	27.46
2.346	2.346 (0.494)	46	2621			0.00- 30.00	47.78
34 Freon 113					CAS #: 76-13-1		
2.598	2.598 (0.547)	151	34365	50.0000	44.015	70.00- 130.00	100.00
2.598	2.598 (0.547)	153	22225			0.00- 30.00	64.67
2.584	2.584 (0.544)	101	43223			0.00- 30.00	125.78
36 1,1-Dichloroethene					CAS #: 75-35-4		
2.612	2.612 (0.550)	61	31606	50.0000	42.626	70.00- 130.00	100.00
2.612	2.612 (0.550)	96	19713			0.00- 30.00	62.37
2.612	2.612 (0.550)	98	12383			0.00- 30.00	39.18
38 Acetone					CAS #: 67-64-1		
2.738	2.738 (0.576)	58	8949	50.0000	45.575	70.00- 130.00	100.00
2.738	2.738 (0.576)	43	28695			0.00- 30.00	320.65
39 Carbon Disulfide					CAS #: 75-15-0		
2.808	2.808 (0.591)	76	55409	50.0000	44.047	70.00- 130.00	100.00
41 2-Propanol					CAS #: 67-63-0		
2.878	2.878 (0.606)	45	22752	50.0000	42.827	70.00- 130.00	100.00
2.878	2.878 (0.606)	43	5993			0.00- 30.00	26.34
2.878	2.878 (0.606)	59	898			0.00- 30.00	3.95
42 3-Chloropropene					CAS #: 107-05-1		
3.004	3.004 (0.632)	76	3167	50.0000	38.858	70.00- 130.00	100.00
3.004	3.004 (0.632)	41	7121			0.00- 30.00	224.85
48 Methylene Chloride					CAS #: 75-09-2		
3.172	3.172 (0.667)	49	22925	50.0000	40.629	70.00- 130.00	100.00
3.172	3.172 (0.667)	84	17937			0.00- 30.00	78.24
3.172	3.172 (0.667)	51	6968			0.00- 30.00	30.39
50 MTBE					CAS #: 1634-04-4		
3.354	3.354 (0.706)	73	40609	50.0000	40.048	70.00- 130.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
50 MTBE (continued)							
3.354	3.354 (0.706)	57	9597			0.00- 30.00	23.63
3.368	3.368 (0.709)	41	12146			0.00- 30.00	29.91
52 trans-1,2-Dichloroethene					CAS #: 156-60-5		
3.396	3.396 (0.714)	96	18693	50.0000	40.774	70.00- 130.00	100.00
3.396	3.396 (0.714)	61	24160			0.00- 30.00	129.25
3.396	3.396 (0.714)	98	12882			0.00- 30.00	68.91
55 Hexane					CAS #: 110-54-3		
3.591	3.591 (0.756)	57	29718	50.0000	42.068	70.00- 130.00	100.00
3.591	3.591 (0.756)	43	18931			0.00- 30.00	63.70
3.591	3.591 (0.756)	86	6678			0.00- 30.00	22.47
59 1,1-Dichloroethane					CAS #: 75-34-3		
3.871	3.871 (0.815)	63	33617	50.0000	42.070	70.00- 130.00	100.00
3.871	3.871 (0.815)	65	10800			0.00- 30.00	32.13
60 Vinyl Acetate					CAS #: 108-05-4		
3.913	3.913 (0.823)	86	5568	50.0000	48.880	70.00- 130.00	100.00
3.913	3.913 (0.823)	43	49348			0.00- 30.00	886.28
3.913	3.913 (0.823)	42	5152			0.00- 30.00	92.53
68 cis-1,2-Dichloroethene					CAS #: 156-59-2		
4.487	4.487 (0.944)	61	29948	50.0000	43.245	70.00- 130.00	100.00
4.487	4.487 (0.944)	96	23668			0.00- 30.00	79.03
4.487	4.487 (0.944)	98	15819			0.00- 30.00	52.82
70 2-Butanone					CAS #: 78-93-3		
4.529	4.529 (0.953)	72	8949	50.0000	46.961	70.00- 130.00	100.00
4.529	4.529 (0.953)	43	32076			0.00- 30.00	358.43
4.529	4.529 (0.953)	57	3014			0.00- 30.00	33.68
74 Tetrahydrofuran					CAS #: 109-99-9		
4.739	4.739 (0.997)	42	17550	50.0000	39.669	70.00- 130.00	100.00
4.739	4.739 (0.997)	71	7825			0.00- 30.00	44.59
4.739	4.739 (0.997)	72	9274			0.00- 30.00	52.84
76 Chloroform					CAS #: 67-66-3		
4.837	4.837 (1.018)	83	44258	50.0000	41.134	70.00- 130.00	100.00
4.837	4.837 (1.018)	85	29348			0.00- 30.00	66.31
77 Cyclohexane					CAS #: 110-82-7		
4.935	4.935 (1.038)	84	28068	50.0000	42.261	70.00- 130.00	100.00
4.921	4.921 (1.035)	56	30627			0.00- 30.00	109.12
4.921	4.921 (1.035)	41	17276			0.00- 30.00	61.55

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
78 1,1,1-Trichloroethane					CAS #: 71-55-6		
4.963	4.963 (1.044)	97	44836	50.0000	44.245	70.00- 130.00	100.00
4.963	4.963 (1.044)	99	28961			0.00- 30.00	64.59
79 Carbon Tetrachloride					CAS #: 56-23-5		
5.089	5.089 (1.071)	119	37629	50.0000	42.011	70.00- 130.00	100.00
5.089	5.089 (1.071)	117	38994			0.00- 30.00	103.63
82 2,2,4-Trimethylpentane					CAS #: 540-84-1		
5.340	5.340 (1.124)	57	96732	50.0000	45.707	70.00- 130.00	100.00
5.340	5.340 (1.124)	56	31169			0.00- 30.00	32.22
5.340	5.340 (1.124)	41	27548			0.00- 30.00	28.48
83 Benzene					CAS #: 71-43-2		
5.354	5.354 (0.914)	78	63326	50.0000	36.775	70.00- 130.00	100.00
5.354	5.354 (0.914)	77	16298			0.00- 30.00	25.74
89 1,2-Dichloroethane					CAS #: 107-06-2		
5.480	5.480 (0.936)	62	28090	50.0000	41.868	70.00- 130.00	100.00
5.480	5.480 (0.936)	64	8933			0.00- 30.00	31.80
93 Heptane					CAS #: 142-82-5		
5.578	5.578 (0.952)	71	21616	50.0000	42.370	70.00- 130.00	100.00
5.578	5.578 (0.952)	43	31117			0.00- 30.00	143.95
5.578	5.578 (0.952)	100	8202			0.00- 30.00	37.94
95 Trichloroethene					CAS #: 79-01-6		
6.096	6.096 (1.041)	95	30183	50.0000	41.316	70.00- 130.00	100.00
6.096	6.096 (1.041)	130	29822			0.00- 30.00	98.80
6.096	6.096 (1.041)	97	19231			0.00- 30.00	63.71
97 Methyl Cyclohexane					CAS #: 108-87-2		
6.208	6.208 (1.060)	83	38695	50.0000	41.977	70.00- 130.00	100.00
6.208	6.208 (1.060)	98	20378			0.00- 30.00	52.66
6.208	6.208 (1.060)	55	29769			0.00- 30.00	76.93
99 1,2-Dichloropropane					CAS #: 78-87-5		
6.404	6.404 (1.093)	63	22423	50.0000	40.584	70.00- 130.00	100.00
6.404	6.404 (1.093)	62	16096			0.00- 30.00	71.78
6.404	6.404 (1.093)	41	13159			0.00- 30.00	58.69
102 1,4-Dioxane					CAS #: 123-91-1		
6.544	6.544 (1.117)	88	13422	50.0000	43.561	70.00- 130.00	100.00
6.530	6.530 (1.115)	58	7652			0.00- 30.00	57.01
6.544	6.544 (1.117)	57	3137			0.00- 30.00	23.37

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
104 Bromodichloromethane						CAS #: 75-27-4	
6.740	6.740 (1.150)	83	51028	50.0000	41.733	70.00- 130.00	100.00
6.740	6.740 (1.150)	85	31325			0.00- 30.00	61.39
108 cis-1,3-Dichloropropene						CAS #: 10061-01-5	
7.341	7.341 (1.253)	75	27760	50.0000	40.711	70.00- 130.00	100.00
7.341	7.341 (1.253)	77	9653			0.00- 30.00	34.77
7.341	7.341 (1.253)	39	15072			0.00- 30.00	54.29
109 4-Methyl-2-pentanone						CAS #: 108-10-1	
7.565	7.565 (1.291)	85	7391	50.0000	43.184	70.00- 130.00	100.00
7.579	7.579 (1.294)	43	39657			0.00- 30.00	536.56
7.579	7.579 (1.294)	58	14926			0.00- 30.00	201.95
111 Toluene						CAS #: 108-88-3	
7.747	7.747 (1.322)	91	80877	50.0000	41.325	70.00- 130.00	100.00
7.747	7.747 (1.322)	92	47514			0.00- 30.00	58.75
114 trans-1,3-Dichloropropene						CAS #: 10061-02-6	
8.307	8.307 (0.845)	75	21773	50.0000	40.641	70.00- 130.00	100.00
8.307	8.307 (0.845)	77	7683			0.00- 30.00	35.29
8.307	8.307 (0.845)	39	13016			0.00- 30.00	59.78
115 1,1,2-Trichloroethane						CAS #: 79-00-5	
8.629	8.629 (0.878)	97	27674	50.0000	39.403	70.00- 130.00	100.00
8.629	8.629 (0.878)	99	17814			0.00- 30.00	64.37
8.614	8.614 (0.876)	83	25178			0.00- 30.00	90.98
116 Tetrachloroethene						CAS #: 127-18-4	
8.629	8.629 (0.878)	166	38777	50.0000	42.208	70.00- 130.00	100.00
8.629	8.629 (0.878)	129	28222			0.00- 30.00	72.78
8.629	8.629 (0.878)	131	28077			0.00- 30.00	72.41
120 2-Hexanone						CAS #: 591-78-6	
9.020	9.020 (0.917)	58	17144	50.0000	42.924	70.00- 130.00	100.00
9.020	9.020 (0.917)	43	32688			0.00- 30.00	190.67
9.020	9.020 (0.917)	100	4250			0.00- 30.00	24.79
121 Dibromochloromethane						CAS #: 124-48-1	
9.160	9.160 (0.932)	129	52656	50.0000	44.436	70.00- 130.00	100.00
9.160	9.160 (0.932)	127	40536			0.00- 30.00	76.98
124 1,2-Dibromoethane						CAS #: 106-93-4	
9.300	9.300 (0.946)	107	41662	50.0000	42.492	70.00- 130.00	100.00
9.300	9.300 (0.946)	109	41563			0.00- 30.00	99.76

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
127 Chlorobenzene					CAS #: 108-90-7		
9.860	9.860 (1.003)	112	66911	50.0000	41.515	70.00- 130.00	100.00
9.860	9.860 (1.003)	114	21799			0.00- 30.00	32.58
9.860	9.860 (1.003)	77	41121			0.00- 30.00	61.46
128 Ethyl Benzene					CAS #: 100-41-4		
9.958	9.958 (1.013)	106	30398	50.0000	42.413	70.00- 130.00	100.00
9.958	9.958 (1.013)	91	101423			0.00- 30.00	333.65
131 m,p-Xylene					CAS #: 108-38-3		
10.084	10.084 (1.026)	106	36690	50.0000	44.258	70.00- 130.00	100.00
10.084	10.084 (1.026)	91	72927			0.00- 30.00	198.77
132 o-Xylene					CAS #: 95-47-6		
10.461	10.461 (1.064)	106	36971	50.0000	44.078	70.00- 130.00	100.00
10.461	10.461 (1.064)	91	75103			0.00- 30.00	203.14
134 Styrene					CAS #: 100-42-5		
10.503	10.503 (1.068)	104	53433	50.0000	43.436	70.00- 130.00	100.00
10.503	10.503 (1.068)	78	22067			0.00- 30.00	41.30
136 Bromoform					CAS #: 75-25-2		
10.671	10.671 (1.085)	173	48785	50.0000	42.159	70.00- 130.00	100.00
10.671	10.671 (1.085)	171	25016			0.00- 30.00	51.28
138 Cumene					CAS #: 98-82-8		
10.783	10.783 (1.097)	105	106898	50.0000	43.267	70.00- 130.00	100.00
10.783	10.783 (1.097)	120	30509			0.00- 30.00	28.54
10.783	10.783 (1.097)	51	10466			0.00- 30.00	9.79
142 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
11.105	11.105 (1.129)	83	63204	50.0000	42.255	70.00- 130.00	100.00
11.105	11.105 (1.129)	85	38975			0.00- 30.00	61.67
143 Propylbenzene					CAS #: 103-65-1		
11.119	11.119 (1.131)	91	137170	50.0000	43.963	70.00- 130.00	100.00
11.119	11.119 (1.131)	120	30886			0.00- 30.00	22.52
11.119	11.119 (1.131)	105	5135			0.00- 30.00	3.74
147 4-Ethyltoluene					CAS #: 622-96-8		
11.203	11.203 (1.139)	105	110835	50.0000	44.778	70.00- 130.00	100.00
11.203	11.203 (1.139)	120	31662			0.00- 30.00	28.57
149 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
11.259	11.259 (1.145)	105	79674	50.0000	43.627	70.00- 130.00	100.00
11.259	11.259 (1.145)	120	39320			0.00- 30.00	49.35

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
152 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
11.511	11.511 (1.171)	105	78171	50.0000	43.332	70.00- 130.00	100.00
11.511	11.511 (1.171)	120	35496			0.00- 30.00	45.41
156 1,3-Dichlorobenzene					CAS #: 541-73-1		
11.707	11.707 (1.191)	146	62239	50.0000	40.914	70.00- 130.00	100.00
11.707	11.707 (1.191)	148	39910			0.00- 30.00	64.12
11.707	11.707 (1.191)	111	23904			0.00- 30.00	38.41
159 1,4-Dichlorobenzene					CAS #: 106-46-7		
11.777	11.777 (1.198)	146	57820	50.0000	39.544	70.00- 130.00	100.00
11.777	11.777 (1.198)	148	38321			0.00- 30.00	66.28
11.763	11.763 (1.196)	111	22497			0.00- 30.00	38.91
161 alpha-Chlorotoluene					CAS #: 100-44-7		
11.861	11.861 (1.206)	91	30977	50.0000	38.989	70.00- 130.00	100.00
11.861	11.861 (1.206)	126	6722			0.00- 30.00	21.70
163 1,2-Dichlorobenzene					CAS #: 95-50-1		
12.001	12.001 (1.221)	146	54573	50.0000	39.558	70.00- 130.00	100.00
12.001	12.001 (1.221)	148	33471			0.00- 30.00	61.33
12.001	12.001 (1.221)	111	22137			0.00- 30.00	40.56
169 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
12.854	12.854 (1.307)	180	28232	50.0000	47.387	70.00- 130.00	100.00
12.854	12.854 (1.307)	182	24425			0.00- 30.00	86.52
170 Hexachlorobutadiene					CAS #: 87-68-3		
12.896	12.896 (1.312)	225	20165	50.0000	42.422	70.00- 130.00	100.00
12.896	12.896 (1.312)	223	12292			0.00- 30.00	60.96
171 Naphthalene					CAS #: 91-20-3		
12.980	12.980 (1.320)	128	5476	5.00000	4.699	70.00- 130.00	100.00(a)
12.980	12.980 (1.320)	127	794			0.00- 30.00	14.50

QC Flag Legend

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

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd14.i
Lab File ID: 14112406.d
Lab Smp Id: ICAL Level 4
Analysis Type: VOA
Quant Type: ISTD
Operator: md
Method File: /chem/msd14.i/24nov14.b/14451124a.m
Misc Info: 50ppbv (200ppbv)

Calibration Date: 24-NOV-2014
Calibration Time: 11:17
Client Smp ID: ICAL Level 4
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
75 Bromochloromethan	117767	70660	164874	108560	-7.82
94 1,4-Difluorobenze	544303	326582	762024	551692	1.36
125 Chlorobenzene-d5	496681	298009	695353	473109	-4.75

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
75 Bromochloromethan	4.75	4.42	5.08	4.75	0.00
94 1,4-Difluorobenze	5.86	5.53	6.19	5.86	0.00
125 Chlorobenzene-d5	9.83	9.50	10.16	9.83	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/msd14.i/24nov14.b/14112406.d

Date : 24-NOV-2014 10:35

Client ID: ICAL Level 4

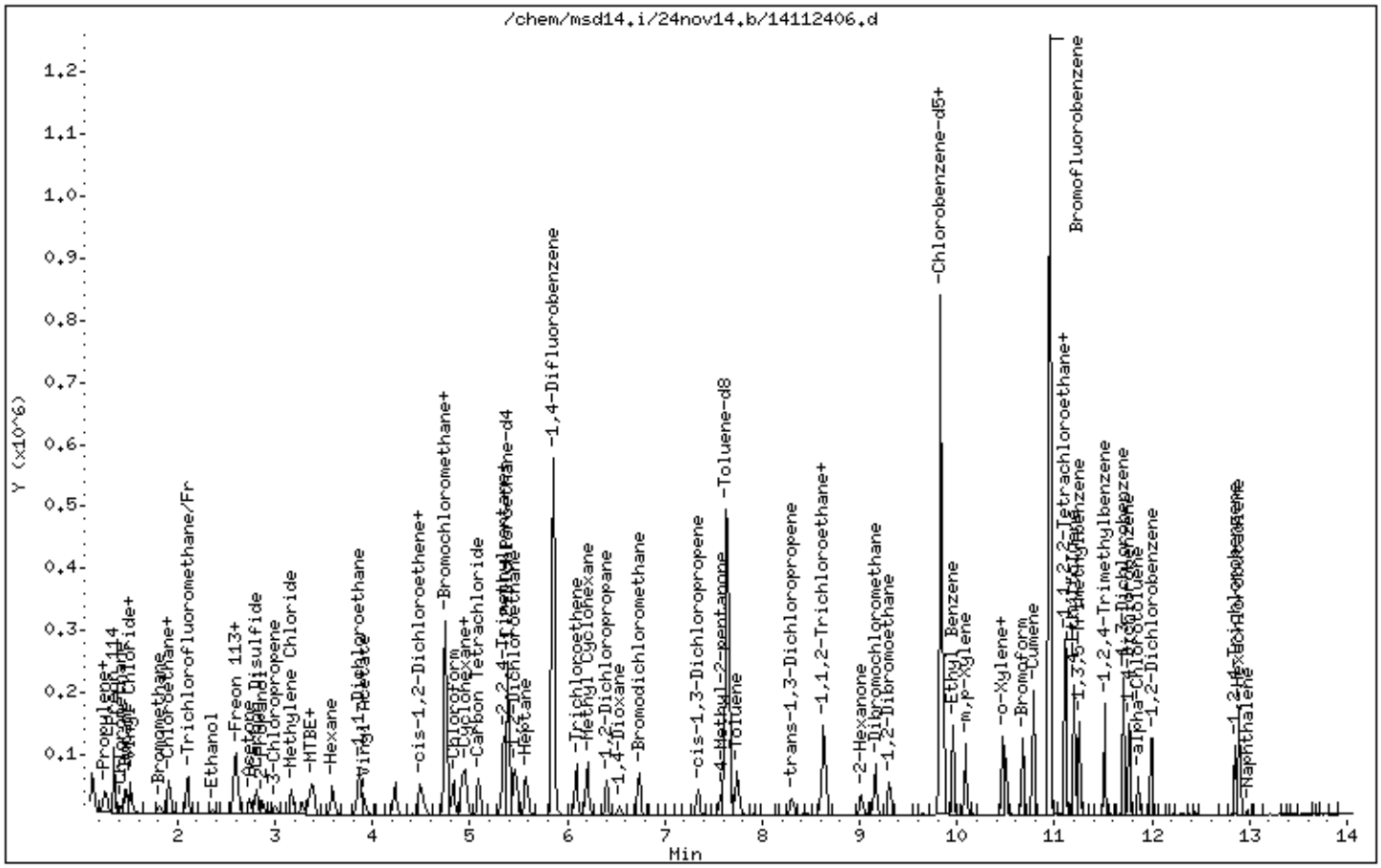
Instrument: msd14.i

Sample Info: 12.5ml #2687-64

Operator: md

Column phase: RTx-624

Column diameter: 0.53



Eurofins Air Toxics Inc.

EPA METHOD TO14A/TO15

Data file : /chem1/msd14.i/24nov14.b/14112407a.d
Lab Smp Id: ICAL Level 5 Client Smp ID: ICAL Level 5
Inj Date : 24-NOV-2014 10:54
Operator : md Inst ID: msd14.i
Smp Info : 25.0ml #2687-64
Misc Info : 100ppbv (200ppbv)
Comment : (5&20) - GC/MS
Method : /chem1/msd14.i/09dec14.b/14451124b.m
Meth Date : 09-Dec-2014 10:36 HR8M Quant Type: ISTD
Cal Date : 24-NOV-2014 10:54 Cal File: 14112407a.d
Als bottle: 1 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: Oxyscurve.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 (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
* 75 Bromochloromethane						CAS #: 74-97-5	
4.753	4.753 (1.000)	130	121003	400.000		70.00- 130.00	100.00
4.753	4.753 (1.000)	128	90933			0.00- 30.00	75.15
4.753	4.753 (1.000)	49	140020			0.00- 30.00	115.72
* 94 1,4-Difluorobenzene						CAS #: 540-36-3	
5.858	5.858 (1.000)	114	539197	400.000		70.00- 130.00	100.00
5.858	5.858 (1.000)	88	79907			0.00- 30.00	14.82
* 125 Chlorobenzene-d5						CAS #: 3114-55-4	
9.832	9.832 (1.000)	117	490674	400.000		70.00- 130.00	100.00
9.832	9.832 (1.000)	82	249056			0.00- 30.00	50.76
49 tert-Butyl-Alcohol						CAS #: 75-65-0	
3.283	3.283 (0.691)	59	45162	100.000	66.699	70.00- 130.00	100.00
3.283	3.283 (0.691)	41	15155			0.00- 30.00	33.56
3.283	3.283 (0.691)	57	5210			0.00- 30.00	11.54
58 Isopropyl ether						CAS #: 108-20-3	
3.857	3.857 (0.812)	45	131195	100.000	81.835	70.00- 130.00	100.00

RT	EXP RT	(REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
58 Isopropyl ether (continued)								
3.857	3.857	(0.812)	87	40309			0.00- 30.00	30.72
3.857	3.857	(0.812)	59	15976			0.00- 30.00	12.18
64 Ethyl-tert-butyl Ether						CAS #: 637-92-3		
4.235	4.235	(0.891)	59	116418	100.000	77.603	70.00- 130.00	100.00
4.235	4.235	(0.891)	87	53800			0.00- 30.00	46.21
4.235	4.235	(0.891)	41	27740			0.00- 30.00	23.83
88 tert-amyl-Methyl Ether						CAS #: 994-05-8		
5.452	5.452	(1.147)	73	113423	100.000	91.038	70.00- 130.00	100.00
5.466	5.466	(1.150)	87	28335			0.00- 30.00	24.98
5.466	5.466	(1.150)	55	42346			0.00- 30.00	37.33

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd14.i
Lab File ID: 14112407a.d
Lab Smp Id: ICAL Level 5
Analysis Type: VOA
Quant Type: ISTD
Operator: md
Method File: /chem1/msd14.i/09dec14.b/14451124b.m
Misc Info: 100ppbv (200ppbv)

Calibration Date: 24-NOV-2014
Calibration Time: 10:54
Client Smp ID: ICAL Level 5
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
75 Bromochloromethan	121003	72602	169404	121003	0.00
94 1,4-Difluorobenze	539197	323518	754876	539197	0.00
125 Chlorobenzene-d5	490674	294404	686944	490674	0.00

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
75 Bromochloromethan	4.75	4.42	5.08	4.75	0.00
94 1,4-Difluorobenze	5.86	5.53	6.19	5.86	0.00
125 Chlorobenzene-d5	9.83	9.50	10.16	9.83	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/msd14.i/24nov14.b/14112407a.d

Date : 24-NOV-2014 10:54

Client ID: ICAL Level 5

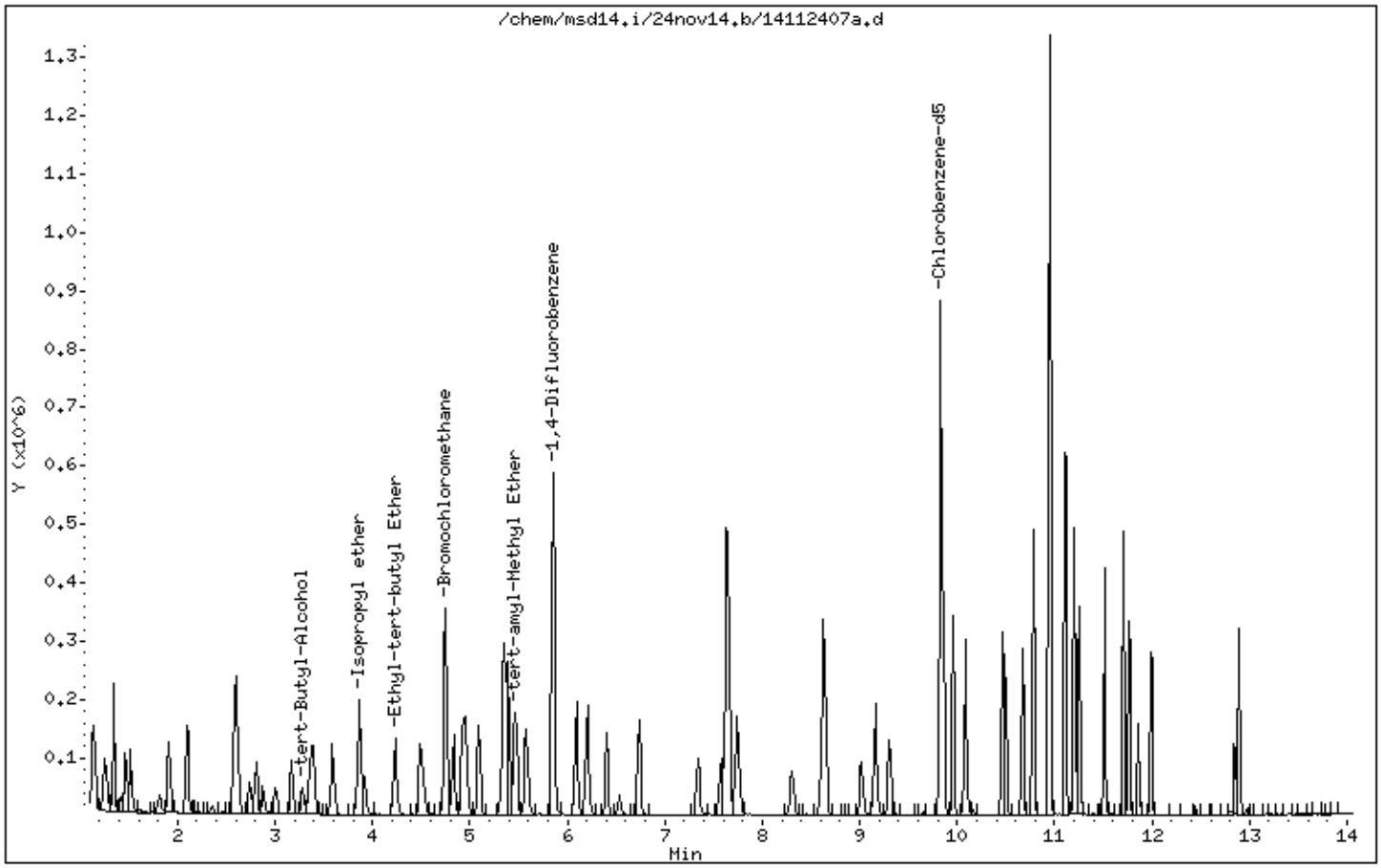
Instrument: msd14.i

Sample Info: 25.0ml #2687-64

Operator: md

Column phase: RTx-624

Column diameter: 0.53



Eurofins Air Toxics Inc.

EPA METHOD TO14A/TO15

Data file : /chem/msd14.i/24nov14.b/14112407.d
Lab Smp Id: ICAL Level 5 Client Smp ID: ICAL Level 5
Inj Date : 24-NOV-2014 10:54
Operator : md Inst ID: msd14.i
Smp Info : 25.0ml #2687-64
Misc Info : 100ppbv (200ppbv)
Comment : (5&20) - GC/MS
Method : /chem/msd14.i/24nov14.b/14451124a.m
Meth Date : 24-Nov-2014 15:17 HR8M Quant Type: ISTD
Cal Date : 24-NOV-2014 10:54 Cal File: 14112407.d
Als bottle: 1 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT09mdlNoOxys.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 (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
* 75 Bromochloromethane						CAS #: 74-97-5	
4.753	4.753 (1.000)	130	121003	400.000		70.00- 130.00	100.00
4.753	4.753 (1.000)	128	90933			0.00- 30.00	75.15
4.753	4.753 (1.000)	49	140020			0.00- 30.00	115.72
* 94 1,4-Difluorobenzene						CAS #: 540-36-3	
5.858	5.858 (1.000)	114	539197	400.000		70.00- 130.00	100.00
5.858	5.858 (1.000)	88	79907			0.00- 30.00	14.82
* 125 Chlorobenzene-d5						CAS #: 3114-55-4	
9.832	9.832 (1.000)	117	490674	400.000		70.00- 130.00	100.00
9.832	9.832 (1.000)	82	249056			0.00- 30.00	50.76
$ 86 1,2-Dichloroethane-d4						CAS #: 17060-07-0	
5.396	5.396 (1.135)	65	169837	400.000	377.16	70.00- 130.00	100.00
5.396	5.396 (1.135)	67	87838			0.00- 30.00	51.72
$ 110 Toluene-d8						CAS #: 2037-26-5	
7.649	7.649 (1.306)	98	536624	400.000	404.39	70.00- 130.00	100.00
7.635	7.635 (1.303)	70	58217			0.00- 30.00	10.85

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
$ 110 Toluene-d8 (continued)							
7.649	7.649 (1.306)	100	358939			0.00- 30.00	66.89
$ 139 Bromofluorobenzene					CAS #: 460-00-4		
10.951	10.951 (1.114)	174	296419	400.000	400.34	70.00- 130.00	100.00
10.951	10.951 (1.114)	95	344900			0.00- 30.00	116.36
10.951	10.951 (1.114)	176	290043			0.00- 30.00	97.85
5 Propylene					CAS #: 115-07-1		
1.227	1.227 (0.258)	41	22808	100.000	96.435	70.00- 130.00	100.00
1.227	1.227 (0.258)	42	14342			0.00- 30.00	62.88
1.227	1.227 (0.258)	39	17899			0.00- 30.00	78.48
7 Dichlorodifluoromethane/Fr12					CAS #: 75-71-8		
1.255	1.255 (0.264)	85	103138	100.000	93.150	70.00- 130.00	100.00
1.255	1.255 (0.264)	87	33611			0.00- 30.00	32.59
9 Freon 114					CAS #: 76-14-2		
1.353	1.353 (0.285)	135	71463	100.000	88.193	70.00- 130.00	100.00
1.353	1.353 (0.285)	137	21834			0.00- 30.00	30.55
12 Chloromethane					CAS #: 74-87-3		
1.423	1.423 (0.299)	50	33571	100.000	96.739	70.00- 130.00	100.00
1.423	1.423 (0.299)	52	10434			0.00- 30.00	31.08
13 Butane					CAS #: 106-97-8		
1.478	1.478 (0.311)	58	10488	100.000	98.998	70.00- 130.00	100.00
1.478	1.478 (0.311)	43	59719			0.00- 30.00	569.40
15 Vinyl Chloride					CAS #: 75-01-4		
1.506	1.506 (0.317)	62	43154	100.000	90.249	70.00- 130.00	100.00
1.506	1.506 (0.317)	64	14045			0.00- 30.00	32.55
16 1,3-Butadiene					CAS #: 106-99-0		
1.520	1.520 (0.320)	54	31529	100.000	90.225	70.00- 130.00	100.00
1.520	1.520 (0.320)	39	30347			0.00- 30.00	96.25
18 Bromomethane					CAS #: 74-83-9		
1.814	1.814 (0.382)	94	26810	100.000	92.826	70.00- 130.00	100.00
1.814	1.814 (0.382)	96	25576			0.00- 30.00	95.40
19 Chloroethane					CAS #: 75-00-3		
1.898	1.898 (0.399)	64	16206	100.000	76.758	70.00- 130.00	100.00
1.898	1.898 (0.399)	66	4413			0.00- 30.00	27.23
1.898	1.898 (0.399)	49	4137			0.00- 30.00	25.53

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
20 Isopentane					CAS #: 78-78-4		
1.912	1.912 (0.402)	43	46908	100.000	102.37	70.00- 130.00	100.00
1.912	1.912 (0.402)	57	35107			0.00- 30.00	74.84
1.912	1.912 (0.402)	72	5149			0.00- 30.00	10.98
23 Trichlorofluoromethane/Fr11					CAS #: 75-69-4		
2.108	2.108 (0.444)	101	136227	100.000	94.089	70.00- 130.00	100.00
2.094	2.094 (0.441)	103	86612			0.00- 30.00	63.58
30 Ethanol					CAS #: 64-17-5		
2.360	2.360 (0.497)	45	13944	100.000	96.152	70.00- 130.00	100.00
2.360	2.360 (0.497)	43	4153			0.00- 30.00	29.78
2.360	2.360 (0.497)	46	6377			0.00- 30.00	45.73
34 Freon 113					CAS #: 76-13-1		
2.598	2.598 (0.547)	151	79499	100.000	92.961	70.00- 130.00	100.00
2.598	2.598 (0.547)	153	51861			0.00- 30.00	65.23
2.584	2.584 (0.544)	101	102993			0.00- 30.00	129.55
36 1,1-Dichloroethene					CAS #: 75-35-4		
2.612	2.612 (0.550)	61	70537	100.000	87.925	70.00- 130.00	100.00
2.612	2.612 (0.550)	96	46925			0.00- 30.00	66.53
2.612	2.612 (0.550)	98	29300			0.00- 30.00	41.54
38 Acetone					CAS #: 67-64-1		
2.738	2.738 (0.576)	58	22078	100.000	100.66	70.00- 130.00	100.00
2.738	2.738 (0.576)	43	63423			0.00- 30.00	287.27
39 Carbon Disulfide					CAS #: 75-15-0		
2.808	2.808 (0.591)	76	122736	100.000	89.773	70.00- 130.00	100.00
41 2-Propanol					CAS #: 67-63-0		
2.878	2.878 (0.605)	45	57829	100.000	98.236	70.00- 130.00	100.00
2.878	2.878 (0.605)	43	14796			0.00- 30.00	25.59
2.878	2.878 (0.605)	59	2084			0.00- 30.00	3.60
42 3-Chloropropene					CAS #: 107-05-1		
3.018	3.018 (0.635)	76	12825	100.000	128.00	70.00- 130.00	100.00
3.004	3.004 (0.632)	41	26178			0.00- 30.00	204.12
48 Methylene Chloride					CAS #: 75-09-2		
3.171	3.171 (0.667)	49	50207	100.000	83.185	70.00- 130.00	100.00
3.171	3.171 (0.667)	84	41653			0.00- 30.00	82.96
3.171	3.171 (0.667)	51	15658			0.00- 30.00	31.19
50 MTBE					CAS #: 1634-04-4		
3.367	3.367 (0.709)	73	98611	100.000	89.532	70.00- 130.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
50 MTBE (continued)							
3.367	3.367 (0.709)	57	22276			0.00- 30.00	22.59
3.353	3.353 (0.706)	41	25339			0.00- 30.00	25.70
52 trans-1,2-Dichloroethene					CAS #: 156-60-5		
3.395	3.395 (0.714)	96	46168	100.000	92.127	70.00- 130.00	100.00
3.395	3.395 (0.714)	61	60545			0.00- 30.00	131.14
3.395	3.395 (0.714)	98	30794			0.00- 30.00	66.70
55 Hexane					CAS #: 110-54-3		
3.591	3.591 (0.756)	57	71596	100.000	92.609	70.00- 130.00	100.00
3.591	3.591 (0.756)	43	41523			0.00- 30.00	58.00
3.591	3.591 (0.756)	86	14810			0.00- 30.00	20.69
59 1,1-Dichloroethane					CAS #: 75-34-3		
3.871	3.871 (0.815)	63	82294	100.000	93.823	70.00- 130.00	100.00
3.871	3.871 (0.815)	65	27688			0.00- 30.00	33.65
60 Vinyl Acetate					CAS #: 108-05-4		
3.927	3.927 (0.826)	86	13535	100.000	104.87	70.00- 130.00	100.00
3.927	3.927 (0.826)	43	108418			0.00- 30.00	801.02
3.927	3.927 (0.826)	42	12347			0.00- 30.00	91.22
68 cis-1,2-Dichloroethene					CAS #: 156-59-2		
4.487	4.487 (0.944)	61	69720	100.000	92.106	70.00- 130.00	100.00
4.487	4.487 (0.944)	96	57467			0.00- 30.00	82.43
4.487	4.487 (0.944)	98	37498			0.00- 30.00	53.78
70 2-Butanone					CAS #: 78-93-3		
4.529	4.529 (0.953)	72	21727	100.000	101.71	70.00- 130.00	100.00
4.529	4.529 (0.953)	43	78306			0.00- 30.00	360.41
4.529	4.529 (0.953)	57	6682			0.00- 30.00	30.75
74 Tetrahydrofuran					CAS #: 109-99-9		
4.739	4.739 (0.997)	42	42312	100.000	88.312	70.00- 130.00	100.00
4.739	4.739 (0.997)	71	20533			0.00- 30.00	48.53
4.739	4.739 (0.997)	72	20599			0.00- 30.00	48.68
76 Chloroform					CAS #: 67-66-3		
4.837	4.837 (1.018)	83	105759	100.000	90.319	70.00- 130.00	100.00
4.837	4.837 (1.018)	85	69162			0.00- 30.00	65.40
77 Cyclohexane					CAS #: 110-82-7		
4.934	4.934 (1.038)	84	70305	100.000	95.936	70.00- 130.00	100.00
4.920	4.920 (1.035)	56	75529			0.00- 30.00	107.43
4.920	4.920 (1.035)	41	40439			0.00- 30.00	57.52

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
78 1,1,1-Trichloroethane					CAS #: 71-55-6		
4.962	4.962 (1.044)	97	105298	100.000	94.505	70.00- 130.00	100.00
4.962	4.962 (1.044)	99	70411			0.00- 30.00	66.87
79 Carbon Tetrachloride					CAS #: 56-23-5		
5.088	5.088 (1.071)	119	96711	100.000	97.480	70.00- 130.00	100.00
5.088	5.088 (1.071)	117	102681			0.00- 30.00	106.17
82 2,2,4-Trimethylpentane					CAS #: 540-84-1		
5.340	5.340 (1.124)	57	231334	100.000	98.447	70.00- 130.00	100.00
5.340	5.340 (1.124)	56	81386			0.00- 30.00	35.18
5.340	5.340 (1.124)	41	62944			0.00- 30.00	27.21
83 Benzene					CAS #: 71-43-2		
5.354	5.354 (0.914)	78	150344	100.000	90.948	70.00- 130.00	100.00
5.354	5.354 (0.914)	77	36512			0.00- 30.00	24.29
89 1,2-Dichloroethane					CAS #: 107-06-2		
5.480	5.480 (0.936)	62	68809	100.000	103.91	70.00- 130.00	100.00
5.480	5.480 (0.936)	64	22866			0.00- 30.00	33.23
93 Heptane					CAS #: 142-82-5		
5.578	5.578 (0.952)	71	52439	100.000	104.09	70.00- 130.00	100.00
5.578	5.578 (0.952)	43	77503			0.00- 30.00	147.80
5.578	5.578 (0.952)	100	19719			0.00- 30.00	37.60
95 Trichloroethene					CAS #: 79-01-6		
6.096	6.096 (1.041)	95	70711	100.000	99.227	70.00- 130.00	100.00
6.096	6.096 (1.041)	130	71274			0.00- 30.00	100.80
6.096	6.096 (1.041)	97	45554			0.00- 30.00	64.42
97 Methyl Cyclohexane					CAS #: 108-87-2		
6.208	6.208 (1.060)	83	89976	100.000	99.896	70.00- 130.00	100.00
6.208	6.208 (1.060)	98	47258			0.00- 30.00	52.52
6.208	6.208 (1.060)	55	66752			0.00- 30.00	74.19
99 1,2-Dichloropropane					CAS #: 78-87-5		
6.404	6.404 (1.093)	63	53550	100.000	99.333	70.00- 130.00	100.00
6.404	6.404 (1.093)	62	37060			0.00- 30.00	69.21
6.404	6.404 (1.093)	41	31225			0.00- 30.00	58.31
102 1,4-Dioxane					CAS #: 123-91-1		
6.544	6.544 (1.117)	88	33641	100.000	108.53	70.00- 130.00	100.00
6.544	6.544 (1.117)	58	19530			0.00- 30.00	58.05
6.544	6.544 (1.117)	57	6928			0.00- 30.00	20.59

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
104 Bromodichloromethane					CAS #: 75-27-4		
6.739	6.739 (1.150)	83	116000	100.000	97.642	70.00- 130.00	100.00
6.739	6.739 (1.150)	85	75183			0.00- 30.00	64.81
108 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
7.341	7.341 (1.253)	75	70586	100.000	104.68	70.00- 130.00	100.00
7.341	7.341 (1.253)	77	21383			0.00- 30.00	30.29
7.341	7.341 (1.253)	39	36145			0.00- 30.00	51.21
109 4-Methyl-2-pentanone					CAS #: 108-10-1		
7.579	7.579 (1.294)	85	18198	100.000	106.91	70.00- 130.00	100.00
7.579	7.579 (1.294)	43	95922			0.00- 30.00	527.10
7.579	7.579 (1.294)	58	42207			0.00- 30.00	231.93
111 Toluene					CAS #: 108-88-3		
7.747	7.747 (1.322)	91	197951	100.000	102.77	70.00- 130.00	100.00
7.747	7.747 (1.322)	92	115162			0.00- 30.00	58.18
114 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
8.306	8.306 (0.845)	75	61993	100.000	109.05	70.00- 130.00	100.00
8.306	8.306 (0.845)	77	18024			0.00- 30.00	29.07
8.306	8.306 (0.845)	39	31277			0.00- 30.00	50.45
115 1,1,2-Trichloroethane					CAS #: 79-00-5		
8.628	8.628 (0.878)	97	64988	100.000	91.185	70.00- 130.00	100.00
8.628	8.628 (0.878)	99	41538			0.00- 30.00	63.92
8.628	8.628 (0.878)	83	57763			0.00- 30.00	88.88
116 Tetrachloroethene					CAS #: 127-18-4		
8.642	8.642 (0.879)	166	95677	100.000	100.33	70.00- 130.00	100.00
8.628	8.628 (0.878)	129	67220			0.00- 30.00	70.26
8.628	8.628 (0.878)	131	64395			0.00- 30.00	67.30
120 2-Hexanone					CAS #: 591-78-6		
9.020	9.020 (0.917)	58	46215	100.000	108.43	70.00- 130.00	100.00
9.020	9.020 (0.917)	43	83197			0.00- 30.00	180.02
9.020	9.020 (0.917)	100	11867			0.00- 30.00	25.68
121 Dibromochloromethane					CAS #: 124-48-1		
9.160	9.160 (0.932)	129	119663	100.000	97.883	70.00- 130.00	100.00
9.160	9.160 (0.932)	127	94405			0.00- 30.00	78.89
124 1,2-Dibromoethane					CAS #: 106-93-4		
9.300	9.300 (0.946)	107	103772	100.000	101.63	70.00- 130.00	100.00
9.300	9.300 (0.946)	109	96317			0.00- 30.00	92.82

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
127 Chlorobenzene					CAS #: 108-90-7		
9.860	9.860 (1.003)	112	159647	100.000	96.373	70.00- 130.00	100.00
9.860	9.860 (1.003)	114	50353			0.00- 30.00	31.54
9.860	9.860 (1.003)	77	87072			0.00- 30.00	54.54
128 Ethyl Benzene					CAS #: 100-41-4		
9.958	9.958 (1.013)	106	75365	100.000	101.11	70.00- 130.00	100.00
9.958	9.958 (1.013)	91	243691			0.00- 30.00	323.35
131 m,p-Xylene					CAS #: 108-38-3		
10.083	10.083 (1.026)	106	91104	100.000	104.71	70.00- 130.00	100.00
10.083	10.083 (1.026)	91	188890			0.00- 30.00	207.33
132 o-Xylene					CAS #: 95-47-6		
10.461	10.461 (1.064)	106	90397	100.000	103.11	70.00- 130.00	100.00
10.461	10.461 (1.064)	91	183442			0.00- 30.00	202.93
134 Styrene					CAS #: 100-42-5		
10.503	10.503 (1.068)	104	131886	100.000	102.68	70.00- 130.00	100.00
10.489	10.489 (1.067)	78	66218			0.00- 30.00	50.21
136 Bromoform					CAS #: 75-25-2		
10.671	10.671 (1.085)	173	111156	100.000	94.007	70.00- 130.00	100.00
10.671	10.671 (1.085)	171	57589			0.00- 30.00	51.81
138 Cumene					CAS #: 98-82-8		
10.783	10.783 (1.097)	105	270950	100.000	104.54	70.00- 130.00	100.00
10.783	10.783 (1.097)	120	71333			0.00- 30.00	26.33
10.783	10.783 (1.097)	51	26059			0.00- 30.00	9.62
142 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
11.105	11.105 (1.129)	83	138588	100.000	91.283	70.00- 130.00	100.00
11.105	11.105 (1.129)	85	88016			0.00- 30.00	63.51
143 Propylbenzene					CAS #: 103-65-1		
11.119	11.119 (1.131)	91	315551	100.000	98.001	70.00- 130.00	100.00
11.119	11.119 (1.131)	120	73705			0.00- 30.00	23.36
11.119	11.119 (1.131)	105	11568			0.00- 30.00	3.67
147 4-Ethyltoluene					CAS #: 622-96-8		
11.203	11.203 (1.139)	105	259583	100.000	100.89	70.00- 130.00	100.00
11.203	11.203 (1.139)	120	74203			0.00- 30.00	28.59
149 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
11.259	11.259 (1.145)	105	191120	100.000	100.72	70.00- 130.00	100.00
11.259	11.259 (1.145)	120	93598			0.00- 30.00	48.97

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
152 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
11.511	11.511 (1.171)	105	180177	100.000	97.019	70.00- 130.00	100.00
11.511	11.511 (1.171)	120	85252			0.00- 30.00	47.32
156 1,3-Dichlorobenzene					CAS #: 541-73-1		
11.707	11.707 (1.191)	146	140471	100.000	91.032	70.00- 130.00	100.00
11.707	11.707 (1.191)	148	89825			0.00- 30.00	63.95
11.707	11.707 (1.191)	111	56562			0.00- 30.00	40.27
159 1,4-Dichlorobenzene					CAS #: 106-46-7		
11.776	11.776 (1.198)	146	134051	100.000	90.497	70.00- 130.00	100.00
11.776	11.776 (1.198)	148	85811			0.00- 30.00	64.01
11.762	11.762 (1.196)	111	47812			0.00- 30.00	35.67
161 alpha-Chlorotoluene					CAS #: 100-44-7		
11.860	11.860 (1.206)	91	73735	100.000	91.406	70.00- 130.00	100.00
11.860	11.860 (1.206)	126	15792			0.00- 30.00	21.42
163 1,2-Dichlorobenzene					CAS #: 95-50-1		
12.000	12.000 (1.221)	146	117727	100.000	85.304	70.00- 130.00	100.00
12.000	12.000 (1.221)	148	76552			0.00- 30.00	65.03
11.986	11.986 (1.219)	111	46324			0.00- 30.00	39.35
169 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
12.854	12.854 (1.307)	180	38297	100.000	70.975	70.00- 130.00	100.00
12.854	12.854 (1.307)	182	34831			0.00- 30.00	90.95
170 Hexachlorobutadiene					CAS #: 87-68-3		
12.896	12.896 (1.312)	225	37926	100.000	83.338	70.00- 130.00	100.00
12.896	12.896 (1.312)	223	22723			0.00- 30.00	59.91
171 Naphthalene					CAS #: 91-20-3		
12.980	12.980 (1.320)	128	6956	10.0000	6.704	70.00- 130.00	100.00(a)
12.980	12.980 (1.320)	127	1026			0.00- 30.00	14.75

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: msd14.i
Lab File ID: 14112407.d
Lab Smp Id: ICAL Level 5
Analysis Type: VOA
Quant Type: ISTD
Operator: md
Method File: /chem/msd14.i/24nov14.b/14451124a.m
Misc Info: 100ppbv (200ppbv)

Calibration Date: 24-NOV-2014
Calibration Time: 11:17
Client Smp ID: ICAL Level 5
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
75 Bromochloromethan	117767	70660	164874	121003	2.75
94 1,4-Difluorobenze	544303	326582	762024	539197	-0.94
125 Chlorobenzene-d5	496681	298009	695353	490674	-1.21

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
75 Bromochloromethan	4.75	4.42	5.08	4.75	0.00
94 1,4-Difluorobenze	5.86	5.53	6.19	5.86	0.00
125 Chlorobenzene-d5	9.83	9.50	10.16	9.83	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/msd14.i/24nov14.b/14112407.d

Date : 24-NOV-2014 10:54

Client ID: ICAL Level 5

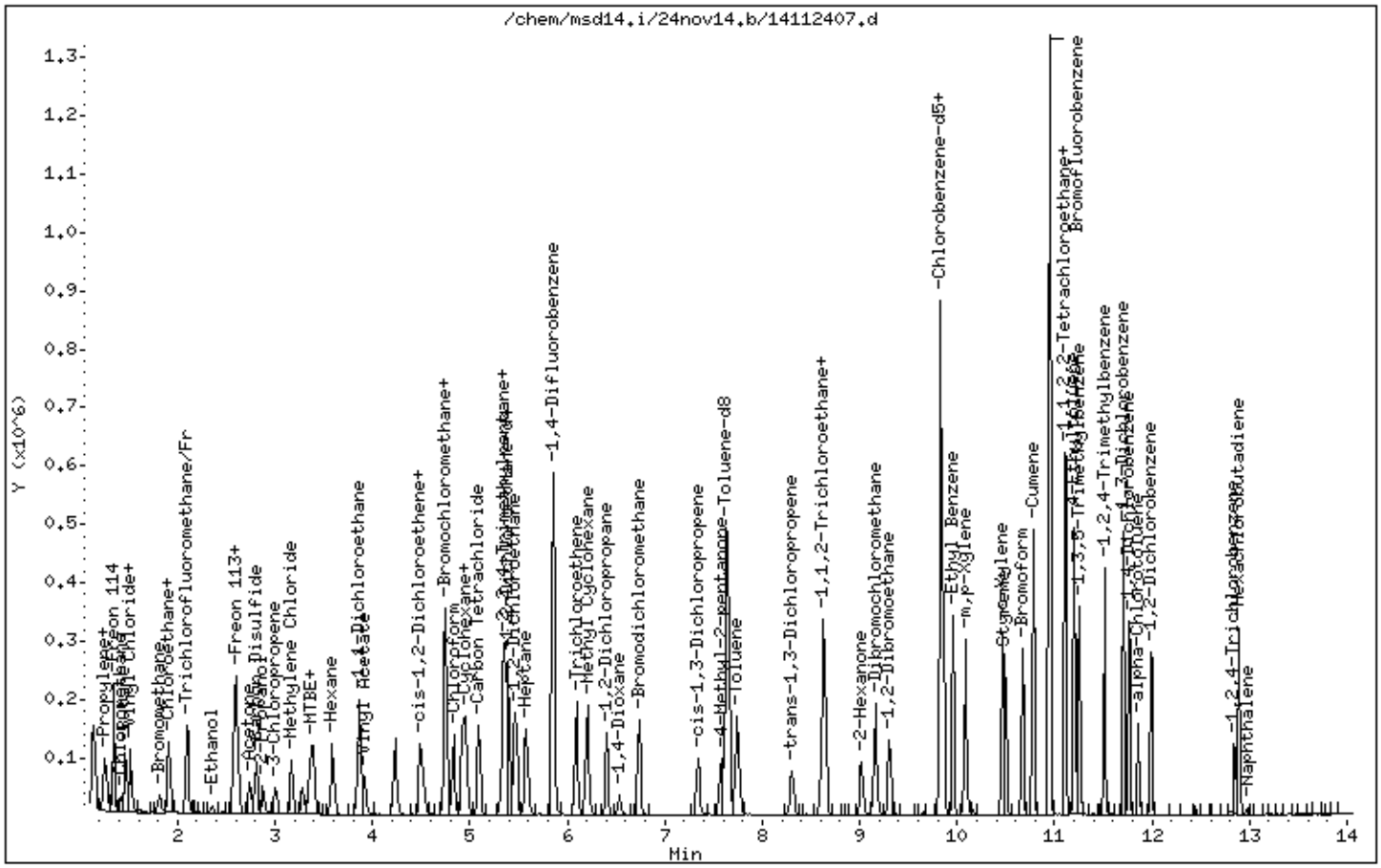
Instrument: msd14.i

Sample Info: 25.0ml #2687-64

Operator: md

Column phase: RTx-624

Column diameter: 0.53



Eurofins Air Toxics Inc.

EPA METHOD TO14A/TO15

Data file : /chem/msd14.i/15dec14.b/14112420k.d
Lab Smp Id: ICAL 6 Client Smp ID: Level 6
Inj Date : 24-NOV-2014 17:39
Operator : mjs Inst ID: msd14.i
Smp Info : 10ml #2677-23
Misc Info : 200ppbv (1000ppbv)
Comment : (5&20) - GC/MS
Method : /chem/msd14.i/15dec14.b/14451124c.m
Meth Date : 15-Dec-2014 16:46 snguyen Quant Type: ISTD
Cal Date : 24-NOV-2014 17:39 Cal File: 14112420k.d
Als bottle: 1 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: spAT1.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 (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
* 75 Bromochloromethane					CAS #: 74-97-5		
4.753	4.753 (1.000)	130	121818	400.000		80.00- 120.00	100.00
4.753	4.753 (1.000)	128	87977			42.22- 102.22	72.22
4.753	4.753 (1.000)	49	138760			83.91- 143.91	113.91
* 94 1,4-Difluorobenzene					CAS #: 540-36-3		
5.858	5.858 (1.000)	114	557361	400.000		80.00- 120.00	100.00
5.858	5.858 (1.000)	88	81857			0.00- 44.69	14.69
* 125 Chlorobenzene-d5					CAS #: 3114-55-4		
9.832	9.832 (1.000)	117	495829	400.000		80.00- 120.00	100.00
9.832	9.832 (1.000)	82	260632			22.56- 82.56	52.56
4 Freon134a					CAS #: 811-97-2		
1.199	1.199 (0.252)	83	44568	200.000	216.70	80.00- 120.00	100.00
1.199	1.199 (0.252)	69	47440			76.44- 136.44	106.44
6 Freon 152a					CAS #: 75-37-6		
1.241	1.241 (0.261)	65	24141	200.000	199.42	80.00- 120.00	100.00
1.241	1.241 (0.261)	51	38874			131.03- 191.03	161.03

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
8 Freon 22					CAS #: 75-45-6		
1.269	1.269 (0.267)	67	13376	200.000	219.30	80.00- 120.00	100.00
1.283	1.283 (0.270)	51	89146			636.46- 696.46	666.46
11 Freon142b					CAS #: 75-68-3		
1.395	1.395 (0.293)	65	123316	200.000	209.59	80.00- 120.00	100.00
1.395	1.395 (0.293)	45	32894			0.00- 56.67	26.67
25 Dichlorofluoromethane/Fr21					CAS #: 75-43-4		
2.108	2.108 (0.444)	67	147353	200.000	196.61	80.00- 120.00	100.00
2.108	2.108 (0.444)	69	49756			3.77- 63.77	33.77
1.744	1.744 (0.367)	35	1573			0.00- 31.07	1.07
29 Freon123					CAS #: 306-83-2		
2.542	2.542 (0.535)	83	167943	200.000	208.83	80.00- 120.00	100.00
2.542	2.542 (0.535)	133	35662			0.00- 51.23	21.23
2.542	2.542 (0.535)	85	115920			39.02- 99.02	69.02
33 Freon123a					CAS #: 354-23-4		
2.472	2.472 (0.520)	117	117486	200.000	213.44	80.00- 120.00	100.00
2.472	2.472 (0.520)	67	146166			94.41- 154.41	124.41
43 Cyclopentene					CAS #: 142-29-0		
3.018	3.018 (0.635)	67	124017	200.000	211.54	80.00- 120.00	100.00
3.018	3.018 (0.635)	68	46687			7.65- 67.65	37.65
3.018	3.018 (0.635)	53	25524			0.00- 50.58	20.58
62 1-Propanol					CAS #: 71-23-8		
4.025	4.025 (0.847)	42	8989	200.000	225.04	80.00- 120.00	100.00
4.025	4.025 (0.847)	59	10611			88.04- 148.04	118.04
4.025	4.025 (0.847)	41	5891			35.54- 95.54	65.54
69 2,2-Dichloropropane					CAS #: 594-20-7		
4.445	4.445 (0.935)	77	59142	200.000	150.27	80.00- 120.00	100.00
4.445	4.445 (0.935)	79	18203			0.78- 60.78	30.78
4.445	4.445 (0.935)	97	12045			0.00- 50.37	20.37
80 1,1-Dichloropropene					CAS #: 563-58-6		
5.144	5.144 (1.082)	110	43407	200.000	204.20	80.00- 120.00	100.00
5.144	5.144 (1.082)	75	114616			234.05- 294.05	264.05
87 Isobutanol					CAS #: 78-83-1		
5.368	5.368 (0.916)	43	40839	200.000	193.84	80.00- 120.00	100.00
5.368	5.368 (0.916)	41	34567			54.64- 114.64	84.64
96 1-Butanol					CAS #: 71-36-3		
6.110	6.110 (1.043)	56	55215	200.000	189.77	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
96 1-Butanol (continued)							
6.110	6.110 (1.043)	41	39430			41.41- 101.41	71.41
6.110	6.110 (1.043)	43	31390			26.85- 86.85	56.85
26 1,3-Dichloropropane					CAS #: 142-28-9		
8.894	8.894 (1.871)	76	133310	200.000	204.31	80.00- 120.00	100.00
8.894	8.894 (1.871)	41	73572			25.19- 85.19	55.19
8.894	8.894 (1.871)	78	43619			2.72- 62.72	32.72
122 Butyl Acetate					CAS #: 123-86-4		
9.174	9.174 (1.566)	56	36737	200.000	202.19	80.00- 120.00	100.00
9.174	9.174 (1.566)	73	15876			13.22- 73.22	43.22
9.174	9.174 (1.566)	43	83933			198.47- 258.47	228.47
129 1,1,1,2-Tetrachloroethane					CAS #: 630-20-6		
9.972	9.972 (1.014)	131	125234	200.000	203.06	80.00- 120.00	100.00
9.972	9.972 (1.014)	117	80769			34.49- 94.49	64.49
9.972	9.972 (1.014)	95	48218			8.50- 68.50	38.50
135 2-Heptanone					CAS #: 110-43-0		
10.643	10.643 (1.083)	58	92423	200.000	195.51	80.00- 120.00	100.00
10.643	10.643 (1.083)	43	135975			117.12- 177.12	147.12
140 Cyclohexanone					CAS #: 108-94-1		
10.909	10.909 (1.110)	55	64301	200.000	185.88	80.00- 120.00	100.00
10.923	10.923 (1.111)	98	30220			17.00- 77.00	47.00
10.909	10.909 (1.110)	42	40930			33.65- 93.65	63.65
144 Bromobenzene					CAS #: 108-86-1		
11.049	11.049 (1.124)	156	124138	200.000	201.47	80.00- 120.00	100.00
11.049	11.049 (1.124)	77	179490			114.59- 174.59	144.59
11.049	11.049 (1.124)	158	118073			65.11- 125.11	95.11
146 1,2,3-Trichloropropane					CAS #: 96-18-4		
11.133	11.133 (1.132)	110	61972	200.000	200.18	80.00- 120.00	100.00
11.133	11.133 (1.132)	61	38687			32.43- 92.43	62.43
11.133	11.133 (1.132)	112	40292			35.02- 95.02	65.02
150 2-Chlorotoluene					CAS #: 95-49-8		
11.189	11.189 (1.138)	126	95767	200.000	207.31	80.00- 120.00	100.00
11.189	11.189 (1.138)	91	261275			242.82- 302.82	272.82
11.189	11.189 (1.138)	65	22614			0.00- 53.61	23.61
151 4-Chlorotoluene					CAS #: 106-43-4		
11.287	11.287 (1.148)	126	86585	200.000	193.51	80.00- 120.00	100.00
11.273	11.273 (1.147)	91	243536			251.27- 311.27	281.27

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
151 4-Chlorotoluene (continued)							
11.273	11.273 (1.147)	63	34668			10.04- 70.04	40.04
153 tert-Butylbenzene					CAS #: 98-06-6		
11.469	11.469 (1.167)	119	304182	200.000	195.88	80.00- 120.00	100.00
11.469	11.469 (1.167)	134	75835			0.00- 54.93	24.93
11.469	11.469 (1.167)	91	189857			32.42- 92.42	62.42
154 Pentachloroethane					CAS #: 76-01-7		
11.511	11.511 (1.171)	167	91083	200.000	195.82	80.00- 120.00	100.00
11.511	11.511 (1.171)	117	93492			72.64- 132.64	102.64
155 sec-Butylbenzene					CAS #: 135-98-8		
11.609	11.609 (1.181)	105	405923	200.000	192.39	80.00- 120.00	100.00
11.609	11.609 (1.181)	134	83988			0.00- 50.69	20.69
11.609	11.609 (1.181)	91	66324			0.00- 46.34	16.34
158 p-Cymene					CAS #: 99-87-6		
11.707	11.707 (1.191)	119	325971	200.000	185.17	80.00- 120.00	100.00
11.707	11.707 (1.191)	134	88419			0.00- 57.12	27.12
11.707	11.707 (1.191)	91	77929			0.00- 53.91	23.91
160 1,2,3-Trimethylbenzene					CAS #: 526-73-8		
11.777	11.777 (1.198)	120	122438	200.000	191.26	80.00- 120.00	100.00
11.777	11.777 (1.198)	105	289773			206.67- 266.67	236.67
11.777	11.777 (1.198)	77	34632			0.00- 58.29	28.29
162 Butylbenzene					CAS #: 104-51-8		
11.959	11.959 (1.216)	134	71394	200.000	176.07	80.00- 120.00	100.00
11.959	11.959 (1.216)	91	259540			333.53- 393.53	363.53
11.959	11.959 (1.216)	92	142842			170.08- 230.08	200.08
167 1,2-Dibromo-3-Chloropropane					CAS #: 96-12-8		
12.448	12.448 (1.266)	157	69411	200.000	150.05	80.00- 120.00	100.00
12.448	12.448 (1.266)	75	56301			51.11- 111.11	81.11
12.448	12.448 (1.266)	155	55536			50.01- 110.01	80.01

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd14.i
Lab File ID: 14112420k.d
Lab Smp Id: ICAL 6
Analysis Type: VOA
Quant Type: ISTD
Operator: mjs
Method File: /chem/msd14.i/15dec14.b/14451124c.m
Misc Info: 200ppbv (1000ppbv)

Calibration Date: 24-NOV-2014
Calibration Time: 17:39
Client Smp ID: Level 6
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
75 Bromochloromethan	121818	73091	170545	121818	0.00
94 1,4-Difluorobenze	557361	334417	780305	557361	0.00
125 Chlorobenzene-d5	495829	297497	694161	495829	0.00

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
75 Bromochloromethan	4.75	4.42	5.08	4.75	0.00
94 1,4-Difluorobenze	5.86	5.53	6.19	5.86	0.00
125 Chlorobenzene-d5	9.83	9.50	10.16	9.83	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/msd14.i/15dec14.b/14112420k.d

Date : 24-NOV-2014 17:39

Client ID: Level 6

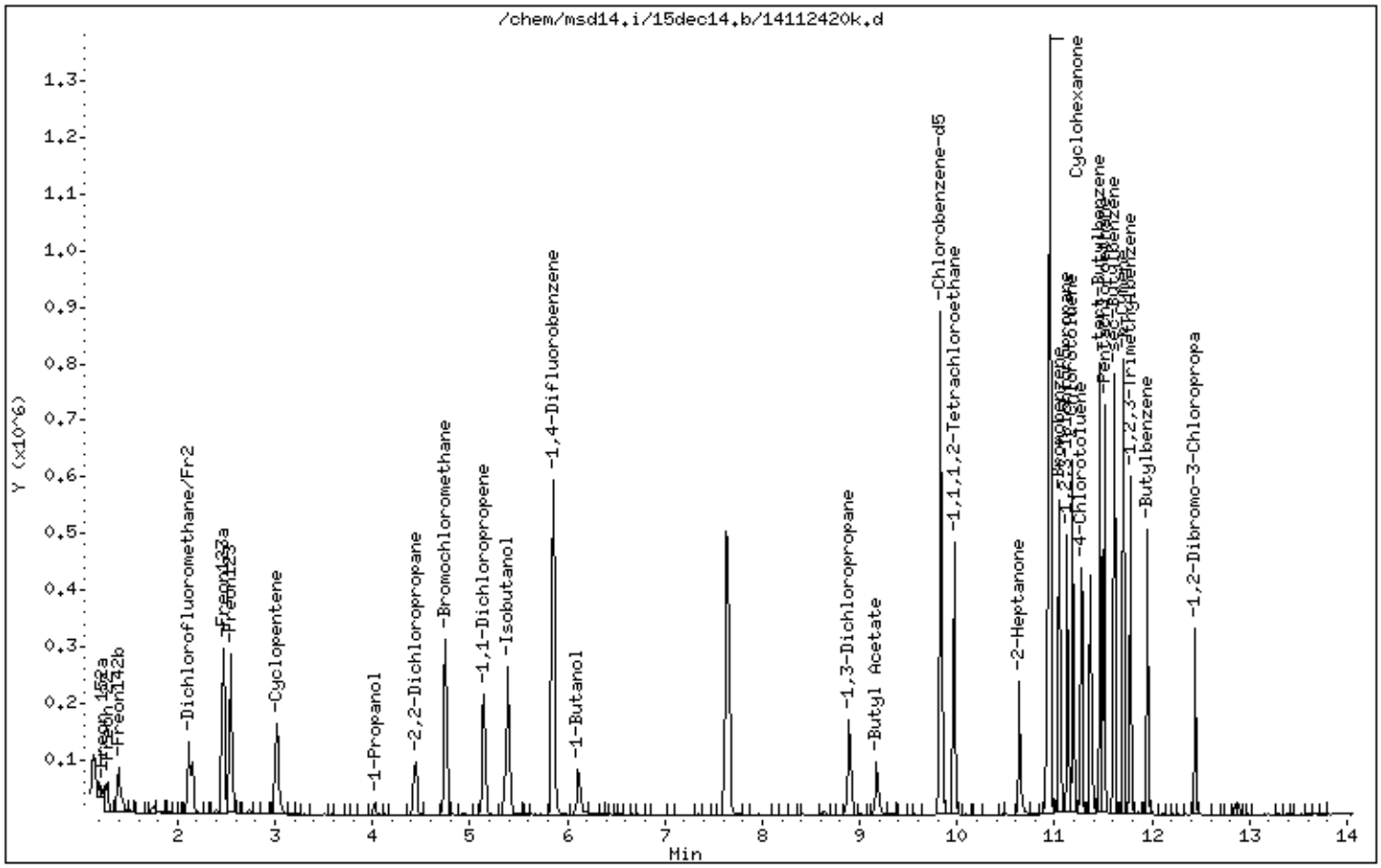
Instrument: msd14.i

Sample Info: 10ml #2677-23

Operator: mjs

Column phase: RTx-624

Column diameter: 0.53



Eurofins Air Toxics Inc.

EPA METHOD TO14A/TO15

Data file : /chem1/msd14.i/24nov14.b/14112408c.d
Lab Smp Id: ICAL Level 6 Client Smp ID: ICAL Level 6
Inj Date : 24-NOV-2014 11:17
Operator : md Inst ID: msd14.i
Smp Info : 50.0ml #2687-64
Misc Info : 200ppbv (200ppbv)
Comment : (5&20) - GC/MS
Method : /chem1/msd14.i/09dec14.b/14451124b.m
Meth Date : 09-Dec-2014 10:36 HR8M Quant Type: ISTD
Cal Date : 24-NOV-2014 17:39 Cal File: 14112420.d
Als bottle: 1 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: Oxyscurve.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 (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
* 75 Bromochloromethane					CAS #: 74-97-5		
4.753	4.753 (1.000)	130	117767	400.000		80.00- 120.00	100.00
4.753	4.753 (1.000)	128	91763			47.92- 107.92	77.92
4.753	4.753 (1.000)	49	140356			89.18- 149.18	119.18
* 94 1,4-Difluorobenzene					CAS #: 540-36-3		
5.858	5.858 (1.000)	114	544303	400.000		80.00- 120.00	100.00
5.858	5.858 (1.000)	88	80354			0.00- 44.76	14.76
* 125 Chlorobenzene-d5					CAS #: 3114-55-4		
9.832	9.832 (1.000)	117	496681	400.000		80.00- 120.00	100.00
9.832	9.832 (1.000)	82	251275			20.59- 80.59	50.59
49 tert-Butyl-Alcohol					CAS #: 75-65-0		
3.284	3.284 (0.691)	59	76244	200.000	115.70	80.00- 120.00	100.00
3.284	3.284 (0.691)	41	24314			1.89- 61.89	31.89
3.284	3.284 (0.691)	57	10042			0.00- 43.17	13.17
58 Isopropyl ether					CAS #: 108-20-3		
3.857	3.857 (0.812)	45	252946	200.000	162.12	80.00- 120.00	100.00

RT	EXP RT	(REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
58 Isopropyl ether (continued)								
3.871	3.871	(0.815)	87	79295			1.35- 61.35	31.35
3.871	3.871	(0.815)	59	30752			0.00- 42.16	12.16
64 Ethyl-tert-butyl Ether						CAS #: 637-92-3		
4.235	4.235	(0.891)	59	229124	200.000	156.93	80.00- 120.00	100.00
4.235	4.235	(0.891)	87	105495			16.04- 76.04	46.04
4.235	4.235	(0.891)	41	47660			0.00- 50.80	20.80
88 tert-amyl-Methyl Ether						CAS #: 994-05-8		
5.466	5.466	(1.150)	73	221718	200.000	182.85	80.00- 120.00	100.00
5.466	5.466	(1.150)	87	52738			0.00- 53.79	23.79
5.452	5.452	(1.147)	55	78077			5.21- 65.21	35.21

Report Date: 09-Dec-2014 10:36

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd14.i
Lab File ID: 14112408c.d
Lab Smp Id: ICAL Level 6
Analysis Type: VOA
Quant Type: ISTD
Operator: md
Method File: /chem1/msd14.i/09dec14.b/14451124b.m
Misc Info: 200ppbv (200ppbv)

Calibration Date: 24-NOV-2014
Calibration Time: 11:17
Client Smp ID: ICAL Level 6
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
75 Bromochloromethan	117767	70660	164874	117767	0.00
94 1,4-Difluorobenze	544303	326582	762024	544303	0.00
125 Chlorobenzene-d5	496681	298009	695353	496681	0.00

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
75 Bromochloromethan	4.75	4.42	5.08	4.75	0.00
94 1,4-Difluorobenze	5.86	5.53	6.19	5.86	0.00
125 Chlorobenzene-d5	9.83	9.50	10.16	9.83	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/msd14.i/24nov14.b/14112408c.d

Date : 24-NOV-2014 11:17

Client ID: ICAL Level 6

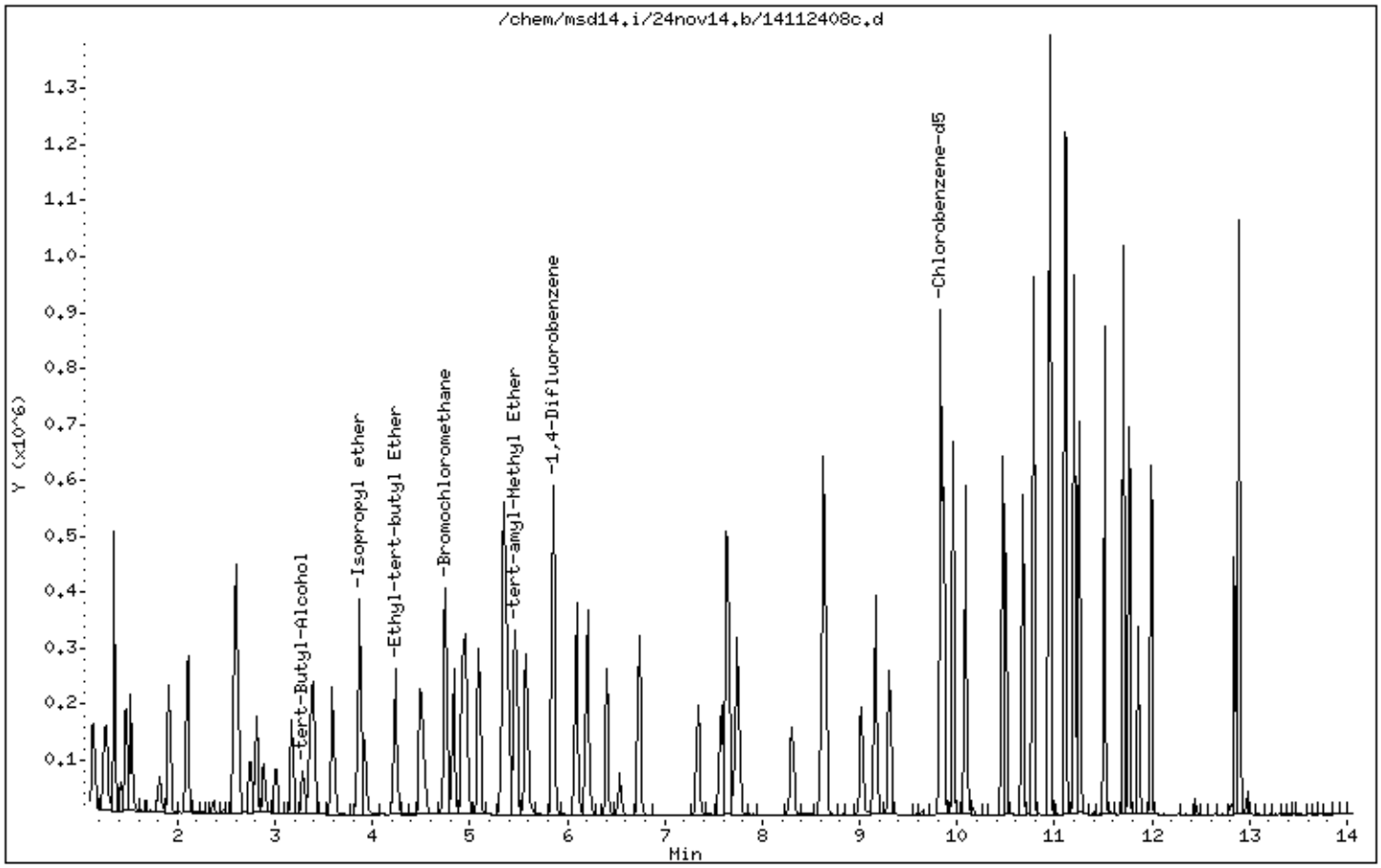
Instrument: msd14.i

Sample Info: 50.0ml #2687-64

Operator: md

Column phase: RTx-624

Column diameter: 0.53



Eurofins Air Toxics Inc.

EPA METHOD TO14A/TO15

Data file : /chem/msd14.i/24nov14.b/14112408.d
Lab Smp Id: ICAL Level 6 Client Smp ID: ICAL Level 6
Inj Date : 24-NOV-2014 11:17
Operator : md Inst ID: msd14.i
Smp Info : 50.0ml #2687-64
Misc Info : 200ppbv (200ppbv)
Comment : (5&20) - GC/MS
Method : /chem/msd14.i/24nov14.b/14451124a.m
Meth Date : 24-Nov-2014 19:14 mskidmor Quant Type: ISTD
Cal Date : 24-NOV-2014 17:39 Cal File: 14112420.d
Als bottle: 1 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT09noOxy.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 (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
* 75 Bromochloromethane					CAS #: 74-97-5		
4.753	4.753 (1.000)	130	117767	400.000		80.00- 120.00	100.00
4.753	4.753 (1.000)	128	91763			47.92- 107.92	77.92
4.753	4.753 (1.000)	49	140356			89.18- 149.18	119.18
* 94 1,4-Difluorobenzene					CAS #: 540-36-3		
5.858	5.858 (1.000)	114	544303	400.000		80.00- 120.00	100.00
5.858	5.858 (1.000)	88	80354			0.00- 44.76	14.76
* 125 Chlorobenzene-d5					CAS #: 3114-55-4		
9.832	9.832 (1.000)	117	496681	400.000		80.00- 120.00	100.00
9.832	9.832 (1.000)	82	251275			20.59- 80.59	50.59
$ 86 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
5.396	5.396 (1.135)	65	168123	400.000	383.78	80.00- 120.00	100.00
5.396	5.396 (1.135)	67	93419			25.57- 85.57	55.57
$ 110 Toluene-d8					CAS #: 2037-26-5		
7.635	7.635 (1.303)	98	547136	400.000	403.57	80.00- 120.00	100.00
7.635	7.635 (1.303)	70	57248			0.00- 40.46	10.46

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
$ 110 Toluene-d8 (continued)							
7.649	7.649 (1.306)	100	377426			38.98- 98.98	68.98
$ 139 Bromofluorobenzene					CAS #: 460-00-4		
10.951	10.951 (1.114)	174	313564	400.000	409.94	80.00- 120.00	100.00
10.951	10.951 (1.114)	95	356331			83.64- 143.64	113.64
10.951	10.951 (1.114)	176	296826			64.66- 124.66	94.66
5 Propylene					CAS #: 115-07-1		
1.241	1.241 (0.261)	41	42217	200.000	182.66	80.00- 120.00	100.00
1.241	1.241 (0.261)	42	28654			37.87- 97.87	67.87
1.241	1.241 (0.261)	39	32114			46.07- 106.07	76.07
7 Dichlorodifluoromethane/Fr12					CAS #: 75-71-8		
1.269	1.269 (0.267)	85	197268	200.000	187.13	80.00- 120.00	100.00
1.269	1.269 (0.267)	87	62946			1.91- 61.91	31.91
9 Freon 114					CAS #: 76-14-2		
1.353	1.353 (0.285)	135	132605	200.000	171.80	80.00- 120.00	100.00
1.353	1.353 (0.285)	137	41383			1.21- 61.21	31.21
12 Chloromethane					CAS #: 74-87-3		
1.423	1.423 (0.299)	50	67184	200.000	211.51	80.00- 120.00	100.00
1.423	1.423 (0.299)	52	21174			1.52- 61.52	31.52
13 Butane					CAS #: 106-97-8		
1.479	1.479 (0.311)	58	18584	200.000	196.30	80.00- 120.00	100.00
1.479	1.479 (0.311)	43	112070			573.05- 633.05	603.05
15 Vinyl Chloride					CAS #: 75-01-4		
1.507	1.507 (0.317)	62	83570	200.000	192.94	80.00- 120.00	100.00
1.507	1.507 (0.317)	64	28639			4.27- 64.27	34.27
16 1,3-Butadiene					CAS #: 106-99-0		
1.521	1.521 (0.320)	54	59745	200.000	189.06	80.00- 120.00	100.00
1.521	1.521 (0.320)	39	57057			65.50- 125.50	95.50
18 Bromomethane					CAS #: 74-83-9		
1.814	1.814 (0.382)	94	53563	200.000	180.82	80.00- 120.00	100.00
1.814	1.814 (0.382)	96	53500			69.88- 129.88	99.88
19 Chloroethane					CAS #: 75-00-3		
1.898	1.898 (0.399)	64	32009	200.000	158.16	80.00- 120.00	100.00
1.898	1.898 (0.399)	66	8562			0.00- 56.75	26.75
1.898	1.898 (0.399)	49	8460			0.00- 56.43	26.43

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
20 Isopentane					CAS #: 78-78-4		
1.912	1.912 (0.402)	43	85917	200.000	204.01	80.00- 120.00	100.00
1.912	1.912 (0.402)	57	65604			46.36- 106.36	76.36
1.912	1.912 (0.402)	72	9854			0.00- 41.47	11.47
23 Trichlorofluoromethane/Fr11					CAS #: 75-69-4		
2.108	2.108 (0.444)	101	256447	200.000	195.10	80.00- 120.00	100.00
2.108	2.108 (0.444)	103	165201			34.42- 94.42	64.42
30 Ethanol					CAS #: 64-17-5		
2.374	2.374 (0.500)	45	25391	200.000	194.08	80.00- 120.00	100.00
2.374	2.374 (0.500)	43	6110			0.00- 54.06	24.06
2.360	2.360 (0.497)	46	10770			12.42- 72.42	42.42
34 Freon 113					CAS #: 76-13-1		
2.598	2.598 (0.547)	151	153506	200.000	195.88	80.00- 120.00	100.00
2.598	2.598 (0.547)	153	95995			32.54- 92.54	62.54
2.598	2.598 (0.547)	101	193429			96.01- 156.01	126.01
36 1,1-Dichloroethene					CAS #: 75-35-4		
2.626	2.626 (0.553)	61	140009	200.000	192.02	80.00- 120.00	100.00
2.626	2.626 (0.553)	96	89095			33.64- 93.64	63.64
2.626	2.626 (0.553)	98	55862			9.90- 69.90	39.90
38 Acetone					CAS #: 67-64-1		
2.752	2.752 (0.579)	58	40111	200.000	201.07	80.00- 120.00	100.00
2.738	2.738 (0.576)	43	124764			281.05- 341.05	311.05
39 Carbon Disulfide					CAS #: 75-15-0		
2.808	2.808 (0.591)	76	239455	200.000	191.30	80.00- 120.00	100.00
41 2-Propanol					CAS #: 67-63-0		
2.892	2.892 (0.608)	45	111031	200.000	194.67	80.00- 120.00	100.00
2.892	2.892 (0.608)	43	25833			0.00- 53.27	23.27
2.892	2.892 (0.608)	59	4438			0.00- 34.00	4.00
42 3-Chloropropene					CAS #: 107-05-1		
3.018	3.018 (0.635)	76	23621	200.000	194.31	80.00- 120.00	100.00
3.004	3.004 (0.632)	41	53049			194.58- 254.58	224.58
48 Methylene Chloride					CAS #: 75-09-2		
3.172	3.172 (0.667)	49	100754	200.000	189.34	80.00- 120.00	100.00
3.172	3.172 (0.667)	84	78615			48.03- 108.03	78.03
3.172	3.172 (0.667)	51	29092			0.00- 58.87	28.87
50 MTBE					CAS #: 1634-04-4		
3.368	3.368 (0.709)	73	198544	200.000	191.44	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
50 MTBE (continued)							
3.368	3.368 (0.709)	57	41574			0.00- 50.94	20.94
3.368	3.368 (0.709)	41	48840			0.00- 54.60	24.60
52 trans-1,2-Dichloroethene					CAS #: 156-60-5		
3.396	3.396 (0.714)	96	87921	200.000	191.77	80.00- 120.00	100.00
3.396	3.396 (0.714)	61	113927			99.58- 159.58	129.58
3.396	3.396 (0.714)	98	54597			32.10- 92.10	62.10
55 Hexane					CAS #: 110-54-3		
3.591	3.591 (0.756)	57	137880	200.000	193.68	80.00- 120.00	100.00
3.591	3.591 (0.756)	43	76727			25.65- 85.65	55.65
3.591	3.591 (0.756)	86	27223			0.00- 49.74	19.74
59 1,1-Dichloroethane					CAS #: 75-34-3		
3.871	3.871 (0.815)	63	156373	200.000	193.11	80.00- 120.00	100.00
3.871	3.871 (0.815)	65	49899			1.91- 61.91	31.91
60 Vinyl Acetate					CAS #: 108-05-4		
3.927	3.927 (0.826)	86	25809	200.000	201.32	80.00- 120.00	100.00
3.927	3.927 (0.826)	43	232508			870.88- 930.88	900.88
3.927	3.927 (0.826)	42	23093			59.48- 119.48	89.48
68 cis-1,2-Dichloroethene					CAS #: 156-59-2		
4.487	4.487 (0.944)	61	134870	200.000	193.17	80.00- 120.00	100.00
4.487	4.487 (0.944)	96	114132			54.62- 114.62	84.62
4.501	4.501 (0.947)	98	74439			25.19- 85.19	55.19
70 2-Butanone					CAS #: 78-93-3		
4.529	4.529 (0.953)	72	42380	200.000	203.04	80.00- 120.00	100.00
4.529	4.529 (0.953)	43	154008			333.40- 393.40	363.40
4.529	4.529 (0.953)	57	12711			0.00- 59.99	29.99
74 Tetrahydrofuran					CAS #: 109-99-9		
4.739	4.739 (0.997)	42	87346	200.000	195.03	80.00- 120.00	100.00
4.739	4.739 (0.997)	71	39926			15.71- 75.71	45.71
4.739	4.739 (0.997)	72	42042			18.13- 78.13	48.13
76 Chloroform					CAS #: 67-66-3		
4.837	4.837 (1.018)	83	203041	200.000	190.34	80.00- 120.00	100.00
4.837	4.837 (1.018)	85	131035			34.54- 94.54	64.54
77 Cyclohexane					CAS #: 110-82-7		
4.921	4.921 (1.035)	84	131764	200.000	193.60	80.00- 120.00	100.00
4.935	4.935 (1.038)	56	134843			72.34- 132.34	102.34
4.921	4.921 (1.035)	41	80374			31.00- 91.00	61.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
78 1,1,1-Trichloroethane					CAS #: 71-55-6		
4.963	4.963 (1.044)	97	205653	200.000	194.74	80.00- 120.00	100.00
4.963	4.963 (1.044)	99	135169			35.73- 95.73	65.73
79 Carbon Tetrachloride					CAS #: 56-23-5		
5.089	5.089 (1.071)	119	189722	200.000	193.45	80.00- 120.00	100.00
5.089	5.089 (1.071)	117	196560			73.60- 133.60	103.60
82 2,2,4-Trimethylpentane					CAS #: 540-84-1		
5.340	5.340 (1.124)	57	444301	200.000	200.45	80.00- 120.00	100.00
5.340	5.340 (1.124)	56	149645			3.68- 63.68	33.68
5.340	5.340 (1.124)	41	123330			0.00- 57.76	27.76
83 Benzene					CAS #: 71-43-2		
5.354	5.354 (0.914)	78	287520	200.000	180.46	80.00- 120.00	100.00
5.354	5.354 (0.914)	77	69988			0.00- 54.34	24.34
89 1,2-Dichloroethane					CAS #: 107-06-2		
5.480	5.480 (0.936)	62	132984	200.000	200.36	80.00- 120.00	100.00
5.480	5.480 (0.936)	64	41760			1.40- 61.40	31.40
93 Heptane					CAS #: 142-82-5		
5.578	5.578 (0.952)	71	102658	200.000	201.54	80.00- 120.00	100.00
5.578	5.578 (0.952)	43	146897			113.09- 173.09	143.09
5.578	5.578 (0.952)	100	37471			6.50- 66.50	36.50
95 Trichloroethene					CAS #: 79-01-6		
6.096	6.096 (1.041)	95	132023	200.000	188.40	80.00- 120.00	100.00
6.096	6.096 (1.041)	130	141450			77.14- 137.14	107.14
6.096	6.096 (1.041)	97	86131			35.24- 95.24	65.24
97 Methyl Cyclohexane					CAS #: 108-87-2		
6.208	6.208 (1.060)	83	173363	200.000	192.19	80.00- 120.00	100.00
6.208	6.208 (1.060)	98	92094			23.12- 83.12	53.12
6.208	6.208 (1.060)	55	130905			45.51- 105.51	75.51
99 1,2-Dichloropropane					CAS #: 78-87-5		
6.404	6.404 (1.093)	63	103530	200.000	194.44	80.00- 120.00	100.00
6.404	6.404 (1.093)	62	73694			41.18- 101.18	71.18
6.404	6.404 (1.093)	41	58792			26.79- 86.79	56.79
102 1,4-Dioxane					CAS #: 123-91-1		
6.544	6.544 (1.117)	88	65774	200.000	200.10	80.00- 120.00	100.00
6.544	6.544 (1.117)	58	39382			29.87- 89.87	59.87
6.530	6.530 (1.115)	57	13703			0.00- 50.83	20.83

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
104 Bromodichloromethane					CAS #: 75-27-4		
6.740	6.740 (1.150)	83	227412	200.000	191.74	80.00- 120.00	100.00
6.740	6.740 (1.150)	85	146045			34.22- 94.22	64.22
108 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
7.341	7.341 (1.253)	75	139621	200.000	191.57	80.00- 120.00	100.00
7.341	7.341 (1.253)	77	43038			0.82- 60.82	30.82
7.341	7.341 (1.253)	39	68792			19.27- 79.27	49.27
109 4-Methyl-2-pentanone					CAS #: 108-10-1		
7.579	7.579 (1.294)	85	33530	200.000	182.28	80.00- 120.00	100.00
7.579	7.579 (1.294)	43	193911			548.32- 608.32	578.32
7.579	7.579 (1.294)	58	83266			218.33- 278.33	248.33
111 Toluene					CAS #: 108-88-3		
7.747	7.747 (1.322)	91	363499	200.000	189.20	80.00- 120.00	100.00
7.747	7.747 (1.322)	92	215418			29.26- 89.26	59.26
114 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
8.307	8.307 (0.845)	75	130637	200.000	194.10	80.00- 120.00	100.00
8.307	8.307 (0.845)	77	40239			0.80- 60.80	30.80
8.307	8.307 (0.845)	39	59828			15.80- 75.80	45.80
115 1,1,2-Trichloroethane					CAS #: 79-00-5		
8.628	8.628 (0.878)	97	131843	200.000	190.14	80.00- 120.00	100.00
8.628	8.628 (0.878)	99	79883			30.59- 90.59	60.59
8.628	8.628 (0.878)	83	112357			55.22- 115.22	85.22
116 Tetrachloroethene					CAS #: 127-18-4		
8.628	8.628 (0.878)	166	171538	200.000	181.89	80.00- 120.00	100.00
8.628	8.628 (0.878)	129	130149			45.87- 105.87	75.87
8.628	8.628 (0.878)	131	128027			44.63- 104.63	74.63
120 2-Hexanone					CAS #: 591-78-6		
9.020	9.020 (0.917)	58	96142	200.000	191.52	80.00- 120.00	100.00
9.020	9.020 (0.917)	43	170160			146.99- 206.99	176.99
9.020	9.020 (0.917)	100	23488			0.00- 54.43	24.43
121 Dibromochloromethane					CAS #: 124-48-1		
9.160	9.160 (0.932)	129	243204	200.000	196.51	80.00- 120.00	100.00
9.160	9.160 (0.932)	127	184104			45.70- 105.70	75.70
124 1,2-Dibromoethane					CAS #: 106-93-4		
9.300	9.300 (0.946)	107	197710	200.000	192.75	80.00- 120.00	100.00
9.300	9.300 (0.946)	109	185003			63.57- 123.57	93.57

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
127 Chlorobenzene					CAS #: 108-90-7		
9.860	9.860 (1.003)	112	302623	200.000	186.52	80.00- 120.00	100.00
9.860	9.860 (1.003)	114	94822			1.33- 61.33	31.33
9.860	9.860 (1.003)	77	164674			24.42- 84.42	54.42
128 Ethyl Benzene					CAS #: 100-41-4		
9.958	9.958 (1.013)	106	146956	200.000	192.33	80.00- 120.00	100.00
9.958	9.958 (1.013)	91	469452			289.45- 349.45	319.45
131 m,p-Xylene					CAS #: 108-38-3		
10.084	10.084 (1.026)	106	179236	200.000	196.19	80.00- 120.00	100.00
10.084	10.084 (1.026)	91	357648			169.54- 229.54	199.54
132 o-Xylene					CAS #: 95-47-6		
10.461	10.461 (1.064)	106	174206	200.000	191.76	80.00- 120.00	100.00
10.461	10.461 (1.064)	91	370988			182.96- 242.96	212.96
134 Styrene					CAS #: 100-42-5		
10.503	10.503 (1.068)	104	266754	200.000	191.58	80.00- 120.00	100.00
10.489	10.489 (1.067)	78	128715			18.25- 78.25	48.25
136 Bromoform					CAS #: 75-25-2		
10.671	10.671 (1.085)	173	222044	200.000	182.33	80.00- 120.00	100.00
10.671	10.671 (1.085)	171	114661			21.64- 81.64	51.64
138 Cumene					CAS #: 98-82-8		
10.783	10.783 (1.097)	105	525897	200.000	195.18	80.00- 120.00	100.00
10.783	10.783 (1.097)	120	142365			0.00- 57.07	27.07
10.783	10.783 (1.097)	51	49654			0.00- 39.44	9.44
142 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
11.105	11.105 (1.129)	83	270734	200.000	179.67	80.00- 120.00	100.00
11.105	11.105 (1.129)	85	173384			34.04- 94.04	64.04
143 Propylbenzene					CAS #: 103-65-1		
11.119	11.119 (1.131)	91	624442	200.000	193.75	80.00- 120.00	100.00
11.119	11.119 (1.131)	120	146943			0.00- 53.53	23.53
11.119	11.119 (1.131)	105	22492			0.00- 33.60	3.60
147 4-Ethyltoluene					CAS #: 622-96-8		
11.203	11.203 (1.139)	105	506327	200.000	195.47	80.00- 120.00	100.00
11.203	11.203 (1.139)	120	147502			0.00- 59.13	29.13
149 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
11.259	11.259 (1.145)	105	373783	200.000	188.86	80.00- 120.00	100.00
11.259	11.259 (1.145)	120	185917			19.74- 79.74	49.74

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
152 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
11.511	11.511 (1.171)	105	366568	200.000	187.91	80.00- 120.00	100.00
11.511	11.511 (1.171)	120	174902			17.71- 77.71	47.71
156 1,3-Dichlorobenzene					CAS #: 541-73-1		
11.707	11.707 (1.191)	146	282490	200.000	183.88	80.00- 120.00	100.00
11.707	11.707 (1.191)	148	183532			34.97- 94.97	64.97
11.707	11.707 (1.191)	111	108313			8.34- 68.34	38.34
159 1,4-Dichlorobenzene					CAS #: 106-46-7		
11.777	11.777 (1.198)	146	273033	200.000	185.65	80.00- 120.00	100.00
11.777	11.777 (1.198)	148	174638			33.96- 93.96	63.96
11.763	11.763 (1.196)	111	101264			7.09- 67.09	37.09
161 alpha-Chlorotoluene					CAS #: 100-44-7		
11.861	11.861 (1.206)	91	163216	200.000	192.72	80.00- 120.00	100.00
11.861	11.861 (1.206)	126	33259			0.00- 50.38	20.38
163 1,2-Dichlorobenzene					CAS #: 95-50-1		
12.001	12.001 (1.221)	146	245176	200.000	179.58	80.00- 120.00	100.00
12.001	12.001 (1.221)	148	154315			32.94- 92.94	62.94
11.987	11.987 (1.219)	111	93884			8.29- 68.29	38.29
169 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
12.854	12.854 (1.307)	180	131629	200.000	231.75	80.00- 120.00	100.00
12.854	12.854 (1.307)	182	122650			63.18- 123.18	93.18
170 Hexachlorobutadiene					CAS #: 87-68-3		
12.896	12.896 (1.312)	225	114934	200.000	255.31	80.00- 120.00	100.00
12.896	12.896 (1.312)	223	72452			33.04- 93.04	63.04
171 Naphthalene					CAS #: 91-20-3		
12.980	12.980 (1.320)	128	25937	20.0000	22.549	80.00- 120.00	100.00
12.980	12.980 (1.320)	127	3112			0.00- 42.00	12.00

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd14.i
Lab File ID: 14112408.d
Lab Smp Id: ICAL Level 6
Analysis Type: VOA
Quant Type: ISTD
Operator: md
Method File: /chem/msd14.i/24nov14.b/14451124a.m
Misc Info: 200ppbv (200ppbv)

Calibration Date: 24-NOV-2014
Calibration Time: 11:17
Client Smp ID: ICAL Level 6
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
75 Bromochloromethan	117767	70660	164874	117767	0.00
94 1,4-Difluorobenze	544303	326582	762024	544303	0.00
125 Chlorobenzene-d5	496681	298009	695353	496681	0.00

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
75 Bromochloromethan	4.75	4.42	5.08	4.75	0.00
94 1,4-Difluorobenze	5.86	5.53	6.19	5.86	0.00
125 Chlorobenzene-d5	9.83	9.50	10.16	9.83	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/msd14.i/24nov14.b/14112408.d

Date : 24-NOV-2014 11:17

Client ID: ICAL Level 6

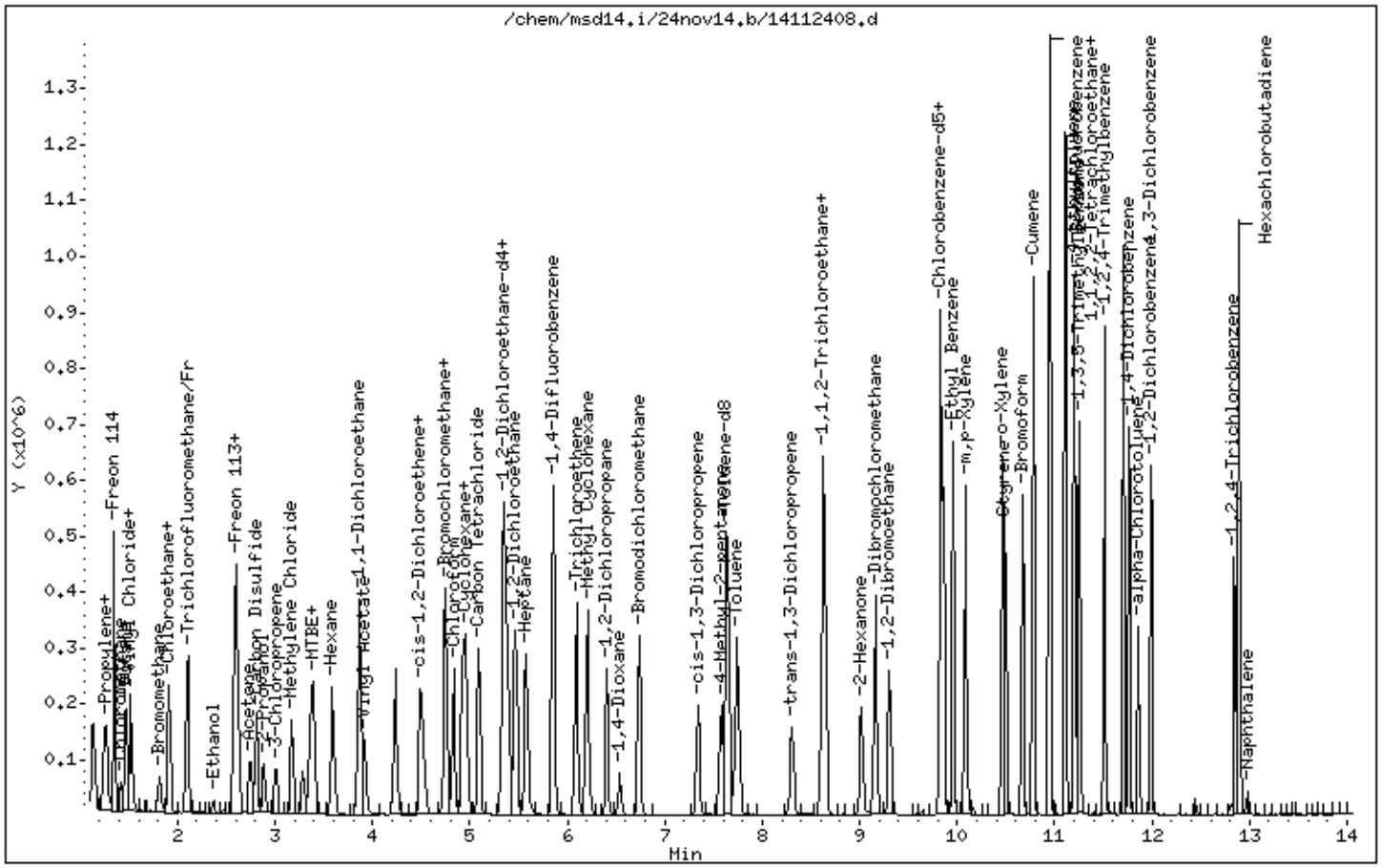
Instrument: msd14.i

Sample Info: 50.0ml #2687-64

Operator: md

Column phase: RTx-624

Column diameter: 0.53



Eurofins Air Toxics Inc.

EPA METHOD TO14A/TO15

Data file : /chem/msd14.i/15dec14.b/14112421k.d
Lab Smp Id: ICAL 7 Client Smp ID: Level 7
Inj Date : 24-NOV-2014 18:25
Operator : mjs Inst ID: msd14.i
Smp Info : 50ml #2677-23
Misc Info : 1000ppbv (1000ppbv)
Comment : (5&20) - GC/MS
Method : /chem/msd14.i/15dec14.b/14451124c.m
Meth Date : 15-Dec-2014 16:47 snguyen Quant Type: ISTD
Cal Date : 24-NOV-2014 18:25 Cal File: 14112421k.d
Als bottle: 1 Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: spAT1.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 (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
* 75 Bromochloromethane						CAS #: 74-97-5	
4.753	4.753 (1.000)	130	136934	400.000		70.00- 130.00	100.00
4.753	4.753 (1.000)	128	104610			0.00- 30.00	76.39
4.753	4.753 (1.000)	49	161191			0.00- 30.00	117.71
* 94 1,4-Difluorobenzene						CAS #: 540-36-3	
5.858	5.858 (1.000)	114	627474	400.000		70.00- 130.00	100.00
5.858	5.858 (1.000)	88	91347			0.00- 30.00	14.56
* 125 Chlorobenzene-d5						CAS #: 3114-55-4	
9.832	9.832 (1.000)	117	533443	400.000		70.00- 130.00	100.00
9.832	9.832 (1.000)	82	281485			0.00- 30.00	52.77
4 Freon134a						CAS #: 811-97-2	
1.199	1.199 (0.252)	83	236386	1000.00	1022.5	70.00- 130.00	100.00(A)
1.199	1.199 (0.252)	69	243011			0.00- 30.00	102.80
6 Freon 152a						CAS #: 75-37-6	
1.241	1.241 (0.261)	65	128197	1000.00	942.07	70.00- 130.00	100.00(A)
1.241	1.241 (0.261)	51	229949			0.00- 30.00	179.37

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
8 Freon 22					CAS #: 75-45-6		
1.269	1.269 (0.267)	67	69675	1000.00	1016.2	70.00- 130.00	100.00(A)
1.269	1.269 (0.267)	51	451102			0.00- 30.00	647.44
11 Freon142b					CAS #: 75-68-3		
1.381	1.381 (0.290)	65	648574	1000.00	980.64	70.00- 130.00	100.00(A)
1.381	1.381 (0.290)	45	165270			0.00- 30.00	25.48
25 Dichlorofluoromethane/Fr21					CAS #: 75-43-4		
2.108	2.108 (0.444)	67	842473	1000.00	1000.0	70.00- 130.00	100.00(A)
2.108	2.108 (0.444)	69	274553			0.00- 30.00	32.59
1.898	1.898 (0.399)	35	229			0.00- 30.00	0.03
29 Freon123					CAS #: 306-83-2		
2.542	2.542 (0.535)	83	952962	1000.00	1054.2	70.00- 130.00	100.00
2.542	2.542 (0.535)	133	211371			0.00- 30.00	22.18
2.542	2.542 (0.535)	85	662055			0.00- 30.00	69.47
33 Freon123a					CAS #: 354-23-4		
2.472	2.472 (0.520)	117	651772	1000.00	1053.4	70.00- 130.00	100.00
2.472	2.472 (0.520)	67	826231			0.00- 30.00	126.77
43 Cyclopentene					CAS #: 142-29-0		
3.018	3.018 (0.635)	67	720460	1000.00	1093.2	70.00- 130.00	100.00(A)
3.018	3.018 (0.635)	68	275336			0.00- 30.00	38.22
3.018	3.018 (0.635)	53	139771			0.00- 30.00	19.40
62 1-Propanol					CAS #: 71-23-8		
4.025	4.025 (0.847)	42	55451	1000.00	1235.0	70.00- 130.00	100.00(A)
4.025	4.025 (0.847)	59	70418			0.00- 30.00	126.99
4.025	4.025 (0.847)	41	38080			0.00- 30.00	68.67
69 2,2-Dichloropropane					CAS #: 594-20-7		
4.445	4.445 (0.935)	77	586447	1000.00	1325.6	70.00- 130.00	100.00(A)
4.445	4.445 (0.935)	79	191115			0.00- 30.00	32.59
4.445	4.445 (0.935)	97	117629			0.00- 30.00	20.06
80 1,1-Dichloropropene					CAS #: 563-58-6		
5.144	5.144 (1.082)	110	257236	1000.00	1076.5	70.00- 130.00	100.00(A)
5.144	5.144 (1.082)	75	689690			0.00- 30.00	268.12
87 Isobutanol					CAS #: 78-83-1		
5.382	5.382 (0.919)	43	282068	1000.00	1189.2	70.00- 130.00	100.00(A)
5.382	5.382 (0.919)	41	223599			0.00- 30.00	79.27
96 1-Butanol					CAS #: 71-36-3		
6.124	6.124 (1.045)	56	439795	1000.00	1342.7	70.00- 130.00	100.00(A)

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

   96 1-Butanol (continued)
  6.124   6.124 (1.045)    41    282537                     0.00-  30.00    64.24
  6.124   6.124 (1.045)    43    226885                     0.00-  30.00    51.59
-------------------------------------------------------------------------------
   26 1,3-Dichloropropane                          CAS #: 142-28-9
  8.894   8.894 (1.871)    76    819705 1000.00   1117.6  70.00- 130.00   100.00(A)
  8.894   8.894 (1.871)    41    441076                     0.00-  30.00    53.81
  8.894   8.894 (1.871)    78    264784                     0.00-  30.00    32.30
-------------------------------------------------------------------------------
  122 Butyl Acetate                                CAS #: 123-86-4
  9.174   9.174 (1.566)    56    273363 1000.00   1336.4  70.00- 130.00   100.00(A)
  9.174   9.174 (1.566)    73    123456                     0.00-  30.00    45.16
  9.174   9.174 (1.566)    43    626864                     0.00-  30.00   229.32
-------------------------------------------------------------------------------
  129 1,1,1,2-Tetrachloroethane                    CAS #: 630-20-6
  9.972   9.972 (1.014)   131    766675 1000.00   1155.5  70.00- 130.00   100.00(A)
  9.972   9.972 (1.014)   117    504079                     0.00-  30.00    65.75
  9.972   9.972 (1.014)    95    295232                     0.00-  30.00    38.51
-------------------------------------------------------------------------------
  135 2-Heptanone                                  CAS #: 110-43-0
 10.643  10.643 (1.083)    58    791522 1000.00   1556.3  70.00- 130.00   100.00(A)
 10.643  10.643 (1.083)    43   1165257                     0.00-  30.00   147.22
-------------------------------------------------------------------------------
  140 Cyclohexanone                                CAS #: 108-94-1
 10.909  10.909 (1.110)    55    500217 1000.00   1344.1  70.00- 130.00   100.00(A)
 10.909  10.909 (1.110)    98    233724                     0.00-  30.00    46.72
 10.909  10.909 (1.110)    42    337848                     0.00-  30.00    67.54
-------------------------------------------------------------------------------
  144 Bromobenzene                                 CAS #: 108-86-1
 11.049  11.049 (1.124)   156    841750 1000.00   1269.8  70.00- 130.00   100.00(A)
 11.049  11.049 (1.124)    77   1211848                     0.00-  30.00   143.97
 11.049  11.049 (1.124)   158    809099                     0.00-  30.00    96.12
-------------------------------------------------------------------------------
  146 1,2,3-Trichloropropane                       CAS #: 96-18-4
 11.133  11.133 (1.132)   110    424343 1000.00   1274.1  70.00- 130.00   100.00(A)
 11.133  11.133 (1.132)    61    261724                     0.00-  30.00    61.68
 11.133  11.133 (1.132)   112    268263                     0.00-  30.00    63.22
-------------------------------------------------------------------------------
  150 2-Chlorotoluene                              CAS #: 95-49-8
 11.189  11.189 (1.138)   126    653548 1000.00   1315.0  70.00- 130.00   100.00(A)
 11.189  11.189 (1.138)    91   1824005                     0.00-  30.00   279.09
 11.189  11.189 (1.138)    65    168272                     0.00-  30.00    25.75
-------------------------------------------------------------------------------
  151 4-Chlorotoluene                              CAS #: 106-43-4
 11.287  11.287 (1.148)   126    649690 1000.00   1349.6  70.00- 130.00   100.00(A)
 11.273  11.273 (1.147)    91   1846268                     0.00-  30.00   284.18
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RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
151 4-Chlorotoluene (continued)							
11.273	11.273 (1.147)	63	268406			0.00- 30.00	41.31
153 tert-Butylbenzene					CAS #: 98-06-6		
11.469	11.469 (1.167)	119	2275892	1000.00	1362.2	70.00- 130.00	100.00(A)
11.469	11.469 (1.167)	134	564390			0.00- 30.00	24.80
11.469	11.469 (1.167)	91	1396743			0.00- 30.00	61.37
154 Pentachloroethane					CAS #: 76-01-7		
11.511	11.511 (1.171)	167	676370	1000.00	1351.6	70.00- 130.00	100.00(A)
11.511	11.511 (1.171)	117	687364			0.00- 30.00	101.63
155 sec-Butylbenzene					CAS #: 135-98-8		
11.609	11.609 (1.181)	105	3196335	1000.00	1408.1	70.00- 130.00	100.00(A)
11.609	11.609 (1.181)	134	640341			0.00- 30.00	20.03
11.609	11.609 (1.181)	91	499059			0.00- 30.00	15.61
158 p-Cymene					CAS #: 99-87-6		
11.707	11.707 (1.191)	119	2733787	1000.00	1443.5	70.00- 130.00	100.00(A)
11.707	11.707 (1.191)	134	727045			0.00- 30.00	26.59
11.707	11.707 (1.191)	91	650873			0.00- 30.00	23.81
160 1,2,3-Trimethylbenzene					CAS #: 526-73-8		
11.777	11.777 (1.198)	120	1000243	1000.00	1452.3	70.00- 130.00	100.00(A)
11.777	11.777 (1.198)	105	2352926			0.00- 30.00	235.24
11.777	11.777 (1.198)	77	295224			0.00- 30.00	29.52
162 Butylbenzene					CAS #: 104-51-8		
11.958	11.958 (1.216)	134	641550	1000.00	1470.6	70.00- 130.00	100.00(A)
11.958	11.958 (1.216)	91	2400988			0.00- 30.00	374.25
11.958	11.958 (1.216)	92	1283003			0.00- 30.00	199.98
167 1,2-Dibromo-3-Chloropropane					CAS #: 96-12-8		
12.448	12.448 (1.266)	157	714800	1000.00	1436.3	70.00- 130.00	100.00(A)
12.448	12.448 (1.266)	75	564922			0.00- 30.00	79.03
12.448	12.448 (1.266)	155	553455			0.00- 30.00	77.43

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: msd14.i
Lab File ID: 14112421k.d
Lab Smp Id: ICAL 7
Analysis Type: VOA
Quant Type: ISTD
Operator: mjs
Method File: /chem/msd14.i/15dec14.b/14451124c.m
Misc Info: 1000ppbv (1000ppbv)

Calibration Date: 24-NOV-2014
Calibration Time: 11:17
Client Smp ID: Level 7
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
75 Bromochloromethan	117767	70660	164874	136934	16.28
94 1,4-Difluorobenze	544303	326582	762024	627474	15.28
125 Chlorobenzene-d5	496681	298009	695353	533443	7.40

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
75 Bromochloromethan	4.75	4.42	5.08	4.75	0.00
94 1,4-Difluorobenze	5.86	5.53	6.19	5.86	0.00
125 Chlorobenzene-d5	9.83	9.50	10.16	9.83	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/msd14.i/15dec14.b/14112421k.d

Date : 24-NOV-2014 18:25

Client ID: Level 7

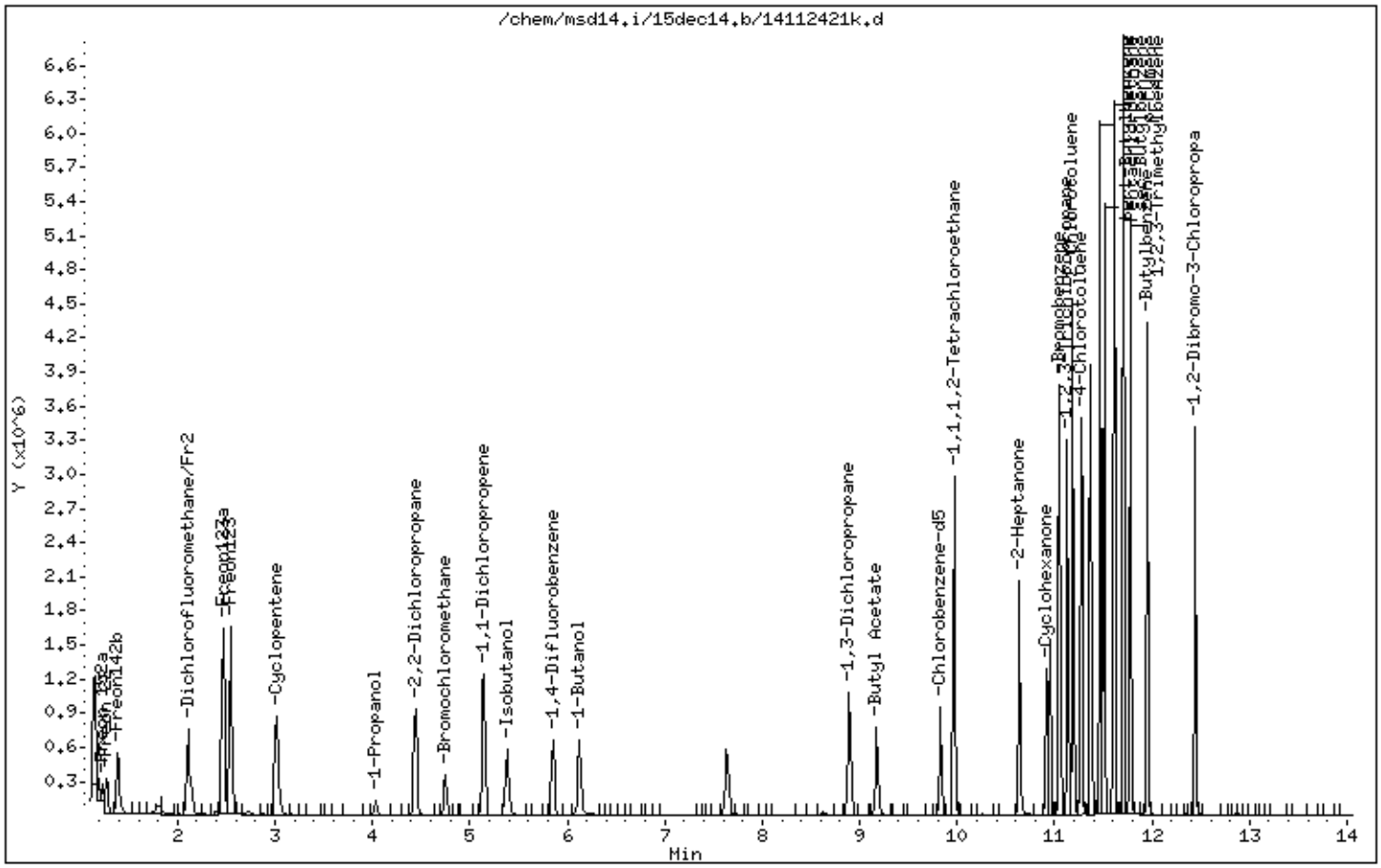
Instrument: msd14.i

Sample Info: 50ml #2677-23

Operator: mjs

Column phase: RTx-624

Column diameter: 0.53



Eurofins Air Toxics Inc.

EPA METHOD TO14A/TO15

Data file : /chem/msd14.i/24nov14.b/14112409.d
Lab Smp Id: ICAL Level 7 Client Smp ID: ICAL Level 7
Inj Date : 24-NOV-2014 12:08
Operator : md Inst ID: msd14.i
Smp Info : 10ml #2687-62
Misc Info : 1000ppbv (5000ppbv)
Comment : (5&20) - GC/MS
Method : /chem/msd14.i/24nov14.b/14451124a.m
Meth Date : 24-Nov-2014 19:15 mskidmor Quant Type: ISTD
Cal Date : 24-NOV-2014 12:08 Cal File: 14112409.d
Als bottle: 1 Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT09noOxyNaph.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 (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
* 75 Bromochloromethane					CAS #: 74-97-5		
4.753	4.753 (1.000)	130	124371	400.000		70.00- 130.00	100.00
4.753	4.753 (1.000)	128	96824			0.00- 30.00	77.85
4.753	4.753 (1.000)	49	150170			0.00- 30.00	120.74
* 94 1,4-Difluorobenzene					CAS #: 540-36-3		
5.858	5.858 (1.000)	114	559372	400.000		70.00- 130.00	100.00
5.858	5.858 (1.000)	88	82923			0.00- 30.00	14.82
* 125 Chlorobenzene-d5					CAS #: 3114-55-4		
9.832	9.832 (1.000)	117	504249	400.000		70.00- 130.00	100.00
9.832	9.832 (1.000)	82	259575			0.00- 30.00	51.48
$ 86 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
5.396	5.396 (1.135)	65	186458	400.000	403.04	70.00- 130.00	100.00
5.396	5.396 (1.135)	67	102939			0.00- 30.00	55.21
$ 110 Toluene-d8					CAS #: 2037-26-5		
7.635	7.635 (1.303)	98	562698	400.000	403.87	70.00- 130.00	100.00
7.635	7.635 (1.303)	70	60004			0.00- 30.00	10.66

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
$ 110 Toluene-d8 (continued)							
7.635	7.635 (1.303)	100	386757			0.00- 30.00	68.73
$ 139 Bromofluorobenzene					CAS #: 460-00-4		
10.951	10.951 (1.114)	174	310208	400.000	399.46	70.00- 130.00	100.00
10.951	10.951 (1.114)	95	365887			0.00- 30.00	117.95
10.951	10.951 (1.114)	176	300014			0.00- 30.00	96.71
5 Propylene					CAS #: 115-07-1		
1.227	1.227 (0.258)	41	231634	1000.00	949.01	70.00- 130.00	100.00
1.227	1.227 (0.258)	42	150347			0.00- 30.00	64.91
1.227	1.227 (0.258)	39	175257			0.00- 30.00	75.66
7 Dichlorodifluoromethane/Fr12					CAS #: 75-71-8		
1.255	1.255 (0.264)	85	997162	1000.00	895.71	70.00- 130.00	100.00
1.255	1.255 (0.264)	87	316329			0.00- 30.00	31.72
9 Freon 114					CAS #: 76-14-2		
1.353	1.353 (0.285)	135	689474	1000.00	845.83	70.00- 130.00	100.00
1.353	1.353 (0.285)	137	223493			0.00- 30.00	32.42
12 Chloromethane					CAS #: 74-87-3		
1.423	1.423 (0.299)	50	296550	1000.00	884.02	70.00- 130.00	100.00
1.423	1.423 (0.299)	52	93639			0.00- 30.00	31.58
13 Butane					CAS #: 106-97-8		
1.479	1.479 (0.311)	58	84623	1000.00	846.38	70.00- 130.00	100.00
1.479	1.479 (0.311)	43	509615			0.00- 30.00	602.22
15 Vinyl Chloride					CAS #: 75-01-4		
1.507	1.507 (0.317)	62	390178	1000.00	852.96	70.00- 130.00	100.00
1.507	1.507 (0.317)	64	129454			0.00- 30.00	33.18
16 1,3-Butadiene					CAS #: 106-99-0		
1.521	1.521 (0.320)	54	280365	1000.00	840.08	70.00- 130.00	100.00
1.521	1.521 (0.320)	39	265768			0.00- 30.00	94.79
18 Bromomethane					CAS #: 74-83-9		
1.814	1.814 (0.382)	94	258996	1000.00	827.91	70.00- 130.00	100.00
1.814	1.814 (0.382)	96	246000			0.00- 30.00	94.98
19 Chloroethane					CAS #: 75-00-3		
1.912	1.912 (0.402)	64	186187	1000.00	871.11	70.00- 130.00	100.00
1.912	1.912 (0.402)	66	60622			0.00- 30.00	32.56
1.912	1.912 (0.402)	49	50603			0.00- 30.00	27.18

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
20 Isopentane					CAS #: 78-78-4		
1.912	1.912 (0.402)	43	387522	1000.00	871.30	70.00- 130.00	100.00
1.912	1.912 (0.402)	57	297010			0.00- 30.00	76.64
1.912	1.912 (0.402)	72	40008			0.00- 30.00	10.32
23 Trichlorofluoromethane/Fr11					CAS #: 75-69-4		
2.108	2.108 (0.444)	101	1128697	1000.00	813.09	70.00- 130.00	100.00
2.108	2.108 (0.444)	103	730817			0.00- 30.00	64.75
30 Ethanol					CAS #: 64-17-5		
2.360	2.360 (0.497)	45	110233	1000.00	797.83	70.00- 130.00	100.00
2.360	2.360 (0.497)	43	23819			0.00- 30.00	21.61
2.360	2.360 (0.497)	46	44267			0.00- 30.00	40.16
34 Freon 113					CAS #: 76-13-1		
2.598	2.598 (0.547)	151	679827	1000.00	821.44	70.00- 130.00	100.00
2.598	2.598 (0.547)	153	432208			0.00- 30.00	63.58
2.598	2.598 (0.547)	101	879304			0.00- 30.00	129.34
36 1,1-Dichloroethene					CAS #: 75-35-4		
2.626	2.626 (0.553)	61	640858	1000.00	832.28	70.00- 130.00	100.00
2.626	2.626 (0.553)	96	397875			0.00- 30.00	62.08
2.626	2.626 (0.553)	98	260579			0.00- 30.00	40.66
38 Acetone					CAS #: 67-64-1		
2.738	2.738 (0.576)	58	181140	1000.00	859.82	70.00- 130.00	100.00
2.738	2.738 (0.576)	43	553960			0.00- 30.00	305.82
39 Carbon Disulfide					CAS #: 75-15-0		
2.808	2.808 (0.591)	76	1132611	1000.00	856.79	70.00- 130.00	100.00
41 2-Propanol					CAS #: 67-63-0		
2.878	2.878 (0.606)	45	508794	1000.00	844.71	70.00- 130.00	100.00
2.878	2.878 (0.606)	43	119031			0.00- 30.00	23.39
2.878	2.878 (0.606)	59	20577			0.00- 30.00	4.04
42 3-Chloropropene					CAS #: 107-05-1		
3.018	3.018 (0.635)	76	116622	1000.00	908.42	70.00- 130.00	100.00
3.018	3.018 (0.635)	41	275072			0.00- 30.00	235.87
48 Methylene Chloride					CAS #: 75-09-2		
3.172	3.172 (0.667)	49	444806	1000.00	791.52	70.00- 130.00	100.00
3.172	3.172 (0.667)	84	357237			0.00- 30.00	80.31
3.172	3.172 (0.667)	51	137462			0.00- 30.00	30.90
50 MTBE					CAS #: 1634-04-4		
3.354	3.354 (0.706)	73	803635	1000.00	733.74	70.00- 130.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
50 MTBE (continued)							
3.354	3.354 (0.706)	57	174923			0.00- 30.00	21.77
3.354	3.354 (0.706)	41	191059			0.00- 30.00	23.77
52 trans-1,2-Dichloroethene					CAS #: 156-60-5		
3.396	3.396 (0.714)	96	410861	1000.00	848.56	70.00- 130.00	100.00
3.396	3.396 (0.714)	61	531192			0.00- 30.00	129.29
3.396	3.396 (0.714)	98	260284			0.00- 30.00	63.35
55 Hexane					CAS #: 110-54-3		
3.591	3.591 (0.756)	57	645630	1000.00	858.74	70.00- 130.00	100.00
3.591	3.591 (0.756)	43	370799			0.00- 30.00	57.43
3.591	3.591 (0.756)	86	134038			0.00- 30.00	20.76
59 1,1-Dichloroethane					CAS #: 75-34-3		
3.871	3.871 (0.815)	63	723492	1000.00	846.04	70.00- 130.00	100.00
3.871	3.871 (0.815)	65	227490			0.00- 30.00	31.44
60 Vinyl Acetate					CAS #: 108-05-4		
3.927	3.927 (0.826)	86	122158	1000.00	902.30	70.00- 130.00	100.00
3.913	3.913 (0.823)	43	1003179			0.00- 30.00	821.21
3.913	3.913 (0.823)	42	104410			0.00- 30.00	85.47
68 cis-1,2-Dichloroethene					CAS #: 156-59-2		
4.487	4.487 (0.944)	61	611460	1000.00	829.27	70.00- 130.00	100.00
4.487	4.487 (0.944)	96	513972			0.00- 30.00	84.06
4.487	4.487 (0.944)	98	331852			0.00- 30.00	54.27
70 2-Butanone					CAS #: 78-93-3		
4.529	4.529 (0.953)	72	194050	1000.00	880.33	70.00- 130.00	100.00
4.529	4.529 (0.953)	43	694942			0.00- 30.00	358.13
4.529	4.529 (0.953)	57	60744			0.00- 30.00	31.30
74 Tetrahydrofuran					CAS #: 109-99-9		
4.739	4.739 (0.997)	42	395582	1000.00	836.38	70.00- 130.00	100.00
4.739	4.739 (0.997)	71	188223			0.00- 30.00	47.58
4.739	4.739 (0.997)	72	192176			0.00- 30.00	48.58
76 Chloroform					CAS #: 67-66-3		
4.837	4.837 (1.018)	83	923502	1000.00	819.78	70.00- 130.00	100.00
4.837	4.837 (1.018)	85	598716			0.00- 30.00	64.83
77 Cyclohexane					CAS #: 110-82-7		
4.921	4.921 (1.035)	84	621953	1000.00	865.30	70.00- 130.00	100.00
4.921	4.921 (1.035)	56	659341			0.00- 30.00	106.01
4.921	4.921 (1.035)	41	356773			0.00- 30.00	57.36

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
78 1,1,1-Trichloroethane					CAS #: 71-55-6		
4.963	4.963 (1.044)	97	970448	1000.00	870.16	70.00- 130.00	100.00
4.963	4.963 (1.044)	99	623764			0.00- 30.00	64.28
79 Carbon Tetrachloride					CAS #: 56-23-5		
5.089	5.089 (1.071)	119	906474	1000.00	875.22	70.00- 130.00	100.00
5.089	5.089 (1.071)	117	947831			0.00- 30.00	104.56
82 2,2,4-Trimethylpentane					CAS #: 540-84-1		
5.340	5.340 (1.124)	57	2117799	1000.00	904.74	70.00- 130.00	100.00
5.340	5.340 (1.124)	56	712264			0.00- 30.00	33.63
5.340	5.340 (1.124)	41	579702			0.00- 30.00	27.37
83 Benzene					CAS #: 71-43-2		
5.354	5.354 (0.914)	78	1331347	1000.00	813.10	70.00- 130.00	100.00
5.354	5.354 (0.914)	77	320537			0.00- 30.00	24.08
89 1,2-Dichloroethane					CAS #: 107-06-2		
5.480	5.480 (0.936)	62	585938	1000.00	859.03	70.00- 130.00	100.00
5.480	5.480 (0.936)	64	189570			0.00- 30.00	32.35
93 Heptane					CAS #: 142-82-5		
5.578	5.578 (0.952)	71	468030	1000.00	894.09	70.00- 130.00	100.00
5.578	5.578 (0.952)	43	662962			0.00- 30.00	141.65
5.578	5.578 (0.952)	100	177468			0.00- 30.00	37.92
95 Trichloroethene					CAS #: 79-01-6		
6.096	6.096 (1.041)	95	606832	1000.00	842.63	70.00- 130.00	100.00
6.096	6.096 (1.041)	130	631262			0.00- 30.00	104.03
6.096	6.096 (1.041)	97	388982			0.00- 30.00	64.10
97 Methyl Cyclohexane					CAS #: 108-87-2		
6.208	6.208 (1.060)	83	811165	1000.00	875.02	70.00- 130.00	100.00
6.208	6.208 (1.060)	98	424218			0.00- 30.00	52.30
6.208	6.208 (1.060)	55	597009			0.00- 30.00	73.60
99 1,2-Dichloropropane					CAS #: 78-87-5		
6.404	6.404 (1.093)	63	466500	1000.00	852.56	70.00- 130.00	100.00
6.404	6.404 (1.093)	62	333077			0.00- 30.00	71.40
6.404	6.404 (1.093)	41	266298			0.00- 30.00	57.08
102 1,4-Dioxane					CAS #: 123-91-1		
6.530	6.530 (1.115)	88	311556	1000.00	922.27	70.00- 130.00	100.00
6.530	6.530 (1.115)	58	192014			0.00- 30.00	61.63
6.530	6.530 (1.115)	57	69039			0.00- 30.00	22.16

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
104 Bromodichloromethane					CAS #: 75-27-4		
6.740	6.740 (1.150)	83	1039687	1000.00	852.96	70.00- 130.00	100.00
6.740	6.740 (1.150)	85	671669			0.00- 30.00	64.60
108 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
7.341	7.341 (1.253)	75	697323	1000.00	931.00	70.00- 130.00	100.00
7.341	7.341 (1.253)	77	216328			0.00- 30.00	31.02
7.341	7.341 (1.253)	39	349592			0.00- 30.00	50.13
109 4-Methyl-2-pentanone					CAS #: 108-10-1		
7.579	7.579 (1.294)	85	178076	1000.00	942.00	70.00- 130.00	100.00
7.565	7.565 (1.291)	43	955631			0.00- 30.00	536.64
7.579	7.579 (1.294)	58	389250			0.00- 30.00	218.59
111 Toluene					CAS #: 108-88-3		
7.747	7.747 (1.322)	91	1709967	1000.00	866.04	70.00- 130.00	100.00
7.747	7.747 (1.322)	92	992419			0.00- 30.00	58.04
114 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
8.307	8.307 (0.845)	75	688694	1000.00	1007.9	70.00- 130.00	100.00
8.307	8.307 (0.845)	77	212411			0.00- 30.00	30.84
8.307	8.307 (0.845)	39	325041			0.00- 30.00	47.20
115 1,1,2-Trichloroethane					CAS #: 79-00-5		
8.629	8.629 (0.878)	97	577986	1000.00	821.06	70.00- 130.00	100.00
8.629	8.629 (0.878)	99	360601			0.00- 30.00	62.39
8.629	8.629 (0.878)	83	494194			0.00- 30.00	85.50
116 Tetrachloroethene					CAS #: 127-18-4		
8.629	8.629 (0.878)	166	815642	1000.00	851.86	70.00- 130.00	100.00
8.629	8.629 (0.878)	129	591188			0.00- 30.00	72.48
8.629	8.629 (0.878)	131	572826			0.00- 30.00	70.23
120 2-Hexanone					CAS #: 591-78-6		
9.006	9.006 (0.916)	58	506077	1000.00	993.01	70.00- 130.00	100.00
9.006	9.006 (0.916)	43	899993			0.00- 30.00	177.84
9.020	9.020 (0.917)	100	126143			0.00- 30.00	24.93
121 Dibromochloromethane					CAS #: 124-48-1		
9.160	9.160 (0.932)	129	1087031	1000.00	865.14	70.00- 130.00	100.00
9.160	9.160 (0.932)	127	845804			0.00- 30.00	77.81
124 1,2-Dibromoethane					CAS #: 106-93-4		
9.300	9.300 (0.946)	107	891297	1000.00	855.91	70.00- 130.00	100.00
9.300	9.300 (0.946)	109	837129			0.00- 30.00	93.92

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
127 Chlorobenzene						CAS #: 108-90-7	
9.860	9.860 (1.003)	112	1389261	1000.00	843.42	70.00- 130.00	100.00
9.860	9.860 (1.003)	114	440428			0.00- 30.00	31.70
9.860	9.860 (1.003)	77	744462			0.00- 30.00	53.59
128 Ethyl Benzene						CAS #: 100-41-4	
9.958	9.958 (1.013)	106	694465	1000.00	895.24	70.00- 130.00	100.00
9.958	9.958 (1.013)	91	2241904			0.00- 30.00	322.82
131 m,p-Xylene						CAS #: 108-38-3	
10.084	10.084 (1.026)	106	859832	1000.00	927.04	70.00- 130.00	100.00
10.084	10.084 (1.026)	91	1736013			0.00- 30.00	201.90
132 o-Xylene						CAS #: 95-47-6	
10.461	10.461 (1.064)	106	833038	1000.00	903.22	70.00- 130.00	100.00
10.461	10.461 (1.064)	91	1775770			0.00- 30.00	213.17
134 Styrene						CAS #: 100-42-5	
10.489	10.489 (1.067)	104	1332957	1000.00	942.94	70.00- 130.00	100.00
10.489	10.489 (1.067)	78	666822			0.00- 30.00	50.03
136 Bromoform						CAS #: 75-25-2	
10.671	10.671 (1.085)	173	1064232	1000.00	860.76	70.00- 130.00	100.00
10.671	10.671 (1.085)	171	552375			0.00- 30.00	51.90
138 Cumene						CAS #: 98-82-8	
10.783	10.783 (1.097)	105	2583294	1000.00	944.37	70.00- 130.00	100.00
10.783	10.783 (1.097)	120	683215			0.00- 30.00	26.45
10.783	10.783 (1.097)	51	250435			0.00- 30.00	9.69
142 1,1,2,2-Tetrachloroethane						CAS #: 79-34-5	
11.105	11.105 (1.129)	83	1278643	1000.00	835.80	70.00- 130.00	100.00
11.105	11.105 (1.129)	85	834956			0.00- 30.00	65.30
143 Propylbenzene						CAS #: 103-65-1	
11.119	11.119 (1.131)	91	3008350	1000.00	919.41	70.00- 130.00	100.00
11.119	11.119 (1.131)	120	694889			0.00- 30.00	23.10
11.119	11.119 (1.131)	105	113050			0.00- 30.00	3.76
147 4-Ethyltoluene						CAS #: 622-96-8	
11.203	11.203 (1.139)	105	2511330	1000.00	954.95	70.00- 130.00	100.00
11.203	11.203 (1.139)	120	736788			0.00- 30.00	29.34
149 1,3,5-Trimethylbenzene						CAS #: 108-67-8	
11.259	11.259 (1.145)	105	1851648	1000.00	921.53	70.00- 130.00	100.00
11.259	11.259 (1.145)	120	908720			0.00- 30.00	49.08

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
152 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
11.511	11.511 (1.171)	105	1907132	1000.00	962.95	70.00- 130.00	100.00
11.511	11.511 (1.171)	120	869331			0.00- 30.00	45.58
156 1,3-Dichlorobenzene					CAS #: 541-73-1		
11.707	11.707 (1.191)	146	1428966	1000.00	916.21	70.00- 130.00	100.00
11.707	11.707 (1.191)	148	903145			0.00- 30.00	63.20
11.707	11.707 (1.191)	111	556033			0.00- 30.00	38.91
159 1,4-Dichlorobenzene					CAS #: 106-46-7		
11.777	11.777 (1.198)	146	1347422	1000.00	902.42	70.00- 130.00	100.00
11.777	11.777 (1.198)	148	866870			0.00- 30.00	64.34
11.763	11.763 (1.196)	111	527655			0.00- 30.00	39.16
161 alpha-Chlorotoluene					CAS #: 100-44-7		
11.861	11.861 (1.206)	91	1013745	1000.00	1179.1	70.00- 130.00	100.00
11.861	11.861 (1.206)	126	215146			0.00- 30.00	21.22
163 1,2-Dichlorobenzene					CAS #: 95-50-1		
12.001	12.001 (1.221)	146	1224992	1000.00	883.80	70.00- 130.00	100.00
12.001	12.001 (1.221)	148	790020			0.00- 30.00	64.49
11.987	11.987 (1.219)	111	498702			0.00- 30.00	40.71
169 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
12.854	12.854 (1.307)	180	618889	1000.00	1073.3	70.00- 130.00	100.00
12.854	12.854 (1.307)	182	586330			0.00- 30.00	94.74
170 Hexachlorobutadiene					CAS #: 87-68-3		
12.910	12.910 (1.313)	225	371793	1000.00	813.49	70.00- 130.00	100.00
12.910	12.910 (1.313)	223	235351			0.00- 30.00	63.30

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd14.i
Lab File ID: 14112409.d
Lab Smp Id: ICAL Level 7
Analysis Type: VOA
Quant Type: ISTD
Operator: md
Method File: /chem/msd14.i/24nov14.b/14451124a.m
Misc Info: 1000ppbv (5000ppbv)

Calibration Date: 24-NOV-2014
Calibration Time: 11:17
Client Smp ID: ICAL Level 7
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
75 Bromochloromethan	117767	70660	164874	124371	5.61
94 1,4-Difluorobenze	544303	326582	762024	559372	2.77
125 Chlorobenzene-d5	496681	298009	695353	504249	1.52

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
75 Bromochloromethan	4.75	4.42	5.08	4.75	0.00
94 1,4-Difluorobenze	5.86	5.53	6.19	5.86	0.00
125 Chlorobenzene-d5	9.83	9.50	10.16	9.83	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/msd14.i/24nov14.b/14112409.d

Date : 24-NOV-2014 12:08

Client ID: ICAL Level 7

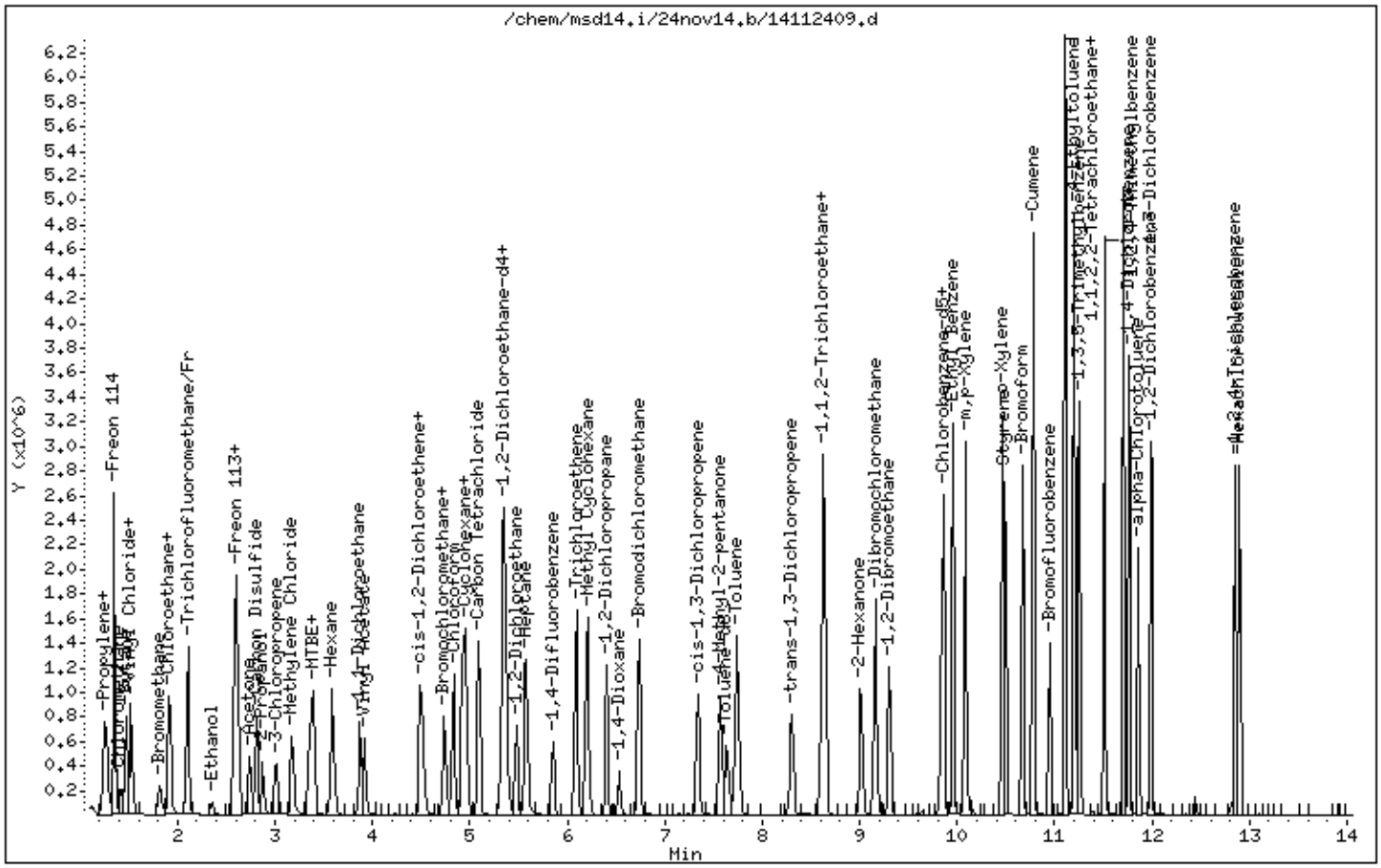
Instrument: msd14.i

Sample Info: 10ml #2687-62

Operator: md

Column phase: RTx-624

Column diameter: 0.53



Eurofins Air Toxics Inc.

EPA METHOD TO14A/TO15

Data file : /chem/msd14.i/24nov14.b/14112413.d
Lab Smp Id: ICAL Level 8 Client Smp ID: ICAL Level 8
Inj Date : 24-NOV-2014 13:59
Operator : md Inst ID: msd14.i
Smp Info : 25ml #2677-829
Misc Info : 250ppbv (500ppbv)
Comment : (5&20) - GC/MS
Method : /chem/msd14.i/24nov14.b/14451124a.m
Meth Date : 24-Nov-2014 19:15 mskidmor Quant Type: ISTD
Cal Date : 24-NOV-2014 13:59 Cal File: 14112413.d
Als bottle: 1 Calibration Sample, Level: 8
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: NapthICAL.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 (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
* 75 Bromochloromethane						CAS #: 74-97-5	
4.753	4.753 (1.000)	130	123465	400.000		70.00- 130.00	100.00
4.753	4.753 (1.000)	128	96455			0.00- 30.00	78.12
4.753	4.753 (1.000)	49	147362			0.00- 30.00	119.36
* 94 1,4-Difluorobenzene						CAS #: 540-36-3	
5.858	5.858 (1.000)	114	550857	400.000		70.00- 130.00	100.00
5.858	5.858 (1.000)	88	80399			0.00- 30.00	14.60
* 125 Chlorobenzene-d5						CAS #: 3114-55-4	
9.832	9.832 (1.000)	117	504228	400.000		70.00- 130.00	100.00
9.832	9.832 (1.000)	82	259064			0.00- 30.00	51.38
171 Naphthalene						CAS #: 91-20-3	
12.980	12.980 (1.320)	128	200290	250.000	171.52	70.00- 130.00	100.00
12.980	12.980 (1.320)	127	26627			0.00- 30.00	13.29

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd14.i
Lab File ID: 14112413.d
Lab Smp Id: ICAL Level 8
Analysis Type: VOA
Quant Type: ISTD
Operator: md
Method File: /chem/msd14.i/24nov14.b/14451124a.m
Misc Info: 250ppbv (500ppbv)

Calibration Date: 24-NOV-2014
Calibration Time: 11:17
Client Smp ID: ICAL Level 8
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
75 Bromochloromethan	117767	70660	164874	123465	4.84
94 1,4-Difluorobenze	544303	326582	762024	550857	1.20
125 Chlorobenzene-d5	496681	298009	695353	504228	1.52

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
75 Bromochloromethan	4.75	4.42	5.08	4.75	0.00
94 1,4-Difluorobenze	5.86	5.53	6.19	5.86	0.00
125 Chlorobenzene-d5	9.83	9.50	10.16	9.83	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/msd14.i/24nov14.b/14112413.d

Date : 24-NOV-2014 13:59

Client ID: ICAL Level 8

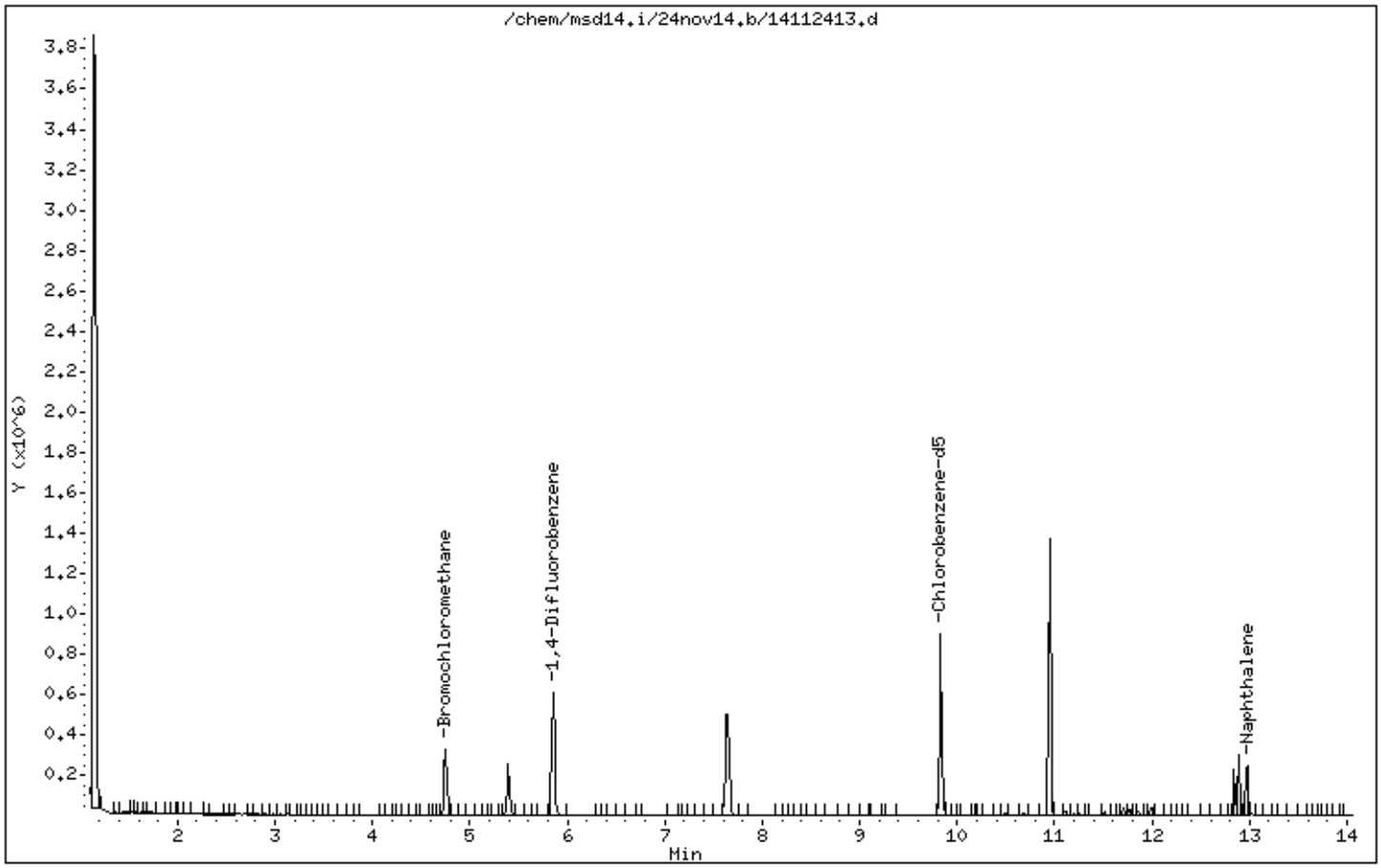
Instrument: msd14.i

Sample Info: 25ml #2677-829

Operator: md

Column phase: RTx-624

Column diameter: 0.53



Eurofins Air Toxics Inc.

EPA METHOD TO14A/TO15

Data file : /chem/msd14.i/24nov14.b/14112410.d
Lab Smp Id: ICAL Level 8 Client Smp ID: ICAL Level 8
Inj Date : 24-NOV-2014 12:31
Operator : md Inst ID: msd14.i
Smp Info : 25ml #2687-62
Misc Info : 2500ppbv (5000ppbv)
Comment : (5&20) - GC/MS
Method : /chem/msd14.i/24nov14.b/14451124a.m
Meth Date : 24-Nov-2014 19:15 mskidmor Quant Type: ISTD
Cal Date : 24-NOV-2014 13:59 Cal File: 14112413.d
Als bottle: 1 Calibration Sample, Level: 8
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT09noOxyNaph.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 (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
* 75 Bromochloromethane					CAS #: 74-97-5		
4.753	4.753 (1.000)	130	130679	400.000		70.00- 130.00	100.00
4.753	4.753 (1.000)	128	101302			0.00- 30.00	77.52
4.753	4.753 (1.000)	49	156268			0.00- 30.00	119.58
* 94 1,4-Difluorobenzene					CAS #: 540-36-3		
5.858	5.858 (1.000)	114	565034	400.000		70.00- 130.00	100.00
5.858	5.858 (1.000)	88	81297			0.00- 30.00	14.39
* 125 Chlorobenzene-d5					CAS #: 3114-55-4		
9.832	9.832 (1.000)	117	518049	400.000		70.00- 130.00	100.00
9.832	9.832 (1.000)	82	277415			0.00- 30.00	53.55
$ 86 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
5.396	5.396 (1.135)	65	200663	400.000	412.80	70.00- 130.00	100.00
5.396	5.396 (1.135)	67	110479			0.00- 30.00	55.06
$ 110 Toluene-d8					CAS #: 2037-26-5		
7.649	7.649 (1.306)	98	584717	400.000	415.47	70.00- 130.00	100.00
7.635	7.635 (1.303)	70	63681			0.00- 30.00	10.89

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

$ 110 Toluene-d8 (continued)
  7.649   7.649 (1.306)   100    433443                     0.00-  30.00    74.13
-------------------------------------------------------------------------------
$ 139 Bromofluorobenzene                            CAS #: 460-00-4
 10.951  10.951 (1.114)   174    337241 400.000   422.70  70.00- 130.00   100.00
 10.951  10.951 (1.114)    95    400258                     0.00-  30.00   118.69
 10.951  10.951 (1.114)   176    327153                     0.00-  30.00    97.01
-------------------------------------------------------------------------------
    5 Propylene                                     CAS #: 115-07-1
  1.227   1.227 (0.258)    41    704466 2500.00   2746.9  70.00- 130.00   100.00
  1.227   1.227 (0.258)    42    457148                     0.00-  30.00    64.89
  1.227   1.227 (0.258)    39    518821                     0.00-  30.00    73.65
-------------------------------------------------------------------------------
    7 Dichlorodifluoromethane/Fr12                  CAS #: 75-71-8
  1.269   1.269 (0.267)    85   3108324 2500.00   2657.3  70.00- 130.00   100.00
  1.269   1.269 (0.267)    87   1022409                     0.00-  30.00    32.89
-------------------------------------------------------------------------------
    9 Freon 114                                     CAS #: 76-14-2
  1.353   1.353 (0.285)   135   2344889 2500.00   2737.8  70.00- 130.00   100.00
  1.353   1.353 (0.285)   137    746806                     0.00-  30.00    31.85
-------------------------------------------------------------------------------
   12 Chloromethane                                 CAS #: 74-87-3
  1.423   1.423 (0.299)    50    867854 2500.00   2462.2  70.00- 130.00   100.00
  1.423   1.423 (0.299)    52    288736                     0.00-  30.00    33.27
-------------------------------------------------------------------------------
   13 Butane                                        CAS #: 106-97-8
  1.479   1.479 (0.311)    58    248017 2500.00   2360.9  70.00- 130.00   100.00
  1.479   1.479 (0.311)    43   1483071                     0.00-  30.00   597.97
-------------------------------------------------------------------------------
   15 Vinyl Chloride                                CAS #: 75-01-4
  1.507   1.507 (0.317)    62   1124110 2500.00   2338.8  70.00- 130.00   100.00
  1.507   1.507 (0.317)    64    355597                     0.00-  30.00    31.63
-------------------------------------------------------------------------------
   16 1,3-Butadiene                                 CAS #: 106-99-0
  1.535   1.535 (0.323)    54    821872 2500.00   2343.8  70.00- 130.00   100.00
  1.535   1.535 (0.323)    39    760749                     0.00-  30.00    92.56
-------------------------------------------------------------------------------
   18 Bromomethane                                  CAS #: 74-83-9
  1.814   1.814 (0.382)    94   1035159 2500.00   3149.3  70.00- 130.00   100.00
  1.814   1.814 (0.382)    96    986690                     0.00-  30.00    95.32
-------------------------------------------------------------------------------
   19 Chloroethane                                  CAS #: 75-00-3
  1.898   1.898 (0.399)    64    602306 2500.00   2682.0  70.00- 130.00   100.00
  1.898   1.898 (0.399)    66    185180                     0.00-  30.00    30.75
  1.898   1.898 (0.399)    49    162841                     0.00-  30.00    27.04
-------------------------------------------------------------------------------
```

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
20 Isopentane					CAS #: 78-78-4		
1.926	1.926 (0.405)	43	1161682	2500.00	2485.8	70.00- 130.00	100.00
1.926	1.926 (0.405)	57	907084			0.00- 30.00	78.08
1.926	1.926 (0.405)	72	125656			0.00- 30.00	10.82
23 Trichlorofluoromethane/Fr11					CAS #: 75-69-4		
2.108	2.108 (0.444)	101	3518022	2500.00	2412.0	70.00- 130.00	100.00
2.108	2.108 (0.444)	103	2274437			0.00- 30.00	64.65
30 Ethanol					CAS #: 64-17-5		
2.360	2.360 (0.497)	45	355509	2500.00	2448.9	70.00- 130.00	100.00
2.360	2.360 (0.497)	43	76671			0.00- 30.00	21.57
2.360	2.360 (0.497)	46	147630			0.00- 30.00	41.53
34 Freon 113					CAS #: 76-13-1		
2.598	2.598 (0.547)	151	2124366	2500.00	2443.0	70.00- 130.00	100.00
2.598	2.598 (0.547)	153	1368640			0.00- 30.00	64.43
2.598	2.598 (0.547)	101	2692636			0.00- 30.00	126.75
36 1,1-Dichloroethene					CAS #: 75-35-4		
2.626	2.626 (0.553)	61	1943953	2500.00	2402.7	70.00- 130.00	100.00
2.626	2.626 (0.553)	96	1216993			0.00- 30.00	62.60
2.626	2.626 (0.553)	98	779693			0.00- 30.00	40.11
38 Acetone					CAS #: 67-64-1		
2.738	2.738 (0.576)	58	539973	2500.00	2439.4	70.00- 130.00	100.00
2.738	2.738 (0.576)	43	1697476			0.00- 30.00	314.36
39 Carbon Disulfide					CAS #: 75-15-0		
2.808	2.808 (0.591)	76	3322198	2500.00	2391.8	70.00- 130.00	100.00
41 2-Propanol					CAS #: 67-63-0		
2.878	2.878 (0.606)	45	1747052	2500.00	2760.5	70.00- 130.00	100.00
2.878	2.878 (0.606)	43	394094			0.00- 30.00	22.56
2.878	2.878 (0.606)	59	76495			0.00- 30.00	4.38
42 3-Chloropropene					CAS #: 107-05-1		
3.018	3.018 (0.635)	76	509283	2500.00	3775.6	70.00- 130.00	100.00
3.018	3.018 (0.635)	41	1126371			0.00- 30.00	221.17
48 Methylene Chloride					CAS #: 75-09-2		
3.172	3.172 (0.667)	49	1315091	2500.00	2227.2	70.00- 130.00	100.00
3.172	3.172 (0.667)	84	1066347			0.00- 30.00	81.09
3.172	3.172 (0.667)	51	403571			0.00- 30.00	30.69
50 MTBE					CAS #: 1634-04-4		
3.368	3.368 (0.709)	73	3212045	2500.00	2791.1	70.00- 130.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
50 MTBE (continued)							
3.368	3.368 (0.709)	57	696700			0.00- 30.00	21.69
3.368	3.368 (0.709)	41	693156			0.00- 30.00	21.58
52 trans-1,2-Dichloroethene					CAS #: 156-60-5		
3.396	3.396 (0.714)	96	1228829	2500.00	2415.4	70.00- 130.00	100.00
3.396	3.396 (0.714)	61	1625341			0.00- 30.00	132.27
3.396	3.396 (0.714)	98	794796			0.00- 30.00	64.68
55 Hexane					CAS #: 110-54-3		
3.591	3.591 (0.756)	57	1935409	2500.00	2450.0	70.00- 130.00	100.00
3.591	3.591 (0.756)	43	1111481			0.00- 30.00	57.43
3.591	3.591 (0.756)	86	403580			0.00- 30.00	20.85
59 1,1-Dichloroethane					CAS #: 75-34-3		
3.871	3.871 (0.815)	63	2237807	2500.00	2490.5	70.00- 130.00	100.00
3.871	3.871 (0.815)	65	712627			0.00- 30.00	31.84
60 Vinyl Acetate					CAS #: 108-05-4		
3.927	3.927 (0.826)	86	404659	2500.00	2844.7	70.00- 130.00	100.00
3.927	3.927 (0.826)	43	3332983			0.00- 30.00	823.65
3.927	3.927 (0.826)	42	355192			0.00- 30.00	87.78
68 cis-1,2-Dichloroethene					CAS #: 156-59-2		
4.501	4.501 (0.947)	61	1938443	2500.00	2502.0	70.00- 130.00	100.00
4.501	4.501 (0.947)	96	1579619			0.00- 30.00	81.49
4.501	4.501 (0.947)	98	1018002			0.00- 30.00	52.52
70 2-Butanone					CAS #: 78-93-3		
4.529	4.529 (0.953)	72	650261	2500.00	2807.6	70.00- 130.00	100.00
4.529	4.529 (0.953)	43	2337838			0.00- 30.00	359.52
4.529	4.529 (0.953)	57	198244			0.00- 30.00	30.49
74 Tetrahydrofuran					CAS #: 109-99-9		
4.739	4.739 (0.997)	42	1270225	2500.00	2556.0	70.00- 130.00	100.00
4.739	4.739 (0.997)	71	591094			0.00- 30.00	46.53
4.739	4.739 (0.997)	72	614055			0.00- 30.00	48.34
76 Chloroform					CAS #: 67-66-3		
4.837	4.837 (1.018)	83	2865395	2500.00	2420.8	70.00- 130.00	100.00
4.837	4.837 (1.018)	85	1842901			0.00- 30.00	64.32
77 Cyclohexane					CAS #: 110-82-7		
4.935	4.935 (1.038)	84	1876321	2500.00	2484.4	70.00- 130.00	100.00
4.935	4.935 (1.038)	56	1979703			0.00- 30.00	105.51
4.935	4.935 (1.038)	41	1081842			0.00- 30.00	57.66

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
78 1,1,1-Trichloroethane					CAS #: 71-55-6		
4.963	4.963 (1.044)	97	3084611	2500.00	2632.3	70.00- 130.00	100.00
4.963	4.963 (1.044)	99	1974938			0.00- 30.00	64.03
79 Carbon Tetrachloride					CAS #: 56-23-5		
5.089	5.089 (1.071)	119	3154463	2500.00	2898.7	70.00- 130.00	100.00
5.089	5.089 (1.071)	117	3283110			0.00- 30.00	104.08
82 2,2,4-Trimethylpentane					CAS #: 540-84-1		
5.340	5.340 (1.124)	57	6278557	2500.00	2552.8	70.00- 130.00	100.00
5.340	5.340 (1.124)	56	2112734			0.00- 30.00	33.65
5.340	5.340 (1.124)	41	1743051			0.00- 30.00	27.76
83 Benzene					CAS #: 71-43-2		
5.354	5.354 (0.914)	78	4049144	2500.00	2448.2	70.00- 130.00	100.00
5.354	5.354 (0.914)	77	969583			0.00- 30.00	23.95
89 1,2-Dichloroethane					CAS #: 107-06-2		
5.480	5.480 (0.936)	62	1882279	2500.00	2731.9	70.00- 130.00	100.00
5.480	5.480 (0.936)	64	608412			0.00- 30.00	32.32
93 Heptane					CAS #: 142-82-5		
5.578	5.578 (0.952)	71	1438540	2500.00	2720.6	70.00- 130.00	100.00
5.578	5.578 (0.952)	43	2061678			0.00- 30.00	143.32
5.578	5.578 (0.952)	100	548235			0.00- 30.00	38.11
95 Trichloroethene					CAS #: 79-01-6		
6.096	6.096 (1.041)	95	1893828	2500.00	2603.4	70.00- 130.00	100.00
6.096	6.096 (1.041)	130	2006840			0.00- 30.00	105.97
6.096	6.096 (1.041)	97	1218448			0.00- 30.00	64.34
97 Methyl Cyclohexane					CAS #: 108-87-2		
6.208	6.208 (1.060)	83	2516318	2500.00	2687.2	70.00- 130.00	100.00
6.208	6.208 (1.060)	98	1318048			0.00- 30.00	52.38
6.208	6.208 (1.060)	55	1833393			0.00- 30.00	72.86
99 1,2-Dichloropropane					CAS #: 78-87-5		
6.404	6.404 (1.093)	63	1452457	2500.00	2627.8	70.00- 130.00	100.00
6.404	6.404 (1.093)	62	1021691			0.00- 30.00	70.34
6.404	6.404 (1.093)	41	836702			0.00- 30.00	57.61
102 1,4-Dioxane					CAS #: 123-91-1		
6.544	6.544 (1.117)	88	993801	2500.00	2912.4	70.00- 130.00	100.00
6.530	6.530 (1.115)	58	617585			0.00- 30.00	62.14
6.530	6.530 (1.115)	57	211266			0.00- 30.00	21.26

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
104 Bromodichloromethane					CAS #: 75-27-4		
6.740	6.740 (1.150)	83	3312027	2500.00	2690.0	70.00- 130.00	100.00
6.740	6.740 (1.150)	85	2137390			0.00- 30.00	64.53
108 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
7.341	7.341 (1.253)	75	2321672	2500.00	3068.6	70.00- 130.00	100.00
7.341	7.341 (1.253)	77	730440			0.00- 30.00	31.46
7.341	7.341 (1.253)	39	1161440			0.00- 30.00	50.03
109 4-Methyl-2-pentanone					CAS #: 108-10-1		
7.579	7.579 (1.294)	85	588927	2500.00	3084.1	70.00- 130.00	100.00
7.579	7.579 (1.294)	43	3092315			0.00- 30.00	525.08
7.579	7.579 (1.294)	58	1258096			0.00- 30.00	213.63
111 Toluene					CAS #: 108-88-3		
7.747	7.747 (1.322)	91	5343406	2500.00	2679.1	70.00- 130.00	100.00
7.747	7.747 (1.322)	92	3130497			0.00- 30.00	58.59
114 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
8.307	8.307 (0.845)	75	2409017	2500.00	3431.8	70.00- 130.00	100.00
8.307	8.307 (0.845)	77	763063			0.00- 30.00	31.68
8.307	8.307 (0.845)	39	1155530			0.00- 30.00	47.97
115 1,1,2-Trichloroethane					CAS #: 79-00-5		
8.628	8.628 (0.878)	97	1833509	2500.00	2535.2	70.00- 130.00	100.00
8.628	8.628 (0.878)	99	1138670			0.00- 30.00	62.10
8.628	8.628 (0.878)	83	1583951			0.00- 30.00	86.39
116 Tetrachloroethene					CAS #: 127-18-4		
8.642	8.642 (0.879)	166	2563750	2500.00	2606.3	70.00- 130.00	100.00
8.628	8.628 (0.878)	129	1905277			0.00- 30.00	74.32
8.642	8.642 (0.879)	131	1823235			0.00- 30.00	71.12
120 2-Hexanone					CAS #: 591-78-6		
9.020	9.020 (0.917)	58	1707371	2500.00	3260.9	70.00- 130.00	100.00
9.020	9.020 (0.917)	43	3023567			0.00- 30.00	177.09
9.020	9.020 (0.917)	100	419247			0.00- 30.00	24.56
121 Dibromochloromethane					CAS #: 124-48-1		
9.160	9.160 (0.932)	129	3487343	2500.00	2701.5	70.00- 130.00	100.00
9.160	9.160 (0.932)	127	2714725			0.00- 30.00	77.85
124 1,2-Dibromoethane					CAS #: 106-93-4		
9.300	9.300 (0.946)	107	2889542	2500.00	2700.9	70.00- 130.00	100.00
9.300	9.300 (0.946)	109	2716215			0.00- 30.00	94.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
127 Chlorobenzene						CAS #: 108-90-7	
9.860	9.860 (1.003)	112	4335125	2500.00	2561.7	70.00- 130.00	100.00
9.860	9.860 (1.003)	114	1379195			0.00- 30.00	31.81
9.860	9.860 (1.003)	77	2363493			0.00- 30.00	54.52
128 Ethyl Benzene						CAS #: 100-41-4	
9.958	9.958 (1.013)	106	2204183	2500.00	2765.7	70.00- 130.00	100.00
9.958	9.958 (1.013)	91	7161269			0.00- 30.00	324.89
131 m,p-Xylene						CAS #: 108-38-3	
10.084	10.084 (1.026)	106	2764985	2500.00	2901.7	70.00- 130.00	100.00
10.084	10.084 (1.026)	91	5616495			0.00- 30.00	203.13
132 o-Xylene						CAS #: 95-47-6	
10.461	10.461 (1.064)	106	2681623	2500.00	2830.1	70.00- 130.00	100.00
10.461	10.461 (1.064)	91	5759229			0.00- 30.00	214.77
134 Styrene						CAS #: 100-42-5	
10.503	10.503 (1.068)	104	4438732	2500.00	3056.3	70.00- 130.00	100.00
10.503	10.503 (1.068)	78	2236386			0.00- 30.00	50.38
136 Bromoform						CAS #: 75-25-2	
10.671	10.671 (1.085)	173	3557226	2500.00	2800.4	70.00- 130.00	100.00
10.671	10.671 (1.085)	171	1838150			0.00- 30.00	51.67
138 Cumene						CAS #: 98-82-8	
10.783	10.783 (1.097)	105	8340603	2500.00	2967.8	70.00- 130.00	100.00
10.783	10.783 (1.097)	120	2220728			0.00- 30.00	26.63
10.783	10.783 (1.097)	51	815968			0.00- 30.00	9.78
142 1,1,2,2-Tetrachloroethane						CAS #: 79-34-5	
11.105	11.105 (1.129)	83	4107724	2500.00	2613.6	70.00- 130.00	100.00
11.105	11.105 (1.129)	85	2678983			0.00- 30.00	65.22
143 Propylbenzene						CAS #: 103-65-1	
11.119	11.119 (1.131)	91	9832344	2500.00	2924.9	70.00- 130.00	100.00
11.119	11.119 (1.131)	120	2281650			0.00- 30.00	23.21
11.119	11.119 (1.131)	105	361403			0.00- 30.00	3.68
147 4-Ethyltoluene						CAS #: 622-96-8	
11.203	11.203 (1.139)	105	8147325	2500.00	3015.5	70.00- 130.00	100.00
11.203	11.203 (1.139)	120	2415671			0.00- 30.00	29.65
149 1,3,5-Trimethylbenzene						CAS #: 108-67-8	
11.259	11.259 (1.145)	105	6033845	2500.00	2922.9	70.00- 130.00	100.00
11.259	11.259 (1.145)	120	2978707			0.00- 30.00	49.37

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
152 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
11.511	11.511 (1.171)	105	6406364	2500.00	3148.5	70.00- 130.00	100.00
11.511	11.511 (1.171)	120	2927960			0.00- 30.00	45.70
156 1,3-Dichlorobenzene					CAS #: 541-73-1		
11.707	11.707 (1.191)	146	4551667	2500.00	2840.6	70.00- 130.00	100.00
11.707	11.707 (1.191)	148	2910292			0.00- 30.00	63.94
11.707	11.707 (1.191)	111	1856808			0.00- 30.00	40.79
159 1,4-Dichlorobenzene					CAS #: 106-46-7		
11.777	11.777 (1.198)	146	4274559	2500.00	2786.6	70.00- 130.00	100.00
11.777	11.777 (1.198)	148	2744610			0.00- 30.00	64.21
11.763	11.763 (1.196)	111	1643961			0.00- 30.00	38.46
161 alpha-Chlorotoluene					CAS #: 100-44-7		
11.861	11.861 (1.206)	91	3774007	2500.00	4272.5	70.00- 130.00	100.00
11.861	11.861 (1.206)	126	782049			0.00- 30.00	20.72
163 1,2-Dichlorobenzene					CAS #: 95-50-1		
12.001	12.001 (1.221)	146	3925275	2500.00	2756.5	70.00- 130.00	100.00
12.001	12.001 (1.221)	148	2516946			0.00- 30.00	64.12
11.987	11.987 (1.219)	111	1617000			0.00- 30.00	41.19
169 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
12.854	12.854 (1.307)	180	1542951	2500.00	2604.5	70.00- 130.00	100.00(A)
12.854	12.854 (1.307)	182	1468157			0.00- 30.00	95.15
170 Hexachlorobutadiene					CAS #: 87-68-3		
12.896	12.896 (1.312)	225	1310785	2500.00	2791.6	70.00- 130.00	100.00(A)
12.896	12.896 (1.312)	223	837983			0.00- 30.00	63.93

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: msd14.i
Lab File ID: 14112410.d
Lab Smp Id: ICAL Level 8
Analysis Type: VOA
Quant Type: ISTD
Operator: md
Method File: /chem/msd14.i/24nov14.b/14451124a.m
Misc Info: 2500ppbv (5000ppbv)

Calibration Date: 24-NOV-2014
Calibration Time: 11:17
Client Smp ID: ICAL Level 8
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
75 Bromochloromethan	117767	70660	164874	130679	10.96
94 1,4-Difluorobenze	544303	326582	762024	565034	3.81
125 Chlorobenzene-d5	496681	298009	695353	518049	4.30

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
75 Bromochloromethan	4.75	4.42	5.08	4.75	0.00
94 1,4-Difluorobenze	5.86	5.53	6.19	5.86	0.00
125 Chlorobenzene-d5	9.83	9.50	10.16	9.83	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/msd14.i/24nov14.b/14112410.d

Date : 24-NOV-2014 12:31

Client ID: ICAL Level 8

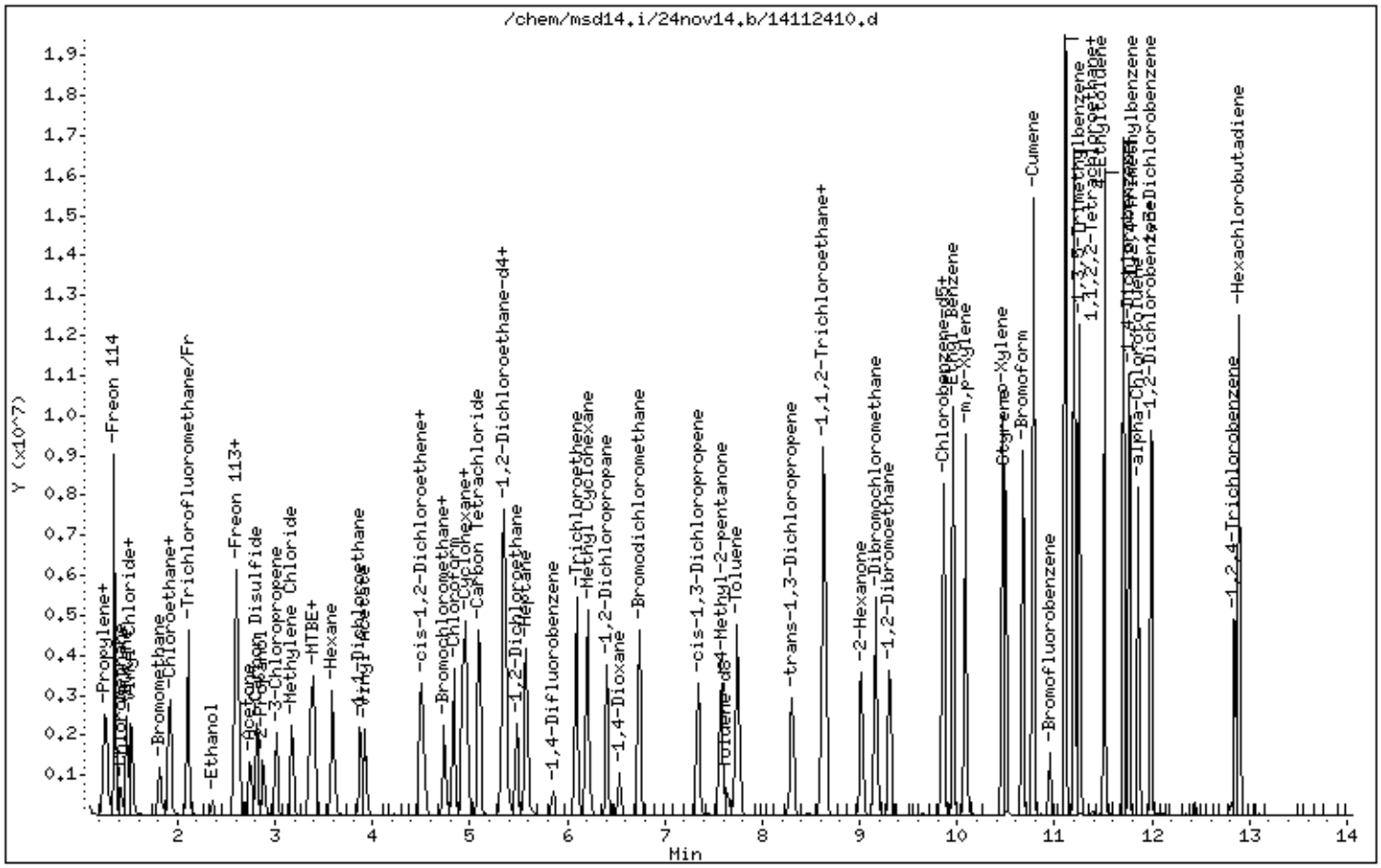
Instrument: msd14.i

Sample Info: 25ml #2687-62

Operator: md

Column phase: RTx-624

Column diameter: 0.53



Eurofins Air Toxics Inc.

EPA METHOD TO14A/TO15

Data file : /chem/msd14.i/24nov14.b/14112414.d
Lab Smp Id: ICAL Level 9 Client Smp ID: ICAL Level 9
Inj Date : 24-NOV-2014 14:22
Operator : md Inst ID: msd14.i
Smp Info : 50ml #2677-829
Misc Info : 500ppbv (500ppbv)
Comment : (5&20) - GC/MS
Method : /chem/msd14.i/24nov14.b/14451124a.m
Meth Date : 24-Nov-2014 19:15 mskidmor Quant Type: ISTD
Cal Date : 24-NOV-2014 14:22 Cal File: 14112414.d
Als bottle: 1 Calibration Sample, Level: 9
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: NapthICAL.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 (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
* 75 Bromochloromethane						CAS #: 74-97-5	
4.753	4.753 (1.000)	130	124655	400.000		70.00- 130.00	100.00
4.753	4.753 (1.000)	128	97517			0.00- 30.00	78.23
4.753	4.753 (1.000)	49	145481			0.00- 30.00	116.71
* 94 1,4-Difluorobenzene						CAS #: 540-36-3	
5.858	5.858 (1.000)	114	540775	400.000		70.00- 130.00	100.00
5.858	5.858 (1.000)	88	78980			0.00- 30.00	14.60
* 125 Chlorobenzene-d5						CAS #: 3114-55-4	
9.832	9.832 (1.000)	117	499551	400.000		70.00- 130.00	100.00
9.832	9.832 (1.000)	82	247691			0.00- 30.00	49.58
171 Naphthalene						CAS #: 91-20-3	
12.980	12.980 (1.320)	128	910938	500.000	787.39	70.00- 130.00	100.00
12.980	12.980 (1.320)	127	117137			0.00- 30.00	12.86

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd14.i
Lab File ID: 14112414.d
Lab Smp Id: ICAL Level 9
Analysis Type: VOA
Quant Type: ISTD
Operator: md
Method File: /chem/msd14.i/24nov14.b/14451124a.m
Misc Info: 500ppbv (500ppbv)

Calibration Date: 24-NOV-2014
Calibration Time: 11:17
Client Smp ID: ICAL Level 9
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
75 Bromochloromethan	117767	70660	164874	124655	5.85
94 1,4-Difluorobenze	544303	326582	762024	540775	-0.65
125 Chlorobenzene-d5	496681	298009	695353	499551	0.58

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
75 Bromochloromethan	4.75	4.42	5.08	4.75	0.00
94 1,4-Difluorobenze	5.86	5.53	6.19	5.86	0.00
125 Chlorobenzene-d5	9.83	9.50	10.16	9.83	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/msd14.i/24nov14.b/14112414.d

Date : 24-NOV-2014 14:22

Client ID: ICAL Level 9

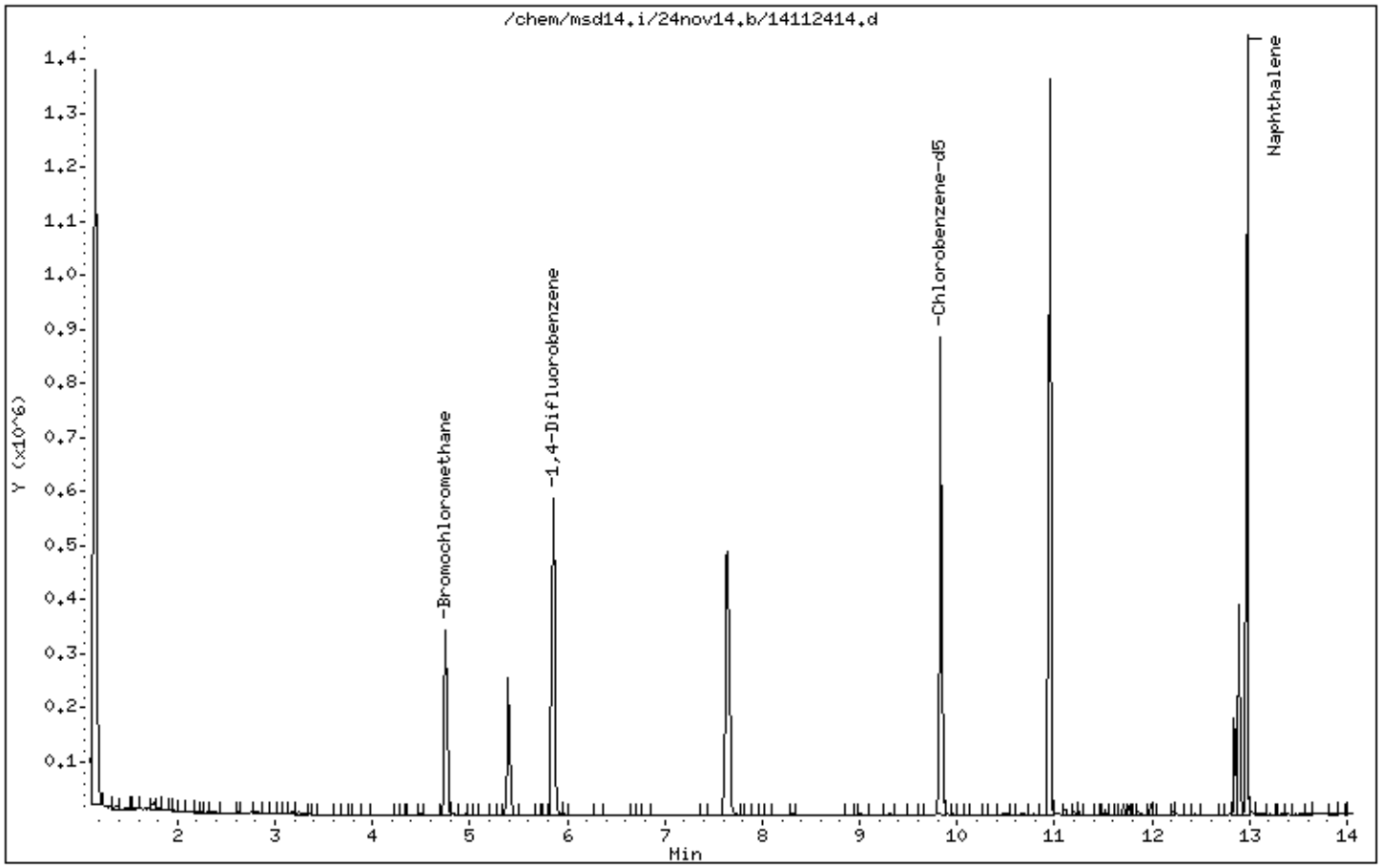
Instrument: msd14.i

Sample Info: 50ml #2677-829

Operator: md

Column phase: RTx-624

Column diameter: 0.53



Eurofins Air Toxics Inc.

EPA METHOD TO14A/TO15

Data file : /chem/msd14.i/24nov14.b/14112412.d
Lab Smp Id: ICAL Level 9 Client Smp ID: ICAL Level 9
Inj Date : 24-NOV-2014 13:41
Operator : md Inst ID: msd14.i
Smp Info : 50ml #2687-62
Misc Info : 5000ppbv (5000ppbv)
Comment : (5&20) - GC/MS
Method : /chem/msd14.i/24nov14.b/14451124a.m
Meth Date : 24-Nov-2014 19:15 mskidmor Quant Type: ISTD
Cal Date : 24-NOV-2014 14:22 Cal File: 14112414.d
Als bottle: 1 Calibration Sample, Level: 9
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT09noOxyNaph.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 (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
* 75 Bromochloromethane						CAS #: 74-97-5	
4.753	4.753 (1.000)	130	142360	400.000		70.00- 130.00	100.00
4.753	4.753 (1.000)	128	106074			0.00- 30.00	74.51
4.753	4.753 (1.000)	49	173100			0.00- 30.00	121.59
* 94 1,4-Difluorobenzene						CAS #: 540-36-3	
5.858	5.858 (1.000)	114	586724	400.000		70.00- 130.00	100.00
5.858	5.858 (1.000)	88	86991			0.00- 30.00	14.83
* 125 Chlorobenzene-d5						CAS #: 3114-55-4	
9.832	9.832 (1.000)	117	534394	400.000		70.00- 130.00	100.00
9.832	9.832 (1.000)	82	275395			0.00- 30.00	51.53
$ 86 1,2-Dichloroethane-d4						CAS #: 17060-07-0	
5.396	5.396 (1.135)	65	202874	400.000	383.11	70.00- 130.00	100.00
5.396	5.396 (1.135)	67	121685			0.00- 30.00	59.98
$ 110 Toluene-d8						CAS #: 2037-26-5	
7.635	7.635 (1.303)	98	598098	400.000	409.27	70.00- 130.00	100.00
7.635	7.635 (1.303)	70	67999			0.00- 30.00	11.37

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
$ 110 Toluene-d8 (continued)							
7.635	7.635 (1.303)	100	403279			0.00- 30.00	67.43
$ 139 Bromofluorobenzene					CAS #: 460-00-4		
10.951	10.951 (1.114)	174	350769	400.000	426.21	70.00- 130.00	100.00
10.951	10.951 (1.114)	95	407317			0.00- 30.00	116.12
10.951	10.951 (1.114)	176	325431			0.00- 30.00	92.78
5 Propylene					CAS #: 115-07-1		
1.227	1.227 (0.258)	41	1352722	5000.00	4841.8	70.00- 130.00	100.00
1.227	1.227 (0.258)	42	892741			0.00- 30.00	66.00
1.227	1.227 (0.258)	39	1005585			0.00- 30.00	74.34
7 Dichlorodifluoromethane/Fr12					CAS #: 75-71-8		
1.269	1.269 (0.267)	85	5926177	5000.00	4650.6	70.00- 130.00	100.00
1.269	1.269 (0.267)	87	1933465			0.00- 30.00	32.63
9 Freon 114					CAS #: 76-14-2		
1.367	1.367 (0.288)	135	4433742	5000.00	4751.9	70.00- 130.00	100.00
1.367	1.367 (0.288)	137	1422880			0.00- 30.00	32.09
12 Chloromethane					CAS #: 74-87-3		
1.423	1.423 (0.299)	50	1685475	5000.00	4389.5	70.00- 130.00	100.00
1.423	1.423 (0.299)	52	543359			0.00- 30.00	32.24
13 Butane					CAS #: 106-97-8		
1.479	1.479 (0.311)	58	488041	5000.00	4264.5	70.00- 130.00	100.00
1.479	1.479 (0.311)	43	2896865			0.00- 30.00	593.57
15 Vinyl Chloride					CAS #: 75-01-4		
1.507	1.507 (0.317)	62	2197782	5000.00	4197.4	70.00- 130.00	100.00
1.521	1.521 (0.320)	64	702868			0.00- 30.00	31.98
16 1,3-Butadiene					CAS #: 106-99-0		
1.535	1.535 (0.323)	54	1606808	5000.00	4206.2	70.00- 130.00	100.00
1.535	1.535 (0.323)	39	1456578			0.00- 30.00	90.65
18 Bromomethane					CAS #: 74-83-9		
1.814	1.814 (0.382)	94	2090565	5000.00	5838.3	70.00- 130.00	100.00(A)
1.814	1.814 (0.382)	96	1970024			0.00- 30.00	94.23
19 Chloroethane					CAS #: 75-00-3		
1.912	1.912 (0.402)	64	1216999	5000.00	4974.4	70.00- 130.00	100.00
1.912	1.912 (0.402)	66	378472			0.00- 30.00	31.10
1.912	1.912 (0.402)	49	325501			0.00- 30.00	26.75

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
20 Isopentane						CAS #: 78-78-4	
1.926	1.926 (0.405)	43	2287722	5000.00	4493.7	70.00- 130.00	100.00
1.926	1.926 (0.405)	57	1791556			0.00- 30.00	78.31
1.926	1.926 (0.405)	72	239819			0.00- 30.00	10.48
23 Trichlorofluoromethane/Fr11						CAS #: 75-69-4	
2.108	2.108 (0.444)	101	6847967	5000.00	4309.8	70.00- 130.00	100.00
2.108	2.108 (0.444)	103	4458552			0.00- 30.00	65.11
30 Ethanol						CAS #: 64-17-5	
2.374	2.374 (0.500)	45	717442	5000.00	4536.5	70.00- 130.00	100.00
2.374	2.374 (0.500)	43	157002			0.00- 30.00	21.88
2.374	2.374 (0.500)	46	296900			0.00- 30.00	41.38
34 Freon 113						CAS #: 76-13-1	
2.598	2.598 (0.547)	151	4219800	5000.00	4454.5	70.00- 130.00	100.00
2.598	2.598 (0.547)	153	2662208			0.00- 30.00	63.09
2.598	2.598 (0.547)	101	5399212			0.00- 30.00	127.95
36 1,1-Dichloroethene						CAS #: 75-35-4	
2.626	2.626 (0.553)	61	3756066	5000.00	4261.6	70.00- 130.00	100.00
2.626	2.626 (0.553)	96	2382021			0.00- 30.00	63.42
2.626	2.626 (0.553)	98	1539491			0.00- 30.00	40.99
38 Acetone						CAS #: 67-64-1	
2.752	2.752 (0.579)	58	1065753	5000.00	4419.6	70.00- 130.00	100.00
2.752	2.752 (0.579)	43	3321861			0.00- 30.00	311.69
39 Carbon Disulfide						CAS #: 75-15-0	
2.822	2.822 (0.594)	76	6592152	5000.00	4356.7	70.00- 130.00	100.00
41 2-Propanol						CAS #: 67-63-0	
2.892	2.892 (0.608)	45	3560803	5000.00	5164.7	70.00- 130.00	100.00(A)
2.892	2.892 (0.608)	43	780817			0.00- 30.00	21.93
2.892	2.892 (0.608)	59	147401			0.00- 30.00	4.14
42 3-Chloropropene						CAS #: 107-05-1	
3.018	3.018 (0.635)	76	1008481	5000.00	6862.9	70.00- 130.00	100.00(A)
3.018	3.018 (0.635)	41	2245918			0.00- 30.00	222.70
48 Methylene Chloride						CAS #: 75-09-2	
3.172	3.172 (0.667)	49	2566511	5000.00	3990.0	70.00- 130.00	100.00
3.186	3.186 (0.670)	84	2090687			0.00- 30.00	81.46
3.172	3.172 (0.667)	51	779220			0.00- 30.00	30.36
50 MTBE						CAS #: 1634-04-4	
3.368	3.368 (0.709)	73	6154271	5000.00	4909.0	70.00- 130.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
50 MTBE (continued)							
3.368	3.368 (0.709)	57	1343976			0.00- 30.00	21.84
3.368	3.368 (0.709)	41	1318158			0.00- 30.00	21.42
52 trans-1,2-Dichloroethene					CAS #: 156-60-5		
3.396	3.396 (0.714)	96	2400482	5000.00	4331.3	70.00- 130.00	100.00
3.396	3.396 (0.714)	61	3167814			0.00- 30.00	131.97
3.396	3.396 (0.714)	98	1530212			0.00- 30.00	63.75
55 Hexane					CAS #: 110-54-3		
3.591	3.591 (0.756)	57	3772192	5000.00	4383.3	70.00- 130.00	100.00
3.591	3.591 (0.756)	43	2125263			0.00- 30.00	56.34
3.591	3.591 (0.756)	86	784466			0.00- 30.00	20.80
59 1,1-Dichloroethane					CAS #: 75-34-3		
3.885	3.885 (0.817)	63	4338922	5000.00	4432.7	70.00- 130.00	100.00
3.885	3.885 (0.817)	65	1383159			0.00- 30.00	31.88
60 Vinyl Acetate					CAS #: 108-05-4		
3.927	3.927 (0.826)	86	806197	5000.00	5202.4	70.00- 130.00	100.00(A)
3.927	3.927 (0.826)	43	6699396			0.00- 30.00	830.99
3.927	3.927 (0.826)	42	708288			0.00- 30.00	87.86
68 cis-1,2-Dichloroethene					CAS #: 156-59-2		
4.501	4.501 (0.947)	61	3773147	5000.00	4470.6	70.00- 130.00	100.00
4.501	4.501 (0.947)	96	3086045			0.00- 30.00	81.79
4.501	4.501 (0.947)	98	1965424			0.00- 30.00	52.09
70 2-Butanone					CAS #: 78-93-3		
4.529	4.529 (0.953)	72	1277062	5000.00	5061.4	70.00- 130.00	100.00(A)
4.529	4.529 (0.953)	43	4605181			0.00- 30.00	360.61
4.529	4.529 (0.953)	57	399540			0.00- 30.00	31.29
74 Tetrahydrofuran					CAS #: 109-99-9		
4.739	4.739 (0.997)	42	2531573	5000.00	4676.1	70.00- 130.00	100.00
4.739	4.739 (0.997)	71	1158538			0.00- 30.00	45.76
4.739	4.739 (0.997)	72	1226023			0.00- 30.00	48.43
76 Chloroform					CAS #: 67-66-3		
4.837	4.837 (1.018)	83	5609964	5000.00	4350.6	70.00- 130.00	100.00
4.837	4.837 (1.018)	85	3645351			0.00- 30.00	64.98
77 Cyclohexane					CAS #: 110-82-7		
4.935	4.935 (1.038)	84	3707171	5000.00	4505.9	70.00- 130.00	100.00
4.935	4.935 (1.038)	56	3862877			0.00- 30.00	104.20
4.935	4.935 (1.038)	41	2116491			0.00- 30.00	57.09

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
78 1,1,1-Trichloroethane					CAS #: 71-55-6		
4.963	4.963 (1.044)	97	6016183	5000.00	4712.8	70.00- 130.00	100.00
4.963	4.963 (1.044)	99	3899833			0.00- 30.00	64.82
79 Carbon Tetrachloride					CAS #: 56-23-5		
5.103	5.103 (1.074)	119	6179324	5000.00	5212.4	70.00- 130.00	100.00(A)
5.103	5.103 (1.074)	117	6479642			0.00- 30.00	104.86
82 2,2,4-Trimethylpentane					CAS #: 540-84-1		
5.340	5.340 (1.124)	57	12259689	5000.00	4575.6	70.00- 130.00	100.00
5.340	5.340 (1.124)	56	4101910			0.00- 30.00	33.46
5.340	5.340 (1.124)	41	3382574			0.00- 30.00	27.59
83 Benzene					CAS #: 71-43-2		
5.354	5.354 (0.914)	78	7929837	5000.00	4617.2	70.00- 130.00	100.00
5.354	5.354 (0.914)	77	1900649			0.00- 30.00	23.97
89 1,2-Dichloroethane					CAS #: 107-06-2		
5.480	5.480 (0.936)	62	3621861	5000.00	5062.4	70.00- 130.00	100.00(A)
5.480	5.480 (0.936)	64	1169780			0.00- 30.00	32.30
93 Heptane					CAS #: 142-82-5		
5.578	5.578 (0.952)	71	2816085	5000.00	5128.9	70.00- 130.00	100.00(A)
5.578	5.578 (0.952)	43	4005629			0.00- 30.00	142.24
5.578	5.578 (0.952)	100	1073849			0.00- 30.00	38.13
95 Trichloroethene					CAS #: 79-01-6		
6.096	6.096 (1.041)	95	3713678	5000.00	4916.3	70.00- 130.00	100.00
6.096	6.096 (1.041)	130	3904340			0.00- 30.00	105.13
6.096	6.096 (1.041)	97	2381025			0.00- 30.00	64.12
97 Methyl Cyclohexane					CAS #: 108-87-2		
6.208	6.208 (1.060)	83	4911915	5000.00	5051.6	70.00- 130.00	100.00(A)
6.208	6.208 (1.060)	98	2561400			0.00- 30.00	52.15
6.208	6.208 (1.060)	55	3573634			0.00- 30.00	72.75
99 1,2-Dichloropropane					CAS #: 78-87-5		
6.404	6.404 (1.093)	63	2829047	5000.00	4929.2	70.00- 130.00	100.00
6.404	6.404 (1.093)	62	2019385			0.00- 30.00	71.38
6.404	6.404 (1.093)	41	1637067			0.00- 30.00	57.87
102 1,4-Dioxane					CAS #: 123-91-1		
6.544	6.544 (1.117)	88	1958210	5000.00	5526.5	70.00- 130.00	100.00(A)
6.544	6.544 (1.117)	58	1201969			0.00- 30.00	61.38
6.544	6.544 (1.117)	57	418107			0.00- 30.00	21.35

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
104 Bromodichloromethane						CAS #: 75-27-4	
6.740	6.740 (1.150)	83	6491125	5000.00	5077.1	70.00- 130.00	100.00(A)
6.740	6.740 (1.150)	85	4170952			0.00- 30.00	64.26
108 cis-1,3-Dichloropropene						CAS #: 10061-01-5	
7.341	7.341 (1.253)	75	4602620	5000.00	5858.5	70.00- 130.00	100.00(A)
7.341	7.341 (1.253)	77	1459597			0.00- 30.00	31.71
7.341	7.341 (1.253)	39	2326577			0.00- 30.00	50.55
109 4-Methyl-2-pentanone						CAS #: 108-10-1	
7.579	7.579 (1.294)	85	1143960	5000.00	5769.3	70.00- 130.00	100.00(A)
7.579	7.579 (1.294)	43	6138163			0.00- 30.00	536.57
7.579	7.579 (1.294)	58	2481126			0.00- 30.00	216.89
111 Toluene						CAS #: 108-88-3	
7.747	7.747 (1.322)	91	10378610	5000.00	5011.4	70.00- 130.00	100.00(A)
7.747	7.747 (1.322)	92	6068717			0.00- 30.00	58.47
114 trans-1,3-Dichloropropene						CAS #: 10061-02-6	
8.307	8.307 (0.845)	75	4866947	5000.00	6721.1	70.00- 130.00	100.00(A)
8.307	8.307 (0.845)	77	1528257			0.00- 30.00	31.40
8.307	8.307 (0.845)	39	2297168			0.00- 30.00	47.20
115 1,1,2-Trichloroethane						CAS #: 79-00-5	
8.628	8.628 (0.878)	97	3590948	5000.00	4813.4	70.00- 130.00	100.00
8.628	8.628 (0.878)	99	2259103			0.00- 30.00	62.91
8.628	8.628 (0.878)	83	3091722			0.00- 30.00	86.10
116 Tetrachloroethene						CAS #: 127-18-4	
8.642	8.642 (0.879)	166	5013014	5000.00	4940.3	70.00- 130.00	100.00
8.642	8.642 (0.879)	129	3715917			0.00- 30.00	74.13
8.642	8.642 (0.879)	131	3591327			0.00- 30.00	71.64
120 2-Hexanone						CAS #: 591-78-6	
9.020	9.020 (0.917)	58	3415845	5000.00	6324.4	70.00- 130.00	100.00(A)
9.020	9.020 (0.917)	43	6082788			0.00- 30.00	178.08
9.020	9.020 (0.917)	100	836313			0.00- 30.00	24.48
121 Dibromochloromethane						CAS #: 124-48-1	
9.174	9.174 (0.933)	129	7023151	5000.00	5274.2	70.00- 130.00	100.00(A)
9.160	9.160 (0.932)	127	5405682			0.00- 30.00	76.97
124 1,2-Dibromoethane						CAS #: 106-93-4	
9.314	9.314 (0.947)	107	5659339	5000.00	5128.1	70.00- 130.00	100.00(A)
9.314	9.314 (0.947)	109	5335977			0.00- 30.00	94.29

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
127 Chlorobenzene						CAS #: 108-90-7	
9.860	9.860 (1.003)	112	8416643	5000.00	4821.5	70.00- 130.00	100.00
9.860	9.860 (1.003)	114	2670213			0.00- 30.00	31.73
9.860	9.860 (1.003)	77	4608025			0.00- 30.00	54.75
128 Ethyl Benzene						CAS #: 100-41-4	
9.958	9.958 (1.013)	106	4361779	5000.00	5305.6	70.00- 130.00	100.00(A)
9.958	9.958 (1.013)	91	13483014			0.00- 30.00	309.12
131 m,p-Xylene						CAS #: 108-38-3	
10.084	10.084 (1.026)	106	5368521	5000.00	5461.6	70.00- 130.00	100.00(A)
10.084	10.084 (1.026)	91	10941221			0.00- 30.00	203.80
132 o-Xylene						CAS #: 95-47-6	
10.461	10.461 (1.064)	106	5279832	5000.00	5401.7	70.00- 130.00	100.00(A)
10.461	10.461 (1.064)	91	11384072			0.00- 30.00	215.61
134 Styrene						CAS #: 100-42-5	
10.503	10.503 (1.068)	104	8732348	5000.00	5828.8	70.00- 130.00	100.00(A)
10.503	10.503 (1.068)	78	4377879			0.00- 30.00	50.13
136 Bromoform						CAS #: 75-25-2	
10.671	10.671 (1.085)	173	7239670	5000.00	5525.2	70.00- 130.00	100.00(A)
10.671	10.671 (1.085)	171	3733926			0.00- 30.00	51.58
138 Cumene						CAS #: 98-82-8	
10.783	10.783 (1.097)	105	12657395	5000.00	4366.1	70.00- 130.00	100.00
10.783	10.783 (1.097)	120	4301540			0.00- 30.00	33.98
10.783	10.783 (1.097)	51	1578635			0.00- 30.00	12.47
142 1,1,2,2-Tetrachloroethane						CAS #: 79-34-5	
11.105	11.105 (1.129)	83	8264078	5000.00	5097.2	70.00- 130.00	100.00(A)
11.105	11.105 (1.129)	85	5377614			0.00- 30.00	65.07
143 Propylbenzene						CAS #: 103-65-1	
11.119	11.119 (1.131)	91	14810434	5000.00	4271.0	70.00- 130.00	100.00
11.119	11.119 (1.131)	120	4531343			0.00- 30.00	30.60
11.119	11.119 (1.131)	105	724216			0.00- 30.00	4.89
147 4-Ethyltoluene						CAS #: 622-96-8	
11.203	11.203 (1.139)	105	11311797	5000.00	4058.7	70.00- 130.00	100.00
11.203	11.203 (1.139)	120	4654426			0.00- 30.00	41.15
149 1,3,5-Trimethylbenzene						CAS #: 108-67-8	
11.259	11.259 (1.145)	105	11253194	5000.00	5284.6	70.00- 130.00	100.00(A)
11.259	11.259 (1.145)	120	5819957			0.00- 30.00	51.72

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
152 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
11.511	11.511 (1.171)	105	10068672	5000.00	4797.1	70.00- 130.00	100.00
11.511	11.511 (1.171)	120	5632754			0.00- 30.00	55.94
156 1,3-Dichlorobenzene					CAS #: 541-73-1		
11.707	11.707 (1.191)	146	8936315	5000.00	5406.5	70.00- 130.00	100.00(A)
11.707	11.707 (1.191)	148	5688574			0.00- 30.00	63.66
11.707	11.707 (1.191)	111	3569445			0.00- 30.00	39.94
159 1,4-Dichlorobenzene					CAS #: 106-46-7		
11.777	11.777 (1.198)	146	8649670	5000.00	5466.3	70.00- 130.00	100.00(A)
11.777	11.777 (1.198)	148	5536230			0.00- 30.00	64.01
11.763	11.763 (1.196)	111	3288730			0.00- 30.00	38.02
161 alpha-Chlorotoluene					CAS #: 100-44-7		
11.861	11.861 (1.206)	91	7823469	5000.00	8586.0	70.00- 130.00	100.00(A)
11.861	11.861 (1.206)	126	1602721			0.00- 30.00	20.49
163 1,2-Dichlorobenzene					CAS #: 95-50-1		
12.001	12.001 (1.221)	146	7903157	5000.00	5380.3	70.00- 130.00	100.00(A)
12.001	12.001 (1.221)	148	5097460			0.00- 30.00	64.50
12.001	12.001 (1.221)	111	3245695			0.00- 30.00	41.07
169 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
12.854	12.854 (1.307)	180	3694951	5000.00	6046.3	70.00- 130.00	100.00(A)
12.854	12.854 (1.307)	182	3495008			0.00- 30.00	94.59
170 Hexachlorobutadiene					CAS #: 87-68-3		
12.896	12.896 (1.312)	225	2761553	5000.00	5701.5	70.00- 130.00	100.00(A)
12.896	12.896 (1.312)	223	1739837			0.00- 30.00	63.00

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: msd14.i
Lab File ID: 14112412.d
Lab Smp Id: ICAL Level 9
Analysis Type: VOA
Quant Type: ISTD
Operator: md
Method File: /chem/msd14.i/24nov14.b/14451124a.m
Misc Info: 5000ppbv (5000ppbv)

Calibration Date: 24-NOV-2014
Calibration Time: 11:17
Client Smp ID: ICAL Level 9
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
75 Bromochloromethan	117767	70660	164874	142360	20.88
94 1,4-Difluorobenze	544303	326582	762024	586724	7.79
125 Chlorobenzene-d5	496681	298009	695353	534394	7.59

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
75 Bromochloromethan	4.75	4.42	5.08	4.75	0.00
94 1,4-Difluorobenze	5.86	5.53	6.19	5.86	0.00
125 Chlorobenzene-d5	9.83	9.50	10.16	9.83	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/msd14.i/24nov14.b/14112412.d

Date : 24-NOV-2014 13:41

Client ID: ICAL Level 9

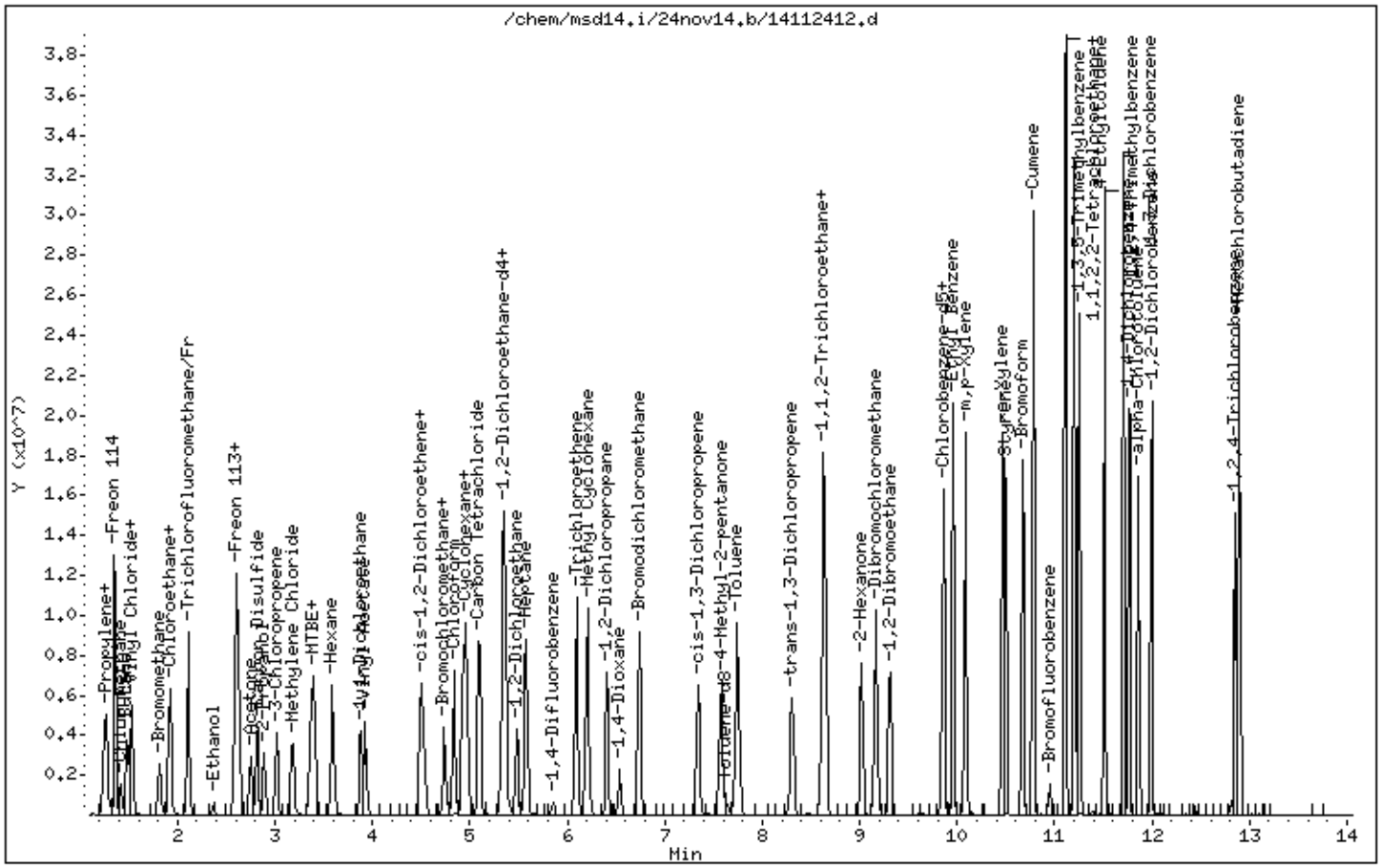
Instrument: msd14.i

Sample Info: 50ml #2687-62

Operator: md

Column phase: RTx-624

Column diameter: 0.53



eurofins | Air Toxics

Client Sample ID: CCV

Lab ID#: 1412216A-10A

EPA METHOD TO-15 GC/MS

File Name:	**14121802**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 12/18/14 07:52 PM**	

Compound	**%Recovery**
Acetone	97
2-Propanol	83
Benzene	92
Toluene	95
Ethyl Benzene	102
m,p-Xylene	103
o-Xylene	100
4-Methyl-2-pentanone	91

Container Type: NA - Not Applicable

Surrogates	**%Recovery**	**Method Limits**
1,2-Dichloroethane-d4	92	70-130
Toluene-d8	100	70-130
4-Bromofluorobenzene	98	70-130

Eurofins Air Toxics Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: msd14.i Injection Date: 18-DEC-2014 19:52
Lab File ID: 14121802.d Init. Cal. Date(s): 24-NOV-2014 24-NOV-2014
Analysis Type: AIR Init. Cal. Times: 09:14 18:25
Lab Sample ID: CCV Quant Type: ISTD
Method: /chem/msd14.i/18dec14.b/14451124c.m

COMPOUND	RRF / AMOUNT	RF200	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
$ 86 1,2-Dichloroethane-d4	1.48791	1.37719	0.010	7.44170	30.00000	Averaged	
$ 110 Toluene-d8	0.99630	0.99257	0.010	0.37469	30.00000	Averaged	
$ 139 Bromofluorobenzene	0.61602	0.60461	0.010	1.85150	30.00000	Averaged	
5 Propylene	0.78500	0.74413	0.010	5.20690	30.00000	Averaged	
7 Dichlorodifluoromethane/Fr1	3.58047	3.68540	0.010	-2.93050	30.00000	Averaged	
9 Freon 114	2.62165	2.40027	0.010	8.44426	30.00000	Averaged	
12 Chloromethane	1.07888	1.15320	0.010	-6.88860	30.00000	Averaged	
13 Butane	0.32156	0.31097	0.010	3.29358	40.00000	Averaged	
15 Vinyl Chloride	1.47121	1.41940	0.010	3.52135	30.00000	Averaged	
16 1,3-Butadiene	1.07335	1.08981	0.010	-1.53367	30.00000	Averaged	
18 Bromomethane	1.00612	0.83855	0.010	16.65530	30.00000	Averaged	
19 Chloroethane	0.68741	0.52878	0.010	23.07646	30.00000	Averaged	
20 Isopentane	1.43045	1.55477	0.010	-8.69124	40.00000	Averaged	
23 Trichlorofluoromethane/Fr11	4.46456	4.29866	0.010	3.71608	30.00000	Averaged	
30 Ethanol	0.44437	0.43449	0.010	2.22315	30.00000	Averaged	
34 Freon 113	2.66172	2.39912	0.010	9.86601	30.00000	Averaged	
36 1,1-Dichloroethene	2.47647	2.28130	0.010	7.88110	30.00000	Averaged	
38 Acetone	0.67756	0.65577	0.010	3.21588	30.00000	Averaged	
39 Carbon Disulfide	4.25153	3.97480	0.010	6.50902	30.00000	Averaged	
41 2-Propanol	1.93720	1.60951	0.010	16.91539	30.00000	Averaged	
42 3-Chloropropene	0.41289	0.39567	0.010	4.16928	30.00000	Averaged	
48 Methylene Chloride	1.80737	1.56116	0.010	13.62259	30.00000	Averaged	
49 tert-Butyl-Alcohol	1.59796	0.80078	0.010	49.88733	40.00000	Averaged	<-
50 MTBE	3.52254	2.57089	0.010	27.01583	30.00000	Averaged	
52 trans-1,2-Dichloroethene	1.55724	1.52198	0.010	2.26433	30.00000	Averaged	
55 Hexane	2.41802	2.15098	0.010	11.04390	30.00000	Averaged	
58 Isopropyl ether	4.43870	3.81642	0.010	14.01941	40.00000	Averaged	
59 1,1-Dichloroethane	2.75031	2.48012	0.010	9.82408	30.00000	Averaged	
60 Vinyl Acetate	0.43542	0.38764	0.010	10.97501	30.00000	Averaged	
64 Ethyl-tert-butyl Ether	3.97595	3.19834	0.010	19.55776	40.00000	Averaged	
68 cis-1,2-Dichloroethene	2.37145	2.16377	0.010	8.75732	30.00000	Averaged	
70 2-Butanone	0.70894	0.67516	0.010	4.76445	30.00000	Averaged	
74 Tetrahydrofuran	1.52116	1.28791	0.010	15.33352	30.00000	Averaged	
76 Chloroform	3.62313	3.44533	0.010	4.90736	30.00000	Averaged	
77 Cyclohexane	2.31169	2.23784	0.010	3.19454	30.00000	Averaged	
78 1,1,1-Trichloroethane	3.58685	3.45143	0.010	3.77544	30.00000	Averaged	

Eurofins Air Toxics Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: msd14.i Injection Date: 18-DEC-2014 19:52
Lab File ID: 14121802.d Init. Cal. Date(s): 24-NOV-2014 24-NOV-2014
Analysis Type: AIR Init. Cal. Times: 09:14 18:25
Lab Sample ID: CCV Quant Type: ISTD
Method: /chem/msd14.i/18dec14.b/14451124c.m

COMPOUND	RRF / AMOUNT	RF200	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
79 Carbon Tetrachloride	3.33103	3.32661	0.010	0.13257	30.00000	Averaged
82 2,2,4-Trimethylpentane	7.52838	7.09867	0.010	5.70788	30.00000	Averaged
83 Benzene	1.17086	1.08136	0.010	7.64427	30.00000	Averaged
88 tert-amyl-Methyl Ether	3.65242	3.06187	0.010	16.16873	40.00000	Averaged
89 1,2-Dichloroethane	0.48776	0.46678	0.010	4.30173	30.00000	Averaged
93 Heptane	0.37433	0.35449	0.010	5.29987	30.00000	Averaged
95 Trichloroethene	0.51498	0.50448	0.010	2.03966	30.00000	Averaged
97 Methyl Cyclohexane	0.66290	0.63826	0.010	3.71746	40.00000	Averaged
99 1,2-Dichloropropane	0.39128	0.35659	0.010	8.86525	30.00000	Averaged
102 1,4-Dioxane	0.24157	0.23290	0.010	3.58808	30.00000	Averaged
104 Bromodichloromethane	0.87163	0.83344	0.010	4.38089	30.00000	Averaged
108 cis-1,3-Dichloropropene	0.53561	0.46566	0.010	13.05948	30.00000	Averaged
109 4-Methyl-2-pentanone	0.13518	0.12265	0.010	9.27036	30.00000	Averaged
111 Toluene	1.41192	1.33707	0.010	5.30124	30.00000	Averaged
114 trans-1,3-Dichloropropene	0.54202	0.45990	0.010	15.14952	30.00000	Averaged
115 1,1,2-Trichloroethane	0.55842	0.51847	0.010	7.15333	30.00000	Averaged
116 Tetrachloroethene	0.75953	0.71408	0.010	5.98371	30.00000	Averaged
120 2-Hexanone	0.40428	0.37417	0.010	7.44726	30.00000	Averaged
121 Dibromochloromethane	0.99672	0.96303	0.010	3.37984	30.00000	Averaged
124 1,2-Dibromoethane	0.82605	0.79362	0.010	3.92600	30.00000	Averaged
127 Chlorobenzene	1.30664	1.25403	0.010	4.02578	30.00000	Averaged
128 Ethyl Benzene	0.61536	0.62854	0.010	-2.14159	30.00000	Averaged
131 m,p-Xylene	0.73575	0.75768	0.010	-2.98075	30.00000	Averaged
132 o-Xylene	0.73162	0.73321	0.010	-0.21689	30.00000	Averaged
134 Styrene	1.12137	1.15658	0.010	-3.13989	30.00000	Averaged
136 Bromoform	0.98078	0.87335	0.010	10.95383	30.00000	Averaged
138 Cumene	2.16994	2.27205	0.010	-4.70567	30.00000	Averaged
142 1,1,2,2-Tetrachloroethane	1.21355	1.16993	0.010	3.59461	30.00000	Averaged
143 Propylbenzene	2.59557	2.73786	0.010	-5.48202	30.00000	Averaged
147 4-Ethyltoluene	2.08612	2.30986	0.010	-10.72547	30.00000	Averaged
149 1,3,5-Trimethylbenzene	1.59390	1.62158	0.010	-1.73650	30.00000	Averaged
152 1,2,4-Trimethylbenzene	1.57106	1.72608	0.010	-9.86741	30.00000	Averaged
156 1,3-Dichlorobenzene	1.23720	1.29870	0.010	-4.97090	30.00000	Averaged
159 1,4-Dichlorobenzene	1.18442	1.27212	0.010	-7.40407	30.00000	Averaged
161 alpha-Chlorotoluene	0.68203	0.68570	0.010	-0.53790	30.00000	Averaged

Eurofins Air Toxics Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: msd14.i Injection Date: 18-DEC-2014 19:52
Lab File ID: 14121802.d Init. Cal. Date(s): 24-NOV-2014 24-NOV-2014
Analysis Type: AIR Init. Cal. Times: 09:14 18:25
Lab Sample ID: CCV Quant Type: ISTD
Method: /chem/msd14.i/18dec14.b/14451124c.m

COMPOUND	RRF / AMOUNT	RF200	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
163 1,2-Dichlorobenzene	1.09950	1.16131	0.010	-5.62182	30.00000	Averaged
169 1,2,4-Trichlorobenzene	0.45742	0.35960	0.010	21.38540	30.00000	Averaged
170 Hexachlorobutadiene	0.36255	0.33620	0.010	7.26584	30.00000	Averaged
171 Naphthalene	0.92636	0.79614	0.010	14.05686	40.00000	Averaged

Eurofins Air Toxics Inc.

EPA METHOD TO14A/TO15

Data file : /var/chem/msd14.i/18dec14.b/14121802.d
Lab Smp Id: CCV Client Smp ID: CCV
Inj Date : 18-DEC-2014 19:52
Operator : sn Inst ID: msd14.i
Smp Info : 50ml #2687-167
Misc Info : 200ppbv (200ppbv)
Comment : (5&20) - GC/MS
Method : /chem/msd14.i/18dec14.b/14451124c.m
Meth Date : 19-Dec-2014 22:03 ghehir Quant Type: ISTD
Cal Date : 24-NOV-2014 18:25 Cal File: 14112421k.d
Als bottle: 1 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT09.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 (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
* 75 Bromochloromethane						CAS #: 74-97-5	
4.753	4.753 (1.000)	130	124906	400.000		80.00- 120.00	100.00
4.753	4.753 (1.000)	128	98913			0.00- 30.00	79.19
4.753	4.753 (1.000)	49	147205			0.00- 30.00	117.85
* 94 1,4-Difluorobenzene						CAS #: 540-36-3	
5.858	5.858 (1.000)	114	570831	400.000		80.00- 120.00	100.00
5.858	5.858 (1.000)	88	85462			0.00- 30.00	14.97
* 125 Chlorobenzene-d5						CAS #: 3114-55-4	
9.832	9.832 (1.000)	117	512999	400.000		80.00- 120.00	100.00
9.832	9.832 (1.000)	82	255521			0.00- 30.00	49.81
$ 86 1,2-Dichloroethane-d4						CAS #: 17060-07-0	
5.396	5.396 (1.135)	65	172019	400.000	370.23	80.00- 120.00	100.00
5.396	5.396 (1.135)	67	92821			0.00- 30.00	53.96
$ 110 Toluene-d8						CAS #: 2037-26-5	
7.635	7.635 (1.303)	98	566590	400.000	398.50	80.00- 120.00	100.00
7.635	7.635 (1.303)	70	58730			0.00- 30.00	10.37

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
$ 110 Toluene-d8 (continued)							
7.635	7.635 (1.303)	100	384957			0.00- 30.00	67.94
$ 139 Bromofluorobenzene					CAS #: 460-00-4		
10.951	10.951 (1.114)	174	310165	400.000	392.59	80.00- 120.00	100.00
10.951	10.951 (1.114)	95	378306			0.00- 30.00	121.97
10.951	10.951 (1.114)	176	297305			0.00- 30.00	95.85
5 Propylene					CAS #: 115-07-1		
1.241	1.241 (0.261)	41	46473	200.000	189.59	80.00- 120.00	100.00
1.241	1.241 (0.261)	42	32849			0.00- 30.00	70.68
1.227	1.227 (0.258)	39	37074			0.00- 30.00	79.78
7 Dichlorodifluoromethane/Fr12					CAS #: 75-71-8		
1.269	1.269 (0.267)	85	230164	200.000	205.86	80.00- 120.00	100.00
1.269	1.269 (0.267)	87	71063			0.00- 30.00	30.87
9 Freon 114					CAS #: 76-14-2		
1.353	1.353 (0.285)	135	149904	200.000	183.11	80.00- 120.00	100.00
1.353	1.353 (0.285)	137	46460			0.00- 30.00	30.99
12 Chloromethane					CAS #: 74-87-3		
1.423	1.423 (0.299)	50	72021	200.000	213.78	80.00- 120.00	100.00
1.423	1.423 (0.299)	52	21465			0.00- 30.00	29.80
13 Butane					CAS #: 106-97-8		
1.479	1.479 (0.311)	58	19421	200.000	193.41	80.00- 120.00	100.00
1.479	1.479 (0.311)	43	116541			0.00- 30.00	600.08
15 Vinyl Chloride					CAS #: 75-01-4		
1.507	1.507 (0.317)	62	88646	200.000	192.96	80.00- 120.00	100.00
1.507	1.507 (0.317)	64	28680			0.00- 30.00	32.35
16 1,3-Butadiene					CAS #: 106-99-0		
1.521	1.521 (0.320)	54	68062	200.000	203.07	80.00- 120.00	100.00
1.521	1.521 (0.320)	39	59023			0.00- 30.00	86.72
18 Bromomethane					CAS #: 74-83-9		
1.815	1.815 (0.382)	94	52370	200.000	166.69	80.00- 120.00	100.00
1.815	1.815 (0.382)	96	49270			0.00- 30.00	94.08
19 Chloroethane					CAS #: 75-00-3		
1.898	1.898 (0.399)	64	33024	200.000	153.85	80.00- 120.00	100.00
1.898	1.898 (0.399)	66	10874			0.00- 30.00	32.93
1.898	1.898 (0.399)	49	8142			0.00- 30.00	24.65

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
20 Isopentane					CAS #: 78-78-4		
1.912	1.912 (0.402)	43	97100	200.000	217.38	80.00- 120.00	100.00
1.912	1.912 (0.402)	57	77810			0.00- 30.00	80.13
1.912	1.912 (0.402)	72	12802			0.00- 30.00	13.18
23 Trichlorofluoromethane/Fr11					CAS #: 75-69-4		
2.094	2.094 (0.441)	101	268464	200.000	192.57	80.00- 120.00	100.00
2.094	2.094 (0.441)	103	177879			0.00- 30.00	66.26
30 Ethanol					CAS #: 64-17-5		
2.374	2.374 (0.500)	45	27135	200.000	195.55	80.00- 120.00	100.00
2.374	2.374 (0.500)	43	6464			0.00- 30.00	23.82
2.374	2.374 (0.500)	46	10567			0.00- 30.00	38.94
34 Freon 113					CAS #: 76-13-1		
2.598	2.598 (0.547)	151	149832	200.000	180.27	80.00- 120.00	100.00
2.598	2.598 (0.547)	153	94303			0.00- 30.00	62.94
2.584	2.584 (0.544)	101	205757			0.00- 30.00	137.33
36 1,1-Dichloroethene					CAS #: 75-35-4		
2.612	2.612 (0.550)	61	142474	200.000	184.24	80.00- 120.00	100.00
2.626	2.626 (0.553)	96	94263			0.00- 30.00	66.16
2.612	2.612 (0.550)	98	60622			0.00- 30.00	42.55
38 Acetone					CAS #: 67-64-1		
2.752	2.752 (0.579)	58	40955	200.000	193.57	80.00- 120.00	100.00
2.738	2.738 (0.576)	43	116018			0.00- 30.00	283.28
39 Carbon Disulfide					CAS #: 75-15-0		
2.808	2.808 (0.591)	76	248238	200.000	186.98	80.00- 120.00	100.00
41 2-Propanol					CAS #: 67-63-0		
2.892	2.892 (0.608)	45	100519	200.000	166.17	80.00- 120.00	100.00
2.892	2.892 (0.608)	43	25646			0.00- 30.00	25.51
2.892	2.892 (0.608)	59	4459			0.00- 30.00	4.44
42 3-Chloropropene					CAS #: 107-05-1		
3.004	3.004 (0.632)	76	24711	200.000	191.66	80.00- 120.00	100.00
3.004	3.004 (0.632)	41	50634			0.00- 30.00	204.90
48 Methylene Chloride					CAS #: 75-09-2		
3.172	3.172 (0.667)	49	97499	200.000	172.75	80.00- 120.00	100.00
3.172	3.172 (0.667)	84	79379			0.00- 30.00	81.42
3.172	3.172 (0.667)	51	29297			0.00- 30.00	30.05
49 tert-Butyl-Alcohol					CAS #: 75-65-0		
3.284	3.284 (0.691)	59	50011	200.000	100.22	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
49 tert-Butyl-Alcohol (continued)							
3.284	3.284 (0.691)	41	19292			1.89- 61.89	38.58
3.284	3.284 (0.691)	57	6301			0.00- 43.17	12.60
50 MTBE					CAS #: 1634-04-4		
3.368	3.368 (0.709)	73	160560	200.000	145.97	80.00- 120.00	100.00
3.368	3.368 (0.709)	57	35376			0.00- 30.00	22.03
3.368	3.368 (0.709)	41	41993			0.00- 30.00	26.15
52 trans-1,2-Dichloroethene					CAS #: 156-60-5		
3.396	3.396 (0.714)	96	95052	200.000	195.47	80.00- 120.00	100.00
3.396	3.396 (0.714)	61	115267			0.00- 30.00	121.27
3.396	3.396 (0.714)	98	59633			0.00- 30.00	62.74
55 Hexane					CAS #: 110-54-3		
3.591	3.591 (0.756)	57	134335	200.000	177.91	80.00- 120.00	100.00
3.591	3.591 (0.756)	43	75742			0.00- 30.00	56.38
3.591	3.591 (0.756)	86	29746			0.00- 30.00	22.14
58 Isopropyl ether					CAS #: 108-20-3		
3.857	3.857 (0.812)	45	238347	200.000	171.96	80.00- 120.00	100.00
3.857	3.857 (0.812)	87	78594			1.35- 61.35	32.97
3.857	3.857 (0.812)	59	30680			0.00- 42.16	12.87
59 1,1-Dichloroethane					CAS #: 75-34-3		
3.871	3.871 (0.815)	63	154891	200.000	180.35	80.00- 120.00	100.00
3.871	3.871 (0.815)	65	52057			0.00- 30.00	33.61
60 Vinyl Acetate					CAS #: 108-05-4		
3.927	3.927 (0.826)	86	24209	200.000	178.05	80.00- 120.00	100.00
3.927	3.927 (0.826)	43	216782			0.00- 30.00	895.46
3.927	3.927 (0.826)	42	23258			0.00- 30.00	96.07
64 Ethyl-tert-butyl Ether					CAS #: 637-92-3		
4.235	4.235 (0.891)	59	199746	200.000	160.88	80.00- 120.00	100.00
4.235	4.235 (0.891)	87	91348			16.04- 76.04	45.73
4.235	4.235 (0.891)	41	48398			0.00- 50.80	24.23
68 cis-1,2-Dichloroethene					CAS #: 156-59-2		
4.487	4.487 (0.944)	61	135134	200.000	182.48	80.00- 120.00	100.00
4.487	4.487 (0.944)	96	117255			0.00- 30.00	86.77
4.487	4.487 (0.944)	98	74541			0.00- 30.00	55.16
70 2-Butanone					CAS #: 78-93-3		
4.529	4.529 (0.953)	72	42166	200.000	190.47	80.00- 120.00	100.00
4.529	4.529 (0.953)	43	144780			0.00- 30.00	343.36

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
70 2-Butanone (continued)							
4.529	4.529 (0.953)	57	13099			0.00- 30.00	31.07
74 Tetrahydrofuran					CAS #: 109-99-9		
4.739	4.739 (0.997)	42	80434	200.000	169.33	80.00- 120.00	100.00
4.739	4.739 (0.997)	71	40405			0.00- 30.00	50.23
4.739	4.739 (0.997)	72	41352			0.00- 30.00	51.41
76 Chloroform					CAS #: 67-66-3		
4.837	4.837 (1.018)	83	215171	200.000	190.18	80.00- 120.00	100.00
4.837	4.837 (1.018)	85	140855			0.00- 30.00	65.46
77 Cyclohexane					CAS #: 110-82-7		
4.921	4.921 (1.035)	84	139760	200.000	193.61	80.00- 120.00	100.00
4.921	4.921 (1.035)	56	138202			0.00- 30.00	98.89
4.921	4.921 (1.035)	41	75037			0.00- 30.00	53.69
78 1,1,1-Trichloroethane					CAS #: 71-55-6		
4.963	4.963 (1.044)	97	215552	200.000	192.45	80.00- 120.00	100.00
4.963	4.963 (1.044)	99	137514			0.00- 30.00	63.80
79 Carbon Tetrachloride					CAS #: 56-23-5		
5.089	5.089 (1.071)	119	207757	200.000	199.73	80.00- 120.00	100.00
5.089	5.089 (1.071)	117	216161			0.00- 30.00	104.05
82 2,2,4-Trimethylpentane					CAS #: 540-84-1		
5.340	5.340 (1.124)	57	443333	200.000	188.58	80.00- 120.00	100.00
5.340	5.340 (1.124)	56	153012			0.00- 30.00	34.51
5.340	5.340 (1.124)	41	116175			0.00- 30.00	26.20
83 Benzene					CAS #: 71-43-2		
5.354	5.354 (0.914)	78	308637	200.000	184.71	80.00- 120.00	100.00
5.354	5.354 (0.914)	77	72179			0.00- 30.00	23.39
88 tert-amyl-Methyl Ether					CAS #: 994-05-8		
5.452	5.452 (1.147)	73	191223	200.000	167.66	80.00- 120.00	100.00
5.466	5.466 (1.150)	87	49025			0.00- 53.79	25.64
5.452	5.452 (1.147)	55	81438			5.21- 65.21	42.59
89 1,2-Dichloroethane					CAS #: 107-06-2		
5.480	5.480 (0.936)	62	133225	200.000	191.40	80.00- 120.00	100.00
5.480	5.480 (0.936)	64	42149			0.00- 30.00	31.64
93 Heptane					CAS #: 142-82-5		
5.578	5.578 (0.952)	71	101176	200.000	189.40	80.00- 120.00	100.00
5.578	5.578 (0.952)	43	143118			0.00- 30.00	141.45

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
93 Heptane (continued)							
5.578	5.578 (0.952)	100	41002			0.00- 30.00	40.53
95 Trichloroethene					CAS #: 79-01-6		
6.096	6.096 (1.041)	95	143985	200.000	195.92	80.00- 120.00	100.00
6.096	6.096 (1.041)	130	151426			0.00- 30.00	105.17
6.096	6.096 (1.041)	97	90798			0.00- 30.00	63.06
97 Methyl Cyclohexane					CAS #: 108-87-2		
6.208	6.208 (1.060)	83	182169	200.000	192.56	80.00- 120.00	100.00
6.208	6.208 (1.060)	98	95622			0.00- 30.00	52.49
6.208	6.208 (1.060)	55	128365			0.00- 30.00	70.46
99 1,2-Dichloropropane					CAS #: 78-87-5		
6.404	6.404 (1.093)	63	101777	200.000	182.27	80.00- 120.00	100.00
6.404	6.404 (1.093)	62	73174			0.00- 30.00	71.90
6.404	6.404 (1.093)	41	54287			0.00- 30.00	53.34
102 1,4-Dioxane					CAS #: 123-91-1		
6.544	6.544 (1.117)	88	66473	200.000	192.82	80.00- 120.00	100.00
6.544	6.544 (1.117)	58	40876			0.00- 30.00	61.49
6.544	6.544 (1.117)	57	13693			0.00- 30.00	20.60
104 Bromodichloromethane					CAS #: 75-27-4		
6.740	6.740 (1.150)	83	237877	200.000	191.24	80.00- 120.00	100.00
6.740	6.740 (1.150)	85	152047			0.00- 30.00	63.92
108 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
7.341	7.341 (1.253)	75	132906	200.000	173.88	80.00- 120.00	100.00
7.341	7.341 (1.253)	77	43053			0.00- 30.00	32.39
7.341	7.341 (1.253)	39	61762			0.00- 30.00	46.47
109 4-Methyl-2-pentanone					CAS #: 108-10-1		
7.579	7.579 (1.294)	85	35006	200.000	181.46	80.00- 120.00	100.00
7.579	7.579 (1.294)	43	176030			0.00- 30.00	502.86
7.579	7.579 (1.294)	58	78341			0.00- 30.00	223.79
111 Toluene					CAS #: 108-88-3		
7.747	7.747 (1.322)	91	381620	200.000	189.40	80.00- 120.00	100.00
7.747	7.747 (1.322)	92	227700			0.00- 30.00	59.67
114 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
8.307	8.307 (0.845)	75	117965	200.000	169.70	80.00- 120.00	100.00
8.307	8.307 (0.845)	77	36734			0.00- 30.00	31.14
8.307	8.307 (0.845)	39	48928			0.00- 30.00	41.48

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
115 1,1,2-Trichloroethane					CAS #: 79-00-5		
8.629	8.629 (0.878)	97	132988	200.000	185.69	80.00- 120.00	100.00
8.629	8.629 (0.878)	99	81839			0.00- 30.00	61.54
8.629	8.629 (0.878)	83	114438			0.00- 30.00	86.05
116 Tetrachloroethene					CAS #: 127-18-4		
8.629	8.629 (0.878)	166	183161	200.000	188.03	80.00- 120.00	100.00
8.629	8.629 (0.878)	129	139413			0.00- 30.00	76.12
8.629	8.629 (0.878)	131	134610			0.00- 30.00	73.49
120 2-Hexanone					CAS #: 591-78-6		
9.020	9.020 (0.917)	58	95974	200.000	185.10	80.00- 120.00	100.00
9.020	9.020 (0.917)	43	165392			0.00- 30.00	172.33
9.020	9.020 (0.917)	100	24506			0.00- 30.00	25.53
121 Dibromochloromethane					CAS #: 124-48-1		
9.160	9.160 (0.932)	129	247017	200.000	193.24	80.00- 120.00	100.00
9.160	9.160 (0.932)	127	190742			0.00- 30.00	77.22
124 1,2-Dibromoethane					CAS #: 106-93-4		
9.300	9.300 (0.946)	107	203564	200.000	192.15	80.00- 120.00	100.00
9.300	9.300 (0.946)	109	195213			0.00- 30.00	95.90
127 Chlorobenzene					CAS #: 108-90-7		
9.860	9.860 (1.003)	112	321659	200.000	191.95	80.00- 120.00	100.00
9.860	9.860 (1.003)	114	102602			0.00- 30.00	31.90
9.860	9.860 (1.003)	77	180353			0.00- 30.00	56.07
128 Ethyl Benzene					CAS #: 100-41-4		
9.958	9.958 (1.013)	106	161219	200.000	204.28	80.00- 120.00	100.00
9.958	9.958 (1.013)	91	497063			0.00- 30.00	308.32
131 m,p-Xylene					CAS #: 108-38-3		
10.084	10.084 (1.026)	106	194344	200.000	205.96	80.00- 120.00	100.00
10.084	10.084 (1.026)	91	386351			0.00- 30.00	198.80
132 o-Xylene					CAS #: 95-47-6		
10.461	10.461 (1.064)	106	188067	200.000	200.43	80.00- 120.00	100.00
10.461	10.461 (1.064)	91	388666			0.00- 30.00	206.66
134 Styrene					CAS #: 100-42-5		
10.489	10.489 (1.067)	104	296662	200.000	206.28	80.00- 120.00	100.00
10.489	10.489 (1.067)	78	138917			0.00- 30.00	46.83
136 Bromoform					CAS #: 75-25-2		
10.671	10.671 (1.085)	173	224013	200.000	178.09	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
136 Bromoform (continued)							
10.671	10.671 (1.085)	171	119031			0.00- 30.00	53.14
138 Cumene					CAS #: 98-82-8		
10.783	10.783 (1.097)	105	582779	200.000	209.41	80.00- 120.00	100.00
10.783	10.783 (1.097)	120	159121			0.00- 30.00	27.30
10.783	10.783 (1.097)	51	50794			0.00- 30.00	8.72
142 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
11.105	11.105 (1.129)	83	300087	200.000	192.81	80.00- 120.00	100.00
11.105	11.105 (1.129)	85	194957			0.00- 30.00	64.97
143 Propylbenzene					CAS #: 103-65-1		
11.119	11.119 (1.131)	91	702260	200.000	210.96	80.00- 120.00	100.00
11.119	11.119 (1.131)	120	167633			0.00- 30.00	23.87
11.119	11.119 (1.131)	105	26540			0.00- 30.00	3.78
147 4-Ethyltoluene					CAS #: 622-96-8		
11.203	11.203 (1.139)	105	592479	200.000	221.45	80.00- 120.00	100.00
11.203	11.203 (1.139)	120	178502			0.00- 30.00	30.13
149 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
11.259	11.259 (1.145)	105	415935	200.000	203.47	80.00- 120.00	100.00
11.259	11.259 (1.145)	120	212625			0.00- 30.00	51.12
152 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
11.511	11.511 (1.171)	105	442739	200.000	219.73	80.00- 120.00	100.00
11.511	11.511 (1.171)	120	203302			0.00- 30.00	45.92
156 1,3-Dichlorobenzene					CAS #: 541-73-1		
11.707	11.707 (1.191)	146	333117	200.000	209.94	80.00- 120.00	100.00
11.707	11.707 (1.191)	148	212730			0.00- 30.00	63.86
11.707	11.707 (1.191)	111	134581			0.00- 30.00	40.40
159 1,4-Dichlorobenzene					CAS #: 106-46-7		
11.763	11.763 (1.196)	146	326298	200.000	214.81	80.00- 120.00	100.00
11.777	11.777 (1.198)	148	204509			0.00- 30.00	62.68
11.763	11.763 (1.196)	111	125862			0.00- 30.00	38.57
161 alpha-Chlorotoluene					CAS #: 100-44-7		
11.861	11.861 (1.206)	91	175882	200.000	201.08	80.00- 120.00	100.00
11.861	11.861 (1.206)	126	36104			0.00- 30.00	20.53
163 1,2-Dichlorobenzene					CAS #: 95-50-1		
12.001	12.001 (1.221)	146	297876	200.000	211.24	80.00- 120.00	100.00
12.001	12.001 (1.221)	148	182825			0.00- 30.00	61.38

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
163 1,2-Dichlorobenzene (continued)							
11.987	11.987 (1.219)	111	118865			0.00- 30.00	39.90
169 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
12.854	12.854 (1.307)	180	92237	200.000	157.23	80.00- 120.00	100.00
12.854	12.854 (1.307)	182	90121			0.00- 30.00	97.71
170 Hexachlorobutadiene					CAS #: 87-68-3		
12.896	12.896 (1.312)	225	86236	200.000	185.47	80.00- 120.00	100.00
12.896	12.896 (1.312)	223	57100			0.00- 30.00	66.21
171 Naphthalene					CAS #: 91-20-3		
12.980	12.980 (1.320)	128	20421	20.0000	17.189	80.00- 120.00	100.00(a)
12.980	12.980 (1.320)	127	3120			0.00- 30.00	15.28

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: msd14.i
Lab File ID: 14121802.d
Lab Smp Id: CCV
Analysis Type: VOA
Quant Type: ISTD
Operator: sn
Method File: /chem/msd14.i/18dec14.b/14451124c.m
Misc Info: 200ppbv (200ppbv)

Calibration Date: 19-DEC-2014
Calibration Time: 19:41
Client Smp ID: CCV
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
75 Bromochloromethan	119322	71593	167051	124906	4.68
94 1,4-Difluorobenze	543908	326345	761471	570831	4.95
125 Chlorobenzene-d5	484148	290489	677807	512999	5.96

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
75 Bromochloromethan	4.75	4.42	5.08	4.75	0.00
94 1,4-Difluorobenze	5.86	5.53	6.19	5.86	0.00
125 Chlorobenzene-d5	9.83	9.50	10.16	9.83	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: /var/chem/msd14.i/18dec14.b/14121802.d

Date : 18-DEC-2014 19:52

Client ID: CCV

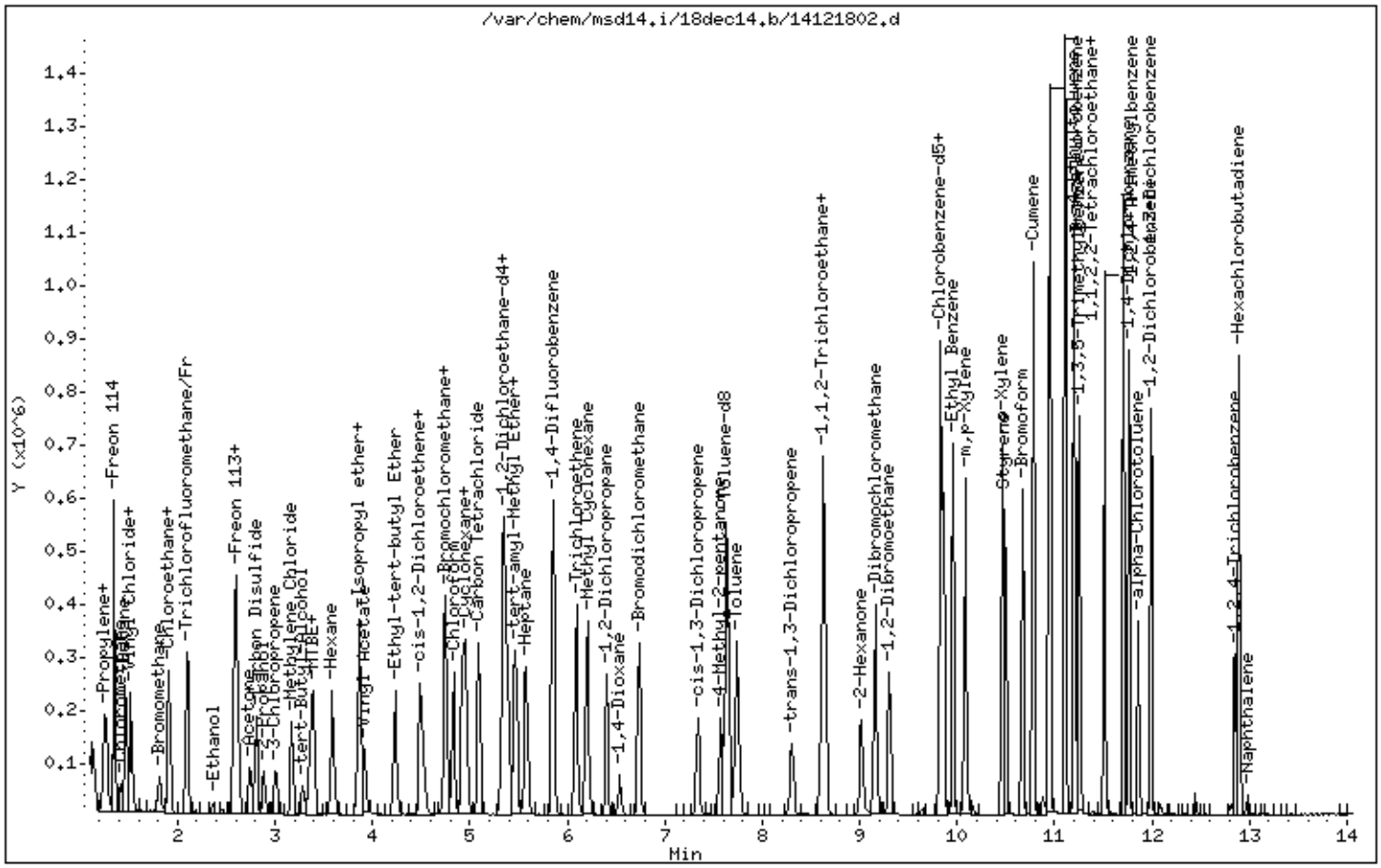
Instrument: msd14.i

Sample Info: 50ml #2687-167

Operator: sn

Column phase: RTx-624

Column diameter: 0.53



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Client Sample ID: CCV

Lab ID#: 1412216A-10B

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p122202**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 12/22/14 09:50 AM**	

Compound	**%Recovery**
Benzene	109
2-Propanol	92
Ethyl Benzene	102
m,p-Xylene	106
o-Xylene	108
4-Methyl-2-pentanone	103
Acetone	94
Toluene	106

Container Type: NA - Not Applicable

Surrogates	**%Recovery**	**Method Limits**
Toluene-d8	104	70-130
1,2-Dichloroethane-d4	88	70-130
4-Bromofluorobenzene	99	70-130

Eurofins Air Toxics Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: msdp.i Injection Date: 22-DEC-2014 09:50
Lab File ID: p122202.d Init. Cal. Date(s): 17-DEC-2014 17-DEC-2014
Analysis Type: AIR Init. Cal. Times: 19:11 21:17
Lab Sample ID: CCV Quant Type: ISTD
Method: /var/chem/msdp.i/22dec14.b/p14q1217a.m

COMPOUND	RRF / AMOUNT	RF50	MIN RRF	%D / %DRIFT	%D / %DRIFT	MAX	CURVE TYPE
$ 117 1,2-Dichloroethane-d4	2.38655	2.10167	0.010	11.93692	30.00000		Averaged
$ 146 Toluene-d8	1.17826	1.22917	0.010	-4.32089	30.00000		Averaged
$ 177 4-Bromofluorobenzene	0.74151	0.73612	0.010	0.72744	30.00000		Averaged
9 Propylene	2.11234	1.96595	0.010	6.93036	30.00000		Averaged
11 Freon 12	6.79322	6.12048	0.010	9.90323	30.00000		Averaged
15 Freon 114	4.52841	3.77235	0.010	16.69585	30.00000		Averaged
17 Chloromethane	2.07560	1.88820	0.010	9.02851	30.00000		Averaged
23 Butane	0.47776	0.51320	0.010	-7.41800	30.00000		Averaged
25 Vinyl Chloride	2.24515	2.26002	0.010	-0.66222	30.00000		Averaged
26 1,3-Butadiene	2.01814	1.97711	0.010	2.03302	30.00000		Averaged
29 Bromomethane	1.45690	1.34481	0.010	7.69370	30.00000		Averaged
30 Chloroethane	1.04329	1.05142	0.010	-0.77884	30.00000		Averaged
31 Isopentane	2.64914	2.44673	0.010	7.64068	40.00000		Averaged
35 Freon 11	6.73644	5.66007	0.010	15.97834	30.00000		Averaged
42 Ethanol	0.78828	0.67143	0.010	14.82345	30.00000		Averaged
49 Freon 113	2.78348	2.56522	0.010	7.84126	30.00000		Averaged
50 1,1-Dichloroethene	0.88756	0.85849	0.010	3.27585	30.00000		Averaged
52 Acetone	1.00094	0.94103	0.010	5.98516	30.00000		Averaged
56 Carbon Disulfide	4.30636	4.09872	0.010	4.82171	30.00000		Averaged
57 2-Propanol	3.61298	3.33406	0.010	7.71987	30.00000		Averaged
58 3-Chloropropene	0.72788	0.70988	0.010	2.47290	30.00000		Averaged
66 Methylene Chloride	2.27446	2.21559	0.010	2.58849	30.00000		Averaged
71 tert-Butyl alcohol	4.23040	3.95070	0.010	6.61161	30.00000		Averaged
72 Methyl tert-butyl ether	4.92523	4.67603	0.010	5.05971	30.00000		Averaged
73 trans-1,2-Dichloroethene	0.86631	0.85288	0.010	1.55052	30.00000		Averaged
78 Hexane	3.17985	2.97534	0.010	6.43145	30.00000		Averaged
82 1,1-Dichloroethane	3.67806	3.52466	0.010	4.17069	30.00000		Averaged
83 Isopropyl ether	5.94345	5.60035	0.010	5.77268	30.00000		Averaged
86 Vinyl Acetate	0.41730	0.39243	0.010	5.95823	40.00000		Averaged
88 Ethyl-tert-butyl ether	5.89238	5.63501	0.010	4.36784	40.00000		Averaged
91 cis-1,2-Dichloroethene	1.12232	1.10684	0.010	1.37969	30.00000		Averaged
92 2-Butanone	0.87982	0.82925	0.010	5.74844	30.00000		Averaged
99 Tetrahydrofuran	2.62079	2.33765	0.010	10.80384	30.00000		Averaged
100 Chloroform	4.19754	3.79189	0.010	9.66397	30.00000		Averaged
102 Cyclohexane	2.14696	2.04670	0.010	4.66966	30.00000		Averaged
103 1,1,1-Trichloroethane	4.70691	4.22042	0.010	10.33572	30.00000		Averaged

Eurofins Air Toxics Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: msdp.i Injection Date: 22-DEC-2014 09:50
Lab File ID: p122202.d Init. Cal. Date(s): 17-DEC-2014 17-DEC-2014
Analysis Type: AIR Init. Cal. Times: 19:11 21:17
Lab Sample ID: CCV Quant Type: ISTD
Method: /var/chem/msdp.i/22dec14.b/p14q1217a.m

COMPOUND	RRF / AMOUNT	RF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
106 Carbon Tetrachloride	4.84607	4.29261	0.010	11.42082	30.00000	Averaged
113 2,2,4-Trimethylpentane	9.43382	9.75116	0.010	-3.36377	30.00000	Averaged
116 Benzene	1.12601	1.23251	0.010	-9.45811	30.00000	Averaged
119 tert-Amyl methyl ether	0.25735	0.28708	0.010	-11.55334	30.00000	Averaged
120 1,2-Dichloroethane	0.73027	0.72232	0.010	1.08929	30.00000	Averaged
121 Heptane	0.36528	0.42728	0.010	-16.97225	30.00000	Averaged
125 Trichloroethene	0.52915	0.57740	0.010	-9.11986	30.00000	Averaged
127 Methylcyclohexane	0.60672	0.68764	0.010	-13.33675	30.00000	Averaged
132 1,2-Dichloropropane	0.54691	0.57519	0.010	-5.17058	30.00000	Averaged
136 1,4-Dioxane	0.29017	0.30180	0.010	-4.00559	30.00000	Averaged
138 Bromodichloromethane	1.05638	1.06360	0.010	-0.68292	30.00000	Averaged
144 cis-1,3-Dichloropropene	0.76828	0.77592	0.010	-0.99449	30.00000	Averaged
145 4-Methyl-2-pentanone	0.53883	0.55537	0.010	-3.06976	30.00000	Averaged
147 Toluene	1.63691	1.73839	0.010	-6.19951	30.00000	Averaged
150 trans-1,3-Dichloropropene	0.82344	0.79726	0.010	3.17918	30.00000	Averaged
155 1,1,2-Trichloroethane	0.52389	0.54579	0.010	-4.17911	30.00000	Averaged
156 Tetrachloroethene	0.75330	0.76858	0.010	-2.02831	30.00000	Averaged
158 2-Hexanone	0.73300	0.80268	0.010	-9.50624	30.00000	Averaged
160 Dibromochloromethane	0.99131	1.02467	0.010	-3.36584	30.00000	Averaged
161 1,2-Dibromoethane (EDB)	0.78227	0.79654	0.010	-1.82355	30.00000	Averaged
165 Chlorobenzene	1.20018	1.27321	0.010	-6.08519	30.00000	Averaged
167 Ethyl Benzene	0.64165	0.65637	0.010	-2.29282	30.00000	Averaged
169 m,p-Xylene	0.77834	0.82929	0.010	-6.54487	30.00000	Averaged
171 o-Xylene	0.72849	0.79059	0.010	-8.52483	30.00000	Averaged
172 Styrene	1.26376	1.36284	0.010	-7.83974	30.00000	Averaged
174 Bromoform	1.17421	1.15656	0.010	1.50325	30.00000	Averaged
175 Cumene	2.55298	2.59794	0.010	-1.76109	30.00000	Averaged
181 1,1,2,2-Tetrachloroethane	1.30258	1.26237	0.010	3.08766	30.00000	Averaged
182 Propylbenzene	3.13758	3.22966	0.010	-2.93472	30.00000	Averaged
188 4-Ethyltoluene	0.67387	0.70385	0.010	-4.44982	30.00000	Averaged
190 1,3,5-Trimethylbenzene	0.86081	0.92750	0.010	-7.74781	30.00000	Averaged
196 1,2,4-Trimethylbenzene	0.77572	0.82691	0.010	-6.59892	30.00000	Averaged
208 1,3-Dichlorobenzene	1.33475	1.34342	0.010	-0.64935	30.00000	Averaged
209 1,4-Dichlorobenzene	1.31609	1.34558	0.010	-2.24004	30.00000	Averaged
212 alpha-Chlorotoluene	1.31738	1.26229	0.010	4.18156	30.00000	Averaged

Eurofins Air Toxics Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: msdp.i Injection Date: 22-DEC-2014 09:50
Lab File ID: p122202.d Init. Cal. Date(s): 17-DEC-2014 17-DEC-2014
Analysis Type: AIR Init. Cal. Times: 19:11 21:17
Lab Sample ID: CCV Quant Type: ISTD
Method: /var/chem/msdp.i/22dec14.b/p14q1217a.m

COMPOUND	RRF / AMOUNT	RF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
214 1,2-Dichlorobenzene	1.18719	1.24523	0.010	-4.88903	30.00000	Averaged
226 1,2,4-Trichlorobenzene	0.75157	0.89679	0.010	-19.32099	30.00000	Averaged
227 Hexachlorobutadiene	0.88544	0.98918	0.010	-11.71636	30.00000	Averaged
228 Naphthalene	2.65262	2.99915	0.010	-13.06362	40.00000	Averaged

Eurofins Air Toxics Inc.

EPA TO-15/MODIFIED TO14A

Data file : /chem/msdp.i/22dec14.b/p122202.d
Lab Smp Id: CCV Client Smp ID: CCV
Inj Date : 22-DEC-2014 09:50
Operator : js Inst ID: msdp.i
Smp Info : 50ml #2687-162
Misc Info : 50ppbv (200ppbv)
Comment : STANDARD LEVEL - GC/MS
Method : /var/chem/msdp.i/22dec14.b/p14q1217a.m
Meth Date : 22-Dec-2014 11:19 jscarbro Quant Type: ISTD
Cal Date : 17-DEC-2014 21:17 Cal File: p121708.d
Als bottle: 13 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT12.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
* 98 Bromochloromethane						CAS #: 74-97-5	
5.455	5.455 (1.000)	130	153275	25.0000		80.00- 120.00	100.00
5.448	5.448 (1.000)	128	112689			0.00- 30.00	73.52
5.448	5.448 (1.000)	49	282650			0.00- 30.00	184.41
* 123 1,4-Difluorobenzene						CAS #: 540-36-3	
6.344	6.344 (1.000)	114	654249	25.0000		80.00- 120.00	100.00
6.344	6.344 (1.000)	88	117270			0.00- 30.00	17.92
* 163 Chlorobenzene-d5						CAS #: 3114-55-4	
8.779	8.779 (1.000)	117	700329	25.0000		80.00- 120.00	100.00
8.779	8.779 (1.000)	82	440767			0.00- 30.00	62.94
$ 117 1,2-Dichloroethane-d4						CAS #: 17060-07-0	
5.985	5.985 (1.097)	65	322134	25.0000	22.016	80.00- 120.00	100.00
5.985	5.985 (1.097)	67	187670			0.00- 30.00	58.26

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
$ 146 Toluene-d8					CAS #: 2037-26-5		
7.554	7.554 (1.191)	98	804182	25.0000	26.080	80.00- 120.00	100.00
7.554	7.554 (1.191)	70	102027			0.00- 30.00	12.69
7.554	7.554 (1.191)	100	521370			0.00- 30.00	64.83
$ 177 4-Bromofluorobenzene					CAS #: 460-00-4		
9.760	9.760 (1.112)	174	515523	25.0000	24.818	80.00- 120.00	100.00
9.760	9.760 (1.112)	95	600052			0.00- 30.00	116.40
9.760	9.760 (1.112)	176	489782			0.00- 30.00	95.01
9 Propylene					CAS #: 115-07-1		
1.473	1.473 (0.270)	41	602661	50.0000	46.535	80.00- 120.00	100.00
1.473	1.473 (0.270)	42	394641			0.00- 30.00	65.48
1.473	1.473 (0.270)	39	403927			0.00- 30.00	67.02
11 Freon 12					CAS #: 75-71-8		
1.509	1.509 (0.277)	85	1876232	50.0000	45.048	80.00- 120.00	100.00
1.509	1.509 (0.277)	87	620021			0.00- 30.00	33.05
15 Freon 114					CAS #: 76-14-2		
1.623	1.623 (0.298)	135	1156415	50.0000	41.652	80.00- 120.00	100.00
1.623	1.623 (0.298)	137	372368			0.00- 30.00	32.20
17 Chloromethane					CAS #: 74-87-3		
1.702	1.702 (0.312)	50	578828	50.0000	45.486	80.00- 120.00	100.00
1.702	1.702 (0.312)	52	187069			0.00- 30.00	32.32
23 Butane					CAS #: 106-97-8		
1.781	1.781 (0.326)	58	157322	50.0000	53.709	80.00- 120.00	100.00
1.781	1.781 (0.326)	43	1143952			0.00- 30.00	727.14
25 Vinyl Chloride					CAS #: 75-01-4		
1.817	1.817 (0.333)	62	692809	50.0000	50.331	80.00- 120.00	100.00
1.817	1.817 (0.333)	64	203867			0.00- 30.00	29.43
26 1,3-Butadiene					CAS #: 106-99-0		
1.845	1.845 (0.338)	54	606083	50.0000	48.983	80.00- 120.00	100.00
1.845	1.845 (0.338)	39	560253			0.00- 30.00	92.44
29 Bromomethane					CAS #: 74-83-9		
2.196	2.196 (0.403)	94	412251	50.0000	46.153	80.00- 120.00	100.00
2.196	2.196 (0.403)	96	376872			0.00- 30.00	91.42
30 Chloroethane					CAS #: 75-00-3		
2.304	2.304 (0.422)	64	322312	50.0000	50.389	80.00- 120.00	100.00
2.304	2.304 (0.422)	66	98202			0.00- 30.00	30.47

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
30 Chloroethane (continued)							
2.304	2.304 (0.422)	49	88654			0.00- 30.00	27.51
31 Isopentane					CAS #: 78-78-4		
2.339	2.339 (0.429)	43	750044	50.0000	46.180	80.00- 120.00	100.00
2.347	2.347 (0.430)	57	526687			0.00- 30.00	70.22
35 Freon 11					CAS #: 75-69-4		
2.569	2.569 (0.471)	101	1735094	50.0000	42.011	80.00- 120.00	100.00
2.569	2.569 (0.471)	103	1125681			0.00- 30.00	64.88
42 Ethanol					CAS #: 64-17-5		
2.891	2.891 (0.530)	45	205827	50.0000	42.588	80.00- 120.00	100.00
2.891	2.891 (0.530)	43	40084			0.00- 30.00	19.47
2.891	2.891 (0.530)	46	74633			0.00- 30.00	36.26
49 Freon 113					CAS #: 76-13-1		
3.213	3.213 (0.589)	151	786369	50.0000	46.079	80.00- 120.00	100.00
3.213	3.213 (0.589)	153	493467			0.00- 30.00	62.75
3.213	3.213 (0.589)	101	974883			0.00- 30.00	123.97
50 1,1-Dichloroethene					CAS #: 75-35-4		
3.242	3.242 (0.594)	98	263170	50.0000	48.362	80.00- 120.00	100.00
3.242	3.242 (0.594)	96	414826			0.00- 30.00	157.63
3.242	3.242 (0.594)	61	914017			0.00- 30.00	347.31
52 Acetone					CAS #: 67-64-1		
3.385	3.385 (0.621)	58	288474	50.0000	47.007	80.00- 120.00	100.00
3.385	3.385 (0.621)	43	848119			0.00- 30.00	294.00
56 Carbon Disulfide					CAS #: 75-15-0		
3.478	3.478 (0.638)	76	1256463	50.0000	47.589	80.00- 120.00	100.00
57 2-Propanol					CAS #: 67-63-0		
3.564	3.564 (0.653)	45	1022056	50.0000	46.140	80.00- 120.00	100.00
3.564	3.564 (0.653)	43	201730			0.00- 30.00	19.74
3.564	3.564 (0.653)	59	37933			0.00- 30.00	3.71
58 3-Chloropropene					CAS #: 107-05-1		
3.722	3.722 (0.682)	76	217613	50.0000	48.764	80.00- 120.00	100.00
3.722	3.722 (0.682)	41	706945			0.00- 30.00	324.86
66 Methylene Chloride					CAS #: 75-09-2		
3.901	3.901 (0.715)	49	679189	50.0000	48.706	80.00- 120.00	100.00
3.901	3.901 (0.715)	84	381259			0.00- 30.00	56.13
3.901	3.901 (0.715)	51	211246			0.00- 30.00	31.10

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
71 tert-Butyl alcohol					CAS #: 75-65-0		
4.023	4.023 (0.737)	59	1211088	50.0000	46.694	80.00- 120.00	100.00
4.023	4.023 (0.737)	41	253112			0.00- 30.00	20.90
4.023	4.023 (0.737)	57	117903			0.00- 30.00	9.74
72 Methyl tert-butyl ether					CAS #: 1634-04-4		
4.130	4.130 (0.757)	73	1433437	50.0000	47.470	80.00- 120.00	100.00
4.130	4.130 (0.757)	57	370026			0.00- 30.00	25.81
4.130	4.130 (0.757)	41	341179			0.00- 30.00	23.80
73 trans-1,2-Dichloroethene					CAS #: 156-60-5		
4.152	4.152 (0.761)	98	261451	50.0000	49.225	80.00- 120.00	100.00
4.152	4.152 (0.761)	61	789396			0.00- 30.00	301.93
4.152	4.152 (0.761)	96	420251			0.00- 30.00	160.74
78 Hexane					CAS #: 110-54-3		
4.367	4.367 (0.800)	57	912091	50.0000	46.784	80.00- 120.00	100.00
4.367	4.367 (0.800)	43	573217			0.00- 30.00	62.85
4.374	4.374 (0.802)	86	119513			0.00- 30.00	13.10
82 1,1-Dichloroethane					CAS #: 75-34-3		
4.639	4.639 (0.850)	63	1080485	50.0000	47.915	80.00- 120.00	100.00
4.639	4.639 (0.850)	65	320899			0.00- 30.00	29.70
83 Isopropyl ether					CAS #: 108-20-3		
4.639	4.639 (0.850)	45	1716788	50.0000	47.114	80.00- 120.00	100.00
4.639	4.639 (0.850)	87	361530			0.00- 30.00	21.06
4.639	4.639 (0.850)	59	189051			0.00- 30.00	11.01
86 Vinyl Acetate					CAS #: 108-05-4		
4.689	4.689 (0.860)	86	120300	50.0000	47.021	80.00- 120.00	100.00
4.682	4.682 (0.858)	43	1719744			0.00- 30.00	1429.55
88 Ethyl-tert-butyl ether					CAS #: 637-92-3		
4.997	4.997 (0.916)	59	1727413	50.0000	47.816	80.00- 120.00	100.00
4.997	4.997 (0.916)	87	583131			0.00- 30.00	33.76
4.997	4.997 (0.916)	41	303277			0.00- 30.00	17.56
91 cis-1,2-Dichloroethene					CAS #: 156-59-2		
5.226	5.226 (0.958)	98	339301	50.0000	49.310	80.00- 120.00	100.00
5.219	5.219 (0.957)	96	547848			0.00- 30.00	161.46
5.219	5.219 (0.957)	61	913588			0.00- 30.00	269.26
92 2-Butanone					CAS #: 78-93-3		
5.248	5.248 (0.962)	72	254206	50.0000	47.126	80.00- 120.00	100.00
5.248	5.248 (0.962)	43	1297810			0.00- 30.00	510.53

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
92 2-Butanone (continued)							
5.248	5.248 (0.962)	57	104786			0.00- 30.00	41.22
99 Tetrahydrofuran					CAS #: 109-99-9		
5.448	5.448 (0.999)	42	716606	50.0000	44.598	80.00- 120.00	100.00
5.448	5.448 (0.999)	71	218676			0.00- 30.00	30.52
5.448	5.448 (0.999)	72	244894			0.00- 30.00	34.17
100 Chloroform					CAS #: 67-66-3		
5.513	5.513 (1.010)	83	1162403	50.0000	45.168	80.00- 120.00	100.00
5.513	5.513 (1.010)	85	768519			0.00- 30.00	66.11
102 Cyclohexane					CAS #: 110-82-7		
5.627	5.627 (1.032)	84	627416	50.0000	47.665	80.00- 120.00	100.00
5.627	5.627 (1.032)	56	983027			0.00- 30.00	156.68
5.627	5.627 (1.032)	41	505192			0.00- 30.00	80.52
103 1,1,1-Trichloroethane					CAS #: 71-55-6		
5.642	5.642 (1.034)	97	1293770	50.0000	44.832	80.00- 120.00	100.00
5.642	5.642 (1.034)	99	828544			0.00- 30.00	64.04
106 Carbon Tetrachloride					CAS #: 56-23-5		
5.756	5.756 (1.055)	119	1315899	50.0000	44.290	80.00- 120.00	100.00
5.756	5.756 (1.055)	117	1429413			0.00- 30.00	108.63
113 2,2,4-Trimethylpentane					CAS #: 540-84-1		
5.957	5.957 (1.092)	57	2989217	50.0000	51.682	80.00- 120.00	100.00
5.957	5.957 (1.092)	56	999681			0.00- 30.00	33.44
5.957	5.957 (1.092)	41	743094			0.00- 30.00	24.86
116 Benzene					CAS #: 71-43-2		
5.971	5.971 (0.941)	78	1612742	50.0000	54.729	80.00- 120.00	100.00
5.971	5.971 (0.941)	77	396483			0.00- 30.00	24.58
119 tert-Amyl methyl ether					CAS #: 994-05-8		
6.043	6.043 (0.953)	87	375648	50.0000	55.777	80.00- 120.00	100.00
6.043	6.043 (0.953)	73	1476114			0.00- 30.00	392.95
6.043	6.043 (0.953)	55	494390			0.00- 30.00	131.61
120 1,2-Dichloroethane					CAS #: 107-06-2		
6.057	6.057 (0.955)	62	945152	50.0000	49.455	80.00- 120.00	100.00
6.057	6.057 (0.955)	64	302427			0.00- 30.00	32.00
121 Heptane					CAS #: 142-82-5		
6.129	6.129 (0.966)	71	559097	50.0000	58.486	80.00- 120.00	100.00
6.129	6.129 (0.966)	43	1295982			0.00- 30.00	231.80

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
121 Heptane (continued)							
6.129	6.129 (0.966)	57	732849			0.00- 30.00	131.08
125 Trichloroethene					CAS #: 79-01-6		
6.537	6.537 (1.030)	95	755531	50.0000	54.560	80.00- 120.00	100.00
6.537	6.537 (1.030)	130	696021			0.00- 30.00	92.12
6.537	6.537 (1.030)	97	484947			0.00- 30.00	64.19
127 Methylcyclohexane					CAS #: 108-87-2		
6.644	6.644 (1.047)	83	899770	50.0000	56.668	80.00- 120.00	100.00
6.644	6.644 (1.047)	98	406086			0.00- 30.00	45.13
6.637	6.637 (1.046)	55	998981			0.00- 30.00	111.03
132 1,2-Dichloropropane					CAS #: 78-87-5		
6.766	6.766 (1.067)	63	752639	50.0000	52.585	80.00- 120.00	100.00
6.766	6.766 (1.067)	62	536798			0.00- 30.00	71.32
6.766	6.766 (1.067)	41	388329			0.00- 30.00	51.60
136 1,4-Dioxane					CAS #: 123-91-1		
6.859	6.859 (1.081)	88	394899	50.0000	52.003	80.00- 120.00	100.00
6.852	6.852 (1.080)	58	367023			0.00- 30.00	92.94
6.852	6.852 (1.080)	57	117252			0.00- 30.00	29.69
138 Bromodichloromethane					CAS #: 75-27-4		
6.995	6.995 (1.103)	83	1391712	50.0000	50.341	80.00- 120.00	100.00
6.995	6.995 (1.103)	85	904921			0.00- 30.00	65.02
144 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
7.368	7.368 (1.161)	75	1015285	50.0000	50.497	80.00- 120.00	100.00
7.368	7.368 (1.161)	77	320191			0.00- 30.00	31.54
7.368	7.368 (1.161)	39	523559			0.00- 30.00	51.57
145 4-Methyl-2-pentanone					CAS #: 108-10-1		
7.483	7.483 (1.180)	58	726702	50.0000	51.535	80.00- 120.00	100.00
7.475	7.475 (1.178)	43	1900481			0.00- 30.00	261.52
7.483	7.483 (1.180)	85	261383			0.00- 30.00	35.97
147 Toluene					CAS #: 108-88-3		
7.611	7.611 (1.200)	91	2274677	50.0000	53.100	80.00- 120.00	100.00
7.611	7.611 (1.200)	92	1278603			0.00- 30.00	56.21
150 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
7.848	7.848 (0.894)	75	1116692	50.0000	48.410	80.00- 120.00	100.00
7.848	7.848 (0.894)	77	350258			0.00- 30.00	31.37
7.848	7.848 (0.894)	39	534650			0.00- 30.00	47.88

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

  155 1,1,2-Trichloroethane                        CAS #: 79-00-5
  7.998   7.998 (0.911)    97    764463 50.0000   52.090  80.00- 120.00   100.00
  7.998   7.998 (0.911)    99    460223                    0.00-  30.00    60.20
  7.998   7.998 (0.911)    83    666979                    0.00-  30.00    87.25
-------------------------------------------------------------------------------
  156 Tetrachloroethene                            CAS #: 127-18-4
  8.048   8.048 (0.917)   166   1076518 50.0000   51.014  80.00- 120.00   100.00
  8.048   8.048 (0.917)   129    765377                    0.00-  30.00    71.10
  8.048   8.048 (0.917)   131    722288                    0.00-  30.00    67.09
-------------------------------------------------------------------------------
  158 2-Hexanone                                   CAS #: 591-78-6
  8.163   8.163 (0.930)    58   1124275 50.0000   54.753  80.00- 120.00   100.00
  8.163   8.163 (0.930)    43   2008893                    0.00-  30.00   178.68
  8.170   8.170 (0.931)   100    176545                    0.00-  30.00    15.70
-------------------------------------------------------------------------------
  160 Dibromochloromethane                         CAS #: 124-48-1
  8.313   8.313 (0.947)   129   1435219 50.0000   51.683  80.00- 120.00   100.00
  8.313   8.313 (0.947)   127   1116383                    0.00-  30.00    77.78
-------------------------------------------------------------------------------
  161 1,2-Dibromoethane (EDB)                      CAS #: 106-93-4
  8.428   8.428 (0.960)   107   1115678 50.0000   50.912  80.00- 120.00   100.00
  8.428   8.428 (0.960)   109   1081535                    0.00-  30.00    96.94
-------------------------------------------------------------------------------
  165 Chlorobenzene                                CAS #: 108-90-7
  8.801   8.801 (1.002)   112   1783337 50.0000   53.042  80.00- 120.00   100.00
  8.808   8.808 (1.003)   114    572743                    0.00-  30.00    32.12
  8.801   8.801 (1.002)    77   1160552                    0.00-  30.00    65.08
-------------------------------------------------------------------------------
  167 Ethyl Benzene                                CAS #: 100-41-4
  8.858   8.858 (1.009)   106    919344 50.0000   51.146  80.00- 120.00   100.00
  8.851   8.851 (1.008)    91   3147554                    0.00-  30.00   342.37
-------------------------------------------------------------------------------
  169 m,p-Xylene                                   CAS #: 108-38-3
  8.951   8.951 (1.020)   106   1161545 50.0000   53.272  80.00- 120.00   100.00
  8.951   8.951 (1.020)    91   2573189                    0.00-  30.00   221.53
-------------------------------------------------------------------------------
  171 o-Xylene                                     CAS #: 95-47-6
  9.295   9.295 (1.059)   106   1107344 50.0000   54.262  80.00- 120.00   100.00
  9.295   9.295 (1.059)    91   2560127                    0.00-  30.00   231.20
-------------------------------------------------------------------------------
  172 Styrene                                      CAS #: 100-42-5
  9.309   9.309 (1.060)   104   1908869 50.0000   53.920  80.00- 120.00   100.00
  9.309   9.309 (1.060)    78   1039875                    0.00-  30.00    54.48
-------------------------------------------------------------------------------
  174 Bromoform                                    CAS #: 75-25-2
  9.502   9.502 (1.082)   173   1619940 50.0000   49.248  80.00- 120.00   100.00
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```
                                        AMOUNTS
                                     CAL-AMT   ON-COL
   RT   EXP RT (REL RT)  MASS  RESPONSE ( PPBV)  ( PPBV)   TARGET RANGE    RATIO
   ==   ====== ========  ====  ======== =======  =======   ============    =====

  174 Bromoform (continued)
  9.502   9.502 (1.082)   171    827128                     0.00-  30.00    51.06
-------------------------------------------------------------------------------
  175 Cumene                                        CAS #: 98-82-8
  9.574   9.574 (1.091)   105   3638826 50.0000   50.880  80.00- 120.00   100.00
  9.574   9.574 (1.091)   120    831831                     0.00-  30.00    22.86
  9.574   9.574 (1.091)    51    414395                     0.00-  30.00    11.39
-------------------------------------------------------------------------------
  181 1,1,2,2-Tetrachloroethane                     CAS #: 79-34-5
  9.882   9.882 (1.126)    83   1768142 50.0000   48.456  80.00- 120.00   100.00
  9.882   9.882 (1.126)    85   1142121                     0.00-  30.00    64.59
-------------------------------------------------------------------------------
  182 Propylbenzene                                 CAS #: 103-65-1
  9.918   9.918 (1.130)    91   4523643 50.0000   51.467  80.00- 120.00   100.00
  9.918   9.918 (1.130)   120    920637                     0.00-  30.00    20.35
  9.918   9.918 (1.130)   105    158406                     0.00-  30.00     3.50
-------------------------------------------------------------------------------
  188 4-Ethyltoluene                                CAS #: 622-96-8
 10.011  10.011 (1.140)   120    985855 50.0000   52.225  80.00- 120.00   100.00
 10.011  10.011 (1.140)   105   3847532                     0.00-  30.00   390.27
-------------------------------------------------------------------------------
  190 1,3,5-Trimethylbenzene                        CAS #: 108-67-8
 10.061  10.061 (1.146)   120   1299109 50.0000   53.874  80.00- 120.00   100.00
 10.061  10.061 (1.146)   105   2829347                     0.00-  30.00   217.79
-------------------------------------------------------------------------------
  196 1,2,4-Trimethylbenzene                        CAS #: 95-63-6
 10.384  10.384 (1.183)   120   1158221 50.0000   53.299  80.00- 120.00   100.00
 10.384  10.384 (1.183)   105   2795123                     0.00-  30.00   241.33
-------------------------------------------------------------------------------
  208 1,3-Dichlorobenzene                           CAS #: 541-73-1
 10.670  10.670 (1.215)   146   1881669 50.0000   50.325  80.00- 120.00   100.00
 10.670  10.670 (1.215)   148   1205996                     0.00-  30.00    64.09
 10.670  10.670 (1.215)   111    803371                     0.00-  30.00    42.69
-------------------------------------------------------------------------------
  209 1,4-Dichlorobenzene                           CAS #: 106-46-7
 10.749  10.749 (1.224)   146   1884691 50.0000   51.120  80.00- 120.00   100.00
 10.749  10.749 (1.224)   148   1183289                     0.00-  30.00    62.78
 10.749  10.749 (1.224)   111    769621                     0.00-  30.00    40.84
-------------------------------------------------------------------------------
  212 alpha-Chlorotoluene                           CAS #: 100-44-7
 10.863  10.863 (1.237)    91   1768036 50.0000   47.909  80.00- 120.00   100.00
 10.863  10.863 (1.237)   126    333399                     0.00-  30.00    18.86
-------------------------------------------------------------------------------
  214 1,2-Dichlorobenzene                           CAS #: 95-50-1
 11.071  11.071 (1.261)   146   1744148 50.0000   52.444  80.00- 120.00   100.00
 11.071  11.071 (1.261)   148   1107938                     0.00-  30.00    63.52
```

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
214 1,2-Dichlorobenzene (continued)							
11.071	11.071 (1.261)	111	748114			0.00- 30.00	42.89
226 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
12.468	12.468 (1.420)	180	1256091	50.0000	59.660	80.00- 120.00	100.00
12.468	12.468 (1.420)	182	1198897			0.00- 30.00	95.45
227 Hexachlorobutadiene					CAS #: 87-68-3		
12.554	12.554 (1.430)	225	1385502	50.0000	55.858	80.00- 120.00	100.00
12.554	12.554 (1.430)	223	897244			0.00- 30.00	64.76
228 Naphthalene					CAS #: 91-20-3		
12.726	12.726 (1.450)	128	420078	5.00000	5.653	80.00- 120.00	100.00
12.726	12.726 (1.450)	127	56760			0.00- 30.00	13.51

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdp.i
Lab File ID: p122202.d
Lab Smp Id: CCV
Analysis Type: VOA
Quant Type: ISTD
Operator: js
Method File: /var/chem/msdp.i/22dec14.b/p14q1217a.m
Misc Info: 50ppbv (200ppbv)

Calibration Date: 22-DEC-2014
Calibration Time: 09:50
Client Smp ID: CCV
Level: LOW
Sample Type: AIR

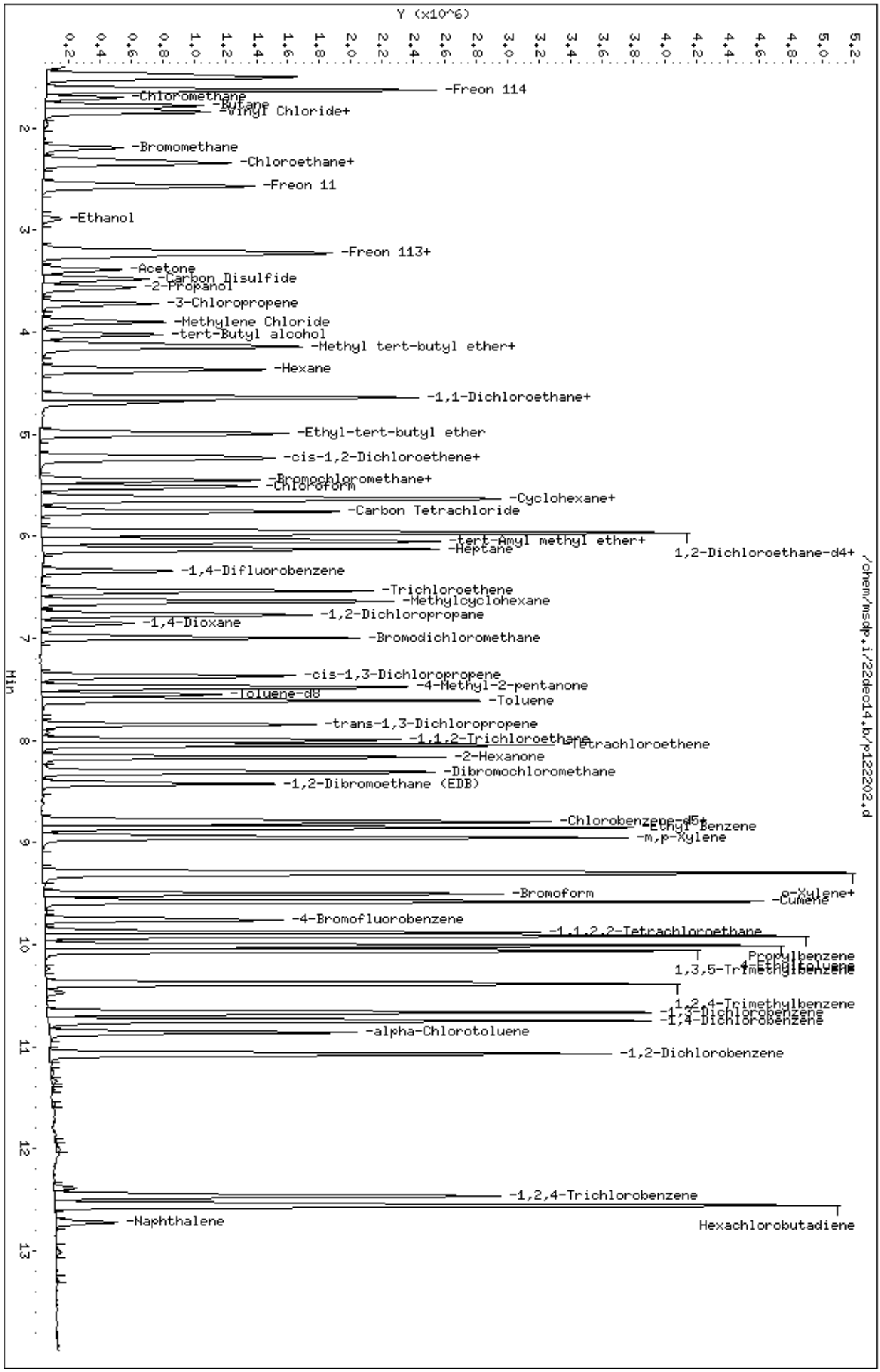
COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
98 Bromochloromethan	153275	91965	214585	153275	0.00
123 1,4-Difluorobenze	654249	392549	915949	654249	0.00
163 Chlorobenzene-d5	700329	420197	980461	700329	0.00

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
98 Bromochloromethan	5.46	5.13	5.79	5.46	0.00
123 1,4-Difluorobenze	6.34	6.01	6.67	6.34	0.00
163 Chlorobenzene-d5	8.78	8.45	9.11	8.78	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/msdp.i/22dec14.b/p122202.d
Date : 22-DEC-2014 09:50
Client ID: CCV
Sample Info: 50ml #2687-162
Column phase: RTX-624

Instrument: msdp.i
Operator: js
Column diameter: 0.25



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Client Sample ID: LCS

Lab ID#: 1412216A-11A

EPA METHOD TO-15 GC/MS

File Name:	**14121803**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 12/18/14 08:22 PM**	

Compound	**%Recovery**	**Method Limits**
Acetone	88	70-130
2-Propanol	80	70-130
Benzene	86	70-130
Toluene	90	70-130
Ethyl Benzene	91	70-130
m,p-Xylene	93	70-130
o-Xylene	89	70-130
4-Methyl-2-pentanone	85	70-130

Container Type: NA - Not Applicable

Surrogates	**%Recovery**	**Method Limits**
1,2-Dichloroethane-d4	96	70-130
Toluene-d8	99	70-130
4-Bromofluorobenzene	98	70-130

Report Date: 18-Dec-2014 20:49

Eurofins Air Toxics Inc.

RECOVERY REPORT

Client Name:
Client SDG: 18dec14
Sample Matrix: GAS
Fraction: VOA
Lab Smp Id: LCS
Client Smp ID: LCS
Level: LOW
Operator: sn
Data Type: MS DATA
SampleType: LCS
SpikeList File: 200.spk
Quant Type: ISTD
Sublist File: AT09.sub
Method File: /var/chem/msd14.i/18dec14.b/14451124c.m
Misc Info: 200ppbv (200ppbv)

SPIKE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
5 Propylene	200.00	169.46	84.73	60-140
7 Dichlorodifluorome	200.00	193.58	96.79	70-130
9 Freon 114	200.00	177.12	88.56	70-130
12 Chloromethane	200.00	187.92	93.96	70-130
13 Butane	200.00	182.25	91.13	60-140
15 Vinyl Chloride	200.00	189.38	94.69	70-130
16 1,3-Butadiene	200.00	181.00	90.50	70-130
18 Bromomethane	200.00	167.85	83.93	70-130
19 Chloroethane	200.00	136.81	68.40*	70-130
20 Isopentane	200.00	192.67	96.34	60-140
23 Trichlorofluoromet	200.00	188.58	94.29	70-130
30 Ethanol	200.00	195.07	97.54	70-130
34 Freon 113	200.00	182.00	91.00	70-130
36 1,1-Dichloroethene	200.00	181.22	90.61	70-130
38 Acetone	200.00	175.84	87.92	70-130
39 Carbon Disulfide	200.00	165.15	82.58	70-130
41 2-Propanol	200.00	159.83	79.92	70-130
42 3-Chloropropene	200.00	168.57	84.29	70-130
48 Methylene Chloride	200.00	163.97	81.98	70-130
50 MTBE	200.00	135.76	67.88*	70-130
52 trans-1,2-Dichloro	200.00	162.66	81.33	70-130
55 Hexane	200.00	164.89	82.44	70-130
59 1,1-Dichloroethane	200.00	175.58	87.79	70-130
60 Vinyl Acetate	200.00	166.92	83.46	70-130
68 cis-1,2-Dichloroet	200.00	168.55	84.28	70-130
70 2-Butanone	200.00	157.58	78.79	70-130
74 Tetrahydrofuran	200.00	154.45	77.23	70-130
76 Chloroform	200.00	173.83	86.91	70-130
77 Cyclohexane	200.00	178.94	89.47	70-130
78 1,1,1-Trichloroeth	200.00	181.74	90.87	70-130
79 Carbon Tetrachlori	200.00	186.84	93.42	70-130
82 2,2,4-Trimethylpen	200.00	172.80	86.40	70-130
83 Benzene	200.00	172.56	86.28	70-130

SPIKE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
89 1,2-Dichloroethane	200.00	176.32	88.16	70-130
93 Heptane	200.00	176.18	88.09	70-130
95 Trichloroethene	200.00	175.36	87.68	70-130
97 Methyl Cyclohexane	200.00	179.50	89.75	60-140
99 1,2-Dichloropropan	200.00	174.71	87.36	70-130
102 1,4-Dioxane	200.00	182.12	91.06	70-130
104 Bromodichlorometha	200.00	177.76	88.88	70-130
108 cis-1,3-Dichloropr	200.00	171.40	85.70	70-130
109 4-Methyl-2-pentano	200.00	170.62	85.31	70-130
111 Toluene	200.00	181.05	90.53	70-130
114 trans-1,3-Dichloro	200.00	152.60	76.30	70-130
115 1,1,2-Trichloroeth	200.00	169.14	84.57	70-130
116 Tetrachloroethene	200.00	168.77	84.38	70-130
120 2-Hexanone	200.00	172.22	86.11	70-130
121 Dibromochlorometha	200.00	178.76	89.38	70-130
124 1,2-Dibromoethane	200.00	179.65	89.83	70-130
127 Chlorobenzene	200.00	175.79	87.90	70-130
128 Ethyl Benzene	200.00	181.75	90.87	70-130
131 m,p-Xylene	200.00	185.57	92.78	70-130
132 o-Xylene	200.00	177.67	88.83	70-130
134 Styrene	200.00	197.73	98.87	70-130
136 Bromoform	200.00	172.02	86.01	70-130
138 Cumene	200.00	189.87	94.94	70-130
142 1,1,2,2-Tetrachlor	200.00	175.86	87.93	70-130
143 Propylbenzene	200.00	195.13	97.56	70-130
147 4-Ethyltoluene	200.00	203.28	101.64	70-130
149 1,3,5-Trimethylben	200.00	221.99	110.99	70-130
152 1,2,4-Trimethylben	200.00	213.37	106.69	70-130
156 1,3-Dichlorobenzen	200.00	191.99	96.00	70-130
159 1,4-Dichlorobenzen	200.00	203.21	101.61	70-130
161 alpha-Chlorotoluen	200.00	318.38	159.19*	70-130
163 1,2-Dichlorobenzen	200.00	198.01	99.00	70-130
169 1,2,4-Trichloroben	200.00	216.73	108.36	70-130
170 Hexachlorobutadien	200.00	220.66	110.33	70-130
171 Naphthalene	20.000	11.611	58.05*	60-140

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 86 1,2-Dichloroethane	400.00	384.76	96.19	70-130
$ 110 Toluene-d8	400.00	397.91	99.48	70-130
$ 139 Bromofluorobenzene	400.00	390.71	97.68	70-130

Eurofins Air Toxics Inc.

EPA METHOD TO14A/TO15

Data file : /chem/msd14.i/18dec14.b/14121803.d
Lab Smp Id: LCS Client Smp ID: LCS
Inj Date : 18-DEC-2014 20:22
Operator : sn Inst ID: msd14.i
Smp Info : 50mL #2687-147
Misc Info : 200ppbv (200ppbv)
Comment : (5&20) - GC/MS
Method : /var/chem/msd14.i/18dec14.b/14451124c.m
Meth Date : 18-Dec-2014 20:32 snguyen Quant Type: ISTD
Cal Date : 24-NOV-2014 18:25 Cal File: 14112421k.d
Als bottle: 1 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT09.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 (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
* 75 Bromochloromethane						CAS #: 74-97-5	
4.753	4.753 (1.000)	130	125878	400.000		80.00- 120.00	100.00
4.753	4.753 (1.000)	128	100191			0.00- 30.00	79.59
4.753	4.753 (1.000)	49	141523			0.00- 30.00	112.43
* 94 1,4-Difluorobenzene						CAS #: 540-36-3	
5.858	5.858 (1.000)	114	575011	400.000		80.00- 120.00	100.00
5.858	5.858 (1.000)	88	86421			0.00- 30.00	15.03
* 125 Chlorobenzene-d5						CAS #: 3114-55-4	
9.832	9.832 (1.000)	117	523880	400.000		80.00- 120.00	100.00
9.832	9.832 (1.000)	82	259172			0.00- 30.00	49.47
$ 86 1,2-Dichloroethane-d4						CAS #: 17060-07-0	
5.396	5.396 (1.135)	65	180160	384.761	384.76	80.00- 120.00	100.00
5.396	5.396 (1.135)	67	94958			0.00- 30.00	52.71
$ 110 Toluene-d8						CAS #: 2037-26-5	
7.635	7.635 (1.303)	98	569889	397.908	397.91	80.00- 120.00	100.00
7.635	7.635 (1.303)	70	59857			0.00- 30.00	10.50

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

$ 110 Toluene-d8 (continued)
  7.635   7.635 (1.303)   100    391449                     0.00-  30.00    68.69
-------------------------------------------------------------------------------
$ 139 Bromofluorobenzene                            CAS #: 460-00-4
 10.951  10.951 (1.114)   174    315226 390.713   390.71  80.00- 120.00   100.00
 10.951  10.951 (1.114)    95    387495                     0.00-  30.00   122.93
 10.951  10.951 (1.114)   176    297036                     0.00-  30.00    94.23
-------------------------------------------------------------------------------
    5 Propylene                                     CAS #: 115-07-1
  1.241   1.241 (0.261)    41     41863 169.461   169.46  80.00- 120.00   100.00
  1.241   1.241 (0.261)    42     27815                     0.00-  30.00    66.44
  1.241   1.227 (0.261)    39     33838                     0.00-  30.00    80.83
-------------------------------------------------------------------------------
    7 Dichlorodifluoromethane/Fr12                  CAS #: 75-71-8
  1.269   1.269 (0.267)    85    218115 193.578   193.58  80.00- 120.00   100.00
  1.269   1.269 (0.267)    87     70558                     0.00-  30.00    32.35
-------------------------------------------------------------------------------
    9 Freon 114                                     CAS #: 76-14-2
  1.353   1.353 (0.285)   135    146130 177.123   177.12  80.00- 120.00   100.00
  1.353   1.353 (0.285)   137     47803                     0.00-  30.00    32.71
-------------------------------------------------------------------------------
   12 Chloromethane                                 CAS #: 74-87-3
  1.423   1.423 (0.299)    50     63803 187.922   187.92  80.00- 120.00   100.00
  1.423   1.423 (0.299)    52     22167                     0.00-  30.00    34.74
-------------------------------------------------------------------------------
   13 Butane                                        CAS #: 106-97-8
  1.479   1.479 (0.311)    58     18443 182.255   182.25  80.00- 120.00   100.00
  1.479   1.479 (0.311)    43    110176                     0.00-  30.00   597.39
-------------------------------------------------------------------------------
   15 Vinyl Chloride                                CAS #: 75-01-4
  1.507   1.507 (0.317)    62     87679 189.379   189.38  80.00- 120.00   100.00
  1.507   1.507 (0.317)    64     28082                     0.00-  30.00    32.03
-------------------------------------------------------------------------------
   16 1,3-Butadiene                                 CAS #: 106-99-0
  1.521   1.521 (0.320)    54     61138 181.001   181.00  80.00- 120.00   100.00
  1.521   1.521 (0.320)    39     57040                     0.00-  30.00    93.30
-------------------------------------------------------------------------------
   18 Bromomethane                                  CAS #: 74-83-9
  1.814   1.815 (0.382)    94     53146 167.853   167.85  80.00- 120.00   100.00
  1.814   1.815 (0.382)    96     49302                     0.00-  30.00    92.77
-------------------------------------------------------------------------------
   19 Chloroethane                                  CAS #: 75-00-3
  1.898   1.898 (0.399)    64     29595 136.808   136.81  80.00- 120.00   100.00(R)
  1.898   1.898 (0.399)    66     10301                     0.00-  30.00    34.81
  1.898   1.898 (0.399)    49      8103                     0.00-  30.00    27.38
-------------------------------------------------------------------------------
```

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
20 Isopentane					CAS #: 78-78-4		
1.912	1.912 (0.402)	43	86733	192.674	192.67	80.00- 120.00	100.00
1.912	1.912 (0.402)	57	69044			0.00- 30.00	79.61
1.912	1.912 (0.402)	72	9534			0.00- 30.00	10.99
23 Trichlorofluoromethane/Fr11					CAS #: 75-69-4		
2.094	2.094 (0.441)	101	264946	188.577	188.58	80.00- 120.00	100.00
2.094	2.094 (0.441)	103	172165			0.00- 30.00	64.98
30 Ethanol					CAS #: 64-17-5		
2.374	2.374 (0.500)	45	27279	195.073	195.07	80.00- 120.00	100.00
2.374	2.374 (0.500)	43	6047			0.00- 30.00	22.17
2.374	2.374 (0.500)	46	12260			0.00- 30.00	44.94
34 Freon 113					CAS #: 76-13-1		
2.598	2.598 (0.547)	151	152451	182.003	182.00	80.00- 120.00	100.00
2.598	2.598 (0.547)	153	97286			0.00- 30.00	63.81
2.598	2.584 (0.547)	101	201160			0.00- 30.00	131.95
36 1,1-Dichloroethene					CAS #: 75-35-4		
2.612	2.612 (0.550)	61	141230	181.219	181.22	80.00- 120.00	100.00
2.626	2.626 (0.553)	96	89570			0.00- 30.00	63.42
2.626	2.612 (0.553)	98	57288			0.00- 30.00	40.56
38 Acetone					CAS #: 67-64-1		
2.752	2.752 (0.579)	58	37494	175.842	175.84	80.00- 120.00	100.00
2.752	2.738 (0.579)	43	108751			0.00- 30.00	290.05
39 Carbon Disulfide					CAS #: 75-15-0		
2.808	2.808 (0.591)	76	220965	165.154	165.15	80.00- 120.00	100.00
41 2-Propanol					CAS #: 67-63-0		
2.892	2.892 (0.608)	45	97439	159.834	159.83	80.00- 120.00	100.00
2.892	2.892 (0.608)	43	23658			0.00- 30.00	24.28
2.892	2.892 (0.608)	59	4398			0.00- 30.00	4.51
42 3-Chloropropene					CAS #: 107-05-1		
3.018	3.004 (0.635)	76	21903	168.570	168.57	80.00- 120.00	100.00
3.018	3.004 (0.635)	41	46219			0.00- 30.00	211.02
48 Methylene Chloride					CAS #: 75-09-2		
3.172	3.172 (0.667)	49	93260	163.968	163.97	80.00- 120.00	100.00
3.172	3.172 (0.667)	84	79273			0.00- 30.00	85.00
3.172	3.172 (0.667)	51	28931			0.00- 30.00	31.02
50 MTBE					CAS #: 1634-04-4		
3.368	3.368 (0.709)	73	150499	135.765	135.76	80.00- 120.00	100.00(R)

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
50 MTBE (continued)							
3.368	3.368 (0.709)	57	33440			0.00- 30.00	22.22
3.368	3.368 (0.709)	41	37703			0.00- 30.00	25.05
52 trans-1,2-Dichloroethene					CAS #: 156-60-5		
3.396	3.396 (0.714)	96	79715	162.665	162.66	80.00- 120.00	100.00
3.396	3.396 (0.714)	61	101399			0.00- 30.00	127.20
3.396	3.396 (0.714)	98	52649			0.00- 30.00	66.05
55 Hexane					CAS #: 110-54-3		
3.591	3.591 (0.756)	57	125469	164.887	164.89	80.00- 120.00	100.00
3.591	3.591 (0.756)	43	71961			0.00- 30.00	57.35
3.591	3.591 (0.756)	86	27299			0.00- 30.00	21.76
59 1,1-Dichloroethane					CAS #: 75-34-3		
3.871	3.871 (0.815)	63	151971	175.585	175.58	80.00- 120.00	100.00
3.871	3.871 (0.815)	65	47959			0.00- 30.00	31.56
60 Vinyl Acetate					CAS #: 108-05-4		
3.927	3.927 (0.826)	86	22872	166.918	166.92	80.00- 120.00	100.00
3.927	3.927 (0.826)	43	179317			0.00- 30.00	784.00
3.927	3.927 (0.826)	42	20584			0.00- 30.00	90.00
68 cis-1,2-Dichloroethene					CAS #: 156-59-2		
4.487	4.487 (0.944)	61	125789	168.554	168.55	80.00- 120.00	100.00
4.487	4.487 (0.944)	96	111430			0.00- 30.00	88.58
4.501	4.487 (0.947)	98	70294			0.00- 30.00	55.88
70 2-Butanone					CAS #: 78-93-3		
4.529	4.529 (0.953)	72	35157	157.584	157.58	80.00- 120.00	100.00
4.529	4.529 (0.953)	43	132069			0.00- 30.00	375.65
4.529	4.529 (0.953)	57	12893			0.00- 30.00	36.67
74 Tetrahydrofuran					CAS #: 109-99-9		
4.739	4.739 (0.997)	42	73937	154.453	154.45	80.00- 120.00	100.00
4.739	4.739 (0.997)	71	35167			0.00- 30.00	47.56
4.739	4.739 (0.997)	72	37763			0.00- 30.00	51.07
76 Chloroform					CAS #: 67-66-3		
4.837	4.837 (1.018)	83	198197	173.830	173.83	80.00- 120.00	100.00
4.837	4.837 (1.018)	85	127445			0.00- 30.00	64.30
77 Cyclohexane					CAS #: 110-82-7		
4.921	4.921 (1.035)	84	130174	178.939	178.94	80.00- 120.00	100.00
4.921	4.921 (1.035)	56	129110			0.00- 30.00	99.18
4.921	4.921 (1.035)	41	71366			0.00- 30.00	54.82

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
78 1,1,1-Trichloroethane					CAS #: 71-55-6		
4.963	4.963 (1.044)	97	205142	181.741	181.74	80.00- 120.00	100.00
4.963	4.963 (1.044)	99	127168			0.00- 30.00	61.99
79 Carbon Tetrachloride					CAS #: 56-23-5		
5.089	5.089 (1.071)	119	195855	186.838	186.84	80.00- 120.00	100.00
5.089	5.089 (1.071)	117	204572			0.00- 30.00	104.45
82 2,2,4-Trimethylpentane					CAS #: 540-84-1		
5.340	5.340 (1.124)	57	409385	172.799	172.80	80.00- 120.00	100.00
5.340	5.340 (1.124)	56	142948			0.00- 30.00	34.92
5.340	5.340 (1.124)	41	109673			0.00- 30.00	26.79
83 Benzene					CAS #: 71-43-2		
5.354	5.354 (0.914)	78	290445	172.560	172.56	80.00- 120.00	100.00
5.354	5.354 (0.914)	77	67923			0.00- 30.00	23.39
89 1,2-Dichloroethane					CAS #: 107-06-2		
5.480	5.480 (0.936)	62	123629	176.319	176.32	80.00- 120.00	100.00
5.480	5.480 (0.936)	64	40530			0.00- 30.00	32.78
93 Heptane					CAS #: 142-82-5		
5.578	5.578 (0.952)	71	94805	176.184	176.18	80.00- 120.00	100.00
5.578	5.578 (0.952)	43	133594			0.00- 30.00	140.91
5.578	5.578 (0.952)	100	36131			0.00- 30.00	38.11
95 Trichloroethene					CAS #: 79-01-6		
6.096	6.096 (1.041)	95	129822	175.365	175.36	80.00- 120.00	100.00
6.096	6.096 (1.041)	130	135362			0.00- 30.00	104.27
6.096	6.096 (1.041)	97	86302			0.00- 30.00	66.48
97 Methyl Cyclohexane					CAS #: 108-87-2		
6.208	6.208 (1.060)	83	171056	179.503	179.50	80.00- 120.00	100.00
6.208	6.208 (1.060)	98	90503			0.00- 30.00	52.91
6.208	6.208 (1.060)	55	118419			0.00- 30.00	69.23
99 1,2-Dichloropropane					CAS #: 78-87-5		
6.404	6.404 (1.093)	63	98273	174.715	174.71	80.00- 120.00	100.00
6.404	6.404 (1.093)	62	65852			0.00- 30.00	67.01
6.404	6.404 (1.093)	41	51123			0.00- 30.00	52.02
102 1,4-Dioxane					CAS #: 123-91-1		
6.544	6.544 (1.117)	88	63242	182.118	182.12	80.00- 120.00	100.00
6.544	6.544 (1.117)	58	37865			0.00- 30.00	59.87
6.530	6.544 (1.115)	57	14028			0.00- 30.00	22.18

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
104 Bromodichloromethane						CAS #: 75-27-4	
6.740	6.740 (1.150)	83	222736	177.764	177.76	80.00- 120.00	100.00
6.740	6.740 (1.150)	85	141687			0.00- 30.00	63.61
108 cis-1,3-Dichloropropene						CAS #: 10061-01-5	
7.341	7.341 (1.253)	75	131967	171.397	171.40	80.00- 120.00	100.00
7.341	7.341 (1.253)	77	42632			0.00- 30.00	32.31
7.341	7.341 (1.253)	39	58969			0.00- 30.00	44.68
109 4-Methyl-2-pentanone						CAS #: 108-10-1	
7.579	7.579 (1.294)	85	33156	170.620	170.62	80.00- 120.00	100.00
7.579	7.579 (1.294)	43	166577			0.00- 30.00	502.40
7.579	7.579 (1.294)	58	74121			0.00- 30.00	223.55
111 Toluene						CAS #: 108-88-3	
7.747	7.747 (1.322)	91	367481	181.055	181.05	80.00- 120.00	100.00
7.747	7.747 (1.322)	92	214058			0.00- 30.00	58.25
114 trans-1,3-Dichloropropene						CAS #: 10061-02-6	
8.307	8.307 (0.845)	75	108324	152.595	152.60	80.00- 120.00	100.00
8.307	8.307 (0.845)	77	33518			0.00- 30.00	30.94
8.307	8.307 (0.845)	39	44098			0.00- 30.00	40.71
115 1,1,2-Trichloroethane						CAS #: 79-00-5	
8.629	8.629 (0.878)	97	123700	169.137	169.14	80.00- 120.00	100.00
8.629	8.629 (0.878)	99	74571			0.00- 30.00	60.28
8.629	8.629 (0.878)	83	106817			0.00- 30.00	86.35
116 Tetrachloroethene						CAS #: 127-18-4	
8.629	8.629 (0.878)	166	167882	168.768	168.77	80.00- 120.00	100.00
8.629	8.629 (0.878)	129	129554			0.00- 30.00	77.17
8.629	8.629 (0.878)	131	125361			0.00- 30.00	74.67
120 2-Hexanone						CAS #: 591-78-6	
9.020	9.020 (0.917)	58	91188	172.222	172.22	80.00- 120.00	100.00
9.020	9.020 (0.917)	43	158254			0.00- 30.00	173.55
9.020	9.020 (0.917)	100	23862			0.00- 30.00	26.17
121 Dibromochloromethane						CAS #: 124-48-1	
9.160	9.160 (0.932)	129	233353	178.759	178.76	80.00- 120.00	100.00
9.160	9.160 (0.932)	127	185180			0.00- 30.00	79.36
124 1,2-Dibromoethane						CAS #: 106-93-4	
9.300	9.300 (0.946)	107	194363	179.652	179.65	80.00- 120.00	100.00
9.300	9.300 (0.946)	109	185254			0.00- 30.00	95.31

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
127 Chlorobenzene					CAS #: 108-90-7		
9.860	9.860 (1.003)	112	300830	175.790	175.79	80.00- 120.00	100.00
9.860	9.860 (1.003)	114	96262			0.00- 30.00	32.00
9.860	9.860 (1.003)	77	162409			0.00- 30.00	53.99
128 Ethyl Benzene					CAS #: 100-41-4		
9.958	9.958 (1.013)	106	146478	181.750	181.75	80.00- 120.00	100.00
9.958	9.958 (1.013)	91	462608			0.00- 30.00	315.82
131 m,p-Xylene					CAS #: 108-38-3		
10.084	10.084 (1.026)	106	178814	185.567	185.57	80.00- 120.00	100.00
10.084	10.084 (1.026)	91	371550			0.00- 30.00	207.79
132 o-Xylene					CAS #: 95-47-6		
10.461	10.461 (1.064)	106	170241	177.667	177.67	80.00- 120.00	100.00
10.461	10.461 (1.064)	91	363404			0.00- 30.00	213.46
134 Styrene					CAS #: 100-42-5		
10.503	10.489 (1.068)	104	290404	197.734	197.73	80.00- 120.00	100.00
10.489	10.489 (1.067)	78	143685			0.00- 30.00	49.48
136 Bromoform					CAS #: 75-25-2		
10.671	10.671 (1.085)	173	220962	172.018	172.02	80.00- 120.00	100.00
10.671	10.671 (1.085)	171	112099			0.00- 30.00	50.73
138 Cumene					CAS #: 98-82-8		
10.783	10.783 (1.097)	105	539614	189.873	189.87	80.00- 120.00	100.00
10.783	10.783 (1.097)	120	153172			0.00- 30.00	28.39
10.783	10.783 (1.097)	51	48888			0.00- 30.00	9.06
142 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
11.105	11.105 (1.129)	83	279508	175.858	175.86	80.00- 120.00	100.00
11.105	11.105 (1.129)	85	179407			0.00- 30.00	64.19
143 Propylbenzene					CAS #: 103-65-1		
11.119	11.119 (1.131)	91	663319	195.127	195.13	80.00- 120.00	100.00
11.119	11.119 (1.131)	120	162153			0.00- 30.00	24.45
11.119	11.119 (1.131)	105	25572			0.00- 30.00	3.86
147 4-Ethyltoluene					CAS #: 622-96-8		
11.203	11.203 (1.139)	105	555413	203.285	203.28	80.00- 120.00	100.00
11.203	11.203 (1.139)	120	170280			0.00- 30.00	30.66
149 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
11.259	11.259 (1.145)	105	463404	221.986	221.99	80.00- 120.00	100.00
11.259	11.259 (1.145)	120	226269			0.00- 30.00	48.83

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
152 1,2,4-Trimethylbenzene						CAS #: 95-63-6	
11.511	11.511 (1.171)	105	439040	213.373	213.37	80.00- 120.00	100.00
11.511	11.511 (1.171)	120	202256			0.00- 30.00	46.07
156 1,3-Dichlorobenzene						CAS #: 541-73-1	
11.707	11.707 (1.191)	146	311099	191.993	191.99	80.00- 120.00	100.00
11.707	11.707 (1.191)	148	199643			0.00- 30.00	64.17
11.707	11.707 (1.191)	111	122956			0.00- 30.00	39.52
159 1,4-Dichlorobenzene						CAS #: 106-46-7	
11.777	11.763 (1.198)	146	315230	203.212	203.21	80.00- 120.00	100.00
11.777	11.777 (1.198)	148	193730			0.00- 30.00	61.46
11.763	11.763 (1.196)	111	116571			0.00- 30.00	36.98
161 alpha-Chlorotoluene						CAS #: 100-44-7	
11.861	11.861 (1.206)	91	284397	318.382	318.38	80.00- 120.00	100.00(R)
11.861	11.861 (1.206)	126	61815			0.00- 30.00	21.74
163 1,2-Dichlorobenzene						CAS #: 95-50-1	
12.001	12.001 (1.221)	146	285132	198.006	198.01	80.00- 120.00	100.00
12.001	12.001 (1.221)	148	181630			0.00- 30.00	63.70
11.987	11.987 (1.219)	111	111981			0.00- 30.00	39.27
169 1,2,4-Trichlorobenzene						CAS #: 120-82-1	
12.854	12.854 (1.307)	180	129837	216.726	216.73	80.00- 120.00	100.00
12.854	12.854 (1.307)	182	127318			0.00- 30.00	98.06
170 Hexachlorobutadiene						CAS #: 87-68-3	
12.896	12.896 (1.312)	225	104777	220.664	220.66	80.00- 120.00	100.00
12.896	12.896 (1.312)	223	66145			0.00- 30.00	63.13
171 Naphthalene						CAS #: 91-20-3	
12.980	12.980 (1.320)	128	14087	11.6109	11.611	80.00- 120.00	100.00(aR)
12.980	12.980 (1.320)	127	1931			0.00- 30.00	13.71

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: msd14.i
Lab File ID: 14121803.d
Lab Smp Id: LCS
Analysis Type: VOA
Quant Type: ISTD
Operator: sn
Method File: /var/chem/msd14.i/18dec14.b/14451124c.m
Misc Info: 200ppbv (200ppbv)

Calibration Date: 18-DEC-2014
Calibration Time: 19:52
Client Smp ID: LCS
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
75 Bromochloromethan	124906	74944	174868	125878	0.78
94 1,4-Difluorobenze	570831	342499	799163	575011	0.73
125 Chlorobenzene-d5	512999	307799	718199	523880	2.12

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
75 Bromochloromethan	4.75	4.42	5.08	4.75	0.00
94 1,4-Difluorobenze	5.86	5.53	6.19	5.86	0.00
125 Chlorobenzene-d5	9.83	9.50	10.16	9.83	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/msd14.i/18dec14.b/14121803.d

Date : 18-DEC-2014 20:22

Client ID: LCS

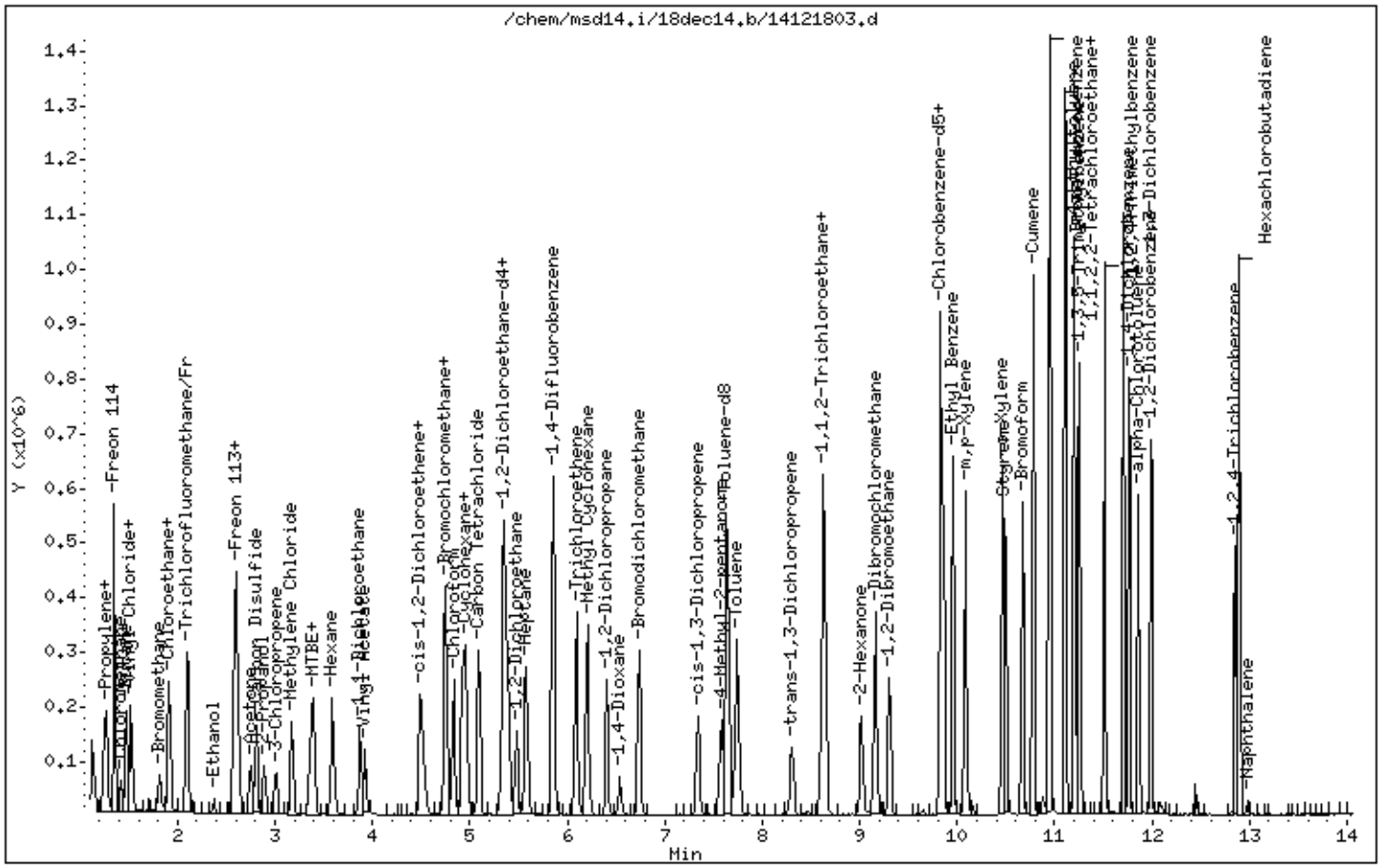
Instrument: msd14.i

Sample Info: 50mL #2687-147

Operator: sn

Column phase: RTx-624

Column diameter: 0.53



eurofins | Air Toxics

Client Sample ID: LCSD

Lab ID#: 1412216A-11AA

EPA METHOD TO-15 GC/MS

File Name:	**14121804**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 12/18/14 08:41 PM**	

Compound	**%Recovery**	**Method Limits**
Acetone	86	70-130
2-Propanol	83	70-130
Benzene	85	70-130
Toluene	90	70-130
Ethyl Benzene	94	70-130
m,p-Xylene	99	70-130
o-Xylene	95	70-130
4-Methyl-2-pentanone	86	70-130

Container Type: NA - Not Applicable

Surrogates	**%Recovery**	**Method Limits**
1,2-Dichloroethane-d4	92	70-130
Toluene-d8	98	70-130
4-Bromofluorobenzene	99	70-130

Report Date: 18-Dec-2014 21:08

Eurofins Air Toxics Inc.

RECOVERY REPORT

Client Name:
Client SDG: 18dec14
Sample Matrix: GAS
Fraction: VOA
Lab Smp Id: LCSD
Client Smp ID: LCSD
Level: LOW
Operator: sn
Data Type: MS DATA
SampleType: LCSD
SpikeList File: 200.spk
Quant Type: ISTD
Sublist File: AT09.sub
Method File: /var/chem/msd14.i/18dec14.b/14451124c.m
Misc Info: 200ppbv (200ppbv)

SPIKE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
5 Propylene	200.00	184.03	92.01	60-140
7 Dichlorodifluorome	200.00	192.69	96.35	70-130
9 Freon 114	200.00	175.69	87.85	70-130
12 Chloromethane	200.00	180.03	90.01	70-130
13 Butane	200.00	194.28	97.14	60-140
15 Vinyl Chloride	200.00	185.73	92.87	70-130
16 1,3-Butadiene	200.00	175.77	87.88	70-130
18 Bromomethane	200.00	232.46	116.23	70-130
19 Chloroethane	200.00	190.19	95.09	70-130
20 Isopentane	200.00	192.34	96.17	60-140
23 Trichlorofluoromet	200.00	196.60	98.30	70-130
30 Ethanol	200.00	176.67	88.33	70-130
34 Freon 113	200.00	182.68	91.34	70-130
36 1,1-Dichloroethene	200.00	169.43	84.71	70-130
38 Acetone	200.00	172.50	86.25	70-130
39 Carbon Disulfide	200.00	160.43	80.21	70-130
41 2-Propanol	200.00	165.89	82.94	70-130
42 3-Chloropropene	200.00	233.54	116.77	70-130
48 Methylene Chloride	200.00	157.04	78.52	70-130
50 MTBE	200.00	174.18	87.09	70-130
52 trans-1,2-Dichloro	200.00	166.61	83.30	70-130
55 Hexane	200.00	160.06	80.03	70-130
59 1,1-Dichloroethane	200.00	170.32	85.16	70-130
60 Vinyl Acetate	200.00	182.16	91.08	70-130
68 cis-1,2-Dichloroet	200.00	170.42	85.21	70-130
70 2-Butanone	200.00	173.50	86.75	70-130
74 Tetrahydrofuran	200.00	153.06	76.53	70-130
76 Chloroform	200.00	168.09	84.05	70-130
77 Cyclohexane	200.00	177.78	88.89	70-130
78 1,1,1-Trichloroeth	200.00	174.72	87.36	70-130
79 Carbon Tetrachlori	200.00	203.08	101.54	70-130
82 2,2,4-Trimethylpen	200.00	170.88	85.44	70-130
83 Benzene	200.00	170.52	85.26	70-130

SPIKE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
89 1,2-Dichloroethane	200.00	174.24	87.12	70-130
93 Heptane	200.00	178.70	89.35	70-130
95 Trichloroethene	200.00	177.10	88.55	70-130
97 Methyl Cyclohexane	200.00	177.91	88.96	60-140
99 1,2-Dichloropropan	200.00	165.28	82.64	70-130
102 1,4-Dioxane	200.00	183.57	91.79	70-130
104 Bromodichlorometha	200.00	176.34	88.17	70-130
108 cis-1,3-Dichloropr	200.00	182.62	91.31	70-130
109 4-Methyl-2-pentano	200.00	171.10	85.55	70-130
111 Toluene	200.00	179.12	89.56	70-130
114 trans-1,3-Dichloro	200.00	182.50	91.25	70-130
115 1,1,2-Trichloroeth	200.00	173.06	86.53	70-130
116 Tetrachloroethene	200.00	175.22	87.61	70-130
120 2-Hexanone	200.00	169.69	84.84	70-130
121 Dibromochlorometha	200.00	184.90	92.45	70-130
124 1,2-Dibromoethane	200.00	183.95	91.97	70-130
127 Chlorobenzene	200.00	180.20	90.10	70-130
128 Ethyl Benzene	200.00	188.05	94.02	70-130
131 m,p-Xylene	200.00	198.92	99.46	70-130
132 o-Xylene	200.00	189.52	94.76	70-130
134 Styrene	200.00	204.94	102.47	70-130
136 Bromoform	200.00	174.78	87.39	70-130
138 Cumene	200.00	195.76	97.88	70-130
142 1,1,2,2-Tetrachlor	200.00	180.22	90.11	70-130
143 Propylbenzene	200.00	199.43	99.72	70-130
147 4-Ethyltoluene	200.00	212.60	106.30	70-130
149 1,3,5-Trimethylben	200.00	220.93	110.46	70-130
152 1,2,4-Trimethylben	200.00	222.94	111.47	70-130
156 1,3-Dichlorobenzen	200.00	207.96	103.98	70-130
159 1,4-Dichlorobenzen	200.00	209.64	104.82	70-130
161 alpha-Chlorotoluen	200.00	338.28	169.14*	70-130
163 1,2-Dichlorobenzen	200.00	203.95	101.97	70-130
169 1,2,4-Trichloroben	200.00	259.82	129.91	70-130
170 Hexachlorobutadien	200.00	281.54	140.77*	70-130
171 Naphthalene	20.000	13.204	66.02	60-140

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 86 1,2-Dichloroethane	400.00	366.52	91.63	70-130
$ 110 Toluene-d8	400.00	393.08	98.27	70-130
$ 139 Bromofluorobenzene	400.00	394.65	98.66	70-130

Eurofins Air Toxics Inc.

EPA METHOD TO14A/TO15

Data file : /chem/msd14.i/18dec14.b/14121804.d
Lab Smp Id: LCSD Client Smp ID: LCSD
Inj Date : 18-DEC-2014 20:41
Operator : sn Inst ID: msd14.i
Smp Info : 50mL #2687-147
Misc Info : 200ppbv (200ppbv)
Comment : (5&20) - GC/MS
Method : /var/chem/msd14.i/18dec14.b/14451124c.m
Meth Date : 18-Dec-2014 20:32 snguyen Quant Type: ISTD
Cal Date : 24-NOV-2014 18:25 Cal File: 14112421k.d
Als bottle: 1 QC Sample: LCSD
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT09.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 (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
* 75 Bromochloromethane						CAS #: 74-97-5	
4.753	4.753 (1.000)	130	132393	400.000		80.00- 120.00	100.00
4.753	4.753 (1.000)	128	103754			0.00- 30.00	78.37
4.753	4.753 (1.000)	49	146593			0.00- 30.00	110.73
* 94 1,4-Difluorobenzene						CAS #: 540-36-3	
5.858	5.858 (1.000)	114	593558	400.000		80.00- 120.00	100.00
5.858	5.858 (1.000)	88	84117			0.00- 30.00	14.17
* 125 Chlorobenzene-d5						CAS #: 3114-55-4	
9.832	9.832 (1.000)	117	528961	400.000		80.00- 120.00	100.00
9.832	9.832 (1.000)	82	259596			0.00- 30.00	49.08
$ 86 1,2-Dichloroethane-d4						CAS #: 17060-07-0	
5.396	5.396 (1.135)	65	180502	366.521	366.52	80.00- 120.00	100.00
5.396	5.396 (1.135)	67	89892			0.00- 30.00	49.80
$ 110 Toluene-d8						CAS #: 2037-26-5	
7.649	7.635 (1.306)	98	581127	393.076	393.08	80.00- 120.00	100.00
7.649	7.635 (1.306)	70	59392			0.00- 30.00	10.22

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

$ 110 Toluene-d8 (continued)
  7.649   7.635 (1.306)   100    393463                    0.00-  30.00    67.71
-------------------------------------------------------------------------------
$ 139 Bromofluorobenzene                            CAS #: 460-00-4
 10.951  10.951 (1.114)   174    321489 394.648   394.65  80.00- 120.00   100.00
 10.951  10.951 (1.114)    95    388162                    0.00-  30.00   120.74
 10.951  10.951 (1.114)   176    307153                    0.00-  30.00    95.54
-------------------------------------------------------------------------------
    5 Propylene                                     CAS #: 115-07-1
  1.241   1.241 (0.261)    41     47814 184.026   184.03  80.00- 120.00   100.00
  1.241   1.241 (0.261)    42     29004                    0.00-  30.00    60.66
  1.241   1.227 (0.261)    39     33945                    0.00-  30.00    70.99
-------------------------------------------------------------------------------
    7 Dichlorodifluoromethane/Fr12                  CAS #: 75-71-8
  1.269   1.269 (0.267)    85    228355 192.693   192.69  80.00- 120.00   100.00
  1.269   1.269 (0.267)    87     74405                    0.00-  30.00    32.58
-------------------------------------------------------------------------------
    9 Freon 114                                     CAS #: 76-14-2
  1.353   1.353 (0.285)   135    152451 175.692   175.69  80.00- 120.00   100.00
  1.353   1.353 (0.285)   137     47263                    0.00-  30.00    31.00
-------------------------------------------------------------------------------
   12 Chloromethane                                 CAS #: 74-87-3
  1.423   1.423 (0.299)    50     64287 180.029   180.03  80.00- 120.00   100.00
  1.423   1.423 (0.299)    52     21209                    0.00-  30.00    32.99
-------------------------------------------------------------------------------
   13 Butane                                        CAS #: 106-97-8
  1.479   1.479 (0.311)    58     20678 194.286   194.28  80.00- 120.00   100.00
  1.479   1.479 (0.311)    43    110607                    0.00-  30.00   534.90
-------------------------------------------------------------------------------
   15 Vinyl Chloride                                CAS #: 75-01-4
  1.507   1.507 (0.317)    62     90441 185.732   185.73  80.00- 120.00   100.00
  1.507   1.507 (0.317)    64     29442                    0.00-  30.00    32.55
-------------------------------------------------------------------------------
   16 1,3-Butadiene                                 CAS #: 106-99-0
  1.535   1.521 (0.323)    54     62443 175.767   175.77  80.00- 120.00   100.00
  1.535   1.521 (0.323)    39     56810                    0.00-  30.00    90.98
-------------------------------------------------------------------------------
   18 Bromomethane                                  CAS #: 74-83-9
  1.814   1.815 (0.382)    94     77410 232.456   232.46  80.00- 120.00   100.00
  1.814   1.815 (0.382)    96     72965                    0.00-  30.00    94.26
-------------------------------------------------------------------------------
   19 Chloroethane                                  CAS #: 75-00-3
  1.898   1.898 (0.399)    64     43272 190.189   190.19  80.00- 120.00   100.00
  1.898   1.898 (0.399)    66     13121                    0.00-  30.00    30.32
  1.898   1.898 (0.399)    49     11742                    0.00-  30.00    27.14
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RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
20 Isopentane					CAS #: 78-78-4		
1.912	1.912 (0.402)	43	91062	192.336	192.34	80.00- 120.00	100.00
1.912	1.912 (0.402)	57	73278			0.00- 30.00	80.47
1.926	1.912 (0.405)	72	11150			0.00- 30.00	12.24
23 Trichlorofluoromethane/Fr11					CAS #: 75-69-4		
2.108	2.094 (0.444)	101	290512	196.598	196.60	80.00- 120.00	100.00
2.108	2.094 (0.444)	103	189052			0.00- 30.00	65.08
30 Ethanol					CAS #: 64-17-5		
2.374	2.374 (0.500)	45	25984	176.669	176.67	80.00- 120.00	100.00
2.374	2.374 (0.500)	43	6906			0.00- 30.00	26.58
2.388	2.374 (0.502)	46	11187			0.00- 30.00	43.05
34 Freon 113					CAS #: 76-13-1		
2.598	2.598 (0.547)	151	160938	182.680	182.68	80.00- 120.00	100.00
2.598	2.598 (0.547)	153	101055			0.00- 30.00	62.79
2.598	2.584 (0.547)	101	210249			0.00- 30.00	130.64
36 1,1-Dichloroethene					CAS #: 75-35-4		
2.626	2.612 (0.553)	61	138876	169.429	169.43	80.00- 120.00	100.00
2.626	2.626 (0.553)	96	93123			0.00- 30.00	67.05
2.626	2.612 (0.553)	98	60670			0.00- 30.00	43.69
38 Acetone					CAS #: 67-64-1		
2.752	2.752 (0.579)	58	38686	172.504	172.50	80.00- 120.00	100.00
2.752	2.738 (0.579)	43	112558			0.00- 30.00	290.95
39 Carbon Disulfide					CAS #: 75-15-0		
2.808	2.808 (0.591)	76	225753	160.429	160.43	80.00- 120.00	100.00
41 2-Propanol					CAS #: 67-63-0		
2.892	2.892 (0.608)	45	106363	165.887	165.89	80.00- 120.00	100.00
2.892	2.892 (0.608)	43	26429			0.00- 30.00	24.85
2.906	2.892 (0.611)	59	4935			0.00- 30.00	4.64
42 3-Chloropropene					CAS #: 107-05-1		
3.018	3.004 (0.635)	76	31916	233.545	233.54	80.00- 120.00	100.00
3.018	3.004 (0.635)	41	68576			0.00- 30.00	214.86
48 Methylene Chloride					CAS #: 75-09-2		
3.172	3.172 (0.667)	49	93945	157.044	157.04	80.00- 120.00	100.00
3.186	3.172 (0.670)	84	79095			0.00- 30.00	84.19
3.172	3.172 (0.667)	51	30631			0.00- 30.00	32.61
50 MTBE					CAS #: 1634-04-4		
3.368	3.368 (0.709)	73	203075	174.179	174.18	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
50 MTBE (continued)							
3.368	3.368 (0.709)	57	44910			0.00- 30.00	22.11
3.368	3.368 (0.709)	41	48166			0.00- 30.00	23.72
52 trans-1,2-Dichloroethene					CAS #: 156-60-5		
3.396	3.396 (0.714)	96	85872	166.606	166.61	80.00- 120.00	100.00
3.396	3.396 (0.714)	61	109840			0.00- 30.00	127.91
3.396	3.396 (0.714)	98	51874			0.00- 30.00	60.41
55 Hexane					CAS #: 110-54-3		
3.591	3.591 (0.756)	57	128103	160.064	160.06	80.00- 120.00	100.00
3.591	3.591 (0.756)	43	70952			0.00- 30.00	55.39
3.591	3.591 (0.756)	86	26778			0.00- 30.00	20.90
59 1,1-Dichloroethane					CAS #: 75-34-3		
3.871	3.871 (0.815)	63	155042	170.319	170.32	80.00- 120.00	100.00
3.871	3.871 (0.815)	65	50867			0.00- 30.00	32.81
60 Vinyl Acetate					CAS #: 108-05-4		
3.927	3.927 (0.826)	86	26252	182.157	182.16	80.00- 120.00	100.00
3.927	3.927 (0.826)	43	191432			0.00- 30.00	729.21
3.927	3.927 (0.826)	42	22486			0.00- 30.00	85.65
68 cis-1,2-Dichloroethene					CAS #: 156-59-2		
4.501	4.487 (0.947)	61	133760	170.415	170.42	80.00- 120.00	100.00
4.501	4.487 (0.947)	96	114070			0.00- 30.00	85.28
4.501	4.487 (0.947)	98	71428			0.00- 30.00	53.40
70 2-Butanone					CAS #: 78-93-3		
4.529	4.529 (0.953)	72	40712	173.503	173.50	80.00- 120.00	100.00
4.529	4.529 (0.953)	43	142209			0.00- 30.00	349.30
4.543	4.529 (0.956)	57	12944			0.00- 30.00	31.79
74 Tetrahydrofuran					CAS #: 109-99-9		
4.739	4.739 (0.997)	42	77060	153.056	153.06	80.00- 120.00	100.00
4.739	4.739 (0.997)	71	36327			0.00- 30.00	47.14
4.739	4.739 (0.997)	72	40297			0.00- 30.00	52.29
76 Chloroform					CAS #: 67-66-3		
4.837	4.837 (1.018)	83	201578	168.095	168.09	80.00- 120.00	100.00
4.837	4.837 (1.018)	85	130985			0.00- 30.00	64.98
77 Cyclohexane					CAS #: 110-82-7		
4.935	4.921 (1.038)	84	136026	177.782	177.78	80.00- 120.00	100.00
4.935	4.921 (1.038)	56	127426			0.00- 30.00	93.68
4.935	4.921 (1.038)	41	70776			0.00- 30.00	52.03

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
78 1,1,1-Trichloroethane					CAS #: 71-55-6		
4.963	4.963 (1.044)	97	207430	174.724	174.72	80.00- 120.00	100.00
4.963	4.963 (1.044)	99	132750			0.00- 30.00	64.00
79 Carbon Tetrachloride					CAS #: 56-23-5		
5.089	5.089 (1.071)	119	223899	203.081	203.08	80.00- 120.00	100.00
5.089	5.089 (1.071)	117	226049			0.00- 30.00	100.96
82 2,2,4-Trimethylpentane					CAS #: 540-84-1		
5.340	5.340 (1.124)	57	425784	170.877	170.88	80.00- 120.00	100.00
5.340	5.340 (1.124)	56	144678			0.00- 30.00	33.98
5.340	5.340 (1.124)	41	112225			0.00- 30.00	26.36
83 Benzene					CAS #: 71-43-2		
5.368	5.354 (0.916)	78	296267	170.519	170.52	80.00- 120.00	100.00
5.368	5.354 (0.916)	77	72717			0.00- 30.00	24.54
89 1,2-Dichloroethane					CAS #: 107-06-2		
5.480	5.480 (0.936)	62	126112	174.241	174.24	80.00- 120.00	100.00
5.480	5.480 (0.936)	64	41065			0.00- 30.00	32.56
93 Heptane					CAS #: 142-82-5		
5.578	5.578 (0.952)	71	99258	178.695	178.70	80.00- 120.00	100.00
5.578	5.578 (0.952)	43	130072			0.00- 30.00	131.04
5.578	5.578 (0.952)	100	38958			0.00- 30.00	39.25
95 Trichloroethene					CAS #: 79-01-6		
6.096	6.096 (1.041)	95	135333	177.097	177.10	80.00- 120.00	100.00
6.096	6.096 (1.041)	130	145150			0.00- 30.00	107.25
6.096	6.096 (1.041)	97	87142			0.00- 30.00	64.39
97 Methyl Cyclohexane					CAS #: 108-87-2		
6.208	6.208 (1.060)	83	175007	177.911	177.91	80.00- 120.00	100.00
6.208	6.208 (1.060)	98	92879			0.00- 30.00	53.07
6.208	6.208 (1.060)	55	125274			0.00- 30.00	71.58
99 1,2-Dichloropropane					CAS #: 78-87-5		
6.404	6.404 (1.093)	63	95965	165.280	165.28	80.00- 120.00	100.00
6.404	6.404 (1.093)	62	68879			0.00- 30.00	71.78
6.404	6.404 (1.093)	41	52535			0.00- 30.00	54.74
102 1,4-Dioxane					CAS #: 123-91-1		
6.544	6.544 (1.117)	88	65804	183.574	183.57	80.00- 120.00	100.00
6.544	6.544 (1.117)	58	41484			0.00- 30.00	63.04
6.544	6.544 (1.117)	57	14575			0.00- 30.00	22.15

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
104 Bromodichloromethane						CAS #: 75-27-4	
6.740	6.740 (1.150)	83	228083	176.344	176.34	80.00- 120.00	100.00
6.740	6.740 (1.150)	85	146857			0.00- 30.00	64.39
108 cis-1,3-Dichloropropene						CAS #: 10061-01-5	
7.341	7.341 (1.253)	75	145143	182.620	182.62	80.00- 120.00	100.00
7.341	7.341 (1.253)	77	46555			0.00- 30.00	32.08
7.341	7.341 (1.253)	39	61523			0.00- 30.00	42.39
109 4-Methyl-2-pentanone						CAS #: 108-10-1	
7.579	7.579 (1.294)	85	34322	171.101	171.10	80.00- 120.00	100.00
7.579	7.579 (1.294)	43	174596			0.00- 30.00	508.70
7.579	7.579 (1.294)	58	76522			0.00- 30.00	222.95
111 Toluene						CAS #: 108-88-3	
7.747	7.747 (1.322)	91	375275	179.117	179.12	80.00- 120.00	100.00
7.747	7.747 (1.322)	92	220560			0.00- 30.00	58.77
114 trans-1,3-Dichloropropene						CAS #: 10061-02-6	
8.307	8.307 (0.845)	75	130808	182.498	182.50	80.00- 120.00	100.00
8.307	8.307 (0.845)	77	40087			0.00- 30.00	30.65
8.307	8.307 (0.845)	39	55399			0.00- 30.00	42.35
115 1,1,2-Trichloroethane						CAS #: 79-00-5	
8.628	8.629 (0.878)	97	127801	173.066	173.06	80.00- 120.00	100.00
8.628	8.629 (0.878)	99	83009			0.00- 30.00	64.95
8.628	8.629 (0.878)	83	110447			0.00- 30.00	86.42
116 Tetrachloroethene						CAS #: 127-18-4	
8.642	8.629 (0.879)	166	175996	175.225	175.22	80.00- 120.00	100.00
8.642	8.629 (0.879)	129	137952			0.00- 30.00	78.38
8.642	8.629 (0.879)	131	131189			0.00- 30.00	74.54
120 2-Hexanone						CAS #: 591-78-6	
9.020	9.020 (0.917)	58	90718	169.688	169.69	80.00- 120.00	100.00
9.020	9.020 (0.917)	43	164762			0.00- 30.00	181.62
9.020	9.020 (0.917)	100	23419			0.00- 30.00	25.82
121 Dibromochloromethane						CAS #: 124-48-1	
9.160	9.160 (0.932)	129	243714	184.903	184.90	80.00- 120.00	100.00
9.160	9.160 (0.932)	127	191051			0.00- 30.00	78.39
124 1,2-Dibromoethane						CAS #: 106-93-4	
9.300	9.300 (0.946)	107	200941	183.949	183.95	80.00- 120.00	100.00
9.300	9.300 (0.946)	109	189859			0.00- 30.00	94.48

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
127 Chlorobenzene					CAS #: 108-90-7		
9.860	9.860 (1.003)	112	311376	180.205	180.20	80.00- 120.00	100.00
9.860	9.860 (1.003)	114	99463			0.00- 30.00	31.94
9.860	9.860 (1.003)	77	171026			0.00- 30.00	54.93
128 Ethyl Benzene					CAS #: 100-41-4		
9.958	9.958 (1.013)	106	153024	188.048	188.05	80.00- 120.00	100.00
9.958	9.958 (1.013)	91	477681			0.00- 30.00	312.16
131 m,p-Xylene					CAS #: 108-38-3		
10.084	10.084 (1.026)	106	193538	198.918	198.92	80.00- 120.00	100.00
10.084	10.084 (1.026)	91	376401			0.00- 30.00	194.48
132 o-Xylene					CAS #: 95-47-6		
10.461	10.461 (1.064)	106	183359	189.519	189.52	80.00- 120.00	100.00
10.461	10.461 (1.064)	91	375445			0.00- 30.00	204.76
134 Styrene					CAS #: 100-42-5		
10.503	10.489 (1.068)	104	303911	204.943	204.94	80.00- 120.00	100.00
10.489	10.489 (1.067)	78	143444			0.00- 30.00	47.20
136 Bromoform					CAS #: 75-25-2		
10.671	10.671 (1.085)	173	226691	174.783	174.78	80.00- 120.00	100.00
10.671	10.671 (1.085)	171	118040			0.00- 30.00	52.07
138 Cumene					CAS #: 98-82-8		
10.783	10.783 (1.097)	105	561746	195.762	195.76	80.00- 120.00	100.00
10.783	10.783 (1.097)	120	147660			0.00- 30.00	26.29
10.783	10.783 (1.097)	51	49607			0.00- 30.00	8.83
142 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
11.105	11.105 (1.129)	83	289222	180.222	180.22	80.00- 120.00	100.00
11.105	11.105 (1.129)	85	190012			0.00- 30.00	65.70
143 Propylbenzene					CAS #: 103-65-1		
11.119	11.119 (1.131)	91	684532	199.433	199.43	80.00- 120.00	100.00
11.119	11.119 (1.131)	120	164130			0.00- 30.00	23.98
11.119	11.119 (1.131)	105	24802			0.00- 30.00	3.62
147 4-Ethyltoluene					CAS #: 622-96-8		
11.203	11.203 (1.139)	105	586485	212.596	212.60	80.00- 120.00	100.00
11.203	11.203 (1.139)	120	173438			0.00- 30.00	29.57
149 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
11.259	11.259 (1.145)	105	465672	220.930	220.93	80.00- 120.00	100.00
11.259	11.259 (1.145)	120	237135			0.00- 30.00	50.92

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
152 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
11.511	11.511 (1.171)	105	463170	222.938	222.94	80.00- 120.00	100.00
11.511	11.511 (1.171)	120	215658			0.00- 30.00	46.56
156 1,3-Dichlorobenzene					CAS #: 541-73-1		
11.707	11.707 (1.191)	146	340240	207.960	207.96	80.00- 120.00	100.00
11.707	11.707 (1.191)	148	215210			0.00- 30.00	63.25
11.707	11.707 (1.191)	111	132218			0.00- 30.00	38.86
159 1,4-Dichlorobenzene					CAS #: 106-46-7		
11.777	11.763 (1.198)	146	328359	209.642	209.64	80.00- 120.00	100.00
11.777	11.777 (1.198)	148	202839			0.00- 30.00	61.77
11.763	11.763 (1.196)	111	120203			0.00- 30.00	36.61
161 alpha-Chlorotoluene					CAS #: 100-44-7		
11.861	11.861 (1.206)	91	305105	338.283	338.28	80.00- 120.00	100.00(R)
11.861	11.861 (1.206)	126	64761			0.00- 30.00	21.23
163 1,2-Dichlorobenzene					CAS #: 95-50-1		
12.001	12.001 (1.221)	146	296534	203.946	203.95	80.00- 120.00	100.00
12.001	12.001 (1.221)	148	191455			0.00- 30.00	64.56
11.987	11.987 (1.219)	111	122580			0.00- 30.00	41.34
169 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
12.840	12.854 (1.306)	180	157163	259.819	259.82	80.00- 120.00	100.00
12.840	12.854 (1.306)	182	144905			0.00- 30.00	92.20
170 Hexachlorobutadiene					CAS #: 87-68-3		
12.896	12.896 (1.312)	225	134977	281.536	281.54	80.00- 120.00	100.00(R)
12.896	12.896 (1.312)	223	83496			0.00- 30.00	61.86
171 Naphthalene					CAS #: 91-20-3		
12.980	12.980 (1.320)	128	16175	13.2039	13.204	80.00- 120.00	100.00(a)
12.980	12.980 (1.320)	127	2140			0.00- 30.00	13.23

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: msd14.i
Lab File ID: 14121804.d
Lab Smp Id: LCSD
Analysis Type: VOA
Quant Type: ISTD
Operator: sn
Method File: /var/chem/msd14.i/18dec14.b/14451124c.m
Misc Info: 200ppbv (200ppbv)

Calibration Date: 18-DEC-2014
Calibration Time: 19:52
Client Smp ID: LCSD
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
75 Bromochloromethan	124906	74944	174868	132393	5.99
94 1,4-Difluorobenze	570831	342499	799163	593558	3.98
125 Chlorobenzene-d5	512999	307799	718199	528961	3.11

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
75 Bromochloromethan	4.75	4.42	5.08	4.75	0.00
94 1,4-Difluorobenze	5.86	5.53	6.19	5.86	0.00
125 Chlorobenzene-d5	9.83	9.50	10.16	9.83	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/msd14.i/18dec14.b/14121804.d

Date : 18-DEC-2014 20:41

Client ID: LCSD

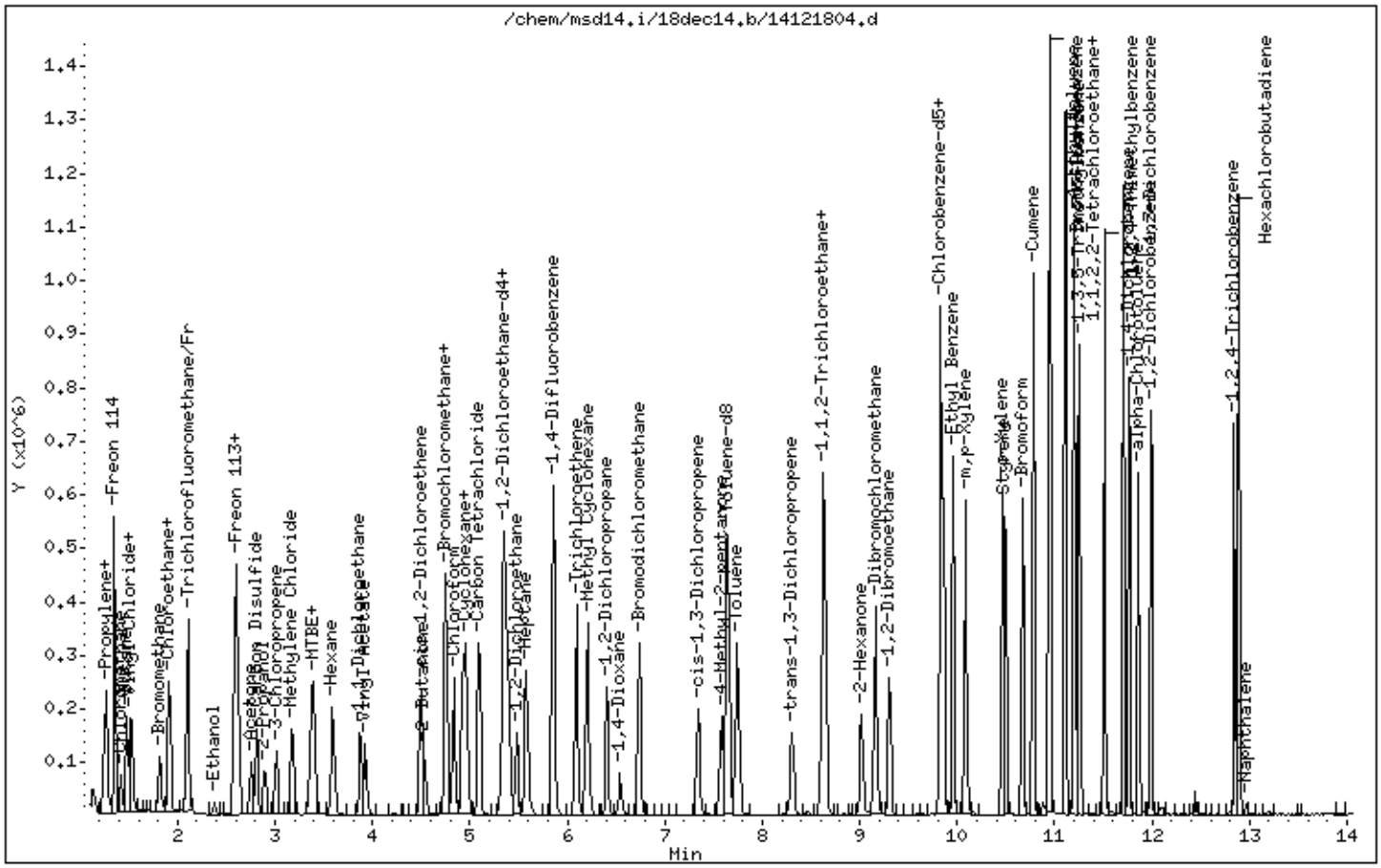
Instrument: msd14.i

Sample Info: 50mL #2687-147

Operator: sn

Column phase: RTx-624

Column diameter: 0.53



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Client Sample ID: LCS

Lab ID#: 1412216A-11B

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p122203**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 12/22/14 10:16 AM**	

Compound	**%Recovery**	**Method Limits**
Benzene	107	70-130
2-Propanol	90	70-130
Ethyl Benzene	100	70-130
m,p-Xylene	104	70-130
o-Xylene	108	70-130
4-Methyl-2-pentanone	94	70-130
Acetone	88	70-130
Toluene	104	70-130

Container Type: NA - Not Applicable

Surrogates	**%Recovery**	**Method Limits**
Toluene-d8	104	70-130
1,2-Dichloroethane-d4	92	70-130
4-Bromofluorobenzene	102	70-130

Report Date: 22-Dec-2014 11:26

Eurofins Air Toxics Inc.

RECOVERY REPORT

Client Name:
Client SDG: 22dec14
Sample Matrix: GAS
Fraction: VOA
Lab Smp Id: LCS
Client Smp ID: LCS
Level: LOW
Operator: js
Data Type: MS DATA
SampleType: LCS
SpikeList File: 2926Spectra.spk
Quant Type: ISTD
Sublist File: AT12.sub
Method File: /var/chem/msdp.i/22dec14.b/p14q1217a.m
Misc Info: 100ppbv (100ppbv)

SPIKE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
9 Propylene	50.000	47.041	94.08	70-130
11 Freon 12	50.000	48.806	97.61	70-130
15 Freon 114	50.000	43.491	86.98	70-130
17 Chloromethane	50.000	49.696	99.39	70-130
23 Butane	50.000	55.188	110.38	70-130
25 Vinyl Chloride	50.000	52.502	105.00	70-130
26 1,3-Butadiene	50.000	48.931	97.86	70-130
29 Bromomethane	50.000	45.172	90.34	70-130
30 Chloroethane	50.000	46.779	93.56	70-130
31 Isopentane	50.000	44.955	89.91	70-130
35 Freon 11	50.000	43.244	86.49	70-130
42 Ethanol	50.000	47.270	94.54	70-130
49 Freon 113	50.000	49.914	99.83	70-130
50 1,1-Dichloroethene	50.000	49.930	99.86	70-130
52 Acetone	50.000	43.888	87.78	70-130
56 Carbon Disulfide	50.000	42.634	85.27	70-130
57 2-Propanol	50.000	45.189	90.38	70-130
58 3-Chloropropene	50.000	43.087	86.17	70-130
66 Methylene Chloride	50.000	47.656	95.31	70-130
72 Methyl tert-butyl	50.000	45.587	91.17	70-130
73 trans-1,2-Dichloro	50.000	43.741	87.48	70-130
78 Hexane	50.000	46.222	92.45	70-130
82 1,1-Dichloroethane	50.000	45.328	90.66	70-130
86 Vinyl Acetate	50.000	44.394	88.79	70-130
91 cis-1,2-Dichloroet	50.000	47.168	94.34	70-130
92 2-Butanone	50.000	42.970	85.94	70-130
99 Tetrahydrofuran	50.000	42.200	84.40	70-130
100 Chloroform	50.000	45.278	90.56	70-130
103 1,1,1-Trichloroeth	50.000	46.972	93.94	70-130
106 Carbon Tetrachlori	50.000	46.739	93.48	70-130
102 Cyclohexane	50.000	48.773	97.55	70-130
113 2,2,4-Trimethylpen	50.000	55.749	111.50	70-130
116 Benzene	50.000	53.472	106.94	70-130

SPIKE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
120 1,2-Dichloroethane	50.000	48.432	96.86	70-130
121 Heptane	50.000	56.016	112.03	70-130
125 Trichloroethene	50.000	50.809	101.62	70-130
127 Methylcyclohexane	50.000	56.553	113.11	70-130
132 1,2-Dichloropropan	50.000	50.362	100.72	70-130
136 1,4-Dioxane	50.000	49.234	98.47	70-130
138 Bromodichlorometha	50.000	49.572	99.14	70-130
144 cis-1,3-Dichloropr	50.000	50.452	100.90	70-130
145 4-Methyl-2-pentano	50.000	47.287	94.57	70-130
147 Toluene	50.000	52.052	104.10	70-130
150 trans-1,3-Dichloro	50.000	45.522	91.04	70-130
155 1,1,2-Trichloroeth	50.000	47.463	94.93	70-130
156 Tetrachloroethene	50.000	49.010	98.02	70-130
158 2-Hexanone	50.000	44.853	89.71	70-130
160 Dibromochlorometha	50.000	48.834	97.67	70-130
161 1,2-Dibromoethane	50.000	49.648	99.30	70-130
165 Chlorobenzene	50.000	50.600	101.20	70-130
167 Ethyl Benzene	50.000	49.768	99.54	70-130
169 m,p-Xylene	50.000	52.285	104.57	70-130
171 o-Xylene	50.000	53.921	107.84	70-130
172 Styrene	50.000	54.272	108.54	70-130
174 Bromoform	50.000	50.093	100.19	70-130
175 Cumene	50.000	51.909	103.82	70-130
181 1,1,2,2-Tetrachlor	50.000	49.822	99.64	70-130
182 Propylbenzene	50.000	53.419	106.84	70-130
188 4-Ethyltoluene	50.000	54.319	108.64	70-130
190 1,3,5-Trimethylben	50.000	62.319	124.64	70-130
196 1,2,4-Trimethylben	50.000	60.520	121.04	70-130
208 1,3-Dichlorobenzen	50.000	56.870	113.74	70-130
209 1,4-Dichlorobenzen	50.000	57.947	115.89	70-130
212 alpha-Chlorotoluen	50.000	96.678	193.36*	70-130
214 1,2-Dichlorobenzen	50.000	62.242	124.48	70-130
226 1,2,4-Trichloroben	50.000	113.59	227.18*	70-130
227 Hexachlorobutadien	50.000	90.272	180.54*	70-130
228 Naphthalene	5.000	5.449	108.99	70-130

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 117 1,2-Dichloroethane	25.000	23.076	92.30	70-130
$ 146 Toluene-d8	25.000	26.098	104.39	70-130
$ 177 4-Bromofluorobenze	25.000	25.582	102.33	70-130

Eurofins Air Toxics Inc.

EPA TO-15/MODIFIED TO14A

Data file : /chem/msdp.i/22dec14.b/p122203.d
Lab Smp Id: LCS Client Smp ID: LCS
Inj Date : 22-DEC-2014 10:16
Operator : js Inst ID: msdp.i
Smp Info : 100ml #2687-110A
Misc Info : 100ppbv (100ppbv)
Comment : STANDARD LEVEL - GC/MS
Method : /var/chem/msdp.i/22dec14.b/p14q1217a.m
Meth Date : 22-Dec-2014 11:19 jscarbro Quant Type: ISTD
Cal Date : 17-DEC-2014 21:17 Cal File: p121708.d
Als bottle: 14 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT12.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
* 98 Bromochloromethane						CAS #: 74-97-5	
5.448	5.455 (1.000)	130	130367	25.0000		80.00- 120.00	100.00
5.448	5.448 (1.000)	128	89936			0.00- 30.00	68.99
5.448	5.448 (1.000)	49	235883			0.00- 30.00	180.94
* 123 1,4-Difluorobenzene						CAS #: 540-36-3	
6.344	6.344 (1.000)	114	570885	25.0000		80.00- 120.00	100.00
6.344	6.344 (1.000)	88	99628			0.00- 30.00	17.45
* 163 Chlorobenzene-d5						CAS #: 3114-55-4	
8.779	8.779 (1.000)	117	632500	25.0000		80.00- 120.00	100.00
8.779	8.779 (1.000)	82	391070			0.00- 30.00	61.83
$ 117 1,2-Dichloroethane-d4						CAS #: 17060-07-0	
5.986	5.985 (1.099)	65	287184	23.0760	23.076	80.00- 120.00	100.00
5.986	5.985 (1.099)	67	162091			0.00- 30.00	56.44

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
$ 146 Toluene-d8					CAS #: 2037-26-5		
7.554	7.554 (1.191)	98	702185	26.0977	26.098	80.00- 120.00	100.00
7.554	7.554 (1.191)	70	84345			0.00- 30.00	12.01
7.554	7.554 (1.191)	100	458372			0.00- 30.00	65.28
$ 177 4-Bromofluorobenzene					CAS #: 460-00-4		
9.761	9.760 (1.112)	174	479918	25.5817	25.582	80.00- 120.00	100.00
9.761	9.760 (1.112)	95	566599			0.00- 30.00	118.06
9.761	9.760 (1.112)	176	478844			0.00- 30.00	99.78
9 Propylene					CAS #: 115-07-1		
1.473	1.473 (0.270)	41	518164	47.0409	47.041	80.00- 120.00	100.00
1.473	1.473 (0.270)	42	351800			0.00- 30.00	67.89
1.473	1.473 (0.270)	39	364295			0.00- 30.00	70.30
11 Freon 12					CAS #: 75-71-8		
1.509	1.509 (0.277)	85	1728932	48.8061	48.806	80.00- 120.00	100.00
1.509	1.509 (0.277)	87	552373			0.00- 30.00	31.95
15 Freon 114					CAS #: 76-14-2		
1.631	1.623 (0.299)	135	1027017	43.4915	43.491	80.00- 120.00	100.00
1.631	1.623 (0.299)	137	337690			0.00- 30.00	32.88
17 Chloromethane					CAS #: 74-87-3		
1.702	1.702 (0.312)	50	537886	49.6958	49.696	80.00- 120.00	100.00
1.702	1.702 (0.312)	52	181693			0.00- 30.00	33.78
23 Butane					CAS #: 106-97-8		
1.788	1.781 (0.328)	58	137495	55.1884	55.188	80.00- 120.00	100.00
1.788	1.781 (0.328)	43	1027039			0.00- 30.00	746.96
25 Vinyl Chloride					CAS #: 75-01-4		
1.817	1.817 (0.333)	62	614681	52.5021	52.502	80.00- 120.00	100.00
1.817	1.817 (0.333)	64	181027			0.00- 30.00	29.45
26 1,3-Butadiene					CAS #: 106-99-0		
1.845	1.845 (0.339)	54	514952	48.9314	48.931	80.00- 120.00	100.00
1.845	1.845 (0.339)	39	477151			0.00- 30.00	92.66
29 Bromomethane					CAS #: 74-83-9		
2.196	2.196 (0.403)	94	343180	45.1716	45.172	80.00- 120.00	100.00
2.196	2.196 (0.403)	96	334117			0.00- 30.00	97.36
30 Chloroethane					CAS #: 75-00-3		
2.311	2.304 (0.424)	64	254499	46.7792	46.779	80.00- 120.00	100.00
2.311	2.304 (0.424)	66	83806			0.00- 30.00	32.93

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
30 Chloroethane (continued)							
2.311	2.304 (0.424)	49	73492			0.00- 30.00	28.88
31 Isopentane					CAS #: 78-78-4		
2.340	2.339 (0.429)	43	621032	44.9554	44.955	80.00- 120.00	100.00
2.347	2.347 (0.431)	57	442108			0.00- 30.00	71.19
35 Freon 11					CAS #: 75-69-4		
2.569	2.569 (0.471)	101	1519086	43.2438	43.244	80.00- 120.00	100.00
2.569	2.569 (0.471)	103	999230			0.00- 30.00	65.78
42 Ethanol					CAS #: 64-17-5		
2.891	2.891 (0.531)	45	194310	47.2701	47.270	80.00- 120.00	100.00
2.891	2.891 (0.531)	43	43215			0.00- 30.00	22.24
2.891	2.891 (0.531)	46	71535			0.00- 30.00	36.81
49 Freon 113					CAS #: 76-13-1		
3.221	3.213 (0.591)	151	724508	49.9145	49.914	80.00- 120.00	100.00
3.221	3.213 (0.591)	153	442204			0.00- 30.00	61.04
3.214	3.213 (0.590)	101	856311			0.00- 30.00	118.19
50 1,1-Dichloroethene					CAS #: 75-35-4		
3.242	3.242 (0.595)	98	231095	49.9301	49.930	80.00- 120.00	100.00
3.242	3.242 (0.595)	96	368869			0.00- 30.00	159.62
3.242	3.242 (0.595)	61	781916			0.00- 30.00	338.35
52 Acetone					CAS #: 67-64-1		
3.385	3.385 (0.621)	58	229075	43.8875	43.888	80.00- 120.00	100.00
3.385	3.385 (0.621)	43	693826			0.00- 30.00	302.88
56 Carbon Disulfide					CAS #: 75-15-0		
3.479	3.478 (0.638)	76	957400	42.6339	42.634	80.00- 120.00	100.00
57 2-Propanol					CAS #: 67-63-0		
3.565	3.564 (0.654)	45	851390	45.1893	45.189	80.00- 120.00	100.00
3.565	3.564 (0.654)	43	170369			0.00- 30.00	20.01
3.557	3.564 (0.653)	59	34310			0.00- 30.00	4.03
58 3-Chloropropene					CAS #: 107-05-1		
3.722	3.722 (0.683)	76	163543	43.0870	43.087	80.00- 120.00	100.00
3.722	3.722 (0.683)	41	579729			0.00- 30.00	354.48
66 Methylene Chloride					CAS #: 75-09-2		
3.901	3.901 (0.716)	49	565225	47.6557	47.656	80.00- 120.00	100.00
3.901	3.901 (0.716)	84	327631			0.00- 30.00	57.96
3.901	3.901 (0.716)	51	174791			0.00- 30.00	30.92

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
72 Methyl tert-butyl ether					CAS #: 1634-04-4		
4.130	4.130 (0.758)	73	1170842	45.5873	45.587	80.00- 120.00	100.00
4.130	4.130 (0.758)	57	304488			0.00- 30.00	26.01
4.130	4.130 (0.758)	41	276520			0.00- 30.00	23.62
73 trans-1,2-Dichloroethene					CAS #: 156-60-5		
4.152	4.152 (0.762)	98	197603	43.7412	43.741	80.00- 120.00	100.00
4.152	4.152 (0.762)	61	616286			0.00- 30.00	311.88
4.152	4.152 (0.762)	96	319769			0.00- 30.00	161.82
78 Hexane					CAS #: 110-54-3		
4.374	4.367 (0.803)	57	766458	46.2225	46.222	80.00- 120.00	100.00
4.367	4.367 (0.801)	43	464598			0.00- 30.00	60.62
4.374	4.374 (0.803)	86	94217			0.00- 30.00	12.29
82 1,1-Dichloroethane					CAS #: 75-34-3		
4.639	4.639 (0.851)	63	869394	45.3284	45.328	80.00- 120.00	100.00
4.639	4.639 (0.851)	65	263489			0.00- 30.00	30.31
86 Vinyl Acetate					CAS #: 108-05-4		
4.689	4.689 (0.861)	86	96605	44.3944	44.394	80.00- 120.00	100.00
4.689	4.682 (0.861)	43	1330292			0.00- 30.00	1377.04
91 cis-1,2-Dichloroethene					CAS #: 156-59-2		
5.226	5.226 (0.959)	98	276052	47.1678	47.168	80.00- 120.00	100.00
5.226	5.219 (0.959)	96	435030			0.00- 30.00	157.59
5.219	5.219 (0.958)	61	754554			0.00- 30.00	273.34
92 2-Butanone					CAS #: 78-93-3		
5.248	5.248 (0.963)	72	197149	42.9706	42.970	80.00- 120.00	100.00
5.248	5.248 (0.963)	43	1007911			0.00- 30.00	511.24
5.248	5.248 (0.963)	57	82873			0.00- 30.00	42.04
99 Tetrahydrofuran					CAS #: 109-99-9		
5.448	5.448 (1.000)	42	576725	42.1996	42.200	80.00- 120.00	100.00
5.448	5.448 (1.000)	71	179475			0.00- 30.00	31.12
5.448	5.448 (1.000)	72	176624			0.00- 30.00	30.63
100 Chloroform					CAS #: 67-66-3		
5.513	5.513 (1.012)	83	991091	45.2784	45.278	80.00- 120.00	100.00
5.513	5.513 (1.012)	85	635180			0.00- 30.00	64.09
102 Cyclohexane					CAS #: 110-82-7		
5.628	5.627 (1.033)	84	546043	48.7726	48.773	80.00- 120.00	100.00
5.628	5.627 (1.033)	56	872846			0.00- 30.00	159.85
5.628	5.627 (1.033)	41	455024			0.00- 30.00	83.33

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
103 1,1,1-Trichloroethane						CAS #: 71-55-6	
5.642	5.642 (1.035)	97	1152938	46.9723	46.972	80.00- 120.00	100.00
5.642	5.642 (1.035)	99	728909			0.00- 30.00	63.22
106 Carbon Tetrachloride						CAS #: 56-23-5	
5.756	5.756 (1.057)	119	1181132	46.7392	46.739	80.00- 120.00	100.00
5.756	5.756 (1.057)	117	1252958			0.00- 30.00	106.08
113 2,2,4-Trimethylpentane						CAS #: 540-84-1	
5.957	5.957 (1.093)	57	2742545	55.7492	55.749	80.00- 120.00	100.00
5.957	5.957 (1.093)	56	889903			0.00- 30.00	32.45
5.957	5.957 (1.093)	41	686327			0.00- 30.00	25.03
116 Benzene						CAS #: 71-43-2	
5.971	5.971 (0.941)	78	1374912	53.4715	53.472	80.00- 120.00	100.00
5.971	5.971 (0.941)	77	322025			0.00- 30.00	23.42
120 1,2-Dichloroethane						CAS #: 107-06-2	
6.057	6.057 (0.955)	62	807654	48.4319	48.432	80.00- 120.00	100.00
6.057	6.057 (0.955)	64	263153			0.00- 30.00	32.58
121 Heptane						CAS #: 142-82-5	
6.129	6.129 (0.966)	71	467250	56.0157	56.016	80.00- 120.00	100.00
6.129	6.129 (0.966)	43	1076418			0.00- 30.00	230.37
6.129	6.129 (0.966)	57	609405			0.00- 30.00	130.42
125 Trichloroethene						CAS #: 79-01-6	
6.537	6.537 (1.030)	95	613941	50.8092	50.809	80.00- 120.00	100.00
6.537	6.537 (1.030)	130	566012			0.00- 30.00	92.19
6.537	6.537 (1.030)	97	387692			0.00- 30.00	63.15
127 Methylcyclohexane						CAS #: 108-87-2	
6.645	6.644 (1.047)	83	783523	56.5530	56.553	80.00- 120.00	100.00
6.645	6.644 (1.047)	98	366899			0.00- 30.00	46.83
6.645	6.637 (1.047)	55	902292			0.00- 30.00	115.16
132 1,2-Dichloropropane						CAS #: 78-87-5	
6.766	6.766 (1.067)	63	628975	50.3623	50.362	80.00- 120.00	100.00
6.766	6.766 (1.067)	62	450414			0.00- 30.00	71.61
6.766	6.766 (1.067)	41	331732			0.00- 30.00	52.74
136 1,4-Dioxane						CAS #: 123-91-1	
6.860	6.859 (1.081)	88	326237	49.2344	49.234	80.00- 120.00	100.00
6.860	6.852 (1.081)	58	301913			0.00- 30.00	92.54
6.860	6.852 (1.081)	57	96118			0.00- 30.00	29.46

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
138 Bromodichloromethane						CAS #: 75-27-4	
6.996	6.995 (1.103)	83	1195809	49.5716	49.572	80.00- 120.00	100.00
6.996	6.995 (1.103)	85	775887			0.00- 30.00	64.88
144 cis-1,3-Dichloropropene						CAS #: 10061-01-5	
7.368	7.368 (1.161)	75	885133	50.4525	50.452	80.00- 120.00	100.00
7.368	7.368 (1.161)	77	284907			0.00- 30.00	32.19
7.368	7.368 (1.161)	39	473769			0.00- 30.00	53.53
145 4-Methyl-2-pentanone						CAS #: 108-10-1	
7.483	7.483 (1.180)	58	581834	47.2866	47.287	80.00- 120.00	100.00
7.476	7.475 (1.178)	43	1486616			0.00- 30.00	255.51
7.483	7.483 (1.180)	85	195725			0.00- 30.00	33.64
147 Toluene						CAS #: 108-88-3	
7.612	7.611 (1.200)	91	1945693	52.0525	52.052	80.00- 120.00	100.00
7.612	7.611 (1.200)	92	1102289			0.00- 30.00	56.65
150 trans-1,3-Dichloropropene						CAS #: 10061-02-6	
7.848	7.848 (0.894)	75	948358	45.5218	45.522	80.00- 120.00	100.00
7.848	7.848 (0.894)	77	308280			0.00- 30.00	32.51
7.848	7.848 (0.894)	39	448793			0.00- 30.00	47.32
155 1,1,2-Trichloroethane						CAS #: 79-00-5	
7.998	7.998 (0.911)	97	629106	47.4635	47.463	80.00- 120.00	100.00
7.998	7.998 (0.911)	99	392303			0.00- 30.00	62.36
7.998	7.998 (0.911)	83	561000			0.00- 30.00	89.17
156 Tetrachloroethene						CAS #: 127-18-4	
8.049	8.048 (0.917)	166	934054	49.0098	49.010	80.00- 120.00	100.00
8.049	8.048 (0.917)	129	661014			0.00- 30.00	70.77
8.049	8.048 (0.917)	131	643780			0.00- 30.00	68.92
158 2-Hexanone						CAS #: 591-78-6	
8.163	8.163 (0.930)	58	831788	44.8529	44.853	80.00- 120.00	100.00
8.163	8.163 (0.930)	43	1524829			0.00- 30.00	183.32
8.170	8.170 (0.931)	100	131184			0.00- 30.00	15.77
160 Dibromochloromethane						CAS #: 124-48-1	
8.314	8.313 (0.947)	129	1224771	48.8343	48.834	80.00- 120.00	100.00
8.314	8.313 (0.947)	127	950783			0.00- 30.00	77.63
161 1,2-Dibromoethane (EDB)						CAS #: 106-93-4	
8.428	8.428 (0.960)	107	982608	49.6479	49.648	80.00- 120.00	100.00
8.428	8.428 (0.960)	109	891050			0.00- 30.00	90.68

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
165 Chlorobenzene						CAS #: 108-90-7	
8.801	8.801 (1.002)	112	1536450	50.6001	50.600	80.00- 120.00	100.00
8.808	8.808 (1.003)	114	467447			0.00- 30.00	30.42
8.801	8.801 (1.002)	77	1015527			0.00- 30.00	66.10
167 Ethyl Benzene						CAS #: 100-41-4	
8.858	8.858 (1.009)	106	807926	49.7680	49.768	80.00- 120.00	100.00
8.858	8.851 (1.009)	91	2793292			0.00- 30.00	345.74
169 m,p-Xylene						CAS #: 108-38-3	
8.951	8.951 (1.020)	106	1029596	52.2847	52.285	80.00- 120.00	100.00
8.951	8.951 (1.020)	91	2282370			0.00- 30.00	221.68
171 o-Xylene						CAS #: 95-47-6	
9.295	9.295 (1.059)	106	993808	53.9213	53.921	80.00- 120.00	100.00
9.295	9.295 (1.059)	91	2293623			0.00- 30.00	230.79
172 Styrene						CAS #: 100-42-5	
9.309	9.309 (1.060)	104	1735263	54.2725	54.272	80.00- 120.00	100.00
9.309	9.309 (1.060)	78	955518			0.00- 30.00	55.06
174 Bromoform						CAS #: 75-25-2	
9.503	9.502 (1.082)	173	1488142	50.0932	50.093	80.00- 120.00	100.00
9.503	9.502 (1.082)	171	763590			0.00- 30.00	51.31
175 Cumene						CAS #: 98-82-8	
9.574	9.574 (1.091)	105	3352804	51.9087	51.909	80.00- 120.00	100.00
9.582	9.574 (1.091)	120	781225			0.00- 30.00	23.30
9.574	9.574 (1.091)	51	384839			0.00- 30.00	11.48
181 1,1,2,2-Tetrachloroethane						CAS #: 79-34-5	
9.882	9.882 (1.126)	83	1641904	49.8220	49.822	80.00- 120.00	100.00
9.882	9.882 (1.126)	85	1049502			0.00- 30.00	63.92
182 Propylbenzene						CAS #: 103-65-1	
9.918	9.918 (1.130)	91	4240423	53.4188	53.419	80.00- 120.00	100.00
9.918	9.918 (1.130)	120	852736			0.00- 30.00	20.11
9.918	9.918 (1.130)	105	149635			0.00- 30.00	3.53
188 4-Ethyltoluene						CAS #: 622-96-8	
10.011	10.011 (1.140)	120	926073	54.3190	54.319	80.00- 120.00	100.00
10.011	10.011 (1.140)	105	3618956			0.00- 30.00	390.79
190 1,3,5-Trimethylbenzene						CAS #: 108-67-8	
10.061	10.061 (1.146)	120	1357202	62.3188	62.319	80.00- 120.00	100.00
10.061	10.061 (1.146)	105	3041830			0.00- 30.00	224.13

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
196 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
10.384	10.384 (1.183)	120	1187761	60.5204	60.520	80.00- 120.00	100.00
10.384	10.384 (1.183)	105	2939238			0.00- 30.00	247.46
208 1,3-Dichlorobenzene					CAS #: 541-73-1		
10.670	10.670 (1.215)	146	1920442	56.8696	56.870	80.00- 120.00	100.00
10.670	10.670 (1.215)	148	1224827			0.00- 30.00	63.78
10.670	10.670 (1.215)	111	806551			0.00- 30.00	42.00
209 1,4-Dichlorobenzene					CAS #: 106-46-7		
10.749	10.749 (1.224)	146	1929474	57.9471	57.947	80.00- 120.00	100.00
10.749	10.749 (1.224)	148	1245199			0.00- 30.00	64.54
10.749	10.749 (1.224)	111	784616			0.00- 30.00	40.66
212 alpha-Chlorotoluene					CAS #: 100-44-7		
10.864	10.863 (1.237)	91	3222242	96.6780	96.678	80.00- 120.00	100.00(R)
10.864	10.863 (1.237)	126	588826			0.00- 30.00	18.27
214 1,2-Dichlorobenzene					CAS #: 95-50-1		
11.071	11.071 (1.261)	146	1869495	62.2419	62.242	80.00- 120.00	100.00
11.071	11.071 (1.261)	148	1206451			0.00- 30.00	64.53
11.071	11.071 (1.261)	111	832041			0.00- 30.00	44.51
226 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
12.468	12.468 (1.420)	180	2159883	113.589	113.59	80.00- 120.00	100.00(R)
12.468	12.468 (1.420)	182	2047928			0.00- 30.00	94.82
227 Hexachlorobutadiene					CAS #: 87-68-3		
12.554	12.554 (1.430)	225	2022242	90.2723	90.272	80.00- 120.00	100.00(R)
12.561	12.554 (1.431)	223	1266367			0.00- 30.00	62.62
228 Naphthalene					CAS #: 91-20-3		
12.726	12.726 (1.450)	128	365718	5.44943	5.449	80.00- 120.00	100.00
12.726	12.726 (1.450)	127	62073			0.00- 30.00	16.97

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdp.i
Lab File ID: p122203.d
Lab Smp Id: LCS
Analysis Type: VOA
Quant Type: ISTD
Operator: js
Method File: /var/chem/msdp.i/22dec14.b/p14q1217a.m
Misc Info: 100ppbv (100ppbv)

Calibration Date: 22-DEC-2014
Calibration Time: 09:50
Client Smp ID: LCS
Level: LOW
Sample Type: AIR

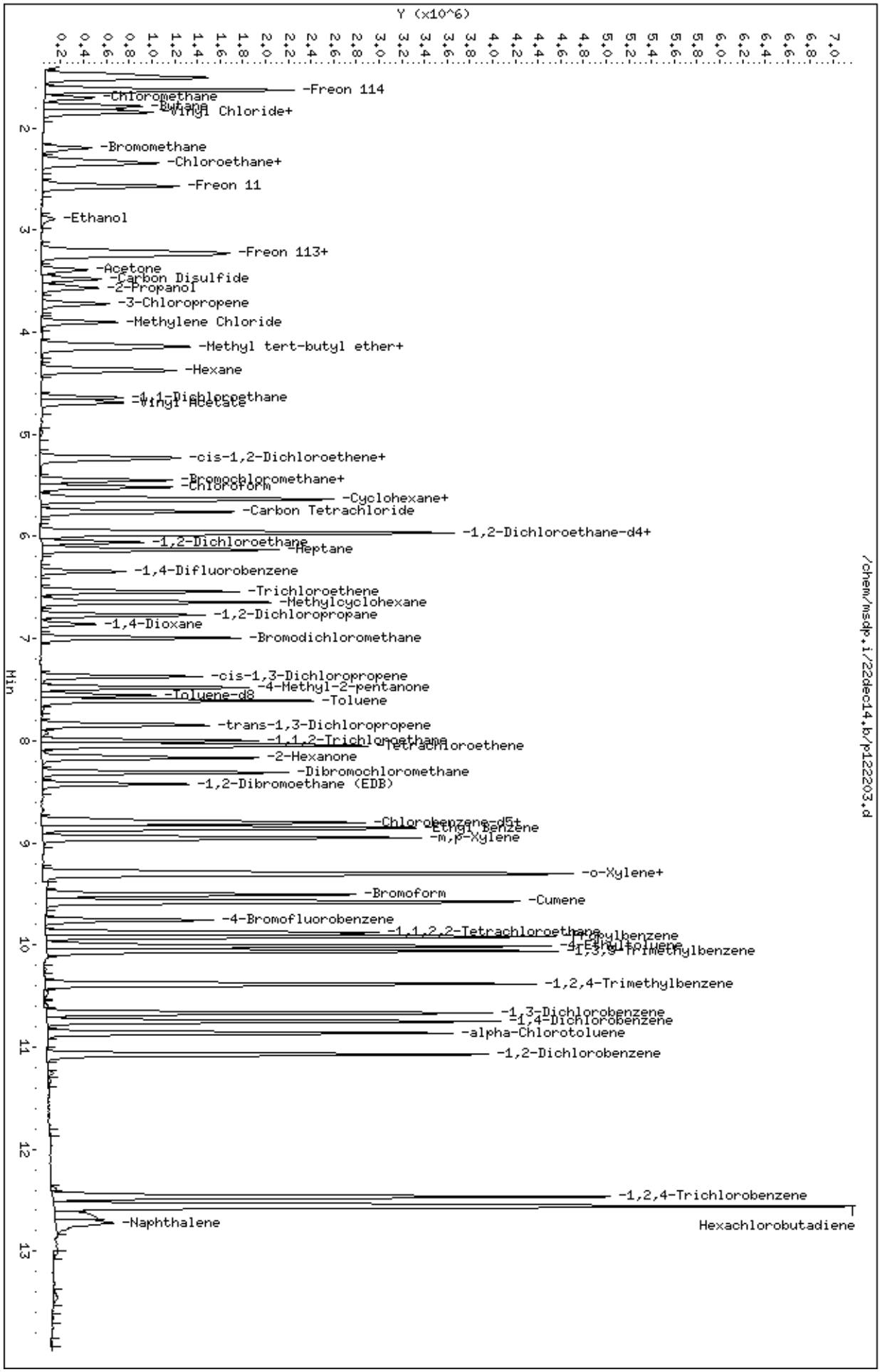
COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
98 Bromochloromethan	153275	91965	214585	130367	-14.95
123 1,4-Difluorobenze	654249	392549	915949	570885	-12.74
163 Chlorobenzene-d5	700329	420197	980461	632500	-9.69

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
98 Bromochloromethan	5.46	5.13	5.79	5.45	-0.13
123 1,4-Difluorobenze	6.34	6.01	6.67	6.34	0.00
163 Chlorobenzene-d5	8.78	8.45	9.11	8.78	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/msdp.i/22dec14.b/p122203.d
Date : 22-DEC-2014 10:16
Client ID: LCS
Sample Info: 100ml #2687-110A
Column phase: RTX-624

Instrument: msdp.i
Operator: js
Column diameter: 0.25



Data File: /chem/msdp.i/22dec14.b/p122203.d

Date : 22-DEC-2014 10:16

Client ID: LCS

Instrument: msdp.i

Sample Info: 100ml #2687-110A

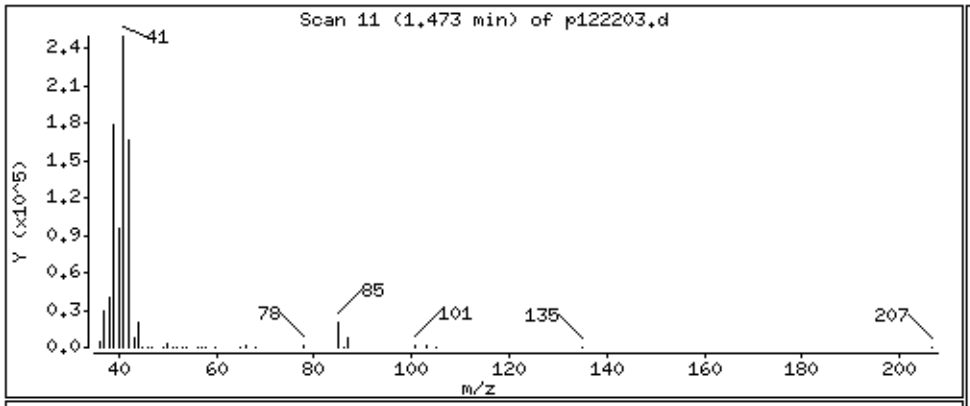
Operator: js

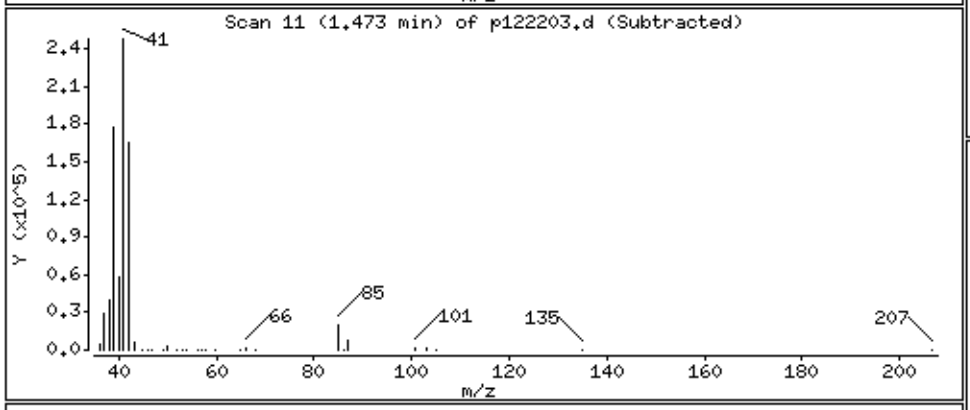
Column phase: RTX-624

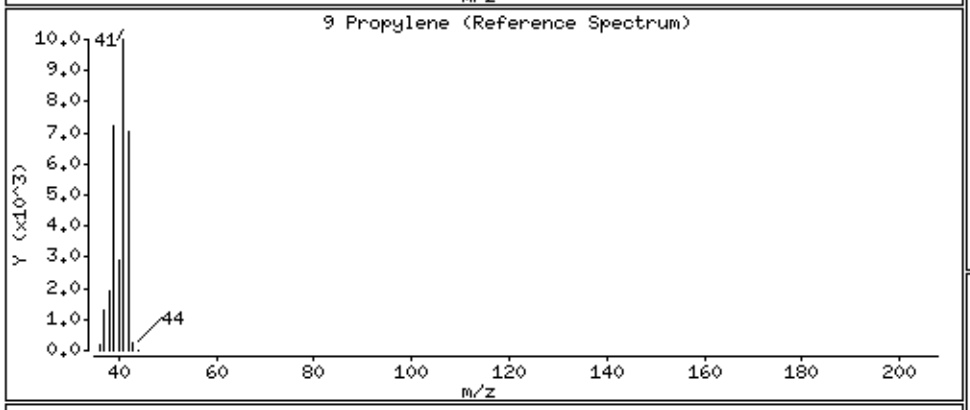
Column diameter: 0.25

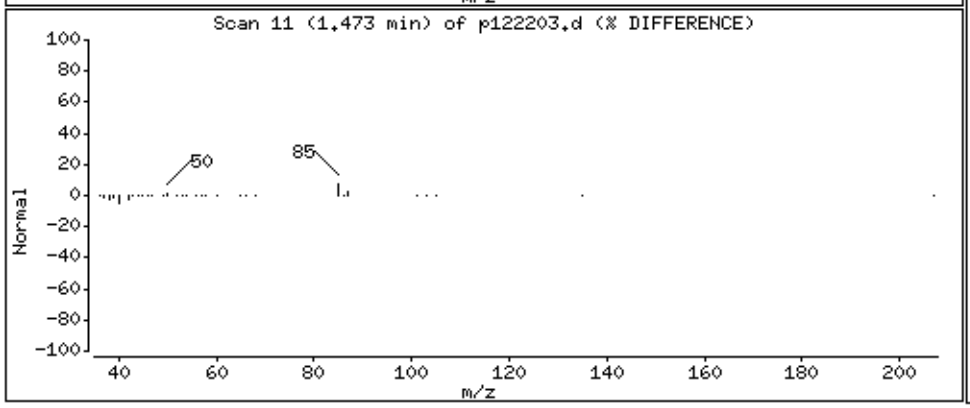
9 Propylene

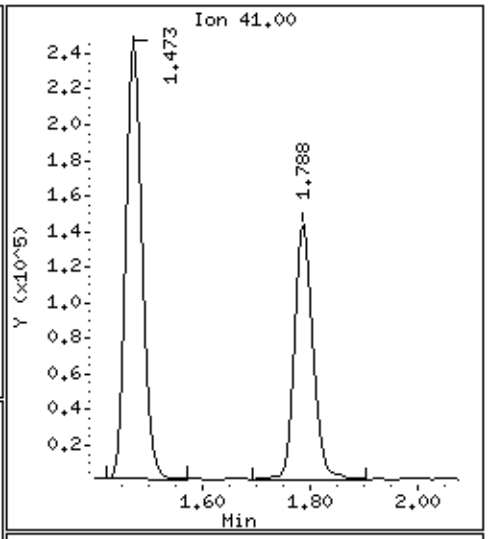
Concentration: 47.041 PPBV

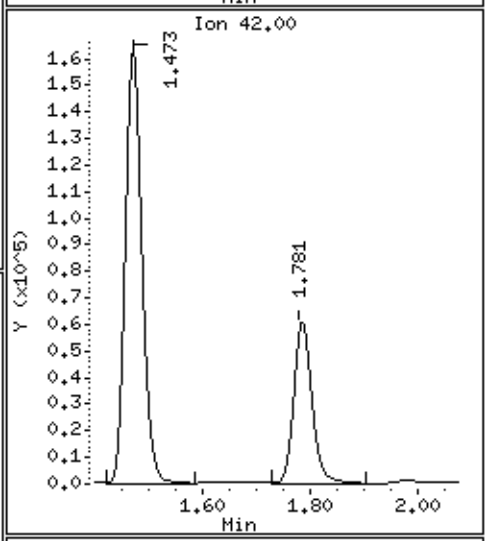


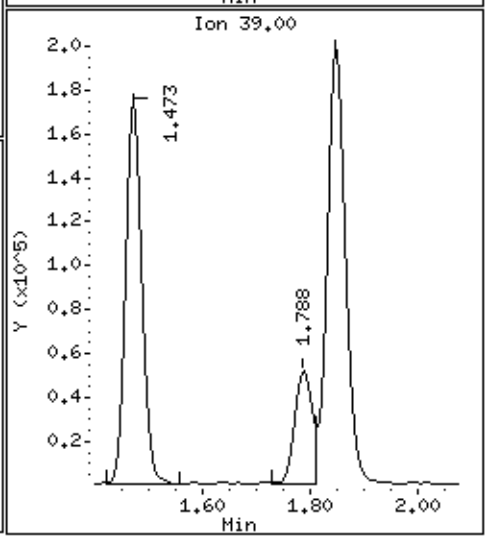












Data File: /chem/msdp.i/22dec14.b/p122203.d

Date : 22-DEC-2014 10:16

Client ID: LCS

Instrument: msdp.i

Sample Info: 100ml #2687-110A

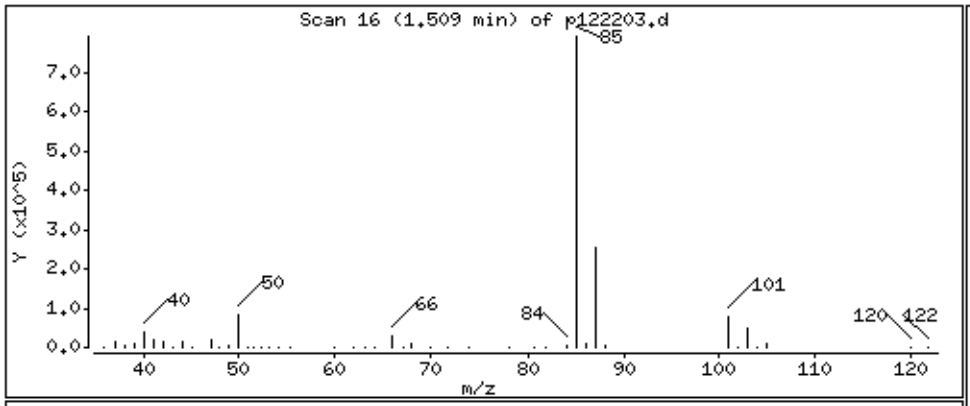
Operator: js

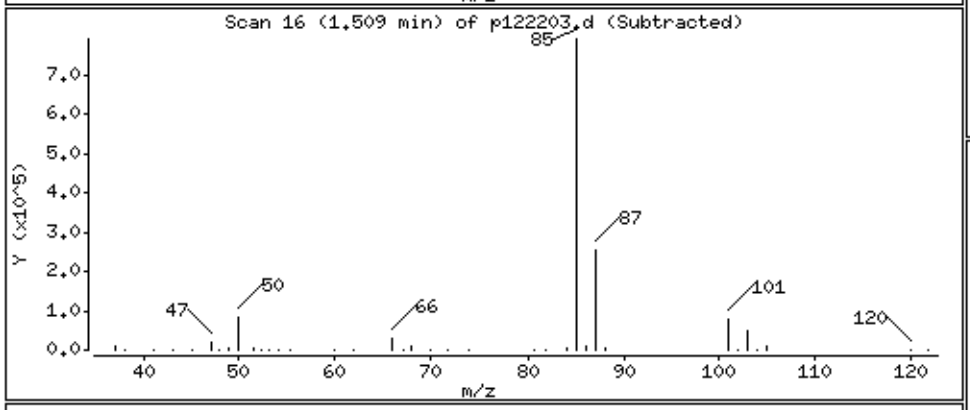
Column phase: RTX-624

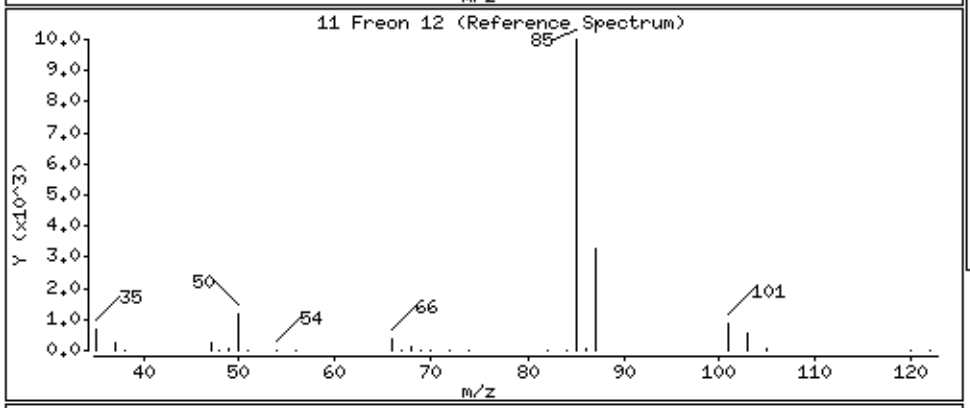
Column diameter: 0.25

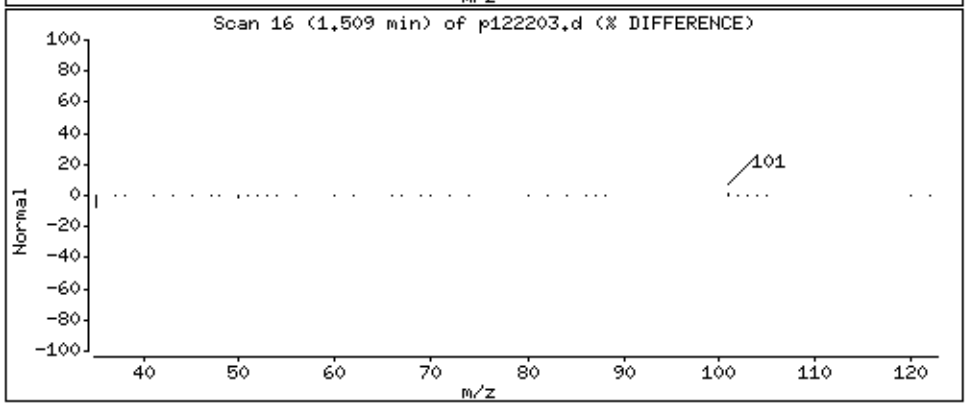
11 Freon 12

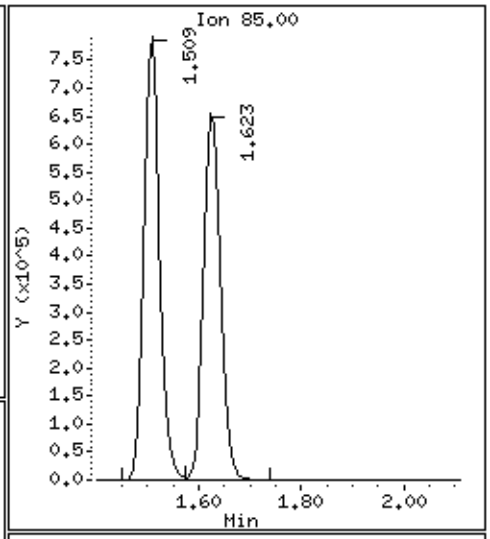
Concentration: 48.806 PPBV

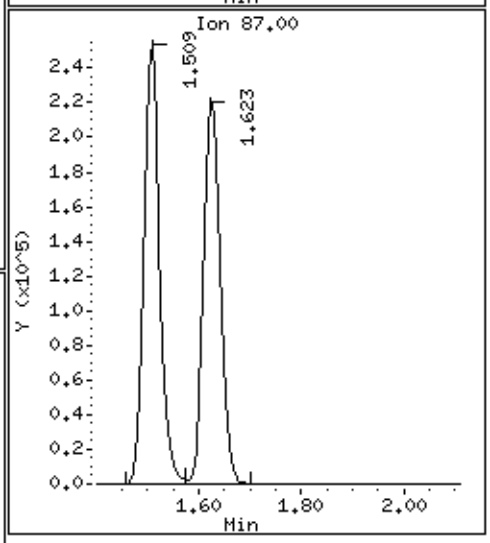












Data File: /chem/msdp.i/22dec14.b/p122203.d

Date : 22-DEC-2014 10:16

Client ID: LCS

Instrument: msdp.i

Sample Info: 100ml #2687-110A

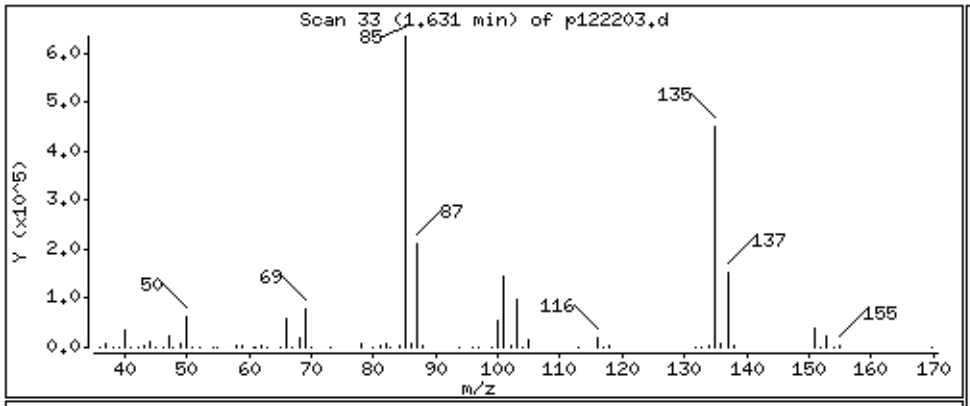
Operator: js

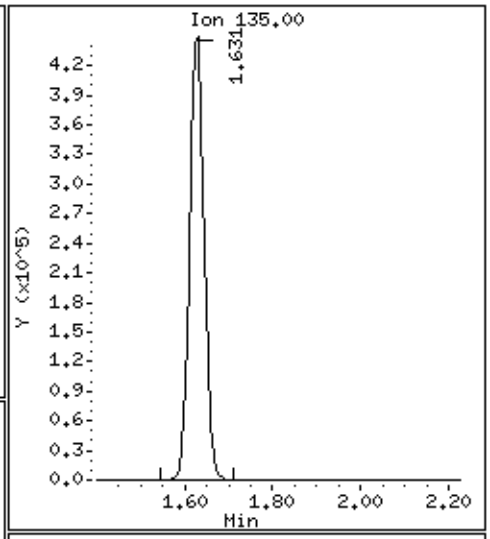
Column phase: RTX-624

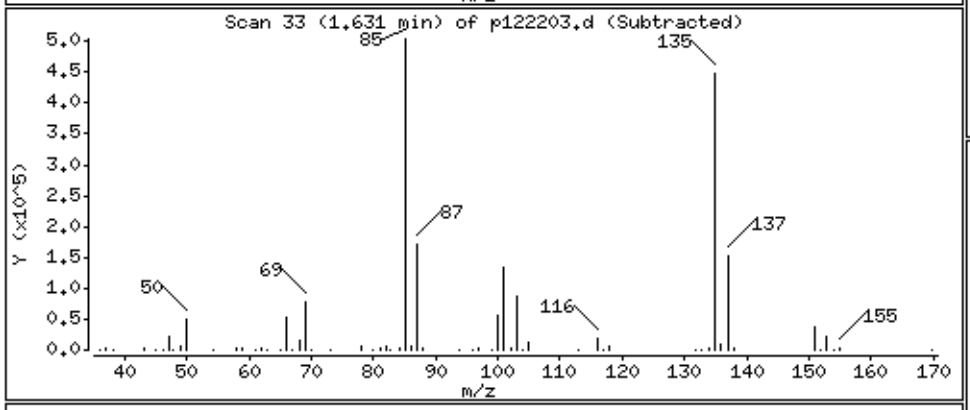
Column diameter: 0.25

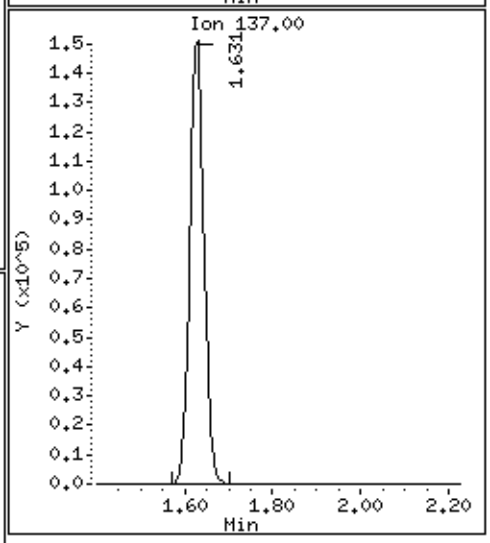
15 Freon 114

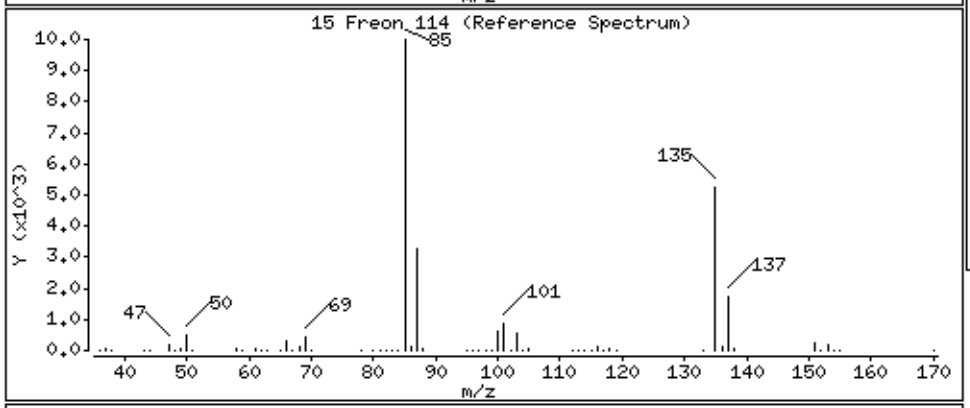
Concentration: 43.491 PPBV

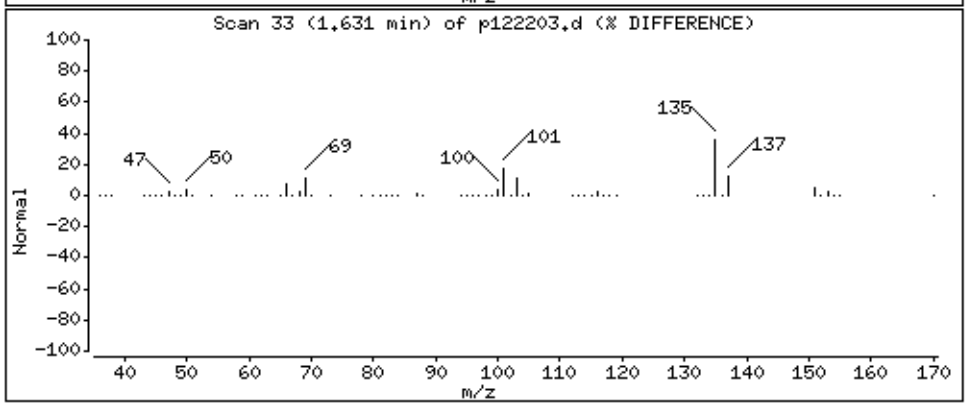












Data File: /chem/msdp.i/22dec14.b/p122203.d

Date : 22-DEC-2014 10:16

Client ID: LCS

Instrument: msdp.i

Sample Info: 100ml #2687-110A

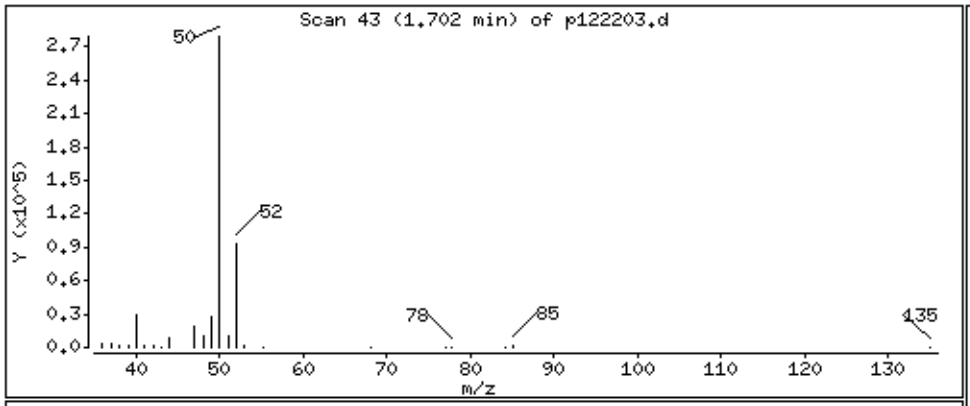
Operator: js

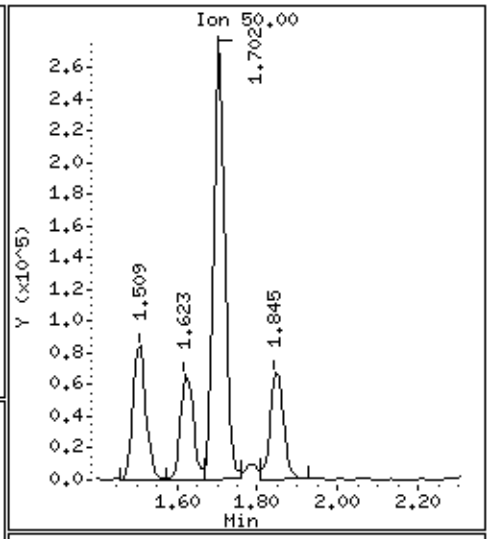
Column phase: RTX-624

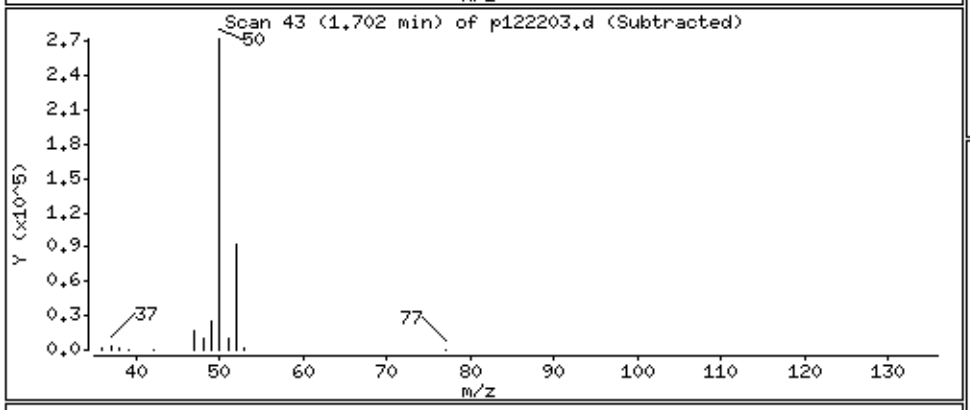
Column diameter: 0.25

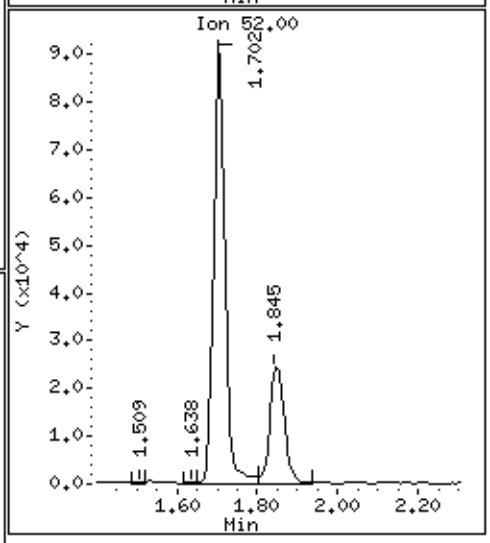
17 Chloromethane

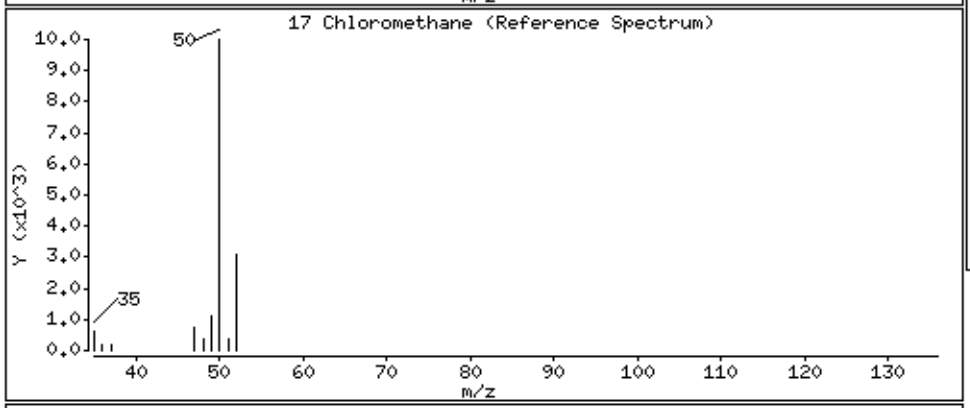
Concentration: 49.696 PPBV

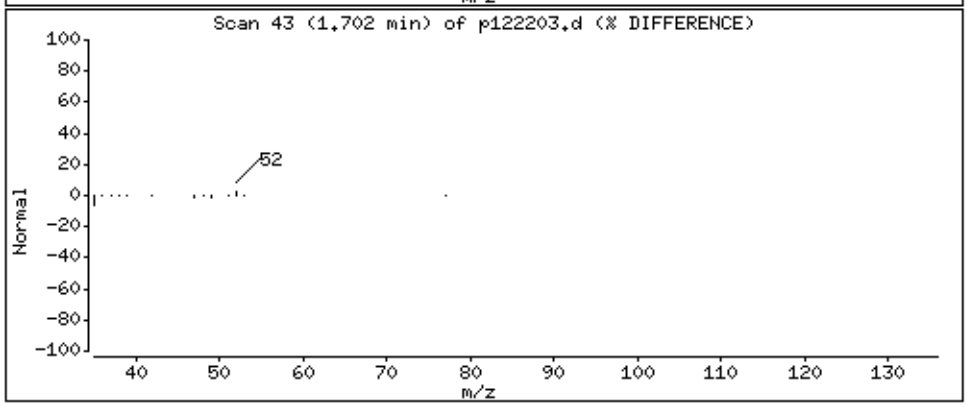












Data File: /chem/msdp.i/22dec14.b/p122203.d

Date : 22-DEC-2014 10:16

Client ID: LCS

Instrument: msdp.i

Sample Info: 100ml #2687-110A

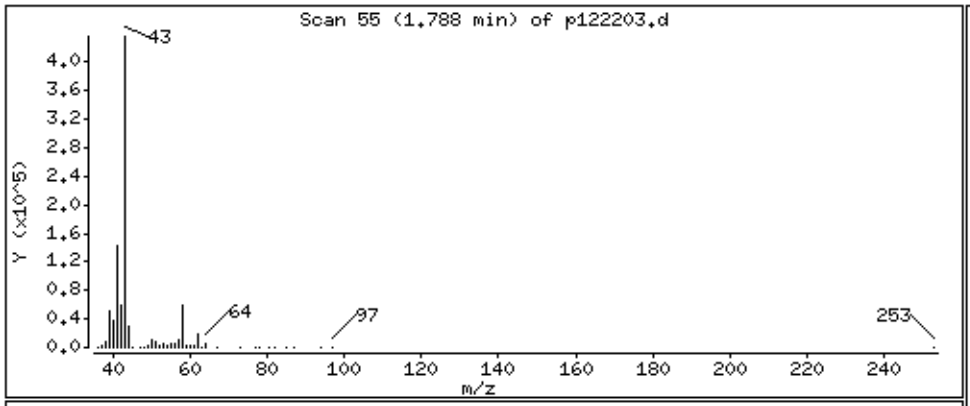
Operator: js

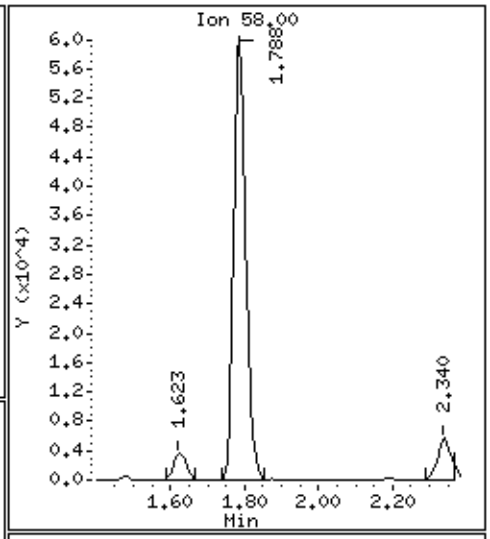
Column phase: RTX-624

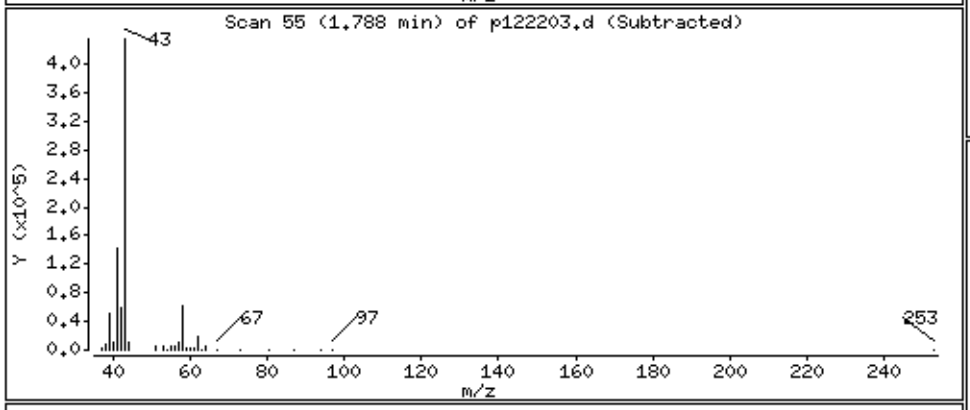
Column diameter: 0.25

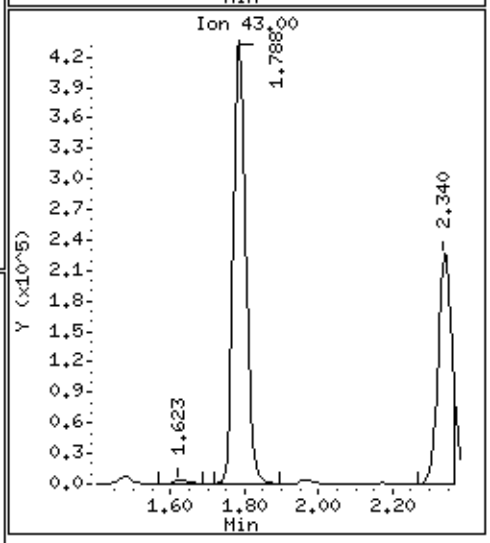
23 Butane

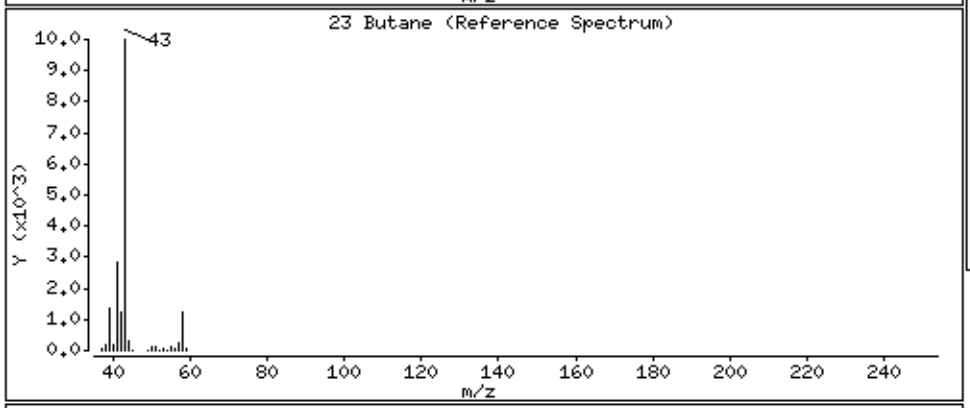
Concentration: 55.188 PPBV

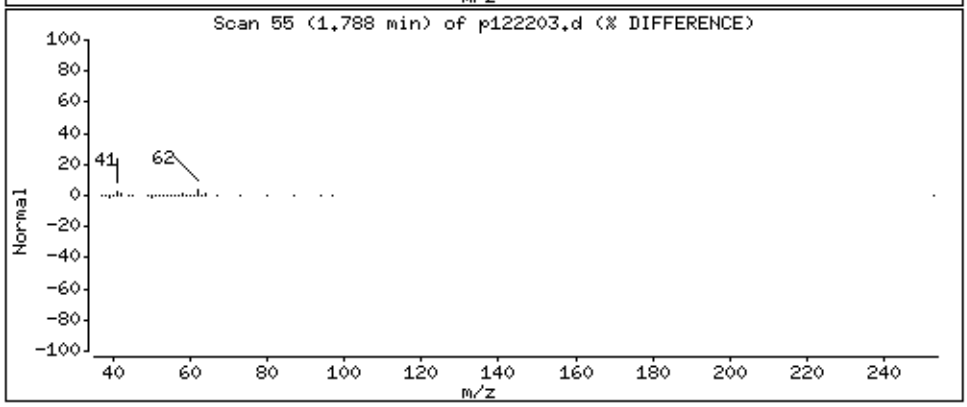












Data File: /chem/msdp.i/22dec14.b/p122203.d

Date : 22-DEC-2014 10:16

Client ID: LCS

Instrument: msdp.i

Sample Info: 100ml #2687-110A

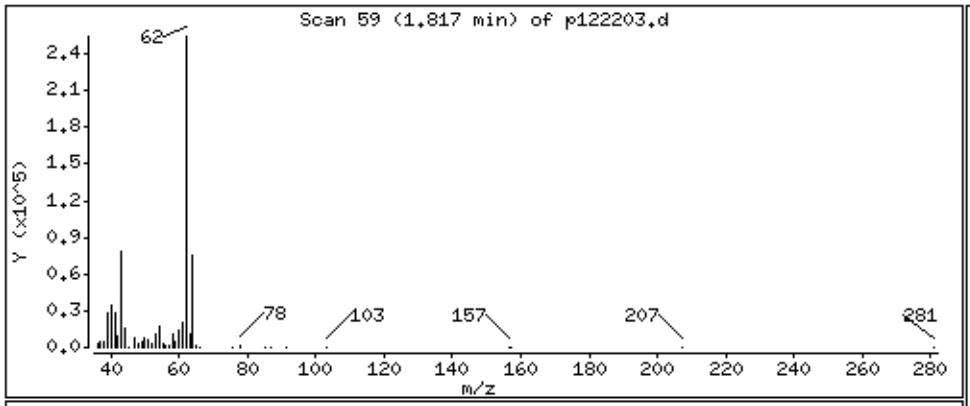
Operator: js

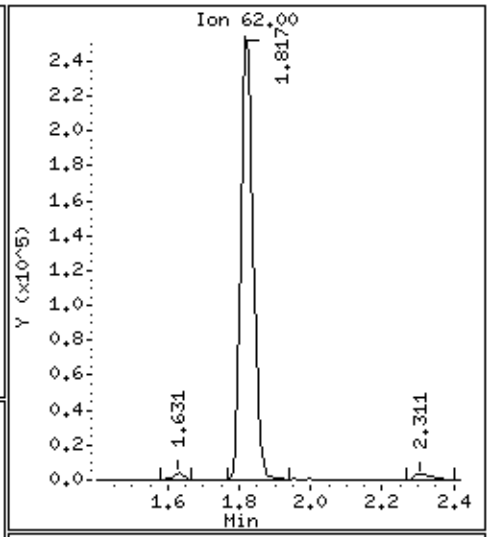
Column phase: RTX-624

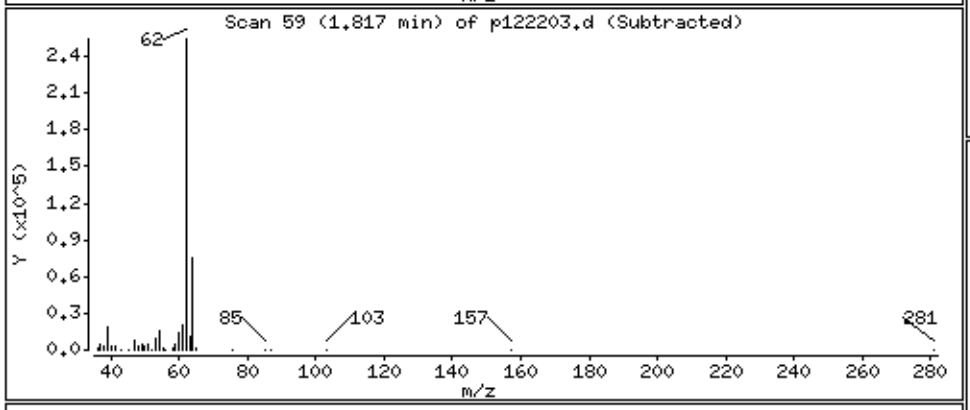
Column diameter: 0.25

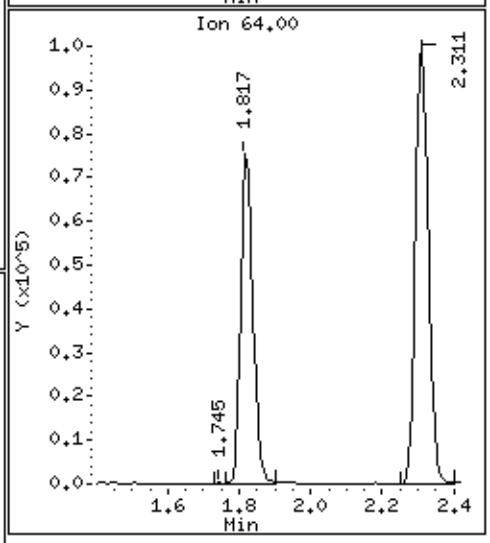
25 Vinyl Chloride

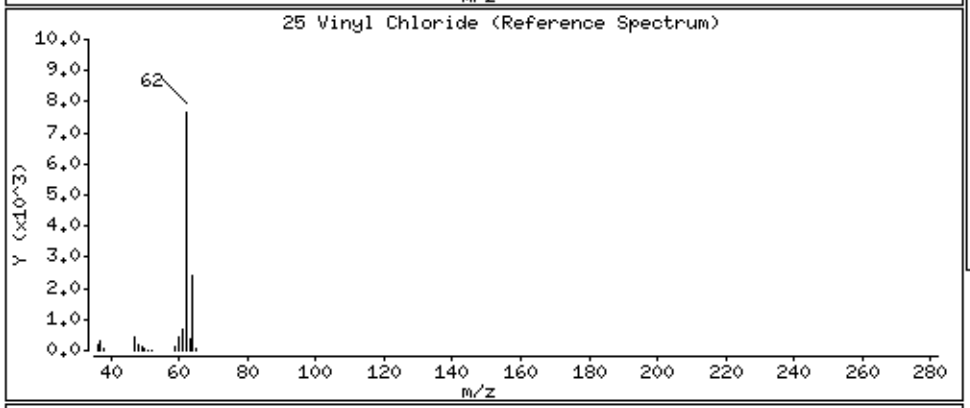
Concentration: 52.502 PPBV

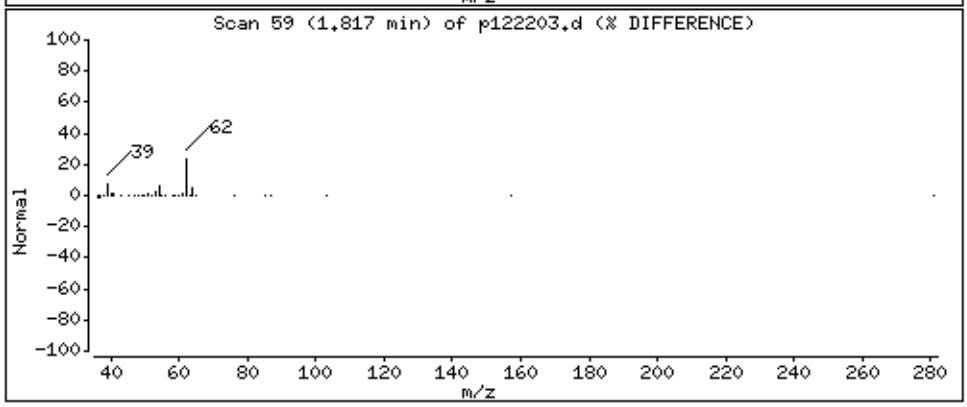












Data File: /chem/msdp.i/22dec14.b/p122203.d

Date : 22-DEC-2014 10:16

Client ID: LCS

Instrument: msdp.i

Sample Info: 100ml #2687-110A

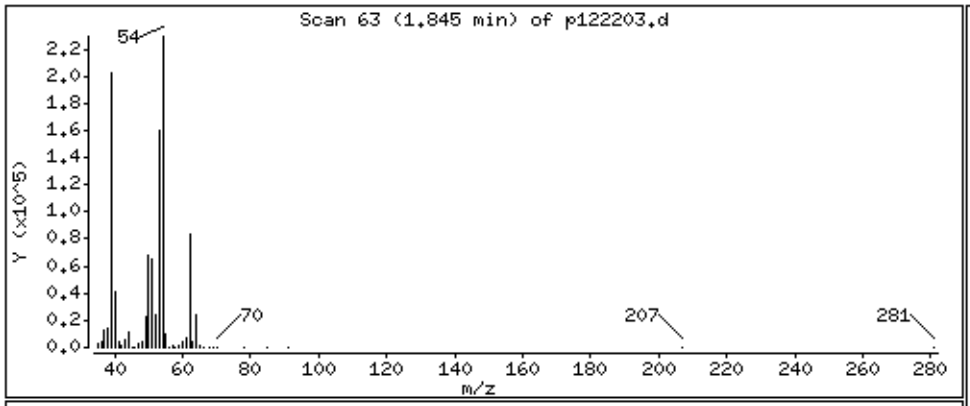
Operator: js

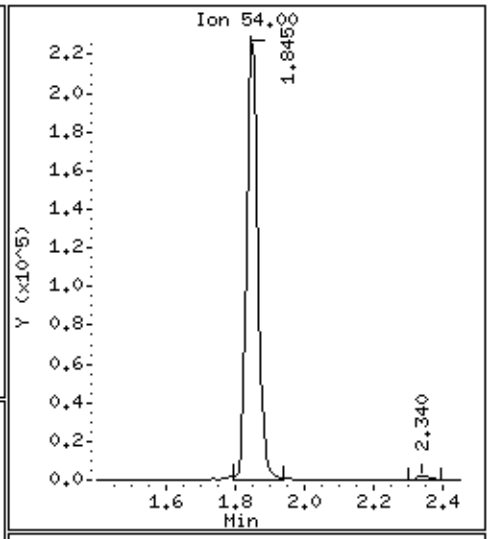
Column phase: RTX-624

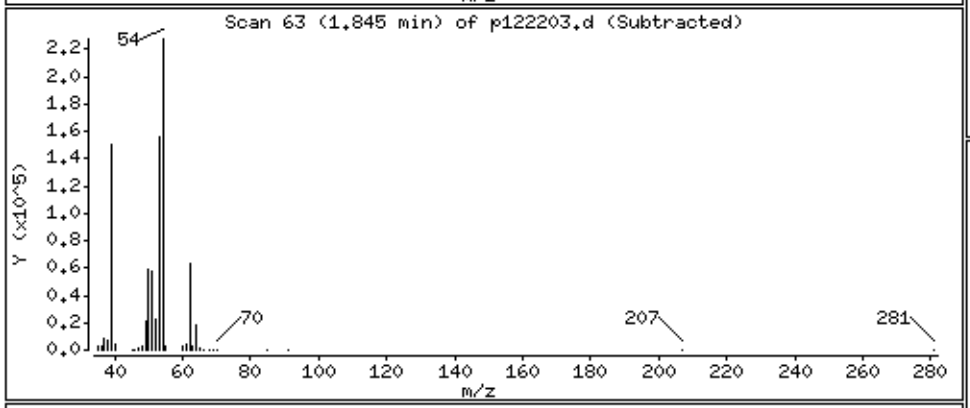
Column diameter: 0.25

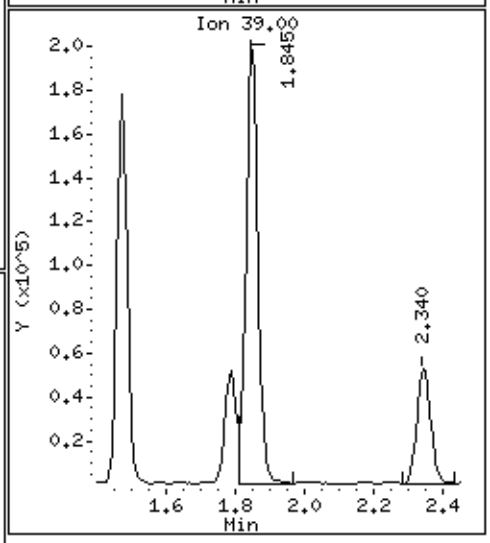
26 1,3-Butadiene

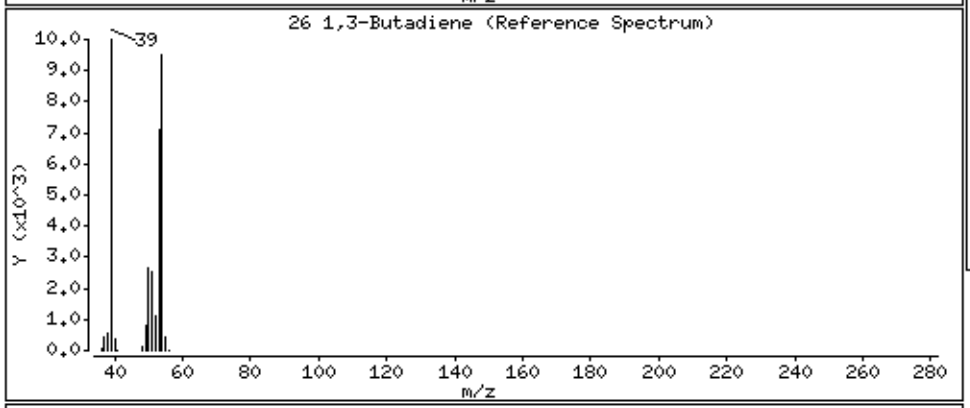
Concentration: 48.931 PPBV

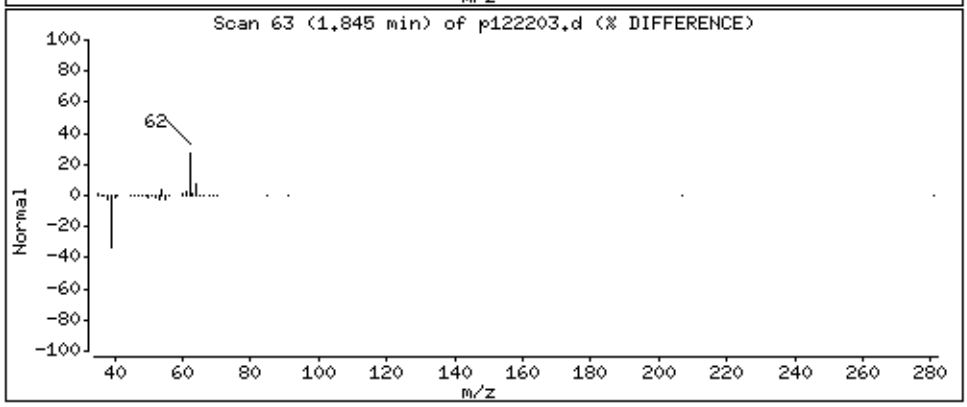












Data File: /chem/msdp.i/22dec14.b/p122203.d

Date : 22-DEC-2014 10:16

Client ID: LCS

Instrument: msdp.i

Sample Info: 100ml #2687-110A

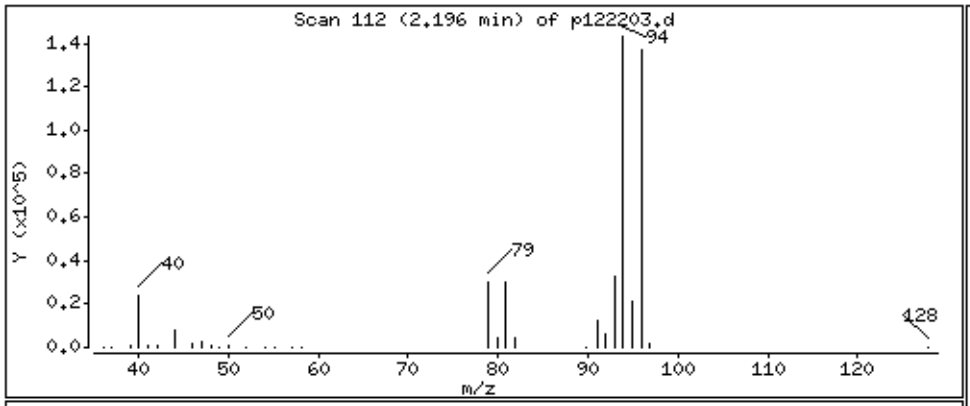
Operator: js

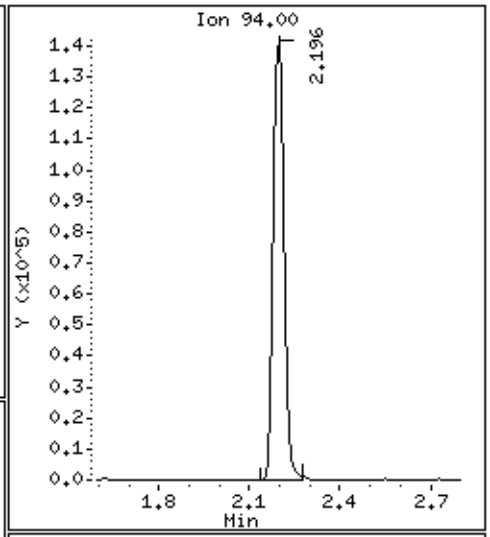
Column phase: RTX-624

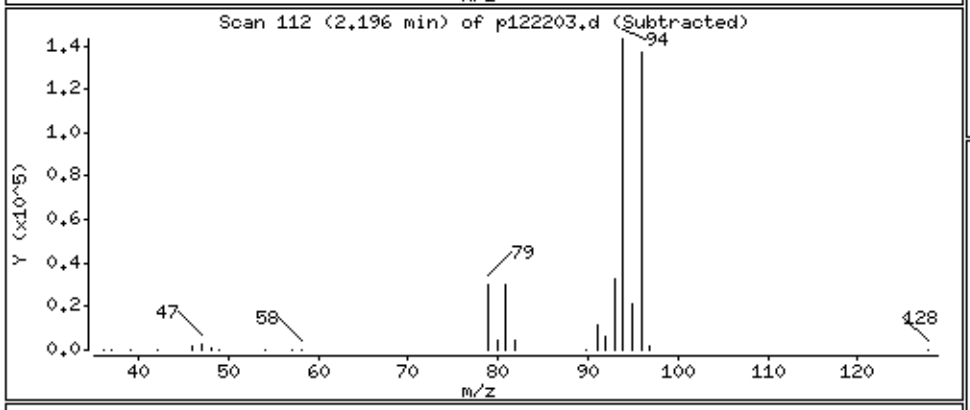
Column diameter: 0.25

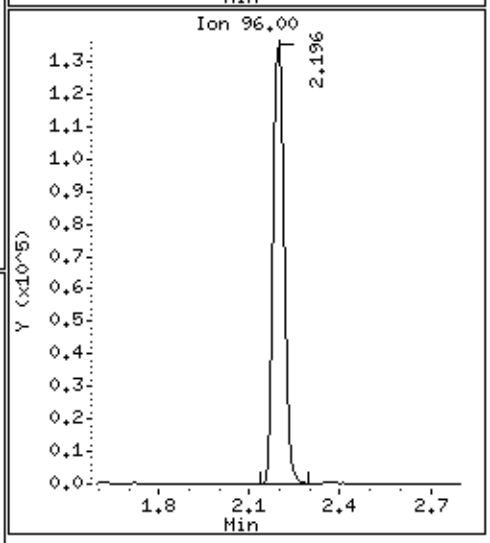
29 Bromomethane

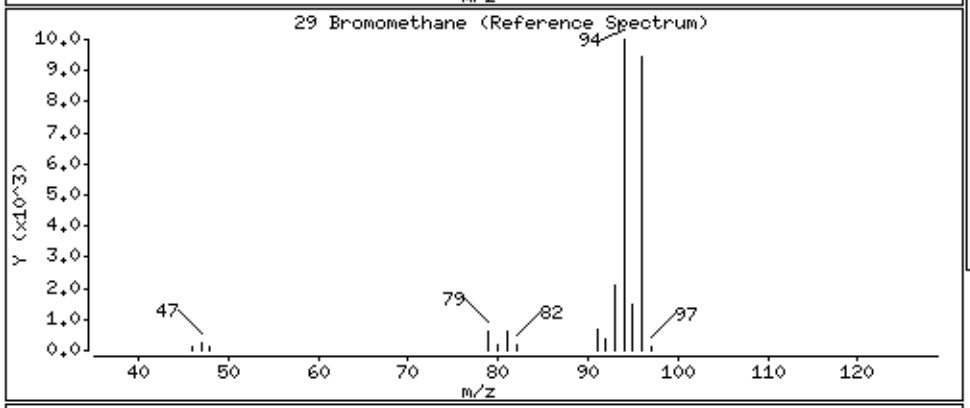
Concentration: 45.172 PPBV

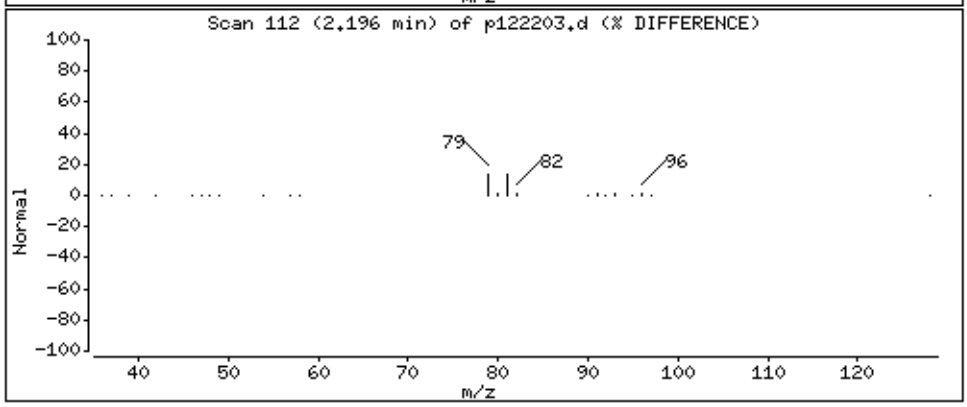












Data File: /chem/msdp.i/22dec14.b/p122203.d

Date : 22-DEC-2014 10:16

Client ID: LCS

Instrument: msdp.i

Sample Info: 100ml #2687-110A

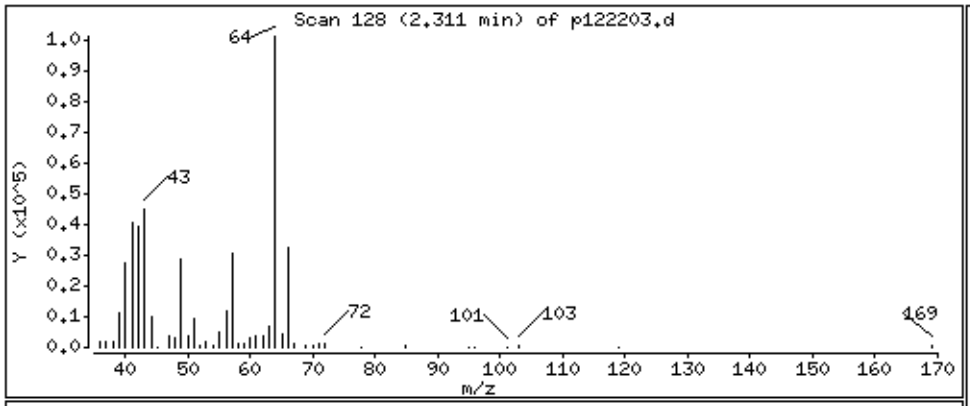
Operator: js

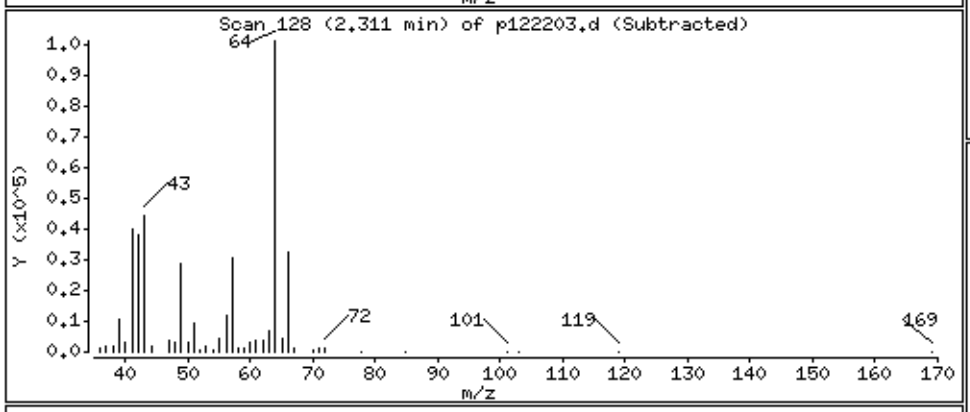
Column phase: RTX-624

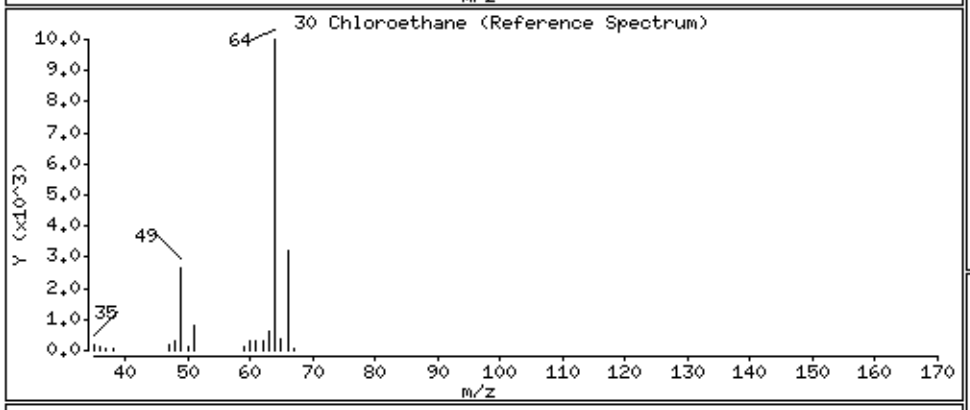
Column diameter: 0.25

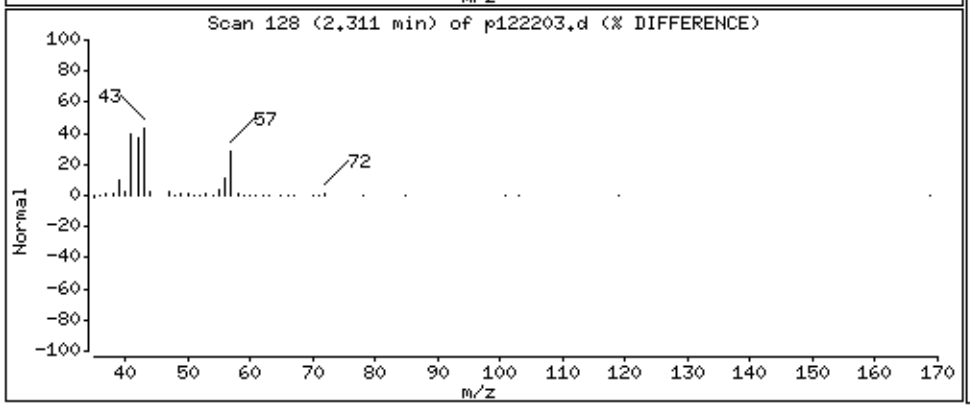
30 Chloroethane

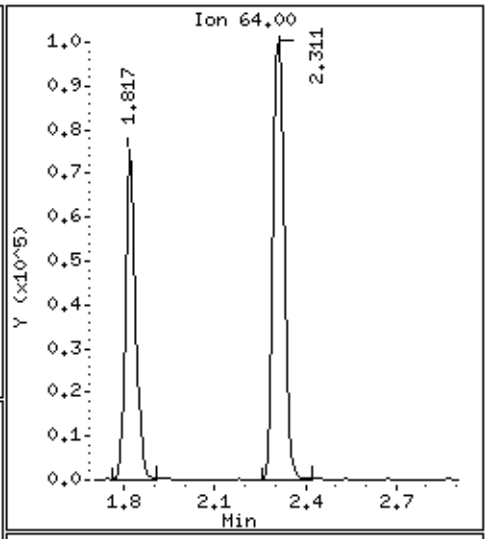
Concentration: 46.779 PPBV

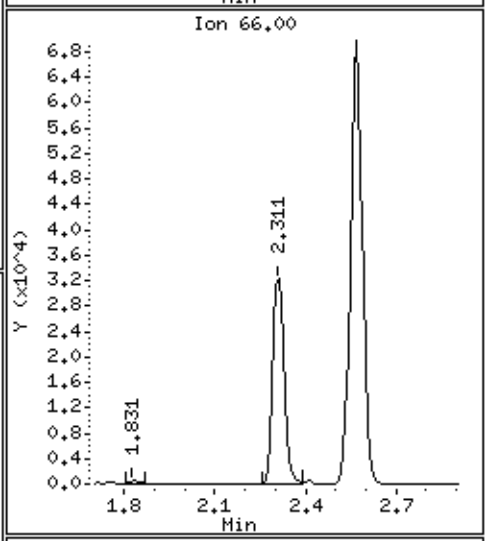


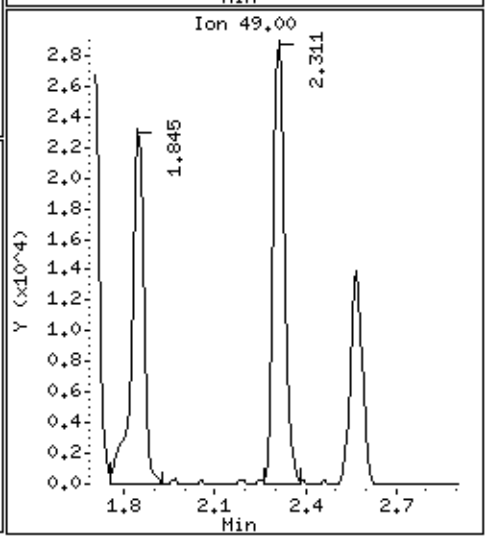












Data File: /chem/msdp.i/22dec14.b/p122203.d

Date : 22-DEC-2014 10:16

Client ID: LCS

Instrument: msdp.i

Sample Info: 100ml #2687-110A

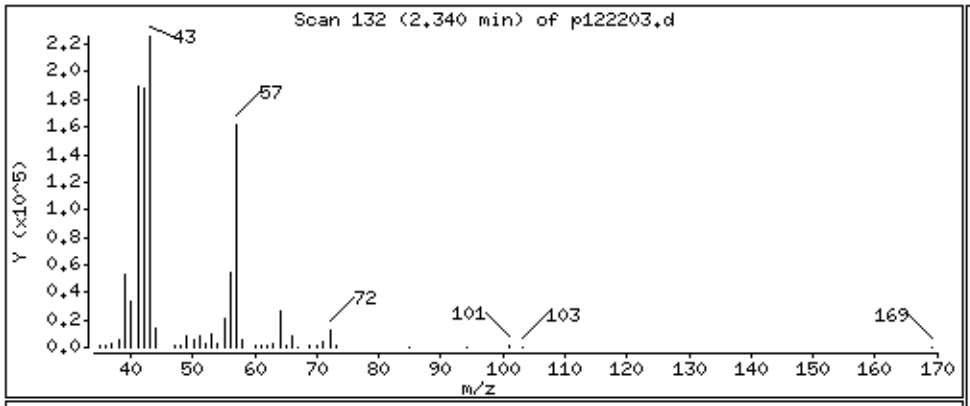
Operator: js

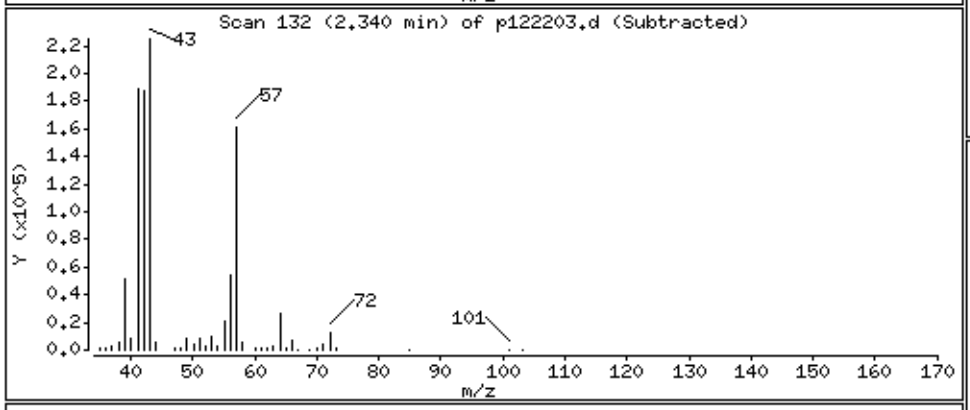
Column phase: RTX-624

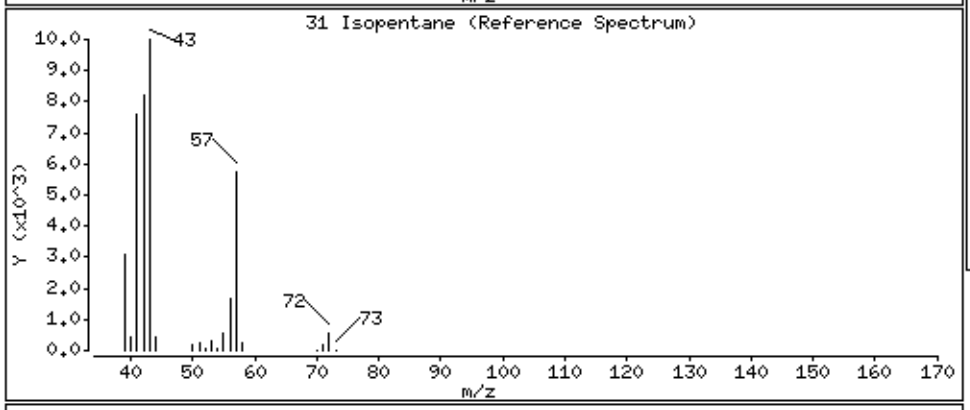
Column diameter: 0.25

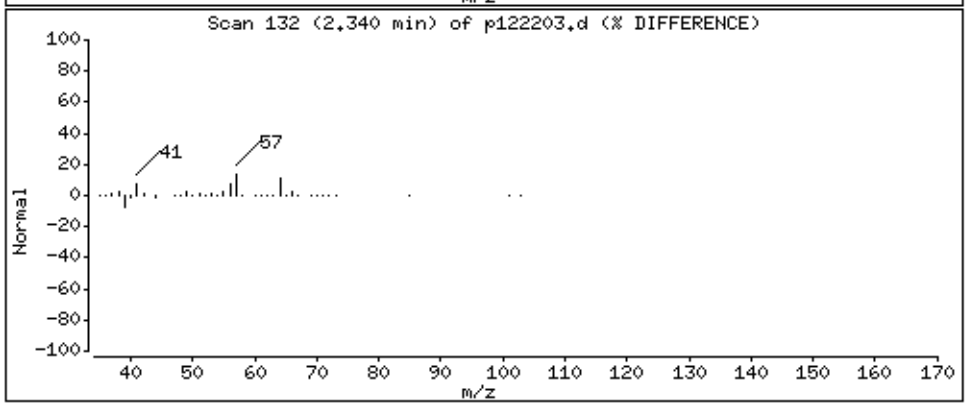
31 Isopentane

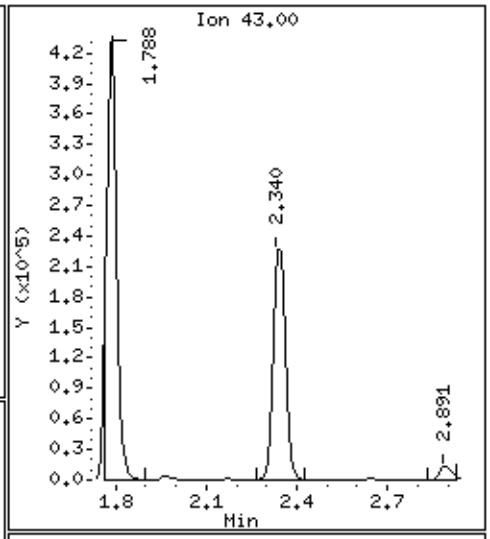
Concentration: 44.955 PPBV

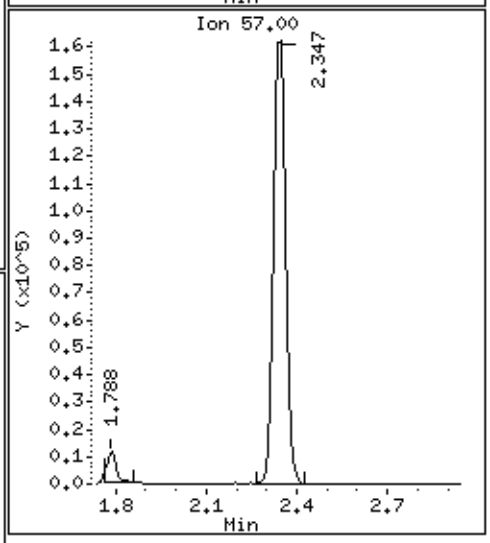












Data File: /chem/msdp.i/22dec14.b/p122203.d

Date : 22-DEC-2014 10:16

Client ID: LCS

Instrument: msdp.i

Sample Info: 100ml #2687-110A

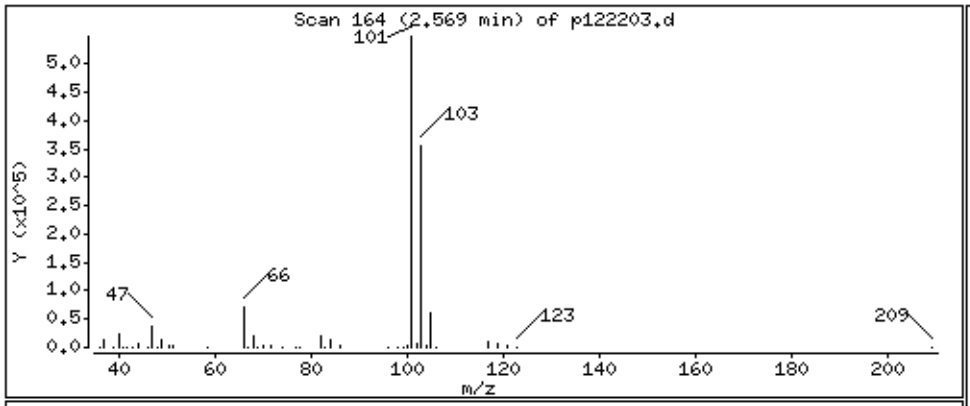
Operator: js

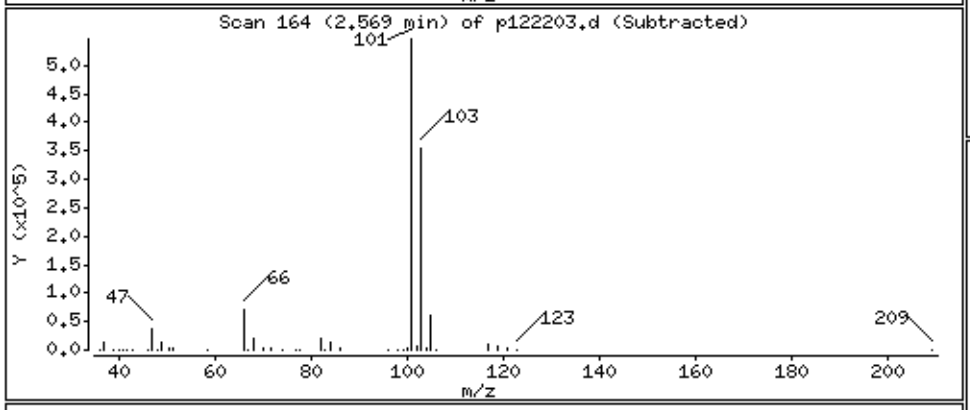
Column phase: RTX-624

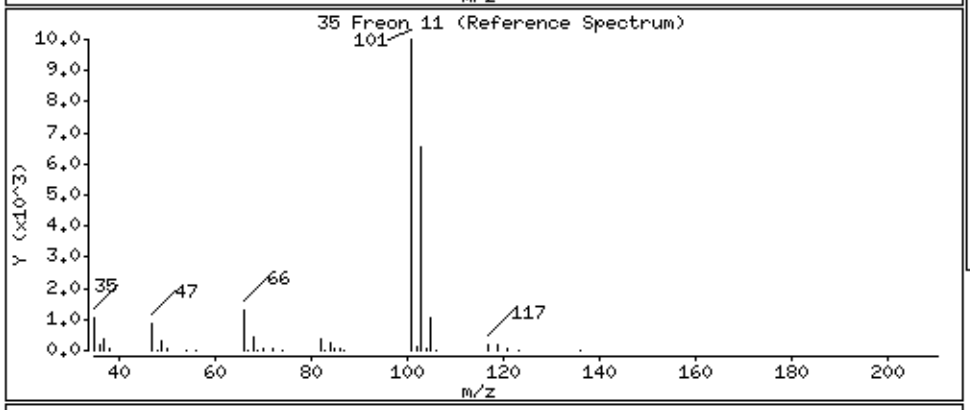
Column diameter: 0.25

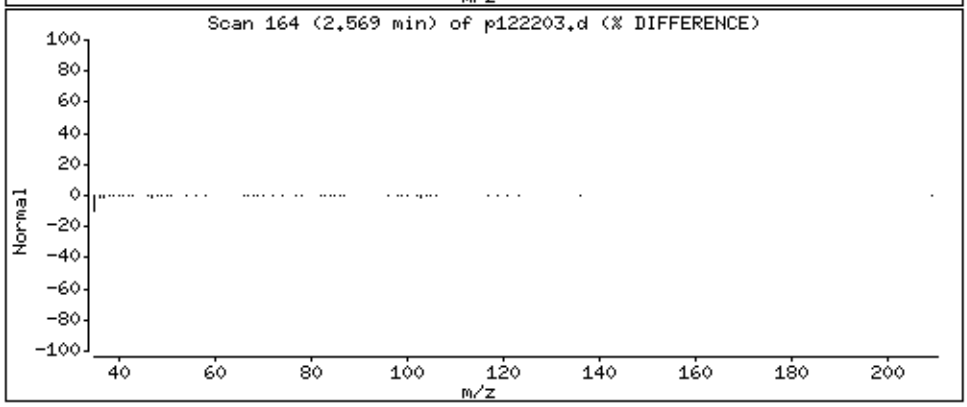
35 Freon 11

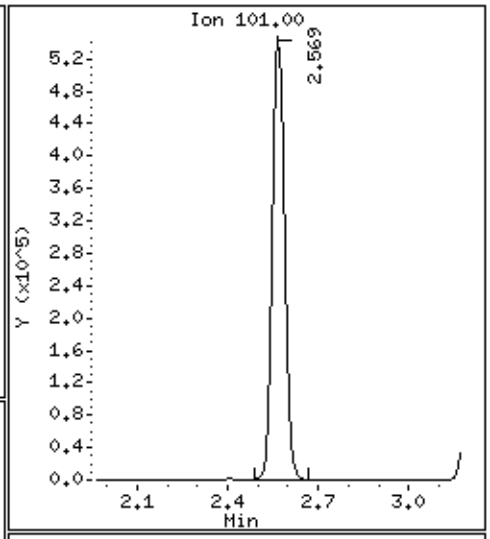
Concentration: 43.244 PPBV

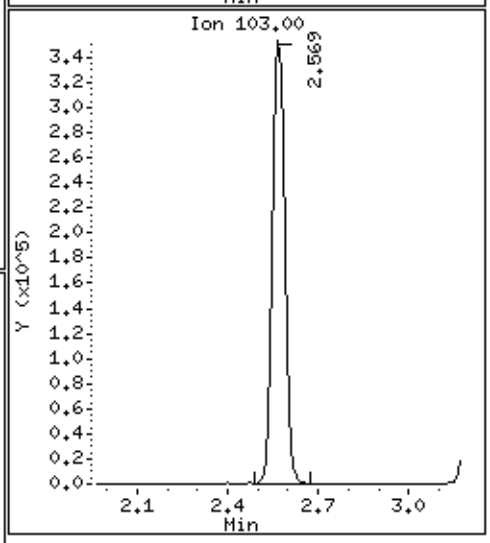












Data File: /chem/msdp.i/22dec14.b/p122203.d

Date : 22-DEC-2014 10:16

Client ID: LCS

Instrument: msdp.i

Sample Info: 100ml #2687-110A

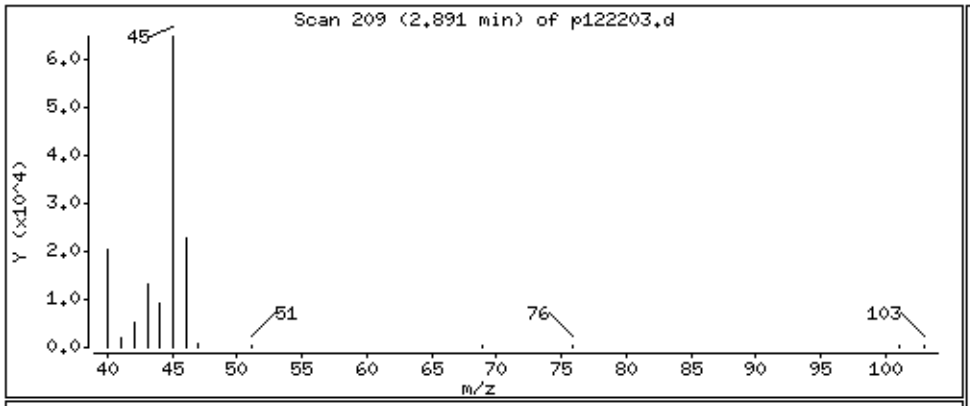
Operator: js

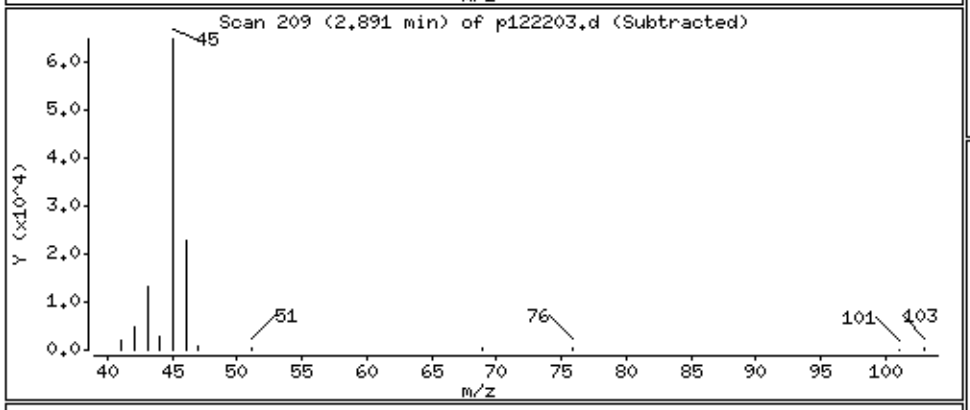
Column phase: RTX-624

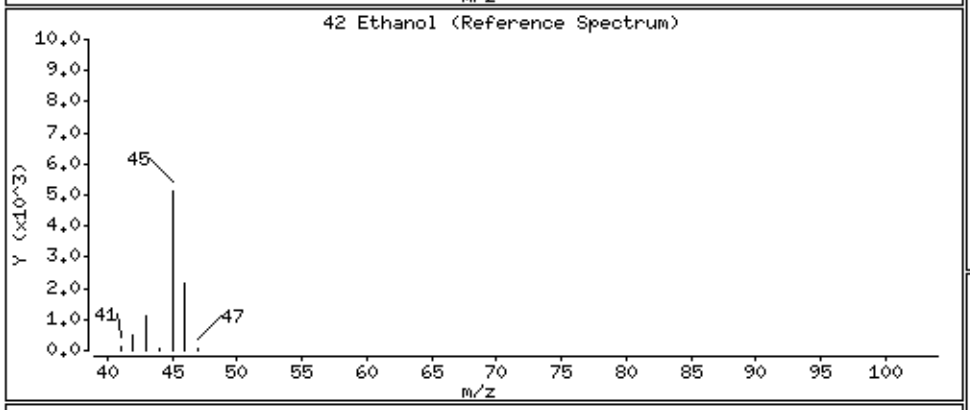
Column diameter: 0.25

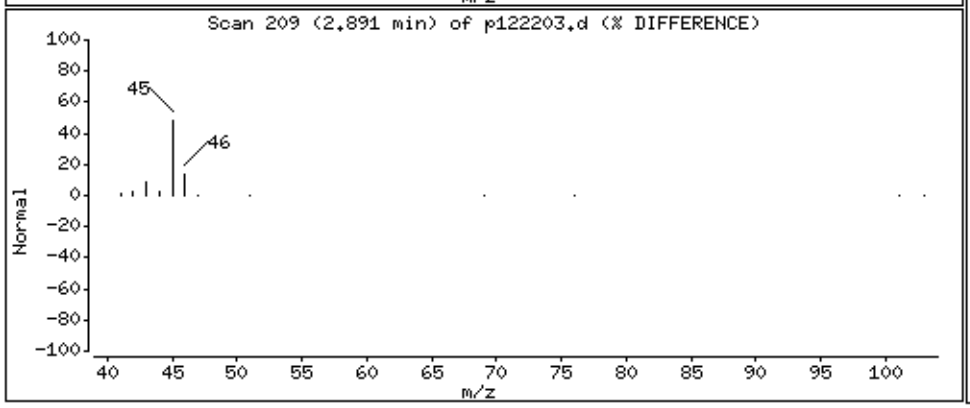
42 Ethanol

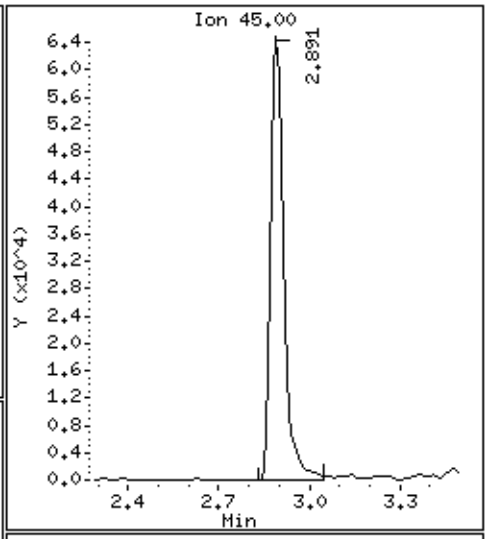
Concentration: 47.270 PPBV

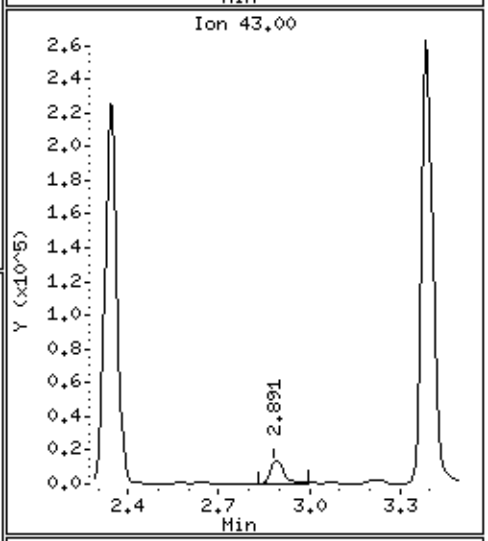


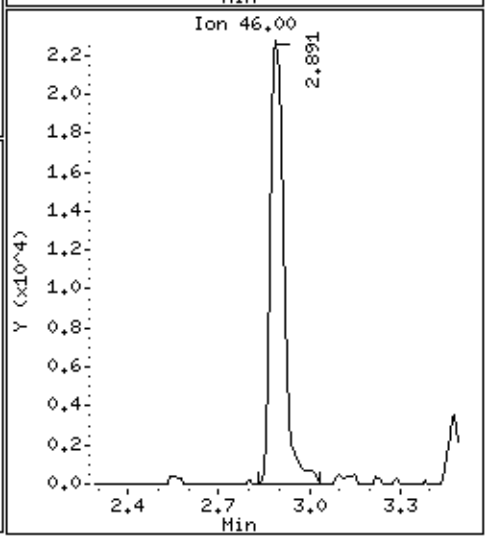












Data File: /chem/msdp.i/22dec14.b/p122203.d

Date : 22-DEC-2014 10:16

Client ID: LCS

Instrument: msdp.i

Sample Info: 100ml #2687-110A

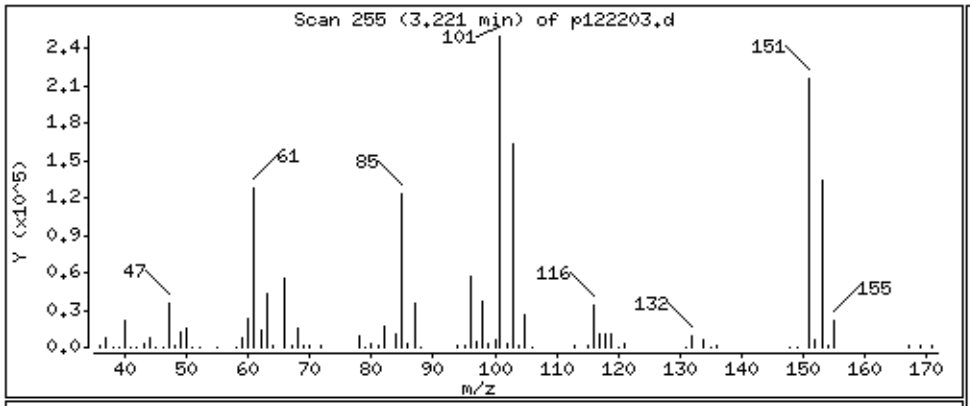
Operator: js

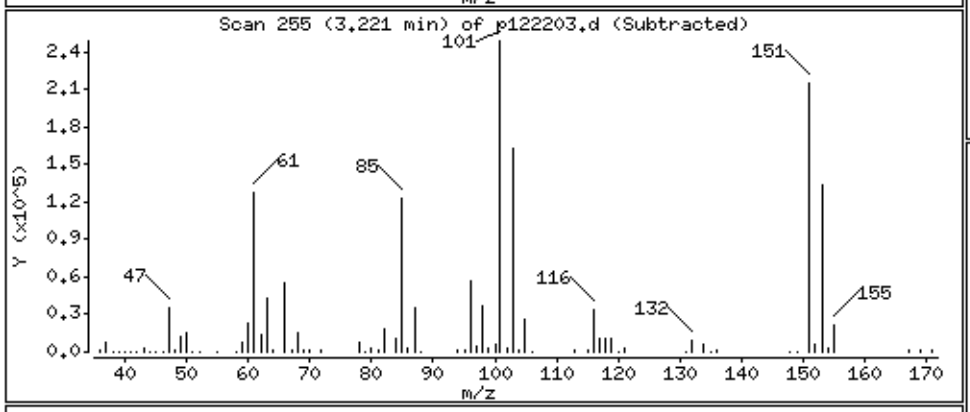
Column phase: RTX-624

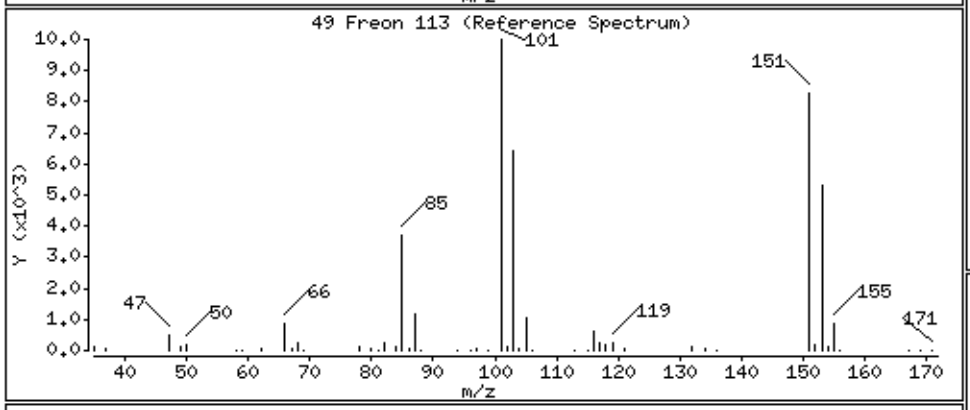
Column diameter: 0.25

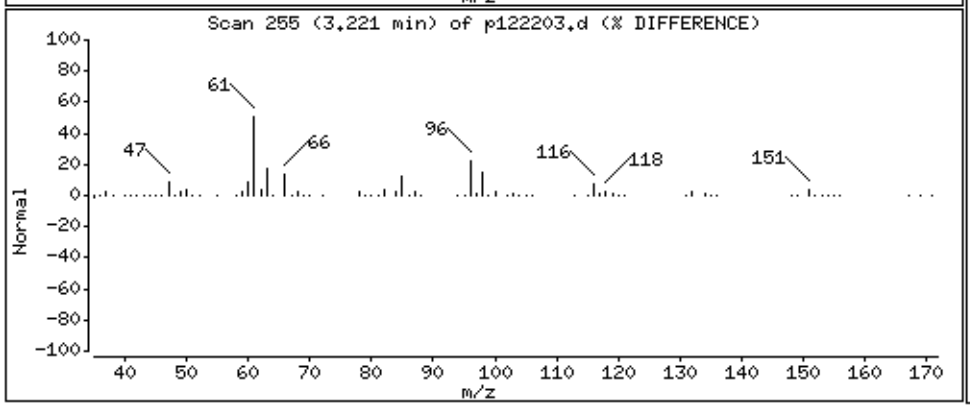
49 Freon 113

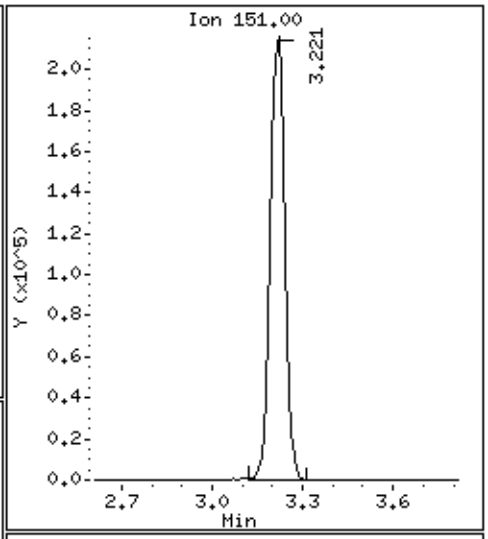
Concentration: 49.914 PPBV

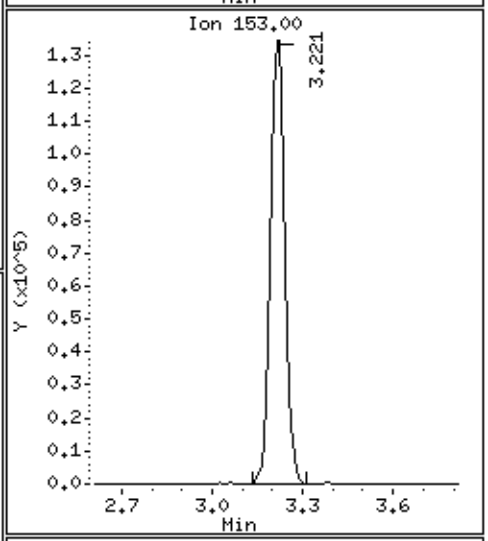


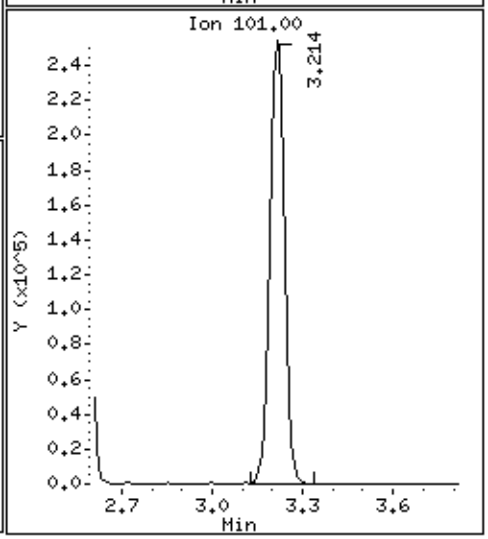












Data File: /chem/msdp.i/22dec14.b/p122203.d

Date : 22-DEC-2014 10:16

Client ID: LCS

Instrument: msdp.i

Sample Info: 100ml #2687-110A

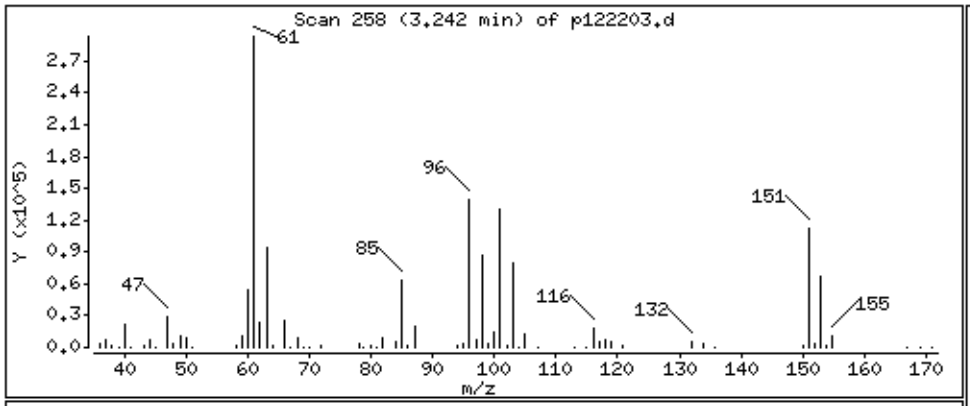
Operator: js

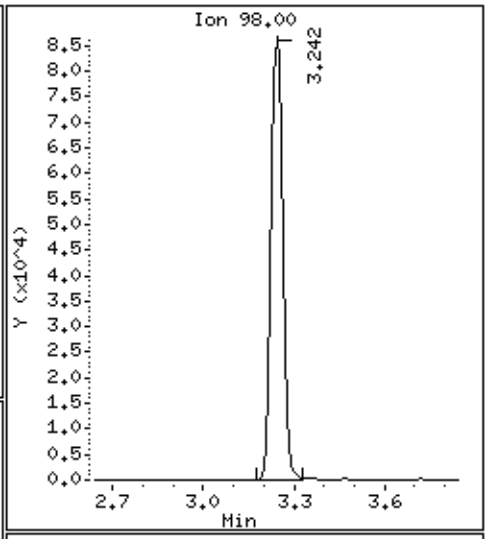
Column phase: RTX-624

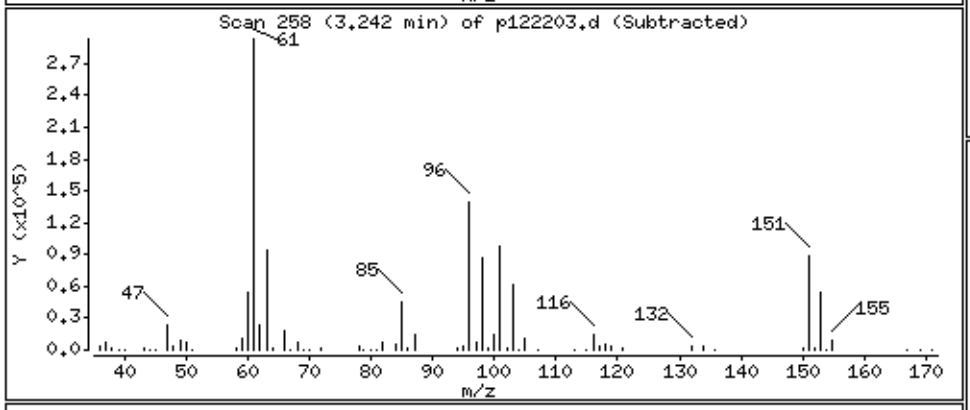
Column diameter: 0.25

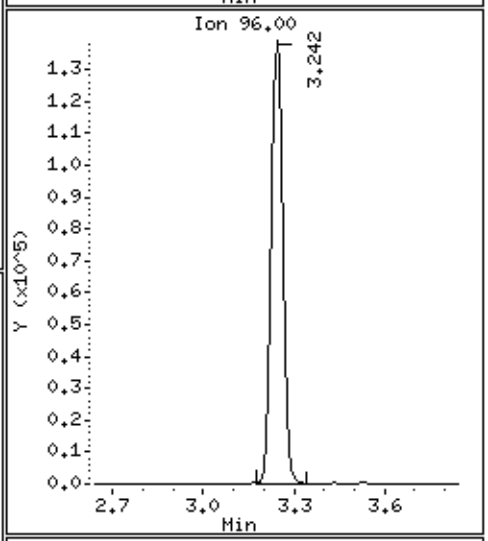
50 1,1-Dichloroethene

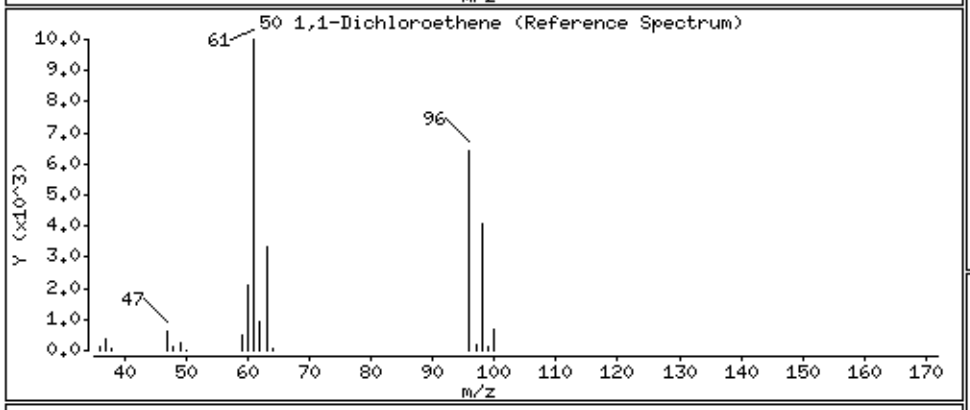
Concentration: 49.930 PPBV

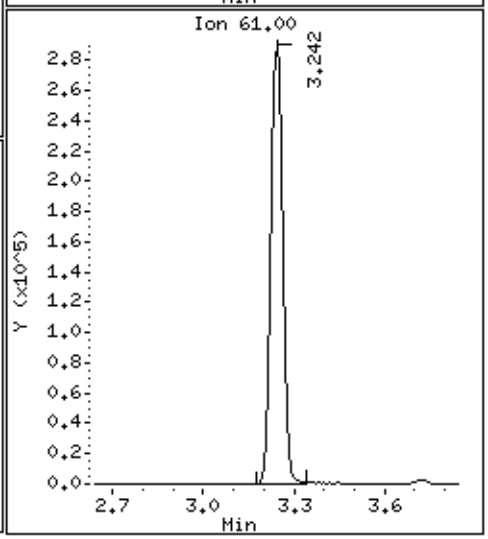


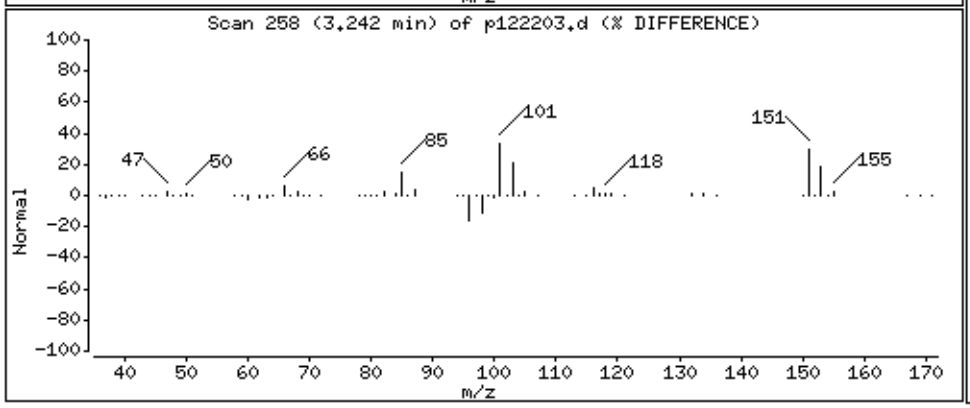












Data File: /chem/msdp.i/22dec14.b/p122203.d

Date : 22-DEC-2014 10:16

Client ID: LCS

Instrument: msdp.i

Sample Info: 100ml #2687-110A

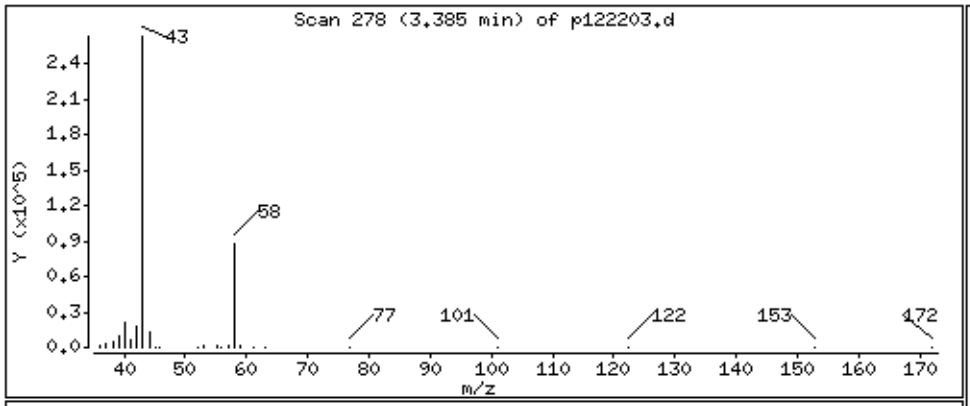
Operator: js

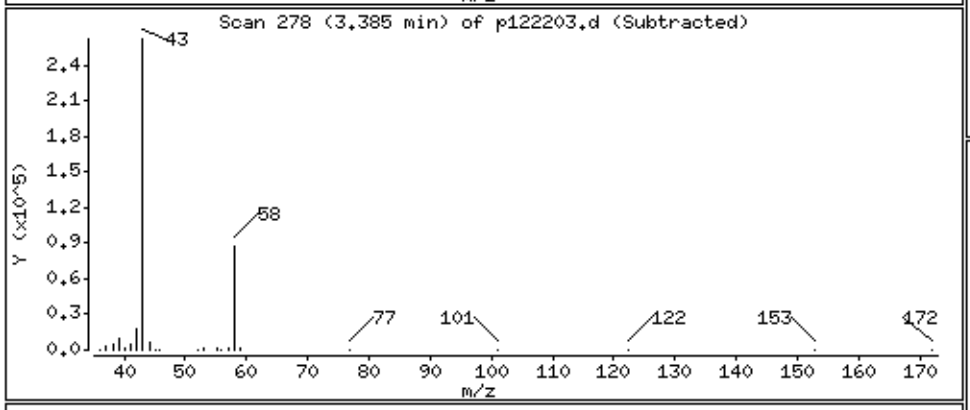
Column phase: RTX-624

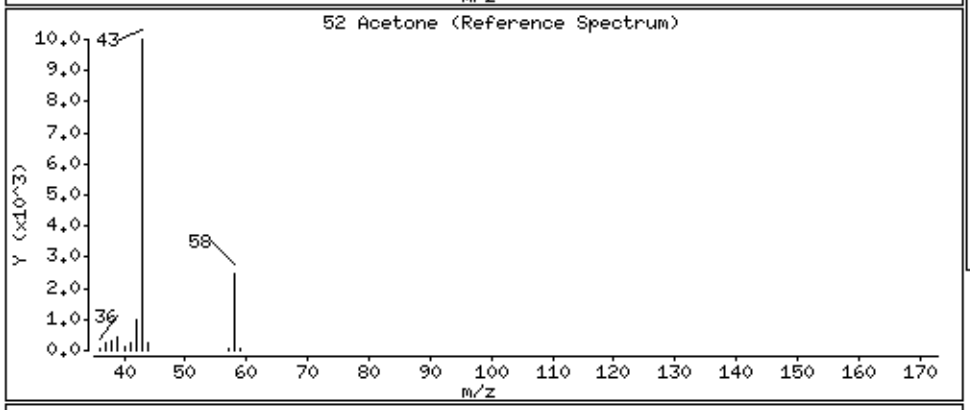
Column diameter: 0.25

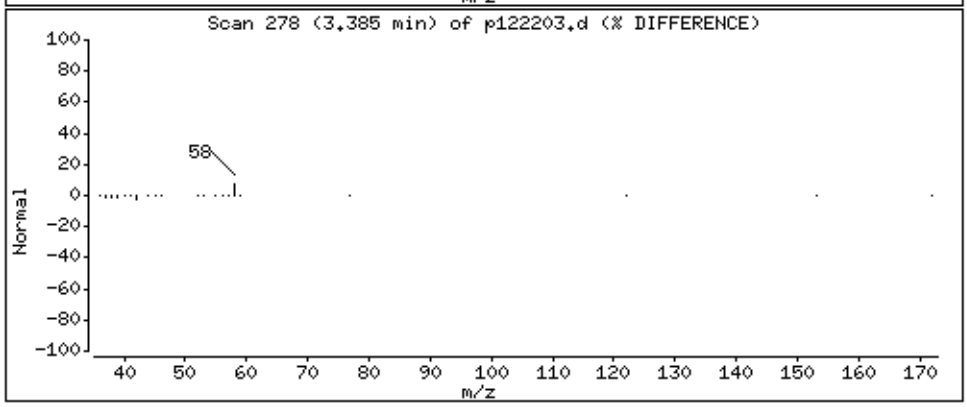
52 Acetone

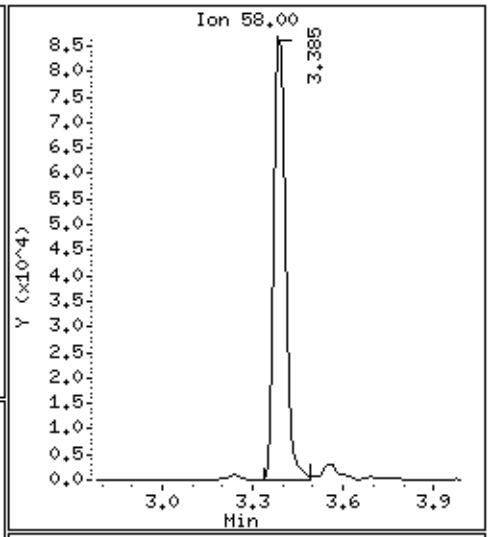
Concentration: 43.888 PPBV

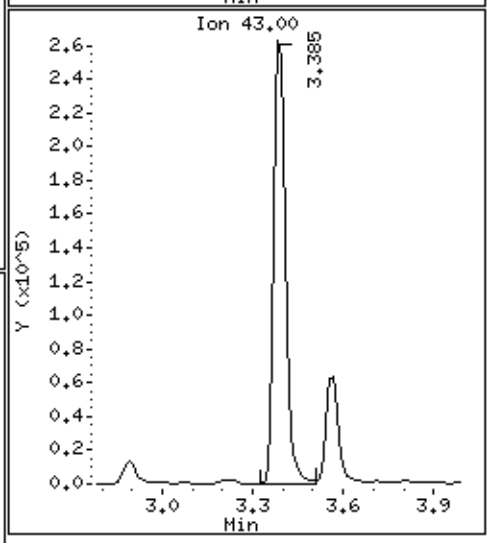












Data File: /chem/msdp.i/22dec14.b/p122203.d

Date : 22-DEC-2014 10:16

Client ID: LCS

Instrument: msdp.i

Sample Info: 100ml #2687-110A

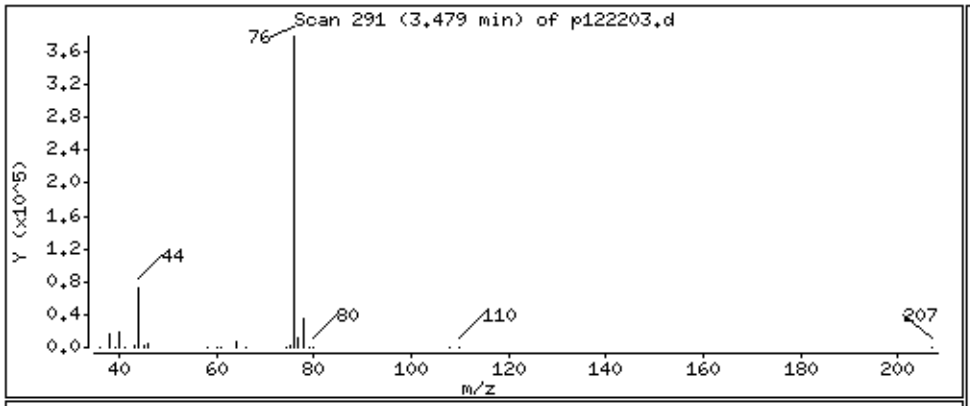
Operator: js

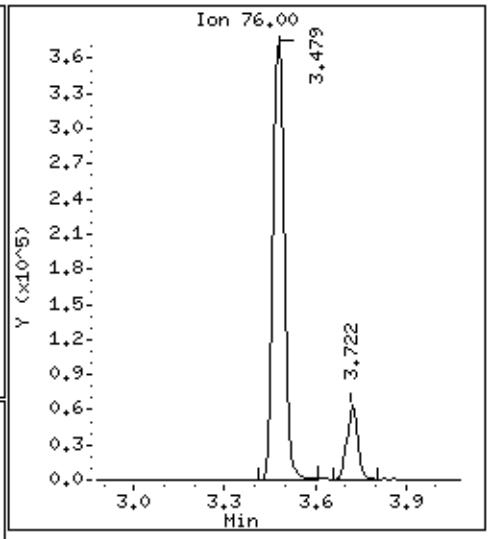
Column phase: RTX-624

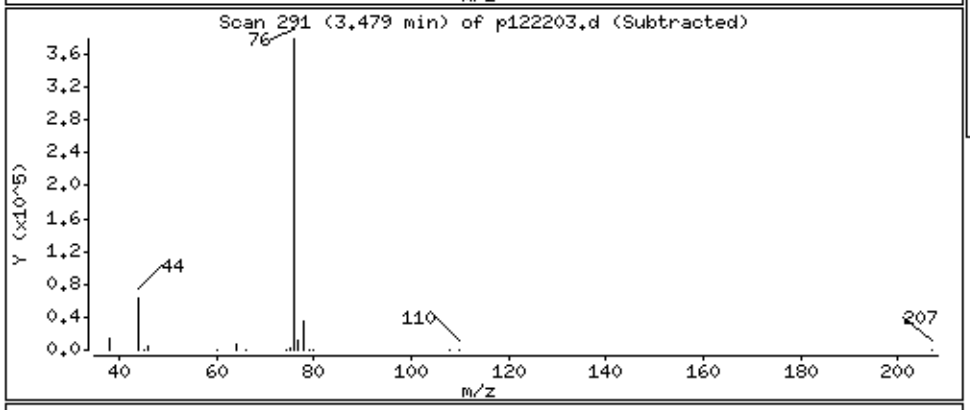
Column diameter: 0.25

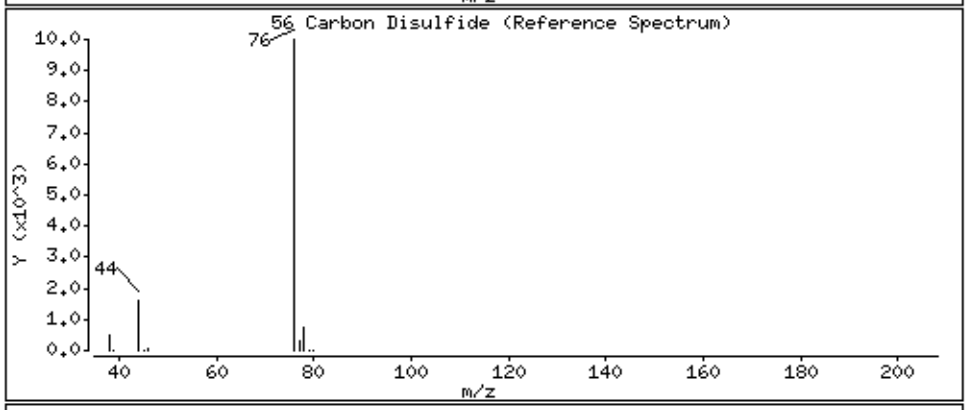
56 Carbon Disulfide

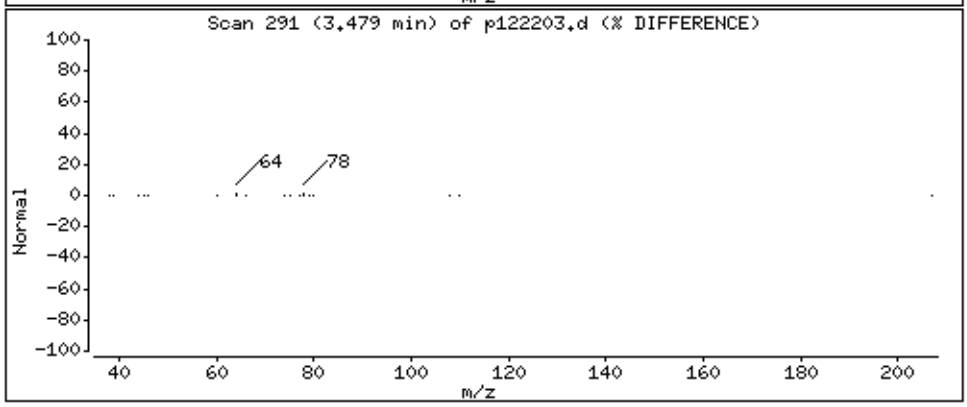
Concentration: 42.634 PPBV











Data File: /chem/msdp.i/22dec14.b/p122203.d

Date : 22-DEC-2014 10:16

Client ID: LCS

Instrument: msdp.i

Sample Info: 100ml #2687-110A

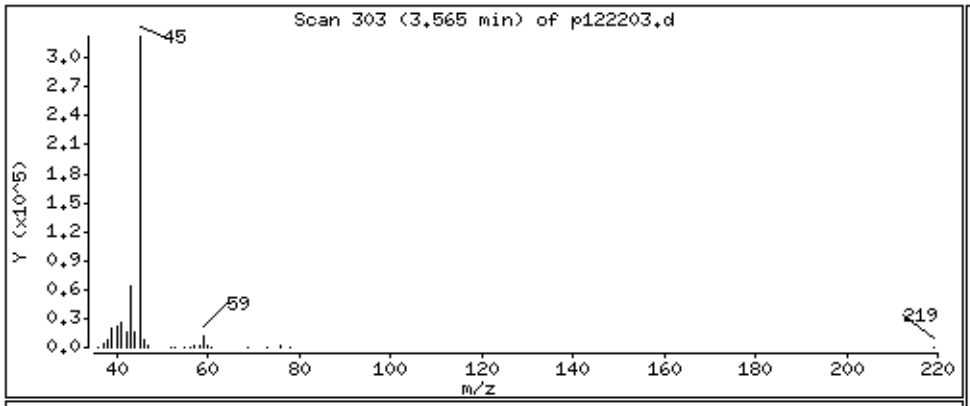
Operator: js

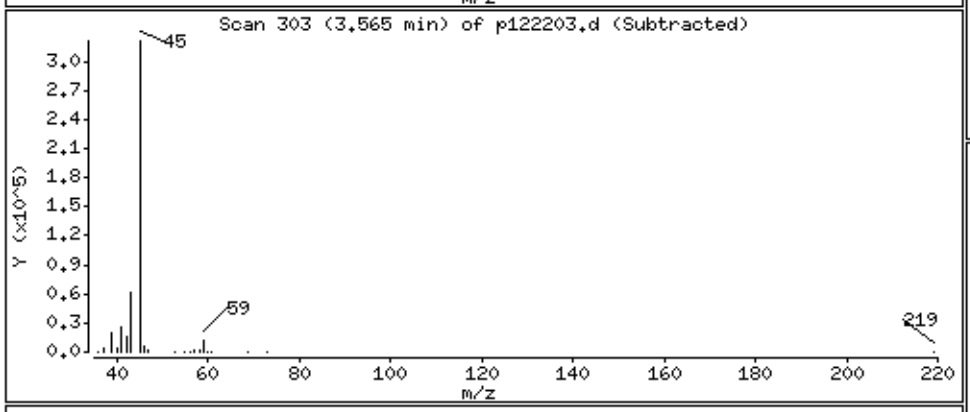
Column phase: RTX-624

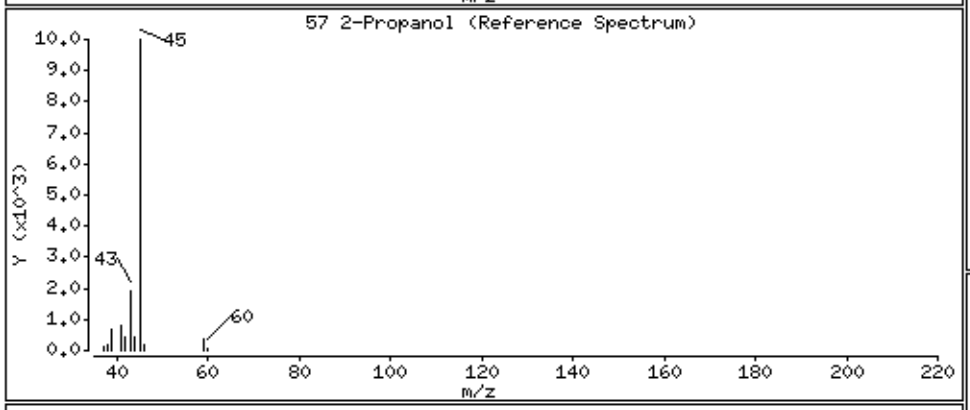
Column diameter: 0.25

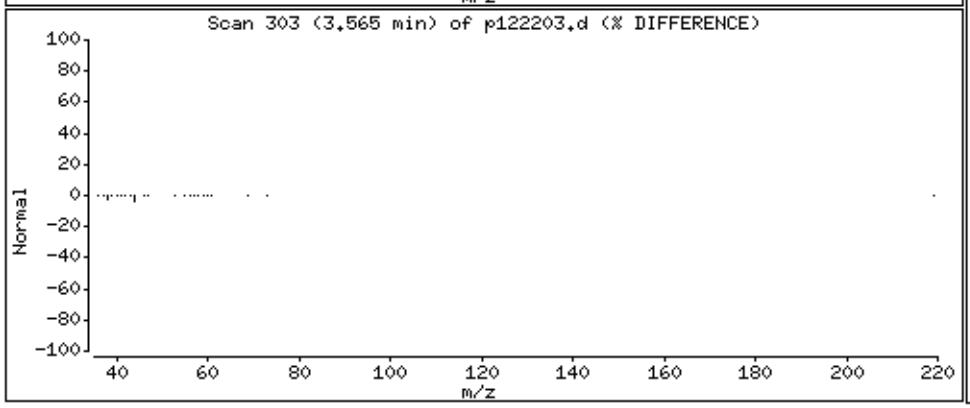
57 2-Propanol

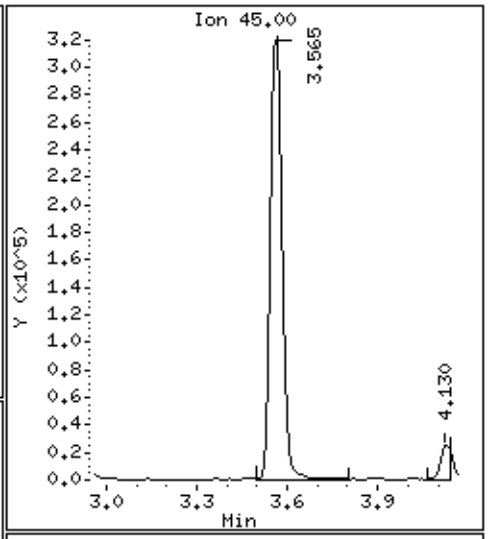
Concentration: 45.189 PPBV

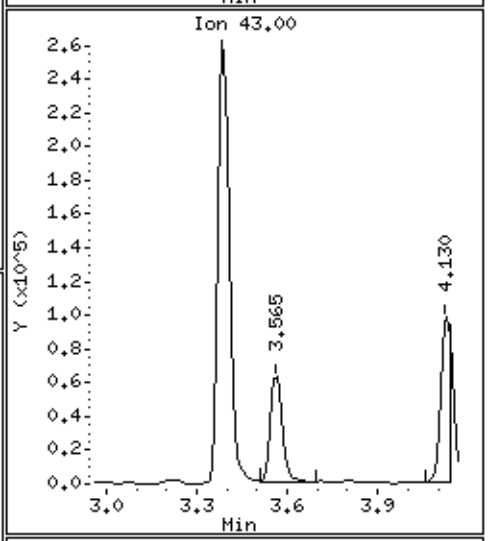


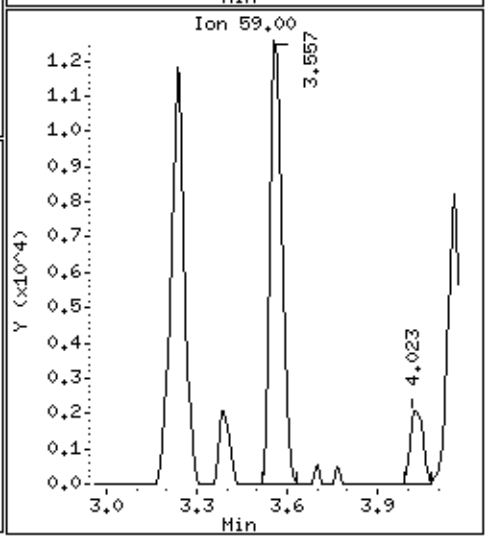












Data File: /chem/msdp.i/22dec14.b/p122203.d

Date : 22-DEC-2014 10:16

Client ID: LCS

Instrument: msdp.i

Sample Info: 100ml #2687-110A

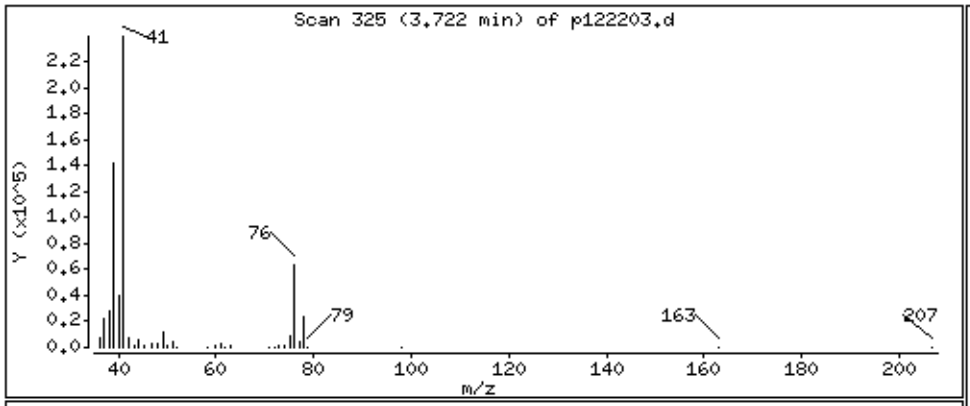
Operator: js

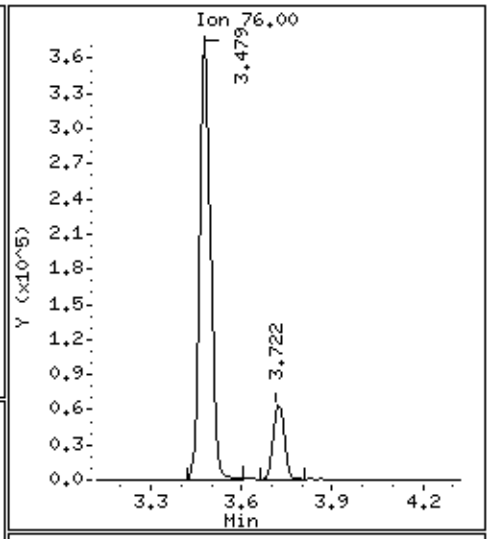
Column phase: RTX-624

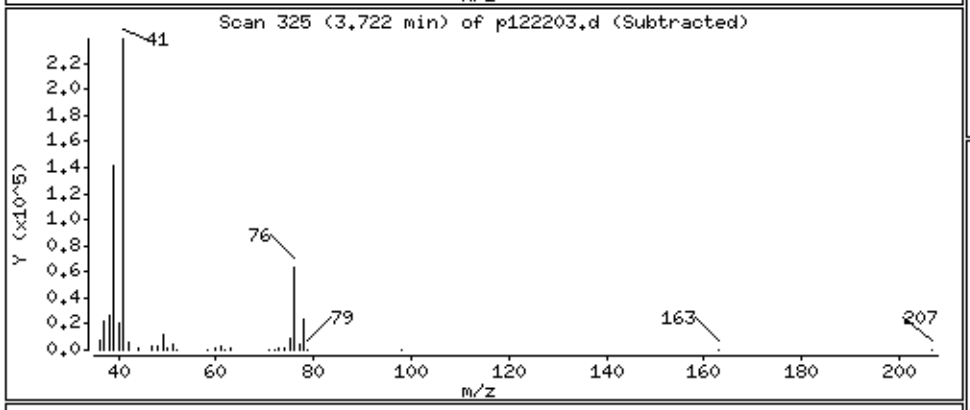
Column diameter: 0.25

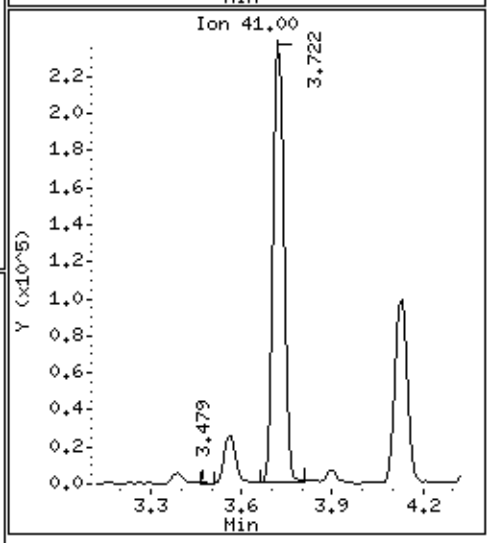
58 3-Chloropropene

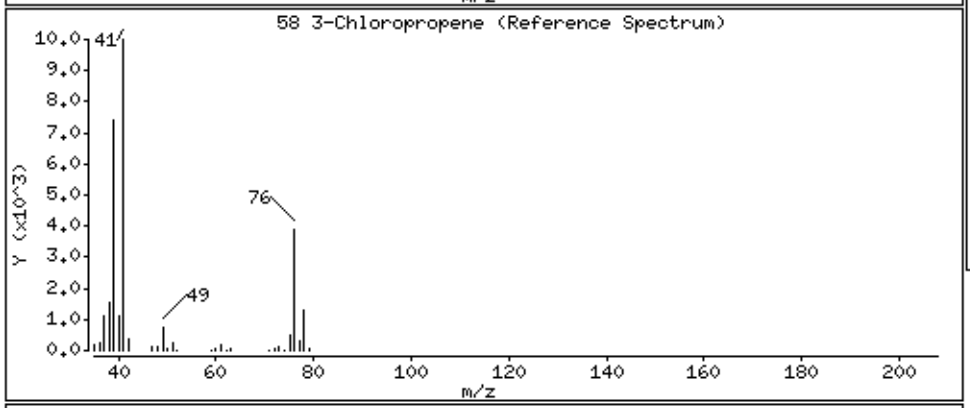
Concentration: 43.087 PPBV

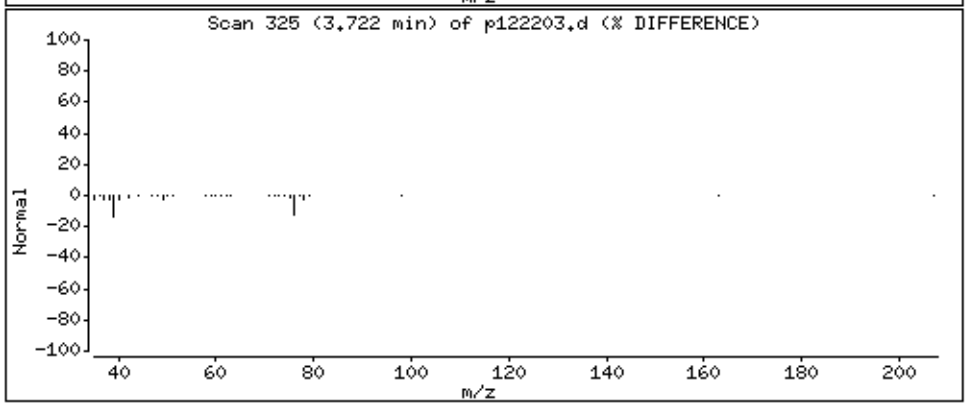












Data File: /chem/msdp.i/22dec14.b/p122203.d

Date : 22-DEC-2014 10:16

Client ID: LCS

Instrument: msdp.i

Sample Info: 100ml #2687-110A

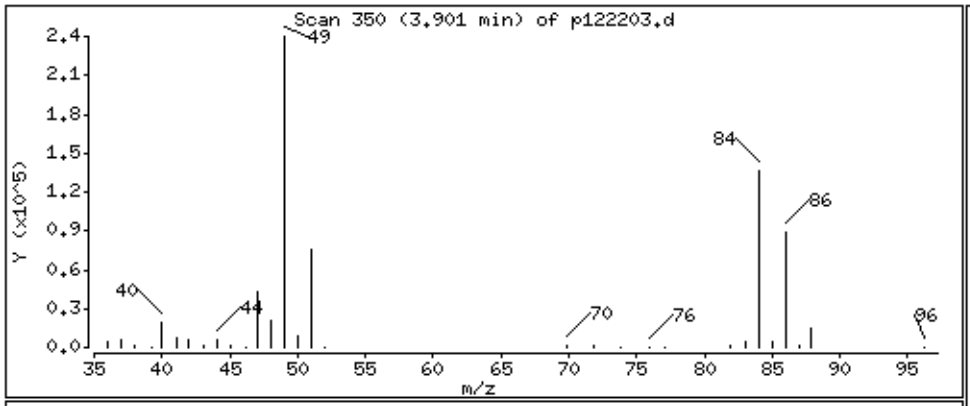
Operator: js

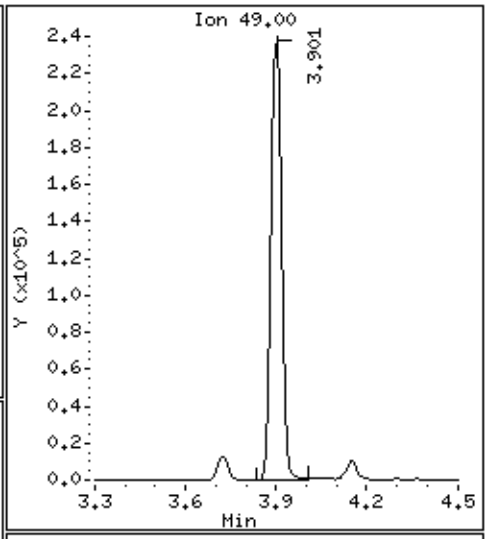
Column phase: RTX-624

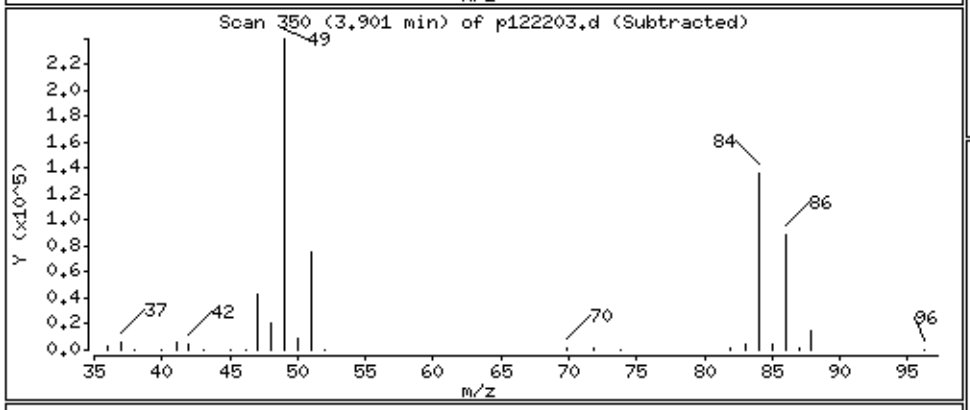
Column diameter: 0.25

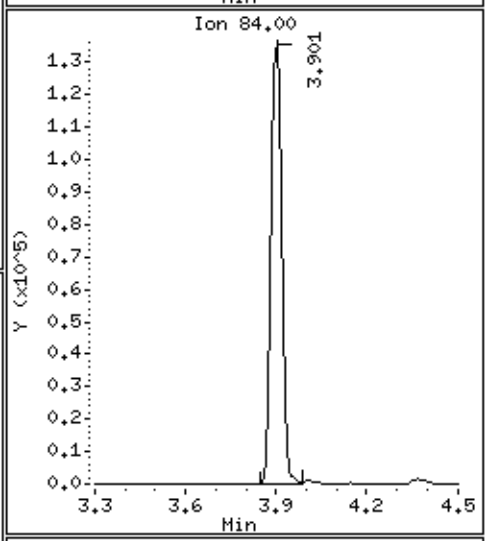
66 Methylene Chloride

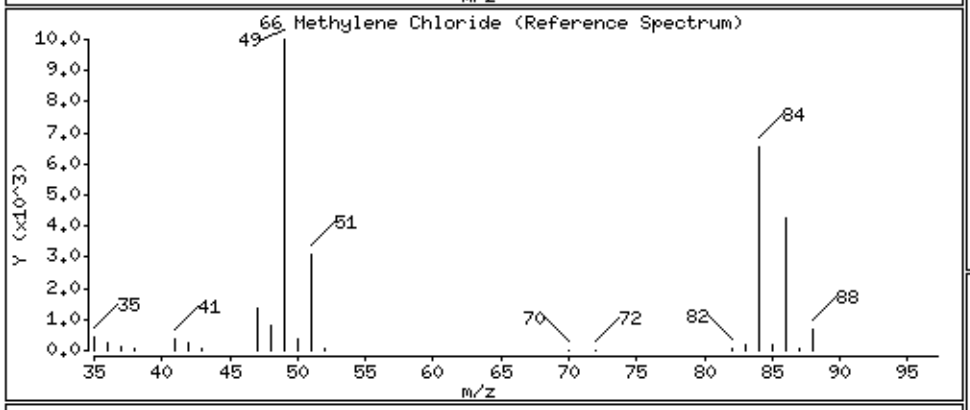
Concentration: 47.656 PPBV

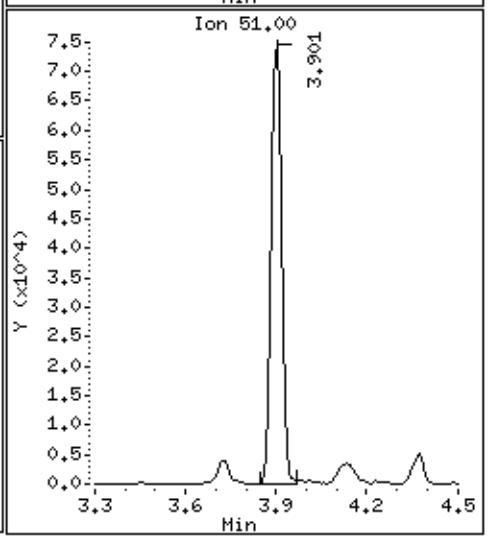


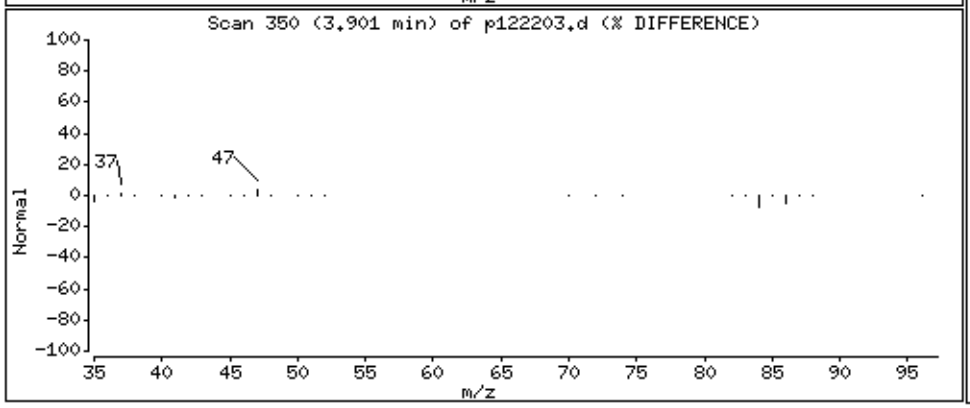












Data File: /chem/msdp.i/22dec14.b/p122203.d

Date : 22-DEC-2014 10:16

Client ID: LCS

Instrument: msdp.i

Sample Info: 100ml #2687-110A

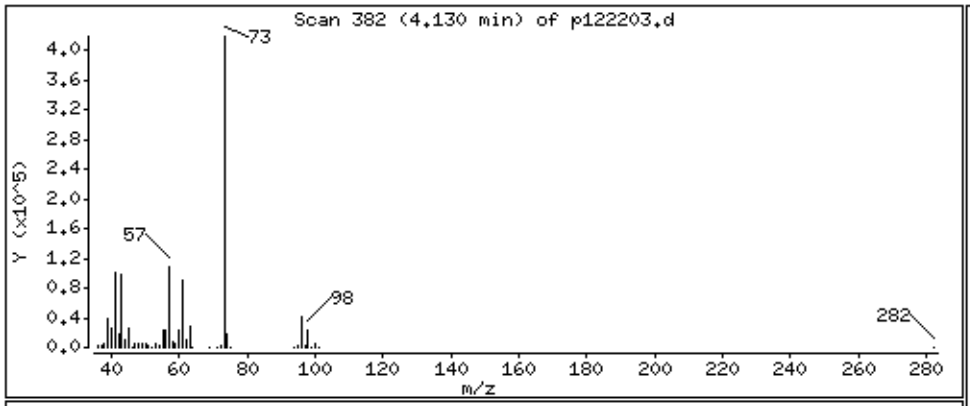
Operator: js

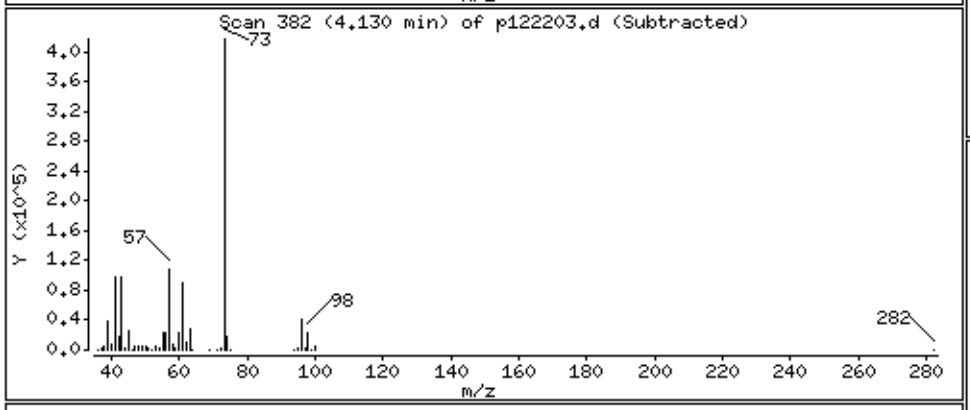
Column phase: RTX-624

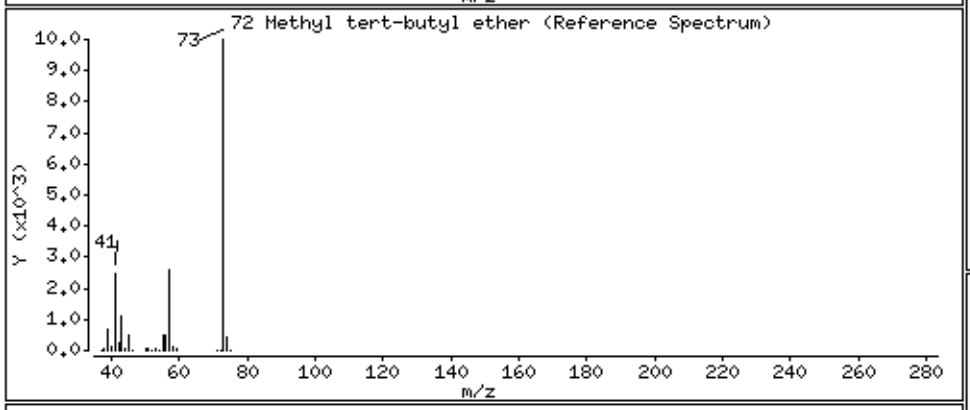
Column diameter: 0.25

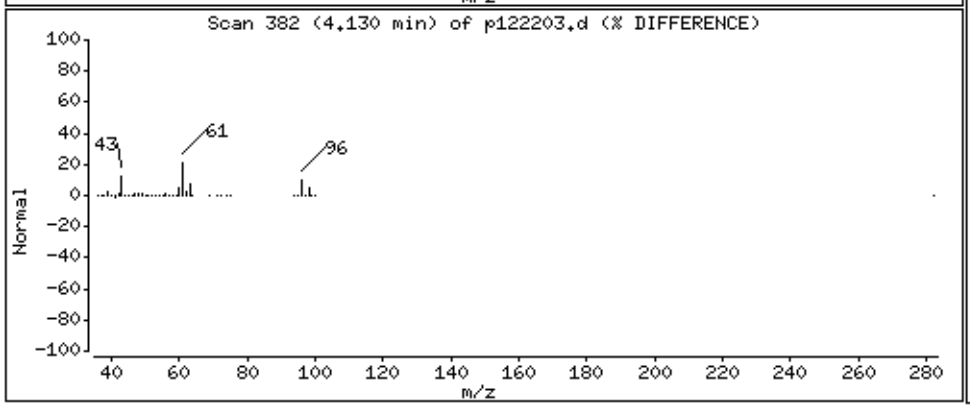
72 Methyl tert-butyl ether

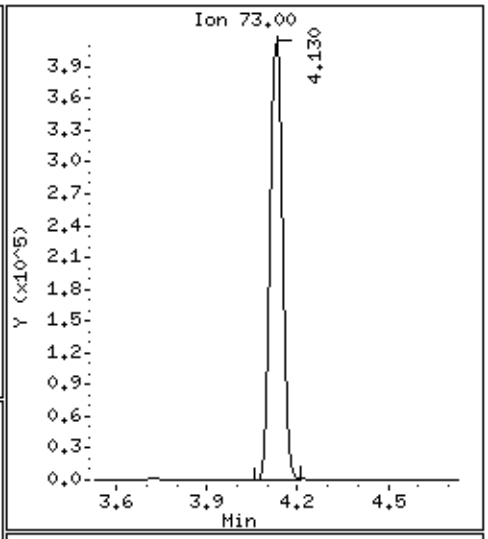
Concentration: 45.587 PPBV

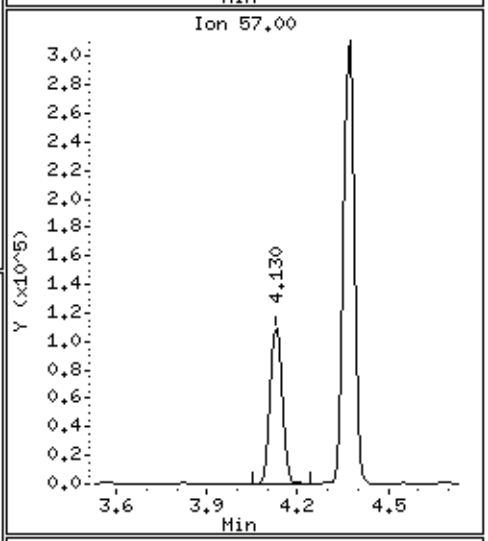


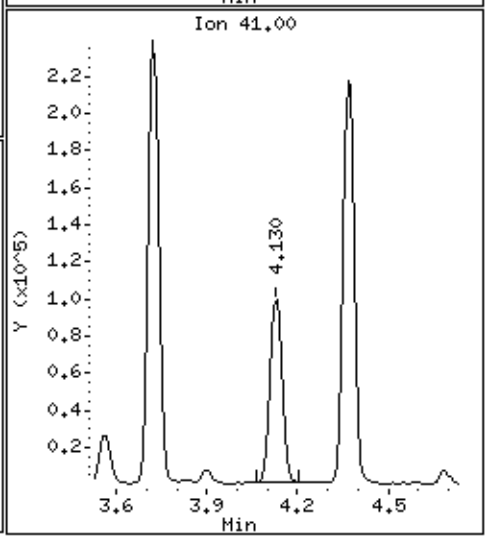












Data File: /chem/msdp.i/22dec14.b/p122203.d

Date : 22-DEC-2014 10:16

Client ID: LCS

Instrument: msdp.i

Sample Info: 100ml #2687-110A

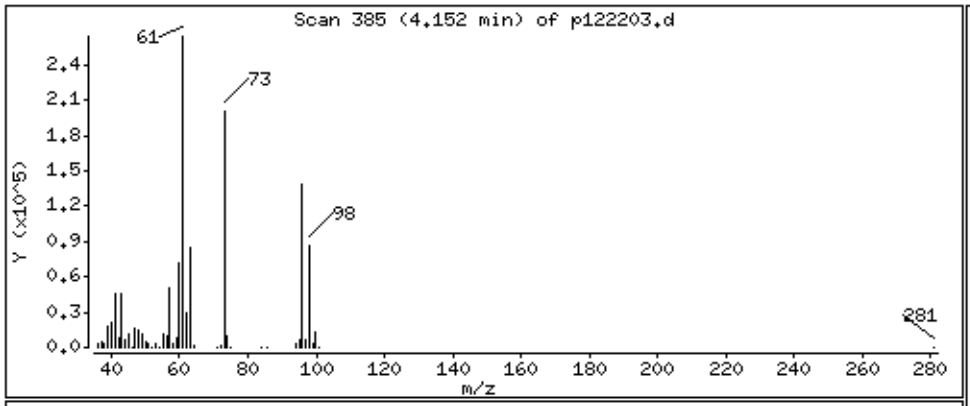
Operator: js

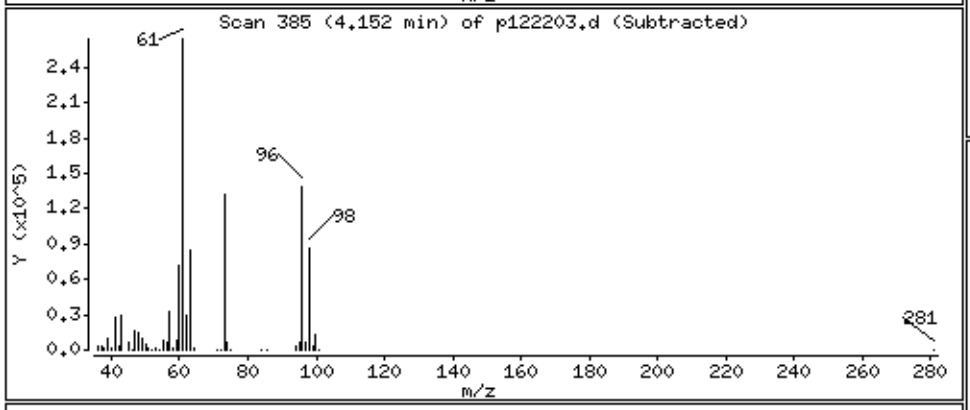
Column phase: RTX-624

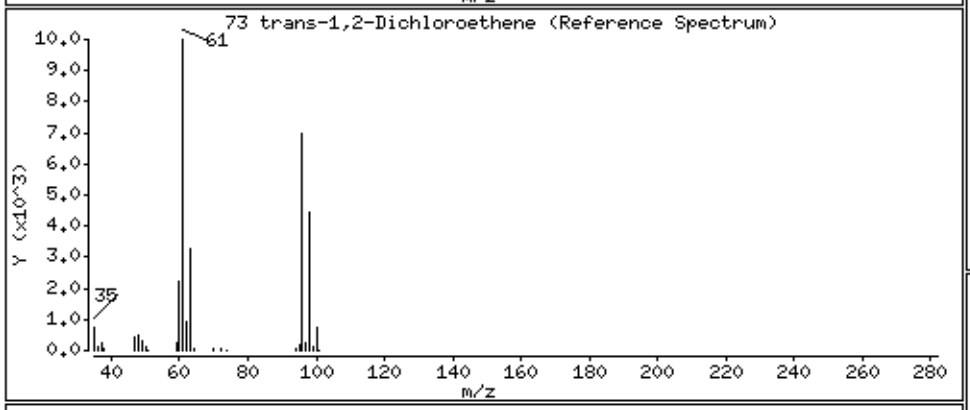
Column diameter: 0.25

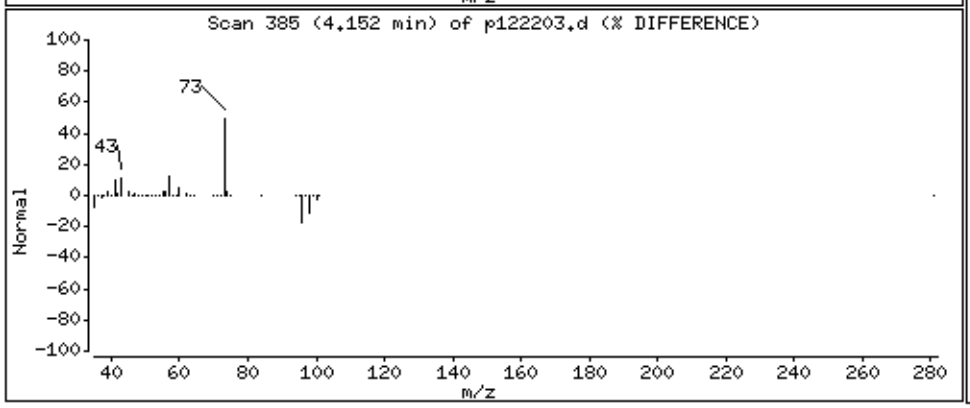
73 trans-1,2-Dichloroethene

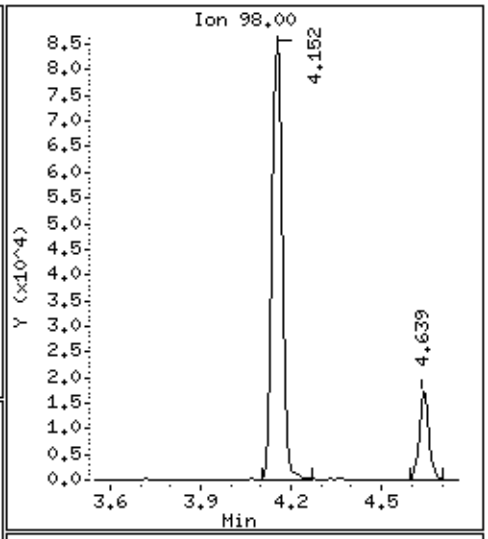
Concentration: 43.741 PPBV

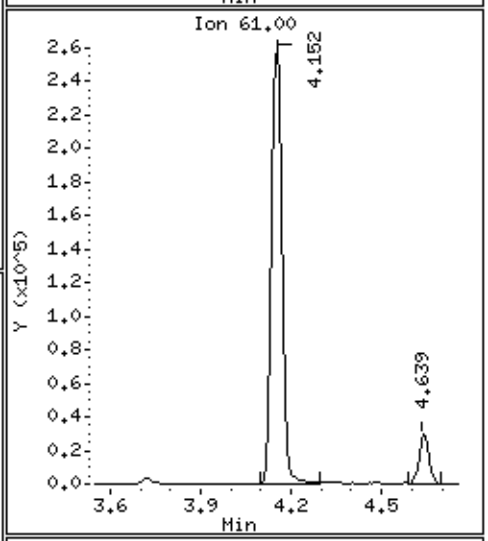


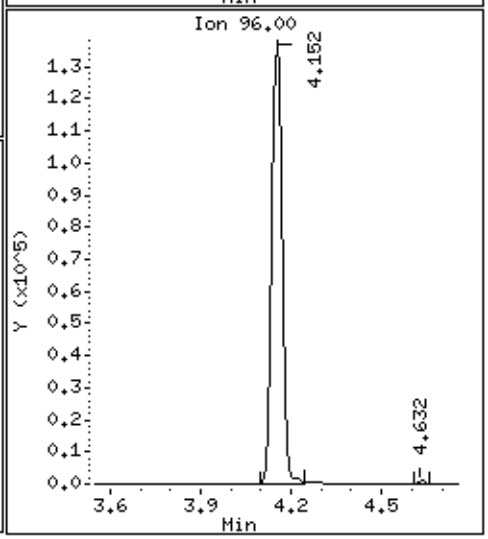












Data File: /chem/msdp.i/22dec14.b/p122203.d

Date : 22-DEC-2014 10:16

Client ID: LCS

Instrument: msdp.i

Sample Info: 100ml #2687-110A

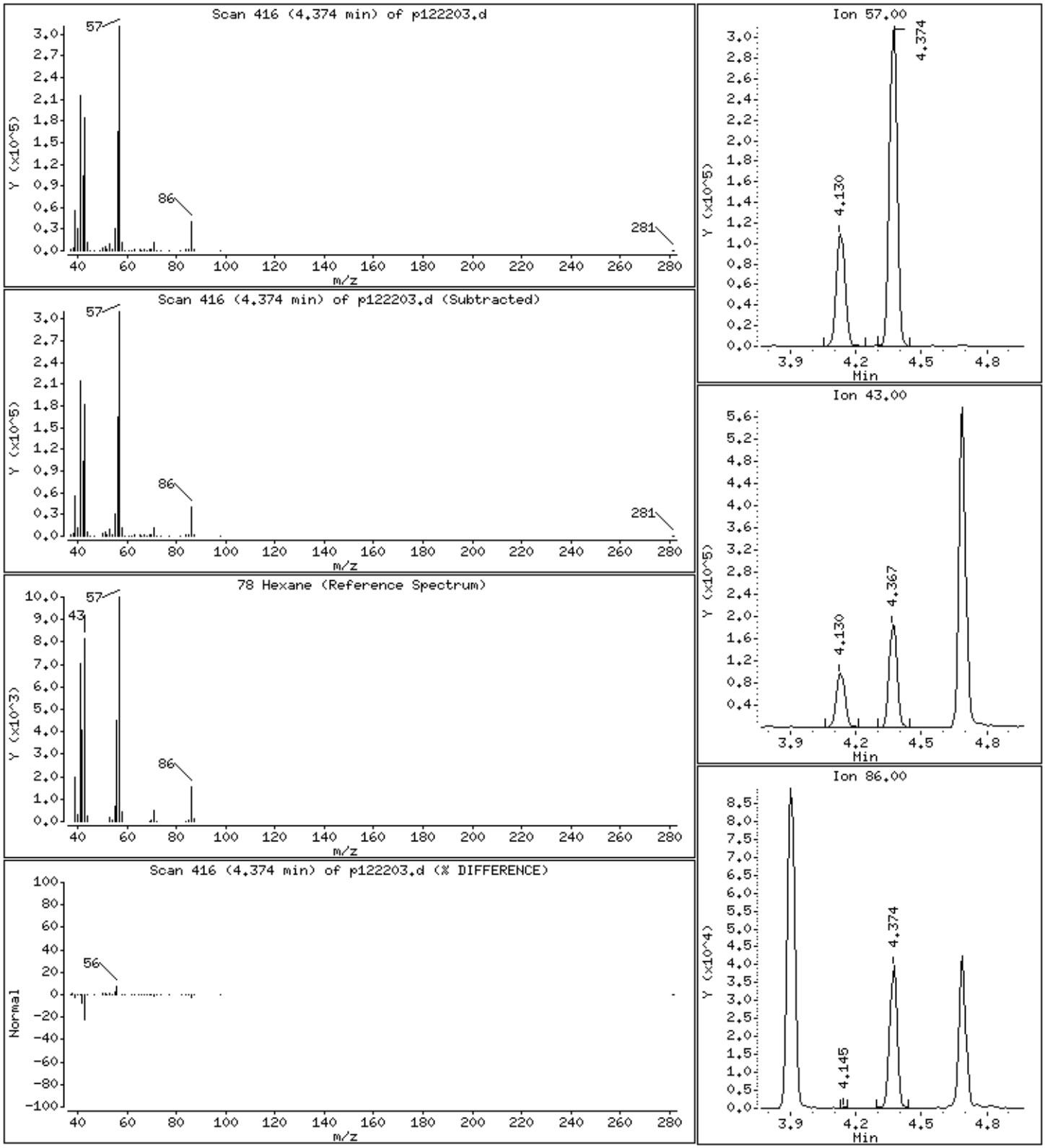
Operator: js

Column phase: RTX-624

Column diameter: 0.25

78 Hexane

Concentration: 46.222 PPBV



Data File: /chem/msdp.i/22dec14.b/p122203.d

Date : 22-DEC-2014 10:16

Client ID: LCS

Instrument: msdp.i

Sample Info: 100ml #2687-110A

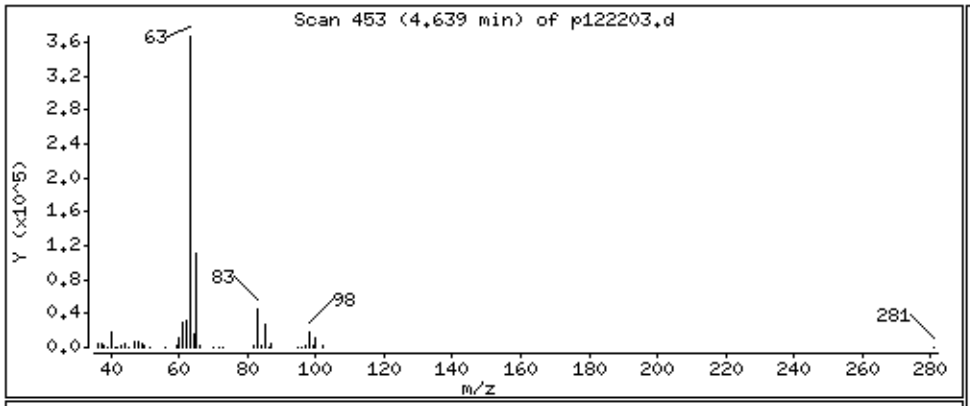
Operator: js

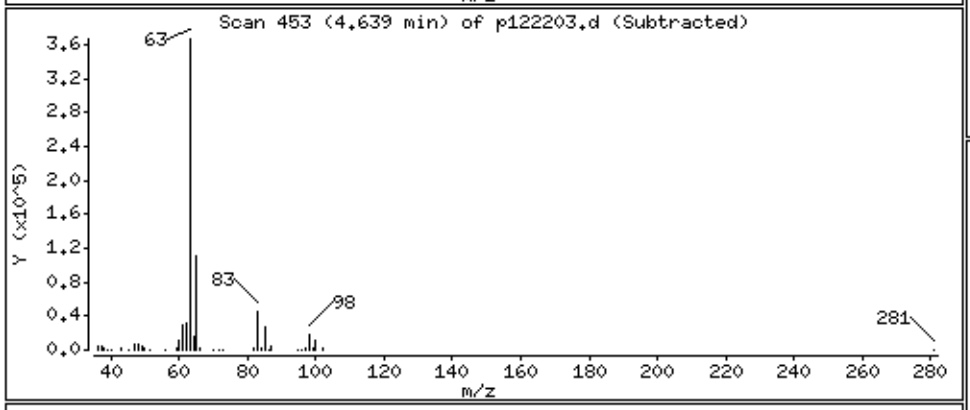
Column phase: RTX-624

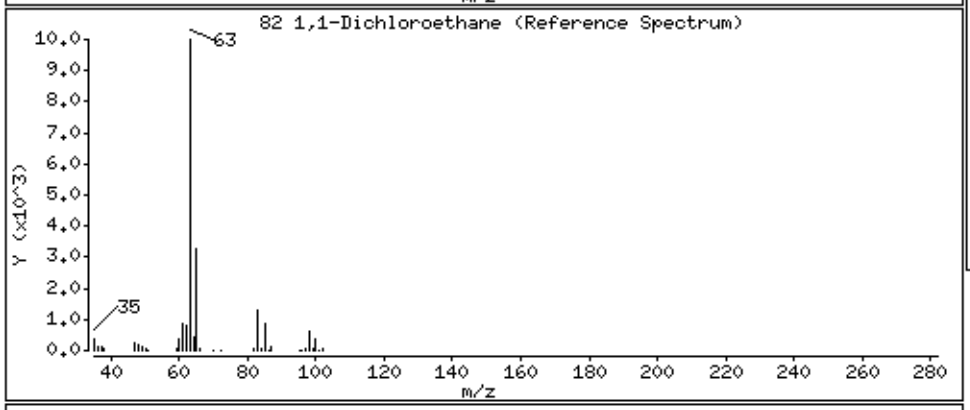
Column diameter: 0.25

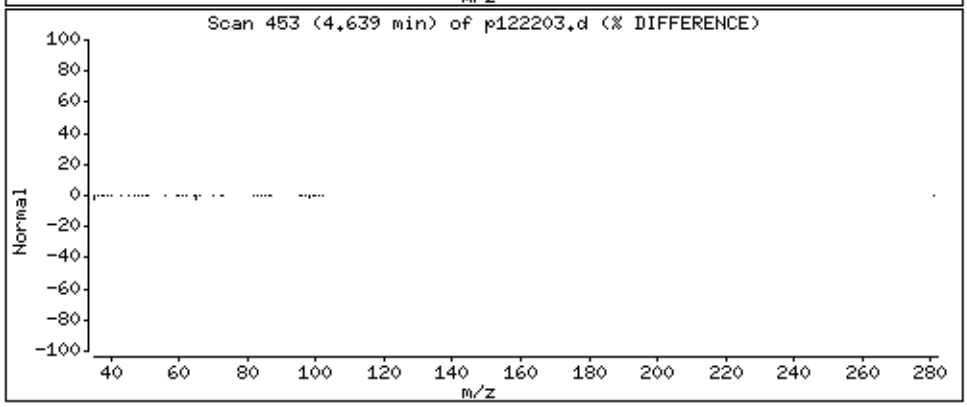
82 1,1-Dichloroethane

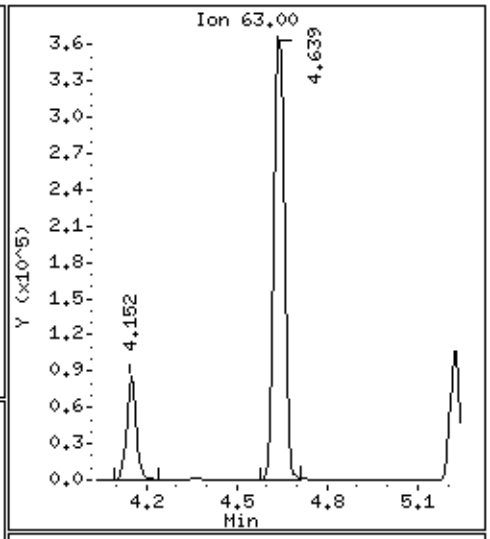
Concentration: 45.328 PPBV

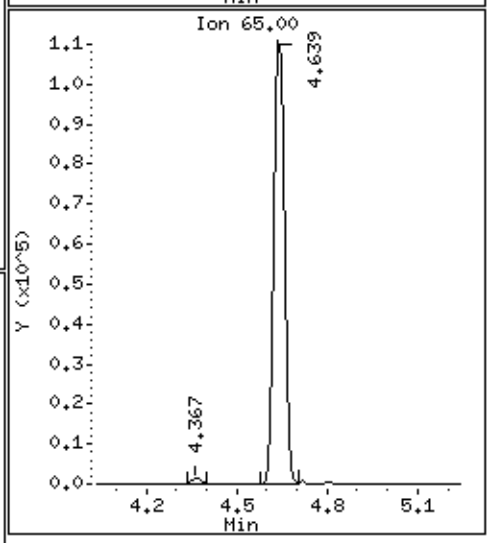












Data File: /chem/msdp.i/22dec14.b/p122203.d

Date : 22-DEC-2014 10:16

Client ID: LCS

Instrument: msdp.i

Sample Info: 100ml #2687-110A

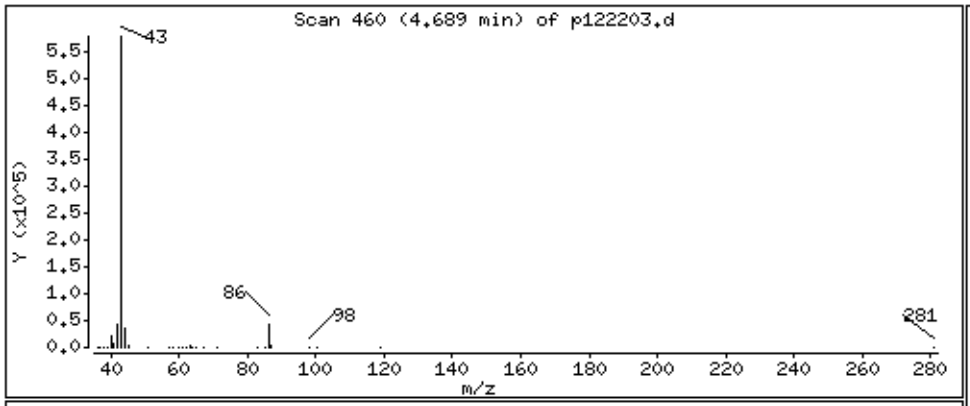
Operator: js

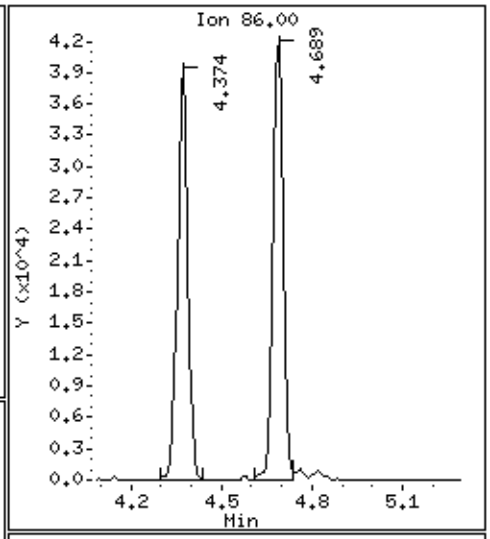
Column phase: RTX-624

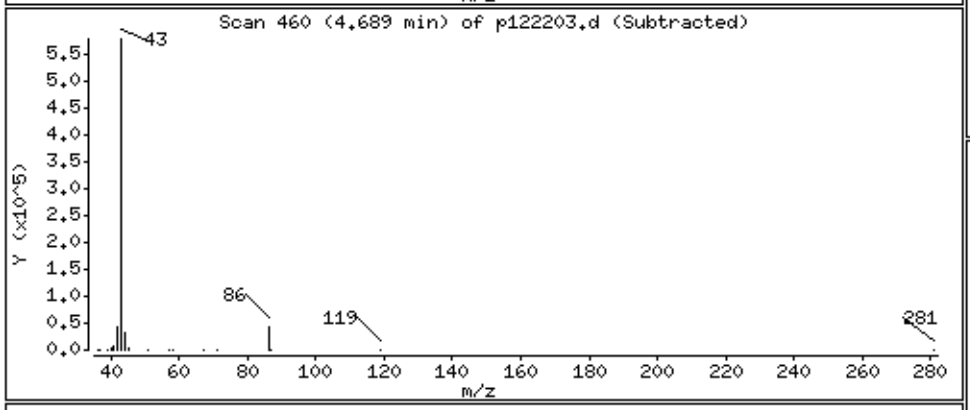
Column diameter: 0.25

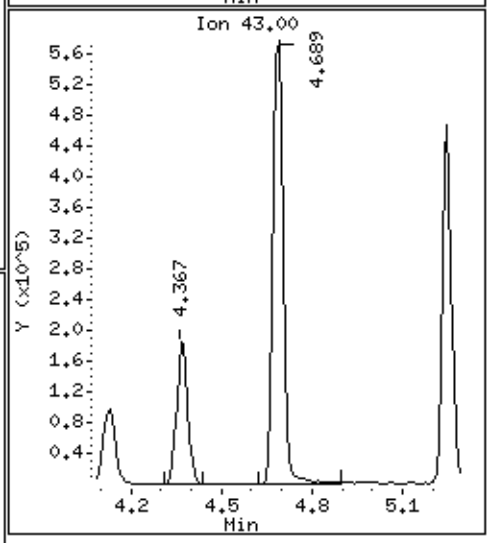
86 Vinyl Acetate

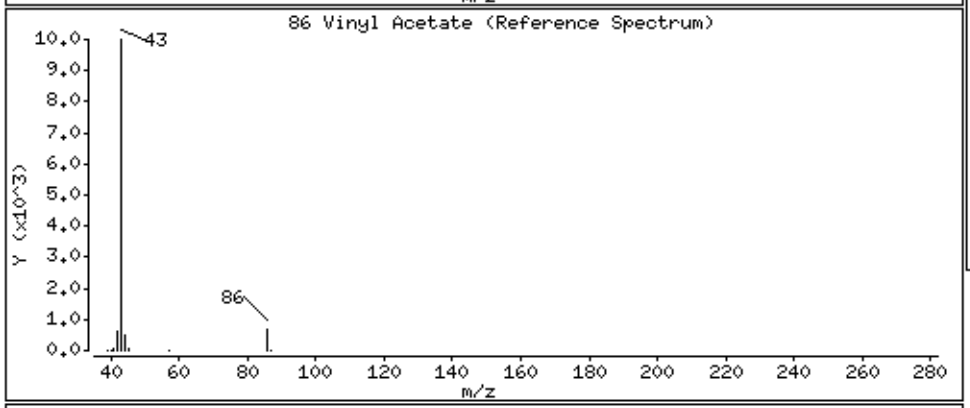
Concentration: 44.394 PPBV

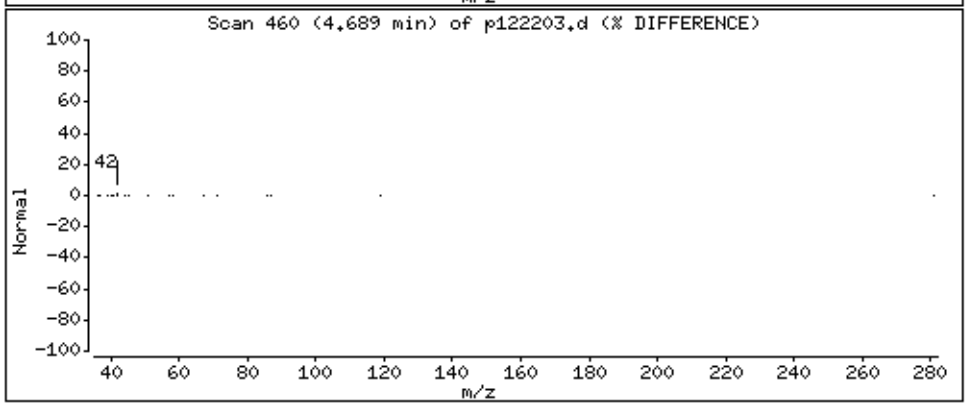












Data File: /chem/msdp.i/22dec14.b/p122203.d

Date : 22-DEC-2014 10:16

Client ID: LCS

Instrument: msdp.i

Sample Info: 100ml #2687-110A

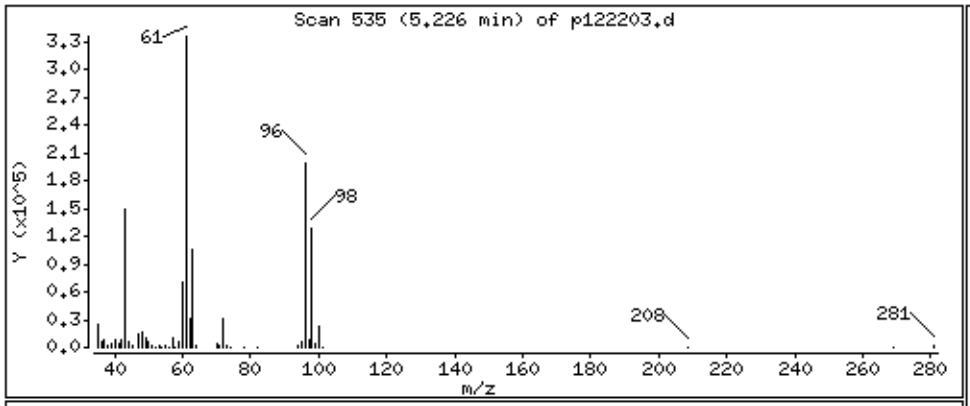
Operator: js

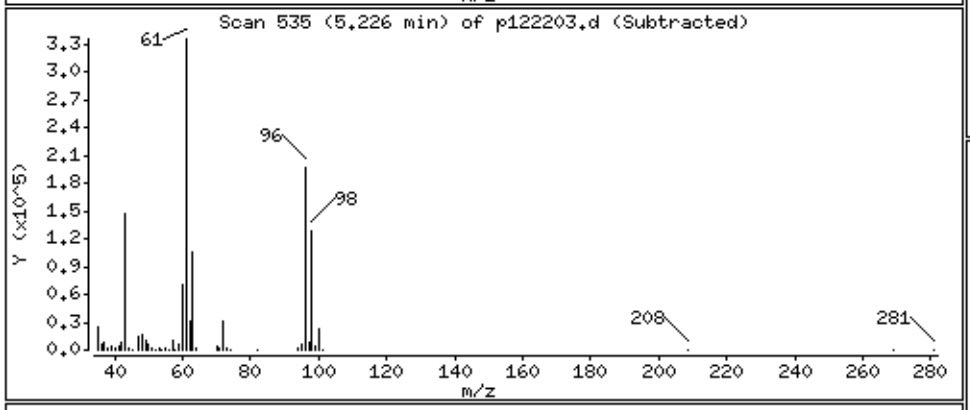
Column phase: RTX-624

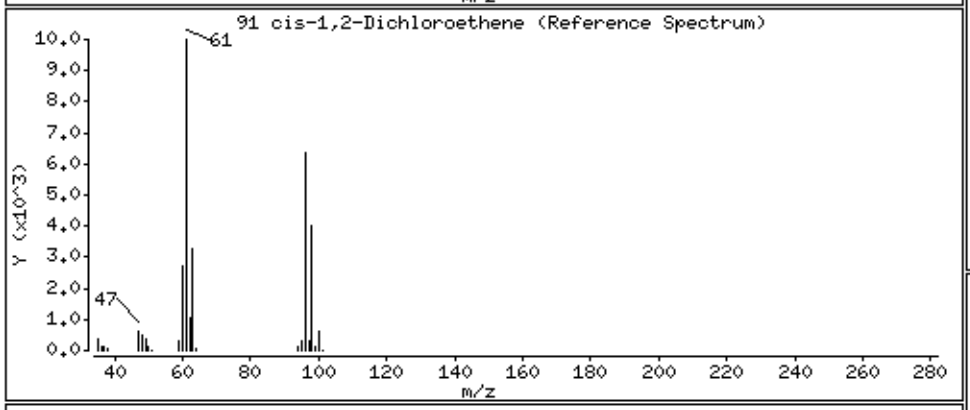
Column diameter: 0.25

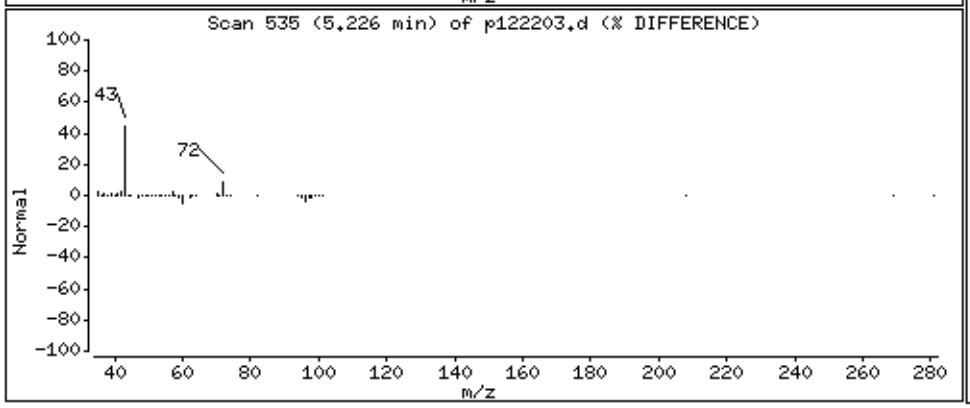
91 cis-1,2-Dichloroethene

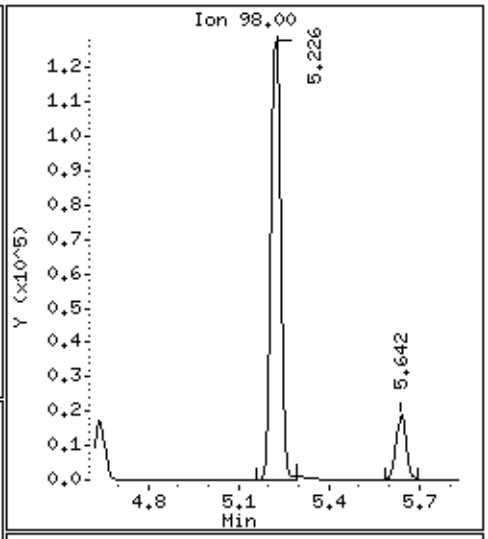
Concentration: 47.168 PPBV

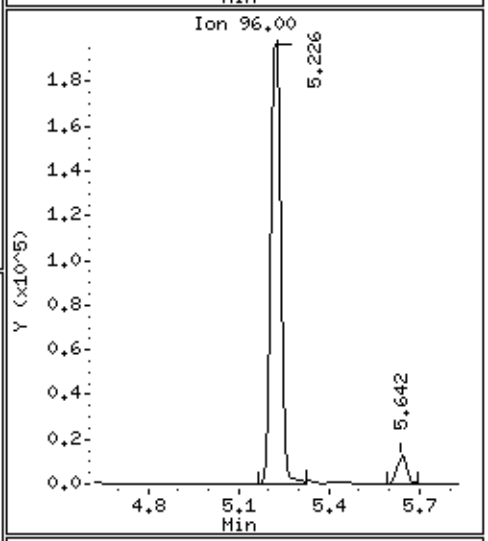


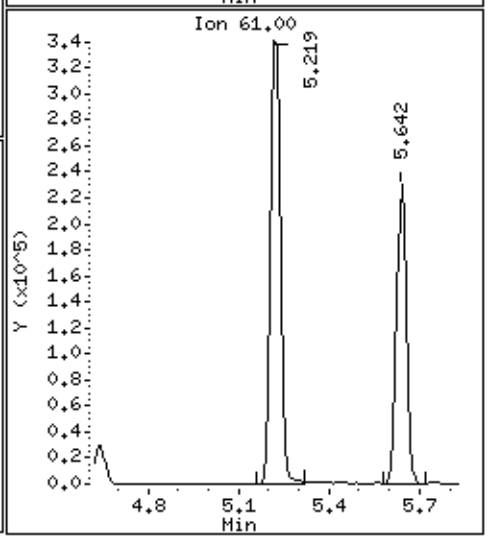












Data File: /chem/msdp.i/22dec14.b/p122203.d

Date : 22-DEC-2014 10:16

Client ID: LCS

Instrument: msdp.i

Sample Info: 100ml #2687-110A

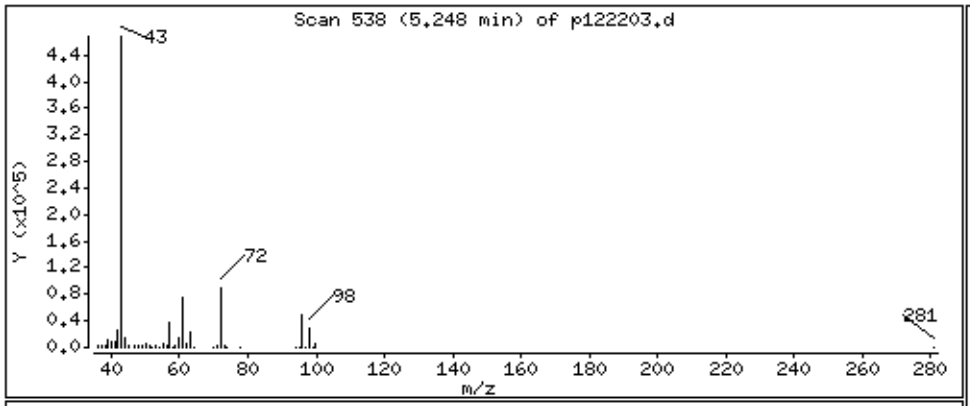
Operator: js

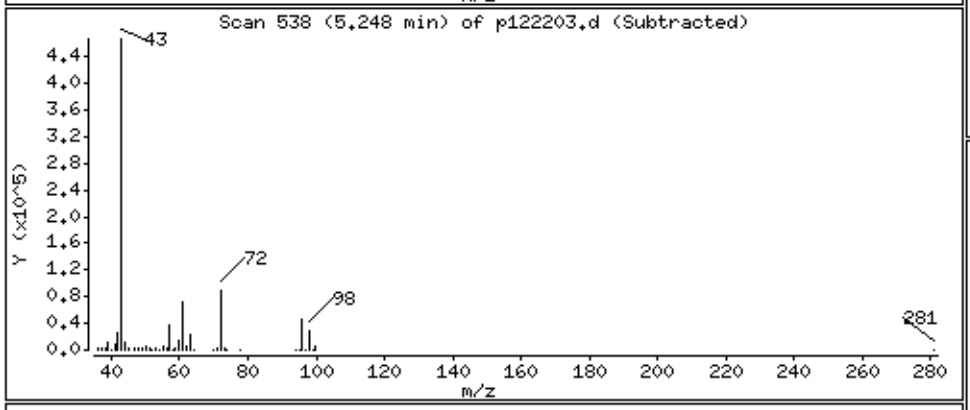
Column phase: RTX-624

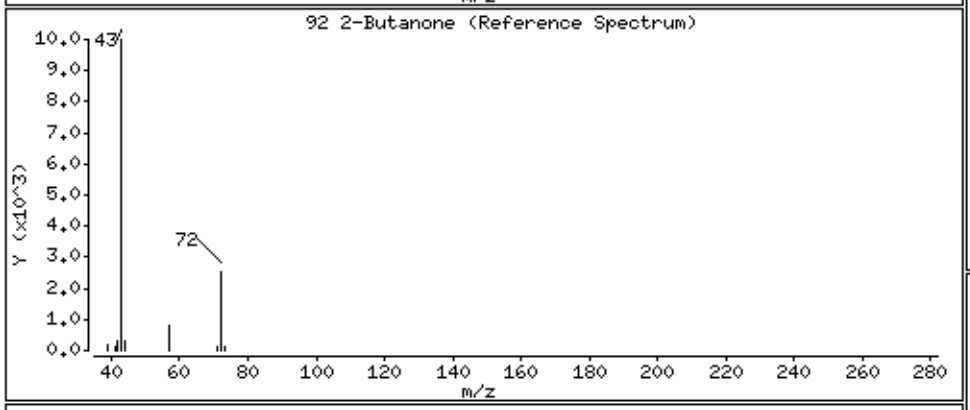
Column diameter: 0.25

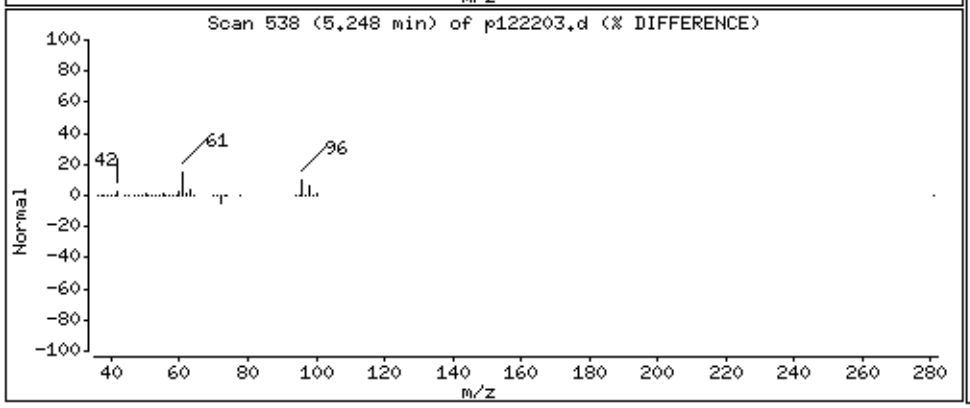
92 2-Butanone

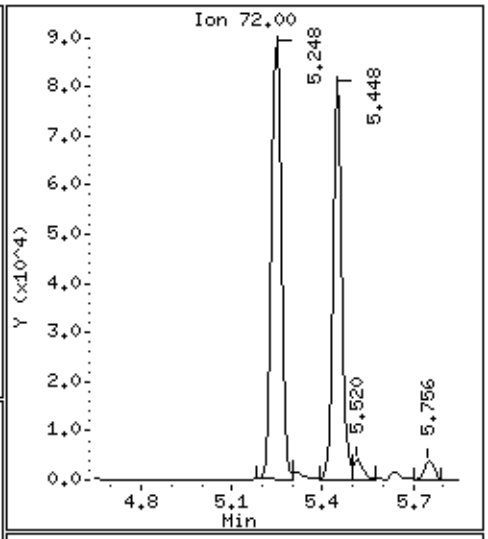
Concentration: 42.970 PPBV

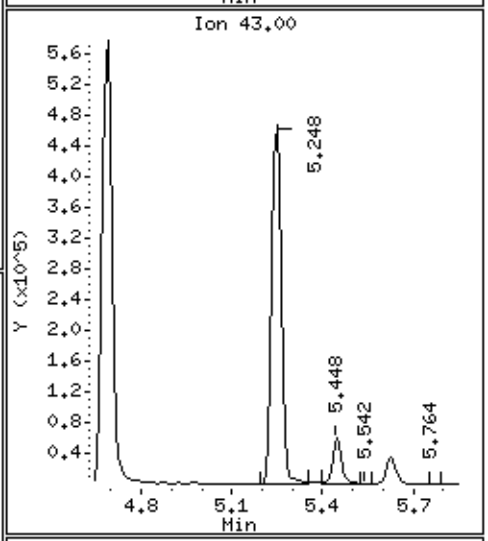


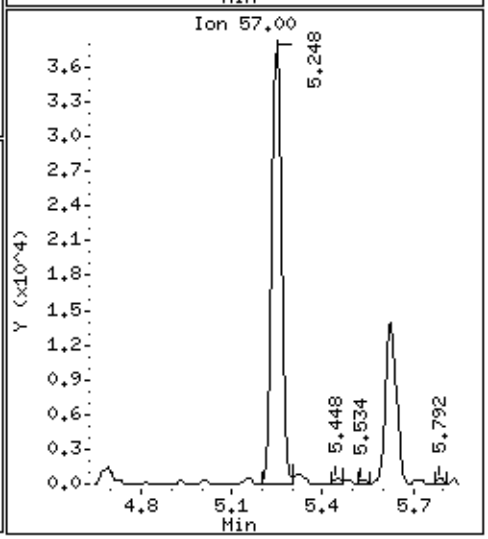












Data File: /chem/msdp.i/22dec14.b/p122203.d

Date : 22-DEC-2014 10:16

Client ID: LCS

Instrument: msdp.i

Sample Info: 100ml #2687-110A

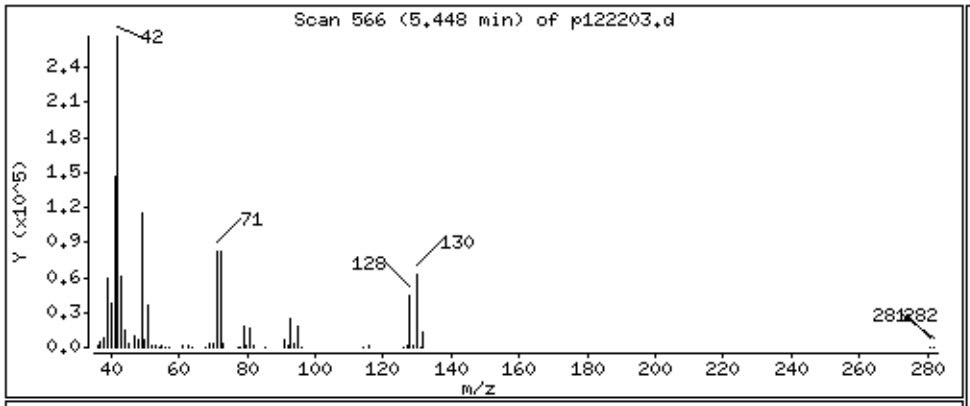
Operator: js

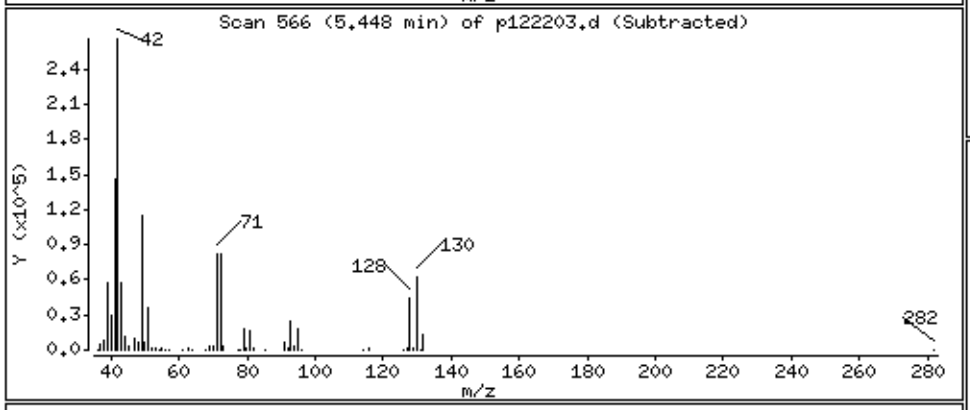
Column phase: RTX-624

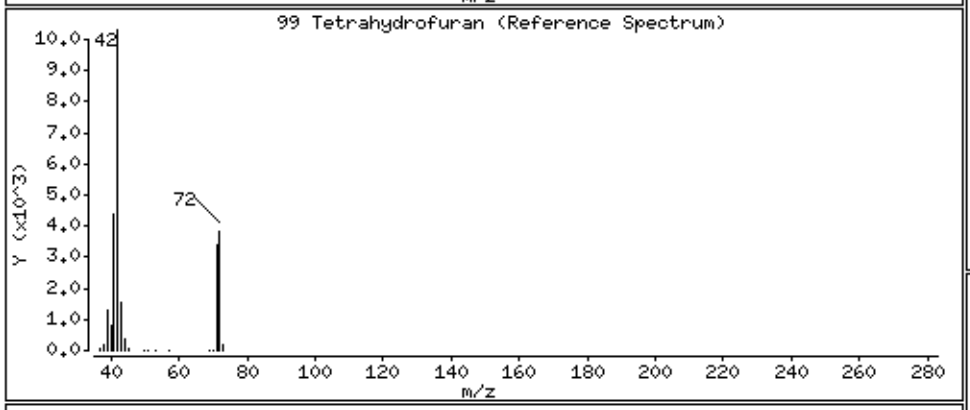
Column diameter: 0.25

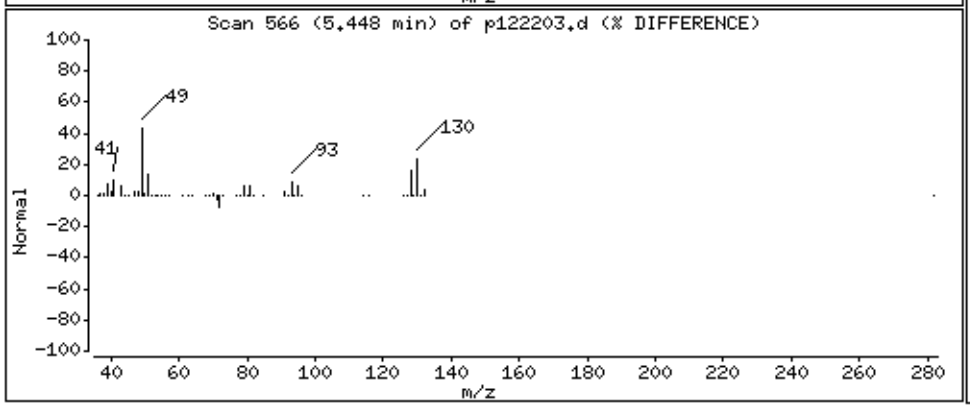
99 Tetrahydrofuran

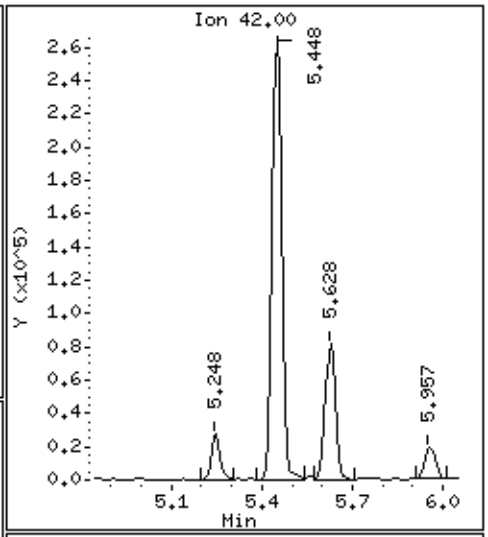
Concentration: 42.200 PPBV

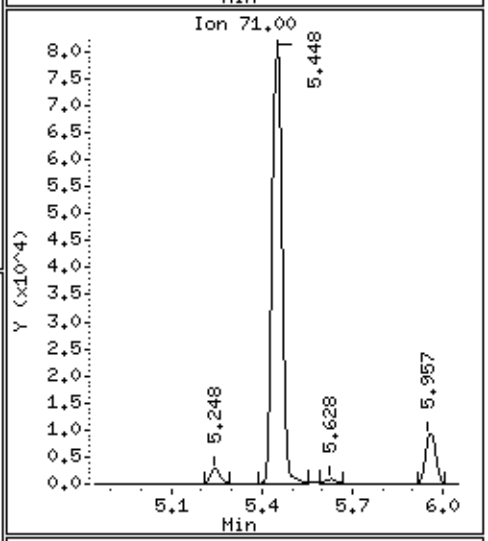


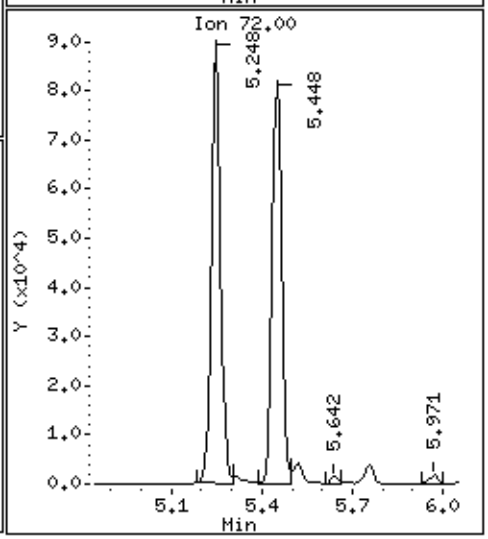












Data File: /chem/msdp.i/22dec14.b/p122203.d

Date : 22-DEC-2014 10:16

Client ID: LCS

Instrument: msdp.i

Sample Info: 100ml #2687-110A

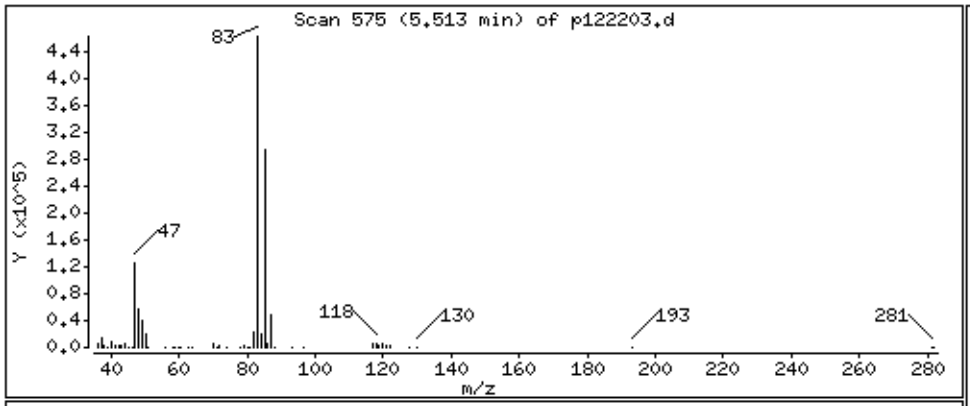
Operator: js

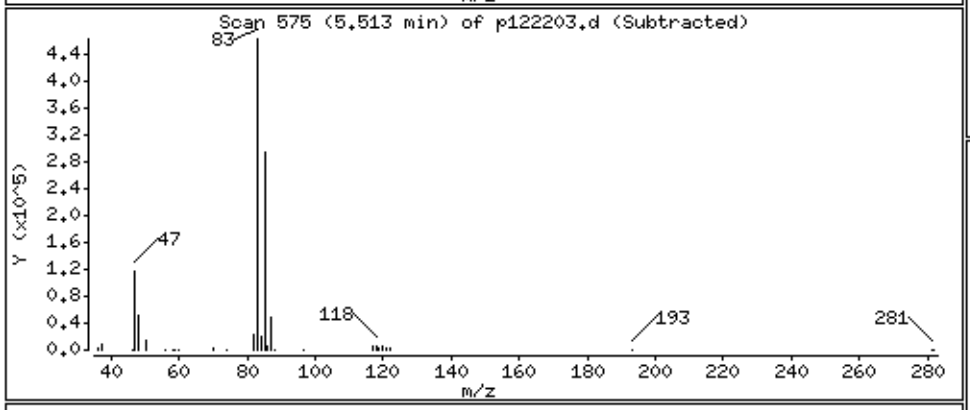
Column phase: RTX-624

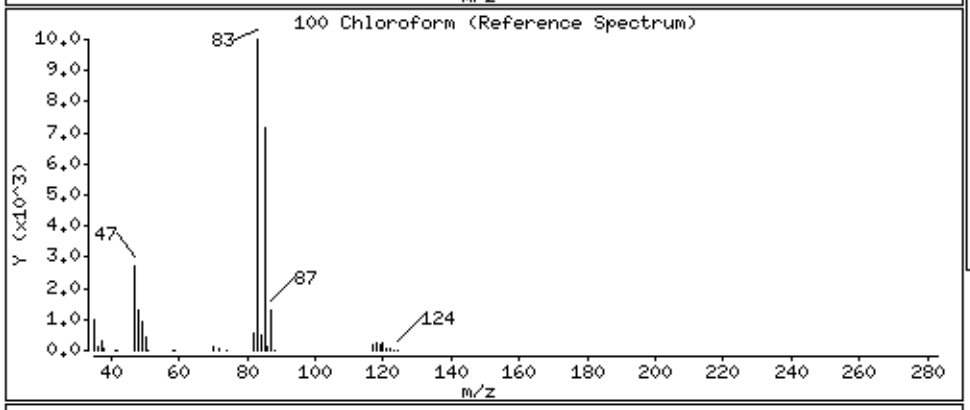
Column diameter: 0.25

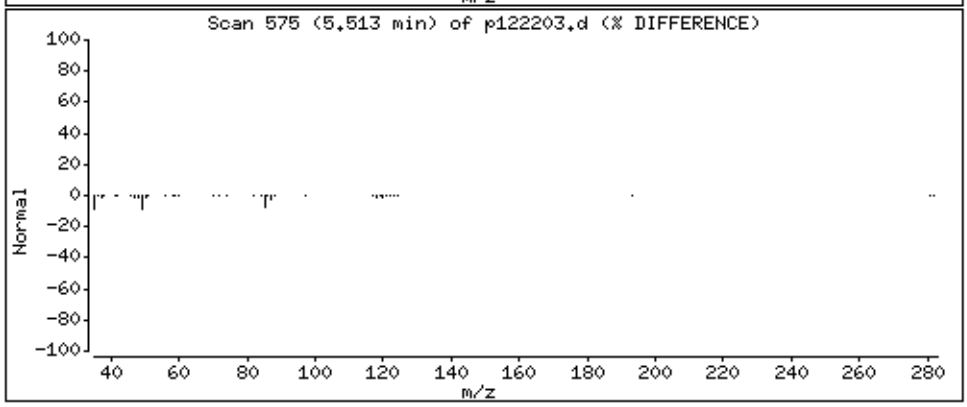
100 Chloroform

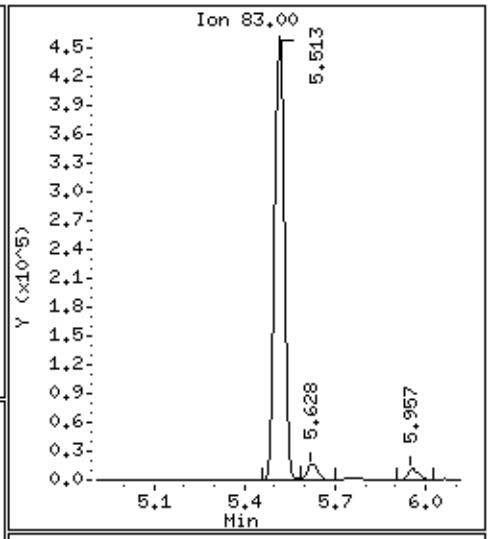
Concentration: 45.278 PPBV

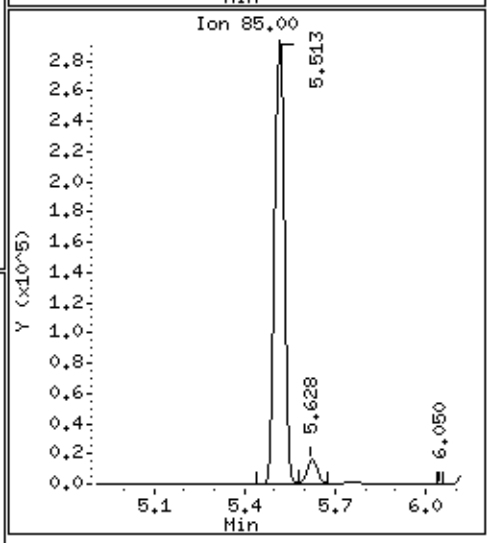












Data File: /chem/msdp.i/22dec14.b/p122203.d

Date : 22-DEC-2014 10:16

Client ID: LCS

Instrument: msdp.i

Sample Info: 100ml #2687-110A

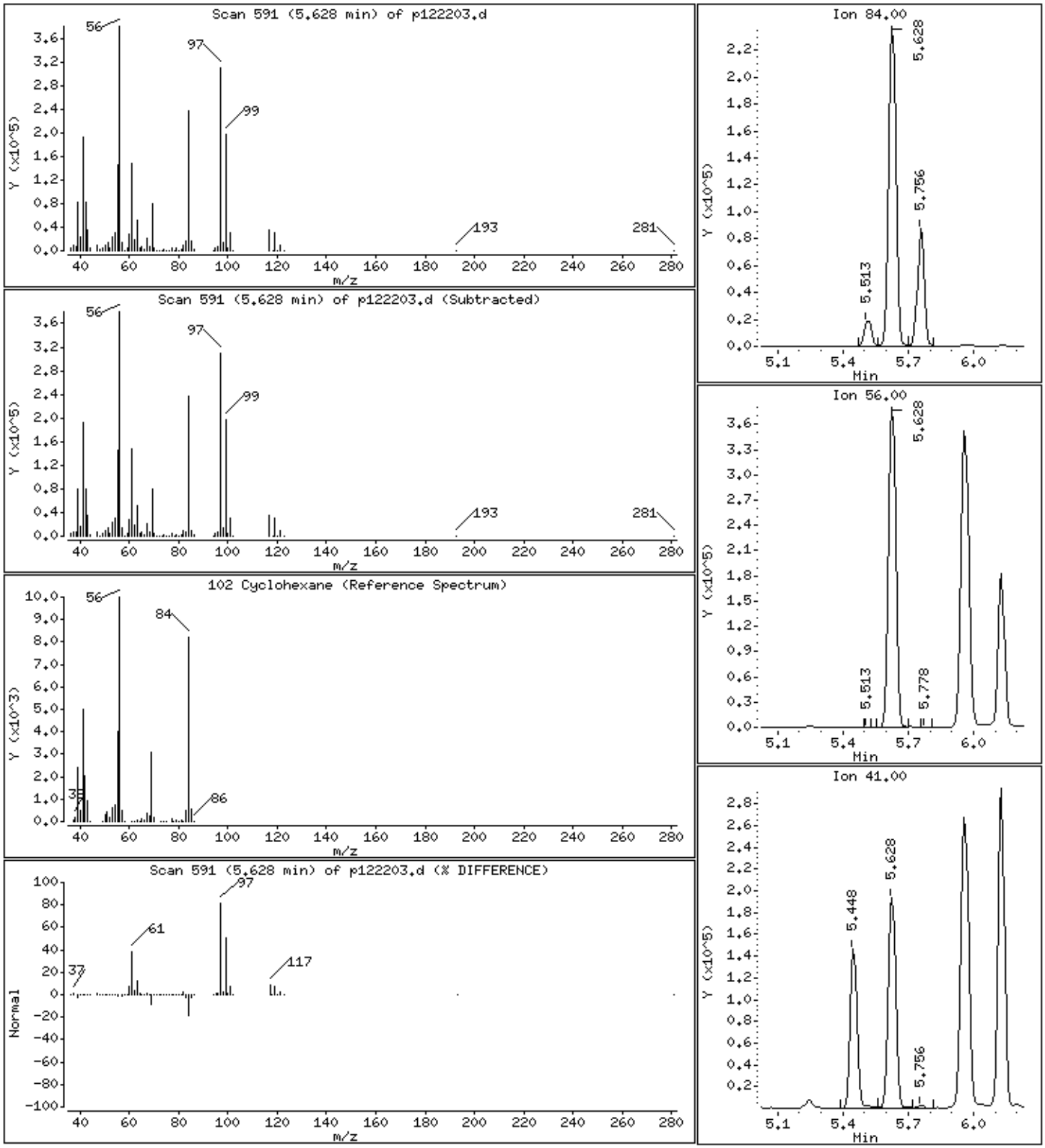
Operator: js

Column phase: RTX-624

Column diameter: 0.25

102 Cyclohexane

Concentration: 48.773 PPBV



Data File: /chem/msdp.i/22dec14.b/p122203.d

Date : 22-DEC-2014 10:16

Client ID: LCS

Instrument: msdp.i

Sample Info: 100ml #2687-110A

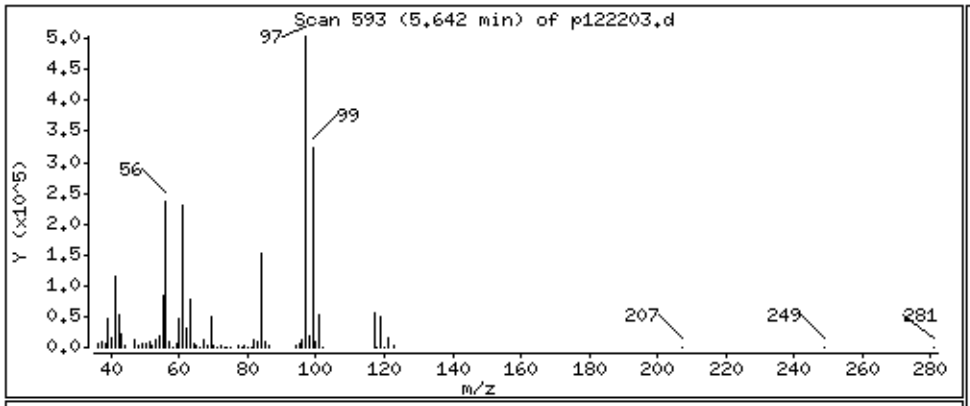
Operator: js

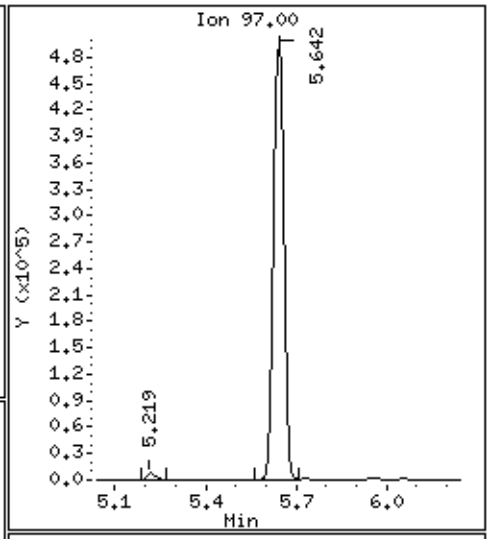
Column phase: RTX-624

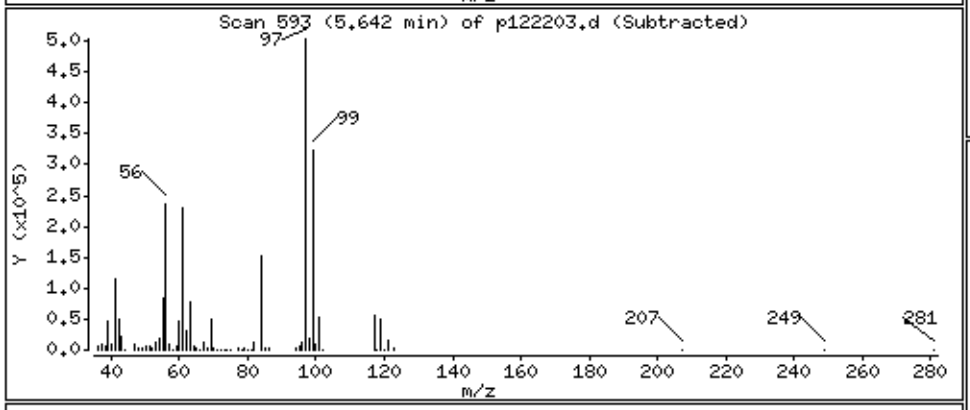
Column diameter: 0.25

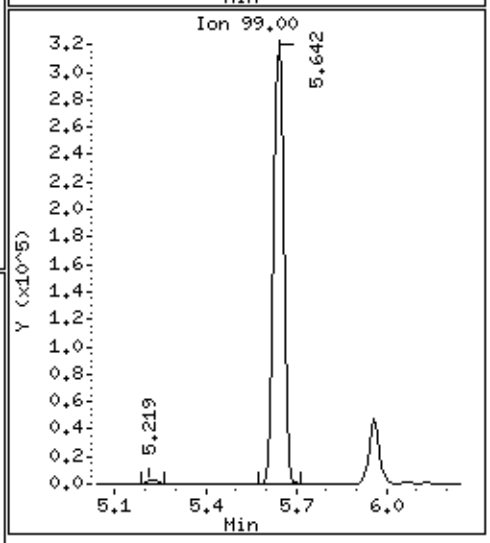
103 1,1,1-Trichloroethane

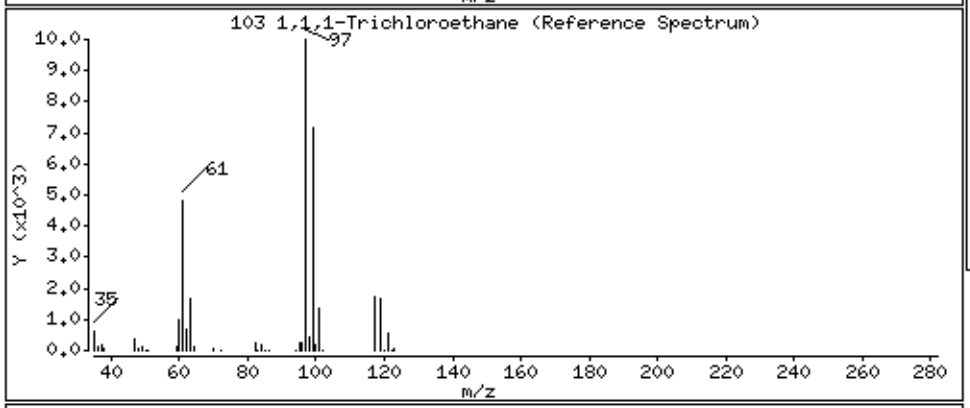
Concentration: 46.972 PPBV

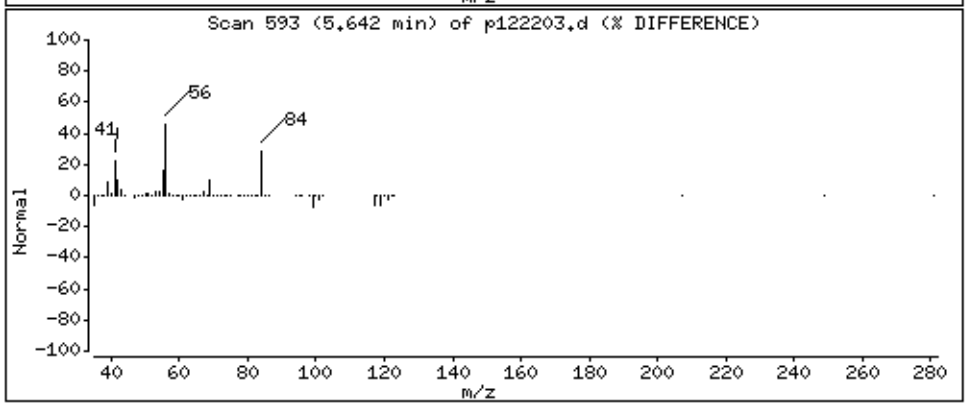












Data File: /chem/msdp.i/22dec14.b/p122203.d

Date : 22-DEC-2014 10:16

Client ID: LCS

Instrument: msdp.i

Sample Info: 100ml #2687-110A

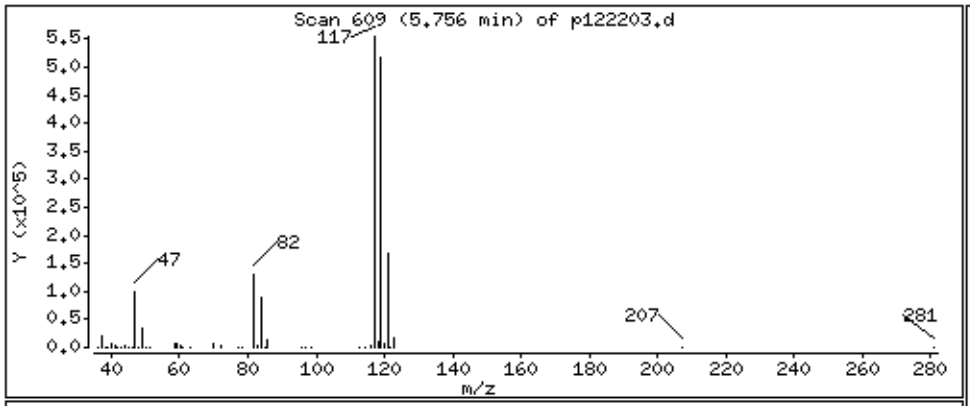
Operator: js

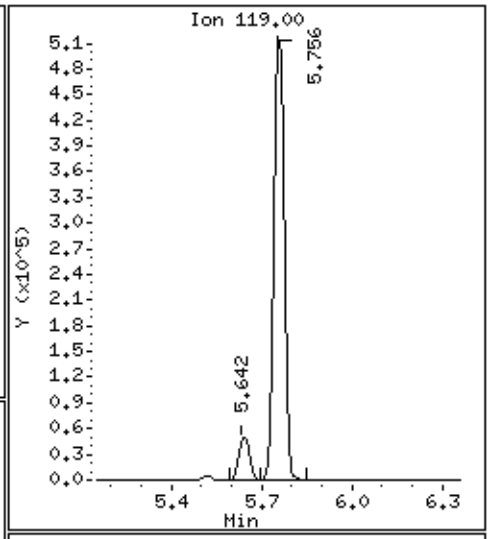
Column phase: RTX-624

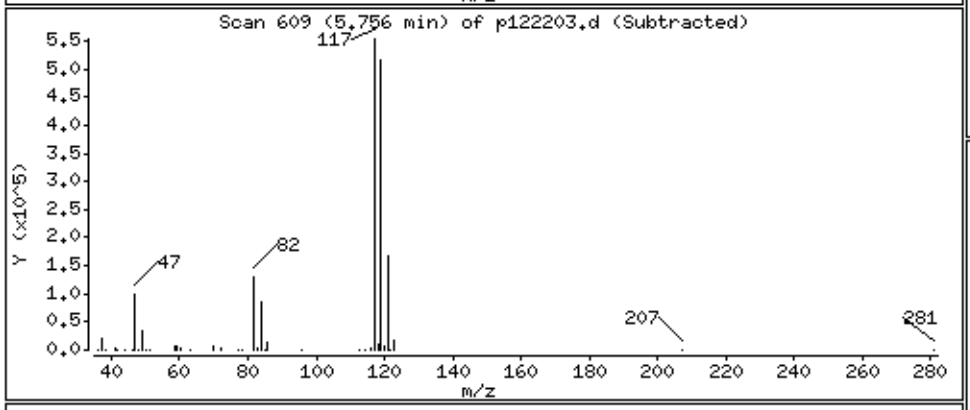
Column diameter: 0.25

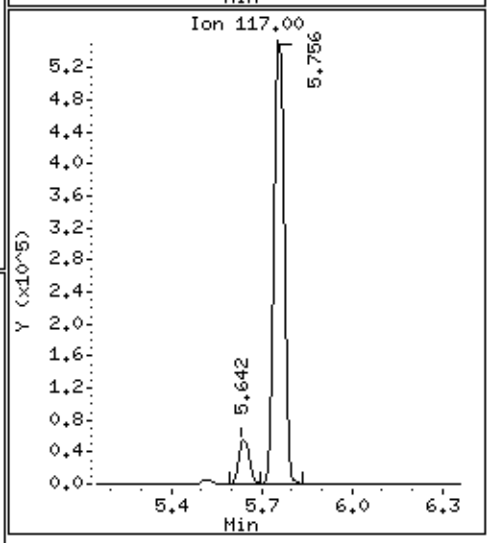
106 Carbon Tetrachloride

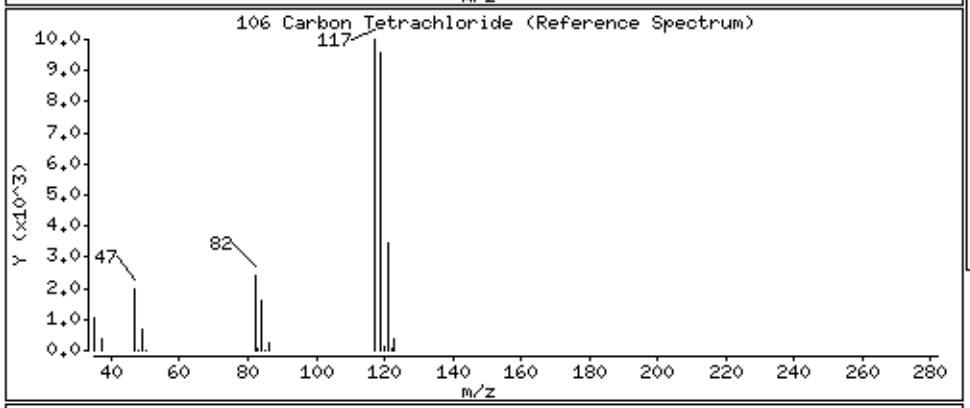
Concentration: 46.739 PPBV

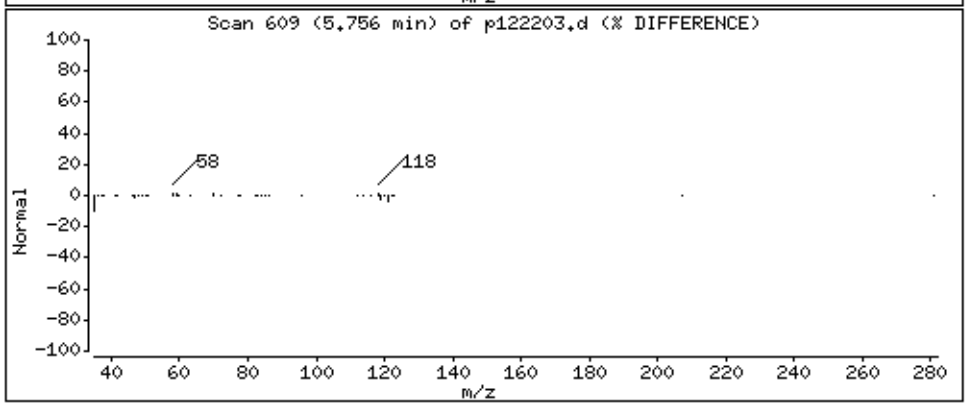












Data File: /chem/msdp.i/22dec14.b/p122203.d

Date : 22-DEC-2014 10:16

Client ID: LCS

Instrument: msdp.i

Sample Info: 100ml #2687-110A

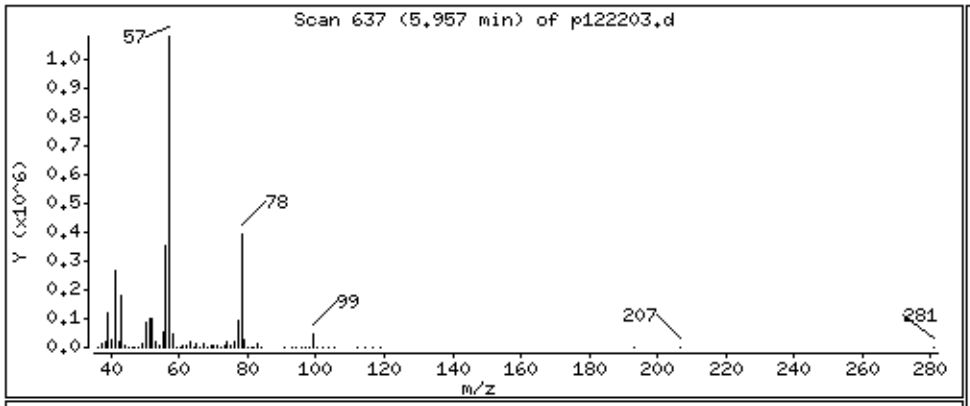
Operator: js

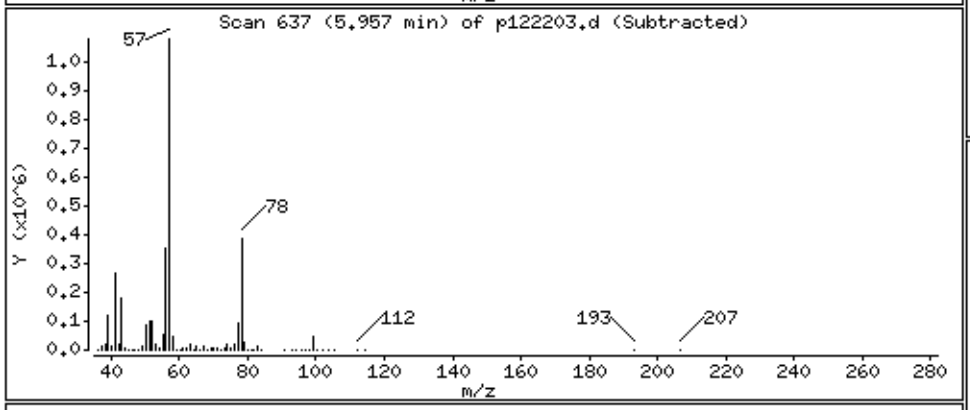
Column phase: RTX-624

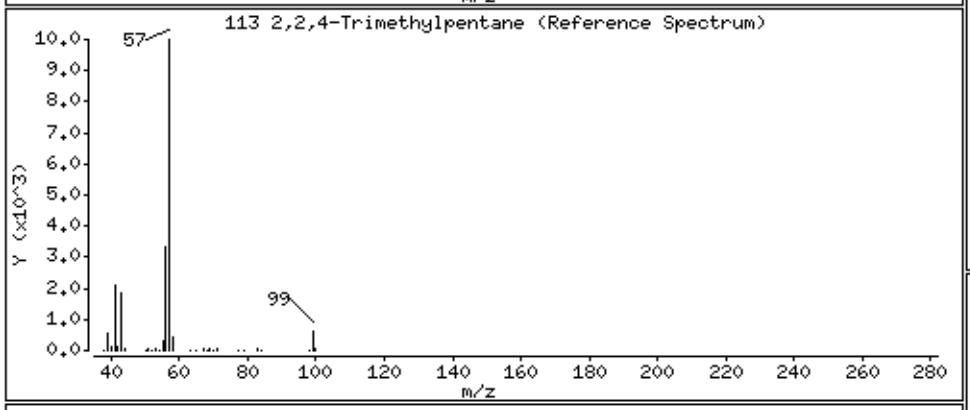
Column diameter: 0.25

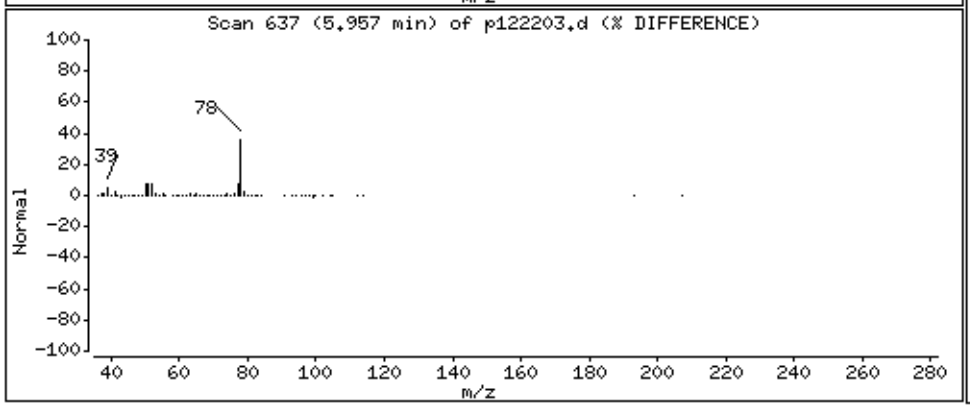
113 2,2,4-Trimethylpentane

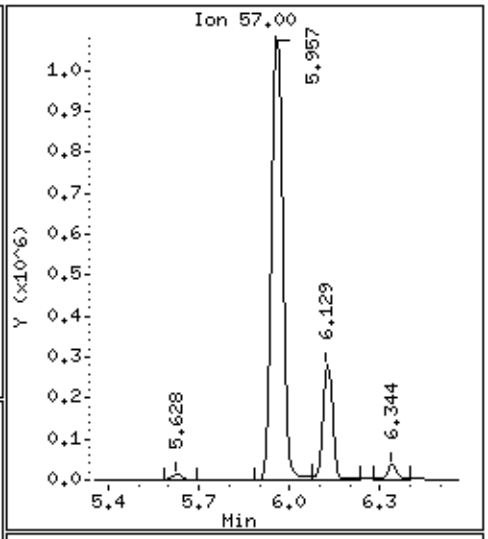
Concentration: 55.749 PPBV

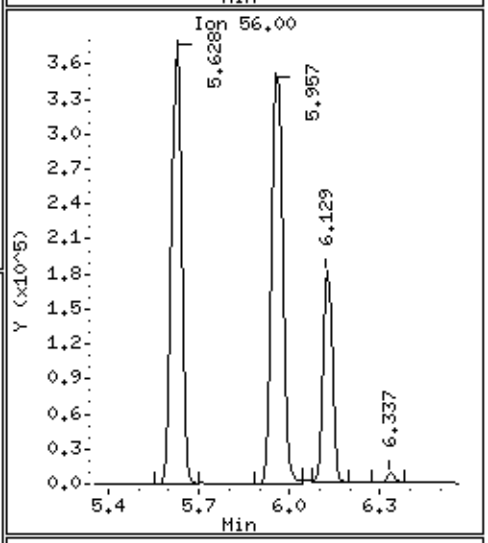


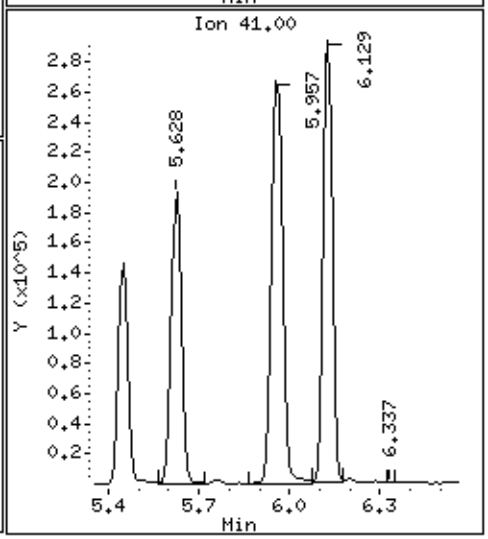












Data File: /chem/msdp.i/22dec14.b/p122203.d

Date : 22-DEC-2014 10:16

Client ID: LCS

Instrument: msdp.i

Sample Info: 100ml #2687-110A

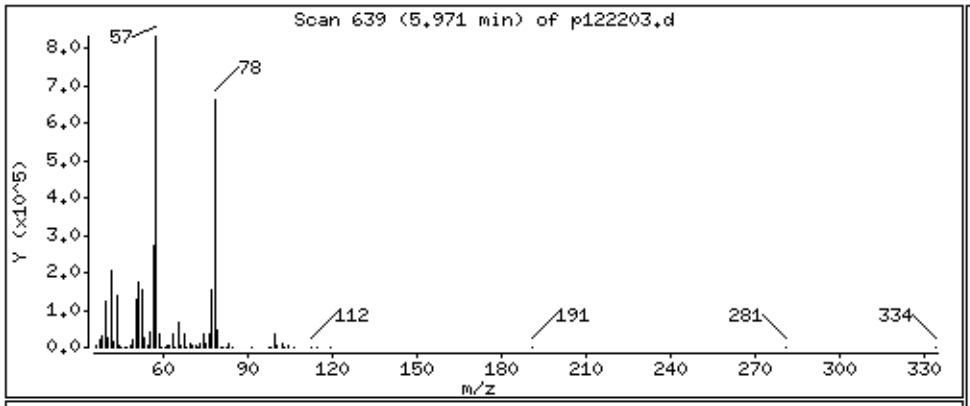
Operator: js

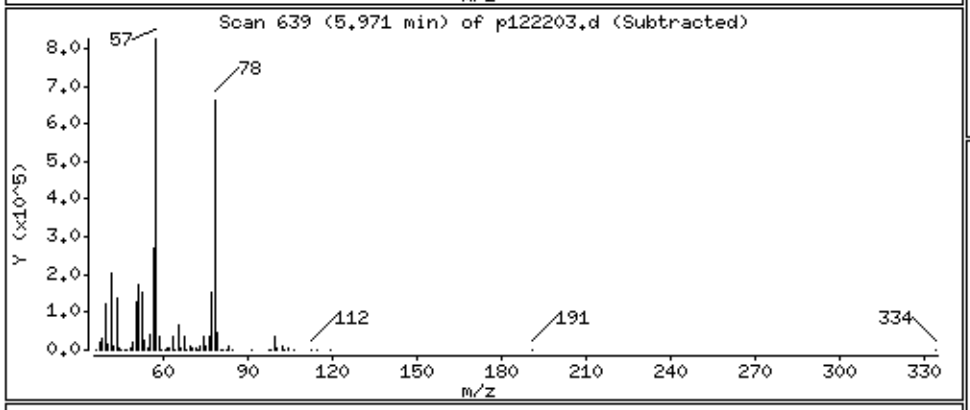
Column phase: RTX-624

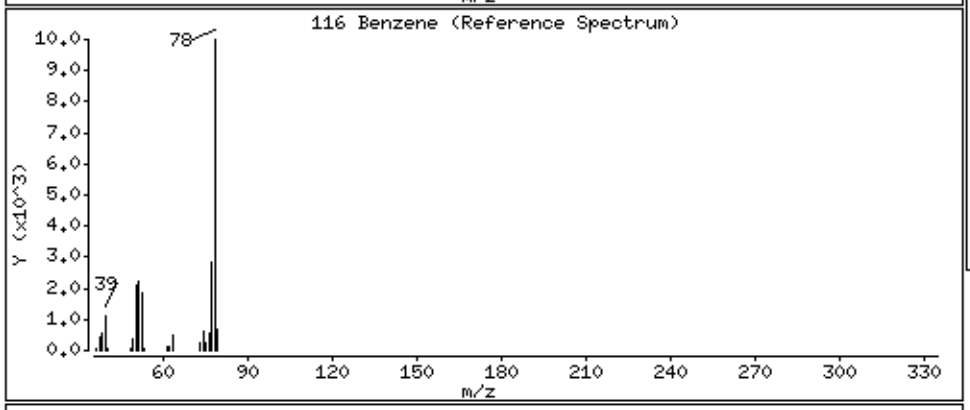
Column diameter: 0.25

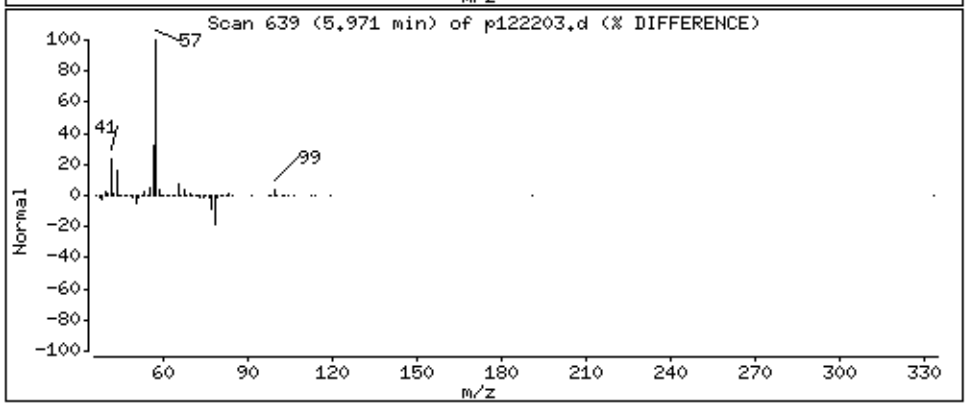
116 Benzene

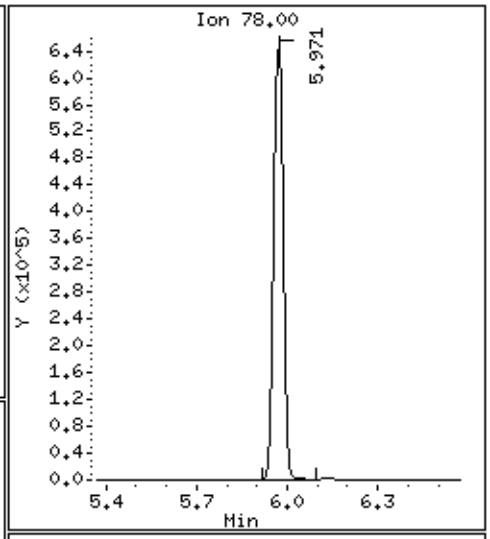
Concentration: 53.472 PPBV

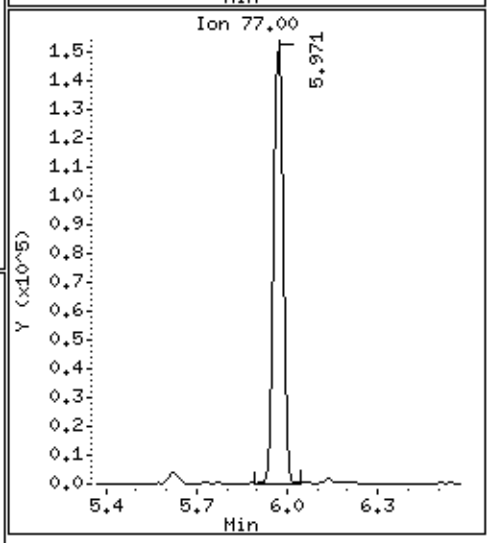












Data File: /chem/msdp.i/22dec14.b/p122203.d

Date : 22-DEC-2014 10:16

Client ID: LCS

Instrument: msdp.i

Sample Info: 100ml #2687-110A

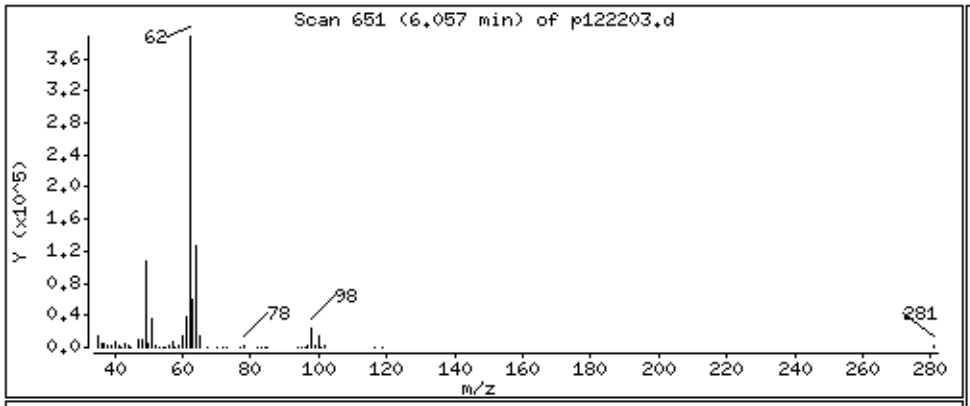
Operator: js

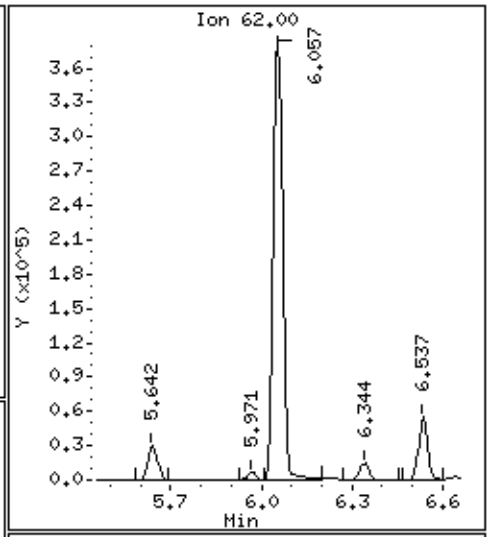
Column phase: RTX-624

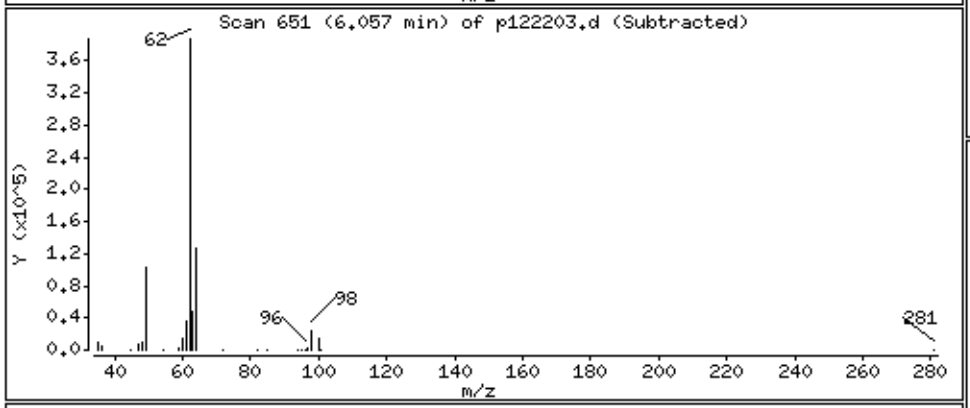
Column diameter: 0.25

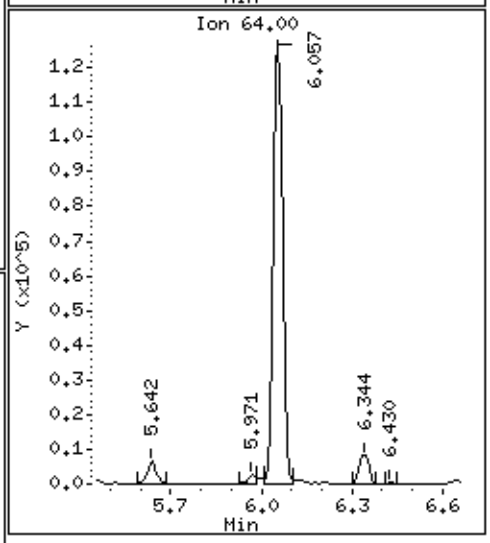
120 1,2-Dichloroethane

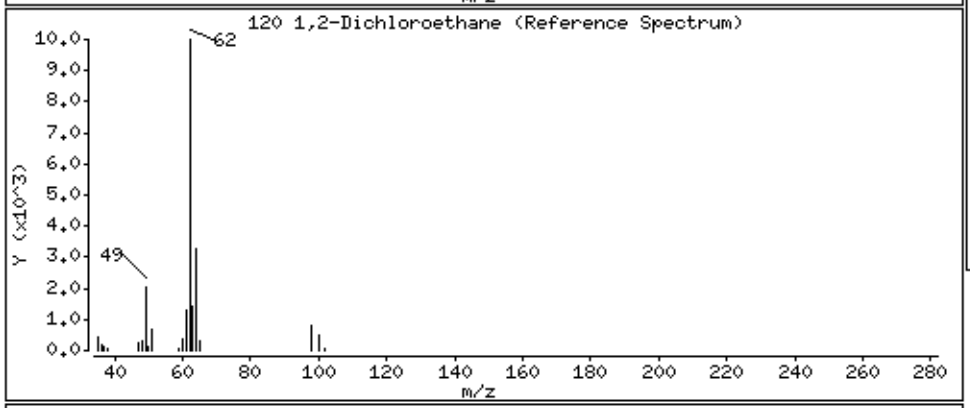
Concentration: 48.432 PPBV

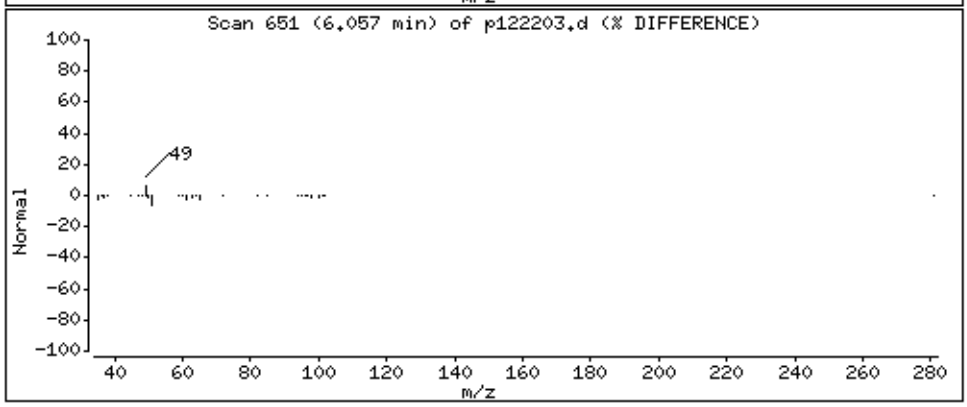












Data File: /chem/msdp.i/22dec14.b/p122203.d

Date : 22-DEC-2014 10:16

Client ID: LCS

Instrument: msdp.i

Sample Info: 100ml #2687-110A

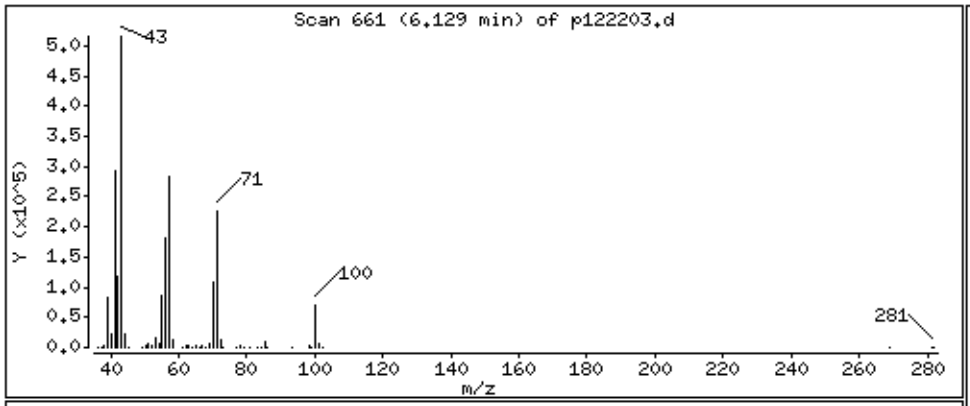
Operator: js

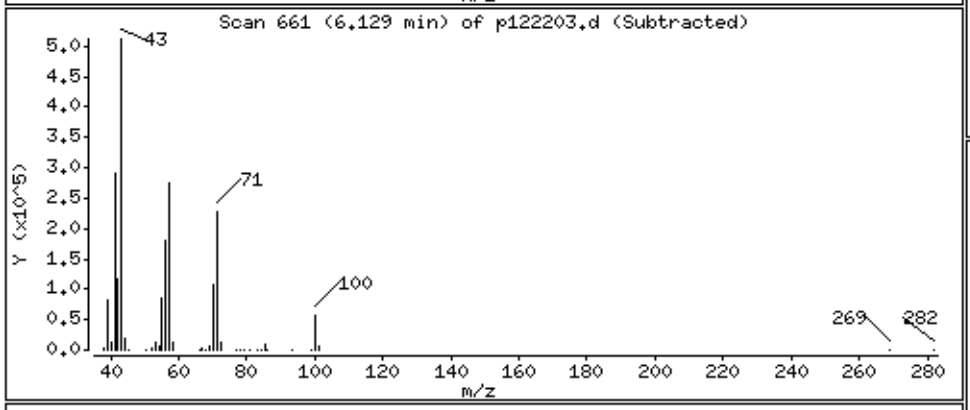
Column phase: RTX-624

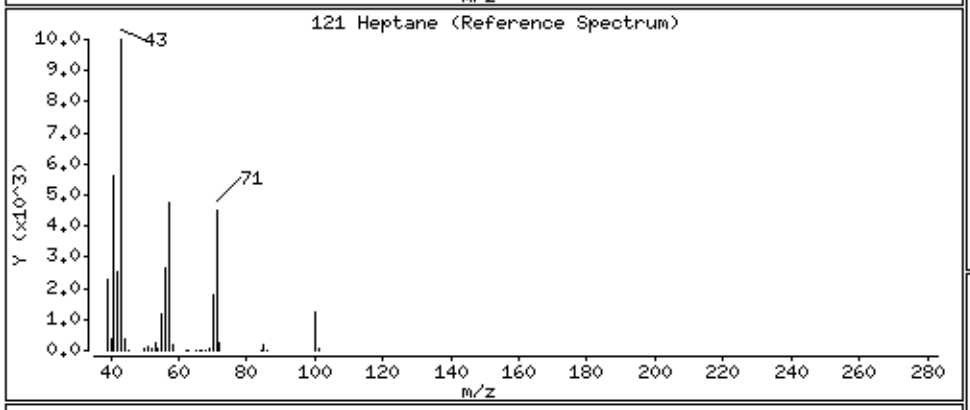
Column diameter: 0.25

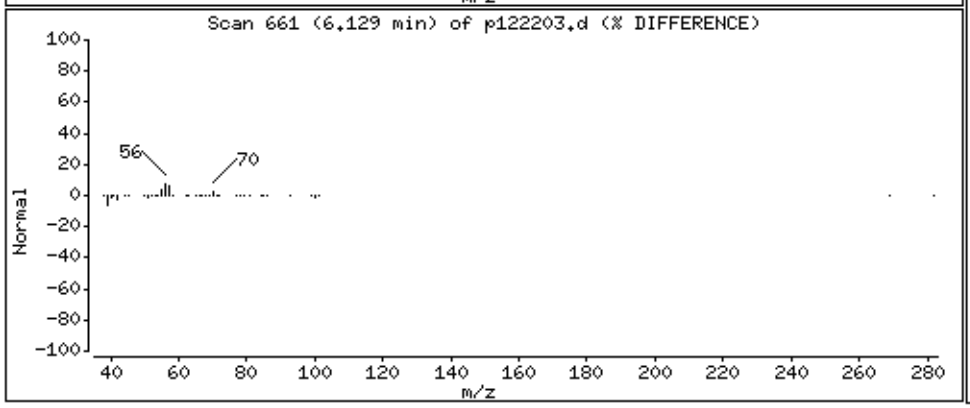
121 Heptane

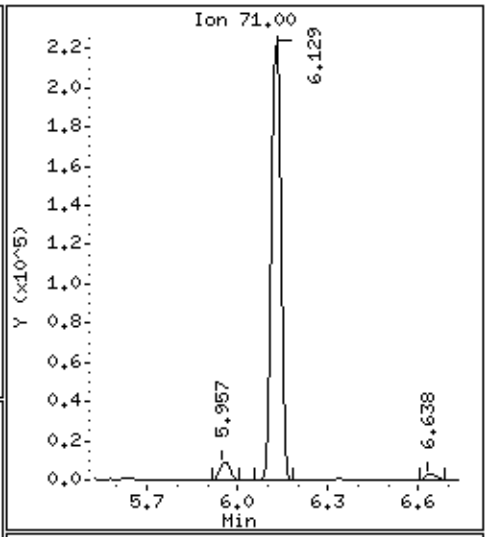
Concentration: 56.016 PPBV

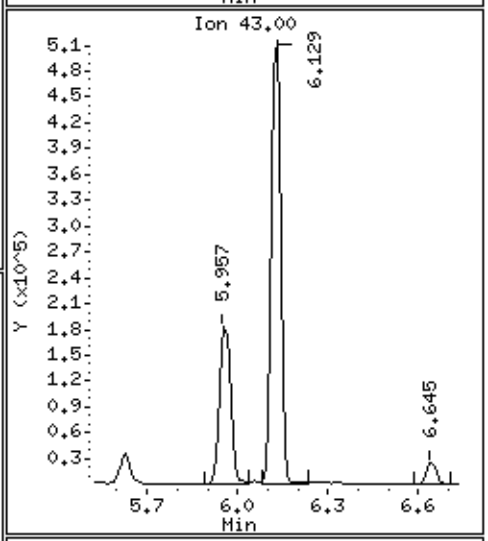


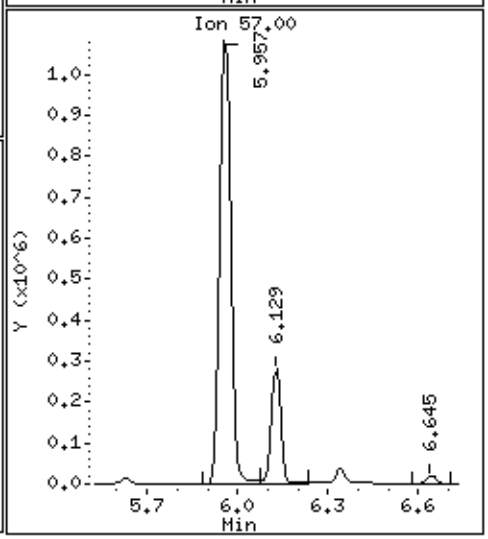












Data File: /chem/msdp.i/22dec14.b/p122203.d

Date : 22-DEC-2014 10:16

Client ID: LCS

Instrument: msdp.i

Sample Info: 100ml #2687-110A

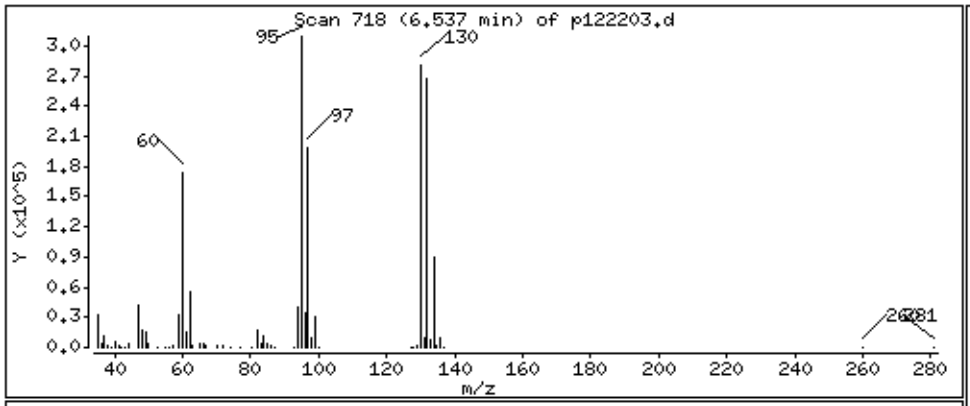
Operator: js

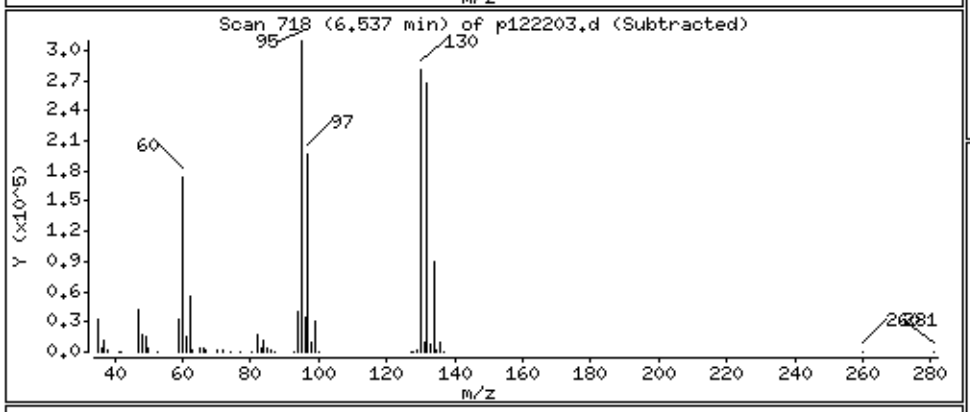
Column phase: RTX-624

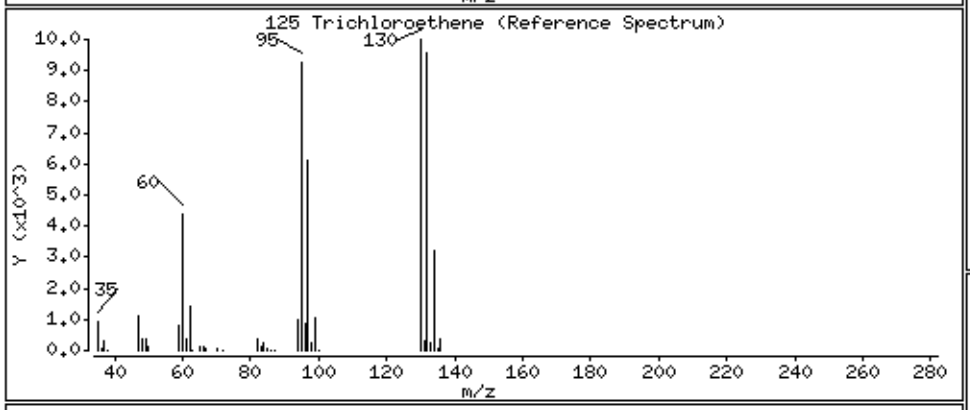
Column diameter: 0.25

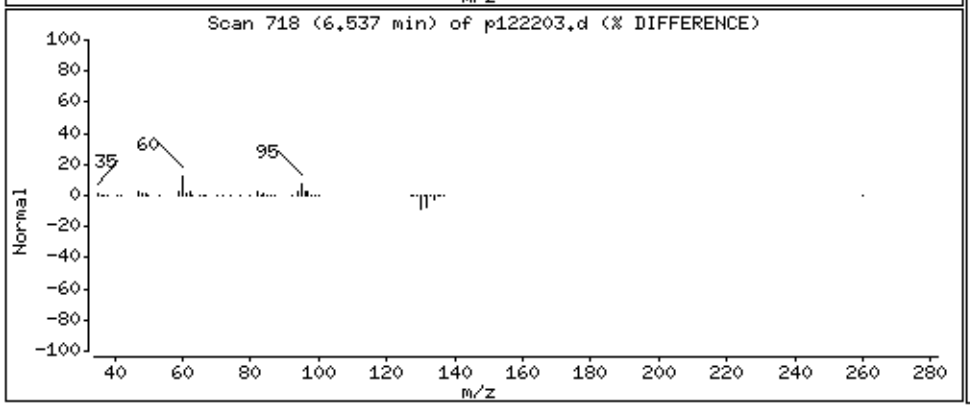
125 Trichloroethene

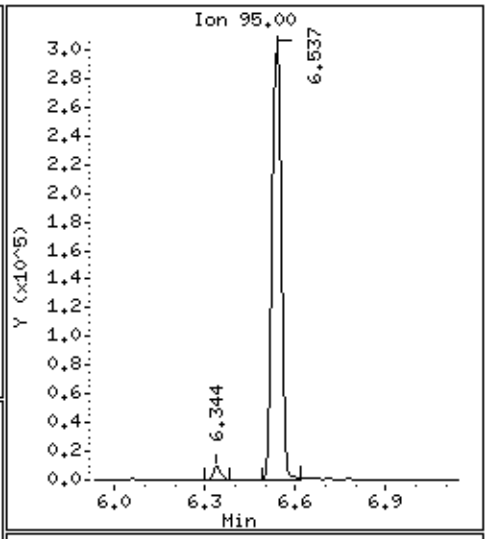
Concentration: 50.809 PPBV

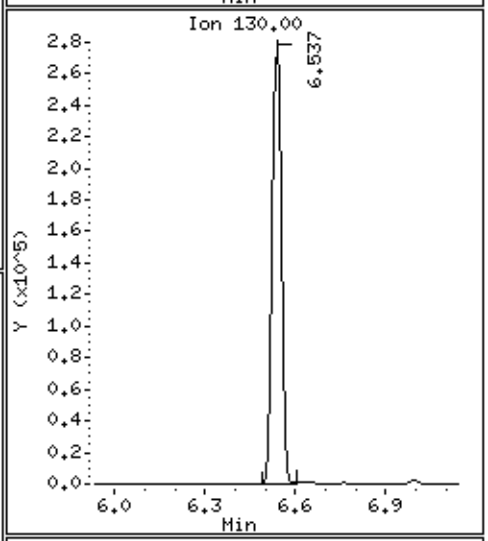


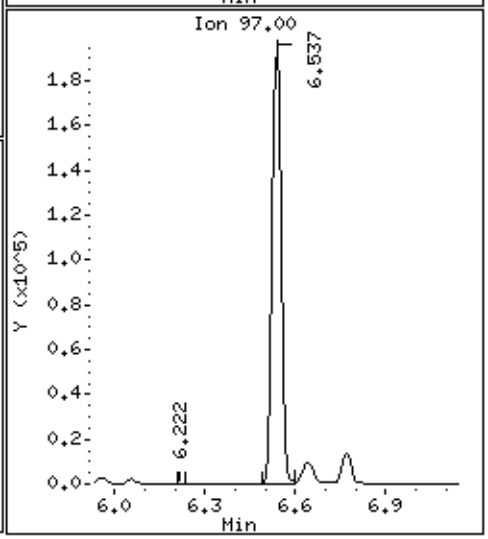












Data File: /chem/msdp.i/22dec14.b/p122203.d

Date : 22-DEC-2014 10:16

Client ID: LCS

Instrument: msdp.i

Sample Info: 100ml #2687-110A

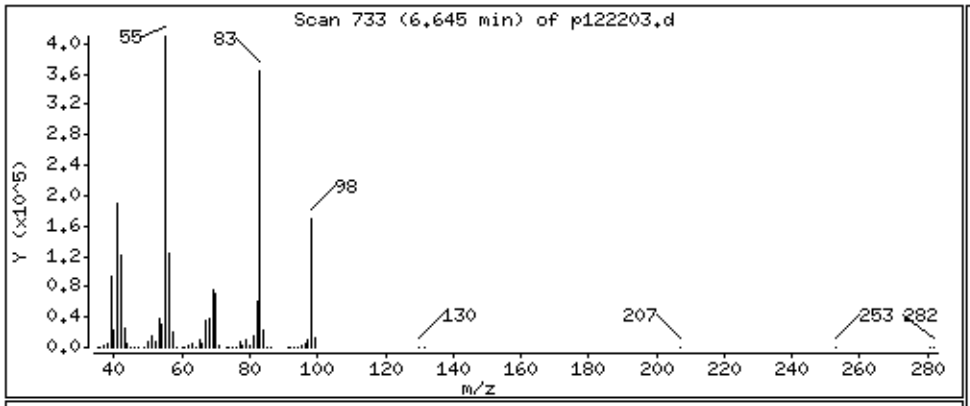
Operator: js

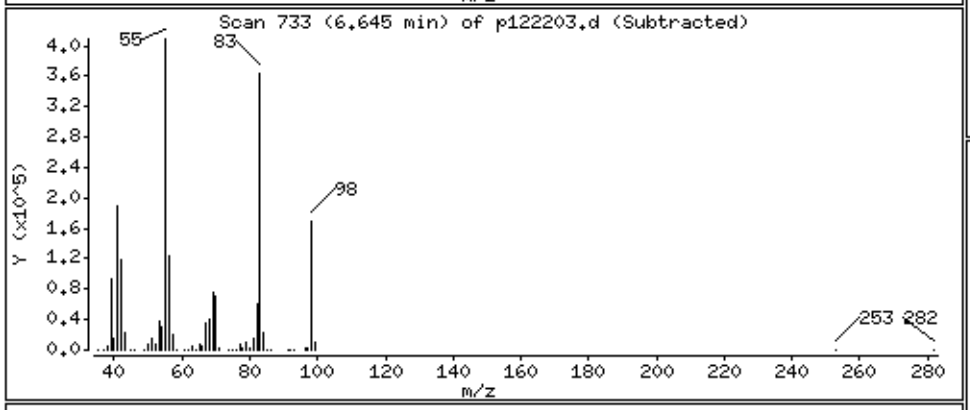
Column phase: RTX-624

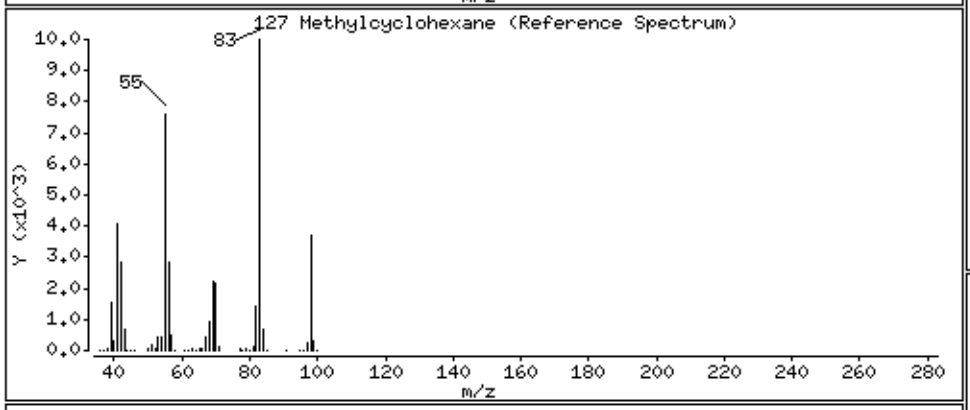
Column diameter: 0.25

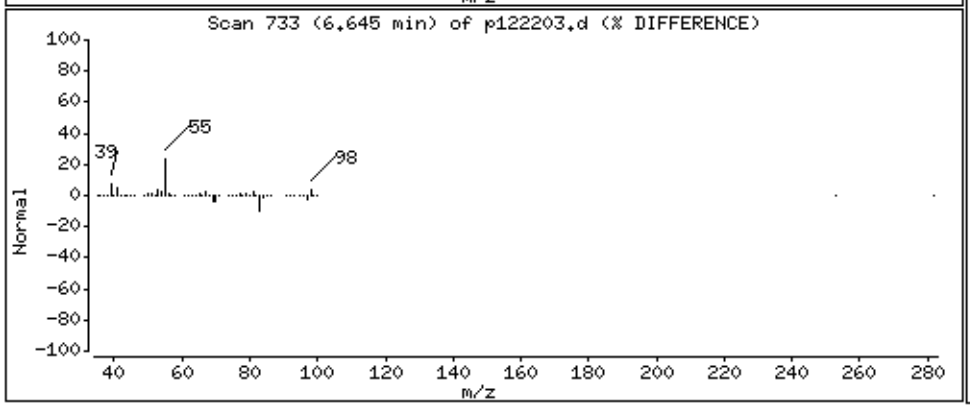
127 Methylcyclohexane

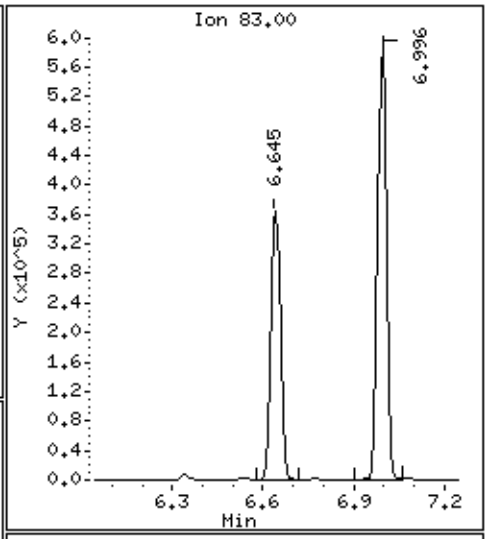
Concentration: 56.553 PPBV

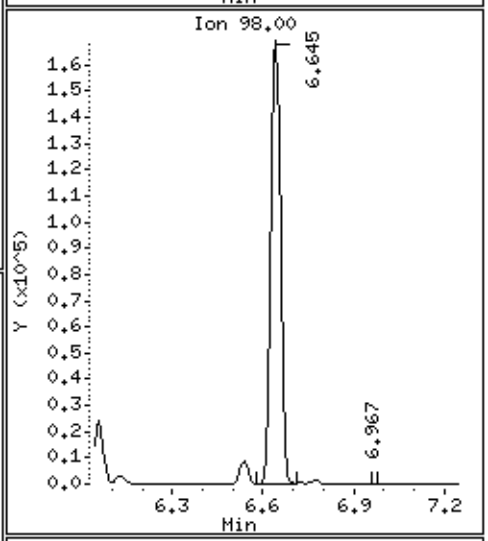


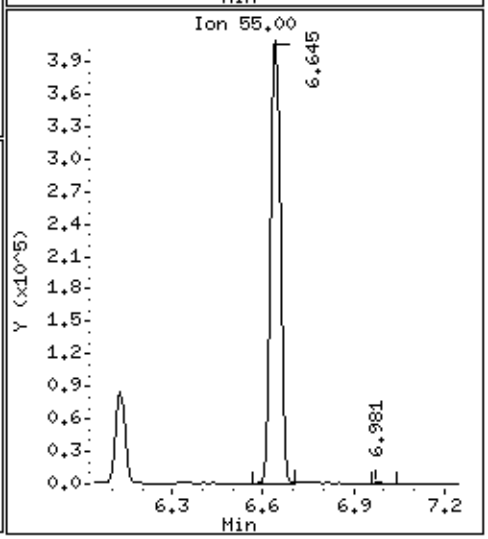












Data File: /chem/msdp.i/22dec14.b/p122203.d

Date : 22-DEC-2014 10:16

Client ID: LCS

Instrument: msdp.i

Sample Info: 100ml #2687-110A

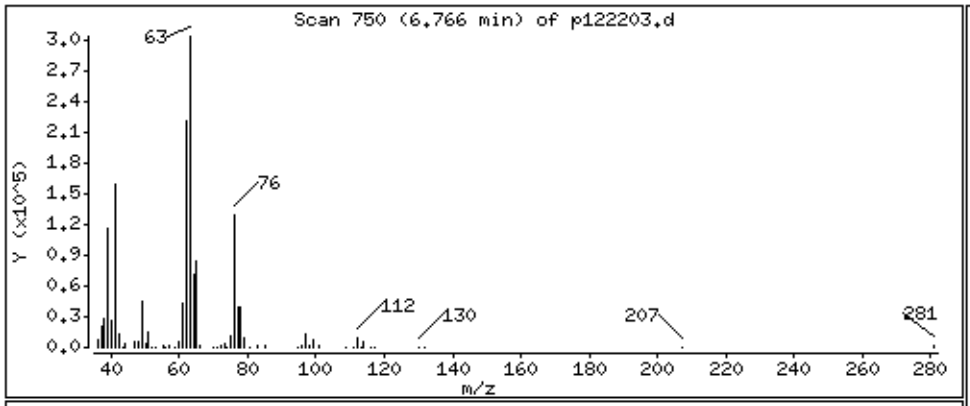
Operator: js

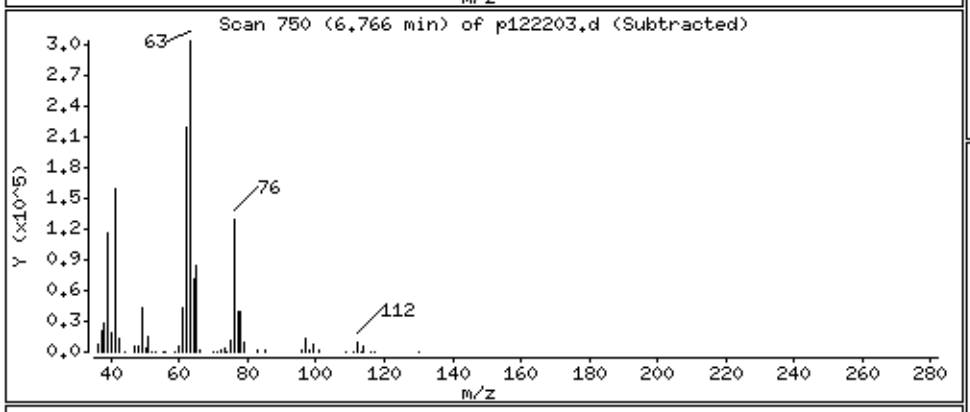
Column phase: RTX-624

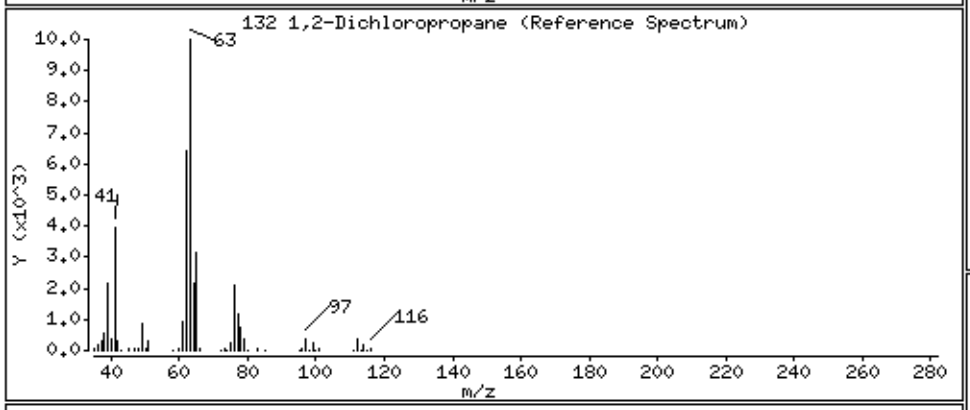
Column diameter: 0.25

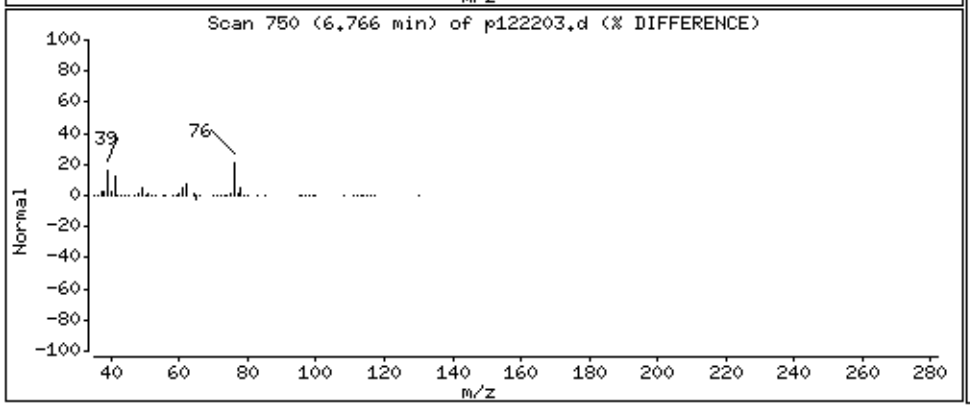
132 1,2-Dichloropropane

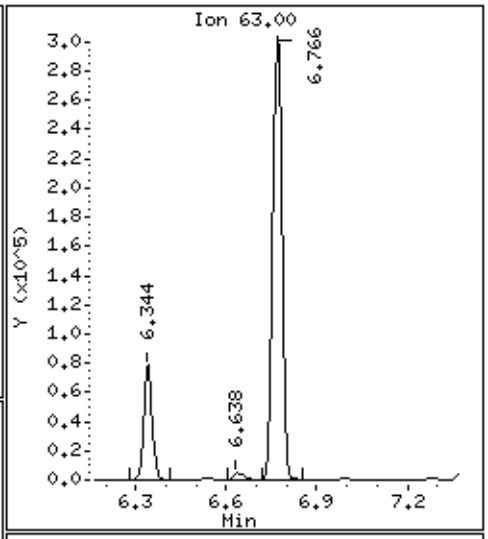
Concentration: 50.362 PPBV

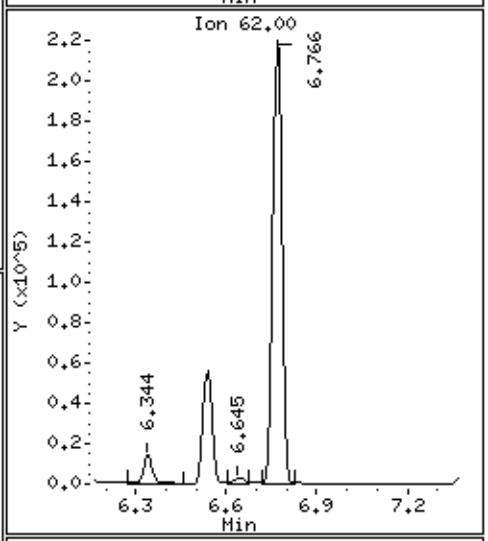


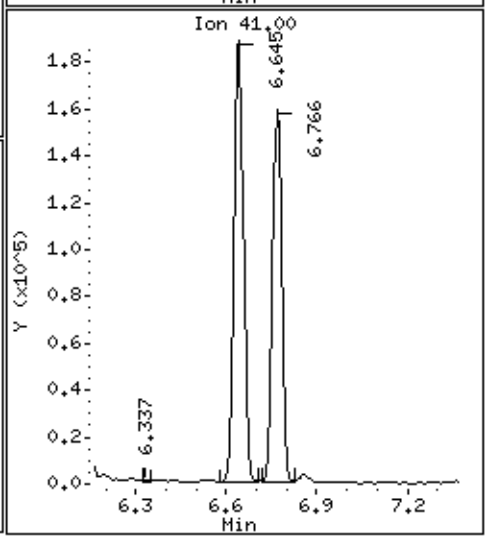












Data File: /chem/msdp.i/22dec14.b/p122203.d

Date : 22-DEC-2014 10:16

Client ID: LCS

Instrument: msdp.i

Sample Info: 100ml #2687-110A

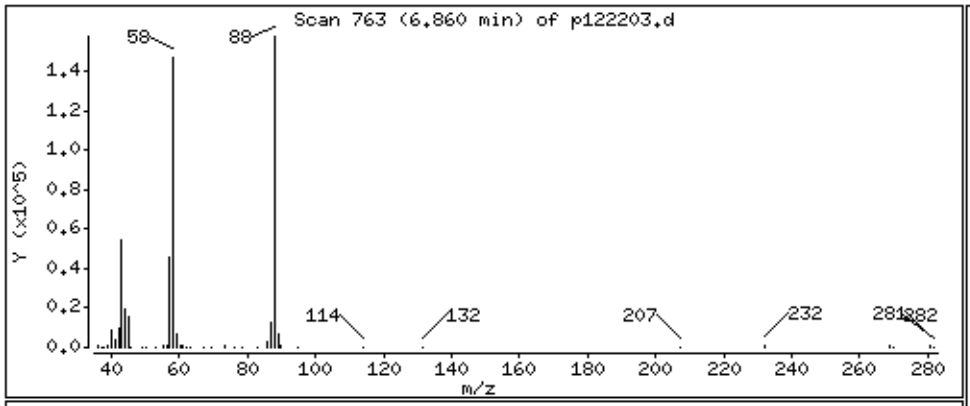
Operator: js

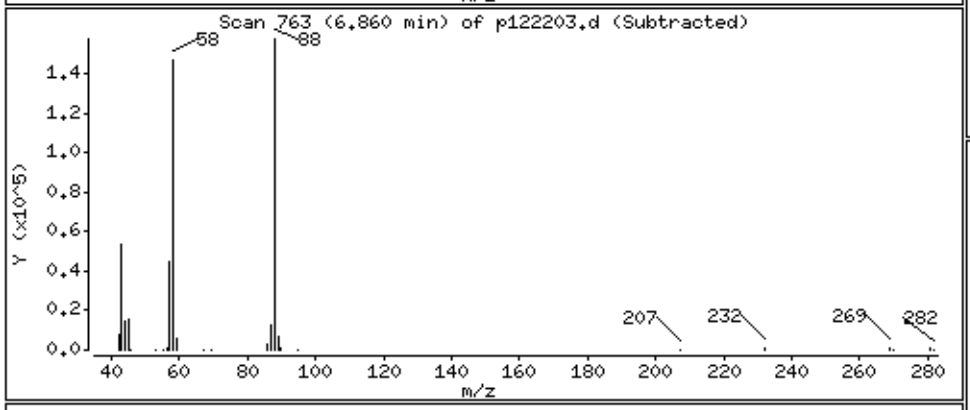
Column phase: RTX-624

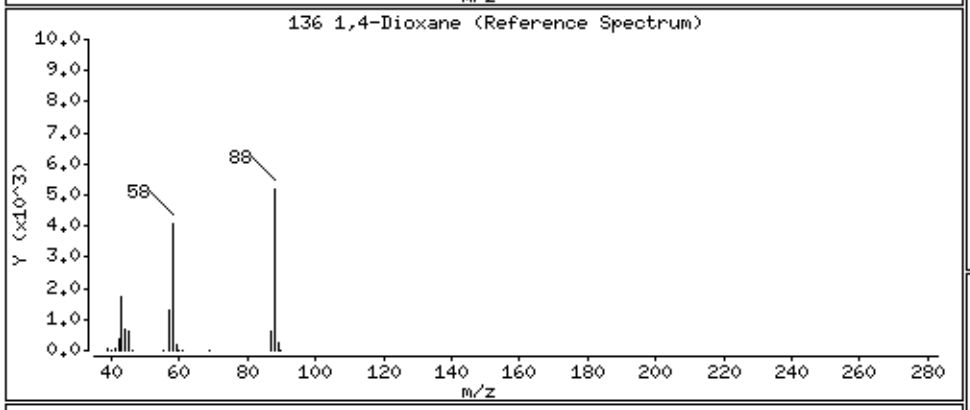
Column diameter: 0.25

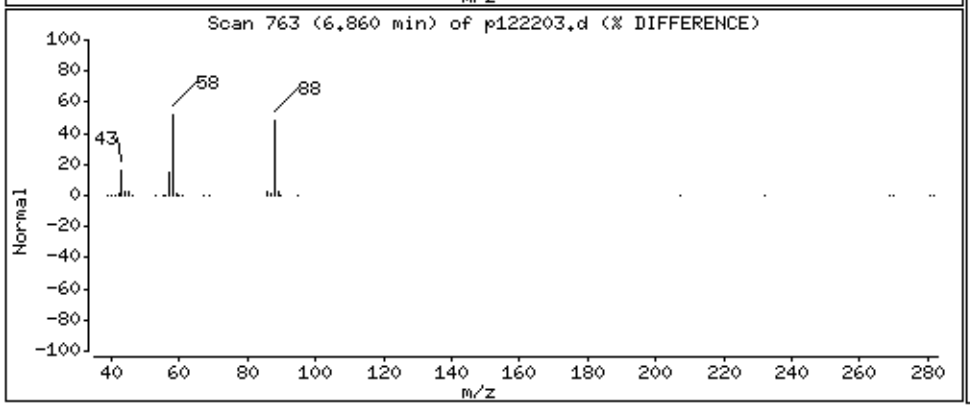
136 1,4-Dioxane

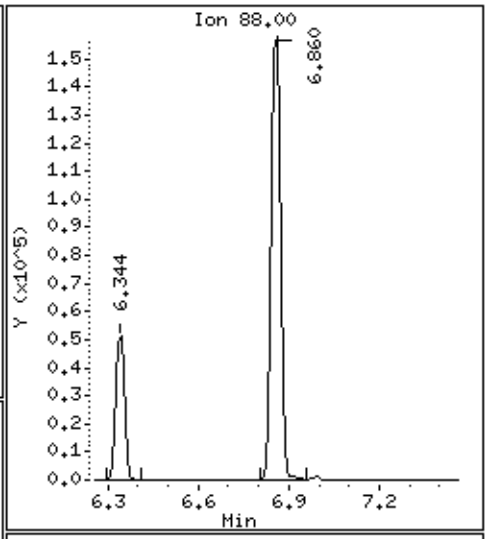
Concentration: 49.234 PPBV

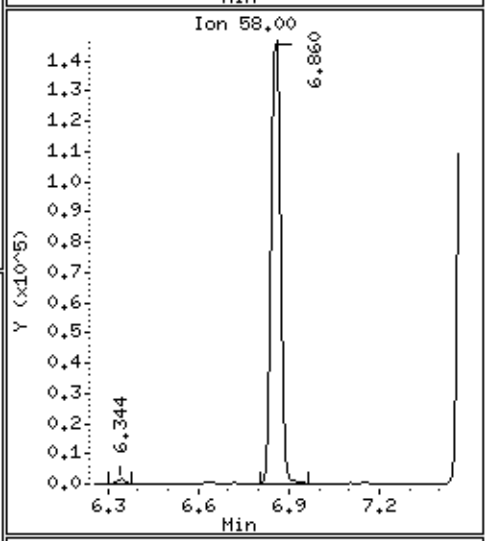


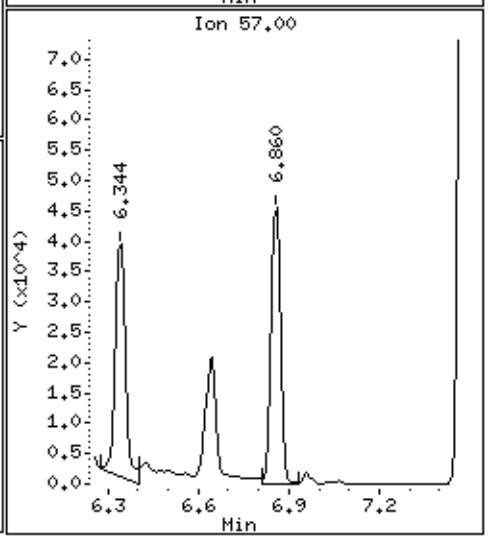












Data File: /chem/msdp.i/22dec14.b/p122203.d

Date : 22-DEC-2014 10:16

Client ID: LCS

Instrument: msdp.i

Sample Info: 100ml #2687-110A

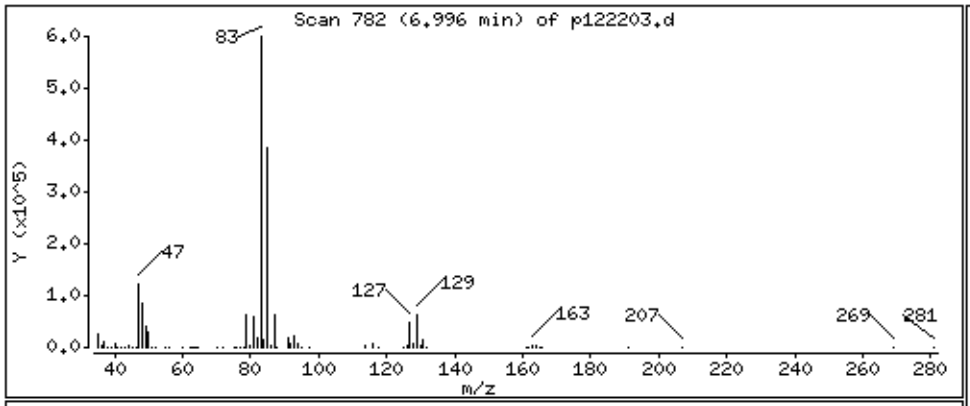
Operator: js

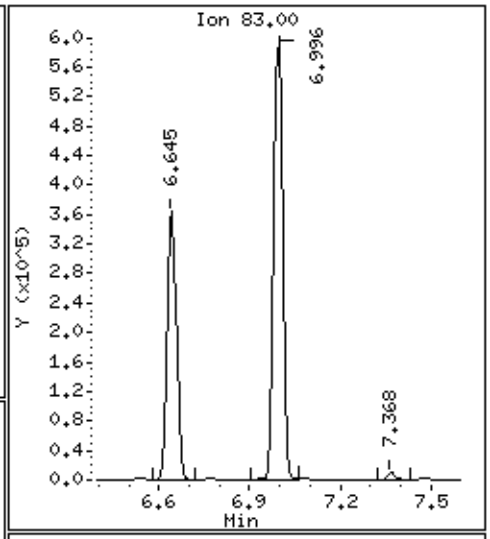
Column phase: RTX-624

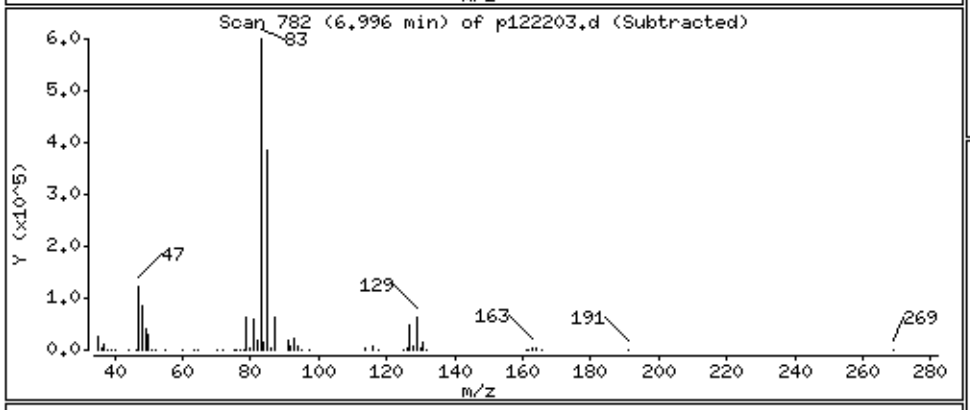
Column diameter: 0.25

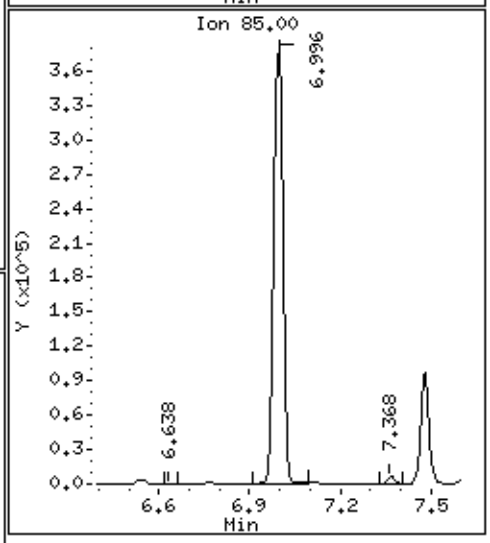
138 Bromodichloromethane

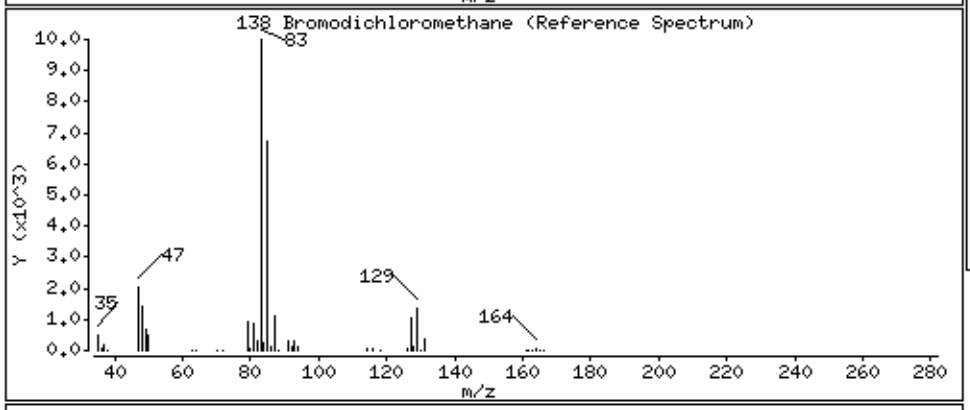
Concentration: 49.572 PPBV

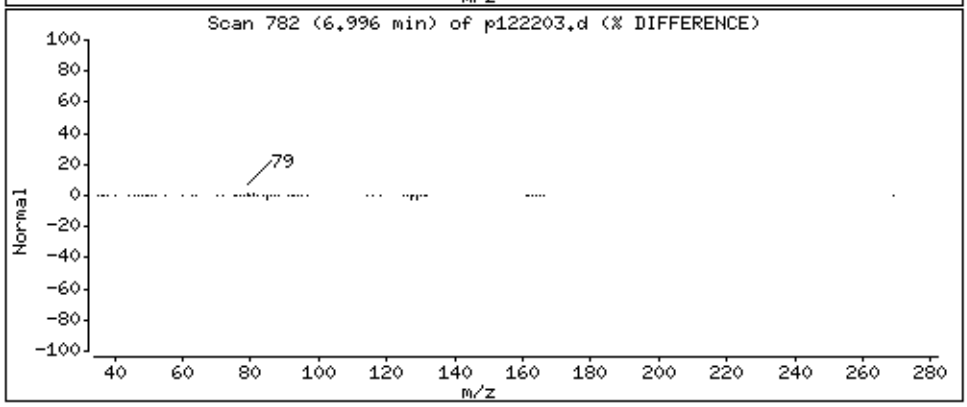












Data File: /chem/msdp.i/22dec14.b/p122203.d

Date : 22-DEC-2014 10:16

Client ID: LCS

Instrument: msdp.i

Sample Info: 100ml #2687-110A

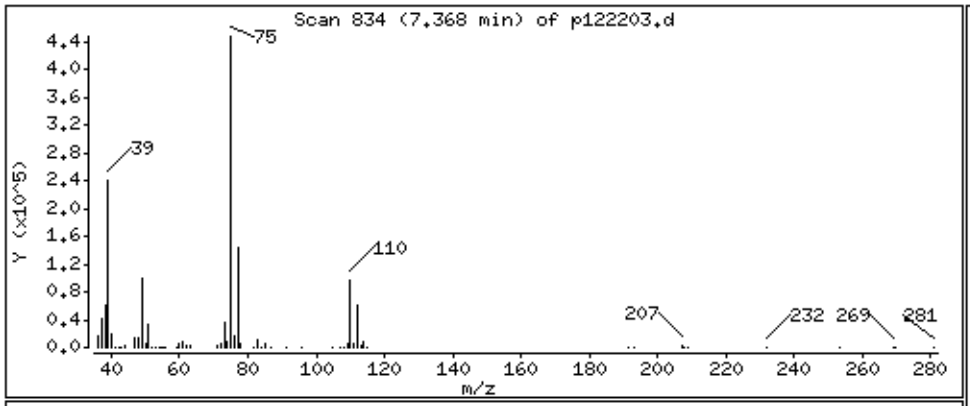
Operator: js

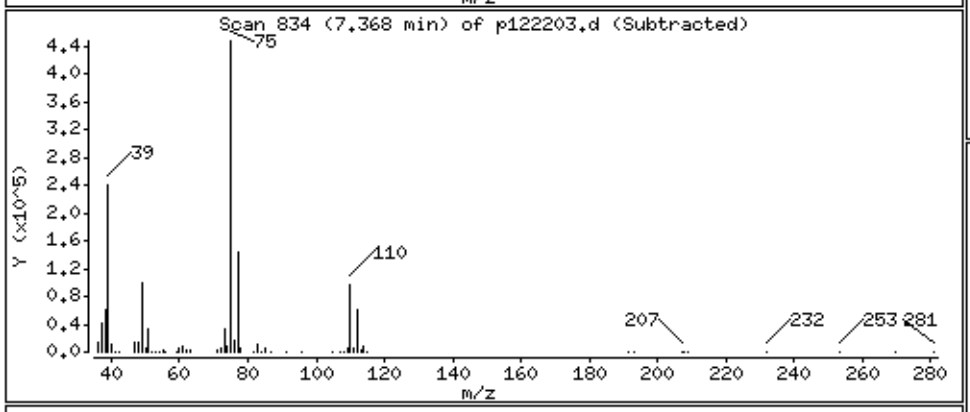
Column phase: RTX-624

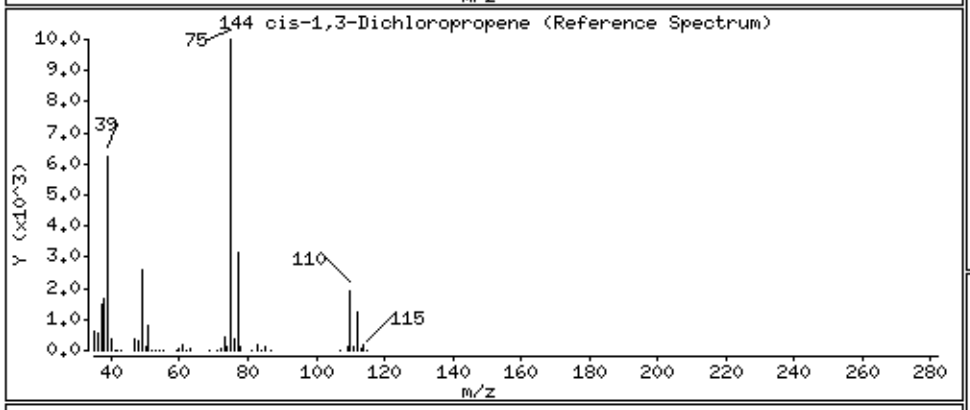
Column diameter: 0.25

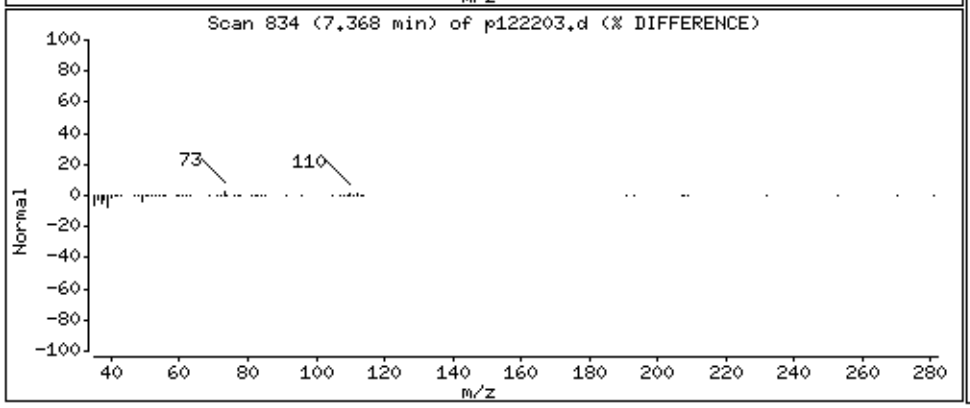
144 cis-1,3-Dichloropropene

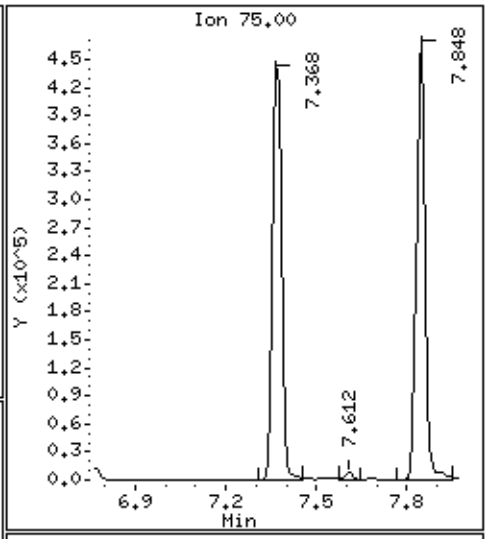
Concentration: 50.452 PPBV

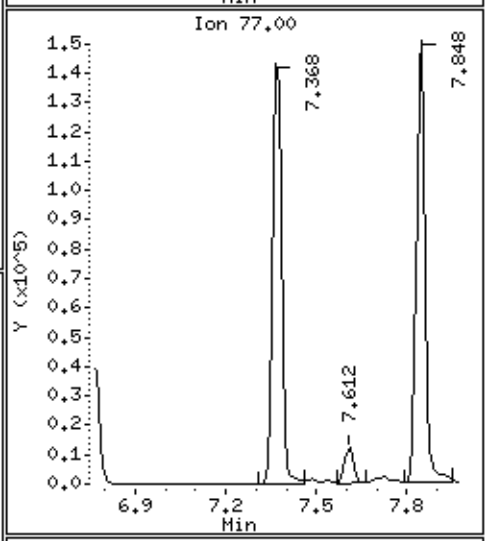


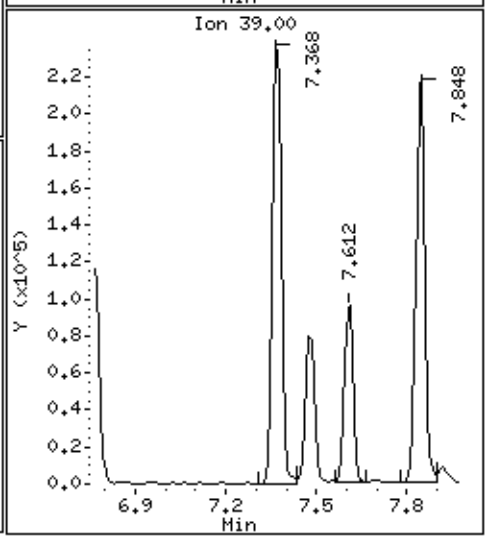












Data File: /chem/msdp.i/22dec14.b/p122203.d

Date : 22-DEC-2014 10:16

Client ID: LCS

Instrument: msdp.i

Sample Info: 100ml #2687-110A

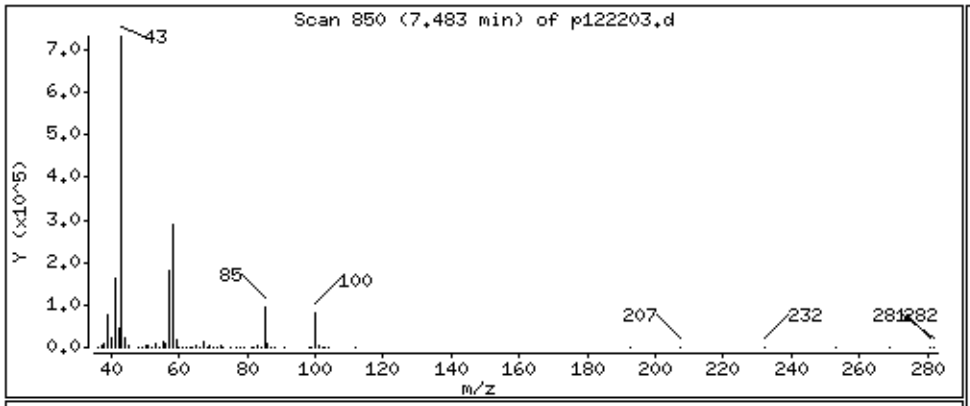
Operator: js

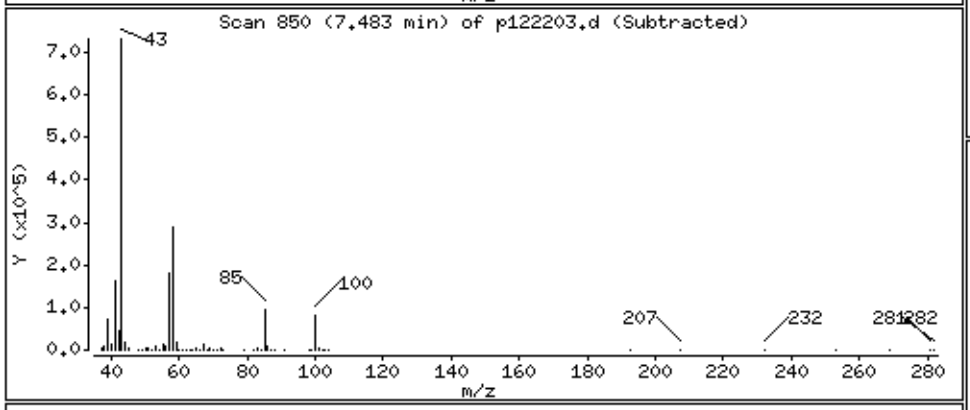
Column phase: RTX-624

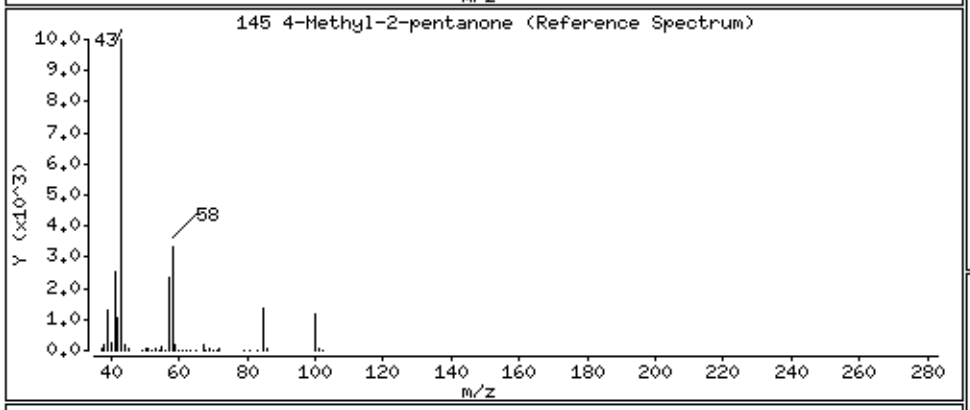
Column diameter: 0.25

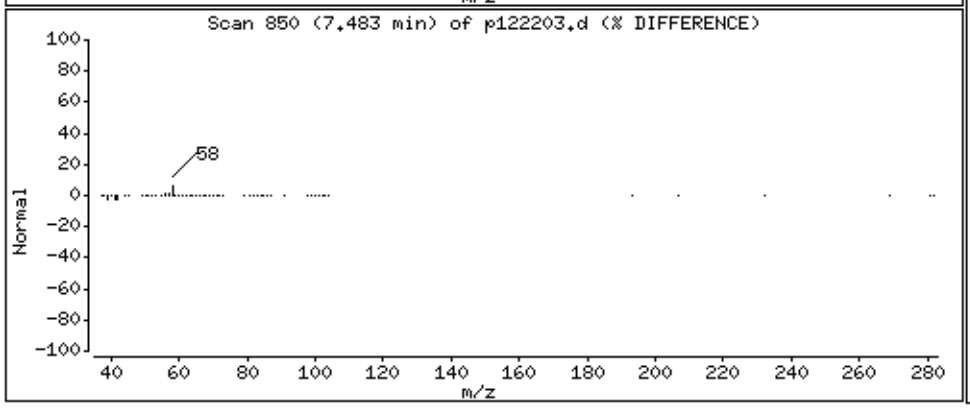
145 4-Methyl-2-pentanone

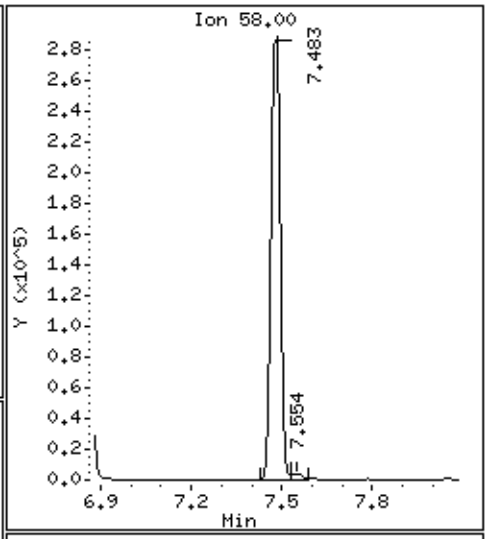
Concentration: 47.287 PPBV

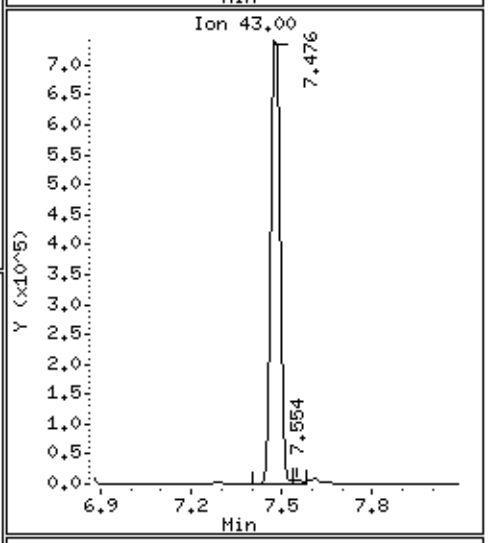


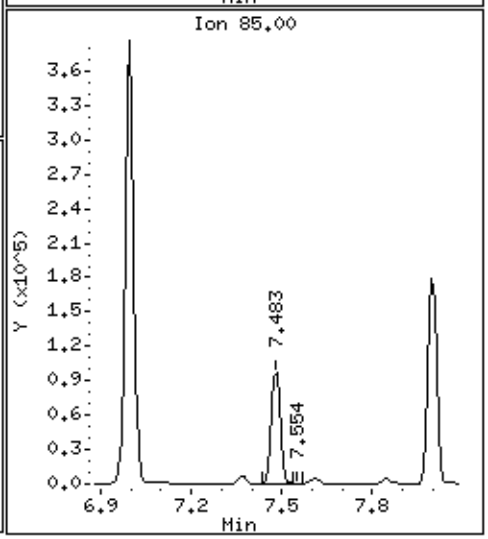












Data File: /chem/msdp.i/22dec14.b/p122203.d

Date : 22-DEC-2014 10:16

Client ID: LCS

Instrument: msdp.i

Sample Info: 100ml #2687-110A

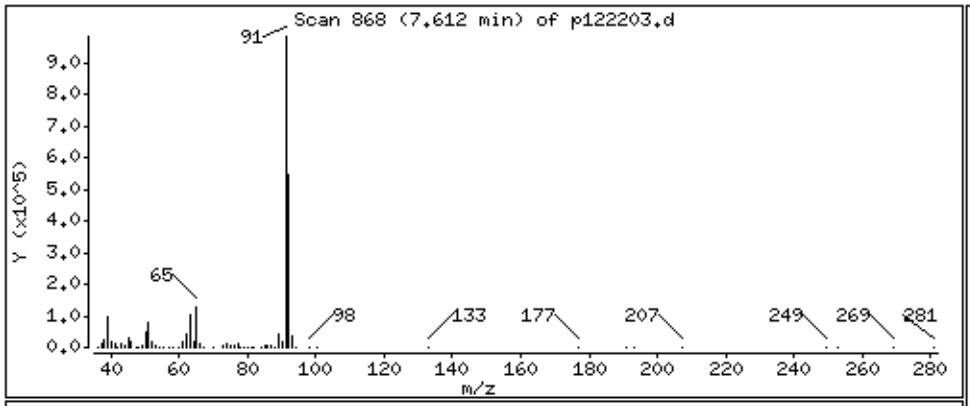
Operator: js

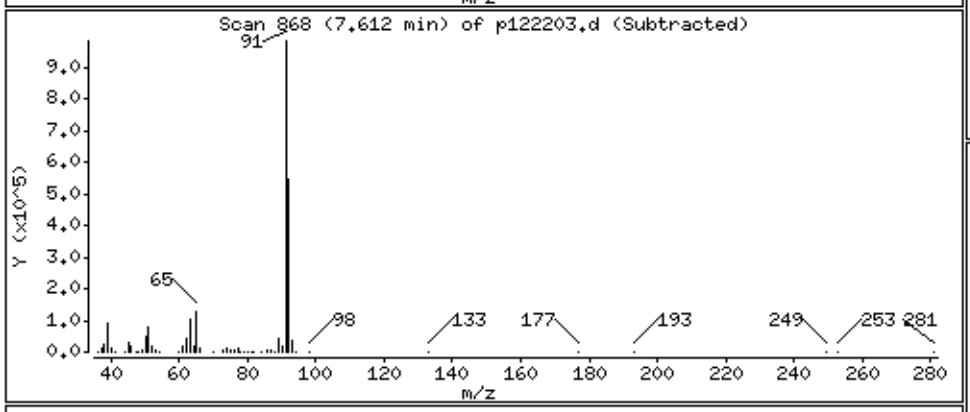
Column phase: RTX-624

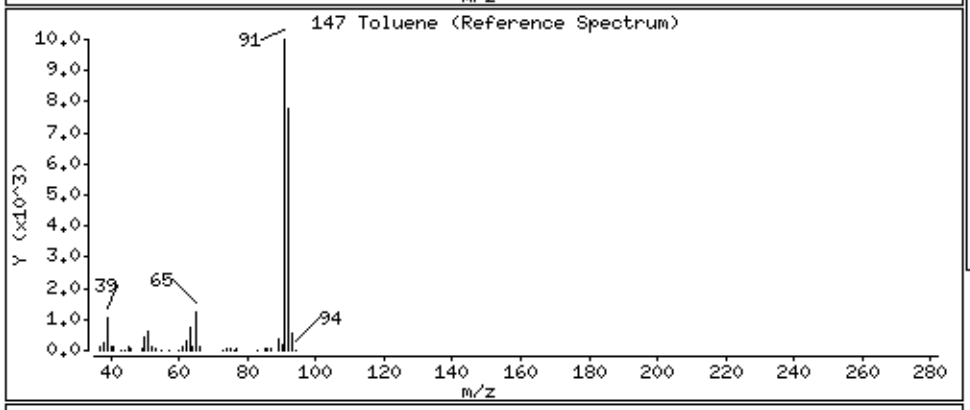
Column diameter: 0.25

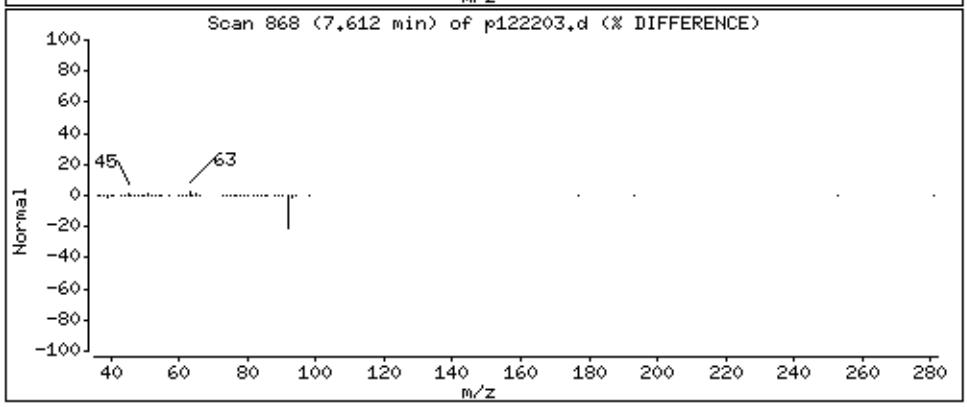
147 Toluene

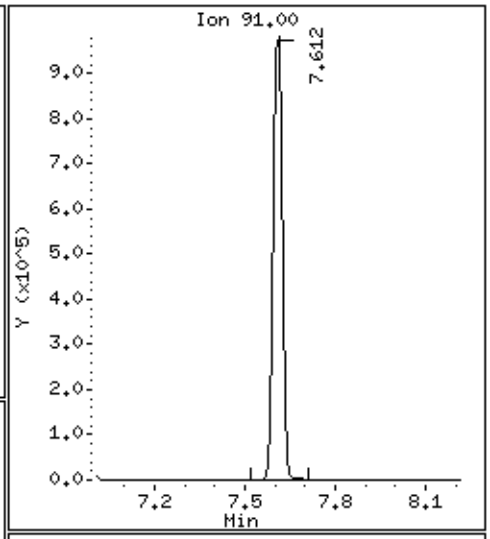
Concentration: 52.052 PPBV

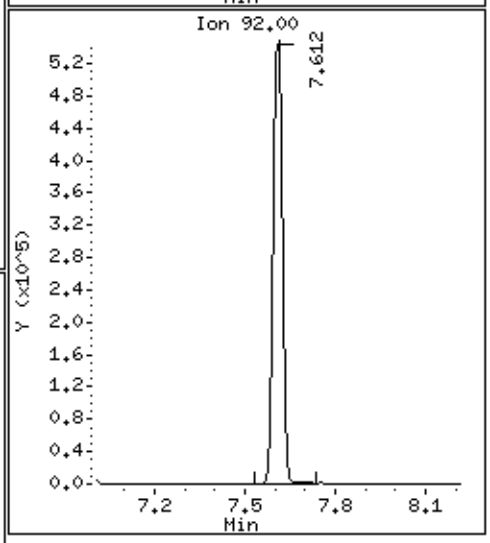












Data File: /chem/msdp.i/22dec14.b/p122203.d

Date : 22-DEC-2014 10:16

Client ID: LCS

Instrument: msdp.i

Sample Info: 100ml #2687-110A

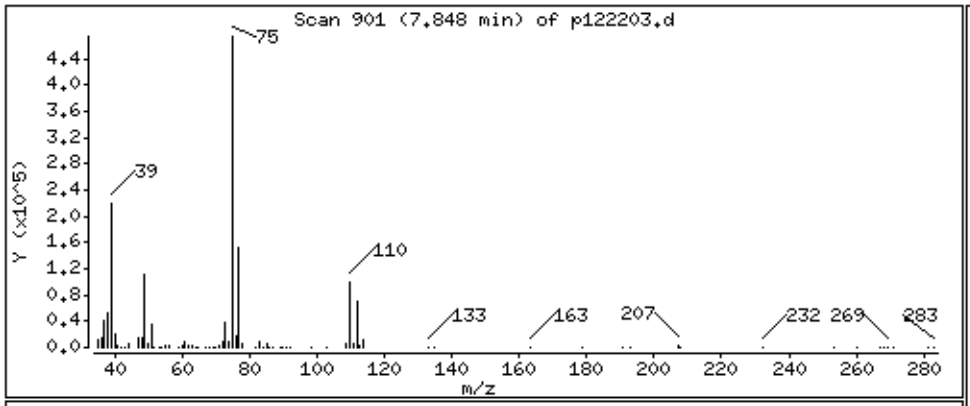
Operator: js

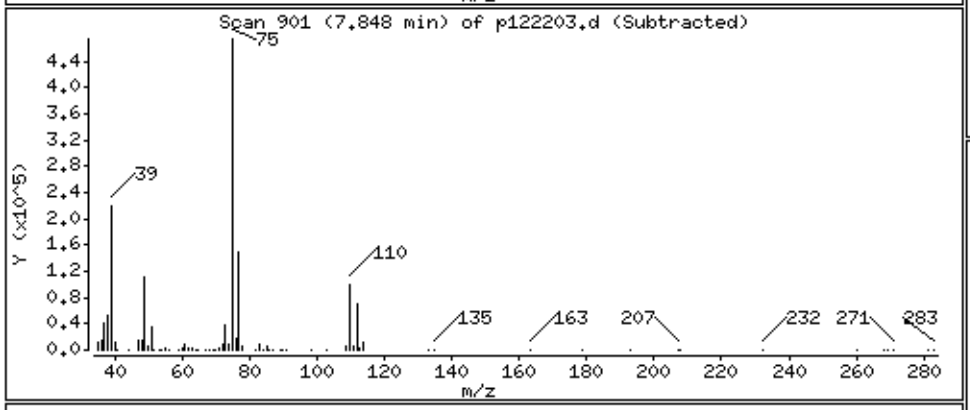
Column phase: RTX-624

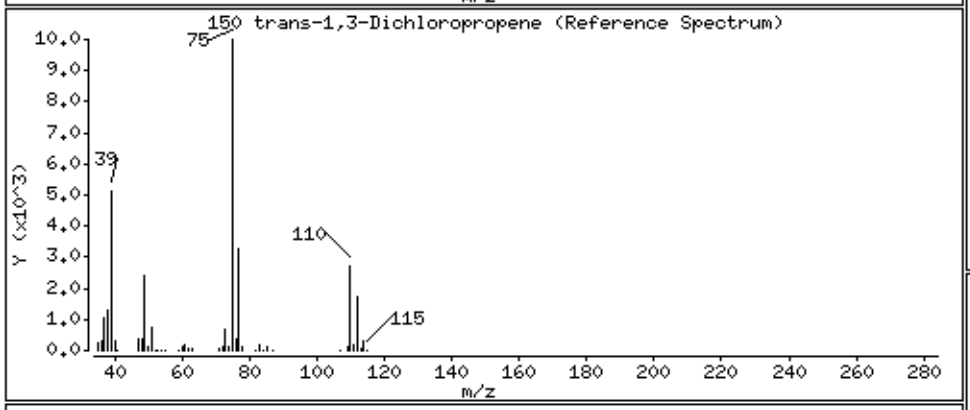
Column diameter: 0.25

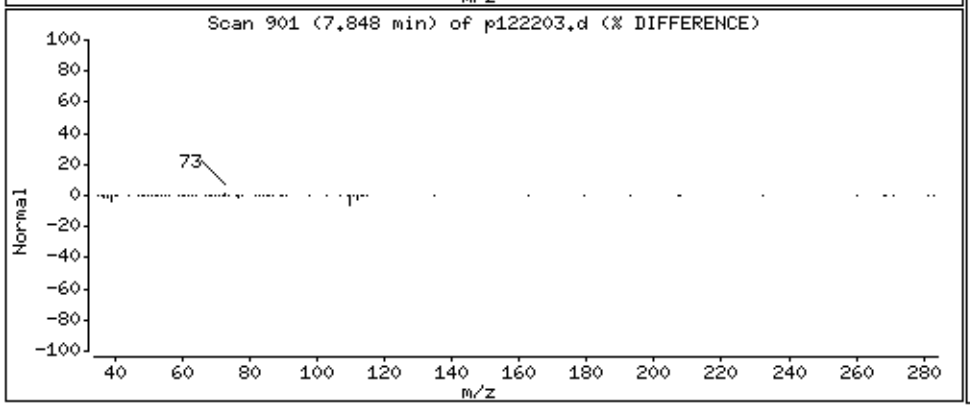
150 trans-1,3-Dichloropropene

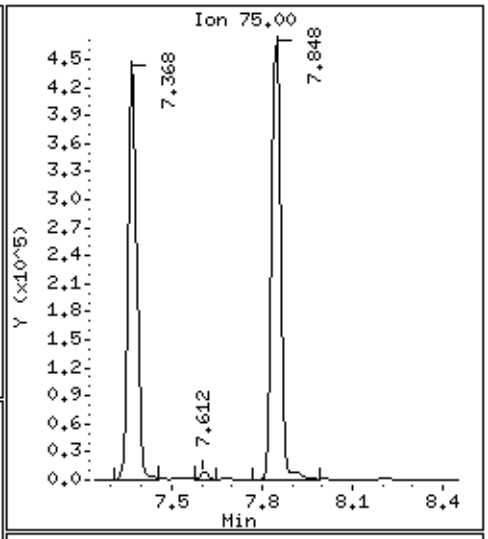
Concentration: 45.522 PPBV

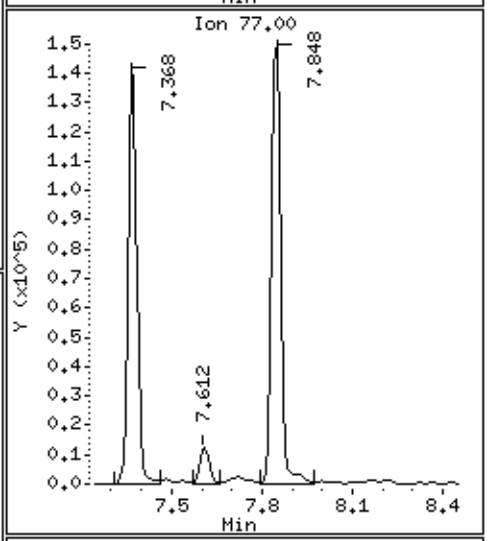


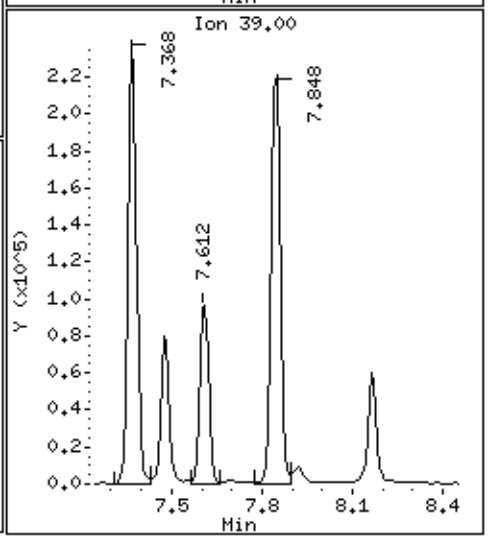












Data File: /chem/msdp.i/22dec14.b/p122203.d

Date : 22-DEC-2014 10:16

Client ID: LCS

Instrument: msdp.i

Sample Info: 100ml #2687-110A

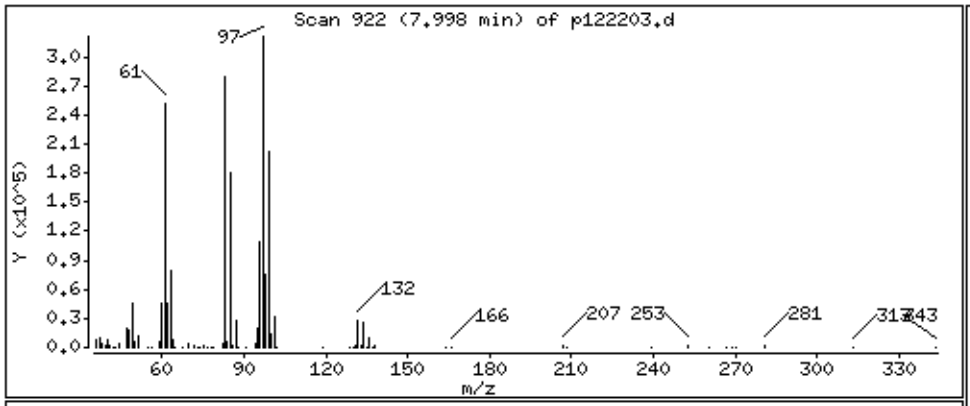
Operator: js

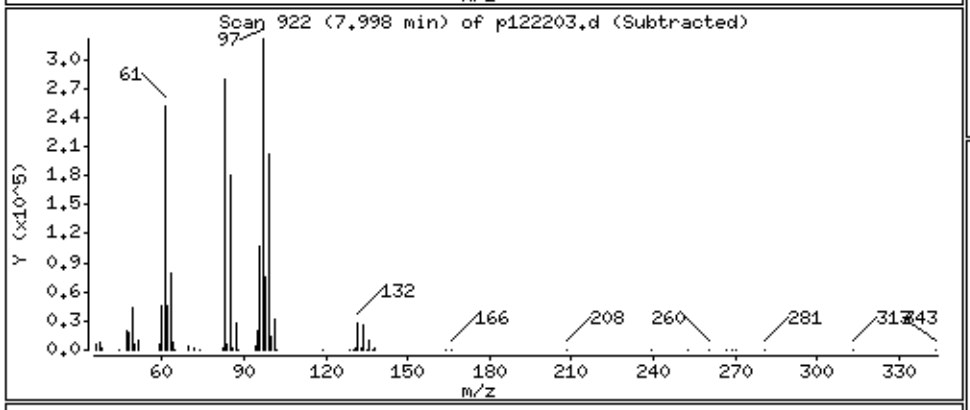
Column phase: RTX-624

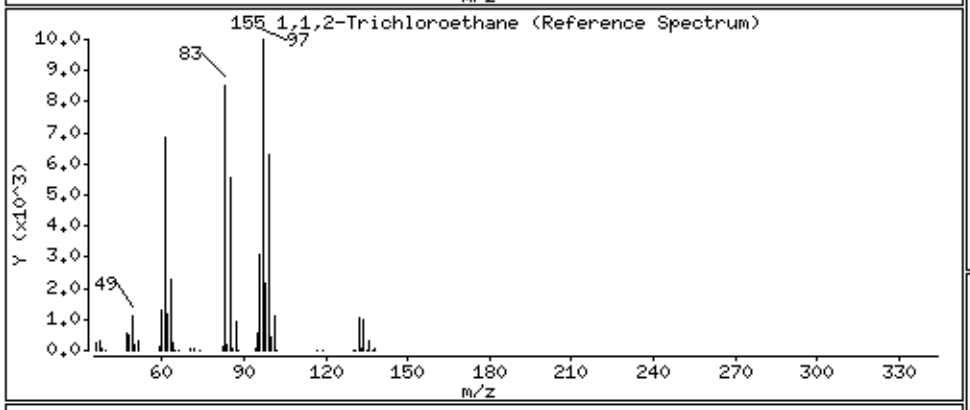
Column diameter: 0.25

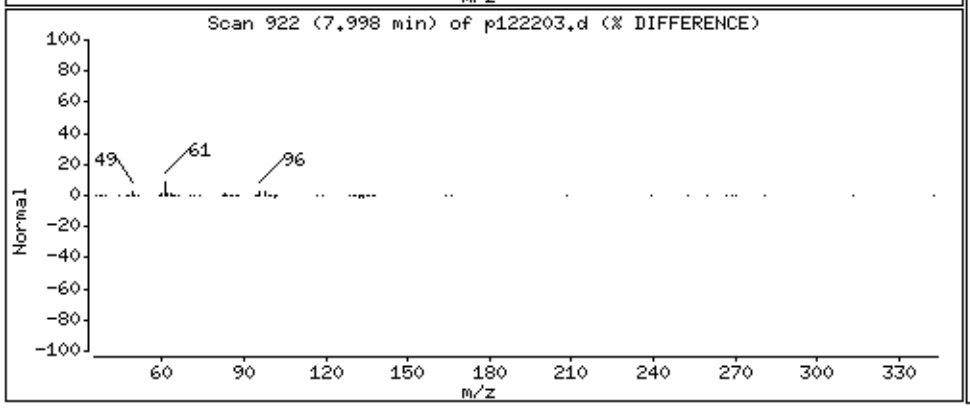
155 1,1,2-Trichloroethane

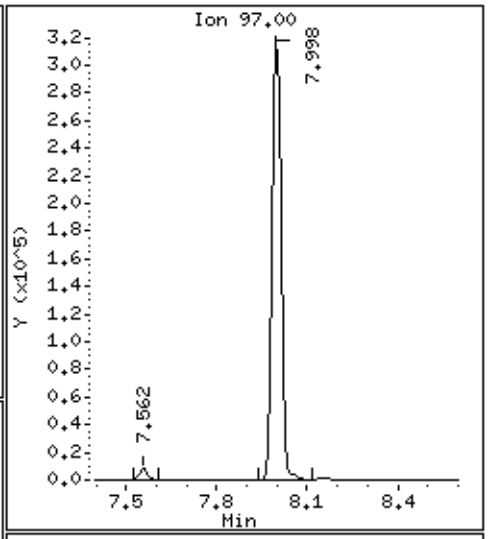
Concentration: 47.463 PPBV

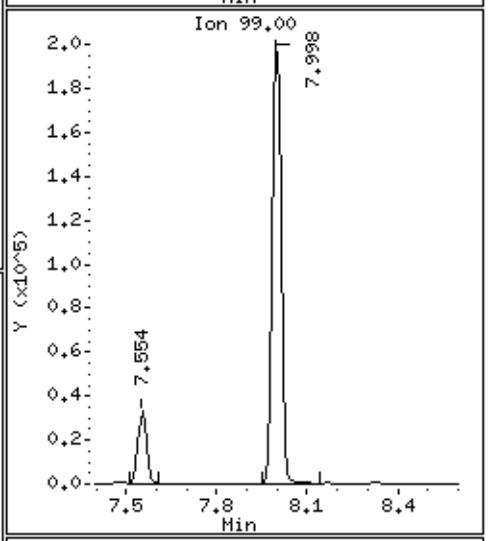


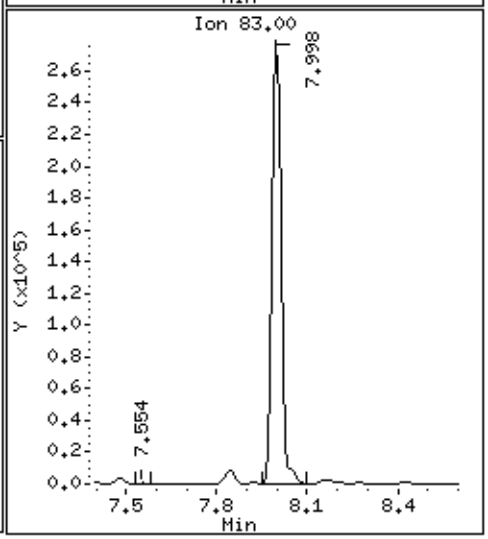












Data File: /chem/msdp.i/22dec14.b/p122203.d

Date : 22-DEC-2014 10:16

Client ID: LCS

Instrument: msdp.i

Sample Info: 100ml #2687-110A

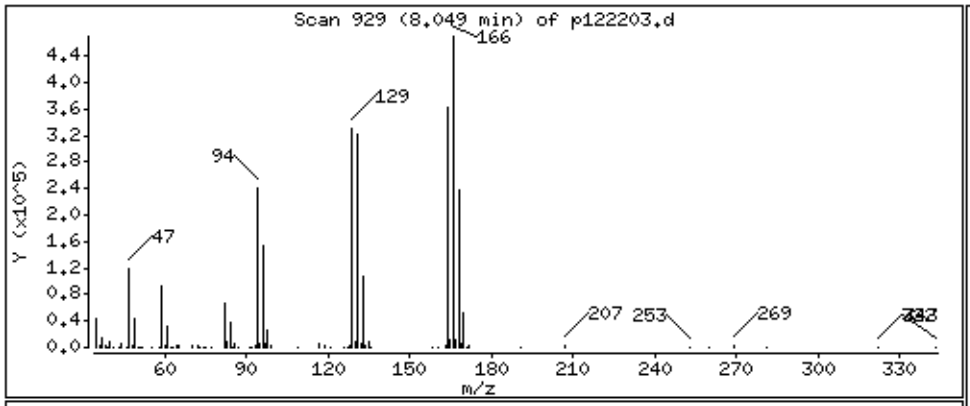
Operator: js

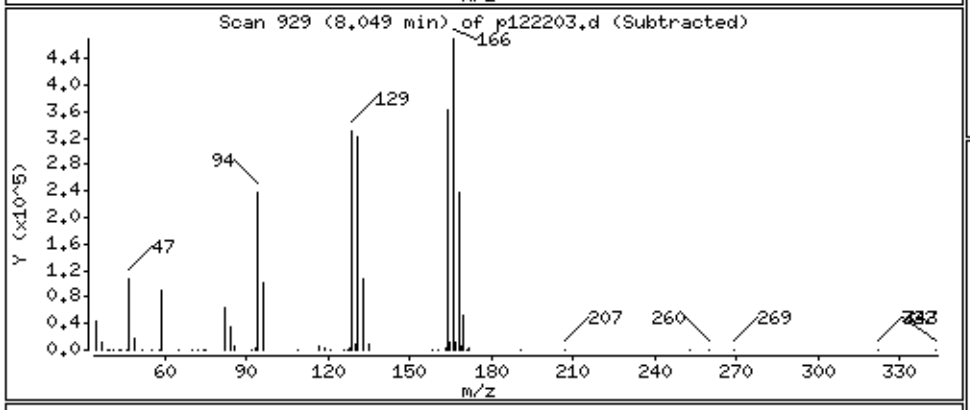
Column phase: RTX-624

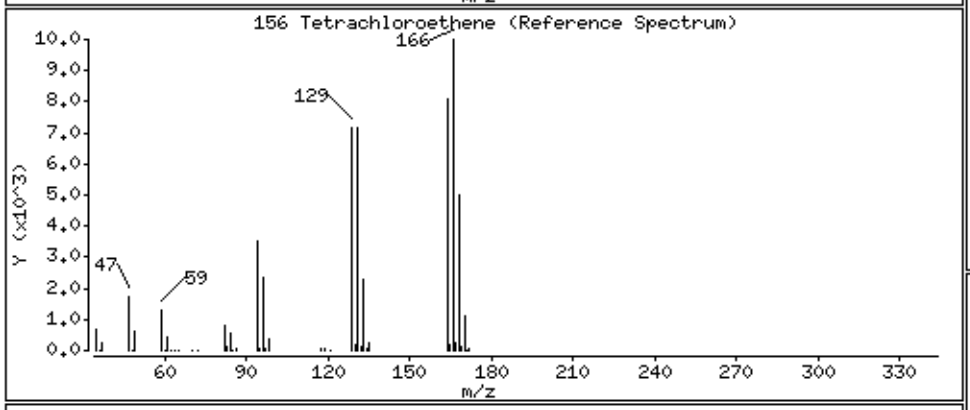
Column diameter: 0.25

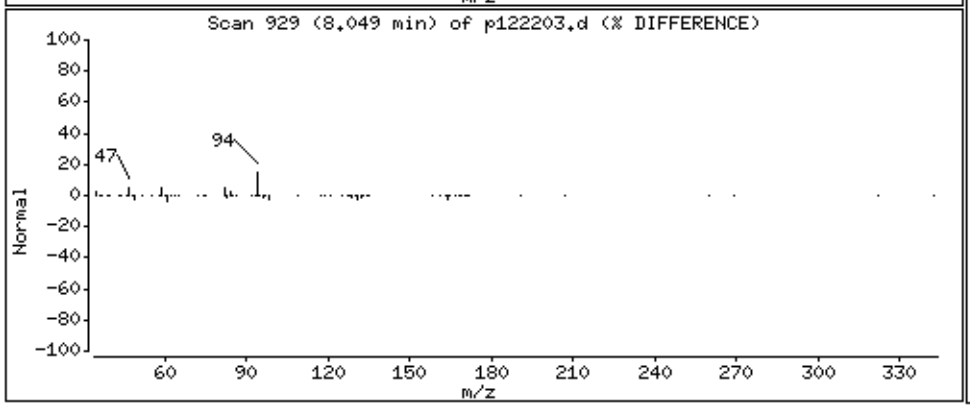
156 Tetrachloroethene

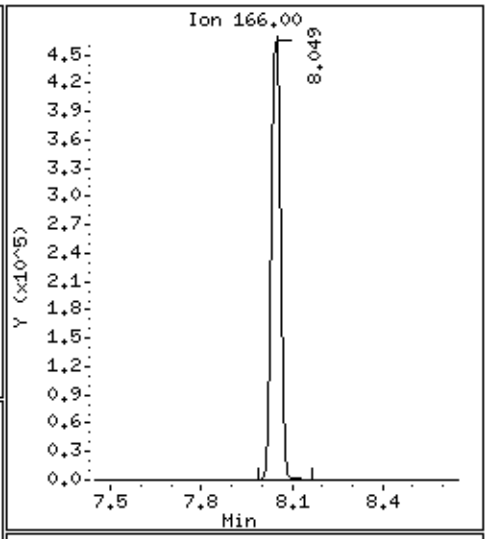
Concentration: 49.010 PPBV

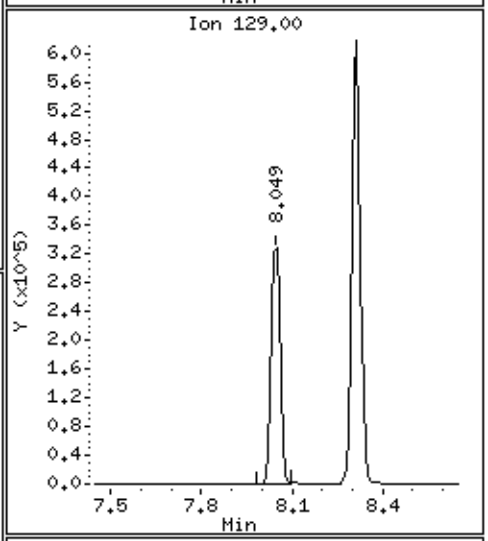


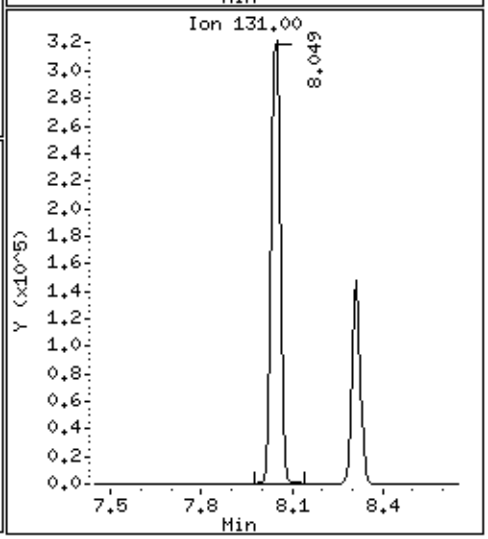












Data File: /chem/msdp.i/22dec14.b/p122203.d

Date : 22-DEC-2014 10:16

Client ID: LCS

Instrument: msdp.i

Sample Info: 100ml #2687-110A

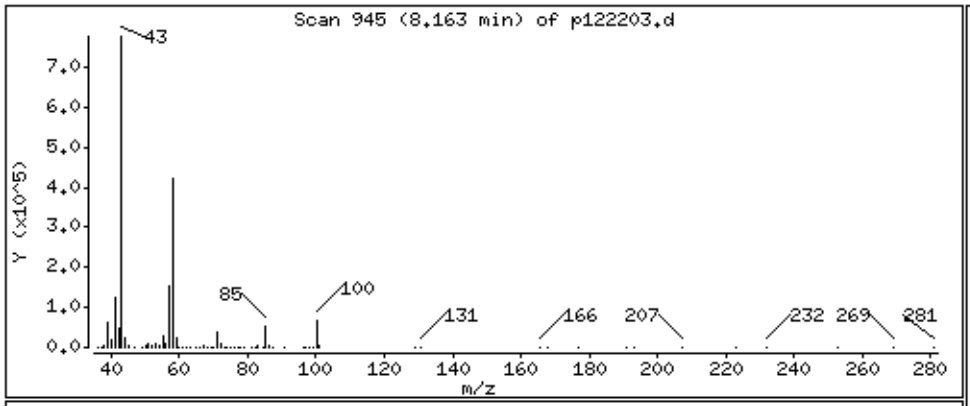
Operator: js

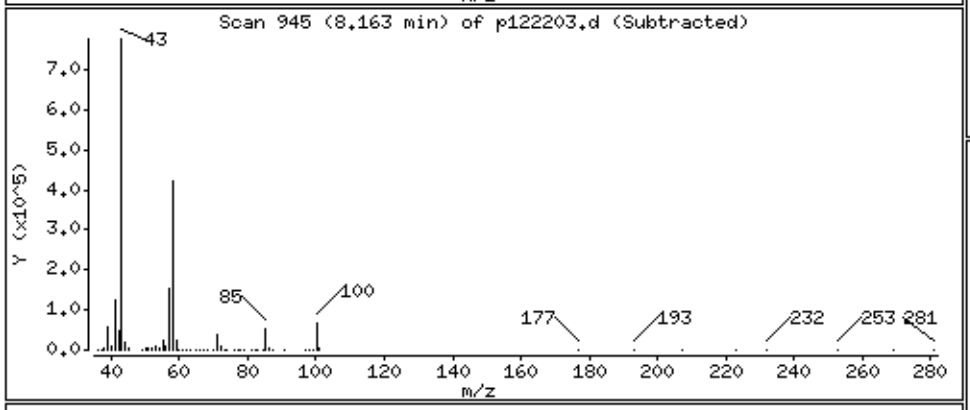
Column phase: RTX-624

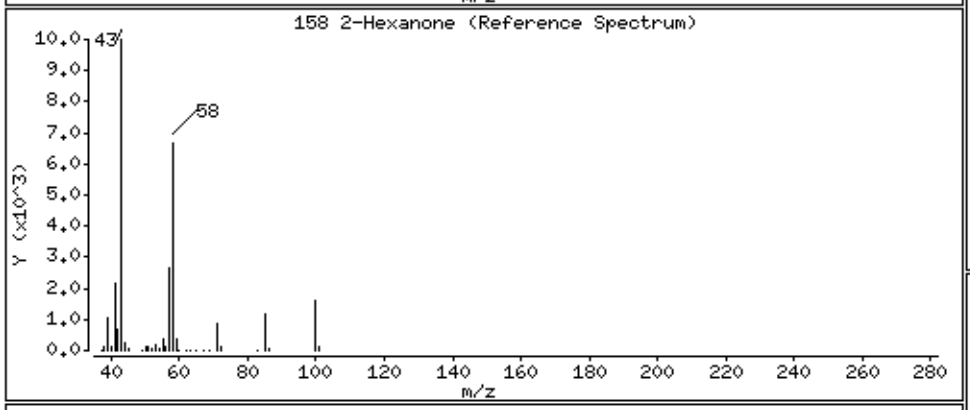
Column diameter: 0.25

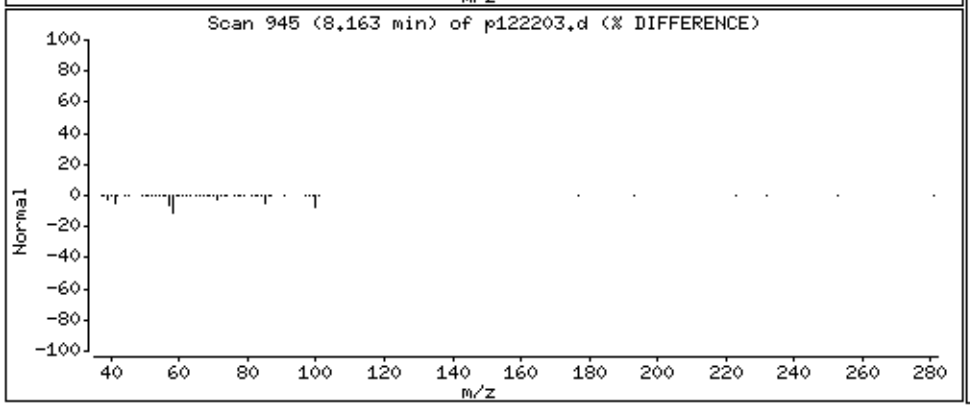
158 2-Hexanone

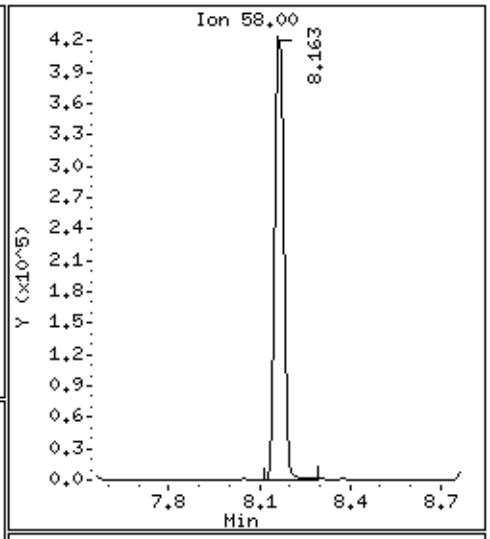
Concentration: 44.853 PPBV

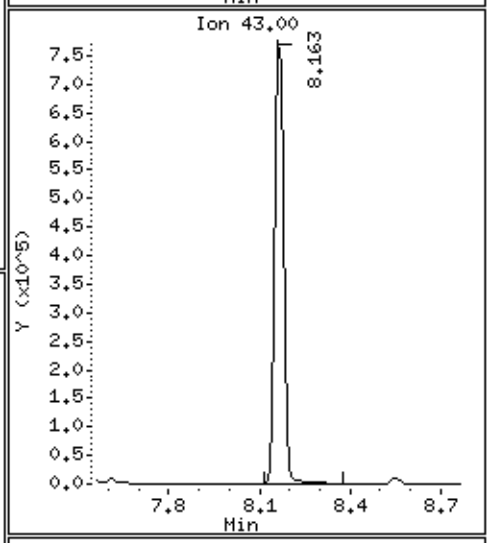


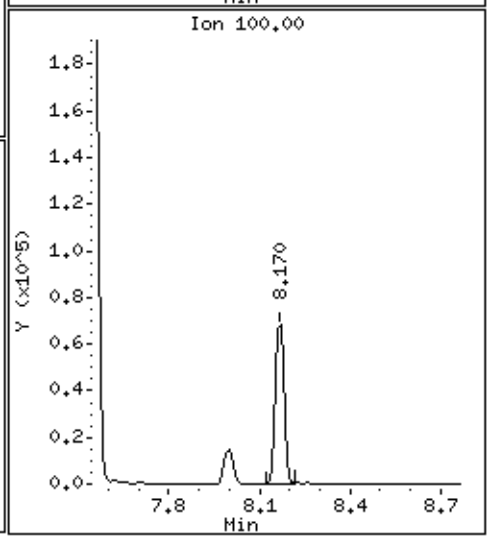












Data File: /chem/msdp.i/22dec14.b/p122203.d

Date : 22-DEC-2014 10:16

Client ID: LCS

Instrument: msdp.i

Sample Info: 100ml #2687-110A

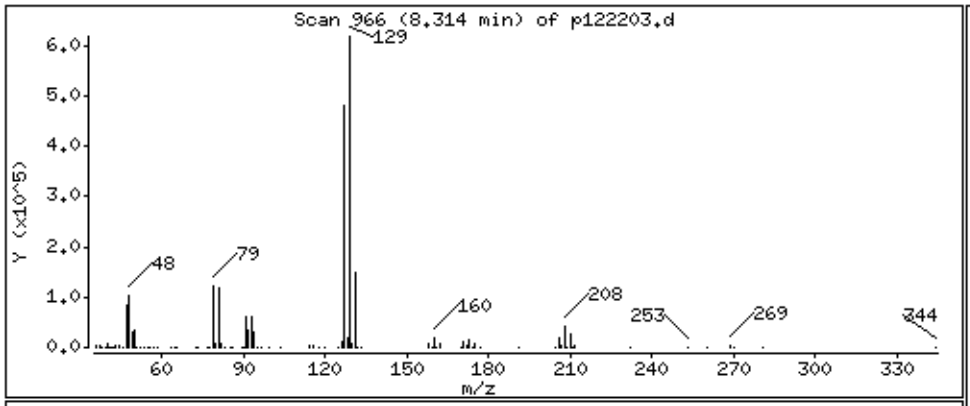
Operator: js

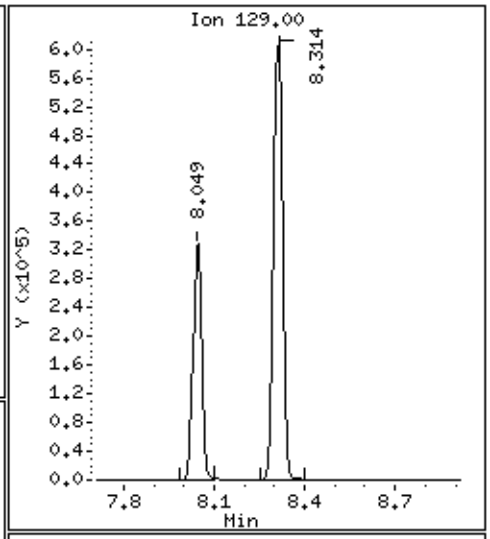
Column phase: RTX-624

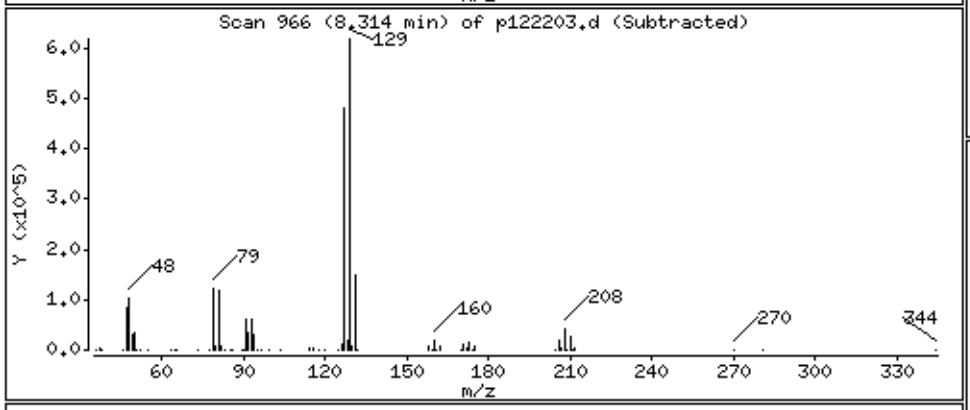
Column diameter: 0.25

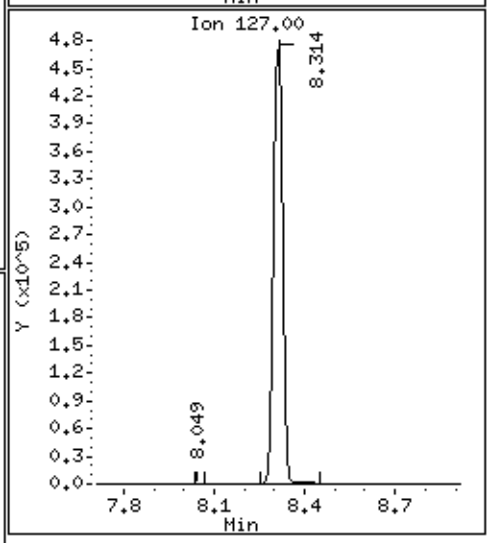
160 Dibromochloromethane

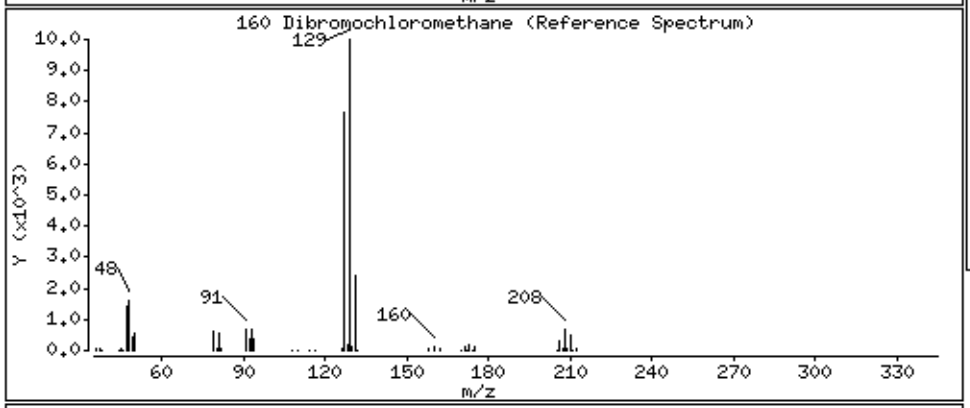
Concentration: 48.834 PPBV

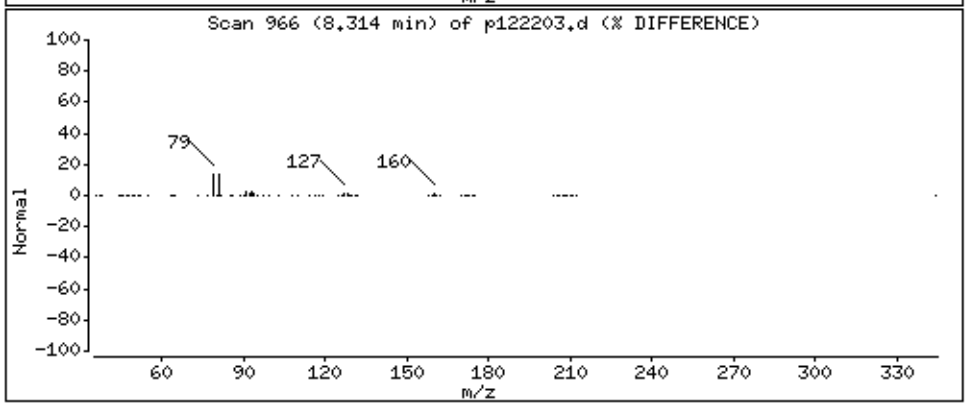












Data File: /chem/msdp.i/22dec14.b/p122203.d

Date : 22-DEC-2014 10:16

Client ID: LCS

Instrument: msdp.i

Sample Info: 100ml #2687-110A

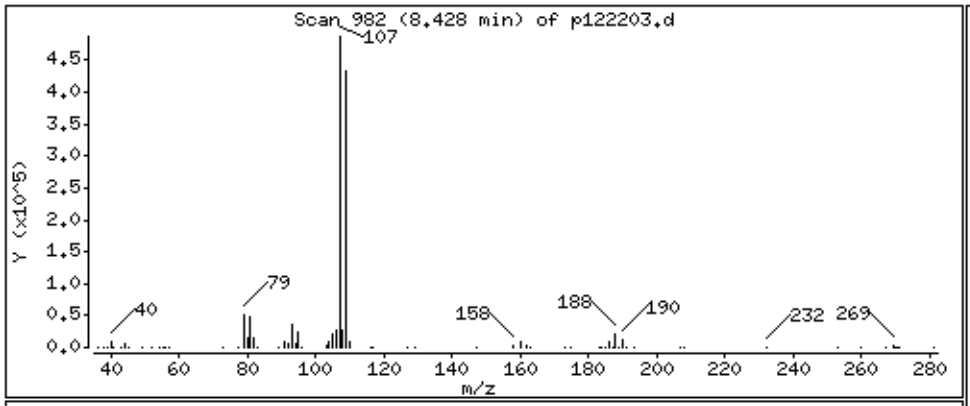
Operator: js

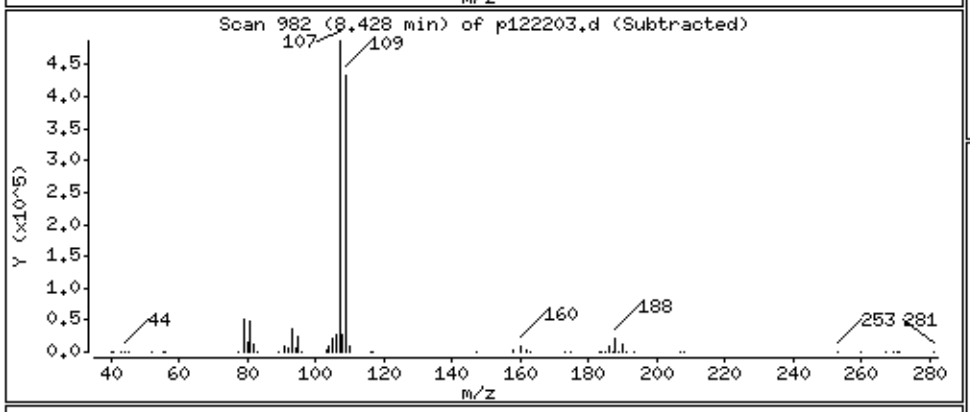
Column phase: RTX-624

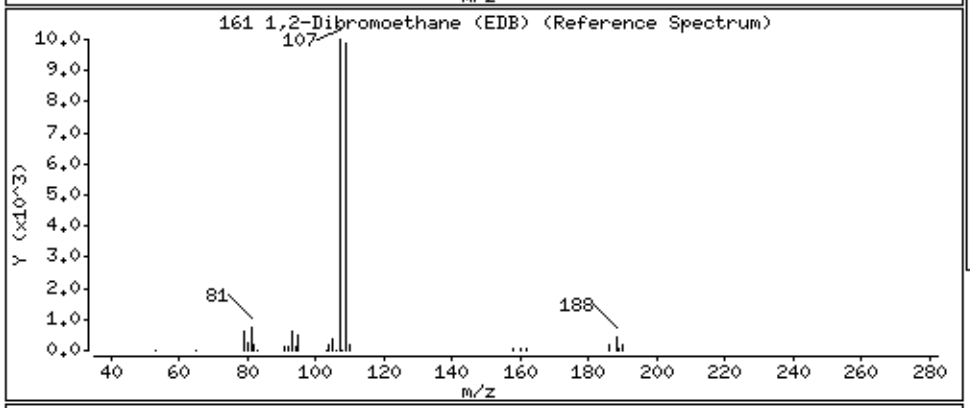
Column diameter: 0.25

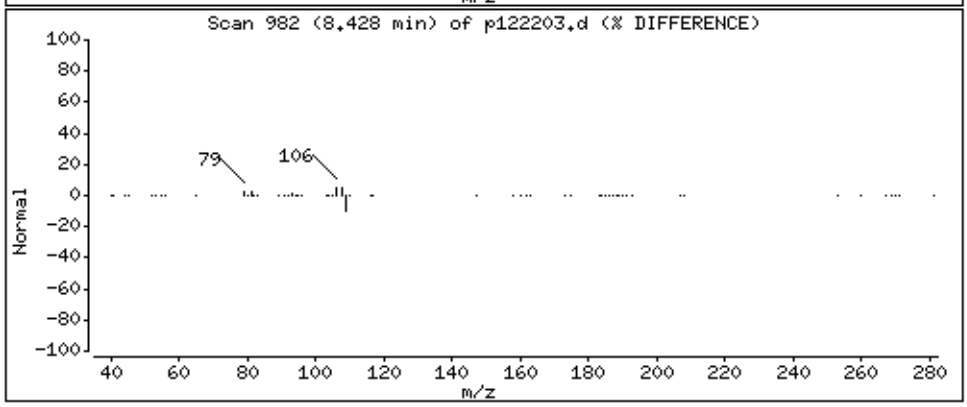
161 1,2-Dibromoethane (EDB)

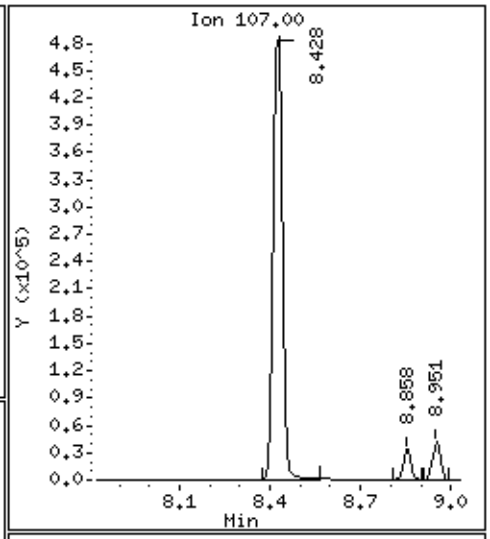
Concentration: 49.648 PPBV

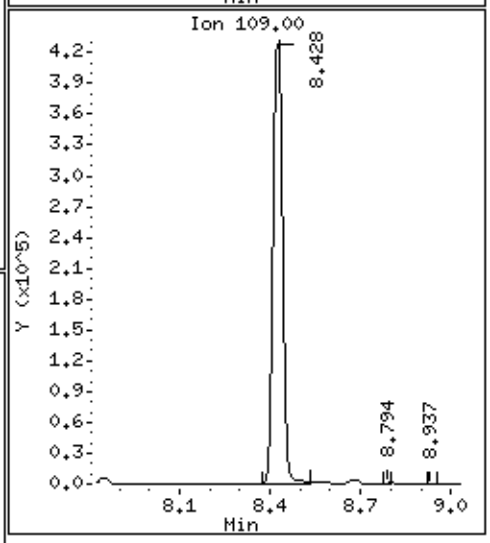












Data File: /chem/msdp.i/22dec14.b/p122203.d

Date : 22-DEC-2014 10:16

Client ID: LCS

Instrument: msdp.i

Sample Info: 100ml #2687-110A

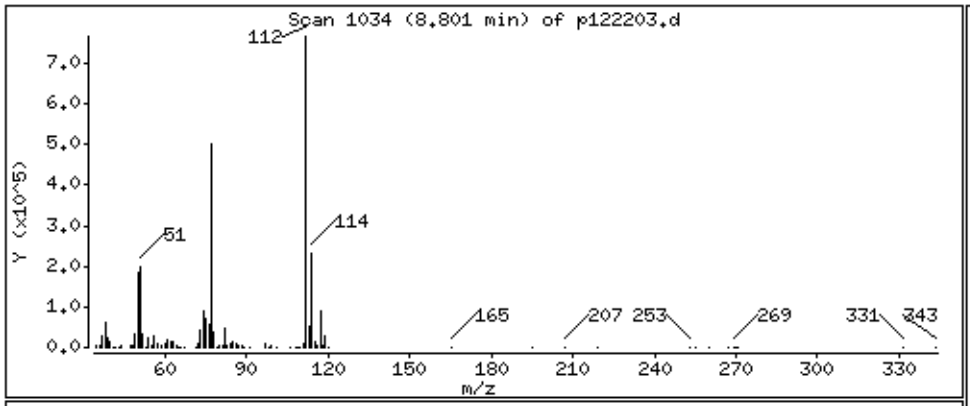
Operator: js

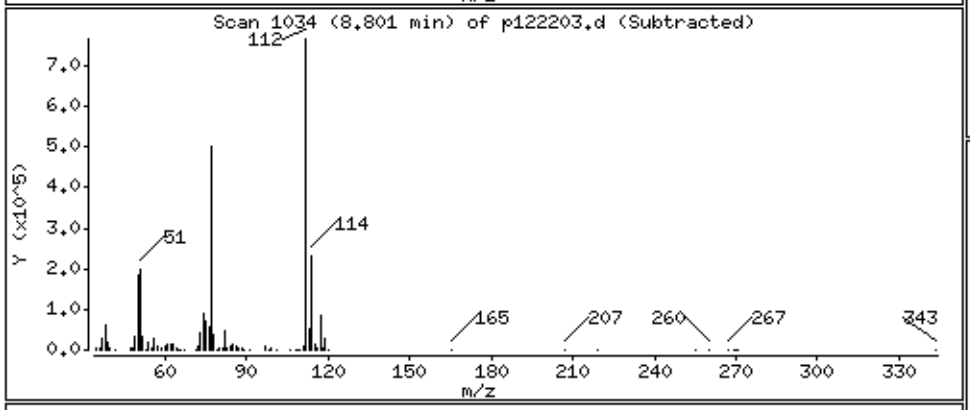
Column phase: RTX-624

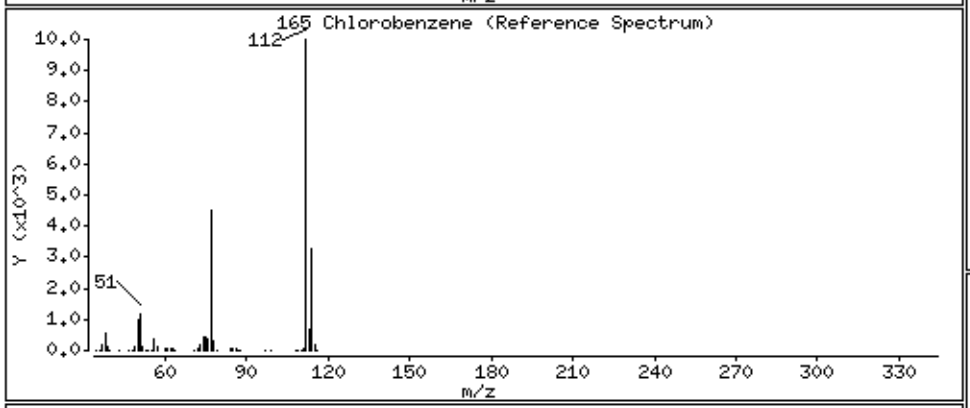
Column diameter: 0.25

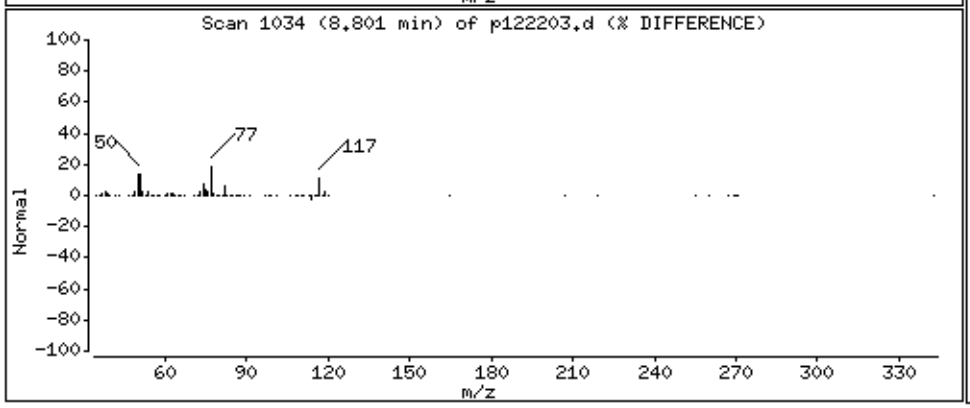
165 Chlorobenzene

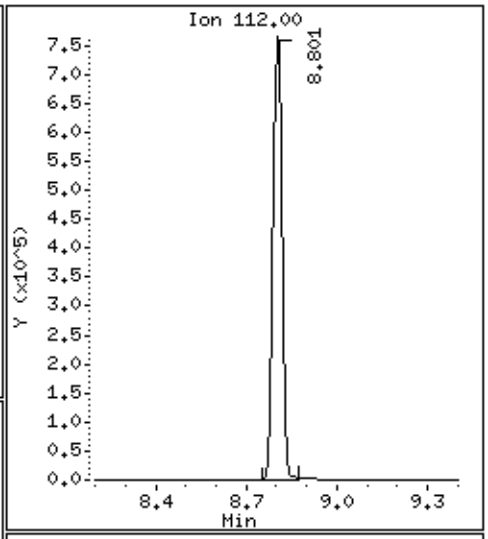
Concentration: 50.600 PPBV

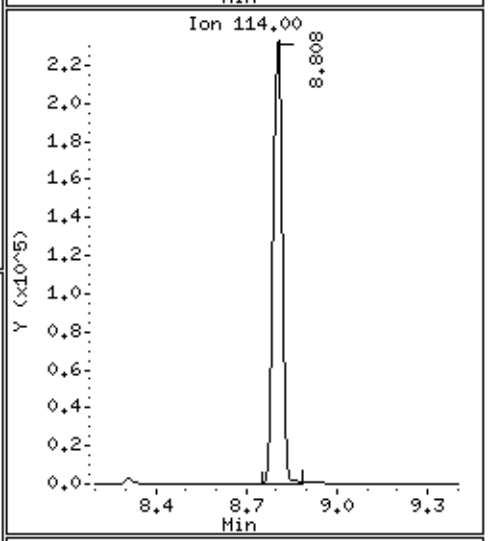


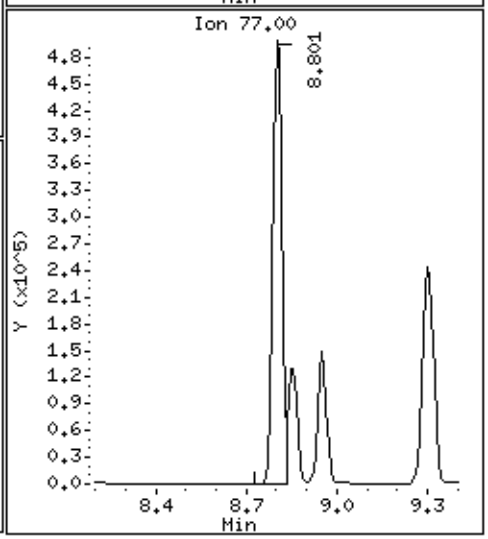












Data File: /chem/msdp.i/22dec14.b/p122203.d

Date : 22-DEC-2014 10:16

Client ID: LCS

Instrument: msdp.i

Sample Info: 100ml #2687-110A

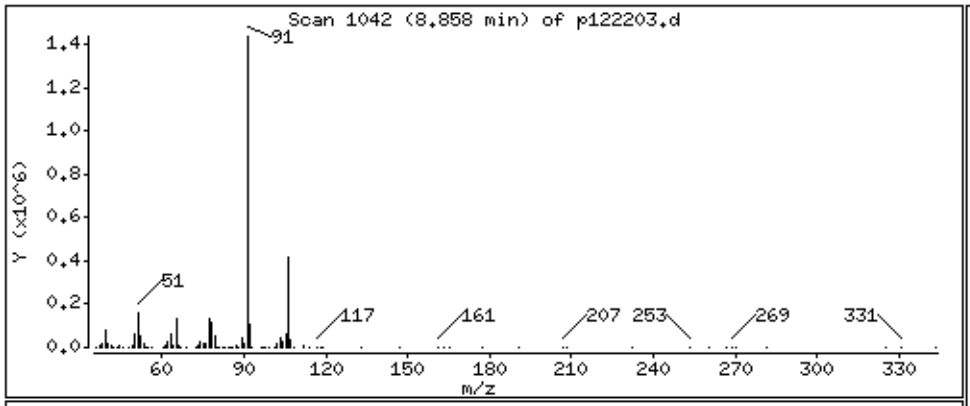
Operator: js

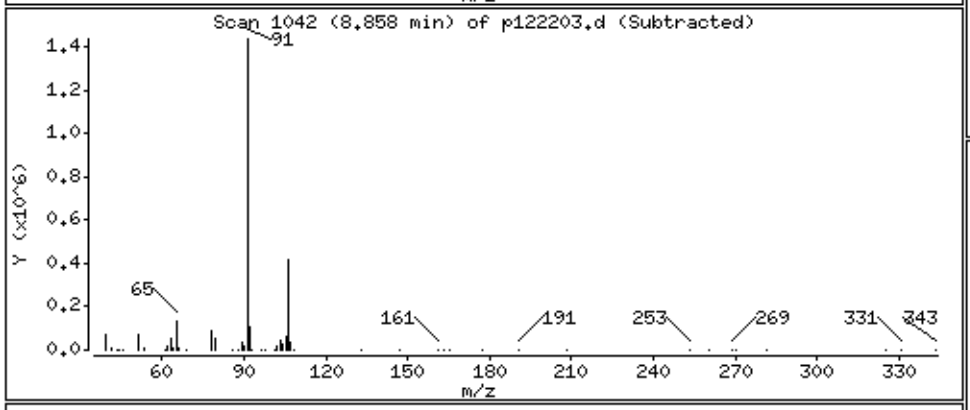
Column phase: RTX-624

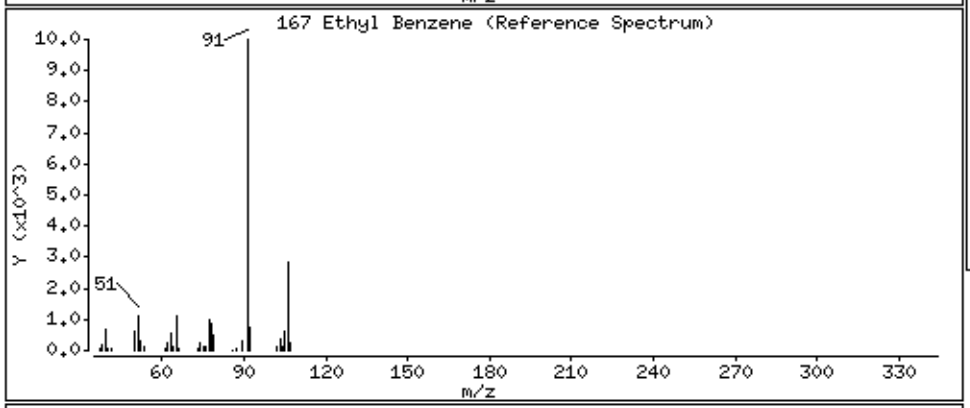
Column diameter: 0.25

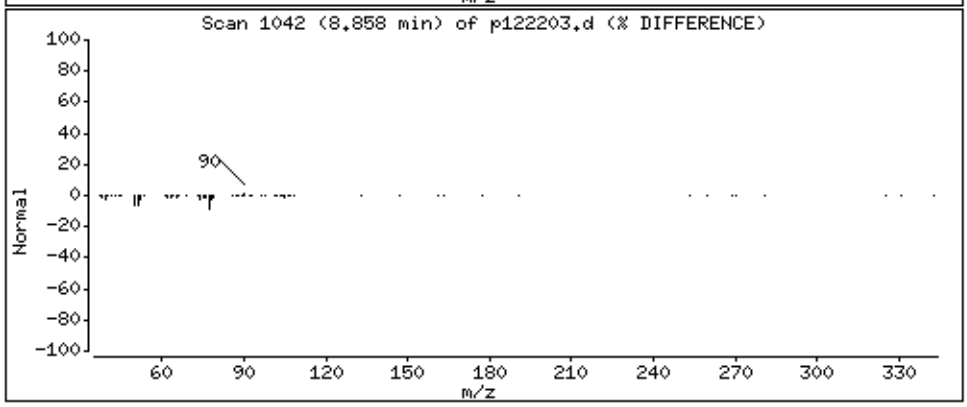
167 Ethyl Benzene

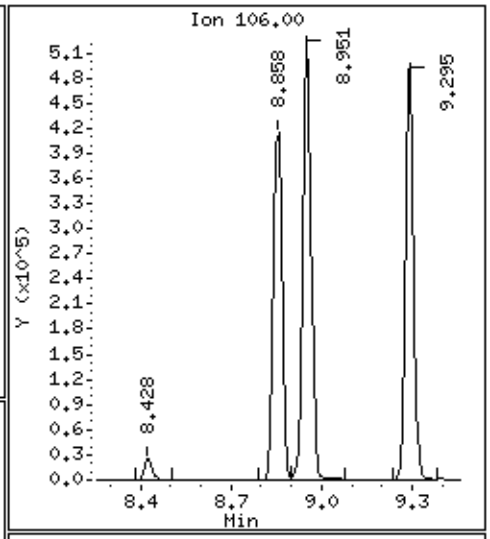
Concentration: 49.768 PPBV

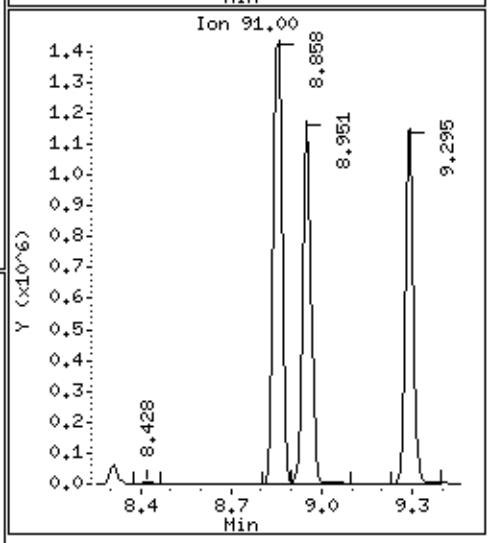












Data File: /chem/msdp.i/22dec14.b/p122203.d

Date : 22-DEC-2014 10:16

Client ID: LCS

Instrument: msdp.i

Sample Info: 100ml #2687-110A

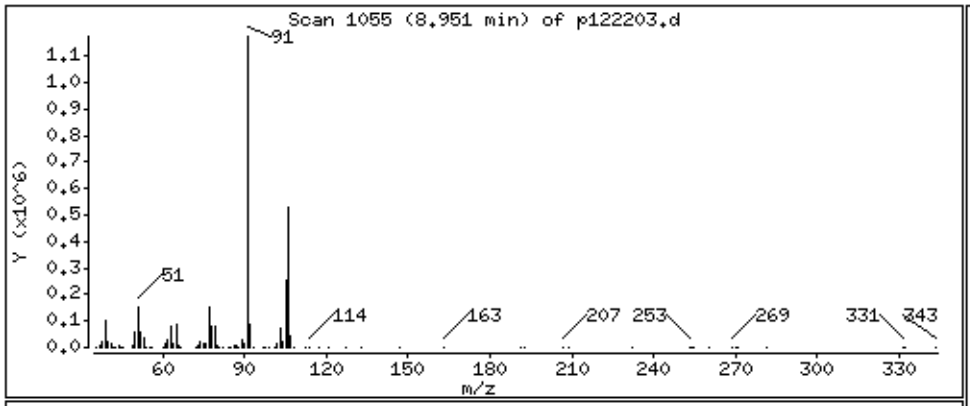
Operator: js

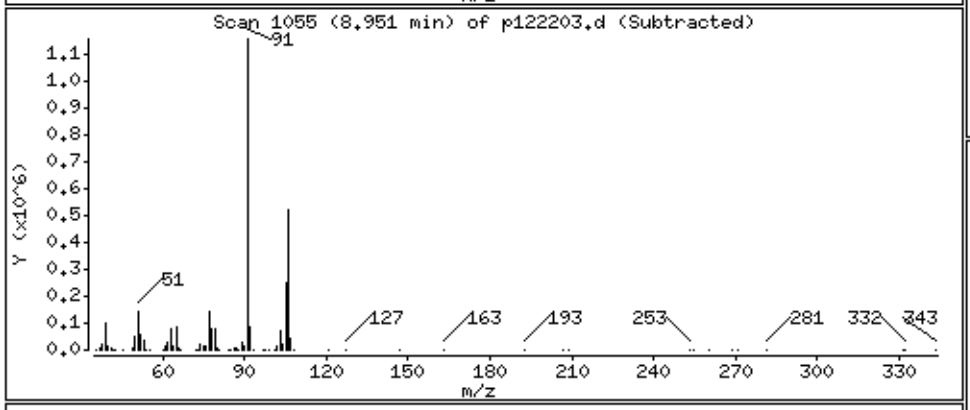
Column phase: RTX-624

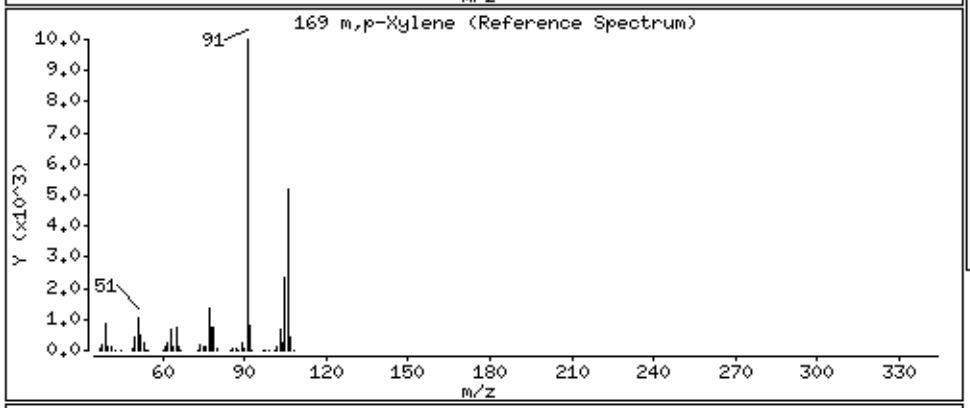
Column diameter: 0.25

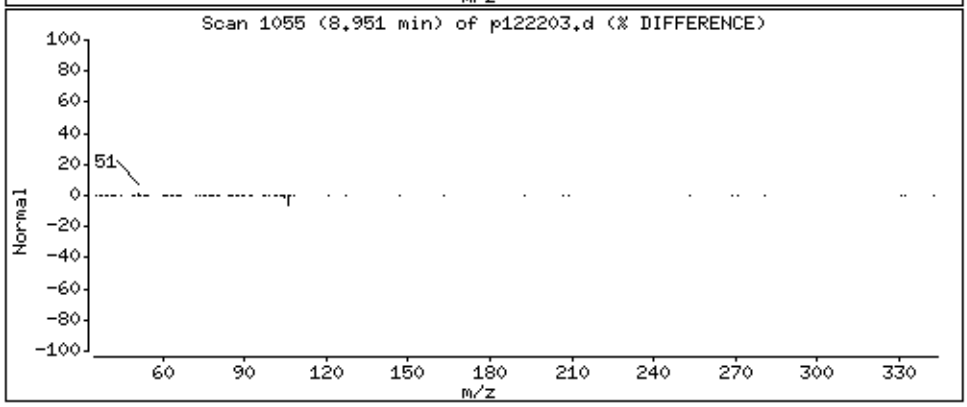
169 m,p-Xylene

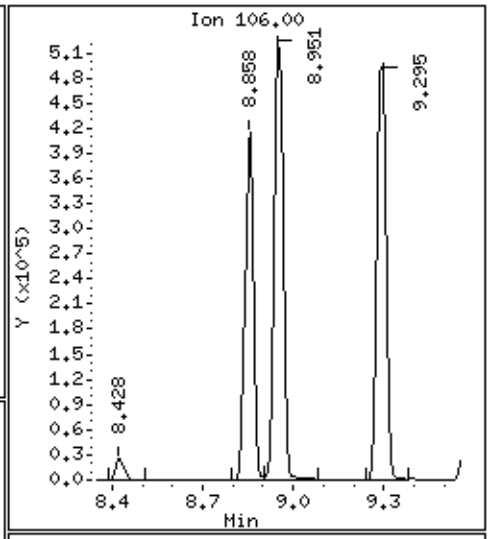
Concentration: 52.285 PPBV

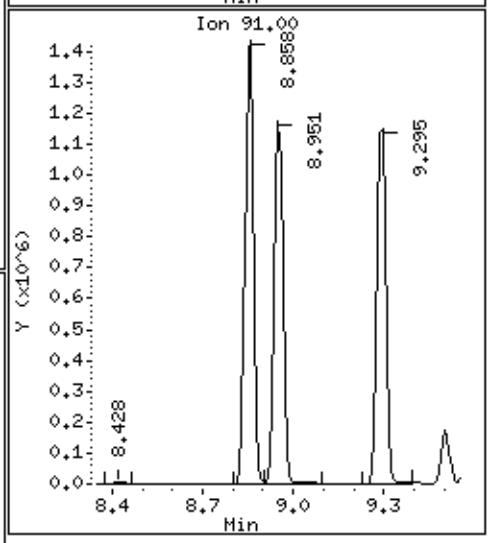












Data File: /chem/msdp.i/22dec14.b/p122203.d

Date : 22-DEC-2014 10:16

Client ID: LCS

Instrument: msdp.i

Sample Info: 100ml #2687-110A

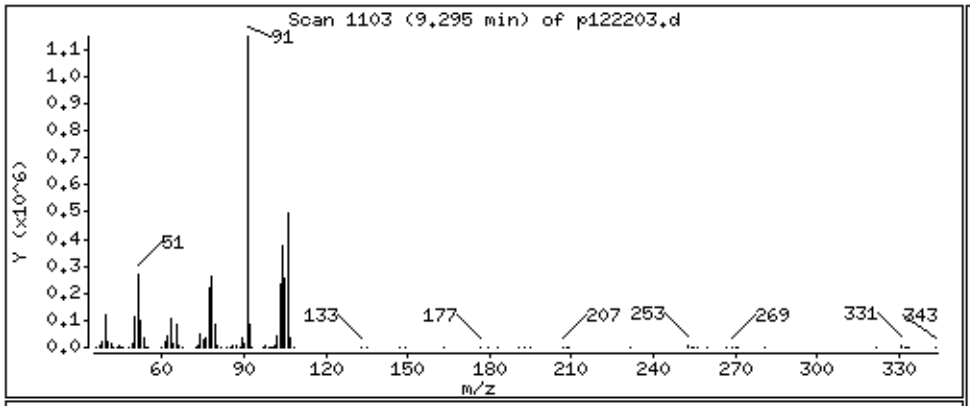
Operator: js

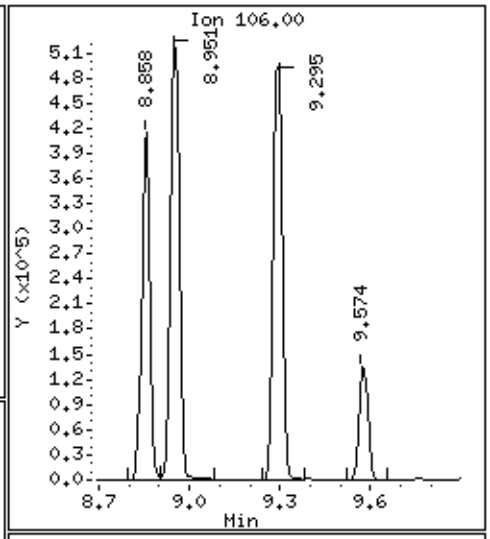
Column phase: RTX-624

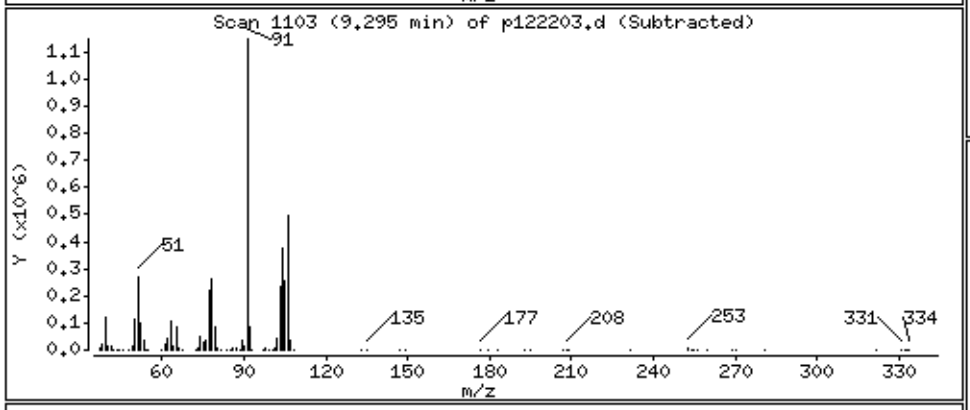
Column diameter: 0.25

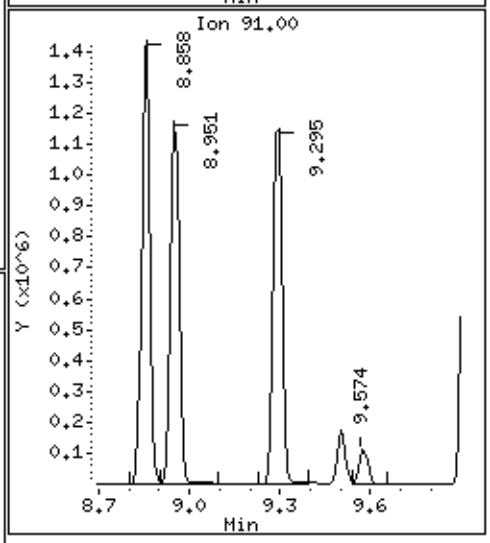
171 o-Xylene

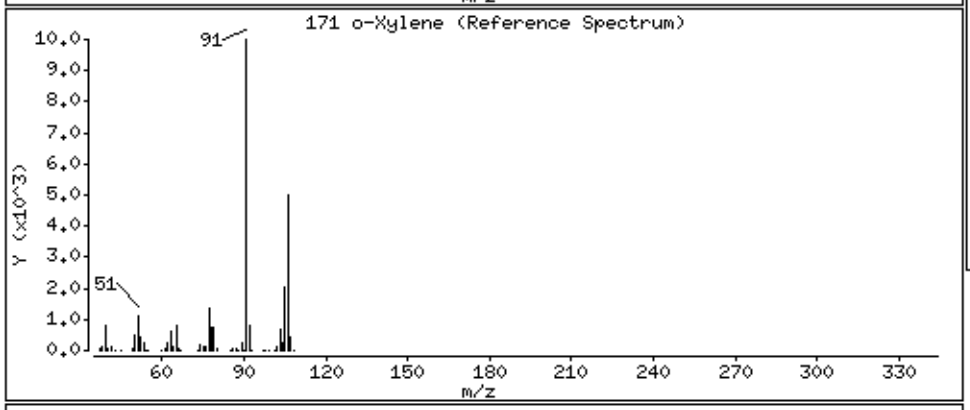
Concentration: 53.921 PPBV

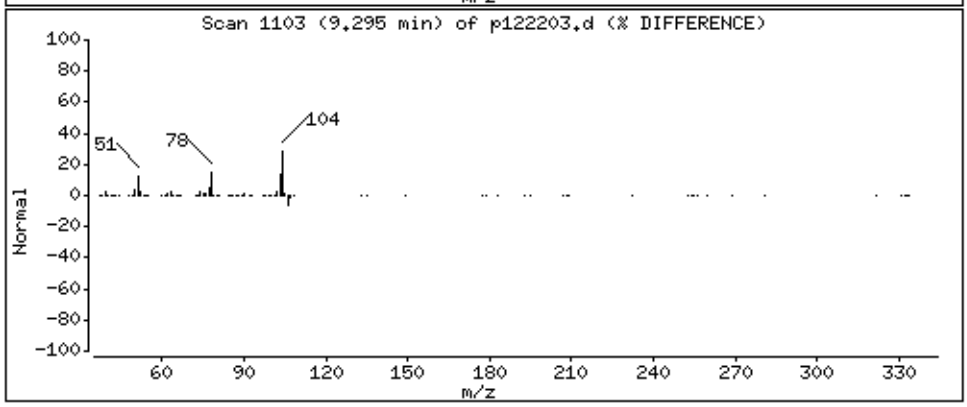












Data File: /chem/msdp.i/22dec14.b/p122203.d

Date : 22-DEC-2014 10:16

Client ID: LCS

Instrument: msdp.i

Sample Info: 100ml #2687-110A

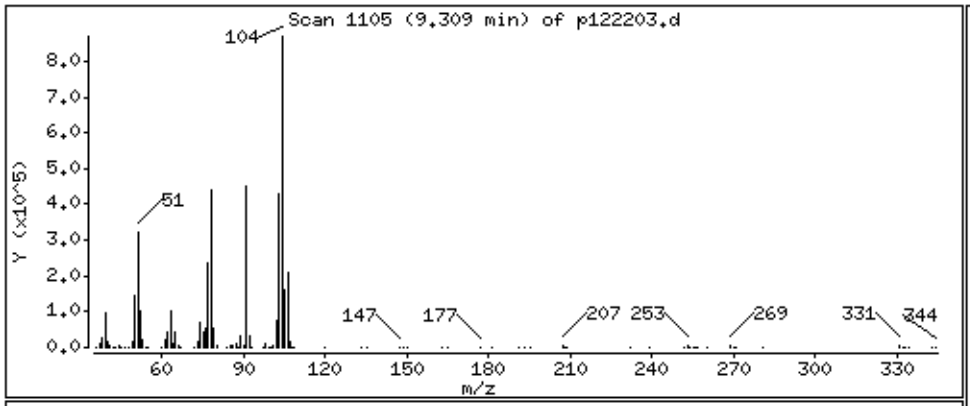
Operator: js

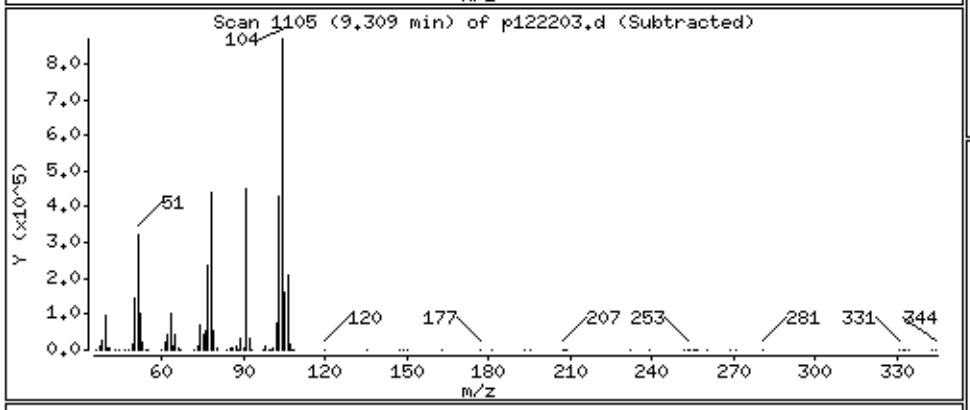
Column phase: RTX-624

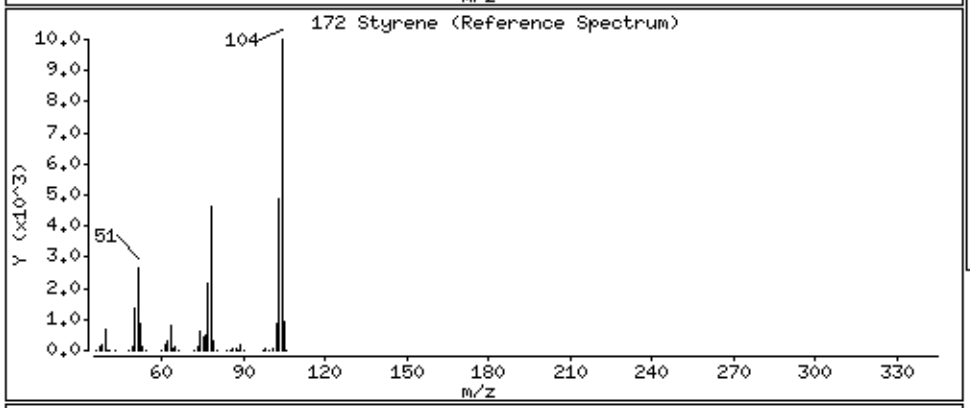
Column diameter: 0.25

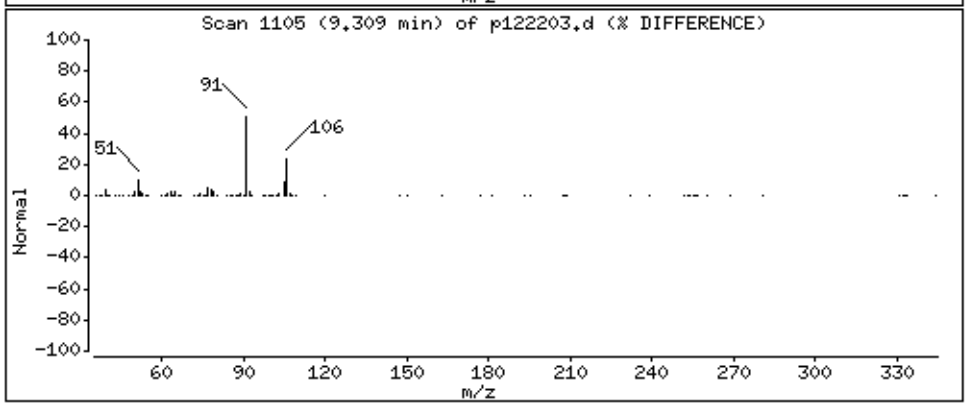
172 Styrene

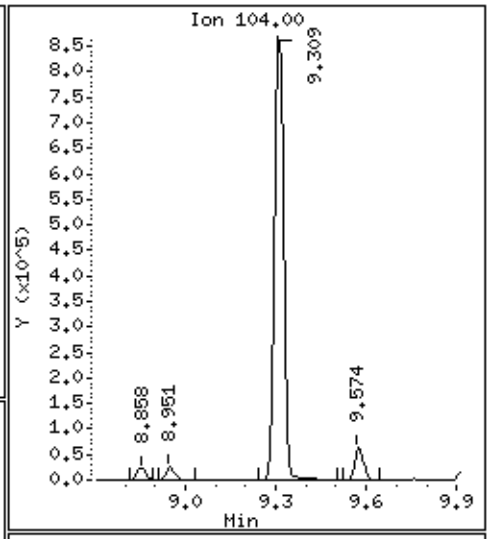
Concentration: 54.272 PPBV

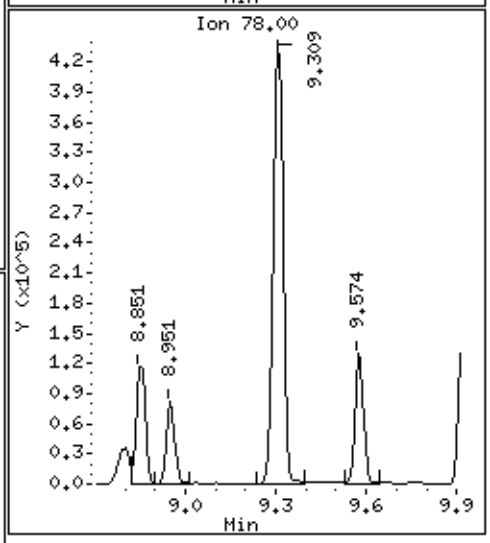












Data File: /chem/msdp.i/22dec14.b/p122203.d

Date : 22-DEC-2014 10:16

Client ID: LCS

Instrument: msdp.i

Sample Info: 100ml #2687-110A

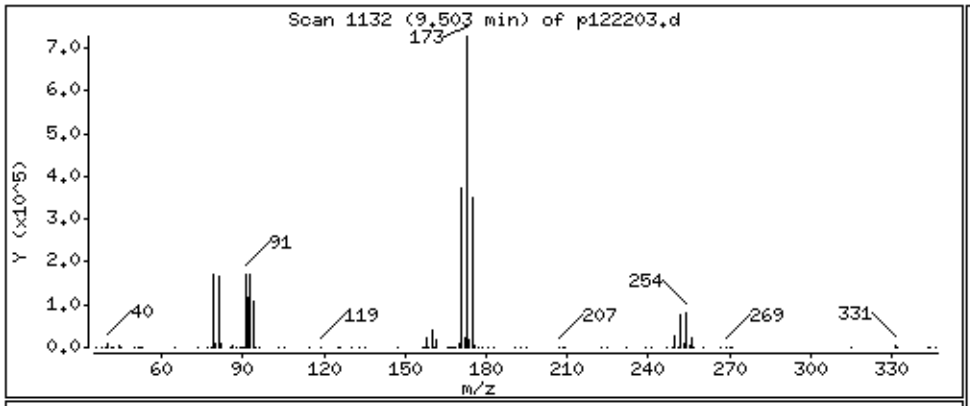
Operator: js

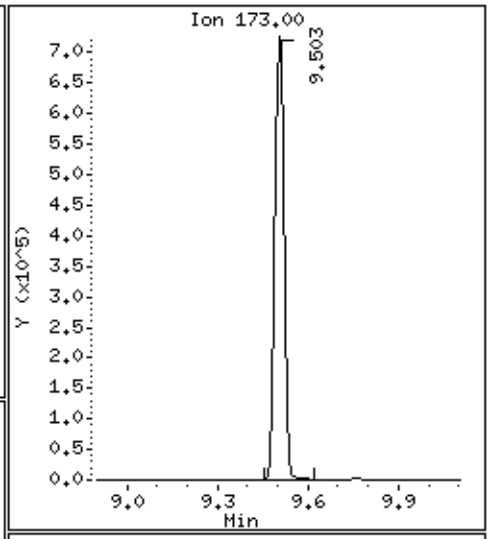
Column phase: RTX-624

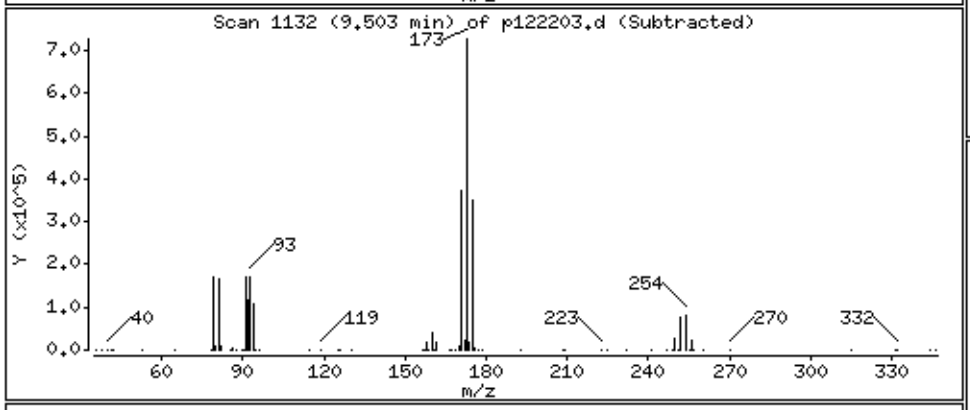
Column diameter: 0.25

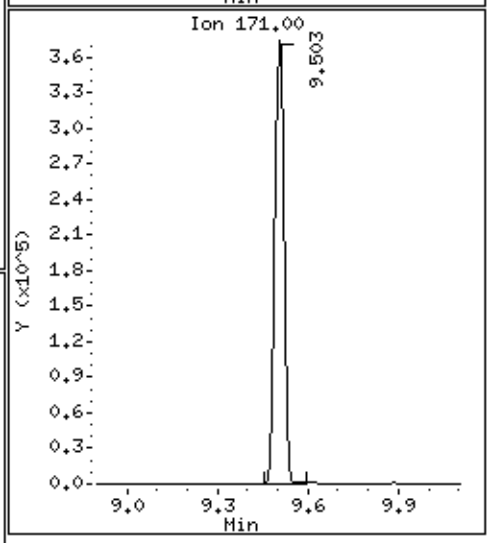
174 Bromoform

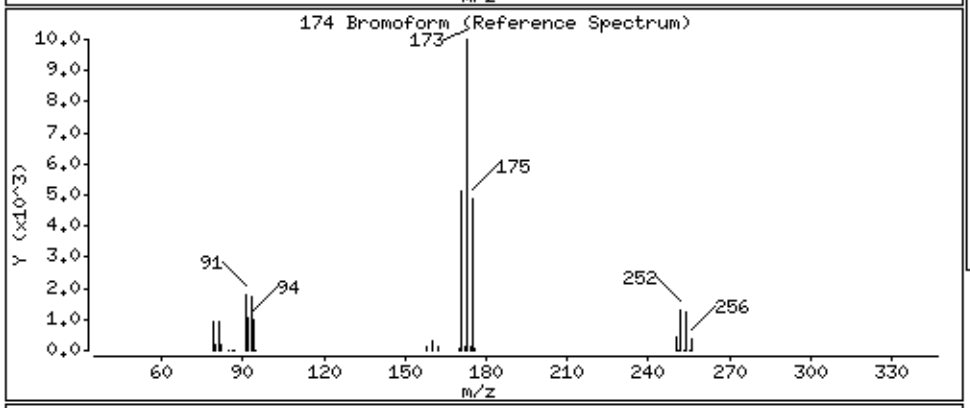
Concentration: 50.093 PPBV

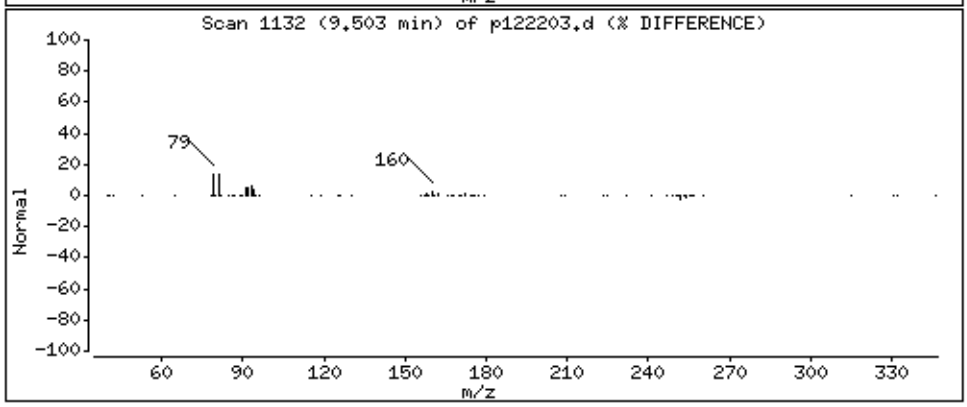












Data File: /chem/msdp.i/22dec14.b/p122203.d

Date : 22-DEC-2014 10:16

Client ID: LCS

Instrument: msdp.i

Sample Info: 100ml #2687-110A

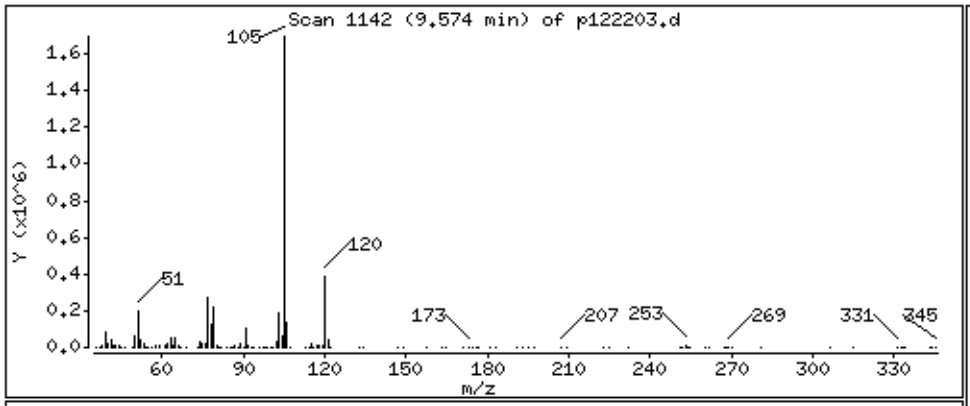
Operator: js

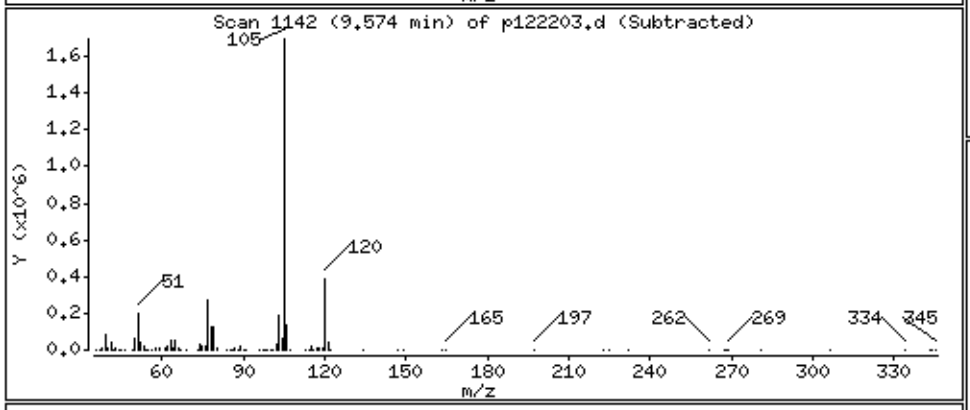
Column phase: RTX-624

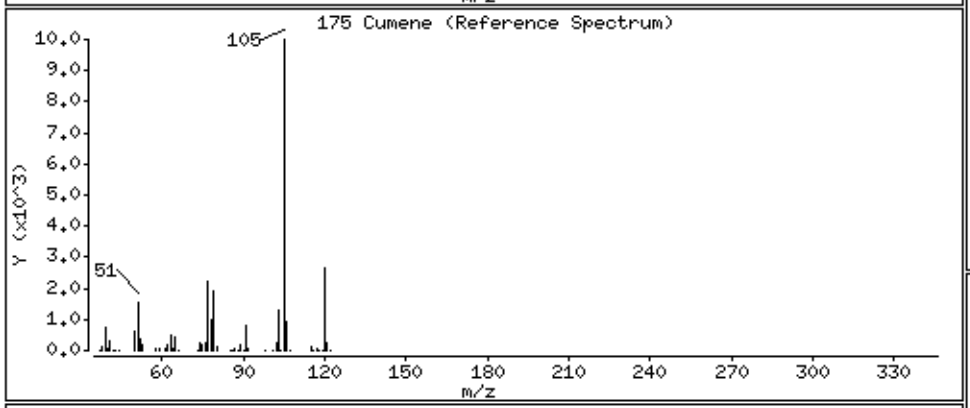
Column diameter: 0.25

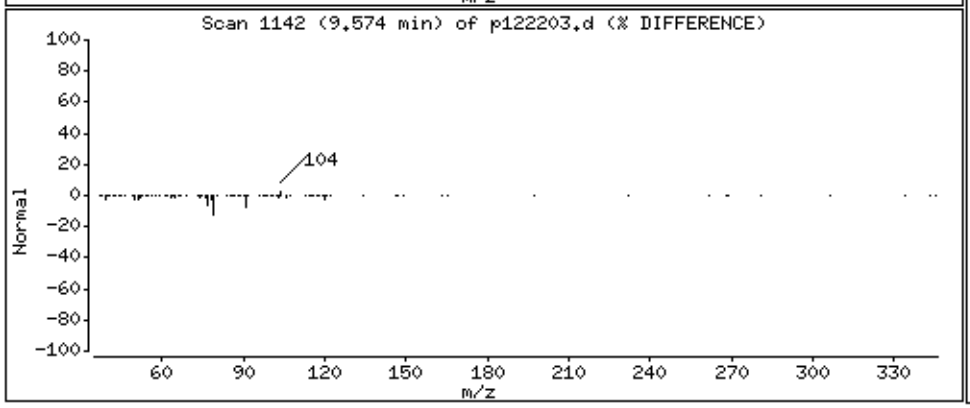
175 Cumene

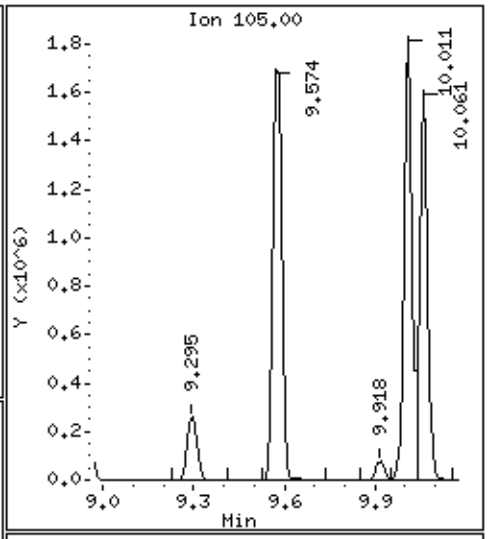
Concentration: 51.909 PPBV

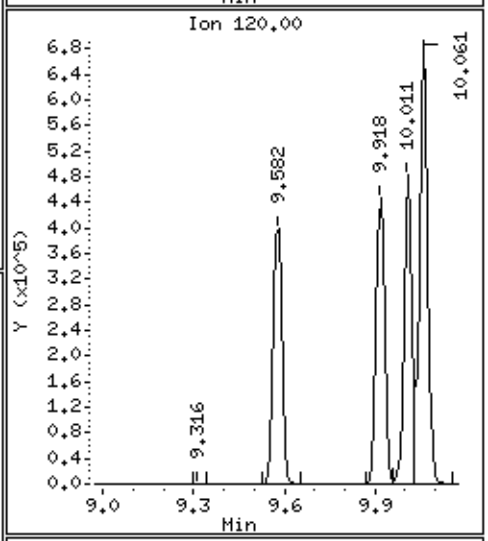


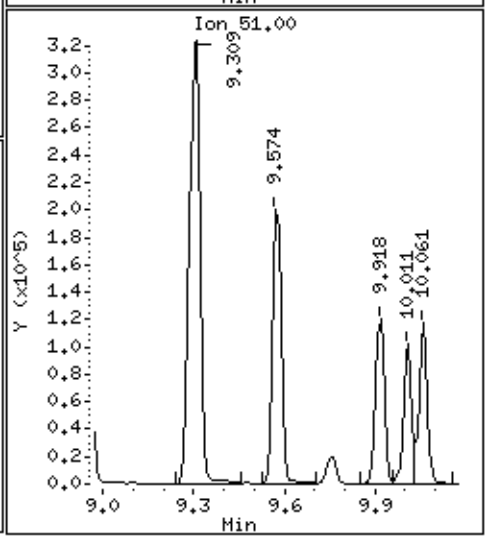












Data File: /chem/msdp.i/22dec14.b/p122203.d

Date : 22-DEC-2014 10:16

Client ID: LCS

Instrument: msdp.i

Sample Info: 100ml #2687-110A

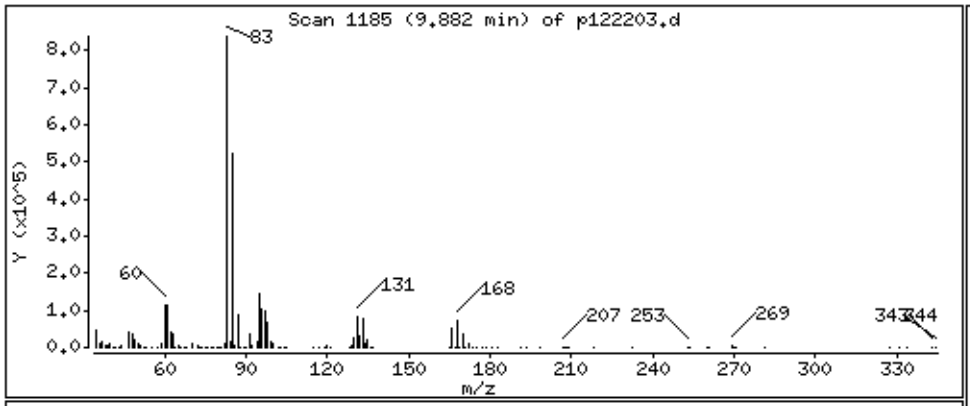
Operator: js

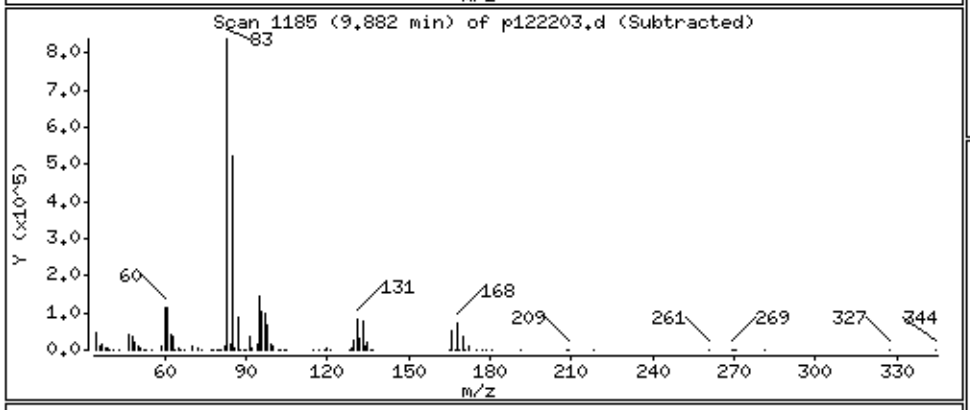
Column phase: RTX-624

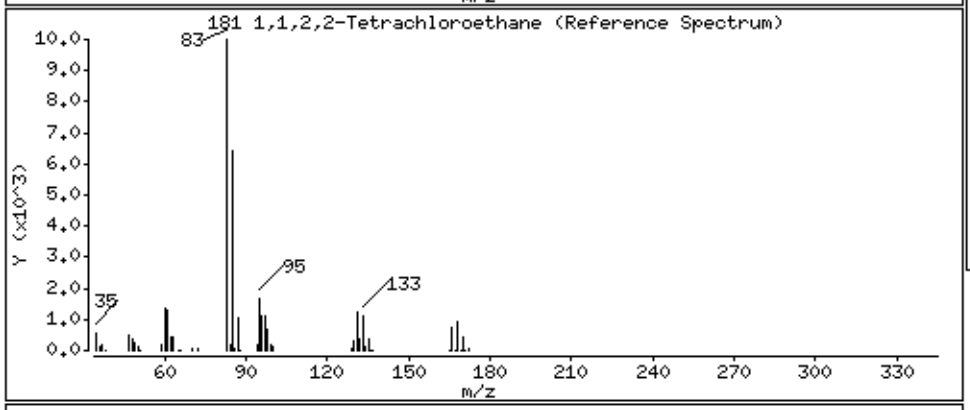
Column diameter: 0.25

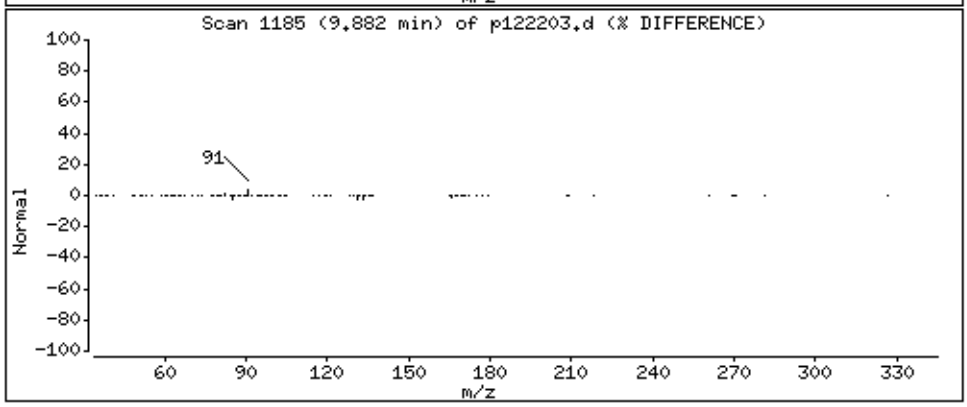
181 1,1,2,2-Tetrachloroethane

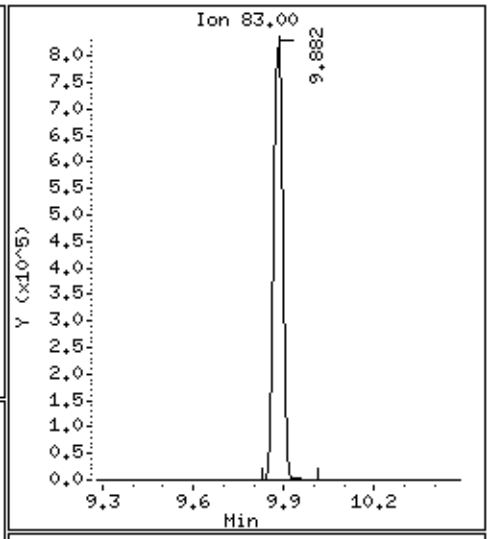
Concentration: 49.822 PPBV

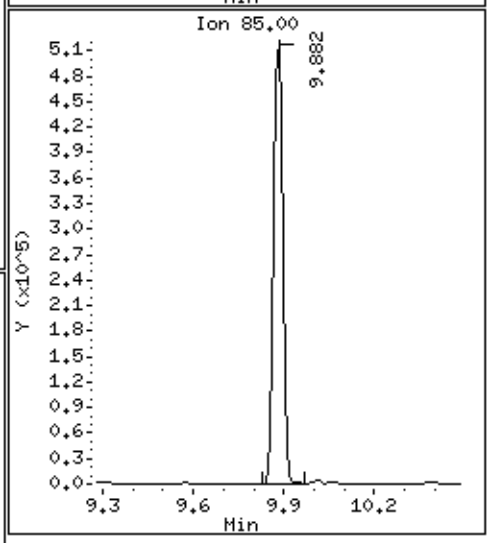












Data File: /chem/msdp.i/22dec14.b/p122203.d

Date : 22-DEC-2014 10:16

Client ID: LCS

Instrument: msdp.i

Sample Info: 100ml #2687-110A

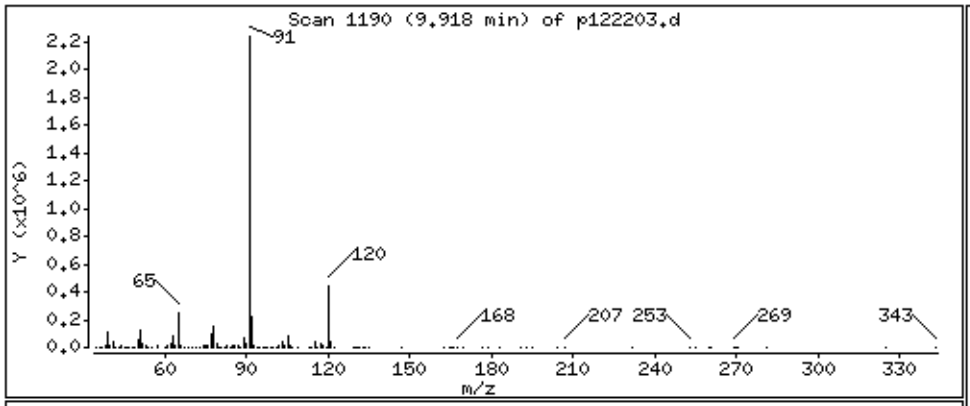
Operator: js

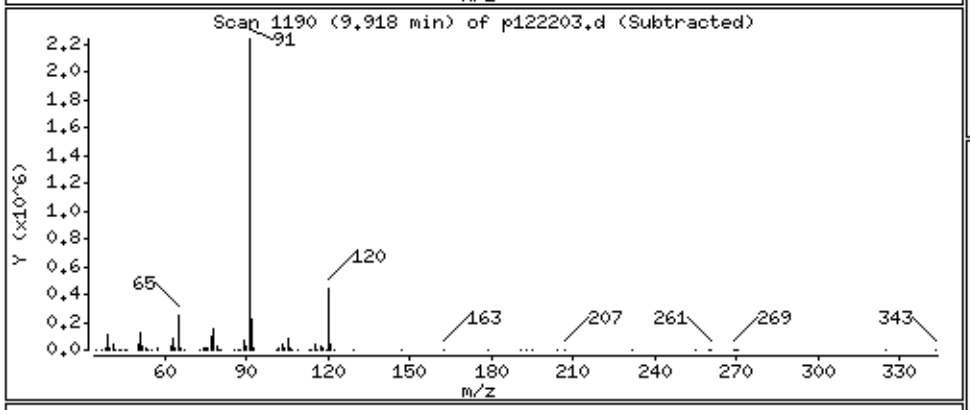
Column phase: RTX-624

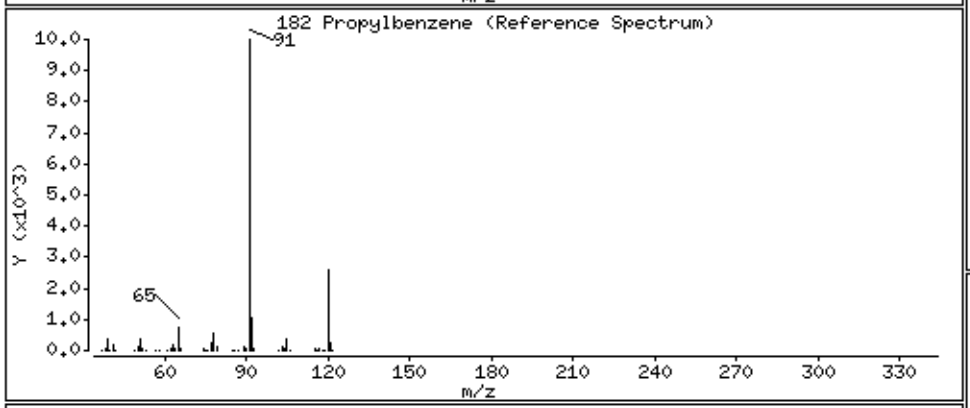
Column diameter: 0.25

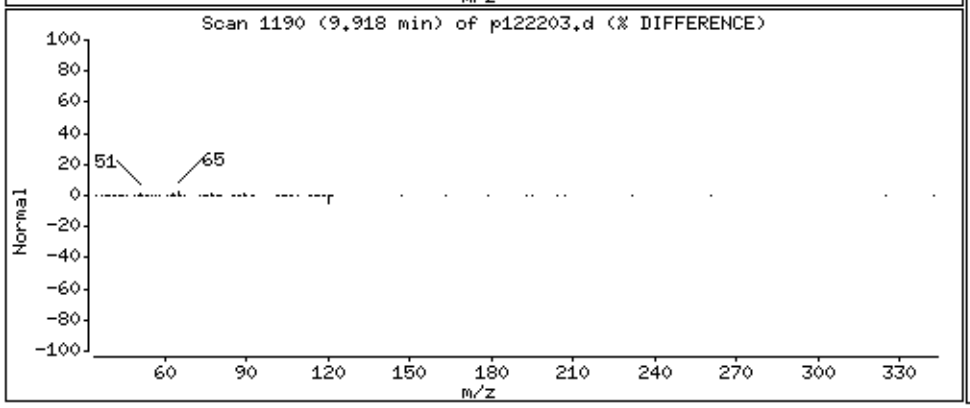
182 Propylbenzene

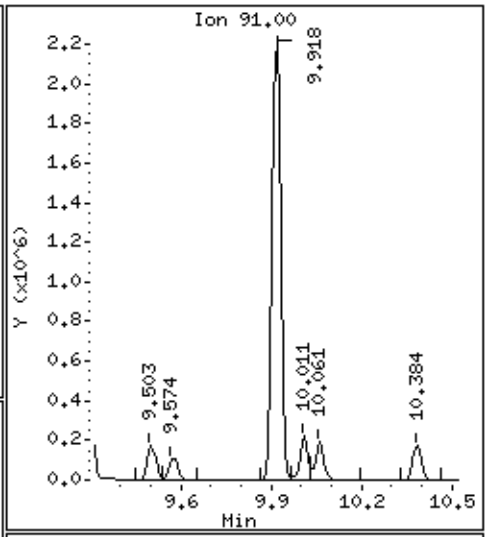
Concentration: 53.419 PPBV

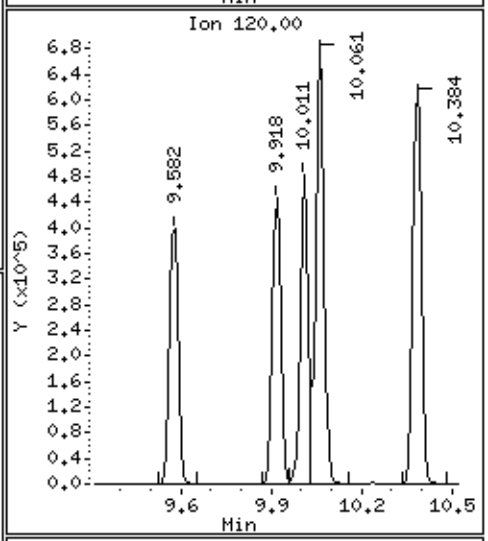


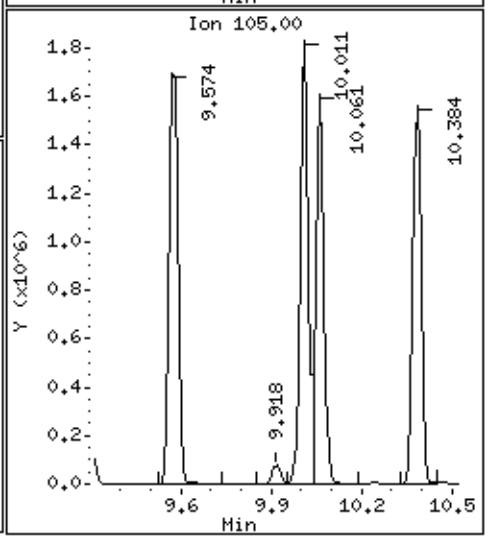












Data File: /chem/msdp.i/22dec14.b/p122203.d

Date : 22-DEC-2014 10:16

Client ID: LCS

Instrument: msdp.i

Sample Info: 100ml #2687-110A

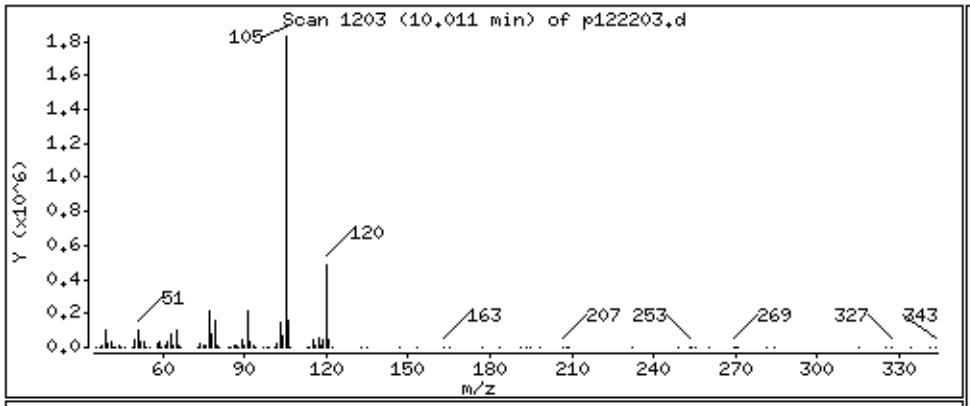
Operator: js

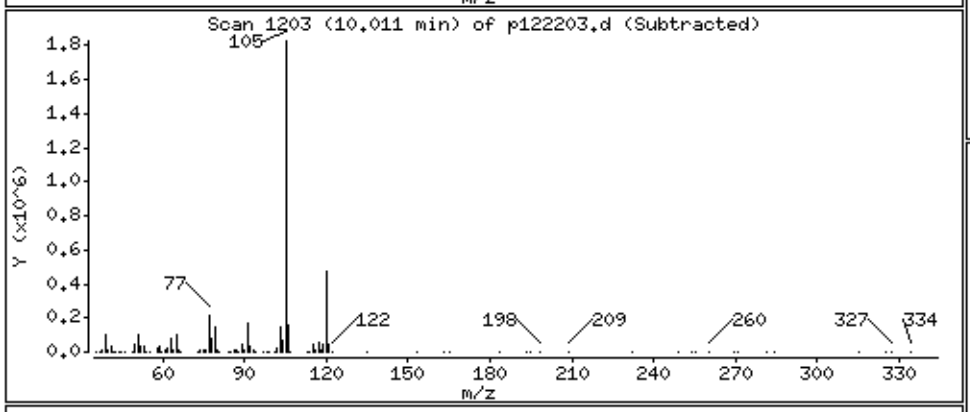
Column phase: RTX-624

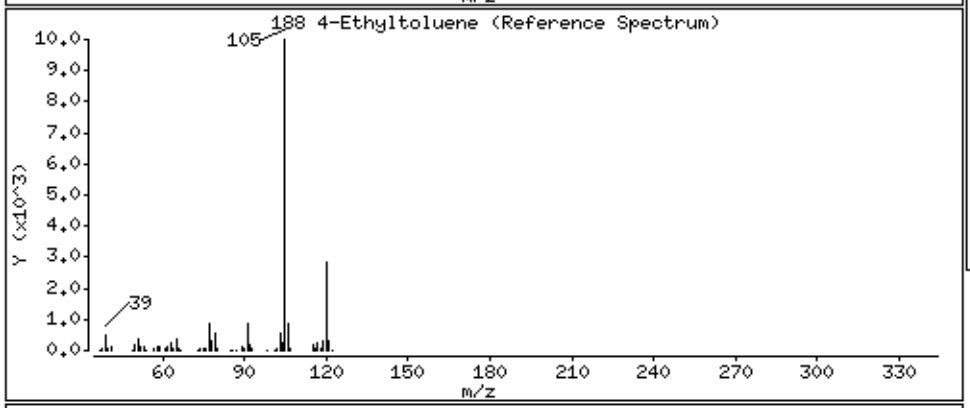
Column diameter: 0.25

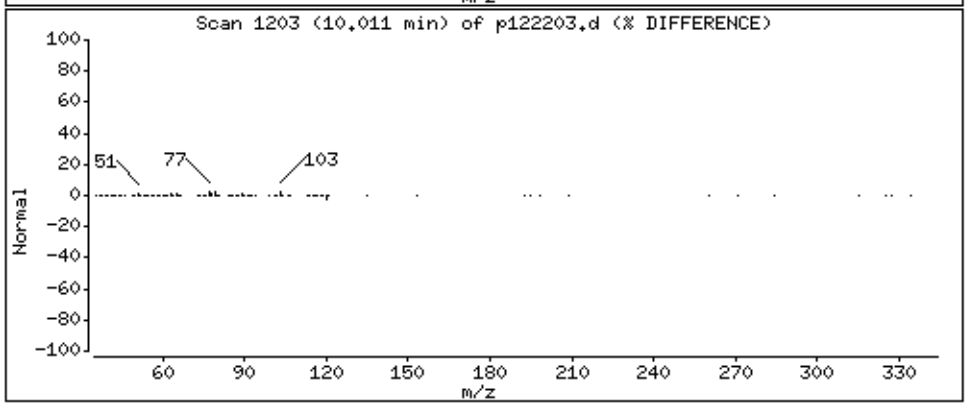
188 4-Ethyltoluene

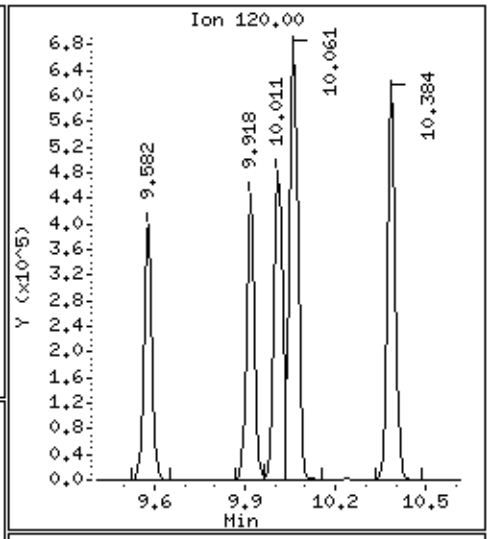
Concentration: 54.319 PPBV

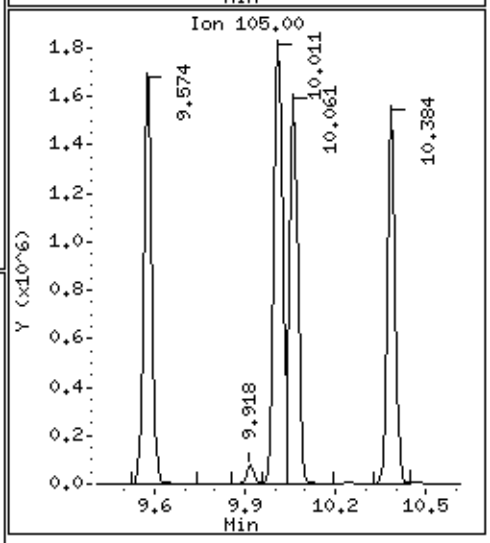












Data File: /chem/msdp.i/22dec14.b/p122203.d

Date : 22-DEC-2014 10:16

Client ID: LCS

Instrument: msdp.i

Sample Info: 100ml #2687-110A

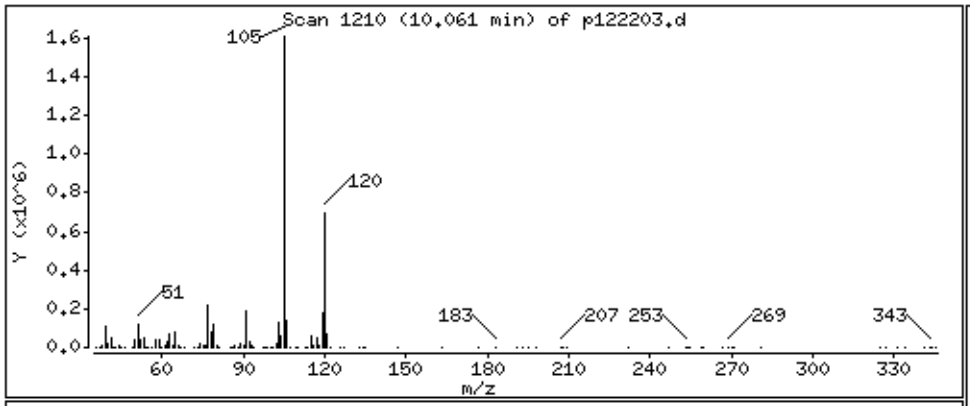
Operator: js

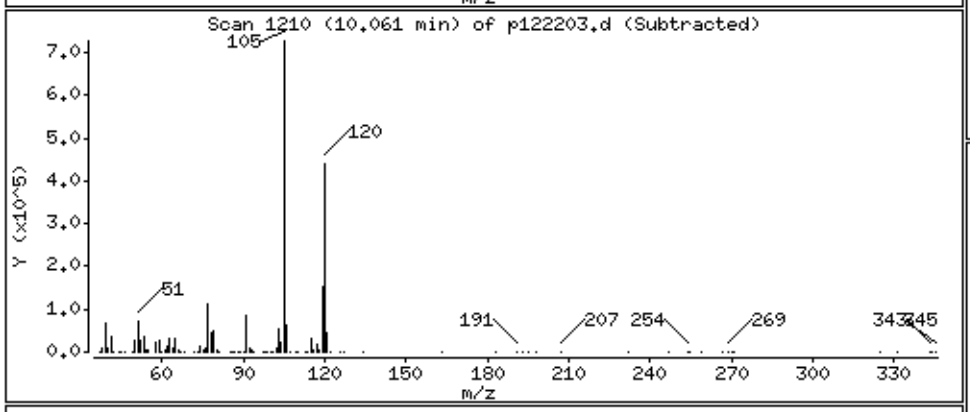
Column phase: RTX-624

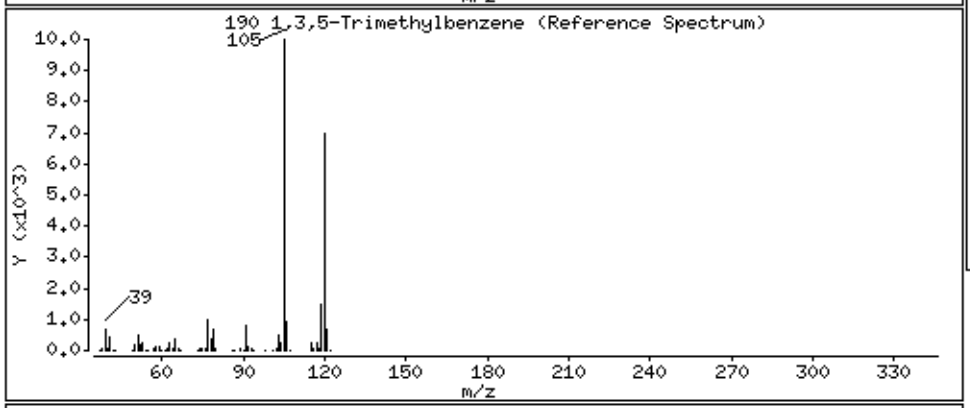
Column diameter: 0.25

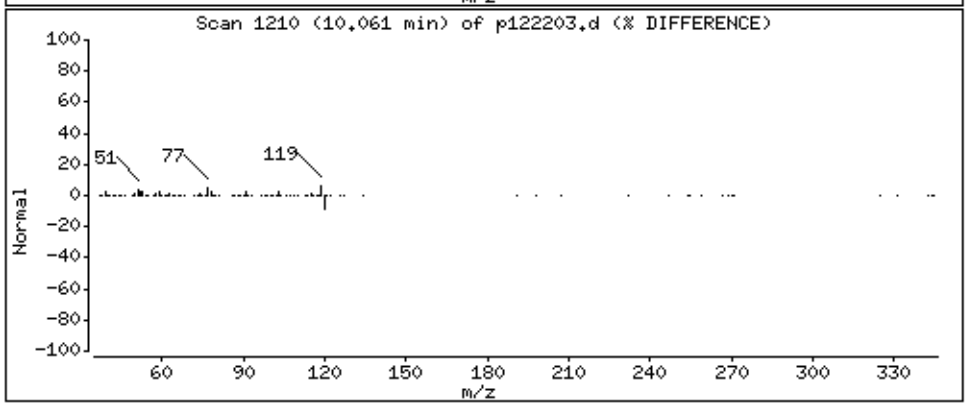
190 1,3,5-Trimethylbenzene

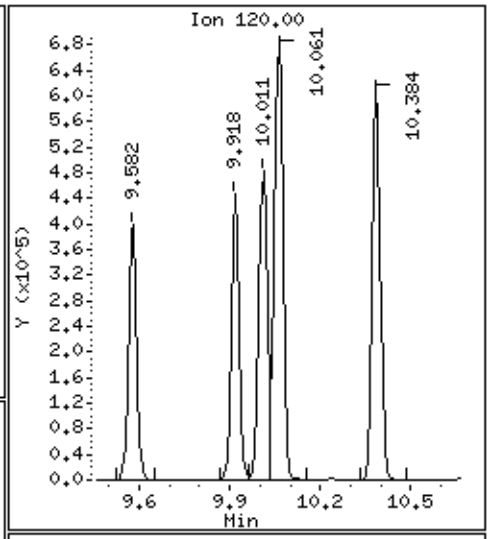
Concentration: 62.319 PPBV

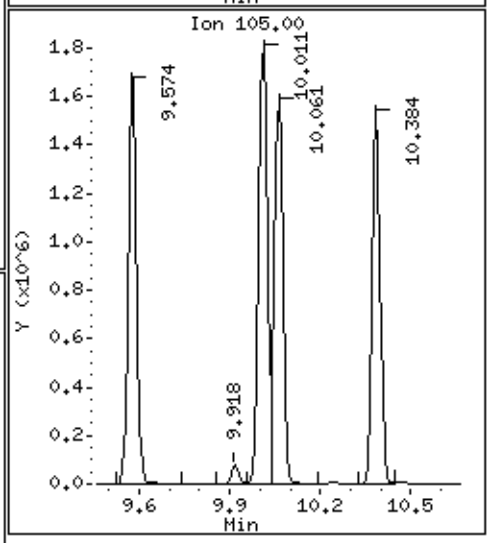












Data File: /chem/msdp.i/22dec14.b/p122203.d

Date : 22-DEC-2014 10:16

Client ID: LCS

Instrument: msdp.i

Sample Info: 100ml #2687-110A

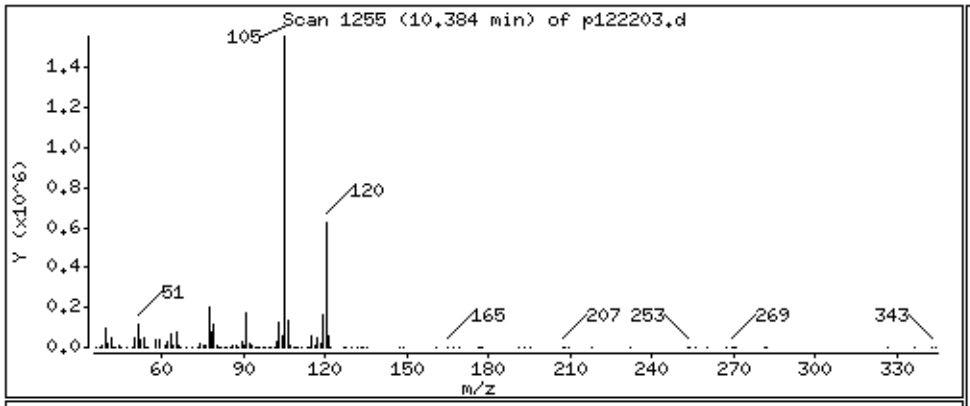
Operator: js

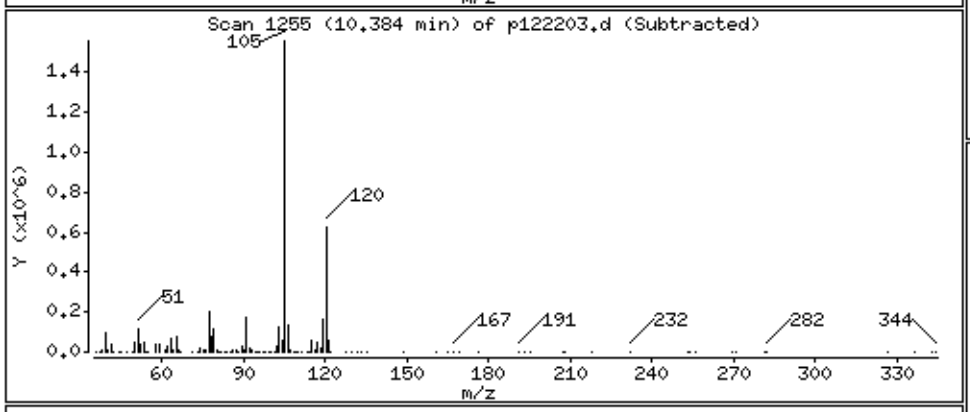
Column phase: RTX-624

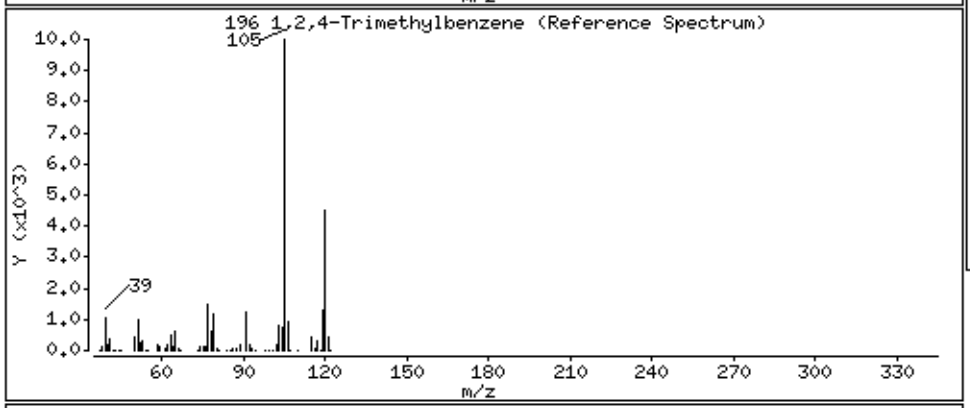
Column diameter: 0.25

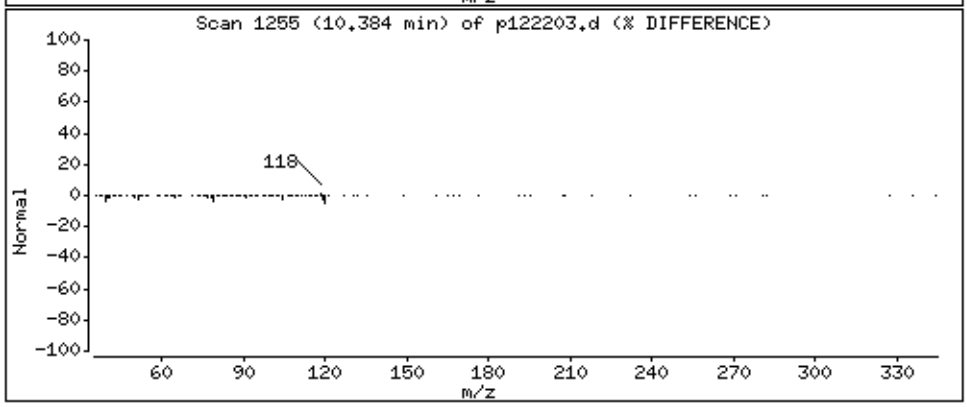
196 1,2,4-Trimethylbenzene

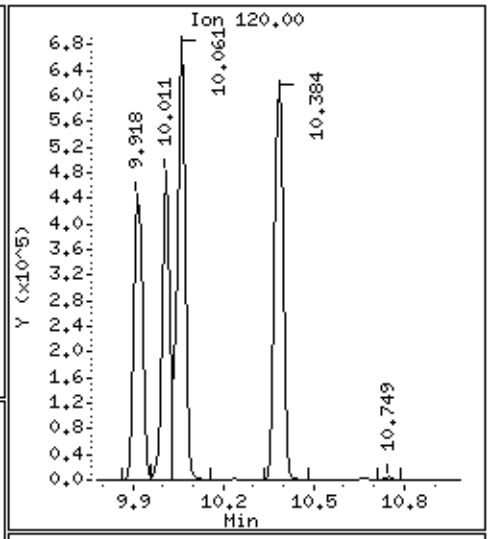
Concentration: 60.520 PPBV

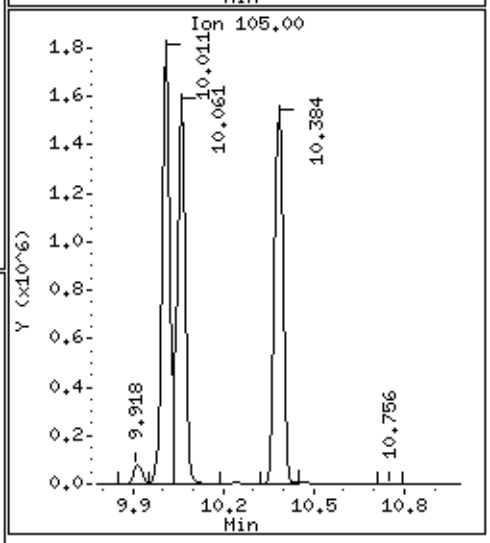












Data File: /chem/msdp.i/22dec14.b/p122203.d

Date : 22-DEC-2014 10:16

Client ID: LCS

Instrument: msdp.i

Sample Info: 100ml #2687-110A

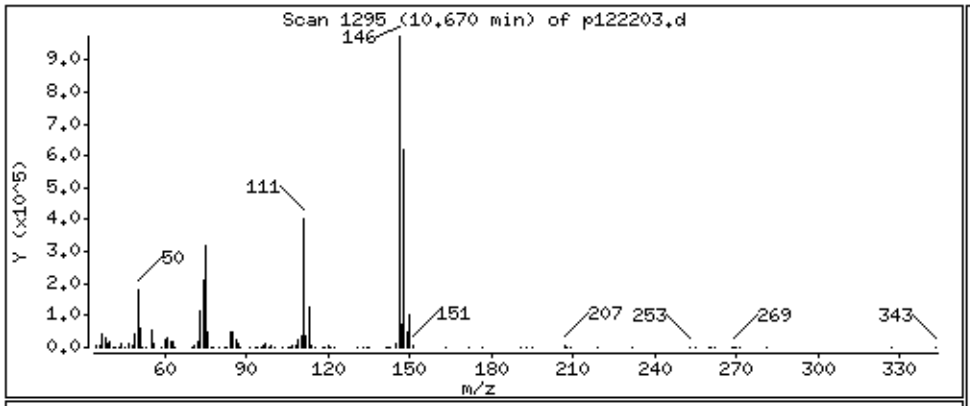
Operator: js

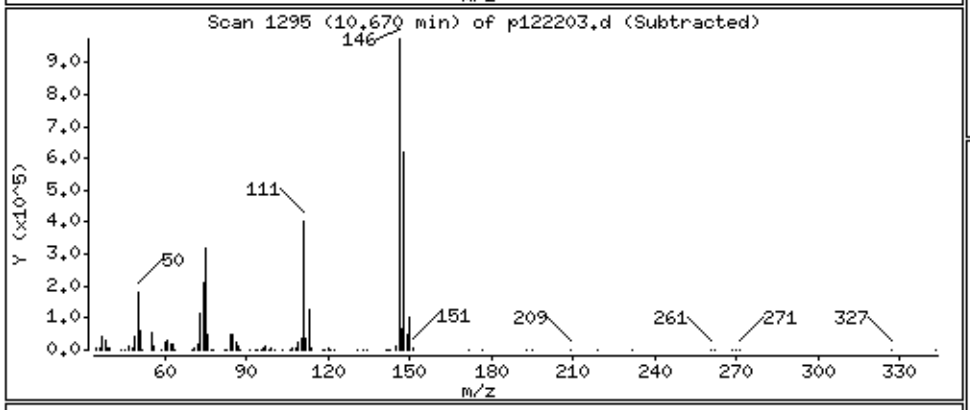
Column phase: RTX-624

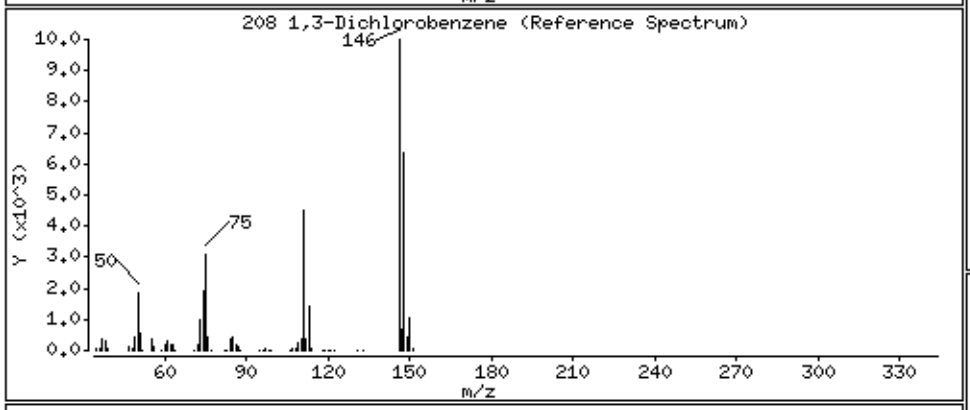
Column diameter: 0.25

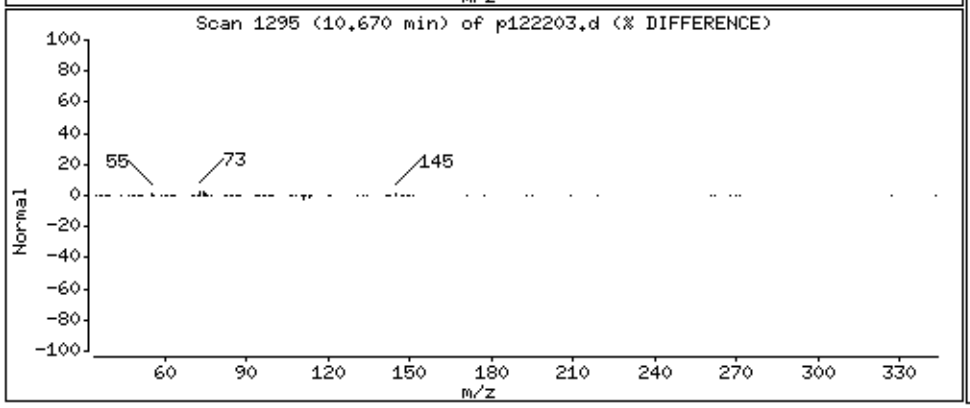
208 1,3-Dichlorobenzene

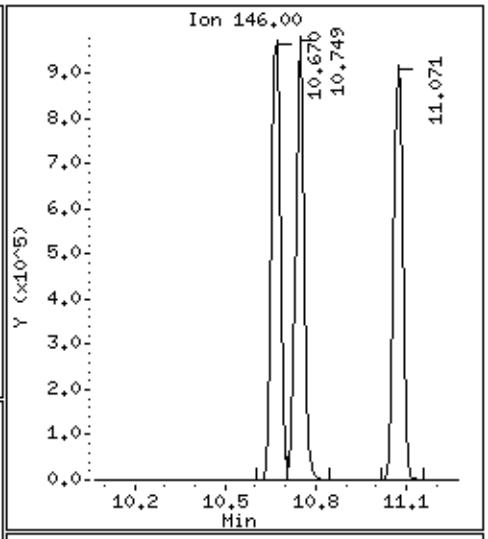
Concentration: 56.870 PPBV

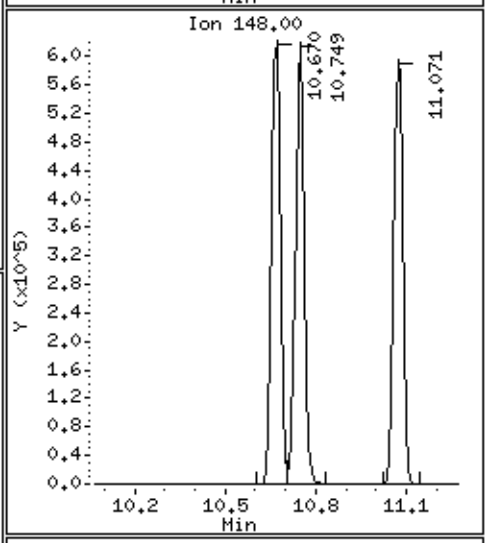


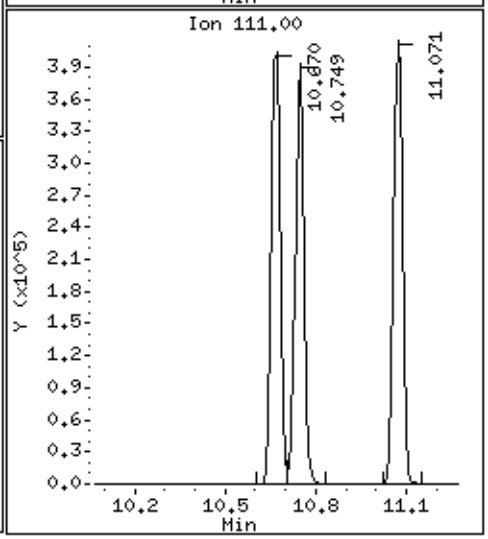












Data File: /chem/msdp.i/22dec14.b/p122203.d

Date : 22-DEC-2014 10:16

Client ID: LCS

Instrument: msdp.i

Sample Info: 100ml #2687-110A

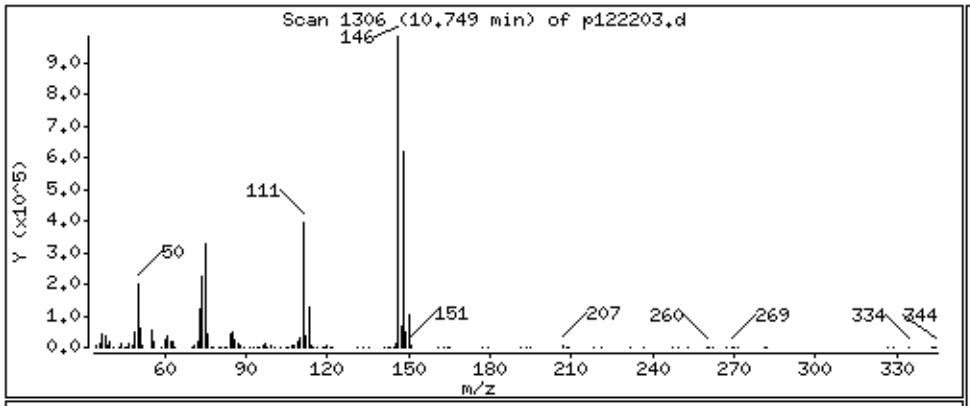
Operator: js

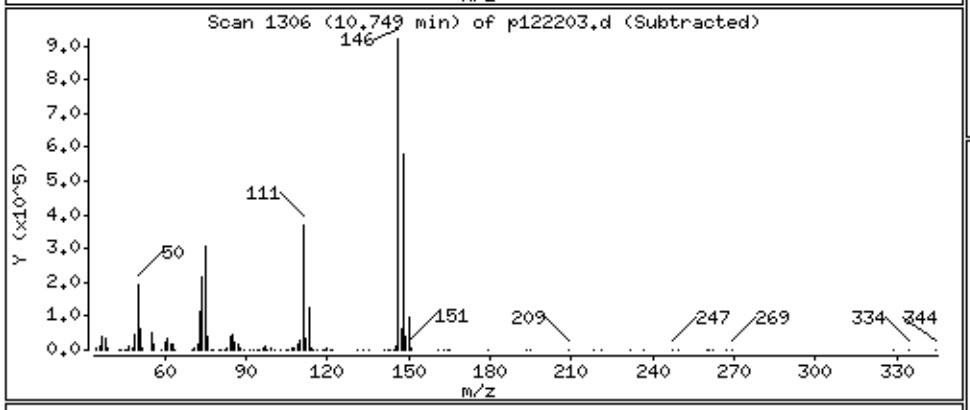
Column phase: RTX-624

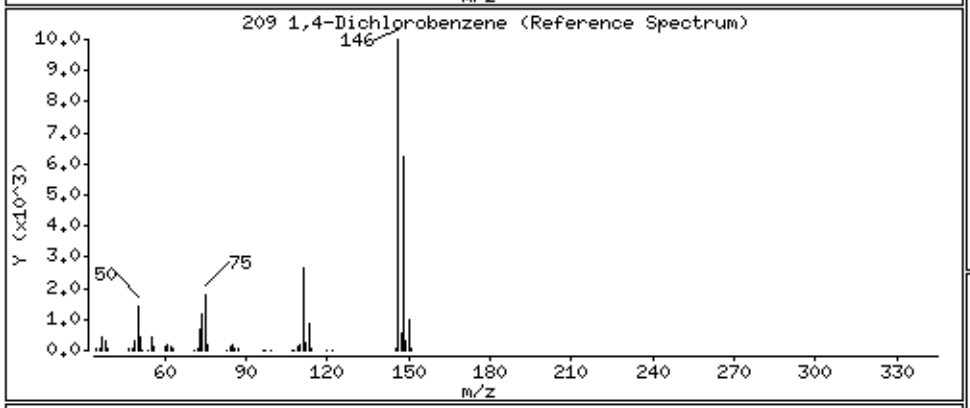
Column diameter: 0.25

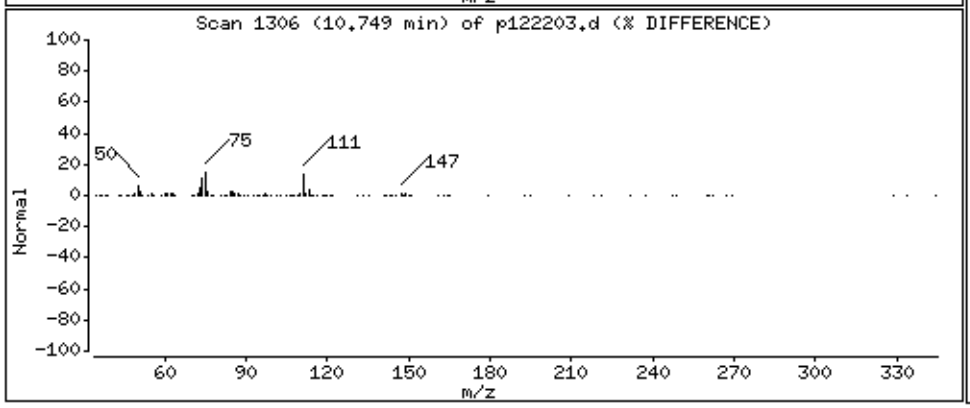
209 1,4-Dichlorobenzene

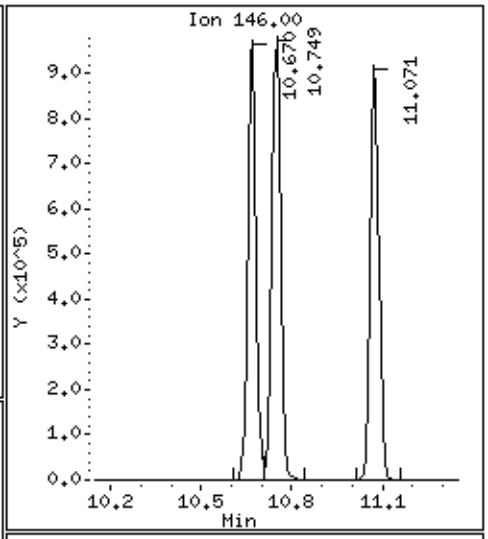
Concentration: 57.947 PPBV

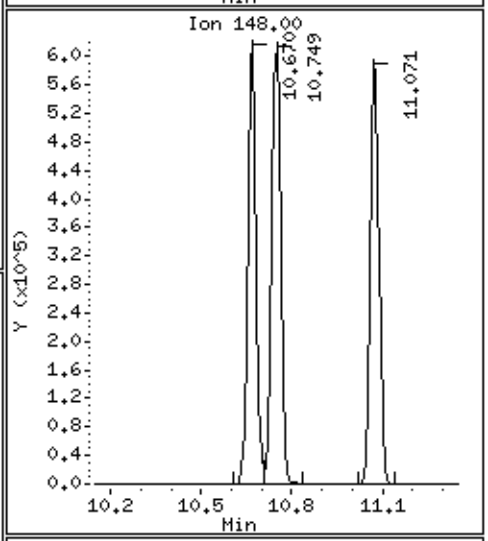


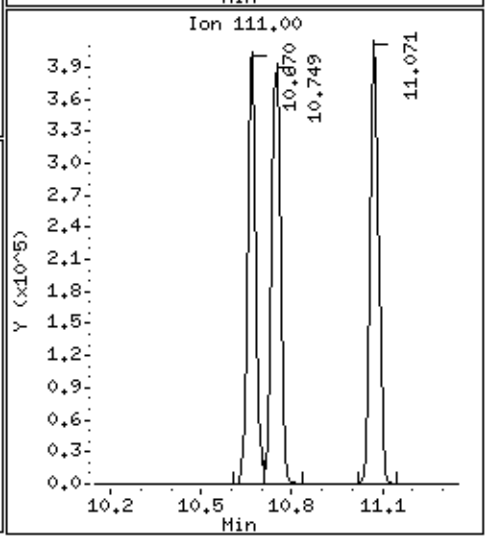












Data File: /chem/msdp.i/22dec14.b/p122203.d

Date : 22-DEC-2014 10:16

Client ID: LCS

Instrument: msdp.i

Sample Info: 100ml #2687-110A

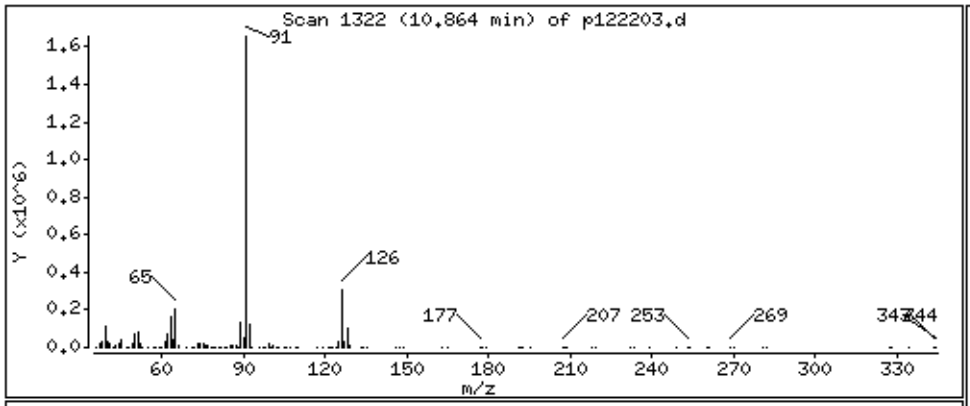
Operator: js

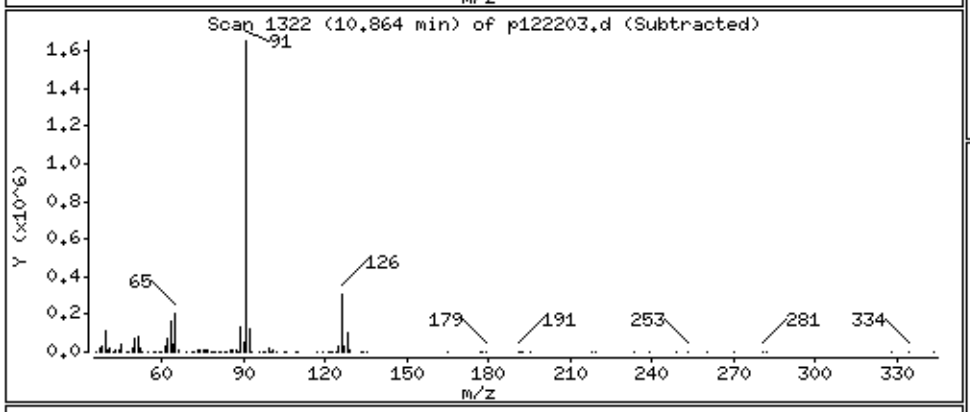
Column phase: RTX-624

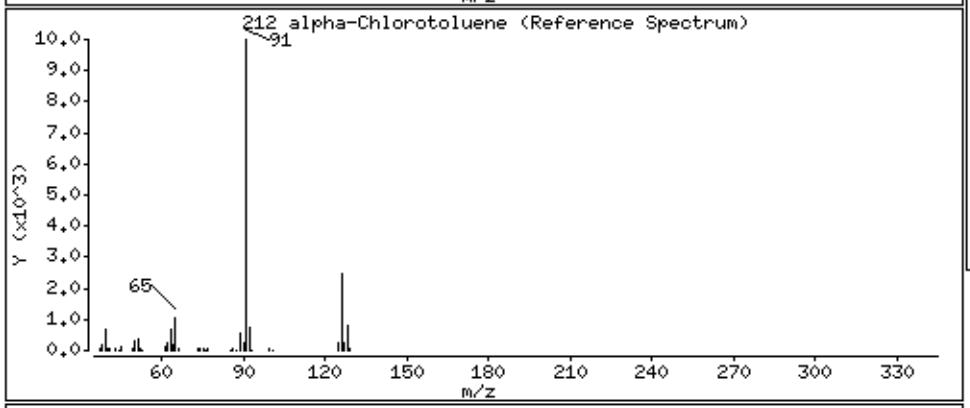
Column diameter: 0.25

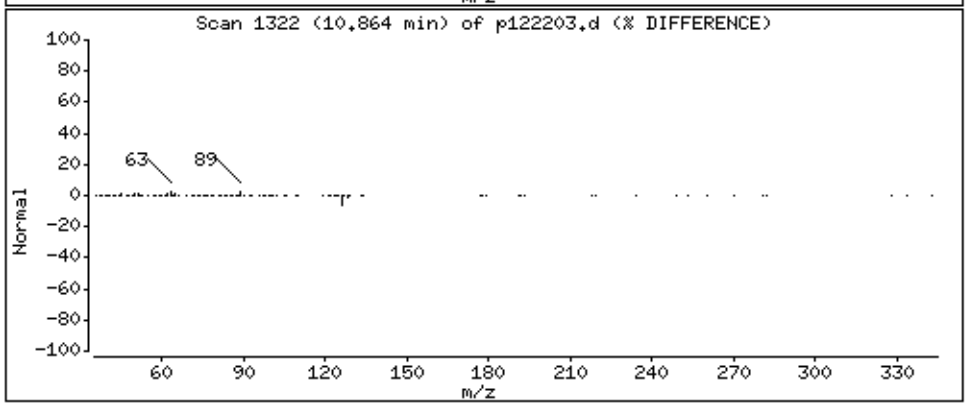
212 alpha-Chlorotoluene

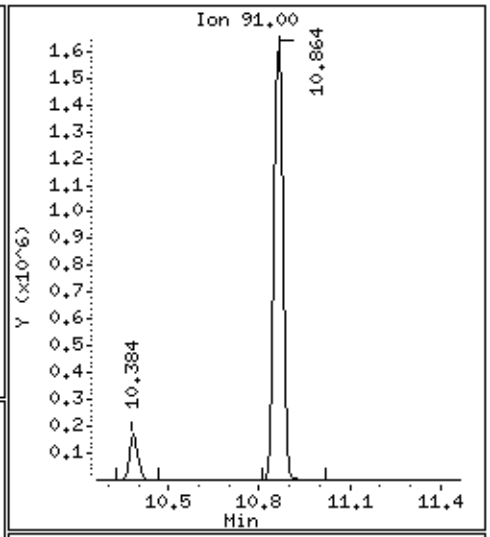
Concentration: 96.678 PPBV

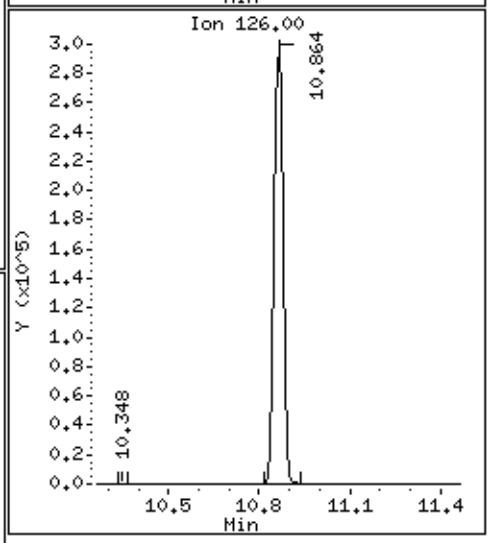












Data File: /chem/msdp.i/22dec14.b/p122203.d

Date : 22-DEC-2014 10:16

Client ID: LCS

Instrument: msdp.i

Sample Info: 100ml #2687-110A

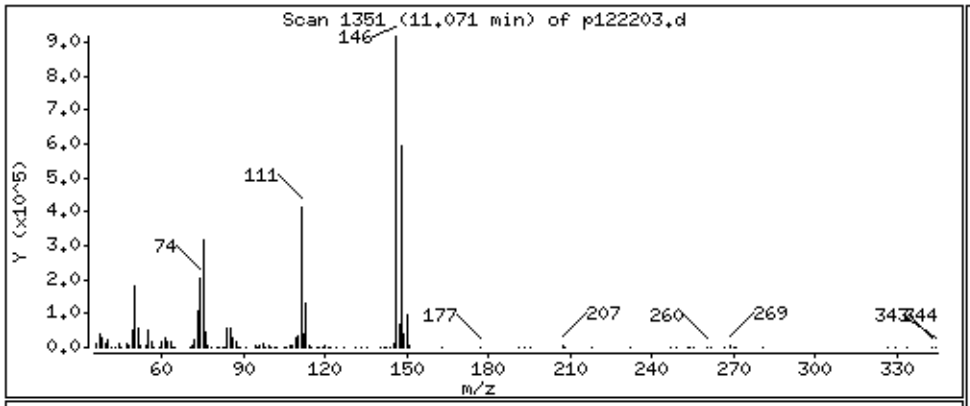
Operator: js

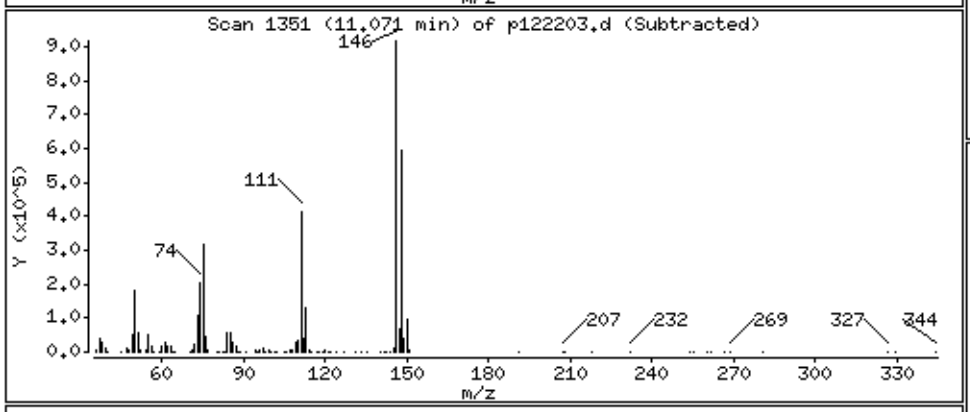
Column phase: RTX-624

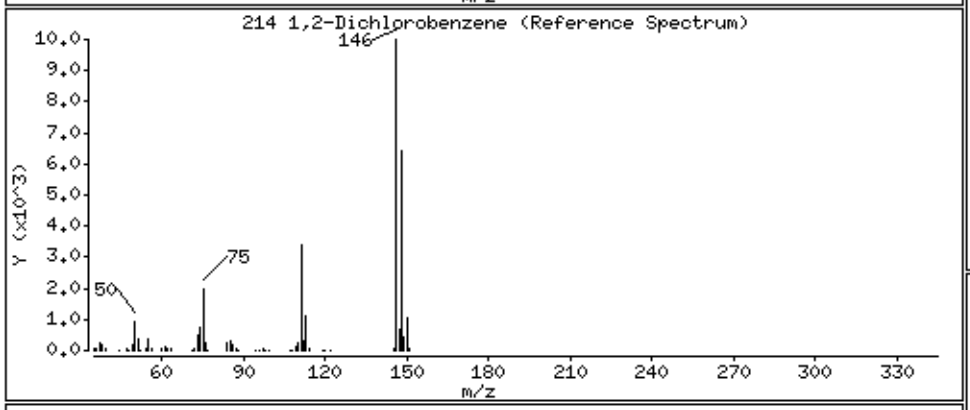
Column diameter: 0.25

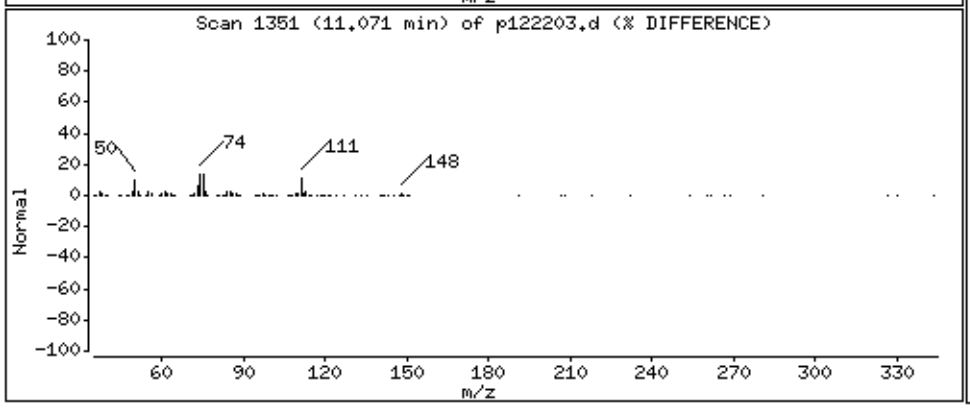
214 1,2-Dichlorobenzene

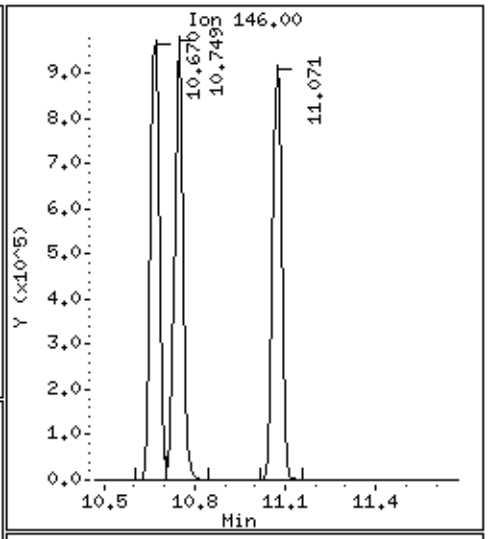
Concentration: 62.242 PPBV

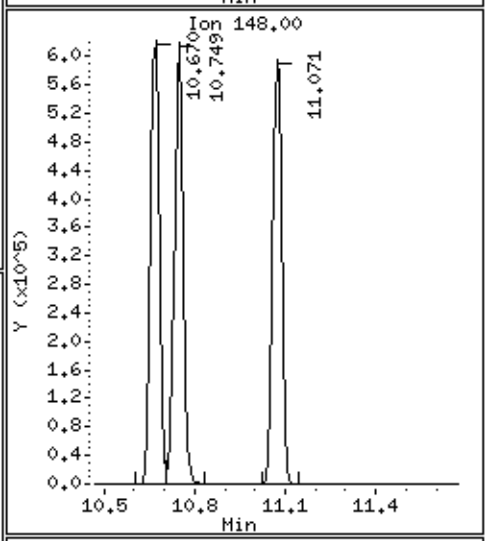


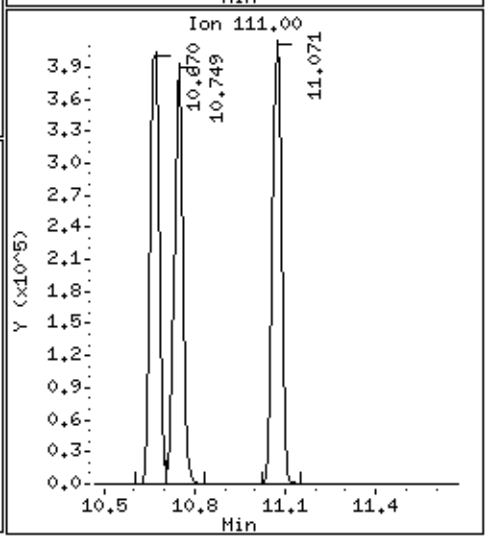












Data File: /chem/msdp.i/22dec14.b/p122203.d

Date : 22-DEC-2014 10:16

Client ID: LCS

Instrument: msdp.i

Sample Info: 100ml #2687-110A

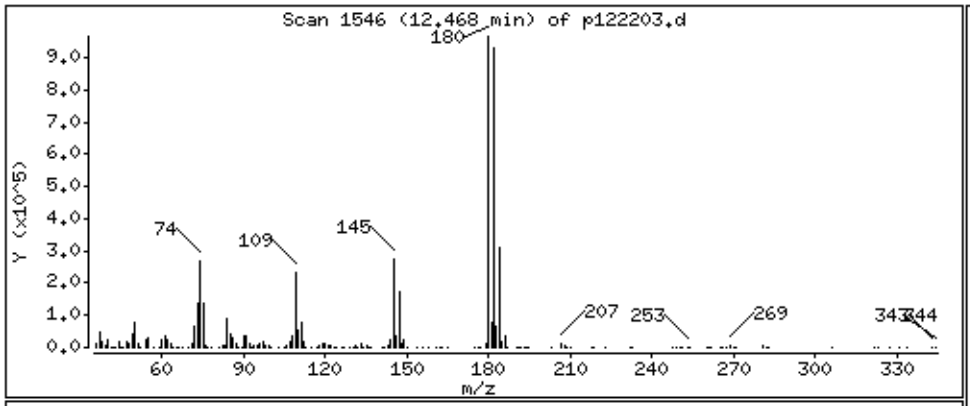
Operator: js

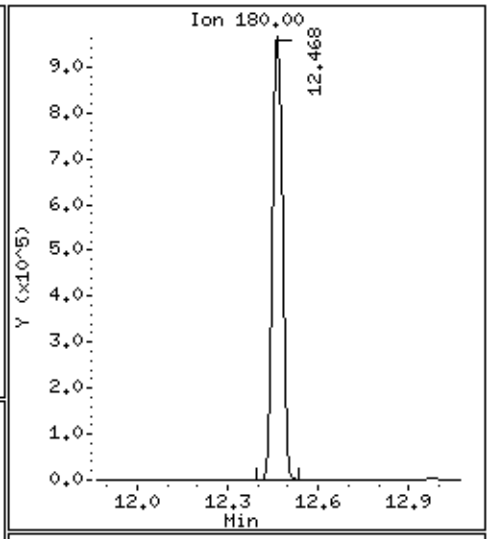
Column phase: RTX-624

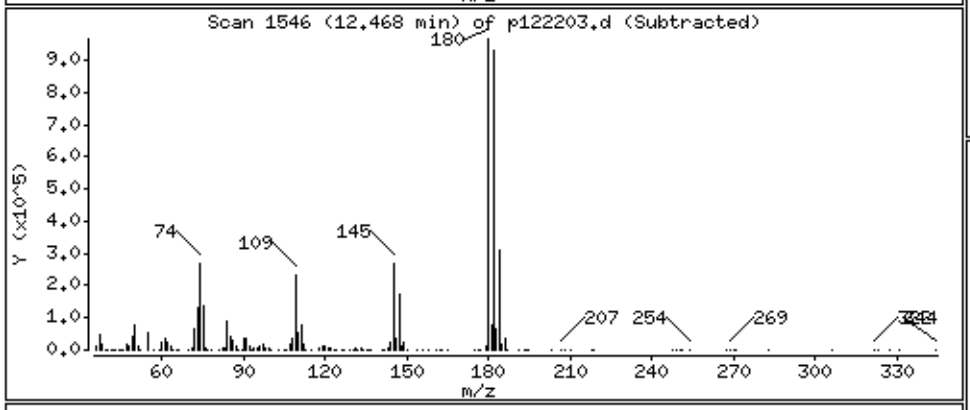
Column diameter: 0.25

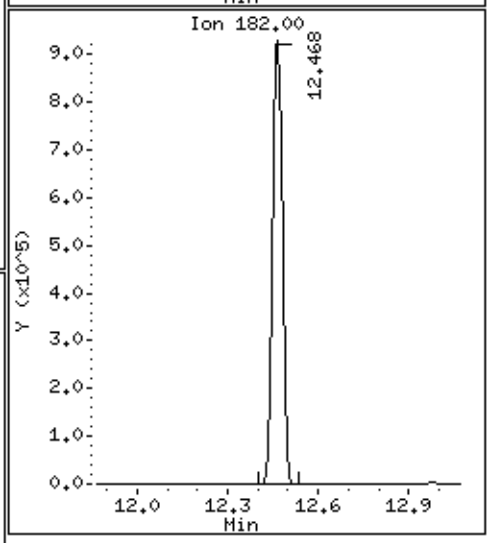
226 1,2,4-Trichlorobenzene

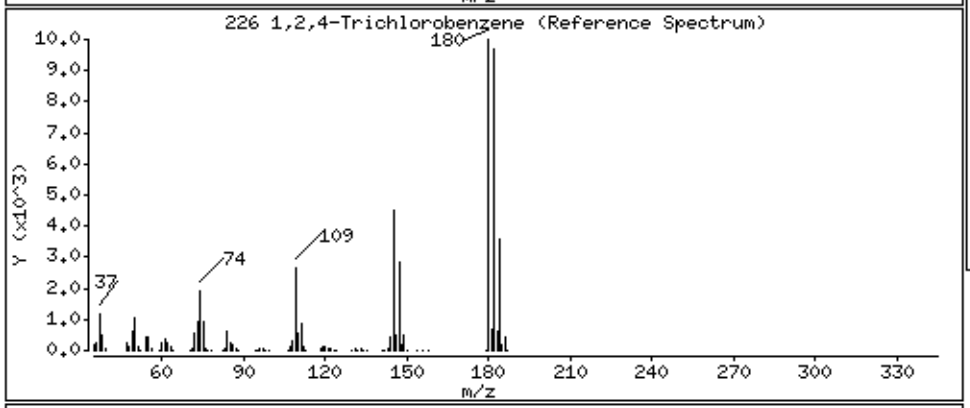
Concentration: 113.59 PPBV

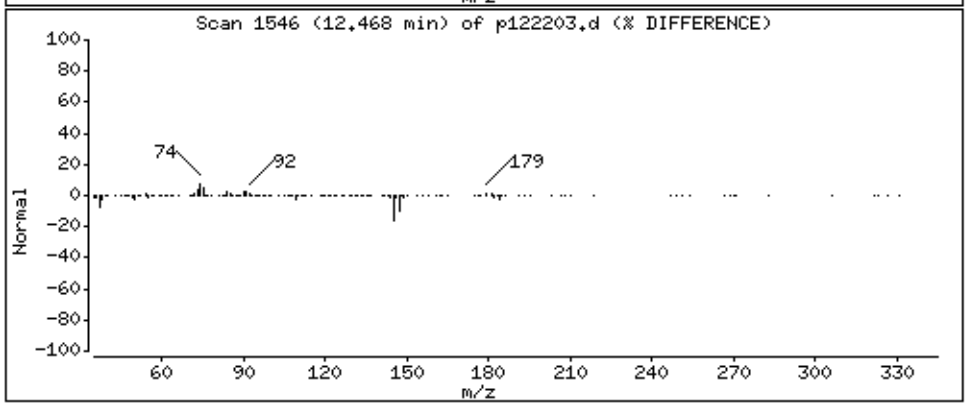












Data File: /chem/msdp.i/22dec14.b/p122203.d

Date : 22-DEC-2014 10:16

Client ID: LCS

Instrument: msdp.i

Sample Info: 100ml #2687-110A

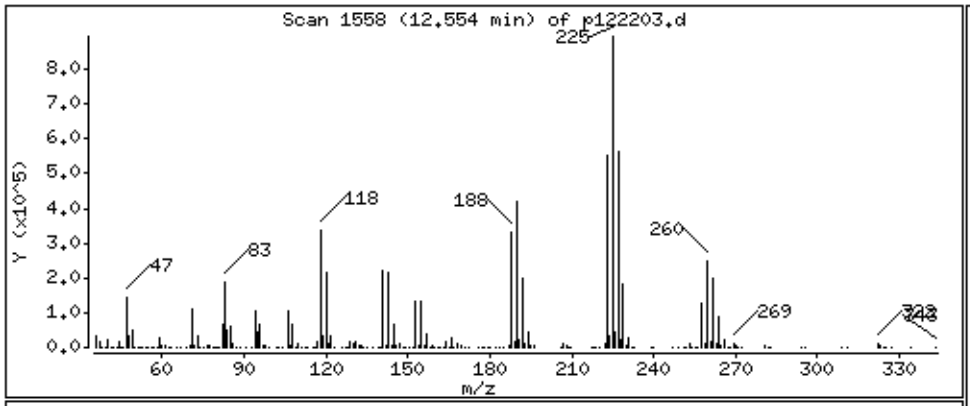
Operator: js

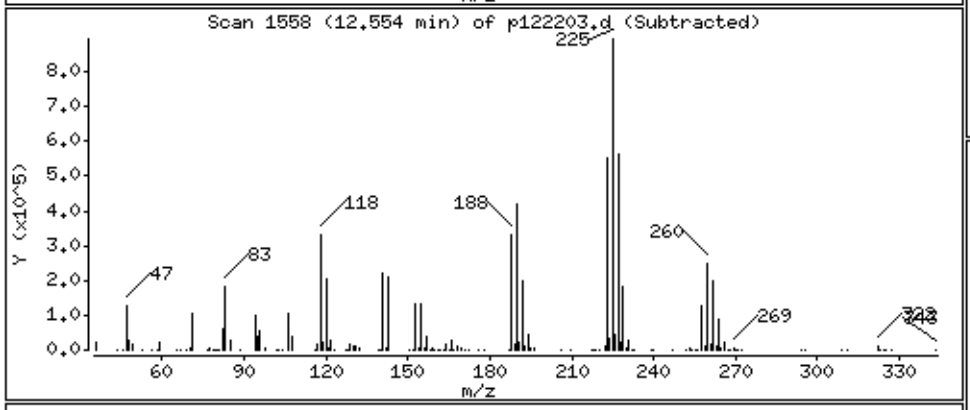
Column phase: RTX-624

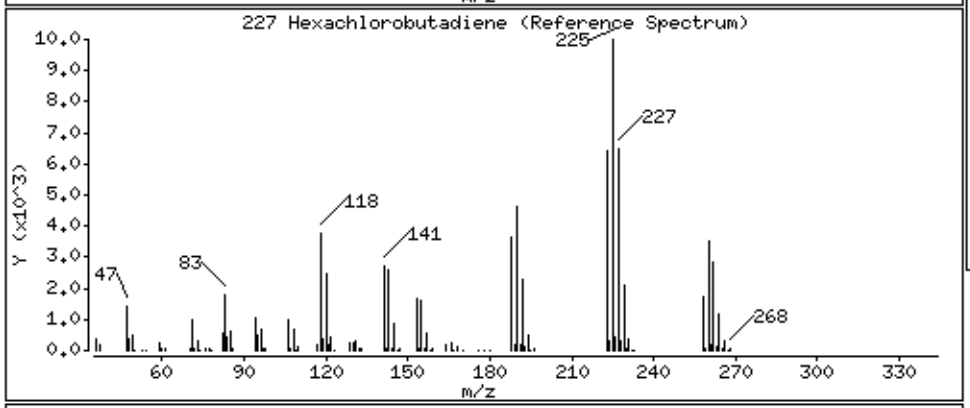
Column diameter: 0.25

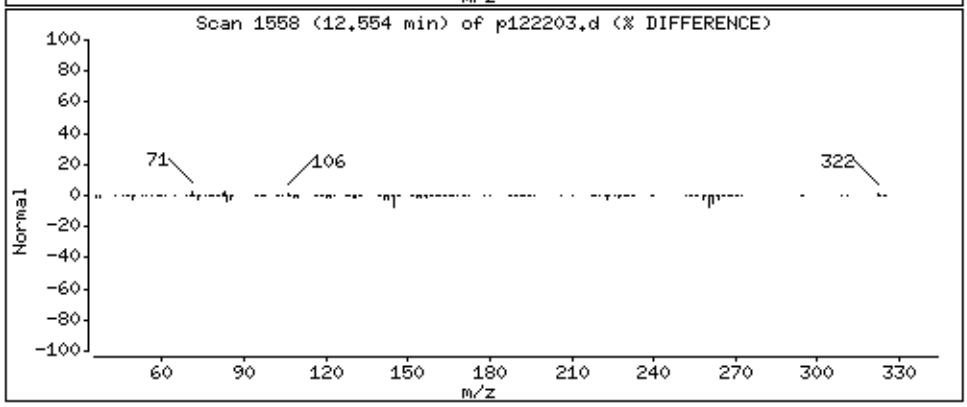
227 Hexachlorobutadiene

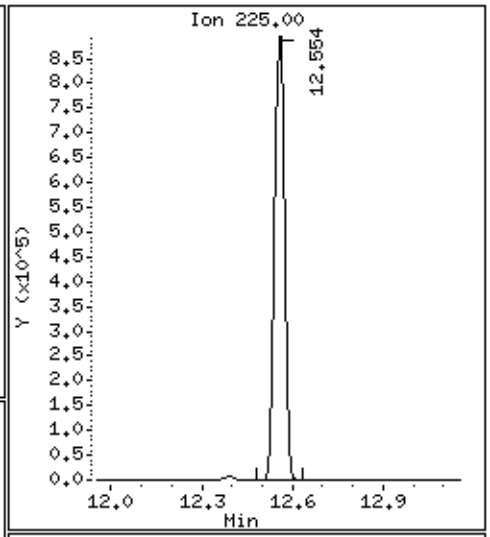
Concentration: 90.272 PPBV

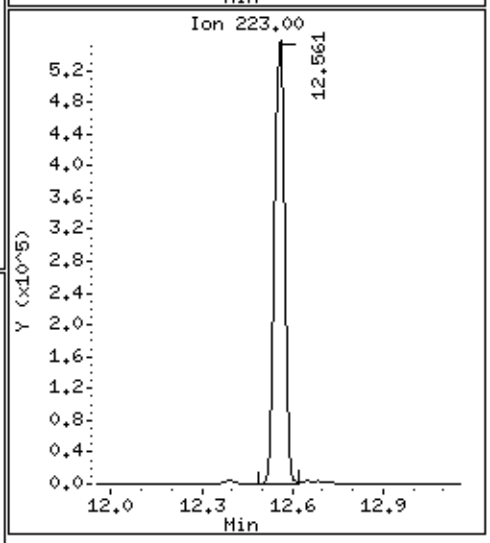












Data File: /chem/msdp.i/22dec14.b/p122203.d

Date : 22-DEC-2014 10:16

Client ID: LCS

Instrument: msdp.i

Sample Info: 100ml #2687-110A

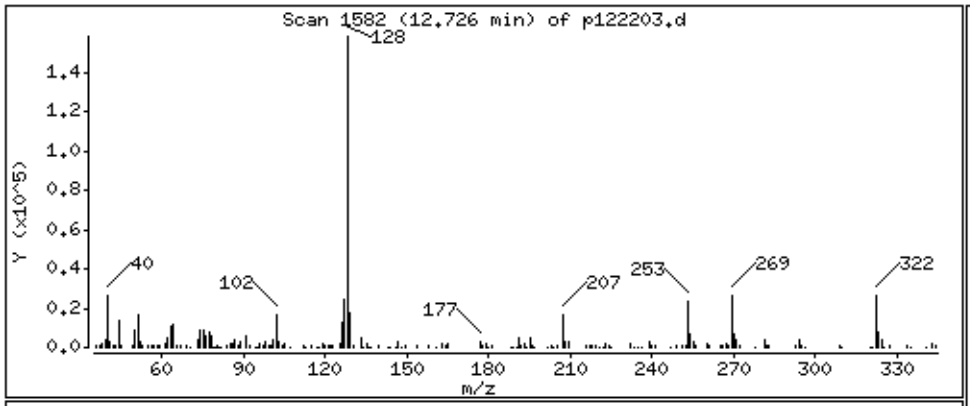
Operator: js

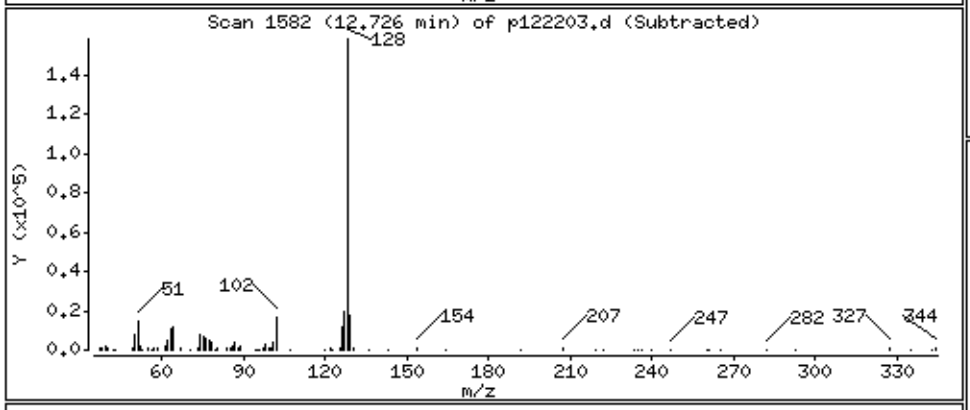
Column phase: RTX-624

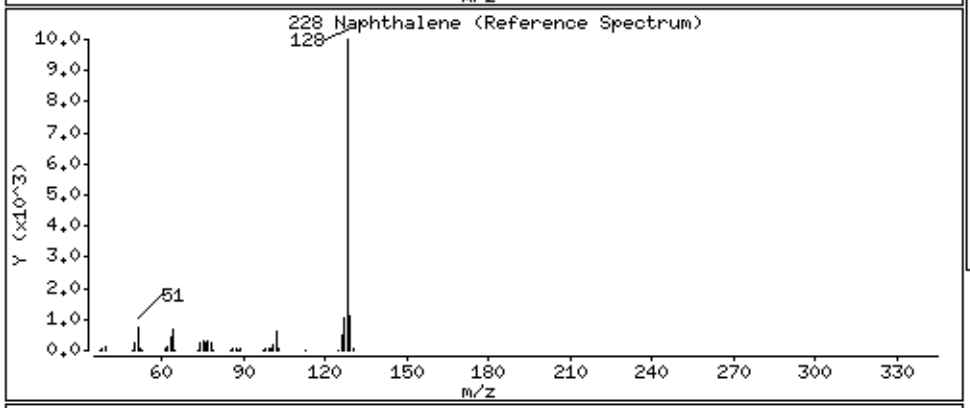
Column diameter: 0.25

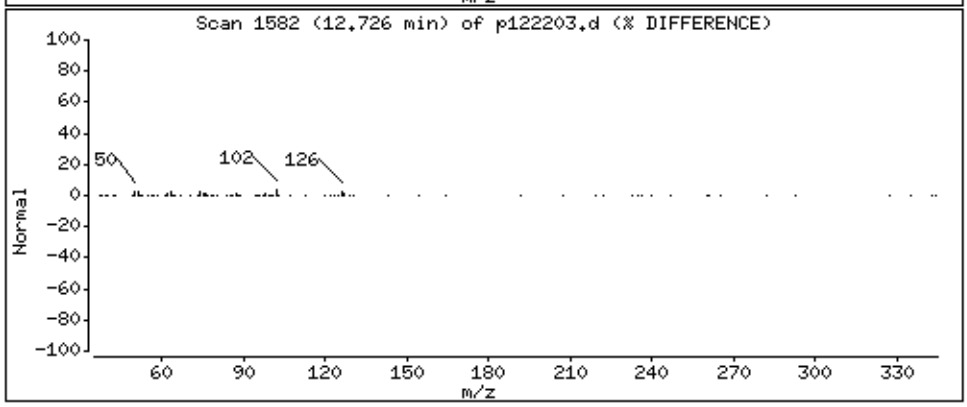
228 Naphthalene

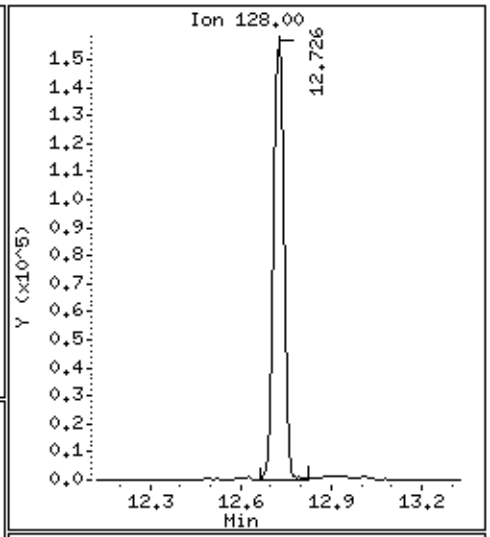
Concentration: 5.449 PPBV

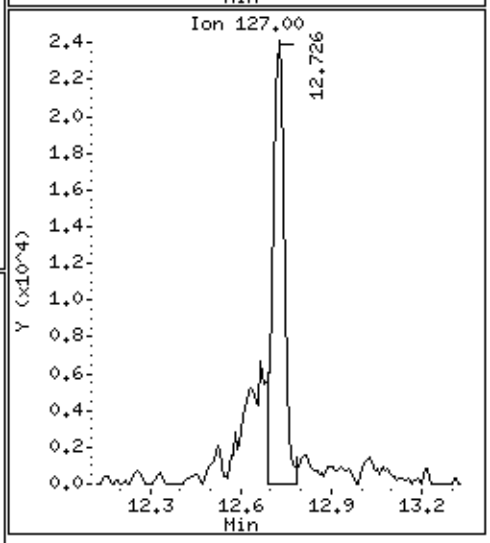












eurofins | Air Toxics

Client Sample ID: LCSD

Lab ID#: 1412216A-11BB

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p122204**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 12/22/14 10:42 AM**	

Compound	**%Recovery**	**Method Limits**
Benzene	100	70-130
2-Propanol	97	70-130
Ethyl Benzene	95	70-130
m,p-Xylene	101	70-130
o-Xylene	105	70-130
4-Methyl-2-pentanone	90	70-130
Acetone	95	70-130
Toluene	98	70-130

Container Type: NA - Not Applicable

Surrogates	**%Recovery**	**Method Limits**
Toluene-d8	105	70-130
1,2-Dichloroethane-d4	98	70-130
4-Bromofluorobenzene	100	70-130

Report Date: 22-Dec-2014 11:26

Eurofins Air Toxics Inc.

RECOVERY REPORT

Client Name:
Client SDG: 22dec14
Sample Matrix: GAS
Fraction: VOA
Lab Smp Id: LCSD
Client Smp ID: LCSD
Level: LOW
Operator: js
Data Type: MS DATA
SampleType: LCSD
SpikeList File: 2926Spectra.spk
Quant Type: ISTD
Sublist File: AT12.sub
Method File: /var/chem/msdp.i/22dec14.b/p14q1217a.m
Misc Info: 100ppbv (100ppbv)

SPIKE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
9 Propylene	50.000	51.289	102.58	70-130
11 Freon 12	50.000	51.998	104.00	70-130
15 Freon 114	50.000	46.920	93.84	70-130
17 Chloromethane	50.000	52.874	105.75	70-130
23 Butane	50.000	58.294	116.59	70-130
25 Vinyl Chloride	50.000	56.098	112.20	70-130
26 1,3-Butadiene	50.000	50.801	101.60	70-130
29 Bromomethane	50.000	49.918	99.84	70-130
30 Chloroethane	50.000	51.194	102.39	70-130
31 Isopentane	50.000	48.270	96.54	70-130
35 Freon 11	50.000	47.114	94.23	70-130
42 Ethanol	50.000	49.076	98.15	70-130
49 Freon 113	50.000	51.258	102.52	70-130
50 1,1-Dichloroethene	50.000	51.535	103.07	70-130
52 Acetone	50.000	47.420	94.84	70-130
56 Carbon Disulfide	50.000	44.597	89.19	70-130
57 2-Propanol	50.000	48.499	97.00	70-130
58 3-Chloropropene	50.000	48.697	97.39	70-130
66 Methylene Chloride	50.000	51.427	102.85	70-130
72 Methyl tert-butyl	50.000	48.640	97.28	70-130
73 trans-1,2-Dichloro	50.000	46.812	93.62	70-130
78 Hexane	50.000	47.948	95.90	70-130
82 1,1-Dichloroethane	50.000	46.822	93.64	70-130
86 Vinyl Acetate	50.000	45.296	90.59	70-130
91 cis-1,2-Dichloroet	50.000	52.958	105.92	70-130
92 2-Butanone	50.000	44.291	88.58	70-130
99 Tetrahydrofuran	50.000	44.018	88.04	70-130
100 Chloroform	50.000	46.578	93.16	70-130
103 1,1,1-Trichloroeth	50.000	49.434	98.87	70-130
106 Carbon Tetrachlori	50.000	50.162	100.32	70-130
102 Cyclohexane	50.000	49.700	99.40	70-130
113 2,2,4-Trimethylpen	50.000	58.238	116.48	70-130
116 Benzene	50.000	50.129	100.26	70-130

SPIKE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
120 1,2-Dichloroethane	50.000	47.658	95.32	70-130
121 Heptane	50.000	53.858	107.72	70-130
125 Trichloroethene	50.000	49.704	99.41	70-130
127 Methylcyclohexane	50.000	54.174	108.35	70-130
132 1,2-Dichloropropan	50.000	47.224	94.45	70-130
136 1,4-Dioxane	50.000	49.190	98.38	70-130
138 Bromodichlorometha	50.000	48.331	96.66	70-130
144 cis-1,3-Dichloropr	50.000	49.659	99.32	70-130
145 4-Methyl-2-pentano	50.000	44.968	89.94	70-130
147 Toluene	50.000	48.876	97.75	70-130
150 trans-1,3-Dichloro	50.000	43.618	87.24	70-130
155 1,1,2-Trichloroeth	50.000	46.342	92.68	70-130
156 Tetrachloroethene	50.000	47.348	94.70	70-130
158 2-Hexanone	50.000	44.553	89.11	70-130
160 Dibromochlorometha	50.000	48.285	96.57	70-130
161 1,2-Dibromoethane	50.000	48.346	96.69	70-130
165 Chlorobenzene	50.000	47.891	95.78	70-130
167 Ethyl Benzene	50.000	47.314	94.63	70-130
169 m,p-Xylene	50.000	50.692	101.38	70-130
171 o-Xylene	50.000	52.391	104.78	70-130
172 Styrene	50.000	52.080	104.16	70-130
174 Bromoform	50.000	48.884	97.77	70-130
175 Cumene	50.000	50.107	100.21	70-130
181 1,1,2,2-Tetrachlor	50.000	46.727	93.45	70-130
182 Propylbenzene	50.000	51.663	103.33	70-130
188 4-Ethyltoluene	50.000	52.265	104.53	70-130
190 1,3,5-Trimethylben	50.000	60.122	120.24	70-130
196 1,2,4-Trimethylben	50.000	58.150	116.30	70-130
208 1,3-Dichlorobenzen	50.000	54.510	109.02	70-130
209 1,4-Dichlorobenzen	50.000	55.707	111.41	70-130
212 alpha-Chlorotoluen	50.000	92.688	185.38*	70-130
214 1,2-Dichlorobenzen	50.000	61.125	122.25	70-130
226 1,2,4-Trichloroben	50.000	109.88	219.77*	70-130
227 Hexachlorobutadien	50.000	89.522	179.04*	70-130
228 Naphthalene	5.000	4.847	96.94	70-130

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 117 1,2-Dichloroethane	25.000	24.445	97.78	70-130
$ 146 Toluene-d8	25.000	26.239	104.96	70-130
$ 177 4-Bromofluorobenze	25.000	25.064	100.26	70-130

Eurofins Air Toxics Inc.

EPA TO-15/MODIFIED TO14A

Data file : /chem/msdp.i/22dec14.b/p122204.d
Lab Smp Id: LCSD Client Smp ID: LCSD
Inj Date : 22-DEC-2014 10:42
Operator : js Inst ID: msdp.i
Smp Info : 100ml #2687-110A
Misc Info : 100ppbv (100ppbv)
Comment : STANDARD LEVEL - GC/MS
Method : /var/chem/msdp.i/22dec14.b/p14q1217a.m
Meth Date : 22-Dec-2014 11:19 jscarbro Quant Type: ISTD
Cal Date : 17-DEC-2014 21:17 Cal File: p121708.d
Als bottle: 14 QC Sample: LCSD
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT12.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
* 98 Bromochloromethane						CAS #: 74-97-5	
5.455	5.455 (1.000)	130	116622	25.0000		80.00- 120.00	100.00
5.448	5.448 (1.000)	128	91509			0.00- 30.00	78.47
5.448	5.448 (1.000)	49	227896			0.00- 30.00	195.41
* 123 1,4-Difluorobenzene						CAS #: 540-36-3	
6.344	6.344 (1.000)	114	560824	25.0000		80.00- 120.00	100.00
6.344	6.344 (1.000)	88	91461			0.00- 30.00	16.31
* 163 Chlorobenzene-d5						CAS #: 3114-55-4	
8.779	8.779 (1.000)	117	617199	25.0000		80.00- 120.00	100.00
8.779	8.779 (1.000)	82	385127			0.00- 30.00	62.40
$ 117 1,2-Dichloroethane-d4						CAS #: 17060-07-0	
5.985	5.985 (1.097)	65	272144	24.4448	24.445	80.00- 120.00	100.00
5.985	5.985 (1.097)	67	148746			0.00- 30.00	54.66

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
$ 146 Toluene-d8					CAS #: 2037-26-5		
7.554	7.554 (1.191)	98	693543	26.2390	26.239	80.00- 120.00	100.00
7.554	7.554 (1.191)	70	79429			0.00- 30.00	11.45
7.554	7.554 (1.191)	100	427518			0.00- 30.00	61.64
$ 177 4-Bromofluorobenzene					CAS #: 460-00-4		
9.760	9.760 (1.112)	174	458829	25.0639	25.064	80.00- 120.00	100.00
9.760	9.760 (1.112)	95	543846			0.00- 30.00	118.53
9.760	9.760 (1.112)	176	453966			0.00- 30.00	98.94
9 Propylene					CAS #: 115-07-1		
1.473	1.473 (0.270)	41	505394	51.2892	51.289	80.00- 120.00	100.00
1.473	1.473 (0.270)	42	338360			0.00- 30.00	66.95
1.473	1.473 (0.270)	39	343711			0.00- 30.00	68.01
11 Freon 12					CAS #: 75-71-8		
1.509	1.509 (0.277)	85	1647813	51.9986	51.998	80.00- 120.00	100.00
1.509	1.509 (0.277)	87	541166			0.00- 30.00	32.84
15 Freon 114					CAS #: 76-14-2		
1.630	1.623 (0.299)	135	991163	46.9201	46.920	80.00- 120.00	100.00
1.630	1.623 (0.299)	137	332086			0.00- 30.00	33.50
17 Chloromethane					CAS #: 74-87-3		
1.702	1.702 (0.312)	50	511951	52.8743	52.874	80.00- 120.00	100.00
1.702	1.702 (0.312)	52	168999			0.00- 30.00	33.01
23 Butane					CAS #: 106-97-8		
1.788	1.781 (0.328)	58	129920	58.2941	58.294	80.00- 120.00	100.00
1.788	1.781 (0.328)	43	990627			0.00- 30.00	762.49
25 Vinyl Chloride					CAS #: 75-01-4		
1.817	1.817 (0.333)	62	587537	56.0982	56.098	80.00- 120.00	100.00
1.824	1.817 (0.334)	64	175897			0.00- 30.00	29.94
26 1,3-Butadiene					CAS #: 106-99-0		
1.845	1.845 (0.338)	54	478259	50.8009	50.801	80.00- 120.00	100.00
1.845	1.845 (0.338)	39	459659			0.00- 30.00	96.11
29 Bromomethane					CAS #: 74-83-9		
2.196	2.196 (0.403)	94	339259	49.9185	49.918	80.00- 120.00	100.00
2.196	2.196 (0.403)	96	304045			0.00- 30.00	89.62
30 Chloroethane					CAS #: 75-00-3		
2.311	2.304 (0.424)	64	249155	51.1945	51.194	80.00- 120.00	100.00
2.311	2.304 (0.424)	66	79637			0.00- 30.00	31.96

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
30 Chloroethane (continued)							
2.311	2.304 (0.424)	49	73943			0.00- 30.00	29.68
31 Isopentane					CAS #: 78-78-4		
2.347	2.339 (0.430)	43	596518	48.2701	48.270	80.00- 120.00	100.00
2.347	2.347 (0.430)	57	412250			0.00- 30.00	69.11
35 Freon 11					CAS #: 75-69-4		
2.569	2.569 (0.471)	101	1480550	47.1142	47.114	80.00- 120.00	100.00
2.569	2.569 (0.471)	103	953713			0.00- 30.00	64.42
42 Ethanol					CAS #: 64-17-5		
2.891	2.891 (0.530)	45	180463	49.0757	49.076	80.00- 120.00	100.00
2.891	2.891 (0.530)	43	38157			0.00- 30.00	21.14
2.891	2.891 (0.530)	46	71974			0.00- 30.00	39.88
49 Freon 113					CAS #: 76-13-1		
3.220	3.213 (0.590)	151	665567	51.2581	51.258	80.00- 120.00	100.00
3.220	3.213 (0.590)	153	440780			0.00- 30.00	66.23
3.213	3.213 (0.589)	101	805732			0.00- 30.00	121.06
50 1,1-Dichloroethene					CAS #: 75-35-4		
3.242	3.242 (0.594)	98	213374	51.5348	51.535	80.00- 120.00	100.00
3.242	3.242 (0.594)	96	335554			0.00- 30.00	157.26
3.242	3.242 (0.594)	61	743602			0.00- 30.00	348.50
52 Acetone					CAS #: 67-64-1		
3.392	3.385 (0.622)	58	221416	47.4198	47.420	80.00- 120.00	100.00
3.385	3.385 (0.621)	43	657179			0.00- 30.00	296.81
56 Carbon Disulfide					CAS #: 75-15-0		
3.478	3.478 (0.638)	76	895904	44.5975	44.597	80.00- 120.00	100.00
57 2-Propanol					CAS #: 67-63-0		
3.564	3.564 (0.653)	45	817408	48.4990	48.499	80.00- 120.00	100.00
3.564	3.564 (0.653)	43	167240			0.00- 30.00	20.46
3.564	3.564 (0.653)	59	32094			0.00- 30.00	3.93
58 3-Chloropropene					CAS #: 107-05-1		
3.722	3.722 (0.682)	76	165348	48.6968	48.697	80.00- 120.00	100.00
3.722	3.722 (0.682)	41	542022			0.00- 30.00	327.81
66 Methylene Chloride					CAS #: 75-09-2		
3.901	3.901 (0.715)	49	545645	51.4269	51.427	80.00- 120.00	100.00
3.901	3.901 (0.715)	84	305730			0.00- 30.00	56.03
3.901	3.901 (0.715)	51	166377			0.00- 30.00	30.49

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
72 Methyl tert-butyl ether					CAS #: 1634-04-4		
4.130	4.130 (0.757)	73	1117535	48.6400	48.640	80.00- 120.00	100.00
4.130	4.130 (0.757)	57	298283			0.00- 30.00	26.69
4.130	4.130 (0.757)	41	268378			0.00- 30.00	24.02
73 trans-1,2-Dichloroethene					CAS #: 156-60-5		
4.152	4.152 (0.761)	98	189179	46.8120	46.812	80.00- 120.00	100.00
4.152	4.152 (0.761)	61	560356			0.00- 30.00	296.20
4.152	4.152 (0.761)	96	297055			0.00- 30.00	157.02
78 Hexane					CAS #: 110-54-3		
4.374	4.367 (0.802)	57	711238	47.9477	47.948	80.00- 120.00	100.00
4.374	4.367 (0.802)	43	453039			0.00- 30.00	63.70
4.374	4.374 (0.802)	86	92502			0.00- 30.00	13.01
82 1,1-Dichloroethane					CAS #: 75-34-3		
4.639	4.639 (0.850)	63	803365	46.8224	46.822	80.00- 120.00	100.00
4.639	4.639 (0.850)	65	242351			0.00- 30.00	30.17
86 Vinyl Acetate					CAS #: 108-05-4		
4.689	4.689 (0.860)	86	88174	45.2957	45.296	80.00- 120.00	100.00
4.689	4.682 (0.860)	43	1275079			0.00- 30.00	1446.09
91 cis-1,2-Dichloroethene					CAS #: 156-59-2		
5.226	5.226 (0.958)	98	277262	52.9581	52.958	80.00- 120.00	100.00
5.226	5.219 (0.958)	96	404079			0.00- 30.00	145.74
5.226	5.219 (0.958)	61	720454			0.00- 30.00	259.85
92 2-Butanone					CAS #: 78-93-3		
5.248	5.248 (0.962)	72	181781	44.2907	44.291	80.00- 120.00	100.00
5.248	5.248 (0.962)	43	967714			0.00- 30.00	532.35
5.248	5.248 (0.962)	57	76928			0.00- 30.00	42.32
99 Tetrahydrofuran					CAS #: 109-99-9		
5.448	5.448 (0.999)	42	538157	44.0185	44.018	80.00- 120.00	100.00
5.448	5.448 (0.999)	71	162732			0.00- 30.00	30.24
5.448	5.448 (0.999)	72	166726			0.00- 30.00	30.98
100 Chloroform					CAS #: 67-66-3		
5.513	5.513 (1.010)	83	912045	46.5781	46.578	80.00- 120.00	100.00
5.520	5.513 (1.012)	85	607683			0.00- 30.00	66.63
102 Cyclohexane					CAS #: 110-82-7		
5.627	5.627 (1.032)	84	497760	49.7000	49.700	80.00- 120.00	100.00
5.627	5.627 (1.032)	56	829120			0.00- 30.00	166.57
5.627	5.627 (1.032)	41	411980			0.00- 30.00	82.77

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
103 1,1,1-Trichloroethane						CAS #: 71-55-6	
5.642	5.642 (1.034)	97	1085444	49.4346	49.434	80.00- 120.00	100.00
5.642	5.642 (1.034)	99	699809			0.00- 30.00	64.47
106 Carbon Tetrachloride						CAS #: 56-23-5	
5.756	5.756 (1.055)	119	1133978	50.1620	50.162	80.00- 120.00	100.00
5.756	5.756 (1.055)	117	1227025			0.00- 30.00	108.21
113 2,2,4-Trimethylpentane						CAS #: 540-84-1	
5.957	5.957 (1.092)	57	2562906	58.2377	58.238	80.00- 120.00	100.00
5.957	5.957 (1.092)	56	840654			0.00- 30.00	32.80
5.957	5.957 (1.092)	41	644110			0.00- 30.00	25.13
116 Benzene						CAS #: 71-43-2	
5.971	5.971 (0.941)	78	1266256	50.1292	50.129	80.00- 120.00	100.00
5.971	5.971 (0.941)	77	304455			0.00- 30.00	24.04
120 1,2-Dichloroethane						CAS #: 107-06-2	
6.057	6.057 (0.955)	62	780749	47.6584	47.658	80.00- 120.00	100.00
6.057	6.057 (0.955)	64	242462			0.00- 30.00	31.06
121 Heptane						CAS #: 142-82-5	
6.129	6.129 (0.966)	71	441336	53.8582	53.858	80.00- 120.00	100.00
6.129	6.129 (0.966)	43	992480			0.00- 30.00	224.88
6.129	6.129 (0.966)	57	572401			0.00- 30.00	129.70
125 Trichloroethene						CAS #: 79-01-6	
6.537	6.537 (1.030)	95	590000	49.7038	49.704	80.00- 120.00	100.00
6.537	6.537 (1.030)	130	539622			0.00- 30.00	91.46
6.537	6.537 (1.030)	97	380263			0.00- 30.00	64.45
127 Methylcyclohexane						CAS #: 108-87-2	
6.644	6.644 (1.047)	83	737340	54.1743	54.174	80.00- 120.00	100.00
6.644	6.644 (1.047)	98	343883			0.00- 30.00	46.64
6.644	6.637 (1.047)	55	852035			0.00- 30.00	115.56
132 1,2-Dichloropropane						CAS #: 78-87-5	
6.766	6.766 (1.067)	63	579382	47.2236	47.224	80.00- 120.00	100.00
6.766	6.766 (1.067)	62	422573			0.00- 30.00	72.94
6.766	6.766 (1.067)	41	323604			0.00- 30.00	55.85
136 1,4-Dioxane						CAS #: 123-91-1	
6.859	6.859 (1.081)	88	320201	49.1903	49.190	80.00- 120.00	100.00
6.859	6.852 (1.081)	58	290022			0.00- 30.00	90.57
6.859	6.852 (1.081)	57	89618			0.00- 30.00	27.99

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
138 Bromodichloromethane						CAS #: 75-27-4	
6.995	6.995 (1.103)	83	1145327	48.3306	48.331	80.00- 120.00	100.00
6.995	6.995 (1.103)	85	717856			0.00- 30.00	62.68
144 cis-1,3-Dichloropropene						CAS #: 10061-01-5	
7.368	7.368 (1.161)	75	855866	49.6595	49.659	80.00- 120.00	100.00
7.368	7.368 (1.161)	77	266489			0.00- 30.00	31.14
7.368	7.368 (1.161)	39	457364			0.00- 30.00	53.44
145 4-Methyl-2-pentanone						CAS #: 108-10-1	
7.482	7.483 (1.180)	58	543560	44.9686	44.968	80.00- 120.00	100.00
7.482	7.475 (1.180)	43	1404803			0.00- 30.00	258.44
7.482	7.483 (1.180)	85	189528			0.00- 30.00	34.87
147 Toluene						CAS #: 108-88-3	
7.611	7.611 (1.200)	91	1794756	48.8759	48.876	80.00- 120.00	100.00
7.611	7.611 (1.200)	92	1030682			0.00- 30.00	57.43
150 trans-1,3-Dichloropropene						CAS #: 10061-02-6	
7.848	7.848 (0.894)	75	886704	43.6175	43.618	80.00- 120.00	100.00
7.848	7.848 (0.894)	77	271185			0.00- 30.00	30.58
7.848	7.848 (0.894)	39	405858			0.00- 30.00	45.77
155 1,1,2-Trichloroethane						CAS #: 79-00-5	
7.998	7.998 (0.911)	97	599380	46.3418	46.342	80.00- 120.00	100.00
7.998	7.998 (0.911)	99	376286			0.00- 30.00	62.78
7.998	7.998 (0.911)	83	531375			0.00- 30.00	88.65
156 Tetrachloroethene						CAS #: 127-18-4	
8.048	8.048 (0.917)	166	880545	47.3476	47.348	80.00- 120.00	100.00
8.048	8.048 (0.917)	129	620522			0.00- 30.00	70.47
8.048	8.048 (0.917)	131	597935			0.00- 30.00	67.91
158 2-Hexanone						CAS #: 591-78-6	
8.163	8.163 (0.930)	58	806244	44.5533	44.553	80.00- 120.00	100.00
8.163	8.163 (0.930)	43	1449806			0.00- 30.00	179.82
8.170	8.170 (0.931)	100	121566			0.00- 30.00	15.08
160 Dibromochloromethane						CAS #: 124-48-1	
8.313	8.313 (0.947)	129	1181705	48.2853	48.285	80.00- 120.00	100.00
8.313	8.313 (0.947)	127	940710			0.00- 30.00	79.61
161 1,2-Dibromoethane (EDB)						CAS #: 106-93-4	
8.428	8.428 (0.960)	107	933690	48.3458	48.346	80.00- 120.00	100.00
8.428	8.428 (0.960)	109	863853			0.00- 30.00	92.52

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

  165 Chlorobenzene                                CAS #: 108-90-7
  8.808   8.801 (1.003)   112   1419014 47.8911   47.891  80.00- 120.00   100.00
  8.808   8.808 (1.003)   114    435120                    0.00-  30.00    30.66
  8.800   8.801 (1.002)    77    956102                    0.00-  30.00    67.38
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  167 Ethyl Benzene                                CAS #: 100-41-4
  8.858   8.858 (1.009)   106    749500 47.3136   47.314  80.00- 120.00   100.00
  8.858   8.851 (1.009)    91   2607163                    0.00-  30.00   347.85
-------------------------------------------------------------------------------
  169 m,p-Xylene                                   CAS #: 108-38-3
  8.951   8.951 (1.020)   106    974076 50.6916   50.692  80.00- 120.00   100.00
  8.951   8.951 (1.020)    91   2124403                    0.00-  30.00   218.09
-------------------------------------------------------------------------------
  171 o-Xylene                                     CAS #: 95-47-6
  9.295   9.295 (1.059)   106    942245 52.3911   52.391  80.00- 120.00   100.00
  9.295   9.295 (1.059)    91   2194868                    0.00-  30.00   232.94
-------------------------------------------------------------------------------
  172 Styrene                                      CAS #: 100-42-5
  9.309   9.309 (1.060)   104   1624895 52.0805   52.080  80.00- 120.00   100.00
  9.309   9.309 (1.060)    78    897453                    0.00-  30.00    55.23
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  174 Bromoform                                    CAS #: 75-25-2
  9.502   9.502 (1.082)   173   1417103 48.8845   48.884  80.00- 120.00   100.00
  9.502   9.502 (1.082)   171    725915                    0.00-  30.00    51.23
-------------------------------------------------------------------------------
  175 Cumene                                       CAS #: 98-82-8
  9.574   9.574 (1.091)   105   3158161 50.1074   50.107  80.00- 120.00   100.00
  9.574   9.574 (1.091)   120    737629                    0.00-  30.00    23.36
  9.574   9.574 (1.091)    51    358029                    0.00-  30.00    11.34
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  181 1,1,2,2-Tetrachloroethane                    CAS #: 79-34-5
  9.882   9.882 (1.126)    83   1502657 46.7271   46.727  80.00- 120.00   100.00
  9.882   9.882 (1.126)    85   1008216                    0.00-  30.00    67.10
-------------------------------------------------------------------------------
  182 Propylbenzene                                CAS #: 103-65-1
  9.918   9.918 (1.130)    91   4001810 51.6627   51.663  80.00- 120.00   100.00
  9.918   9.918 (1.130)   120    786778                    0.00-  30.00    19.66
  9.918   9.918 (1.130)   105    134939                    0.00-  30.00     3.37
-------------------------------------------------------------------------------
  188 4-Ethyltoluene                               CAS #: 622-96-8
 10.011  10.011 (1.140)   120    869501 52.2651   52.265  80.00- 120.00   100.00
 10.011  10.011 (1.140)   105   3515368                    0.00-  30.00   404.30
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  190 1,3,5-Trimethylbenzene                       CAS #: 108-67-8
 10.061  10.061 (1.146)   120   1277682 60.1219   60.122  80.00- 120.00   100.00
 10.061  10.061 (1.146)   105   2870429                    0.00-  30.00   224.66
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RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
196 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
10.384	10.384 (1.183)	120	1113630	58.1499	58.150	80.00- 120.00	100.00
10.384	10.384 (1.183)	105	2812891			0.00- 30.00	252.59
208 1,3-Dichlorobenzene					CAS #: 541-73-1		
10.670	10.670 (1.215)	146	1796226	54.5099	54.510	80.00- 120.00	100.00
10.670	10.670 (1.215)	148	1118930			0.00- 30.00	62.29
10.670	10.670 (1.215)	111	749756			0.00- 30.00	41.74
209 1,4-Dichlorobenzene					CAS #: 106-46-7		
10.749	10.749 (1.224)	146	1810009	55.7068	55.707	80.00- 120.00	100.00
10.749	10.749 (1.224)	148	1149094			0.00- 30.00	63.49
10.749	10.749 (1.224)	111	721869			0.00- 30.00	39.88
212 alpha-Chlorotoluene					CAS #: 100-44-7		
10.863	10.863 (1.237)	91	3014538	92.6885	92.688	80.00- 120.00	100.00(R)
10.863	10.863 (1.237)	126	544156			0.00- 30.00	18.05
214 1,2-Dichlorobenzene					CAS #: 95-50-1		
11.071	11.071 (1.261)	146	1791539	61.1251	61.125	80.00- 120.00	100.00
11.071	11.071 (1.261)	148	1159811			0.00- 30.00	64.74
11.071	11.071 (1.261)	111	760572			0.00- 30.00	42.45
226 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
12.468	12.468 (1.420)	180	2038902	109.885	109.88	80.00- 120.00	100.00(R)
12.468	12.468 (1.420)	182	1924034			0.00- 30.00	94.37
227 Hexachlorobutadiene					CAS #: 87-68-3		
12.561	12.554 (1.431)	225	1956910	89.5215	89.522	80.00- 120.00	100.00(R)
12.561	12.554 (1.431)	223	1251603			0.00- 30.00	63.96
228 Naphthalene					CAS #: 91-20-3		
12.726	12.726 (1.450)	128	317416	4.84695	4.847	80.00- 120.00	100.00
12.726	12.726 (1.450)	127	43771			0.00- 30.00	13.79

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdp.i
Lab File ID: p122204.d
Lab Smp Id: LCSD
Analysis Type: VOA
Quant Type: ISTD
Operator: js
Method File: /var/chem/msdp.i/22dec14.b/p14q1217a.m
Misc Info: 100ppbv (100ppbv)

Calibration Date: 22-DEC-2014
Calibration Time: 09:50
Client Smp ID: LCSD
Level: LOW
Sample Type: AIR

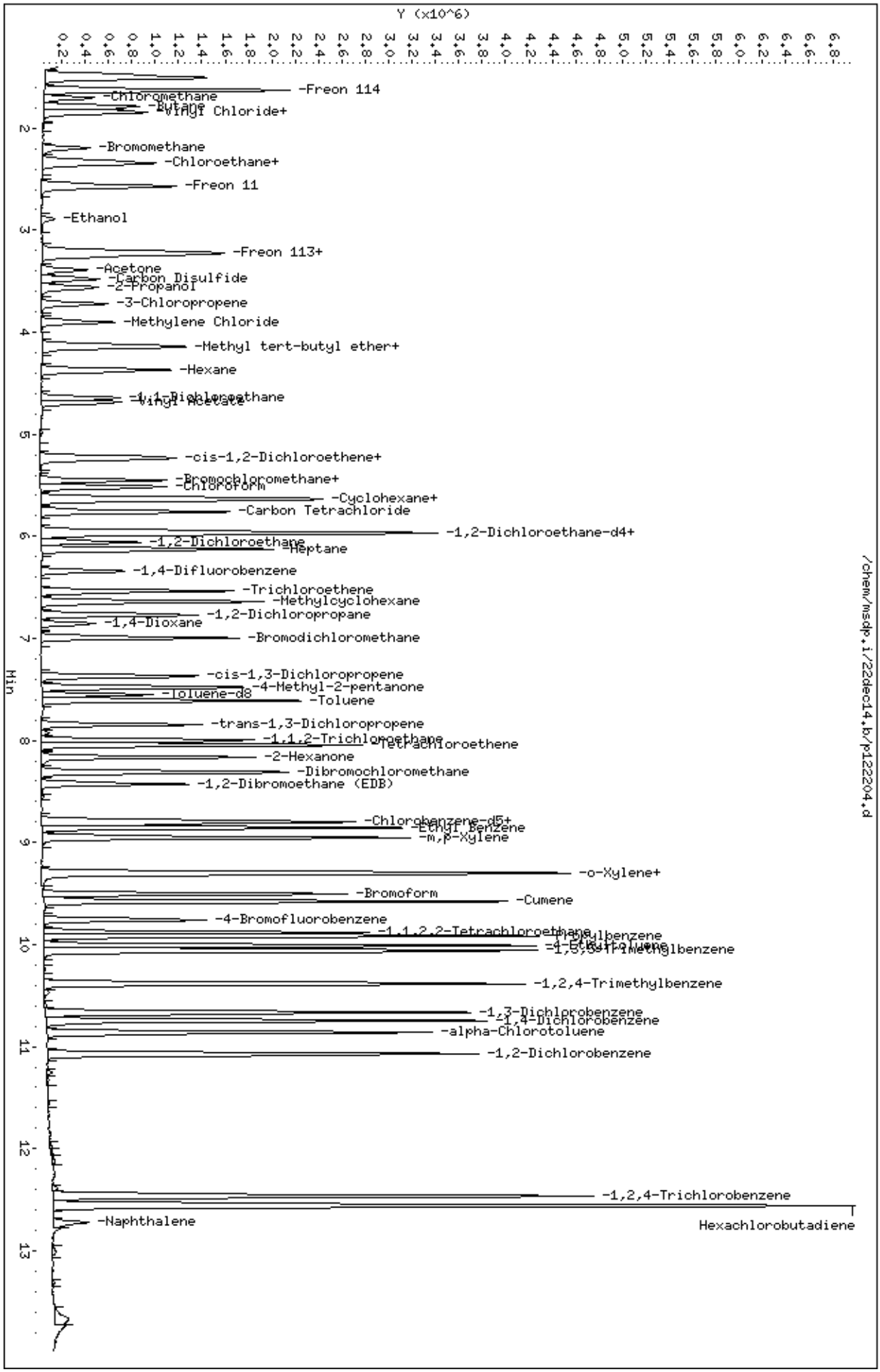
COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
98 Bromochloromethan	153275	91965	214585	116622	-23.91
123 1,4-Difluorobenze	654249	392549	915949	560824	-14.28
163 Chlorobenzene-d5	700329	420197	980461	617199	-11.87

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
98 Bromochloromethan	5.46	5.13	5.79	5.46	0.00
123 1,4-Difluorobenze	6.34	6.01	6.67	6.34	0.00
163 Chlorobenzene-d5	8.78	8.45	9.11	8.78	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/msdp.i/22dec14.b/p122204.d
Date : 22-DEC-2014 10:42
Client ID: LCSD
Sample Info: 100ml #2687-110A
Column phase: RTX-624

Instrument: msdp.i
Operator: js
Column diameter: 0.25



Eurofins Air Toxics, Inc. **MSD-14** **Logbook #2696**

BFB Verification of 176/174 m/z Ratio:	19,754 / 20,261 x 100 = 97.50
Tekmar Purge Flow:	N/A
Vacuum:	3.87x10-6

IS/S Std. #: 2687-99	Exp. Date: 2/18/15
BCM	124,906
1,4-DFB	570,831
CB-d5	512,999

Verified CCV IS vs ICAL mid-point (-40%D): SN

File ID:	14121802
Compound:	Tol-d8
Initials:	SN

Calculation Check:

ppbv of compound = $\frac{\text{Area}_{\text{Sample}}}{\text{Area}_{\text{IS}}} \times \frac{\text{Conc}_{\text{IS}}}{\text{RRF}}$ = (566,590) x (400.00) = 398.50
(570,831) (0.99630)

SOP# (Circle one): 6 / 83 / 38 / 91 / 109 Method (Circle one): TO-14A/TO-15/TO-17 Reported Result: 398.50

Method Name: 1445/1124CM

	Use	File	Lab ID#	Can#	Pressure	Amt. Loaded	DF	Loaded By Initials	Date Analyzed	Time Analyzed	Reviewed By Initials	Comments/Standard Expiration Date
1	✓	14121801	BFB TUNE CHECK	2299-789	50ng	2.0ml	1.00	SN	12/18/14	1928	SN	
2	✓	02	CCV (200ppbv)	2687-167	200ppbv	50ml	1.00	SN	↓	1952	SN	exp: 3/17/15 1 out No TBA
3	✓	03	LCS (200ppbv)	2687-147	200ppbv	50ml	1.00	SN		2022	SN	exp: 3/10/15 ~~1 out~~ 4 out ~~No TBA~~ & OT 3 on 12/18/14
4	✓	04	LCSD (200ppbv)	↓	200ppbv	50ml	1.00	SN		2041	SN	↓
5	✓	05	CCVsp (500ppbv)	2687-324	200ppbv	20ml	1.00	SN		2112	SN	Exp: 1/23/15 AT-1; 0 out
6	✓	06	CCVsp (100ppbv)	2516-105	4000ppbv	2.0ml	1.00	SN		2137	SN	Exp: 1/23/15 TBA
7	✓	07	LAB BLANK	34496	Humid	50ml	1.00	SN		2200	SN	
8	✓	08	1412145 -01A	620059	4.7"Hg → 5psi	1.0mL	79.5	ACT	12/19/14	0519	ACT	Dil TC
9	✓	09	↓ -01AA	↓	↓	↓	↓	ACT		0544	ACT	
10	✓	10	1412192 -07A	110266	4.9"Hg → 4.8psi	3.0mL	26.5	ACT		0611	ACT	
11	✓	11	↓ -07AA	↓	↓	↓	↓	ACT		0641	ACT	↓
12	X	12	1412225 -01A	1L15866	5.0"Hg → 15.2psi	1.0mL	122	ACT		0715	ACT	over-range
13	✓	13	1412245A -07A	34133	9.0"Hg → 15.2psi	50mL	2.90	ACT		0756	ACT	no carry-over (NTC)
14	✓	14	↓ -06A	32449	10.0"Hg → 15psi	50mL	3.03	ACT		0835	ACT	

Reviewed 12/19/14 Date

Eurofins Air Toxics, Inc. **MSD-14** **Logbook #2696**

	Use	File	Lab ID#	Can#	Pressure	Amt. Loaded	DF	Loaded By Initials	Date Analyzed	Time Analyzed	Reviewed By Initials	Comments/Standard Expiration Date
15	✓	14121815	1412245A -05A	12380	8.2"Hg → 15psi	50mL	2.78	AG	12/19/14	0856	AG	
16	✓	16	↓ -04A	12030	6.9"Hg → 14.8psi	5.0mL	26.1	AG		0927	AG	DiTC
17	✓	17	-01A	3011	6.9"Hg → 14.1psi	2.5mL	51.0	AG		0953	AG	DiTC
18	✓	18	14122216A -05A	1L1706	4.5"Hg → 14.8psi	2.0mL	59.0	WD		1037	WD/AG	DiLTC
19	X	19	-06A	1L1702	4.7"Hg → 14.9psi	0.7mL	170	WD		1102	—	overrange Toluene 14500
20	✓	20	System blank	34496	Humid	50mL	1.00	WD		1130	WD/SW	CARRYOVER TOLUENE, MPXSLENE 8 TOTAL/4-METHYL 2-PENTANONE/
21	X	21	14122216A - ~~05A~~ 06A	1L1706	4.7"Hg → 14.9psi	25mL	~~597~~	WD		1152	—	500x bag dil incorrect bag DIL
22	X	22	14122216A -07A	1L1556	5.1"Hg → 14.7psi	25mL	241	WD		1232	—	50x bag dil over range
23	✓	23	↓ -07A	↓	↓	10mL	602	WD		1320	WD/SW	50x bag dil DILTC
24	✓	24	14122216A -06A	1L1702	4.7"Hg → 14.9psi	14mL	854	WD		1343	WD/SW	10x bag DILTC
25	X	25	14122216A-08A	2034	4.1"Hg → 14.9psi	25mL	1165	WD		1402	—	overdil
26	✓	26	-08	↓	↓	50mL	~~5825~~ 583	WD		1426	WD/SW	DILTC 250x Bag
27	✓	27	1412201-05A	34446	3.9"Hg → 5.1psi	50mL	1.55	WD		~~1501~~ 1446	WD/SW	DILTC ~~DILMatrix~~
28	✓	28	14122246A -01A ~~1412325-01A~~	C8454 ~~1L1556~~	4.1"Hg → 4.9psi ~~5.0"Hg → 15.2psi~~	2.0mL ~~5.0mL~~	38.5 ~~2440~~	WD	WD 12/19/14	1507	WD/SW	100x bag ~~DiL~~ ~~over~~ Range DILMatrix
29	X	29	14122~~25~~-01A	~~1L1556~~ ↓	~~5.0"Hg → 15.2psi~~ ↓	1.0mL	2440	WD		1552	—	100x Bag DIL over range
30	✓	30	141225 ~~-01A~~ ~~-02A~~	1L1584 ~~1L1614~~	5.0"Hg → 15.2psi ~~4.5"Hg → 15.0psi~~	1.0mL	12200	WD		1618	WD/SW	100x Bag DIL DILTC
31	✓	31	↓ ~~-03A~~	1L1614	4.5"Hg → 15.0psi	1.0mL	11900	WD		1637	WD/SW	100x Bag DIL DILTC
32	✓	32	~~-04A~~	1L1617	3.0"Hg → 15.0psi	1.0mL	11200	WD				
33		33	-04A	8003	5.0"Hg → 15.0psi	1.0mL	12100	WD				
34		34	14122246A-01AA	C8454	4.1"Hg → 4.9psi	2.0mL	38.5	WD				
35												
36												WD 12/19/14

WD
Reviewed

12/19/14
Date

MSDP

BFB verification of 176/174 ratio: (252288/257898)*100= 97.82 %			
IS/Surr Std#	2687-116	Exp. Date:	2/25/2015
BCM	153,275		
1,4-DFB	654,249		
C8-d5	700,329		

Method TO-15/TO-14	
SOP# 6	
Vacuum:	NA
Please check all standards	
Surrogate# NA	Exp. Date: NA
Surrogate# NA	Exp. Date: NA

Verified CCV vs ICAL mid-point(-40%): js

Method: p14Q1217a.m

Use	File #	Enter/Scan Sample IDs	Canister#	Cart Pos.	Pressure	ml	DF	Verify Load	Loaded Init	Date Analyzed	Time Analyzed	Review Init	Comments
✓	P122201	BFB Tune Check	2687-116	12	36ng	50ml	1.00	js	js	12/22/14	0926	js	
✓	P122202	CCV	#2687-162	13	50ppbv (200ppbv)	50ml	1.00	js	js	12/22/14	0950	js	exp 3/17/15, 0 out
✓	P122203	LCS	#2687-110A	13	50ppbv (100ppbv)	100ml	1.00	js	js	12/22/14	1016	js	exp 2/21/15 3 out >150%, must be ND in samples
✓	P122204	LCSD	#2687-110A	2	50ppbv (200ppbv)	100ml	1.00	js	js	12/22/14	1042	js	
✓	P122205	Lab Blank	#33329	12	Humid	200ml	1.00	js	js	12/22/14	1112	js	"d"
✓	P122206	1412216-01A	1L1685	1	5.1 Hg->14.9 psi	200ml	2.43	js	js	12/22/14	1231	js	
✓	P122207	1412216-02A	1L1681	2	6.5 Hg->14.9 psi	200ml	2.57	js	js	12/22/14	1325	js	
✓	P122208	1412216-03A	1L1707	3	5.1 Hg->15 psi	200ml	2.4	js	js	12/22/14	1351	js	
✓	P122209	1412216-04A	1L1680	4	2.2 Hg->14.8 psi	200ml	2.16	js	js	12/22/14	1418	js	

12/22/14

Eurofins Air Toxics Inc.

Data file : /var/chem/msd14.i/24nov14.b/14112402.d
Lab Smp Id: BFB Client Smp ID: BFB
Inj Date : 24-NOV-2014 08:58
Operator : md Inst ID: msd14.i
Smp Info : 2.0ul #2299-789;BFB;BFB
Misc Info : 50 ng
Comment :
Method : /var/chem/msd14.i/24nov14.b/bfb20.m
Meth Date : 24-Nov-2014 09:09 Quant Type: ESTD
Cal Date : Cal File:
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		
2.471	2.483	-0.012	95	45325			100.00- 100.00	100.00
2.471	2.483	-0.012	50	11136			8.00- 40.00	24.57
2.471	2.483	-0.012	75	24920			30.00- 66.00	54.98
2.471	2.483	-0.012	96	3025			5.00- 9.00	6.67
2.471	2.483	-0.012	173	500			0.00- 1.99	1.42
2.471	2.483	-0.012	174	35128			50.01- 120.00	77.50
2.471	2.483	-0.012	175	2804			4.00- 9.00	7.98
2.471	2.483	-0.012	176	33146			93.00- 101.00	94.36
2.471	2.483	-0.012	177	2238			5.00- 9.00	6.75

Data File: /var/chem/msd14.i/24nov14.b/14112402.d

Date : 24-NOV-2014 08:58

Client ID: BFB

Instrument: msd14.i

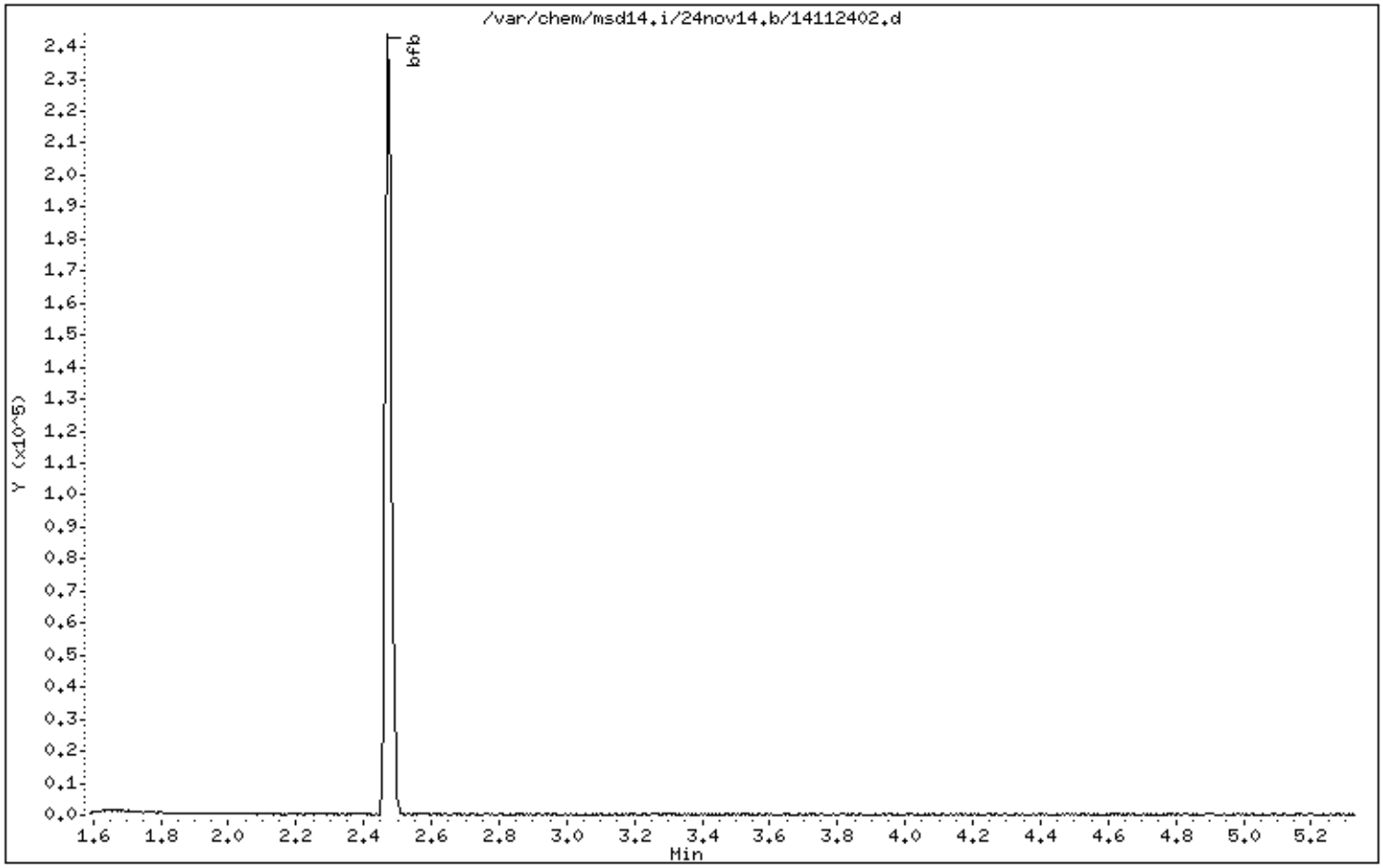
Sample Info: 2.0ul #2299-789;BFB;BFB

Volume Injected (uL): 1.0

Operator: md

Column phase:

Column diameter: 2.00



Data File: /var/chem/msd14.i/24nov14.b/14112402.d

Date : 24-NOV-2014 08:58

Client ID: BFB

Instrument: msd14.i

Sample Info: 2.0ul #2299-789;BFB;BFB

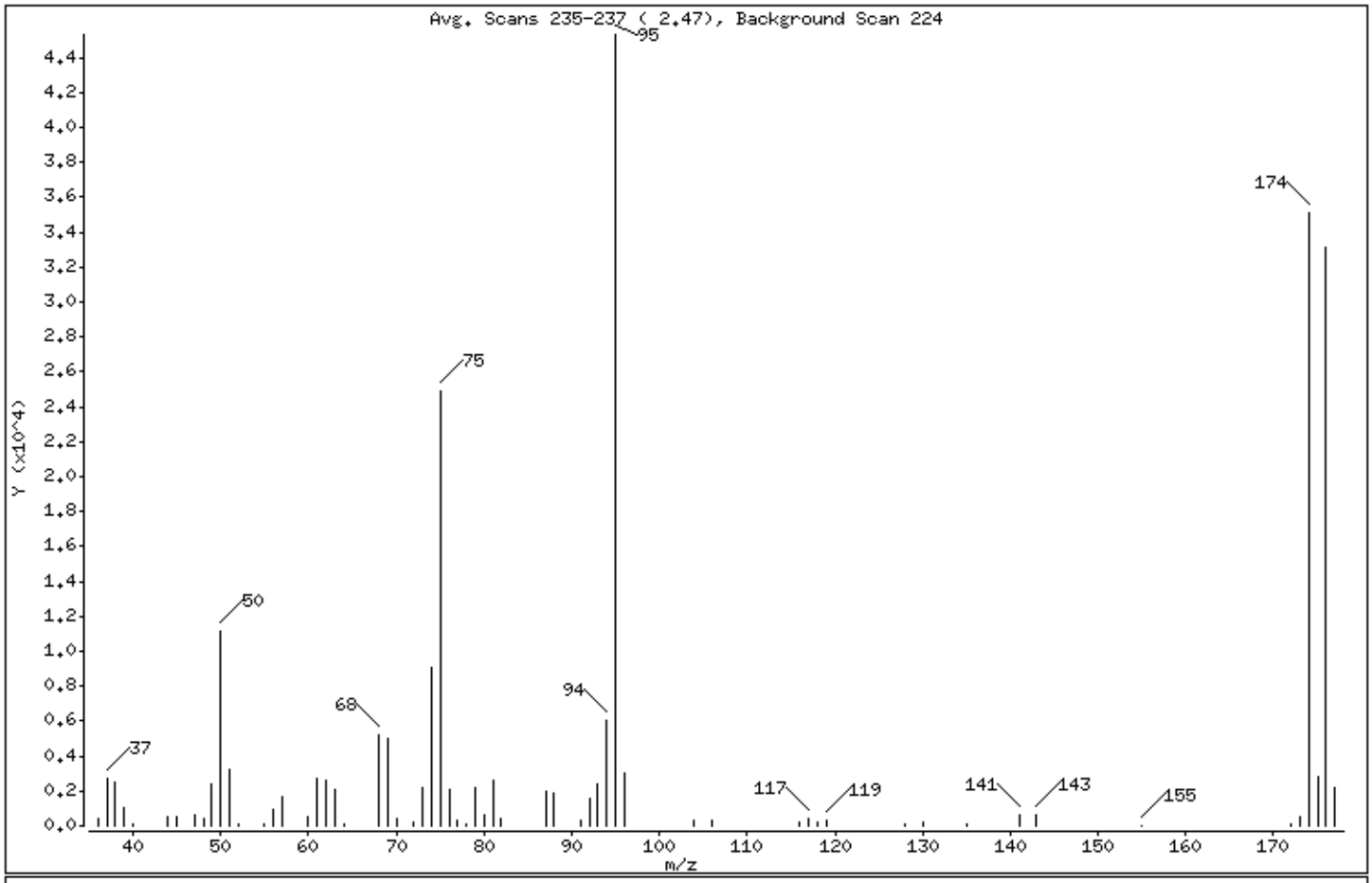
Volume Injected (uL): 1.0

Operator: md

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	24.57
75	30.00 - 66.00% of mass 95	54.98
96	5.00 - 9.00% of mass 95	6.67
173	Less than 1.99% of mass 174	1.10 (1.42)
174	50.01 - 120.00% of mass 95	77.50
175	4.00 - 9.00% of mass 174	6.19 (7.98)
176	93.00 - 101.00% of mass 174	73.13 (94.36)
177	5.00 - 9.00% of mass 176	4.94 (6.75)

Data File: /var/chem/msd14.i/24nov14.b/14112402.d

Date : 24-NOV-2014 08:58

Client ID: BFB

Instrument: msd14.i

Sample Info: 2.0ul #2299-789;BFB;BFB

Volume Injected (uL): 1.0

Operator: md

Column phase:

Column diameter: 2.00

Data File: 14112402.d
Spectrum: Avg. Scans 235-237 (2.47), Background Scan 224
Location of Maximum: 95.00
Number of points: 61

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	467	60.00	517	80.00	612	119.00	314
37.00	2737	61.00	2705	81.00	2562	128.00	132
38.00	2551	62.00	2610	82.00	435	130.00	200
39.00	1024	63.00	2066	87.00	1996	135.00	57
40.00	66	64.00	129	88.00	1908	141.00	611
44.00	541	68.00	5210	91.00	278	143.00	636
45.00	556	69.00	5038	92.00	1545	155.00	52
47.00	574	70.00	410	93.00	2377	172.00	140
48.00	433	72.00	259	94.00	6025	173.00	500
49.00	2438	73.00	2228	95.00	45320	174.00	35128
50.00	11136	74.00	9045	96.00	3025	175.00	2804
51.00	3238	75.00	24920	104.00	297	176.00	33144
52.00	109	76.00	2061	106.00	295	177.00	2238
55.00	136	77.00	318	116.00	215		
56.00	892	78.00	111	117.00	402		
57.00	1624	79.00	2223	118.00	210		

Eurofins Air Toxics Inc.

Data file : /var/chem/msd14.i/15dec14.b/14121501.d
Lab Smp Id: BFB Client Smp ID: BFB
Inj Date : 15-DEC-2014 06:48
Operator : act Inst ID: msd14.i
Smp Info : 2.0ul #2299-789;BFB;BFB
Misc Info : 50ng
Comment :
Method : /var/chem/msd14.i/15dec14.b/bfb20.m
Meth Date : 15-Dec-2014 06:58 Quant Type: ESTD
Cal Date : Cal File:
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	
2.460	2.483	-0.023	95	22984			100.00- 100.00	100.00
2.460	2.483	-0.023	50	5163			8.00- 40.00	22.46
2.460	2.483	-0.023	75	12082			30.00- 66.00	52.57
2.460	2.483	-0.023	96	1445			5.00- 9.00	6.29
2.460	2.483	-0.023	173	64			0.00- 1.99	0.37
2.460	2.483	-0.023	174	17235			50.01- 120.00	74.99
2.460	2.483	-0.023	175	1317			4.00- 9.00	7.64
2.460	2.483	-0.023	176	16855			93.00- 101.00	97.80
2.460	2.483	-0.023	177	1141			5.00- 9.00	6.77

Data File: /chem/msd14.i/15dec14.b/14121501.d

Date : 15-DEC-2014 06:48

Client ID: BFB

Instrument: msd14.i

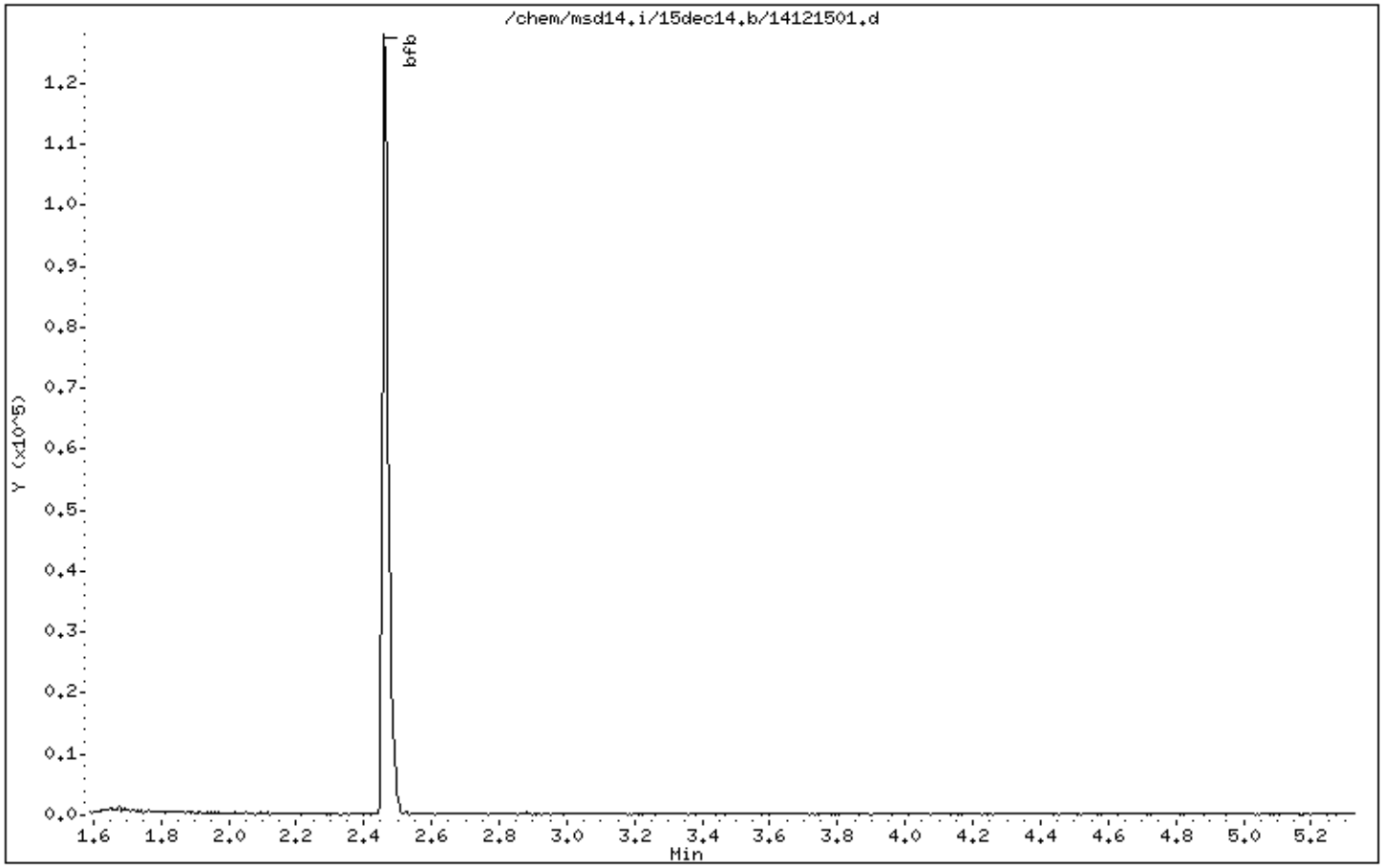
Sample Info: 2.0ul #2299-789;BFB;BFB

Volume Injected (uL): 1.0

Operator: act

Column phase:

Column diameter: 2.00



Data File: /chem/msd14.i/15dec14.b/14121501.d

Date : 15-DEC-2014 06:48

Client ID: BFB

Instrument: msd14.i

Sample Info: 2.0ul #2299-789;BFB;BFB

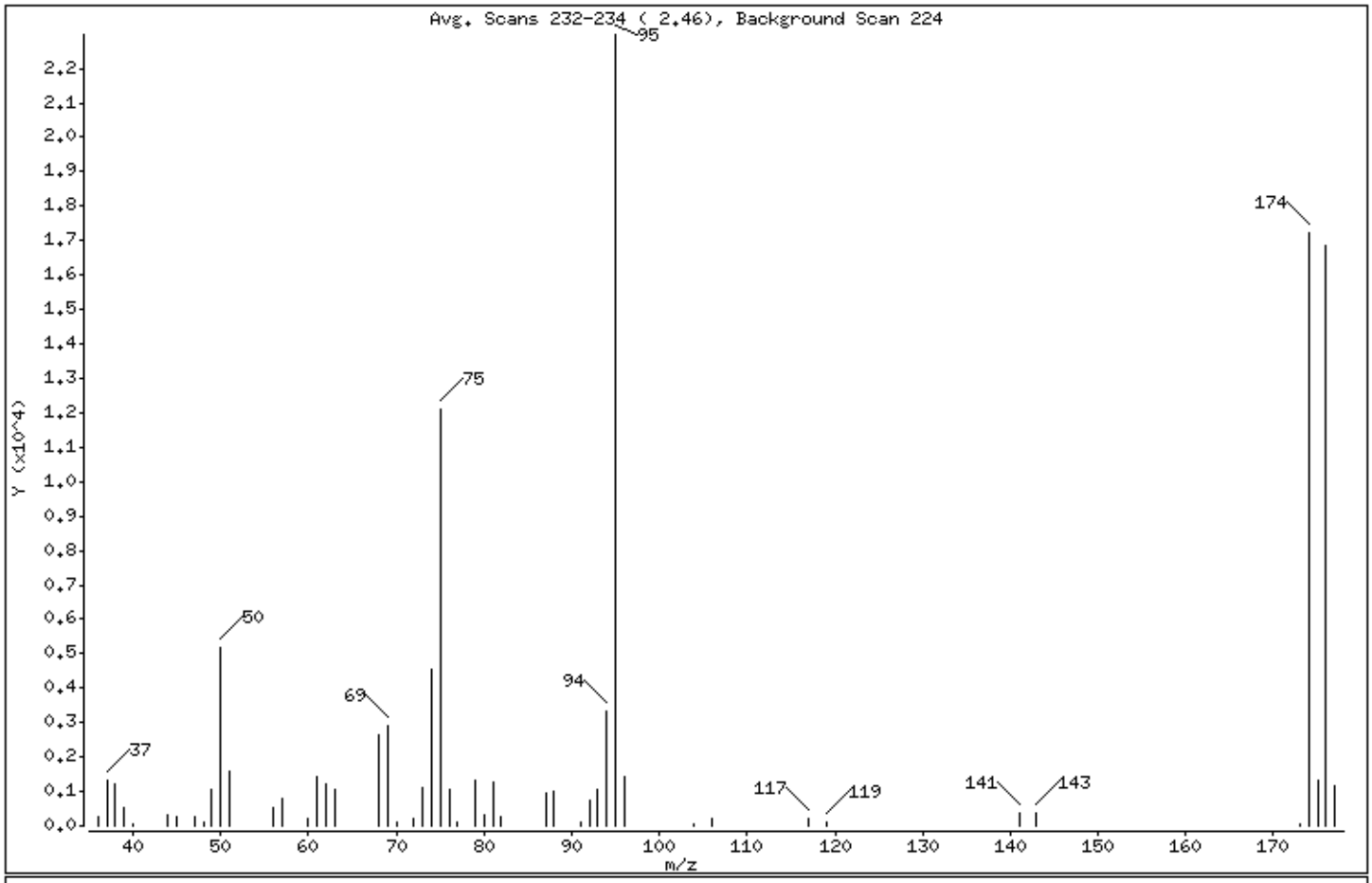
Volume Injected (uL): 1.0

Operator: act

Column phase:

Column diameter: 2.00

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	8.00 - 40.00% of mass 95	22.46
75	30.00 - 66.00% of mass 95	52.57
96	5.00 - 9.00% of mass 95	6.29
173	Less than 1.99% of mass 174	0.28 (0.37)
174	50.01 - 120.00% of mass 95	74.99
175	4.00 - 9.00% of mass 174	5.73 (7.64)
176	93.00 - 101.00% of mass 174	73.33 (97.80)
177	5.00 - 9.00% of mass 176	4.96 (6.77)

Data File: /chem/msd14.i/15dec14.b/14121501.d

Date : 15-DEC-2014 06:48

Client ID: BFB

Instrument: msd14.i

Sample Info: 2.0ul #2299-789;BFB;BFB

Volume Injected (uL): 1.0

Operator: act

Column phase:

Column diameter: 2.00

Data File: 14121501.d
Spectrum: Avg. Scans 232-234 (2.46), Background Scan 224
Location of Maximum: 95.00
Number of points: 50

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	255	57.00	776	77.00	126	104.00	56
37.00	1316	60.00	235	79.00	1315	106.00	192
38.00	1205	61.00	1410	80.00	341	117.00	203
39.00	528	62.00	1233	81.00	1272	119.00	113
40.00	62	63.00	1059	82.00	240	141.00	383
44.00	292	68.00	2665	87.00	929	143.00	344
45.00	245	69.00	2904	88.00	1023	173.00	64
47.00	238	70.00	122	91.00	121	174.00	17232
48.00	106	72.00	191	92.00	739	175.00	1317
49.00	1049	73.00	1105	93.00	1078	176.00	16848
50.00	5163	74.00	4539	94.00	3305	177.00	1141
51.00	1570	75.00	12082	95.00	22984		
56.00	509	76.00	1072	96.00	1445		

Eurofins Air Toxics Inc.

Data file : /var/chem/msdp.i/17dec14.b/p121702.d
Lab Smp Id: BFB Client Smp ID: BFB
Inj Date : 17-DEC-2014 18:47
Operator : sn Inst ID: msdp.i
Smp Info : 50ml 2687-116;BFB Tune Check
Misc Info : 36ng
Comment :
Method : /var/chem/msdp.i/17dec14.b/bfb30.m
Meth Date : 17-Dec-2014 16:16 Quant Type: ESTD
Cal Date : Cal File:
Als bottle: 12 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	
9.761	9.898	-0.137	95	267584			100.00- 100.00	100.00
9.761	9.898	-0.137	50	54568			8.00- 40.00	20.39
9.761	9.898	-0.137	75	143741			30.00- 66.00	53.72
9.761	9.898	-0.137	96	16959			5.00- 9.00	6.34
9.761	9.898	-0.137	173	3629			0.00- 1.99	1.54
9.761	9.898	-0.137	174	235349			50.01- 120.00	87.95
9.761	9.898	-0.137	175	17789			4.00- 9.00	7.56
9.761	9.898	-0.137	176	220245			93.00- 101.00	93.58
9.761	9.898	-0.137	177	13271			5.00- 9.00	6.03

Data File: /chem/msdp.i/17dec14.b/p121702.d

Date : 17-DEC-2014 18:47

Client ID: BFB

Instrument: msdp.i

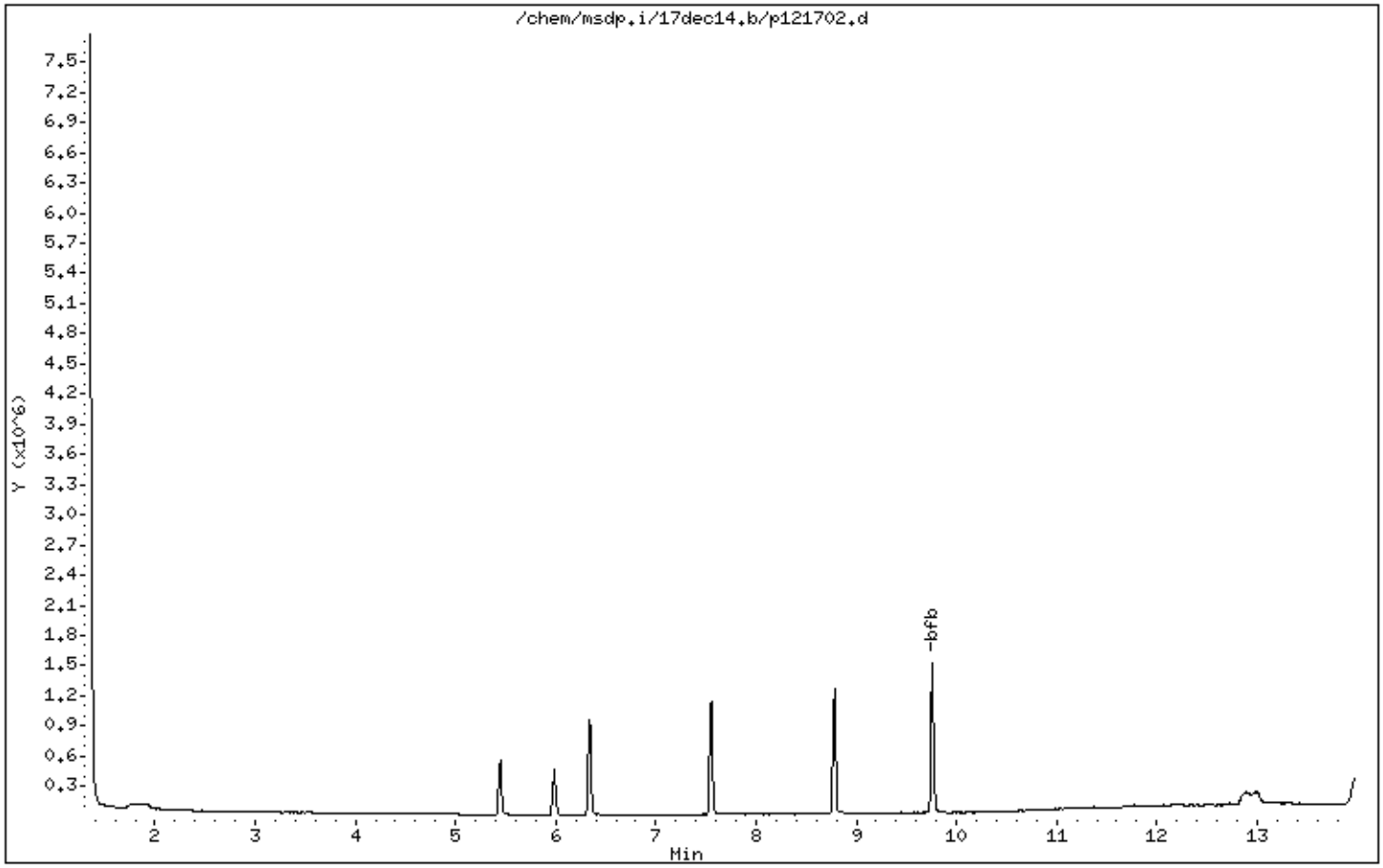
Sample Info: 50ml 2687-116;BFB Tune Check

Volume Injected (uL): 1.0

Operator: sn

Column phase:

Column diameter: 2.00



Data File: /chem/msdp.i/17dec14.b/p121702.d

Date : 17-DEC-2014 18:47

Client ID: BFB

Instrument: msdp.i

Sample Info: 50ml 2687-116;BFB Tune Check

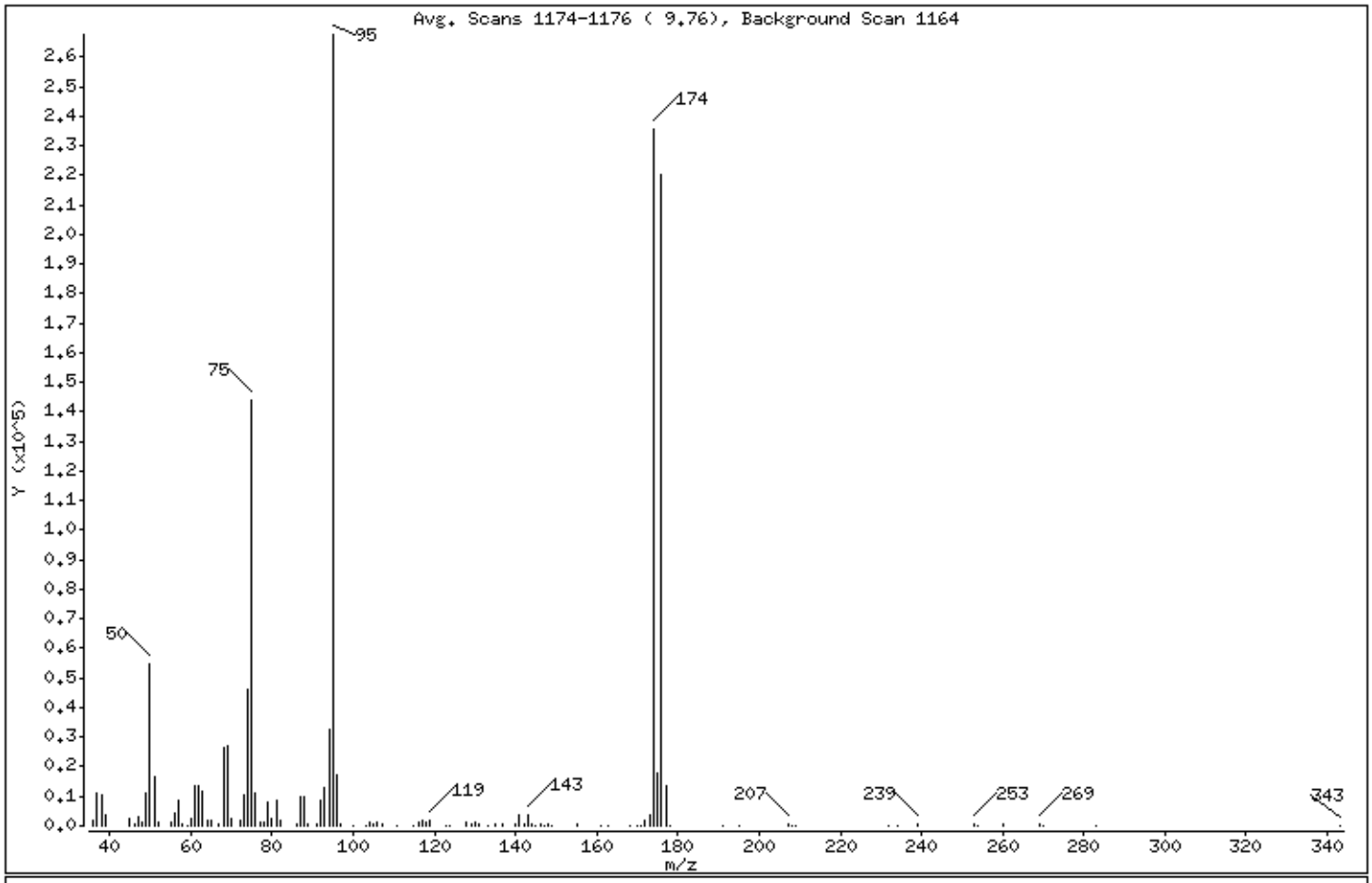
Volume Injected (uL): 1.0

Operator: sn

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	20.39
75	30.00 - 66.00% of mass 95	53.72
96	5.00 - 9.00% of mass 95	6.34
173	Less than 1.99% of mass 174	1.36 (1.54)
174	50.01 - 120.00% of mass 95	87.95
175	4.00 - 9.00% of mass 174	6.65 (7.56)
176	93.00 - 101.00% of mass 174	82.31 (93.58)
177	5.00 - 9.00% of mass 176	4.96 (6.03)

Data File: /chem/msdp.i/17dec14.b/p121702.d

Date : 17-DEC-2014 18:47

Client ID: BFB

Instrument: msdp.i

Sample Info: 50ml 2687-116;BFB Tune Check

Volume Injected (uL): 1.0

Operator: sn

Column phase:

Column diameter: 2.00

Data File: p121702.d
Spectrum: Avg. Scans 1174-1176 (9.76), Background Scan 1164
Location of Maximum: 95.00
Number of points: 108

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	1881	73.00	10249	115.00	77	170.00	87
37.00	10858	74.00	46024	116.00	1404	171.00	267
38.00	10380	75.00	143680	117.00	1901	172.00	1764
39.00	3926	76.00	11151	118.00	1258	173.00	3629
45.00	2199	77.00	1141	119.00	2105	174.00	235328
46.00	398	78.00	1150	123.00	76	175.00	17784
47.00	3252	79.00	7945	124.00	72	176.00	220224
48.00	1046	80.00	2744	128.00	944	177.00	13271
49.00	11371	81.00	8770	129.00	595	178.00	301
50.00	54568	82.00	1730	130.00	1047	191.00	104
51.00	16608	86.00	456	131.00	354	195.00	68
52.00	1247	87.00	10023	133.00	291	207.00	840
55.00	1055	88.00	9680	135.00	865	208.00	271
56.00	4438	89.00	350	137.00	308	209.00	15
57.00	8449	91.00	841	140.00	350	232.00	75
58.00	921	92.00	8543	141.00	3715	234.00	193
59.00	145	93.00	12888	142.00	440	239.00	321
60.00	2552	94.00	32432	143.00	3982	253.00	802
61.00	13231	95.00	267584	144.00	314	254.00	245
62.00	13654	96.00	16952	145.00	276	260.00	513
63.00	11730	97.00	521	146.00	371	269.00	878
64.00	1582	100.00	74	147.00	68	270.00	229
65.00	1965	103.00	226	148.00	571	283.00	236
67.00	906	104.00	1336	149.00	88	343.00	61
68.00	26184	105.00	582	155.00	850		
69.00	27008	106.00	1394	161.00	244		
70.00	2403	107.00	335	163.00	90		
72.00	1965	111.00	217	168.00	172		

Eurofins Air Toxics Inc.

Data file : /var/chem/msdp.i/18dec14.b/p121801.d
Lab Smp Id: BFB Client Smp ID: BFB
Inj Date : 18-DEC-2014 08:16
Operator : js Inst ID: msdp.i
Smp Info : 50mL# 2687-116; BFB;BFB
Misc Info : 36ng
Comment :
Method : /var/chem/msdp.i/18dec14.b/bfb30.m
Meth Date : 18-Dec-2014 08:39 Quant Type: ESTD
Cal Date : Cal File:
Als bottle: 12 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	
9.760	9.898	-0.138	95	255872			100.00- 100.00	100.00
9.760	9.898	-0.138	50	51685			8.00- 40.00	20.20
9.760	9.898	-0.138	75	138728			30.00- 66.00	54.22
9.760	9.898	-0.138	96	15579			5.00- 9.00	6.09
9.760	9.898	-0.138	173	3206			0.00- 1.99	1.44
9.760	9.898	-0.138	174	222805			50.01- 120.00	87.08
9.760	9.898	-0.138	175	17034			4.00- 9.00	7.65
9.760	9.898	-0.138	176	218218			93.00- 101.00	97.94
9.760	9.898	-0.138	177	14377			5.00- 9.00	6.59

Data File: /chem/msdp.i/18dec14.b/p121801.d

Date : 18-DEC-2014 08:16

Client ID: BFB

Instrument: msdp.i

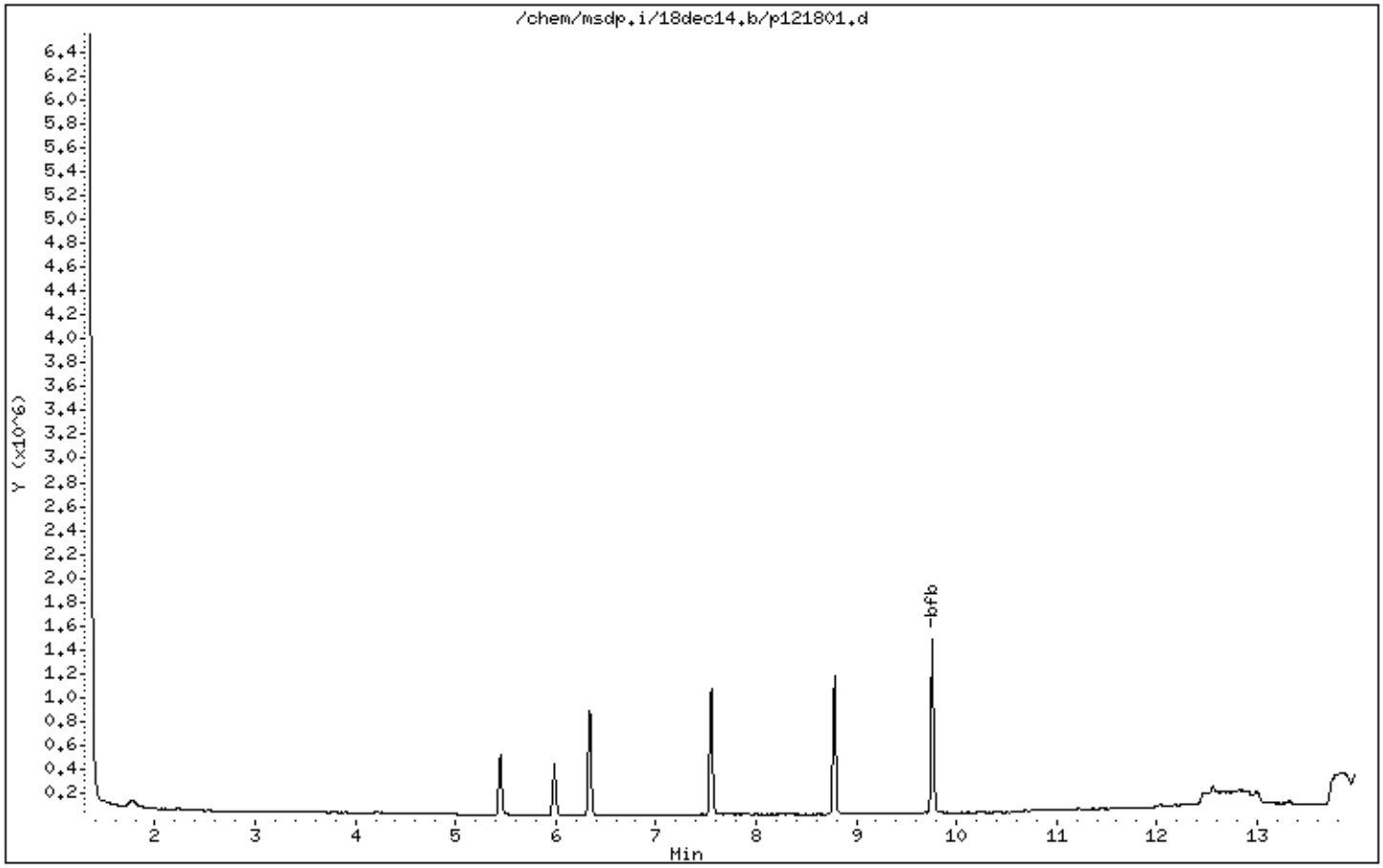
Sample Info: 50mL# 2687-116; BFB;BFB

Volume Injected (uL): 1.0

Operator: js

Column phase:

Column diameter: 2.00



Data File: /chem/msdp.i/18dec14.b/p121801.d

Date : 18-DEC-2014 08:16

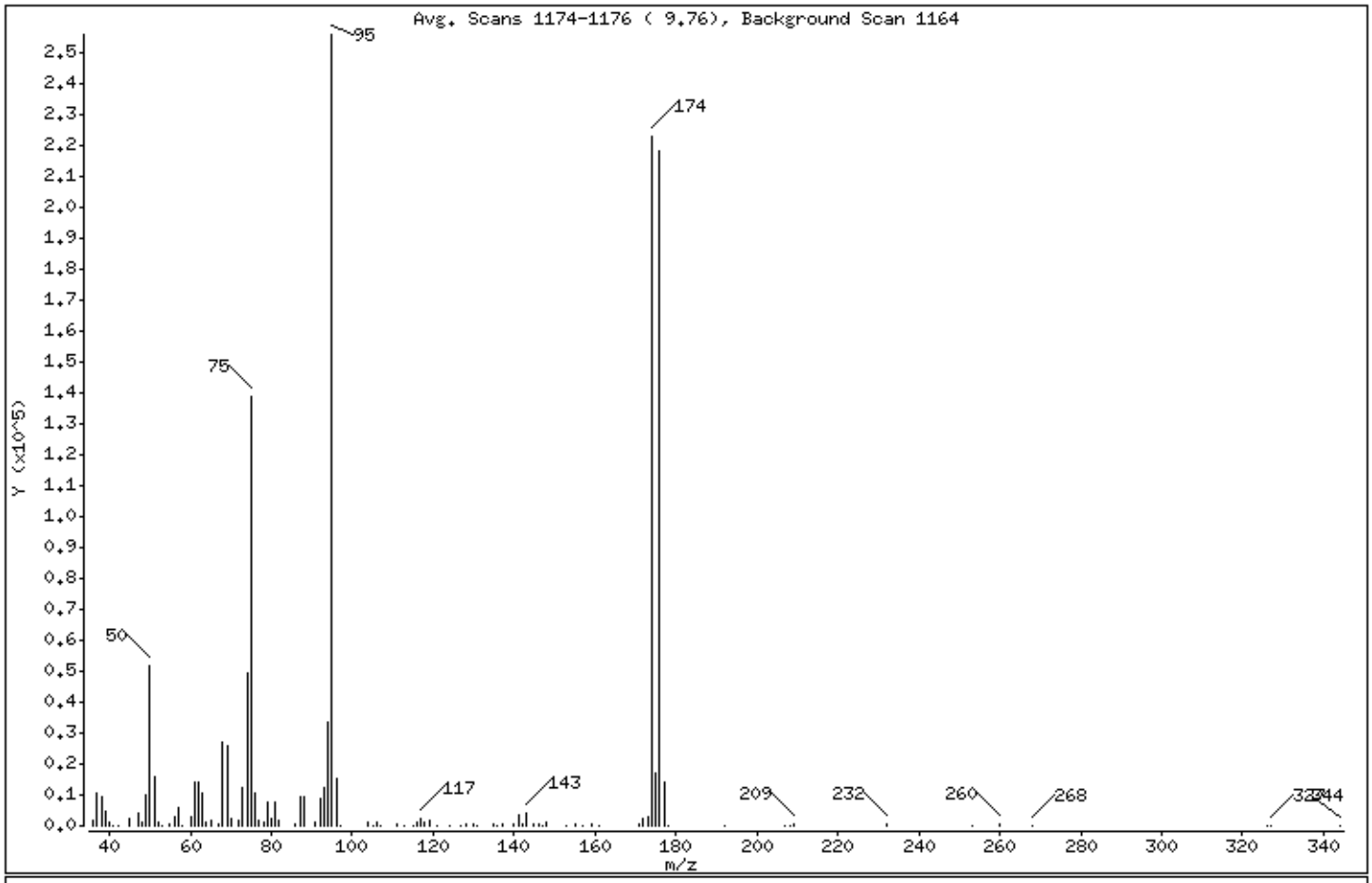
Client ID: BFB Instrument: msdp.i

Sample Info: 50mL# 2687-116; BFB;BFB

Volume Injected (uL): 1.0 Operator: js

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	20.20
75	30.00 - 66.00% of mass 95	54.22
96	5.00 - 9.00% of mass 95	6.09
173	Less than 1.99% of mass 174	1.25 (1.44)
174	50.01 - 120.00% of mass 95	87.08
175	4.00 - 9.00% of mass 174	6.66 (7.65)
176	93.00 - 101.00% of mass 174	85.28 (97.94)
177	5.00 - 9.00% of mass 176	5.62 (6.59)

Data File: /chem/msdp.i/18dec14.b/p121801.d

Date : 18-DEC-2014 08:16

Client ID: BFB

Instrument: msdp.i

Sample Info: 50mL# 2687-116; BFB;BFB

Volume Injected (uL): 1.0

Operator: js

Column phase:

Column diameter: 2.00

Data File: p121801.d
Spectrum: Avg. Scans 1174-1176 (9.76), Background Scan 1164
Location of Maximum: 95.00
Number of points: 102

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	2044	68.00	27048	106.00	1396	153.00	106
37.00	10758	69.00	25832	107.00	152	155.00	503
38.00	9696	70.00	2368	111.00	498	157.00	199
39.00	4731	72.00	1890	113.00	232	159.00	334
40.00	1111	73.00	12173	115.00	232	161.00	76
41.00	273	74.00	49664	116.00	1371	171.00	491
42.00	91	75.00	138688	117.00	2575	172.00	2550
45.00	2322	76.00	10316	118.00	1331	173.00	3206
47.00	4343	77.00	1877	119.00	1706	174.00	222784
48.00	1147	78.00	1173	121.00	264	175.00	17032
49.00	9846	79.00	7868	124.00	83	176.00	218176
50.00	51680	80.00	2295	127.00	186	177.00	14377
51.00	15891	81.00	7734	128.00	752	178.00	82
52.00	1043	82.00	1948	130.00	748	192.00	66
53.00	71	86.00	463	131.00	90	207.00	181
55.00	654	87.00	9306	135.00	785	208.00	90
56.00	3095	88.00	9261	136.00	167	209.00	374
57.00	6169	91.00	1315	137.00	535	232.00	512
58.00	69	92.00	8920	140.00	353	253.00	125
60.00	2676	93.00	12267	141.00	3493	260.00	359
61.00	13920	94.00	33408	142.00	687	268.00	252
62.00	14035	95.00	255872	143.00	3914	326.00	70
63.00	10704	96.00	15579	145.00	601	327.00	80
64.00	1335	97.00	260	146.00	352	344.00	82
65.00	1950	104.00	1249	147.00	261		
67.00	752	105.00	74	148.00	909		

Eurofins Air Toxics Inc.

Data file : /var/chem/msd14.i/18dec14.b/14121801.d
Lab Smp Id: BFB Client Smp ID: BFB
Inj Date : 18-DEC-2014 19:28
Operator : sn Inst ID: msd14.i
Smp Info : 2.0ul #2299-789;BFB;BFB
Misc Info : 50ng
Comment :
Method : /var/chem/msd14.i/18dec14.b/bfb20.m
Meth Date : 18-Dec-2014 19:40 Quant Type: ESTD
Cal Date : Cal File:
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		
2.468	2.483	-0.015	95	25290			100.00- 100.00	100.00
2.468	2.483	-0.015	50	6094			8.00- 40.00	24.10
2.468	2.483	-0.015	75	13652			30.00- 66.00	53.98
2.468	2.483	-0.015	96	1650			5.00- 9.00	6.52
2.468	2.483	-0.015	173	213			0.00- 1.99	1.05
2.468	2.483	-0.015	174	20261			50.01- 120.00	80.11
2.468	2.483	-0.015	175	1486			4.00- 9.00	7.33
2.468	2.483	-0.015	176	19754			93.00- 101.00	97.50
2.468	2.483	-0.015	177	1330			5.00- 9.00	6.73

Data File: /var/chem/msd14.i/18dec14.b/14121801.d

Date : 18-DEC-2014 19:28

Client ID: BFB

Instrument: msd14.i

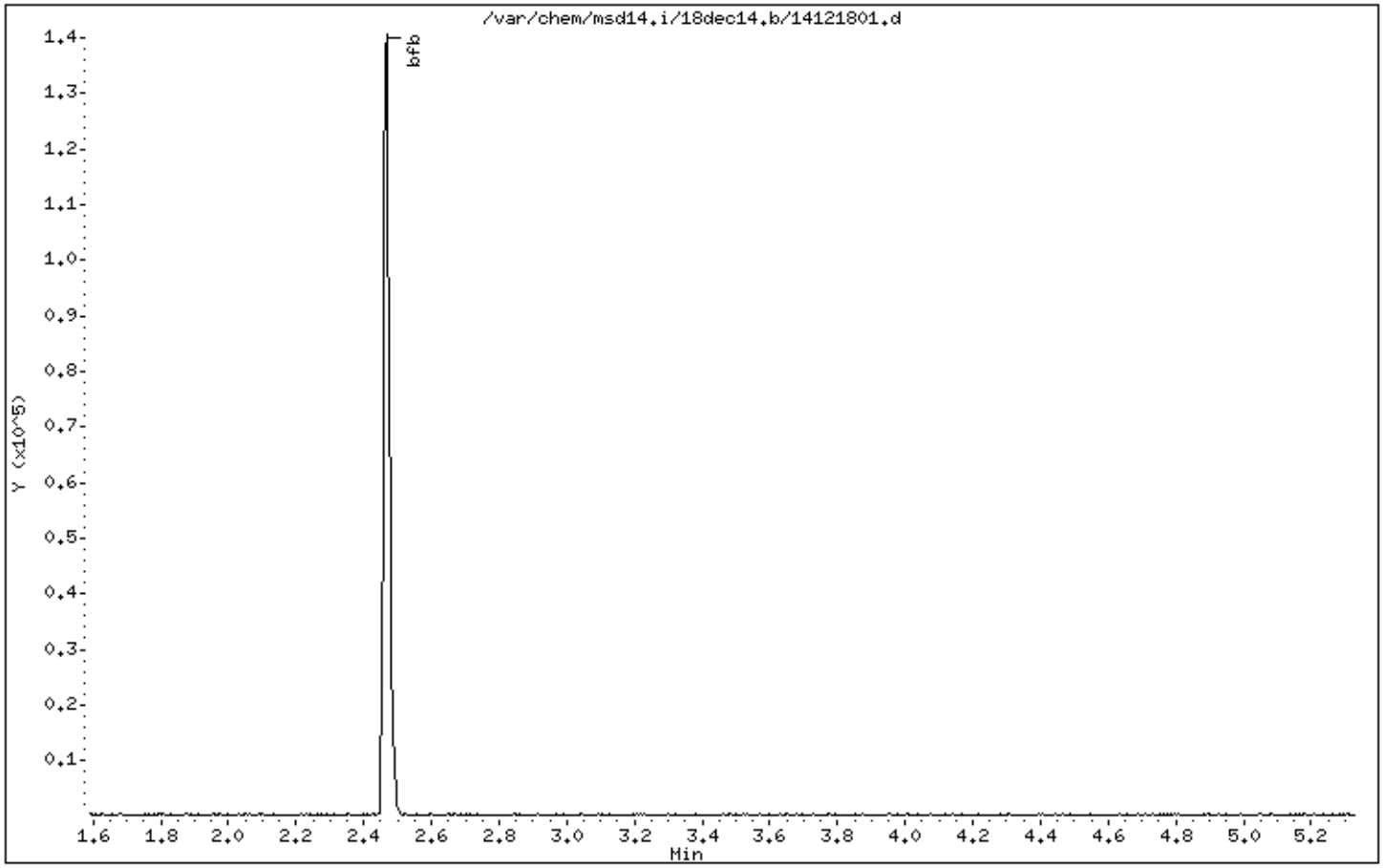
Sample Info: 2.0ul #2299-789;BFB;BFB

Volume Injected (uL): 1.0

Operator: sn

Column phase:

Column diameter: 2.00



Data File: /var/chem/msd14.i/18dec14.b/14121801.d

Date : 18-DEC-2014 19:28

Client ID: BFB

Instrument: msd14.i

Sample Info: 2.0ul #2299-789;BFB;BFB

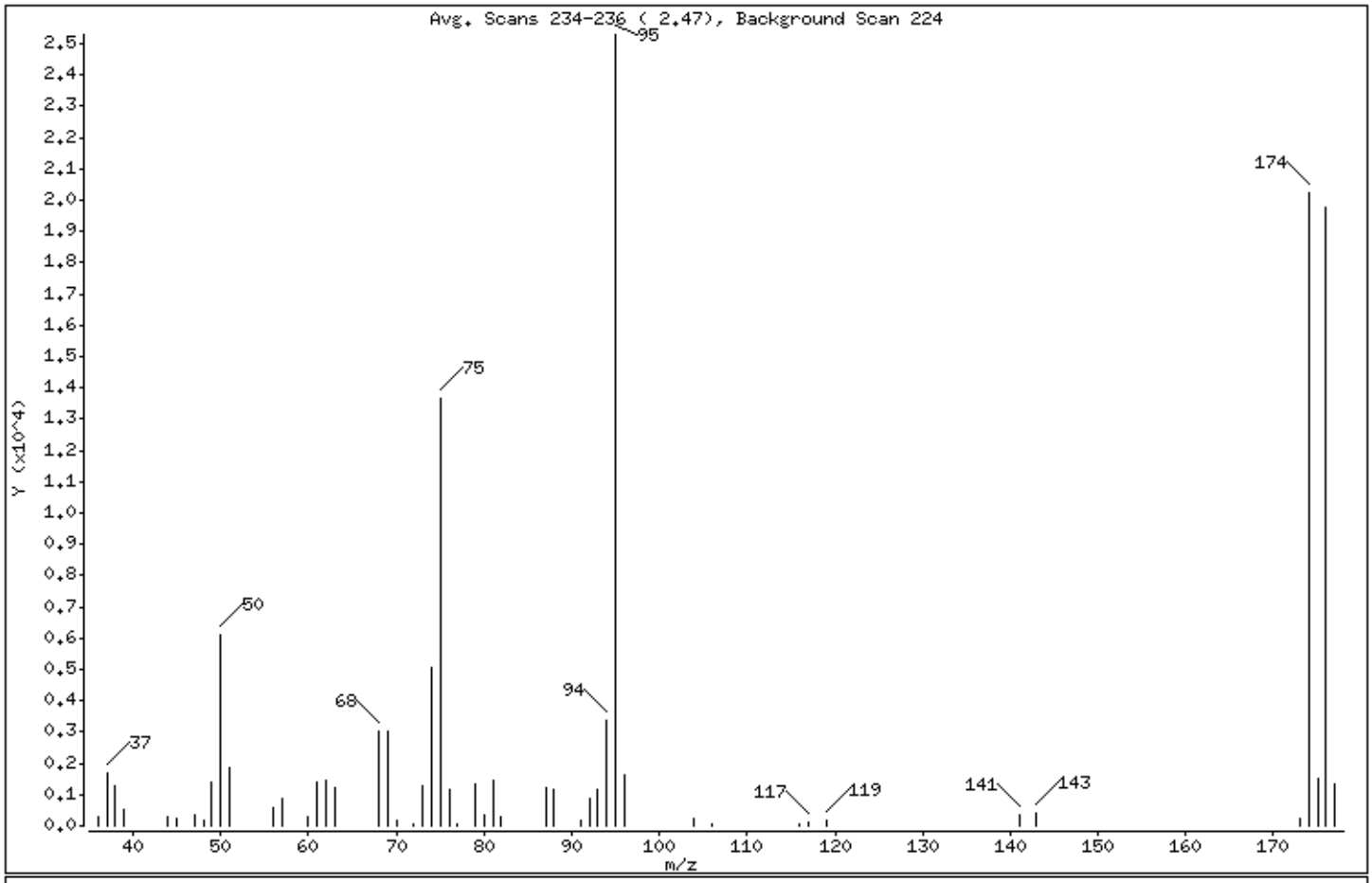
Volume Injected (uL): 1.0

Operator: sn

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	24.10
75	30.00 - 66.00% of mass 95	53.98
96	5.00 - 9.00% of mass 95	6.52
173	Less than 1.99% of mass 174	0.84 (1.05)
174	50.01 - 120.00% of mass 95	80.11
175	4.00 - 9.00% of mass 174	5.88 (7.33)
176	93.00 - 101.00% of mass 174	78.11 (97.50)
177	5.00 - 9.00% of mass 176	5.26 (6.73)

Data File: /var/chem/msd14.i/18dec14.b/14121801.d

Date : 18-DEC-2014 19:28

Client ID: BFB

Instrument: msd14.i

Sample Info: 2.0ul #2299-789;BFB;BFB

Volume Injected (uL): 1.0

Operator: sn

Column phase:

Column diameter: 2.00

Data File: 14121801.d
Spectrum: Avg. Scans 234-236 (2.47), Background Scan 224
Location of Maximum: 95.00
Number of points: 50

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	292	60.00	315	79.00	1346	106.00	54
37.00	1663	61.00	1413	80.00	357	116.00	62
38.00	1304	62.00	1430	81.00	1456	117.00	125
39.00	520	63.00	1224	82.00	308	119.00	184
44.00	315	68.00	3000	87.00	1223	141.00	353
45.00	254	69.00	3000	88.00	1143	143.00	428
47.00	333	70.00	198	91.00	170	173.00	213
48.00	200	72.00	57	92.00	878	174.00	20256
49.00	1379	73.00	1306	93.00	1163	175.00	1486
50.00	6094	74.00	5076	94.00	3352	176.00	19752
51.00	1876	75.00	13652	95.00	25288	177.00	1330
56.00	568	76.00	1170	96.00	1650		
57.00	898	77.00	65	104.00	222		

Eurofins Air Toxics Inc.

Data file : /var/chem/msdp.i/22dec14.b/p122201.d
Lab Smp Id: BFB Client Smp ID: BFB
Inj Date : 22-DEC-2014 09:26
Operator : js Inst ID: msdp.i
Smp Info : 50mL# 2687-116; BFB;BFB
Misc Info : 36ng
Comment :
Method : /var/chem/msdp.i/22dec14.b/bfb30.m
Meth Date : 22-Dec-2014 09:49 Quant Type: ESTD
Cal Date : Cal File:
Als bottle: 12 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	
9.761	9.898	-0.137	95	305524			100.00- 100.00	100.00
9.761	9.898	-0.137	50	61472			8.00- 40.00	20.12
9.761	9.898	-0.137	75	157572			30.00- 66.00	51.57
9.761	9.898	-0.137	96	18607			5.00- 9.00	6.09
9.761	9.898	-0.137	173	4033			0.00- 1.99	1.56
9.761	9.898	-0.137	174	257898			50.01- 120.00	84.41
9.761	9.898	-0.137	175	18552			4.00- 9.00	7.19
9.761	9.898	-0.137	176	252288			93.00- 101.00	97.82
9.761	9.898	-0.137	177	14311			5.00- 9.00	5.67

Data File: /chem/msdp.i/22dec14.b/p122201.d

Date : 22-DEC-2014 09:26

Client ID: BFB

Instrument: msdp.i

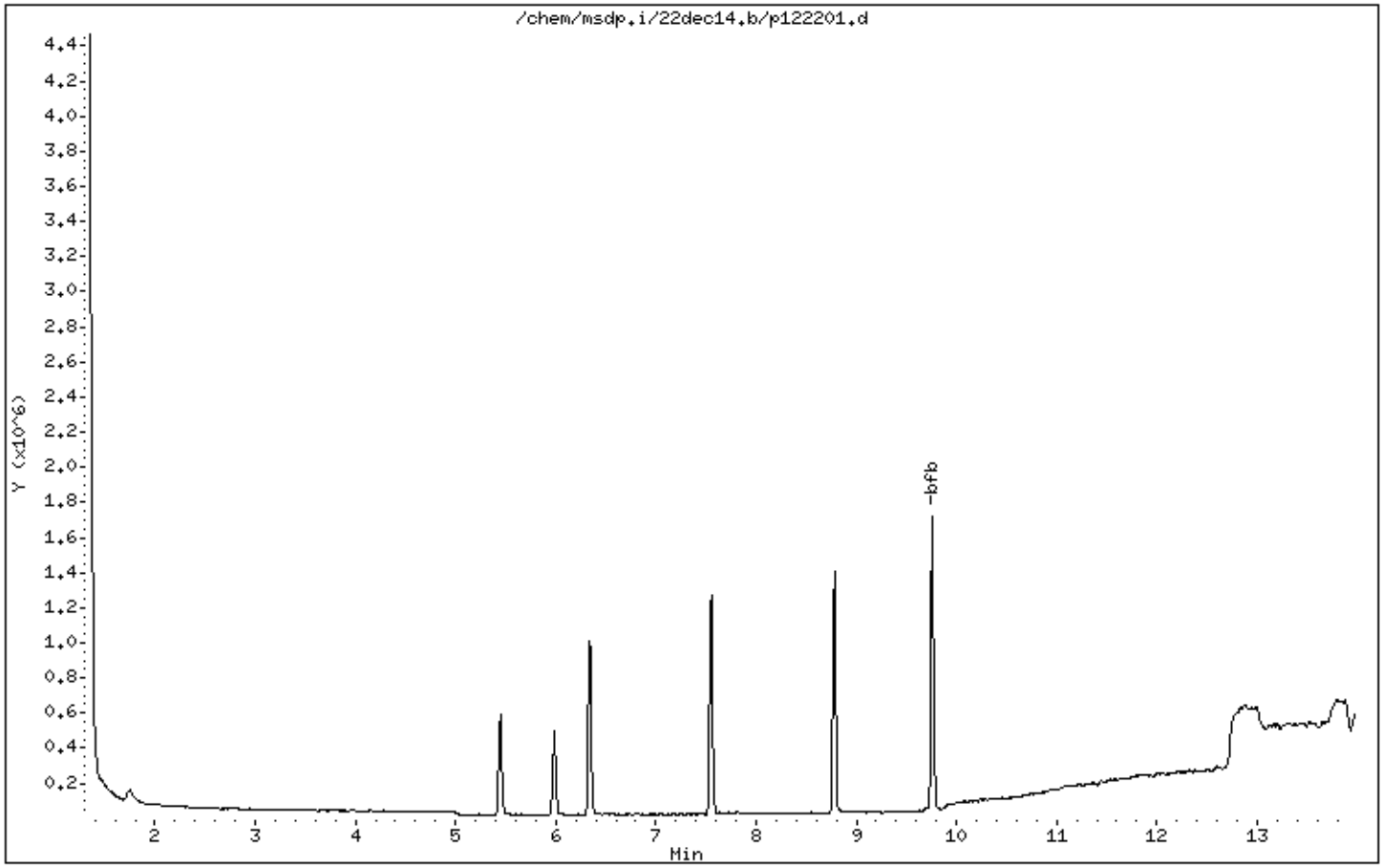
Sample Info: 50mL# 2687-116; BFB;BFB

Volume Injected (uL): 1.0

Operator: js

Column phase:

Column diameter: 2.00



Data File: /chem/msdp.i/22dec14.b/p122201.d

Date : 22-DEC-2014 09:26

Client ID: BFB

Instrument: msdp.i

Sample Info: 50mL# 2687-116; BFB;BFB

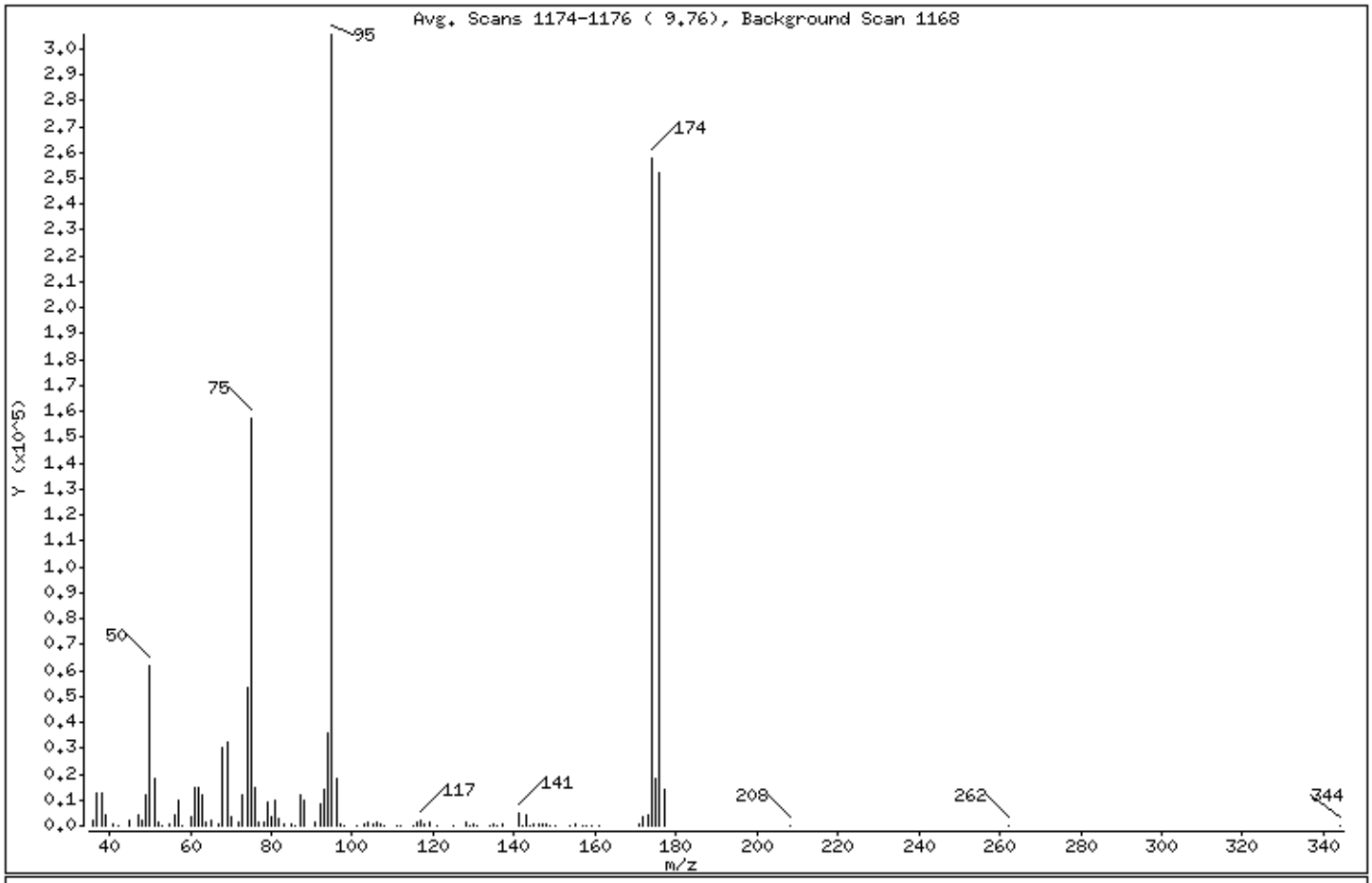
Volume Injected (uL): 1.0

Operator: js

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	20.12
75	30.00 - 66.00% of mass 95	51.57
96	5.00 - 9.00% of mass 95	6.09
173	Less than 1.99% of mass 174	1.32 (1.56)
174	50.01 - 120.00% of mass 95	84.41
175	4.00 - 9.00% of mass 174	6.07 (7.19)
176	93.00 - 101.00% of mass 174	82.58 (97.82)
177	5.00 - 9.00% of mass 176	4.68 (5.67)

Data File: /chem/msdp.i/22dec14.b/p122201.d

Date : 22-DEC-2014 09:26

Client ID: BFB Instrument: msdp.i

Sample Info: 50mL# 2687-116; BFB;BFB

Volume Injected (uL): 1.0 Operator: js

Column phase: Column diameter: 2.00

Data File: p122201.d
Spectrum: Avg. Scans 1174-1176 (9.76), Background Scan 1168
Location of Maximum: 95.00
Number of points: 102

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	2076	69.00	32056	101.00	138	143.00	4393
37.00	12919	70.00	3312	103.00	664	144.00	84
38.00	12882	72.00	1415	104.00	1224	145.00	915
39.00	4414	73.00	11977	105.00	446	146.00	616
41.00	688	74.00	53360	106.00	1282	147.00	416
42.00	293	75.00	157568	107.00	374	148.00	685
45.00	2347	76.00	14457	108.00	298	149.00	181
47.00	4244	77.00	1233	111.00	294	150.00	173
48.00	1772	78.00	1578	112.00	331	154.00	301
49.00	11895	79.00	9302	115.00	170	155.00	679
50.00	61472	80.00	3492	116.00	1089	157.00	67
51.00	18256	81.00	9911	117.00	2290	158.00	75
52.00	1223	82.00	2586	118.00	980	159.00	339
53.00	170	83.00	357	119.00	1600	161.00	169
55.00	437	85.00	387	121.00	104	171.00	1019
56.00	4190	86.00	193	125.00	68	172.00	3450
57.00	9869	87.00	11949	128.00	1558	173.00	4033
58.00	8	88.00	10149	129.00	91	174.00	257856
60.00	3419	91.00	1643	130.00	1005	175.00	18552
61.00	15090	92.00	8540	131.00	178	176.00	252288
62.00	14470	93.00	14018	134.00	66	177.00	14311
63.00	11934	94.00	35888	135.00	908	208.00	161
64.00	1313	95.00	305472	136.00	112	262.00	68
65.00	2069	96.00	18600	137.00	583	344.00	159
67.00	723	97.00	690	141.00	4671		
68.00	30472	98.00	69	142.00	319		

Shipping/ Receiving Documents

eurofins | Air Toxics

Eurofins Air Toxics, Inc. Sample Receipt Confirmation Cover Page

Thank you for choosing Eurofins Air Toxics, Inc. (EATL). We have received your samples and have listed any Sample Receipt Descrepancies below.

In order to expedite analysis and reporting, please review the attached information for accuracy.

For corrections call: **Brian Whittaker at 916-985-1000**

EATL will proceed with the analysis as specified on the Chain of Custody (COC) and Sample Receipt Summary page.

Please note : The Sample Receipt Confirmation, including the total workorder charge, is subject to change upon secondary review. Our aim is to provide a confirmation to you in a timely manner. Sample Receipt Discrepancies, if any, may not include discrepancies regarding sample receipt pressure(s). Additionally, the COC will be provided with the final report.

180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 95630

(916) 985-1000 .FAX (916) 985-1020
Hours 6:30 A.M to 5:30 P.M. PST

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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 95630-4719
(916) 985-1000 FAX (916) 985-1020

Page ____ of ____

Project Manager: Terry Taylor
Collected by: (Print and Sign)
Company: AMAI Email:
Address: 110 Corporate Pk City: White Plains State: NY Zip: 10604
Phone: 914-251-0400 Fax:

Project Info:
P.O. #:
Project #: Building 5 VI
Project Name: BMS Humacao

Turn Around Time:
☒ Normal
☐ Rush
specify

Lab Use Only
Pressurized by:
Date:
Pressurization Gas: N_2 He

Lab I.D.	Field Sample I.D. (Location)	Can #	Date of Collection	Time of Collection	Analyses Requested	Canister Pressure/Vacuum Initial	Final	Receipt	Final (psi)
01A	BSSS-7(2014) ✓	IL1685	12/10/14	1202	see notes	30	6.5		
02A	BSSS-4(2014) ✓	IL1681	12/10/14	1412	"	30+	5		
03A	BSSS-6(2014) ✓	IL1707	12/10/14	1531	"	30+	5		
04A	BSSS-2(2014) ✓	IL1680	12/11/14	1038	"	30+	5		
05A	BSSS-3(2014) ✓	IL1706	12/11/14	1147	"	28	5		
06A	BSSS-5(2014) ✓	IL1702	12/11/14	1359	"	30	5		
07A	BSSS-1(2014) ✓	IL1556	12/11/14	1513	"	30	5		
08A	BSSS-1D(2014) ✓	IL2034	12/11/14	1519	"	30	5		
~~09A~~	UNUSED	IL1558							

DM 12/13/14

Relinquished by: (signature) Date/Time	Received by: (signature) Date/Time
12/11/14; 1531	FATL 12/12/14 0925
Relinquished by: (signature) Date/Time	Received by: (signature) Date/Time
Relinquished by: (signature) Date/Time	Received by: (signature) Date/Time

Notes: Acetone, Benzene, Ethylbenzene, Isopropyl Alcohol, Methanol, MIBK, Toluene, Xylene via TO-15. Methane via ASTM D-1946

Lab Use Only	Shipper Name	Air Bill #	Temp (°C)	Condition	Custody Seals Intact?	Work Order #
	Fed Ex	7721 9049 5206	NA	Good	Yes No None	1412216

Form 1293 rev.11

@ Air Toxics Ltd	Title: Bag Dilution Form			Release Date: 3/08/10
	Form #: F1.21	Revision #: 1	Revision Date: 10/17/03	Page #: 1 of 1

Bag Dilution Form

Workorder #: 1412216A

Date Prepared: 12/19/14 **Expiration Date:** 12/21/14 **Initials:** WD

Sample ID	Canister #	Vol. N_2 Added (mL)	Vol. N_2 Removed (mL)	Vol. Sample Added (mL)	Final Dilution Factor
1412216-06A	1L1702	500mL	5mL	5mL	100X
-07A	1L1556	500mL	10mL	10mL	50X
-08A	2034	500mL	2mL	2mL	250X

WD 12/19/14

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SAMPLE RECEIPT SUMMARY

WORKORDER 1412216A

Client

Mr. Terry Taylor
Anderson Mulholland &
Associates, Inc.
110 Corporate Park Drive
White Plains, NY 10604

Phone

(914) 251-0400

Fax

(914) 251-1286

Sales Rep: N/A

Date Promised: 12/24/14
Date Completed: 12/24/14
Date Received: 12/12/14
PO#:
Project#: Building 5 VI BMS Humacao

Total $: $ 1,511.00
Logged By: DM

Fraction	Sample #	Analysis	Collected	Receipt Vac./Pres.	Amount$
01A	B5SS-7 (2014)	TO-15	12/10/2014	5.1 "Hg	$120.00
02A	B5SS-4 (2014)	TO-15	12/10/2014	6.5 "Hg	$120.00
03A	B5SS-6 (2014)	TO-15	12/10/2014	5.1 "Hg	$120.00
04A	B5SS-2 (2014)	TO-15	12/11/2014	2.2 "Hg	$120.00
05A	B5SS-3 (2014)	TO-15	12/11/2014	4.5 "Hg	$120.00
06A	B5SS-5 (2014)	TO-15	12/11/2014	4.7 "Hg	$120.00
07A	B5SS-1 (2014)	TO-15	12/11/2014	5.1 "Hg	$120.00
08A	B5SS-1D (2014)	TO-15	12/11/2014	4.1 "Hg	$120.00
09A	Lab Blank	TO-15	NA	NA	$0.00
09B	Lab Blank	TO-15	NA	NA	$0.00
10A	CCV	TO-15	NA	NA	$0.00
10B	CCV	TO-15	NA	NA	$0.00
11A	LCS	TO-15	NA	NA	$0.00
11AA	LCSD	TO-15	NA	NA	$0.00
11B	LCS	TO-15	NA	NA	$0.00
11BB	LCSD	TO-15	NA	NA	$0.00

Misc. Charges	1 Liter Summa Canister (100% Certified) (9) @ $40.00 each., Shipme	$360.00
	Blue Body Flow Controller (100% Certified) (9) @ $10.00 each., Ship	$90.00
	eCVP (8) @ $5.00 each.	$40.00

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.
110 Corporate Park Drive
White Plains, NY 10604

Analysis Code: TO-14A

TERMS:

Reporting Method: TO-15 (Sp)-AM&A (Puerto Rico) v2

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SAMPLE RECEIPT SUMMARY Continued

Client

Mr. Terry Taylor
Anderson Mulholland &
Associates, Inc.
110 Corporate Park Drive
White Plains, NY 10604

Phone

(914) 251-0400

Fax

(914) 251-1286

Sales Rep:

Date Promised:
Date Completed: 12/24/14
Date Received: 12/12/14
PO#:
Project#: Building 5 VI BMS Humacao

Total $: $ 1,511.00
Logged By: DM

Fraction	Sample #	Analysis	Collected	Receipt Vac./Pres.	Amount$
	Duplicate Sampling T (100% Certified) (2) @ $8.00 each.				$16.00
	High Level Sample Prep (3) @ $15.00 each.				$45.00

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.
110 Corporate Park Drive
White Plains, NY 10604

Analysis Code: TO-14A

TERMS:

Reporting Method: TO-15 (Sp)-AM&A (Puerto Rico) v2

Other Records

$$\text{Dilution Factor} = \frac{\text{Final Pressure}}{\text{Initial Vacuum}} = \frac{14.7\text{psi} + \text{Final Pressure (psi)}}{14.7\text{psi} - [\text{Init. Pressure ("Hg)})*(14.7\text{psi}/30\text{"Hg})]}$$

$$\text{Dilution Factor} = \frac{\text{Final Pressure}}{\text{Initial Pressure}} = \frac{14.7\text{psi} + \text{Final Pressure (psi)}}{14.7\text{psi} + \text{Initial Pressure (psi)}}$$

Initial Vacuum (" of Hg)	5 psi Final Pressure Dilution Factor	15 psi Final Pressure Dilution Factor
0.0	1.34	2.02
0.2	1.35	2.03
0.4	1.36	2.05
0.5	1.36	2.05
0.6	1.37	2.06
0.8	1.38	2.08
1.0	1.39	2.09
1.2	1.40	2.10
1.4	1.40	2.12
1.5	1.41	2.13
1.6	1.42	2.13
1.8	1.42	2.15
2.0	1.44	2.16
2.2	1.45	2.18
2.4	1.46	2.20
2.5	1.46	2.20
2.6	1.47	2.21
2.8	1.48	2.23
3.0	1.49	2.24
3.2	1.50	2.26
3.4	1.51	2.28
3.5	1.52	2.29
3.6	1.52	2.30
3.8	1.53	2.31
4.0	1.55	2.33
4.2	1.56	2.35
4.4	1.57	2.37
4.5	1.58	2.38
4.6	1.58	2.39
4.8	1.60	2.40
5.0	1.61	2.42
5.2	1.62	2.44
5.4	1.63	2.46
5.5	1.64	2.47
5.6	1.65	2.48
5.8	1.66	2.50
6.0	1.68	2.52
6.2	1.69	2.55
6.4	1.70	2.57
6.5	1.71	2.58
6.6	1.72	2.59
6.8	1.73	2.61
7.0	1.75	2.64
7.2	1.76	2.66
7.4	1.78	2.68
7.5	1.79	2.69
7.6	1.79	2.70

Initial Vacuum (" of Hg)	5 psi Final Pressure Dilution Factor	15 psi Final Pressure Dilution Factor
7.7	1.80	2.72
7.8	1.81	2.73
8.0	1.83	2.76
8.2	1.84	2.78
8.4	1.86	2.81
8.5	1.87	2.82
8.6	1.88	2.83
8.8	1.90	2.86
9.0	1.91	2.89
9.2	1.93	2.91
9.4	1.95	2.94
9.5	1.96	2.96
9.6	1.97	2.97
9.8	1.99	3.00
10.0	2.01	3.03
10.2	2.03	3.06
10.4	2.05	3.09
10.5	2.06	3.11
10.6	2.07	3.12
10.8	2.09	3.16
11.0	2.12	3.19
11.2	2.14	3.22
11.4	2.16	3.26
11.5	2.17	3.28
11.6	2.18	3.29
11.8	2.21	3.33
12.0	2.23	3.37
12.2	2.26	3.40
12.4	2.28	3.44
12.5	2.30	3.46
12.6	2.31	3.48
12.8	2.34	3.52
13.0	2.36	3.56
13.2	2.39	3.61
13.4	2.42	3.65
13.5	2.44	3.67
13.6	2.45	3.70
13.8	2.48	3.74
14.0	2.51	3.79
14.2	2.54	3.84
14.4	2.58	3.88
14.5	2.59	3.91
14.6	2.61	3.94
14.8	2.64	3.99
15.0	2.68	4.04
15.2	2.72	4.10
15.4	2.75	4.15

Initial Vacuum (" of Hg)	5 psi Final Pressure Dilution Factor	15 psi Final Pressure Dilution Factor
15.5	2.77	4.18
15.6	2.79	4.21
15.8	2.83	4.27
16.0	2.87	4.33
16.2	2.91	4.39
16.4	2.96	4.46
16.5	2.98	4.49
16.6	3.00	4.52
16.8	3.05	4.59
17.0	3.09	4.66
17.2	3.14	4.74
17.4	3.19	4.81
17.5	3.22	4.85
17.6	3.24	4.89
17.8	3.30	4.97
18.0	3.35	5.05
18.2	3.41	5.14
18.4	3.47	5.22
18.5	3.50	5.27
18.6	3.53	5.32
18.8	3.59	5.41
19.0	3.65	5.51
19.2	3.72	5.61
19.4	3.79	5.72
19.5	3.83	5.77
19.6	3.87	5.83
19.8	3.94	5.94
20.0	4.02	6.06
20.2	4.10	6.18
20.4	4.19	6.31
20.5	4.23	6.38
20.6	4.28	6.45
20.8	4.37	6.59
21.0	4.47	6.73
21.2	4.57	6.89
21.4	4.67	7.05
21.5	4.73	7.13
21.6	4.79	7.22
21.8	4.90	7.39
22.0	5.03	7.58
22.4	5.29	7.98

Initial Vacuum (" of Hg)	5 psi Final Pressure Dilution Factor	15 psi Final Pressure Dilution Factor
22.5	5.36	8.08
22.6	5.43	8.19
22.8	5.58	8.42
23.0	5.74	8.66
23.2	5.91	8.91
23.4	6.09	9.18
23.5	6.19	9.32
23.6	6.28	9.47
23.8	6.48	9.78
24.0	6.70	10.10
24.2	6.93	10.45
24.4	7.18	10.82
24.5	7.31	11.02
24.6	7.45	11.22
24.8	7.73	11.66
25.0	8.04	12.12
25.2	8.38	12.63
25.4	8.74	13.18
25.5	8.93	13.47
25.6	9.14	13.78
25.8	9.57	14.43
26.0	10.05	15.15
26.2	10.58	15.95
26.4	11.17	16.84
26.5	11.49	17.32
26.6	11.82	17.83
26.8	12.56	18.94
27.0	13.40	20.20
27.2	14.36	21.65
27.4	15.46	23.31
27.5	16.08	24.24
27.6	16.75	25.26
27.8	18.27	27.55
28.0	20.10	30.31
28.2	22.34	33.67
28.4	25.13	37.88
28.5	26.80	40.41
28.6	28.72	43.29
28.8	33.50	50.51
29.0	40.20	60.61

Compound List

TO-15 (Sp)-AM&A (Puerto Rico) v2

CAS Number	Compound	Detection Limit ppbv	Type
71-43-2	Benzene	0.50	
100-41-4	Ethyl Benzene	0.50	
108-38-3	m,p-Xylene	0.50	
95-47-6	o-Xylene	0.50	
2037-26-5	Toluene-d8		
17060-07-0	1,2-Dichloroethane-d4		
460-00-4	4-Bromofluorobenzene		
67-63-0	2-Propanol	2.0	
67-64-1	Acetone	5.0	
108-88-3	Toluene	0.50	
108-10-1	4-Methyl-2-pentanone	0.50	

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Media Certification Report

Canister Number: 1L#1L1685 w/160ml#FC00732
Can#: 99058-1L1685
Date : 11/26/14 13:44
Data File: d112611sim.d

www.airtoxics.com
1-800-985-5955

Name	CAS	Conc.	Units
Ethyl Benzene	100-41-4	ND	ppbv
m,p-Xylene	108-38-3	ND	ppbv
Chloroform	67-66-3	ND	ppbv
Benzene	71-43-2	ND	ppbv
Bromodichloromethane	75-27-4	ND	ppbv
Naphthalene	91-20-3	ND	ppbv
o-Xylene	95-47-6	ND	ppbv
1,2-Dichloroethane-d4	17060-07-0	113.00	% Recovery
Toluene-d8	2037-26-5	110.00	% Recovery
4-Bromofluorobenzene	460-00-4	91.00	% Recovery

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Media Certification Report

Canister Number: 1L#1L1681 W/160#FC00809
Can#: 99058-1L1681
Date : 11/26/14 9:53
Data File: i112510sim.d

www.airtoxics.com
1-800-985-5955

Name	CAS	Conc.	Units
Ethyl Benzene	100-41-4	ND	ppbv
m,p-Xylene	108-38-3	ND	ppbv
Chloroform	67-66-3	ND	ppbv
Benzene	71-43-2	ND	ppbv
Bromodichloromethane	75-27-4	ND	ppbv
Naphthalene	91-20-3	ND	ppbv
o-Xylene	95-47-6	ND	ppbv
1,2-Dichloroethane-d4	17060-07-0	98.00	% Recovery
Toluene-d8	2037-26-5	104.00	% Recovery
4-Bromofluorobenzene	460-00-4	97.00	% Recovery

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Media Certification Report

Canister Number: 1L#1L1707 W/160#FC00684
Can#: 99058-1L1707
Date : 11/26/14 9:16
Data File: i112509sim.d

www.airtoxics.com
1-800-985-5955

Name	CAS	Conc.	Units
Ethyl Benzene	100-41-4	ND	ppbv
m,p-Xylene	108-38-3	ND	ppbv
Chloroform	67-66-3	ND	ppbv
Benzene	71-43-2	ND	ppbv
Bromodichloromethane	75-27-4	ND	ppbv
Naphthalene	91-20-3	ND	ppbv
o-Xylene	95-47-6	ND	ppbv
1,2-Dichloroethane-d4	17060-07-0	98.00	% Recovery
Toluene-d8	2037-26-5	106.00	% Recovery
4-Bromofluorobenzene	460-00-4	96.00	% Recovery

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Media Certification Report

Canister Number: 1L#1L1680 w/160ml#FC00
Can#: 99058-1L1680
Date : 11/26/14 14:31
Data File: i112607sim.d

www.airtoxics.com
1-800-985-5955

Name	CAS	Conc.	Units
Ethyl Benzene	100-41-4	ND	ppbv
m,p-Xylene	108-38-3	ND	ppbv
Chloroform	67-66-3	ND	ppbv
Benzene	71-43-2	ND	ppbv
Bromodichloromethane	75-27-4	ND	ppbv
Naphthalene	91-20-3	ND	ppbv
o-Xylene	95-47-6	ND	ppbv
1,2-Dichloroethane-d4	17060-07-0	98.00	% Recovery
Toluene-d8	2037-26-5	102.00	% Recovery
4-Bromofluorobenzene	460-00-4	97.00	% Recovery

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Media Certification Report

Canister Number: 1L#1L1706 w/160ml#FC00437
Can#: 99058-1L1706
Date : 11/26/14 14:21
Data File: d112612sim.d

www.airtoxics.com
1-800-985-5955

Name	CAS	Conc.	Units
Ethyl Benzene	100-41-4	ND	ppbv
m,p-Xylene	108-38-3	ND	ppbv
Chloroform	67-66-3	ND	ppbv
Benzene	71-43-2	ND	ppbv
Bromodichloromethane	75-27-4	ND	ppbv
Naphthalene	91-20-3	ND	ppbv
o-Xylene	95-47-6	ND	ppbv
1,2-Dichloroethane-d4	17060-07-0	107.00	% Recovery
Toluene-d8	2037-26-5	104.00	% Recovery
4-Bromofluorobenzene	460-00-4	92.00	% Recovery

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Media Certification Report

Canister Number: 1L#1L1702 w/160ml#FC00469
Can#: 99058-1L1702
Date : 11/26/14 14:57
Data File: d112613sim.d

www.airtoxics.com
1-800-985-5955

Name	CAS	Conc.	Units
Ethyl Benzene	100-41-4	ND	ppbv
m,p-Xylene	108-38-3	ND	ppbv
Chloroform	67-66-3	ND	ppbv
Benzene	71-43-2	ND	ppbv
Bromodichloromethane	75-27-4	ND	ppbv
Naphthalene	91-20-3	ND	ppbv
o-Xylene	95-47-6	ND	ppbv
1,2-Dichloroethane-d4	17060-07-0	120.00	% Recovery
Toluene-d8	2037-26-5	108.00	% Recovery
4-Bromofluorobenzene	460-00-4	95.00	% Recovery

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Media Certification Report

Canister Number: 1L#1L1556 w/Batch
Can#: 99058-1L1556
Date : 11/26/14 10:07
Data File: d112605sima.d

www.airtoxics.com
1-800-985-5955

Name	CAS	Conc.	Units
Ethyl Benzene	100-41-4	ND	ppbv
m,p-Xylene	108-38-3	ND	ppbv
Chloroform	67-66-3	ND	ppbv
Benzene	71-43-2	ND	ppbv
Bromodichloromethane	75-27-4	ND	ppbv
Naphthalene	91-20-3	ND	ppbv
o-Xylene	95-47-6	ND	ppbv
1,2-Dichloroethane-d4	17060-07-0	107.00	% Recovery
Toluene-d8	2037-26-5	103.00	% Recovery
4-Bromofluorobenzene	460-00-4	99.00	% Recovery

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Media Certification Report

Canister Number: 1L#2034 w/Batch
Can#: 99058-2034
Date : 11/25/14 11:40
Data File: d112508sima.d

www.airtoxics.com
1-800-985-5955

Name	CAS	Conc.	Units
Ethyl Benzene	100-41-4	ND	ppbv
m,p-Xylene	108-38-3	ND	ppbv
Chloroform	67-66-3	ND	ppbv
Benzene	71-43-2	ND	ppbv
Bromodichloromethane	75-27-4	ND	ppbv
Naphthalene	91-20-3	ND	ppbv
o-Xylene	95-47-6	ND	ppbv
1,2-Dichloroethane-d4	17060-07-0	101.00	% Recovery
Toluene-d8	2037-26-5	103.00	% Recovery
4-Bromofluorobenzene	460-00-4	88.00	% Recovery

Eurofins Air Toxics, Inc.	Data Review Checklist			Release Date: 07/14/14
Workorder # 1412216A	Form F1.27	Revision #9	Revision date: 07/14/14	Page 1 of 2

S1	S2	S3	S4	D	Section 1 – Spec Out				
					Initials/Instrument/Date	S1: MD 12/18/14 MSD-14	S2: MJDP 12/22/14	S3:	S4:
✓	✓				Daily QC and ICAL met Criteria				
✓	✓				Lumen QC and ICAL evaluation report initialed and in folder				
NA	NA				Manual integrations included and approved				
✓	✓				Chain of Custody verified for special comments (add comments below)				
✓	✓				Non standard Target sublist printed				

Profile, analyses, reporting, special notes and unusual circumstances:

Short list: ø out QC
ø out QC

A1	A2	A3	A4	D	Section 2 – Sample Analysis				
					Initials/Date	A1: MD 12/19/14	A2: 12/22/14	A3:	A4:
✓	✓				Internal Standard/Surrogate Recoveries, Dilution Factors, Load Volumes, Initial/Final Pressures, and Canister #s Verified				
✓	✓				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) have been evaluated for comparability and/or samples have been checked for trends (Inf/Eff).				
✓	✓				All runs have been evaluated for potential carry-over (TPHg/non-Target/over-range compounds etc)				

Analytical and special notes:

A1: 05A-08A DILTC, 06A, 07A, 08A Bag DIL ✓
A2: 04A-04A Full load ✓

D1	D2	D3	D4	T	3T	Section 3 – Target Data Reduction	Technical Review Needed? Circle one: Yes/No		T:	
						Initials/Instrument/Date MD 14, P	D1: HAB 12/24/14	D2:	D3:	D4:
NA						CAR # (if applicable)				
NA						Spectra Verified *(documentation of spectral defense included if applicable)*				
						TICs resemble reference spectra/ TICs between sample dups. are consistent *(if applicable)*				
NA						Lab Narrative is correct				
						TPH/NMOC calculations complete and included in folder				

Special notes: -07A/-08A → different coll times → not FD → RPDs are out 3 bag dil

A	3T	Section 4- Atlas Data Entry	Lumen verified and included in folder	Circle one: Yes/No
		Initials/Date: HAB 12/24/14	3rd Tier: *(needed only for DOD or per client request)*	
		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: updated target list (no Naph)

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