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Electronic Comprehensive Validation Package (eCVP)

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COMPREHENSIVE VALIDATION PACKAGE

Modified TO-15

INVENTORY SHEET

Work Order #: 1412152AR1

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Comments:

Completed by:

Kara McKiernan	Kara McKiernan / Document Control	7/2/15
(Signature)	(Print Name & Title)	(Date)

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WORK ORDER #: 1412152AR1

Work Order Summary

CLIENT:	Mr. Terry Taylor Anderson Mulholland & Associates, Inc. 2700 Westchester Avenue Suite 417 Purchase, NY 10577	**BILL TO:**	Accounts Payable Anderson Mulholland & Associates, Inc. 2700 Westchester Avenue Suite 417 Purchase, NY 10577
PHONE:	(914) 251-0400	**P.O. #**	
FAX:		**PROJECT #**	Building 5 VI BMS Humacao
DATE RECEIVED:	12/10/2014	**CONTACT:**	Brian Whittaker
DATE COMPLETED:	12/23/2014		
DATE REISSUED:	07/01/2015		

FRACTION #	NAME	TEST	RECEIPT VAC./PRES.	FINAL PRESSURE
01A	B5IA- 8 (2014)	Modified TO-15	6.9 "Hg	4.9 psi
02A	B5IA-10 (2014)	Modified TO-15	7.6 "Hg	5.1 psi
03A	B5IA-6 (2014)	Modified TO-15	4.7 "Hg	4.9 psi
04A	B5IA-7 (2014)	Modified TO-15	8 "Hg	4.5 psi
05A	B5IA-2 (2014)	Modified TO-15	6.7 "Hg	5.2 psi
06A	B5IA-1 (2014)	Modified TO-15	7.3 "Hg	4.3 psi
07A	B5IA-AA (2014)	Modified TO-15	5.5 "Hg	5.3 psi
08A	B5IA-4 (2014)	Modified TO-15	6.9 "Hg	5 psi
09A	Lab Blank	Modified TO-15	NA	NA
10A	CCV	Modified TO-15	NA	NA
11A	LCS	Modified TO-15	NA	NA
11AA	LCSD	Modified TO-15	NA	NA

CERTIFIED BY: Heidi Hayes

Technical Director

DATE: 07/01/15

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
(916) 985-1000 . (800) 985-5955 . FAX (916) 985-1020

LABORATORY NARRATIVE
Modified TO-15
Anderson Mulholland & Associates, Inc.
Workorder# 1412152AR1

Eight 6 Liter Summa Canister (100% Certified) samples were received on December 10, 2014. The laboratory performed analysis via modified 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.

Method modifications taken to run these samples are summarized in the table below. Specific project requirements may over-ride the ATL modifications.

Requirement	***TO-15***	***ATL Modifications***
Initial Calibration	</=30% RSD with 2 compounds allowed out to < 40% RSD	</=30% RSD with 4 compounds allowed out to < 40% RSD
Blank and standards	Zero Air	UHP Nitrogen provides a higher purity gas matrix than zero air

Receiving Notes

There were no receiving discrepancies.

Analytical Notes

Dilution was performed on sample B5IA-1 (2014) due to the presence of high level target species.

Detected results for Toluene, 2-Propanol, and Acetone in samples B5IA-6 (2014), B5IA-7 (2014), B5IA-2 (2014) and B5IA-1 (2014) exceed the instrument calibration range and are considered estimated values.

Detected results for Toluene, 2-Propanol, 4-Methyl-2-pentanone and Acetone in sample B5IA-4 (2014) exceed the instrument calibration range and are considered estimated values.

The work order was re-issued on July 1, 2015 for the following reasons:

1. To report additional compounds per client's request. While the initial report met the laboratory data quality requirements for the originally requested compounds, the additional compounds were not evaluated for quality compliance at the time of sample analysis. As a result, the re-issued report contains qualified data for several of the added compounds.

2. All Quality Control Limit exceedances and affected sample results are noted by flags. Each flag is defined at the bottom of this Case Narrative and on each Sample Result Summary page.

3. To report estimated values for target compound hits that are below the Reporting Limit but greater than the Method Detection Limit. Concentrations that are below the level at which the canister was certified may be false positives.

4.
Due to the linear calibration range of the instrument, the reporting limit for Freon 12 and alpha-Chlorotoluene was raised from 0.1ppbv to 0.5ppbv.

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)	Sample Extract Date Analyzed	Sample Extract Holding Time (Days)	Sample Condition
B5IA- 8 (2014)	1412152AR1-01	12/ 9/2014	12/10/2014	NA	7	12/16/2014	NA	Good
B5IA-10 (2014)	1412152AR1-02	12/ 9/2014	12/10/2014	NA	7	12/16/2014	NA	Good
B5IA-6 (2014)	1412152AR1-03	12/ 9/2014	12/10/2014	NA	7	12/16/2014	NA	Good
B5IA-7 (2014)	1412152AR1-04	12/ 9/2014	12/10/2014	NA	7	12/16/2014	NA	Good
B5IA-2 (2014)	1412152AR1-05	12/ 9/2014	12/10/2014	NA	7	12/16/2014	NA	Good
B5IA-1 (2014)	1412152AR1-06	12/ 9/2014	12/10/2014	NA	7	12/16/2014	NA	Good
B5IA-AA (2014)	1412152AR1-07	12/ 9/2014	12/10/2014	NA	8	12/17/2014	NA	Good
B5IA-4 (2014)	1412152AR1-08	12/ 9/2014	12/10/2014	NA	8	12/17/2014	NA	Good
Lab Blank	1412152AR1-09	NA	NA	NA	NA	12/16/2014	NA	Good
CCV	1412152AR1-10	NA	NA	NA	NA	12/16/2014	NA	Good
LCS	1412152AR1-11	NA	NA	NA	NA	12/16/2014	NA	Good
LCSD	1412152AR1-11	NA	NA	NA	NA	12/16/2014	NA	Good

Sample Results and Raw Data

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

Client Sample ID: B5IA- 8 (2014)

Lab ID#: 1412152AR1-01A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.86	0.46 J	4.3	2.3 J
Chloromethane	0.86	0.85 J	1.8	1.8 J
1,3-Butadiene	0.17	0.056 J	0.38	0.12 J
Freon 11	0.17	0.22	0.97	1.2
Ethanol	0.86	68 J0	1.6	130 J0
Freon 113	0.17	0.053 J	1.3	0.41 J
Acetone	0.86	45	2.0	100
2-Propanol	0.86	30	2.1	73
Methylene Chloride	0.35	10	1.2	36
Methyl tert-butyl ether	0.17	0.25	0.62	0.91
Hexane	0.17	0.16 J	0.61	0.58 J
2-Butanone (Methyl Ethyl Ketone)	0.86	0.61 J	2.6	1.8 J
Tetrahydrofuran	0.86	0.70 J	2.6	2.1 J
Chloroform	0.17	0.049 J	0.84	0.24 J
Carbon Tetrachloride	0.17	0.080 J	1.1	0.50 J
2,2,4-Trimethylpentane	0.86	0.55 J	4.0	2.6 J
Benzene	0.17	0.13 J	0.55	0.42 J
Heptane	0.17	0.43	0.71	1.8
4-Methyl-2-pentanone	0.17	10	0.71	43
Toluene	0.17	21	0.65	80
Ethyl Benzene	0.17	2.7	0.75	12
m,p-Xylene	0.17	10	0.75	44
o-Xylene	0.17	1.0	0.75	4.5
Styrene	0.17	0.15 J	0.74	0.65 J
4-Ethyltoluene	0.17	0.078 J	0.85	0.38 J
1,2,4-Trimethylbenzene	0.17	0.17 J	0.85	0.84 J

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Client Sample ID: B5IA- 8 (2014)

Lab ID#: 1412152AR1-01A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**v121616r1**	**Date of Collection:**	**12/9/14 11:26:00 AM**
Dil. Factor:	**1.73**	**Date of Analysis:**	**12/16/14 07:01 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.86	0.46 J	4.3	2.3 J
Freon 114	0.17	Not Detected	1.2	Not Detected
Chloromethane	0.86	0.85 J	1.8	1.8 J
Vinyl Chloride	0.17	Not Detected	0.44	Not Detected
1,3-Butadiene	0.17	0.056 J	0.38	0.12 J
Bromomethane	0.86	Not Detected	3.4	Not Detected
Chloroethane	0.86	Not Detected	2.3	Not Detected
Freon 11	0.17	0.22	0.97	1.2
Ethanol	0.86	68 J0	1.6	130 J0
Freon 113	0.17	0.053 J	1.3	0.41 J
1,1-Dichloroethene	0.17	Not Detected	0.68	Not Detected
Acetone	0.86	45	2.0	100
2-Propanol	0.86	30	2.1	73
Carbon Disulfide	0.86	Not Detected	2.7	Not Detected
3-Chloropropene	0.86	Not Detected	2.7	Not Detected
Methylene Chloride	0.35	10	1.2	36
Methyl tert-butyl ether	0.17	0.25	0.62	0.91
trans-1,2-Dichloroethene	0.17	Not Detected	0.68	Not Detected
Hexane	0.17	0.16 J	0.61	0.58 J
1,1-Dichloroethane	0.17	Not Detected	0.70	Not Detected
2-Butanone (Methyl Ethyl Ketone)	0.86	0.61 J	2.6	1.8 J
cis-1,2-Dichloroethene	0.17	Not Detected	0.68	Not Detected
Tetrahydrofuran	0.86	0.70 J	2.6	2.1 J
Chloroform	0.17	0.049 J	0.84	0.24 J
1,1,1-Trichloroethane	0.17	Not Detected	0.94	Not Detected
Cyclohexane	0.17	Not Detected	0.60	Not Detected
Carbon Tetrachloride	0.17	0.080 J	1.1	0.50 J
2,2,4-Trimethylpentane	0.86	0.55 J	4.0	2.6 J
Benzene	0.17	0.13 J	0.55	0.42 J
1,2-Dichloroethane	0.17	Not Detected	0.70	Not Detected
Heptane	0.17	0.43	0.71	1.8
Trichloroethene	0.17	Not Detected	0.93	Not Detected
1,2-Dichloropropane	0.17	Not Detected	0.80	Not Detected
1,4-Dioxane	0.17	Not Detected	0.62	Not Detected
Bromodichloromethane	0.17	Not Detected	1.2	Not Detected
cis-1,3-Dichloropropene	0.17	Not Detected	0.78	Not Detected
4-Methyl-2-pentanone	0.17	10	0.71	43
Toluene	0.17	21	0.65	80
trans-1,3-Dichloropropene	0.17	Not Detected	0.78	Not Detected
1,1,2-Trichloroethane	0.17	Not Detected	0.94	Not Detected
Tetrachloroethene	0.17	Not Detected	1.2	Not Detected
2-Hexanone	0.86	Not Detected	3.5	Not Detected

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Client Sample ID: B5IA- 8 (2014)

Lab ID#: 1412152AR1-01A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**v121616r1**	**Date of Collection:**	**12/9/14 11:26:00 AM**
Dil. Factor:	**1.73**	**Date of Analysis:**	**12/16/14 07:01 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Dibromochloromethane	0.17	Not Detected	1.5	Not Detected
1,2-Dibromoethane (EDB)	0.17	Not Detected	1.3	Not Detected
Chlorobenzene	0.17	Not Detected	0.80	Not Detected
Ethyl Benzene	0.17	2.7	0.75	12
m,p-Xylene	0.17	10	0.75	44
o-Xylene	0.17	1.0	0.75	4.5
Styrene	0.17	0.15 J	0.74	0.65 J
Bromoform	0.17	Not Detected	1.8	Not Detected
Cumene	0.17	Not Detected	0.85	Not Detected
1,1,2,2-Tetrachloroethane	0.17	Not Detected	1.2	Not Detected
Propylbenzene	0.17	Not Detected	0.85	Not Detected
4-Ethyltoluene	0.17	0.078 J	0.85	0.38 J
1,3,5-Trimethylbenzene	0.17	Not Detected	0.85	Not Detected
1,2,4-Trimethylbenzene	0.17	0.17 J	0.85	0.84 J
1,3-Dichlorobenzene	0.17	Not Detected UJ	1.0	Not Detected UJ
1,4-Dichlorobenzene	0.17	Not Detected UJ	1.0	Not Detected UJ
alpha-Chlorotoluene	0.86	Not Detected UJ	4.5	Not Detected UJ
1,2-Dichlorobenzene	0.17	Not Detected UJ	1.0	Not Detected UJ
1,2,4-Trichlorobenzene	0.86	Not Detected	6.4	Not Detected
Hexachlorobutadiene	0.86	Not Detected UJ	9.2	Not Detected UJ
Naphthalene	0.86	Not Detected	4.5	Not Detected

J = Estimated value.
J0 = Estimated value due to bias in the CCV.
UJ = Analyte associated with low bias in the CCV and/or LCS.
Container Type: 6 Liter Summa Canister (100% Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	111	70-130
Toluene-d8	106	70-130
4-Bromofluorobenzene	98	70-130

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TO15/Modified TO-14A

Data file : /chem/msdv.i/16Dec2014.b/v121616r1.d
Lab Smp Id: 1412152AR1-01A
Inj Date : 16-DEC-2014 19:01
Operator : sn Inst ID: msdv.i
Smp Info : 250ml #33654
Misc Info : 6.9"Hg -> 4.9psi
Comment : Low Level GC-MS
Method : /chem/msdv.i/16Dec2014.b/v14l1006d.m
Meth Date : 01-Jul-2015 09:03 sblack Quant Type: ISTD
Cal Date : 03-NOV-2014 11:17 Cal File: v110307.d
Als bottle: 1
Dil Factor: 1.73000
Integrator: HP RTE Compound Sublist: And19256r1.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
* 54 Bromochloromethane							CAS #: 74-97-5	
15.933	15.933	(1.000)	130	89897	5.00000		80.00- 120.00	100.00
15.933	15.933	(1.000)	128	73976			47.55- 107.55	82.29
15.933	15.933	(1.000)	49	238981			213.64- 273.64	265.84
* 71 1,4-Difluorobenzene							CAS #: 540-36-3	
17.305	17.305	(1.000)	114	413726	5.00000		80.00- 120.00	100.00
17.305	17.305	(1.000)	88	69015			0.00- 46.17	16.68
* 92 Chlorobenzene-d5							CAS #: 3114-55-4	
22.205	22.205	(1.000)	117	328554	5.00000		80.00- 120.00	100.00
22.205	22.205	(1.000)	82	205702			28.56- 88.56	62.61
$ 65 1,2-Dichloroethane-d4							CAS #: 17060-07-0	
16.756	16.756	(1.052)	65	183296	5.55571	5.556	80.00- 120.00	100.00
16.756	16.756	(1.052)	67	93231			28.37- 88.37	50.86
$ 80 Toluene-d8							CAS #: 2037-26-5	
19.879	19.879	(1.149)	98	420060	5.28085	5.281	80.00- 120.00	100.00
19.856	19.879	(1.147)	70	54219			0.00- 41.90	12.91

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

$  80 Toluene-d8 (continued)
 19.856  19.879 (1.147)   100    268500                    34.60-  94.60    63.92
-------------------------------------------------------------------------------
$ 106 Bromofluorobenzene                            CAS #: 460-00-4
 23.704  23.704 (1.067)   174    138094 4.88736    4.887  80.00- 120.00   100.00
 23.678  23.704 (1.066)    95    191240                  113.85- 173.85   138.48
 23.704  23.704 (1.067)   176    124995                   68.89- 128.89    90.51
-------------------------------------------------------------------------------
    4 Dichlorodifluoromethane/Fr12                  CAS #: 75-71-8
  5.278   5.202 (0.331)    85     22672 0.26919   0.4657  80.00- 120.00   100.00(a)
  5.240   5.202 (0.329)    87      7347                    1.57-  61.57    32.41
-------------------------------------------------------------------------------
    8 Chloromethane                                 CAS #: 74-87-3
  7.128   7.052 (0.447)    50     24992 0.49240   0.8518  80.00- 120.00   100.00
  7.128   7.052 (0.447)    52      7164                    1.81-  61.81    28.66
-------------------------------------------------------------------------------
   11 1,3-Butadiene                                 CAS #: 106-99-0
  8.257   8.257 (0.518)    54      1202 0.03237  0.05600  80.00- 120.00   100.00(a)
  8.288   8.257 (0.520)    39      3543                  107.15- 167.15   294.75
-------------------------------------------------------------------------------
   20 Trichlorofluoromethane/Fr11                   CAS #: 75-69-4
 11.184  11.183 (0.702)   101     10810 0.12469   0.2157  80.00- 120.00   100.00
 11.184  11.183 (0.702)   103      6598                   34.11-  94.11    61.04
-------------------------------------------------------------------------------
   24 Ethanol                                       CAS #: 64-17-5
 12.101  12.101 (0.760)    45    728110 39.6191   68.541  80.00- 120.00   100.00
 12.101  12.101 (0.760)    46    283122                    8.51-  68.51    38.88
 12.101  12.101 (0.760)    43    150401                    0.00-  54.10    20.66
-------------------------------------------------------------------------------
   28 Freon 113                                     CAS #: 76-13-1
 12.568  12.568 (0.789)   151      1608 0.03081  0.05331  80.00- 120.00   100.00(a)
 12.596  12.568 (0.791)   153      1137                   33.65-  93.65    70.69
 12.568  12.568 (0.789)   101      2877                   96.37- 156.37   178.88
-------------------------------------------------------------------------------
   31 Acetone                                       CAS #: 67-64-1
 12.816  12.816 (0.804)    58    547810 25.7916   44.619  80.00- 120.00   100.00
 12.816  12.816 (0.804)    43   2456918                  413.15- 473.15   448.50
-------------------------------------------------------------------------------
   34 2-Propanol                                    CAS #: 67-63-0
 13.173  13.173 (0.827)    45   1680468 17.0860   29.559  80.00- 120.00   100.00
 13.173  13.173 (0.827)    43    335092                    0.00-  50.74    19.94
 13.173  13.173 (0.827)    59     47011                    0.00-  32.83     2.80
-------------------------------------------------------------------------------
   37 Methylene Chloride                            CAS #: 75-09-2
 13.667  13.640 (0.858)    84    166258 6.08335   10.524  80.00- 120.00   100.00
 13.640  13.640 (0.856)    49    388875                  212.37- 272.37   233.90
```

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
37 Methylene Chloride (continued)							
13.640	13.640 (0.856)	51	111570			43.31- 103.31	67.11
39 MTBE					CAS #: 1634-04-4		
13.997	13.996 (0.878)	73	14247	0.14530	0.2514	80.00- 120.00	100.00
13.942	13.996 (0.875)	57	9869			2.99- 62.99	69.27
13.997	13.996 (0.878)	41	7265			12.12- 72.12	51.00
43 Hexane					CAS #: 110-54-3		
14.381	14.381 (0.903)	57	7476	0.09528	0.1648	80.00- 120.00	100.00(a)
14.408	14.381 (0.904)	43	10037			57.65- 117.65	134.26
14.381	14.381 (0.903)	86	779			0.00- 40.67	10.42
51 2-Butanone					CAS #: 78-93-3		
15.592	15.571 (0.979)	72	5599	0.35417	0.6127	80.00- 120.00	100.00(a)
15.592	15.571 (0.979)	43	35171			794.80- 854.80	628.12
15.592	15.571 (0.979)	57	2702			18.01- 78.01	48.26
53 Tetrahydrofuran					CAS #: 109-99-9		
15.933	15.933 (1.000)	42	32900	0.40385	0.6987	80.00- 120.00	100.00(a)
15.933	15.933 (1.000)	71	6019			0.00- 49.03	18.30
15.933	15.933 (1.000)	72	7092			0.00- 51.35	21.56
55 Chloroform					CAS #: 67-66-3		
15.995	15.995 (1.004)	83	2134	0.02817	0.04873	80.00- 120.00	100.00(a)
15.995	15.995 (1.004)	85	1481			33.33- 93.33	69.41
59 Carbon Tetrachloride					CAS #: 56-23-5		
16.457	16.457 (1.033)	119	3522	0.04641	0.08030	80.00- 120.00	100.00(a)
16.457	16.457 (1.033)	117	4675			69.67- 129.67	132.71
	Sum of Peak Concentrations =				0.08030		
63 2,2,4-Trimethylpentane					CAS #: 540-84-1		
16.728	16.728 (1.050)	56	26600	0.32035	0.5542	80.00- 120.00	100.00(a)
16.728	16.728 (1.050)	57	76248			258.69- 318.69	286.64
16.728	16.728 (1.050)	41	28103			79.91- 139.91	105.65
64 Benzene					CAS #: 71-43-2		
16.756	16.756 (0.968)	78	9290	0.07609	0.1316	80.00- 120.00	100.00(a)
16.756	16.756 (0.968)	77	3251			0.00- 53.73	35.00
69 Heptane					CAS #: 142-82-5		
16.975	16.948 (0.981)	57	13105	0.24905	0.4308	80.00- 120.00	100.00
16.975	16.948 (0.981)	100	2893			0.00- 51.27	22.08
16.975	16.948 (0.981)	43	35418			235.24- 295.24	270.27

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
79 4-Methyl-2-pentanone					CAS #: 108-10-1		
19.588	19.587 (1.132)	43	1052953	6.10997	10.570	80.00- 120.00	100.00
19.588	19.587 (1.132)	58	275477			0.00- 57.24	26.16
19.588	19.587 (1.132)	85	88731			0.00- 38.20	8.43
81 Toluene					CAS #: 108-88-3		
19.991	19.991 (1.155)	91	1659439	12.3132	21.302	80.00- 120.00	100.00
19.991	19.991 (1.155)	92	960703			28.60- 88.60	57.89
95 Ethyl Benzene					CAS #: 100-41-4		
22.315	22.315 (1.005)	106	75220	1.55326	2.687	80.00- 120.00	100.00
22.315	22.315 (1.005)	91	257546			292.36- 352.36	342.39
96 m,p-Xylene					CAS #: 108-38-3		
22.452	22.452 (1.011)	106	279094	5.84465	10.111	80.00- 120.00	100.00
22.452	22.452 (1.011)	91	583794			164.15- 224.15	209.17
100 o-Xylene					CAS #: 95-47-6		
23.001	23.001 (1.036)	106	26709	0.60109	1.040	80.00- 120.00	100.00
23.001	23.001 (1.036)	91	57841			186.63- 246.63	216.56
101 Styrene					CAS #: 100-42-5		
23.029	23.029 (1.037)	104	5719	0.08798	0.1522	80.00- 120.00	100.00(a)
23.001	23.029 (1.036)	78	6377			28.70- 88.70	111.51
113 4-Ethyltoluene					CAS #: 622-96-8		
24.013	24.039 (1.081)	105	3809	0.04511	0.07804	80.00- 120.00	100.00(a)
24.013	24.039 (1.081)	120	1850			0.18- 60.18	48.58
120 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
24.529	24.529 (1.105)	105	5656	0.09905	0.1714	80.00- 120.00	100.00(a)
24.529	24.529 (1.105)	120	1840			19.27- 79.27	32.53

QC Flag Legend

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

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdv.i
Lab File ID: v121616r1.d
Lab Smp Id: 1412152AR1-01A
Analysis Type: VOA
Quant Type: ISTD
Operator: sn
Method File: /chem/msdv.i/16Dec2014.b/v14l1006d.m
Misc Info: 6.9"Hg -> 4.9psi

Calibration Date: 16-DEC-2014
Calibration Time: 08:42

Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
54 Bromochloromethan	109722	65833	153611	89897	-18.07
71 1,4-Difluorobenze	445503	267302	623704	413726	-7.13
92 Chlorobenzene-d5	361081	216649	505513	328554	-9.01

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
54 Bromochloromethan	15.93	15.60	16.26	15.93	0.00
71 1,4-Difluorobenze	17.30	16.97	17.63	17.30	0.00
92 Chlorobenzene-d5	22.21	21.88	22.54	22.21	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: 01-Jul-2015 12:17

Eurofins Air Toxics Inc.

RECOVERY REPORT

Client Name:
Client SDG: 16Dec2014
Sample Matrix: GAS
Fraction: VOA
Lab Smp Id: 1412152AR1-01A
Level: LOW
Operator: sn
Data Type: MS DATA
SampleType: SAMPLE
SpikeList File: AT12.spk
Quant Type: ISTD
Sublist File: And19256r1.sub
Method File: /chem/msdv.i/16Dec2014.b/v14l1006d.m
Misc Info: 6.9"Hg -> 4.9psi

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 65 1,2-Dichloroethane	5.000	5.556	111.11	70-130
$ 80 Toluene-d8	5.000	5.281	105.62	70-130
$ 106 Bromofluorobenzene	5.000	4.887	97.75	70-130

Data File: /chem/msdv.i/16Dec2014.b/v121616r1.d

Date : 16-DEC-2014 19:01

Client ID:

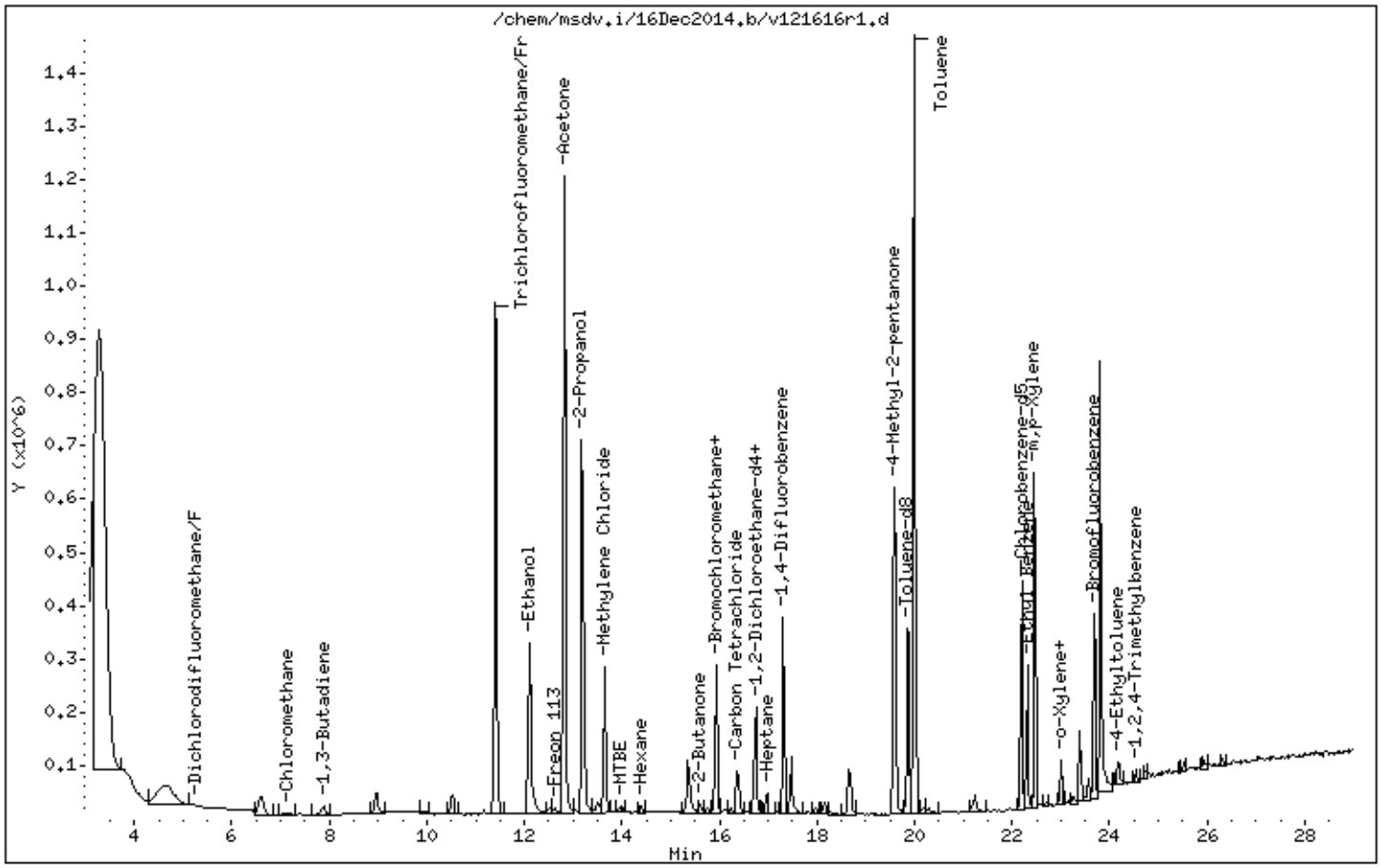
Instrument: msdv.i

Sample Info: 250ml #33654

Operator: sn

Column phase: RTx-624

Column diameter: 0.32



Data File: /chem/msdv.i/16Dec2014.b/v121616r1.d

Date : 16-DEC-2014 19:01

Client ID:

Instrument: msdv.i

Sample Info: 250ml #33654

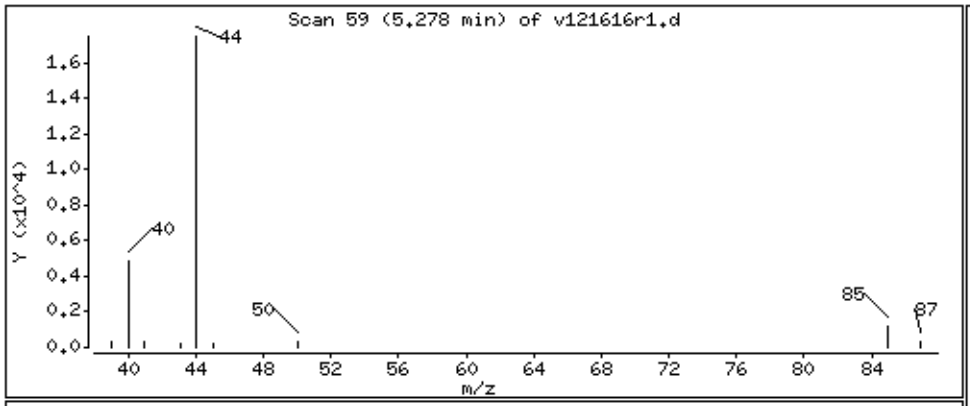
Operator: sn

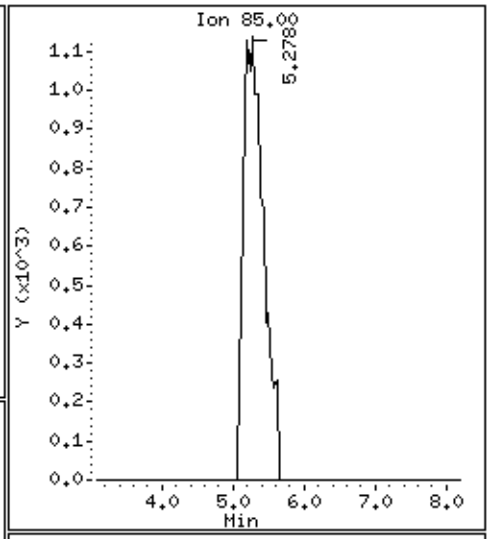
Column phase: RTx-624

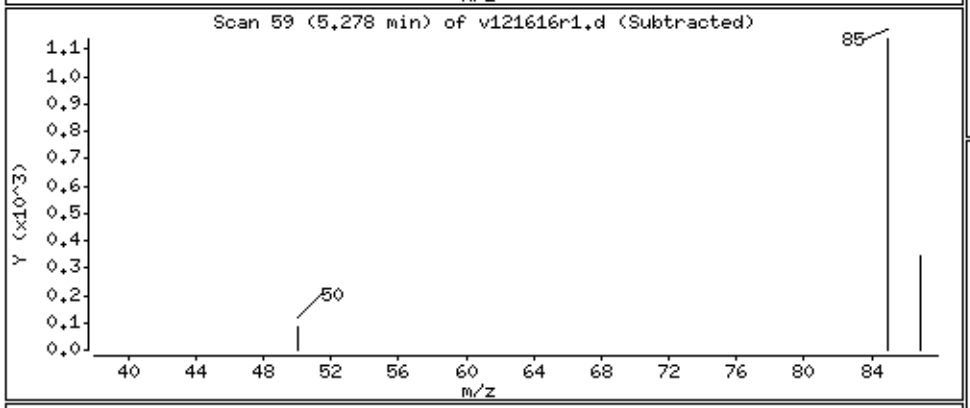
Column diameter: 0.32

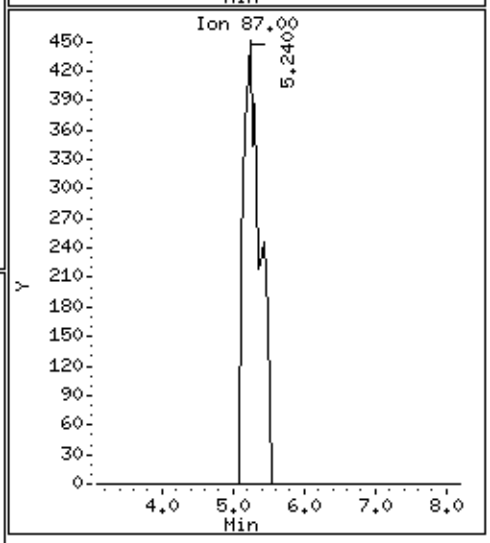
4 Dichlorodifluoromethane/Fr12

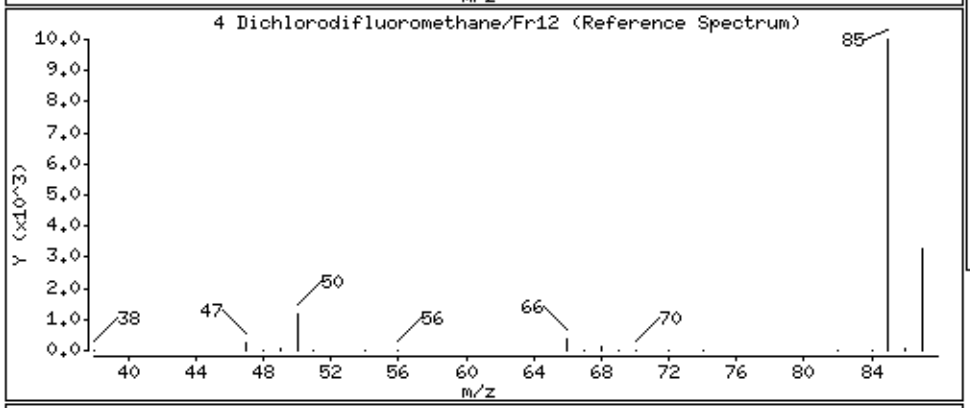
Concentration: 0.4657 PPBV

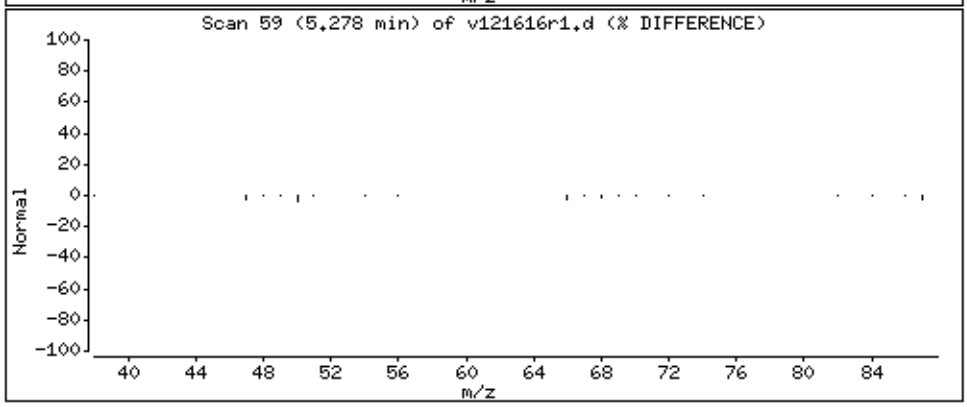












Data File: /chem/msdv.i/16Dec2014.b/v121616r1.d

Date : 16-DEC-2014 19:01

Client ID:

Instrument: msdv.i

Sample Info: 250ml #33654

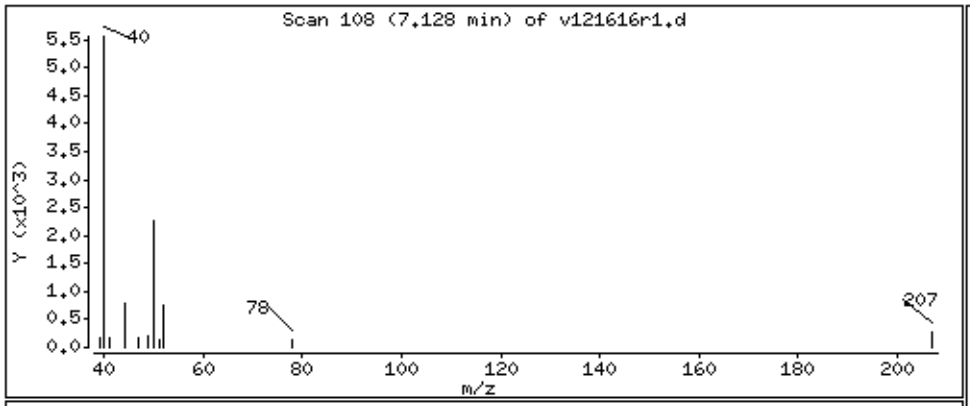
Operator: sn

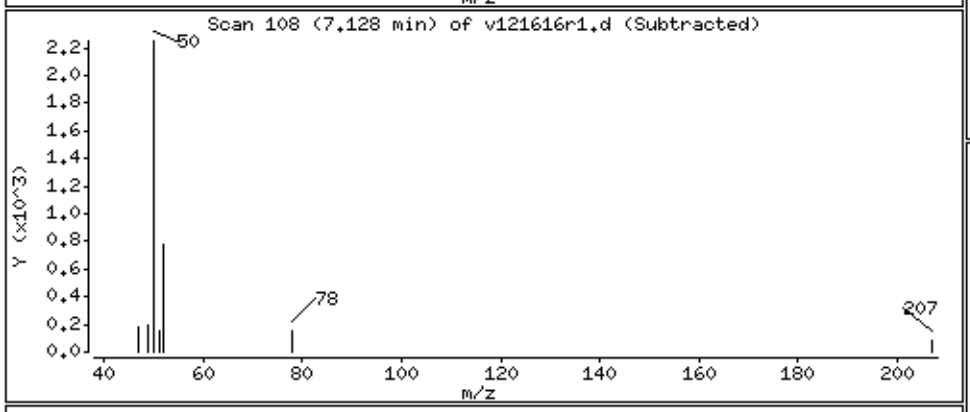
Column phase: RTx-624

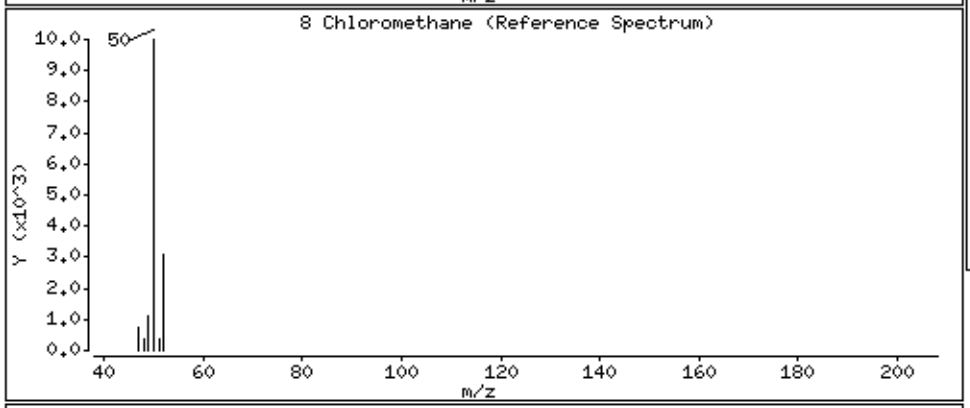
Column diameter: 0.32

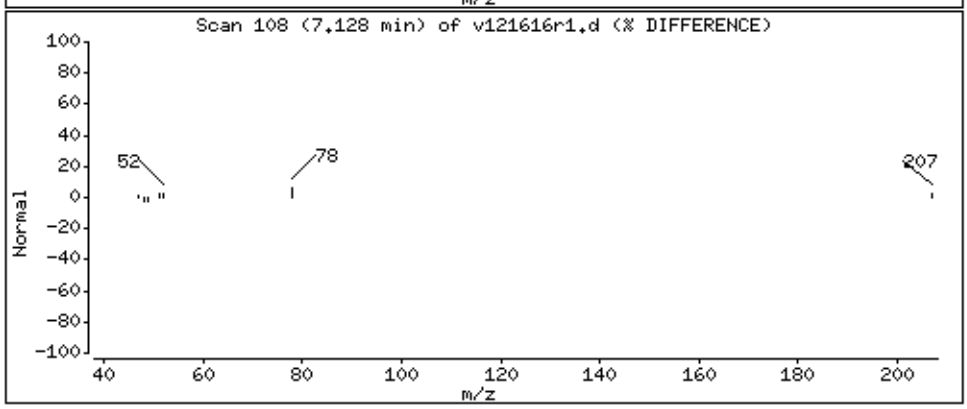
8 Chloromethane

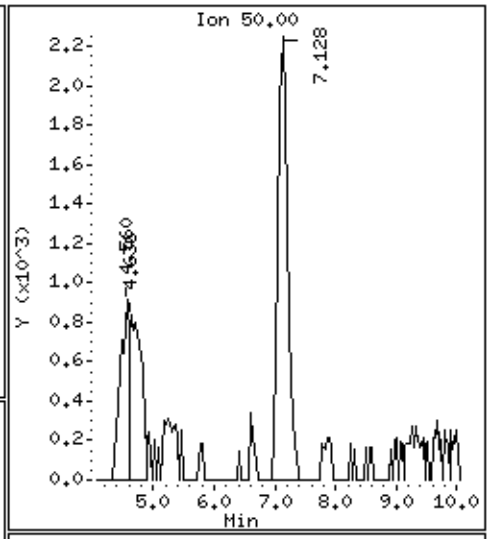
Concentration: 0.8518 PPBV

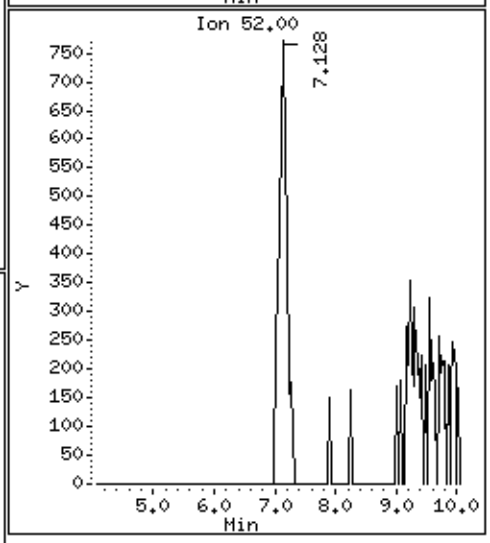












Data File: /chem/msdv.i/16Dec2014.b/v121616r1.d

Date : 16-DEC-2014 19:01

Client ID:

Instrument: msdv.i

Sample Info: 250ml #33654

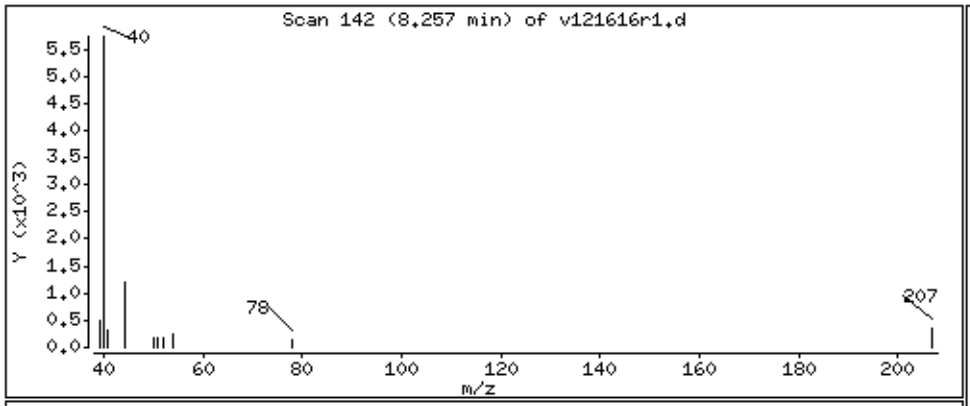
Operator: sn

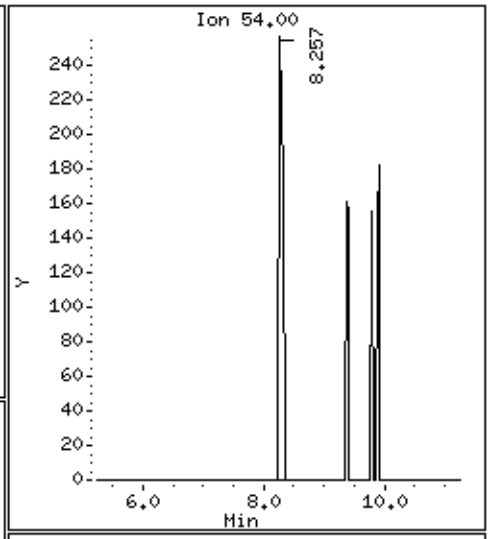
Column phase: RTx-624

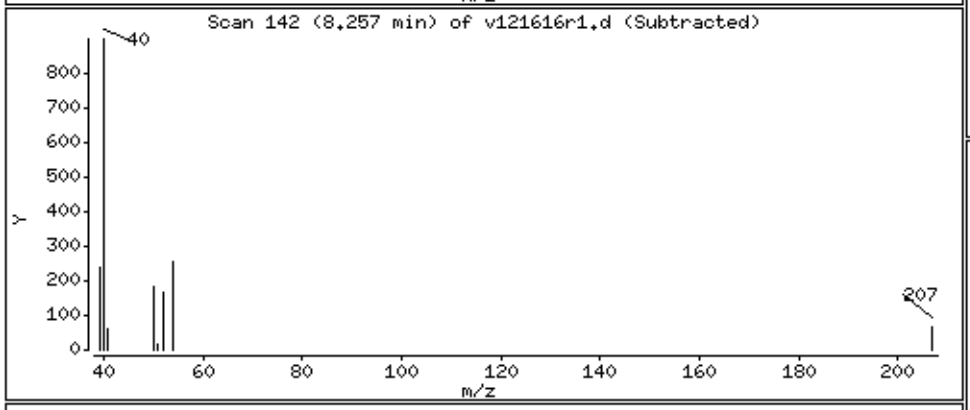
Column diameter: 0.32

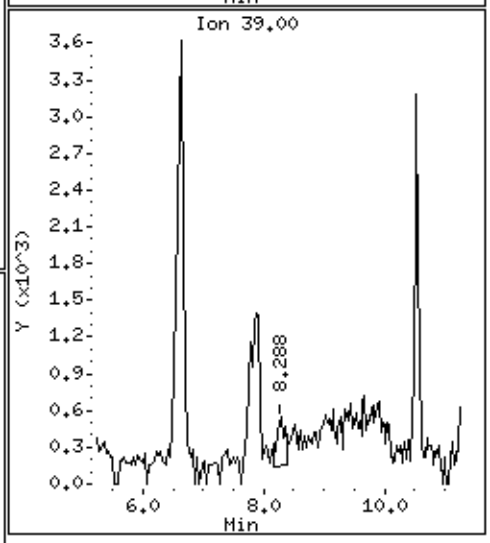
11 1,3-Butadiene

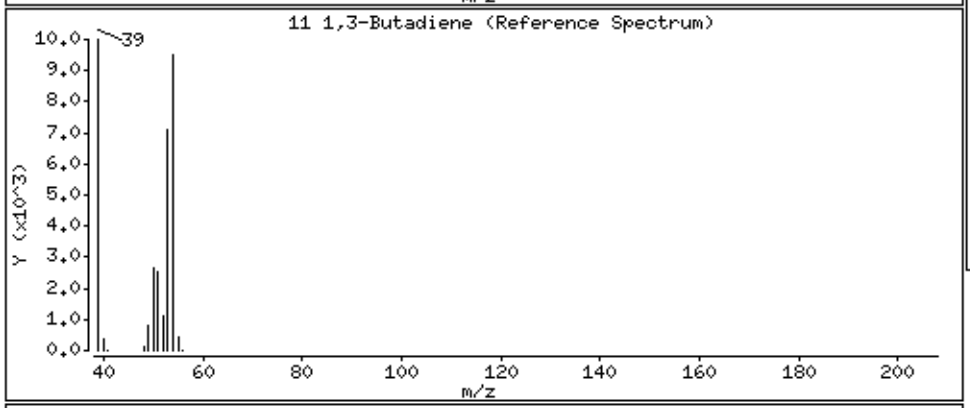
Concentration: 0.05600 PPBV

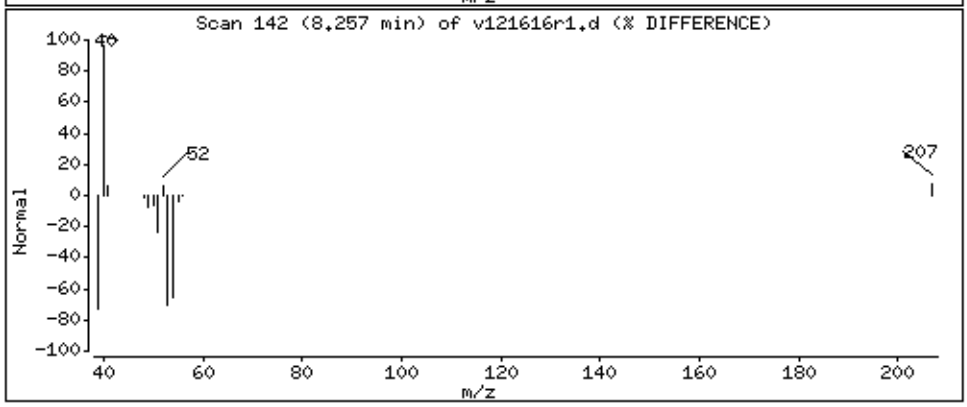












Data File: /chem/msdv.i/16Dec2014.b/v121616r1.d

Date : 16-DEC-2014 19:01

Client ID:

Instrument: msdv.i

Sample Info: 250ml #33654

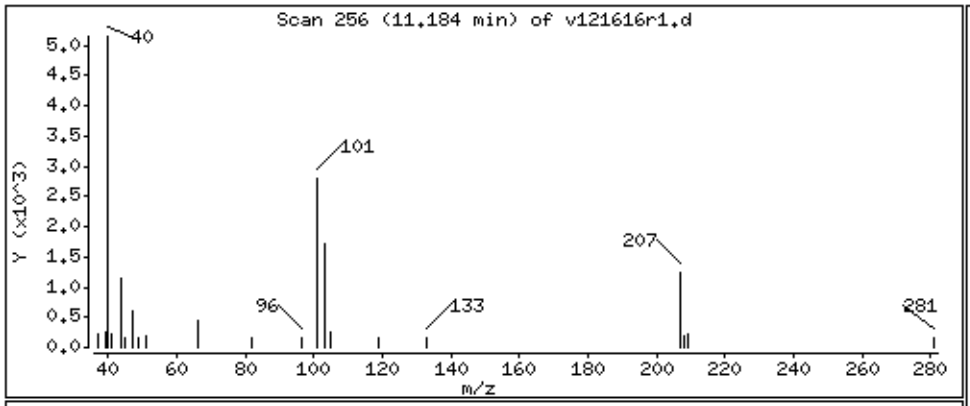
Operator: sn

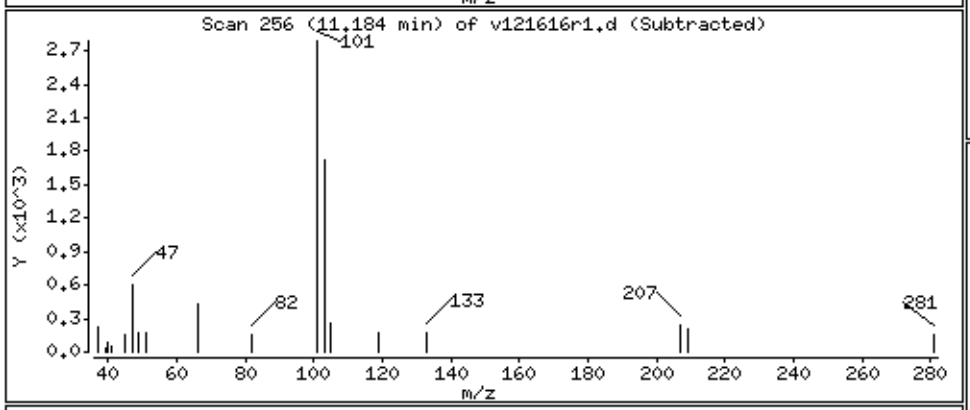
Column phase: RTx-624

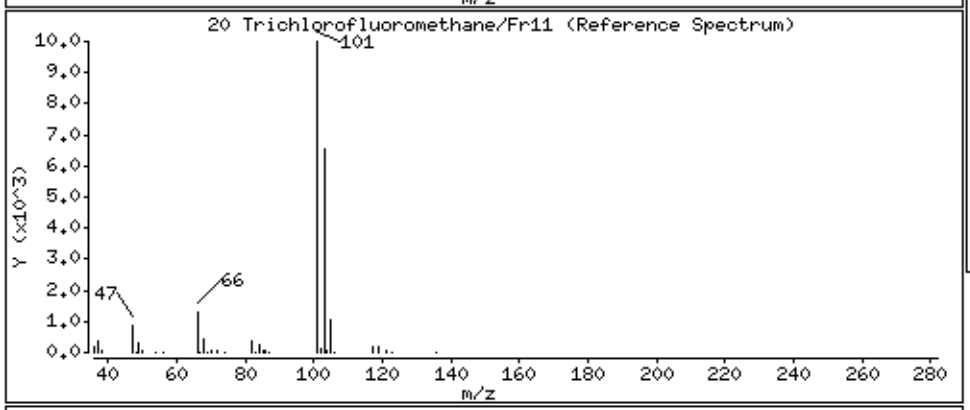
Column diameter: 0.32

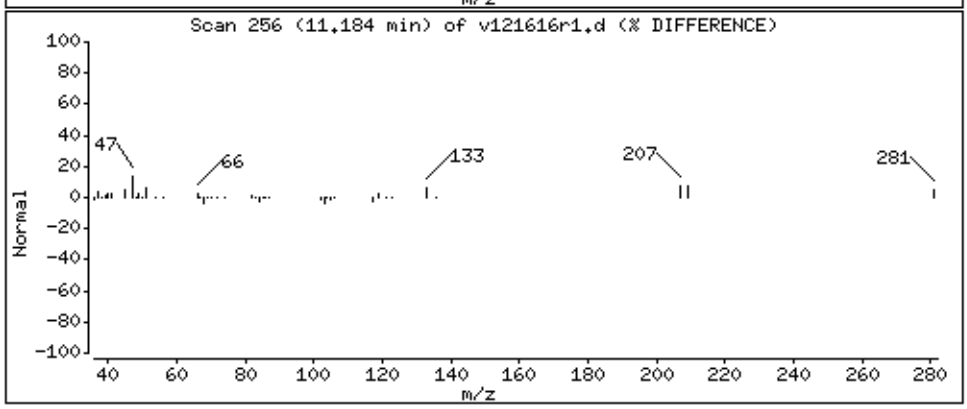
20 Trichlorofluoromethane/Fr11

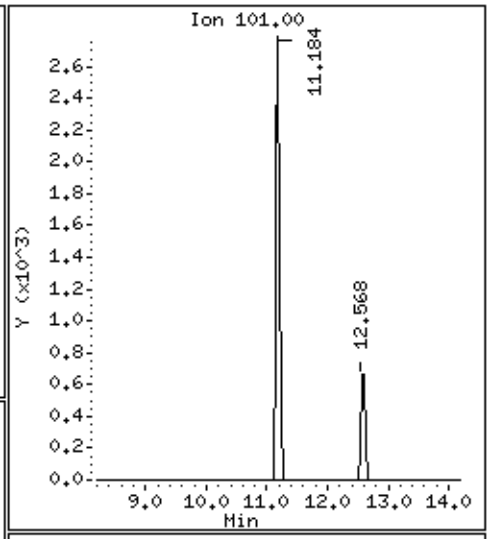
Concentration: 0.2157 PPBV

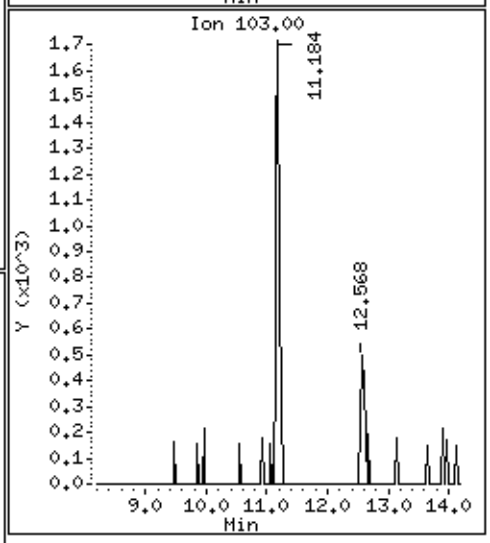












Data File: /chem/msdv.i/16Dec2014.b/v121616r1.d

Date : 16-DEC-2014 19:01

Client ID:

Instrument: msdv.i

Sample Info: 250ml #33654

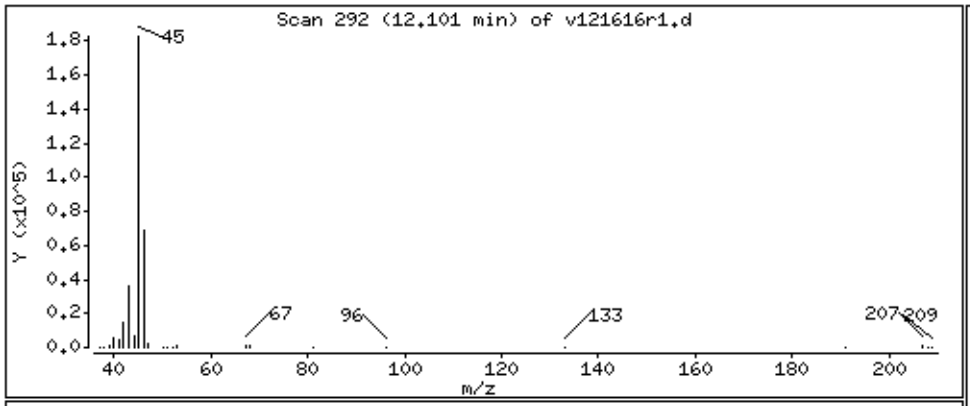
Operator: sn

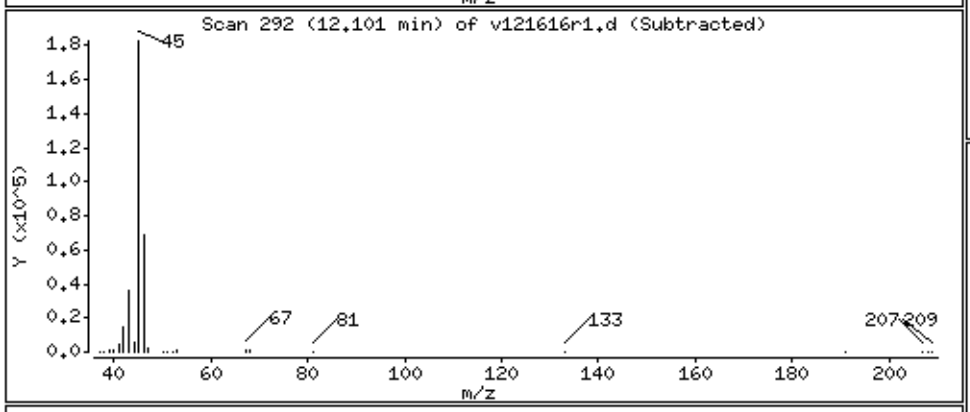
Column phase: RTx-624

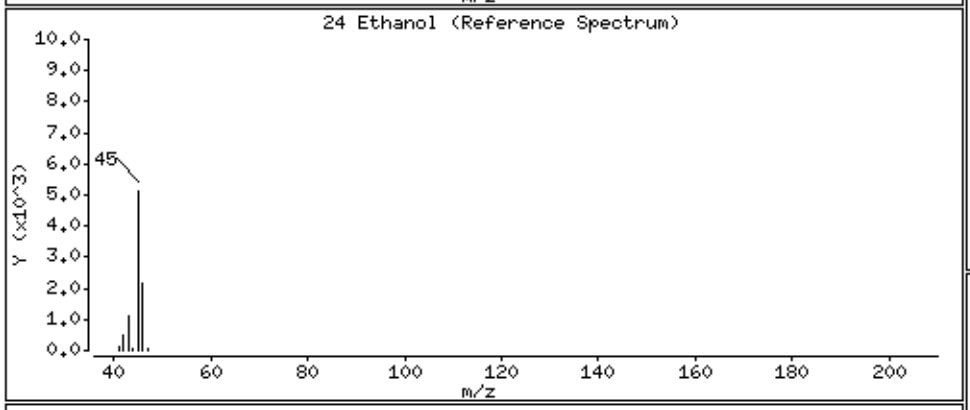
Column diameter: 0.32

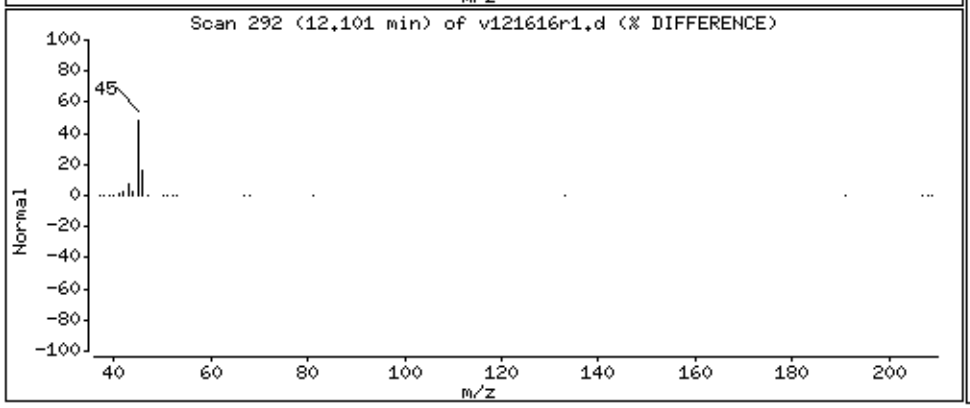
24 Ethanol

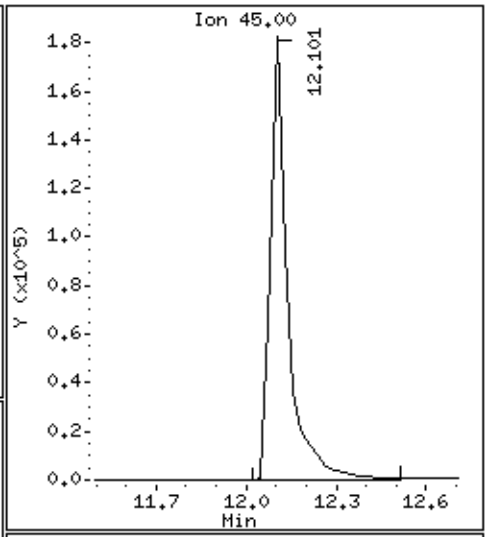
Concentration: 68.541 PPBV

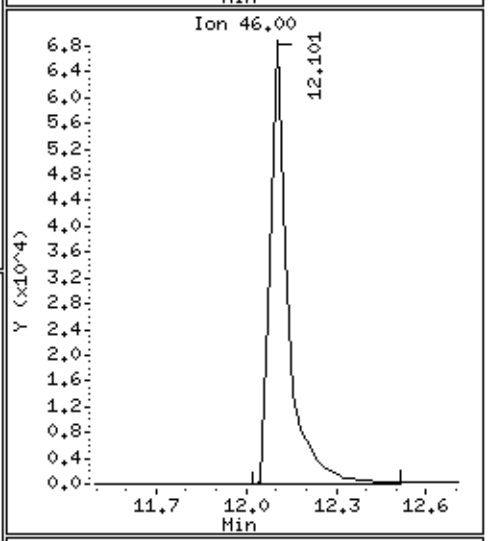


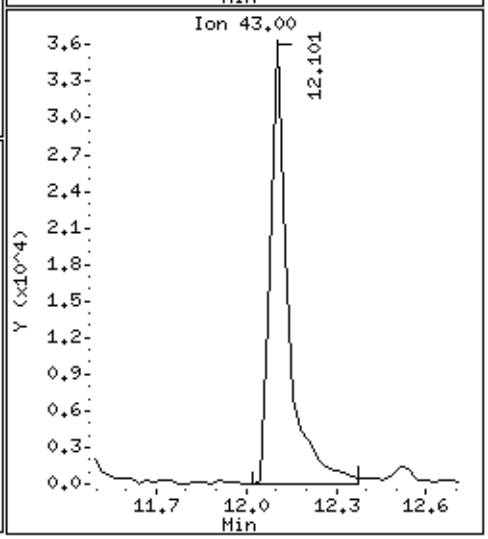












Data File: /chem/msdv.i/16Dec2014.b/v121616r1.d

Date : 16-DEC-2014 19:01

Client ID:

Instrument: msdv.i

Sample Info: 250ml #33654

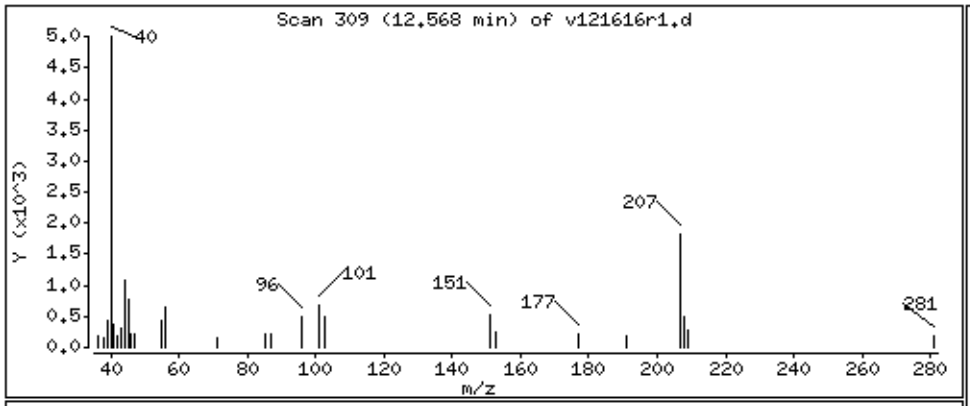
Operator: sn

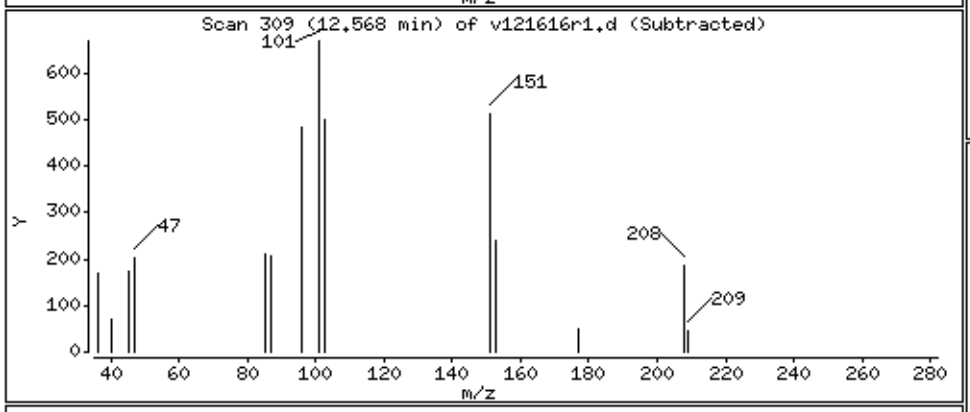
Column phase: RTx-624

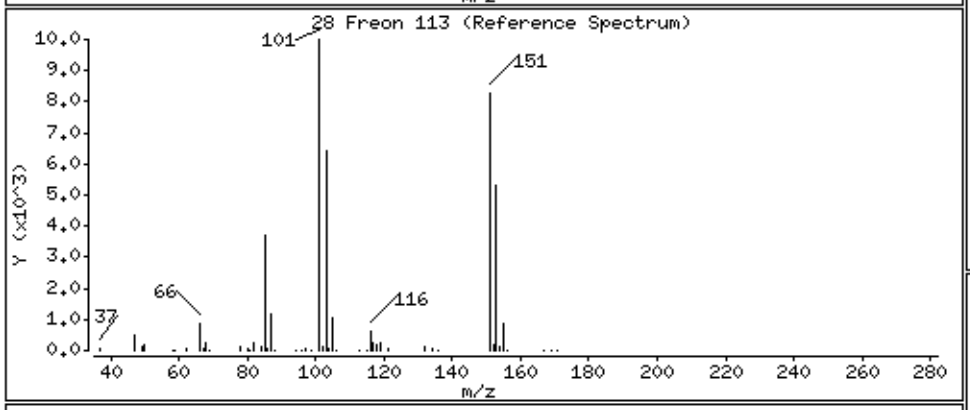
Column diameter: 0.32

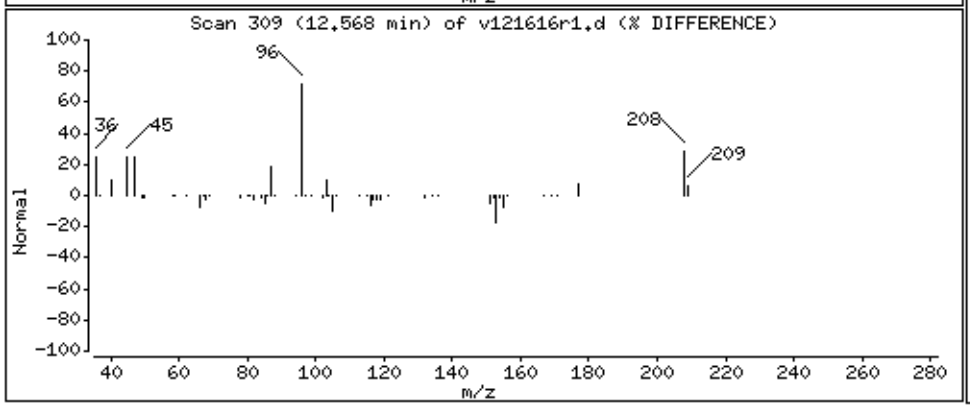
28 Freon 113

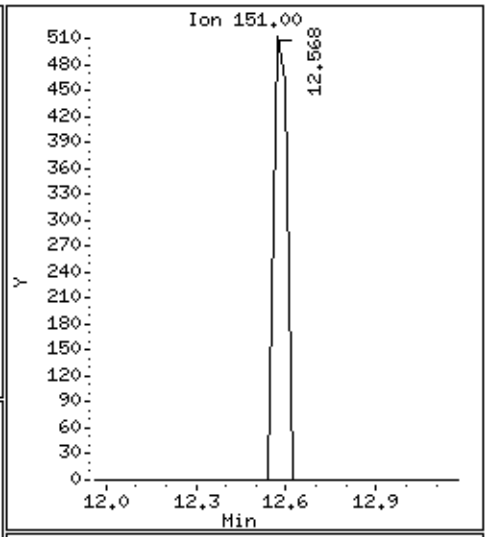
Concentration: 0.05331 PPBV

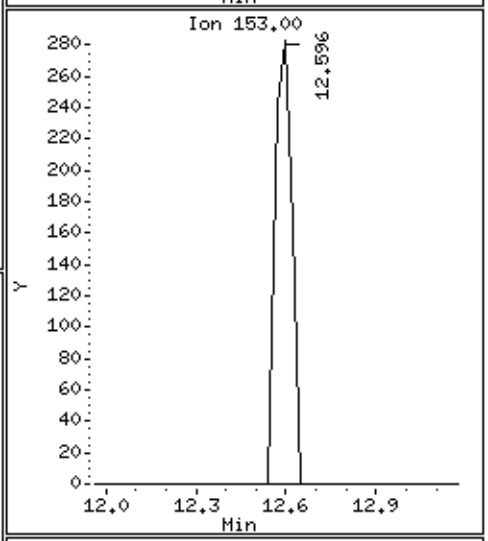


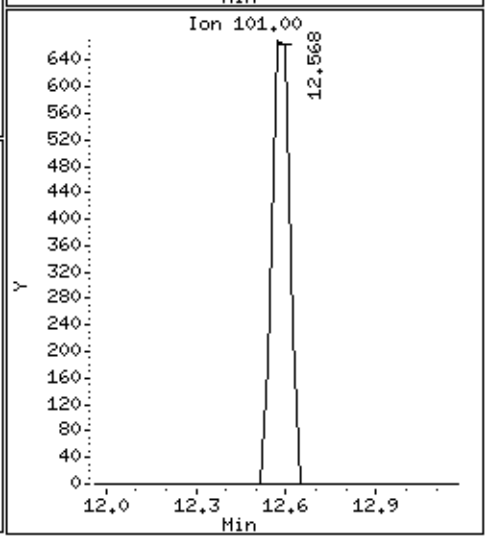












Data File: /chem/msdv.i/16Dec2014.b/v121616r1.d

Date : 16-DEC-2014 19:01

Client ID:

Instrument: msdv.i

Sample Info: 250ml #33654

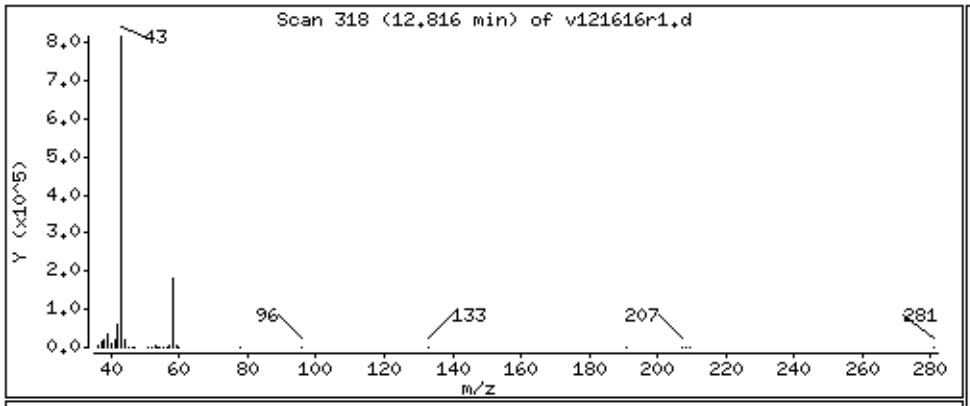
Operator: sn

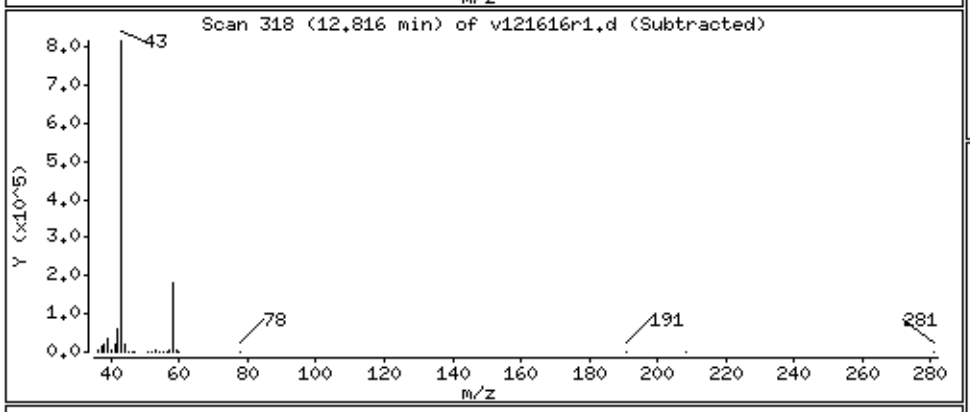
Column phase: RTx-624

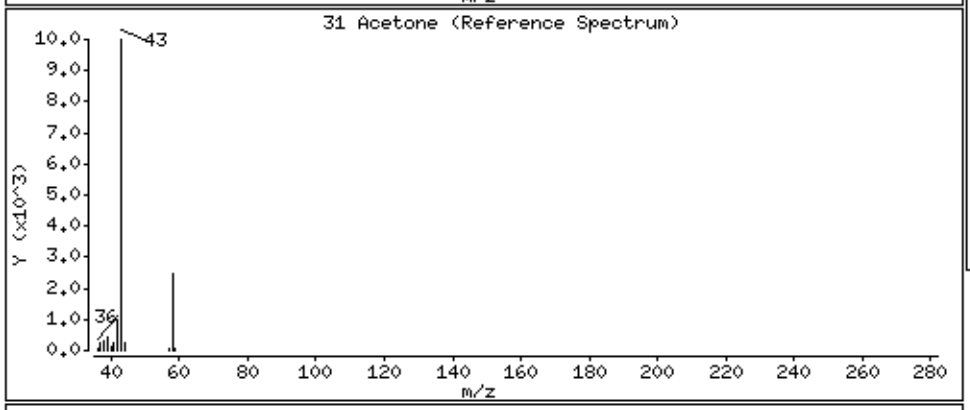
Column diameter: 0.32

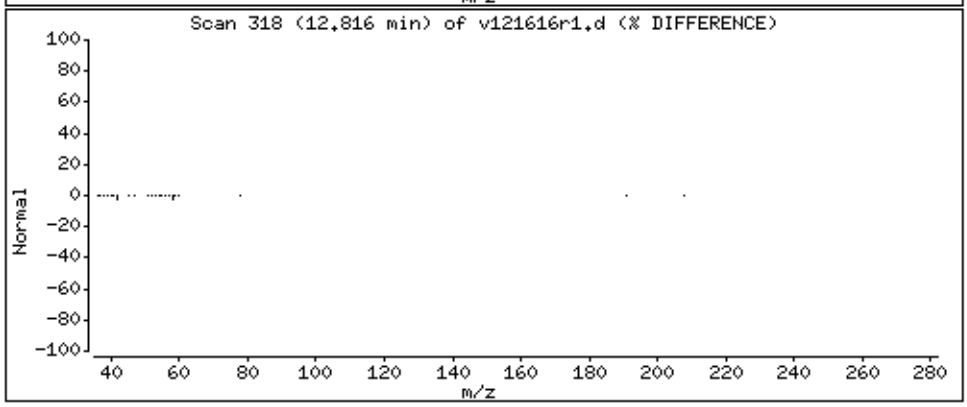
31 Acetone

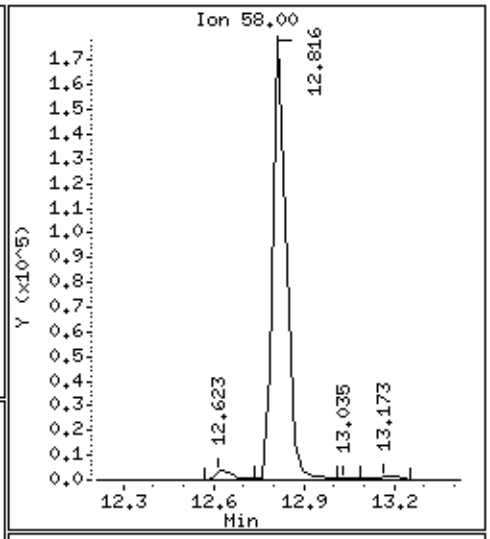
Concentration: 44.619 PPBV

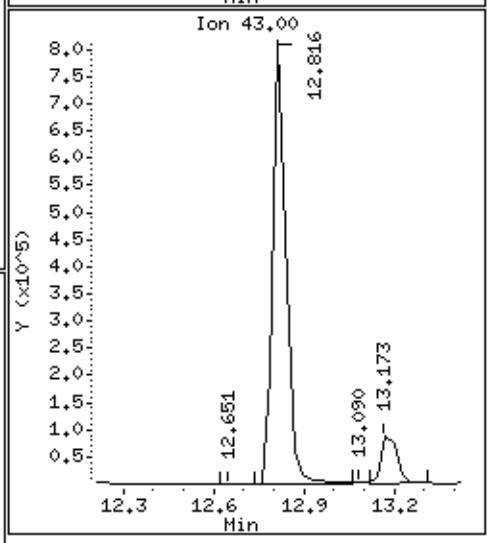












Data File: /chem/msdv.i/16Dec2014.b/v121616r1.d

Date : 16-DEC-2014 19:01

Client ID:

Instrument: msdv.i

Sample Info: 250ml #33654

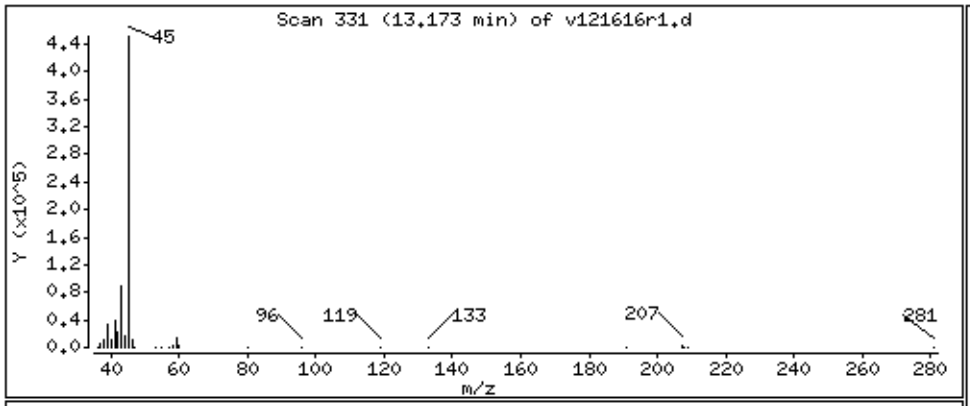
Operator: sn

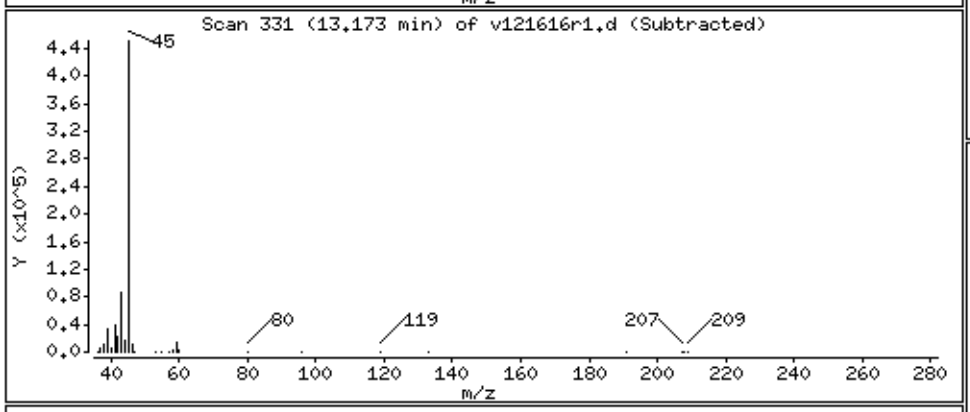
Column phase: RTx-624

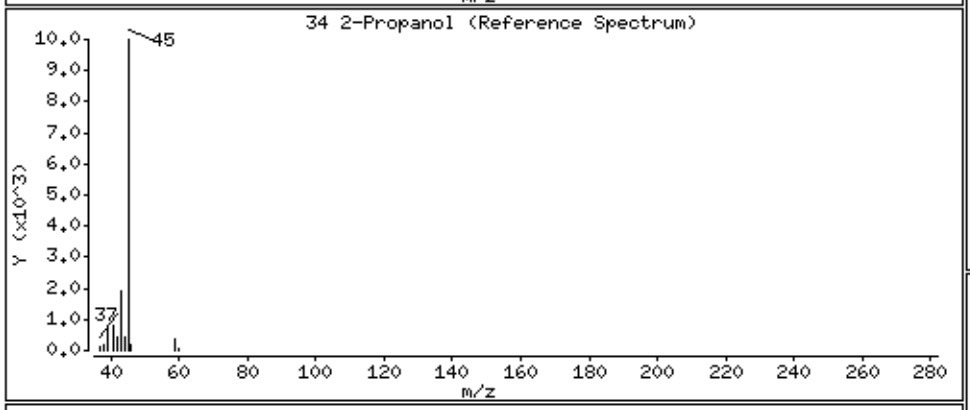
Column diameter: 0.32

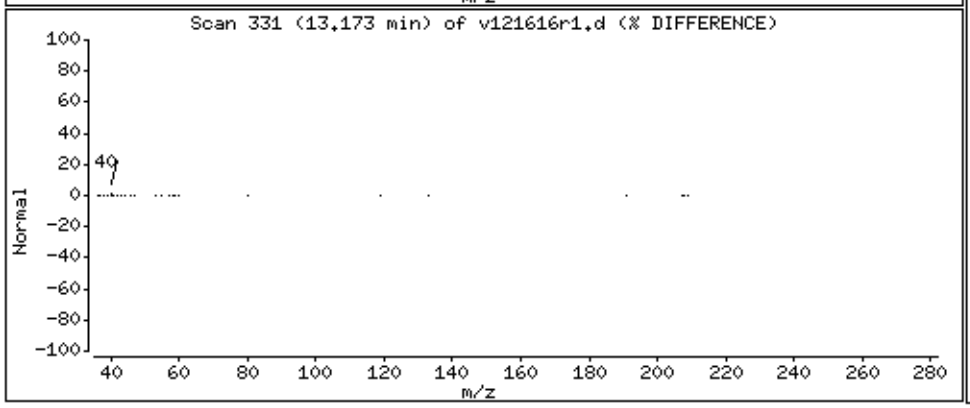
34 2-Propanol

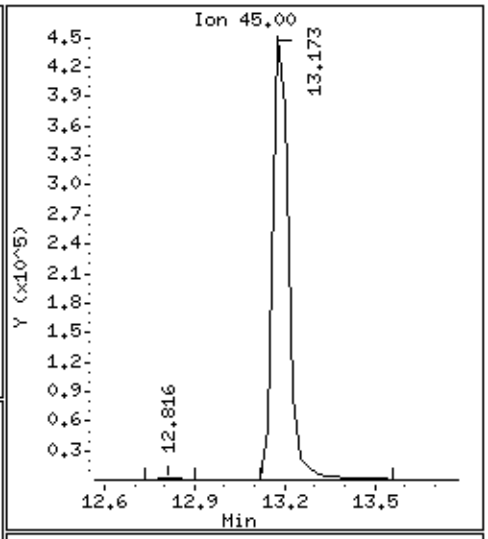
Concentration: 29.559 PPBV

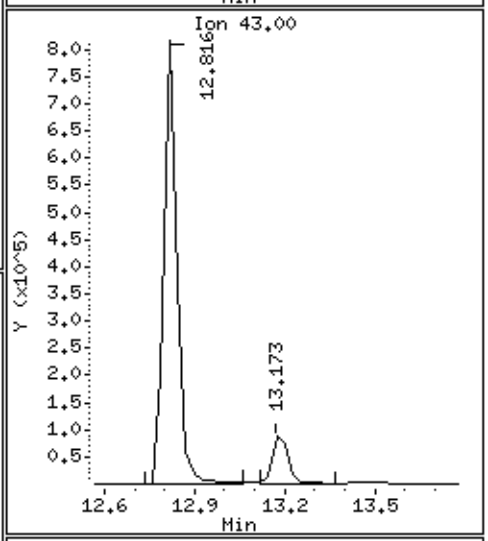


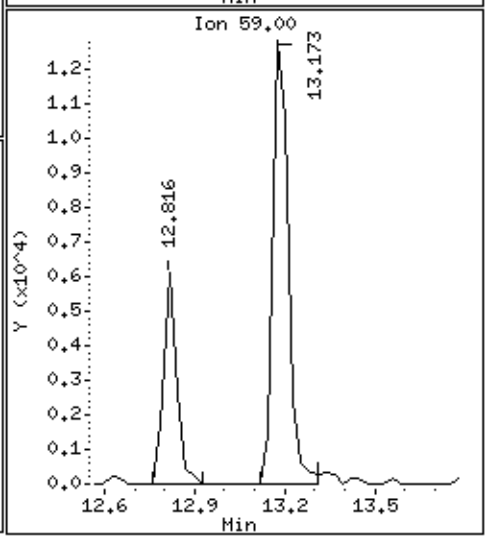












Data File: /chem/msdv.i/16Dec2014.b/v121616r1.d

Date : 16-DEC-2014 19:01

Client ID:

Instrument: msdv.i

Sample Info: 250ml #33654

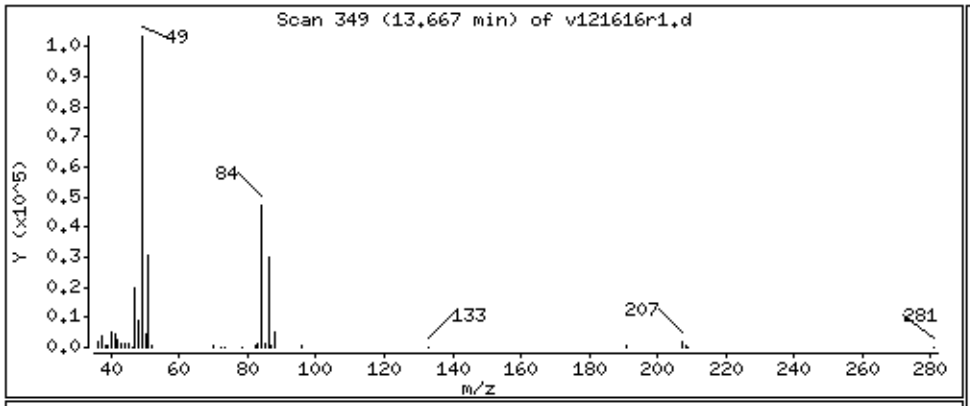
Operator: sn

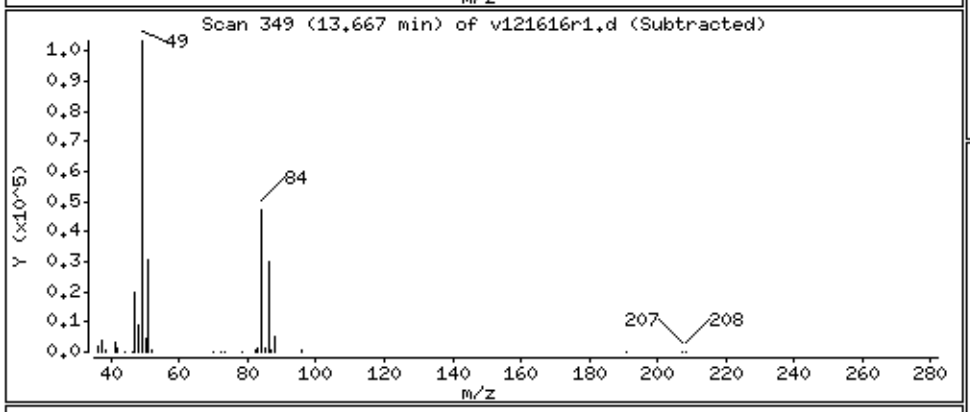
Column phase: RTx-624

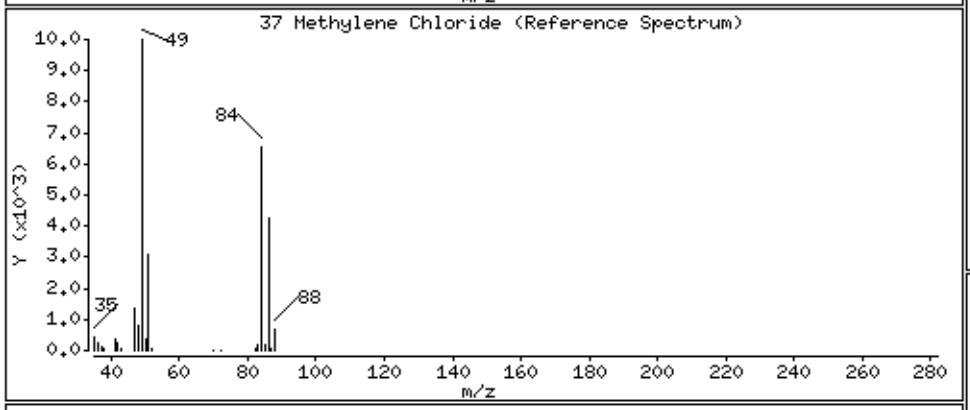
Column diameter: 0.32

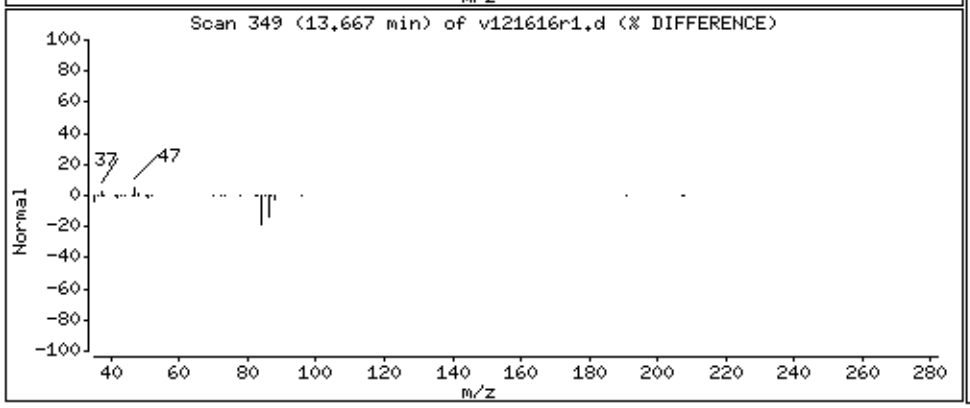
37 Methylene Chloride

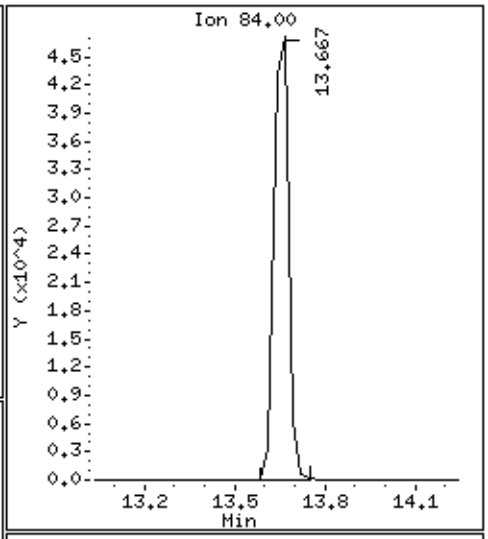
Concentration: 10.524 PPBV

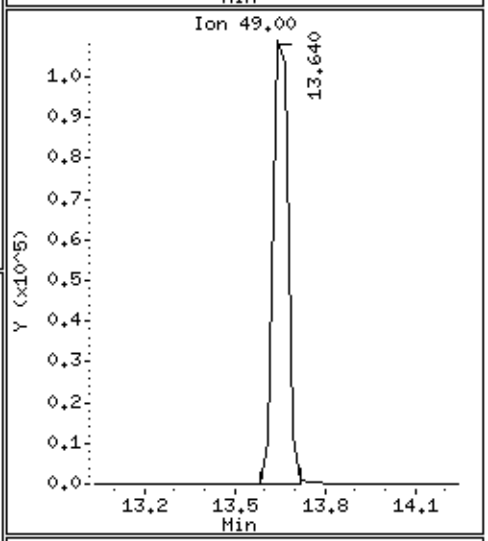


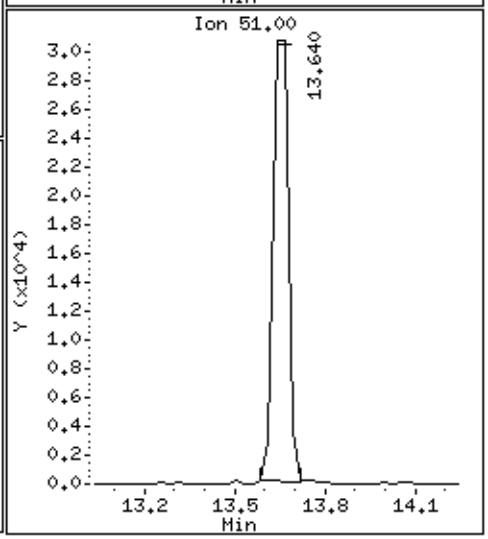












Data File: /chem/msdv.i/16Dec2014.b/v121616r1.d

Date : 16-DEC-2014 19:01

Client ID:

Instrument: msdv.i

Sample Info: 250ml #33654

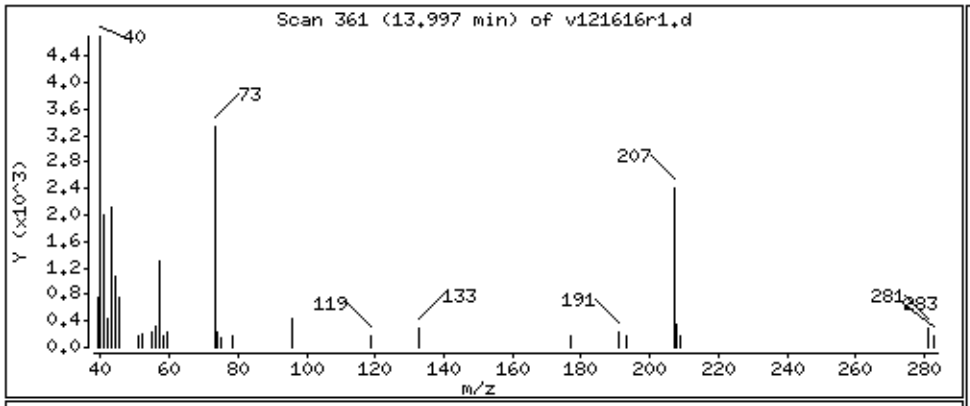
Operator: sn

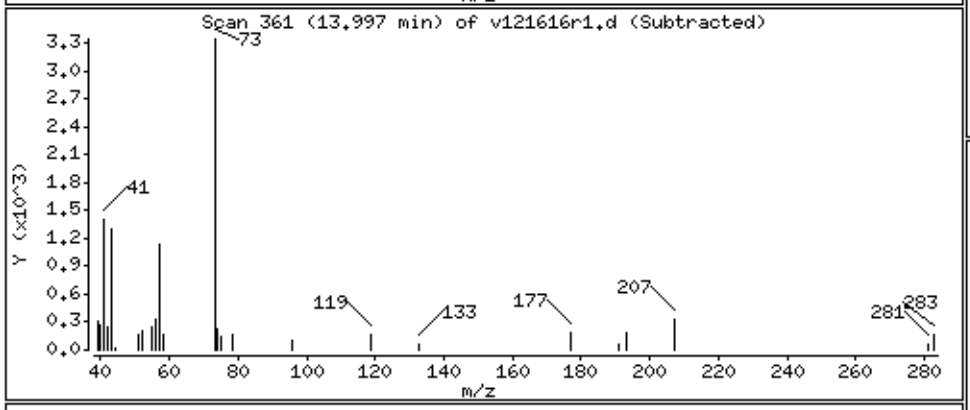
Column phase: RTx-624

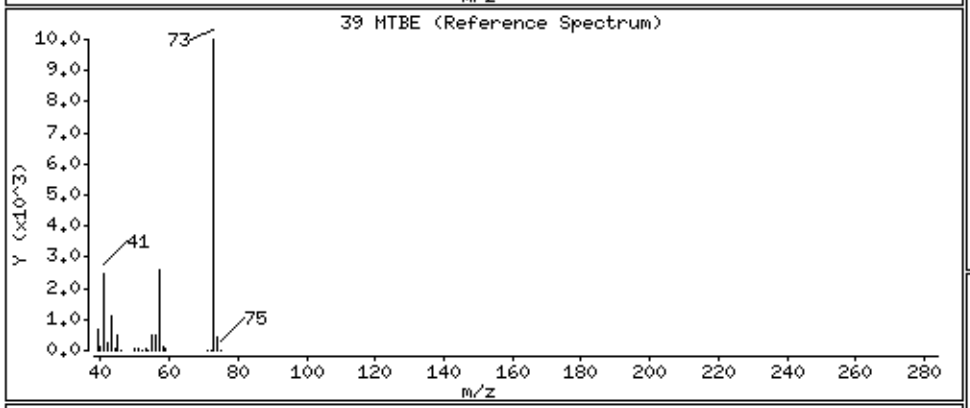
Column diameter: 0.32

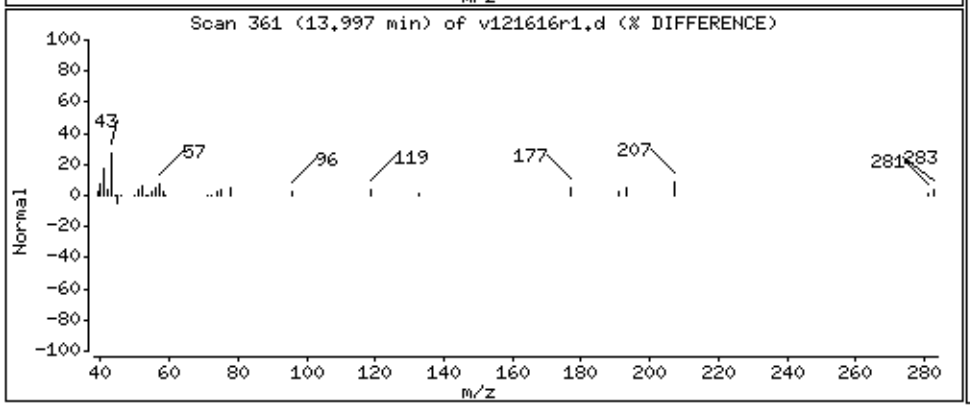
39 MTBE

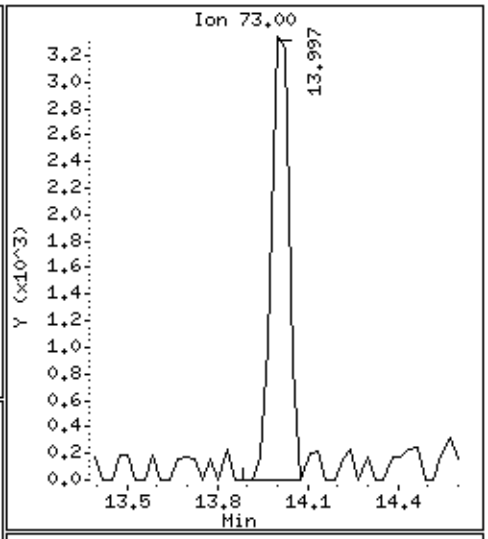
Concentration: 0.2514 PPBV

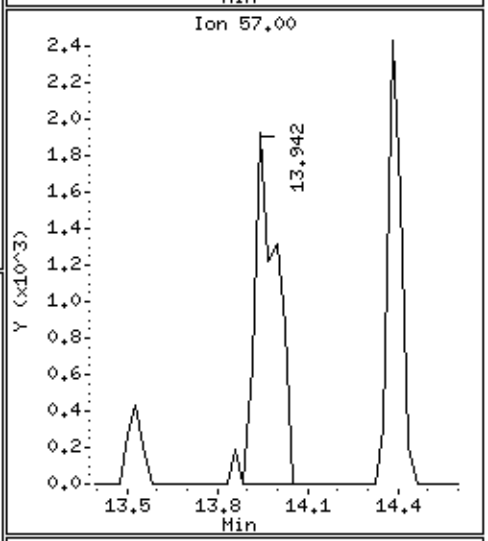


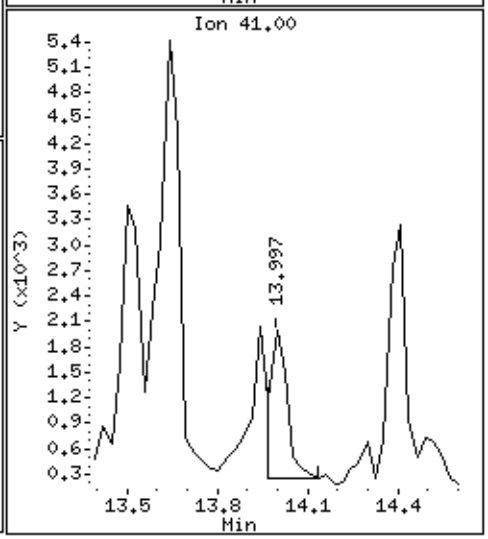












Data File: /chem/msdv.i/16Dec2014.b/v121616r1.d

Date : 16-DEC-2014 19:01

Client ID:

Instrument: msdv.i

Sample Info: 250ml #33654

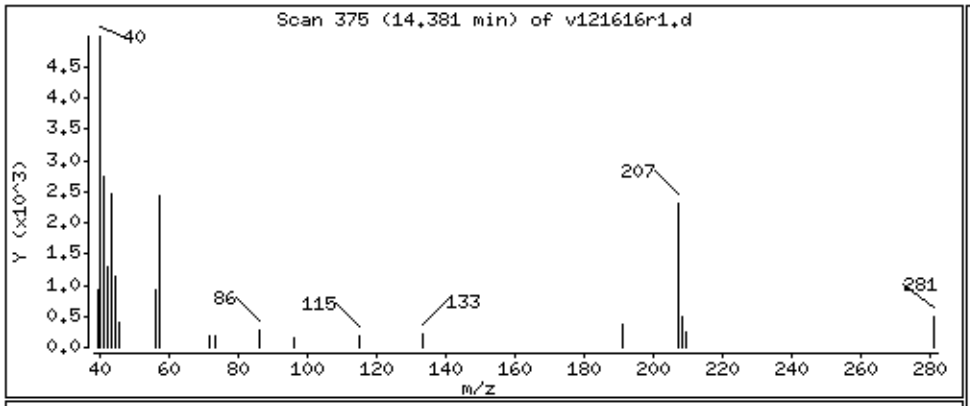
Operator: sn

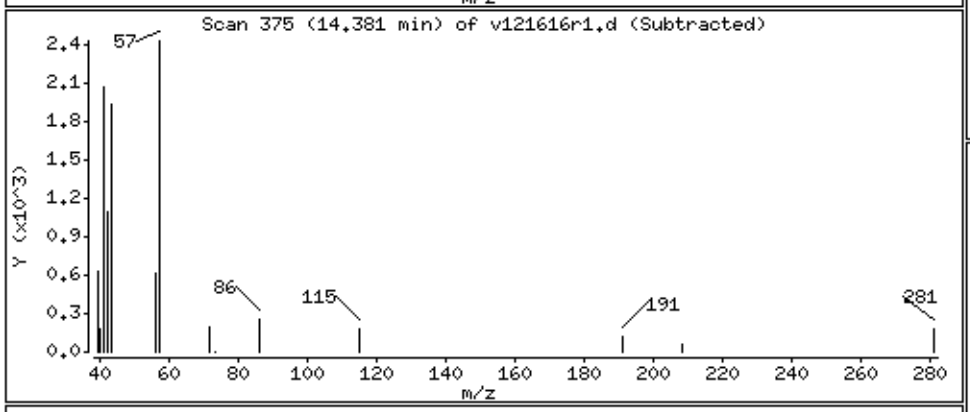
Column phase: RTx-624

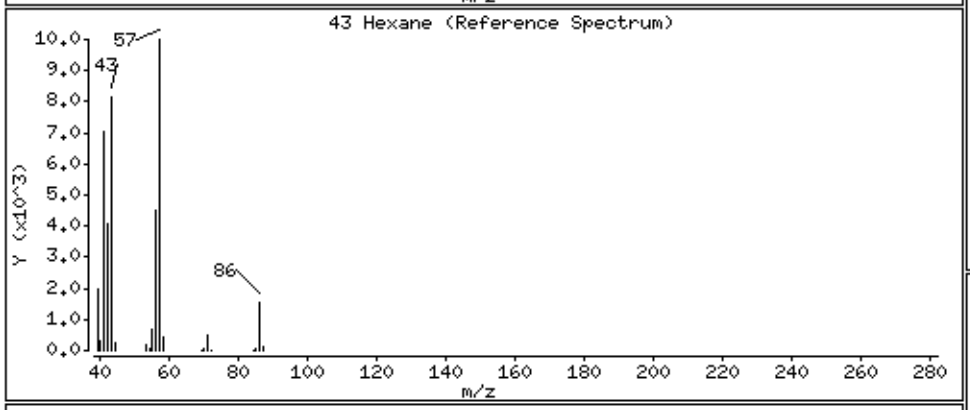
Column diameter: 0.32

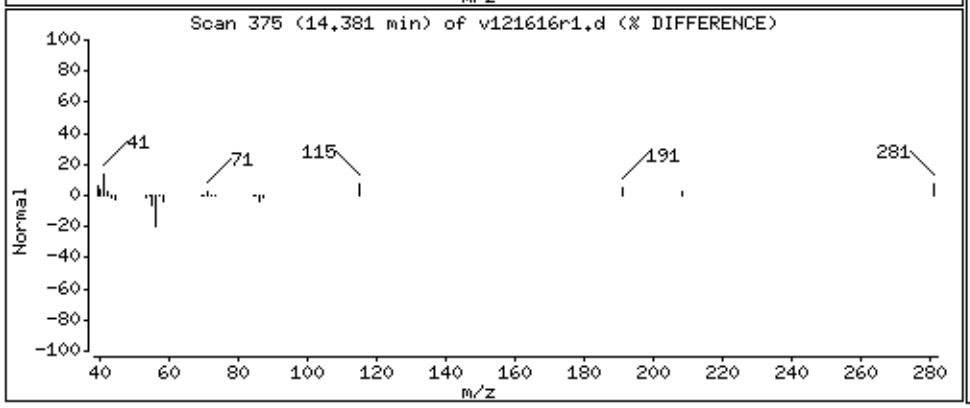
43 Hexane

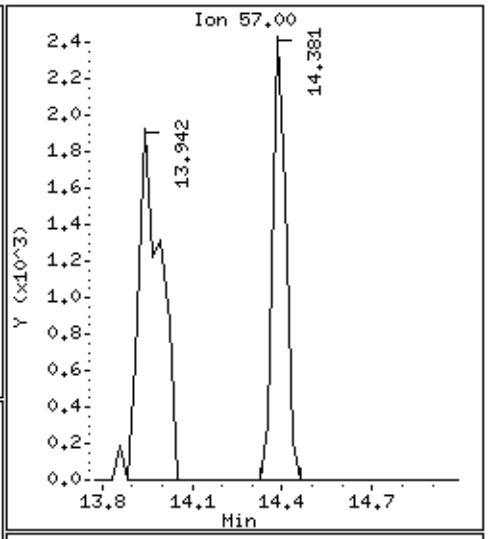
Concentration: 0.1648 PPBV

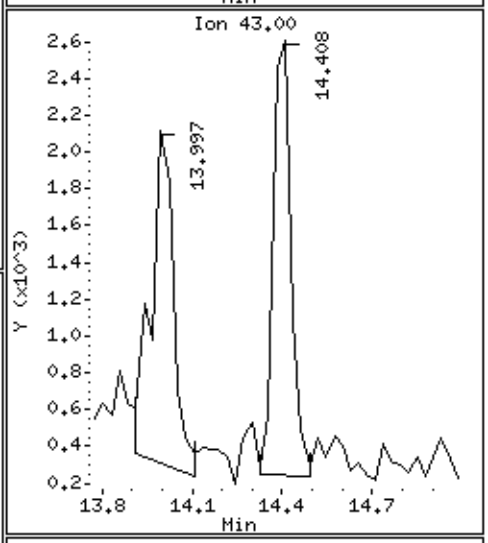


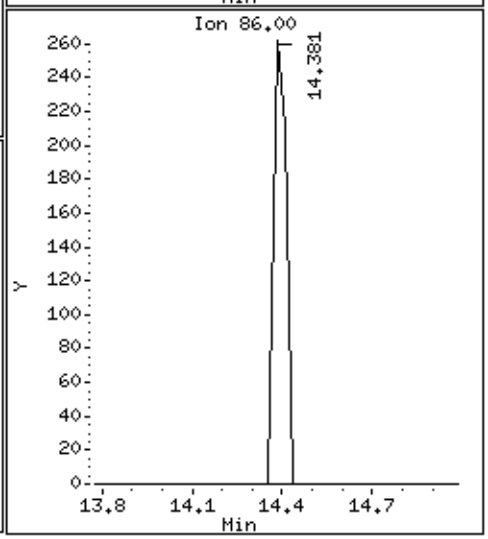












Data File: /chem/msdv.i/16Dec2014.b/v121616r1.d

Date : 16-DEC-2014 19:01

Client ID:

Instrument: msdv.i

Sample Info: 250ml #33654

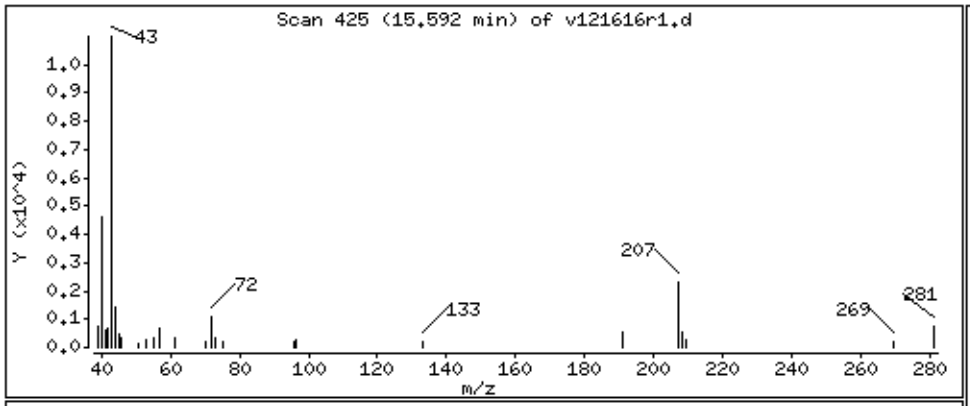
Operator: sn

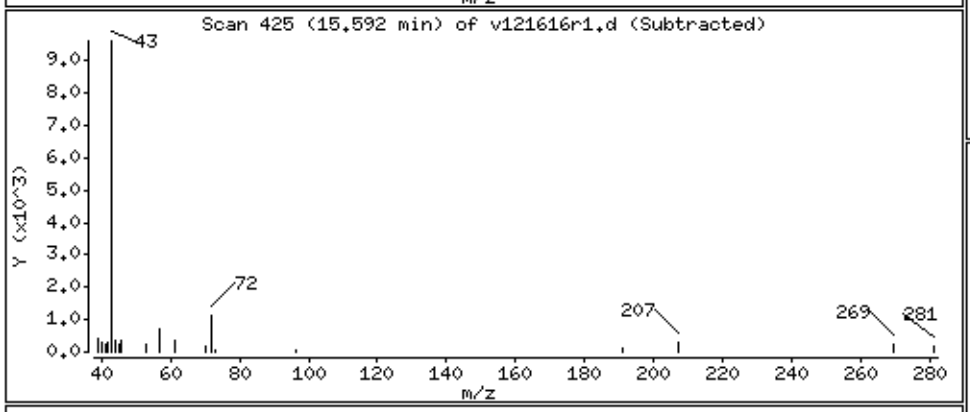
Column phase: RTx-624

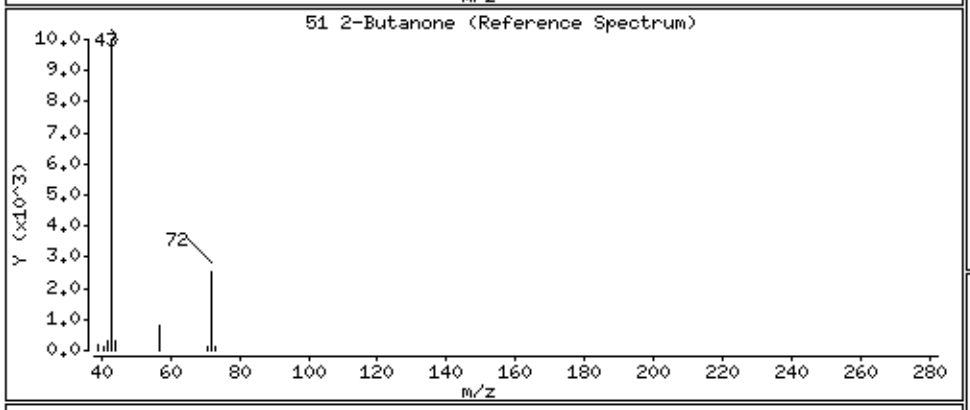
Column diameter: 0.32

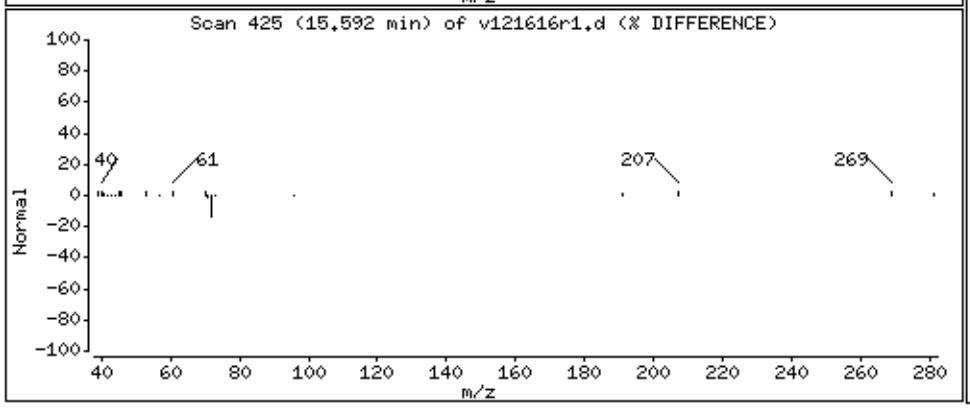
51 2-Butanone

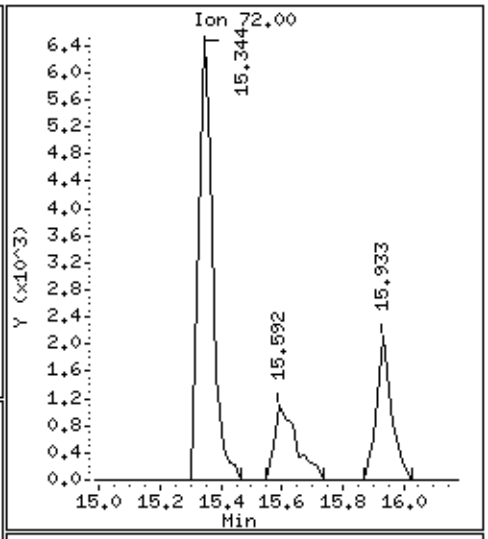
Concentration: 0.6127 PPBV

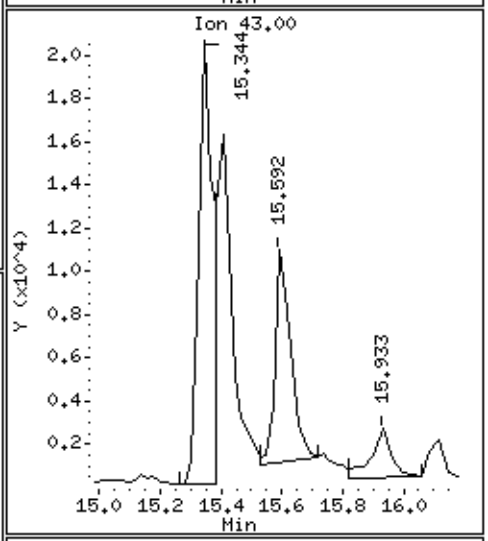


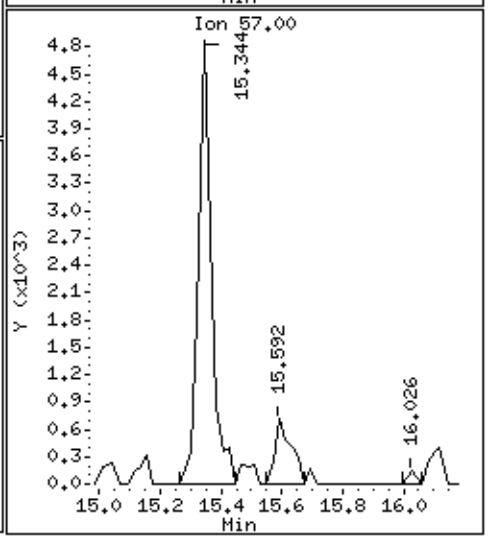












Data File: /chem/msdv.i/16Dec2014.b/v121616r1.d

Date : 16-DEC-2014 19:01

Client ID:

Instrument: msdv.i

Sample Info: 250ml #33654

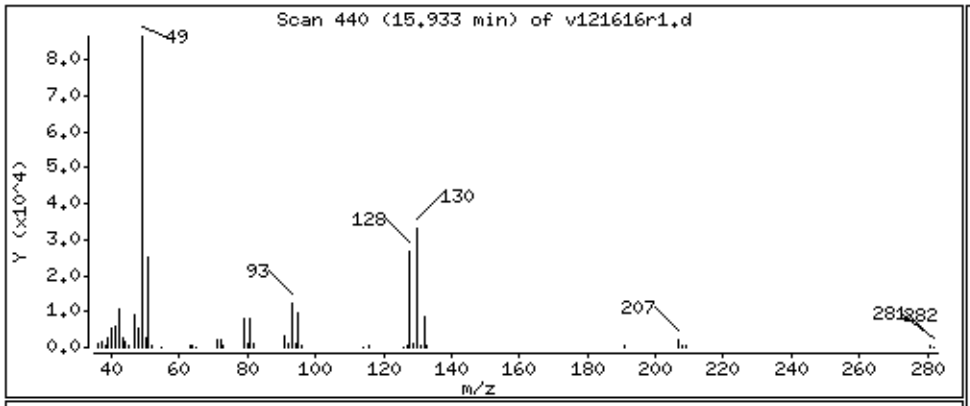
Operator: sn

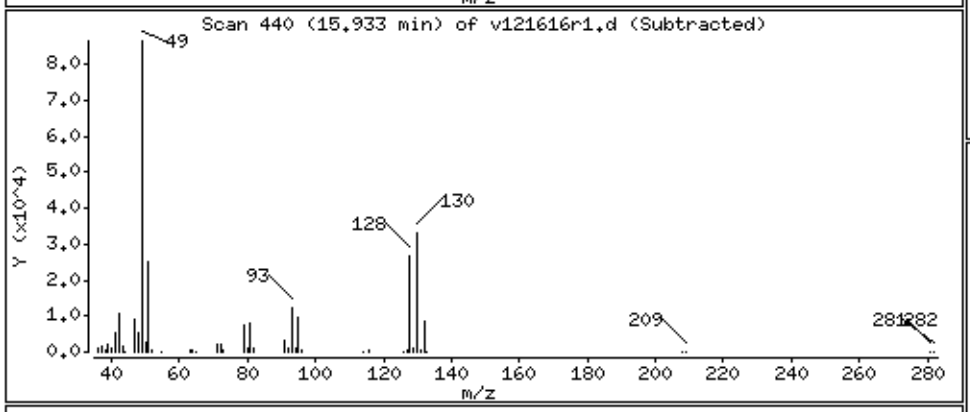
Column phase: RTx-624

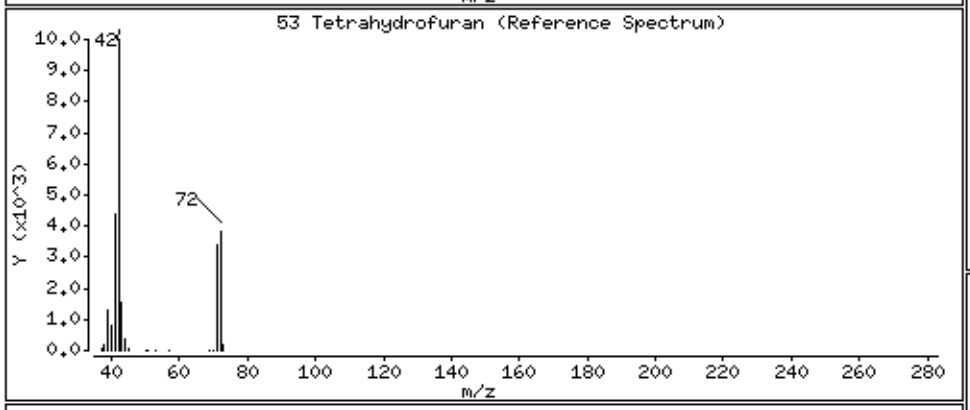
Column diameter: 0.32

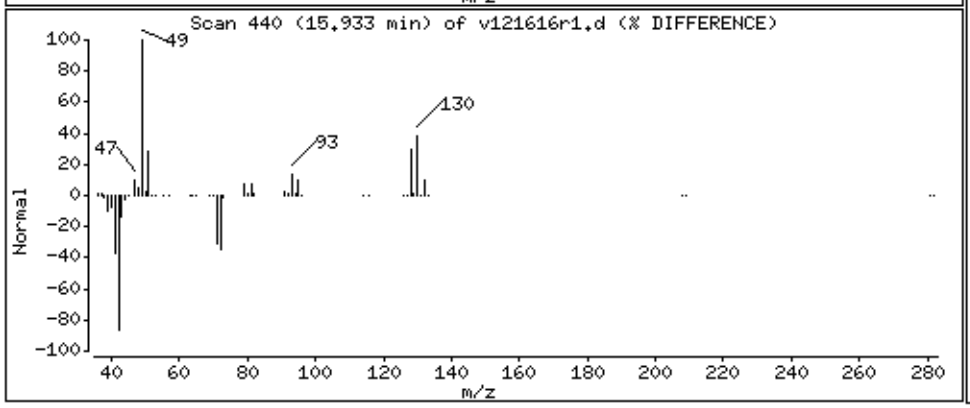
53 Tetrahydrofuran

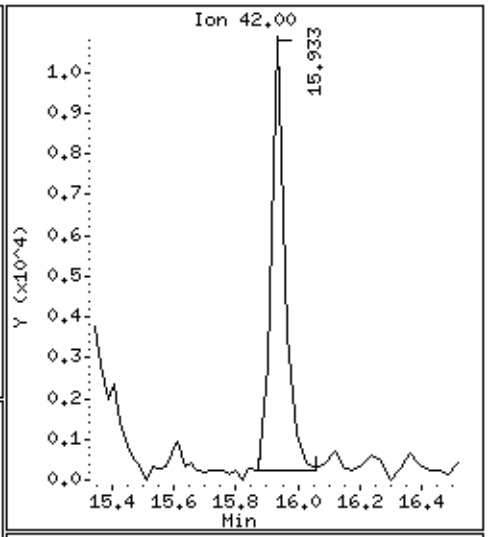
Concentration: 0.6987 PPBV

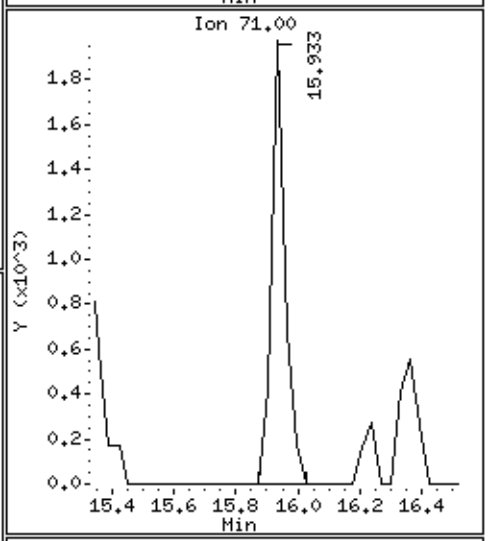


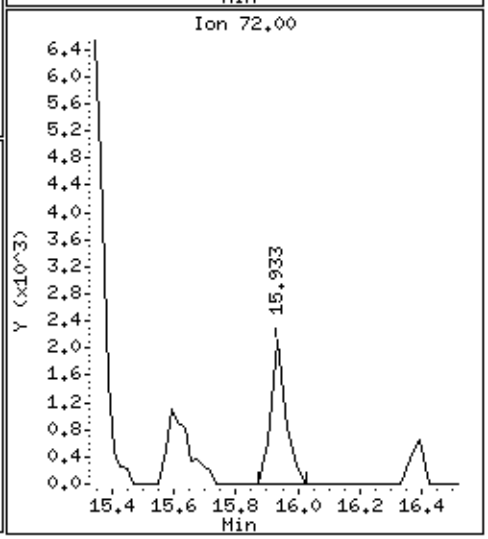












Data File: /chem/msdv.i/16Dec2014.b/v121616r1.d

Date : 16-DEC-2014 19:01

Client ID:

Instrument: msdv.i

Sample Info: 250ml #33654

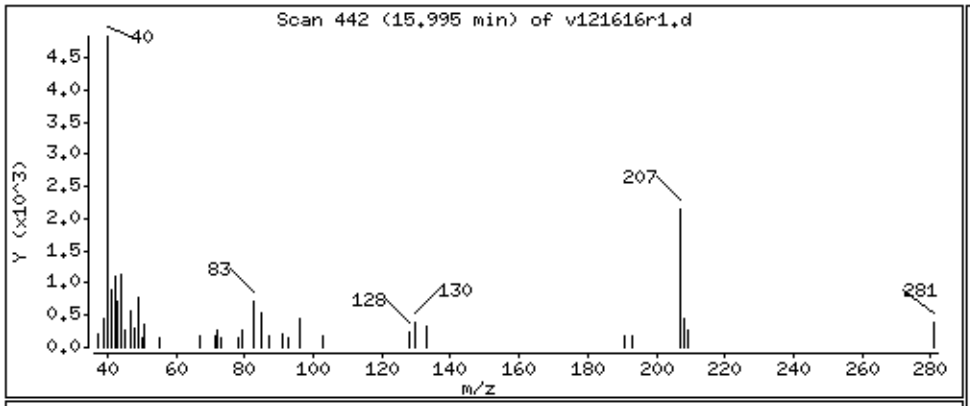
Operator: sn

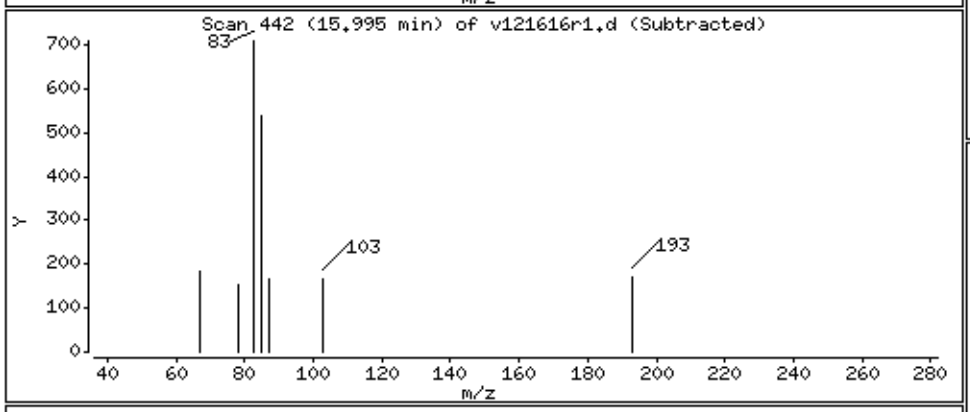
Column phase: RTx-624

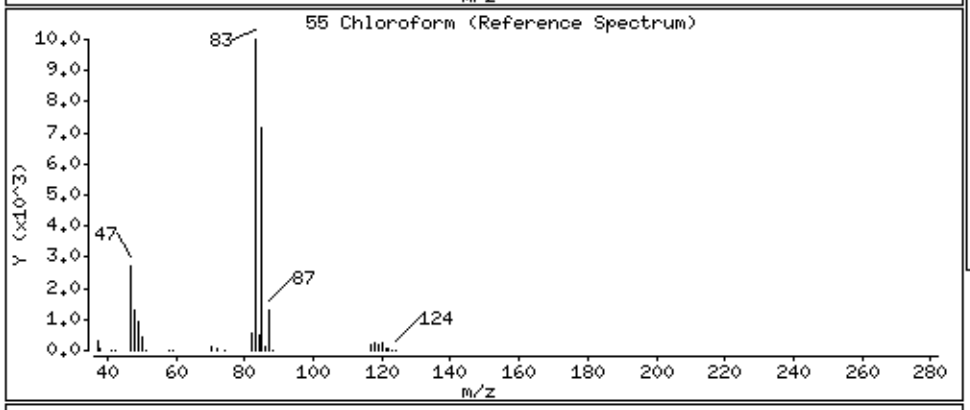
Column diameter: 0.32

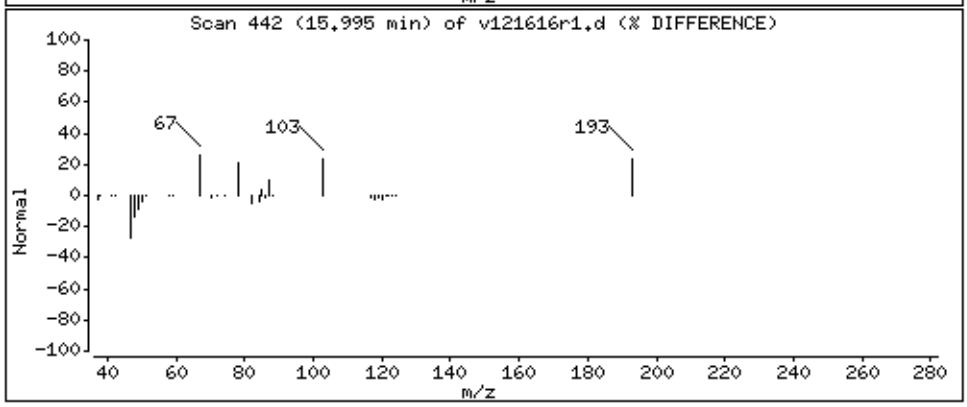
55 Chloroform

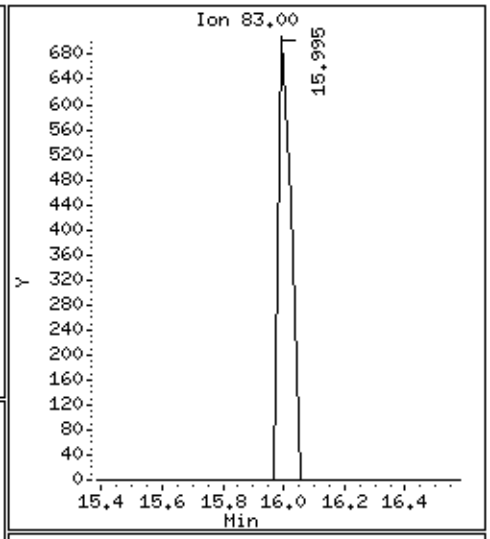
Concentration: 0.04873 PPBV

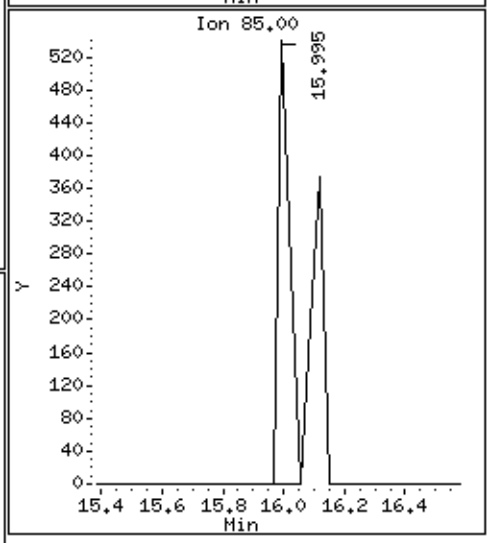












Data File: /chem/msdv.i/16Dec2014.b/v121616r1.d

Date : 16-DEC-2014 19:01

Client ID:

Instrument: msdv.i

Sample Info: 250ml #33654

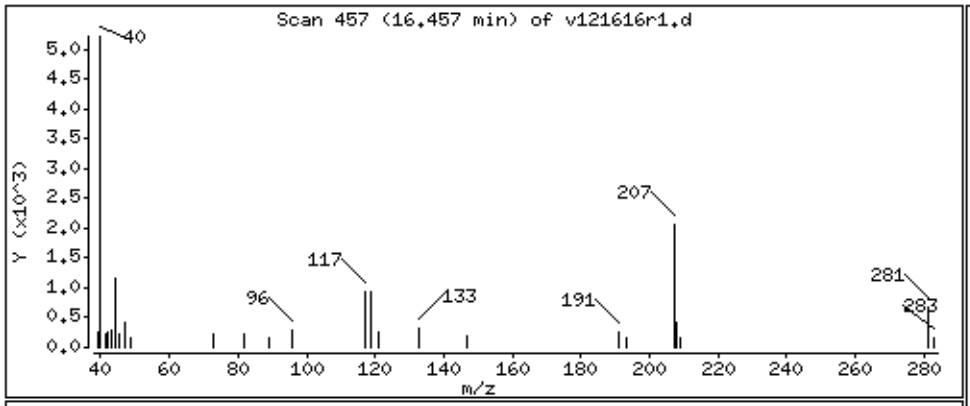
Operator: sn

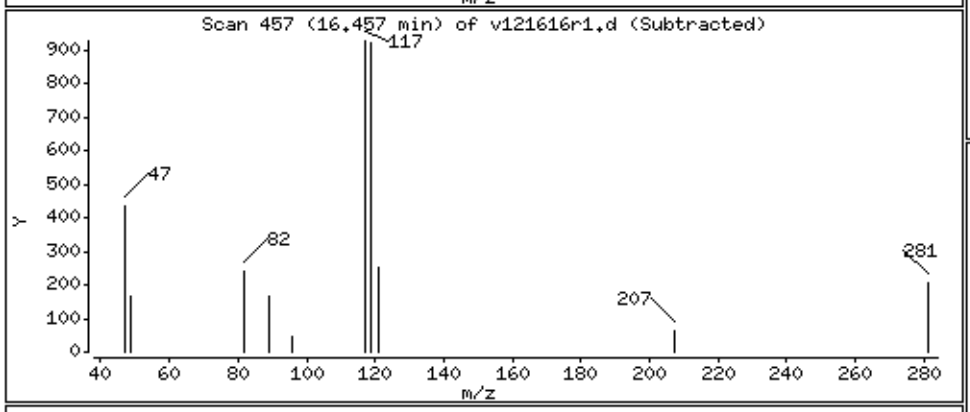
Column phase: RTx-624

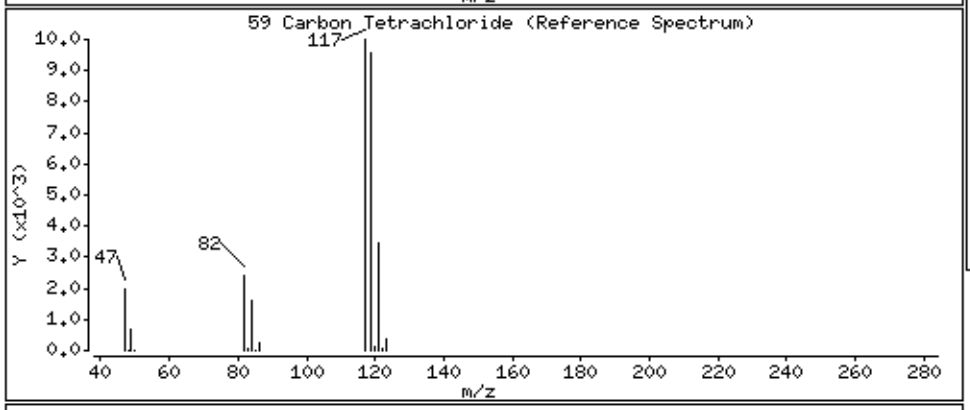
Column diameter: 0.32

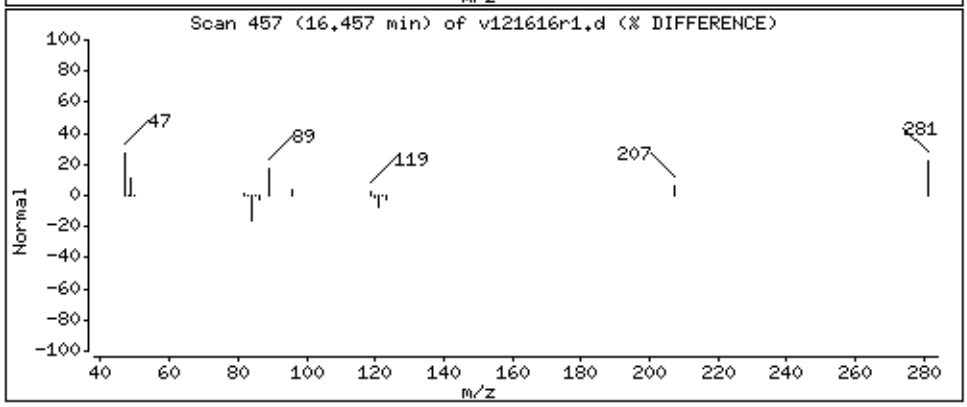
59 Carbon Tetrachloride

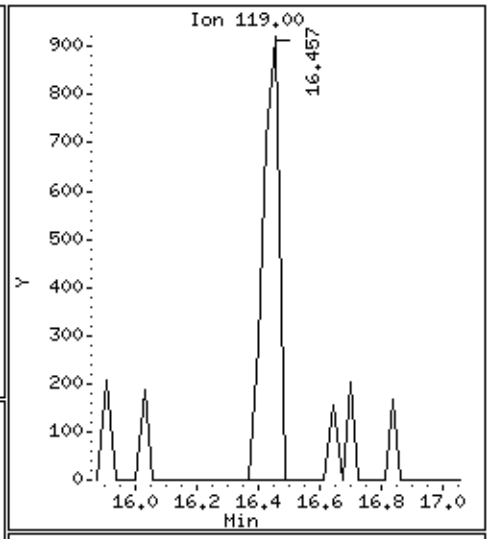
Concentration: 0.08030 PPBV

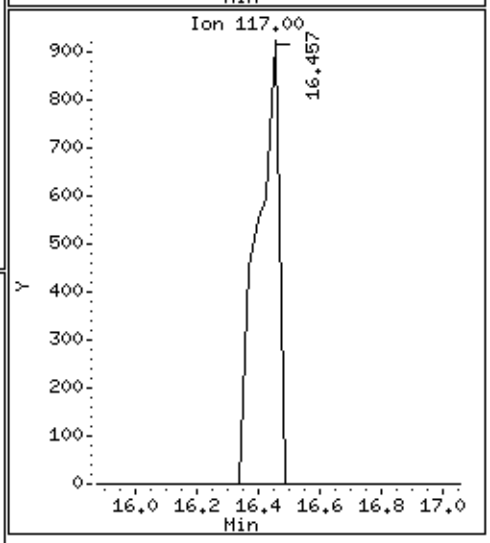












Data File: /chem/msdv.i/16Dec2014.b/v121616r1.d

Date : 16-DEC-2014 19:01

Client ID:

Instrument: msdv.i

Sample Info: 250ml #33654

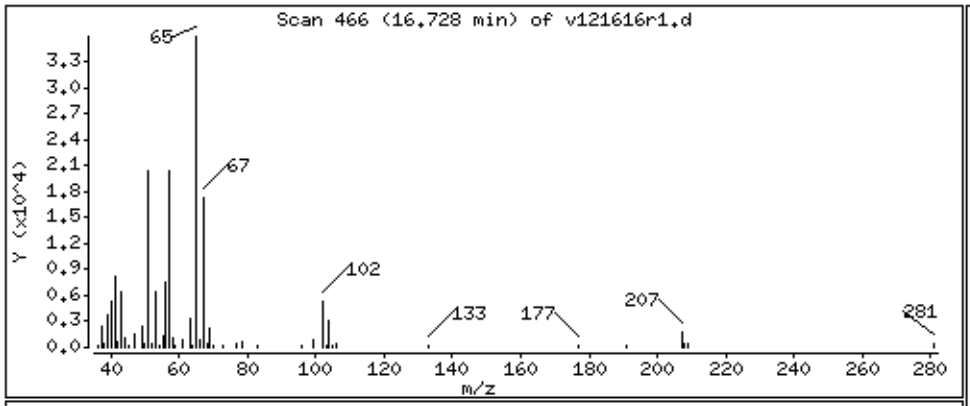
Operator: sn

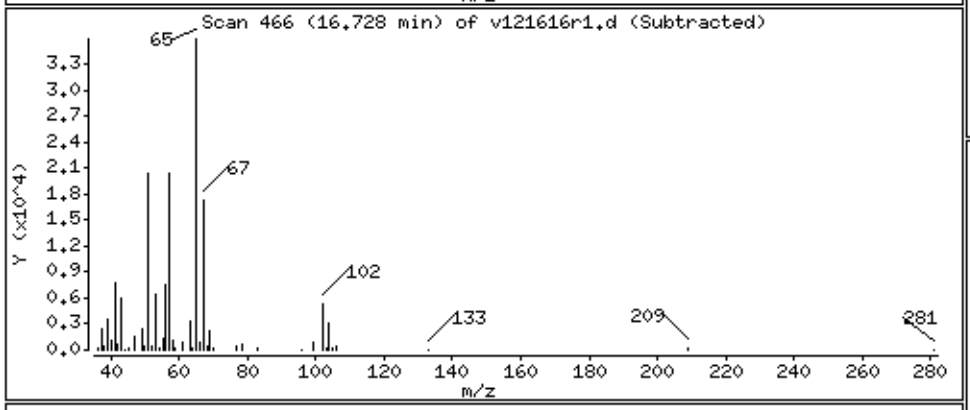
Column phase: RTx-624

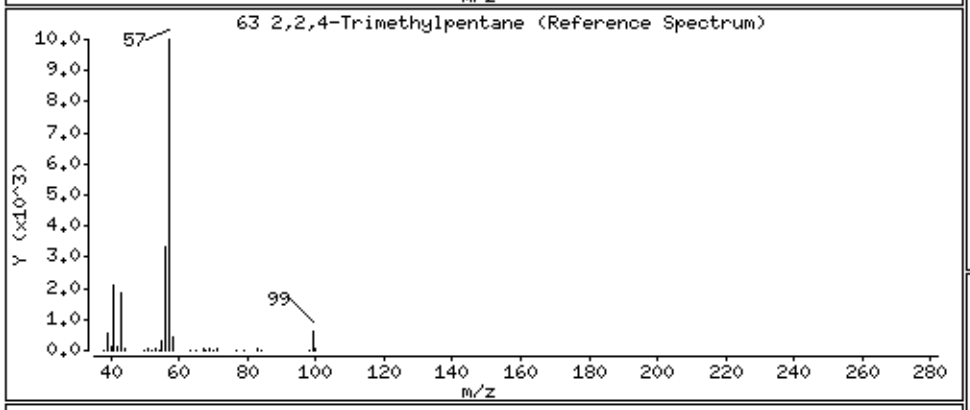
Column diameter: 0.32

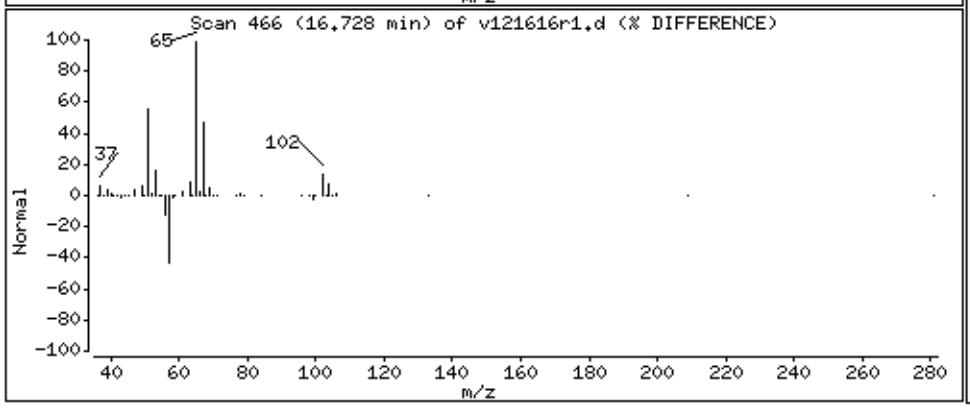
63 2,2,4-Trimethylpentane

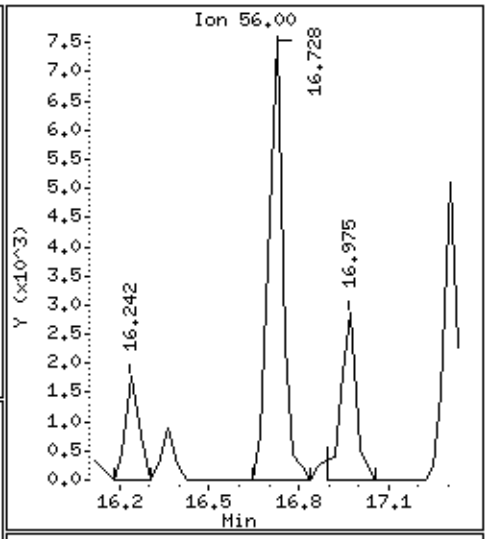
Concentration: 0.5542 PPBV

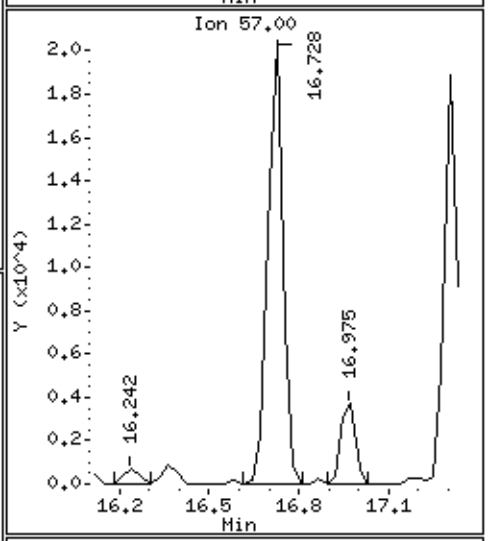


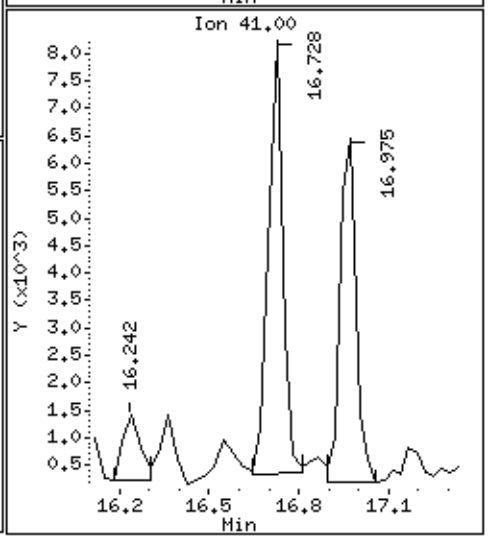












Data File: /chem/msdv.i/16Dec2014.b/v121616r1.d

Date : 16-DEC-2014 19:01

Client ID:

Instrument: msdv.i

Sample Info: 250ml #33654

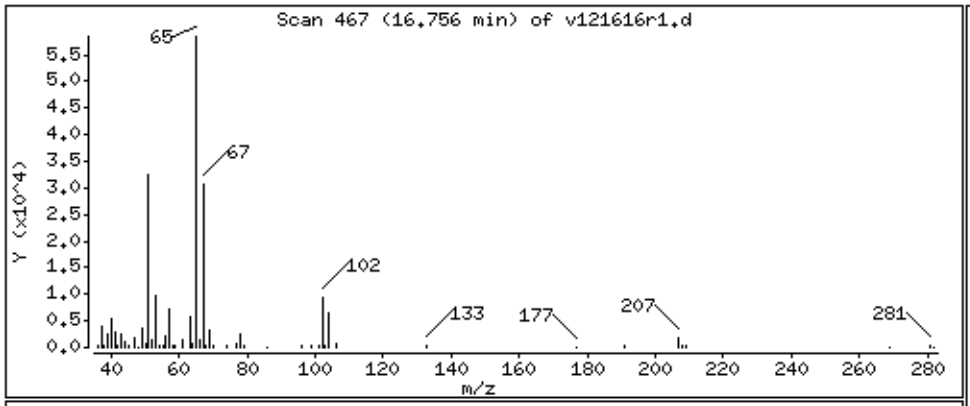
Operator: sn

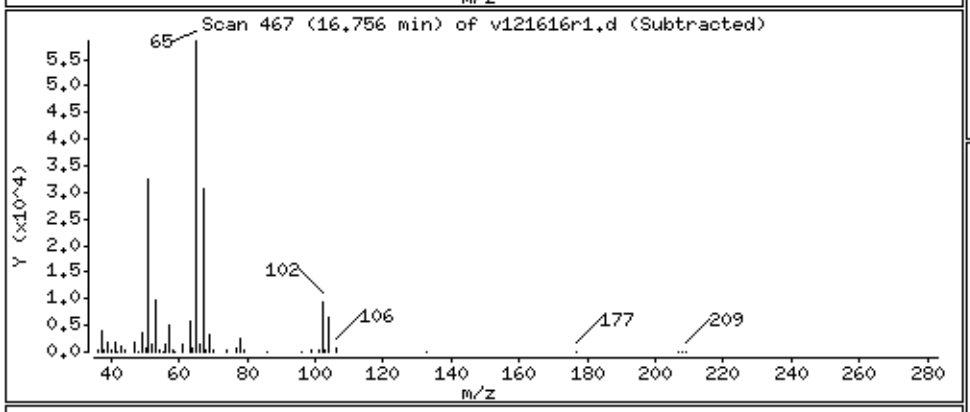
Column phase: RTx-624

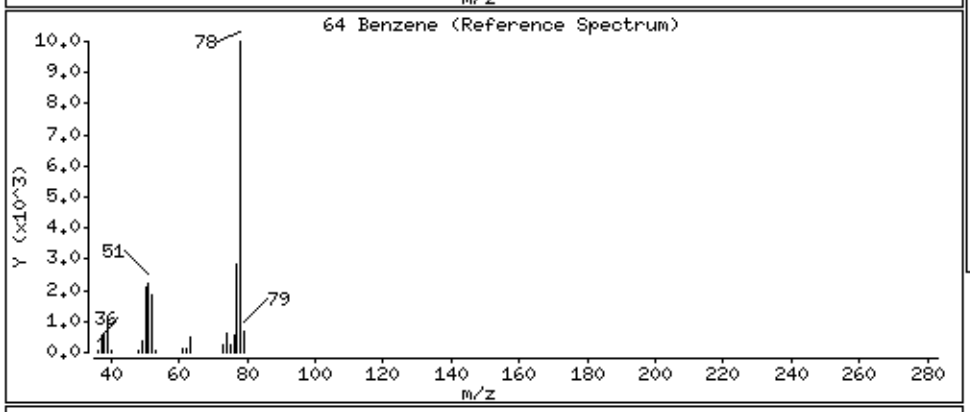
Column diameter: 0.32

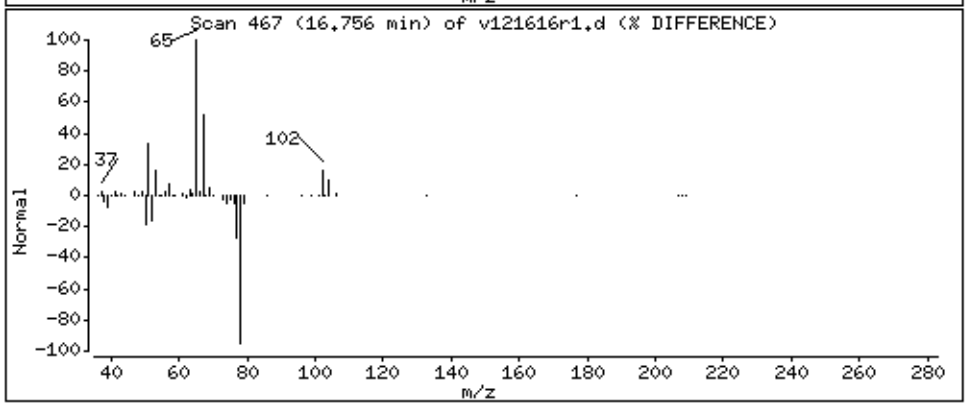
64 Benzene

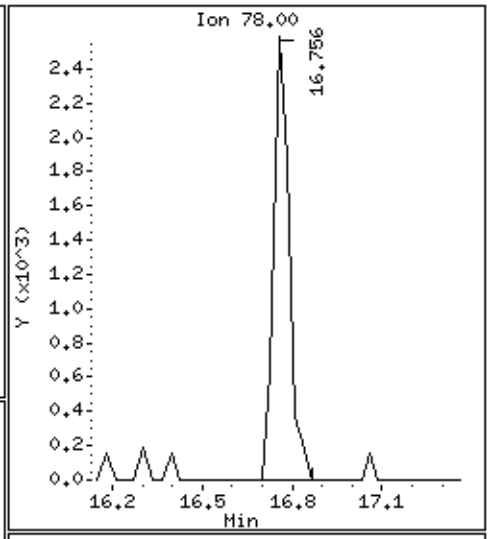
Concentration: 0.1316 PPBV

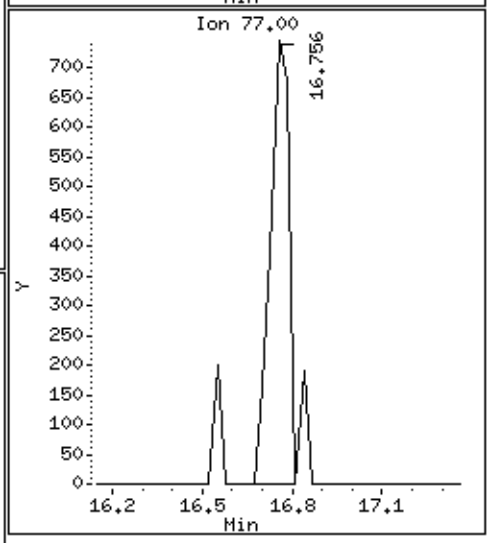












Data File: /chem/msdv.i/16Dec2014.b/v121616r1.d

Date : 16-DEC-2014 19:01

Client ID:

Instrument: msdv.i

Sample Info: 250ml #33654

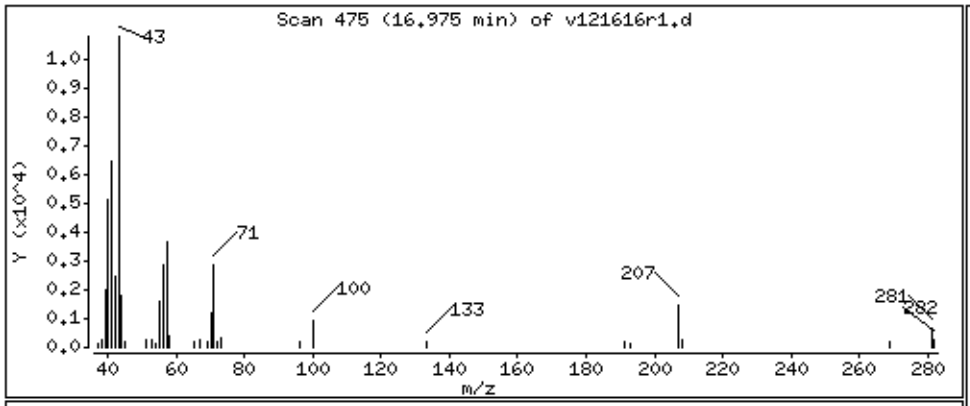
Operator: sn

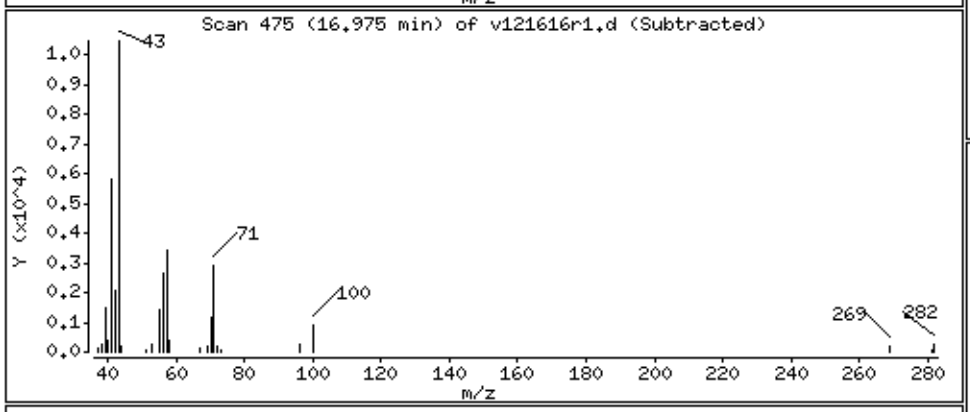
Column phase: RTx-624

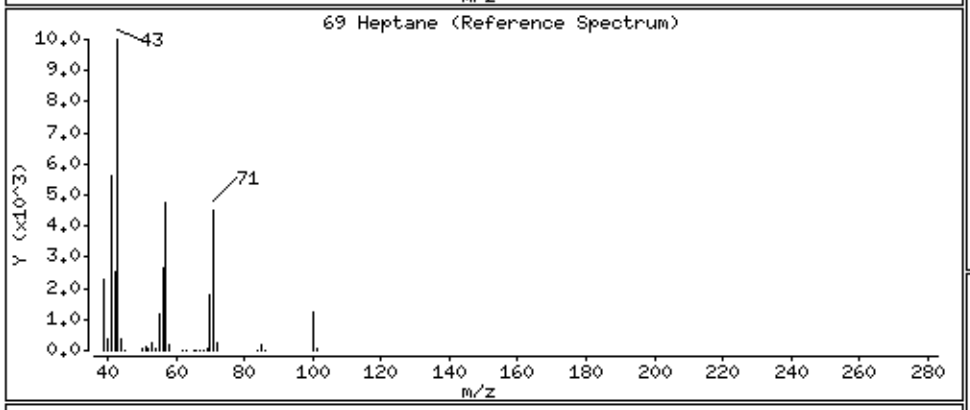
Column diameter: 0.32

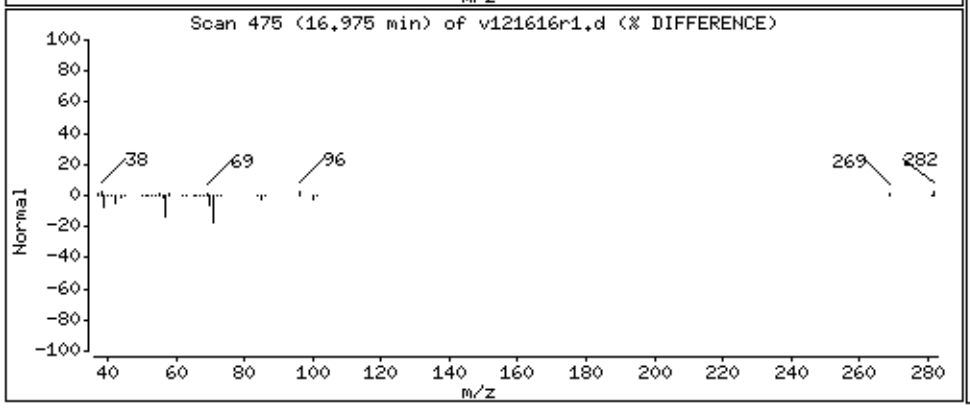
69 Heptane

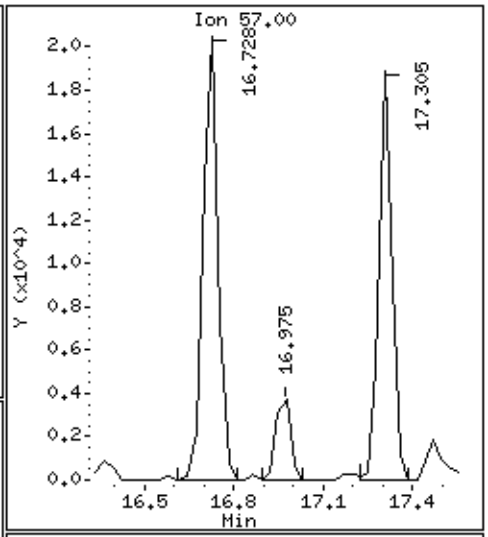
Concentration: 0.4308 PPBV

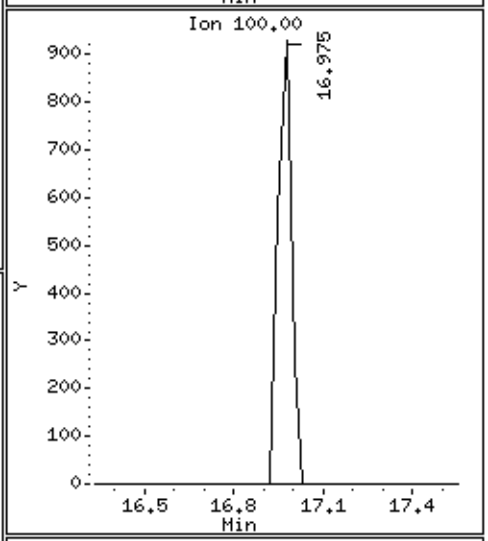


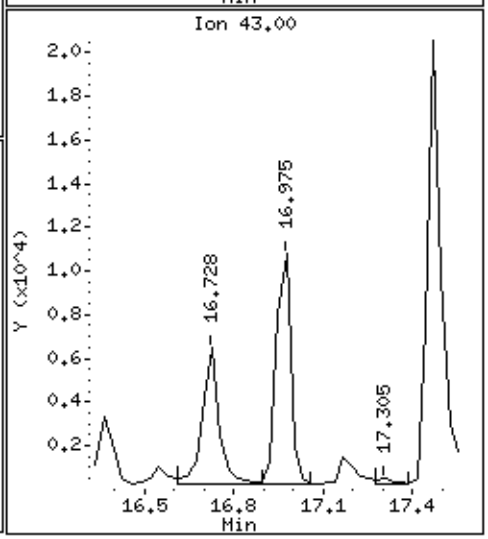












Data File: /chem/msdv.i/16Dec2014.b/v121616r1.d

Date : 16-DEC-2014 19:01

Client ID:

Instrument: msdv.i

Sample Info: 250ml #33654

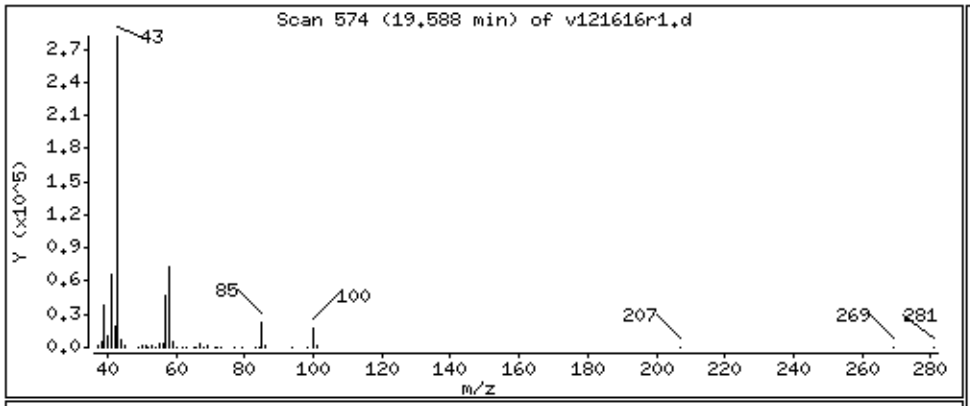
Operator: sn

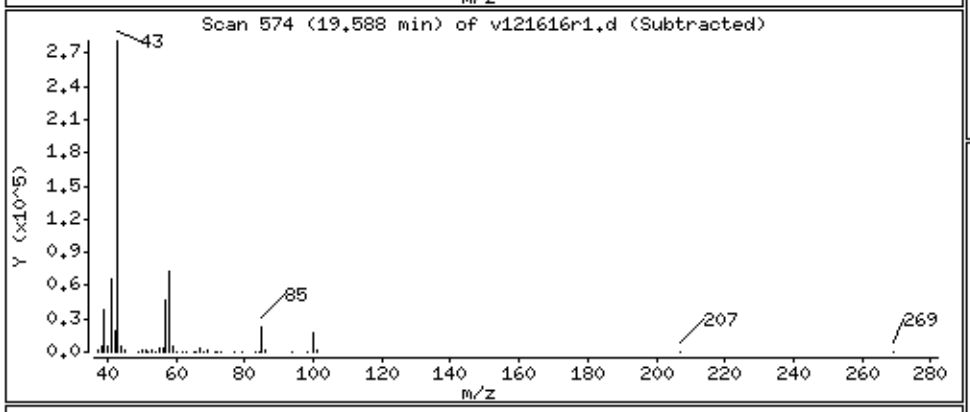
Column phase: RTx-624

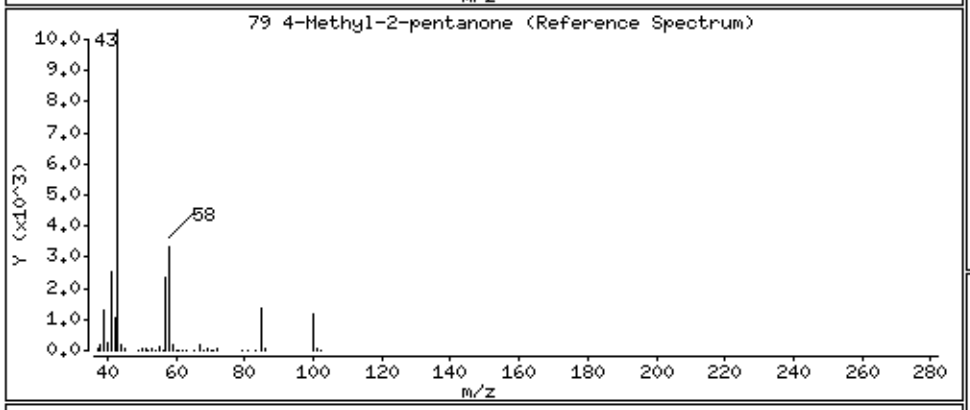
Column diameter: 0.32

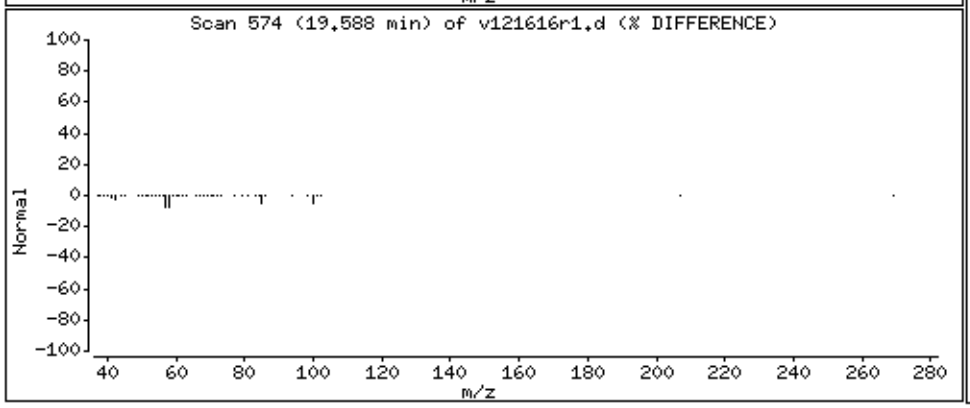
79 4-Methyl-2-pentanone

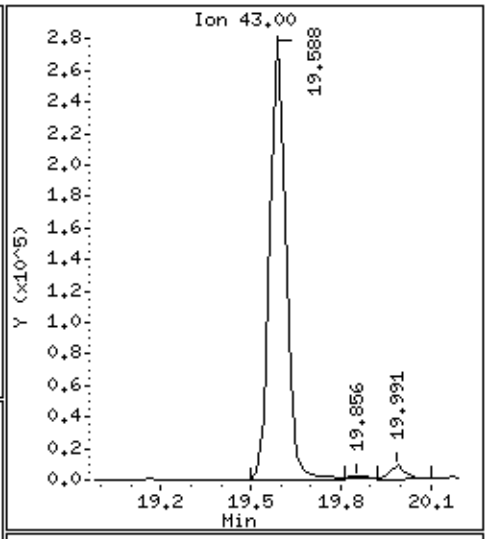
Concentration: 10.570 PPBV

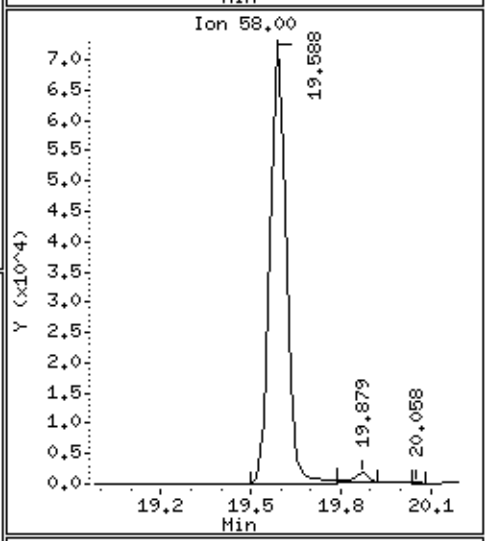


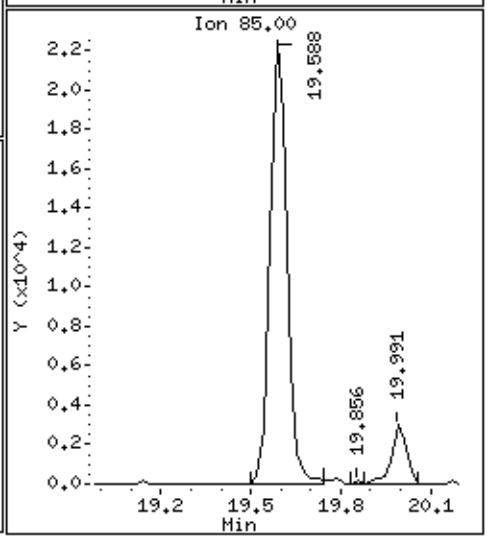












Data File: /chem/msdv.i/16Dec2014.b/v121616r1.d

Date : 16-DEC-2014 19:01

Client ID:

Instrument: msdv.i

Sample Info: 250ml #33654

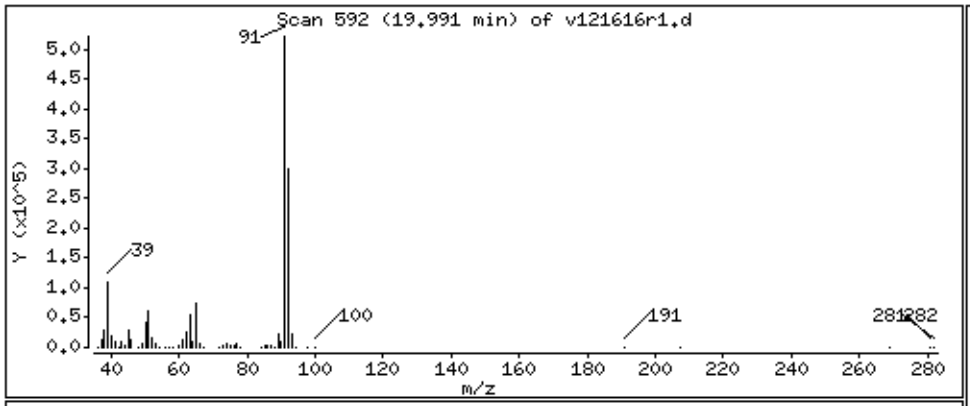
Operator: sn

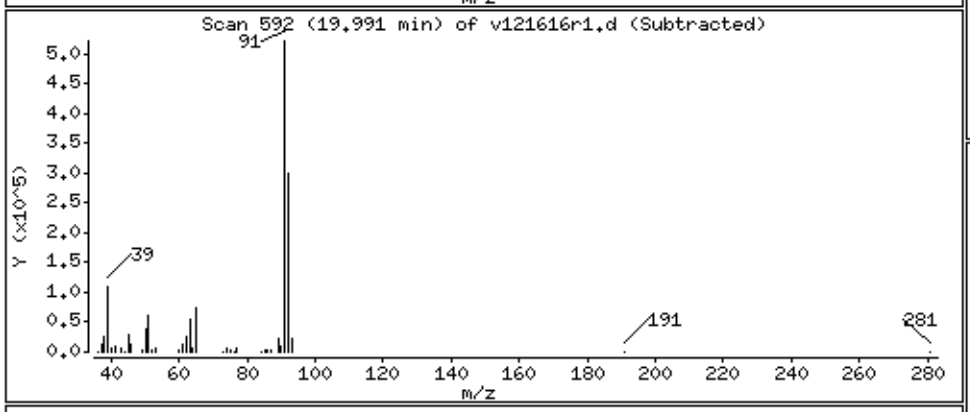
Column phase: RTx-624

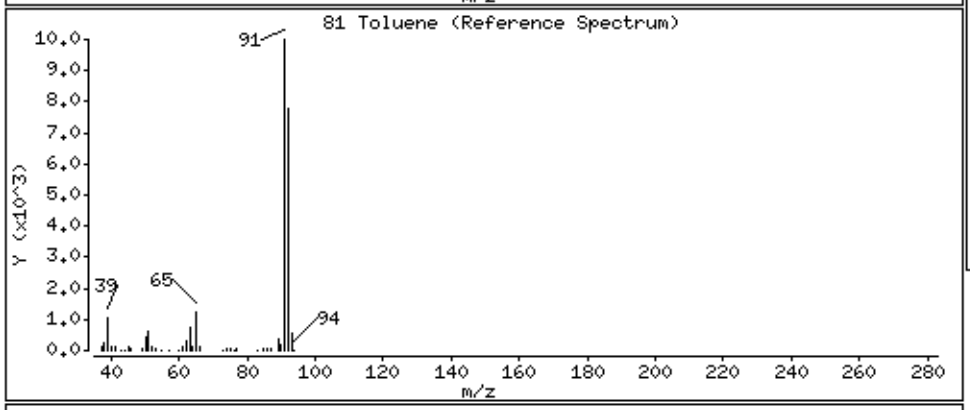
Column diameter: 0.32

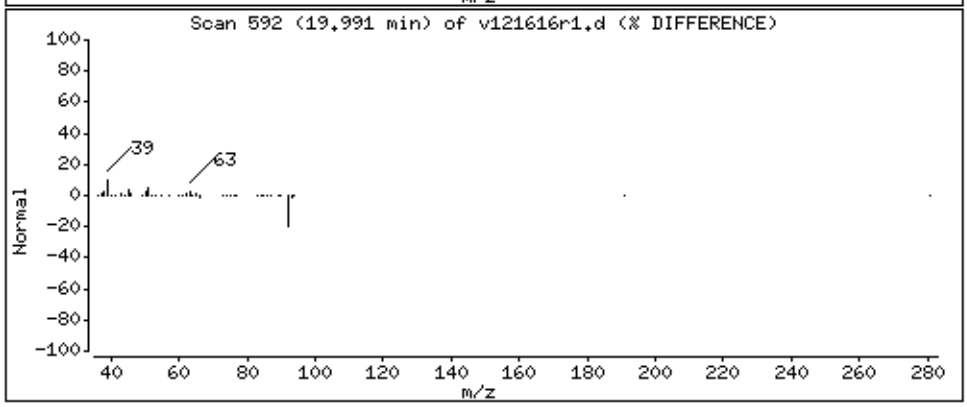
81 Toluene

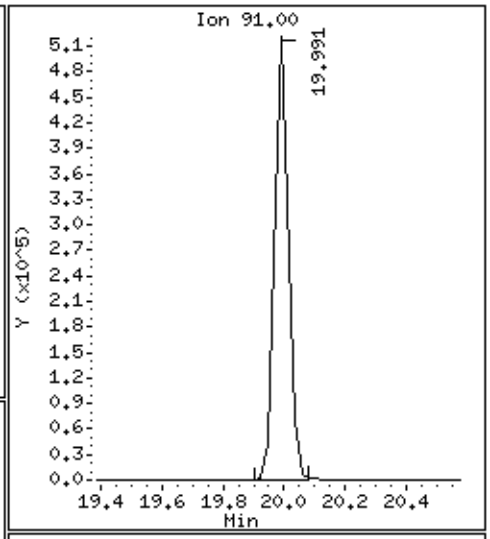
Concentration: 21.302 PPBV

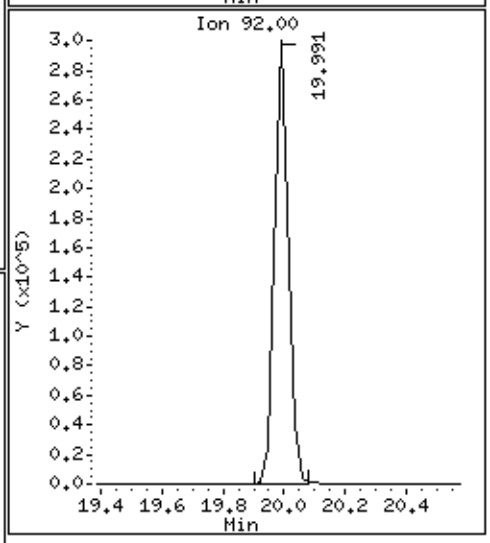












Data File: /chem/msdv.i/16Dec2014.b/v121616r1.d

Date : 16-DEC-2014 19:01

Client ID:

Instrument: msdv.i

Sample Info: 250ml #33654

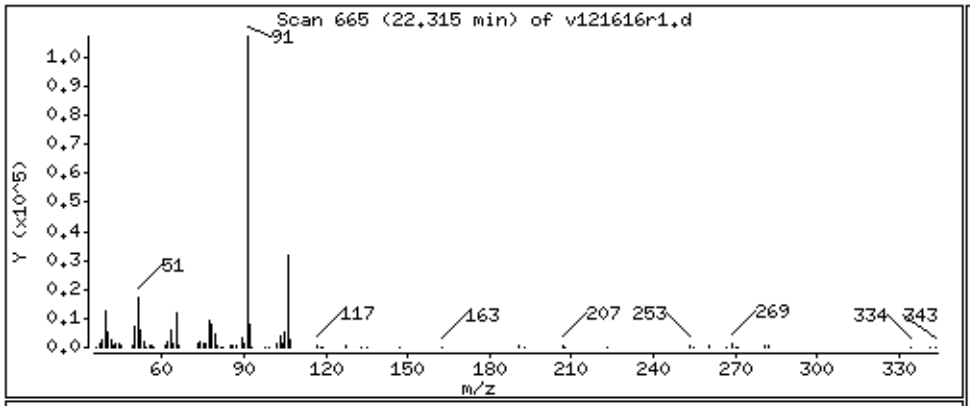
Operator: sn

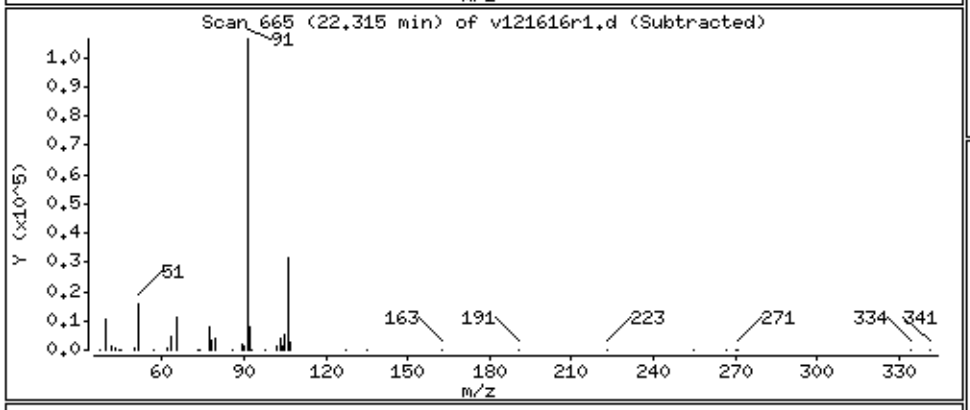
Column phase: RTx-624

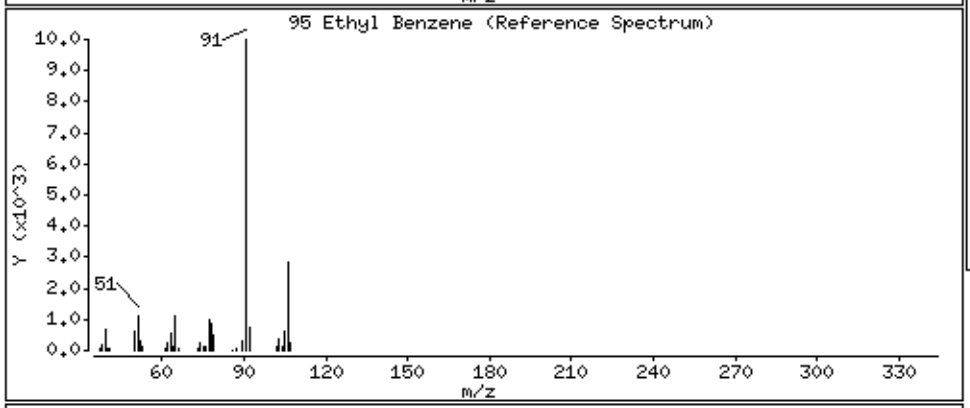
Column diameter: 0.32

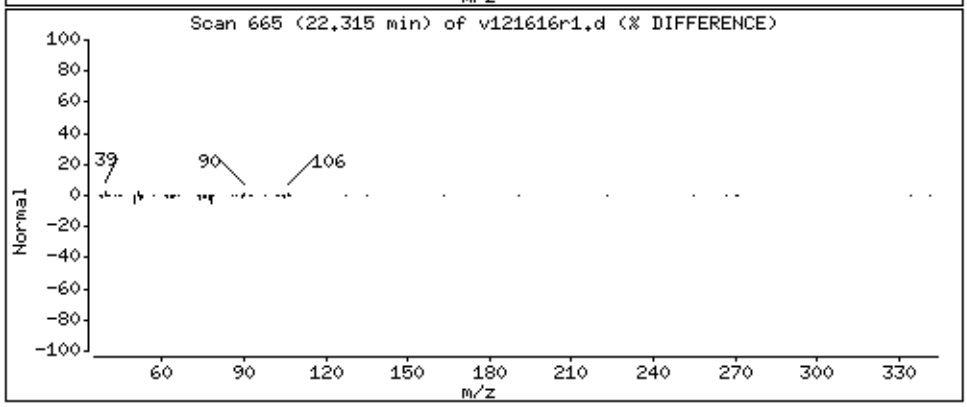
95 Ethyl Benzene

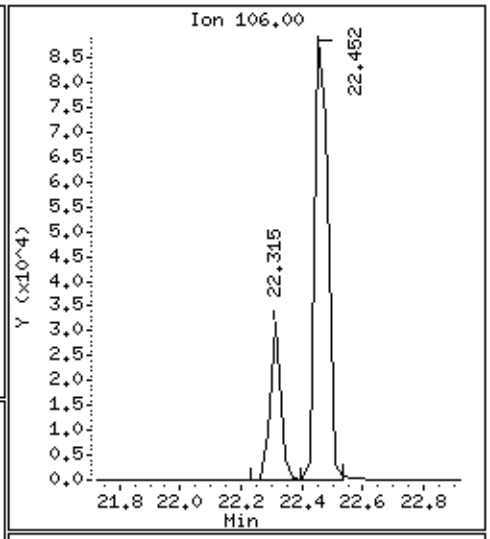
Concentration: 2.687 PPBV

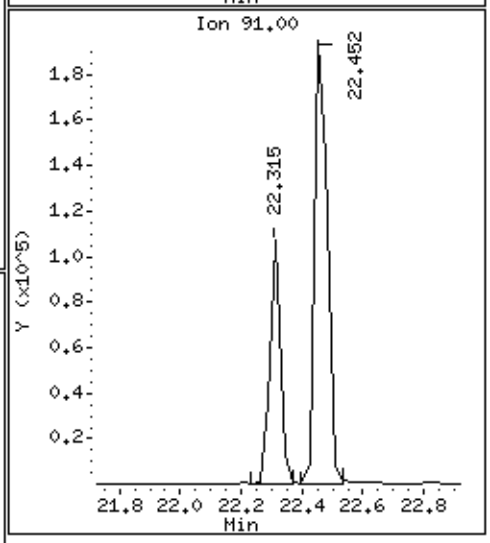












Data File: /chem/msdv.i/16Dec2014.b/v121616r1.d

Date : 16-DEC-2014 19:01

Client ID:

Instrument: msdv.i

Sample Info: 250ml #33654

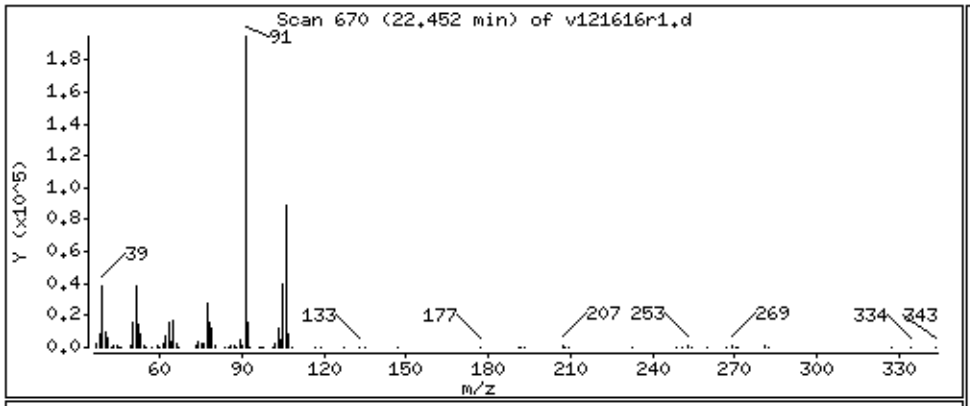
Operator: sn

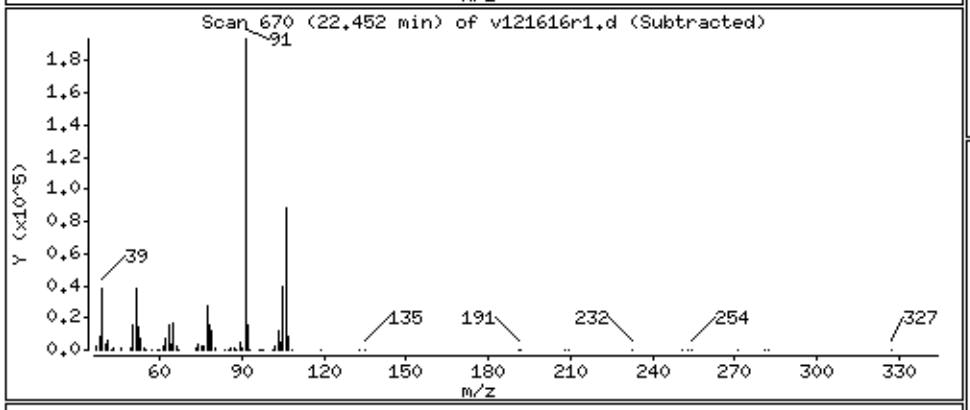
Column phase: RTx-624

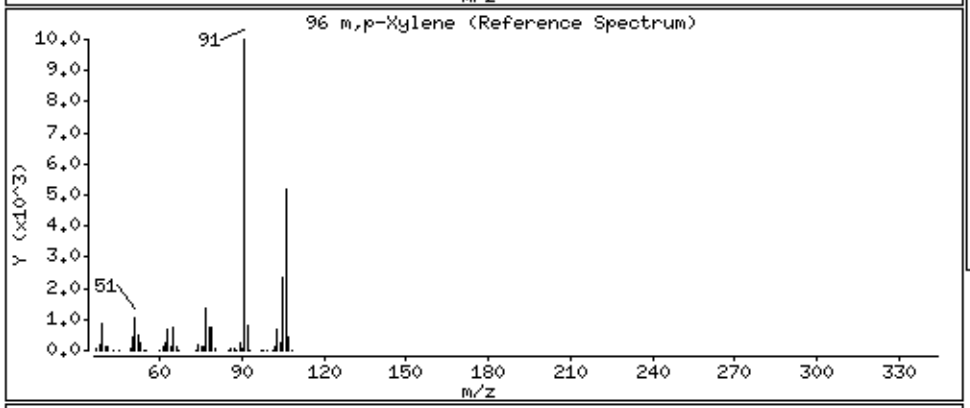
Column diameter: 0.32

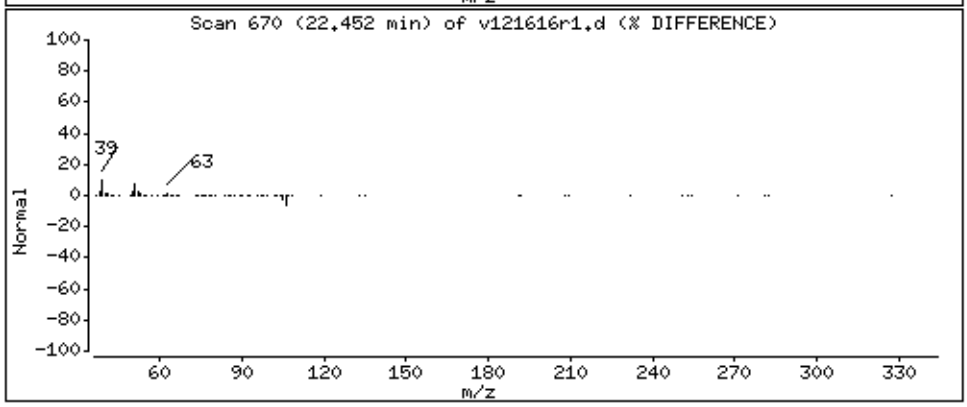
96 m,p-Xylene

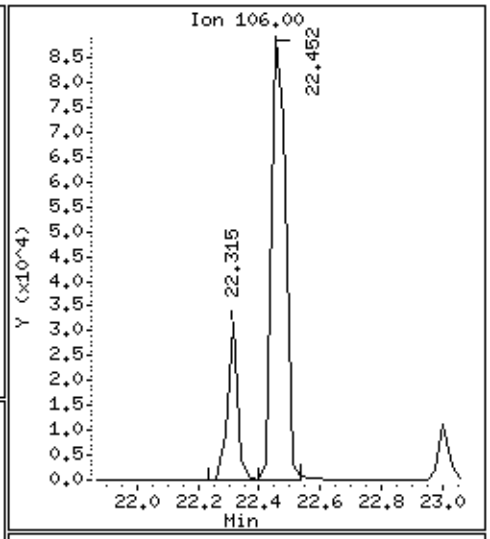
Concentration: 10.111 PPBV

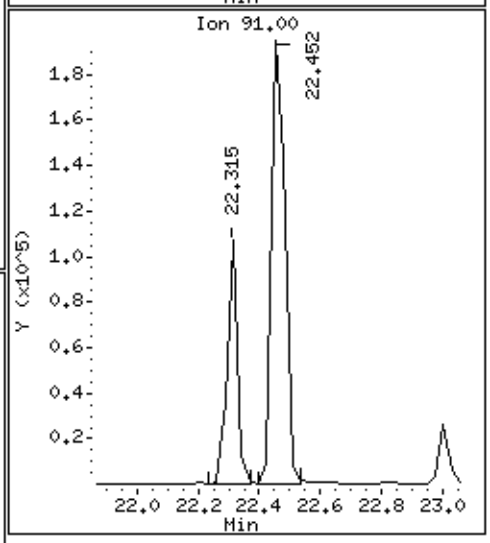












Data File: /chem/msdv.i/16Dec2014.b/v121616r1.d

Date : 16-DEC-2014 19:01

Client ID:

Instrument: msdv.i

Sample Info: 250ml #33654

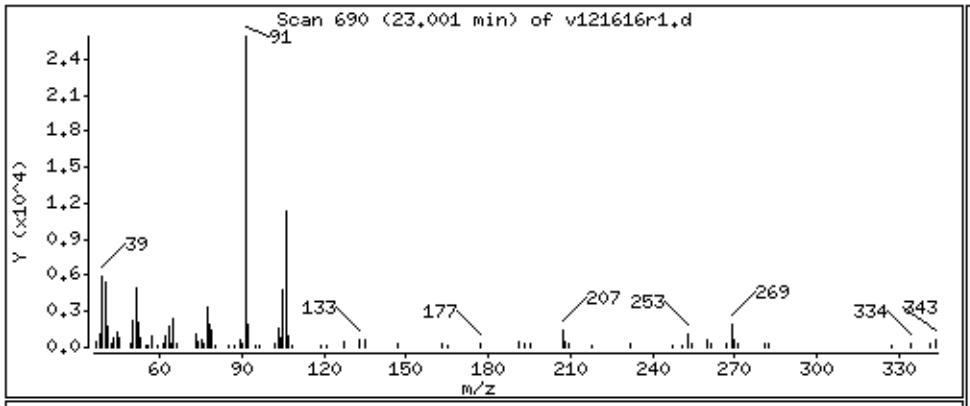
Operator: sn

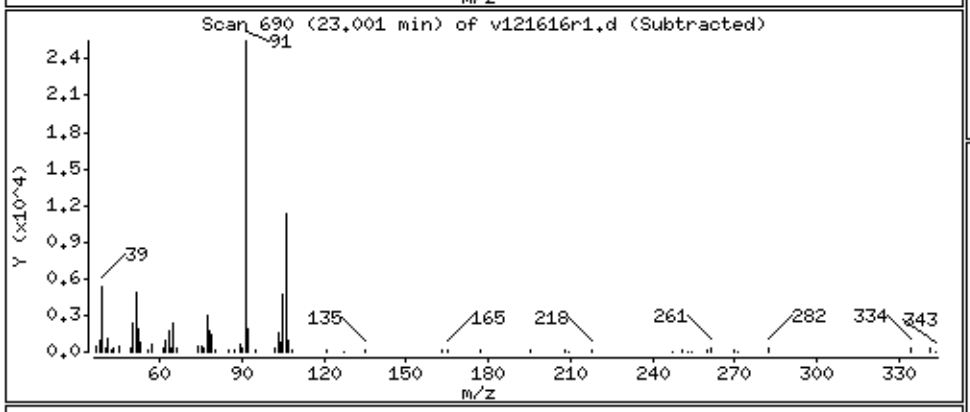
Column phase: RTx-624

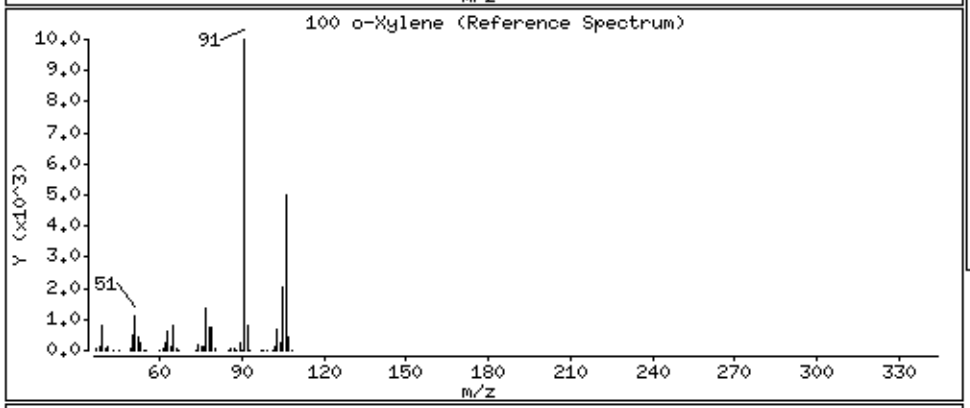
Column diameter: 0.32

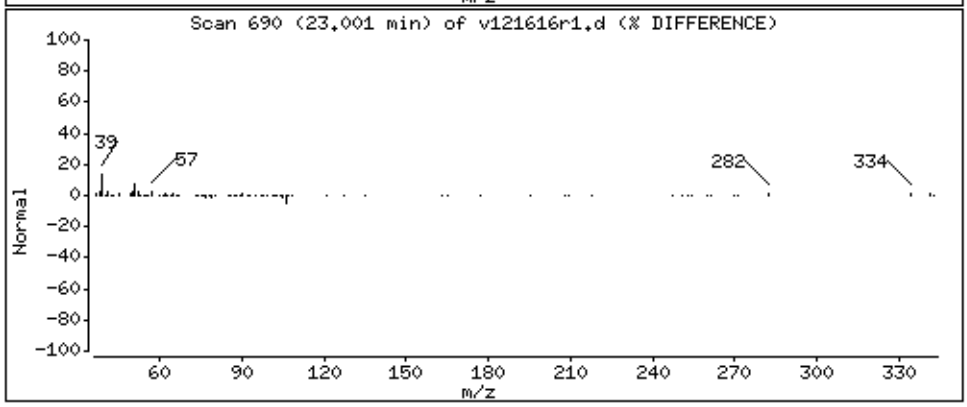
100 o-Xylene

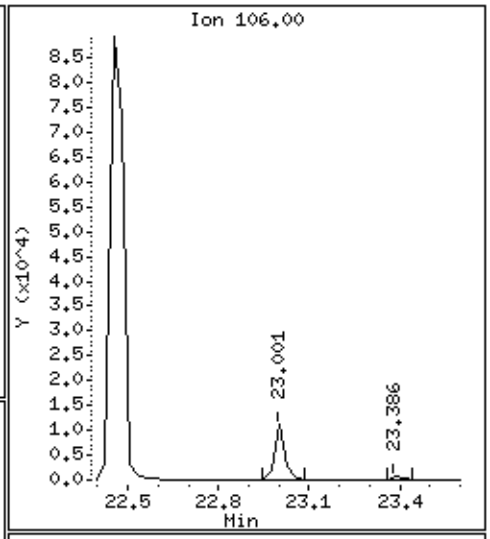
Concentration: 1.040 PPBV

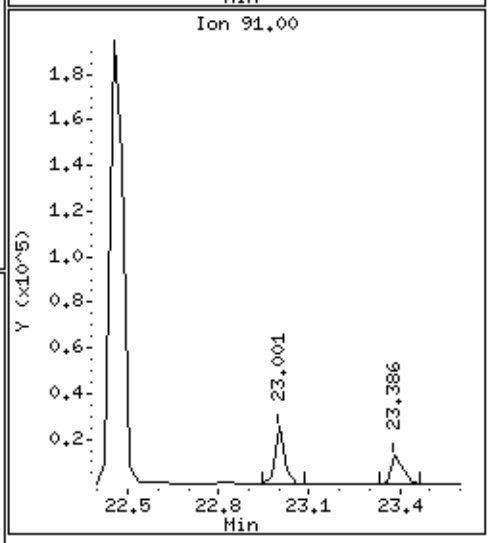












Data File: /chem/msdv.i/16Dec2014.b/v121616r1.d

Date : 16-DEC-2014 19:01

Client ID:

Instrument: msdv.i

Sample Info: 250ml #33654

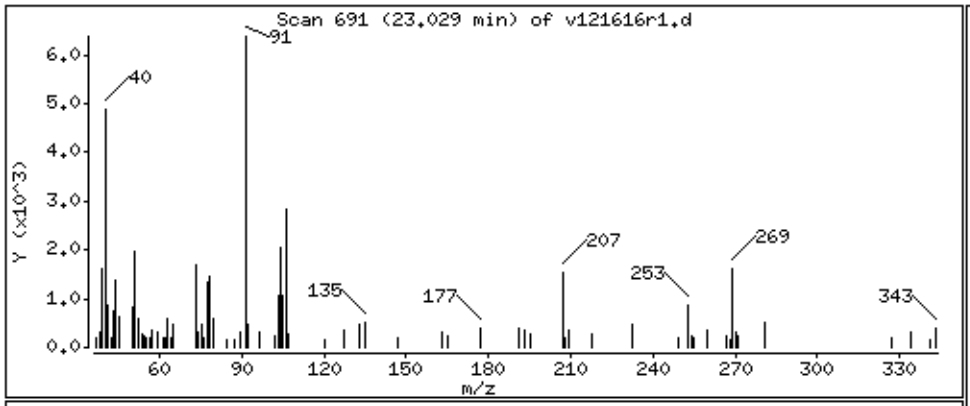
Operator: sn

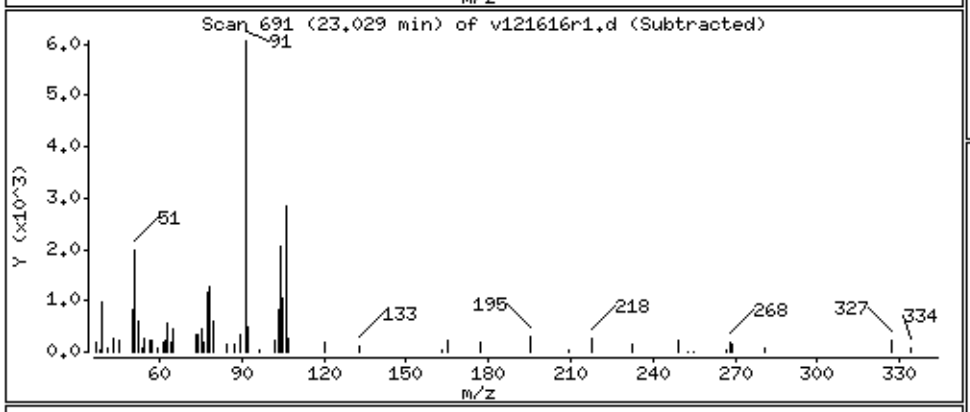
Column phase: RTx-624

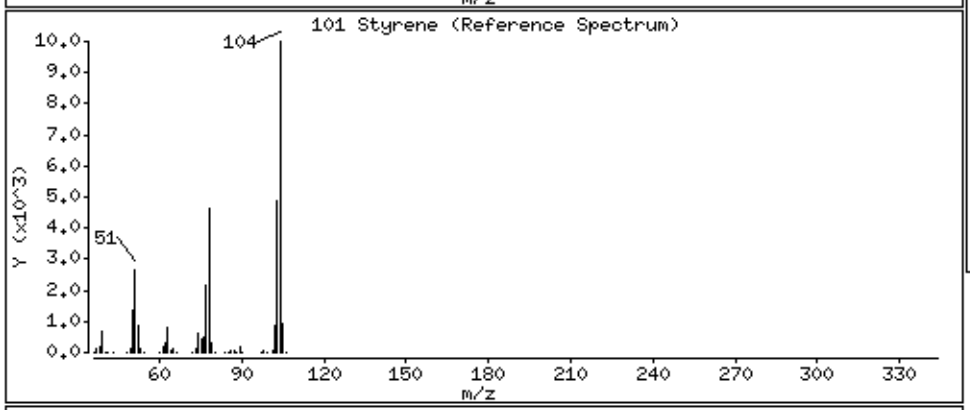
Column diameter: 0.32

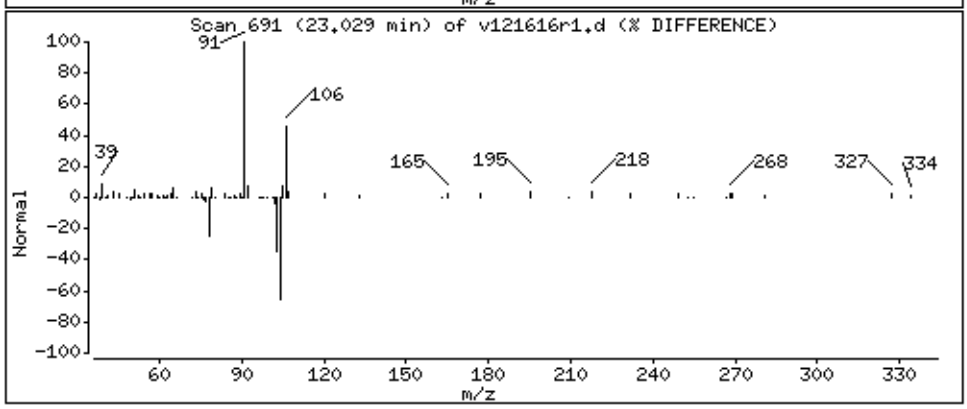
101 Styrene

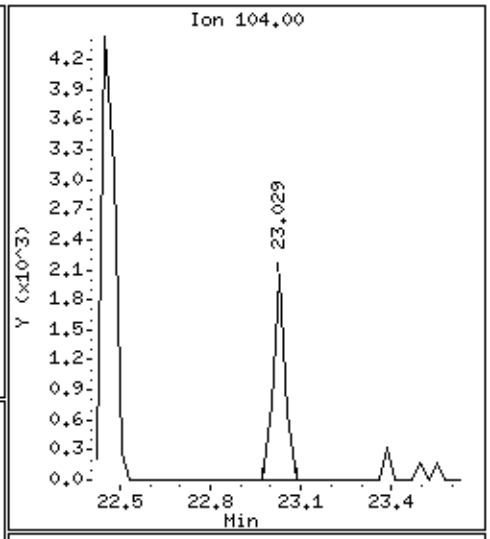
Concentration: 0.1522 PPBV

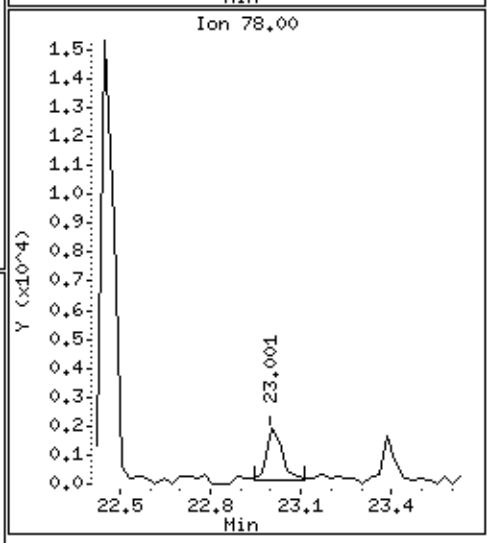












Data File: /chem/msdv.i/16Dec2014.b/v121616r1.d

Date : 16-DEC-2014 19:01

Client ID:

Instrument: msdv.i

Sample Info: 250ml #33654

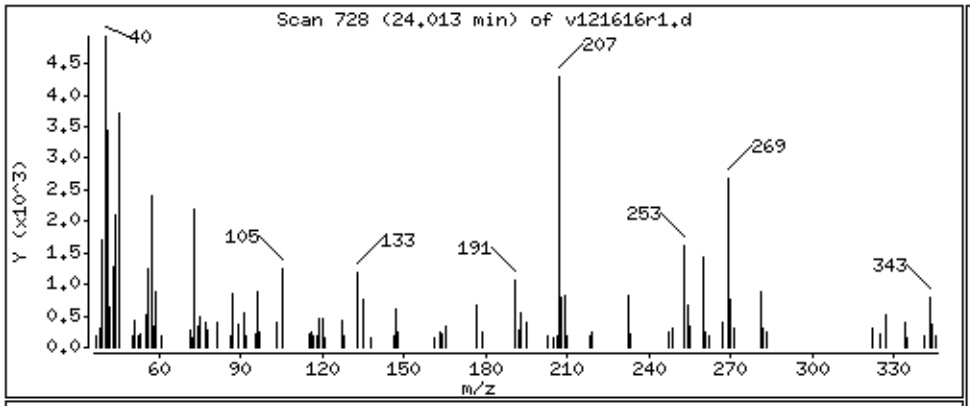
Operator: sn

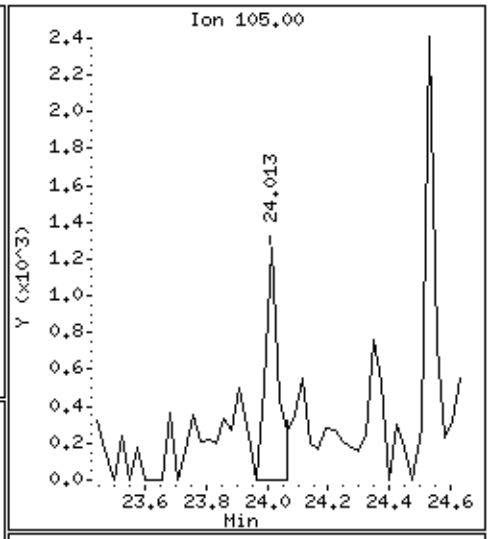
Column phase: RTx-624

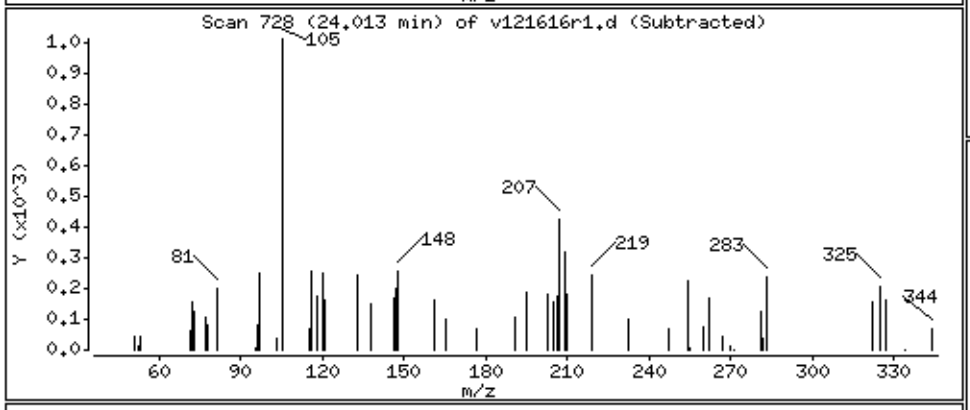
Column diameter: 0.32

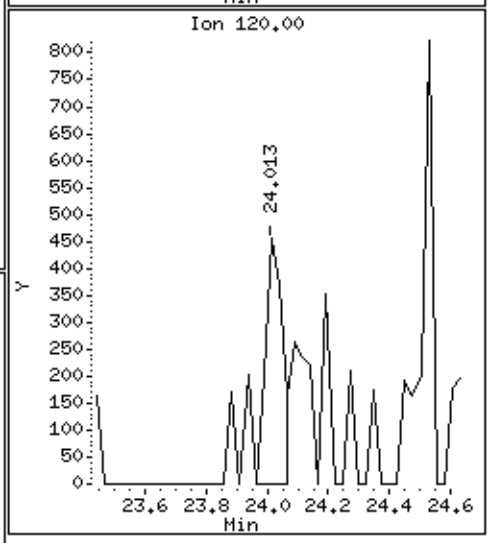
113 4-Ethyltoluene

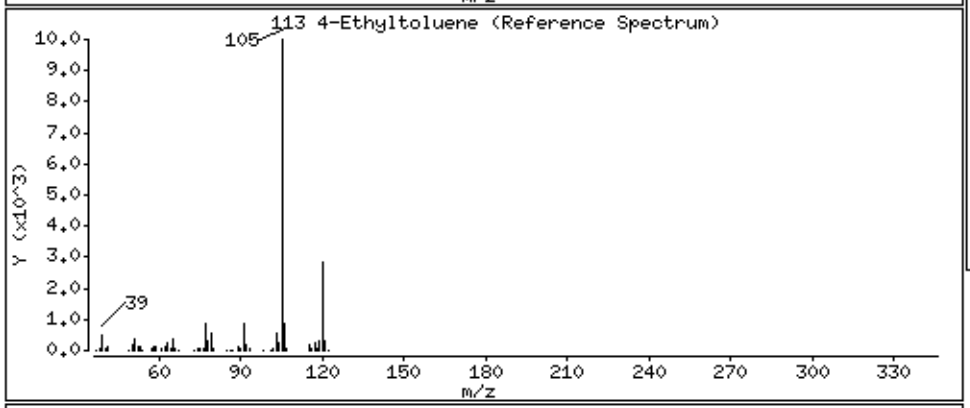
Concentration: 0.07804 PPBV

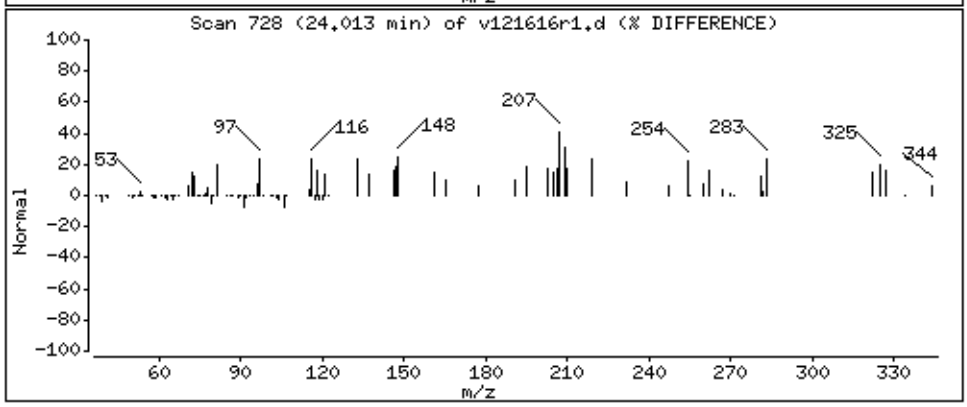












Data File: /chem/msdv.i/16Dec2014.b/v121616r1.d

Date : 16-DEC-2014 19:01

Client ID:

Instrument: msdv.i

Sample Info: 250ml #33654

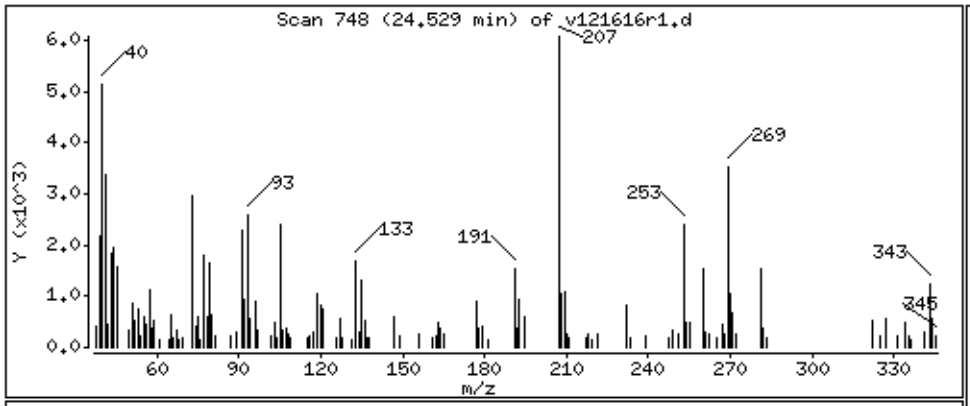
Operator: sn

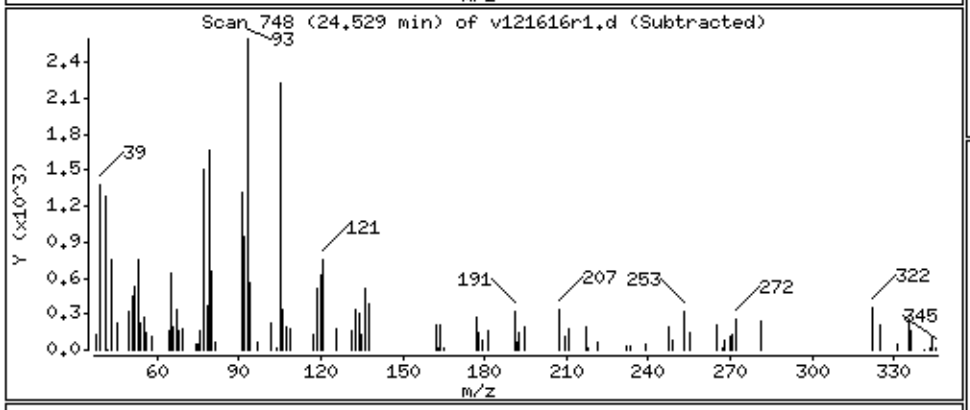
Column phase: RTx-624

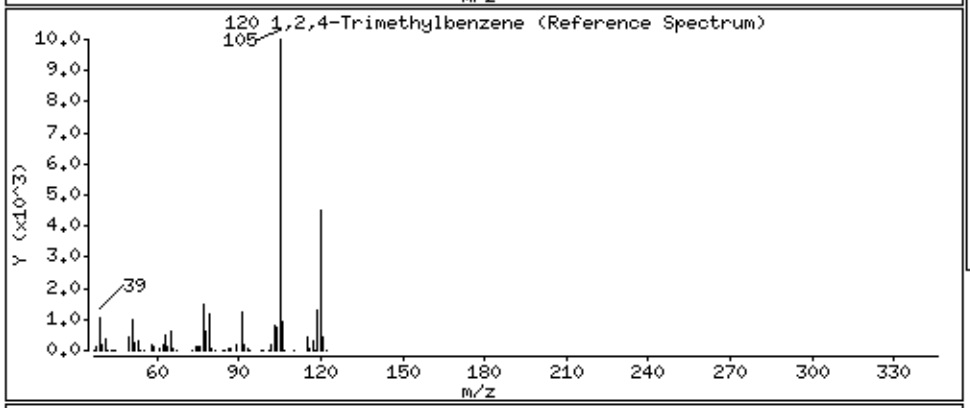
Column diameter: 0.32

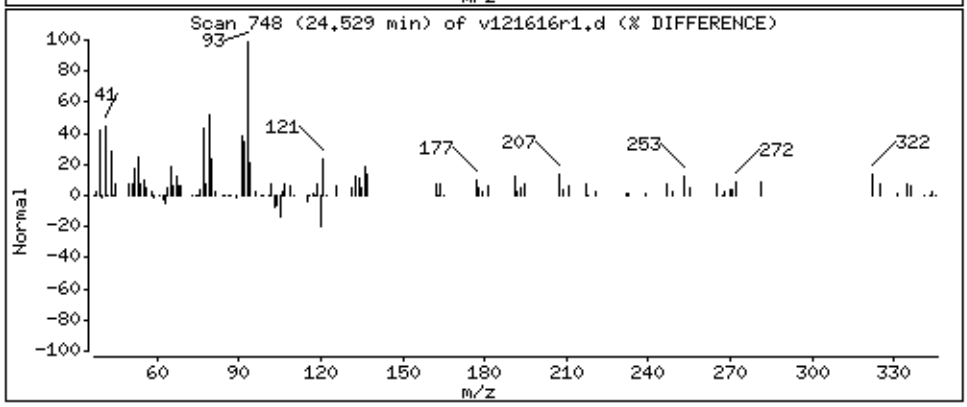
120 1,2,4-Trimethylbenzene

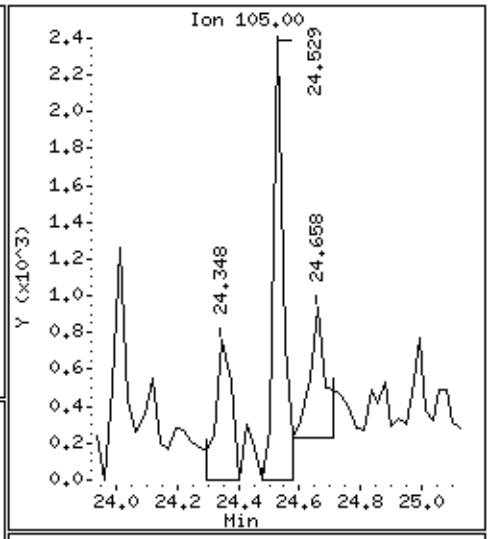
Concentration: 0.1714 PPBV

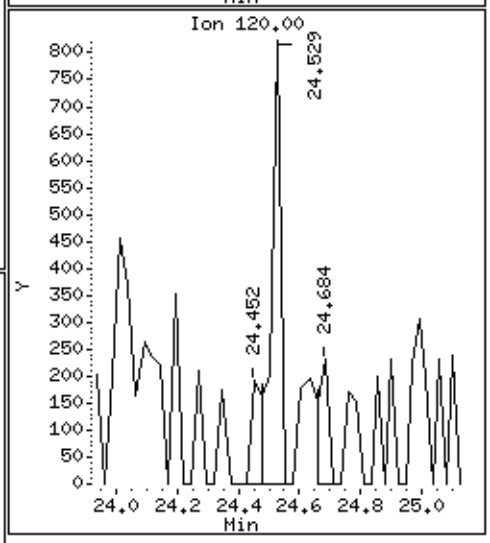












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Summary of Detected Compounds
MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: B5IA-10 (2014)

Lab ID#: 1412152AR1-02A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.90	0.48 J	4.4	2.4 J
Chloromethane	0.90	0.78 J	1.8	1.6 J
Freon 11	0.18	0.21	1.0	1.2
Ethanol	0.90	53 J0	1.7	100 J0
Freon 113	0.18	0.058 J	1.4	0.44 J
Acetone	0.90	36	2.1	86
2-Propanol	0.90	25	2.2	61
Carbon Disulfide	0.90	1.8	2.8	5.4
Methylene Chloride	0.36	8.0	1.2	28
Methyl tert-butyl ether	0.18	0.22	0.65	0.80
Hexane	0.18	0.16 J	0.63	0.56 J
2-Butanone (Methyl Ethyl Ketone)	0.90	0.59 J	2.6	1.7 J
Tetrahydrofuran	0.90	0.45 J	2.6	1.3 J
Chloroform	0.18	0.045 J	0.88	0.22 J
2,2,4-Trimethylpentane	0.90	0.53 J	4.2	2.5 J
Benzene	0.18	0.16 J	0.58	0.51 J
Heptane	0.18	0.38	0.74	1.5
1,4-Dioxane	0.18	0.28	0.65	1.0
4-Methyl-2-pentanone	0.18	8.2	0.74	34
Toluene	0.18	17	0.68	64
Ethyl Benzene	0.18	2.2	0.78	9.5
m,p-Xylene	0.18	7.7	0.78	34
o-Xylene	0.18	0.92	0.78	4.0
Styrene	0.18	0.13 J	0.77	0.57 J
4-Ethyltoluene	0.18	0.098 J	0.88	0.48 J
1,2,4-Trimethylbenzene	0.18	0.14 J	0.88	0.70 J
1,4-Dichlorobenzene	0.18	0.027 J	1.1	0.16 J
alpha-Chlorotoluene	0.90	0.11 J	4.6	0.56 J

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Client Sample ID: B5IA-10 (2014)

Lab ID#: 1412152AR1-02A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**v121617r1**	**Date of Collection:**	**12/9/14 11:48:00 AM**
Dil. Factor:	**1.80**	**Date of Analysis:**	**12/16/14 07:43 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.90	0.48 J	4.4	2.4 J
Freon 114	0.18	Not Detected	1.2	Not Detected
Chloromethane	0.90	0.78 J	1.8	1.6 J
Vinyl Chloride	0.18	Not Detected	0.46	Not Detected
1,3-Butadiene	0.18	Not Detected	0.40	Not Detected
Bromomethane	0.90	Not Detected	3.5	Not Detected
Chloroethane	0.90	Not Detected	2.4	Not Detected
Freon 11	0.18	0.21	1.0	1.2
Ethanol	0.90	53 J0	1.7	100 J0
Freon 113	0.18	0.058 J	1.4	0.44 J
1,1-Dichloroethene	0.18	Not Detected	0.71	Not Detected
Acetone	0.90	36	2.1	86
2-Propanol	0.90	25	2.2	61
Carbon Disulfide	0.90	1.8	2.8	5.4
3-Chloropropene	0.90	Not Detected	2.8	Not Detected
Methylene Chloride	0.36	8.0	1.2	28
Methyl tert-butyl ether	0.18	0.22	0.65	0.80
trans-1,2-Dichloroethene	0.18	Not Detected	0.71	Not Detected
Hexane	0.18	0.16 J	0.63	0.56 J
1,1-Dichloroethane	0.18	Not Detected	0.73	Not Detected
2-Butanone (Methyl Ethyl Ketone)	0.90	0.59 J	2.6	1.7 J
cis-1,2-Dichloroethene	0.18	Not Detected	0.71	Not Detected
Tetrahydrofuran	0.90	0.45 J	2.6	1.3 J
Chloroform	0.18	0.045 J	0.88	0.22 J
1,1,1-Trichloroethane	0.18	Not Detected	0.98	Not Detected
Cyclohexane	0.18	Not Detected	0.62	Not Detected
Carbon Tetrachloride	0.18	Not Detected	1.1	Not Detected
2,2,4-Trimethylpentane	0.90	0.53 J	4.2	2.5 J
Benzene	0.18	0.16 J	0.58	0.51 J
1,2-Dichloroethane	0.18	Not Detected	0.73	Not Detected
Heptane	0.18	0.38	0.74	1.5
Trichloroethene	0.18	Not Detected	0.97	Not Detected
1,2-Dichloropropane	0.18	Not Detected	0.83	Not Detected
1,4-Dioxane	0.18	0.28	0.65	1.0
Bromodichloromethane	0.18	Not Detected	1.2	Not Detected
cis-1,3-Dichloropropene	0.18	Not Detected	0.82	Not Detected
4-Methyl-2-pentanone	0.18	8.2	0.74	34
Toluene	0.18	17	0.68	64
trans-1,3-Dichloropropene	0.18	Not Detected	0.82	Not Detected
1,1,2-Trichloroethane	0.18	Not Detected	0.98	Not Detected
Tetrachloroethene	0.18	Not Detected	1.2	Not Detected
2-Hexanone	0.90	Not Detected	3.7	Not Detected

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Client Sample ID: B5IA-10 (2014)

Lab ID#: 1412152AR1-02A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**v121617r1**	**Date of Collection:**	**12/9/14 11:48:00 AM**
Dil. Factor:	**1.80**	**Date of Analysis:**	**12/16/14 07:43 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Dibromochloromethane	0.18	Not Detected	1.5	Not Detected
1,2-Dibromoethane (EDB)	0.18	Not Detected	1.4	Not Detected
Chlorobenzene	0.18	Not Detected	0.83	Not Detected
Ethyl Benzene	0.18	2.2	0.78	9.5
m,p-Xylene	0.18	7.7	0.78	34
o-Xylene	0.18	0.92	0.78	4.0
Styrene	0.18	0.13 J	0.77	0.57 J
Bromoform	0.18	Not Detected	1.9	Not Detected
Cumene	0.18	Not Detected	0.88	Not Detected
1,1,2,2-Tetrachloroethane	0.18	Not Detected	1.2	Not Detected
Propylbenzene	0.18	Not Detected	0.88	Not Detected
4-Ethyltoluene	0.18	0.098 J	0.88	0.48 J
1,3,5-Trimethylbenzene	0.18	Not Detected	0.88	Not Detected
1,2,4-Trimethylbenzene	0.18	0.14 J	0.88	0.70 J
1,3-Dichlorobenzene	0.18	Not Detected UJ	1.1	Not Detected UJ
1,4-Dichlorobenzene	0.18	0.027 J	1.1	0.16 J
alpha-Chlorotoluene	0.90	0.11 J	4.6	0.56 J
1,2-Dichlorobenzene	0.18	Not Detected UJ	1.1	Not Detected UJ
1,2,4-Trichlorobenzene	0.90	Not Detected	6.7	Not Detected
Hexachlorobutadiene	0.90	Not Detected UJ	9.6	Not Detected UJ
Naphthalene	0.90	Not Detected	4.7	Not Detected

J = Estimated value.
J0 = Estimated value due to bias in the CCV.
UJ = Analyte associated with low bias in the CCV and/or LCS.
Container Type: 6 Liter Summa Canister (100% Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	113	70-130
Toluene-d8	105	70-130
4-Bromofluorobenzene	96	70-130

Eurofins Air Toxics Inc.

TO15/Modified TO-14A

Data file : /chem/msdv.i/16Dec2014.b/v121617r1.d
Lab Smp Id: 1412152AR1-02A
Inj Date : 16-DEC-2014 19:43
Operator : sn Inst ID: msdv.i
Smp Info : 250ml #25261
Misc Info : 7.6"Hg -> 5.1psi
Comment : Low Level GC-MS
Method : /chem/msdv.i/16Dec2014.b/v14l1006d.m
Meth Date : 01-Jul-2015 09:03 sblack Quant Type: ISTD
Cal Date : 03-NOV-2014 11:17 Cal File: v110307.d
Als bottle: 1
Dil Factor: 1.80000
Integrator: HP RTE Compound Sublist: And19256r1.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
* 54 Bromochloromethane							CAS #: 74-97-5	
15.934	15.933	(1.000)	130	90051	5.00000		80.00- 120.00	100.00
15.934	15.933	(1.000)	128	70811			47.55- 107.55	78.63
15.934	15.933	(1.000)	49	238296			213.64- 273.64	264.62
* 71 1,4-Difluorobenzene							CAS #: 540-36-3	
17.305	17.305	(1.000)	114	404322	5.00000		80.00- 120.00	100.00
17.305	17.305	(1.000)	88	68961			0.00- 46.17	17.06
* 92 Chlorobenzene-d5							CAS #: 3114-55-4	
22.205	22.205	(1.000)	117	328178	5.00000		80.00- 120.00	100.00
22.205	22.205	(1.000)	82	207822			28.56- 88.56	63.33
$ 65 1,2-Dichloroethane-d4							CAS #: 17060-07-0	
16.756	16.756	(1.052)	65	187435	5.67145	5.671	80.00- 120.00	100.00
16.756	16.756	(1.052)	67	90876			28.37- 88.37	48.48
$ 80 Toluene-d8							CAS #: 2037-26-5	
19.857	19.879	(1.147)	98	409696	5.27035	5.270	80.00- 120.00	100.00
19.857	19.879	(1.147)	70	52904			0.00- 41.90	12.91

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

$  80 Toluene-d8 (continued)
 19.857  19.879 (1.147)   100    264141                    34.60-  94.60    64.47
-------------------------------------------------------------------------------
$ 106 Bromofluorobenzene                            CAS #: 460-00-4
 23.678  23.704 (1.066)   174    135418 4.79815    4.798  80.00- 120.00   100.00
 23.678  23.704 (1.066)    95    190679                  113.85- 173.85   140.81
 23.678  23.704 (1.066)   176    129794                    68.89- 128.89    95.85
-------------------------------------------------------------------------------
    4 Dichlorodifluoromethane/Fr12                  CAS #: 75-71-8
  5.278   5.202 (0.331)    85     22287 0.26417   0.4755  80.00- 120.00   100.00(a)
  5.278   5.202 (0.331)    87      6536                     1.57-  61.57    29.33
-------------------------------------------------------------------------------
    8 Chloromethane                                 CAS #: 74-87-3
  7.128   7.052 (0.447)    50     22002 0.43275   0.7789  80.00- 120.00   100.00
  7.128   7.052 (0.447)    52      7644                     1.81-  61.81    34.74
-------------------------------------------------------------------------------
   20 Trichlorofluoromethane/Fr11                   CAS #: 75-69-4
 11.184  11.183 (0.702)   101     10180 0.11722   0.2110  80.00- 120.00   100.00
 11.184  11.183 (0.702)   103      7196                    34.11-  94.11    70.68
-------------------------------------------------------------------------------
   24 Ethanol                                       CAS #: 64-17-5
 12.102  12.101 (0.760)    45    543844 29.5419   53.175  80.00- 120.00   100.00
 12.102  12.101 (0.760)    46    203544                     8.51-  68.51    37.43
 12.102  12.101 (0.760)    43    114664                     0.00-  54.10    21.08
-------------------------------------------------------------------------------
   28 Freon 113                                     CAS #: 76-13-1
 12.569  12.568 (0.789)   151      1689 0.03231  0.05816  80.00- 120.00   100.00(a)
 12.596  12.568 (0.791)   153       932                    33.65-  93.65    55.22
 12.569  12.568 (0.789)   101      2425                    96.37- 156.37   143.61
-------------------------------------------------------------------------------
   31 Acetone                                       CAS #: 67-64-1
 12.816  12.816 (0.804)    58    427527 20.0941   36.169  80.00- 120.00   100.00
 12.816  12.816 (0.804)    43   1914580                  413.15- 473.15   447.83
-------------------------------------------------------------------------------
   33 Carbon Disulfide                              CAS #: 75-15-0
 12.926  12.925 (0.811)    76     80366 0.97364    1.752  80.00- 120.00   100.00
-------------------------------------------------------------------------------
   34 2-Propanol                                    CAS #: 67-63-0
 13.173  13.173 (0.827)    45   1359715 13.8011   24.842  80.00- 120.00   100.00
 13.173  13.173 (0.827)    43    270936                     0.00-  50.74    19.93
 13.173  13.173 (0.827)    59     37061                     0.00-  32.83     2.73
-------------------------------------------------------------------------------
   37 Methylene Chloride                            CAS #: 75-09-2
 13.640  13.640 (0.856)    84    121060 4.42199    7.960  80.00- 120.00   100.00
 13.640  13.640 (0.856)    49    288241                   212.37- 272.37   238.10
 13.640  13.640 (0.856)    51     86031                    43.31- 103.31    71.06
-------------------------------------------------------------------------------
```

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
39 MTBE					CAS #: 1634-04-4		
13.997	13.996 (0.878)	73	12194	0.12415	0.2235	80.00- 120.00	100.00
13.942	13.996 (0.875)	57	8977			2.99- 62.99	73.62
14.024	13.996 (0.880)	41	7098			12.12- 72.12	58.21
43 Hexane					CAS #: 110-54-3		
14.381	14.381 (0.903)	57	6938	0.08828	0.1589	80.00- 120.00	100.00(a)
14.381	14.381 (0.903)	43	9857			57.65- 117.65	142.07
14.408	14.381 (0.904)	86	826			0.00- 40.67	11.92
51 2-Butanone					CAS #: 78-93-3		
15.592	15.571 (0.979)	72	5165	0.32615	0.5871	80.00- 120.00	100.00(a)
15.592	15.571 (0.979)	43	57242			794.80- 854.80	1108.24
15.613	15.571 (0.980)	57	3382			18.01- 78.01	65.49
53 Tetrahydrofuran					CAS #: 109-99-9		
15.934	15.933 (1.000)	42	20530	0.25158	0.4528	80.00- 120.00	100.00(a)
15.934	15.933 (1.000)	71	4416			0.00- 49.03	21.51
15.934	15.933 (1.000)	72	4488			0.00- 51.35	21.86
55 Chloroform					CAS #: 67-66-3		
15.995	15.995 (1.004)	83	1908	0.02514	0.04526	80.00- 120.00	100.00(a)
16.026	15.995 (1.006)	85	1244			33.33- 93.33	65.21
63 2,2,4-Trimethylpentane					CAS #: 540-84-1		
16.728	16.728 (1.050)	56	24419	0.29358	0.5284	80.00- 120.00	100.00(a)
16.728	16.728 (1.050)	57	74047			258.69- 318.69	303.24
16.728	16.728 (1.050)	41	28467			79.91- 139.91	116.58
64 Benzene					CAS #: 71-43-2		
16.756	16.756 (0.968)	78	10611	0.08893	0.1601	80.00- 120.00	100.00(a)
16.756	16.756 (0.968)	77	2468			0.00- 53.73	23.27
69 Heptane					CAS #: 142-82-5		
16.975	16.948 (0.981)	57	10772	0.20947	0.3770	80.00- 120.00	100.00
16.975	16.948 (0.981)	100	1622			0.00- 51.27	15.06
16.975	16.948 (0.981)	43	27538			235.24- 295.24	255.64
75 1,4-Dioxane					CAS #: 123-91-1		
18.266	18.266 (1.056)	88	4267	0.15512	0.2792	80.00- 120.00	100.00
18.266	18.266 (1.056)	58	6199			72.13- 132.13	145.28
18.156	18.266 (1.049)	57	8661			4.41- 64.41	202.97
79 4-Methyl-2-pentanone					CAS #: 108-10-1		
19.588	19.587 (1.132)	43	772492	4.58680	8.256	80.00- 120.00	100.00
19.588	19.587 (1.132)	58	202850			0.00- 57.24	26.26

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
79 4-Methyl-2-pentanone (continued)							
19.588	19.587 (1.132)	85	61652			0.00- 38.20	7.98
81 Toluene					CAS #: 108-88-3		
19.991	19.991 (1.155)	91	1250448	9.49429	17.090	80.00- 120.00	100.00
19.991	19.991 (1.155)	92	723103			28.60- 88.60	57.83
95 Ethyl Benzene					CAS #: 100-41-4		
22.315	22.315 (1.005)	106	58607	1.21160	2.181	80.00- 120.00	100.00
22.315	22.315 (1.005)	91	193971			292.36- 352.36	330.97
96 m,p-Xylene					CAS #: 108-38-3		
22.452	22.452 (1.011)	106	204486	4.28716	7.717	80.00- 120.00	100.00
22.452	22.452 (1.011)	91	434646			164.15- 224.15	212.55
100 o-Xylene					CAS #: 95-47-6		
23.002	23.001 (1.036)	106	22688	0.51118	0.9201	80.00- 120.00	100.00
23.002	23.001 (1.036)	91	45253			186.63- 246.63	199.46
101 Styrene					CAS #: 100-42-5		
23.029	23.029 (1.037)	104	4794	0.07383	0.1329	80.00- 120.00	100.00(a)
23.002	23.029 (1.036)	78	6606			28.70- 88.70	137.79
113 4-Ethyltoluene					CAS #: 622-96-8		
24.013	24.039 (1.081)	105	4613	0.05470	0.09845	80.00- 120.00	100.00(a)
24.013	24.039 (1.081)	120	1335			0.18- 60.18	28.95
120 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
24.529	24.529 (1.105)	105	4505	0.07899	0.1422	80.00- 120.00	100.00(a)
24.529	24.529 (1.105)	120	2052			19.27- 79.27	45.55
124 1,4-Dichlorobenzene					CAS #: 106-46-7		
24.992	24.992 (1.125)	146	765	0.01479	0.02662	80.00- 120.00	100.00(a)
24.992	24.992 (1.125)	148	597			38.92- 98.92	78.03
0.000	24.992 (0.000)	111	0			11.61- 71.61	0.00
127 alpha-chlorotoluene					CAS #: 100-44-7		
25.149	25.126 (1.133)	91	3325	0.06015	0.1083	80.00- 120.00	100.00(a)
25.149	25.126 (1.133)	126	1155			0.00- 52.82	34.75

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: msdv.i
Lab File ID: v121617r1.d
Lab Smp Id: 1412152AR1-02A
Analysis Type: VOA
Quant Type: ISTD
Operator: sn
Method File: /chem/msdv.i/16Dec2014.b/v14l1006d.m
Misc Info: 7.6"Hg -> 5.1psi

Calibration Date: 16-DEC-2014
Calibration Time: 08:42

Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
54 Bromochloromethan	109722	65833	153611	90051	-17.93
71 1,4-Difluorobenze	445503	267302	623704	404322	-9.24
92 Chlorobenzene-d5	361081	216649	505513	328178	-9.11

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
54 Bromochloromethan	15.93	15.60	16.26	15.93	0.00
71 1,4-Difluorobenze	17.30	16.97	17.63	17.30	0.00
92 Chlorobenzene-d5	22.21	21.88	22.54	22.21	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: 01-Jul-2015 12:21

Eurofins Air Toxics Inc.

RECOVERY REPORT

Client Name:
Client SDG: 16Dec2014
Sample Matrix: GAS
Fraction: VOA
Lab Smp Id: 1412152AR1-02A
Level: LOW
Operator: sn
Data Type: MS DATA
SampleType: SAMPLE
SpikeList File: AT12.spk
Quant Type: ISTD
Sublist File: And19256r1.sub
Method File: /chem/msdv.i/16Dec2014.b/v14l1006d.m
Misc Info: 7.6"Hg -> 5.1psi

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 65 1,2-Dichloroethane	5.000	5.671	113.43	70-130
$ 80 Toluene-d8	5.000	5.270	105.41	70-130
$ 106 Bromofluorobenzene	5.000	4.798	95.96	70-130

Data File: /chem/msdv.i/16Dec2014.b/v121617r1.d

Date : 16-DEC-2014 19:43

Client ID:

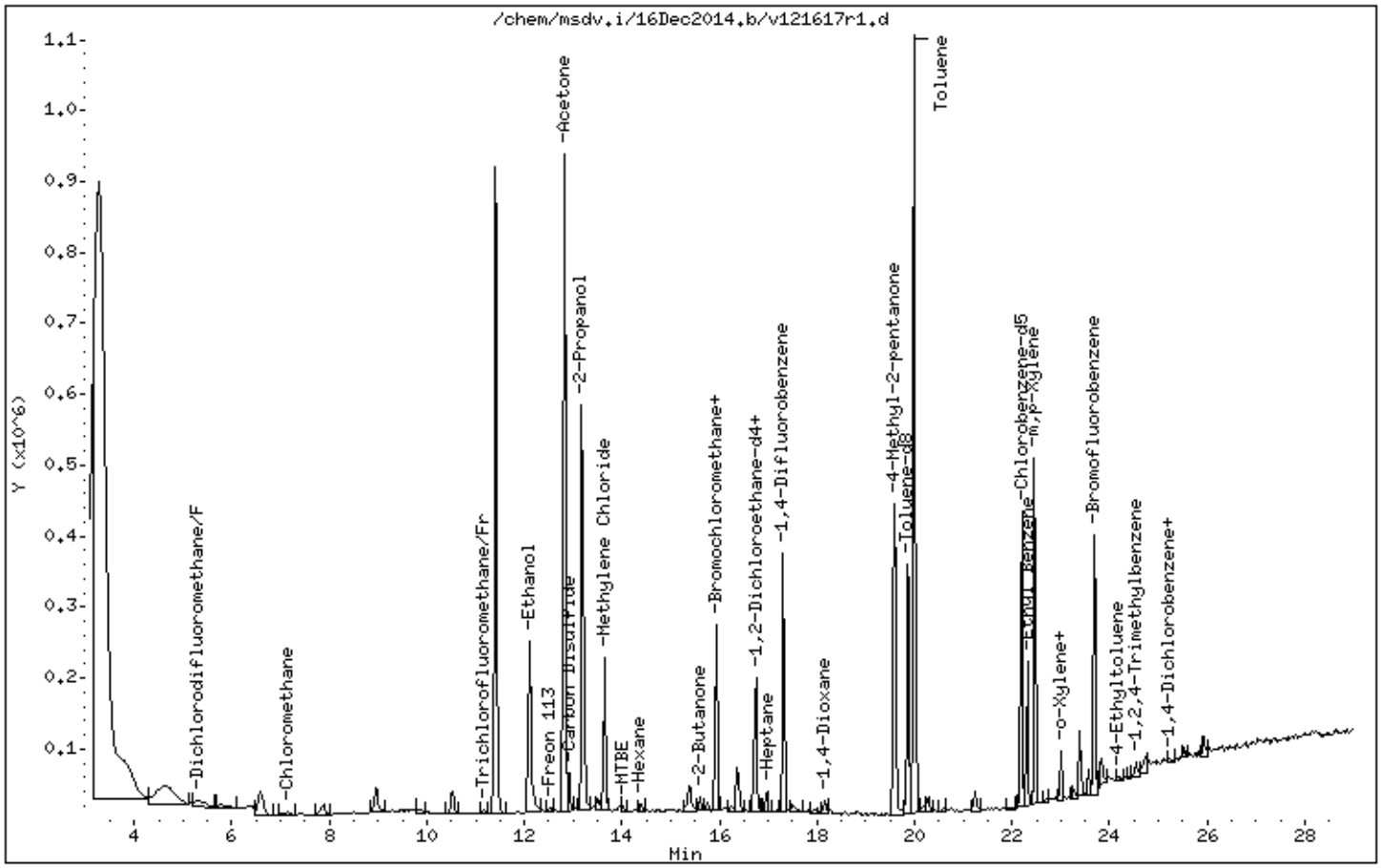
Instrument: msdv.i

Sample Info: 250ml #25261

Operator: sn

Column phase: RTx-624

Column diameter: 0.32



Data File: /chem/msdv.i/16Dec2014.b/v121617r1.d

Date : 16-DEC-2014 19:43

Client ID:

Instrument: msdv.i

Sample Info: 250ml #25261

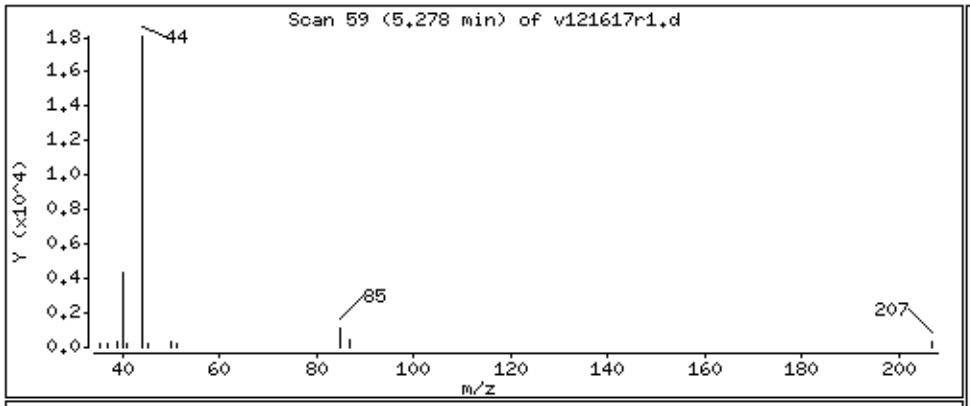
Operator: sn

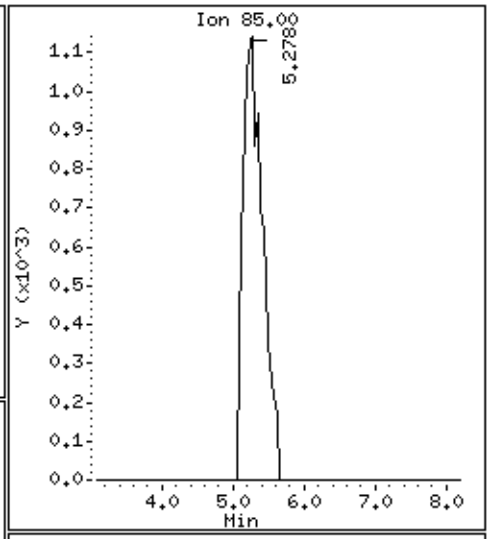
Column phase: RTx-624

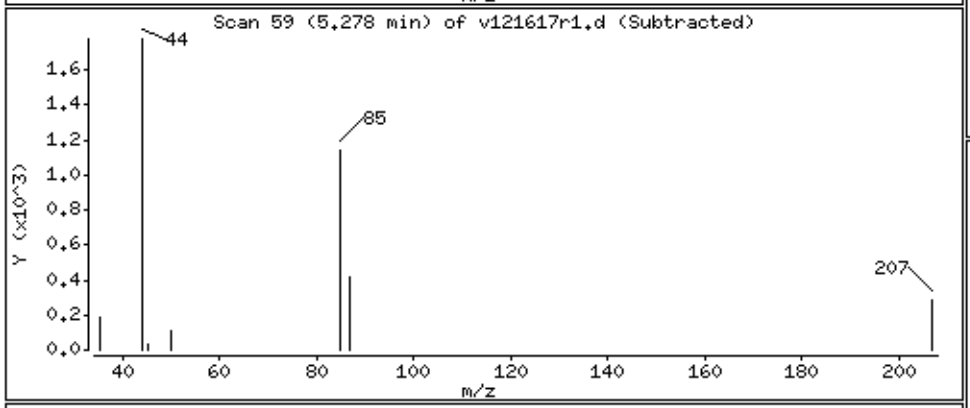
Column diameter: 0.32

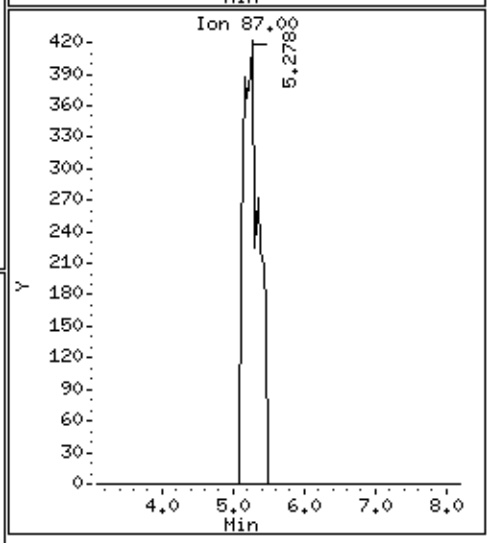
4 Dichlorodifluoromethane/Fr12

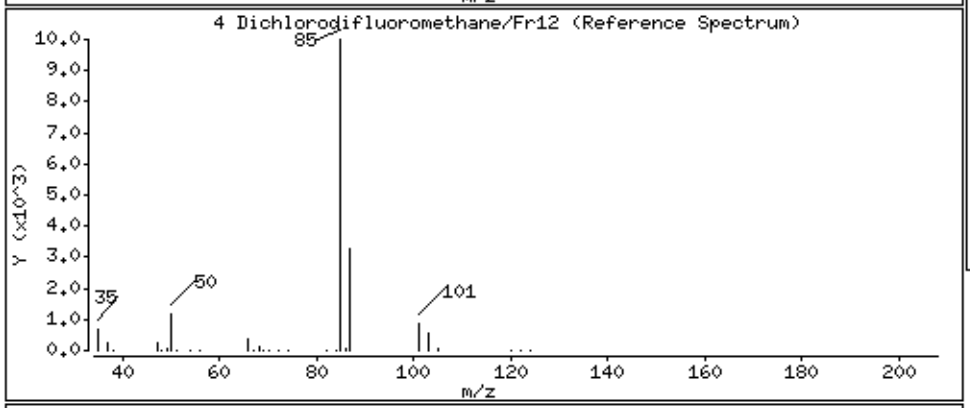
Concentration: 0.4755 PPBV

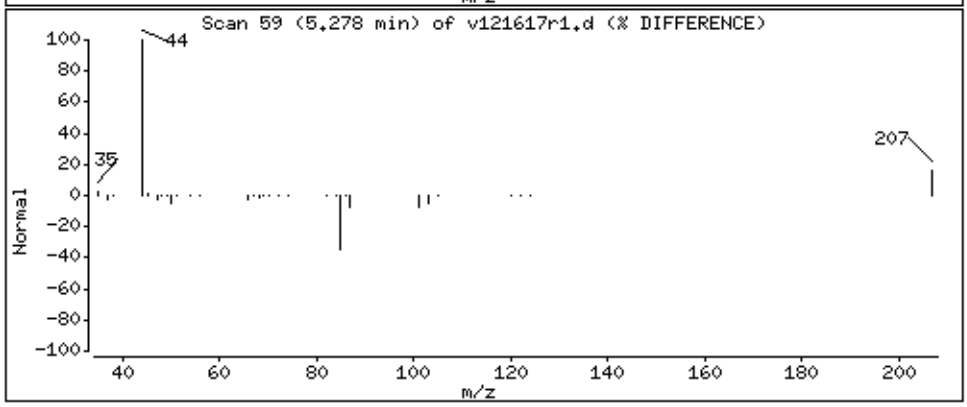












Data File: /chem/msdv.i/16Dec2014.b/v121617r1.d

Date : 16-DEC-2014 19:43

Client ID:

Instrument: msdv.i

Sample Info: 250ml #25261

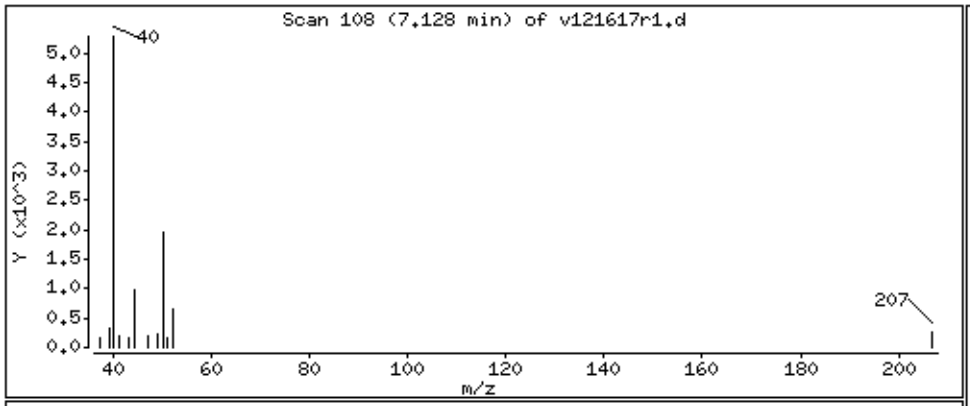
Operator: sn

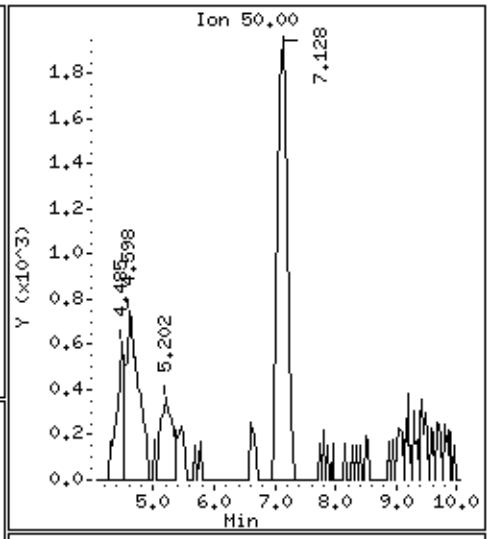
Column phase: RTx-624

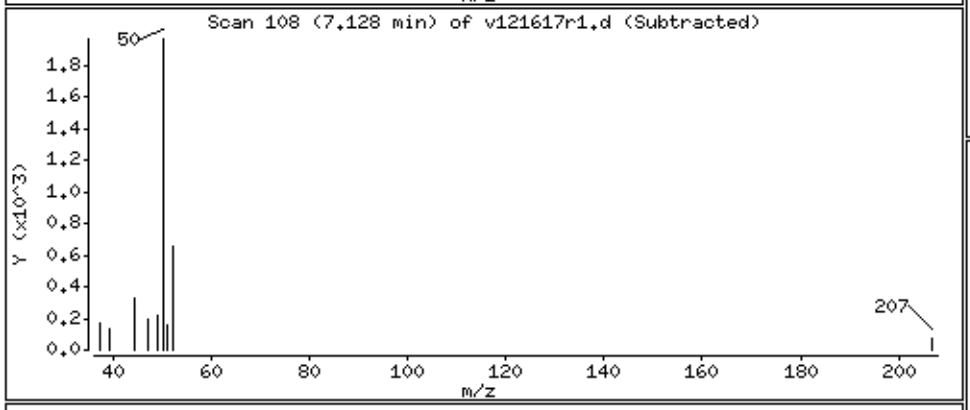
Column diameter: 0.32

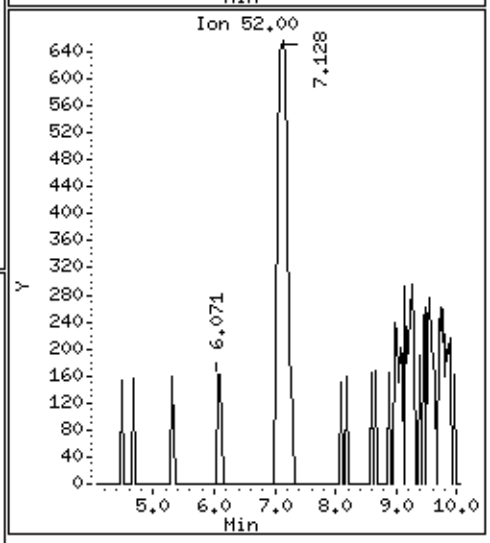
8 Chloromethane

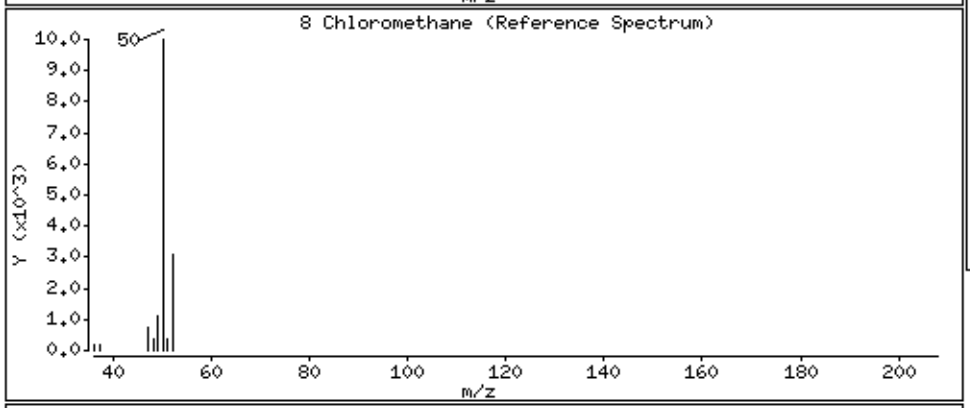
Concentration: 0.7789 PPBV

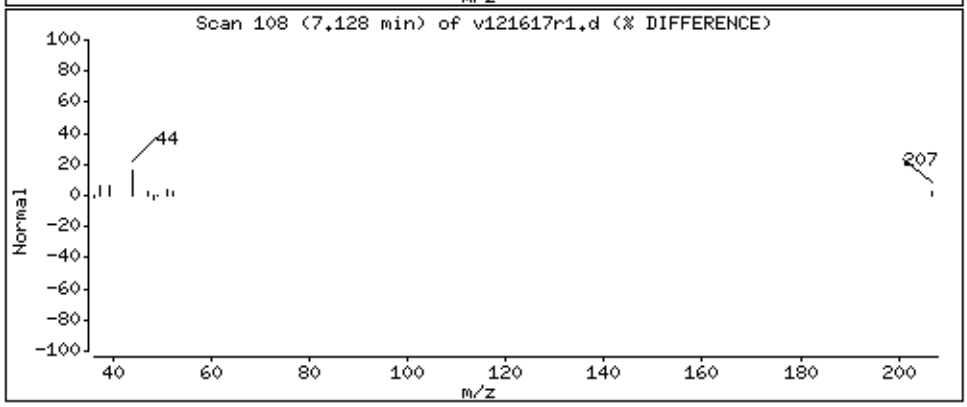












Data File: /chem/msdv.i/16Dec2014.b/v121617r1.d

Date : 16-DEC-2014 19:43

Client ID:

Instrument: msdv.i

Sample Info: 250ml #25261

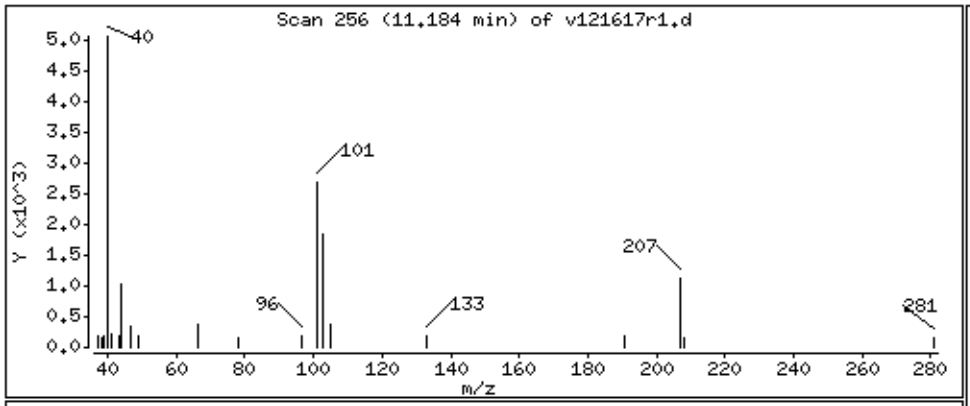
Operator: sn

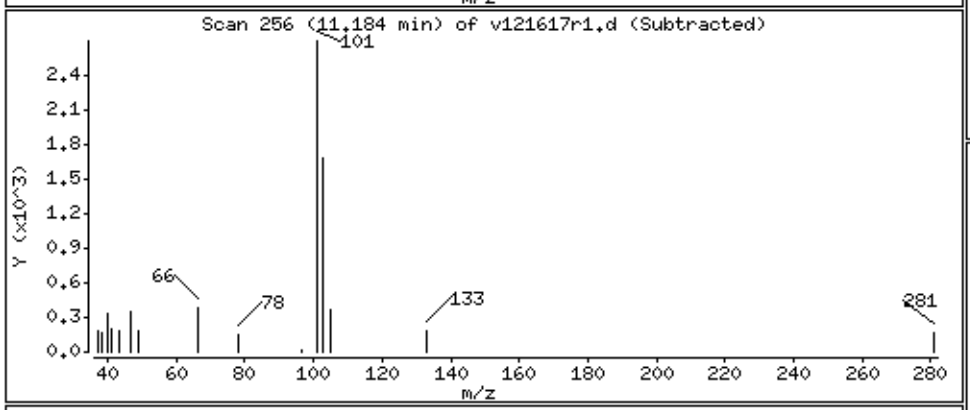
Column phase: RTx-624

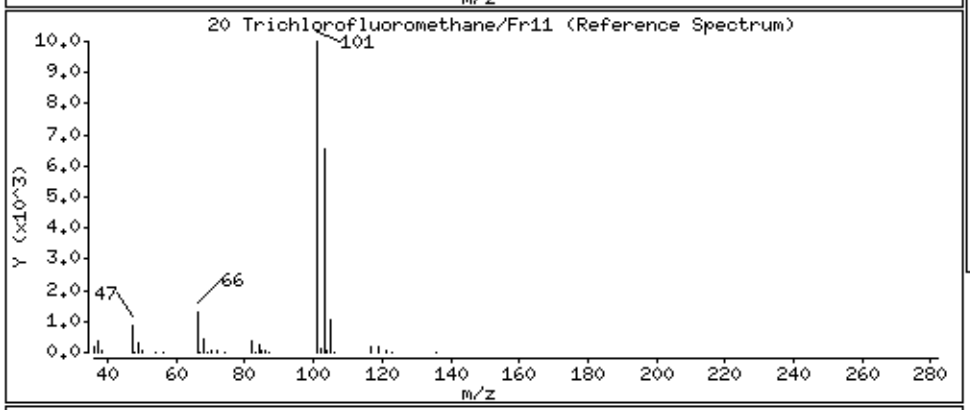
Column diameter: 0.32

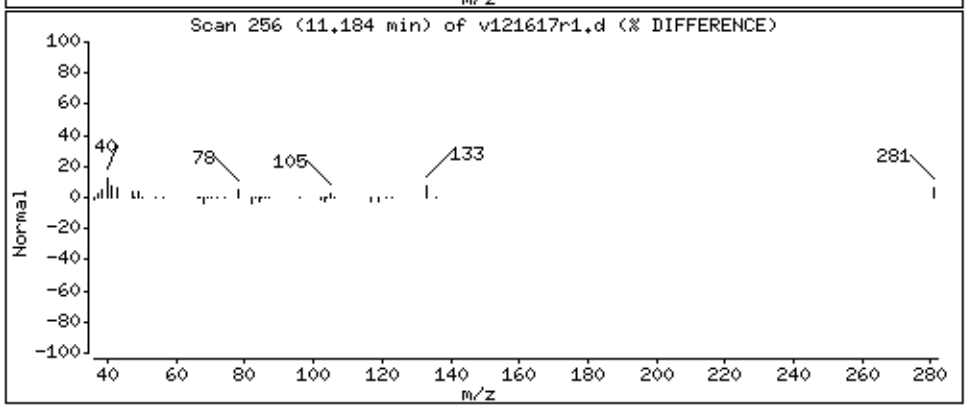
20 Trichlorofluoromethane/Fr11

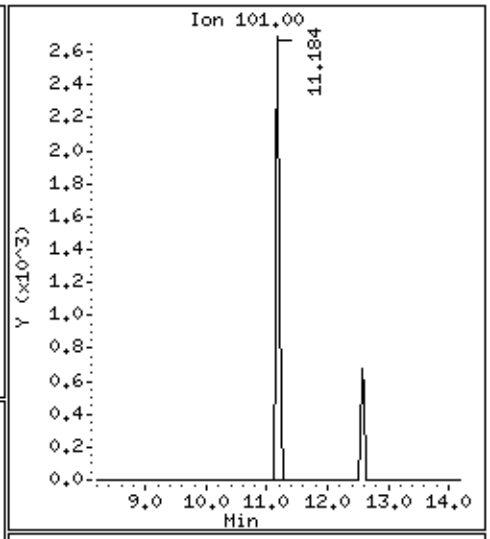
Concentration: 0.2110 PPBV

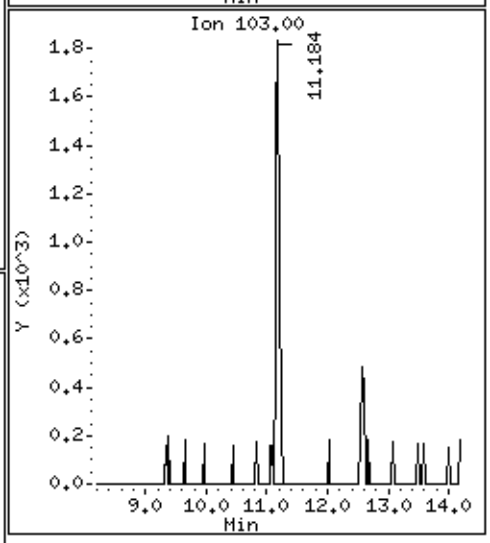












Data File: /chem/msdv.i/16Dec2014.b/v121617r1.d

Date : 16-DEC-2014 19:43

Client ID:

Instrument: msdv.i

Sample Info: 250ml #25261

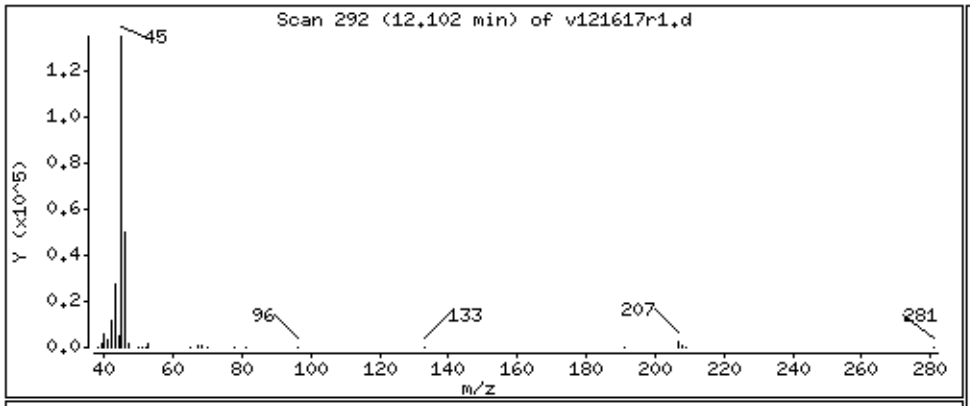
Operator: sn

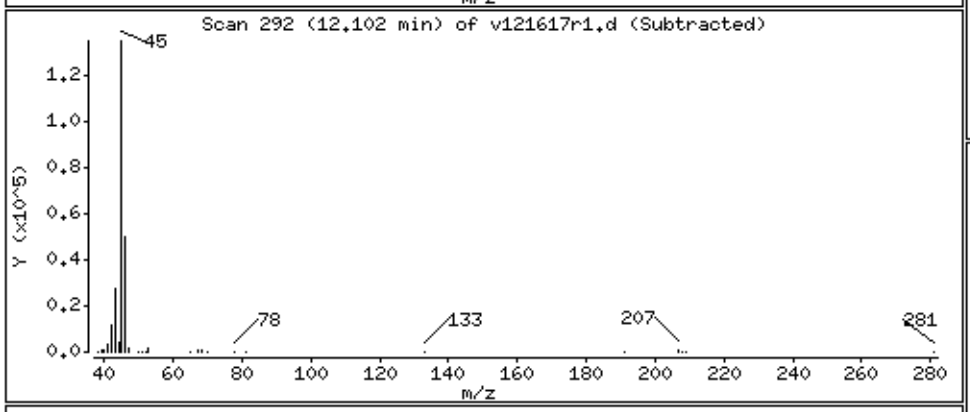
Column phase: RTx-624

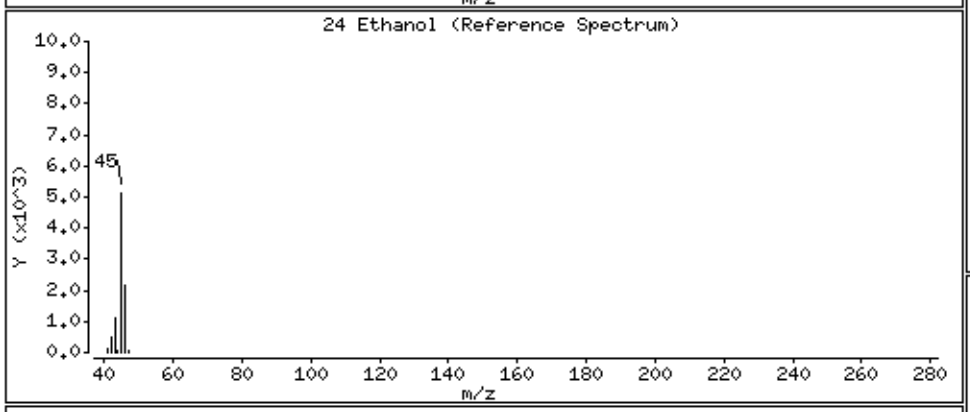
Column diameter: 0.32

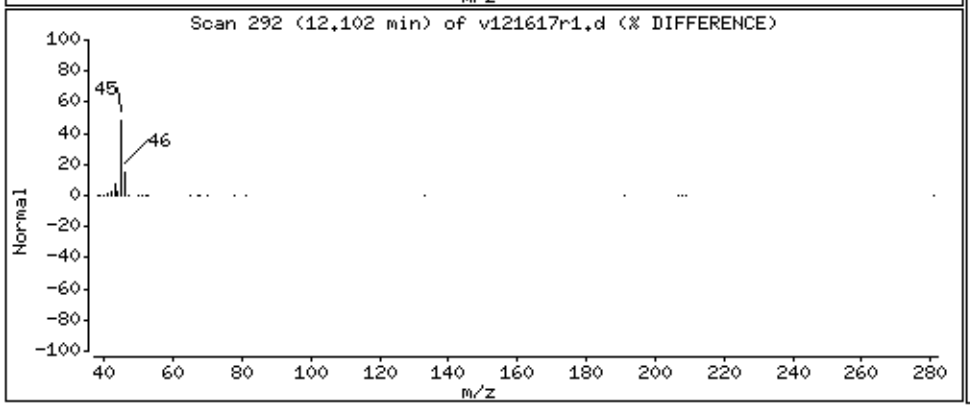
24 Ethanol

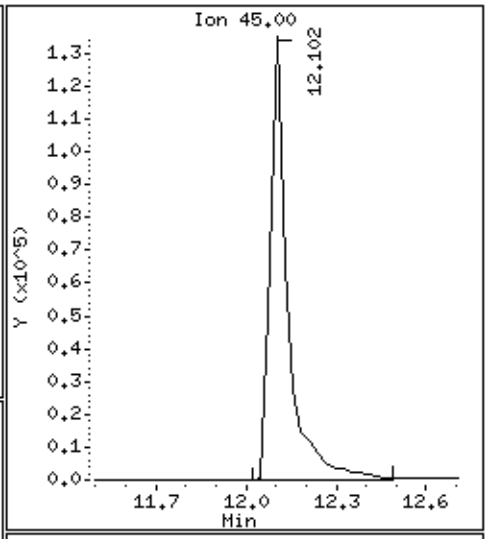
Concentration: 53.175 PPBV

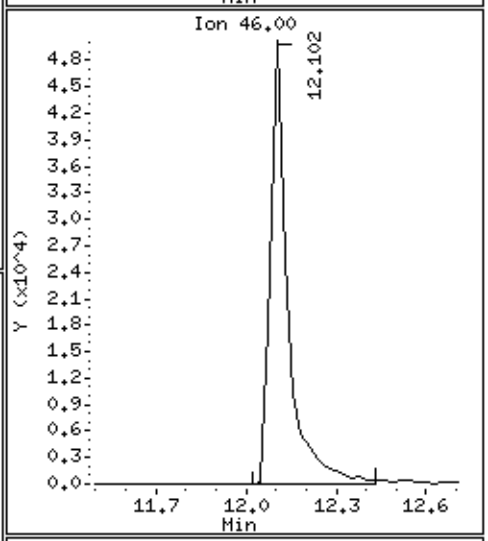


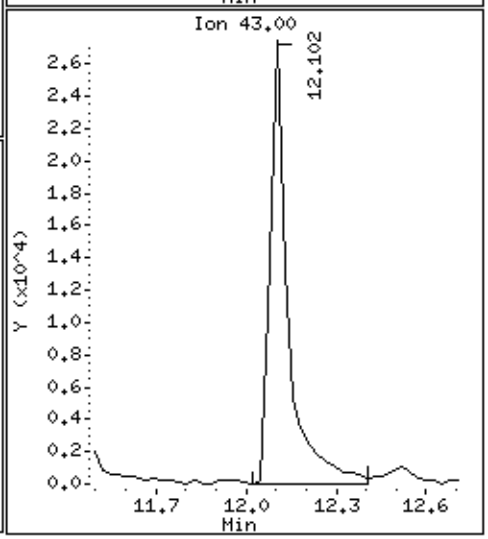












Data File: /chem/msdv.i/16Dec2014.b/v121617r1.d

Date : 16-DEC-2014 19:43

Client ID:

Instrument: msdv.i

Sample Info: 250ml #25261

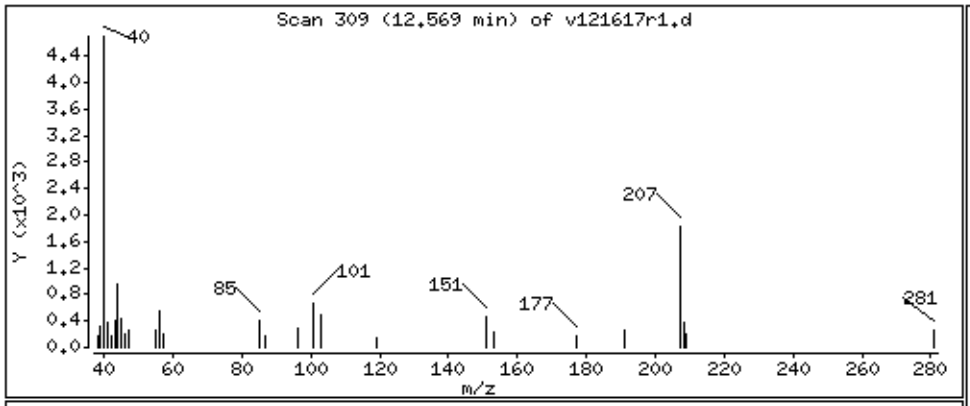
Operator: sn

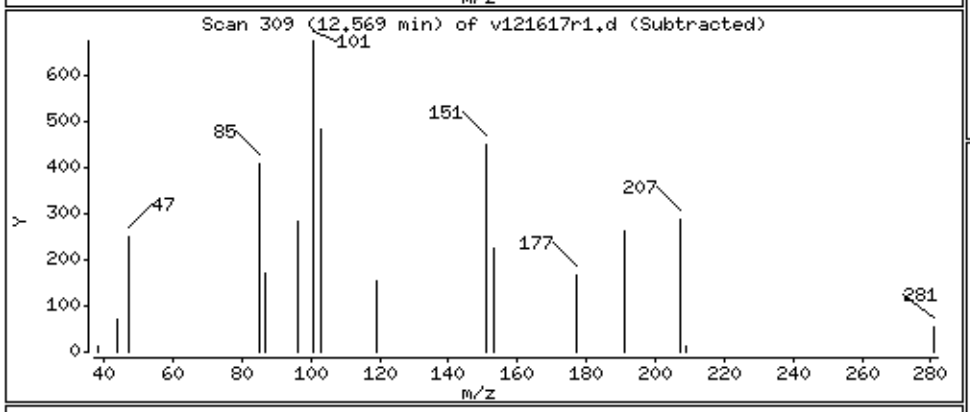
Column phase: RTx-624

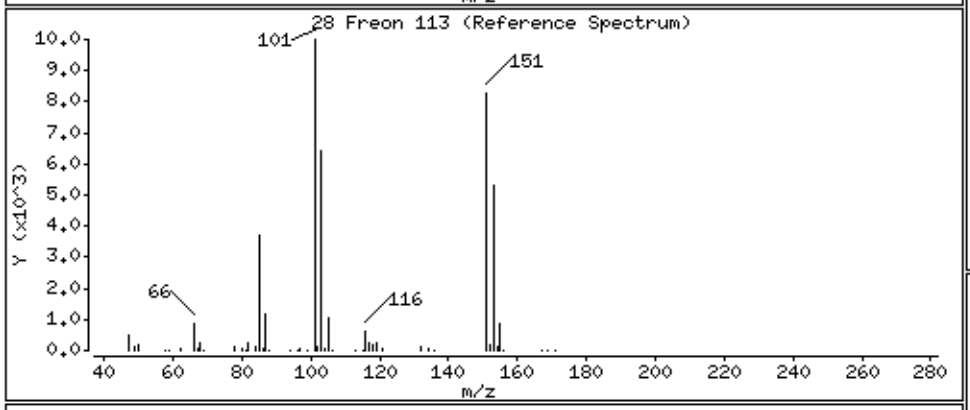
Column diameter: 0.32

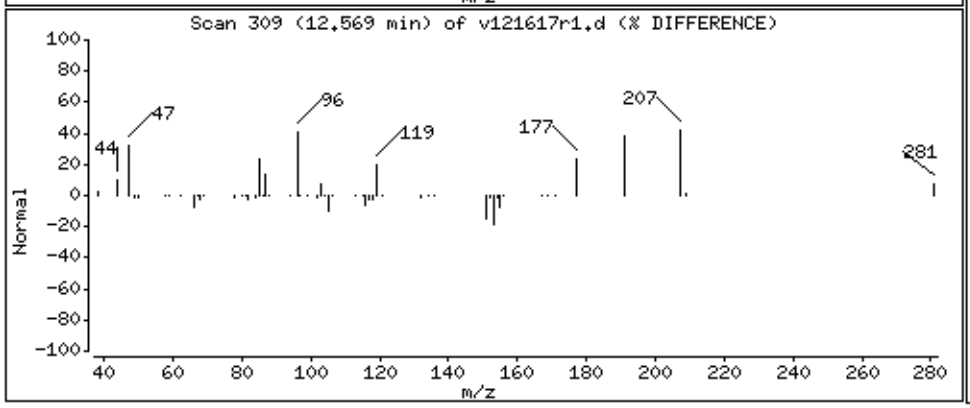
28 Freon 113

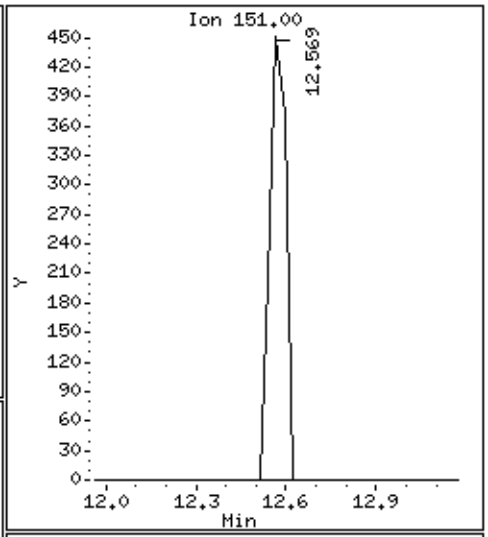
Concentration: 0.05816 PPBV

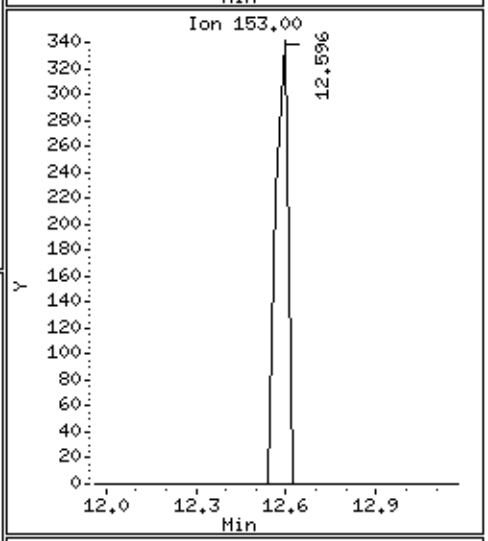


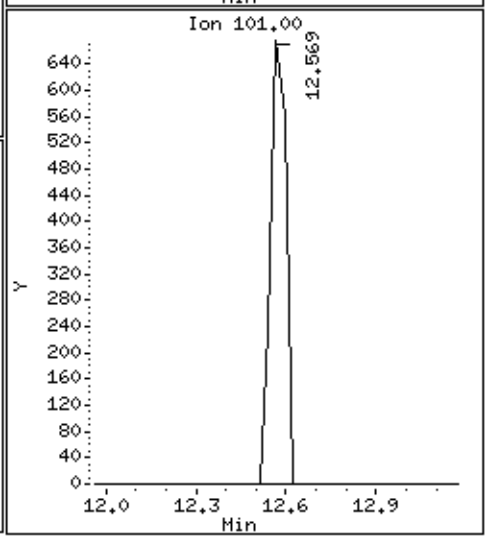












Data File: /chem/msdv.i/16Dec2014.b/v121617r1.d

Date : 16-DEC-2014 19:43

Client ID:

Instrument: msdv.i

Sample Info: 250ml #25261

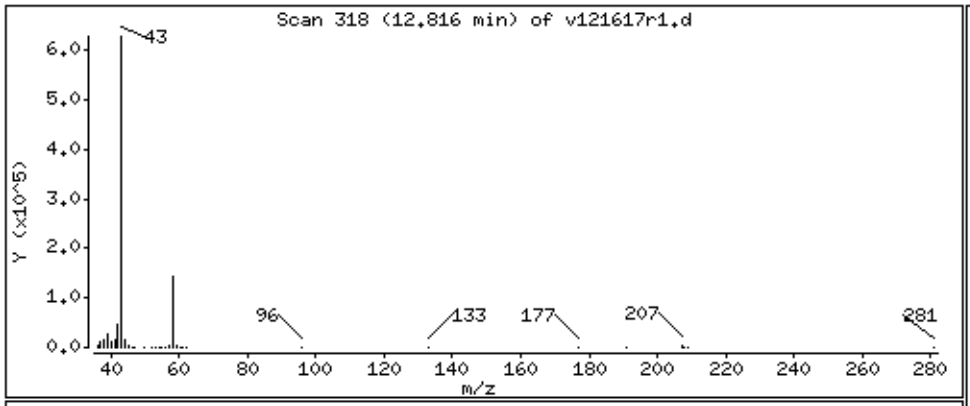
Operator: sn

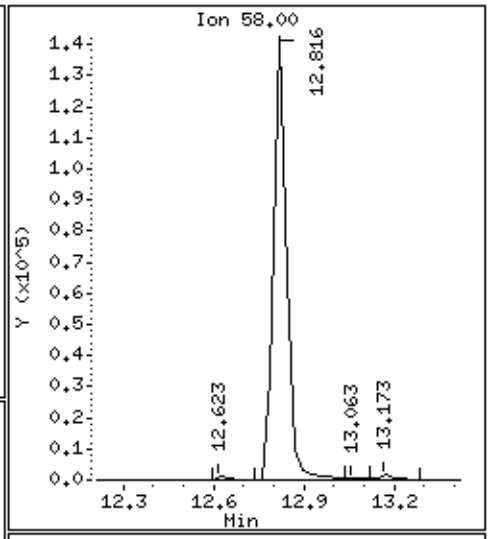
Column phase: RTx-624

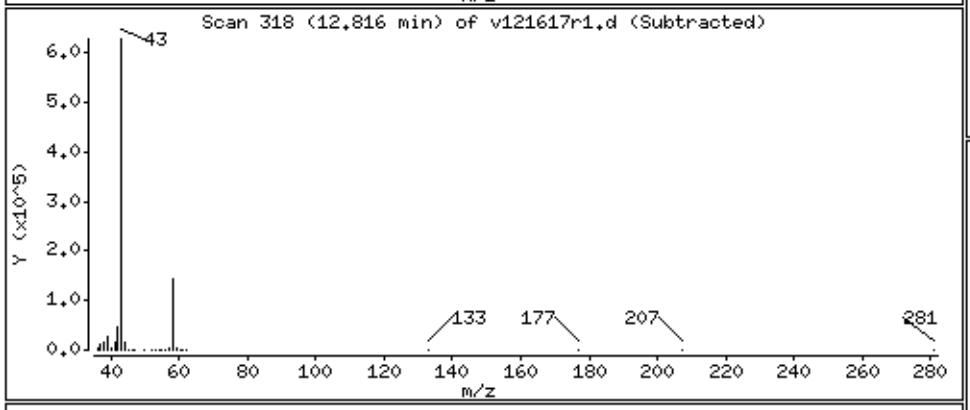
Column diameter: 0.32

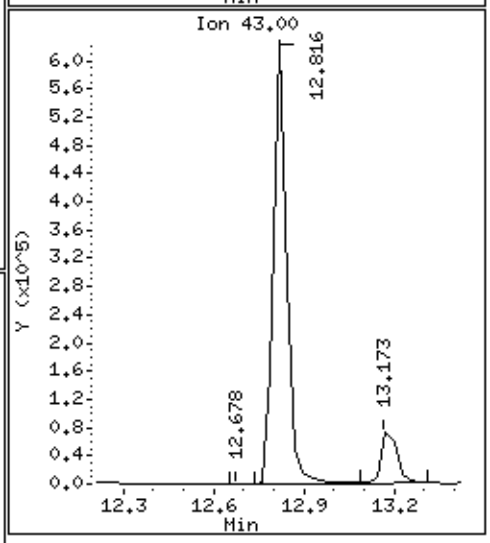
31 Acetone

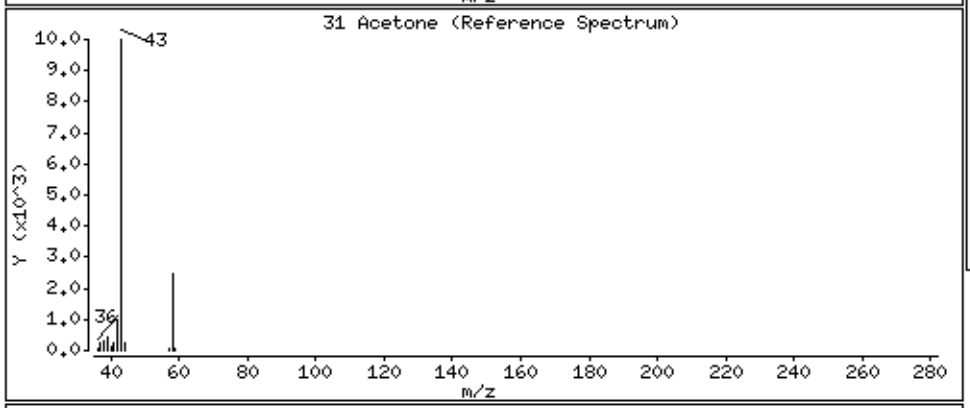
Concentration: 36.169 PPBV

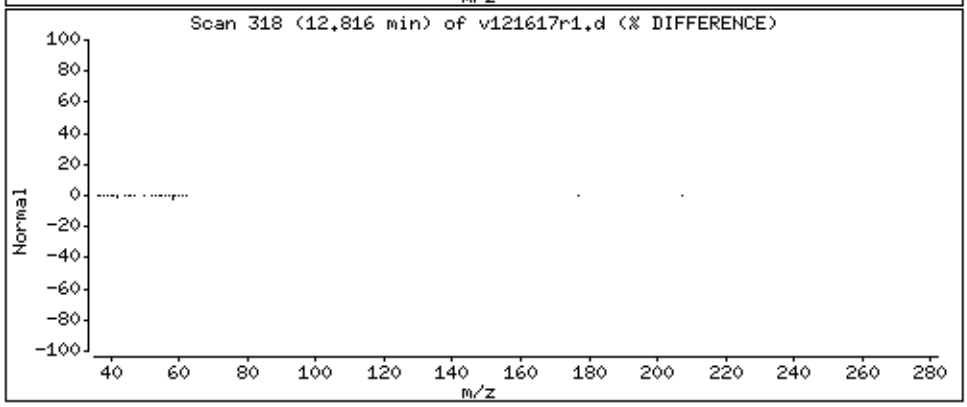












Data File: /chem/msdv.i/16Dec2014.b/v121617r1.d

Date : 16-DEC-2014 19:43

Client ID:

Instrument: msdv.i

Sample Info: 250ml #25261

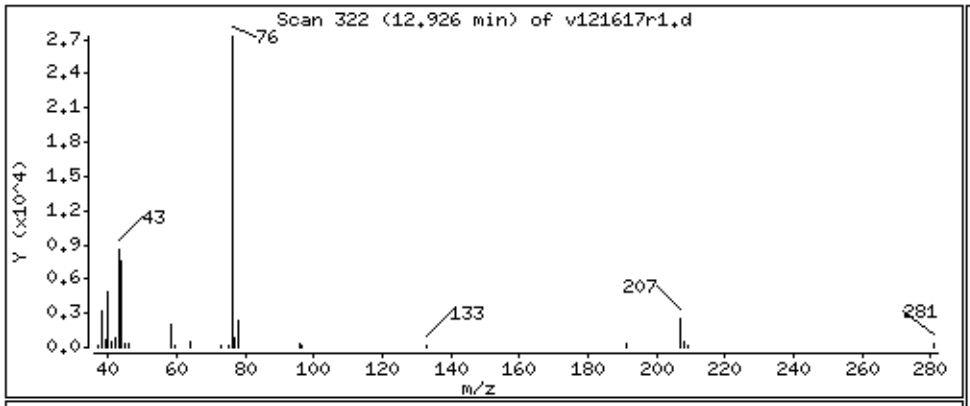
Operator: sn

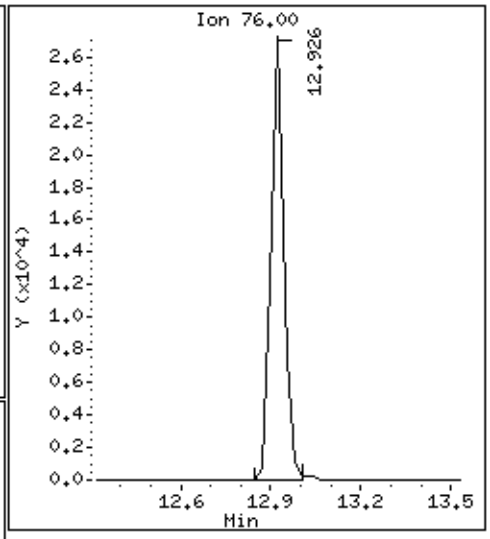
Column phase: RTx-624

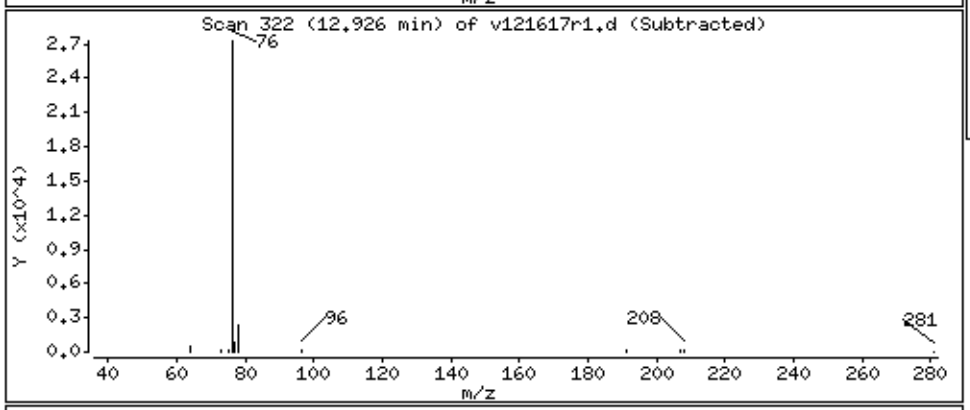
Column diameter: 0.32

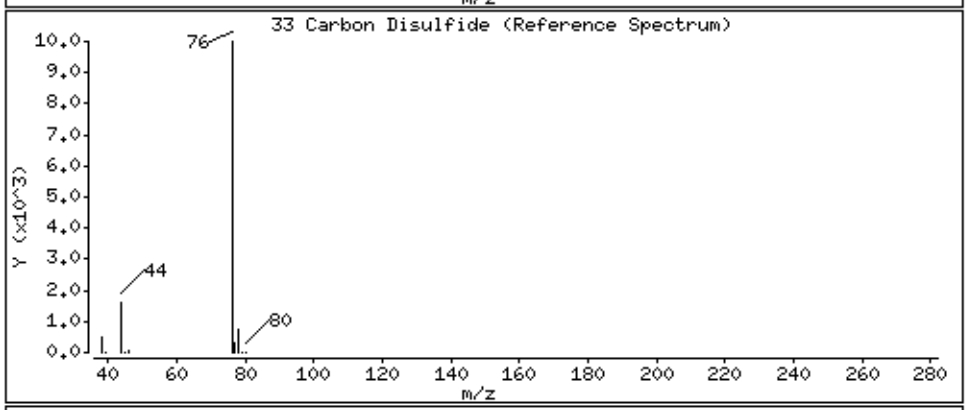
33 Carbon Disulfide

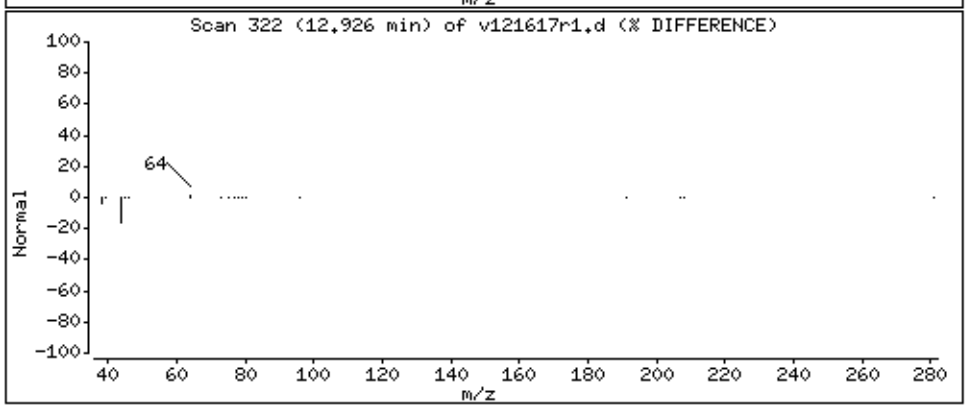
Concentration: 1.752 PPBV











Data File: /chem/msdv.i/16Dec2014.b/v121617r1.d

Date : 16-DEC-2014 19:43

Client ID:

Instrument: msdv.i

Sample Info: 250ml #25261

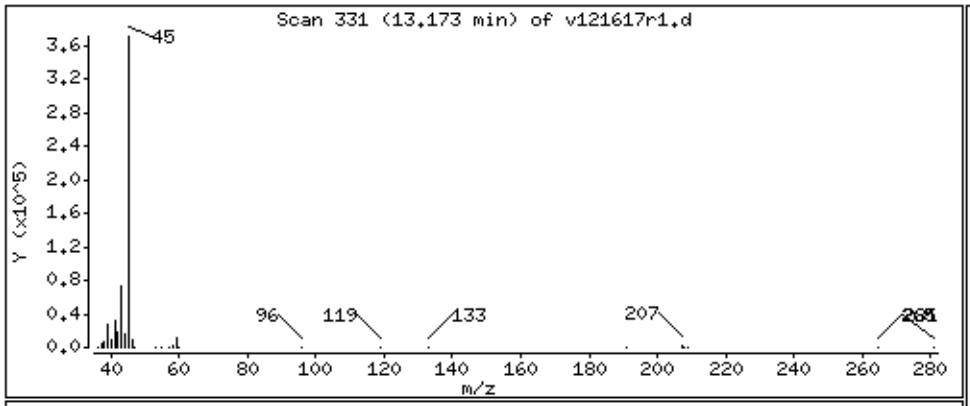
Operator: sn

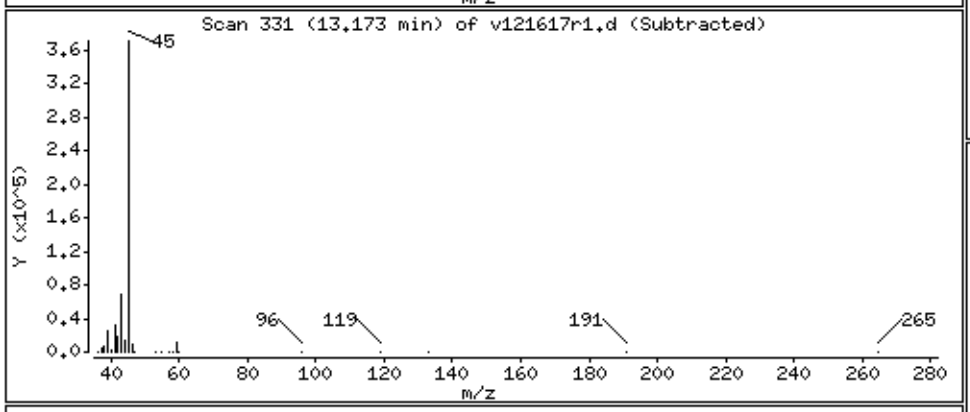
Column phase: RTx-624

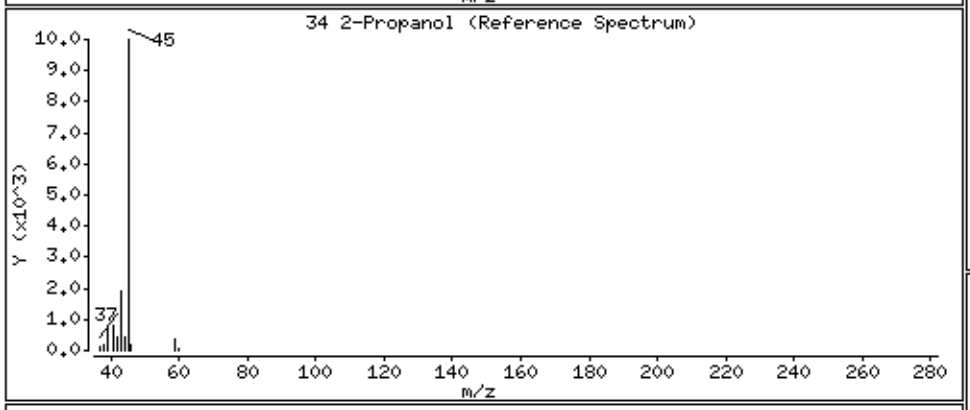
Column diameter: 0.32

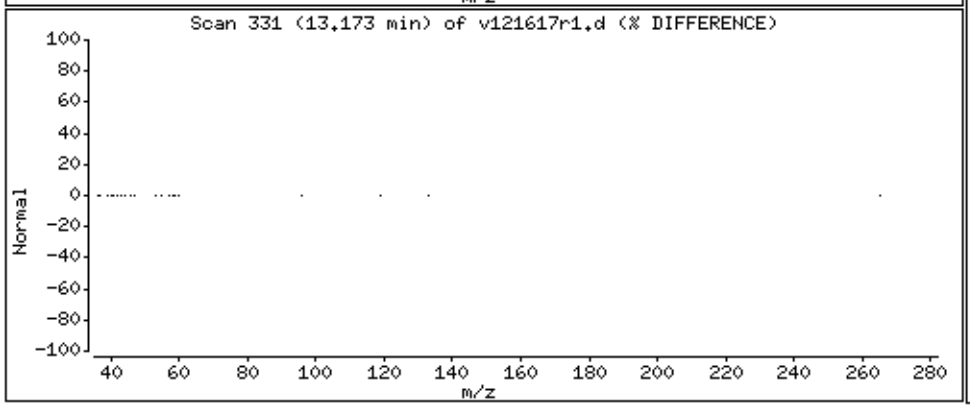
34 2-Propanol

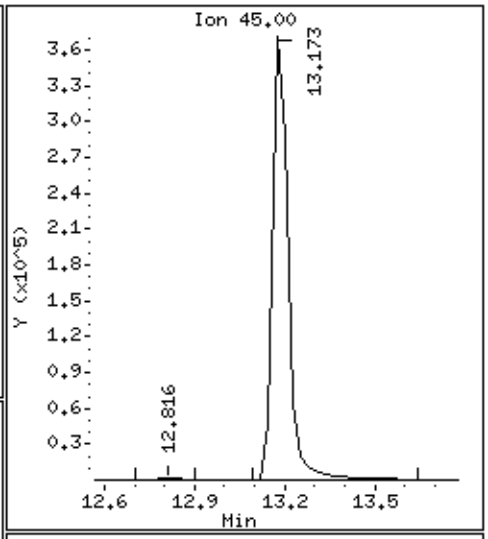
Concentration: 24.842 PPBV

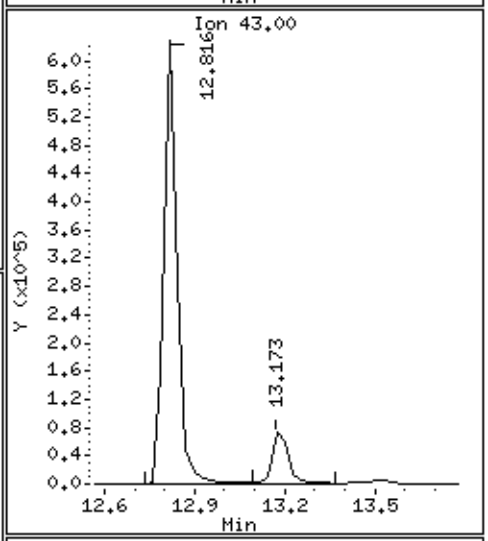


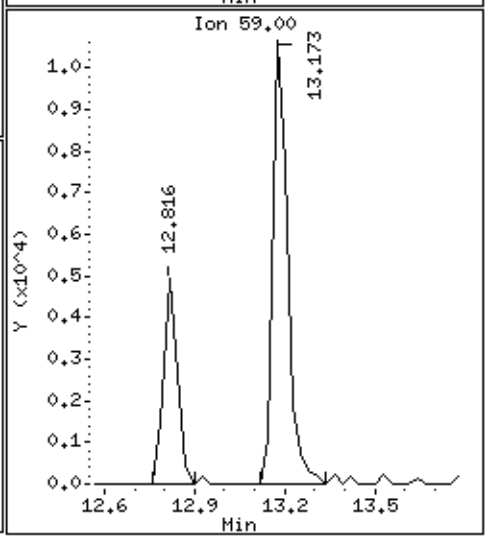












Data File: /chem/msdv.i/16Dec2014.b/v121617r1.d

Date : 16-DEC-2014 19:43

Client ID:

Instrument: msdv.i

Sample Info: 250ml #25261

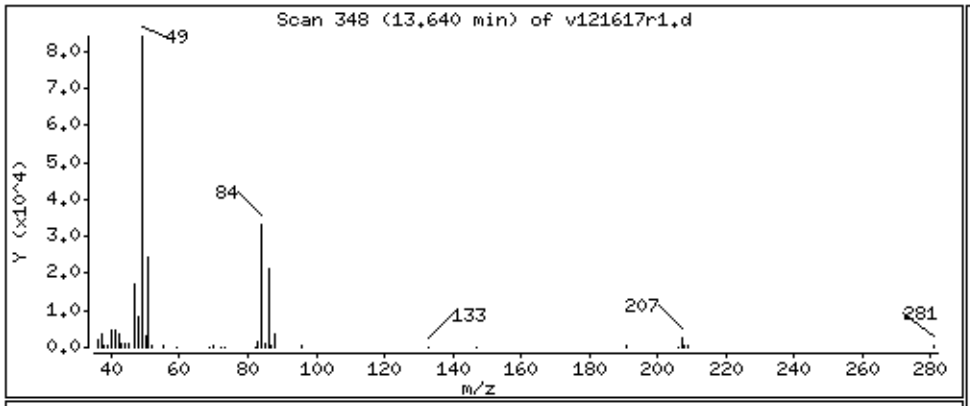
Operator: sn

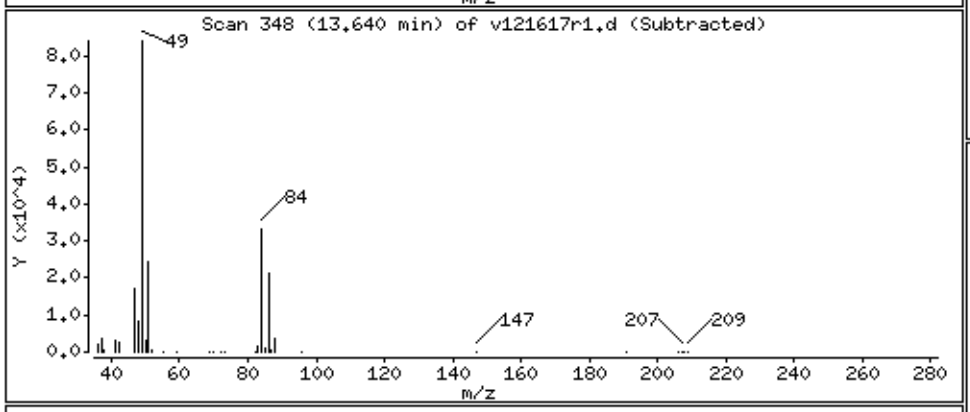
Column phase: RTx-624

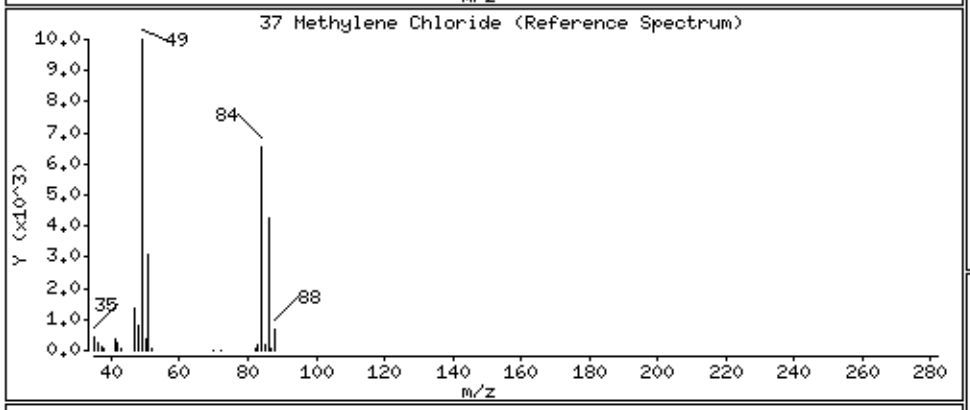
Column diameter: 0.32

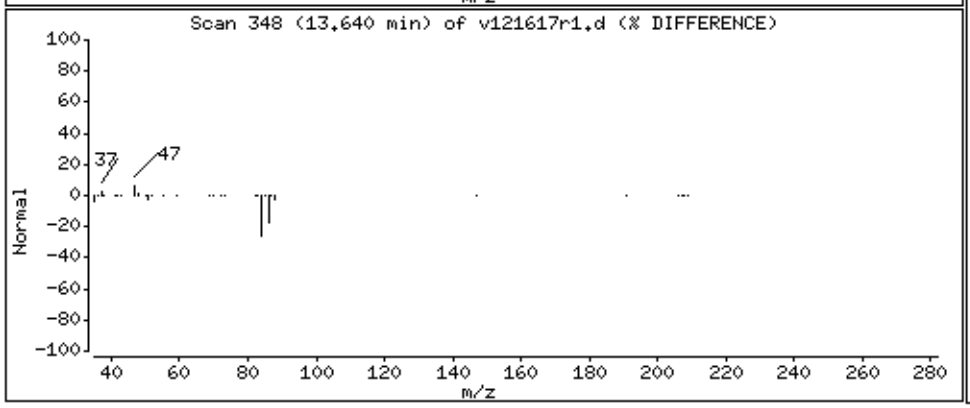
37 Methylene Chloride

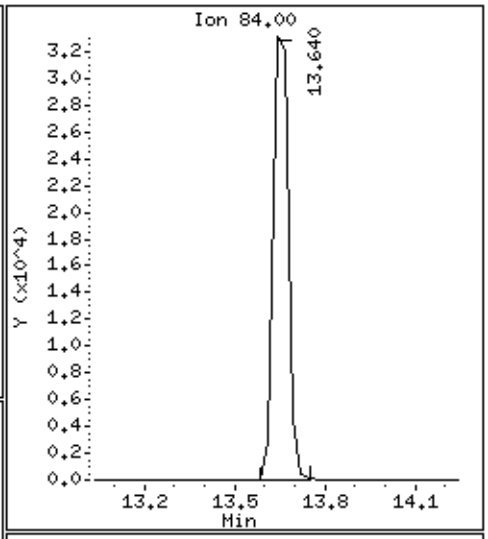
Concentration: 7.960 PPBV

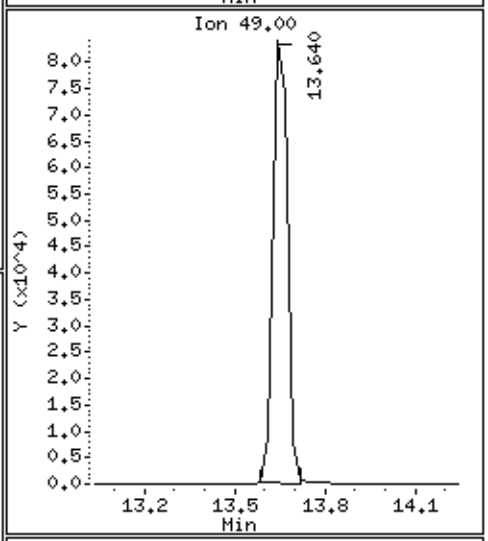


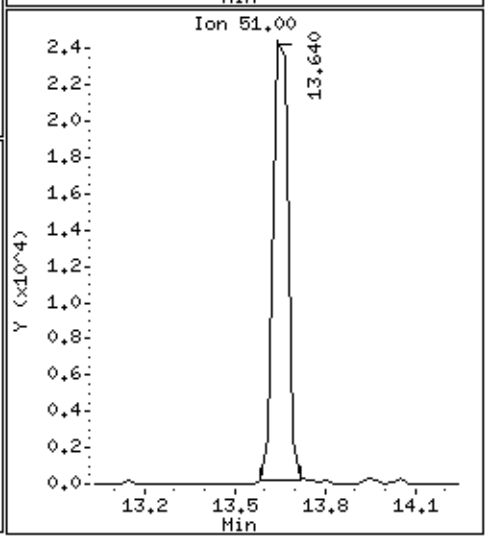












Data File: /chem/msdv.i/16Dec2014.b/v121617r1.d

Date : 16-DEC-2014 19:43

Client ID:

Instrument: msdv.i

Sample Info: 250ml #25261

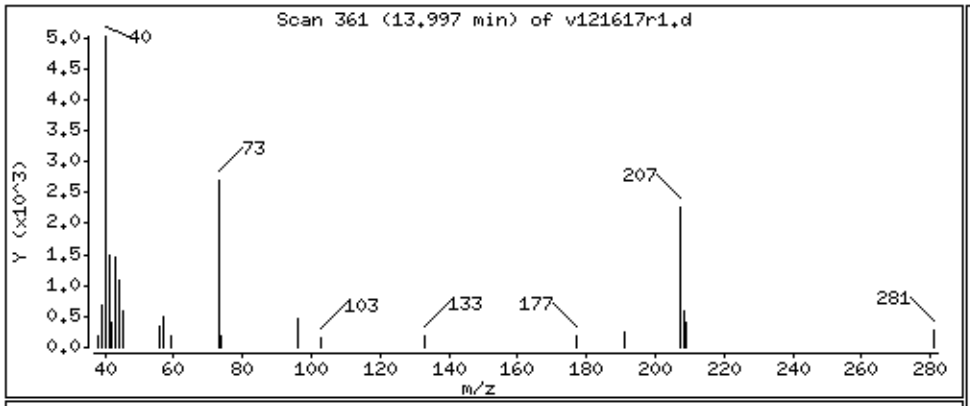
Operator: sn

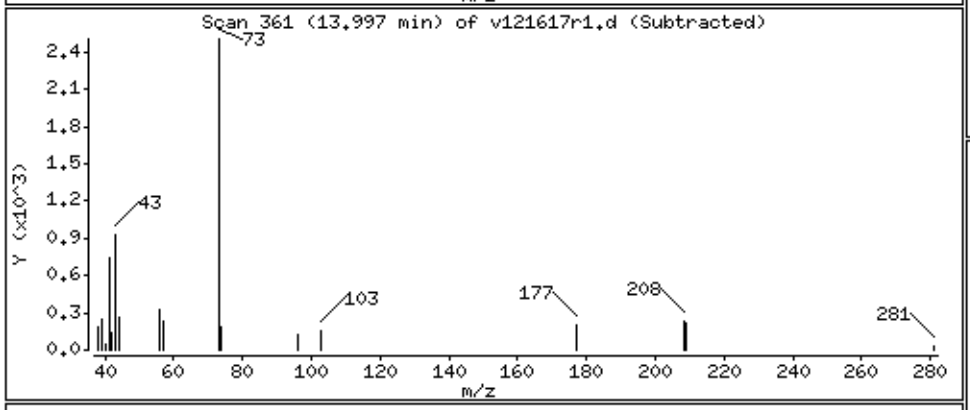
Column phase: RTx-624

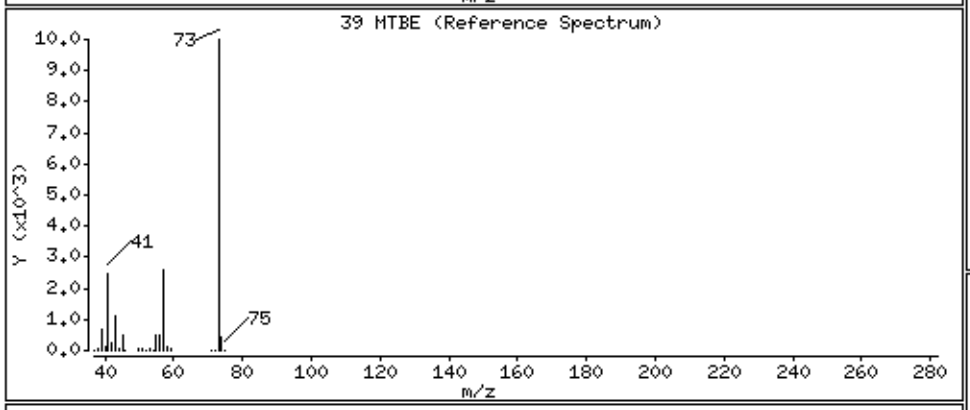
Column diameter: 0.32

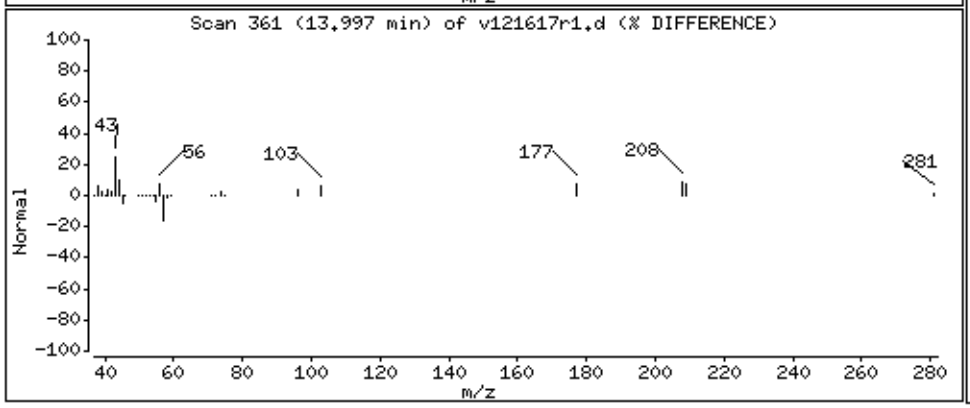
39 MTBE

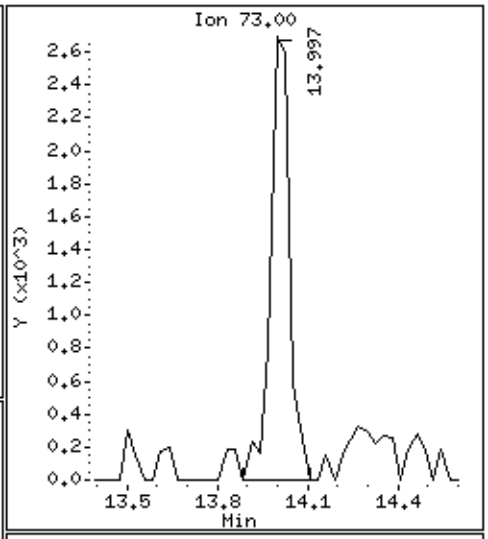
Concentration: 0.2235 PPBV

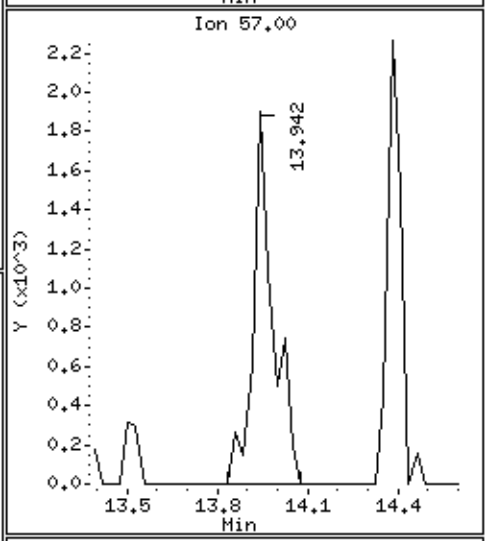


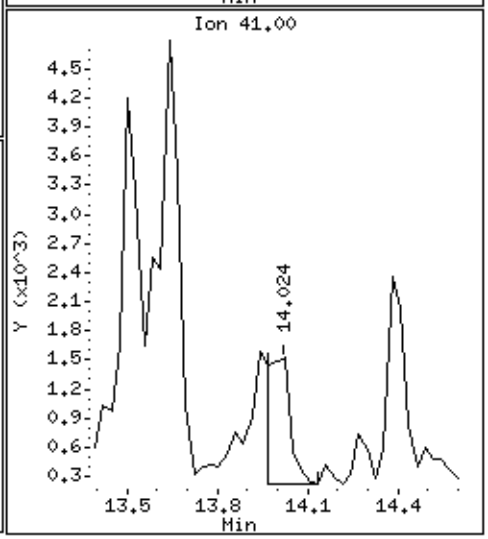












Data File: /chem/msdv.i/16Dec2014.b/v121617r1.d

Date : 16-DEC-2014 19:43

Client ID:

Instrument: msdv.i

Sample Info: 250ml #25261

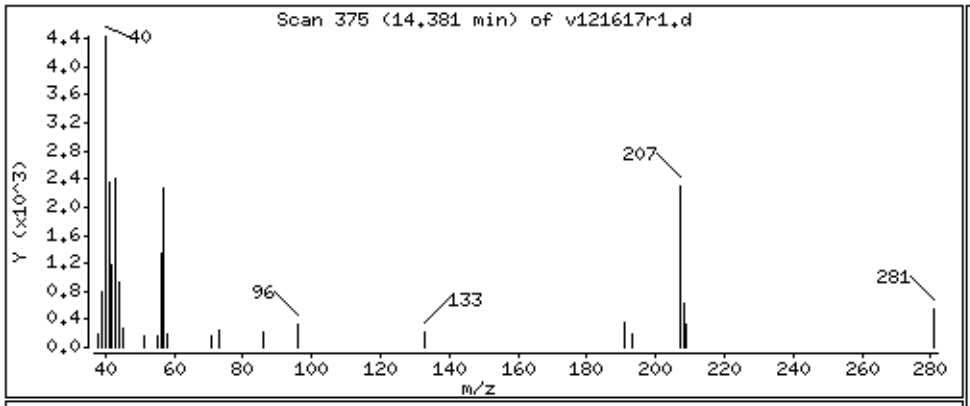
Operator: sn

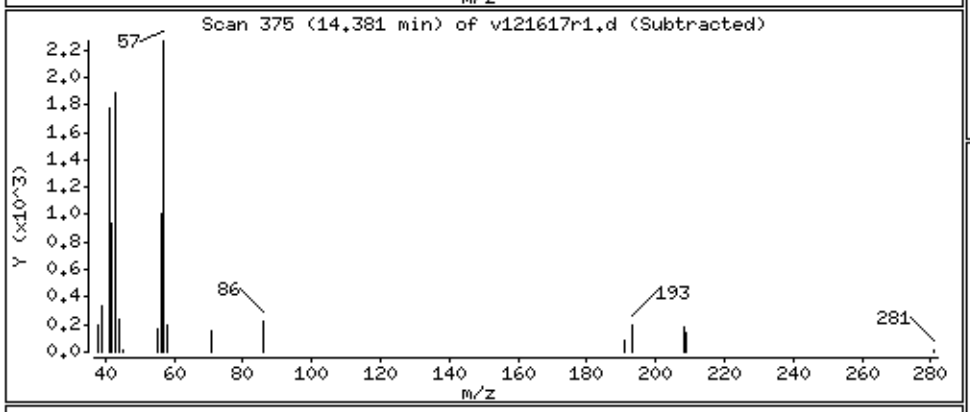
Column phase: RTx-624

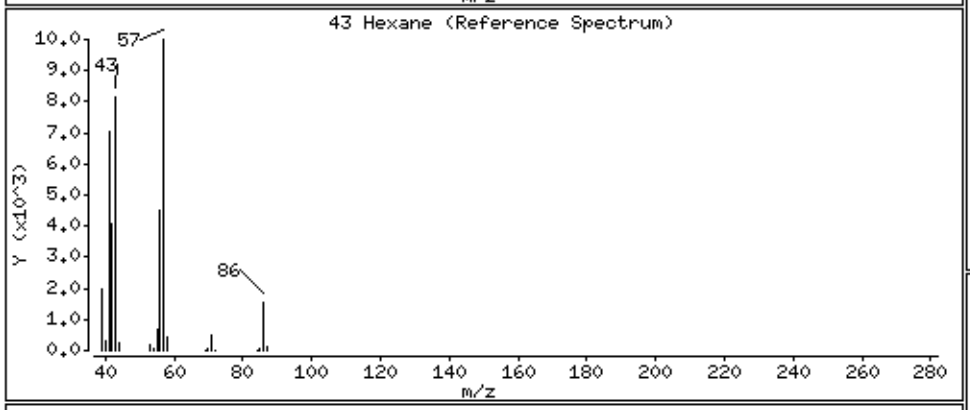
Column diameter: 0.32

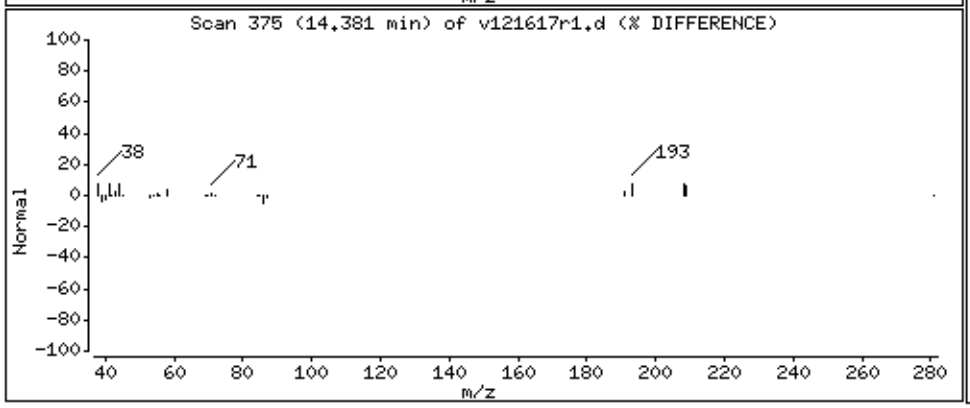
43 Hexane

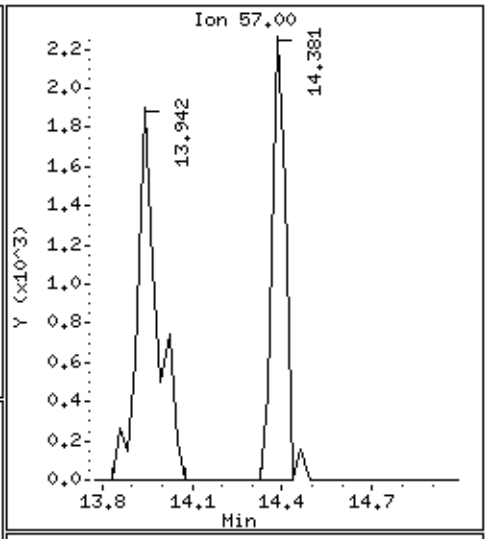
Concentration: 0.1589 PPBV

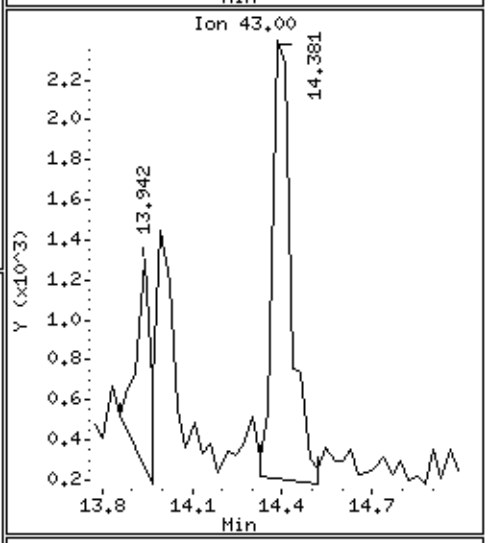


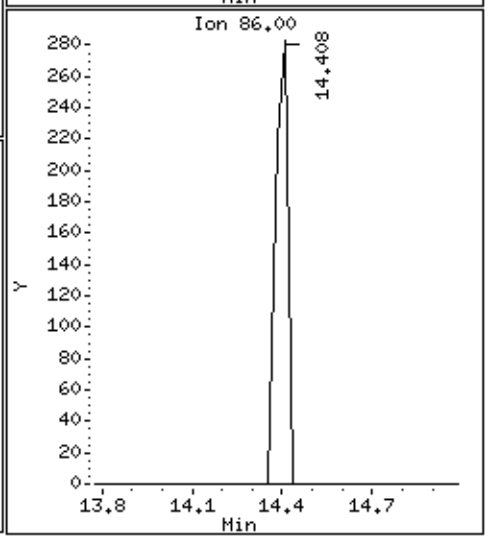












Data File: /chem/msdv.i/16Dec2014.b/v121617r1.d

Date : 16-DEC-2014 19:43

Client ID:

Instrument: msdv.i

Sample Info: 250ml #25261

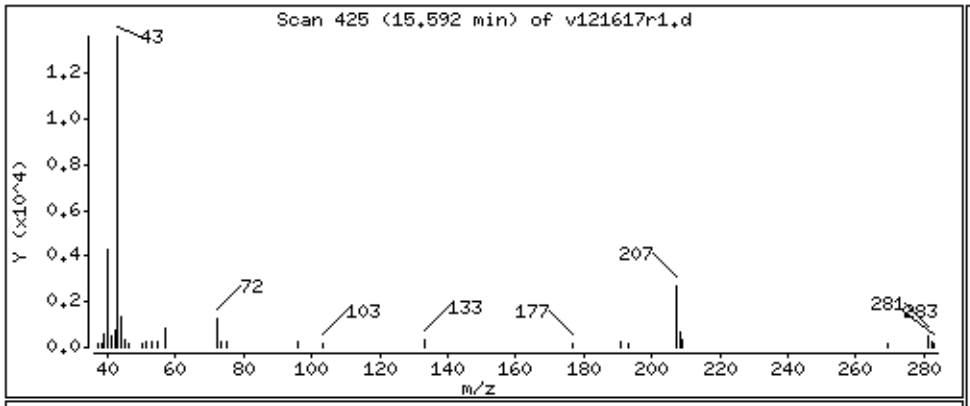
Operator: sn

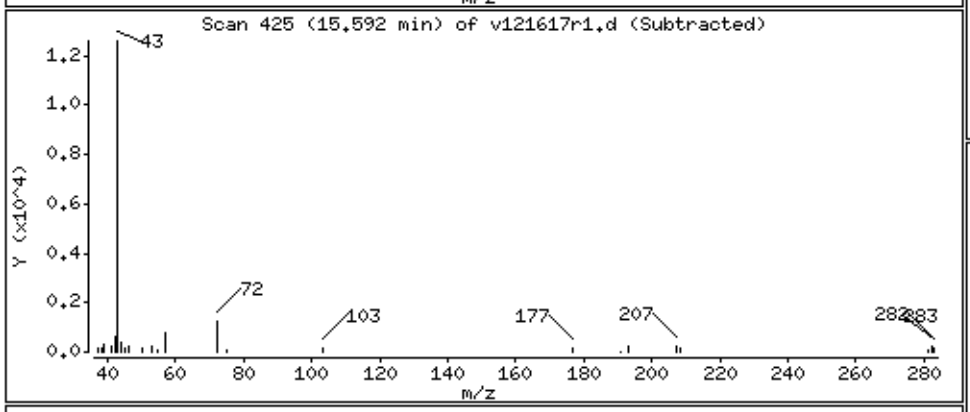
Column phase: RTx-624

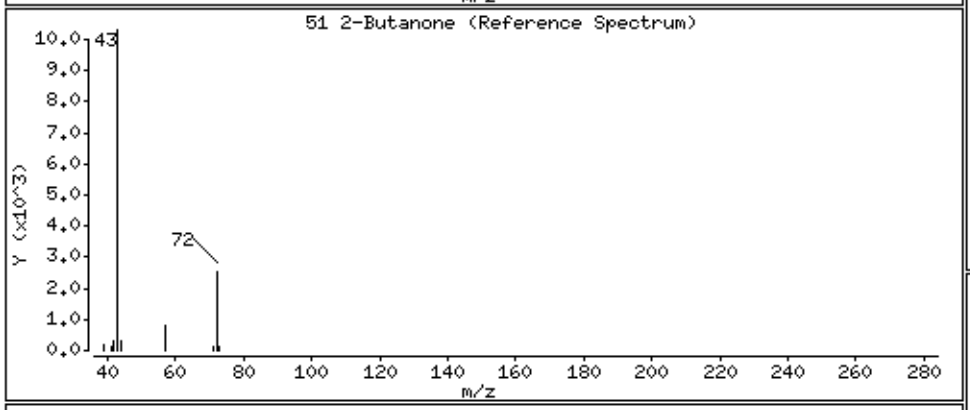
Column diameter: 0.32

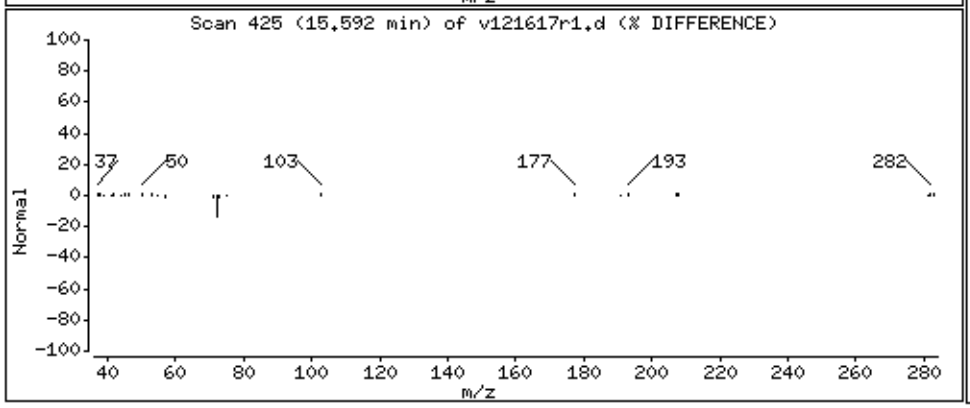
51 2-Butanone

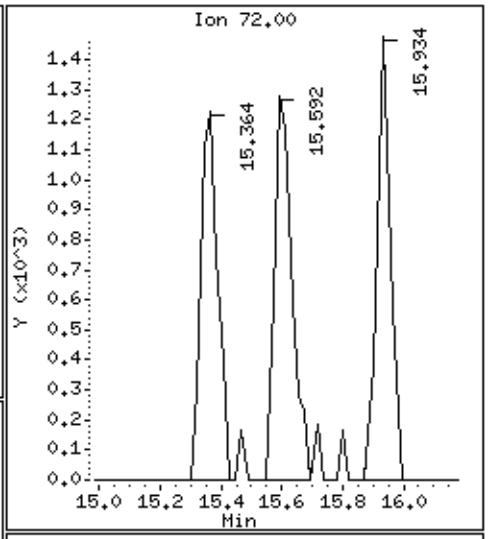
Concentration: 0.5871 PPBV

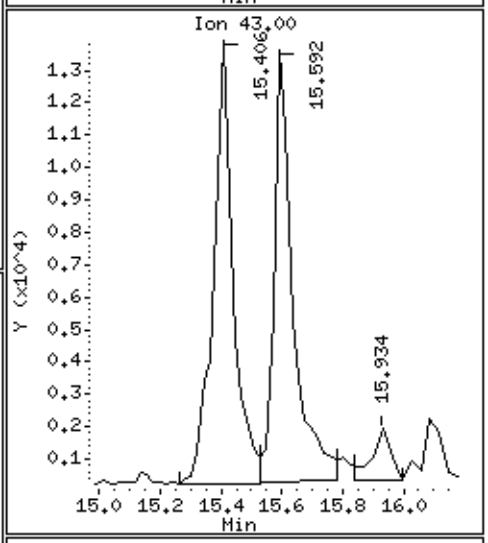


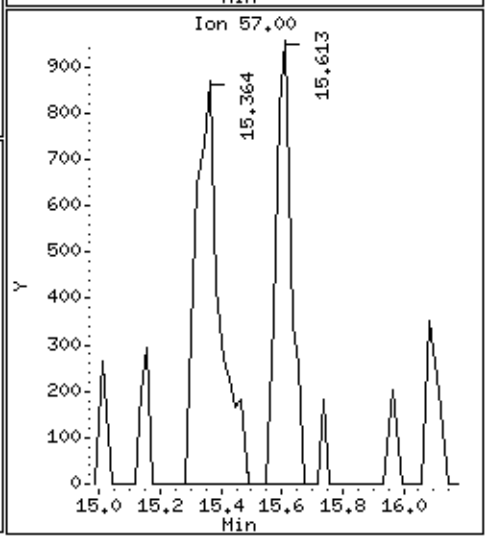












Data File: /chem/msdv.i/16Dec2014.b/v121617r1.d

Date : 16-DEC-2014 19:43

Client ID:

Instrument: msdv.i

Sample Info: 250ml #25261

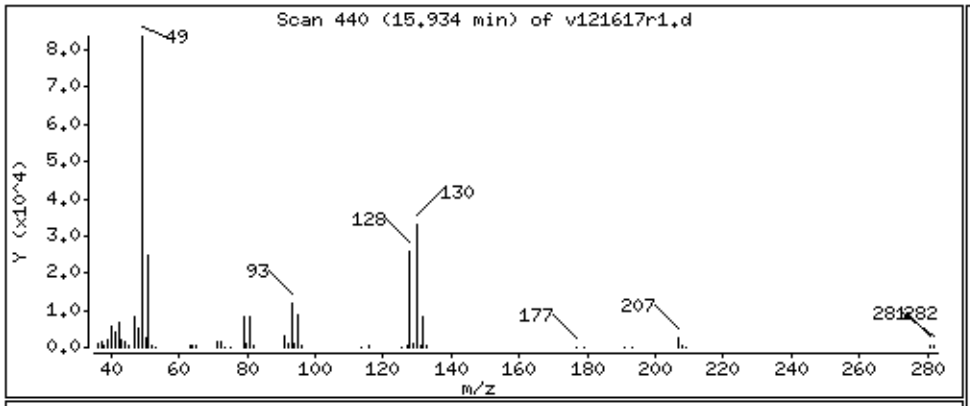
Operator: sn

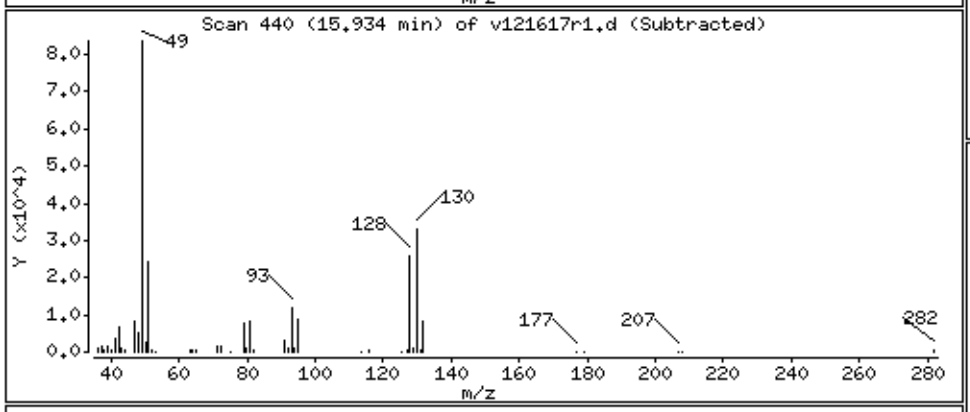
Column phase: RTx-624

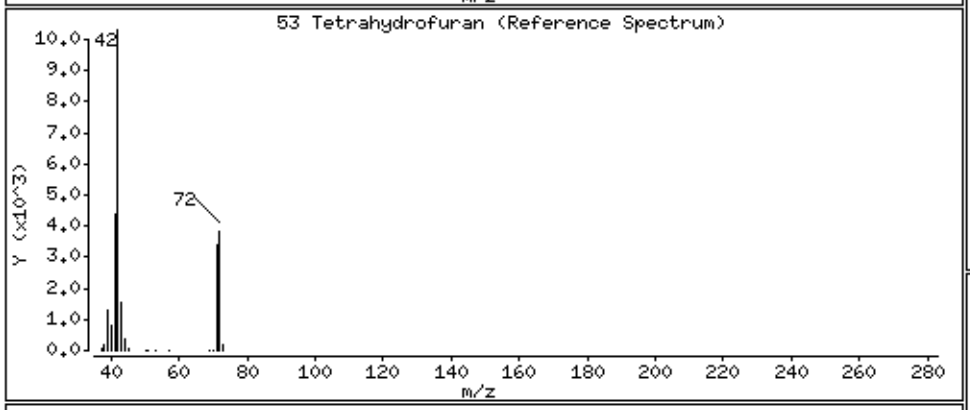
Column diameter: 0.32

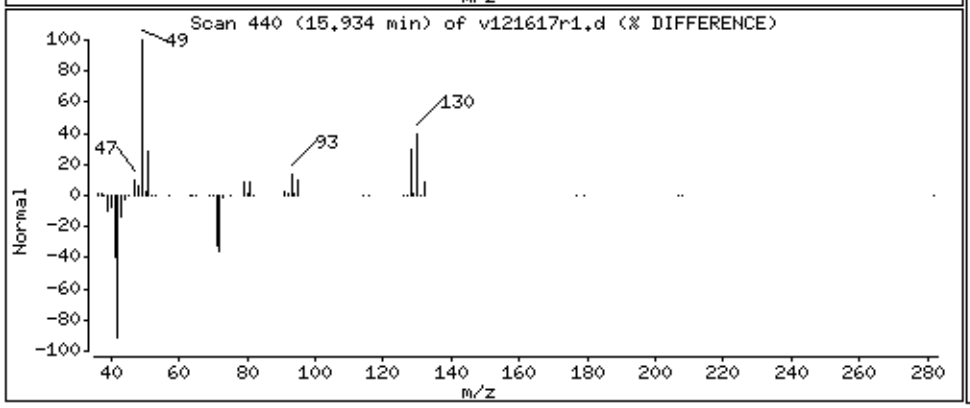
53 Tetrahydrofuran

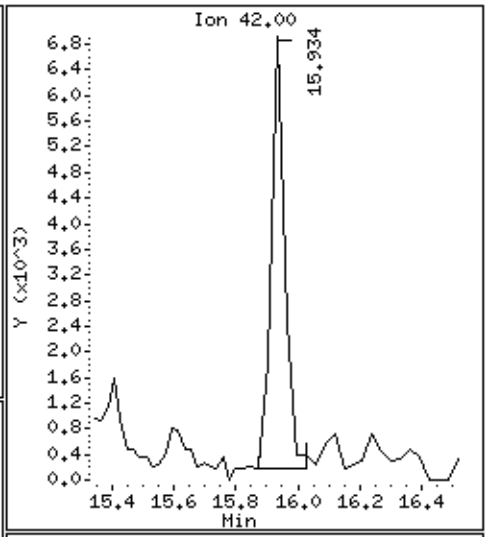
Concentration: 0.4528 PPBV

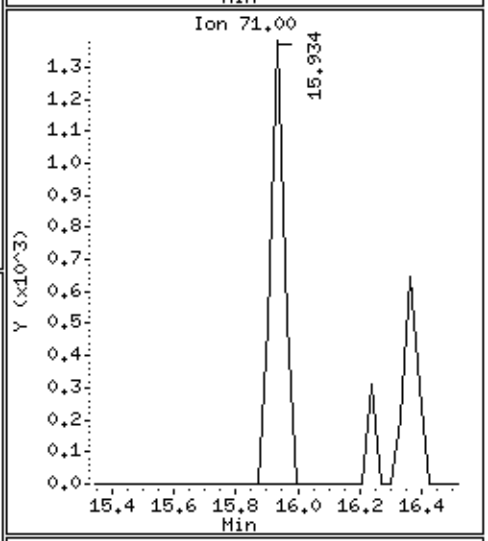


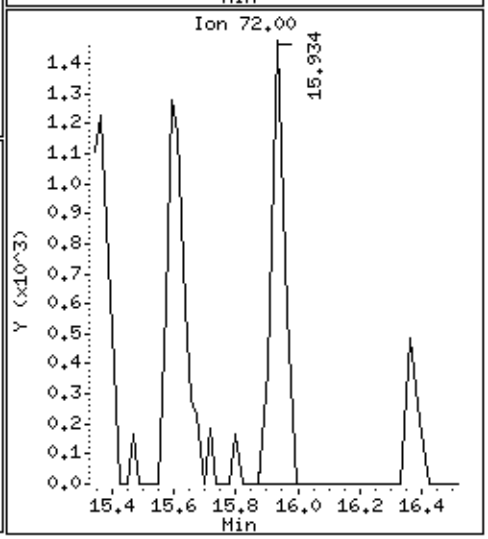












Data File: /chem/msdv.i/16Dec2014.b/v121617r1.d

Date : 16-DEC-2014 19:43

Client ID:

Instrument: msdv.i

Sample Info: 250ml #25261

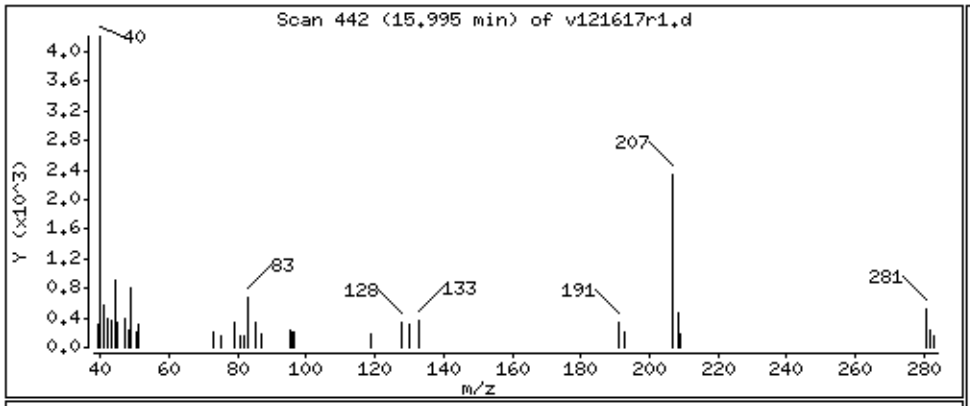
Operator: sn

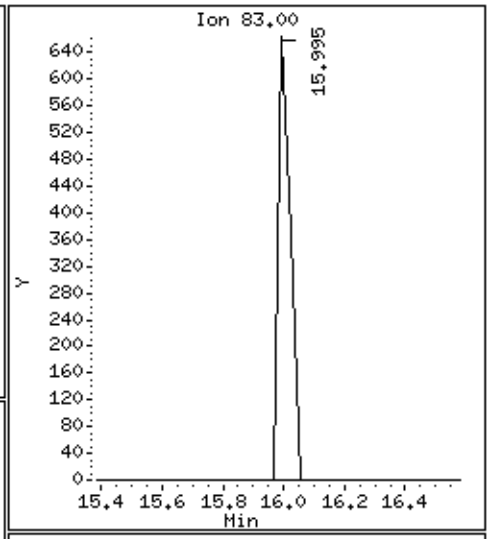
Column phase: RTx-624

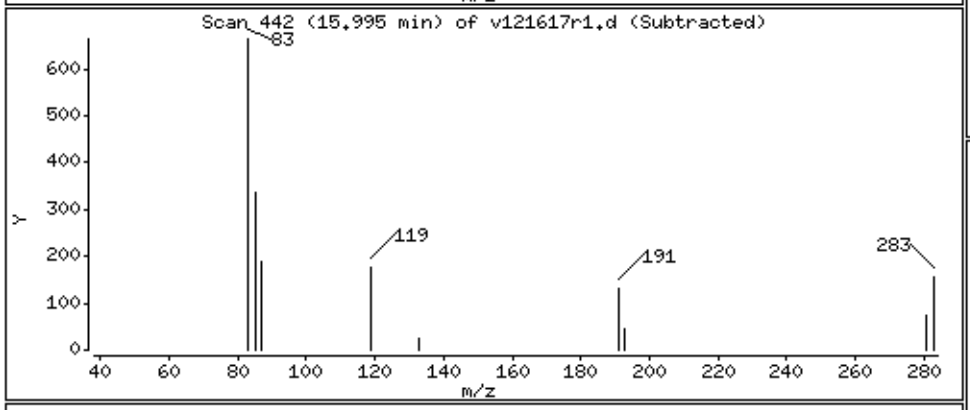
Column diameter: 0.32

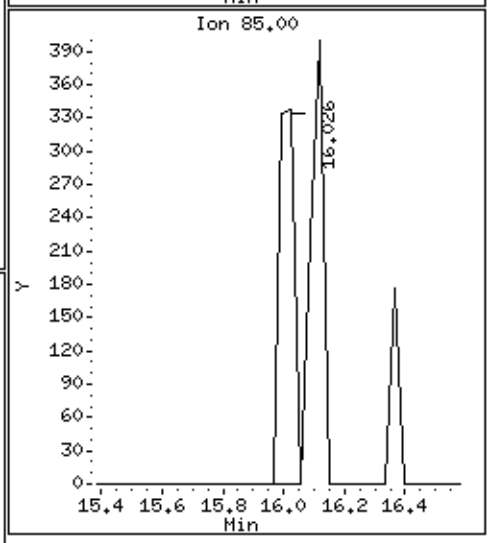
55 Chloroform

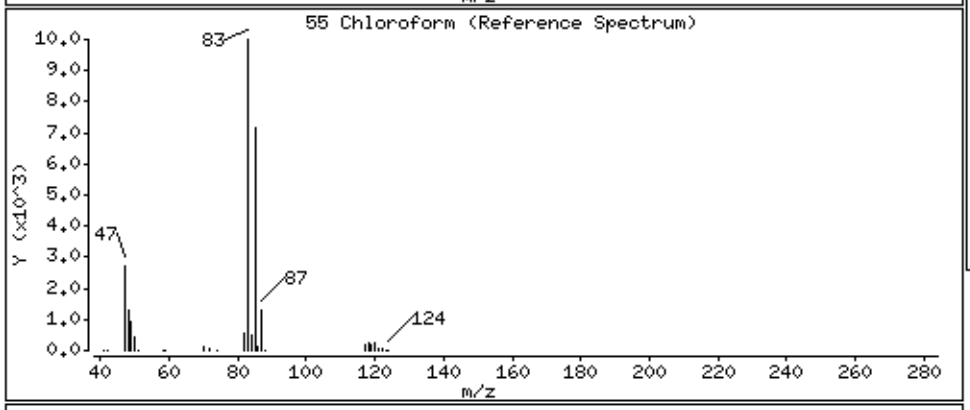
Concentration: 0.04526 PPBV

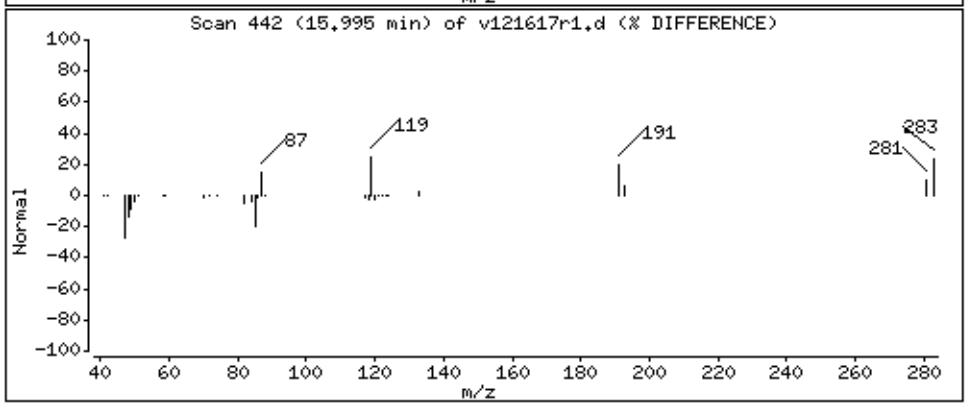












Data File: /chem/msdv.i/16Dec2014.b/v121617r1.d

Date : 16-DEC-2014 19:43

Client ID:

Instrument: msdv.i

Sample Info: 250ml #25261

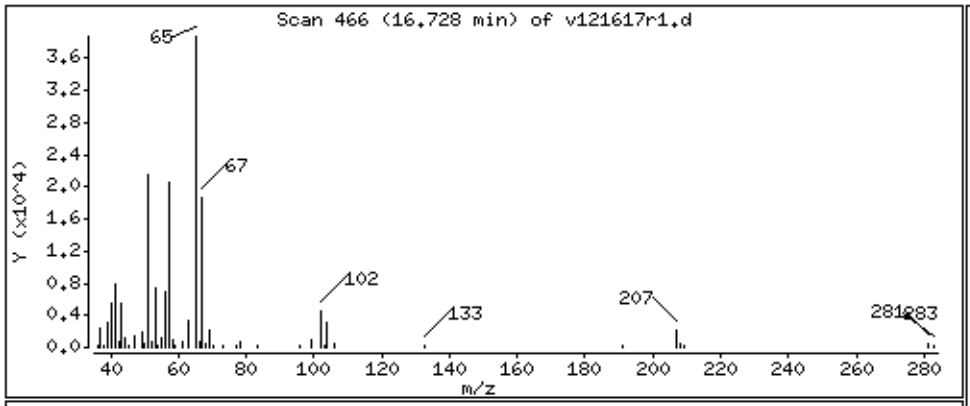
Operator: sn

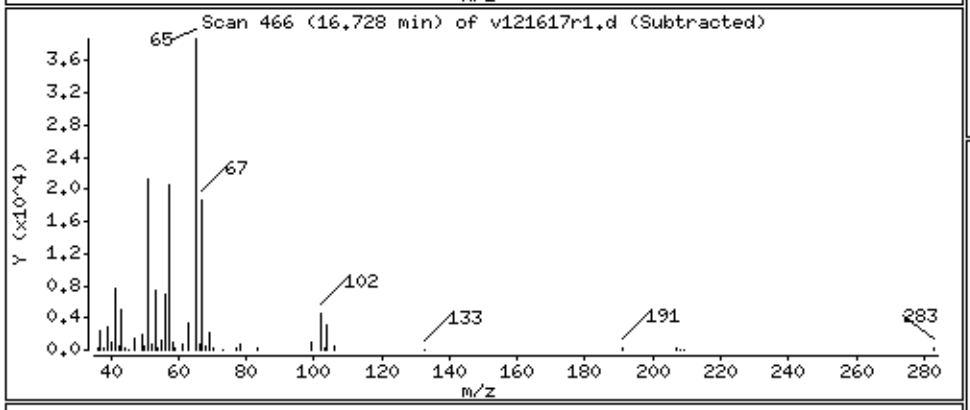
Column phase: RTx-624

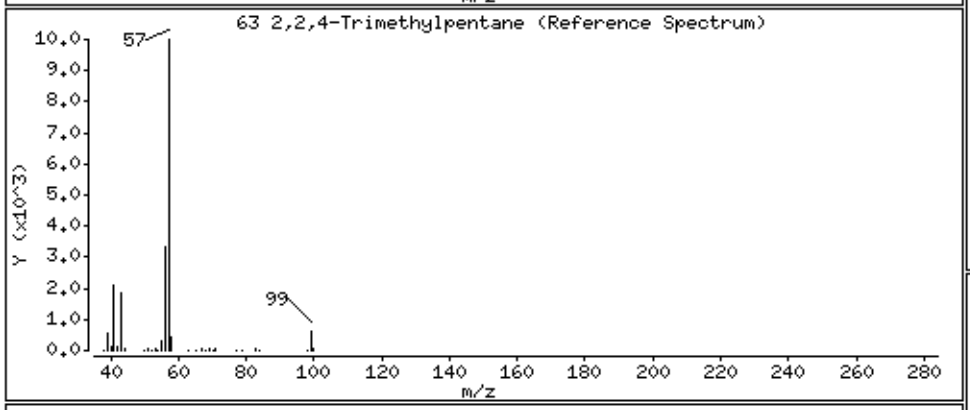
Column diameter: 0.32

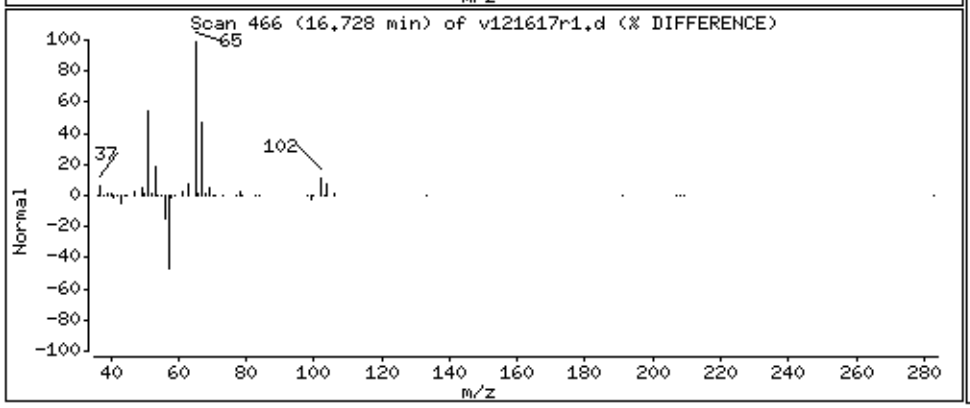
63 2,2,4-Trimethylpentane

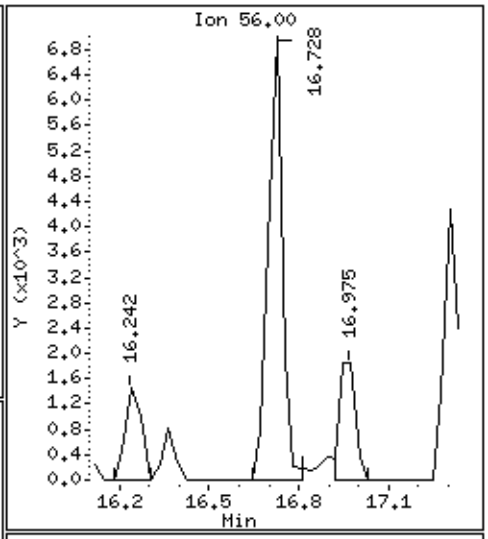
Concentration: 0.5284 PPBV

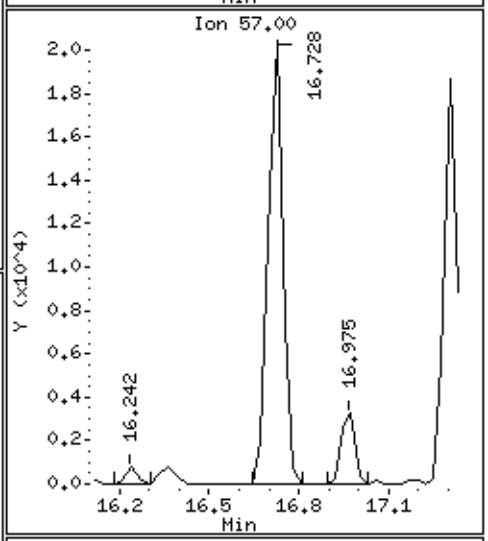


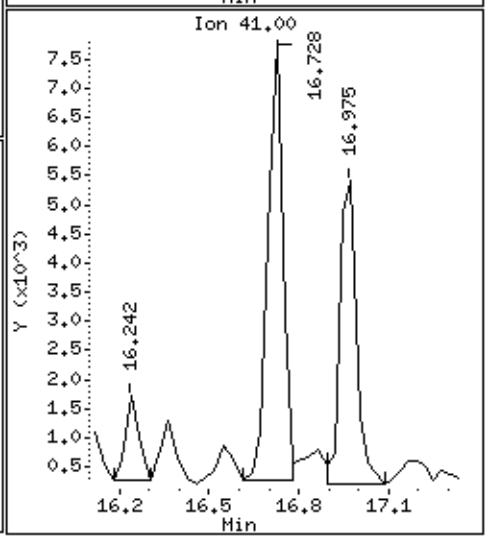












Data File: /chem/msdv.i/16Dec2014.b/v121617r1.d

Date : 16-DEC-2014 19:43

Client ID:

Instrument: msdv.i

Sample Info: 250ml #25261

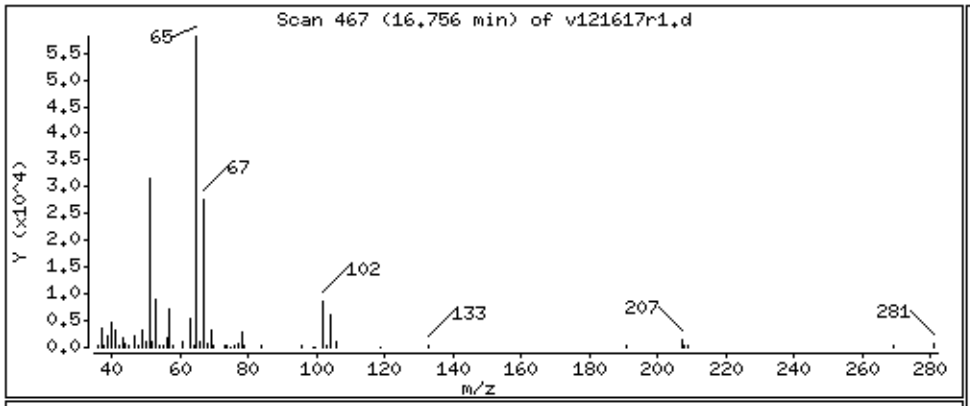
Operator: sn

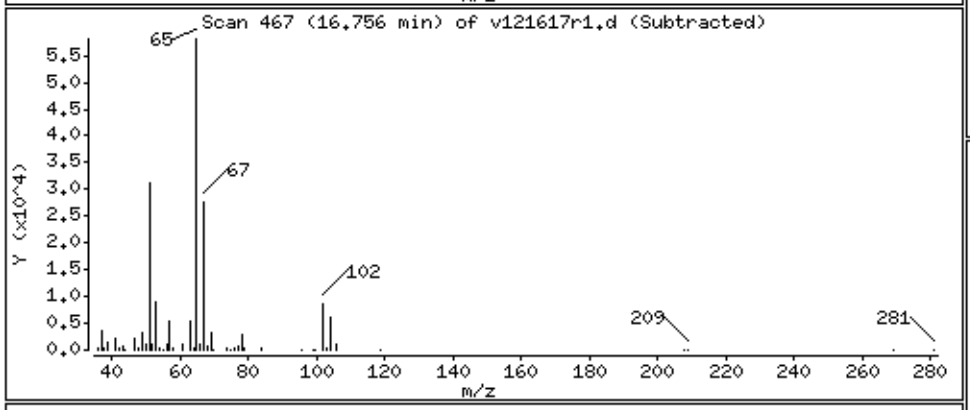
Column phase: RTx-624

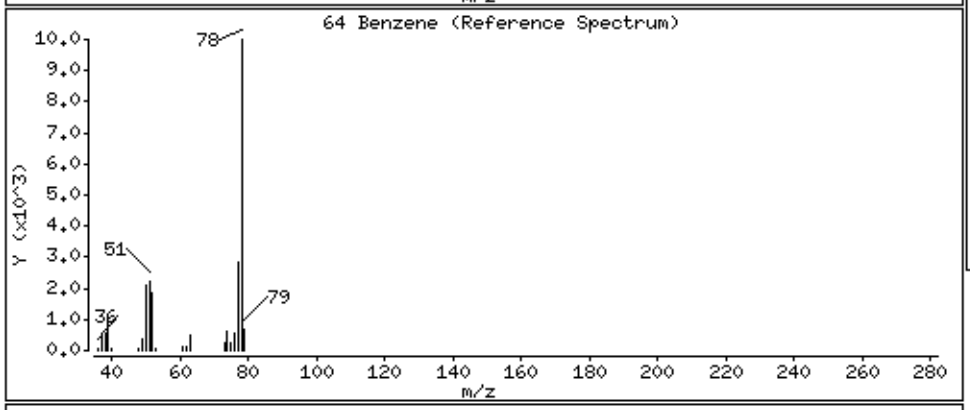
Column diameter: 0.32

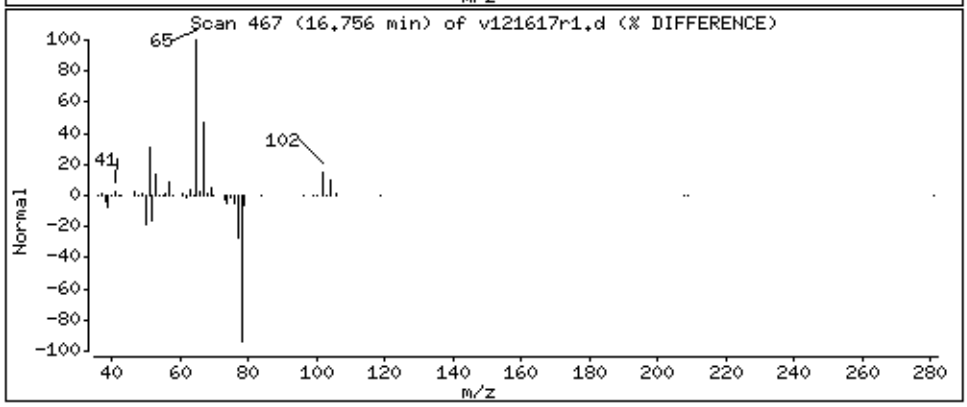
64 Benzene

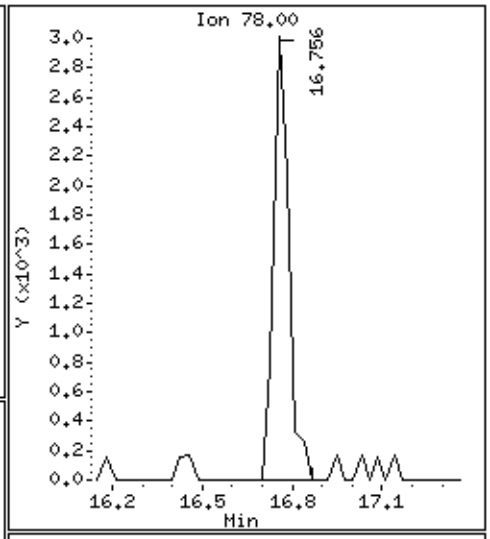
Concentration: 0.1601 PPBV

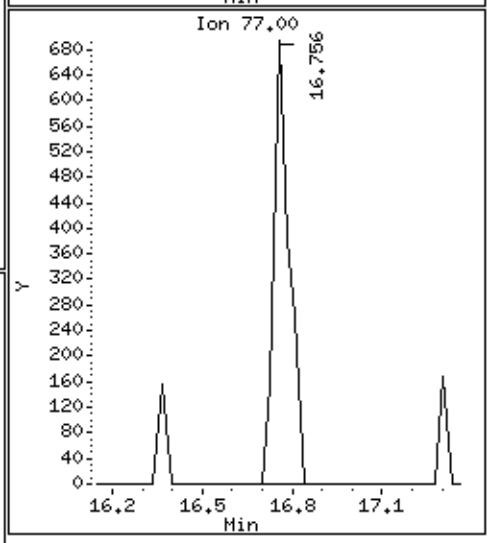












Data File: /chem/msdv.i/16Dec2014.b/v121617r1.d

Date : 16-DEC-2014 19:43

Client ID:

Instrument: msdv.i

Sample Info: 250ml #25261

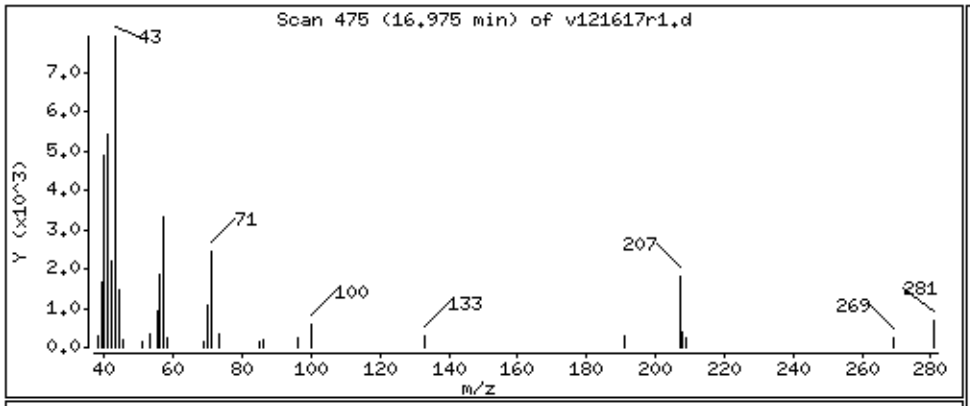
Operator: sn

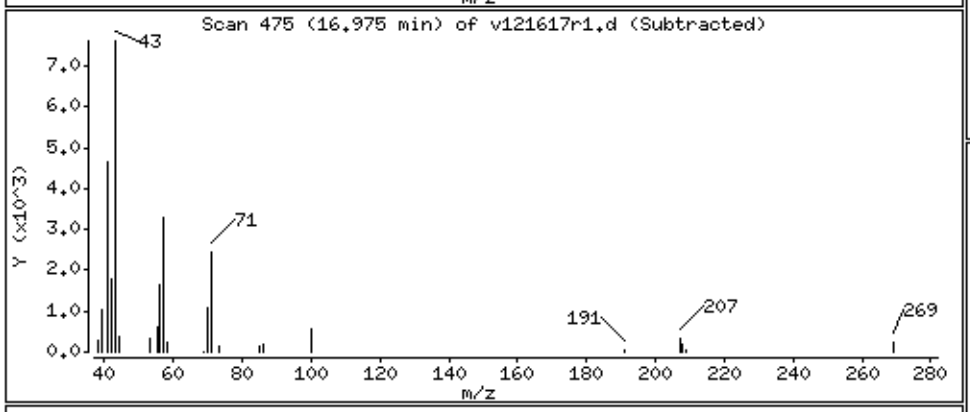
Column phase: RTx-624

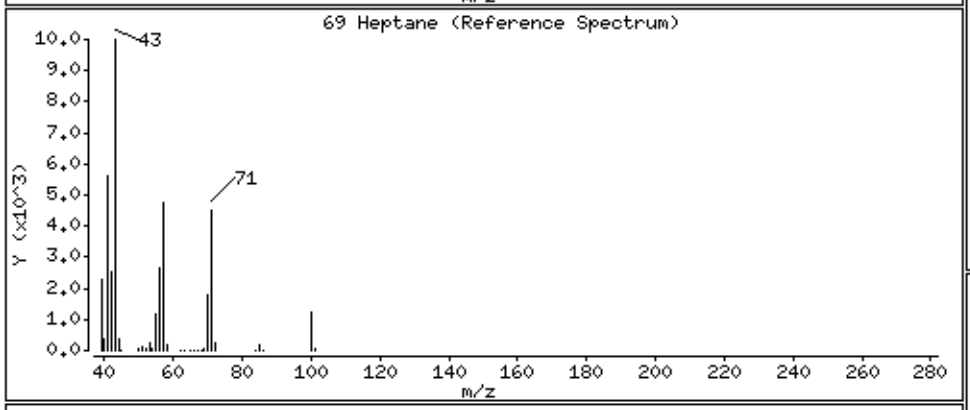
Column diameter: 0.32

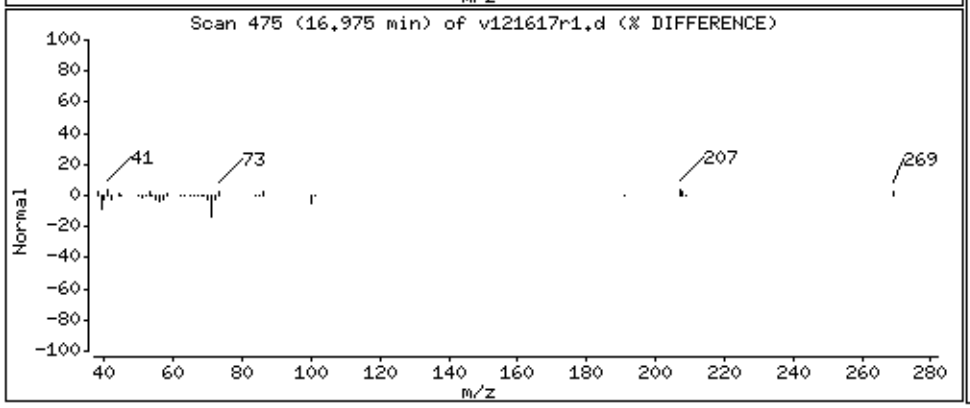
69 Heptane

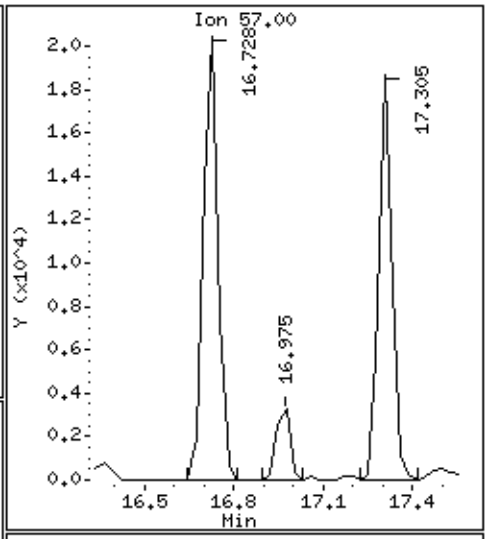
Concentration: 0.3770 PPBV

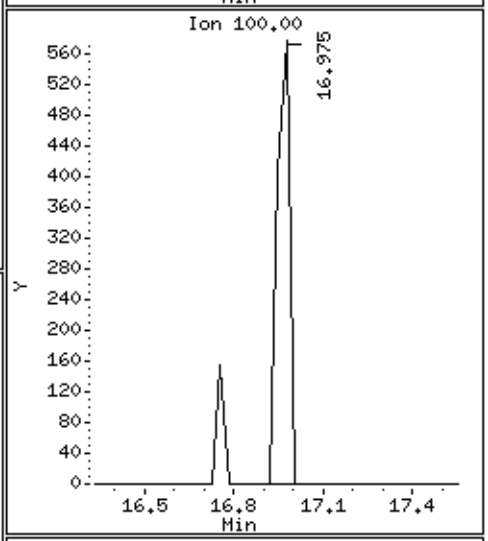


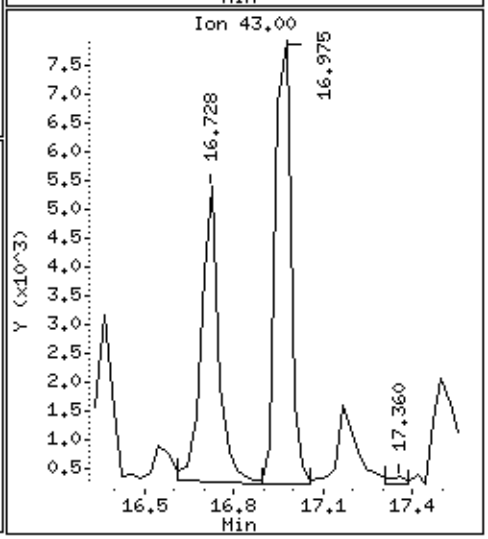












Data File: /chem/msdv.i/16Dec2014.b/v121617r1.d

Date : 16-DEC-2014 19:43

Client ID:

Instrument: msdv.i

Sample Info: 250ml #25261

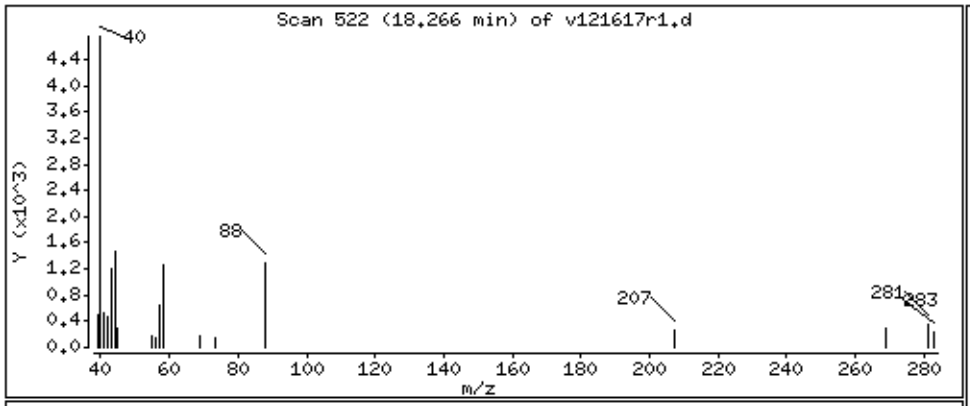
Operator: sn

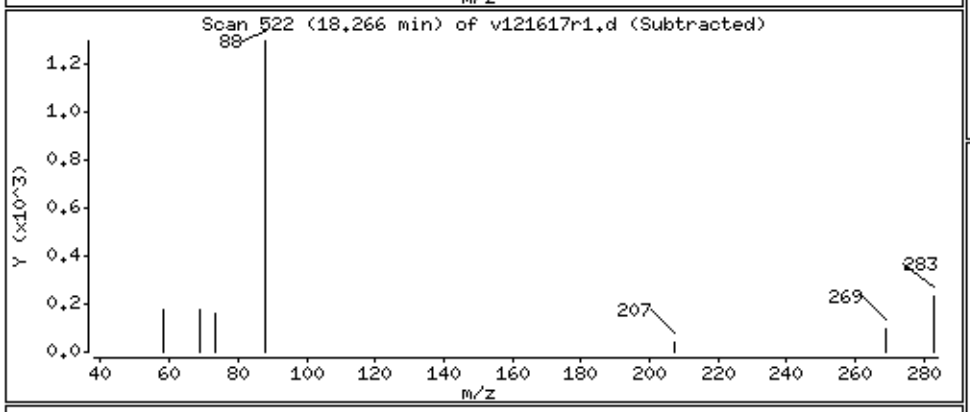
Column phase: RTx-624

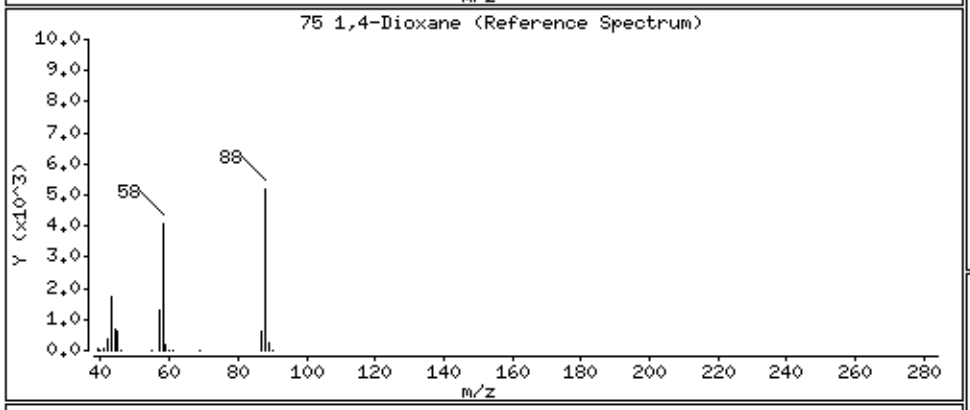
Column diameter: 0.32

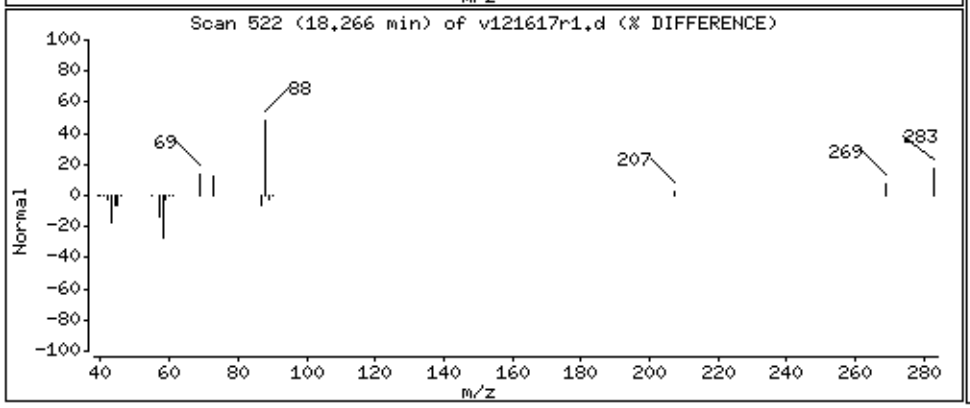
75 1,4-Dioxane

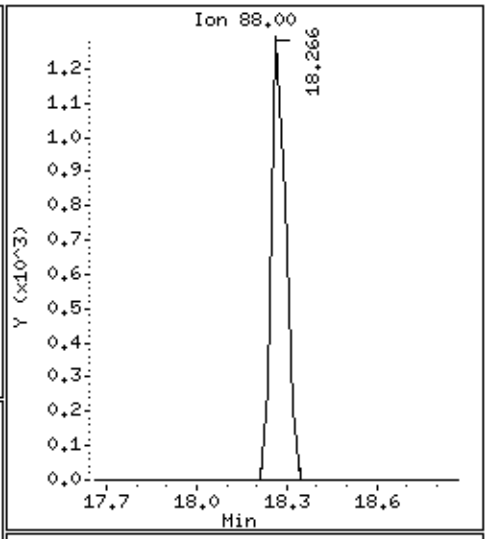
Concentration: 0.2792 PPBV

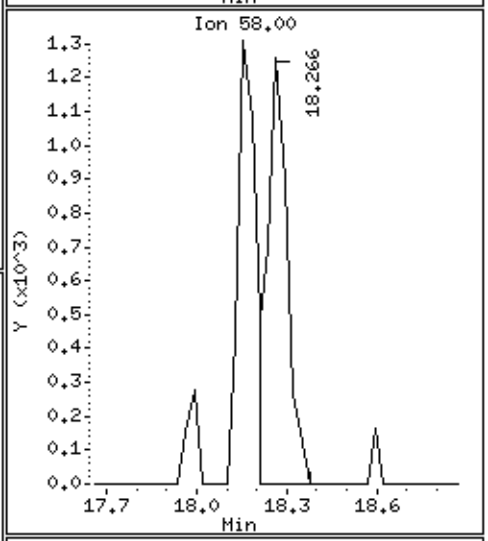


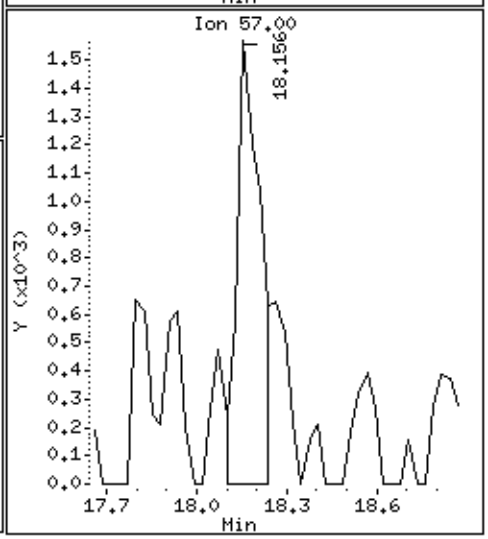












Data File: /chem/msdv.i/16Dec2014.b/v121617r1.d

Date : 16-DEC-2014 19:43

Client ID:

Instrument: msdv.i

Sample Info: 250ml #25261

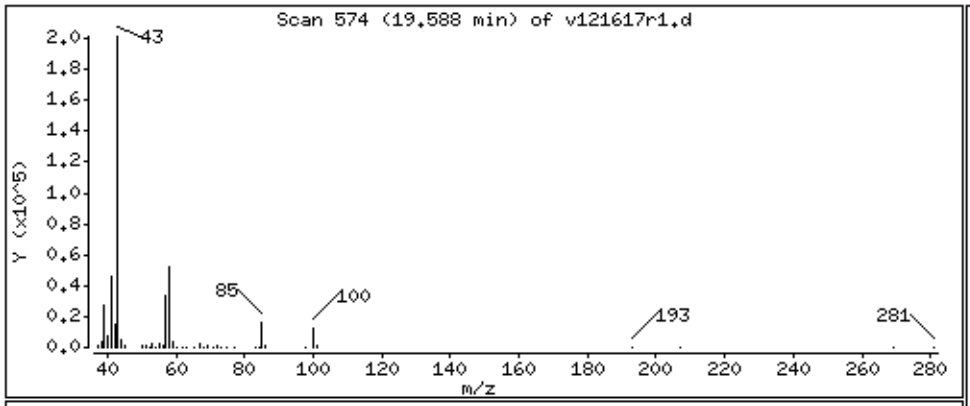
Operator: sn

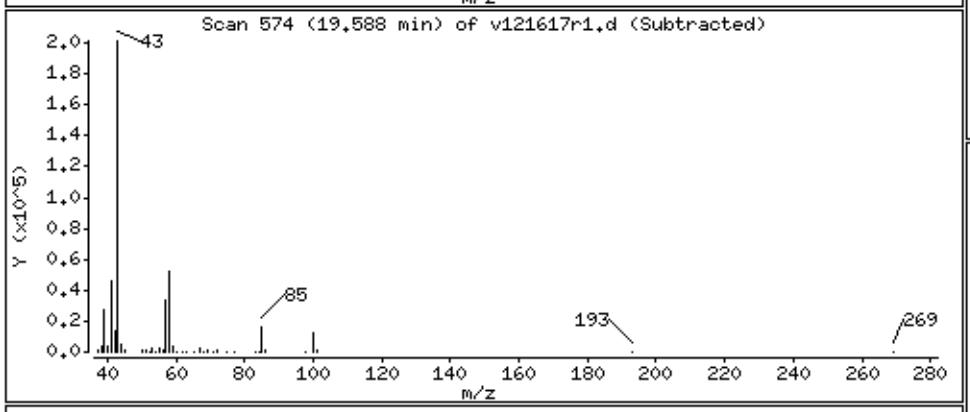
Column phase: RTx-624

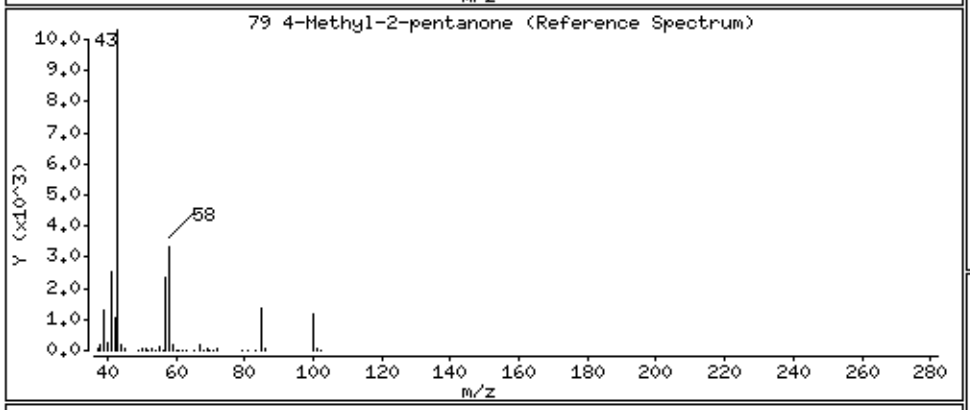
Column diameter: 0.32

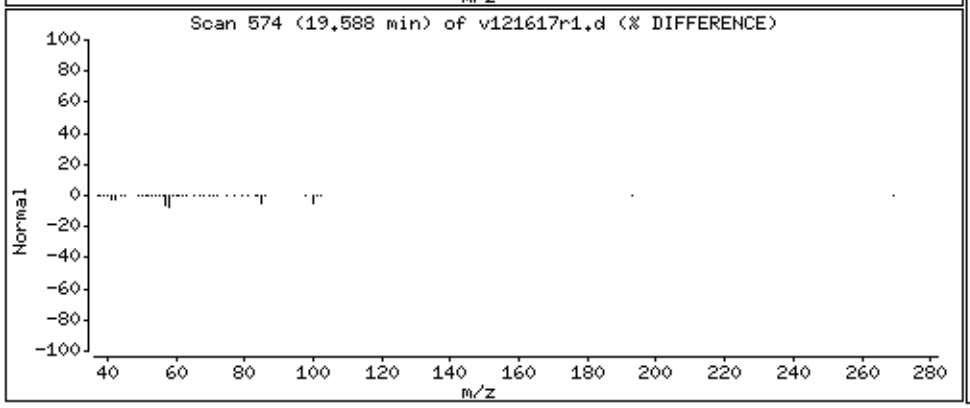
79 4-Methyl-2-pentanone

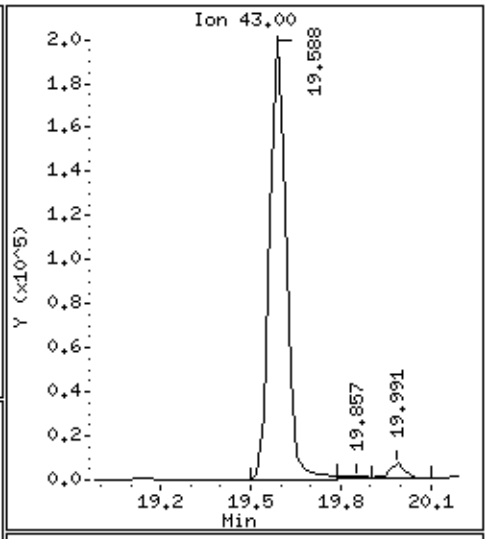
Concentration: 8.256 PPBV

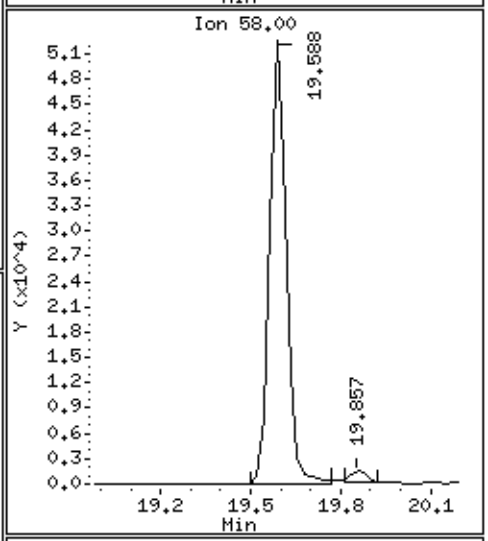


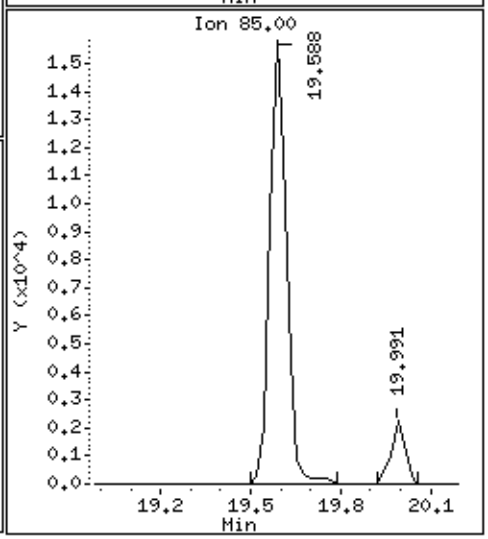












Data File: /chem/msdv.i/16Dec2014.b/v121617r1.d

Date : 16-DEC-2014 19:43

Client ID:

Instrument: msdv.i

Sample Info: 250ml #25261

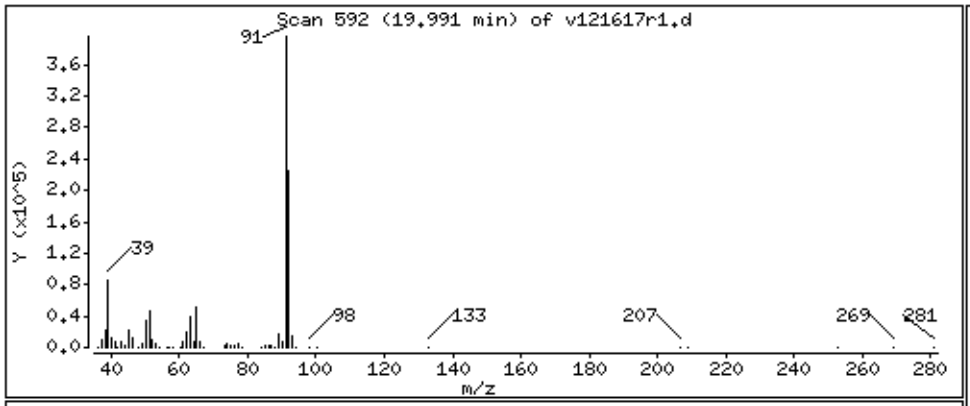
Operator: sn

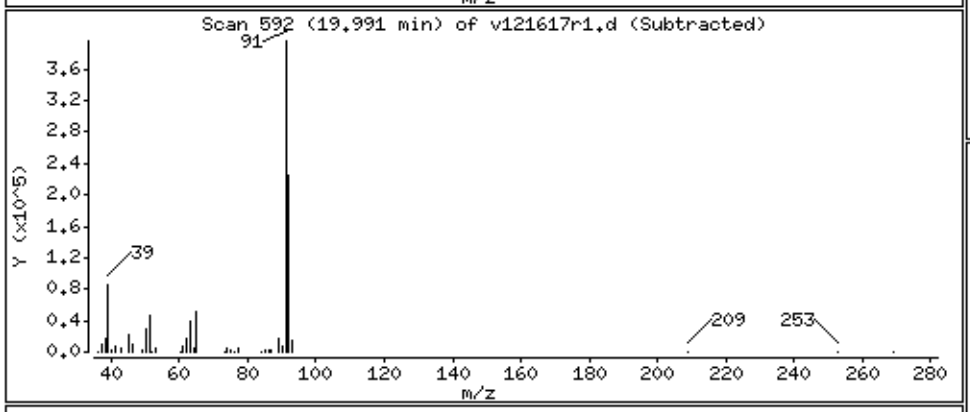
Column phase: RTx-624

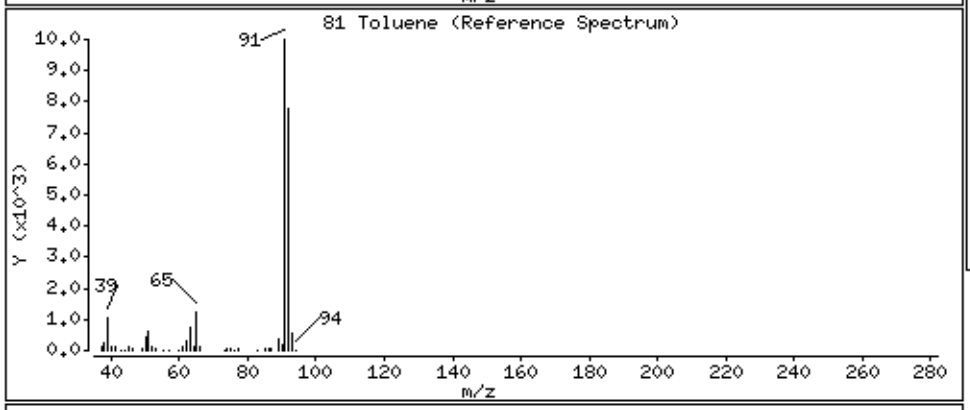
Column diameter: 0.32

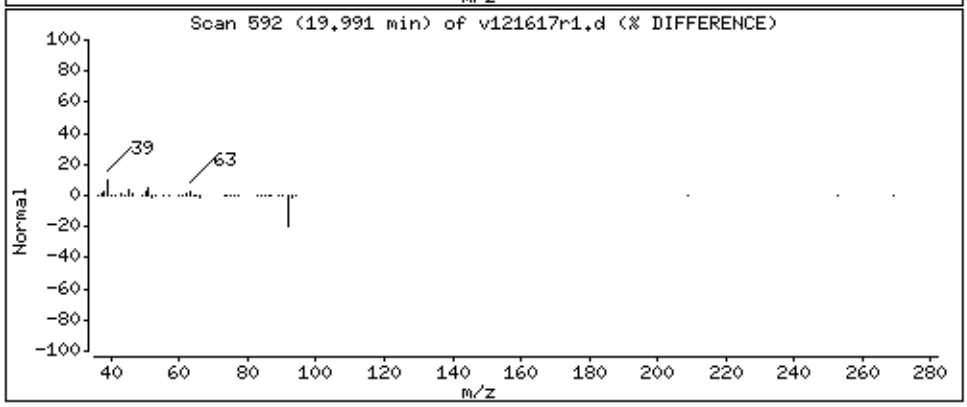
81 Toluene

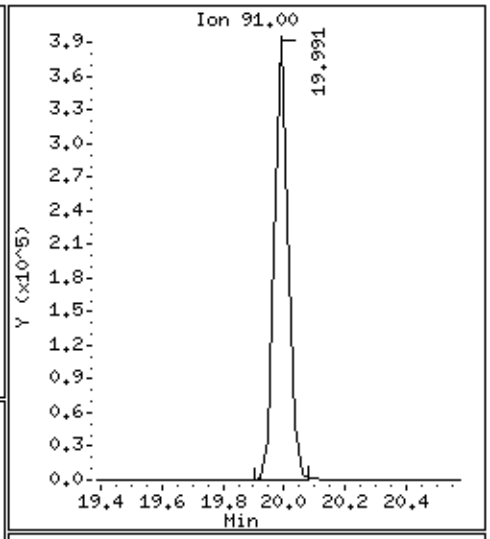
Concentration: 17.090 PPBV

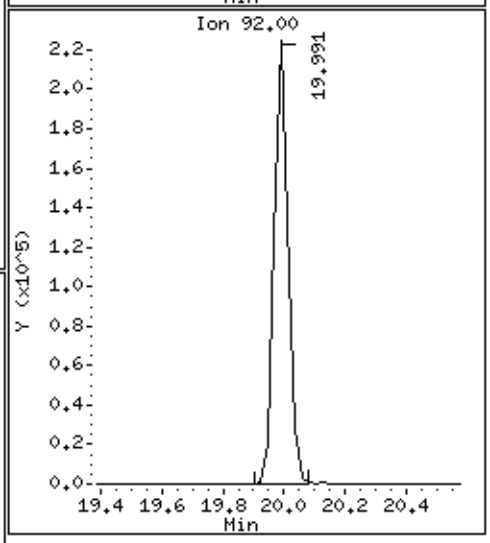












Data File: /chem/msdv.i/16Dec2014.b/v121617r1.d

Date : 16-DEC-2014 19:43

Client ID:

Instrument: msdv.i

Sample Info: 250ml #25261

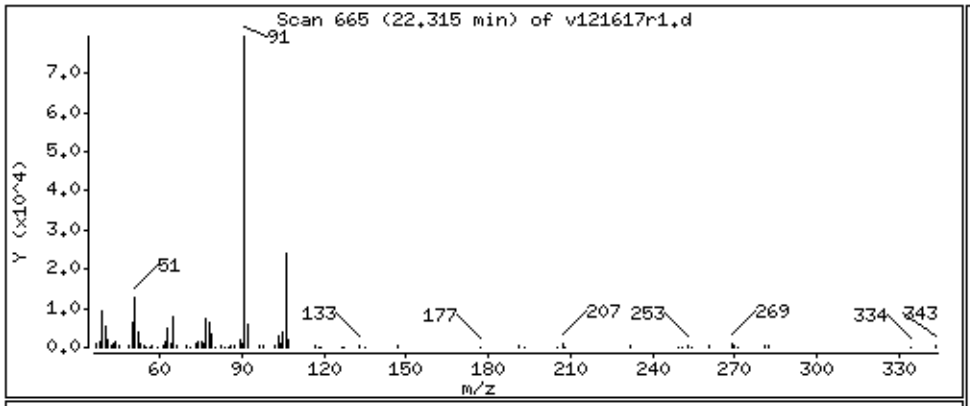
Operator: sn

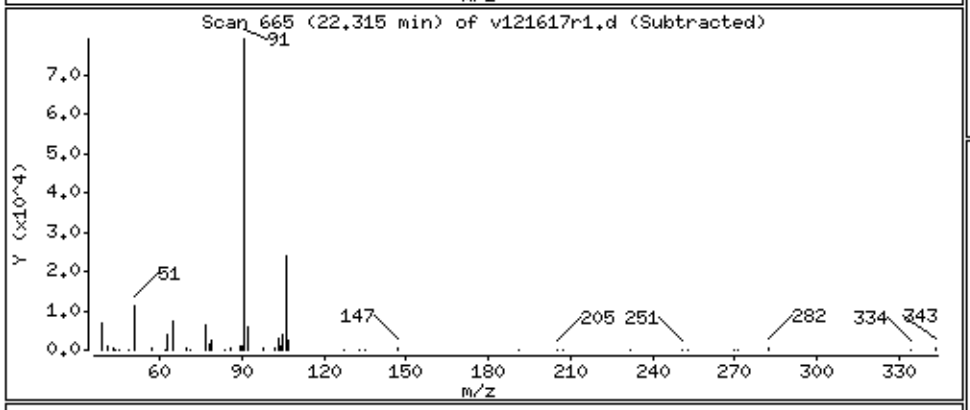
Column phase: RTx-624

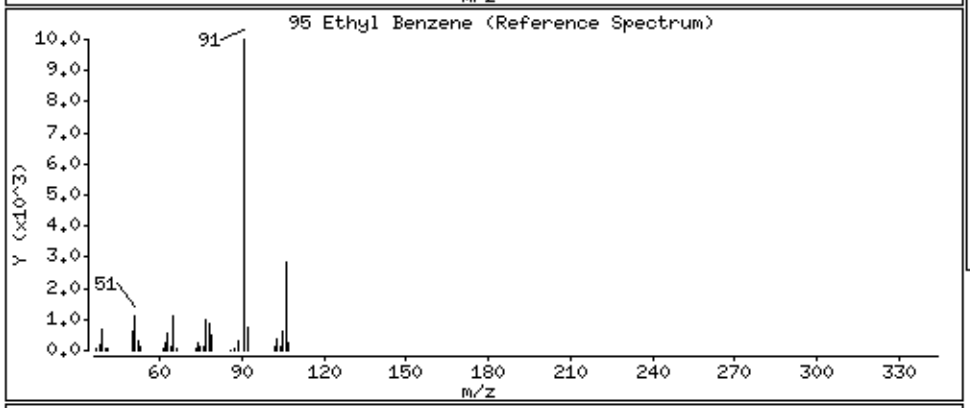
Column diameter: 0.32

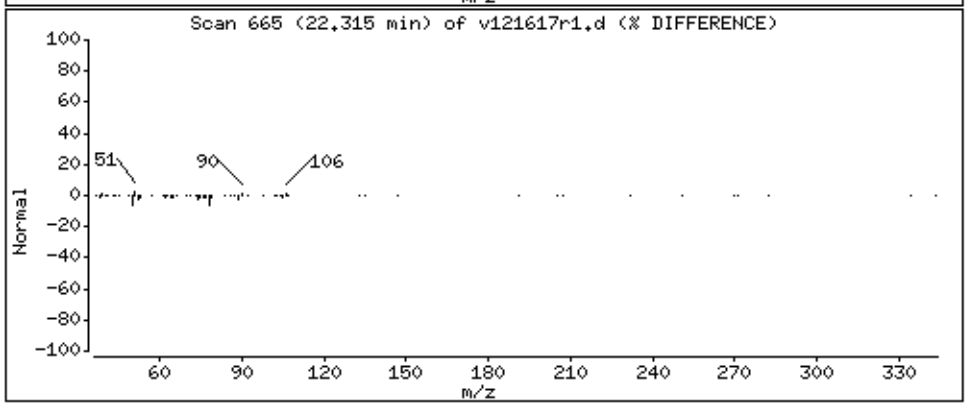
95 Ethyl Benzene

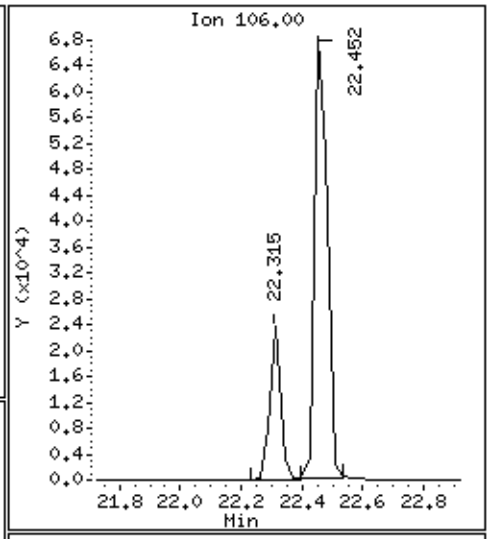
Concentration: 2.181 PPBV

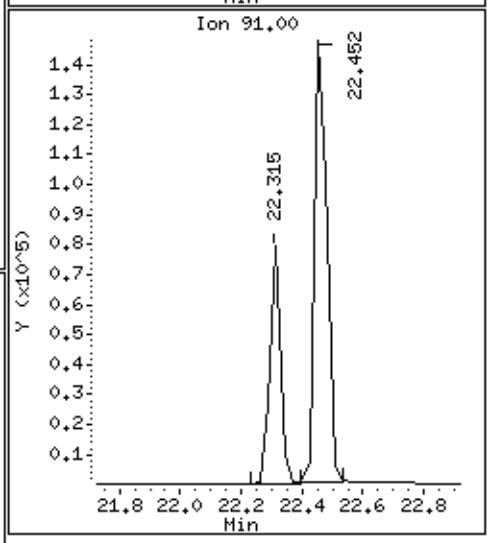












Data File: /chem/msdv.i/16Dec2014.b/v121617r1.d

Date : 16-DEC-2014 19:43

Client ID:

Instrument: msdv.i

Sample Info: 250ml #25261

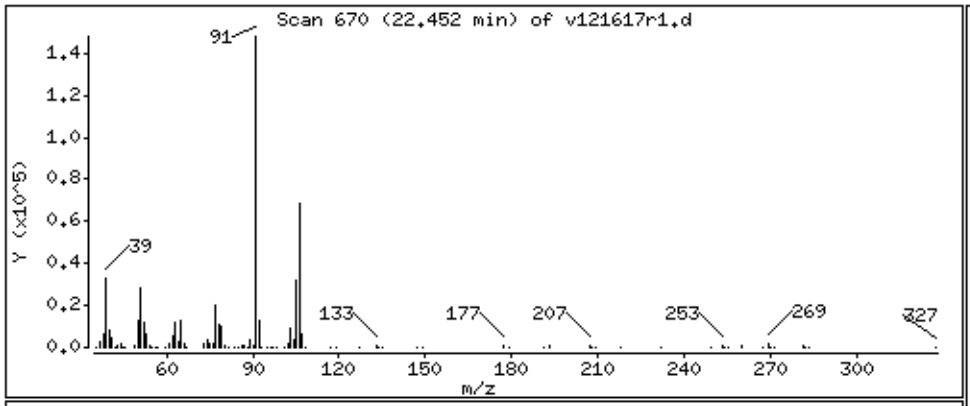
Operator: sn

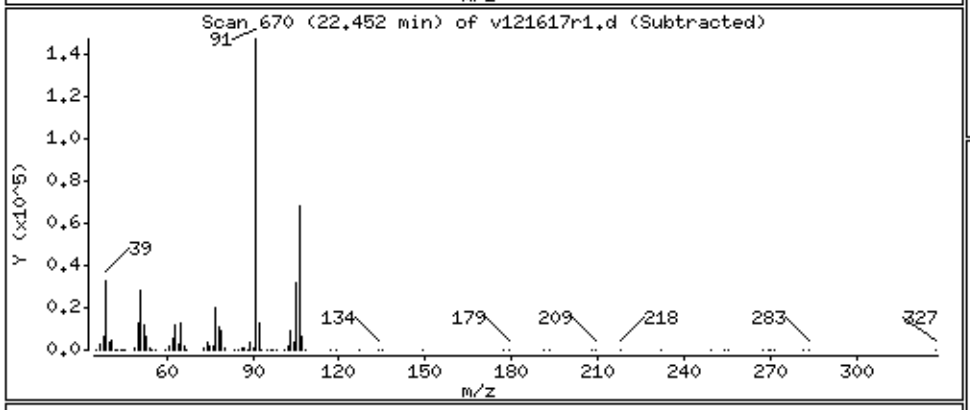
Column phase: RTx-624

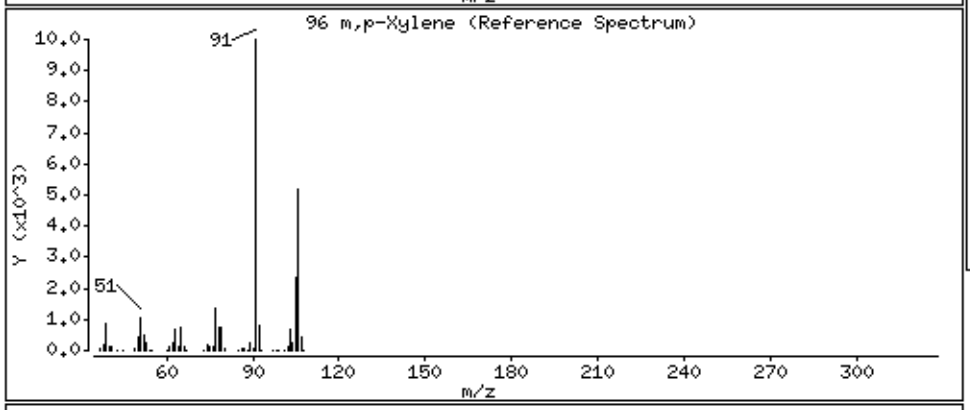
Column diameter: 0.32

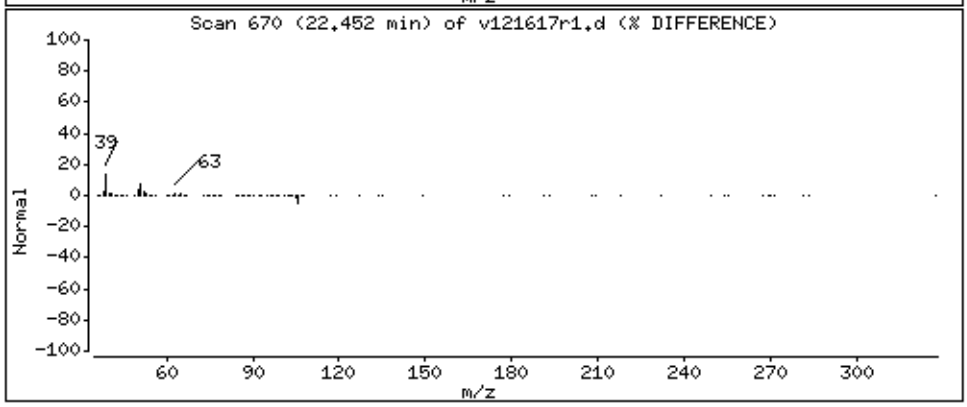
96 m,p-Xylene

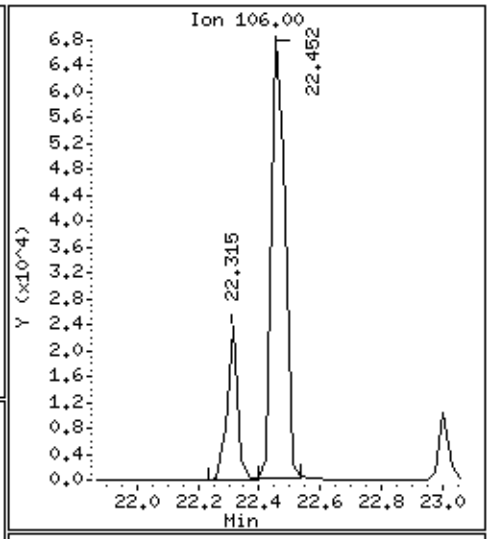
Concentration: 7.717 PPBV

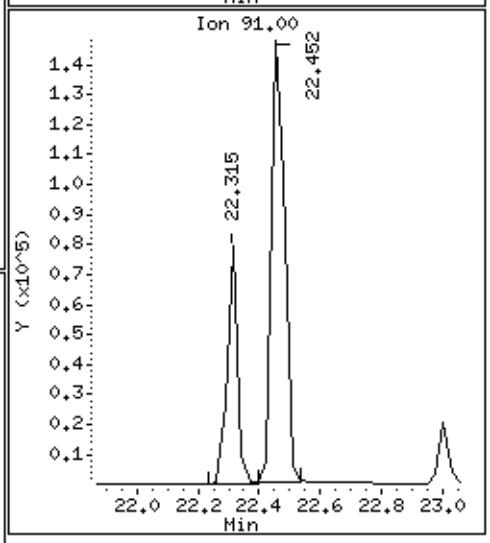












Data File: /chem/msdv.i/16Dec2014.b/v121617r1.d

Date : 16-DEC-2014 19:43

Client ID:

Instrument: msdv.i

Sample Info: 250ml #25261

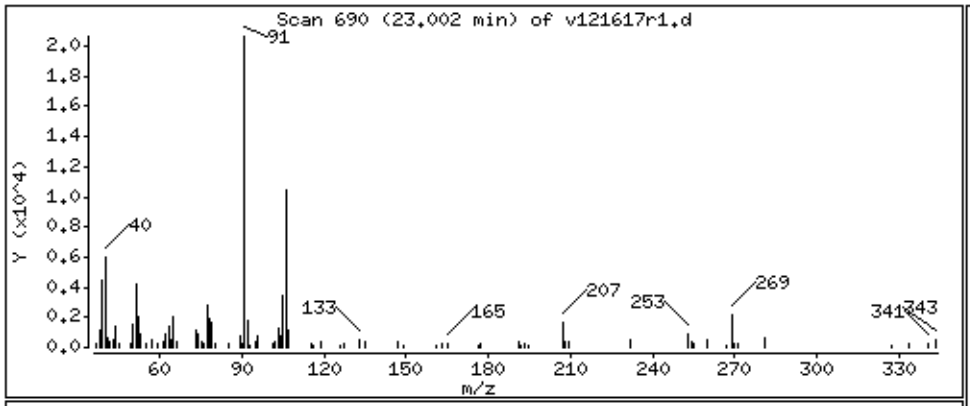
Operator: sn

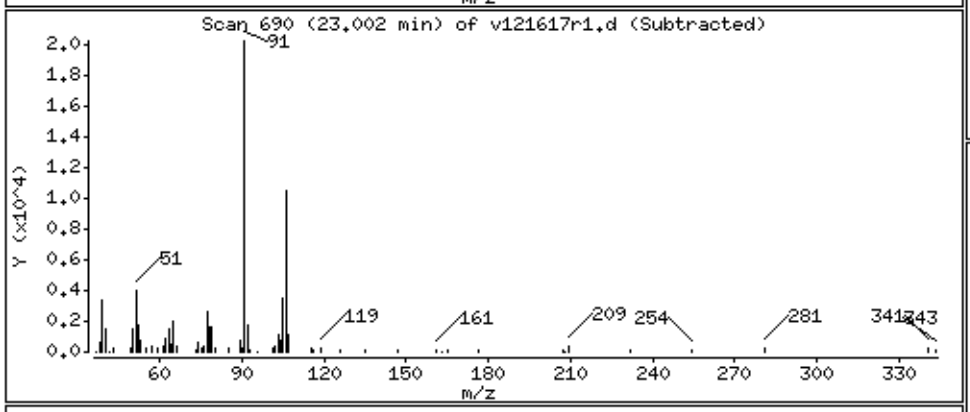
Column phase: RTx-624

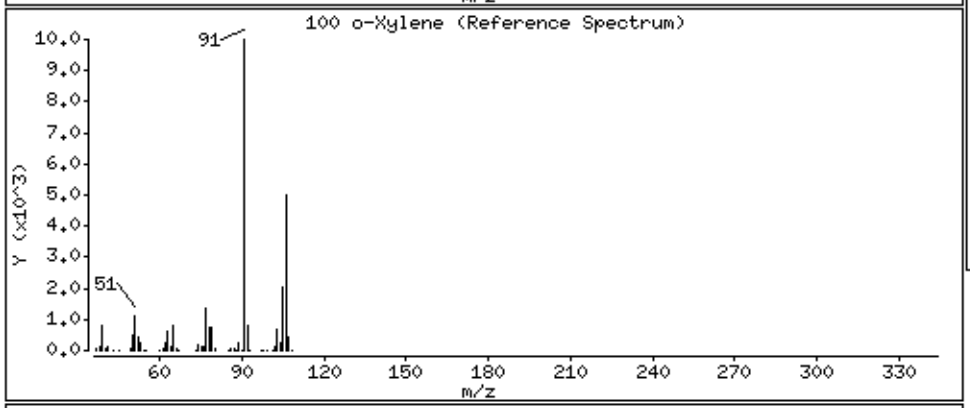
Column diameter: 0.32

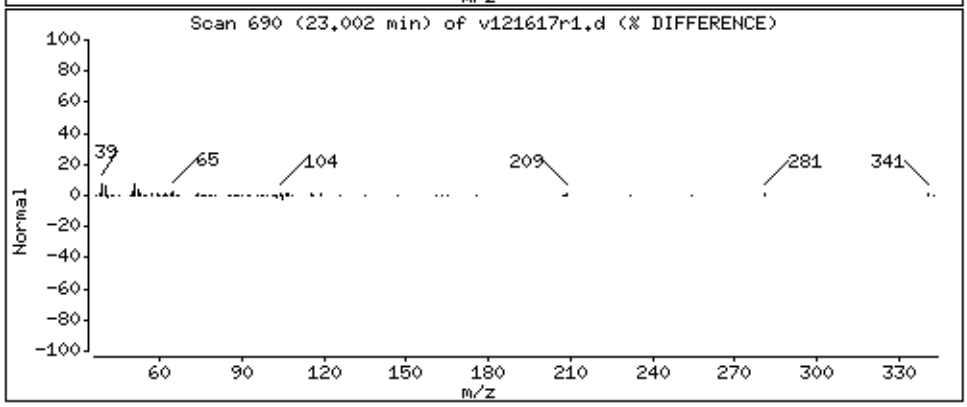
100 o-Xylene

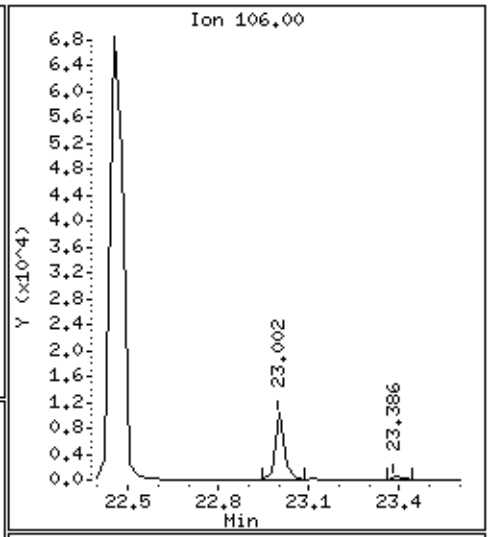
Concentration: 0.9201 PPBV

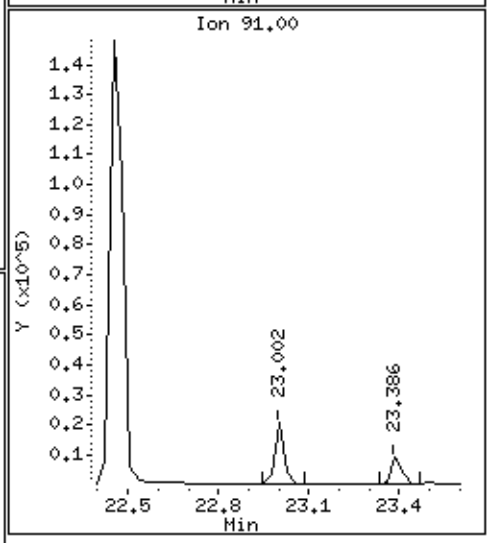












Data File: /chem/msdv.i/16Dec2014.b/v121617r1.d

Date : 16-DEC-2014 19:43

Client ID:

Instrument: msdv.i

Sample Info: 250ml #25261

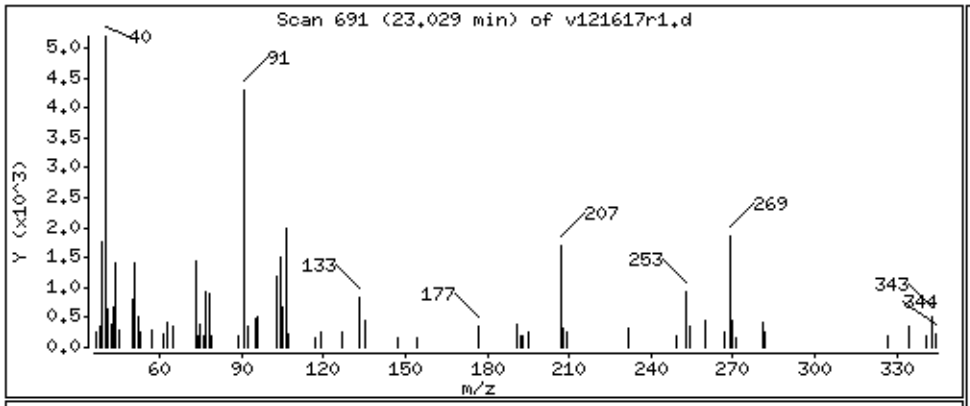
Operator: sn

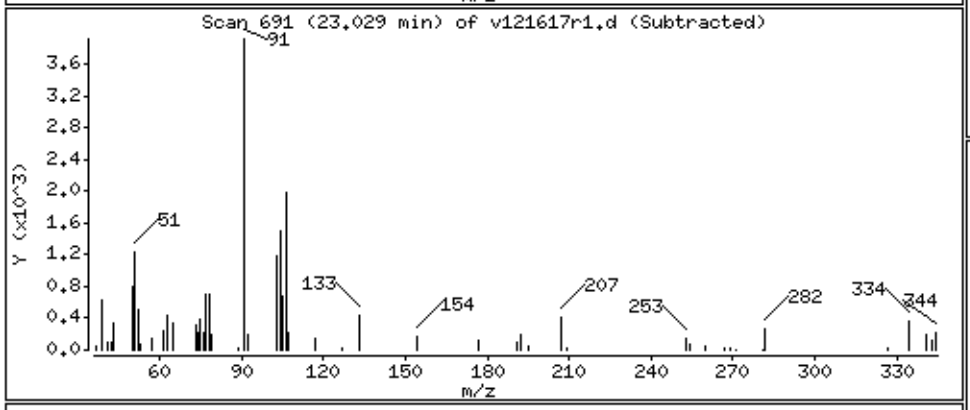
Column phase: RTx-624

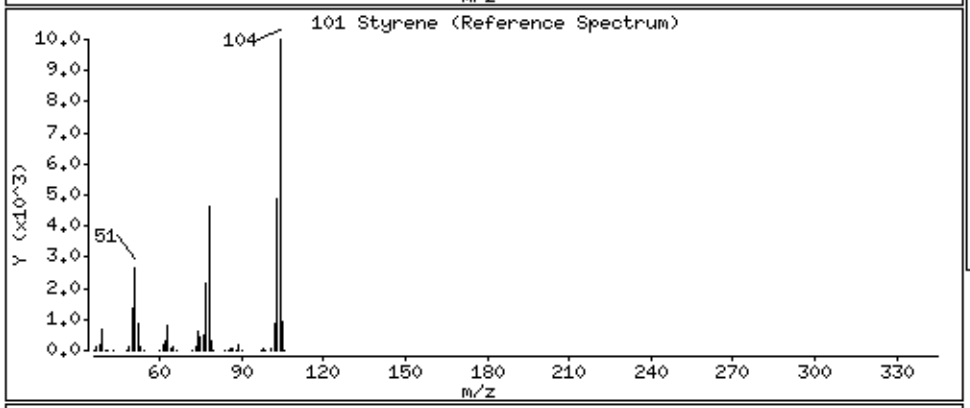
Column diameter: 0.32

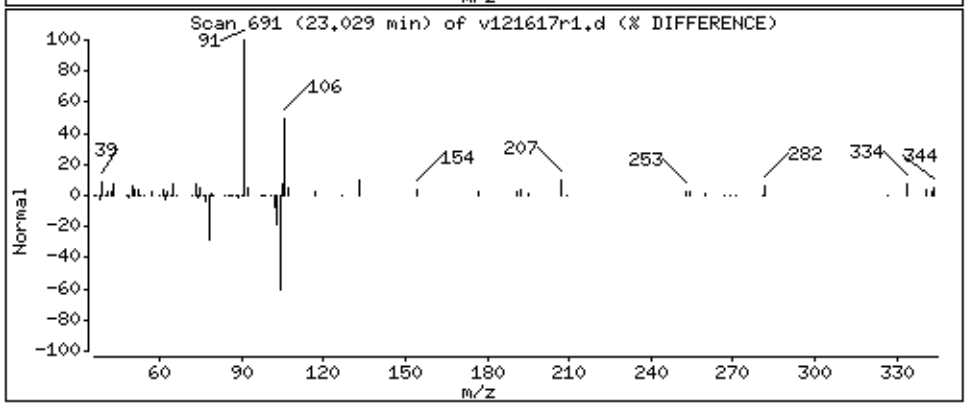
101 Styrene

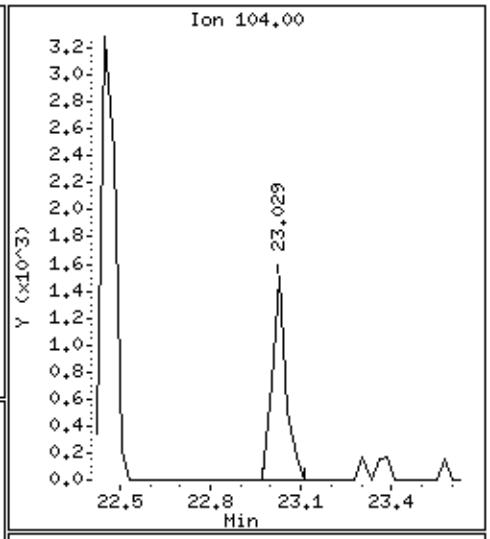
Concentration: 0.1329 PPBV

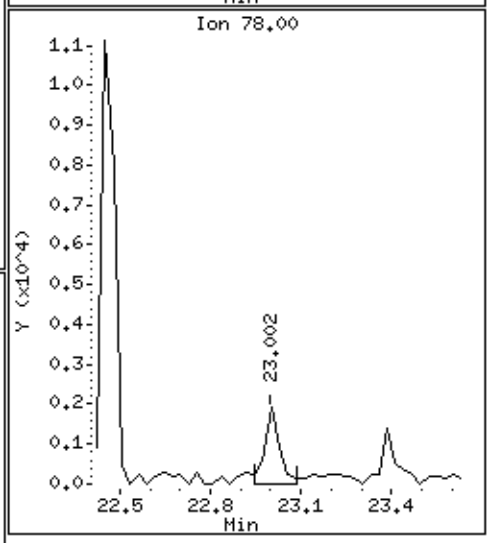












Data File: /chem/msdv.i/16Dec2014.b/v121617r1.d

Date : 16-DEC-2014 19:43

Client ID:

Instrument: msdv.i

Sample Info: 250ml #25261

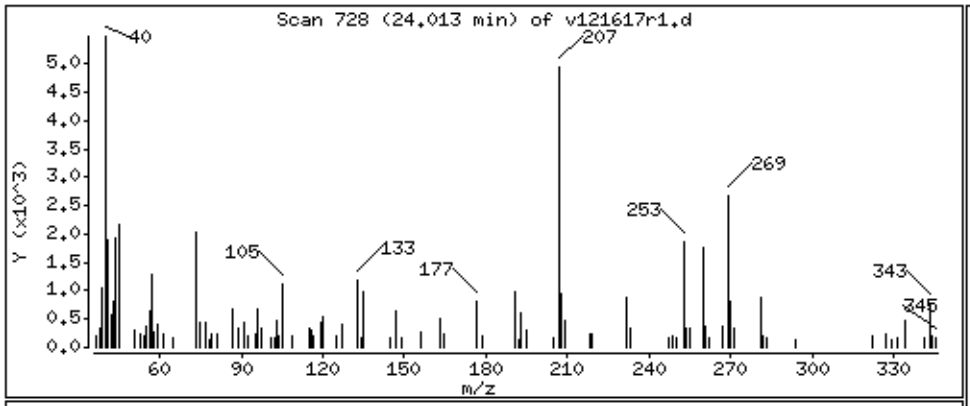
Operator: sn

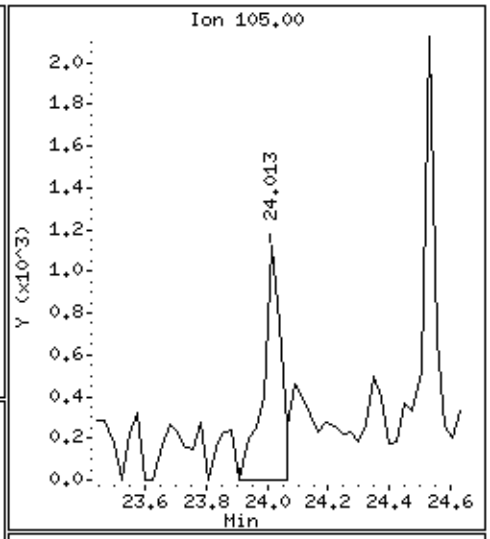
Column phase: RTx-624

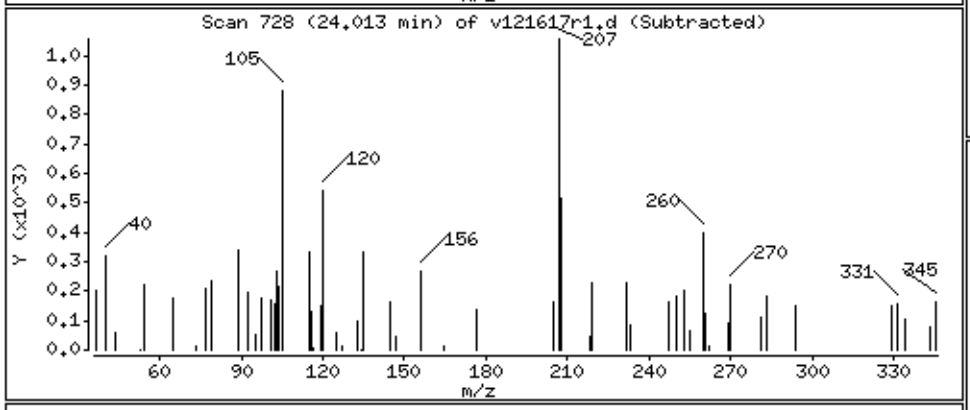
Column diameter: 0.32

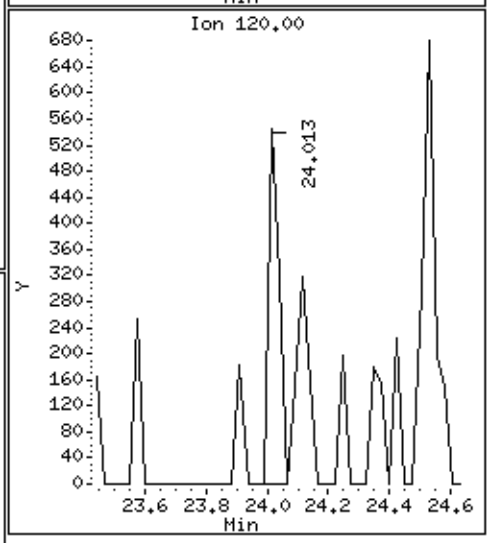
113 4-Ethyltoluene

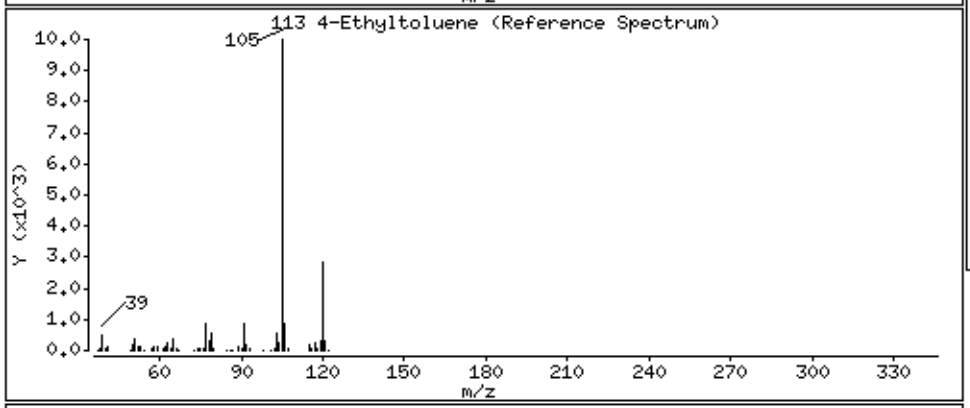
Concentration: 0.09845 PPBV

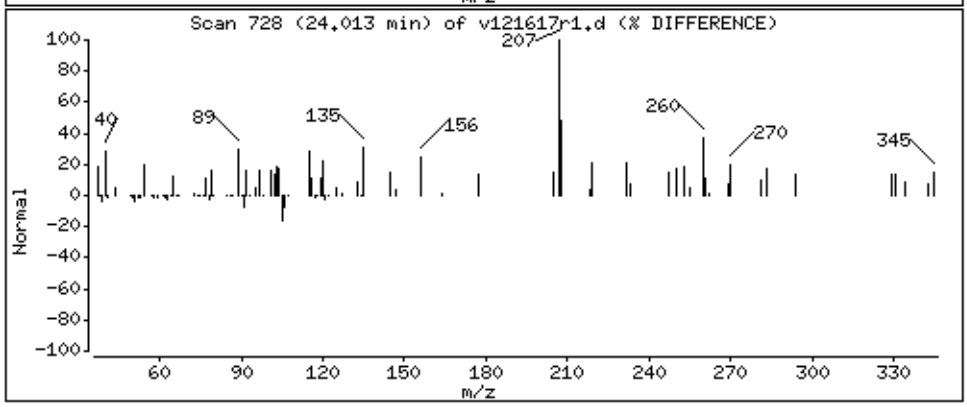












Data File: /chem/msdv.i/16Dec2014.b/v121617r1.d

Date : 16-DEC-2014 19:43

Client ID:

Instrument: msdv.i

Sample Info: 250ml #25261

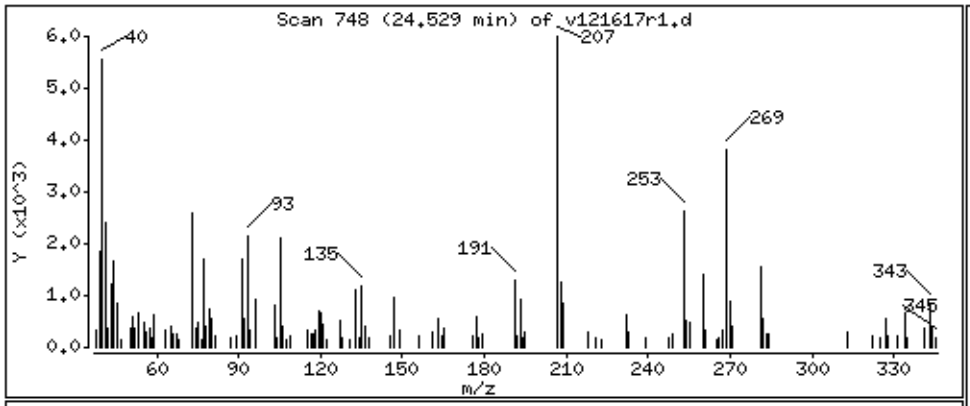
Operator: sn

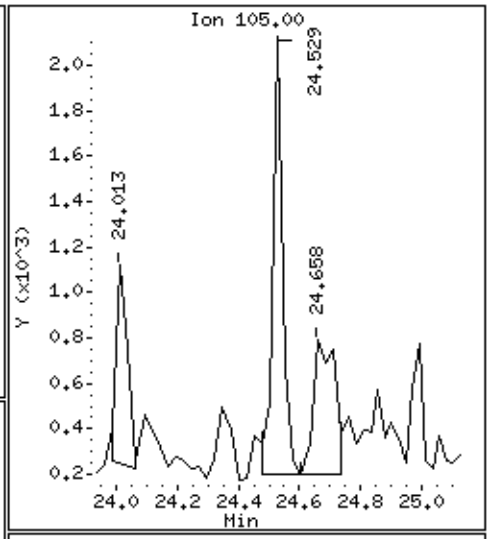
Column phase: RTx-624

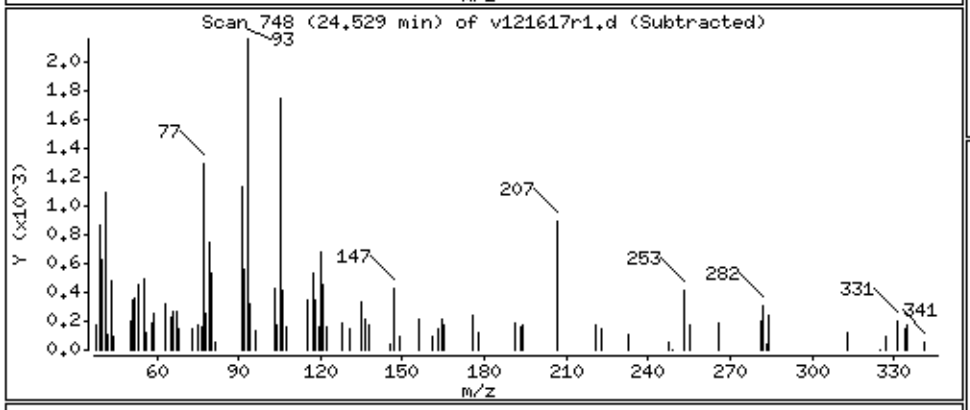
Column diameter: 0.32

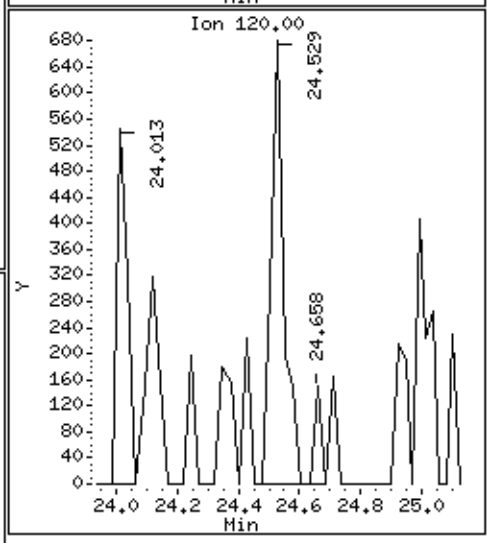
120 1,2,4-Trimethylbenzene

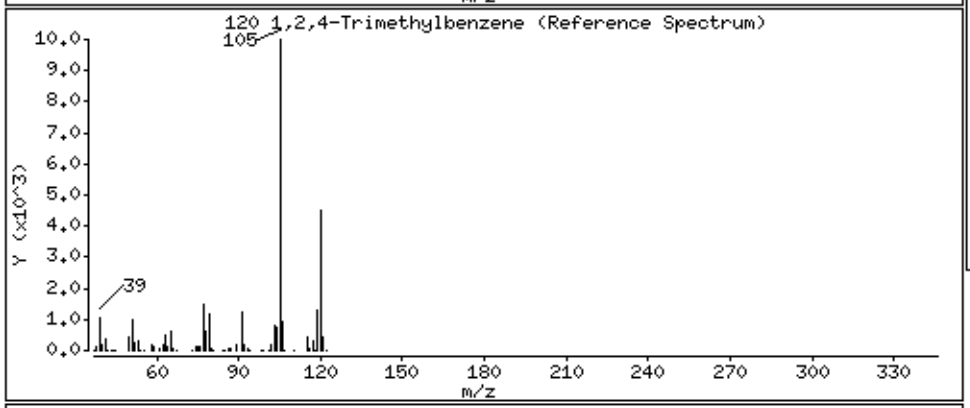
Concentration: 0.1422 PPBV

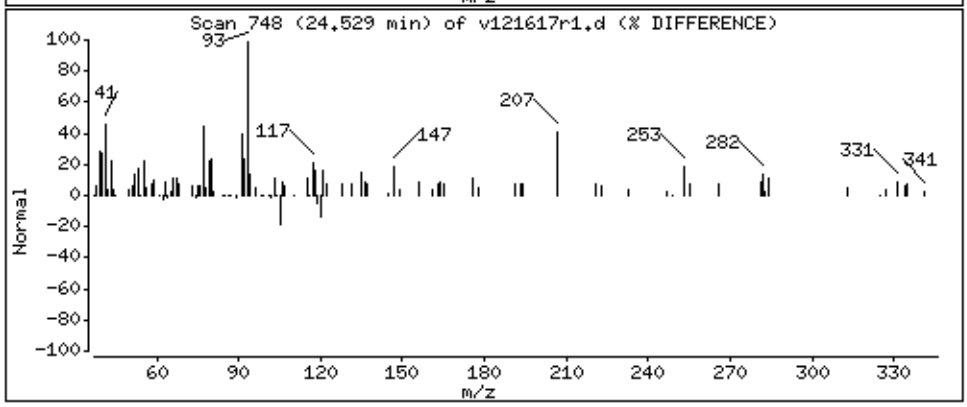












Data File: /chem/msdv.i/16Dec2014.b/v121617r1.d

Date : 16-DEC-2014 19:43

Client ID:

Instrument: msdv.i

Sample Info: 250ml #25261

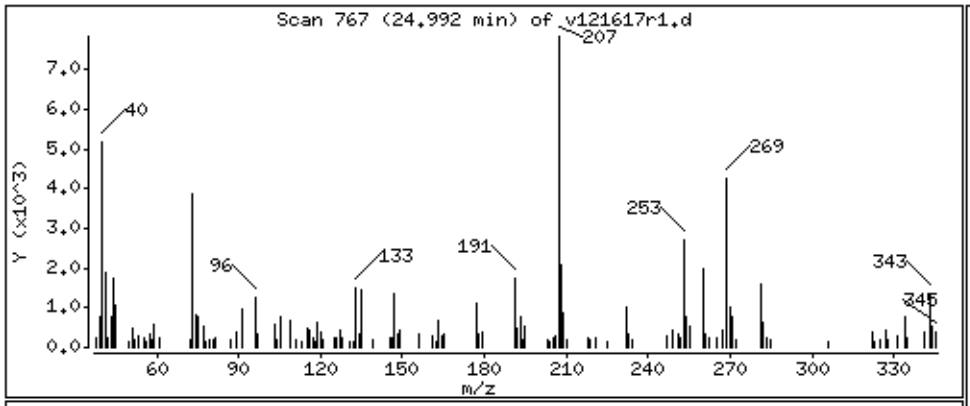
Operator: sn

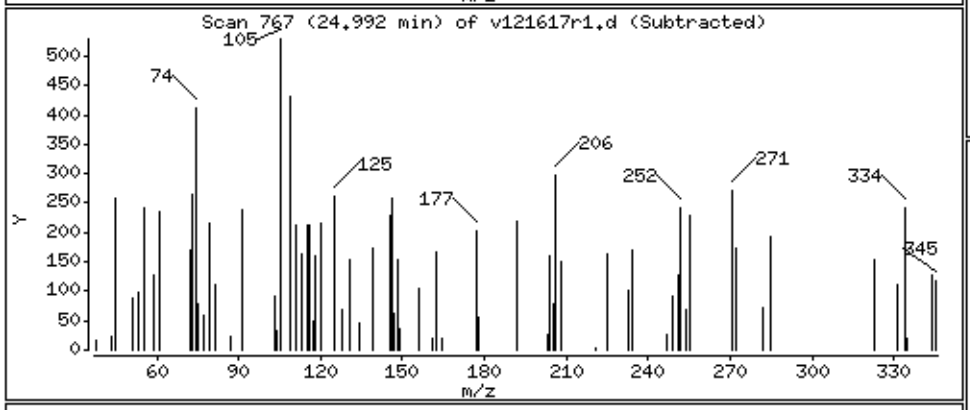
Column phase: RTx-624

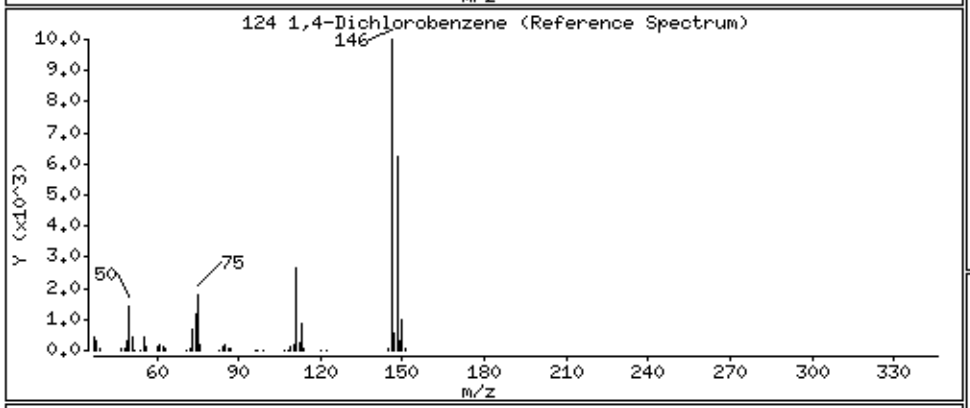
Column diameter: 0.32

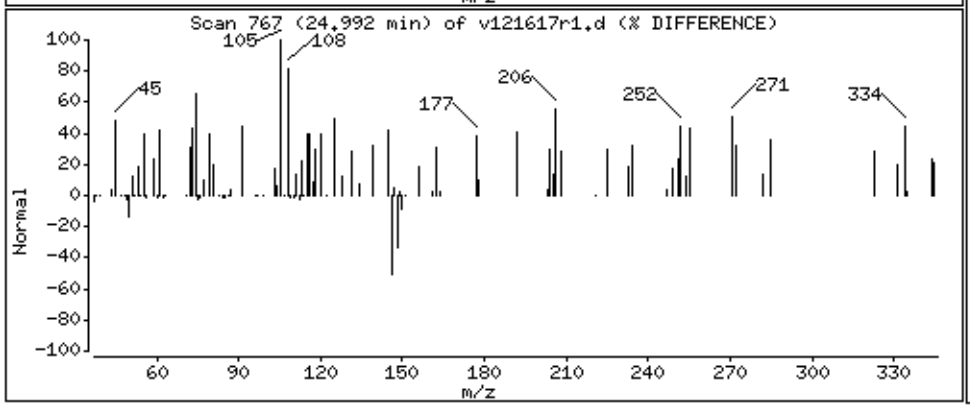
124 1,4-Dichlorobenzene

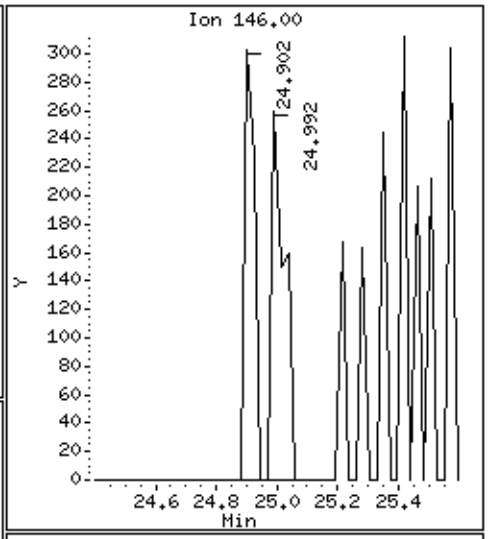
Concentration: 0.02662 PPBV

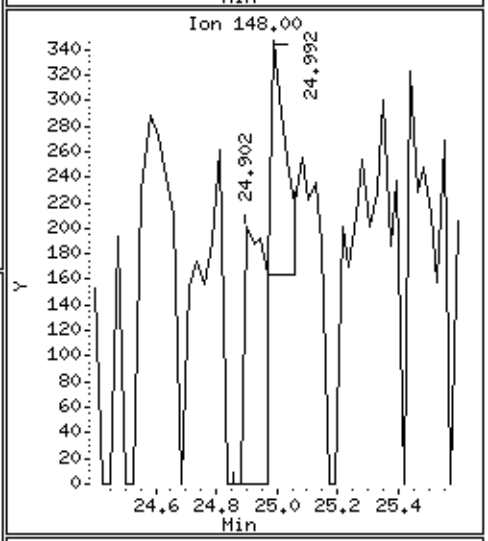


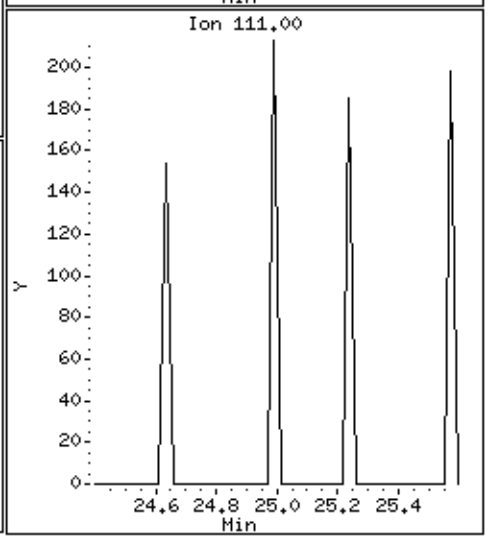












Data File: /chem/msdv.i/16Dec2014.b/v121617r1.d

Date : 16-DEC-2014 19:43

Client ID:

Instrument: msdv.i

Sample Info: 250ml #25261

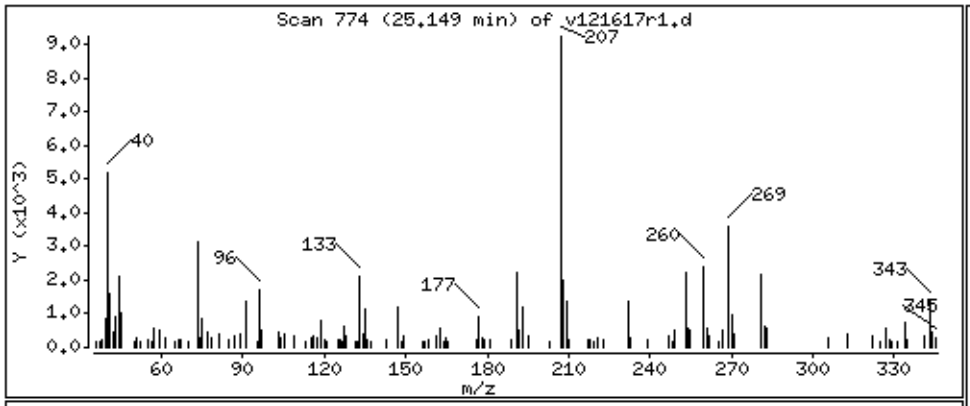
Operator: sn

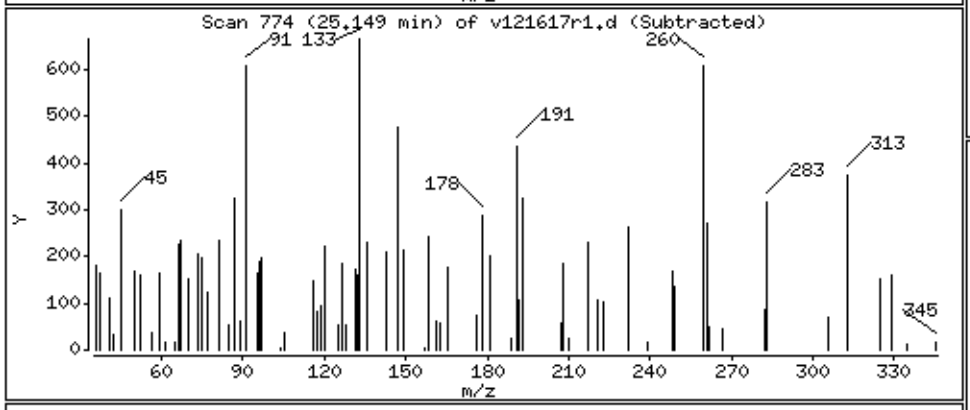
Column phase: RTx-624

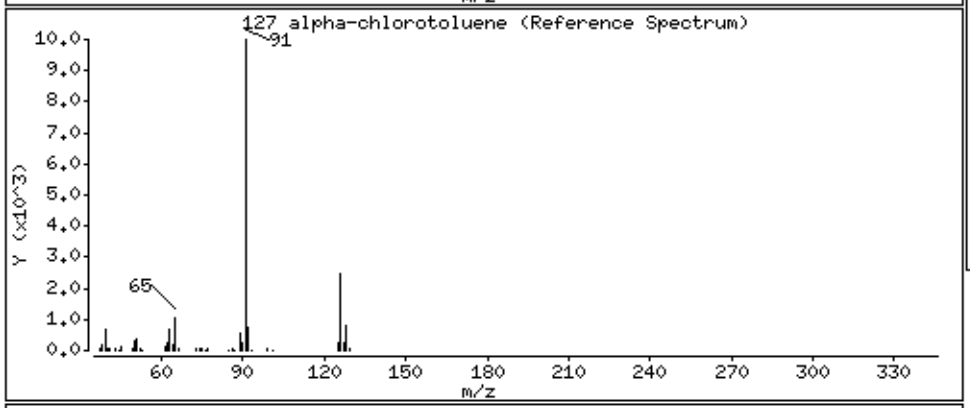
Column diameter: 0.32

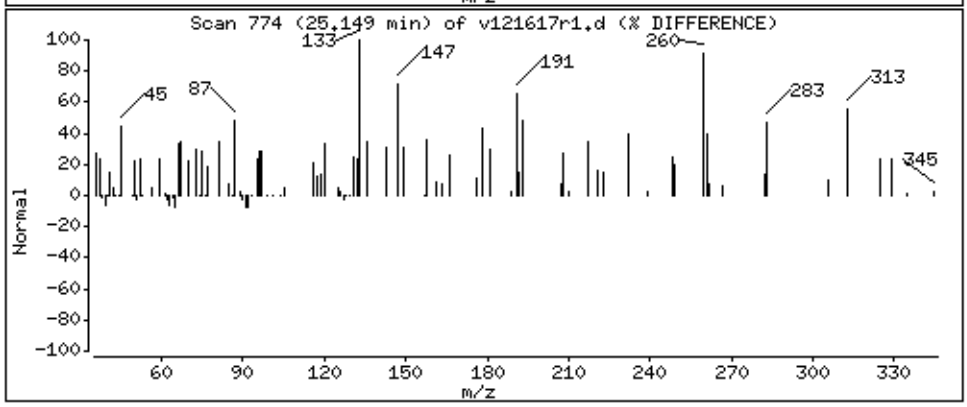
127 alpha-chlorotoluene

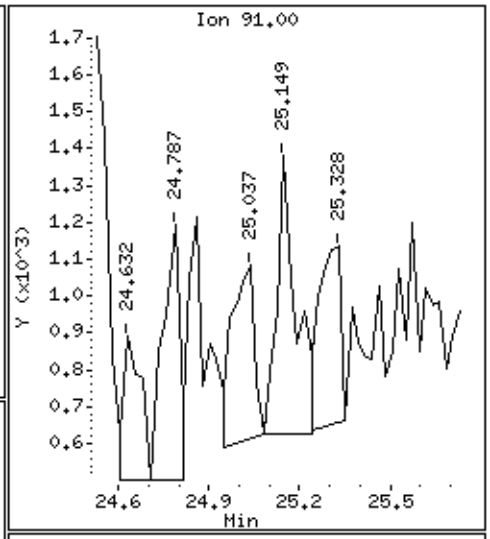
Concentration: 0.1083 PPBV

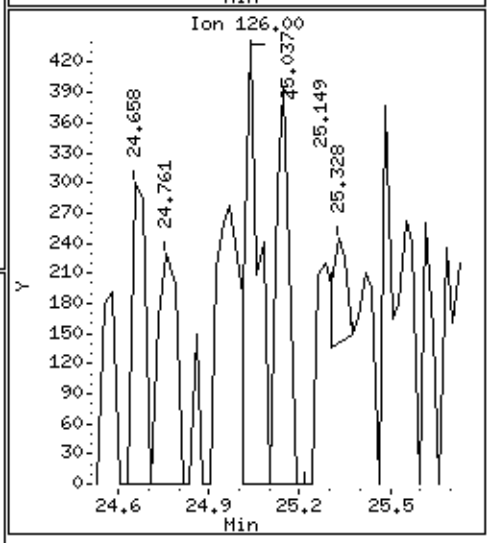












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Summary of Detected Compounds
MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: B5IA-6 (2014)

Lab ID#: 1412152AR1-03A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.79	0.46 J	3.9	2.3 J
Chloromethane	0.79	0.89	1.6	1.8
Freon 11	0.16	0.18	0.89	1.0
Ethanol	0.79	280 J0E	1.5	520 J0E
Freon 113	0.16	0.050 J	1.2	0.38 J
Acetone	0.79	210 E	1.9	510 E
2-Propanol	0.79	160 E	1.9	380 E
Carbon Disulfide	0.79	0.36 J	2.5	1.1 J
Methylene Chloride	0.32	45	1.1	160
Methyl tert-butyl ether	0.16	0.98	0.57	3.5
Hexane	0.16	0.30	0.56	1.1
2-Butanone (Methyl Ethyl Ketone)	0.79	0.98	2.3	2.9
Tetrahydrofuran	0.79	2.6	2.3	7.8
Chloroform	0.16	0.36	0.77	1.8
Cyclohexane	0.16	0.14 J	0.54	0.47 J
Carbon Tetrachloride	0.16	0.10 J	0.99	0.66 J
2,2,4-Trimethylpentane	0.79	0.14 J	3.7	0.64 J
Benzene	0.16	0.22	0.50	0.70
Heptane	0.16	2.1	0.65	8.8
4-Methyl-2-pentanone	0.16	50	0.65	210
Toluene	0.16	98 E	0.60	370 E
Tetrachloroethene	0.16	0.73	1.1	5.0
Ethyl Benzene	0.16	13	0.69	56
m,p-Xylene	0.16	45	0.69	200
o-Xylene	0.16	4.1	0.69	18
Styrene	0.16	0.54	0.67	2.3
4-Ethyltoluene	0.16	0.11 J	0.78	0.53 J
1,2,4-Trimethylbenzene	0.16	0.32	0.78	1.6

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Client Sample ID: B5IA-6 (2014)

Lab ID#: 1412152AR1-03A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**v121618r1**	**Date of Collection:**	**12/9/14 1:29:00 PM**
Dil. Factor:	**1.58**	**Date of Analysis:**	**12/16/14 08:41 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.79	0.46 J	3.9	2.3 J
Freon 114	0.16	Not Detected	1.1	Not Detected
Chloromethane	0.79	0.89	1.6	1.8
Vinyl Chloride	0.16	Not Detected	0.40	Not Detected
1,3-Butadiene	0.16	Not Detected	0.35	Not Detected
Bromomethane	0.79	Not Detected	3.1	Not Detected
Chloroethane	0.79	Not Detected	2.1	Not Detected
Freon 11	0.16	0.18	0.89	1.0
Ethanol	0.79	280 J0E	1.5	520 J0E
Freon 113	0.16	0.050 J	1.2	0.38 J
1,1-Dichloroethene	0.16	Not Detected	0.63	Not Detected
Acetone	0.79	210 E	1.9	510 E
2-Propanol	0.79	160 E	1.9	380 E
Carbon Disulfide	0.79	0.36 J	2.5	1.1 J
3-Chloropropene	0.79	Not Detected	2.5	Not Detected
Methylene Chloride	0.32	45	1.1	160
Methyl tert-butyl ether	0.16	0.98	0.57	3.5
trans-1,2-Dichloroethene	0.16	Not Detected	0.63	Not Detected
Hexane	0.16	0.30	0.56	1.1
1,1-Dichloroethane	0.16	Not Detected	0.64	Not Detected
2-Butanone (Methyl Ethyl Ketone)	0.79	0.98	2.3	2.9
cis-1,2-Dichloroethene	0.16	Not Detected	0.63	Not Detected
Tetrahydrofuran	0.79	2.6	2.3	7.8
Chloroform	0.16	0.36	0.77	1.8
1,1,1-Trichloroethane	0.16	Not Detected	0.86	Not Detected
Cyclohexane	0.16	0.14 J	0.54	0.47 J
Carbon Tetrachloride	0.16	0.10 J	0.99	0.66 J
2,2,4-Trimethylpentane	0.79	0.14 J	3.7	0.64 J
Benzene	0.16	0.22	0.50	0.70
1,2-Dichloroethane	0.16	Not Detected	0.64	Not Detected
Heptane	0.16	2.1	0.65	8.8
Trichloroethene	0.16	Not Detected	0.85	Not Detected
1,2-Dichloropropane	0.16	Not Detected	0.73	Not Detected
1,4-Dioxane	0.16	Not Detected	0.57	Not Detected
Bromodichloromethane	0.16	Not Detected	1.0	Not Detected
cis-1,3-Dichloropropene	0.16	Not Detected	0.72	Not Detected
4-Methyl-2-pentanone	0.16	50	0.65	210
Toluene	0.16	98 E	0.60	370 E
trans-1,3-Dichloropropene	0.16	Not Detected	0.72	Not Detected
1,1,2-Trichloroethane	0.16	Not Detected	0.86	Not Detected
Tetrachloroethene	0.16	0.73	1.1	5.0
2-Hexanone	0.79	Not Detected	3.2	Not Detected

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Client Sample ID: B5IA-6 (2014)

Lab ID#: 1412152AR1-03A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**v121618r1**	**Date of Collection:**	**12/9/14 1:29:00 PM**
Dil. Factor:	**1.58**	**Date of Analysis:**	**12/16/14 08:41 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Dibromochloromethane	0.16	Not Detected	1.3	Not Detected
1,2-Dibromoethane (EDB)	0.16	Not Detected	1.2	Not Detected
Chlorobenzene	0.16	Not Detected	0.73	Not Detected
Ethyl Benzene	0.16	13	0.69	56
m,p-Xylene	0.16	45	0.69	200
o-Xylene	0.16	4.1	0.69	18
Styrene	0.16	0.54	0.67	2.3
Bromoform	0.16	Not Detected	1.6	Not Detected
Cumene	0.16	Not Detected	0.78	Not Detected
1,1,2,2-Tetrachloroethane	0.16	Not Detected	1.1	Not Detected
Propylbenzene	0.16	Not Detected	0.78	Not Detected
4-Ethyltoluene	0.16	0.11 J	0.78	0.53 J
1,3,5-Trimethylbenzene	0.16	Not Detected	0.78	Not Detected
1,2,4-Trimethylbenzene	0.16	0.32	0.78	1.6
1,3-Dichlorobenzene	0.16	Not Detected UJ	0.95	Not Detected UJ
1,4-Dichlorobenzene	0.16	Not Detected UJ	0.95	Not Detected UJ
alpha-Chlorotoluene	0.79	Not Detected UJ	4.1	Not Detected UJ
1,2-Dichlorobenzene	0.16	Not Detected UJ	0.95	Not Detected UJ
1,2,4-Trichlorobenzene	0.79	Not Detected	5.9	Not Detected
Hexachlorobutadiene	0.79	Not Detected UJ	8.4	Not Detected UJ
Naphthalene	0.79	Not Detected	4.1	Not Detected

J = Estimated value.
J0 = Estimated value due to bias in the CCV.
E = Exceeds instrument calibration range.
UJ = Analyte associated with low bias in the CCV and/or LCS.
Container Type: 6 Liter Summa Canister (100% Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	102	70-130
Toluene-d8	108	70-130
4-Bromofluorobenzene	102	70-130

Eurofins Air Toxics Inc.

TO15/Modified TO-14A

Data file : /chem/msdv.i/16Dec2014.b/v121618r1.d
Lab Smp Id: 1412152AR1-03A
Inj Date : 16-DEC-2014 20:41
Operator : sn Inst ID: msdv.i
Smp Info : 250ml #940
Misc Info : 4.7"Hg -> 4.9psi
Comment : Low Level GC-MS
Method : /chem/msdv.i/16Dec2014.b/v14l1006d.m
Meth Date : 01-Jul-2015 09:03 sblack Quant Type: ISTD
Cal Date : 03-NOV-2014 11:17 Cal File: v110307.d
Als bottle: 1
Dil Factor: 1.58000
Integrator: HP RTE Compound Sublist: And19256r1.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
* 54 Bromochloromethane							CAS #: 74-97-5	
15.934	15.933	(1.000)	130	98434	5.00000		80.00- 120.00	100.00
15.934	15.933	(1.000)	128	73332			47.55- 107.55	74.50
15.934	15.933	(1.000)	49	252769			213.64- 273.64	256.79
* 71 1,4-Difluorobenzene							CAS #: 540-36-3	
17.305	17.305	(1.000)	114	414346	5.00000		80.00- 120.00	100.00
17.305	17.305	(1.000)	88	70487			0.00- 46.17	17.01
* 92 Chlorobenzene-d5							CAS #: 3114-55-4	
22.205	22.205	(1.000)	117	332483	5.00000		80.00- 120.00	100.00
22.205	22.205	(1.000)	82	207051			28.56- 88.56	62.27
$ 65 1,2-Dichloroethane-d4							CAS #: 17060-07-0	
16.756	16.756	(1.052)	65	184131	5.09699	5.097	80.00- 120.00	100.00
16.756	16.756	(1.052)	67	91996			28.37- 88.37	49.96
$ 80 Toluene-d8							CAS #: 2037-26-5	
19.857	19.879	(1.147)	98	429346	5.38951	5.390	80.00- 120.00	100.00
19.857	19.879	(1.147)	70	56073			0.00- 41.90	13.06

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

$  80 Toluene-d8 (continued)
 19.857  19.879 (1.147)   100    274390                    34.60-  94.60    63.91
-------------------------------------------------------------------------------
$ 106 Bromofluorobenzene                            CAS #: 460-00-4
 23.678  23.704 (1.066)   174    145594 5.09191    5.092  80.00- 120.00   100.00
 23.678  23.704 (1.066)    95    206905                  113.85- 173.85   142.11
 23.678  23.704 (1.066)   176    141765                   68.89- 128.89    97.37
-------------------------------------------------------------------------------
    4 Dichlorodifluoromethane/Fr12                  CAS #: 75-71-8
  5.240   5.202 (0.329)    85     26685 0.28936   0.4572  80.00- 120.00   100.00(a)
  5.316   5.202 (0.334)    87      7542                    1.57-  61.57    28.26
-------------------------------------------------------------------------------
    8 Chloromethane                                 CAS #: 74-87-3
  7.128   7.052 (0.447)    50     31334 0.56381   0.8908  80.00- 120.00   100.00
  7.166   7.052 (0.450)    52     11294                    1.81-  61.81    36.04
-------------------------------------------------------------------------------
   20 Trichlorofluoromethane/Fr11                   CAS #: 75-69-4
 11.184  11.183 (0.702)   101     10718 0.11291   0.1784  80.00- 120.00   100.00
 11.184  11.183 (0.702)   103      8244                   34.11-  94.11    76.91
-------------------------------------------------------------------------------
   24 Ethanol                                       CAS #: 64-17-5
 12.102  12.101 (0.760)    45   3527676 175.306   276.98  80.00- 120.00   100.00(A)
 12.102  12.101 (0.760)    46   1350985                    8.51-  68.51    38.30
 12.102  12.101 (0.760)    43    723742                    0.00-  54.10    20.52
-------------------------------------------------------------------------------
   28 Freon 113                                     CAS #: 76-13-1
 12.569  12.568 (0.789)   151      1811 0.03169  0.05008  80.00- 120.00   100.00(a)
 12.569  12.568 (0.789)   153       937                   33.65-  93.65    51.78
 12.569  12.568 (0.789)   101      2465                   96.37- 156.37   136.12
-------------------------------------------------------------------------------
   31 Acetone                                       CAS #: 67-64-1
 12.816  12.816 (0.804)    58   3159309 135.844   214.63  80.00- 120.00   100.00(A)
 12.816  12.816 (0.804)    43  14081411                  413.15- 473.15   445.71
-------------------------------------------------------------------------------
   33 Carbon Disulfide                              CAS #: 75-15-0
 12.926  12.925 (0.811)    76     20353 0.22558   0.3564  80.00- 120.00   100.00(a)
-------------------------------------------------------------------------------
   34 2-Propanol                                    CAS #: 67-63-0
 13.200  13.173 (0.828)    45  10665045 99.0314   156.47  80.00- 120.00   100.00(A)
 13.200  13.173 (0.828)    43   2018252                    0.00-  50.74    18.92
 13.200  13.173 (0.828)    59    301318                    0.00-  32.83     2.83
-------------------------------------------------------------------------------
   37 Methylene Chloride                            CAS #: 75-09-2
 13.667  13.640 (0.858)    84    857073 28.6403   45.252  80.00- 120.00   100.00
 13.640  13.640 (0.856)    49   2040299                  212.37- 272.37   238.05
 13.640  13.640 (0.856)    51    597106                   43.31- 103.31    69.67
-------------------------------------------------------------------------------
```

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
39 MTBE					CAS #: 1634-04-4		
13.997	13.996 (0.878)	73	66844	0.62259	0.9837	80.00- 120.00	100.00
13.997	13.996 (0.878)	57	36104			2.99- 62.99	54.01
13.997	13.996 (0.878)	41	39462			12.12- 72.12	59.04
43 Hexane					CAS #: 110-54-3		
14.381	14.381 (0.903)	57	16633	0.19361	0.3059	80.00- 120.00	100.00
14.381	14.381 (0.903)	43	18609			57.65- 117.65	111.88
14.381	14.381 (0.903)	86	1471			0.00- 40.67	8.84
51 2-Butanone					CAS #: 78-93-3		
15.592	15.571 (0.979)	72	10684	0.61721	0.9752	80.00- 120.00	100.00
15.592	15.571 (0.979)	43	111377			794.80- 854.80	1042.47
15.592	15.571 (0.979)	57	4812			18.01- 78.01	45.05
53 Tetrahydrofuran					CAS #: 109-99-9		
15.934	15.933 (1.000)	42	149870	1.68012	2.654	80.00- 120.00	100.00
15.934	15.933 (1.000)	71	29065			0.00- 49.03	19.39
15.934	15.933 (1.000)	72	30121			0.00- 51.35	20.10
55 Chloroform					CAS #: 67-66-3		
15.995	15.995 (1.004)	83	18987	0.22889	0.3616	80.00- 120.00	100.00
15.995	15.995 (1.004)	85	9315			33.33- 93.33	49.06
57 Cyclohexane					CAS #: 110-82-7		
16.273	16.242 (1.021)	84	4472	0.08572	0.1354	80.00- 120.00	100.00(a)
16.242	16.242 (1.019)	56	11969			157.43- 217.43	267.64
16.242	16.242 (1.019)	41	9610			105.99- 165.99	214.87
59 Carbon Tetrachloride					CAS #: 56-23-5		
16.427	16.457 (1.031)	119	5479	0.06594	0.1042	80.00- 120.00	100.00(a)
16.396	16.457 (1.029)	117	10874			69.67- 129.67	198.44
	Sum of Peak Concentrations =				0.1042		
63 2,2,4-Trimethylpentane					CAS #: 540-84-1		
16.728	16.728 (1.050)	56	7950	0.08744	0.1382	80.00- 120.00	100.00(a)
16.728	16.728 (1.050)	57	17804			258.69- 318.69	223.94
16.728	16.728 (1.050)	41	8676			79.91- 139.91	109.13
64 Benzene					CAS #: 71-43-2		
16.756	16.756 (0.968)	78	16866	0.13793	0.2179	80.00- 120.00	100.00
16.756	16.756 (0.968)	77	4720			0.00- 53.73	27.99
69 Heptane					CAS #: 142-82-5		
16.975	16.948 (0.981)	57	71293	1.35282	2.137	80.00- 120.00	100.00
16.975	16.948 (0.981)	100	14590			0.00- 51.27	20.47

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
69 Heptane (continued)							
16.948	16.948 (0.979)	43	194700			235.24- 295.24	273.10
79 4-Methyl-2-pentanone					CAS #: 108-10-1		
19.588	19.587 (1.132)	43	5513426	31.9449	50.473	80.00- 120.00	100.00
19.588	19.587 (1.132)	58	1457023			0.00- 57.24	26.43
19.588	19.587 (1.132)	85	460867			0.00- 38.20	8.36
81 Toluene					CAS #: 108-88-3		
19.991	19.991 (1.155)	91	8376898	62.0646	98.062	80.00- 120.00	100.00(A)
19.991	19.991 (1.155)	92	4845801			28.60- 88.60	57.85
86 Tetrachloroethene					CAS #: 127-18-4		
20.901	20.901 (0.941)	166	31372	0.46365	0.7326	80.00- 120.00	100.00
20.901	20.901 (0.941)	129	25139			47.04- 107.04	80.13
20.901	20.901 (0.941)	131	21966			46.95- 106.95	70.02
95 Ethyl Benzene					CAS #: 100-41-4		
22.315	22.315 (1.005)	106	397471	8.11064	12.815	80.00- 120.00	100.00
22.315	22.315 (1.005)	91	1300248			292.36- 352.36	327.13
96 m,p-Xylene					CAS #: 108-38-3		
22.452	22.452 (1.011)	106	1376222	28.4796	44.998	80.00- 120.00	100.00
22.452	22.452 (1.011)	91	2859453			164.15- 224.15	207.78
100 o-Xylene					CAS #: 95-47-6		
23.002	23.001 (1.036)	106	117173	2.60583	4.117	80.00- 120.00	100.00
23.002	23.001 (1.036)	91	260249			186.63- 246.63	222.11
101 Styrene					CAS #: 100-42-5		
23.029	23.029 (1.037)	104	22571	0.34311	0.5421	80.00- 120.00	100.00
23.002	23.029 (1.036)	78	27542			28.70- 88.70	122.02
113 4-Ethyltoluene					CAS #: 622-96-8		
24.013	24.039 (1.081)	105	5858	0.06856	0.1083	80.00- 120.00	100.00(a)
24.013	24.039 (1.081)	120	2287			0.18- 60.18	39.04
120 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
24.529	24.529 (1.105)	105	11826	0.20466	0.3234	80.00- 120.00	100.00
24.529	24.529 (1.105)	120	2756			19.27- 79.27	23.31

QC Flag Legend

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

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: msdv.i
Lab File ID: v121618r1.d
Lab Smp Id: 1412152AR1-03A
Analysis Type: VOA
Quant Type: ISTD
Operator: sn
Method File: /chem/msdv.i/16Dec2014.b/v14l1006d.m
Misc Info: 4.7"Hg -> 4.9psi

Calibration Date: 16-DEC-2014
Calibration Time: 08:42

Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
54 Bromochloromethan	109722	65833	153611	98434	-10.29
71 1,4-Difluorobenze	445503	267302	623704	414346	-6.99
92 Chlorobenzene-d5	361081	216649	505513	332483	-7.92

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
54 Bromochloromethan	15.93	15.60	16.26	15.93	0.00
71 1,4-Difluorobenze	17.30	16.97	17.63	17.30	0.00
92 Chlorobenzene-d5	22.21	21.88	22.54	22.21	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: 01-Jul-2015 13:54

Eurofins Air Toxics Inc.

RECOVERY REPORT

Client Name:
Client SDG: 16Dec2014
Sample Matrix: GAS
Fraction: VOA
Lab Smp Id: 1412152AR1-03A
Level: LOW
Operator: sn
Data Type: MS DATA
SampleType: SAMPLE
SpikeList File: AT12.spk
Quant Type: ISTD
Sublist File: And19256r1.sub
Method File: /chem/msdv.i/16Dec2014.b/v14l1006d.m
Misc Info: 4.7"Hg -> 4.9psi

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 65 1,2-Dichloroethane	5.000	5.097	101.94	70-130
$ 80 Toluene-d8	5.000	5.390	107.79	70-130
$ 106 Bromofluorobenzene	5.000	5.092	101.84	70-130

Data File: /chem/msdv.i/16Dec2014.b/v121618r1.d

Date : 16-DEC-2014 20:41

Client ID:

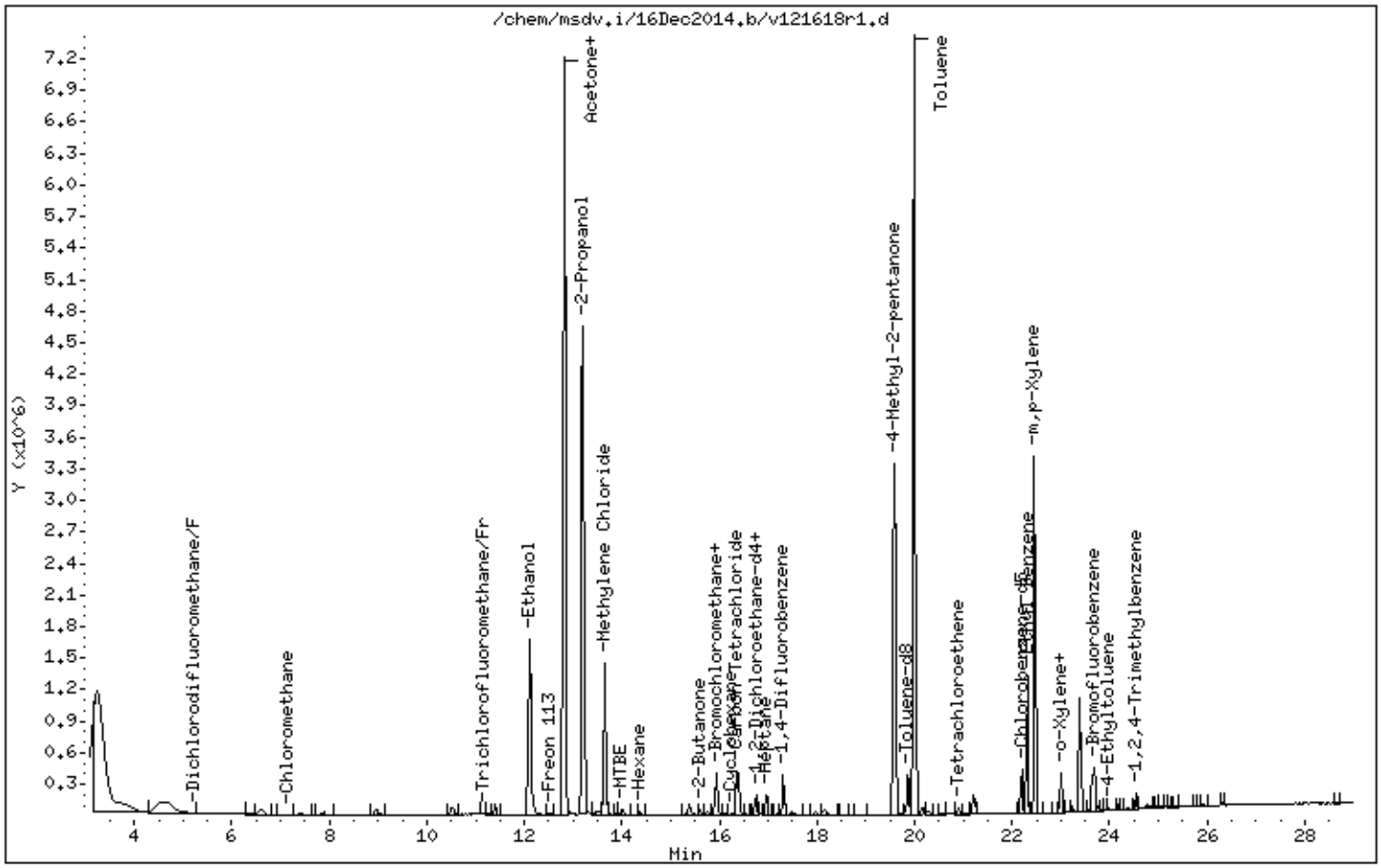
Instrument: msdv.i

Sample Info: 250ml #940

Operator: sn

Column phase: RTx-624

Column diameter: 0.32



Data File: /chem/msdv.i/16Dec2014.b/v121618r1.d

Date : 16-DEC-2014 20:41

Client ID:

Instrument: msdv.i

Sample Info: 250ml #940

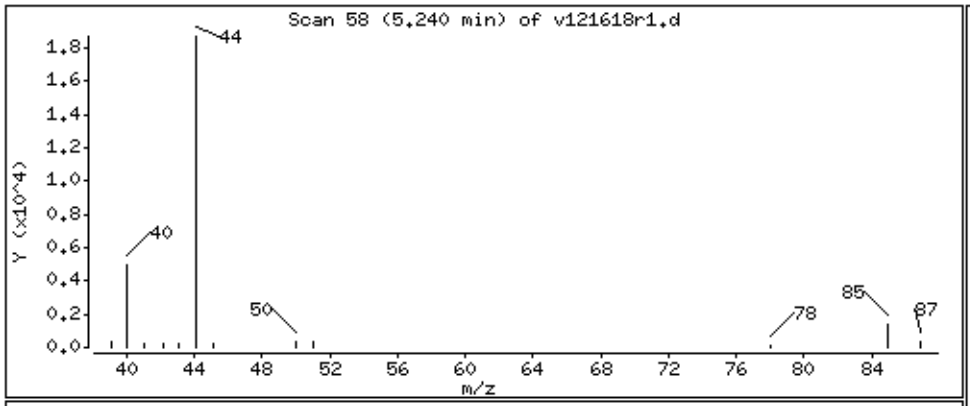
Operator: sn

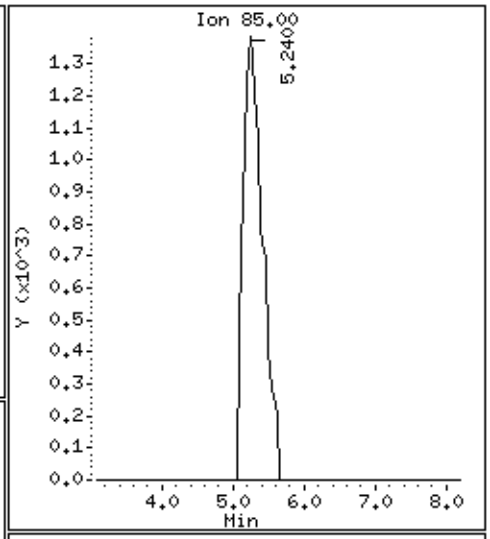
Column phase: RTx-624

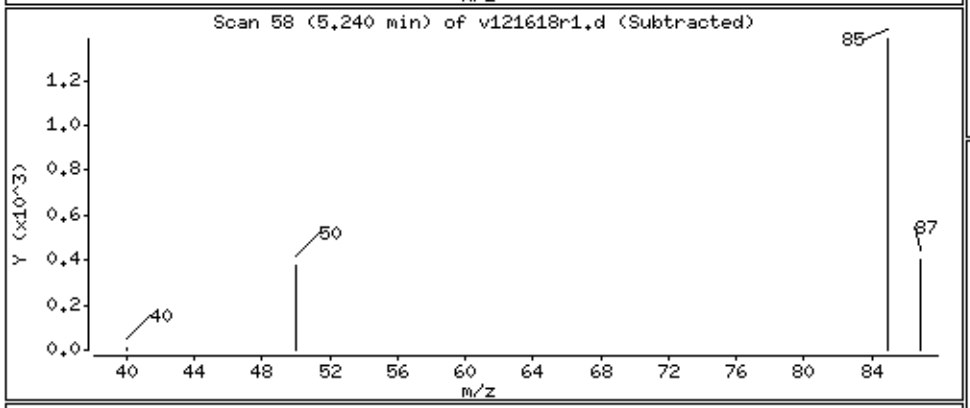
Column diameter: 0.32

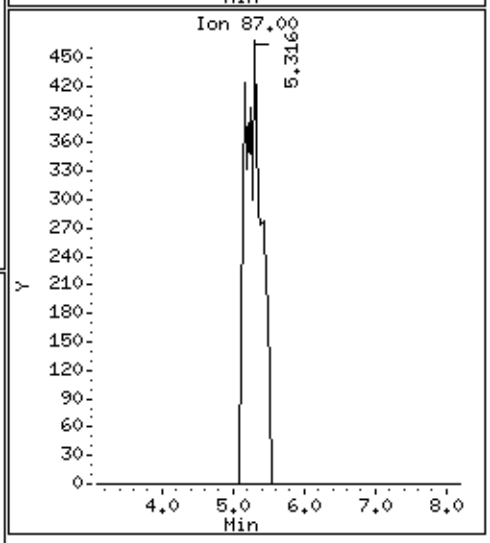
4 Dichlorodifluoromethane/Fr12

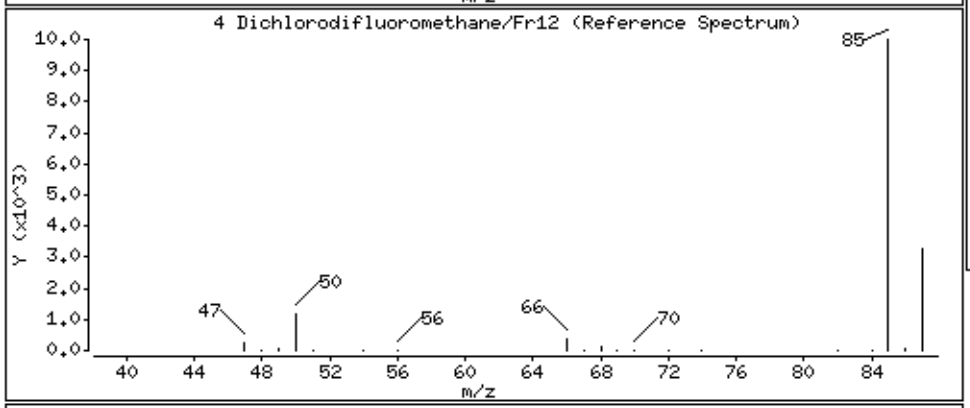
Concentration: 0.4572 PPBV

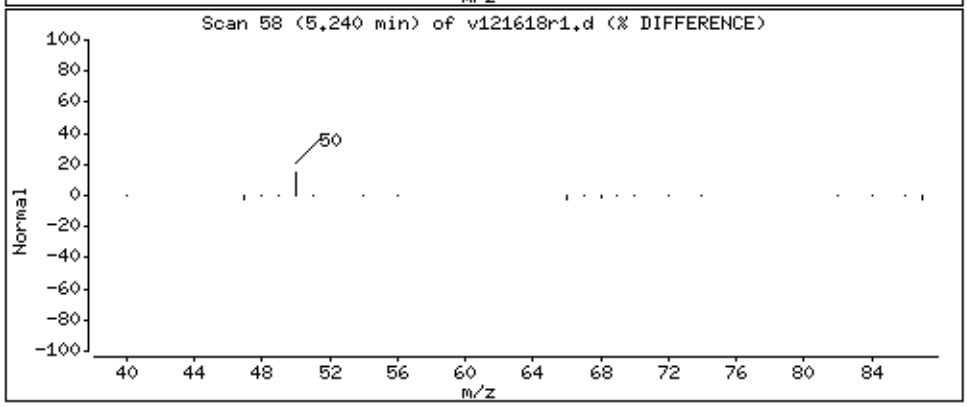












Data File: /chem/msdv.i/16Dec2014.b/v121618r1.d

Date : 16-DEC-2014 20:41

Client ID:

Instrument: msdv.i

Sample Info: 250ml #940

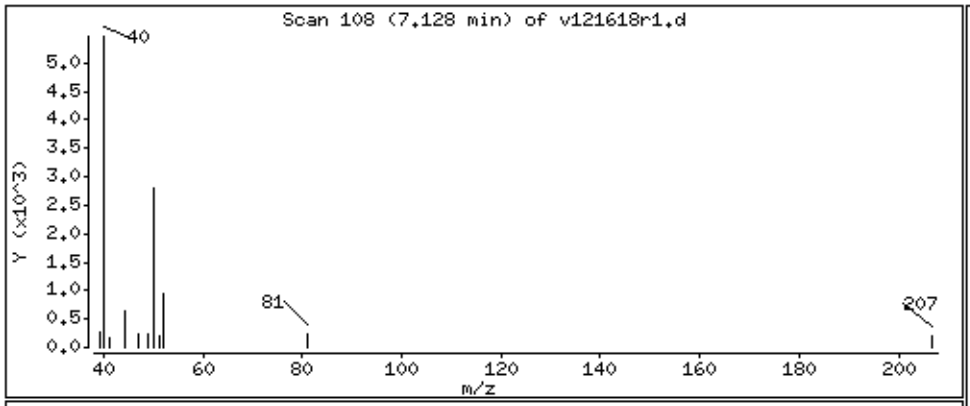
Operator: sn

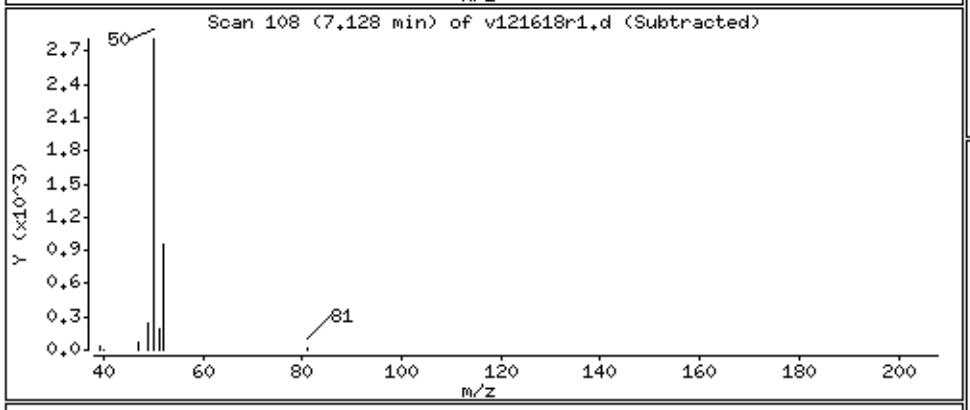
Column phase: RTx-624

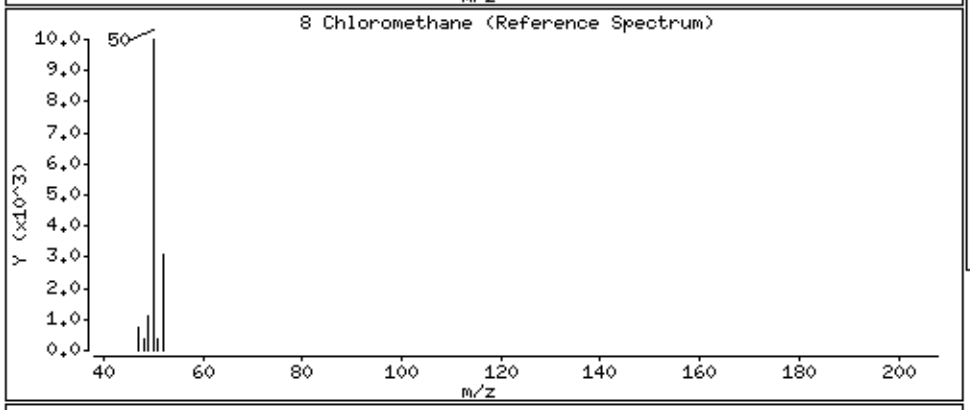
Column diameter: 0.32

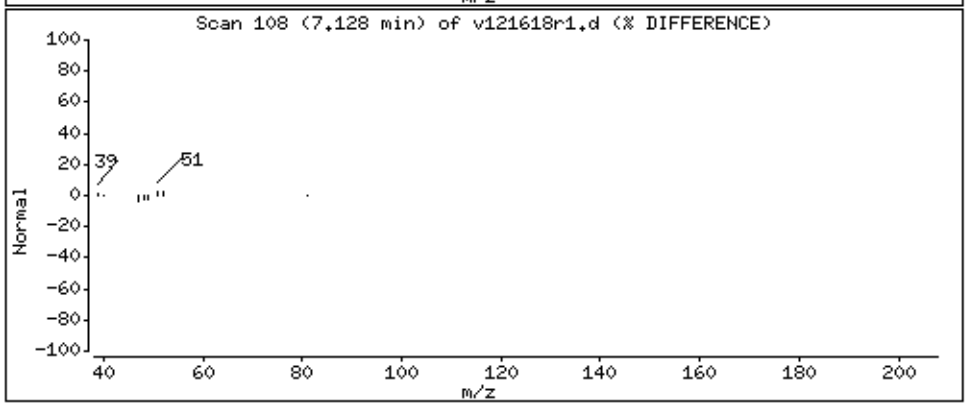
8 Chloromethane

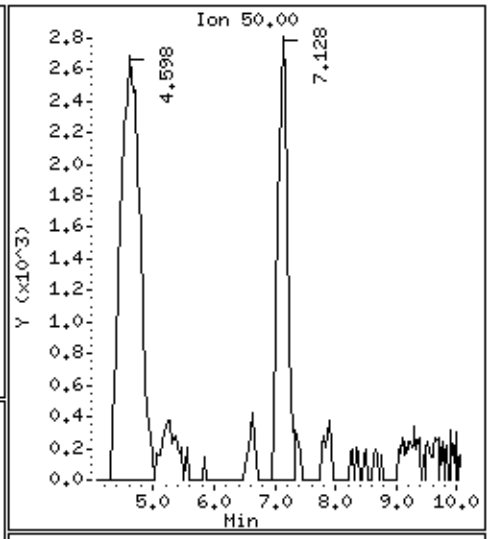
Concentration: 0.8908 PPBV

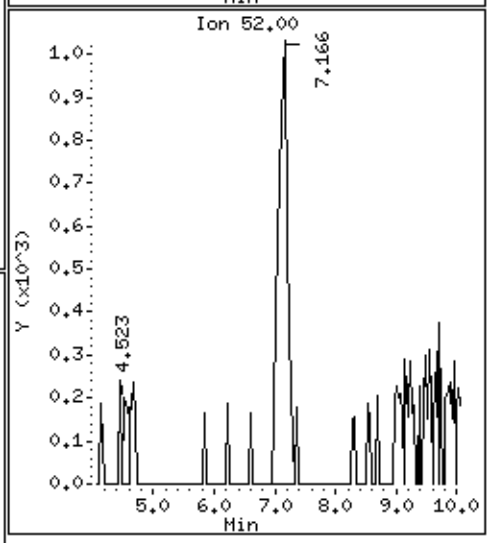












Data File: /chem/msdv.i/16Dec2014.b/v121618r1.d

Date : 16-DEC-2014 20:41

Client ID:

Instrument: msdv.i

Sample Info: 250ml #940

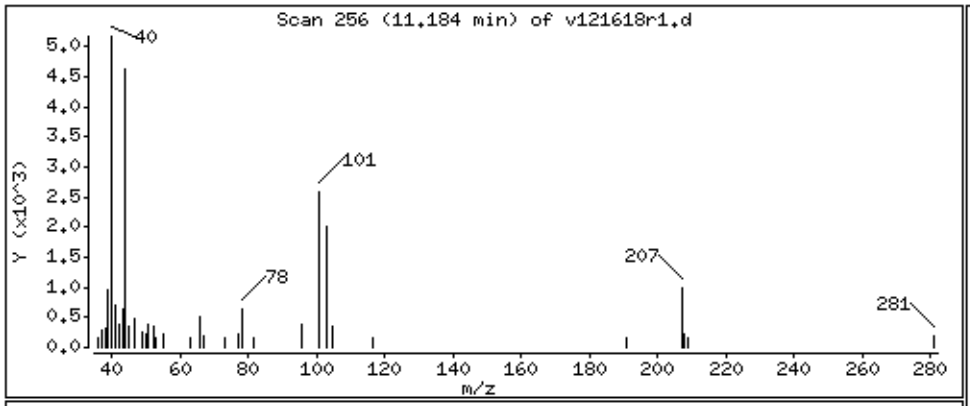
Operator: sn

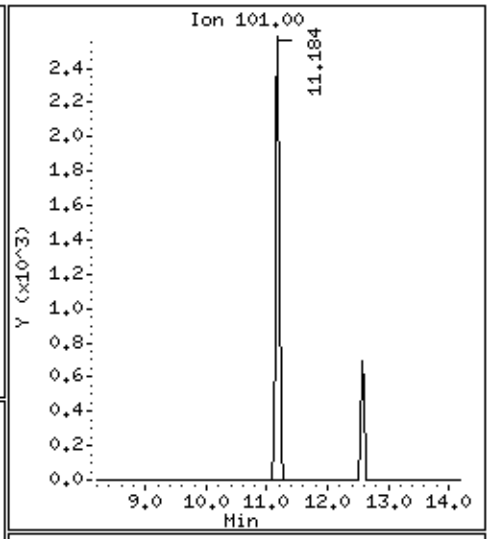
Column phase: RTx-624

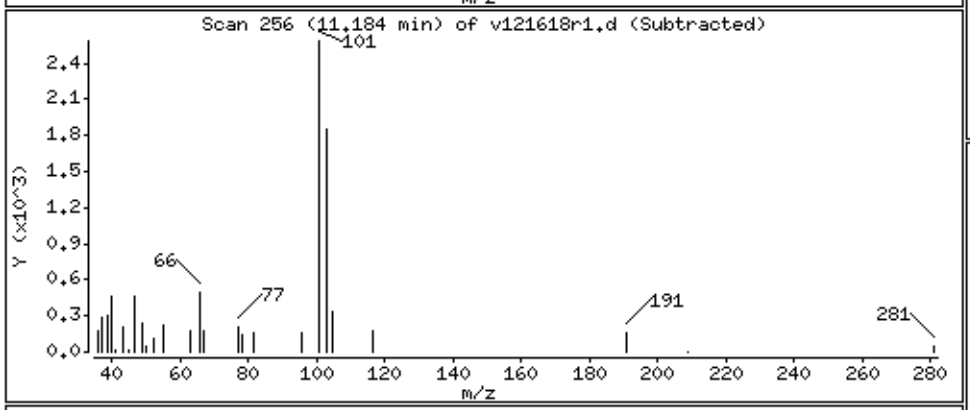
Column diameter: 0.32

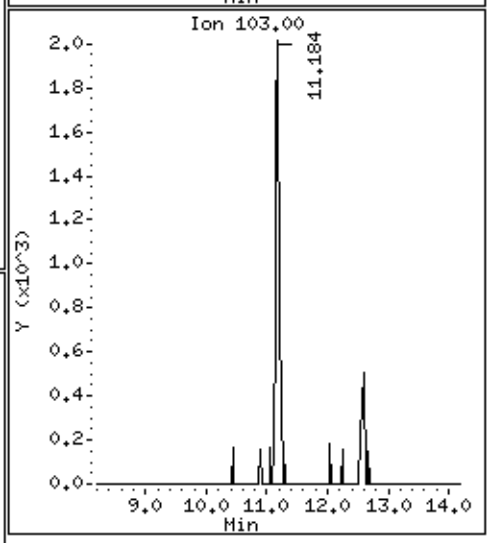
20 Trichlorofluoromethane/Fr11

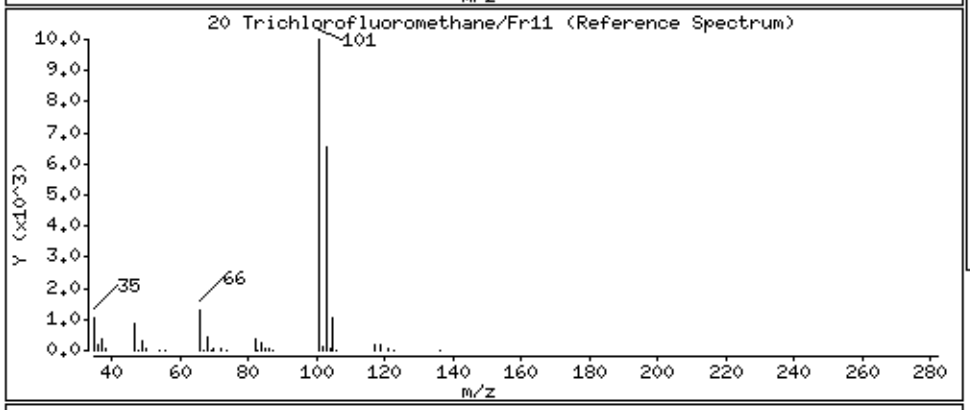
Concentration: 0.1784 PPBV

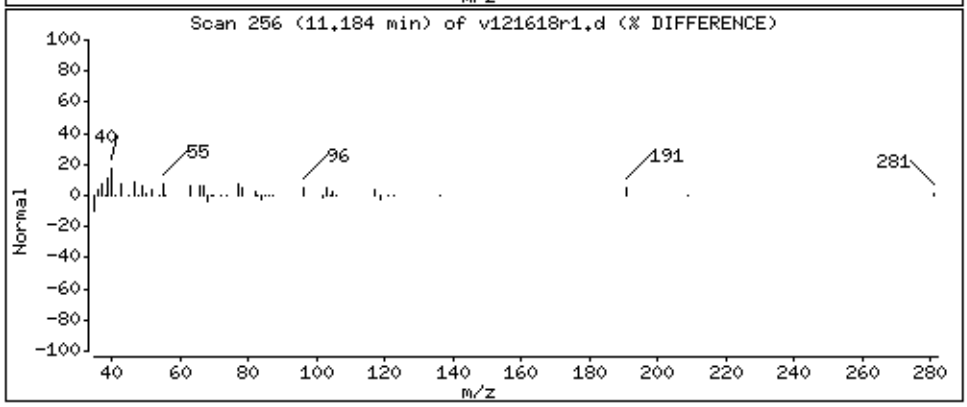












Data File: /chem/msdv.i/16Dec2014.b/v121618r1.d

Date : 16-DEC-2014 20:41

Client ID:

Instrument: msdv.i

Sample Info: 250ml #940

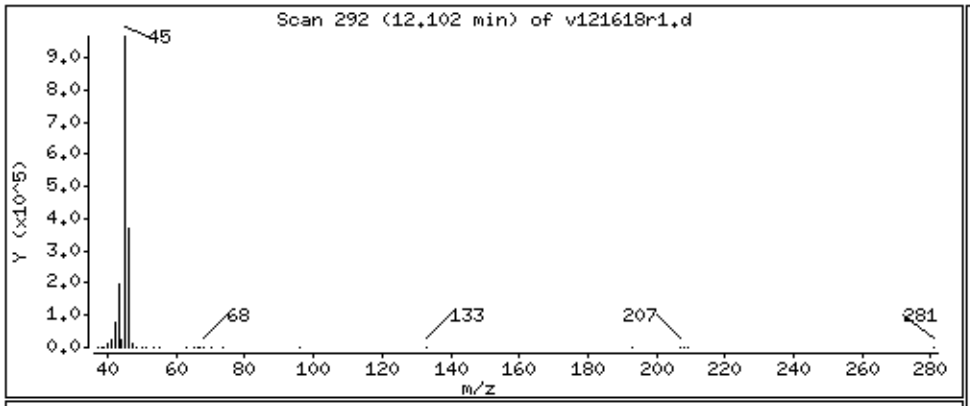
Operator: sn

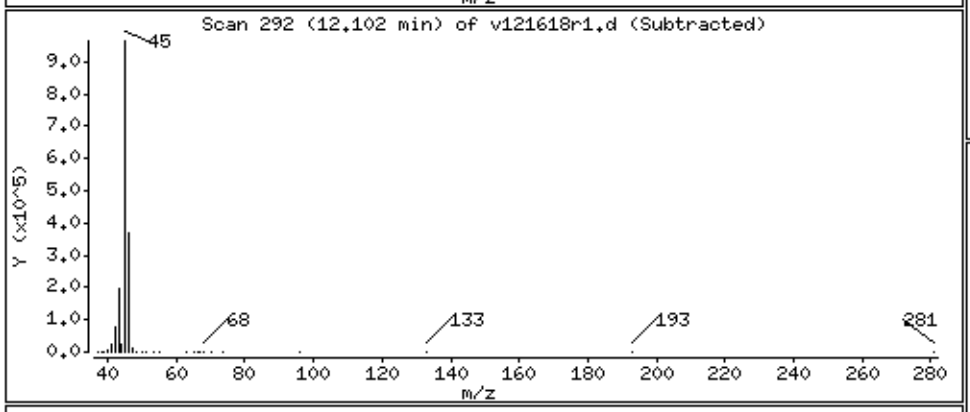
Column phase: RTx-624

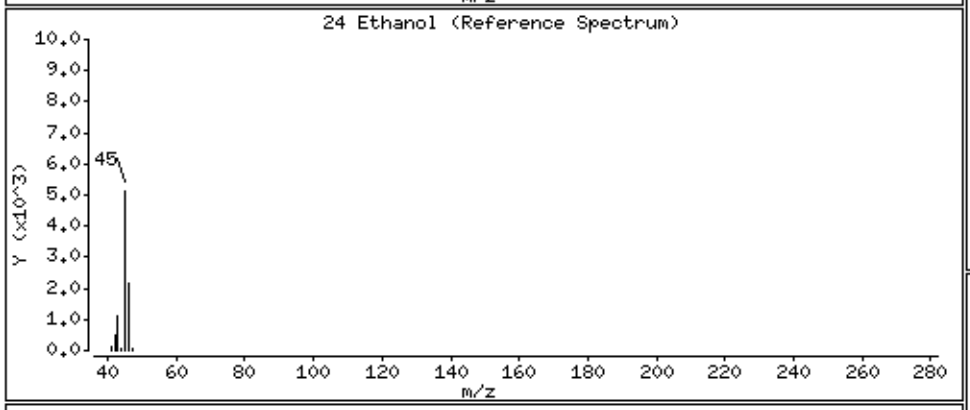
Column diameter: 0.32

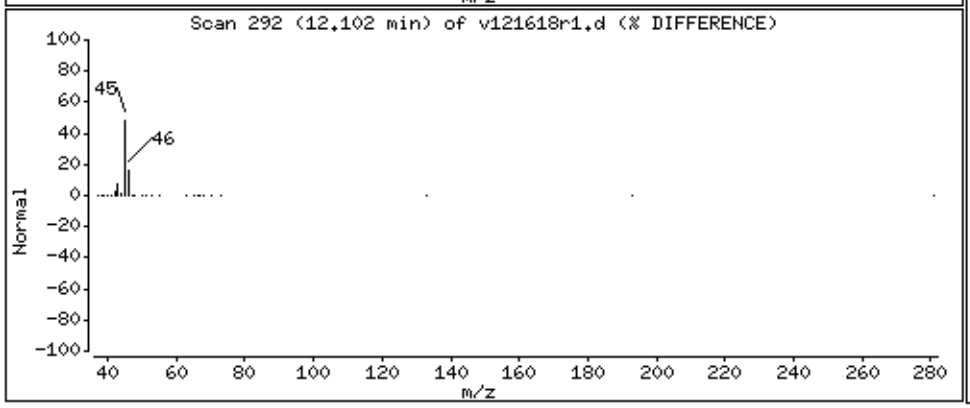
24 Ethanol

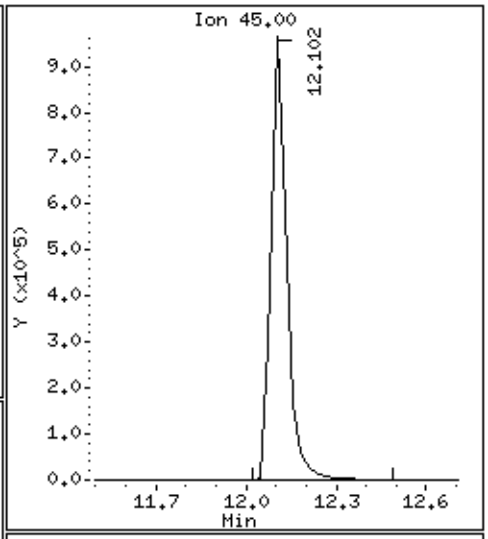
Concentration: 276.98 PPBV

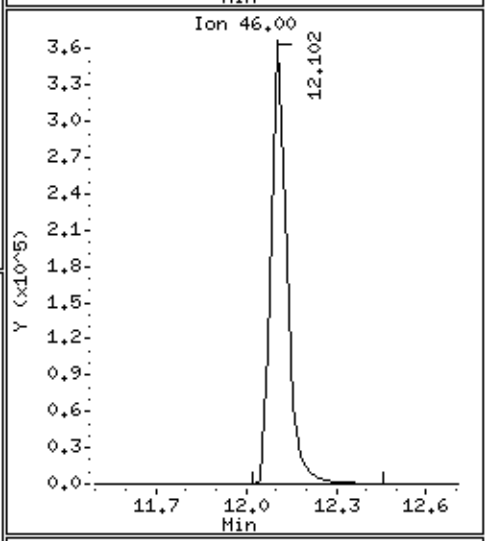


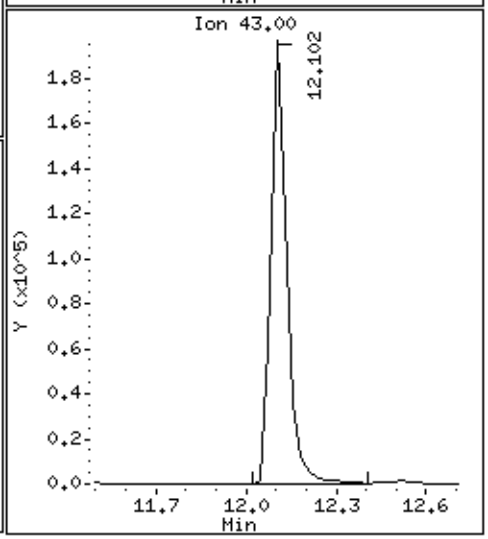












Data File: /chem/msdv.i/16Dec2014.b/v121618r1.d

Date : 16-DEC-2014 20:41

Client ID:

Instrument: msdv.i

Sample Info: 250ml #940

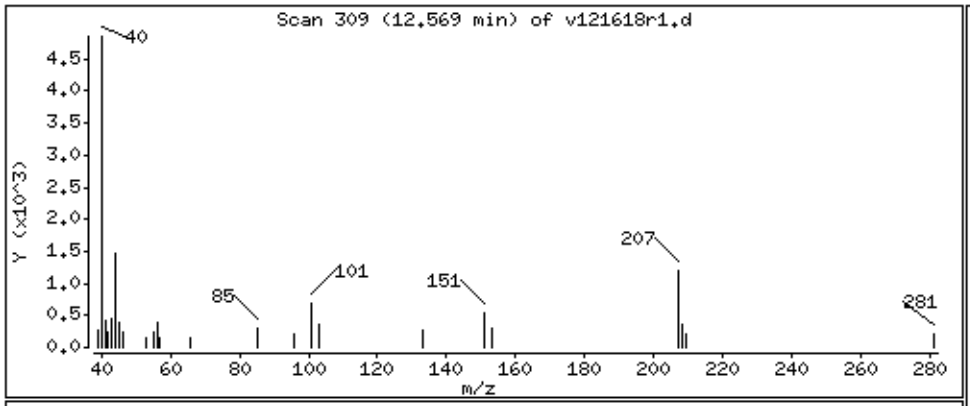
Operator: sn

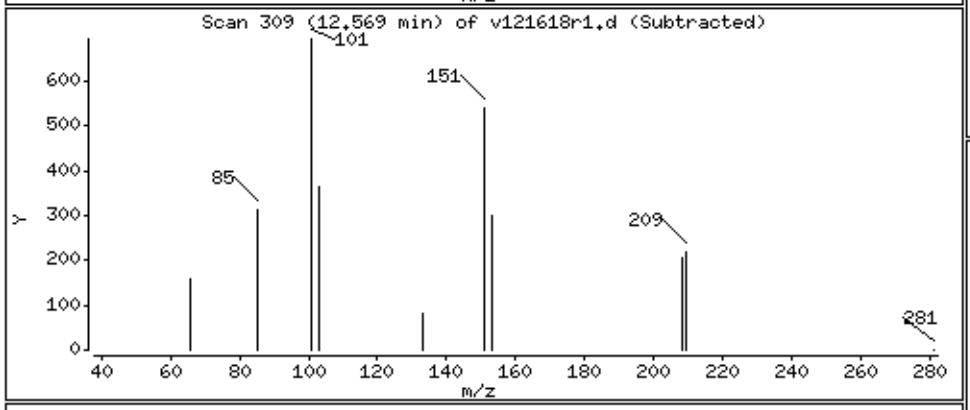
Column phase: RTx-624

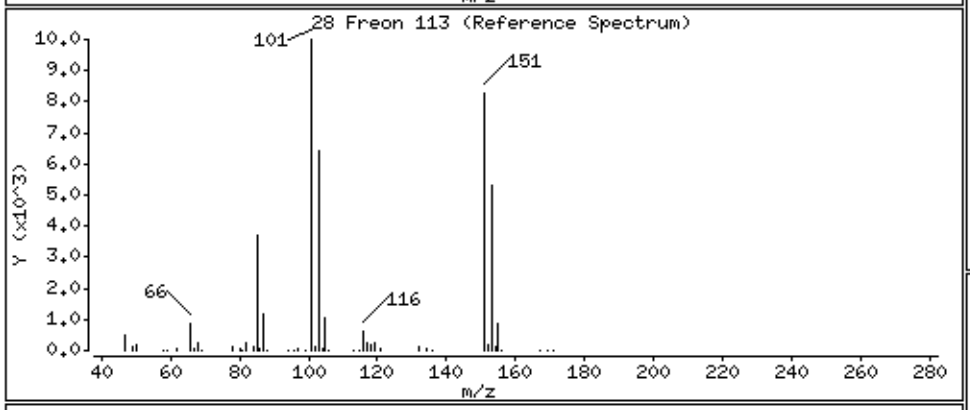
Column diameter: 0.32

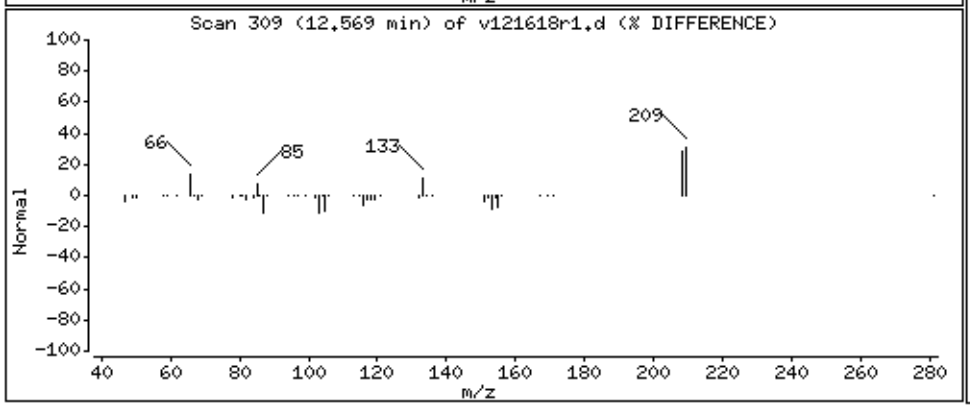
28 Freon 113

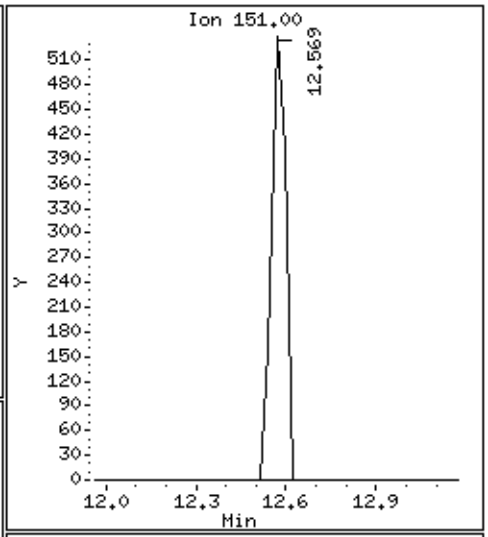
Concentration: 0.05008 PPBV

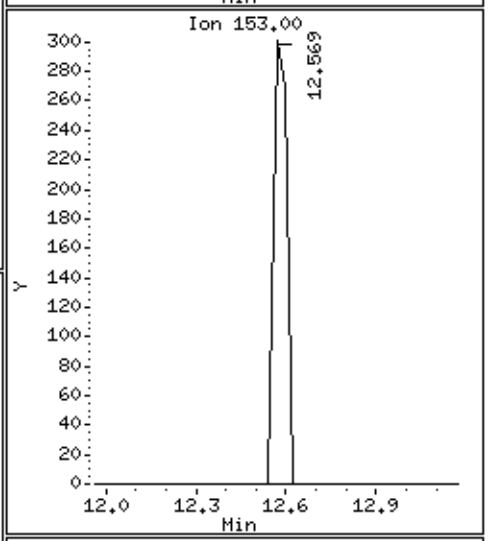


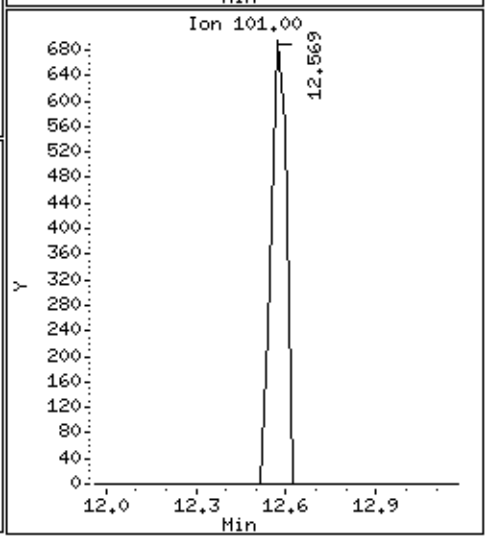












Data File: /chem/msdv.i/16Dec2014.b/v121618r1.d

Date : 16-DEC-2014 20:41

Client ID:

Instrument: msdv.i

Sample Info: 250ml #940

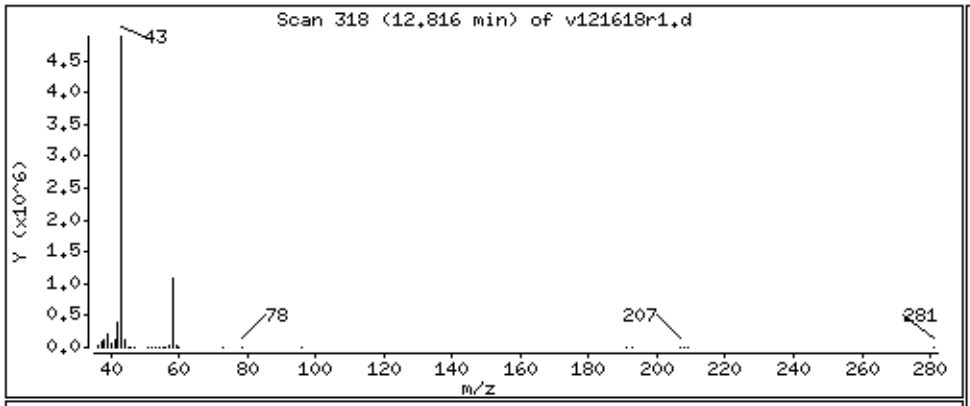
Operator: sn

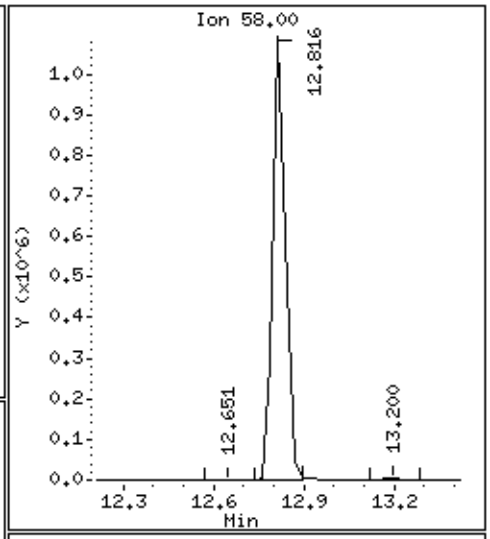
Column phase: RTx-624

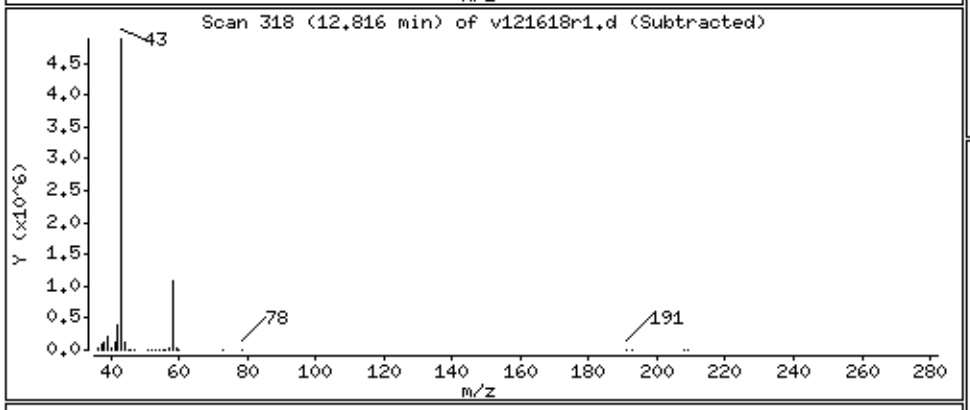
Column diameter: 0.32

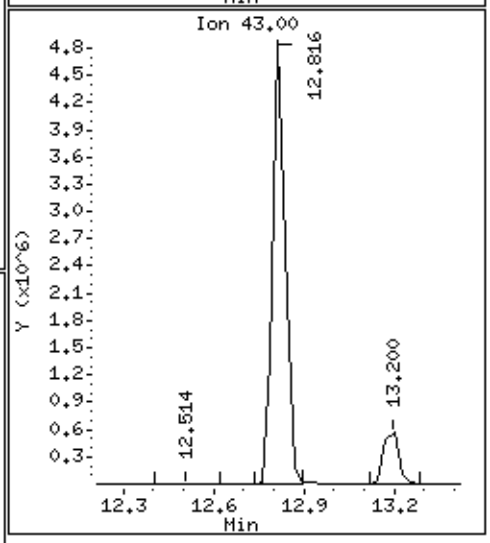
31 Acetone

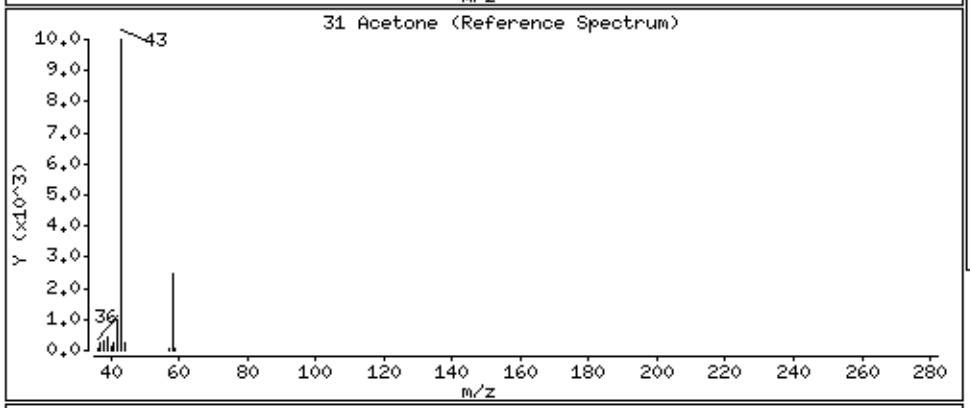
Concentration: 214.63 PPBV

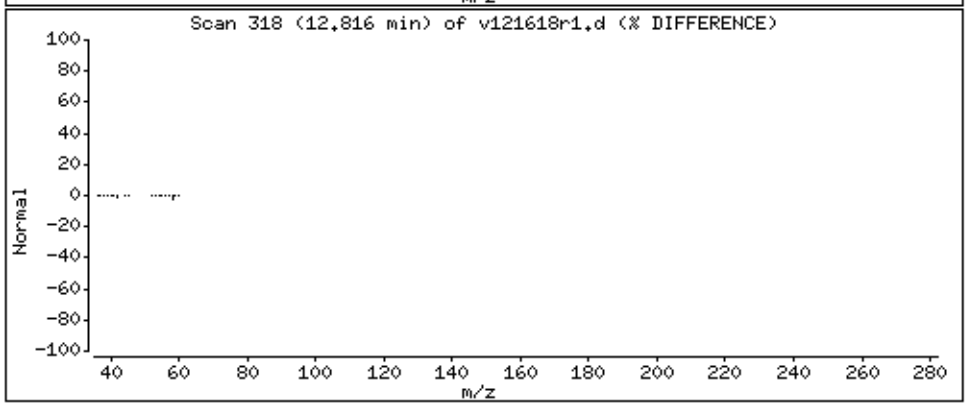












Data File: /chem/msdv.i/16Dec2014.b/v121618r1.d

Date : 16-DEC-2014 20:41

Client ID:

Instrument: msdv.i

Sample Info: 250ml #940

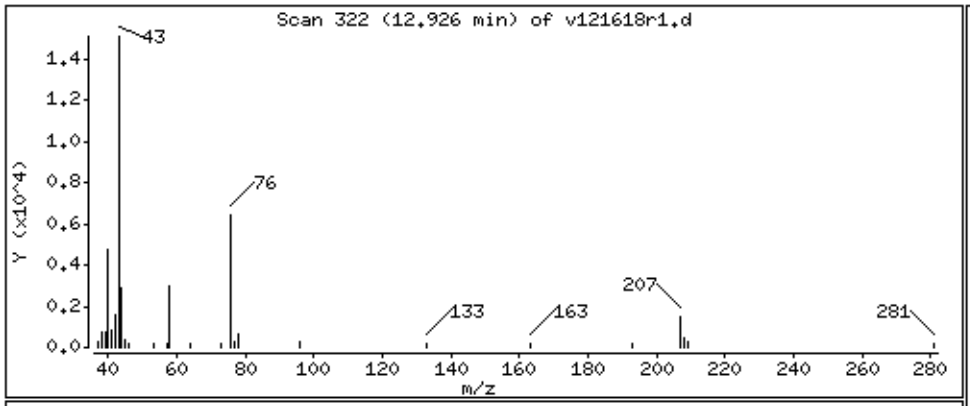
Operator: sn

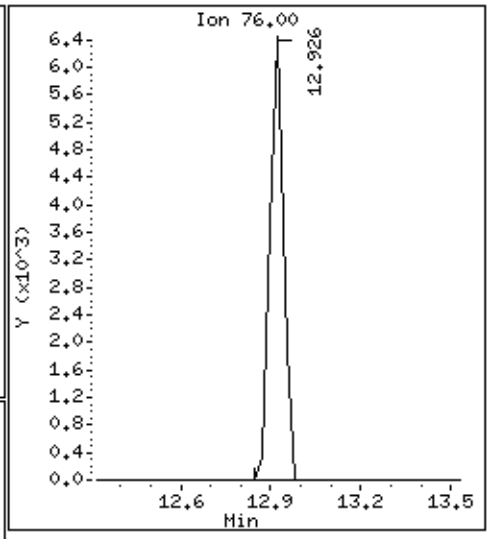
Column phase: RTx-624

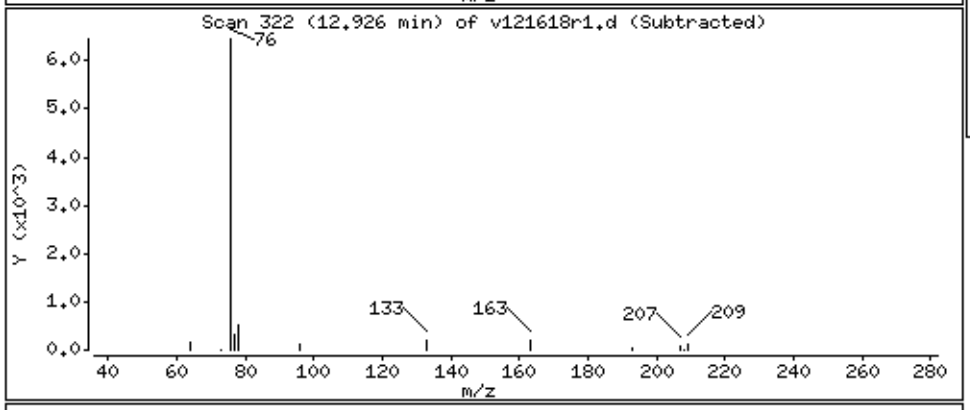
Column diameter: 0.32

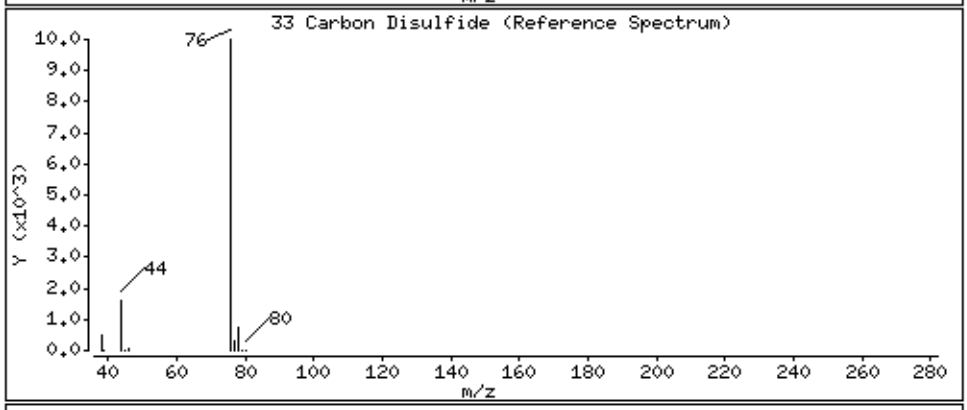
33 Carbon Disulfide

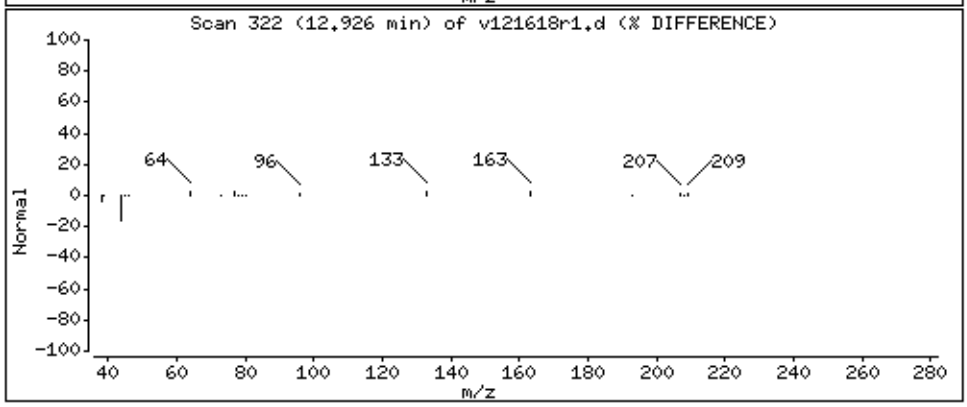
Concentration: 0.3564 PPBV











Data File: /chem/msdv.i/16Dec2014.b/v121618r1.d

Date : 16-DEC-2014 20:41

Client ID:

Instrument: msdv.i

Sample Info: 250ml #940

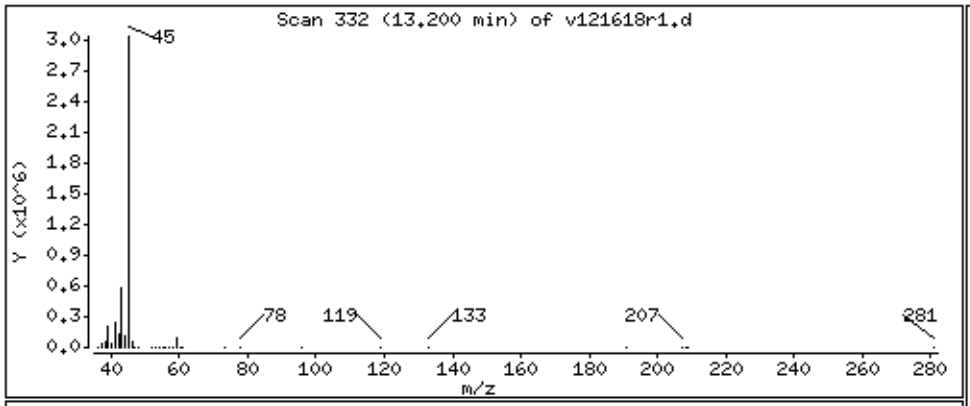
Operator: sn

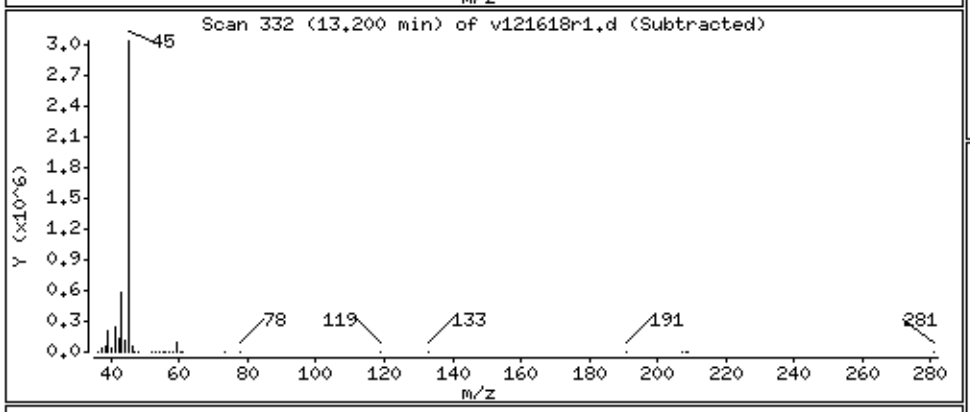
Column phase: RTx-624

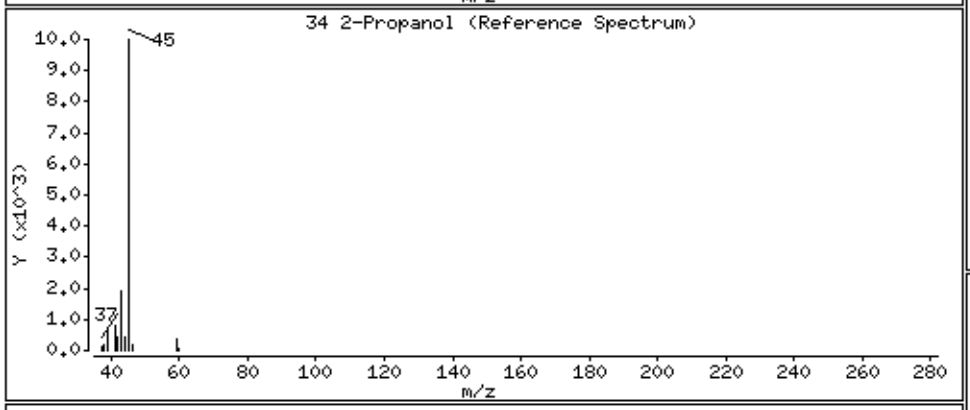
Column diameter: 0.32

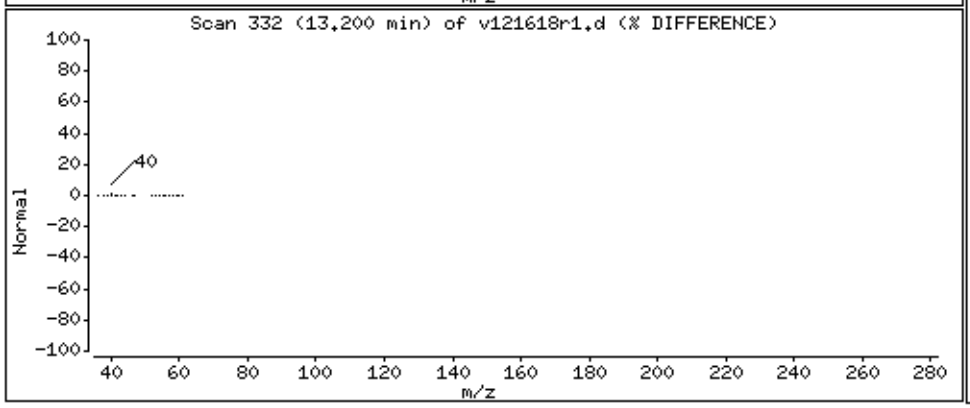
34 2-Propanol

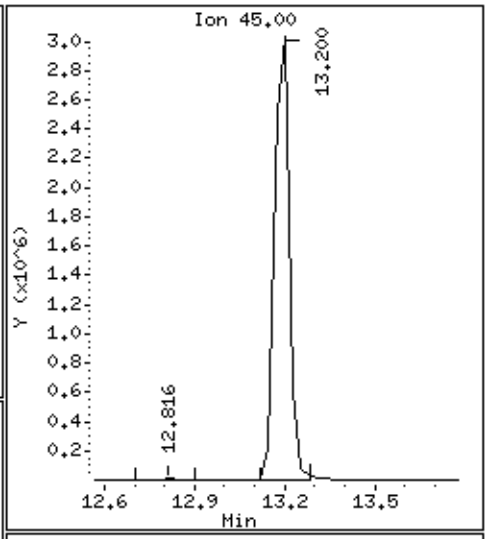
Concentration: 156.47 PPBV

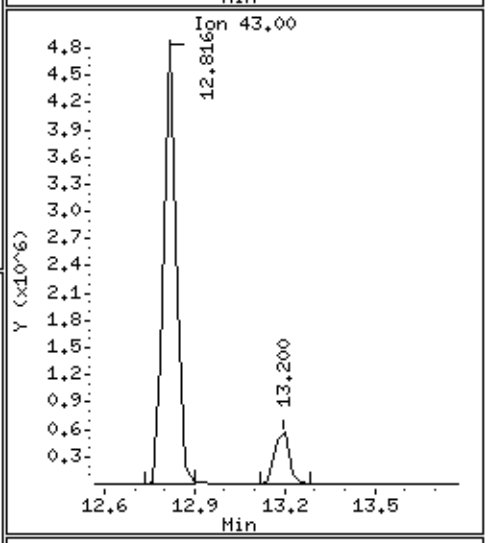


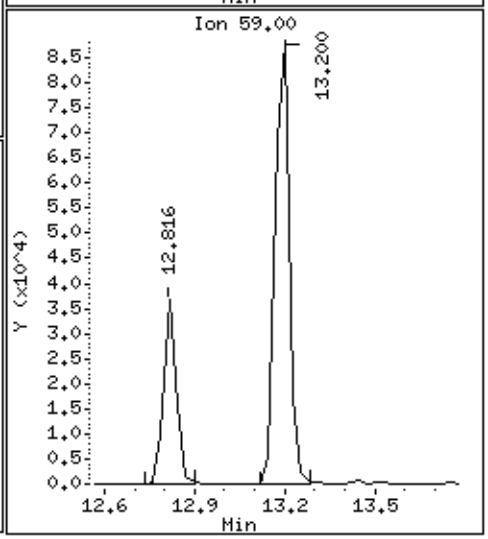












Data File: /chem/msdv.i/16Dec2014.b/v121618r1.d

Date : 16-DEC-2014 20:41

Client ID:

Instrument: msdv.i

Sample Info: 250ml #940

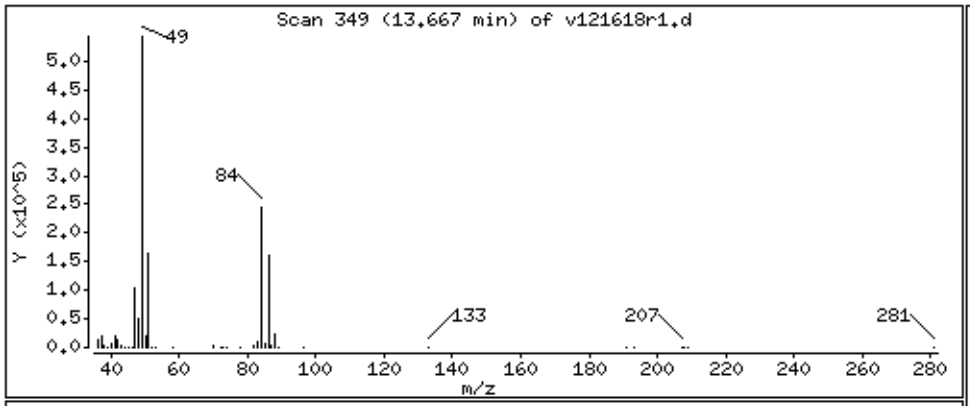
Operator: sn

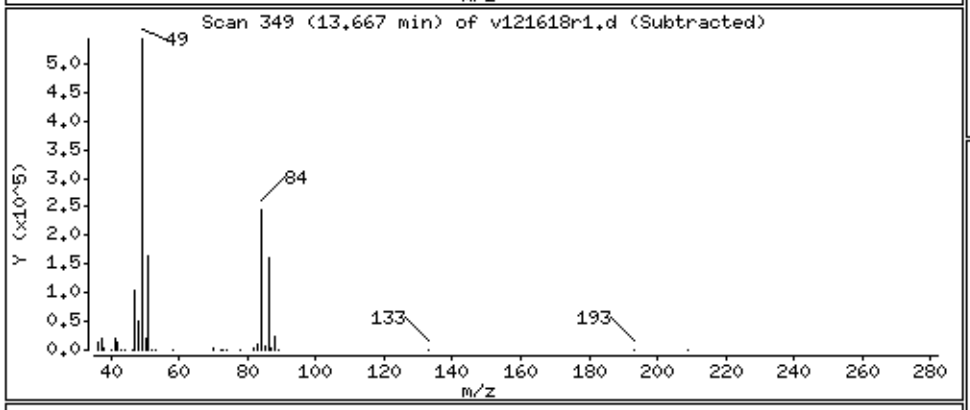
Column phase: RTx-624

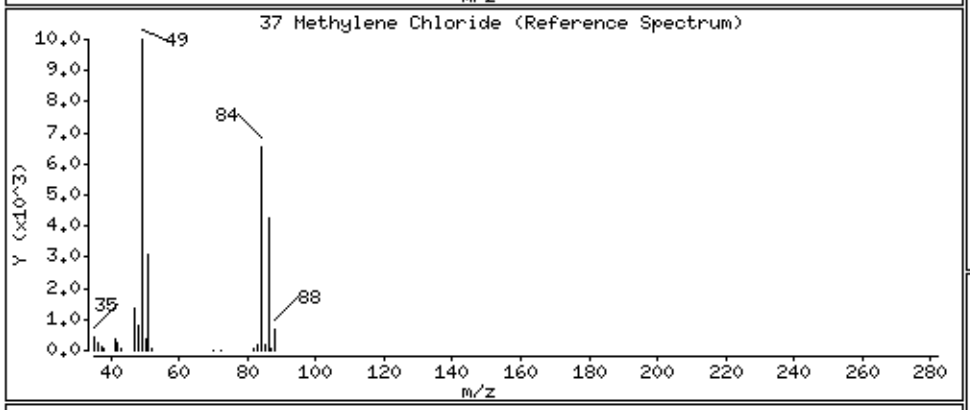
Column diameter: 0.32

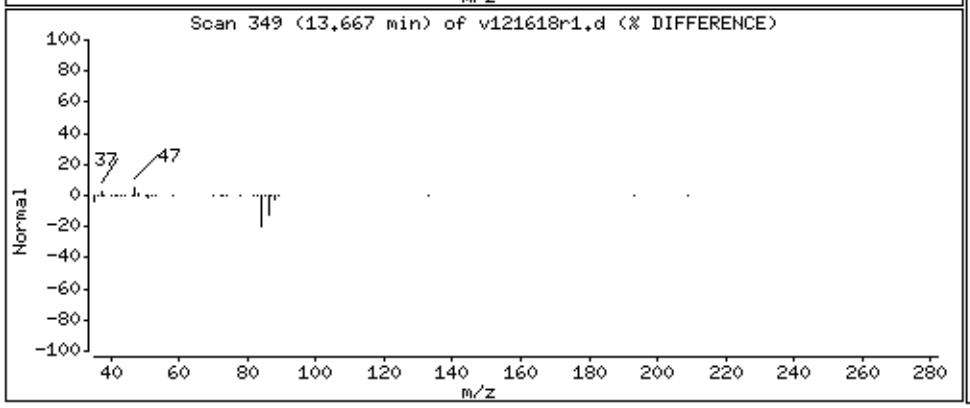
37 Methylene Chloride

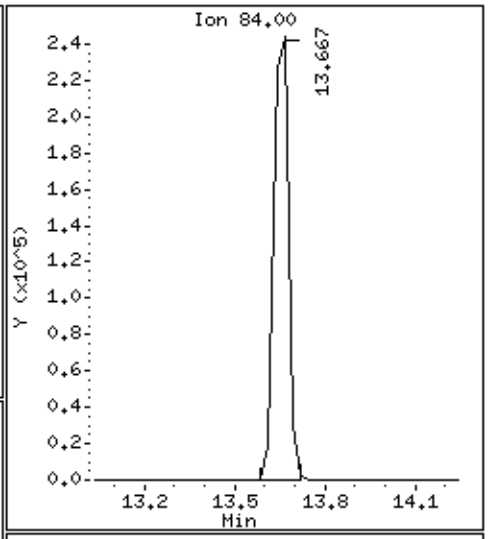
Concentration: 45.252 PPBV

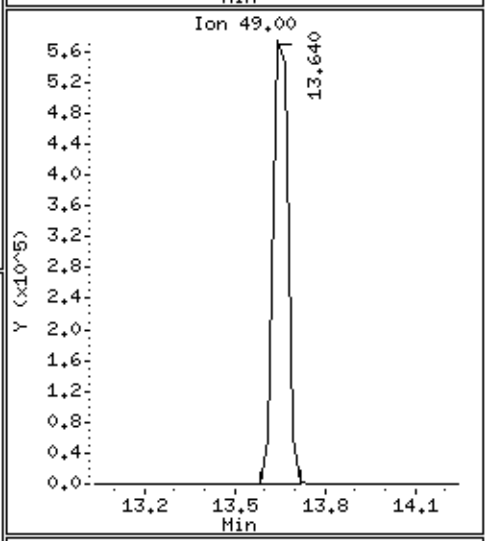


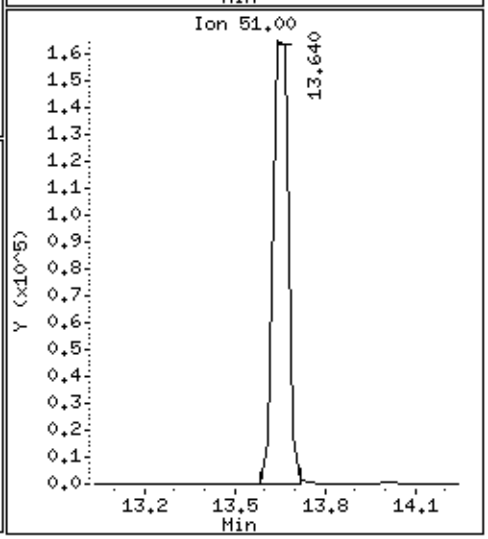












Data File: /chem/msdv.i/16Dec2014.b/v121618r1.d

Date : 16-DEC-2014 20:41

Client ID:

Instrument: msdv.i

Sample Info: 250ml #940

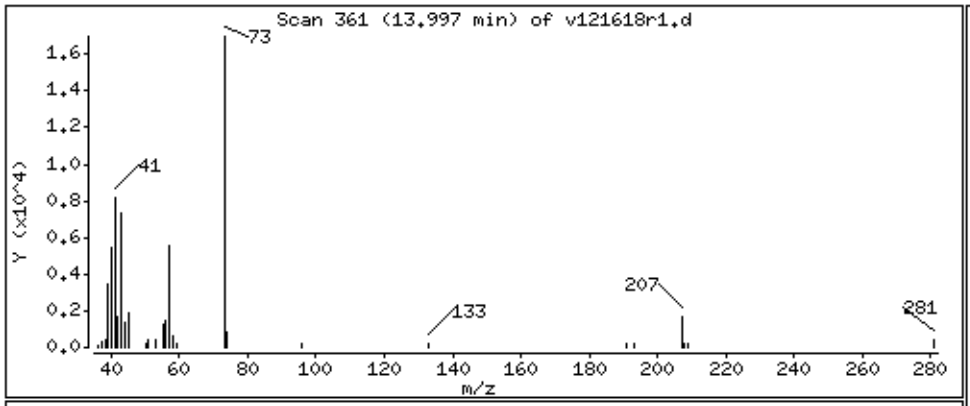
Operator: sn

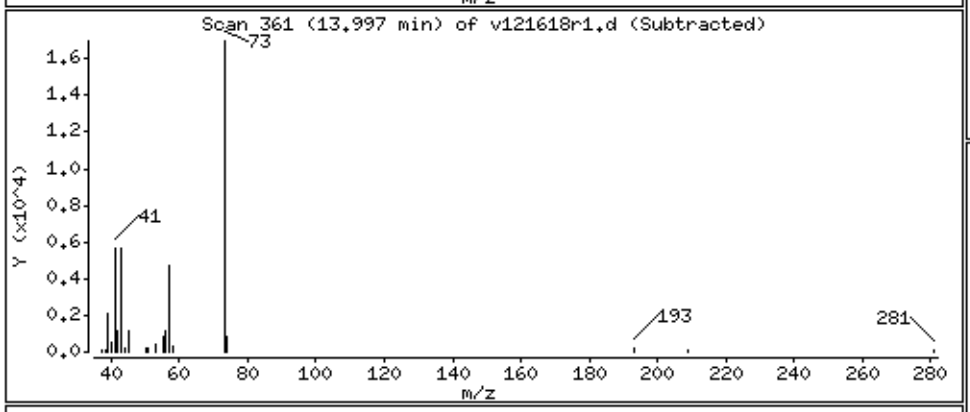
Column phase: RTx-624

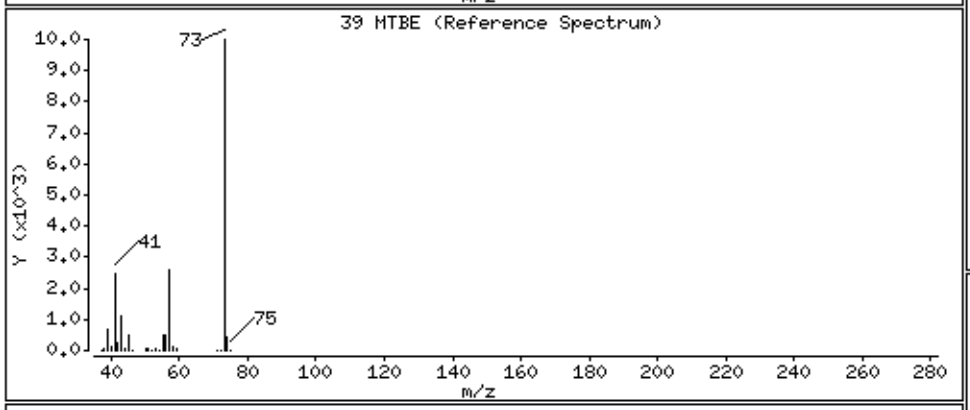
Column diameter: 0.32

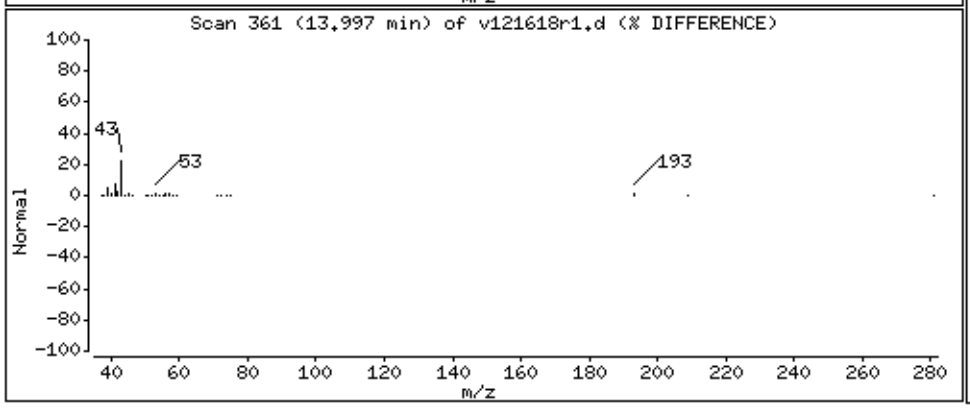
39 MTBE

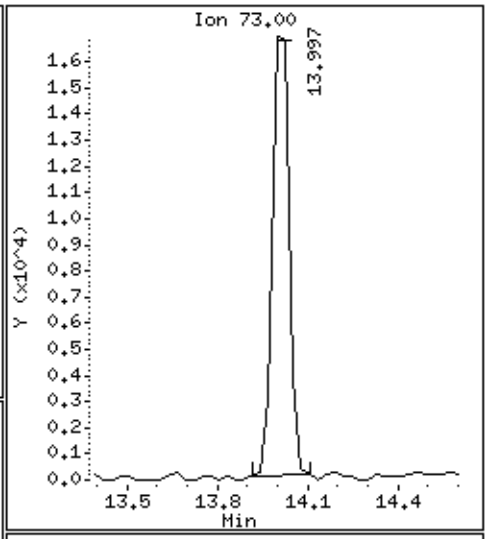
Concentration: 0.9837 PPBV

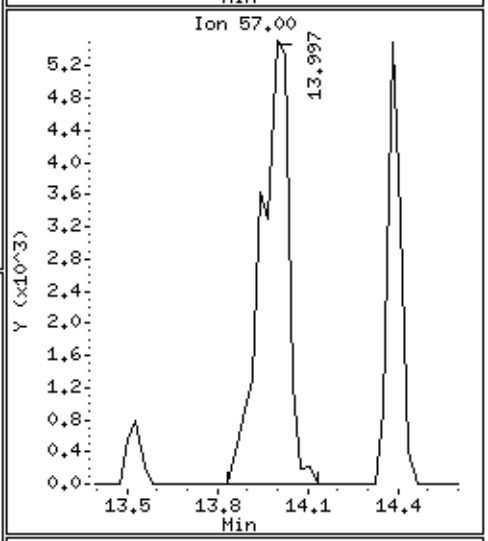


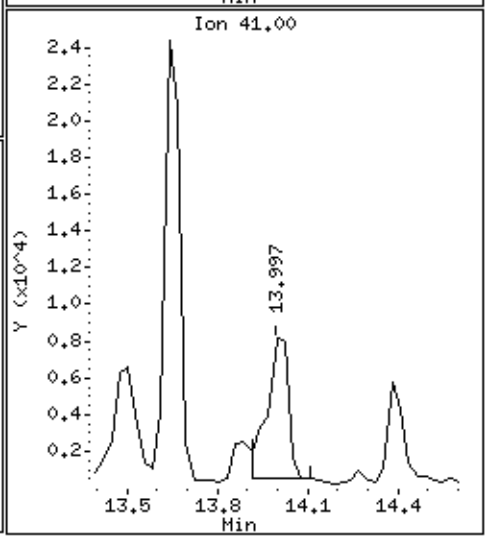












Data File: /chem/msdv.i/16Dec2014.b/v121618r1.d

Date : 16-DEC-2014 20:41

Client ID:

Instrument: msdv.i

Sample Info: 250ml #940

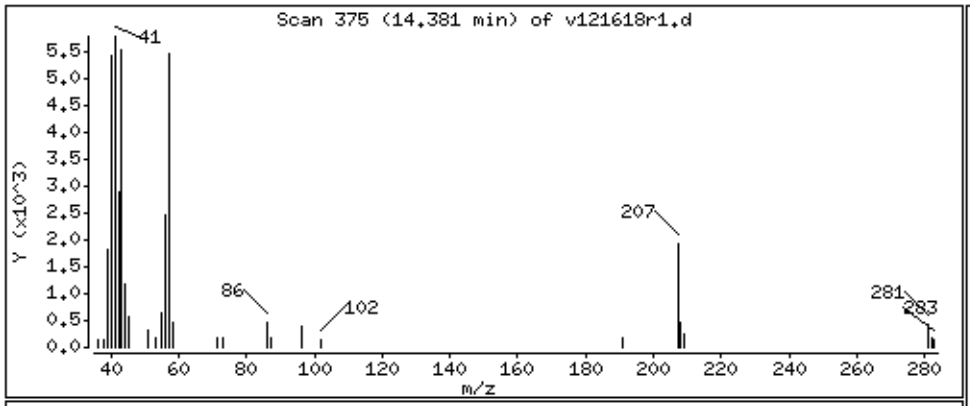
Operator: sn

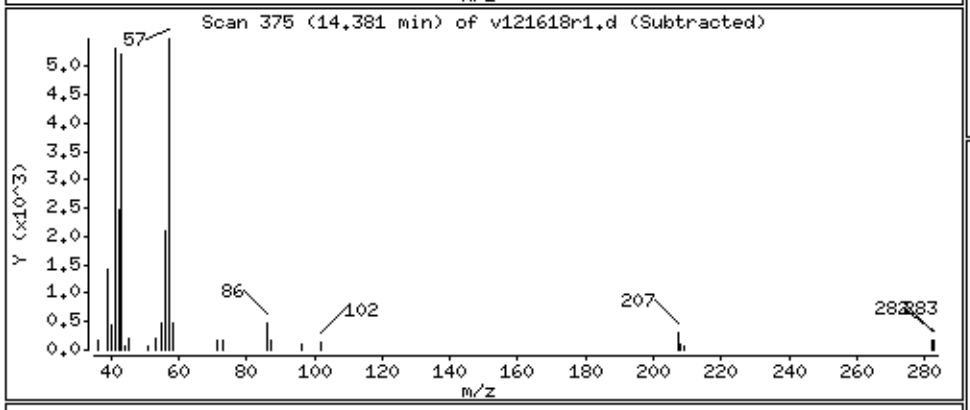
Column phase: RTx-624

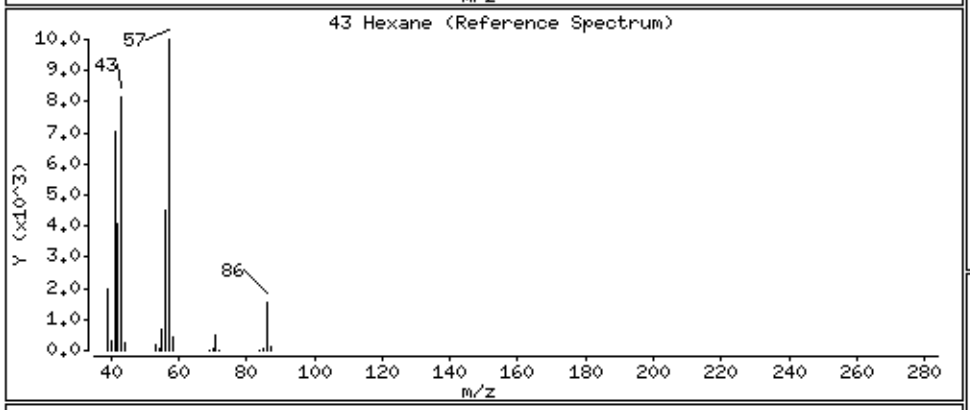
Column diameter: 0.32

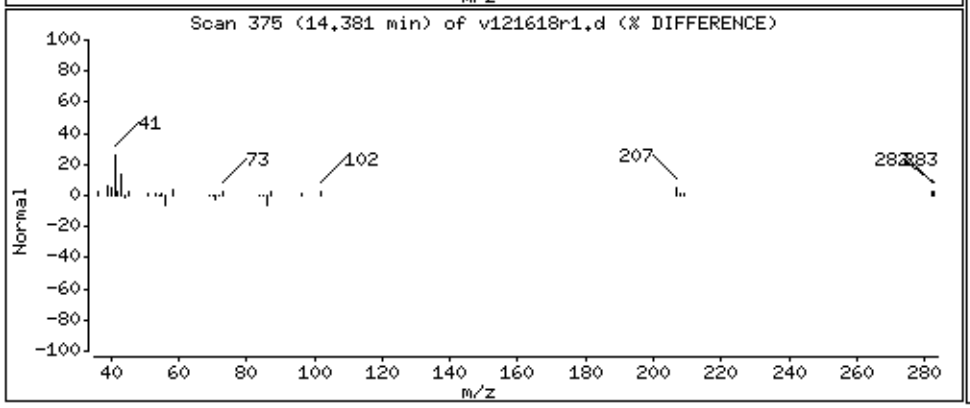
43 Hexane

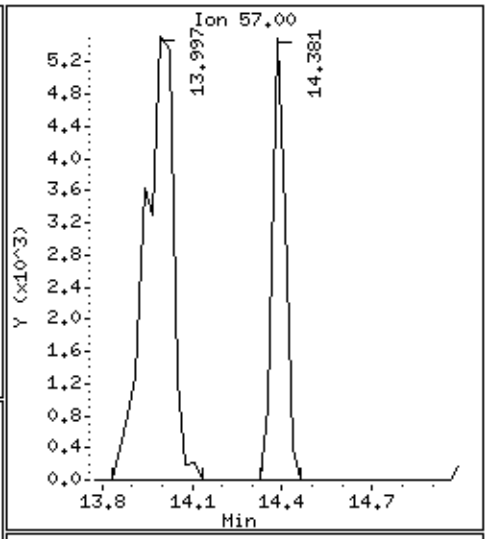
Concentration: 0.3059 PPBV

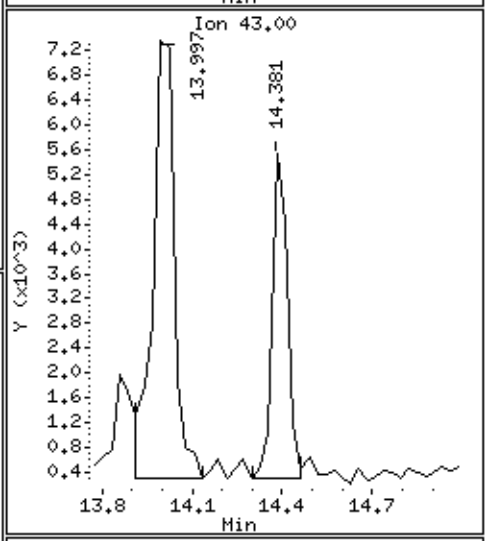


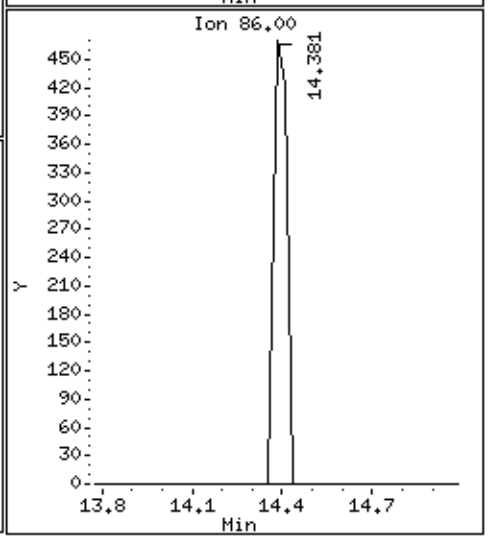












Data File: /chem/msdv.i/16Dec2014.b/v121618r1.d

Date : 16-DEC-2014 20:41

Client ID:

Instrument: msdv.i

Sample Info: 250ml #940

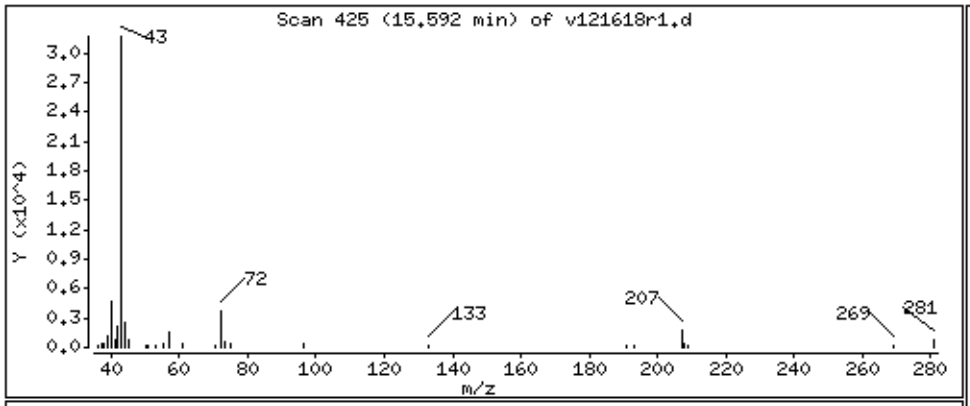
Operator: sn

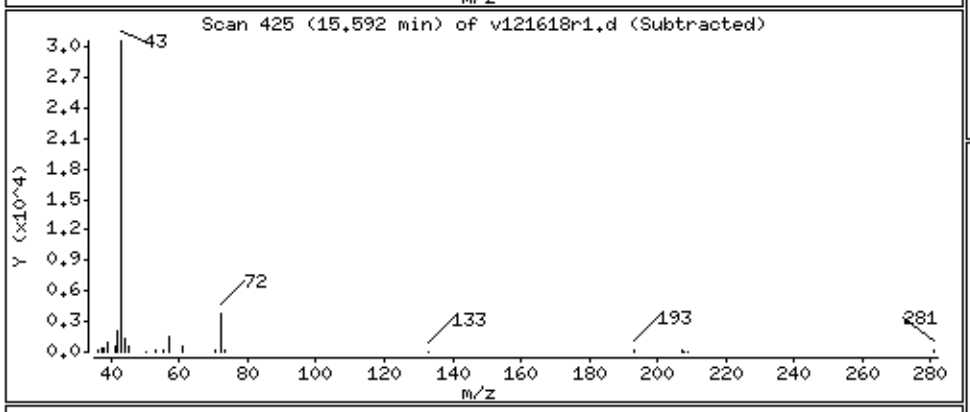
Column phase: RTx-624

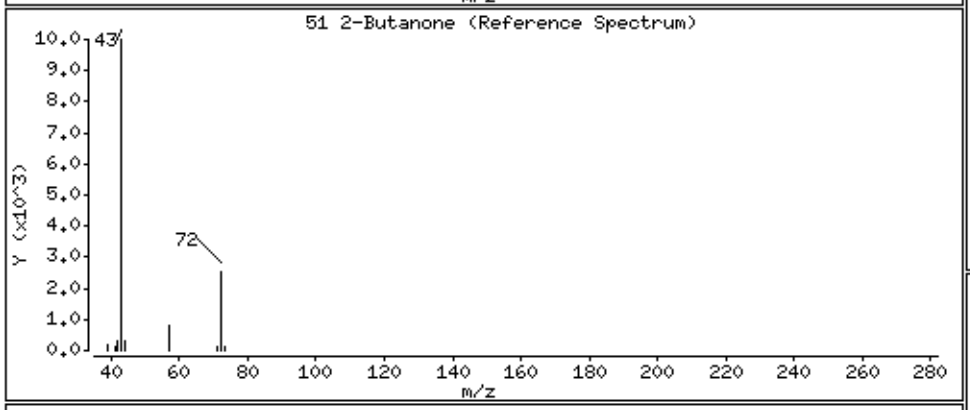
Column diameter: 0.32

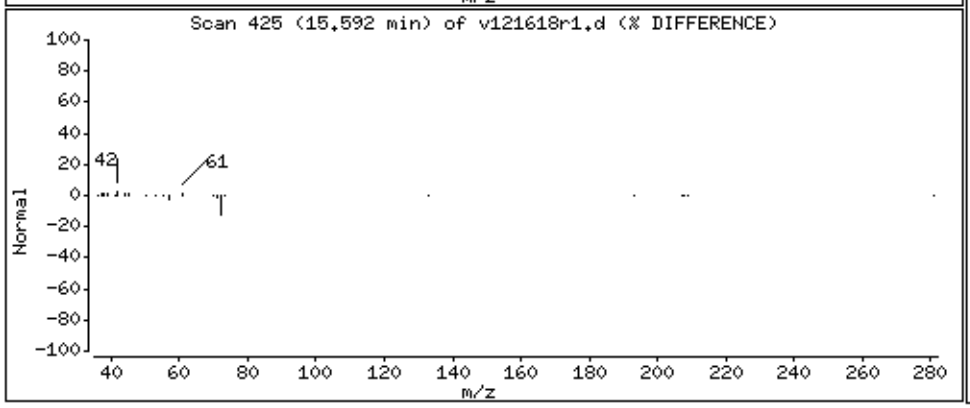
51 2-Butanone

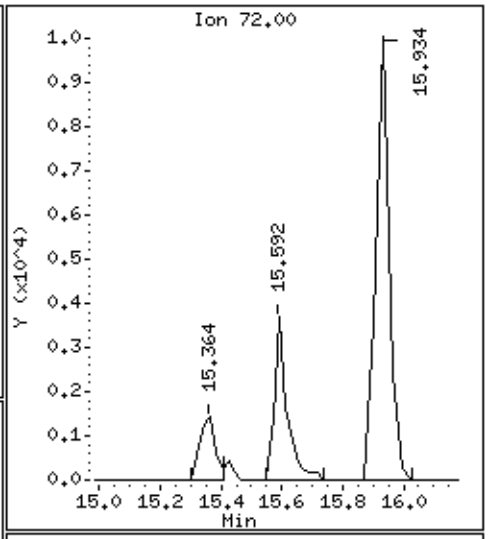
Concentration: 0.9752 PPBV

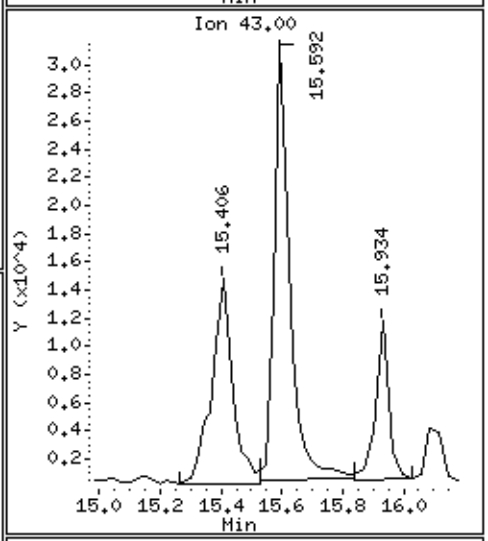


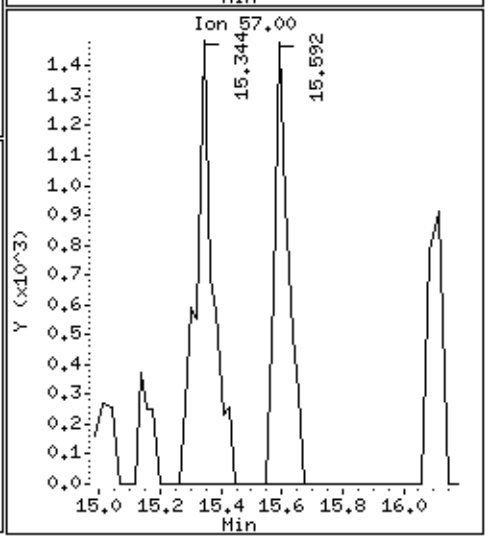












Data File: /chem/msdv.i/16Dec2014.b/v121618r1.d

Date : 16-DEC-2014 20:41

Client ID:

Instrument: msdv.i

Sample Info: 250ml #940

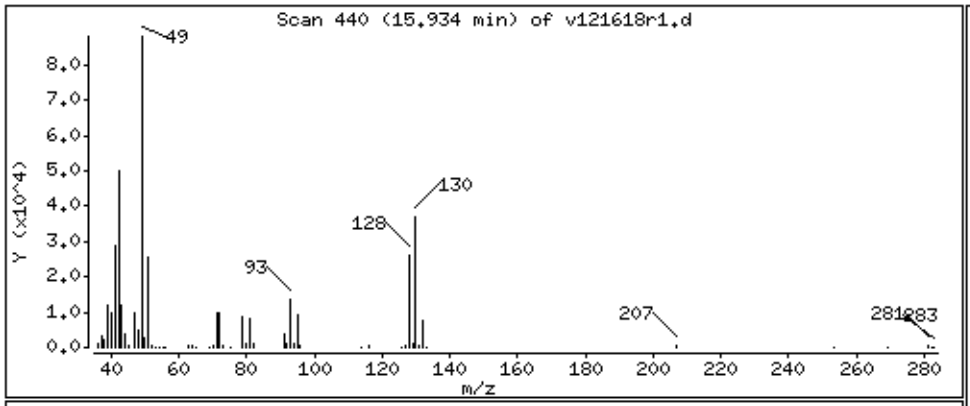
Operator: sn

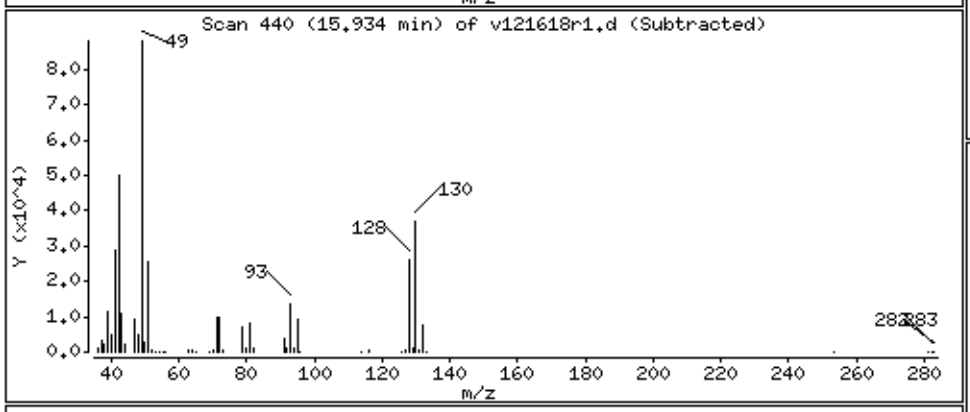
Column phase: RTx-624

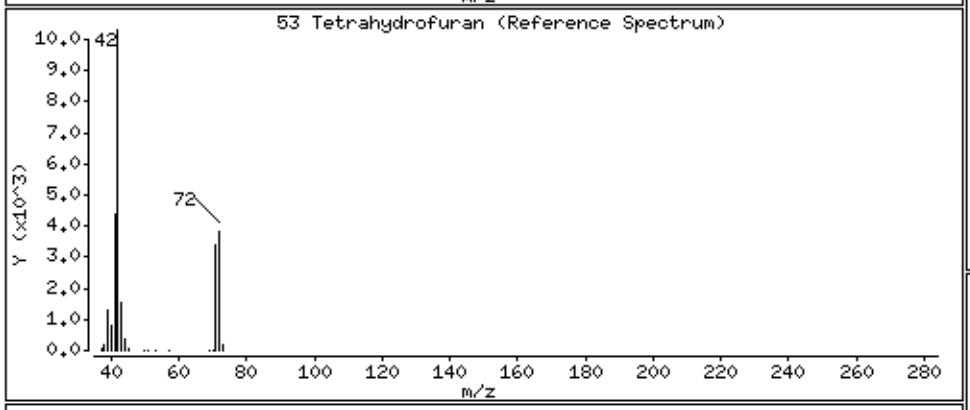
Column diameter: 0.32

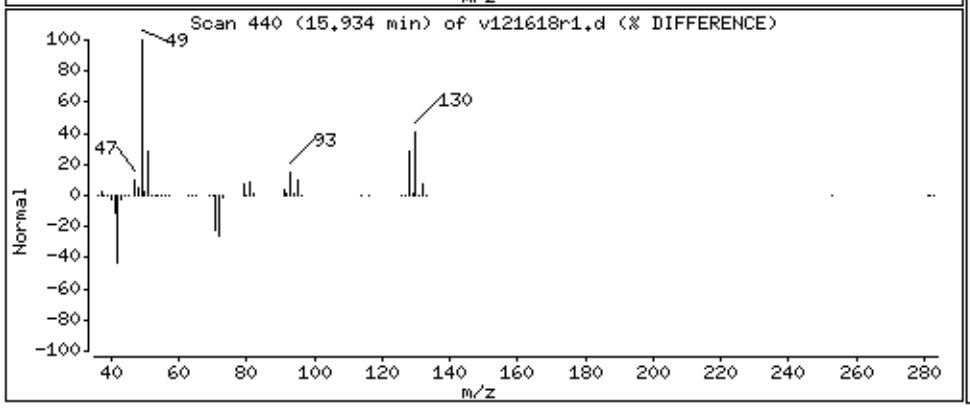
53 Tetrahydrofuran

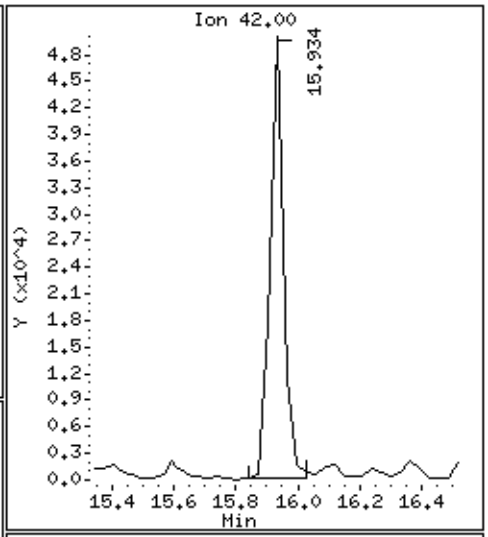
Concentration: 2.654 PPBV

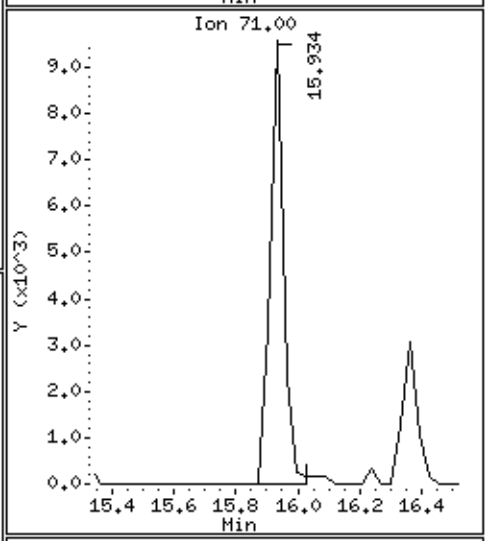


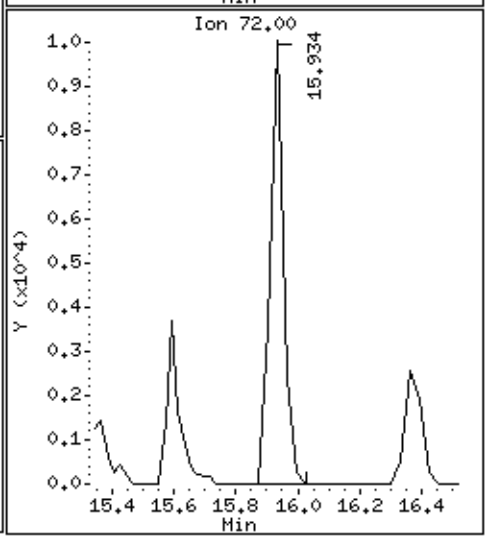












Data File: /chem/msdv.i/16Dec2014.b/v121618r1.d

Date : 16-DEC-2014 20:41

Client ID:

Instrument: msdv.i

Sample Info: 250ml #940

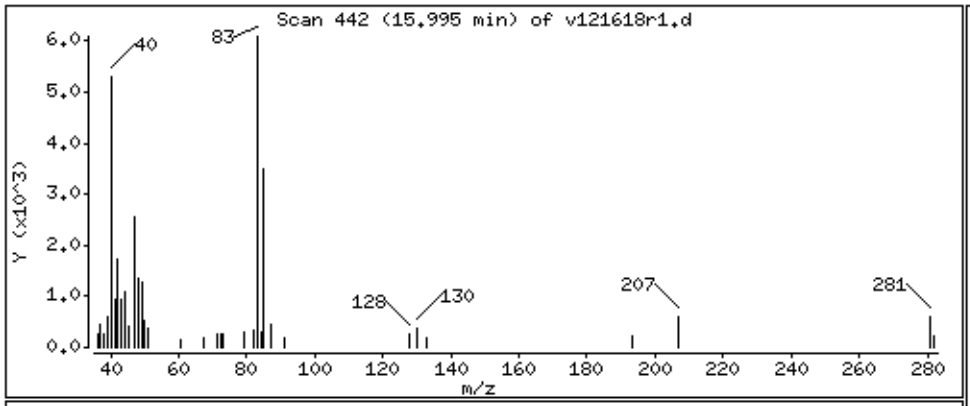
Operator: sn

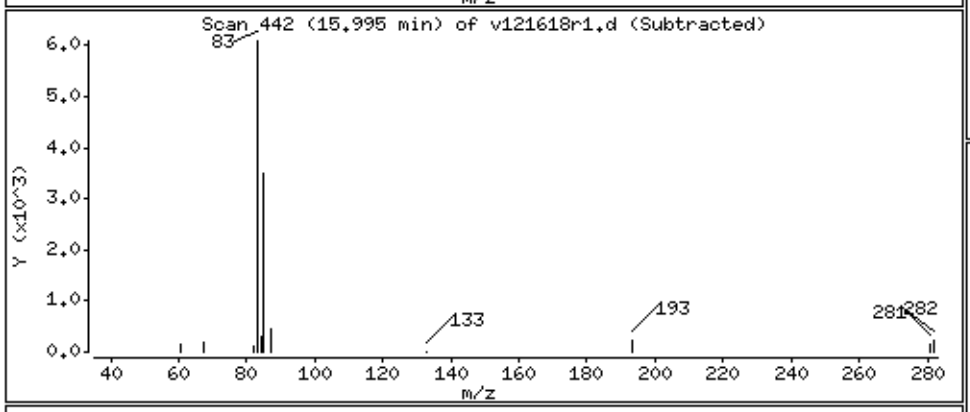
Column phase: RTx-624

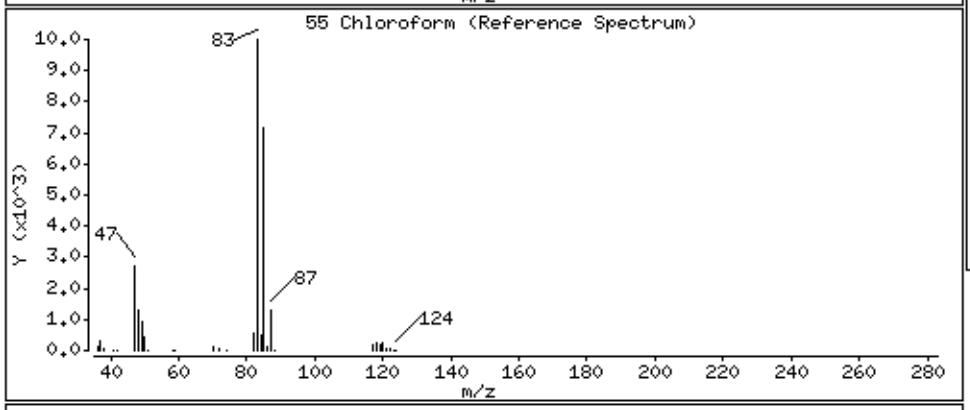
Column diameter: 0.32

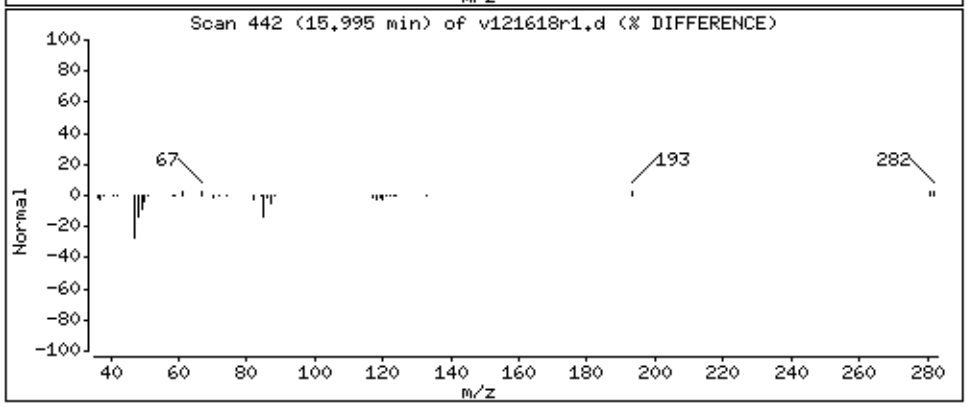
55 Chloroform

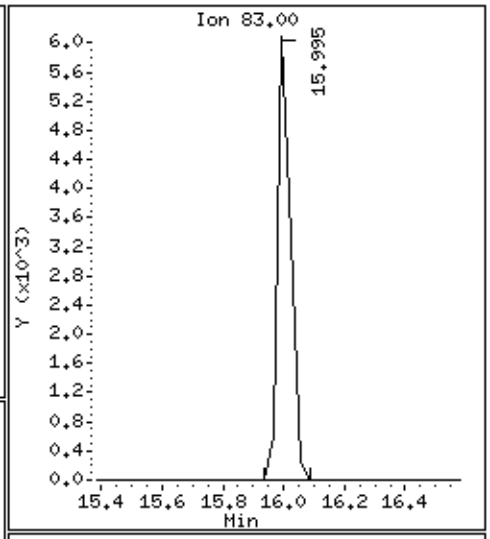
Concentration: 0.3616 PPBV

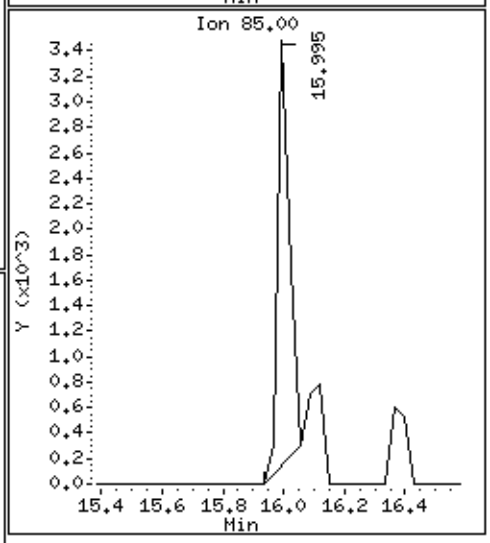












Data File: /chem/msdv.i/16Dec2014.b/v121618r1.d

Date : 16-DEC-2014 20:41

Client ID:

Instrument: msdv.i

Sample Info: 250ml #940

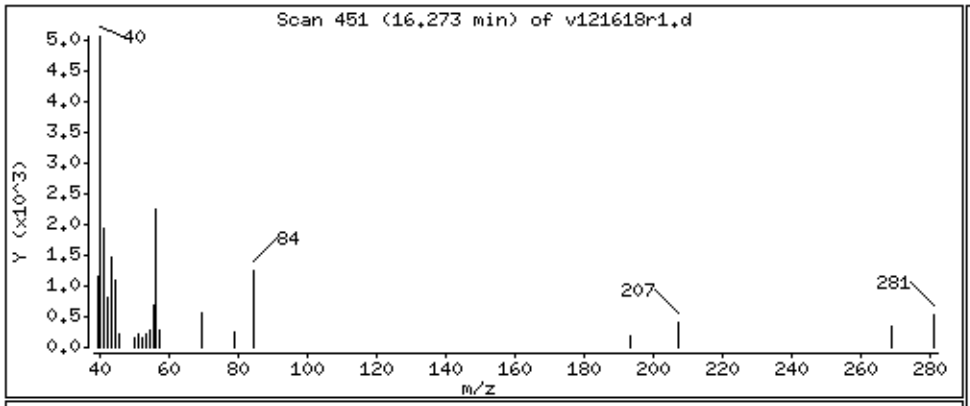
Operator: sn

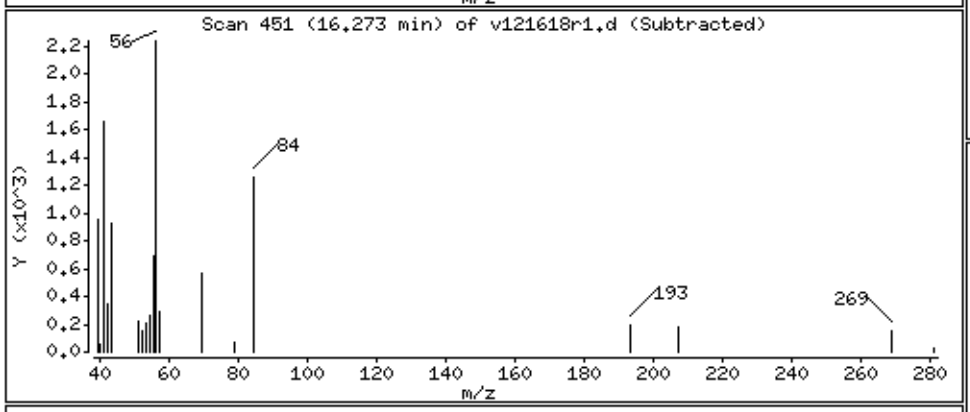
Column phase: RTx-624

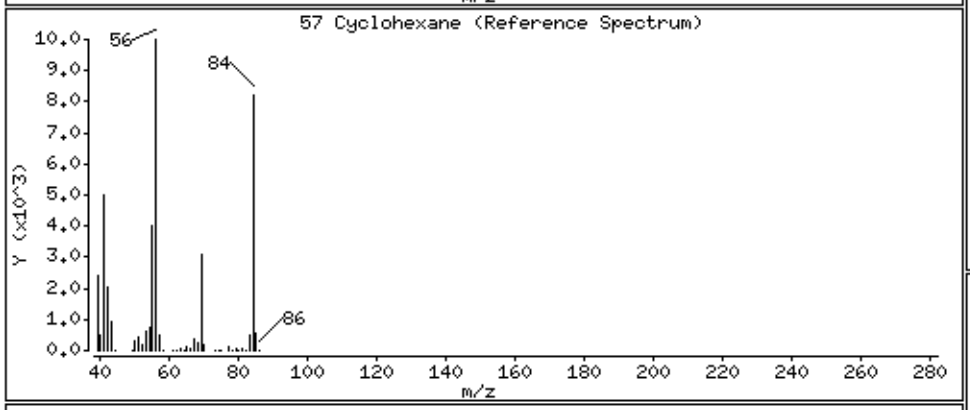
Column diameter: 0.32

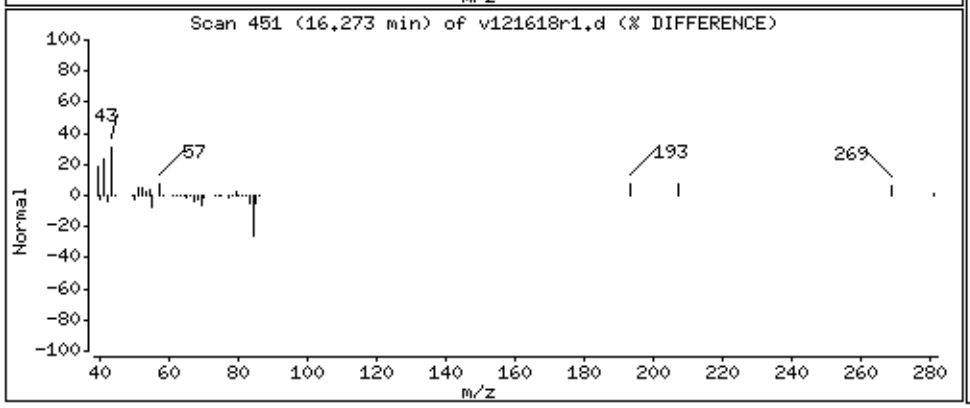
57 Cyclohexane

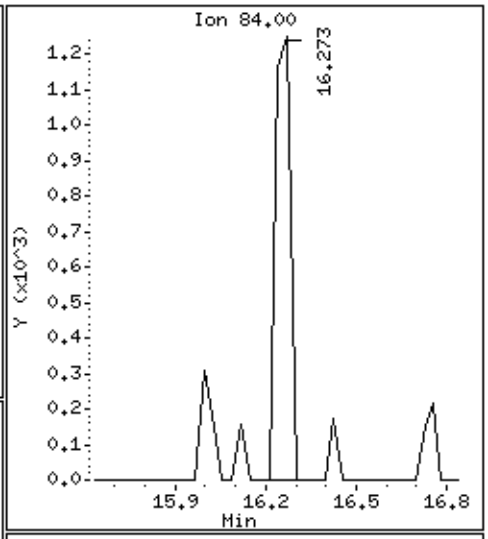
Concentration: 0.1354 PPBV

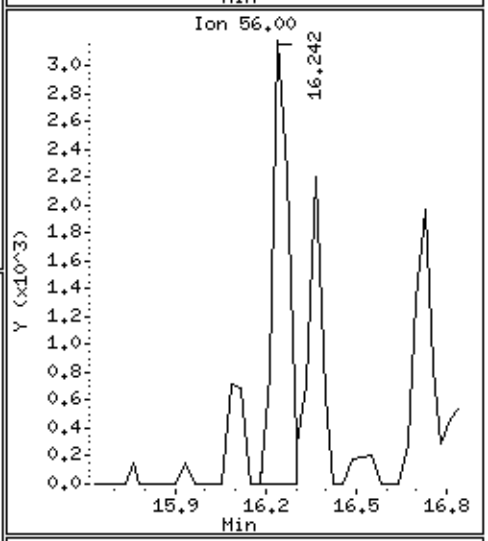


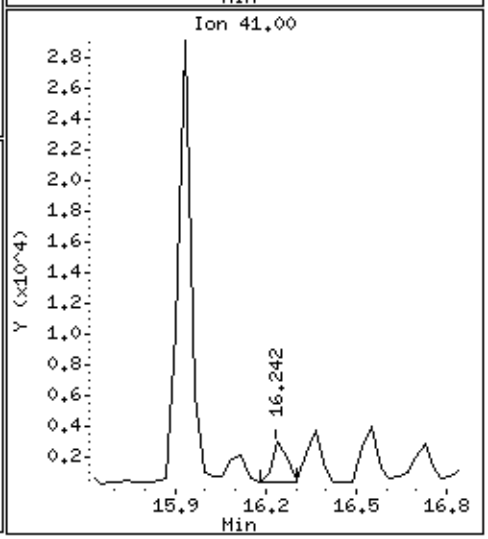












Data File: /chem/msdv.i/16Dec2014.b/v121618r1.d

Date : 16-DEC-2014 20:41

Client ID:

Instrument: msdv.i

Sample Info: 250ml #940

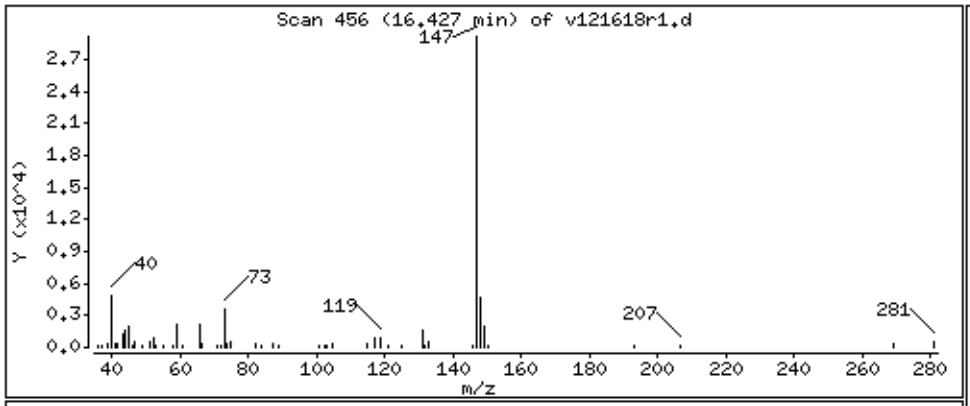
Operator: sn

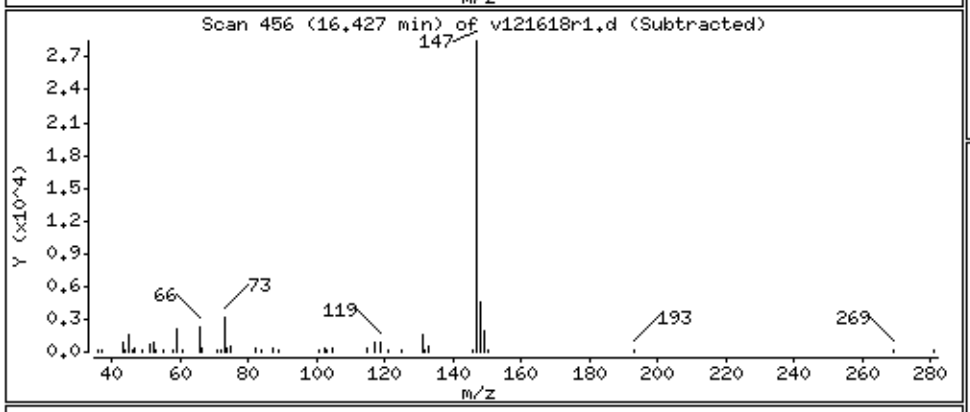
Column phase: RTx-624

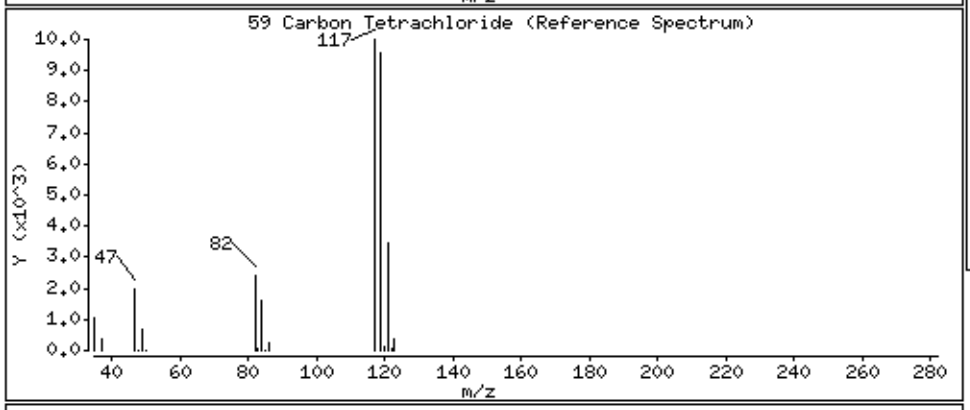
Column diameter: 0.32

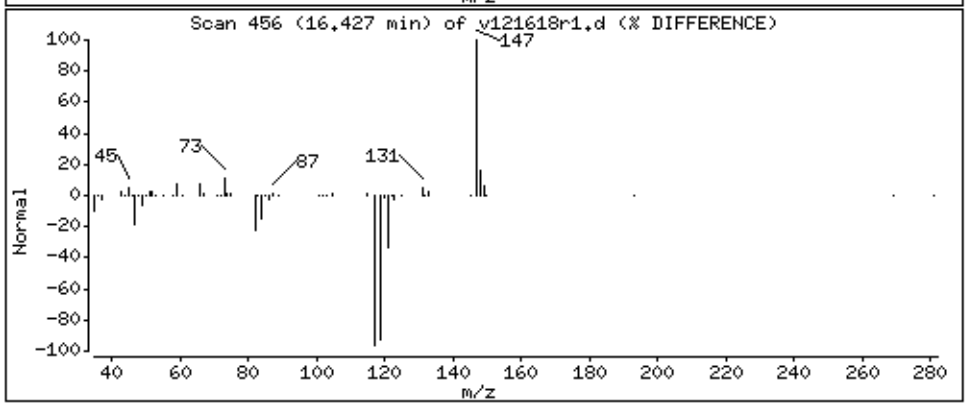
59 Carbon Tetrachloride

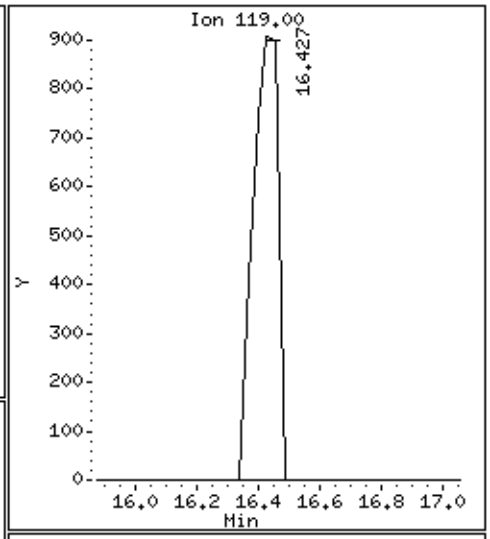
Concentration: 0.1042 PPBV

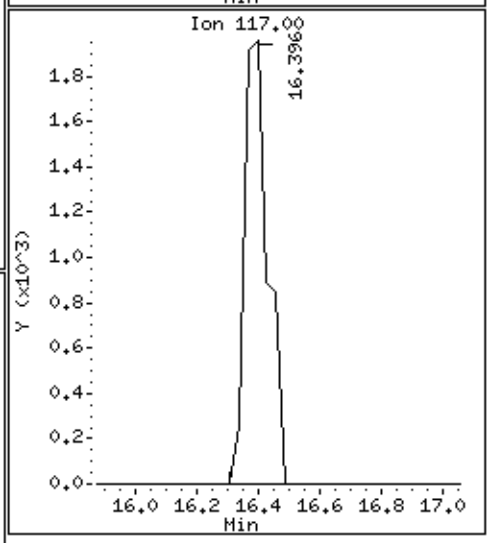












Data File: /chem/msdv.i/16Dec2014.b/v121618r1.d

Date : 16-DEC-2014 20:41

Client ID:

Instrument: msdv.i

Sample Info: 250ml #940

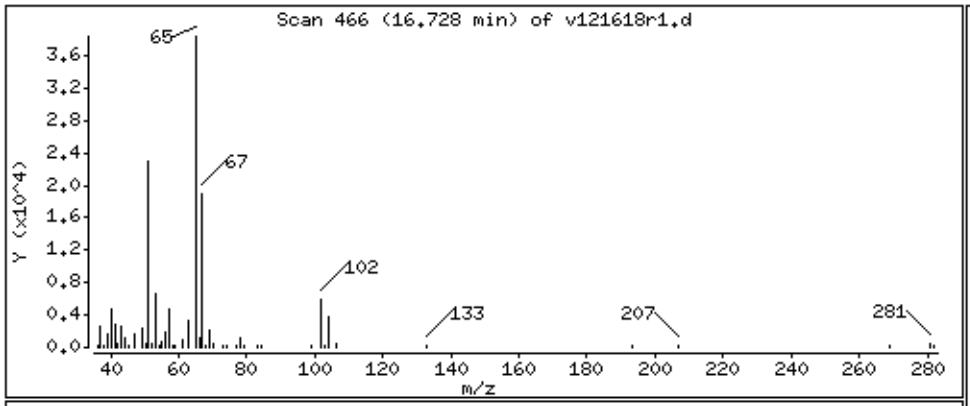
Operator: sn

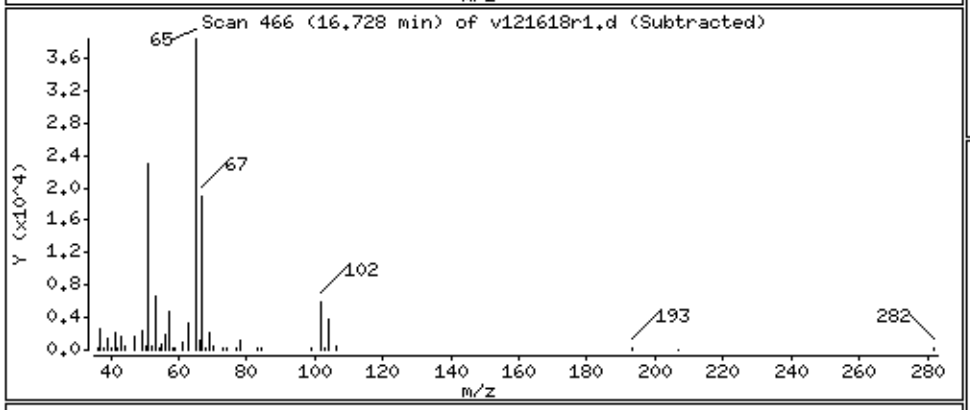
Column phase: RTx-624

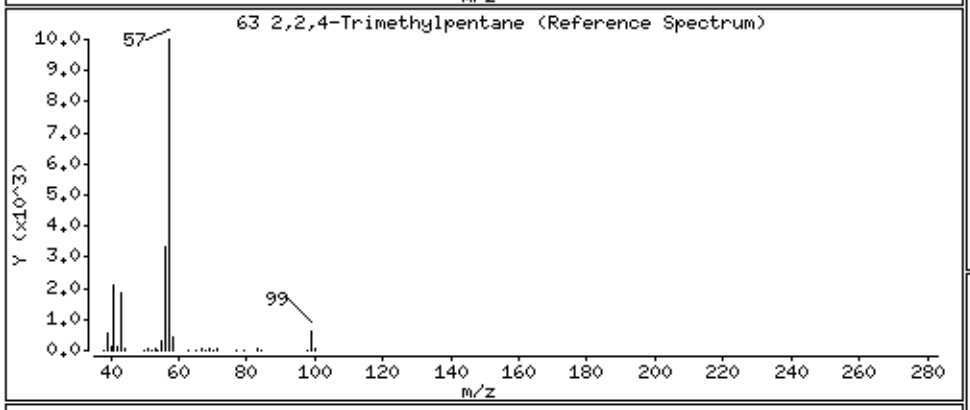
Column diameter: 0.32

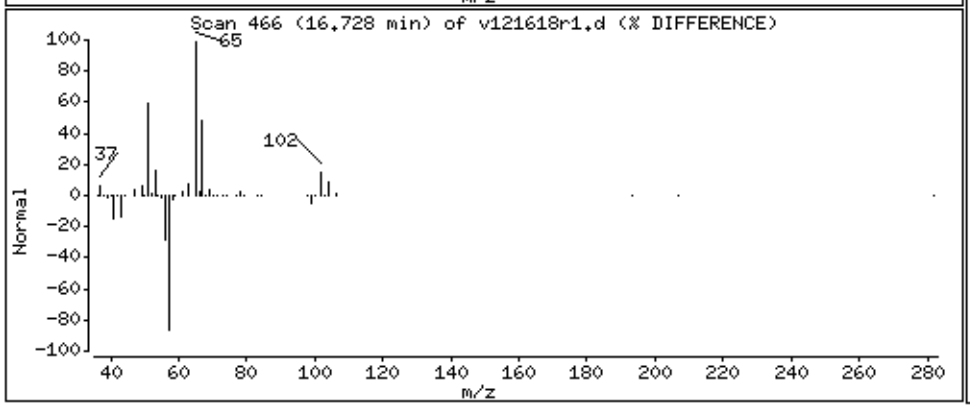
63 2,2,4-Trimethylpentane

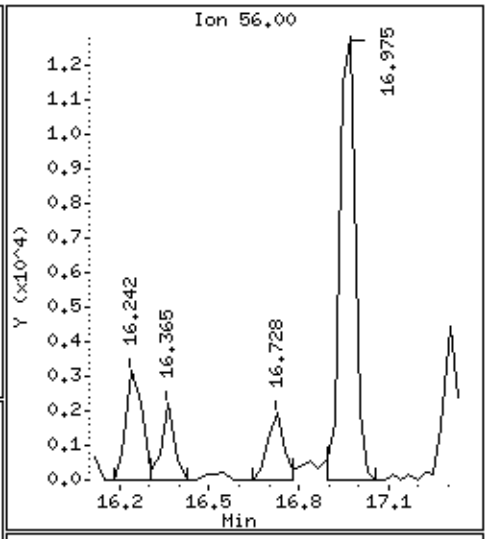
Concentration: 0.1382 PPBV

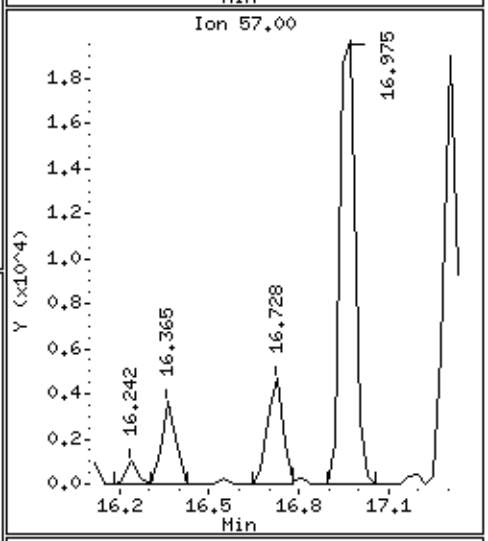


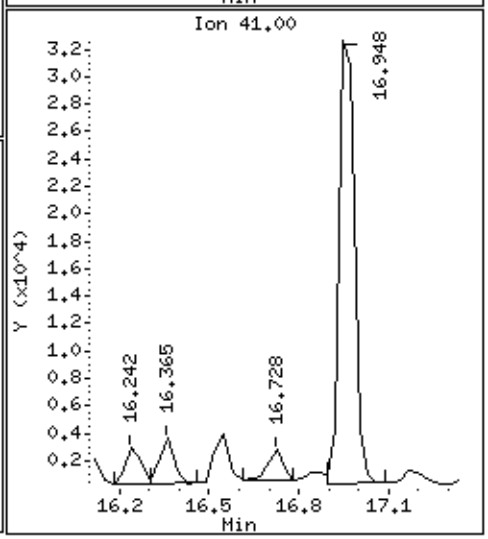












Data File: /chem/msdv.i/16Dec2014.b/v121618r1.d

Date : 16-DEC-2014 20:41

Client ID:

Instrument: msdv.i

Sample Info: 250ml #940

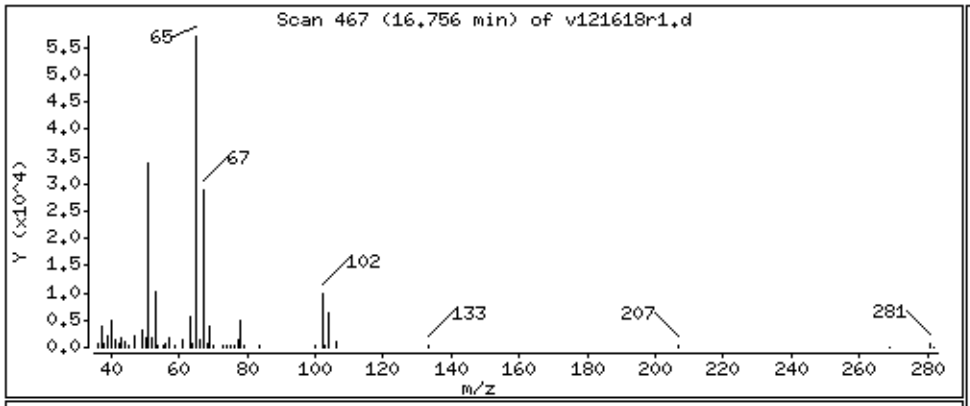
Operator: sn

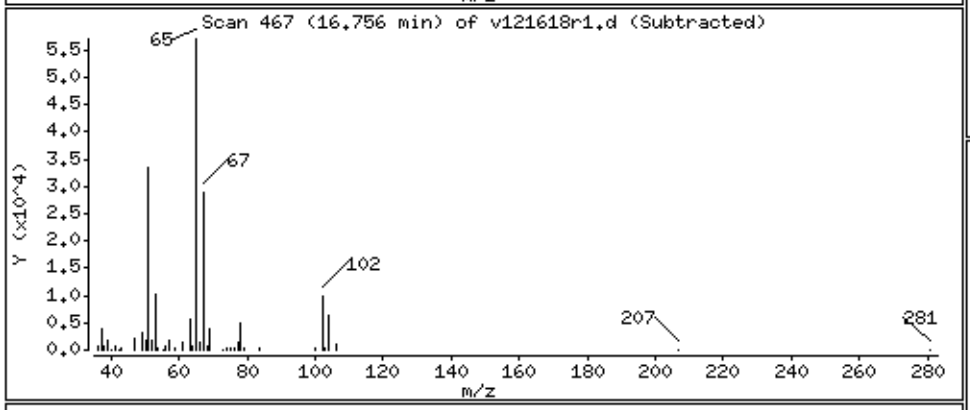
Column phase: RTx-624

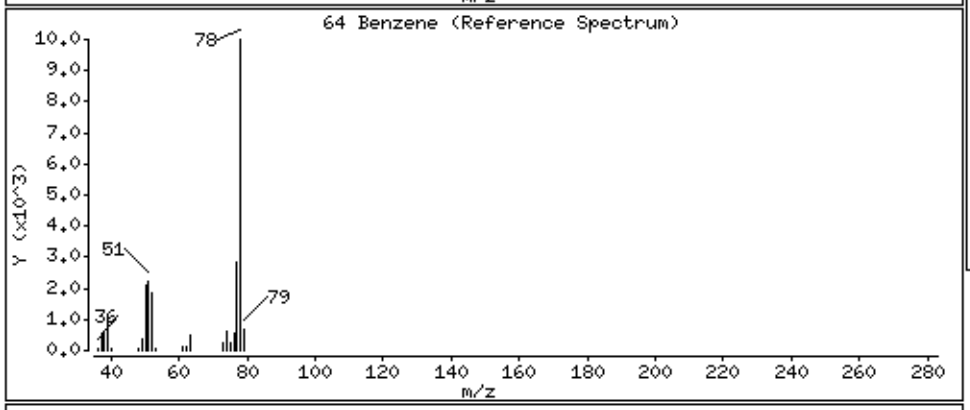
Column diameter: 0.32

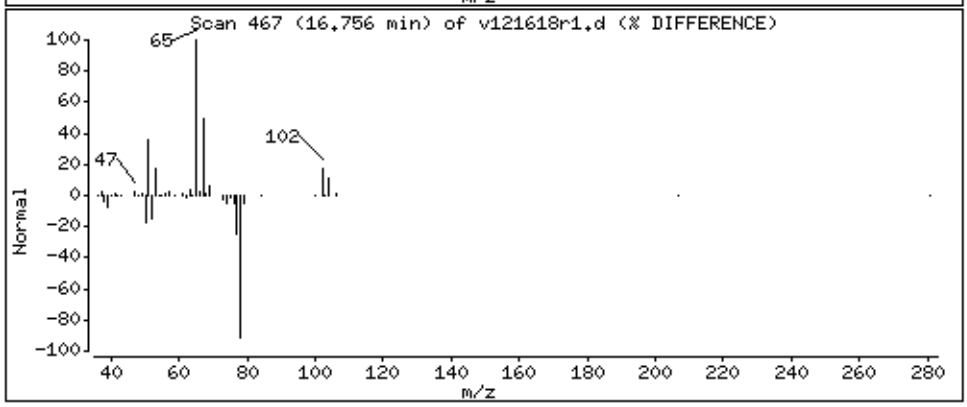
64 Benzene

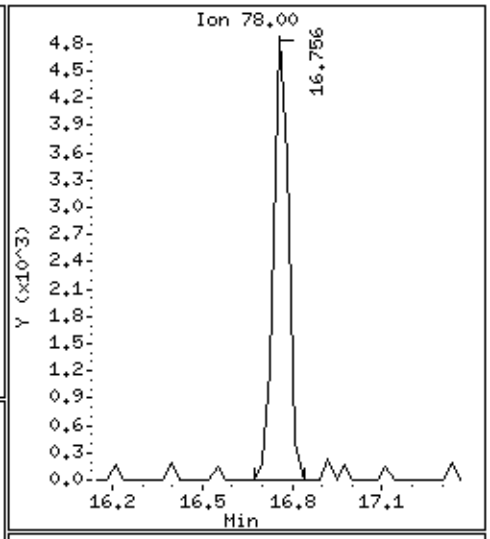
Concentration: 0.2179 PPBV

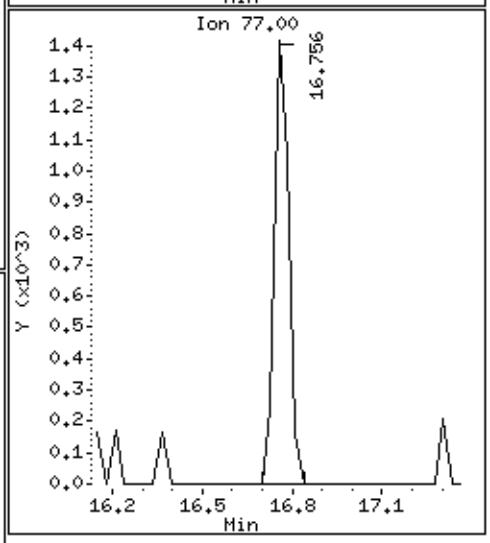












Data File: /chem/msdv.i/16Dec2014.b/v121618r1.d

Date : 16-DEC-2014 20:41

Client ID:

Instrument: msdv.i

Sample Info: 250ml #940

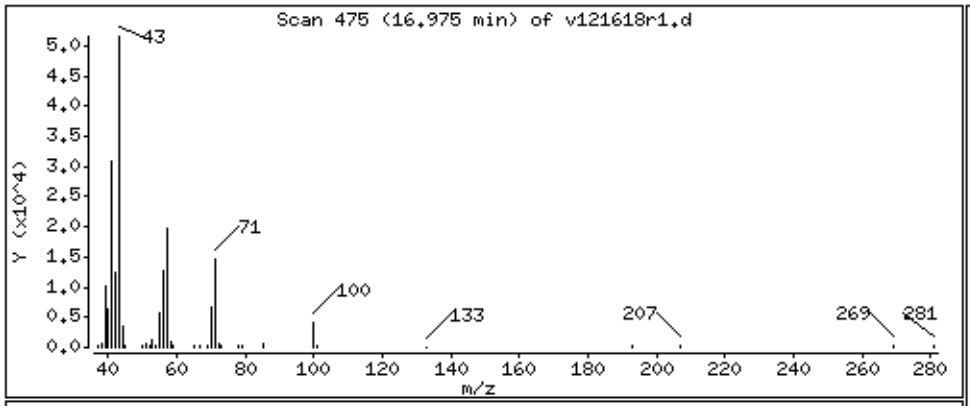
Operator: sn

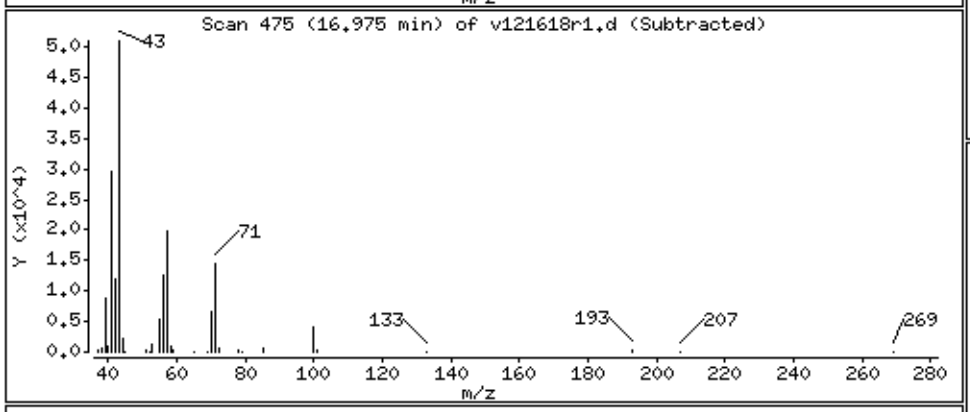
Column phase: RTx-624

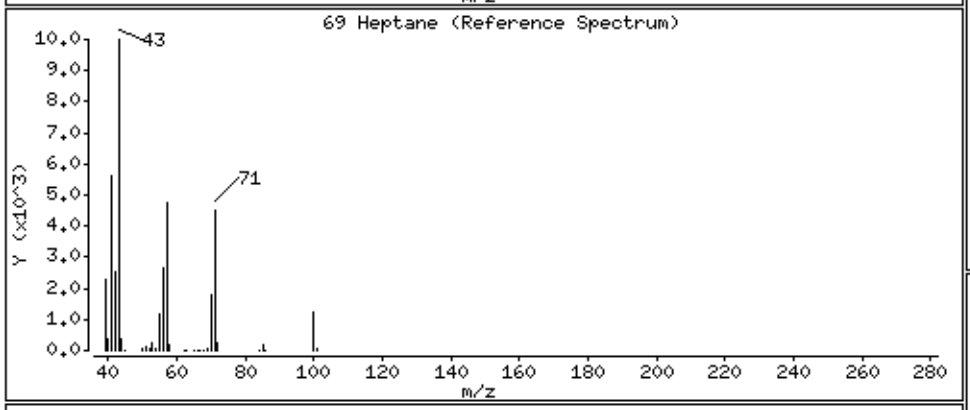
Column diameter: 0.32

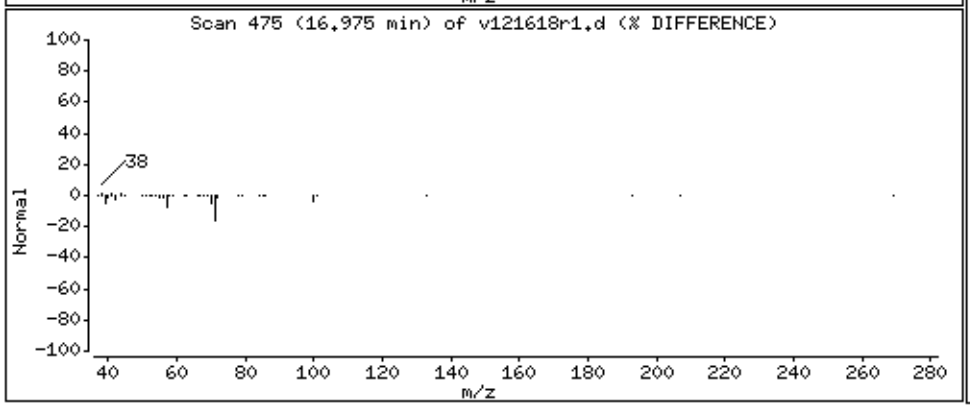
69 Heptane

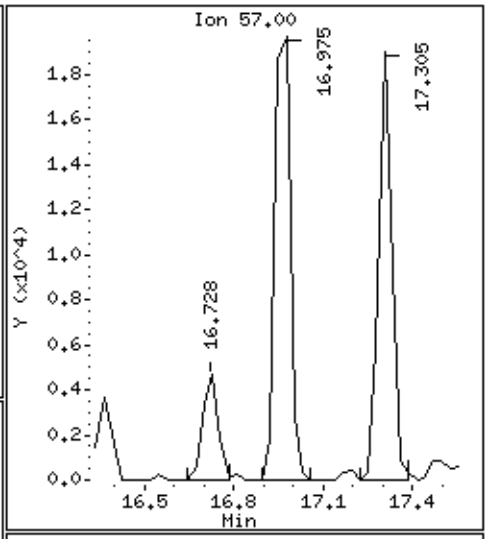
Concentration: 2.137 PPBV

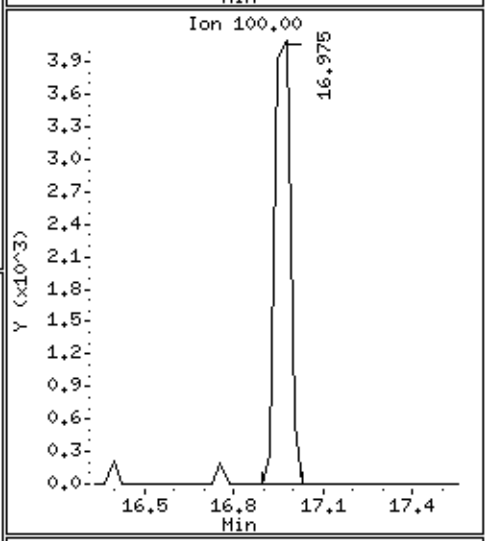


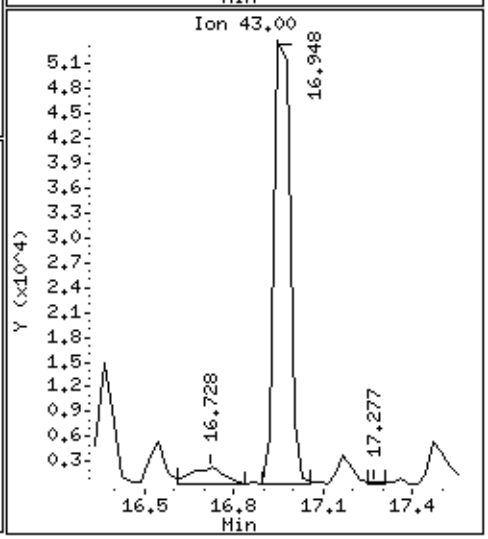












Data File: /chem/msdv.i/16Dec2014.b/v121618r1.d

Date : 16-DEC-2014 20:41

Client ID:

Instrument: msdv.i

Sample Info: 250ml #940

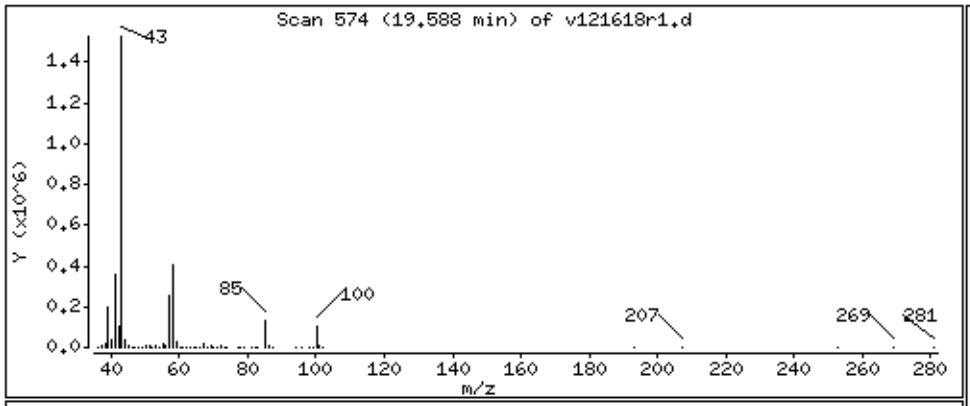
Operator: sn

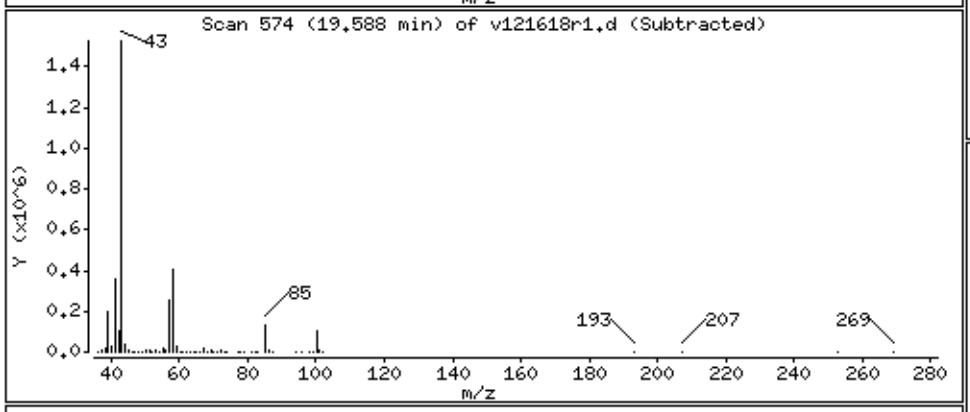
Column phase: RTx-624

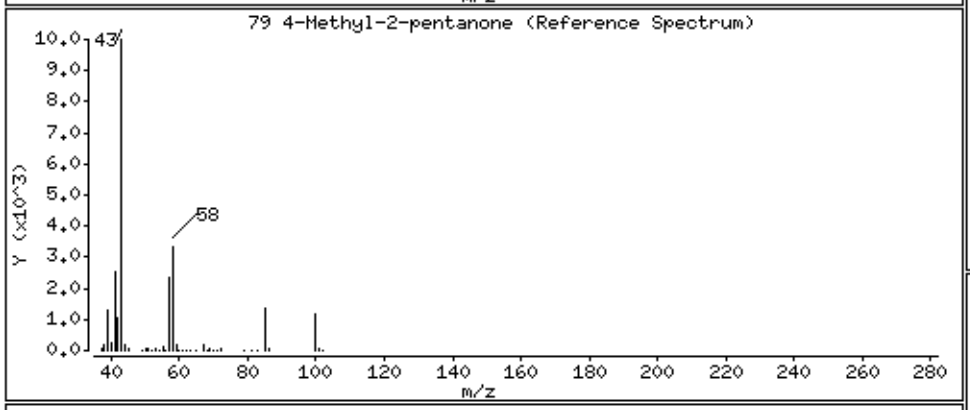
Column diameter: 0.32

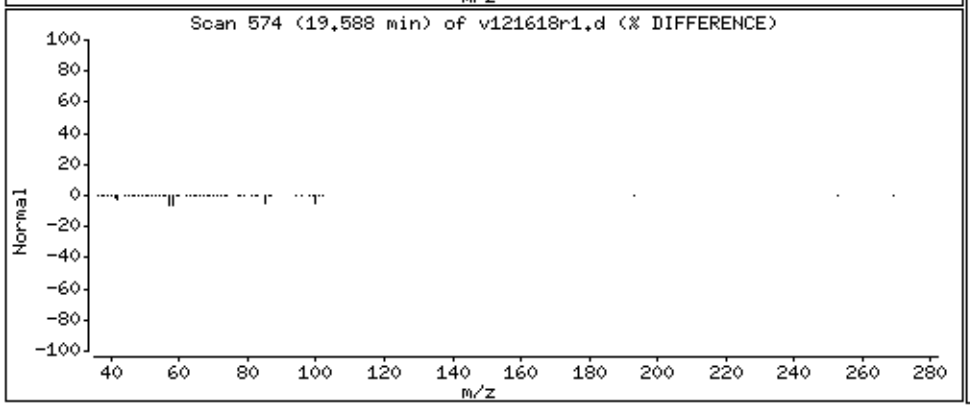
79 4-Methyl-2-pentanone

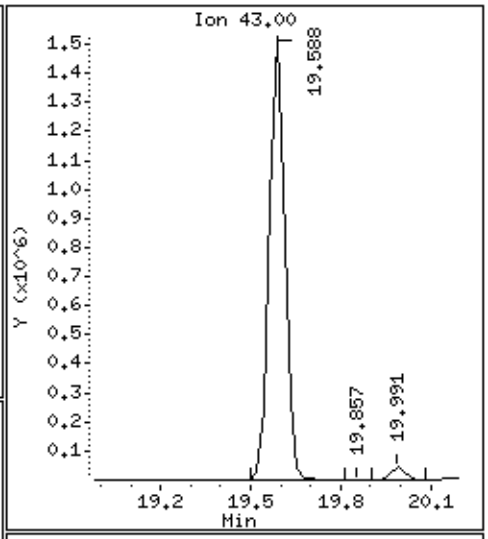
Concentration: 50.473 PPBV

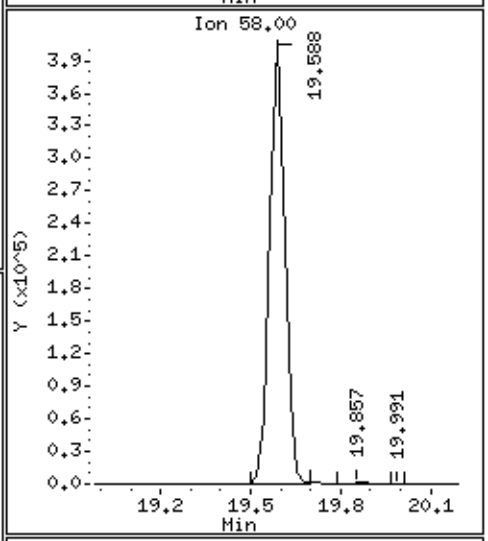


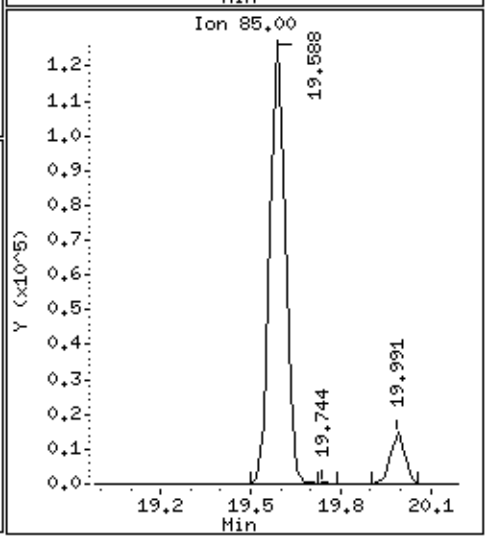












Data File: /chem/msdv.i/16Dec2014.b/v121618r1.d

Date : 16-DEC-2014 20:41

Client ID:

Instrument: msdv.i

Sample Info: 250ml #940

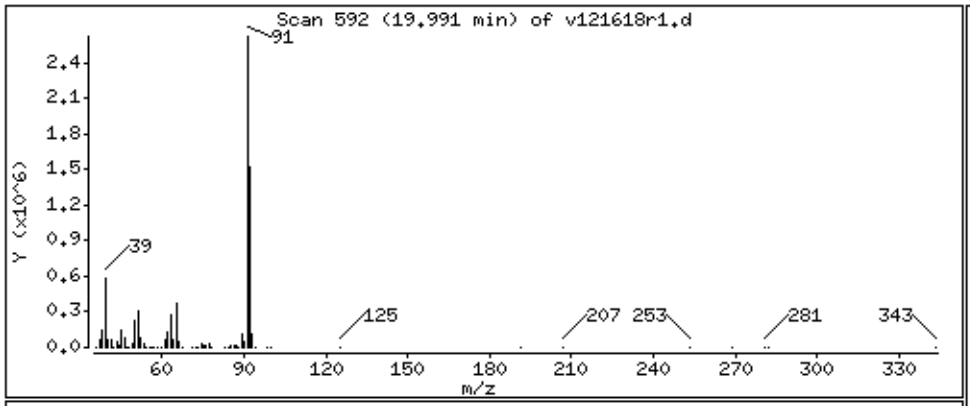
Operator: sn

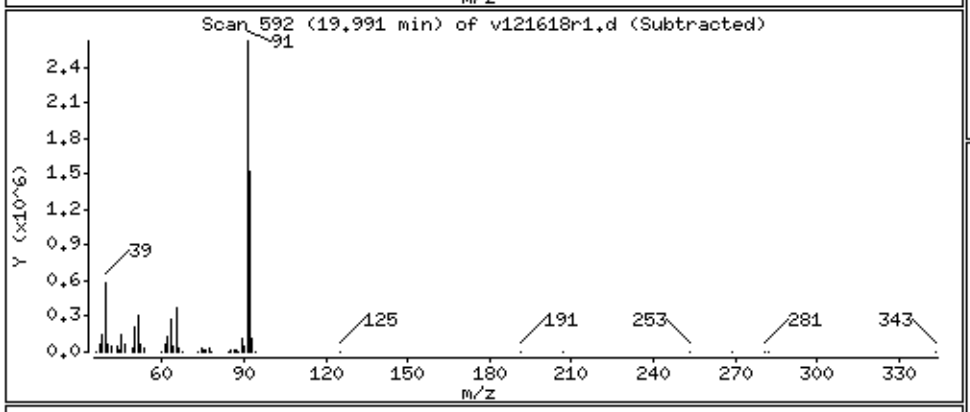
Column phase: RTx-624

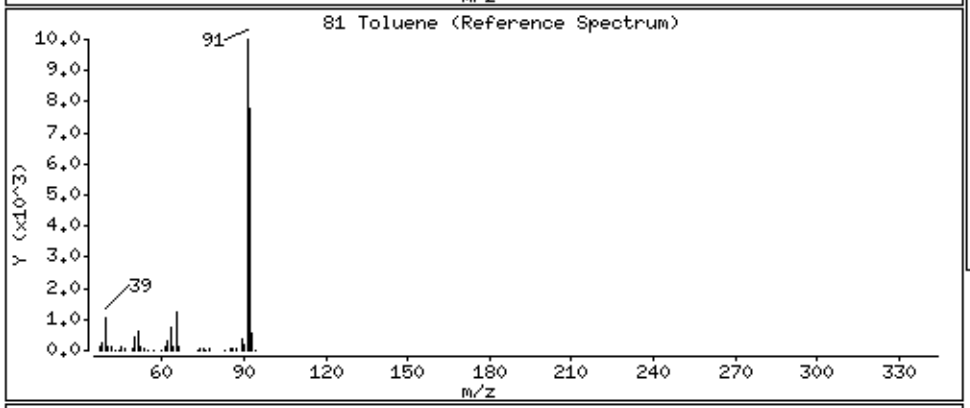
Column diameter: 0.32

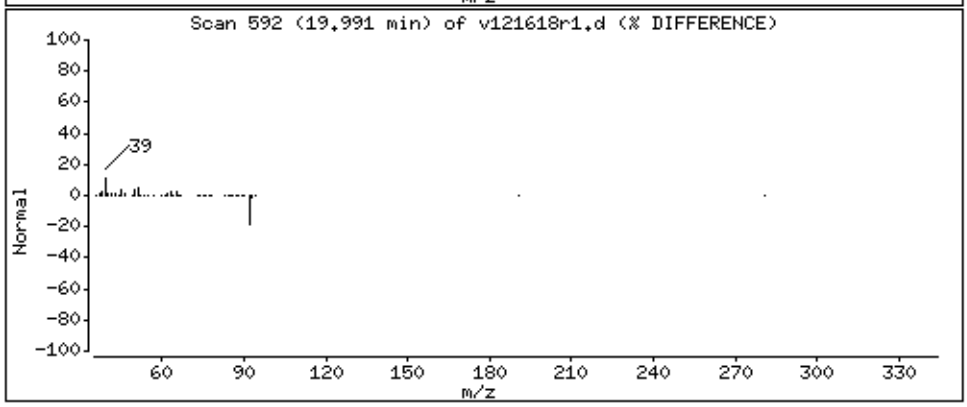
81 Toluene

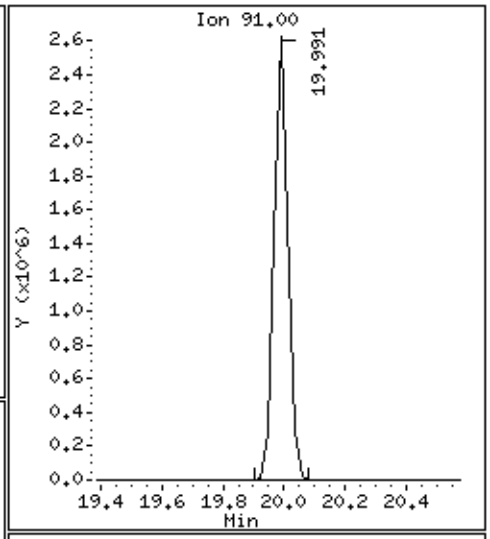
Concentration: 98.062 PPBV

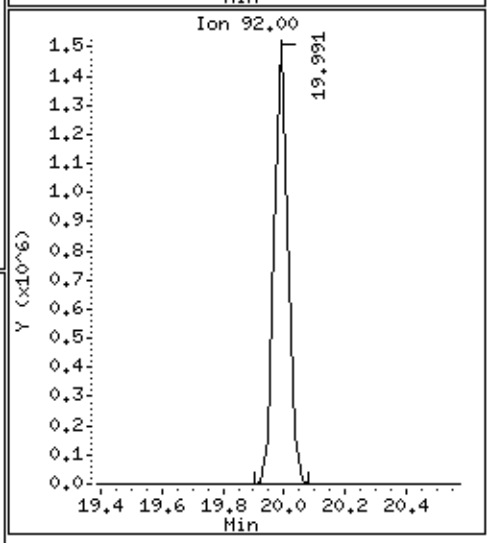












Data File: /chem/msdv.i/16Dec2014.b/v121618r1.d

Date : 16-DEC-2014 20:41

Client ID:

Instrument: msdv.i

Sample Info: 250ml #940

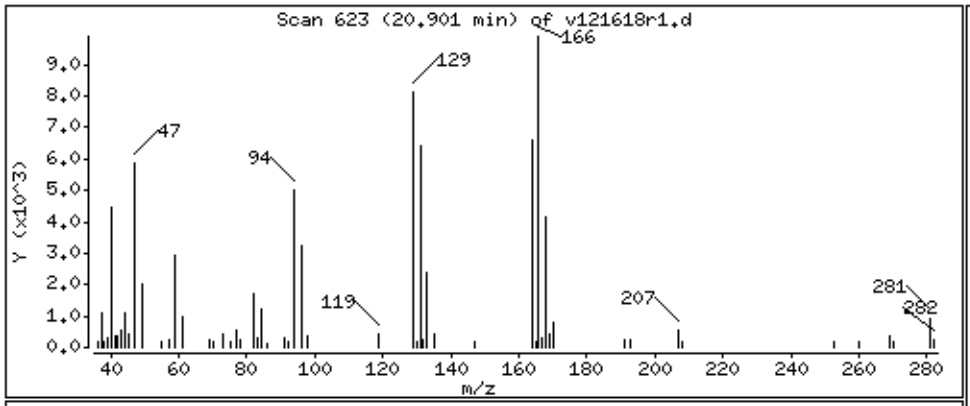
Operator: sn

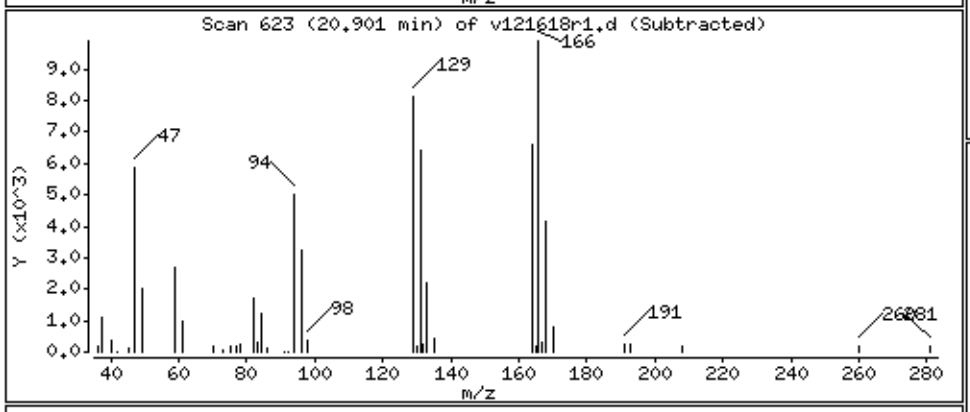
Column phase: RTx-624

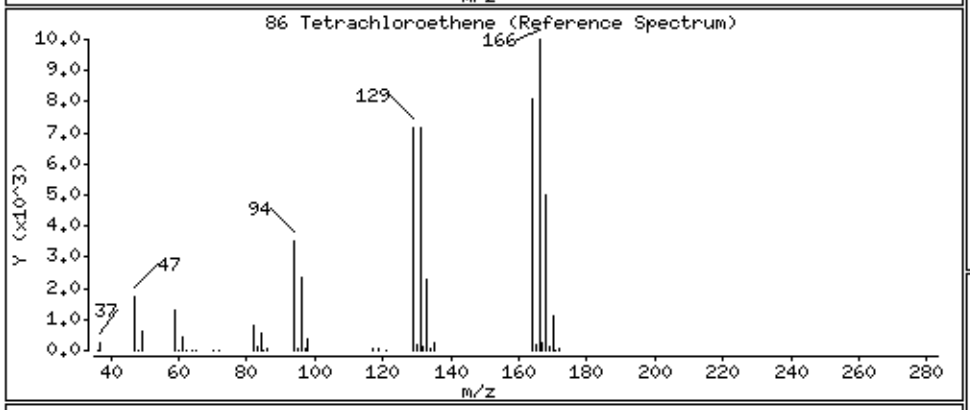
Column diameter: 0.32

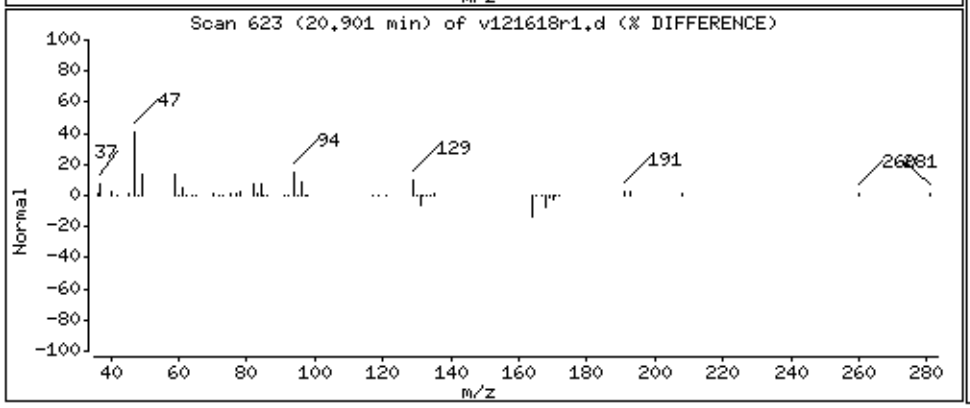
86 Tetrachloroethene

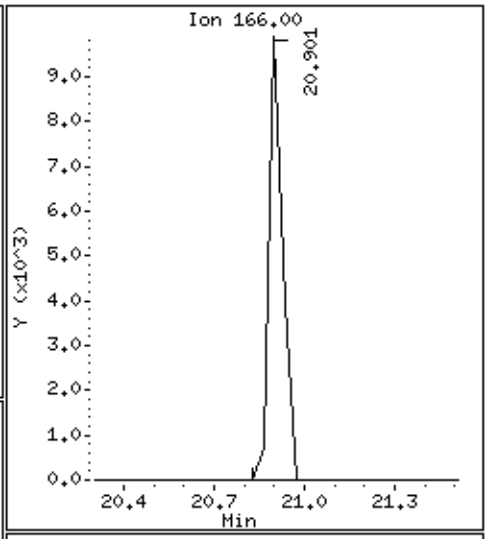
Concentration: 0.7326 PPBV

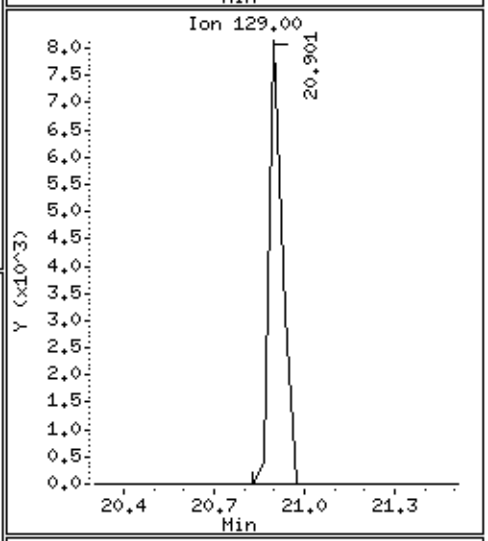


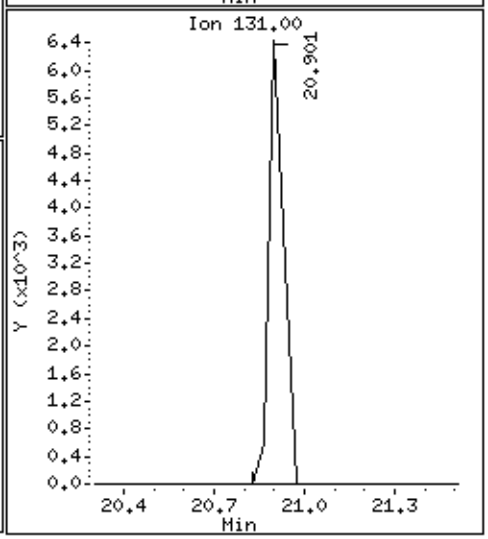












Data File: /chem/msdv.i/16Dec2014.b/v121618r1.d

Date : 16-DEC-2014 20:41

Client ID:

Instrument: msdv.i

Sample Info: 250ml #940

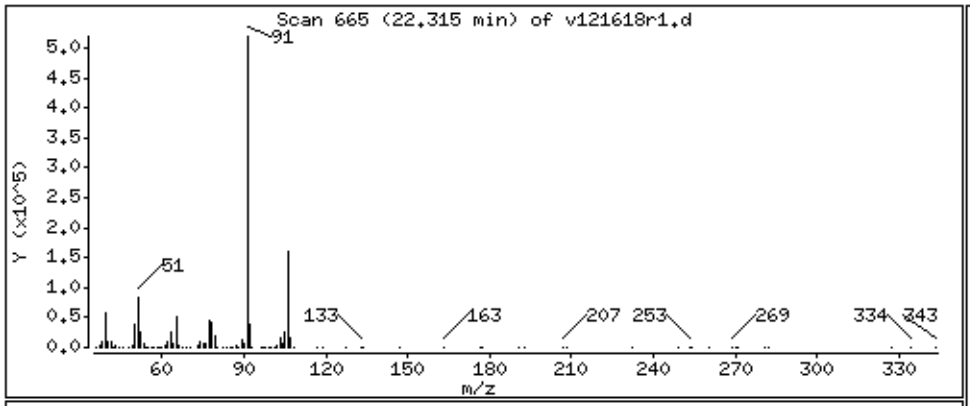
Operator: sn

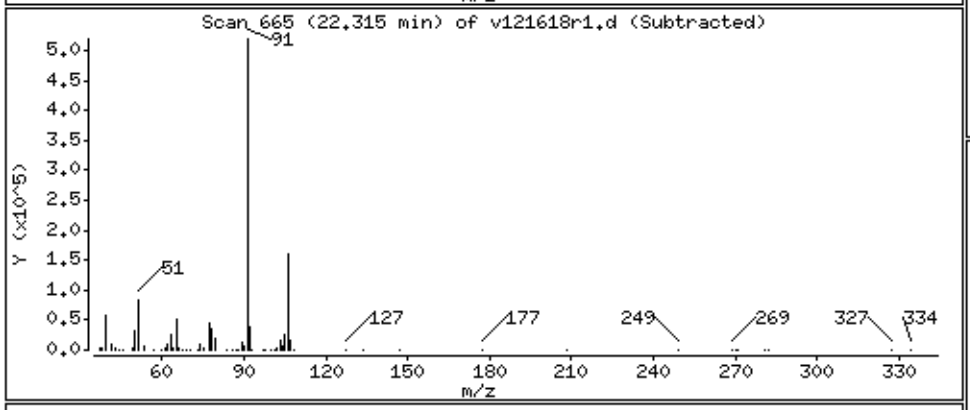
Column phase: RTx-624

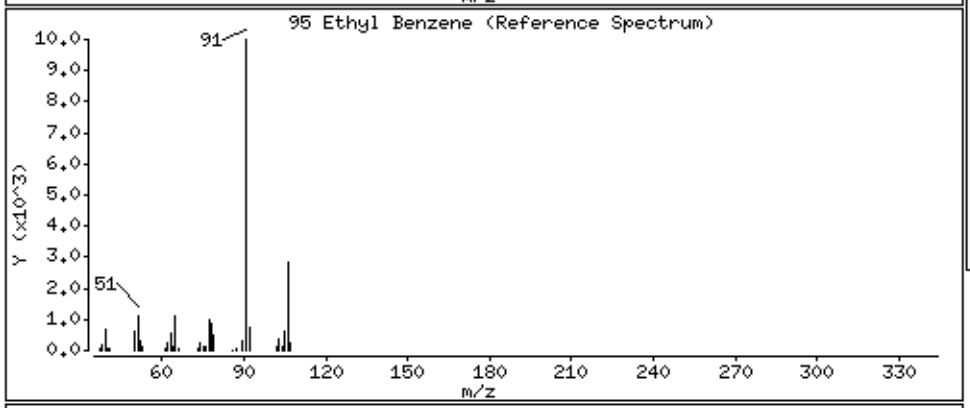
Column diameter: 0.32

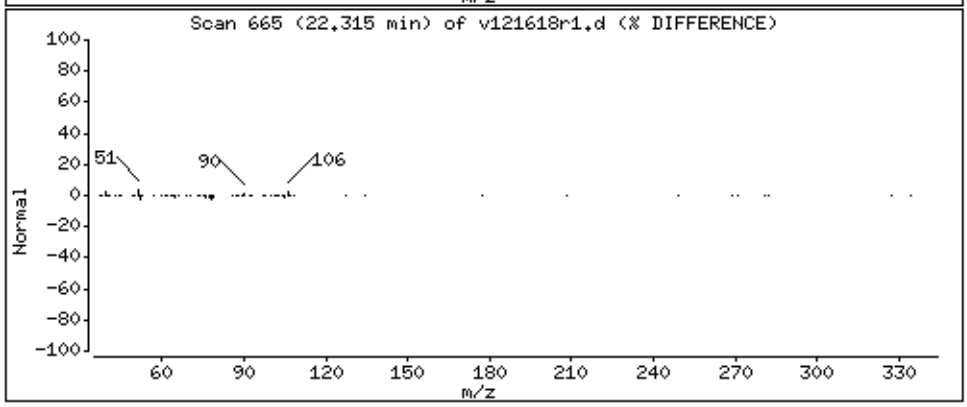
95 Ethyl Benzene

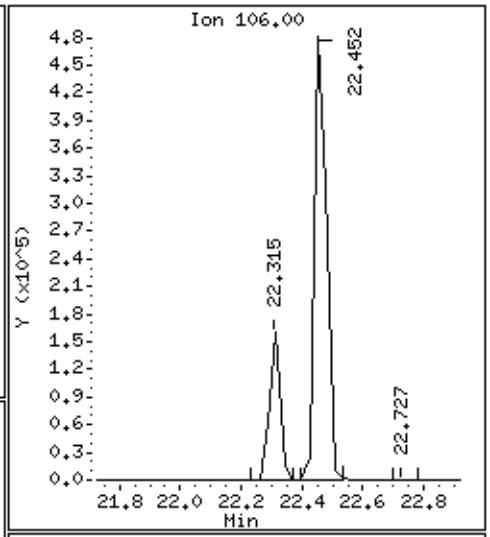
Concentration: 12.815 PPBV

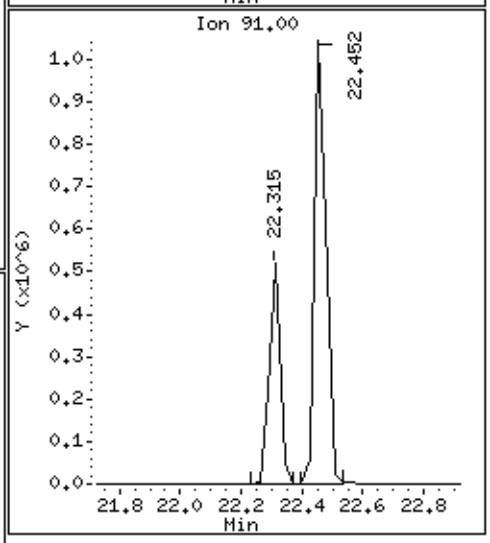












Data File: /chem/msdv.i/16Dec2014.b/v121618r1.d

Date : 16-DEC-2014 20:41

Client ID:

Instrument: msdv.i

Sample Info: 250ml #940

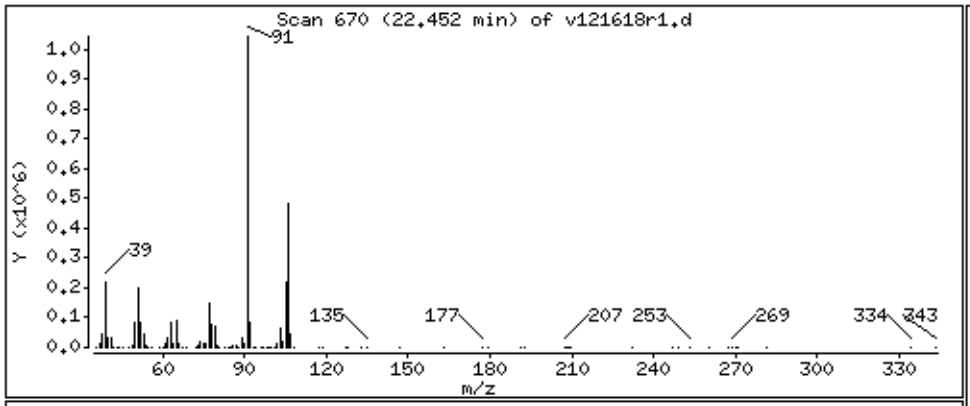
Operator: sn

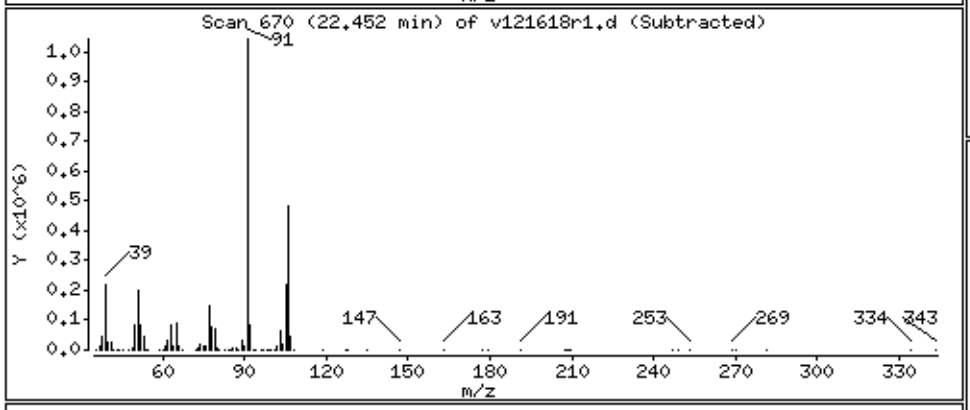
Column phase: RTx-624

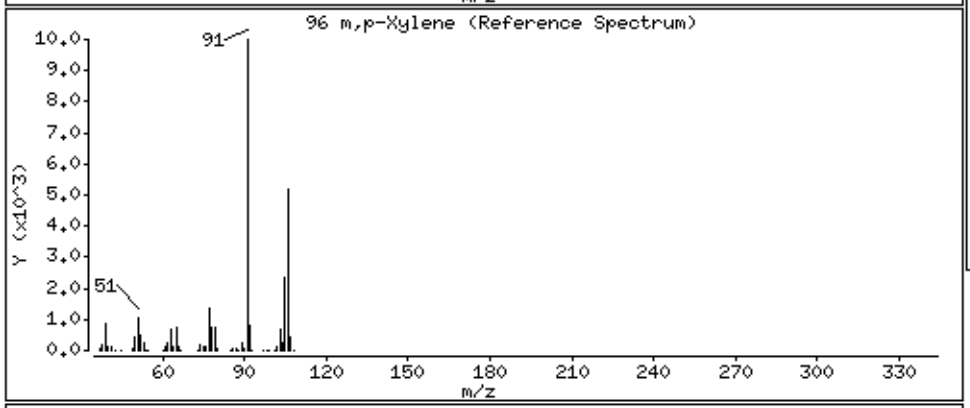
Column diameter: 0.32

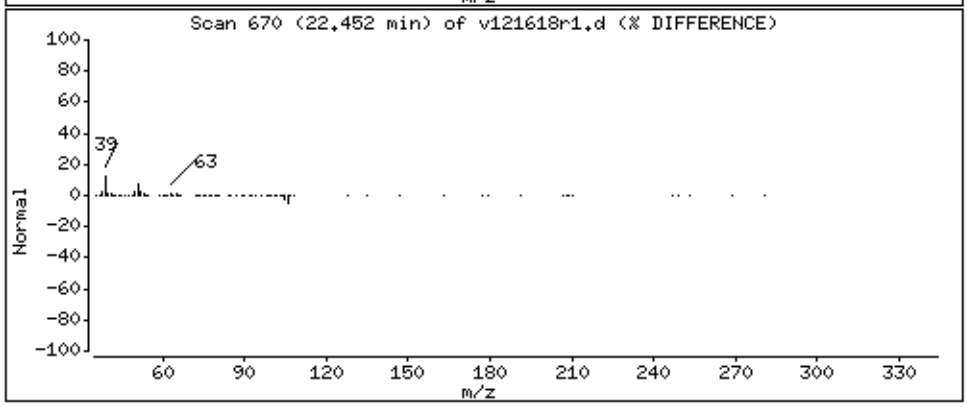
96 m,p-Xylene

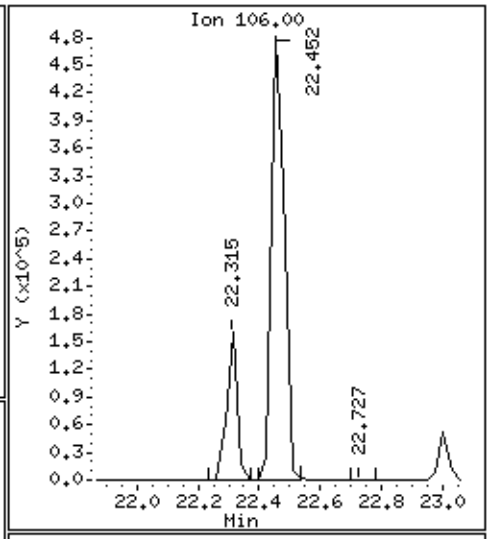
Concentration: 44.998 PPBV

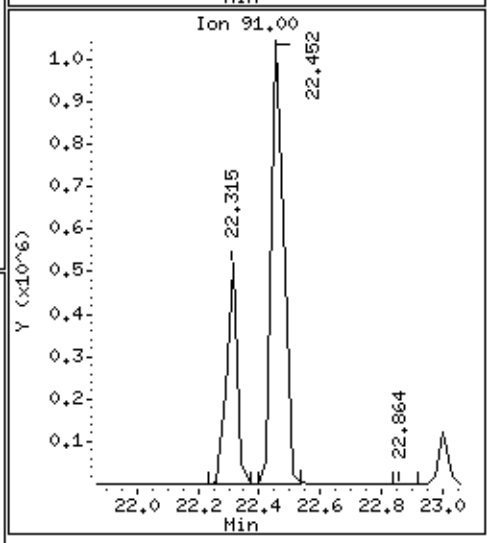












Data File: /chem/msdv.i/16Dec2014.b/v121618r1.d

Date : 16-DEC-2014 20:41

Client ID:

Instrument: msdv.i

Sample Info: 250ml #940

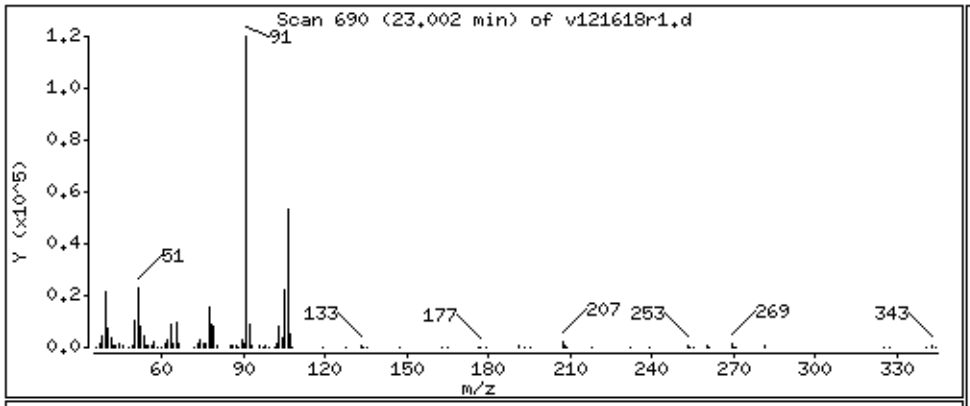
Operator: sn

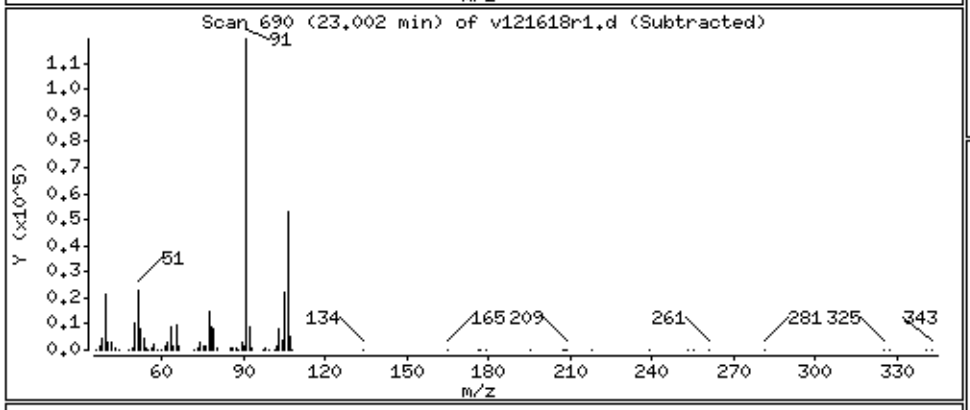
Column phase: RTx-624

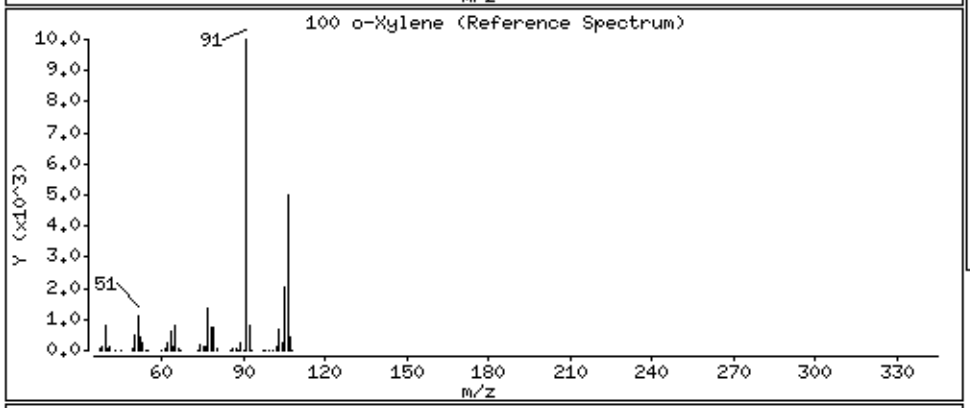
Column diameter: 0.32

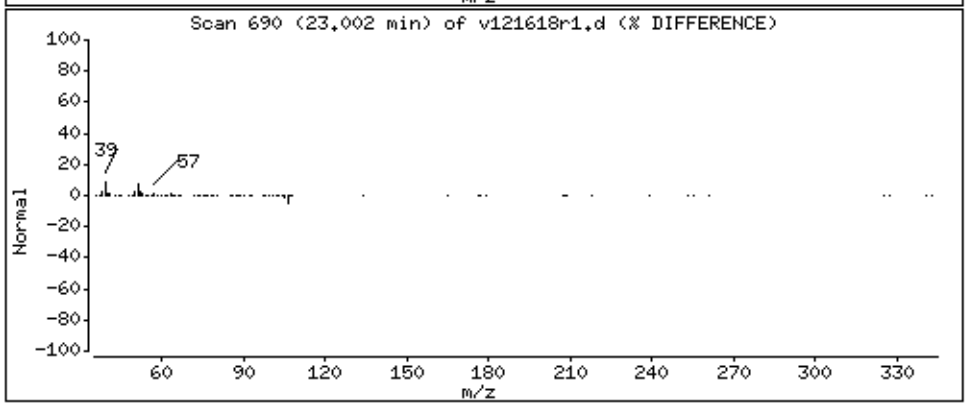
100 o-Xylene

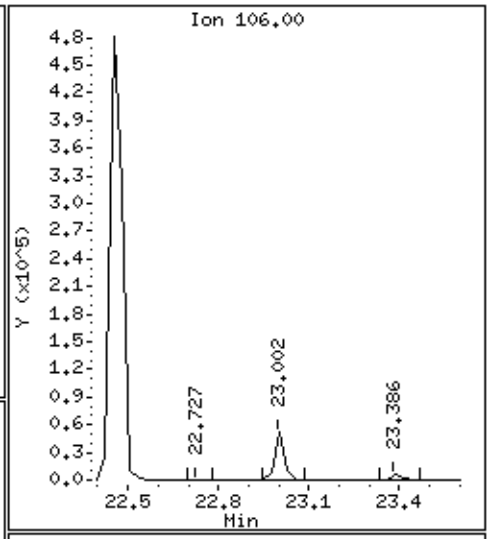
Concentration: 4.117 PPBV

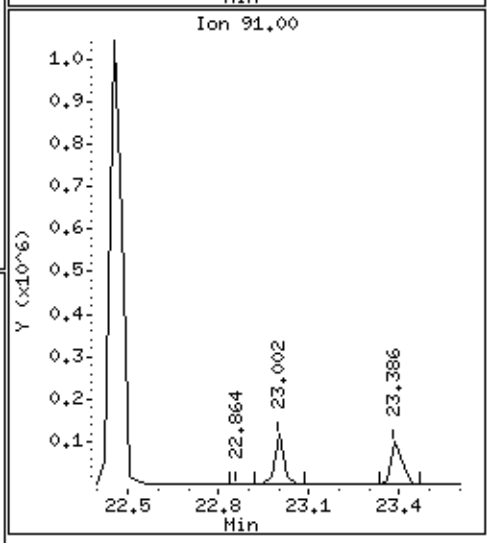












Data File: /chem/msdv.i/16Dec2014.b/v121618r1.d

Date : 16-DEC-2014 20:41

Client ID:

Instrument: msdv.i

Sample Info: 250ml #940

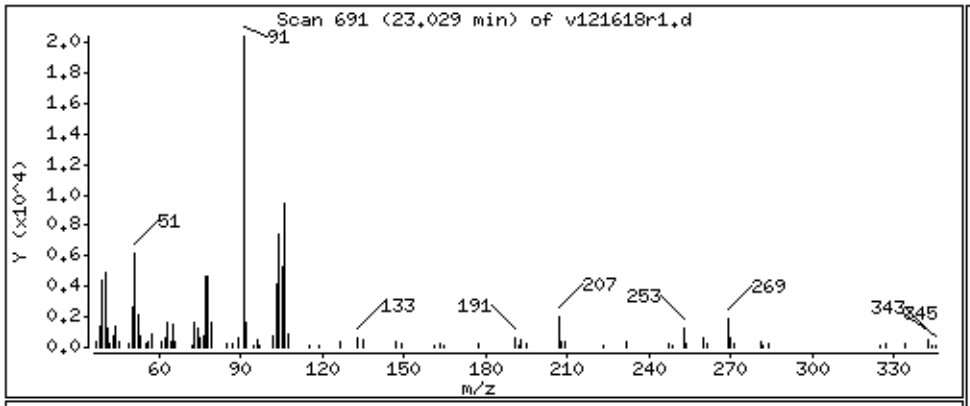
Operator: sn

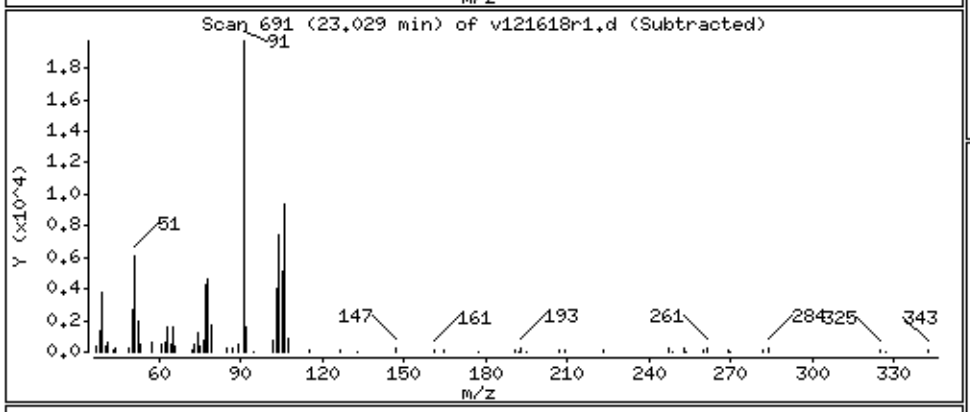
Column phase: RTx-624

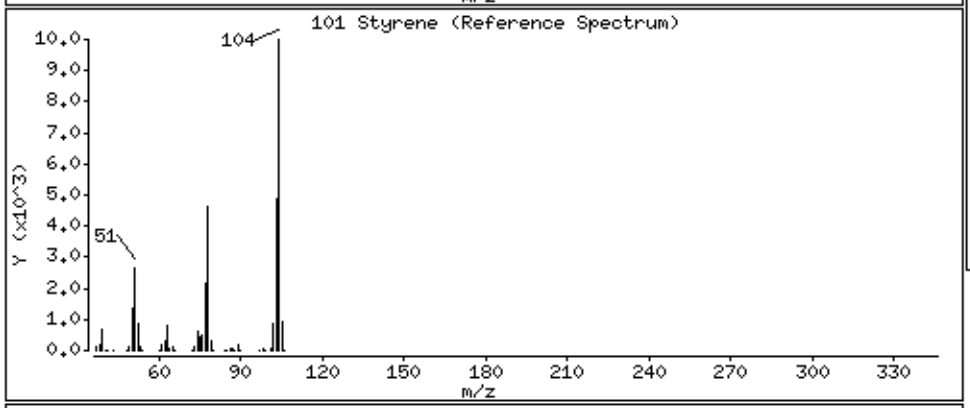
Column diameter: 0.32

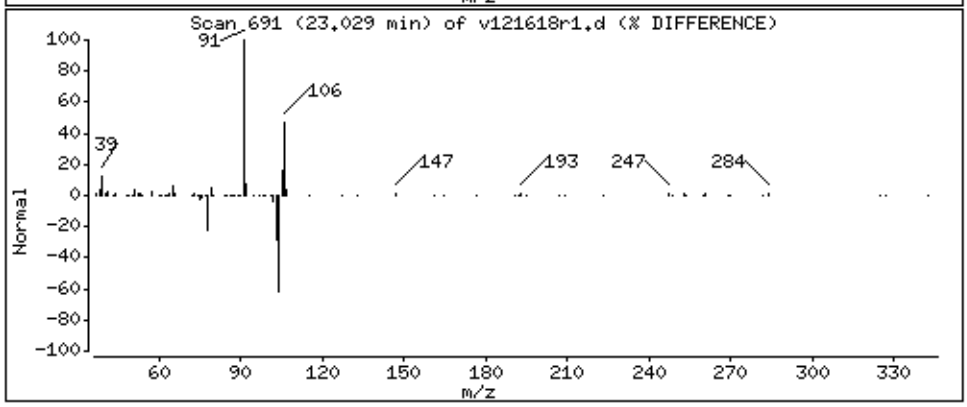
101 Styrene

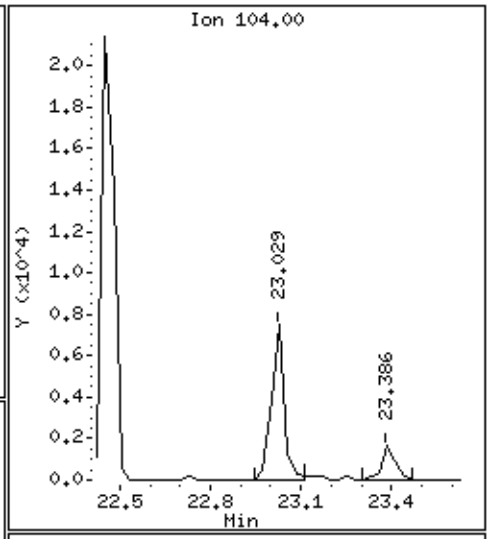
Concentration: 0.5421 PPBV

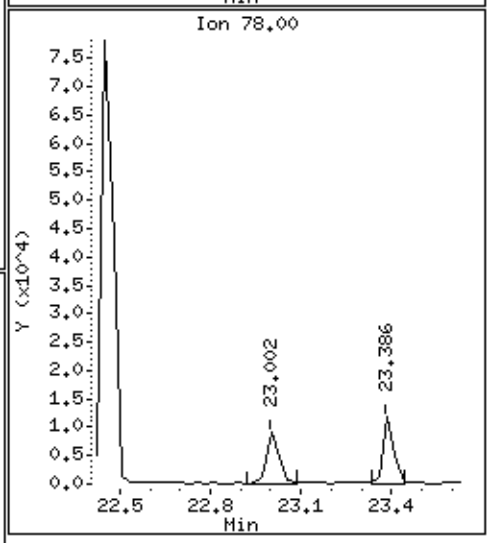












Data File: /chem/msdv.i/16Dec2014.b/v121618r1.d

Date : 16-DEC-2014 20:41

Client ID:

Instrument: msdv.i

Sample Info: 250ml #940

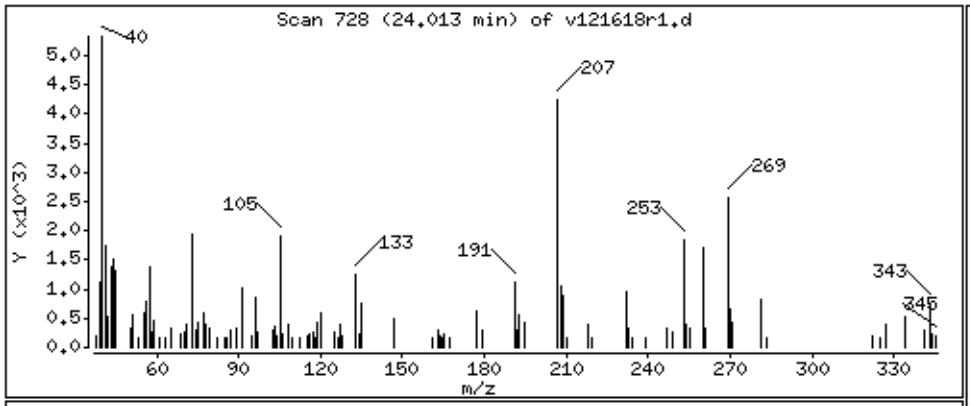
Operator: sn

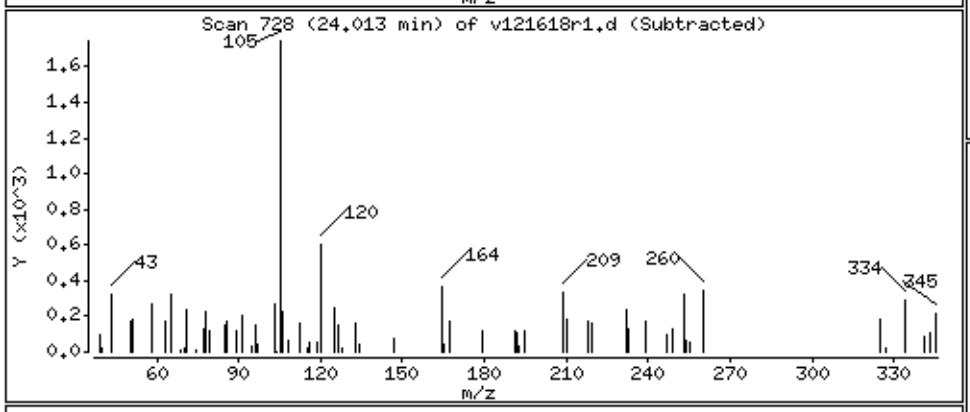
Column phase: RTx-624

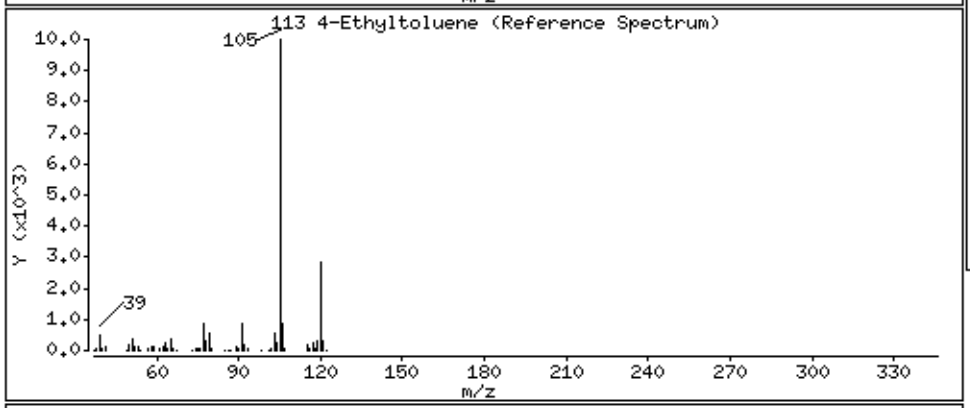
Column diameter: 0.32

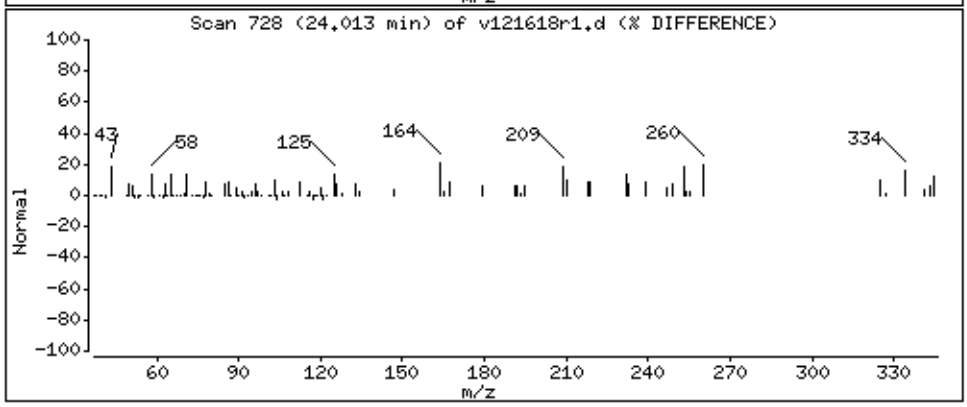
113 4-Ethyltoluene

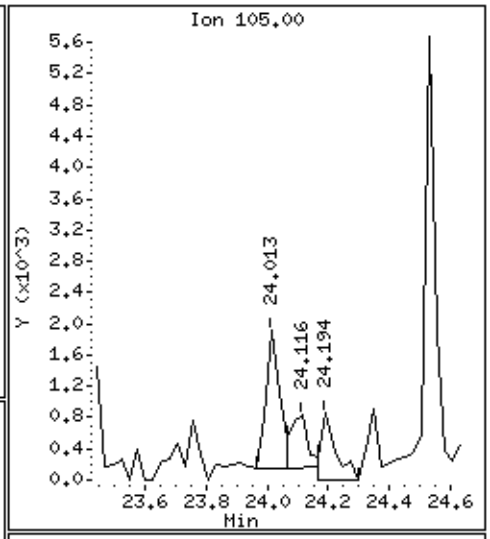
Concentration: 0.1083 PPBV

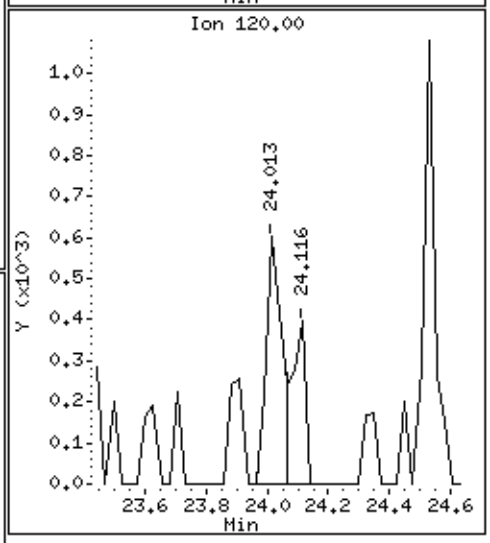












Data File: /chem/msdv.i/16Dec2014.b/v121618r1.d

Date : 16-DEC-2014 20:41

Client ID:

Instrument: msdv.i

Sample Info: 250ml #940

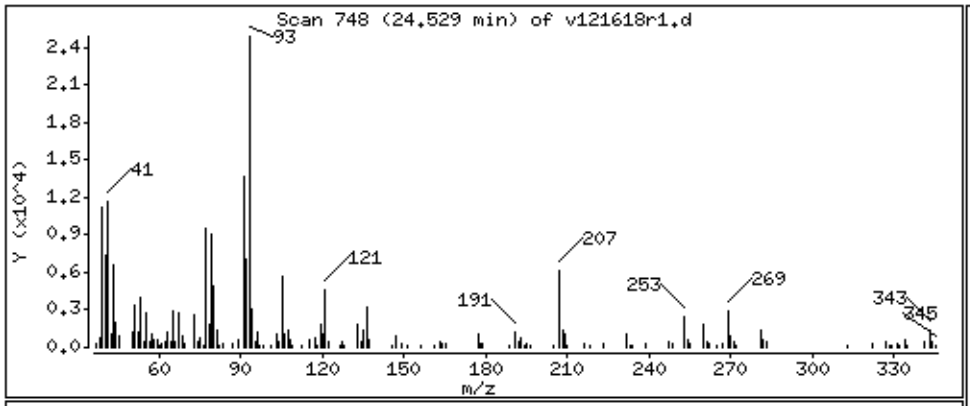
Operator: sn

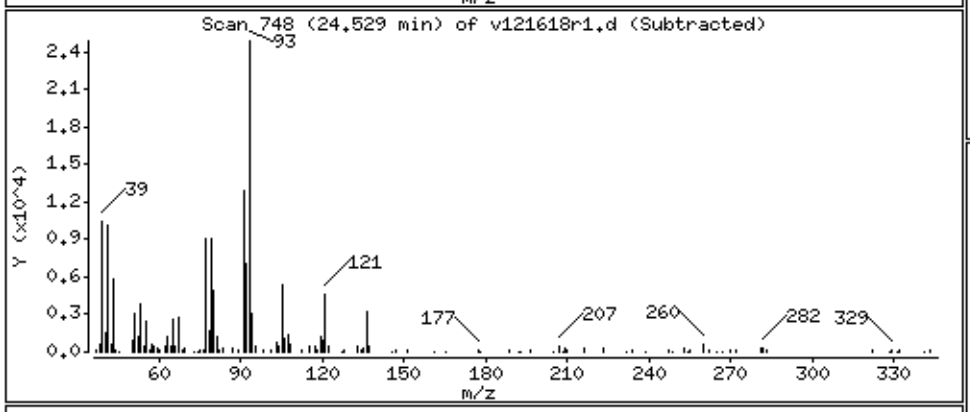
Column phase: RTx-624

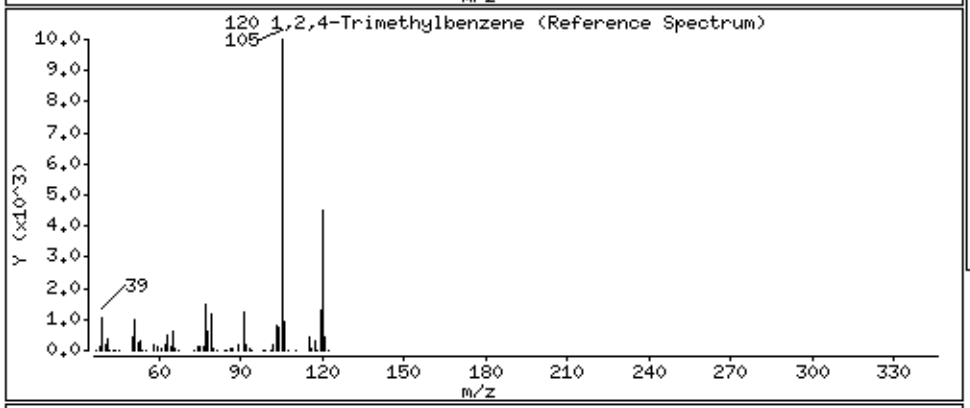
Column diameter: 0.32

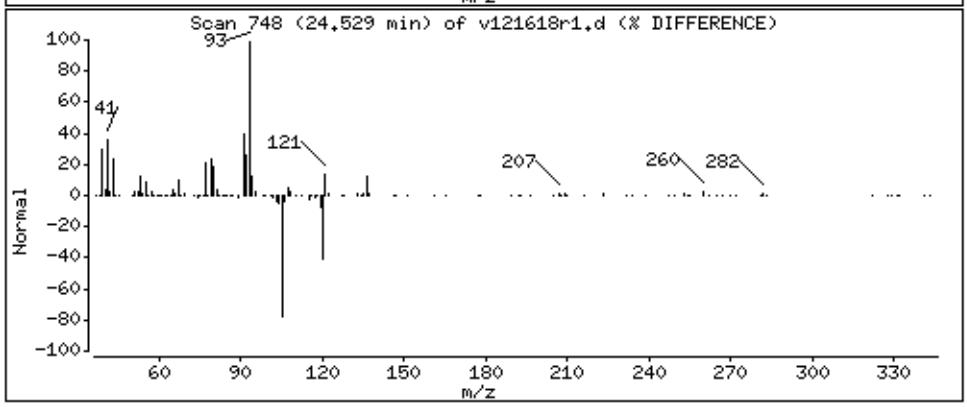
120 1,2,4-Trimethylbenzene

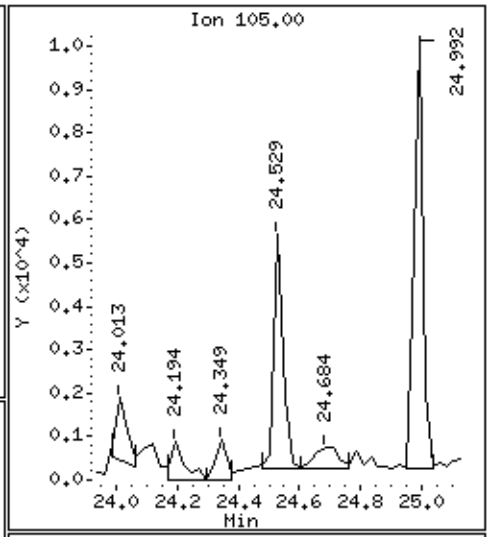
Concentration: 0.3234 PPBV

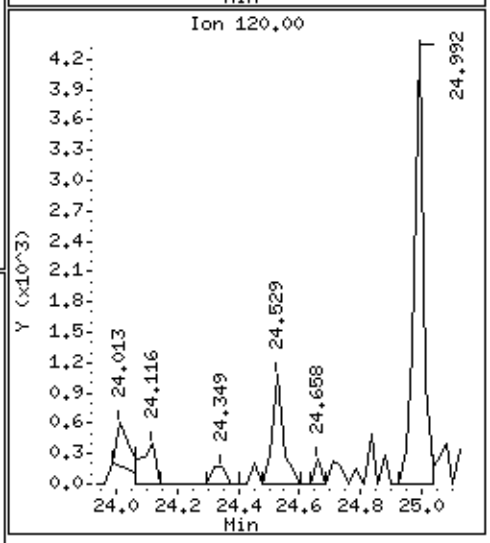












eurofins | Air Toxics

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

Client Sample ID: B5IA-7 (2014)

Lab ID#: 1412152AR1-04A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.89	0.47 J	4.4	2.3 J
Chloromethane	0.89	0.87 J	1.8	1.8 J
Freon 11	0.18	0.20	1.0	1.1
Ethanol	0.89	380 J0E	1.7	720 J0E
Freon 113	0.18	0.051 J	1.4	0.39 J
Acetone	0.89	240 E	2.1	580 E
2-Propanol	0.89	160 E	2.2	400 E
Methylene Chloride	0.36	65	1.2	230
Methyl tert-butyl ether	0.18	1.5	0.64	5.3
Hexane	0.18	0.22	0.63	0.80
2-Butanone (Methyl Ethyl Ketone)	0.89	0.90	2.6	2.6
Tetrahydrofuran	0.89	3.6	2.6	10
Chloroform	0.18	0.34	0.87	1.6
Cyclohexane	0.18	0.11 J	0.61	0.38 J
2,2,4-Trimethylpentane	0.89	0.14 J	4.2	0.64 J
Benzene	0.18	0.23	0.57	0.74
Heptane	0.18	2.8	0.73	11
4-Methyl-2-pentanone	0.18	71	0.73	290
Toluene	0.18	140 E	0.67	520 E
2-Hexanone	0.89	0.16 J	3.6	0.68 J
Ethyl Benzene	0.18	18	0.77	81
m,p-Xylene	0.18	68	0.77	290
o-Xylene	0.18	6.2	0.77	27
Styrene	0.18	0.85	0.76	3.6
4-Ethyltoluene	0.18	0.13 J	0.88	0.65 J
1,2,4-Trimethylbenzene	0.18	0.41	0.88	2.0
1,4-Dichlorobenzene	0.18	0.051 J	1.1	0.30 J

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Client Sample ID: B5IA-7 (2014)

Lab ID#: 1412152AR1-04A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**v121619r1**	**Date of Collection:**	**12/9/14 2:20:00 PM**
Dil. Factor:	**1.78**	**Date of Analysis:**	**12/16/14 09:39 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.89	0.47 J	4.4	2.3 J
Freon 114	0.18	Not Detected	1.2	Not Detected
Chloromethane	0.89	0.87 J	1.8	1.8 J
Vinyl Chloride	0.18	Not Detected	0.46	Not Detected
1,3-Butadiene	0.18	Not Detected	0.39	Not Detected
Bromomethane	0.89	Not Detected	3.4	Not Detected
Chloroethane	0.89	Not Detected	2.3	Not Detected
Freon 11	0.18	0.20	1.0	1.1
Ethanol	0.89	380 J0E	1.7	720 J0E
Freon 113	0.18	0.051 J	1.4	0.39 J
1,1-Dichloroethene	0.18	Not Detected	0.70	Not Detected
Acetone	0.89	240 E	2.1	580 E
2-Propanol	0.89	160 E	2.2	400 E
Carbon Disulfide	0.89	Not Detected	2.8	Not Detected
3-Chloropropene	0.89	Not Detected	2.8	Not Detected
Methylene Chloride	0.36	65	1.2	230
Methyl tert-butyl ether	0.18	1.5	0.64	5.3
trans-1,2-Dichloroethene	0.18	Not Detected	0.70	Not Detected
Hexane	0.18	0.22	0.63	0.80
1,1-Dichloroethane	0.18	Not Detected	0.72	Not Detected
2-Butanone (Methyl Ethyl Ketone)	0.89	0.90	2.6	2.6
cis-1,2-Dichloroethene	0.18	Not Detected	0.70	Not Detected
Tetrahydrofuran	0.89	3.6	2.6	10
Chloroform	0.18	0.34	0.87	1.6
1,1,1-Trichloroethane	0.18	Not Detected	0.97	Not Detected
Cyclohexane	0.18	0.11 J	0.61	0.38 J
Carbon Tetrachloride	0.18	Not Detected	1.1	Not Detected
2,2,4-Trimethylpentane	0.89	0.14 J	4.2	0.64 J
Benzene	0.18	0.23	0.57	0.74
1,2-Dichloroethane	0.18	Not Detected	0.72	Not Detected
Heptane	0.18	2.8	0.73	11
Trichloroethene	0.18	Not Detected	0.96	Not Detected
1,2-Dichloropropane	0.18	Not Detected	0.82	Not Detected
1,4-Dioxane	0.18	Not Detected	0.64	Not Detected
Bromodichloromethane	0.18	Not Detected	1.2	Not Detected
cis-1,3-Dichloropropene	0.18	Not Detected	0.81	Not Detected
4-Methyl-2-pentanone	0.18	71	0.73	290
Toluene	0.18	140 E	0.67	520 E
trans-1,3-Dichloropropene	0.18	Not Detected	0.81	Not Detected
1,1,2-Trichloroethane	0.18	Not Detected	0.97	Not Detected
Tetrachloroethene	0.18	Not Detected	1.2	Not Detected
2-Hexanone	0.89	0.16 J	3.6	0.68 J

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Client Sample ID: B5IA-7 (2014)

Lab ID#: 1412152AR1-04A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**v121619r1**	**Date of Collection:**	**12/9/14 2:20:00 PM**
Dil. Factor:	**1.78**	**Date of Analysis:**	**12/16/14 09:39 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Dibromochloromethane	0.18	Not Detected	1.5	Not Detected
1,2-Dibromoethane (EDB)	0.18	Not Detected	1.4	Not Detected
Chlorobenzene	0.18	Not Detected	0.82	Not Detected
Ethyl Benzene	0.18	18	0.77	81
m,p-Xylene	0.18	68	0.77	290
o-Xylene	0.18	6.2	0.77	27
Styrene	0.18	0.85	0.76	3.6
Bromoform	0.18	Not Detected	1.8	Not Detected
Cumene	0.18	Not Detected	0.88	Not Detected
1,1,2,2-Tetrachloroethane	0.18	Not Detected	1.2	Not Detected
Propylbenzene	0.18	Not Detected	0.88	Not Detected
4-Ethyltoluene	0.18	0.13 J	0.88	0.65 J
1,3,5-Trimethylbenzene	0.18	Not Detected	0.88	Not Detected
1,2,4-Trimethylbenzene	0.18	0.41	0.88	2.0
1,3-Dichlorobenzene	0.18	Not Detected UJ	1.1	Not Detected UJ
1,4-Dichlorobenzene	0.18	0.051 J	1.1	0.30 J
alpha-Chlorotoluene	0.89	Not Detected UJ	4.6	Not Detected UJ
1,2-Dichlorobenzene	0.18	Not Detected UJ	1.1	Not Detected UJ
1,2,4-Trichlorobenzene	0.89	Not Detected	6.6	Not Detected
Hexachlorobutadiene	0.89	Not Detected UJ	9.5	Not Detected UJ
Naphthalene	0.89	Not Detected	4.7	Not Detected

J = Estimated value.
J0 = Estimated value due to bias in the CCV.
E = Exceeds instrument calibration range.
UJ = Analyte associated with low bias in the CCV and/or LCS.
Container Type: 6 Liter Summa Canister (100% Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	104	70-130
Toluene-d8	109	70-130
4-Bromofluorobenzene	101	70-130

Eurofins Air Toxics Inc.

TO15/Modified TO-14A

Data file : /chem/msdv.i/16Dec2014.b/v121619r1.d
Lab Smp Id: 1412152AR1-04A
Inj Date : 16-DEC-2014 21:39
Operator : sn Inst ID: msdv.i
Smp Info : 250ml #33889
Misc Info : 8.0"Hg -> 4.5psi
Comment : Low Level GC-MS
Method : /chem/msdv.i/16Dec2014.b/v14l1006d.m
Meth Date : 01-Jul-2015 09:03 sblack Quant Type: ISTD
Cal Date : 03-NOV-2014 11:17 Cal File: v110307.d
Als bottle: 1
Dil Factor: 1.78000
Integrator: HP RTE Compound Sublist: And19256r1.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
* 54 Bromochloromethane						CAS #: 74-97-5	
15.933	15.933 (1.000)	130	95619	5.00000		80.00- 120.00	100.00
15.933	15.933 (1.000)	128	75725			47.55- 107.55	79.19
15.933	15.933 (1.000)	49	256141			213.64- 273.64	267.88
* 71 1,4-Difluorobenzene						CAS #: 540-36-3	
17.305	17.305 (1.000)	114	413145	5.00000		80.00- 120.00	100.00
17.305	17.305 (1.000)	88	70497			0.00- 46.17	17.06
* 92 Chlorobenzene-d5						CAS #: 3114-55-4	
22.205	22.205 (1.000)	117	330263	5.00000		80.00- 120.00	100.00
22.205	22.205 (1.000)	82	206054			28.56- 88.56	62.39
$ 65 1,2-Dichloroethane-d4						CAS #: 17060-07-0	
16.756	16.756 (1.052)	65	183214	5.22091	5.221	80.00- 120.00	100.00
16.756	16.756 (1.052)	67	92885			28.37- 88.37	50.70
$ 80 Toluene-d8						CAS #: 2037-26-5	
19.856	19.879 (1.147)	98	432728	5.44775	5.448	80.00- 120.00	100.00
19.856	19.879 (1.147)	70	53921			0.00- 41.90	12.46

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

$  80 Toluene-d8 (continued)
 19.856  19.879 (1.147)   100    270018                    34.60-  94.60    62.40
-------------------------------------------------------------------------------
$ 106 Bromofluorobenzene                            CAS #: 460-00-4
 23.678  23.704 (1.066)   174    144007 5.07026    5.070  80.00- 120.00   100.00
 23.678  23.704 (1.066)    95    209681                  113.85- 173.85   145.61
 23.678  23.704 (1.066)   176    138773                    68.89- 128.89    96.37
-------------------------------------------------------------------------------
    4 Dichlorodifluoromethane/Fr12                  CAS #: 75-71-8
  5.202   5.202 (0.326)    85     23461 0.26189   0.4662  80.00- 120.00   100.00(a)
  5.240   5.202 (0.329)    87      6799                     1.57-  61.57    28.98
-------------------------------------------------------------------------------
    8 Chloromethane                                 CAS #: 74-87-3
  7.128   7.052 (0.447)    50     26458 0.49009   0.8724  80.00- 120.00   100.00
  7.090   7.052 (0.445)    52      9495                     1.81-  61.81    35.89
-------------------------------------------------------------------------------
   20 Trichlorofluoromethane/Fr11                   CAS #: 75-69-4
 11.159  11.183 (0.700)   101     10244 0.11109   0.1977  80.00- 120.00   100.00
 11.183  11.183 (0.702)   103      6381                    34.11-  94.11    62.30
-------------------------------------------------------------------------------
   24 Ethanol                                       CAS #: 64-17-5
 12.101  12.101 (0.759)    45   4200320 214.877   382.48  80.00- 120.00   100.00(A)
 12.101  12.101 (0.759)    46   1609780                     8.51-  68.51    38.33
 12.101  12.101 (0.759)    43    851130                     0.00-  54.10    20.26
-------------------------------------------------------------------------------
   28 Freon 113                                     CAS #: 76-13-1
 12.568  12.568 (0.789)   151      1601 0.02884  0.05134  80.00- 120.00   100.00(a)
 12.596  12.568 (0.791)   153      1183                    33.65-  93.65    73.87
 12.568  12.568 (0.789)   101      2130                    96.37- 156.37   133.02
-------------------------------------------------------------------------------
   31 Acetone                                       CAS #: 67-64-1
 12.816  12.816 (0.804)    58   3093832 136.945   243.76  80.00- 120.00   100.00(A)
 12.816  12.816 (0.804)    43  13833936                  413.15- 473.15   447.15
-------------------------------------------------------------------------------
   34 2-Propanol                                    CAS #: 67-63-0
 13.173  13.173 (0.827)    45   9643256 92.1796   164.08  80.00- 120.00   100.00(A)
 13.173  13.173 (0.827)    43   1839752                     0.00-  50.74    19.08
 13.173  13.173 (0.827)    59    271384                     0.00-  32.83     2.81
-------------------------------------------------------------------------------
   37 Methylene Chloride                            CAS #: 75-09-2
 13.640  13.640 (0.856)    84   1063264 36.5765   65.106  80.00- 120.00   100.00
 13.640  13.640 (0.856)    49   2470271                  212.37- 272.37   232.33
 13.640  13.640 (0.856)    51    728110                    43.31- 103.31    68.48
-------------------------------------------------------------------------------
   39 MTBE                                          CAS #: 1634-04-4
 13.996  13.996 (0.878)    73     85591 0.82066    1.461  80.00- 120.00   100.00
```

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
39 MTBE (continued)							
13.996	13.996 (0.878)	57	36809			2.99- 62.99	43.01
13.996	13.996 (0.878)	41	46467			12.12- 72.12	54.29
43 Hexane					CAS #: 110-54-3		
14.381	14.381 (0.903)	57	10589	0.12688	0.2258	80.00- 120.00	100.00
14.381	14.381 (0.903)	43	16547			57.65- 117.65	156.26
14.381	14.381 (0.903)	86	1260			0.00- 40.67	11.90
51 2-Butanone					CAS #: 78-93-3		
15.592	15.571 (0.979)	72	8506	0.50585	0.9004	80.00- 120.00	100.00
15.592	15.571 (0.979)	43	81223			794.80- 854.80	954.83
15.592	15.571 (0.979)	57	4584			18.01- 78.01	53.89
53 Tetrahydrofuran					CAS #: 109-99-9		
15.933	15.933 (1.000)	42	173654	2.00407	3.567	80.00- 120.00	100.00
15.933	15.933 (1.000)	71	30826			0.00- 49.03	17.75
15.933	15.933 (1.000)	72	34418			0.00- 51.35	19.82
55 Chloroform					CAS #: 67-66-3		
15.995	15.995 (1.004)	83	15356	0.19057	0.3392	80.00- 120.00	100.00
15.995	15.995 (1.004)	85	8423			33.33- 93.33	54.85
57 Cyclohexane					CAS #: 110-82-7		
16.242	16.242 (1.019)	84	3106	0.06129	0.1091	80.00- 120.00	100.00(a)
16.242	16.242 (1.019)	56	9358			157.43- 217.43	301.22
16.242	16.242 (1.019)	41	9959			105.99- 165.99	320.55
63 2,2,4-Trimethylpentane					CAS #: 540-84-1		
16.728	16.728 (1.050)	56	6805	0.07705	0.1371	80.00- 120.00	100.00(a)
16.728	16.728 (1.050)	57	15633			258.69- 318.69	229.72
16.728	16.728 (1.050)	41	7069			79.91- 139.91	103.88
64 Benzene					CAS #: 71-43-2		
16.756	16.756 (0.968)	78	15913	0.13052	0.2323	80.00- 120.00	100.00
16.756	16.756 (0.968)	77	4786			0.00- 53.73	30.08
69 Heptane					CAS #: 142-82-5		
16.948	16.948 (0.979)	57	82065	1.56175	2.780	80.00- 120.00	100.00
16.975	16.948 (0.981)	100	16839			0.00- 51.27	20.52
16.948	16.948 (0.979)	43	220950			235.24- 295.24	269.24
79 4-Methyl-2-pentanone					CAS #: 108-10-1		
19.587	19.587 (1.132)	43	6867319	39.9050	71.031	80.00- 120.00	100.00
19.587	19.587 (1.132)	58	1804680			0.00- 57.24	26.28
19.587	19.587 (1.132)	85	580634			0.00- 38.20	8.46

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
81 Toluene					CAS #: 108-88-3		
19.991	19.991 (1.155)	91	10339881	76.8311	136.76	80.00- 120.00	100.00(A)
19.991	19.991 (1.155)	92	5971786			28.60- 88.60	57.75
87 2-Hexanone					CAS #: 591-78-6		
21.044	21.044 (0.948)	58	5396	0.09269	0.1650	80.00- 120.00	100.00(a)
21.044	21.044 (0.948)	43	9074			242.48- 302.48	168.17
20.865	21.044 (0.940)	100	370			0.00- 43.88	6.86
95 Ethyl Benzene					CAS #: 100-41-4		
22.315	22.315 (1.005)	106	508350	10.4429	18.588	80.00- 120.00	100.00
22.315	22.315 (1.005)	91	1670753			292.36- 352.36	328.66
96 m,p-Xylene					CAS #: 108-38-3		
22.452	22.452 (1.011)	106	1823755	37.9946	67.630	80.00- 120.00	100.00
22.452	22.452 (1.011)	91	3817805			164.15- 224.15	209.34
100 o-Xylene					CAS #: 95-47-6		
23.001	23.001 (1.036)	106	156430	3.50225	6.234	80.00- 120.00	100.00
23.001	23.001 (1.036)	91	358176			186.63- 246.63	228.97
101 Styrene					CAS #: 100-42-5		
23.029	23.029 (1.037)	104	31304	0.47906	0.8527	80.00- 120.00	100.00
23.001	23.029 (1.036)	78	34737			28.70- 88.70	110.97
113 4-Ethyltoluene					CAS #: 622-96-8		
24.013	24.039 (1.081)	105	6299	0.07421	0.1321	80.00- 120.00	100.00(a)
24.039	24.039 (1.083)	120	2160			0.18- 60.18	34.30
120 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
24.529	24.529 (1.105)	105	13302	0.23176	0.4125	80.00- 120.00	100.00
24.529	24.529 (1.105)	120	3311			19.27- 79.27	24.90
124 1,4-Dichlorobenzene					CAS #: 106-46-7		
24.992	24.992 (1.125)	146	1482	0.02846	0.05067	80.00- 120.00	100.00(a)
24.992	24.992 (1.125)	148	913			38.92- 98.92	61.62
24.992	24.992 (1.125)	111	532			11.61- 71.61	35.93

QC Flag Legend

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

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdv.i
Lab File ID: v121619r1.d
Lab Smp Id: 1412152AR1-04A
Analysis Type: VOA
Quant Type: ISTD
Operator: sn
Method File: /chem/msdv.i/16Dec2014.b/v14l1006d.m
Misc Info: 8.0"Hg -> 4.5psi

Calibration Date: 16-DEC-2014
Calibration Time: 08:42

Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
54 Bromochloromethan	109722	65833	153611	95619	-12.85
71 1,4-Difluorobenze	445503	267302	623704	413145	-7.26
92 Chlorobenzene-d5	361081	216649	505513	330263	-8.53

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
54 Bromochloromethan	15.93	15.60	16.26	15.93	0.00
71 1,4-Difluorobenze	17.30	16.97	17.63	17.30	0.00
92 Chlorobenzene-d5	22.21	21.88	22.54	22.21	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: 01-Jul-2015 12:26

Eurofins Air Toxics Inc.

RECOVERY REPORT

Client Name:
Client SDG: 16Dec2014
Sample Matrix: GAS
Fraction: VOA
Lab Smp Id: 1412152AR1-04A
Level: LOW
Operator: sn
Data Type: MS DATA
SampleType: SAMPLE
SpikeList File: AT12.spk
Quant Type: ISTD
Sublist File: And19256r1.sub
Method File: /chem/msdv.i/16Dec2014.b/v14l1006d.m
Misc Info: 8.0"Hg -> 4.5psi

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 65 1,2-Dichloroethane	5.000	5.221	104.42	70-130
$ 80 Toluene-d8	5.000	5.448	108.96	70-130
$ 106 Bromofluorobenzene	5.000	5.070	101.41	70-130

Data File: /chem/msdv.i/16Dec2014.b/v121619r1.d

Date : 16-DEC-2014 21:39

Client ID:

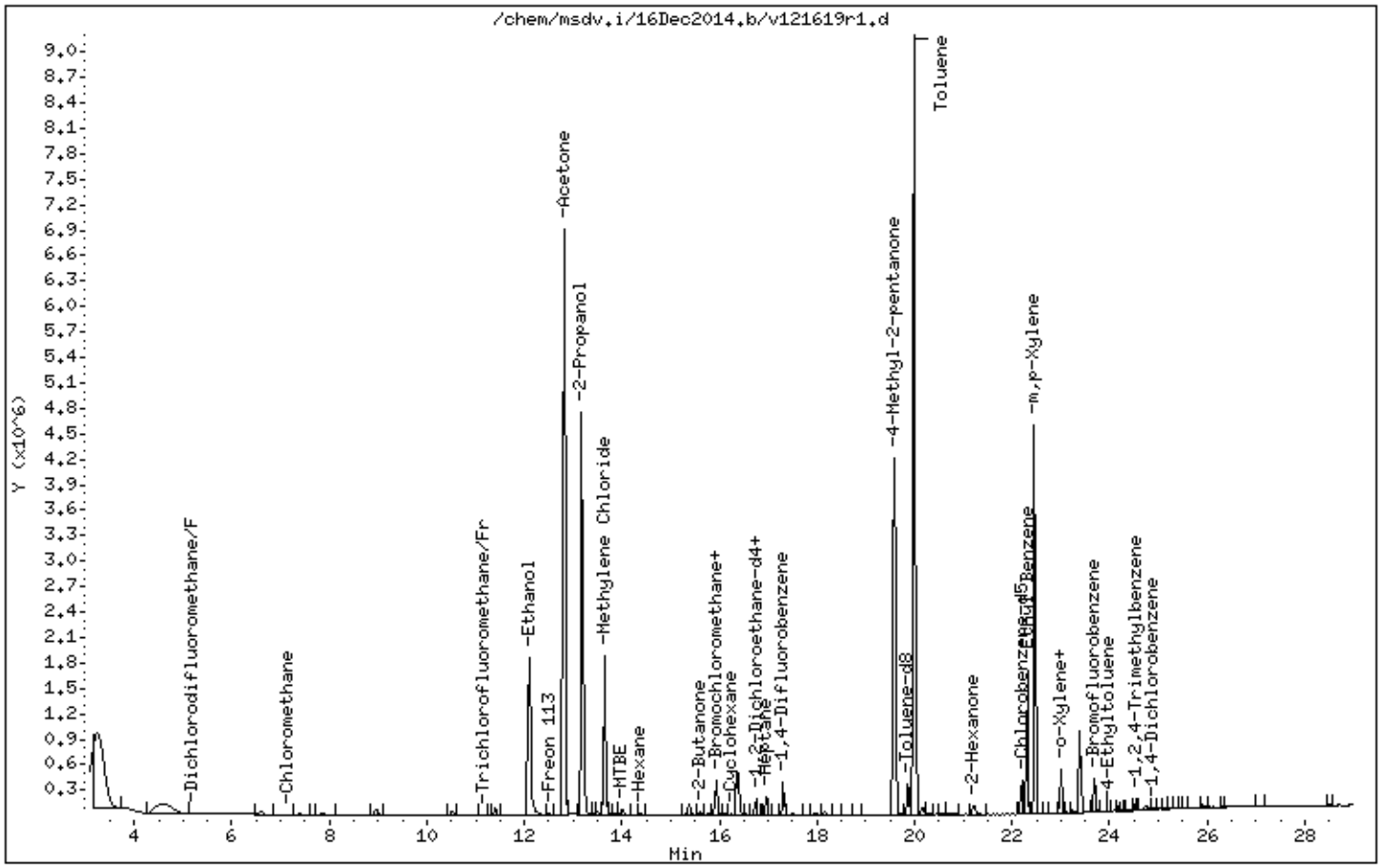
Instrument: msdv.i

Sample Info: 250ml #33889

Operator: sn

Column phase: RTx-624

Column diameter: 0.32



Data File: /chem/msdv.i/16Dec2014.b/v121619r1.d

Date : 16-DEC-2014 21:39

Client ID:

Instrument: msdv.i

Sample Info: 250ml #33889

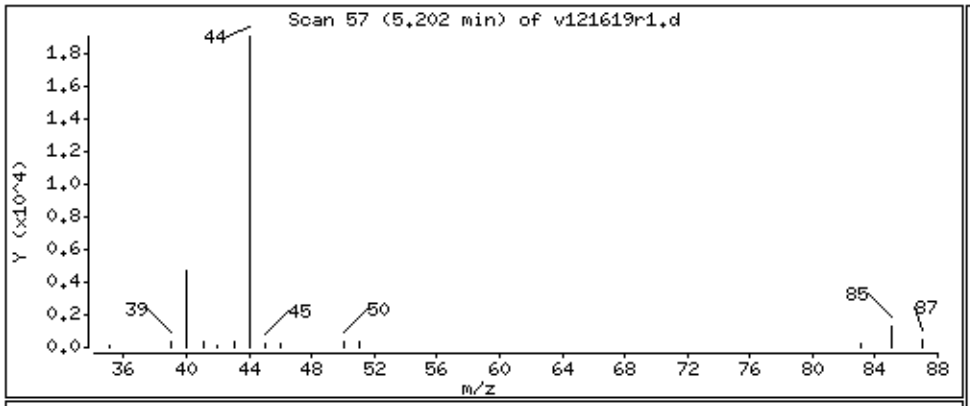
Operator: sn

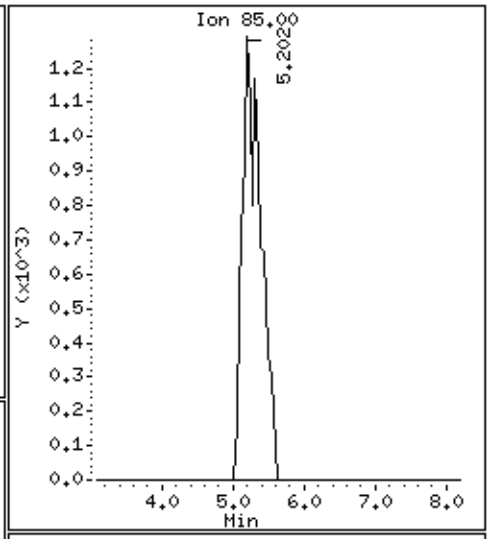
Column phase: RTx-624

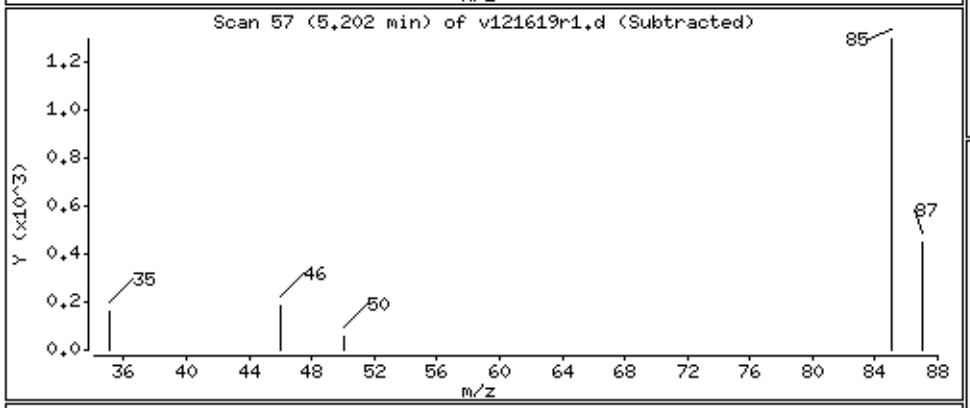
Column diameter: 0.32

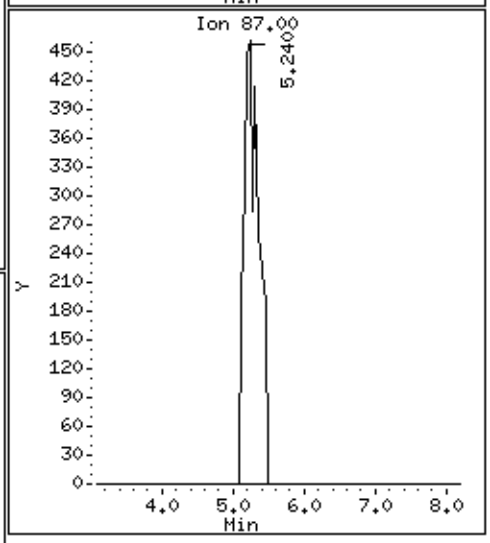
4 Dichlorodifluoromethane/Fr12

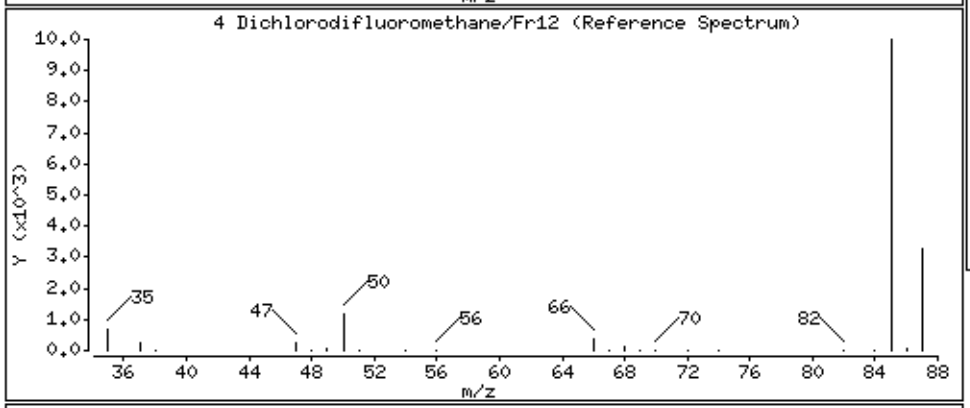
Concentration: 0.4662 PPBV

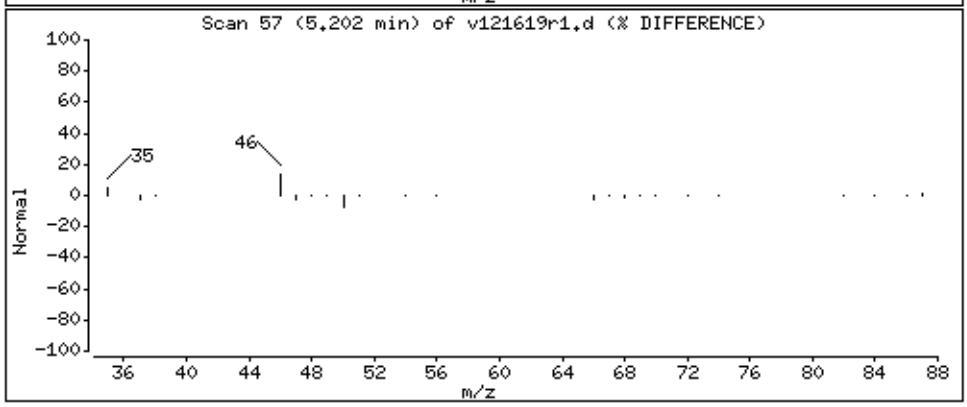












Data File: /chem/msdv.i/16Dec2014.b/v121619r1.d

Date : 16-DEC-2014 21:39

Client ID:

Instrument: msdv.i

Sample Info: 250ml #33889

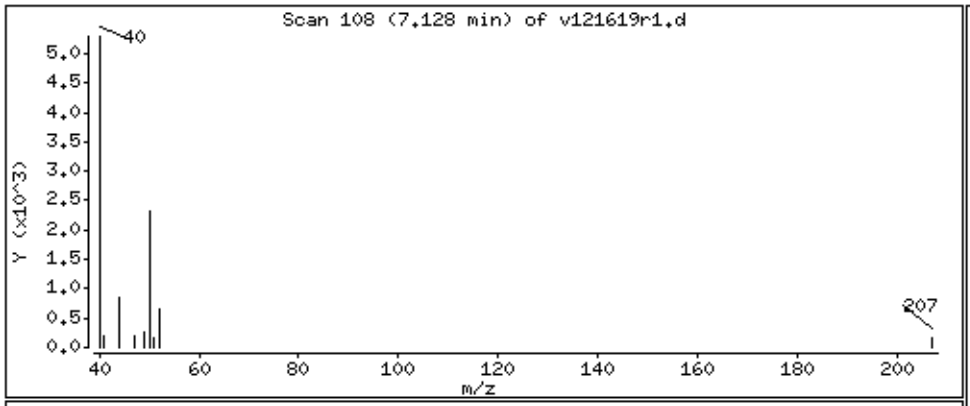
Operator: sn

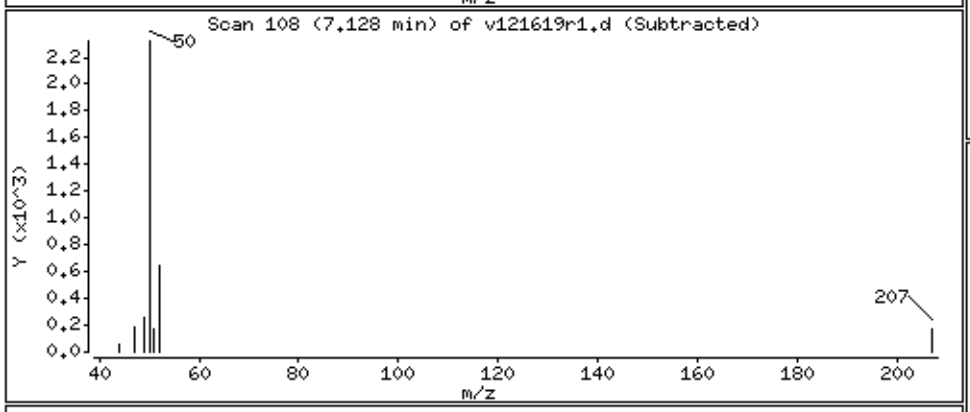
Column phase: RTx-624

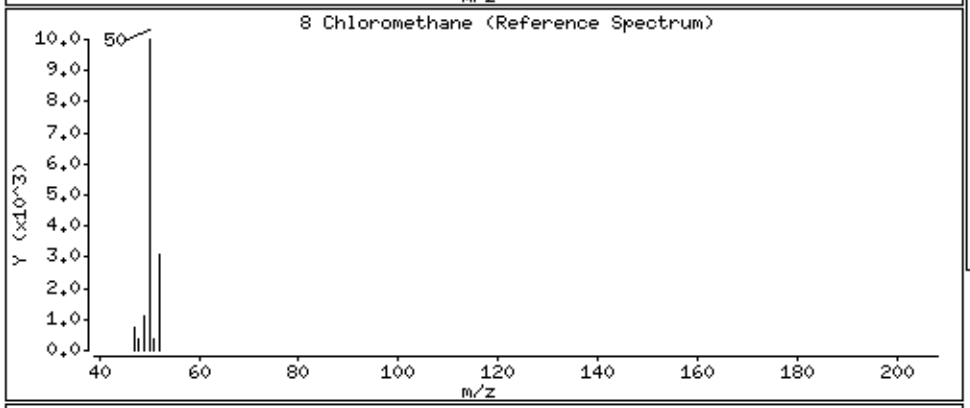
Column diameter: 0.32

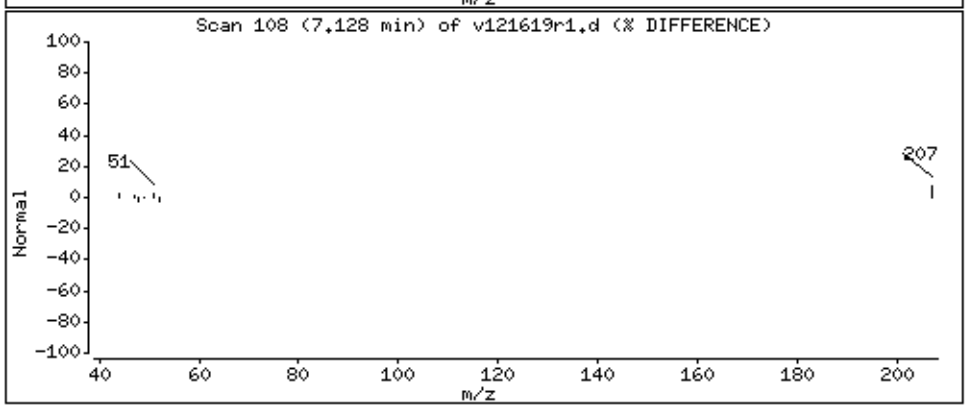
8 Chloromethane

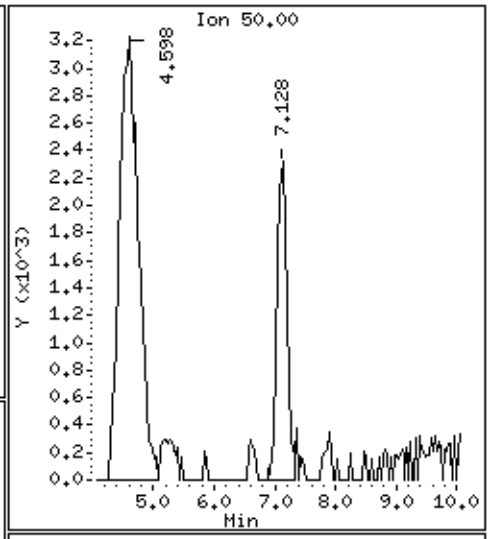
Concentration: 0.8724 PPBV

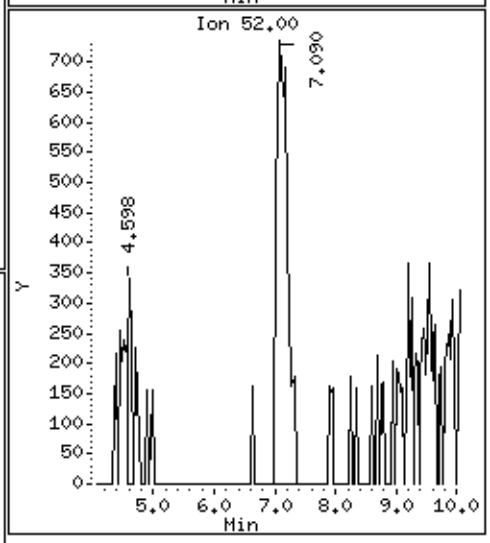












Data File: /chem/msdv.i/16Dec2014.b/v121619r1.d

Date : 16-DEC-2014 21:39

Client ID:

Instrument: msdv.i

Sample Info: 250ml #33889

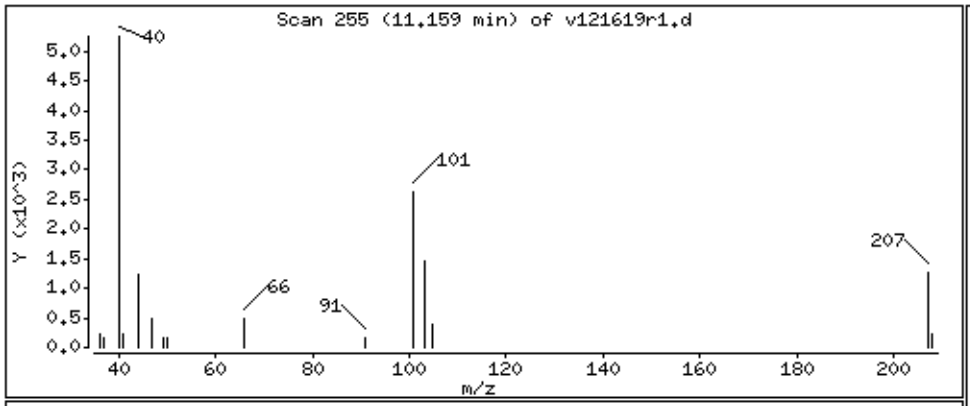
Operator: sn

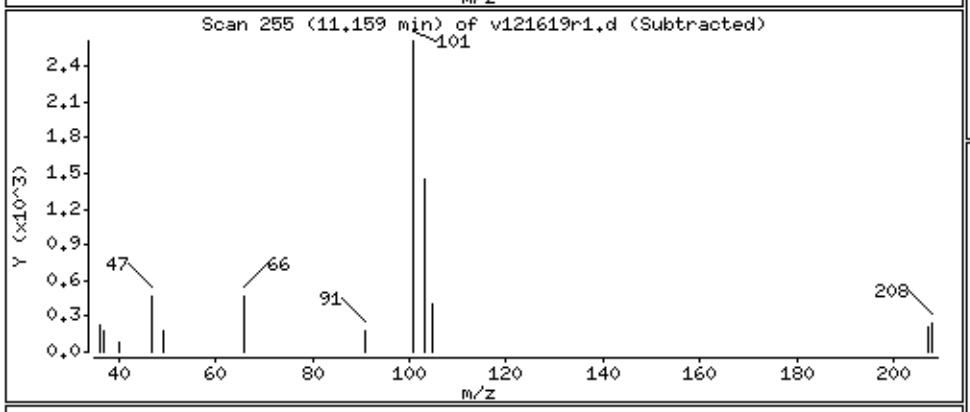
Column phase: RTx-624

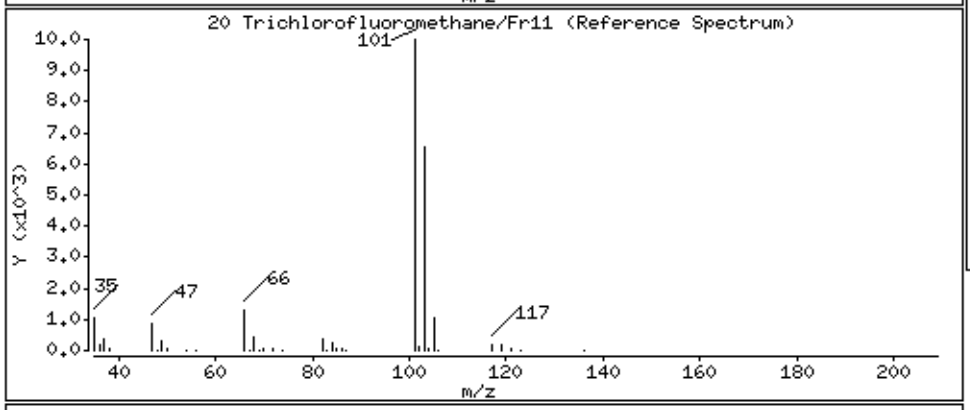
Column diameter: 0.32

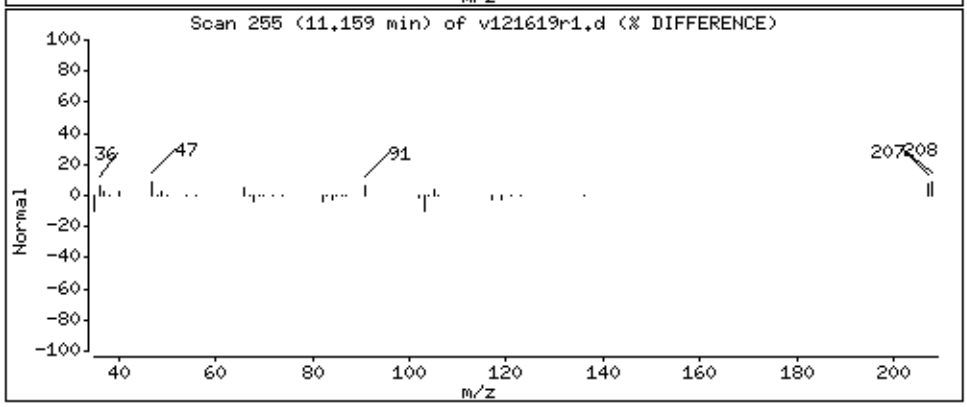
20 Trichlorofluoromethane/Fr11

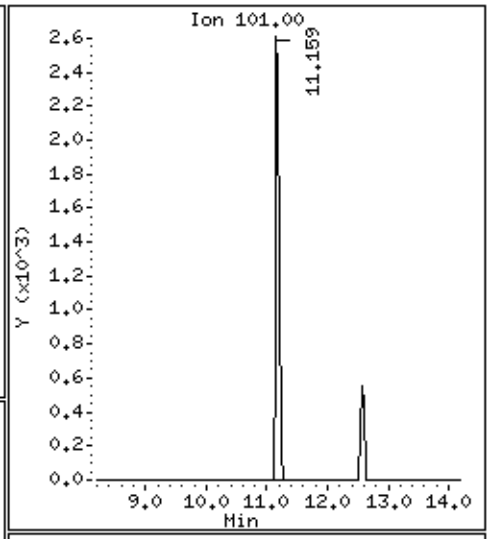
Concentration: 0.1977 PPBV

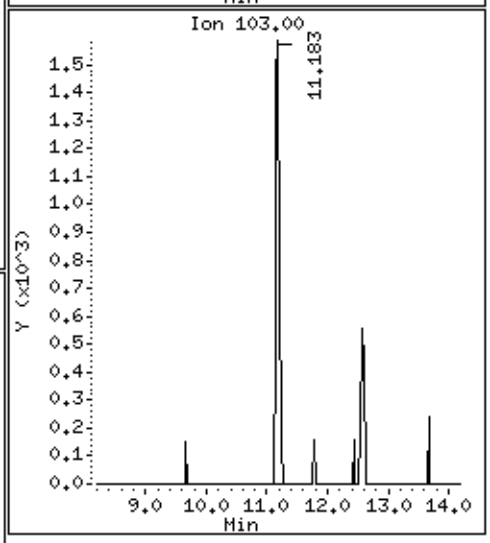












Data File: /chem/msdv.i/16Dec2014.b/v121619r1.d

Date : 16-DEC-2014 21:39

Client ID:

Instrument: msdv.i

Sample Info: 250ml #33889

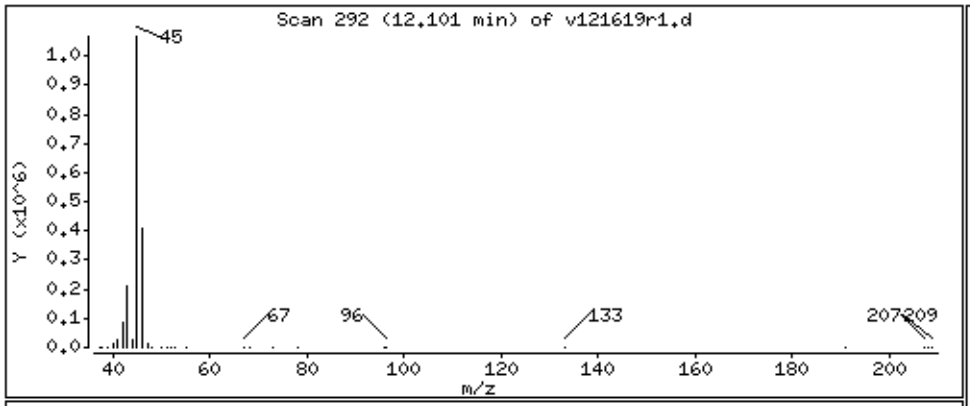
Operator: sn

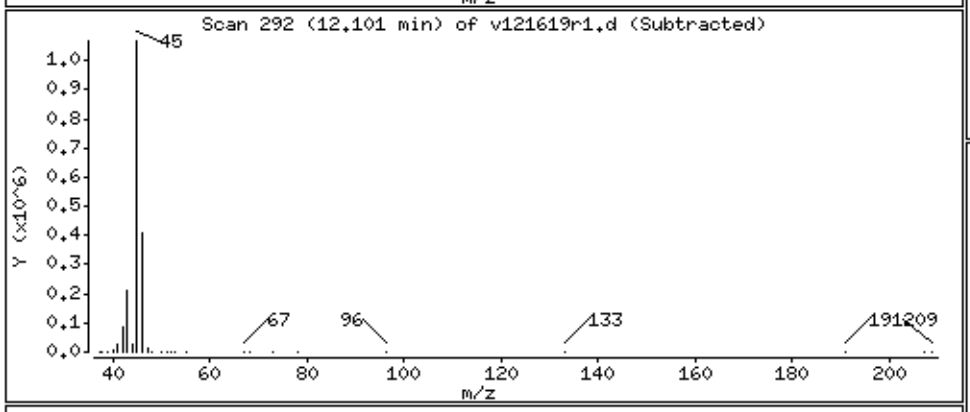
Column phase: RTx-624

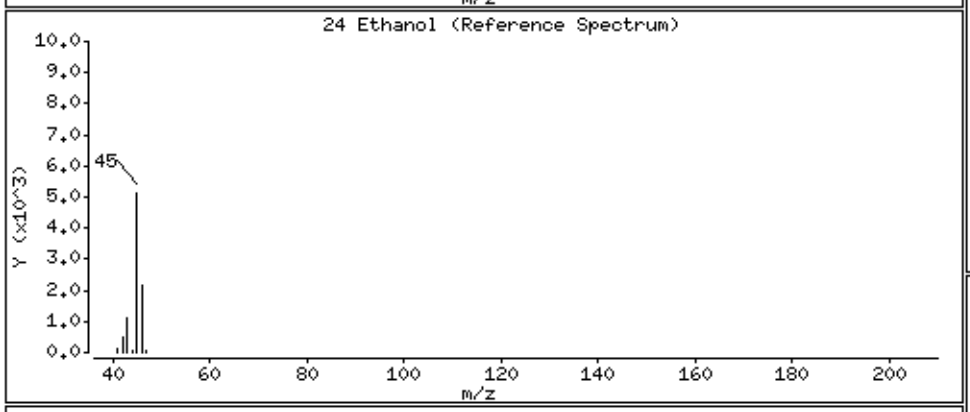
Column diameter: 0.32

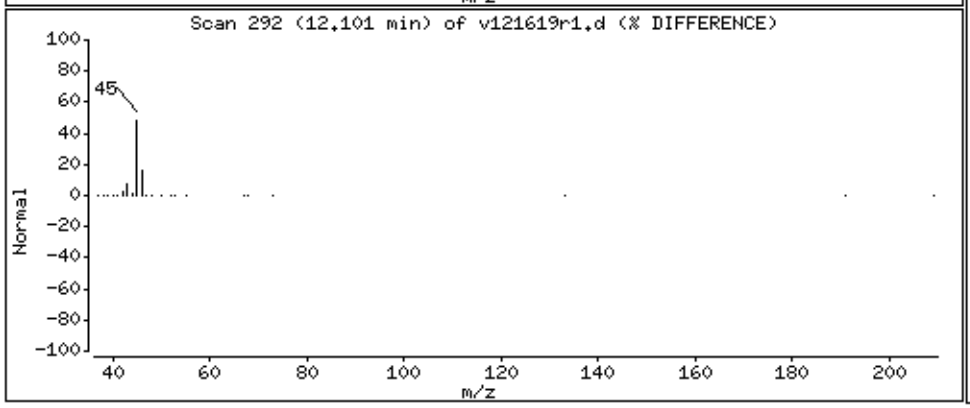
24 Ethanol

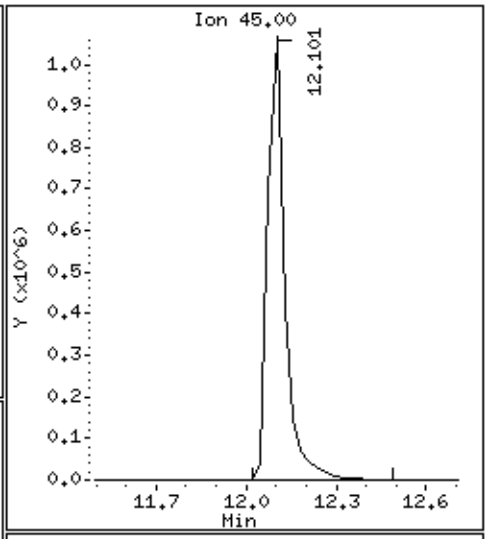
Concentration: 382.48 PPBV

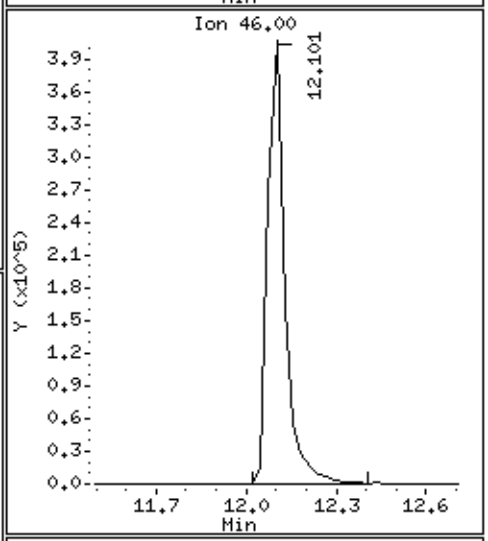


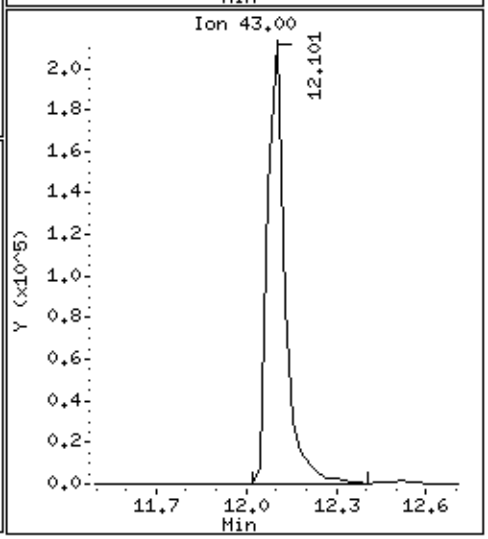












Data File: /chem/msdv.i/16Dec2014.b/v121619r1.d

Date : 16-DEC-2014 21:39

Client ID:

Instrument: msdv.i

Sample Info: 250ml #33889

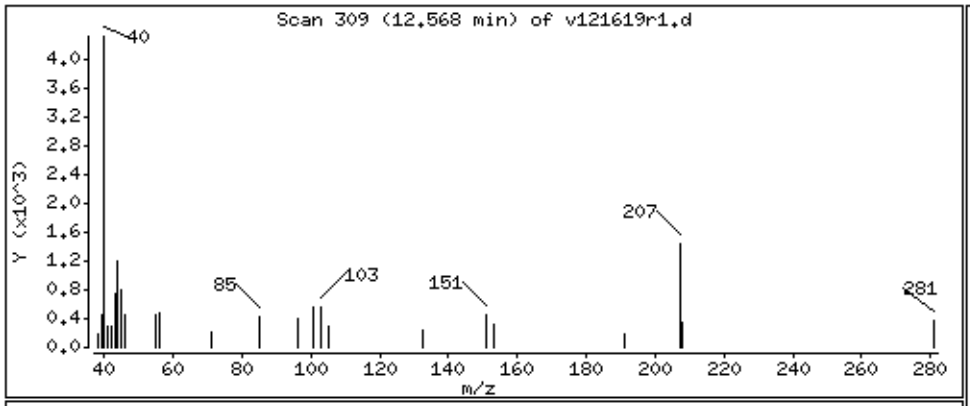
Operator: sn

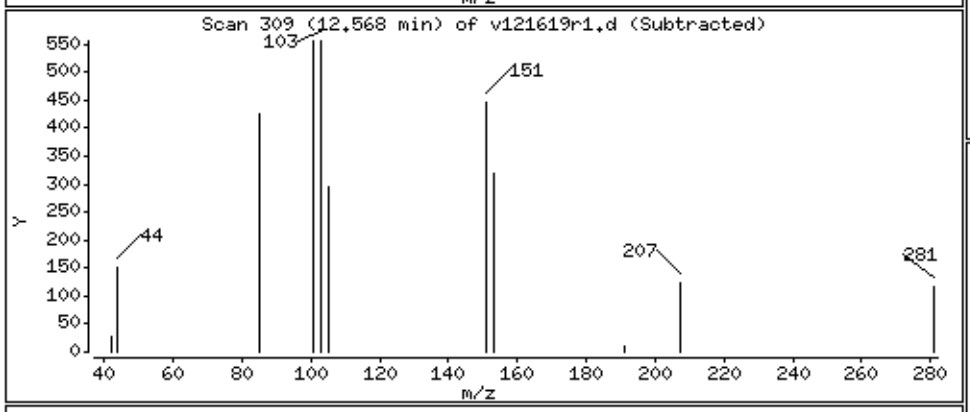
Column phase: RTx-624

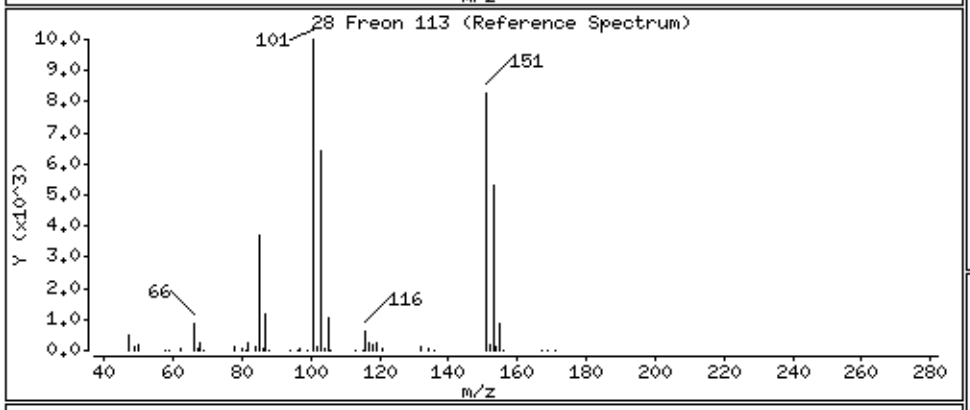
Column diameter: 0.32

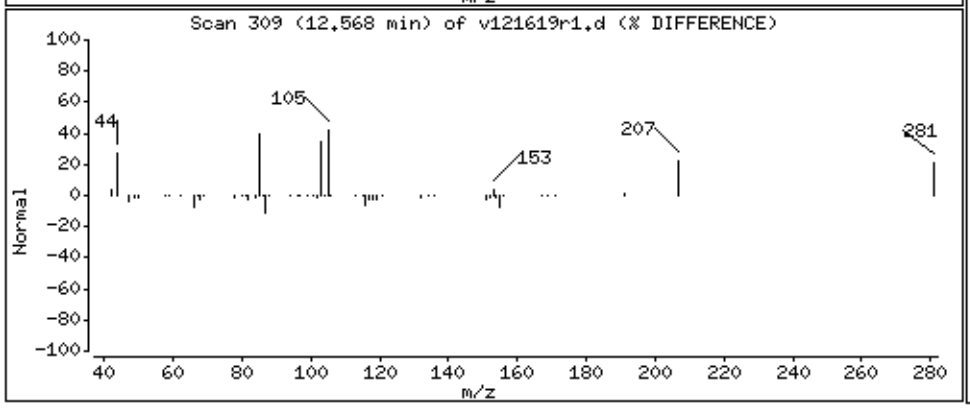
28 Freon 113

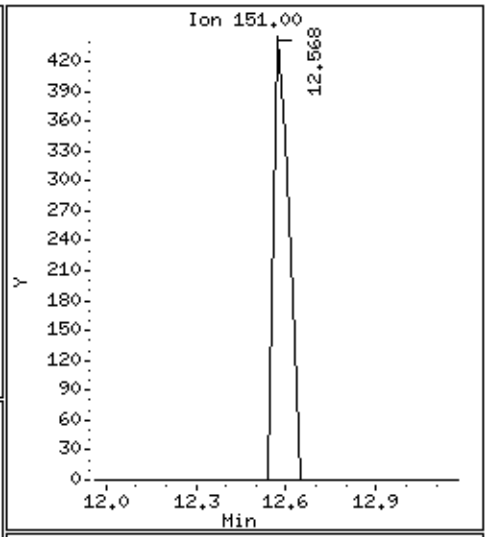
Concentration: 0.05134 PPBV

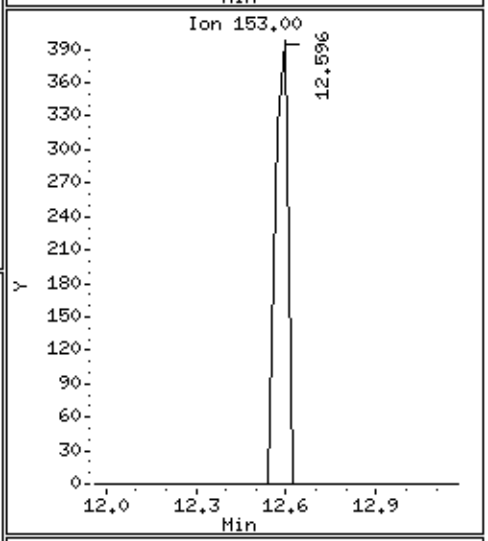


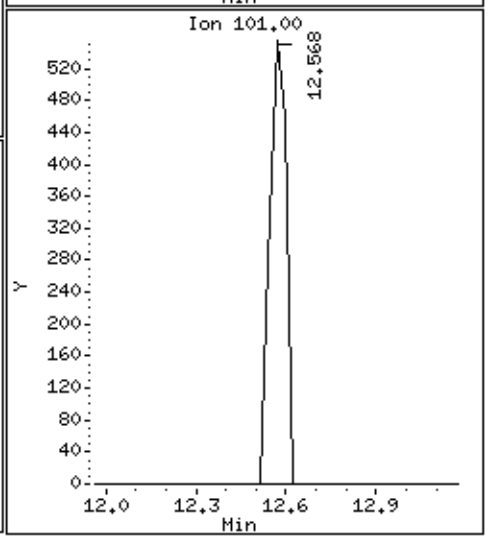












Data File: /chem/msdv.i/16Dec2014.b/v121619r1.d

Date : 16-DEC-2014 21:39

Client ID:

Instrument: msdv.i

Sample Info: 250ml #33889

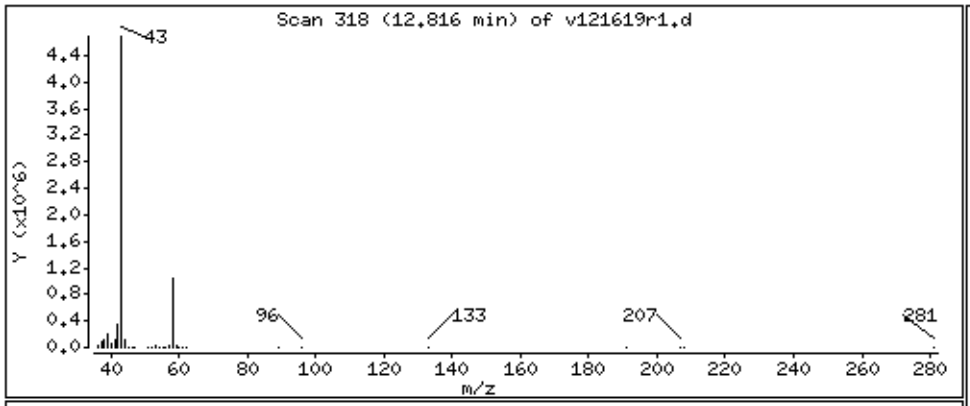
Operator: sn

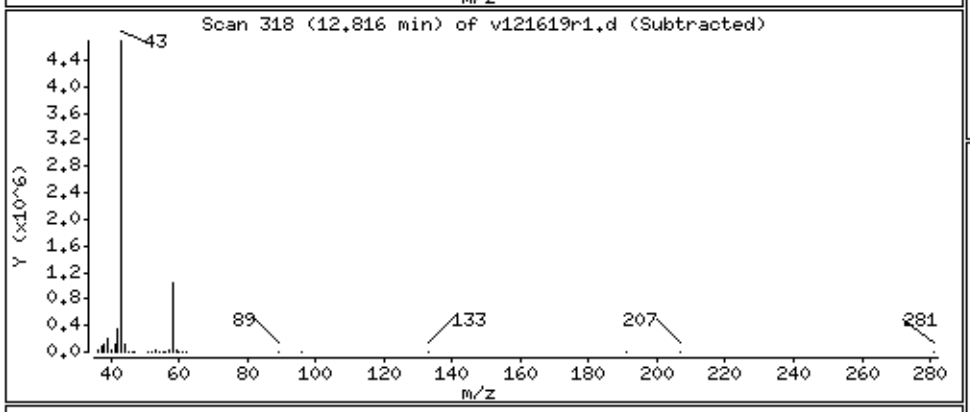
Column phase: RTx-624

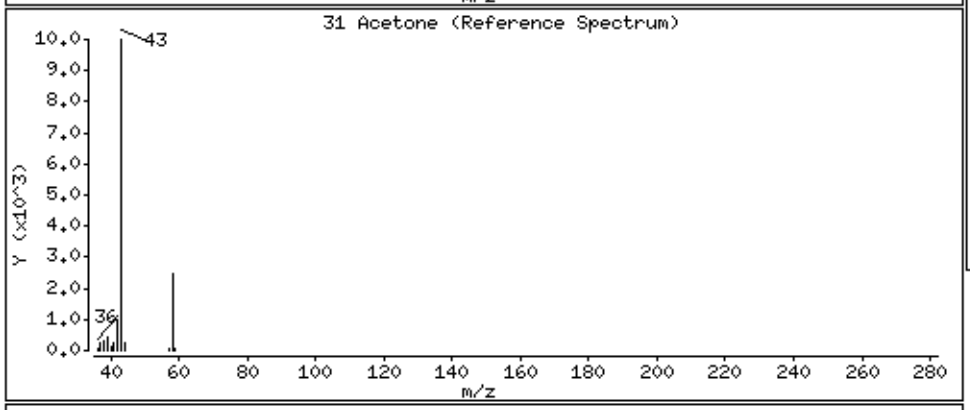
Column diameter: 0.32

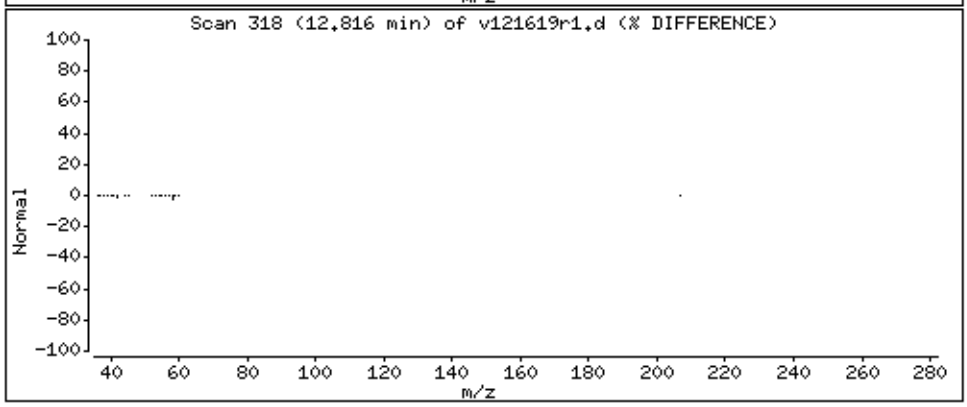
31 Acetone

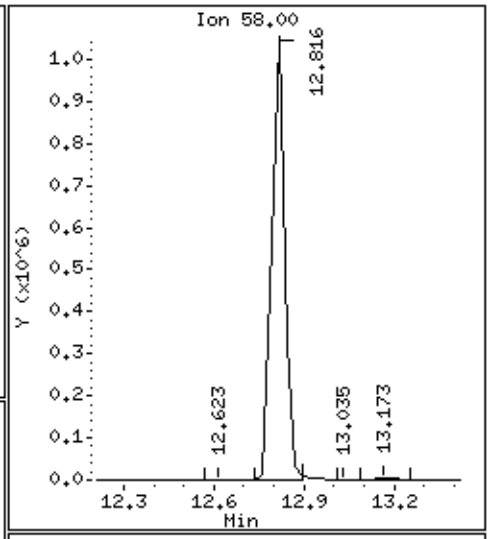
Concentration: 243.76 PPBV

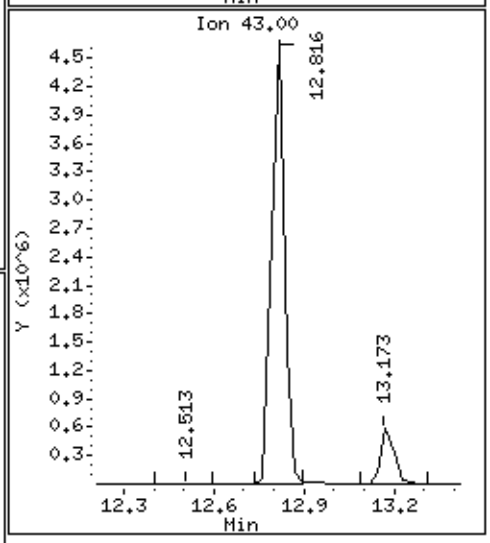












Data File: /chem/msdv.i/16Dec2014.b/v121619r1.d

Date : 16-DEC-2014 21:39

Client ID:

Instrument: msdv.i

Sample Info: 250ml #33889

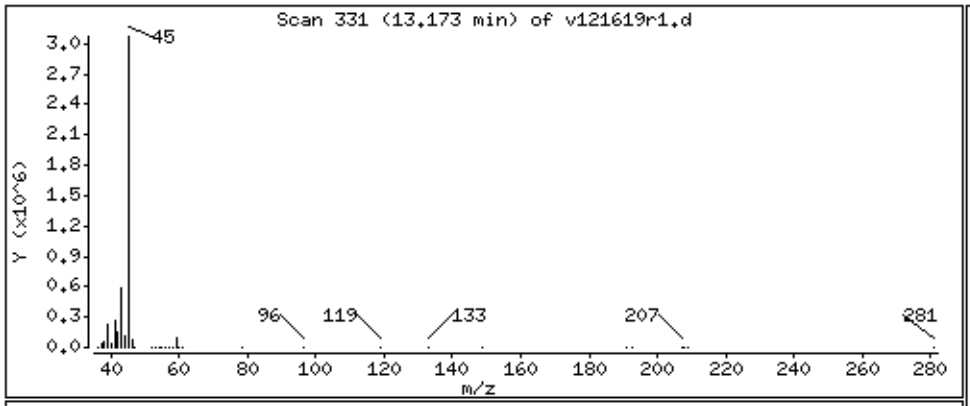
Operator: sn

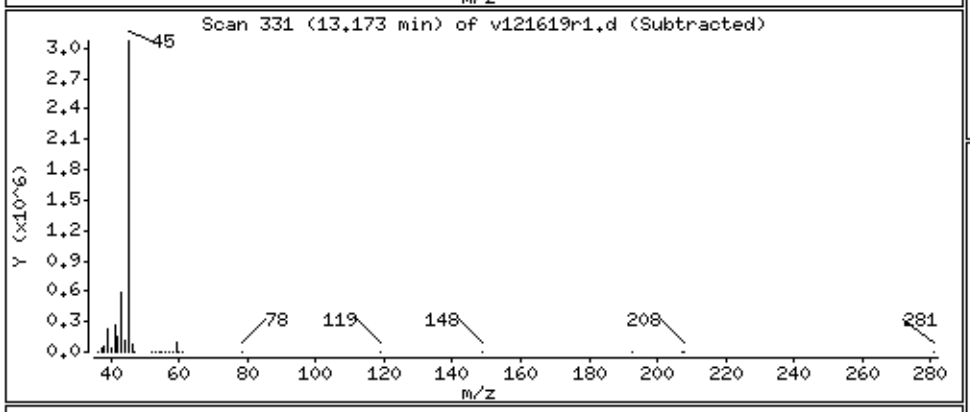
Column phase: RTx-624

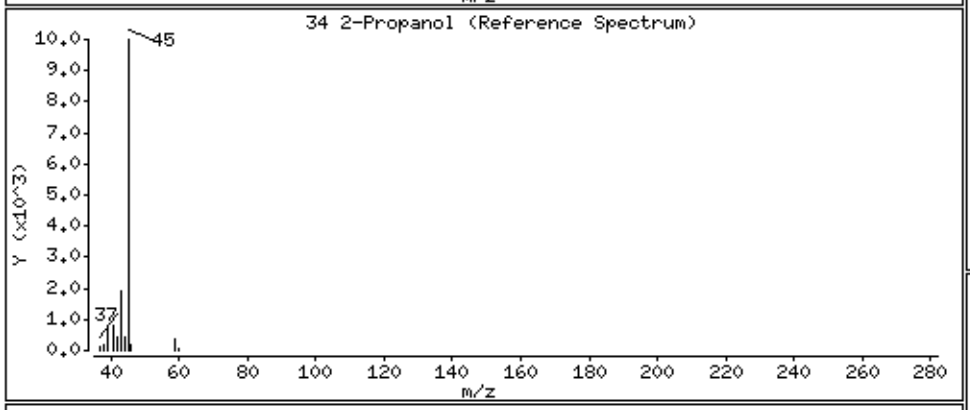
Column diameter: 0.32

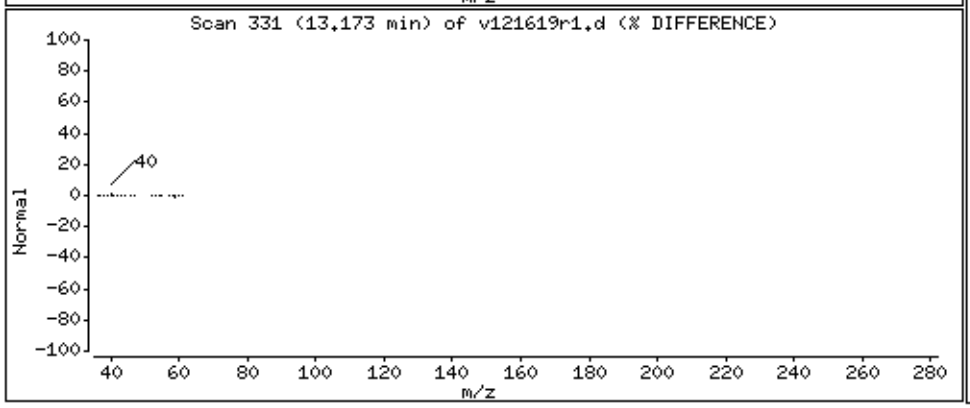
34 2-Propanol

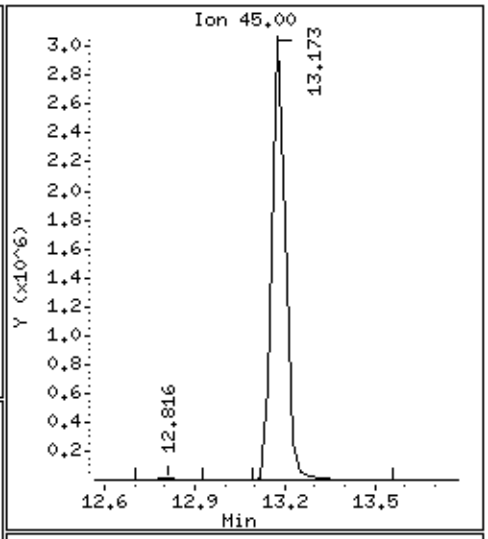
Concentration: 164.08 PPBV

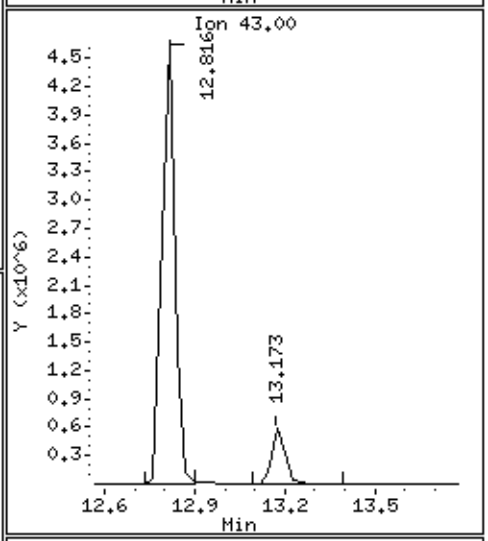


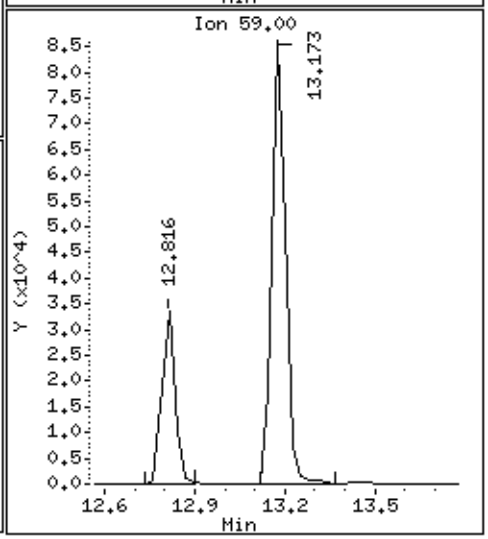












Data File: /chem/msdv.i/16Dec2014.b/v121619r1.d

Date : 16-DEC-2014 21:39

Client ID:

Instrument: msdv.i

Sample Info: 250ml #33889

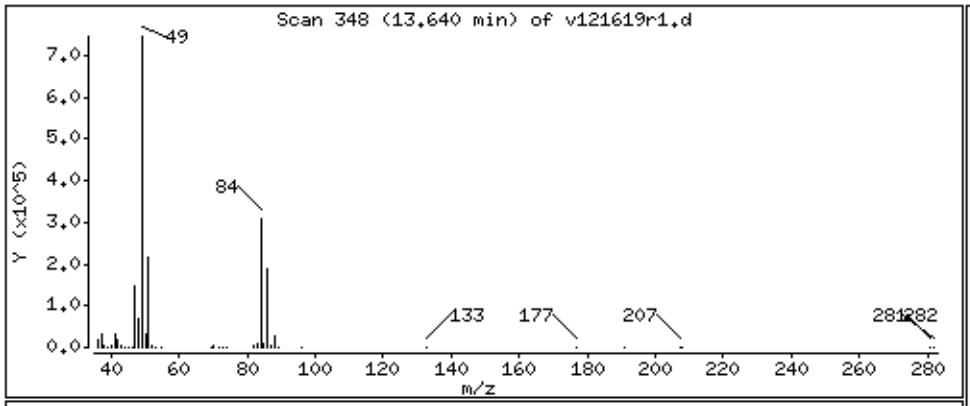
Operator: sn

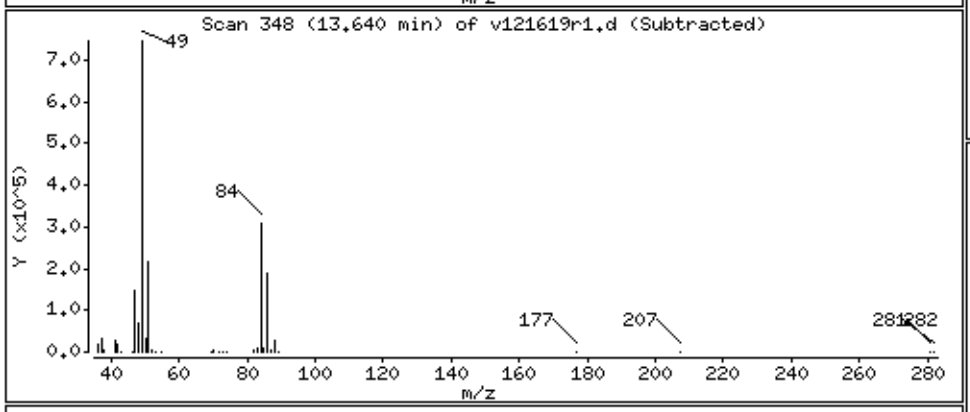
Column phase: RTx-624

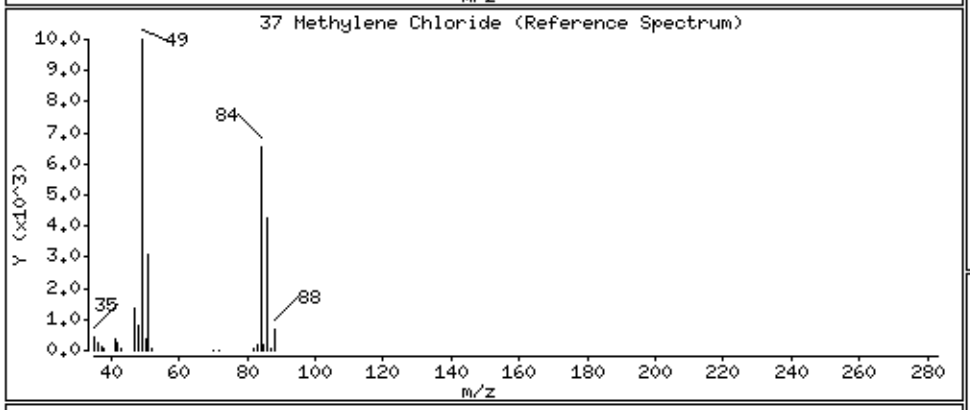
Column diameter: 0.32

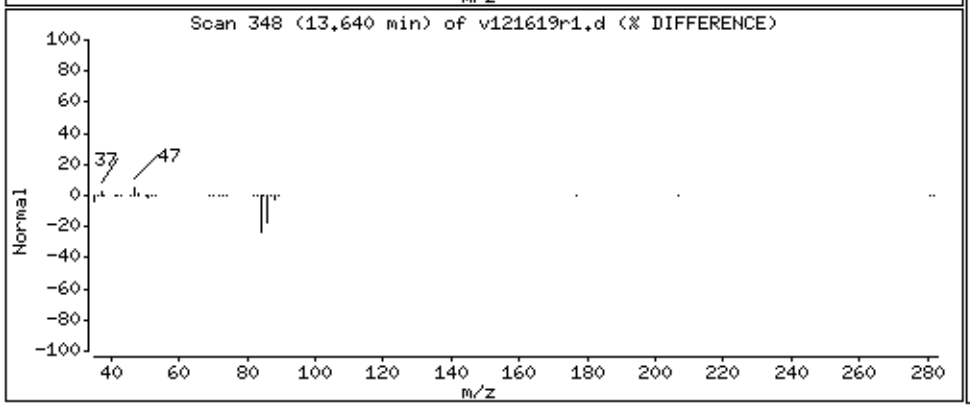
37 Methylene Chloride

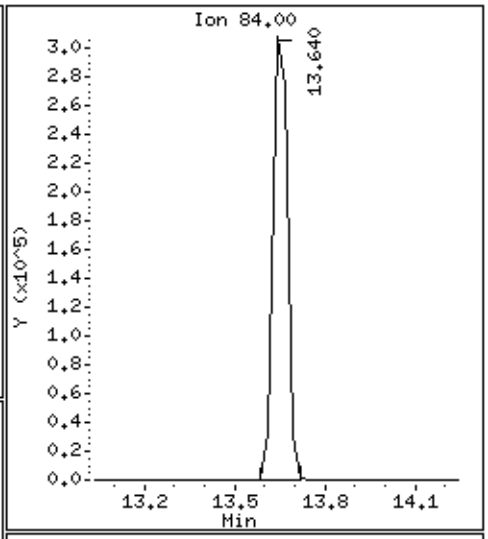
Concentration: 65.106 PPBV

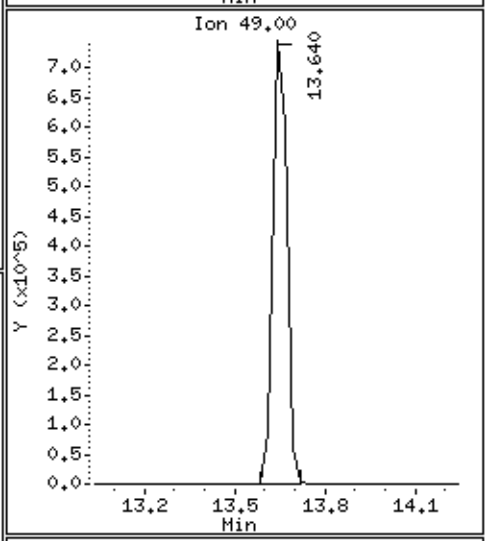


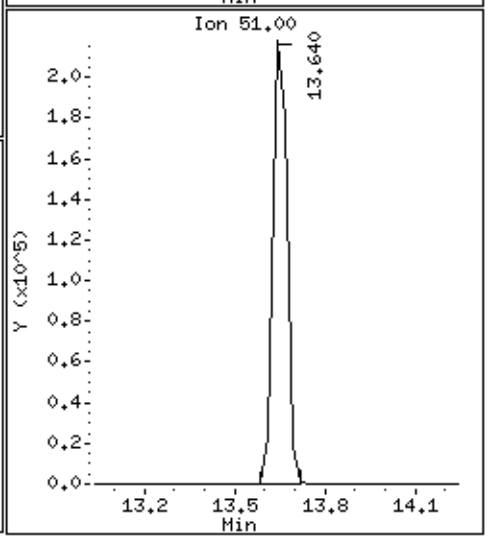












Data File: /chem/msdv.i/16Dec2014.b/v121619r1.d

Date : 16-DEC-2014 21:39

Client ID:

Instrument: msdv.i

Sample Info: 250ml #33889

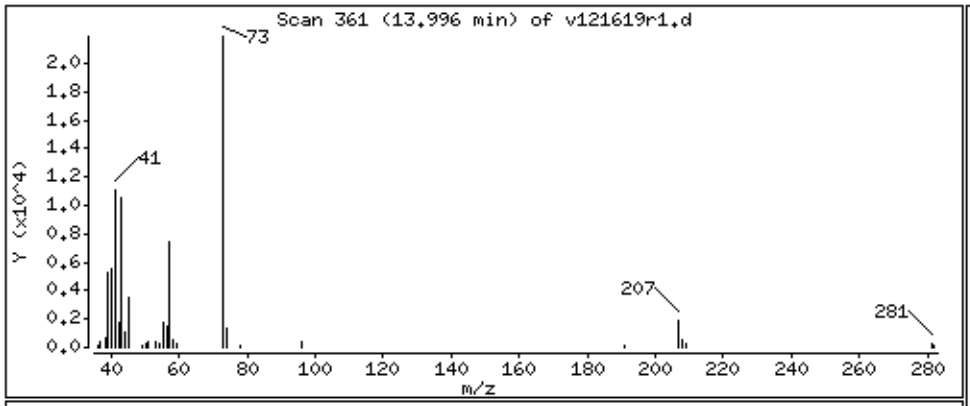
Operator: sn

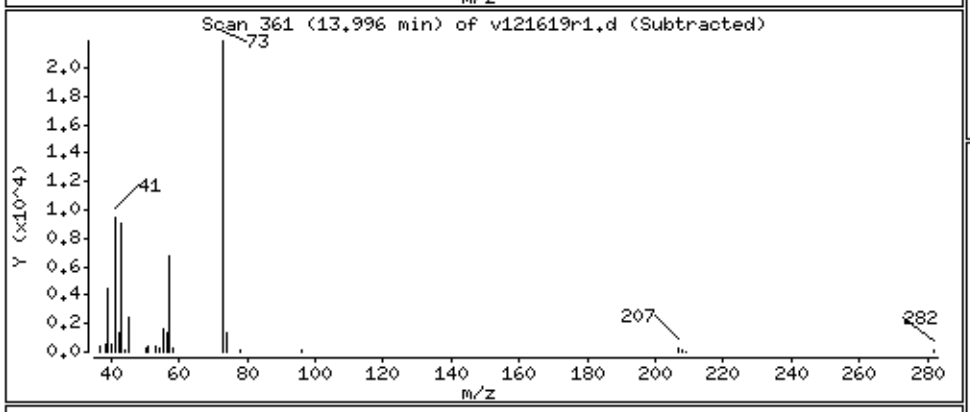
Column phase: RTx-624

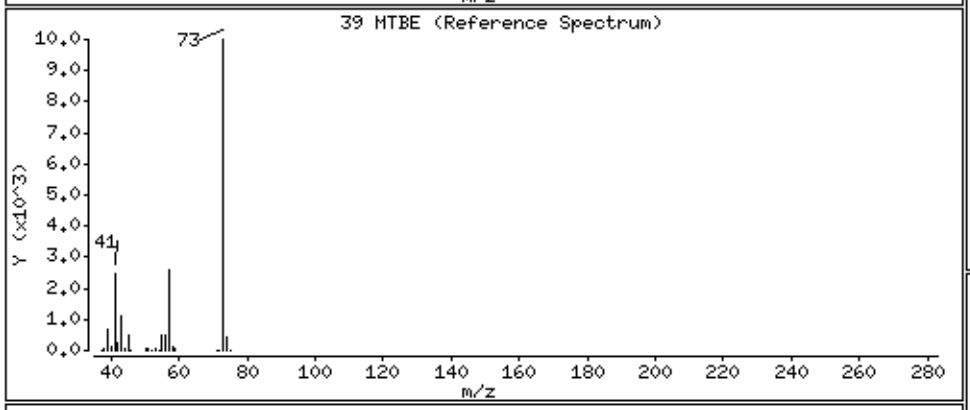
Column diameter: 0.32

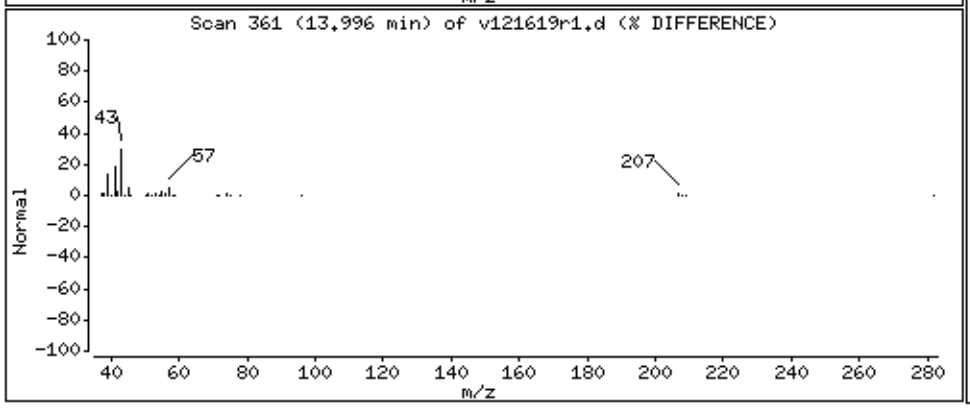
39 MTBE

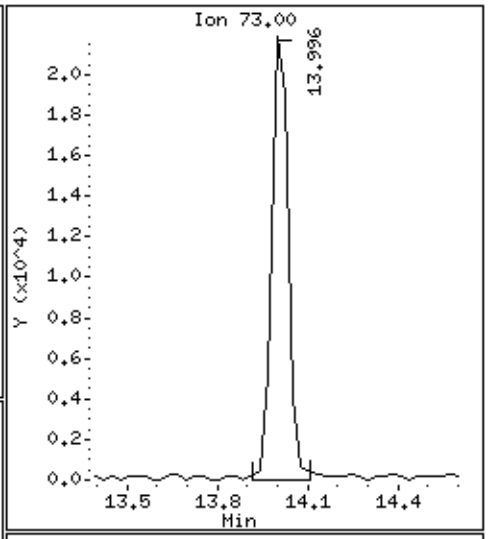
Concentration: 1.461 PPBV

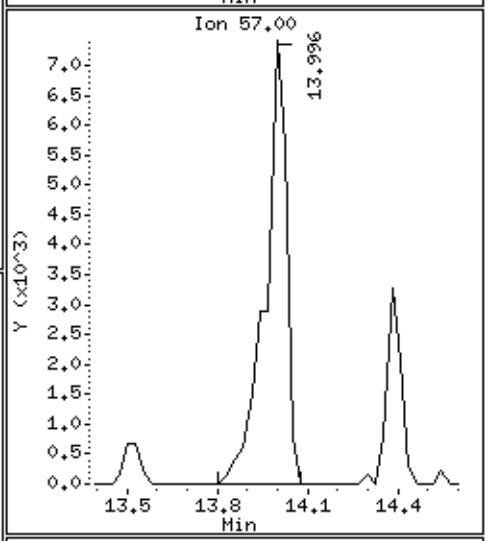


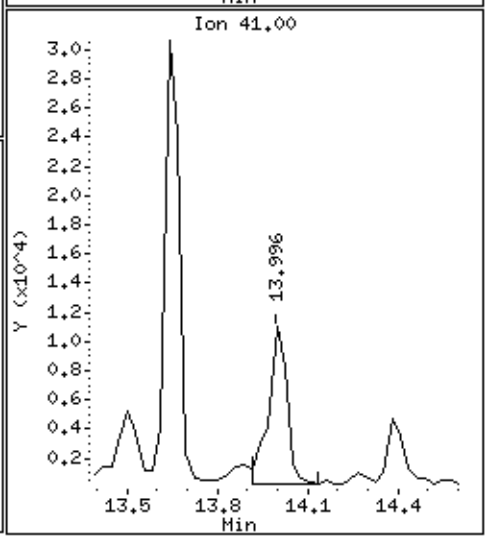












Data File: /chem/msdv.i/16Dec2014.b/v121619r1.d

Date : 16-DEC-2014 21:39

Client ID:

Instrument: msdv.i

Sample Info: 250ml #33889

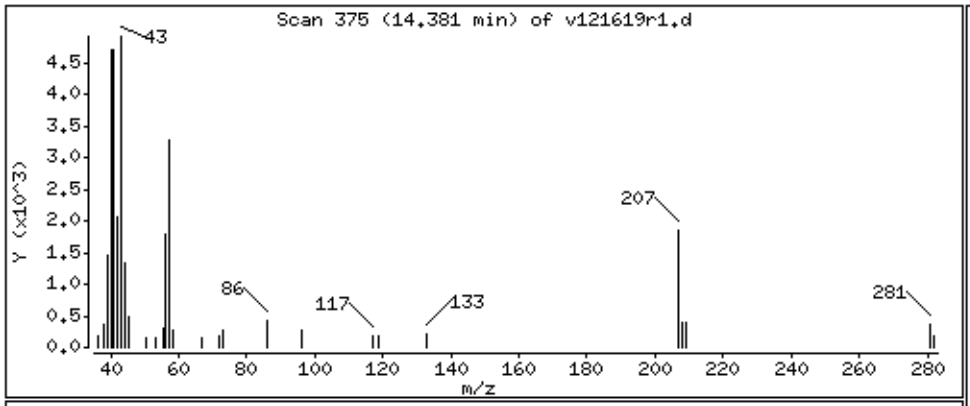
Operator: sn

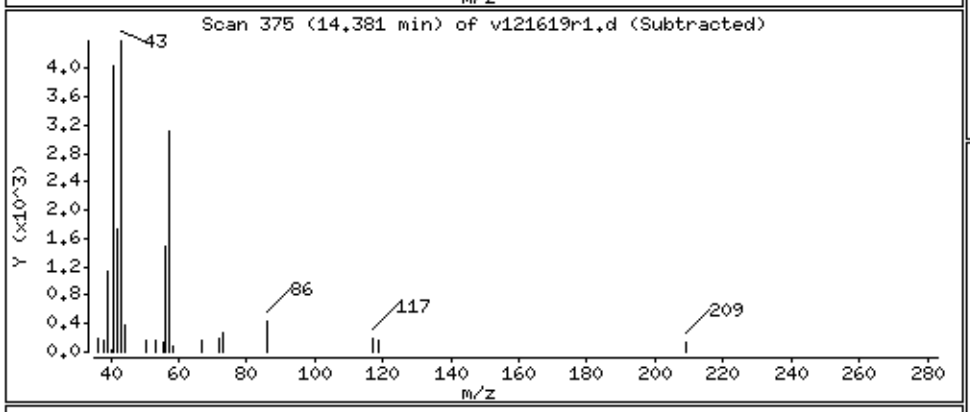
Column phase: RTx-624

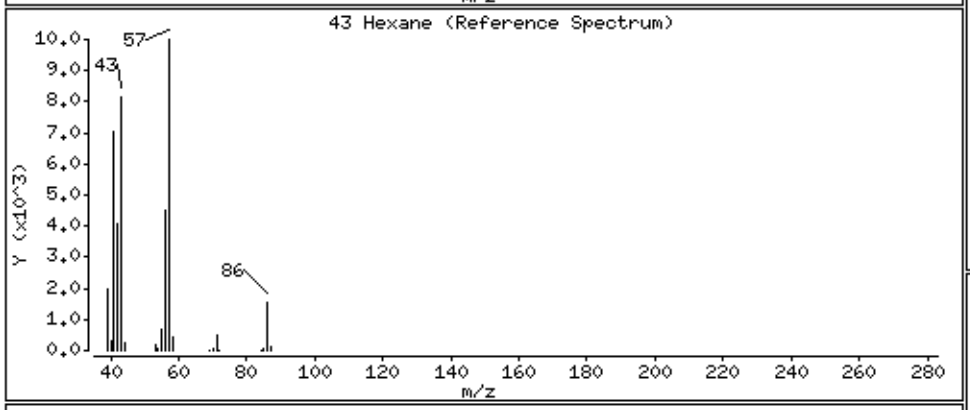
Column diameter: 0.32

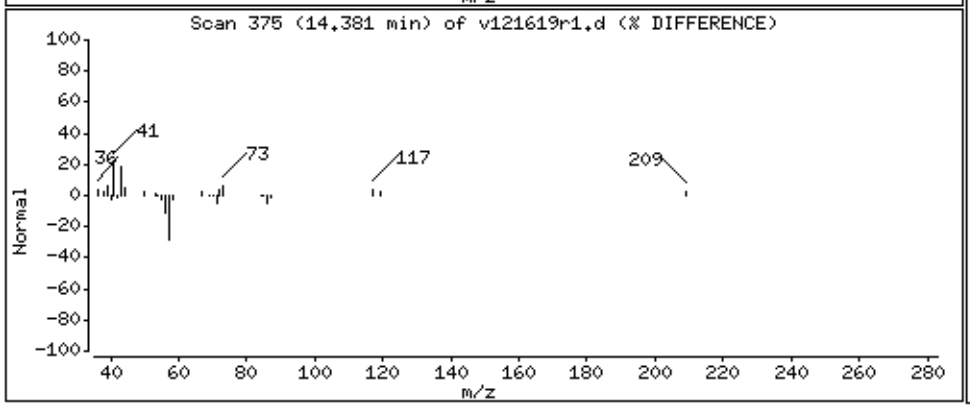
43 Hexane

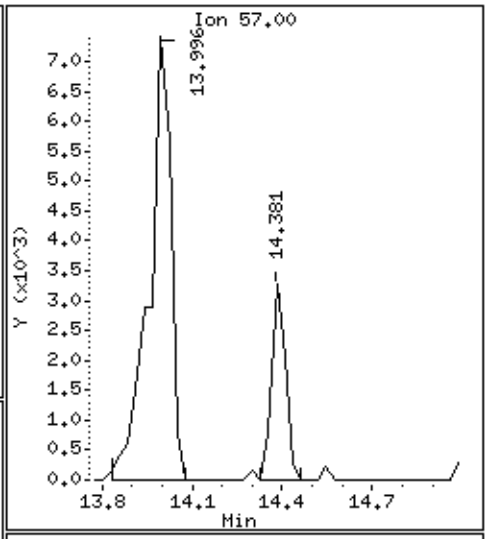
Concentration: 0.2258 PPBV

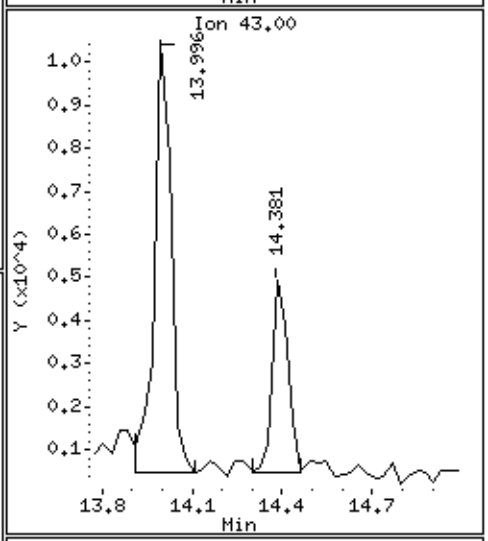


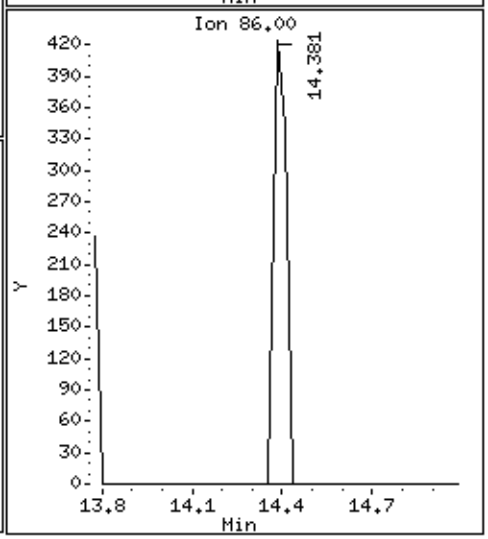












Data File: /chem/msdv.i/16Dec2014.b/v121619r1.d

Date : 16-DEC-2014 21:39

Client ID:

Instrument: msdv.i

Sample Info: 250ml #33889

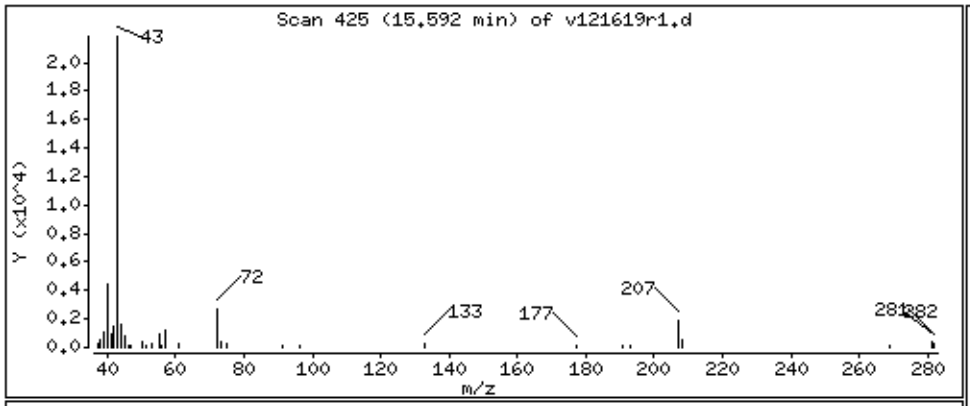
Operator: sn

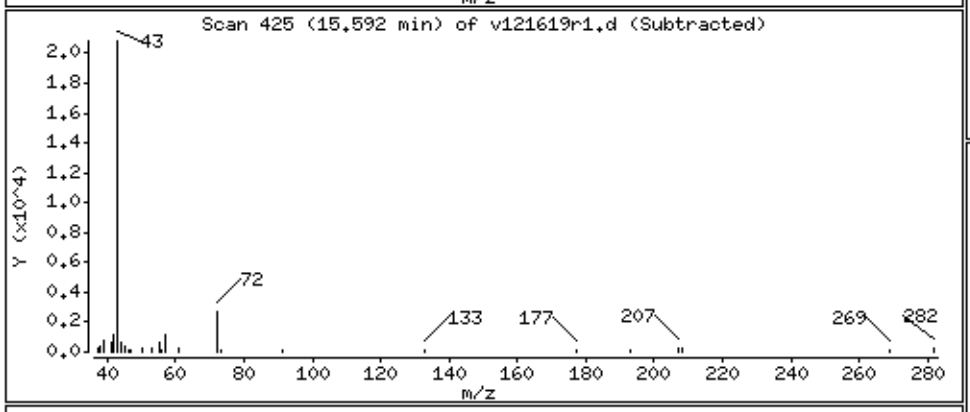
Column phase: RTx-624

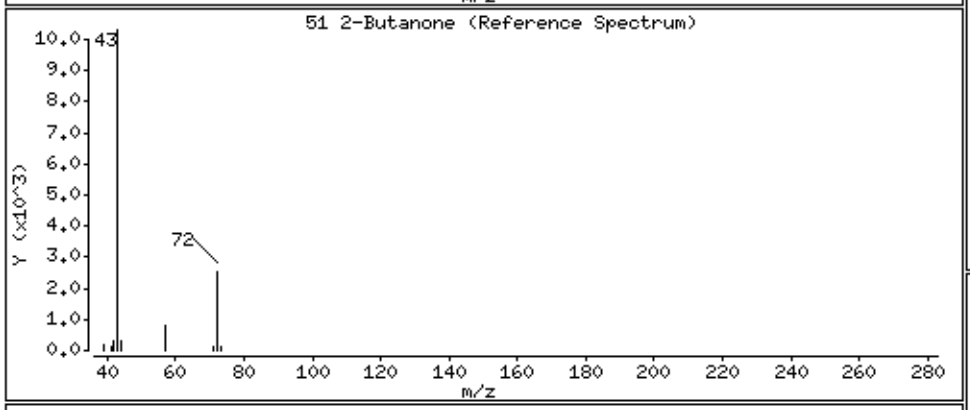
Column diameter: 0.32

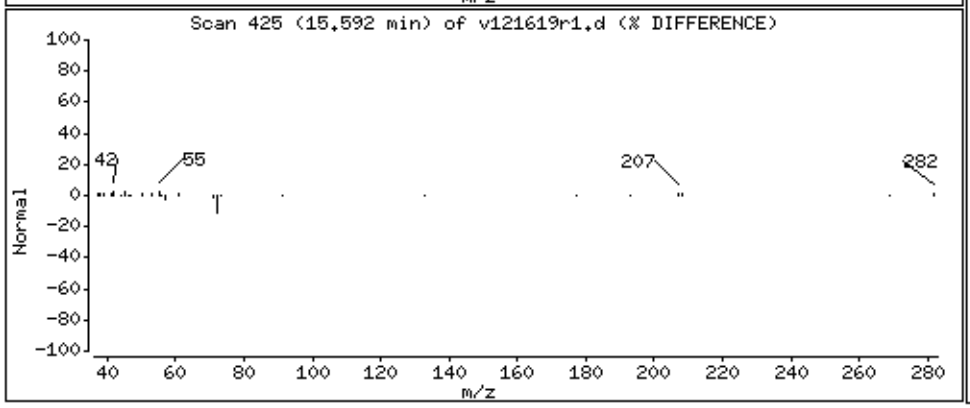
51 2-Butanone

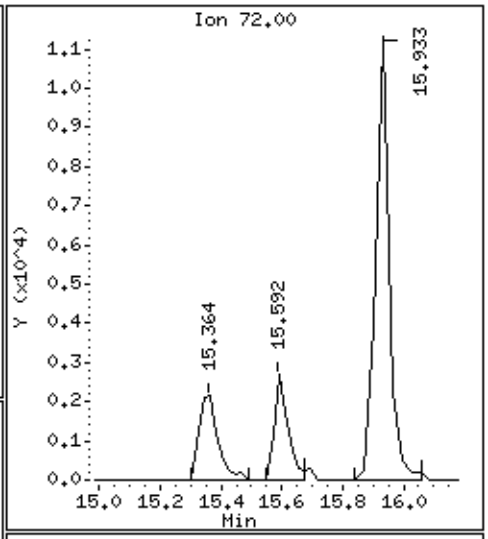
Concentration: 0.9004 PPBV

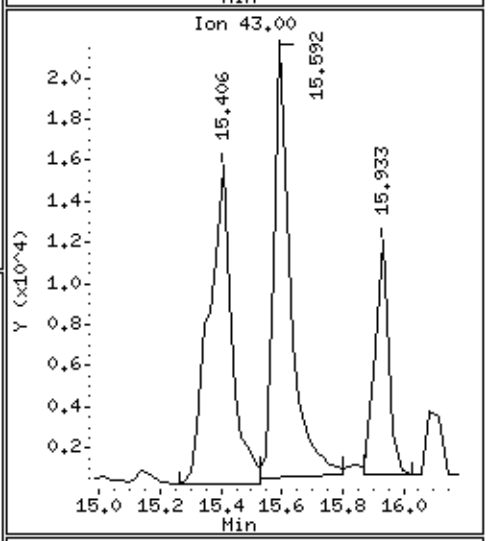


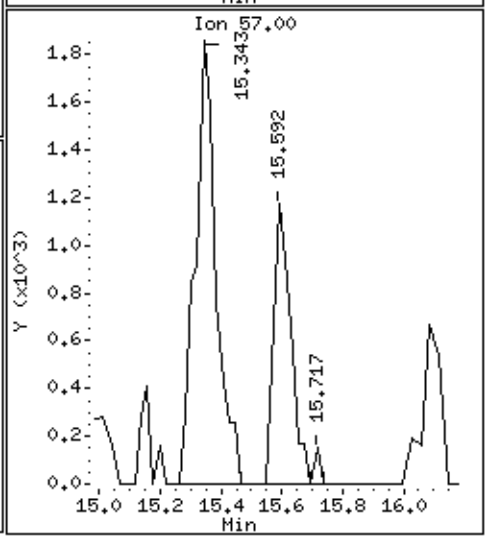












Data File: /chem/msdv.i/16Dec2014.b/v121619r1.d

Date : 16-DEC-2014 21:39

Client ID:

Instrument: msdv.i

Sample Info: 250ml #33889

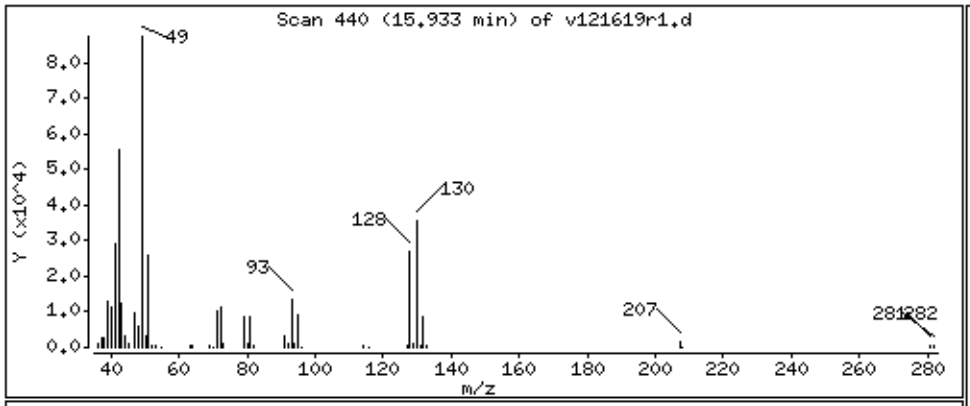
Operator: sn

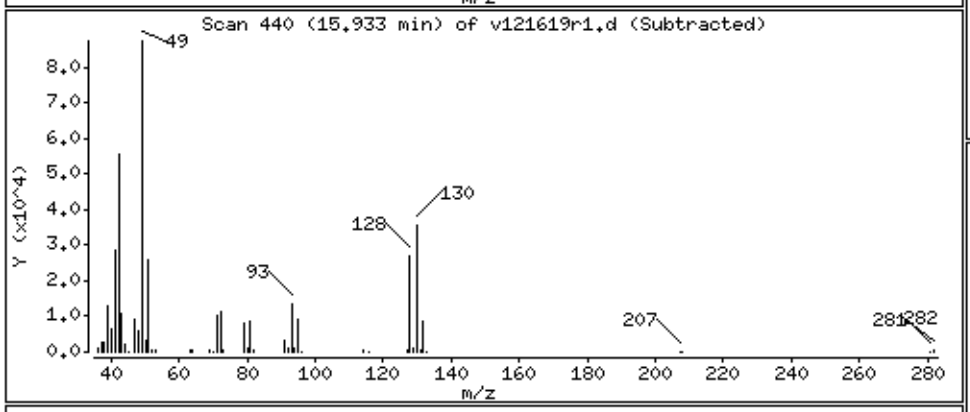
Column phase: RTx-624

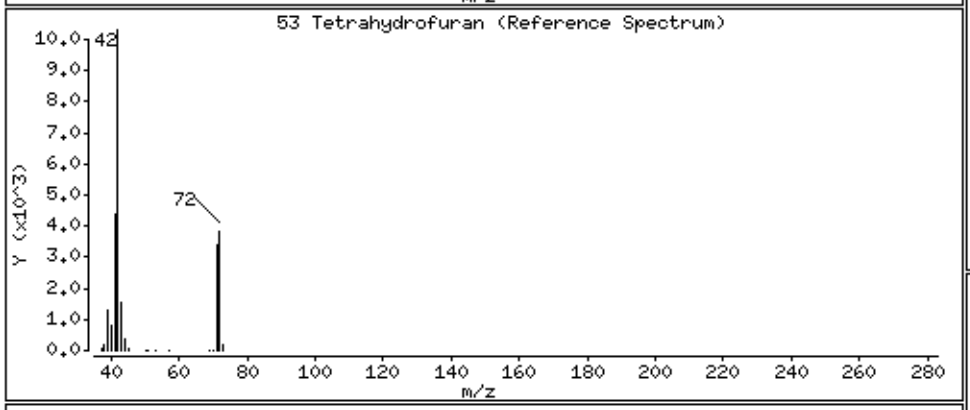
Column diameter: 0.32

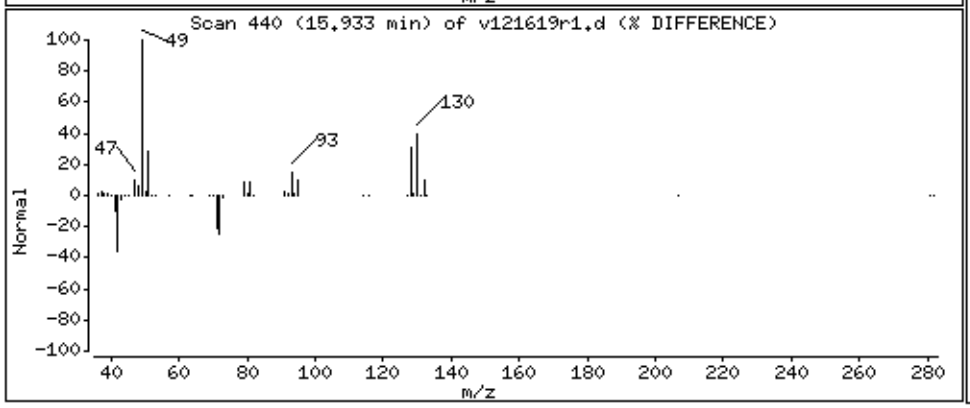
53 Tetrahydrofuran

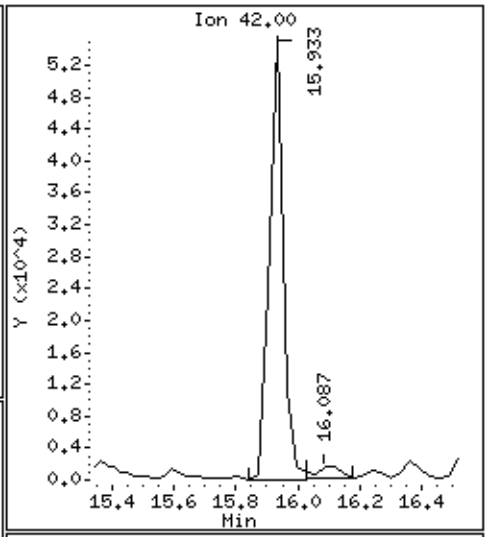
Concentration: 3.567 PPBV

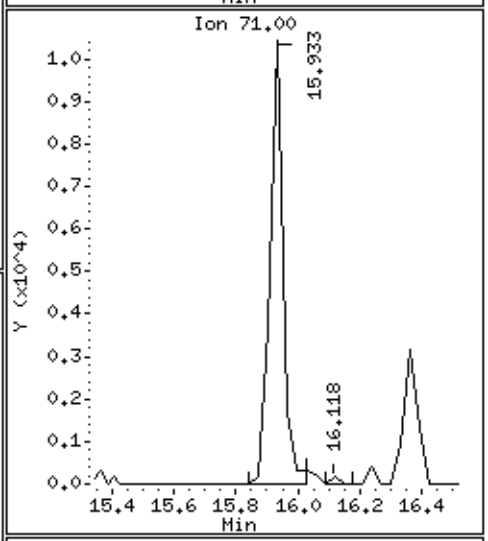


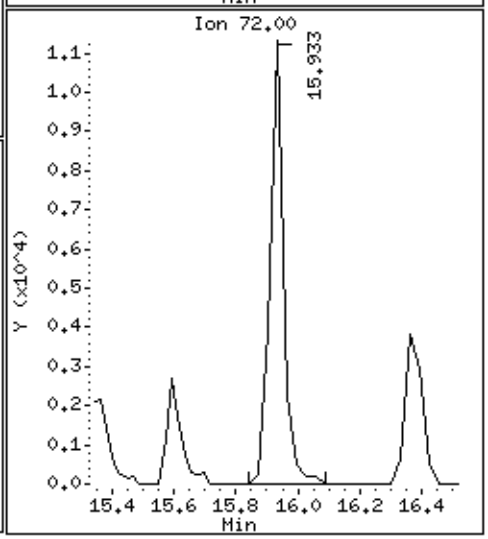












Data File: /chem/msdv.i/16Dec2014.b/v121619r1.d

Date : 16-DEC-2014 21:39

Client ID:

Instrument: msdv.i

Sample Info: 250ml #33889

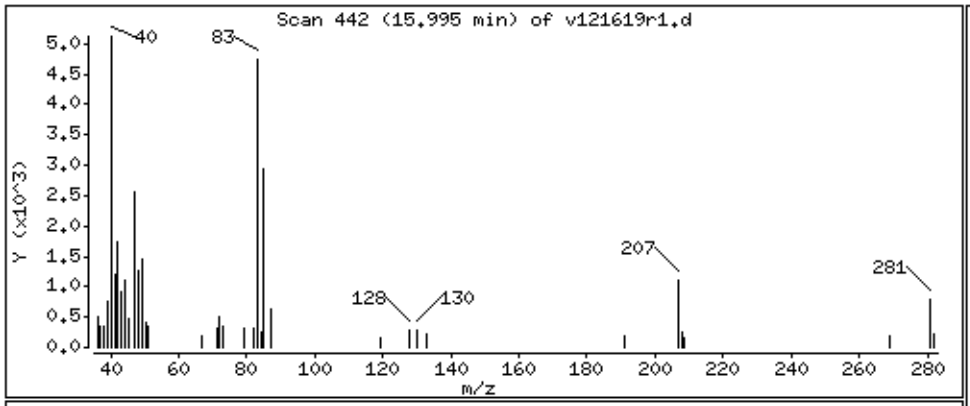
Operator: sn

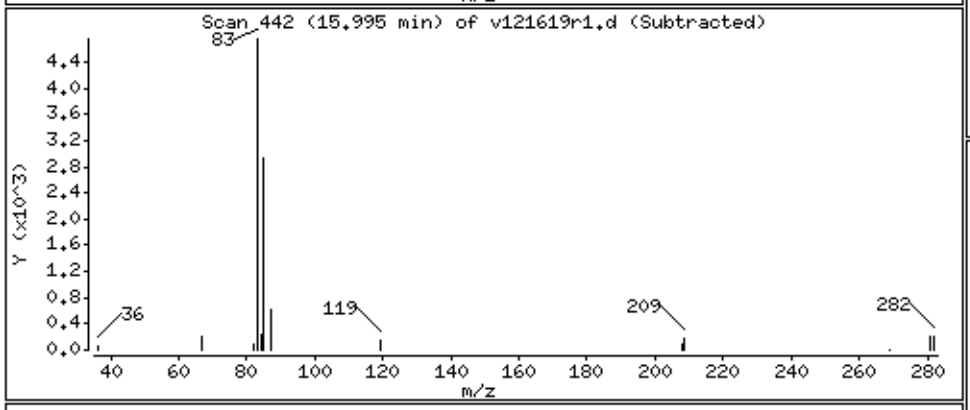
Column phase: RTx-624

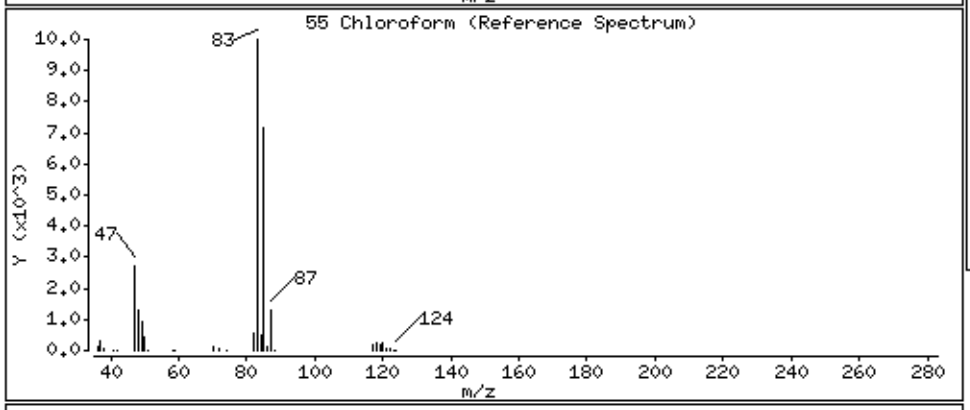
Column diameter: 0.32

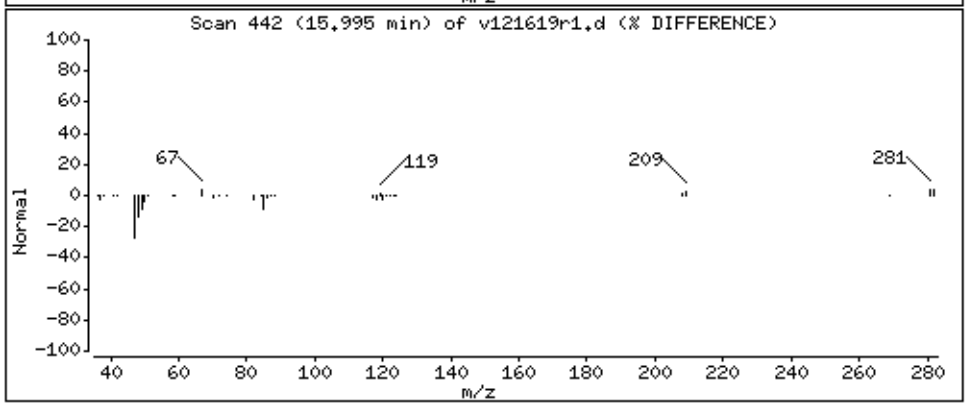
55 Chloroform

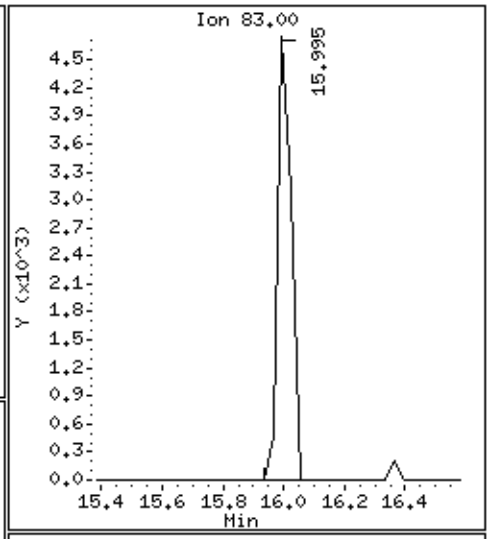
Concentration: 0.3392 PPBV

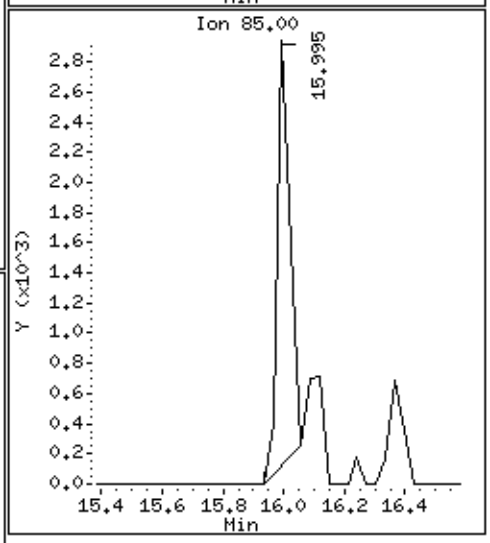












Data File: /chem/msdv.i/16Dec2014.b/v121619r1.d

Date : 16-DEC-2014 21:39

Client ID:

Instrument: msdv.i

Sample Info: 250ml #33889

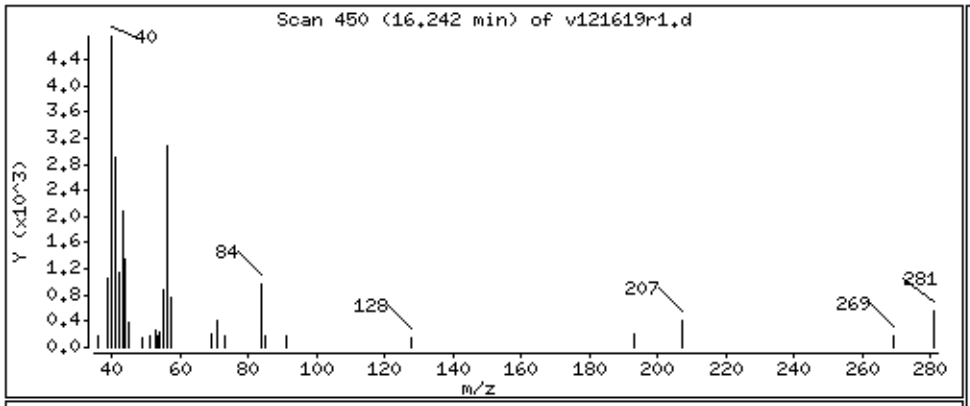
Operator: sn

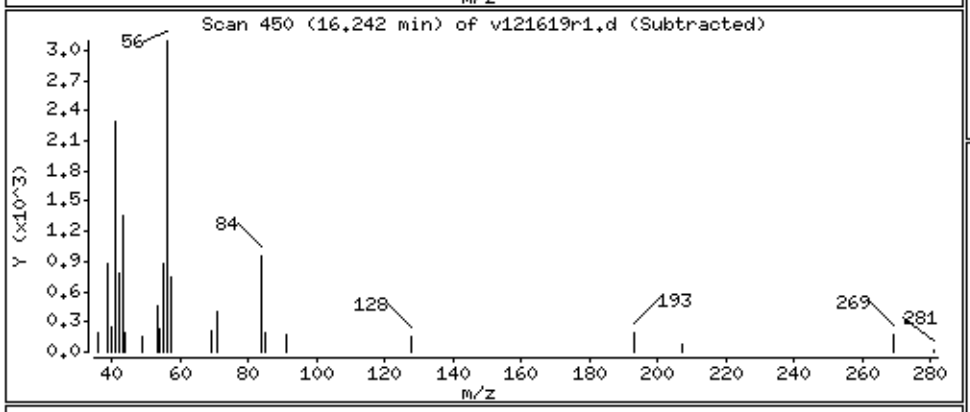
Column phase: RTx-624

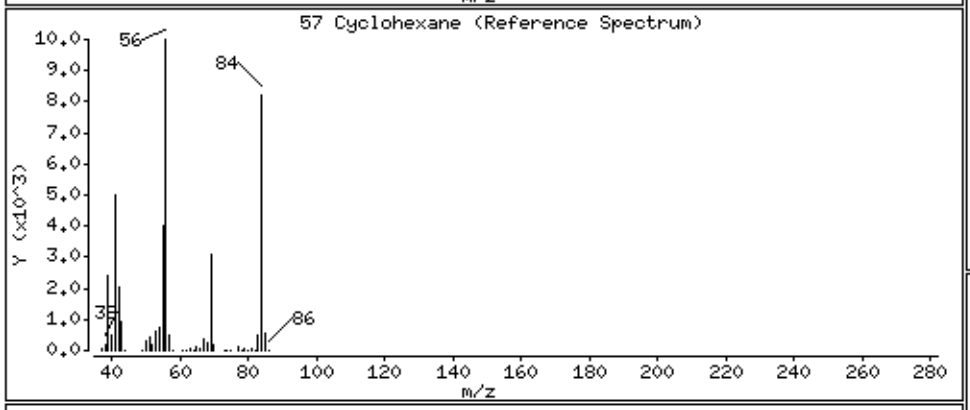
Column diameter: 0.32

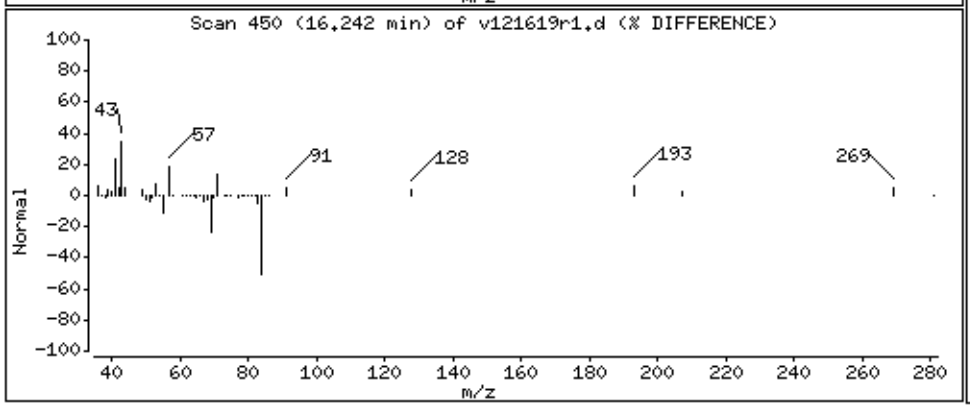
57 Cyclohexane

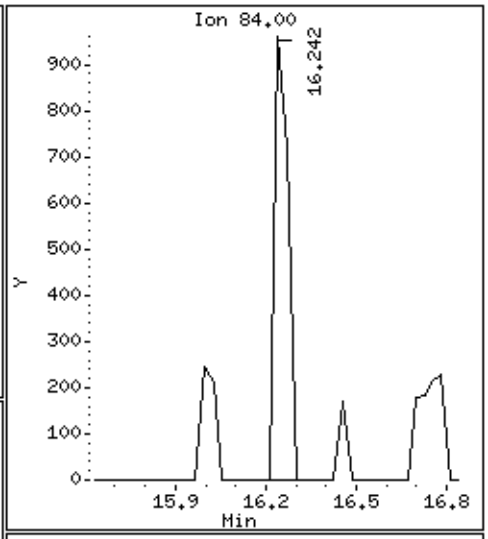
Concentration: 0.1091 PPBV

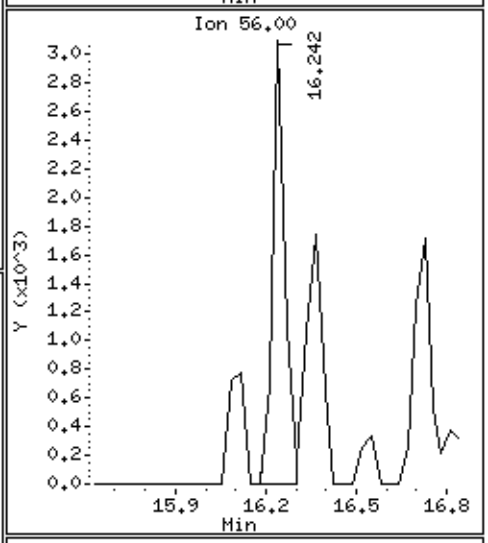


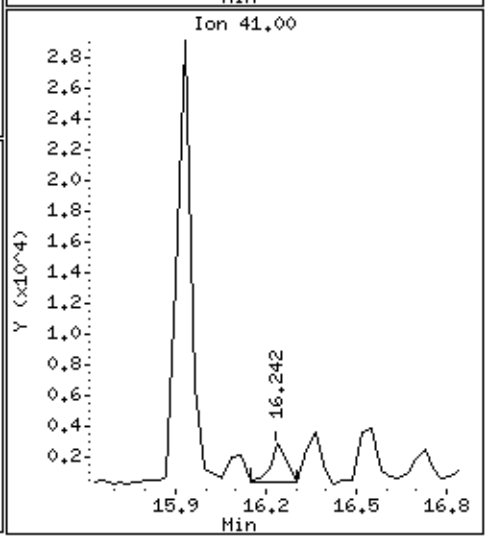












Data File: /chem/msdv.i/16Dec2014.b/v121619r1.d

Date : 16-DEC-2014 21:39

Client ID:

Instrument: msdv.i

Sample Info: 250ml #33889

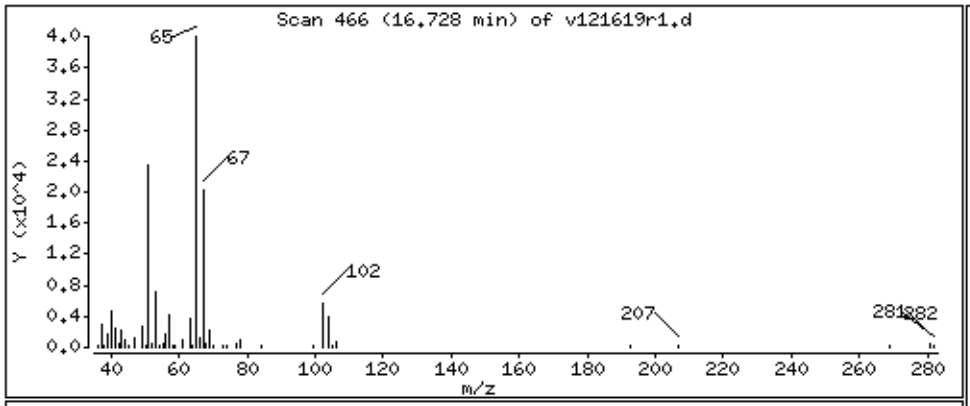
Operator: sn

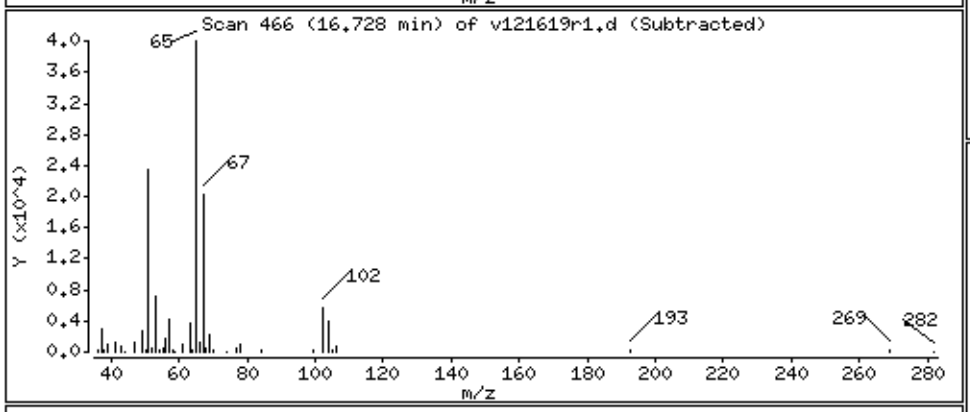
Column phase: RTx-624

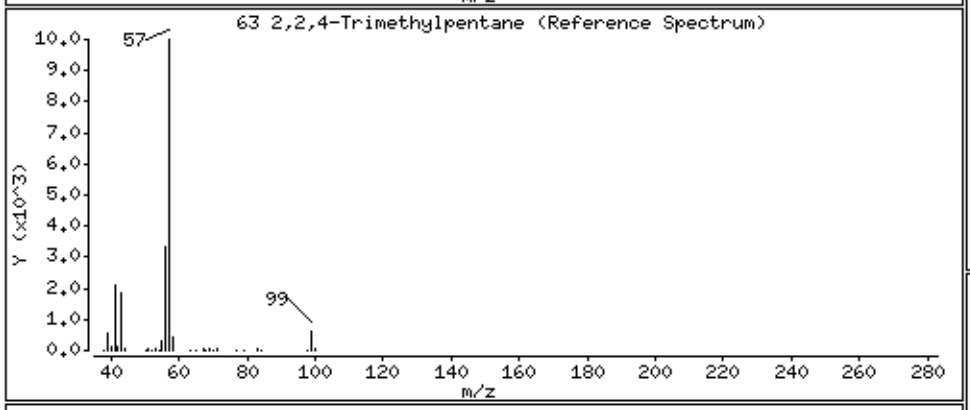
Column diameter: 0.32

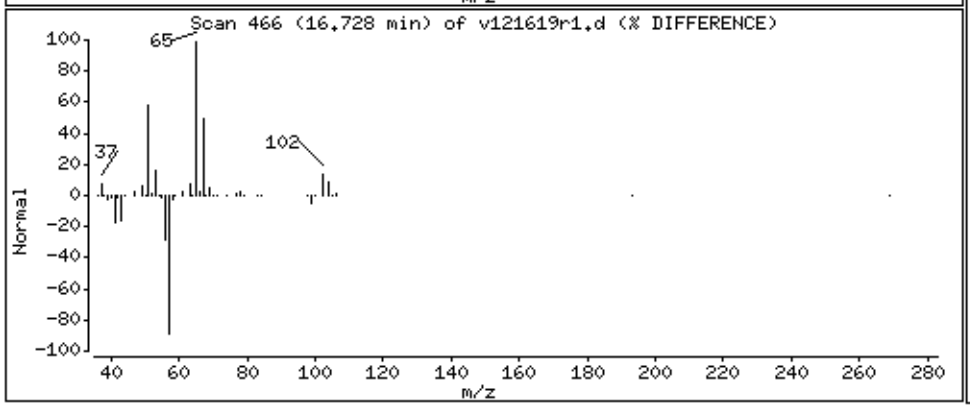
63 2,2,4-Trimethylpentane

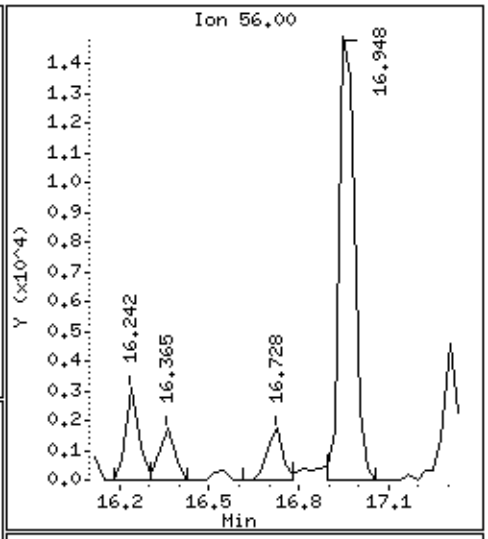
Concentration: 0.1371 PPBV

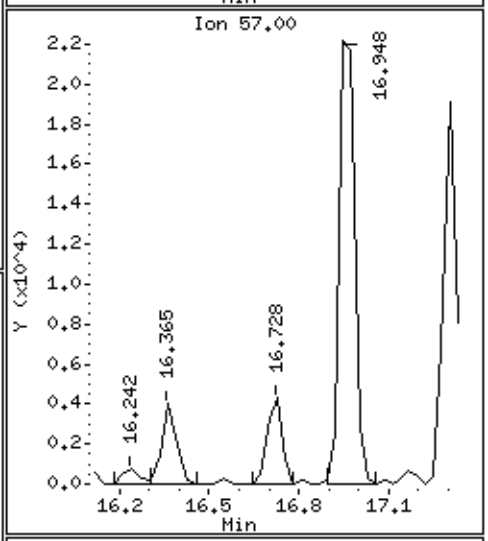


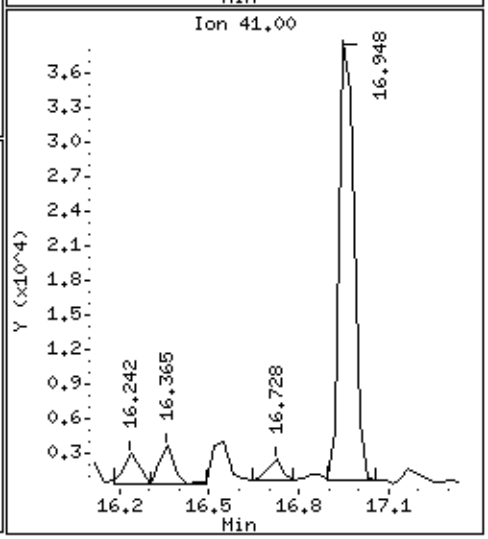












Data File: /chem/msdv.i/16Dec2014.b/v121619r1.d

Date : 16-DEC-2014 21:39

Client ID:

Instrument: msdv.i

Sample Info: 250ml #33889

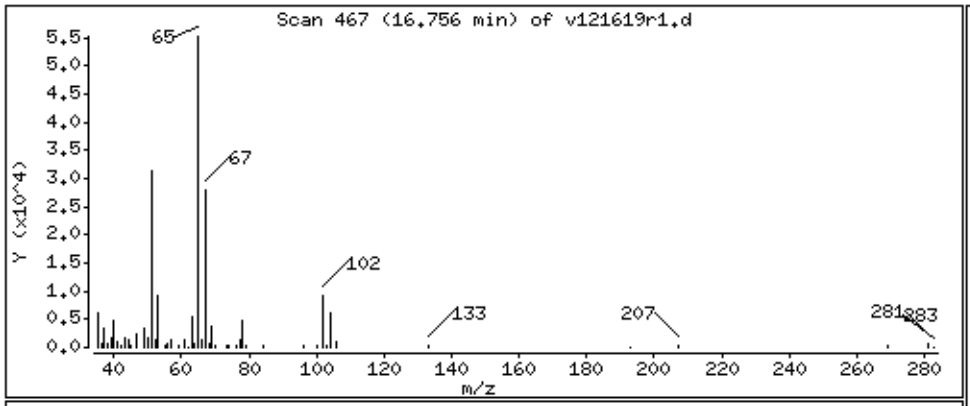
Operator: sn

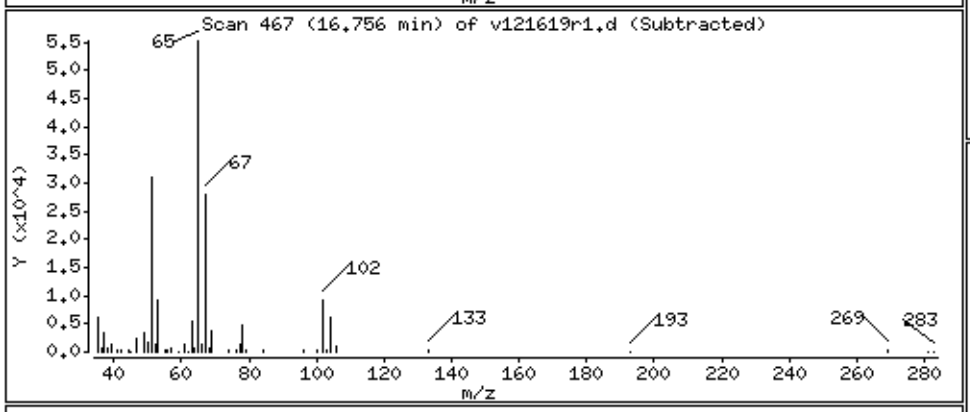
Column phase: RTx-624

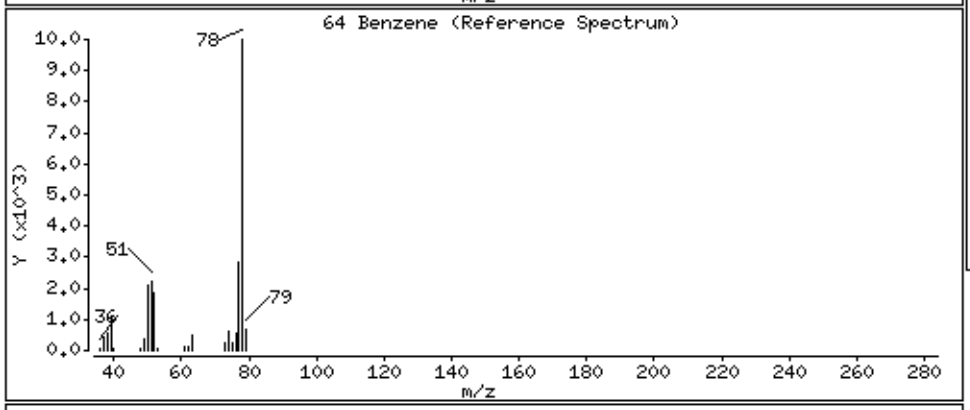
Column diameter: 0.32

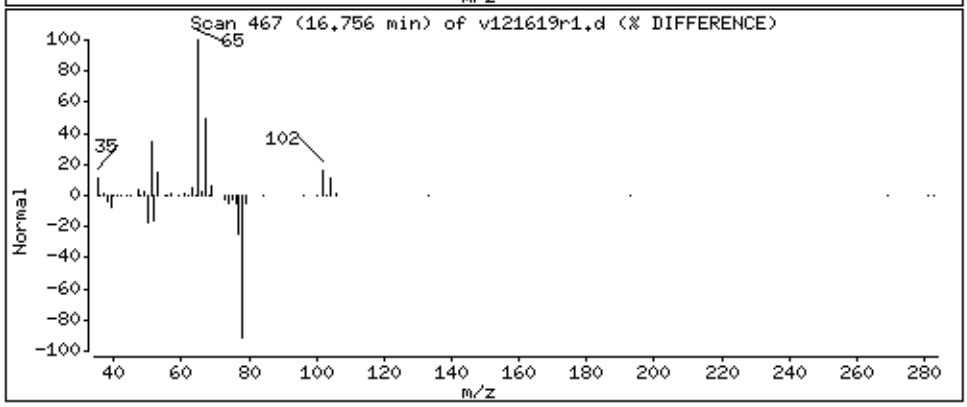
64 Benzene

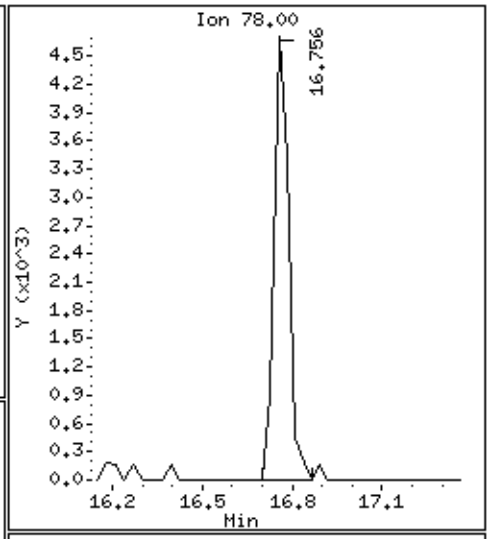
Concentration: 0.2323 PPBV

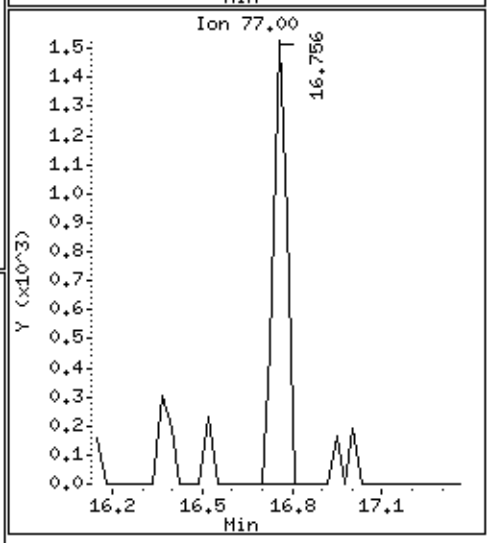












Data File: /chem/msdv.i/16Dec2014.b/v121619r1.d

Date : 16-DEC-2014 21:39

Client ID:

Instrument: msdv.i

Sample Info: 250ml #33889

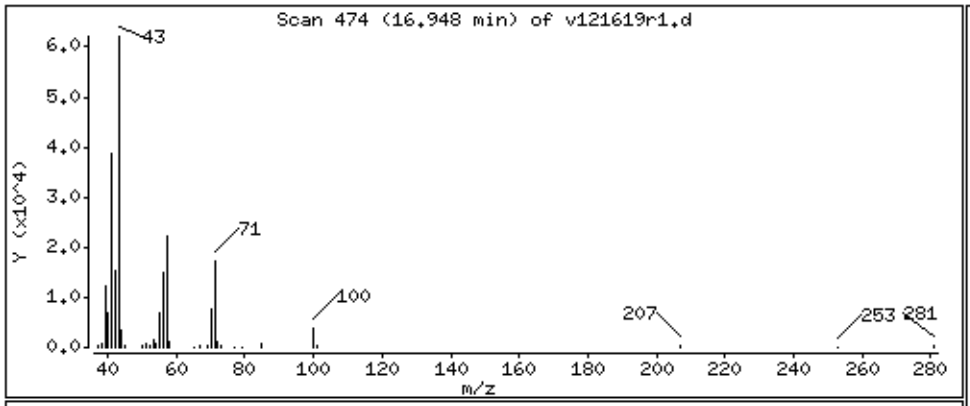
Operator: sn

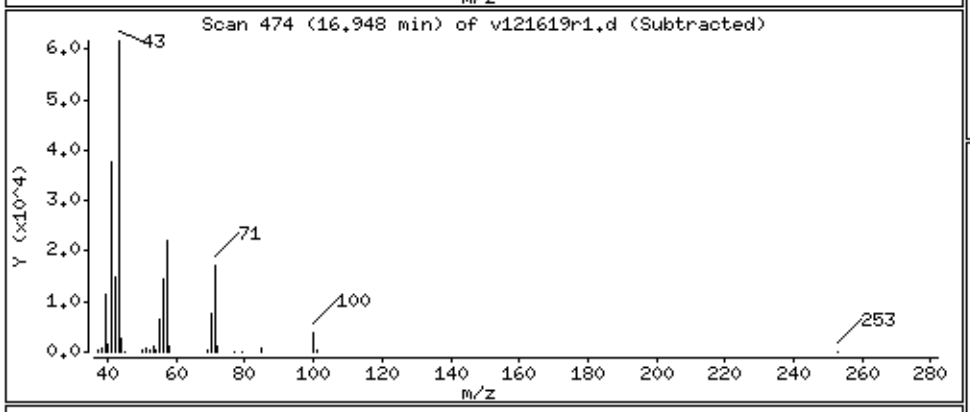
Column phase: RTx-624

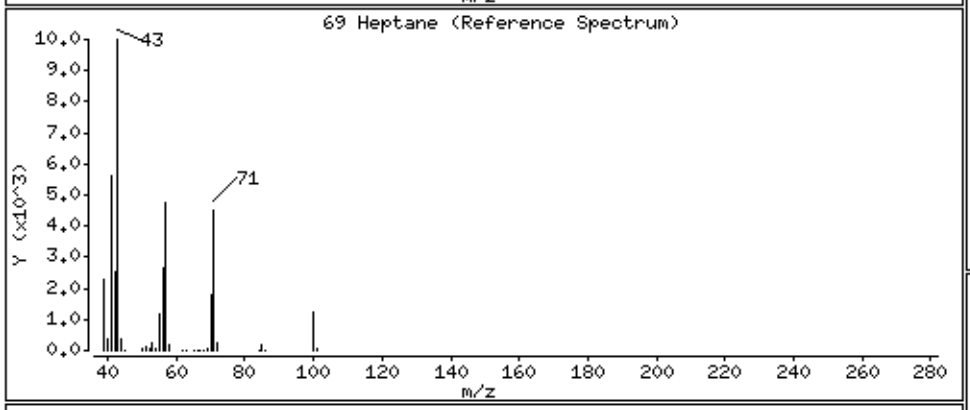
Column diameter: 0.32

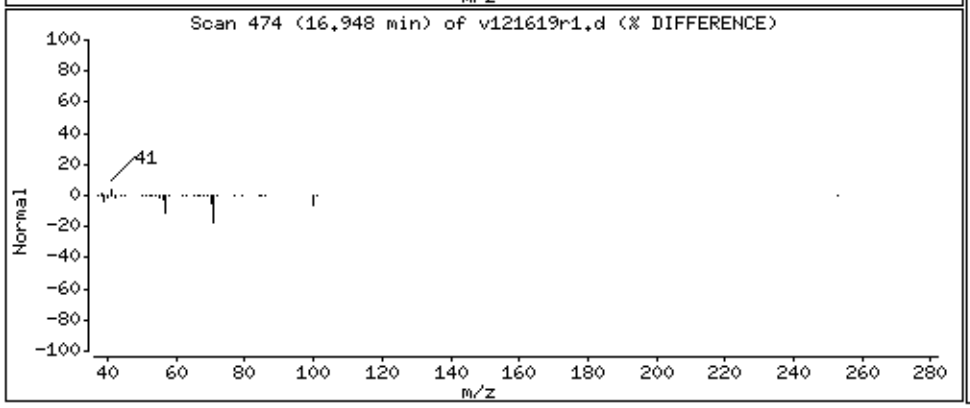
69 Heptane

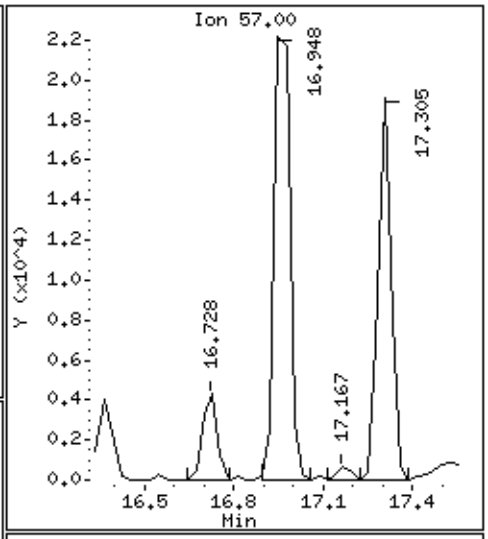
Concentration: 2.780 PPBV

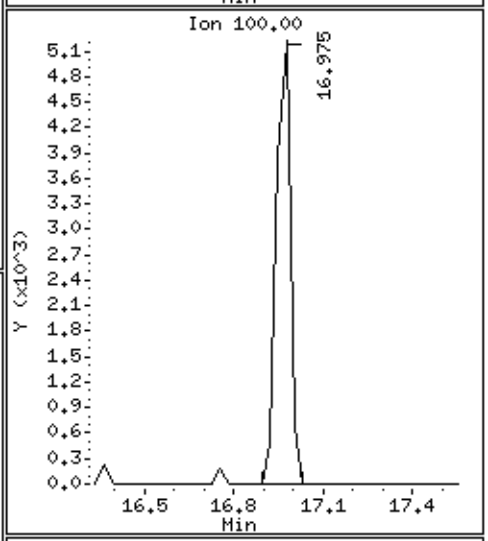


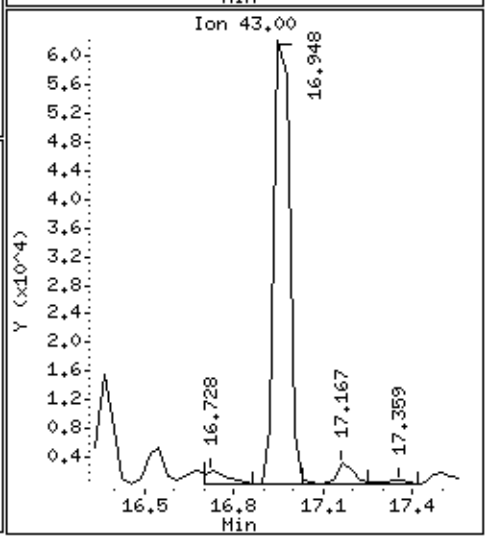












Data File: /chem/msdv.i/16Dec2014.b/v121619r1.d

Date : 16-DEC-2014 21:39

Client ID:

Instrument: msdv.i

Sample Info: 250ml #33889

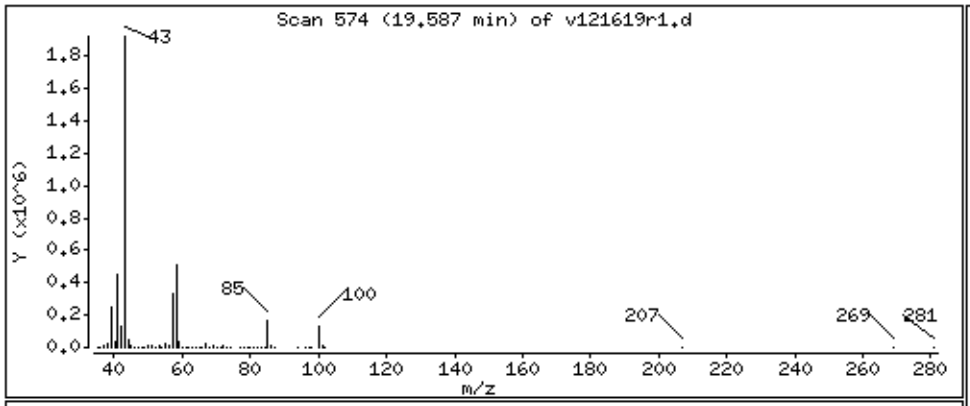
Operator: sn

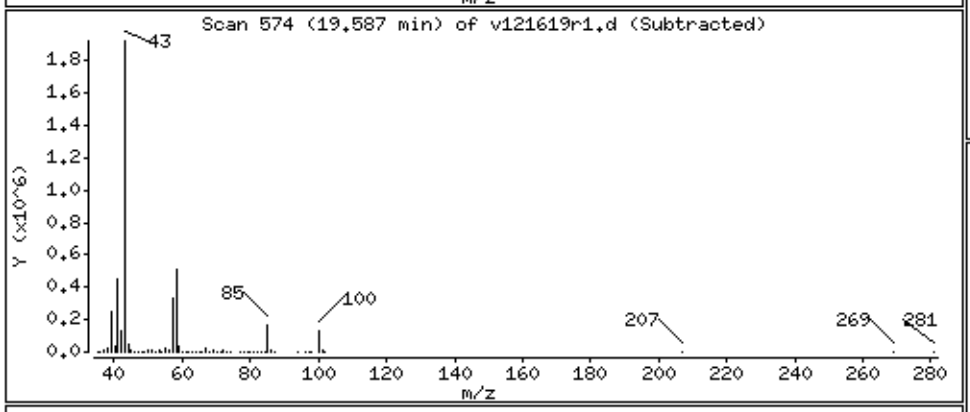
Column phase: RTx-624

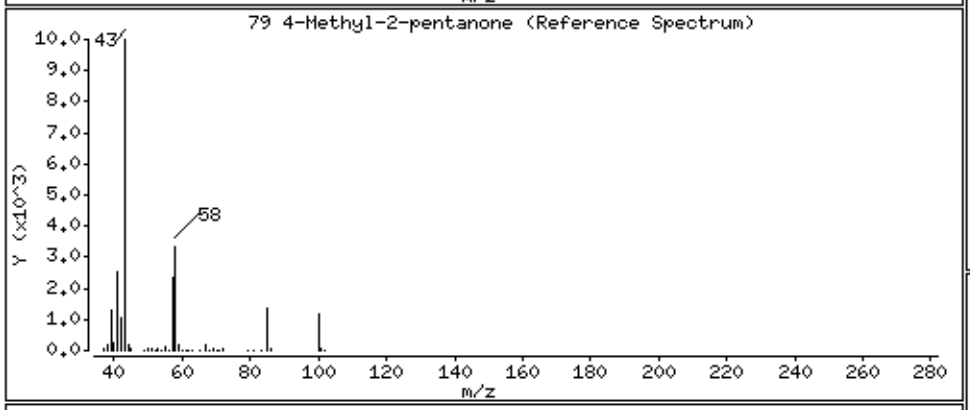
Column diameter: 0.32

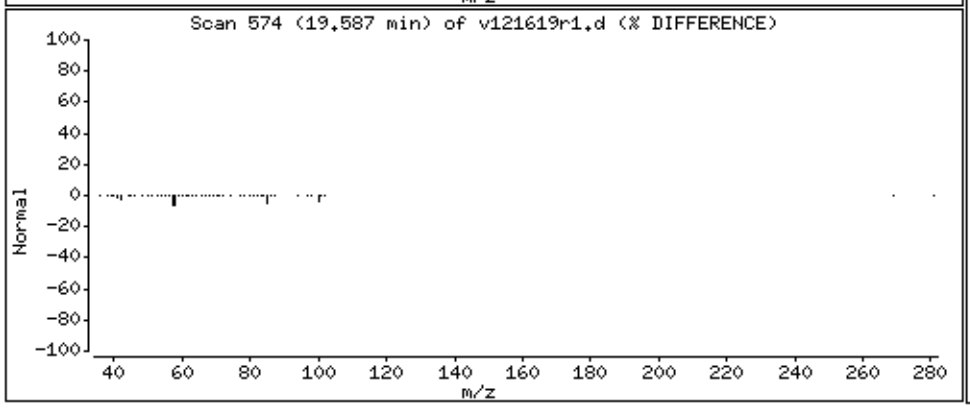
79 4-Methyl-2-pentanone

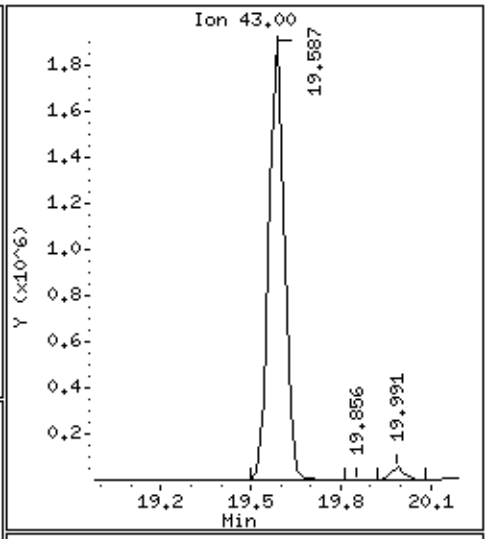
Concentration: 71.031 PPBV

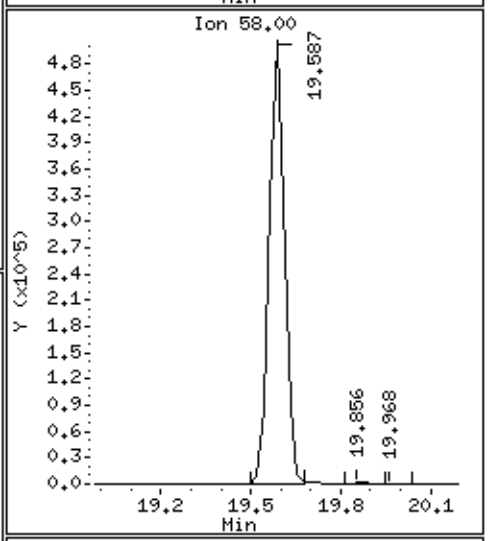


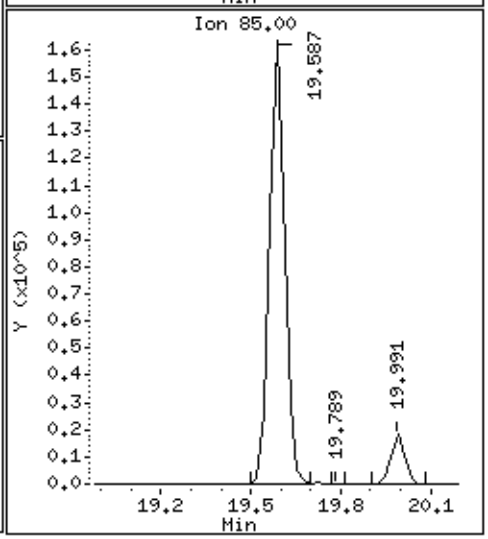












Data File: /chem/msdv.i/16Dec2014.b/v121619r1.d

Date : 16-DEC-2014 21:39

Client ID:

Instrument: msdv.i

Sample Info: 250ml #33889

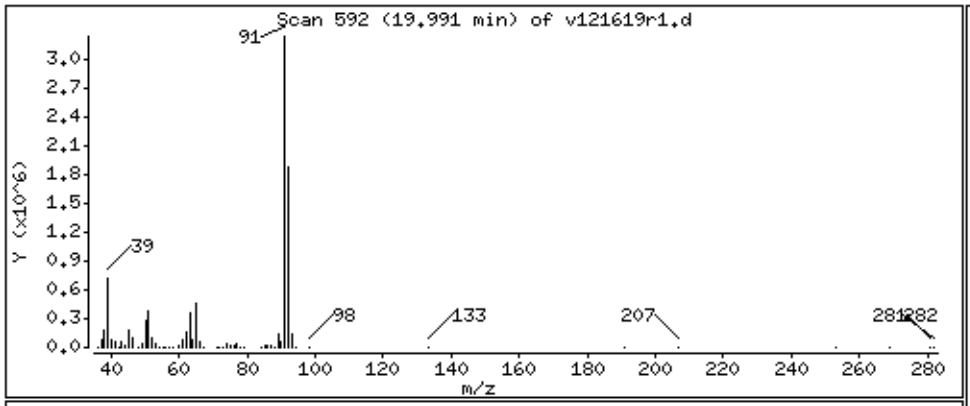
Operator: sn

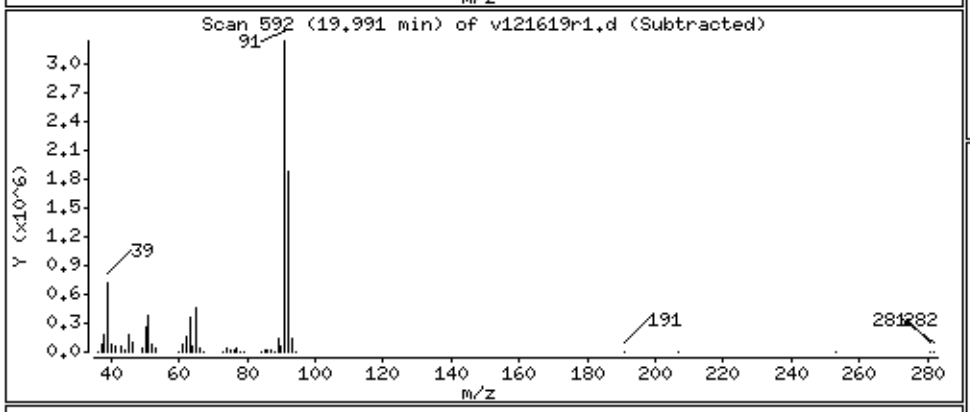
Column phase: RTx-624

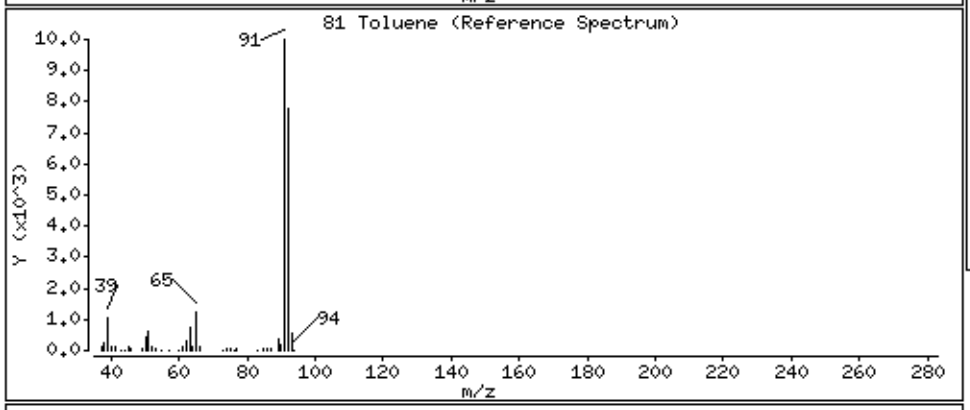
Column diameter: 0.32

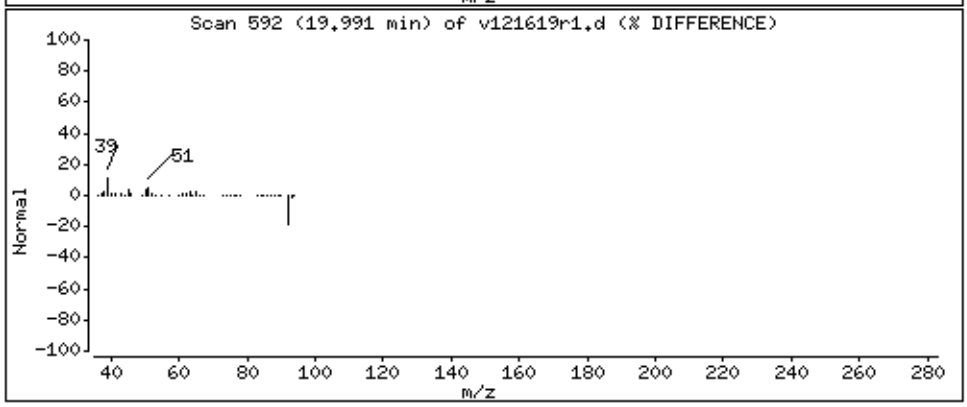
81 Toluene

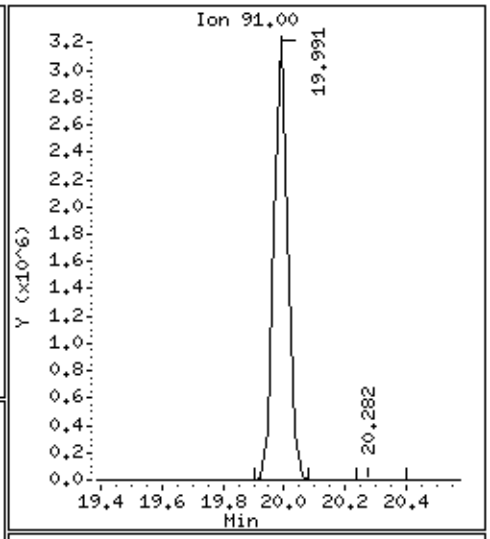
Concentration: 136.76 PPBV

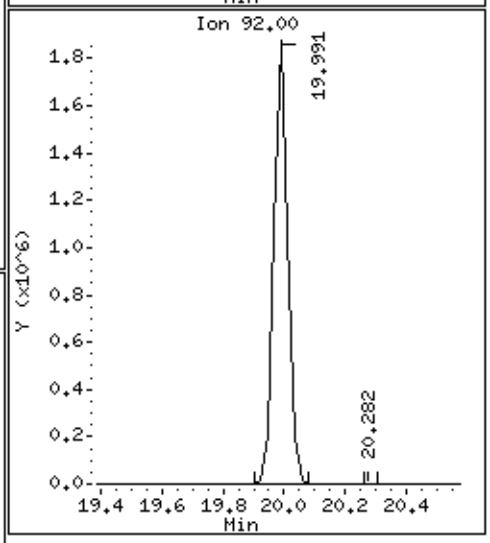












Data File: /chem/msdv.i/16Dec2014.b/v121619r1.d

Date : 16-DEC-2014 21:39

Client ID:

Instrument: msdv.i

Sample Info: 250ml #33889

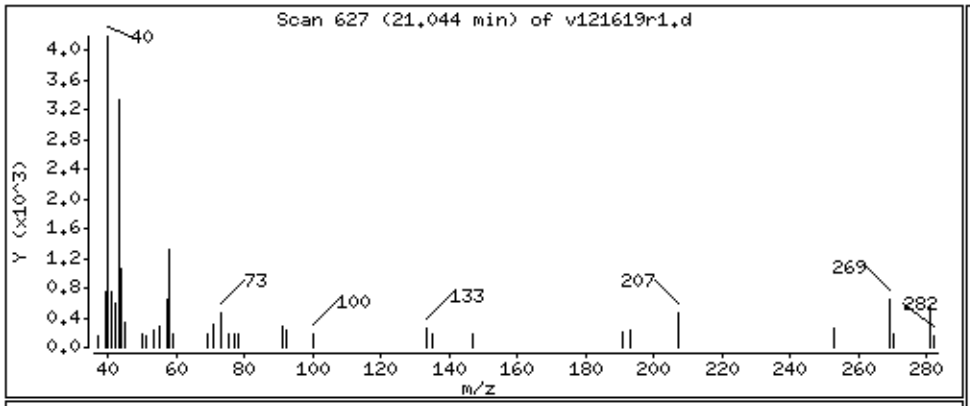
Operator: sn

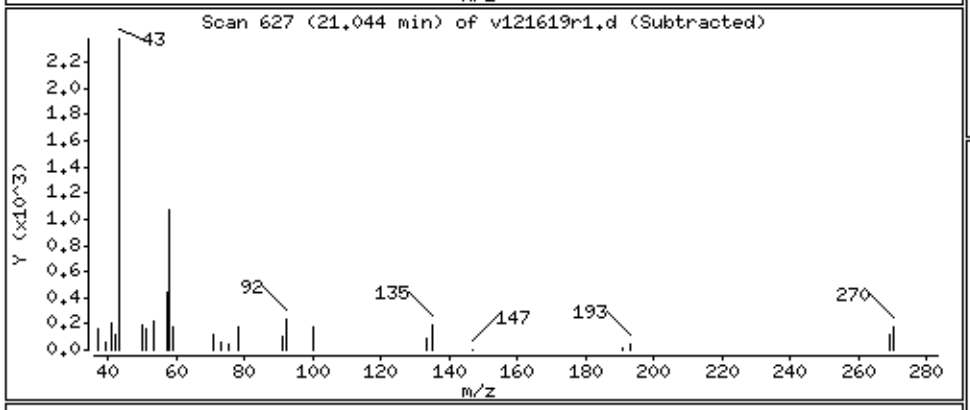
Column phase: RTx-624

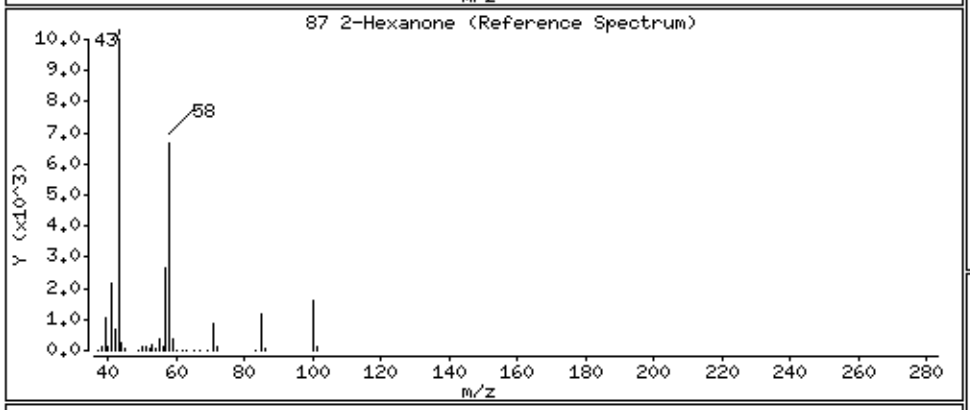
Column diameter: 0.32

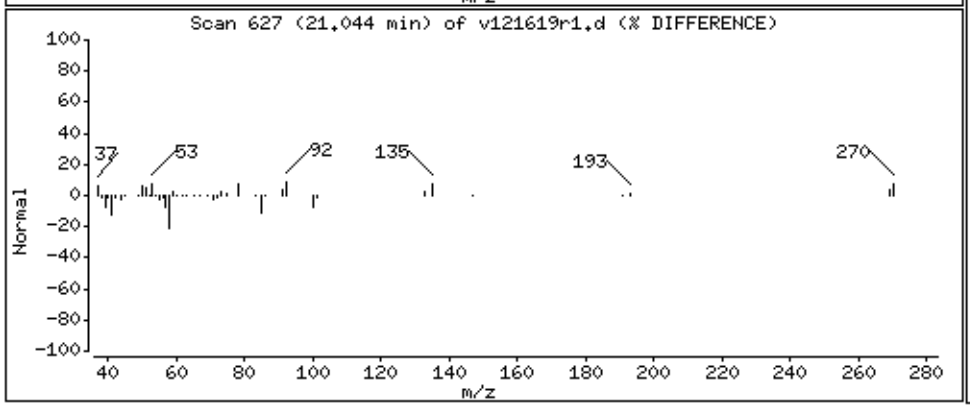
87 2-Hexanone

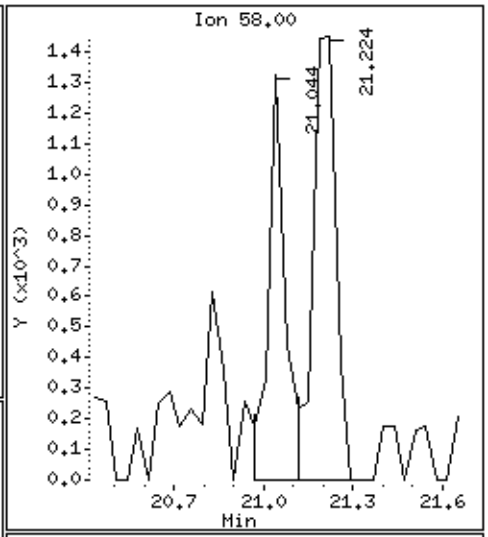
Concentration: 0.1650 PPBV

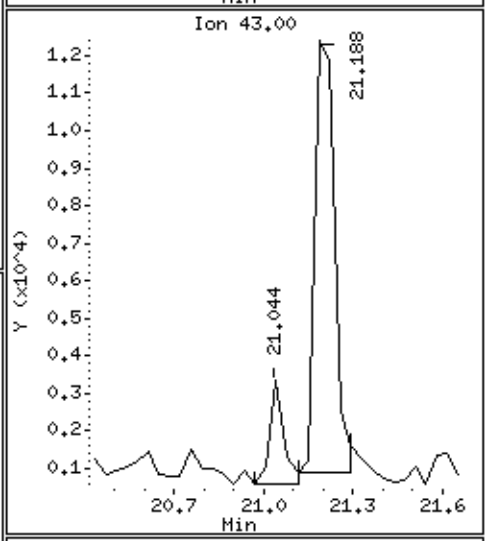


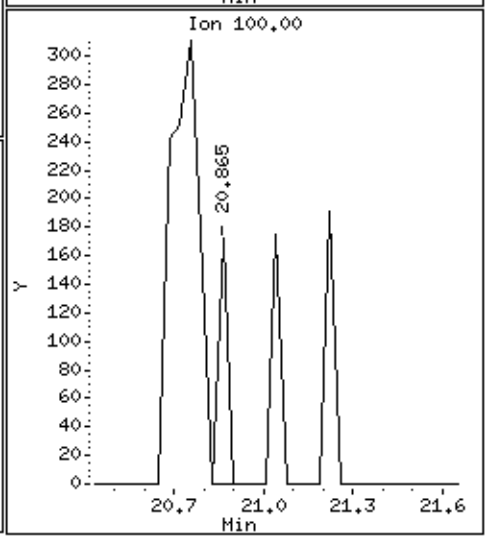












Data File: /chem/msdv.i/16Dec2014.b/v121619r1.d

Date : 16-DEC-2014 21:39

Client ID:

Instrument: msdv.i

Sample Info: 250ml #33889

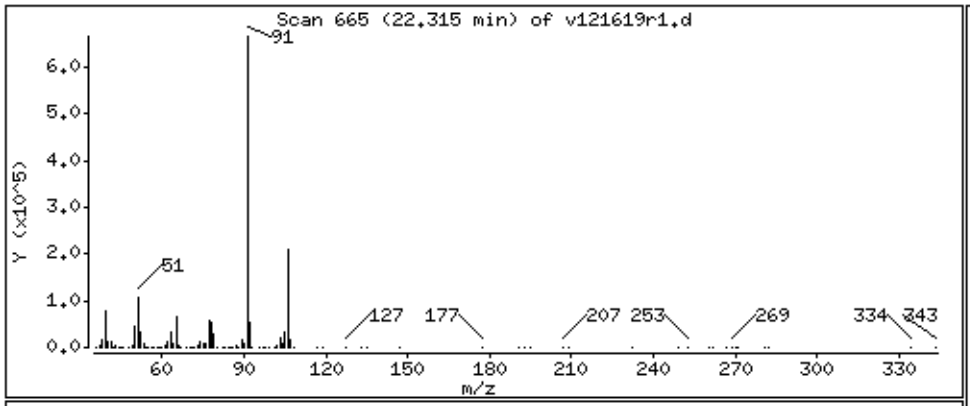
Operator: sn

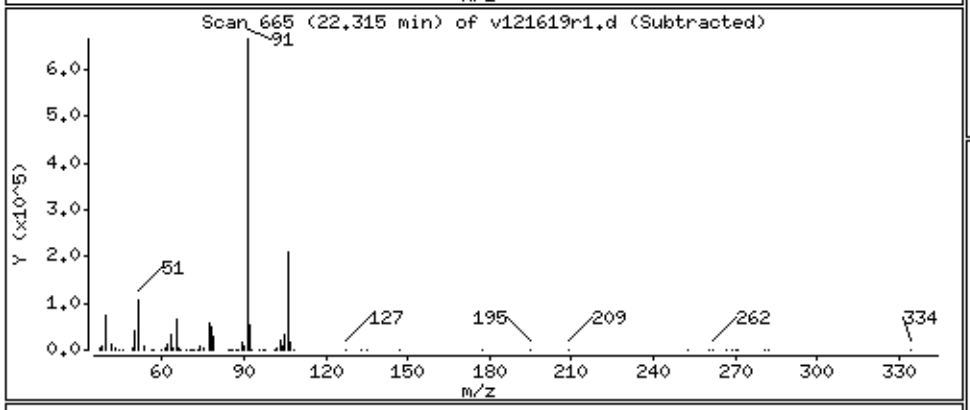
Column phase: RTx-624

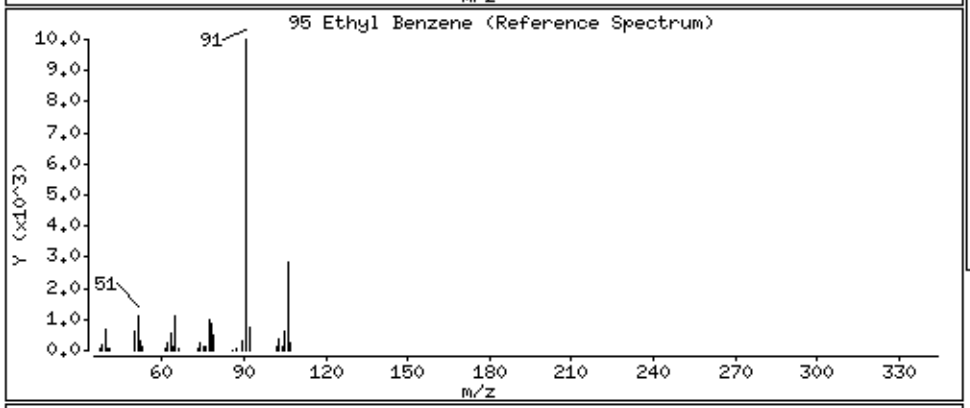
Column diameter: 0.32

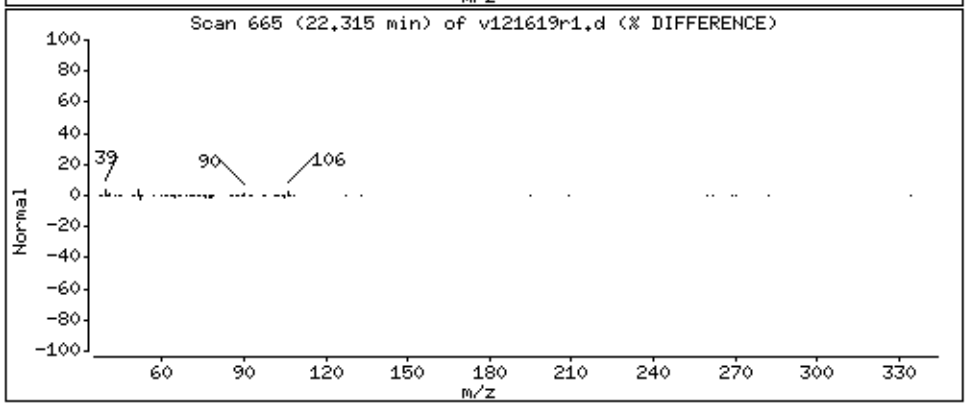
95 Ethyl Benzene

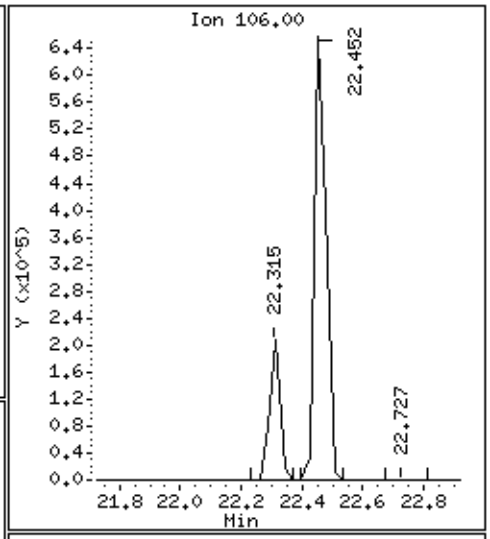
Concentration: 18.588 PPBV

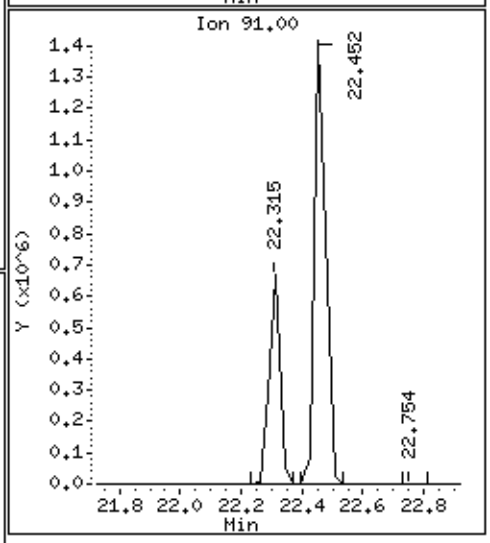












Data File: /chem/msdv.i/16Dec2014.b/v121619r1.d

Date : 16-DEC-2014 21:39

Client ID:

Instrument: msdv.i

Sample Info: 250ml #33889

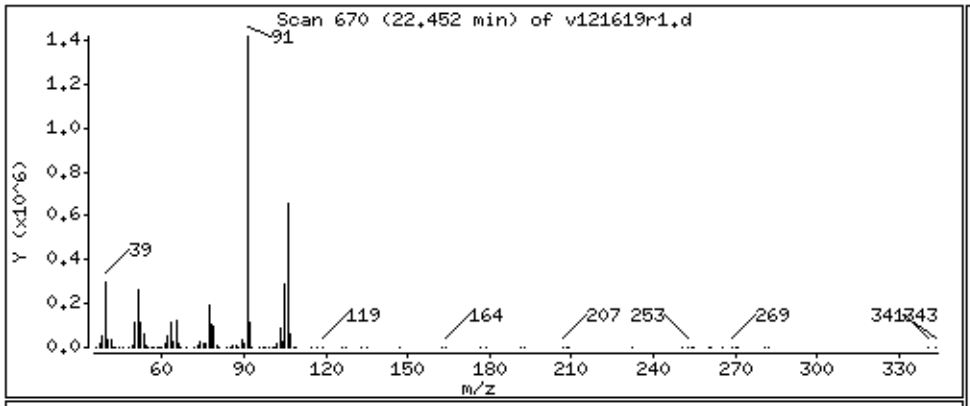
Operator: sn

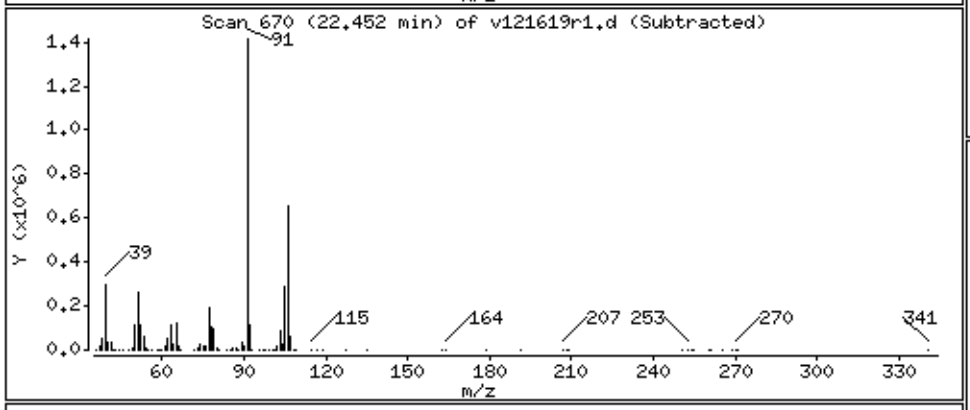
Column phase: RTx-624

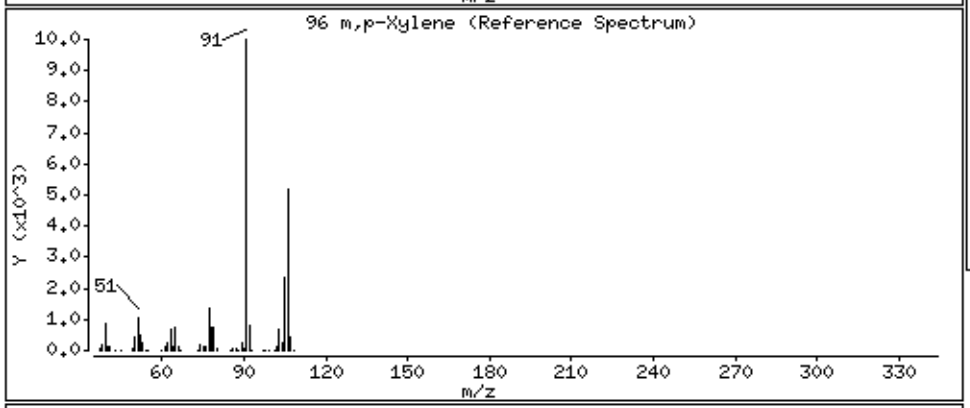
Column diameter: 0.32

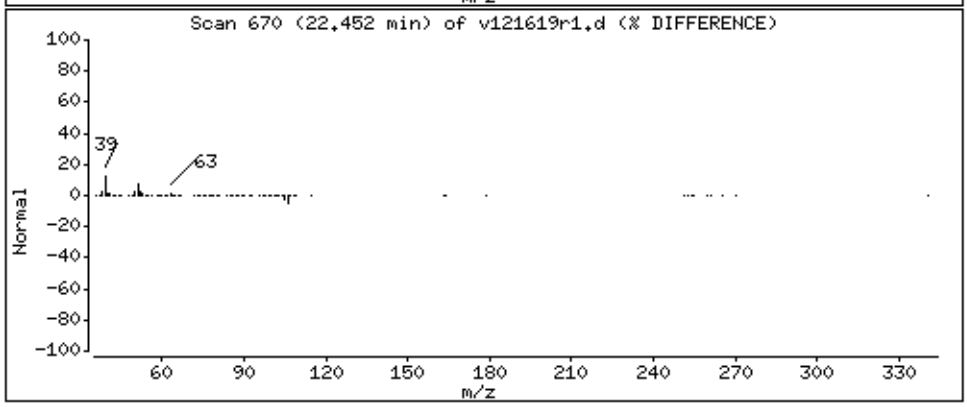
96 m,p-Xylene

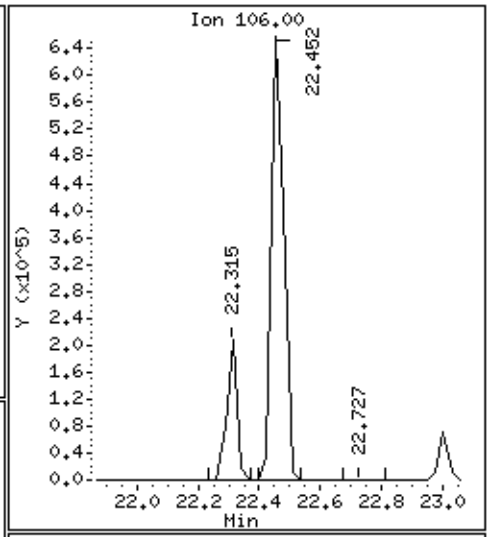
Concentration: 67.630 PPBV

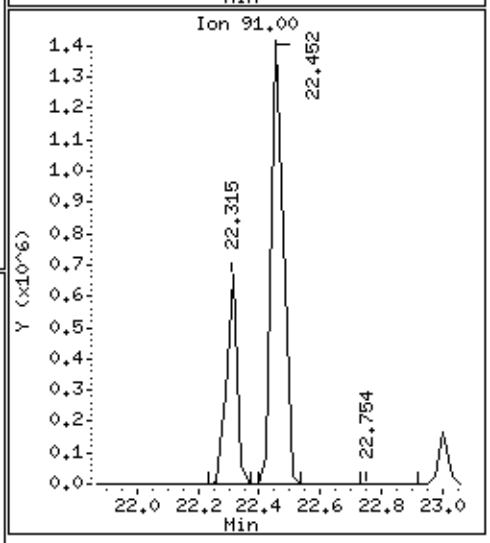












Data File: /chem/msdv.i/16Dec2014.b/v121619r1.d

Date : 16-DEC-2014 21:39

Client ID:

Instrument: msdv.i

Sample Info: 250ml #33889

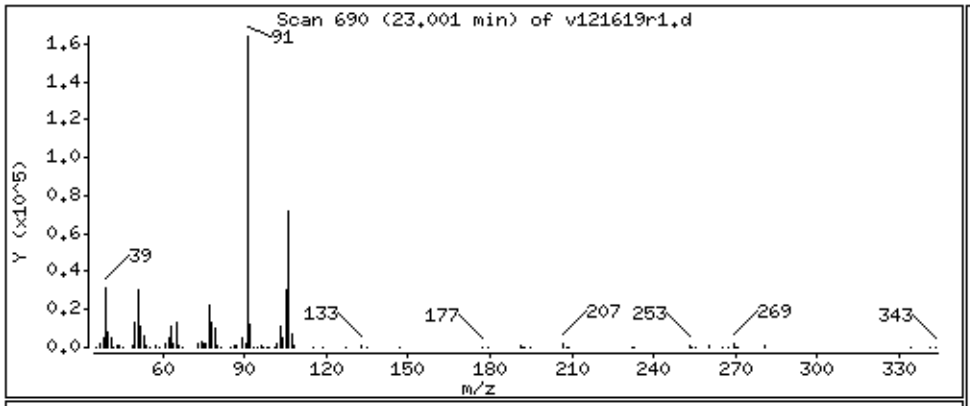
Operator: sn

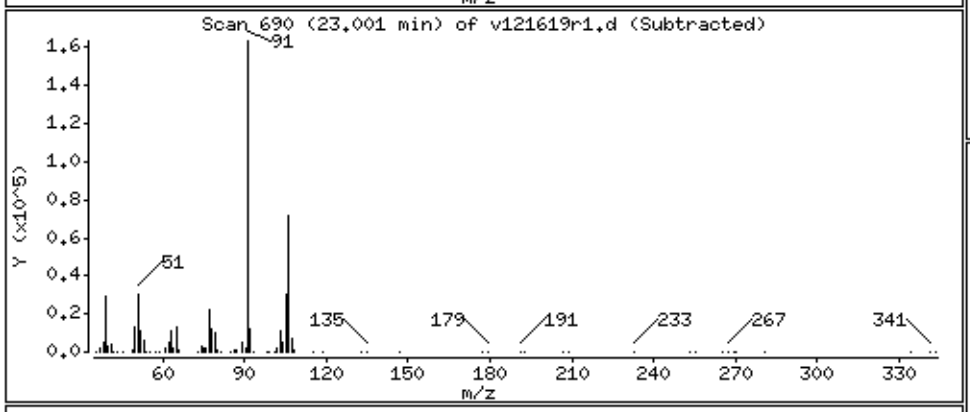
Column phase: RTx-624

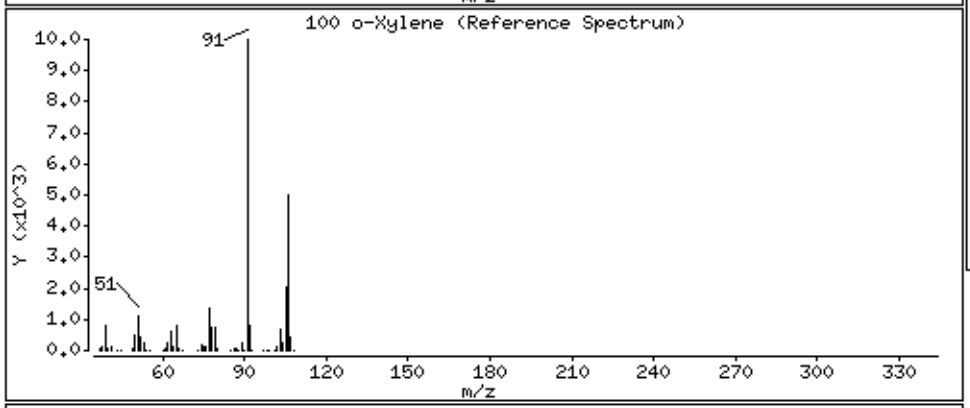
Column diameter: 0.32

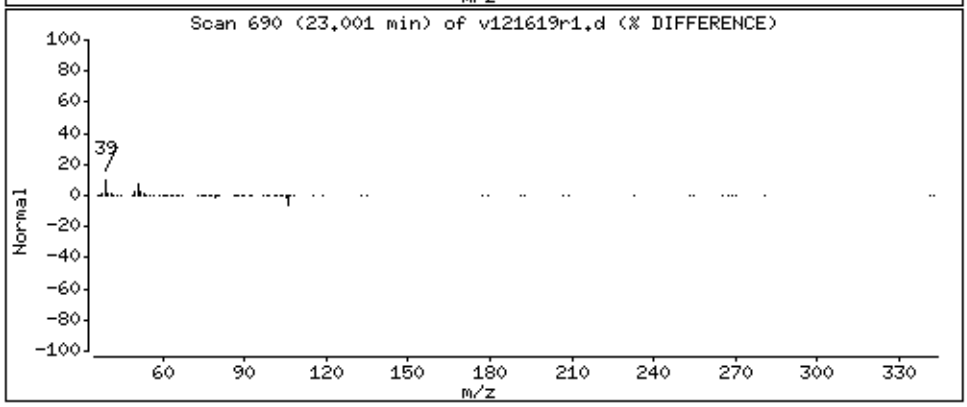
100 o-Xylene

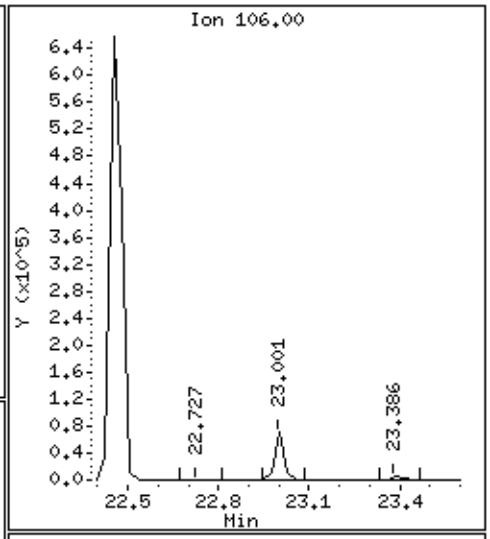
Concentration: 6.234 PPBV

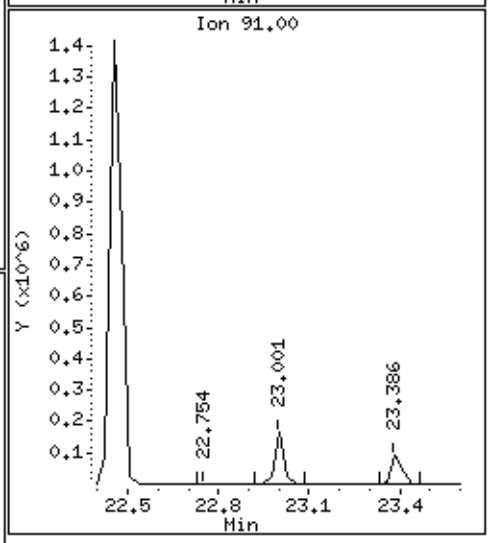












Data File: /chem/msdv.i/16Dec2014.b/v121619r1.d

Date : 16-DEC-2014 21:39

Client ID:

Instrument: msdv.i

Sample Info: 250ml #33889

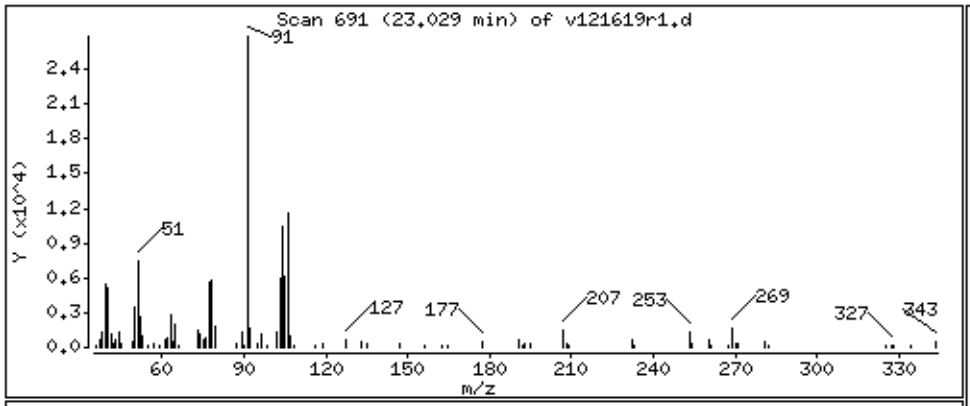
Operator: sn

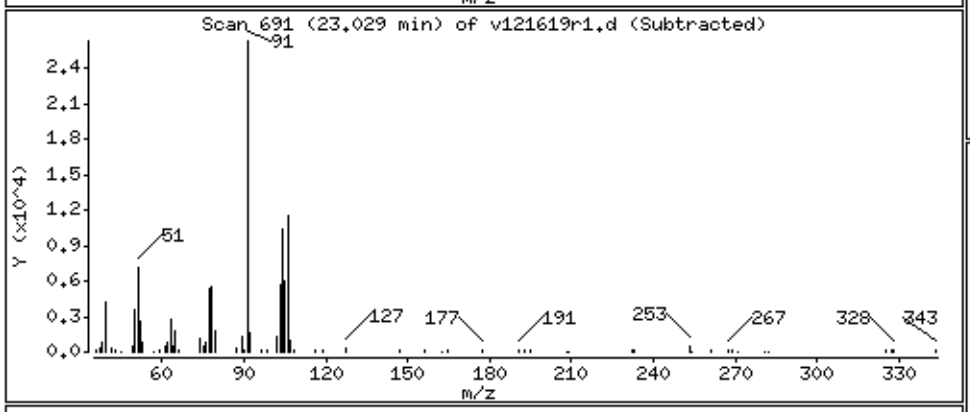
Column phase: RTx-624

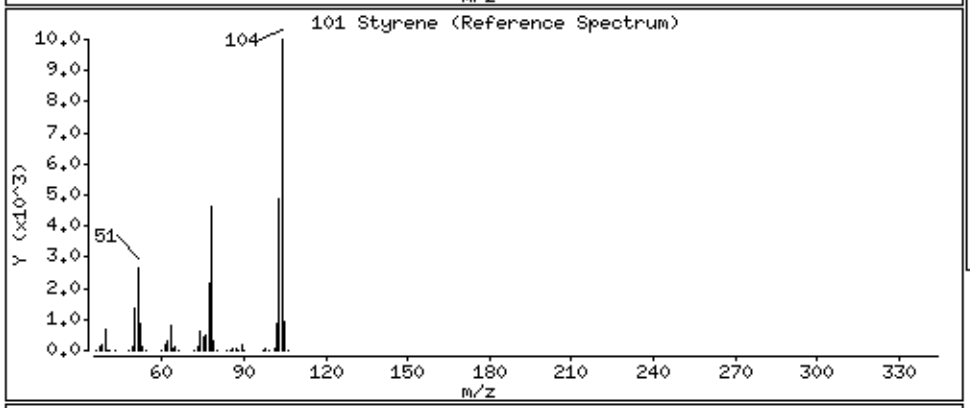
Column diameter: 0.32

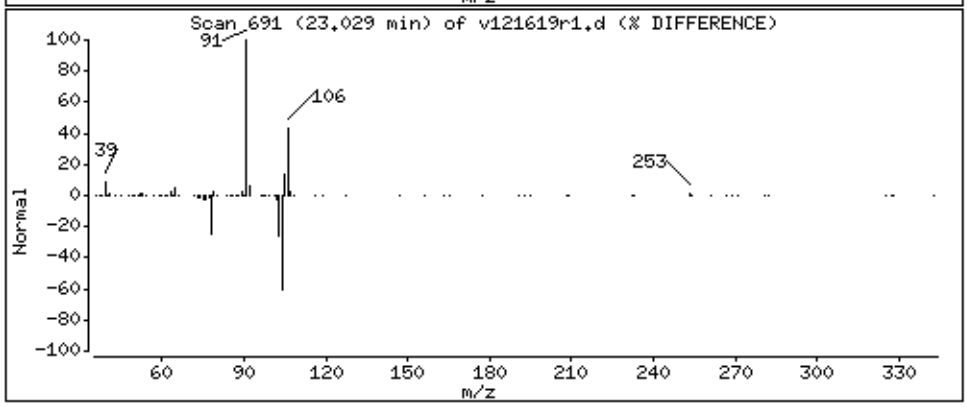
101 Styrene

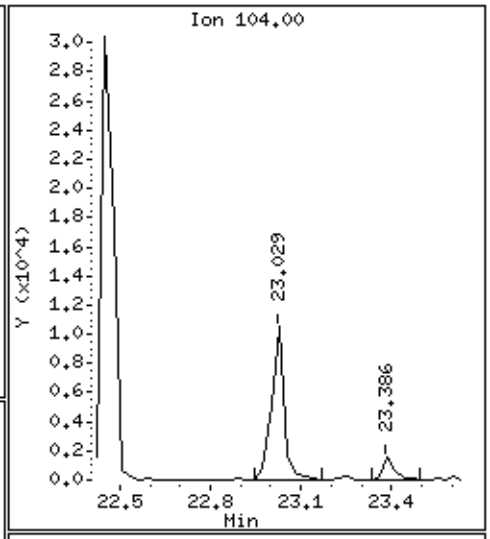
Concentration: 0.8527 PPBV

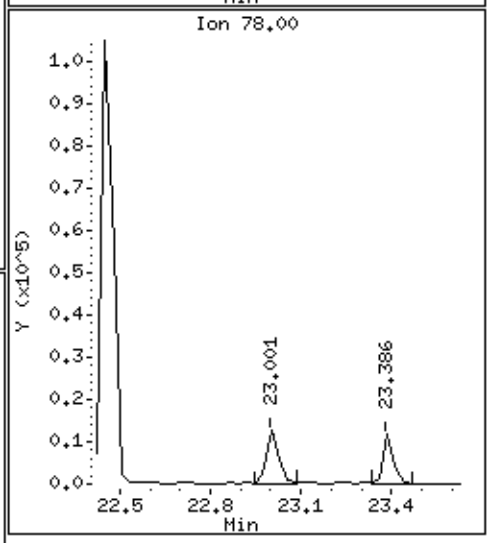












Data File: /chem/msdv.i/16Dec2014.b/v121619r1.d

Date : 16-DEC-2014 21:39

Client ID:

Instrument: msdv.i

Sample Info: 250ml #33889

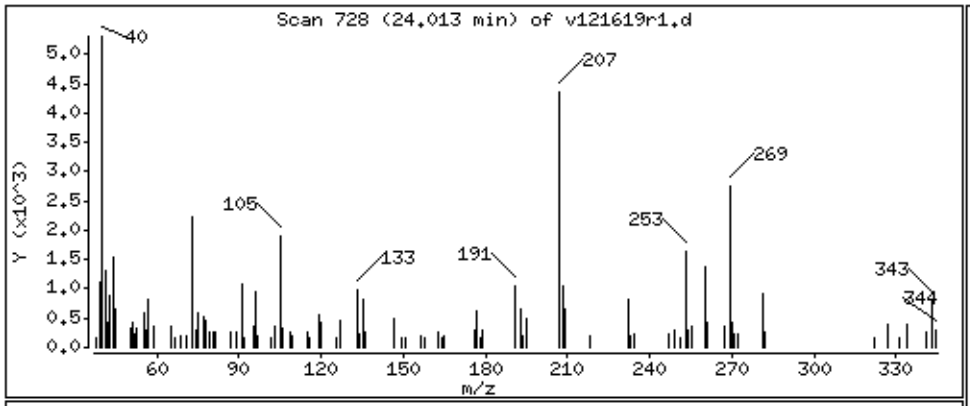
Operator: sn

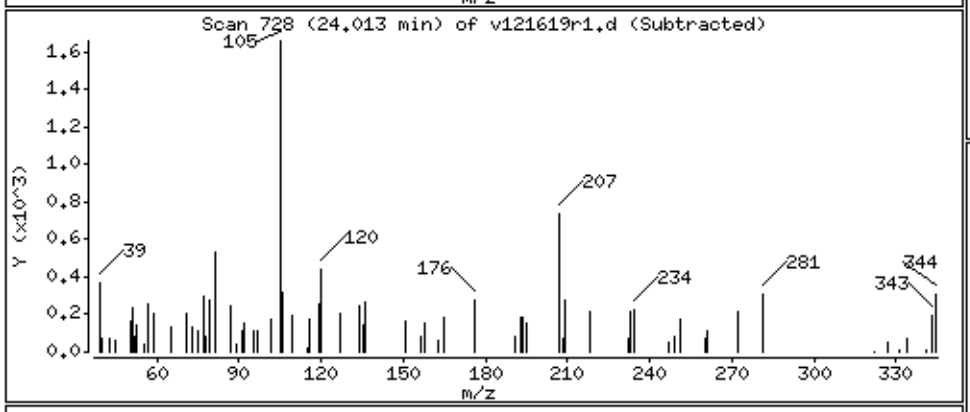
Column phase: RTx-624

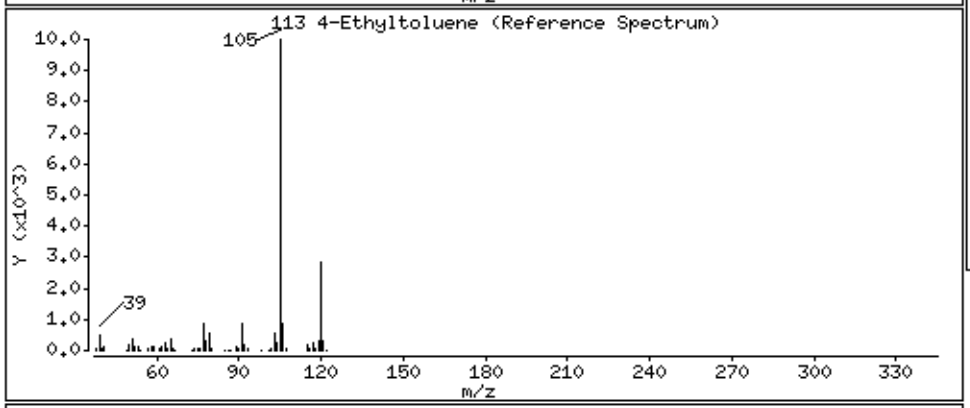
Column diameter: 0.32

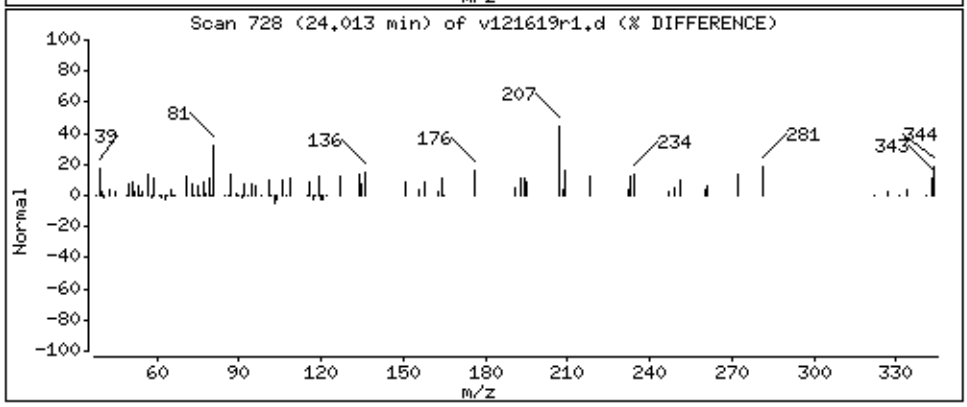
113 4-Ethyltoluene

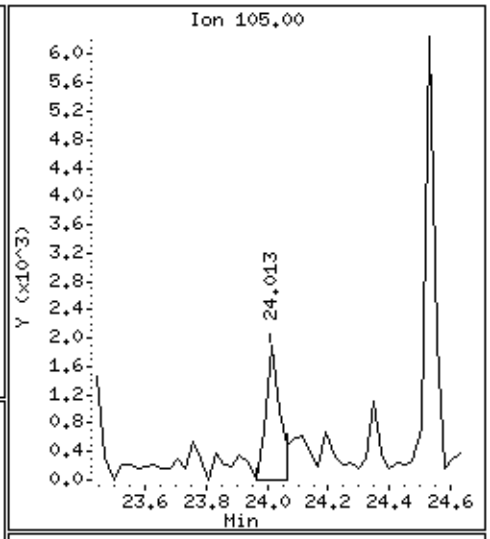
Concentration: 0.1321 PPBV

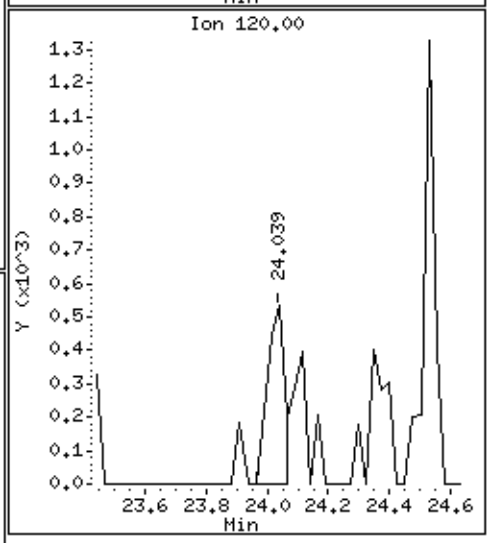












Data File: /chem/msdv.i/16Dec2014.b/v121619r1.d

Date : 16-DEC-2014 21:39

Client ID:

Instrument: msdv.i

Sample Info: 250ml #33889

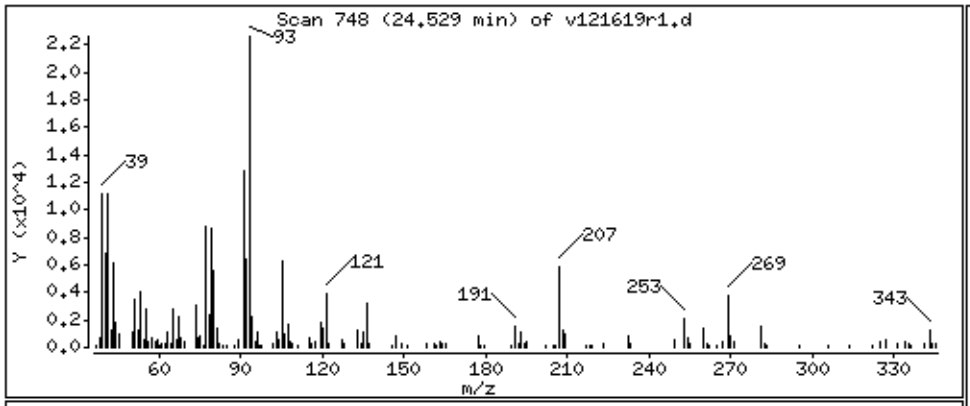
Operator: sn

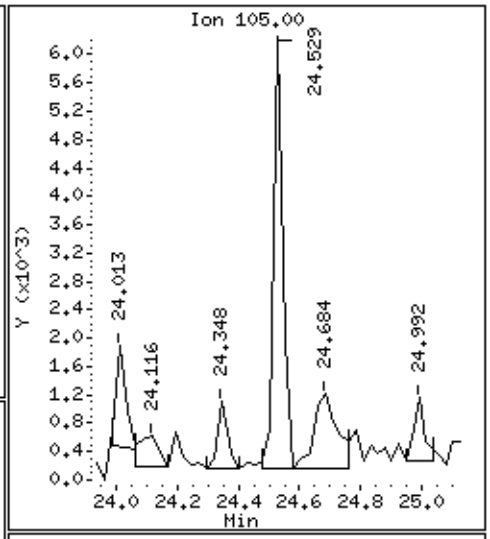
Column phase: RTx-624

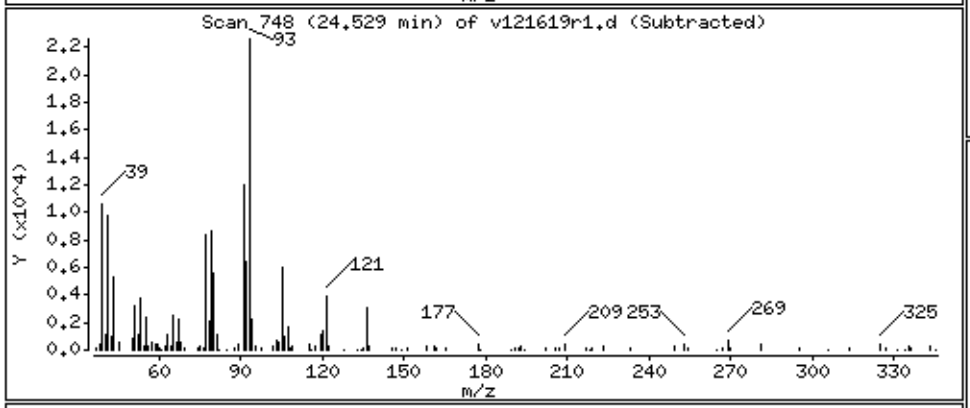
Column diameter: 0.32

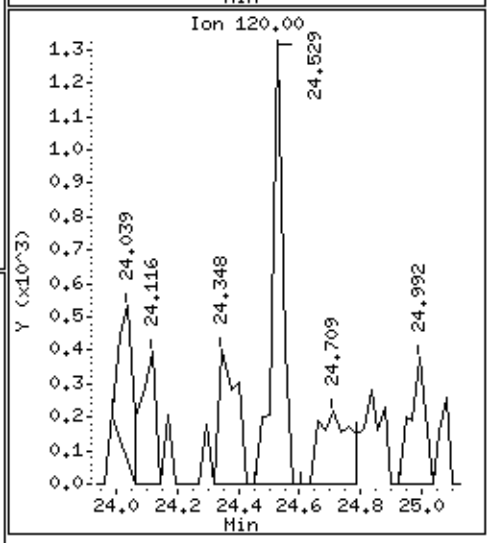
120 1,2,4-Trimethylbenzene

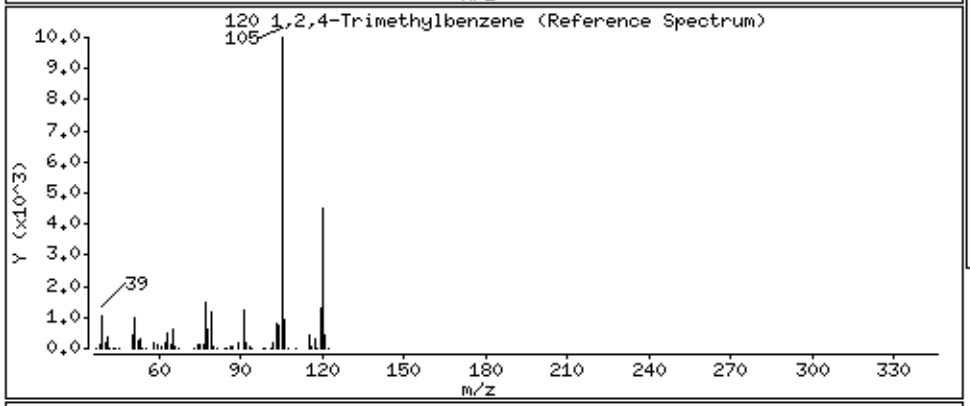
Concentration: 0.4125 PPBV

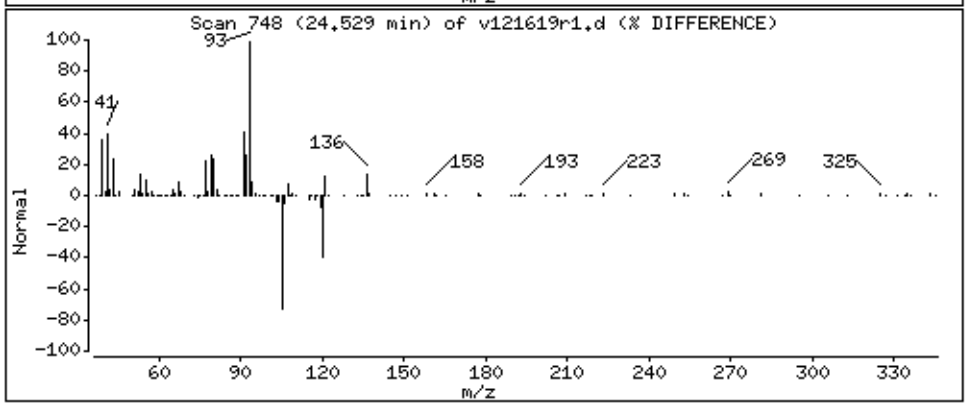












Data File: /chem/msdv.i/16Dec2014.b/v121619r1.d

Date : 16-DEC-2014 21:39

Client ID:

Instrument: msdv.i

Sample Info: 250ml #33889

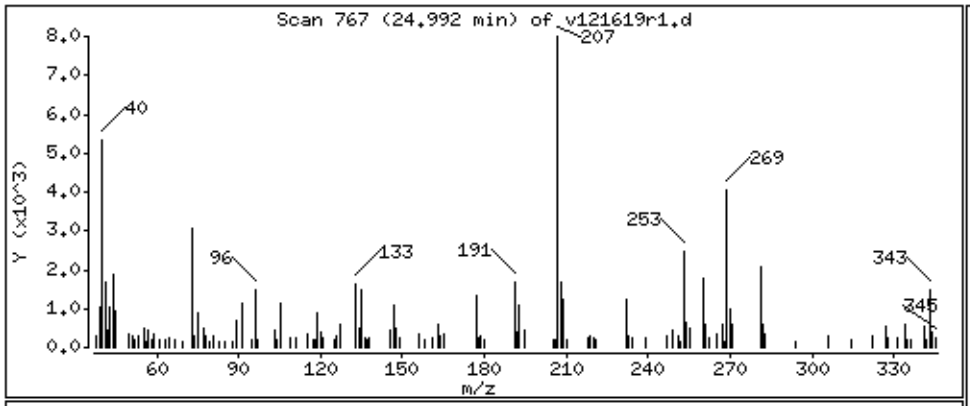
Operator: sn

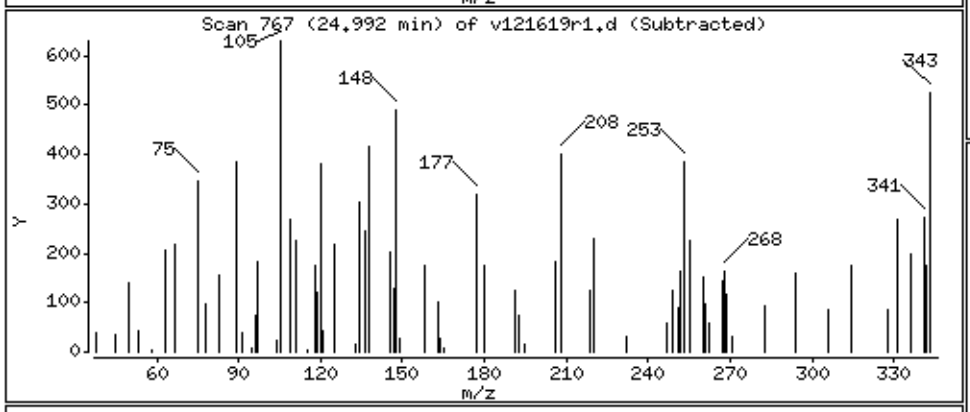
Column phase: RTx-624

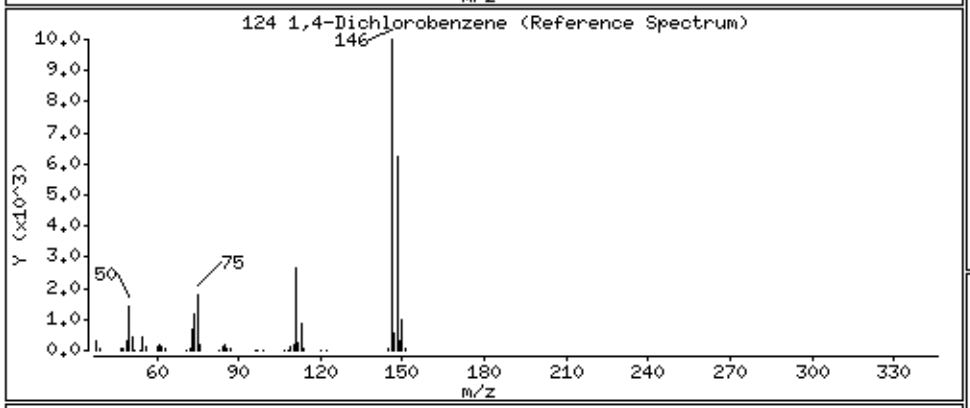
Column diameter: 0.32

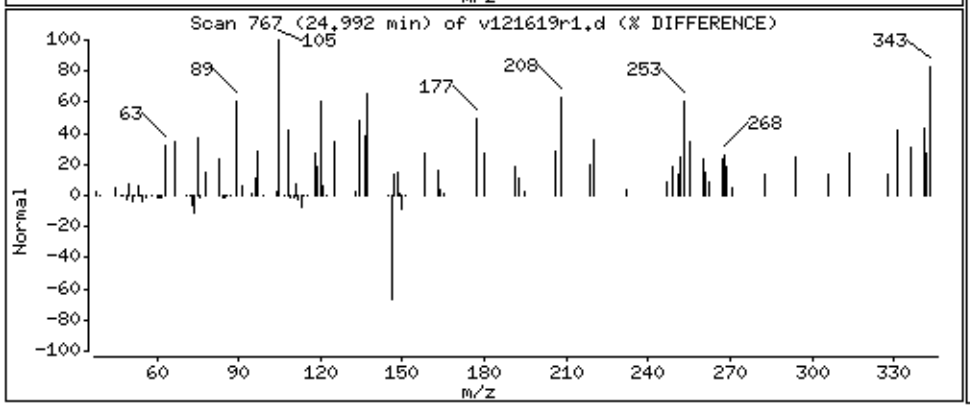
124 1,4-Dichlorobenzene

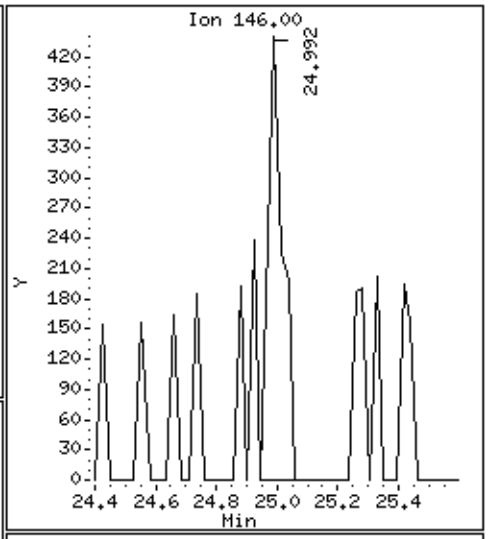
Concentration: 0.05067 PPBV

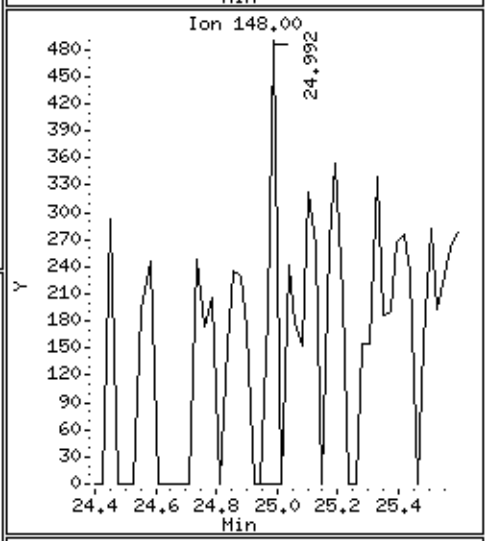


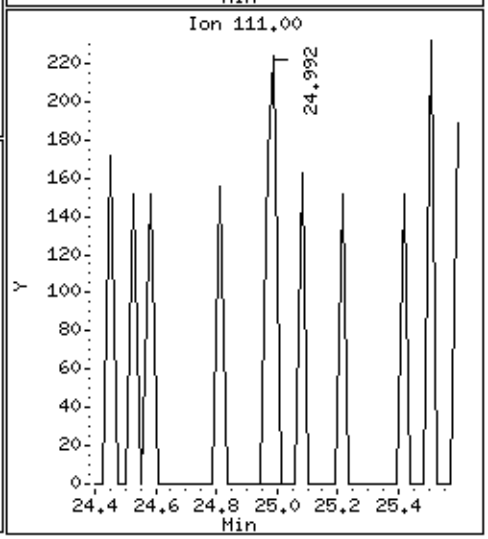












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Summary of Detected Compounds
MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: B5IA-2 (2014)

Lab ID#: 1412152AR1-05A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.87	0.48 J	4.3	2.4 J
Chloromethane	0.87	0.89	1.8	1.8
1,3-Butadiene	0.17	0.056 J	0.38	0.12 J
Freon 11	0.17	0.18	0.98	1.0
Ethanol	0.87	320 J0E	1.6	600 J0E
Freon 113	0.17	0.046 J	1.3	0.35 J
Acetone	0.87	210 E	2.1	510 E
2-Propanol	0.87	150 E	2.1	380 E
Carbon Disulfide	0.87	4.4	2.7	14
Methylene Chloride	0.35	53	1.2	180
Methyl tert-butyl ether	0.17	1.2	0.63	4.2
Hexane	0.17	0.20	0.61	0.70
2-Butanone (Methyl Ethyl Ketone)	0.87	0.96	2.6	2.8
Tetrahydrofuran	0.87	2.9	2.6	8.6
Chloroform	0.17	0.39	0.85	1.9
Cyclohexane	0.17	0.087 J	0.60	0.30 J
2,2,4-Trimethylpentane	0.87	0.14 J	4.1	0.67 J
Benzene	0.17	0.39	0.56	1.3
Heptane	0.17	2.4	0.71	9.7
1,4-Dioxane	0.17	0.13 J	0.63	0.47 J
4-Methyl-2-pentanone	0.17	60	0.71	250
Toluene	0.17	120 E	0.66	450 E
Ethyl Benzene	0.17	16	0.76	71
m,p-Xylene	0.17	60	0.76	260
o-Xylene	0.17	5.8	0.76	25
Styrene	0.17	0.88	0.74	3.7
4-Ethyltoluene	0.17	0.14 J	0.86	0.70 J
1,2,4-Trimethylbenzene	0.17	0.40	0.86	1.9

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Client Sample ID: B5IA-2 (2014)

Lab ID#: 1412152AR1-05A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**v121620r1**	**Date of Collection:**	**12/9/14 2:45:00 PM**
Dil. Factor:	**1.74**	**Date of Analysis:**	**12/16/14 10:19 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.87	0.48 J	4.3	2.4 J
Freon 114	0.17	Not Detected	1.2	Not Detected
Chloromethane	0.87	0.89	1.8	1.8
Vinyl Chloride	0.17	Not Detected	0.44	Not Detected
1,3-Butadiene	0.17	0.056 J	0.38	0.12 J
Bromomethane	0.87	Not Detected	3.4	Not Detected
Chloroethane	0.87	Not Detected	2.3	Not Detected
Freon 11	0.17	0.18	0.98	1.0
Ethanol	0.87	320 J0E	1.6	600 J0E
Freon 113	0.17	0.046 J	1.3	0.35 J
1,1-Dichloroethene	0.17	Not Detected	0.69	Not Detected
Acetone	0.87	210 E	2.1	510 E
2-Propanol	0.87	150 E	2.1	380 E
Carbon Disulfide	0.87	4.4	2.7	14
3-Chloropropene	0.87	Not Detected	2.7	Not Detected
Methylene Chloride	0.35	53	1.2	180
Methyl tert-butyl ether	0.17	1.2	0.63	4.2
trans-1,2-Dichloroethene	0.17	Not Detected	0.69	Not Detected
Hexane	0.17	0.20	0.61	0.70
1,1-Dichloroethane	0.17	Not Detected	0.70	Not Detected
2-Butanone (Methyl Ethyl Ketone)	0.87	0.96	2.6	2.8
cis-1,2-Dichloroethene	0.17	Not Detected	0.69	Not Detected
Tetrahydrofuran	0.87	2.9	2.6	8.6
Chloroform	0.17	0.39	0.85	1.9
1,1,1-Trichloroethane	0.17	Not Detected	0.95	Not Detected
Cyclohexane	0.17	0.087 J	0.60	0.30 J
Carbon Tetrachloride	0.17	Not Detected	1.1	Not Detected
2,2,4-Trimethylpentane	0.87	0.14 J	4.1	0.67 J
Benzene	0.17	0.39	0.56	1.3
1,2-Dichloroethane	0.17	Not Detected	0.70	Not Detected
Heptane	0.17	2.4	0.71	9.7
Trichloroethene	0.17	Not Detected	0.94	Not Detected
1,2-Dichloropropane	0.17	Not Detected	0.80	Not Detected
1,4-Dioxane	0.17	0.13 J	0.63	0.47 J
Bromodichloromethane	0.17	Not Detected	1.2	Not Detected
cis-1,3-Dichloropropene	0.17	Not Detected	0.79	Not Detected
4-Methyl-2-pentanone	0.17	60	0.71	250
Toluene	0.17	120 E	0.66	450 E
trans-1,3-Dichloropropene	0.17	Not Detected	0.79	Not Detected
1,1,2-Trichloroethane	0.17	Not Detected	0.95	Not Detected
Tetrachloroethene	0.17	Not Detected	1.2	Not Detected
2-Hexanone	0.87	Not Detected	3.6	Not Detected

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Client Sample ID: B5IA-2 (2014)

Lab ID#: 1412152AR1-05A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**v121620r1**	**Date of Collection:**	**12/9/14 2:45:00 PM**
Dil. Factor:	**1.74**	**Date of Analysis:**	**12/16/14 10:19 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Dibromochloromethane	0.17	Not Detected	1.5	Not Detected
1,2-Dibromoethane (EDB)	0.17	Not Detected	1.3	Not Detected
Chlorobenzene	0.17	Not Detected	0.80	Not Detected
Ethyl Benzene	0.17	16	0.76	71
m,p-Xylene	0.17	60	0.76	260
o-Xylene	0.17	5.8	0.76	25
Styrene	0.17	0.88	0.74	3.7
Bromoform	0.17	Not Detected	1.8	Not Detected
Cumene	0.17	Not Detected	0.86	Not Detected
1,1,2,2-Tetrachloroethane	0.17	Not Detected	1.2	Not Detected
Propylbenzene	0.17	Not Detected	0.86	Not Detected
4-Ethyltoluene	0.17	0.14 J	0.86	0.70 J
1,3,5-Trimethylbenzene	0.17	Not Detected	0.86	Not Detected
1,2,4-Trimethylbenzene	0.17	0.40	0.86	1.9
1,3-Dichlorobenzene	0.17	Not Detected UJ	1.0	Not Detected UJ
1,4-Dichlorobenzene	0.17	Not Detected UJ	1.0	Not Detected UJ
alpha-Chlorotoluene	0.87	Not Detected UJ	4.5	Not Detected UJ
1,2-Dichlorobenzene	0.17	Not Detected UJ	1.0	Not Detected UJ
1,2,4-Trichlorobenzene	0.87	Not Detected	6.4	Not Detected
Hexachlorobutadiene	0.87	Not Detected UJ	9.3	Not Detected UJ
Naphthalene	0.87	Not Detected	4.6	Not Detected

J = Estimated value.
J0 = Estimated value due to bias in the CCV.
E = Exceeds instrument calibration range.
UJ = Analyte associated with low bias in the CCV and/or LCS.
Container Type: 6 Liter Summa Canister (100% Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	100	70-130
Toluene-d8	109	70-130
4-Bromofluorobenzene	104	70-130

Eurofins Air Toxics Inc.

TO15/Modified TO-14A

Data file : /chem/msdv.i/16Dec2014.b/v121620r1.d
Lab Smp Id: 1412152AR1-05A
Inj Date : 16-DEC-2014 22:19
Operator : sn Inst ID: msdv.i
Smp Info : 250ml #3737
Misc Info : 6.7"Hg -> 5.2psi
Comment : Low Level GC-MS
Method : /chem/msdv.i/16Dec2014.b/v14l1006d.m
Meth Date : 01-Jul-2015 09:03 sblack Quant Type: ISTD
Cal Date : 03-NOV-2014 11:17 Cal File: v110307.d
Als bottle: 1
Dil Factor: 1.74000
Integrator: HP RTE Compound Sublist: And19256r1.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
* 54 Bromochloromethane						CAS #: 74-97-5		
15.934	15.933	(1.000)	130	97734	5.00000		80.00- 120.00	100.00
15.934	15.933	(1.000)	128	73258			47.55- 107.55	74.96
15.934	15.933	(1.000)	49	239029			213.64- 273.64	244.57
* 71 1,4-Difluorobenzene						CAS #: 540-36-3		
17.305	17.305	(1.000)	114	404242	5.00000		80.00- 120.00	100.00
17.305	17.305	(1.000)	88	70084			0.00- 46.17	17.34
* 92 Chlorobenzene-d5						CAS #: 3114-55-4		
22.205	22.205	(1.000)	117	322335	5.00000		80.00- 120.00	100.00
22.205	22.205	(1.000)	82	209465			28.56- 88.56	64.98
$ 65 1,2-Dichloroethane-d4						CAS #: 17060-07-0		
16.756	16.756	(1.052)	65	179928	5.01631	5.016	80.00- 120.00	100.00
16.756	16.756	(1.052)	67	95069			28.37- 88.37	52.84
$ 80 Toluene-d8						CAS #: 2037-26-5		
19.857	19.879	(1.147)	98	422025	5.43002	5.430	80.00- 120.00	100.00
19.857	19.879	(1.147)	70	51548			0.00- 41.90	12.21

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

$  80 Toluene-d8 (continued)
 19.857  19.879 (1.147)   100    265156                    34.60-  94.60    62.83
-------------------------------------------------------------------------------
$ 106 Bromofluorobenzene                            CAS #: 460-00-4
 23.678  23.704 (1.066)   174    144900 5.22718    5.227  80.00- 120.00   100.00
 23.678  23.704 (1.066)    95    211259                  113.85- 173.85   145.80
 23.678  23.704 (1.066)   176    143346                   68.89- 128.89    98.93
-------------------------------------------------------------------------------
    4 Dichlorodifluoromethane/Fr12                  CAS #: 75-71-8
  5.240   5.202 (0.329)    85     25053 0.27361   0.4761  80.00- 120.00   100.00(a)
  5.202   5.202 (0.326)    87      5693                    1.57-  61.57    22.73
-------------------------------------------------------------------------------
    8 Chloromethane                                 CAS #: 74-87-3
  7.090   7.052 (0.445)    50     28162 0.51036   0.8880  80.00- 120.00   100.00
  7.090   7.052 (0.445)    52      9631                    1.81-  61.81    34.20
-------------------------------------------------------------------------------
   11 1,3-Butadiene                                 CAS #: 106-99-0
  8.257   8.257 (0.518)    54      1293 0.03203  0.05573  80.00- 120.00   100.00(a)
  8.288   8.257 (0.520)    39      2468                  107.15- 167.15   190.85
-------------------------------------------------------------------------------
   20 Trichlorofluoromethane/Fr11                   CAS #: 75-69-4
 11.160  11.183 (0.700)   101      9988 0.10597   0.1844  80.00- 120.00   100.00
 11.160  11.183 (0.700)   103      6993                   34.11-  94.11    70.01
-------------------------------------------------------------------------------
   24 Ethanol                                       CAS #: 64-17-5
 12.102  12.101 (0.760)    45   3651493 182.758   318.00  80.00- 120.00   100.00(A)
 12.102  12.101 (0.760)    46   1416066                    8.51-  68.51    38.78
 12.102  12.101 (0.760)    43    755477                    0.00-  54.10    20.69
-------------------------------------------------------------------------------
   28 Freon 113                                     CAS #: 76-13-1
 12.569  12.568 (0.789)   151      1493 0.02632  0.04579  80.00- 120.00   100.00(a)
 12.569  12.568 (0.789)   153       871                   33.65-  93.65    58.39
 12.569  12.568 (0.789)   101      2485                   96.37- 156.37   166.44
-------------------------------------------------------------------------------
   31 Acetone                                       CAS #: 67-64-1
 12.816  12.816 (0.804)    58   2847885 123.330   214.59  80.00- 120.00   100.00(A)
 12.816  12.816 (0.804)    43  12658999                  413.15- 473.15   444.51
-------------------------------------------------------------------------------
   33 Carbon Disulfide                              CAS #: 75-15-0
 12.926  12.925 (0.811)    76    224776 2.50912    4.366  80.00- 120.00   100.00
-------------------------------------------------------------------------------
   34 2-Propanol                                    CAS #: 67-63-0
 13.173  13.173 (0.827)    45   9499251 88.8380   154.58  80.00- 120.00   100.00(A)
 13.173  13.173 (0.827)    43   1799492                    0.00-  50.74    18.94
 13.173  13.173 (0.827)    59    267434                    0.00-  32.83     2.82
-------------------------------------------------------------------------------
```

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
37 Methylene Chloride					CAS #: 75-09-2		
13.640	13.640 (0.856)	84	906292	30.5020	53.073	80.00- 120.00	100.00
13.640	13.640 (0.856)	49	2116569			212.37- 272.37	233.54
13.640	13.640 (0.856)	51	626214			43.31- 103.31	69.10
39 MTBE					CAS #: 1634-04-4		
13.997	13.996 (0.878)	73	71973	0.67516	1.175	80.00- 120.00	100.00
13.997	13.996 (0.878)	57	34385			2.99- 62.99	47.78
13.997	13.996 (0.878)	41	43473			12.12- 72.12	60.40
43 Hexane					CAS #: 110-54-3		
14.381	14.381 (0.903)	57	9756	0.11437	0.1990	80.00- 120.00	100.00
14.381	14.381 (0.903)	43	17618			57.65- 117.65	180.58
14.381	14.381 (0.903)	86	1098			0.00- 40.67	11.26
51 2-Butanone					CAS #: 78-93-3		
15.592	15.571 (0.979)	72	9524	0.55413	0.9642	80.00- 120.00	100.00
15.592	15.571 (0.979)	43	81472			794.80- 854.80	855.37
15.592	15.571 (0.979)	57	4866			18.01- 78.01	51.09
53 Tetrahydrofuran					CAS #: 109-99-9		
15.934	15.933 (1.000)	42	148975	1.68205	2.927	80.00- 120.00	100.00
15.934	15.933 (1.000)	71	30365			0.00- 49.03	20.38
15.934	15.933 (1.000)	72	30554			0.00- 51.35	20.51
55 Chloroform					CAS #: 67-66-3		
15.995	15.995 (1.004)	83	18344	0.22272	0.3875	80.00- 120.00	100.00
15.995	15.995 (1.004)	85	11003			33.33- 93.33	59.98
57 Cyclohexane					CAS #: 110-82-7		
16.242	16.242 (1.019)	84	2589	0.04998	0.08696	80.00- 120.00	100.00(a)
16.242	16.242 (1.019)	56	10817			157.43- 217.43	417.73
16.242	16.242 (1.019)	41	8167			105.99- 165.99	315.40
63 2,2,4-Trimethylpentane					CAS #: 540-84-1		
16.728	16.728 (1.050)	56	7423	0.08223	0.1431	80.00- 120.00	100.00(a)
16.728	16.728 (1.050)	57	15416			258.69- 318.69	207.66
16.728	16.728 (1.050)	41	7955			79.91- 139.91	107.16
64 Benzene					CAS #: 71-43-2		
16.756	16.756 (0.968)	78	27057	0.22681	0.3946	80.00- 120.00	100.00
16.756	16.756 (0.968)	77	6902			0.00- 53.73	25.51
69 Heptane					CAS #: 142-82-5		
16.948	16.948 (0.979)	57	69798	1.35756	2.362	80.00- 120.00	100.00
16.975	16.948 (0.981)	100	15027			0.00- 51.27	21.53

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
69 Heptane (continued)							
16.948	16.948 (0.979)	43	193510			235.24- 295.24	277.24
75 1,4-Dioxane					CAS #: 123-91-1		
18.266	18.266 (1.056)	88	2049	0.07450	0.1296	80.00- 120.00	100.00(a)
18.266	18.266 (1.056)	58	3252			72.13- 132.13	158.69
18.321	18.266 (1.059)	57	4146			4.41- 64.41	202.31
79 4-Methyl-2-pentanone					CAS #: 108-10-1		
19.588	19.587 (1.132)	43	5863974	34.8252	60.596	80.00- 120.00	100.00
19.588	19.587 (1.132)	58	1547326			0.00- 57.24	26.39
19.588	19.587 (1.132)	85	491584			0.00- 38.20	8.38
81 Toluene					CAS #: 108-88-3		
19.991	19.991 (1.155)	91	9046346	68.6999	119.54	80.00- 120.00	100.00(A)
19.991	19.991 (1.155)	92	5223444			28.60- 88.60	57.74
95 Ethyl Benzene					CAS #: 100-41-4		
22.315	22.315 (1.005)	106	446863	9.40558	16.366	80.00- 120.00	100.00
22.315	22.315 (1.005)	91	1444301			292.36- 352.36	323.21
96 m,p-Xylene					CAS #: 108-38-3		
22.452	22.452 (1.011)	106	1622852	34.6407	60.275	80.00- 120.00	100.00
22.452	22.452 (1.011)	91	3387150			164.15- 224.15	208.72
100 o-Xylene					CAS #: 95-47-6		
23.002	23.001 (1.036)	106	144877	3.32337	5.783	80.00- 120.00	100.00
23.002	23.001 (1.036)	91	315825			186.63- 246.63	218.00
101 Styrene					CAS #: 100-42-5		
23.029	23.029 (1.037)	104	32267	0.50594	0.8803	80.00- 120.00	100.00
23.002	23.029 (1.036)	78	34736			28.70- 88.70	107.65
113 4-Ethyltoluene					CAS #: 622-96-8		
24.013	24.039 (1.081)	105	6805	0.08215	0.1429	80.00- 120.00	100.00(a)
24.013	24.039 (1.081)	120	2277			0.18- 60.18	33.47
120 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
24.529	24.529 (1.105)	105	12761	0.22780	0.3964	80.00- 120.00	100.00
24.529	24.529 (1.105)	120	3942			19.27- 79.27	30.90

QC Flag Legend

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

QC Flag Legend

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

Report Date: 01-Jul-2015 13:54

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdv.i
Lab File ID: v121620r1.d
Lab Smp Id: 1412152AR1-05A
Analysis Type: VOA
Quant Type: ISTD
Operator: sn
Method File: /chem/msdv.i/16Dec2014.b/v14l1006d.m
Misc Info: 6.7"Hg -> 5.2psi

Calibration Date: 16-DEC-2014
Calibration Time: 08:42

Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
54 Bromochloromethan	109722	65833	153611	97734	-10.93
71 1,4-Difluorobenze	445503	267302	623704	404242	-9.26
92 Chlorobenzene-d5	361081	216649	505513	322335	-10.73

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
54 Bromochloromethan	15.93	15.60	16.26	15.93	0.00
71 1,4-Difluorobenze	17.30	16.97	17.63	17.30	0.00
92 Chlorobenzene-d5	22.21	21.88	22.54	22.21	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: 01-Jul-2015 13:54

Eurofins Air Toxics Inc.

RECOVERY REPORT

Client Name:
Client SDG: 16Dec2014
Sample Matrix: GAS
Fraction: VOA
Lab Smp Id: 1412152AR1-05A
Level: LOW
Operator: sn
Data Type: MS DATA
SampleType: SAMPLE
SpikeList File: AT12.spk
Quant Type: ISTD
Sublist File: And19256r1.sub
Method File: /chem/msdv.i/16Dec2014.b/v14l1006d.m
Misc Info: 6.7"Hg -> 5.2psi

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 65 1,2-Dichloroethane	5.000	5.016	100.33	70-130
$ 80 Toluene-d8	5.000	5.430	108.60	70-130
$ 106 Bromofluorobenzene	5.000	5.227	104.54	70-130

Data File: /chem/msdv.i/16Dec2014.b/v121620r1.d

Date : 16-DEC-2014 22:19

Client ID:

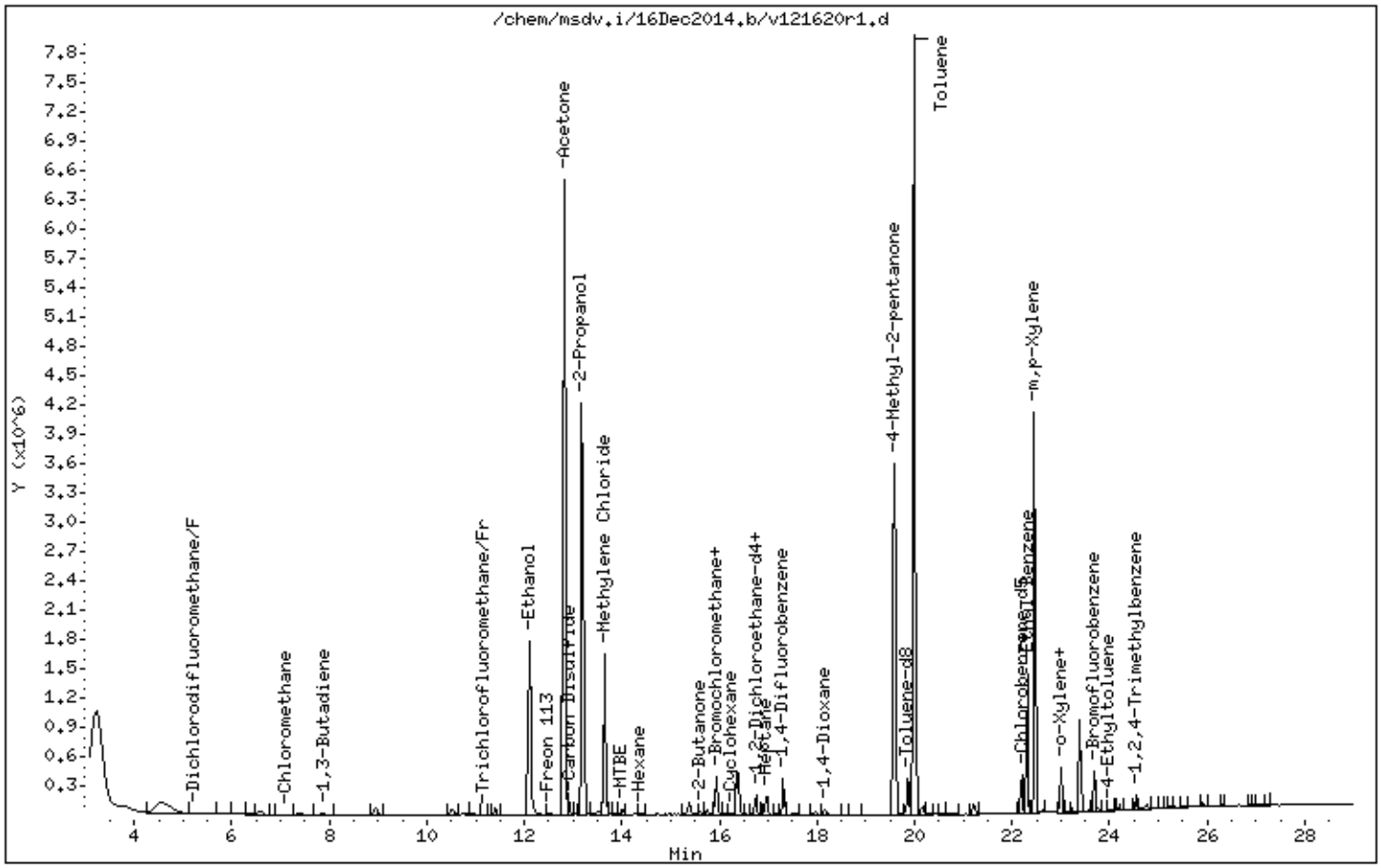
Instrument: msdv.i

Sample Info: 250ml #3737

Operator: sn

Column phase: RTx-624

Column diameter: 0.32



Data File: /chem/msdv.i/16Dec2014.b/v121620r1.d

Date : 16-DEC-2014 22:19

Client ID:

Instrument: msdv.i

Sample Info: 250ml #3737

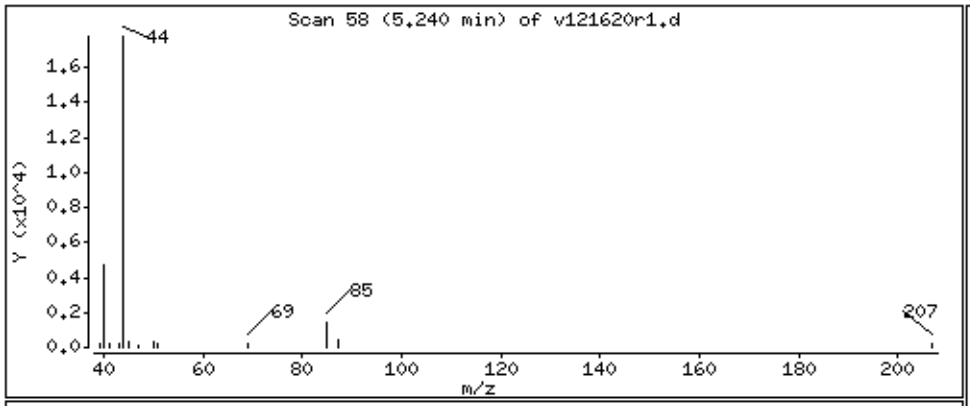
Operator: sn

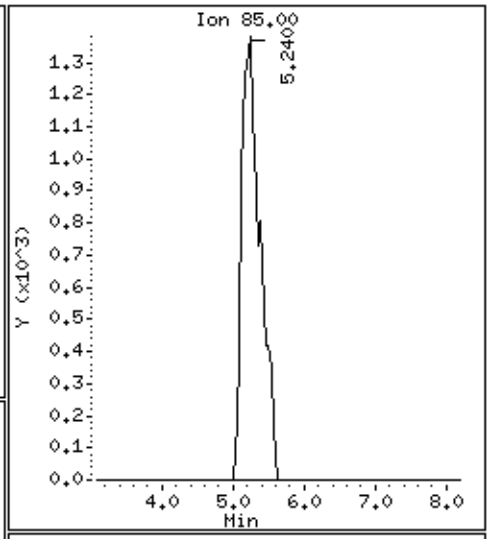
Column phase: RTx-624

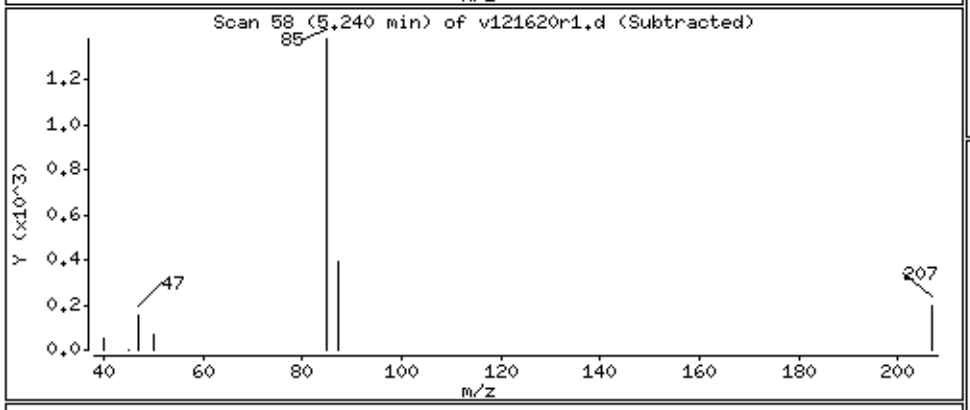
Column diameter: 0.32

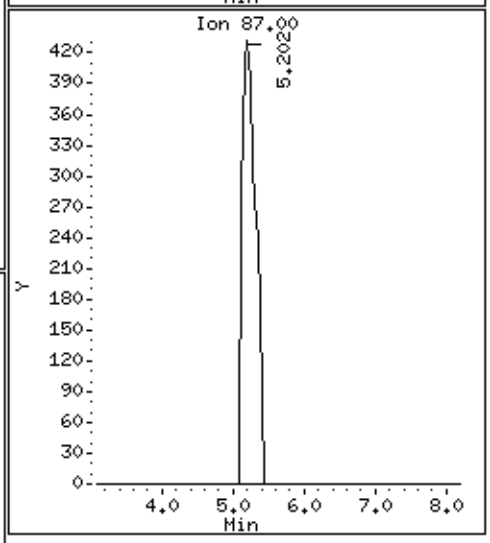
4 Dichlorodifluoromethane/Fr12

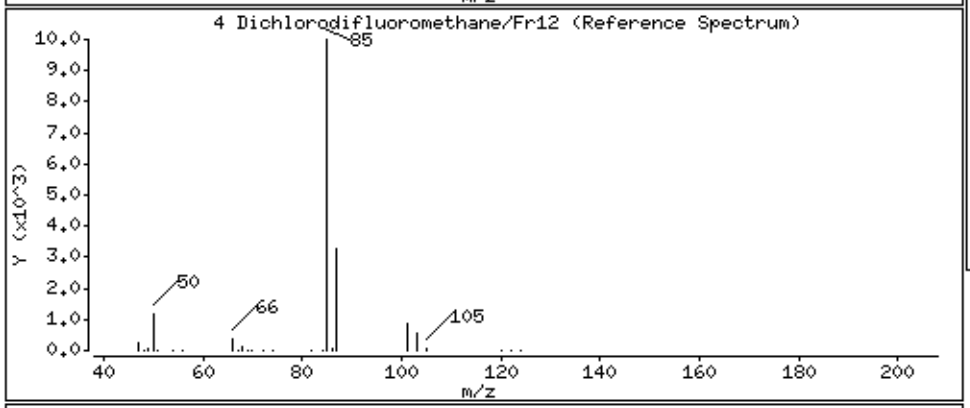
Concentration: 0.4761 PPBV

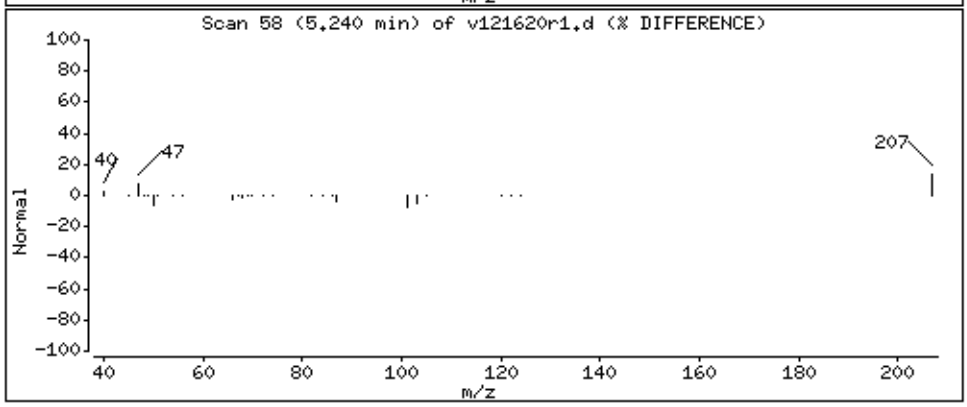












Data File: /chem/msdv.i/16Dec2014.b/v121620r1.d

Date : 16-DEC-2014 22:19

Client ID:

Instrument: msdv.i

Sample Info: 250ml #3737

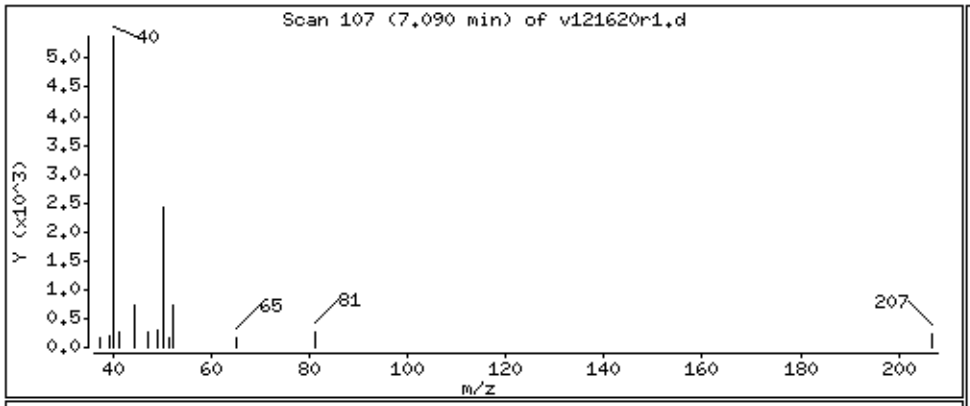
Operator: sn

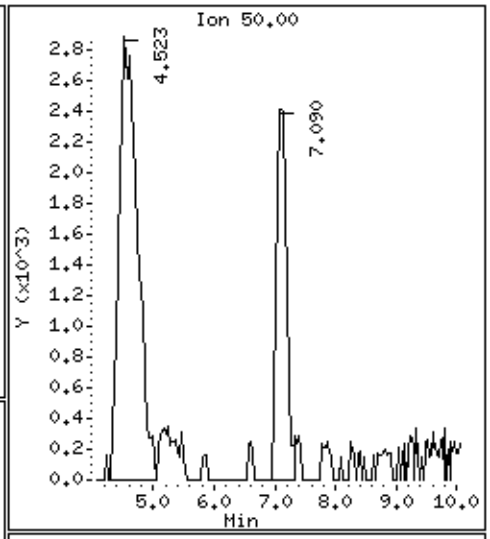
Column phase: RTx-624

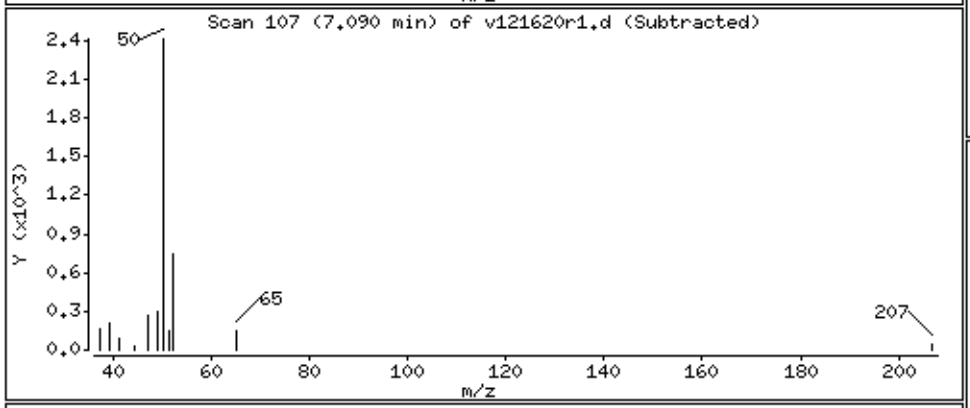
Column diameter: 0.32

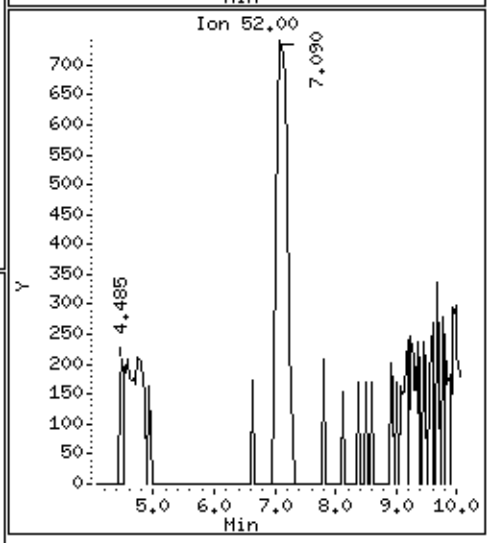
8 Chloromethane

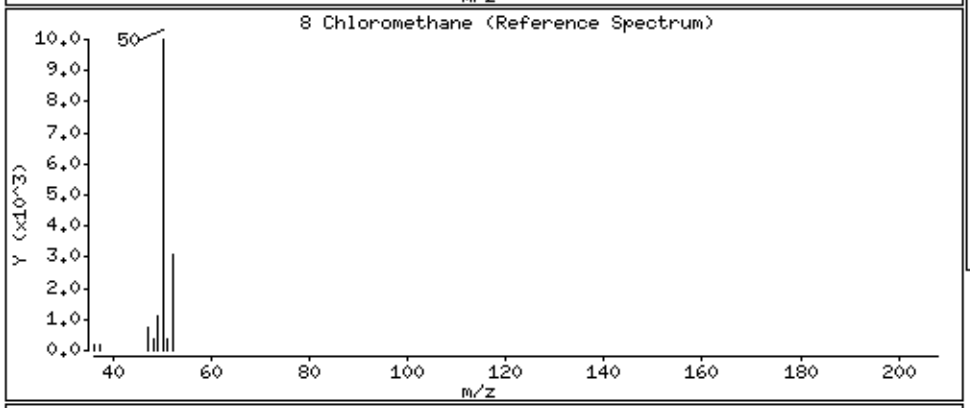
Concentration: 0.8880 PPBV

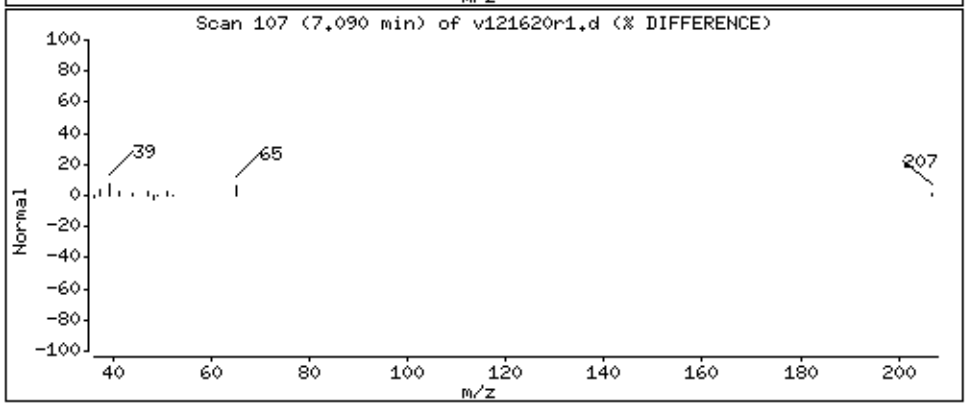












Data File: /chem/msdv.i/16Dec2014.b/v121620r1.d

Date : 16-DEC-2014 22:19

Client ID:

Instrument: msdv.i

Sample Info: 250ml #3737

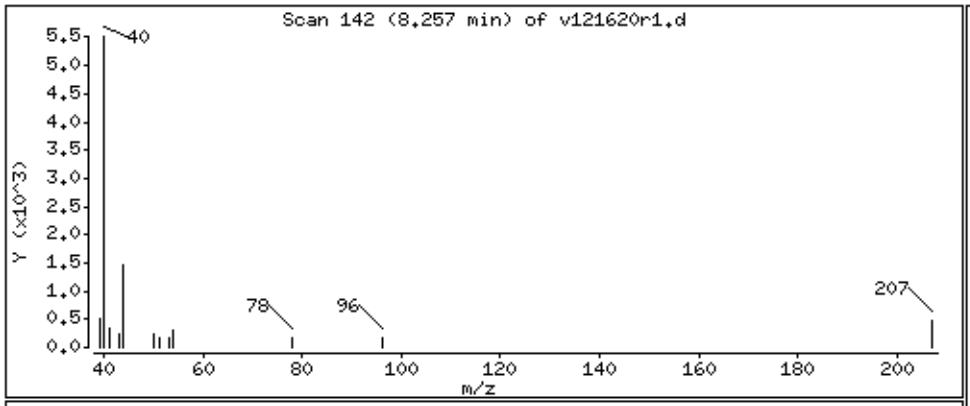
Operator: sn

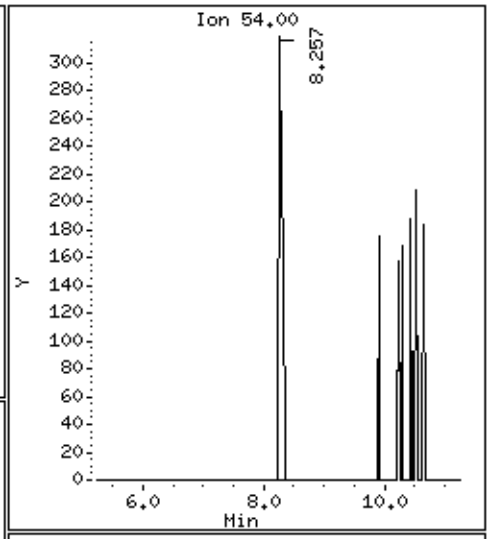
Column phase: RTx-624

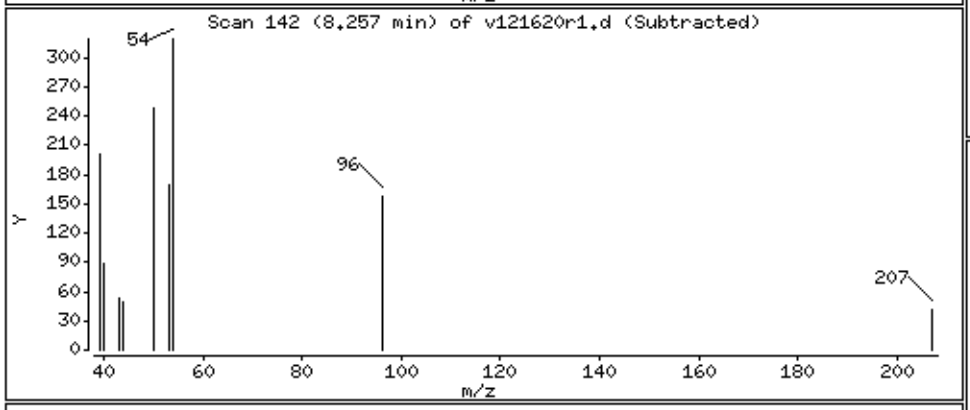
Column diameter: 0.32

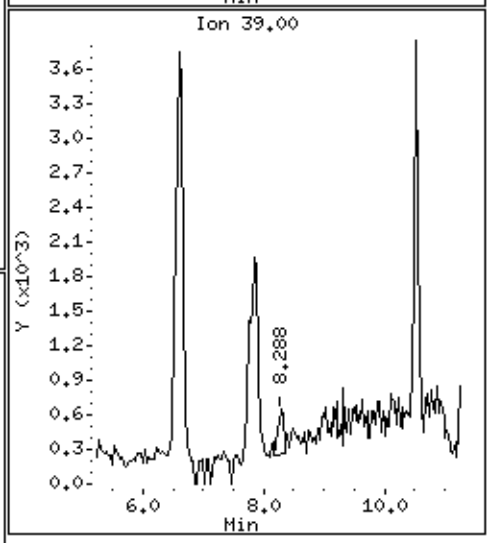
11 1,3-Butadiene

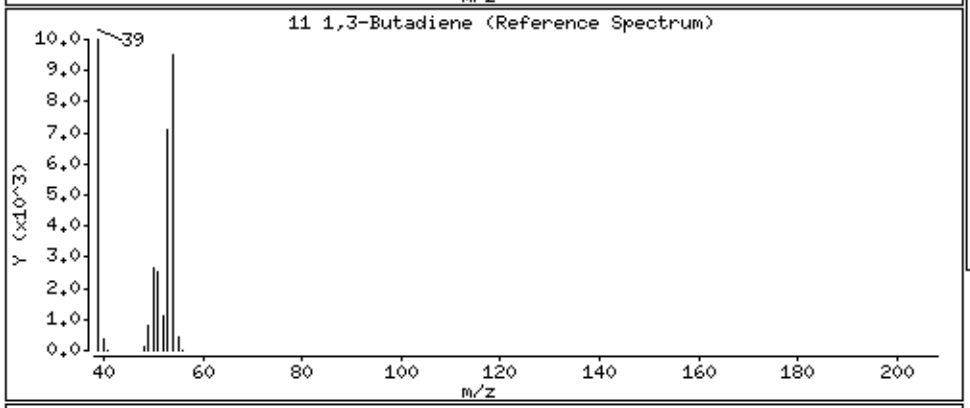
Concentration: 0.05573 PPBV

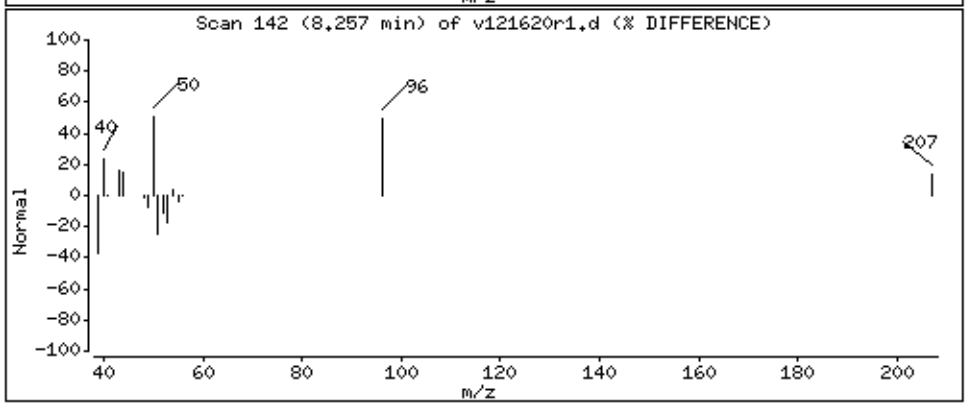












Data File: /chem/msdv.i/16Dec2014.b/v121620r1.d

Date : 16-DEC-2014 22:19

Client ID:

Instrument: msdv.i

Sample Info: 250ml #3737

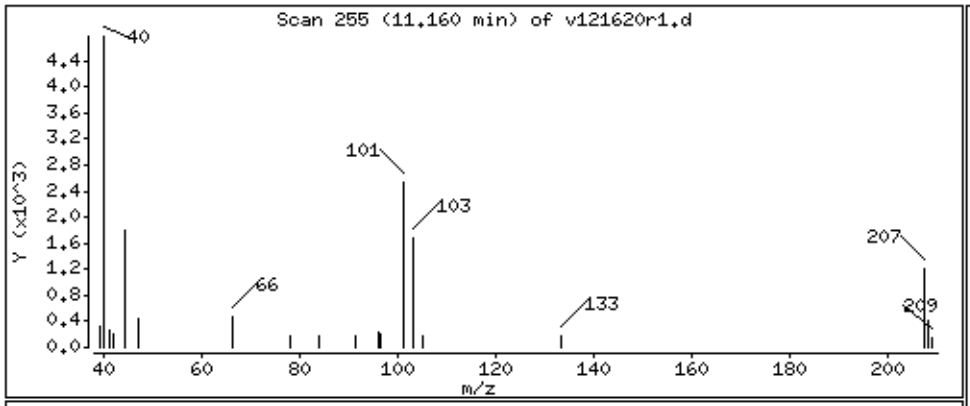
Operator: sn

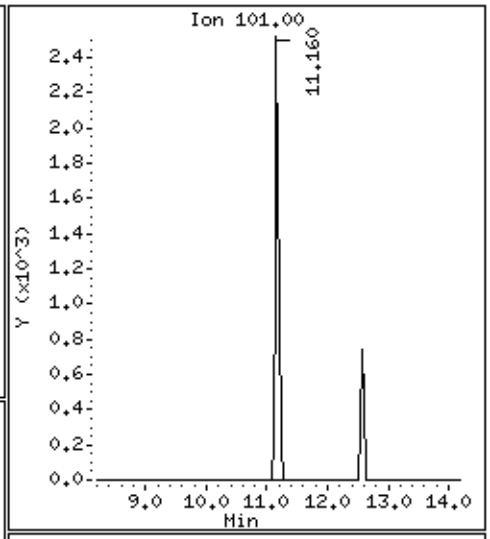
Column phase: RTx-624

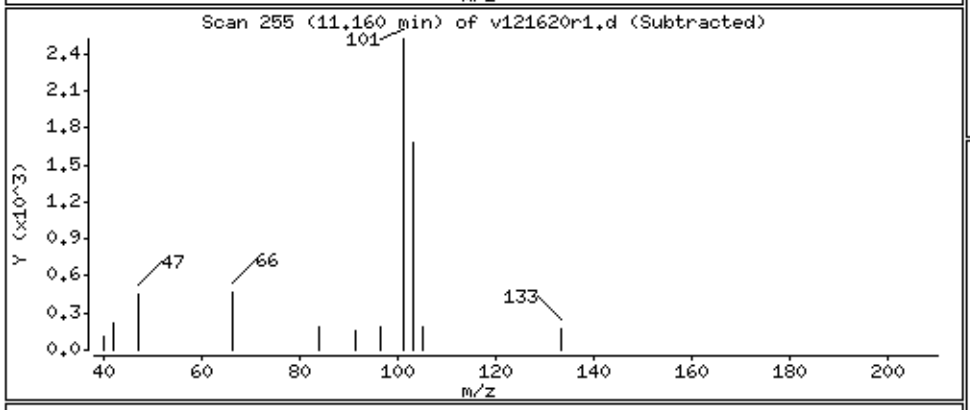
Column diameter: 0.32

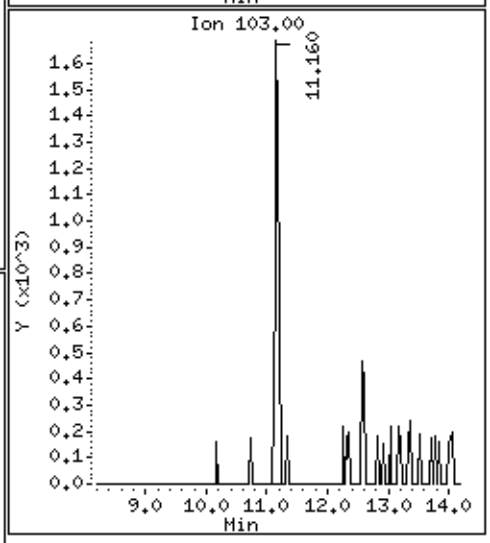
20 Trichlorofluoromethane/Fr11

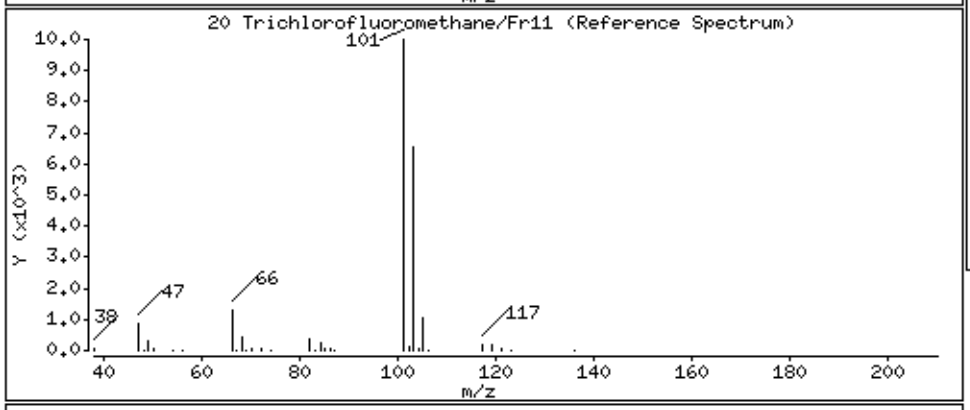
Concentration: 0.1844 PPBV

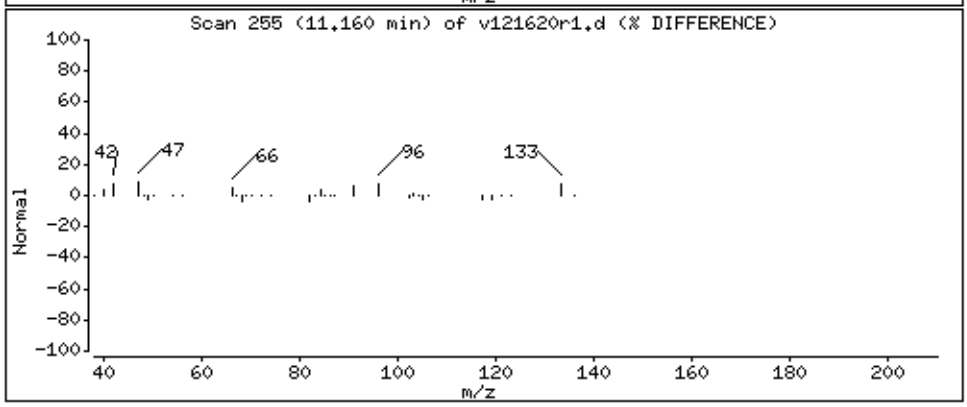












Data File: /chem/msdv.i/16Dec2014.b/v121620r1.d

Date : 16-DEC-2014 22:19

Client ID:

Instrument: msdv.i

Sample Info: 250ml #3737

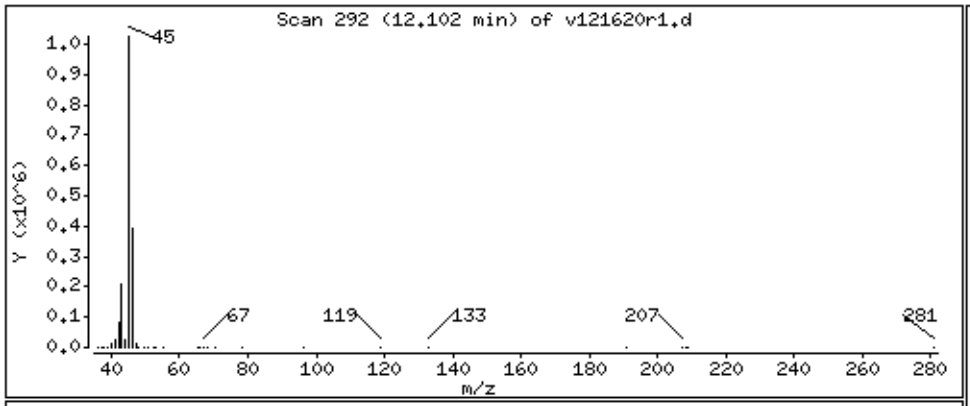
Operator: sn

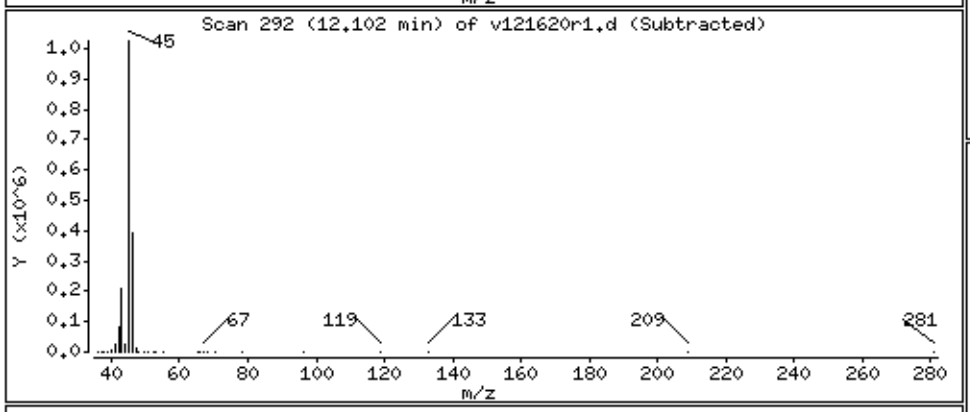
Column phase: RTx-624

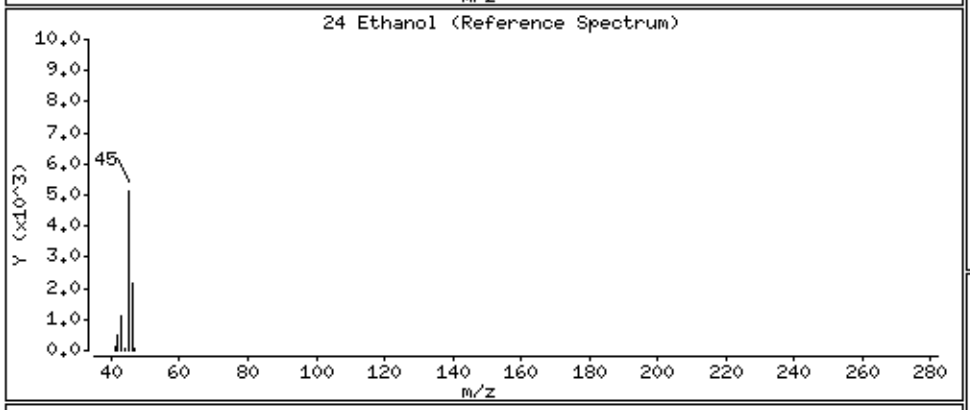
Column diameter: 0.32

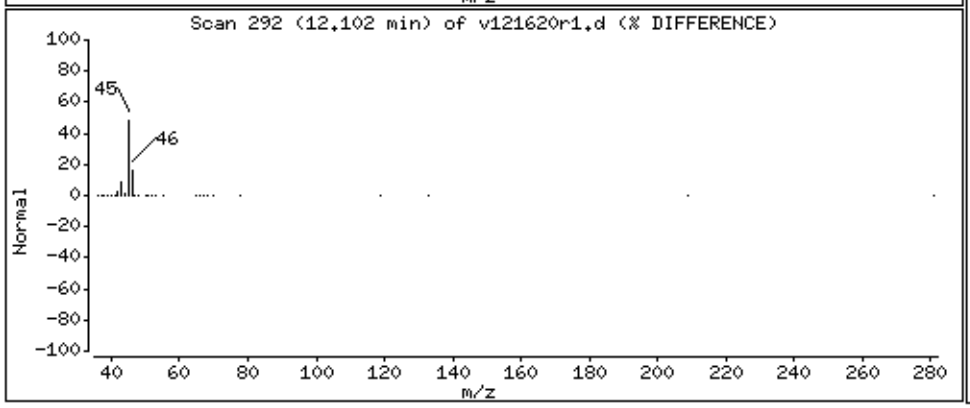
24 Ethanol

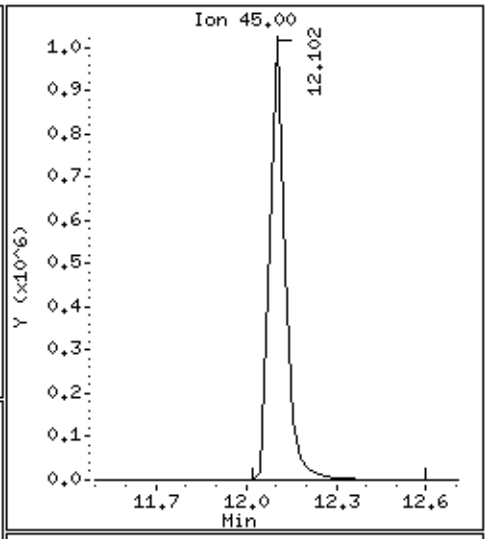
Concentration: 318.00 PPBV

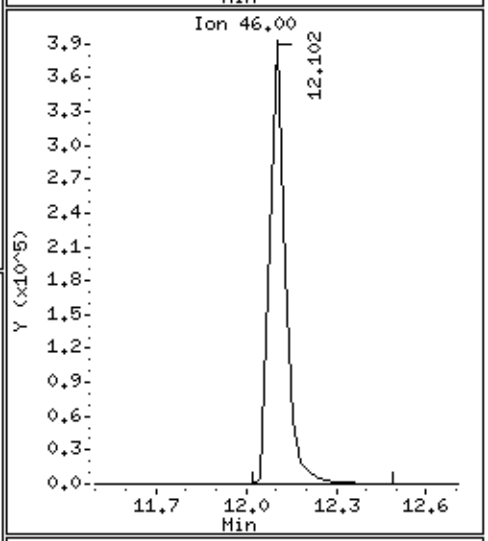


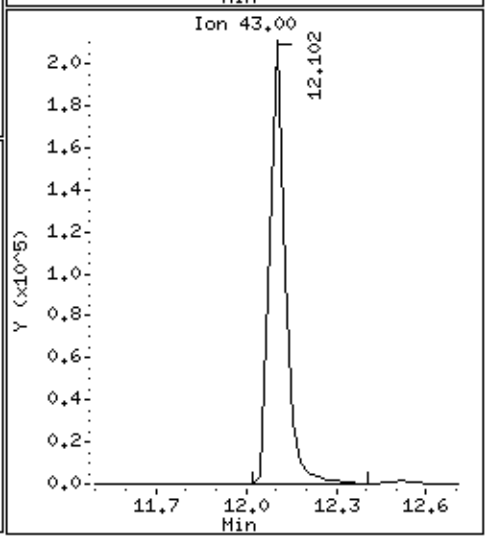












Data File: /chem/msdv.i/16Dec2014.b/v121620r1.d

Date : 16-DEC-2014 22:19

Client ID:

Instrument: msdv.i

Sample Info: 250ml #3737

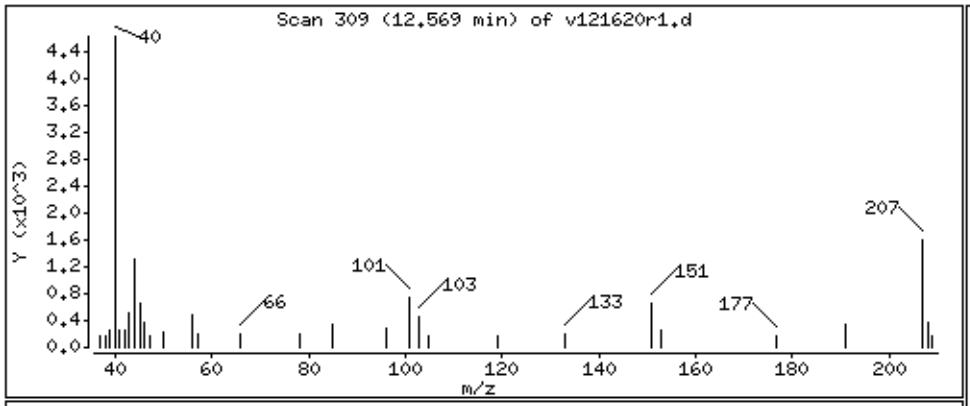
Operator: sn

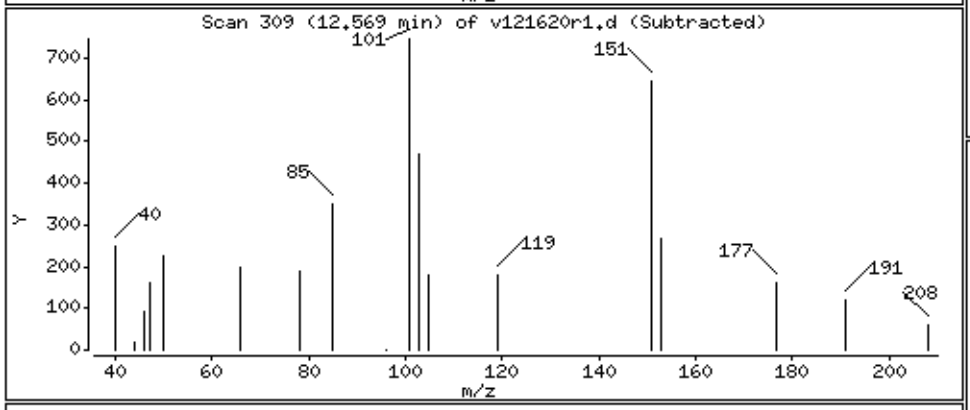
Column phase: RTx-624

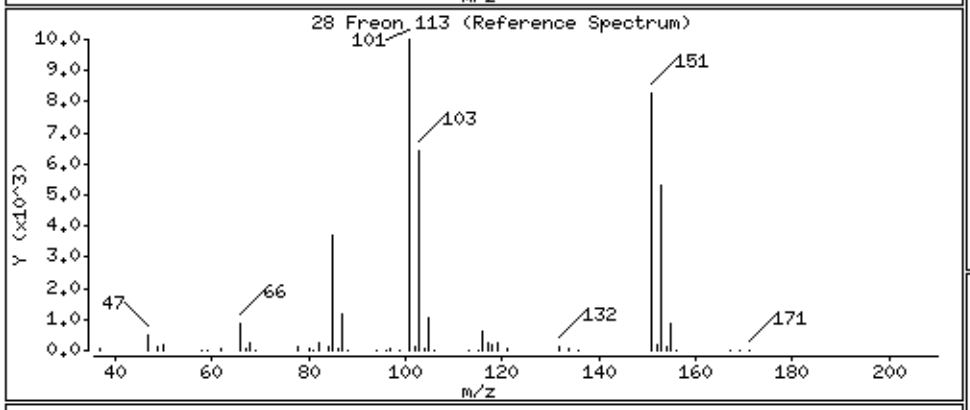
Column diameter: 0.32

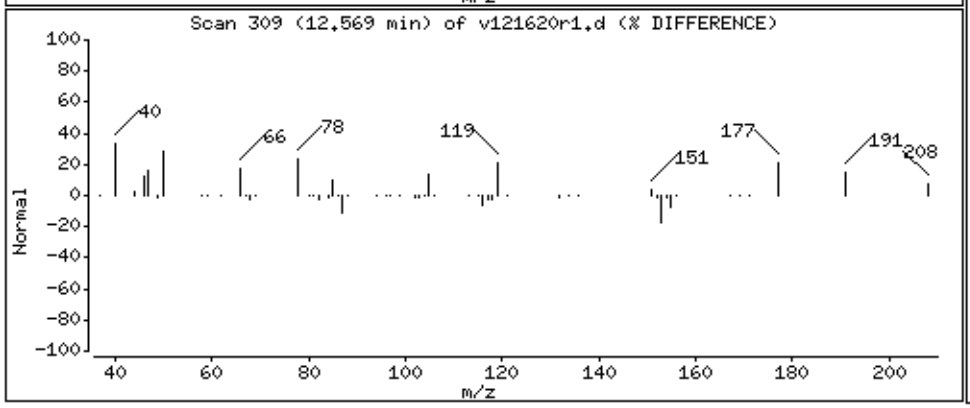
28 Freon 113

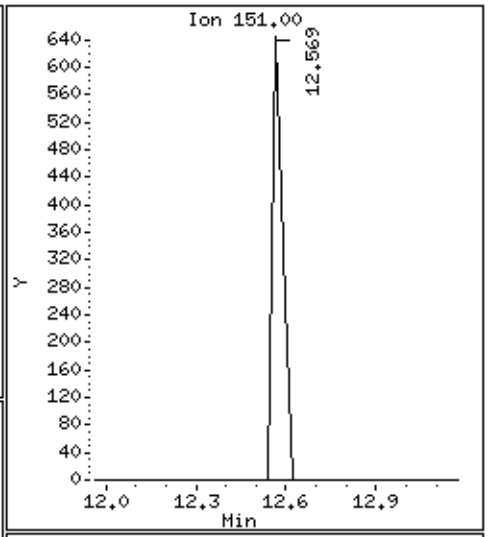
Concentration: 0.04579 PPBV

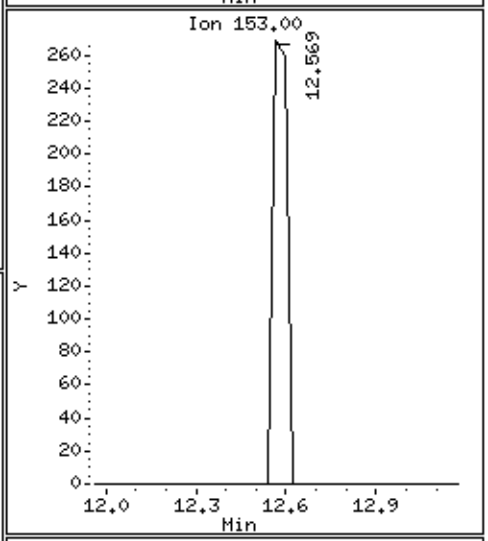


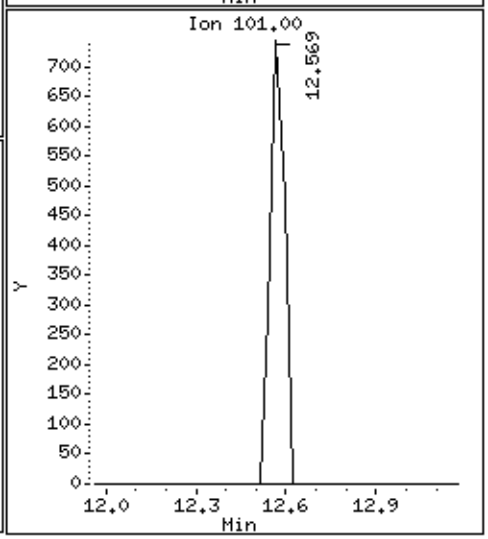












Data File: /chem/msdv.i/16Dec2014.b/v121620r1.d

Date : 16-DEC-2014 22:19

Client ID:

Instrument: msdv.i

Sample Info: 250ml #3737

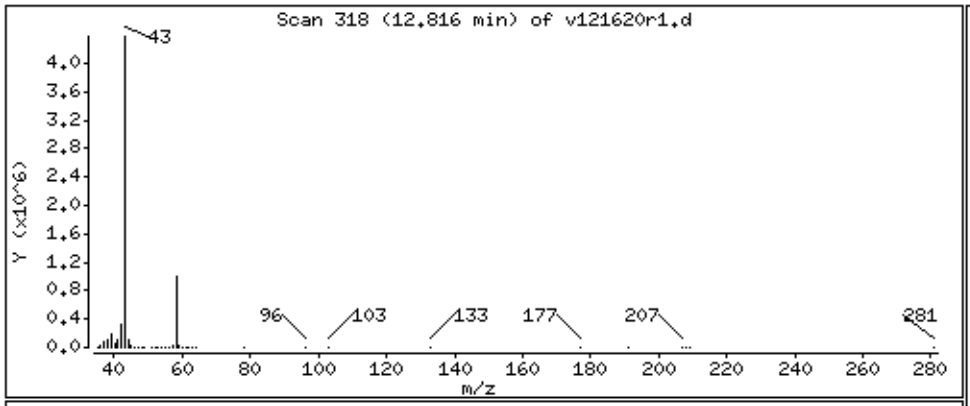
Operator: sn

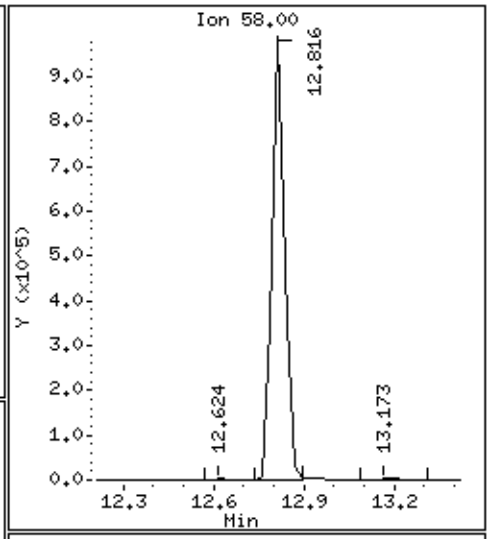
Column phase: RTx-624

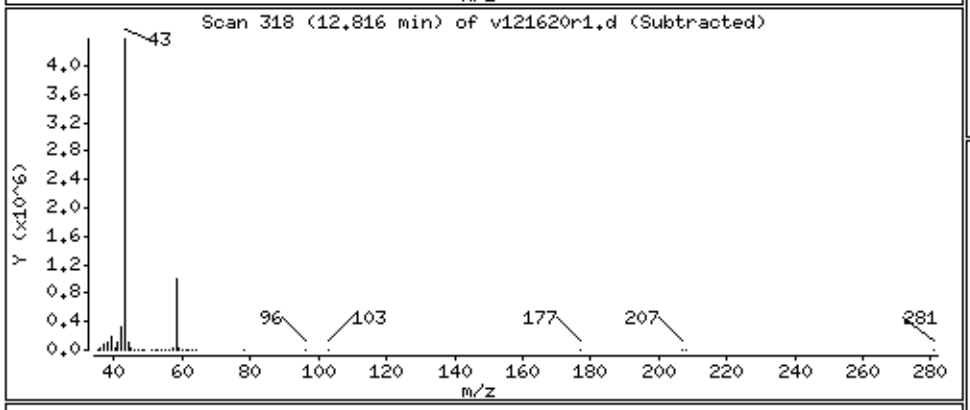
Column diameter: 0.32

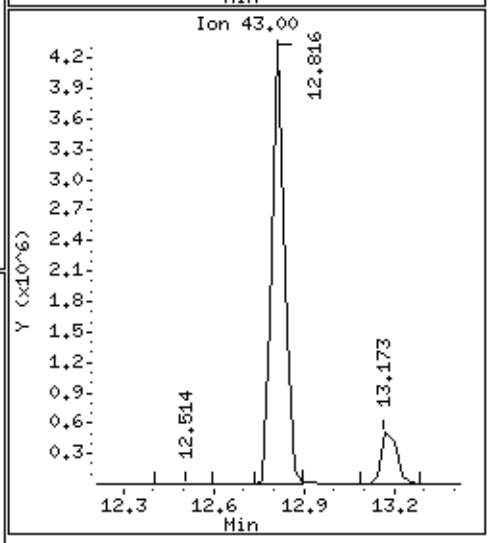
31 Acetone

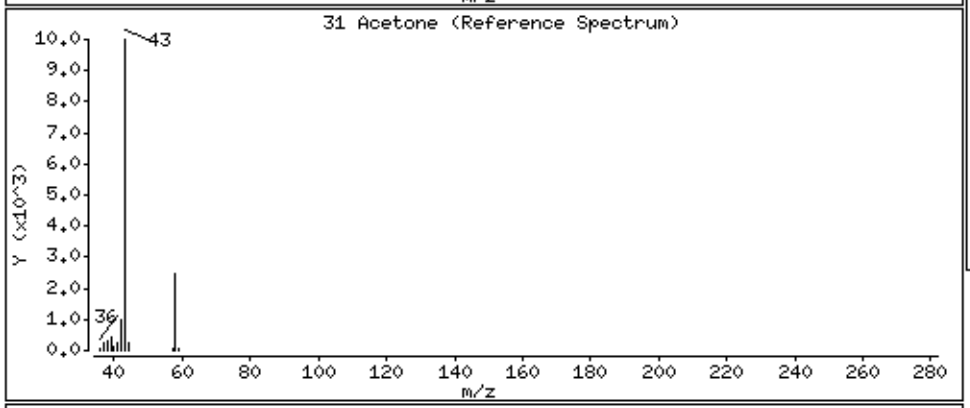
Concentration: 214.59 PPBV

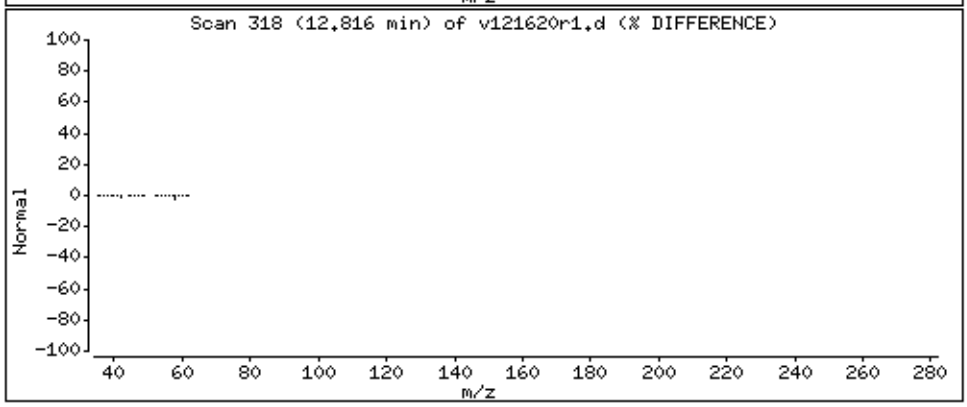












Data File: /chem/msdv.i/16Dec2014.b/v121620r1.d

Date : 16-DEC-2014 22:19

Client ID:

Instrument: msdv.i

Sample Info: 250ml #3737

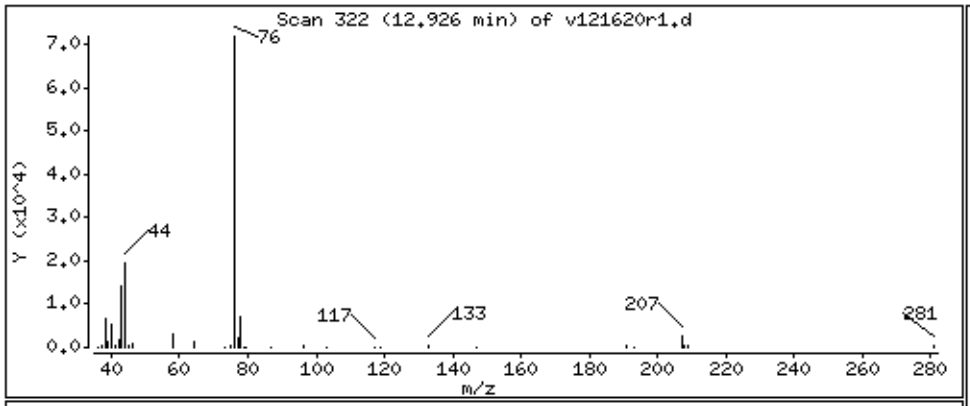
Operator: sn

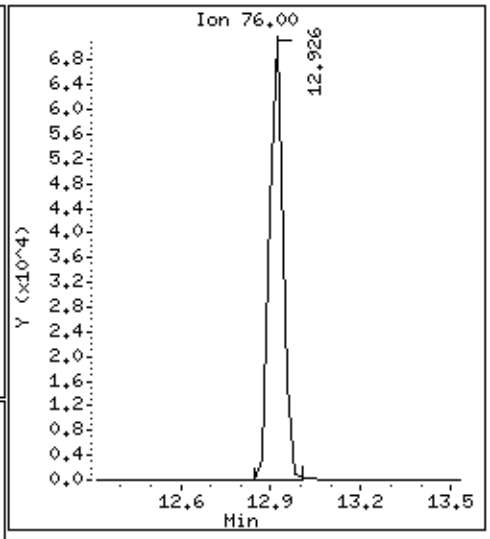
Column phase: RTx-624

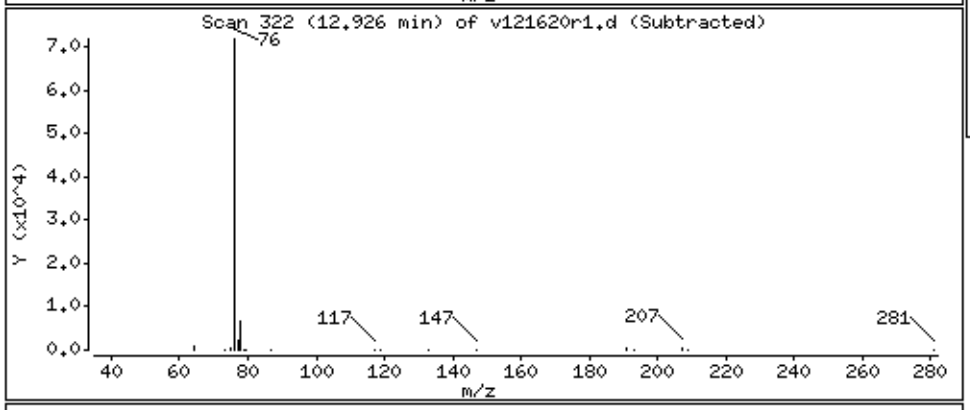
Column diameter: 0.32

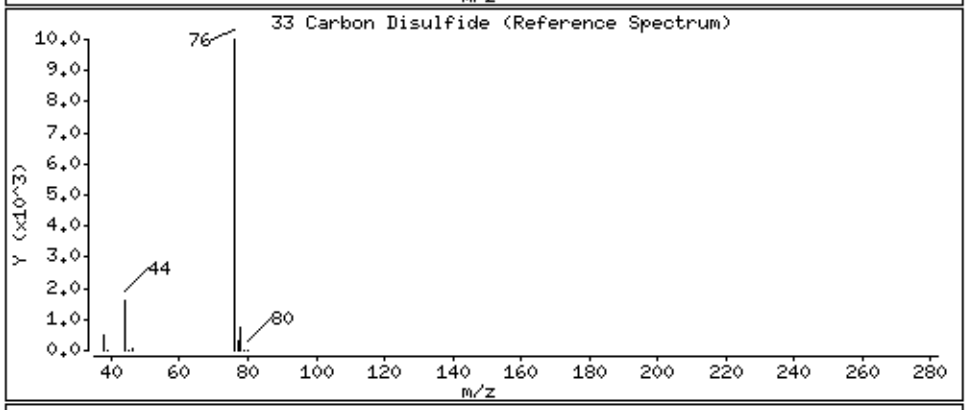
33 Carbon Disulfide

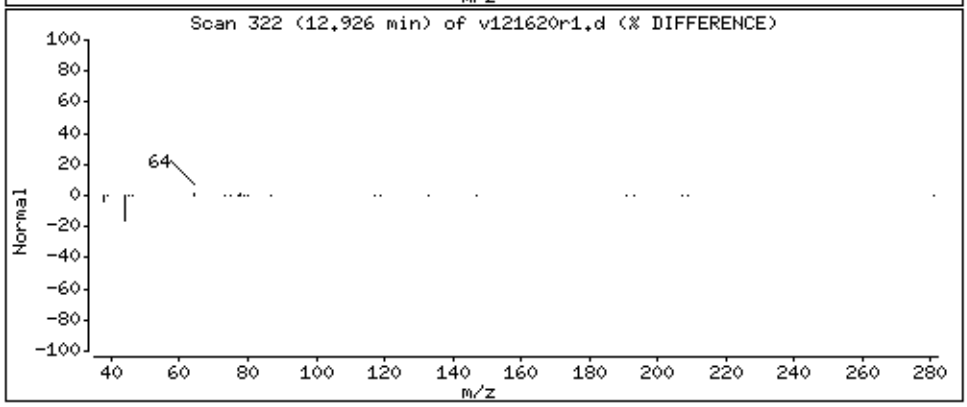
Concentration: 4.366 PPBV











Data File: /chem/msdv.i/16Dec2014.b/v121620r1.d

Date : 16-DEC-2014 22:19

Client ID:

Instrument: msdv.i

Sample Info: 250ml #3737

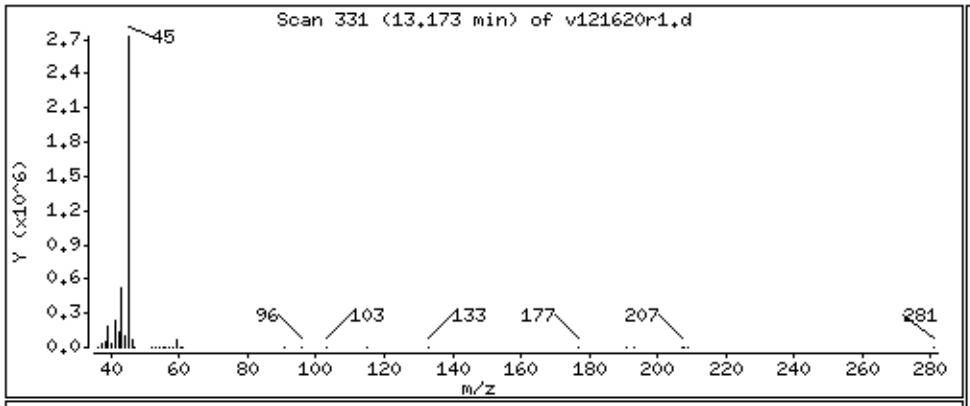
Operator: sn

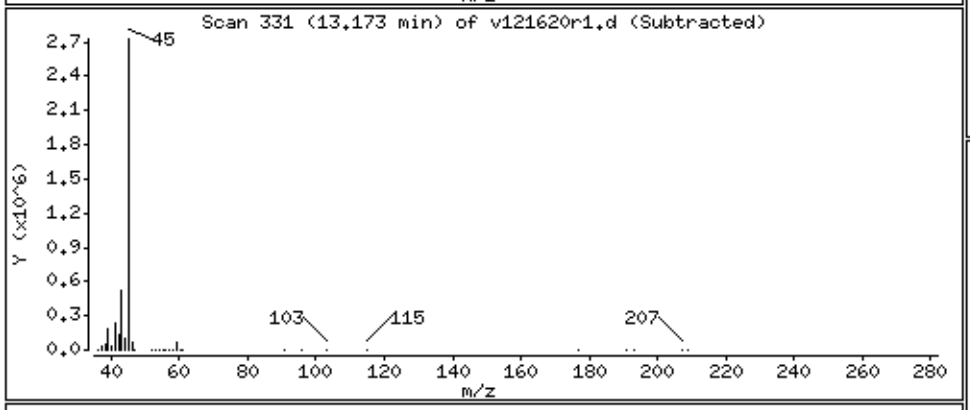
Column phase: RTx-624

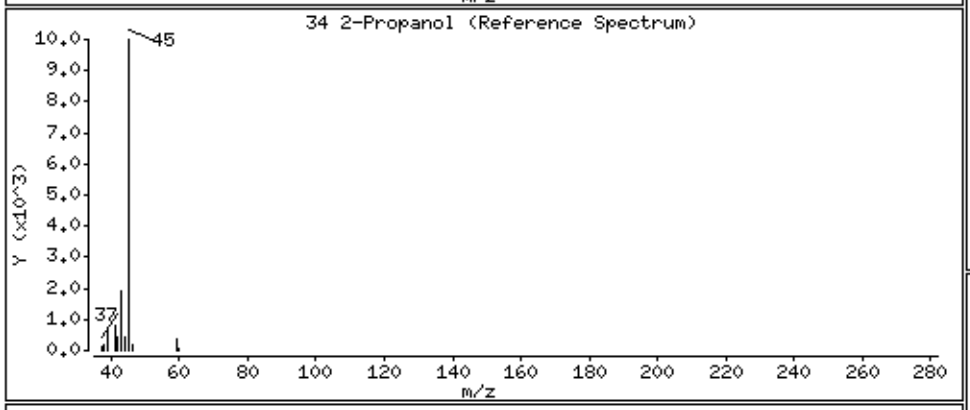
Column diameter: 0.32

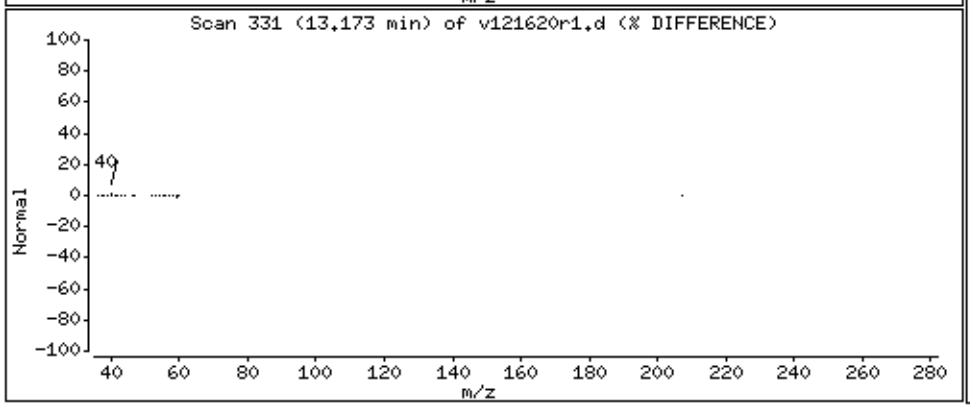
34 2-Propanol

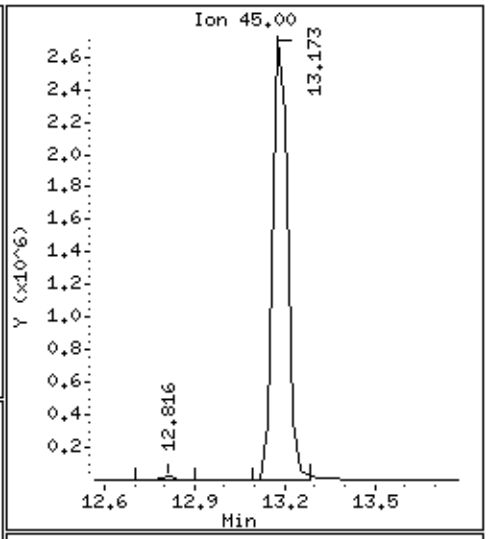
Concentration: 154.58 PPBV

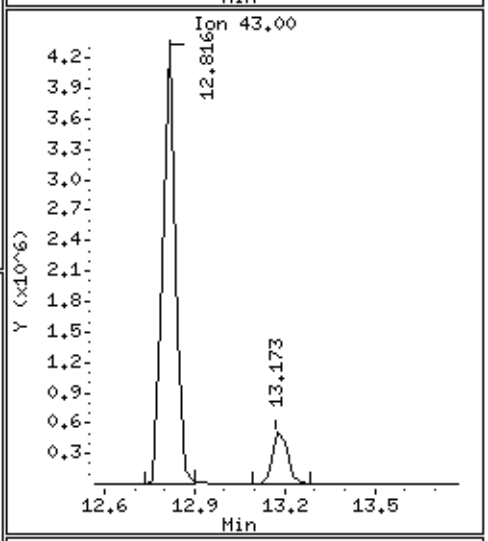


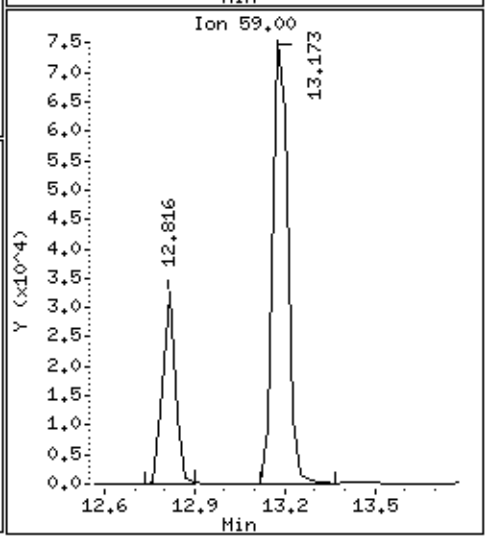












Data File: /chem/msdv.i/16Dec2014.b/v121620r1.d

Date : 16-DEC-2014 22:19

Client ID:

Instrument: msdv.i

Sample Info: 250ml #3737

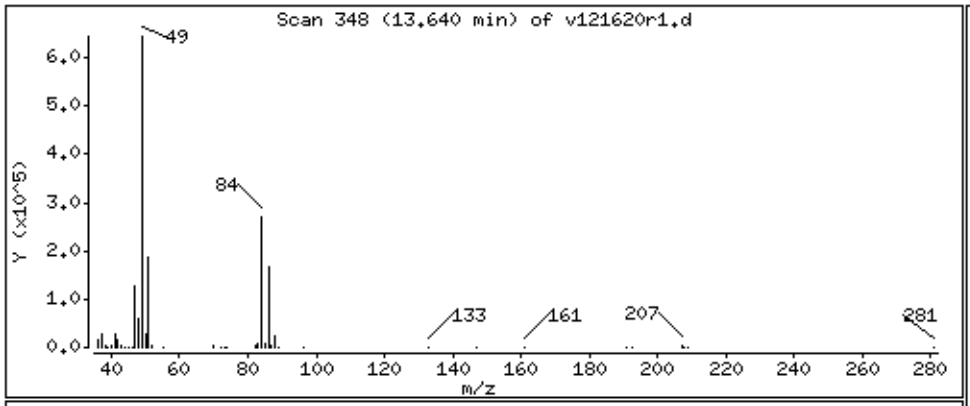
Operator: sn

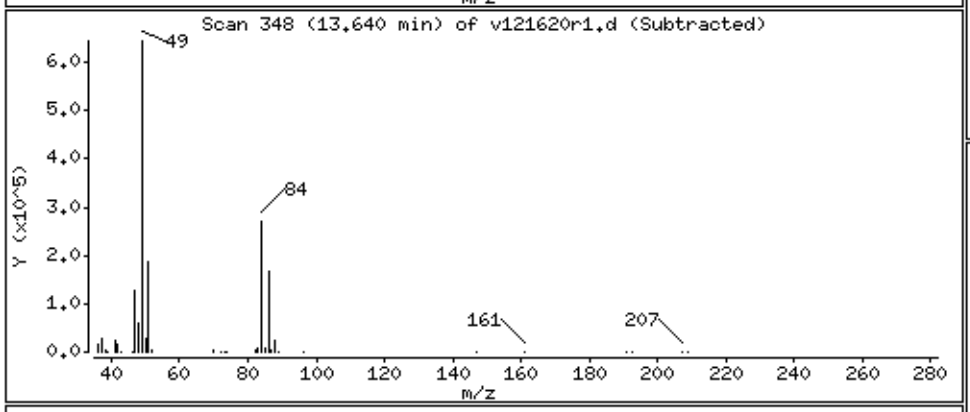
Column phase: RTx-624

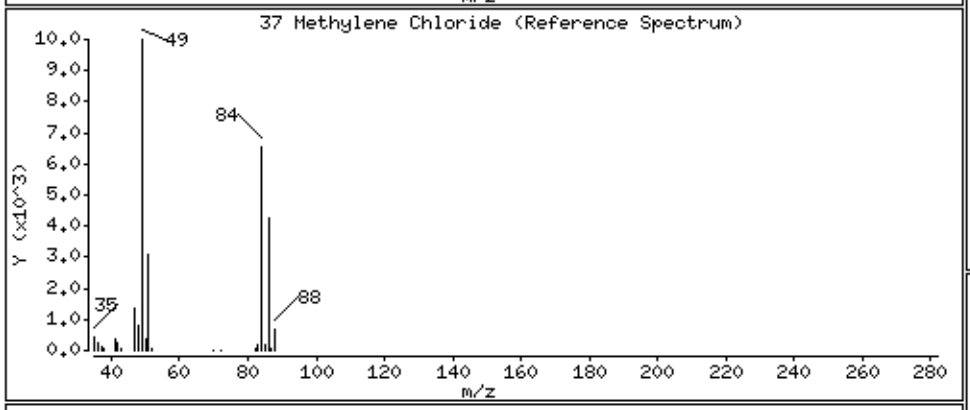
Column diameter: 0.32

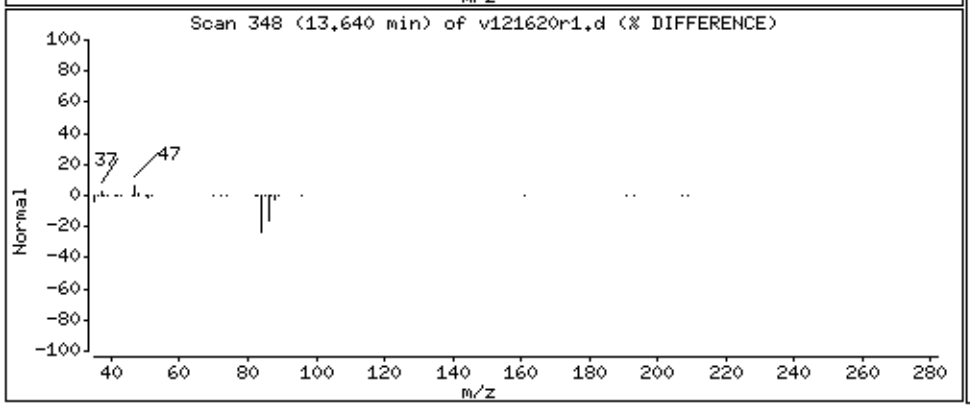
37 Methylene Chloride

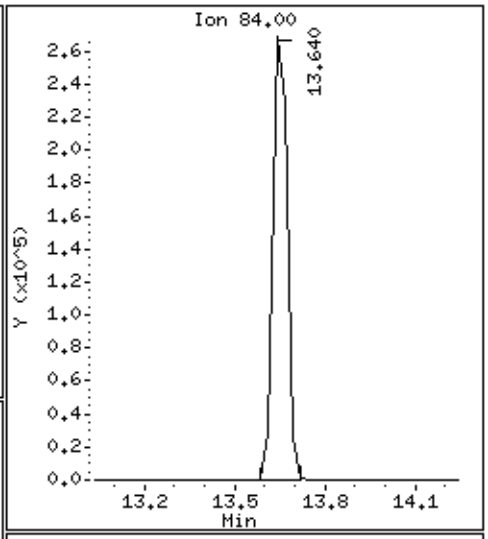
Concentration: 53.073 PPBV

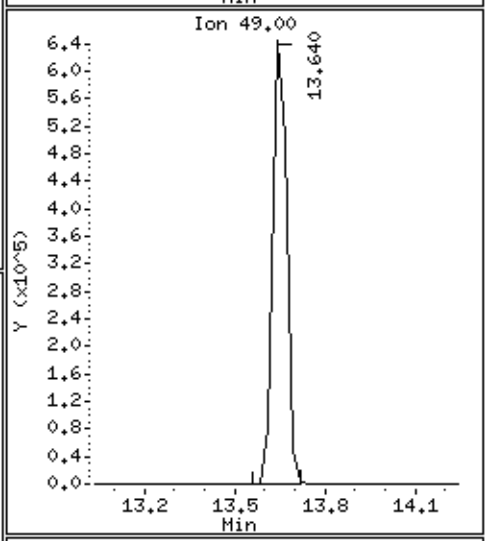


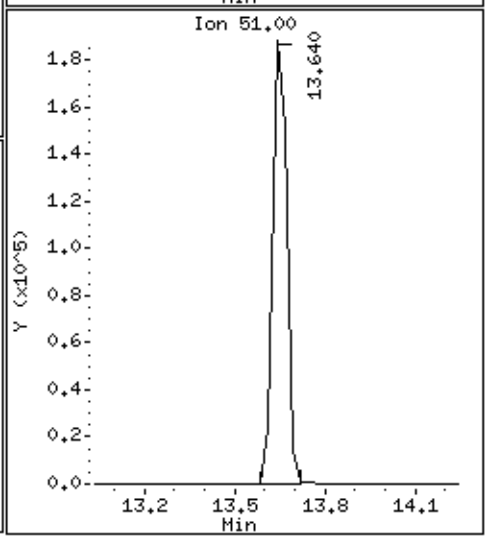












Data File: /chem/msdv.i/16Dec2014.b/v121620r1.d

Date : 16-DEC-2014 22:19

Client ID:

Instrument: msdv.i

Sample Info: 250ml #3737

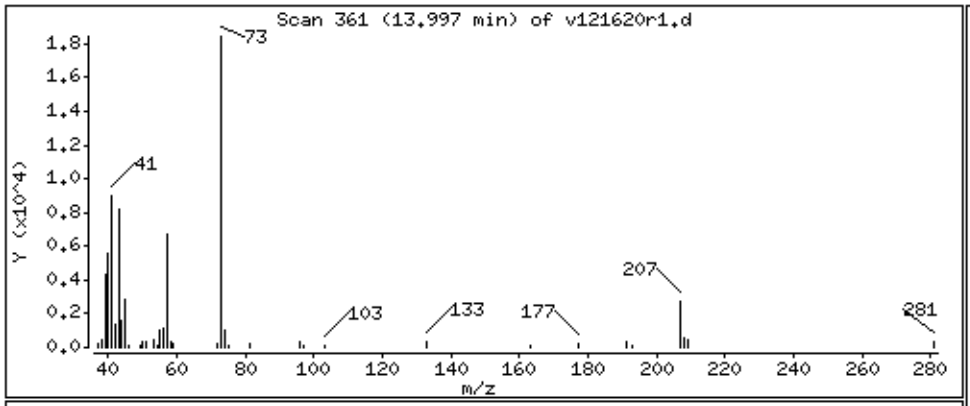
Operator: sn

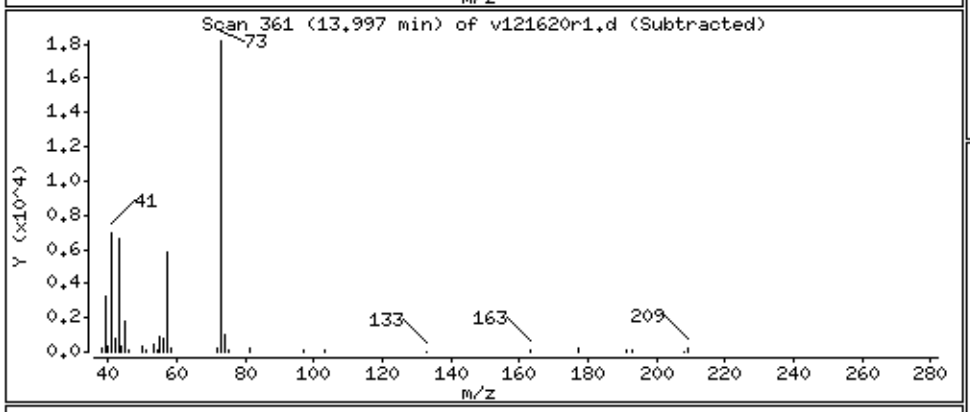
Column phase: RTx-624

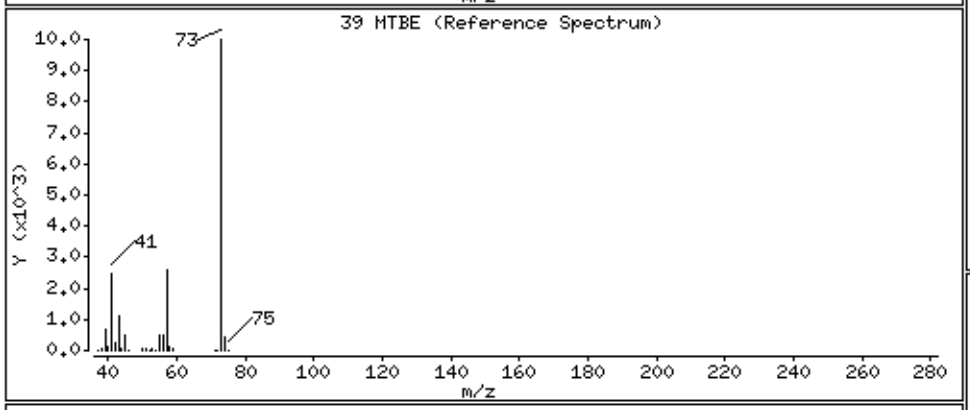
Column diameter: 0.32

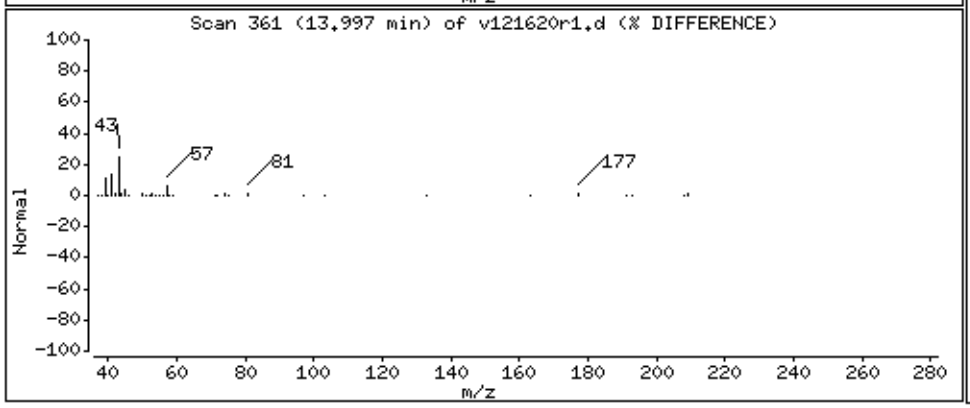
39 MTBE

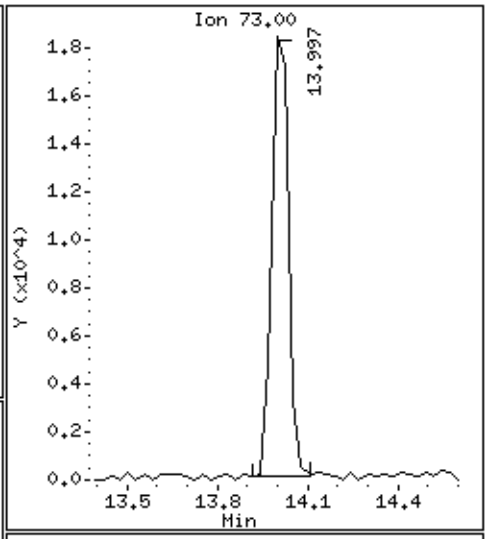
Concentration: 1.175 PPBV

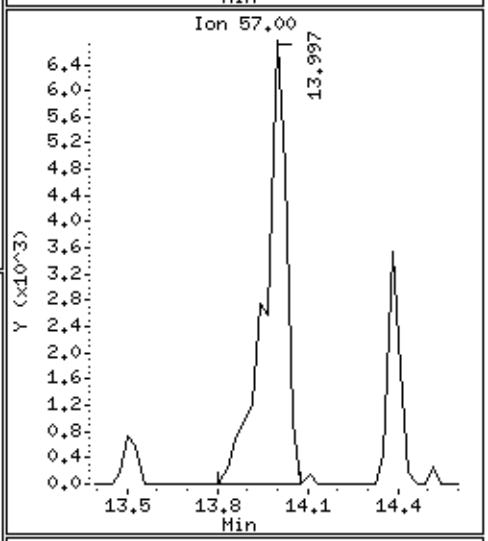


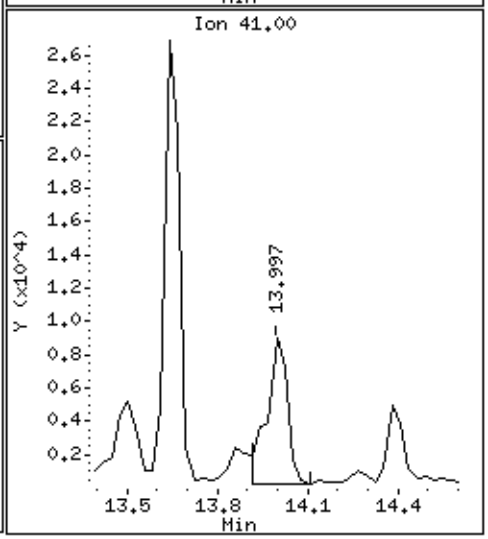












Data File: /chem/msdv.i/16Dec2014.b/v121620r1.d

Date : 16-DEC-2014 22:19

Client ID:

Instrument: msdv.i

Sample Info: 250ml #3737

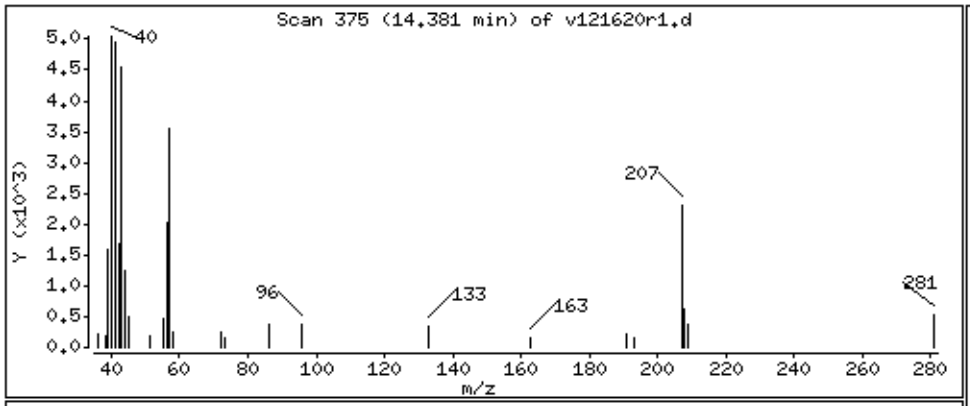
Operator: sn

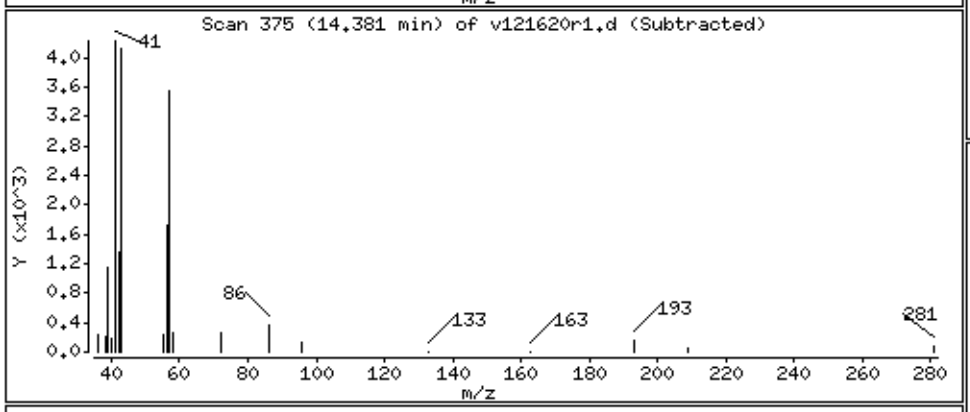
Column phase: RTx-624

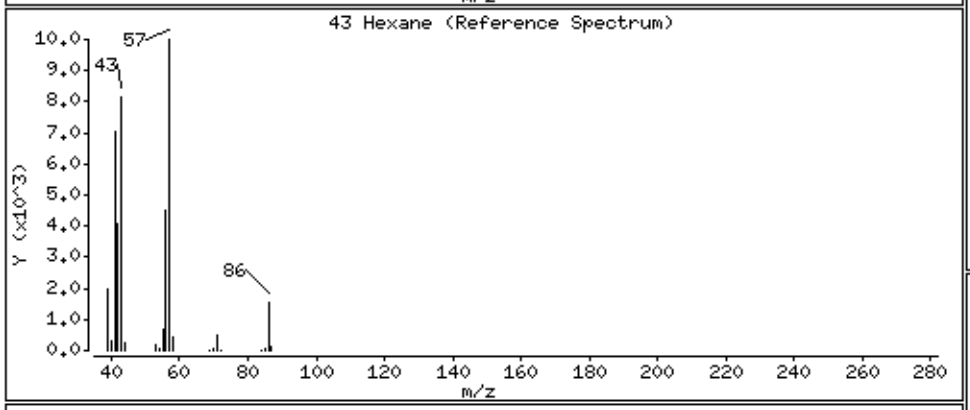
Column diameter: 0.32

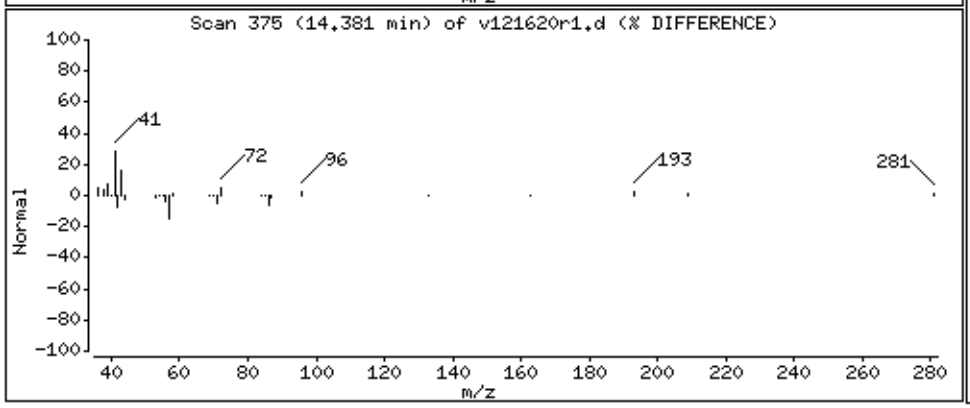
43 Hexane

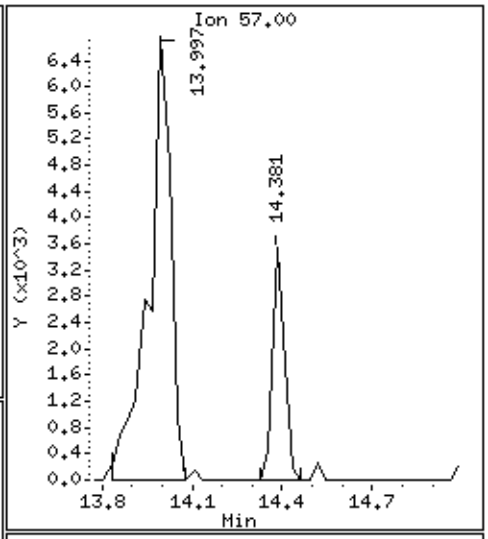
Concentration: 0.1990 PPBV

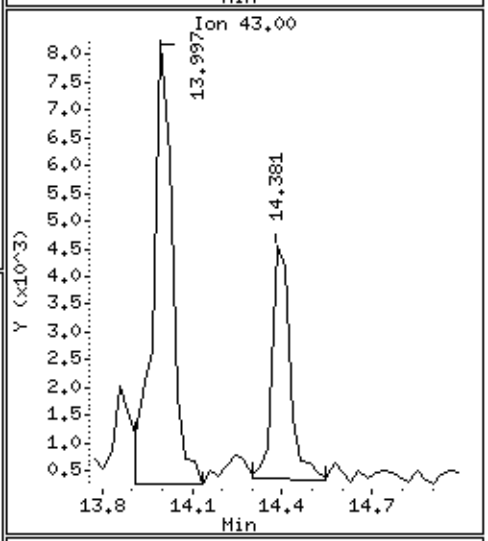


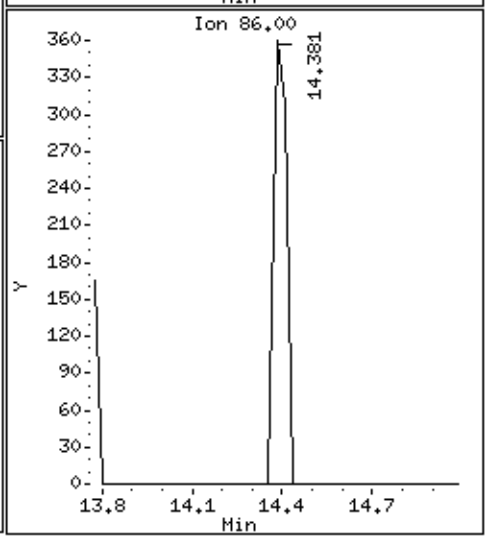












Data File: /chem/msdv.i/16Dec2014.b/v121620r1.d

Date : 16-DEC-2014 22:19

Client ID:

Instrument: msdv.i

Sample Info: 250ml #3737

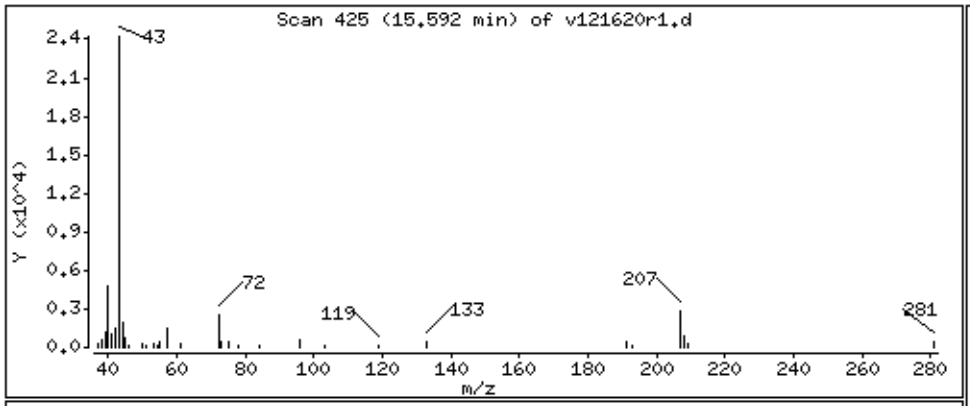
Operator: sn

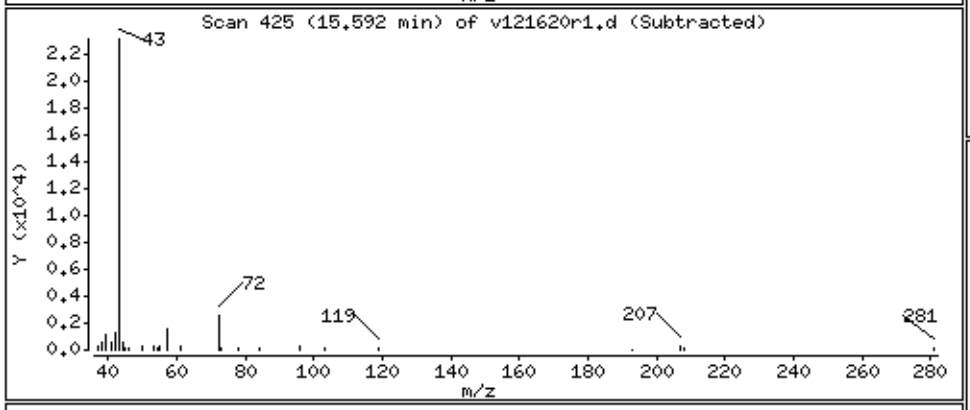
Column phase: RTx-624

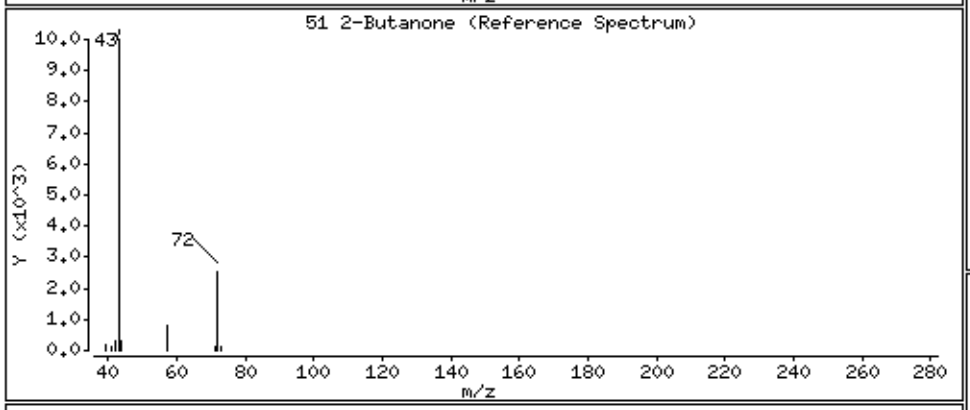
Column diameter: 0.32

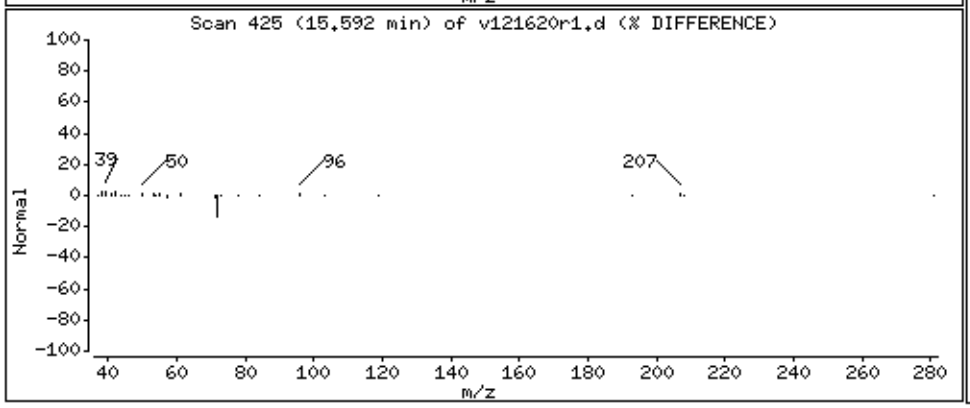
51 2-Butanone

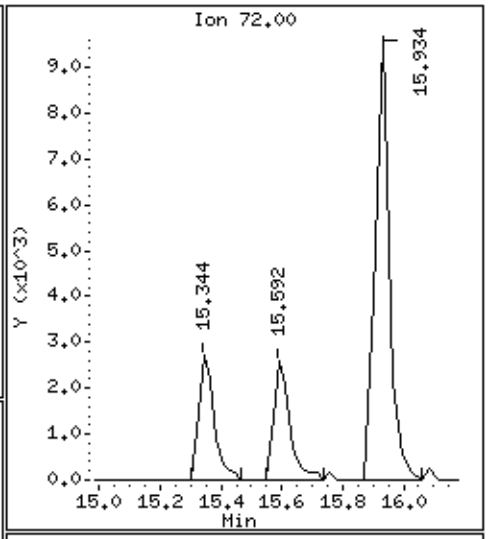
Concentration: 0.9642 PPBV

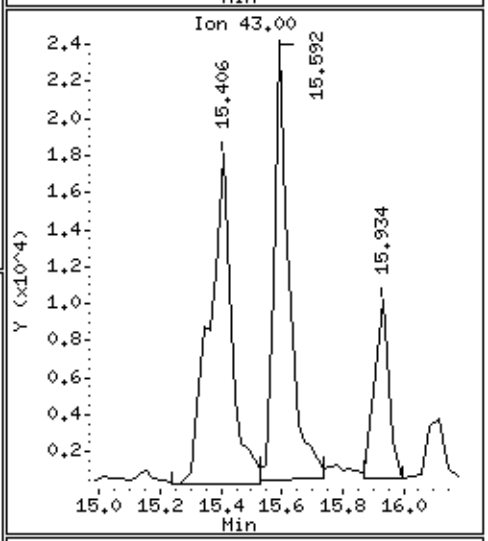


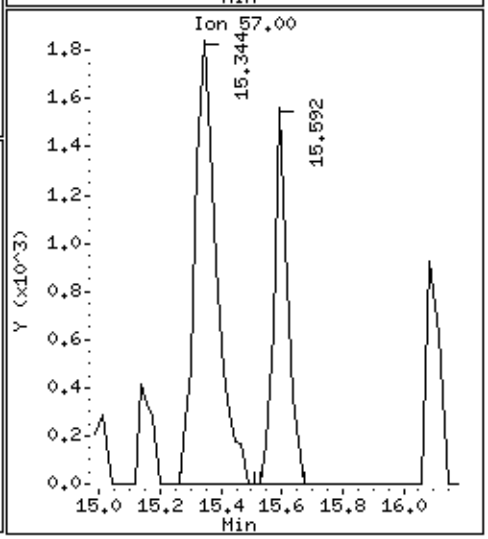












Data File: /chem/msdv.i/16Dec2014.b/v121620r1.d

Date : 16-DEC-2014 22:19

Client ID:

Instrument: msdv.i

Sample Info: 250ml #3737

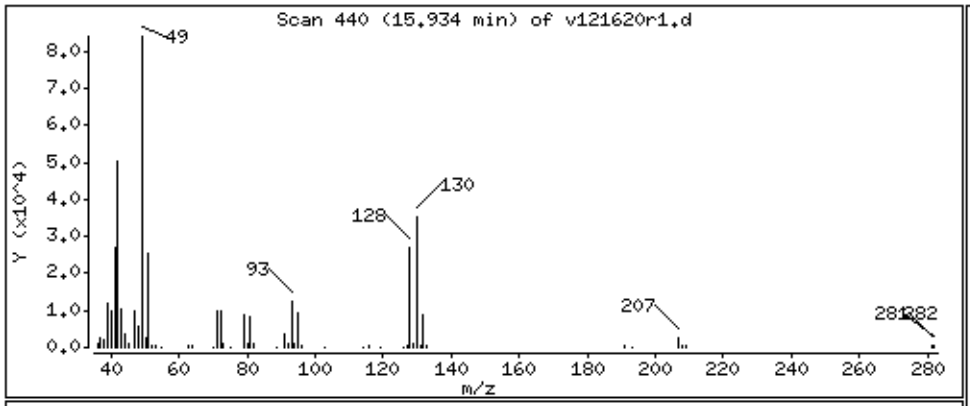
Operator: sn

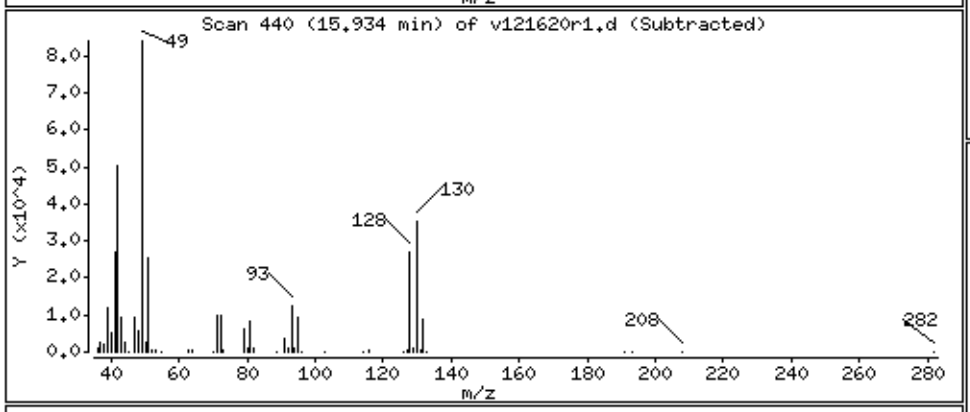
Column phase: RTx-624

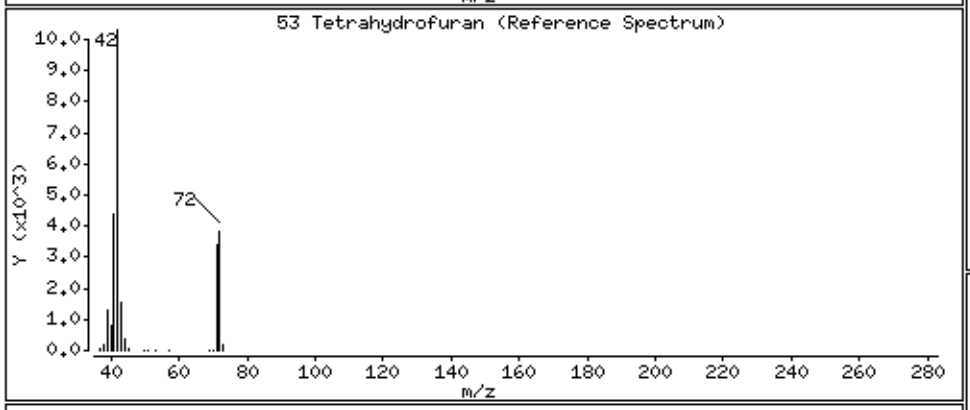
Column diameter: 0.32

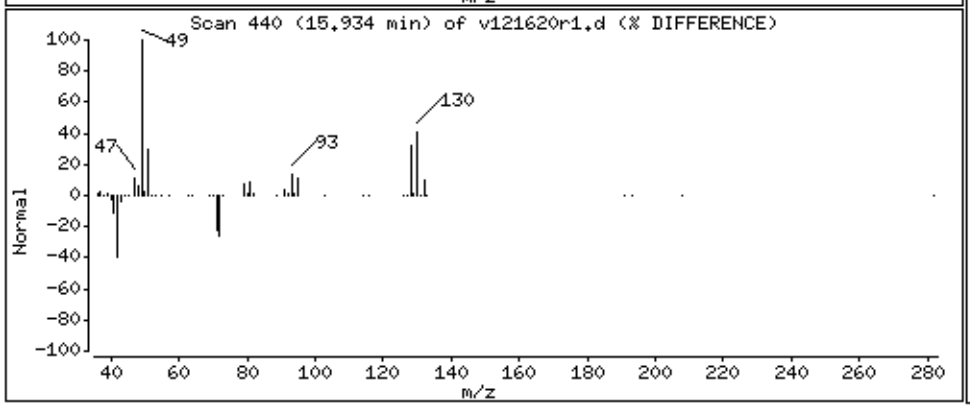
53 Tetrahydrofuran

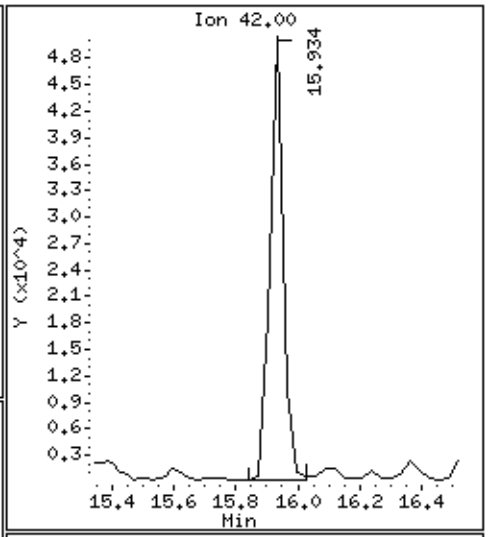
Concentration: 2.927 PPBV

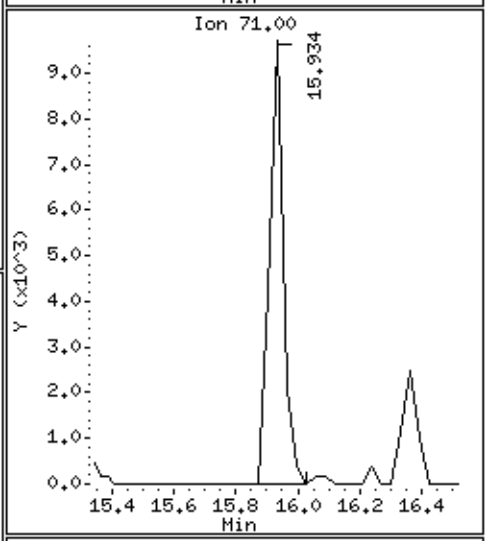


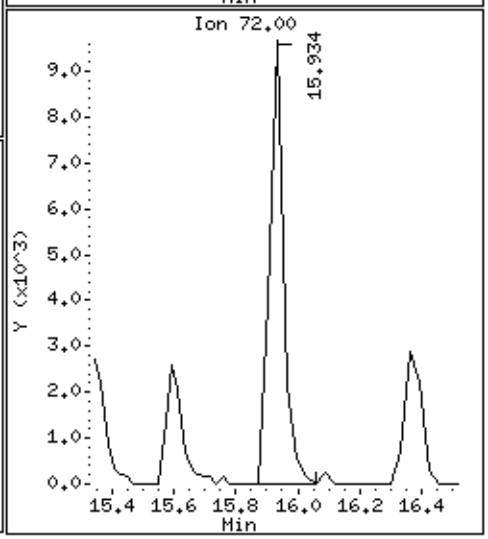












Data File: /chem/msdv.i/16Dec2014.b/v121620r1.d

Date : 16-DEC-2014 22:19

Client ID:

Instrument: msdv.i

Sample Info: 250ml #3737

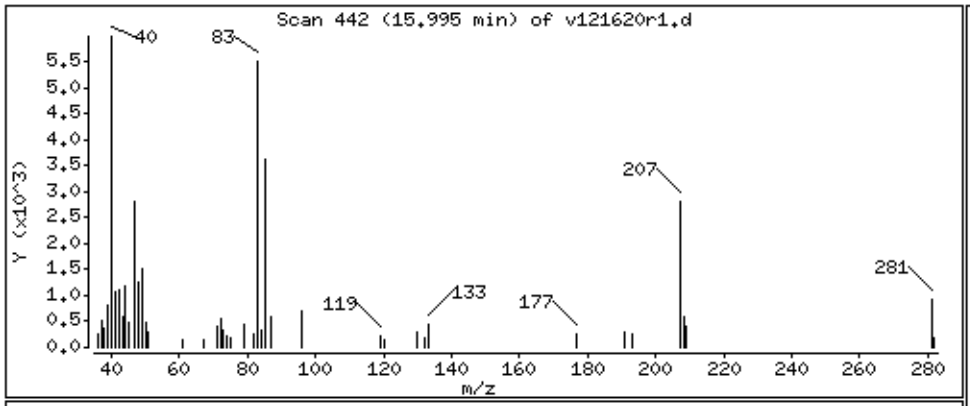
Operator: sn

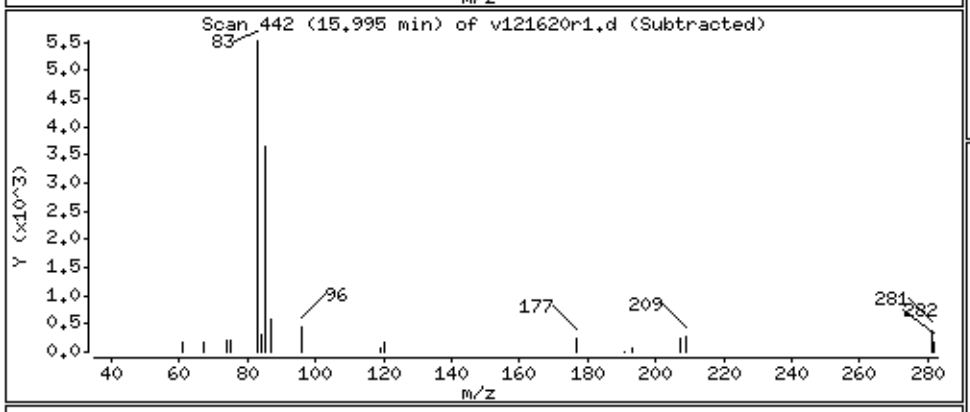
Column phase: RTx-624

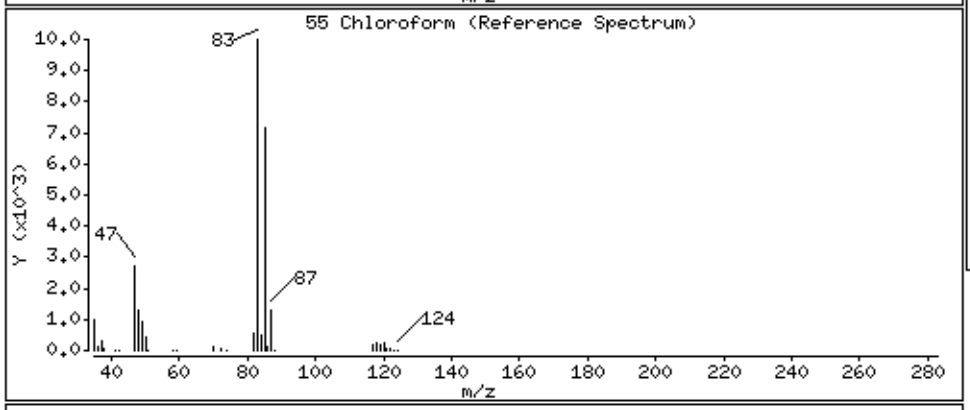
Column diameter: 0.32

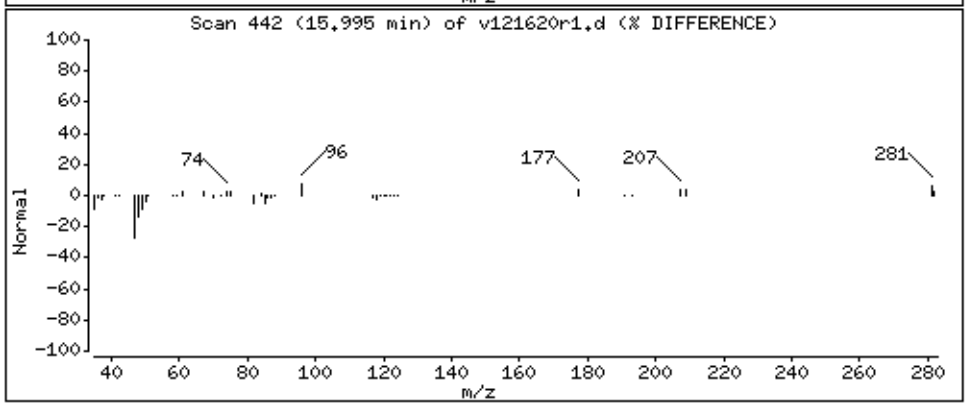
55 Chloroform

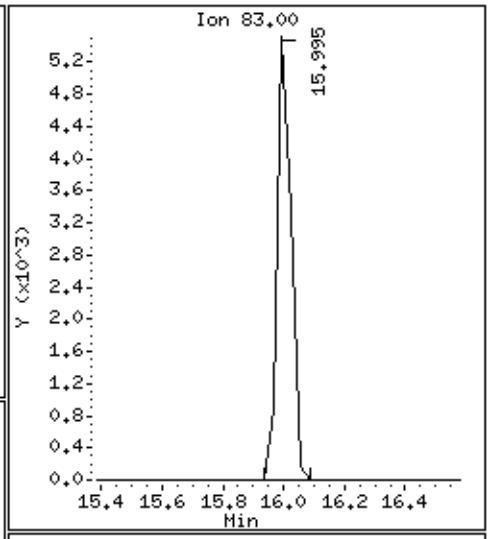
Concentration: 0.3875 PPBV

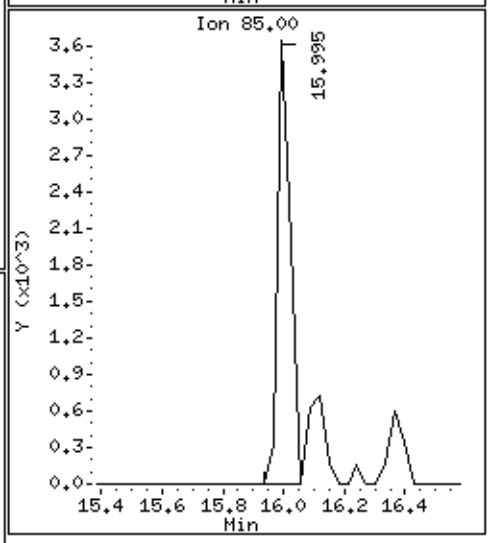












Data File: /chem/msdv.i/16Dec2014.b/v121620r1.d

Date : 16-DEC-2014 22:19

Client ID:

Instrument: msdv.i

Sample Info: 250ml #3737

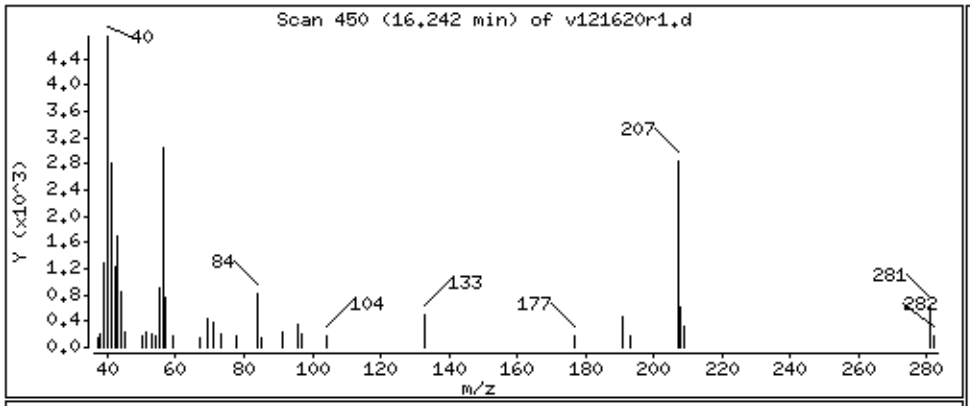
Operator: sn

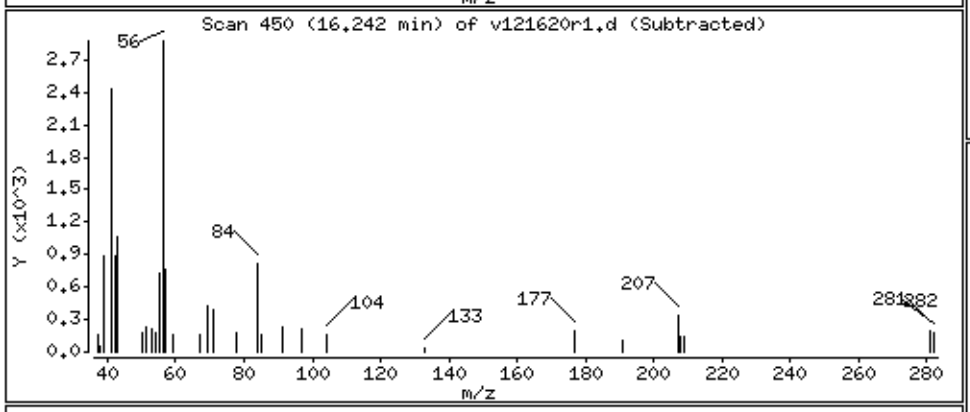
Column phase: RTx-624

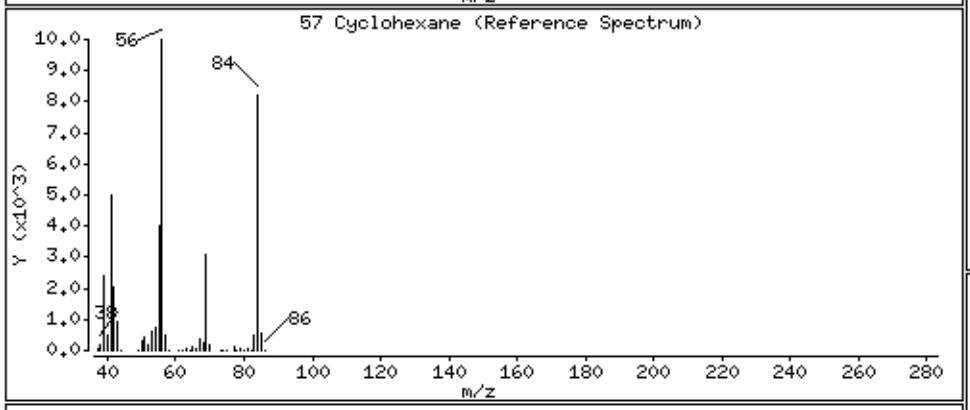
Column diameter: 0.32

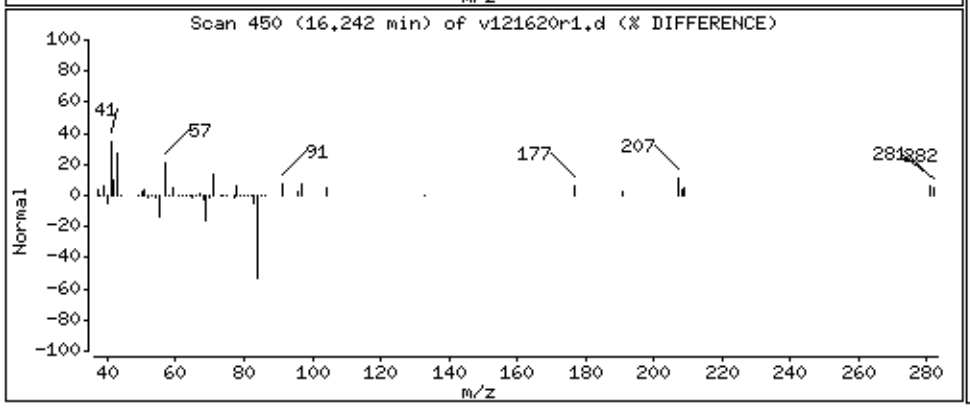
57 Cyclohexane

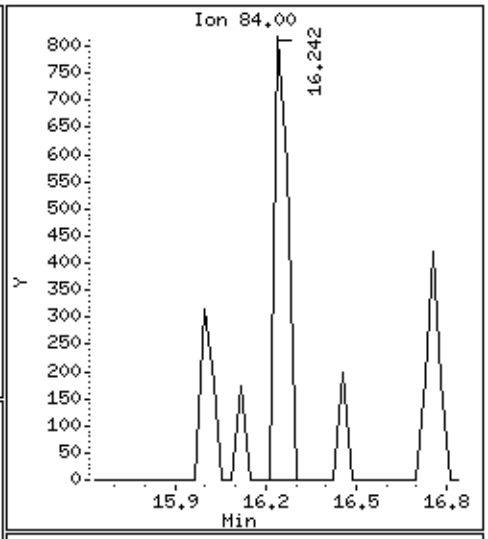
Concentration: 0.08696 PPBV

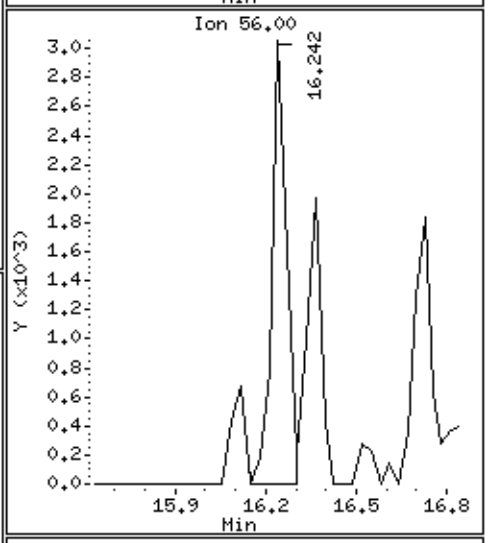


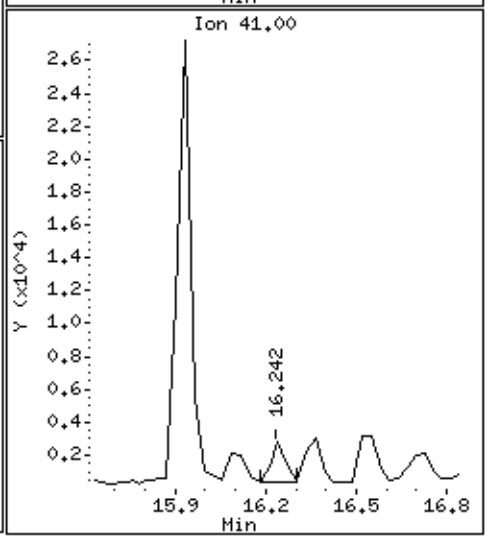












Data File: /chem/msdv.i/16Dec2014.b/v121620r1.d

Date : 16-DEC-2014 22:19

Client ID:

Instrument: msdv.i

Sample Info: 250ml #3737

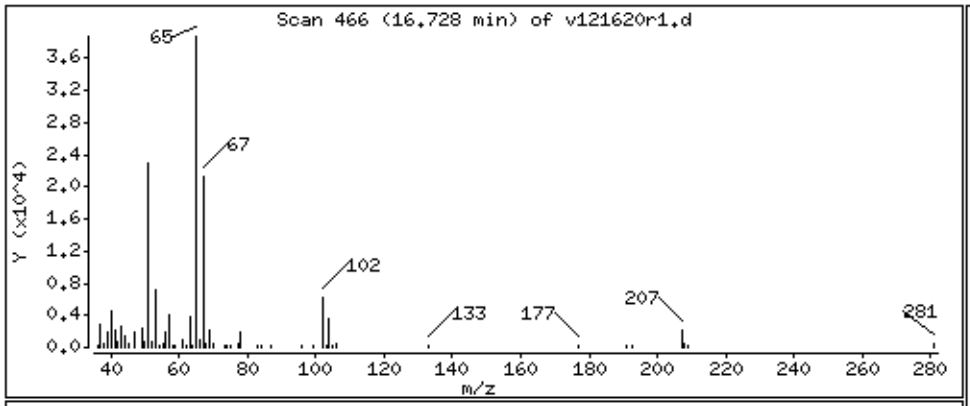
Operator: sn

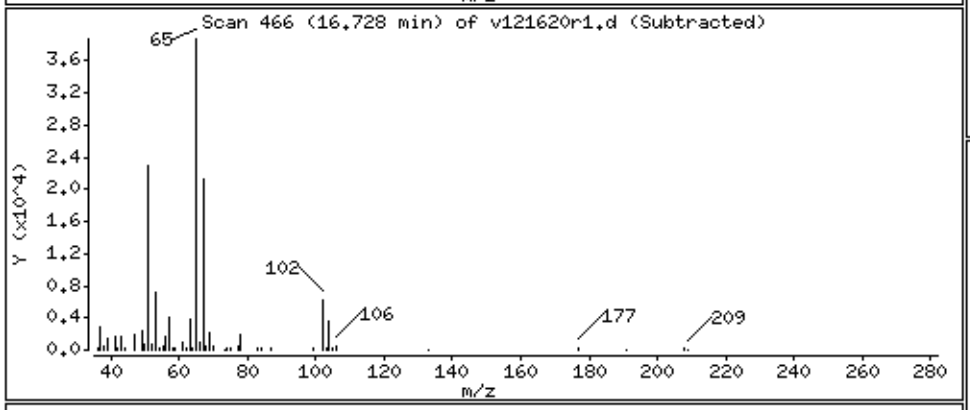
Column phase: RTx-624

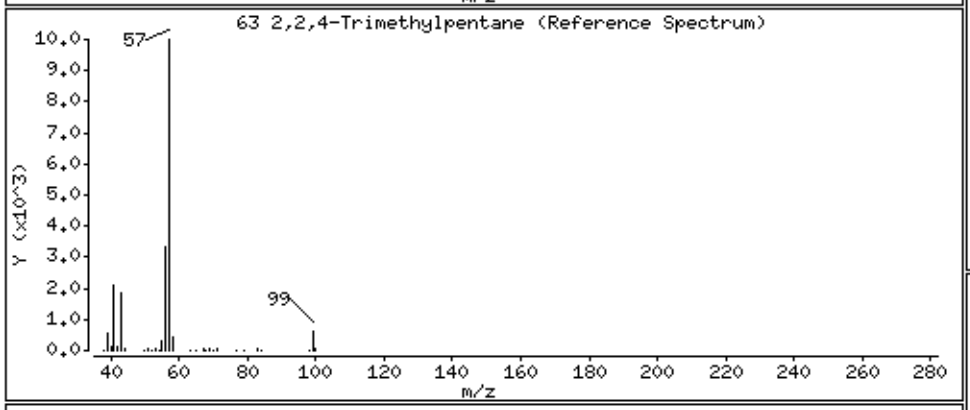
Column diameter: 0.32

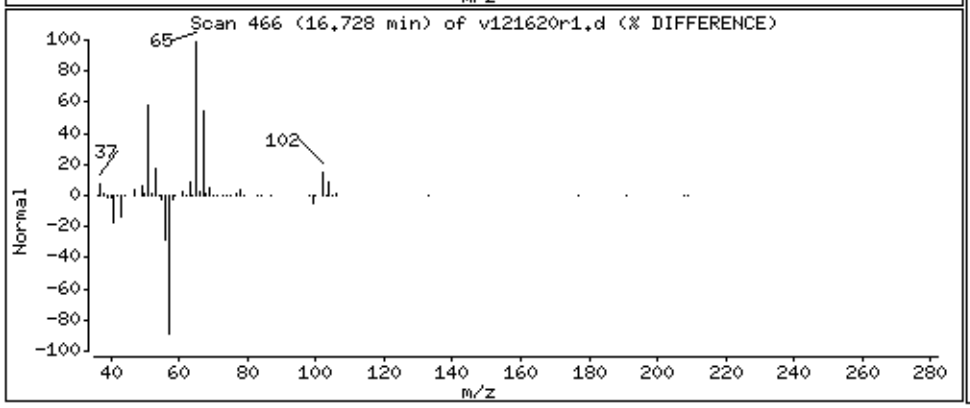
63 2,2,4-Trimethylpentane

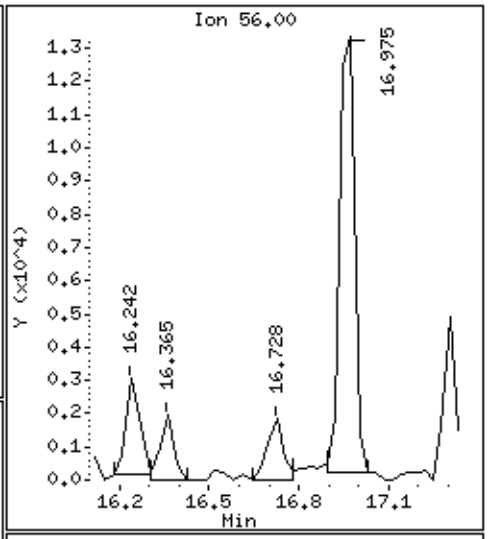
Concentration: 0.1431 PPBV

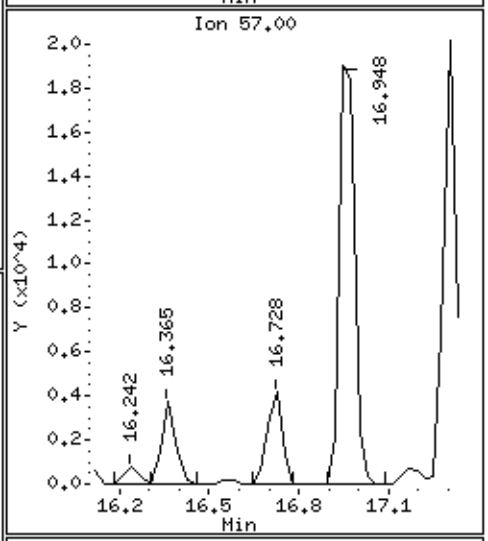


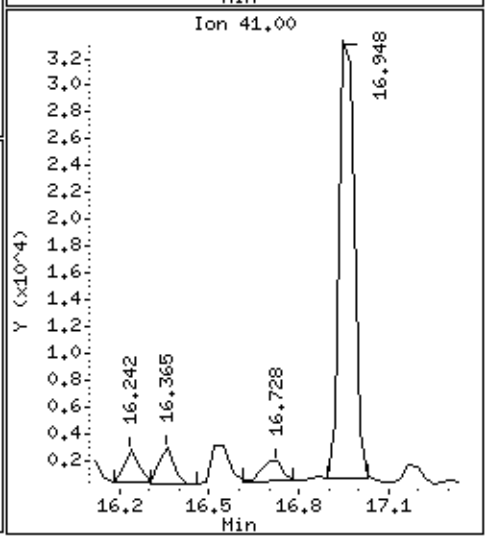












Data File: /chem/msdv.i/16Dec2014.b/v121620r1.d

Date : 16-DEC-2014 22:19

Client ID:

Instrument: msdv.i

Sample Info: 250ml #3737

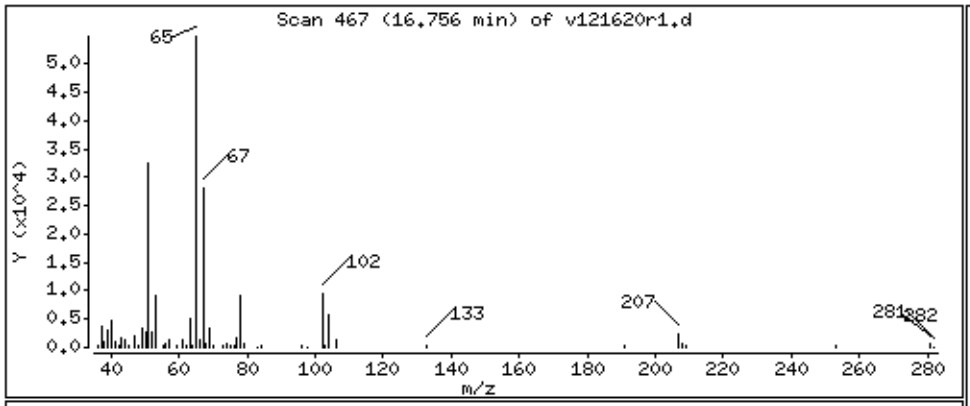
Operator: sn

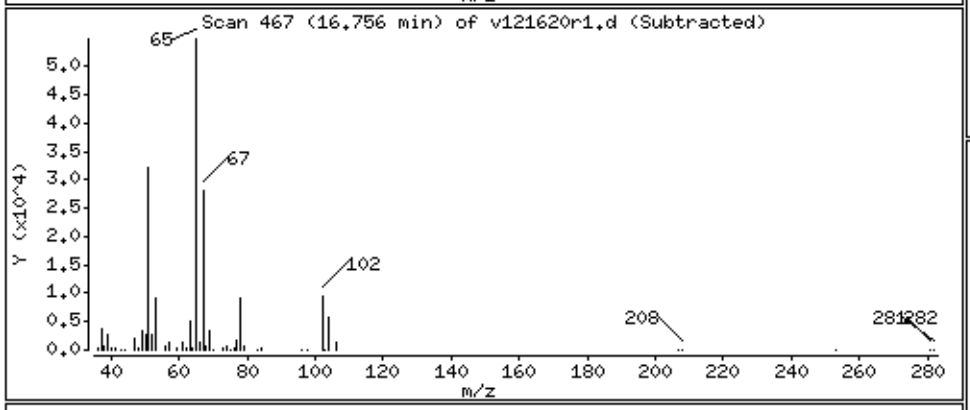
Column phase: RTx-624

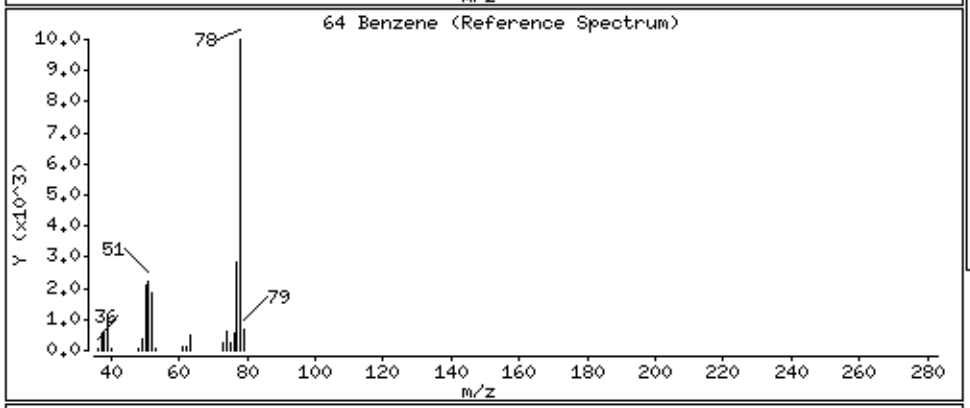
Column diameter: 0.32

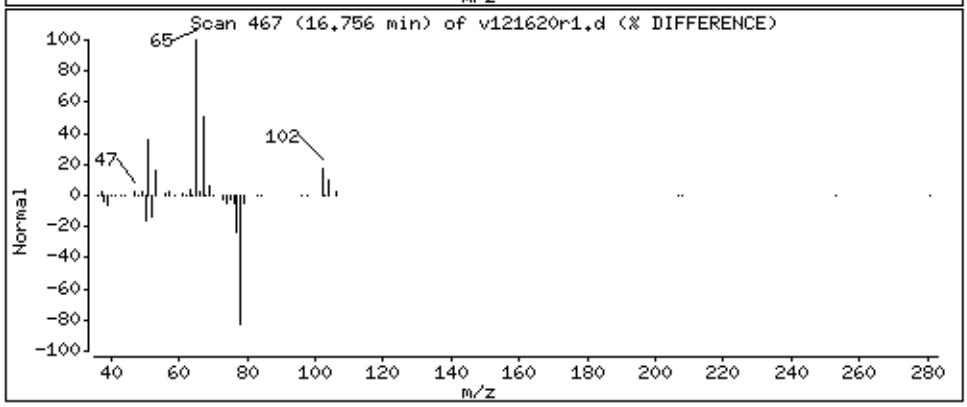
64 Benzene

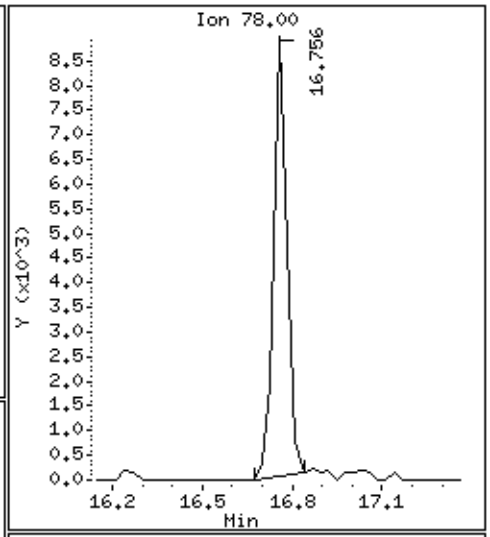
Concentration: 0.3946 PPBV

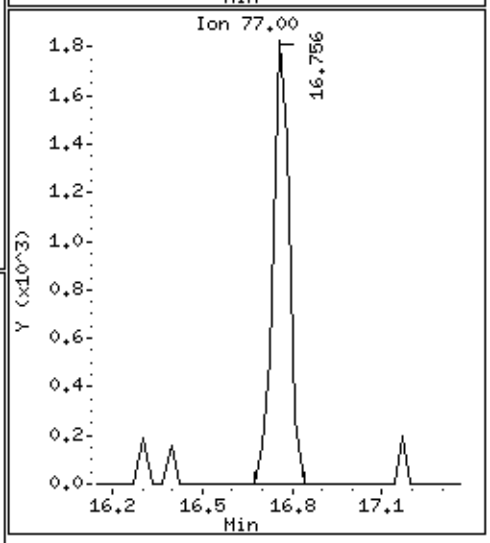












Data File: /chem/msdv.i/16Dec2014.b/v121620r1.d

Date : 16-DEC-2014 22:19

Client ID:

Instrument: msdv.i

Sample Info: 250ml #3737

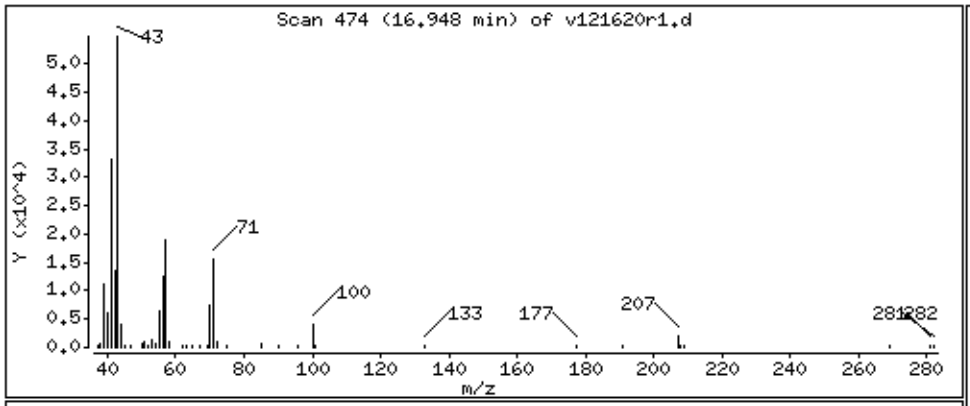
Operator: sn

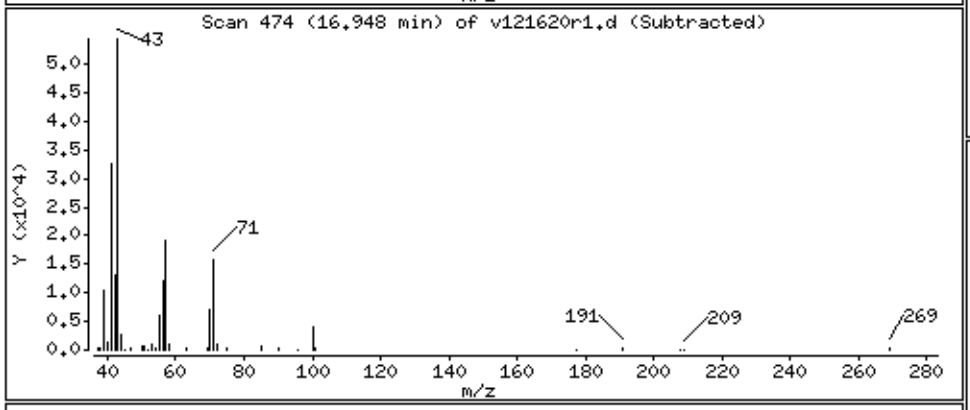
Column phase: RTx-624

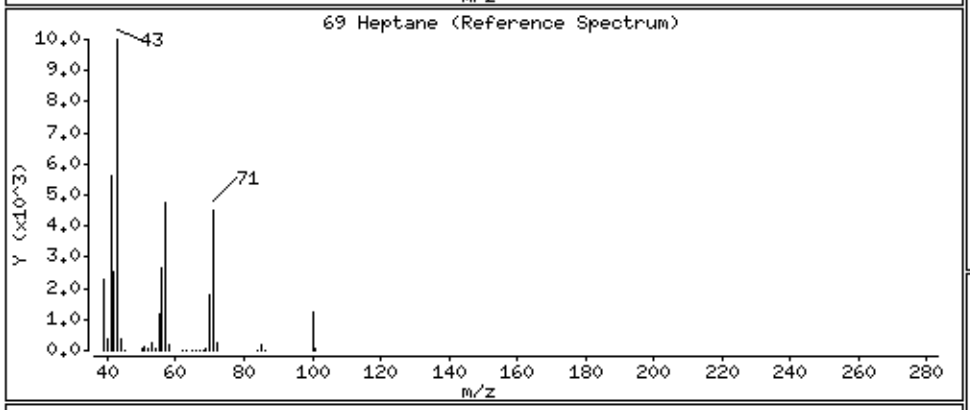
Column diameter: 0.32

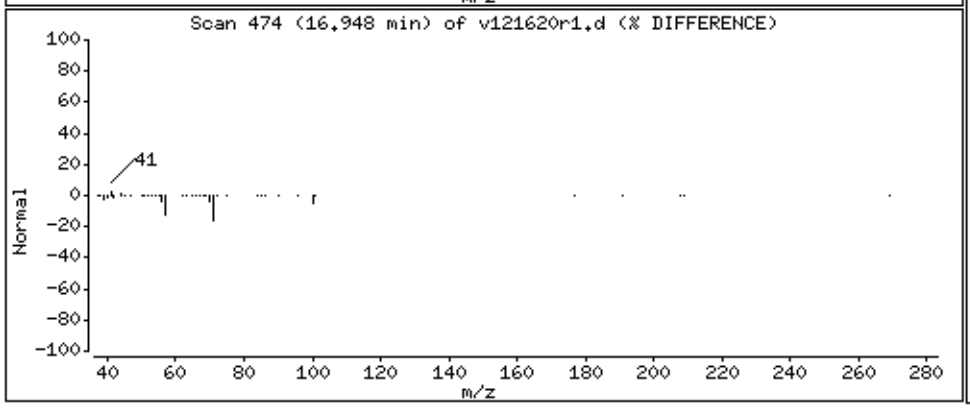
69 Heptane

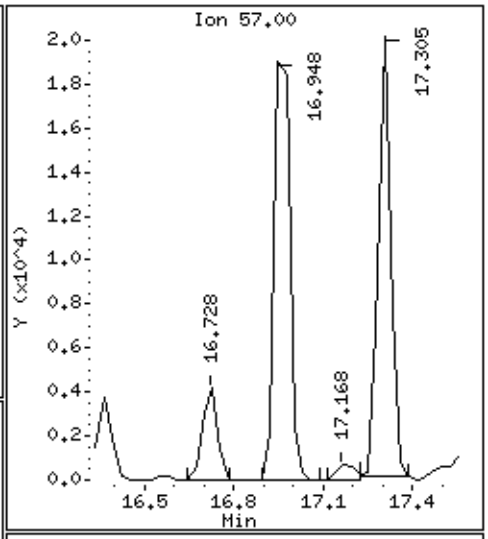
Concentration: 2.362 PPBV

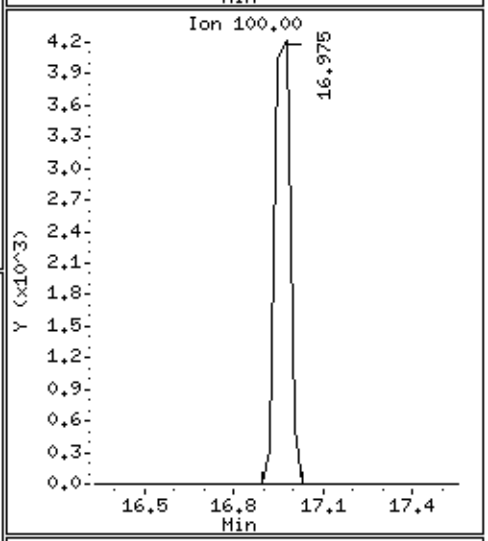


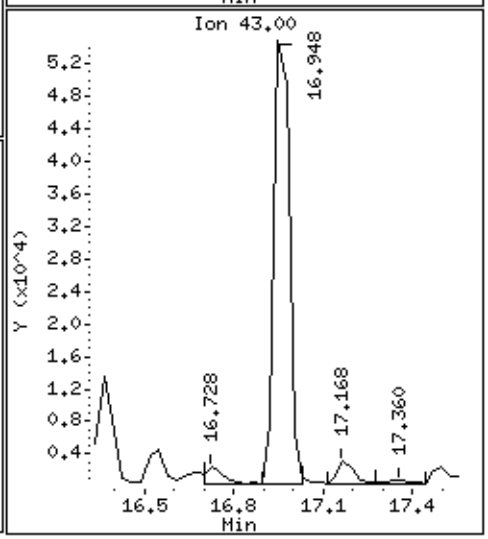












Data File: /chem/msdv.i/16Dec2014.b/v121620r1.d

Date : 16-DEC-2014 22:19

Client ID:

Instrument: msdv.i

Sample Info: 250ml #3737

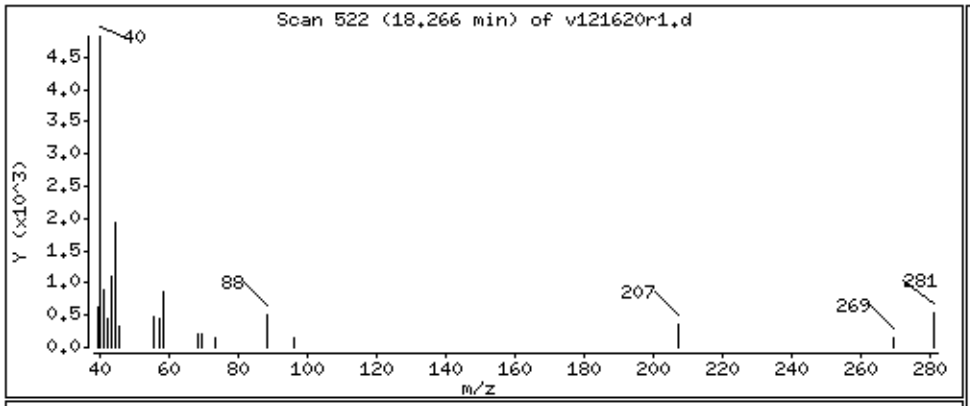
Operator: sn

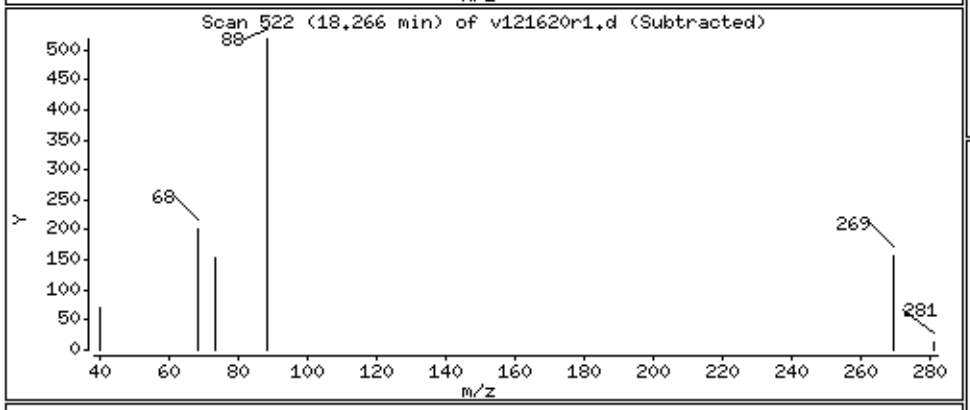
Column phase: RTx-624

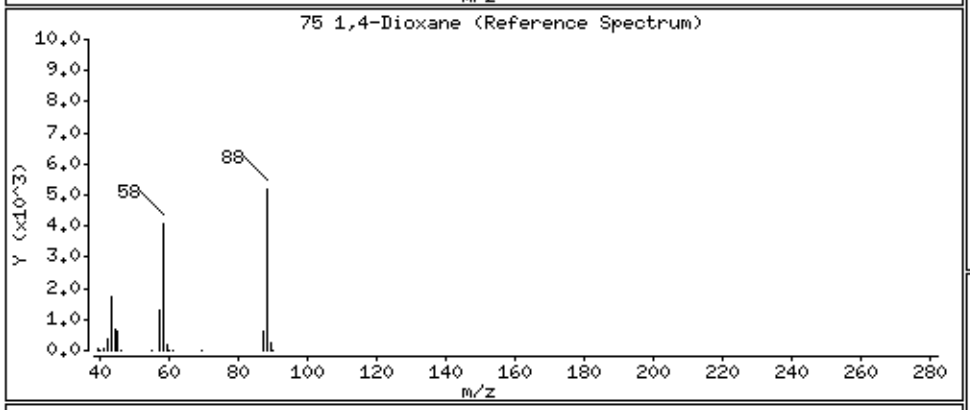
Column diameter: 0.32

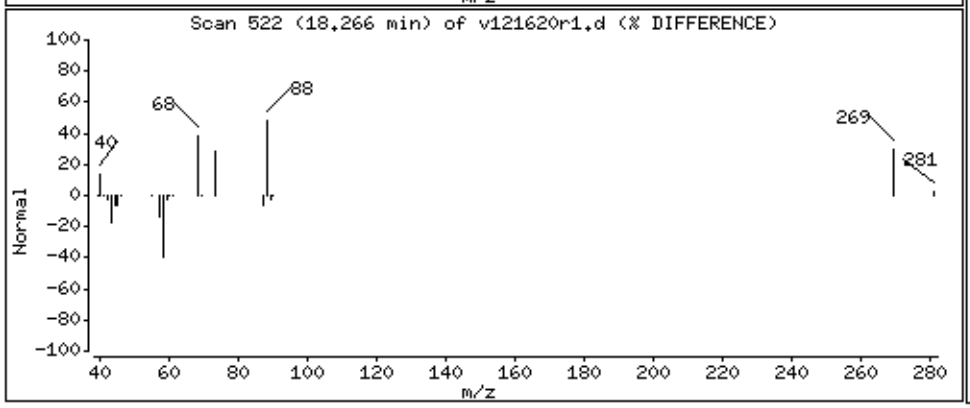
75 1,4-Dioxane

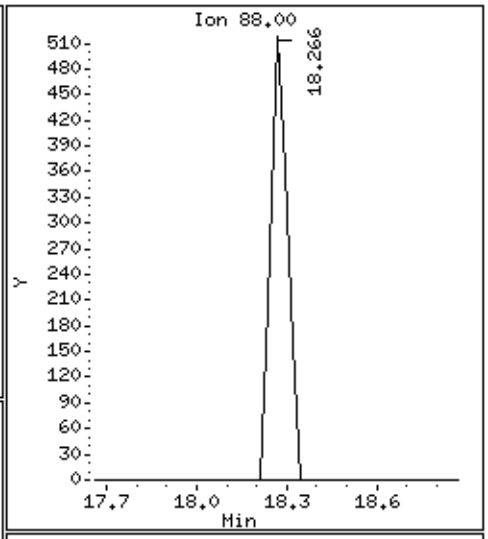
Concentration: 0.1296 PPBV

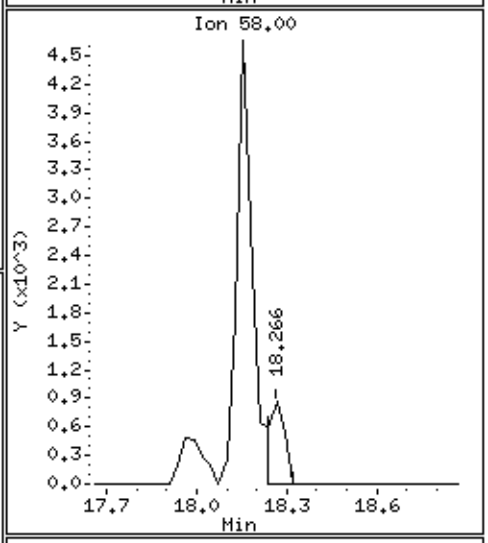


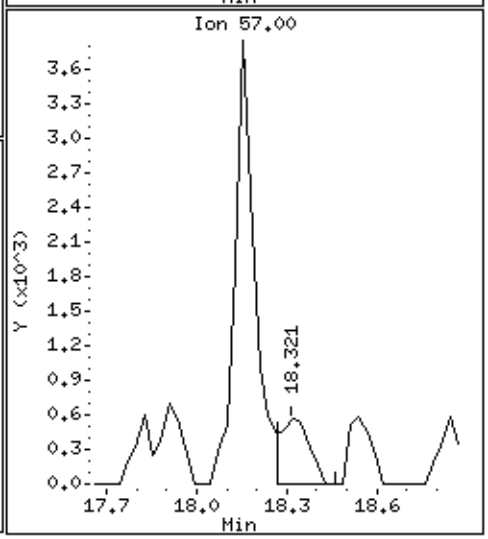












Data File: /chem/msdv.i/16Dec2014.b/v121620r1.d

Date : 16-DEC-2014 22:19

Client ID:

Instrument: msdv.i

Sample Info: 250ml #3737

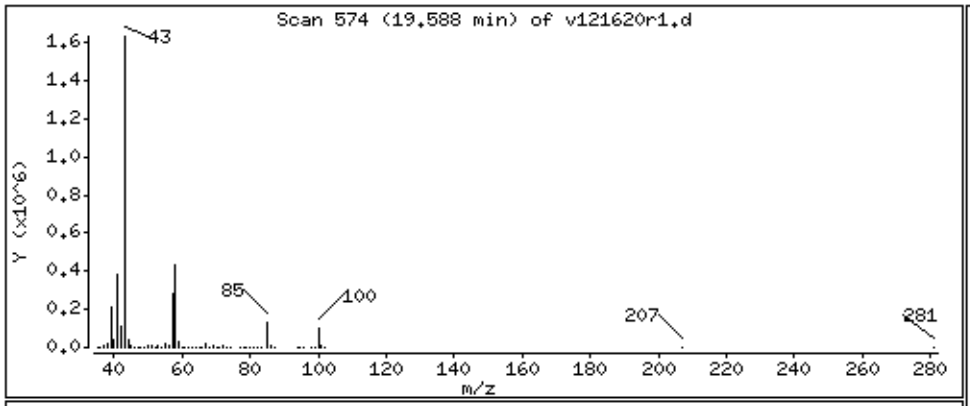
Operator: sn

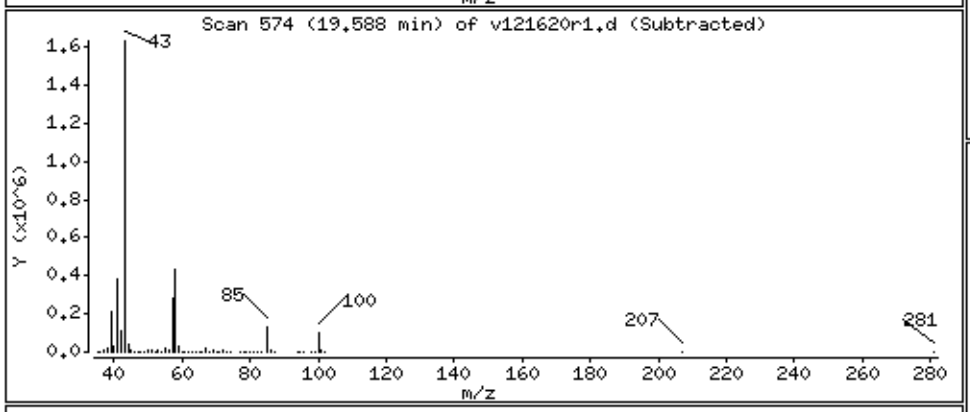
Column phase: RTx-624

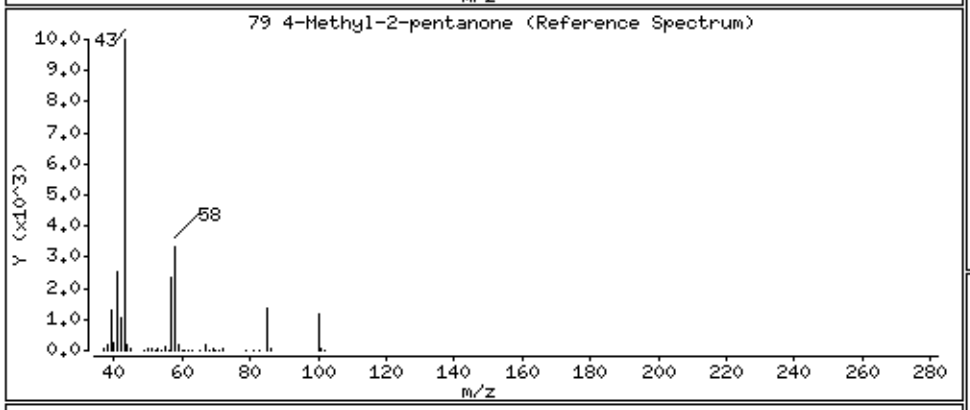
Column diameter: 0.32

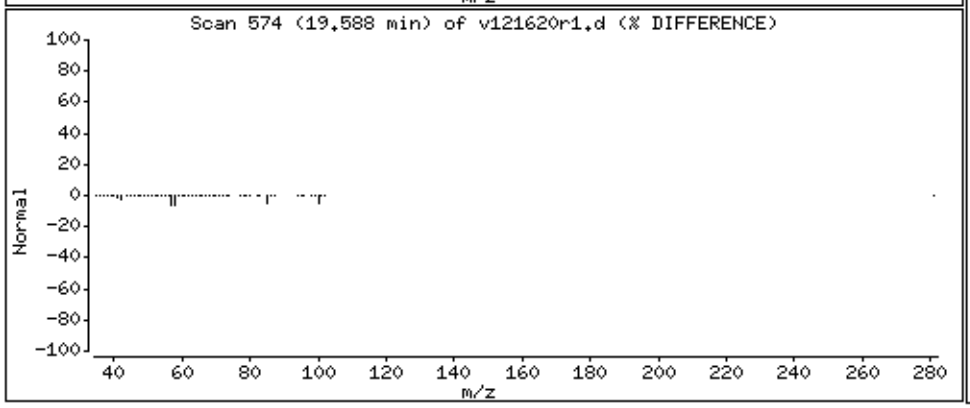
79 4-Methyl-2-pentanone

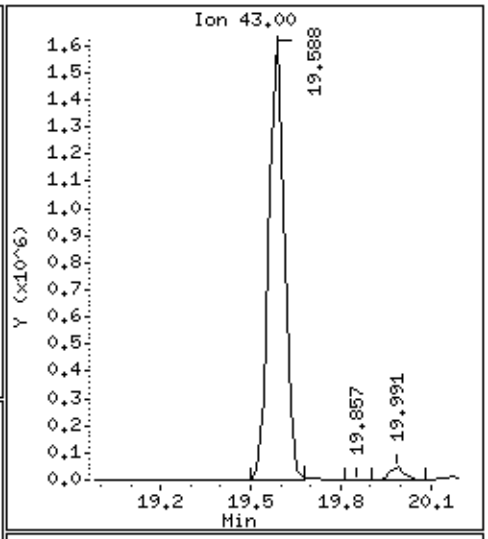
Concentration: 60.596 PPBV

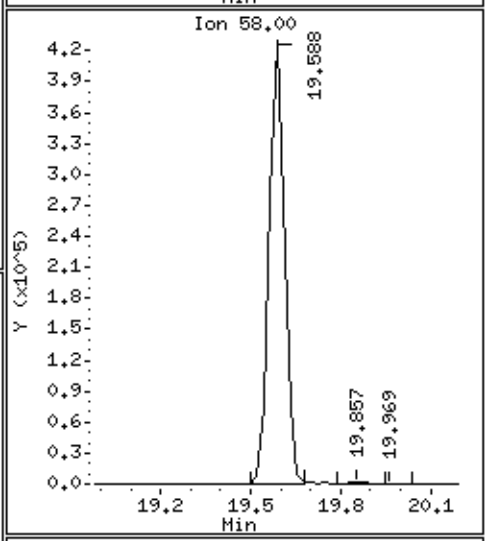


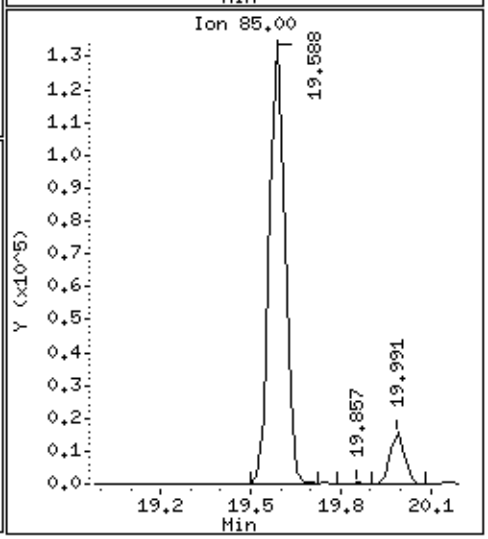












Data File: /chem/msdv.i/16Dec2014.b/v121620r1.d

Date : 16-DEC-2014 22:19

Client ID:

Instrument: msdv.i

Sample Info: 250ml #3737

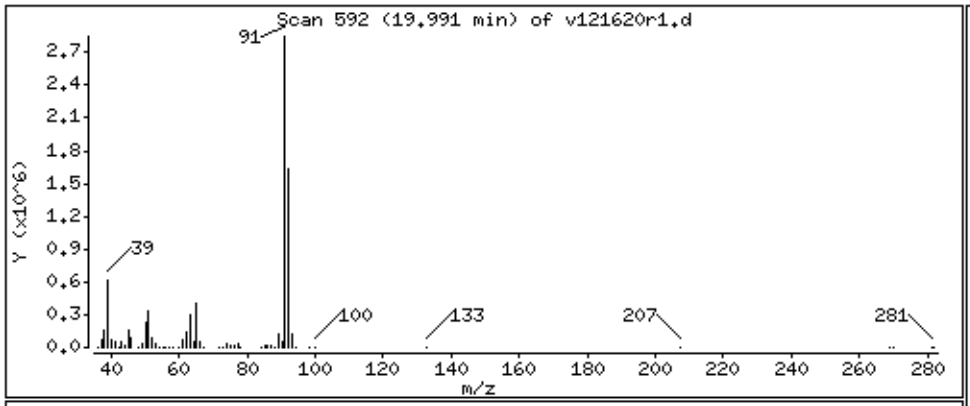
Operator: sn

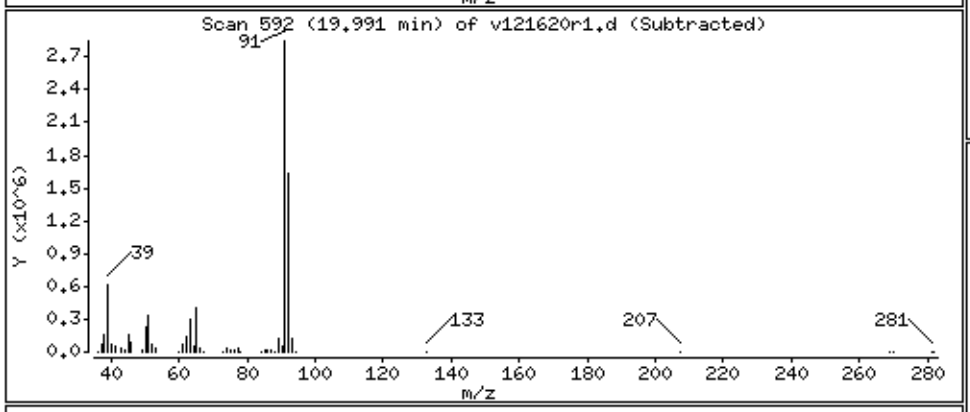
Column phase: RTx-624

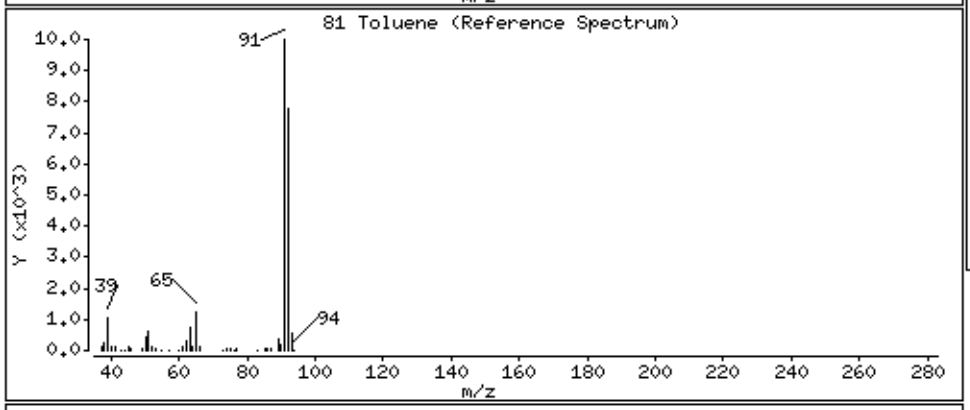
Column diameter: 0.32

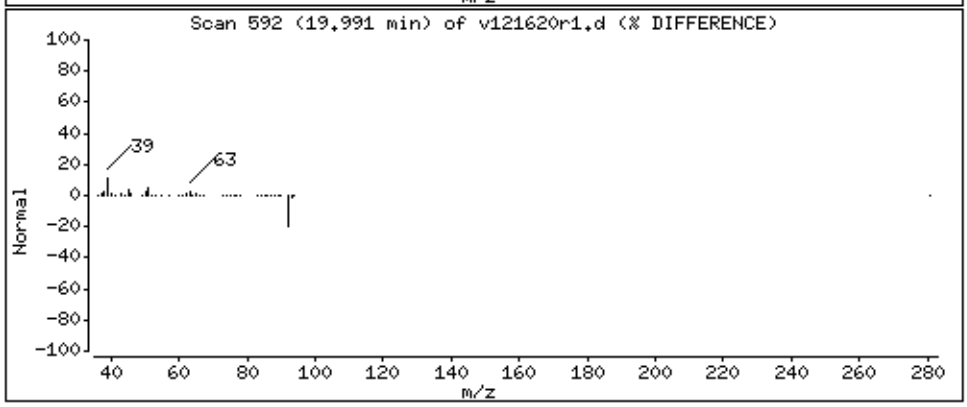
81 Toluene

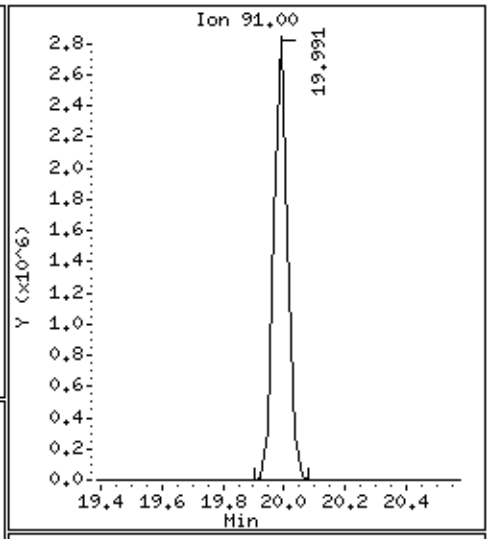
Concentration: 119.54 PPBV

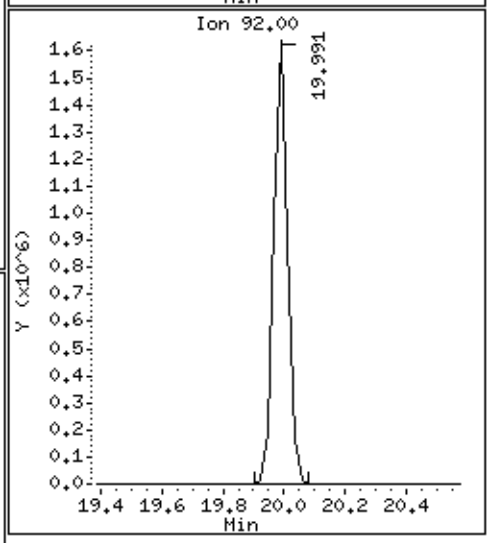












Data File: /chem/msdv.i/16Dec2014.b/v121620r1.d

Date : 16-DEC-2014 22:19

Client ID:

Instrument: msdv.i

Sample Info: 250ml #3737

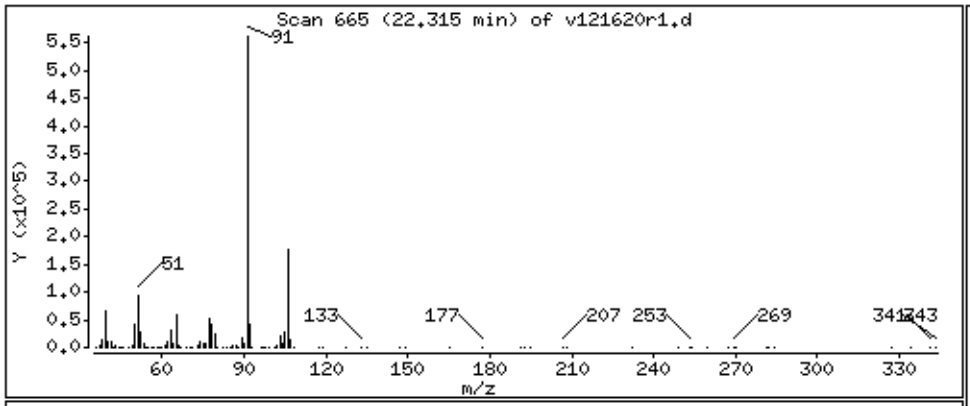
Operator: sn

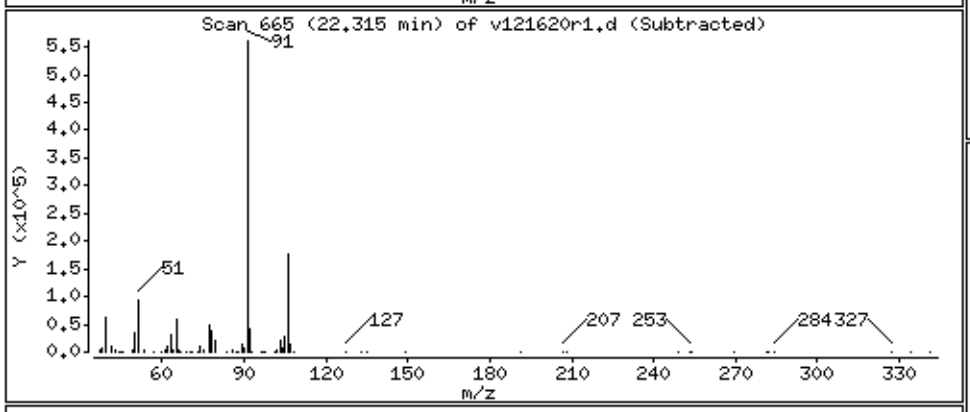
Column phase: RTx-624

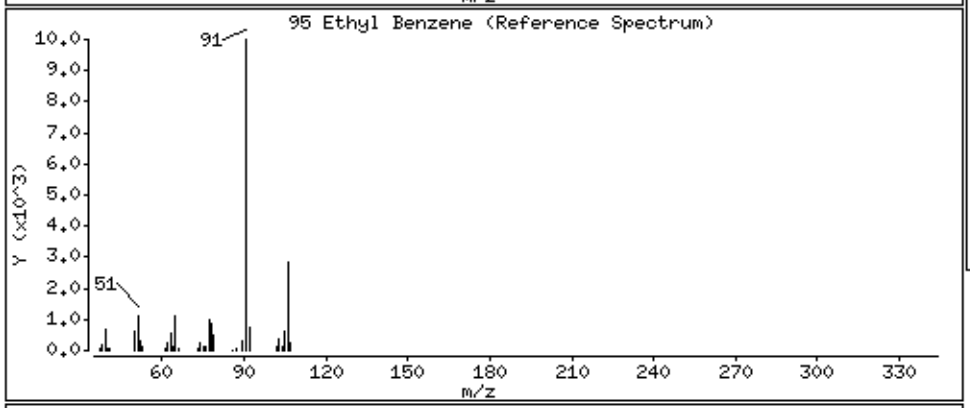
Column diameter: 0.32

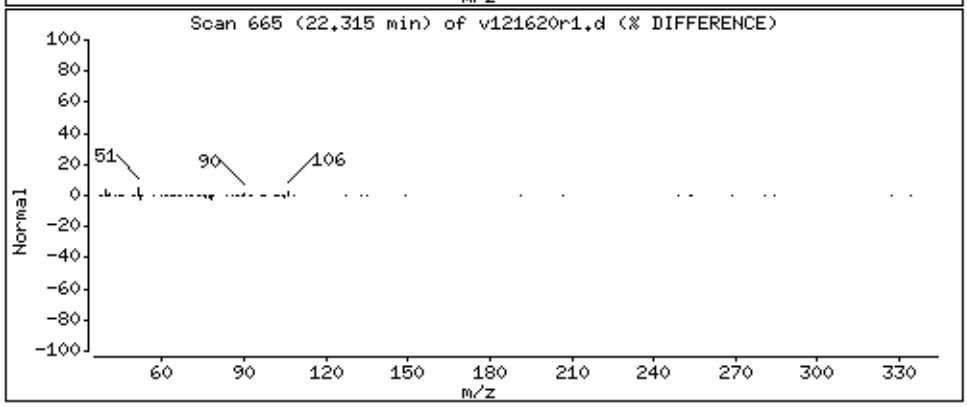
95 Ethyl Benzene

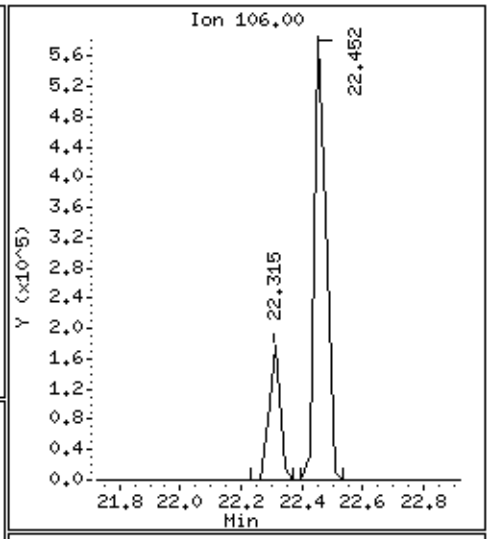
Concentration: 16.366 PPBV

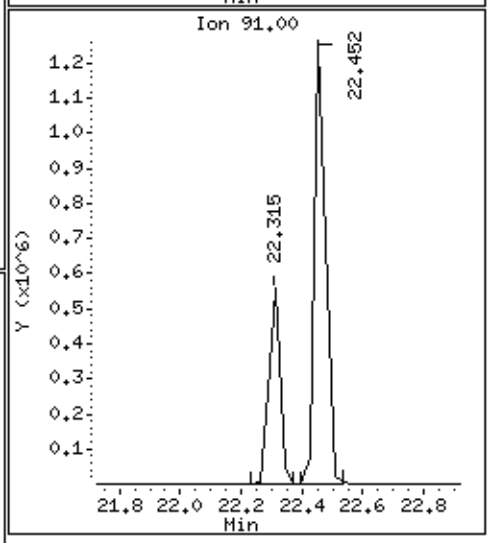












Data File: /chem/msdv.i/16Dec2014.b/v121620r1.d

Date : 16-DEC-2014 22:19

Client ID:

Instrument: msdv.i

Sample Info: 250ml #3737

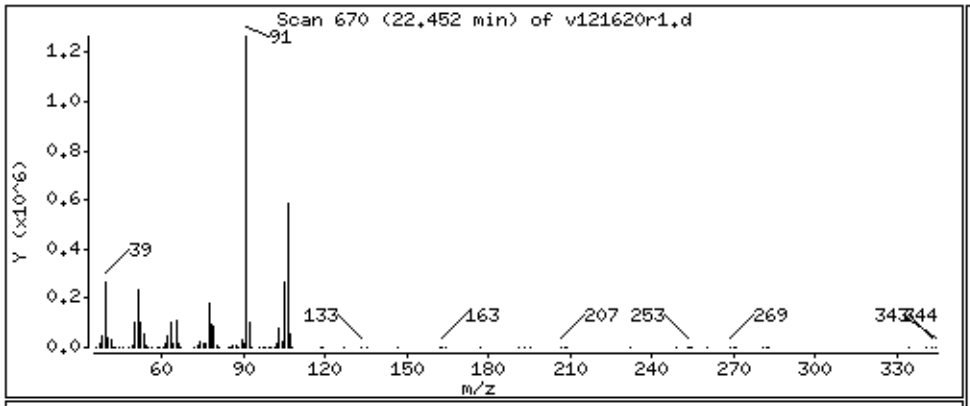
Operator: sn

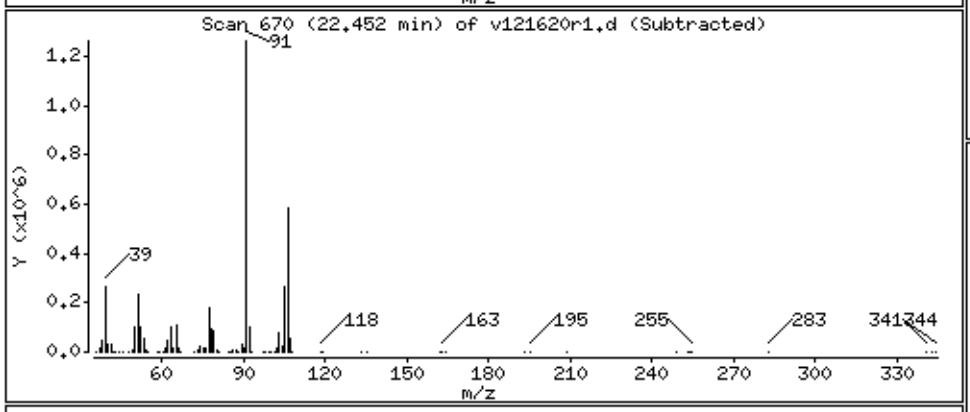
Column phase: RTx-624

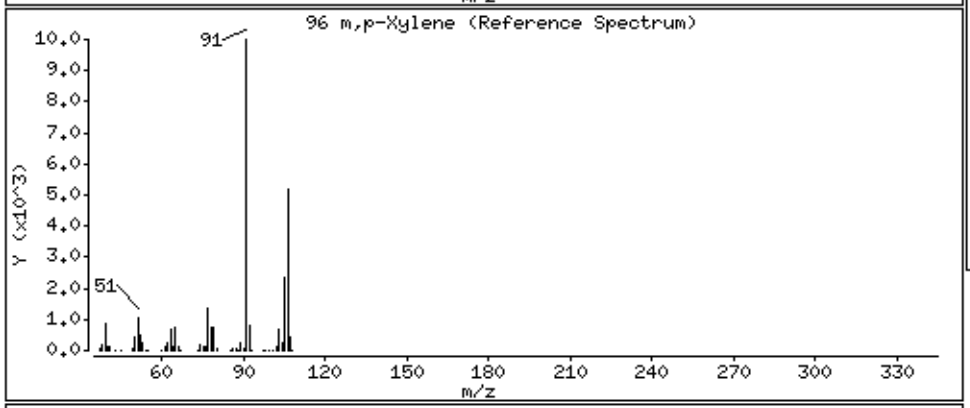
Column diameter: 0.32

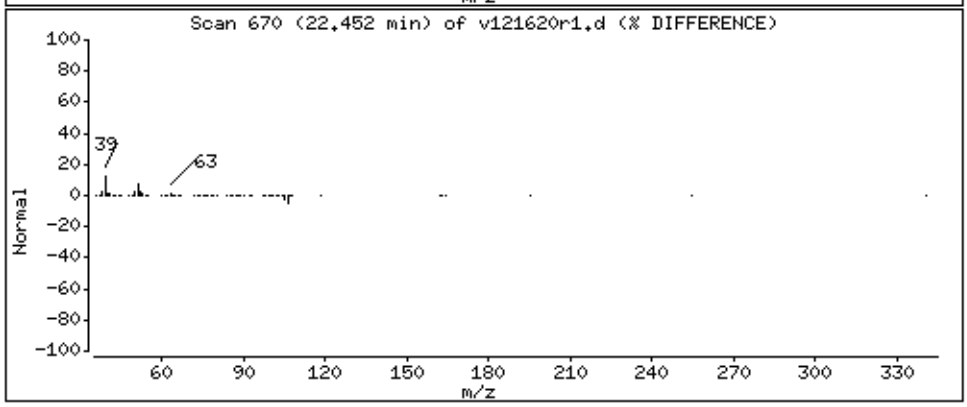
96 m,p-Xylene

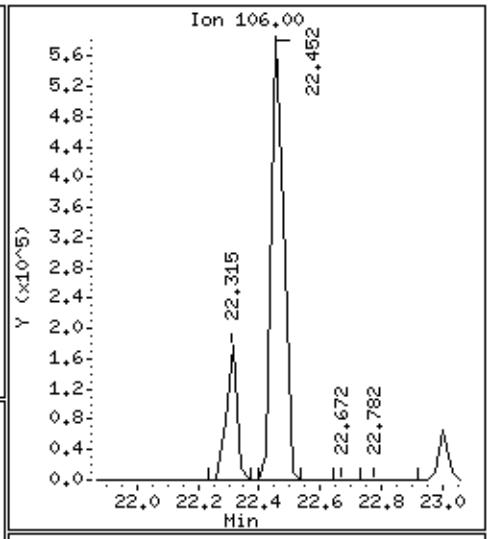
Concentration: 60.275 PPBV

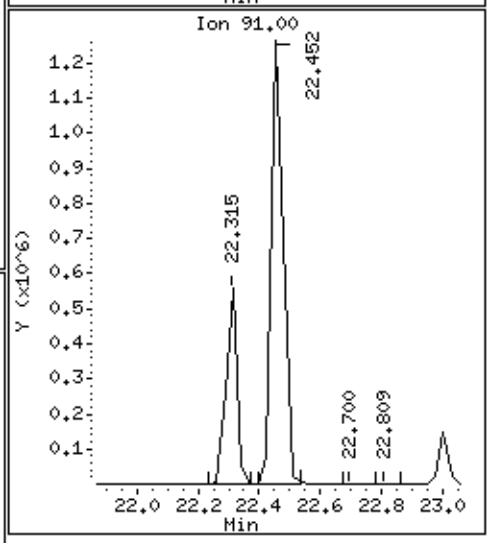












Data File: /chem/msdv.i/16Dec2014.b/v121620r1.d

Date : 16-DEC-2014 22:19

Client ID:

Instrument: msdv.i

Sample Info: 250ml #3737

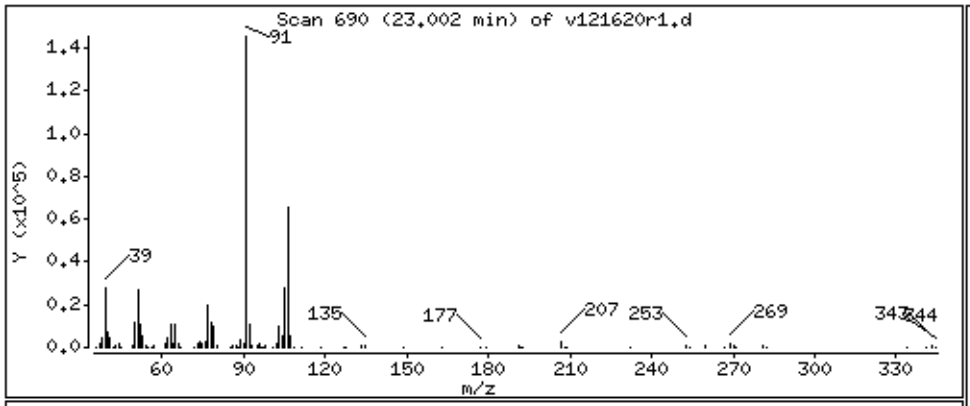
Operator: sn

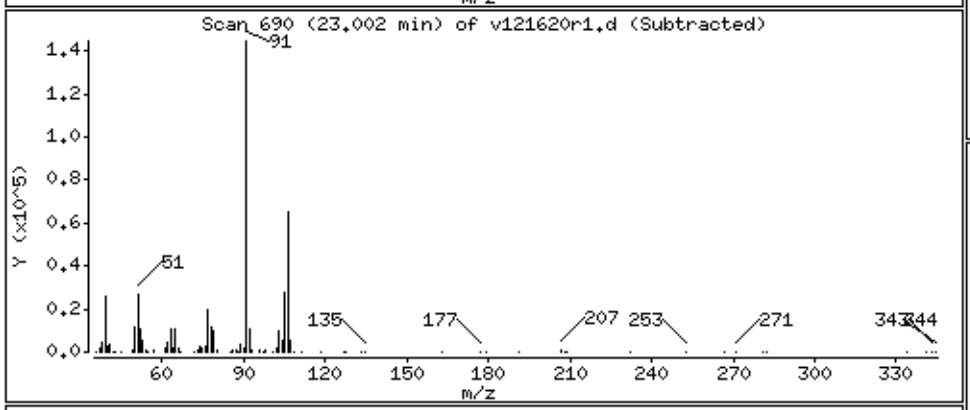
Column phase: RTx-624

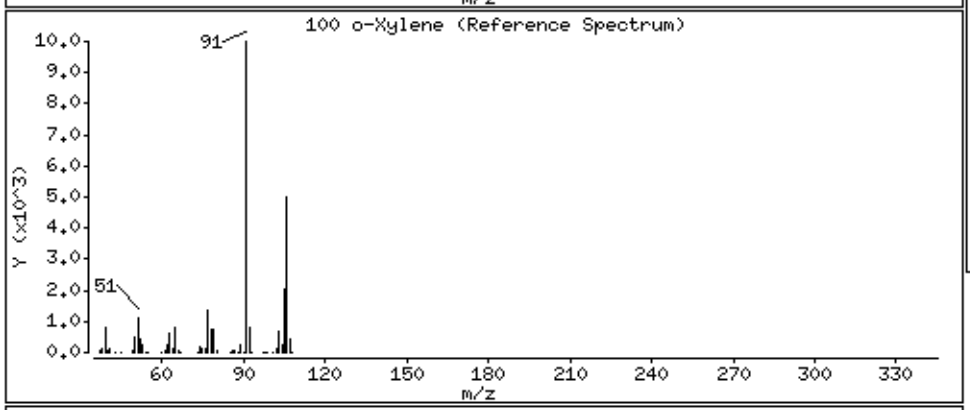
Column diameter: 0.32

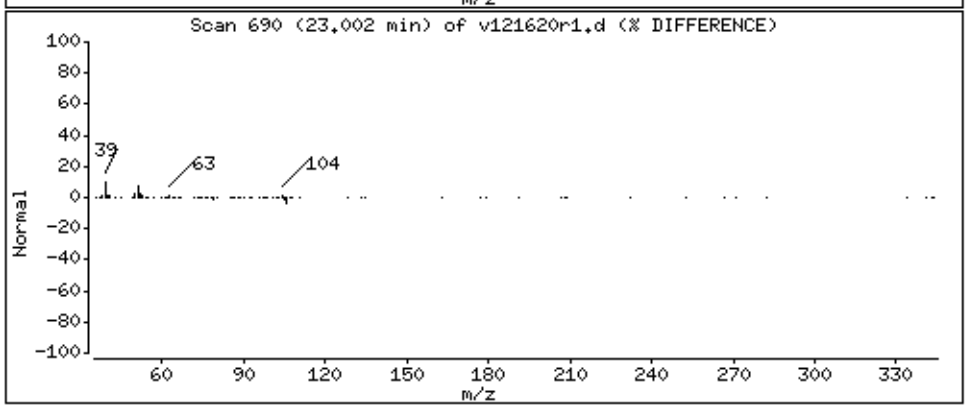
100 o-Xylene

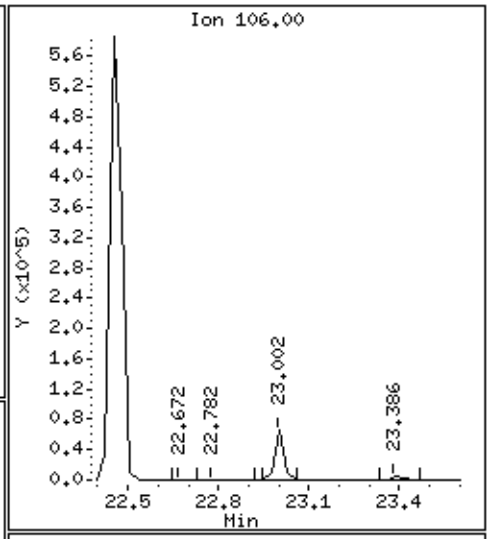
Concentration: 5.783 PPBV

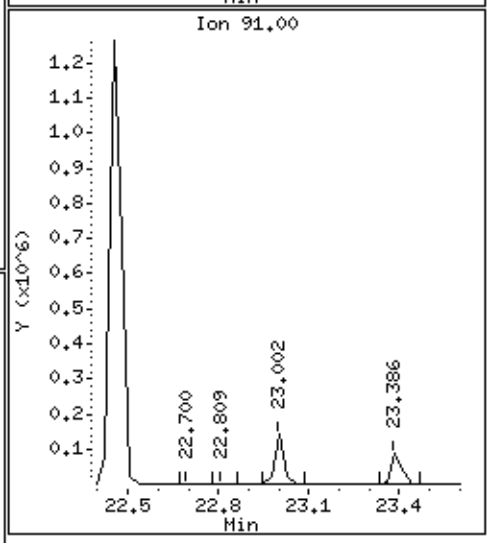












Data File: /chem/msdv.i/16Dec2014.b/v121620r1.d

Date : 16-DEC-2014 22:19

Client ID:

Instrument: msdv.i

Sample Info: 250ml #3737

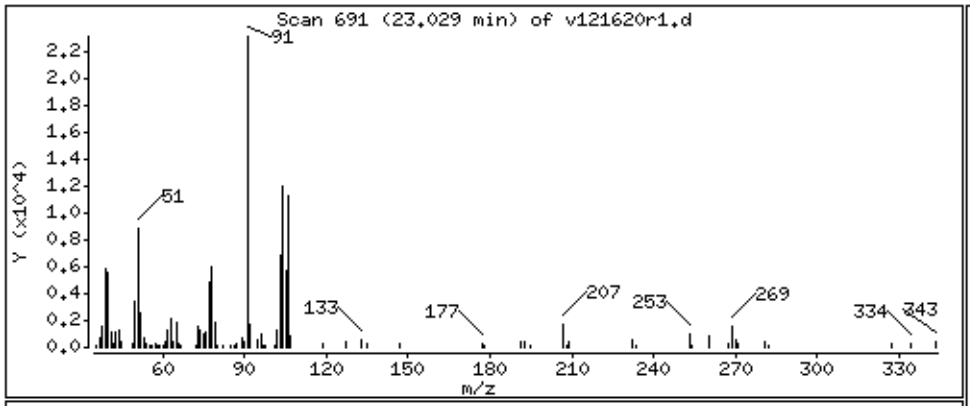
Operator: sn

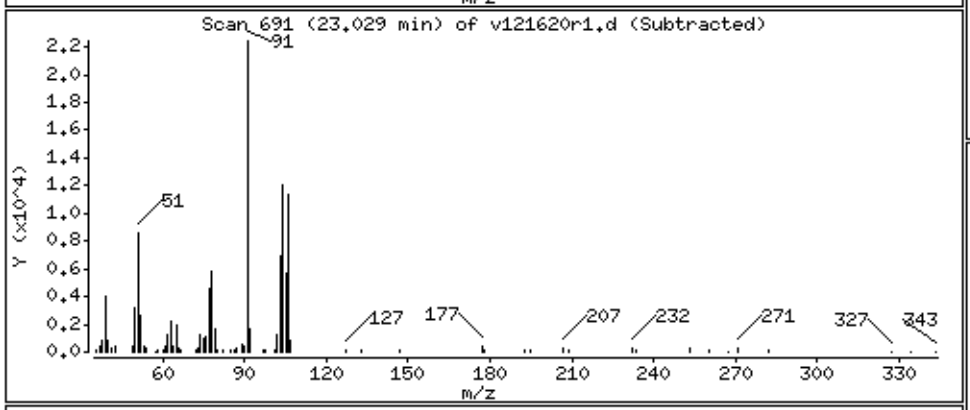
Column phase: RTx-624

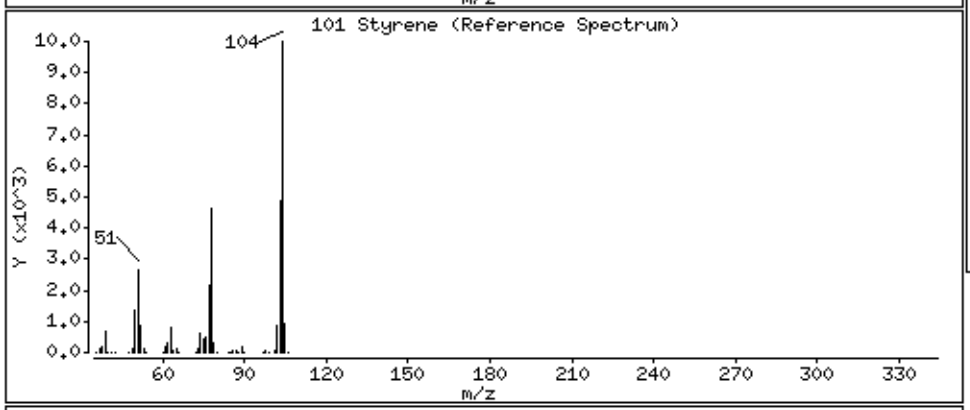
Column diameter: 0.32

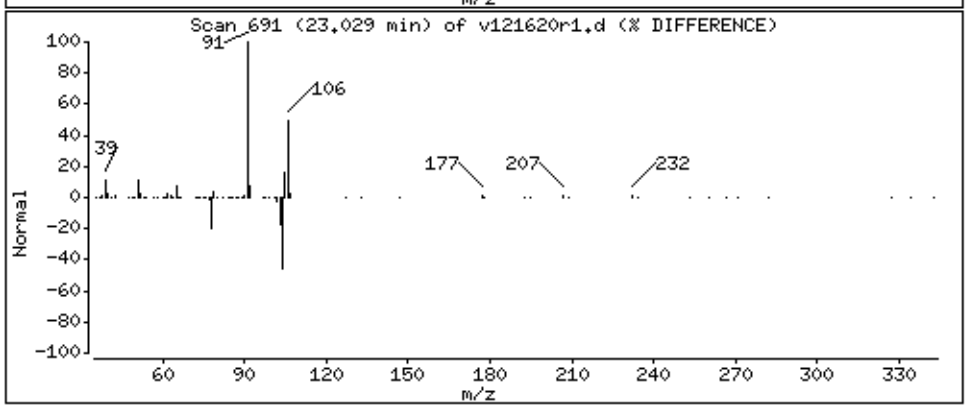
101 Styrene

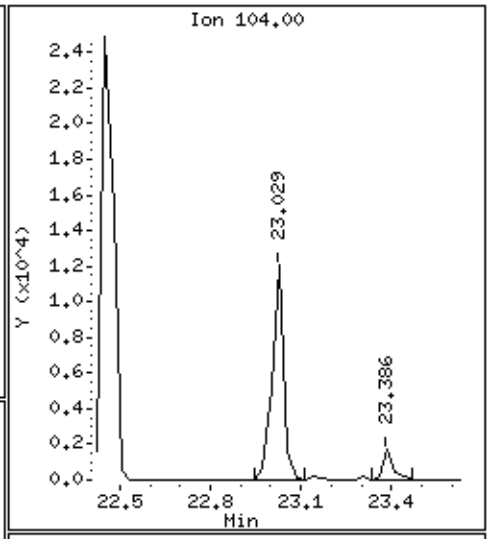
Concentration: 0.8803 PPBV

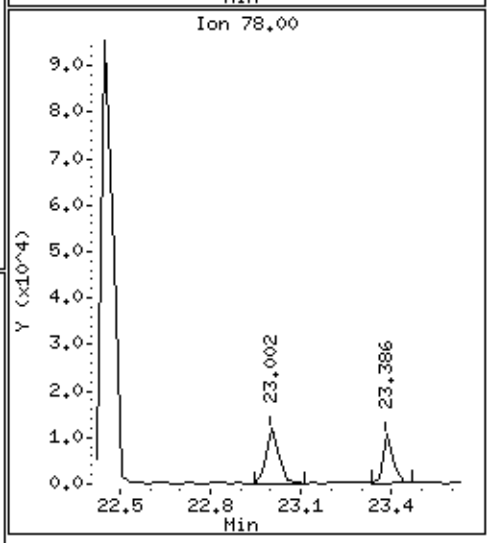












Data File: /chem/msdv.i/16Dec2014.b/v121620r1.d

Date : 16-DEC-2014 22:19

Client ID:

Instrument: msdv.i

Sample Info: 250ml #3737

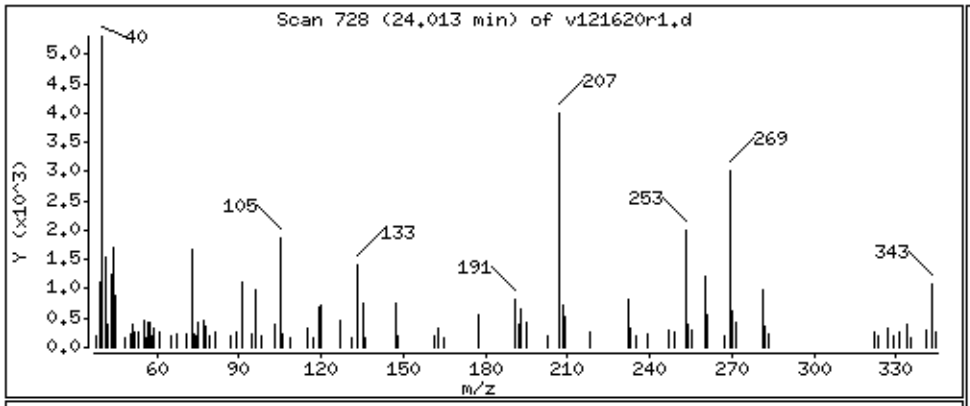
Operator: sn

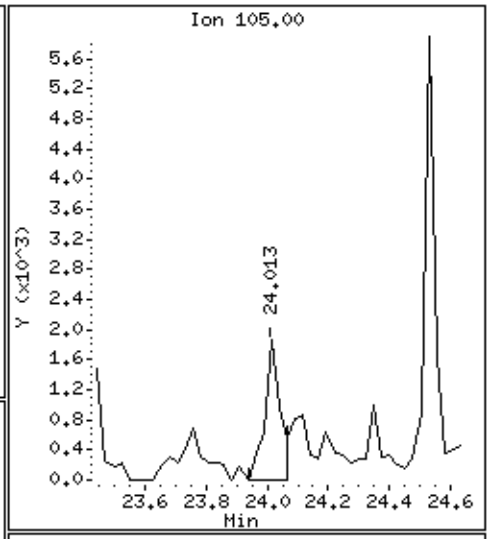
Column phase: RTx-624

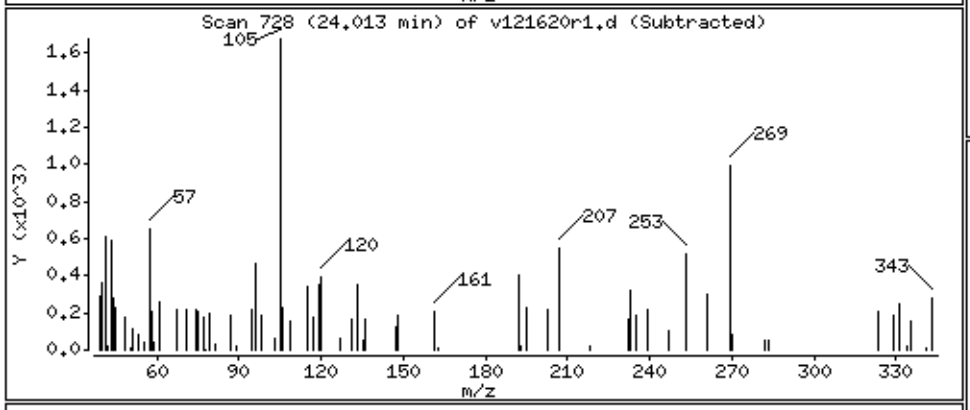
Column diameter: 0.32

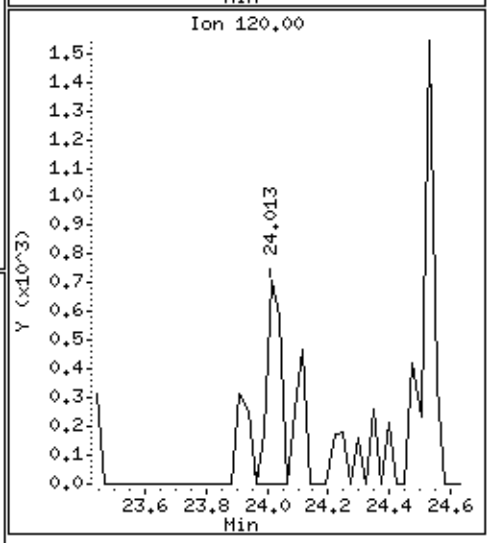
113 4-Ethyltoluene

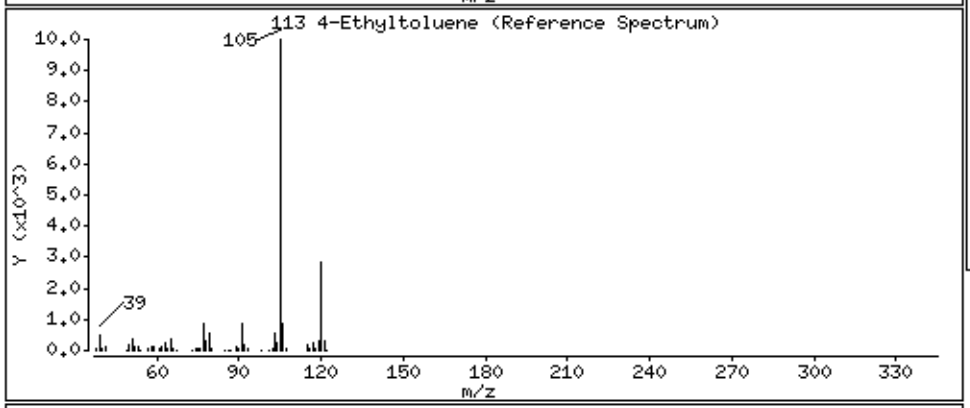
Concentration: 0.1429 PPBV

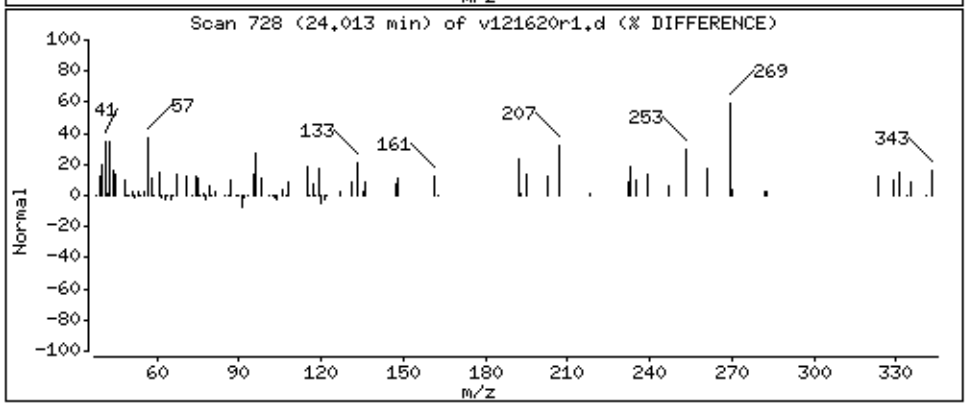












Data File: /chem/msdv.i/16Dec2014.b/v121620r1.d

Date : 16-DEC-2014 22:19

Client ID:

Instrument: msdv.i

Sample Info: 250ml #3737

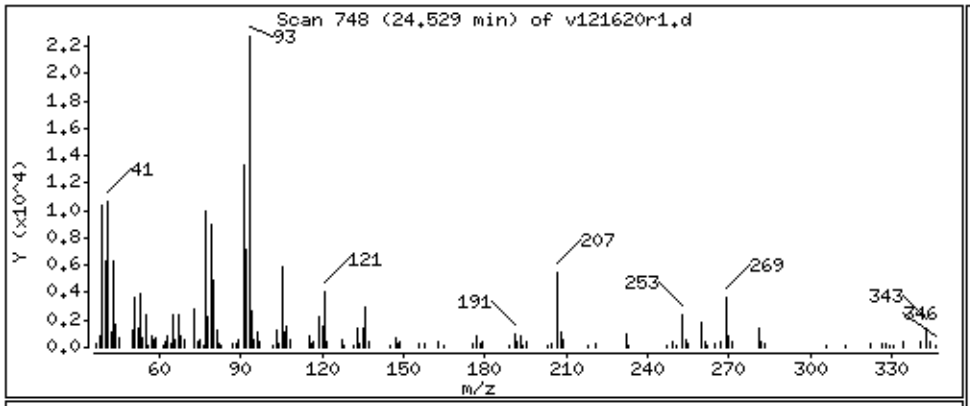
Operator: sn

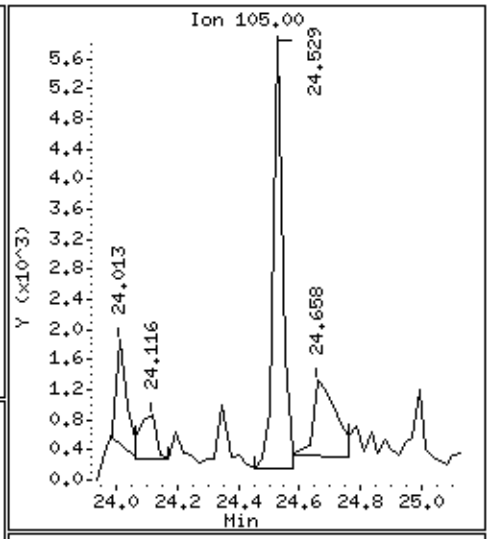
Column phase: RTx-624

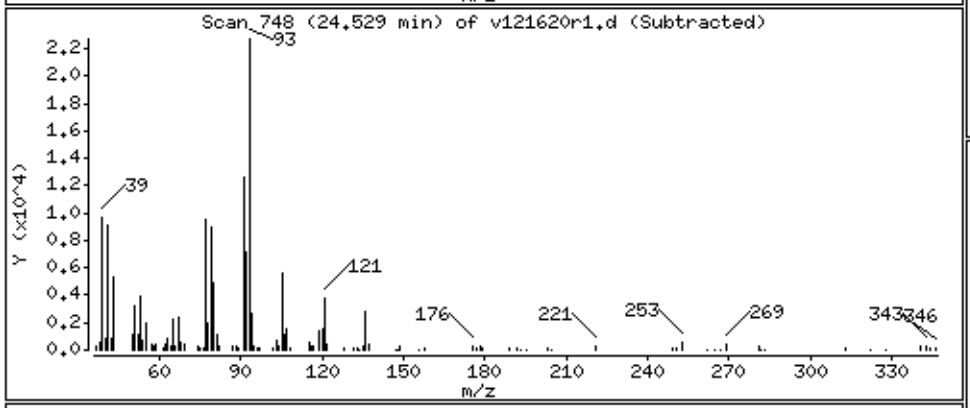
Column diameter: 0.32

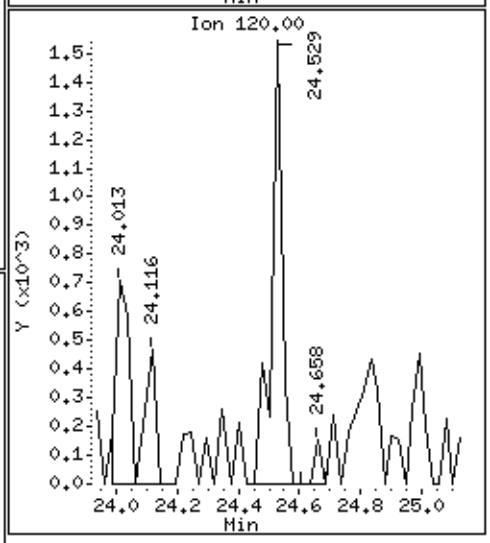
120 1,2,4-Trimethylbenzene

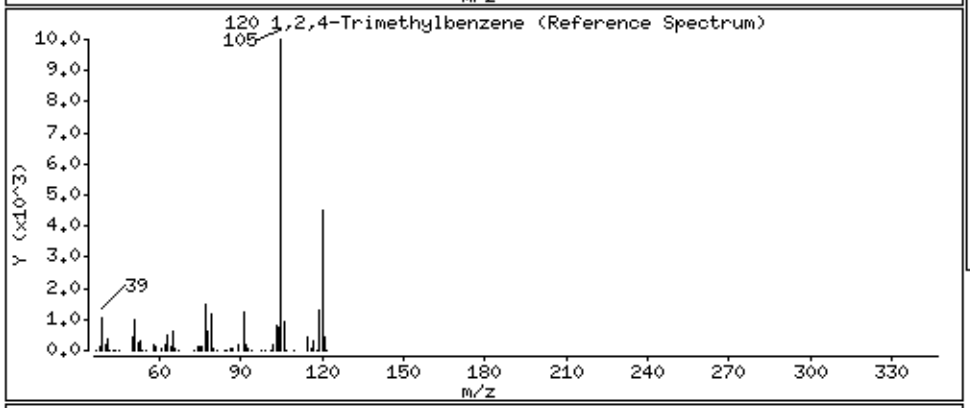
Concentration: 0.3964 PPBV

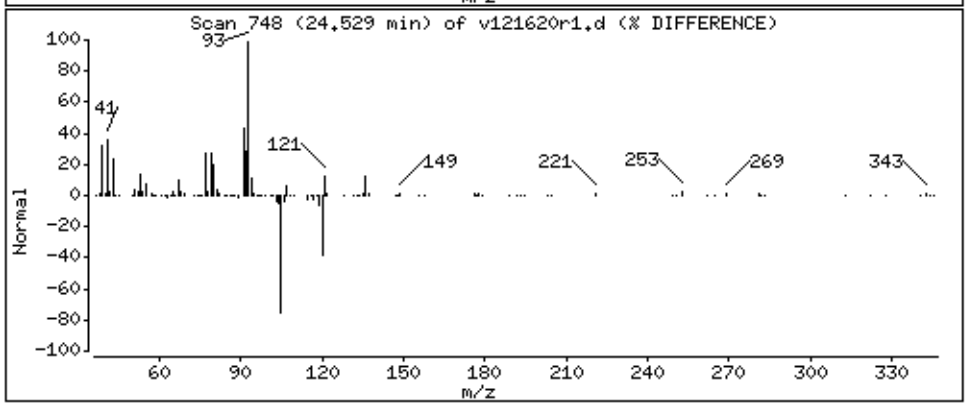












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Summary of Detected Compounds
MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: B5IA-1 (2014)

Lab ID#: 1412152AR1-06A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	1.7	0.36 J	8.4	1.8 J
Chloromethane	1.7	0.80 J	3.5	1.6 J
Freon 11	0.34	0.22 J	1.9	1.2 J
Ethanol	1.7	580 J0E	3.2	1100 J0E
Acetone	1.7	340 E	4.1	820 E
2-Propanol	1.7	210 E	4.2	510 E
Methylene Chloride	0.68	96	2.4	330
Methyl tert-butyl ether	0.34	2.0	1.2	7.4
Hexane	0.34	0.21 J	1.2	0.74 J
2-Butanone (Methyl Ethyl Ketone)	1.7	0.88 J	5.0	2.6 J
Tetrahydrofuran	1.7	5.0	5.0	15
Chloroform	0.34	0.37	1.7	1.8
Benzene	0.34	0.24 J	1.1	0.77 J
Heptane	0.34	3.7	1.4	15
4-Methyl-2-pentanone	0.34	110	1.4	440
Toluene	0.34	190 E	1.3	730 E
Ethyl Benzene	0.34	26	1.5	110
m,p-Xylene	0.34	96	1.5	420
o-Xylene	0.34	9.1	1.5	40
Styrene	0.34	0.93	1.4	4.0
4-Ethyltoluene	0.34	0.18 J	1.7	0.88 J
1,2,4-Trimethylbenzene	0.34	0.49	1.7	2.4

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Client Sample ID: B5IA-1 (2014)

Lab ID#: 1412152AR1-06A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**v121621r1**	**Date of Collection:**	**12/9/14 2:52:00 PM**
Dil. Factor:	**3.42**	**Date of Analysis:**	**12/16/14 10:54 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	1.7	0.36 J	8.4	1.8 J
Freon 114	0.34	Not Detected	2.4	Not Detected
Chloromethane	1.7	0.80 J	3.5	1.6 J
Vinyl Chloride	0.34	Not Detected	0.87	Not Detected
1,3-Butadiene	0.34	Not Detected	0.76	Not Detected
Bromomethane	1.7	Not Detected	6.6	Not Detected
Chloroethane	1.7	Not Detected	4.5	Not Detected
Freon 11	0.34	0.22 J	1.9	1.2 J
Ethanol	1.7	580 J0E	3.2	1100 J0E
Freon 113	0.34	Not Detected	2.6	Not Detected
1,1-Dichloroethene	0.34	Not Detected	1.4	Not Detected
Acetone	1.7	340 E	4.1	820 E
2-Propanol	1.7	210 E	4.2	510 E
Carbon Disulfide	1.7	Not Detected	5.3	Not Detected
3-Chloropropene	1.7	Not Detected	5.4	Not Detected
Methylene Chloride	0.68	96	2.4	330
Methyl tert-butyl ether	0.34	2.0	1.2	7.4
trans-1,2-Dichloroethene	0.34	Not Detected	1.4	Not Detected
Hexane	0.34	0.21 J	1.2	0.74 J
1,1-Dichloroethane	0.34	Not Detected	1.4	Not Detected
2-Butanone (Methyl Ethyl Ketone)	1.7	0.88 J	5.0	2.6 J
cis-1,2-Dichloroethene	0.34	Not Detected	1.4	Not Detected
Tetrahydrofuran	1.7	5.0	5.0	15
Chloroform	0.34	0.37	1.7	1.8
1,1,1-Trichloroethane	0.34	Not Detected	1.9	Not Detected
Cyclohexane	0.34	Not Detected	1.2	Not Detected
Carbon Tetrachloride	0.34	Not Detected	2.2	Not Detected
2,2,4-Trimethylpentane	1.7	Not Detected	8.0	Not Detected
Benzene	0.34	0.24 J	1.1	0.77 J
1,2-Dichloroethane	0.34	Not Detected	1.4	Not Detected
Heptane	0.34	3.7	1.4	15
Trichloroethene	0.34	Not Detected	1.8	Not Detected
1,2-Dichloropropane	0.34	Not Detected	1.6	Not Detected
1,4-Dioxane	0.34	Not Detected	1.2	Not Detected
Bromodichloromethane	0.34	Not Detected	2.3	Not Detected
cis-1,3-Dichloropropene	0.34	Not Detected	1.6	Not Detected
4-Methyl-2-pentanone	0.34	110	1.4	440
Toluene	0.34	190 E	1.3	730 E
trans-1,3-Dichloropropene	0.34	Not Detected	1.6	Not Detected
1,1,2-Trichloroethane	0.34	Not Detected	1.9	Not Detected
Tetrachloroethene	0.34	Not Detected	2.3	Not Detected
2-Hexanone	1.7	Not Detected	7.0	Not Detected

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Client Sample ID: B5IA-1 (2014)

Lab ID#: 1412152AR1-06A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**v121621r1**	**Date of Collection:**	**12/9/14 2:52:00 PM**
Dil. Factor:	**3.42**	**Date of Analysis:**	**12/16/14 10:54 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Dibromochloromethane	0.34	Not Detected	2.9	Not Detected
1,2-Dibromoethane (EDB)	0.34	Not Detected	2.6	Not Detected
Chlorobenzene	0.34	Not Detected	1.6	Not Detected
Ethyl Benzene	0.34	26	1.5	110
m,p-Xylene	0.34	96	1.5	420
o-Xylene	0.34	9.1	1.5	40
Styrene	0.34	0.93	1.4	4.0
Bromoform	0.34	Not Detected	3.5	Not Detected
Cumene	0.34	Not Detected	1.7	Not Detected
1,1,2,2-Tetrachloroethane	0.34	Not Detected	2.3	Not Detected
Propylbenzene	0.34	Not Detected	1.7	Not Detected
4-Ethyltoluene	0.34	0.18 J	1.7	0.88 J
1,3,5-Trimethylbenzene	0.34	Not Detected	1.7	Not Detected
1,2,4-Trimethylbenzene	0.34	0.49	1.7	2.4
1,3-Dichlorobenzene	0.34	Not Detected UJ	2.0	Not Detected UJ
1,4-Dichlorobenzene	0.34	Not Detected UJ	2.0	Not Detected UJ
alpha-Chlorotoluene	1.7	Not Detected UJ	8.8	Not Detected UJ
1,2-Dichlorobenzene	0.34	Not Detected UJ	2.0	Not Detected UJ
1,2,4-Trichlorobenzene	1.7	Not Detected	13	Not Detected
Hexachlorobutadiene	1.7	Not Detected UJ	18	Not Detected UJ
Naphthalene	1.7	Not Detected	9.0	Not Detected

J = Estimated value.
J0 = Estimated value due to bias in the CCV.
E = Exceeds instrument calibration range.
UJ = Analyte associated with low bias in the CCV and/or LCS.

Container Type: 6 Liter Summa Canister (100% Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	99	70-130
Toluene-d8	108	70-130
4-Bromofluorobenzene	102	70-130

Eurofins Air Toxics Inc.

TO15/Modified TO-14A

Data file : /chem/msdv.i/16Dec2014.b/v121621r1.d
Lab Smp Id: 1412152AR1-06A
Inj Date : 16-DEC-2014 22:54
Operator : sn Inst ID: msdv.i
Smp Info : 125ml #12019
Misc Info : 7.3"Hg -> 4.3psi
Comment : Low Level GC-MS
Method : /chem/msdv.i/16Dec2014.b/v14l1006d.m
Meth Date : 01-Jul-2015 09:03 sblack Quant Type: ISTD
Cal Date : 03-NOV-2014 11:17 Cal File: v110307.d
Als bottle: 1
Dil Factor: 3.42000
Integrator: HP RTE Compound Sublist: And19256r1.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
* 54 Bromochloromethane						CAS #: 74-97-5	
15.933	15.933 (1.000)	130	100215	5.00000		80.00- 120.00	100.00
15.933	15.933 (1.000)	128	73656			47.55- 107.55	73.50
15.933	15.933 (1.000)	49	255125			213.64- 273.64	254.58
* 71 1,4-Difluorobenzene						CAS #: 540-36-3	
17.305	17.305 (1.000)	114	408001	5.00000		80.00- 120.00	100.00
17.305	17.305 (1.000)	88	69315			0.00- 46.17	16.99
* 92 Chlorobenzene-d5						CAS #: 3114-55-4	
22.205	22.205 (1.000)	117	329718	5.00000		80.00- 120.00	100.00
22.205	22.205 (1.000)	82	207898			28.56- 88.56	63.05
$ 65 1,2-Dichloroethane-d4						CAS #: 17060-07-0	
16.755	16.756 (1.052)	65	181314	4.92981	4.930	80.00- 120.00	100.00
16.755	16.756 (1.052)	67	89298			28.37- 88.37	49.25
$ 80 Toluene-d8						CAS #: 2037-26-5	
19.856	19.879 (1.147)	98	421857	5.37785	5.378	80.00- 120.00	100.00
19.856	19.879 (1.147)	70	54398			0.00- 41.90	12.90

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

$  80 Toluene-d8 (continued)
 19.856  19.879 (1.147)   100    272972                    34.60-  94.60    64.71
-------------------------------------------------------------------------------
$ 106 Bromofluorobenzene                            CAS #: 460-00-4
 23.703  23.704 (1.067)   174    144528 5.09702    5.097  80.00- 120.00   100.00
 23.678  23.704 (1.066)    95    206943                  113.85- 173.85   143.18
 23.703  23.704 (1.067)   176    138708                    68.89- 128.89    95.97
-------------------------------------------------------------------------------
    4 Dichlorodifluoromethane/Fr12                  CAS #: 75-71-8
  5.202   5.202 (0.326)    85      9969 0.10618   0.3631  80.00- 120.00   100.00(aM)
  5.202   5.202 (0.326)    87       960                     1.57-  61.57     9.63
-------------------------------------------------------------------------------
    8 Chloromethane                                 CAS #: 74-87-3
  7.052   7.052 (0.443)    50     13278 0.23467   0.8026  80.00- 120.00   100.00
  7.090   7.052 (0.445)    52      5616                     1.81-  61.81    42.30
-------------------------------------------------------------------------------
   20 Trichlorofluoromethane/Fr11                   CAS #: 75-69-4
 11.159  11.183 (0.700)   101      6097 0.06309   0.2158  80.00- 120.00   100.00(a)
 11.183  11.183 (0.702)   103      3803                    34.11-  94.11    62.38
-------------------------------------------------------------------------------
   24 Ethanol                                       CAS #: 64-17-5
 12.074  12.101 (0.758)    45   3452865 168.539   576.40  80.00- 120.00   100.00(A)
 12.074  12.101 (0.758)    46   1328175                     8.51-  68.51    38.47
 12.074  12.101 (0.758)    43    709802                     0.00-  54.10    20.56
-------------------------------------------------------------------------------
   31 Acetone                                       CAS #: 67-64-1
 12.816  12.816 (0.804)    58   2392342 101.038   345.55  80.00- 120.00   100.00(A)
 12.816  12.816 (0.804)    43  10719218                  413.15- 473.15   448.06
-------------------------------------------------------------------------------
   34 2-Propanol                                    CAS #: 67-63-0
 13.173  13.173 (0.827)    45   6614584 60.3289   206.32  80.00- 120.00   100.00(A)
 13.173  13.173 (0.827)    43   1261478                     0.00-  50.74    19.07
 13.173  13.173 (0.827)    59    188902                     0.00-  32.83     2.86
-------------------------------------------------------------------------------
   37 Methylene Chloride                            CAS #: 75-09-2
 13.640  13.640 (0.856)    84    851402 27.9452   95.573  80.00- 120.00   100.00
 13.640  13.640 (0.856)    49   2018228                  212.37- 272.37   237.05
 13.640  13.640 (0.856)    51    589261                    43.31- 103.31    69.21
-------------------------------------------------------------------------------
   39 MTBE                                          CAS #: 1634-04-4
 13.996  13.996 (0.878)    73     65461 0.59887    2.048  80.00- 120.00   100.00
 13.996  13.996 (0.878)    57     26242                     2.99-  62.99    40.09
 13.996  13.996 (0.878)    41     37029                    12.12-  72.12    56.57
-------------------------------------------------------------------------------
   43 Hexane                                        CAS #: 110-54-3
 14.381  14.381 (0.903)    57      5368 0.06137   0.2099  80.00- 120.00   100.00(a)
```

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
43 Hexane (continued)							
14.408	14.381 (0.904)	43	9980			57.65- 117.65	185.92
14.381	14.381 (0.903)	86	574			0.00- 40.67	10.71
51 2-Butanone					CAS #: 78-93-3		
15.613	15.571 (0.980)	72	4549	0.25812	0.8828	80.00- 120.00	100.00(a)
15.592	15.571 (0.979)	43	34332			794.80- 854.80	754.61
15.613	15.571 (0.980)	57	1235			18.01- 78.01	27.15
53 Tetrahydrofuran					CAS #: 109-99-9		
15.933	15.933 (1.000)	42	133390	1.46880	5.023	80.00- 120.00	100.00
15.933	15.933 (1.000)	71	24294			0.00- 49.03	18.21
15.933	15.933 (1.000)	72	25414			0.00- 51.35	19.05
55 Chloroform					CAS #: 67-66-3		
15.995	15.995 (1.004)	83	9247	0.10949	0.3745	80.00- 120.00	100.00
15.995	15.995 (1.004)	85	6648			33.33- 93.33	71.90
64 Benzene					CAS #: 71-43-2		
16.755	16.756 (0.968)	78	8455	0.07022	0.2402	80.00- 120.00	100.00(a)
16.755	16.756 (0.968)	77	2249			0.00- 53.73	26.61
69 Heptane					CAS #: 142-82-5		
16.948	16.948 (0.979)	57	56416	1.08717	3.718	80.00- 120.00	100.00
16.975	16.948 (0.981)	100	11525			0.00- 51.27	20.43
16.948	16.948 (0.979)	43	153166			235.24- 295.24	271.49
79 4-Methyl-2-pentanone					CAS #: 108-10-1		
19.587	19.587 (1.132)	43	5403759	31.7964	108.74	80.00- 120.00	100.00
19.587	19.587 (1.132)	58	1425518			0.00- 57.24	26.38
19.587	19.587 (1.132)	85	457078			0.00- 38.20	8.46
81 Toluene					CAS #: 108-88-3		
19.991	19.991 (1.155)	91	7537365	56.7130	193.96	80.00- 120.00	100.00(A)
19.991	19.991 (1.155)	92	4353247			28.60- 88.60	57.76
95 Ethyl Benzene					CAS #: 100-41-4		
22.315	22.315 (1.005)	106	371214	7.63837	26.123	80.00- 120.00	100.00
22.315	22.315 (1.005)	91	1206466			292.36- 352.36	325.01
96 m,p-Xylene					CAS #: 108-38-3		
22.452	22.452 (1.011)	106	1350751	28.1869	96.399	80.00- 120.00	100.00
22.452	22.452 (1.011)	91	2769264			164.15- 224.15	205.02
100 o-Xylene					CAS #: 95-47-6		
23.001	23.001 (1.036)	106	119196	2.67305	9.142	80.00- 120.00	100.00

RT	EXP RT	(REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
100 o-Xylene (continued)								
23.001	23.001	(1.036)	91	259183			186.63- 246.63	217.44
101 Styrene						CAS #: 100-42-5		
23.029	23.029	(1.037)	104	17723	0.27167	0.9291	80.00- 120.00	100.00
23.001	23.029	(1.036)	78	26063			28.70- 88.70	147.06
113 4-Ethyltoluene						CAS #: 622-96-8		
24.013	24.039	(1.081)	105	4416	0.05211	0.1782	80.00- 120.00	100.00(a)
24.013	24.039	(1.081)	120	1654			0.18- 60.18	37.46
120 1,2,4-Trimethylbenzene						CAS #: 95-63-6		
24.529	24.529	(1.105)	105	8152	0.14226	0.4865	80.00- 120.00	100.00
24.529	24.529	(1.105)	120	2621			19.27- 79.27	32.15

QC Flag Legend

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

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdv.i
Lab File ID: v121621r1.d
Lab Smp Id: 1412152AR1-06A
Analysis Type: VOA
Quant Type: ISTD
Operator: sn
Method File: /chem/msdv.i/16Dec2014.b/v14l1006d.m
Misc Info: 7.3"Hg -> 4.3psi

Calibration Date: 16-DEC-2014
Calibration Time: 08:42

Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
54 Bromochloromethan	109722	65833	153611	100215	-8.66
71 1,4-Difluorobenze	445503	267302	623704	408001	-8.42
92 Chlorobenzene-d5	361081	216649	505513	329718	-8.69

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
54 Bromochloromethan	15.93	15.60	16.26	15.93	0.00
71 1,4-Difluorobenze	17.30	16.97	17.63	17.30	0.00
92 Chlorobenzene-d5	22.21	21.88	22.54	22.21	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: 01-Jul-2015 13:56

Eurofins Air Toxics Inc.

RECOVERY REPORT

Client Name: Client SDG: 16Dec2014
Sample Matrix: GAS Fraction: VOA
Lab Smp Id: 1412152AR1-06A
Level: LOW Operator: sn
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: AT12.spk Quant Type: ISTD
Sublist File: And19256r1.sub
Method File: /chem/msdv.i/16Dec2014.b/v14l1006d.m
Misc Info: 7.3"Hg -> 4.3psi

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 65 1,2-Dichloroethane	5.000	4.930	98.60	70-130
$ 80 Toluene-d8	5.000	5.378	107.56	70-130
$ 106 Bromofluorobenzene	5.000	5.097	101.94	70-130

Data File: /chem/msdv.i/16Dec2014.b/v121621r1.d

Date : 16-DEC-2014 22:54

Client ID:

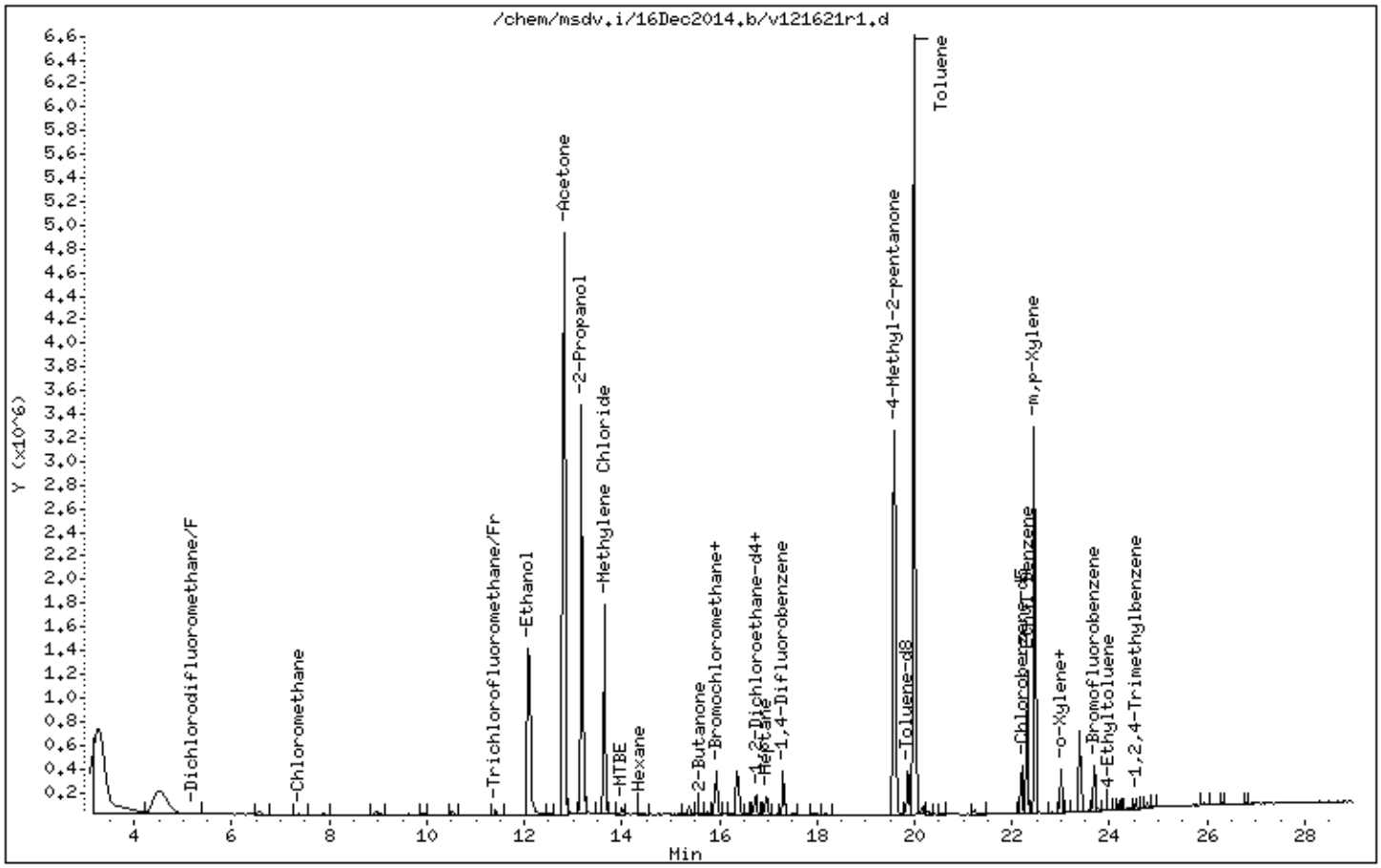
Instrument: msdv.i

Sample Info: 125ml #12019

Operator: sn

Column phase: RTx-624

Column diameter: 0.32



Data File: /chem/msdv.i/16Dec2014.b/v121621r1.d

Date : 16-DEC-2014 22:54

Client ID:

Instrument: msdv.i

Sample Info: 125ml #12019

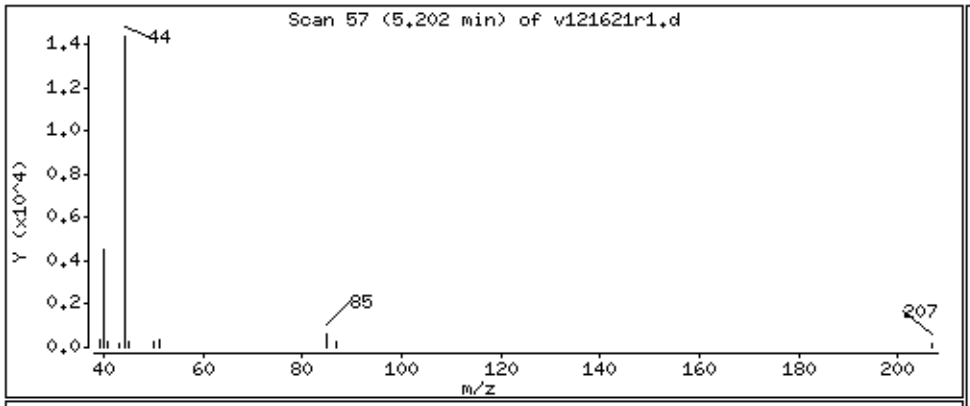
Operator: sn

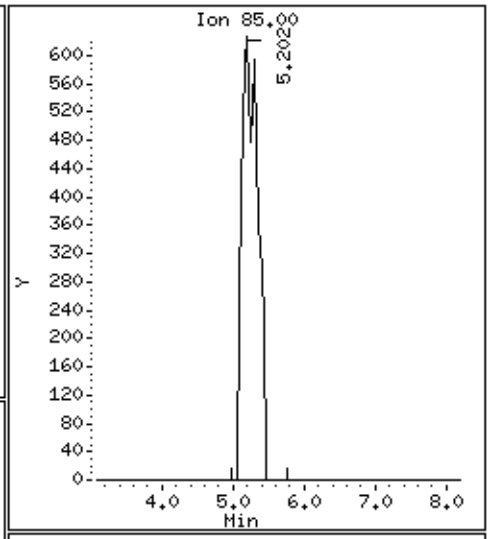
Column phase: RTx-624

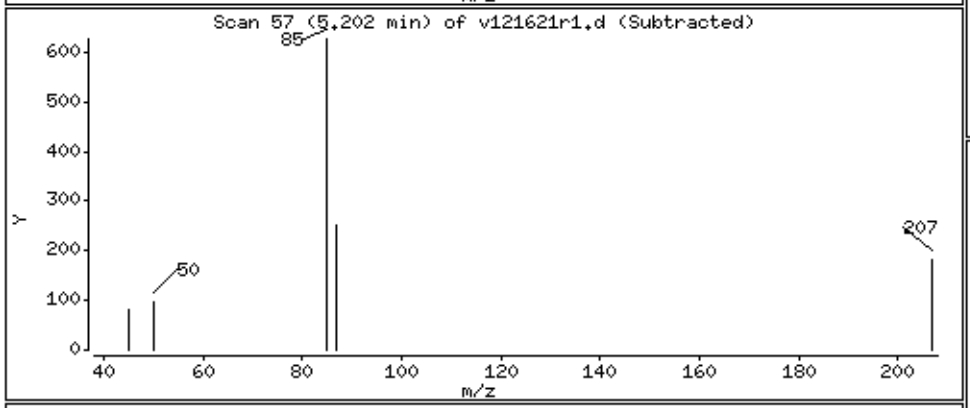
Column diameter: 0.32

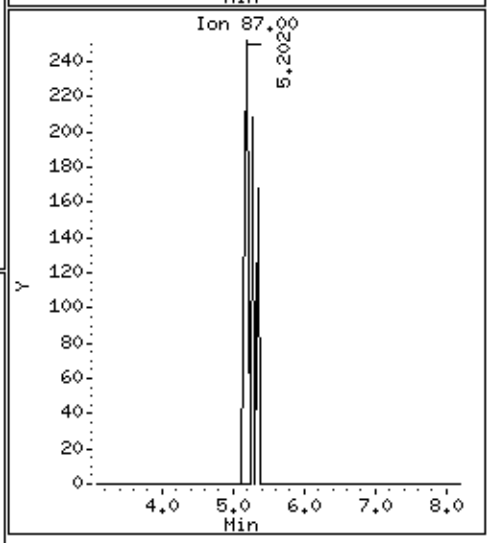
4 Dichlorodifluoromethane/Fr12

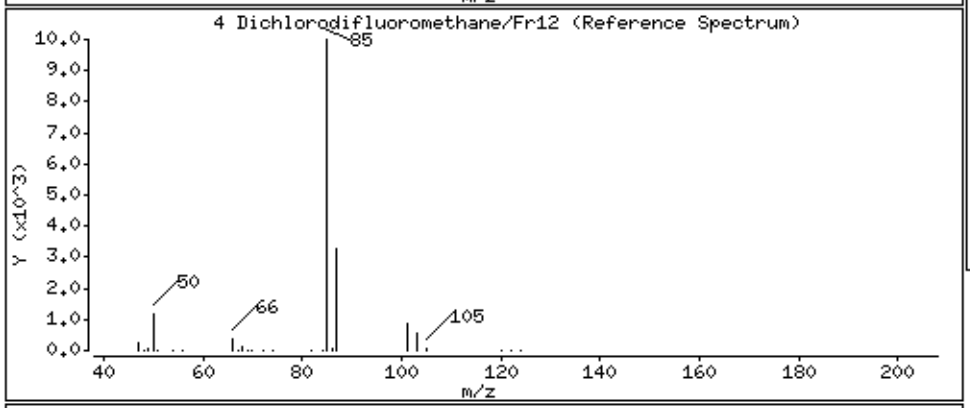
Concentration: 0.3631 PPBV

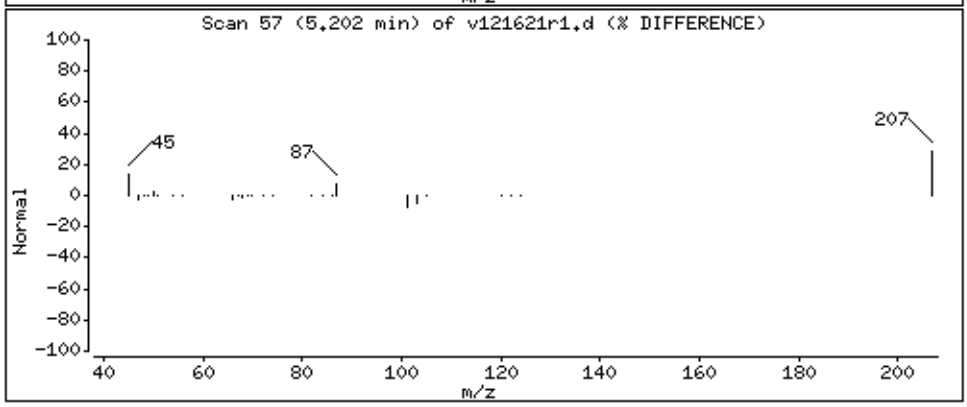












Data File: /chem/msdv.i/16Dec2014.b/v121621r1.d

Date : 16-DEC-2014 22:54

Client ID:

Instrument: msdv.i

Sample Info: 125ml #12019

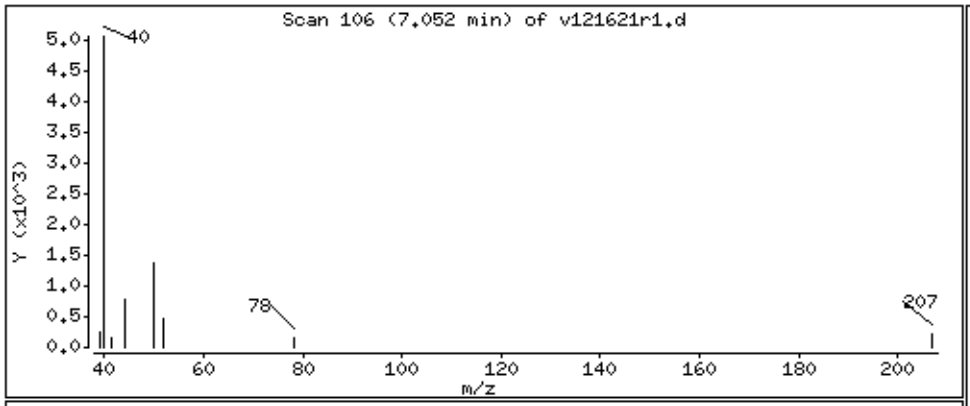
Operator: sn

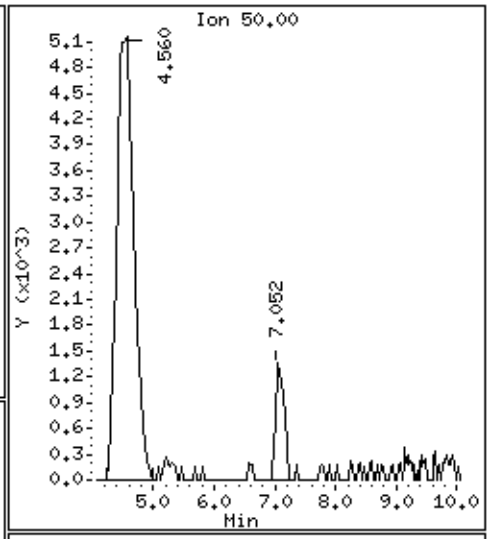
Column phase: RTx-624

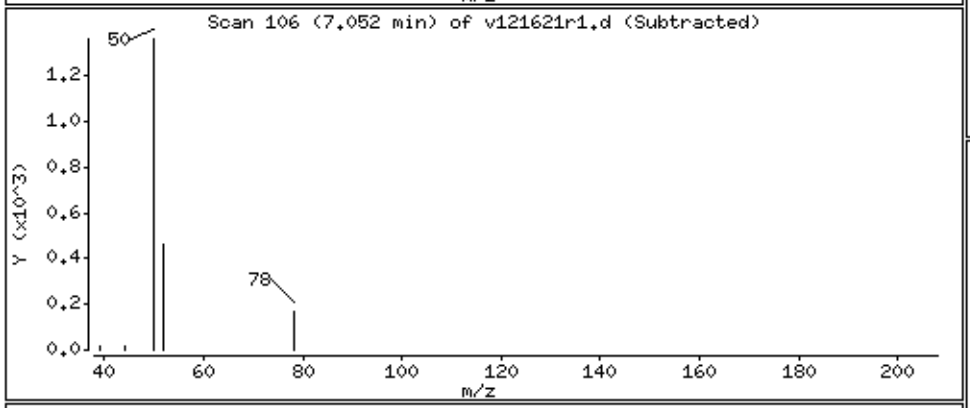
Column diameter: 0.32

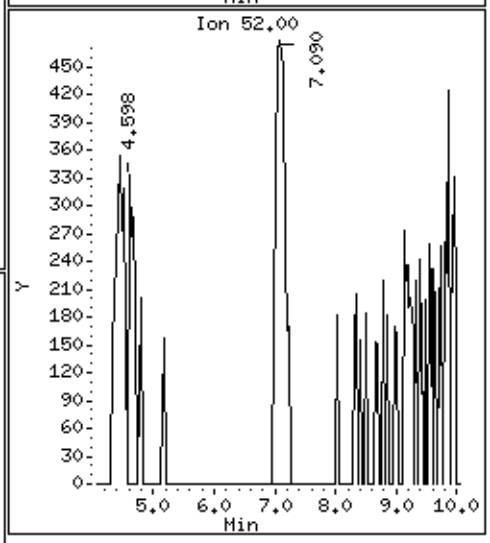
8 Chloromethane

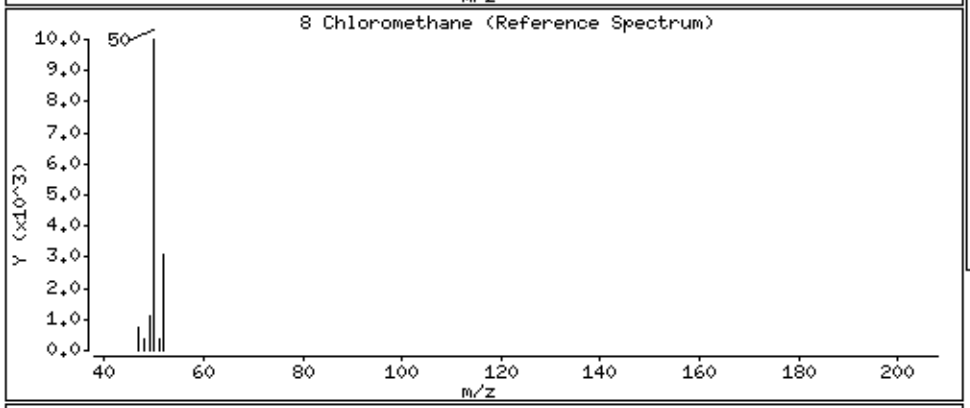
Concentration: 0.8026 PPBV

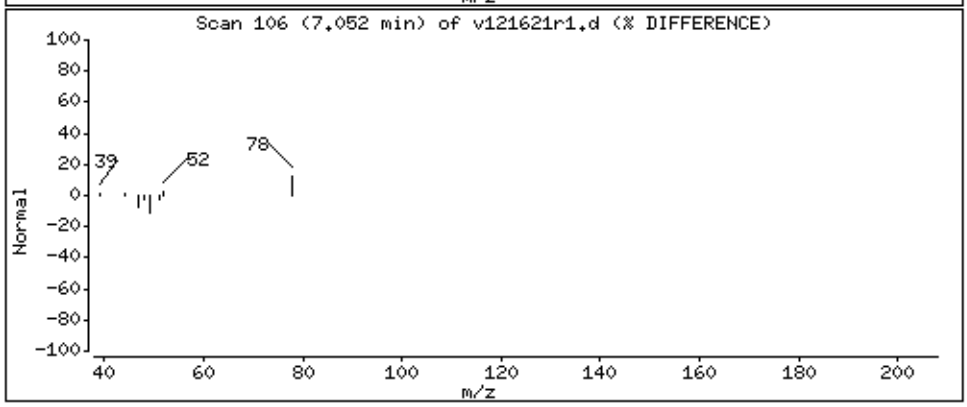












Data File: /chem/msdv.i/16Dec2014.b/v121621r1.d

Date : 16-DEC-2014 22:54

Client ID:

Instrument: msdv.i

Sample Info: 125ml #12019

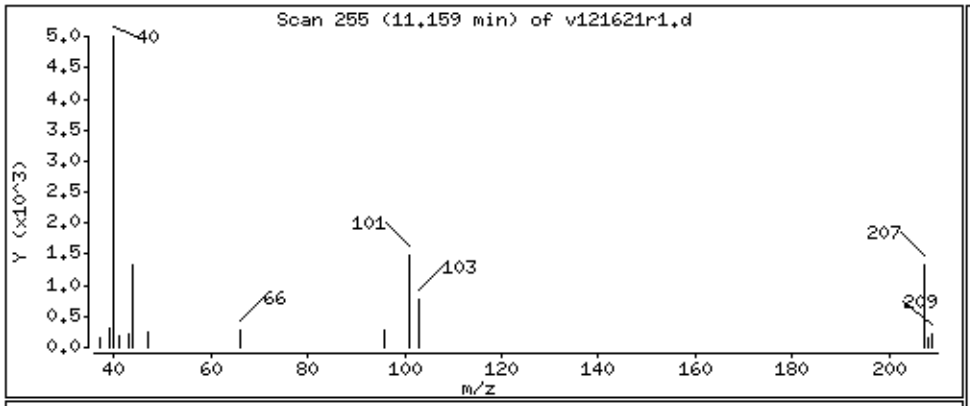
Operator: sn

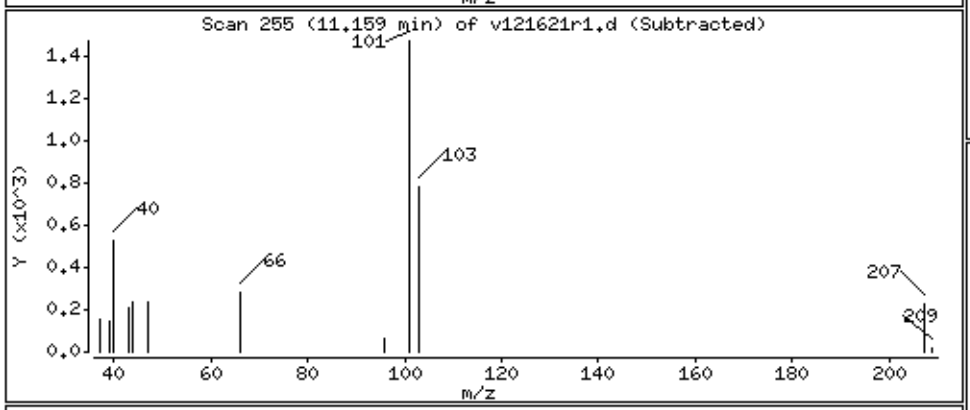
Column phase: RTx-624

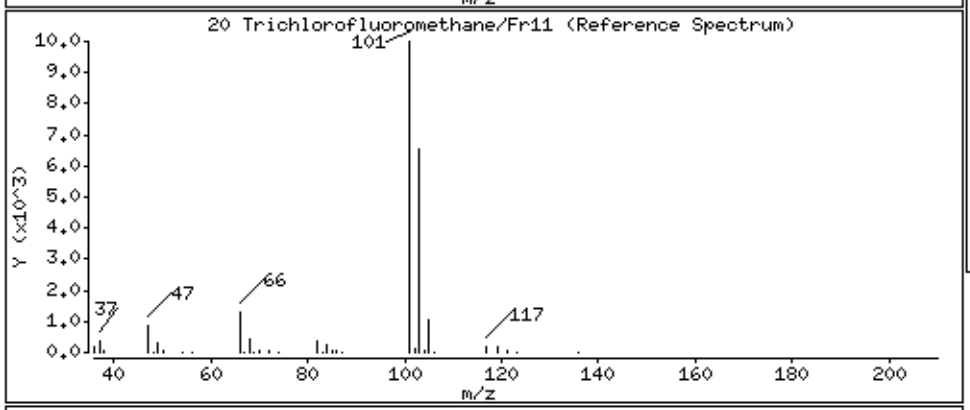
Column diameter: 0.32

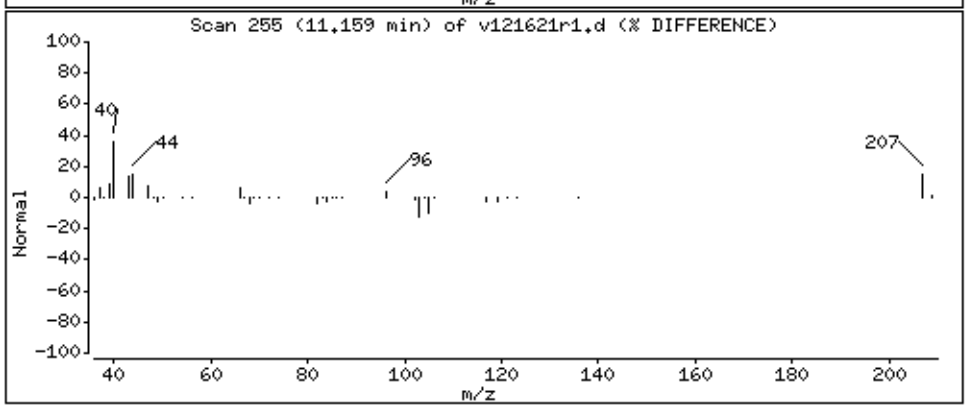
20 Trichlorofluoromethane/Fr11

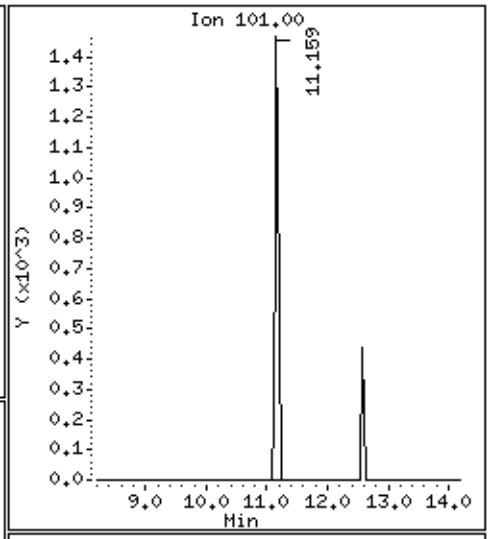
Concentration: 0.2158 PPBV

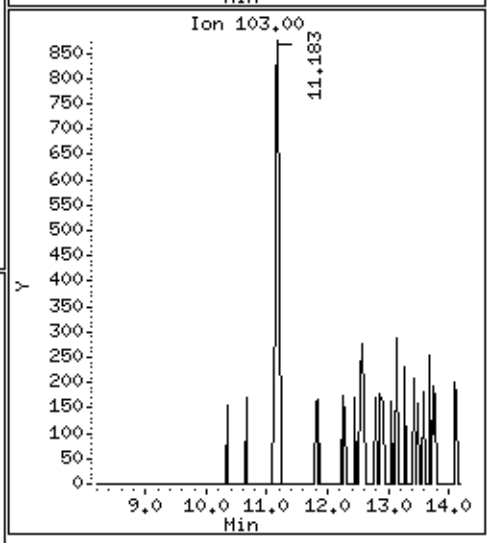












Data File: /chem/msdv.i/16Dec2014.b/v121621r1.d

Date : 16-DEC-2014 22:54

Client ID:

Instrument: msdv.i

Sample Info: 125ml #12019

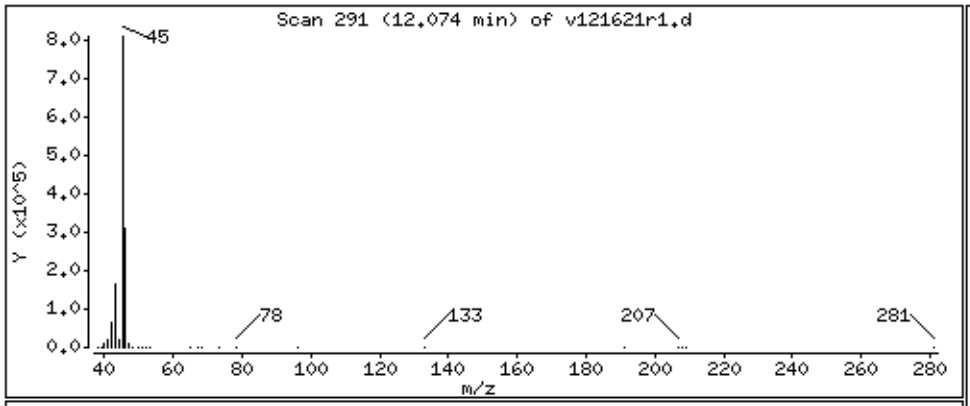
Operator: sn

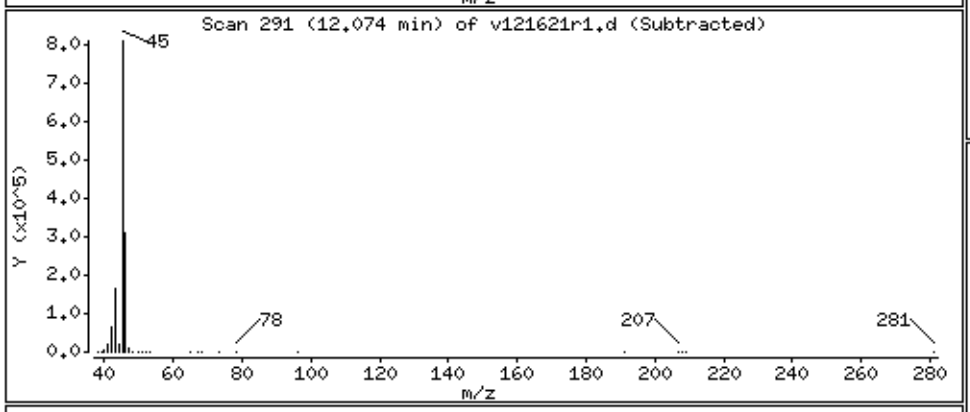
Column phase: RTx-624

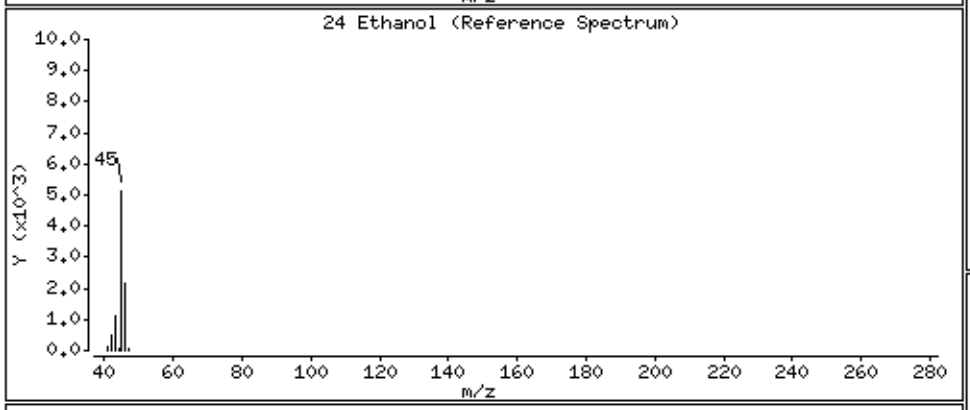
Column diameter: 0.32

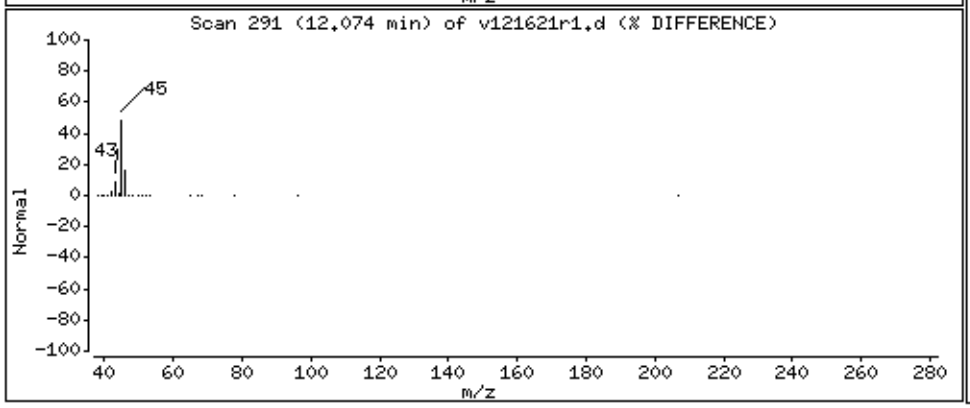
24 Ethanol

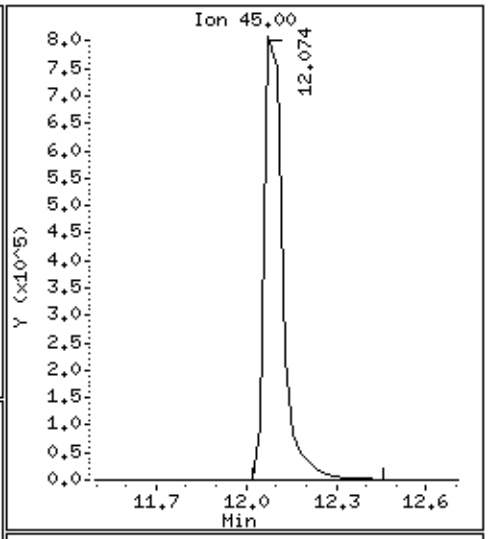
Concentration: 576.40 PPBV

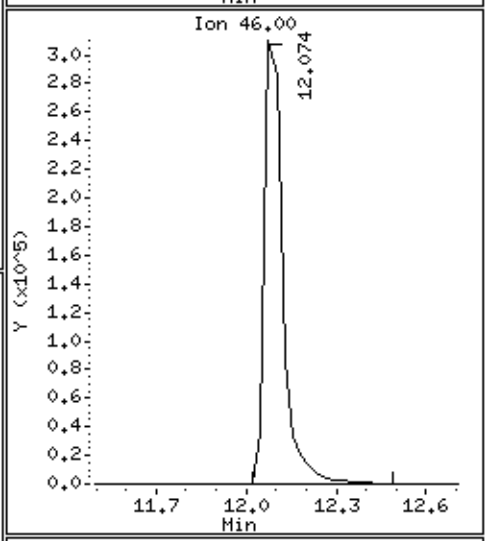


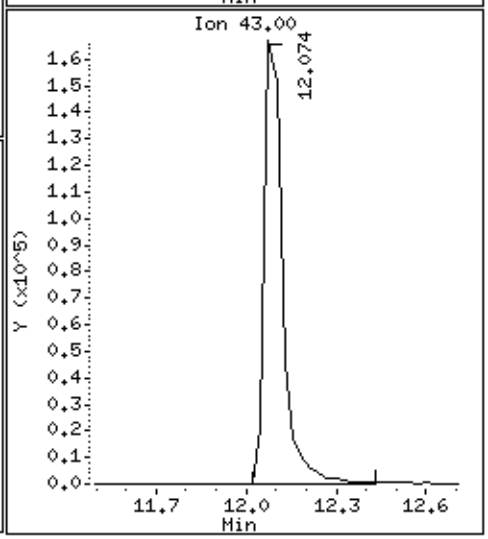












Data File: /chem/msdv.i/16Dec2014.b/v121621r1.d

Date : 16-DEC-2014 22:54

Client ID:

Instrument: msdv.i

Sample Info: 125ml #12019

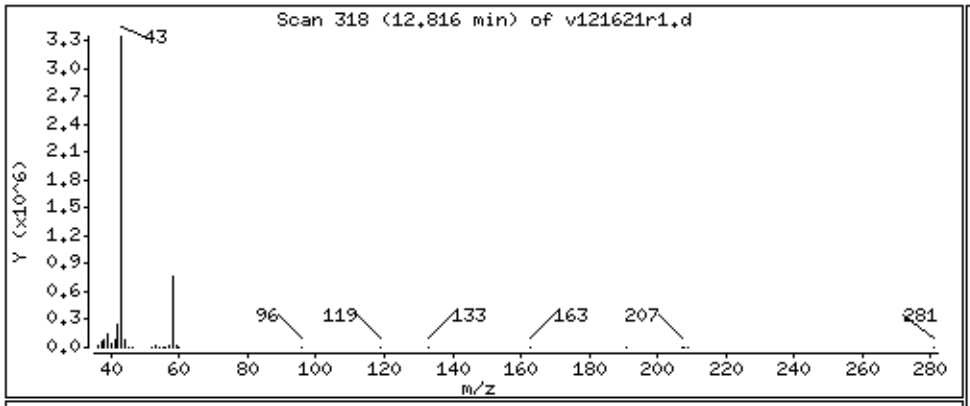
Operator: sn

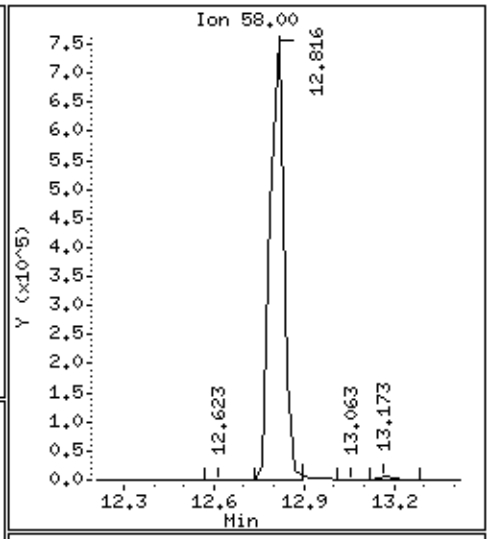
Column phase: RTx-624

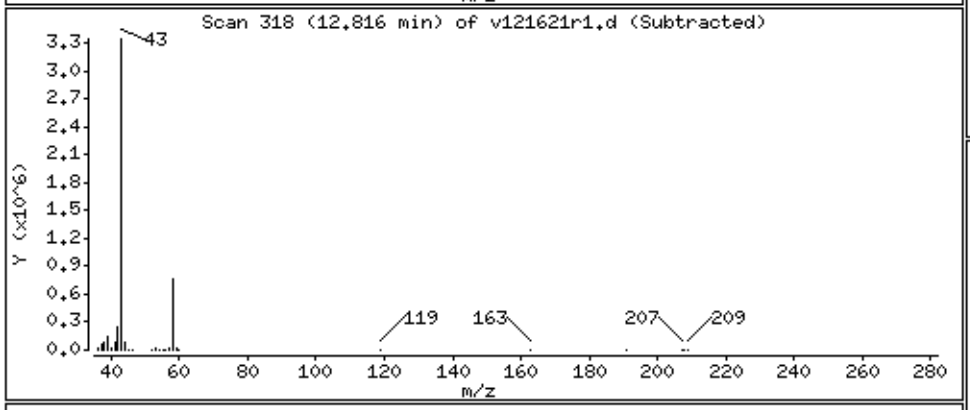
Column diameter: 0.32

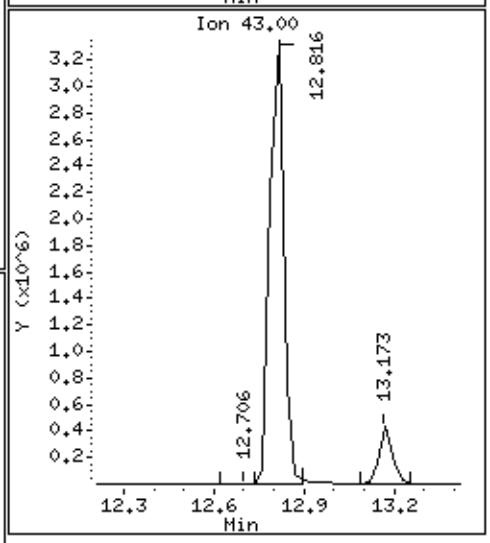
31 Acetone

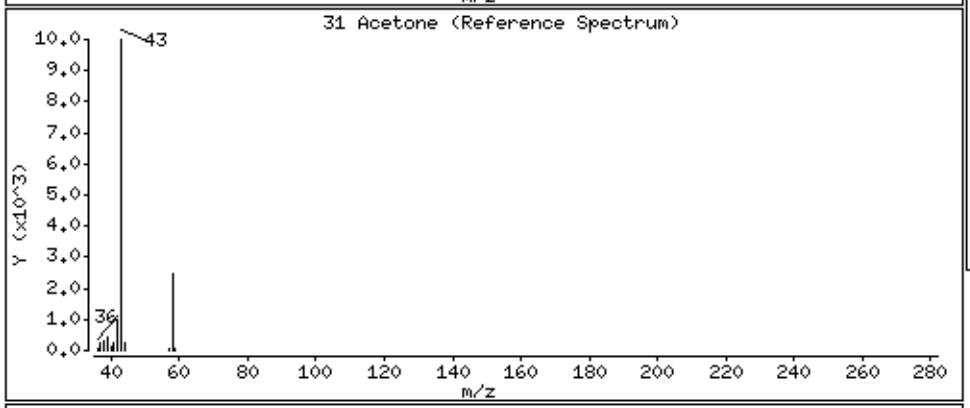
Concentration: 345.55 PPBV

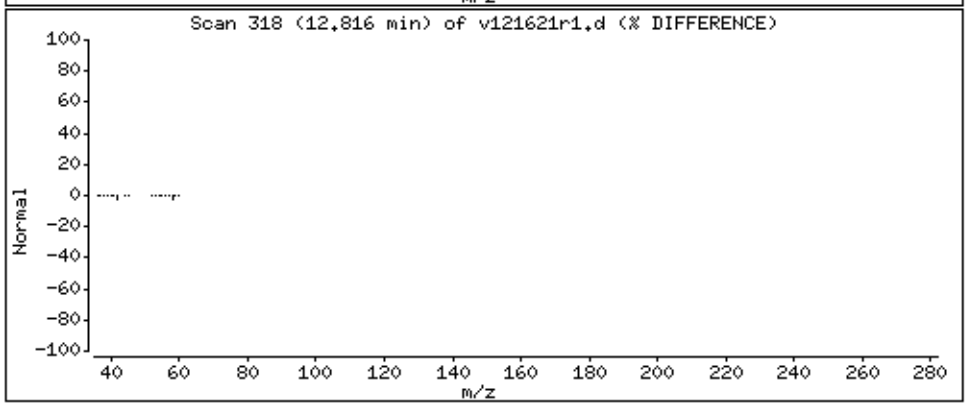












Data File: /chem/msdv.i/16Dec2014.b/v121621r1.d

Date : 16-DEC-2014 22:54

Client ID:

Instrument: msdv.i

Sample Info: 125ml #12019

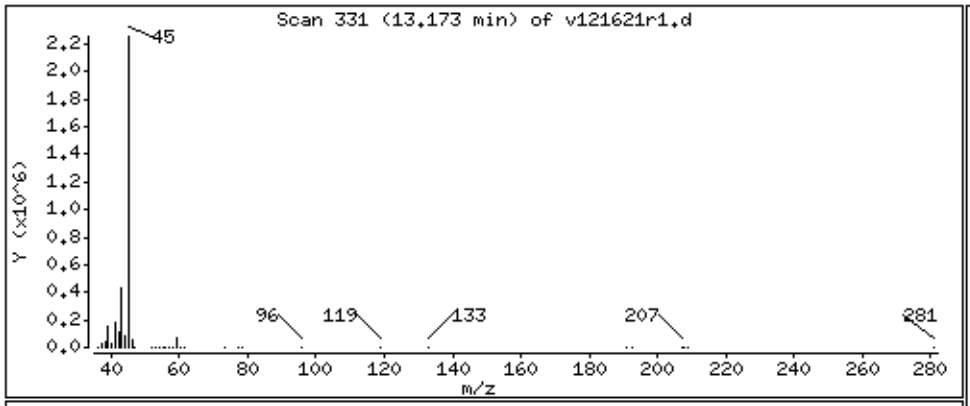
Operator: sn

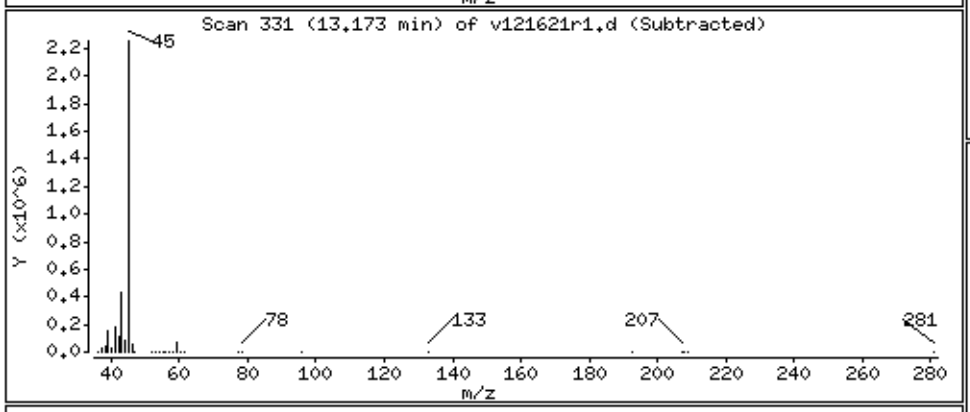
Column phase: RTx-624

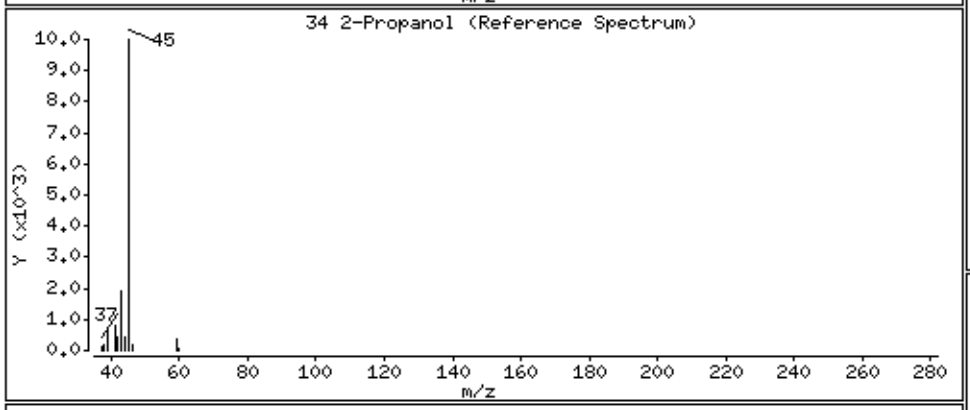
Column diameter: 0.32

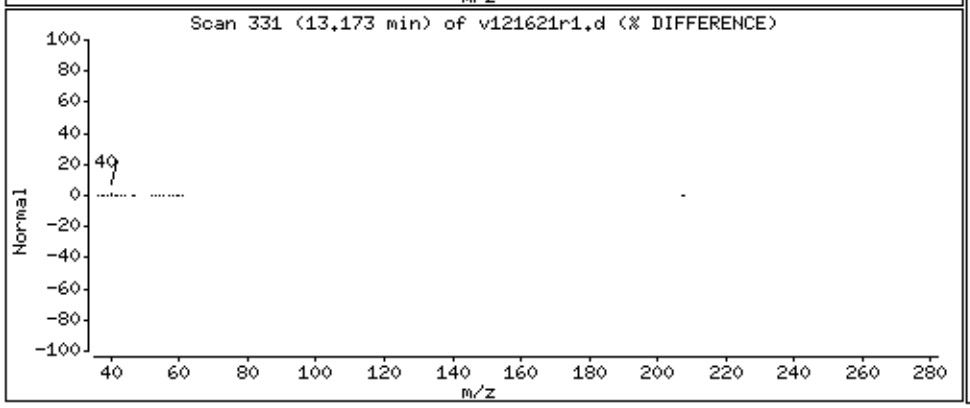
34 2-Propanol

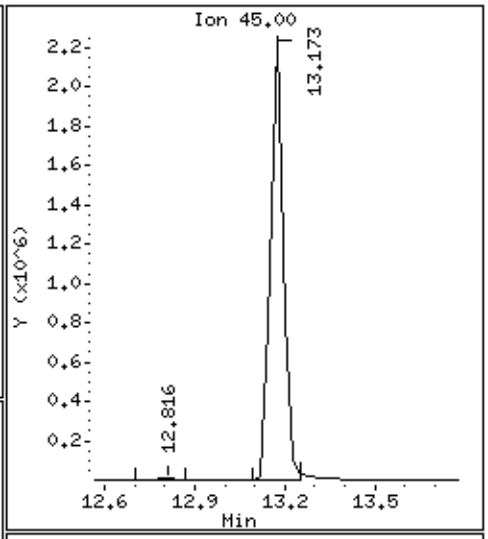
Concentration: 206.32 PPBV

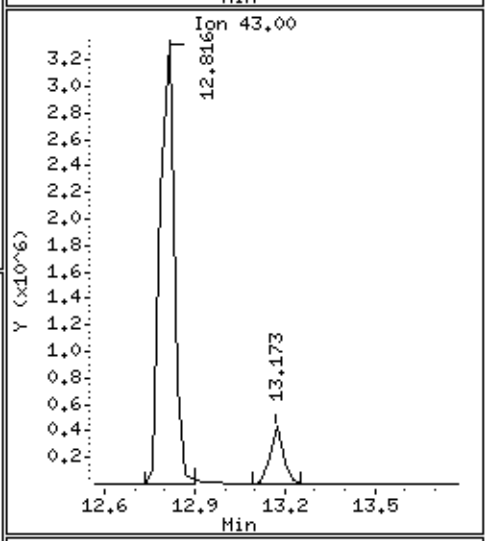


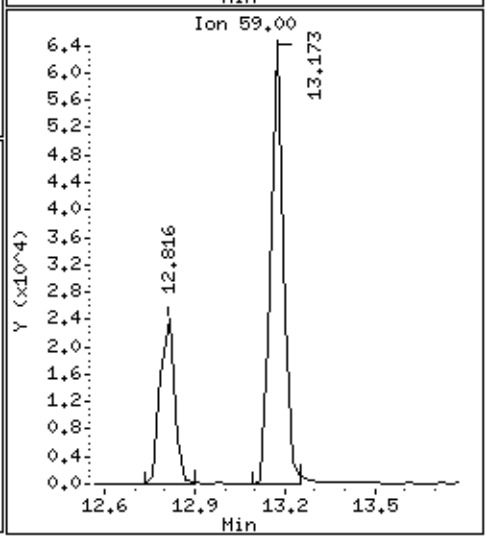












Data File: /chem/msdv.i/16Dec2014.b/v121621r1.d

Date : 16-DEC-2014 22:54

Client ID:

Instrument: msdv.i

Sample Info: 125ml #12019

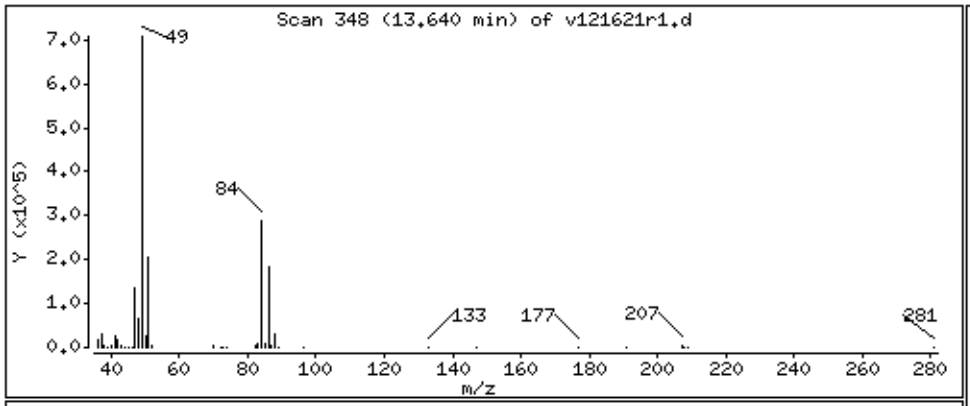
Operator: sn

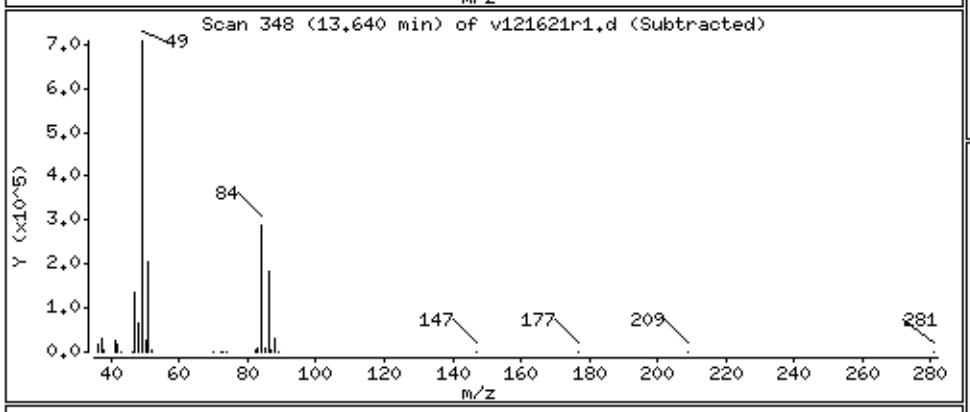
Column phase: RTx-624

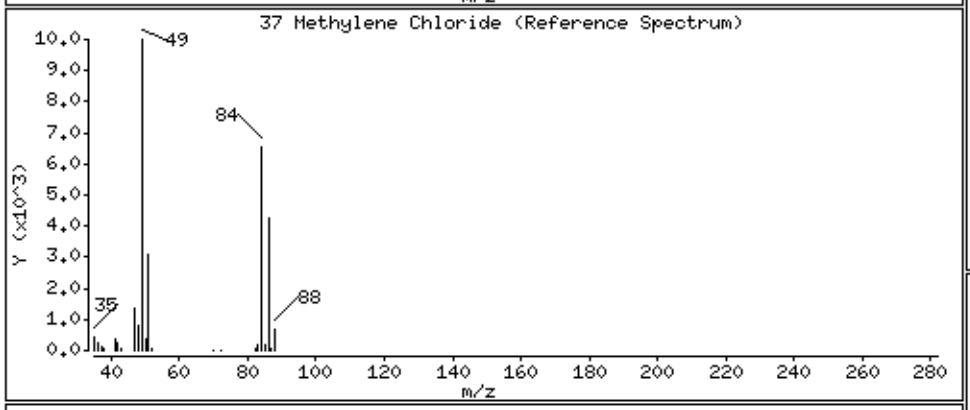
Column diameter: 0.32

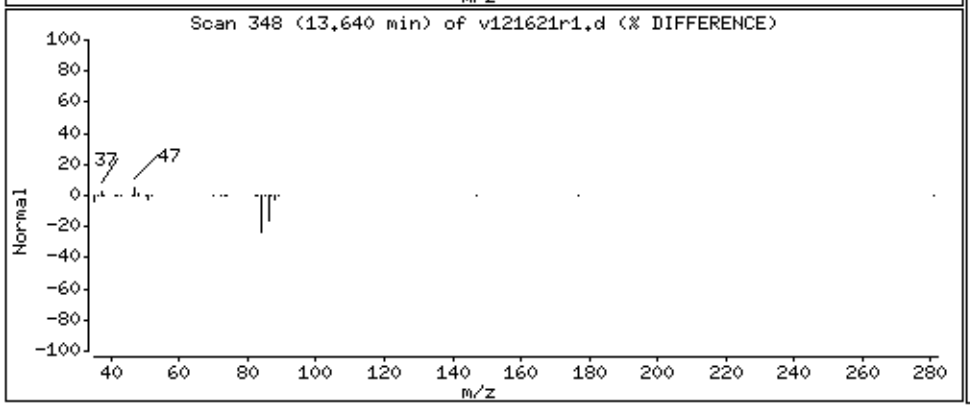
37 Methylene Chloride

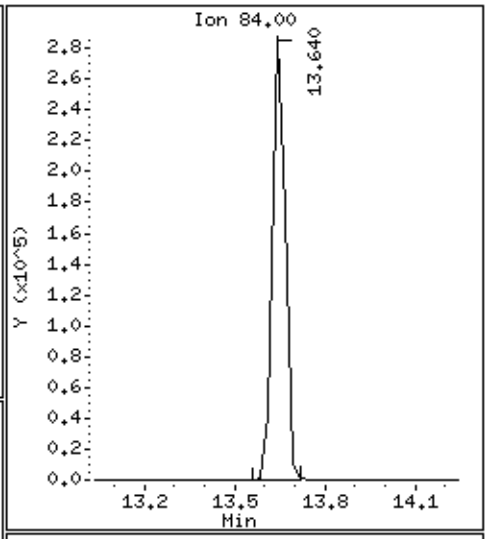
Concentration: 95.573 PPBV

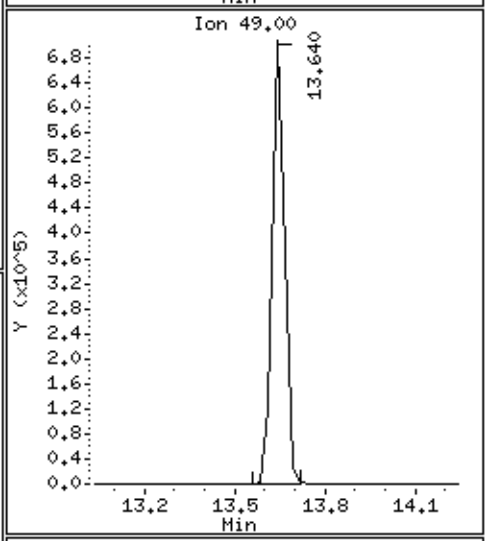


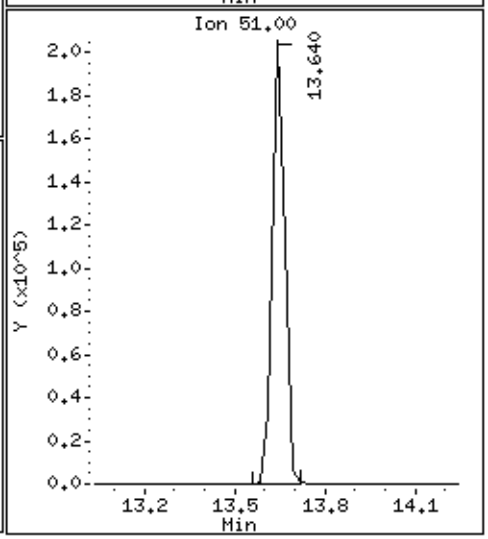












Data File: /chem/msdv.i/16Dec2014.b/v121621r1.d

Date : 16-DEC-2014 22:54

Client ID:

Instrument: msdv.i

Sample Info: 125ml #12019

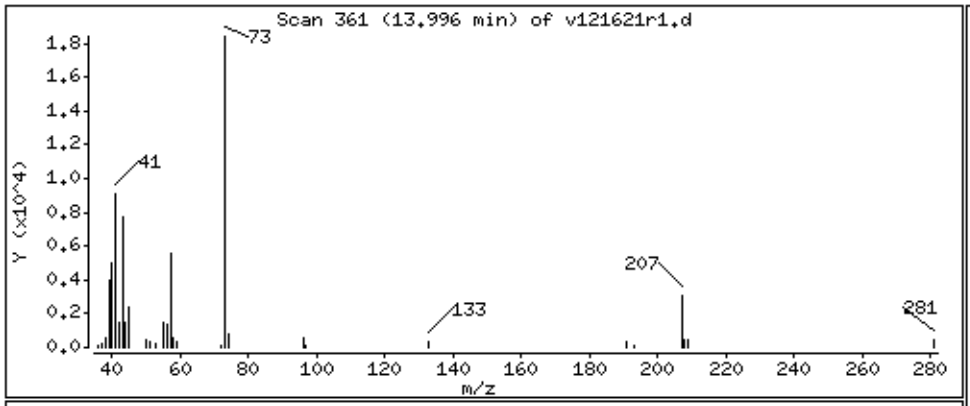
Operator: sn

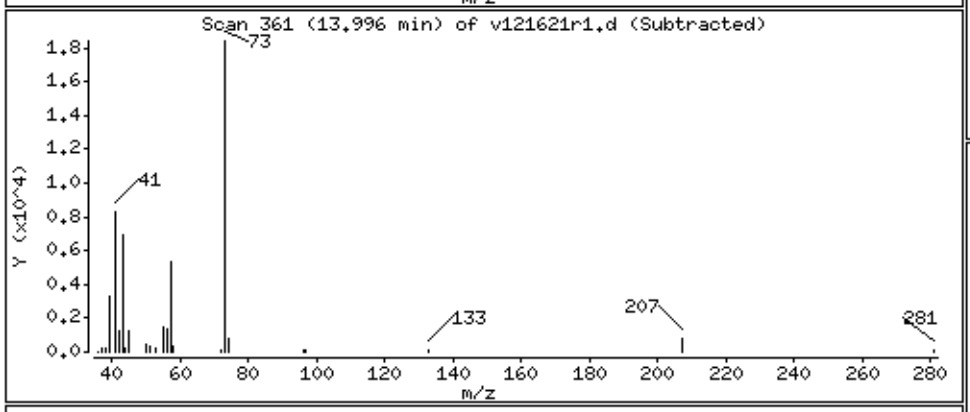
Column phase: RTx-624

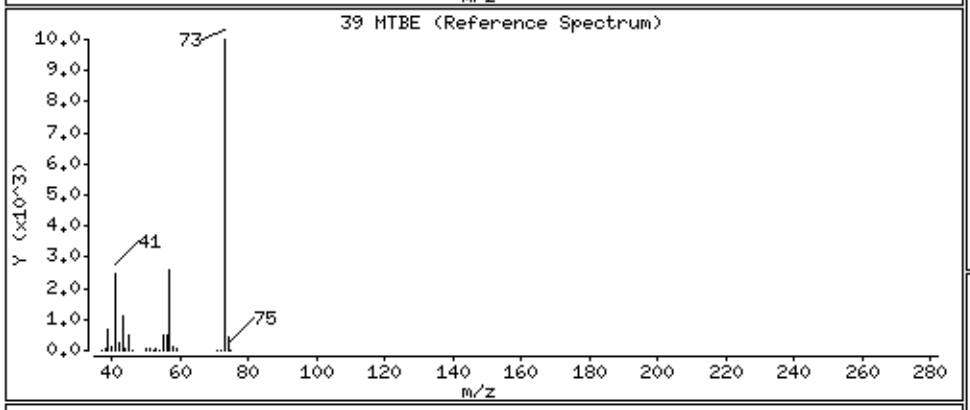
Column diameter: 0.32

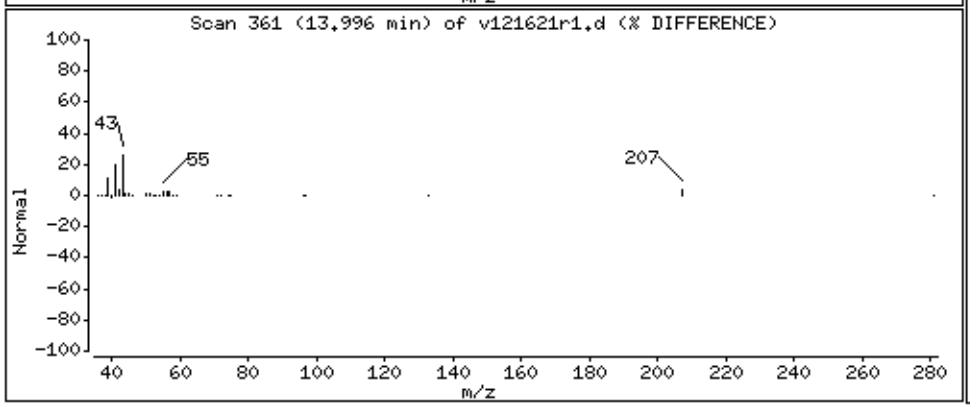
39 MTBE

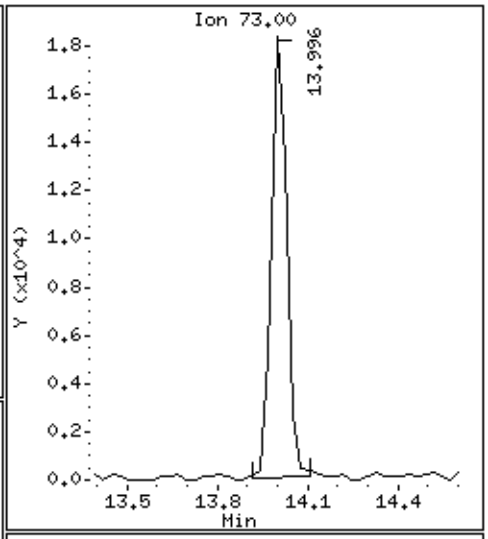
Concentration: 2.048 PPBV

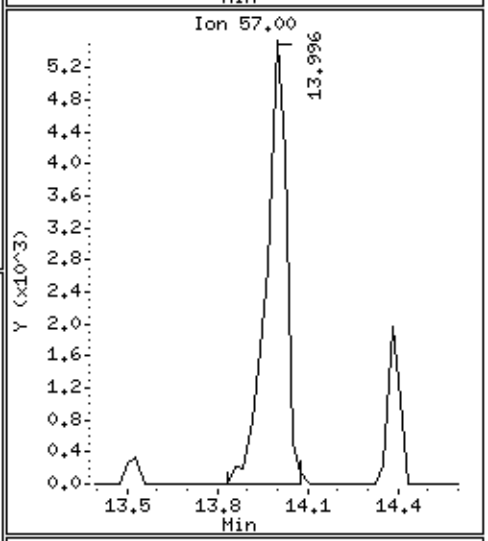


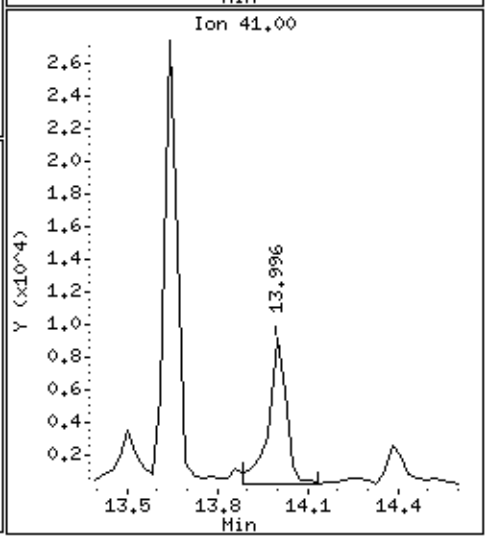












Data File: /chem/msdv.i/16Dec2014.b/v121621r1.d

Date : 16-DEC-2014 22:54

Client ID:

Instrument: msdv.i

Sample Info: 125ml #12019

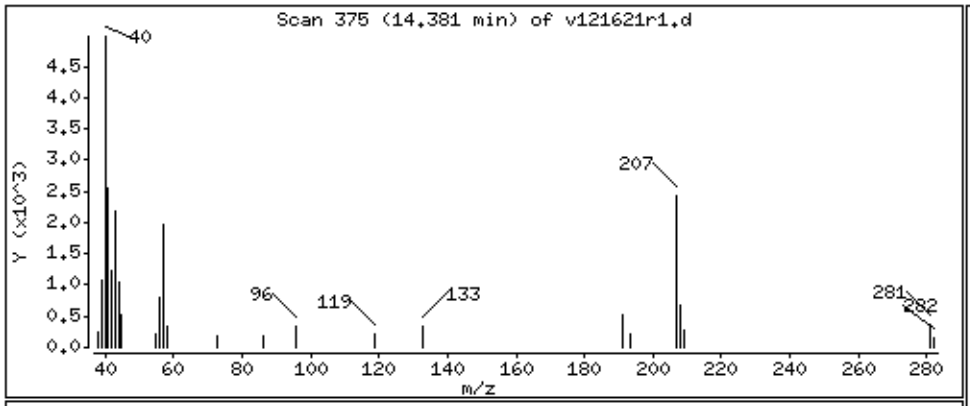
Operator: sn

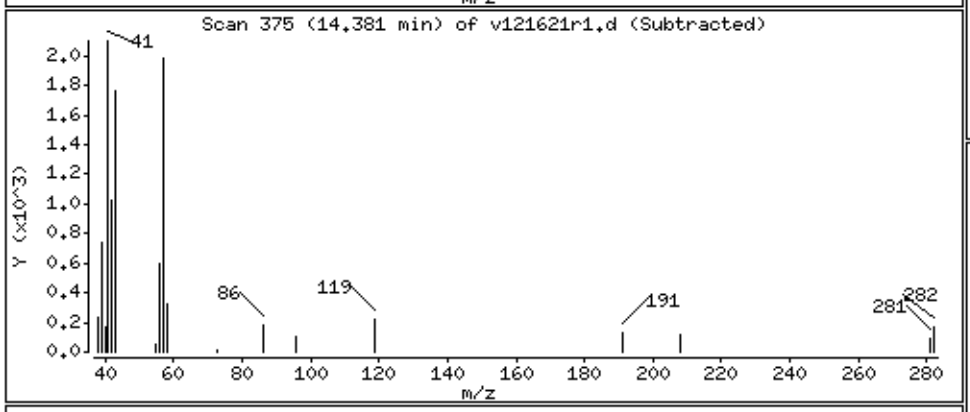
Column phase: RTx-624

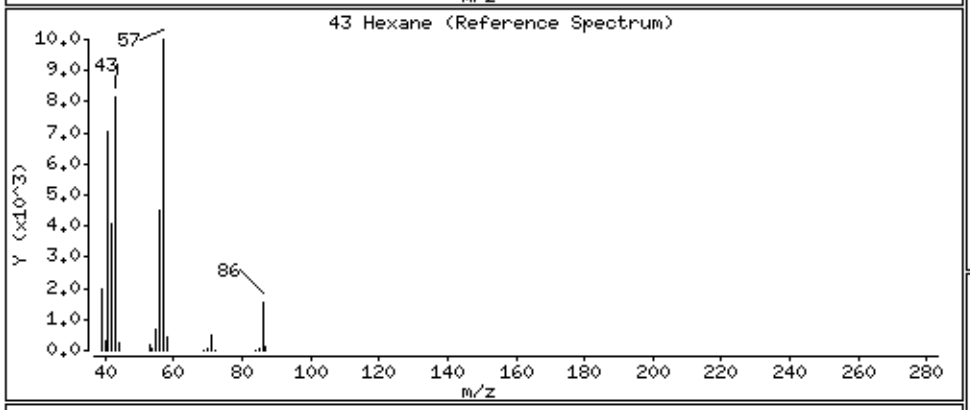
Column diameter: 0.32

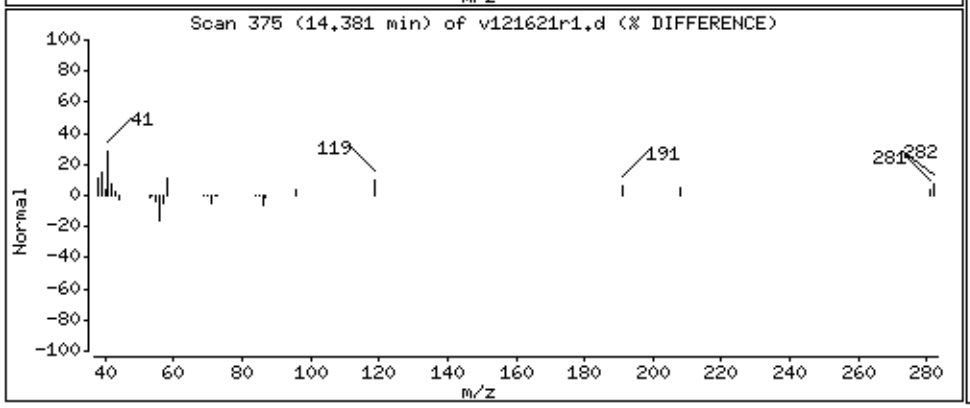
43 Hexane

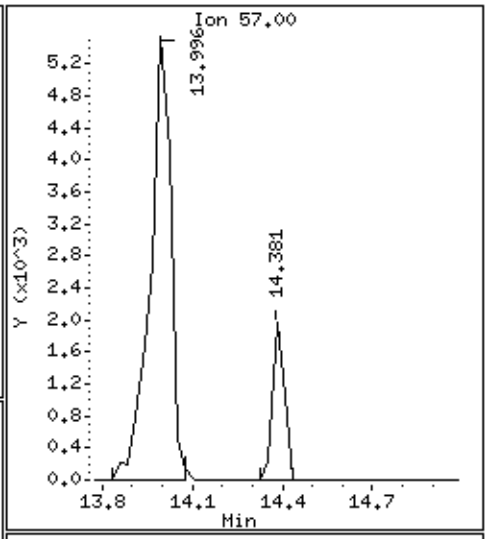
Concentration: 0.2099 PPBV

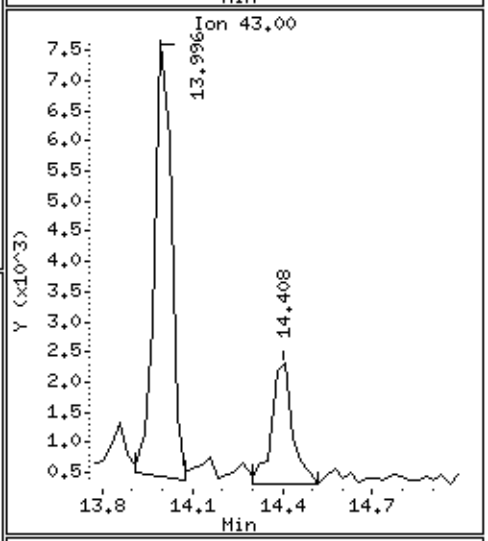


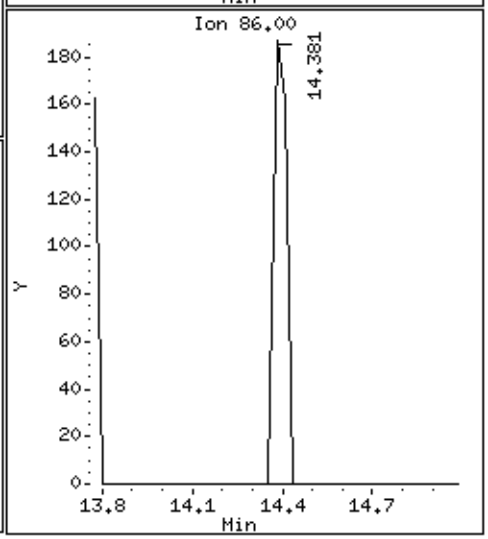












Data File: /chem/msdv.i/16Dec2014.b/v121621r1.d

Date : 16-DEC-2014 22:54

Client ID:

Instrument: msdv.i

Sample Info: 125ml #12019

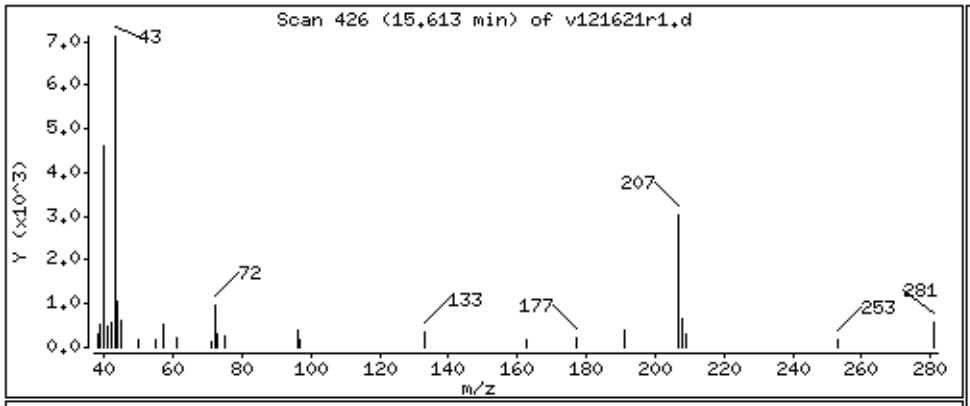
Operator: sn

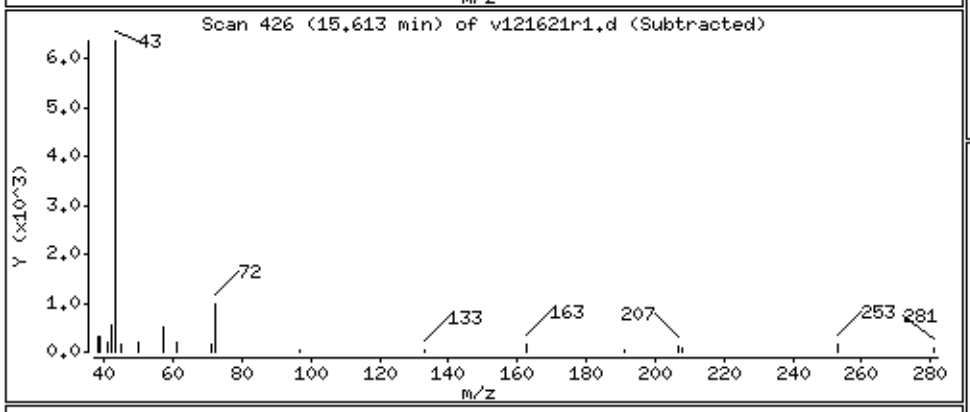
Column phase: RTx-624

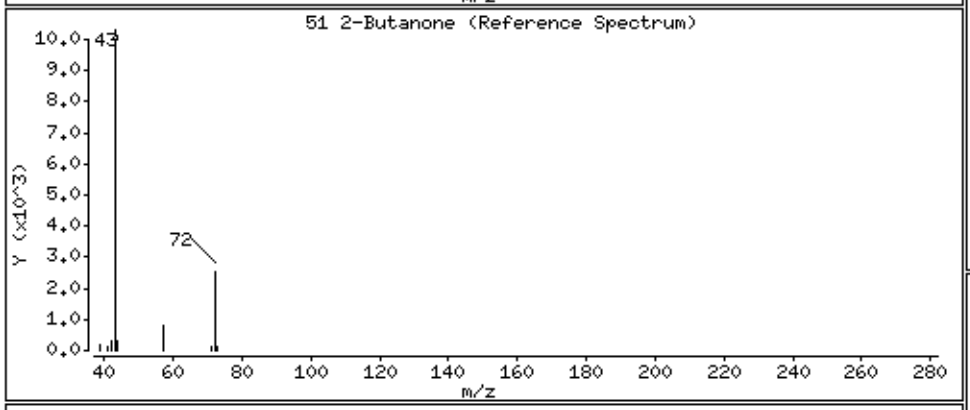
Column diameter: 0.32

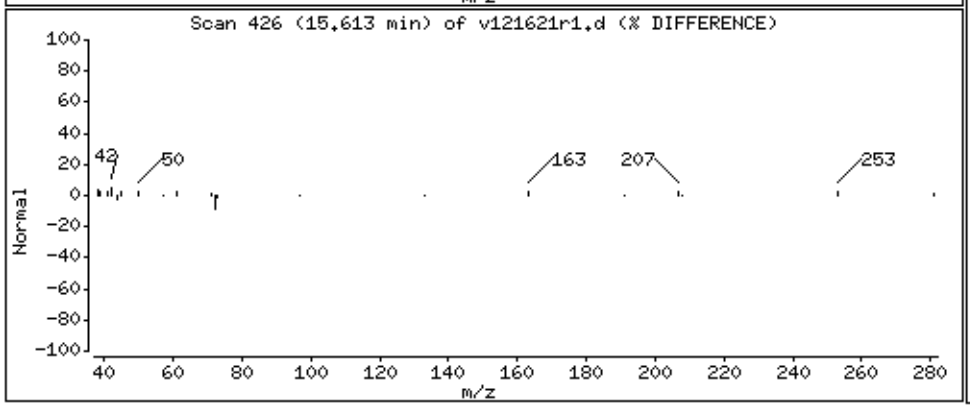
51 2-Butanone

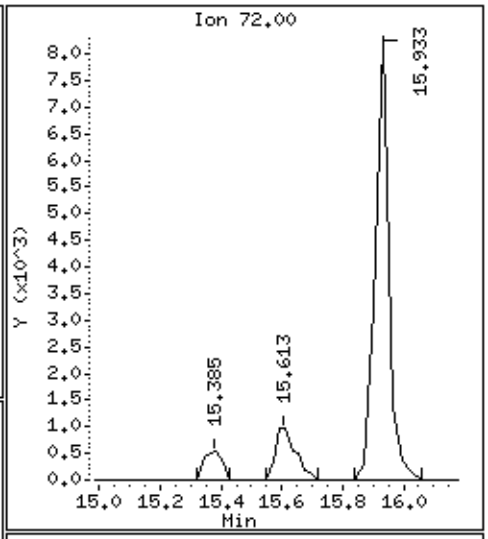
Concentration: 0.8828 PPBV

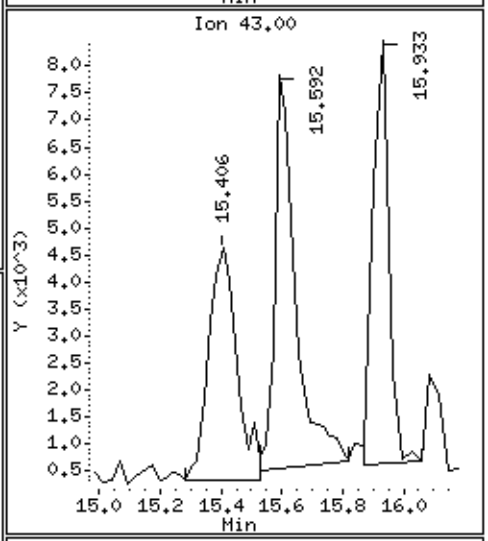


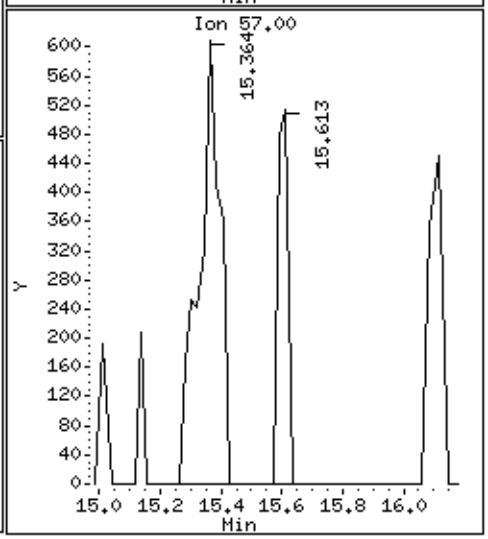












Data File: /chem/msdv.i/16Dec2014.b/v121621r1.d

Date : 16-DEC-2014 22:54

Client ID:

Instrument: msdv.i

Sample Info: 125ml #12019

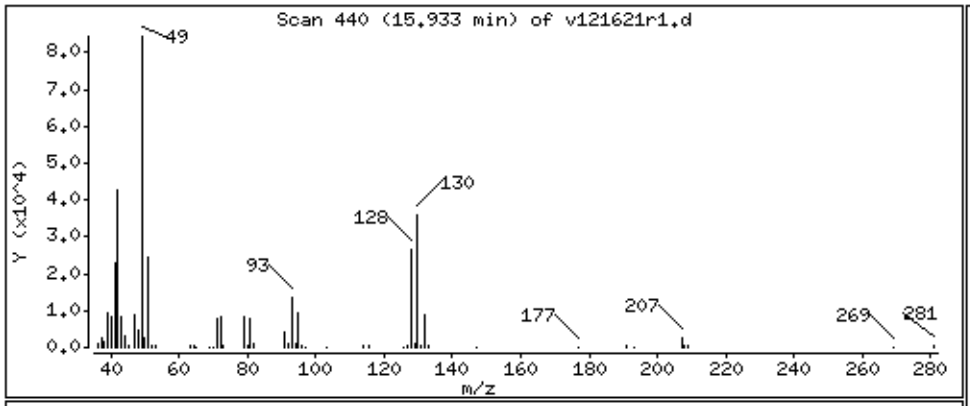
Operator: sn

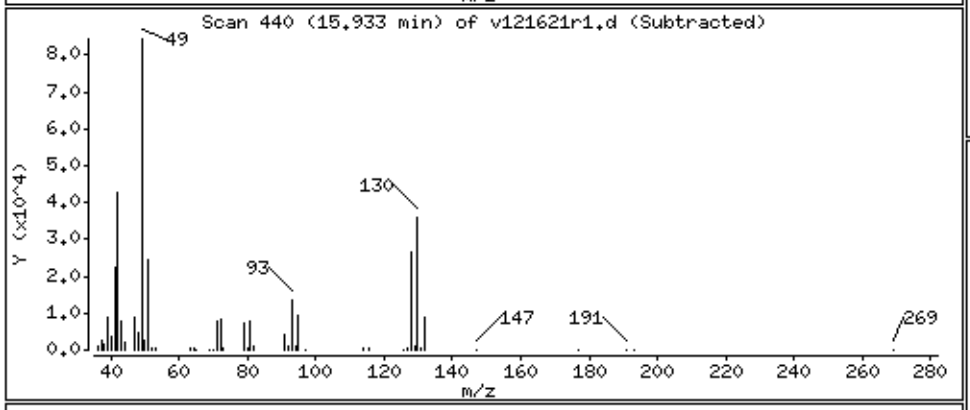
Column phase: RTx-624

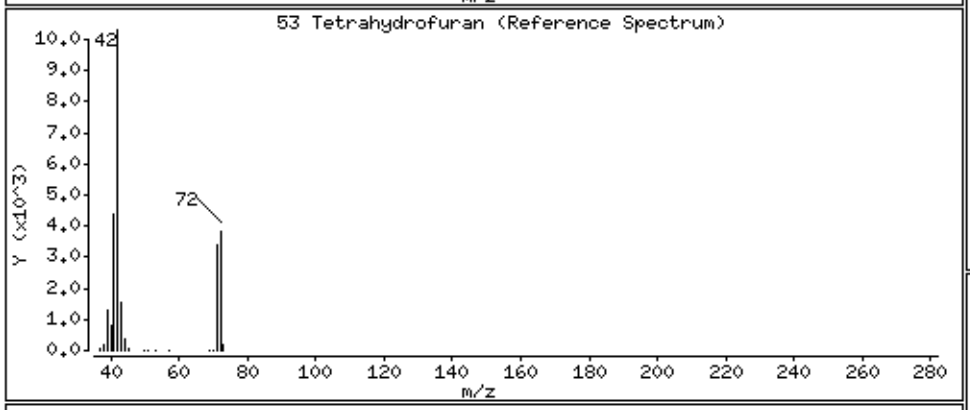
Column diameter: 0.32

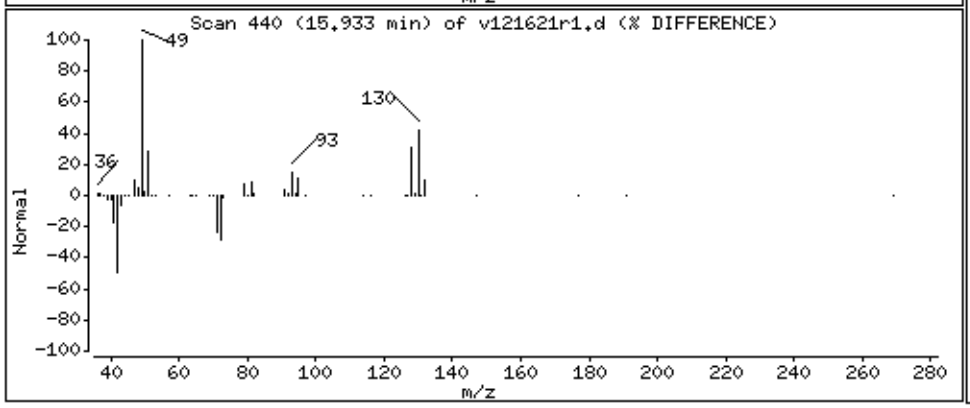
53 Tetrahydrofuran

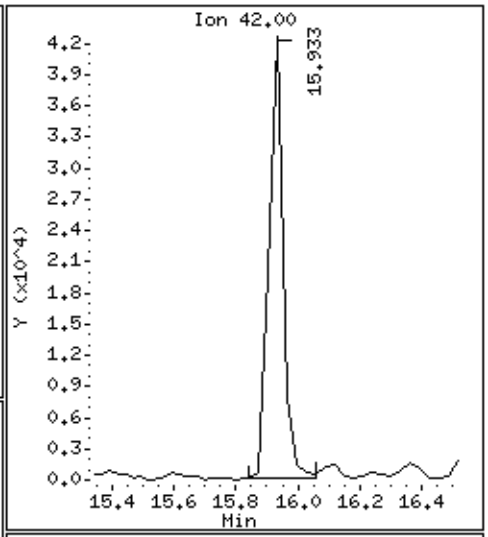
Concentration: 5.023 PPBV

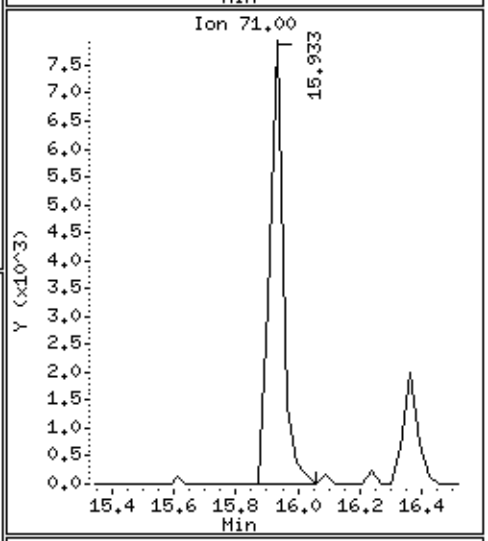


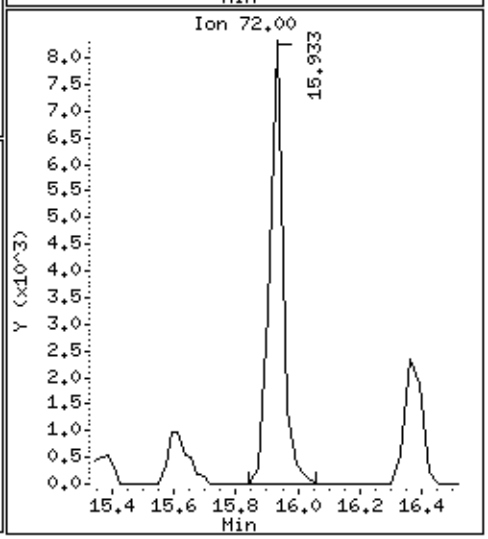












Data File: /chem/msdv.i/16Dec2014.b/v121621r1.d

Date : 16-DEC-2014 22:54

Client ID:

Instrument: msdv.i

Sample Info: 125ml #12019

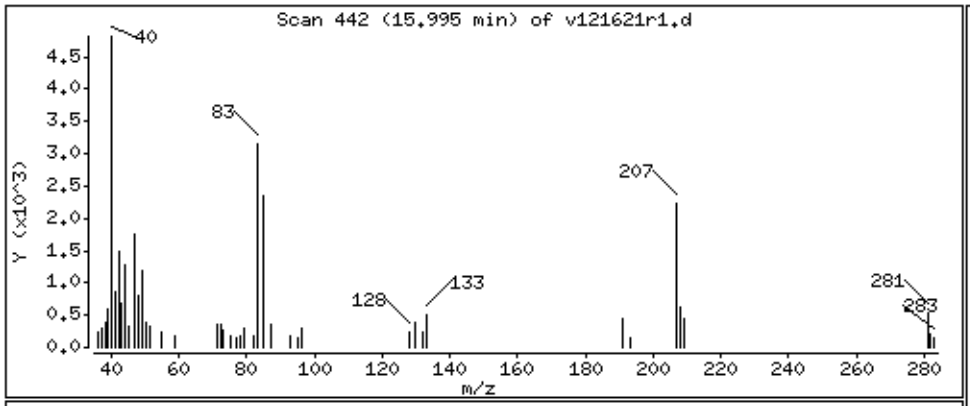
Operator: sn

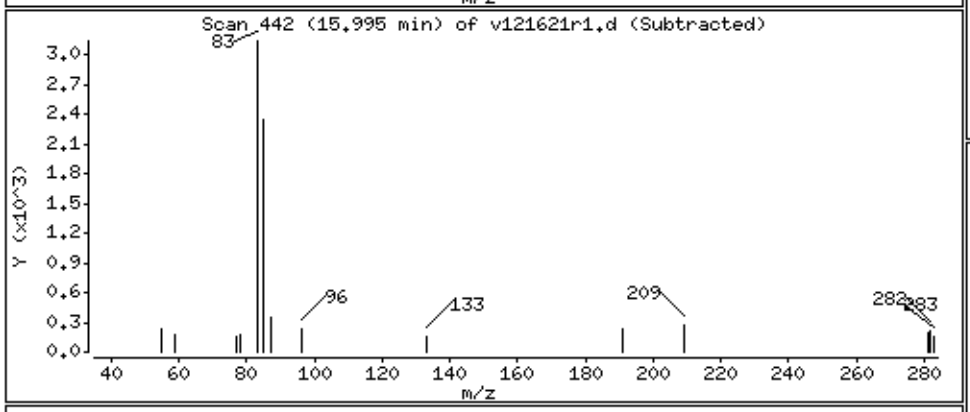
Column phase: RTx-624

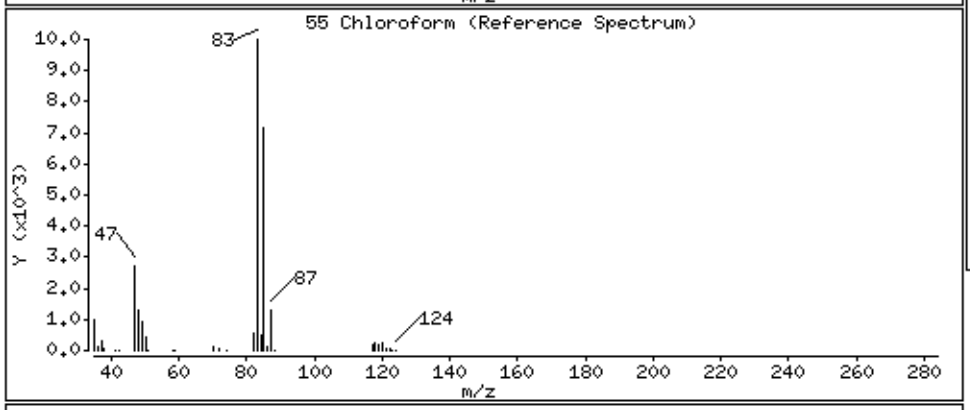
Column diameter: 0.32

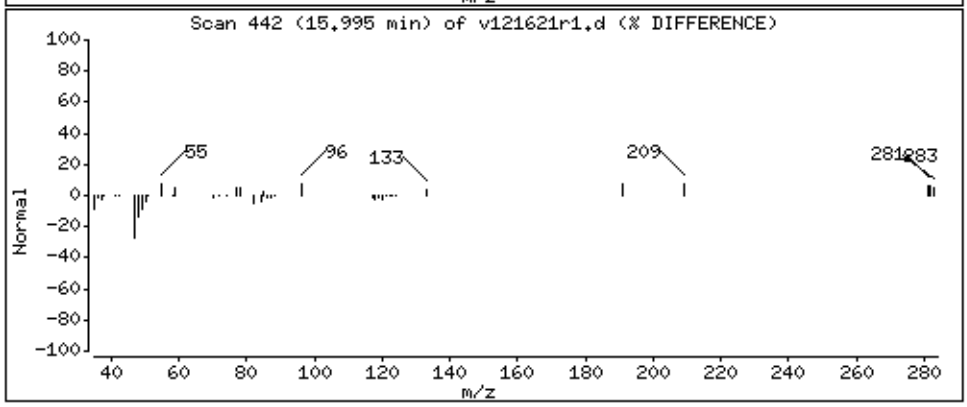
55 Chloroform

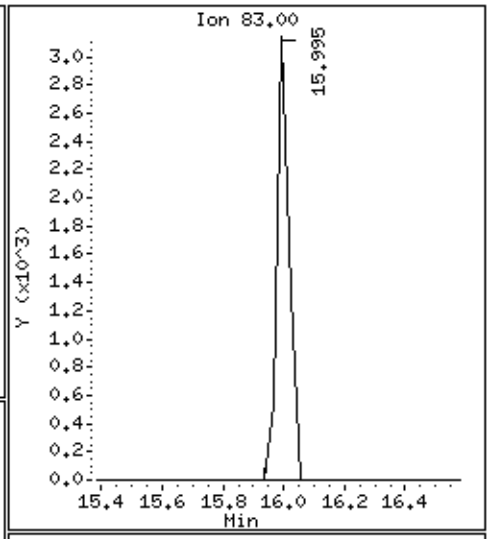
Concentration: 0.3745 PPBV

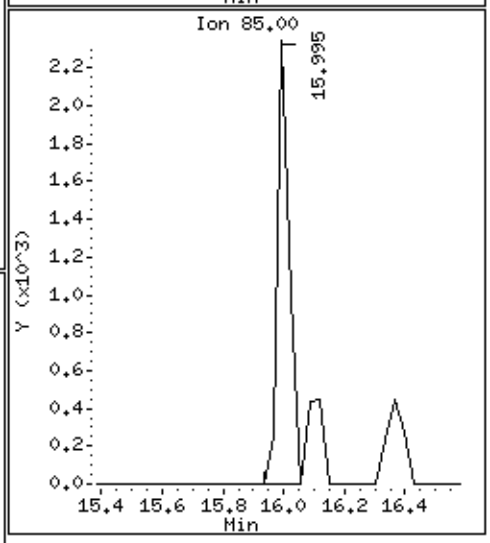












Data File: /chem/msdv.i/16Dec2014.b/v121621r1.d

Date : 16-DEC-2014 22:54

Client ID:

Instrument: msdv.i

Sample Info: 125ml #12019

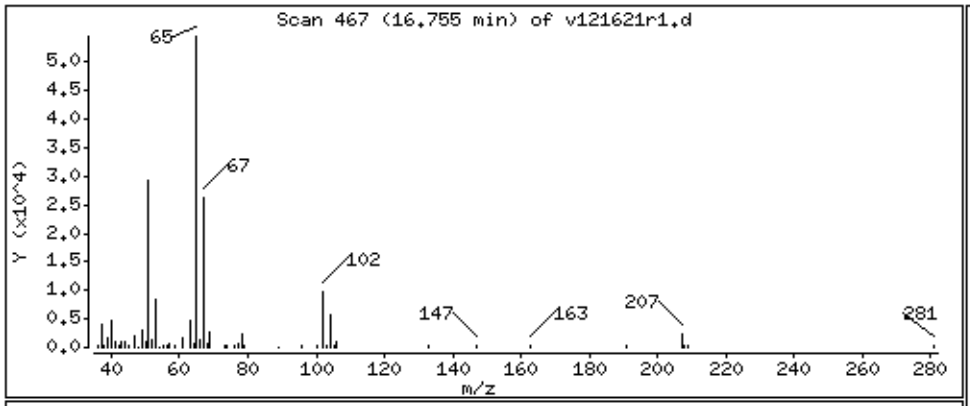
Operator: sn

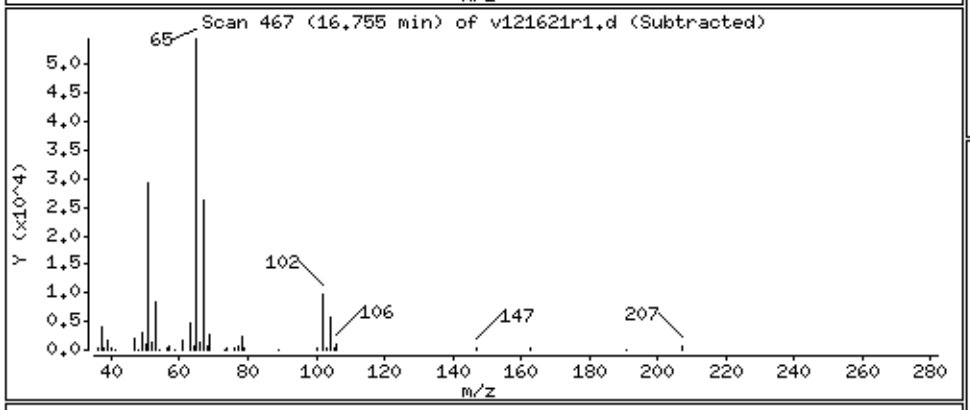
Column phase: RTx-624

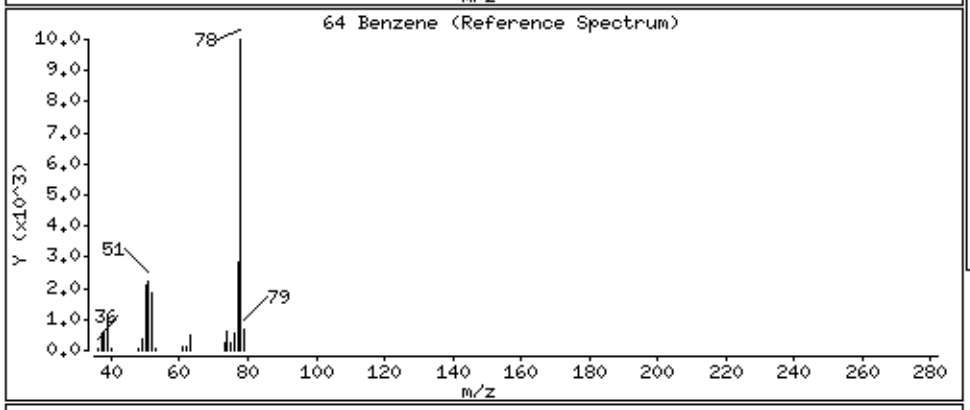
Column diameter: 0.32

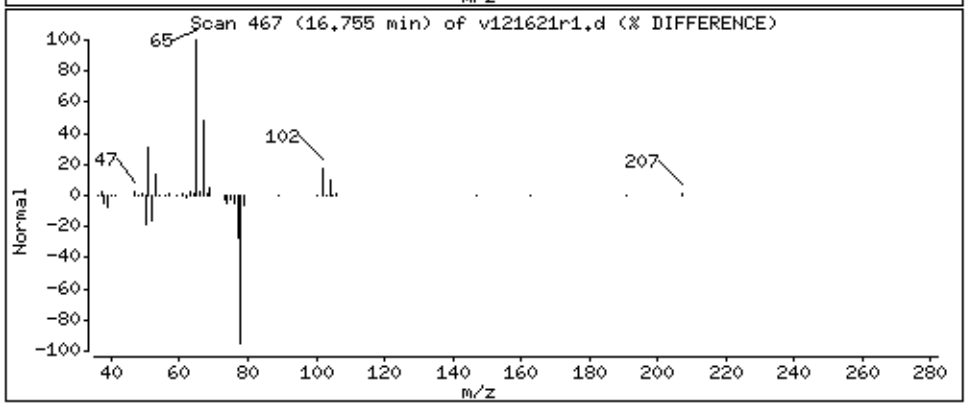
64 Benzene

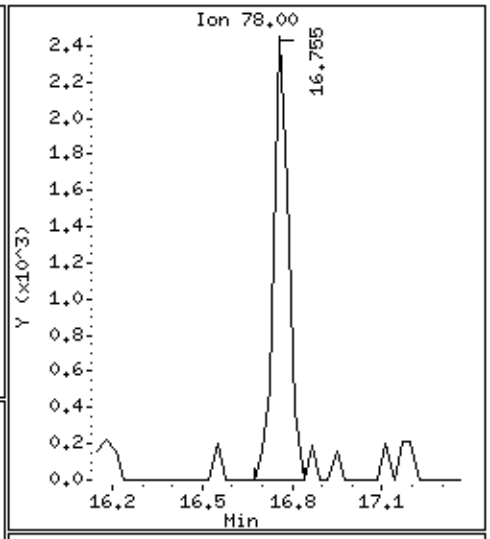
Concentration: 0.2402 PPBV

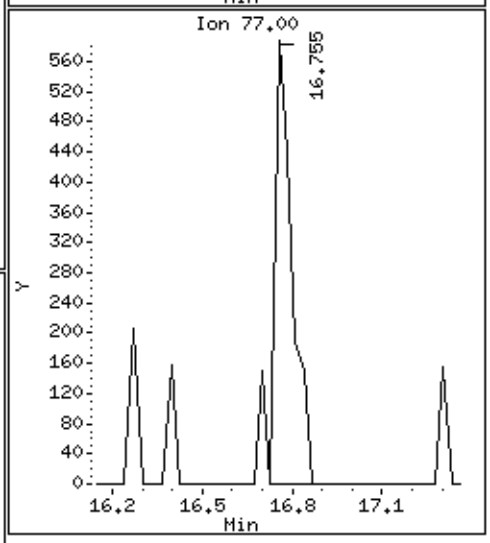












Data File: /chem/msdv.i/16Dec2014.b/v121621r1.d

Date : 16-DEC-2014 22:54

Client ID:

Instrument: msdv.i

Sample Info: 125ml #12019

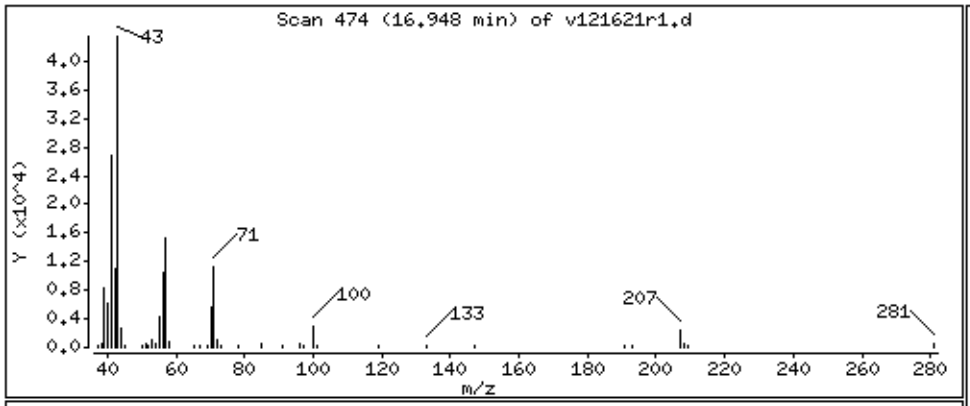
Operator: sn

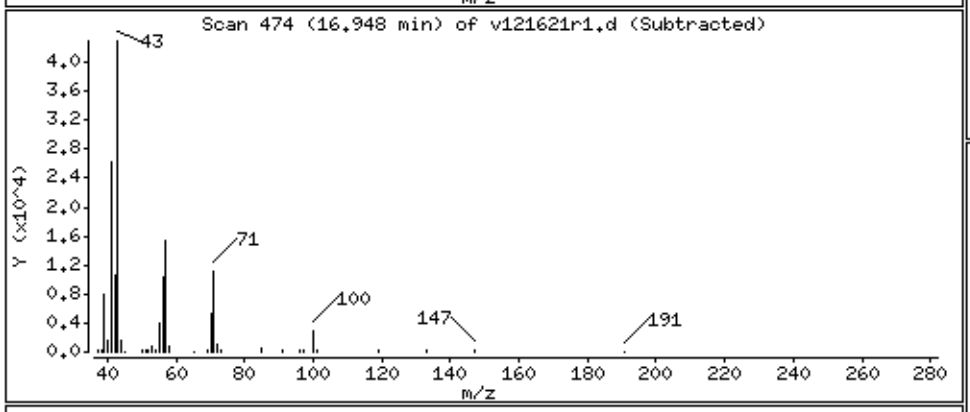
Column phase: RTx-624

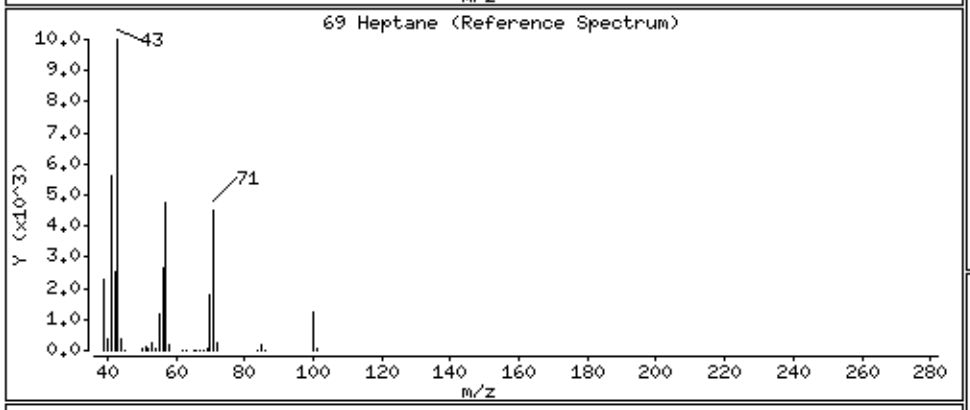
Column diameter: 0.32

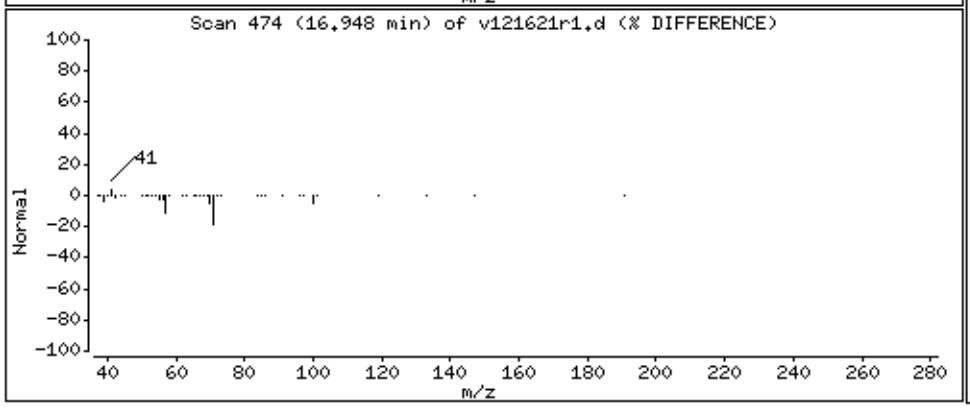
69 Heptane

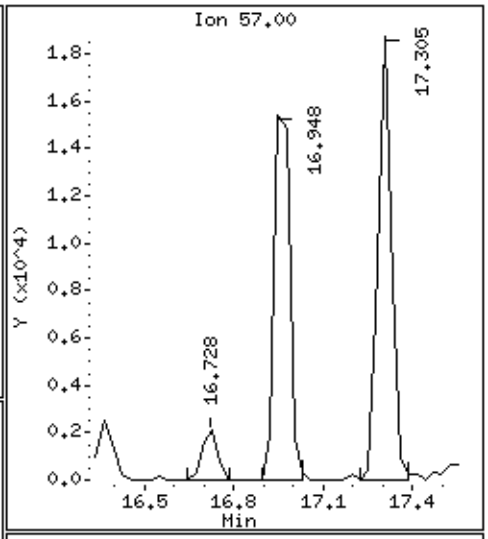
Concentration: 3.718 PPBV

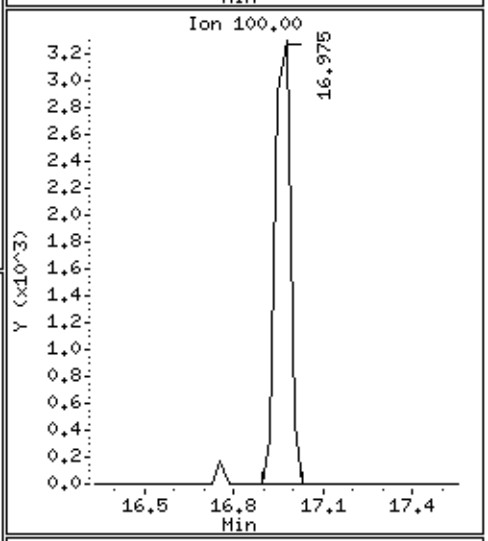


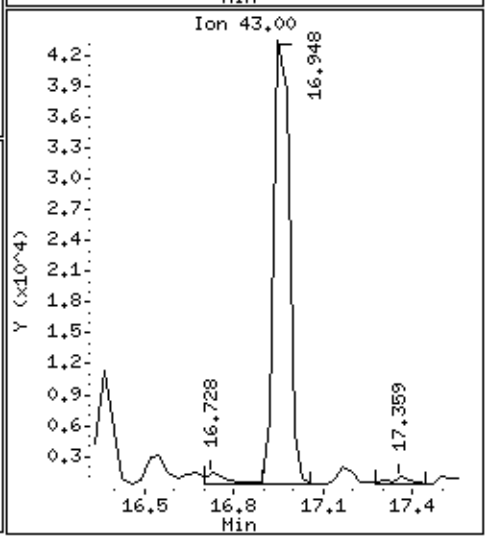












Data File: /chem/msdv.i/16Dec2014.b/v121621r1.d

Date : 16-DEC-2014 22:54

Client ID:

Instrument: msdv.i

Sample Info: 125ml #12019

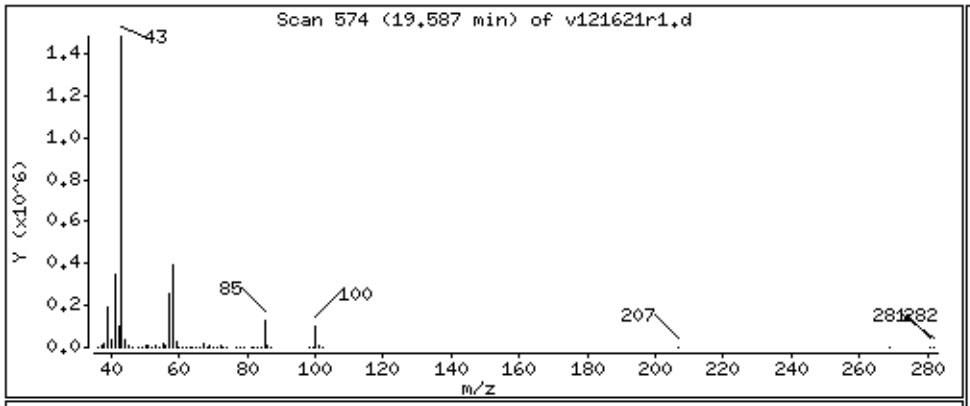
Operator: sn

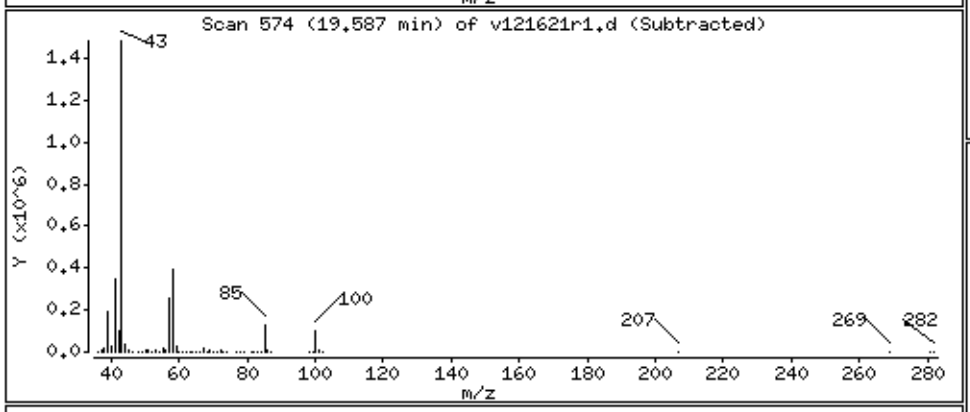
Column phase: RTx-624

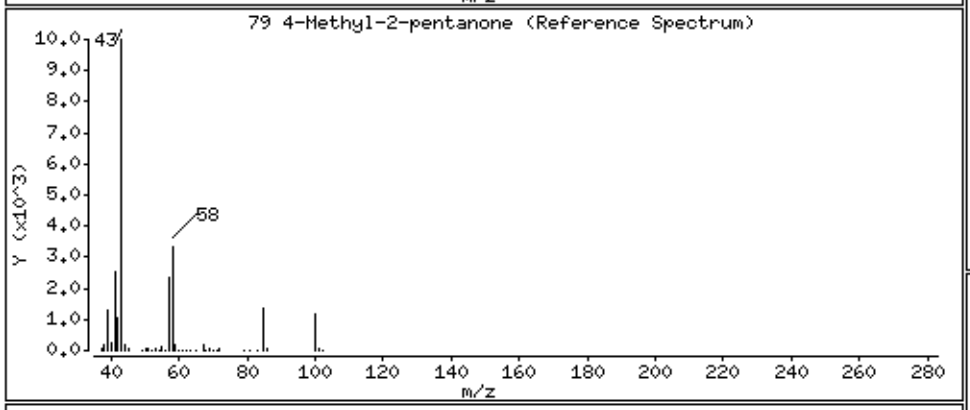
Column diameter: 0.32

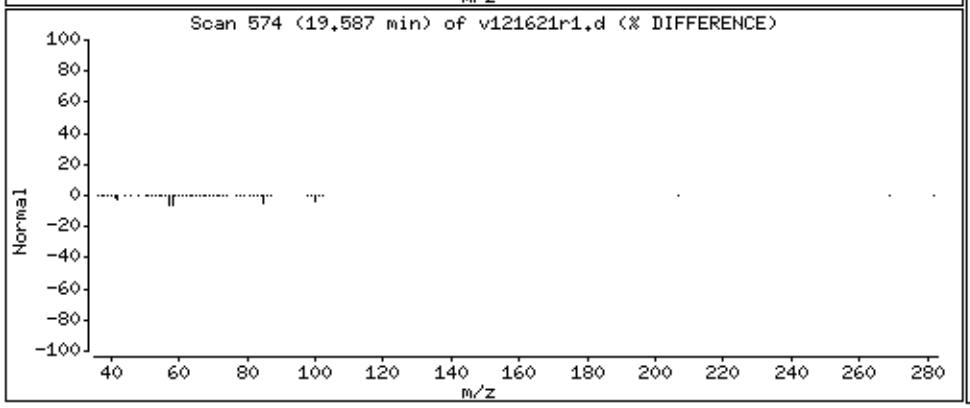
79 4-Methyl-2-pentanone

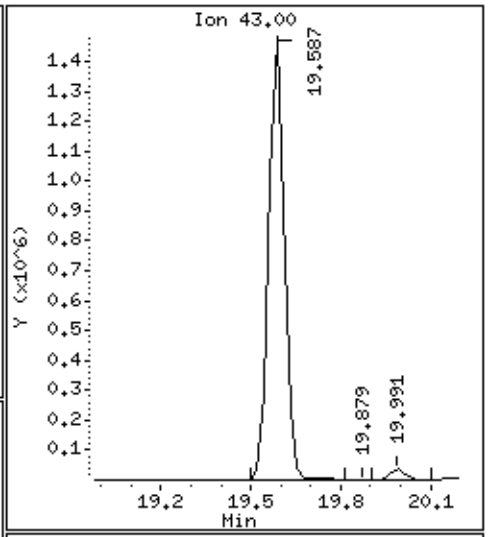
Concentration: 108.74 PPBV

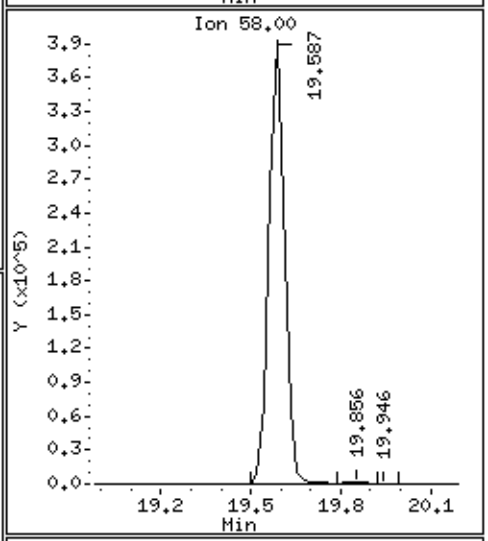


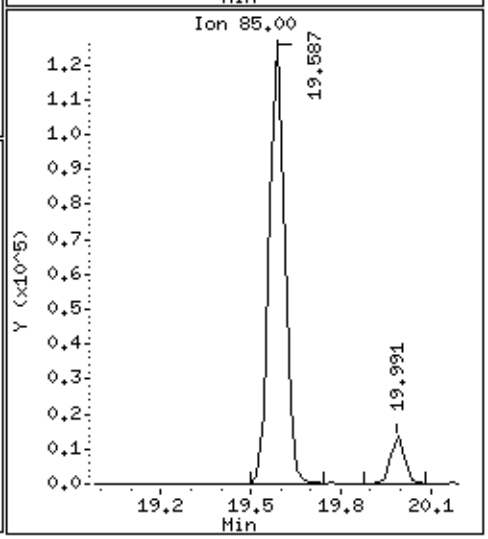












Data File: /chem/msdv.i/16Dec2014.b/v121621r1.d

Date : 16-DEC-2014 22:54

Client ID:

Instrument: msdv.i

Sample Info: 125ml #12019

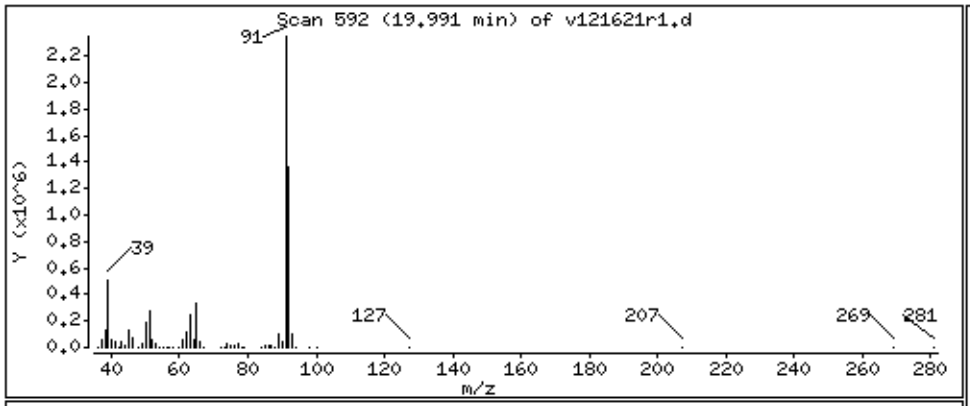
Operator: sn

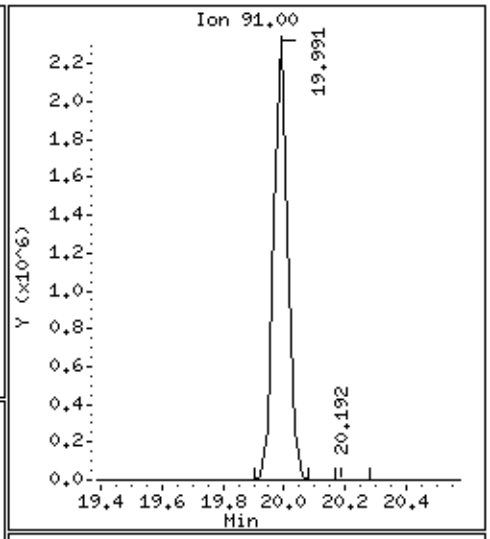
Column phase: RTx-624

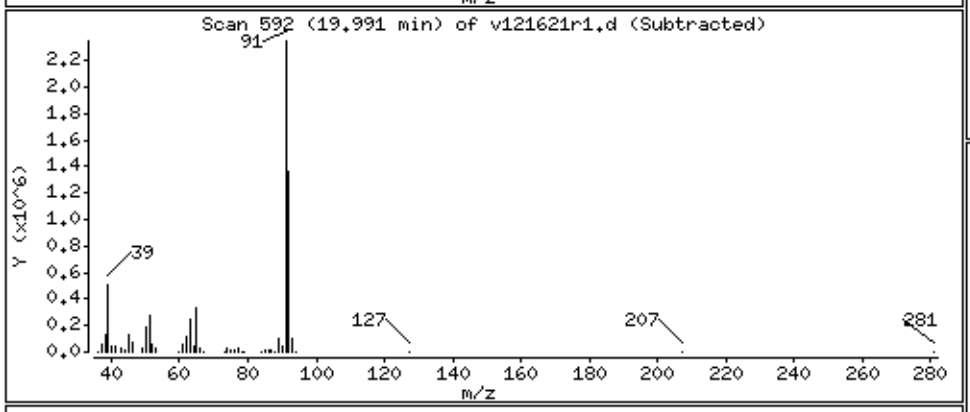
Column diameter: 0.32

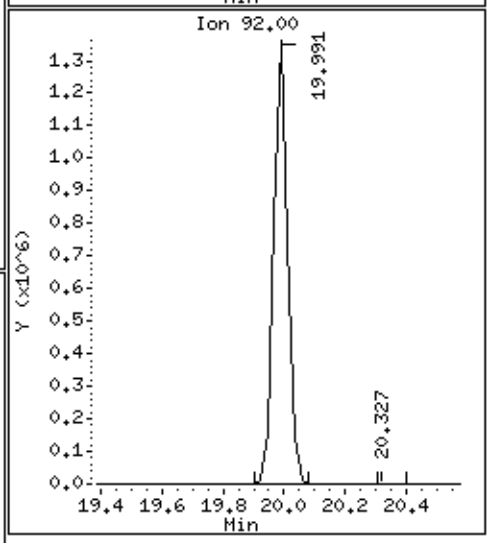
81 Toluene

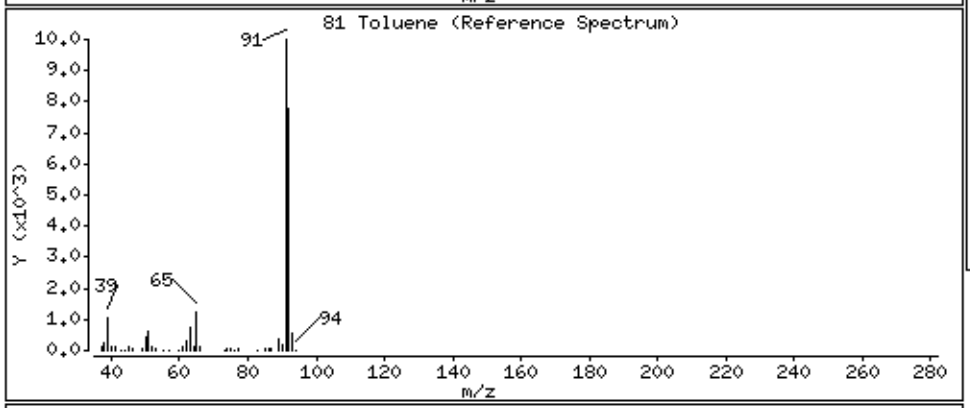
Concentration: 193.96 PPBV

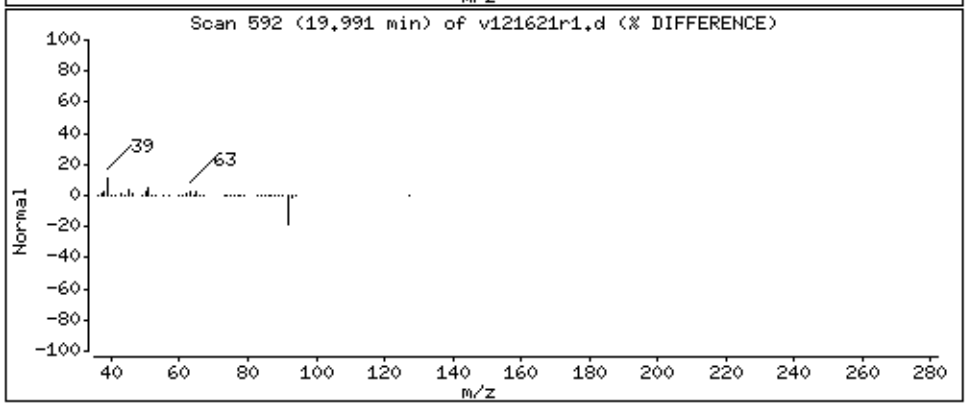












Data File: /chem/msdv.i/16Dec2014.b/v121621r1.d

Date : 16-DEC-2014 22:54

Client ID:

Instrument: msdv.i

Sample Info: 125ml #12019

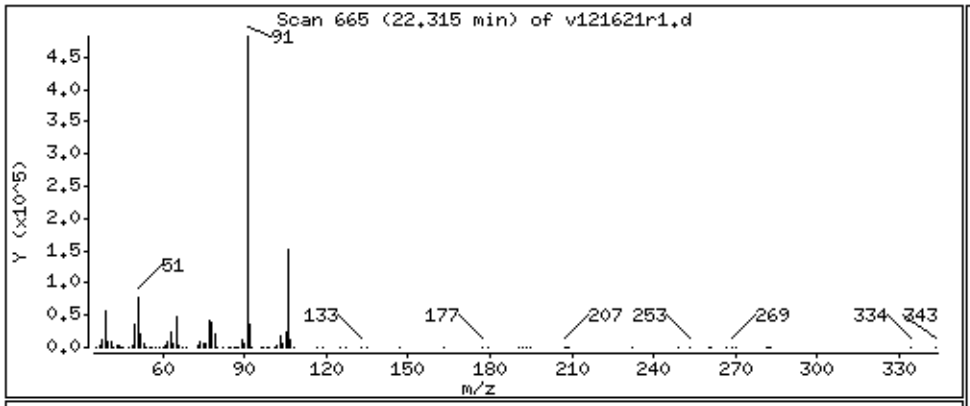
Operator: sn

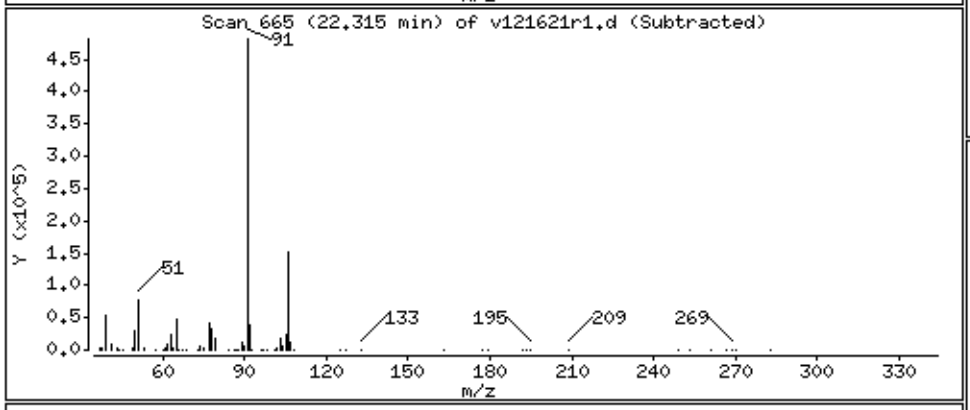
Column phase: RTx-624

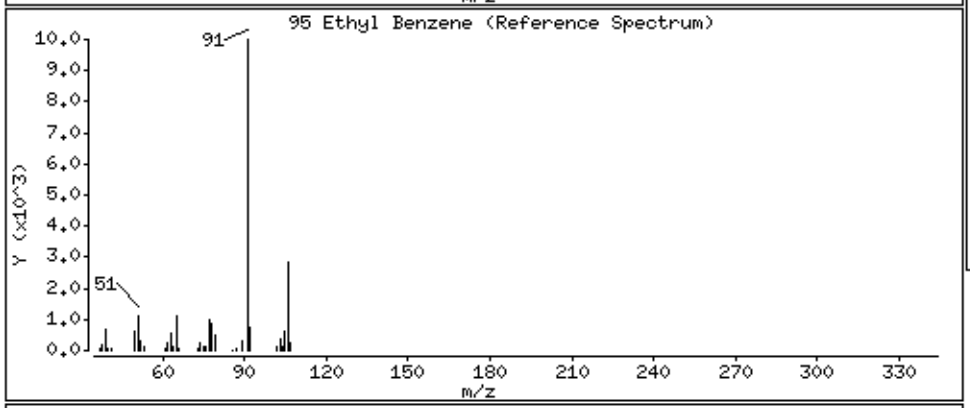
Column diameter: 0.32

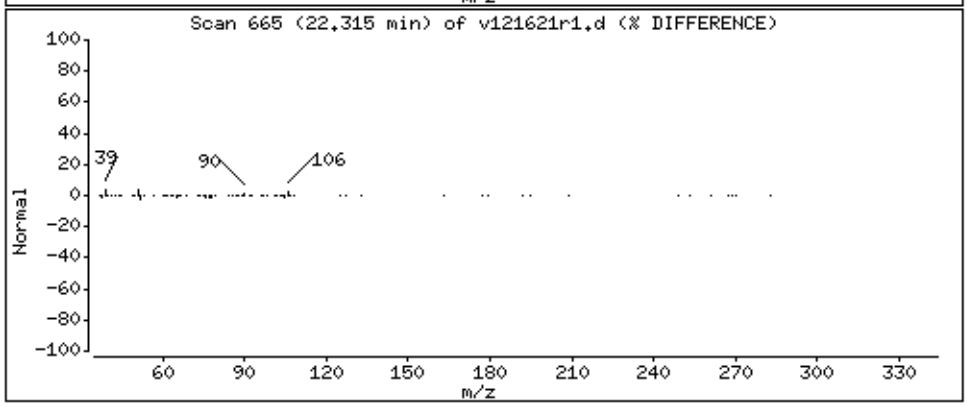
95 Ethyl Benzene

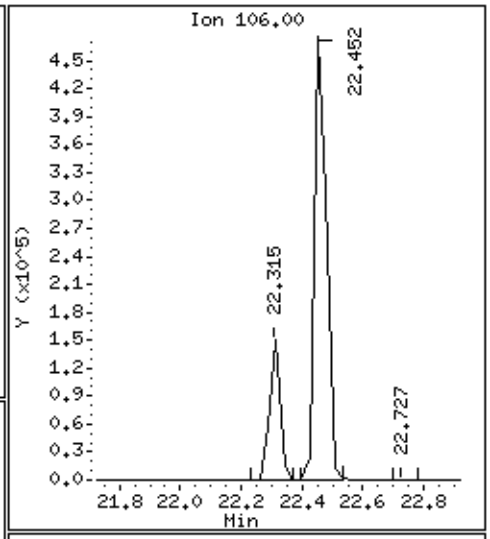
Concentration: 26.123 PPBV

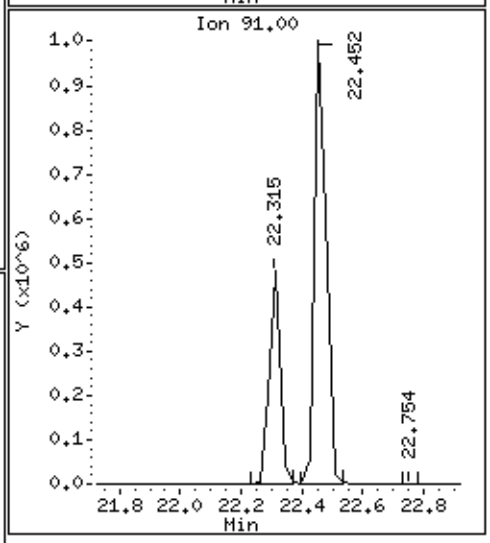












Data File: /chem/msdv.i/16Dec2014.b/v121621r1.d

Date : 16-DEC-2014 22:54

Client ID:

Instrument: msdv.i

Sample Info: 125ml #12019

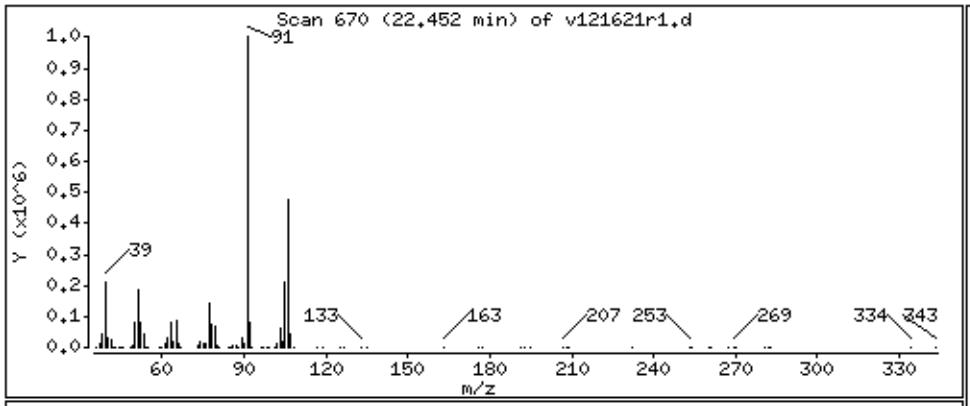
Operator: sn

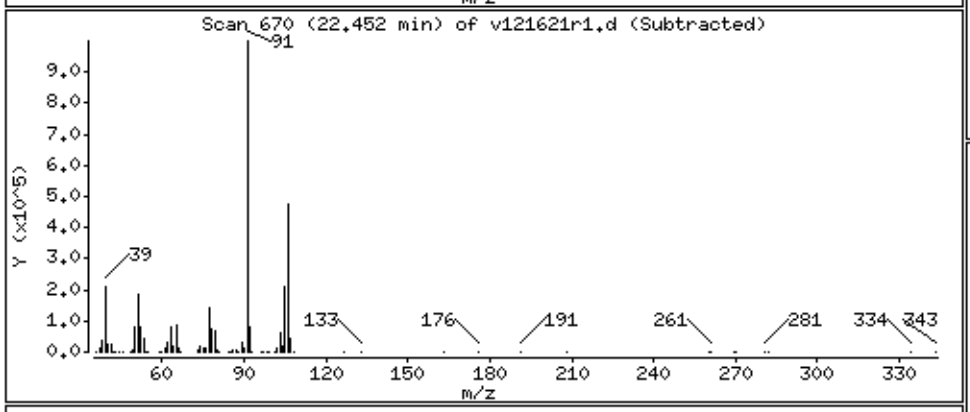
Column phase: RTx-624

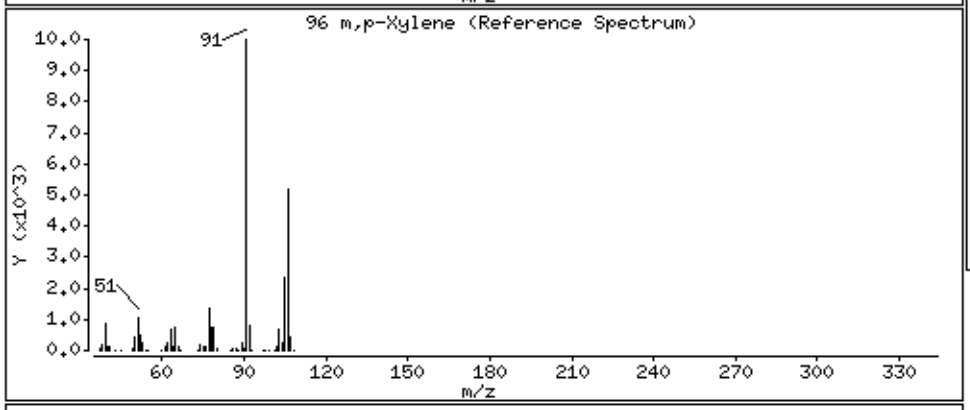
Column diameter: 0.32

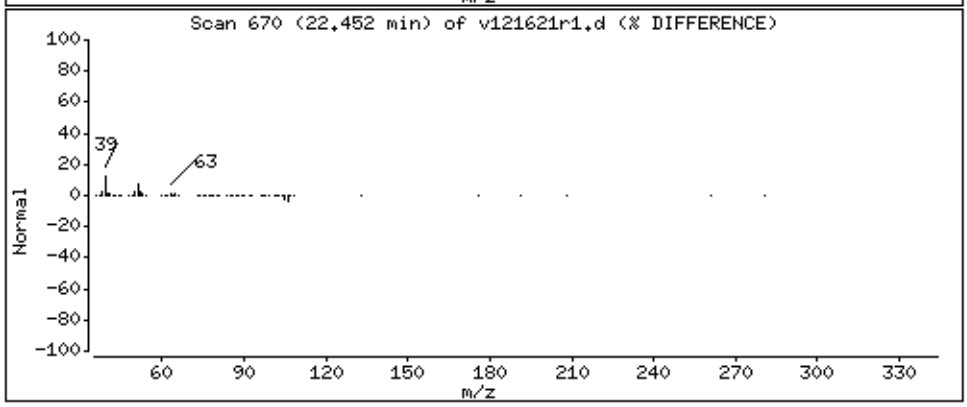
96 m,p-Xylene

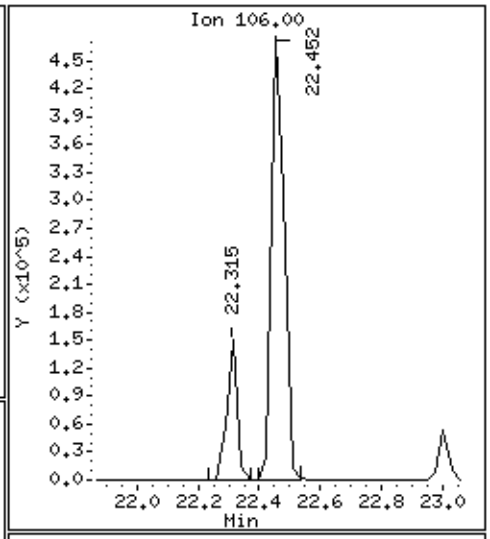
Concentration: 96.399 PPBV

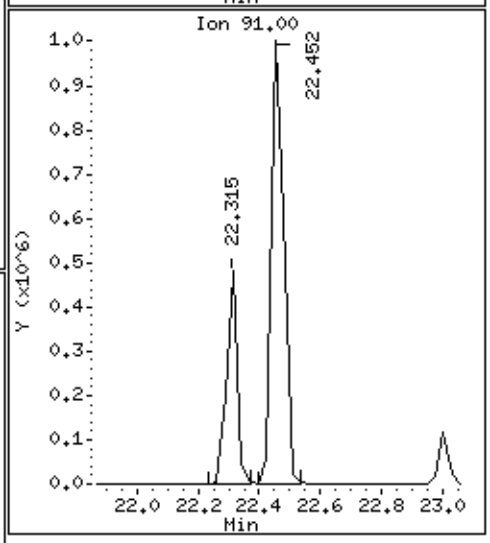












Data File: /chem/msdv.i/16Dec2014.b/v121621r1.d

Date : 16-DEC-2014 22:54

Client ID:

Instrument: msdv.i

Sample Info: 125ml #12019

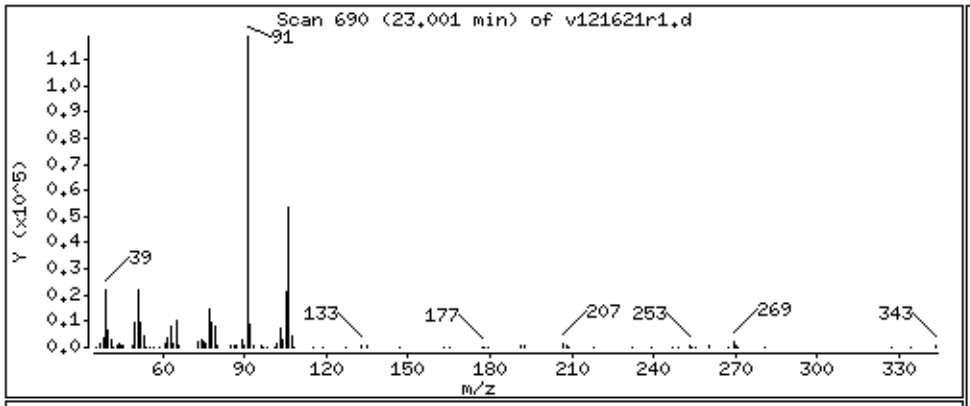
Operator: sn

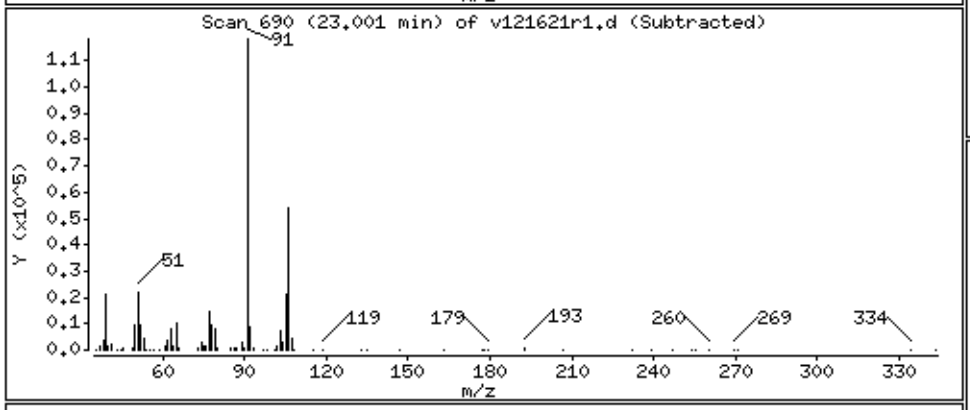
Column phase: RTx-624

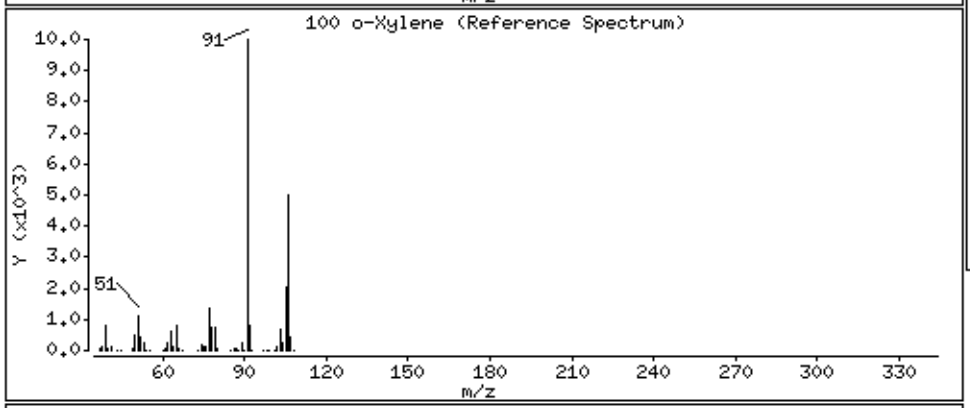
Column diameter: 0.32

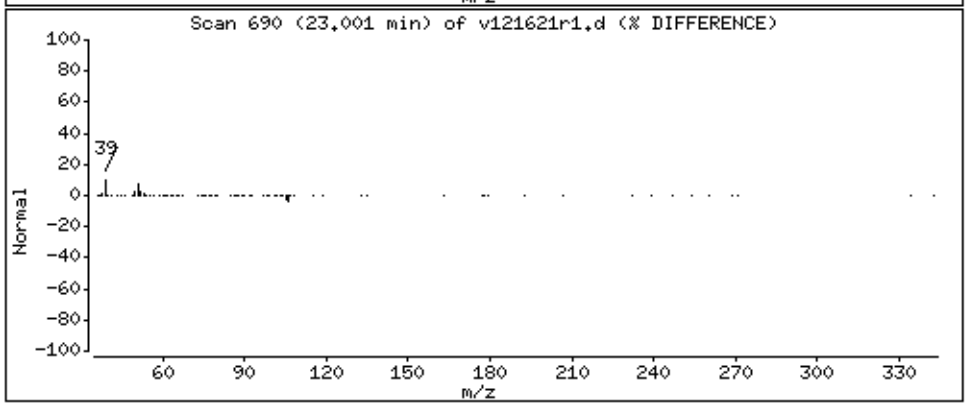
100 o-Xylene

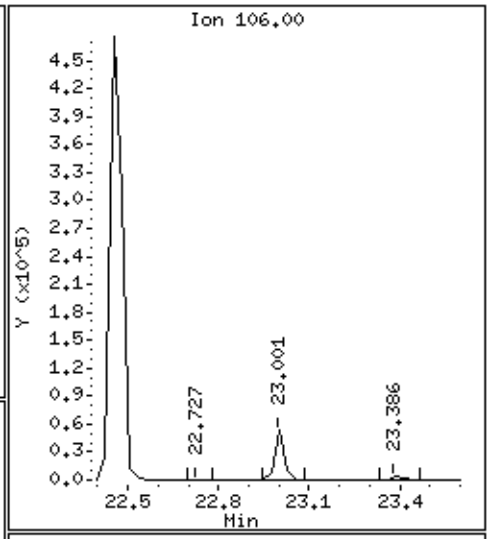
Concentration: 9.142 PPBV

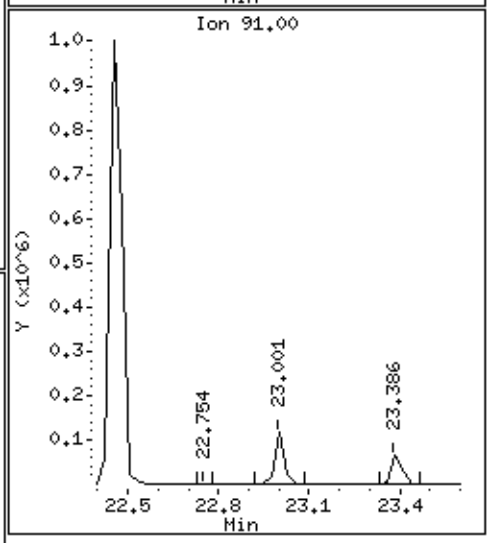












Data File: /chem/msdv.i/16Dec2014.b/v121621r1.d

Date : 16-DEC-2014 22:54

Client ID:

Instrument: msdv.i

Sample Info: 125ml #12019

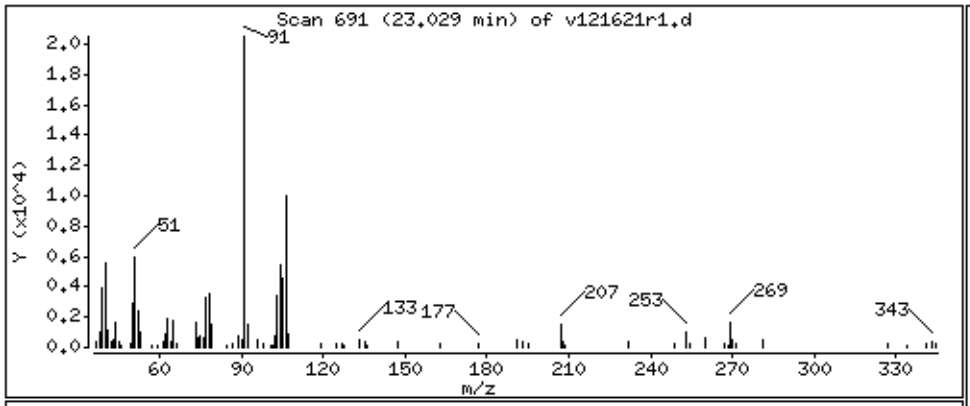
Operator: sn

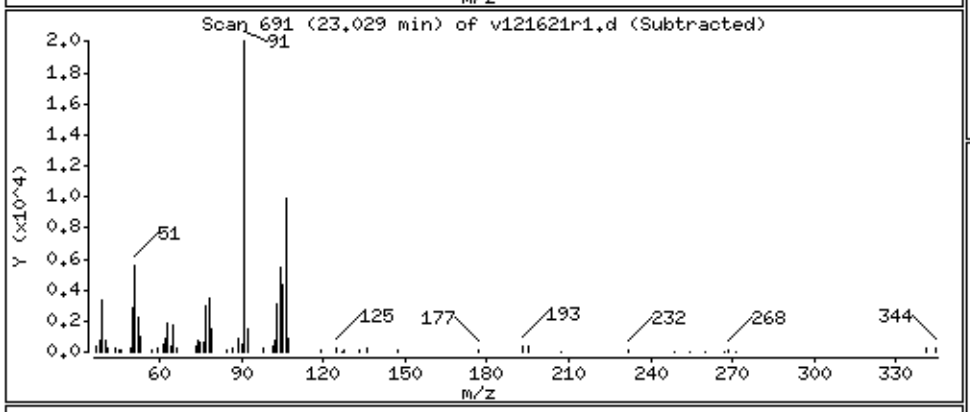
Column phase: RTx-624

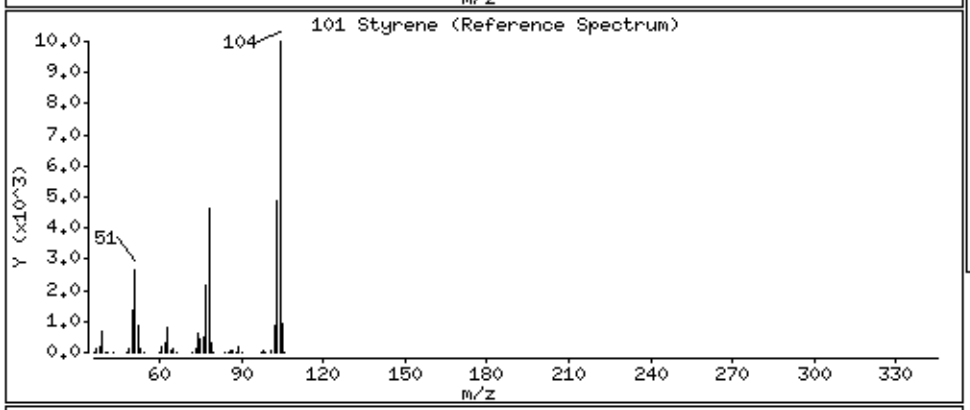
Column diameter: 0.32

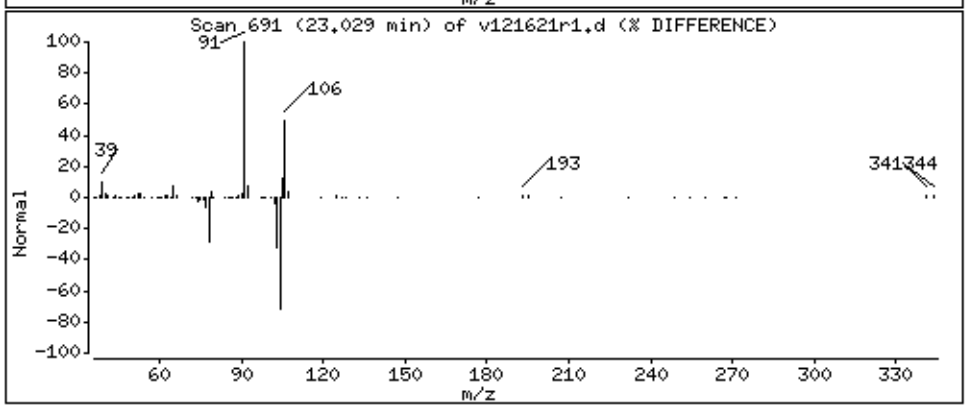
101 Styrene

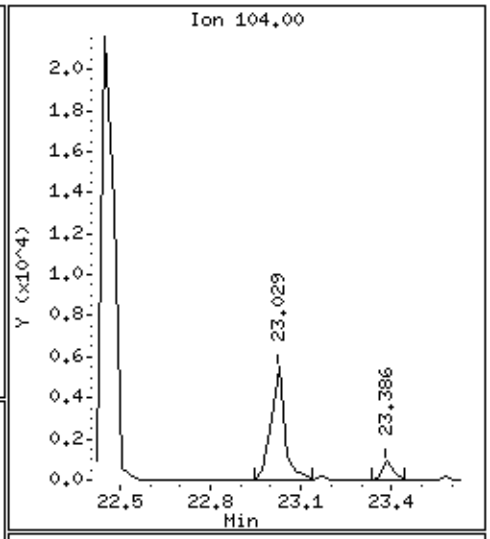
Concentration: 0.9291 PPBV

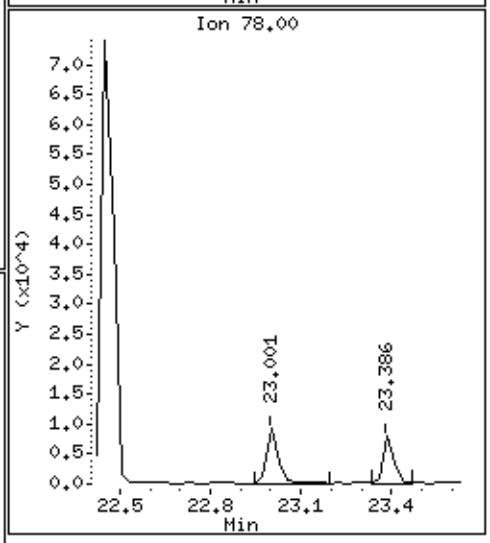












Data File: /chem/msdv.i/16Dec2014.b/v121621r1.d

Date : 16-DEC-2014 22:54

Client ID:

Instrument: msdv.i

Sample Info: 125ml #12019

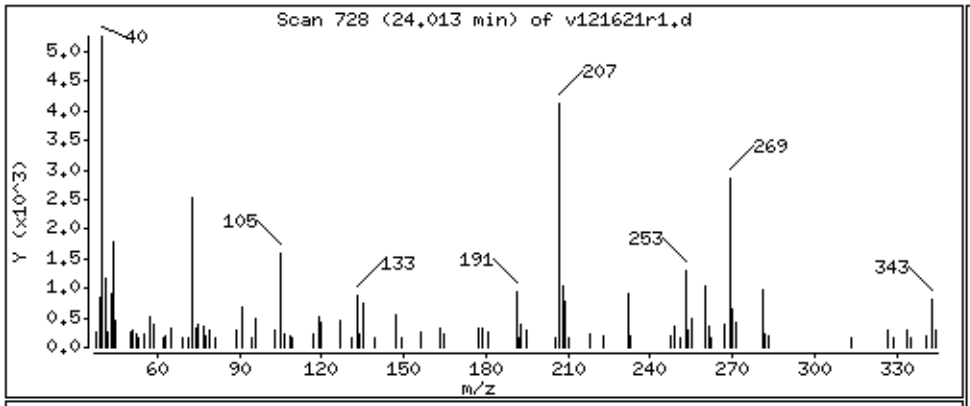
Operator: sn

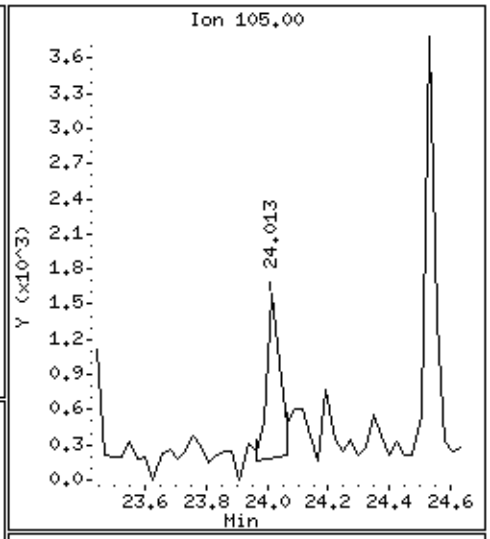
Column phase: RTx-624

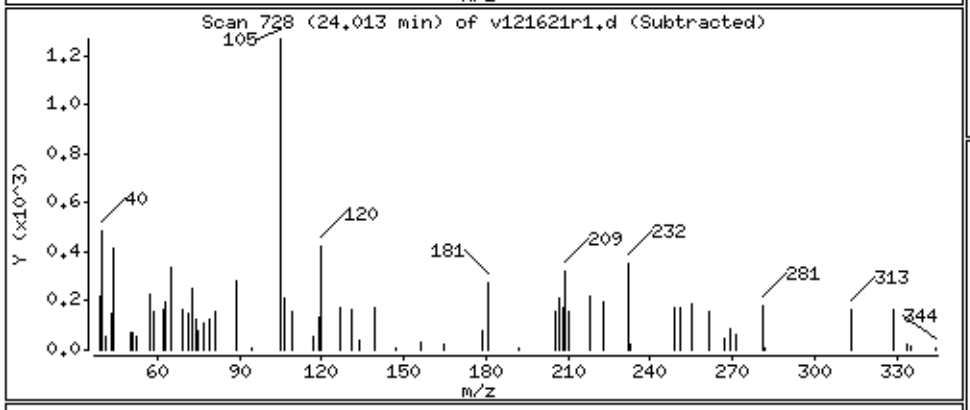
Column diameter: 0.32

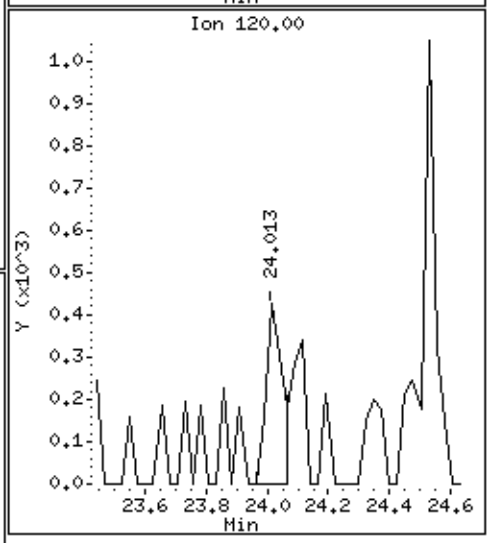
113 4-Ethyltoluene

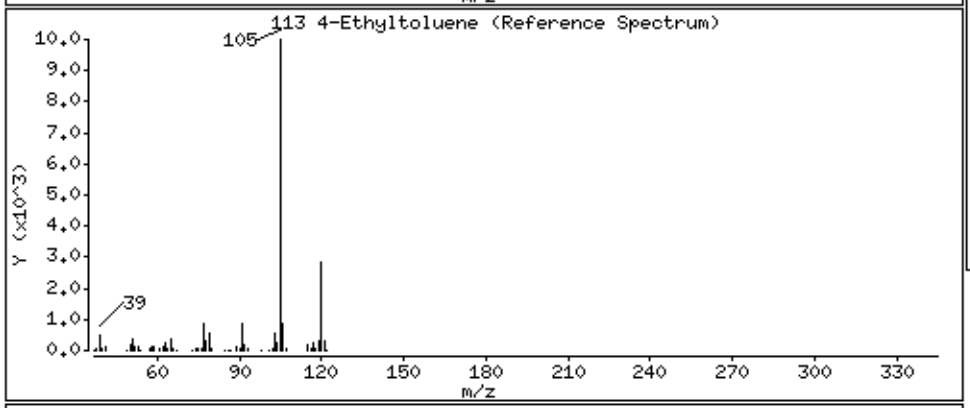
Concentration: 0.1782 PPBV

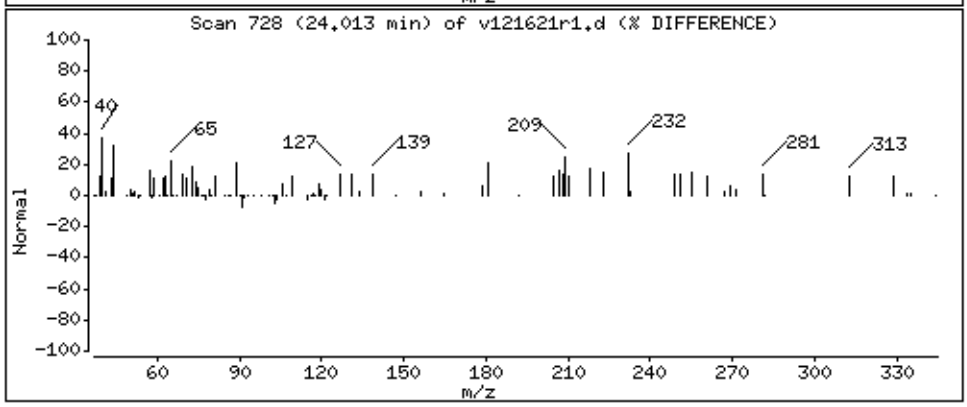












Data File: /chem/msdv.i/16Dec2014.b/v121621r1.d

Date : 16-DEC-2014 22:54

Client ID:

Instrument: msdv.i

Sample Info: 125ml #12019

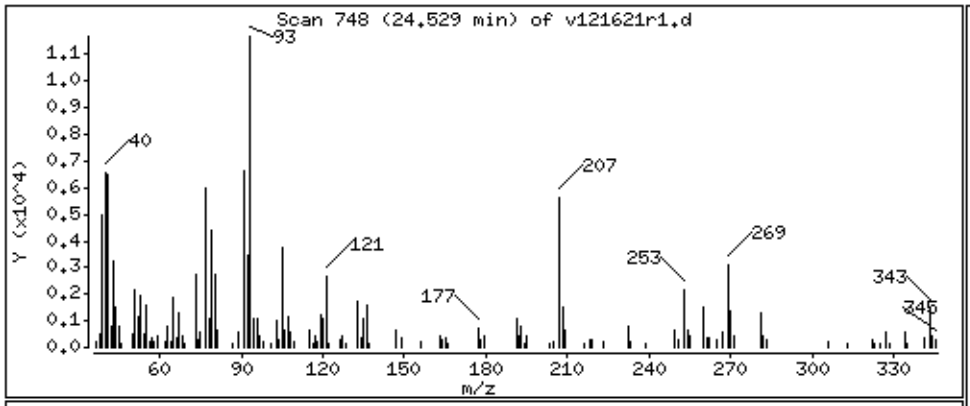
Operator: sn

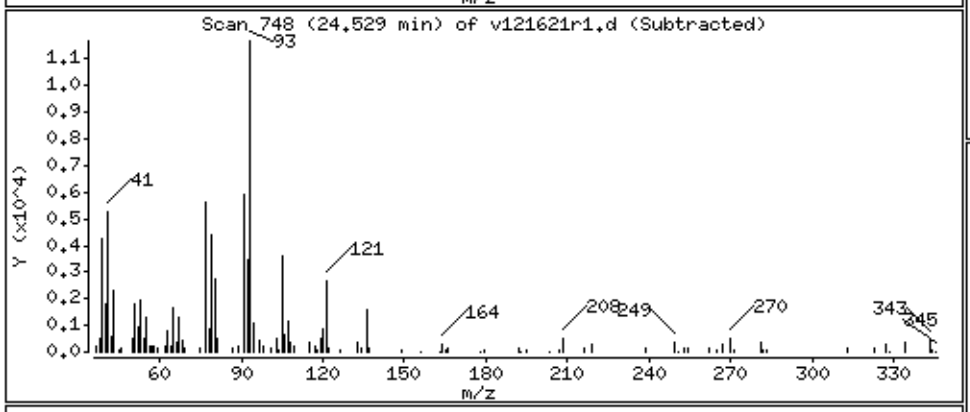
Column phase: RTx-624

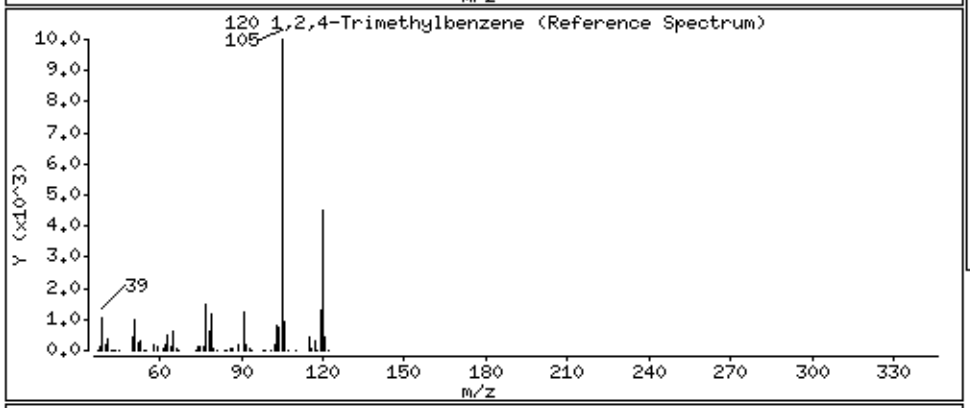
Column diameter: 0.32

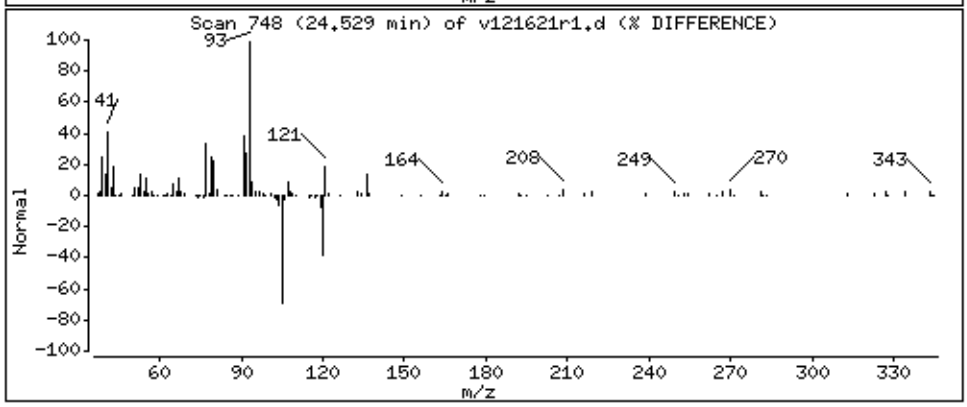
120 1,2,4-Trimethylbenzene

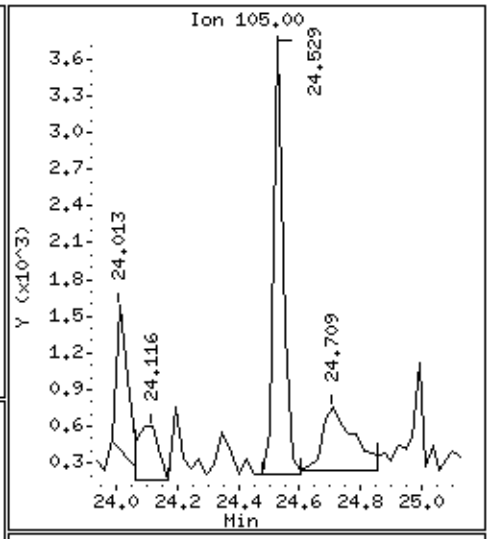
Concentration: 0.4865 PPBV

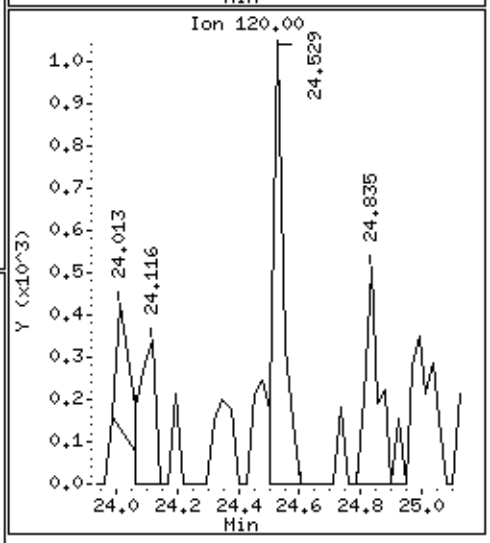












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Summary of Detected Compounds
MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: B5IA-AA (2014)

Lab ID#: 1412152AR1-07A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.84	0.49 J	4.1	2.4 J
Chloromethane	0.84	0.85	1.7	1.8
Freon 11	0.17	0.21	0.94	1.2
Ethanol	0.84	3.6 J0	1.6	6.7 J0
Freon 113	0.17	0.048 J	1.3	0.37 J
Acetone	0.84	5.1	2.0	12
2-Propanol	0.84	2.3	2.0	5.6
Carbon Disulfide	0.84	0.19 J	2.6	0.59 J
Methylene Chloride	0.33	0.49	1.2	1.7
Hexane	0.17	0.20	0.59	0.70
2-Butanone (Methyl Ethyl Ketone)	0.84	0.61 J	2.5	1.8 J
Cyclohexane	0.17	0.066 J	0.57	0.22 J
2,2,4-Trimethylpentane	0.84	0.10 J	3.9	0.47 J
Benzene	0.17	0.16 J	0.53	0.51 J
Heptane	0.17	0.15 J	0.68	0.62 J
4-Methyl-2-pentanone	0.17	0.29	0.68	1.2
Toluene	0.17	0.81	0.63	3.0
Ethyl Benzene	0.17	0.20	0.72	0.86
m,p-Xylene	0.17	0.47	0.72	2.0
o-Xylene	0.17	0.14 J	0.72	0.59 J
Styrene	0.17	0.080 J	0.71	0.34 J
4-Ethyltoluene	0.17	0.13 J	0.82	0.66 J
1,3,5-Trimethylbenzene	0.17	0.10 J	0.82	0.51 J
1,2,4-Trimethylbenzene	0.17	0.25	0.82	1.2
1,4-Dichlorobenzene	0.17	0.030 J	1.0	0.18 J

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Client Sample ID: B5IA-AA (2014)

Lab ID#: 1412152AR1-07A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**v121622r1**	**Date of Collection:**	**12/9/14 3:08:00 PM**
Dil. Factor:	**1.67**	**Date of Analysis:**	**12/17/14 05:22 AM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.84	0.49 J	4.1	2.4 J
Freon 114	0.17	Not Detected	1.2	Not Detected
Chloromethane	0.84	0.85	1.7	1.8
Vinyl Chloride	0.17	Not Detected	0.43	Not Detected
1,3-Butadiene	0.17	Not Detected	0.37	Not Detected
Bromomethane	0.84	Not Detected	3.2	Not Detected
Chloroethane	0.84	Not Detected	2.2	Not Detected
Freon 11	0.17	0.21	0.94	1.2
Ethanol	0.84	3.6 J0	1.6	6.7 J0
Freon 113	0.17	0.048 J	1.3	0.37 J
1,1-Dichloroethene	0.17	Not Detected	0.66	Not Detected
Acetone	0.84	5.1	2.0	12
2-Propanol	0.84	2.3	2.0	5.6
Carbon Disulfide	0.84	0.19 J	2.6	0.59 J
3-Chloropropene	0.84	Not Detected	2.6	Not Detected
Methylene Chloride	0.33	0.49	1.2	1.7
Methyl tert-butyl ether	0.17	Not Detected	0.60	Not Detected
trans-1,2-Dichloroethene	0.17	Not Detected	0.66	Not Detected
Hexane	0.17	0.20	0.59	0.70
1,1-Dichloroethane	0.17	Not Detected	0.68	Not Detected
2-Butanone (Methyl Ethyl Ketone)	0.84	0.61 J	2.5	1.8 J
cis-1,2-Dichloroethene	0.17	Not Detected	0.66	Not Detected
Tetrahydrofuran	0.84	Not Detected	2.5	Not Detected
Chloroform	0.17	Not Detected	0.82	Not Detected
1,1,1-Trichloroethane	0.17	Not Detected	0.91	Not Detected
Cyclohexane	0.17	0.066 J	0.57	0.22 J
Carbon Tetrachloride	0.17	Not Detected	1.0	Not Detected
2,2,4-Trimethylpentane	0.84	0.10 J	3.9	0.47 J
Benzene	0.17	0.16 J	0.53	0.51 J
1,2-Dichloroethane	0.17	Not Detected	0.68	Not Detected
Heptane	0.17	0.15 J	0.68	0.62 J
Trichloroethene	0.17	Not Detected	0.90	Not Detected
1,2-Dichloropropane	0.17	Not Detected	0.77	Not Detected
1,4-Dioxane	0.17	Not Detected	0.60	Not Detected
Bromodichloromethane	0.17	Not Detected	1.1	Not Detected
cis-1,3-Dichloropropene	0.17	Not Detected	0.76	Not Detected
4-Methyl-2-pentanone	0.17	0.29	0.68	1.2
Toluene	0.17	0.81	0.63	3.0
trans-1,3-Dichloropropene	0.17	Not Detected	0.76	Not Detected
1,1,2-Trichloroethane	0.17	Not Detected	0.91	Not Detected
Tetrachloroethene	0.17	Not Detected	1.1	Not Detected
2-Hexanone	0.84	Not Detected	3.4	Not Detected

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Client Sample ID: B5IA-AA (2014)

Lab ID#: 1412152AR1-07A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**v121622r1**	**Date of Collection:**	**12/9/14 3:08:00 PM**
Dil. Factor:	**1.67**	**Date of Analysis:**	**12/17/14 05:22 AM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Dibromochloromethane	0.17	Not Detected	1.4	Not Detected
1,2-Dibromoethane (EDB)	0.17	Not Detected	1.3	Not Detected
Chlorobenzene	0.17	Not Detected	0.77	Not Detected
Ethyl Benzene	0.17	0.20	0.72	0.86
m,p-Xylene	0.17	0.47	0.72	2.0
o-Xylene	0.17	0.14 J	0.72	0.59 J
Styrene	0.17	0.080 J	0.71	0.34 J
Bromoform	0.17	Not Detected	1.7	Not Detected
Cumene	0.17	Not Detected	0.82	Not Detected
1,1,2,2-Tetrachloroethane	0.17	Not Detected	1.1	Not Detected
Propylbenzene	0.17	Not Detected	0.82	Not Detected
4-Ethyltoluene	0.17	0.13 J	0.82	0.66 J
1,3,5-Trimethylbenzene	0.17	0.10 J	0.82	0.51 J
1,2,4-Trimethylbenzene	0.17	0.25	0.82	1.2
1,3-Dichlorobenzene	0.17	Not Detected UJ	1.0	Not Detected UJ
1,4-Dichlorobenzene	0.17	0.030 J	1.0	0.18 J
alpha-Chlorotoluene	0.84	Not Detected UJ	4.3	Not Detected UJ
1,2-Dichlorobenzene	0.17	Not Detected UJ	1.0	Not Detected UJ
1,2,4-Trichlorobenzene	0.84	Not Detected	6.2	Not Detected
Hexachlorobutadiene	0.84	Not Detected UJ	8.9	Not Detected UJ
Naphthalene	0.84	Not Detected	4.4	Not Detected

J = Estimated value.
J0 = Estimated value due to bias in the CCV.
UJ = Analyte associated with low bias in the CCV and/or LCS.
Container Type: 6 Liter Summa Canister (100% Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	109	70-130
Toluene-d8	106	70-130
4-Bromofluorobenzene	99	70-130

Eurofins Air Toxics Inc.

TO15/Modified TO-14A

Data file : /chem/msdv.i/16Dec2014.b/v121622r1.d
Lab Smp Id: 1412152AR1-07A
Inj Date : 17-DEC-2014 05:22
Operator : act Inst ID: msdv.i
Smp Info : 250ml #5695
Misc Info : 5.5"Hg -> 5.3psi
Comment : Low Level GC-MS
Method : /chem/msdv.i/16Dec2014.b/v14l1006d.m
Meth Date : 01-Jul-2015 09:03 sblack Quant Type: ISTD
Cal Date : 03-NOV-2014 11:17 Cal File: v110307.d
Als bottle: 1
Dil Factor: 1.67000
Integrator: HP RTE Compound Sublist: And19256r1.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
* 54 Bromochloromethane						CAS #: 74-97-5	
15.933	15.933 (1.000)	130	93875	5.00000		80.00- 120.00	100.00
15.933	15.933 (1.000)	128	76300			47.55- 107.55	81.28
15.933	15.933 (1.000)	49	234790			213.64- 273.64	250.11
* 71 1,4-Difluorobenzene						CAS #: 540-36-3	
17.305	17.305 (1.000)	114	419381	5.00000		80.00- 120.00	100.00
17.305	17.305 (1.000)	88	70078			0.00- 46.17	16.71
* 92 Chlorobenzene-d5						CAS #: 3114-55-4	
22.205	22.205 (1.000)	117	340071	5.00000		80.00- 120.00	100.00
22.205	22.205 (1.000)	82	211368			28.56- 88.56	62.15
$ 65 1,2-Dichloroethane-d4						CAS #: 17060-07-0	
16.756	16.756 (1.052)	65	188144	5.46100	5.461	80.00- 120.00	100.00
16.756	16.756 (1.052)	67	95506			28.37- 88.37	50.76
$ 80 Toluene-d8						CAS #: 2037-26-5	
19.879	19.879 (1.149)	98	426788	5.29308	5.293	80.00- 120.00	100.00
19.879	19.879 (1.149)	70	55848			0.00- 41.90	13.09

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

$  80 Toluene-d8 (continued)
 19.879  19.879 (1.149)   100    271073                    34.60-  94.60    63.51
-------------------------------------------------------------------------------
$ 106 Bromofluorobenzene                            CAS #: 460-00-4
 23.704  23.704 (1.067)   174    144992 4.95771    4.958  80.00- 120.00   100.00
 23.678  23.704 (1.066)    95    204564                  113.85- 173.85   141.09
 23.704  23.704 (1.067)   176    142903                    68.89- 128.89    98.56
-------------------------------------------------------------------------------
    4 Dichlorodifluoromethane/Fr12                  CAS #: 75-71-8
  5.240   5.202 (0.329)    85     25876 0.29421   0.4913  80.00- 120.00   100.00(a)
  5.278   5.202 (0.331)    87      7562                     1.57-  61.57    29.23
-------------------------------------------------------------------------------
    8 Chloromethane                                 CAS #: 74-87-3
  7.128   7.052 (0.447)    50     27116 0.51161   0.8544  80.00- 120.00   100.00
  7.166   7.052 (0.450)    52      8990                     1.81-  61.81    33.15
-------------------------------------------------------------------------------
   20 Trichlorofluoromethane/Fr11                   CAS #: 75-69-4
 11.184  11.183 (0.702)   101     11399 0.12591   0.2103  80.00- 120.00   100.00
 11.184  11.183 (0.702)   103      7178                    34.11-  94.11    62.97
-------------------------------------------------------------------------------
   24 Ethanol                                       CAS #: 64-17-5
 12.129  12.101 (0.761)    45     41143 2.14387    3.580  80.00- 120.00   100.00
 12.129  12.101 (0.761)    46     15437                     8.51-  68.51    37.52
 12.129  12.101 (0.761)    43      9432                     0.00-  54.10    22.92
-------------------------------------------------------------------------------
   28 Freon 113                                     CAS #: 76-13-1
 12.596  12.568 (0.791)   151      1572 0.02885  0.04817  80.00- 120.00   100.00(a)
 12.596  12.568 (0.791)   153      1301                    33.65-  93.65    82.81
 12.596  12.568 (0.791)   101      2149                    96.37- 156.37   136.70
-------------------------------------------------------------------------------
   31 Acetone                                       CAS #: 67-64-1
 12.843  12.816 (0.806)    58     67934 3.06288    5.115  80.00- 120.00   100.00
 12.843  12.816 (0.806)    43    303849                   413.15- 473.15   447.27
-------------------------------------------------------------------------------
   33 Carbon Disulfide                              CAS #: 75-15-0
 12.926  12.925 (0.811)    76      9717 0.11293   0.1886  80.00- 120.00   100.00(a)
-------------------------------------------------------------------------------
   34 2-Propanol                                    CAS #: 67-63-0
 13.200  13.173 (0.828)    45    140872 1.37161    2.290  80.00- 120.00   100.00
 13.200  13.173 (0.828)    43     33100                     0.00-  50.74    23.50
 13.200  13.173 (0.828)    59      4118                     0.00-  32.83     2.92
-------------------------------------------------------------------------------
   37 Methylene Chloride                            CAS #: 75-09-2
 13.667  13.640 (0.858)    84      8372 0.29335   0.4899  80.00- 120.00   100.00
 13.667  13.640 (0.858)    49     18810                   212.37- 272.37   224.69
 13.667  13.640 (0.858)    51      6354                    43.31- 103.31    75.90
-------------------------------------------------------------------------------
```

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
43 Hexane					CAS #: 110-54-3		
14.381	14.381 (0.903)	57	9716	0.11859	0.1980	80.00- 120.00	100.00
14.381	14.381 (0.903)	43	14771			57.65- 117.65	152.02
14.381	14.381 (0.903)	86	1118			0.00- 40.67	11.51
51 2-Butanone					CAS #: 78-93-3		
15.592	15.571 (0.979)	72	5993	0.36302	0.6062	80.00- 120.00	100.00(a)
15.592	15.571 (0.979)	43	57137			794.80- 854.80	953.36
15.613	15.571 (0.980)	57	2851			18.01- 78.01	47.58
57 Cyclohexane					CAS #: 110-82-7		
16.273	16.242 (1.021)	84	1954	0.03927	0.06558	80.00- 120.00	100.00(a)
16.242	16.242 (1.019)	56	6473			157.43- 217.43	331.16
16.242	16.242 (1.019)	41	5685			105.99- 165.99	290.83
63 2,2,4-Trimethylpentane					CAS #: 540-84-1		
16.728	16.728 (1.050)	56	5234	0.06036	0.1008	80.00- 120.00	100.00(a)
16.728	16.728 (1.050)	57	9341			258.69- 318.69	178.46
16.728	16.728 (1.050)	41	6456			79.91- 139.91	123.36
64 Benzene					CAS #: 71-43-2		
16.756	16.756 (0.968)	78	11879	0.09598	0.1603	80.00- 120.00	100.00(a)
16.756	16.756 (0.968)	77	2801			0.00- 53.73	23.58
69 Heptane					CAS #: 142-82-5		
16.975	16.948 (0.981)	57	4802	0.09003	0.1503	80.00- 120.00	100.00(a)
16.975	16.948 (0.981)	100	971			0.00- 51.27	20.23
16.975	16.948 (0.981)	43	15875			235.24- 295.24	330.55
79 4-Methyl-2-pentanone					CAS #: 108-10-1		
19.610	19.587 (1.133)	43	30397	0.17401	0.2906	80.00- 120.00	100.00
19.610	19.587 (1.133)	58	7684			0.00- 57.24	25.28
19.610	19.587 (1.133)	85	1795			0.00- 38.20	5.91
81 Toluene					CAS #: 108-88-3		
19.991	19.991 (1.155)	91	66313	0.48542	0.8106	80.00- 120.00	100.00
19.991	19.991 (1.155)	92	37413			28.60- 88.60	56.42
95 Ethyl Benzene					CAS #: 100-41-4		
22.315	22.315 (1.005)	106	5964	0.11898	0.1987	80.00- 120.00	100.00
22.315	22.315 (1.005)	91	16213			292.36- 352.36	271.83
96 m,p-Xylene					CAS #: 108-38-3		
22.480	22.452 (1.012)	106	13943	0.28210	0.4711	80.00- 120.00	100.00
22.480	22.452 (1.012)	91	31331			164.15- 224.15	224.69

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
100 o-Xylene					CAS #: 95-47-6		
23.001	23.001 (1.036)	106	3757	0.08169	0.1364	80.00- 120.00	100.00(a)
23.001	23.001 (1.036)	91	7577			186.63- 246.63	201.66
101 Styrene					CAS #: 100-42-5		
23.029	23.029 (1.037)	104	3240	0.04815	0.08042	80.00- 120.00	100.00(a)
23.029	23.029 (1.037)	78	3222			28.70- 88.70	99.44
113 4-Ethyltoluene					CAS #: 622-96-8		
24.013	24.039 (1.081)	105	7056	0.08074	0.1348	80.00- 120.00	100.00(a)
24.013	24.039 (1.081)	120	2932			0.18- 60.18	41.56
114 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
24.116	24.116 (1.086)	105	4507	0.06176	0.1031	80.00- 120.00	100.00(a)
24.116	24.116 (1.086)	120	2137			20.44- 80.44	47.41
120 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
24.529	24.529 (1.105)	105	8914	0.15083	0.2519	80.00- 120.00	100.00
24.529	24.529 (1.105)	120	3960			19.27- 79.27	44.42
124 1,4-Dichlorobenzene					CAS #: 106-46-7		
24.992	24.992 (1.125)	146	968	0.01806	0.03015	80.00- 120.00	100.00(a)
25.014	24.992 (1.127)	148	1156			38.92- 98.92	119.44
24.858	24.992 (1.119)	111	441			11.61- 71.61	45.54

QC Flag Legend

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

Report Date: 01-Jul-2015 14:00

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdv.i
Lab File ID: v121622r1.d
Lab Smp Id: 1412152AR1-07A
Analysis Type: VOA
Quant Type: ISTD
Operator: act
Method File: /chem/msdv.i/16Dec2014.b/v14l1006d.m
Misc Info: 5.5"Hg -> 5.3psi

Calibration Date: 16-DEC-2014
Calibration Time: 08:42

Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
54 Bromochloromethan	109722	65833	153611	93875	-14.44
71 1,4-Difluorobenze	445503	267302	623704	419381	-5.86
92 Chlorobenzene-d5	361081	216649	505513	340071	-5.82

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
54 Bromochloromethan	15.93	15.60	16.26	15.93	0.00
71 1,4-Difluorobenze	17.30	16.97	17.63	17.30	0.00
92 Chlorobenzene-d5	22.21	21.88	22.54	22.21	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: 01-Jul-2015 14:00

Eurofins Air Toxics Inc.

RECOVERY REPORT

Client Name: Client SDG: 17Dec2014
Sample Matrix: GAS Fraction: VOA
Lab Smp Id: 1412152AR1-07A
Level: LOW Operator: act
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: AT12.spk Quant Type: ISTD
Sublist File: And19256r1.sub
Method File: /chem/msdv.i/16Dec2014.b/v14l1006d.m
Misc Info: 5.5"Hg -> 5.3psi

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 65 1,2-Dichloroethane	5.000	5.461	109.22	70-130
$ 80 Toluene-d8	5.000	5.293	105.86	70-130
$ 106 Bromofluorobenzene	5.000	4.958	99.15	70-130

Data File: /chem/msdv.i/16Dec2014.b/v121622r1.d

Date : 17-DEC-2014 05:22

Client ID:

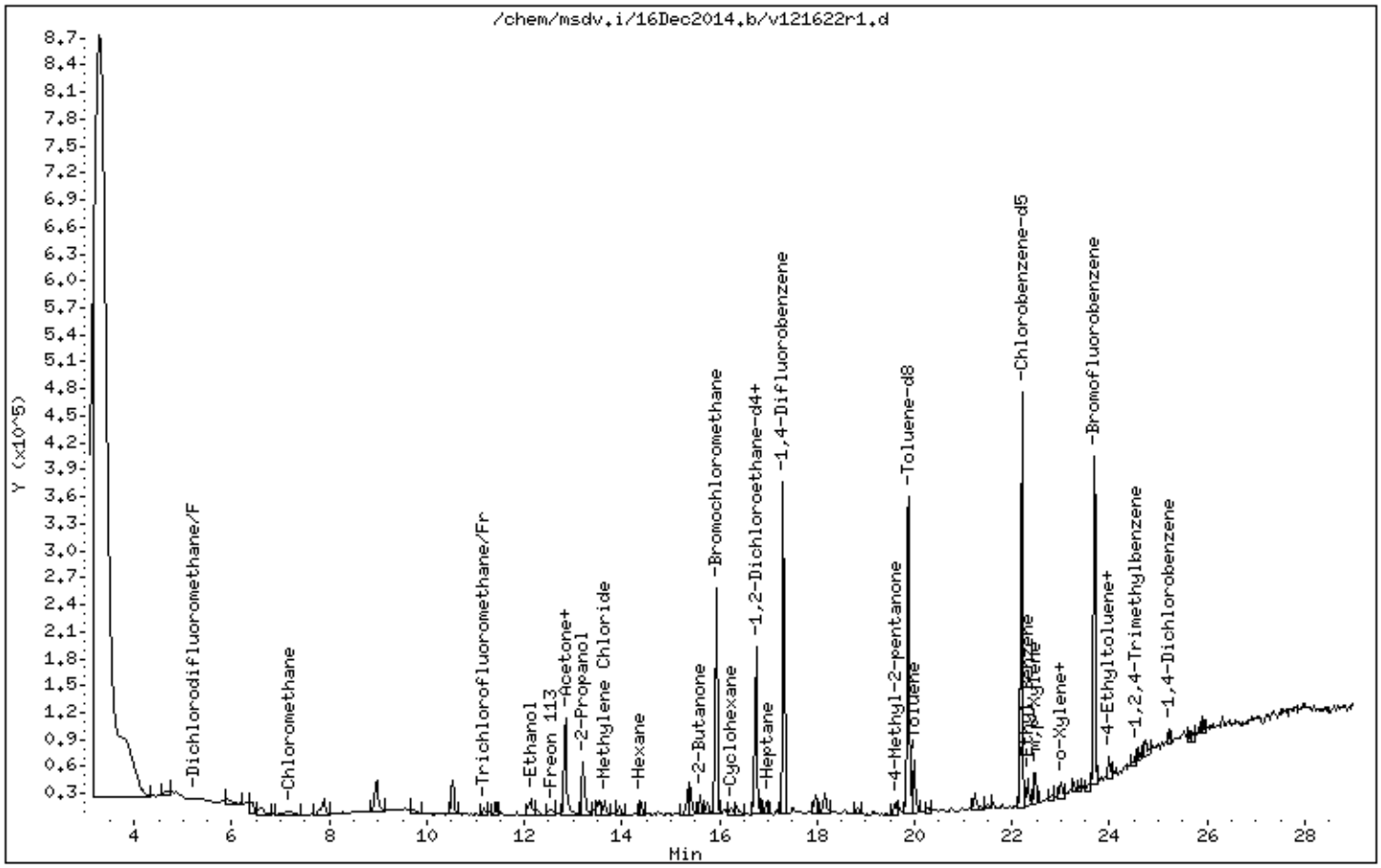
Instrument: msdv.i

Sample Info: 250ml #5695

Operator: act

Column phase: RTx-624

Column diameter: 0.32



Data File: /chem/msdv.i/16Dec2014.b/v121622r1.d

Date : 17-DEC-2014 05:22

Client ID:

Instrument: msdv.i

Sample Info: 250ml #5695

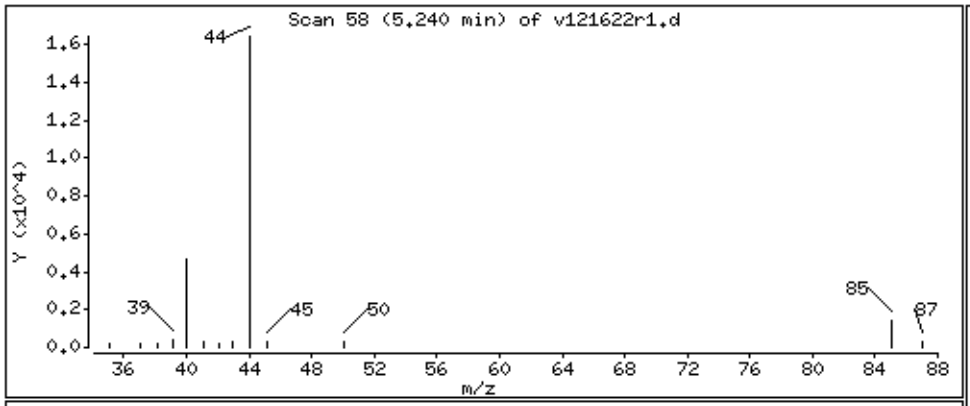
Operator: act

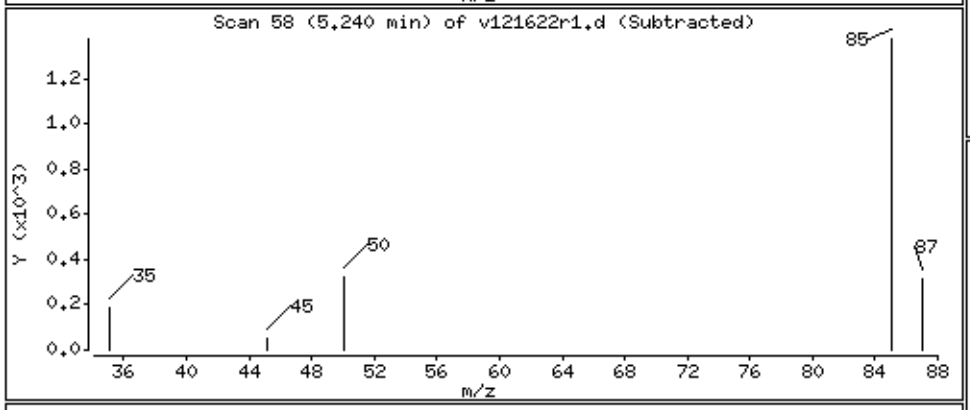
Column phase: RTx-624

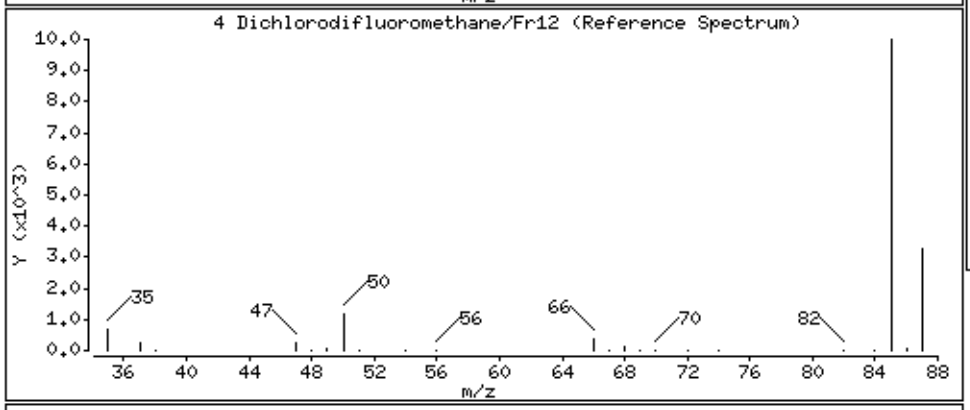
Column diameter: 0.32

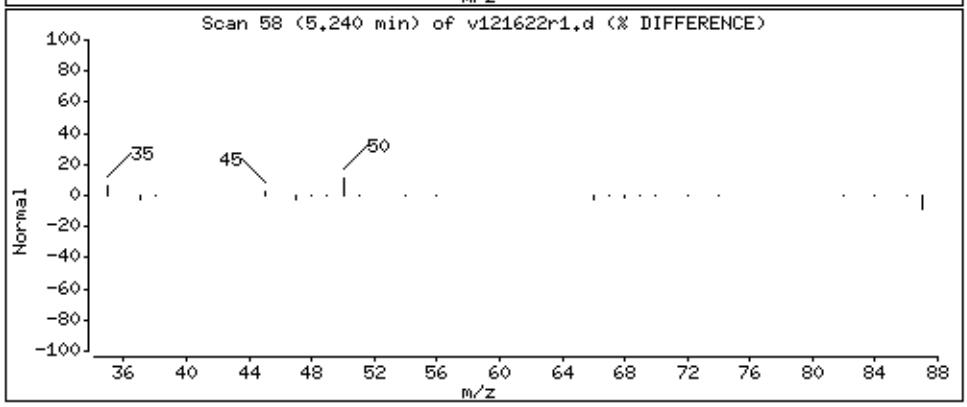
4 Dichlorodifluoromethane/Fr12

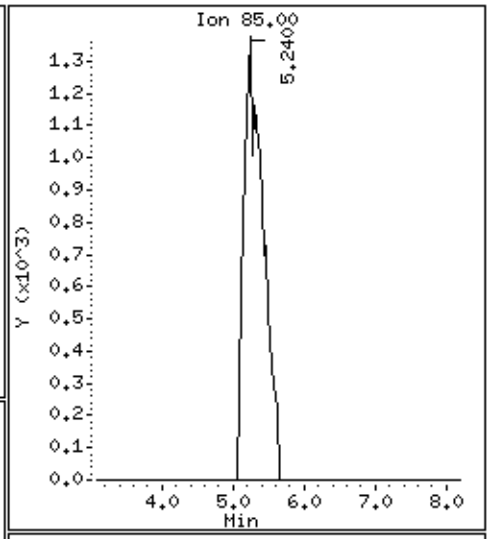
Concentration: 0.4913 PPBV

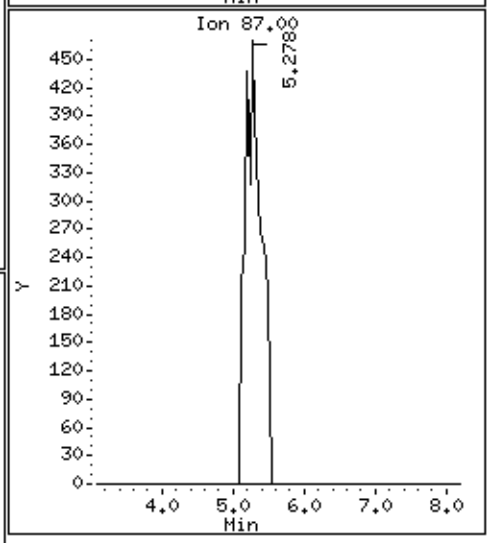












Data File: /chem/msdv.i/16Dec2014.b/v121622r1.d

Date : 17-DEC-2014 05:22

Client ID:

Instrument: msdv.i

Sample Info: 250ml #5695

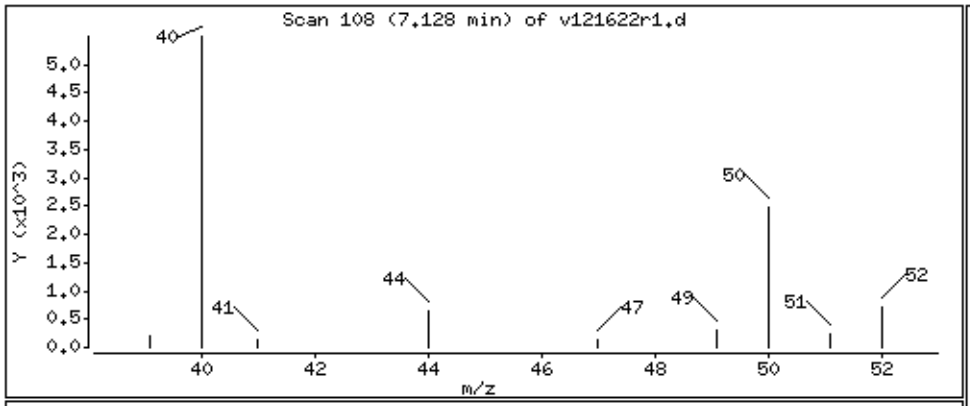
Operator: act

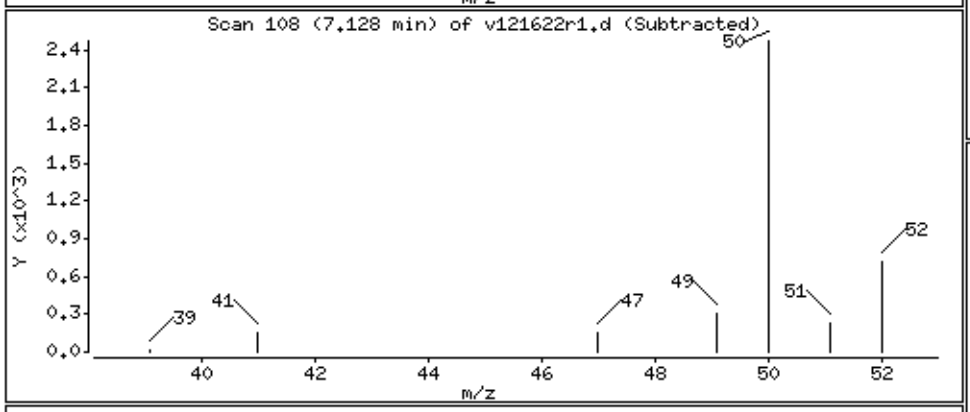
Column phase: RTx-624

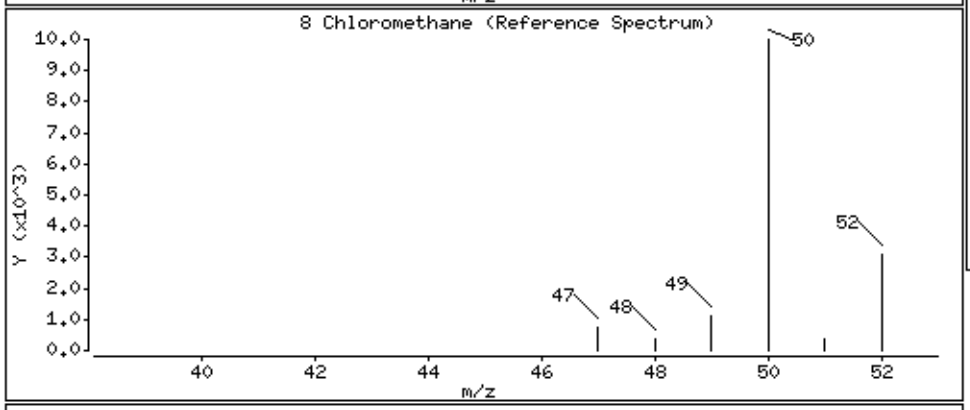
Column diameter: 0.32

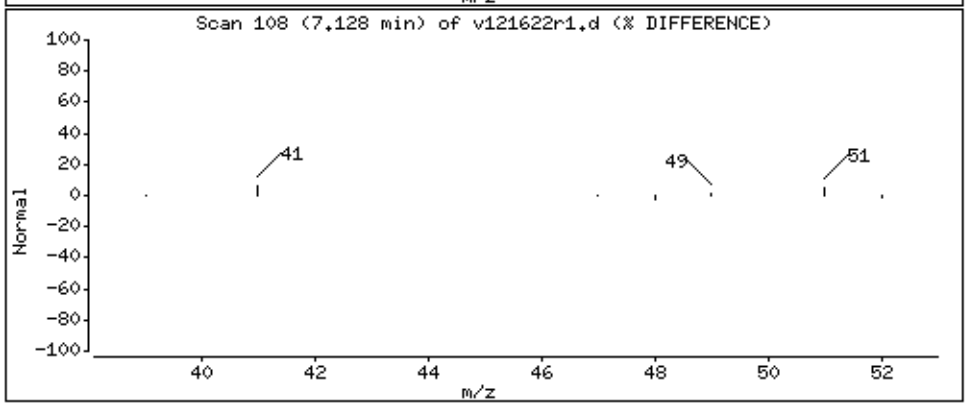
8 Chloromethane

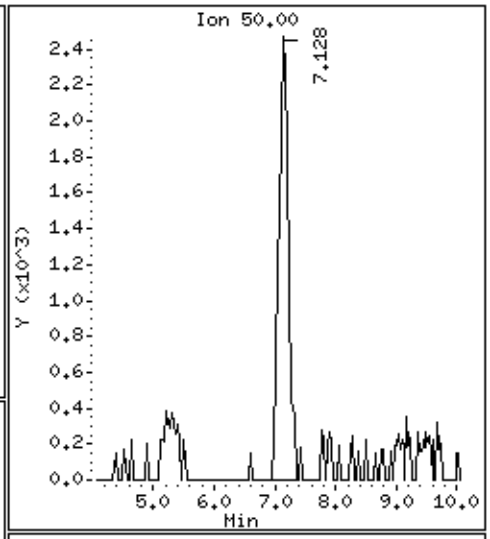
Concentration: 0.8544 PPBV

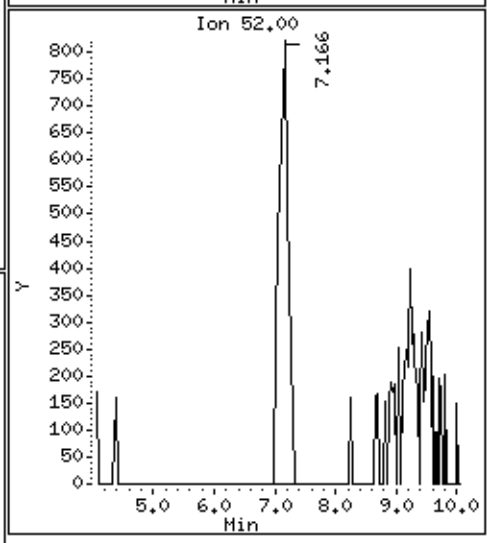












Data File: /chem/msdv.i/16Dec2014.b/v121622r1.d

Date : 17-DEC-2014 05:22

Client ID:

Instrument: msdv.i

Sample Info: 250ml #5695

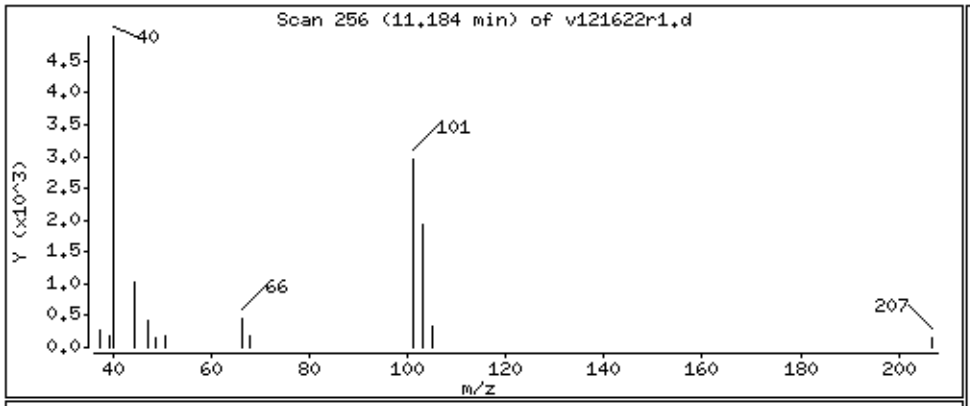
Operator: act

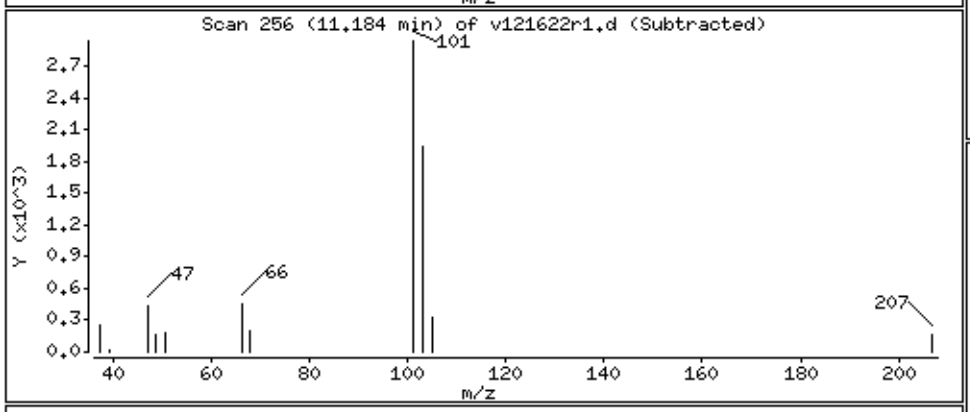
Column phase: RTx-624

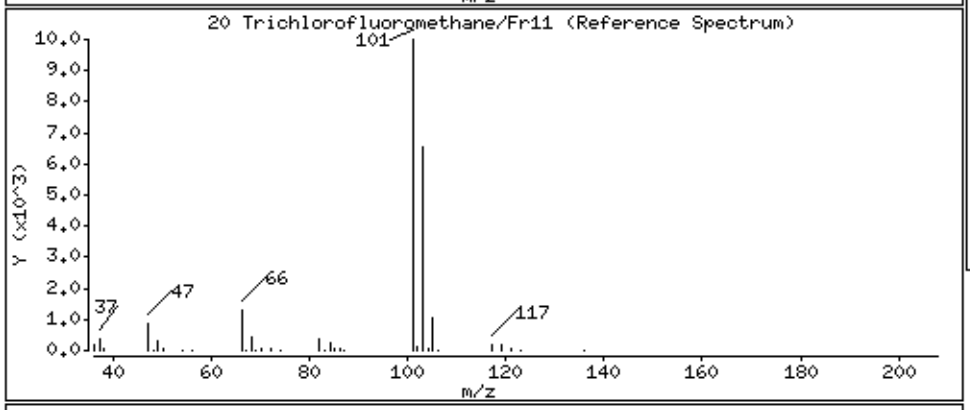
Column diameter: 0.32

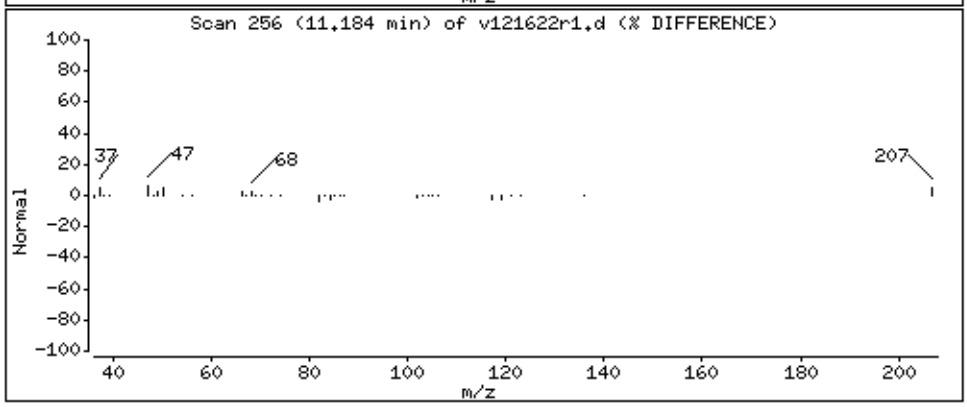
20 Trichlorofluoromethane/Fr11

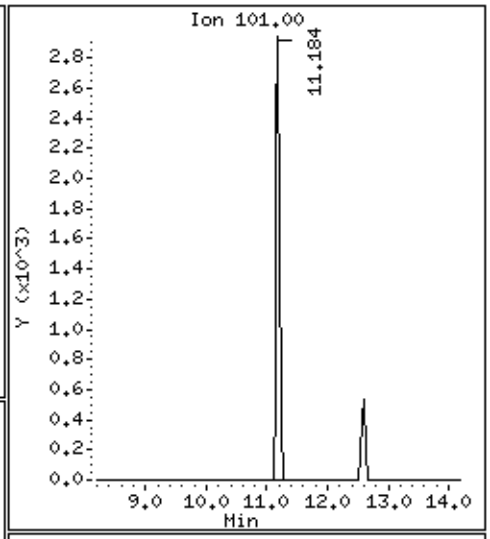
Concentration: 0.2103 PPBV

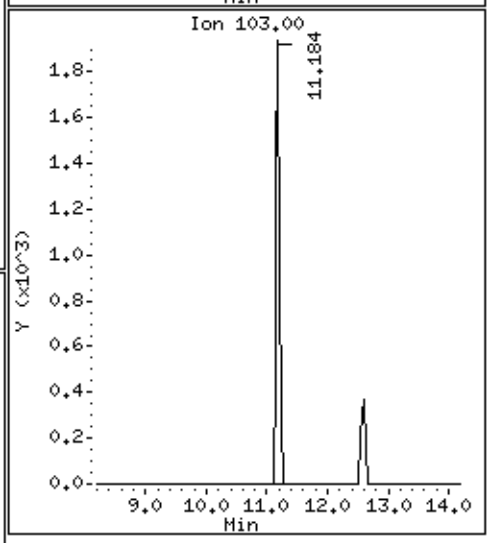












Data File: /chem/msdv.i/16Dec2014.b/v121622r1.d

Date : 17-DEC-2014 05:22

Client ID:

Instrument: msdv.i

Sample Info: 250ml #5695

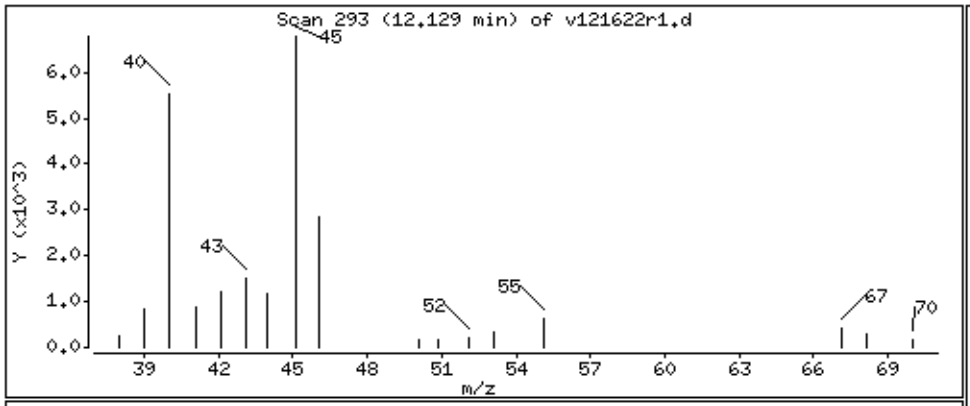
Operator: act

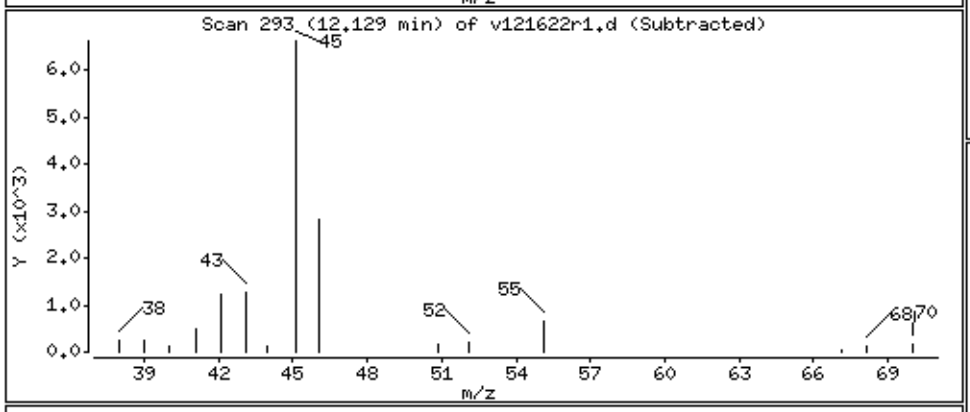
Column phase: RTx-624

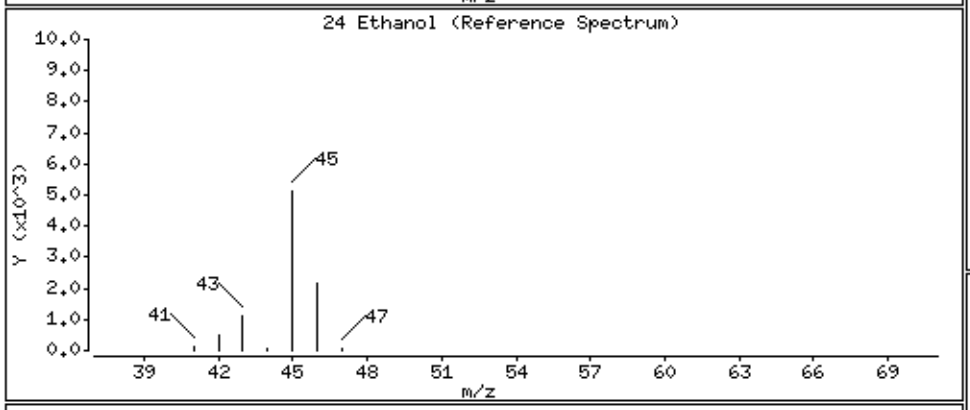
Column diameter: 0.32

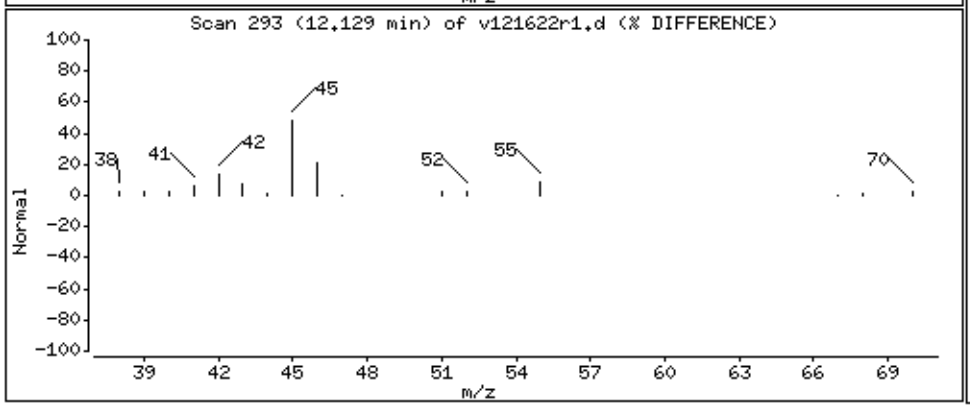
24 Ethanol

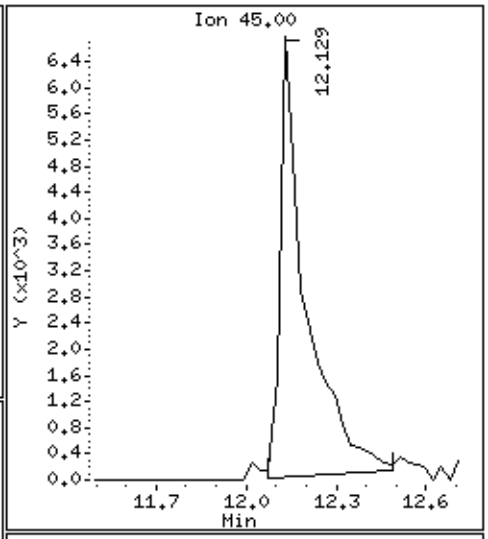
Concentration: 3.580 PPBV

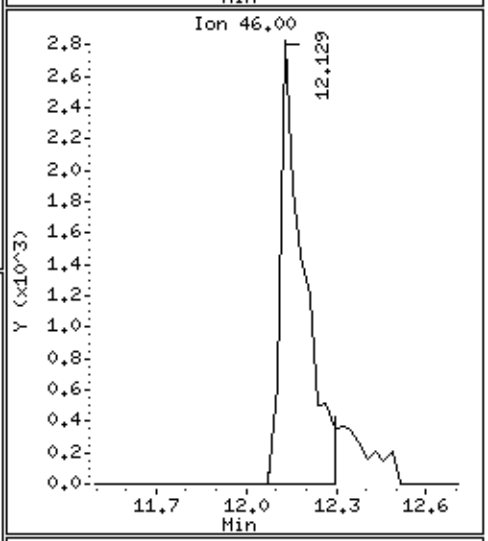


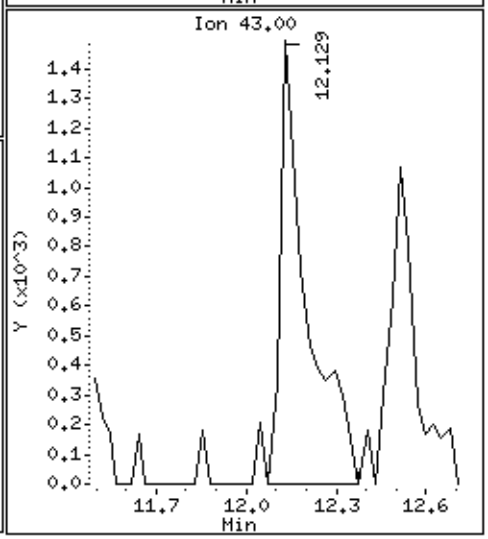












Data File: /chem/msdv.i/16Dec2014.b/v121622r1.d

Date : 17-DEC-2014 05:22

Client ID:

Instrument: msdv.i

Sample Info: 250ml #5695

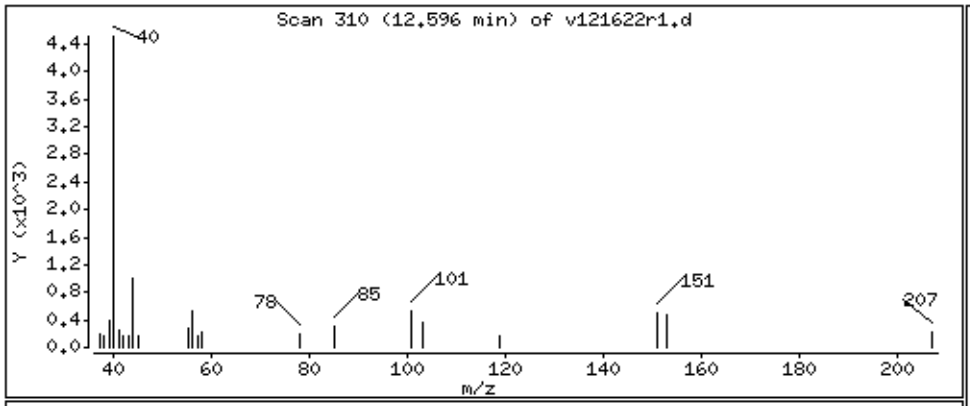
Operator: act

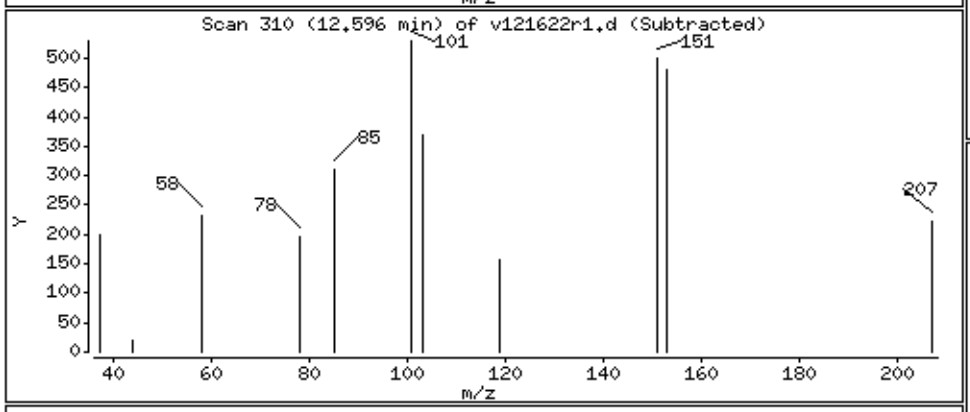
Column phase: RTx-624

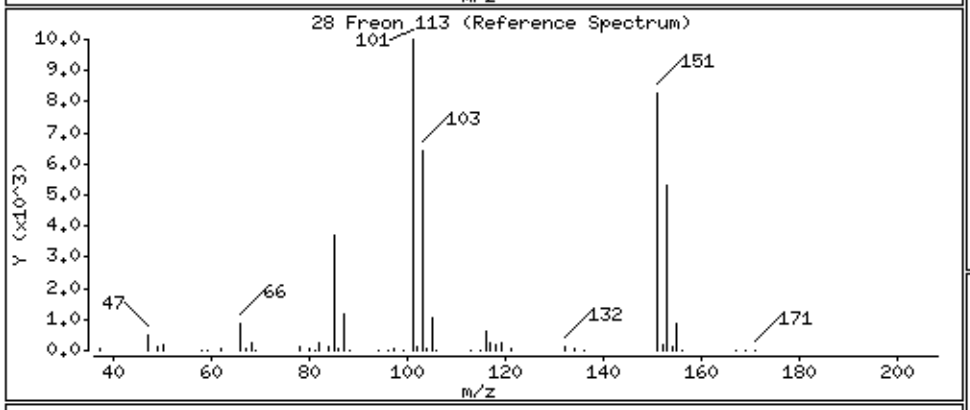
Column diameter: 0.32

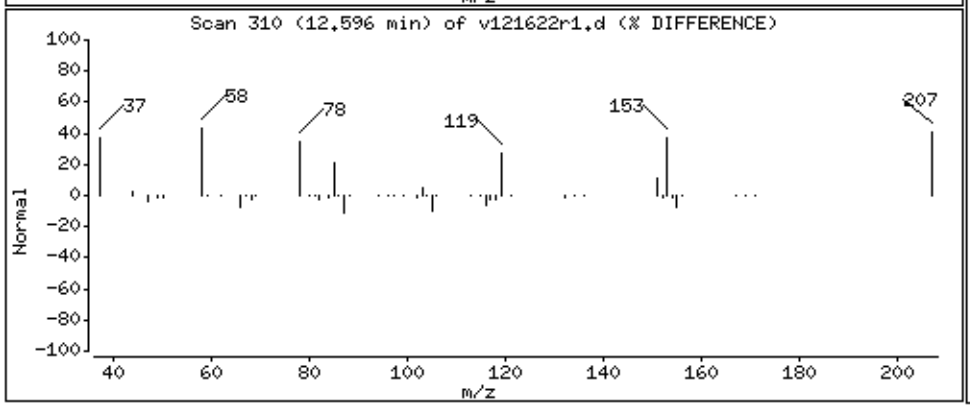
28 Freon 113

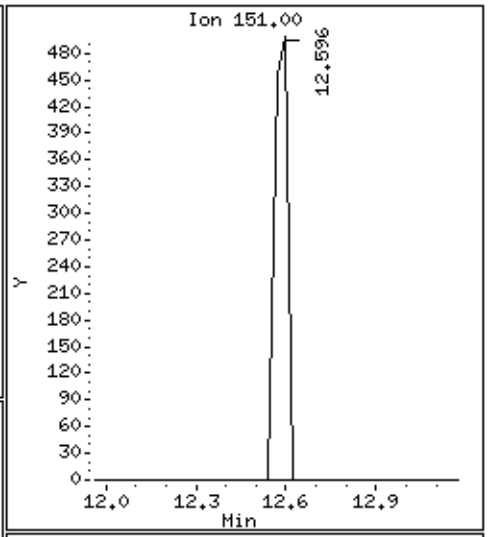
Concentration: 0.04817 PPBV

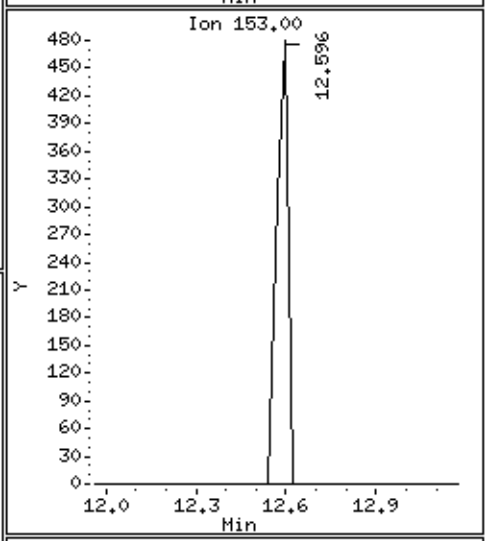


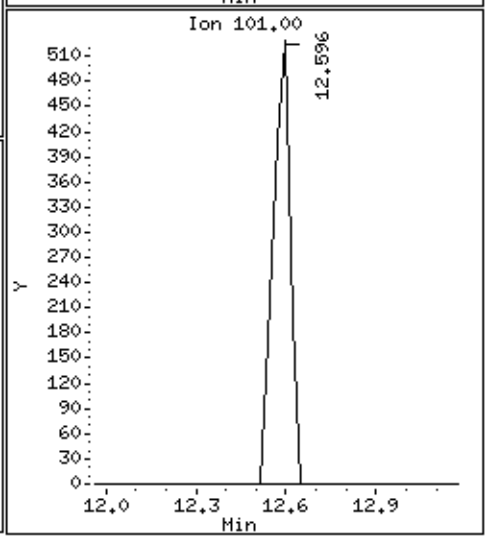












Data File: /chem/msdv.i/16Dec2014.b/v121622r1.d

Date : 17-DEC-2014 05:22

Client ID:

Instrument: msdv.i

Sample Info: 250ml #5695

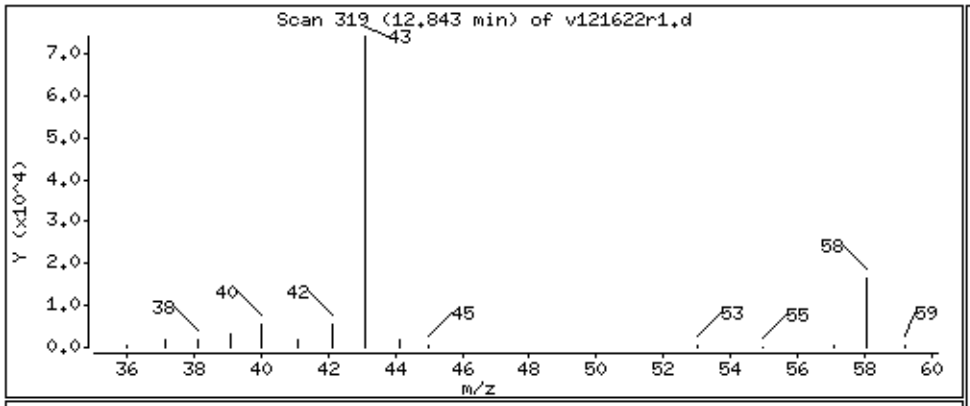
Operator: act

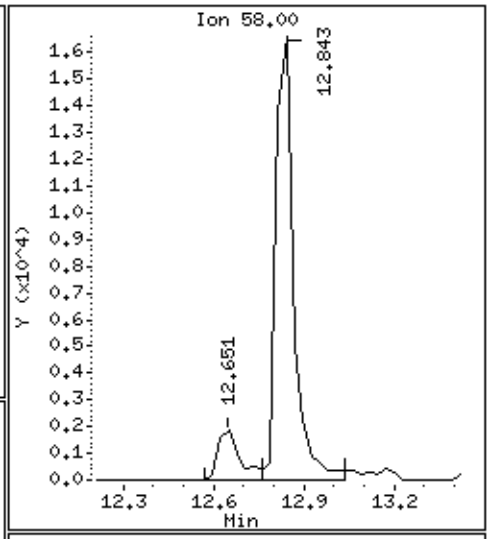
Column phase: RTx-624

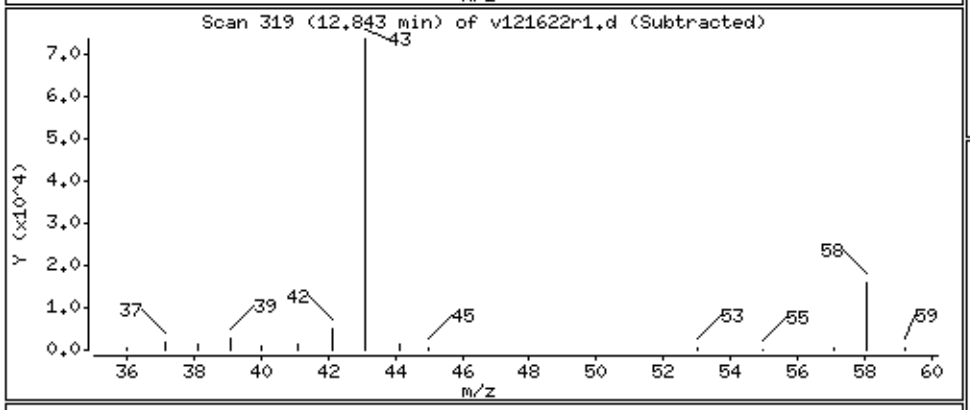
Column diameter: 0.32

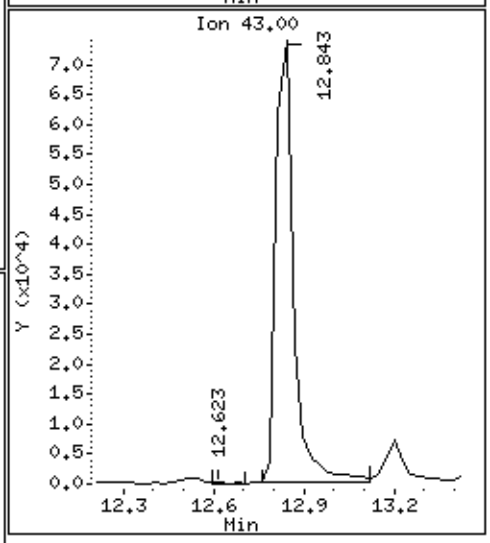
31 Acetone

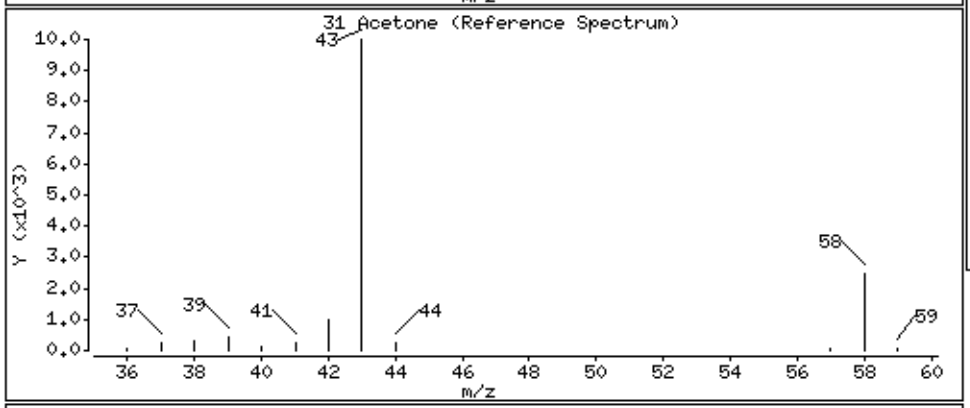
Concentration: 5.115 PPBV

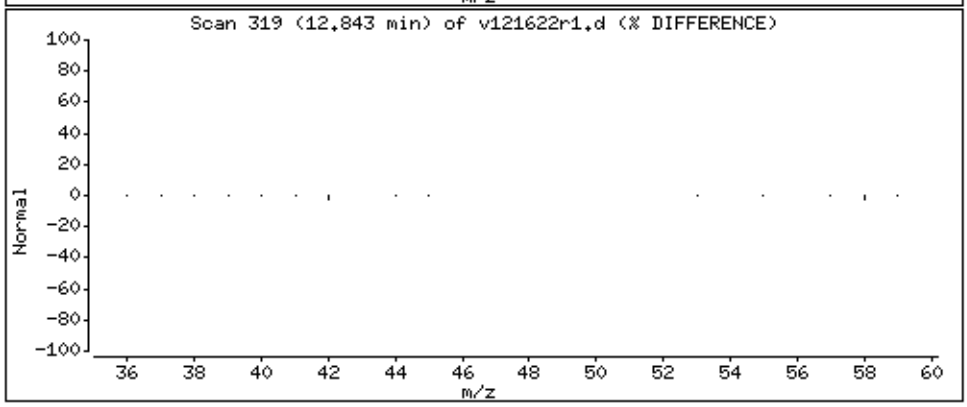












Data File: /chem/msdv.i/16Dec2014.b/v121622r1.d

Date : 17-DEC-2014 05:22

Client ID:

Instrument: msdv.i

Sample Info: 250ml #5695

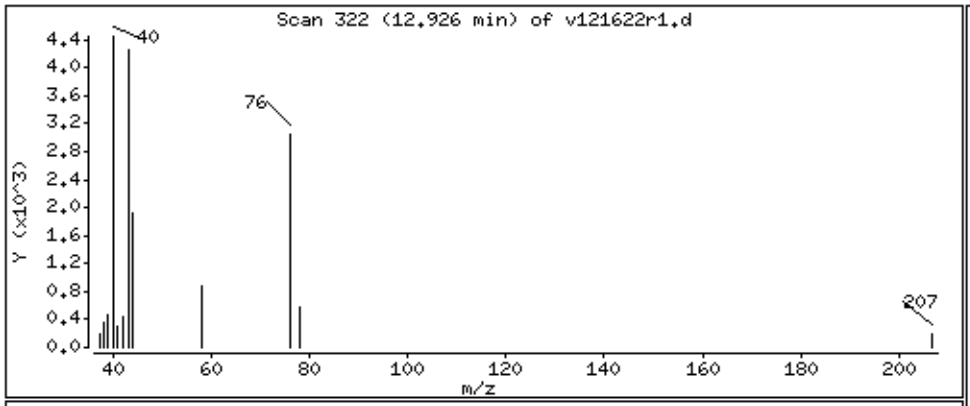
Operator: act

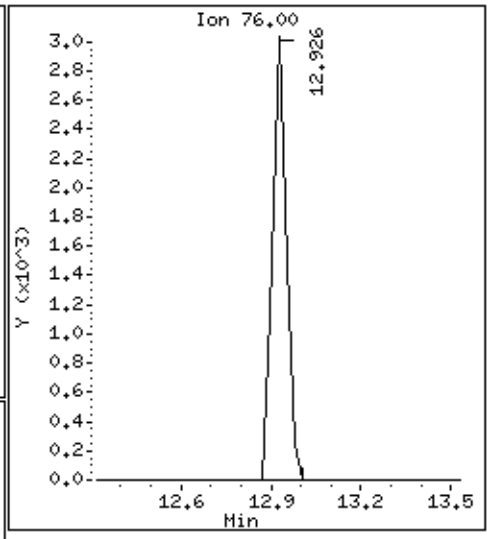
Column phase: RTx-624

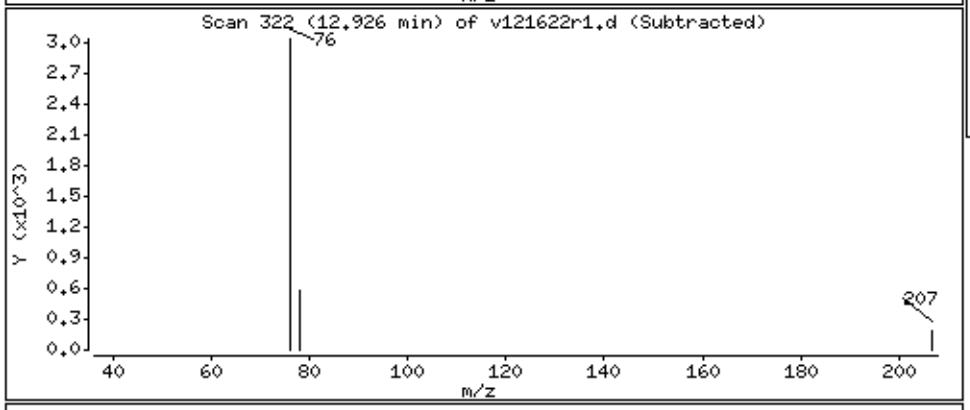
Column diameter: 0.32

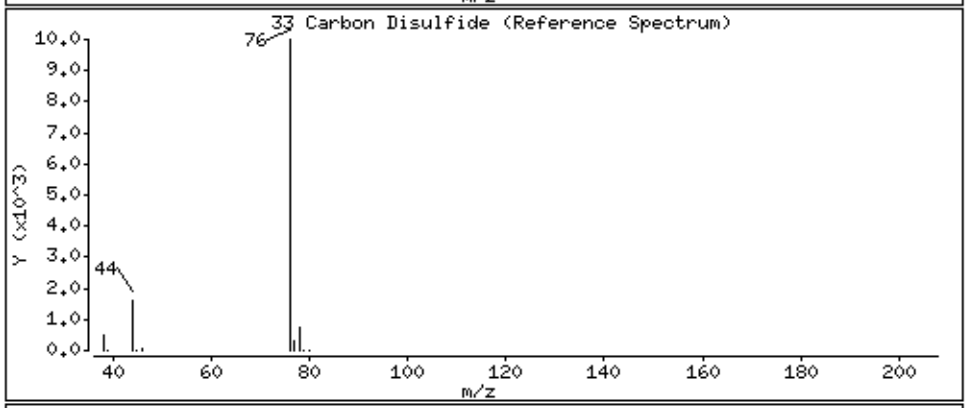
33 Carbon Disulfide

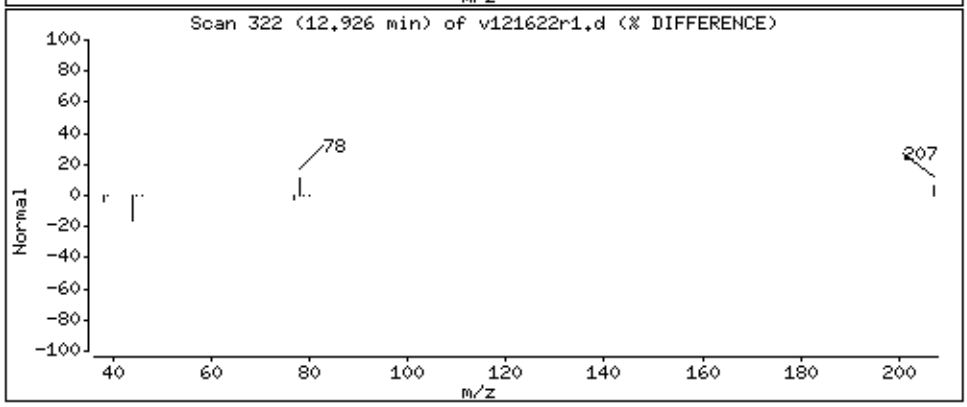
Concentration: 0.1886 PPBV











Data File: /chem/msdv.i/16Dec2014.b/v121622r1.d

Date : 17-DEC-2014 05:22

Client ID:

Instrument: msdv.i

Sample Info: 250ml #5695

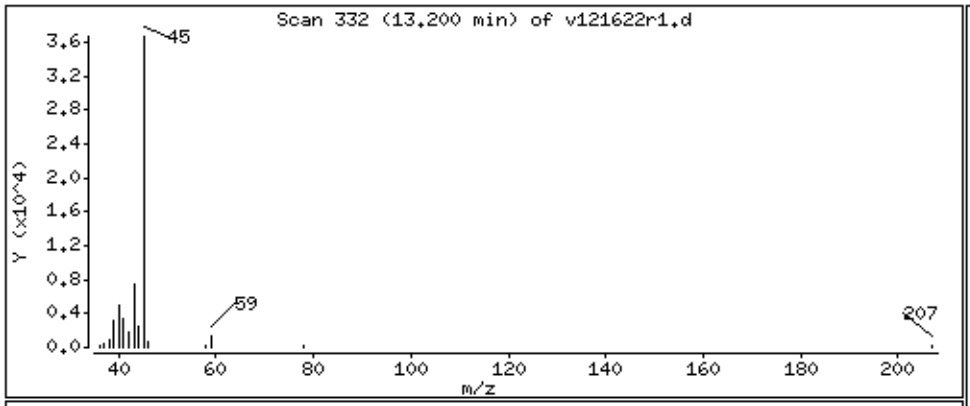
Operator: act

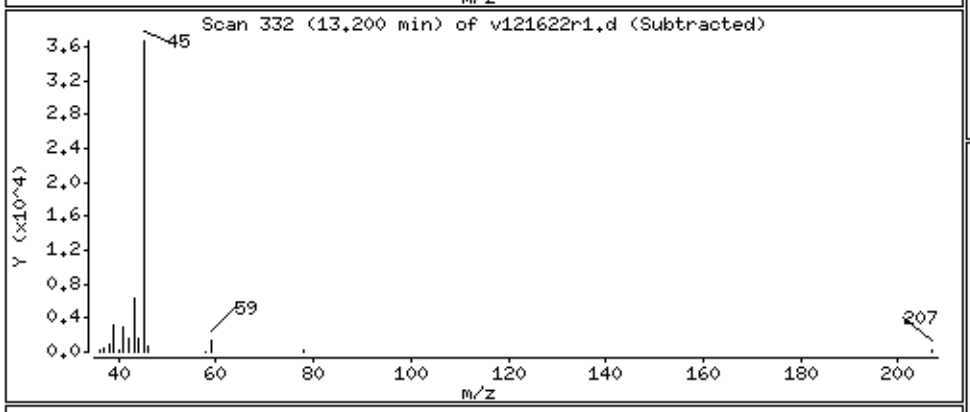
Column phase: RTx-624

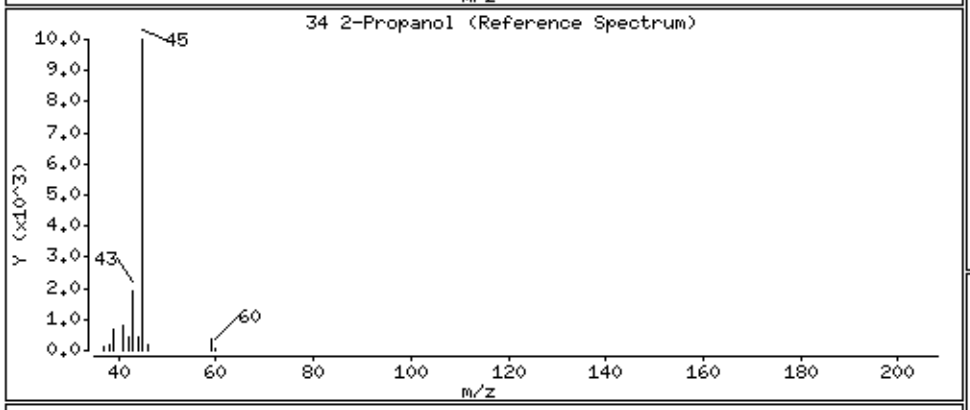
Column diameter: 0.32

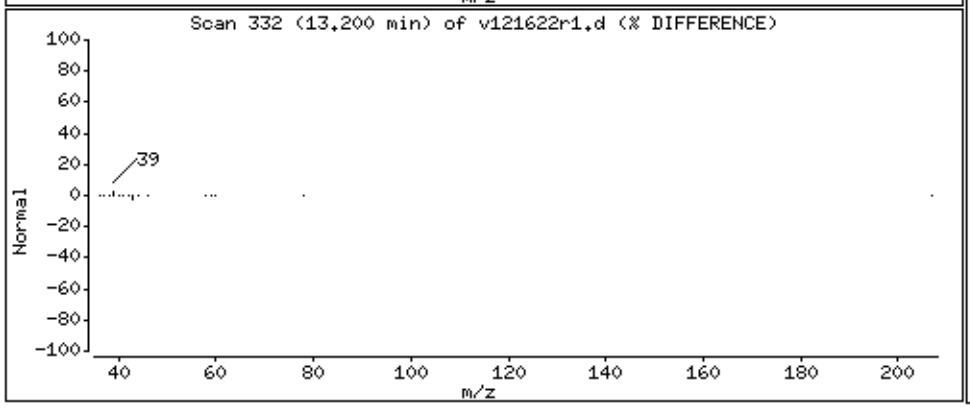
34 2-Propanol

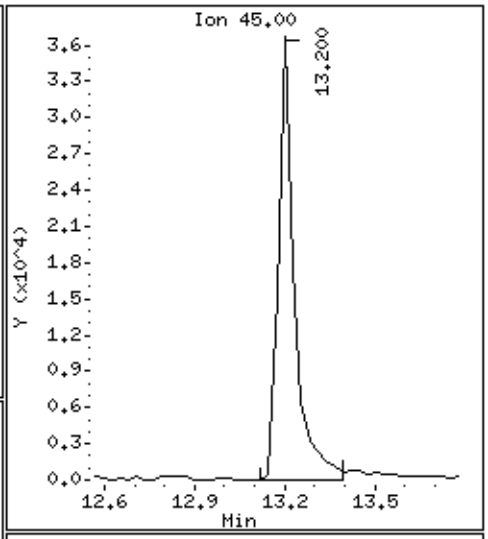
Concentration: 2.290 PPBV

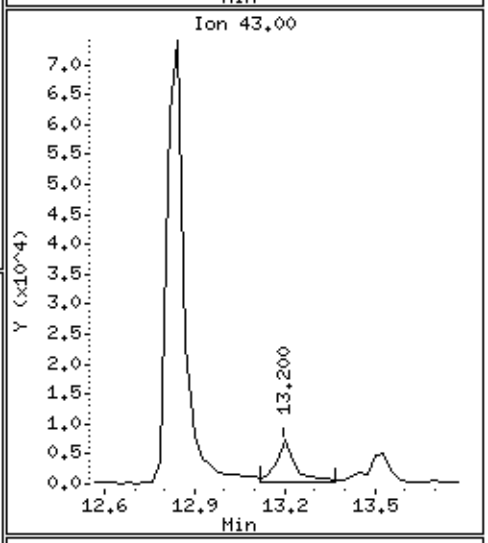


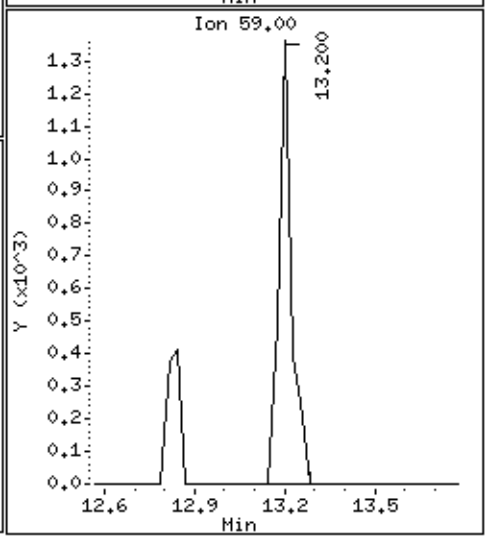












Data File: /chem/msdv.i/16Dec2014.b/v121622r1.d

Date : 17-DEC-2014 05:22

Client ID:

Instrument: msdv.i

Sample Info: 250ml #5695

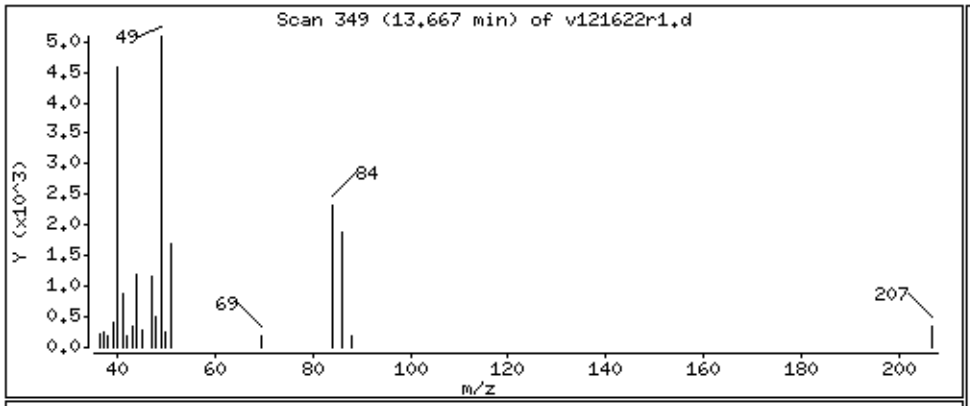
Operator: act

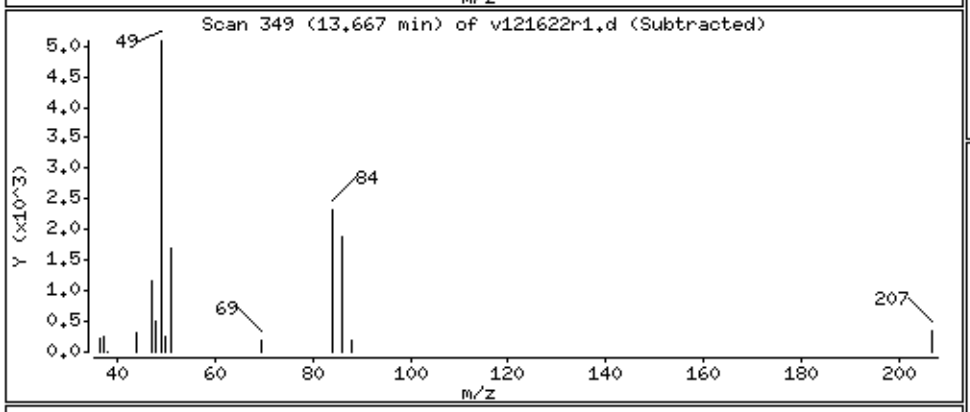
Column phase: RTx-624

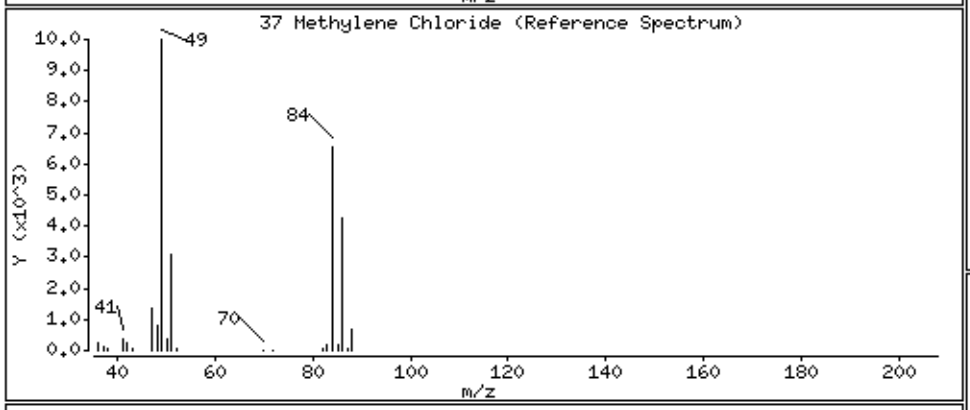
Column diameter: 0.32

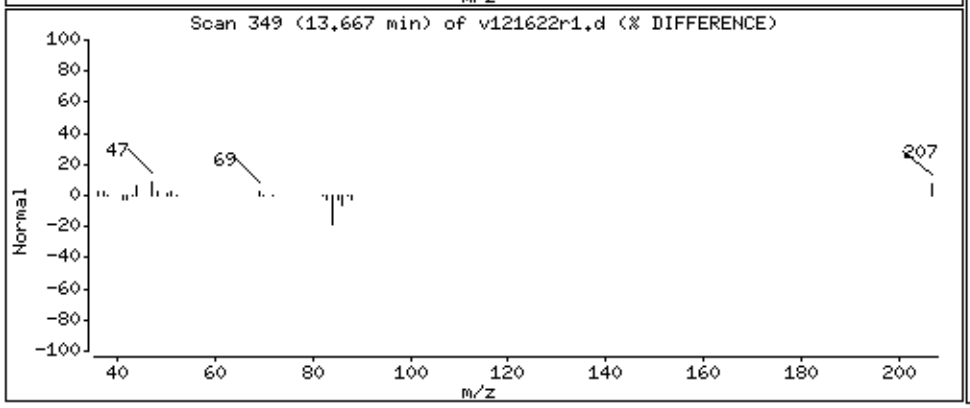
37 Methylene Chloride

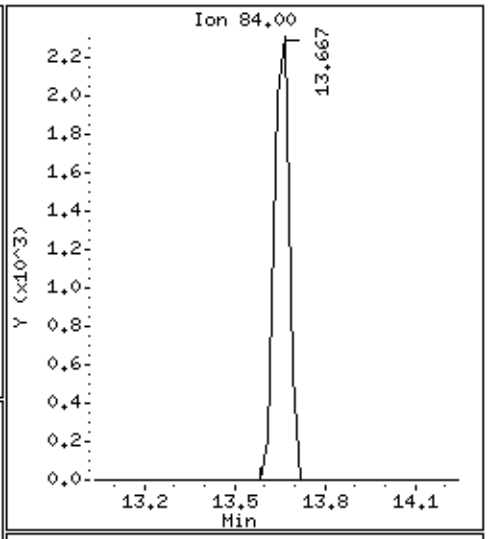
Concentration: 0.4899 PPBV

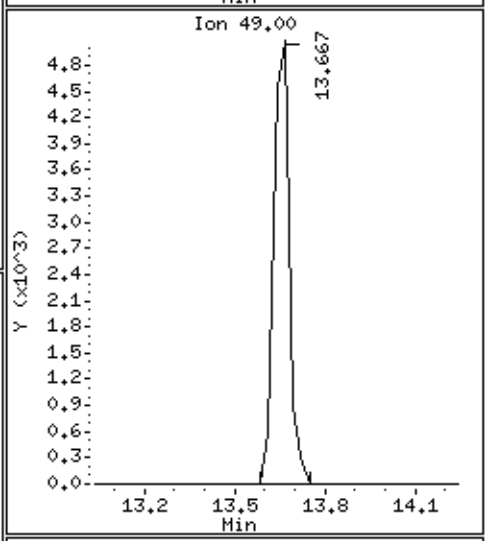


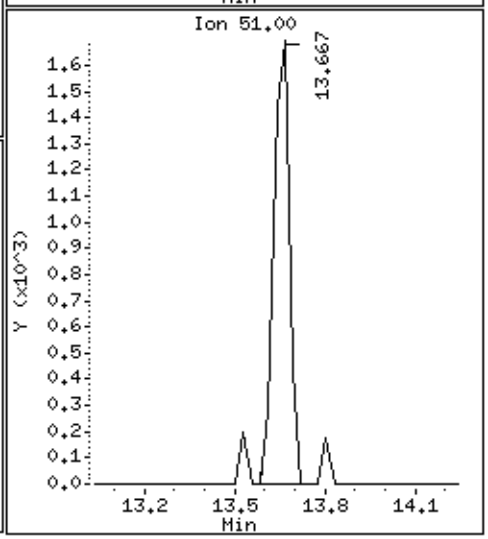












Data File: /chem/msdv.i/16Dec2014.b/v121622r1.d

Date : 17-DEC-2014 05:22

Client ID:

Instrument: msdv.i

Sample Info: 250ml #5695

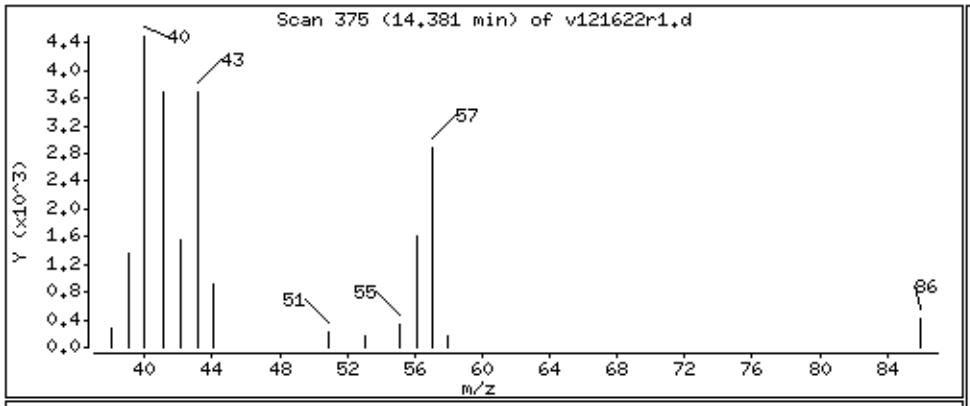
Operator: act

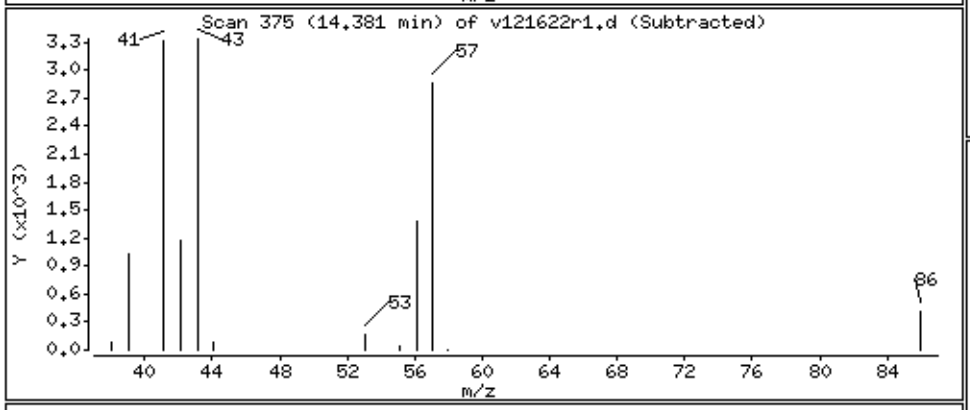
Column phase: RTx-624

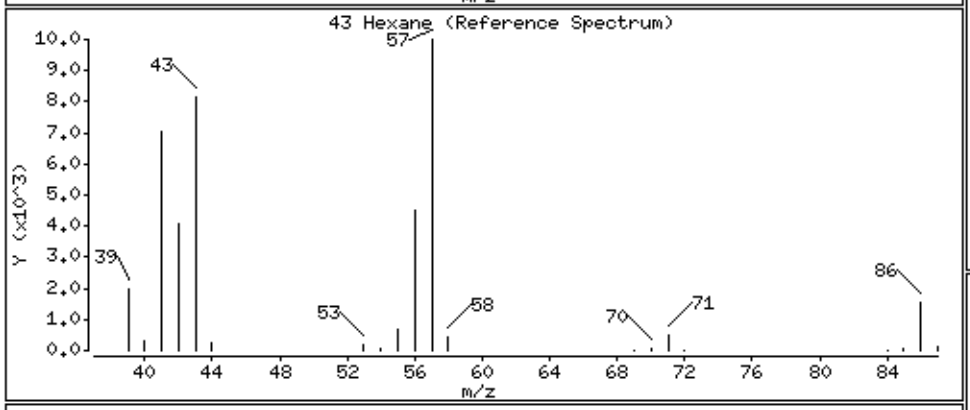
Column diameter: 0.32

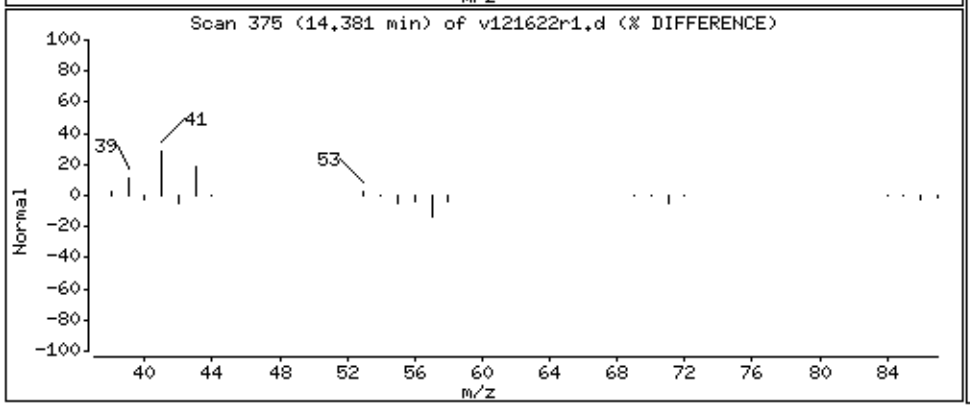
43 Hexane

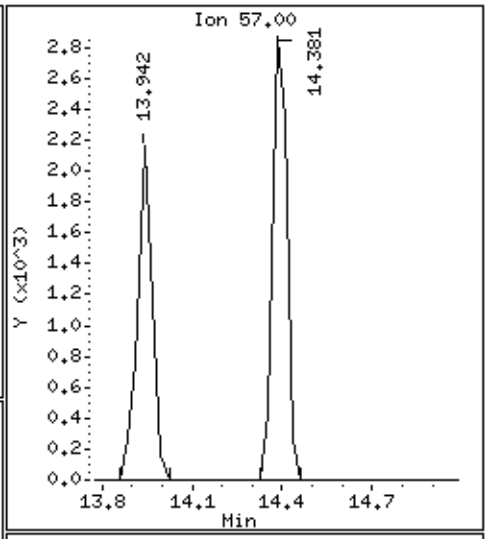
Concentration: 0.1980 PPBV

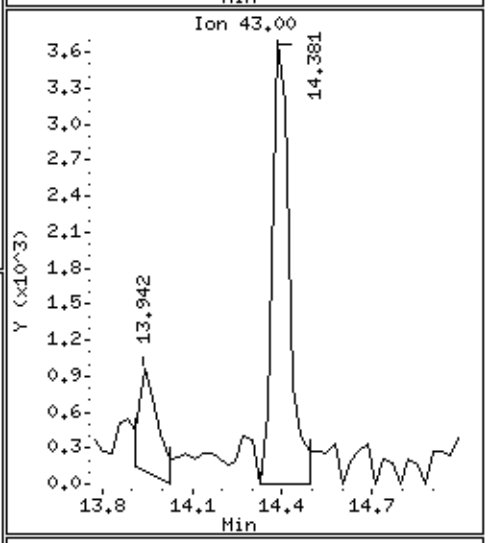


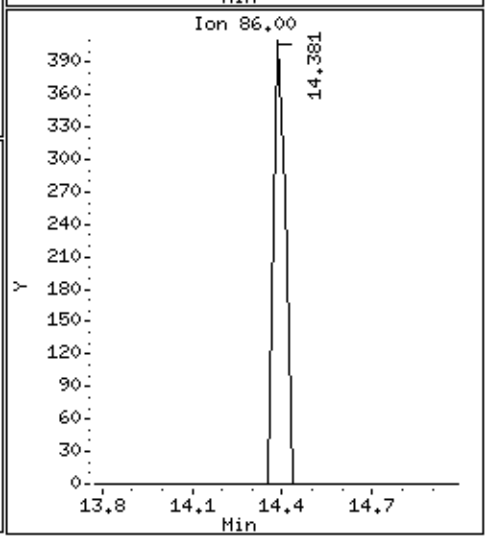












Data File: /chem/msdv.i/16Dec2014.b/v121622r1.d

Date : 17-DEC-2014 05:22

Client ID:

Instrument: msdv.i

Sample Info: 250ml #5695

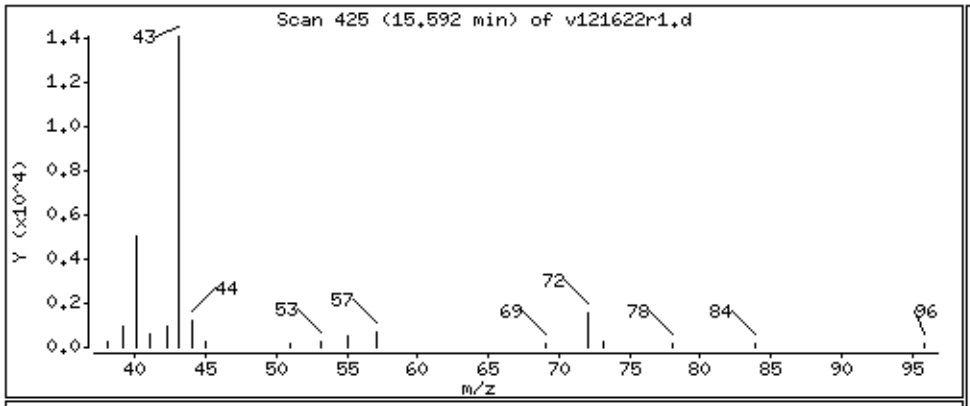
Operator: act

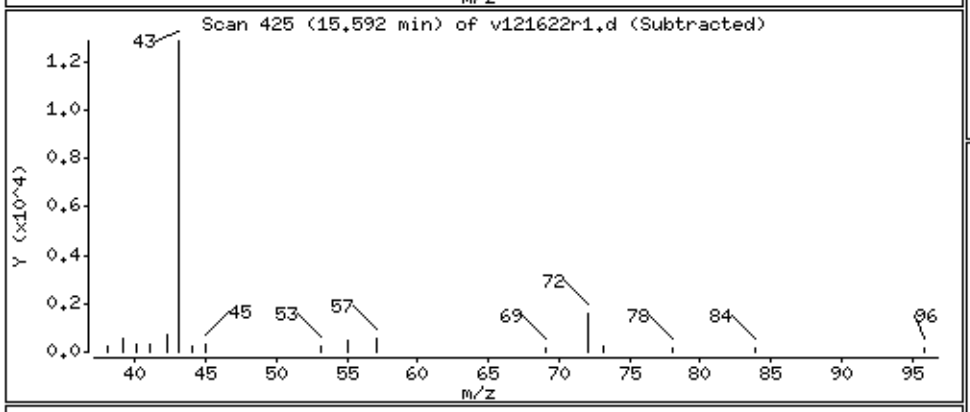
Column phase: RTx-624

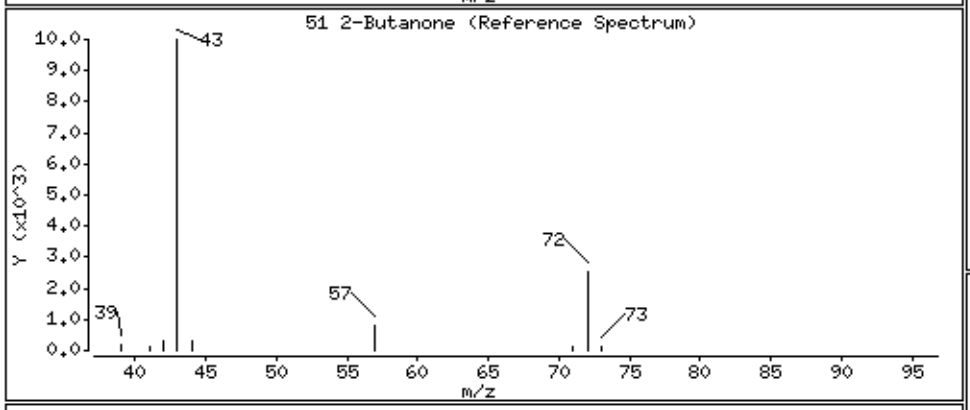
Column diameter: 0.32

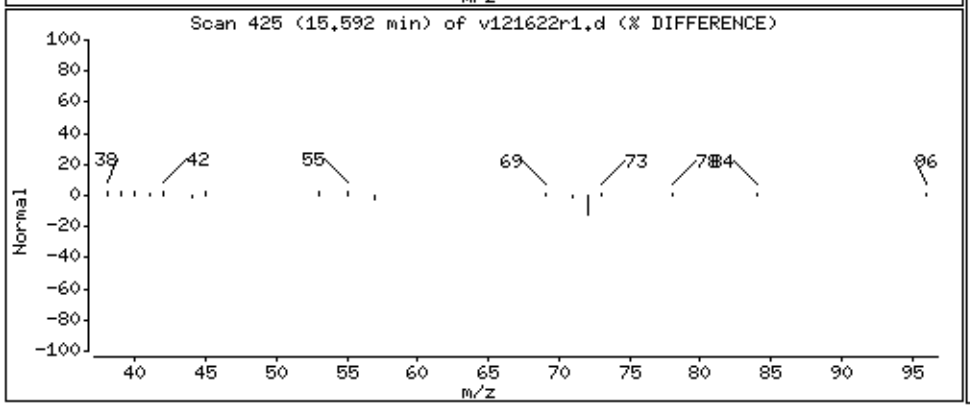
51 2-Butanone

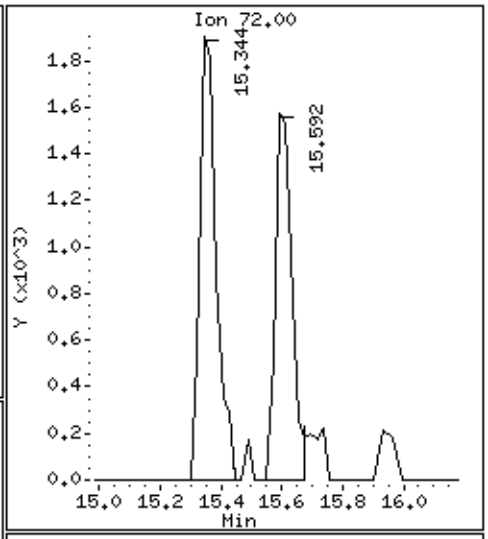
Concentration: 0.6062 PPBV

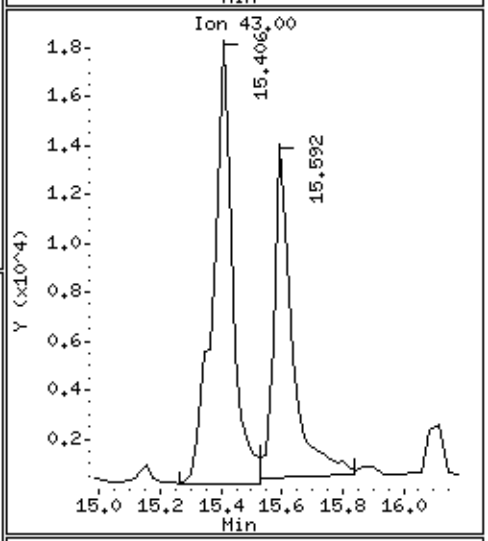


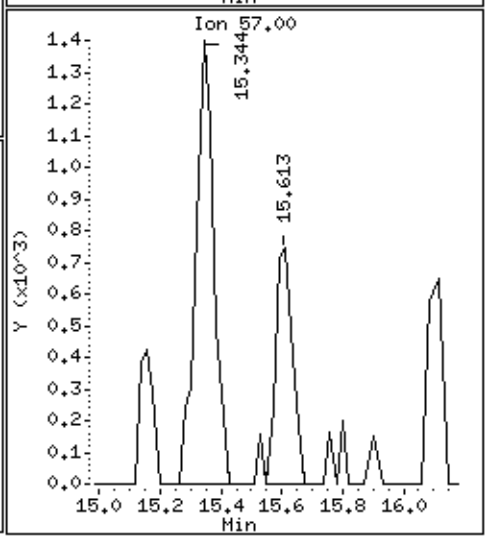












Data File: /chem/msdv.i/16Dec2014.b/v121622r1.d

Date : 17-DEC-2014 05:22

Client ID:

Instrument: msdv.i

Sample Info: 250ml #5695

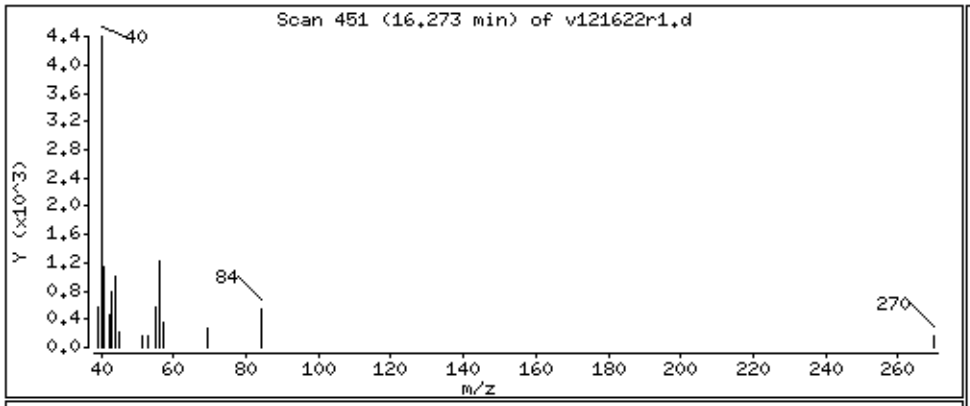
Operator: act

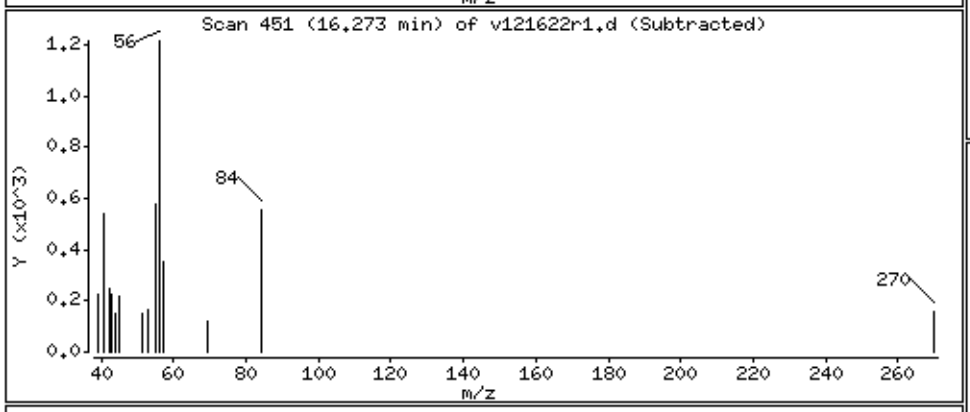
Column phase: RTx-624

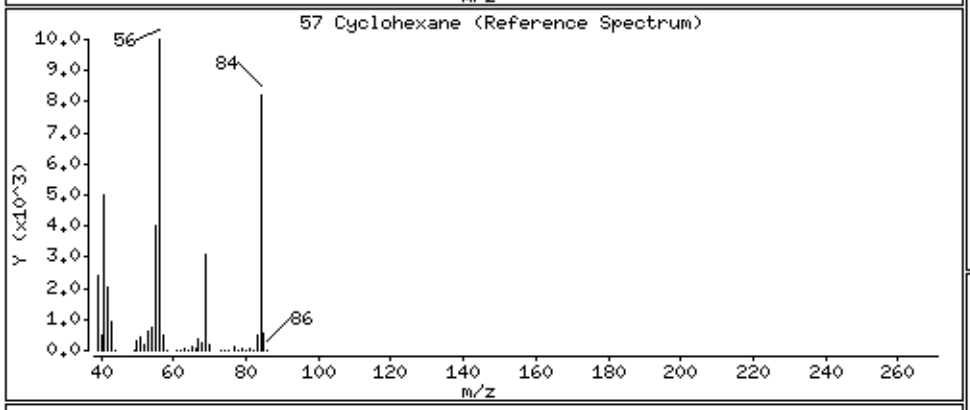
Column diameter: 0.32

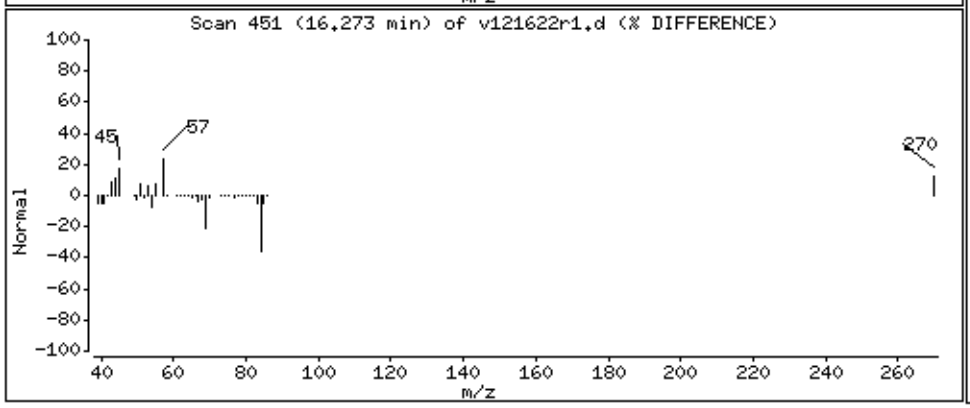
57 Cyclohexane

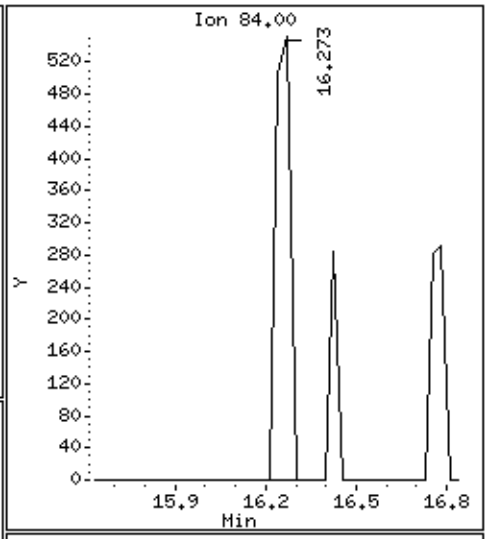
Concentration: 0.06558 PPBV

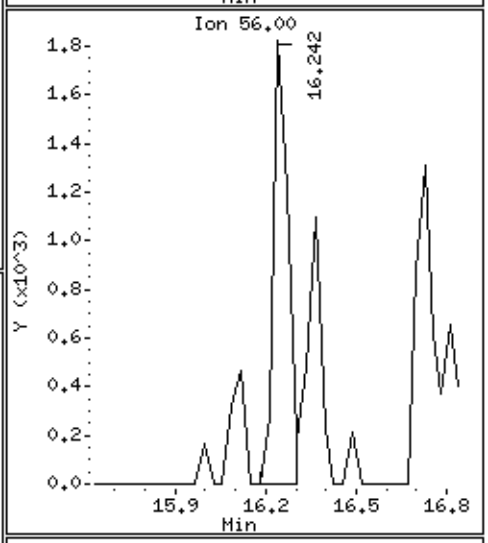


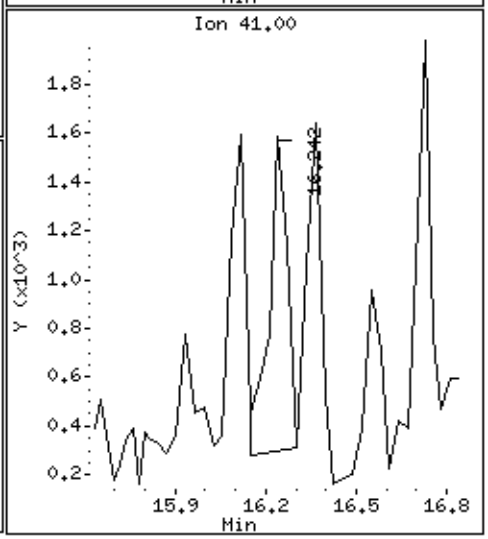












Data File: /chem/msdv.i/16Dec2014.b/v121622r1.d

Date : 17-DEC-2014 05:22

Client ID:

Instrument: msdv.i

Sample Info: 250ml #5695

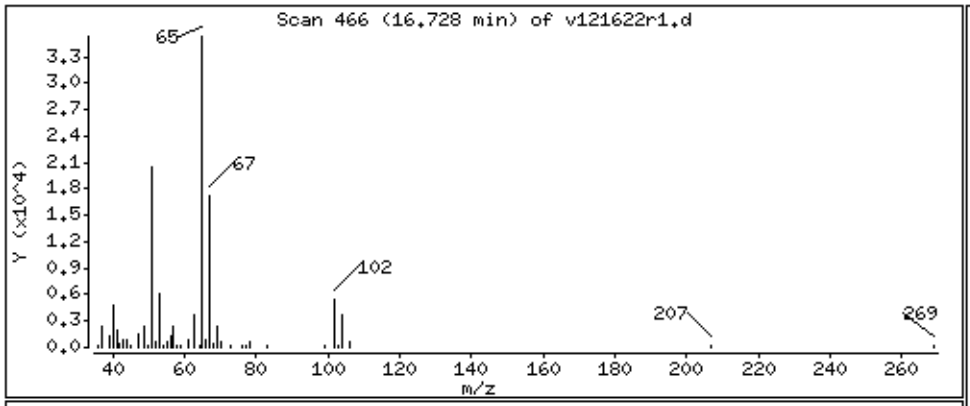
Operator: act

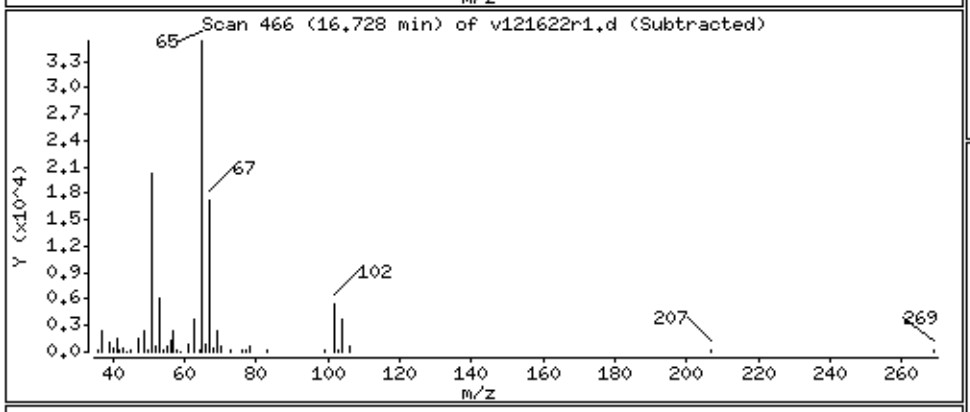
Column phase: RTx-624

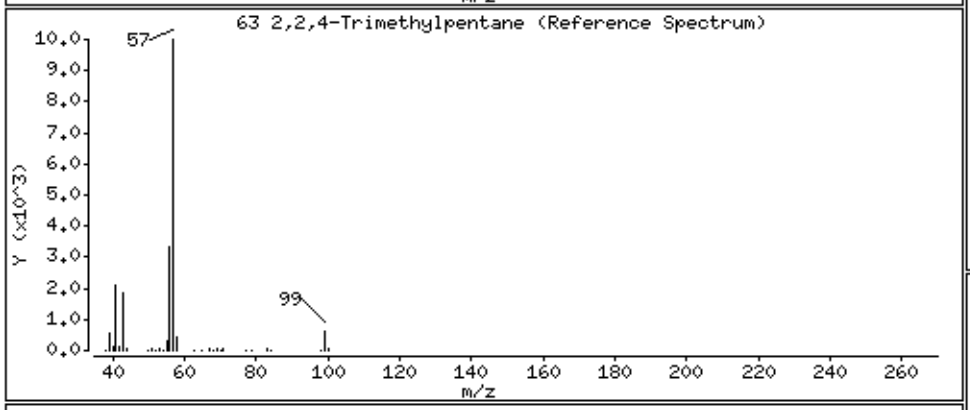
Column diameter: 0.32

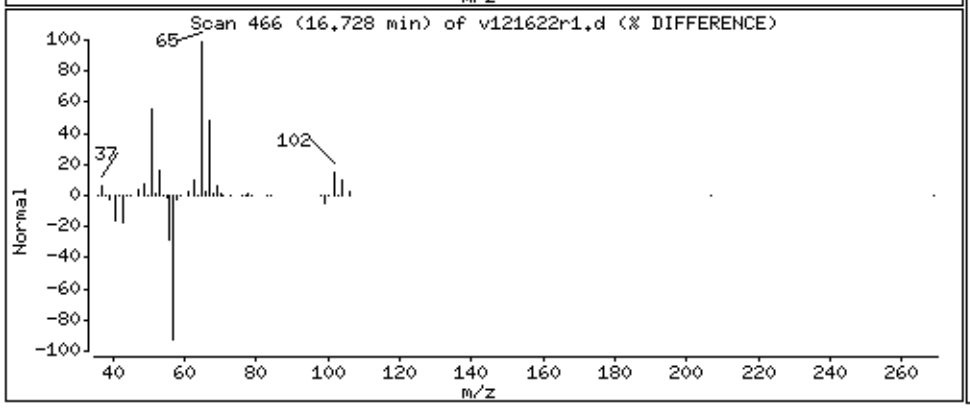
63 2,2,4-Trimethylpentane

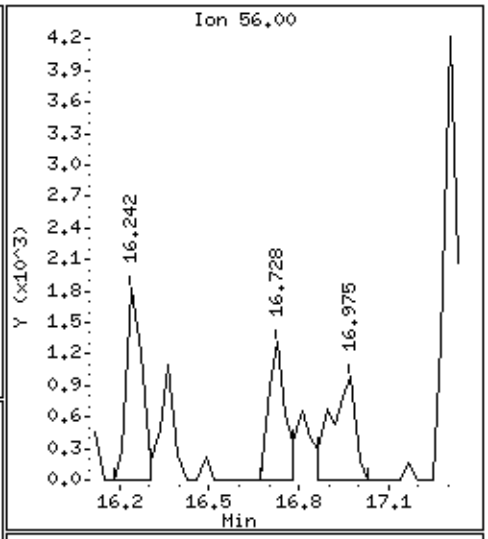
Concentration: 0.1008 PPBV

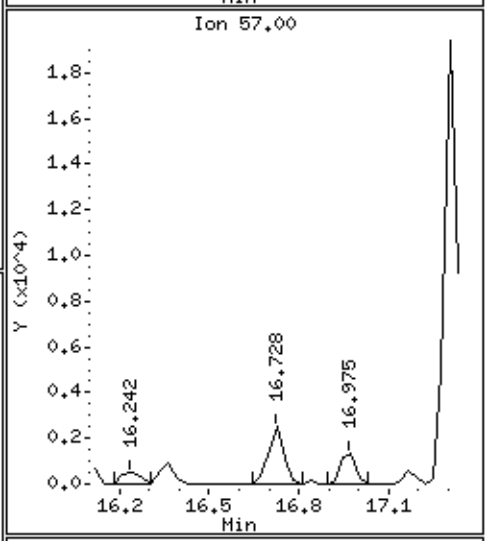


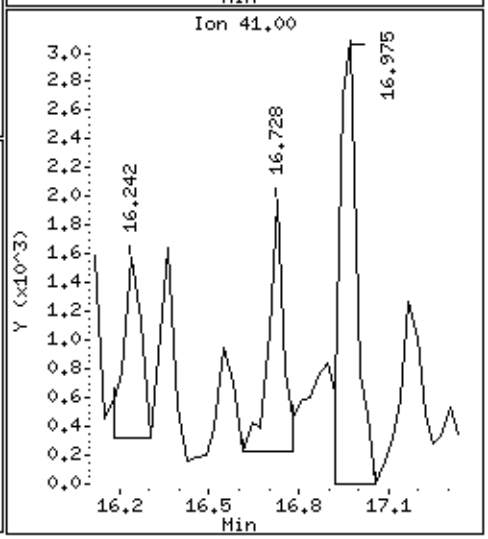












Data File: /chem/msdv.i/16Dec2014.b/v121622r1.d

Date : 17-DEC-2014 05:22

Client ID:

Instrument: msdv.i

Sample Info: 250ml #5695

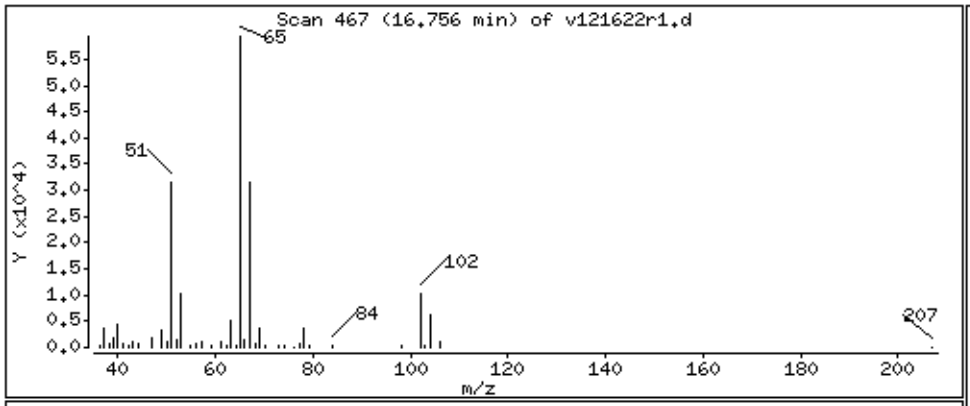
Operator: act

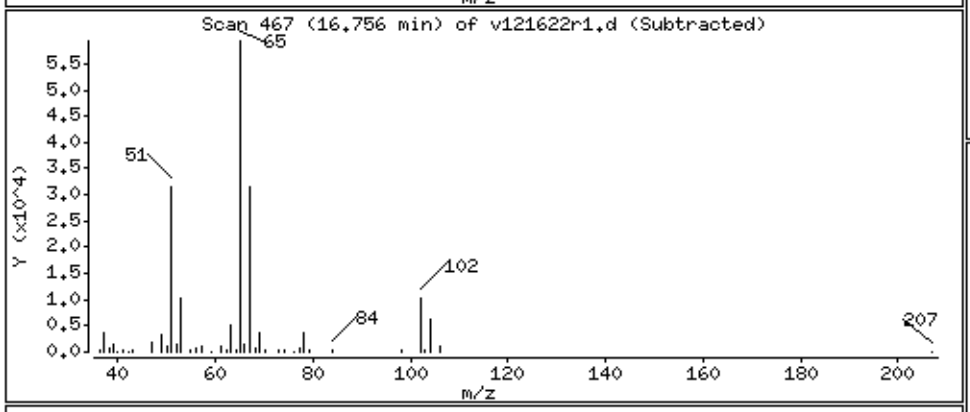
Column phase: RTx-624

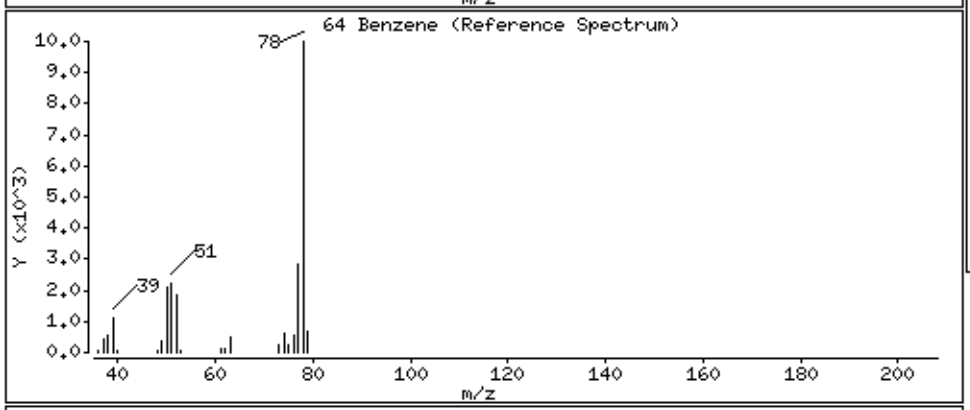
Column diameter: 0.32

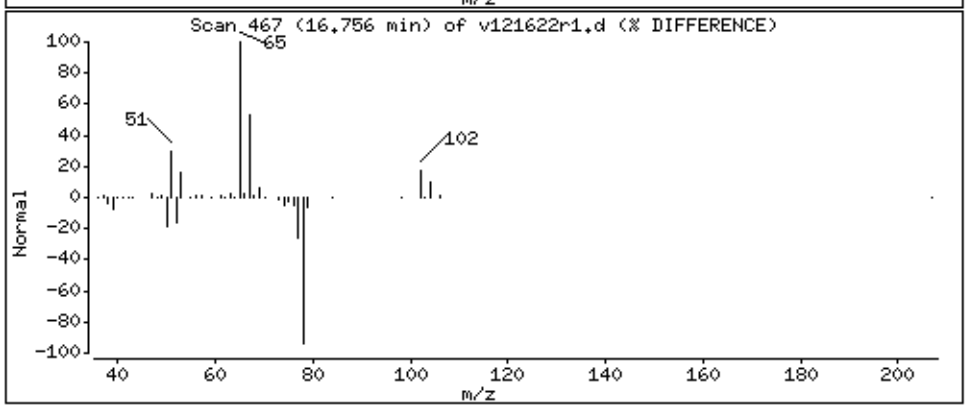
64 Benzene

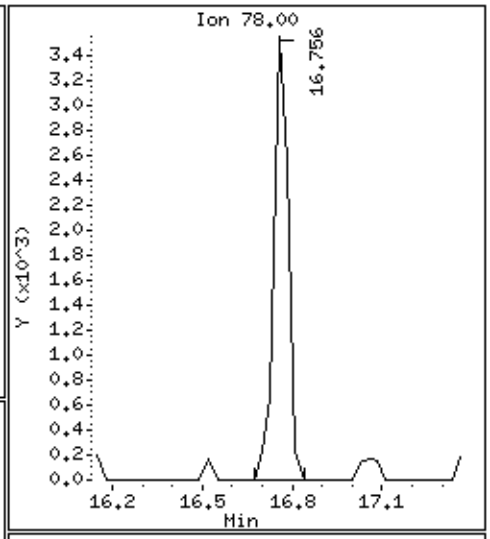
Concentration: 0.1603 PPBV

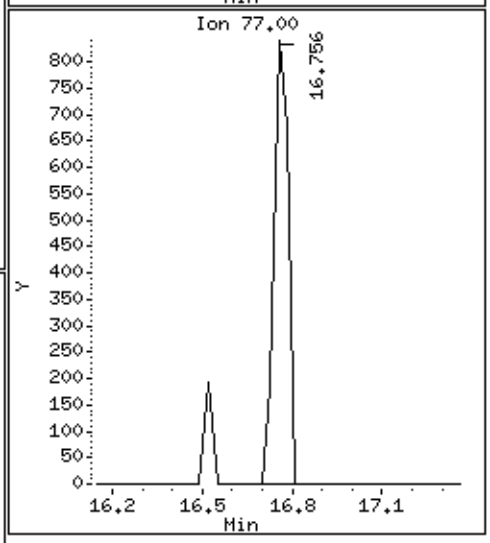












Data File: /chem/msdv.i/16Dec2014.b/v121622r1.d

Date : 17-DEC-2014 05:22

Client ID:

Instrument: msdv.i

Sample Info: 250ml #5695

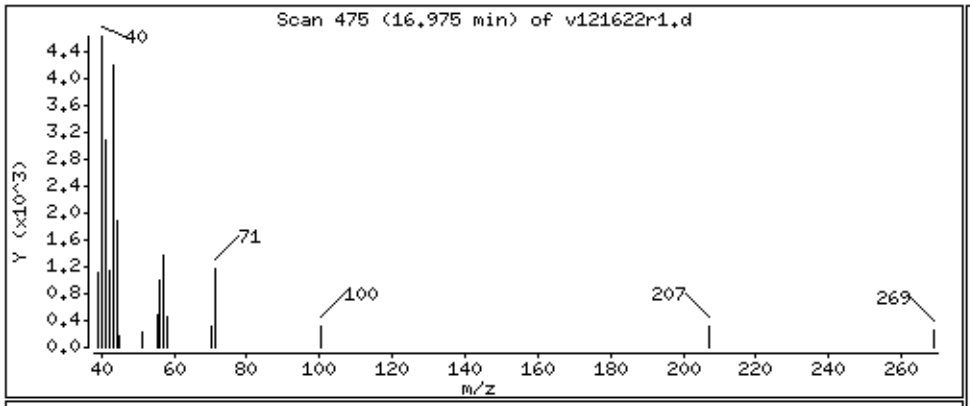
Operator: act

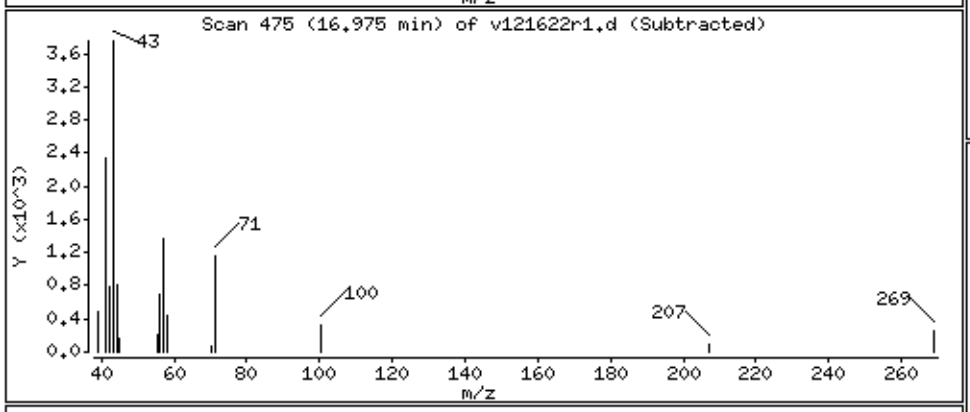
Column phase: RTx-624

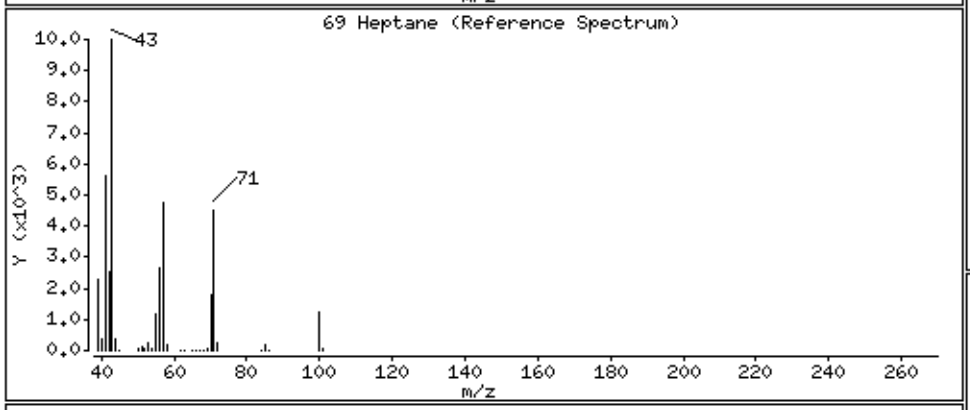
Column diameter: 0.32

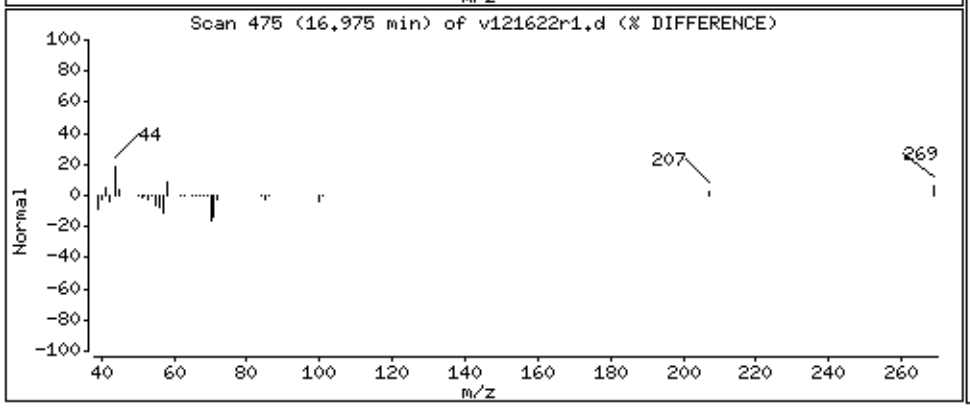
69 Heptane

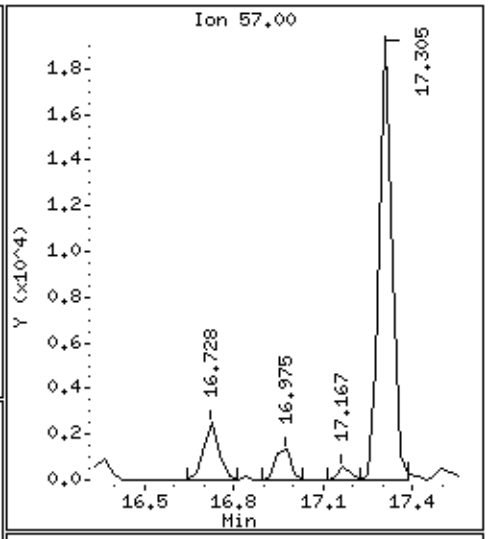
Concentration: 0.1503 PPBV

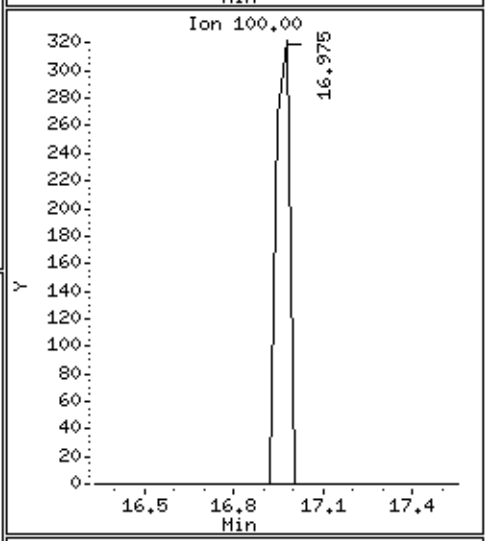


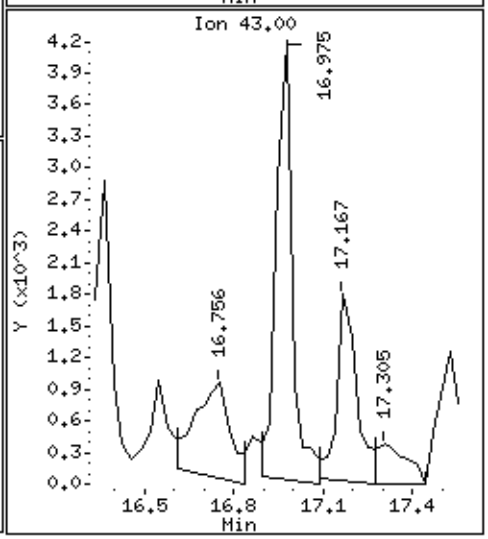












Data File: /chem/msdv.i/16Dec2014.b/v121622r1.d

Date : 17-DEC-2014 05:22

Client ID:

Instrument: msdv.i

Sample Info: 250ml #5695

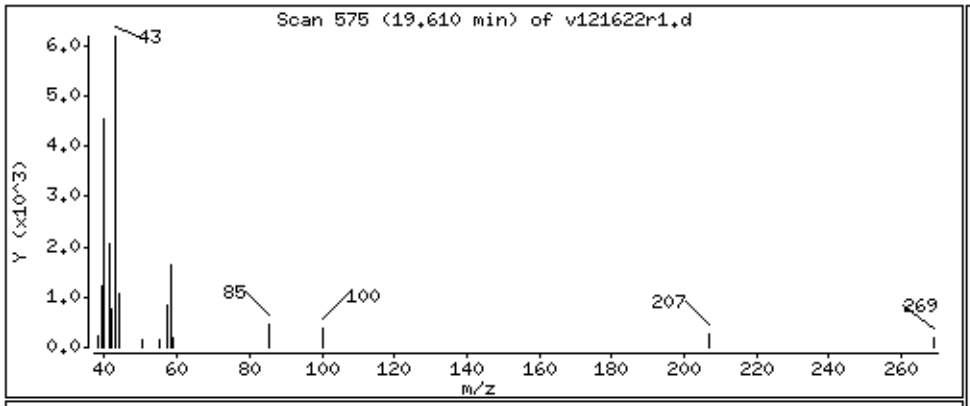
Operator: act

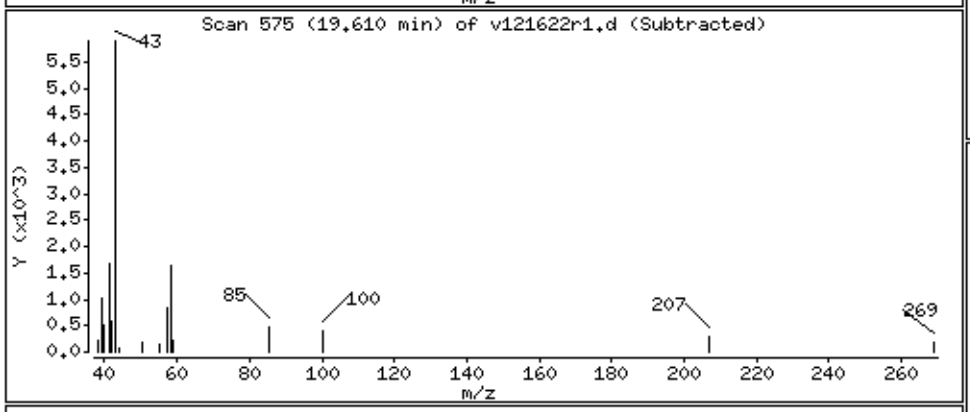
Column phase: RTx-624

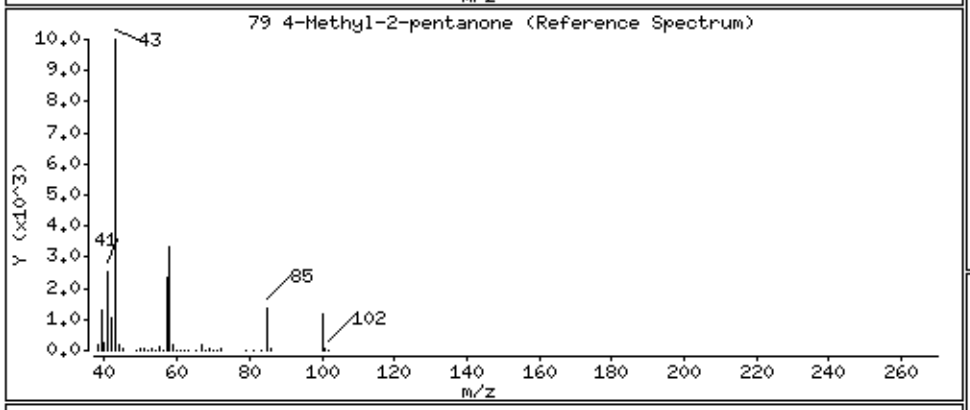
Column diameter: 0.32

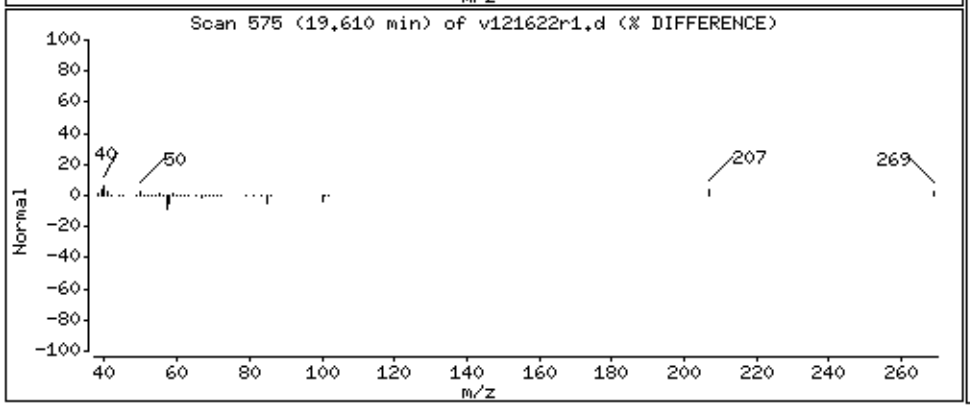
79 4-Methyl-2-pentanone

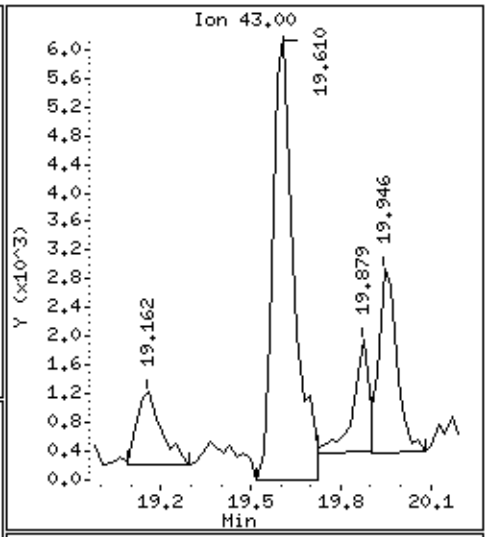
Concentration: 0.2906 PPBV

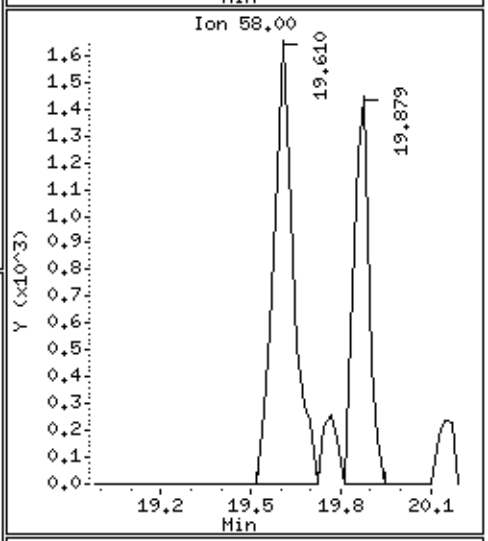


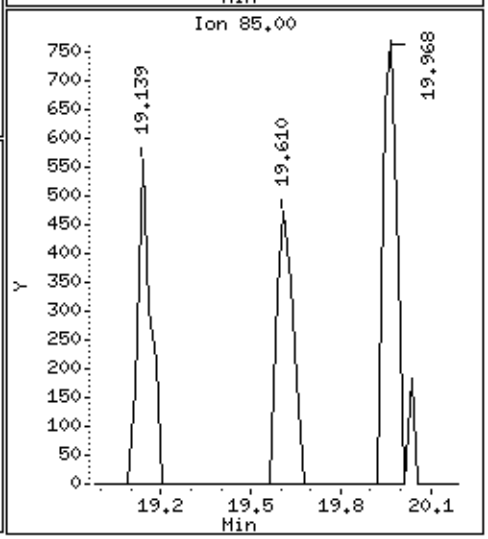












Data File: /chem/msdv.i/16Dec2014.b/v121622r1.d

Date : 17-DEC-2014 05:22

Client ID:

Instrument: msdv.i

Sample Info: 250ml #5695

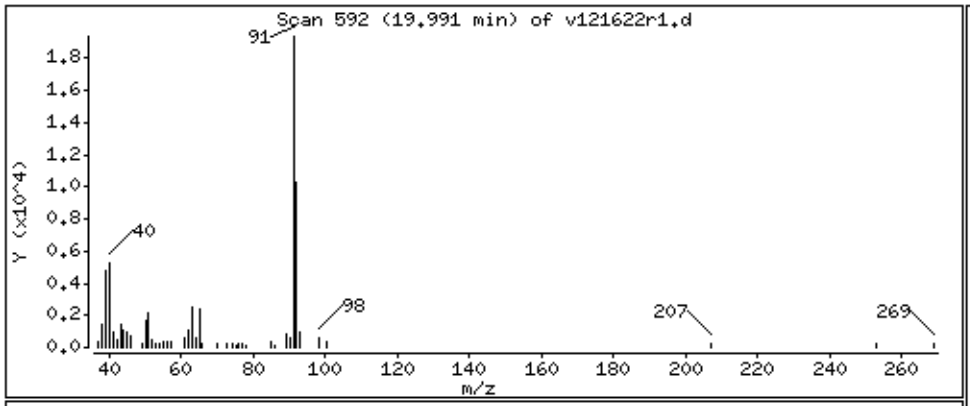
Operator: act

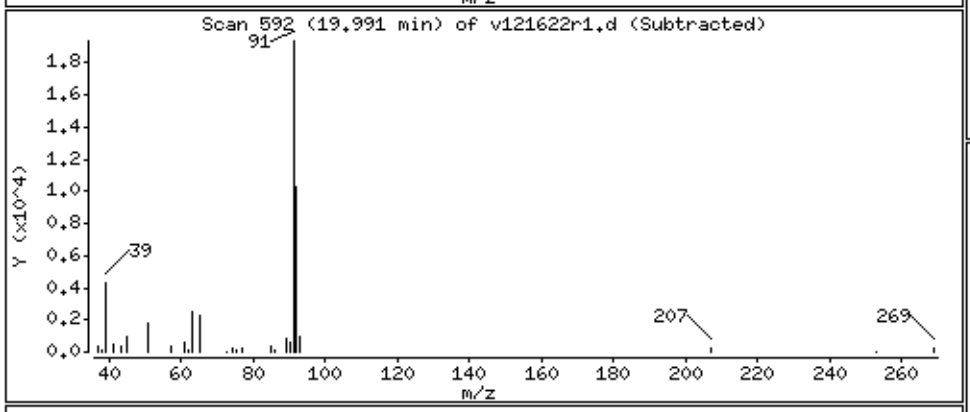
Column phase: RTx-624

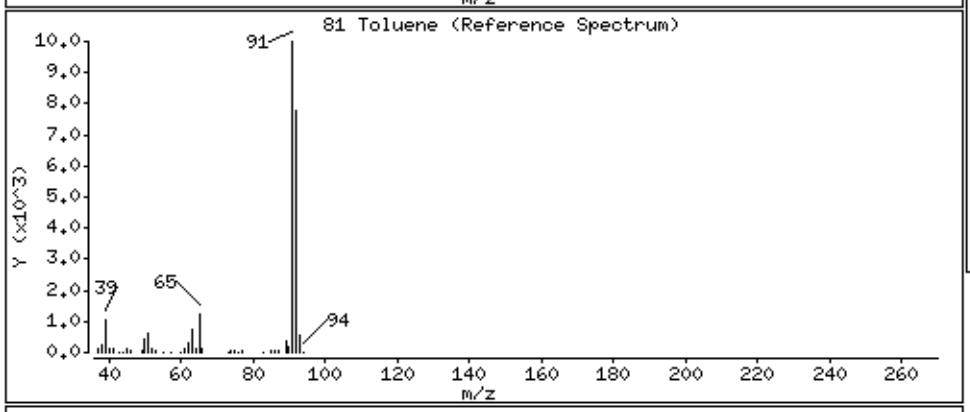
Column diameter: 0.32

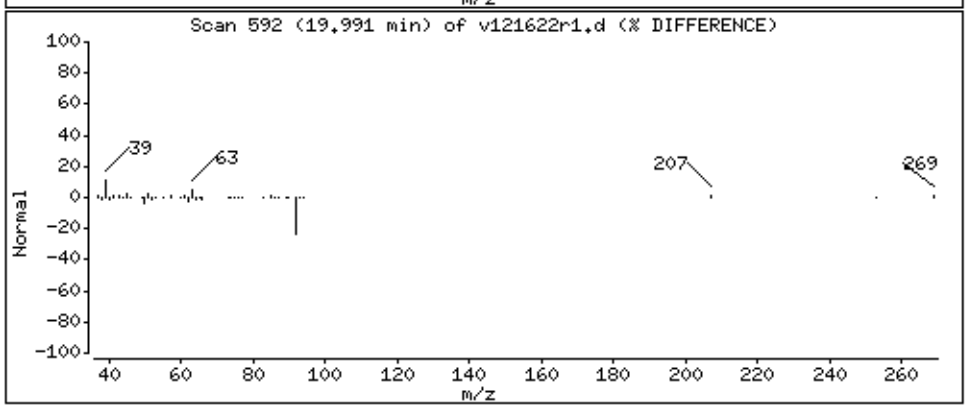
81 Toluene

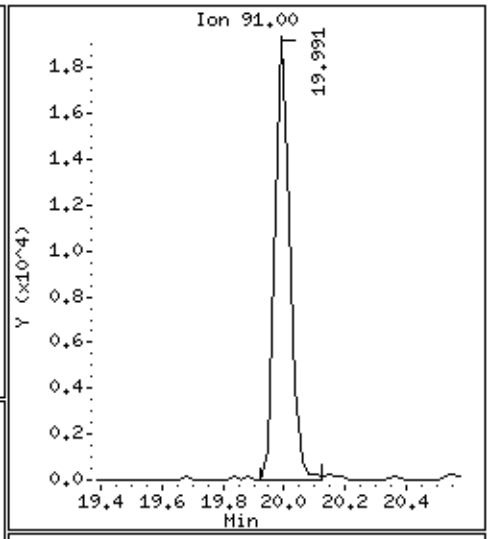
Concentration: 0.8106 PPBV

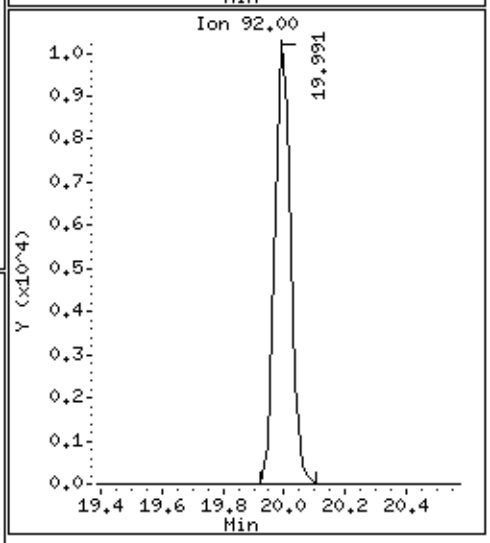












Data File: /chem/msdv.i/16Dec2014.b/v121622r1.d

Date : 17-DEC-2014 05:22

Client ID:

Instrument: msdv.i

Sample Info: 250ml #5695

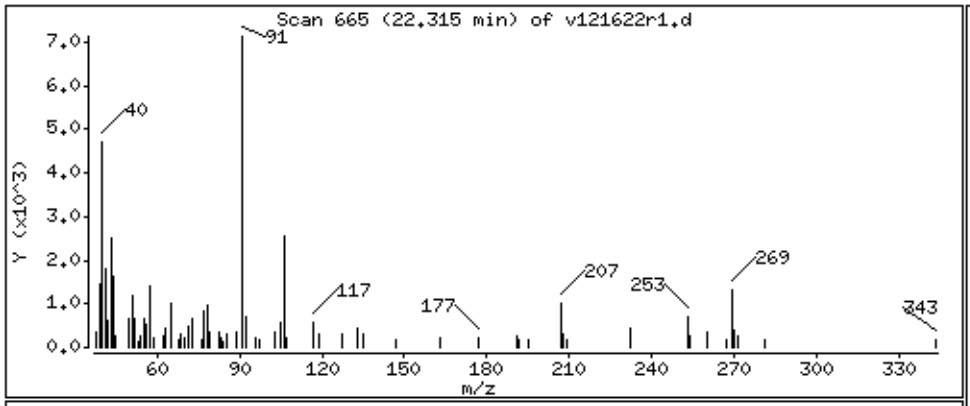
Operator: act

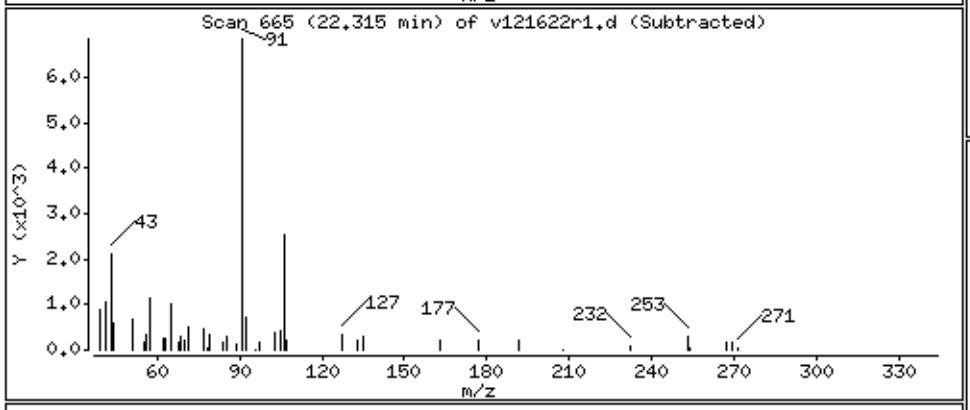
Column phase: RTx-624

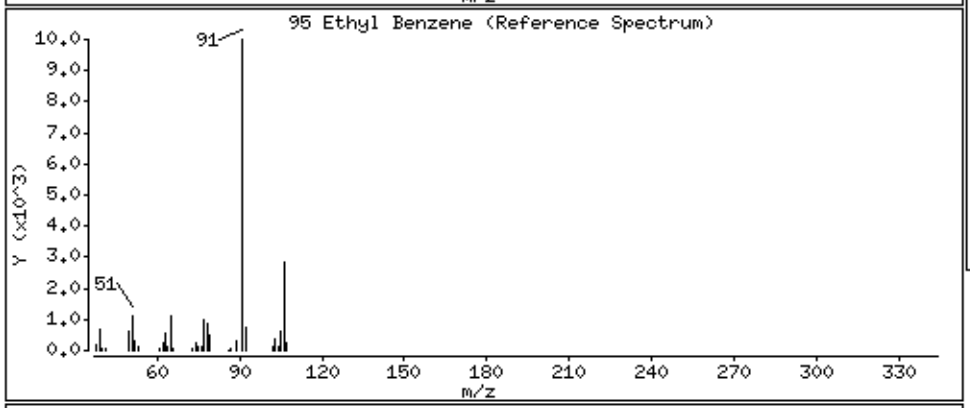
Column diameter: 0.32

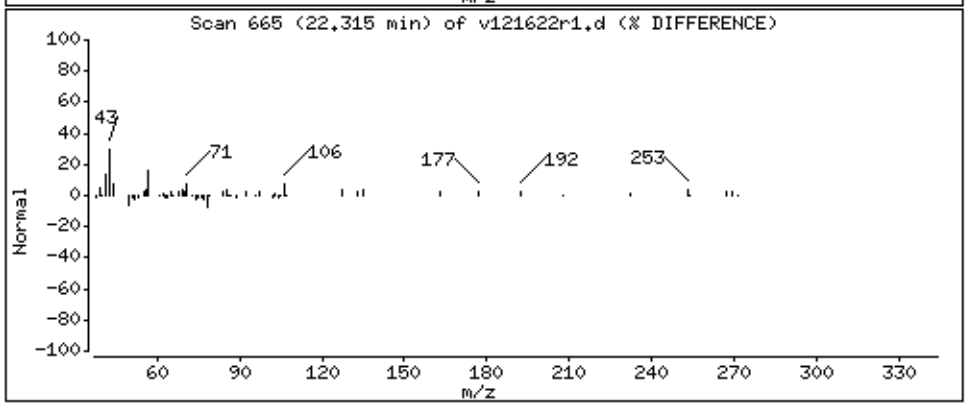
95 Ethyl Benzene

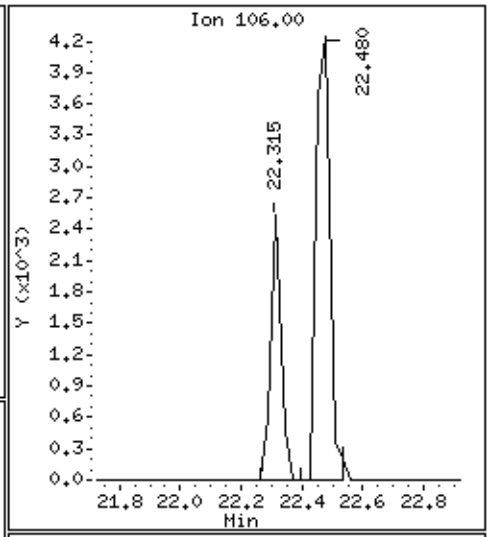
Concentration: 0.1987 PPBV

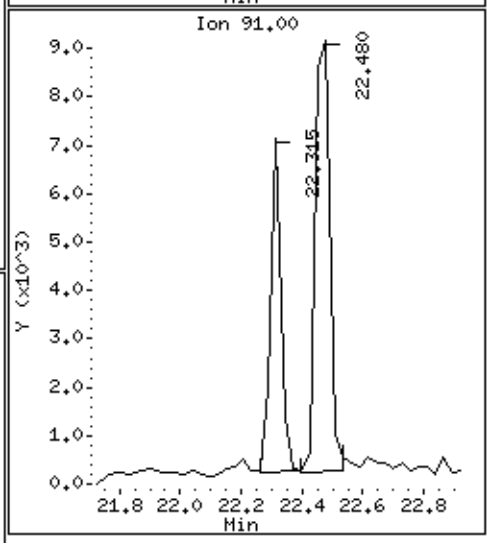












Data File: /chem/msdv.i/16Dec2014.b/v121622r1.d

Date : 17-DEC-2014 05:22

Client ID:

Instrument: msdv.i

Sample Info: 250ml #5695

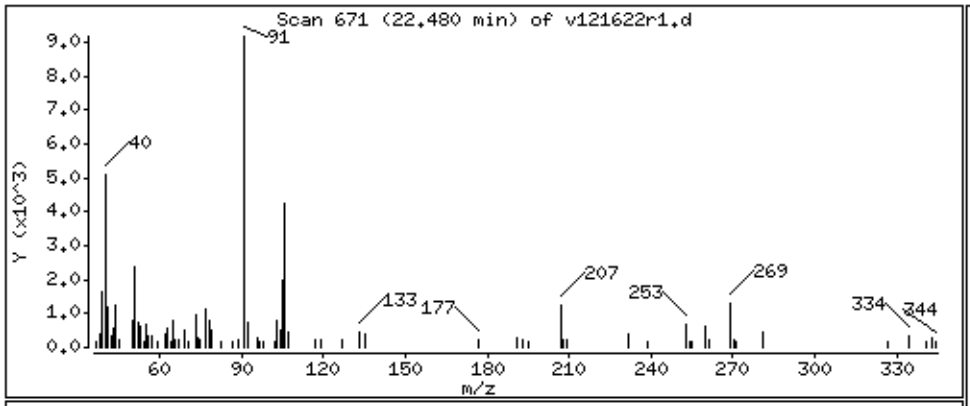
Operator: act

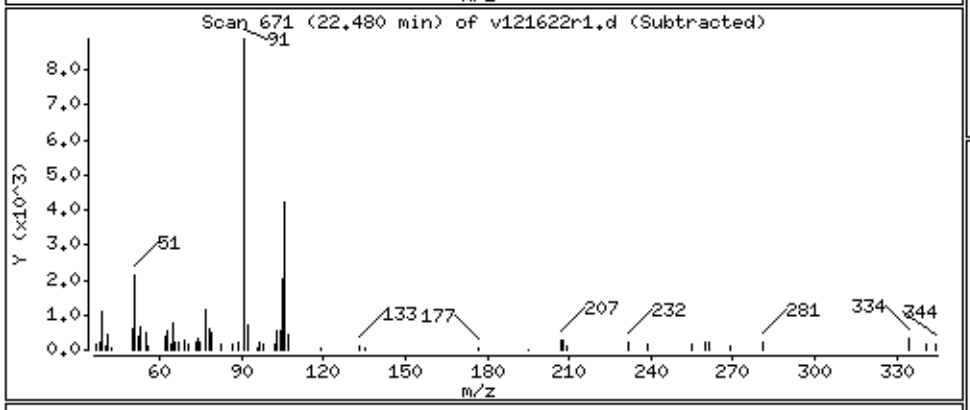
Column phase: RTx-624

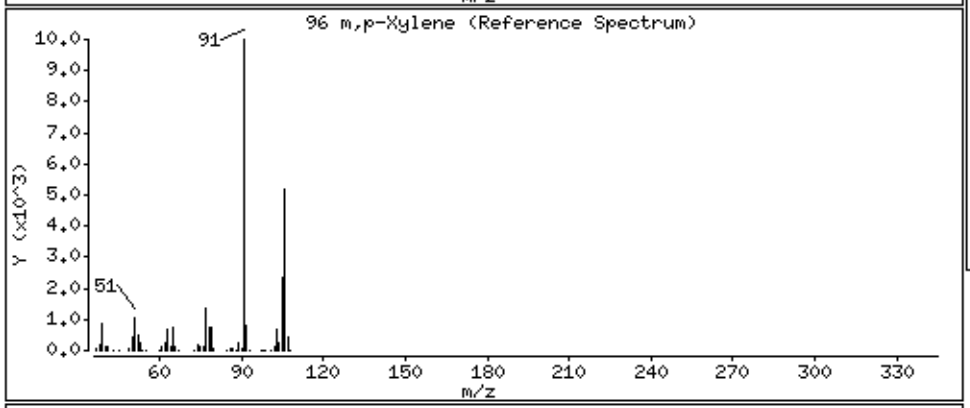
Column diameter: 0.32

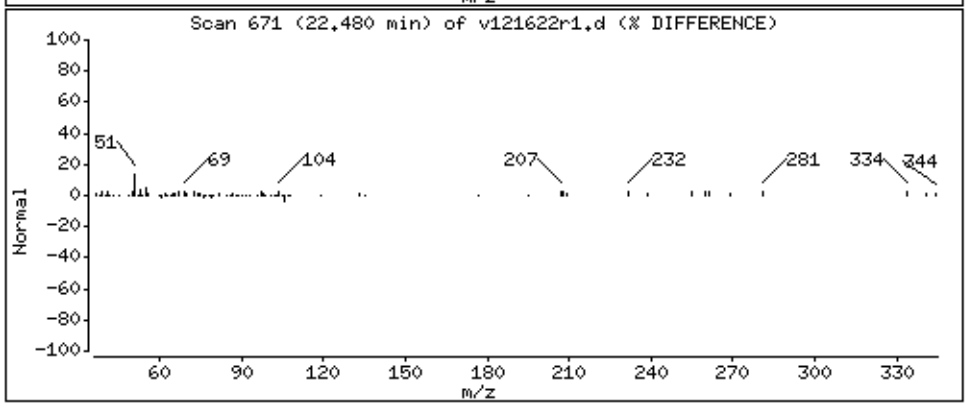
96 m,p-Xylene

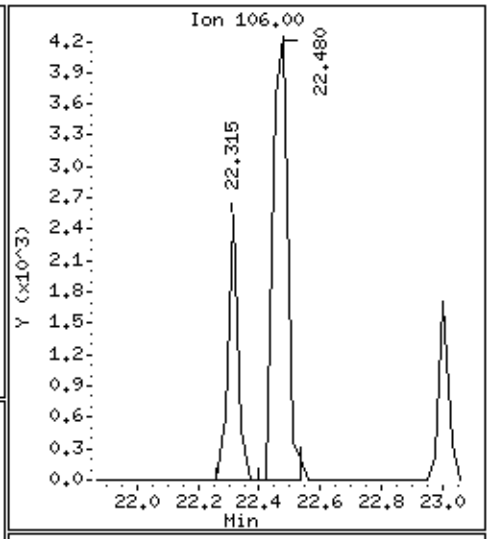
Concentration: 0.4711 PPBV

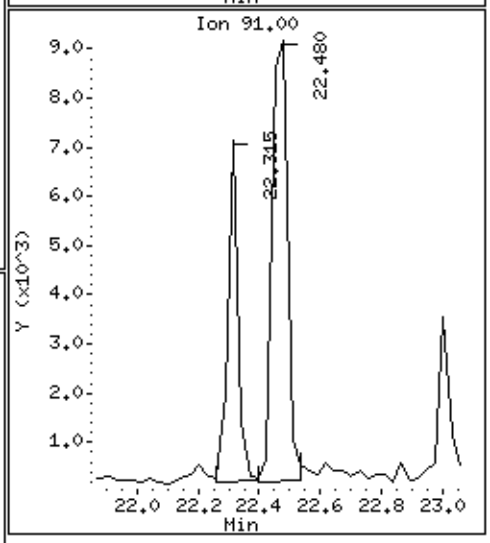












Data File: /chem/msdv.i/16Dec2014.b/v121622r1.d

Date : 17-DEC-2014 05:22

Client ID:

Instrument: msdv.i

Sample Info: 250ml #5695

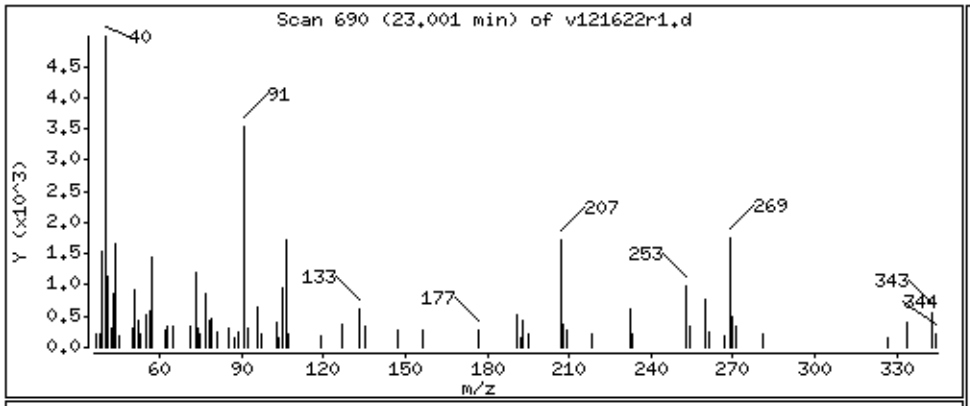
Operator: act

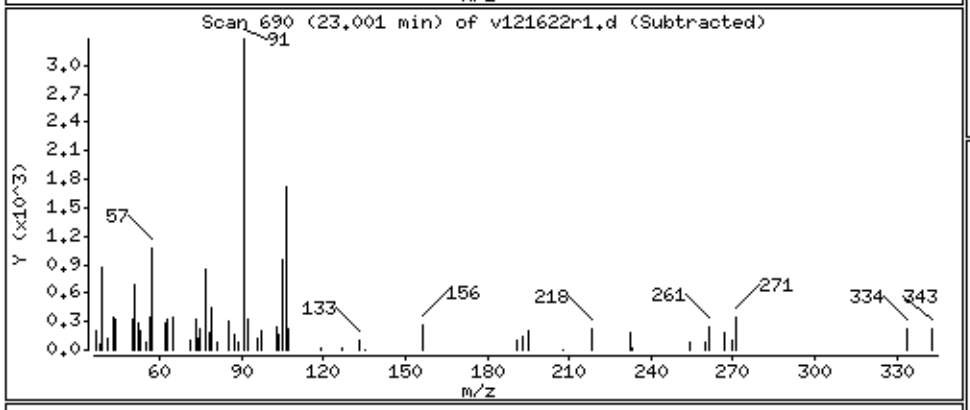
Column phase: RTx-624

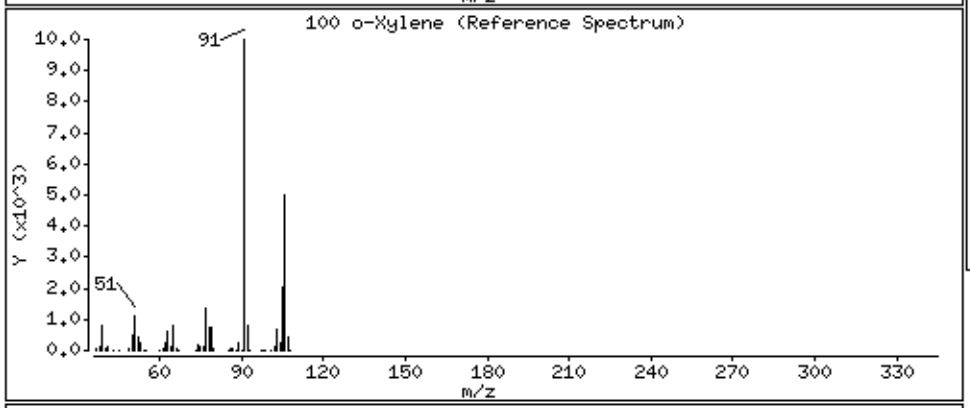
Column diameter: 0.32

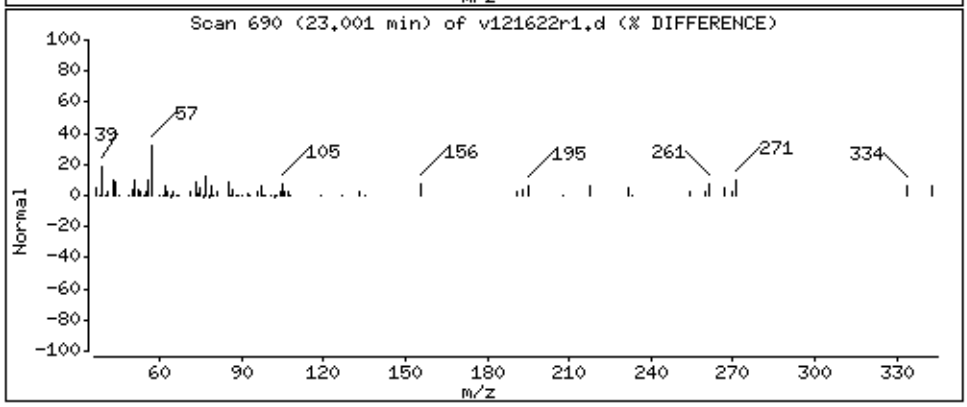
100 o-Xylene

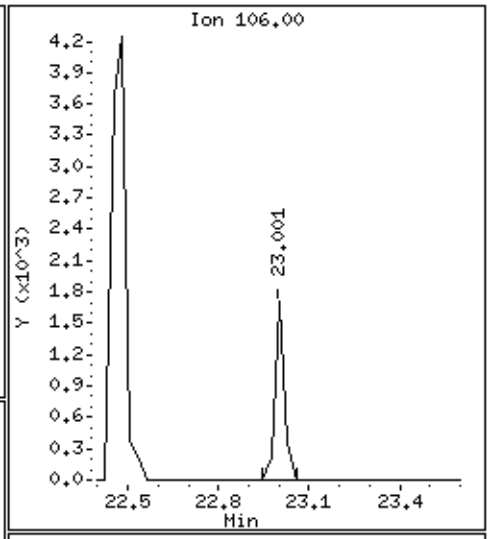
Concentration: 0.1364 PPBV

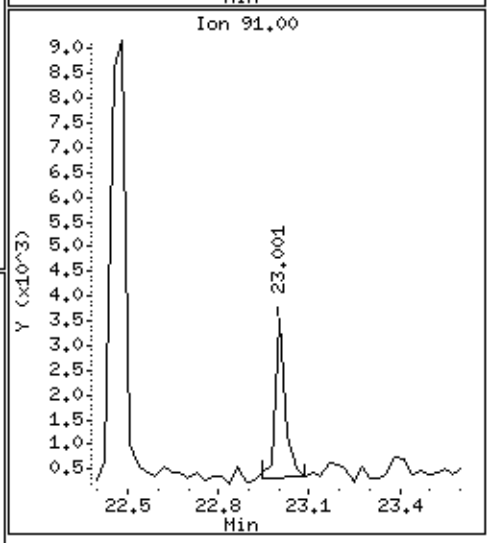












Data File: /chem/msdv.i/16Dec2014.b/v121622r1.d

Date : 17-DEC-2014 05:22

Client ID:

Instrument: msdv.i

Sample Info: 250ml #5695

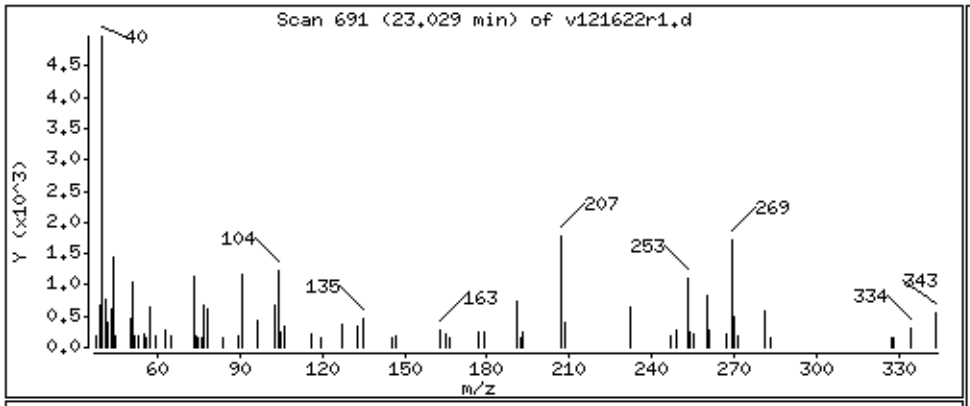
Operator: act

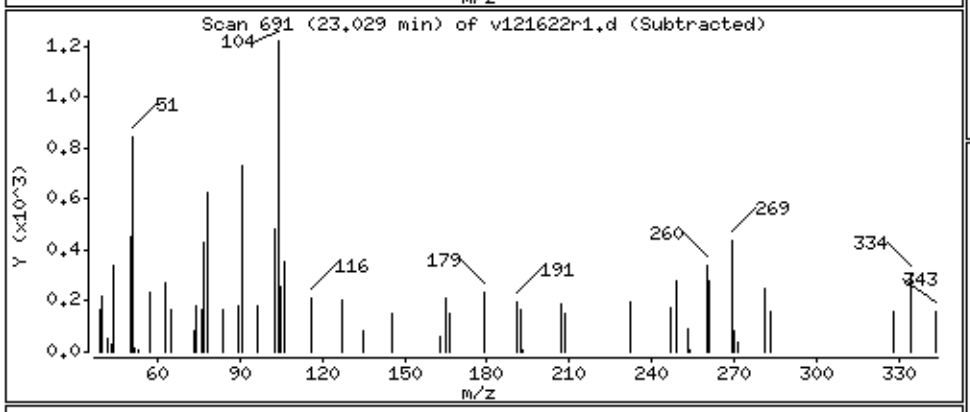
Column phase: RTx-624

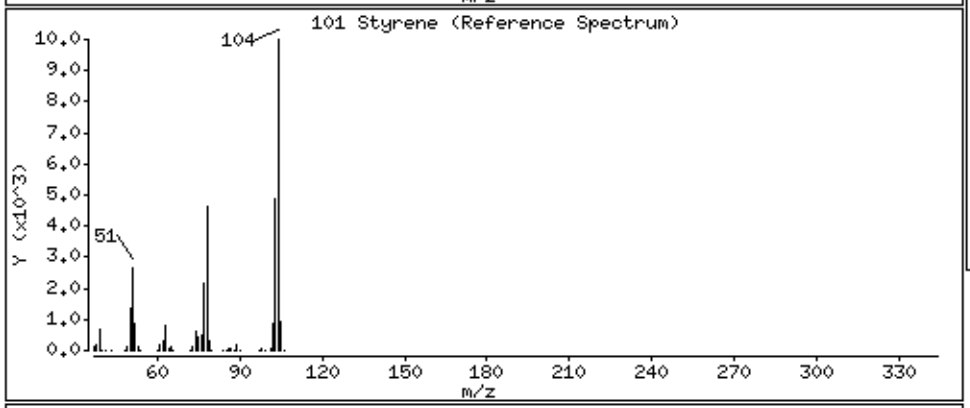
Column diameter: 0.32

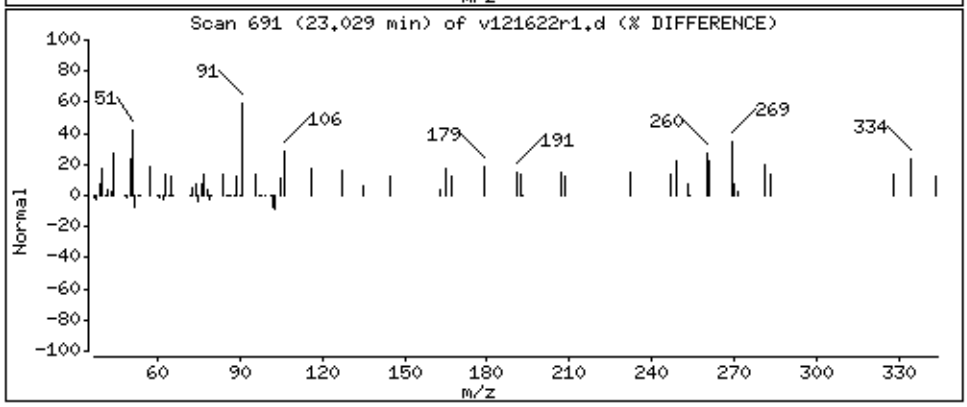
101 Styrene

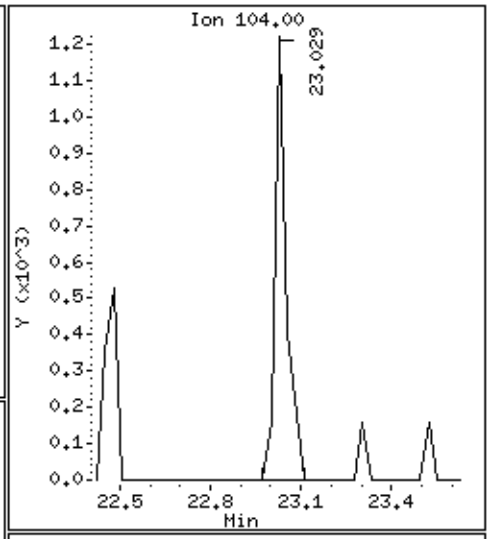
Concentration: 0.08042 PPBV

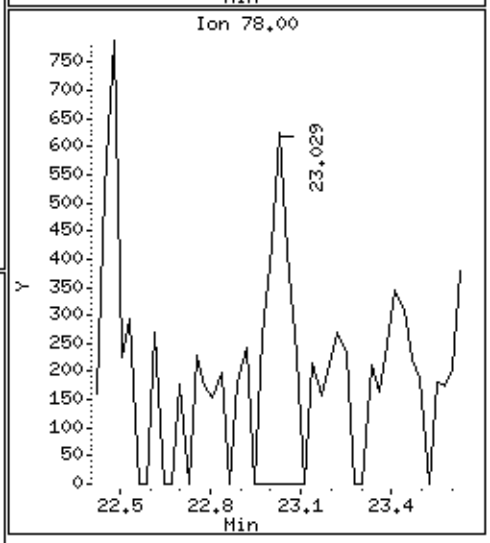












Data File: /chem/msdv.i/16Dec2014.b/v121622r1.d

Date : 17-DEC-2014 05:22

Client ID:

Instrument: msdv.i

Sample Info: 250ml #5695

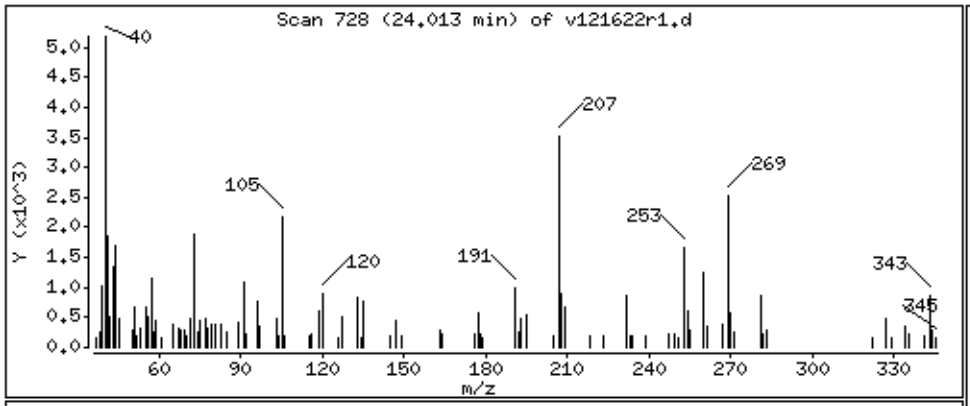
Operator: act

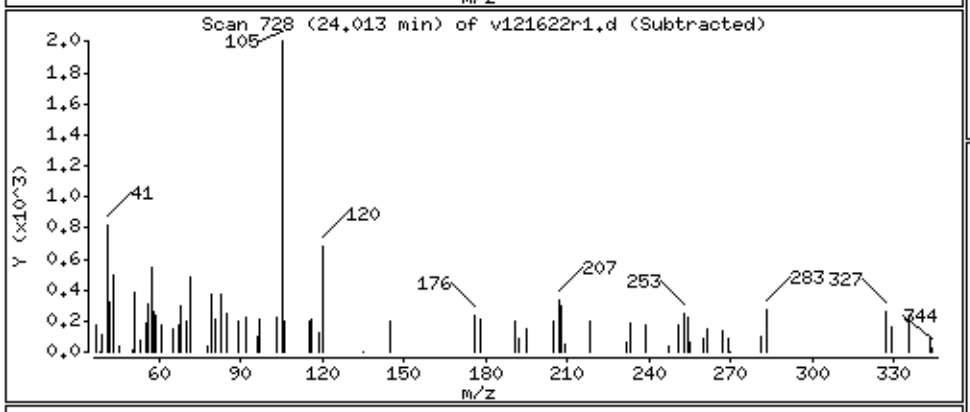
Column phase: RTx-624

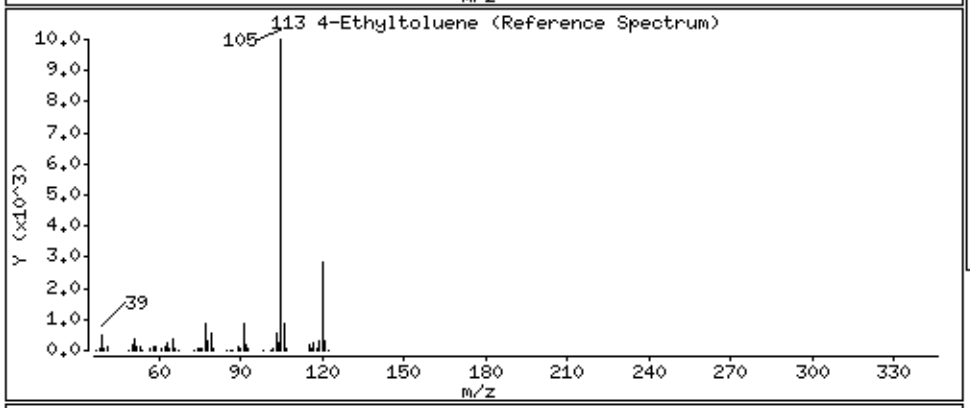
Column diameter: 0.32

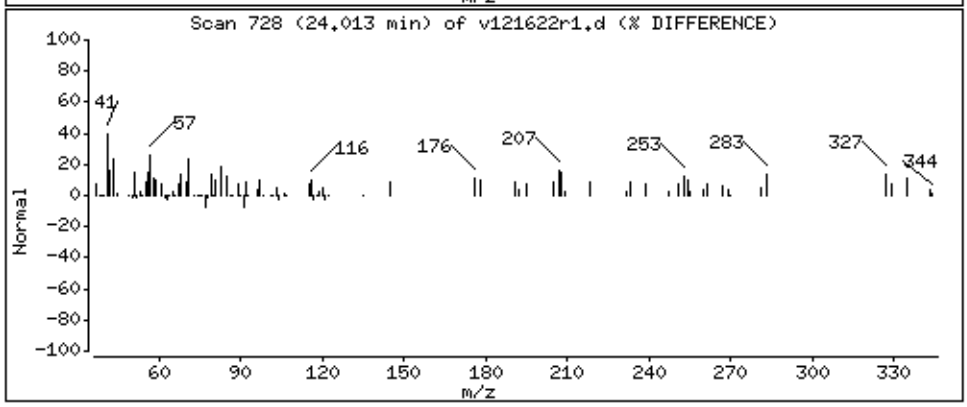
113 4-Ethyltoluene

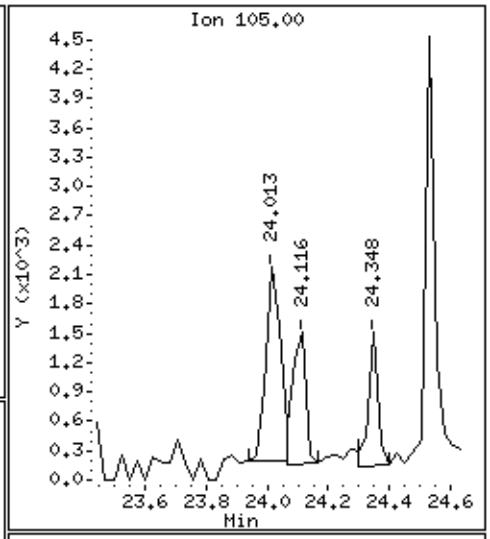
Concentration: 0.1348 PPBV

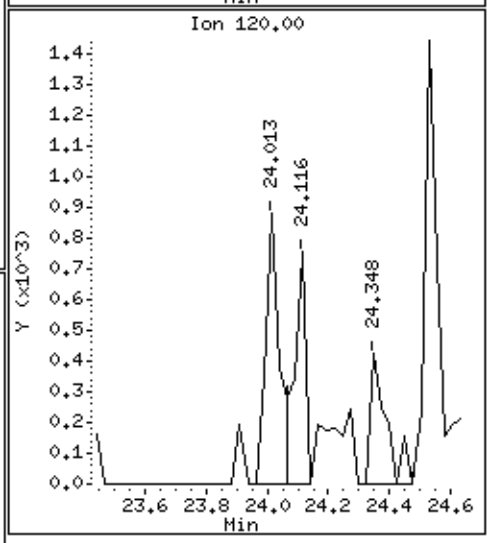












Data File: /chem/msdv.i/16Dec2014.b/v121622r1.d

Date : 17-DEC-2014 05:22

Client ID:

Instrument: msdv.i

Sample Info: 250ml #5695

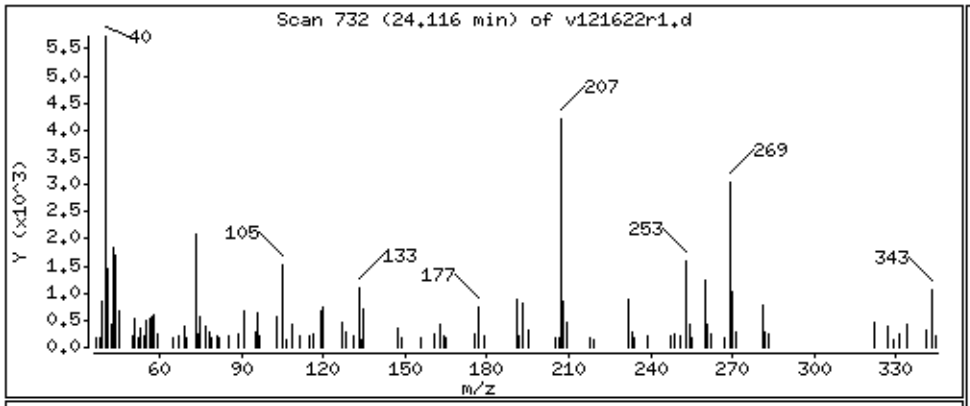
Operator: act

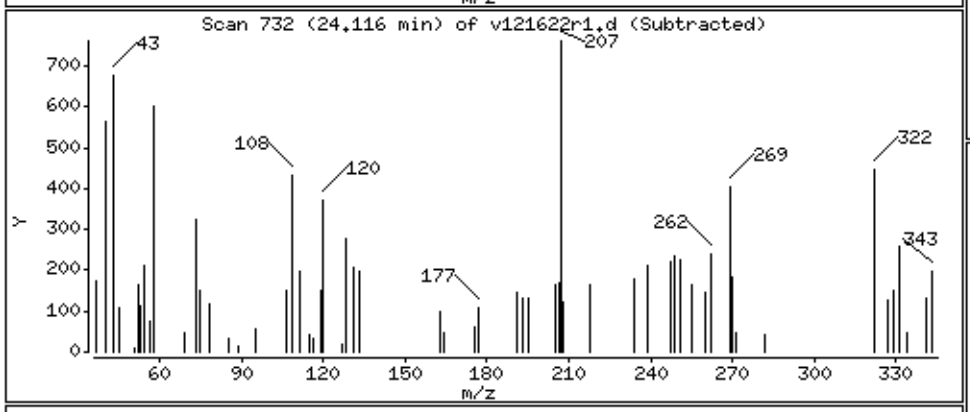
Column phase: RTx-624

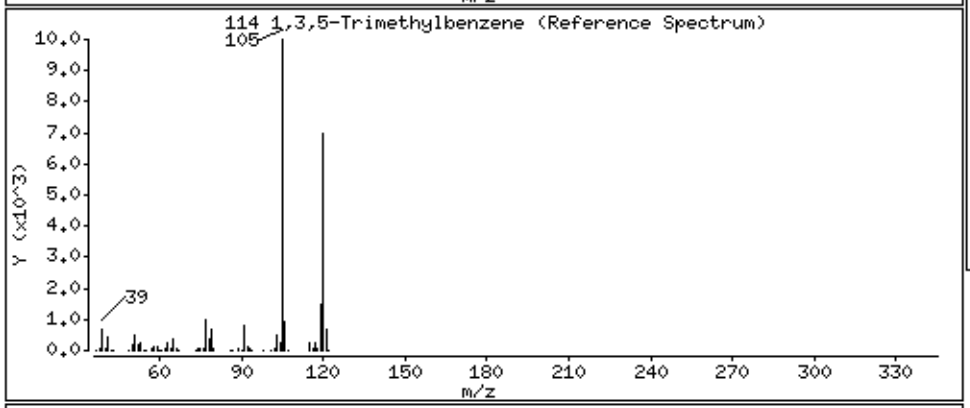
Column diameter: 0.32

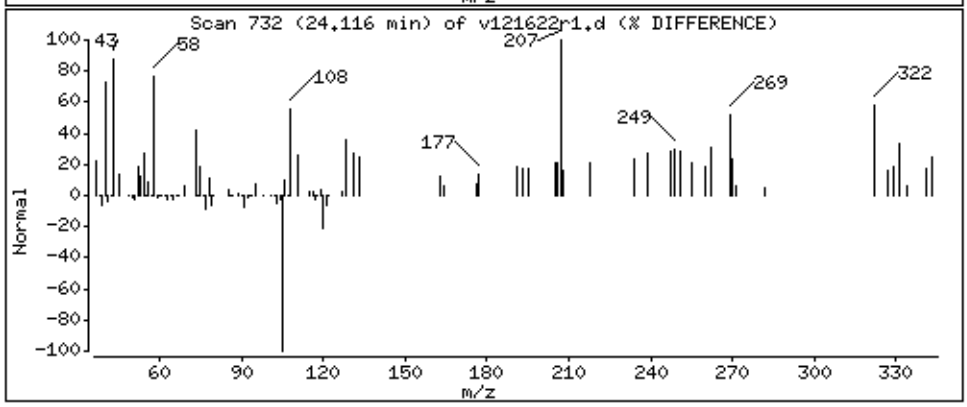
114 1,3,5-Trimethylbenzene

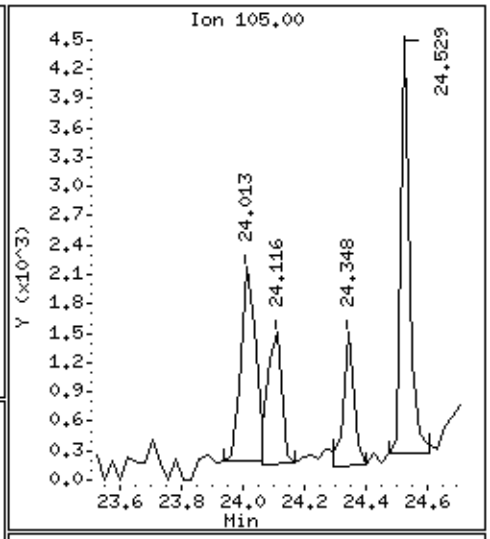
Concentration: 0.1031 PPBV

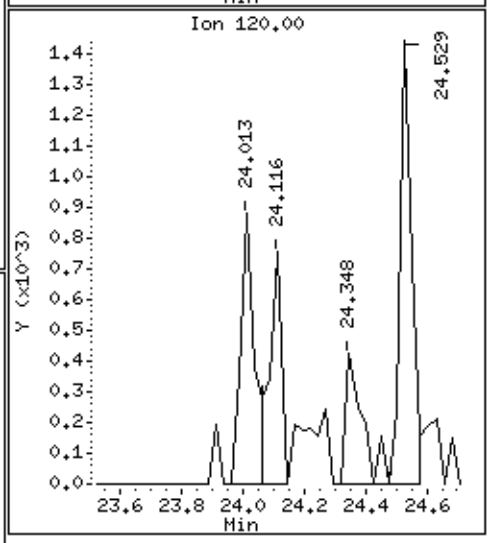












Data File: /chem/msdv.i/16Dec2014.b/v121622r1.d

Date : 17-DEC-2014 05:22

Client ID:

Instrument: msdv.i

Sample Info: 250ml #5695

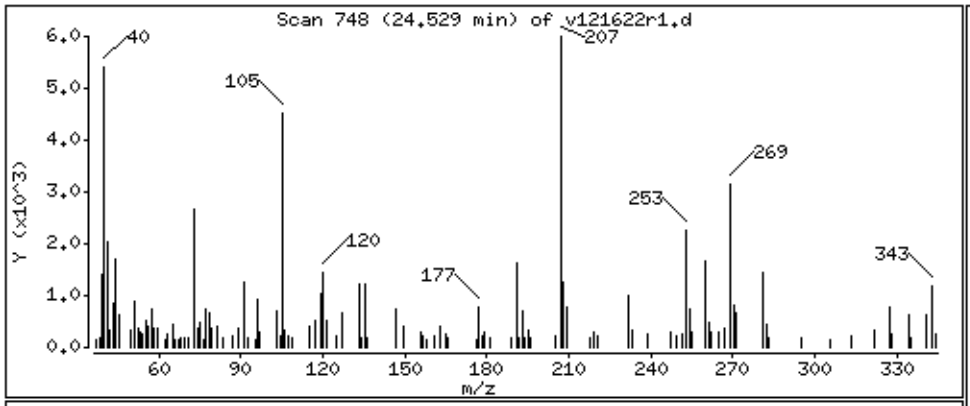
Operator: act

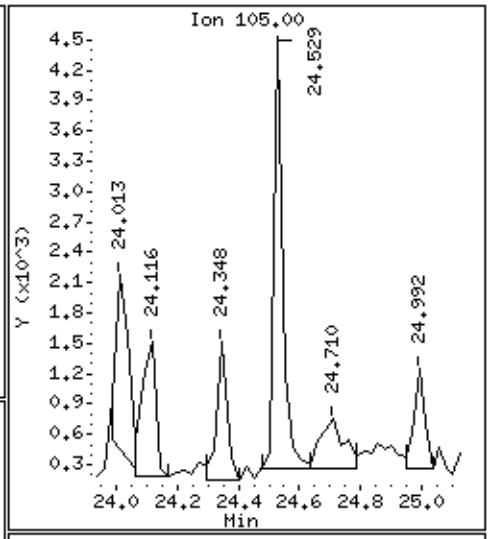
Column phase: RTx-624

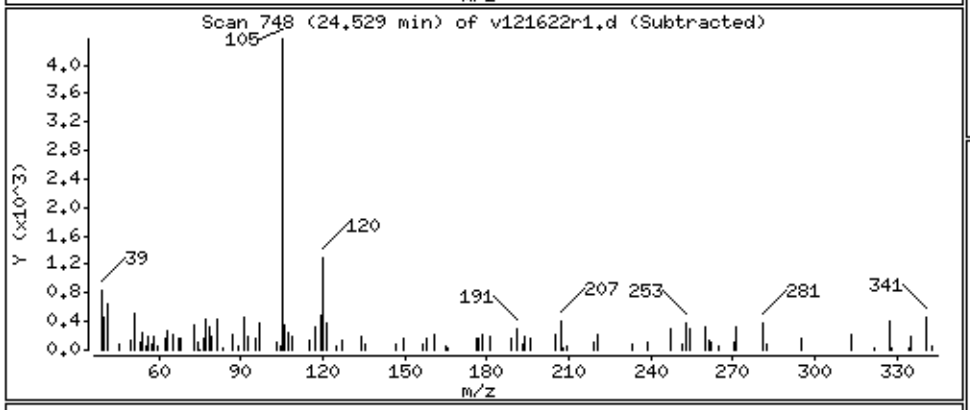
Column diameter: 0.32

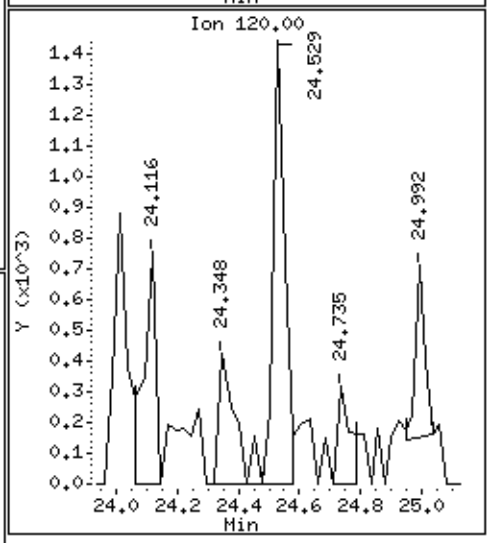
120 1,2,4-Trimethylbenzene

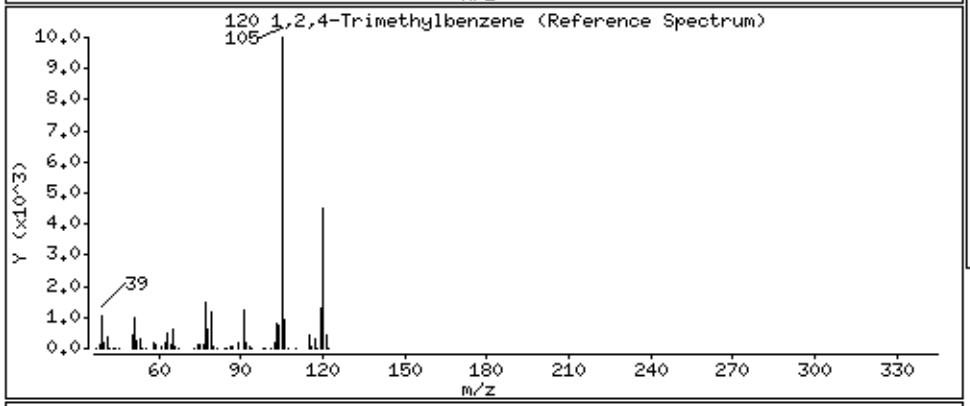
Concentration: 0.2519 PPBV

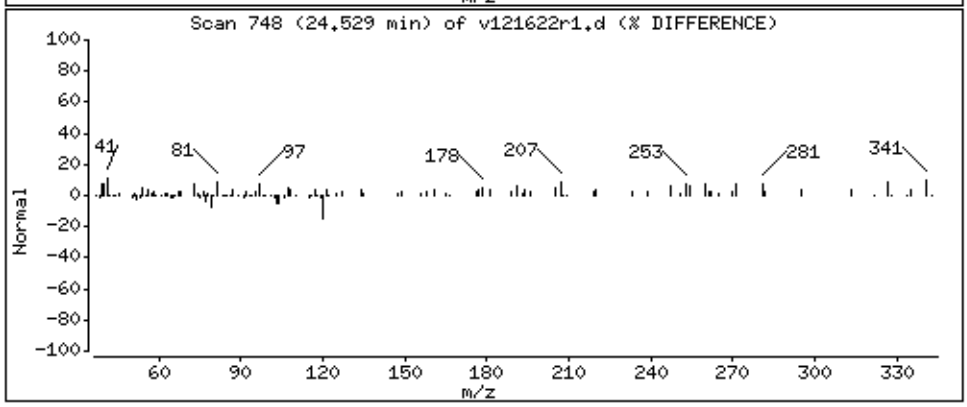












Data File: /chem/msdv.i/16Dec2014.b/v121622r1.d

Date : 17-DEC-2014 05:22

Client ID:

Instrument: msdv.i

Sample Info: 250ml #5695

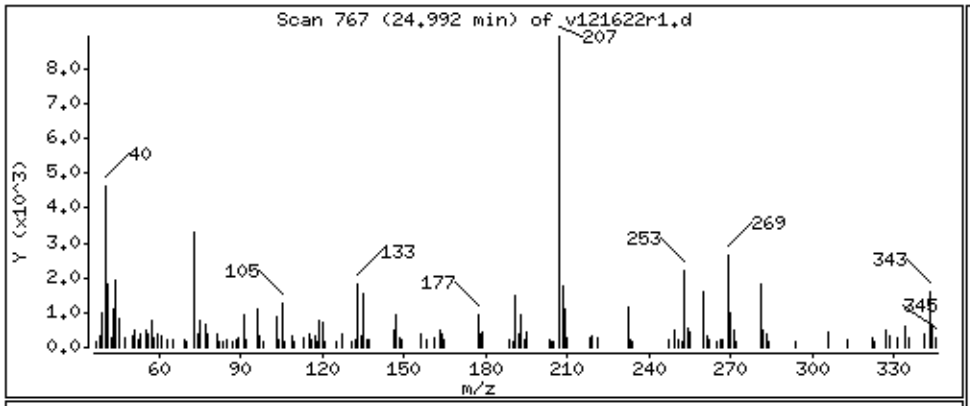
Operator: act

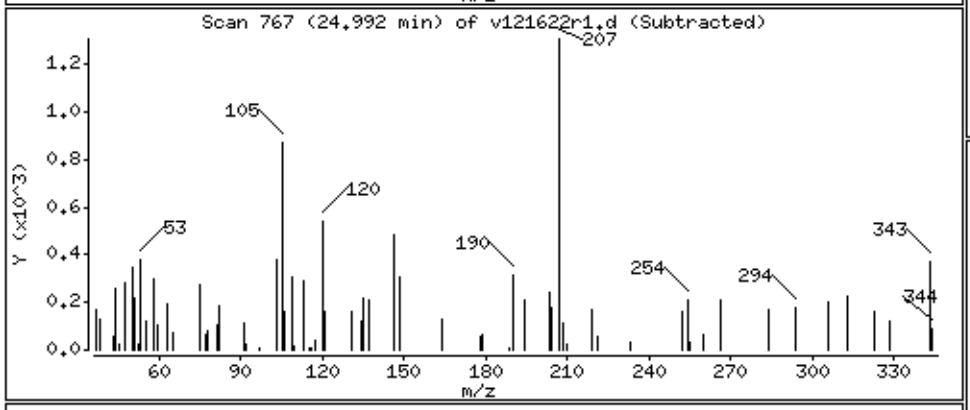
Column phase: RTx-624

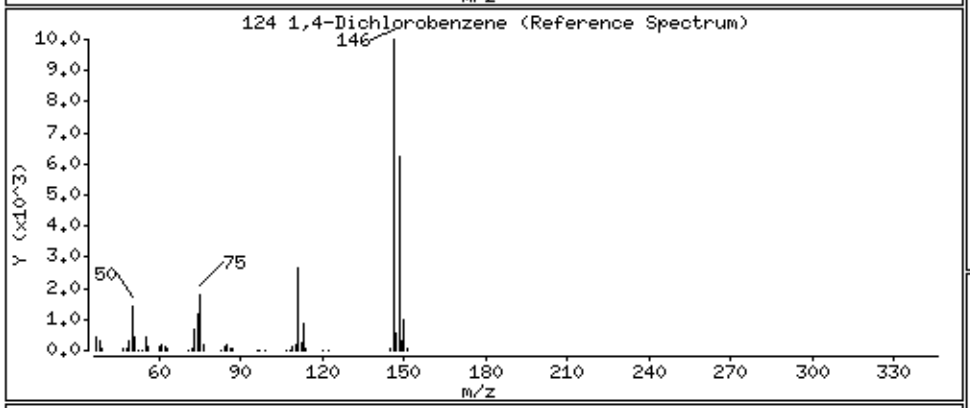
Column diameter: 0.32

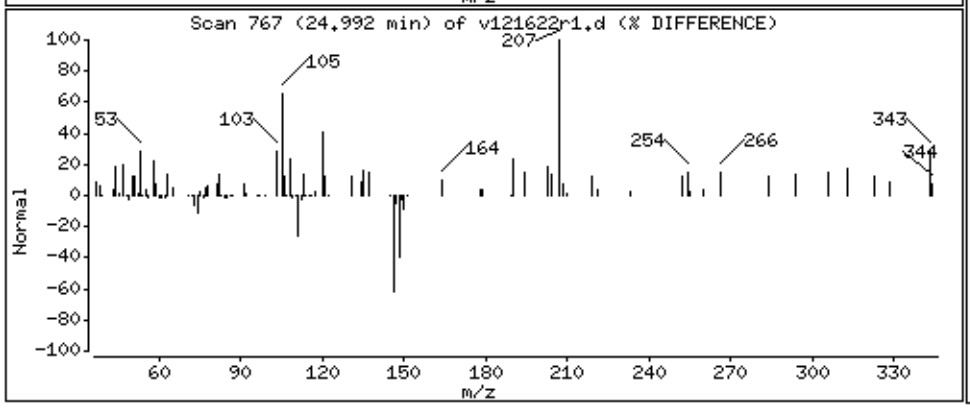
124 1,4-Dichlorobenzene

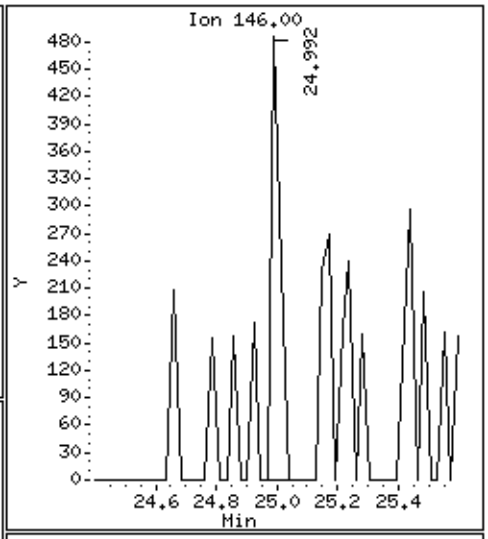
Concentration: 0.03015 PPBV

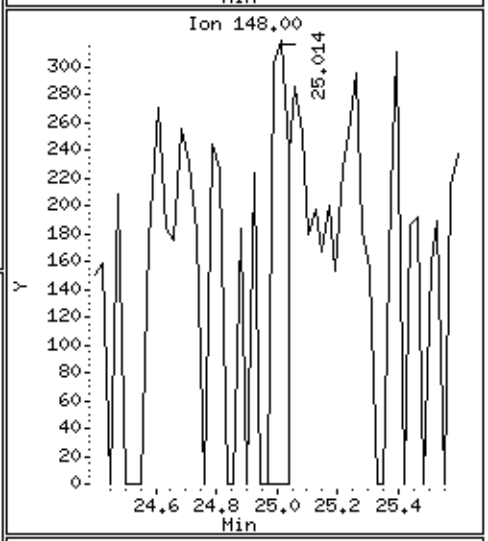


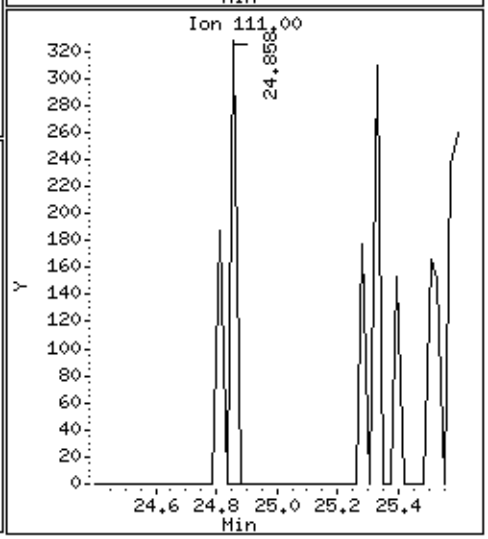












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Summary of Detected Compounds
MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: B5IA-4 (2014)

Lab ID#: 1412152AR1-08A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.87	0.40 J	4.3	2.0 J
Chloromethane	0.87	0.92	1.8	1.9
Freon 11	0.17	0.19	0.98	1.1
Ethanol	0.87	360 J0E	1.6	680 J0E
Freon 113	0.17	0.072 J	1.3	0.55 J
Acetone	0.87	240 E	2.1	570 E
2-Propanol	0.87	160 E	2.1	400 E
Methylene Chloride	0.35	63	1.2	220
Methyl tert-butyl ether	0.17	1.4	0.63	5.0
Hexane	0.17	0.42	0.61	1.5
2-Butanone (Methyl Ethyl Ketone)	0.87	0.84 J	2.6	2.5 J
Tetrahydrofuran	0.87	3.5	2.6	10
Chloroform	0.17	0.34	0.85	1.6
Cyclohexane	0.17	0.094 J	0.60	0.32 J
2,2,4-Trimethylpentane	0.87	0.17 J	4.1	0.79 J
Benzene	0.17	0.18	0.56	0.57
Heptane	0.17	2.9	0.71	12
4-Methyl-2-pentanone	0.17	71 E	0.71	290 E
Toluene	0.17	140 E	0.66	520 E
Ethyl Benzene	0.17	20	0.76	85
o-Xylene	0.17	6.6	0.76	28
Styrene	0.17	0.80	0.74	3.4
Propylbenzene	0.17	0.039 J	0.86	0.19 J
4-Ethyltoluene	0.17	0.18	0.86	0.87
1,2,4-Trimethylbenzene	0.17	0.38	0.86	1.9

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Client Sample ID: B5IA-4 (2014)

Lab ID#: 1412152AR1-08A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**v121623r1**	**Date of Collection:**	**12/9/14 3:17:00 PM**
Dil. Factor:	**1.74**	**Date of Analysis:**	**12/17/14 06:13 AM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.87	0.40 J	4.3	2.0 J
Freon 114	0.17	Not Detected	1.2	Not Detected
Chloromethane	0.87	0.92	1.8	1.9
Vinyl Chloride	0.17	Not Detected	0.44	Not Detected
1,3-Butadiene	0.17	Not Detected	0.38	Not Detected
Bromomethane	0.87	Not Detected	3.4	Not Detected
Chloroethane	0.87	Not Detected	2.3	Not Detected
Freon 11	0.17	0.19	0.98	1.1
Ethanol	0.87	360 J0E	1.6	680 J0E
Freon 113	0.17	0.072 J	1.3	0.55 J
1,1-Dichloroethene	0.17	Not Detected	0.69	Not Detected
Acetone	0.87	240 E	2.1	570 E
2-Propanol	0.87	160 E	2.1	400 E
Carbon Disulfide	0.87	Not Detected	2.7	Not Detected
3-Chloropropene	0.87	Not Detected	2.7	Not Detected
Methylene Chloride	0.35	63	1.2	220
Methyl tert-butyl ether	0.17	1.4	0.63	5.0
trans-1,2-Dichloroethene	0.17	Not Detected	0.69	Not Detected
Hexane	0.17	0.42	0.61	1.5
1,1-Dichloroethane	0.17	Not Detected	0.70	Not Detected
2-Butanone (Methyl Ethyl Ketone)	0.87	0.84 J	2.6	2.5 J
cis-1,2-Dichloroethene	0.17	Not Detected	0.69	Not Detected
Tetrahydrofuran	0.87	3.5	2.6	10
Chloroform	0.17	0.34	0.85	1.6
1,1,1-Trichloroethane	0.17	Not Detected	0.95	Not Detected
Cyclohexane	0.17	0.094 J	0.60	0.32 J
Carbon Tetrachloride	0.17	Not Detected	1.1	Not Detected
2,2,4-Trimethylpentane	0.87	0.17 J	4.1	0.79 J
Benzene	0.17	0.18	0.56	0.57
1,2-Dichloroethane	0.17	Not Detected	0.70	Not Detected
Heptane	0.17	2.9	0.71	12
Trichloroethene	0.17	Not Detected	0.94	Not Detected
1,2-Dichloropropane	0.17	Not Detected	0.80	Not Detected
1,4-Dioxane	0.17	Not Detected	0.63	Not Detected
Bromodichloromethane	0.17	Not Detected	1.2	Not Detected
cis-1,3-Dichloropropene	0.17	Not Detected	0.79	Not Detected
4-Methyl-2-pentanone	0.17	71 E	0.71	290 E
Toluene	0.17	140 E	0.66	520 E
trans-1,3-Dichloropropene	0.17	Not Detected	0.79	Not Detected
1,1,2-Trichloroethane	0.17	Not Detected	0.95	Not Detected
Tetrachloroethene	0.17	Not Detected	1.2	Not Detected
2-Hexanone	0.87	Not Detected	3.6	Not Detected

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Client Sample ID: B5IA-4 (2014)

Lab ID#: 1412152AR1-08A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**v121623r1**	**Date of Collection:**	**12/9/14 3:17:00 PM**
Dil. Factor:	**1.74**	**Date of Analysis:**	**12/17/14 06:13 AM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Dibromochloromethane	0.17	Not Detected	1.5	Not Detected
1,2-Dibromoethane (EDB)	0.17	Not Detected	1.3	Not Detected
Chlorobenzene	0.17	Not Detected	0.80	Not Detected
Ethyl Benzene	0.17	20	0.76	85
m,p-Xylene	0.17	Not Detected	0.76	Not Detected
o-Xylene	0.17	6.6	0.76	28
Styrene	0.17	0.80	0.74	3.4
Bromoform	0.17	Not Detected	1.8	Not Detected
Cumene	0.17	Not Detected	0.86	Not Detected
1,1,2,2-Tetrachloroethane	0.17	Not Detected	1.2	Not Detected
Propylbenzene	0.17	0.039 J	0.86	0.19 J
4-Ethyltoluene	0.17	0.18	0.86	0.87
1,3,5-Trimethylbenzene	0.17	Not Detected	0.86	Not Detected
1,2,4-Trimethylbenzene	0.17	0.38	0.86	1.9
1,3-Dichlorobenzene	0.17	Not Detected UJ	1.0	Not Detected UJ
1,4-Dichlorobenzene	0.17	Not Detected UJ	1.0	Not Detected UJ
alpha-Chlorotoluene	0.87	Not Detected UJ	4.5	Not Detected UJ
1,2-Dichlorobenzene	0.17	Not Detected UJ	1.0	Not Detected UJ
1,2,4-Trichlorobenzene	0.87	Not Detected	6.4	Not Detected
Hexachlorobutadiene	0.87	Not Detected UJ	9.3	Not Detected UJ
Naphthalene	0.87	Not Detected	4.6	Not Detected

J = Estimated value.
J0 = Estimated value due to bias in the CCV.
E = Exceeds instrument calibration range.
UJ = Analyte associated with low bias in the CCV and/or LCS.
Container Type: 6 Liter Summa Canister (100% Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	103	70-130
Toluene-d8	107	70-130
4-Bromofluorobenzene	102	70-130

Eurofins Air Toxics Inc.

TO15/Modified TO-14A

Data file : /chem/msdv.i/16Dec2014.b/v121623r1.d
Lab Smp Id: 1412152AR1-08A
Inj Date : 17-DEC-2014 06:13
Operator : act Inst ID: msdv.i
Smp Info : 250ml #25248
Misc Info : 6.9"Hg -> 5psi
Comment : Low Level GC-MS
Method : /chem/msdv.i/16Dec2014.b/v14l1006d.m
Meth Date : 01-Jul-2015 09:03 sblack Quant Type: ISTD
Cal Date : 03-NOV-2014 11:17 Cal File: v110307.d
Als bottle: 1
Dil Factor: 1.74000
Integrator: HP RTE Compound Sublist: And19256r1.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
* 54 Bromochloromethane							CAS #: 74-97-5	
15.934	15.933	(1.000)	130	99471	5.00000		80.00- 120.00	100.00
15.934	15.933	(1.000)	128	73047			47.55- 107.55	73.44
15.934	15.933	(1.000)	49	256345			213.64- 273.64	257.71
* 71 1,4-Difluorobenzene							CAS #: 540-36-3	
17.305	17.305	(1.000)	114	414688	5.00000		80.00- 120.00	100.00
17.305	17.305	(1.000)	88	72419			0.00- 46.17	17.46
* 92 Chlorobenzene-d5							CAS #: 3114-55-4	
22.205	22.205	(1.000)	117	332409	5.00000		80.00- 120.00	100.00
22.205	22.205	(1.000)	82	213681			28.56- 88.56	64.28
$ 65 1,2-Dichloroethane-d4							CAS #: 17060-07-0	
16.756	16.756	(1.052)	65	187454	5.13487	5.135	80.00- 120.00	100.00
16.756	16.756	(1.052)	67	93957			28.37- 88.37	50.12
$ 80 Toluene-d8							CAS #: 2037-26-5	
19.856	19.879	(1.147)	98	425403	5.33561	5.336	80.00- 120.00	100.00
19.856	19.879	(1.147)	70	54413			0.00- 41.90	12.79

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

$  80 Toluene-d8 (continued)
 19.856  19.879 (1.147)   100    267970                    34.60-  94.60    62.99
-------------------------------------------------------------------------------
$ 106 Bromofluorobenzene                            CAS #: 460-00-4
 23.704  23.704 (1.067)   174    146514 5.12523    5.125  80.00- 120.00   100.00
 23.678  23.704 (1.066)    95    208628                  113.85- 173.85   142.39
 23.704  23.704 (1.067)   176    139707                    68.89- 128.89    95.35
-------------------------------------------------------------------------------
    4 Dichlorodifluoromethane/Fr12                  CAS #: 75-71-8
  5.278   5.202 (0.331)    85     21519 0.23091   0.4018  80.00- 120.00   100.00(a)
  5.164   5.202 (0.324)    87      6065                     1.57-  61.57    28.19
-------------------------------------------------------------------------------
    8 Chloromethane                                 CAS #: 74-87-3
  7.128   7.052 (0.447)    50     29590 0.52688   0.9168  80.00- 120.00   100.00
  7.128   7.052 (0.447)    52      8598                     1.81-  61.81    29.06
-------------------------------------------------------------------------------
   20 Trichlorofluoromethane/Fr11                   CAS #: 75-69-4
 11.184  11.183 (0.702)   101     10528 0.10975   0.1910  80.00- 120.00   100.00
 11.184  11.183 (0.702)   103      7209                    34.11-  94.11    68.48
-------------------------------------------------------------------------------
   24 Ethanol                                       CAS #: 64-17-5
 12.102  12.101 (0.760)    45   4218573 207.454   360.97  80.00- 120.00   100.00(A)
 12.102  12.101 (0.760)    46   1621132                     8.51-  68.51    38.43
 12.102  12.101 (0.760)    43    861757                     0.00-  54.10    20.43
-------------------------------------------------------------------------------
   28 Freon 113                                     CAS #: 76-13-1
 12.568  12.568 (0.789)   151      2383 0.04127  0.07181  80.00- 120.00   100.00(a)
 12.596  12.568 (0.791)   153      1099                    33.65-  93.65    46.13
 12.596  12.568 (0.791)   101      1997                    96.37- 156.37    83.82
-------------------------------------------------------------------------------
   31 Acetone                                       CAS #: 67-64-1
 12.816  12.816 (0.804)    58   3253133 138.420   240.85  80.00- 120.00   100.00(A)
 12.816  12.816 (0.804)    43  14435039                  413.15- 473.15   443.73
-------------------------------------------------------------------------------
   34 2-Propanol                                    CAS #: 67-63-0
 13.173  13.173 (0.827)    45  10084364 92.6632   161.23  80.00- 120.00   100.00(A)
 13.173  13.173 (0.827)    43   1908127                     0.00-  50.74    18.92
 13.173  13.173 (0.827)    59    283807                     0.00-  32.83     2.81
-------------------------------------------------------------------------------
   37 Methylene Chloride                            CAS #: 75-09-2
 13.667  13.640 (0.858)    84   1097130 36.2800   63.127  80.00- 120.00   100.00
 13.640  13.640 (0.856)    49   2553537                  212.37- 272.37   232.75
 13.640  13.640 (0.856)    51    755444                    43.31- 103.31    68.86
-------------------------------------------------------------------------------
   39 MTBE                                          CAS #: 1634-04-4
 13.997  13.996 (0.878)    73     87314 0.80476    1.400  80.00- 120.00   100.00
```

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
39 MTBE (continued)							
13.997	13.996 (0.878)	57	38820			2.99- 62.99	44.46
13.997	13.996 (0.878)	41	48412			12.12- 72.12	55.45
43 Hexane					CAS #: 110-54-3		
14.381	14.381 (0.903)	57	20840	0.24005	0.4177	80.00- 120.00	100.00
14.381	14.381 (0.903)	43	20456			57.65- 117.65	98.16
14.381	14.381 (0.903)	86	2072			0.00- 40.67	9.94
51 2-Butanone					CAS #: 78-93-3		
15.592	15.571 (0.979)	72	8395	0.47992	0.8350	80.00- 120.00	100.00(a)
15.592	15.571 (0.979)	43	74410			794.80- 854.80	886.36
15.592	15.571 (0.979)	57	3893			18.01- 78.01	46.37
53 Tetrahydrofuran					CAS #: 109-99-9		
15.934	15.933 (1.000)	42	182771	2.02760	3.528	80.00- 120.00	100.00
15.934	15.933 (1.000)	71	34953			0.00- 49.03	19.12
15.934	15.933 (1.000)	72	36681			0.00- 51.35	20.07
55 Chloroform					CAS #: 67-66-3		
15.995	15.995 (1.004)	83	16200	0.19326	0.3363	80.00- 120.00	100.00
15.995	15.995 (1.004)	85	9854			33.33- 93.33	60.83
57 Cyclohexane					CAS #: 110-82-7		
16.242	16.242 (1.019)	84	2853	0.05411	0.09416	80.00- 120.00	100.00(a)
16.242	16.242 (1.019)	56	11568			157.43- 217.43	405.42
16.242	16.242 (1.019)	41	11312			105.99- 165.99	396.45
63 2,2,4-Trimethylpentane					CAS #: 540-84-1		
16.728	16.728 (1.050)	56	8908	0.09696	0.1687	80.00- 120.00	100.00(a)
16.728	16.728 (1.050)	57	18634			258.69- 318.69	209.17
16.728	16.728 (1.050)	41	9396			79.91- 139.91	105.47
64 Benzene					CAS #: 71-43-2		
16.756	16.756 (0.968)	78	12539	0.10246	0.1783	80.00- 120.00	100.00
16.756	16.756 (0.968)	77	3777			0.00- 53.73	30.12
69 Heptane					CAS #: 142-82-5		
16.975	16.948 (0.981)	57	87150	1.65235	2.875	80.00- 120.00	100.00
16.975	16.948 (0.981)	100	18885			0.00- 51.27	21.67
16.975	16.948 (0.981)	43	243619			235.24- 295.24	279.54
79 4-Methyl-2-pentanone					CAS #: 108-10-1		
19.588	19.587 (1.132)	43	7082255	41.0009	71.342	80.00- 120.00	100.00(A)
19.588	19.587 (1.132)	58	1865611			0.00- 57.24	26.34
19.588	19.587 (1.132)	85	604348			0.00- 38.20	8.53

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
81 Toluene					CAS #: 108-88-3		
19.991	19.991 (1.155)	91	10794651	79.9118	139.05	80.00- 120.00	100.00(A)
19.991	19.991 (1.155)	92	6234035			28.60- 88.60	57.75
95 Ethyl Benzene					CAS #: 100-41-4		
22.315	22.315 (1.005)	106	549723	11.2199	19.523	80.00- 120.00	100.00
22.315	22.315 (1.005)	91	1758552			292.36- 352.36	319.90
100 o-Xylene					CAS #: 95-47-6		
23.001	23.001 (1.036)	106	169947	3.78032	6.578	80.00- 120.00	100.00
23.001	23.001 (1.036)	91	370117			186.63- 246.63	217.78
101 Styrene					CAS #: 100-42-5		
23.029	23.029 (1.037)	104	30337	0.46127	0.8026	80.00- 120.00	100.00
23.001	23.029 (1.036)	78	38524			28.70- 88.70	126.99
111 Propylbenzene					CAS #: 103-65-1		
23.910	23.910 (1.077)	91	2612	0.02243	0.03903	80.00- 120.00	100.00(a)
23.910	23.910 (1.077)	120	1244			0.00- 53.83	47.63
113 4-Ethyltoluene					CAS #: 622-96-8		
24.013	24.039 (1.081)	105	8669	0.10148	0.1766	80.00- 120.00	100.00
24.013	24.039 (1.081)	120	2522			0.18- 60.18	29.09
120 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
24.529	24.529 (1.105)	105	12693	0.21972	0.3823	80.00- 120.00	100.00
24.529	24.529 (1.105)	120	3690			19.27- 79.27	29.07

QC Flag Legend

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

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdv.i
Lab File ID: v121623r1.d
Lab Smp Id: 1412152AR1-08A
Analysis Type: VOA
Quant Type: ISTD
Operator: act
Method File: /chem/msdv.i/16Dec2014.b/v14l1006d.m
Misc Info: 6.9"Hg -> 5psi

Calibration Date: 16-DEC-2014
Calibration Time: 08:42

Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
54 Bromochloromethan	109722	65833	153611	99471	-9.34
71 1,4-Difluorobenze	445503	267302	623704	414688	-6.92
92 Chlorobenzene-d5	361081	216649	505513	332409	-7.94

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
54 Bromochloromethan	15.93	15.60	16.26	15.93	0.00
71 1,4-Difluorobenze	17.30	16.97	17.63	17.30	0.00
92 Chlorobenzene-d5	22.21	21.88	22.54	22.21	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: 01-Jul-2015 15:39

Eurofins Air Toxics Inc.

RECOVERY REPORT

Client Name:
Client SDG: 17Dec2014
Sample Matrix: GAS
Fraction: VOA
Lab Smp Id: 1412152AR1-08A
Level: LOW
Operator: act
Data Type: MS DATA
SampleType: SAMPLE
SpikeList File: AT12.spk
Quant Type: ISTD
Sublist File: And19256r1.sub
Method File: /chem/msdv.i/16Dec2014.b/v14l1006d.m
Misc Info: 6.9"Hg -> 5psi

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 65 1,2-Dichloroethane	5.000	5.135	102.70	70-130
$ 80 Toluene-d8	5.000	5.336	106.71	70-130
$ 106 Bromofluorobenzene	5.000	5.125	102.50	70-130

Data File: /chem/msdv.i/16Dec2014.b/v121623r1.d

Date : 17-DEC-2014 06:13

Client ID:

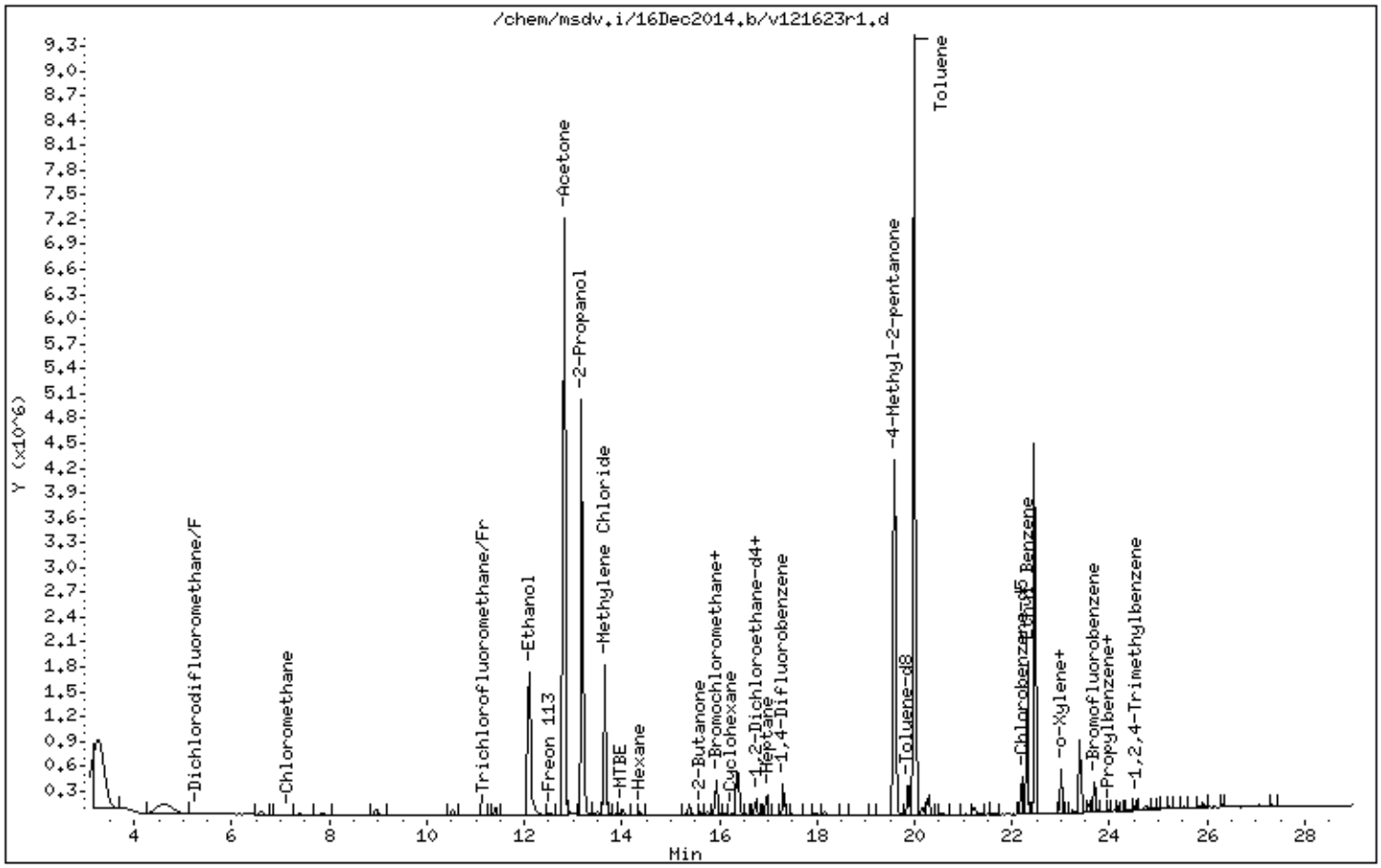
Instrument: msdv.i

Sample Info: 250ml #25248

Operator: act

Column phase: RTx-624

Column diameter: 0.32



Data File: /chem/msdv.i/16Dec2014.b/v121623r1.d

Date : 17-DEC-2014 06:13

Client ID:

Instrument: msdv.i

Sample Info: 250ml #25248

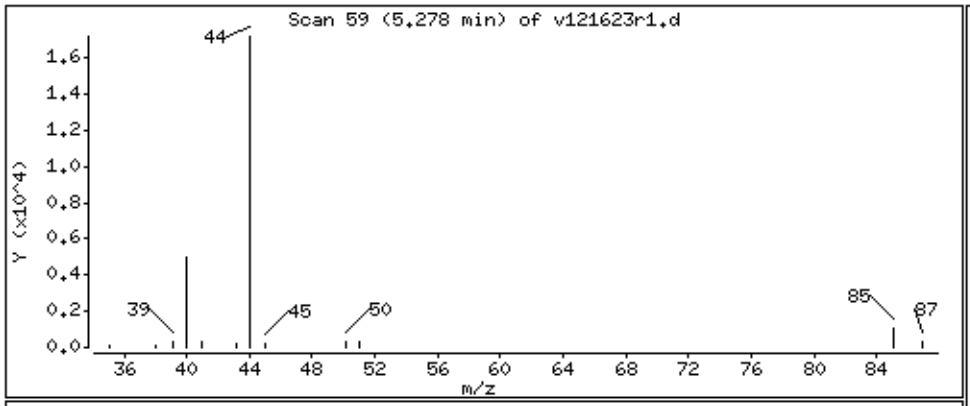
Operator: act

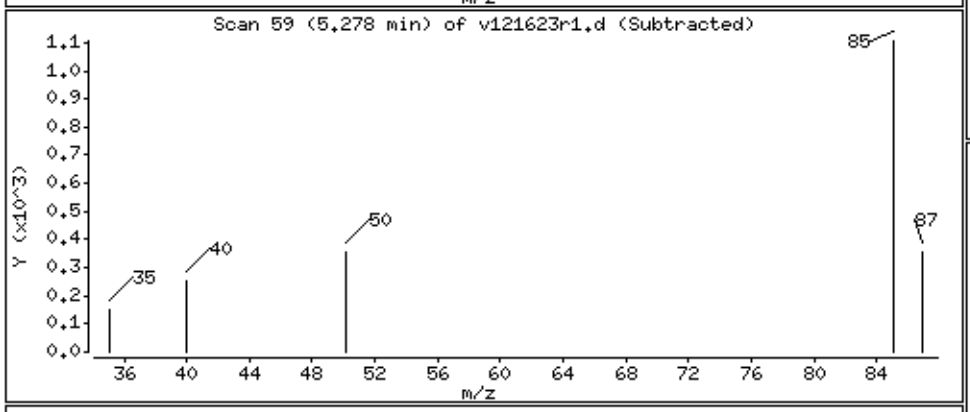
Column phase: RTx-624

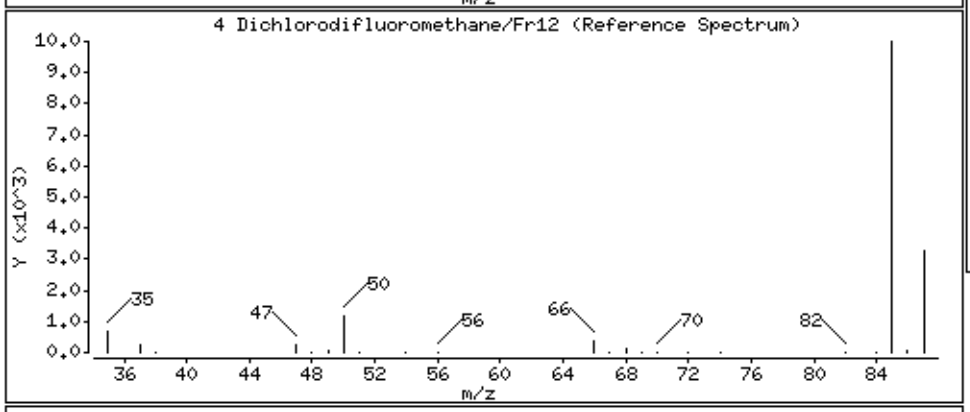
Column diameter: 0.32

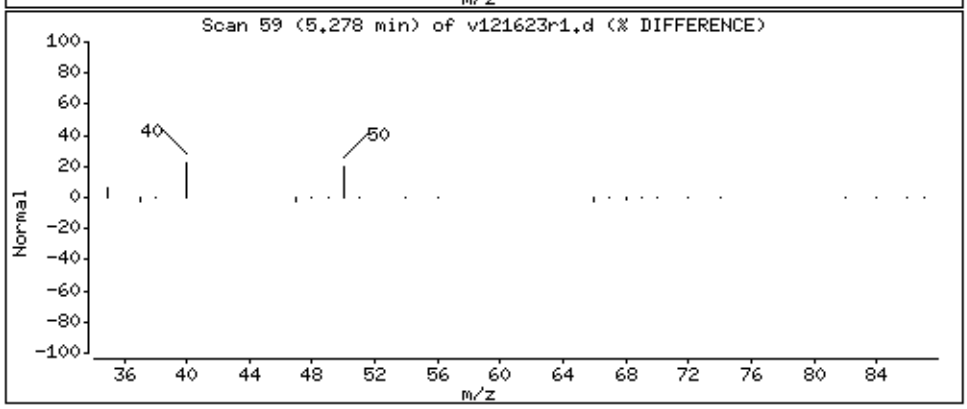
4 Dichlorodifluoromethane/Fr12

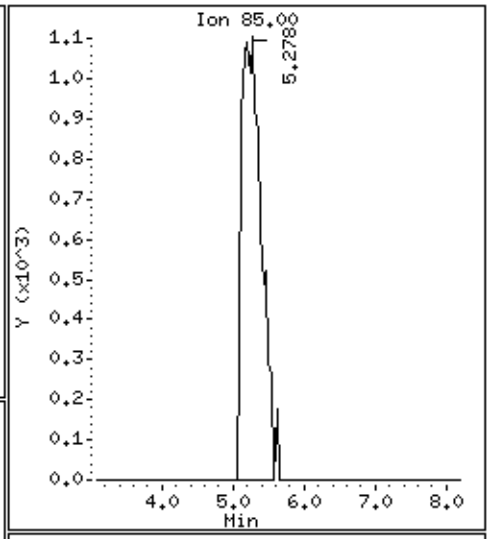
Concentration: 0.4018 PPBV

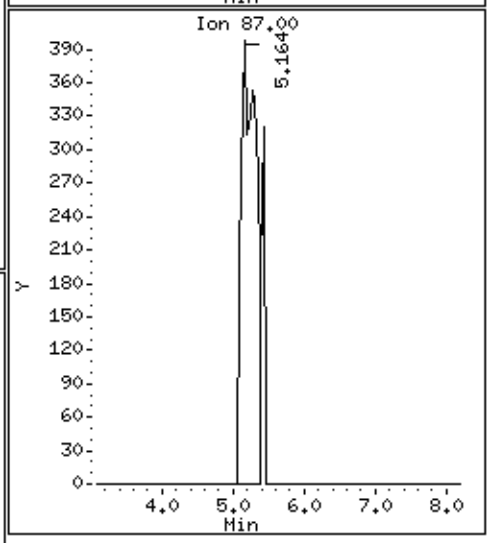












Data File: /chem/msdv.i/16Dec2014.b/v121623r1.d

Date : 17-DEC-2014 06:13

Client ID:

Instrument: msdv.i

Sample Info: 250ml #25248

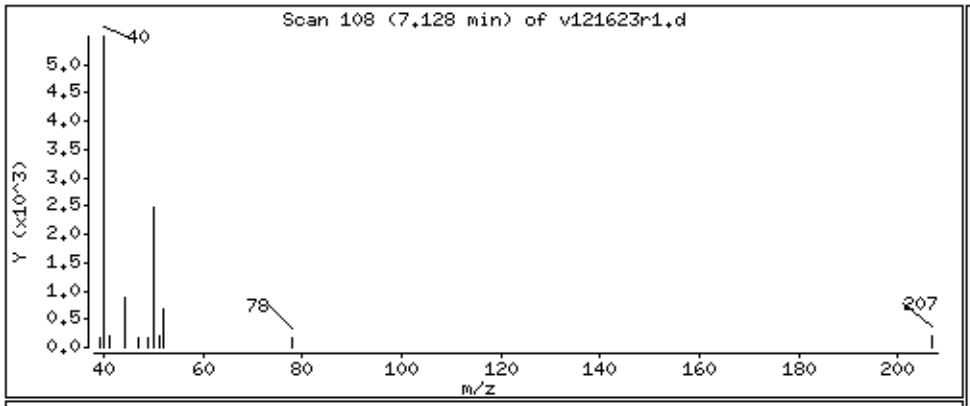
Operator: act

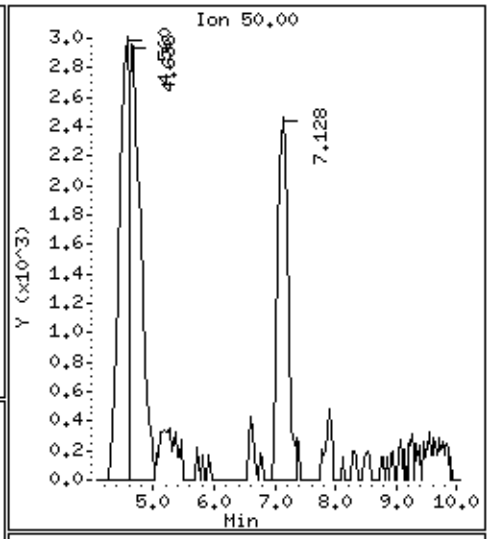
Column phase: RTx-624

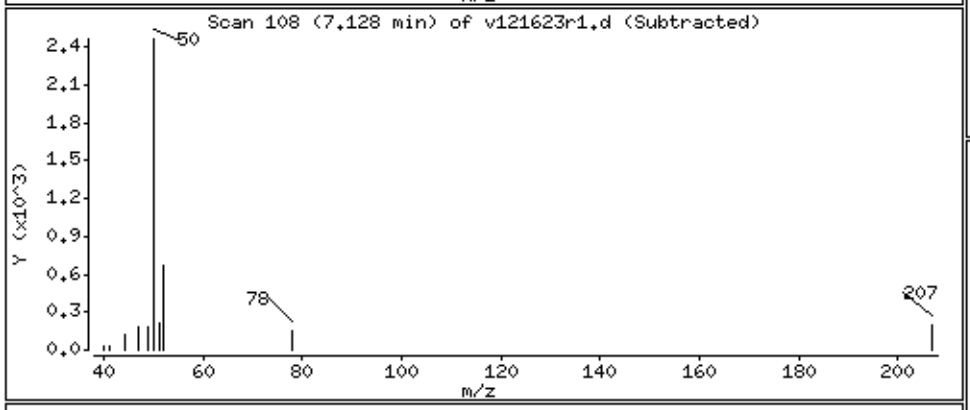
Column diameter: 0.32

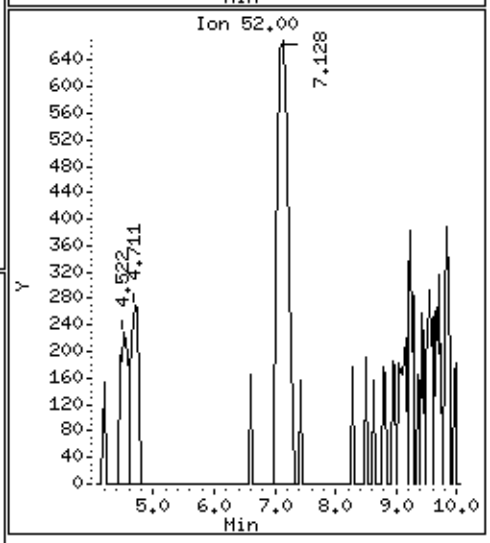
8 Chloromethane

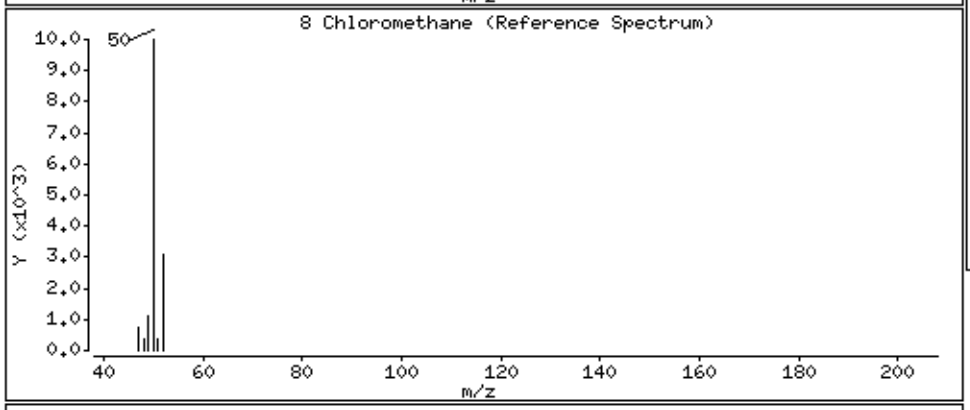
Concentration: 0.9168 PPBV

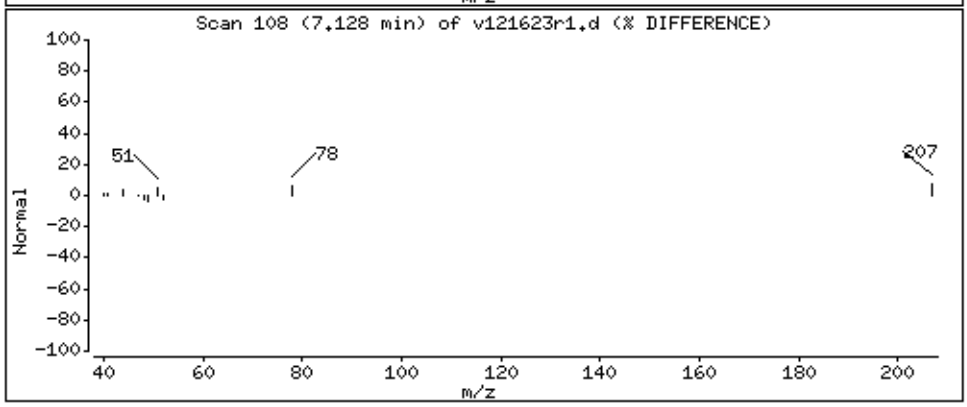












Data File: /chem/msdv.i/16Dec2014.b/v121623r1.d

Date : 17-DEC-2014 06:13

Client ID:

Instrument: msdv.i

Sample Info: 250ml #25248

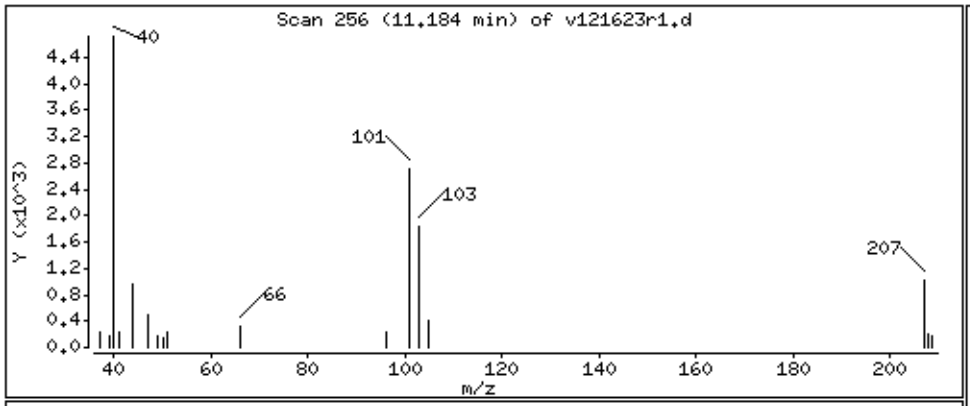
Operator: act

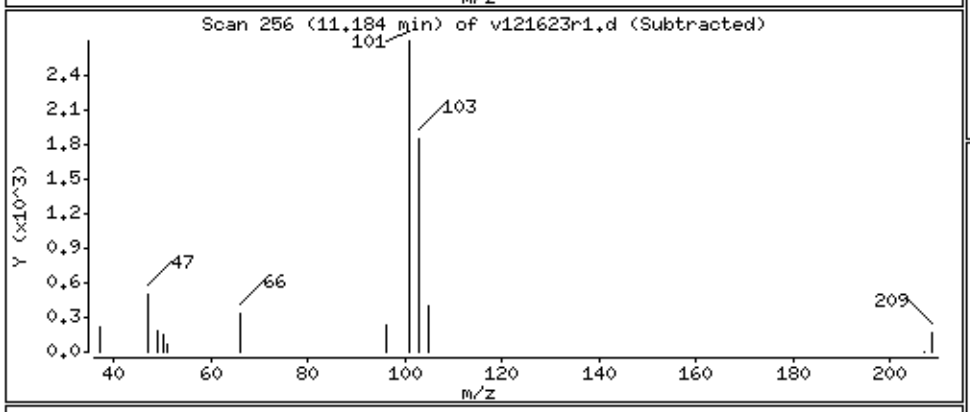
Column phase: RTx-624

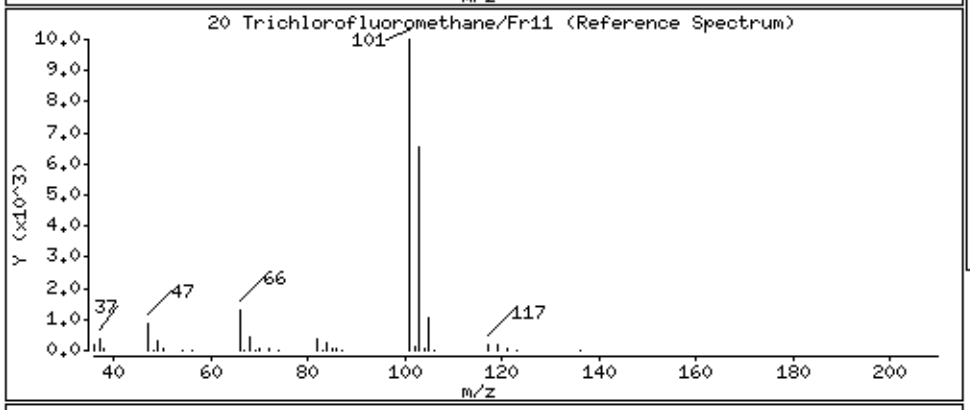
Column diameter: 0.32

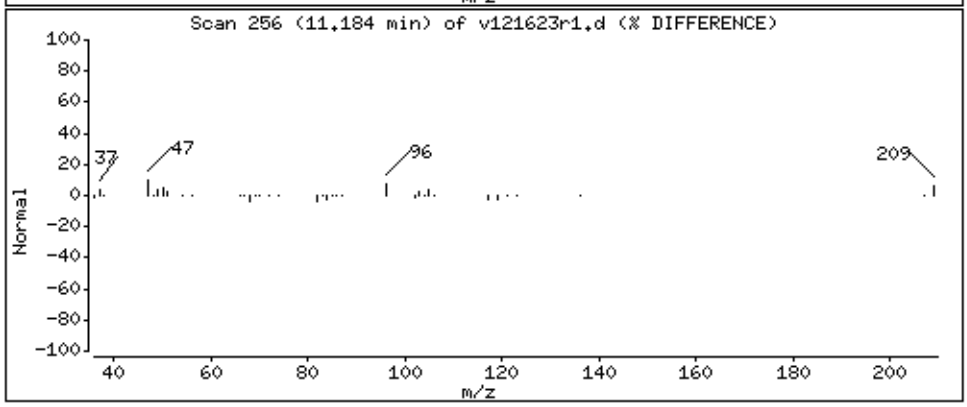
20 Trichlorofluoromethane/Fr11

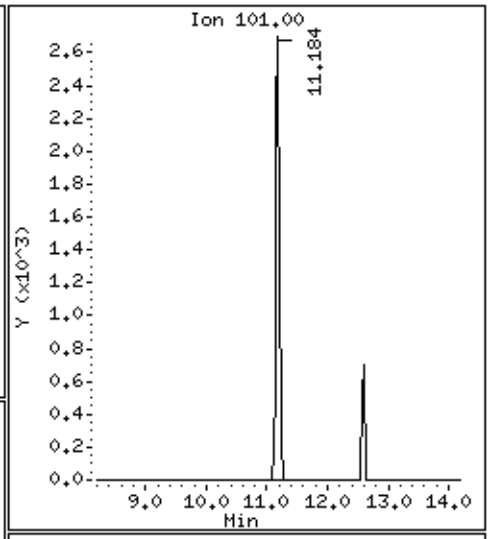
Concentration: 0.1910 PPBV

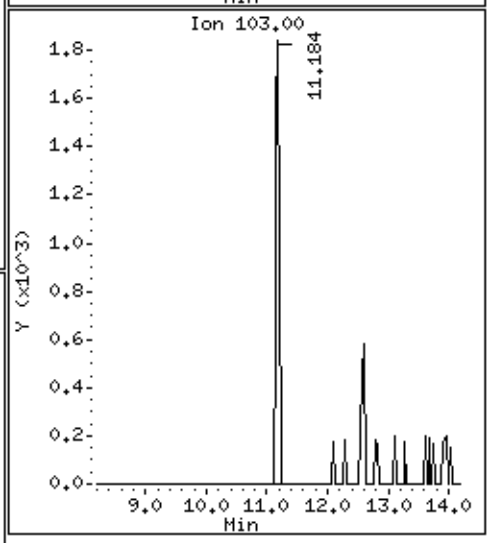












Data File: /chem/msdv.i/16Dec2014.b/v121623r1.d

Date : 17-DEC-2014 06:13

Client ID:

Instrument: msdv.i

Sample Info: 250ml #25248

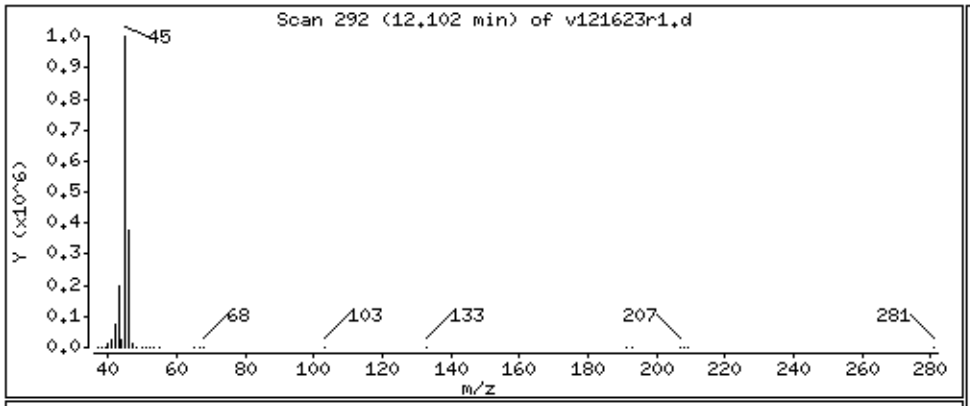
Operator: act

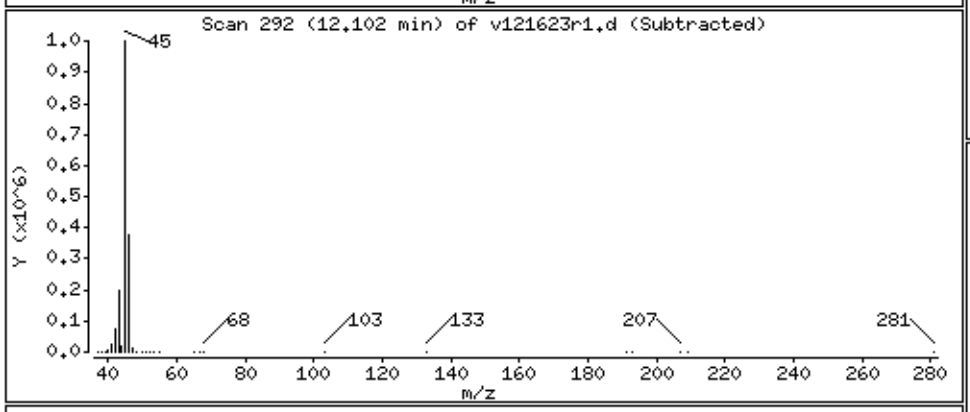
Column phase: RTx-624

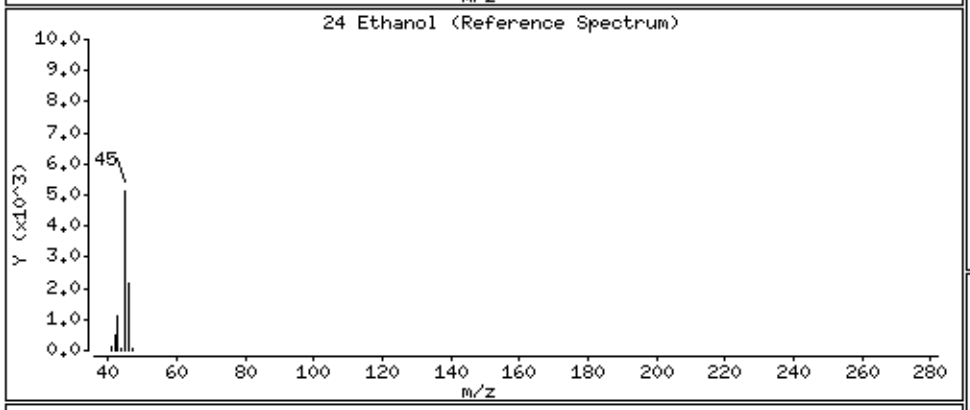
Column diameter: 0.32

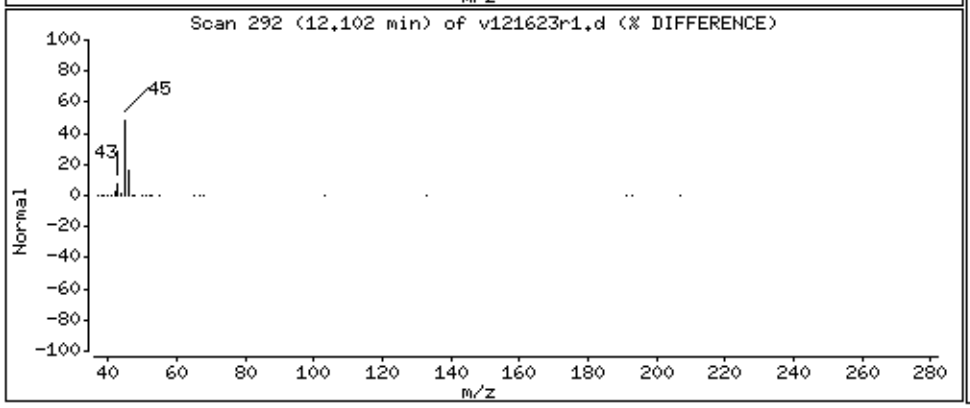
24 Ethanol

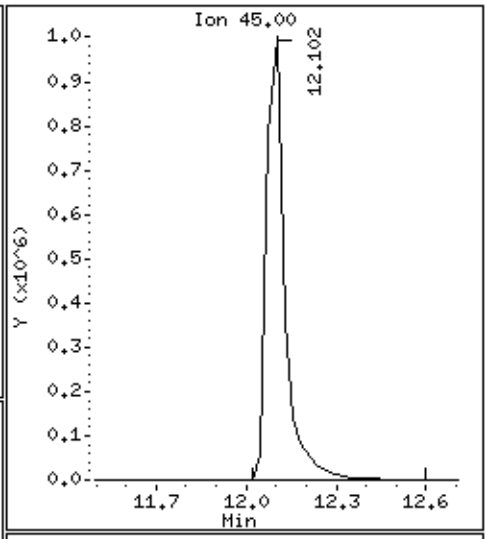
Concentration: 360.97 PPBV

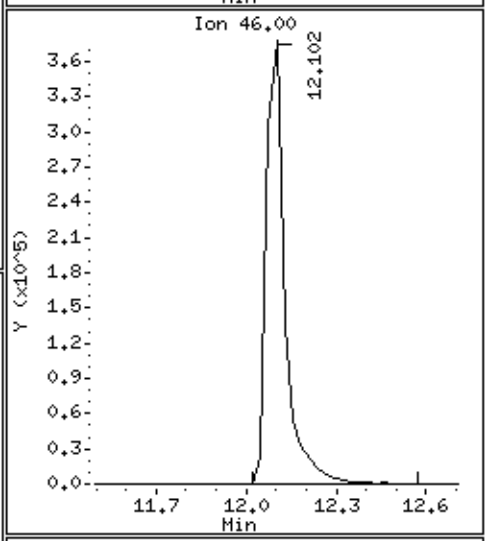


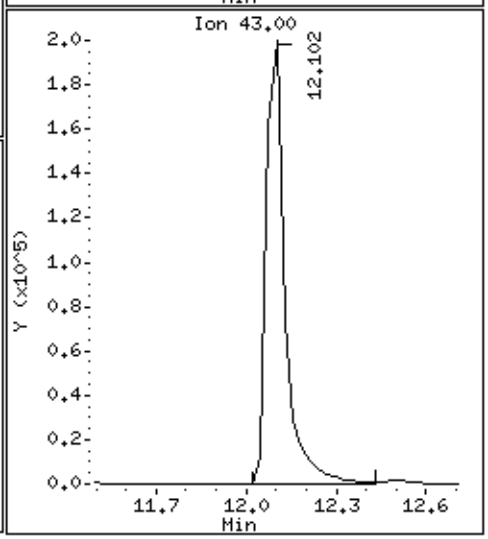












Data File: /chem/msdv.i/16Dec2014.b/v121623r1.d

Date : 17-DEC-2014 06:13

Client ID:

Instrument: msdv.i

Sample Info: 250ml #25248

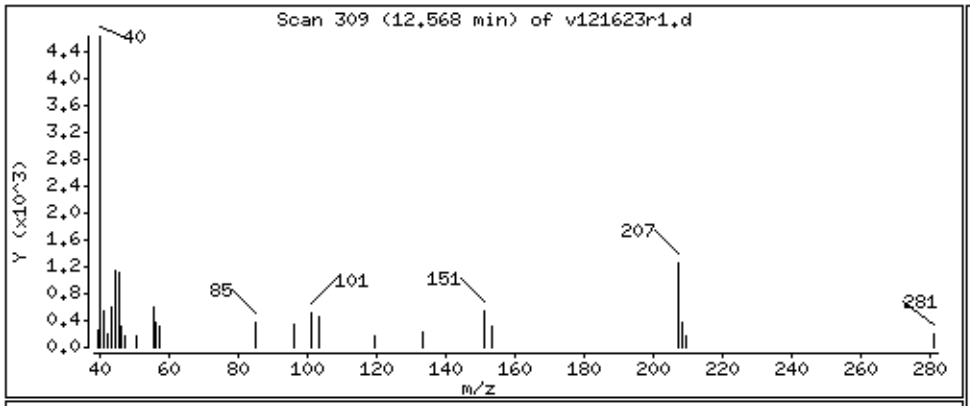
Operator: act

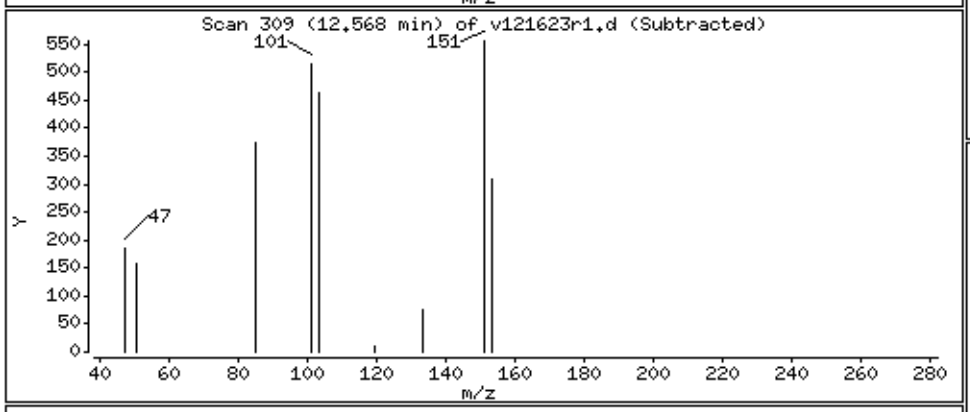
Column phase: RTx-624

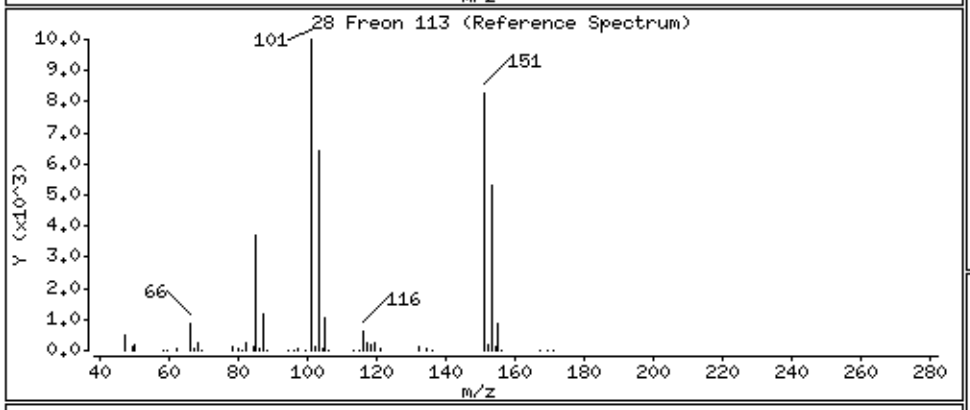
Column diameter: 0.32

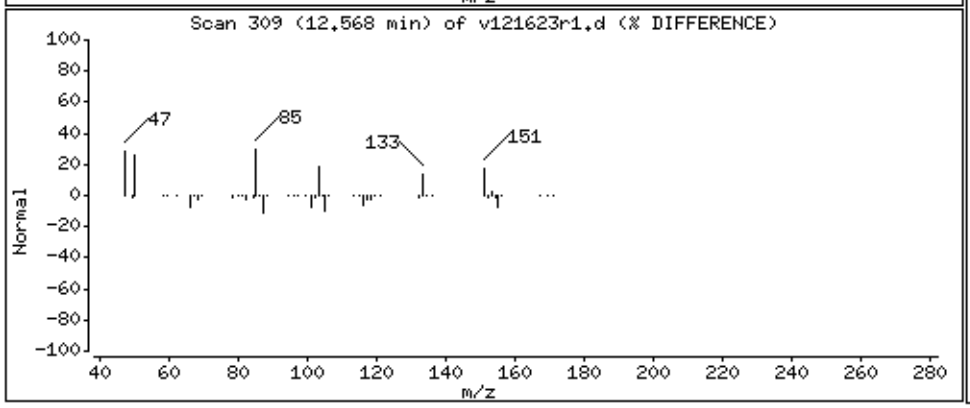
28 Freon 113

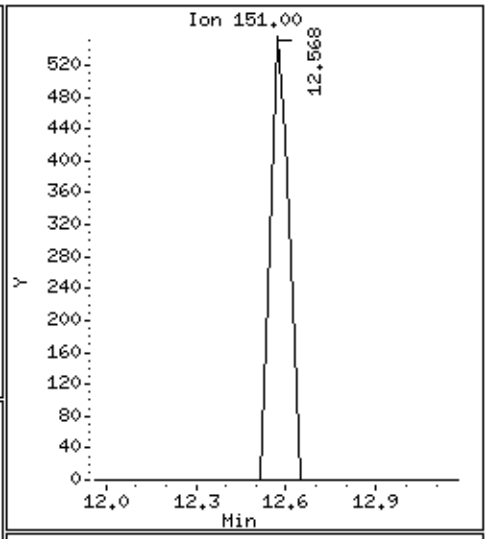
Concentration: 0.07181 PPBV

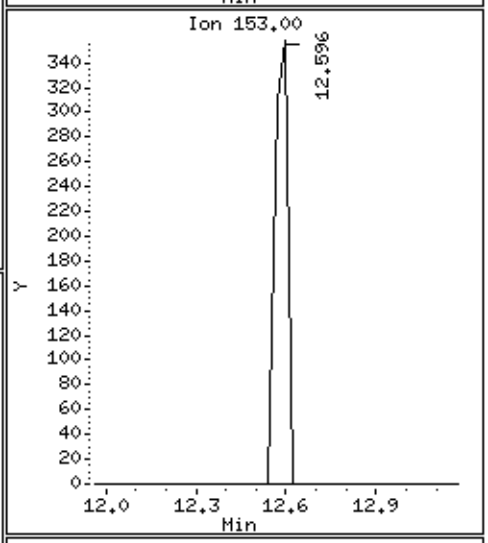


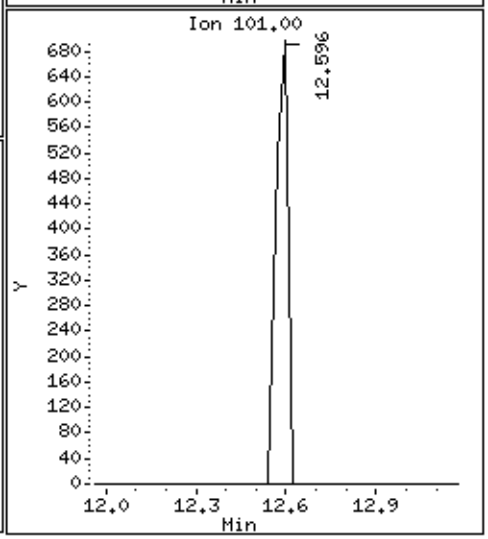












Data File: /chem/msdv.i/16Dec2014.b/v121623r1.d

Date : 17-DEC-2014 06:13

Client ID:

Instrument: msdv.i

Sample Info: 250ml #25248

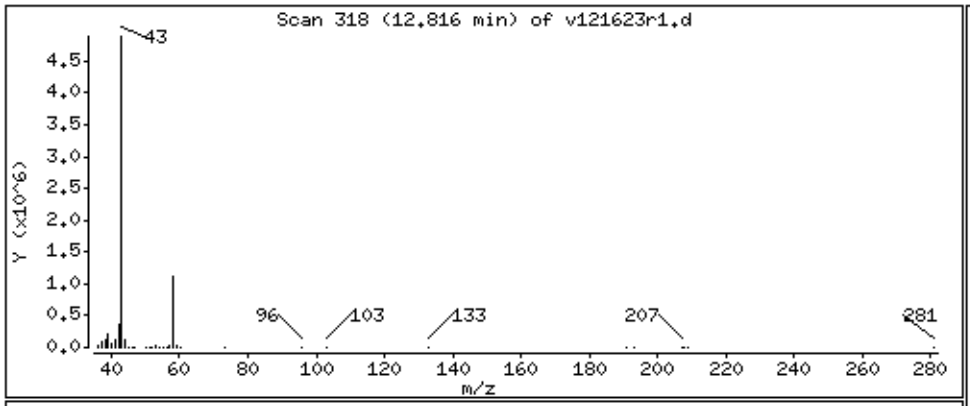
Operator: act

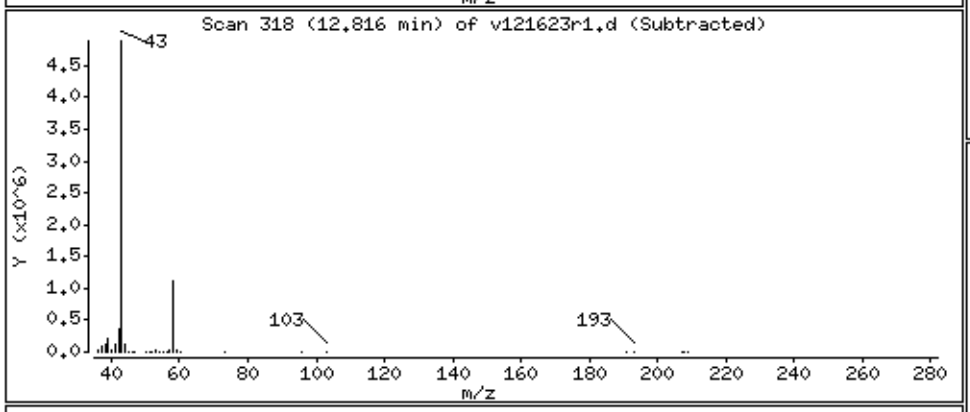
Column phase: RTx-624

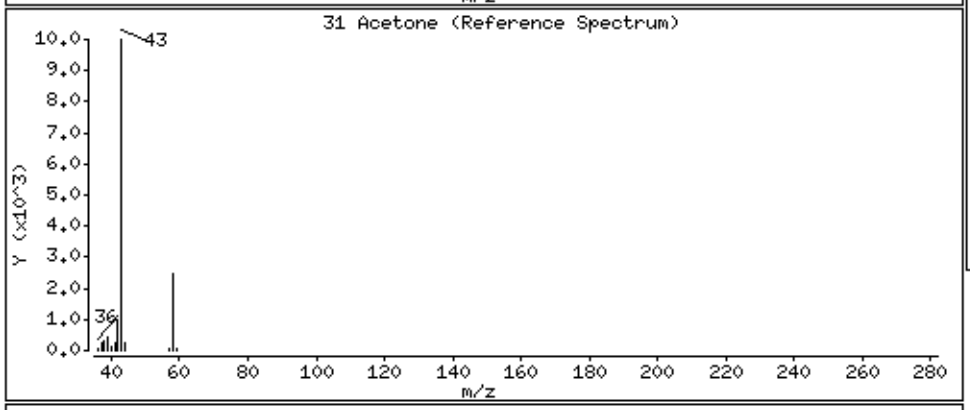
Column diameter: 0.32

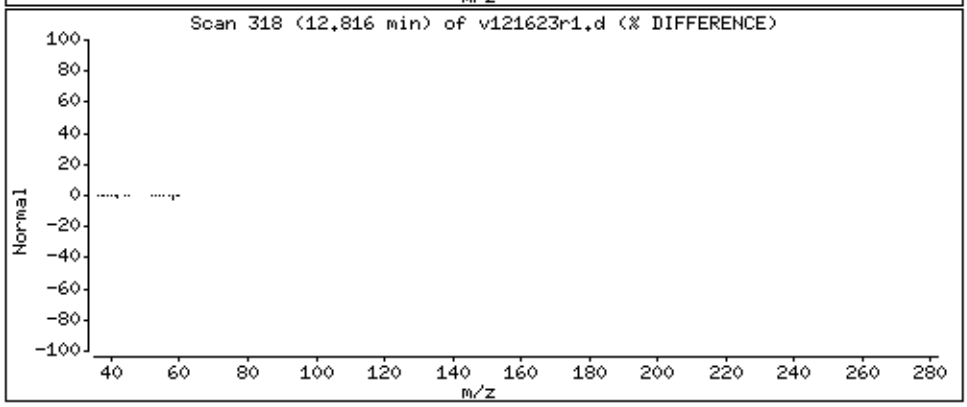
31 Acetone

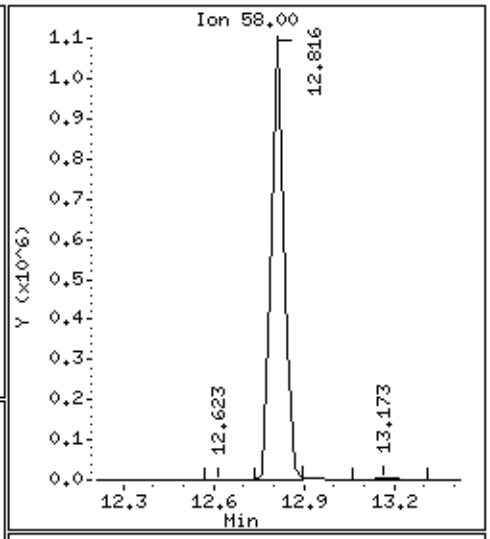
Concentration: 240.85 PPBV

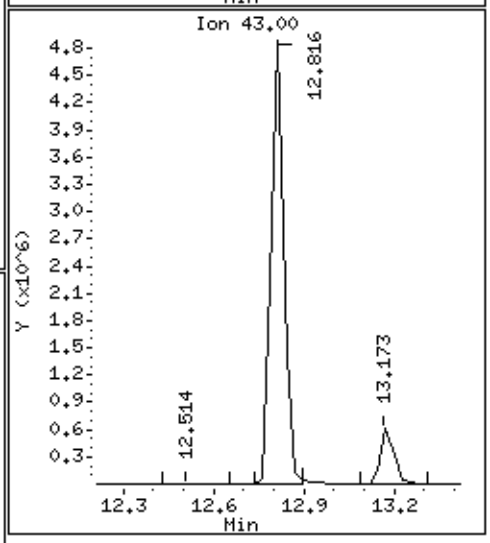












Data File: /chem/msdv.i/16Dec2014.b/v121623r1.d

Date : 17-DEC-2014 06:13

Client ID:

Instrument: msdv.i

Sample Info: 250ml #25248

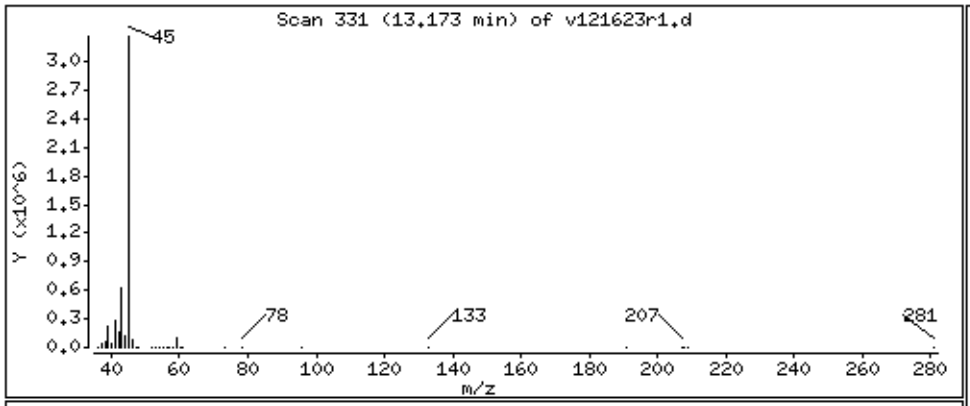
Operator: act

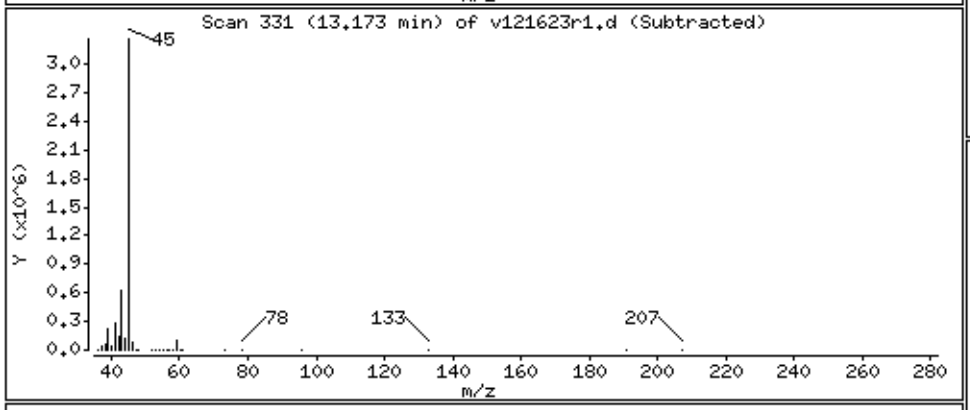
Column phase: RTx-624

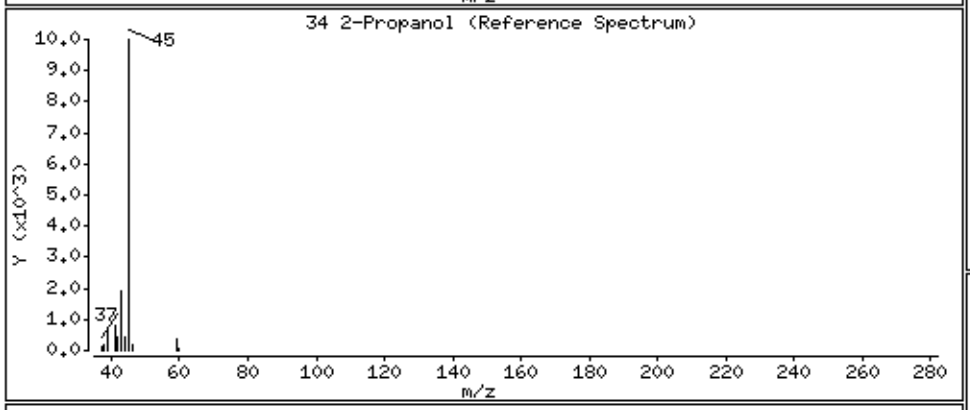
Column diameter: 0.32

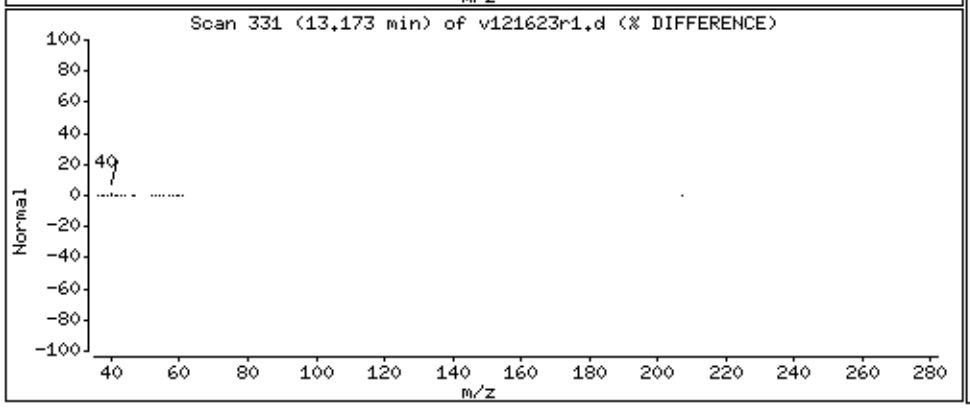
34 2-Propanol

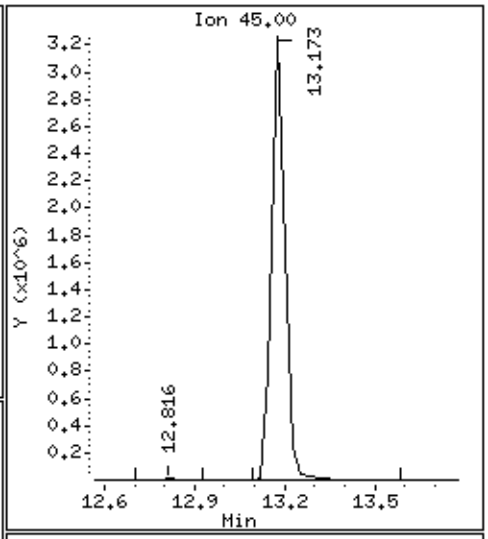
Concentration: 161.23 PPBV

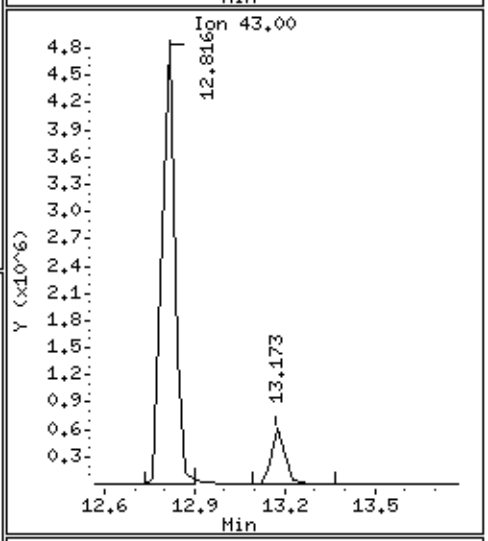


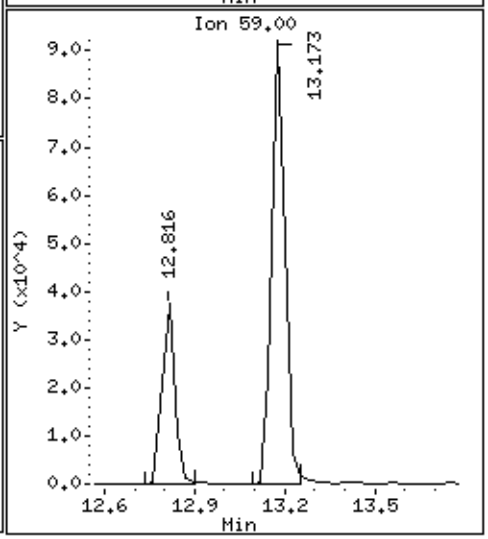












Data File: /chem/msdv.i/16Dec2014.b/v121623r1.d

Date : 17-DEC-2014 06:13

Client ID:

Instrument: msdv.i

Sample Info: 250ml #25248

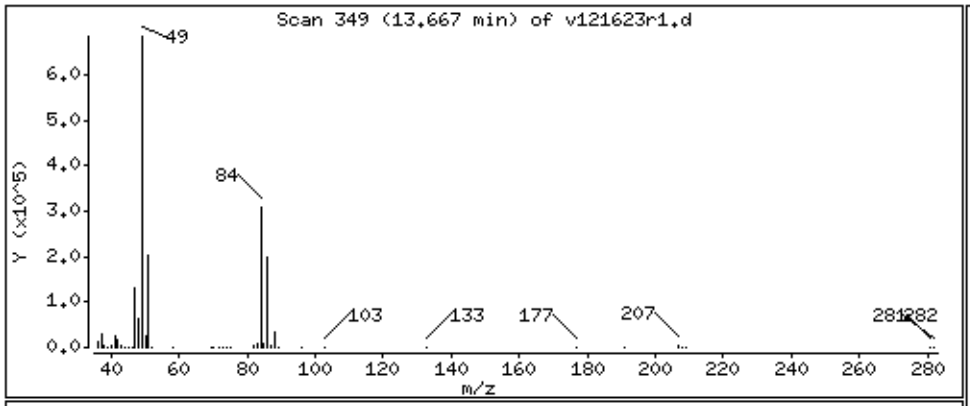
Operator: act

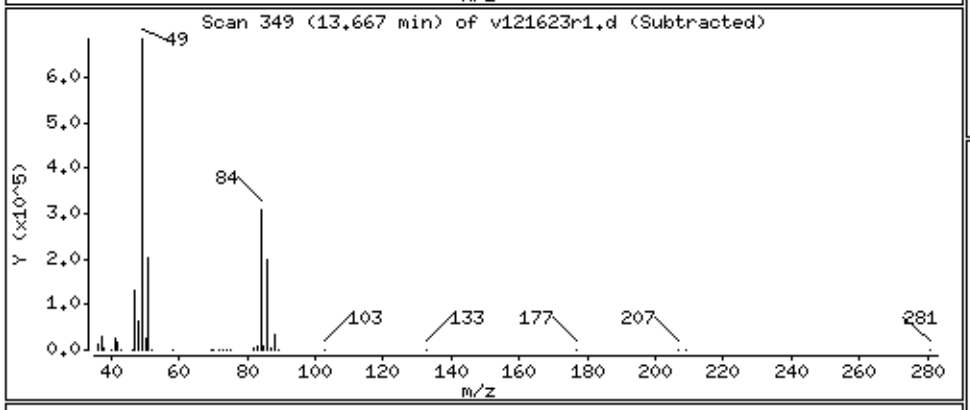
Column phase: RTx-624

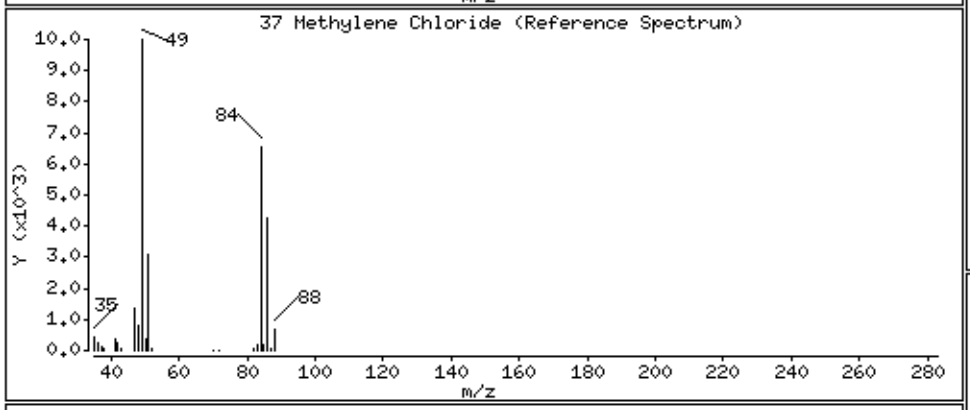
Column diameter: 0.32

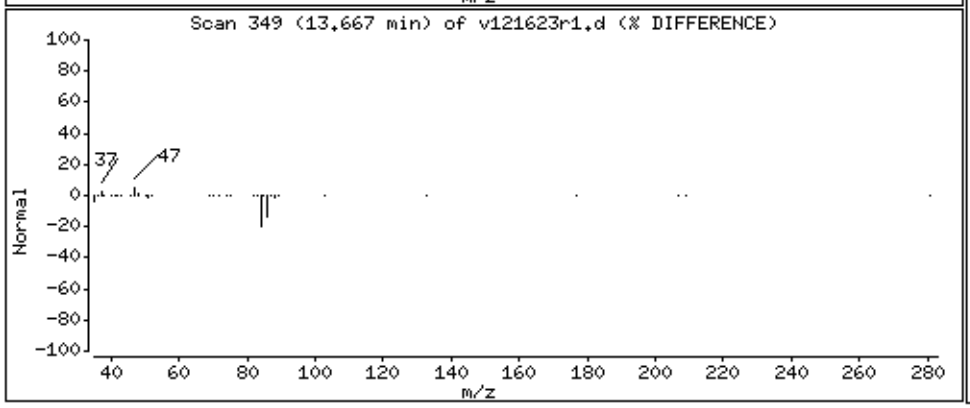
37 Methylene Chloride

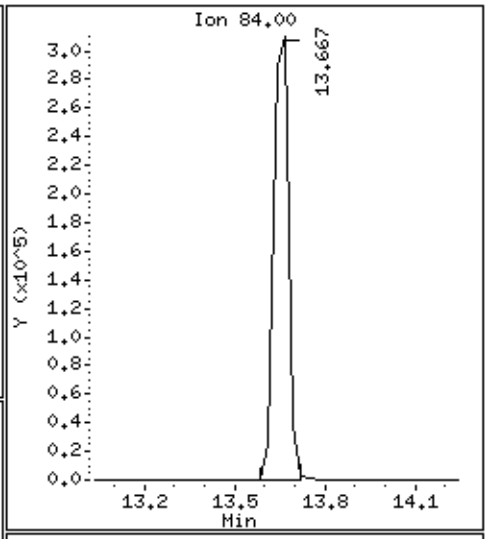
Concentration: 63.127 PPBV

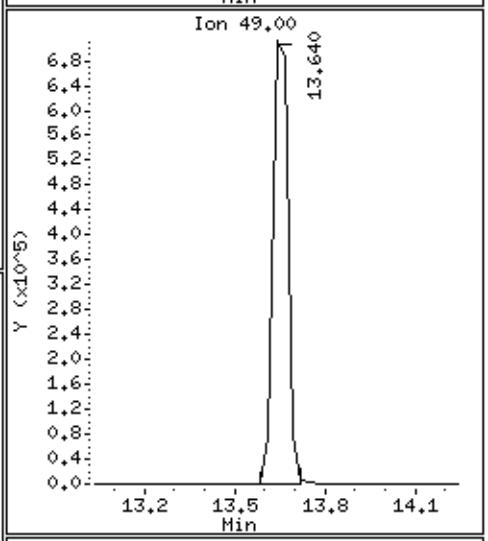


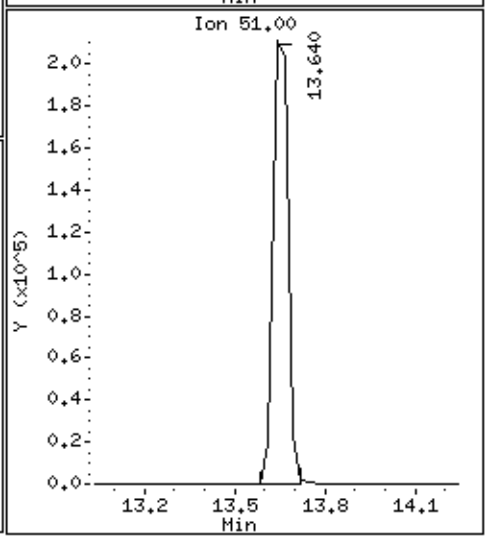












Data File: /chem/msdv.i/16Dec2014.b/v121623r1.d

Date : 17-DEC-2014 06:13

Client ID:

Instrument: msdv.i

Sample Info: 250ml #25248

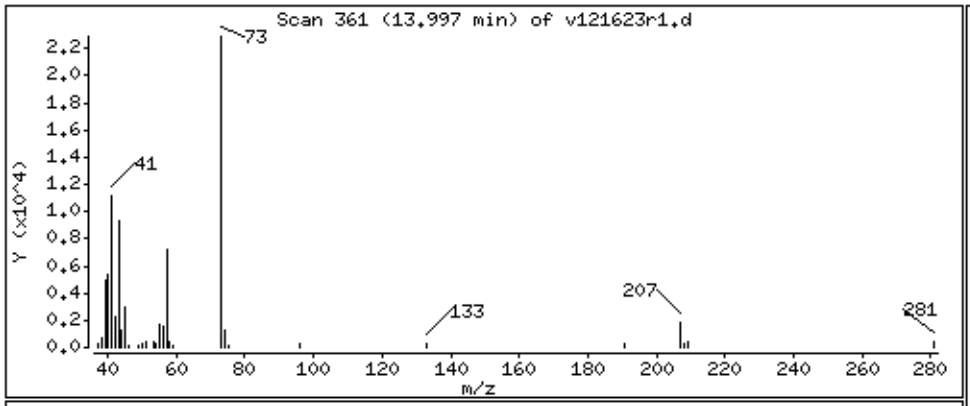
Operator: act

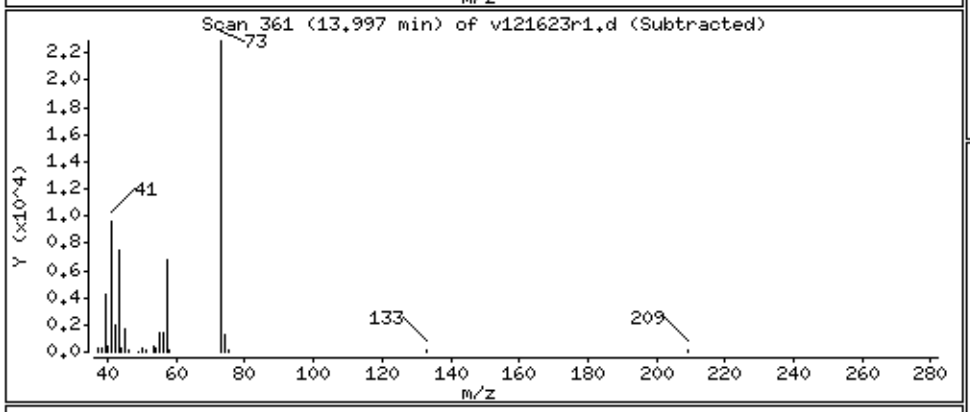
Column phase: RTx-624

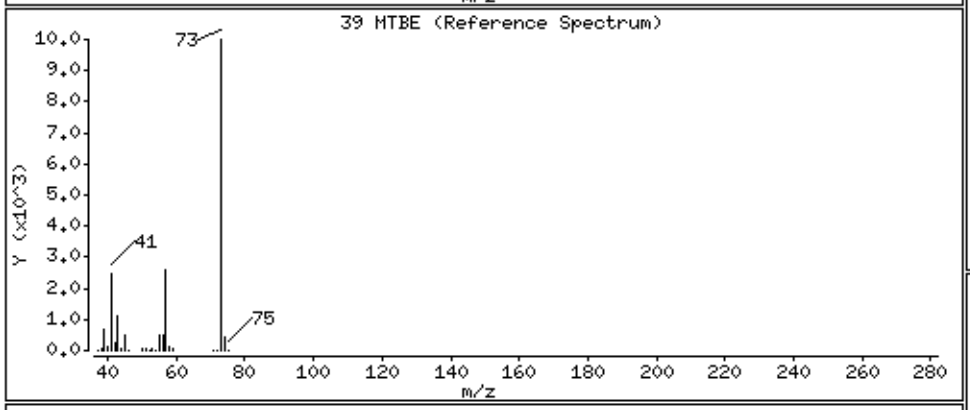
Column diameter: 0.32

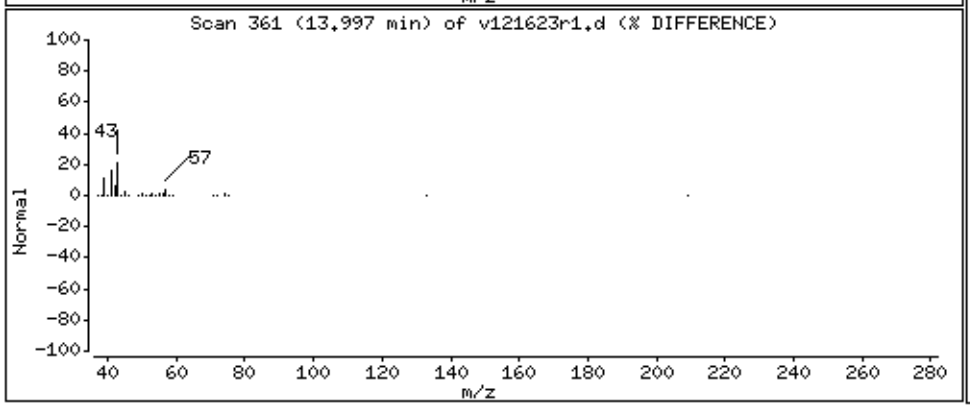
39 MTBE

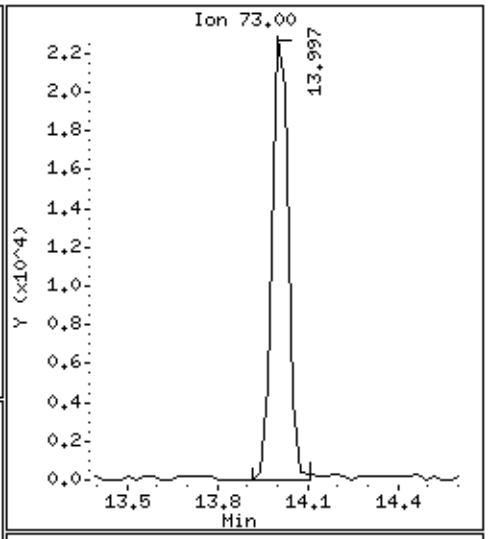
Concentration: 1.400 PPBV

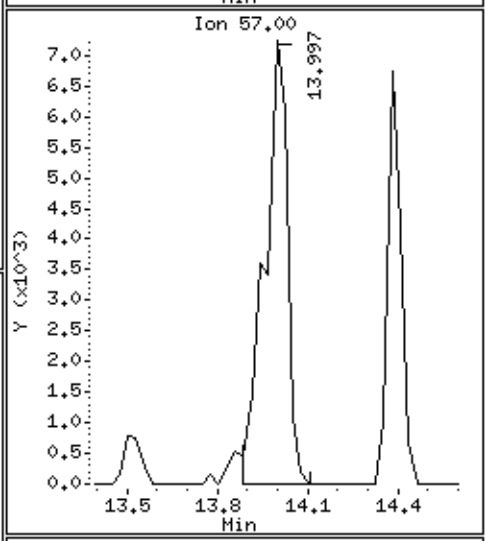


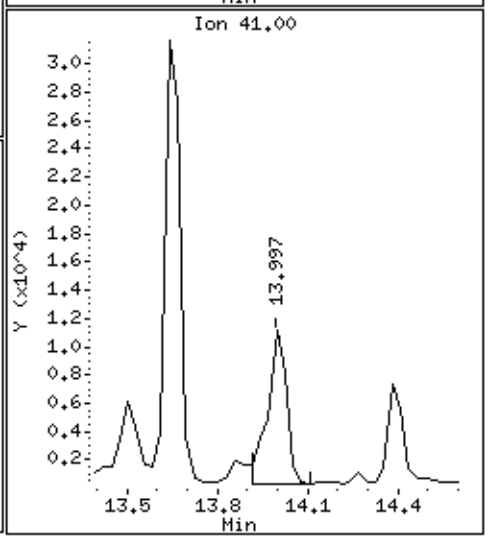












Data File: /chem/msdv.i/16Dec2014.b/v121623r1.d

Date : 17-DEC-2014 06:13

Client ID:

Instrument: msdv.i

Sample Info: 250ml #25248

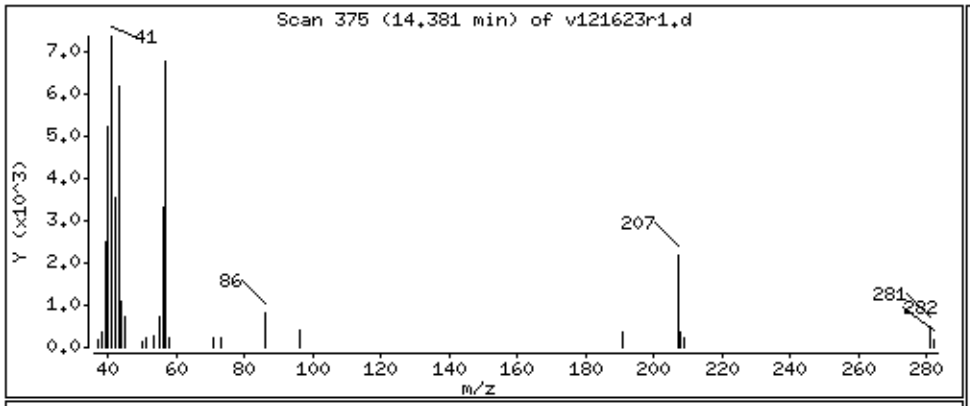
Operator: act

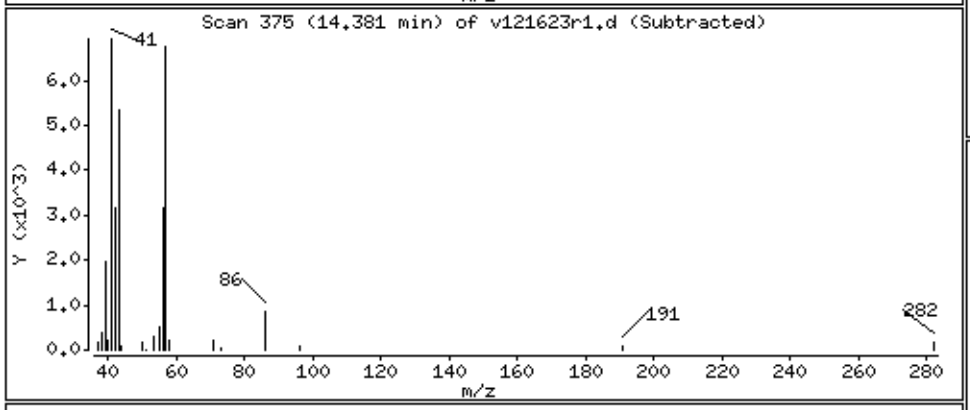
Column phase: RTx-624

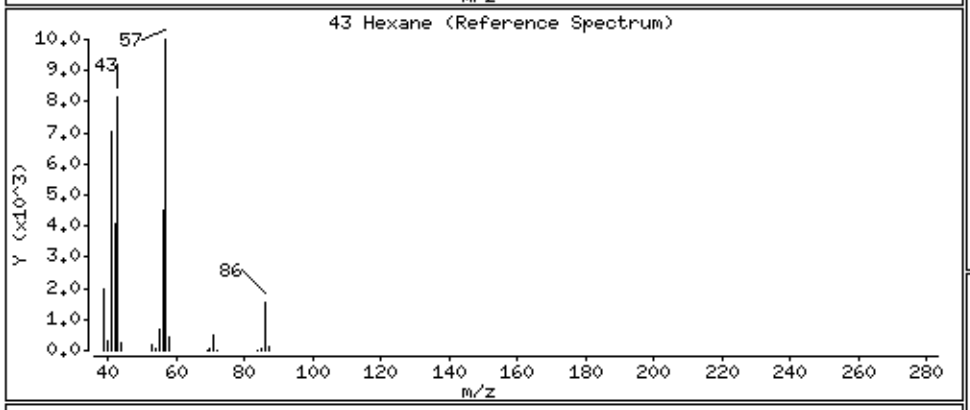
Column diameter: 0.32

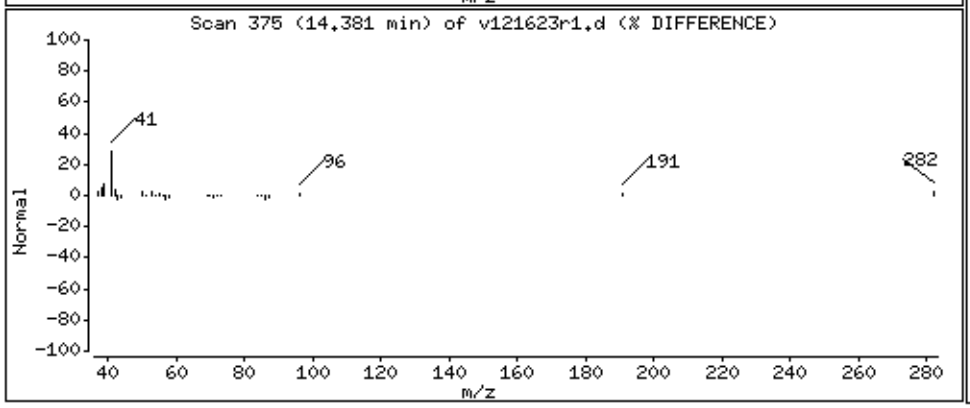
43 Hexane

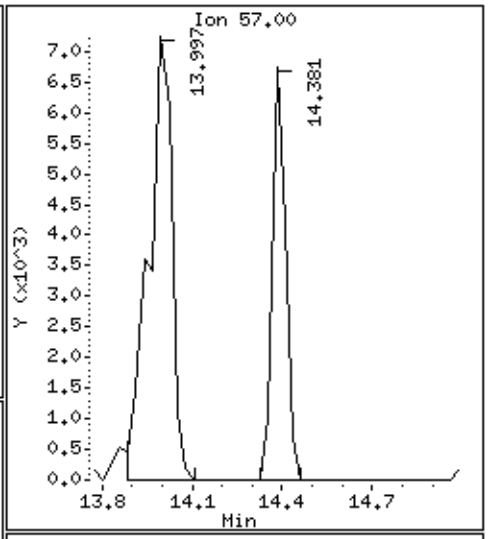
Concentration: 0.4177 PPBV

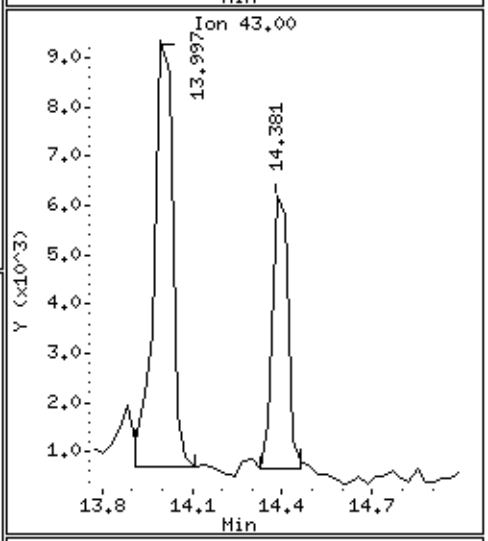


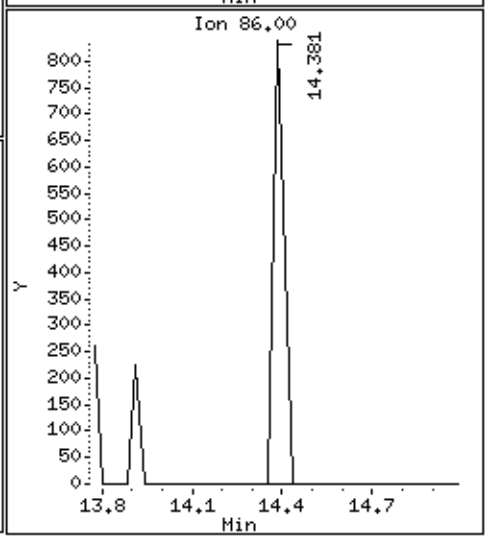












Data File: /chem/msdv.i/16Dec2014.b/v121623r1.d

Date : 17-DEC-2014 06:13

Client ID:

Instrument: msdv.i

Sample Info: 250ml #25248

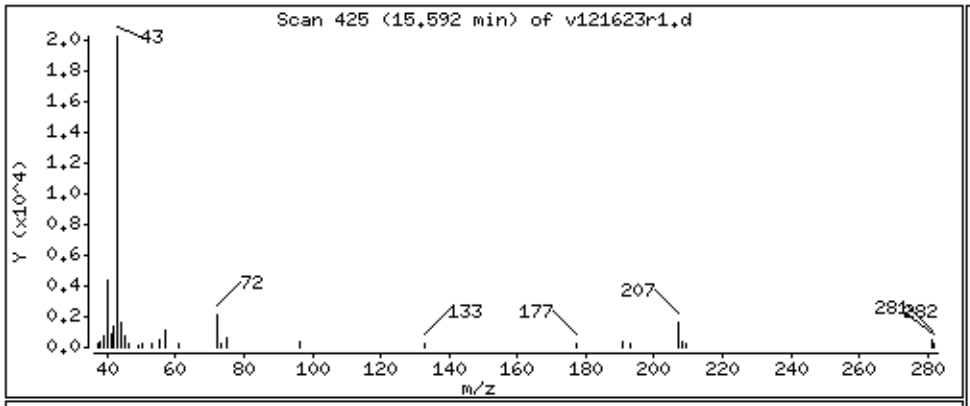
Operator: act

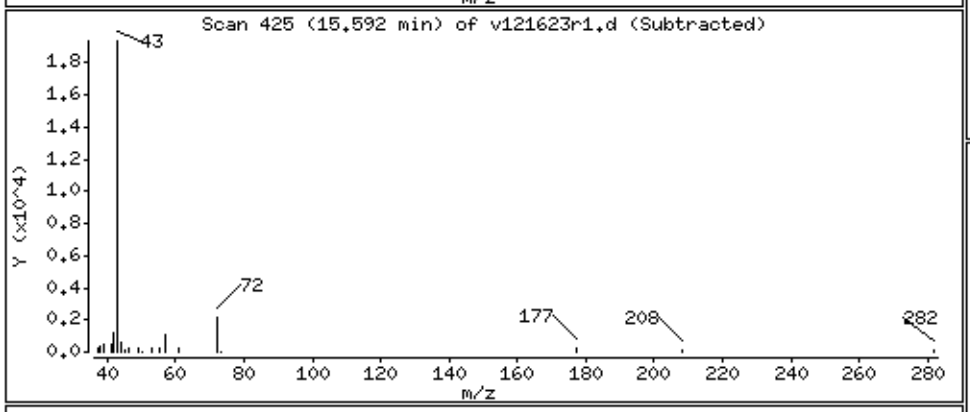
Column phase: RTx-624

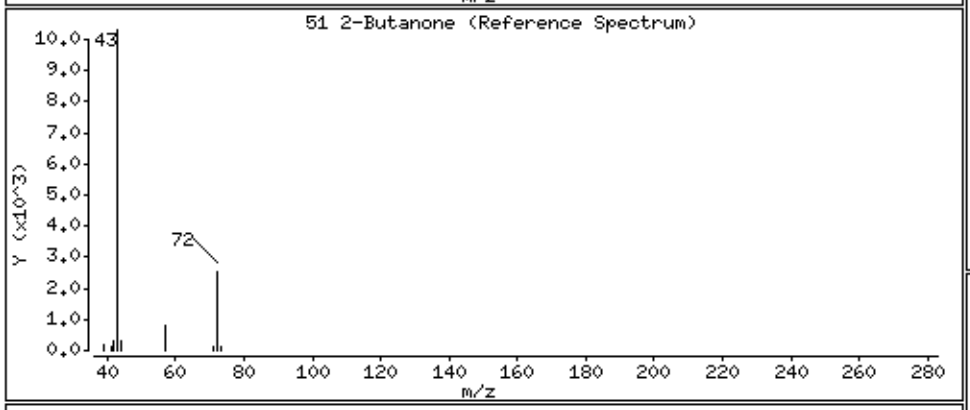
Column diameter: 0.32

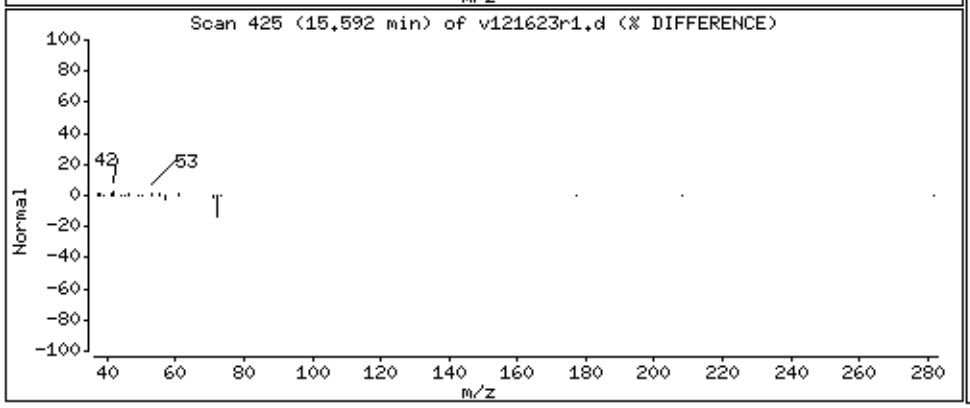
51 2-Butanone

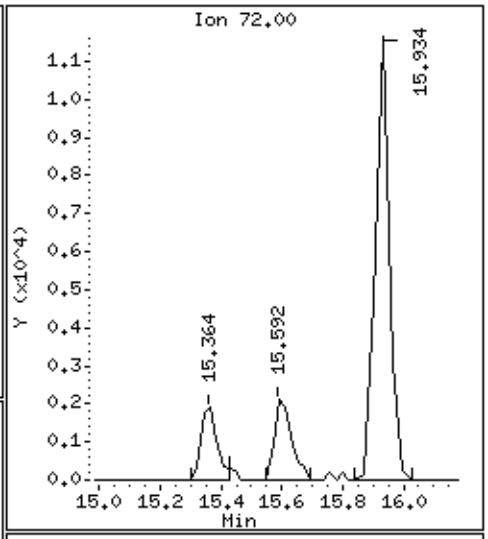
Concentration: 0.8350 PPBV

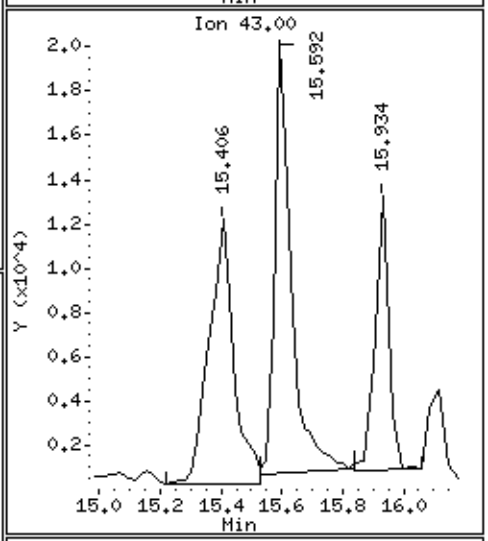


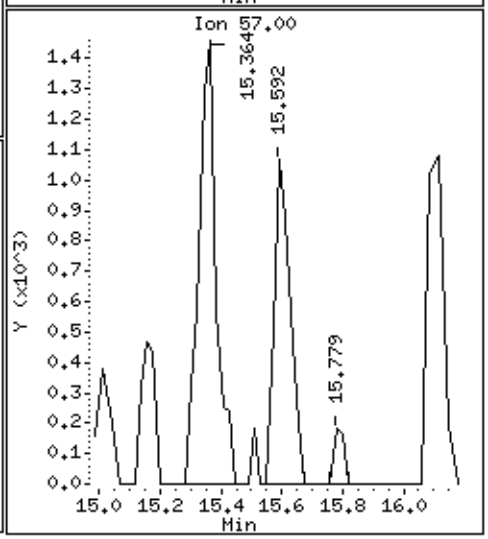












Data File: /chem/msdv.i/16Dec2014.b/v121623r1.d

Date : 17-DEC-2014 06:13

Client ID:

Instrument: msdv.i

Sample Info: 250ml #25248

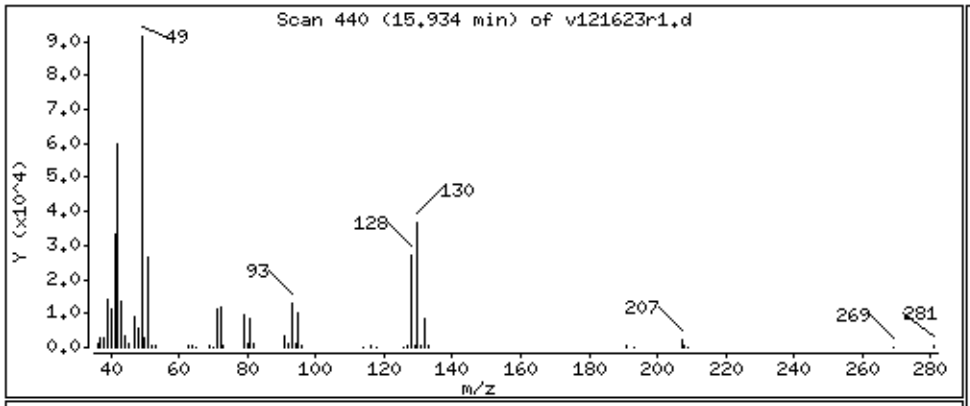
Operator: act

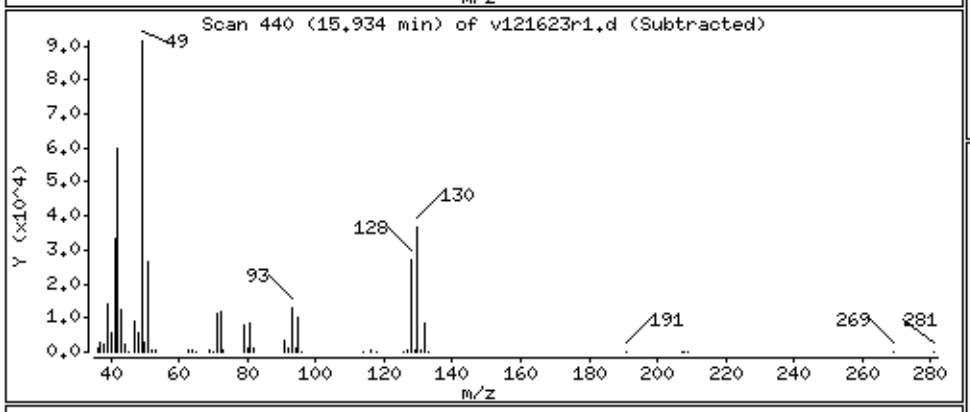
Column phase: RTx-624

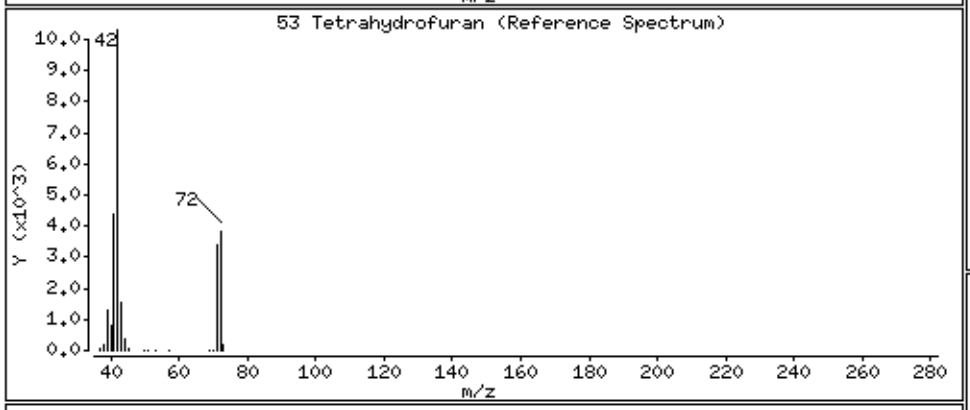
Column diameter: 0.32

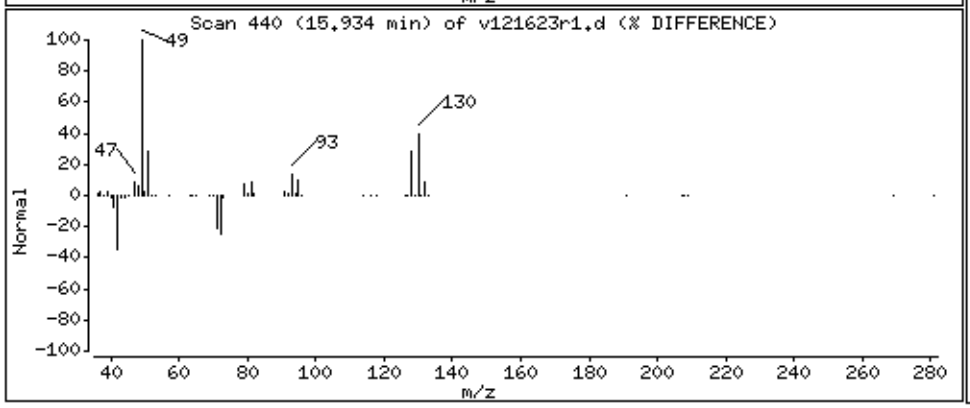
53 Tetrahydrofuran

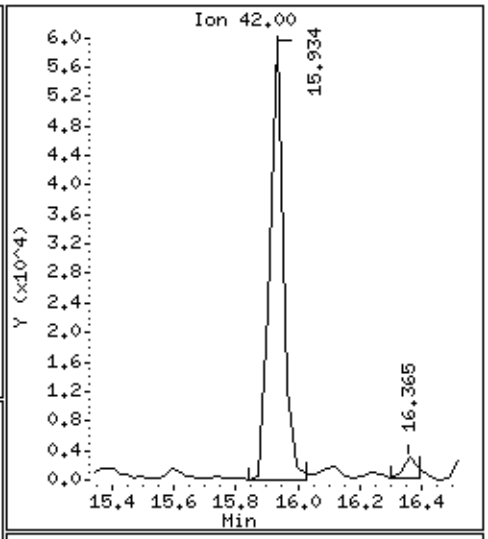
Concentration: 3.528 PPBV

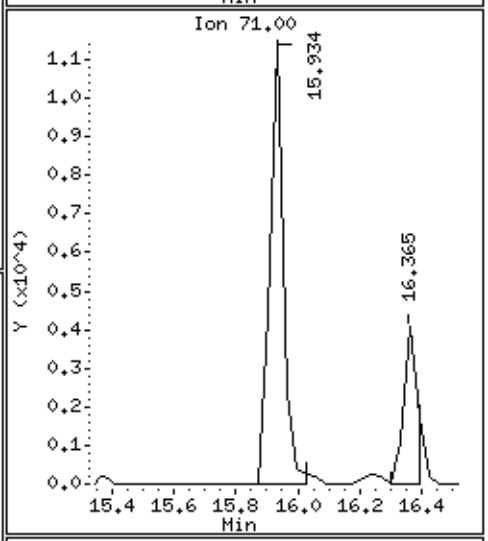


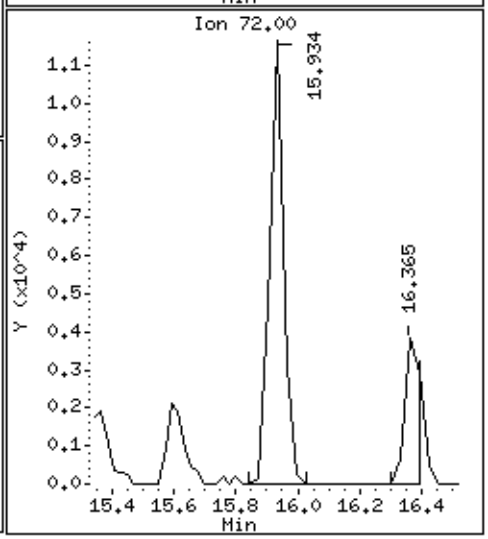












Data File: /chem/msdv.i/16Dec2014.b/v121623r1.d

Date : 17-DEC-2014 06:13

Client ID:

Instrument: msdv.i

Sample Info: 250ml #25248

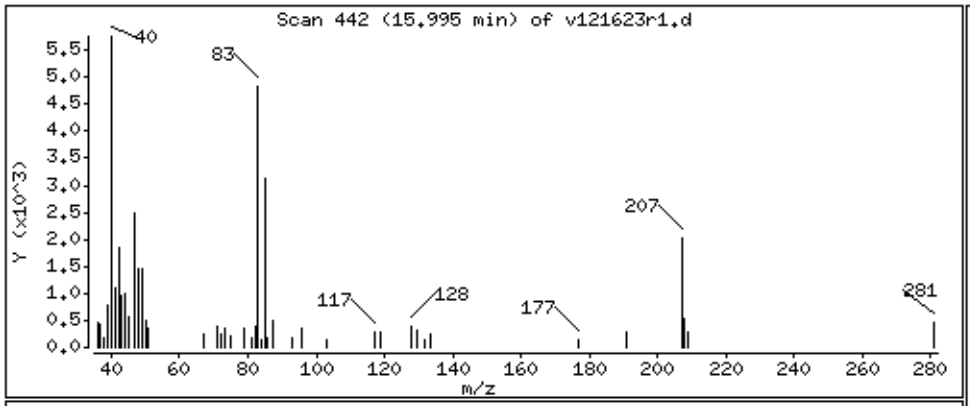
Operator: act

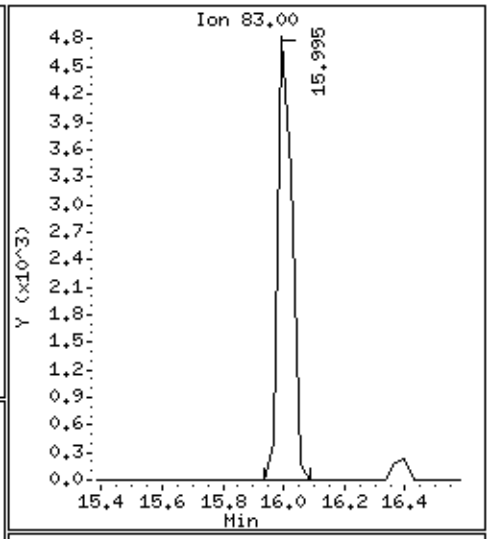
Column phase: RTx-624

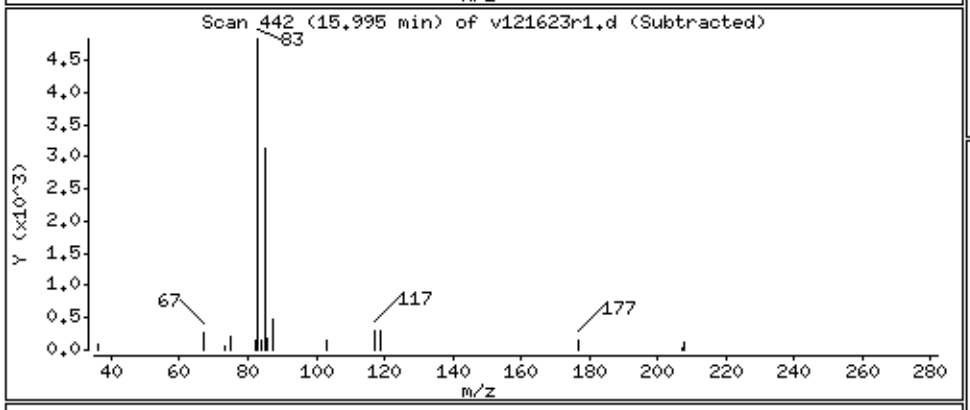
Column diameter: 0.32

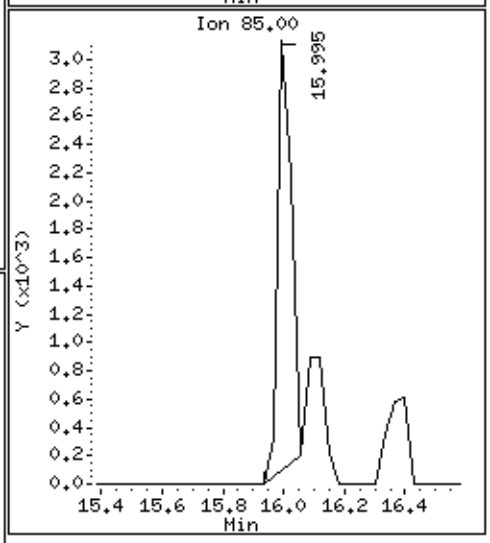
55 Chloroform

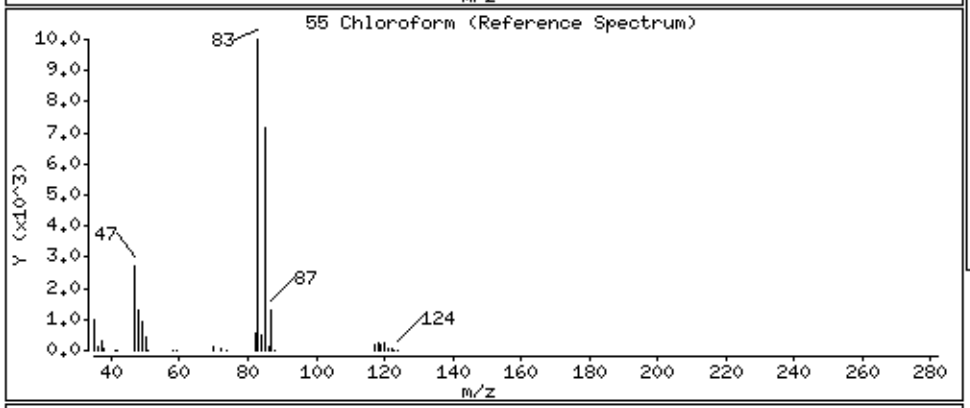
Concentration: 0.3363 PPBV

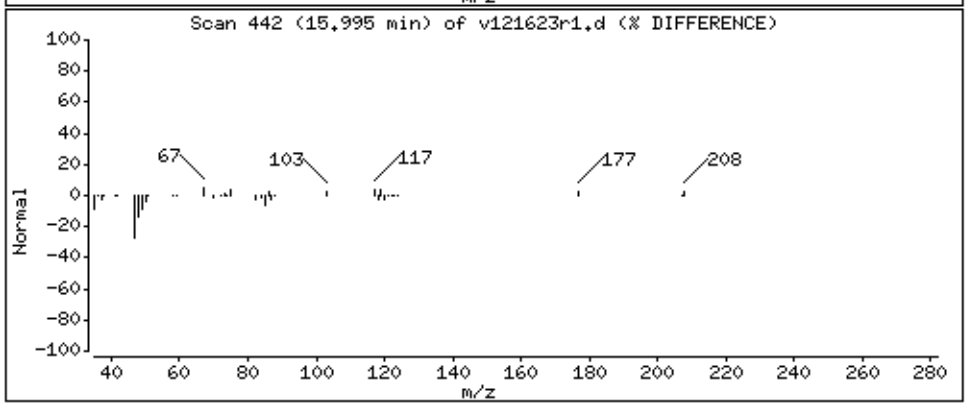












Data File: /chem/msdv.i/16Dec2014.b/v121623r1.d

Date : 17-DEC-2014 06:13

Client ID:

Instrument: msdv.i

Sample Info: 250ml #25248

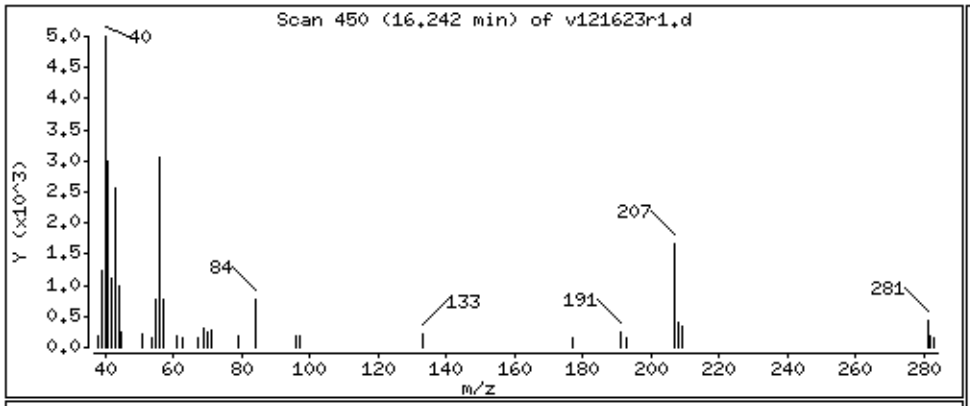
Operator: act

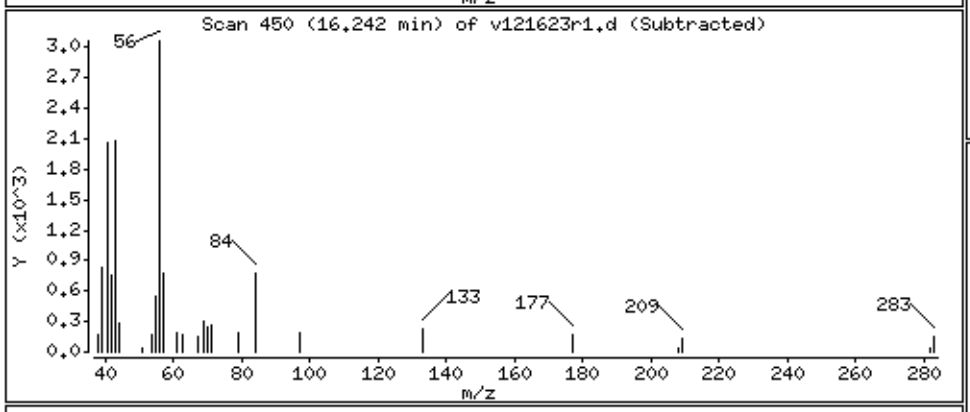
Column phase: RTx-624

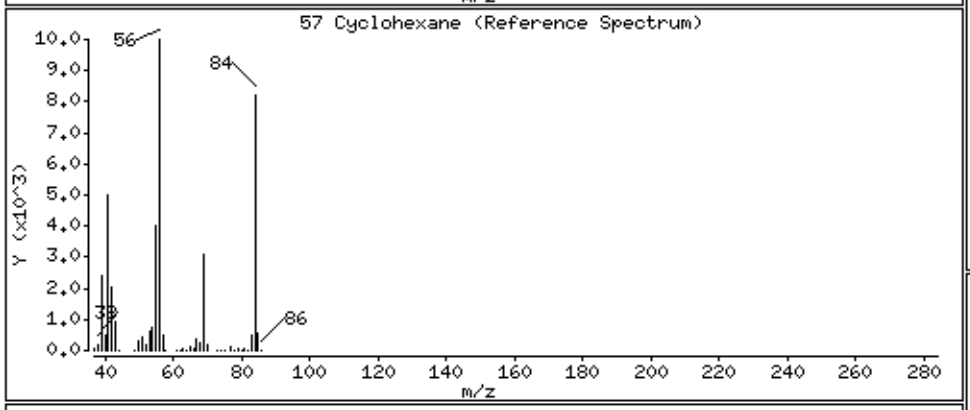
Column diameter: 0.32

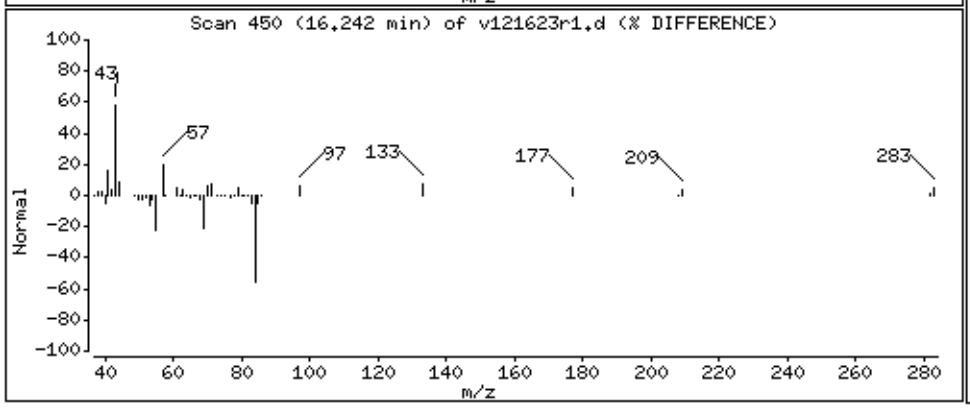
57 Cyclohexane

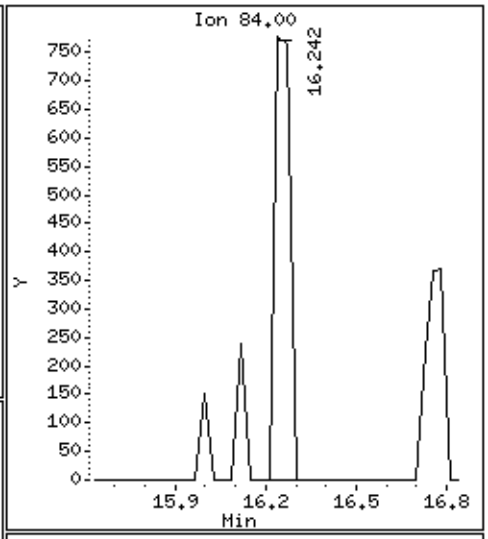
Concentration: 0.09416 PPBV

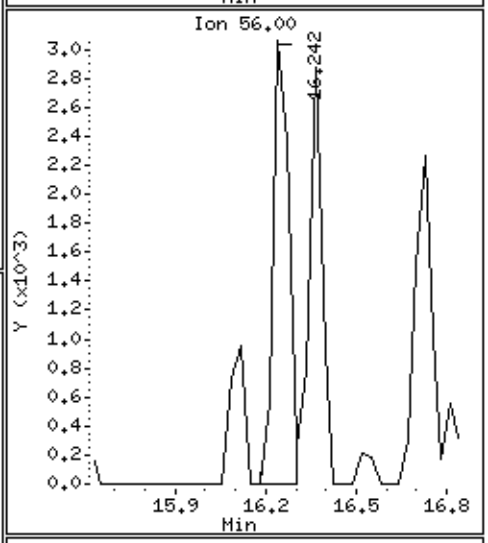


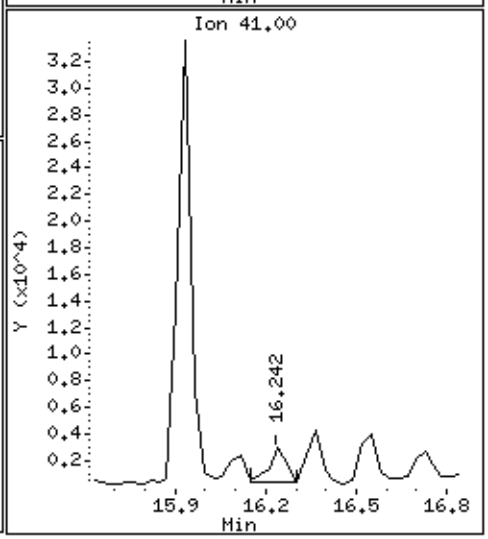












Data File: /chem/msdv.i/16Dec2014.b/v121623r1.d

Date : 17-DEC-2014 06:13

Client ID:

Instrument: msdv.i

Sample Info: 250ml #25248

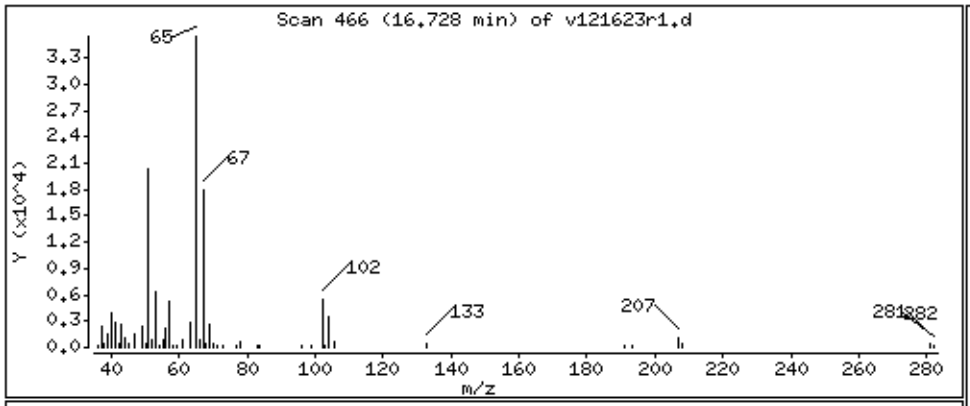
Operator: act

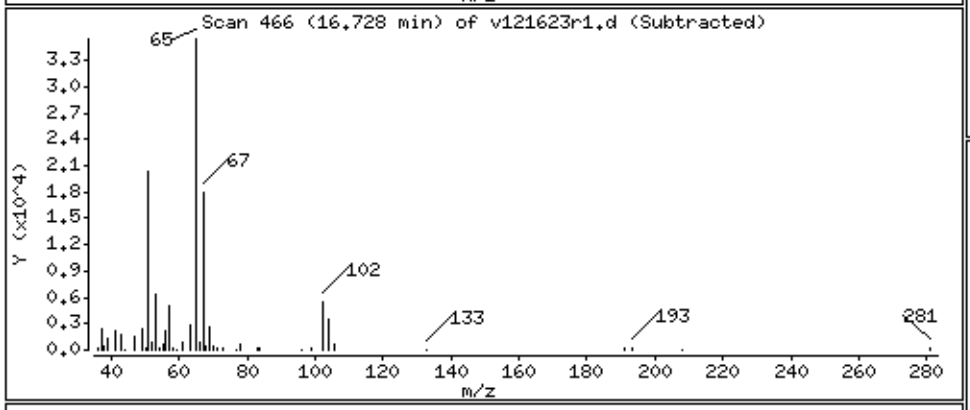
Column phase: RTx-624

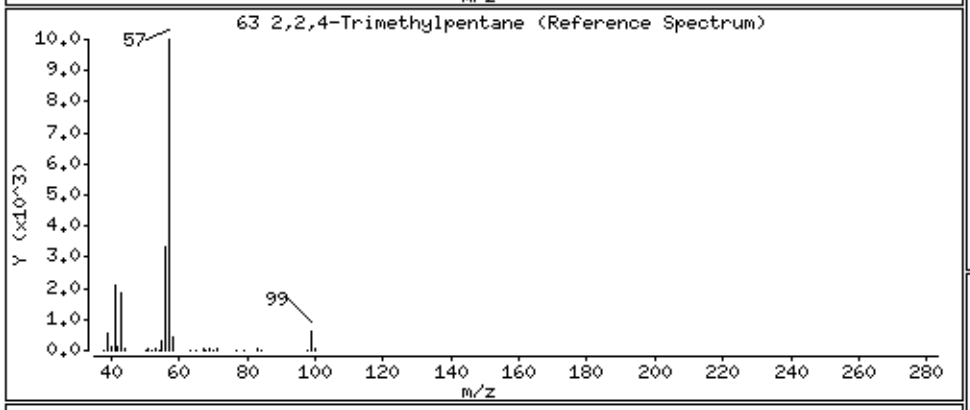
Column diameter: 0.32

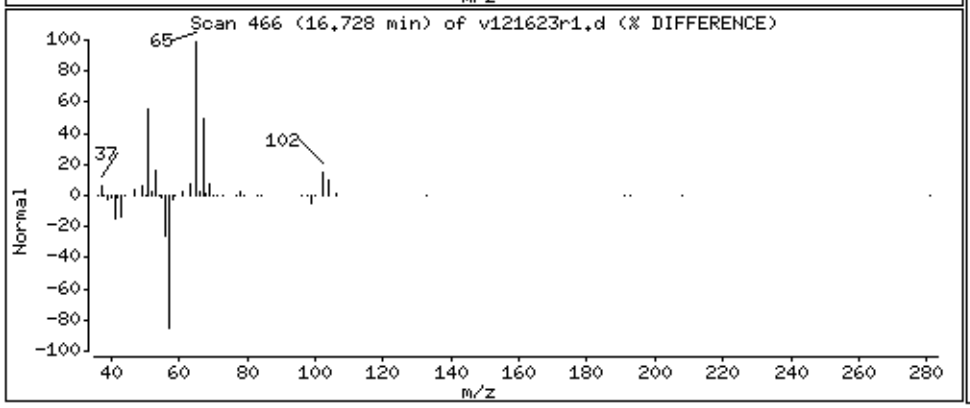
63 2,2,4-Trimethylpentane

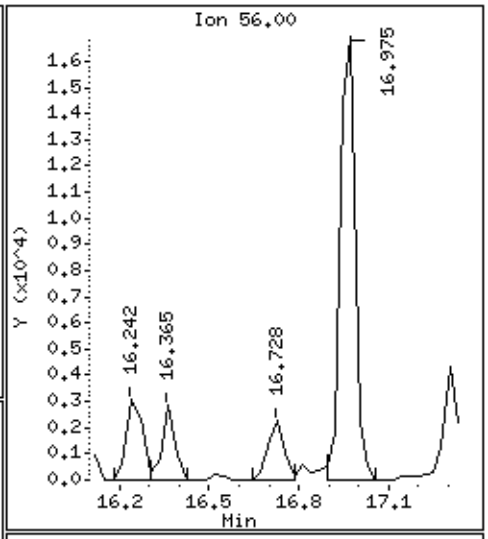
Concentration: 0.1687 PPBV

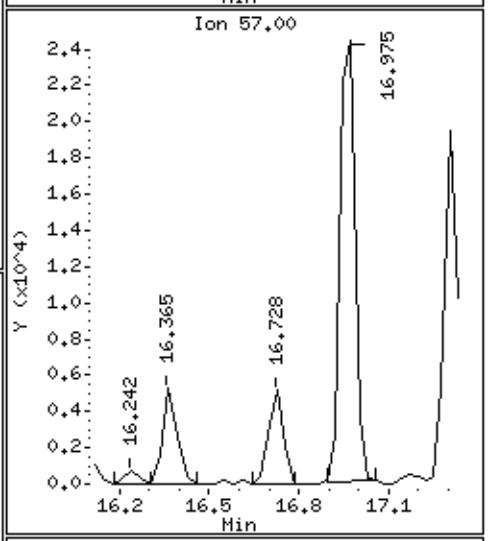


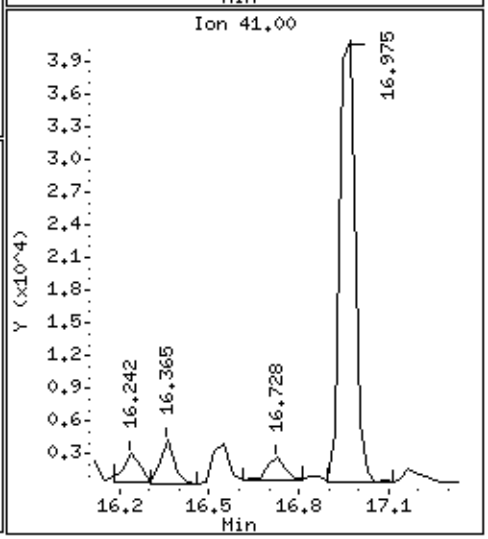












Data File: /chem/msdv.i/16Dec2014.b/v121623r1.d

Date : 17-DEC-2014 06:13

Client ID:

Instrument: msdv.i

Sample Info: 250ml #25248

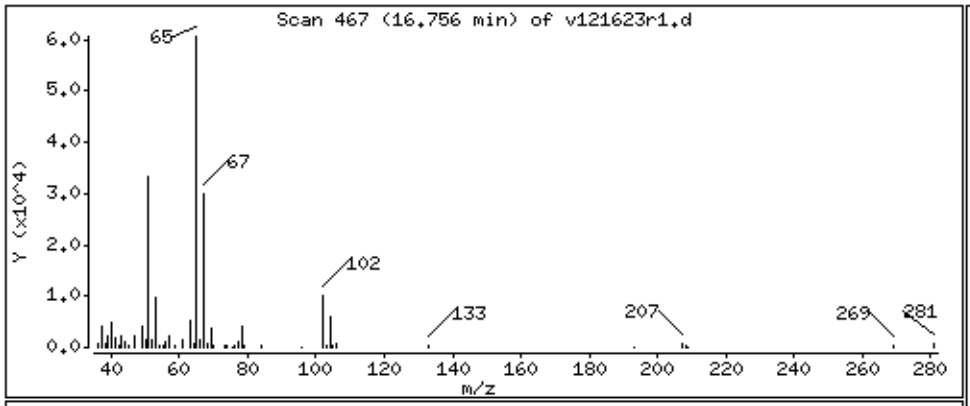
Operator: act

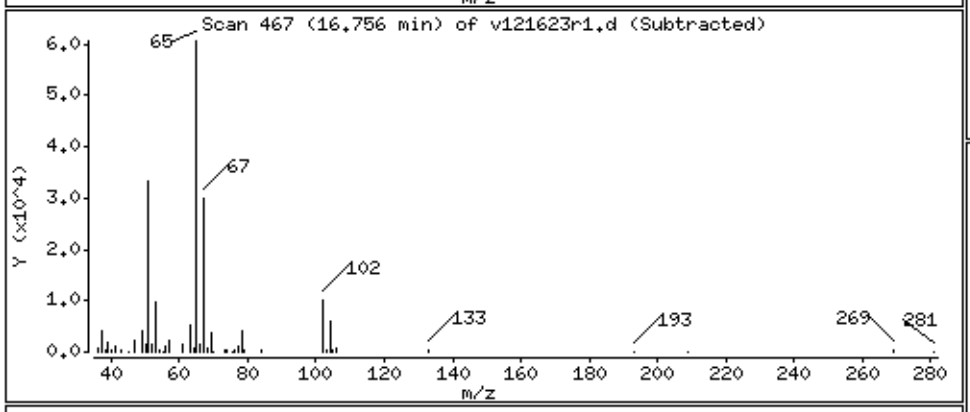
Column phase: RTx-624

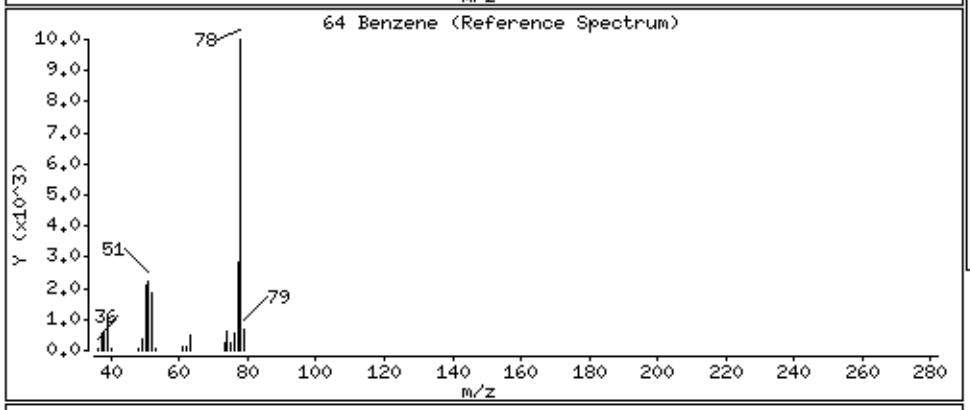
Column diameter: 0.32

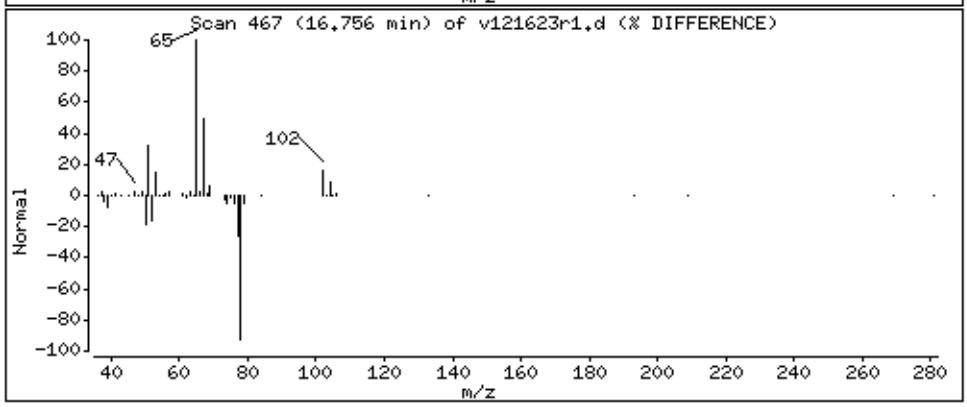
64 Benzene

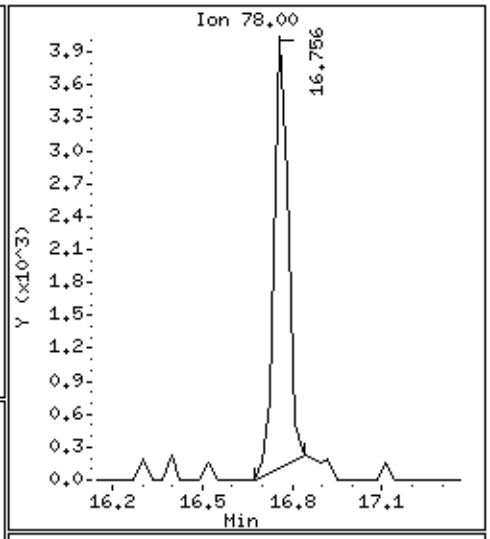
Concentration: 0.1783 PPBV

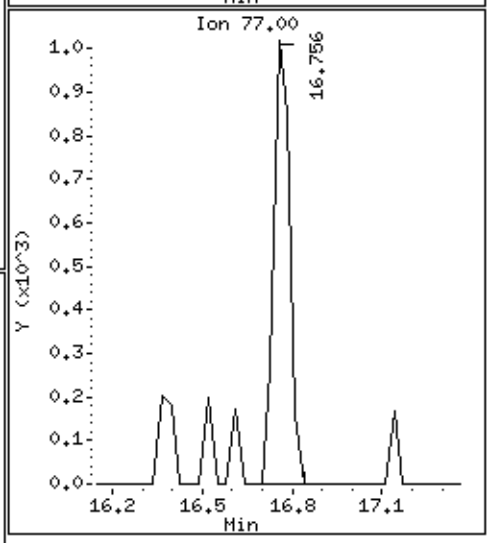












Data File: /chem/msdv.i/16Dec2014.b/v121623r1.d

Date : 17-DEC-2014 06:13

Client ID:

Instrument: msdv.i

Sample Info: 250ml #25248

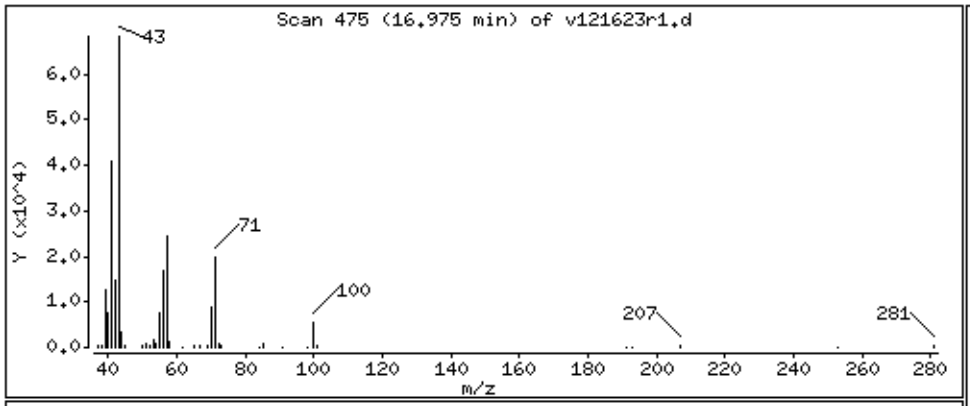
Operator: act

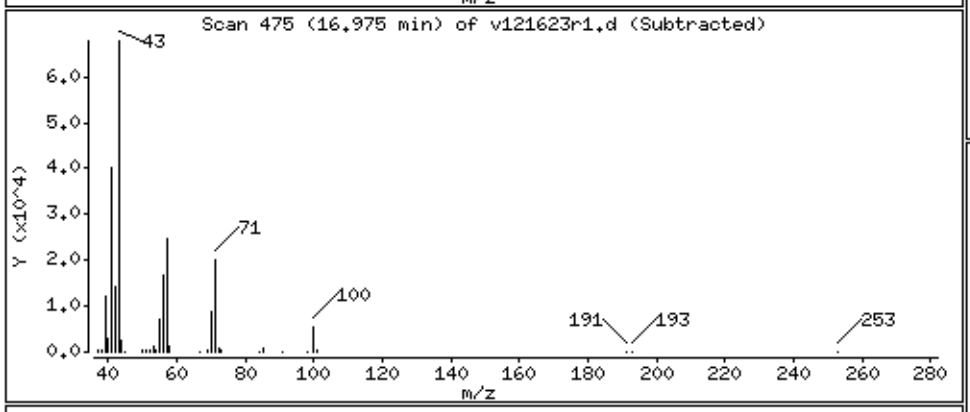
Column phase: RTx-624

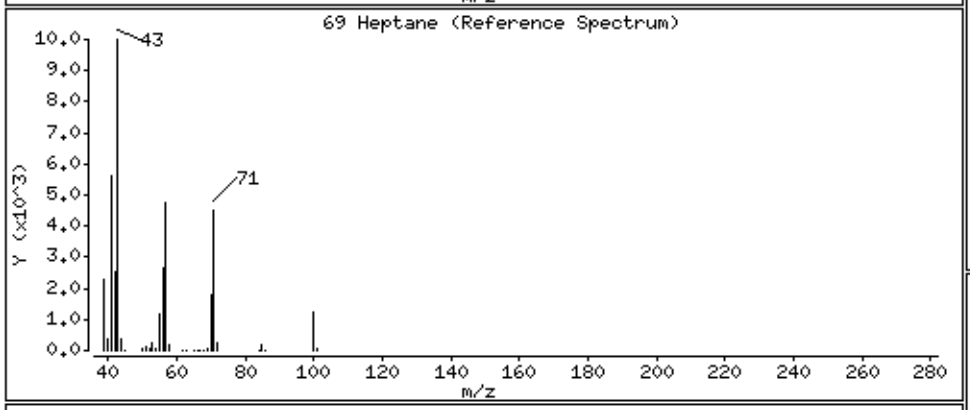
Column diameter: 0.32

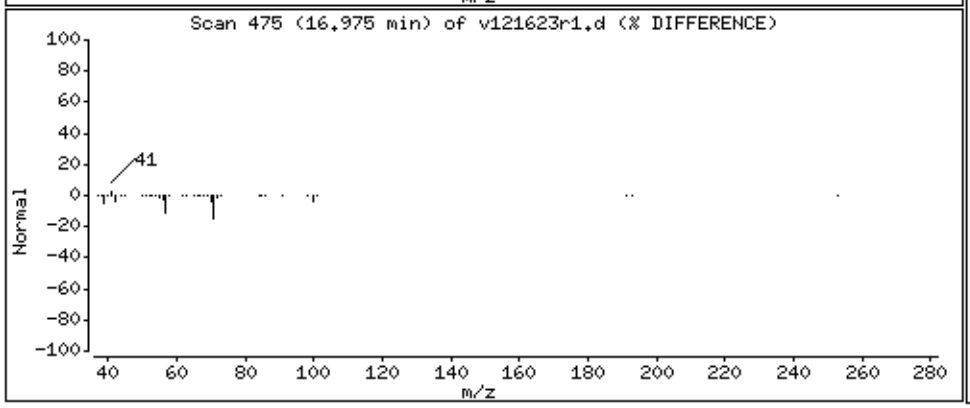
69 Heptane

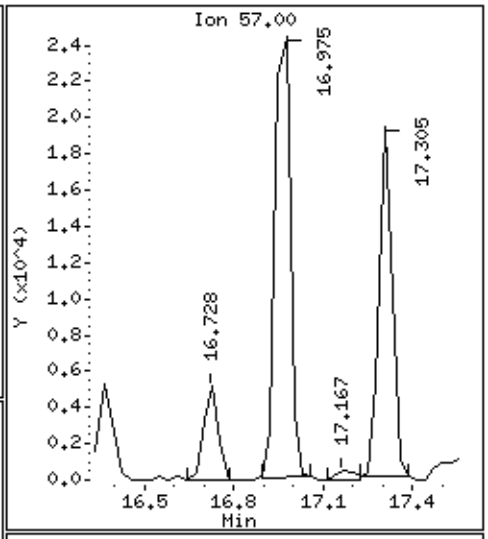
Concentration: 2.875 PPBV

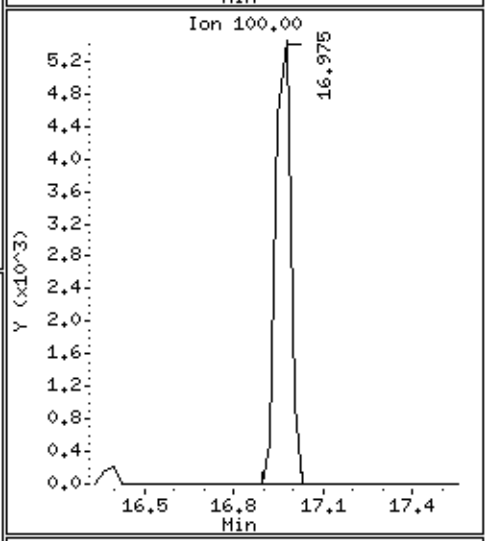


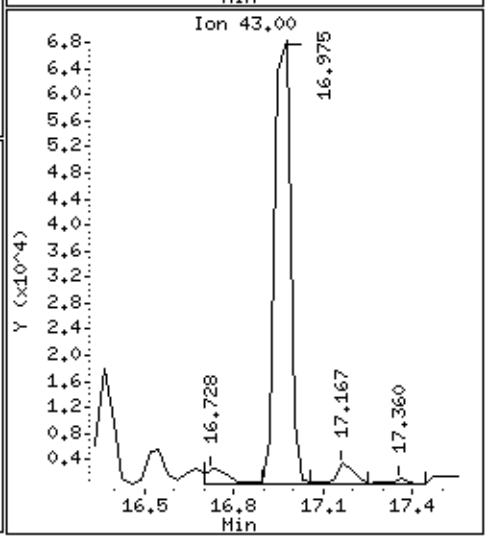












Data File: /chem/msdv.i/16Dec2014.b/v121623r1.d

Date : 17-DEC-2014 06:13

Client ID:

Instrument: msdv.i

Sample Info: 250ml #25248

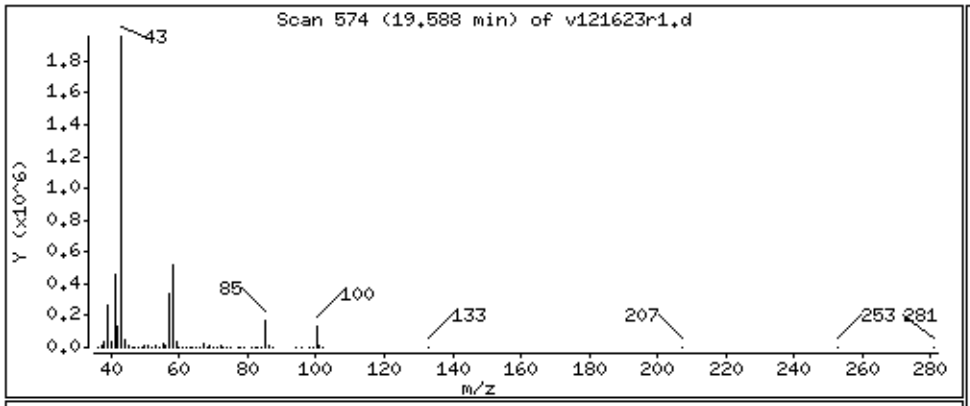
Operator: act

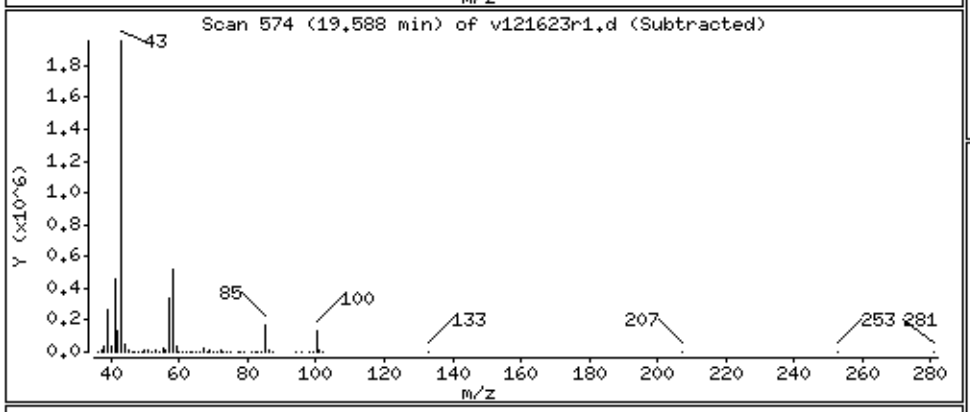
Column phase: RTx-624

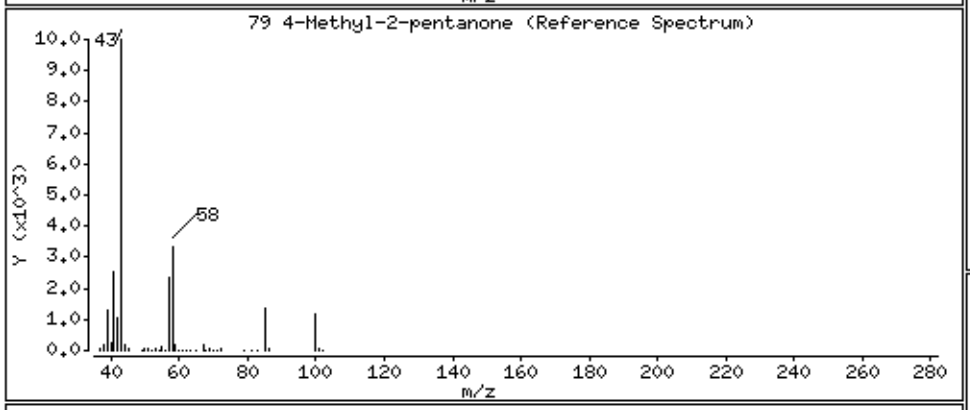
Column diameter: 0.32

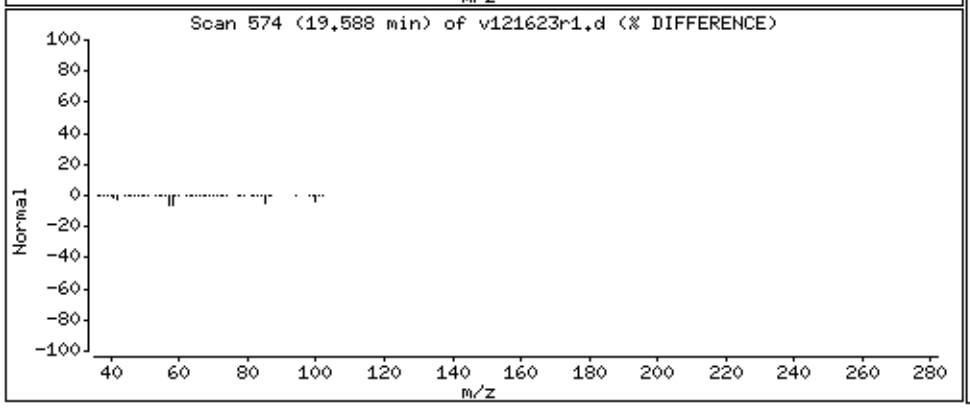
79 4-Methyl-2-pentanone

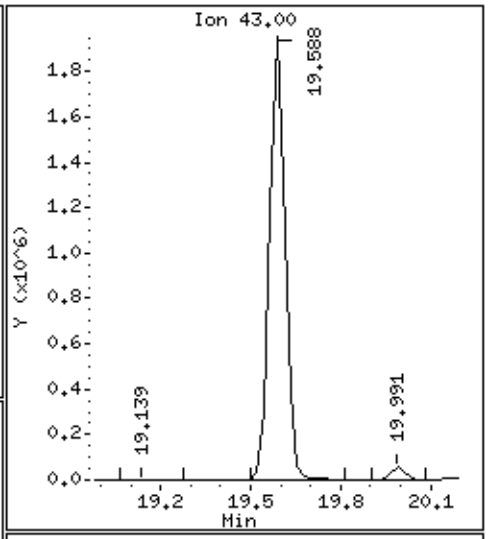
Concentration: 71.342 PPBV

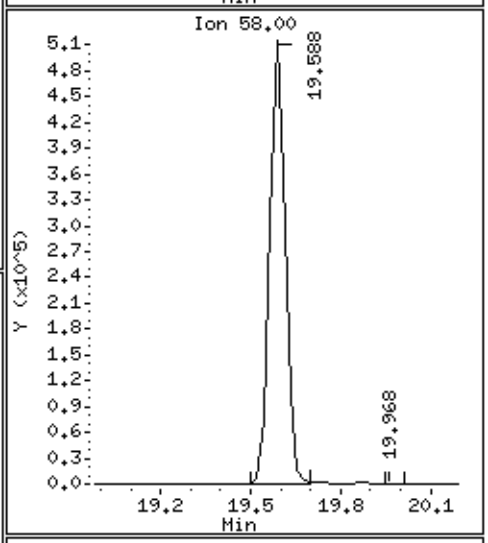


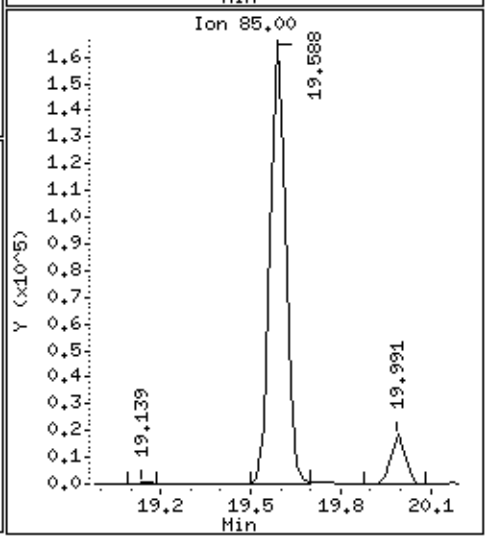












Data File: /chem/msdv.i/16Dec2014.b/v121623r1.d

Date : 17-DEC-2014 06:13

Client ID:

Instrument: msdv.i

Sample Info: 250ml #25248

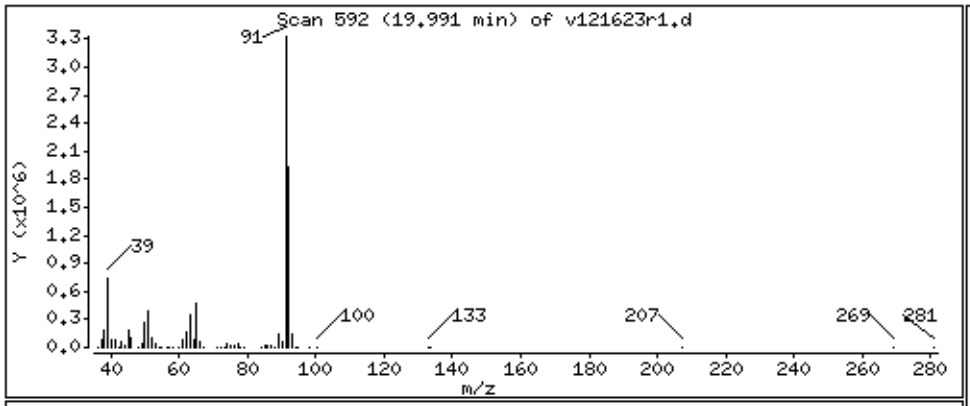
Operator: act

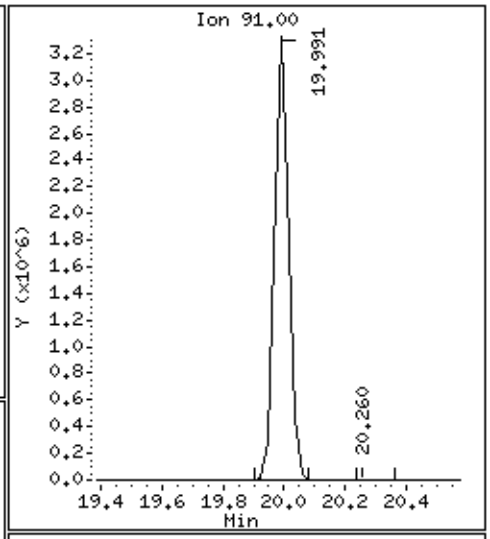
Column phase: RTx-624

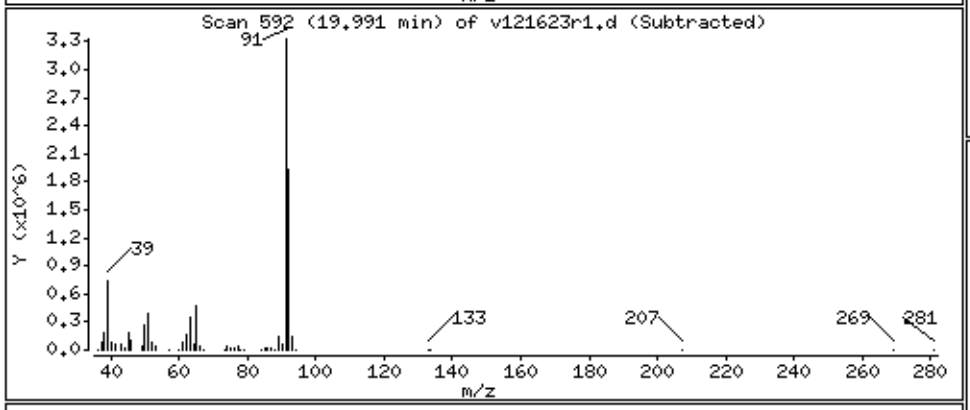
Column diameter: 0.32

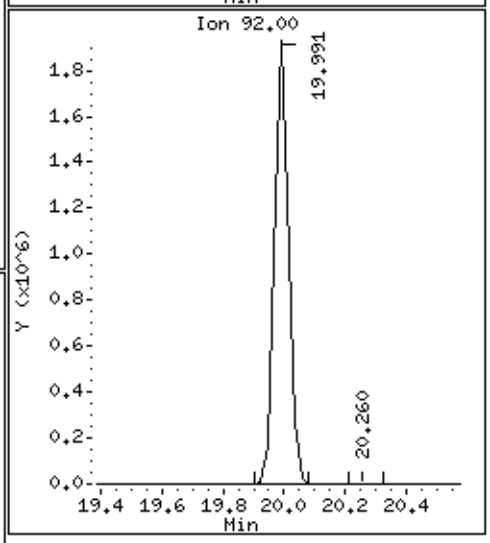
81 Toluene

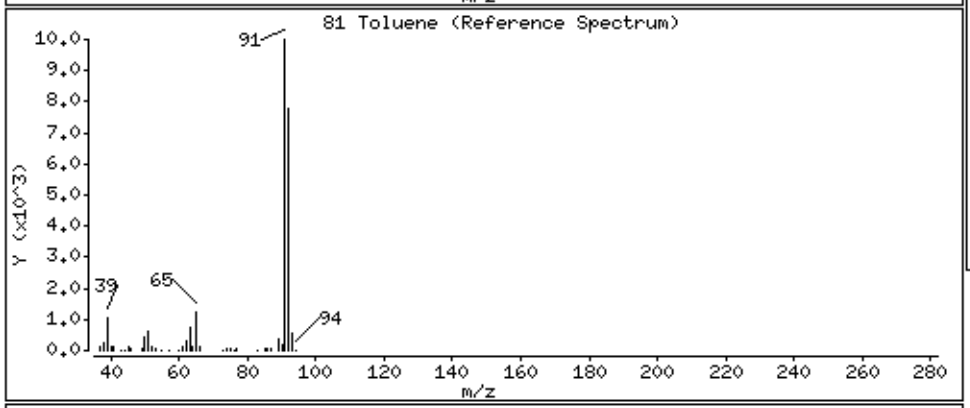
Concentration: 139.05 PPBV

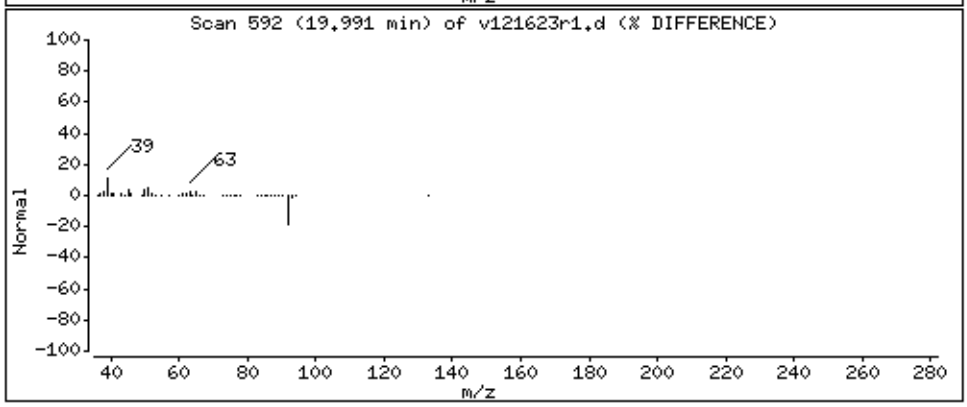












Data File: /chem/msdv.i/16Dec2014.b/v121623r1.d

Date : 17-DEC-2014 06:13

Client ID:

Instrument: msdv.i

Sample Info: 250ml #25248

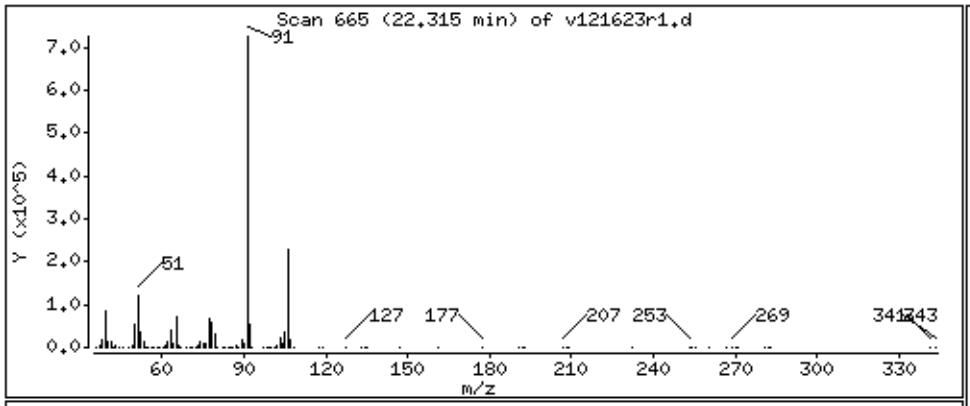
Operator: act

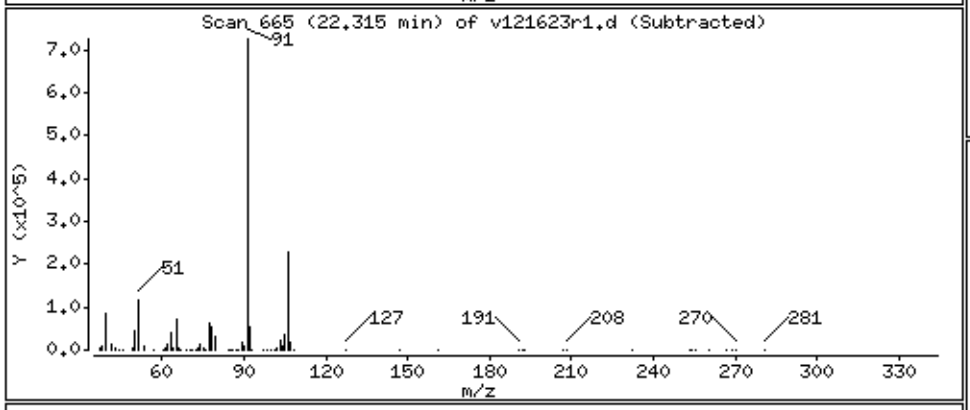
Column phase: RTx-624

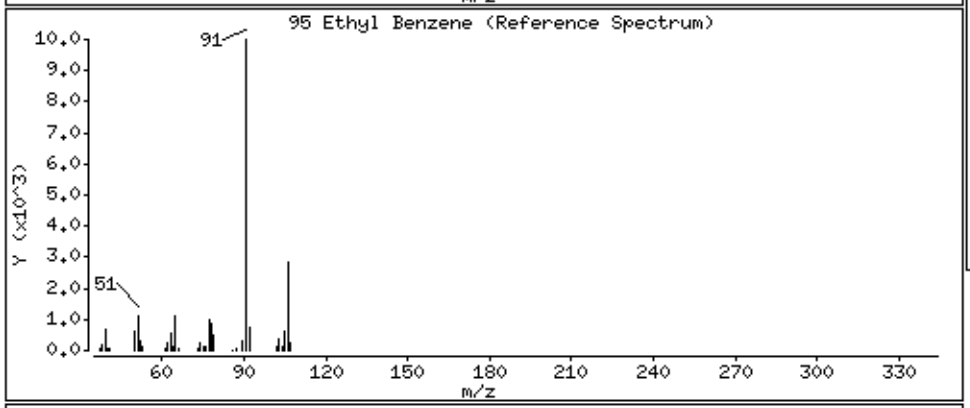
Column diameter: 0.32

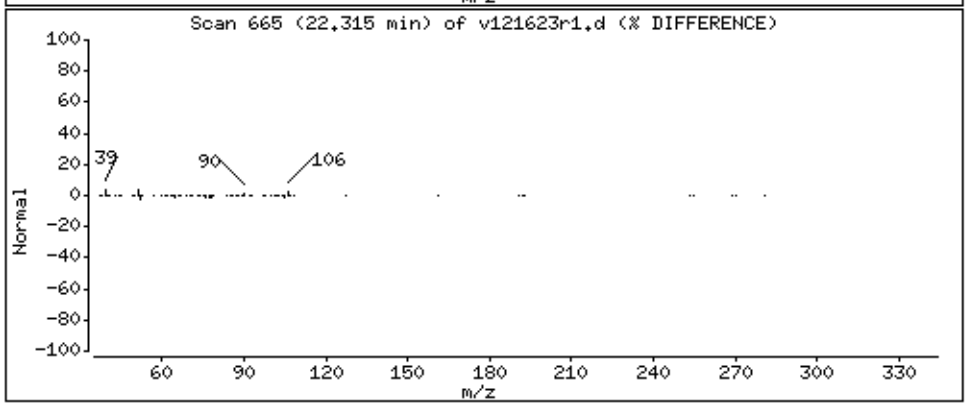
95 Ethyl Benzene

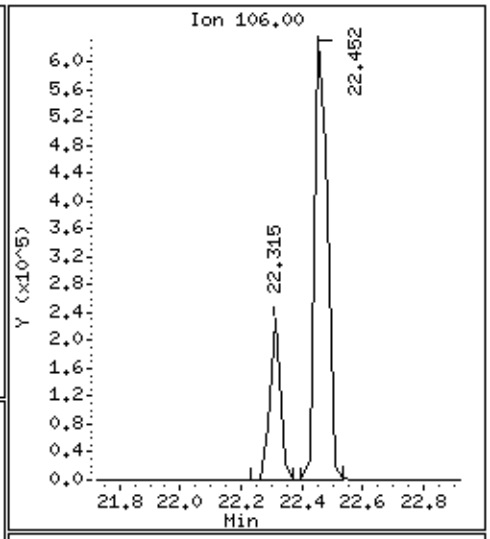
Concentration: 19.523 PPBV

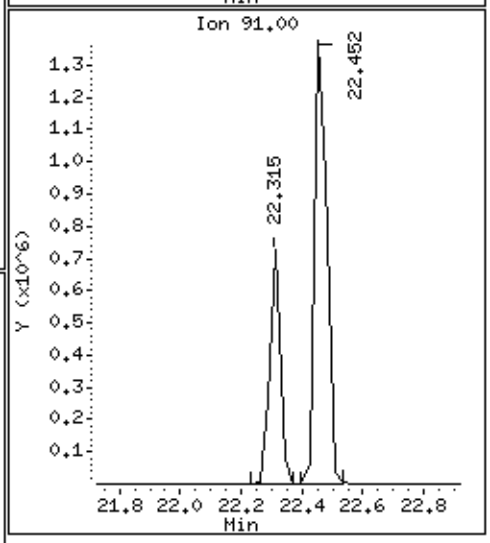












Data File: /chem/msdv.i/16Dec2014.b/v121623r1.d

Date : 17-DEC-2014 06:13

Client ID:

Instrument: msdv.i

Sample Info: 250ml #25248

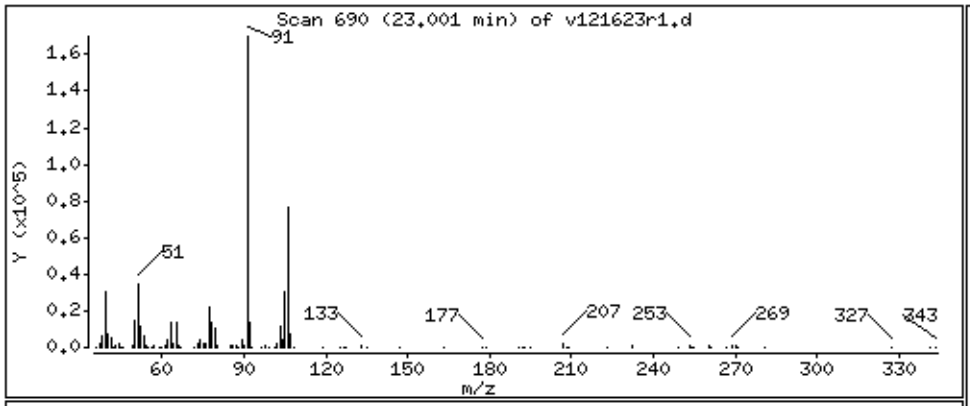
Operator: act

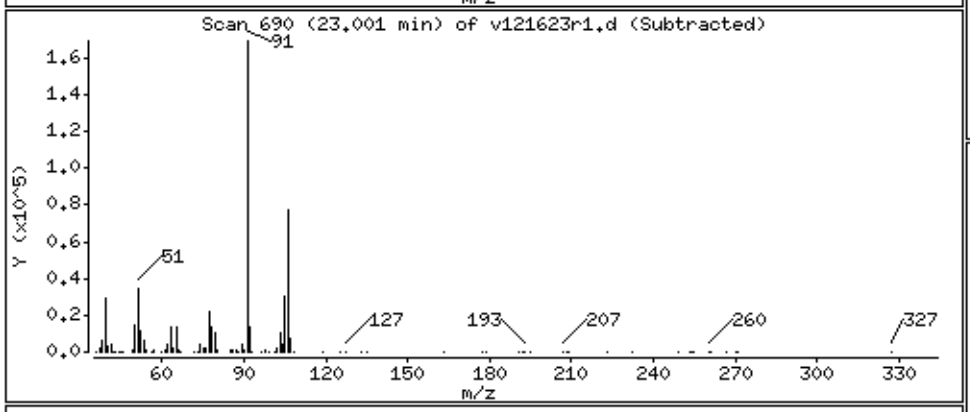
Column phase: RTx-624

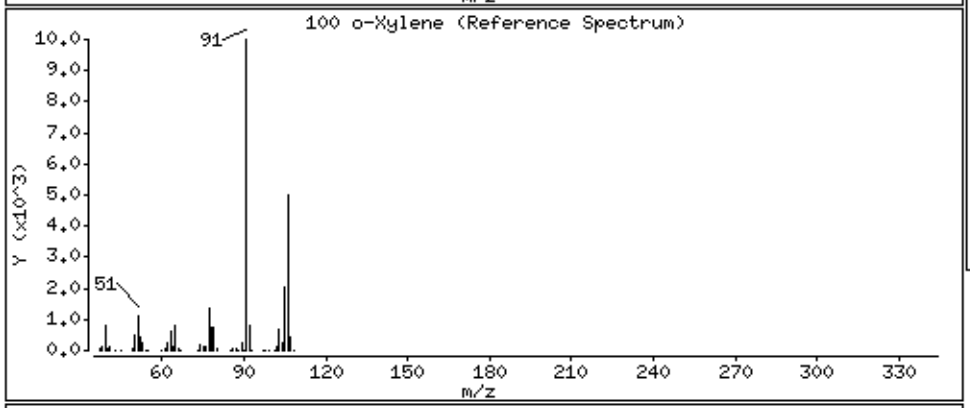
Column diameter: 0.32

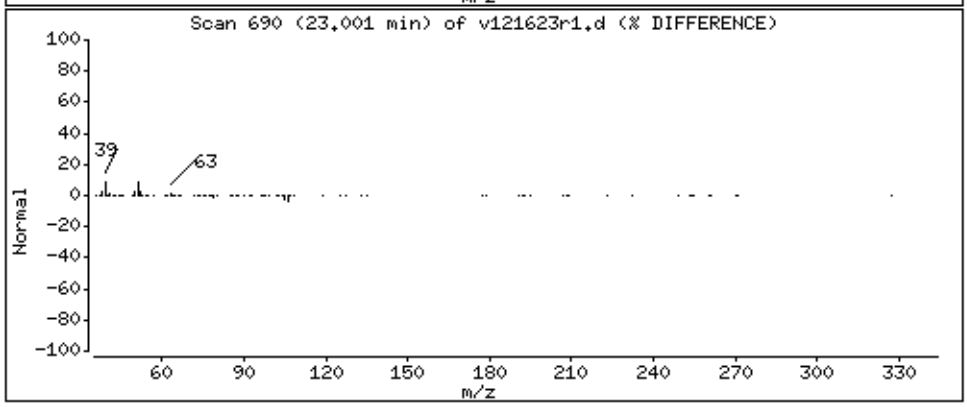
100 o-Xylene

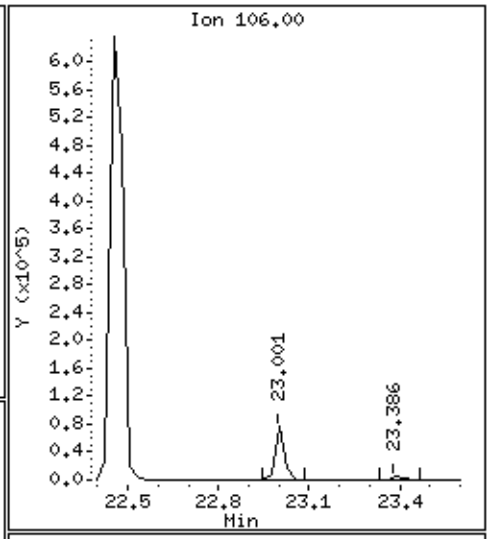
Concentration: 6.578 PPBV

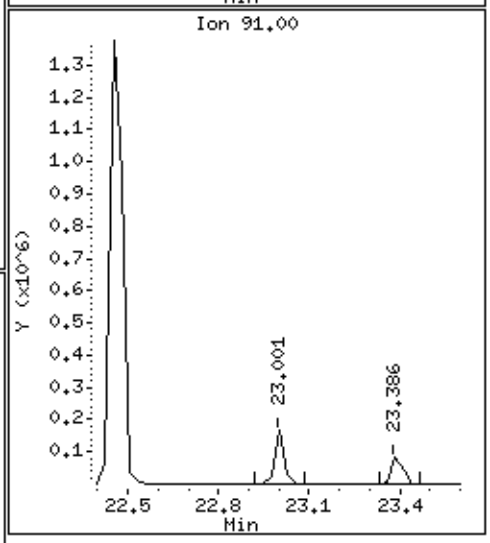












Data File: /chem/msdv.i/16Dec2014.b/v121623r1.d

Date : 17-DEC-2014 06:13

Client ID:

Instrument: msdv.i

Sample Info: 250ml #25248

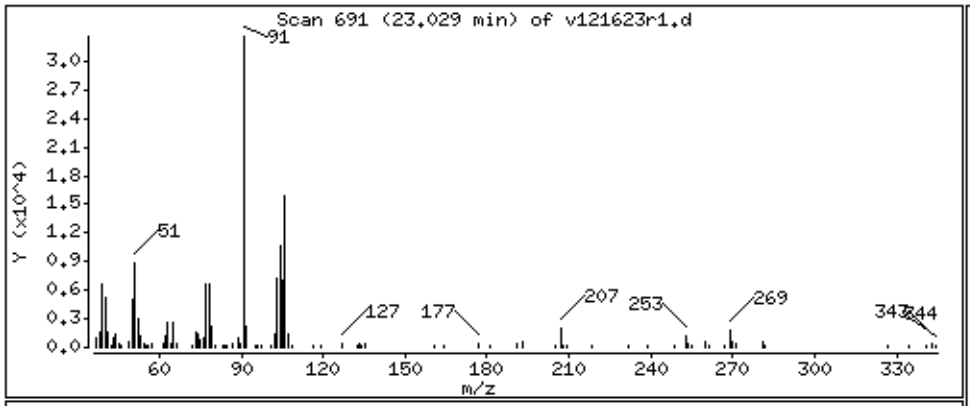
Operator: act

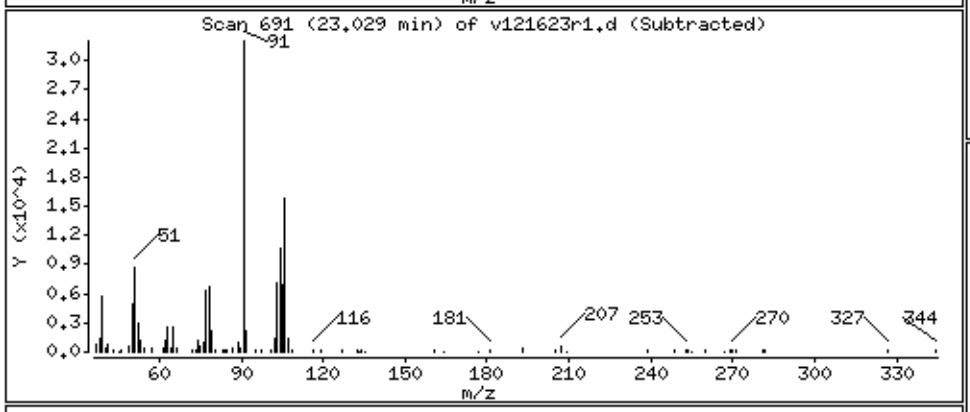
Column phase: RTx-624

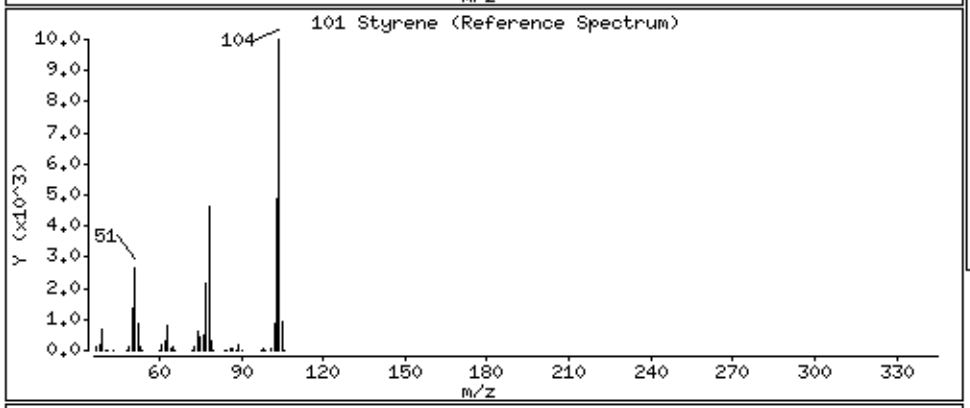
Column diameter: 0.32

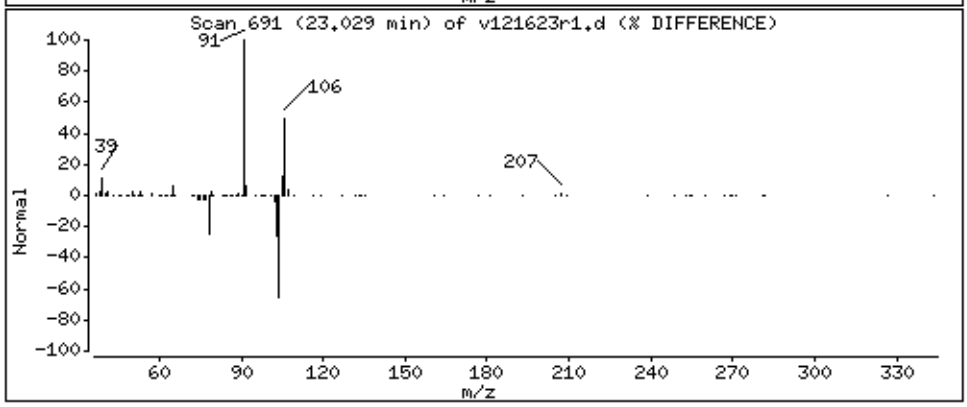
101 Styrene

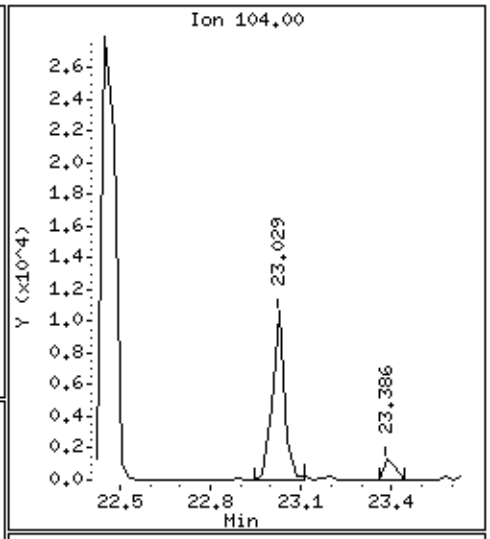
Concentration: 0.8026 PPBV

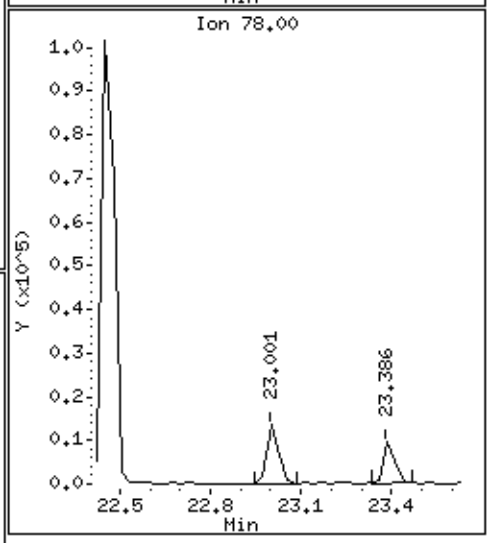












Data File: /chem/msdv.i/16Dec2014.b/v121623r1.d

Date : 17-DEC-2014 06:13

Client ID:

Instrument: msdv.i

Sample Info: 250ml #25248

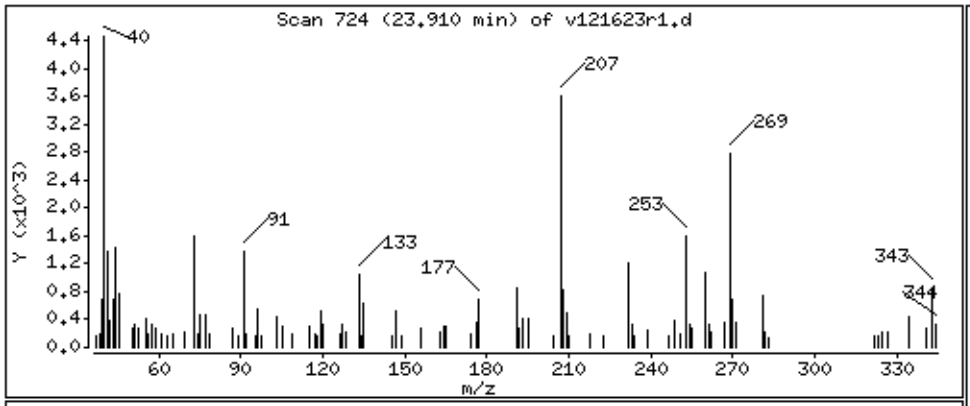
Operator: act

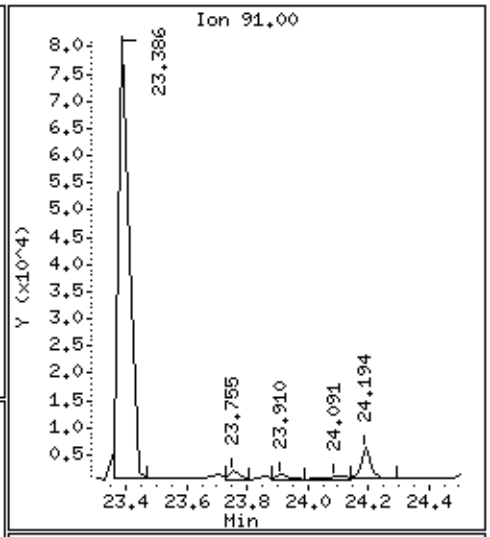
Column phase: RTx-624

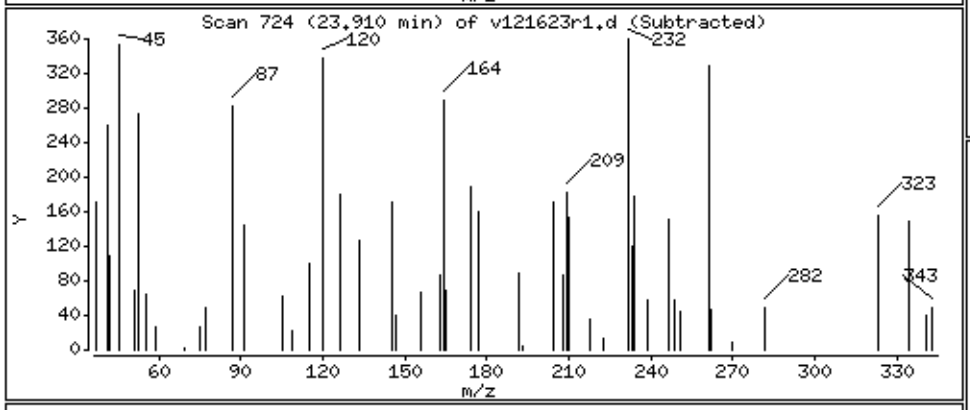
Column diameter: 0.32

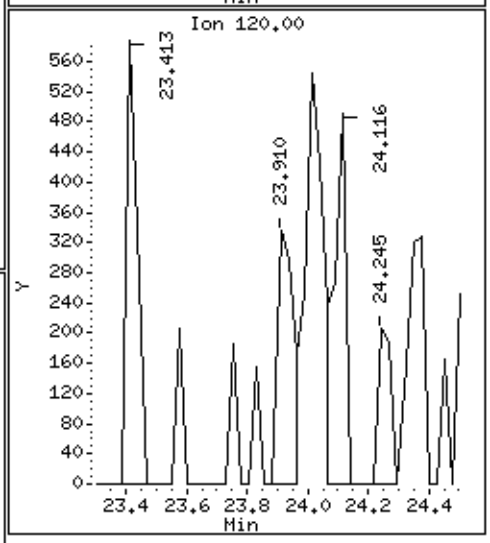
111 Propylbenzene

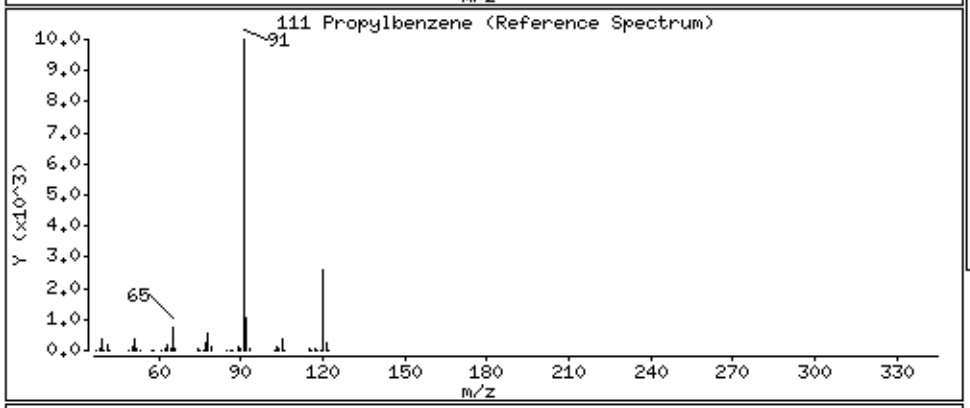
Concentration: 0.03903 PPBV

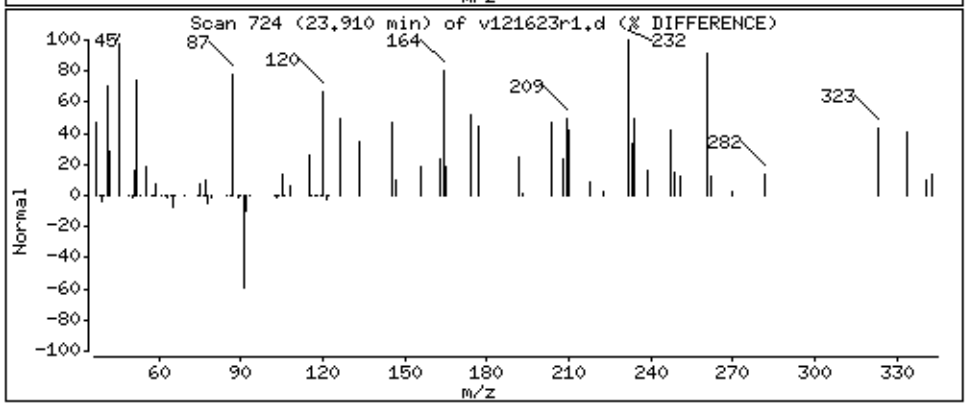












Data File: /chem/msdv.i/16Dec2014.b/v121623r1.d

Date : 17-DEC-2014 06:13

Client ID:

Instrument: msdv.i

Sample Info: 250ml #25248

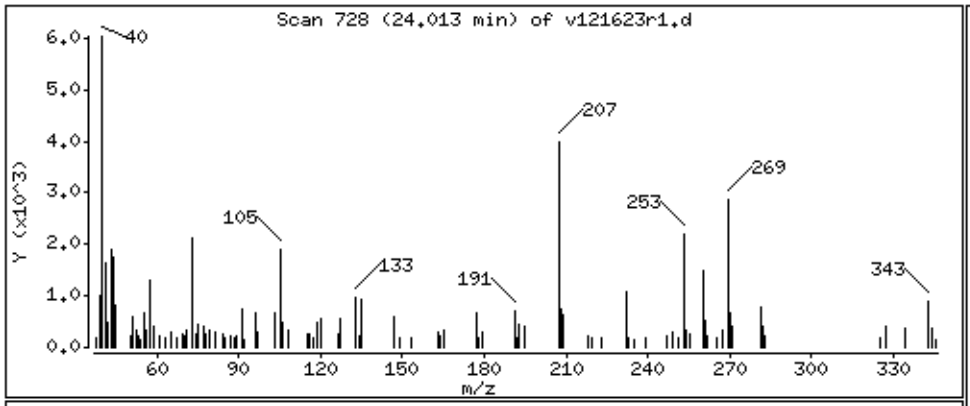
Operator: act

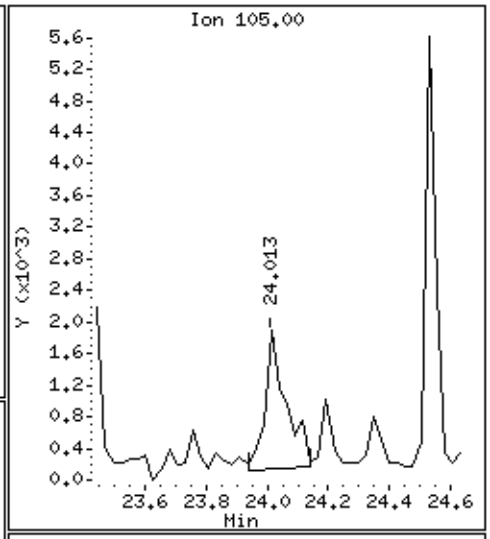
Column phase: RTx-624

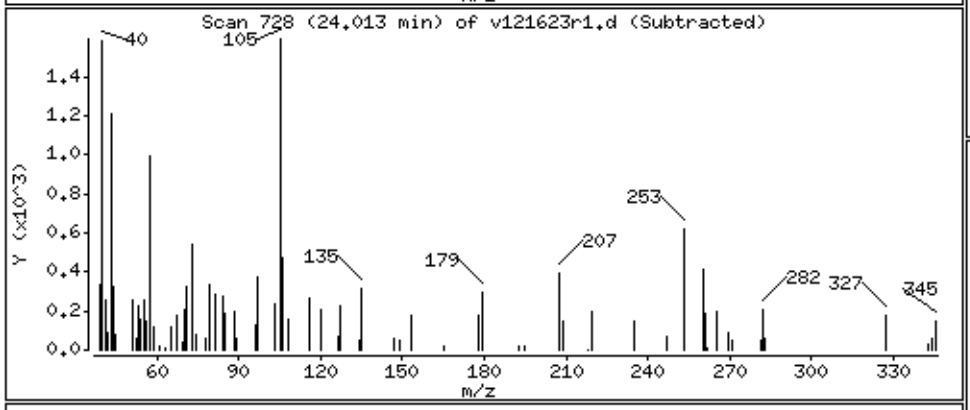
Column diameter: 0.32

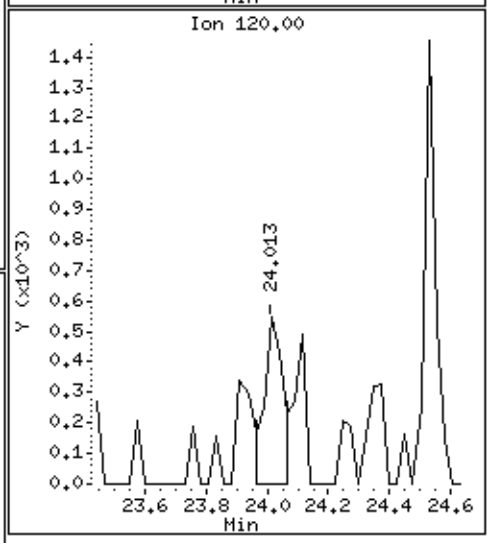
113 4-Ethyltoluene

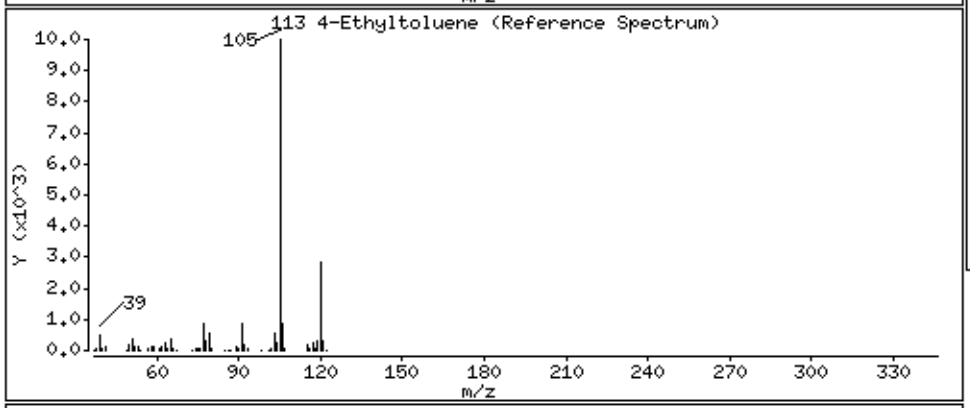
Concentration: 0.1766 PPBV

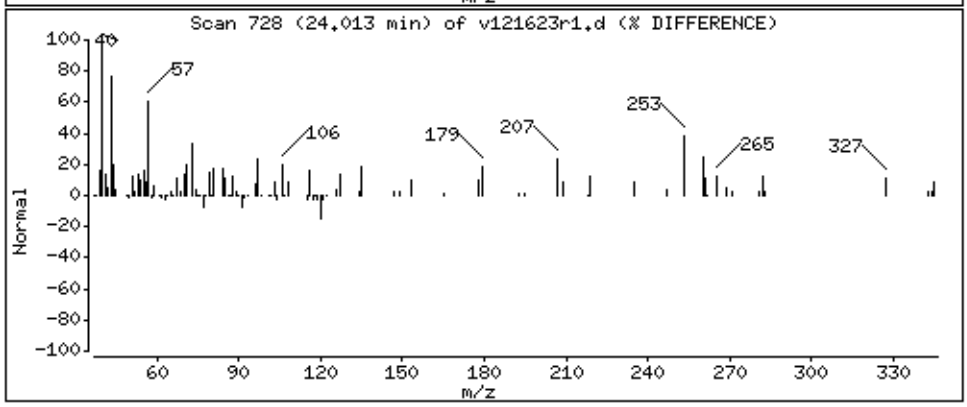












Data File: /chem/msdv.i/16Dec2014.b/v121623r1.d

Date : 17-DEC-2014 06:13

Client ID:

Instrument: msdv.i

Sample Info: 250ml #25248

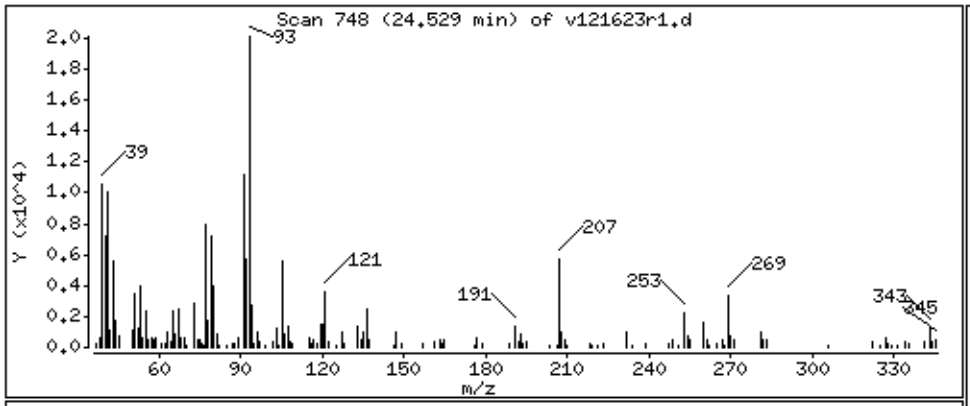
Operator: act

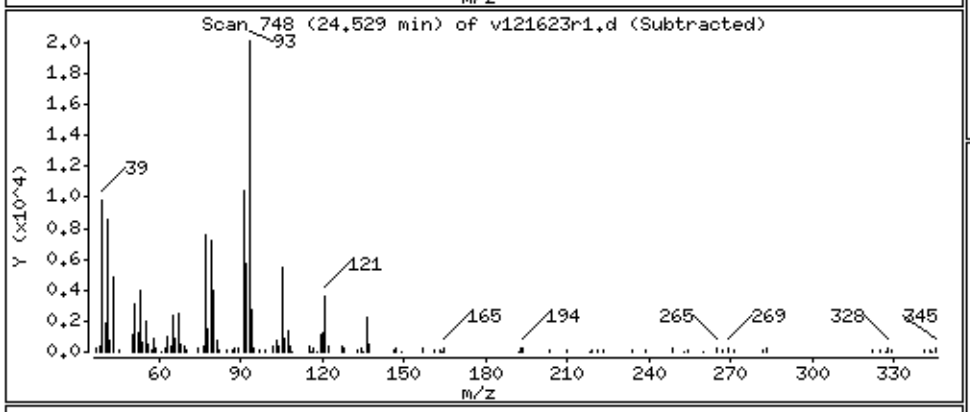
Column phase: RTx-624

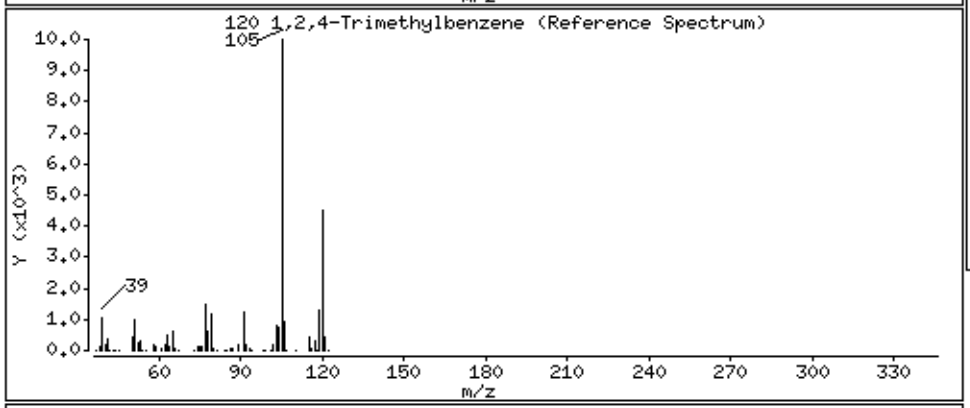
Column diameter: 0.32

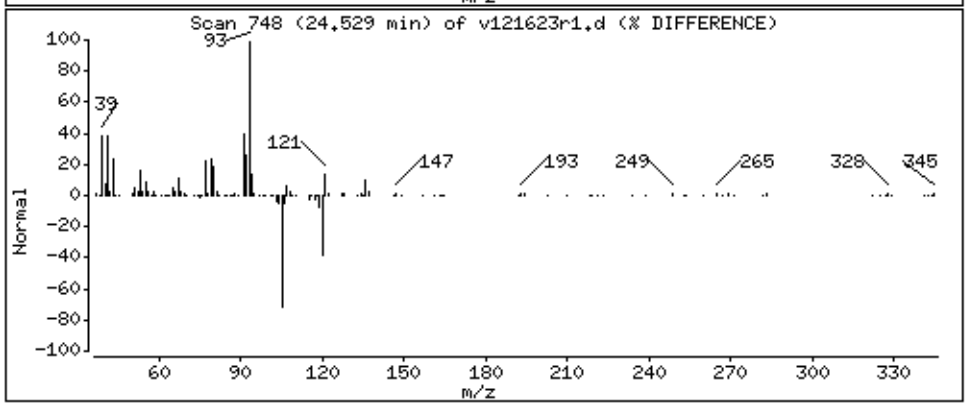
120 1,2,4-Trimethylbenzene

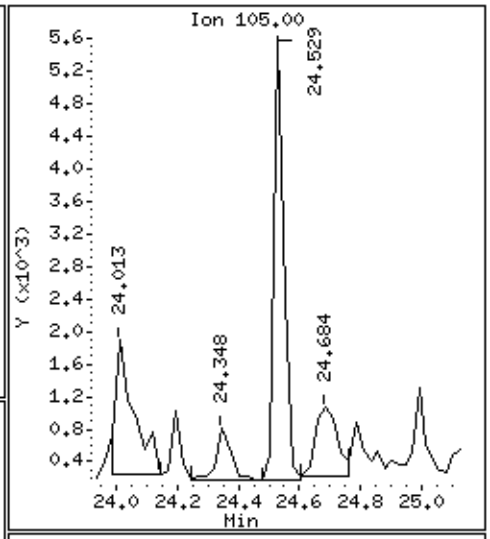
Concentration: 0.3823 PPBV

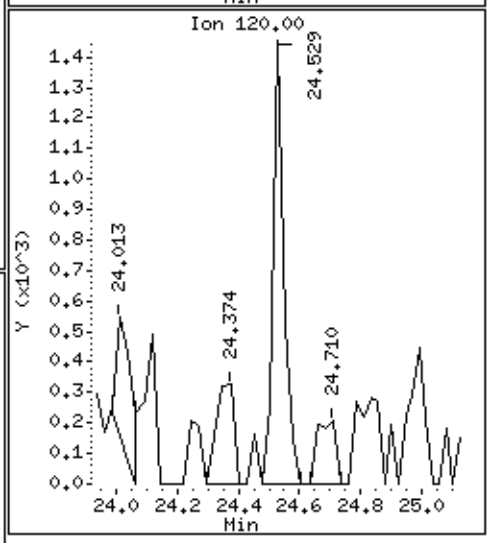












QC Results and Raw Data

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Client Sample ID: Lab Blank

Lab ID#: 1412152AR1-09A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**v121605r1**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 12/16/14 11:11 AM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.50	Not Detected	2.5	Not Detected
Freon 114	0.10	Not Detected	0.70	Not Detected
Chloromethane	0.50	Not Detected	1.0	Not Detected
Vinyl Chloride	0.10	Not Detected	0.26	Not Detected
1,3-Butadiene	0.10	Not Detected	0.22	Not Detected
Bromomethane	0.50	Not Detected	1.9	Not Detected
Chloroethane	0.50	Not Detected	1.3	Not Detected
Freon 11	0.10	Not Detected	0.56	Not Detected
Ethanol	0.50	Not Detected	0.94	Not Detected
Freon 113	0.10	Not Detected	0.77	Not Detected
1,1-Dichloroethene	0.10	Not Detected	0.40	Not Detected
Acetone	0.50	Not Detected	1.2	Not Detected
2-Propanol	0.50	Not Detected	1.2	Not Detected
Carbon Disulfide	0.50	Not Detected	1.6	Not Detected
3-Chloropropene	0.50	Not Detected	1.6	Not Detected
Methylene Chloride	0.20	Not Detected	0.69	Not Detected
Methyl tert-butyl ether	0.10	Not Detected	0.36	Not Detected
trans-1,2-Dichloroethene	0.10	Not Detected	0.40	Not Detected
Hexane	0.10	0.10 J	0.35	0.35 J
1,1-Dichloroethane	0.10	Not Detected	0.40	Not Detected
2-Butanone (Methyl Ethyl Ketone)	0.50	Not Detected	1.5	Not Detected
cis-1,2-Dichloroethene	0.10	Not Detected	0.40	Not Detected
Tetrahydrofuran	0.50	Not Detected	1.5	Not Detected
Chloroform	0.10	Not Detected	0.49	Not Detected
1,1,1-Trichloroethane	0.10	Not Detected	0.54	Not Detected
Cyclohexane	0.10	Not Detected	0.34	Not Detected
Carbon Tetrachloride	0.10	Not Detected	0.63	Not Detected
2,2,4-Trimethylpentane	0.50	Not Detected	2.3	Not Detected
Benzene	0.10	Not Detected	0.32	Not Detected
1,2-Dichloroethane	0.10	Not Detected	0.40	Not Detected
Heptane	0.10	Not Detected	0.41	Not Detected
Trichloroethene	0.10	Not Detected	0.54	Not Detected
1,2-Dichloropropane	0.10	Not Detected	0.46	Not Detected
1,4-Dioxane	0.10	Not Detected	0.36	Not Detected
Bromodichloromethane	0.10	Not Detected	0.67	Not Detected
cis-1,3-Dichloropropene	0.10	Not Detected	0.45	Not Detected
4-Methyl-2-pentanone	0.10	Not Detected	0.41	Not Detected
Toluene	0.10	Not Detected	0.38	Not Detected
trans-1,3-Dichloropropene	0.10	Not Detected	0.45	Not Detected
1,1,2-Trichloroethane	0.10	Not Detected	0.54	Not Detected
Tetrachloroethene	0.10	Not Detected	0.68	Not Detected
2-Hexanone	0.50	Not Detected	2.0	Not Detected

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Client Sample ID: Lab Blank

Lab ID#: 1412152AR1-09A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**v121605r1**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 12/16/14 11:11 AM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Dibromochloromethane	0.10	Not Detected	0.85	Not Detected
1,2-Dibromoethane (EDB)	0.10	Not Detected	0.77	Not Detected
Chlorobenzene	0.10	Not Detected	0.46	Not Detected
Ethyl Benzene	0.10	Not Detected	0.43	Not Detected
m,p-Xylene	0.10	Not Detected	0.43	Not Detected
o-Xylene	0.10	Not Detected	0.43	Not Detected
Styrene	0.10	Not Detected	0.42	Not Detected
Bromoform	0.10	Not Detected	1.0	Not Detected
Cumene	0.10	Not Detected	0.49	Not Detected
1,1,2,2-Tetrachloroethane	0.10	Not Detected	0.69	Not Detected
Propylbenzene	0.10	Not Detected	0.49	Not Detected
4-Ethyltoluene	0.10	Not Detected	0.49	Not Detected
1,3,5-Trimethylbenzene	0.10	Not Detected	0.49	Not Detected
1,2,4-Trimethylbenzene	0.10	Not Detected	0.49	Not Detected
1,3-Dichlorobenzene	0.10	Not Detected UJ	0.60	Not Detected UJ
1,4-Dichlorobenzene	0.10	0.038 J	0.60	0.23 J
alpha-Chlorotoluene	0.50	0.10 J	2.6	0.54 J
1,2-Dichlorobenzene	0.10	0.046 J	0.60	0.28 J
1,2,4-Trichlorobenzene	0.50	0.12 J	3.7	0.88 J
Hexachlorobutadiene	0.50	0.043 J	5.3	0.46 J
Naphthalene	0.50	Not Detected	2.6	Not Detected

J = Estimated value.
UJ = Analyte associated with low bias in the CCV and/or LCS.
Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	103	70-130
Toluene-d8	103	70-130
4-Bromofluorobenzene	93	70-130

Eurofins Air Toxics Inc.

TO15/Modified TO-14A

Data file : /chem/msdv.i/16Dec2014.b/v121605r1.d
Lab Smp Id: Lab Blank Client Smp ID: Lab Blank
Inj Date : 16-DEC-2014 11:11
Operator : ef Inst ID: msdv.i
Smp Info : 250mL# 25313
Misc Info : Humid
Comment : Low Level GC-MS
Method : /chem/msdv.i/16Dec2014.b/v14l1006d.m
Meth Date : 01-Jul-2015 09:03 sblack Quant Type: ISTD
Cal Date : 03-NOV-2014 11:17 Cal File: v110307.d
Als bottle: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: And19256r1.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
* 54 Bromochloromethane						CAS #: 74-97-5	
15.934	15.933 (1.000)	130	98254	5.00000		80.00- 120.00	100.00
15.934	15.933 (1.000)	128	75668			47.55- 107.55	77.01
15.934	15.933 (1.000)	49	247607			213.64- 273.64	252.01
* 71 1,4-Difluorobenzene						CAS #: 540-36-3	
17.305	17.305 (1.000)	114	426181	5.00000		80.00- 120.00	100.00
17.305	17.305 (1.000)	88	71916			0.00- 46.17	16.87
* 92 Chlorobenzene-d5						CAS #: 3114-55-4	
22.205	22.205 (1.000)	117	348367	5.00000		80.00- 120.00	100.00
22.205	22.205 (1.000)	82	211017			28.56- 88.56	60.57
$ 65 1,2-Dichloroethane-d4						CAS #: 17060-07-0	
16.756	16.756 (1.052)	65	185126	5.13392	5.134	80.00- 120.00	100.00
16.756	16.756 (1.052)	67	95288			28.37- 88.37	51.47
$ 80 Toluene-d8						CAS #: 2037-26-5	
19.879	19.879 (1.149)	98	422391	5.15496	5.155	80.00- 120.00	100.00
19.856	19.879 (1.147)	70	53145			0.00- 41.90	12.58

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
$ 80 Toluene-d8 (continued)							
19.879	19.879 (1.149)	100	275979			34.60- 94.60	65.34
$ 106 Bromofluorobenzene					CAS #: 460-00-4		
23.704	23.704 (1.067)	174	139418	4.65359	4.654	80.00- 120.00	100.00
23.678	23.704 (1.066)	95	191927			113.85- 173.85	137.66
23.704	23.704 (1.067)	176	134710			68.89- 128.89	96.62
43 Hexane					CAS #: 110-54-3		
14.381	14.381 (0.903)	57	8561	0.09983	0.09983	80.00- 120.00	100.00(a)
14.381	14.381 (0.903)	43	8989			57.65- 117.65	105.00
14.408	14.381 (0.904)	86	597			0.00- 40.67	6.97
124 1,4-Dichlorobenzene					CAS #: 106-46-7		
25.014	24.992 (1.127)	146	2087	0.03800	0.03800	80.00- 120.00	100.00(a)
25.014	24.992 (1.127)	148	2851			38.92- 98.92	136.61
25.104	24.992 (1.131)	111	215			11.61- 71.61	10.30
127 alpha-chlorotoluene					CAS #: 100-44-7		
25.149	25.126 (1.133)	91	6137	0.10459	0.1046	80.00- 120.00	100.00(a)
25.171	25.126 (1.134)	126	893			0.00- 52.82	14.55
128 1,2-Dichlorobenzene					CAS #: 95-50-1		
25.396	25.395 (1.144)	146	2488	0.04590	0.04590	80.00- 120.00	100.00(a)
25.396	25.395 (1.144)	148	1253			33.86- 93.86	50.36
25.396	25.395 (1.144)	111	999			15.01- 75.01	40.15
131 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
27.077	27.077 (1.219)	180	4726	0.11881	0.1188	80.00- 120.00	100.00(a)
27.077	27.077 (1.219)	182	4735			64.14- 124.14	100.19
132 Hexachlorobutadiene					CAS #: 87-68-3		
27.167	27.166 (1.223)	225	1443	0.04338	0.04338	80.00- 120.00	100.00(a)
27.167	27.166 (1.223)	223	839			44.27- 104.27	58.14

QC Flag Legend

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

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdv.i
Lab File ID: v121605r1.d
Lab Smp Id: Lab Blank
Analysis Type: VOA
Quant Type: ISTD
Operator: ef
Method File: /chem/msdv.i/16Dec2014.b/v14l1006d.m
Misc Info: Humid

Calibration Date: 16-DEC-2014
Calibration Time: 08:42
Client Smp ID: Lab Blank
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
54 Bromochloromethan	109722	65833	153611	98254	-10.45
71 1,4-Difluorobenze	445503	267302	623704	426181	-4.34
92 Chlorobenzene-d5	361081	216649	505513	348367	-3.52

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
54 Bromochloromethan	15.93	15.60	16.26	15.93	0.00
71 1,4-Difluorobenze	17.30	16.97	17.63	17.30	0.00
92 Chlorobenzene-d5	22.21	21.88	22.54	22.21	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: 01-Jul-2015 09:04

Eurofins Air Toxics Inc.

RECOVERY REPORT

Client Name:
Client SDG: 16Dec2014
Sample Matrix: GAS
Fraction: VOA
Lab Smp Id: Lab Blank
Client Smp ID: Lab Blank
Level: LOW
Operator: ef
Data Type: MS DATA
SampleType: SAMPLE
SpikeList File: AT12.spk
Quant Type: ISTD
Sublist File: And19256r1.sub
Method File: /chem/msdv.i/16Dec2014.b/v14l1006d.m
Misc Info: Humid

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 65 1,2-Dichloroethane	5.000	5.134	102.68	70-130
$ 80 Toluene-d8	5.000	5.155	103.10	70-130
$ 106 Bromofluorobenzene	5.000	4.654	93.07	70-130

Data File: /chem/msdv.i/16Dec2014.b/v121605r1.d

Date : 16-DEC-2014 11:11

Client ID: Lab Blank

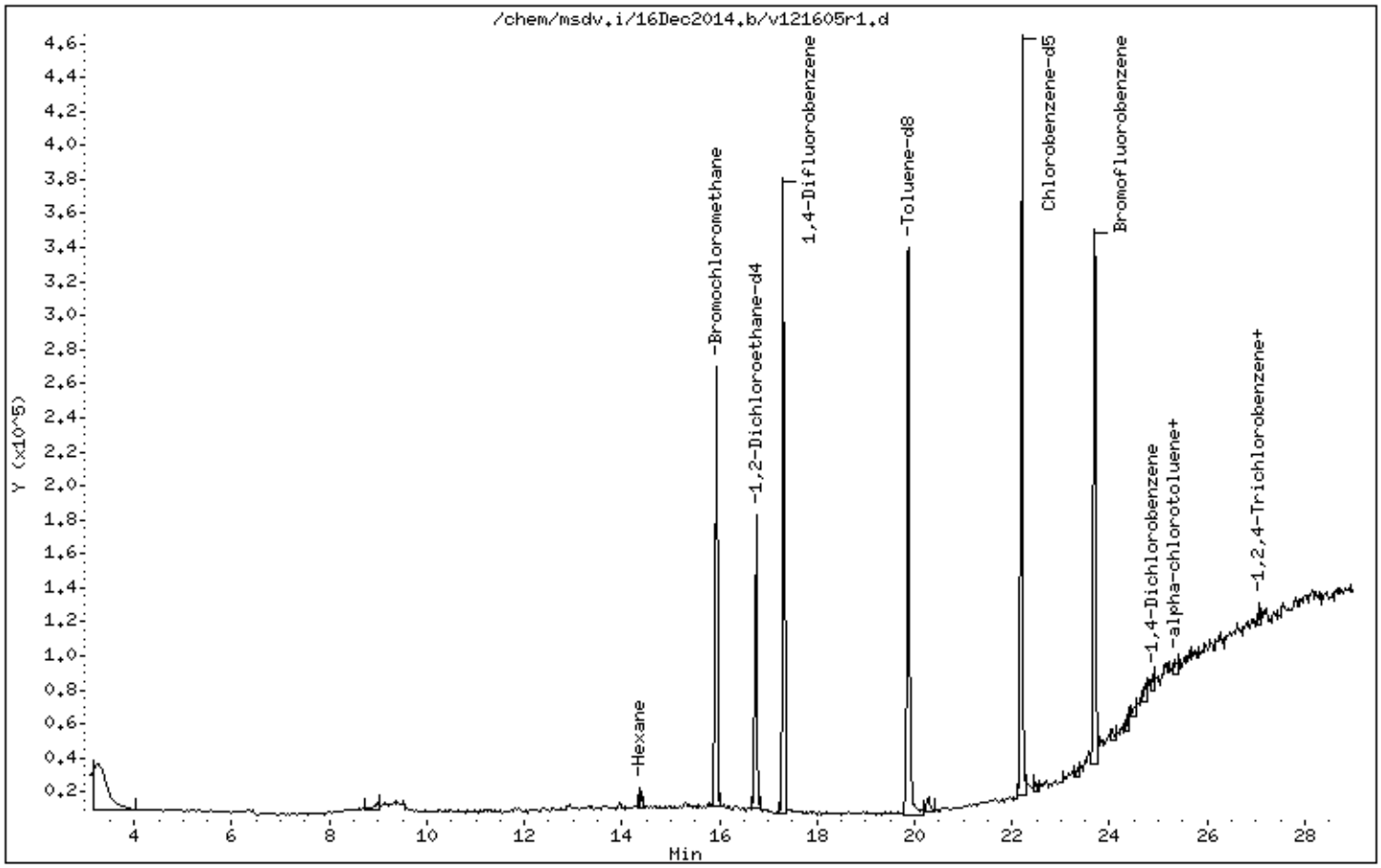
Instrument: msdv.i

Sample Info: 250mL# 25313

Operator: ef

Column phase: RTx-624

Column diameter: 0.32



Data File: /chem/msdv.i/16Dec2014.b/v121605r1.d

Date : 16-DEC-2014 11:11

Client ID: Lab Blank

Instrument: msdv.i

Sample Info: 250mL# 25313

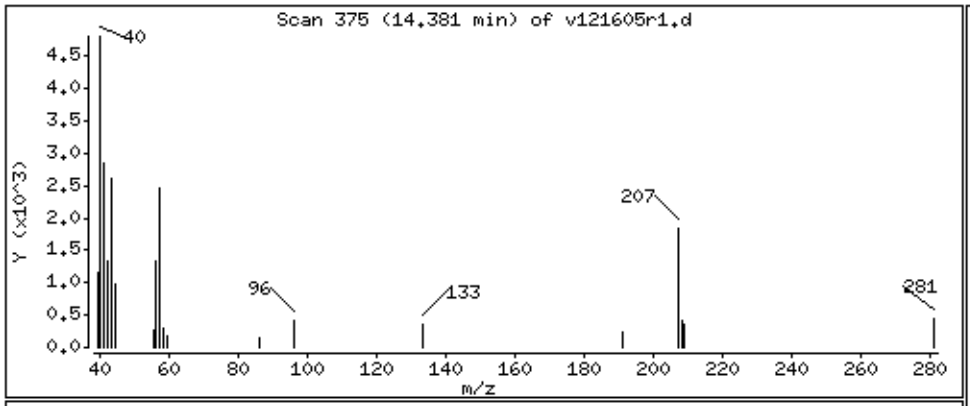
Operator: ef

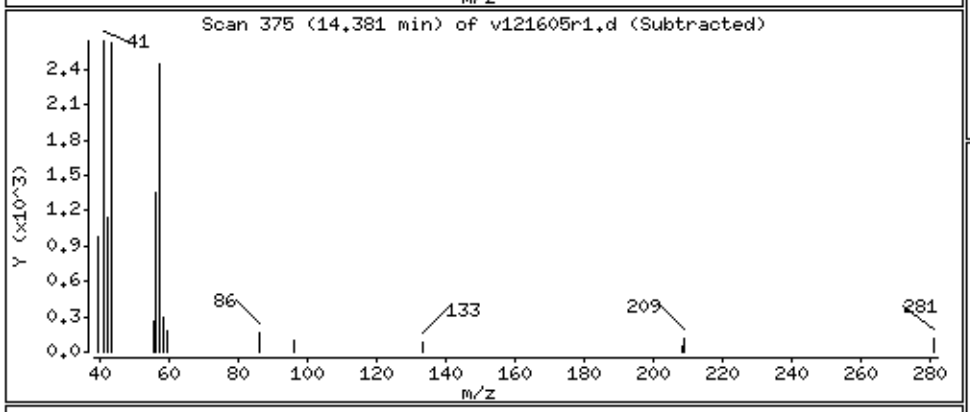
Column phase: RTx-624

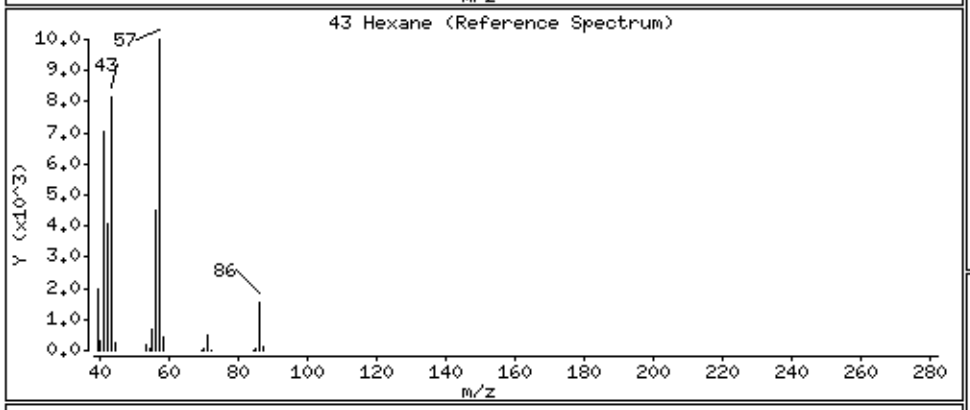
Column diameter: 0.32

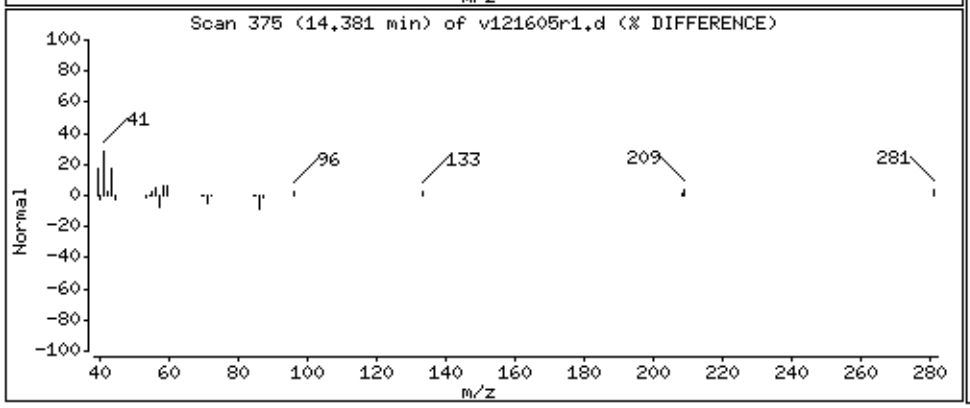
43 Hexane

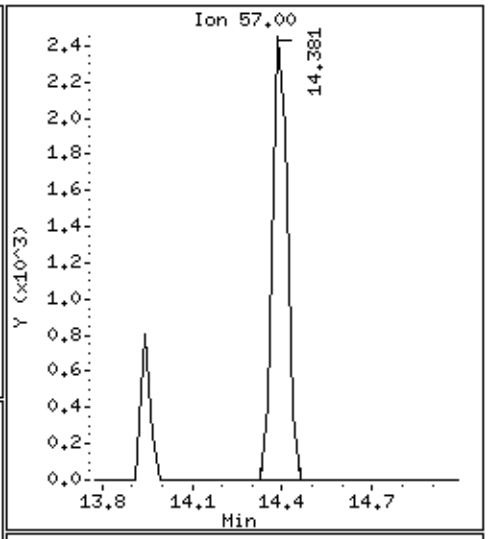
Concentration: 0.09983 PPBV

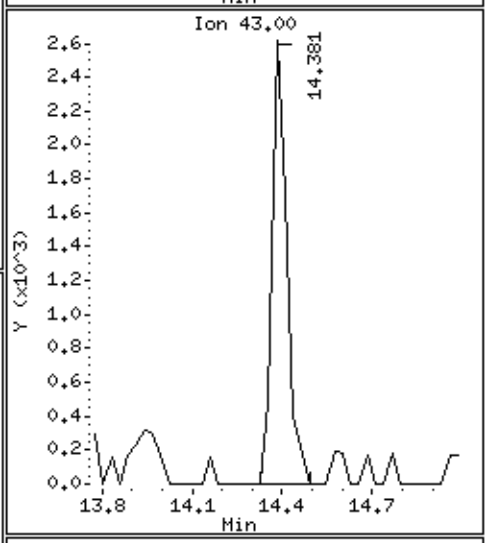


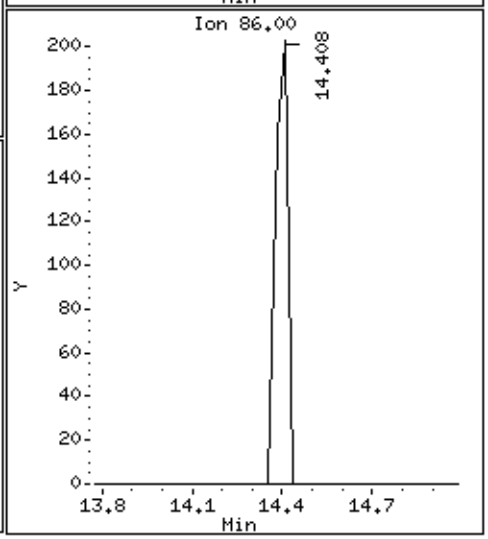












Data File: /chem/msdv.i/16Dec2014.b/v121605r1.d

Date : 16-DEC-2014 11:11

Client ID: Lab Blank

Instrument: msdv.i

Sample Info: 250mL# 25313

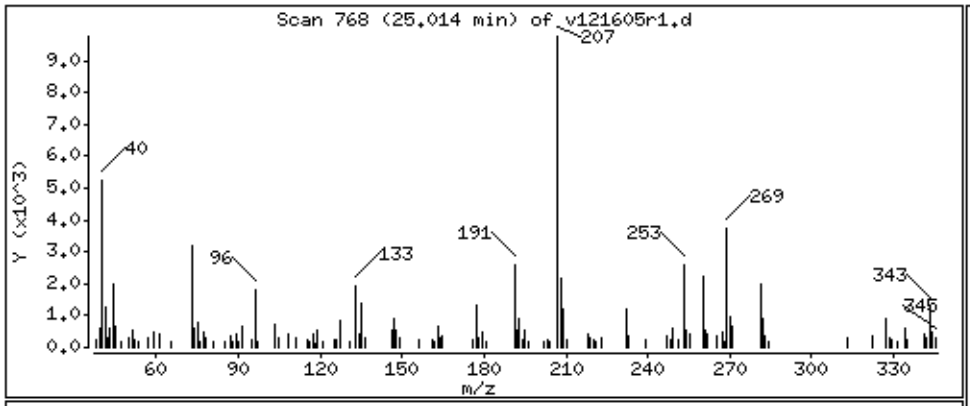
Operator: ef

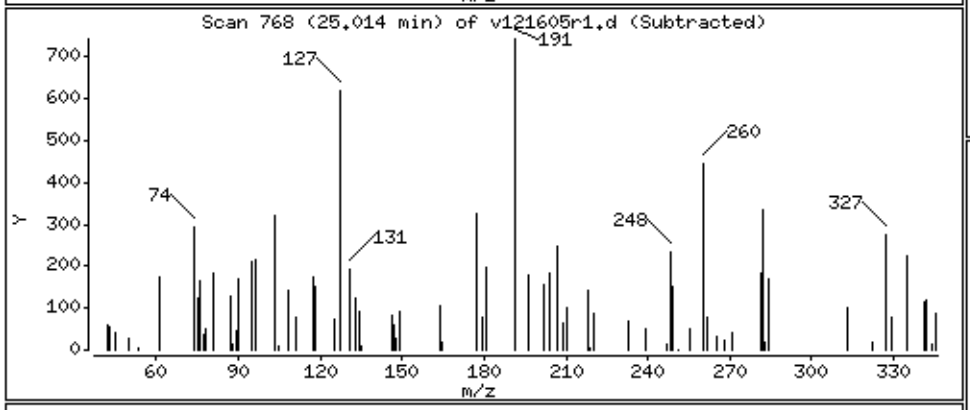
Column phase: RTx-624

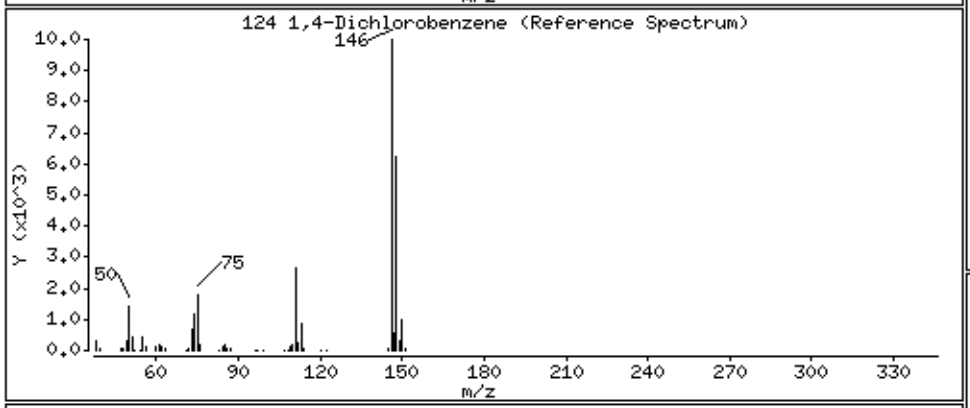
Column diameter: 0.32

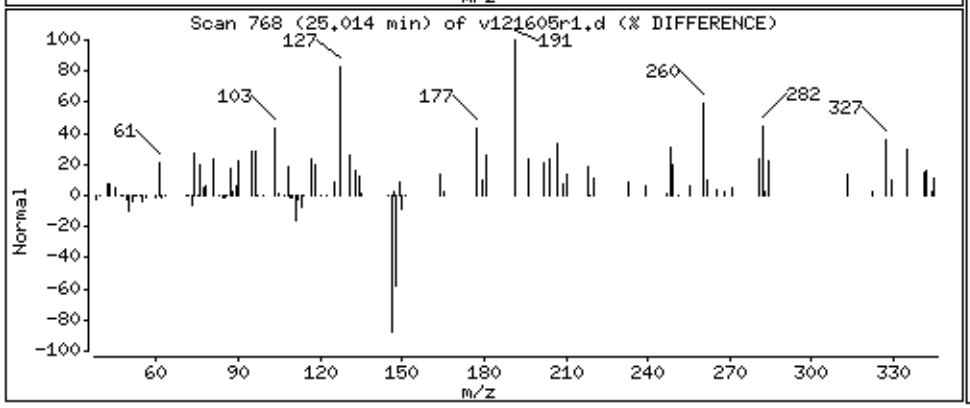
124 1,4-Dichlorobenzene

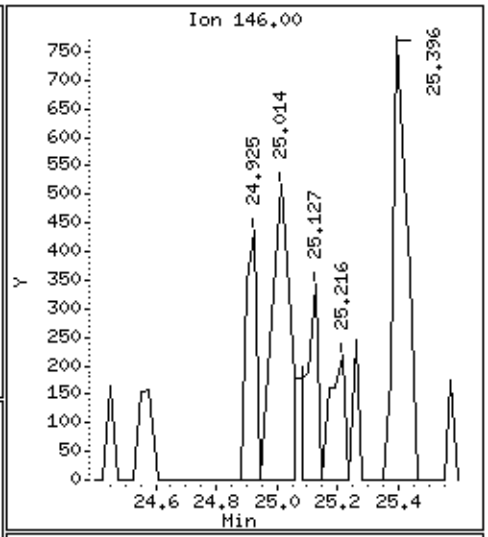
Concentration: 0.03800 PPBV

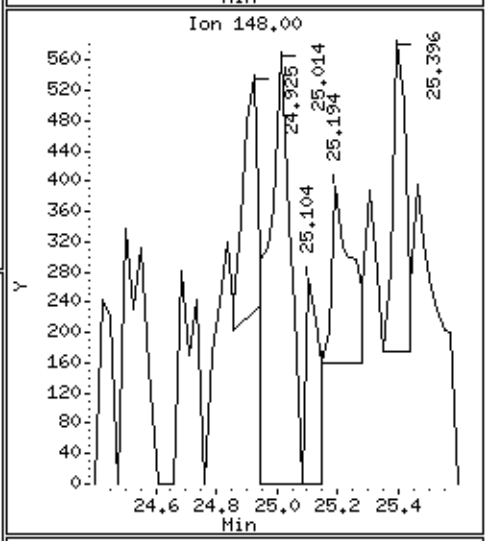


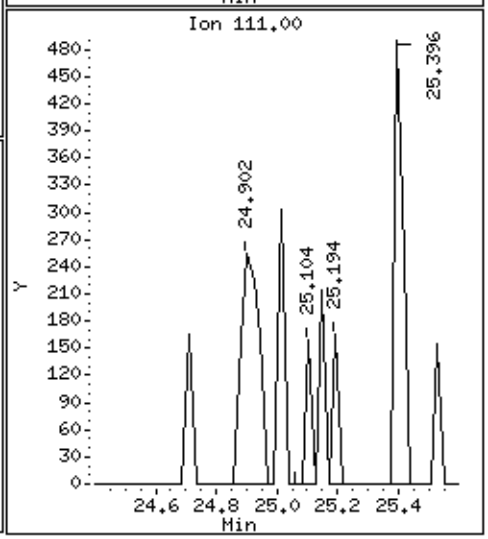












Data File: /chem/msdv.i/16Dec2014.b/v121605r1.d

Date : 16-DEC-2014 11:11

Client ID: Lab Blank

Instrument: msdv.i

Sample Info: 250mL# 25313

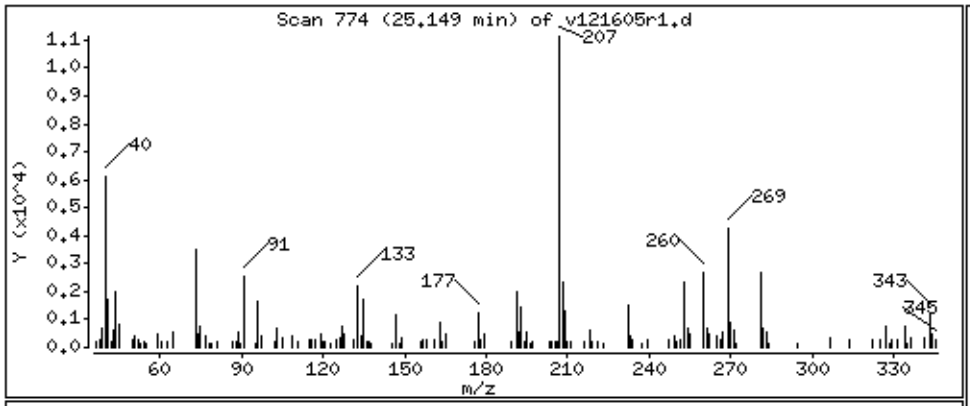
Operator: ef

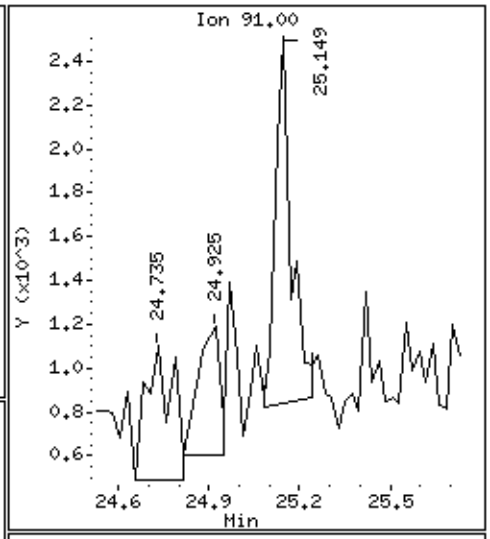
Column phase: RTx-624

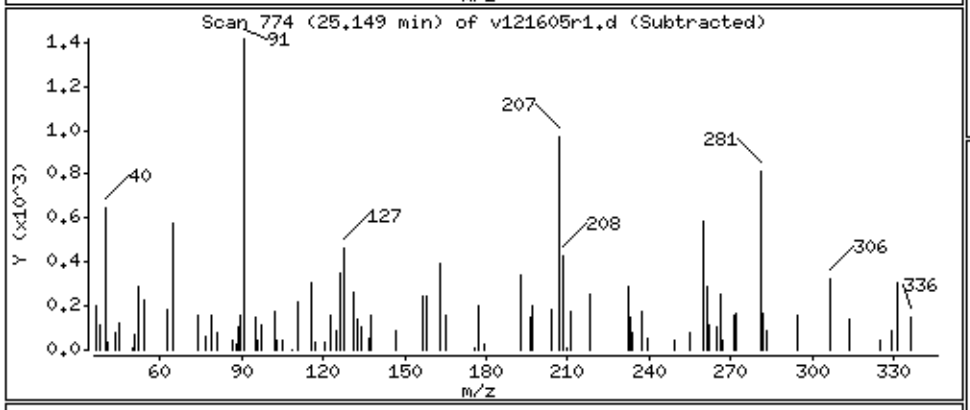
Column diameter: 0.32

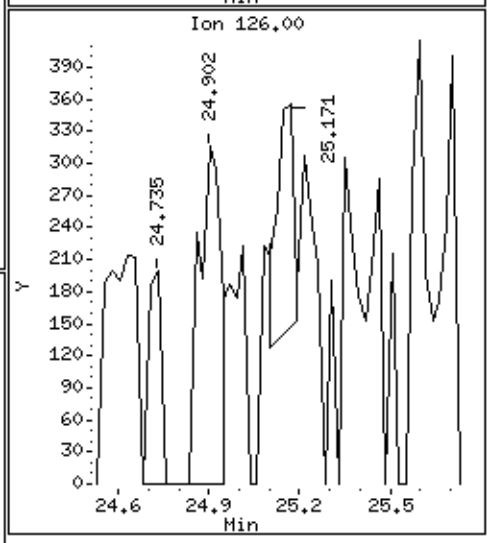
127 alpha-chlorotoluene

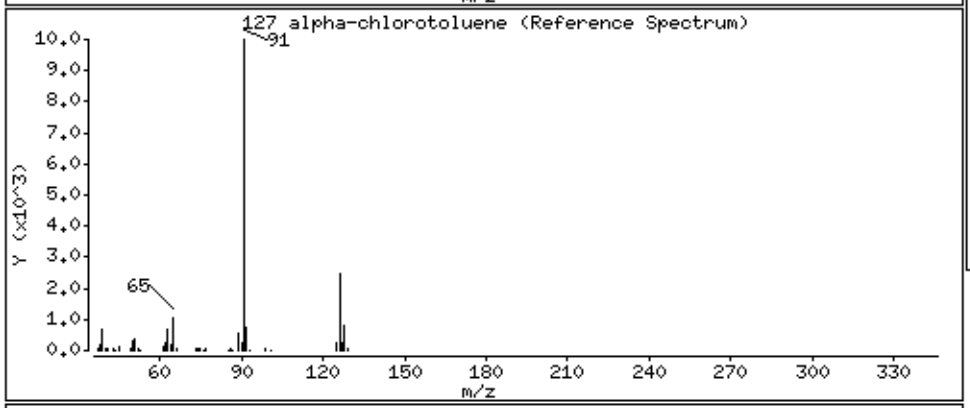
Concentration: 0.1046 PPBV

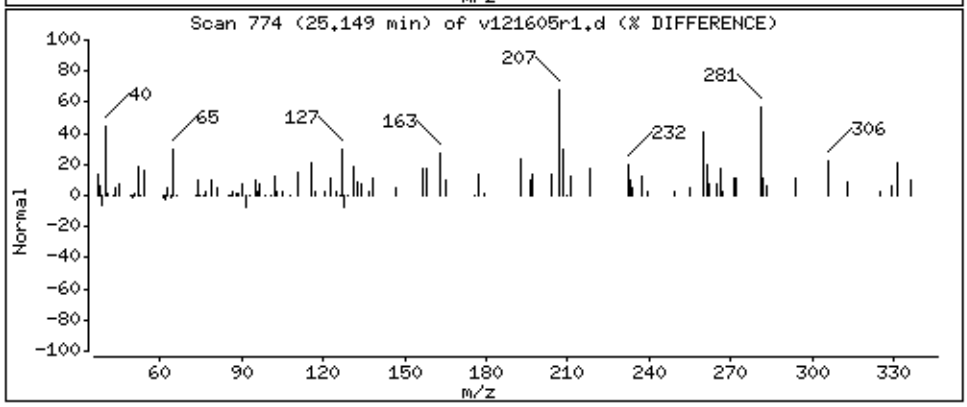












Data File: /chem/msdv.i/16Dec2014.b/v121605r1.d

Date : 16-DEC-2014 11:11

Client ID: Lab Blank

Instrument: msdv.i

Sample Info: 250mL# 25313

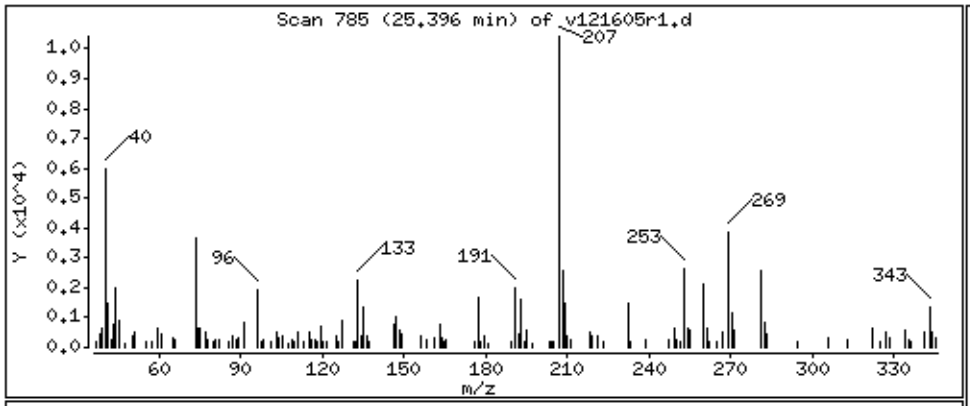
Operator: ef

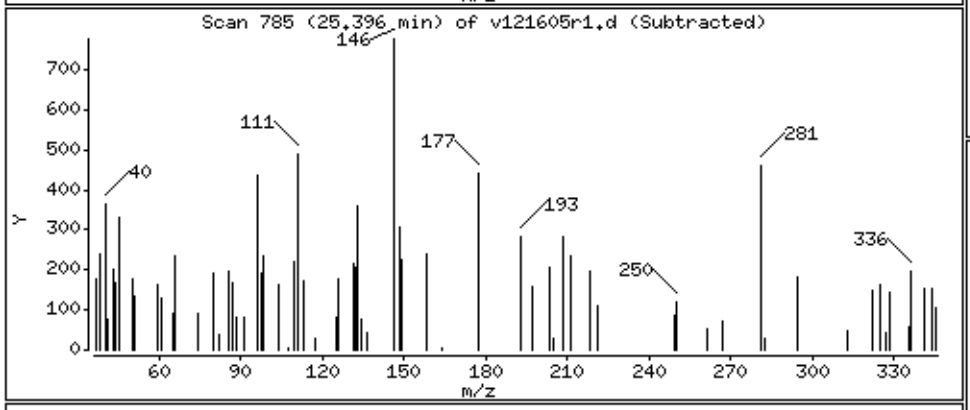
Column phase: RTx-624

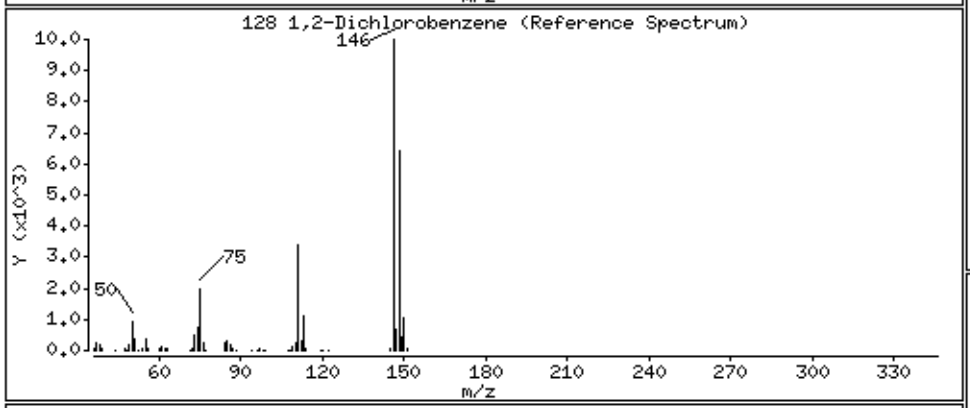
Column diameter: 0.32

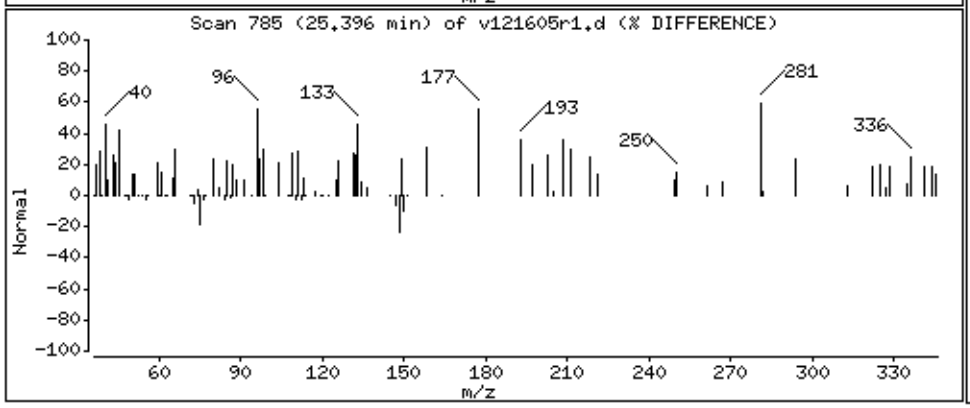
128 1,2-Dichlorobenzene

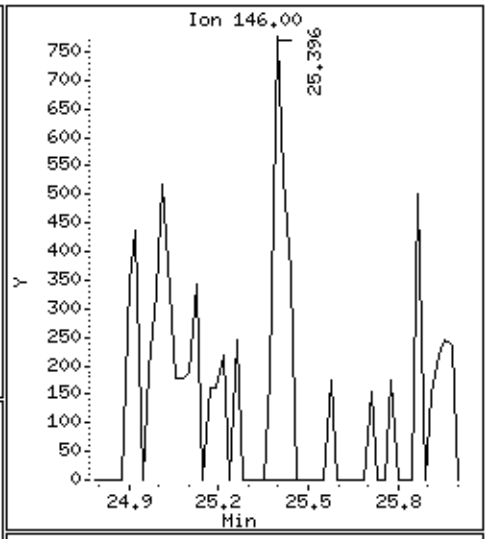
Concentration: 0.04590 PPBV

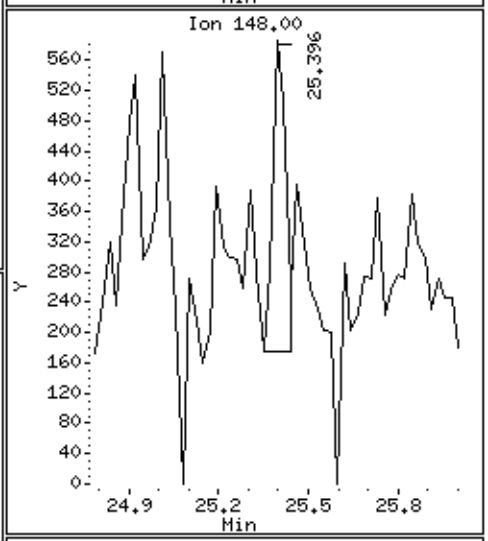


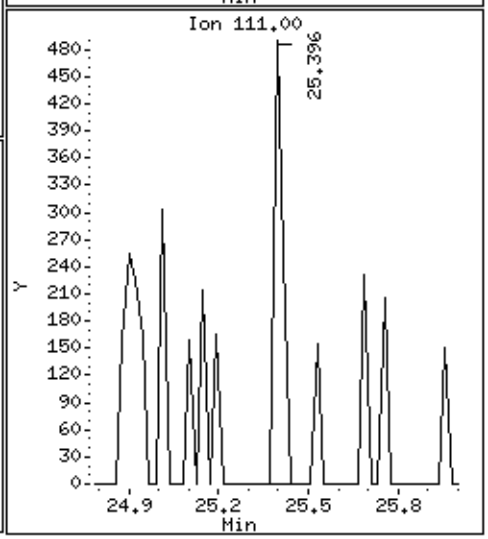












Data File: /chem/msdv.i/16Dec2014.b/v121605r1.d

Date : 16-DEC-2014 11:11

Client ID: Lab Blank

Instrument: msdv.i

Sample Info: 250mL# 25313

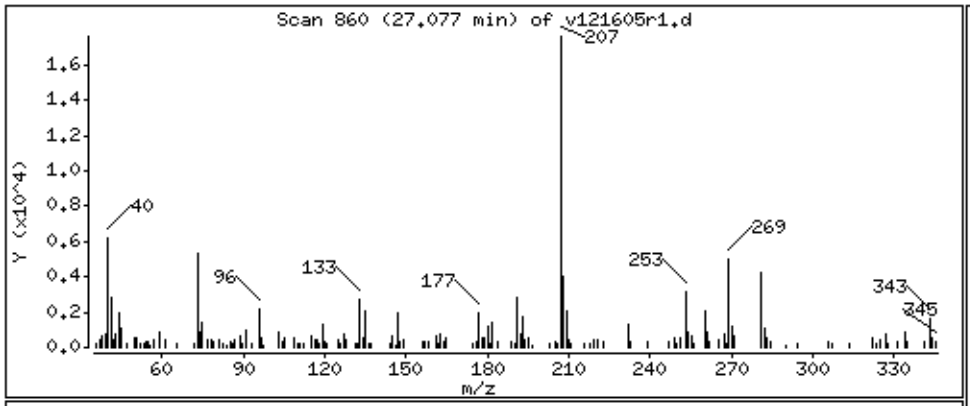
Operator: ef

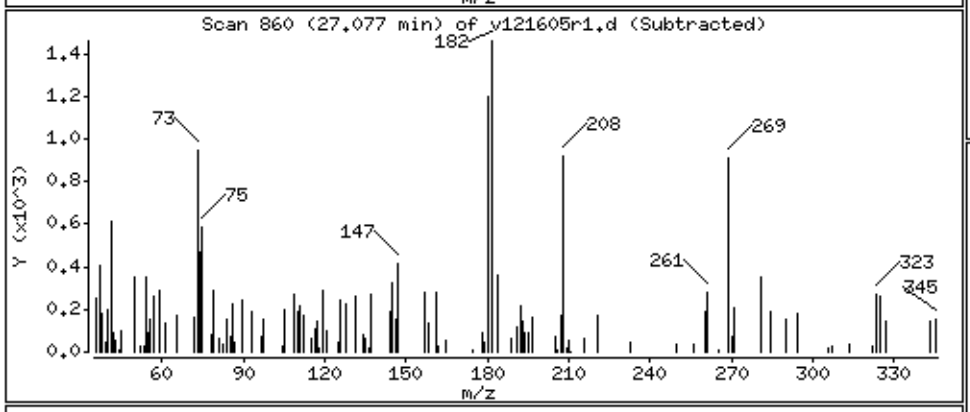
Column phase: RTx-624

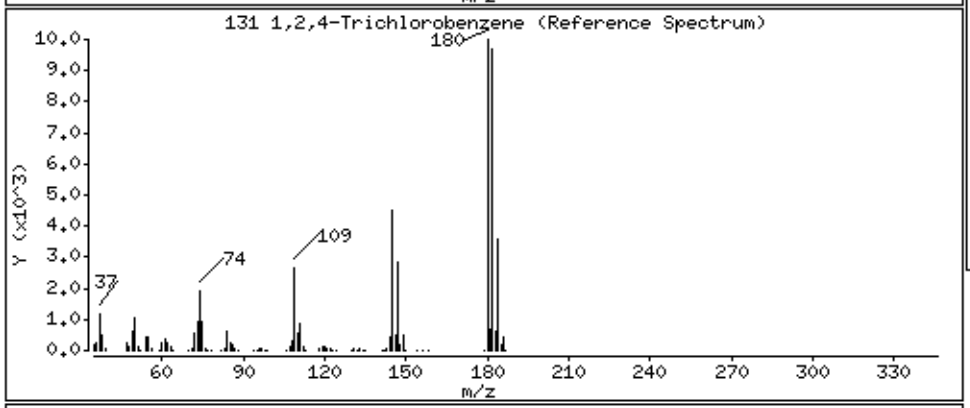
Column diameter: 0.32

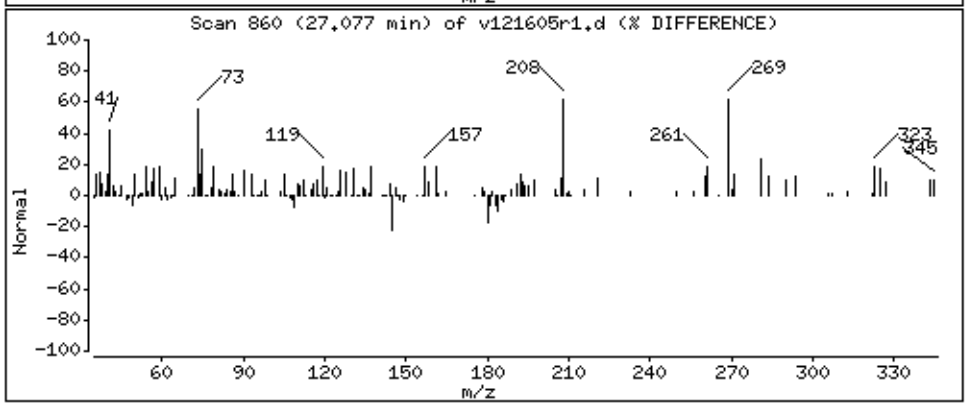
131 1,2,4-Trichlorobenzene

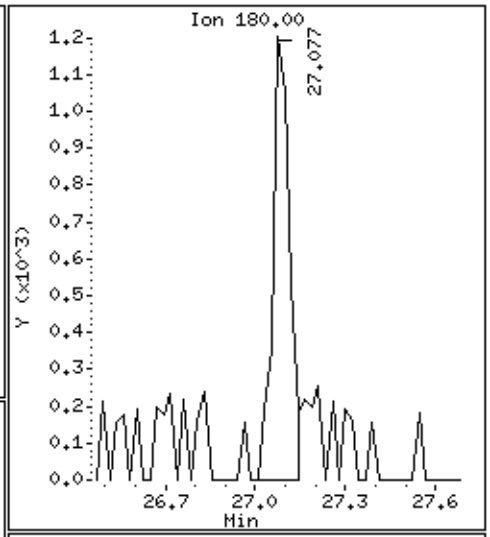
Concentration: 0.1188 PPBV

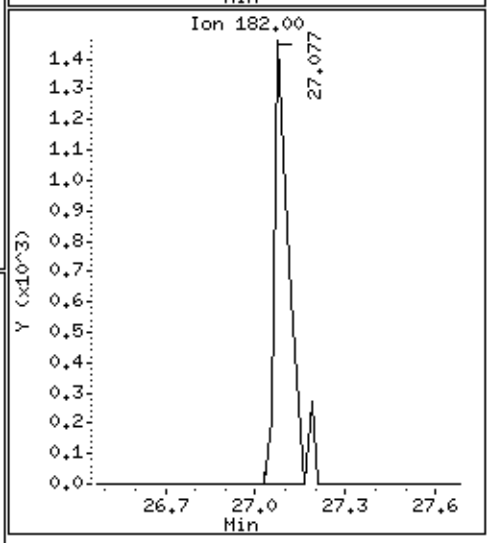












Data File: /chem/msdv.i/16Dec2014.b/v121605r1.d

Date : 16-DEC-2014 11:11

Client ID: Lab Blank

Instrument: msdv.i

Sample Info: 250mL# 25313

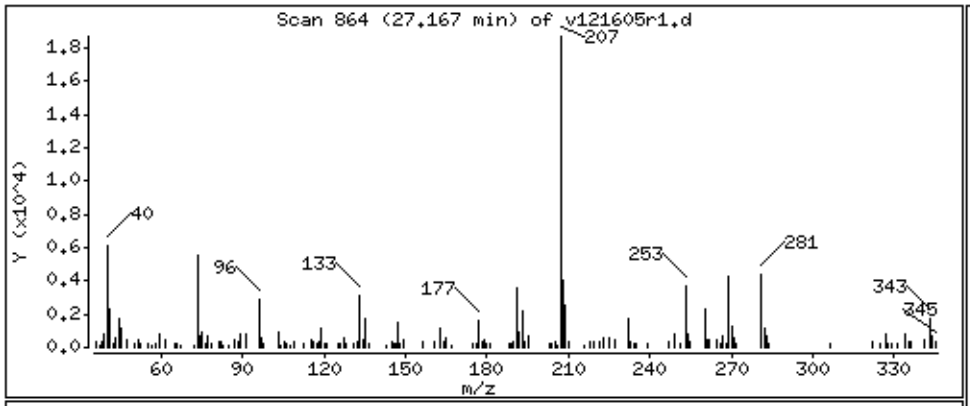
Operator: ef

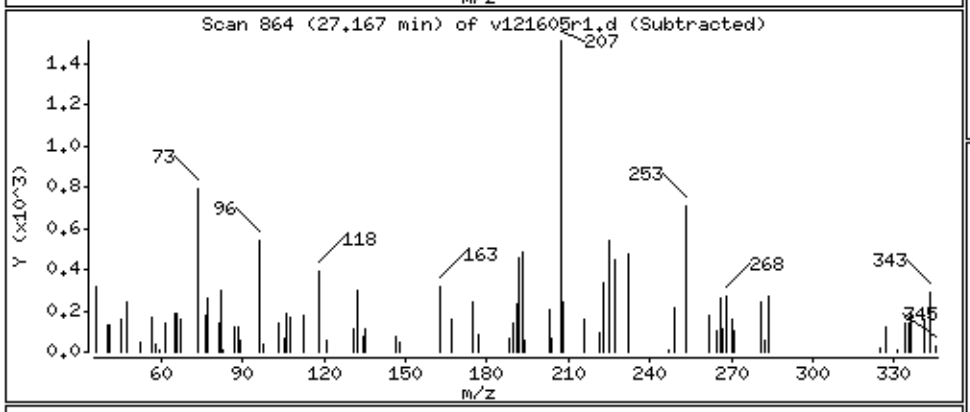
Column phase: RTx-624

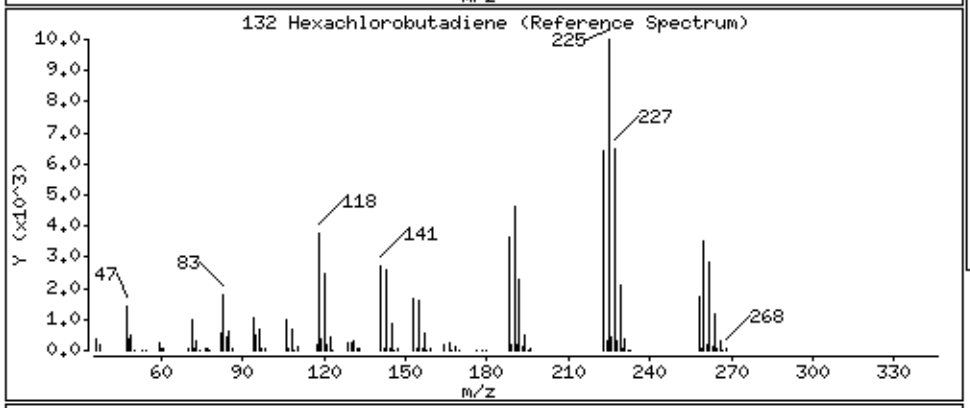
Column diameter: 0.32

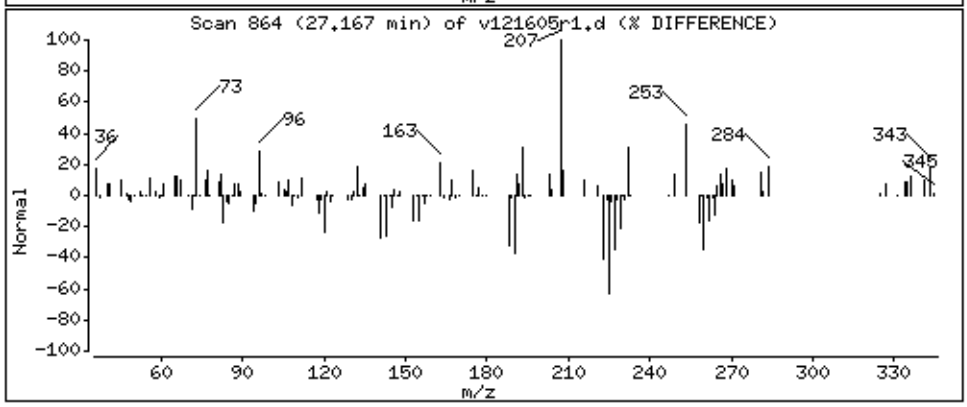
132 Hexachlorobutadiene

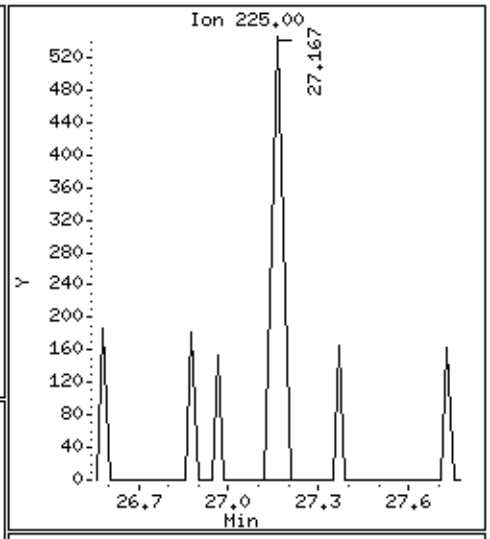
Concentration: 0.04338 PPBV

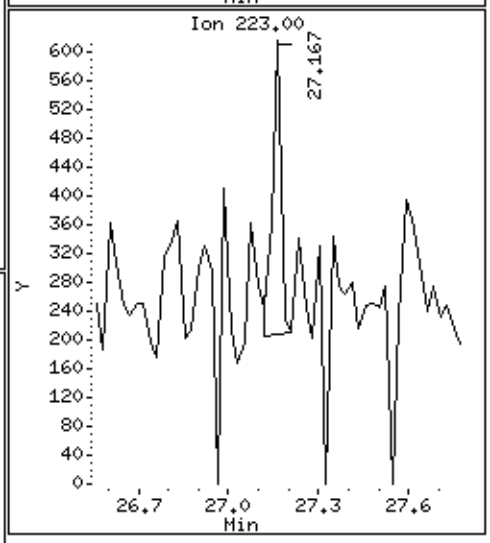












LEVEL-IV VALIDATABLE

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

SURROGATE RECOVERY FORM

Lab Name: AIR TOXICS LIMITED. SDG No.: 1412152AR1

	CLIENT SAMPLE NO.	SURROGATE % RECOVERY								
		1,2-Dichloroethane-d4	#	Toluene-d8	#	4-Bromofluorobenzene	#		#	TOTAL OUT
01	B5IA- 8 (2014)	111		106		98				0
02	B5IA-10 (2014)	113		105		96				0
03	B5IA-6 (2014)	102		108		102				0
04	B5IA-7 (2014)	104		109		101				0
05	B5IA-2 (2014)	100		109		104				0
06	B5IA-1 (2014)	99		108		102				0
07	B5IA-AA (2014)	109		106		99				0
08	B5IA-4 (2014)	103		107		102				0
09	Lab Blank	103		103		93				0
10	CCV	99		103		96				0
11	LCS	101		107		101				0
12	LCSD	99		106		98				0
13										0
14										0
15										0
16										0
17										0
18										0
19										0
20										0
21										0
22										0
23										0
24										0

Surrogate Recovery Limits

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

* Designates values outside of QC limits

LEVEL-IV VALIDATABLE

Modified EPA Method TO-15 GC/MS Full Scan

INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name:	AIR TOXICS, LTD	SDG No:	1412152AR1
Lab File ID:	v121602.d	Date Analyzed:	12/16/2014
Instrument ID:	msdv.i	Time Analyzed:	08:42 AM

		Chlorobenzene-d5 Area	#	RT	#	1,4-Difluorobenzene Area	#	RT	#	Bromochloromethane Area	#	RT	#
	24-HOUR STD	361081		22.21		445503		17.3		109722		15.93	
	UPPER LIMIT	505513		22.54		623704		17.63		153611		16.26	
	LOWER LIMIT	216649		21.88		267302		16.97		65833		15.60	
	CLIENT SAMPLE NO												
01	B5IA- 8 (2014)	328554		22.21		413726		17.3		89897		15.93	
02	B5IA-10 (2014)	328178		22.21		404322		17.3		90051		15.93	
03	B5IA-6 (2014)	332483		22.21		414346		17.3		98434		15.93	
04	B5IA-7 (2014)	330263		22.21		413145		17.3		95619		15.93	
05	B5IA-2 (2014)	322335		22.21		404242		17.3		97734		15.93	
06	B5IA-1 (2014)	329718		22.21		408001		17.3		100215		15.93	
07	B5IA-AA (2014)	340071		22.21		419381		17.3		93875		15.93	
08	B5IA-4 (2014)	332409		22.21		414688		17.3		99471		15.93	
09	Lab Blank	348367		22.21		426181		17.3		98254		15.93	
10	CCV	361081		22.21		445503		17.3		109722		15.93	
11	LCS	353604		22.21		440956		17.3		108561		15.93	
12	LCSD	352217		22.21		437786		17.3		110022		15.93	
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: v121604.d & v121603.d

Lab Sample ID: &

Dilution: 1.00 & 1.00

Client Sample ID: LCS & LCSD

Date Analyzed: 12/16/14 & 12/16/14

CAS Number	Compound	Original Amount	Original Flags	Duplicate Amount	Duplicate Flags	RPD	Result Less Than 5X RL
71-55-6	1,1,1-Trichloroethane	102		102		0	
79-34-5	1,1,2,2-Tetrachloroethane	103		101		2.0	
79-00-5	1,1,2-Trichloroethane	103		103		0	
75-34-3	1,1-Dichloroethane	108		107		0.93	
75-35-4	1,1-Dichloroethene	108		109		0.92	
120-82-1	1,2,4-Trichlorobenzene	116		117		0.86	
95-63-6	1,2,4-Trimethylbenzene	143		142		0.70	
106-93-4	1,2-Dibromoethane (EDB)	104		103		0.97	
95-50-1	1,2-Dichlorobenzene	97		96		1.0	
107-06-2	1,2-Dichloroethane	102		102		0	
78-87-5	1,2-Dichloropropane	110		110		0	
108-67-8	1,3,5-Trimethylbenzene	125		126		0.80	
106-99-0	1,3-Butadiene	108		113		4.5	
541-73-1	1,3-Dichlorobenzene	97		95		2.1	
106-46-7	1,4-Dichlorobenzene	92		89		3.3	
123-91-1	1,4-Dioxane	112		112		0	
540-84-1	2,2,4-Trimethylpentane	106		102		3.8	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	121		111		8.6	
591-78-6	2-Hexanone	111		110		0.90	
67-63-0	2-Propanol	124		126		1.6	
107-05-1	3-Chloropropene	108		107		0.93	
622-96-8	4-Ethyltoluene	103		102		0.98	
108-10-1	4-Methyl-2-pentanone	118		118		0	
67-64-1	Acetone	110		112		1.8	
100-44-7	alpha-Chlorotoluene	167		159		4.9	
71-43-2	Benzene	108		110		1.8	
75-27-4	Bromodichloromethane	106		105		0.95	
75-25-2	Bromoform	95		93		2.1	
74-83-9	Bromomethane	115		111		3.5	
75-15-0	Carbon Disulfide	111		110		0.90	
56-23-5	Carbon Tetrachloride	77		77		0	
108-90-7	Chlorobenzene	99		98		1.0	
75-00-3	Chloroethane	117		117		0	
67-66-3	Chloroform	107		105		1.9	
74-87-3	Chloromethane	110		107		2.8	
156-59-2	cis-1,2-Dichloroethene	109		109		0	
10061-01-5	cis-1,3-Dichloropropene	120		122		1.6	
98-82-8	Cumene	103		104		0.97	
110-82-7	Cyclohexane	108		104		3.8	
124-48-1	Dibromochloromethane	92		95		3.2	
64-17-5	Ethanol	149		152		2.0	
100-41-4	Ethyl Benzene	103		102		0.98	
75-69-4	Freon 11	104		104		0	
76-13-1	Freon 113	101		102		0.98	
76-14-2	Freon 114	102		100		2.0	

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: v121604.d & v121603.d

Lab Sample ID: &

Dilution: 1.00 & 1.00

Client Sample ID: LCS & LCSD

Date Analyzed: 12/16/14 & 12/16/14

CAS Number	Compound	Original Amount	Original Flags	Duplicate Amount	Duplicate Flags	RPD	Result Less Than 5X RL
75-71-8	Freon 12	110		108		1.8	
142-82-5	Heptane	106		107		0.94	
87-68-3	Hexachlorobutadiene	88		88		0	
110-54-3	Hexane	107		108		0.93	
108-38-3	m,p-Xylene	100		100		0	
1634-04-4	Methyl tert-butyl ether	108		110		1.8	
75-09-2	Methylene Chloride	114		114		0	
91-20-3	Naphthalene	75		75		0	
95-47-6	o-Xylene	106		104		1.9	
103-65-1	Propylbenzene	106		106		0	
100-42-5	Styrene	110		108		1.8	
127-18-4	Tetrachloroethene	98		97		1.0	
109-99-9	Tetrahydrofuran	112		111		0.90	
108-88-3	Toluene	107		109		1.8	
156-60-5	trans-1,2-Dichloroethene	108		106		1.9	
10061-02-6	trans-1,3-Dichloropropene	101		101		0	
79-01-6	Trichloroethene	99		101		2.0	
75-01-4	Vinyl Chloride	118		115		2.6	

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

Eurofins Air Toxics Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 06-OCT-2014 15:09
End Cal Date : 03-NOV-2014 11:17
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msdv.i/03Nov2014.b/v14l1006d.m
Cal Date : 04-Nov-2014 09:22 efinn
Curve Type : Average

Calibration File Names:
Level 5: /chem/msdv.i/06Oct2014.b/v100618.d
Level 6: /chem/msdv.i/06Oct2014.b/v100607.d
Level 7: /chem1/msdv.i/22Oct2014.b/v102206.d
Level 8: /chem1/msdv.i/22Oct2014.b/v102212.d
Level 9: /chem1/msdv.i/22Oct2014.b/v102208.d
Level 10: /chem/msdv.i/06Oct2014.b/v100611.d
Level 11: /chem/msdv.i/06Oct2014.b/v100612.d
Level 12: /chem/msdv.i/06Oct2014.b/v100613.d
Level 13: /chem/msdv.i/03Nov2014.b/v110306.d
Level 15: /chem/msdv.i/06Oct2014.b/v100615.d
Level 16: /chem/msdv.i/03Nov2014.b/v110307.d

Compound	0.05000 Level 5	0.10000 Level 6	0.50000 Level 7	1.000 Level 8	5.000 Level 9	10.000 Level 10	___ RRF	% RSD
	20.000 Level 11	40.000 Level 12	2.000 Level 13	15.000 Level 15	4.000 Level 16			
1 Freon134a	+++++	+++++	1.08224	1.08904	0.98107	+++++		
	+++++	+++++	0.93909	+++++	0.89464		0.99721	8.659
208 D-Limonene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++	+++++		+++++	+++++
2 Freon 152A	+++++	+++++	0.66260	0.63962	0.56056	+++++		
	+++++	+++++	0.62225	+++++	0.56396		0.60980	7.496
3 Propylene	+++++	+++++	3.17955	3.05930	2.90779	2.79028		
	2.58335	2.59253	+++++	2.52316	+++++		2.80514	9.082
4 Dichlorodifluoromethane/Fr12	+++++	+++++	4.60448	4.49924	5.15160	4.93596		
	4.57849	4.46510	+++++	4.55605	+++++		4.68442	5.498
5 Freon 22	+++++	+++++	3.05830	2.72577	2.59150	+++++		
	+++++	+++++	2.76072	+++++	2.59323		2.74590	6.942

Eurofins Air Toxics Inc.

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Curve Type : Average

Compound	0.05000 Level 5	0.10000 Level 6	0.50000 Level 7	1.000 Level 8	5.000 Level 9	10.000 Level 10	___ RRF	% RSD
	20.000 Level 11	40.000 Level 12	2.000 Level 13	15.000 Level 15	4.000 Level 16			
6 Freon 114	+++++	3.69628	3.25331	3.14193	3.61847	3.43702		
	3.24522	3.17521	+++++	3.19565	+++++		3.34539	6.365
7 Isobutylene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++	+++++		+++++	+++++
8 Chloromethane	+++++	3.86615	2.69651	2.61526	2.98643	2.82932		
	2.58146	2.45447	+++++	2.55437	+++++		2.82300	16.069
9 Butane	+++++	+++++	0.47697	0.47874	0.49945	0.48583		
	0.45942	0.46589	+++++	0.44533	+++++		0.47309	3.774
10 Vinyl Chloride	+++++	2.17905	1.99486	2.01677	2.34998	2.23728		
	2.05175	1.99393	+++++	2.02851	+++++		2.10652	6.316
11 1,3-Butadiene	+++++	2.16827	2.02006	1.95819	2.22564	2.13188		
	2.02628	2.02901	+++++	1.96175	+++++		2.06513	4.767
12 Bromomethane	+++++	1.18308	1.09289	1.11958	1.47556	1.45446		
	1.37255	1.27532	+++++	1.35787	+++++		1.29142	11.427
13 Vinyl Bromide	+++++	+++++	0.64715	0.61208	0.61144	+++++		
	+++++	+++++	+++++	+++++	+++++		0.62355	3.277
14 Fr21	+++++	+++++	3.37147	3.08370	2.84043	+++++		
	+++++	+++++	2.98888	+++++	2.84979		3.02685	7.192
15 1-Pentene	+++++	+++++	0.50365	0.51740	0.47563	+++++		
	+++++	+++++	+++++	+++++	+++++		0.49889	4.268

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Compound	0.05000 Level 5	0.10000 Level 6	0.50000 Level 7	1.000 Level 8	5.000 Level 9	10.000 Level 10	___ RRF	% RSD
	20.000 Level 11	40.000 Level 12	2.000 Level 13	15.000 Level 15	4.000 Level 16			
16 Pentane	+++++	+++++	5.96499	5.51729	5.45136	+++++		
	+++++	+++++	+++++	+++++	+++++		5.64455	4.951
17 Chloroethane	+++++	+++++	0.88035	0.91079	1.10628	1.06718		
	0.96622	0.95440	+++++	0.96778	+++++		0.97900	8.262
18 Isopentane	+++++	+++++	2.02488	1.85406	2.19900	2.10363		
	2.01194	1.98015	+++++	1.94321	+++++		2.01670	5.509
19 Diethyl Ether	+++++	+++++	0.28470	0.25721	0.27774	+++++		
	+++++	+++++	+++++	+++++	+++++		0.27322	5.232
20 Trichlorofluoromethane/Fr11	4.84912	5.38511	4.55043	4.55049	5.26400	5.01636		
	4.64312	4.54248	+++++	4.59570	+++++		4.82187	6.799
21 Acrolein	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++	+++++		+++++	+++++
22 Iodomethane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++	+++++		+++++	+++++
23 Methyl Acetate	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++	+++++		+++++	+++++
24 Ethanol	+++++	+++++	0.76028	0.75375	1.15597	1.20391		
	1.09488	1.08183	+++++	1.10447	+++++		1.02216	18.180
25 2-Methylpentane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++	+++++		+++++	+++++

Eurofins Air Toxics Inc.

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Cal Date : 04-Nov-2014 09:22 efinn
Curve Type : Average

Compound	0.05000 Level 5	0.10000 Level 6	0.50000 Level 7	1.000 Level 8	5.000 Level 9	10.000 Level 10	___ RRF	% RSD
	20.000 Level 11	40.000 Level 12	2.000 Level 13	15.000 Level 15	4.000 Level 16			
26 Acetonitrile	+++++	+++++	1.76431	1.84087	2.64679	+++++		
	+++++	+++++	+++++	+++++	+++++		2.08399	23.460
27 Cyclopentane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++	+++++		+++++	+++++
28 Freon 113	3.36514	3.04998	2.77127	2.84493	3.03043	2.94341		
	2.75182	2.66582	+++++	2.69993	+++++		2.90253	7.647
29 2,4-Dimethylpentane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++	+++++		+++++	+++++
30 1,1-Dichloroethene	+++++	1.11539	1.06387	0.98375	1.16881	1.14424		
	1.05857	1.04492	+++++	1.04064	+++++		1.07752	5.654
31 Acetone	+++++	+++++	1.21654	1.13820	1.24363	1.23364		
	1.15740	1.15446	+++++	1.12555	+++++		1.18134	4.107
32 Acrylonitrile	+++++	+++++	0.98787	1.07320	1.20748	+++++		
	+++++	+++++	+++++	+++++	+++++		1.08952	10.162
33 Carbon Disulfide	+++++	+++++	4.43559	4.49993	4.88723	4.72901		
	4.52957	4.56087	+++++	4.43907	+++++		4.58304	3.636
34 2-Propanol	+++++	+++++	4.45838	5.09024	5.86140	5.84275		
	5.73136	5.80395	+++++	5.50434	+++++		5.47035	9.559
35 3-Chloroprene	+++++	0.67001	0.55480	0.59214	0.68550	0.69813		
	0.70369	0.70741	+++++	0.67932	+++++		0.66137	8.551

Eurofins Air Toxics Inc.

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Integrator : HP RTE
Method file : /chem/msdv.i/03Nov2014.b/v14l1006d.m
Cal Date : 04-Nov-2014 09:22 efinn
Curve Type : Average

Compound	0.05000 Level 5	0.10000 Level 6	0.50000 Level 7	1.000 Level 8	5.000 Level 9	10.000 Level 10	___ RRF	% RSD
	20.000 Level 11	40.000 Level 12	2.000 Level 13	15.000 Level 15	4.000 Level 16			
36 Chloroprene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++	+++++		+++++	+++++
37 Methylene Chloride	+++++	1.76385	1.50500	1.40892	1.56359	1.56260		
	1.48337	1.43987	+++++	1.43338	+++++		1.52007	7.501
38 tert-butyl alcohol	+++++	+++++	4.92450	4.55290	4.49714	+++++		
	+++++	+++++	+++++	+++++	+++++		4.65818	4.987
39 MTBE	+++++	6.22499	5.05168	5.07121	5.73526	5.61336		
	5.36415	5.26884	+++++	5.29983	+++++		5.45367	7.180
40 trans-1,2-Dichloroethene	+++++	0.83558	0.99327	0.99286	1.12917	1.09642		
	1.04217	1.03635	+++++	1.03026	+++++		1.01951	8.622
41 1-Hexene	+++++	+++++	0.43005	0.31586	0.35249	+++++		
	+++++	+++++	+++++	+++++	+++++		0.36614	15.924
42 Ethyl Acetate	+++++	+++++	0.44490	0.43255	0.47709	+++++		
	+++++	+++++	+++++	+++++	+++++		0.45151	5.092
43 Hexane	+++++	4.97120	4.15919	4.18613	4.65121	4.52357		
	4.22843	4.07076	+++++	4.12066	+++++		4.36389	7.318
44 Methyl Acrylate	+++++	+++++	2.45416	2.27732	3.04872	+++++		
	+++++	+++++	+++++	+++++	+++++		2.59340	15.582
45 Isopropyl ether	+++++	+++++	10.86316	9.85741	9.58588	+++++		
	+++++	+++++	+++++	+++++	+++++		10.10215	6.661

Eurofins Air Toxics Inc.

INITIAL CALIBRATION DATA

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Integrator : HP RTE
Method file : /chem/msdv.i/03Nov2014.b/v14l1006d.m
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Curve Type : Average

Compound	0.05000 Level 5	0.10000 Level 6	0.50000 Level 7	1.000 Level 8	5.000 Level 9	10.000 Level 10	___ RRF	% RSD
	20.000 Level 11	40.000 Level 12	2.000 Level 13	15.000 Level 15	4.000 Level 16			
46 1,1-Dichloroethane	+++++	4.72415	4.07562	3.97285	4.46250	4.35956		
	4.13033	4.09107	+++++	4.06231	+++++		4.23480	6.068
47 Vinyl Acetate	+++++	+++++	0.32513	0.38550	0.47298	0.46814		
	0.46265	0.46197	+++++	0.44947	+++++		0.43226	12.919
48 2,3-Dimethylpentane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++	+++++		+++++	+++++
49 Ethyl-tert-butyl ether	+++++	+++++	8.12028	7.73416	7.51493	+++++		
	+++++	+++++	+++++	+++++	+++++		7.78979	3.934
50 cis-1,2-Dichloroethene	+++++	1.23267	1.34335	1.31083	1.45217	1.42860		
	1.36518	1.33995	+++++	1.35060	+++++		1.35292	5.015
51 2-Butanone	+++++	+++++	0.64053	0.77902	0.97139	0.96131		
	0.94241	0.94445	+++++	0.91587	+++++		0.87928	14.070
52 Thiophene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++	+++++		+++++	+++++
53 Tetrahydrofuran	+++++	+++++	4.45355	4.15524	4.75575	4.79945		
	4.58047	4.52554	+++++	4.44731	+++++		4.53104	4.761
55 Chloroform	+++++	4.74484	4.18364	4.11787	4.39042	4.26886		
	4.02869	3.95521	+++++	4.01940	+++++		4.21362	6.119
56 1,1-Dicholoropropene	+++++	+++++	0.92334	0.96953	0.85544	+++++		
	+++++	+++++	0.86140	+++++	0.86846		0.89564	5.514

Eurofins Air Toxics Inc.

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Method file : /chem/msdv.i/03Nov2014.b/v14l1006d.m
Cal Date : 04-Nov-2014 09:22 efinn
Curve Type : Average

Compound	0.05000 Level 5	0.10000 Level 6	0.50000 Level 7	1.000 Level 8	5.000 Level 9	10.000 Level 10	___ RRF	% RSD
	20.000 Level 11	40.000 Level 12	2.000 Level 13	15.000 Level 15	4.000 Level 16			
57 Cyclohexane	+++++	2.66755	2.79039	2.51700	2.84320	2.75148		
	2.57314	2.52483	+++++	2.53330	+++++		2.65011	4.951
58 1,1,1-Trichloroethane	4.77997	4.94361	4.06115	4.16524	4.59806	4.49299		
	4.24983	4.17566	+++++	4.13282	+++++		4.39992	7.196
59 Carbon Tetrachloride	4.60429	4.25936	3.81718	3.92872	4.59166	4.40298		
	4.19370	4.08275	+++++	4.10418	+++++		4.22054	6.494
60 Ethyl Acrylate	+++++	+++++	0.09905	0.12934	0.19512	+++++		
	+++++	+++++	+++++	+++++	+++++		0.14117	34.792 <-
61 2-Chloroethyl Vinyl Ether	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++	+++++		+++++	+++++
62 2-Pentanone	+++++	+++++	6.55055	6.23731	6.57637	+++++		
	+++++	+++++	+++++	+++++	+++++		6.45474	2.924
63 2,2,4-Trimethylpentane	+++++	5.47651	4.41422	4.24309	4.78101	4.77358		
	4.48949	4.35551	+++++	4.41267	+++++		4.61826	8.574
64 Benzene	+++++	1.63330	1.45207	1.40283	1.56252	1.49650		
	1.42344	1.41896	+++++	1.41455	+++++		1.47552	5.634
66 tert-amyl methyl ether	+++++	+++++	0.33717	0.30816	0.30503	+++++		
	+++++	+++++	+++++	+++++	+++++		0.31679	5.595
67 Methyl Methacrylate	+++++	+++++	2.71079	2.63287	2.84358	+++++		
	+++++	+++++	+++++	+++++	+++++		2.72908	3.904

Eurofins Air Toxics Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 06-OCT-2014 15:09
End Cal Date : 03-NOV-2014 11:17
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msdv.i/03Nov2014.b/v14l1006d.m
Cal Date : 04-Nov-2014 09:22 efinn
Curve Type : Average

Compound	0.05000 Level 5	0.10000 Level 6	0.50000 Level 7	1.000 Level 8	5.000 Level 9	10.000 Level 10	___ RRF	% RSD
	20.000 Level 11	40.000 Level 12	2.000 Level 13	15.000 Level 15	4.000 Level 16			
68 1,2-Dichloroethane	+++++	0.93098	0.82303	0.86923	0.95321	0.92910		
	0.88274	0.88532	+++++	0.87997	+++++		0.89420	4.660
69 Heptane	+++++	0.61702	0.60501	0.58504	0.68083	0.68036		
	0.64345	0.63577	+++++	0.64002	+++++		0.63594	5.305
70 Dibromomethane	+++++	+++++	0.28053	0.34150	0.35425	+++++		
	+++++	+++++	+++++	+++++	+++++		0.32543	12.107
72 Trichloroethene	0.58735	0.65038	0.66022	0.65482	0.71189	0.70866		
	0.67330	0.67011	+++++	0.66122	+++++		0.66422	5.475
73 Methylcyclohexane	+++++	+++++	0.77878	0.81756	0.94389	0.92666		
	0.87442	0.87707	+++++	0.88737	+++++		0.87225	6.632
74 1,2-Dichloropropane	+++++	0.65722	0.64148	0.63917	0.72697	0.70590		
	0.68290	0.68991	+++++	0.67132	+++++		0.67686	4.553
75 1,4-Dioxane	+++++	0.32478	0.30030	0.30936	0.37008	0.36120		
	0.34828	0.35558	+++++	0.35173	+++++		0.34017	7.495
76 Octane	+++++	+++++	0.43998	0.42737	0.38547	+++++		
	+++++	+++++	0.43878	+++++	0.36826		0.41197	8.008
77 Bromodichloromethane	1.03027	1.14781	0.99876	1.03824	1.21850	1.19396		
	1.14712	1.17049	+++++	1.14000	+++++		1.12057	6.989
78 cis-1,3-Dichloropropene	+++++	0.65518	0.68346	0.71999	0.83248	0.81698		
	0.79981	0.82994	+++++	0.78898	+++++		0.76585	9.099

Eurofins Air Toxics Inc.

INITIAL CALIBRATION DATA

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Quant Method : ISTD
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Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msdv.i/03Nov2014.b/v14l1006d.m
Cal Date : 04-Nov-2014 09:22 efinn
Curve Type : Average

Compound	0.05000 Level 5	0.10000 Level 6	0.50000 Level 7	1.000 Level 8	5.000 Level 9	10.000 Level 10	___ RRF	% RSD
	20.000 Level 11	40.000 Level 12	2.000 Level 13	15.000 Level 15	4.000 Level 16			
79 4-Methyl-2-pentanone	+++++	1.71432	1.74052	1.82511	2.24768	2.28350		
	2.28154	2.32278	+++++	2.24617	+++++		2.08270	12.968
81 Toluene	+++++	1.63453	1.52256	1.60291	1.75777	1.70207		
	1.61280	1.57872	+++++	1.61839	+++++		1.62872	4.456
82 trans-1,3-Dichloropropene	+++++	0.93518	0.95855	0.91817	1.12303	1.07403		
	1.07321	1.11444	+++++	1.04855	+++++		1.03064	7.911
83 1,3-Dichloropropane	+++++	+++++	0.73847	0.70375	0.64642	+++++		
	+++++	+++++	0.62866	+++++	0.64054		0.67157	7.043
84 1,1,2-Trichloroethane	0.65135	0.90797	0.74605	0.75189	0.88306	0.79149		
	0.78091	0.79904	+++++	0.77157	+++++		0.78704	9.594
85 Nonane	+++++	+++++	1.16160	1.06290	1.02841	+++++		
	+++++	+++++	+++++	+++++	+++++		1.08430	6.375
86 Tetrachloroethene	1.04447	1.03929	0.98820	0.96368	1.11381	1.04364		
	0.98245	0.98831	+++++	0.99410	+++++		1.01755	4.602
87 2-Hexanone	+++++	+++++	0.65837	0.77548	0.93676	0.93898		
	0.95940	0.98618	+++++	0.91407	+++++		0.88132	13.542
88 alpha-pinene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++	+++++		+++++	+++++
89 Dibromochloromethane	1.54814	1.43032	1.27858	1.35088	1.57654	1.49735		
	1.47648	1.55428	+++++	1.47089	+++++		1.46483	6.720

Eurofins Air Toxics Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 06-OCT-2014 15:09
End Cal Date : 03-NOV-2014 11:17
Quant Method : ISTD
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Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msdv.i/03Nov2014.b/v14l1006d.m
Cal Date : 04-Nov-2014 09:22 efinn
Curve Type : Average

Compound	0.05000 Level 5	0.10000 Level 6	0.50000 Level 7	1.000 Level 8	5.000 Level 9	10.000 Level 10	___ RRF	% RSD
	20.000 Level 11	40.000 Level 12	2.000 Level 13	15.000 Level 15	4.000 Level 16			
90 1,2-Dibromoethane	1.31082	1.18046	1.08687	1.08317	1.34025	1.25205		
	1.25111	1.29554	#####	1.23440	#####		1.22607	7.536
91 1,1,1,2-Tetrachloroethane	#####	#####	0.90086	0.81496	0.76579	#####		
	#####	#####	0.70896	#####	0.70243		0.77860	10.569
93 Chlorobenzene	#####	1.70225	1.60485	1.59330	1.78105	1.67336		
	1.60475	1.56580	#####	1.61030	#####		1.64196	4.361
94 cis-1,4-dichloro-2-butene	#####	#####	#####	#####	#####	#####		
	#####	#####	#####	#####	#####		#####	#####
95 Ethyl Benzene	#####	0.72321	0.66958	0.66051	0.78575	0.79178		
	0.76704	0.74118	#####	0.75673	#####		0.73697	6.740
96 m,p-Xylene	#####	0.84634	0.63016	0.64742	0.76756	0.76410		
	0.73752	0.68401	#####	0.73648	#####		0.72670	9.733
97 Bromobenzene	#####	#####	0.65351	0.63323	0.59573	#####		
	#####	#####	0.58776	#####	0.58925		0.61190	4.864
98 trans-1,4-dichloro-2-butene	#####	#####	#####	#####	#####	#####		
	#####	#####	#####	#####	#####		#####	#####
99 Decane	#####	#####	1.70104	1.48211	1.32741	#####		
	#####	#####	1.41722	#####	1.17815		1.42119	13.622
100 o-Xylene	#####	0.64090	0.59105	0.59829	0.74076	0.73421		
	0.72601	0.67270	#####	0.70578	#####		0.67621	8.920

Eurofins Air Toxics Inc.

INITIAL CALIBRATION DATA

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Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msdv.i/03Nov2014.b/v14l1006d.m
Cal Date : 04-Nov-2014 09:22 efinn
Curve Type : Average

Compound	0.05000 Level 5	0.10000 Level 6	0.50000 Level 7	1.000 Level 8	5.000 Level 9	10.000 Level 10	___ RRF	% RSD	
	20.000 Level 11	40.000 Level 12	2.000 Level 13	15.000 Level 15	4.000 Level 16				
101 Styrene	+++++	0.83829	0.85240	0.84515	1.08271	1.09189			
	1.11638	1.03922	+++++	1.04820	+++++		0.98928	12.302	
102 Bromoform	1.30414	1.17838	1.02106	1.06107	1.33449	1.30223			
	1.30851	1.38145	+++++	1.28254	+++++		1.24154	10.155	
103 Cumene	+++++	2.02735	1.65922	1.75706	2.05642	2.11278			
	2.10965	2.03192	+++++	2.04291	+++++		1.97466	8.593	
104 Bis(2-Chloroethyl) Ether	+++++	+++++	0.94788	0.52291	0.65340	+++++			
	+++++	+++++	+++++	+++++	+++++		0.70806	30.745	<-
105 1,2,3-Trichloropropane	+++++	+++++	0.40724	0.35800	0.32669	+++++			
	+++++	+++++	0.31408	+++++	0.31293		0.34379	11.595	
107 2-Chlorotoluene	+++++	+++++	0.36172	0.35232	0.32351	+++++			
	+++++	+++++	0.33610	+++++	0.32928		0.34059	4.697	
108 1,1,2,2-Tetrachloroethane	1.69582	1.55678	1.44463	1.47318	1.55963	1.49801			
	1.47010	1.49661	+++++	1.45728	+++++		1.51689	5.163	
109 4-Chlorotoluene	+++++	+++++	0.38188	0.28588	0.27637	+++++			
	+++++	+++++	0.28628	+++++	0.27733		0.30155	14.971	
110 Undecane	+++++	+++++	2.00565	2.10756	2.10149	+++++			
	+++++	+++++	+++++	+++++	+++++		2.07157	2.760	
111 Propylbenzene	+++++	2.04248	1.44823	1.41063	1.75630	1.82353			
	1.89877	1.84522	+++++	1.78721	+++++		1.75155	12.392	

Eurofins Air Toxics Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 06-OCT-2014 15:09
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Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msdv.i/03Nov2014.b/v14l1006d.m
Cal Date : 04-Nov-2014 09:22 efinn
Curve Type : Average

Compound	0.05000 Level 5	0.10000 Level 6	0.50000 Level 7	1.000 Level 8	5.000 Level 9	10.000 Level 10	___ RRF	% RSD
	20.000 Level 11	40.000 Level 12	2.000 Level 13	15.000 Level 15	4.000 Level 16			
112 Indan	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++	+++++		+++++	+++++
113 4-Ethyltoluene	+++++	1.70087	1.20436	0.98287	1.24136	1.29857		
	1.30811	1.26070	+++++	1.28299	+++++		1.28498	15.395
114 1,3,5-Trimethylbenzene	+++++	1.27818	0.83041	1.00174	1.15785	1.18470		
	1.12174	0.89078	+++++	1.11771	+++++		1.07289	14.235
115 tert-Butylbenzene	+++++	+++++	0.91986	0.77370	0.74122	+++++		
	+++++	+++++	0.76796	+++++	0.74037		0.78862	9.499
116 p-Cymene	+++++	+++++	1.34048	0.99761	0.78694	+++++		
	+++++	+++++	0.93538	+++++	0.86769		0.98562	21.641
117 Indene	+++++	+++++	0.82148	0.71264	0.62030	+++++		
	+++++	+++++	0.60919	+++++	0.50781		0.65428	18.084
118 Hexachloroethane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++	+++++		+++++	+++++
119 sec-Butylbenzene	+++++	+++++	1.23666	0.97839	0.97257	+++++		
	+++++	+++++	1.02710	+++++	0.99634		1.04221	10.627
120 1,2,4-Trimethylbenzene	+++++	1.34551	0.83545	0.73183	0.86870	0.85241		
	0.80986	0.67925	+++++	0.82864	+++++		0.86896	23.359
121 1,2,3-trimethylbenzene	+++++	+++++	0.48415	0.40889	0.33230	+++++		
	+++++	+++++	0.37156	+++++	0.28330		0.37604	20.297

Eurofins Air Toxics Inc.

INITIAL CALIBRATION DATA

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Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msdv.i/03Nov2014.b/v14l1006d.m
Cal Date : 04-Nov-2014 09:22 efinn
Curve Type : Average

Compound	0.05000 Level 5	0.10000 Level 6	0.50000 Level 7	1.000 Level 8	5.000 Level 9	10.000 Level 10	___ RRF	% RSD
	20.000 Level 11	40.000 Level 12	2.000 Level 13	15.000 Level 15	4.000 Level 16			
122 1,3-Dichlorobenzene	1.01140	0.89145	0.65991	0.71105	0.85997	0.87141		
	0.88038	0.80361	+++++	0.85695	+++++		0.83846	12.344
123 Butylbenzene	+++++	+++++	0.43057	0.34605	0.21948	+++++		
	+++++	+++++	0.29148	+++++	0.24460		0.30644	27.587
124 1,4-Dichlorobenzene	1.00966	0.89687	0.71613	0.63572	0.75510	0.80052		
	0.78998	0.72460	+++++	0.76554	+++++		0.78823	13.833
125 Dodecane	+++++	+++++	0.33996	0.39554	0.43876	+++++		
	+++++	+++++	+++++	+++++	+++++		0.39142	12.653
126 1,3,5-Trichlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++	+++++		+++++	+++++
127 alpha-chlorotoluene	+++++	+++++	0.72677	0.68059	0.85537	0.91741		
	0.93629	0.89065	+++++	0.88808	+++++		0.84217	11.733
128 1,2-Dichlorobenzene	0.97281	0.79109	0.64633	0.66394	0.79226	0.81006		
	0.81388	0.72784	+++++	0.78331	+++++		0.77795	12.324
129 1,2-dibromo-3-chloropropane	+++++	+++++	0.43774	0.43657	0.47018	+++++		
	+++++	+++++	0.42555	+++++	0.41961		0.43793	4.467
130 1,2,3-trichlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++	+++++		+++++	+++++
131 1,2,4-Trichlorobenzene	0.89593	0.86966	0.56824	0.49903	0.53994	0.52248		
	0.46318	0.30193	+++++	0.47776	+++++		0.57091	33.693 <-

Eurofins Air Toxics Inc.

INITIAL CALIBRATION DATA

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Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msdv.i/03Nov2014.b/v14l1006d.m
Cal Date : 04-Nov-2014 09:22 efinn
Curve Type : Average

Compound	0.05000 Level 5	0.10000 Level 6	0.50000 Level 7	1.000 Level 8	5.000 Level 9	10.000 Level 10	___ RRF	% RSD
	20.000 Level 11	40.000 Level 12	2.000 Level 13	15.000 Level 15	4.000 Level 16			
132 Hexachlorobutadiene	0.68964	0.57746	0.40211	0.36397	0.41065	0.46379		
	0.46291	0.49627	+++++	0.43050	+++++		0.47748	21.074
133 Naphthalene	+++++	+++++	1.57402	1.69204	1.40942	1.47308		
	1.24913	0.79518	+++++	1.27142	+++++		1.35204	21.564
204 Butyl Acetate	+++++	+++++	0.28113	0.27933	0.30914	+++++		
	+++++	+++++	0.32626	+++++	0.31647		0.30247	7.008
205 2-Heptanone	+++++	+++++	0.81430	0.69640	0.67727	+++++		
	+++++	+++++	0.65810	+++++	0.70327		0.70987	8.590
206 1-Butanol	+++++	+++++	0.40036	0.49148	0.63850	+++++		
	+++++	+++++	0.61764	+++++	0.67210		0.56402	20.244
207 1-Methoxy-2-Propyl Acetate	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++	+++++		+++++	+++++
$ 65 1,2-Dichloroethane-d4	1.85518	1.73176	1.78274	1.74767	1.74462	1.84429		
	1.88329	2.12737	+++++	1.79816	+++++		1.83501	6.642
$ 80 Toluene-d8	0.92958	0.93721	0.96064	0.95781	0.97667	0.99305		
	0.97042	0.97030	+++++	0.95615	+++++		0.96131	2.026
$ 106 Bromofluorobenzene	0.40220	0.43236	0.40233	0.39731	0.43870	0.44177		
	0.46939	0.43233	+++++	0.45357	+++++		0.43000	5.778

Calibration History

Method : /chem/msdv.i/03Nov2014.b/v14l1006d.m
Start Cal Date: 06-OCT-2014 15:09
End Cal Date : 03-NOV-2014 11:17

Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 5 , Cal Amount: 0.05000		
07-OCT-2014 10:14	Level05	/chem/msdv.i/06Oct2014.b/v100618.d

Injection Date	Sublist	Calibration File
Cal Level: 6 , Cal Amount: 0.10000		
06-OCT-2014 15:09	Level#1	/chem/msdv.i/06Oct2014.b/v100607.d

Injection Date	Sublist	Calibration File
Cal Level: 7 , Cal Amount: 0.50000		
22-OCT-2014 14:20	Combo-AT7-AT1	/chem1/msdv.i/22Oct2014.b/v102206.d
17-OCT-2014 15:22	AT1crv	/chem/msdv.i/17Oct2014.b/v101709.d
17-OCT-2014 12:42	Oxy	/chem/msdv.i/17Oct2014.b/v101706.d
07-OCT-2014 18:39	AT7crv	/chem/msdv.i/07Oct2014.b/v100709.d
06-OCT-2014 15:47	HiLoFULLcrv	/chem/msdv.i/06Oct2014.b/v100608.d

Injection Date	Sublist	Calibration File
Cal Level: 8 , Cal Amount: 1.00000		
22-OCT-2014 19:15	Combo-AT7-AT1	/chem1/msdv.i/22Oct2014.b/v102212.d
17-OCT-2014 16:02	AT1crv	/chem/msdv.i/17Oct2014.b/v101710.d
17-OCT-2014 13:40	Oxy	/chem/msdv.i/17Oct2014.b/v101707.d
07-OCT-2014 19:25	AT7crv	/chem/msdv.i/07Oct2014.b/v100710.d
06-OCT-2014 16:43	HiLoFULLcrv	/chem/msdv.i/06Oct2014.b/v100609.d

Injection Date	Sublist	Calibration File
Cal Level: 9 , Cal Amount: 5.00000		
22-OCT-2014 15:31	Combo-AT7-AT1	/chem1/msdv.i/22Oct2014.b/v102208.d
17-OCT-2014 17:06	AT1crv	/chem/msdv.i/17Oct2014.b/v101711.d
17-OCT-2014 14:29	Oxy	/chem/msdv.i/17Oct2014.b/v101708.d
07-OCT-2014 21:35	AT7crv	/chem/msdv.i/07Oct2014.b/v100713.d
06-OCT-2014 17:52	HiLoFULLcrv	/chem/msdv.i/06Oct2014.b/v100610.d

Injection Date	Sublist	Calibration File
Cal Level: 10, Cal Amount: 10.00000		

```
|06-OCT-2014 18:36 |AT12             |/chem/msdv.i/06Oct2014.b/v100611.d      |
+------------------+-----------------+----------------------------------------+

+------------------+-----------------+----------------------------------------+
| Cal Level: 11, Cal Amount: 20.00000                                         |
+=============================================================================+
|06-OCT-2014 19:24 |HiLoFULLcrv      |/chem/msdv.i/06Oct2014.b/v100612.d      |
+------------------+-----------------+----------------------------------------+

+------------------+-----------------+----------------------------------------+
| Cal Level: 12, Cal Amount: 40.00000                                         |
+=============================================================================+
|06-OCT-2014 20:51 |HiLoFULLcrv      |/chem/msdv.i/06Oct2014.b/v100613.d      |
+------------------+-----------------+----------------------------------------+

+------------------+-----------------+----------------------------------------+
| Cal Level: 13, Cal Amount: 2.00000                                          |
+=============================================================================+
|03-NOV-2014 10:22 |AT1crv           |/chem/msdv.i/03Nov2014.b/v110306.d      |
|07-OCT-2014 20:02 |AT7crv           |/chem/msdv.i/07Oct2014.b/v100711.d      |
+------------------+-----------------+----------------------------------------+

+------------------+-----------------+----------------------------------------+
| Cal Level: 15, Cal Amount: 15.00000                                         |
+=============================================================================+
|06-OCT-2014 22:22 |HiLoFULLcrv      |/chem/msdv.i/06Oct2014.b/v100615.d      |
+------------------+-----------------+----------------------------------------+

+------------------+-----------------+----------------------------------------+
| Cal Level: 16, Cal Amount: 4.00000                                          |
+=============================================================================+
|03-NOV-2014 11:17 |AT1crv           |/chem/msdv.i/03Nov2014.b/v110307.d      |
|07-OCT-2014 20:41 |AT7crv           |/chem/msdv.i/07Oct2014.b/v100712.d      |
+------------------+-----------------+----------------------------------------+


Continuing Calibration
Ccal Level Mode: GLOBAL LEVEL 10
+------------------+-----------------+----------------------------------------+
| Ccal Level: 10, Ccal Amount: 10.000                                         |
+=============================================================================+
|03-NOV-2014 07:40 |CNTRL122414      |/chem/msdv.i/03Nov2014.b/v110303.d      |
+------------------+-----------------+----------------------------------------+
| Ccal Level: 13, Ccal Amount: 2.000                                          |
+=============================================================================+
|03-NOV-2014 10:22 |AT1CCV           |/chem/msdv.i/03Nov2014.b/v110306a.d     |
+------------------+-----------------+----------------------------------------+
```

Curve Name: $V14_L1006D$

Initial Calibration Narrative

An initial calibration curve was analyzed on 10/06/14 on MSD-V.

The instrument was set up to do Full Scan and Selective Ion Monitoring (SIM) simultaneously.

ICAL: One (1) out; 1,2,4-Trichlorobenzene @ 34%.

ICV: One (1) out; alpha-Chlorotoluene @ 160%.
Zero (0) out AFCEE 4.0.
File #V100619. Standard 2677-275; 10ppbv (50ppbv); 50mL load.

Naphthalene was calibrated at 0.05ppbv, 0.1ppbv, 0.5ppbv, 1.0ppbv, 1.5ppbv, 2.0ppbv, and 4.0ppbv.

The reporting limit for Freon 12 and alpha-Chlorotoluene was raised to 0.5ppbv due to poor peak quality of the secondary ion at the 0.1ppbv level.

The following compounds were calibrated down to a special RL of 0.05ppbv:

Freon 11
Freon 113
1,1,1,-Trichloroethane
Carbon Tetrachloride
Trichloroethene
Bromodichloromethane
1,1,2-Trichloroethane
Tetrachloroethane
Dibromochloromethane
1,2-Dibromoethane
Bromoform
1,1,2,2-Tetrachloroethane
1,3-Dichlorobenzene
1,4-Dichlorobenzene
1,2-Dichlorobenzene
1,2,4-Trichlorobenzene
Hexachlorobutadiene

A five (5) point initial calibration for the AT-7 specials was analyzed on 10/7/14 at levels 05ppbv, 1.0ppbv, 2.0ppbv, 4.0ppbv, and 5.0ppbv. Zero (0) out.
ICV: Zero (0) OUT. File# v100715. Standard 2677-190; 1.0ppbv (5.0ppbv); 50mL load.

A three (3) point initial calibration for the AT-1 specials was analyzed on 10/17/14 at levels 0.5ppbv, 1.0ppbv, and 5.0ppbv.

A three (3) point initial calibration for the Oxygenate specials was analyzed on 10/17/14 at levels 0.5ppbv, 1.0ppbv, and 5.0ppbv. The calibration points from the initial ICAL run on 10/6/14 were disabled and/or overwritten.

A three (3) point initial calibration for the Combination specials was analyzed on 10/22/14 at levels 0.5ppbv, 1.0ppbv, and 5.0ppbv. The 1.0ppbv point was re-run due to a load error (wrong load volume). AT-1 and AT-7 compounds that were already calibrated were left out of this ICAL.

Two (2) additional AT-1 points were added to the ICAL on 11/3/14. Levels 2.0ppbv and 4.0ppbv.

MDL 2/14, 2/18, & 2/19/2014
AT1 MDL: 03/18/2014
Special RL MDL for Hexabutadiene and 1, 2, 4 Trichlorobenzene on 8/19/14

Eurofins Air Toxics Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 06-OCT-2014 15:09
End Cal Date : 03-NOV-2014 11:17
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msdv.i/03Nov2014.b/v1411006d.m
Cal Date : 04-Nov-2014 09:22 efinn
Curve Type : Average

Calibration File Names:
Level 5: /chem/msdv.i/06Oct2014.b/v100618.d
Level 6: /chem/msdv.i/06Oct2014.b/v100607.d
Level 7: /chem1/msdv.i/22Oct2014.b/v102206.d
Level 8: /chem1/msdv.i/22Oct2014.b/v102212.d
Level 9: /chem1/msdv.i/22Oct2014.b/v102208.d
Level 10: /chem/msdv.i/06Oct2014.b/v100611.d
Level 11: /chem/msdv.i/06Oct2014.b/v100612.d
Level 12: /chem/msdv.i/06Oct2014.b/v100613.d
Level 13: /chem/msdv.i/03Nov2014.b/v110306.d
Level 15: /chem/msdv.i/06Oct2014.b/v100615.d
Level 16: /chem/msdv.i/03Nov2014.b/v110307.d

EF 11/4/14

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

Compound	0.05000 Level 5	0.10000 Level 6	0.50000 Level 7	1.000 Level 8	5.000 Level 9	10.000 Level 10	RRF	% RSD
	20.000 Level 11	40.000 Level 12	2.000 Level 13	15.000 Level 15	4.000 Level 16			
1 Freon134a	+++++	+++++	1.08224	1.08904	0.98107	+++++		
	+++++	+++++	0.93909	+++++	0.89464		0.99721	8.659
208 D-Limonene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++	+++++		+++++	+++++
2 Freon 152A	+++++	+++++	0.66260	0.63962	0.56056	+++++		
	+++++	+++++	0.62225	+++++	0.56396		0.60980	7.496
3 Propylene	+++++	+++++	3.17955	3.05930	2.90779	2.79028		
	2.58335	2.59253	+++++	2.52316	+++++		2.80514	9.082
4 Dichlorodifluoromethane/Fr12	+++++	+++++	4.60448	4.49924	5.15160	4.93596		
	4.57849	4.46510	+++++	4.55605	+++++		4.68442	5.498
5 Freon 22	+++++	+++++	3.05830	2.72577	2.59150	+++++		
	+++++	+++++	2.76072	+++++	2.59323		2.74590	6.942

Eurofins Air Toxics, Inc.

MSD-V

Logbook #2684

BFB Verification of 176/174 m/z Ratio:	(303064 / 316380) x 100 = 95.81
Tekmar Purge Flow:	N/A
Vacuum:	N/A

IS/S Std. #:	2677-225	Exp. Date:	12/23/14
BCM	125097		134890
1,4-DFB	498199		158527
CB-d5	406420		426719

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

File ID:	V100601
Compound:	Toluene-d8
Initials:	EF

Calculation Check:

ppbv of compound = $\frac{\text{Area}_{\text{Sample}}}{\text{Area}_{\text{IS}}} \times \frac{\text{Conc}_{\text{IS}}}{\text{RRF}}$ = (494735) x (5.000) = 5.165
(498199) (0.96181)

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

Method Name: V14100601A / V14S10061A

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

Reported Result: 5.165

	Use	File	Lab ID#	Can#	Pressure	Amt. Loaded	DF	Loaded By-Initials	Date Analyzed	Time Analyzed	Reviewed By-Initials	Comments/Standard Expiration Date
1	/	V100601	BFB Tune check	2677-788	50ng	2mL	1.00	EF	10/6/14	1134	EF	
2	/	02	ICAL Level 1	2677-277	0.005ppbv	15mL	1.00	EF		1157	EF	Exp. 12/4/14; Exp. 2/20 [illegible]
3	/	03	2		0.005ppbv	25mL	1.00	EF		1235	EF	
4	/	04	3		0.01ppbv	50mL	1.00	EF		1317	EF	
5	/	05	4		0.02ppbv	100mL	1.00	EF		1357	EF	
6	X	06	5		0.05ppbv	250mL	1.00	EF		1431	EF	NR [illegible] due to High 1,2,4 TCB response
7	/	07	6	2677-278	0.1ppbv	25mL	1.00	EF		1507	EF	
8	/	08	7		0.5ppbv	125mL	1.00	EF		1547	EF	
9	/	09	8		1.0ppbv	250mL	1.00	EF		1643	EF	
10	/	10	9	2677-212	5.0ppbv	25mL	1.00	gd		1752	EF	
11	/	11	10		10ppbv	50mL	1.00	gd		1836	EF	
12	/	12	11		20ppbv	100mL	1.00	gd		1924	EF	
13	/	13	12		40ppbv	200mL	1.00	gd		2051	EF	
14	/	14	System Blank	34078	Humid	250mL	1.00	gd		2138	EF	

Reviewed

10/7/14
Date

Eurofins Air Toxics, Inc. MSD-V Logbook #2684

	Use	File	Lab ID#	Can#	Pressure	Amt. Loaded	DF	Loaded By/Initials	Date Analyzed	Time Analyzed	Reviewed By/Initials	Comments/Standard Expiration Date
15	/	V100615	ICAL Level 15	2677-212	15 ppbv	75mL	1.00	gd	10/6/14	2222	[illegible]	Exp. 12/4/14 · No [illegible]
16	/	16	System Blank	34008	Humid.	250mL	1	gd	1	2302	[illegible]	
17	/	17	System Blank	35248	Humid	250mL	1.00	AG	10/7/14	0921	[illegible]	
18	/	18	ICAL Level 5	2677-277	0.05 ppbv	250mL	1.00	[illegible]	1	1014	[illegible]	Exp. 12/4/14 · No [illegible]
19	/	19	ICV (50 ppbv)	2677-275	10 ppbv	50mL	1.00	[illegible]	1	1127	[illegible]	Exp. 11/5/14.
20												
21												
22												
23												
24												
25												
26												
27												
28												
29												
30												
31												
32												
33												
34												
35												
36												[illegible] 10/7/14

[illegible] Reviewed

10/7/14 Date

Eurofins Air Toxics, Inc. **MSD-V** **Logbook #2684**

BFB Verification of 176/174 m/z Ratio:	(296246/305706)*100 = 96.90
Tekmar Purge Flow:	
Vacuum:	10/7/14

IS/S Std. #:	2677-226	Exp. Date:	12/23/14
BCM	ul: 122750		5ml: 132863
1,4-DFB	498533		522839
CB-d5	397978		418787

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

File ID:	V100702
Compound:	Toluene-d8
Initials:	EF

Calculation Check:

ppbv of compound = $\frac{\text{Area}_{\text{sample}}}{\text{Area}_{\text{IS}}} \times \frac{\text{Conc}_{\text{IS}}}{\text{RRF}}$ = (488490) x (5.000) / (498533) (0.96131) = 5.096

SOP# (Circle one): 6 / 83 / 38 / 91 / 109 Method (Circle one): TO-14A/TO-15/TO-17 Reported Result: 5.096

Method Name: ~~V14L1007A/V14S1007A~~ EF 10/7/14

	Use	File	Lab ID# (V14L1006A/V14S1006A)	Can#	Pressure	Amt. Loaded	DF	Loaded By Initials	Date Analyzed	Time Analyzed	Reviewed By Initials	Comments/Standard Expiration Date
1	✓	V100701	BFB Tune check	2299-788	50psig	2ml	1.00	EF	10/7/14	1207	EF	
2	✓	02	CCV (50ppbv)	2677-212	10ppbv	50ml	1.00	EF		1229	EF	exp. 12/4/14. ul: 1 out. 5ml: ∅ out.
3	✓	03	LCS (50ppbv)	2677-275	10ppbv	50ml	1.00	EF		1333	EF	exp. 11/5/14 5ml: ∅ out
4	✓	04	LCSD (50ppbv)	2677-275	10ppbv	50ml	1.00	EF		1414	GH	
5	✓	05	DOC #1	2677-275	10ppbv	50ml	1.00	GH		1602	GH	
6	✓	06	DOC #2	↓	10ppbv	50ml	1.00	GH		1638	GH	
7	✓	07	DOC #3		10ppbv	50ml	1.00	GH		1714	GH	
8	✓	08	DOC #4	↓	10ppbv	50ml	1.00	GH		1750	GH	
9	✓	09	ICAL level 7	2677-286	0.5ppbv	25ml	1.00	gd		1839	gd/EF	
10	✓	10	8		1.0ppbv	50ml	1.00	gd		1925	gd/EF	CCV AT-7
11	✓	11	13		2.0ppbv	100ml	1.00	gd		2002	gd/EF	
12	✓	12	16		4.0ppbv	200ml	1.00	gd		2041	gd/EF	
13	✓	13	9	↓	5.0ppbv	250ml	1.00	gd		2135	gd/EF	↓
14	✓	14	System Blank	34008	Humid	250ml	1.00	gd	↓	2223	EF	

[signature] 10/8/14

Reviewed Date

Eurofins Air Toxics, Inc.

MSD-V

Logbook #2684

	Use	File	Lab ID#	Can#	Pressure	Amt. Loaded	DF	Loaded By/Initials	Date Analyzed	Time Analyzed	Reviewed By/Initials	Comments/Standard Expiration Date
15		V100715	ICV (50ppbv)	2677-190	1.0ppbv	50mL	1.00	ACT	10/8/14	6:48	[illegible]	NT-7
16												
17												
18												
19												
20												
21												
22												
23												
24												
25												
26												
27												
28												
29												
30												
31												
32												
33												
34												
35												
36												[illegible] 10/8/14

[illegible] Reviewed

10/8/14 Date

Eurofins Air Toxics, Inc. **MSD-V** **Logbook #2684**

BFB Verification of 176/174 m/z Ratio: (3573621/3484453) x100 = 96.62	
Tekmar Purge Flow:	
Vacuum:	10/17/14

IS/S Std. #: 2677-225		Exp. Date: 12/23/14
BCM	LL: 1127116	Sm: 1116591
1,4-DFB	459383	480411
CB-d5	369877	391769

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

File ID:	V101702
Compound:	Toluene-d8
Initials:	

Calculation Check:

ppbv of compound = $\frac{\text{Area}_{\text{Sample}}}{\text{Area}_{\text{IS}}} \times \frac{\text{Conc}_{\text{IS}}}{\text{RRF}}$ = (432134) x (5.000) = 4.893
(459383) (0.96131)

SOP# (Circle one): 6 / 83 / 38 / 91 / 109 Method (Circle one): TO-14A / TO-15 / TO-17 Reported Result: 4.893

Method Name: V14L100GB / V14S100GA

	Use	File	Lab ID#	Can#	Pressure	Amt. Loaded	DF	Loaded By Initials	Date Analyzed	Time Analyzed	Reviewed By Initials	Comments/Standard Expiration Date
1	✓	V101701	BFB Tune check	2677-783	50mg	2µL	1.00		10/17/14	0924		
2	✓	02	CCV (50 ppbv)	2677-213	10 ppbv	50mL	1.00			0945		Exp. 12/4/14 LL: 1 out Sm: 1 out
3	✓	03	LCS (50 ppbv)	2677-215	10 ppbv	50mL	1.00			1027		Exp. 11/5/14
4	✓	04	LCSD (50 ppbv)	2677-215	10 ppbv	50mL	1.00			1111		Exp. 11/5/14
5	✓	05	System Blank	35248	Humid	250mL	1.00			1159		Oxygenates out
6	✓	06	1 CAL level 7	2687-3	0.5 ppbv	25mL	1.00			1242		Exp. 1/15/15 Oxygenates
7	✓	07	8		1.0 ppbv	50mL	1.00			1340		
8	✓	08	9		5.0 ppbv	250mL	1.00			1427		
9	✓	09	7	2687-10	0.5 ppbv	25mL	1.00			1522	gd/ AG	Exp. 12/4/14 Ar. 1
10	✓	10	8		1.0 ppbv	50mL	1.00	gd		1602	gd/ AG	
11	✓	11	9		5.0 ppbv	250mL	1.00	gd		1706	gd/ AG	
12	✓	12	TPHg CCV (2500 ppbv)	2677-287	125 ppbv	12.5mL	1.00	gd		1924	gd/ AG	
13	✓	13	Lab Blank	35248	Humid	250mL	1.00	gd		2044	gd/ AG	
14	✓	14	1410185A-01AB	33943	2"Hg - 5.3 psi	250mL	1.46	gd		2154	gd/ AG	

gd
Reviewed

10/17/14
Date

Eurofins Air Toxics, Inc. **MSD-V** **Logbook #2684**

BFB Verification of 176/174 m/z Ratio:	(324160 / 324864) x 100 = 96.84
Tekmar Purge Flow:	
Vacuum:	2 in 10/22/14

IS/S Std. #:	2677-225	Exp. Date:	12/23/14
BCM	LL: 971523	Sm:	98277
1,4-DFB	354906		337414
CB-d5	297425		315597

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

File ID:	V102203
Compound:	Toluene-d8
Initials:	BB

Calculation Check:

ppbv of compound = $\frac{\text{Area}_{\text{Sample}}}{\text{Area}_{\text{IS}}} \times \frac{\text{Conc}_{\text{IS}}}{\text{RRF}}$ = (340347) x (5.000) = 4.988
(354906) (0.76151)

SOP# (Circle one): 6 / 83 / 88 / 91 / 109 Method (Circle one): TO-14A/TO-15/TO-17 Reported Result: 4.988

Method Name: V14V1006C/V14S1006CA

	Use	File	Lab ID#	Can#	Pressure	Amt. Loaded	DF	Loaded By/Initials	Date Analyzed	Time Analyzed	Reviewed By/Initials	Comments/Standard Expiration Date
1		V102201	BFB TUNE check	2699-788	50ng	2mL	1.00	BB	10/22/14	0904	BB	
2	X	02	CCV (50ppbv)	2677-213	10ppbv	50mL	1.00	BB		0929	BB	Exp. 11/4/14 Sure out
3	✓	03	CCV (50ppbv)	2677-213	10ppbv	50mL	1.00	BB		1010	BB	Exp. 11/4/14 Ø out
4	✓	04	LCS (50ppbv)	2677-272	10ppbv	50mL	1.00	BB		1051	BB	Exp. 11/5/14 LL 3 out SM 2 out
5	✓	05	LCSD (50ppbv)	2677-272	10ppbv	50mL	1.00	BB		1133	BB	Exp. 11/5/14
6	X ✓	06	ICAL LEVEL 7	2687-31	0.5ppbv	25mL	1.00	BB		1420	BB	Exp. 11/25/14 COMBO
7	X	07	8		1.0ppbv	125mL	1.00	BB		1455	BB	
8	X ✓	08	9		5.0ppbv	250mL	1.00	BB		1531	BB	(INCLUDING ANT. LOADS)
9	X	09	~~SYSTEM BLANK~~ LAB BLANK	34008	HUM 10	250ml	1.00	BB		1612	BB	LAB BLANK CONTAMINATED ACETONITRILE
10	X	10	SYSTEM BLANK			250ml	1.00	BB		1710	BB	
11	✓	11		25313	HUM 10	250ml	1.00	BB		1812	BB	
12	✓	12	ICAL LEVEL 8	2687-31	1.0ppbv	50ml	1.00	BB		1915	BB	Exp: 11/25/14 COMBO; CCV
13	✓	13	LAB BLANK	25313	HUM 10	250ml	1.00	BB		2023	BB	
14	✓	14	141016S-QA	9922	12.3psi-12.3psi	250ml	1.00	BB		2123	BB	

BB
Reviewed

10/22/14
Date

Eurofins Air Toxics, Inc. **MSD-V** **Logbook #2684**

BFB Verification of 176/174 m/z Ratio: (222829/231786) x 100 = 96.14%	
Tekmar Purge Flow:	
Vacuum:	11/3/14 ACT

IS/S Std. #:	2687-57	Exp. Date:	1/28/15
BCM LL.	1026600	SIM.	1075113
1,4-DFB	414479		437505
CB-d5	3440409		3661141

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

File ID:	V110303
Compound:	~~Toluene-d8~~
Initials:	ES

Calculation Check:

ppbv of compound = $\frac{\text{Area}_{\text{Sample}}}{\text{Area}_{\text{IS}}} \times \frac{\text{Conc}_{\text{IS}}}{\text{RRF}}$ = (418052) x (5.000) = 5.208
(414479) (0.96131)

SOP# (Circle one): 6 / 83 / 38 / 91 / 109 Method (Circle one): ~~TO-14A/TO-15~~/TO-17 Reported Result: 5.208

Method Name: ~~V1006 V1111006A~~ V1141006D/V1151006A

	Use	File	Lab ID#	Can#	Pressure	Amt. Loaded	DF	Loaded By Initials	Date Analyzed	Time Analyzed	Reviewed By Initials	Comments/Standard Expiration Date
1	✓	V110301	BFB Tune Check	2299-790	50 ng	2.0 µl	1.00	ACT	11/3/14	0627	ACT	
2	✓	02	System Prime	House Line	Dry	250 mL		ACT		0657	ACT	
3	✓	03	CCV (50 ppbv)	2677-213	10 ppbv	50 mL		ACT		0740	ES	Exp 12/4/14
4	✓	04	LCS (50 ppbv)	2677-213	10 ppbv	50 mL		ES		0826	ES	Exp. 11/5/14
5	✓	05	LCSD (50 ppbv)	2677-213	10 ppbv	50 mL		ES		0907	ES	Exp. 11/5/14
6	✓	06	ICAL Level 13	2677-10	2.0 ppbv	100 mL		ES		1022	ES	Exp. 12/4/14 AT-1 CCV
7	✓	07	ICAL Level 16	↓	4.0 ppbv	200 mL		ES		1117	ES	↓
8	N/A	08	LAB Blank	3400B	4 mmHg	250 mL		ES		1211	ES	
9	✓	09	~~LCS~~ LCS cp (5.00)	2687-19	2.0 ppbv	100 mL		ES		1430	ES	Exp. 12/30/14 AT-1
10	✓	10	LAB Blank	3400B	4 mmHg	250 mL		ES		1522	ES	
11	✗	11	1410506-001AB	35261	6.7 "Hg-5 psig	125 mL	3.46	EA		1728	EA	overdil.
12	✓	12	↓ -01AB	↓	↓	250 mL	1.73	EA		1832	EA	
13	✗	13	1410467-001B	5564	6.5 "Hg-5 psig	125 mL	3.42	EA		1919	EA	TCE - overrange 670 ppbv in sample
14	✗	14	System Blank	2531B	Humid	250 mL	1.00	EA		2039	EA	TCE RL

Reviewed

11/03/14
Date

Air Toxics Ltd.
Modified EPA Methods TO-14A/TO-15 Low Level
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
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
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.

TO15/Modified TO-14A

Data file : /chem/msdv.i/06Oct2014.b/v100619.d
Lab Smp Id: ICV Client Smp ID: ICV
Inj Date : 07-OCT-2014 11:27
Operator : ef Inst ID: msdv.i
Smp Info : 50mL # 2677-275
Misc Info : 10ppbv (50ppbv)
Comment : Low Level GC-MS
Method : /chem/msdv.i/06Oct2014.b/v14l1006a.m
Meth Date : 07-Oct-2014 11:32 efinn Quant Type: ISTD
Cal Date : 07-OCT-2014 10:14 Cal File: v100618.d
Als bottle: 1 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

Cpnd Variable Local Compound Variable

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
* 54 Bromochloromethane					CAS #: 74-97-5		
15.933	15.934 (1.000)	130	120773	5.00000		70.00- 130.00	100.00
15.933	15.934 (1.000)	128	93757			47.54- 107.54	77.63
15.933	15.934 (1.000)	49	294698			218.45- 278.45	244.01
* 71 1,4-Difluorobenzene					CAS #: 540-36-3		
17.305	17.305 (1.000)	114	486323	5.00000		70.00- 130.00	100.00
17.305	17.305 (1.000)	88	79004			0.00- 46.16	16.25
* 92 Chlorobenzene-d5					CAS #: 3114-55-4		
22.205	22.205 (1.000)	117	395102	5.00000		70.00- 130.00	100.00
22.205	22.205 (1.000)	82	229670			29.12- 89.12	58.13
$ 65 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
16.756	16.756 (1.052)	65	219896	4.96111	4.961	70.00- 130.00	100.00
16.756	16.756 (1.052)	67	131534			28.37- 88.37	59.82
$ 80 Toluene-d8					CAS #: 2037-26-5		
19.879	19.879 (1.149)	98	478058	5.11282	5.113	70.00- 130.00	100.00
19.879	19.879 (1.149)	70	56883			0.00- 41.90	11.90

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

$  80 Toluene-d8 (continued)
 19.879  19.879 (1.149)   100    307253                    33.85-  93.85    64.27
-------------------------------------------------------------------------------
$ 106 Bromofluorobenzene                            CAS #: 460-00-4
 23.704  23.704 (1.067)   174    175668 5.17000    5.170  70.00- 130.00   100.00
 23.704  23.704 (1.067)    95    230246                   99.95- 159.95   131.07
 23.704  23.704 (1.067)   176    171283                   67.64- 127.64    97.50
-------------------------------------------------------------------------------
    3 Propylene                                     CAS #: 115-07-1
  4.711   4.673 (0.296)    41    654174 9.65470    9.655  70.00- 130.00   100.00
  4.711   4.673 (0.296)    42    424198                   35.18-  95.18    64.84
  4.673   4.673 (0.293)    39    466541                   44.12- 104.12    71.32
-------------------------------------------------------------------------------
    4 Dichlorodifluoromethane/Fr12                  CAS #: 75-71-8
  5.202   5.202 (0.326)    85   1203775 10.6387   10.639  70.00- 130.00   100.00
  5.240   5.202 (0.329)    87    379272                    1.90-  61.90    31.51
-------------------------------------------------------------------------------
    6 Freon 114                                     CAS #: 76-14-2
  6.750   6.712 (0.424)   135    833015 10.3088   10.309  70.00- 130.00   100.00
  6.750   6.712 (0.424)   137    266480                    0.53-  60.53    31.99
  6.713   6.712 (0.421)    85   1128886                  121.37- 181.37   135.52
-------------------------------------------------------------------------------
    8 Chloromethane                                 CAS #: 74-87-3
  7.090   7.052 (0.445)    50    683265 10.0202   10.020  70.00- 130.00   100.00
  7.090   7.052 (0.445)    52    209402                    1.81-  61.81    30.65
-------------------------------------------------------------------------------
    9 Butane                                        CAS #: 106-97-8
  7.884   7.884 (0.495)    58    118564 10.3755   10.376  70.00- 130.00   100.00
  7.884   7.884 (0.495)    43   1300781                 1065.18-1125.18  1097.11
-------------------------------------------------------------------------------
   10 Vinyl Chloride                                CAS #: 75-01-4
  8.009   8.008 (0.503)    62    531395 10.4436   10.444  70.00- 130.00   100.00
  8.009   8.008 (0.503)    64    165750                    0.00-  58.65    31.19
-------------------------------------------------------------------------------
   11 1,3-Butadiene                                 CAS #: 106-99-0
  8.257   8.257 (0.518)    54    491994 9.86306    9.863  70.00- 130.00   100.00
  8.257   8.257 (0.518)    39    660933                  107.15- 167.15   134.34
-------------------------------------------------------------------------------
   12 Bromomethane                                  CAS #: 74-83-9
  9.834   9.834 (0.617)    94    332312 10.6532   10.653  70.00- 130.00   100.00
  9.834   9.834 (0.617)    96    308379                   72.12- 132.12    92.80
-------------------------------------------------------------------------------
   17 Chloroethane                                  CAS #: 75-00-3
 10.364  10.364 (0.650)    64    247927 10.4843   10.484  70.00- 130.00   100.00
 10.364  10.364 (0.650)    66     71796                    0.00-  59.90    28.96
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RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
18 Isopentane					CAS #: 78-78-4		
10.533	10.533 (0.661)	57	494003	10.1412	10.141	70.00- 130.00	100.00
10.533	10.533 (0.661)	43	994435			171.32- 231.32	201.30
10.533	10.533 (0.661)	42	867247			150.03- 210.03	175.55
20 Trichlorofluoromethane/Fr11					CAS #: 75-69-4		
11.183	11.184 (0.702)	101	1196203	10.2704	10.270	70.00- 130.00	100.00
11.183	11.184 (0.702)	103	769217			36.54- 96.54	64.30
24 Ethanol					CAS #: 64-17-5		
12.101	12.074 (0.759)	45	300095	12.1546	12.155	70.00- 130.00	100.00
12.101	12.101 (0.759)	46	116062			8.51- 68.51	38.68
12.101	12.101 (0.759)	43	63376			0.00- 54.10	21.12
30 1,1-Dichloroethene					CAS #: 75-35-4		
12.568	12.568 (0.789)	98	279949	10.7560	10.756	70.00- 130.00	100.00
12.568	12.568 (0.789)	61	958626			320.65- 380.65	342.43
12.568	12.568 (0.789)	96	436909			134.30- 194.30	156.07
28 Freon 113					CAS #: 76-13-1		
12.568	12.569 (0.789)	151	732539	10.4485	10.448	70.00- 130.00	100.00
12.568	12.569 (0.789)	153	458386			33.10- 93.10	62.57
12.568	12.569 (0.789)	101	908906			96.37- 156.37	124.08
31 Acetone					CAS #: 67-64-1		
12.816	12.815 (0.804)	58	315146	11.0442	11.044	70.00- 130.00	100.00
12.816	12.815 (0.804)	43	1382914			413.15- 473.15	438.82
33 Carbon Disulfide					CAS #: 75-15-0		
12.925	12.925 (0.811)	76	1051804	9.50126	9.501	70.00- 130.00	100.00
35 3-Chloroprene					CAS #: 107-05-1		
13.392	13.365 (0.841)	76	170520	10.6740	10.674	70.00- 130.00	100.00
13.392	13.365 (0.841)	41	995678			547.03- 607.03	583.91
34 2-Propanol					CAS #: 67-63-0		
13.173	13.173 (0.827)	45	1416204	10.7179	10.718	70.00- 130.00	100.00
13.173	13.173 (0.827)	43	271943			0.00- 50.74	19.20
13.173	13.173 (0.827)	59	40653			0.00- 32.83	2.87
37 Methylene Chloride					CAS #: 75-09-2		
13.667	13.639 (0.858)	84	383970	10.4576	10.458	70.00- 130.00	100.00
13.640	13.639 (0.856)	49	917404			212.37- 272.37	238.93
13.667	13.639 (0.858)	51	273542			43.31- 103.31	71.24
38 tert-butyl alcohol					CAS #: 75-65-0		
13.859	13.859 (0.870)	59	80268	0.69313	0.6931	70.00- 130.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
38 tert-butyl alcohol (continued)							
13.859	13.859 (0.870)	41	24408			1.97- 61.97	30.41
13.859	13.859 (0.870)	57	7458			0.00- 40.67	9.29
39 MTBE					CAS #: 1634-04-4		
13.996	13.996 (0.878)	73	1298416	9.85655	9.856	70.00- 130.00	100.00
13.996	13.996 (0.878)	57	421575			2.99- 62.99	32.47
13.996	13.996 (0.878)	41	539230			12.12- 72.12	41.53
40 trans-1,2-Dichloroethene					CAS #: 156-60-5		
14.051	14.051 (0.882)	98	249635	10.1371	10.137	70.00- 130.00	100.00
14.051	14.051 (0.882)	61	751401			293.73- 353.73	301.00
14.051	14.051 (0.882)	96	397196			146.88- 206.88	159.11
43 Hexane					CAS #: 110-54-3		
14.381	14.381 (0.903)	57	1036858	9.83659	9.836	70.00- 130.00	100.00
14.381	14.381 (0.903)	43	915798			57.65- 117.65	88.32
14.381	14.381 (0.903)	86	110159			0.00- 40.67	10.62
46 1,1-Dichloroethane					CAS #: 75-34-3		
14.765	14.765 (0.927)	63	1027033	10.0404	10.040	70.00- 130.00	100.00
14.765	14.765 (0.927)	65	305043			0.37- 60.37	29.70
47 Vinyl Acetate					CAS #: 108-05-4		
14.793	14.793 (0.928)	86	116238	11.1328	11.133	70.00- 130.00	100.00
14.793	14.793 (0.928)	42	202697			220.92- 280.92	174.38
14.793	14.793 (0.928)	43	2412420			3282.47-3342.47	2075.40
50 cis-1,2-Dichloroethene					CAS #: 156-59-2		
15.592	15.592 (0.979)	98	336730	10.3041	10.304	70.00- 130.00	100.00
15.592	15.592 (0.979)	61	931718			248.69- 308.69	276.70
15.592	15.592 (0.979)	96	539989			132.55- 192.55	160.36
51 2-Butanone					CAS #: 78-93-3		
15.592	15.592 (0.979)	72	224657	10.5777	10.578	70.00- 130.00	100.00
15.592	15.571 (0.979)	43	1824257			794.80- 854.80	812.02
15.592	15.571 (0.979)	57	107169			18.01- 78.01	47.70
53 Tetrahydrofuran					CAS #: 109-99-9		
15.933	15.933 (1.000)	42	1057652	9.66371	9.664	70.00- 130.00	100.00
15.933	15.933 (1.000)	71	203201			0.00- 49.03	19.21
15.933	15.933 (1.000)	72	229255			0.00- 51.35	21.68
55 Chloroform					CAS #: 67-66-3		
15.995	15.995 (1.004)	83	1000469	9.82989	9.830	70.00- 130.00	100.00
15.995	15.995 (1.004)	85	644787			33.33- 93.33	64.45

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
57 Cyclohexane					CAS #: 110-82-7		
16.272	16.272 (1.021)	84	633744	9.90031	9.900	70.00- 130.00	100.00
16.272	16.272 (1.021)	56	1179833			157.43- 217.43	186.17
16.272	16.242 (1.021)	41	864834			105.99- 165.99	136.46
58 1,1,1-Trichloroethane					CAS #: 71-55-6		
16.242	16.242 (1.019)	97	1031502	9.70565	9.706	70.00- 130.00	100.00
16.242	16.242 (1.019)	99	660507			32.16- 92.16	64.03
59 Carbon Tetrachloride					CAS #: 56-23-5		
16.457	16.458 (1.033)	119	1028331	10.0871	10.087	70.00- 130.00	100.00
16.457	16.458 (1.033)	117	1048664			69.67- 129.67	101.98
63 2,2,4-Trimethylpentane					CAS #: 540-84-1		
16.728	16.728 (1.050)	56	1077948	9.66316	9.663	70.00- 130.00	100.00
16.728	16.728 (1.050)	57	3211970			258.69- 318.69	297.97
16.728	16.728 (1.050)	41	1162918			79.91- 139.91	107.88
64 Benzene					CAS #: 71-43-2		
16.756	16.755 (0.968)	78	1395370	9.72275	9.723	70.00- 130.00	100.00
16.756	16.755 (0.968)	77	326048			0.00- 53.73	23.37
68 1,2-Dichloroethane					CAS #: 107-06-2		
16.865	16.865 (0.975)	62	844960	9.71509	9.715	70.00- 130.00	100.00
16.865	16.865 (0.975)	64	256665			1.11- 61.11	30.38
69 Heptane					CAS #: 142-82-5		
16.975	16.975 (0.981)	57	628900	10.1675	10.167	70.00- 130.00	100.00
16.975	16.975 (0.981)	100	131494			0.00- 51.27	20.91
16.975	16.975 (0.981)	43	1610508			235.24- 295.24	256.08
72 Trichloroethene					CAS #: 79-01-6		
17.716	17.717 (1.024)	130	647960	10.0296	10.030	70.00- 130.00	100.00
17.716	17.717 (1.024)	95	631163			71.16- 131.16	97.41
17.716	17.717 (1.024)	97	410463			33.04- 93.04	63.35
73 Methylcyclohexane					CAS #: 108-87-2		
17.964	17.963 (1.038)	83	857415	10.1064	10.106	70.00- 130.00	100.00
17.964	17.963 (1.038)	98	394730			15.02- 75.02	46.04
17.964	17.963 (1.038)	55	1062059			95.64- 155.64	123.87
74 1,2-Dichloropropane					CAS #: 78-87-5		
18.156	18.156 (1.049)	63	646421	9.81888	9.819	70.00- 130.00	100.00
18.156	18.156 (1.049)	62	471708			45.17- 105.17	72.97
18.156	18.156 (1.049)	41	584615			59.65- 119.65	90.44

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
75 1,4-Dioxane					CAS #: 123-91-1		
18.266	18.265 (1.056)	88	325624	9.84173	9.842	70.00- 130.00	100.00
18.266	18.265 (1.056)	58	324927			72.13- 132.13	99.79
18.266	18.265 (1.056)	57	111817			4.41- 64.41	34.34
77 Bromodichloromethane					CAS #: 75-27-4		
18.568	18.568 (1.073)	83	1120261	10.2784	10.278	70.00- 130.00	100.00
18.568	18.568 (1.073)	85	712058			32.12- 92.12	63.56
78 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
19.408	19.408 (1.122)	75	797541	10.7066	10.707	70.00- 130.00	100.00
19.408	19.408 (1.122)	77	248420			1.25- 61.25	31.15
19.408	19.408 (1.122)	39	793668			71.17- 131.17	99.51
79 4-Methyl-2-pentanone					CAS #: 108-10-1		
19.587	19.587 (1.132)	43	2186524	10.7937	10.794	70.00- 130.00	100.00
19.587	19.587 (1.132)	58	593805			0.00- 57.24	27.16
19.587	19.587 (1.132)	85	180272			0.00- 38.20	8.24
81 Toluene					CAS #: 108-88-3		
19.991	19.991 (1.155)	91	1566189	9.88650	9.886	70.00- 130.00	100.00
19.991	19.991 (1.155)	92	913117			28.60- 88.60	58.30
82 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
20.435	20.434 (0.920)	75	800735	9.83197	9.832	70.00- 130.00	100.00
20.435	20.434 (0.920)	77	249611			5.48- 65.48	31.17
20.435	20.434 (0.920)	39	740414			63.15- 123.15	92.47
84 1,1,2-Trichloroethane					CAS #: 79-00-5		
20.757	20.758 (0.935)	97	616425	9.91166	9.912	70.00- 130.00	100.00
20.757	20.758 (0.935)	99	378447			32.13- 92.13	61.39
20.757	20.758 (0.935)	83	527643			57.82- 117.82	85.60
86 Tetrachloroethene					CAS #: 127-18-4		
20.901	20.937 (0.941)	166	774757	9.63541	9.635	70.00- 130.00	100.00
20.901	20.937 (0.941)	129	602088			47.04- 107.04	77.71
20.901	20.901 (0.941)	131	597852			46.95- 106.95	77.17
87 2-Hexanone					CAS #: 591-78-6		
21.044	21.044 (0.948)	58	753256	10.8161	10.816	70.00- 130.00	100.00
21.044	21.044 (0.948)	43	1998283			242.48- 302.48	265.29
21.044	21.044 (0.948)	100	104936			0.00- 43.88	13.93
89 Dibromochloromethane					CAS #: 124-48-1		
21.367	21.367 (0.962)	129	1155139	9.97948	9.979	70.00- 130.00	100.00
21.367	21.367 (0.962)	127	893741			50.38- 110.38	77.37

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
90 1,2-Dibromoethane					CAS #: 106-93-4		
21.583	21.583 (0.972)	107	965606	9.96654	9.966	70.00- 130.00	100.00
21.583	21.583 (0.972)	109	885945			62.69- 122.69	91.75
93 Chlorobenzene					CAS #: 108-90-7		
22.233	22.233 (1.001)	112	1253201	9.65870	9.659	70.00- 130.00	100.00
22.233	22.233 (1.001)	114	397663			1.62- 61.62	31.73
22.233	22.233 (1.001)	77	740516			38.66- 98.66	59.09
95 Ethyl Benzene					CAS #: 100-41-4		
22.315	22.315 (1.005)	106	586419	10.0697	10.070	70.00- 130.00	100.00
22.315	22.315 (1.005)	91	1816065			292.36- 352.36	309.69
96 m,p-Xylene					CAS #: 108-38-3		
22.480	22.480 (1.012)	106	580227	10.1042	10.104	70.00- 130.00	100.00
22.480	22.480 (1.012)	91	1152965			164.15- 224.15	198.71
100 o-Xylene					CAS #: 95-47-6		
23.001	23.001 (1.036)	106	536037	10.0317	10.032	70.00- 130.00	100.00
23.001	23.001 (1.036)	91	1164270			186.63- 246.63	217.20
101 Styrene					CAS #: 100-42-5		
23.029	23.029 (1.037)	104	860390	11.0062	11.006	70.00- 130.00	100.00
23.029	23.029 (1.037)	78	450432			28.70- 88.70	52.35
102 Bromoform					CAS #: 75-25-2		
23.331	23.331 (1.051)	173	1013935	10.3350	10.335	70.00- 130.00	100.00
23.331	23.331 (1.051)	171	525561			20.40- 80.40	51.83
103 Cumene					CAS #: 98-82-8		
23.441	23.441 (1.056)	105	1597561	10.2382	10.238	70.00- 130.00	100.00
23.441	23.441 (1.056)	120	446809			0.00- 57.73	27.97
108 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
23.832	23.833 (1.073)	83	1113327	9.28813	9.288	70.00- 130.00	100.00
23.832	23.833 (1.073)	85	708390			34.81- 94.81	63.63
111 Propylbenzene					CAS #: 103-65-1		
23.910	23.910 (1.077)	91	1447977	10.4617	10.462	70.00- 130.00	100.00
23.910	23.910 (1.077)	120	342620			0.00- 53.83	23.66
113 4-Ethyltoluene					CAS #: 622-96-8		
24.039	24.039 (1.083)	105	1036583	10.2087	10.209	70.00- 130.00	100.00
24.039	24.039 (1.083)	120	319284			0.18- 60.18	30.80
114 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
24.116	24.116 (1.086)	105	1050404	12.3897	12.390	70.00- 130.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
114 1,3,5-Trimethylbenzene (continued)							
24.116	24.116 (1.086)	120	496090			20.44- 80.44	47.23
120 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
24.529	24.529 (1.105)	105	721694	10.5103	10.510	70.00- 130.00	100.00
24.529	24.529 (1.105)	120	339745			19.27- 79.27	47.08
122 1,3-Dichlorobenzene					CAS #: 541-73-1		
24.902	24.902 (1.121)	146	679755	10.2596	10.260	70.00- 130.00	100.00
24.902	24.902 (1.121)	148	436033			38.48- 98.48	64.15
24.902	24.902 (1.121)	111	276072			10.49- 70.49	40.61
124 1,4-Dichlorobenzene					CAS #: 106-46-7		
24.992	24.992 (1.125)	146	606668	9.73994	9.740	70.00- 130.00	100.00
24.992	24.992 (1.125)	148	391218			38.92- 98.92	64.49
24.992	25.015 (1.125)	111	235922			11.61- 71.61	38.89
127 alpha-chlorotoluene					CAS #: 100-44-7		
25.126	25.126 (1.132)	91	1062162	15.9607	15.961	70.00- 130.00	100.00(R)
25.126	25.126 (1.132)	126	225119			0.00- 52.82	21.19
128 1,2-Dichlorobenzene					CAS #: 95-50-1		
25.395	25.418 (1.144)	146	624492	10.1587	10.159	70.00- 130.00	100.00
25.395	25.396 (1.144)	148	399014			36.09- 96.09	63.89
25.395	25.396 (1.144)	111	262237			13.38- 73.38	41.99
131 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
27.077	27.077 (1.219)	180	441878	9.79487	9.795	70.00- 130.00	100.00
27.077	27.099 (1.219)	182	425295			64.14- 124.14	96.25
132 Hexachlorobutadiene					CAS #: 87-68-3		
27.166	27.167 (1.223)	225	382154	10.1285	10.128	70.00- 130.00	100.00
27.166	27.167 (1.223)	223	243156			44.27- 104.27	63.63
133 Naphthalene					CAS #: 91-20-3		
27.391	27.368 (1.234)	128	74325	0.69568	0.6957	70.00- 130.00	100.00
27.391	27.368 (1.234)	127	13136			0.00- 47.41	17.67

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdv.i
Lab File ID: v100619.d
Lab Smp Id: ICV
Analysis Type: VOA
Quant Type: ISTD
Operator: ef
Method File: /chem/msdv.i/06Oct2014.b/v14l1006a.m
Misc Info: 10ppbv (50ppbv)

Calibration Date: 06-OCT-2014
Calibration Time: 18:36
Client Smp ID: ICV
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
54 Bromochloromethan	125097	75058	175136	120773	-3.46
71 1,4-Difluorobenze	498199	298919	697479	486323	-2.38
92 Chlorobenzene-d5	406420	243852	568988	395102	-2.78

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
54 Bromochloromethan	15.93	15.60	16.26	15.93	0.00
71 1,4-Difluorobenze	17.30	16.97	17.63	17.30	0.00
92 Chlorobenzene-d5	22.21	21.88	22.54	22.21	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: 07-Oct-2014 12:14

Eurofins Air Toxics Inc.

RECOVERY REPORT

Client Name:
Client SDG: 06Oct2014
Sample Matrix: GAS
Fraction: VOA
Lab Smp Id: ICV
Client Smp ID: ICV
Level: LOW
Operator: ef
Data Type: MS DATA
SampleType: LCS
SpikeList File: AT12.spk
Quant Type: ISTD
Sublist File: AT12.sub
Method File: /chem/msdv.i/06Oct2014.b/v14l1006a.m
Misc Info: 10ppbv (50ppbv)

SPIKE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
4 Dichlorodifluorome	10.000	10.639	106.39	70-130
3 Propylene	10.000	9.655	96.55	60-140
6 Freon 114	10.000	10.309	103.09	70-130
8 Chloromethane	10.000	10.020	100.20	70-130
10 Vinyl Chloride	10.000	10.444	104.44	70-130
11 1,3-Butadiene	10.000	9.863	98.63	70-130
12 Bromomethane	10.000	10.653	106.53	70-130
17 Chloroethane	10.000	10.484	104.84	70-130
20 Trichlorofluoromet	10.000	10.270	102.70	70-130
24 Ethanol	10.000	12.155	121.55	70-130
28 Freon 113	10.000	10.448	104.49	70-130
30 1,1-Dichloroethene	10.000	10.756	107.56	70-130
31 Acetone	10.000	11.044	110.44	70-130
33 Carbon Disulfide	10.000	9.501	95.01	70-130
34 2-Propanol	10.000	10.718	107.18	70-130
35 3-Chloroprene	10.000	10.674	106.74	70-130
37 Methylene Chloride	10.000	10.458	104.58	70-130
39 MTBE	10.000	9.856	98.57	70-130
40 trans-1,2-Dichloro	10.000	10.137	101.37	70-130
43 Hexane	10.000	9.836	98.37	70-130
46 1,1-Dichloroethane	10.000	10.040	100.40	70-130
47 Vinyl Acetate	10.000	11.133	111.33	60-140
50 cis-1,2-Dichloroet	10.000	10.304	103.04	70-130
51 2-Butanone	10.000	10.578	105.78	70-130
53 Tetrahydrofuran	10.000	9.664	96.64	70-130
55 Chloroform	10.000	9.830	98.30	70-130
57 Cyclohexane	10.000	9.900	99.00	70-130
58 1,1,1-Trichloroeth	10.000	9.706	97.06	70-130
59 Carbon Tetrachlori	10.000	10.087	100.87	70-130
63 2,2,4-Trimethylpen	10.000	9.663	96.63	70-130
64 Benzene	10.000	9.723	97.23	70-130
69 Heptane	10.000	10.167	101.67	70-130
68 1,2-Dichloroethane	10.000	9.715	97.15	70-130

SPIKE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
72 Trichloroethene	10.000	10.030	100.30	70-130
74 1,2-Dichloropropan	10.000	9.819	98.19	70-130
75 1,4-Dioxane	10.000	9.842	98.42	70-130
77 Bromodichlorometha	10.000	10.278	102.78	70-130
78 cis-1,3-Dichloropr	10.000	10.707	107.07	70-130
79 4-Methyl-2-pentano	10.000	10.794	107.94	70-130
81 Toluene	10.000	9.886	98.87	70-130
82 trans-1,3-Dichloro	10.000	9.832	98.32	70-130
84 1,1,2-Trichloroeth	10.000	9.912	99.12	70-130
87 2-Hexanone	10.000	10.816	108.16	70-130
86 Tetrachloroethene	10.000	9.635	96.35	70-130
89 Dibromochlorometha	10.000	9.979	99.79	70-130
90 1,2-Dibromoethane	10.000	9.966	99.67	70-130
93 Chlorobenzene	10.000	9.659	96.59	70-130
95 Ethyl Benzene	10.000	10.070	100.70	70-130
96 m,p-Xylene	10.000	10.104	101.04	70-130
100 o-Xylene	10.000	10.032	100.32	70-130
101 Styrene	10.000	11.006	110.06	70-130
102 Bromoform	10.000	10.335	103.35	70-130
103 Cumene	10.000	10.238	102.38	70-130
108 1,1,2,2-Tetrachlor	10.000	9.288	92.88	70-130
111 Propylbenzene	10.000	10.462	104.62	70-130
113 4-Ethyltoluene	10.000	10.209	102.09	70-130
114 1,3,5-Trimethylben	10.000	12.390	123.90	70-130
120 1,2,4-Trimethylben	10.000	10.510	105.10	70-130
122 1,3-Dichlorobenzen	10.000	10.260	102.60	70-130
124 1,4-Dichlorobenzen	10.000	9.740	97.40	70-130
127 alpha-chlorotoluen	10.000	15.961	159.61*	70-130
128 1,2-Dichlorobenzen	10.000	10.159	101.59	70-130
131 1,2,4-Trichloroben	10.000	9.795	97.95	70-130
132 Hexachlorobutadien	10.000	10.128	101.29	70-130
133 Naphthalene	1.000	0.6957	69.57	60-140
18 Isopentane	10.000	10.141	101.41	60-140
9 Butane	10.000	10.376	103.76	60-140
73 Methylcyclohexane	10.000	10.106	101.06	60-140

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 65 1,2-Dichloroethane	5.000	4.961	99.22	70-130
$ 80 Toluene-d8	5.000	5.113	102.26	70-130
$ 106 Bromofluorobenzene	5.000	5.170	103.40	70-130

Data File: /chem/msdv.i/06Oct2014.b/v100619.d

Date : 07-OCT-2014 11:27

Client ID: ICV

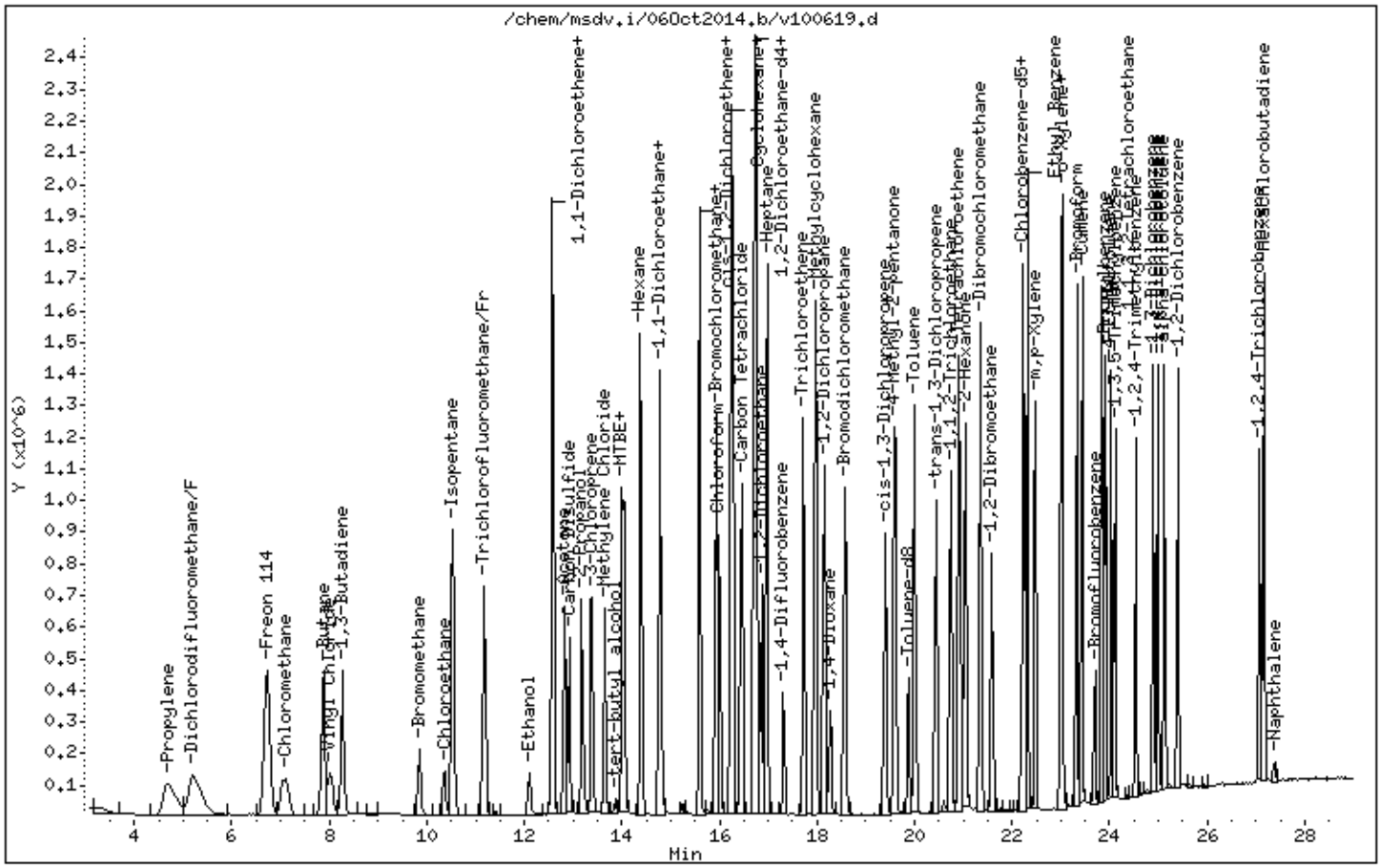
Instrument: msdv.i

Sample Info: 50mL # 2677-275

Operator: ef

Column phase: RTx-624

Column diameter: 0.32



Eurofins Air Toxics Inc.

TO15/Modified TO-14A

Data file : /chem/msdv.i/07Oct2014.b/v100715.d
Lab Smp Id: ICV Client Smp ID: ICV
Inj Date : 08-OCT-2014 07:48
Operator : act Inst ID: msdv.i
Smp Info : 50mL # 2677-190
Misc Info : 10ppbv (50ppbv)
Comment : Low Level GC-MS
Method : /chem/msdv.i/07Oct2014.b/v14l1006a.m
Meth Date : 08-Oct-2014 08:34 efinn Quant Type: ISTD
Cal Date : 07-OCT-2014 21:35 Cal File: v100713.d
Als bottle: 1 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT7ccv.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
* 54 Bromochloromethane						CAS #: 74-97-5	
15.933	15.934 (1.000)	130	116556	5.00000		80.00- 120.00	100.00
15.933	15.934 (1.000)	128	88024			48.21- 108.21	75.52
15.933	15.934 (1.000)	49	279249			215.61- 275.61	239.58
* 71 1,4-Difluorobenzene						CAS #: 540-36-3	
17.305	17.305 (1.000)	114	477254	5.00000		80.00- 120.00	100.00
17.305	17.305 (1.000)	88	75177			0.00- 46.17	15.75
* 92 Chlorobenzene-d5						CAS #: 3114-55-4	
22.205	22.205 (1.000)	117	352288	5.00000		80.00- 120.00	100.00
22.205	22.205 (1.000)	82	206960			29.34- 89.34	58.75
$ 65 1,2-Dichloroethane-d4						CAS #: 17060-07-0	
16.755	16.756 (1.052)	65	210526	4.92154	4.922	80.00- 120.00	100.00
16.755	16.756 (1.052)	67	101766			28.37- 88.37	48.34
$ 80 Toluene-d8						CAS #: 2037-26-5	
19.879	19.879 (1.149)	98	444294	4.84202	4.842	80.00- 120.00	100.00
19.856	19.879 (1.147)	70	53516			0.00- 41.90	12.05

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

$  80 Toluene-d8 (continued)
 19.879  19.879 (1.149)   100    281223                    33.46-  93.46    63.30
-------------------------------------------------------------------------------
$ 106 Bromofluorobenzene                            CAS #: 460-00-4
 23.704  23.704 (1.067)   174    128704 4.24818    4.248  80.00- 120.00   100.00
 23.678  23.704 (1.066)    95    167259                    98.58- 158.58   129.96
 23.704  23.704 (1.067)   176    128647                    68.14- 128.14    99.96
-------------------------------------------------------------------------------
   76 Octane                                        CAS #: 111-65-9
 19.946  19.968 (1.153)    57     31288 0.79568   0.7957  80.00- 120.00   100.00
 19.946  19.968 (1.153)    85     21657                    45.62- 105.62    69.22
 19.946  19.968 (1.153)    43     95018                   293.94- 353.94   303.68
-------------------------------------------------------------------------------
   99 Decane                                        CAS #: 124-18-5
 23.987  23.987 (1.080)    57     89819 0.89700   0.8970  80.00- 120.00   100.00
 23.987  23.987 (1.080)    71     25337                     0.00-  57.94    28.21
 23.987  23.987 (1.080)   142      2944                     0.00-  33.26     3.28
-------------------------------------------------------------------------------
  117 Indene                                        CAS #: 95-13-6
 25.463  25.485 (1.147)   115     29954 0.64978   0.6498  80.00- 120.00   100.00
 25.463  25.485 (1.147)   116     32323                    67.11- 127.11   107.91
  0.000  25.485 (0.000)     0         0                     0.00-  30.00     0.00
-------------------------------------------------------------------------------
  121 1,2,3-trimethylbenzene                        CAS #: 526-73-8
 24.992  24.992 (1.125)   120     28616 1.08006    1.080  80.00- 120.00   100.00
 24.992  24.992 (1.125)   105     62251                   192.71- 252.71   217.54
 24.992  24.992 (1.125)    77      9191                     2.83-  62.83    32.12
-------------------------------------------------------------------------------
```

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdv.i
Lab File ID: v100715.d
Lab Smp Id: ICV
Analysis Type: VOA
Quant Type: ISTD
Operator: act
Method File: /chem/msdv.i/07Oct2014.b/v14l1006a.m
Misc Info: 10ppbv (50ppbv)

Calibration Date: 07-OCT-2014
Calibration Time: 12:28
Client Smp ID: ICV
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
54 Bromochloromethan	122750	73650	171850	116556	-5.05
71 1,4-Difluorobenze	498533	299120	697946	477254	-4.27
92 Chlorobenzene-d5	397978	238787	557169	352288	-11.48

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
54 Bromochloromethan	15.93	15.60	16.26	15.93	0.00
71 1,4-Difluorobenze	17.30	16.97	17.63	17.30	0.00
92 Chlorobenzene-d5	22.21	21.88	22.54	22.21	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: 08-Oct-2014 08:34

Eurofins Air Toxics Inc.

RECOVERY REPORT

Client Name:
Client SDG: 08Oct2014
Sample Matrix: GAS
Fraction: VOA
Lab Smp Id: ICV
Client Smp ID: ICV
Level: LOW
Operator: act
Data Type: MS DATA
SampleType: LCS
SpikeList File: ObrLCS.spk
Quant Type: ISTD
Sublist File: AT7ccv.sub
Method File: /chem/msdv.i/07Oct2014.b/v14l1006a.m
Misc Info: 10ppbv (50ppbv)

SPIKE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
99 Decane	1.000	0.8970	89.70	60-140
76 Octane	1.000	0.7957	79.57	60-140
117 Indene	1.000	0.6498	64.98	60-140
121 1,2,3-trimethylben	1.000	1.080	108.01	60-140

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 65 1,2-Dichloroethane	5.000	4.922	98.43	70-130
$ 80 Toluene-d8	5.000	4.842	96.84	70-130
$ 106 Bromofluorobenzene	5.000	4.248	84.96	70-130

Data File: /chem/msdv.i/07Oct2014.b/v100715.d

Date : 08-OCT-2014 07:48

Client ID: ICV

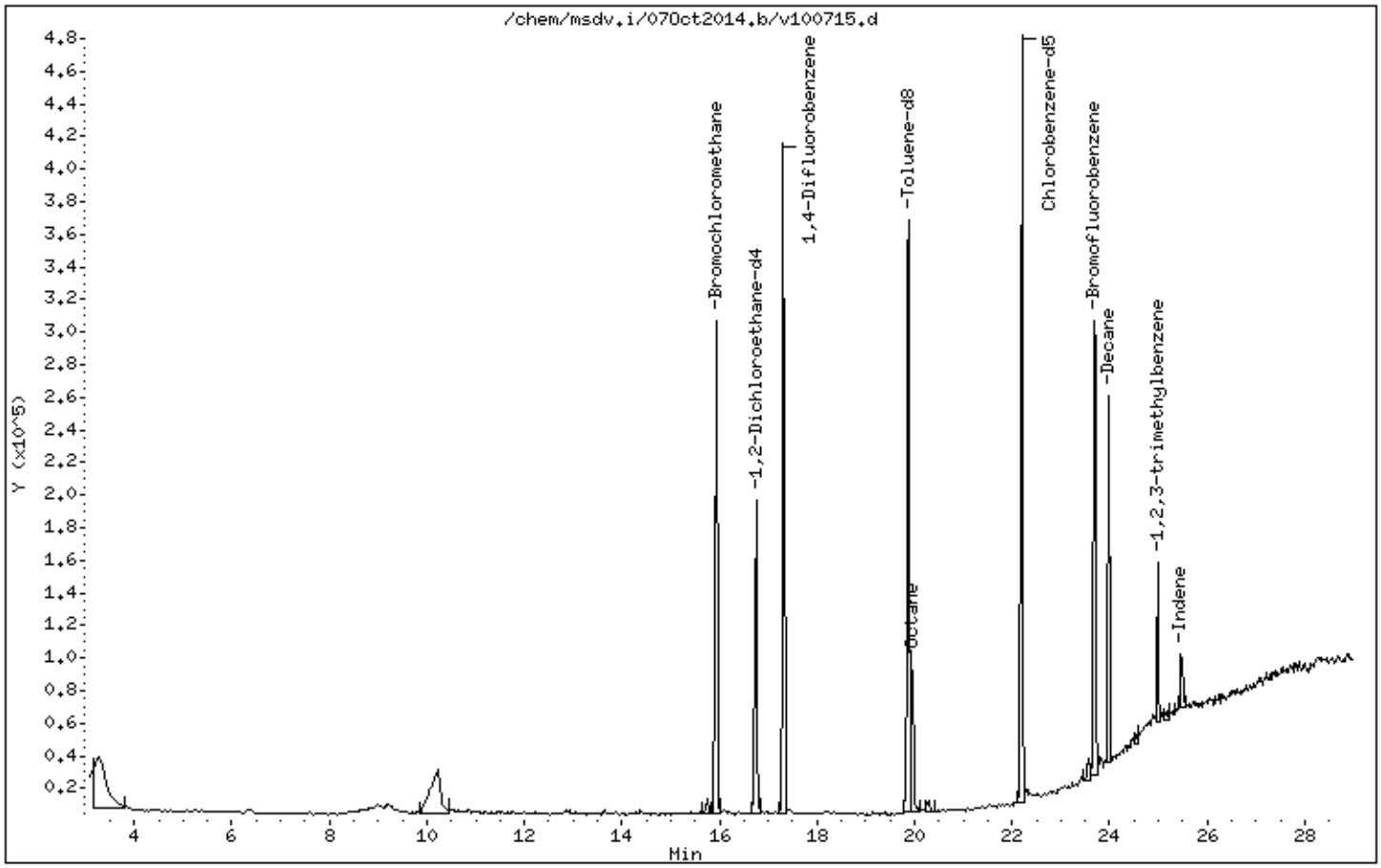
Instrument: msdv.i

Sample Info: 50mL # 2677-190

Operator: act

Column phase: RTx-624

Column diameter: 0.32



Data File: /chem/msdv.i/07Oct2014.b/v100715.d

Date : 08-OCT-2014 07:48

Client ID: ICV

Instrument: msdv.i

Sample Info: 50mL # 2677-190

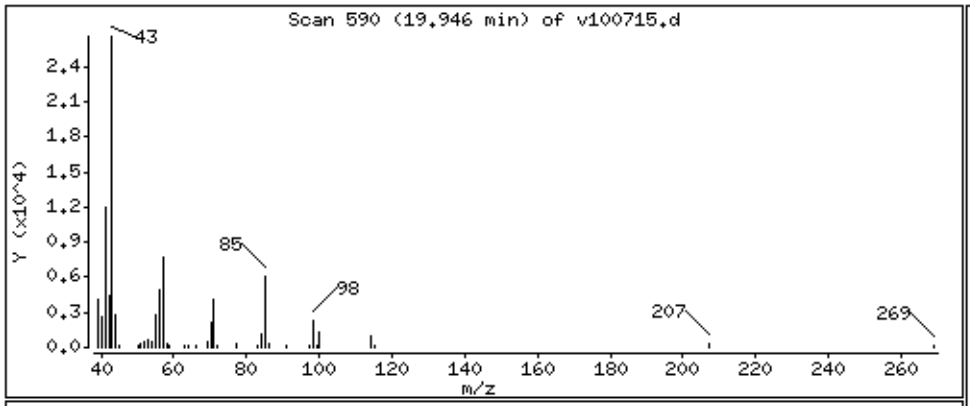
Operator: act

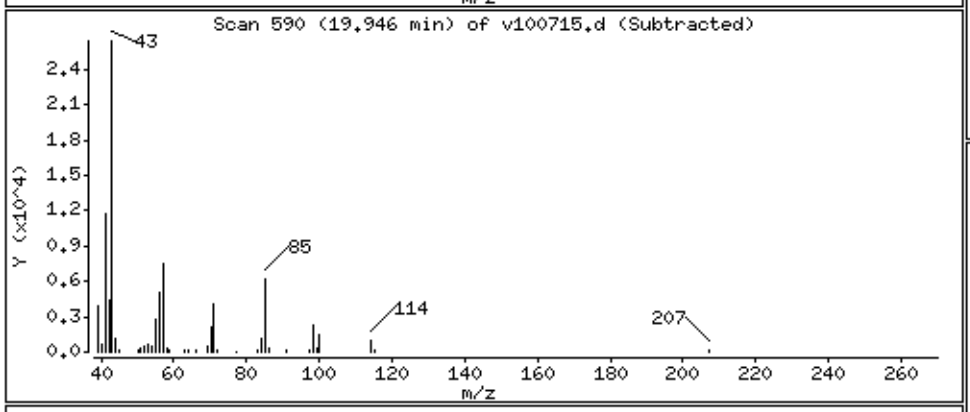
Column phase: RTx-624

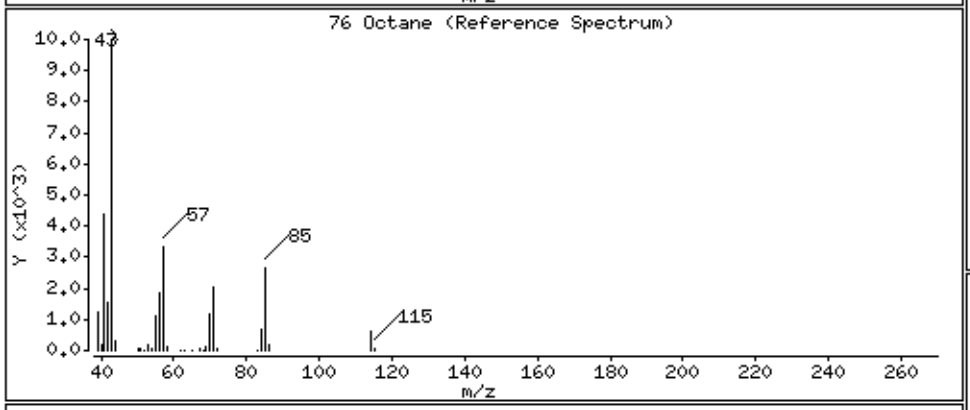
Column diameter: 0.32

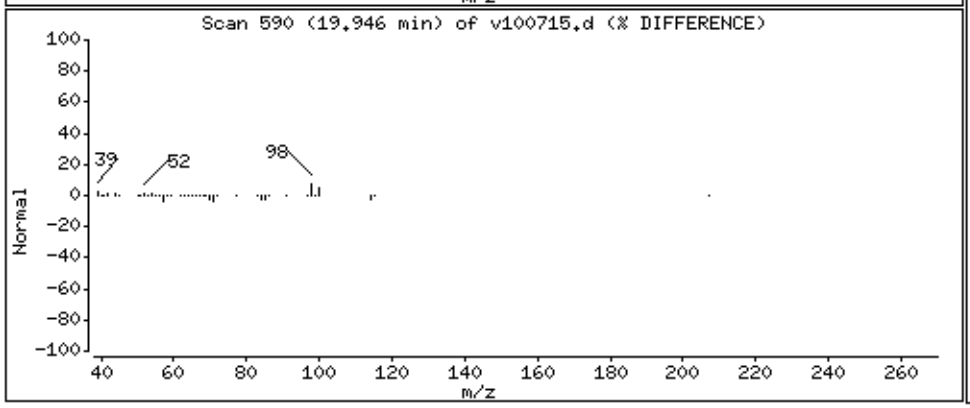
76 Octane

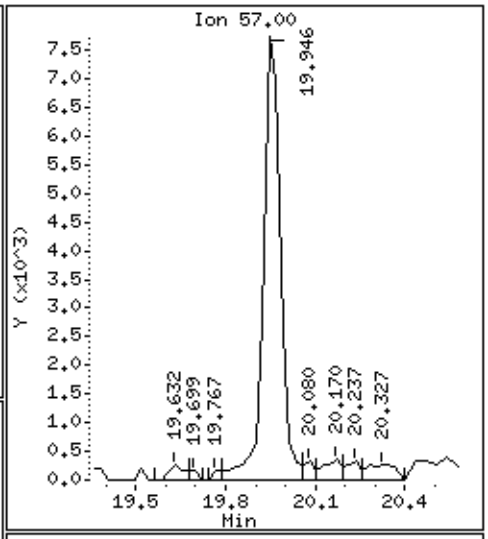
Concentration: 0.7957 PPBV

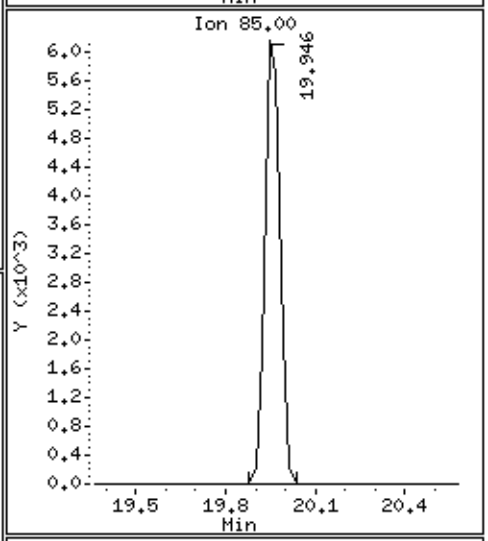


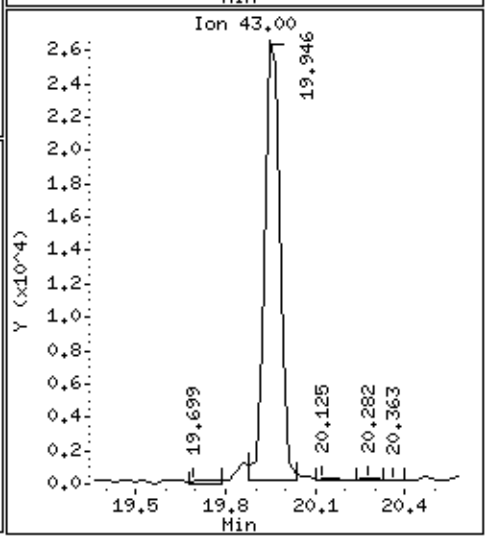












Data File: /chem/msdv.i/07Oct2014.b/v100715.d

Date : 08-OCT-2014 07:48

Client ID: ICV

Instrument: msdv.i

Sample Info: 50mL # 2677-190

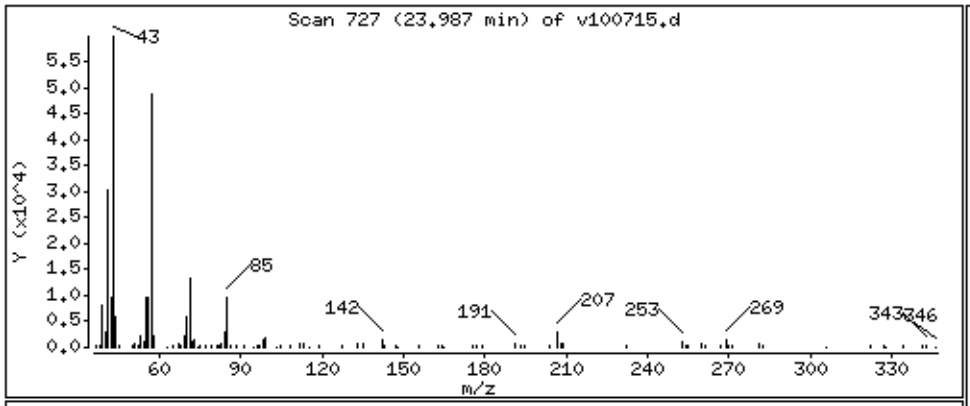
Operator: act

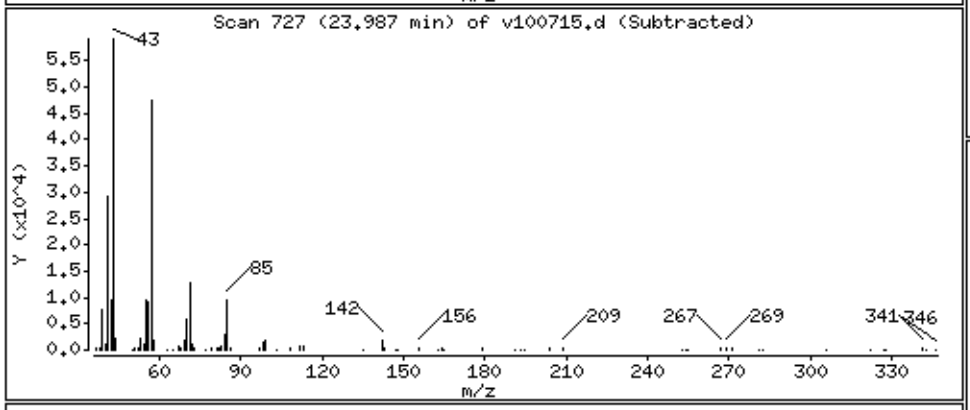
Column phase: RTx-624

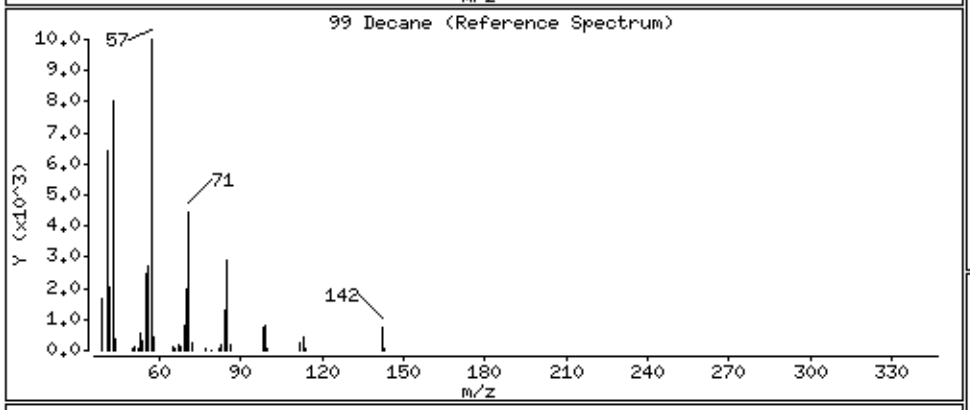
Column diameter: 0.32

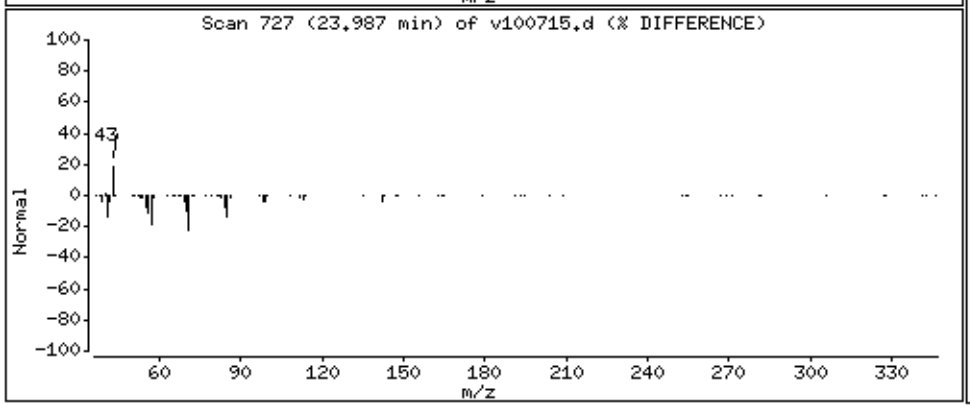
99 Decane

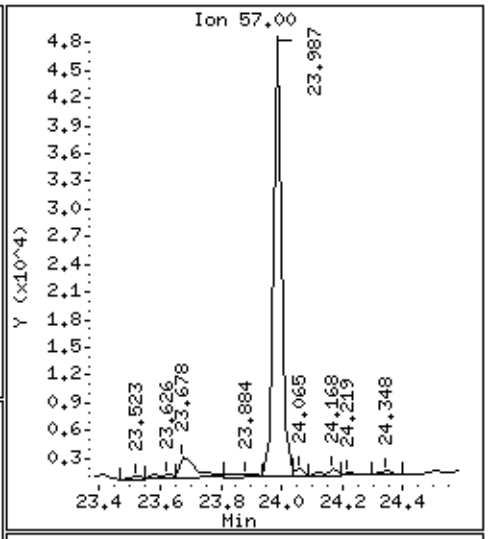
Concentration: 0.8970 PPBV

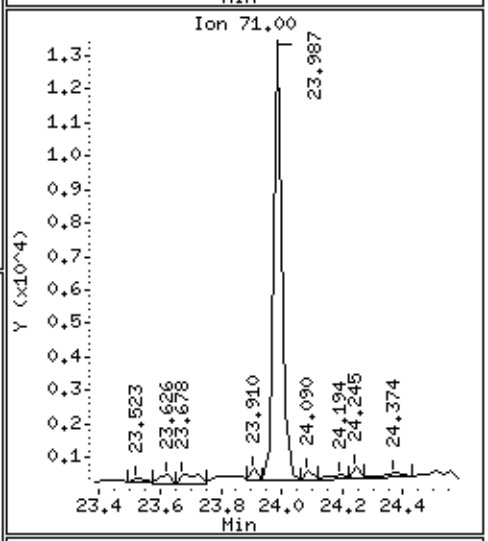


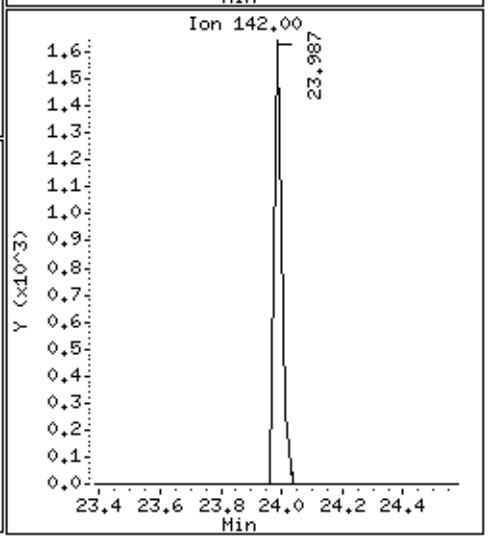












Data File: /chem/msdv.i/07Oct2014.b/v100715.d

Date : 08-OCT-2014 07:48

Client ID: ICV

Instrument: msdv.i

Sample Info: 50mL # 2677-190

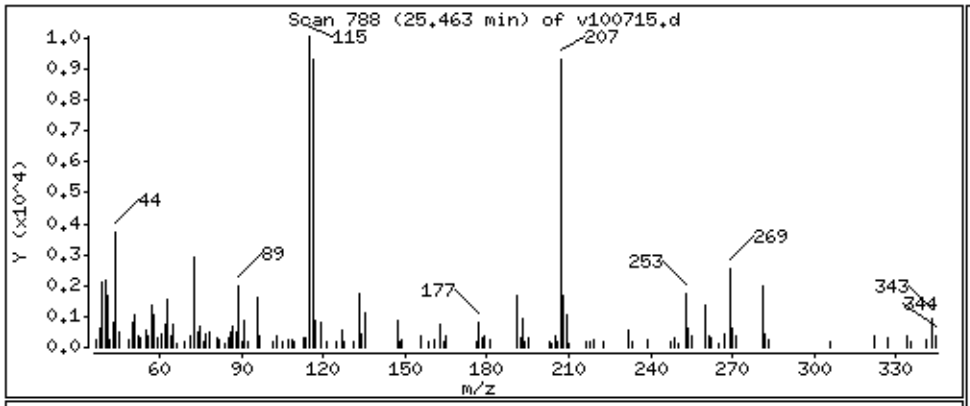
Operator: act

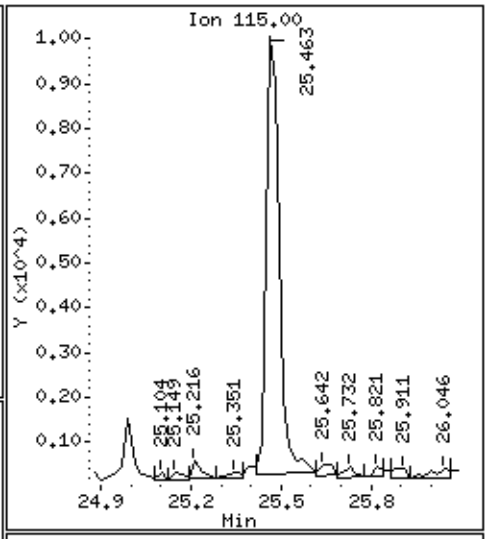
Column phase: RTx-624

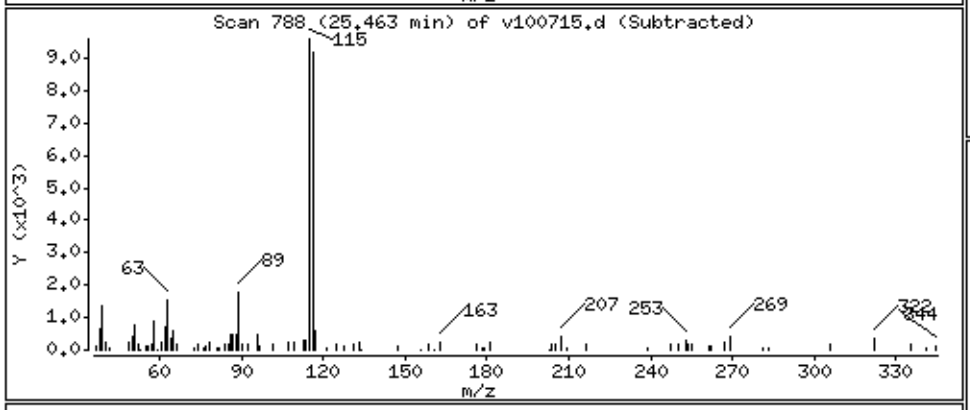
Column diameter: 0.32

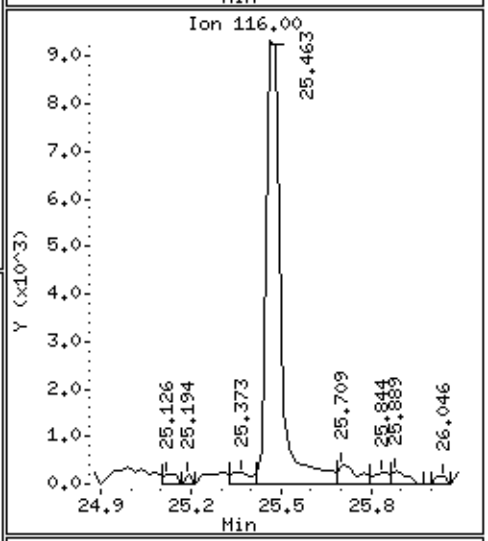
117 Indene

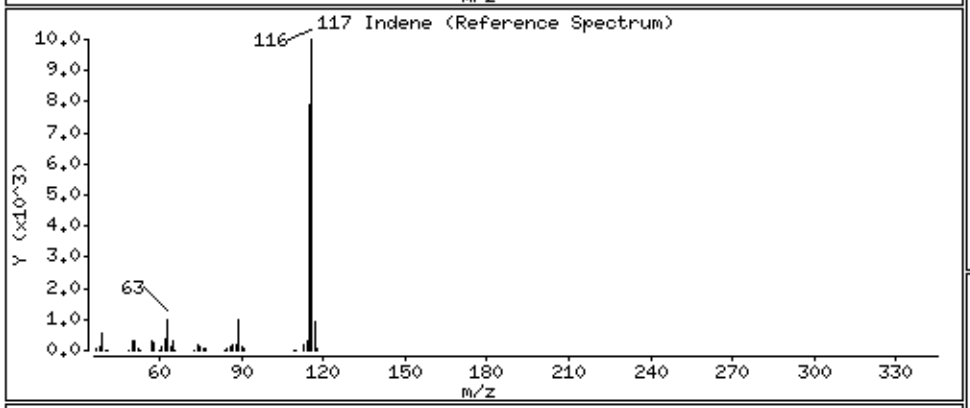
Concentration: 0.6498 PPBV

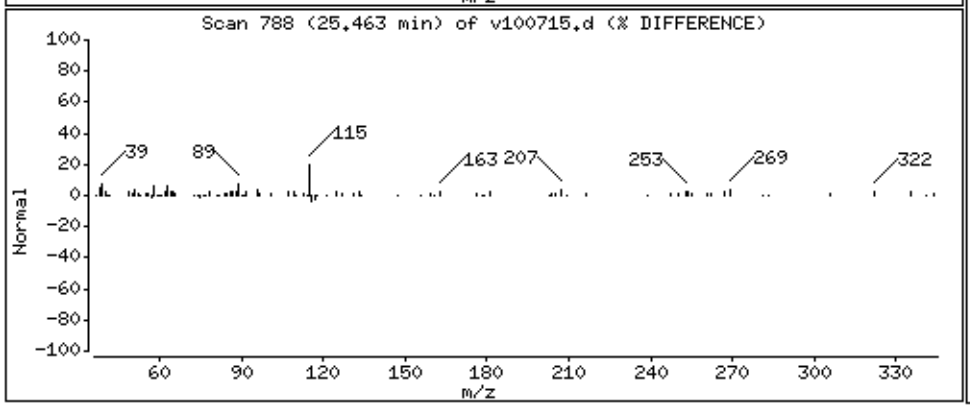


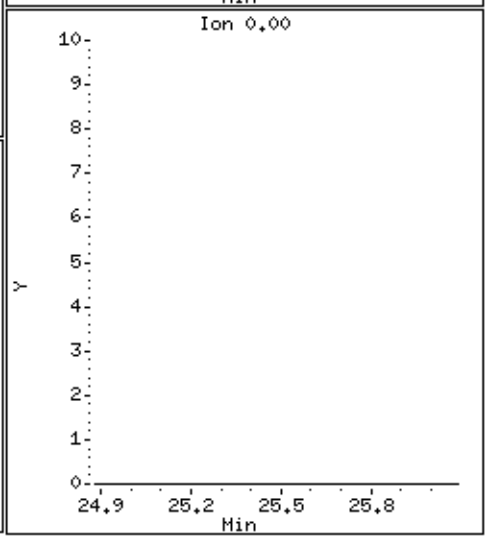












Data File: /chem/msdv.i/07Oct2014.b/v100715.d

Date : 08-OCT-2014 07:48

Client ID: ICV

Instrument: msdv.i

Sample Info: 50mL # 2677-190

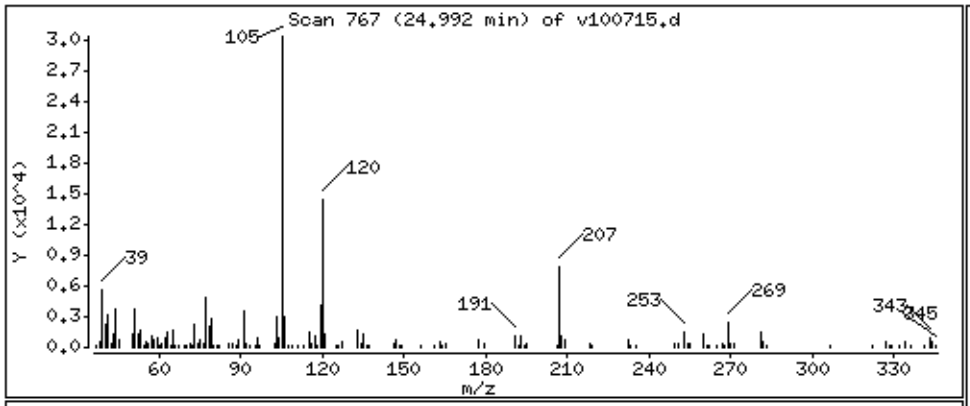
Operator: act

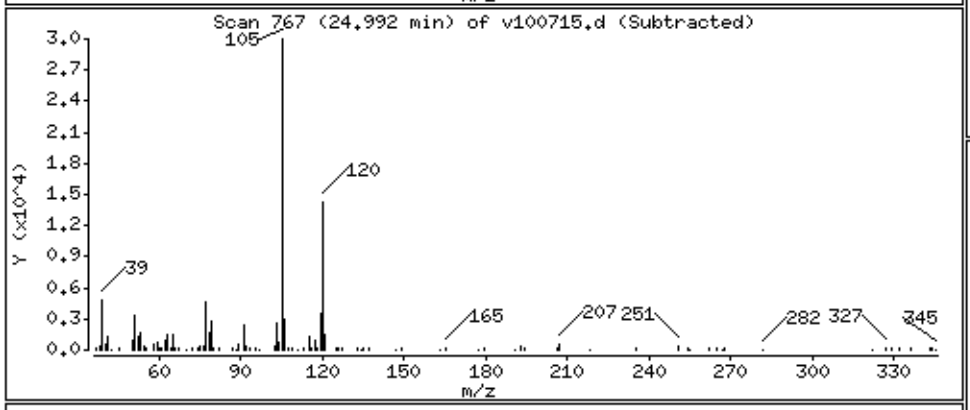
Column phase: RTx-624

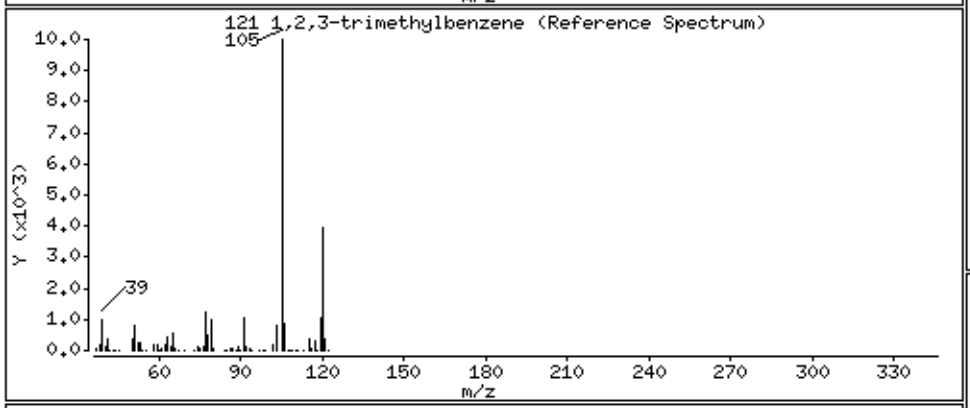
Column diameter: 0.32

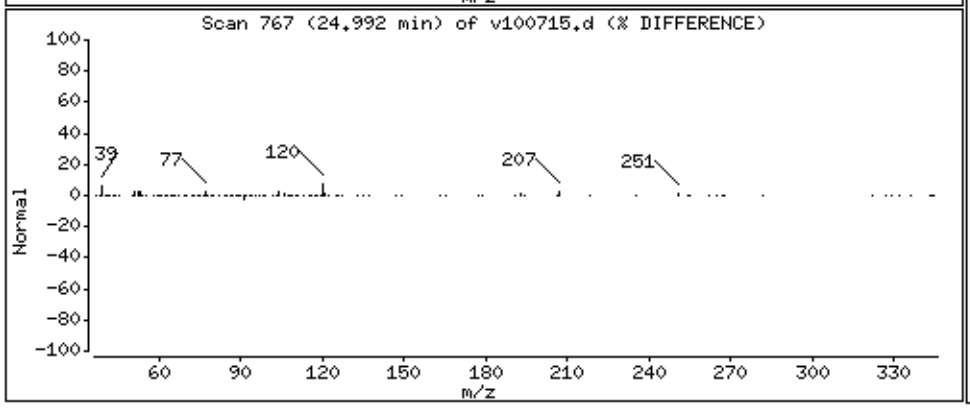
121 1,2,3-trimethylbenzene

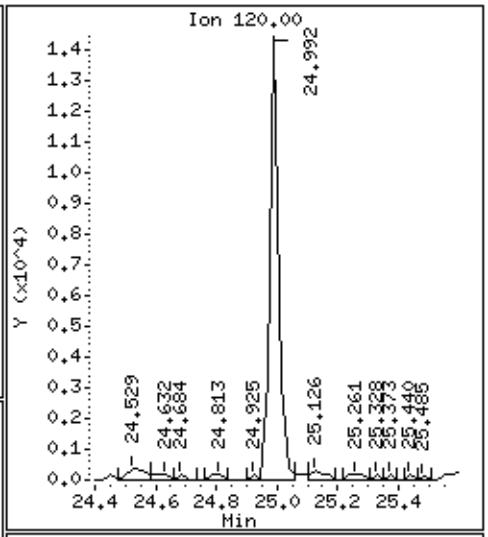
Concentration: 1.080 PPBV

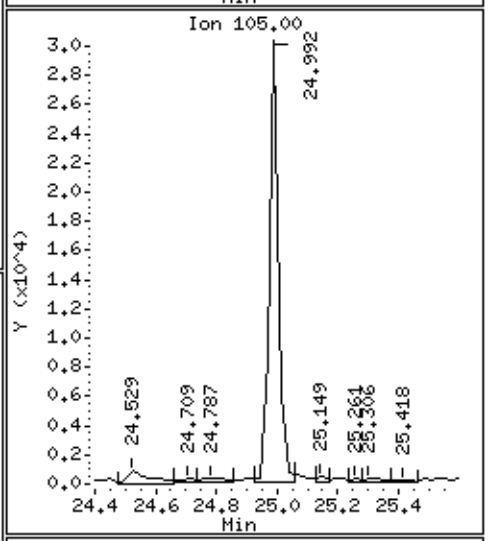


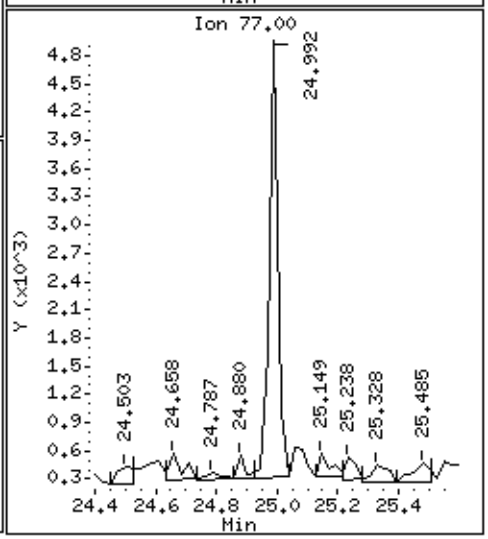












Eurofins Air Toxics Inc.

TO15/Modified TO-14A

Data file : /chem/msdv.i/06Oct2014.b/v100618.d
Lab Smp Id: ICAL Client Smp ID: Level 5
Inj Date : 07-OCT-2014 10:14
Operator : ef Inst ID: msdv.i
Smp Info : 250mL# 2677-277
Misc Info : 0.05ppbv (0.05ppbv)
Comment : Low Level GC-MS
Method : /chem/msdv.i/06Oct2014.b/v14l1006a.m
Meth Date : 07-Oct-2014 11:32 efinn Quant Type: ISTD
Cal Date : 07-OCT-2014 10:14 Cal File: v100618.d
Als bottle: 1 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: Level05.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
* 54 Bromochloromethane					CAS #: 74-97-5		
15.934	15.934 (1.000)	130	107009	5.00000		70.00- 130.00	100.00
15.934	15.934 (1.000)	128	81678			47.54- 107.54	76.33
15.934	15.934 (1.000)	49	253921			218.45- 278.45	237.29
* 71 1,4-Difluorobenzene					CAS #: 540-36-3		
17.305	17.305 (1.000)	114	468033	5.00000		70.00- 130.00	100.00
17.305	17.305 (1.000)	88	74384			0.00- 46.16	15.89
* 92 Chlorobenzene-d5					CAS #: 3114-55-4		
22.205	22.205 (1.000)	117	344671	5.00000		70.00- 130.00	100.00
22.205	22.205 (1.000)	82	202038			29.12- 89.12	58.62
$ 65 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
16.756	16.756 (1.052)	65	198521	5.00000	5.055	70.00- 130.00	100.00
16.756	16.756 (1.052)	67	96724			28.37- 88.37	48.72
$ 80 Toluene-d8					CAS #: 2037-26-5		
19.879	19.879 (1.149)	98	435074	5.00000	4.835	70.00- 130.00	100.00
19.879	19.879 (1.149)	70	51140			0.00- 41.90	11.75

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

$  80 Toluene-d8 (continued)
 19.879  19.879 (1.149)   100    280006                    33.85-  93.85    64.36
-------------------------------------------------------------------------------
$ 106 Bromofluorobenzene                            CAS #: 460-00-4
 23.704  23.704 (1.067)   174    138628 5.00000    4.677  70.00- 130.00   100.00
 23.704  23.704 (1.067)    95    175182                   99.95- 159.95   126.37
 23.704  23.704 (1.067)   176    130329                   67.64- 127.64    94.01
-------------------------------------------------------------------------------
   20 Trichlorofluoromethane/Fr11                   CAS #: 75-69-4
 11.184  11.184 (0.702)   101      5189 0.05000  0.05028  70.00- 130.00   100.00(a)
 11.184  11.184 (0.702)   103      3977                   36.54-  96.54    76.64
-------------------------------------------------------------------------------
   28 Freon 113                                     CAS #: 76-13-1
 12.569  12.569 (0.789)   151      3601 0.05000  0.05797  70.00- 130.00   100.00(a)
 12.569  12.569 (0.789)   153      1872                   33.10-  93.10    51.99
 12.569  12.569 (0.789)   101      3879                   96.37- 156.37   107.72
-------------------------------------------------------------------------------
   58 1,1,1-Trichloroethane                         CAS #: 71-55-6
 16.242  16.242 (1.019)    97      5115 0.05000  0.05432  70.00- 130.00   100.00(a)
 16.242  16.242 (1.019)    99      2955                   32.16-  92.16    57.77
-------------------------------------------------------------------------------
   59 Carbon Tetrachloride                          CAS #: 56-23-5
 16.458  16.458 (1.033)   119      4927 0.05000  0.05455  70.00- 130.00   100.00(a)
 16.458  16.458 (1.033)   117      4309                   69.67- 129.67    87.46
-------------------------------------------------------------------------------
   72 Trichloroethene                               CAS #: 79-01-6
 17.717  17.717 (1.024)   130      2749 0.05000  0.04421  70.00- 130.00   100.00(a)
 17.717  17.717 (1.024)    95      3214                   71.16- 131.16   116.92
 17.717  17.717 (1.024)    97      1607                   33.04-  93.04    58.46
-------------------------------------------------------------------------------
   77 Bromodichloromethane                          CAS #: 75-27-4
 18.568  18.568 (1.073)    83      4822 0.05000  0.04597  70.00- 130.00   100.00(a)
 18.568  18.568 (1.073)    85      2809                   32.12-  92.12    58.25
-------------------------------------------------------------------------------
   84 1,1,2-Trichloroethane                         CAS #: 79-00-5
 20.758  20.758 (0.935)    97      2245 0.05000  0.04138  70.00- 130.00   100.00(a)
 20.758  20.758 (0.935)    99      1633                   32.13-  92.13    72.74
 20.758  20.758 (0.935)    83      2124                   57.82- 117.82    94.61
-------------------------------------------------------------------------------
   86 Tetrachloroethene                             CAS #: 127-18-4
 20.937  20.937 (0.943)   166      3600 0.05000  0.05132  70.00- 130.00   100.00(a)
 20.937  20.937 (0.943)   129      2563                   47.04- 107.04    71.19
 20.901  20.901 (0.941)   131      2851                   46.95- 106.95    79.19
-------------------------------------------------------------------------------
   89 Dibromochloromethane                          CAS #: 124-48-1
 21.367  21.367 (0.962)   129      5336 0.05000  0.05284  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
89 Dibromochloromethane (continued)							
21.367	21.367 (0.962)	127	4556			50.38- 110.38	85.38
90 1,2-Dibromoethane					CAS #: 106-93-4		
21.583	21.583 (0.972)	107	4518	0.05000	0.05346	70.00- 130.00	100.00(a)
21.583	21.583 (0.972)	109	3913			62.69- 122.69	86.61
102 Bromoform					CAS #: 75-25-2		
23.331	23.331 (1.051)	173	4495	0.05000	0.05252	70.00- 130.00	100.00(a)
23.331	23.331 (1.051)	171	1917			20.40- 80.40	42.65
108 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
23.833	23.833 (1.073)	83	5845	0.05000	0.05590	70.00- 130.00	100.00(a)
23.833	23.833 (1.073)	85	3752			34.81- 94.81	64.19
122 1,3-Dichlorobenzene					CAS #: 541-73-1		
24.902	24.902 (1.121)	146	3486	0.05000	0.06031	70.00- 130.00	100.00(a)
24.902	24.902 (1.121)	148	2645			38.48- 98.48	75.87
24.902	24.902 (1.121)	111	1129			10.49- 70.49	32.39
124 1,4-Dichlorobenzene					CAS #: 106-46-7		
24.992	24.992 (1.125)	146	3480	0.05000	0.06404	70.00- 130.00	100.00(a)
24.992	24.992 (1.125)	148	2759			38.92- 98.92	79.28
25.015	25.015 (1.127)	111	1389			11.61- 71.61	39.91
128 1,2-Dichlorobenzene					CAS #: 95-50-1		
25.418	25.418 (1.145)	146	3353	0.05000	0.06252	70.00- 130.00	100.00(a)
25.396	25.396 (1.144)	148	1888			36.09- 96.09	56.31
25.396	25.396 (1.144)	111	1419			13.38- 73.38	42.32
131 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
27.077	27.077 (1.219)	180	3088	0.05000	0.07846	70.00- 130.00	100.00(a)
27.099	27.099 (1.220)	182	2767			64.14- 124.14	89.60
132 Hexachlorobutadiene					CAS #: 87-68-3		
27.167	27.167 (1.223)	225	2377	0.05000	0.07222	70.00- 130.00	100.00(a)
27.167	27.167 (1.223)	223	2492			44.27- 104.27	104.84

QC Flag Legend

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

Report Date: 07-Oct-2014 11:32

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdv.i
Lab File ID: v100618.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: ef
Method File: /chem/msdv.i/06Oct2014.b/v14l1006a.m
Misc Info: 0.05ppbv (0.05ppbv)

Calibration Date: 06-OCT-2014
Calibration Time: 18:36
Client Smp ID: Level 5
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
54 Bromochloromethan	125097	75058	175136	107009	-14.46
71 1,4-Difluorobenze	498199	298919	697479	468033	-6.06
92 Chlorobenzene-d5	406420	243852	568988	344671	-15.19

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
54 Bromochloromethan	15.93	15.60	16.26	15.93	0.00
71 1,4-Difluorobenze	17.30	16.97	17.63	17.30	0.00
92 Chlorobenzene-d5	22.21	21.88	22.54	22.21	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/msdv.i/06Oct2014.b/v100618.d

Date : 07-OCT-2014 10:14

Client ID: Level 5

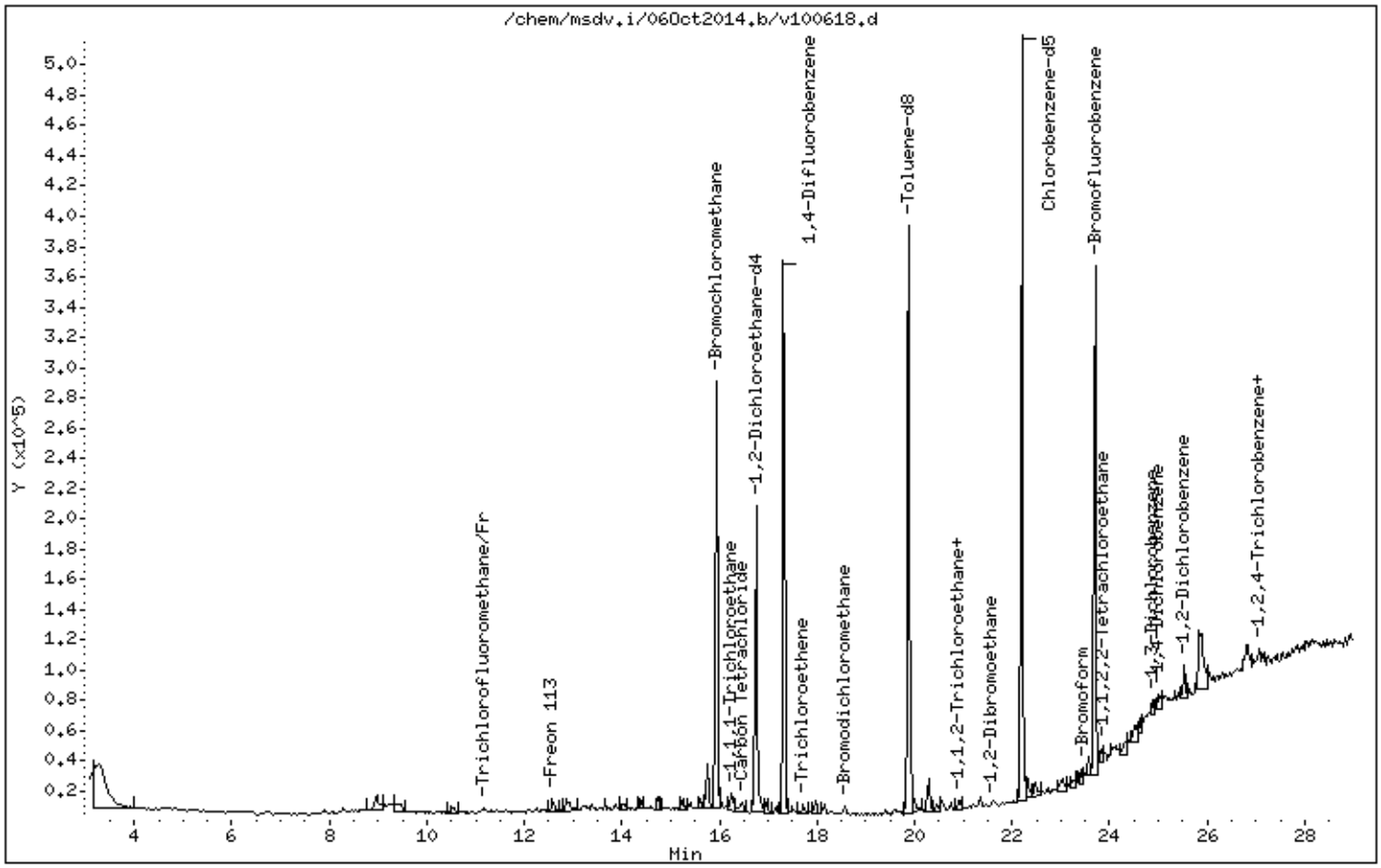
Instrument: msdv.i

Sample Info: 250mL# 2677-277

Operator: ef

Column phase: RTx-624

Column diameter: 0.32



Eurofins Air Toxics Inc.

TO15/Modified TO-14A

Data file : /chem/msdv.i/06Oct2014.b/v100607.d
Lab Smp Id: ICAL Client Smp ID: Level 6
Inj Date : 06-OCT-2014 15:09
Operator : ef Inst ID: msdv.i
Smp Info : 25mL #2677-278
Misc Info : 0.1ppbv (1.0ppbv)
Comment : Low Level GC-MS
Method : /chem/msdv.i/06Oct2014.b/v14l1006a.m
Meth Date : 07-Oct-2014 11:32 efinn Quant Type: ISTD
Cal Date : 06-OCT-2014 15:09 Cal File: v100607.d
Als bottle: 1 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: Level#1.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
* 54 Bromochloromethane					CAS #: 74-97-5		
15.933	15.933 (1.000)	130	115968	5.00000		70.00- 130.00	100.00
15.933	15.933 (1.000)	128	91563			47.54- 107.54	78.96
15.933	15.933 (1.000)	49	284181			218.45- 278.45	245.05
* 71 1,4-Difluorobenzene					CAS #: 540-36-3		
17.305	17.305 (1.000)	114	490020	5.00000		70.00- 130.00	100.00
17.305	17.305 (1.000)	88	78963			0.00- 46.16	16.11
* 92 Chlorobenzene-d5					CAS #: 3114-55-4		
22.205	22.205 (1.000)	117	360199	5.00000		70.00- 130.00	100.00
22.205	22.205 (1.000)	82	215619			29.12- 89.12	59.86
$ 65 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
16.756	16.756 (1.052)	65	200829	5.00000	4.719	70.00- 130.00	100.00
16.756	16.756 (1.052)	67	100811			28.37- 88.37	50.20
$ 80 Toluene-d8					CAS #: 2037-26-5		
19.879	19.879 (1.149)	98	459250	5.00000	4.875	70.00- 130.00	100.00
19.879	19.879 (1.149)	70	53821			0.00- 41.90	11.72

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
$ 80 Toluene-d8 (continued)							
19.879	19.879 (1.149)	100	292128			33.85- 93.85	63.61
$ 106 Bromofluorobenzene					CAS #: 460-00-4		
23.704	23.704 (1.067)	174	155734	5.00000	5.027	70.00- 130.00	100.00
23.704	23.704 (1.067)	95	198893			99.95- 159.95	127.71
23.704	23.704 (1.067)	176	153441			67.64- 127.64	98.53
6 Freon 114					CAS #: 76-14-2		
6.713	6.713 (0.421)	135	8573	0.10000	0.1105	70.00- 130.00	100.00
6.713	6.713 (0.421)	137	2095			0.53- 60.53	24.44
6.713	6.713 (0.421)	85	13021			121.37- 181.37	151.88
8 Chloromethane					CAS #: 74-87-3		
7.052	7.052 (0.443)	50	8967	0.10000	0.1370	70.00- 130.00	100.00
7.052	7.052 (0.443)	52	2897			1.81- 61.81	32.31
10 Vinyl Chloride					CAS #: 75-01-4		
8.009	8.009 (0.503)	62	5054	0.10000	0.1034	70.00- 130.00	100.00
8.040	8.040 (0.505)	64	1084			0.00- 58.65	21.45
11 1,3-Butadiene					CAS #: 106-99-0		
8.257	8.257 (0.518)	54	5029	0.10000	0.1050	70.00- 130.00	100.00
8.257	8.257 (0.518)	39	7344			107.15- 167.15	146.03
12 Bromomethane					CAS #: 74-83-9		
9.834	9.834 (0.617)	94	2744	0.10000	0.09161	70.00- 130.00	100.00(a)
9.834	9.834 (0.617)	96	3952			72.12- 132.12	144.02
20 Trichlorofluoromethane/Fr11					CAS #: 75-69-4		
11.159	11.159 (0.700)	101	12490	0.10000	0.1117	70.00- 130.00	100.00
11.184	11.184 (0.702)	103	8638			36.54- 96.54	69.16
28 Freon 113					CAS #: 76-13-1		
12.596	12.596 (0.791)	151	7074	0.10000	0.1051	70.00- 130.00	100.00
12.568	12.568 (0.789)	153	4800			33.10- 93.10	67.85
12.568	12.568 (0.789)	101	9759			96.37- 156.37	137.96
30 1,1-Dichloroethene					CAS #: 75-35-4		
12.568	12.568 (0.789)	98	2587	0.10000	0.1035	70.00- 130.00	100.00
12.568	12.568 (0.789)	61	9752			320.65- 380.65	376.96
12.568	12.568 (0.789)	96	5005			134.30- 194.30	193.47
35 3-Chloroprene					CAS #: 107-05-1		
13.392	13.392 (0.841)	76	1554	0.10000	0.1013	70.00- 130.00	100.00(a)
13.392	13.392 (0.841)	41	8183			547.03- 607.03	526.58

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
37 Methylene Chloride					CAS #: 75-09-2		
13.667	13.667 (0.858)	84	4091	0.10000	0.1160	70.00- 130.00	100.00(a)
13.667	13.667 (0.858)	49	9670			212.37- 272.37	236.37
13.667	13.667 (0.858)	51	3116			43.31- 103.31	76.17
39 MTBE					CAS #: 1634-04-4		
14.024	14.024 (0.880)	73	14438	0.10000	0.1141	70.00- 130.00	100.00
14.024	14.024 (0.880)	57	5180			2.99- 62.99	35.88
13.997	13.997 (0.878)	41	5449			12.12- 72.12	37.74
40 trans-1,2-Dichloroethene					CAS #: 156-60-5		
14.051	14.051 (0.882)	98	1938	0.10000	0.08196	70.00- 130.00	100.00(a)
14.051	14.051 (0.882)	61	8404			293.73- 353.73	433.64
14.079	14.079 (0.884)	96	5772			146.88- 206.88	297.83
43 Hexane					CAS #: 110-54-3		
14.408	14.408 (0.904)	57	11530	0.10000	0.1139	70.00- 130.00	100.00
14.381	14.381 (0.903)	43	10341			57.65- 117.65	89.69
14.381	14.381 (0.903)	86	1248			0.00- 40.67	10.82
46 1,1-Dichloroethane					CAS #: 75-34-3		
14.765	14.765 (0.927)	63	10957	0.10000	0.1116	70.00- 130.00	100.00
14.765	14.765 (0.927)	65	3579			0.37- 60.37	32.66
50 cis-1,2-Dichloroethene					CAS #: 156-59-2		
15.592	15.592 (0.979)	98	2859	0.10000	0.09111	70.00- 130.00	100.00(a)
15.592	15.592 (0.979)	61	8854			248.69- 308.69	309.69
15.592	15.592 (0.979)	96	5481			132.55- 192.55	191.71
55 Chloroform					CAS #: 67-66-3		
16.026	16.026 (1.006)	83	11005	0.10000	0.1126	70.00- 130.00	100.00
15.995	15.995 (1.004)	85	6581			33.33- 93.33	59.80
58 1,1,1-Trichloroethane					CAS #: 71-55-6		
16.242	16.242 (1.019)	97	11466	0.10000	0.1124	70.00- 130.00	100.00
16.242	16.242 (1.019)	99	6484			32.16- 92.16	56.55
57 Cyclohexane					CAS #: 110-82-7		
16.273	16.273 (1.021)	84	6187	0.10000	0.1006	70.00- 130.00	100.00
16.273	16.273 (1.021)	56	13537			157.43- 217.43	218.80
16.273	16.273 (1.021)	41	9348			105.99- 165.99	151.09
59 Carbon Tetrachloride					CAS #: 56-23-5		
16.457	16.457 (1.033)	119	9879	0.10000	0.1009	70.00- 130.00	100.00
16.457	16.457 (1.033)	117	9445			69.67- 129.67	95.61

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
63 2,2,4-Trimethylpentane					CAS #: 540-84-1		
16.728	16.728 (1.050)	56	12702	0.10000	0.1186	70.00- 130.00	100.00
16.728	16.728 (1.050)	57	34213			258.69- 318.69	269.35
16.728	16.728 (1.050)	41	12797			79.91- 139.91	100.75
64 Benzene					CAS #: 71-43-2		
16.756	16.756 (0.968)	78	16007	0.10000	0.1107	70.00- 130.00	100.00
16.783	16.783 (0.970)	77	3772			0.00- 53.73	23.56
68 1,2-Dichloroethane					CAS #: 107-06-2		
16.865	16.865 (0.975)	62	9124	0.10000	0.1041	70.00- 130.00	100.00
16.865	16.865 (0.975)	64	3119			1.11- 61.11	34.18
69 Heptane					CAS #: 142-82-5		
16.975	16.975 (0.981)	57	6047	0.10000	0.09702	70.00- 130.00	100.00(a)
16.975	16.975 (0.981)	100	1070			0.00- 51.27	17.69
16.975	16.975 (0.981)	43	18680			235.24- 295.24	308.91
72 Trichloroethene					CAS #: 79-01-6		
17.716	17.716 (1.024)	130	6374	0.10000	0.09792	70.00- 130.00	100.00(a)
17.716	17.716 (1.024)	95	6104			71.16- 131.16	95.76
17.716	17.716 (1.024)	97	4359			33.04- 93.04	68.39
74 1,2-Dichloropropane					CAS #: 78-87-5		
18.156	18.156 (1.049)	63	6441	0.10000	0.09710	70.00- 130.00	100.00(a)
18.156	18.156 (1.049)	62	5323			45.17- 105.17	82.64
18.156	18.156 (1.049)	41	5741			59.65- 119.65	89.13
75 1,4-Dioxane					CAS #: 123-91-1		
18.293	18.293 (1.057)	88	3183	0.10000	0.09548	70.00- 130.00	100.00(a)
18.293	18.293 (1.057)	58	3345			72.13- 132.13	105.09
18.266	18.266 (1.056)	57	1252			4.41- 64.41	39.33
77 Bromodichloromethane					CAS #: 75-27-4		
18.568	18.568 (1.073)	83	11249	0.10000	0.1024	70.00- 130.00	100.00
18.568	18.568 (1.073)	85	6178			32.12- 92.12	54.92
78 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
19.408	19.408 (1.122)	75	6421	0.10000	0.08555	70.00- 130.00	100.00(a)
19.408	19.408 (1.122)	77	1887			1.25- 61.25	29.39
19.408	19.408 (1.122)	39	7318			71.17- 131.17	113.97
79 4-Methyl-2-pentanone					CAS #: 108-10-1		
19.632	19.632 (1.135)	43	16801	0.10000	0.08231	70.00- 130.00	100.00(a)
19.632	19.632 (1.135)	58	4591			0.00- 57.24	27.33
19.610	19.610 (1.133)	85	1156			0.00- 38.20	6.88

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

   81 Toluene                                        CAS #: 108-88-3
 20.013  20.013 (1.157)    91     16019 0.10000   0.1004  70.00- 130.00   100.00
 19.991  19.991 (1.155)    92     10194                   28.60-  88.60    63.64
-------------------------------------------------------------------------------
   82 trans-1,3-Dichloropropene                      CAS #: 10061-02-6
 20.435  20.435 (0.920)    75      6737 0.10000  0.09074  70.00- 130.00   100.00(a)
 20.435  20.435 (0.920)    77      3224                    5.48-  65.48    47.86
 20.435  20.435 (0.920)    39      7346                   63.15- 123.15   109.04
-------------------------------------------------------------------------------
   84 1,1,2-Trichloroethane                          CAS #: 79-00-5
 20.757  20.757 (0.935)    97      6541 0.10000   0.1154  70.00- 130.00   100.00
 20.757  20.757 (0.935)    99      3295                   32.13-  92.13    50.37
 20.757  20.757 (0.935)    83      5458                   57.82- 117.82    83.44
-------------------------------------------------------------------------------
   86 Tetrachloroethene                              CAS #: 127-18-4
 20.937  20.937 (0.943)   166      7487 0.10000   0.1021  70.00- 130.00   100.00
 20.901  20.901 (0.941)   129      6017                   47.04- 107.04    80.37
 20.901  20.901 (0.941)   131      5740                   46.95- 106.95    76.67
-------------------------------------------------------------------------------
   89 Dibromochloromethane                           CAS #: 124-48-1
 21.367  21.367 (0.962)   129     10304 0.10000  0.09764  70.00- 130.00   100.00(a)
 21.367  21.367 (0.962)   127      9402                   50.38- 110.38    91.25
-------------------------------------------------------------------------------
   90 1,2-Dibromoethane                              CAS #: 106-93-4
 21.583  21.583 (0.972)   107      8504 0.10000  0.09628  70.00- 130.00   100.00(a)
 21.583  21.583 (0.972)   109      8297                   62.69- 122.69    97.57
-------------------------------------------------------------------------------
   93 Chlorobenzene                                  CAS #: 108-90-7
 22.233  22.233 (1.001)   112     12263 0.10000   0.1037  70.00- 130.00   100.00
 22.233  22.233 (1.001)   114      3968                    1.62-  61.62    32.36
 22.233  22.233 (1.001)    77     13142                   38.66-  98.66   107.17
-------------------------------------------------------------------------------
   95 Ethyl Benzene                                  CAS #: 100-41-4
 22.315  22.315 (1.005)   106      5210 0.10000  0.09813  70.00- 130.00   100.00(a)
 22.315  22.315 (1.005)    91     18742                  292.36- 352.36   359.73
-------------------------------------------------------------------------------
   96 m,p-Xylene                                     CAS #: 108-38-3
 22.480  22.480 (1.012)   106      6097 0.10000   0.1165  70.00- 130.00   100.00
 22.480  22.480 (1.012)    91     10857                  164.15- 224.15   178.07
-------------------------------------------------------------------------------
  100 o-Xylene                                       CAS #: 95-47-6
 23.001  23.001 (1.036)   106      4617 0.10000  0.09478  70.00- 130.00   100.00(a)
 23.001  23.001 (1.036)    91     11805                  186.63- 246.63   255.69
-------------------------------------------------------------------------------
  101 Styrene                                        CAS #: 100-42-5
 23.029  23.029 (1.037)   104      6039 0.10000  0.08474  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
101 Styrene (continued)							
23.029	23.029 (1.037)	78	6101			28.70- 88.70	101.03
102 Bromoform					CAS #: 75-25-2		
23.331	23.331 (1.051)	173	8489	0.10000	0.09491	70.00- 130.00	100.00(a)
23.331	23.331 (1.051)	171	4167			20.40- 80.40	49.09
103 Cumene					CAS #: 98-82-8		
23.441	23.441 (1.056)	105	14605	0.10000	0.1027	70.00- 130.00	100.00
23.441	23.441 (1.056)	120	4216			0.00- 57.73	28.87
108 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
23.833	23.833 (1.073)	83	11215	0.10000	0.1026	70.00- 130.00	100.00
23.833	23.833 (1.073)	85	8594			34.81- 94.81	76.63
111 Propylbenzene					CAS #: 103-65-1		
23.910	23.910 (1.077)	91	14714	0.10000	0.1166	70.00- 130.00	100.00
23.910	23.910 (1.077)	120	3587			0.00- 53.83	24.38
113 4-Ethyltoluene					CAS #: 622-96-8		
24.039	24.039 (1.083)	105	12253	0.10000	0.1324	70.00- 130.00	100.00
24.039	24.039 (1.083)	120	3341			0.18- 60.18	27.27
114 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
24.116	24.116 (1.086)	105	9208	0.10000	0.1191	70.00- 130.00	100.00
24.116	24.116 (1.086)	120	5492			20.44- 80.44	59.64
120 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
24.529	24.529 (1.105)	105	9693	0.10000	0.1548	70.00- 130.00	100.00
24.529	24.529 (1.105)	120	6145			19.27- 79.27	63.40
122 1,3-Dichlorobenzene					CAS #: 541-73-1		
24.902	24.902 (1.121)	146	6422	0.10000	0.1063	70.00- 130.00	100.00
24.902	24.902 (1.121)	148	6008			38.48- 98.48	93.55
24.902	24.902 (1.121)	111	2882			10.49- 70.49	44.88
124 1,4-Dichlorobenzene					CAS #: 106-46-7		
24.992	24.992 (1.125)	146	6461	0.10000	0.1138	70.00- 130.00	100.00
24.992	24.992 (1.125)	148	6159			38.92- 98.92	95.33
24.992	24.992 (1.125)	111	3734			11.61- 71.61	57.79
128 1,2-Dichlorobenzene					CAS #: 95-50-1		
25.395	25.395 (1.144)	146	5699	0.10000	0.1017	70.00- 130.00	100.00
25.395	25.395 (1.144)	148	5396			36.09- 96.09	94.68
25.395	25.395 (1.144)	111	3100			13.38- 73.38	54.40

RT	EXP RT	(REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
131 1,2,4-Trichlorobenzene						CAS #: 120-82-1		
27.077	27.077	(1.219)	180	6265	0.10000	0.1523	70.00- 130.00	100.00(a)
27.077	27.077	(1.219)	182	5534			64.14- 124.14	88.33
132 Hexachlorobutadiene						CAS #: 87-68-3		
27.166	27.166	(1.223)	225	4160	0.10000	0.1209	70.00- 130.00	100.00(a)
27.166	27.166	(1.223)	223	4860			44.27- 104.27	116.83

QC Flag Legend

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

Report Date: 07-Oct-2014 11:32

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdv.i
Lab File ID: v100607.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: ef
Method File: /chem/msdv.i/06Oct2014.b/v14l1006a.m
Misc Info: 0.1ppbv (1.0ppbv)

Calibration Date: 06-OCT-2014
Calibration Time: 18:36
Client Smp ID: Level 6
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
54 Bromochloromethan	125097	75058	175136	115968	-7.30
71 1,4-Difluorobenze	498199	298919	697479	490020	-1.64
92 Chlorobenzene-d5	406420	243852	568988	360199	-11.37

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
54 Bromochloromethan	15.93	15.60	16.26	15.93	0.00
71 1,4-Difluorobenze	17.30	16.97	17.63	17.30	0.00
92 Chlorobenzene-d5	22.21	21.88	22.54	22.21	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/msdv.i/06Oct2014.b/v100607.d

Date : 06-OCT-2014 15:09

Client ID: Level 6

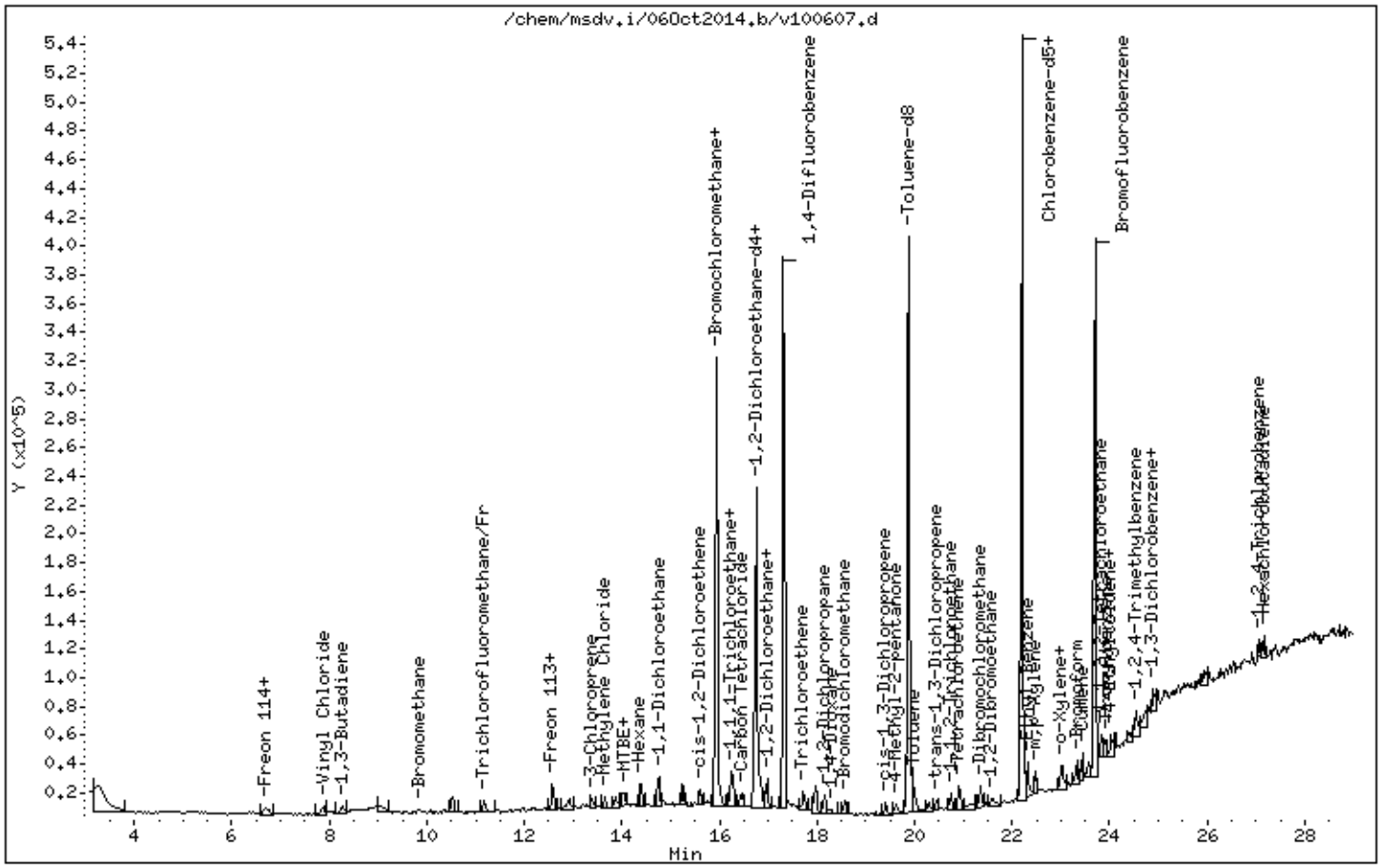
Instrument: msdv.i

Sample Info: 25mL #2677-278

Operator: ef

Column phase: RTx-624

Column diameter: 0.32



Eurofins Air Toxics Inc.

TO15/Modified TO-14A

Data file : /chem1/msdv.i/22Oct2014.b/v102206.d
Lab Smp Id: ICAL Level 7 Client Smp ID: ICAL Level 7
Inj Date : 22-OCT-2014 14:20
Operator : ef Inst ID: msdv.i
Smp Info : 25mL# 2689-31
Misc Info : 0.5ppbv (5.0ppbv) Combo
Comment : Low Level GC-MS
Method : /chem1/msdv.i/22Oct2014.b/v14l1006c.m
Meth Date : 22-Oct-2014 20:02 snguyen Quant Type: ISTD
Cal Date : 22-OCT-2014 14:20 Cal File: v102206.d
Als bottle: 1 Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: Combo-AT7-AT1.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
* 54 Bromochloromethane						CAS #: 74-97-5	
15.934	15.934 (1.000)	130	91571	5.00000		70.00- 130.00	100.00
15.934	15.934 (1.000)	128	71230			47.58- 107.58	77.79
15.934	15.934 (1.000)	49	207118			212.40- 272.40	226.18
* 71 1,4-Difluorobenzene						CAS #: 540-36-3	
17.305	17.305 (1.000)	114	389869	5.00000		70.00- 130.00	100.00
17.305	17.305 (1.000)	88	62069			0.00- 46.08	15.92
* 92 Chlorobenzene-d5						CAS #: 3114-55-4	
22.205	22.205 (1.000)	117	310124	5.00000		70.00- 130.00	100.00
22.205	22.205 (1.000)	82	181096			28.82- 88.82	58.39
13 Vinyl Bromide						CAS #: 593-60-2	
10.967	10.967 (0.688)	106	5926	0.50000	0.5189	70.00- 130.00	100.00
10.967	10.967 (0.688)	108	6332			69.86- 129.86	106.85
15 1-Pentene						CAS #: 109-67-1	
11.256	11.256 (0.706)	55	4612	0.50000	0.5048	70.00- 130.00	100.00
11.256	11.256 (0.706)	42	8151			142.41- 202.41	176.73

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
19 Diethyl Ether					CAS #: 60-29-7		
12.102	12.102 (0.760)	74	2607	0.50000	0.5210	70.00- 130.00	100.00(T)
12.102	12.102 (0.760)	59	4931			162.36- 222.36	189.14
0.000	1.000 (0.000)	31	0			0.00- 30.00	0.00
26 Acetonitrile					CAS #: 75-05-8		
13.502	13.502 (0.847)	41	16156	0.50000	0.4233	70.00- 130.00	100.00(a)
13.502	13.502 (0.847)	40	7456			15.69- 75.69	46.15
13.502	13.502 (0.847)	39	3210			25.67- 85.67	19.87
32 Acrylonitrile					CAS #: 107-13-1		
14.189	14.189 (0.890)	53	9046	0.50000	0.4534	70.00- 130.00	100.00(a)
14.189	14.189 (0.890)	52	8031			54.38- 114.38	88.78
41 1-Hexene					CAS #: 592-41-6		
14.271	14.271 (0.896)	55	3938	0.50000	0.5873	70.00- 130.00	100.00
14.271	14.271 (0.896)	41	6252			152.85- 212.85	158.76
14.271	14.271 (0.896)	84	833			0.00- 53.17	21.15
44 Methyl Acrylate					CAS #: 96-33-3		
15.696	15.696 (0.985)	55	22473	0.50000	0.4732	70.00- 130.00	100.00(a)
15.696	15.696 (0.985)	85	1580			0.00- 38.30	7.03
15.675	15.675 (0.984)	58	1608			0.00- 37.05	7.16
60 Ethyl Acrylate					CAS #: 140-88-5		
17.772	17.772 (1.115)	99	907	0.50000	0.3508	70.00- 130.00	100.00(a)
17.772	17.772 (1.115)	45	3934			301.40- 361.40	433.74
17.772	17.772 (1.115)	55	29511			2545.61-2605.61	3253.69
62 2-Pentanone					CAS #: 107-87-9		
17.964	17.964 (1.127)	43	59984	0.50000	0.5074	70.00- 130.00	100.00
17.964	17.964 (1.127)	58	3389			0.00- 35.77	5.65
17.964	17.964 (1.127)	86	5225			0.00- 39.16	8.71
67 Methyl Methacrylate					CAS #: 80-62-6		
18.156	18.156 (1.139)	41	24823	0.50000	0.4966	70.00- 130.00	100.00(a)
18.156	18.156 (1.139)	69	9448			9.41- 69.41	38.06
18.156	18.156 (1.139)	100	3881			0.00- 45.26	15.63
70 Dibromomethane					CAS #: 74-95-3		
18.376	18.376 (0.828)	174	8700	0.50000	0.4310	70.00- 130.00	100.00(a)
18.376	18.376 (0.828)	93	9656			69.31- 129.31	110.99
18.376	18.376 (0.828)	95	7702			51.34- 111.34	88.53
104 Bis(2-Chloroethyl) Ether					CAS #: 111-44-4		
24.761	24.761 (1.115)	93	29396	0.50000	0.6693	70.00- 130.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
104 Bis(2-Chloroethyl) Ether (continued)							
24.761	24.761 (1.115)	95	9279			3.18- 63.18	31.57
24.761	24.761 (1.115)	63	27622			65.44- 125.44	93.97
16 Pentane					CAS #: 109-66-0		
11.401	11.401 (0.716)	43	54622	0.50000	0.5284	70.00- 130.00	100.00
11.401	11.401 (0.716)	57	6423			0.00- 41.87	11.76
11.401	11.401 (0.716)	72	2981			0.00- 35.35	5.46
85 Nonane					CAS #: 111-84-2		
22.343	22.343 (1.006)	43	36024	0.50000	0.5356	70.00- 130.00	100.00
22.343	22.343 (1.006)	57	24660			37.33- 97.33	68.45
22.343	22.343 (1.006)	85	6274			0.00- 48.12	17.42
110 Undecane					CAS #: 1120-21-4		
25.239	25.239 (1.137)	57	62200	0.50000	0.4841	70.00- 130.00	100.00(a)
25.239	25.239 (1.137)	43	70047			81.76- 141.76	112.62
25.239	25.239 (1.137)	85	13057			0.00- 50.32	20.99
125 Dodecane					CAS #: 112-40-3		
26.315	26.315 (1.185)	85	10543	0.50000	0.4343	70.00- 130.00	100.00(a)
26.315	26.315 (1.185)	57	41470			393.93- 453.93	393.34
26.315	26.315 (1.185)	43	42756			409.24- 469.24	405.54
42 Ethyl Acetate					CAS #: 141-78-6		
15.613	15.613 (0.980)	70	4074	0.50000	0.4927	70.00- 130.00	100.00(a)
15.592	15.592 (0.979)	43	78511			1769.14-1829.14	1927.12
15.592	15.592 (0.979)	61	12570			270.97- 330.97	308.54

QC Flag Legend

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

Report Date: 22-Oct-2014 20:02

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdv.i
Lab File ID: v102206.d
Lab Smp Id: ICAL Level 7
Analysis Type: VOA
Quant Type: ISTD
Operator: ef
Method File: /chem1/msdv.i/22Oct2014.b/v14l1006c.m
Misc Info: 0.5ppbv (5.0ppbv) Combo

Calibration Date: 22-OCT-2014
Calibration Time: 10:10
Client Smp ID: ICAL Level 7
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
54 Bromochloromethan	91528	54917	128139	91571	0.05
71 1,4-Difluorobenze	354906	212944	496868	389869	9.85
92 Chlorobenzene-d5	297425	178455	416395	310124	4.27

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
54 Bromochloromethan	15.93	15.60	16.26	15.93	0.00
71 1,4-Difluorobenze	17.30	16.97	17.63	17.30	0.00
92 Chlorobenzene-d5	22.21	21.88	22.54	22.21	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/msdv.i/22Oct2014.b/v102206.d

Date : 22-OCT-2014 14:20

Client ID: ICAL Level 7

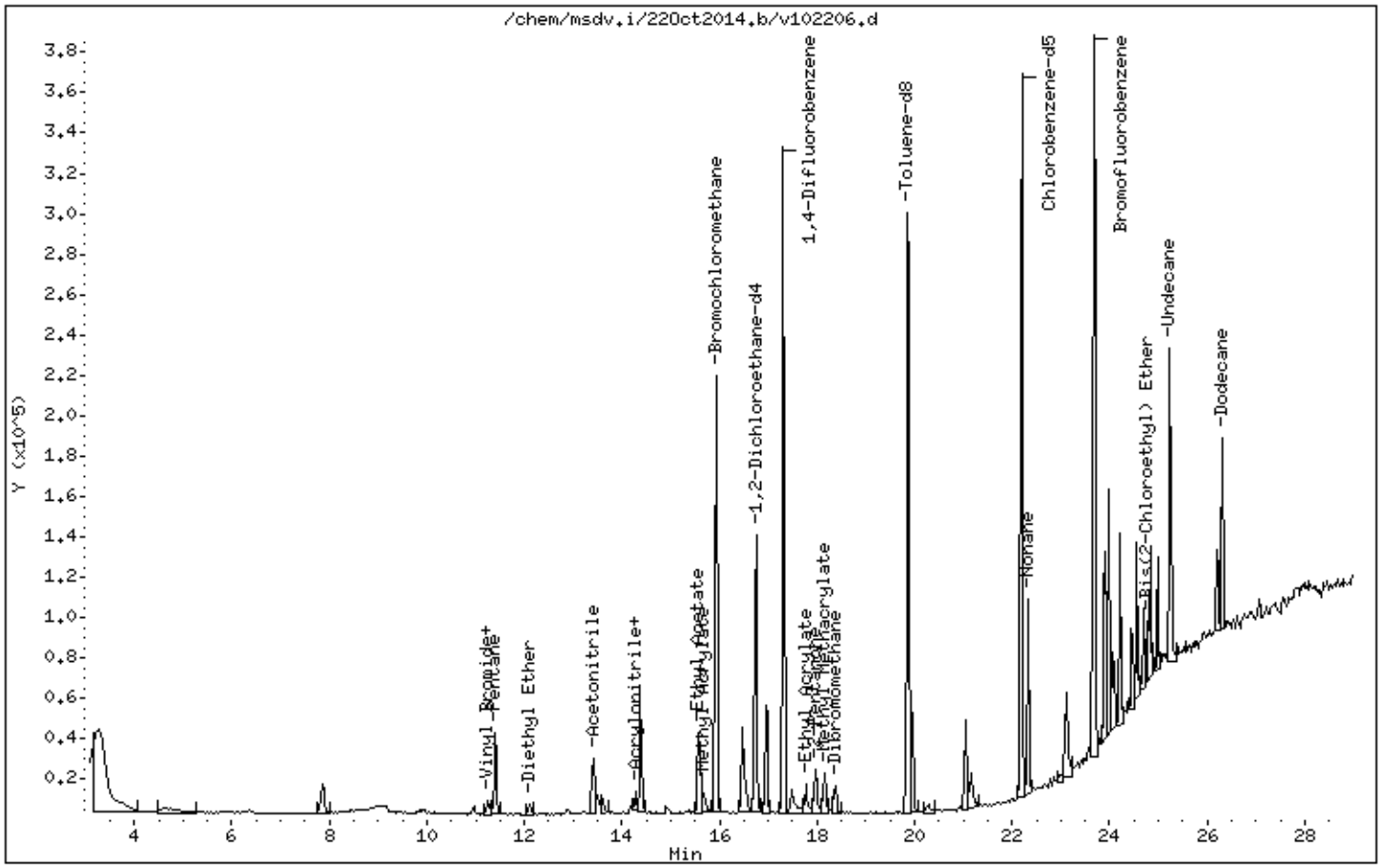
Instrument: msdv.i

Sample Info: 25mL# 2689-31

Operator: ef

Column phase: RTx-624

Column diameter: 0.32



Eurofins Air Toxics Inc.

TO15/Modified TO-14A

Data file : /chem/msdv.i/17Oct2014.b/v101709.d
Lab Smp Id: ICAL Level 7
Inj Date : 17-OCT-2014 15:22
Operator : ef Inst ID: msdv.i
Smp Info : 25mL# 2687-10
Misc Info : 0.5ppbv (5.0ppbv) AT-1
Comment : Low Level GC-MS
Method : /chem/msdv.i/17Oct2014.b/v14l1006b.m
Meth Date : 18-Oct-2014 08:06 lover Quant Type: ISTD
Cal Date : 17-OCT-2014 15:22 Cal File: v101709.d
Als bottle: 1 Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT1crv.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
* 54 Bromochloromethane						CAS #: 74-97-5	
15.933	15.947 (1.000)	130	99562	5.00000		80.00- 120.00	100.00
15.933	15.947 (1.000)	128	79694			48.18- 108.18	80.04
15.933	15.916 (1.000)	49	221716			210.53- 270.53	222.69
* 71 1,4-Difluorobenzene						CAS #: 540-36-3	
17.304	17.318 (1.000)	114	436482	5.00000		80.00- 120.00	100.00
17.304	17.318 (1.000)	88	68135			0.00- 45.98	15.61
* 92 Chlorobenzene-d5						CAS #: 3114-55-4	
22.205	22.219 (1.000)	117	334790	5.00000		80.00- 120.00	100.00
22.205	22.192 (1.000)	82	189371			28.41- 88.41	56.56
1 Freon134a						CAS #: 811-97-2	
4.447	4.560 (0.279)	83	10775	0.50000	0.5150	70.00- 130.00	100.00
4.485	4.560 (0.281)	69	9930			55.07- 115.07	92.16
2 Freon 152A						CAS #: 75-37-6	
4.938	5.051 (0.310)	65	6597	0.50000	0.5336	70.00- 130.00	100.00
4.938	5.051 (0.310)	51	21571			272.07- 332.07	326.98

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
5 Freon 22					CAS #: 75-45-6		
5.731	5.806 (0.360)	51	30449	0.50000	0.5477	70.00- 130.00	100.00
5.693	5.806 (0.357)	67	3405			0.00- 41.79	11.18
6.977	5.806 (0.438)	85	3416			0.00- 37.94	11.22
14 Fr21					CAS #: 75-43-4		
11.280	11.280 (0.708)	67	33567	0.50000	0.5440	70.00- 130.00	100.00
11.280	11.280 (0.708)	69	9635			0.49- 60.49	28.70
11.280	11.280 (0.708)	47	4796			0.00- 45.46	14.29
205 2-Heptanone					CAS #: 110-43-0		
23.111	23.111 (1.041)	58	27262	0.50000	0.5582	70.00- 130.00	100.00
23.111	23.111 (1.041)	43	62692			201.02- 261.02	229.96
206 1-Butanol					CAS #: 71-36-3		
17.497	17.469 (1.011)	56	17475	0.50000	0.3924	70.00- 130.00	100.00(a)
17.497	17.469 (1.011)	41	12464			53.11- 113.11	71.32
17.497	17.469 (1.011)	43	9639			32.89- 92.89	55.16
204 Butyl Acetate					CAS #: 123-86-4		
21.152	21.116 (1.222)	56	12271	0.50000	0.4849	70.00- 130.00	100.00(a)
21.152	21.116 (1.222)	73	4754			1.67- 61.67	38.74
21.152	21.116 (1.222)	43	40439			283.51- 343.51	329.55
56 1,1-Dicholoropropene					CAS #: 563-58-6		
16.457	16.458 (1.033)	110	9193	0.50000	0.5040	70.00- 130.00	100.00
16.457	16.458 (1.033)	75	27480			249.21- 309.21	298.92
91 1,1,1,2-Tetrachloroethane					CAS #: 630-20-6		
22.342	22.343 (1.006)	131	30160	0.50000	0.5445	70.00- 130.00	100.00
22.342	22.343 (1.006)	117	22020			40.73- 100.73	73.01
22.342	22.343 (1.006)	95	11433			8.70- 68.70	37.91
105 1,2,3-Trichloropropane					CAS #: 96-18-4		
23.936	23.936 (1.078)	110	13634	0.50000	0.5594	70.00- 130.00	100.00
23.936	23.936 (1.078)	75	35802			248.74- 308.74	262.59
23.936	23.936 (1.078)	61	13002			67.24- 127.24	95.36
97 Bromobenzene					CAS #: 108-86-1		
23.884	23.884 (1.076)	156	21879	0.50000	0.5207	70.00- 130.00	100.00
23.884	23.884 (1.076)	158	23486			70.23- 130.23	107.34
23.884	23.884 (1.076)	77	46017			166.97- 226.97	210.32
107 2-Chlorotoluene					CAS #: 95-49-8		
24.090	24.091 (1.085)	126	12110	0.50000	0.5229	70.00- 130.00	100.00
24.090	24.091 (1.085)	91	38115			263.05- 323.05	314.74

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
107 2-Chlorotoluene (continued)							
24.090	24.091 (1.085)	65	4748			6.34- 66.34	39.21
109 4-Chlorotoluene					CAS #: 106-43-4		
24.193	24.194 (1.090)	126	12785	0.50000	0.6067	70.00- 130.00	100.00
24.193	24.194 (1.090)	91	29682			237.89- 297.89	232.16
24.193	24.194 (1.090)	63	5552			17.19- 77.19	43.43
115 tert-Butylbenzene					CAS #: 98-06-6		
24.477	24.477 (1.102)	119	30796	0.50000	0.5667	70.00- 130.00	100.00
24.477	24.477 (1.102)	134	7429			0.00- 54.70	24.12
24.477	24.477 (1.102)	91	22185			37.96- 97.96	72.04
119 sec-Butylbenzene					CAS #: 135-98-8		
24.709	24.710 (1.113)	105	41402	0.50000	0.5819	70.00- 130.00	100.00
24.709	24.710 (1.113)	134	8745			0.00- 51.17	21.12
24.709	24.710 (1.113)	91	7161			0.00- 46.66	17.30
116 p-Cymene					CAS #: 99-87-6		
24.835	24.835 (1.118)	119	44878	0.50000	0.6434	70.00- 130.00	100.00
24.835	24.835 (1.118)	134	12563			0.00- 57.73	27.99
24.835	24.835 (1.118)	91	12048			0.00- 54.71	26.85
123 Butylbenzene					CAS #: 104-51-8		
25.261	25.261 (1.138)	134	14415	0.50000	0.6484	70.00- 130.00	100.00
25.261	25.261 (1.138)	91	52075			322.95- 382.95	361.26
25.261	25.261 (1.138)	92	27629			154.37- 214.37	191.67
129 1,2-dibromo-3-chloropropane					CAS #: 96-12-8		
26.225	26.203 (1.181)	157	14655	0.50000	0.4884	70.00- 130.00	100.00(a)
26.202	26.203 (1.180)	75	12976			60.30- 120.30	88.54
26.225	26.203 (1.181)	155	11451			49.02- 109.02	78.14
83 1,3-Dichloropropane					CAS #: 142-28-9		
21.044	21.045 (1.216)	76	32233	0.50000	0.5303	70.00- 130.00	100.00
21.044	21.045 (1.216)	41	38211			86.61- 146.61	118.55
21.044	21.045 (1.216)	78	11453			2.78- 62.78	35.53

QC Flag Legend

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

Report Date: 20-Oct-2014 08:42

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdv.i
Lab File ID: v101709.d
Lab Smp Id: ICAL Level 7
Analysis Type: VOA
Quant Type: ISTD
Operator: ef
Method File: /chem/msdv.i/17Oct2014.b/v14l1006b.m
Misc Info: 0.5ppbv (5.0ppbv) AT-1

Calibration Date: 17-OCT-2014
Calibration Time: 09:45

Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
54 Bromochloromethan	116594	69956	163232	99562	-14.61
71 1,4-Difluorobenze	480411	288247	672575	436482	-9.14
92 Chlorobenzene-d5	391969	235181	548757	334790	-14.59

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
54 Bromochloromethan	15.95	15.62	16.28	15.93	-0.09
71 1,4-Difluorobenze	17.32	16.99	17.65	17.30	-0.08
92 Chlorobenzene-d5	22.22	21.89	22.55	22.21	-0.06

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

Data File: /chem/msdv.i/17Oct2014.b/v101709.d

Date : 17-OCT-2014 15:22

Client ID:

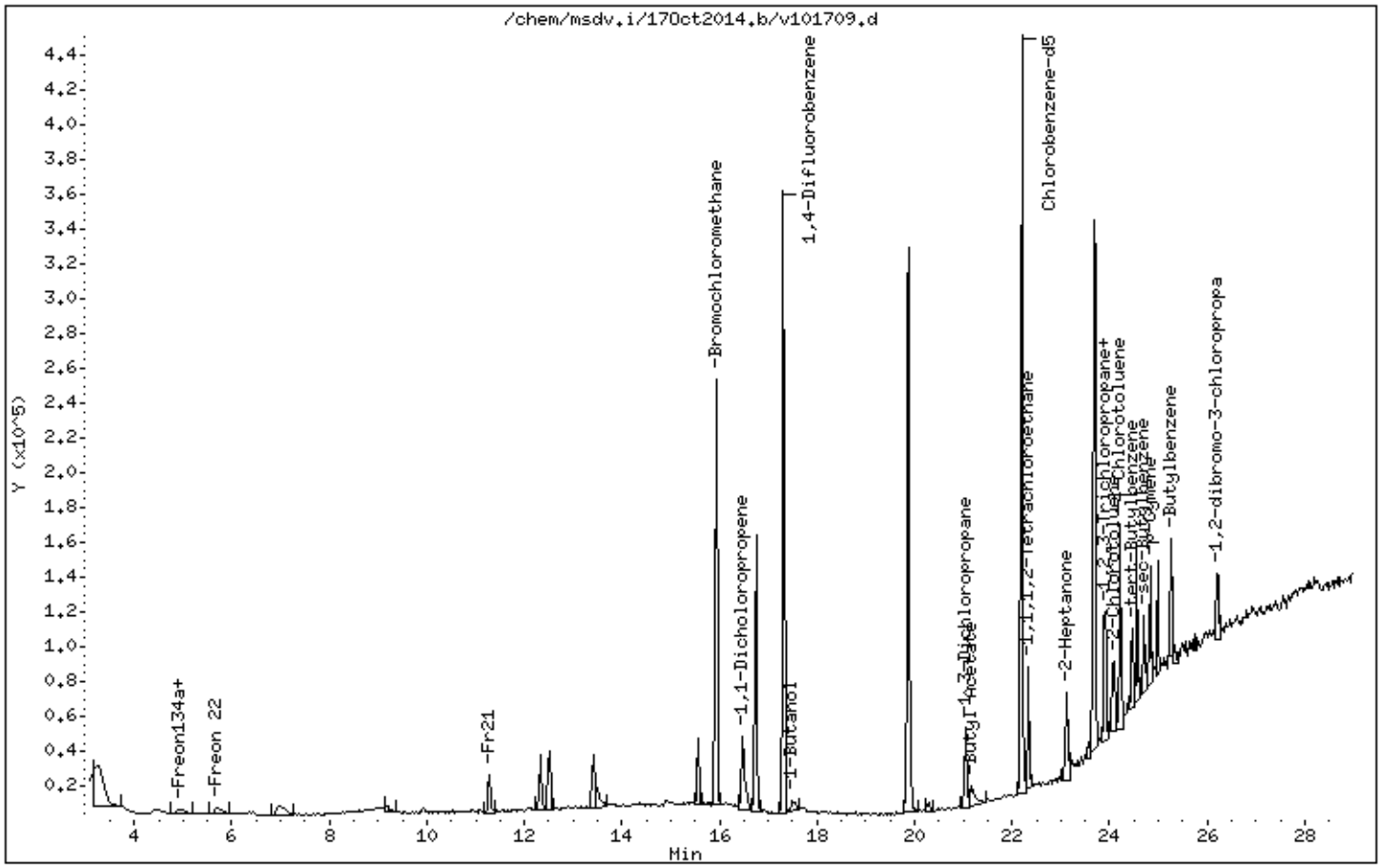
Instrument: msdv.i

Sample Info: 25mL# 2687-10

Operator: ef

Column phase: RTx-624

Column diameter: 0.32



Eurofins Air Toxics Inc.

TO15/Modified TO-14A

Data file : /chem/msdv.i/17Oct2014.b/v101706.d
Lab Smp Id: ICAL Level 7
Inj Date : 17-OCT-2014 12:42
Operator : ef Inst ID: msdv.i
Smp Info : 25mL# 2687-8
Misc Info : 0.5ppbv (5.0ppbv)
Comment : Low Level GC-MS
Method : /chem/msdv.i/17Oct2014.b/v14l1006b.m
Meth Date : 18-Oct-2014 08:06 lover Quant Type: ISTD
Cal Date : 17-OCT-2014 15:22 Cal File: v101709.d
Als bottle: 1 Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: Oxy.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
* 54 Bromochloromethane						CAS #: 74-97-5	
15.933	15.947 (1.000)	130	104372	5.00000		80.00- 120.00	100.00
15.933	15.947 (1.000)	128	79603			48.18- 108.18	76.27
15.933	15.916 (1.000)	49	224518			210.53- 270.53	215.11
* 71 1,4-Difluorobenzene						CAS #: 540-36-3	
17.305	17.318 (1.000)	114	438823	5.00000		80.00- 120.00	100.00
17.305	17.318 (1.000)	88	69861			0.00- 45.98	15.92
* 92 Chlorobenzene-d5						CAS #: 3114-55-4	
22.205	22.219 (1.000)	117	345776	5.00000		80.00- 120.00	100.00
22.205	22.192 (1.000)	82	191745			28.41- 88.41	55.45
38 tert-butyl alcohol						CAS #: 75-65-0	
13.859	13.859 (0.870)	59	51398	0.50000	0.5286	80.00- 120.00	100.00
13.859	13.859 (0.870)	41	17514			1.21- 61.21	34.08
13.859	13.859 (0.870)	57	5005			0.00- 40.48	9.74
45 Isopropyl ether						CAS #: 108-20-3	
14.738	14.738 (0.925)	45	113381	0.50000	0.5377	80.00- 120.00	100.00

RT	EXP RT	(REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
45 Isopropyl ether (continued)								
14.738	14.738	(0.925)	87	15169			0.00- 43.46	13.38
14.738	14.738	(0.925)	59	9246			0.00- 38.28	8.15
49 Ethyl-tert-butyl ether						CAS #: 637-92-3		
15.240	15.240	(0.956)	59	84753	0.50000	0.5212	80.00- 120.00	100.00
15.240	15.240	(0.956)	87	25879			0.00- 58.99	30.53
15.240	15.240	(0.956)	41	22046			0.00- 55.20	26.01
66 tert-amyl methyl ether						CAS #: 994-05-8		
16.810	16.810	(0.971)	87	14796	0.50000	0.5322	80.00- 120.00	100.00
16.810	16.810	(0.971)	73	61437			391.10- 451.10	415.23
16.810	16.810	(0.971)	55	23551			132.07- 192.07	159.17

Report Date: 20-Oct-2014 08:42

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdv.i
Lab File ID: v101706.d
Lab Smp Id: ICAL Level 7
Analysis Type: VOA
Quant Type: ISTD
Operator: ef
Method File: /chem/msdv.i/17Oct2014.b/v14l1006b.m
Misc Info: 0.5ppbv (5.0ppbv)

Calibration Date: 17-OCT-2014
Calibration Time: 09:45

Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
54 Bromochloromethan	116594	69956	163232	104372	-10.48
71 1,4-Difluorobenze	480411	288247	672575	438823	-8.66
92 Chlorobenzene-d5	391969	235181	548757	345776	-11.78

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
54 Bromochloromethan	15.95	15.62	16.28	15.93	-0.09
71 1,4-Difluorobenze	17.32	16.99	17.65	17.30	-0.08
92 Chlorobenzene-d5	22.22	21.89	22.55	22.21	-0.06

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

Data File: /chem/msdv.i/17Oct2014.b/v101706.d

Date : 17-OCT-2014 12:42

Client ID:

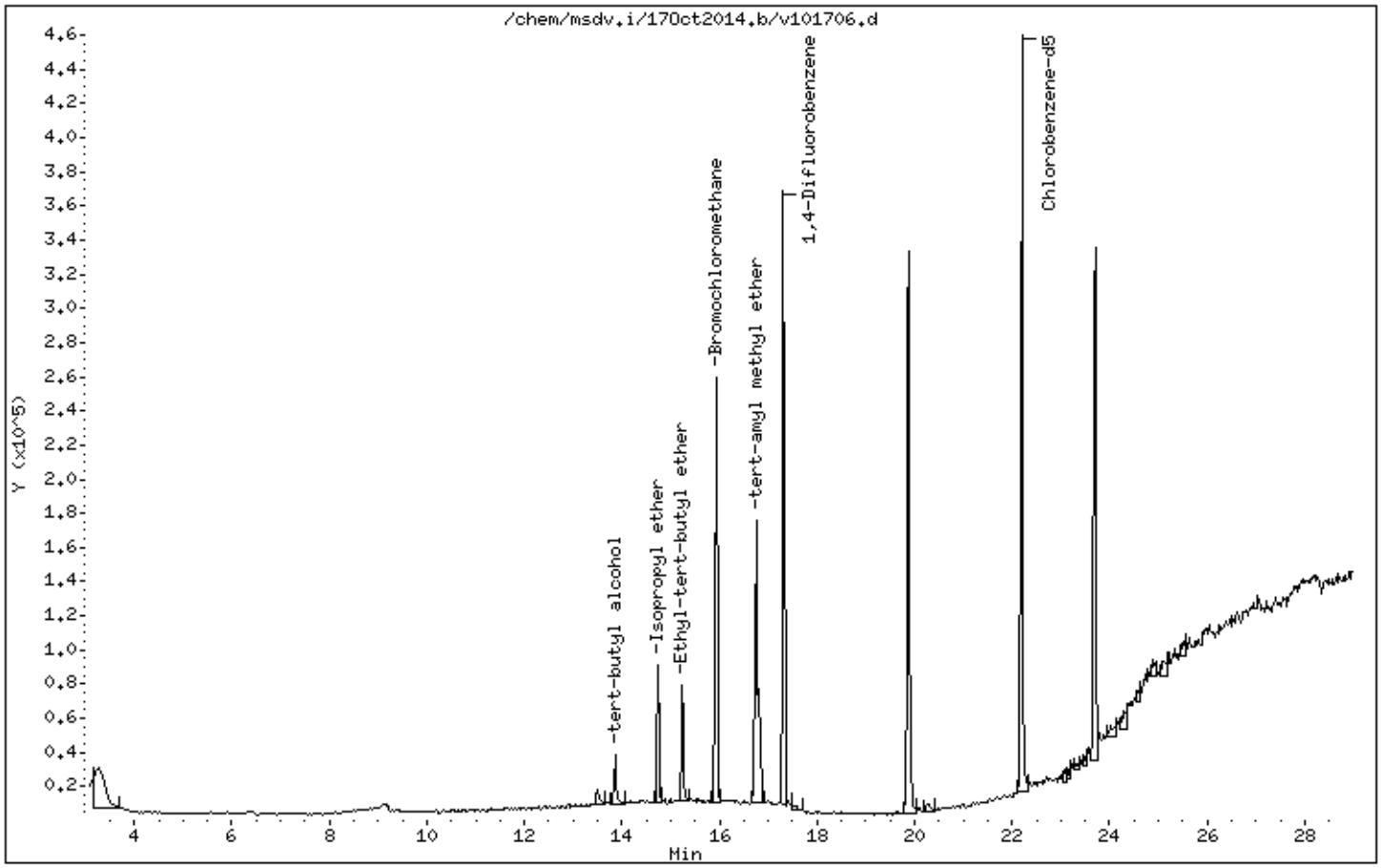
Instrument: msdv.i

Sample Info: 25mL# 2687-8

Operator: ef

Column phase: RTx-624

Column diameter: 0.32



Eurofins Air Toxics Inc.

TO15/Modified TO-14A

Data file : /chem/msdv.i/07Oct2014.b/v100709.d
Lab Smp Id: ICAL Client Smp ID: Level 7
Inj Date : 07-OCT-2014 18:39
Operator : gd Inst ID: msdv.i
Smp Info : 25mL #2677-286
Misc Info : 0.5ppbv (5.0ppbv)
Comment : Low Level GC-MS
Method : /chem/msdv.i/07Oct2014.b/v14l1006a.m
Meth Date : 07-Oct-2014 22:27 gdelacru Quant Type: ISTD
Cal Date : 07-OCT-2014 18:39 Cal File: v100709.d
Als bottle: 4 Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT7crv.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
* 54 Bromochloromethane						CAS #: 74-97-5	
15.934	15.934 (1.000)	130	103540	5.00000		80.00- 120.00	100.00
15.934	15.934 (1.000)	128	82294			48.21- 108.21	79.48
15.934	15.934 (1.000)	49	244383			215.61- 275.61	236.03
* 71 1,4-Difluorobenzene						CAS #: 540-36-3	
17.305	17.305 (1.000)	114	450706	5.00000		80.00- 120.00	100.00
17.305	17.305 (1.000)	88	71992			0.00- 46.17	15.97
* 92 Chlorobenzene-d5						CAS #: 3114-55-4	
22.205	22.205 (1.000)	117	339850	5.00000		80.00- 120.00	100.00
22.205	22.205 (1.000)	82	201486			29.34- 89.34	59.29
76 Octane						CAS #: 111-65-9	
19.968	19.968 (1.154)	57	19830	0.50000	0.5053	80.00- 120.00	100.00
19.968	19.968 (1.154)	85	14716			45.62- 105.62	74.21
19.968	19.968 (1.154)	43	69056			293.94- 353.94	348.24
99 Decane						CAS #: 124-18-5	
23.987	23.987 (1.080)	57	57810	0.50000	0.5546	80.00- 120.00	100.00

RT	EXP RT	(REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
99 Decane (continued)								
23.987	23.987	(1.080)	71	15345			0.00- 57.94	26.54
23.987	23.987	(1.080)	142	2143			0.00- 33.26	3.71
117 Indene						CAS #: 95-13-6		
25.485	25.485	(1.148)	115	27918	0.50000	0.5749	80.00- 120.00	100.00(T)
25.485	25.485	(1.148)	116	29351			67.11- 127.11	105.13
0.000	25.485	(0.000)	0	0			0.00- 30.00	0.00
121 1,2,3-trimethylbenzene						CAS #: 526-73-8		
24.992	24.992	(1.125)	120	16454	0.50000	0.5743	80.00- 120.00	100.00
24.992	24.992	(1.125)	105	35261			192.71- 252.71	214.30
24.992	24.992	(1.125)	77	6557			2.83- 62.83	39.85

QC Flag Legend

T - Target compound detected outside RT window.

Report Date: 08-Oct-2014 08:26

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdv.i
Lab File ID: v100709.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: gd
Method File: /chem/msdv.i/07Oct2014.b/v14l1006a.m
Misc Info: 0.5ppbv (5.0ppbv)

Calibration Date: 07-OCT-2014
Calibration Time: 12:28
Client Smp ID: Level 7
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
54 Bromochloromethan	122750	73650	171850	103540	-15.65
71 1,4-Difluorobenze	498533	299120	697946	450706	-9.59
92 Chlorobenzene-d5	397978	238787	557169	339850	-14.61

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
54 Bromochloromethan	15.93	15.60	16.26	15.93	0.00
71 1,4-Difluorobenze	17.30	16.97	17.63	17.30	0.00
92 Chlorobenzene-d5	22.21	21.88	22.54	22.21	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/msdv.i/07Oct2014.b/v100709.d

Date : 07-OCT-2014 18:39

Client ID: Level 7

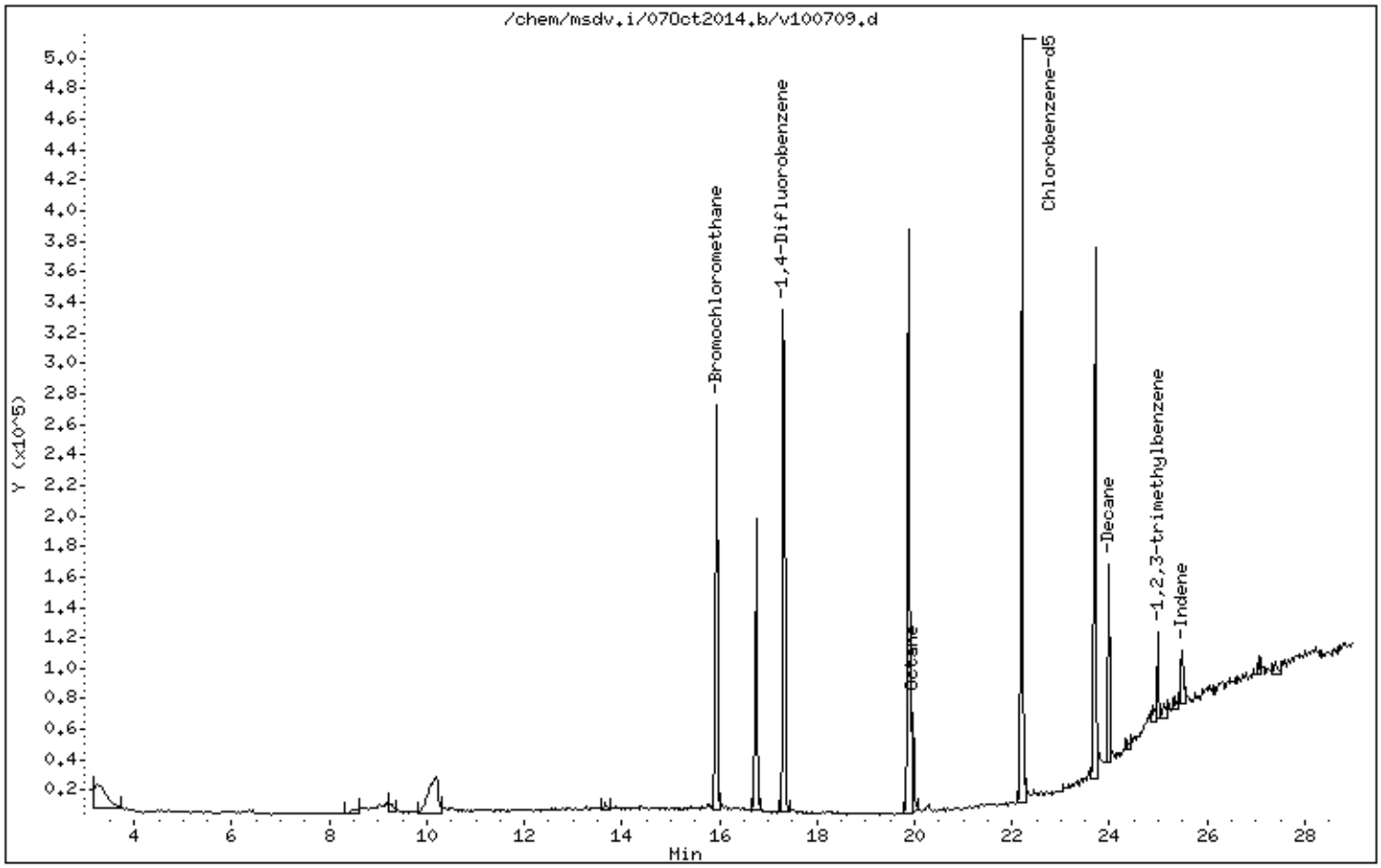
Instrument: msdv.i

Sample Info: 25mL #2677-286

Operator: gd

Column phase: RTx-624

Column diameter: 0.32



Eurofins Air Toxics Inc.

TO15/Modified TO-14A

Data file : /chem/msdv.i/06Oct2014.b/v100608.d
Lab Smp Id: ICAL Client Smp ID: Level 7
Inj Date : 06-OCT-2014 15:47
Operator : ef Inst ID: msdv.i
Smp Info : 125mL #2677-278
Misc Info : 0.5ppbv (1.0ppbv)
Comment : Low Level GC-MS
Method : /chem/msdv.i/06Oct2014.b/v14l1006a.m
Meth Date : 07-Oct-2014 11:32 efinn Quant Type: ISTD
Cal Date : 06-OCT-2014 15:47 Cal File: v100608.d
Als bottle: 1 Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: HiLoFULLcrv.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
* 54 Bromochloromethane					CAS #: 74-97-5		
15.933	15.933 (1.000)	130	120259	5.00000		70.00- 130.00	100.00
15.933	15.933 (1.000)	128	93964			47.54- 107.54	78.13
15.933	15.933 (1.000)	49	299027			218.45- 278.45	248.65
* 71 1,4-Difluorobenzene					CAS #: 540-36-3		
17.305	17.305 (1.000)	114	486142	5.00000		70.00- 130.00	100.00
17.305	17.305 (1.000)	88	80783			0.00- 46.16	16.62
* 92 Chlorobenzene-d5					CAS #: 3114-55-4		
22.205	22.205 (1.000)	117	382777	5.00000		70.00- 130.00	100.00
22.205	22.205 (1.000)	82	224408			29.12- 89.12	58.63
$ 65 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
16.756	16.756 (1.052)	65	214391	5.00000	4.858	70.00- 130.00	100.00
16.756	16.756 (1.052)	67	103519			28.37- 88.37	48.29
$ 80 Toluene-d8					CAS #: 2037-26-5		
19.879	19.879 (1.149)	98	467006	5.00000	4.996	70.00- 130.00	100.00
19.879	19.879 (1.149)	70	53187			0.00- 41.90	11.39

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

$  80 Toluene-d8 (continued)
 19.879  19.879 (1.149)   100    290038                    33.85-  93.85    62.11
-------------------------------------------------------------------------------
$ 106 Bromofluorobenzene                            CAS #: 460-00-4
 23.704  23.704 (1.067)   174    154004 5.00000    4.678  70.00- 130.00   100.00
 23.704  23.704 (1.067)    95    197666                   99.95- 159.95   128.35
 23.704  23.704 (1.067)   176    149443                   67.64- 127.64    97.04
-------------------------------------------------------------------------------
    3 Propylene                                     CAS #: 115-07-1
  4.711   4.711 (0.296)    41     38237 0.50000   0.5667  70.00- 130.00   100.00
  4.711   4.711 (0.296)    42     25636                   35.18-  95.18    67.05
  4.673   4.673 (0.293)    39     27340                   44.12- 104.12    71.50
-------------------------------------------------------------------------------
    4 Dichlorodifluoromethane/Fr12                  CAS #: 75-71-8
  5.240   5.240 (0.329)    85     55373 0.50000   0.4915  70.00- 130.00   100.00
  5.202   5.202 (0.326)    87     17513                    1.90-  61.90    31.63
-------------------------------------------------------------------------------
    6 Freon 114                                     CAS #: 76-14-2
  6.750   6.750 (0.424)   135     39124 0.50000   0.4862  70.00- 130.00   100.00
  6.750   6.750 (0.424)   137     11158                    0.53-  60.53    28.52
  6.750   6.750 (0.424)    85     58788                  121.37- 181.37   150.26
-------------------------------------------------------------------------------
    8 Chloromethane                                 CAS #: 74-87-3
  7.090   7.090 (0.445)    50     32428 0.50000   0.4776  70.00- 130.00   100.00
  7.090   7.090 (0.445)    52     11602                    1.81-  61.81    35.78
-------------------------------------------------------------------------------
    9 Butane                                        CAS #: 106-97-8
  7.884   7.884 (0.495)    58      5736 0.50000   0.5041  70.00- 130.00   100.00
  7.884   7.884 (0.495)    43     63363                 1065.18-1125.18  1104.65
-------------------------------------------------------------------------------
   10 Vinyl Chloride                                CAS #: 75-01-4
  8.009   8.009 (0.503)    62     23990 0.50000   0.4735  70.00- 130.00   100.00
  8.009   8.009 (0.503)    64      6909                    0.00-  58.65    28.80
-------------------------------------------------------------------------------
   11 1,3-Butadiene                                 CAS #: 106-99-0
  8.257   8.257 (0.518)    54     24293 0.50000   0.4891  70.00- 130.00   100.00
  8.257   8.257 (0.518)    39     37260                  107.15- 167.15   153.38
-------------------------------------------------------------------------------
   12 Bromomethane                                  CAS #: 74-83-9
  9.834   9.834 (0.617)    94     13143 0.50000   0.4231  70.00- 130.00   100.00
  9.834   9.834 (0.617)    96     14743                   72.12- 132.12   112.17
-------------------------------------------------------------------------------
   17 Chloroethane                                  CAS #: 75-00-3
 10.364  10.364 (0.650)    64     10587 0.50000   0.4496  70.00- 130.00   100.00
 10.364  10.364 (0.650)    66      3703                    0.00-  59.90    34.98
-------------------------------------------------------------------------------
```

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
18 Isopentane					CAS #: 78-78-4		
10.533	10.533 (0.661)	57	24351	0.50000	0.5020	70.00- 130.00	100.00
10.533	10.533 (0.661)	43	45722			171.32- 231.32	187.76
10.533	10.533 (0.661)	42	43503			150.03- 210.03	178.65
20 Trichlorofluoromethane/Fr11					CAS #: 75-69-4		
11.183	11.183 (0.702)	101	54723	0.50000	0.4718	70.00- 130.00	100.00
11.183	11.183 (0.702)	103	34505			36.54- 96.54	63.05
24 Ethanol					CAS #: 64-17-5		
12.156	12.156 (0.763)	45	9143	0.50000	0.3719	70.00- 130.00	100.00
12.184	12.184 (0.765)	46	4049			8.51- 68.51	44.29
12.156	12.156 (0.763)	43	4194			0.00- 54.10	45.87
30 1,1-Dichloroethene					CAS #: 75-35-4		
12.568	12.568 (0.789)	98	12794	0.50000	0.4937	70.00- 130.00	100.00
12.568	12.568 (0.789)	61	42434			320.65- 380.65	331.67
12.568	12.568 (0.789)	96	21325			134.30- 194.30	166.68
28 Freon 113					CAS #: 76-13-1		
12.596	12.596 (0.791)	151	33327	0.50000	0.4774	70.00- 130.00	100.00
12.596	12.596 (0.791)	153	21246			33.10- 93.10	63.75
12.568	12.568 (0.789)	101	43479			96.37- 156.37	130.46
31 Acetone					CAS #: 67-64-1		
12.843	12.843 (0.806)	58	14630	0.50000	0.5149	70.00- 130.00	100.00
12.843	12.843 (0.806)	43	60558			413.15- 473.15	413.93
33 Carbon Disulfide					CAS #: 75-15-0		
12.925	12.925 (0.811)	76	53342	0.50000	0.4839	70.00- 130.00	100.00
35 3-Chloroprene					CAS #: 107-05-1		
13.392	13.392 (0.841)	76	6672	0.50000	0.4194	70.00- 130.00	100.00
13.392	13.392 (0.841)	41	40158			547.03- 607.03	601.89
34 2-Propanol					CAS #: 67-63-0		
13.200	13.200 (0.828)	45	53616	0.50000	0.4075	70.00- 130.00	100.00
13.200	13.200 (0.828)	43	13981			0.00- 50.74	26.08
13.200	13.200 (0.828)	59	1661			0.00- 32.83	3.10
37 Methylene Chloride					CAS #: 75-09-2		
13.667	13.667 (0.858)	84	18099	0.50000	0.4950	70.00- 130.00	100.00
13.667	13.667 (0.858)	49	43100			212.37- 272.37	238.13
13.667	13.667 (0.858)	51	13704			43.31- 103.31	75.72
38 tert-butyl alcohol					CAS #: 75-65-0		
13.859	13.859 (0.870)	59	51905	0.50000	0.4501	70.00- 130.00	100.00

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

   38 tert-butyl alcohol (continued)
 13.859  13.859 (0.870)    41     18735                     1.97-  61.97    36.09
 13.859  13.859 (0.870)    57      5762                     0.00-  40.67    11.10
-------------------------------------------------------------------------------
   39 MTBE                                          CAS #: 1634-04-4
 14.024  14.024 (0.880)    73     60751 0.50000   0.4631  70.00- 130.00   100.00
 13.996  13.996 (0.878)    57     20014                     2.99-  62.99    32.94
 13.996  13.996 (0.878)    41     25504                    12.12-  72.12    41.98
-------------------------------------------------------------------------------
   40 trans-1,2-Dichloroethene                      CAS #: 156-60-5
 14.051  14.051 (0.882)    98     11945 0.50000   0.4871  70.00- 130.00   100.00
 14.051  14.051 (0.882)    61     38803                   293.73- 353.73   324.85
 14.051  14.051 (0.882)    96     18716                   146.88- 206.88   156.68
-------------------------------------------------------------------------------
   43 Hexane                                        CAS #: 110-54-3
 14.381  14.381 (0.903)    57     50018 0.50000   0.4765  70.00- 130.00   100.00
 14.381  14.381 (0.903)    43     41885                    57.65- 117.65    83.74
 14.381  14.381 (0.903)    86      5015                     0.00-  40.67    10.03
-------------------------------------------------------------------------------
   45 Isopropyl ether                               CAS #: 108-20-3
 14.738  14.738 (0.925)    45    124930 0.50000   0.4582  70.00- 130.00   100.00
 14.738  14.738 (0.925)    87     18176                     0.00-  43.44    14.55
 14.738  14.738 (0.925)    59     11875                     0.00-  38.34     9.51
-------------------------------------------------------------------------------
   46 1,1-Dichloroethane                            CAS #: 75-34-3
 14.765  14.765 (0.927)    63     49013 0.50000   0.4812  70.00- 130.00   100.00
 14.765  14.765 (0.927)    65     14306                     0.37-  60.37    29.19
-------------------------------------------------------------------------------
   47 Vinyl Acetate                                 CAS #: 108-05-4
 14.820  14.820 (0.930)    86      3910 0.50000   0.3761  70.00- 130.00   100.00
 14.820  14.820 (0.930)    42      6868                   220.92- 280.92   175.65
 14.820  14.820 (0.930)    43    108054                  3282.47-3342.47  2763.53
-------------------------------------------------------------------------------
   49 Ethyl-tert-butyl ether                        CAS #: 637-92-3
 15.240  15.240 (0.956)    59     88410 0.50000   0.4758  70.00- 130.00   100.00
 15.240  15.240 (0.956)    87     24483                     0.00-  58.71    27.69
 15.240  15.240 (0.956)    41     24046                     0.00-  56.39    27.20
-------------------------------------------------------------------------------
   50 cis-1,2-Dichloroethene                        CAS #: 156-59-2
 15.592  15.592 (0.979)    98     16155 0.50000   0.4965  70.00- 130.00   100.00
 15.592  15.592 (0.979)    61     43416                   248.69- 308.69   268.75
 15.592  15.592 (0.979)    96     25570                   132.55- 192.55   158.28
-------------------------------------------------------------------------------
   51 2-Butanone                                    CAS #: 78-93-3
 15.592  15.592 (0.979)    72      7703 0.50000   0.3642  70.00- 130.00   100.00
 15.592  15.592 (0.979)    43     69697                   794.80- 854.80   904.80
```

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
51 2-Butanone (continued)							
15.613	15.613 (0.980)	57	4120			18.01- 78.01	53.49
53 Tetrahydrofuran					CAS #: 109-99-9		
15.933	15.933 (1.000)	42	53558	0.50000	0.4914	70.00- 130.00	100.00
15.933	15.933 (1.000)	71	9430			0.00- 49.03	17.61
15.933	15.933 (1.000)	72	12089			0.00- 51.35	22.57
55 Chloroform					CAS #: 67-66-3		
15.995	15.995 (1.004)	83	50312	0.50000	0.4964	70.00- 130.00	100.00
15.995	15.995 (1.004)	85	31269			33.33- 93.33	62.15
57 Cyclohexane					CAS #: 110-82-7		
16.272	16.272 (1.021)	84	33557	0.50000	0.5265	70.00- 130.00	100.00
16.272	16.272 (1.021)	56	57135			157.43- 217.43	170.26
16.272	16.272 (1.021)	41	40398			105.99- 165.99	120.39
58 1,1,1-Trichloroethane					CAS #: 71-55-6		
16.242	16.242 (1.019)	97	48839	0.50000	0.4615	70.00- 130.00	100.00
16.242	16.242 (1.019)	99	32342			32.16- 92.16	66.22
59 Carbon Tetrachloride					CAS #: 56-23-5		
16.457	16.457 (1.033)	119	45905	0.50000	0.4522	70.00- 130.00	100.00
16.457	16.457 (1.033)	117	49247			69.67- 129.67	107.28
63 2,2,4-Trimethylpentane					CAS #: 540-84-1		
16.728	16.728 (1.050)	56	53085	0.50000	0.4779	70.00- 130.00	100.00
16.728	16.728 (1.050)	57	154476			258.69- 318.69	291.00
16.728	16.728 (1.050)	41	59422			79.91- 139.91	111.94
64 Benzene					CAS #: 71-43-2		
16.783	16.783 (0.970)	78	70591	0.50000	0.4920	70.00- 130.00	100.00
16.756	16.756 (0.968)	77	17451			0.00- 53.73	24.72
66 tert-amyl methyl ether					CAS #: 994-05-8		
16.810	16.810 (0.971)	87	15127	0.50000	0.4656	70.00- 130.00	100.00
16.810	16.810 (0.971)	73	65045			399.95- 459.95	429.99
16.810	16.810 (0.971)	55	27814			143.62- 203.62	183.87
68 1,2-Dichloroethane					CAS #: 107-06-2		
16.865	16.865 (0.975)	62	40011	0.50000	0.4602	70.00- 130.00	100.00
16.865	16.865 (0.975)	64	12309			1.11- 61.11	30.76
69 Heptane					CAS #: 142-82-5		
16.975	16.975 (0.981)	57	29412	0.50000	0.4757	70.00- 130.00	100.00
16.975	16.975 (0.981)	100	6487			0.00- 51.27	22.06

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
69 Heptane (continued)							
16.975	16.975 (0.981)	43	72995			235.24- 295.24	248.18
72 Trichloroethene					CAS #: 79-01-6		
17.716	17.716 (1.024)	130	32096	0.50000	0.4970	70.00- 130.00	100.00
17.716	17.716 (1.024)	95	32152			71.16- 131.16	100.17
17.716	17.716 (1.024)	97	19437			33.04- 93.04	60.56
73 Methylcyclohexane					CAS #: 108-87-2		
17.964	17.964 (1.038)	83	37860	0.50000	0.4464	70.00- 130.00	100.00
17.964	17.964 (1.038)	98	16507			15.02- 75.02	43.60
17.964	17.964 (1.038)	55	49965			95.64- 155.64	131.97
74 1,2-Dichloropropane					CAS #: 78-87-5		
18.156	18.156 (1.049)	63	31185	0.50000	0.4739	70.00- 130.00	100.00
18.156	18.156 (1.049)	62	24195			45.17- 105.17	77.59
18.156	18.156 (1.049)	41	26921			59.65- 119.65	86.33
75 1,4-Dioxane					CAS #: 123-91-1		
18.293	18.293 (1.057)	88	14599	0.50000	0.4414	70.00- 130.00	100.00
18.293	18.293 (1.057)	58	14613			72.13- 132.13	100.10
18.293	18.293 (1.057)	57	4983			4.41- 64.41	34.13
77 Bromodichloromethane					CAS #: 75-27-4		
18.568	18.568 (1.073)	83	48554	0.50000	0.4456	70.00- 130.00	100.00
18.568	18.568 (1.073)	85	32401			32.12- 92.12	66.73
78 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
19.408	19.408 (1.122)	75	33226	0.50000	0.4462	70.00- 130.00	100.00
19.408	19.408 (1.122)	77	10641			1.25- 61.25	32.03
19.408	19.408 (1.122)	39	33340			71.17- 131.17	100.34
79 4-Methyl-2-pentanone					CAS #: 108-10-1		
19.610	19.610 (1.133)	43	84614	0.50000	0.4178	70.00- 130.00	100.00
19.610	19.610 (1.133)	58	22717			0.00- 57.24	26.85
19.610	19.610 (1.133)	85	6996			0.00- 38.20	8.27
81 Toluene					CAS #: 108-88-3		
19.991	19.991 (1.155)	91	74018	0.50000	0.4674	70.00- 130.00	100.00
19.991	19.991 (1.155)	92	43608			28.60- 88.60	58.92
82 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
20.435	20.435 (0.920)	75	36691	0.50000	0.4650	70.00- 130.00	100.00
20.435	20.435 (0.920)	77	15467			5.48- 65.48	42.15
20.435	20.435 (0.920)	39	29172			63.15- 123.15	79.51

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

   84 1,1,2-Trichloroethane                        CAS #: 79-00-5
 20.757  20.757 (0.935)    97     28557 0.50000   0.4740  70.00- 130.00   100.00
 20.757  20.757 (0.935)    99     18705                   32.13-  92.13    65.50
 20.757  20.757 (0.935)    83     24917                   57.82- 117.82    87.25
-------------------------------------------------------------------------------
   86 Tetrachloroethene                            CAS #: 127-18-4
 20.901  20.901 (0.941)   166     37826 0.50000   0.4856  70.00- 130.00   100.00
 20.901  20.901 (0.941)   129     27646                   47.04- 107.04    73.09
 20.901  20.901 (0.941)   131     27765                   46.95- 106.95    73.40
-------------------------------------------------------------------------------
   87 2-Hexanone                                   CAS #: 591-78-6
 21.044  21.044 (0.948)    58     25201 0.50000   0.3735  70.00- 130.00   100.00
 21.044  21.044 (0.948)    43     71966                  242.48- 302.48   285.57
 21.044  21.044 (0.948)   100      3396                    0.00-  43.88    13.48
-------------------------------------------------------------------------------
   89 Dibromochloromethane                         CAS #: 124-48-1
 21.367  21.367 (0.962)   129     48941 0.50000   0.4364  70.00- 130.00   100.00
 21.367  21.367 (0.962)   127     38174                   50.38- 110.38    78.00
-------------------------------------------------------------------------------
   90 1,2-Dibromoethane                            CAS #: 106-93-4
 21.583  21.583 (0.972)   107     41603 0.50000   0.4432  70.00- 130.00   100.00
 21.583  21.583 (0.972)   109     37253                   62.69- 122.69    89.54
-------------------------------------------------------------------------------
   93 Chlorobenzene                                CAS #: 108-90-7
 22.233  22.233 (1.001)   112     61430 0.50000   0.4887  70.00- 130.00   100.00
 22.233  22.233 (1.001)   114     19522                    1.62-  61.62    31.78
 22.233  22.233 (1.001)    77     42245                   38.66-  98.66    68.77
-------------------------------------------------------------------------------
   95 Ethyl Benzene                                CAS #: 100-41-4
 22.315  22.315 (1.005)   106     25630 0.50000   0.4543  70.00- 130.00   100.00
 22.315  22.315 (1.005)    91     84657                  292.36- 352.36   330.30
-------------------------------------------------------------------------------
   96 m,p-Xylene                                   CAS #: 108-38-3
 22.480  22.480 (1.012)   106     24121 0.50000   0.4336  70.00- 130.00   100.00
 22.480  22.480 (1.012)    91     46913                  164.15- 224.15   194.49
-------------------------------------------------------------------------------
  100 o-Xylene                                     CAS #: 95-47-6
 23.001  23.001 (1.036)   106     22624 0.50000   0.4370  70.00- 130.00   100.00
 23.001  23.001 (1.036)    91     46479                  186.63- 246.63   205.44
-------------------------------------------------------------------------------
  101 Styrene                                      CAS #: 100-42-5
 23.029  23.029 (1.037)   104     32628 0.50000   0.4308  70.00- 130.00   100.00
 23.029  23.029 (1.037)    78     16563                   28.70-  88.70    50.76
-------------------------------------------------------------------------------
  102 Bromoform                                    CAS #: 75-25-2
 23.331  23.331 (1.051)   173     39084 0.50000   0.4112  70.00- 130.00   100.00
```

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
102 Bromoform (continued)							
23.331	23.331 (1.051)	171	20099			20.40- 80.40	51.43
103 Cumene					CAS #: 98-82-8		
23.441	23.441 (1.056)	105	63511	0.50000	0.4201	70.00- 130.00	100.00
23.441	23.441 (1.056)	120	17940			0.00- 57.73	28.25
108 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
23.833	23.833 (1.073)	83	55297	0.50000	0.4762	70.00- 130.00	100.00
23.833	23.833 (1.073)	85	34052			34.81- 94.81	61.58
111 Propylbenzene					CAS #: 103-65-1		
23.910	23.910 (1.077)	91	55435	0.50000	0.4134	70.00- 130.00	100.00
23.910	23.910 (1.077)	120	13929			0.00- 53.83	25.13
113 4-Ethyltoluene					CAS #: 622-96-8		
24.039	24.039 (1.083)	105	46100	0.50000	0.4686	70.00- 130.00	100.00
24.039	24.039 (1.083)	120	13588			0.18- 60.18	29.48
114 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
24.116	24.116 (1.086)	105	31786	0.50000	0.3870	70.00- 130.00	100.00
24.116	24.116 (1.086)	120	19149			20.44- 80.44	60.24
120 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
24.529	24.529 (1.105)	105	31979	0.50000	0.4807	70.00- 130.00	100.00
24.529	24.529 (1.105)	120	16013			19.27- 79.27	50.07
122 1,3-Dichlorobenzene					CAS #: 541-73-1		
24.902	24.902 (1.121)	146	25260	0.50000	0.3935	70.00- 130.00	100.00
24.902	24.902 (1.121)	148	16340			38.48- 98.48	64.69
24.902	24.902 (1.121)	111	11015			10.49- 70.49	43.61
124 1,4-Dichlorobenzene					CAS #: 106-46-7		
24.992	24.992 (1.125)	146	27412	0.50000	0.4543	70.00- 130.00	100.00
24.992	24.992 (1.125)	148	17046			38.92- 98.92	62.18
24.992	24.992 (1.125)	111	10696			11.61- 71.61	39.02
127 alpha-chlorotoluene					CAS #: 100-44-7		
25.126	25.126 (1.132)	91	27819	0.50000	0.4315	70.00- 130.00	100.00
25.126	25.126 (1.132)	126	8088			0.00- 52.82	29.07
128 1,2-Dichlorobenzene					CAS #: 95-50-1		
25.395	25.395 (1.144)	146	24740	0.50000	0.4154	70.00- 130.00	100.00
25.395	25.395 (1.144)	148	15197			36.09- 96.09	61.43
25.395	25.395 (1.144)	111	10263			13.38- 73.38	41.48

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
131 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
27.077	27.077 (1.219)	180	21751	0.50000	0.4977	70.00- 130.00	100.00
27.077	27.077 (1.219)	182	20431			64.14- 124.14	93.93
132 Hexachlorobutadiene					CAS #: 87-68-3		
27.166	27.166 (1.223)	225	15392	0.50000	0.4211	70.00- 130.00	100.00
27.166	27.166 (1.223)	223	9641			44.27- 104.27	62.64
133 Naphthalene					CAS #: 91-20-3		
27.391	27.391 (1.234)	128	6025	0.05000	0.05821	70.00- 130.00	100.00(a)
27.391	27.391 (1.234)	127	2273			0.00- 47.41	37.73

QC Flag Legend

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

Report Date: 07-Oct-2014 11:32

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdv.i
Lab File ID: v100608.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: ef
Method File: /chem/msdv.i/06Oct2014.b/v14l1006a.m
Misc Info: 0.5ppbv (1.0ppbv)

Calibration Date: 06-OCT-2014
Calibration Time: 18:36
Client Smp ID: Level 7
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
54 Bromochloromethan	125097	75058	175136	120259	-3.87
71 1,4-Difluorobenze	498199	298919	697479	486142	-2.42
92 Chlorobenzene-d5	406420	243852	568988	382777	-5.82

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
54 Bromochloromethan	15.93	15.60	16.26	15.93	0.00
71 1,4-Difluorobenze	17.30	16.97	17.63	17.30	0.00
92 Chlorobenzene-d5	22.21	21.88	22.54	22.21	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/msdv.i/06Oct2014.b/v100608.d

Date : 06-OCT-2014 15:47

Client ID: Level 7

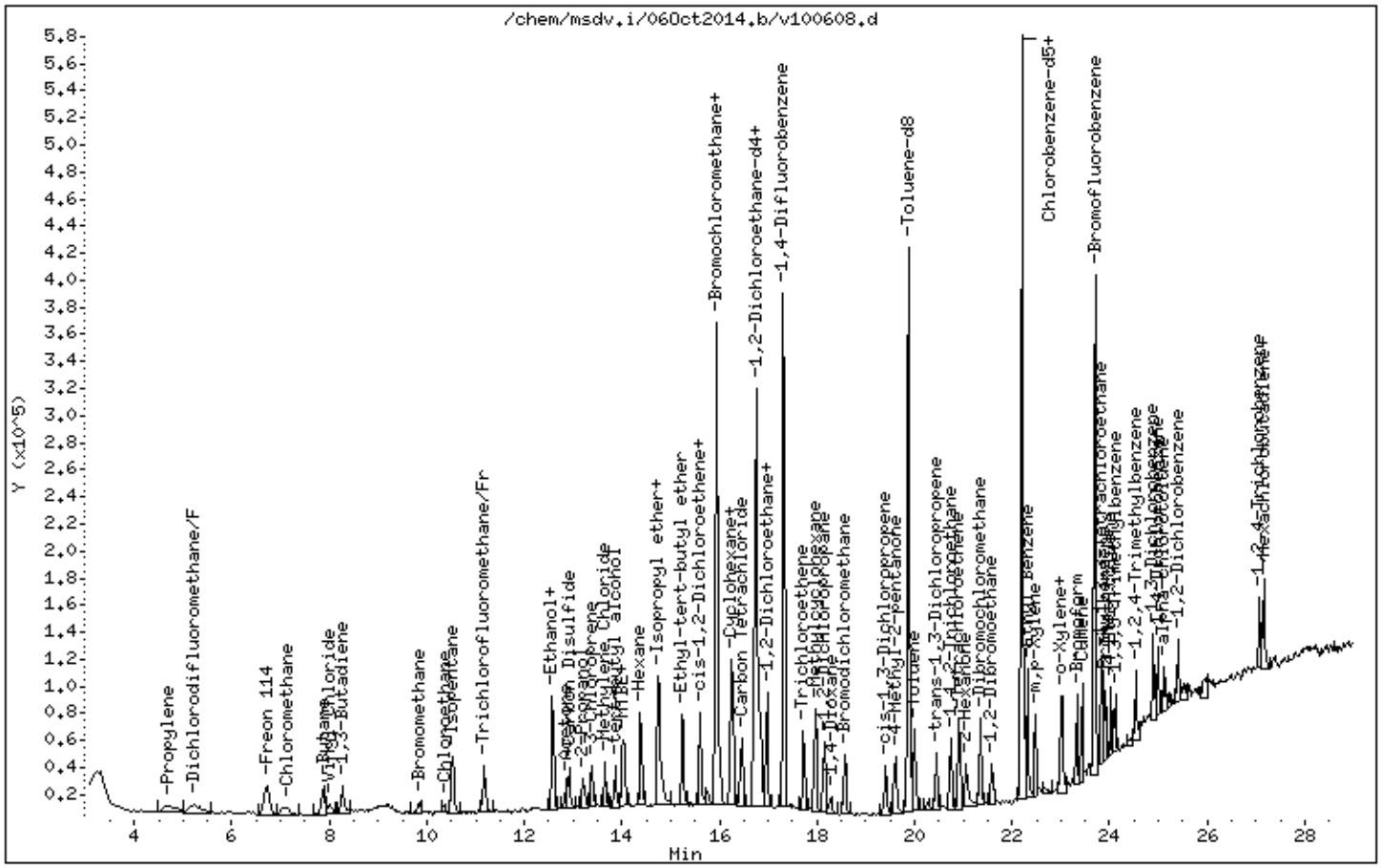
Instrument: msdv.i

Sample Info: 125mL #2677-278

Operator: ef

Column phase: RTx-624

Column diameter: 0.32



Eurofins Air Toxics Inc.

TO15/Modified TO-14A

Data file : /chem1/msdv.i/22Oct2014.b/v102212.d
Lab Smp Id: ICAL Level 8 Client Smp ID: ICAL Level 8
Inj Date : 22-OCT-2014 19:15
Operator : sn Inst ID: msdv.i
Smp Info : 50mL #2687-31
Misc Info : 1.0ppbv (5.0ppbv)
Comment : Low Level GC-MS
Method : /chem/msdv.i/22Oct2014.b/v14l1006c.m
Meth Date : 22-Oct-2014 20:00 snguyen Quant Type: ISTD
Cal Date : 22-OCT-2014 19:15 Cal File: v102212.d
Als bottle: 1 Calibration Sample, Level: 8
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: Combo-AT7-AT1.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
* 54 Bromochloromethane					CAS #: 74-97-5		
15.933	15.933 (1.000)	130	88567	5.00000		70.00- 130.00	100.00
15.933	15.933 (1.000)	128	69119			47.58- 107.58	78.04
15.933	15.933 (1.000)	49	203905			212.40- 272.40	230.23
* 71 1,4-Difluorobenzene					CAS #: 540-36-3		
17.305	17.305 (1.000)	114	365222	5.00000		70.00- 130.00	100.00
17.305	17.305 (1.000)	88	57870			0.00- 46.08	15.85
* 92 Chlorobenzene-d5					CAS #: 3114-55-4		
22.205	22.205 (1.000)	117	277294	5.00000		70.00- 130.00	100.00
22.205	22.205 (1.000)	82	162280			28.82- 88.82	58.52
13 Vinyl Bromide					CAS #: 593-60-2		
10.967	10.967 (0.688)	106	10842	1.00000	0.9816	70.00- 130.00	100.00
10.967	10.967 (0.688)	108	10803			69.86- 129.86	99.64
15 1-Pentene					CAS #: 109-67-1		
11.256	11.256 (0.706)	55	9165	1.00000	1.037	70.00- 130.00	100.00
11.256	11.256 (0.706)	42	15773			142.41- 202.41	172.10

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
19 Diethyl Ether					CAS #: 60-29-7		
12.101	12.101 (0.759)	74	4556	1.00000	0.9414	70.00- 130.00	100.00(T)
12.101	12.101 (0.759)	59	8950			162.36- 222.36	196.44
0.000	1.000 (0.000)	31	0			0.00- 30.00	0.00
26 Acetonitrile					CAS #: 75-05-8		
13.502	13.502 (0.847)	41	32608	1.00000	0.8833	70.00- 130.00	100.00
13.475	13.475 (0.846)	40	16707			15.69- 75.69	51.24
13.420	13.420 (0.842)	39	27249			25.67- 85.67	83.57
32 Acrylonitrile					CAS #: 107-13-1		
14.161	14.161 (0.889)	53	19010	1.00000	0.9850	70.00- 130.00	100.00
14.161	14.161 (0.889)	52	14874			54.38- 114.38	78.24
41 1-Hexene					CAS #: 592-41-6		
14.271	14.271 (0.896)	55	5595	1.00000	0.8627	70.00- 130.00	100.00
14.271	14.271 (0.896)	41	11578			152.85- 212.85	206.93
14.298	14.298 (0.897)	84	1292			0.00- 53.17	23.09
44 Methyl Acrylate					CAS #: 96-33-3		
15.696	15.696 (0.985)	55	40339	1.00000	0.8781	70.00- 130.00	100.00
15.696	15.696 (0.985)	85	3704			0.00- 38.30	9.18
15.696	15.696 (0.985)	58	2871			0.00- 37.05	7.12
60 Ethyl Acrylate					CAS #: 140-88-5		
17.771	17.771 (1.115)	99	2291	1.00000	0.9162	70.00- 130.00	100.00
17.771	17.771 (1.115)	45	7703			301.40- 361.40	336.23
17.771	17.771 (1.115)	55	58517			2545.61-2605.61	2554.21
62 2-Pentanone					CAS #: 107-87-9		
17.964	17.964 (1.127)	43	110484	1.00000	0.9663	70.00- 130.00	100.00
17.964	17.964 (1.127)	58	6062			0.00- 35.77	5.49
17.964	17.964 (1.127)	86	10031			0.00- 39.16	9.08
67 Methyl Methacrylate					CAS #: 80-62-6		
18.156	18.156 (1.139)	41	46637	1.00000	0.9647	70.00- 130.00	100.00
18.156	18.156 (1.139)	69	18400			9.41- 69.41	39.45
18.156	18.156 (1.139)	100	7282			0.00- 45.26	15.61
70 Dibromomethane					CAS #: 74-95-3		
18.375	18.375 (0.828)	174	18939	1.00000	1.049	70.00- 130.00	100.00
18.375	18.375 (0.828)	93	17805			69.31- 129.31	94.01
18.375	18.375 (0.828)	95	14125			51.34- 111.34	74.58
104 Bis(2-Chloroethyl) Ether					CAS #: 111-44-4		
24.787	24.787 (1.116)	93	29000	1.00000	0.7385	70.00- 130.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
104 Bis(2-Chloroethyl) Ether (continued)							
24.761	24.761 (1.115)	95	9827			3.18- 63.18	33.89
24.761	24.761 (1.115)	63	28465			65.44- 125.44	98.16
16 Pentane					CAS #: 109-66-0		
11.400	11.400 (0.715)	43	97730	1.00000	0.9774	70.00- 130.00	100.00
11.400	11.400 (0.715)	57	11801			0.00- 41.87	12.08
11.400	11.400 (0.715)	72	5156			0.00- 35.35	5.28
85 Nonane					CAS #: 111-84-2		
22.342	22.342 (1.006)	43	58947	1.00000	0.9802	70.00- 130.00	100.00
22.342	22.342 (1.006)	57	38690			37.33- 97.33	65.64
22.342	22.342 (1.006)	85	11342			0.00- 48.12	19.24
110 Undecane					CAS #: 1120-21-4		
25.239	25.239 (1.137)	57	116883	1.00000	1.017	70.00- 130.00	100.00
25.239	25.239 (1.137)	43	129167			81.76- 141.76	110.51
25.239	25.239 (1.137)	85	23454			0.00- 50.32	20.07
125 Dodecane					CAS #: 112-40-3		
26.315	26.315 (1.185)	85	21936	1.00000	1.010	70.00- 130.00	100.00
26.315	26.315 (1.185)	57	94225			393.93- 453.93	429.55
26.315	26.315 (1.185)	43	97554			409.24- 469.24	444.72
42 Ethyl Acetate					CAS #: 141-78-6		
15.592	15.592 (0.979)	70	7662	1.00000	0.9580	70.00- 130.00	100.00
15.592	15.592 (0.979)	43	133466			1769.14-1829.14	1741.92
15.592	15.592 (0.979)	61	22737			270.97- 330.97	296.75

QC Flag Legend

T - Target compound detected outside RT window.

Report Date: 22-Oct-2014 20:00

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdv.i
Lab File ID: v102212.d
Lab Smp Id: ICAL Level 8
Analysis Type: VOA
Quant Type: ISTD
Operator: sn
Method File: /chem/msdv.i/22Oct2014.b/v14l1006c.m
Misc Info: 1.0ppbv (5.0ppbv)

Calibration Date: 22-OCT-2014
Calibration Time: 10:10
Client Smp ID: ICAL Level 8
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
54 Bromochloromethan	91528	54917	128139	88567	-3.24
71 1,4-Difluorobenze	354906	212944	496868	365222	2.91
92 Chlorobenzene-d5	297425	178455	416395	277294	-6.77

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
54 Bromochloromethan	15.93	15.60	16.26	15.93	0.00
71 1,4-Difluorobenze	17.30	16.97	17.63	17.30	0.00
92 Chlorobenzene-d5	22.21	21.88	22.54	22.21	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/msdv.i/22Oct2014.b/v102212.d

Date : 22-OCT-2014 19:15

Client ID: ICAL Level 8

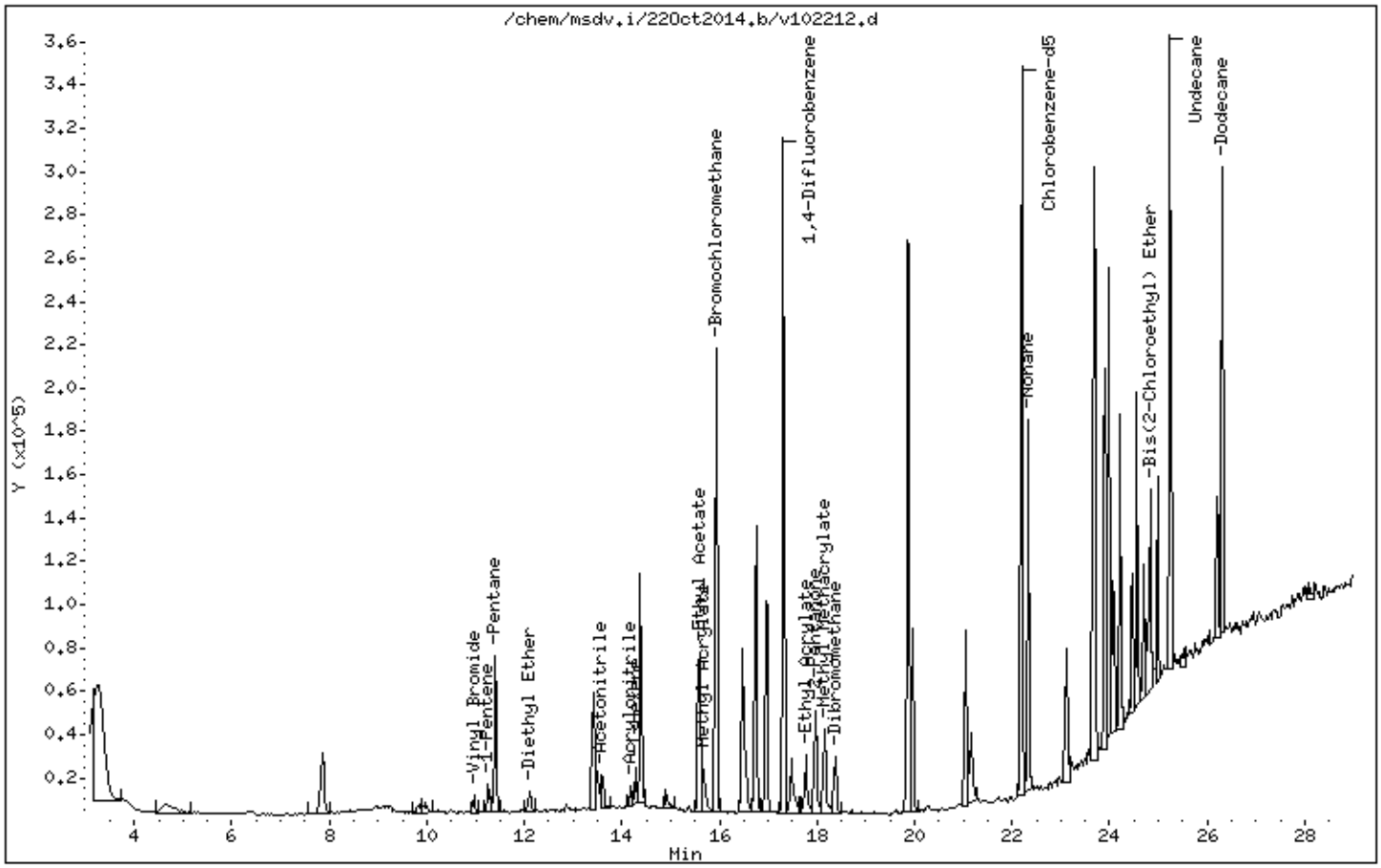
Instrument: msdv.i

Sample Info: 50mL #2687-31

Operator: sn

Column phase: RTx-624

Column diameter: 0.32



Eurofins Air Toxics Inc.

TO15/Modified TO-14A

Data file : /chem/msdv.i/17Oct2014.b/v101710.d
Lab Smp Id: ICAL Level 8
Inj Date : 17-OCT-2014 16:02
Operator : gd Inst ID: msdv.i
Smp Info : 50mL# 2687-10
Misc Info : 1.0ppbv (5.0ppbv) AT-1
Comment : Low Level GC-MS
Method : /chem/msdv.i/17Oct2014.b/v14l1006b.m
Meth Date : 18-Oct-2014 08:06 lover Quant Type: ISTD
Cal Date : 17-OCT-2014 16:02 Cal File: v101710.d
Als bottle: 1 Calibration Sample, Level: 8
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT1crv.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
* 54 Bromochloromethane					CAS #: 74-97-5		
15.933	15.947 (1.000)	130	101709	5.00000		80.00- 120.00	100.00
15.933	15.947 (1.000)	128	79383			48.18- 108.18	78.05
15.933	15.916 (1.000)	49	222637			210.53- 270.53	218.90
* 71 1,4-Difluorobenzene					CAS #: 540-36-3		
17.305	17.318 (1.000)	114	429028	5.00000		80.00- 120.00	100.00
17.305	17.318 (1.000)	88	69132			0.00- 45.98	16.11
* 92 Chlorobenzene-d5					CAS #: 3114-55-4		
22.205	22.219 (1.000)	117	332991	5.00000		80.00- 120.00	100.00
22.205	22.192 (1.000)	82	187884			28.41- 88.41	56.42
1 Freon134a					CAS #: 811-97-2		
4.485	4.560 (0.281)	83	22153	1.00000	1.036	70.00- 130.00	100.00
4.485	4.560 (0.281)	69	18687			55.07- 115.07	84.35
2 Freon 152A					CAS #: 75-37-6		
4.976	5.051 (0.312)	65	13011	1.00000	1.030	70.00- 130.00	100.00
4.976	5.051 (0.312)	51	39608			272.07- 332.07	304.42

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
5 Freon 22					CAS #: 75-45-6		
5.731	5.806 (0.360)	51	55447	1.00000	0.9763	70.00- 130.00	100.00
5.731	5.806 (0.360)	67	6942			0.00- 41.79	12.52
7.015	5.806 (0.440)	85	6817			0.00- 37.94	12.29
14 Fr21					CAS #: 75-43-4		
11.280	11.280 (0.708)	67	62728	1.00000	0.9952	70.00- 130.00	100.00
11.280	11.280 (0.708)	69	19917			0.49- 60.49	31.75
11.280	11.280 (0.708)	47	10397			0.00- 45.46	16.57
205 2-Heptanone					CAS #: 110-43-0		
23.111	23.111 (1.041)	58	46379	1.00000	0.9548	70.00- 130.00	100.00
23.111	23.111 (1.041)	43	108309			201.02- 261.02	233.53
206 1-Butanol					CAS #: 71-36-3		
17.469	17.469 (1.010)	56	42172	1.00000	0.9635	70.00- 130.00	100.00
17.469	17.469 (1.010)	41	37690			53.11- 113.11	89.37
17.469	17.469 (1.010)	43	27659			32.89- 92.89	65.59
204 Butyl Acetate					CAS #: 123-86-4		
21.152	21.116 (1.222)	56	23968	1.00000	0.9636	70.00- 130.00	100.00
21.152	21.116 (1.222)	73	6930			1.67- 61.67	28.91
21.152	21.116 (1.222)	43	74653			283.51- 343.51	311.47
56 1,1-Dicholoropropene					CAS #: 563-58-6		
16.457	16.458 (1.033)	110	19722	1.00000	1.058	70.00- 130.00	100.00
16.457	16.458 (1.033)	75	52088			249.21- 309.21	264.11
91 1,1,1,2-Tetrachloroethane					CAS #: 630-20-6		
22.343	22.343 (1.006)	131	54275	1.00000	0.9852	70.00- 130.00	100.00
22.343	22.343 (1.006)	117	38980			40.73- 100.73	71.82
22.343	22.343 (1.006)	95	21652			8.70- 68.70	39.89
105 1,2,3-Trichloropropane					CAS #: 96-18-4		
23.936	23.936 (1.078)	110	23842	1.00000	0.9836	70.00- 130.00	100.00
23.936	23.936 (1.078)	75	67939			248.74- 308.74	284.96
23.910	23.936 (1.077)	61	24178			67.24- 127.24	101.41
97 Bromobenzene					CAS #: 108-86-1		
23.884	23.884 (1.076)	156	42172	1.00000	1.009	70.00- 130.00	100.00
23.884	23.884 (1.076)	158	40877			70.23- 130.23	96.93
23.884	23.884 (1.076)	77	79363			166.97- 226.97	188.19
107 2-Chlorotoluene					CAS #: 95-49-8		
24.090	24.091 (1.085)	126	23464	1.00000	1.019	70.00- 130.00	100.00
24.090	24.091 (1.085)	91	65539			263.05- 323.05	279.32

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
107 2-Chlorotoluene (continued)							
24.065	24.091 (1.084)	65	8773			6.34- 66.34	37.39
109 4-Chlorotoluene					CAS #: 106-43-4		
24.194	24.194 (1.090)	126	19039	1.00000	0.9084	70.00- 130.00	100.00
24.194	24.194 (1.090)	91	55759			237.89- 297.89	292.87
24.194	24.194 (1.090)	63	9802			17.19- 77.19	51.48
115 tert-Butylbenzene					CAS #: 98-06-6		
24.477	24.477 (1.102)	119	51527	1.00000	0.9533	70.00- 130.00	100.00
24.477	24.477 (1.102)	134	13448			0.00- 54.70	26.10
24.477	24.477 (1.102)	91	34123			37.96- 97.96	66.22
119 sec-Butylbenzene					CAS #: 135-98-8		
24.709	24.710 (1.113)	105	65159	1.00000	0.9208	70.00- 130.00	100.00
24.709	24.710 (1.113)	134	13773			0.00- 51.17	21.14
24.709	24.710 (1.113)	91	10926			0.00- 46.66	16.77
116 p-Cymene					CAS #: 99-87-6		
24.835	24.835 (1.118)	119	66439	1.00000	0.9577	70.00- 130.00	100.00
24.835	24.835 (1.118)	134	18253			0.00- 57.73	27.47
24.835	24.835 (1.118)	91	16265			0.00- 54.71	24.48
123 Butylbenzene					CAS #: 104-51-8		
25.261	25.261 (1.138)	134	23046	1.00000	1.042	70.00- 130.00	100.00
25.261	25.261 (1.138)	91	80022			322.95- 382.95	347.23
25.261	25.261 (1.138)	92	40669			154.37- 214.37	176.47
129 1,2-dibromo-3-chloropropane					CAS #: 96-12-8		
26.225	26.203 (1.181)	157	29075	1.00000	0.9741	70.00- 130.00	100.00
26.203	26.203 (1.180)	75	26724			60.30- 120.30	91.91
26.225	26.203 (1.181)	155	23301			49.02- 109.02	80.14
83 1,3-Dichloropropane					CAS #: 142-28-9		
21.044	21.045 (1.216)	76	60386	1.00000	1.011	70.00- 130.00	100.00
21.044	21.045 (1.216)	41	70432			86.61- 146.61	116.64
21.044	21.045 (1.216)	78	18385			2.78- 62.78	30.45

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdv.i
Lab File ID: v101710.d
Lab Smp Id: ICAL Level 8
Analysis Type: VOA
Quant Type: ISTD
Operator: gd
Method File: /chem/msdv.i/17Oct2014.b/v14l1006b.m
Misc Info: 1.0ppbv (5.0ppbv) AT-1

Calibration Date: 17-OCT-2014
Calibration Time: 09:45

Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
54 Bromochloromethan	116594	69956	163232	101709	-12.77
71 1,4-Difluorobenze	480411	288247	672575	429028	-10.70
92 Chlorobenzene-d5	391969	235181	548757	332991	-15.05

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
54 Bromochloromethan	15.95	15.62	16.28	15.93	-0.09
71 1,4-Difluorobenze	17.32	16.99	17.65	17.30	-0.08
92 Chlorobenzene-d5	22.22	21.89	22.55	22.21	-0.06

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

Data File: /chem/msdv.i/17Oct2014.b/v101710.d

Date : 17-OCT-2014 16:02

Client ID:

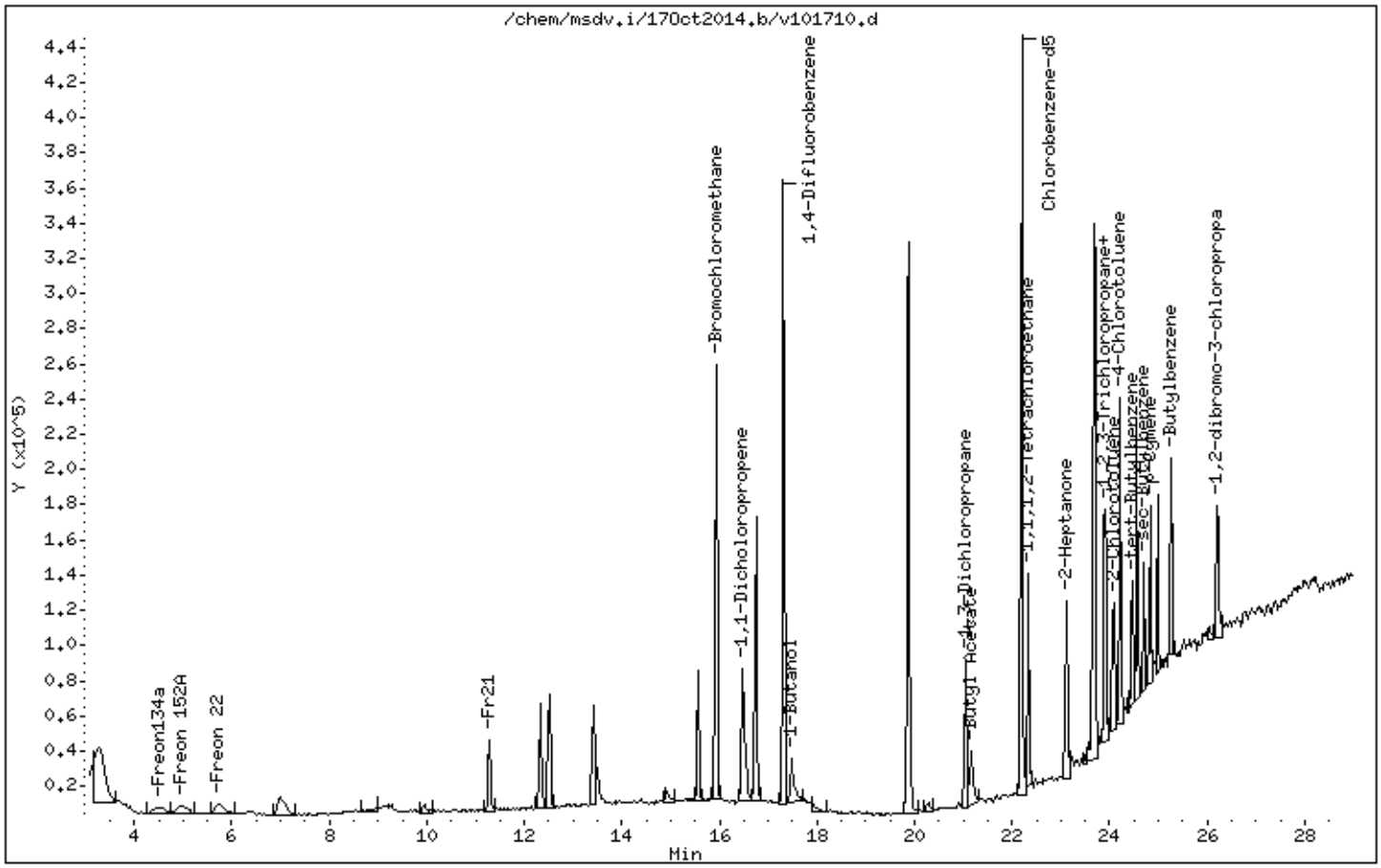
Instrument: msdv.i

Sample Info: 50mL# 2687-10

Operator: gd

Column phase: RTx-624

Column diameter: 0.32



Eurofins Air Toxics Inc.

TO15/Modified TO-14A

Data file : /chem/msdv.i/17Oct2014.b/v101707.d
Lab Smp Id: ICAL Level 8
Inj Date : 17-OCT-2014 13:40
Operator : ef Inst ID: msdv.i
Smp Info : 50mL# 2687-8
Misc Info : 1.0ppbv (5.0ppbv) Oxygenates
Comment : Low Level GC-MS
Method : /chem/msdv.i/17Oct2014.b/v14l1006b.m
Meth Date : 18-Oct-2014 08:06 lover Quant Type: ISTD
Cal Date : 17-OCT-2014 16:02 Cal File: v101710.d
Als bottle: 1 Calibration Sample, Level: 8
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: Oxy.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
* 54 Bromochloromethane						CAS #: 74-97-5	
15.933	15.947 (1.000)	130	105548	5.00000		80.00- 120.00	100.00
15.933	15.947 (1.000)	128	79076			48.18- 108.18	74.92
15.933	15.916 (1.000)	49	225955			210.53- 270.53	214.08
* 71 1,4-Difluorobenzene						CAS #: 540-36-3	
17.305	17.318 (1.000)	114	438412	5.00000		80.00- 120.00	100.00
17.305	17.318 (1.000)	88	69246			0.00- 45.98	15.79
* 92 Chlorobenzene-d5						CAS #: 3114-55-4	
22.205	22.219 (1.000)	117	337599	5.00000		80.00- 120.00	100.00
22.205	22.192 (1.000)	82	195740			28.41- 88.41	57.98
38 tert-butyl alcohol						CAS #: 75-65-0	
13.859	13.859 (0.870)	59	96110	1.00000	0.9774	80.00- 120.00	100.00
13.859	13.859 (0.870)	41	31728			1.21- 61.21	33.01
13.859	13.859 (0.870)	57	9426			0.00- 40.48	9.81
45 Isopropyl ether						CAS #: 108-20-3	
14.738	14.738 (0.925)	45	208086	1.00000	0.9758	80.00- 120.00	100.00

RT	EXP RT	(REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
45 Isopropyl ether (continued)								
14.738	14.738	(0.925)	87	28321			0.00- 43.46	13.61
14.738	14.738	(0.925)	59	18188			0.00- 38.28	8.74
49 Ethyl-tert-butyl ether						CAS #: 637-92-3		
15.240	15.240	(0.956)	59	163265	1.00000	0.9928	80.00- 120.00	100.00
15.240	15.240	(0.956)	87	46277			0.00- 58.99	28.34
15.240	15.240	(0.956)	41	37450			0.00- 55.20	22.94
66 tert-amyl methyl ether						CAS #: 994-05-8		
16.810	16.810	(0.971)	87	27020	1.00000	0.9728	80.00- 120.00	100.00
16.810	16.810	(0.971)	73	113331			391.10- 451.10	419.43
16.810	16.810	(0.971)	55	43507			132.07- 192.07	161.02

Report Date: 20-Oct-2014 08:42

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdv.i
Lab File ID: v101707.d
Lab Smp Id: ICAL Level 8
Analysis Type: VOA
Quant Type: ISTD
Operator: ef
Method File: /chem/msdv.i/17Oct2014.b/v14l1006b.m
Misc Info: 1.0ppbv (5.0ppbv) Oxygenates

Calibration Date: 17-OCT-2014
Calibration Time: 09:45

Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
54 Bromochloromethan	116594	69956	163232	105548	-9.47
71 1,4-Difluorobenze	480411	288247	672575	438412	-8.74
92 Chlorobenzene-d5	391969	235181	548757	337599	-13.87

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
54 Bromochloromethan	15.95	15.62	16.28	15.93	-0.09
71 1,4-Difluorobenze	17.32	16.99	17.65	17.30	-0.08
92 Chlorobenzene-d5	22.22	21.89	22.55	22.21	-0.06

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

Data File: /chem/msdv.i/17Oct2014.b/v101707.d

Date : 17-OCT-2014 13:40

Client ID:

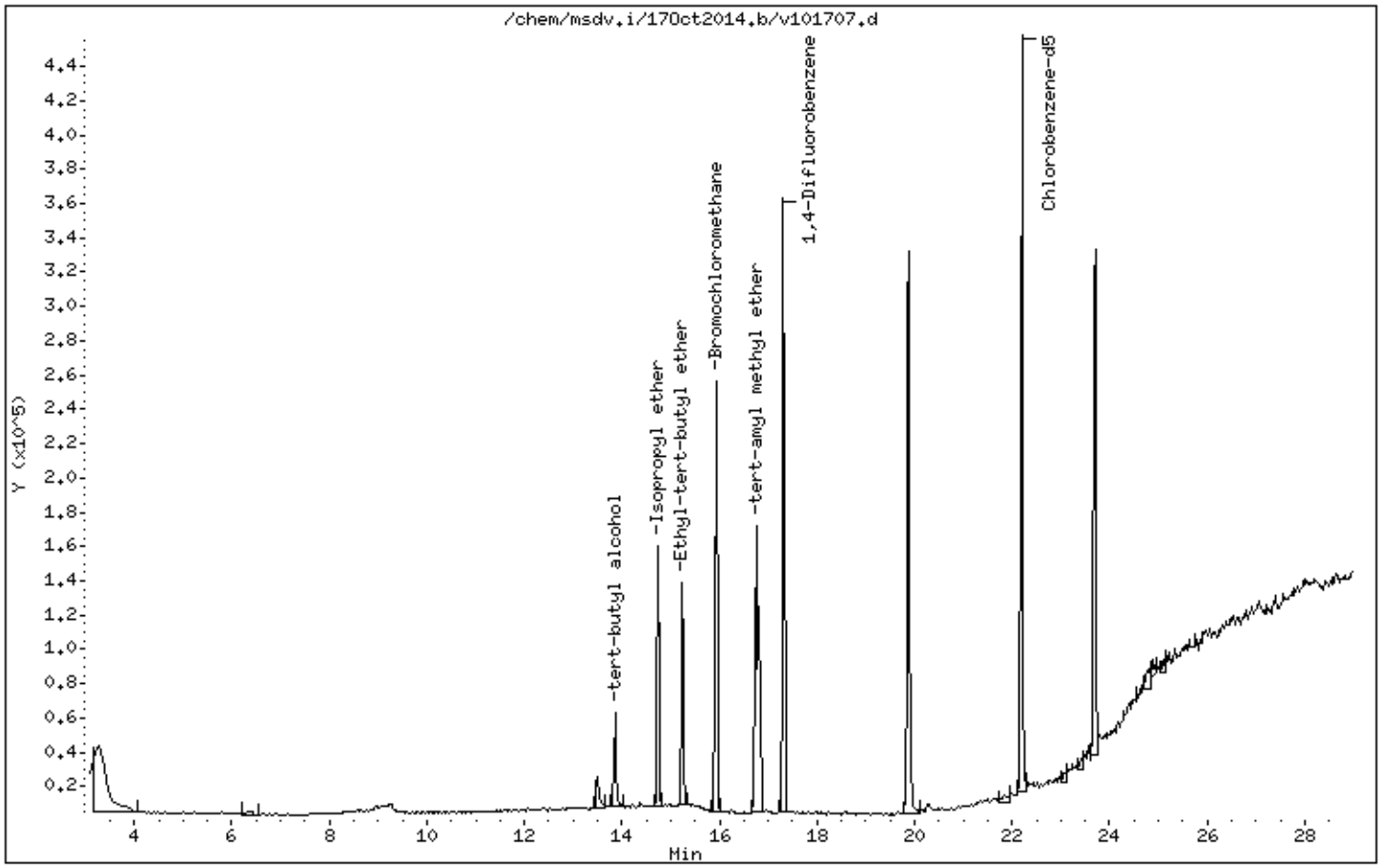
Instrument: msdv.i

Sample Info: 50mL# 2687-8

Operator: ef

Column phase: RTx-624

Column diameter: 0.32



Eurofins Air Toxics Inc.

TO15/Modified TO-14A

Data file : /chem/msdv.i/07Oct2014.b/v100710.d
Lab Smp Id: ICAL Client Smp ID: Level 8
Inj Date : 07-OCT-2014 19:25
Operator : gd Inst ID: msdv.i
Smp Info : 50mL #2677-286
Misc Info : 1.0ppbv (5.0ppbv)
Comment : Low Level GC-MS
Method : /chem/msdv.i/07Oct2014.b/v14l1006a.m
Meth Date : 07-Oct-2014 22:27 gdelacru Quant Type: ISTD
Cal Date : 07-OCT-2014 19:25 Cal File: v100710.d
Als bottle: 4 Calibration Sample, Level: 8
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT7crv.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
* 54 Bromochloromethane						CAS #: 74-97-5	
15.933	15.934 (1.000)	130	104193	5.00000		80.00- 120.00	100.00
15.933	15.934 (1.000)	128	82714			48.21- 108.21	79.39
15.933	15.934 (1.000)	49	258036			215.61- 275.61	247.65
* 71 1,4-Difluorobenzene						CAS #: 540-36-3	
17.305	17.305 (1.000)	114	453289	5.00000		80.00- 120.00	100.00
17.305	17.305 (1.000)	88	75261			0.00- 46.17	16.60
* 92 Chlorobenzene-d5						CAS #: 3114-55-4	
22.205	22.205 (1.000)	117	342684	5.00000		80.00- 120.00	100.00
22.205	22.205 (1.000)	82	207275			29.34- 89.34	60.49
76 Octane						CAS #: 111-65-9	
19.968	19.968 (1.154)	57	38744	1.00000	0.9816	80.00- 120.00	100.00
19.968	19.968 (1.154)	85	28265			45.62- 105.62	72.95
19.968	19.968 (1.154)	43	125508			293.94- 353.94	323.94
99 Decane						CAS #: 124-18-5	
23.987	23.987 (1.080)	57	101579	1.00000	0.9665	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
99 Decane (continued)							
23.987	23.987 (1.080)	71	29410			0.00- 57.94	28.95
23.987	23.987 (1.080)	142	2781			0.00- 33.26	2.74
117 Indene					CAS #: 95-13-6		
25.485	25.485 (1.148)	115	48842	1.00000	0.9975	80.00- 120.00	100.00(T)
25.485	25.485 (1.148)	116	43211			67.11- 127.11	88.47
0.000	25.485 (0.000)	0	0			0.00- 30.00	0.00
121 1,2,3-trimethylbenzene					CAS #: 526-73-8		
24.992	24.992 (1.125)	120	28024	1.00000	0.9700	80.00- 120.00	100.00
24.992	24.992 (1.125)	105	62500			192.71- 252.71	223.02
24.992	24.992 (1.125)	77	8919			2.83- 62.83	31.83

QC Flag Legend

T - Target compound detected outside RT window.

Report Date: 08-Oct-2014 08:26

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdv.i
Lab File ID: v100710.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: gd
Method File: /chem/msdv.i/07Oct2014.b/v14l1006a.m
Misc Info: 1.0ppbv (5.0ppbv)

Calibration Date: 07-OCT-2014
Calibration Time: 12:28
Client Smp ID: Level 8
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
54 Bromochloromethan	122750	73650	171850	104193	-15.12
71 1,4-Difluorobenze	498533	299120	697946	453289	-9.08
92 Chlorobenzene-d5	397978	238787	557169	342684	-13.89

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
54 Bromochloromethan	15.93	15.60	16.26	15.93	0.00
71 1,4-Difluorobenze	17.30	16.97	17.63	17.30	0.00
92 Chlorobenzene-d5	22.21	21.88	22.54	22.21	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/msdv.i/07Oct2014.b/v100710.d

Date : 07-OCT-2014 19:25

Client ID: Level 8

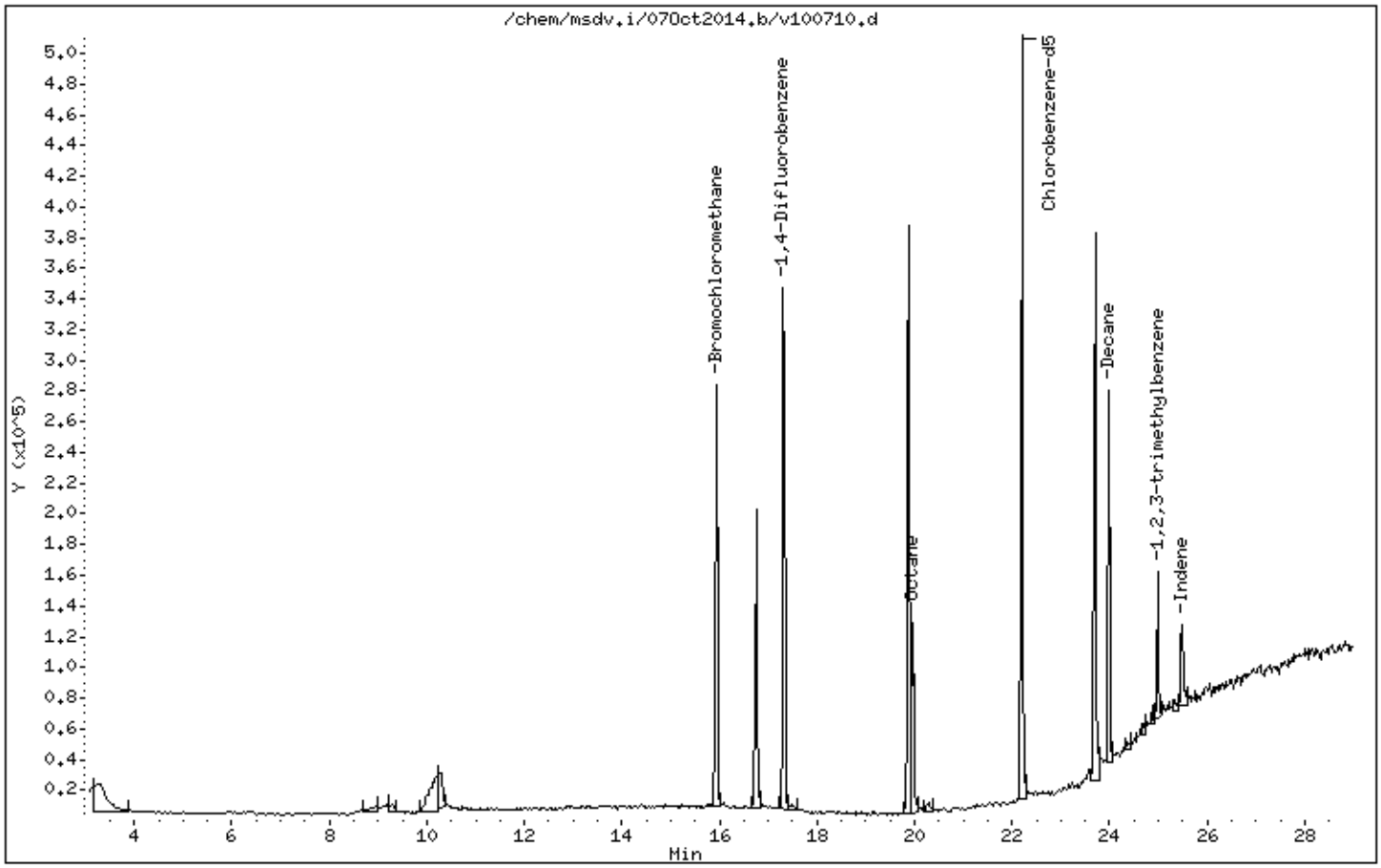
Instrument: msdv.i

Sample Info: 50mL #2677-286

Operator: gd

Column phase: RTx-624

Column diameter: 0.32



Eurofins Air Toxics Inc.

TO15/Modified TO-14A

Data file : /chem/msdv.i/06Oct2014.b/v100609.d
Lab Smp Id: ICAL Client Smp ID: Level 8
Inj Date : 06-OCT-2014 16:43
Operator : ef Inst ID: msdv.i
Smp Info : 250mL #2677-278
Misc Info : 1.0ppbv (1.0ppbv)
Comment : Low Level GC-MS
Method : /chem/msdv.i/06Oct2014.b/v14l1006a.m
Meth Date : 07-Oct-2014 11:32 efinn Quant Type: ISTD
Cal Date : 06-OCT-2014 16:43 Cal File: v100609.d
Als bottle: 1 Calibration Sample, Level: 8
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: HiLoFULLcrv.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
* 54 Bromochloromethane					CAS #: 74-97-5		
15.934	15.934 (1.000)	130	123502	5.00000		70.00- 130.00	100.00
15.934	15.934 (1.000)	128	93017			47.54- 107.54	75.32
15.934	15.934 (1.000)	49	307499			218.45- 278.45	248.98
* 71 1,4-Difluorobenzene					CAS #: 540-36-3		
17.305	17.305 (1.000)	114	487832	5.00000		70.00- 130.00	100.00
17.305	17.305 (1.000)	88	76211			0.00- 46.16	15.62
* 92 Chlorobenzene-d5					CAS #: 3114-55-4		
22.205	22.205 (1.000)	117	379868	5.00000		70.00- 130.00	100.00
22.205	22.205 (1.000)	82	222379			29.12- 89.12	58.54
$ 65 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
16.756	16.756 (1.052)	65	215841	5.00000	4.762	70.00- 130.00	100.00
16.756	16.756 (1.052)	67	110773			28.37- 88.37	51.32
$ 80 Toluene-d8					CAS #: 2037-26-5		
19.879	19.879 (1.149)	98	467252	5.00000	4.982	70.00- 130.00	100.00
19.879	19.879 (1.149)	70	55255			0.00- 41.90	11.83

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
$ 80 Toluene-d8 (continued)							
19.879	19.879 (1.149)	100	297236			33.85- 93.85	63.61
$ 106 Bromofluorobenzene					CAS #: 460-00-4		
23.704	23.704 (1.067)	174	150924	5.00000	4.620	70.00- 130.00	100.00
23.704	23.704 (1.067)	95	196819			99.95- 159.95	130.41
23.704	23.704 (1.067)	176	147493			67.64- 127.64	97.73
3 Propylene					CAS #: 115-07-1		
4.711	4.711 (0.296)	41	75566	1.00000	1.091	70.00- 130.00	100.00
4.749	4.749 (0.298)	42	48652			35.18- 95.18	64.38
4.825	4.825 (0.303)	39	60253			44.12- 104.12	79.74
4 Dichlorodifluoromethane/Fr12					CAS #: 75-71-8		
5.240	5.240 (0.329)	85	111133	1.00000	0.9605	70.00- 130.00	100.00
5.202	5.202 (0.326)	87	34723			1.90- 61.90	31.24
6 Freon 114					CAS #: 76-14-2		
6.750	6.750 (0.424)	135	77607	1.00000	0.9392	70.00- 130.00	100.00
6.750	6.750 (0.424)	137	23885			0.53- 60.53	30.78
6.750	6.750 (0.424)	85	117691			121.37- 181.37	151.65
8 Chloromethane					CAS #: 74-87-3		
7.128	7.128 (0.447)	50	64598	1.00000	0.9264	70.00- 130.00	100.00
7.090	7.090 (0.445)	52	20713			1.81- 61.81	32.06
9 Butane					CAS #: 106-97-8		
7.885	7.885 (0.495)	58	11825	1.00000	1.012	70.00- 130.00	100.00
7.885	7.885 (0.495)	43	125351			1065.18-1125.18	1060.05
10 Vinyl Chloride					CAS #: 75-01-4		
8.009	8.009 (0.503)	62	49815	1.00000	0.9574	70.00- 130.00	100.00
8.040	8.040 (0.505)	64	14318			0.00- 58.65	28.74
11 1,3-Butadiene					CAS #: 106-99-0		
8.288	8.288 (0.520)	54	48368	1.00000	0.9482	70.00- 130.00	100.00
8.288	8.288 (0.520)	39	67150			107.15- 167.15	138.83
12 Bromomethane					CAS #: 74-83-9		
9.859	9.859 (0.619)	94	27654	1.00000	0.8669	70.00- 130.00	100.00
9.859	9.859 (0.619)	96	26004			72.12- 132.12	94.03
17 Chloroethane					CAS #: 75-00-3		
10.365	10.365 (0.650)	64	22497	1.00000	0.9303	70.00- 130.00	100.00
10.365	10.365 (0.650)	66	6300			0.00- 59.90	28.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
18 Isopentane					CAS #: 78-78-4		
10.533	10.533 (0.661)	57	45796	1.00000	0.9194	70.00- 130.00	100.00
10.533	10.533 (0.661)	43	95085			171.32- 231.32	207.63
10.533	10.533 (0.661)	42	85969			150.03- 210.03	187.72
20 Trichlorofluoromethane/Fr11					CAS #: 75-69-4		
11.184	11.184 (0.702)	101	112399	1.00000	0.9437	70.00- 130.00	100.00
11.184	11.184 (0.702)	103	74735			36.54- 96.54	66.49
24 Ethanol					CAS #: 64-17-5		
12.156	12.156 (0.763)	45	18618	1.00000	0.7374	70.00- 130.00	100.00
12.156	12.156 (0.763)	46	6225			8.51- 68.51	33.44
12.129	12.129 (0.761)	43	4365			0.00- 54.10	23.45
30 1,1-Dichloroethene					CAS #: 75-35-4		
12.569	12.569 (0.789)	98	24299	1.00000	0.9130	70.00- 130.00	100.00
12.569	12.569 (0.789)	61	88588			320.65- 380.65	364.57
12.569	12.569 (0.789)	96	40793			134.30- 194.30	167.88
28 Freon 113					CAS #: 76-13-1		
12.596	12.596 (0.791)	151	70271	1.00000	0.9802	70.00- 130.00	100.00
12.596	12.596 (0.791)	153	44900			33.10- 93.10	63.90
12.569	12.569 (0.789)	101	88818			96.37- 156.37	126.39
31 Acetone					CAS #: 67-64-1		
12.843	12.843 (0.806)	58	28114	1.00000	0.9635	70.00- 130.00	100.00
12.843	12.843 (0.806)	43	136408			413.15- 473.15	485.20
33 Carbon Disulfide					CAS #: 75-15-0		
12.926	12.926 (0.811)	76	111150	1.00000	0.9819	70.00- 130.00	100.00
35 3-Chloroprene					CAS #: 107-05-1		
13.393	13.393 (0.841)	76	14626	1.00000	0.8953	70.00- 130.00	100.00
13.393	13.393 (0.841)	41	80770			547.03- 607.03	552.24
34 2-Propanol					CAS #: 67-63-0		
13.200	13.200 (0.828)	45	125731	1.00000	0.9305	70.00- 130.00	100.00
13.200	13.200 (0.828)	43	29224			0.00- 50.74	23.24
13.200	13.200 (0.828)	59	3307			0.00- 32.83	2.63
37 Methylene Chloride					CAS #: 75-09-2		
13.667	13.667 (0.858)	84	34801	1.00000	0.9269	70.00- 130.00	100.00
13.667	13.667 (0.858)	49	84002			212.37- 272.37	241.38
13.667	13.667 (0.858)	51	27059			43.31- 103.31	77.75
38 tert-butyl alcohol					CAS #: 75-65-0		
13.859	13.859 (0.870)	59	107633	1.00000	0.9089	70.00- 130.00	100.00

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

   38 tert-butyl alcohol (continued)
 13.859  13.859 (0.870)    41     34165                     1.97-  61.97    31.74
 13.859  13.859 (0.870)    57     10680                     0.00-  40.67     9.92
-------------------------------------------------------------------------------
   39 MTBE                                          CAS #: 1634-04-4
 14.024  14.024 (0.880)    73    125261 1.00000   0.9299  70.00- 130.00   100.00
 13.997  13.997 (0.878)    57     38296                     2.99-  62.99    30.57
 13.997  13.997 (0.878)    41     56554                    12.12-  72.12    45.15
-------------------------------------------------------------------------------
   40 trans-1,2-Dichloroethene                      CAS #: 156-60-5
 14.052  14.052 (0.882)    98     24524 1.00000   0.9738  70.00- 130.00   100.00
 14.052  14.052 (0.882)    61     75632                   293.73- 353.73   308.40
 14.052  14.052 (0.882)    96     42638                   146.88- 206.88   173.86
-------------------------------------------------------------------------------
   43 Hexane                                        CAS #: 110-54-3
 14.381  14.381 (0.903)    57    103399 1.00000   0.9593  70.00- 130.00   100.00
 14.381  14.381 (0.903)    43     88948                    57.65- 117.65    86.02
 14.408  14.408 (0.904)    86     10978                     0.00-  40.67    10.62
-------------------------------------------------------------------------------
   45 Isopropyl ether                               CAS #: 108-20-3
 14.738  14.738 (0.925)    45    261286 1.00000   0.9331  70.00- 130.00   100.00
 14.738  14.738 (0.925)    87     35106                     0.00-  43.44    13.44
 14.738  14.738 (0.925)    59     21604                     0.00-  38.34     8.27
-------------------------------------------------------------------------------
   46 1,1-Dichloroethane                            CAS #: 75-34-3
 14.765  14.765 (0.927)    63     98131 1.00000   0.9381  70.00- 130.00   100.00
 14.765  14.765 (0.927)    65     29002                     0.37-  60.37    29.55
-------------------------------------------------------------------------------
   47 Vinyl Acetate                                 CAS #: 108-05-4
 14.793  14.793 (0.928)    86      9522 1.00000   0.8918  70.00- 130.00   100.00
 14.793  14.793 (0.928)    42     17257                   220.92- 280.92   181.23
 14.793  14.793 (0.928)    43    337561                  3282.47-3342.47  3545.06
-------------------------------------------------------------------------------
   49 Ethyl-tert-butyl ether                        CAS #: 637-92-3
 15.240  15.240 (0.956)    59    177186 1.00000   0.9286  70.00- 130.00   100.00
 15.240  15.240 (0.956)    87     52052                     0.00-  58.71    29.38
 15.240  15.240 (0.956)    41     47716                     0.00-  56.39    26.93
-------------------------------------------------------------------------------
   50 cis-1,2-Dichloroethene                        CAS #: 156-59-2
 15.592  15.592 (0.979)    98     32378 1.00000   0.9689  70.00- 130.00   100.00
 15.592  15.592 (0.979)    61     88742                   248.69- 308.69   274.08
 15.592  15.592 (0.979)    96     51922                   132.55- 192.55   160.36
-------------------------------------------------------------------------------
   51 2-Butanone                                    CAS #: 78-93-3
 15.592  15.592 (0.979)    72     19242 1.00000   0.8860  70.00- 130.00   100.00
 15.592  15.592 (0.979)    43    165569                   794.80- 854.80   860.46
```

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
51 2-Butanone (continued)							
15.592	15.592 (0.979)	57	10023			18.01- 78.01	52.09
53 Tetrahydrofuran					CAS #: 109-99-9		
15.934	15.934 (1.000)	42	102636	1.00000	0.9170	70.00- 130.00	100.00
15.934	15.934 (1.000)	71	20729			0.00- 49.03	20.20
15.934	15.934 (1.000)	72	23325			0.00- 51.35	22.73
55 Chloroform					CAS #: 67-66-3		
15.995	15.995 (1.004)	83	101713	1.00000	0.9773	70.00- 130.00	100.00
15.995	15.995 (1.004)	85	65076			33.33- 93.33	63.98
57 Cyclohexane					CAS #: 110-82-7		
16.273	16.273 (1.021)	84	62171	1.00000	0.9498	70.00- 130.00	100.00
16.273	16.273 (1.021)	56	114862			157.43- 217.43	184.75
16.273	16.273 (1.021)	41	82037			105.99- 165.99	131.95
58 1,1,1-Trichloroethane					CAS #: 71-55-6		
16.242	16.242 (1.019)	97	102883	1.00000	0.9467	70.00- 130.00	100.00
16.242	16.242 (1.019)	99	61877			32.16- 92.16	60.14
59 Carbon Tetrachloride					CAS #: 56-23-5		
16.458	16.458 (1.033)	119	97041	1.00000	0.9308	70.00- 130.00	100.00
16.458	16.458 (1.033)	117	96392			69.67- 129.67	99.33
63 2,2,4-Trimethylpentane					CAS #: 540-84-1		
16.728	16.728 (1.050)	56	104806	1.00000	0.9188	70.00- 130.00	100.00
16.728	16.728 (1.050)	57	304185			258.69- 318.69	290.24
16.728	16.728 (1.050)	41	114755			79.91- 139.91	109.49
64 Benzene					CAS #: 71-43-2		
16.756	16.756 (0.968)	78	136869	1.00000	0.9507	70.00- 130.00	100.00
16.783	16.783 (0.970)	77	32961			0.00- 53.73	24.08
66 tert-amyl methyl ether					CAS #: 994-05-8		
16.811	16.811 (0.971)	87	28817	1.00000	0.8840	70.00- 130.00	100.00
16.811	16.811 (0.971)	73	129712			399.95- 459.95	450.12
16.811	16.811 (0.971)	55	55764			143.62- 203.62	193.51
68 1,2-Dichloroethane					CAS #: 107-06-2		
16.865	16.865 (0.975)	62	84808	1.00000	0.9721	70.00- 130.00	100.00
16.865	16.865 (0.975)	64	24589			1.11- 61.11	28.99
69 Heptane					CAS #: 142-82-5		
16.975	16.975 (0.981)	57	57080	1.00000	0.9200	70.00- 130.00	100.00
16.975	16.975 (0.981)	100	12355			0.00- 51.27	21.65

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
69 Heptane (continued)							
16.975	16.975 (0.981)	43	146424			235.24- 295.24	256.52
72 Trichloroethene					CAS #: 79-01-6		
17.717	17.717 (1.024)	130	63888	1.00000	0.9858	70.00- 130.00	100.00
17.717	17.717 (1.024)	95	62371			71.16- 131.16	97.63
17.717	17.717 (1.024)	97	38788			33.04- 93.04	60.71
73 Methylcyclohexane					CAS #: 108-87-2		
17.964	17.964 (1.038)	83	79766	1.00000	0.9373	70.00- 130.00	100.00
17.964	17.964 (1.038)	98	35846			15.02- 75.02	44.94
17.964	17.964 (1.038)	55	98574			95.64- 155.64	123.58
74 1,2-Dichloropropane					CAS #: 78-87-5		
18.156	18.156 (1.049)	63	62362	1.00000	0.9443	70.00- 130.00	100.00
18.156	18.156 (1.049)	62	46711			45.17- 105.17	74.90
18.156	18.156 (1.049)	41	58035			59.65- 119.65	93.06
75 1,4-Dioxane					CAS #: 123-91-1		
18.266	18.266 (1.056)	88	30183	1.00000	0.9094	70.00- 130.00	100.00
18.293	18.293 (1.057)	58	33020			72.13- 132.13	109.40
18.293	18.293 (1.057)	57	10650			4.41- 64.41	35.28
77 Bromodichloromethane					CAS #: 75-27-4		
18.568	18.568 (1.073)	83	101297	1.00000	0.9265	70.00- 130.00	100.00
18.568	18.568 (1.073)	85	62350			32.12- 92.12	61.55
78 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
19.408	19.408 (1.122)	75	70247	1.00000	0.9401	70.00- 130.00	100.00
19.408	19.408 (1.122)	77	22770			1.25- 61.25	32.41
19.408	19.408 (1.122)	39	68296			71.17- 131.17	97.22
79 4-Methyl-2-pentanone					CAS #: 108-10-1		
19.610	19.610 (1.133)	43	178069	1.00000	0.8763	70.00- 130.00	100.00
19.610	19.610 (1.133)	58	50996			0.00- 57.24	28.64
19.610	19.610 (1.133)	85	15001			0.00- 38.20	8.42
81 Toluene					CAS #: 108-88-3		
19.991	19.991 (1.155)	91	156390	1.00000	0.9842	70.00- 130.00	100.00
19.991	19.991 (1.155)	92	89845			28.60- 88.60	57.45
82 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
20.435	20.435 (0.920)	75	69757	1.00000	0.8909	70.00- 130.00	100.00
20.435	20.435 (0.920)	77	26027			5.48- 65.48	37.31
20.435	20.435 (0.920)	39	65795			63.15- 123.15	94.32

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

   84 1,1,2-Trichloroethane                        CAS #: 79-00-5
 20.758  20.758 (0.935)    97     57124 1.00000   0.9553  70.00- 130.00   100.00
 20.758  20.758 (0.935)    99     36090                   32.13-  92.13    63.18
 20.758  20.758 (0.935)    83     48293                   57.82- 117.82    84.54
-------------------------------------------------------------------------------
   86 Tetrachloroethene                            CAS #: 127-18-4
 20.901  20.901 (0.941)   166     73214 1.00000   0.9470  70.00- 130.00   100.00
 20.901  20.901 (0.941)   129     54759                   47.04- 107.04    74.79
 20.901  20.901 (0.941)   131     58955                   46.95- 106.95    80.52
-------------------------------------------------------------------------------
   87 2-Hexanone                                   CAS #: 591-78-6
 21.045  21.045 (0.948)    58     58916 1.00000   0.8799  70.00- 130.00   100.00
 21.045  21.045 (0.948)    43    167500                  242.48- 302.48   284.30
 21.045  21.045 (0.948)   100      7587                    0.00-  43.88    12.88
-------------------------------------------------------------------------------
   89 Dibromochloromethane                         CAS #: 124-48-1
 21.367  21.367 (0.962)   129    102631 1.00000   0.9222  70.00- 130.00   100.00
 21.367  21.367 (0.962)   127     81993                   50.38- 110.38    79.89
-------------------------------------------------------------------------------
   90 1,2-Dibromoethane                            CAS #: 106-93-4
 21.583  21.583 (0.972)   107     82292 1.00000   0.8834  70.00- 130.00   100.00
 21.583  21.583 (0.972)   109     77266                   62.69- 122.69    93.89
-------------------------------------------------------------------------------
   93 Chlorobenzene                                CAS #: 108-90-7
 22.233  22.233 (1.001)   112    121049 1.00000   0.9704  70.00- 130.00   100.00
 22.233  22.233 (1.001)   114     35726                    1.62-  61.62    29.51
 22.233  22.233 (1.001)    77     76045                   38.66-  98.66    62.82
-------------------------------------------------------------------------------
   95 Ethyl Benzene                                CAS #: 100-41-4
 22.315  22.315 (1.005)   106     50181 1.00000   0.8962  70.00- 130.00   100.00
 22.315  22.315 (1.005)    91    163155                  292.36- 352.36   325.13
-------------------------------------------------------------------------------
   96 m,p-Xylene                                   CAS #: 108-38-3
 22.480  22.480 (1.012)   106     49187 1.00000   0.8909  70.00- 130.00   100.00
 22.480  22.480 (1.012)    91     89737                  164.15- 224.15   182.44
-------------------------------------------------------------------------------
  100 o-Xylene                                     CAS #: 95-47-6
 23.002  23.002 (1.036)   106     45454 1.00000   0.8848  70.00- 130.00   100.00
 23.002  23.002 (1.036)    91     95717                  186.63- 246.63   210.58
-------------------------------------------------------------------------------
  101 Styrene                                      CAS #: 100-42-5
 23.029  23.029 (1.037)   104     64209 1.00000   0.8543  70.00- 130.00   100.00
 23.029  23.029 (1.037)    78     32650                   28.70-  88.70    50.85
-------------------------------------------------------------------------------
  102 Bromoform                                    CAS #: 75-25-2
 23.331  23.331 (1.051)   173     80613 1.00000   0.8546  70.00- 130.00   100.00
```

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
102 Bromoform (continued)							
23.331	23.331 (1.051)	171	41159			20.40- 80.40	51.06
103 Cumene					CAS #: 98-82-8		
23.441	23.441 (1.056)	105	133490	1.00000	0.8898	70.00- 130.00	100.00
23.441	23.441 (1.056)	120	33617			0.00- 57.73	25.18
108 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
23.833	23.833 (1.073)	83	111923	1.00000	0.9712	70.00- 130.00	100.00
23.833	23.833 (1.073)	85	69879			34.81- 94.81	62.43
111 Propylbenzene					CAS #: 103-65-1		
23.910	23.910 (1.077)	91	107171	1.00000	0.8054	70.00- 130.00	100.00
23.910	23.910 (1.077)	120	24139			0.00- 53.83	22.52
113 4-Ethyltoluene					CAS #: 622-96-8		
24.039	24.039 (1.083)	105	74672	1.00000	0.7649	70.00- 130.00	100.00
24.039	24.039 (1.083)	120	22648			0.18- 60.18	30.33
114 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
24.116	24.116 (1.086)	105	76106	1.00000	0.9337	70.00- 130.00	100.00
24.116	24.116 (1.086)	120	34625			20.44- 80.44	45.50
120 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
24.529	24.529 (1.105)	105	55600	1.00000	0.8422	70.00- 130.00	100.00
24.529	24.529 (1.105)	120	25682			19.27- 79.27	46.19
122 1,3-Dichlorobenzene					CAS #: 541-73-1		
24.902	24.902 (1.121)	146	54021	1.00000	0.8480	70.00- 130.00	100.00
24.902	24.902 (1.121)	148	33717			38.48- 98.48	62.41
24.902	24.902 (1.121)	111	21463			10.49- 70.49	39.73
124 1,4-Dichlorobenzene					CAS #: 106-46-7		
24.992	24.992 (1.125)	146	48298	1.00000	0.8065	70.00- 130.00	100.00
24.992	24.992 (1.125)	148	32956			38.92- 98.92	68.23
24.992	24.992 (1.125)	111	19809			11.61- 71.61	41.01
127 alpha-chlorotoluene					CAS #: 100-44-7		
25.127	25.127 (1.132)	91	51707	1.00000	0.8081	70.00- 130.00	100.00
25.127	25.127 (1.132)	126	12325			0.00- 52.82	23.84
128 1,2-Dichlorobenzene					CAS #: 95-50-1		
25.396	25.396 (1.144)	146	50442	1.00000	0.8534	70.00- 130.00	100.00
25.396	25.396 (1.144)	148	32405			36.09- 96.09	64.24
25.396	25.396 (1.144)	111	21486			13.38- 73.38	42.60

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
131 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
27.077	27.077 (1.219)	180	37913	1.00000	0.8741	70.00- 130.00	100.00
27.077	27.077 (1.219)	182	37762			64.14- 124.14	99.60
132 Hexachlorobutadiene					CAS #: 87-68-3		
27.167	27.167 (1.223)	225	27652	1.00000	0.7623	70.00- 130.00	100.00
27.167	27.167 (1.223)	223	18253			44.27- 104.27	66.01
133 Naphthalene					CAS #: 91-20-3		
27.391	27.391 (1.234)	128	12855	0.10000	0.1251	70.00- 130.00	100.00
27.368	27.368 (1.232)	127	3347			0.00- 47.41	26.04

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdv.i
Lab File ID: v100609.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: ef
Method File: /chem/msdv.i/06Oct2014.b/v14l1006a.m
Misc Info: 1.0ppbv (1.0ppbv)

Calibration Date: 06-OCT-2014
Calibration Time: 18:36
Client Smp ID: Level 8
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
54 Bromochloromethan	125097	75058	175136	123502	-1.28
71 1,4-Difluorobenze	498199	298919	697479	487832	-2.08
92 Chlorobenzene-d5	406420	243852	568988	379868	-6.53

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
54 Bromochloromethan	15.93	15.60	16.26	15.93	0.00
71 1,4-Difluorobenze	17.30	16.97	17.63	17.30	0.00
92 Chlorobenzene-d5	22.21	21.88	22.54	22.21	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/msdv.i/06Oct2014.b/v100609.d

Date : 06-OCT-2014 16:43

Client ID: Level 8

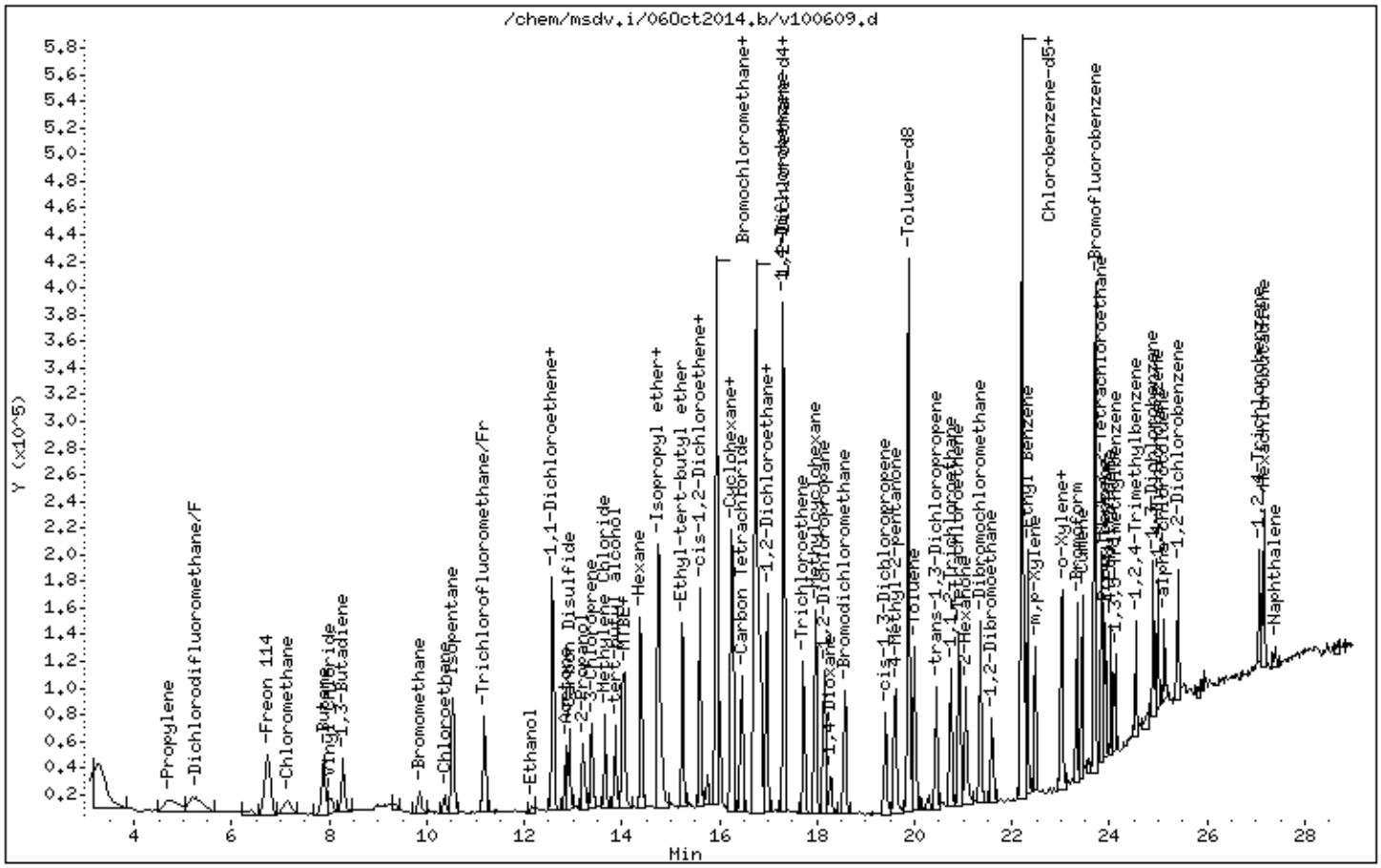
Instrument: msdv.i

Sample Info: 250mL #2677-278

Operator: ef

Column phase: RTx-624

Column diameter: 0.32



Eurofins Air Toxics Inc.

TO15/Modified TO-14A

Data file : /chem1/msdv.i/22Oct2014.b/v102208.d
Lab Smp Id: ICAL Level 9 Client Smp ID: ICAL Level 9
Inj Date : 22-OCT-2014 15:31
Operator : ef Inst ID: msdv.i
Smp Info : 125mL# 2689-31
Misc Info : 5.0ppbv (5.0ppbv) Combo
Comment : Low Level GC-MS
Method : /chem1/msdv.i/22Oct2014.b/v14l1006c.m
Meth Date : 22-Oct-2014 20:02 snguyen Quant Type: ISTD
Cal Date : 22-OCT-2014 15:31 Cal File: v102208.d
Als bottle: 1 Calibration Sample, Level: 9
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: Combo-AT7-AT1.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
* 54 Bromochloromethane						CAS #: 74-97-5	
15.934	15.934 (1.000)	130	90325	5.00000		70.00- 130.00	100.00
15.934	15.934 (1.000)	128	66075			47.58- 107.58	73.15
15.934	15.934 (1.000)	49	204214			212.40- 272.40	226.09
* 71 1,4-Difluorobenzene						CAS #: 540-36-3	
17.305	17.305 (1.000)	114	362306	5.00000		70.00- 130.00	100.00
17.305	17.305 (1.000)	88	58626			0.00- 46.08	16.18
* 92 Chlorobenzene-d5						CAS #: 3114-55-4	
22.205	22.205 (1.000)	117	271171	5.00000		70.00- 130.00	100.00
22.205	22.205 (1.000)	82	154618			28.82- 88.82	57.02
13 Vinyl Bromide						CAS #: 593-60-2	
10.967	10.967 (0.688)	106	55228	5.00000	4.903	70.00- 130.00	100.00
10.967	10.967 (0.688)	108	51408			69.86- 129.86	93.08
15 1-Pentene						CAS #: 109-67-1	
11.256	11.256 (0.706)	55	42961	5.00000	4.767	70.00- 130.00	100.00
11.256	11.256 (0.706)	42	72346			142.41- 202.41	168.40

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
19 Diethyl Ether					CAS #: 60-29-7		
12.102	12.102 (0.760)	74	25087	5.00000	5.083	70.00- 130.00	100.00(T)
12.102	12.102 (0.760)	59	48040			162.36- 222.36	191.49
0.000	1.000 (0.000)	31	0			0.00- 30.00	0.00
26 Acetonitrile					CAS #: 75-05-8		
13.475	13.475 (0.846)	41	239071	5.00000	6.350	70.00- 130.00	100.00
13.475	13.475 (0.846)	40	94844			15.69- 75.69	39.67
13.420	13.420 (0.842)	39	152008			25.67- 85.67	63.58
32 Acrylonitrile					CAS #: 107-13-1		
14.161	14.161 (0.889)	53	109066	5.00000	5.541	70.00- 130.00	100.00
14.161	14.161 (0.889)	52	93917			54.38- 114.38	86.11
41 1-Hexene					CAS #: 592-41-6		
14.271	14.271 (0.896)	55	31839	5.00000	4.814	70.00- 130.00	100.00
14.271	14.271 (0.896)	41	58216			152.85- 212.85	182.84
14.271	14.271 (0.896)	84	8045			0.00- 53.17	25.27
44 Methyl Acrylate					CAS #: 96-33-3		
15.675	15.675 (0.984)	55	275376	5.00000	5.878	70.00- 130.00	100.00
15.675	15.675 (0.984)	85	23912			0.00- 38.30	8.68
15.675	15.675 (0.984)	58	18911			0.00- 37.05	6.87
60 Ethyl Acrylate					CAS #: 140-88-5		
17.772	17.772 (1.115)	99	17624	5.00000	6.911	70.00- 130.00	100.00
17.772	17.772 (1.115)	45	39517			301.40- 361.40	224.22
17.772	17.772 (1.115)	55	338193			2545.61-2605.61	1918.93
62 2-Pentanone					CAS #: 107-87-9		
17.964	17.964 (1.127)	43	594011	5.00000	5.094	70.00- 130.00	100.00
17.964	17.964 (1.127)	58	36694			0.00- 35.77	6.18
17.964	17.964 (1.127)	86	57565			0.00- 39.16	9.69
67 Methyl Methacrylate					CAS #: 80-62-6		
18.156	18.156 (1.139)	41	256846	5.00000	5.210	70.00- 130.00	100.00
18.156	18.156 (1.139)	69	104576			9.41- 69.41	40.72
18.156	18.156 (1.139)	100	37301			0.00- 45.26	14.52
70 Dibromomethane					CAS #: 74-95-3		
18.376	18.376 (0.828)	174	96062	5.00000	5.443	70.00- 130.00	100.00
18.376	18.376 (0.828)	93	89274			69.31- 129.31	92.93
18.376	18.376 (0.828)	95	77715			51.34- 111.34	80.90
104 Bis(2-Chloroethyl) Ether					CAS #: 111-44-4		
24.761	24.761 (1.115)	93	177184	5.00000	4.614	70.00- 130.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
104 Bis(2-Chloroethyl) Ether (continued)							
24.761	24.761 (1.115)	95	60405			3.18- 63.18	34.09
24.761	24.761 (1.115)	63	166895			65.44- 125.44	94.19
16 Pentane					CAS #: 109-66-0		
11.400	11.400 (0.715)	43	492394	5.00000	4.829	70.00- 130.00	100.00
11.400	11.400 (0.715)	57	57925			0.00- 41.87	11.76
11.400	11.400 (0.715)	72	26247			0.00- 35.35	5.33
85 Nonane					CAS #: 111-84-2		
22.343	22.343 (1.006)	43	278875	5.00000	4.742	70.00- 130.00	100.00
22.343	22.343 (1.006)	57	189368			37.33- 97.33	67.90
22.343	22.343 (1.006)	85	49335			0.00- 48.12	17.69
110 Undecane					CAS #: 1120-21-4		
25.239	25.239 (1.137)	57	569864	5.00000	5.072	70.00- 130.00	100.00
25.239	25.239 (1.137)	43	639110			81.76- 141.76	112.15
25.239	25.239 (1.137)	85	113442			0.00- 50.32	19.91
125 Dodecane					CAS #: 112-40-3		
26.315	26.315 (1.185)	85	118979	5.00000	5.605	70.00- 130.00	100.00
26.315	26.315 (1.185)	57	534116			393.93- 453.93	448.92
26.315	26.315 (1.185)	43	556171			409.24- 469.24	467.45
42 Ethyl Acetate					CAS #: 141-78-6		
15.592	15.592 (0.979)	70	43093	5.00000	5.283	70.00- 130.00	100.00
15.592	15.592 (0.979)	43	744806			1769.14-1829.14	1728.37
15.592	15.592 (0.979)	61	128246			270.97- 330.97	297.60

QC Flag Legend

T - Target compound detected outside RT window.

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdv.i
Lab File ID: v102208.d
Lab Smp Id: ICAL Level 9
Analysis Type: VOA
Quant Type: ISTD
Operator: ef
Method File: /chem1/msdv.i/22Oct2014.b/v14l1006c.m
Misc Info: 5.0ppbv (5.0ppbv) Combo

Calibration Date: 22-OCT-2014
Calibration Time: 10:10
Client Smp ID: ICAL Level 9
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
54 Bromochloromethan	91528	54917	128139	90325	-1.31
71 1,4-Difluorobenze	354906	212944	496868	362306	2.09
92 Chlorobenzene-d5	297425	178455	416395	271171	-8.83

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
54 Bromochloromethan	15.93	15.60	16.26	15.93	0.00
71 1,4-Difluorobenze	17.30	16.97	17.63	17.30	0.00
92 Chlorobenzene-d5	22.21	21.88	22.54	22.21	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/msdv.i/22Oct2014.b/v102208.d

Date : 22-OCT-2014 15:31

Client ID: ICAL Level 9

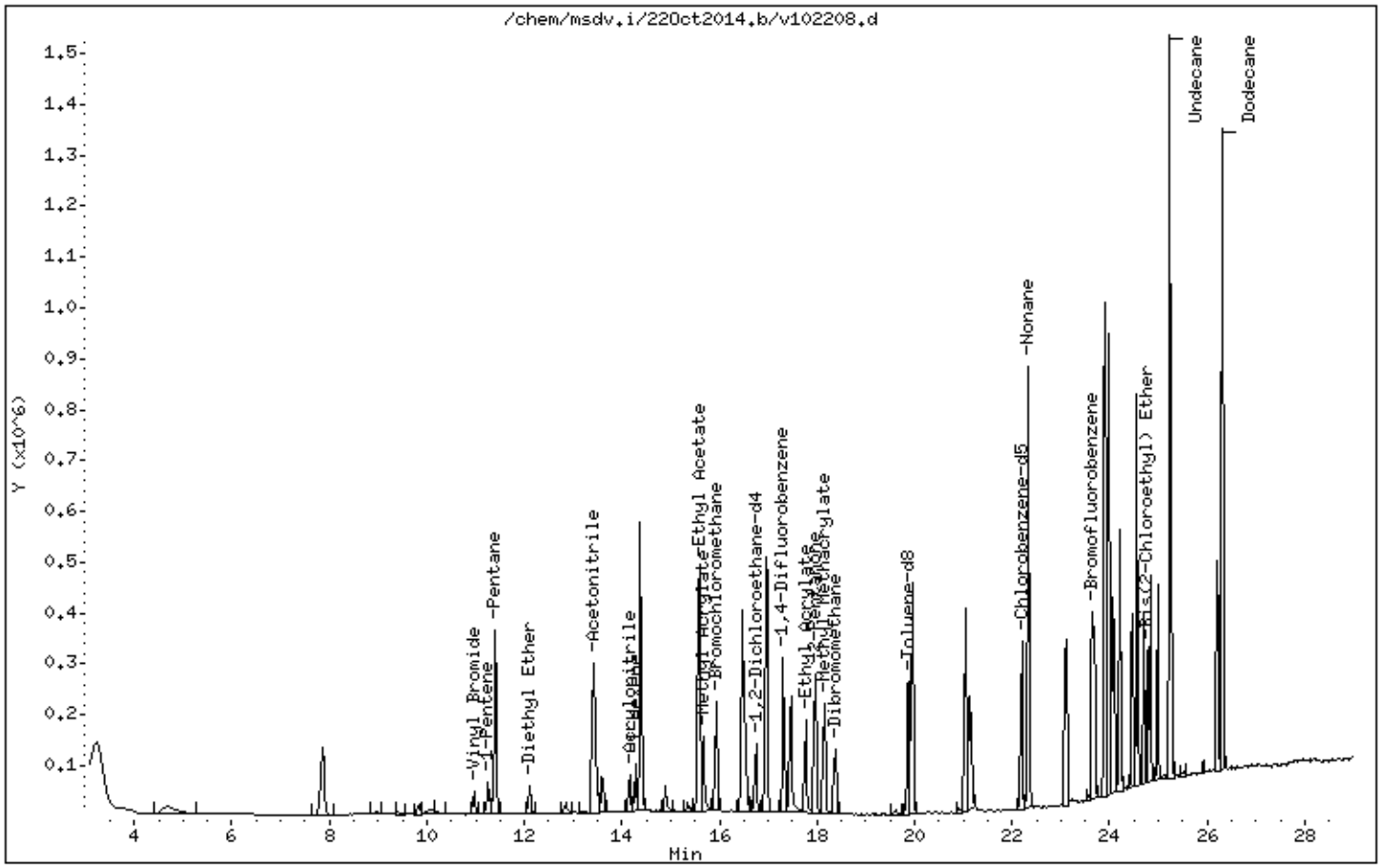
Instrument: msdv.i

Sample Info: 125mL# 2689-31

Operator: ef

Column phase: RTx-624

Column diameter: 0.32



Eurofins Air Toxics Inc.

TO15/Modified TO-14A

Data file : /chem/msdv.i/17Oct2014.b/v101711.d
Lab Smp Id: ICAL Level 9
Inj Date : 17-OCT-2014 17:06
Operator : gd Inst ID: msdv.i
Smp Info : 250mL# 2687-10
Misc Info : 5.0ppbv (5.0ppbv) AT-1
Comment : Low Level GC-MS
Method : /chem/msdv.i/17Oct2014.b/v14l1006b.m
Meth Date : 18-Oct-2014 08:06 lover Quant Type: ISTD
Cal Date : 17-OCT-2014 17:06 Cal File: v101711.d
Als bottle: 1 Calibration Sample, Level: 9
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT1crv.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
* 54 Bromochloromethane					CAS #: 74-97-5		
15.934	15.947 (1.000)	130	103854	5.00000		80.00- 120.00	100.00
15.934	15.947 (1.000)	128	80463			48.18- 108.18	77.48
15.934	15.916 (1.000)	49	228749			210.53- 270.53	220.26
* 71 1,4-Difluorobenzene					CAS #: 540-36-3		
17.305	17.318 (1.000)	114	441823	5.00000		80.00- 120.00	100.00
17.305	17.318 (1.000)	88	67197			0.00- 45.98	15.21
* 92 Chlorobenzene-d5					CAS #: 3114-55-4		
22.205	22.219 (1.000)	117	346519	5.00000		80.00- 120.00	100.00
22.205	22.192 (1.000)	82	195542			28.41- 88.41	56.43
1 Freon134a					CAS #: 811-97-2		
4.560	4.560 (0.286)	83	101888	5.00000	4.668	70.00- 130.00	100.00
4.598	4.560 (0.289)	69	80179			55.07- 115.07	78.69
2 Freon 152A					CAS #: 75-37-6		
5.051	5.051 (0.317)	65	58216	5.00000	4.514	70.00- 130.00	100.00
5.051	5.051 (0.317)	51	159974			272.07- 332.07	274.79

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
5 Freon 22					CAS #: 75-45-6		
5.806	5.806 (0.364)	51	269138	5.00000	4.641	70.00- 130.00	100.00
5.806	5.806 (0.364)	67	31438			0.00- 41.79	11.68
5.844	5.806 (0.367)	85	860			0.00- 37.94	0.32
14 Fr21					CAS #: 75-43-4		
11.280	11.280 (0.708)	67	294990	5.00000	4.584	70.00- 130.00	100.00
11.280	11.280 (0.708)	69	91468			0.49- 60.49	31.01
11.280	11.280 (0.708)	47	45772			0.00- 45.46	15.52
205 2-Heptanone					CAS #: 110-43-0		
23.111	23.111 (1.041)	58	234686	5.00000	4.643	70.00- 130.00	100.00
23.111	23.111 (1.041)	43	538781			201.02- 261.02	229.58
206 1-Butanol					CAS #: 71-36-3		
17.469	17.469 (1.010)	56	282104	5.00000	6.258	70.00- 130.00	100.00
17.469	17.469 (1.010)	41	250039			53.11- 113.11	88.63
17.469	17.469 (1.010)	43	191593			32.89- 92.89	67.92
204 Butyl Acetate					CAS #: 123-86-4		
21.116	21.116 (1.220)	56	136585	5.00000	5.332	70.00- 130.00	100.00
21.152	21.116 (1.222)	73	37372			1.67- 61.67	27.36
21.116	21.116 (1.220)	43	409073			283.51- 343.51	299.50
56 1,1-Dicholoropropene					CAS #: 563-58-6		
16.458	16.458 (1.033)	110	88841	5.00000	4.669	70.00- 130.00	100.00
16.458	16.458 (1.033)	75	243954			249.21- 309.21	274.60
91 1,1,1,2-Tetrachloroethane					CAS #: 630-20-6		
22.343	22.343 (1.006)	131	265361	5.00000	4.629	70.00- 130.00	100.00
22.343	22.343 (1.006)	117	178767			40.73- 100.73	67.37
22.343	22.343 (1.006)	95	101616			8.70- 68.70	38.29
105 1,2,3-Trichloropropane					CAS #: 96-18-4		
23.936	23.936 (1.078)	110	113203	5.00000	4.488	70.00- 130.00	100.00
23.910	23.936 (1.077)	75	326785			248.74- 308.74	288.67
23.910	23.936 (1.077)	61	107465			67.24- 127.24	94.93
97 Bromobenzene					CAS #: 108-86-1		
23.884	23.884 (1.076)	156	206432	5.00000	4.747	70.00- 130.00	100.00
23.884	23.884 (1.076)	158	199033			70.23- 130.23	96.42
23.884	23.884 (1.076)	77	397152			166.97- 226.97	192.39
107 2-Chlorotoluene					CAS #: 95-49-8		
24.091	24.091 (1.085)	126	112104	5.00000	4.677	70.00- 130.00	100.00
24.065	24.091 (1.084)	91	319598			263.05- 323.05	285.09

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
107 2-Chlorotoluene (continued)							
24.065	24.091 (1.084)	65	36337			6.34- 66.34	32.41
109 4-Chlorotoluene					CAS #: 106-43-4		
24.194	24.194 (1.090)	126	95768	5.00000	4.391	70.00- 130.00	100.00
24.194	24.194 (1.090)	91	266852			237.89- 297.89	278.64
24.194	24.194 (1.090)	63	44685			17.19- 77.19	46.66
115 tert-Butylbenzene					CAS #: 98-06-6		
24.477	24.477 (1.102)	119	256846	5.00000	4.566	70.00- 130.00	100.00
24.477	24.477 (1.102)	134	61307			0.00- 54.70	23.87
24.477	24.477 (1.102)	91	168524			37.96- 97.96	65.61
119 sec-Butylbenzene					CAS #: 135-98-8		
24.710	24.710 (1.113)	105	337013	5.00000	4.577	70.00- 130.00	100.00
24.710	24.710 (1.113)	134	71642			0.00- 51.17	21.26
24.710	24.710 (1.113)	91	53611			0.00- 46.66	15.91
116 p-Cymene					CAS #: 99-87-6		
24.835	24.835 (1.118)	119	272689	5.00000	3.777	70.00- 130.00	100.00
24.835	24.835 (1.118)	134	75595			0.00- 57.73	27.72
24.835	24.835 (1.118)	91	62175			0.00- 54.71	22.80
123 Butylbenzene					CAS #: 104-51-8		
25.261	25.261 (1.138)	134	76053	5.00000	3.305	70.00- 130.00	100.00
25.261	25.261 (1.138)	91	266457			322.95- 382.95	350.36
25.261	25.261 (1.138)	92	140669			154.37- 214.37	184.96
129 1,2-dibromo-3-chloropropane					CAS #: 96-12-8		
26.203	26.203 (1.180)	157	162926	5.00000	5.246	70.00- 130.00	100.00
26.203	26.203 (1.180)	75	147367			60.30- 120.30	90.45
26.203	26.203 (1.180)	155	128352			49.02- 109.02	78.78
83 1,3-Dichloropropane					CAS #: 142-28-9		
21.045	21.045 (1.216)	76	285604	5.00000	4.642	70.00- 130.00	100.00
21.045	21.045 (1.216)	41	327403			86.61- 146.61	114.64
21.045	21.045 (1.216)	78	92421			2.78- 62.78	32.36

Report Date: 20-Oct-2014 08:42

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdv.i
Lab File ID: v101711.d
Lab Smp Id: ICAL Level 9
Analysis Type: VOA
Quant Type: ISTD
Operator: gd
Method File: /chem/msdv.i/17Oct2014.b/v14l1006b.m
Misc Info: 5.0ppbv (5.0ppbv) AT-1

Calibration Date: 17-OCT-2014
Calibration Time: 09:45

Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
54 Bromochloromethan	116594	69956	163232	103854	-10.93
71 1,4-Difluorobenze	480411	288247	672575	441823	-8.03
92 Chlorobenzene-d5	391969	235181	548757	346519	-11.60

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
54 Bromochloromethan	15.95	15.62	16.28	15.93	-0.09
71 1,4-Difluorobenze	17.32	16.99	17.65	17.30	-0.08
92 Chlorobenzene-d5	22.22	21.89	22.55	22.21	-0.06

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

Data File: /chem/msdv.i/17Oct2014.b/v101711.d

Date : 17-OCT-2014 17:06

Client ID:

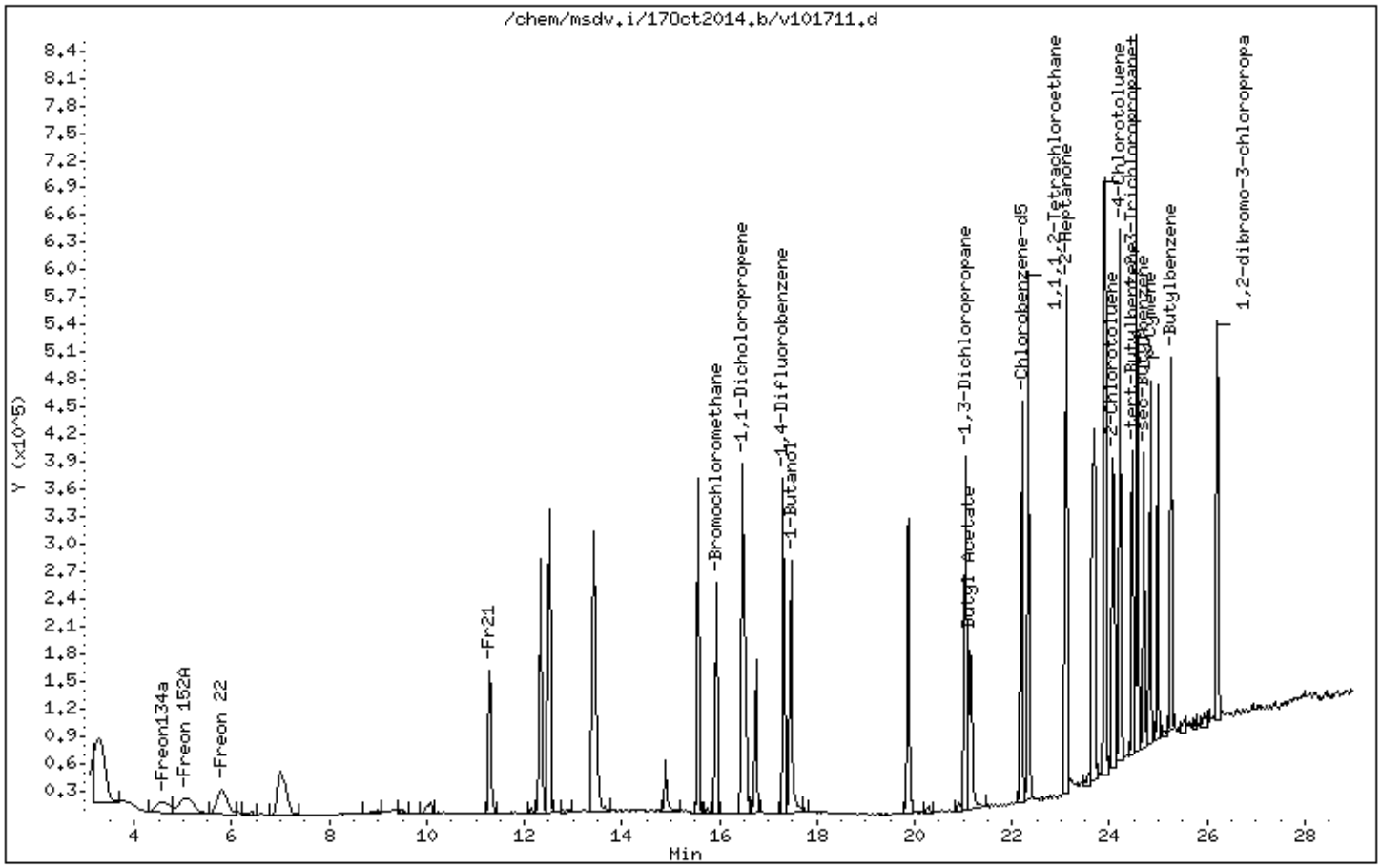
Instrument: msdv.i

Sample Info: 250mL# 2687-10

Operator: gd

Column phase: RTx-624

Column diameter: 0.32



Eurofins Air Toxics Inc.

TO15/Modified TO-14A

Data file : /chem/msdv.i/17Oct2014.b/v101708.d
Lab Smp Id: ICAL Level 9
Inj Date : 17-OCT-2014 14:29
Operator : ef Inst ID: msdv.i
Smp Info : 250mL# 2687-8
Misc Info : 5.0ppbv (5.0ppbv) Oxygenates
Comment : Low Level GC-MS
Method : /chem/msdv.i/17Oct2014.b/v14l1006b.m
Meth Date : 18-Oct-2014 08:06 lover Quant Type: ISTD
Cal Date : 17-OCT-2014 17:06 Cal File: v101711.d
Als bottle: 1 Calibration Sample, Level: 9
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: Oxy.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
* 54 Bromochloromethane					CAS #: 74-97-5		
15.933	15.947 (1.000)	130	104489	5.00000		80.00- 120.00	100.00
15.933	15.947 (1.000)	128	79435			48.18- 108.18	76.02
15.933	15.916 (1.000)	49	219480			210.53- 270.53	210.05
* 71 1,4-Difluorobenzene					CAS #: 540-36-3		
17.305	17.318 (1.000)	114	429065	5.00000		80.00- 120.00	100.00
17.305	17.318 (1.000)	88	70343			0.00- 45.98	16.39
* 92 Chlorobenzene-d5					CAS #: 3114-55-4		
22.205	22.219 (1.000)	117	339373	5.00000		80.00- 120.00	100.00
22.205	22.192 (1.000)	82	187339			28.41- 88.41	55.20
38 tert-butyl alcohol					CAS #: 75-65-0		
13.859	13.859 (0.870)	59	469902	5.00000	4.827	80.00- 120.00	100.00
13.859	13.859 (0.870)	41	133960			1.21- 61.21	28.51
13.859	13.859 (0.870)	57	51042			0.00- 40.48	10.86
45 Isopropyl ether					CAS #: 108-20-3		
14.738	14.738 (0.925)	45	1001619	5.00000	4.744	80.00- 120.00	100.00

RT	EXP RT	(REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
45 Isopropyl ether (continued)								
14.738	14.738	(0.925)	87	145500			0.00- 43.46	14.53
14.738	14.738	(0.925)	59	86513			0.00- 38.28	8.64
49 Ethyl-tert-butyl ether						CAS #: 637-92-3		
15.240	15.240	(0.956)	59	785227	5.00000	4.824	80.00- 120.00	100.00
15.240	15.240	(0.956)	87	228456			0.00- 58.99	29.09
15.240	15.240	(0.956)	41	184017			0.00- 55.20	23.43
66 tert-amyl methyl ether						CAS #: 994-05-8		
16.810	16.810	(0.971)	87	130877	5.00000	4.814	80.00- 120.00	100.00
16.810	16.810	(0.971)	73	541848			391.10- 451.10	414.01
16.810	16.810	(0.971)	55	193756			132.07- 192.07	148.04

Report Date: 20-Oct-2014 08:42

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdv.i
Lab File ID: v101708.d
Lab Smp Id: ICAL Level 9
Analysis Type: VOA
Quant Type: ISTD
Operator: ef
Method File: /chem/msdv.i/17Oct2014.b/v14l1006b.m
Misc Info: 5.0ppbv (5.0ppbv) Oxygenates

Calibration Date: 17-OCT-2014
Calibration Time: 09:45

Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
54 Bromochloromethan	116594	69956	163232	104489	-10.38
71 1,4-Difluorobenze	480411	288247	672575	429065	-10.69
92 Chlorobenzene-d5	391969	235181	548757	339373	-13.42

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
54 Bromochloromethan	15.95	15.62	16.28	15.93	-0.09
71 1,4-Difluorobenze	17.32	16.99	17.65	17.30	-0.08
92 Chlorobenzene-d5	22.22	21.89	22.55	22.21	-0.06

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

Data File: /chem/msdv.i/17Oct2014.b/v101708.d

Date : 17-OCT-2014 14:29

Client ID:

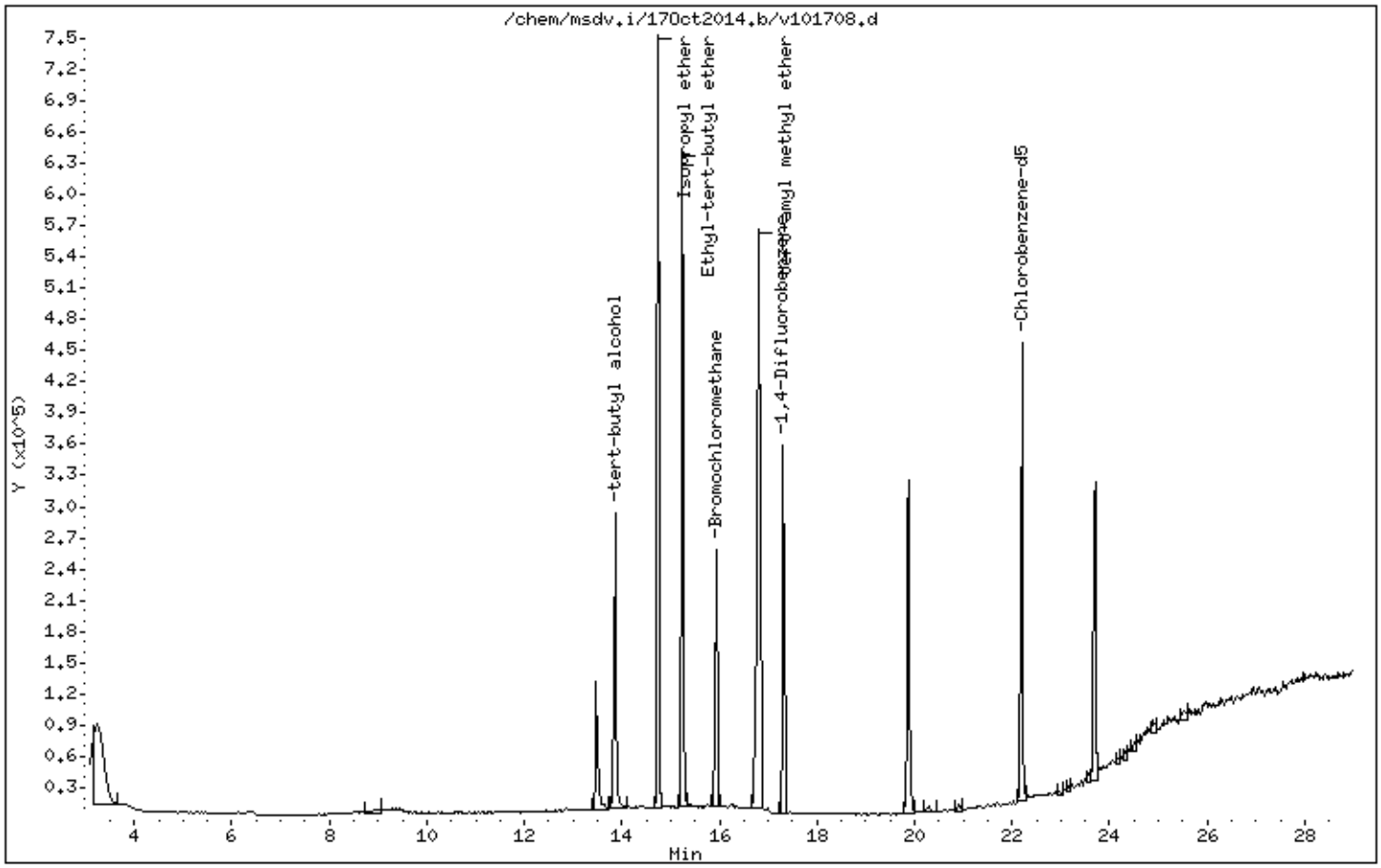
Instrument: msdv.i

Sample Info: 250mL# 2687-8

Operator: ef

Column phase: RTx-624

Column diameter: 0.32



Eurofins Air Toxics Inc.

TO15/Modified TO-14A

Data file : /chem/msdv.i/07Oct2014.b/v100713.d
Lab Smp Id: ICAL Client Smp ID: Level 9
Inj Date : 07-OCT-2014 21:35
Operator : gd Inst ID: msdv.i
Smp Info : 250mL #2677-286
Misc Info : 5.0ppbv (5.0ppbv)
Comment : Low Level GC-MS
Method : /chem/msdv.i/07Oct2014.b/v14l1006a.m
Meth Date : 07-Oct-2014 22:27 gdelacru Quant Type: ISTD
Cal Date : 07-OCT-2014 21:35 Cal File: v100713.d
Als bottle: 6 Calibration Sample, Level: 9
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT7crv.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
* 54 Bromochloromethane					CAS #: 74-97-5		
15.934	15.934 (1.000)	130	112291	5.00000		80.00- 120.00	100.00
15.934	15.934 (1.000)	128	86429			48.21- 108.21	76.97
15.934	15.934 (1.000)	49	262838			215.61- 275.61	234.07
* 71 1,4-Difluorobenzene					CAS #: 540-36-3		
17.305	17.305 (1.000)	114	473536	5.00000		80.00- 120.00	100.00
17.305	17.305 (1.000)	88	77846			0.00- 46.17	16.44
* 92 Chlorobenzene-d5					CAS #: 3114-55-4		
22.205	22.205 (1.000)	117	281286	5.00000		80.00- 120.00	100.00
22.205	22.205 (1.000)	82	168386			29.34- 89.34	59.86
76 Octane					CAS #: 111-65-9		
19.969	19.968 (1.154)	57	182532	5.00000	4.678	80.00- 120.00	100.00
19.969	19.968 (1.154)	85	143689			45.62- 105.62	78.72
19.969	19.968 (1.154)	43	611353			293.94- 353.94	334.93
99 Decane					CAS #: 124-18-5		
23.987	23.987 (1.080)	57	373381	5.00000	4.670	80.00- 120.00	100.00

RT	EXP RT	(REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
99 Decane (continued)								
23.987	23.987	(1.080)	71	106838			0.00- 57.94	28.61
23.987	23.987	(1.080)	142	11436			0.00- 33.26	3.06
117 Indene						CAS #: 95-13-6		
25.463	25.485	(1.147)	115	174482	5.00000	4.740	80.00- 120.00	100.00(T)
25.485	25.485	(1.148)	116	168898			67.11- 127.11	96.80
0.000	25.485	(0.000)	0	0			0.00- 30.00	0.00
121 1,2,3-trimethylbenzene						CAS #: 526-73-8		
24.992	24.992	(1.125)	120	93472	5.00000	4.418	80.00- 120.00	100.00
24.992	24.992	(1.125)	105	213966			192.71- 252.71	228.91
24.992	24.992	(1.125)	77	29762			2.83- 62.83	31.84

QC Flag Legend

T - Target compound detected outside RT window.

Report Date: 08-Oct-2014 08:27

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdv.i
Lab File ID: v100713.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: gd
Method File: /chem/msdv.i/07Oct2014.b/v14l1006a.m
Misc Info: 5.0ppbv (5.0ppbv)

Calibration Date: 07-OCT-2014
Calibration Time: 12:28
Client Smp ID: Level 9
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
54 Bromochloromethan	122750	73650	171850	112291	-8.52
71 1,4-Difluorobenze	498533	299120	697946	473536	-5.01
92 Chlorobenzene-d5	397978	238787	557169	281286	-29.32

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
54 Bromochloromethan	15.93	15.60	16.26	15.93	0.00
71 1,4-Difluorobenze	17.30	16.97	17.63	17.30	0.00
92 Chlorobenzene-d5	22.21	21.88	22.54	22.21	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/msdv.i/07Oct2014.b/v100713.d

Date : 07-OCT-2014 21:35

Client ID: Level 9

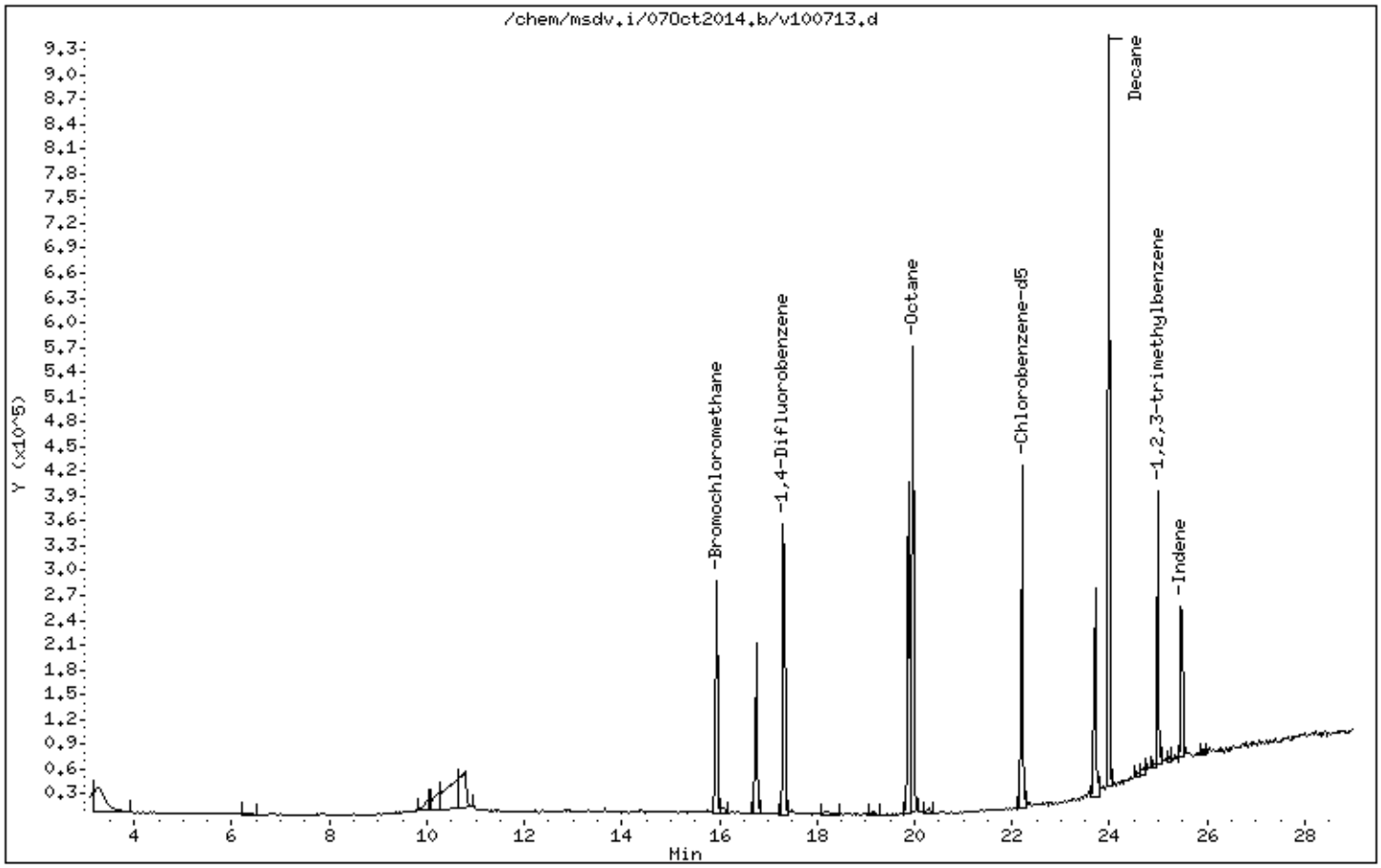
Instrument: msdv.i

Sample Info: 250mL #2677-286

Operator: gd

Column phase: RTx-624

Column diameter: 0.32



Eurofins Air Toxics Inc.

TO15/Modified TO-14A

Data file : /chem/msdv.i/06Oct2014.b/v100610.d
Lab Smp Id: ICAL Client Smp ID: Level 9
Inj Date : 06-OCT-2014 17:52
Operator : gd Inst ID: msdv.i
Smp Info : 25mL #2677-212
Misc Info : 5.0ppbv (50ppbv)
Comment : Low Level GC-MS
Method : /chem/msdv.i/06Oct2014.b/v14l1006a.m
Meth Date : 07-Oct-2014 11:32 efinn Quant Type: ISTD
Cal Date : 06-OCT-2014 17:52 Cal File: v100610.d
Als bottle: 1 Calibration Sample, Level: 9
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: HiLoFULLcrv.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
* 54 Bromochloromethane					CAS #: 74-97-5		
15.933	15.933 (1.000)	130	125977	5.00000		70.00- 130.00	100.00
15.933	15.933 (1.000)	128	99218			47.54- 107.54	78.76
15.933	15.933 (1.000)	49	303192			218.45- 278.45	240.67
* 71 1,4-Difluorobenzene					CAS #: 540-36-3		
17.305	17.305 (1.000)	114	495355	5.00000		70.00- 130.00	100.00
17.305	17.305 (1.000)	88	81080			0.00- 46.16	16.37
* 92 Chlorobenzene-d5					CAS #: 3114-55-4		
22.205	22.205 (1.000)	117	388529	5.00000		70.00- 130.00	100.00
22.205	22.205 (1.000)	82	233869			29.12- 89.12	60.19
$ 65 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
16.756	16.756 (1.052)	65	219782	5.00000	4.754	70.00- 130.00	100.00
16.756	16.756 (1.052)	67	122733			28.37- 88.37	55.84
$ 80 Toluene-d8					CAS #: 2037-26-5		
19.879	19.879 (1.149)	98	483799	5.00000	5.080	70.00- 130.00	100.00
19.879	19.879 (1.149)	70	58128			0.00- 41.90	12.01

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
$ 80 Toluene-d8 (continued)							
19.879	19.879 (1.149)	100	311979			33.85- 93.85	64.49
$ 106 Bromofluorobenzene					CAS #: 460-00-4		
23.704	23.704 (1.067)	174	170446	5.00000	5.101	70.00- 130.00	100.00
23.704	23.704 (1.067)	95	223459			99.95- 159.95	131.10
23.704	23.704 (1.067)	176	161679			67.64- 127.64	94.86
3 Propylene					CAS #: 115-07-1		
4.673	4.673 (0.293)	41	366315	5.00000	5.183	70.00- 130.00	100.00
4.673	4.673 (0.293)	42	241925			35.18- 95.18	66.04
4.673	4.673 (0.293)	39	272364			44.12- 104.12	74.35
4 Dichlorodifluoromethane/Fr12					CAS #: 75-71-8		
5.202	5.202 (0.326)	85	648983	5.00000	5.499	70.00- 130.00	100.00
5.202	5.202 (0.326)	87	208545			1.90- 61.90	32.13
6 Freon 114					CAS #: 76-14-2		
6.713	6.713 (0.421)	135	455844	5.00000	5.408	70.00- 130.00	100.00
6.713	6.713 (0.421)	137	146364			0.53- 60.53	32.11
6.713	6.713 (0.421)	85	684581			121.37- 181.37	150.18
8 Chloromethane					CAS #: 74-87-3		
7.052	7.052 (0.443)	50	376222	5.00000	5.289	70.00- 130.00	100.00
7.052	7.052 (0.443)	52	117431			1.81- 61.81	31.21
9 Butane					CAS #: 106-97-8		
7.853	7.853 (0.493)	58	62919	5.00000	5.278	70.00- 130.00	100.00
7.853	7.853 (0.493)	43	701497			1065.18-1125.18	1114.92
10 Vinyl Chloride					CAS #: 75-01-4		
8.009	8.009 (0.503)	62	296043	5.00000	5.578	70.00- 130.00	100.00
8.009	8.009 (0.503)	64	87758			0.00- 58.65	29.64
11 1,3-Butadiene					CAS #: 106-99-0		
8.257	8.257 (0.518)	54	280379	5.00000	5.389	70.00- 130.00	100.00
8.257	8.257 (0.518)	39	367364			107.15- 167.15	131.02
12 Bromomethane					CAS #: 74-83-9		
9.834	9.834 (0.617)	94	185887	5.00000	5.713	70.00- 130.00	100.00
9.834	9.834 (0.617)	96	177464			72.12- 132.12	95.47
17 Chloroethane					CAS #: 75-00-3		
10.340	10.340 (0.649)	64	139366	5.00000	5.650	70.00- 130.00	100.00
10.340	10.340 (0.649)	66	41023			0.00- 59.90	29.44

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
18 Isopentane					CAS #: 78-78-4		
10.533	10.533 (0.661)	57	277024	5.00000	5.452	70.00- 130.00	100.00
10.533	10.533 (0.661)	43	559535			171.32- 231.32	201.98
10.533	10.533 (0.661)	42	493927			150.03- 210.03	178.30
20 Trichlorofluoromethane/Fr11					CAS #: 75-69-4		
11.183	11.183 (0.702)	101	663143	5.00000	5.458	70.00- 130.00	100.00
11.183	11.183 (0.702)	103	428095			36.54- 96.54	64.56
24 Ethanol					CAS #: 64-17-5		
12.101	12.101 (0.759)	45	145626	5.00000	5.654	70.00- 130.00	100.00
12.101	12.101 (0.759)	46	57620			8.51- 68.51	39.57
12.101	12.101 (0.759)	43	31644			0.00- 54.10	21.73
30 1,1-Dichloroethene					CAS #: 75-35-4		
12.568	12.568 (0.789)	98	147243	5.00000	5.424	70.00- 130.00	100.00
12.568	12.568 (0.789)	61	505527			320.65- 380.65	343.33
12.568	12.568 (0.789)	96	228951			134.30- 194.30	155.49
28 Freon 113					CAS #: 76-13-1		
12.568	12.568 (0.789)	151	381765	5.00000	5.220	70.00- 130.00	100.00
12.568	12.568 (0.789)	153	251920			33.10- 93.10	65.99
12.568	12.568 (0.789)	101	488496			96.37- 156.37	127.96
31 Acetone					CAS #: 67-64-1		
12.816	12.816 (0.804)	58	156669	5.00000	5.264	70.00- 130.00	100.00
12.816	12.816 (0.804)	43	689714			413.15- 473.15	440.24
33 Carbon Disulfide					CAS #: 75-15-0		
12.925	12.925 (0.811)	76	615679	5.00000	5.332	70.00- 130.00	100.00
35 3-Chloroprene					CAS #: 107-05-1		
13.392	13.392 (0.841)	76	86357	5.00000	5.182	70.00- 130.00	100.00
13.365	13.365 (0.839)	41	507418			547.03- 607.03	587.58
34 2-Propanol					CAS #: 67-63-0		
13.173	13.173 (0.827)	45	738402	5.00000	5.357	70.00- 130.00	100.00
13.173	13.173 (0.827)	43	142138			0.00- 50.74	19.25
13.173	13.173 (0.827)	59	19962			0.00- 32.83	2.70
37 Methylene Chloride					CAS #: 75-09-2		
13.640	13.640 (0.856)	84	196977	5.00000	5.143	70.00- 130.00	100.00
13.640	13.640 (0.856)	49	490755			212.37- 272.37	249.14
13.640	13.640 (0.856)	51	140187			43.31- 103.31	71.17
38 tert-butyl alcohol					CAS #: 75-65-0		
13.859	13.859 (0.870)	59	630593	5.00000	5.220	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
   ==   ====== ========  ====  ======== =======  =======   ============    =====

   38 tert-butyl alcohol (continued)
 13.859  13.859 (0.870)    41    208467                     1.97-  61.97    33.06
 13.859  13.859 (0.870)    57     67681                     0.00-  40.67    10.73
-------------------------------------------------------------------------------
   39 MTBE                                          CAS #: 1634-04-4
 13.996  13.996 (0.878)    73    722511 5.00000    5.258  70.00- 130.00   100.00
 13.996  13.996 (0.878)    57    240604                     2.99-  62.99    33.30
 13.996  13.996 (0.878)    41    309378                    12.12-  72.12    42.82
-------------------------------------------------------------------------------
   40 trans-1,2-Dichloroethene                      CAS #: 156-60-5
 14.051  14.051 (0.882)    98    142249 5.00000    5.538  70.00- 130.00   100.00
 14.051  14.051 (0.882)    61    431008                   293.73- 353.73   303.00
 14.051  14.051 (0.882)    96    223734                   146.88- 206.88   157.28
-------------------------------------------------------------------------------
   43 Hexane                                        CAS #: 110-54-3
 14.381  14.381 (0.903)    57    585945 5.00000    5.329  70.00- 130.00   100.00
 14.381  14.381 (0.903)    43    505672                    57.65- 117.65    86.30
 14.381  14.381 (0.903)    86     63240                     0.00-  40.67    10.79
-------------------------------------------------------------------------------
   45 Isopropyl ether                               CAS #: 108-20-3
 14.738  14.738 (0.925)    45   1551523 5.00000    5.432  70.00- 130.00   100.00
 14.738  14.738 (0.925)    87    208234                     0.00-  43.44    13.42
 14.738  14.738 (0.925)    59    126966                     0.00-  38.34     8.18
-------------------------------------------------------------------------------
   46 1,1-Dichloroethane                            CAS #: 75-34-3
 14.765  14.765 (0.927)    63    562172 5.00000    5.269  70.00- 130.00   100.00
 14.765  14.765 (0.927)    65    174187                     0.37-  60.37    30.98
-------------------------------------------------------------------------------
   47 Vinyl Acetate                                 CAS #: 108-05-4
 14.793  14.793 (0.928)    86     59584 5.00000    5.471  70.00- 130.00   100.00
 14.793  14.793 (0.928)    42    171166                   220.92- 280.92   287.27
 14.793  14.793 (0.928)    43   2021261                  3282.47-3342.47  3392.29
-------------------------------------------------------------------------------
   49 Ethyl-tert-butyl ether                        CAS #: 637-92-3
 15.240  15.240 (0.956)    59   1035362 5.00000    5.319  70.00- 130.00   100.00
 15.240  15.240 (0.956)    87    300056                     0.00-  58.71    28.98
 15.240  15.240 (0.956)    41    274965                     0.00-  56.39    26.56
-------------------------------------------------------------------------------
   50 cis-1,2-Dichloroethene                        CAS #: 156-59-2
 15.592  15.592 (0.979)    98    182940 5.00000    5.367  70.00- 130.00   100.00
 15.592  15.592 (0.979)    61    506163                   248.69- 308.69   276.68
 15.592  15.592 (0.979)    96    290658                   132.55- 192.55   158.88
-------------------------------------------------------------------------------
   51 2-Butanone                                    CAS #: 78-93-3
 15.592  15.592 (0.979)    72    122373 5.00000    5.524  70.00- 130.00   100.00
 15.592  15.592 (0.979)    43    981937                   794.80- 854.80   802.41
```

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
51 2-Butanone (continued)							
15.592	15.592 (0.979)	57	55865			18.01- 78.01	45.65
53 Tetrahydrofuran					CAS #: 109-99-9		
15.933	15.933 (1.000)	42	599115	5.00000	5.248	70.00- 130.00	100.00
15.933	15.933 (1.000)	71	115850			0.00- 49.03	19.34
15.933	15.933 (1.000)	72	131492			0.00- 51.35	21.95
55 Chloroform					CAS #: 67-66-3		
15.995	15.995 (1.004)	83	553092	5.00000	5.210	70.00- 130.00	100.00
15.995	15.995 (1.004)	85	354400			33.33- 93.33	64.08
57 Cyclohexane					CAS #: 110-82-7		
16.272	16.272 (1.021)	84	358178	5.00000	5.364	70.00- 130.00	100.00
16.272	16.272 (1.021)	56	653944			157.43- 217.43	182.58
16.272	16.272 (1.021)	41	475556			105.99- 165.99	132.77
58 1,1,1-Trichloroethane					CAS #: 71-55-6		
16.242	16.242 (1.019)	97	579250	5.00000	5.225	70.00- 130.00	100.00
16.242	16.242 (1.019)	99	374549			32.16- 92.16	64.66
59 Carbon Tetrachloride					CAS #: 56-23-5		
16.457	16.457 (1.033)	119	578443	5.00000	5.440	70.00- 130.00	100.00
16.457	16.457 (1.033)	117	586565			69.67- 129.67	101.40
63 2,2,4-Trimethylpentane					CAS #: 540-84-1		
16.728	16.728 (1.050)	56	602297	5.00000	5.176	70.00- 130.00	100.00
16.728	16.728 (1.050)	57	1761243			258.69- 318.69	292.42
16.728	16.728 (1.050)	41	661335			79.91- 139.91	109.80
64 Benzene					CAS #: 71-43-2		
16.756	16.756 (0.968)	78	774004	5.00000	5.295	70.00- 130.00	100.00
16.756	16.756 (0.968)	77	179842			0.00- 53.73	23.24
66 tert-amyl methyl ether					CAS #: 994-05-8		
16.810	16.810 (0.971)	87	178890	5.00000	5.404	70.00- 130.00	100.00
16.810	16.810 (0.971)	73	770168			399.95- 459.95	430.53
16.810	16.810 (0.971)	55	307276			143.62- 203.62	171.77
68 1,2-Dichloroethane					CAS #: 107-06-2		
16.865	16.865 (0.975)	62	472175	5.00000	5.330	70.00- 130.00	100.00
16.865	16.865 (0.975)	64	147963			1.11- 61.11	31.34
69 Heptane					CAS #: 142-82-5		
16.975	16.975 (0.981)	57	337252	5.00000	5.353	70.00- 130.00	100.00
16.975	16.975 (0.981)	100	76722			0.00- 51.27	22.75

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
69 Heptane (continued)							
16.975	16.975 (0.981)	43	889100			235.24- 295.24	263.63
72 Trichloroethene					CAS #: 79-01-6		
17.716	17.716 (1.024)	130	352640	5.00000	5.359	70.00- 130.00	100.00
17.716	17.716 (1.024)	95	357797			71.16- 131.16	101.46
17.716	17.716 (1.024)	97	225872			33.04- 93.04	64.05
73 Methylcyclohexane					CAS #: 108-87-2		
17.964	17.964 (1.038)	83	467559	5.00000	5.411	70.00- 130.00	100.00
17.964	17.964 (1.038)	98	217200			15.02- 75.02	46.45
17.964	17.964 (1.038)	55	587061			95.64- 155.64	125.56
74 1,2-Dichloropropane					CAS #: 78-87-5		
18.156	18.156 (1.049)	63	360108	5.00000	5.370	70.00- 130.00	100.00
18.156	18.156 (1.049)	62	262105			45.17- 105.17	72.79
18.156	18.156 (1.049)	41	326673			59.65- 119.65	90.72
75 1,4-Dioxane					CAS #: 123-91-1		
18.266	18.266 (1.056)	88	183323	5.00000	5.440	70.00- 130.00	100.00
18.266	18.266 (1.056)	58	187904			72.13- 132.13	102.50
18.266	18.266 (1.056)	57	60796			4.41- 64.41	33.16
77 Bromodichloromethane					CAS #: 75-27-4		
18.568	18.568 (1.073)	83	603589	5.00000	5.437	70.00- 130.00	100.00
18.568	18.568 (1.073)	85	386335			32.12- 92.12	64.01
78 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
19.408	19.408 (1.122)	75	412375	5.00000	5.435	70.00- 130.00	100.00
19.408	19.408 (1.122)	77	127165			1.25- 61.25	30.84
19.408	19.408 (1.122)	39	405972			71.17- 131.17	98.45
79 4-Methyl-2-pentanone					CAS #: 108-10-1		
19.587	19.587 (1.132)	43	1113398	5.00000	5.396	70.00- 130.00	100.00
19.610	19.610 (1.133)	58	296809			0.00- 57.24	26.66
19.610	19.610 (1.133)	85	95037			0.00- 38.20	8.54
81 Toluene					CAS #: 108-88-3		
19.991	19.991 (1.155)	91	870720	5.00000	5.396	70.00- 130.00	100.00
19.991	19.991 (1.155)	92	502128			28.60- 88.60	57.67
82 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
20.435	20.435 (0.920)	75	436328	5.00000	5.448	70.00- 130.00	100.00
20.435	20.435 (0.920)	77	138623			5.48- 65.48	31.77
20.435	20.435 (0.920)	39	404246			63.15- 123.15	92.65

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
84 1,1,2-Trichloroethane					CAS #: 79-00-5		
20.757	20.757 (0.935)	97	343094	5.00000	5.610	70.00- 130.00	100.00
20.757	20.757 (0.935)	99	202842			32.13- 92.13	59.12
20.757	20.757 (0.935)	83	294751			57.82- 117.82	85.91
86 Tetrachloroethene					CAS #: 127-18-4		
20.901	20.901 (0.941)	166	432748	5.00000	5.473	70.00- 130.00	100.00
20.901	20.901 (0.941)	129	347093			47.04- 107.04	80.21
20.901	20.901 (0.941)	131	330363			46.95- 106.95	76.34
87 2-Hexanone					CAS #: 591-78-6		
21.044	21.044 (0.948)	58	363957	5.00000	5.314	70.00- 130.00	100.00
21.044	21.044 (0.948)	43	964106			242.48- 302.48	264.90
21.044	21.044 (0.948)	100	51657			0.00- 43.88	14.19
89 Dibromochloromethane					CAS #: 124-48-1		
21.367	21.367 (0.962)	129	612530	5.00000	5.381	70.00- 130.00	100.00
21.367	21.367 (0.962)	127	480011			50.38- 110.38	78.37
90 1,2-Dibromoethane					CAS #: 106-93-4		
21.583	21.583 (0.972)	107	520725	5.00000	5.466	70.00- 130.00	100.00
21.583	21.583 (0.972)	109	486859			62.69- 122.69	93.50
93 Chlorobenzene					CAS #: 108-90-7		
22.233	22.233 (1.001)	112	691990	5.00000	5.424	70.00- 130.00	100.00
22.233	22.233 (1.001)	114	218781			1.62- 61.62	31.62
22.233	22.233 (1.001)	77	408868			38.66- 98.66	59.09
95 Ethyl Benzene					CAS #: 100-41-4		
22.315	22.315 (1.005)	106	305285	5.00000	5.331	70.00- 130.00	100.00
22.315	22.315 (1.005)	91	981039			292.36- 352.36	321.35
96 m,p-Xylene					CAS #: 108-38-3		
22.480	22.480 (1.012)	106	298218	5.00000	5.281	70.00- 130.00	100.00
22.480	22.480 (1.012)	91	592110			164.15- 224.15	198.55
100 o-Xylene					CAS #: 95-47-6		
23.001	23.001 (1.036)	106	287808	5.00000	5.477	70.00- 130.00	100.00
23.001	23.001 (1.036)	91	606643			186.63- 246.63	210.78
101 Styrene					CAS #: 100-42-5		
23.029	23.029 (1.037)	104	420664	5.00000	5.472	70.00- 130.00	100.00
23.029	23.029 (1.037)	78	220029			28.70- 88.70	52.31
102 Bromoform					CAS #: 75-25-2		
23.331	23.331 (1.051)	173	518490	5.00000	5.374	70.00- 130.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
102 Bromoform (continued)							
23.331	23.331 (1.051)	171	268560			20.40- 80.40	51.80
103 Cumene					CAS #: 98-82-8		
23.441	23.441 (1.056)	105	798977	5.00000	5.207	70.00- 130.00	100.00
23.441	23.441 (1.056)	120	226153			0.00- 57.73	28.31
108 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
23.833	23.833 (1.073)	83	605962	5.00000	5.141	70.00- 130.00	100.00
23.833	23.833 (1.073)	85	390411			34.81- 94.81	64.43
111 Propylbenzene					CAS #: 103-65-1		
23.910	23.910 (1.077)	91	682372	5.00000	5.014	70.00- 130.00	100.00
23.910	23.910 (1.077)	120	162870			0.00- 53.83	23.87
113 4-Ethyltoluene					CAS #: 622-96-8		
24.039	24.039 (1.083)	105	482303	5.00000	4.830	70.00- 130.00	100.00
24.039	24.039 (1.083)	120	147595			0.18- 60.18	30.60
114 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
24.116	24.116 (1.086)	105	449858	5.00000	5.396	70.00- 130.00	100.00
24.116	24.116 (1.086)	120	215730			20.44- 80.44	47.96
120 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
24.529	24.529 (1.105)	105	337517	5.00000	4.998	70.00- 130.00	100.00
24.529	24.529 (1.105)	120	160308			19.27- 79.27	47.50
122 1,3-Dichlorobenzene					CAS #: 541-73-1		
24.902	24.902 (1.121)	146	334123	5.00000	5.128	70.00- 130.00	100.00
24.902	24.902 (1.121)	148	214822			38.48- 98.48	64.29
24.902	24.902 (1.121)	111	136487			10.49- 70.49	40.85
124 1,4-Dichlorobenzene					CAS #: 106-46-7		
24.992	24.992 (1.125)	146	293378	5.00000	4.790	70.00- 130.00	100.00
24.992	24.992 (1.125)	148	182004			38.92- 98.92	62.04
24.992	24.992 (1.125)	111	118514			11.61- 71.61	40.40
127 alpha-chlorotoluene					CAS #: 100-44-7		
25.126	25.126 (1.132)	91	332335	5.00000	5.078	70.00- 130.00	100.00
25.126	25.126 (1.132)	126	73095			0.00- 52.82	21.99
128 1,2-Dichlorobenzene					CAS #: 95-50-1		
25.395	25.395 (1.144)	146	307815	5.00000	5.092	70.00- 130.00	100.00
25.395	25.395 (1.144)	148	195358			36.09- 96.09	63.47
25.395	25.395 (1.144)	111	129565			13.38- 73.38	42.09

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
131 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
27.077	27.077 (1.219)	180	209783	5.00000	4.729	70.00- 130.00	100.00
27.077	27.077 (1.219)	182	199510			64.14- 124.14	95.10
132 Hexachlorobutadiene					CAS #: 87-68-3		
27.166	27.166 (1.223)	225	159548	5.00000	4.300	70.00- 130.00	100.00
27.166	27.166 (1.223)	223	104041			44.27- 104.27	65.21
133 Naphthalene					CAS #: 91-20-3		
27.391	27.391 (1.234)	128	54760	0.50000	0.5212	70.00- 130.00	100.00
27.368	27.368 (1.232)	127	7665			0.00- 47.41	14.00

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdv.i
Lab File ID: v100610.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: gd
Method File: /chem/msdv.i/06Oct2014.b/v14l1006a.m
Misc Info: 5.0ppbv (50ppbv)

Calibration Date: 06-OCT-2014
Calibration Time: 18:36
Client Smp ID: Level 9
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
54 Bromochloromethan	125097	75058	175136	125977	0.70
71 1,4-Difluorobenze	498199	298919	697479	495355	-0.57
92 Chlorobenzene-d5	406420	243852	568988	388529	-4.40

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
54 Bromochloromethan	15.93	15.60	16.26	15.93	0.00
71 1,4-Difluorobenze	17.30	16.97	17.63	17.30	0.00
92 Chlorobenzene-d5	22.21	21.88	22.54	22.21	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/msdv.i/06Oct2014.b/v100610.d

Date : 06-OCT-2014 17:52

Client ID: Level 9

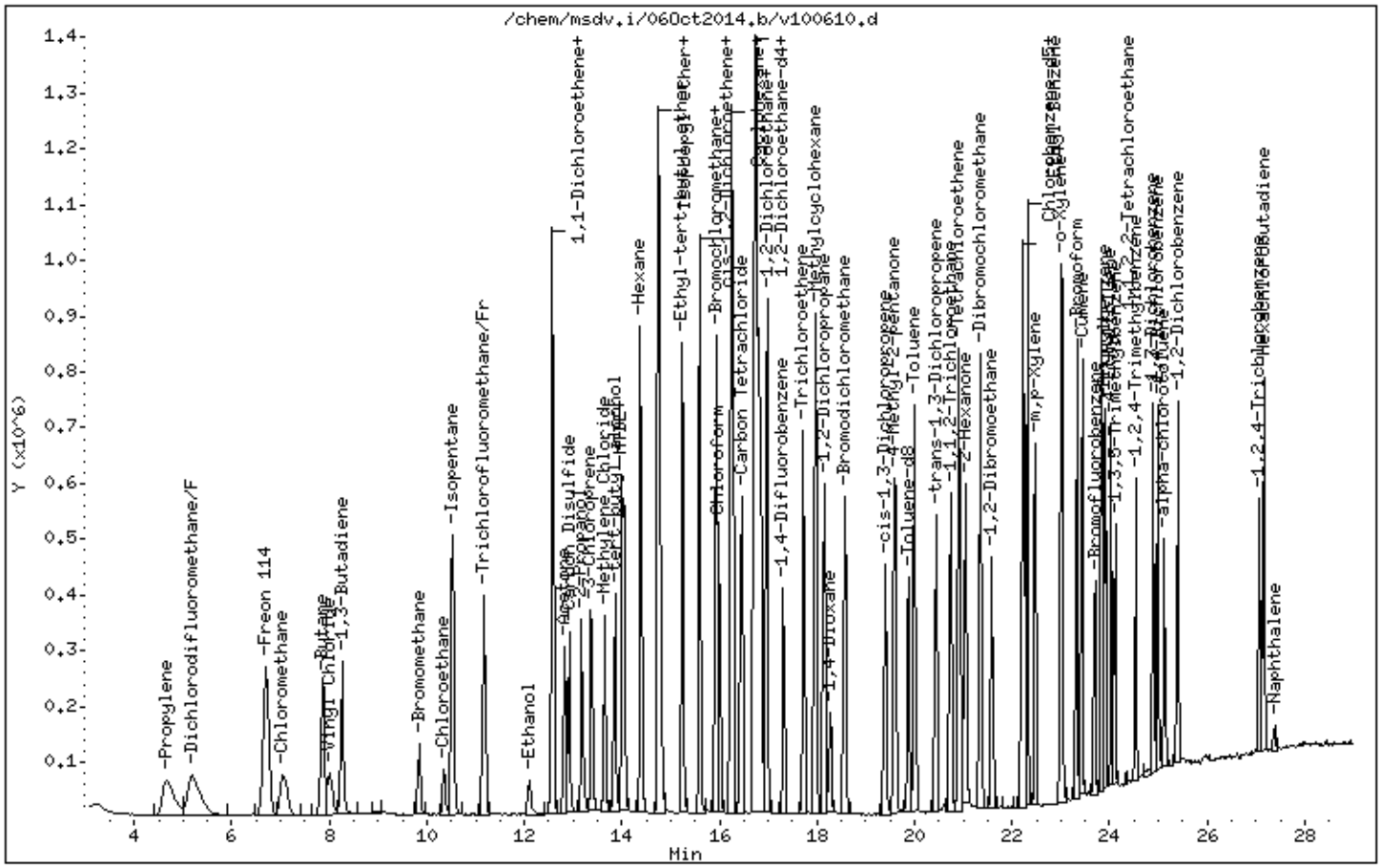
Instrument: msdv.i

Sample Info: 25mL #2677-212

Operator: gd

Column phase: RTx-624

Column diameter: 0.32



Eurofins Air Toxics Inc.

TO15/Modified TO-14A

Data file : /chem/msdv.i/06Oct2014.b/v100611.d
Lab Smp Id: ICAL Client Smp ID: Level 10
Inj Date : 06-OCT-2014 18:36
Operator : gd Inst ID: msdv.i
Smp Info : 50mL #2677-212; ICAL; Level 10
Misc Info : 10ppbv (50ppbv)
Comment : Low Level GC-MS
Method : /chem/msdv.i/06Oct2014.b/v14l1006a.m
Meth Date : 31-Oct-2014 10:34 atoyama Quant Type: ISTD
Cal Date : 06-OCT-2014 18:36 Cal File: v100611.d
Als bottle: 1 Calibration Sample, Level: 10
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

Cpnd Variable Local Compound Variable

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
* 54 Bromochloromethane					CAS #: 74-97-5		
15.934	15.934 (1.000)	130	125097	5.00000		80.00- 120.00	100.00
15.934	15.934 (1.000)	128	101188			50.89- 110.89	80.89
15.934	15.934 (1.000)	49	307671			215.95- 275.95	245.95
* 71 1,4-Difluorobenzene					CAS #: 540-36-3		
17.305	17.305 (1.000)	114	498199	5.00000		80.00- 120.00	100.00
17.305	17.305 (1.000)	88	82485			0.00- 46.56	16.56
* 92 Chlorobenzene-d5					CAS #: 3114-55-4		
22.205	22.205 (1.000)	117	406420	5.00000		80.00- 120.00	100.00
22.205	22.205 (1.000)	82	236846			28.28- 88.28	58.28
$ 65 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
16.756	16.756 (1.052)	65	230715	5.00000	5.025	80.00- 120.00	100.00
16.756	16.756 (1.052)	67	138012			29.82- 89.82	59.82
$ 80 Toluene-d8					CAS #: 2037-26-5		
19.879	19.879 (1.149)	98	494735	5.00000	5.165	80.00- 120.00	100.00
19.879	19.879 (1.149)	70	58108			0.00- 41.75	11.75

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
$ 80 Toluene-d8 (continued)							
19.879	19.879 (1.149)	100	315177			33.71- 93.71	63.71
$ 106 Bromofluorobenzene					CAS #: 460-00-4		
23.704	23.704 (1.067)	174	179544	5.00000	5.137	80.00- 120.00	100.00
23.704	23.704 (1.067)	95	238192			102.66- 162.66	132.66
23.704	23.704 (1.067)	176	182465			71.63- 131.63	101.63
3 Propylene					CAS #: 115-07-1		
4.674	4.674 (0.293)	41	698111	10.0000	9.947	80.00- 120.00	100.00
4.674	4.674 (0.293)	42	446693			33.99- 93.99	63.99
4.674	4.674 (0.293)	39	504684			42.29- 102.29	72.29
4 Dichlorodifluoromethane/Fr12					CAS #: 75-71-8		
5.202	5.202 (0.326)	85	1234948	10.0000	10.537	80.00- 120.00	100.00
5.202	5.202 (0.326)	87	398969			2.31- 62.31	32.31
6 Freon 114					CAS #: 76-14-2		
6.713	6.713 (0.421)	135	859922	10.0000	10.274	80.00- 120.00	100.00
6.713	6.713 (0.421)	137	278078			2.34- 62.34	32.34
6.713	6.713 (0.421)	85	1318334			123.31- 183.31	153.31
8 Chloromethane					CAS #: 74-87-3		
7.053	7.053 (0.443)	50	707880	10.0000	10.022	80.00- 120.00	100.00
7.053	7.053 (0.443)	52	216079			0.52- 60.52	30.52
9 Butane					CAS #: 106-97-8		
7.885	7.885 (0.495)	58	121552	10.0000	10.269	80.00- 120.00	100.00
7.885	7.885 (0.495)	43	1337672			1070.49-1130.49	1100.49
10 Vinyl Chloride					CAS #: 75-01-4		
8.009	8.009 (0.503)	62	559755	10.0000	10.621	80.00- 120.00	100.00
8.009	8.009 (0.503)	64	168687			0.14- 60.14	30.14
11 1,3-Butadiene					CAS #: 106-99-0		
8.257	8.257 (0.518)	54	533384	10.0000	10.323	80.00- 120.00	100.00
8.257	8.257 (0.518)	39	702836			101.77- 161.77	131.77
12 Bromomethane					CAS #: 74-83-9		
9.834	9.834 (0.617)	94	363898	10.0000	11.262	80.00- 120.00	100.00
9.834	9.834 (0.617)	96	340904			63.68- 123.68	93.68
17 Chloroethane					CAS #: 75-00-3		
10.364	10.364 (0.650)	64	267002	10.0000	10.901	80.00- 120.00	100.00
10.364	10.364 (0.650)	66	76131			0.00- 58.51	28.51

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
18 Isopentane					CAS #: 78-78-4		
10.533	10.533 (0.661)	57	526315	10.0000	10.431	80.00- 120.00	100.00
10.533	10.533 (0.661)	43	1076062			174.45- 234.45	204.45
10.533	10.533 (0.661)	42	944559			149.47- 209.47	179.47
20 Trichlorofluoromethane/Fr11					CAS #: 75-69-4		
11.184	11.184 (0.702)	101	1255064	10.0000	10.403	80.00- 120.00	100.00
11.184	11.184 (0.702)	103	807607			34.35- 94.35	64.35
24 Ethanol					CAS #: 64-17-5		
12.101	12.101 (0.760)	45	301212	10.0000	11.778	80.00- 120.00	100.00
12.101	12.101 (0.760)	46	116065			8.53- 68.53	38.53
12.101	12.101 (0.760)	43	56362			0.00- 48.71	18.71
30 1,1-Dichloroethene					CAS #: 75-35-4		
12.568	12.568 (0.789)	98	286281	10.0000	10.619	80.00- 120.00	100.00
12.568	12.568 (0.789)	61	976665			311.16- 371.16	341.16
12.568	12.568 (0.789)	96	442643			124.62- 184.62	154.62
28 Freon 113					CAS #: 76-13-1		
12.568	12.568 (0.789)	151	736424	10.0000	10.141	80.00- 120.00	100.00
12.568	12.568 (0.789)	153	467939			33.54- 93.54	63.54
12.568	12.568 (0.789)	101	937280			97.27- 157.27	127.27
31 Acetone					CAS #: 67-64-1		
12.816	12.816 (0.804)	58	308649	10.0000	10.443	80.00- 120.00	100.00
12.816	12.816 (0.804)	43	1341041			404.49- 464.49	434.49
33 Carbon Disulfide					CAS #: 75-15-0		
12.926	12.926 (0.811)	76	1183169	10.0000	10.318	80.00- 120.00	100.00
35 3-Chloroprene					CAS #: 107-05-1		
13.393	13.393 (0.841)	76	174667	10.0000	10.556	80.00- 120.00	100.00
13.365	13.365 (0.839)	41	1035898			563.07- 623.07	593.07
34 2-Propanol					CAS #: 67-63-0		
13.173	13.173 (0.827)	45	1461821	10.0000	10.681	80.00- 120.00	100.00
13.173	13.173 (0.827)	43	282638			0.00- 49.33	19.33
13.173	13.173 (0.827)	59	40967			0.00- 32.80	2.80
37 Methylene Chloride					CAS #: 75-09-2		
13.640	13.640 (0.856)	84	390953	10.0000	10.280	80.00- 120.00	100.00
13.640	13.640 (0.856)	49	939819			210.39- 270.39	240.39
13.640	13.640 (0.856)	51	275039			40.35- 100.35	70.35
38 tert-butyl alcohol					CAS #: 75-65-0		
13.859	13.859 (0.870)	59	1275761	10.0000	10.636	80.00- 120.00	100.00

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

   38 tert-butyl alcohol (continued)
 13.859  13.859 (0.870)    41    404293                     1.69-  61.69    31.69
 13.859  13.859 (0.870)    57    139499                     0.00-  40.93    10.93
-------------------------------------------------------------------------------
   39 MTBE                                          CAS #: 1634-04-4
 13.997  13.997 (0.878)    73   1404429 10.0000   10.293  80.00- 120.00   100.00
 13.997  13.997 (0.878)    57    463229                     2.98-  62.98    32.98
 13.997  13.997 (0.878)    41    599258                    12.67-  72.67    42.67
-------------------------------------------------------------------------------
   40 trans-1,2-Dichloroethene                      CAS #: 156-60-5
 14.052  14.052 (0.882)    98    274317 10.0000   10.754  80.00- 120.00   100.00
 14.052  14.052 (0.882)    61    843759                   277.59- 337.59   307.59
 14.052  14.052 (0.882)    96    431387                   127.26- 187.26   157.26
-------------------------------------------------------------------------------
   43 Hexane                                        CAS #: 110-54-3
 14.381  14.381 (0.903)    57   1131770 10.0000   10.366  80.00- 120.00   100.00
 14.381  14.381 (0.903)    43    992389                    57.68- 117.68    87.68
 14.381  14.381 (0.903)    86    121976                     0.00-  40.78    10.78
-------------------------------------------------------------------------------
   45 Isopropyl ether                               CAS #: 108-20-3
 14.738  14.738 (0.925)    45   3041341 10.0000   10.722  80.00- 120.00   100.00
 14.738  14.738 (0.925)    87    399867                     0.00-  43.15    13.15
 14.738  14.738 (0.925)    59    241927                     0.00-  37.95     7.95
-------------------------------------------------------------------------------
   46 1,1-Dichloroethane                            CAS #: 75-34-3
 14.765  14.765 (0.927)    63   1090735 10.0000   10.295  80.00- 120.00   100.00
 14.765  14.765 (0.927)    65    324980                     0.00-  59.79    29.79
-------------------------------------------------------------------------------
   47 Vinyl Acetate                                 CAS #: 108-05-4
 14.793  14.793 (0.928)    86    117125 10.0000   10.830  80.00- 120.00   100.00
 14.793  14.793 (0.928)    42    333202                   254.48- 314.48   284.48
 14.793  14.793 (0.928)    43   4014328                  3397.39-3457.39  3427.39
-------------------------------------------------------------------------------
   49 Ethyl-tert-butyl ether                        CAS #: 637-92-3
 15.240  15.240 (0.956)    59   2028758 10.0000   10.496  80.00- 120.00   100.00
 15.240  15.240 (0.956)    87    587423                     0.00-  58.95    28.95
 15.240  15.240 (0.956)    41    531141                     0.00-  56.18    26.18
-------------------------------------------------------------------------------
   50 cis-1,2-Dichloroethene                        CAS #: 156-59-2
 15.592  15.592 (0.979)    98    357428 10.0000   10.559  80.00- 120.00   100.00
 15.592  15.592 (0.979)    61    986291                   245.94- 305.94   275.94
 15.592  15.592 (0.979)    96    568078                   128.93- 188.93   158.93
-------------------------------------------------------------------------------
   51 2-Butanone                                    CAS #: 78-93-3
 15.592  15.592 (0.979)    72    240514 10.0000   10.933  80.00- 120.00   100.00
 15.592  15.592 (0.979)    43   1952992                   782.01- 842.01   812.01
```

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
51 2-Butanone (continued)							
15.592	15.592 (0.979)	57	111597			16.40- 76.40	46.40
53 Tetrahydrofuran					CAS #: 109-99-9		
15.934	15.934 (1.000)	42	1200793	10.0000	10.592	80.00- 120.00	100.00
15.934	15.934 (1.000)	71	227403			0.00- 48.94	18.94
15.934	15.934 (1.000)	72	253440			0.00- 51.11	21.11
55 Chloroform					CAS #: 67-66-3		
15.995	15.995 (1.004)	83	1068043	10.0000	10.131	80.00- 120.00	100.00
15.995	15.995 (1.004)	85	693192			34.90- 94.90	64.90
57 Cyclohexane					CAS #: 110-82-7		
16.273	16.273 (1.021)	84	688404	10.0000	10.382	80.00- 120.00	100.00
16.273	16.273 (1.021)	56	1264434			153.68- 213.68	183.68
16.273	16.273 (1.021)	41	954680			108.68- 168.68	138.68
58 1,1,1-Trichloroethane					CAS #: 71-55-6		
16.242	16.242 (1.019)	97	1124120	10.0000	10.212	80.00- 120.00	100.00
16.242	16.242 (1.019)	99	707511			32.94- 92.94	62.94
59 Carbon Tetrachloride					CAS #: 56-23-5		
16.457	16.457 (1.033)	119	1101599	10.0000	10.432	80.00- 120.00	100.00
16.457	16.457 (1.033)	117	1120321			71.70- 131.70	101.70
63 2,2,4-Trimethylpentane					CAS #: 540-84-1		
16.728	16.728 (1.050)	56	1194322	10.0000	10.336	80.00- 120.00	100.00
16.728	16.728 (1.050)	57	3483064			261.64- 321.64	291.64
16.728	16.728 (1.050)	41	1341477			82.32- 142.32	112.32
64 Benzene					CAS #: 71-43-2		
16.756	16.756 (0.968)	78	1491108	10.0000	10.142	80.00- 120.00	100.00
16.756	16.756 (0.968)	77	350897			0.00- 53.53	23.53
66 tert-amyl methyl ether					CAS #: 994-05-8		
16.811	16.811 (0.971)	87	349800	10.0000	10.507	80.00- 120.00	100.00
16.811	16.811 (0.971)	73	1488676			395.58- 455.58	425.58
16.811	16.811 (0.971)	55	598877			141.21- 201.21	171.21
68 1,2-Dichloroethane					CAS #: 107-06-2		
16.865	16.865 (0.975)	62	925758	10.0000	10.390	80.00- 120.00	100.00
16.865	16.865 (0.975)	64	286952			1.00- 61.00	31.00
69 Heptane					CAS #: 142-82-5		
16.975	16.975 (0.981)	57	677911	10.0000	10.698	80.00- 120.00	100.00
16.975	16.975 (0.981)	100	144875			0.00- 51.37	21.37

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
69 Heptane (continued)							
16.975	16.975 (0.981)	43	1756825			229.15- 289.15	259.15
72 Trichloroethene					CAS #: 79-01-6		
17.717	17.717 (1.024)	130	706111	10.0000	10.669	80.00- 120.00	100.00
17.717	17.717 (1.024)	95	689879			67.70- 127.70	97.70
17.717	17.717 (1.024)	97	446022			33.17- 93.17	63.17
73 Methylcyclohexane					CAS #: 108-87-2		
17.964	17.964 (1.038)	83	923323	10.0000	10.624	80.00- 120.00	100.00
17.964	17.964 (1.038)	98	413113			14.74- 74.74	44.74
17.964	17.964 (1.038)	55	1155464			95.14- 155.14	125.14
74 1,2-Dichloropropane					CAS #: 78-87-5		
18.156	18.156 (1.049)	63	703353	10.0000	10.429	80.00- 120.00	100.00
18.156	18.156 (1.049)	62	513276			42.98- 102.98	72.98
18.156	18.156 (1.049)	41	623188			58.60- 118.60	88.60
75 1,4-Dioxane					CAS #: 123-91-1		
18.266	18.266 (1.056)	88	359898	10.0000	10.618	80.00- 120.00	100.00
18.266	18.266 (1.056)	58	357353			69.29- 129.29	99.29
18.266	18.266 (1.056)	57	120903			3.59- 63.59	33.59
77 Bromodichloromethane					CAS #: 75-27-4		
18.568	18.568 (1.073)	83	1189662	10.0000	10.655	80.00- 120.00	100.00
18.568	18.568 (1.073)	85	748771			32.94- 92.94	62.94
78 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
19.408	19.408 (1.122)	75	814038	10.0000	10.668	80.00- 120.00	100.00
19.408	19.408 (1.122)	77	251335			0.88- 60.88	30.88
19.408	19.408 (1.122)	39	801708			68.49- 128.49	98.49
79 4-Methyl-2-pentanone					CAS #: 108-10-1		
19.588	19.588 (1.132)	43	2275274	10.0000	10.964	80.00- 120.00	100.00
19.588	19.588 (1.132)	58	623651			0.00- 57.41	27.41
19.588	19.588 (1.132)	85	190584			0.00- 38.38	8.38
81 Toluene					CAS #: 108-88-3		
19.991	19.991 (1.155)	91	1695935	10.0000	10.450	80.00- 120.00	100.00
19.991	19.991 (1.155)	92	974166			27.44- 87.44	57.44
82 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
20.435	20.435 (0.920)	75	873011	10.0000	10.421	80.00- 120.00	100.00
20.435	20.435 (0.920)	77	268587			0.77- 60.77	30.77
20.435	20.435 (0.920)	39	795804			61.16- 121.16	91.16

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
84 1,1,2-Trichloroethane					CAS #: 79-00-5		
20.758	20.758 (0.935)	97	643352	10.0000	10.056	80.00- 120.00	100.00
20.758	20.758 (0.935)	99	396383			31.61- 91.61	61.61
20.758	20.758 (0.935)	83	580188			60.18- 120.18	90.18
86 Tetrachloroethene					CAS #: 127-18-4		
20.901	20.901 (0.941)	166	848312	10.0000	10.256	80.00- 120.00	100.00
20.901	20.901 (0.941)	129	651871			46.84- 106.84	76.84
20.901	20.901 (0.941)	131	640778			45.54- 105.54	75.54
87 2-Hexanone					CAS #: 591-78-6		
21.045	21.045 (0.948)	58	763240	10.0000	10.654	80.00- 120.00	100.00
21.045	21.045 (0.948)	43	2043842			237.78- 297.78	267.78
21.045	21.045 (0.948)	100	109975			0.00- 44.41	14.41
89 Dibromochloromethane					CAS #: 124-48-1		
21.367	21.367 (0.962)	129	1217104	10.0000	10.222	80.00- 120.00	100.00
21.367	21.367 (0.962)	127	946918			47.80- 107.80	77.80
90 1,2-Dibromoethane					CAS #: 106-93-4		
21.583	21.583 (0.972)	107	1017714	10.0000	10.212	80.00- 120.00	100.00
21.583	21.583 (0.972)	109	966272			64.95- 124.95	94.95
93 Chlorobenzene					CAS #: 108-90-7		
22.233	22.233 (1.001)	112	1360172	10.0000	10.191	80.00- 120.00	100.00
22.233	22.233 (1.001)	114	433519			1.87- 61.87	31.87
22.233	22.233 (1.001)	77	802776			29.02- 89.02	59.02
95 Ethyl Benzene					CAS #: 100-41-4		
22.315	22.315 (1.005)	106	643593	10.0000	10.744	80.00- 120.00	100.00
22.315	22.315 (1.005)	91	1979659			277.59- 337.59	307.59
96 m,p-Xylene					CAS #: 108-38-3		
22.480	22.480 (1.012)	106	621094	10.0000	10.515	80.00- 120.00	100.00
22.480	22.480 (1.012)	91	1236994			169.16- 229.16	199.16
100 o-Xylene					CAS #: 95-47-6		
23.001	23.001 (1.036)	106	596795	10.0000	10.858	80.00- 120.00	100.00
23.001	23.001 (1.036)	91	1271167			183.00- 243.00	213.00
101 Styrene					CAS #: 100-42-5		
23.029	23.029 (1.037)	104	887531	10.0000	11.037	80.00- 120.00	100.00
23.029	23.029 (1.037)	78	475113			23.53- 83.53	53.53
102 Bromoform					CAS #: 75-25-2		
23.331	23.331 (1.051)	173	1058502	10.0000	10.489	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
102 Bromoform (continued)							
23.331	23.331 (1.051)	171	555198			22.45- 82.45	52.45
103 Cumene					CAS #: 98-82-8		
23.441	23.441 (1.056)	105	1717355	10.0000	10.699	80.00- 120.00	100.00
23.441	23.441 (1.056)	120	476342			0.00- 57.74	27.74
108 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
23.833	23.833 (1.073)	83	1217639	10.0000	9.875	80.00- 120.00	100.00
23.833	23.833 (1.073)	85	765023			32.83- 92.83	62.83
111 Propylbenzene					CAS #: 103-65-1		
23.910	23.910 (1.077)	91	1482240	10.0000	10.411	80.00- 120.00	100.00
23.910	23.910 (1.077)	120	352684			0.00- 53.79	23.79
113 4-Ethyltoluene					CAS #: 622-96-8		
24.039	24.039 (1.083)	105	1055532	10.0000	10.106	80.00- 120.00	100.00
24.039	24.039 (1.083)	120	322459			0.55- 60.55	30.55
114 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
24.116	24.116 (1.086)	105	962969	10.0000	11.042	80.00- 120.00	100.00
24.116	24.116 (1.086)	120	451367			16.87- 76.87	46.87
120 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
24.529	24.529 (1.105)	105	692871	10.0000	9.810	80.00- 120.00	100.00
24.529	24.529 (1.105)	120	323171			16.64- 76.64	46.64
122 1,3-Dichlorobenzene					CAS #: 541-73-1		
24.902	24.902 (1.121)	146	708316	10.0000	10.393	80.00- 120.00	100.00
24.902	24.902 (1.121)	148	459651			34.89- 94.89	64.89
24.902	24.902 (1.121)	111	289887			10.93- 70.93	40.93
124 1,4-Dichlorobenzene					CAS #: 106-46-7		
24.992	24.992 (1.125)	146	650697	10.0000	10.156	80.00- 120.00	100.00
24.992	24.992 (1.125)	148	411038			33.17- 93.17	63.17
24.992	24.992 (1.125)	111	255449			9.26- 69.26	39.26
127 alpha-chlorotoluene					CAS #: 100-44-7		
25.127	25.127 (1.132)	91	745711	10.0000	10.893	80.00- 120.00	100.00
25.127	25.127 (1.132)	126	159575			0.00- 51.40	21.40
128 1,2-Dichlorobenzene					CAS #: 95-50-1		
25.396	25.396 (1.144)	146	658448	10.0000	10.413	80.00- 120.00	100.00
25.396	25.396 (1.144)	148	420667			33.89- 93.89	63.89
25.396	25.396 (1.144)	111	277687			12.17- 72.17	42.17

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
131 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
27.077	27.077 (1.219)	180	424695	10.0000	9.152	80.00- 120.00	100.00
27.077	27.077 (1.219)	182	398200			63.76- 123.76	93.76
132 Hexachlorobutadiene					CAS #: 87-68-3		
27.167	27.167 (1.223)	225	376991	10.0000	9.713	80.00- 120.00	100.00
27.167	27.167 (1.223)	223	241135			33.96- 93.96	63.96
133 Naphthalene					CAS #: 91-20-3		
27.368	27.368 (1.232)	128	119738	1.00000	1.090	80.00- 120.00	100.00
27.391	27.391 (1.234)	127	15877			0.00- 43.26	13.26

Report Date: 31-Oct-2014 10:34

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdv.i
Lab File ID: v100611.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: gd
Method File: /chem/msdv.i/06Oct2014.b/v14l1006a.m
Misc Info: 10ppbv (50ppbv)

Calibration Date: 06-OCT-2014
Calibration Time: 18:36
Client Smp ID: Level 10
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
54 Bromochloromethan	125097	75058	175136	125097	0.00
71 1,4-Difluorobenze	498199	298919	697479	498199	0.00
92 Chlorobenzene-d5	406420	243852	568988	406420	0.00

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
54 Bromochloromethan	15.93	15.60	16.26	15.93	0.00
71 1,4-Difluorobenze	17.30	16.97	17.63	17.30	0.00
92 Chlorobenzene-d5	22.21	21.88	22.54	22.21	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/msdv.i/06Oct2014.b/v100611.d

Date : 06-OCT-2014 18:36

Client ID: Level 10

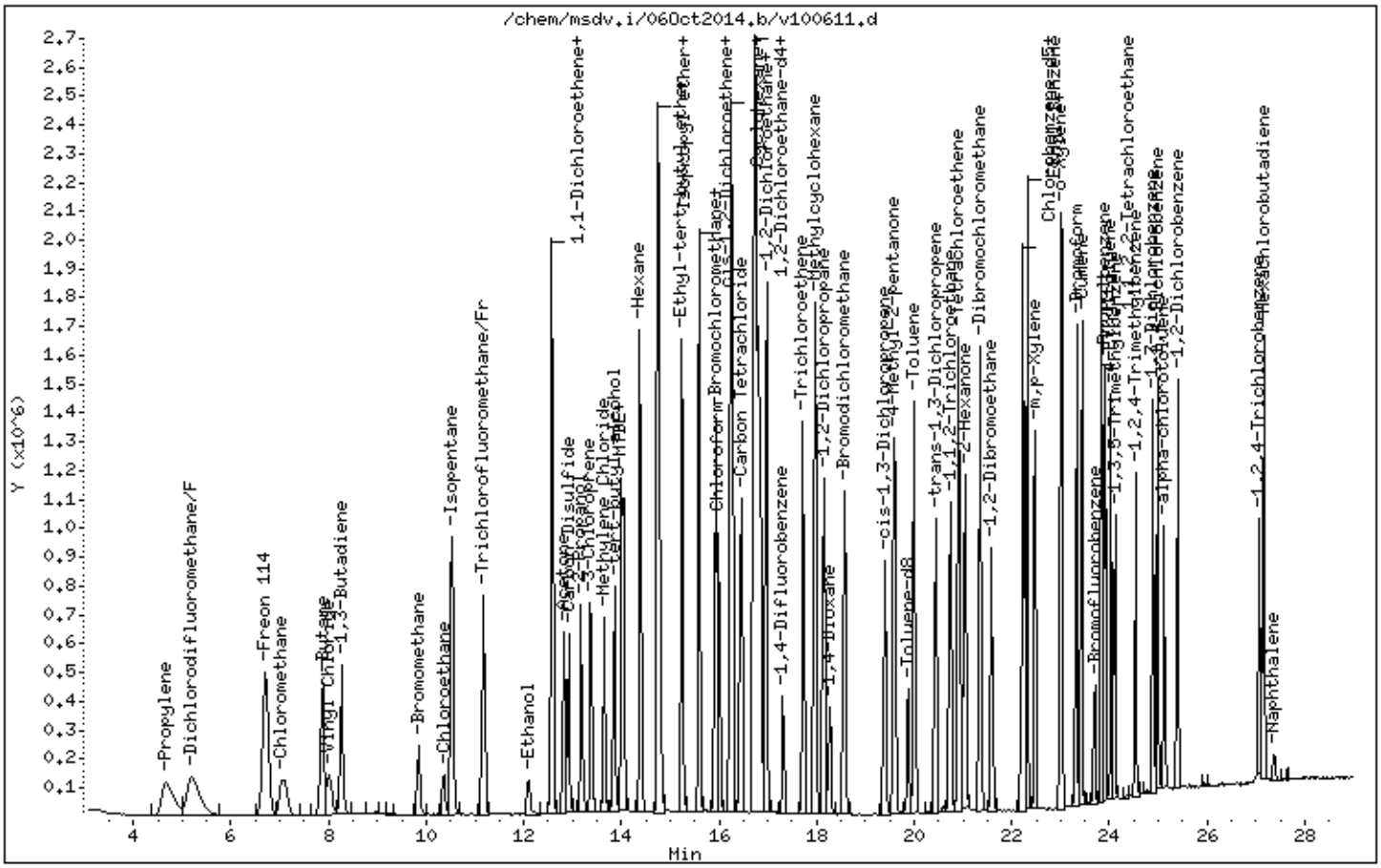
Instrument: msdv.i

Sample Info: 50mL #2677-212; ICAL; Level 10

Operator: gd

Column phase: RTx-624

Column diameter: 0.32



Eurofins Air Toxics Inc.

TO15/Modified TO-14A

Data file : /chem/msdv.i/06Oct2014.b/v100612.d
Lab Smp Id: ICAL Client Smp ID: Level 11
Inj Date : 06-OCT-2014 19:24
Operator : gh Inst ID: msdv.i
Smp Info : 100mL #2677-212
Misc Info : 20ppbv (50ppbv)
Comment : Low Level GC-MS
Method : /chem/msdv.i/06Oct2014.b/v14l1006a.m
Meth Date : 07-Oct-2014 11:32 efinn Quant Type: ISTD
Cal Date : 06-OCT-2014 19:24 Cal File: v100612.d
Als bottle: 1 Calibration Sample, Level: 11
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: HiLoFULLcrv.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
* 54 Bromochloromethane					CAS #: 74-97-5		
15.933	15.933 (1.000)	130	130018	5.00000		70.00- 130.00	100.00
15.933	15.933 (1.000)	128	99874			47.54- 107.54	76.82
15.933	15.933 (1.000)	49	332381			218.45- 278.45	255.64
* 71 1,4-Difluorobenzene					CAS #: 540-36-3		
17.305	17.305 (1.000)	114	507495	5.00000		70.00- 130.00	100.00
17.305	17.305 (1.000)	88	82175			0.00- 46.16	16.19
* 92 Chlorobenzene-d5					CAS #: 3114-55-4		
22.205	22.205 (1.000)	117	411197	5.00000		70.00- 130.00	100.00
22.205	22.205 (1.000)	82	241976			29.12- 89.12	58.85
$ 65 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
16.756	16.756 (1.052)	65	244862	5.00000	5.132	70.00- 130.00	100.00
16.756	16.756 (1.052)	67	169868			28.37- 88.37	69.37
$ 80 Toluene-d8					CAS #: 2037-26-5		
19.879	19.879 (1.149)	98	492481	5.00000	5.047	70.00- 130.00	100.00
19.879	19.879 (1.149)	70	57949			0.00- 41.90	11.77

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
$ 80 Toluene-d8 (continued)							
19.879	19.879 (1.149)	100	317004			33.85- 93.85	64.37
$ 106 Bromofluorobenzene					CAS #: 460-00-4		
23.704	23.704 (1.067)	174	193012	5.00000	5.458	70.00- 130.00	100.00
23.678	23.678 (1.066)	95	256856			99.95- 159.95	133.08
23.704	23.704 (1.067)	176	185377			67.64- 127.64	96.04
3 Propylene					CAS #: 115-07-1		
4.711	4.711 (0.296)	41	1343529	20.0000	18.419	70.00- 130.00	100.00
4.674	4.674 (0.293)	42	873900			35.18- 95.18	65.05
4.674	4.674 (0.293)	39	996227			44.12- 104.12	74.15
4 Dichlorodifluoromethane/Fr12					CAS #: 75-71-8		
5.240	5.240 (0.329)	85	2381146	20.0000	19.548	70.00- 130.00	100.00
5.240	5.240 (0.329)	87	765291			1.90- 61.90	32.14
6 Freon 114					CAS #: 76-14-2		
6.750	6.750 (0.424)	135	1687749	20.0000	19.401	70.00- 130.00	100.00
6.750	6.750 (0.424)	137	546891			0.53- 60.53	32.40
6.750	6.750 (0.424)	85	2544166			121.37- 181.37	150.74
8 Chloromethane					CAS #: 74-87-3		
7.090	7.090 (0.445)	50	1342544	20.0000	18.289	70.00- 130.00	100.00
7.090	7.090 (0.445)	52	414050			1.81- 61.81	30.84
9 Butane					CAS #: 106-97-8		
7.885	7.885 (0.495)	58	238933	20.0000	19.422	70.00- 130.00	100.00
7.885	7.885 (0.495)	43	2627380			1065.18-1125.18	1099.63
10 Vinyl Chloride					CAS #: 75-01-4		
8.009	8.009 (0.503)	62	1067058	20.0000	19.480	70.00- 130.00	100.00
8.009	8.009 (0.503)	64	316376			0.00- 58.65	29.65
11 1,3-Butadiene					CAS #: 106-99-0		
8.257	8.257 (0.518)	54	1053809	20.0000	19.624	70.00- 130.00	100.00
8.257	8.257 (0.518)	39	1394079			107.15- 167.15	132.29
12 Bromomethane					CAS #: 74-83-9		
9.834	9.834 (0.617)	94	713827	20.0000	21.256	70.00- 130.00	100.00
9.834	9.834 (0.617)	96	652673			72.12- 132.12	91.43
17 Chloroethane					CAS #: 75-00-3		
10.364	10.364 (0.650)	64	502505	20.0000	19.739	70.00- 130.00	100.00
10.364	10.364 (0.650)	66	151047			0.00- 59.90	30.06

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
18 Isopentane					CAS #: 78-78-4		
10.533	10.533 (0.661)	57	1046356	20.0000	19.953	70.00- 130.00	100.00
10.533	10.533 (0.661)	43	2109327			171.32- 231.32	201.59
10.533	10.533 (0.661)	42	1866026			150.03- 210.03	178.34
20 Trichlorofluoromethane/Fr11					CAS #: 75-69-4		
11.184	11.184 (0.702)	101	2414755	20.0000	19.258	70.00- 130.00	100.00
11.184	11.184 (0.702)	103	1561129			36.54- 96.54	64.65
24 Ethanol					CAS #: 64-17-5		
12.101	12.101 (0.760)	45	569415	20.0000	21.423	70.00- 130.00	100.00
12.101	12.101 (0.760)	46	212968			8.51- 68.51	37.40
12.101	12.101 (0.760)	43	111414			0.00- 54.10	19.57
30 1,1-Dichloroethene					CAS #: 75-35-4		
12.568	12.568 (0.789)	98	550535	20.0000	19.648	70.00- 130.00	100.00
12.568	12.568 (0.789)	61	1926358			320.65- 380.65	349.91
12.568	12.568 (0.789)	96	877917			134.30- 194.30	159.47
28 Freon 113					CAS #: 76-13-1		
12.568	12.568 (0.789)	151	1431147	20.0000	18.962	70.00- 130.00	100.00
12.568	12.568 (0.789)	153	904227			33.10- 93.10	63.18
12.568	12.568 (0.789)	101	1807783			96.37- 156.37	126.32
31 Acetone					CAS #: 67-64-1		
12.816	12.816 (0.804)	58	601932	20.0000	19.595	70.00- 130.00	100.00
12.816	12.816 (0.804)	43	2684362			413.15- 473.15	445.96
33 Carbon Disulfide					CAS #: 75-15-0		
12.926	12.926 (0.811)	76	2355703	20.0000	19.767	70.00- 130.00	100.00
35 3-Chloroprene					CAS #: 107-05-1		
13.392	13.392 (0.841)	76	365971	20.0000	21.280	70.00- 130.00	100.00
13.365	13.365 (0.839)	41	2124062			547.03- 607.03	580.39
34 2-Propanol					CAS #: 67-63-0		
13.173	13.173 (0.827)	45	2980719	20.0000	20.954	70.00- 130.00	100.00
13.173	13.173 (0.827)	43	576337			0.00- 50.74	19.34
13.173	13.173 (0.827)	59	84883			0.00- 32.83	2.85
37 Methylene Chloride					CAS #: 75-09-2		
13.667	13.667 (0.858)	84	771457	20.0000	19.517	70.00- 130.00	100.00
13.640	13.640 (0.856)	49	1883006			212.37- 272.37	244.08
13.640	13.640 (0.856)	51	551783			43.31- 103.31	71.52
38 tert-butyl alcohol					CAS #: 75-65-0		
13.859	13.859 (0.870)	59	2580589	20.0000	20.699	70.00- 130.00	100.00

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

   38 tert-butyl alcohol (continued)
 13.859  13.859 (0.870)    41    796556                     1.97-  61.97    30.87
 13.859  13.859 (0.870)    57    279874                     0.00-  40.67    10.85
-------------------------------------------------------------------------------
   39 MTBE                                          CAS #: 1634-04-4
 13.997  13.997 (0.878)    73   2789745 20.0000   19.672  70.00- 130.00   100.00
 13.997  13.997 (0.878)    57    919358                     2.99-  62.99    32.95
 13.997  13.997 (0.878)    41   1172986                    12.12-  72.12    42.05
-------------------------------------------------------------------------------
   40 trans-1,2-Dichloroethene                      CAS #: 156-60-5
 14.051  14.051 (0.882)    98    542006 20.0000   20.445  70.00- 130.00   100.00
 14.051  14.051 (0.882)    61   1647876                   293.73- 353.73   304.03
 14.051  14.051 (0.882)    96    857236                   146.88- 206.88   158.16
-------------------------------------------------------------------------------
   43 Hexane                                        CAS #: 110-54-3
 14.381  14.381 (0.903)    57   2199087 20.0000   19.379  70.00- 130.00   100.00
 14.381  14.381 (0.903)    43   1938725                    57.65- 117.65    88.16
 14.381  14.381 (0.903)    86    236882                     0.00-  40.67    10.77
-------------------------------------------------------------------------------
   45 Isopropyl ether                               CAS #: 108-20-3
 14.738  14.738 (0.925)    45   5971001 20.0000   20.255  70.00- 130.00   100.00
 14.738  14.738 (0.925)    87    790523                     0.00-  43.44    13.24
 14.738  14.738 (0.925)    59    483305                     0.00-  38.34     8.09
-------------------------------------------------------------------------------
   46 1,1-Dichloroethane                            CAS #: 75-34-3
 14.765  14.765 (0.927)    63   2148070 20.0000   19.507  70.00- 130.00   100.00
 14.765  14.765 (0.927)    65    653174                     0.37-  60.37    30.41
-------------------------------------------------------------------------------
   47 Vinyl Acetate                                 CAS #: 108-05-4
 14.793  14.793 (0.928)    86    240609 20.0000   21.406  70.00- 130.00   100.00
 14.793  14.793 (0.928)    42    663452                   220.92- 280.92   275.74
 14.793  14.793 (0.928)    43   8065068                  3282.47-3342.47  3351.94
-------------------------------------------------------------------------------
   49 Ethyl-tert-butyl ether                        CAS #: 637-92-3
 15.240  15.240 (0.956)    59   4051151 20.0000   20.166  70.00- 130.00   100.00
 15.240  15.240 (0.956)    87   1164844                     0.00-  58.71    28.75
 15.240  15.240 (0.956)    41   1056551                     0.00-  56.39    26.08
-------------------------------------------------------------------------------
   50 cis-1,2-Dichloroethene                        CAS #: 156-59-2
 15.592  15.592 (0.979)    98    709991 20.0000   20.181  70.00- 130.00   100.00
 15.592  15.592 (0.979)    61   1967313                   248.69- 308.69   277.09
 15.592  15.592 (0.979)    96   1111670                   132.55- 192.55   156.58
-------------------------------------------------------------------------------
   51 2-Butanone                                    CAS #: 78-93-3
 15.592  15.592 (0.979)    72    490119 20.0000   21.436  70.00- 130.00   100.00
 15.572  15.572 (0.977)    43   3895126                   794.80- 854.80   794.73
```

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

   51 2-Butanone (continued)
 15.592  15.592 (0.979)    57    226720                    18.01-  78.01    46.26
-------------------------------------------------------------------------------
   53 Tetrahydrofuran                                CAS #: 109-99-9
 15.933  15.933 (1.000)    42   2382176 20.0000   20.218  70.00- 130.00   100.00
 15.933  15.933 (1.000)    71    453730                     0.00-  49.03    19.05
 15.933  15.933 (1.000)    72    489317                     0.00-  51.35    20.54
-------------------------------------------------------------------------------
   55 Chloroform                                     CAS #: 67-66-3
 15.995  15.995 (1.004)    83   2095211 20.0000   19.122  70.00- 130.00   100.00
 15.995  15.995 (1.004)    85   1339231                    33.33-  93.33    63.92
-------------------------------------------------------------------------------
   57 Cyclohexane                                    CAS #: 110-82-7
 16.273  16.273 (1.021)    84   1338220 20.0000   19.419  70.00- 130.00   100.00
 16.273  16.273 (1.021)    56   2485393                   157.43- 217.43   185.72
 16.273  16.273 (1.021)    41   1830806                   105.99- 165.99   136.81
-------------------------------------------------------------------------------
   58 1,1,1-Trichloroethane                          CAS #: 71-55-6
 16.242  16.242 (1.019)    97   2210215 20.0000   19.318  70.00- 130.00   100.00
 16.242  16.242 (1.019)    99   1391476                    32.16-  92.16    62.96
-------------------------------------------------------------------------------
   59 Carbon Tetrachloride                           CAS #: 56-23-5
 16.457  16.457 (1.033)   119   2181026 20.0000   19.873  70.00- 130.00   100.00
 16.457  16.457 (1.033)   117   2215797                    69.67- 129.67   101.59
-------------------------------------------------------------------------------
   63 2,2,4-Trimethylpentane                         CAS #: 540-84-1
 16.728  16.728 (1.050)    56   2334858 20.0000   19.442  70.00- 130.00   100.00
 16.728  16.728 (1.050)    57   6783805                   258.69- 318.69   290.54
 16.728  16.728 (1.050)    41   2601651                    79.91- 139.91   111.43
-------------------------------------------------------------------------------
   64 Benzene                                        CAS #: 71-43-2
 16.756  16.756 (0.968)    78   2889555 20.0000   19.294  70.00- 130.00   100.00
 16.756  16.756 (0.968)    77    676474                     0.00-  53.73    23.41
-------------------------------------------------------------------------------
   66 tert-amyl methyl ether                         CAS #: 994-05-8
 16.811  16.811 (0.971)    87    699668 20.0000   20.632  70.00- 130.00   100.00
 16.811  16.811 (0.971)    73   2921325                   399.95- 459.95   417.53
 16.811  16.811 (0.971)    55   1149825                   143.62- 203.62   164.34
-------------------------------------------------------------------------------
   68 1,2-Dichloroethane                             CAS #: 107-06-2
 16.865  16.865 (0.975)    62   1791940 20.0000   19.744  70.00- 130.00   100.00
 16.865  16.865 (0.975)    64    557807                     1.11-  61.11    31.13
-------------------------------------------------------------------------------
   69 Heptane                                        CAS #: 142-82-5
 16.975  16.975 (0.981)    57   1306196 20.0000   20.236  70.00- 130.00   100.00
 16.975  16.975 (0.981)   100    280760                     0.00-  51.27    21.49
```

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
69 Heptane (continued)							
16.975	16.975 (0.981)	43	3451641			235.24- 295.24	264.25
72 Trichloroethene					CAS #: 79-01-6		
17.717	17.717 (1.024)	130	1366780	20.0000	20.273	70.00- 130.00	100.00
17.717	17.717 (1.024)	95	1353380			71.16- 131.16	99.02
17.717	17.717 (1.024)	97	864828			33.04- 93.04	63.27
73 Methylcyclohexane					CAS #: 108-87-2		
17.964	17.964 (1.038)	83	1775063	20.0000	20.050	70.00- 130.00	100.00
17.964	17.964 (1.038)	98	809326			15.02- 75.02	45.59
17.964	17.964 (1.038)	55	2231253			95.64- 155.64	125.70
74 1,2-Dichloropropane					CAS #: 78-87-5		
18.156	18.156 (1.049)	63	1386274	20.0000	20.178	70.00- 130.00	100.00
18.156	18.156 (1.049)	62	1021855			45.17- 105.17	73.71
18.156	18.156 (1.049)	41	1249126			59.65- 119.65	90.11
75 1,4-Dioxane					CAS #: 123-91-1		
18.266	18.266 (1.056)	88	707003	20.0000	20.477	70.00- 130.00	100.00
18.266	18.266 (1.056)	58	717250			72.13- 132.13	101.45
18.266	18.266 (1.056)	57	235307			4.41- 64.41	33.28
77 Bromodichloromethane					CAS #: 75-27-4		
18.568	18.568 (1.073)	83	2328634	20.0000	20.474	70.00- 130.00	100.00
18.568	18.568 (1.073)	85	1493796			32.12- 92.12	64.15
78 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
19.408	19.408 (1.122)	75	1623589	20.0000	20.887	70.00- 130.00	100.00
19.408	19.408 (1.122)	77	510761			1.25- 61.25	31.46
19.408	19.408 (1.122)	39	1619534			71.17- 131.17	99.75
79 4-Methyl-2-pentanone					CAS #: 108-10-1		
19.588	19.588 (1.132)	43	4631476	20.0000	21.909	70.00- 130.00	100.00
19.588	19.588 (1.132)	58	1249401			0.00- 57.24	26.98
19.588	19.588 (1.132)	85	388036			0.00- 38.20	8.38
81 Toluene					CAS #: 108-88-3		
19.991	19.991 (1.155)	91	3273959	20.0000	19.804	70.00- 130.00	100.00
19.991	19.991 (1.155)	92	1902249			28.60- 88.60	58.10
82 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
20.435	20.435 (0.920)	75	1765207	20.0000	20.826	70.00- 130.00	100.00
20.435	20.435 (0.920)	77	556337			5.48- 65.48	31.52
20.435	20.435 (0.920)	39	1613608			63.15- 123.15	91.41

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

   84 1,1,2-Trichloroethane                        CAS #: 79-00-5
 20.758  20.758 (0.935)    97   1284428 20.0000   19.844  70.00- 130.00   100.00
 20.758  20.758 (0.935)    99    795501                   32.13-  92.13    61.93
 20.758  20.758 (0.935)    83   1127004                   57.82- 117.82    87.74
-------------------------------------------------------------------------------
   86 Tetrachloroethene                            CAS #: 127-18-4
 20.901  20.901 (0.941)   166   1615920 20.0000   19.310  70.00- 130.00   100.00
 20.901  20.901 (0.941)   129   1280165                   47.04- 107.04    79.22
 20.901  20.901 (0.941)   131   1234248                   46.95- 106.95    76.38
-------------------------------------------------------------------------------
   87 2-Hexanone                                   CAS #: 591-78-6
 21.044  21.044 (0.948)    58   1578014 20.0000   21.772  70.00- 130.00   100.00
 21.044  21.044 (0.948)    43   4219487                  242.48- 302.48   267.39
 21.044  21.044 (0.948)   100    225657                    0.00-  43.88    14.30
-------------------------------------------------------------------------------
   89 Dibromochloromethane                         CAS #: 124-48-1
 21.367  21.367 (0.962)   129   2428496 20.0000   20.159  70.00- 130.00   100.00
 21.367  21.367 (0.962)   127   1887593                   50.38- 110.38    77.73
-------------------------------------------------------------------------------
   90 1,2-Dibromoethane                            CAS #: 106-93-4
 21.583  21.583 (0.972)   107   2057808 20.0000   20.408  70.00- 130.00   100.00
 21.583  21.583 (0.972)   109   1912402                   62.69- 122.69    92.93
-------------------------------------------------------------------------------
   93 Chlorobenzene                                CAS #: 108-90-7
 22.233  22.233 (1.001)   112   2639475 20.0000   19.547  70.00- 130.00   100.00
 22.233  22.233 (1.001)   114    836900                    1.62-  61.62    31.71
 22.233  22.233 (1.001)    77   1591582                   38.66-  98.66    60.30
-------------------------------------------------------------------------------
   95 Ethyl Benzene                                CAS #: 100-41-4
 22.315  22.315 (1.005)   106   1261620 20.0000   20.816  70.00- 130.00   100.00
 22.315  22.315 (1.005)    91   3956425                  292.36- 352.36   313.60
-------------------------------------------------------------------------------
   96 m,p-Xylene                                   CAS #: 108-38-3
 22.480  22.480 (1.012)   106   1213072 20.0000   20.298  70.00- 130.00   100.00
 22.480  22.480 (1.012)    91   2459215                  164.15- 224.15   202.73
-------------------------------------------------------------------------------
  100 o-Xylene                                     CAS #: 95-47-6
 23.001  23.001 (1.036)   106   1194131 20.0000   21.473  70.00- 130.00   100.00
 23.001  23.001 (1.036)    91   2528984                  186.63- 246.63   211.78
-------------------------------------------------------------------------------
  101 Styrene                                      CAS #: 100-42-5
 23.029  23.029 (1.037)   104   1836202 20.0000   22.569  70.00- 130.00   100.00
 23.029  23.029 (1.037)    78    980074                   28.70-  88.70    53.38
-------------------------------------------------------------------------------
  102 Bromoform                                    CAS #: 75-25-2
 23.331  23.331 (1.051)   173   2152221 20.0000   21.079  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
   ==   ====== ========  ====  ======== =======  =======   ============    =====

  102 Bromoform (continued)
 23.331  23.331 (1.051)   171   1107873                   20.40-  80.40    51.48
-------------------------------------------------------------------------------
  103 Cumene                                        CAS #: 98-82-8
 23.441  23.441 (1.056)   105   3469931 20.0000   21.367  70.00- 130.00   100.00
 23.441  23.441 (1.056)   120    965676                    0.00-  57.73    27.83
-------------------------------------------------------------------------------
  108 1,1,2,2-Tetrachloroethane                     CAS #: 79-34-5
 23.833  23.833 (1.073)    83   2417998 20.0000   19.383  70.00- 130.00   100.00
 23.833  23.833 (1.073)    85   1546993                   34.81-  94.81    63.98
-------------------------------------------------------------------------------
  111 Propylbenzene                                 CAS #: 103-65-1
 23.910  23.910 (1.077)    91   3123067 20.0000   21.681  70.00- 130.00   100.00
 23.910  23.910 (1.077)   120    730618                    0.00-  53.83    23.39
-------------------------------------------------------------------------------
  113 4-Ethyltoluene                                CAS #: 622-96-8
 24.039  24.039 (1.083)   105   2151564 20.0000   20.360  70.00- 130.00   100.00
 24.039  24.039 (1.083)   120    674008                    0.18-  60.18    31.33
-------------------------------------------------------------------------------
  114 1,3,5-Trimethylbenzene                        CAS #: 108-67-8
 24.116  24.116 (1.086)   105   1845022 20.0000   20.911  70.00- 130.00   100.00
 24.116  24.116 (1.086)   120    875220                   20.44-  80.44    47.44
-------------------------------------------------------------------------------
  120 1,2,4-Trimethylbenzene                        CAS #: 95-63-6
 24.529  24.529 (1.105)   105   1332054 20.0000   18.640  70.00- 130.00   100.00
 24.529  24.529 (1.105)   120    625533                   19.27-  79.27    46.96
-------------------------------------------------------------------------------
  122 1,3-Dichlorobenzene                           CAS #: 541-73-1
 24.902  24.902 (1.121)   146   1448037 20.0000   21.000  70.00- 130.00   100.00
 24.902  24.902 (1.121)   148    929989                   38.48-  98.48    64.22
 24.902  24.902 (1.121)   111    593358                   10.49-  70.49    40.98
-------------------------------------------------------------------------------
  124 1,4-Dichlorobenzene                           CAS #: 106-46-7
 24.992  24.992 (1.125)   146   1299342 20.0000   20.044  70.00- 130.00   100.00
 24.992  24.992 (1.125)   148    824787                   38.92-  98.92    63.48
 24.992  24.992 (1.125)   111    502552                   11.61-  71.61    38.68
-------------------------------------------------------------------------------
  127 alpha-chlorotoluene                           CAS #: 100-44-7
 25.127  25.127 (1.132)    91   1540002 20.0000   22.235  70.00- 130.00   100.00
 25.127  25.127 (1.132)   126    324902                    0.00-  52.82    21.10
-------------------------------------------------------------------------------
  128 1,2-Dichlorobenzene                           CAS #: 95-50-1
 25.396  25.396 (1.144)   146   1338659 20.0000   20.924  70.00- 130.00   100.00
 25.396  25.396 (1.144)   148    845031                   36.09-  96.09    63.13
 25.396  25.396 (1.144)   111    555919                   13.38-  73.38    41.53
-------------------------------------------------------------------------------
```

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
131 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
27.077	27.077 (1.219)	180	761828	20.0000	16.226	70.00- 130.00	100.00
27.077	27.077 (1.219)	182	727803			64.14- 124.14	95.53
132 Hexachlorobutadiene					CAS #: 87-68-3		
27.167	27.167 (1.223)	225	761391	20.0000	19.390	70.00- 130.00	100.00
27.167	27.167 (1.223)	223	478865			44.27- 104.27	62.89
133 Naphthalene					CAS #: 91-20-3		
27.368	27.368 (1.232)	128	205455	2.00000	1.848	70.00- 130.00	100.00
27.368	27.368 (1.232)	127	27670			0.00- 47.41	13.47

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdv.i
Lab File ID: v100612.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: gh
Method File: /chem/msdv.i/06Oct2014.b/v14l1006a.m
Misc Info: 20ppbv (50ppbv)

Calibration Date: 06-OCT-2014
Calibration Time: 18:36
Client Smp ID: Level 11
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
54 Bromochloromethan	125097	75058	175136	130018	3.93
71 1,4-Difluorobenze	498199	298919	697479	507495	1.87
92 Chlorobenzene-d5	406420	243852	568988	411197	1.18

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
54 Bromochloromethan	15.93	15.60	16.26	15.93	0.00
71 1,4-Difluorobenze	17.30	16.97	17.63	17.30	0.00
92 Chlorobenzene-d5	22.21	21.88	22.54	22.21	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/msdv.i/06Oct2014.b/v100612.d

Date : 06-OCT-2014 19:24

Client ID: Level 11

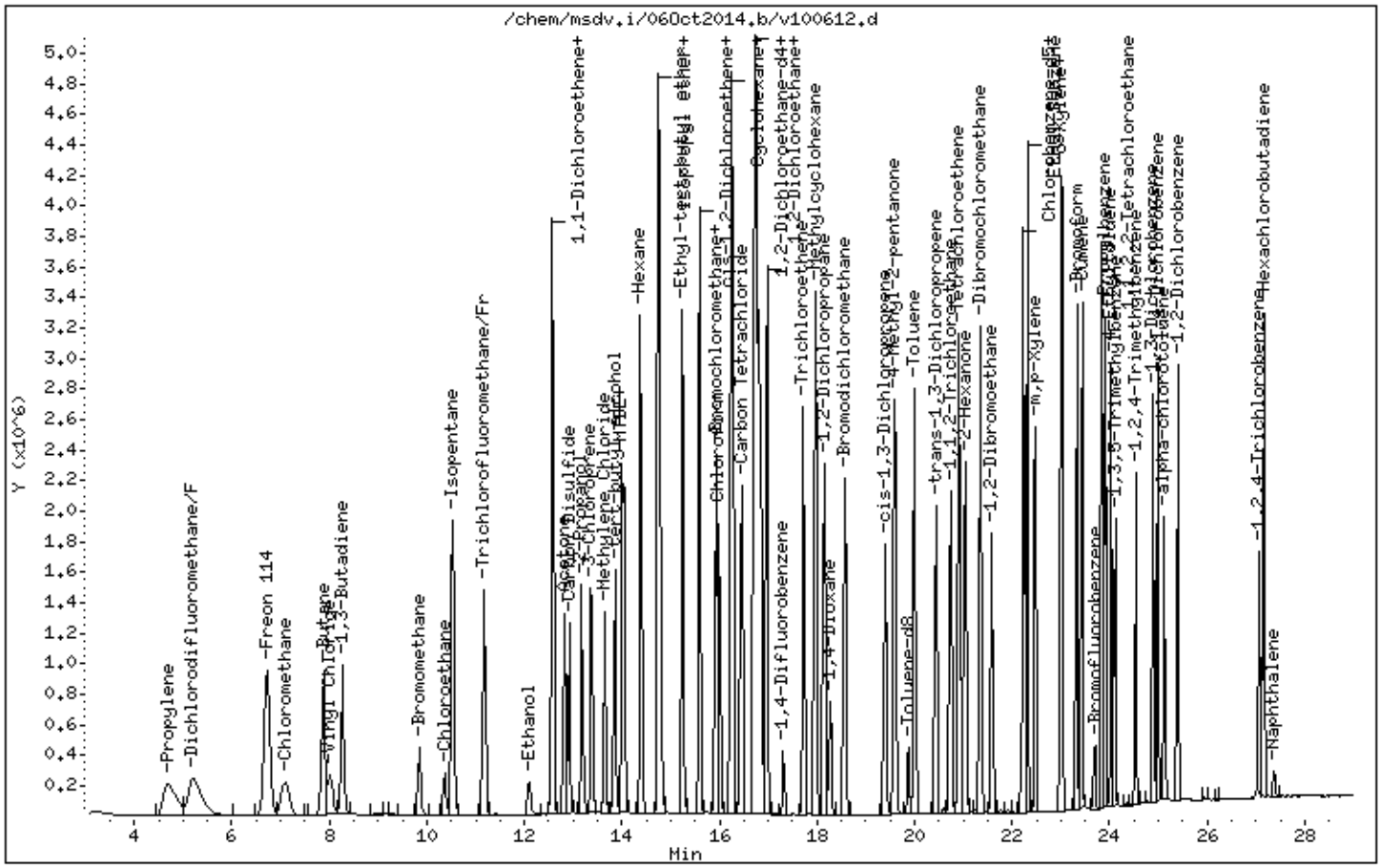
Instrument: msdv.i

Sample Info: 100mL #2677-212

Operator: gh

Column phase: RTx-624

Column diameter: 0.32



Eurofins Air Toxics Inc.

TO15/Modified TO-14A

Data file : /chem/msdv.i/06Oct2014.b/v100613.d
Lab Smp Id: ICAL Client Smp ID: Level 12
Inj Date : 06-OCT-2014 20:51
Operator : gd Inst ID: msdv.i
Smp Info : 200mL #2677-212; ICAL; Level 12
Misc Info : 40ppbv (50ppbv)
Comment : Low Level GC-MS
Method : /chem/msdv.i/06Oct2014.b/v14l1006a.m
Meth Date : 07-Oct-2014 11:32 efinn Quant Type: ISTD
Cal Date : 06-OCT-2014 20:51 Cal File: v100613.d
Als bottle: 1 Calibration Sample, Level: 12
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: HiLoFULLcrv.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
* 54 Bromochloromethane					CAS #: 74-97-5		
15.933	15.933 (1.000)	130	133288	5.00000		70.00- 130.00	100.00
15.933	15.933 (1.000)	128	104012			47.54- 107.54	78.04
15.933	15.933 (1.000)	49	368884			218.45- 278.45	276.76
* 71 1,4-Difluorobenzene					CAS #: 540-36-3		
17.305	17.305 (1.000)	114	505995	5.00000		70.00- 130.00	100.00
17.305	17.305 (1.000)	88	80571			0.00- 46.16	15.92
* 92 Chlorobenzene-d5					CAS #: 3114-55-4		
22.205	22.205 (1.000)	117	399674	5.00000		70.00- 130.00	100.00
22.205	22.205 (1.000)	82	239259			29.12- 89.12	59.86
$ 65 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
16.755	16.755 (1.052)	65	283553	5.00000	5.797	70.00- 130.00	100.00
16.728	16.728 (1.050)	67	219107			28.37- 88.37	77.27
$ 80 Toluene-d8					CAS #: 2037-26-5		
19.879	19.879 (1.149)	98	490969	5.00000	5.047	70.00- 130.00	100.00
19.856	19.856 (1.147)	70	62128			0.00- 41.90	12.65

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
$ 80 Toluene-d8 (continued)							
19.879	19.879 (1.149)	100	310869			33.85- 93.85	63.32
$ 106 Bromofluorobenzene					CAS #: 460-00-4		
23.704	23.704 (1.067)	174	172793	5.00000	5.027	70.00- 130.00	100.00
23.678	23.678 (1.066)	95	228482			99.95- 159.95	132.23
23.704	23.704 (1.067)	176	178342			67.64- 127.64	103.21
3 Propylene					CAS #: 115-07-1		
4.711	4.711 (0.296)	41	2764430	40.0000	36.968	70.00- 130.00	100.00
4.711	4.711 (0.296)	42	1788819			35.18- 95.18	64.71
4.711	4.711 (0.296)	39	2028654			44.12- 104.12	73.38
4 Dichlorodifluoromethane/Fr12					CAS #: 75-71-8		
5.240	5.240 (0.329)	85	4761156	40.0000	38.127	70.00- 130.00	100.00
5.240	5.240 (0.329)	87	1530149			1.90- 61.90	32.14
6 Freon 114					CAS #: 76-14-2		
6.750	6.750 (0.424)	135	3385741	40.0000	37.965	70.00- 130.00	100.00
6.750	6.750 (0.424)	137	1087398			0.53- 60.53	32.12
6.713	6.713 (0.421)	85	5158925			121.37- 181.37	152.37
8 Chloromethane					CAS #: 74-87-3		
7.128	7.128 (0.447)	50	2617213	40.0000	34.778	70.00- 130.00	100.00
7.128	7.128 (0.447)	52	811961			1.81- 61.81	31.02
9 Butane					CAS #: 106-97-8		
7.884	7.884 (0.495)	58	496779	40.0000	39.391	70.00- 130.00	100.00
7.884	7.884 (0.495)	43	5386138			1065.18-1125.18	1084.21
10 Vinyl Chloride					CAS #: 75-01-4		
8.008	8.008 (0.503)	62	2126137	40.0000	37.862	70.00- 130.00	100.00
8.008	8.008 (0.503)	64	643249			0.00- 58.65	30.25
11 1,3-Butadiene					CAS #: 106-99-0		
8.257	8.257 (0.518)	54	2163541	40.0000	39.300	70.00- 130.00	100.00
8.257	8.257 (0.518)	39	2851029			107.15- 167.15	131.78
12 Bromomethane					CAS #: 74-83-9		
9.834	9.834 (0.617)	94	1359877	40.0000	39.501	70.00- 130.00	100.00
9.834	9.834 (0.617)	96	1273847			72.12- 132.12	93.67
17 Chloroethane					CAS #: 75-00-3		
10.364	10.364 (0.650)	64	1017682	40.0000	38.995	70.00- 130.00	100.00
10.364	10.364 (0.650)	66	299666			0.00- 59.90	29.45

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
18 Isopentane					CAS #: 78-78-4		
10.533	10.533 (0.661)	57	2111444	40.0000	39.275	70.00- 130.00	100.00
10.533	10.533 (0.661)	43	4283793			171.32- 231.32	202.88
10.533	10.533 (0.661)	42	3762596			150.03- 210.03	178.20
20 Trichlorofluoromethane/Fr11					CAS #: 75-69-4		
11.183	11.183 (0.702)	101	4843662	40.0000	37.682	70.00- 130.00	100.00
11.183	11.183 (0.702)	103	3147433			36.54- 96.54	64.98
24 Ethanol					CAS #: 64-17-5		
12.074	12.074 (0.758)	45	1153556	40.0000	42.335	70.00- 130.00	100.00(A)
12.074	12.074 (0.758)	46	445269			8.51- 68.51	38.60
12.074	12.074 (0.758)	43	227109			0.00- 54.10	19.69
30 1,1-Dichloroethene					CAS #: 75-35-4		
12.568	12.568 (0.789)	98	1114202	40.0000	38.790	70.00- 130.00	100.00
12.568	12.568 (0.789)	61	3915697			320.65- 380.65	351.44
12.568	12.568 (0.789)	96	1772868			134.30- 194.30	159.12
28 Freon 113					CAS #: 76-13-1		
12.568	12.568 (0.789)	151	2842575	40.0000	36.738	70.00- 130.00	100.00
12.568	12.568 (0.789)	153	1809564			33.10- 93.10	63.66
12.568	12.568 (0.789)	101	3620044			96.37- 156.37	127.35
31 Acetone					CAS #: 67-64-1		
12.816	12.816 (0.804)	58	1231000	40.0000	39.090	70.00- 130.00	100.00
12.816	12.816 (0.804)	43	5378857			413.15- 473.15	436.95
33 Carbon Disulfide					CAS #: 75-15-0		
12.925	12.925 (0.811)	76	4863273	40.0000	39.806	70.00- 130.00	100.00
35 3-Chloroprene					CAS #: 107-05-1		
13.365	13.365 (0.839)	76	754315	40.0000	42.784	70.00- 130.00	100.00(A)
13.365	13.365 (0.839)	41	4466599			547.03- 607.03	592.14
34 2-Propanol					CAS #: 67-63-0		
13.173	13.173 (0.827)	45	6188770	40.0000	42.439	70.00- 130.00	100.00(A)
13.173	13.173 (0.827)	43	1165056			0.00- 50.74	18.83
13.173	13.173 (0.827)	59	177128			0.00- 32.83	2.86
37 Methylene Chloride					CAS #: 75-09-2		
13.640	13.640 (0.856)	84	1535338	40.0000	37.889	70.00- 130.00	100.00
13.640	13.640 (0.856)	49	3766027			212.37- 272.37	245.29
13.640	13.640 (0.856)	51	1110657			43.31- 103.31	72.34
38 tert-butyl alcohol					CAS #: 75-65-0		
13.859	13.859 (0.870)	59	5350684	40.0000	41.866	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
   ==   ====== ========  ====  ======== =======  =======   ============    =====

   38 tert-butyl alcohol (continued)
 13.859  13.859 (0.870)    41   1591633                     1.97-  61.97    29.75
 13.859  13.859 (0.870)    57    564204                     0.00-  40.67    10.54
-------------------------------------------------------------------------------
   39 MTBE                                          CAS #: 1634-04-4
 13.996  13.996 (0.878)    73   5618180 40.0000   38.644  70.00- 130.00   100.00
 13.996  13.996 (0.878)    57   1842919                     2.99-  62.99    32.80
 13.996  13.996 (0.878)    41   2374145                    12.12-  72.12    42.26
-------------------------------------------------------------------------------
   40 trans-1,2-Dichloroethene                      CAS #: 156-60-5
 14.051  14.051 (0.882)    98   1105067 40.0000   40.661  70.00- 130.00   100.00(A)
 14.051  14.051 (0.882)    61   3369032                   293.73- 353.73   304.87
 14.051  14.051 (0.882)    96   1734460                   146.88- 206.88   156.96
-------------------------------------------------------------------------------
   43 Hexane                                        CAS #: 110-54-3
 14.381  14.381 (0.903)    57   4340671 40.0000   37.313  70.00- 130.00   100.00
 14.381  14.381 (0.903)    43   3911582                    57.65- 117.65    90.11
 14.381  14.381 (0.903)    86    470605                     0.00-  40.67    10.84
-------------------------------------------------------------------------------
   45 Isopropyl ether                               CAS #: 108-20-3
 14.738  14.738 (0.925)    45  12014430 40.0000   39.755  70.00- 130.00   100.00
 14.738  14.738 (0.925)    87   1594010                     0.00-  43.44    13.27
 14.738  14.738 (0.925)    59    973341                     0.00-  38.34     8.10
-------------------------------------------------------------------------------
   46 1,1-Dichloroethane                            CAS #: 75-34-3
 14.765  14.765 (0.927)    63   4362323 40.0000   38.642  70.00- 130.00   100.00
 14.765  14.765 (0.927)    65   1318833                     0.37-  60.37    30.23
-------------------------------------------------------------------------------
   47 Vinyl Acetate                                 CAS #: 108-05-4
 14.793  14.793 (0.928)    86    492601 40.0000   42.749  70.00- 130.00   100.00(A)
 14.793  14.793 (0.928)    42   1346946                   220.92- 280.92   273.44
 14.793  14.793 (0.928)    43  16428814                  3282.47-3342.47  3335.12
-------------------------------------------------------------------------------
   49 Ethyl-tert-butyl ether                        CAS #: 637-92-3
 15.240  15.240 (0.956)    59   8326642 40.0000   40.433  70.00- 130.00   100.00(A)
 15.240  15.240 (0.956)    87   2370929                     0.00-  58.71    28.47
 15.240  15.240 (0.956)    41   2140397                     0.00-  56.39    25.71
-------------------------------------------------------------------------------
   50 cis-1,2-Dichloroethene                        CAS #: 156-59-2
 15.592  15.592 (0.979)    98   1428798 40.0000   39.617  70.00- 130.00   100.00
 15.592  15.592 (0.979)    61   3976357                   248.69- 308.69   278.30
 15.592  15.592 (0.979)    96   2268672                   132.55- 192.55   158.78
-------------------------------------------------------------------------------
   51 2-Butanone                                    CAS #: 78-93-3
 15.571  15.571 (0.977)    72   1007076 40.0000   42.965  70.00- 130.00   100.00(A)
 15.571  15.571 (0.977)    43   8056534                   794.80- 854.80   799.99
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                                        AMOUNTS
                                     CAL-AMT   ON-COL
   RT   EXP RT (REL RT)  MASS  RESPONSE ( PPBV)  ( PPBV)   TARGET RANGE    RATIO
   ==   ====== ========  ====  ======== =======  =======   ============    =====

   51 2-Butanone (continued)
 15.571  15.571 (0.977)    57    467214                    18.01-  78.01    46.39
-------------------------------------------------------------------------------
   53 Tetrahydrofuran                                CAS #: 109-99-9
 15.933  15.933 (1.000)    42   4825600 40.0000   39.951  70.00- 130.00   100.00
 15.933  15.933 (1.000)    71    913037                     0.00-  49.03    18.92
 15.933  15.933 (1.000)    72    973882                     0.00-  51.35    20.18
-------------------------------------------------------------------------------
   55 Chloroform                                     CAS #: 67-66-3
 15.995  15.995 (1.004)    83   4217453 40.0000   37.547  70.00- 130.00   100.00
 15.995  15.995 (1.004)    85   2708747                    33.33-  93.33    64.23
-------------------------------------------------------------------------------
   57 Cyclohexane                                    CAS #: 110-82-7
 16.242  16.242 (1.019)    84   2692240 40.0000   38.109  70.00- 130.00   100.00
 16.242  16.242 (1.019)    56   5036537                   157.43- 217.43   187.08
 16.242  16.242 (1.019)    41   3726694                   105.99- 165.99   138.42
-------------------------------------------------------------------------------
   58 1,1,1-Trichloroethane                          CAS #: 71-55-6
 16.242  16.242 (1.019)    97   4452521 40.0000   37.961  70.00- 130.00   100.00
 16.242  16.242 (1.019)    99   2852439                    32.16-  92.16    64.06
-------------------------------------------------------------------------------
   59 Carbon Tetrachloride                           CAS #: 56-23-5
 16.457  16.457 (1.033)   119   4353454 40.0000   38.694  70.00- 130.00   100.00
 16.457  16.457 (1.033)   117   4401967                    69.67- 129.67   101.11
-------------------------------------------------------------------------------
   63 2,2,4-Trimethylpentane                         CAS #: 540-84-1
 16.728  16.728 (1.050)    56   4644293 40.0000   37.724  70.00- 130.00   100.00
 16.728  16.728 (1.050)    57  13569051                   258.69- 318.69   292.17
 16.728  16.728 (1.050)    41   5218846                    79.91- 139.91   112.37
-------------------------------------------------------------------------------
   64 Benzene                                        CAS #: 71-43-2
 16.755  16.755 (0.968)    78   5743876 40.0000   38.466  70.00- 130.00   100.00
 16.755  16.755 (0.968)    77   1372019                     0.00-  53.73    23.89
-------------------------------------------------------------------------------
   66 tert-amyl methyl ether                         CAS #: 994-05-8
 16.810  16.810 (0.971)    87   1375347 40.0000   40.676  70.00- 130.00   100.00(A)
 16.810  16.810 (0.971)    73   5886788                   399.95- 459.95   428.02
 16.810  16.810 (0.971)    55   2251783                   143.62- 203.62   163.72
-------------------------------------------------------------------------------
   68 1,2-Dichloroethane                             CAS #: 107-06-2
 16.865  16.865 (0.975)    62   3583746 40.0000   39.603  70.00- 130.00   100.00
 16.865  16.865 (0.975)    64   1126552                     1.11-  61.11    31.44
-------------------------------------------------------------------------------
   69 Heptane                                        CAS #: 142-82-5
 16.975  16.975 (0.981)    57   2573577 40.0000   39.990  70.00- 130.00   100.00
 16.975  16.975 (0.981)   100    560841                     0.00-  51.27    21.79
```

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
69 Heptane (continued)							
16.975	16.975 (0.981)	43	6711905			235.24- 295.24	260.80
72 Trichloroethene					CAS #: 79-01-6		
17.716	17.716 (1.024)	130	2712588	40.0000	40.355	70.00- 130.00	100.00(A)
17.716	17.716 (1.024)	95	2727681			71.16- 131.16	100.56
17.716	17.716 (1.024)	97	1749453			33.04- 93.04	64.49
73 Methylcyclohexane					CAS #: 108-87-2		
17.964	17.964 (1.038)	83	3550335	40.0000	40.221	70.00- 130.00	100.00(A)
17.964	17.964 (1.038)	98	1597312			15.02- 75.02	44.99
17.964	17.964 (1.038)	55	4429025			95.64- 155.64	124.75
74 1,2-Dichloropropane					CAS #: 78-87-5		
18.156	18.156 (1.049)	63	2792715	40.0000	40.771	70.00- 130.00	100.00(A)
18.156	18.156 (1.049)	62	2038393			45.17- 105.17	72.99
18.156	18.156 (1.049)	41	2487701			59.65- 119.65	89.08
75 1,4-Dioxane					CAS #: 123-91-1		
18.266	18.266 (1.056)	88	1439381	40.0000	41.813	70.00- 130.00	100.00(A)
18.266	18.266 (1.056)	58	1445921			72.13- 132.13	100.45
18.266	18.266 (1.056)	57	479382			4.41- 64.41	33.30
77 Bromodichloromethane					CAS #: 75-27-4		
18.568	18.568 (1.073)	83	4738096	40.0000	41.782	70.00- 130.00	100.00(A)
18.568	18.568 (1.073)	85	2999766			32.12- 92.12	63.31
78 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
19.386	19.386 (1.120)	75	3359572	40.0000	43.347	70.00- 130.00	100.00(A)
19.386	19.386 (1.120)	77	1054092			1.25- 61.25	31.38
19.386	19.386 (1.120)	39	3398981			71.17- 131.17	101.17
79 4-Methyl-2-pentanone					CAS #: 108-10-1		
19.587	19.587 (1.132)	43	9402530	40.0000	44.611	70.00- 130.00	100.00(A)
19.587	19.587 (1.132)	58	2554741			0.00- 57.24	27.17
19.587	19.587 (1.132)	85	785430			0.00- 38.20	8.35
81 Toluene					CAS #: 108-88-3		
19.991	19.991 (1.155)	91	6390598	40.0000	38.772	70.00- 130.00	100.00
19.991	19.991 (1.155)	92	3701992			28.60- 88.60	57.93
82 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
20.435	20.435 (0.920)	75	3563298	40.0000	43.252	70.00- 130.00	100.00(A)
20.435	20.435 (0.920)	77	1107358			5.48- 65.48	31.08
20.435	20.435 (0.920)	39	3299370			63.15- 123.15	92.59

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

   84 1,1,2-Trichloroethane                        CAS #: 79-00-5
 20.757  20.757 (0.935)    97   2554853 40.0000   40.610  70.00- 130.00   100.00(A)
 20.757  20.757 (0.935)    99   1594620                   32.13-  92.13    62.42
 20.757  20.757 (0.935)    83   2249514                   57.82- 117.82    88.05
-------------------------------------------------------------------------------
   86 Tetrachloroethene                            CAS #: 127-18-4
 20.901  20.901 (0.941)   166   3160025 40.0000   38.851  70.00- 130.00   100.00
 20.901  20.901 (0.941)   129   2476191                   47.04- 107.04    78.36
 20.901  20.901 (0.941)   131   2439567                   46.95- 106.95    77.20
-------------------------------------------------------------------------------
   87 2-Hexanone                                   CAS #: 591-78-6
 21.044  21.044 (0.948)    58   3153192 40.0000   44.759  70.00- 130.00   100.00(A)
 21.009  21.009 (0.946)    43   8437963                  242.48- 302.48   267.60
 21.044  21.044 (0.948)   100    435779                    0.00-  43.88    13.82
-------------------------------------------------------------------------------
   89 Dibromochloromethane                         CAS #: 124-48-1
 21.367  21.367 (0.962)   129   4969656 40.0000   42.443  70.00- 130.00   100.00(A)
 21.367  21.367 (0.962)   127   3848303                   50.38- 110.38    77.44
-------------------------------------------------------------------------------
   90 1,2-Dibromoethane                            CAS #: 106-93-4
 21.582  21.582 (0.972)   107   4142341 40.0000   42.266  70.00- 130.00   100.00(A)
 21.582  21.582 (0.972)   109   3852830                   62.69- 122.69    93.01
-------------------------------------------------------------------------------
   93 Chlorobenzene                                CAS #: 108-90-7
 22.233  22.233 (1.001)   112   5006470 40.0000   38.145  70.00- 130.00   100.00
 22.233  22.233 (1.001)   114   1613603                    1.62-  61.62    32.23
 22.233  22.233 (1.001)    77   3581125                   38.66-  98.66    71.53
-------------------------------------------------------------------------------
   95 Ethyl Benzene                                CAS #: 100-41-4
 22.315  22.315 (1.005)   106   2369839 40.0000   40.228  70.00- 130.00   100.00(A)
 22.315  22.315 (1.005)    91   7351647                  292.36- 352.36   310.22
-------------------------------------------------------------------------------
   96 m,p-Xylene                                   CAS #: 108-38-3
 22.480  22.480 (1.012)   106   2187058 40.0000   37.650  70.00- 130.00   100.00
 22.480  22.480 (1.012)    91   4421717                  164.15- 224.15   202.18
-------------------------------------------------------------------------------
  100 o-Xylene                                     CAS #: 95-47-6
 23.001  23.001 (1.036)   106   2150896 40.0000   39.792  70.00- 130.00   100.00
 23.001  23.001 (1.036)    91   4556092                  186.63- 246.63   211.82
-------------------------------------------------------------------------------
  101 Styrene                                      CAS #: 100-42-5
 23.029  23.029 (1.037)   104   3322792 40.0000   42.019  70.00- 130.00   100.00(A)
 23.029  23.029 (1.037)    78   1780289                   28.70-  88.70    53.58
-------------------------------------------------------------------------------
  102 Bromoform                                    CAS #: 75-25-2
 23.331  23.331 (1.051)   173   4417045 40.0000   44.508  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
   ==   ====== ========  ====  ======== =======  =======   ============    =====

  102 Bromoform (continued)
 23.331  23.331 (1.051)   171   2292892                   20.40-  80.40    51.91
-------------------------------------------------------------------------------
  103 Cumene                                        CAS #: 98-82-8
 23.441  23.441 (1.056)   105   6496854 40.0000   41.160  70.00- 130.00   100.00(A)
 23.441  23.441 (1.056)   120   1809651                    0.00-  57.73    27.85
-------------------------------------------------------------------------------
  108 1,1,2,2-Tetrachloroethane                     CAS #: 79-34-5
 23.832  23.832 (1.073)    83   4785264 40.0000   39.465  70.00- 130.00   100.00
 23.832  23.832 (1.073)    85   3051266                   34.81-  94.81    63.76
-------------------------------------------------------------------------------
  111 Propylbenzene                                 CAS #: 103-65-1
 23.910  23.910 (1.077)    91   5899900 40.0000   42.139  70.00- 130.00   100.00(A)
 23.910  23.910 (1.077)   120   1405606                    0.00-  53.83    23.82
-------------------------------------------------------------------------------
  113 4-Ethyltoluene                                CAS #: 622-96-8
 24.039  24.039 (1.083)   105   4030948 40.0000   39.244  70.00- 130.00   100.00
 24.039  24.039 (1.083)   120   1250581                    0.18-  60.18    31.02
-------------------------------------------------------------------------------
  114 1,3,5-Trimethylbenzene                        CAS #: 108-67-8
 24.116  24.116 (1.086)   105   2848186 40.0000   33.211  70.00- 130.00   100.00
 24.116  24.116 (1.086)   120   1364301                   20.44-  80.44    47.90
-------------------------------------------------------------------------------
  120 1,2,4-Trimethylbenzene                        CAS #: 95-63-6
 24.529  24.529 (1.105)   105   2171830 40.0000   31.267  70.00- 130.00   100.00
 24.529  24.529 (1.105)   120   1004547                   19.27-  79.27    46.25
-------------------------------------------------------------------------------
  122 1,3-Dichlorobenzene                           CAS #: 541-73-1
 24.902  24.902 (1.121)   146   2569446 40.0000   38.337  70.00- 130.00   100.00
 24.902  24.902 (1.121)   148   1625153                   38.48-  98.48    63.25
 24.902  24.902 (1.121)   111   1051353                   10.49-  70.49    40.92
-------------------------------------------------------------------------------
  124 1,4-Dichlorobenzene                           CAS #: 106-46-7
 24.992  24.992 (1.125)   146   2316818 40.0000   36.770  70.00- 130.00   100.00
 24.992  24.992 (1.125)   148   1482807                   38.92-  98.92    64.00
 24.992  24.992 (1.125)   111    911374                   11.61-  71.61    39.34
-------------------------------------------------------------------------------
  127 alpha-chlorotoluene                           CAS #: 100-44-7
 25.126  25.126 (1.132)    91   2847760 40.0000   42.303  70.00- 130.00   100.00(A)
 25.126  25.126 (1.132)   126    602569                    0.00-  52.82    21.16
-------------------------------------------------------------------------------
  128 1,2-Dichlorobenzene                           CAS #: 95-50-1
 25.395  25.395 (1.144)   146   2327204 40.0000   37.424  70.00- 130.00   100.00
 25.395  25.395 (1.144)   148   1490115                   36.09-  96.09    64.03
 25.395  25.395 (1.144)   111    973556                   13.38-  73.38    41.83
-------------------------------------------------------------------------------
```

RT	EXP RT	(REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
131 1,2,4-Trichlorobenzene						CAS #: 120-82-1		
27.077	27.077	(1.219)	180	965379	40.0000	21.154	70.00- 130.00	100.00
27.077	27.077	(1.219)	182	927185			64.14- 124.14	96.04
132 Hexachlorobutadiene						CAS #: 87-68-3		
27.166	27.166	(1.223)	225	1586754	40.0000	41.574	70.00- 130.00	100.00(A)
27.166	27.166	(1.223)	223	989377			44.27- 104.27	62.35
133 Naphthalene						CAS #: 91-20-3		
27.368	27.368	(1.232)	128	254250	4.00000	2.352	70.00- 130.00	100.00
27.368	27.368	(1.232)	127	32597			0.00- 47.41	12.82

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: msdv.i
Lab File ID: v100613.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: gd
Method File: /chem/msdv.i/06Oct2014.b/v14l1006a.m
Misc Info: 40ppbv (50ppbv)

Calibration Date: 06-OCT-2014
Calibration Time: 18:36
Client Smp ID: Level 12
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
54 Bromochloromethan	125097	75058	175136	133288	6.55
71 1,4-Difluorobenze	498199	298919	697479	505995	1.56
92 Chlorobenzene-d5	406420	243852	568988	399674	-1.66

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
54 Bromochloromethan	15.93	15.60	16.26	15.93	0.00
71 1,4-Difluorobenze	17.30	16.97	17.63	17.30	0.00
92 Chlorobenzene-d5	22.21	21.88	22.54	22.21	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/msdv.i/06Oct2014.b/v100613.d

Date : 06-OCT-2014 20:51

Client ID: Level 12

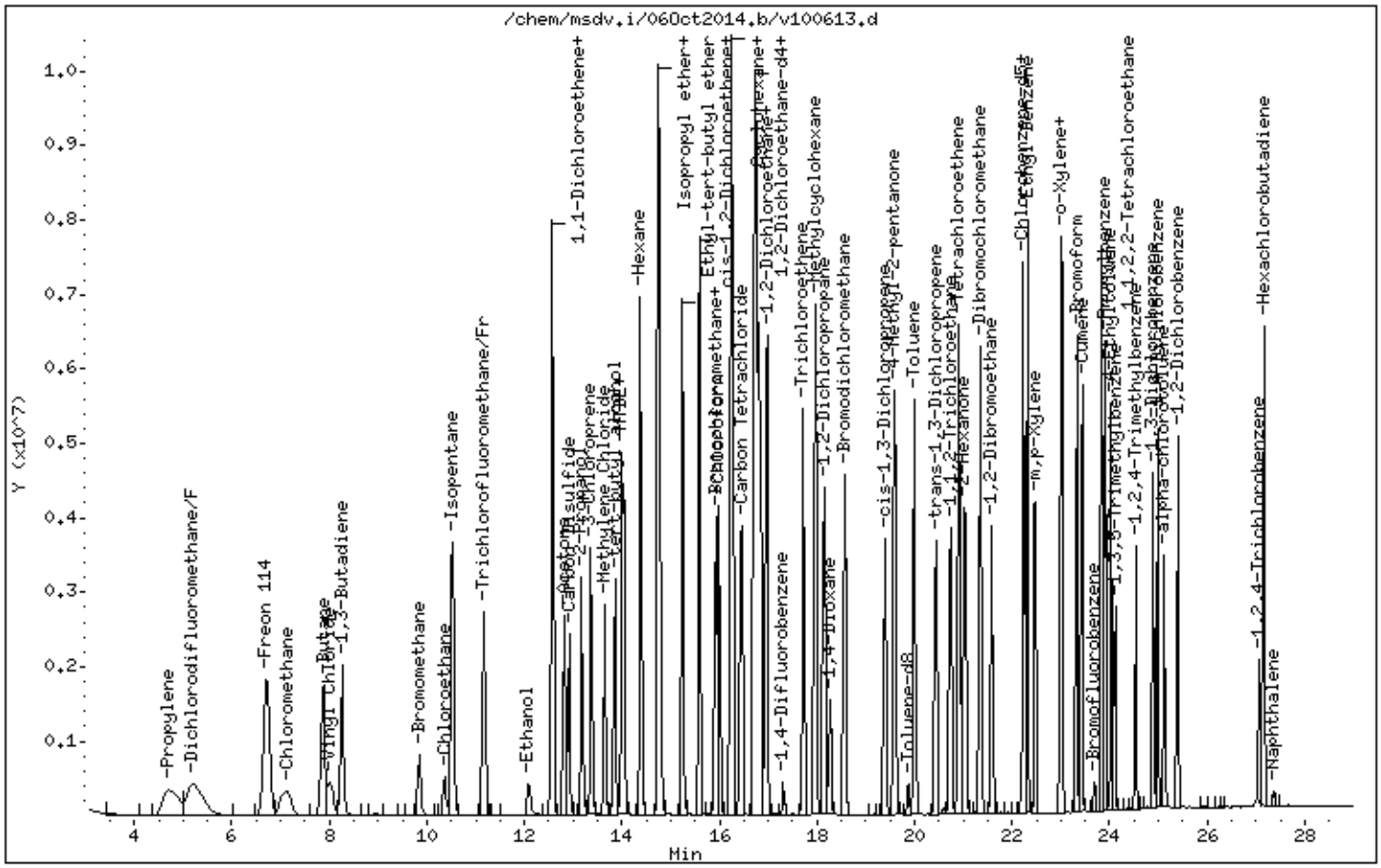
Instrument: msdv.i

Sample Info: 200mL #2677-212; ICAL; Level 12

Operator: gd

Column phase: RTx-624

Column diameter: 0.32



Eurofins Air Toxics Inc.

TO15/Modified TO-14A

Data file : /chem/msdv.i/03Nov2014.b/v110306.d
Lab Smp Id: ICAL Level 13
Inj Date : 03-NOV-2014 10:22
Operator : ef Inst ID: msdv.i
Smp Info : 100mL #2687-10
Misc Info : 2.0ppbv (5.0ppbv) AT1
Comment : Low Level GC-MS
Method : /chem/msdv.i/03Nov2014.b/v14l1006d.m
Meth Date : 04-Nov-2014 09:18 efinn Quant Type: ISTD
Cal Date : 03-NOV-2014 10:22 Cal File: v110306.d
Als bottle: 1 Calibration Sample, Level: 13
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT1crv.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
* 54 Bromochloromethane					CAS #: 74-97-5		
15.933	15.934 (1.000)	130	93519	5.00000		70.00- 130.00	100.00
15.933	15.934 (1.000)	128	76050			47.55- 107.55	81.32
15.933	15.934 (1.000)	49	233285			213.64- 273.64	249.45
* 71 1,4-Difluorobenzene					CAS #: 540-36-3		
17.305	17.305 (1.000)	114	402219	5.00000		70.00- 130.00	100.00
17.305	17.305 (1.000)	88	66081			0.00- 46.17	16.43
* 92 Chlorobenzene-d5					CAS #: 3114-55-4		
22.205	22.205 (1.000)	117	326998	5.00000		70.00- 130.00	100.00
22.205	22.205 (1.000)	82	187482			28.56- 88.56	57.33
1 Freon134a					CAS #: 811-97-2		
4.447	4.560 (0.279)	83	35129	2.00000	1.836	70.00- 130.00	100.00
4.447	4.523 (0.279)	69	33654			59.63- 119.63	95.80
2 Freon 152A					CAS #: 75-37-6		
4.976	5.013 (0.312)	65	23277	2.00000	2.003	70.00- 130.00	100.00
5.013	5.051 (0.315)	51	68130			269.13- 329.13	292.69

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
5 Freon 22					CAS #: 75-45-6		
5.731	5.769 (0.360)	51	103272	2.00000	2.011	70.00- 130.00	100.00
5.731	5.769 (0.360)	67	10301			0.00- 41.21	9.97
6.977	5.731 (0.438)	85	11516			0.00- 37.03	11.15
14 Fr21					CAS #: 75-43-4		
11.280	11.280 (0.708)	67	111807	2.00000	1.946	70.00- 130.00	100.00
11.280	11.280 (0.708)	69	34219			0.60- 60.60	30.61
11.280	11.280 (0.708)	47	17182			0.00- 45.43	15.37
205 2-Heptanone					CAS #: 110-43-0		
23.111	23.111 (1.041)	58	86079	2.00000	1.850	70.00- 130.00	100.00
23.111	23.084 (1.041)	43	187255			195.73- 255.73	217.54
206 1-Butanol					CAS #: 71-36-3		
17.469	17.470 (1.010)	56	99370	2.00000	2.300	70.00- 130.00	100.00
17.469	17.470 (1.010)	41	95549			58.27- 118.27	96.15
17.469	17.470 (1.010)	43	70661			36.87- 96.87	71.11
204 Butyl Acetate					CAS #: 123-86-4		
21.152	21.116 (1.222)	56	52491	2.00000	2.182	70.00- 130.00	100.00
21.152	21.116 (1.222)	73	12771			0.00- 58.66	24.33
21.116	21.116 (1.220)	43	161363			284.26- 344.26	307.41
56 1,1-Dicholoropropene					CAS #: 563-58-6		
16.457	16.458 (1.033)	110	32223	2.00000	1.909	70.00- 130.00	100.00
16.457	16.458 (1.033)	75	88203			245.44- 305.44	273.73
91 1,1,1,2-Tetrachloroethane					CAS #: 630-20-6		
22.343	22.343 (1.006)	131	92732	2.00000	1.778	70.00- 130.00	100.00
22.343	22.343 (1.006)	117	67007			40.91- 100.91	72.26
22.315	22.343 (1.005)	95	36741			9.01- 69.01	39.62
105 1,2,3-Trichloropropane					CAS #: 96-18-4		
23.910	23.910 (1.077)	110	41081	2.00000	1.787	70.00- 130.00	100.00
23.910	23.910 (1.077)	75	120264			254.96- 314.96	292.75
23.910	23.910 (1.077)	61	42326			68.29- 128.29	103.03
97 Bromobenzene					CAS #: 108-86-1		
23.884	23.884 (1.076)	156	76878	2.00000	1.903	70.00- 130.00	100.00
23.884	23.884 (1.076)	158	72297			68.03- 128.03	94.04
23.884	23.884 (1.076)	77	153070			167.20- 227.20	199.11
107 2-Chlorotoluene					CAS #: 95-49-8		
24.065	24.065 (1.084)	126	43961	2.00000	1.957	70.00- 130.00	100.00
24.065	24.065 (1.084)	91	126447			259.67- 319.67	287.63

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
107 2-Chlorotoluene (continued)							
24.065	24.065 (1.084)	65	13350			4.25- 64.25	30.37
109 4-Chlorotoluene					CAS #: 106-43-4		
24.194	24.194 (1.090)	126	37445	2.00000	1.861	70.00- 130.00	100.00
24.194	24.194 (1.090)	91	103571			242.46- 302.46	276.60
24.194	24.194 (1.090)	63	16706			16.50- 76.50	44.61
115 tert-Butylbenzene					CAS #: 98-06-6		
24.452	24.478 (1.101)	119	100448	2.00000	1.918	70.00- 130.00	100.00
24.477	24.478 (1.102)	134	23966			0.00- 54.58	23.86
24.452	24.452 (1.101)	91	64981			36.83- 96.83	64.69
119 sec-Butylbenzene					CAS #: 135-98-8		
24.709	24.710 (1.113)	105	134344	2.00000	1.950	70.00- 130.00	100.00
24.709	24.710 (1.113)	134	27719			0.00- 51.05	20.63
24.684	24.684 (1.112)	91	20634			0.00- 46.24	15.36
116 p-Cymene					CAS #: 99-87-6		
24.835	24.835 (1.118)	119	122347	2.00000	1.843	70.00- 130.00	100.00
24.835	24.835 (1.118)	134	33133			0.00- 57.36	27.08
24.835	24.835 (1.118)	91	28127			0.00- 54.27	22.99
123 Butylbenzene					CAS #: 104-51-8		
25.261	25.261 (1.138)	134	38126	2.00000	1.811	70.00- 130.00	100.00
25.261	25.261 (1.138)	91	135906			327.67- 387.67	356.47
25.261	25.261 (1.138)	92	75604			160.08- 220.08	198.30
129 1,2-dibromo-3-chloropropane					CAS #: 96-12-8		
26.203	26.203 (1.180)	157	55662	2.00000	1.923	70.00- 130.00	100.00
26.203	26.203 (1.180)	75	54654			63.21- 123.21	98.19
26.203	26.203 (1.180)	155	44616			49.09- 109.09	80.16
83 1,3-Dichloropropane					CAS #: 142-28-9		
21.044	21.045 (1.216)	76	101143	2.00000	1.872	70.00- 130.00	100.00
21.044	21.045 (1.216)	41	129655			90.75- 150.75	128.19
21.044	21.045 (1.216)	78	33480			2.90- 62.90	33.10

Report Date: 04-Nov-2014 09:18

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdv.i
Lab File ID: v110306.d
Lab Smp Id: ICAL Level 13
Analysis Type: VOA
Quant Type: ISTD
Operator: ef
Method File: /chem/msdv.i/03Nov2014.b/v14l1006d.m
Misc Info: 2.0ppbv (5.0ppbv) AT1

Calibration Date: 03-NOV-2014
Calibration Time: 07:40

Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
54 Bromochloromethan	102660	61596	143724	93519	-8.90
71 1,4-Difluorobenze	414479	248687	580271	402219	-2.96
92 Chlorobenzene-d5	344049	206429	481669	326998	-4.96

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
54 Bromochloromethan	15.93	15.60	16.26	15.93	0.00
71 1,4-Difluorobenze	17.30	16.97	17.63	17.30	0.00
92 Chlorobenzene-d5	22.21	21.88	22.54	22.21	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/msdv.i/03Nov2014.b/v110306.d

Date : 03-NOV-2014 10:22

Client ID:

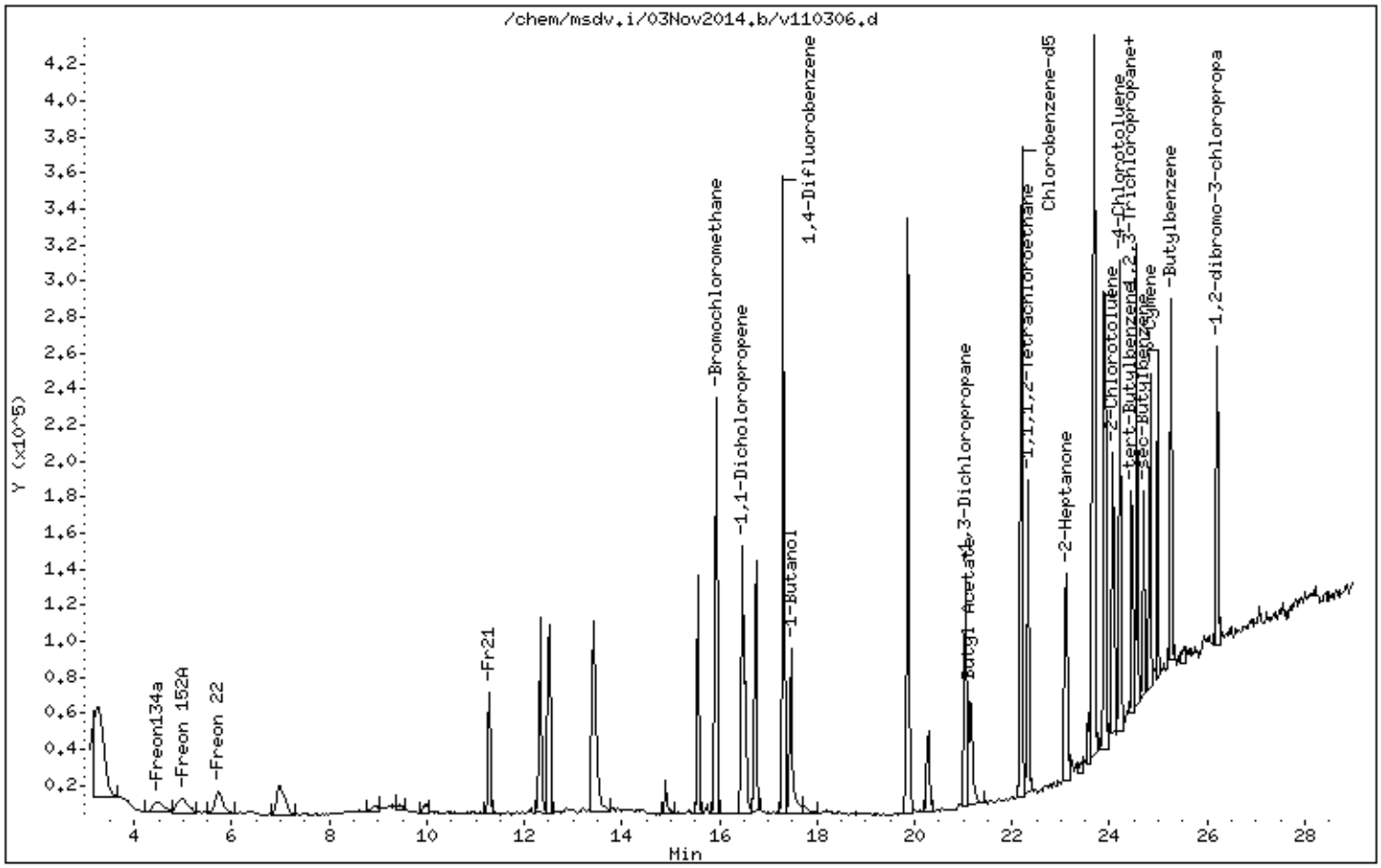
Instrument: msdv.i

Sample Info: 100mL #2687-10

Operator: ef

Column phase: RTx-624

Column diameter: 0.32



Eurofins Air Toxics Inc.

TO15/Modified TO-14A

Data file : /chem/msdv.i/07Oct2014.b/v100711.d
Lab Smp Id: ICAL Client Smp ID: Level 13
Inj Date : 07-OCT-2014 20:02
Operator : gd Inst ID: msdv.i
Smp Info : 100mL #2677-286
Misc Info : 2.0ppbv (5.0ppbv)
Comment : Low Level GC-MS
Method : /chem/msdv.i/07Oct2014.b/v14l1006a.m
Meth Date : 07-Oct-2014 22:27 gdelacru Quant Type: ISTD
Cal Date : 07-OCT-2014 20:02 Cal File: v100711.d
Als bottle: 5 Calibration Sample, Level: 13
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT7crv.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
* 54 Bromochloromethane					CAS #: 74-97-5		
15.934	15.934 (1.000)	130	105770	5.00000		80.00- 120.00	100.00
15.934	15.934 (1.000)	128	84918			48.21- 108.21	80.29
15.934	15.934 (1.000)	49	255426			215.61- 275.61	241.49
* 71 1,4-Difluorobenzene					CAS #: 540-36-3		
17.305	17.305 (1.000)	114	455611	5.00000		80.00- 120.00	100.00
17.305	17.305 (1.000)	88	75188			0.00- 46.17	16.50
* 92 Chlorobenzene-d5					CAS #: 3114-55-4		
22.205	22.205 (1.000)	117	349680	5.00000		80.00- 120.00	100.00
22.205	22.205 (1.000)	82	206898			29.34- 89.34	59.17
76 Octane					CAS #: 111-65-9		
19.968	19.968 (1.154)	57	79966	2.00000	2.016	80.00- 120.00	100.00
19.968	19.968 (1.154)	85	60859			45.62- 105.62	76.11
19.968	19.968 (1.154)	43	260353			293.94- 353.94	325.58
99 Decane					CAS #: 124-18-5		
23.987	23.987 (1.080)	57	198229	2.00000	1.848	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
99 Decane (continued)							
23.987	23.987 (1.080)	71	54295			0.00- 57.94	27.39
23.987	23.987 (1.080)	142	6450			0.00- 33.26	3.25
117 Indene					CAS #: 95-13-6		
25.485	25.485 (1.148)	115	85208	2.00000	1.705	80.00- 120.00	100.00(T)
25.485	25.485 (1.148)	116	81441			67.11- 127.11	95.58
0.000	25.485 (0.000)	0	0			0.00- 30.00	0.00
121 1,2,3-trimethylbenzene					CAS #: 526-73-8		
24.992	24.992 (1.125)	120	51971	2.00000	1.763	80.00- 120.00	100.00
24.992	24.992 (1.125)	105	114266			192.71- 252.71	219.86
24.992	24.992 (1.125)	77	15563			2.83- 62.83	29.95

QC Flag Legend

T - Target compound detected outside RT window.

Report Date: 08-Oct-2014 08:26

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdv.i
Lab File ID: v100711.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: gd
Method File: /chem/msdv.i/07Oct2014.b/v14l1006a.m
Misc Info: 2.0ppbv (5.0ppbv)

Calibration Date: 07-OCT-2014
Calibration Time: 12:28
Client Smp ID: Level 13
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
54 Bromochloromethan	122750	73650	171850	105770	-13.83
71 1,4-Difluorobenze	498533	299120	697946	455611	-8.61
92 Chlorobenzene-d5	397978	238787	557169	349680	-12.14

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
54 Bromochloromethan	15.93	15.60	16.26	15.93	0.00
71 1,4-Difluorobenze	17.30	16.97	17.63	17.30	0.00
92 Chlorobenzene-d5	22.21	21.88	22.54	22.21	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/msdv.i/07Oct2014.b/v100711.d

Date : 07-OCT-2014 20:02

Client ID: Level 13

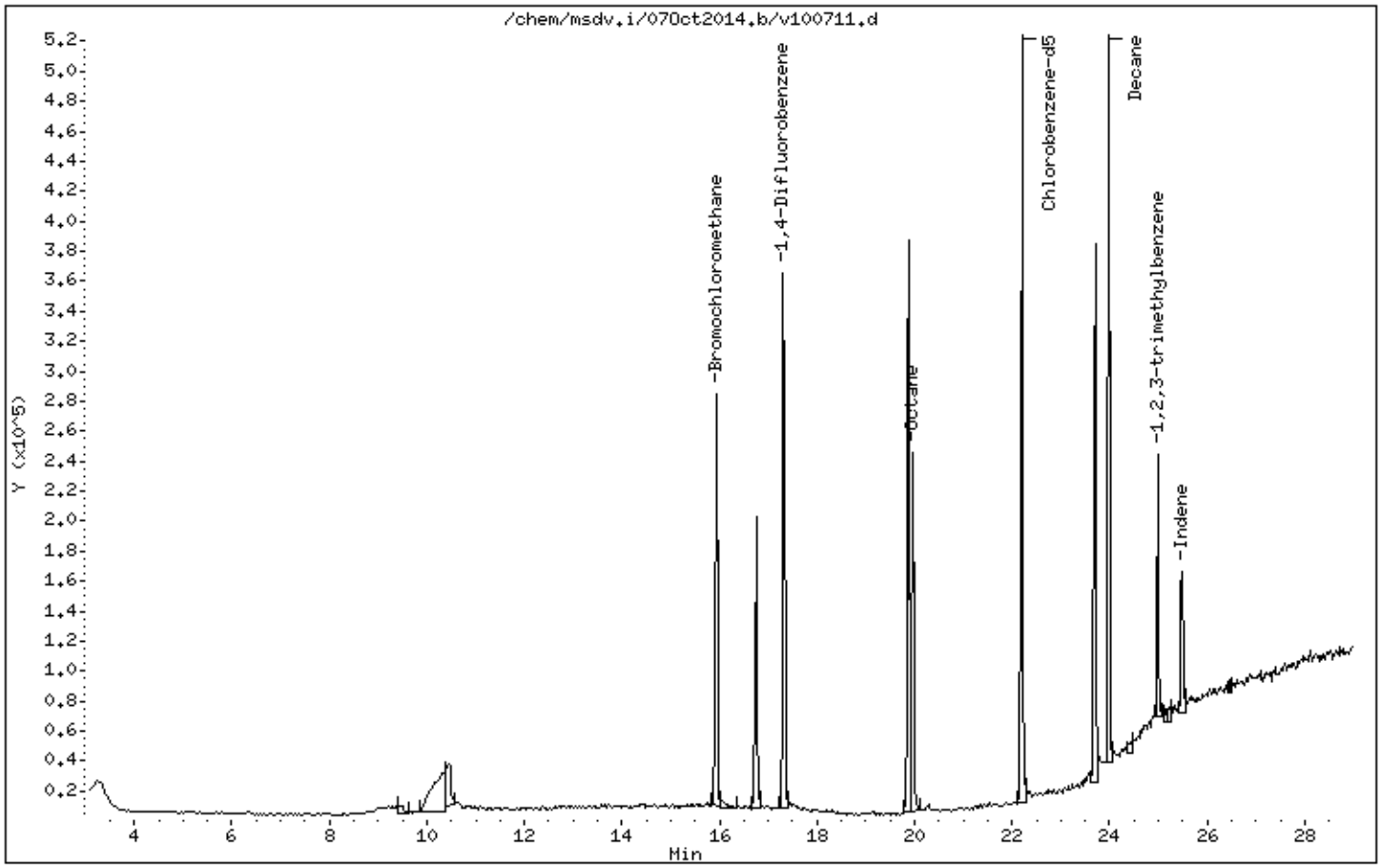
Instrument: msdv.i

Sample Info: 100mL #2677-286

Operator: gd

Column phase: RTx-624

Column diameter: 0.32



Eurofins Air Toxics Inc.

TO15/Modified TO-14A

Data file : /chem/msdv.i/06Oct2014.b/v100615.d
Lab Smp Id: ICAL Client Smp ID: Level 15
Inj Date : 06-OCT-2014 22:22
Operator : gd Inst ID: msdv.i
Smp Info : 75mL #2677-212
Misc Info : 15ppbv (50ppbv)
Comment : Low Level GC-MS
Method : /chem/msdv.i/06Oct2014.b/v14l1006a.m
Meth Date : 07-Oct-2014 14:35 efinn Quant Type: ISTD
Cal Date : 06-OCT-2014 22:22 Cal File: v100615.d
Als bottle: 1 Calibration Sample, Level: 15
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: HiLoFULLcrv.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
* 54 Bromochloromethane					CAS #: 74-97-5		
15.933	15.933 (1.000)	130	129224	5.00000		70.00- 130.00	100.00
15.933	15.933 (1.000)	128	96491			47.54- 107.54	74.67
15.933	15.933 (1.000)	49	306284			218.45- 278.45	237.02
* 71 1,4-Difluorobenzene					CAS #: 540-36-3		
17.304	17.304 (1.000)	114	500457	5.00000		70.00- 130.00	100.00
17.304	17.304 (1.000)	88	80790			0.00- 46.16	16.14
* 92 Chlorobenzene-d5					CAS #: 3114-55-4		
22.205	22.205 (1.000)	117	402672	5.00000		70.00- 130.00	100.00
22.205	22.205 (1.000)	82	238606			29.12- 89.12	59.26
$ 65 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
16.755	16.755 (1.052)	65	232365	5.00000	4.900	70.00- 130.00	100.00
16.755	16.755 (1.052)	67	149774			28.37- 88.37	64.46
$ 80 Toluene-d8					CAS #: 2037-26-5		
19.879	19.879 (1.149)	98	478510	5.00000	4.973	70.00- 130.00	100.00
19.879	19.879 (1.149)	70	58710			0.00- 41.90	12.27

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

$  80 Toluene-d8 (continued)
 19.879  19.879 (1.149)   100    311421                    33.85-  93.85    65.08
-------------------------------------------------------------------------------
$ 106 Bromofluorobenzene                            CAS #: 460-00-4
 23.703  23.703 (1.067)   174    182638 5.00000    5.274  70.00- 130.00   100.00
 23.678  23.678 (1.066)    95    233040                   99.95- 159.95   127.60
 23.703  23.703 (1.067)   176    174761                   67.64- 127.64    95.69
-------------------------------------------------------------------------------
    3 Propylene                                     CAS #: 115-07-1
  4.673   4.673 (0.293)    41    978159 15.0000   13.492  70.00- 130.00   100.00
  4.673   4.673 (0.293)    42    636568                   35.18-  95.18    65.08
  4.673   4.673 (0.293)    39    717953                   44.12- 104.12    73.40
-------------------------------------------------------------------------------
    4 Dichlorodifluoromethane/Fr12                  CAS #: 75-71-8
  5.202   5.202 (0.326)    85   1766252 15.0000   14.589  70.00- 130.00   100.00
  5.202   5.202 (0.326)    87    560113                    1.90-  61.90    31.71
-------------------------------------------------------------------------------
    6 Freon 114                                     CAS #: 76-14-2
  6.712   6.712 (0.421)   135   1238864 15.0000   14.329  70.00- 130.00   100.00
  6.712   6.712 (0.421)   137    390492                    0.53-  60.53    31.52
  6.712   6.712 (0.421)    85   1865347                  121.37- 181.37   150.57
-------------------------------------------------------------------------------
    8 Chloromethane                                 CAS #: 74-87-3
  7.052   7.052 (0.443)    50    990257 15.0000   13.573  70.00- 130.00   100.00
  7.052   7.052 (0.443)    52    304400                    1.81-  61.81    30.74
-------------------------------------------------------------------------------
    9 Butane                                        CAS #: 106-97-8
  7.884   7.884 (0.495)    58    172643 15.0000   14.120  70.00- 130.00   100.00
  7.884   7.884 (0.495)    43   1903087                 1065.18-1125.18  1102.33
-------------------------------------------------------------------------------
   10 Vinyl Chloride                                CAS #: 75-01-4
  8.008   8.008 (0.503)    62    786398 15.0000   14.444  70.00- 130.00   100.00
  8.008   8.008 (0.503)    64    239926                    0.00-  58.65    30.51
-------------------------------------------------------------------------------
   11 1,3-Butadiene                                 CAS #: 106-99-0
  8.257   8.257 (0.518)    54    760515 15.0000   14.249  70.00- 130.00   100.00
  8.257   8.257 (0.518)    39   1004799                  107.15- 167.15   132.12
-------------------------------------------------------------------------------
   12 Bromomethane                                  CAS #: 74-83-9
  9.834   9.834 (0.617)    94    526409 15.0000   15.772  70.00- 130.00   100.00
  9.834   9.834 (0.617)    96    486730                   72.12- 132.12    92.46
-------------------------------------------------------------------------------
   17 Chloroethane                                  CAS #: 75-00-3
 10.364  10.364 (0.650)    64    375180 15.0000   14.828  70.00- 130.00   100.00
 10.364  10.364 (0.650)    66    108181                    0.00-  59.90    28.83
-------------------------------------------------------------------------------
```

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
18 Isopentane					CAS #: 78-78-4		
10.533	10.533 (0.661)	57	753329	15.0000	14.453	70.00- 130.00	100.00
10.533	10.533 (0.661)	43	1528652			171.32- 231.32	202.92
10.533	10.533 (0.661)	42	1352405			150.03- 210.03	179.52
20 Trichlorofluoromethane/Fr11					CAS #: 75-69-4		
11.183	11.183 (0.702)	101	1781625	15.0000	14.296	70.00- 130.00	100.00
11.183	11.183 (0.702)	103	1157413			36.54- 96.54	64.96
24 Ethanol					CAS #: 64-17-5		
12.074	12.074 (0.758)	45	428174	15.0000	16.208	70.00- 130.00	100.00
12.101	12.101 (0.759)	46	161587			8.51- 68.51	37.74
12.101	12.101 (0.759)	43	84270			0.00- 54.10	19.68
30 1,1-Dichloroethene					CAS #: 75-35-4		
12.568	12.568 (0.789)	98	403428	15.0000	14.486	70.00- 130.00	100.00
12.568	12.568 (0.789)	61	1396671			320.65- 380.65	346.20
12.568	12.568 (0.789)	96	636105			134.30- 194.30	157.67
28 Freon 113					CAS #: 76-13-1		
12.568	12.568 (0.789)	151	1046687	15.0000	13.953	70.00- 130.00	100.00
12.568	12.568 (0.789)	153	670083			33.10- 93.10	64.02
12.568	12.568 (0.789)	101	1317826			96.37- 156.37	125.90
31 Acetone					CAS #: 67-64-1		
12.815	12.815 (0.804)	58	436343	15.0000	14.292	70.00- 130.00	100.00
12.815	12.815 (0.804)	43	1943062			413.15- 473.15	445.31
33 Carbon Disulfide					CAS #: 75-15-0		
12.925	12.925 (0.811)	76	1720902	15.0000	14.529	70.00- 130.00	100.00
35 3-Chloroprene					CAS #: 107-05-1		
13.365	13.365 (0.839)	76	263352	15.0000	15.407	70.00- 130.00	100.00
13.365	13.365 (0.839)	41	1533546			547.03- 607.03	582.32
34 2-Propanol					CAS #: 67-63-0		
13.173	13.173 (0.827)	45	2133879	15.0000	15.093	70.00- 130.00	100.00
13.173	13.173 (0.827)	43	408271			0.00- 50.74	19.13
13.173	13.173 (0.827)	59	60598			0.00- 32.83	2.84
37 Methylene Chloride					CAS #: 75-09-2		
13.639	13.639 (0.856)	84	555681	15.0000	14.144	70.00- 130.00	100.00
13.639	13.639 (0.856)	49	1356689			212.37- 272.37	244.15
13.639	13.639 (0.856)	51	396980			43.31- 103.31	71.44
38 tert-butyl alcohol					CAS #: 75-65-0		
13.859	13.859 (0.870)	59	1861711	15.0000	15.025	70.00- 130.00	100.00

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

   38 tert-butyl alcohol (continued)
 13.859  13.859 (0.870)    41    569759                     1.97-  61.97    30.60
 13.859  13.859 (0.870)    57    197515                     0.00-  40.67    10.61
-------------------------------------------------------------------------------
   39 MTBE                                          CAS #: 1634-04-4
 13.996  13.996 (0.878)    73   2054595 15.0000   14.577  70.00- 130.00   100.00
 13.996  13.996 (0.878)    57    666765                     2.99-  62.99    32.45
 13.996  13.996 (0.878)    41    869330                    12.12-  72.12    42.31
-------------------------------------------------------------------------------
   40 trans-1,2-Dichloroethene                      CAS #: 156-60-5
 14.051  14.051 (0.882)    98    399403 15.0000   15.158  70.00- 130.00   100.00
 14.051  14.051 (0.882)    61   1212082                   293.73- 353.73   303.47
 14.051  14.051 (0.882)    96    627078                   146.88- 206.88   157.00
-------------------------------------------------------------------------------
   43 Hexane                                        CAS #: 110-54-3
 14.381  14.381 (0.903)    57   1597466 15.0000   14.164  70.00- 130.00   100.00
 14.381  14.381 (0.903)    43   1429208                    57.65- 117.65    89.47
 14.381  14.381 (0.903)    86    171619                     0.00-  40.67    10.74
-------------------------------------------------------------------------------
   45 Isopropyl ether                               CAS #: 108-20-3
 14.738  14.738 (0.925)    45   4330483 15.0000   14.780  70.00- 130.00   100.00
 14.738  14.738 (0.925)    87    564126                     0.00-  43.44    13.03
 14.738  14.738 (0.925)    59    358474                     0.00-  38.34     8.28
-------------------------------------------------------------------------------
   46 1,1-Dichloroethane                            CAS #: 75-34-3
 14.765  14.765 (0.927)    63   1574844 15.0000   14.389  70.00- 130.00   100.00
 14.765  14.765 (0.927)    65    473998                     0.37-  60.37    30.10
-------------------------------------------------------------------------------
   47 Vinyl Acetate                                 CAS #: 108-05-4
 14.793  14.793 (0.928)    86    174245 15.0000   15.597  70.00- 130.00   100.00
 14.793  14.793 (0.928)    42    485437                   220.92- 280.92   278.59
 14.793  14.793 (0.928)    43   5875429                  3282.47-3342.47  3371.94
-------------------------------------------------------------------------------
   49 Ethyl-tert-butyl ether                        CAS #: 637-92-3
 15.240  15.240 (0.956)    59   2956441 15.0000   14.807  70.00- 130.00   100.00
 15.240  15.240 (0.956)    87    849987                     0.00-  58.71    28.75
 15.240  15.240 (0.956)    41    770520                     0.00-  56.39    26.06
-------------------------------------------------------------------------------
   50 cis-1,2-Dichloroethene                        CAS #: 156-59-2
 15.592  15.592 (0.979)    98    523591 15.0000   14.974  70.00- 130.00   100.00
 15.592  15.592 (0.979)    61   1408398                   248.69- 308.69   268.99
 15.592  15.592 (0.979)    96    821286                   132.55- 192.55   156.86
-------------------------------------------------------------------------------
   51 2-Butanone                                    CAS #: 78-93-3
 15.592  15.592 (0.979)    72    355057 15.0000   15.624  70.00- 130.00   100.00
 15.571  15.571 (0.977)    43   2837580                   794.80- 854.80   799.19
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                                        AMOUNTS
                                     CAL-AMT   ON-COL
   RT   EXP RT (REL RT)  MASS  RESPONSE ( PPBV)  ( PPBV)   TARGET RANGE    RATIO
   ==   ====== ========  ====  ======== =======  =======   ============    =====

   51 2-Butanone (continued)
 15.571  15.571 (0.977)    57    162537                    18.01-  78.01    45.78
-------------------------------------------------------------------------------
   53 Tetrahydrofuran                                CAS #: 109-99-9
 15.933  15.933 (1.000)    42   1724096 15.0000   14.723  70.00- 130.00   100.00
 15.933  15.933 (1.000)    71    330185                     0.00-  49.03    19.15
 15.933  15.933 (1.000)    72    351864                     0.00-  51.35    20.41
-------------------------------------------------------------------------------
   55 Chloroform                                     CAS #: 67-66-3
 15.995  15.995 (1.004)    83   1558208 15.0000   14.309  70.00- 130.00   100.00
 15.995  15.995 (1.004)    85    990335                    33.33-  93.33    63.56
-------------------------------------------------------------------------------
   57 Cyclohexane                                    CAS #: 110-82-7
 16.272  16.272 (1.021)    84    982090 15.0000   14.339  70.00- 130.00   100.00
 16.272  16.272 (1.021)    56   1831989                   157.43- 217.43   186.54
 16.242  16.242 (1.019)    41   1353170                   105.99- 165.99   137.78
-------------------------------------------------------------------------------
   58 1,1,1-Trichloroethane                          CAS #: 71-55-6
 16.242  16.242 (1.019)    97   1602177 15.0000   14.089  70.00- 130.00   100.00
 16.242  16.242 (1.019)    99   1027719                    32.16-  92.16    64.15
-------------------------------------------------------------------------------
   59 Carbon Tetrachloride                           CAS #: 56-23-5
 16.457  16.457 (1.033)   119   1591076 15.0000   14.586  70.00- 130.00   100.00
 16.457  16.457 (1.033)   117   1614959                    69.67- 129.67   101.50
-------------------------------------------------------------------------------
   63 2,2,4-Trimethylpentane                         CAS #: 540-84-1
 16.728  16.728 (1.050)    56   1710668 15.0000   14.332  70.00- 130.00   100.00
 16.728  16.728 (1.050)    57   4998331                   258.69- 318.69   292.19
 16.728  16.728 (1.050)    41   1902087                    79.91- 139.91   111.19
-------------------------------------------------------------------------------
   64 Benzene                                        CAS #: 71-43-2
 16.755  16.755 (0.968)    78   2123759 15.0000   14.380  70.00- 130.00   100.00
 16.755  16.755 (0.968)    77    496312                     0.00-  53.73    23.37
-------------------------------------------------------------------------------
   66 tert-amyl methyl ether                         CAS #: 994-05-8
 16.810  16.810 (0.971)    87    503927 15.0000   15.069  70.00- 130.00   100.00
 16.810  16.810 (0.971)    73   2156328                   399.95- 459.95   427.90
 16.810  16.810 (0.971)    55    841340                   143.62- 203.62   166.96
-------------------------------------------------------------------------------
   68 1,2-Dichloroethane                             CAS #: 107-06-2
 16.865  16.865 (0.975)    62   1321164 15.0000   14.761  70.00- 130.00   100.00
 16.865  16.865 (0.975)    64    397102                     1.11-  61.11    30.06
-------------------------------------------------------------------------------
   69 Heptane                                        CAS #: 142-82-5
 16.975  16.975 (0.981)    57    960905 15.0000   15.096  70.00- 130.00   100.00
 16.975  16.975 (0.981)   100    204898                     0.00-  51.27    21.32
```

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
69 Heptane (continued)							
16.975	16.975 (0.981)	43	2502849			235.24- 295.24	260.47
72 Trichloroethene					CAS #: 79-01-6		
17.716	17.716 (1.024)	130	992742	15.0000	14.932	70.00- 130.00	100.00
17.716	17.716 (1.024)	95	1005256			71.16- 131.16	101.26
17.716	17.716 (1.024)	97	637478			33.04- 93.04	64.21
73 Methylcyclohexane					CAS #: 108-87-2		
17.963	17.963 (1.038)	83	1332274	15.0000	15.260	70.00- 130.00	100.00
17.963	17.963 (1.038)	98	597541			15.02- 75.02	44.85
17.963	17.963 (1.038)	55	1636133			95.64- 155.64	122.81
74 1,2-Dichloropropane					CAS #: 78-87-5		
18.156	18.156 (1.049)	63	1007906	15.0000	14.877	70.00- 130.00	100.00
18.156	18.156 (1.049)	62	743359			45.17- 105.17	73.75
18.156	18.156 (1.049)	41	909177			59.65- 119.65	90.20
75 1,4-Dioxane					CAS #: 123-91-1		
18.265	18.265 (1.056)	88	528078	15.0000	15.510	70.00- 130.00	100.00
18.265	18.265 (1.056)	58	521585			72.13- 132.13	98.77
18.265	18.265 (1.056)	57	175070			4.41- 64.41	33.15
77 Bromodichloromethane					CAS #: 75-27-4		
18.568	18.568 (1.073)	83	1711568	15.0000	15.260	70.00- 130.00	100.00
18.568	18.568 (1.073)	85	1082454			32.12- 92.12	63.24
78 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
19.408	19.408 (1.122)	75	1184545	15.0000	15.453	70.00- 130.00	100.00
19.408	19.408 (1.122)	77	374207			1.25- 61.25	31.59
19.408	19.408 (1.122)	39	1183910			71.17- 131.17	99.95
79 4-Methyl-2-pentanone					CAS #: 108-10-1		
19.587	19.587 (1.132)	43	3372329	15.0000	16.177	70.00- 130.00	100.00
19.587	19.587 (1.132)	58	905896			0.00- 57.24	26.86
19.587	19.587 (1.132)	85	282709			0.00- 38.20	8.38
81 Toluene					CAS #: 108-88-3		
19.991	19.991 (1.155)	91	2429809	15.0000	14.905	70.00- 130.00	100.00
19.991	19.991 (1.155)	92	1400038			28.60- 88.60	57.62
82 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
20.434	20.434 (0.920)	75	1266667	15.0000	15.261	70.00- 130.00	100.00
20.434	20.434 (0.920)	77	397684			5.48- 65.48	31.40
20.434	20.434 (0.920)	39	1196852			63.15- 123.15	94.49

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

   84 1,1,2-Trichloroethane                          CAS #: 79-00-5
 20.757  20.757 (0.935)    97    932066 15.0000   14.705  70.00- 130.00   100.00
 20.757  20.757 (0.935)    99    581018                   32.13-  92.13    62.34
 20.757  20.757 (0.935)    83    826302                   57.82- 117.82    88.65
-------------------------------------------------------------------------------
   86 Tetrachloroethene                              CAS #: 127-18-4
 20.901  20.901 (0.941)   166   1200884 15.0000   14.654  70.00- 130.00   100.00
 20.901  20.901 (0.941)   129    952536                   47.04- 107.04    79.32
 20.901  20.901 (0.941)   131    928594                   46.95- 106.95    77.33
-------------------------------------------------------------------------------
   87 2-Hexanone                                     CAS #: 591-78-6
 21.044  21.044 (0.948)    58   1104217 15.0000   15.557  70.00- 130.00   100.00
 21.044  21.044 (0.948)    43   2979241                  242.48- 302.48   269.81
 21.044  21.044 (0.948)   100    155542                    0.00-  43.88    14.09
-------------------------------------------------------------------------------
   89 Dibromochloromethane                           CAS #: 124-48-1
 21.367  21.367 (0.962)   129   1776857 15.0000   15.062  70.00- 130.00   100.00
 21.367  21.367 (0.962)   127   1377909                   50.38- 110.38    77.55
-------------------------------------------------------------------------------
   90 1,2-Dibromoethane                              CAS #: 106-93-4
 21.582  21.582 (0.972)   107   1491178 15.0000   15.102  70.00- 130.00   100.00
 21.582  21.582 (0.972)   109   1375529                   62.69- 122.69    92.24
-------------------------------------------------------------------------------
   93 Chlorobenzene                                  CAS #: 108-90-7
 22.233  22.233 (1.001)   112   1945272 15.0000   14.711  70.00- 130.00   100.00
 22.233  22.233 (1.001)   114    620447                    1.62-  61.62    31.90
 22.233  22.233 (1.001)    77   1178663                   38.66-  98.66    60.59
-------------------------------------------------------------------------------
   95 Ethyl Benzene                                  CAS #: 100-41-4
 22.315  22.315 (1.005)   106    914144 15.0000   15.402  70.00- 130.00   100.00
 22.315  22.315 (1.005)    91   2842219                  292.36- 352.36   310.92
-------------------------------------------------------------------------------
   96 m,p-Xylene                                     CAS #: 108-38-3
 22.480  22.480 (1.012)   106    889680 15.0000   15.202  70.00- 130.00   100.00
 22.480  22.480 (1.012)    91   1740179                  164.15- 224.15   195.60
-------------------------------------------------------------------------------
  100 o-Xylene                                       CAS #: 95-47-6
 23.001  23.001 (1.036)   106    852589 15.0000   15.656  70.00- 130.00   100.00
 23.001  23.001 (1.036)    91   1824346                  186.63- 246.63   213.98
-------------------------------------------------------------------------------
  101 Styrene                                        CAS #: 100-42-5
 23.029  23.029 (1.037)   104   1266246 15.0000   15.893  70.00- 130.00   100.00
 23.029  23.029 (1.037)    78    686267                   28.70-  88.70    54.20
-------------------------------------------------------------------------------
  102 Bromoform                                      CAS #: 75-25-2
 23.331  23.331 (1.051)   173   1549333 15.0000   15.495  70.00- 130.00   100.00
```

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
102 Bromoform (continued)							
23.331	23.331 (1.051)	171	801362			20.40- 80.40	51.72
103 Cumene					CAS #: 98-82-8		
23.441	23.441 (1.056)	105	2467874	15.0000	15.518	70.00- 130.00	100.00
23.441	23.441 (1.056)	120	685627			0.00- 57.73	27.78
108 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
23.832	23.832 (1.073)	83	1760413	15.0000	14.410	70.00- 130.00	100.00
23.832	23.832 (1.073)	85	1116892			34.81- 94.81	63.44
111 Propylbenzene					CAS #: 103-65-1		
23.910	23.910 (1.077)	91	2158977	15.0000	15.305	70.00- 130.00	100.00
23.910	23.910 (1.077)	120	512479			0.00- 53.83	23.74
113 4-Ethyltoluene					CAS #: 622-96-8		
24.039	24.039 (1.083)	105	1549867	15.0000	14.977	70.00- 130.00	100.00
24.039	24.039 (1.083)	120	478452			0.18- 60.18	30.87
114 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
24.116	24.116 (1.086)	105	1350206	15.0000	15.626	70.00- 130.00	100.00
24.116	24.116 (1.086)	120	647624			20.44- 80.44	47.96
120 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
24.529	24.529 (1.105)	105	1001006	15.0000	14.304	70.00- 130.00	100.00
24.529	24.529 (1.105)	120	471668			19.27- 79.27	47.12
122 1,3-Dichlorobenzene					CAS #: 541-73-1		
24.902	24.902 (1.121)	146	1035215	15.0000	15.331	70.00- 130.00	100.00
24.902	24.902 (1.121)	148	653684			38.48- 98.48	63.14
24.902	24.902 (1.121)	111	415871			10.49- 70.49	40.17
124 1,4-Dichlorobenzene					CAS #: 106-46-7		
24.992	24.992 (1.125)	146	924782	15.0000	14.568	70.00- 130.00	100.00
24.992	24.992 (1.125)	148	578764			38.92- 98.92	62.58
24.992	24.992 (1.125)	111	361466			11.61- 71.61	39.09
127 alpha-chlorotoluene					CAS #: 100-44-7		
25.126	25.126 (1.132)	91	1072819	15.0000	15.818	70.00- 130.00	100.00
25.126	25.126 (1.132)	126	227370			0.00- 52.82	21.19
128 1,2-Dichlorobenzene					CAS #: 95-50-1		
25.395	25.395 (1.144)	146	946253	15.0000	15.103	70.00- 130.00	100.00
25.395	25.395 (1.144)	148	602151			36.09- 96.09	63.64
25.395	25.395 (1.144)	111	397509			13.38- 73.38	42.01

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
131 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
27.077	27.077 (1.219)	180	577146	15.0000	12.553	70.00- 130.00	100.00
27.077	27.077 (1.219)	182	550450			64.14- 124.14	95.37
132 Hexachlorobutadiene					CAS #: 87-68-3		
27.166	27.166 (1.223)	225	520045	15.0000	13.524	70.00- 130.00	100.00
27.166	27.166 (1.223)	223	331143			44.27- 104.27	63.68
133 Naphthalene					CAS #: 91-20-3		
27.368	27.368 (1.232)	128	153589	1.50000	1.410	70.00- 130.00	100.00
27.368	27.368 (1.232)	127	20220			0.00- 47.41	13.17

Report Date: 07-Oct-2014 14:35

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdv.i
Lab File ID: v100615.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: gd
Method File: /chem/msdv.i/06Oct2014.b/v14l1006a.m
Misc Info: 15ppbv (50ppbv)

Calibration Date: 06-OCT-2014
Calibration Time: 18:36
Client Smp ID: Level 15
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
54 Bromochloromethan	125097	75058	175136	129224	3.30
71 1,4-Difluorobenze	498199	298919	697479	500457	0.45
92 Chlorobenzene-d5	406420	243852	568988	402672	-0.92

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
54 Bromochloromethan	15.93	15.60	16.26	15.93	0.00
71 1,4-Difluorobenze	17.30	16.97	17.63	17.30	0.00
92 Chlorobenzene-d5	22.21	21.88	22.54	22.21	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/msdv.i/06Oct2014.b/v100615.d

Date : 06-OCT-2014 22:22

Client ID: Level 15

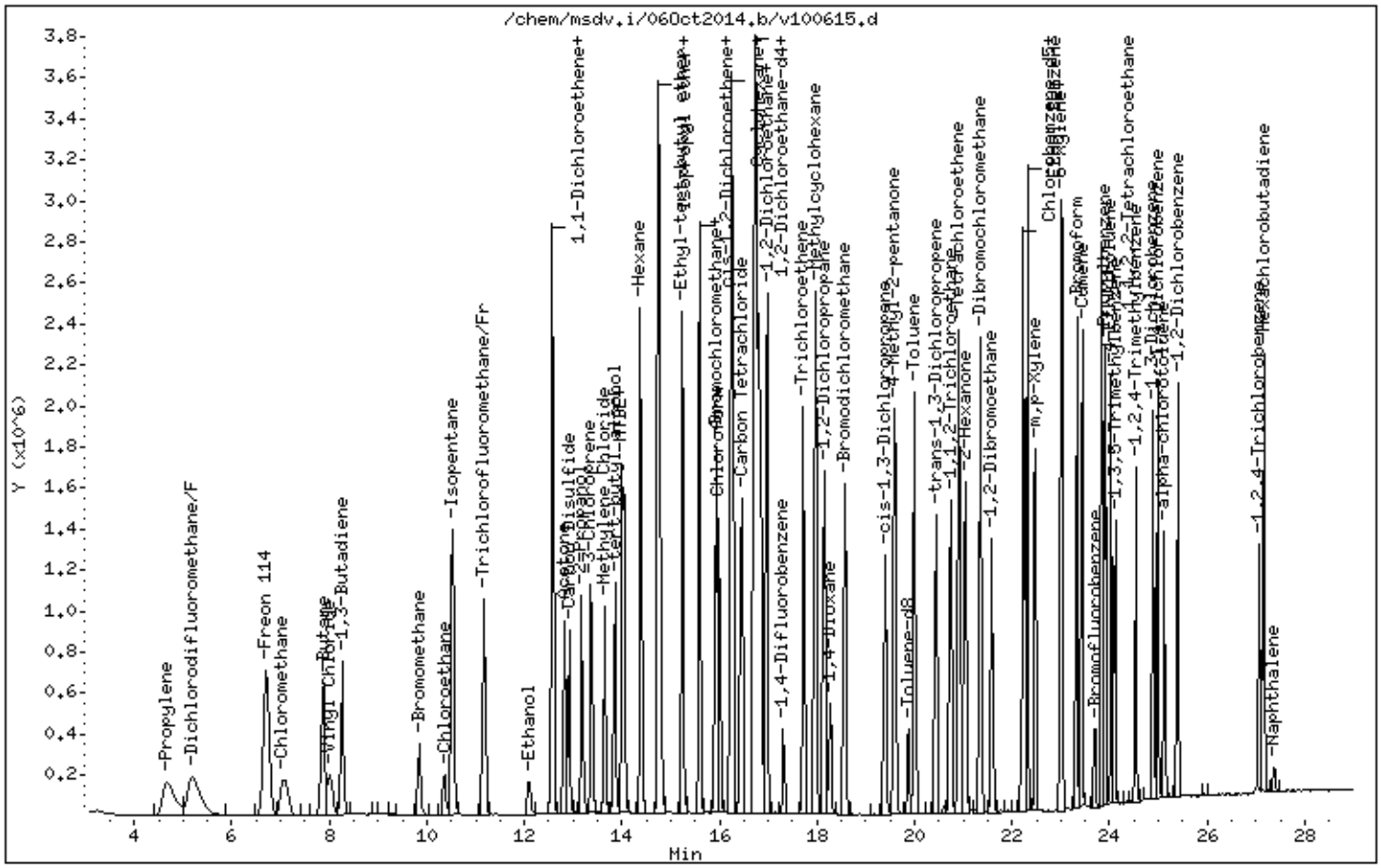
Instrument: msdv.i

Sample Info: 75mL #2677-212

Operator: gd

Column phase: RTx-624

Column diameter: 0.32



Eurofins Air Toxics Inc.

TO15/Modified TO-14A

Data file : /chem/msdv.i/03Nov2014.b/v110307.d
Lab Smp Id: ICAL Level 16
Inj Date : 03-NOV-2014 11:17
Operator : ef Inst ID: msdv.i
Smp Info : 200mL #2687-10
Misc Info : 4.0ppbv (5.0ppbv) AT1
Comment : Low Level GC-MS
Method : /chem/msdv.i/03Nov2014.b/v14l1006d.m
Meth Date : 04-Nov-2014 09:18 efinn Quant Type: ISTD
Cal Date : 03-NOV-2014 11:17 Cal File: v110307.d
Als bottle: 1 Calibration Sample, Level: 16
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT1crv.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
* 54 Bromochloromethane					CAS #: 74-97-5		
15.934	15.934 (1.000)	130	95111	5.00000		70.00- 130.00	100.00
15.934	15.934 (1.000)	128	73249			47.55- 107.55	77.01
15.934	15.934 (1.000)	49	238130			213.64- 273.64	250.37
* 71 1,4-Difluorobenzene					CAS #: 540-36-3		
17.305	17.305 (1.000)	114	403976	5.00000		70.00- 130.00	100.00
17.305	17.305 (1.000)	88	67401			0.00- 46.17	16.68
* 92 Chlorobenzene-d5					CAS #: 3114-55-4		
22.205	22.205 (1.000)	117	324355	5.00000		70.00- 130.00	100.00
22.205	22.205 (1.000)	82	188810			28.56- 88.56	58.21
1 Freon134a					CAS #: 811-97-2		
4.560	4.560 (0.286)	83	68072	4.00000	3.588	70.00- 130.00	100.00
4.523	4.523 (0.284)	69	66123			59.63- 119.63	97.14
2 Freon 152A					CAS #: 75-37-6		
5.013	5.013 (0.315)	65	42911	4.00000	3.699	70.00- 130.00	100.00
5.051	5.051 (0.317)	51	127341			269.13- 329.13	296.76

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
5 Freon 22					CAS #: 75-45-6		
5.769	5.769 (0.362)	51	197316	4.00000	3.778	70.00- 130.00	100.00
5.769	5.769 (0.362)	67	21090			0.00- 41.21	10.69
5.731	5.731 (0.360)	85	351			0.00- 37.03	0.18
14 Fr21					CAS #: 75-43-4		
11.280	11.280 (0.708)	67	216837	4.00000	3.766	70.00- 130.00	100.00
11.280	11.280 (0.708)	69	67069			0.60- 60.60	30.93
11.280	11.280 (0.708)	47	33363			0.00- 45.43	15.39
205 2-Heptanone					CAS #: 110-43-0		
23.111	23.111 (1.041)	58	182487	4.00000	3.963	70.00- 130.00	100.00
23.084	23.084 (1.040)	43	397919			195.73- 255.73	218.05
206 1-Butanol					CAS #: 71-36-3		
17.470	17.470 (1.010)	56	217209	4.00000	4.766	70.00- 130.00	100.00
17.470	17.470 (1.010)	41	208178			58.27- 118.27	95.84
17.470	17.470 (1.010)	43	162027			36.87- 96.87	74.59
204 Butyl Acetate					CAS #: 123-86-4		
21.116	21.116 (1.220)	56	102276	4.00000	4.185	70.00- 130.00	100.00
21.116	21.116 (1.220)	73	24490			0.00- 58.66	23.95
21.116	21.116 (1.220)	43	330750			284.26- 344.26	323.39
56 1,1-Dicholoropropene					CAS #: 563-58-6		
16.458	16.458 (1.033)	110	66080	4.00000	3.879	70.00- 130.00	100.00
16.458	16.458 (1.033)	75	175656			245.44- 305.44	265.82
91 1,1,1,2-Tetrachloroethane					CAS #: 630-20-6		
22.343	22.343 (1.006)	131	182270	4.00000	3.609	70.00- 130.00	100.00
22.343	22.343 (1.006)	117	127743			40.91- 100.91	70.08
22.343	22.343 (1.006)	95	71725			9.01- 69.01	39.35
105 1,2,3-Trichloropropane					CAS #: 96-18-4		
23.910	23.910 (1.077)	110	81201	4.00000	3.641	70.00- 130.00	100.00
23.910	23.910 (1.077)	75	240235			254.96- 314.96	295.85
23.910	23.910 (1.077)	61	78516			68.29- 128.29	96.69
97 Bromobenzene					CAS #: 108-86-1		
23.884	23.884 (1.076)	156	152902	4.00000	3.852	70.00- 130.00	100.00
23.884	23.884 (1.076)	158	145907			68.03- 128.03	95.43
23.884	23.884 (1.076)	77	299663			167.20- 227.20	195.98
107 2-Chlorotoluene					CAS #: 95-49-8		
24.065	24.065 (1.084)	126	85444	4.00000	3.867	70.00- 130.00	100.00
24.065	24.065 (1.084)	91	240566			259.67- 319.67	281.55

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

  107 2-Chlorotoluene (continued)
 24.065  24.065 (1.084)    65     27231                     4.25-  64.25    31.87
-------------------------------------------------------------------------------
  109 4-Chlorotoluene                                CAS #: 106-43-4
 24.194  24.194 (1.090)   126     71963 4.00000    3.679  70.00- 130.00   100.00
 24.194  24.194 (1.090)    91    202966                  242.46- 302.46   282.04
 24.194  24.194 (1.090)    63     33341                   16.50-  76.50    46.33
-------------------------------------------------------------------------------
  115 tert-Butylbenzene                              CAS #: 98-06-6
 24.478  24.478 (1.102)   119    192115 4.00000    3.755  70.00- 130.00   100.00
 24.478  24.478 (1.102)   134     47966                    0.00-  54.58    24.97
 24.452  24.452 (1.101)    91    126013                   36.83-  96.83    65.59
-------------------------------------------------------------------------------
  119 sec-Butylbenzene                               CAS #: 135-98-8
 24.710  24.710 (1.113)   105    258534 4.00000    3.824  70.00- 130.00   100.00
 24.710  24.710 (1.113)   134     54572                    0.00-  51.05    21.11
 24.684  24.684 (1.112)    91     41026                    0.00-  46.24    15.87
-------------------------------------------------------------------------------
  116 p-Cymene                                       CAS #: 99-87-6
 24.835  24.835 (1.118)   119    225151 4.00000    3.521  70.00- 130.00   100.00
 24.835  24.835 (1.118)   134     59682                    0.00-  57.36    26.51
 24.835  24.835 (1.118)    91     54583                    0.00-  54.27    24.24
-------------------------------------------------------------------------------
  123 Butylbenzene                                   CAS #: 104-51-8
 25.261  25.261 (1.138)   134     63471 4.00000    3.193  70.00- 130.00   100.00
 25.261  25.261 (1.138)    91    236785                  327.67- 387.67   373.06
 25.261  25.261 (1.138)    92    126304                  160.08- 220.08   198.99
-------------------------------------------------------------------------------
  129 1,2-dibromo-3-chloropropane                    CAS #: 96-12-8
 26.203  26.203 (1.180)   157    108883 4.00000    3.833  70.00- 130.00   100.00
 26.203  26.203 (1.180)    75    105540                   63.21- 123.21    96.93
 26.203  26.203 (1.180)   155     85205                   49.09- 109.09    78.25
-------------------------------------------------------------------------------
   83 1,3-Dichloropropane                            CAS #: 142-28-9
 21.045  21.045 (1.216)    76    207009 4.00000    3.815  70.00- 130.00   100.00
 21.045  21.045 (1.216)    41    260295                   90.75- 150.75   125.74
 21.045  21.045 (1.216)    78     68442                    2.90-  62.90    33.06
-------------------------------------------------------------------------------
```

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdv.i
Lab File ID: v110307.d
Lab Smp Id: ICAL Level 16
Analysis Type: VOA
Quant Type: ISTD
Operator: ef
Method File: /chem/msdv.i/03Nov2014.b/v14l1006d.m
Misc Info: 4.0ppbv (5.0ppbv) AT1

Calibration Date: 03-NOV-2014
Calibration Time: 07:40

Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
54 Bromochloromethan	102660	61596	143724	95111	-7.35
71 1,4-Difluorobenze	414479	248687	580271	403976	-2.53
92 Chlorobenzene-d5	344049	206429	481669	324355	-5.72

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
54 Bromochloromethan	15.93	15.60	16.26	15.93	0.00
71 1,4-Difluorobenze	17.30	16.97	17.63	17.30	0.00
92 Chlorobenzene-d5	22.21	21.88	22.54	22.21	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/msdv.i/03Nov2014.b/v110307.d

Date : 03-NOV-2014 11:17

Client ID:

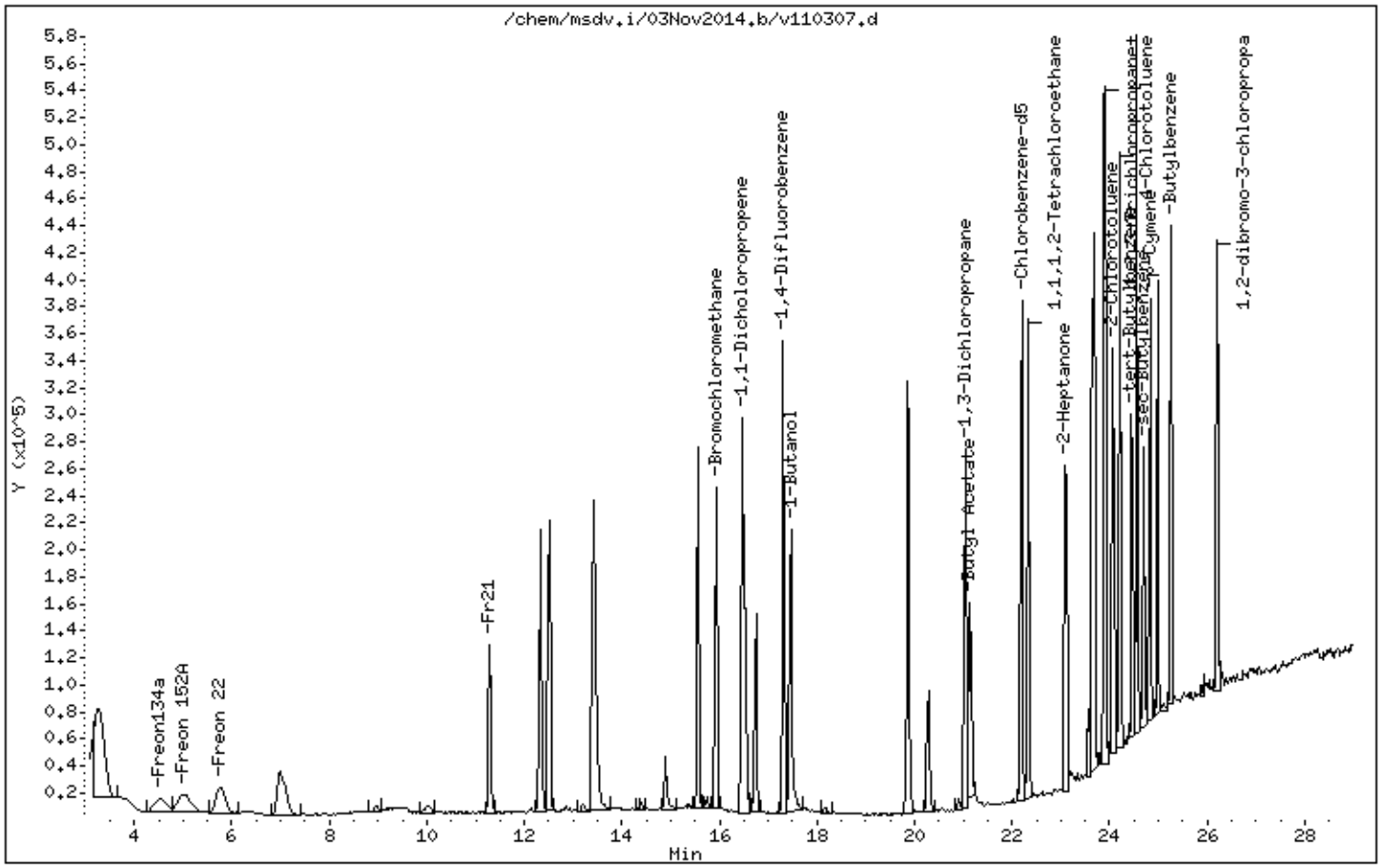
Instrument: msdv.i

Sample Info: 200mL #2687-10

Operator: ef

Column phase: RTx-624

Column diameter: 0.32



Eurofins Air Toxics Inc.

TO15/Modified TO-14A

Data file : /chem/msdv.i/07Oct2014.b/v100712.d
Lab Smp Id: ICAL Client Smp ID: Level 16
Inj Date : 07-OCT-2014 20:41
Operator : gd Inst ID: msdv.i
Smp Info : 200mL #2677-286
Misc Info : 4.0ppbv (5.0ppbv)
Comment : Low Level GC-MS
Method : /chem/msdv.i/07Oct2014.b/v14l1006a.m
Meth Date : 07-Oct-2014 22:27 gdelacru Quant Type: ISTD
Cal Date : 07-OCT-2014 20:41 Cal File: v100712.d
Als bottle: 6 Calibration Sample, Level: 16
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT7crv.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
* 54 Bromochloromethane					CAS #: 74-97-5		
15.933	15.934 (1.000)	130	108245	5.00000		80.00- 120.00	100.00
15.933	15.934 (1.000)	128	84933			48.21- 108.21	78.46
15.933	15.934 (1.000)	49	264935			215.61- 275.61	244.75
* 71 1,4-Difluorobenzene					CAS #: 540-36-3		
17.305	17.305 (1.000)	114	479675	5.00000		80.00- 120.00	100.00
17.305	17.305 (1.000)	88	74710			0.00- 46.17	15.58
* 92 Chlorobenzene-d5					CAS #: 3114-55-4		
22.205	22.205 (1.000)	117	335423	5.00000		80.00- 120.00	100.00
22.205	22.205 (1.000)	82	198497			29.34- 89.34	59.18
76 Octane					CAS #: 111-65-9		
19.968	19.968 (1.154)	57	141317	4.00000	3.519	80.00- 120.00	100.00
19.968	19.968 (1.154)	85	107524			45.62- 105.62	76.09
19.968	19.968 (1.154)	43	467484			293.94- 353.94	330.81
99 Decane					CAS #: 124-18-5		
23.987	23.987 (1.080)	57	316143	4.00000	3.262	80.00- 120.00	100.00

RT	EXP RT	(REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
99 Decane (continued)								
23.987	23.987	(1.080)	71	89106			0.00- 57.94	28.19
23.987	23.987	(1.080)	142	11186			0.00- 33.26	3.54
117 Indene						CAS #: 95-13-6		
25.485	25.485	(1.148)	115	136266	4.00000	3.065	80.00- 120.00	100.00(T)
25.485	25.485	(1.148)	116	135705			67.11- 127.11	99.59
0.000	25.485	(0.000)	0	0			0.00- 30.00	0.00
121 1,2,3-trimethylbenzene						CAS #: 526-73-8		
24.992	24.992	(1.125)	120	76020	4.00000	2.928	80.00- 120.00	100.00
24.992	24.992	(1.125)	105	172915			192.71- 252.71	227.46
24.992	24.992	(1.125)	77	23322			2.83- 62.83	30.68

QC Flag Legend

T - Target compound detected outside RT window.

Report Date: 08-Oct-2014 08:27

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdv.i
Lab File ID: v100712.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: gd
Method File: /chem/msdv.i/07Oct2014.b/v14l1006a.m
Misc Info: 4.0ppbv (5.0ppbv)

Calibration Date: 07-OCT-2014
Calibration Time: 12:28
Client Smp ID: Level 16
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
54 Bromochloromethan	122750	73650	171850	108245	-11.82
71 1,4-Difluorobenze	498533	299120	697946	479675	-3.78
92 Chlorobenzene-d5	397978	238787	557169	335423	-15.72

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
54 Bromochloromethan	15.93	15.60	16.26	15.93	0.00
71 1,4-Difluorobenze	17.30	16.97	17.63	17.30	0.00
92 Chlorobenzene-d5	22.21	21.88	22.54	22.21	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/msdv.i/07Oct2014.b/v100712.d

Date : 07-OCT-2014 20:41

Client ID: Level 16

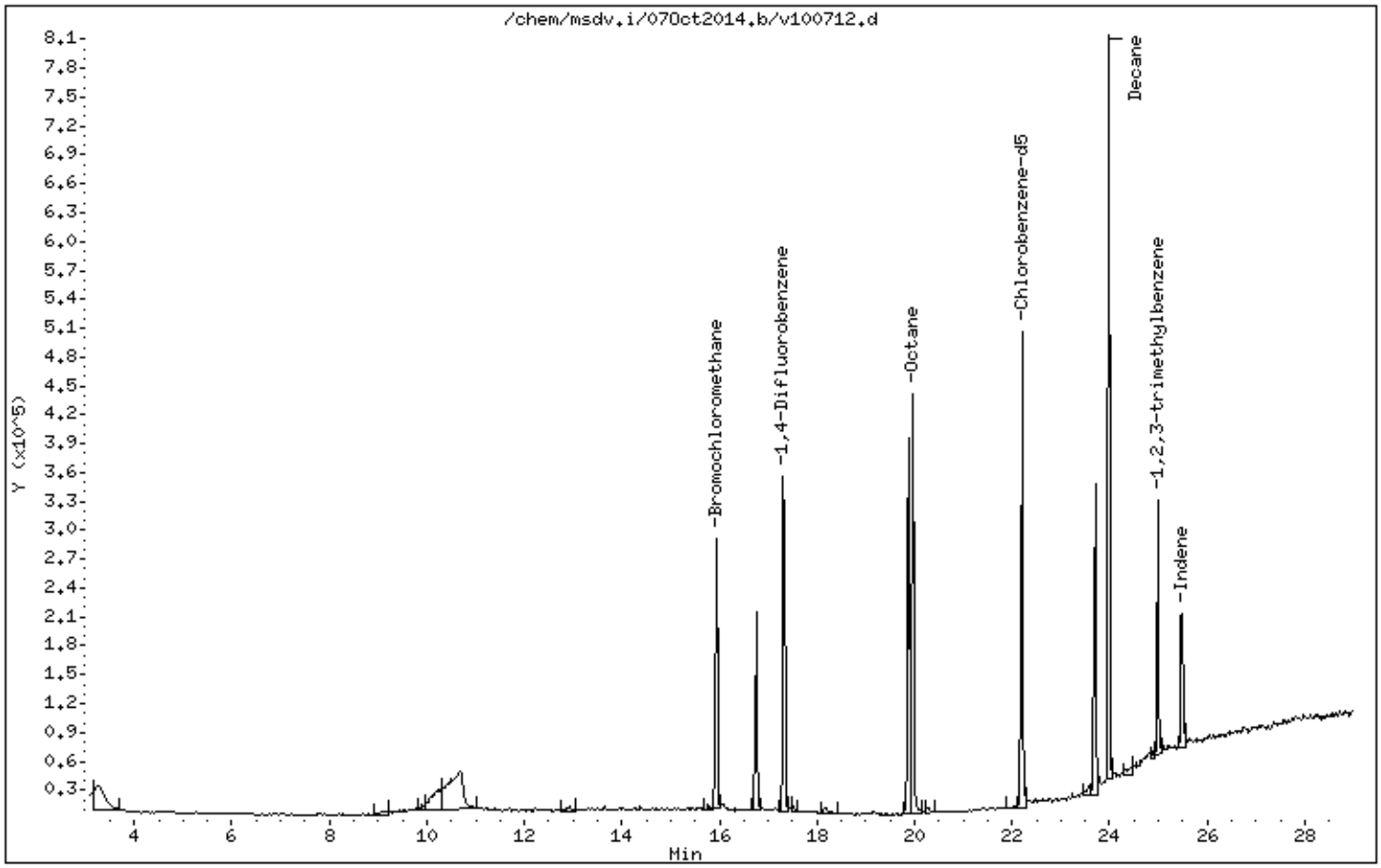
Instrument: msdv.i

Sample Info: 200mL #2677-286

Operator: gd

Column phase: RTx-624

Column diameter: 0.32



TO-15 Low level MDL

~~0.5p~~ 2/20/14 0.1ppbv RLs Page 1

0.1ppbv (1.0ppbv); load amount: 25mL # 2612-

MDL Verification: 0.09ppbv (~~50~~ 1.0 ppbv) 2/20/14

load amount: ~~25~~ 22.5 mL # 2612-300 2/20/14

V021906

Report Date : 18-Feb-2014 11:23

Eurofins Air Toxics Inc.
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msdv.i/14Feb2014.b/v1410107a.m
Batch File: /chem/msdv.i/14Feb2014.b
Inst ID: msdv.i

ID:	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08
FILENAME:	v021408	v021409	v021410	v021411	v021412	v021413	v021414	v021415
INJ.DATE:	14-FEB-2014	14-FEB-2014	14-FEB-2014	14-FEB-2014	14-FEB-2014	14-FEB-2014	14-FEB-2014	14-FEB-2014
INJ.TIME:	16:18	17:11	18:00	18:36	19:12	20:04	20:40	21:17

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	AVG CONC	STD DEV	MDL	RL(ppbv)
1 Freon134a	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
208 D-Limonene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
2 Freon 152A	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
3 Propylene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
4 Dichlorodifluoromethan	139.62	127.29	128.28	107.44	144.97	126.38	118.82	140.28	129.13	12.39	37.13	100/150
5 Freon 22	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
6 Freon 114	118.74	110.46	110.77	100.52	113.37	114.01	112.48	114.66	111.88	5.27	15.79	100/150
7 Isobutylene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
8 Chloromethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
9 Butane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
10 Vinyl Chloride	126.27	115.23	123.80	117.46	109.60	114.19	110.12	95.96	114.08	9.41	28.22	100
11 1,3-Butadiene	111.49	124.46	119.98	135.39	116.70	126.42	136.43	111.51	122.80	9.72	29.13	100
12 Bromomethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
13 Vinyl Bromide	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
14 Fr21	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
15 1-Pentene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
16 Pentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	

Reviewer 1 _____ Date: 2/24/14
Reviewer 2 _____ Date: 2/24/14

$\bar{X}$ = 31.04 ppbv = 0.031 ppbv

$2\bar{x}$ = 0.06 ppbv

$3\bar{x}$ = 0.09 ppbv

$4\bar{x}$ = 0.12 ppbv

Special 0.05ppbv RL Not met for:
- 1,2,4-Trichlorobenzene
- Hexachlorobutadiene

Eurofins Air Toxics Inc.
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msdv.i/14Feb2014.b/v14l0107a.m
Batch File: /chem/msdv.i/14Feb2014.b
Inst ID: msdv.i

RL (PPBV)

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	AVG CONC	STD DEV	MDL	
17 Chloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
18 Isopentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
19 Diethyl Ether	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
20 Trichlorofluoromethane	116.29	98.86	97.20	101.43	124.45	111.17	112.38	104.32	108.26	9.45	28.33	100/50
21 Acrolein	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
22 Iodomethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
23 Methyl Acetate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
24 Ethanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
25 2-Methylpentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
26 Acetonitrile	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
27 Cyclopentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
28 Freon 113	108.54	102.59	100.86	96.66	108.02	105.11	96.68	116.78	104.41	6.76	20.25	100/50
29 2,4-Dimethylpentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
30 1,1-Dichloroethene	98.66	132.14	111.64	91.33	107.05	99.16	101.33	117.33	107.33	12.92	38.73	100
31 Acetone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
32 Acrylonitrile	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
33 Carbon Disulfide	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
34 2-Propanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
35 3-Chloroprene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
36 Chloroprene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
37 Methylene Chloride	135.54	118.29	109.51	104.95	134.15	111.90	127.39	118.80	120.07	11.36	34.05	200
38 tert-butyl alcohol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	

Eurofins Air Toxics Inc.
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msdv.i/14Feb2014.b/v1410107a.m
Batch File: /chem/msdv.i/14Feb2014.b
Inst ID: msdv.i

RL(PPbV)

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	AVG CONC	STD DEV	MDL	
39 MTBE	92.09	106.06	104.16	107.83	121.71	94.15	120.45	134.02	110.06	14.39	43.14	100
40 trans-1,2-Dichloroethe	121.50	109.49	120.15	102.96	95.61	116.25	112.26	116.11	111.79	8.85	26.52	100
41 1-Hexene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
42 Ethyl Acetate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
43 Hexane	96.33	118.80	109.77	120.92	104.58	87.04	98.32	109.79	105.69	11.51	34.52	100
44 Methyl Acrylate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
45 Isopropyl ether	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
46 1,1-Dichloroethane	107.24	94.84	98.17	89.01	108.74	106.63	117.18	97.30	102.39	9.10	27.30	100
47 Vinyl Acetate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
48 2,3-Dimethylpentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
49 Ethyl-tert-butyl ether	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
50 cis-1,2-Dichloroethene	113.41	91.05	102.51	106.31	80.51	128.34	101.60	74.61	99.79	17.47	52.37	100
51 2-Butanone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
52 Thiophene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
53 Tetrahydrofuran	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
* 54 Bromochloromethane	5000.00	5000.00	5000.00	5000.00	5000.00	5000.00	5000.00	5000.00	5000.00	0.00	0.00	
55 Chloroform	113.74	106.45	106.77	116.70	111.38	112.55	125.73	107.42	112.59	6.44	19.32	100
56 1,1-Dicholoropropene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
57 Cyclohexane	94.99	78.53	108.12	85.62	102.03	84.99	102.46	109.33	95.76	11.57	34.69	100
58 1,1,1-Trichloroethane	85.70	86.21	98.23	126.78	109.96	92.85	101.07	102.84	100.46	13.48	40.43	100/50
59 Carbon Tetrachloride	104.74	97.03	84.42	76.55	70.88	79.62	89.94	90.50	86.71	11.12	33.33	100/50
60 Ethyl Acrylate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
61 2-Chloroethyl Vinyl Et	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
62 2-Pentanone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	

Eurofins Air Toxics Inc.
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msdv.i/14Feb2014.b/v1410107a.m
Batch File: /chem/msdv.i/14Feb2014.b
Inst ID: msdv.i

	Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	AVG CONC	STD DEV	MDL	RL (ppbv)
	63 2,2,4-Trimethylpentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	2/20/1483
	64 Benzene	102.27	118.30	115.44	112.04	111.89	122.33	102.03	89.29	109.20	10.73	32.15	~~20~~ 100
$	65 1,2-Dichloroethane-d4	5263.33	5332.75	5197.56	5241.42	5458.98	5094.07	5222.19	5382.86	5274.15	114.39	342.94	
	66 tert-amyl methyl ether	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
	67 Methyl Methacrylate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
	68 1,2-Dichloroethane	88.92	102.76	129.34	98.56	100.23	118.48	124.01	112.72	109.38	13.99	41.94	100
	69 Heptane	87.20	84.91	89.90	82.28	94.02	79.43	108.59	92.23	89.82	9.04	27.09	100
	70 Dibromomethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
*	71 1,4-Difluorobenzene	5000.00	5000.00	5000.00	5000.00	5000.00	5000.00	5000.00	5000.00	5000.00	0.00	0.00	
	72 Trichloroethene	90.51	94.51	96.62	91.73	77.27	102.25	81.46	86.84	90.15	8.13	24.36	100/50
	73 Methylcyclohexane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
	74 1,2-Dichloropropane	105.66	106.62	101.76	122.23	107.88	94.10	120.69	104.89	107.98	9.36	28.05	100
	75 1,4-Dioxane	117.90	111.19	116.33	102.33	90.61	69.49	77.65	72.94	94.81	19.83	59.45	↓
	76 Octane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
	77 Bromodichloromethane	107.90	96.38	101.34	96.04	81.23	106.11	74.21	76.43	92.46	13.35	40.03	100/50
	78 cis-1,3-Dichloropropen	81.26	91.05	100.62	81.69	78.10	88.71	80.00	74.92	84.54	8.38	25.13	100
	79 4-Methyl-2-pentanone	103.65	95.85	70.61	98.94	93.97	99.40	81.51	89.89	91.73	10.88	32.62	2/20/1483
$	80 Toluene-d8	5047.72	4906.25	4849.61	4938.52	4879.00	5086.55	4960.03	4869.81	4942.19	85.69	256.91	
	81 Toluene	103.24	100.77	115.09	103.92	98.95	94.97	112.27	98.73	103.49	6.92	20.74	100
	82 trans-1,3-Dichloroprop	88.72	96.55	76.96	78.55	117.78	94.87	79.80	68.45	87.71	15.43	46.27	100
	83 1,3-Dichloropropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
	84 1,1,2-Trichloroethane	108.36	80.50	100.33	93.07	98.81	116.77	97.01	96.84	98.96	10.63	31.88	100/50
	85 Nonane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	

Eurofins Air Toxics Inc.
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msdv.i/14Feb2014.b/v1410107a.m
Batch File: /chem/msdv.i/14Feb2014.b
Inst ID: msdv.i

RL (ppbV)

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	AVG CONC	STD DEV	MDL	
86 Tetrachloroethene	98.61	87.76	97.76	97.99	100.06	109.47	98.85	96.20	98.34	5.91	17.71	100/50
87 2-Hexanone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
88 alpha-pinene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
89 Dibromochloromethane	87.41	76.11	76.12	75.53	70.49	67.08	71.37	85.58	76.21	7.10	21.29	100/50
90 1,2-Dibromoethane	87.42	80.94	80.49	101.56	99.72	93.02	87.71	79.53	88.80	8.62	25.83	100/50
91 1,1,1,2-Tetrachloroeth	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
* 92 Chlorobenzene-d5	5000.00	5000.00	5000.00	5000.00	5000.00	5000.00	5000.00	5000.00	5000.00	0.00	0.00	
93 Chlorobenzene	102.02	104.85	99.98	102.34	99.54	94.21	93.78	94.79	98.94	4.20	12.60	100
94 cis-1,4-dichloro-2-but	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
95 Ethyl Benzene	105.83	101.05	107.23	102.39	116.42	105.53	97.05	90.84	103.29	7.55	22.64	100
96 m,p-Xylene	113.16	116.11	119.13	98.71	98.81	108.72	106.06	98.16	107.36	8.32	24.95	100
97 Bromobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
98 trans-1,4-dichloro-2-b	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
99 Decane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
100 o-Xylene	93.09	89.03	106.19	78.65	88.77	97.03	98.57	90.45	92.72	8.17	24.48	100
101 Styrene	82.80	79.66	82.55	80.97	92.74	86.88	72.17	78.73	82.06	6.02	18.06	100
102 Bromoform	77.30	75.11	85.62	72.06	74.97	74.64	69.81	73.35	75.36	4.71	14.13	100/50
103 Cumene	86.88	96.21	84.33	91.47	92.54	103.89	83.03	82.38	90.09	7.45	22.34	100
104 Bis(2-Chloroethyl) Eth	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	2/21 11:45
105 1,2,3-Trichloropropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
$ 106 Bromofluorobenzene	4860.55	5214.25	5098.28	5332.85	5175.79	4879.61	5196.77	5086.48	5105.57	163.98	491.61	
107 2-Chlorotoluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
108 1,1,2,2-Tetrachloroeth	98.14	97.52	112.96	112.87	101.74	99.87	105.28	87.05	101.93	8.55	25.64	100/50
109 4-Chlorotoluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	

Eurofins Air Toxics Inc.
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msdv.i/14Feb2014.b/v1410107a.m
Batch File: /chem/msdv.i/14Feb2014.b
Inst ID: msdv.i

RL (ppbv)

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	AVG CONC	STD DEV	MDL	
110 Undecane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
111 Propylbenzene	94.28	84.51	95.84	90.21	98.20	89.66	98.13	108.99	94.98	7.35	22.05	100
112 Indan	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
113 4-Ethyltoluene	92.30	98.16	102.03	104.72	117.02	94.27	85.81	112.91	100.90	10.51	31.50	100
114 1,3,5-Trimethylbenzene	96.10	112.60	98.68	132.91	87.31	108.61	116.79	110.03	107.88	14.04	42.09	100
115 tert-Butylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
116 p-Cymene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
117 Indene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
118 Hexachloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
119 sec-Butylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
120 1,2,4-Trimethylbenzene	128.60	137.18	144.52	135.14	138.16	112.03	125.32	148.50	133.68	11.56	34.67	100/50
121 1,2,3-trimethylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
122 1,3-Dichlorobenzene	77.72	112.33	102.79	102.65	104.71	99.42	92.91	107.95	100.06	10.69	32.04	100/50
123 Butylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
124 1,4-Dichlorobenzene	105.64	100.65	103.11	99.65	91.08	97.32	99.47	97.19	99.26	4.35	13.05	100/50
125 Dodecane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
126 1,3,5-Trichlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
127 alpha-chlorotoluene	104.29	93.43	81.66	87.12	83.31	92.84	86.05	70.31	87.37	9.97	29.88	100
128 1,2-Dichlorobenzene	89.33	119.49	97.17	89.42	99.85	119.94	85.29	86.33	98.35	14.11	42.29	100/50
129 1,2-dibromo-3-chloropr	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
130 1,2,3-trichlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
131 1,2,4-Trichlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
132 Hexachlorobutadiene	52.83	139.94	106.92	71.77	135.31	118.38	89.61	89.22	100.50	30.41	91.16	500
133 Naphthalene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	

Eurofins Air Toxics Inc.
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msdv.i/14Feb2014.b/v1410107a.m
Batch File: /chem/msdv.i/14Feb2014.b
Inst ID: msdv.i

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	AVG CONC	STD DEV	MDL
204 Butyl Acetate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
205 2-Heptanone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
206 1-Butanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
207 1-Methoxy-2-Propyl Ace	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

TO15 Low level MDL
0.5ppbv RLs

0.5ppbv (1.0ppbv); load amount: 125mL # 2612-30

MDL Verification: 0.3ppbv (1.0ppbv)
load amount: 75mL # 2612-300
V021907

Report Date : 18-Feb-2014 19:41

Eurofins Air Toxics Inc.
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msdv.i/18Feb2014.b/v1410107a.m
Batch File: /chem/msdv.i/18Feb2014.b
Inst ID: msdv.i

ID:	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08
FILENAME:	v021806	v021807	v021808	v021809	v021810	v021811	v021812	v021813
INJ.DATE:	18-FEB-2014	18-FEB-2014	18-FEB-2014	18-FEB-2014	18-FEB-2014	18-FEB-2014	18-FEB-2014	18-FEB-2014
INJ.TIME:	13:17	14:23	15:02	15:39	16:18	17:05	17:58	18:42

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	AVG CONC	STD DEV	MDL	RL (ppbv)
1 Freon134a	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
208 D-Limonene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
2 Freon 152A	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
3 Propylene	618.17	532.99	595.62	545.26	648.22	557.52	559.24	573.25	578.78	39.17	117.44	500
4 Dichlorodifluoromethan	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
5 Freon 22	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
6 Freon 114	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
7 Isobutylene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
8 Chloromethane	587.84	575.49	553.85	515.12	552.24	600.07	584.09	586.80	569.44	27.57	82.64	500
9 Butane	564.40	555.36	523.09	613.76	501.13	477.08	525.56	561.09	540.18	42.56	127.68	500
10 Vinyl Chloride	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
11 1,3-Butadiene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
12 Bromomethane	475.03	429.79	538.23	489.15	459.52	468.93	497.42	484.64	480.34	31.36	94.03	500
13 Vinyl Bromide	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
14 Fr21	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
15 1-Pentene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
16 Pentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	

Reviewer 1 _____ Date: 2/24/14
Reviewer 2 _____ Date: 2/24/14

$\bar{X} = 0.096$

83 2tail $2\bar{X} = 0.2$

$3\bar{X} = 0.3$ ppbv

Report Date : 18-Feb-2014 19:41

Eurofins Air Toxics Inc.
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msdv.i/18Feb2014.b/v1410107a.m
Batch File: /chem/msdv.i/18Feb2014.b
Inst ID: msdv.i

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	AVG CONC	STD DEV	MDL	RL(ppbv)
17 Chloroethane	536.54	519.59	588.39	494.73	463.13	524.89	453.44	561.53	517.78	46.23	138.61	500
18 Isopentane	501.30	520.81	520.37	502.99	477.27	475.48	532.62	487.90	502.34	21.19	63.53	500
19 Diethyl Ether	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
20 Trichlorofluoromethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
21 Acrolein	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
22 Iodomethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
23 Methyl Acetate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
24 Ethanol	506.87	586.83	503.55	461.43	450.96	432.55	500.17	547.38	498.72	51.10	153.18	500
25 2-Methylpentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
26 Acetonitrile	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
27 Cyclopentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
28 Freon 113	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
29 2,4-Dimethylpentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
30 1,1-Dichloroethene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
31 Acetone	890.95	922.18	855.69	871.14	871.99	833.41	826.97	835.46	863.47	32.55	97.57	500
32 Acrylonitrile	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
33 Carbon Disulfide	485.98	468.85	511.74	475.08	458.70	484.51	488.02	466.75	479.95	16.50	49.47	500
34 2-Propanol	395.38	396.55	437.15	391.47	421.83	363.74	386.30	428.55	402.62	24.57	73.66	500
35 3-Chloroprene	380.10	342.92	422.27	394.18	452.83	386.24	348.34	393.02	389.99	36.02	107.98	500
36 Chloroprene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
37 Methylene Chloride	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
38 tert-butyl alcohol	421.46	420.65	455.24	431.06	422.29	436.30	420.78	380.37	423.52	21.08	63.19	500

Eurofins Air Toxics Inc.
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msdv.i/18Feb2014.b/v1410107a.m
Batch File: /chem/msdv.i/18Feb2014.b
Inst ID: msdv.i

	Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	AVG CONC	STD DEV	MDL	RL(ppbv)
	39 MTBE	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
	40 trans-1,2-Dichloroethe	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
	41 1-Hexene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
	42 Ethyl Acetate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
	43 Hexane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
	44 Methyl Acrylate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
	45 Isopropyl ether	421.26	468.88	456.72	423.25	436.40	384.30	432.28	419.76	430.36	25.59	76.73	500
	46 1,1-Dichloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
	47 Vinyl Acetate	364.92	480.15	396.68	342.20	406.72	313.36	355.29	338.10	374.68	52.45	157.25	500
	48 2,3-Dimethylpentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
	49 Ethyl-tert-butyl ether	427.68	411.09	445.68	430.31	421.82	406.89	418.82	413.46	421.97	12.49	37.45	500
	50 cis-1,2-Dichloroethene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
	51 2-Butanone	390.46	405.67	455.11	451.37	349.91	457.14	379.14	426.34	414.39	39.72	119.08	500
	52 Thiophene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
	53 Tetrahydrofuran	484.21	425.70	480.08	449.99	490.93	424.39	494.79	474.76	465.61	28.45	85.30	500
*	54 Bromochloromethane	5000.00	5000.00	5000.00	5000.00	5000.00	5000.00	5000.00	5000.00	5000.00	0.00	0.00	
	55 Chloroform	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
	56 1,1-Dicholoropropene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
	57 Cyclohexane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
	58 1,1,1-Trichloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
	59 Carbon Tetrachloride	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
	60 Ethyl Acrylate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
	61 2-Chloroethyl Vinyl Et	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
	62 2-Pentanone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	

Eurofins Air Toxics Inc.
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msdv.i/18Feb2014.b/v1410107a.m
Batch File: /chem/msdv.i/18Feb2014.b
Inst ID: msdv.i

RL (ppbv)

	Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	AVG CONC	STD DEV	MDL	
	63 2,2,4-Trimethylpentane	463.77	420.28	459.19	439.60	436.20	416.80	444.82	436.34	439.63	16.52	49.52	500
	64 Benzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
$	65 1,2-Dichloroethane-d4	5142.08	5302.42	5251.14	5062.55	5415.19	4962.62	5122.16	5255.15	5189.17	144.50	433.22	
	66 tert-amyl methyl ether	422.04	406.31	446.58	435.22	420.50	381.16	376.87	444.41	416.64	26.74	80.16	500
	67 Methyl Methacrylate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
	68 1,2-Dichloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
	69 Heptane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
	70 Dibromomethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
*	71 1,4-Difluorobenzene	5000.00	5000.00	5000.00	5000.00	5000.00	5000.00	5000.00	5000.00	5000.00	0.00	0.00	
	72 Trichloroethene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
	73 Methylcyclohexane	401.74	428.64	383.67	400.74	396.99	390.95	404.64	369.58	397.12	17.16	51.45	500
	74 1,2-Dichloropropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
	75 1,4-Dioxane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
	76 Octane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
	77 Bromodichloromethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
	78 cis-1,3-Dichloropropen	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
	79 4-Methyl-2-pentanone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
$	80 Toluene-d8	4830.30	5119.42	4849.77	4867.64	4914.25	4971.43	5044.42	4838.94	4929.52	106.57	319.48	
	81 Toluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
	82 trans-1,3-Dichloroprop	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
	83 1,3-Dichloropropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
	84 1,1,2-Trichloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
	85 Nonane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	

Eurofins Air Toxics Inc.
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msdv.i/18Feb2014.b/v14l0107a.m
Batch File: /chem/msdv.i/18Feb2014.b
Inst ID: msdv.i

RL(PPBV)

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	AVG CONC	STD DEV	MDL
86 Tetrachloroethene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
87 2-Hexanone	375.79	348.92	351.88	342.35	383.06	342.20	356.55	298.69	349.93	25.52	76.50
89 alpha-pinene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
89 Dibromochloromethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
90 1,2-Dibromoethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
91 1,1,1,2-Tetrachloroeth	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
* 92 Chlorobenzene-d5	5000.00	5000.00	5000.00	5000.00	5000.00	5000.00	5000.00	5000.00	5000.00	0.00	0.00
93 Chlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
94 cis-1,4-dichloro-2-but	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
95 Ethyl Benzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
96 m,p-Xylene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
97 Bromobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
98 trans-1,4-dichloro-2-b	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
99 Decane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
100 o-Xylene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
101 Styrene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
102 Bromoform	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
103 Cumene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
104 Bis(2-Chloroethyl) Eth	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
105 1,2,3-Trichloropropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
$ 106 Bromofluorobenzene	5263.30	5314.97	5001.77	5068.54	5162.36	5181.60	4974.39	5221.97	5148.61	122.95	368.60
107 2-Chlorotoluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
108 1,1,2,2-Tetrachloroeth	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
109 4-Chlorotoluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

500

Eurofins Air Toxics Inc.
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msdv.i/18Feb2014.b/v1410107a.m
Batch File: /chem/msdv.i/18Feb2014.b
Inst ID: msdv.i

RL(ppbv)

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	AVG CONC	STD DEV	MDL
110 Undecane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
111 Propylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
112 Indan	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
113 4-Ethyltoluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
114 1,3,5-Trimethylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
115 tert-Butylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
116 p-Cymene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
117 Indene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
118 Hexachloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
119 sec-Butylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
120 1,2,4-Trimethylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
121 1,2,3-trimethylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
122 1,3-Dichlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
123 Butylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
124 1,4-Dichlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
125 Dodecane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
126 1,3,5-Trichlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
127 alpha-chlorotoluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
128 1,2-Dichlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
129 1,2-dibromo-3-chloropr	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
130 1,2,3-trichlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
131 1,2,4-Trichlorobenzene	542.40	555.89	618.24	452.24	686.85	551.10	524.82	558.22	561.22	68.38	205.00 500
132 Hexachlorobutadiene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
133 Naphthalene	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Eurofins Air Toxics Inc.
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msdv.i/18Feb2014.b/v1410107a.m
Batch File: /chem/msdv.i/18Feb2014.b
Inst ID: msdv.i

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	AVG CONC	STD DEV	MDL
204 Butyl Acetate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
205 2-Heptanone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
206 1-Butanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
207 1-Methoxy-2-Propyl Ace	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

TO-15 Naphthalene* Lowlevel MDL (0.5ppbv)*

0.5ppbv*(5ppbv)*; load amount: 25mL #2612-209

MDL Verification: 0.3ppbv*(2.5ppbv)*
load amount: 30mL # 2612-115A
V022007

Report Date : 20-Feb-2014 07:48

Eurofins Air Toxics Inc.
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msdv.i/19Feb2014.b/v1410107a.m
Batch File: /chem/msdv.i/19Feb2014.b
Inst ID: msdv.i

ID:	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08
FILENAME:	v021911	v021912	v021913	v021914	v021915	v021916	v021917	v021918
INJ.DATE:	19-FEB-2014	19-FEB-2014	19-FEB-2014	19-FEB-2014	19-FEB-2014	19-FEB-2014	19-FEB-2014	20-FEB-2014
INJ.TIME:	19:06	19:56	20:32	21:10	21:46	22:22	22:57	07:08

RL(ppbv)

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	AVG CONC	STD DEV	MDL
1 Freon134a	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
208 D-Limonene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
2 Freon 152A	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
3 Propylene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
4 Dichlorodifluoromethan	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
5 Freon 22	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
6 Freon 114	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
7 Isobutylene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
8 Chloromethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
9 Butane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
10 Vinyl Chloride	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
11 1,3-Butadiene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
12 Bromomethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
13 Vinyl Bromide	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
14 Fr21	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
15 1-Pentene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
16 Pentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

Reviewer 1 _____ Date: 2/24/14
Reviewer 2 _____ Date: 2/24/14

$\bar{x}$ = .168
$2\bar{x}$ = .337

Eurofins Air Toxics Inc.
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msdv.i/19Feb2014.b/v14l0107a.m
Batch File: /chem/msdv.i/19Feb2014.b
Inst ID: msdv.i

RL (PPbV)

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	AVG CONC	STD DEV	MDL
17 Chloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
18 Isopentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
19 Diethyl Ether	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
20 Trichlorofluoromethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
21 Acrolein	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
22 Iodomethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
23 Methyl Acetate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
24 Ethanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
25 2-Methylpentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
26 Acetonitrile	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
27 Cyclopentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
28 Freon 113	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
29 2,4-Dimethylpentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
30 1,1-Dichloroethene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
31 Acetone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
32 Acrylonitrile	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
33 Carbon Disulfide	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
34 2-Propanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
35 3-Chloroprene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
36 Chloroprene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
37 Methylene Chloride	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
38 tert-butyl alcohol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

Eurofins Air Toxics Inc.
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msdv.i/19Feb2014.b/v1410107a.m
Batch File: /chem/msdv.i/19Feb2014.b
Inst ID: msdv.i

BL (ppbv)

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	AVG CONC	STD DEV	MDL
39 MTBE	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
40 trans-1,2-Dichloroethe	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
41 1-Hexene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
42 Ethyl Acetate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
43 Hexane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
44 Methyl Acrylate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
45 Isopropyl ether	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
46 1,1-Dichloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
47 Vinyl Acetate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
48 2,3-Dimethylpentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
49 Ethyl-tert-butyl ether	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
50 cis-1,2-Dichloroethene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
51 2-Butanone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
52 Thiophene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
53 Tetrahydrofuran	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
* 54 Bromochloromethane	5000.00	5000.00	5000.00	5000.00	5000.00	5000.00	5000.00	5000.00	5000.00	0.00	0.00
55 Chloroform	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
56 1,1-Dicholoropropene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
57 Cyclohexane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
58 1,1,1-Trichloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
59 Carbon Tetrachloride	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
60 Ethyl Acrylate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
61 2-Chloroethyl Vinyl Et	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
62 2-Pentanone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

Eurofins Air Toxics Inc.
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msdv.i/19Feb2014.b/v14l0107a.m
Batch File: /chem/msdv.i/19Feb2014.b
Inst ID: msdv.i

RL (ppbv)

	Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	AVG CONC	STD DEV	MDL
	63 2,2,4-Trimethylpentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	64 Benzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
$	65 1,2-Dichloroethane-d4	5253.92	5031.48	5361.68	5186.87	5304.98	5213.97	5126.65	4919.19	5174.84	145.41	435.94
	66 tert-amyl methyl ether	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	67 Methyl Methacrylate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	68 1,2-Dichloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	69 Heptane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	70 Dibromomethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
*	71 1,4-Difluorobenzene	5000.00	5000.00	5000.00	5000.00	5000.00	5000.00	5000.00	5000.00	5000.00	0.00	0.00
	72 Trichloroethene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	73 Methylcyclohexane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	74 1,2-Dichloropropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	75 1,4-Dioxane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	76 Octane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	77 Bromodichloromethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	78 cis-1,3-Dichloropropen	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	79 4-Methyl-2-pentanone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
$	80 Toluene-d8	5053.77	5152.87	4987.31	5112.97	5022.12	4973.61	4955.10	4878.90	5017.08	88.41	265.06
	81 Toluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	82 trans-1,3-Dichloroprop	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	83 1,3-Dichloropropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	84 1,1,2-Trichloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	85 Nonane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

Eurofins Air Toxics Inc.
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msdv.i/19Feb2014.b/v14l0107a.m
Batch File: /chem/msdv.i/19Feb2014.b
Inst ID: msdv.i

BL(PPBV)

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	AVG CONC	STD DEV	MDL
86 Tetrachloroethene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
87 2-Hexanone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
88 alpha-pinene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
89 Dibromochloromethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
90 1,2-Dibromoethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
91 1,1,1,2-Tetrachloroeth	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
* 92 Chlorobenzene-d5	5000.00	5000.00	5000.00	5000.00	5000.00	5000.00	5000.00	5000.00	5000.00	0.00	0.00
93 Chlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
94 cis-1,4-dichloro-2-but	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
95 Ethyl Benzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
96 m,p-Xylene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
97 Bromobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
98 trans-1,4-dichloro-2-b	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
99 Decane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
100 o-Xylene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
101 Styrene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
102 Bromoform	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
103 Cumene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
104 Bis(2-Chloroethyl) Eth	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
105 1,2,3-Trichloropropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
$ 106 Bromofluorobenzene	5397.41	5406.58	5394.35	5348.34	5581.09	5614.98	5499.39	5395.39	5454.69	98.37	294.90
107 2-Chlorotoluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
108 1,1,2,2-Tetrachloroeth	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
109 4-Chlorotoluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

Eurofins Air Toxics Inc.
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msdv.i/19Feb2014.b/v1410107a.m
Batch File: /chem/msdv.i/19Feb2014.b
Inst ID: msdv.i

RL (ppbv)

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	AVG CONC	STD DEV	MDL
110 Undecane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
111 Propylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
112 Indan	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
113 4-Ethyltoluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
114 1,3,5-Trimethylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
115 tert-Butylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
116 p-Cymene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
117 Indene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
118 Hexachloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
119 sec-Butylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
120 1,2,4-Trimethylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
121 1,2,3-trimethylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
122 1,3-Dichlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
123 Butylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
124 1,4-Dichlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
125 Dodecane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
126 1,3,5-Trichlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
127 alpha-chlorotoluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
128 1,2-Dichlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
129 1,2-dibromo-3-chloropr	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
130 1,2,3-trichlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
131 1,2,4-Trichlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
132 Hexachlorobutadiene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
133 Naphthalene	674.33	786.97	620.41	758.50	706.04	677.54	639.18	683.18	693.27	56.24	168.61

500

Eurofins Air Toxics Inc.
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msdv.i/19Feb2014.b/v1410107a.m
Batch File: /chem/msdv.i/19Feb2014.b
Inst ID: msdv.i

RL (ppt ✓)

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	AVG CONC	STD DEV	MDL
204 Butyl Acetate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
205 2-Heptanone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
206 1-Butanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
207 1-Methoxy-2-Propyl Ace	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

Report Date : 19-Aug-2014 21:27

0.05ppbv (RL)
Low level sp RL for 1,2,4-Trichlorobenzene & Hexachlorobutadiene
0.2ppbv (10ppbv); load amount: 50ml
#2677-112

Eurofins Air Toxics Inc.
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msdv.i/19Aug2014.b/v1410814b.m
Batch File: /chem/msdv.i/19Aug2014.b
Inst ID: msdv.i

ID:	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07
FILENAME:	v081907	v081908	v081909	v081910	v081911	v081912	v081913
INJ.DATE:	19-AUG-2014	19-AUG-2014	19-AUG-2014	19-AUG-2014	19-AUG-2014	19-AUG-2014	19-AUG-2014
INJ.TIME:	13:59	14:34	15:10	15:48	16:58	17:34	18:20

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	AVG CONC	STD DEV	MDL
1 Freon134a	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
208 D-Limonene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
2 Freon 152A	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
3 Propylene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
4 Dichlorodifluoromethan	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
5 Freon 22	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
6 Freon 114	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
7 Isobutylene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
8 Chloromethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
9 Butane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
10 Vinyl Chloride	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
11 1,3-Butadiene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
12 Bromomethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
13 Vinyl Bromide	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
14 Fr21	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
15 1-Pentene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
16 Pentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

MDL Verification:
File: V081919
0.04ppbv (0.05ppbv)

Reviewer 1 _____ Date: 8/19/14
Reviewer 2 _____ Date: 8/20/14

X.033

Eurofins Air Toxics Inc.
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msdv.i/19Aug2014.b/v14l0814b.m
Batch File: /chem/msdv.i/19Aug2014.b
Inst ID: msdv.i

RL (0.05ppbv)

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	AVG CONC	STD DEV	MDL
110 Undecane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
111 Propylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
112 Indan	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
113 4-Ethyltoluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
114 1,3,5-Trimethylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
115 tert-Butylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
116 p-Cymene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
117 Indene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
118 Hexachloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
119 sec-Butylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
120 1,2,4-Trimethylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
121 1,2,3-trimethylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
122 1,3-Dichlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
123 Butylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
124 1,4-Dichlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
125 Dodecane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
126 1,3,5-Trichlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
127 alpha-chlorotoluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
128 1,2-Dichlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
129 1,2-dibromo-3-chloropr	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
130 1,2,3-trichlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
131 1,2,4-Trichlorobenzene	261.12	245.26	239.66	254.63	251.79	224.28	254.47	247.31	12.31	38.69
132 Hexachlorobutadiene	214.47	224.50	218.12	210.61	211.03	201.42	201.51	211.67	8.40	26.41
133 Naphthalene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

Eurofins Air Toxics Inc.
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msdv.i/19Aug2014.b/v14l0814b.m
Batch File: /chem/msdv.i/19Aug2014.b
Inst ID: msdv.i

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	AVG CONC	STD DEV	MDL
17 Chloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
18 Isopentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
19 Diethyl Ether	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
20 Trichlorofluoromethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
21 Acrolein	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
22 Iodomethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
23 Methyl Acetate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
24 Ethanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
25 2-Methylpentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
26 Acetonitrile	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
27 Cyclopentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
28 Freon 113	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
29 2,4-Dimethylpentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
30 1,1-Dichloroethene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
31 Acetone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
32 Acrylonitrile	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
33 Carbon Disulfide	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
34 2-Propanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
35 3-Chloroprene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
36 Chloroprene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
37 Methylene Chloride	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
38 tert-butyl alcohol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

Eurofins Air Toxics Inc.
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msdv.i/19Aug2014.b/v1410814b.m
Batch File: /chem/msdv.i/19Aug2014.b
Inst ID: msdv.i

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	AVG CONC	STD DEV	MDL
39 MTBE	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
40 trans-1,2-Dichloroethe	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
41 1-Hexene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
42 Ethyl Acetate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
43 Hexane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
44 Methyl Acrylate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
45 Isopropyl ether	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
46 1,1-Dichloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
47 Vinyl Acetate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
48 2,3-Dimethylpentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
49 Ethyl-tert-butyl ether	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
50 cis-1,2-Dichloroethene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
51 2-Butanone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
52 Thiophene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
53 Tetrahydrofuran	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
* 54 Bromochloromethane	5000.00	5000.00	5000.00	5000.00	5000.00	5000.00	5000.00	5000.00	0.00	0.00
55 Chloroform	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
56 1,1-Dicholoropropene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
57 Cyclohexane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
58 1,1,1-Trichloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
59 Carbon Tetrachloride	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
60 Ethyl Acrylate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
61 2-Chloroethyl Vinyl Et	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
62 2-Pentanone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

Eurofins Air Toxics Inc.
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msdv.i/19Aug2014.b/v1410814b.m
Batch File: /chem/msdv.i/19Aug2014.b
Inst ID: msdv.i

	Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	AVG CONC	STD DEV	MDL
	63 2,2,4-Trimethylpentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	64 Benzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
$	65 1,2-Dichloroethane-d4	4783.72	4760.60	4843.58	4920.36	4764.78	4977.41	4854.08	4843.50	82.25	258.52
	66 tert-amyl methyl ether	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	67 Methyl Methacrylate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	68 1,2-Dichloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	69 Heptane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	70 Dibromomethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
*	71 1,4-Difluorobenzene	5000.00	5000.00	5000.00	5000.00	5000.00	5000.00	5000.00	5000.00	0.00	0.00
	72 Trichloroethene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	73 Methylcyclohexane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	74 1,2-Dichloropropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	75 1,4-Dioxane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	76 Octane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	77 Bromodichloromethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	78 cis-1,3-Dichloropropen	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	79 4-Methyl-2-pentanone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
$	80 Toluene-d8	4896.44	4965.79	4936.81	4939.63	5011.49	4932.28	5022.21	4957.81	45.25	142.21
	81 Toluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	82 trans-1,3-Dichloroprop	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	83 1,3-Dichloropropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	84 1,1,2-Trichloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	85 Nonane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

Eurofins Air Toxics Inc.
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msdv.i/19Aug2014.b/v1410814b.m
Batch File: /chem/msdv.i/19Aug2014.b
Inst ID: msdv.i

	Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	AVG CONC	STD DEV	MDL
	86 Tetrachloroethene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	87 2-Hexanone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	88 alpha-pinene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	89 Dibromochloromethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	90 1,2-Dibromoethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	91 1,1,1,2-Tetrachloroeth	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
*	92 Chlorobenzene-d5	5000.00	5000.00	5000.00	5000.00	5000.00	5000.00	5000.00	5000.00	0.00	0.00
	93 Chlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	94 cis-1,4-dichloro-2-buc	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	95 Ethyl Benzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	96 m,p-Xylene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	97 Bromobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	98 trans-1,4-dichloro-2-b	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	99 Decane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	100 o-Xylene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	101 Styrene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	102 Bromoform	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	103 Cumene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	104 Bis(2-Chloroethyl) Eth	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	105 1,2,3-Trichloropropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
$	106 Bromofluorobenzene	4760.46	4836.05	4499.36	4921.34	4814.05	4800.97	4641.24	4753.35	140.32	441.03
	107 2-Chlorotoluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	108 1,1,2,2-Tetrachloroeth	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	109 4-Chlorotoluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

Eurofins Air Toxics Inc.
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msdv.i/19Aug2014.b/v1410814b.m
Batch File: /chem/msdv.i/19Aug2014.b
Inst ID: msdv.i

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	AVG CONC	STD DEV	MDL	RL (ppbv)	SPRL (ppbv)
110 Undecane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
111 Propylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
112 Indan	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
113 4-Ethyltoluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
114 1,3,5-Trimethylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
115 tert-Butylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
116 p-Cymene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
117 Indene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
118 Hexachloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
119 sec-Butylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
120 1,2,4-Trimethylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
121 1,2,3-trimethylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
122 1,3-Dichlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
123 Butylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
124 1,4-Dichlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
125 Dodecane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
126 1,3,5-Trichlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
127 alpha-chlorotoluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
128 1,2-Dichlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
129 1,2-dibromo-3-chloropr	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
130 1,2,3-trichlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
131 1,2,4-Trichlorobenzene	261.12	245.26	239.66	254.63	251.79	224.28	254.47	247.31	12.31	38.69	500	50
132 Hexachlorobutadiene	214.47	224.50	218.12	210.61	211.03	201.42	201.51	211.67	8.40	26.41	500	50
133 Naphthalene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		

Eurofins Air Toxics Inc.
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msdv.i/19Aug2014.b/v1410814b.m
Batch File: /chem/msdv.i/19Aug2014.b
Inst ID: msdv.i

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	AVG CONC	STD DEV	MDL
204 Butyl Acetate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
205 2-Heptanone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
206 1-Butanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
207 1-Methoxy-2-Propyl Ace	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

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Client Sample ID: CCV

Lab ID#: 1412152AR1-10A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**v121602**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 12/16/14 08:42 AM**	

Compound	%Recovery
Freon 12	117
Freon 114	108
Chloromethane	115
Vinyl Chloride	125
1,3-Butadiene	123
Bromomethane	127
Chloroethane	125
Freon 11	114
Ethanol	138 Q
Freon 113	105
1,1-Dichloroethene	116
Acetone	124
2-Propanol	126
Carbon Disulfide	126
3-Chloropropene	123
Methylene Chloride	119
Methyl tert-butyl ether	122
trans-1,2-Dichloroethene	122
Hexane	118
1,1-Dichloroethane	115
2-Butanone (Methyl Ethyl Ketone)	127
cis-1,2-Dichloroethene	118
Tetrahydrofuran	120
Chloroform	113
1,1,1-Trichloroethane	112
Cyclohexane	119
Carbon Tetrachloride	103
2,2,4-Trimethylpentane	119
Benzene	117
1,2-Dichloroethane	108
Heptane	117
Trichloroethene	110
1,2-Dichloropropane	120
1,4-Dioxane	110
Bromodichloromethane	114
cis-1,3-Dichloropropene	123
4-Methyl-2-pentanone	115
Toluene	115
trans-1,3-Dichloropropene	111
1,1,2-Trichloroethane	109
Tetrachloroethene	103
2-Hexanone	98

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Client Sample ID: CCV

Lab ID#: 1412152AR1-10A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**v121602**	**Date of Collection: NA**
Dil. Factor:	**1.00**	**Date of Analysis: 12/16/14 08:42 AM**

Compound	%Recovery
Dibromochloromethane	99
1,2-Dibromoethane (EDB)	107
Chlorobenzene	101
Ethyl Benzene	106
m,p-Xylene	104
o-Xylene	103
Styrene	98
Bromoform	88
Cumene	100
1,1,2,2-Tetrachloroethane	88
Propylbenzene	98
4-Ethyltoluene	91
1,3,5-Trimethylbenzene	100
1,2,4-Trimethylbenzene	112
1,3-Dichlorobenzene	68 Q
1,4-Dichlorobenzene	63 Q
alpha-Chlorotoluene	67 Q
1,2-Dichlorobenzene	62 Q
1,2,4-Trichlorobenzene	76
Hexachlorobutadiene	61 Q
Naphthalene	79

Q = Exceeds Quality Control limits.

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	99	70-130
Toluene-d8	103	70-130
4-Bromofluorobenzene	96	70-130

Report Date: 16-Dec-2014 10:58

Eurofins Air Toxics Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: msdv.i Injection Date: 16-DEC-2014 08:42
Lab File ID: v121602.d Init. Cal. Date(s): 06-OCT-2014 03-NOV-2014
Analysis Type: AIR Init. Cal. Times: 15:09 11:17
Lab Sample ID: CCV Quant Type: ISTD
Method: /chem/msdv.i/16Dec2014.b/v14l1006d.m

COMPOUND	RRF / AMOUNT	RF5	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
$ 65 1,2-Dichloroethane-d4	1.83501	1.82220	0.010	0.69829	30.00000	Averaged	
$ 80 Toluene-d8	0.96131	0.99136	0.010	-3.12538	30.00000	Averaged	
$ 106 Bromofluorobenzene	0.43000	0.41350	0.010	3.83673	30.00000	Averaged	
3 Propylene	2.80514	3.56685	0.010	-27.15413	30.00000	Averaged	
4 Dichlorodifluoromethane/Fr1	4.68442	5.46852	0.010	-16.73854	30.00000	Averaged	
6 Freon 114	3.34539	3.61343	0.010	-8.01238	30.00000	Averaged	
8 Chloromethane	2.82300	3.23842	0.010	-14.71566	30.00000	Averaged	
9 Butane	0.47309	0.59853	0.010	-26.51516	30.00000	Averaged	
10 Vinyl Chloride	2.10652	2.63097	0.010	-24.89657	30.00000	Averaged	
11 1,3-Butadiene	2.06513	2.53189	0.010	-22.60176	30.00000	Averaged	
12 Bromomethane	1.29142	1.64488	0.010	-27.36995	30.00000	Averaged	
17 Chloroethane	0.97900	1.22445	0.010	-25.07129	30.00000	Averaged	
18 Isopentane	2.01670	2.49246	0.010	-23.59133	30.00000	Averaged	
20 Trichlorofluoromethane/Fr11	4.82187	5.48258	0.010	-13.70247	30.00000	Averaged	
24 Ethanol	1.02216	1.41212	0.010	-38.15141	30.00000	Averaged	<-
30 1,1-Dichloroethene	1.07752	1.24980	0.010	-15.98847	30.00000	Averaged	
28 Freon 113	2.90253	3.05089	0.010	-5.11160	30.00000	Averaged	
31 Acetone	1.18134	1.45899	0.010	-23.50222	30.00000	Averaged	
33 Carbon Disulfide	4.58304	5.77831	0.010	-26.08039	30.00000	Averaged	
35 3-Chloroprene	0.66137	0.81121	0.010	-22.65574	30.00000	Averaged	
34 2-Propanol	5.47035	6.87206	0.010	-25.62385	30.00000	Averaged	
37 Methylene Chloride	1.52007	1.81122	0.010	-19.15369	30.00000	Averaged	
39 MTBE	5.45367	6.68469	0.010	-22.57250	30.00000	Averaged	
40 trans-1,2-Dichloroethene	1.01951	1.24875	0.010	-22.48503	30.00000	Averaged	
43 Hexane	4.36389	5.17312	0.010	-18.54367	30.00000	Averaged	
46 1,1-Dichloroethane	4.23480	4.88508	0.010	-15.35573	30.00000	Averaged	
47 Vinyl Acetate	0.43226	0.54570	0.010	-26.24266	30.00000	Averaged	
50 cis-1,2-Dichloroethene	1.35292	1.59732	0.010	-18.06458	30.00000	Averaged	
51 2-Butanone	0.87928	1.11421	0.010	-26.71764	30.00000	Averaged	
53 Tetrahydrofuran	4.53104	5.42199	0.010	-19.66324	30.00000	Averaged	
55 Chloroform	4.21362	4.78230	0.010	-13.49645	30.00000	Averaged	
57 Cyclohexane	2.65011	3.15336	0.010	-18.98965	30.00000	Averaged	
58 1,1,1-Trichloroethane	4.39992	4.92751	0.010	-11.99074	30.00000	Averaged	
59 Carbon Tetrachloride	4.22054	4.35255	0.010	-3.12781	30.00000	Averaged	
63 2,2,4-Trimethylpentane	4.61826	5.47835	0.010	-18.62378	30.00000	Averaged	
64 Benzene	1.47552	1.72188	0.010	-16.69653	30.00000	Averaged	

Eurofins Air Toxics Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: msdv.i Injection Date: 16-DEC-2014 08:42
Lab File ID: v121602.d Init. Cal. Date(s): 06-OCT-2014 03-NOV-2014
Analysis Type: AIR Init. Cal. Times: 15:09 11:17
Lab Sample ID: CCV Quant Type: ISTD
Method: /chem/msdv.i/16Dec2014.b/v14l1006d.m

COMPOUND	RRF / AMOUNT	RF5	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
68 1,2-Dichloroethane	0.89420	0.96281	0.010	-7.67252	30.00000	Averaged	
69 Heptane	0.63594	0.74198	0.010	-16.67536	30.00000	Averaged	
72 Trichloroethene	0.66422	0.73088	0.010	-10.03683	30.00000	Averaged	
73 Methylcyclohexane	0.87225	1.05209	0.010	-20.61810	30.00000	Averaged	
74 1,2-Dichloropropane	0.67686	0.81374	0.010	-20.22285	30.00000	Averaged	
75 1,4-Dioxane	0.34017	0.37582	0.010	-10.48169	30.00000	Averaged	
77 Bromodichloromethane	1.12057	1.28119	0.010	-14.33352	30.00000	Averaged	
78 cis-1,3-Dichloropropene	0.76585	0.94405	0.010	-23.26814	30.00000	Averaged	
79 4-Methyl-2-pentanone	2.08270	2.39952	0.010	-15.21190	30.00000	Averaged	
81 Toluene	1.62872	1.87152	0.010	-14.90729	30.00000	Averaged	
82 trans-1,3-Dichloropropene	1.03064	1.14275	0.010	-10.87717	30.00000	Averaged	
84 1,1,2-Trichloroethane	0.78704	0.85728	0.010	-8.92535	30.00000	Averaged	
86 Tetrachloroethene	1.01755	1.05003	0.010	-3.19233	30.00000	Averaged	
87 2-Hexanone	0.88132	0.86099	0.010	2.30716	30.00000	Averaged	
89 Dibromochloromethane	1.46483	1.44628	0.010	1.26609	30.00000	Averaged	
90 1,2-Dibromoethane	1.22607	1.31375	0.010	-7.15102	30.00000	Averaged	
93 Chlorobenzene	1.64196	1.65685	0.010	-0.90709	30.00000	Averaged	
95 Ethyl Benzene	0.73697	0.78499	0.010	-6.51518	30.00000	Averaged	
96 m,p-Xylene	0.72670	0.75757	0.010	-4.24836	30.00000	Averaged	
100 o-Xylene	0.67621	0.69788	0.010	-3.20429	30.00000	Averaged	
101 Styrene	0.98928	0.96934	0.010	2.01533	30.00000	Averaged	
102 Bromoform	1.24154	1.09610	0.010	11.71436	30.00000	Averaged	
103 Cumene	1.97466	1.97405	0.010	0.03111	30.00000	Averaged	
108 1,1,2,2-Tetrachloroethane	1.51689	1.33350	0.010	12.08975	30.00000	Averaged	
111 Propylbenzene	1.75155	1.71957	0.010	1.82549	30.00000	Averaged	
113 4-Ethyltoluene	1.28498	1.16935	0.010	8.99858	30.00000	Averaged	
114 1,3,5-Trimethylbenzene	1.07289	1.07015	0.010	0.25490	30.00000	Averaged	
120 1,2,4-Trimethylbenzene	0.86896	0.97437	0.010	-12.13125	30.00000	Averaged	
122 1,3-Dichlorobenzene	0.83846	0.56745	0.010	32.32177	30.00000	Averaged	<-
124 1,4-Dichlorobenzene	0.78823	0.49745	0.010	36.89123	30.00000	Averaged	<-
127 alpha-chlorotoluene	0.84217	0.56200	0.010	33.26788	30.00000	Averaged	<-
128 1,2-Dichlorobenzene	0.77795	0.47861	0.010	38.47817	30.00000	Averaged	<-
131 1,2,4-Trichlorobenzene	0.57091	0.43148	0.010	24.42190	30.00000	Averaged	
132 Hexachlorobutadiene	0.47748	0.29135	0.010	38.98138	30.00000	Averaged	<-
133 Naphthalene	1.35204	1.06721	0.010	21.06654	40.00000	Averaged	

Eurofins Air Toxics Inc.

TO15/Modified TO-14A

Data file : /chem/msdv.i/16Dec2014.b/v121602.d
Lab Smp Id: CCV Client Smp ID: CCV
Inj Date : 16-DEC-2014 08:42
Operator : ef Inst ID: msdv.i
Smp Info : 25mL #2687-48
Misc Info : 5.0ppbv (50ppbv)
Comment : Low Level GC-MS
Method : /chem/msdv.i/16Dec2014.b/v14l1006d.m
Meth Date : 16-Dec-2014 10:10 efinn Quant Type: ISTD
Cal Date : 03-NOV-2014 11:17 Cal File: v110307.d
Als bottle: 1 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT12-Oxy.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
* 54 Bromochloromethane						CAS #: 74-97-5	
15.933	15.933 (1.000)	130	109722	5.00000		80.00- 120.00	100.00
15.933	15.933 (1.000)	128	83511			47.55- 107.55	76.11
15.933	15.933 (1.000)	49	277123			213.64- 273.64	252.57
* 71 1,4-Difluorobenzene						CAS #: 540-36-3	
17.305	17.305 (1.000)	114	445503	5.00000		80.00- 120.00	100.00
17.305	17.305 (1.000)	88	72570			0.00- 46.17	16.29
* 92 Chlorobenzene-d5						CAS #: 3114-55-4	
22.205	22.205 (1.000)	117	361081	5.00000		80.00- 120.00	100.00
22.205	22.205 (1.000)	82	223223			28.56- 88.56	61.82
$ 65 1,2-Dichloroethane-d4						CAS #: 17060-07-0	
16.756	16.756 (1.052)	65	199935	5.00000	4.965	80.00- 120.00	100.00
16.756	16.756 (1.052)	67	116770			28.37- 88.37	58.40
$ 80 Toluene-d8						CAS #: 2037-26-5	
19.879	19.879 (1.149)	98	441653	5.00000	5.156	80.00- 120.00	100.00
19.856	19.879 (1.147)	70	56275			0.00- 41.90	12.74

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

$  80 Toluene-d8 (continued)
 19.856  19.879 (1.147)   100    285320                    34.60-  94.60    64.60
-------------------------------------------------------------------------------
$ 106 Bromofluorobenzene                            CAS #: 460-00-4
 23.704  23.704 (1.067)   174    149306 5.00000    4.808  80.00- 120.00   100.00
 23.678  23.704 (1.066)    95    214771                  113.85- 173.85   143.85
 23.704  23.704 (1.067)   176    147644                   68.89- 128.89    98.89
-------------------------------------------------------------------------------
    3 Propylene                                     CAS #: 115-07-1
  4.711   4.711 (0.296)    41    391362 5.00000    6.358  80.00- 120.00   100.00
  4.673   4.711 (0.293)    42    259701                   35.18-  95.18    66.36
  4.673   4.711 (0.293)    39    288790                   44.12- 104.12    73.79
-------------------------------------------------------------------------------
    4 Dichlorodifluoromethane/Fr12                  CAS #: 75-71-8
  5.202   5.202 (0.326)    85    600017 5.00000    5.837  80.00- 120.00   100.00
  5.202   5.202 (0.326)    87    189448                    1.57-  61.57    31.57
-------------------------------------------------------------------------------
    6 Freon 114                                     CAS #: 76-14-2
  6.713   6.713 (0.421)   135    396473 5.00000    5.401  80.00- 120.00   100.00
  6.713   6.713 (0.421)   137    125240                    0.53-  60.53    31.59
  6.713   6.713 (0.421)    85    651733                  121.37- 181.37   164.38
-------------------------------------------------------------------------------
    8 Chloromethane                                 CAS #: 74-87-3
  7.052   7.052 (0.443)    50    355326 5.00000    5.736  80.00- 120.00   100.00
  7.052   7.052 (0.443)    52    108720                    1.81-  61.81    30.60
-------------------------------------------------------------------------------
    9 Butane                                        CAS #: 106-97-8
  7.884   7.884 (0.495)    58     65672 5.00000    6.326  80.00- 120.00   100.00
  7.853   7.884 (0.493)    43    740493                 1065.18-1125.18  1127.56
-------------------------------------------------------------------------------
   10 Vinyl Chloride                                CAS #: 75-01-4
  8.009   8.009 (0.503)    62    288675 5.00000    6.245  80.00- 120.00   100.00
  8.009   8.009 (0.503)    64     85222                    0.00-  59.52    29.52
-------------------------------------------------------------------------------
   11 1,3-Butadiene                                 CAS #: 106-99-0
  8.257   8.257 (0.518)    54    277804 5.00000    6.130  80.00- 120.00   100.00
  8.257   8.257 (0.518)    39    411947                  107.15- 167.15   148.29
-------------------------------------------------------------------------------
   12 Bromomethane                                  CAS #: 74-83-9
  9.834   9.834 (0.617)    94    180479 5.00000    6.368  80.00- 120.00   100.00
  9.834   9.834 (0.617)    96    163189                   60.42- 120.42    90.42
-------------------------------------------------------------------------------
   17 Chloroethane                                  CAS #: 75-00-3
 10.340  10.340 (0.649)    64    134349 5.00000    6.254  80.00- 120.00   100.00
 10.340  10.340 (0.649)    66     41097                    0.00-  59.90    30.59
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RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
18 Isopentane					CAS #: 78-78-4		
10.533	10.533 (0.661)	57	273478	5.00000	6.180	80.00- 120.00	100.00
10.533	10.533 (0.661)	43	583461			171.32- 231.32	213.35
10.533	10.533 (0.661)	42	510190			150.03- 210.03	186.56
20 Trichlorofluoromethane/Fr11					CAS #: 75-69-4		
11.183	11.183 (0.702)	101	601560	5.00000	5.685	80.00- 120.00	100.00
11.183	11.183 (0.702)	103	385656			34.11- 94.11	64.11
24 Ethanol					CAS #: 64-17-5		
12.101	12.101 (0.759)	45	154941	5.00000	6.908	80.00- 120.00	100.00
12.101	12.101 (0.759)	46	57596			8.51- 68.51	37.17
12.101	12.101 (0.759)	43	29401			0.00- 54.10	18.98
30 1,1-Dichloroethene					CAS #: 75-35-4		
12.568	12.568 (0.789)	98	137131	5.00000	5.799	80.00- 120.00	100.00
12.568	12.568 (0.789)	61	479240			320.65- 380.65	349.48
12.568	12.568 (0.789)	96	226357			134.30- 194.30	165.07
28 Freon 113					CAS #: 76-13-1		
12.568	12.568 (0.789)	151	334750	5.00000	5.256	80.00- 120.00	100.00
12.568	12.568 (0.789)	153	213053			33.65- 93.65	63.65
12.568	12.568 (0.789)	101	450843			96.37- 156.37	134.68
31 Acetone					CAS #: 67-64-1		
12.816	12.816 (0.804)	58	160083	5.00000	6.175	80.00- 120.00	100.00
12.816	12.816 (0.804)	43	702774			413.15- 473.15	439.01
33 Carbon Disulfide					CAS #: 75-15-0		
12.925	12.925 (0.811)	76	634008	5.00000	6.304	80.00- 120.00	100.00
35 3-Chloroprene					CAS #: 107-05-1		
13.365	13.365 (0.839)	76	89008	5.00000	6.133	80.00- 120.00	100.00
13.365	13.365 (0.839)	41	555109			547.03- 607.03	623.66
34 2-Propanol					CAS #: 67-63-0		
13.173	13.173 (0.827)	45	754016	5.00000	6.281	80.00- 120.00	100.00
13.173	13.173 (0.827)	43	147118			0.00- 50.74	19.51
13.173	13.173 (0.827)	59	19070			0.00- 32.83	2.53
37 Methylene Chloride					CAS #: 75-09-2		
13.640	13.640 (0.856)	84	198731	5.00000	5.958	80.00- 120.00	100.00
13.640	13.640 (0.856)	49	480426			212.37- 272.37	241.75
13.640	13.640 (0.856)	51	136686			43.31- 103.31	68.78
39 MTBE					CAS #: 1634-04-4		
13.996	13.996 (0.878)	73	733458	5.00000	6.129	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
   ==   ====== ========  ====  ======== =======  =======   ============    =====

   39 MTBE (continued)
 13.996  13.996 (0.878)    57    229335                     2.99-  62.99    31.27
 13.996  13.996 (0.878)    41    318061                    12.12-  72.12    43.36
-------------------------------------------------------------------------------
   40 trans-1,2-Dichloroethene                      CAS #: 156-60-5
 14.051  14.051 (0.882)    98    137015 5.00000    6.124  80.00- 120.00   100.00
 14.051  14.051 (0.882)    61    403916                   293.73- 353.73   294.80
 14.051  14.051 (0.882)    96    213972                   146.88- 206.88   156.17
-------------------------------------------------------------------------------
   43 Hexane                                        CAS #: 110-54-3
 14.381  14.381 (0.903)    57    567605 5.00000    5.927  80.00- 120.00   100.00
 14.381  14.381 (0.903)    43    524469                    57.65- 117.65    92.40
 14.381  14.381 (0.903)    86     60523                     0.00-  40.67    10.66
-------------------------------------------------------------------------------
   46 1,1-Dichloroethane                            CAS #: 75-34-3
 14.765  14.765 (0.927)    63    536001 5.00000    5.768  80.00- 120.00   100.00
 14.765  14.765 (0.927)    65    160300                     0.37-  60.37    29.91
-------------------------------------------------------------------------------
   47 Vinyl Acetate                                 CAS #: 108-05-4
 14.793  14.793 (0.928)    86     59875 5.00000    6.312  80.00- 120.00   100.00
 14.793  14.793 (0.928)    42    172018                   220.92- 280.92   287.30
 14.793  14.793 (0.928)    43   2026103                  3282.47-3342.47  3383.89
-------------------------------------------------------------------------------
   50 cis-1,2-Dichloroethene                        CAS #: 156-59-2
 15.592  15.592 (0.979)    98    175261 5.00000    5.903  80.00- 120.00   100.00
 15.592  15.592 (0.979)    61    484496                   248.69- 308.69   276.44
 15.592  15.592 (0.979)    96    275121                   126.98- 186.98   156.98
-------------------------------------------------------------------------------
   51 2-Butanone                                    CAS #: 78-93-3
 15.571  15.571 (0.977)    72    122253 5.00000    6.336  80.00- 120.00   100.00
 15.571  15.571 (0.977)    43    953047                   794.80- 854.80   779.57
 15.571  15.571 (0.977)    57     51066                    18.01-  78.01    41.77
-------------------------------------------------------------------------------
   53 Tetrahydrofuran                               CAS #: 109-99-9
 15.933  15.933 (1.000)    42    594912 5.00000    5.983  80.00- 120.00   100.00
 15.933  15.933 (1.000)    71    113770                     0.00-  49.03    19.12
 15.933  15.933 (1.000)    72    129061                     0.00-  51.35    21.69
-------------------------------------------------------------------------------
   55 Chloroform                                    CAS #: 67-66-3
 15.995  15.995 (1.004)    83    524724 5.00000    5.675  80.00- 120.00   100.00
 15.995  15.995 (1.004)    85    344905                    33.33-  93.33    65.73
-------------------------------------------------------------------------------
   57 Cyclohexane                                   CAS #: 110-82-7
 16.242  16.242 (1.019)    84    345993 5.00000    5.949  80.00- 120.00   100.00
 16.242  16.242 (1.019)    56    640249                   157.43- 217.43   185.05
 16.242  16.242 (1.019)    41    489393                   105.99- 165.99   141.45
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                                          AMOUNTS
                                       CAL-AMT   ON-COL
   RT   EXP RT (REL RT)  MASS  RESPONSE ( PPBV)  ( PPBV)   TARGET RANGE    RATIO
   ==   ====== ========  ====  ======== =======  =======   ============    =====

   58 1,1,1-Trichloroethane                        CAS #: 71-55-6
 16.242  16.242 (1.019)    97    540656 5.00000    5.600  80.00- 120.00   100.00
 16.242  16.242 (1.019)    99    345172                   32.16-  92.16    63.84
-------------------------------------------------------------------------------
   59 Carbon Tetrachloride                         CAS #: 56-23-5
 16.457  16.457 (1.033)   119    477570 5.00000    5.156  80.00- 120.00   100.00
 16.457  16.457 (1.033)   117    483815                   69.67- 129.67   101.31
                   Sum of Peak Amounts =            5.16
-------------------------------------------------------------------------------
   63 2,2,4-Trimethylpentane                       CAS #: 540-84-1
 16.728  16.728 (1.050)    56    601096 5.00000    5.931  80.00- 120.00   100.00
 16.728  16.728 (1.050)    57   1770531                  258.69- 318.69   294.55
 16.728  16.728 (1.050)    41    708655                   79.91- 139.91   117.89
-------------------------------------------------------------------------------
   64 Benzene                                      CAS #: 71-43-2
 16.756  16.756 (0.968)    78    767103 5.00000    5.835  80.00- 120.00   100.00
 16.756  16.756 (0.968)    77    181619                    0.00-  53.73    23.68
-------------------------------------------------------------------------------
   68 1,2-Dichloroethane                           CAS #: 107-06-2
 16.865  16.865 (0.975)    62    428933 5.00000    5.384  80.00- 120.00   100.00
 16.865  16.865 (0.975)    64    133074                    1.11-  61.11    31.02
-------------------------------------------------------------------------------
   69 Heptane                                      CAS #: 142-82-5
 16.948  16.948 (0.979)    57    330555 5.00000    5.834  80.00- 120.00   100.00
 16.975  16.948 (0.981)   100     74483                    0.00-  51.27    22.53
 16.948  16.948 (0.979)    43    889459                  235.24- 295.24   269.08
-------------------------------------------------------------------------------
   72 Trichloroethene                              CAS #: 79-01-6
 17.716  17.716 (1.024)   130    325611 5.00000    5.502  80.00- 120.00   100.00
 17.716  17.716 (1.024)    95    344582                   71.16- 131.16   105.83
 17.716  17.716 (1.024)    97    219942                   33.04-  93.04    67.55
-------------------------------------------------------------------------------
   73 Methylcyclohexane                            CAS #: 108-87-2
 17.964  17.964 (1.038)    83    468710 5.00000    6.031  80.00- 120.00   100.00
 17.964  17.964 (1.038)    98    204412                   15.02-  75.02    43.61
 17.964  17.964 (1.038)    55    568820                   95.64- 155.64   121.36
-------------------------------------------------------------------------------
   74 1,2-Dichloropropane                          CAS #: 78-87-5
 18.156  18.156 (1.049)    63    362523 5.00000    6.011  80.00- 120.00   100.00
 18.156  18.156 (1.049)    62    259678                   45.17- 105.17    71.63
 18.156  18.156 (1.049)    41    330369                   61.13- 121.13    91.13
-------------------------------------------------------------------------------
   75 1,4-Dioxane                                  CAS #: 123-91-1
 18.266  18.266 (1.056)    88    167429 5.00000    5.524  80.00- 120.00   100.00
 18.266  18.266 (1.056)    58    170505                   72.13- 132.13   101.84
 18.266  18.266 (1.056)    57     55416                    4.41-  64.41    33.10
-------------------------------------------------------------------------------
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RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
77 Bromodichloromethane					CAS #: 75-27-4		
18.568	18.568 (1.073)	83	570774	5.00000	5.717	80.00- 120.00	100.00
18.568	18.568 (1.073)	85	362484			32.12- 92.12	63.51
78 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
19.386	19.386 (1.120)	75	420578	5.00000	6.163	80.00- 120.00	100.00
19.386	19.386 (1.120)	77	132315			1.25- 61.25	31.46
19.386	19.386 (1.120)	39	429395			72.10- 132.10	102.10
79 4-Methyl-2-pentanone					CAS #: 108-10-1		
19.587	19.587 (1.132)	43	1068993	5.00000	5.760	80.00- 120.00	100.00
19.587	19.587 (1.132)	58	284078			0.00- 57.24	26.57
19.587	19.587 (1.132)	85	89983			0.00- 38.20	8.42
81 Toluene					CAS #: 108-88-3		
19.991	19.991 (1.155)	91	833766	5.00000	5.745	80.00- 120.00	100.00
19.991	19.991 (1.155)	92	482995			28.60- 88.60	57.93
82 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
20.435	20.435 (0.920)	75	412625	5.00000	5.544	80.00- 120.00	100.00
20.435	20.435 (0.920)	77	126501			5.48- 65.48	30.66
20.435	20.435 (0.920)	39	402021			67.43- 127.43	97.43
84 1,1,2-Trichloroethane					CAS #: 79-00-5		
20.757	20.757 (0.935)	97	309548	5.00000	5.446	80.00- 120.00	100.00
20.757	20.757 (0.935)	99	188875			32.13- 92.13	61.02
20.722	20.757 (0.933)	83	274843			58.79- 118.79	88.79
86 Tetrachloroethene					CAS #: 127-18-4		
20.901	20.901 (0.941)	166	379147	5.00000	5.160	80.00- 120.00	100.00
20.901	20.901 (0.941)	129	300782			47.04- 107.04	79.33
20.901	20.901 (0.941)	131	287347			46.95- 106.95	75.79
87 2-Hexanone					CAS #: 591-78-6		
21.044	21.044 (0.948)	58	310886	5.00000	4.885	80.00- 120.00	100.00
21.044	21.044 (0.948)	43	838293			242.48- 302.48	269.65
21.044	21.044 (0.948)	100	43518			0.00- 43.88	14.00
89 Dibromochloromethane					CAS #: 124-48-1		
21.367	21.367 (0.962)	129	522225	5.00000	4.937	80.00- 120.00	100.00
21.367	21.367 (0.962)	127	411796			50.38- 110.38	78.85
90 1,2-Dibromoethane					CAS #: 106-93-4		
21.583	21.583 (0.972)	107	474370	5.00000	5.358	80.00- 120.00	100.00
21.583	21.583 (0.972)	109	441616			62.69- 122.69	93.10

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
93 Chlorobenzene					CAS #: 108-90-7		
22.233	22.233 (1.001)	112	598258	5.00000	5.045	80.00- 120.00	100.00
22.233	22.233 (1.001)	114	187899			1.62- 61.62	31.41
22.233	22.233 (1.001)	77	398192			36.56- 96.56	66.56
95 Ethyl Benzene					CAS #: 100-41-4		
22.315	22.315 (1.005)	106	283444	5.00000	5.326	80.00- 120.00	100.00
22.315	22.315 (1.005)	91	911922			292.36- 352.36	321.73
96 m,p-Xylene					CAS #: 108-38-3		
22.452	22.452 (1.011)	106	273545	5.00000	5.212	80.00- 120.00	100.00
22.452	22.452 (1.011)	91	559503			164.15- 224.15	204.54
100 o-Xylene					CAS #: 95-47-6		
23.001	23.001 (1.036)	106	251991	5.00000	5.160	80.00- 120.00	100.00
23.001	23.001 (1.036)	91	554192			186.63- 246.63	219.93
101 Styrene					CAS #: 100-42-5		
23.029	23.029 (1.037)	104	350011	5.00000	4.899	80.00- 120.00	100.00
23.029	23.029 (1.037)	78	193980			28.70- 88.70	55.42
102 Bromoform					CAS #: 75-25-2		
23.331	23.331 (1.051)	173	395782	5.00000	4.414	80.00- 120.00	100.00
23.331	23.331 (1.051)	171	203590			20.40- 80.40	51.44
103 Cumene					CAS #: 98-82-8		
23.441	23.441 (1.056)	105	712792	5.00000	4.998	80.00- 120.00	100.00
23.441	23.441 (1.056)	120	193457			0.00- 57.73	27.14
108 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
23.832	23.832 (1.073)	83	481503	5.00000	4.396	80.00- 120.00	100.00
23.832	23.832 (1.073)	85	309764			34.81- 94.81	64.33
111 Propylbenzene					CAS #: 103-65-1		
23.910	23.910 (1.077)	91	620905	5.00000	4.909	80.00- 120.00	100.00
23.910	23.910 (1.077)	120	138755			0.00- 53.83	22.35
113 4-Ethyltoluene					CAS #: 622-96-8		
24.039	24.039 (1.083)	105	422229	5.00000	4.550	80.00- 120.00	100.00
24.039	24.039 (1.083)	120	127957			0.18- 60.18	30.31
114 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
24.116	24.116 (1.086)	105	386412	5.00000	4.987	80.00- 120.00	100.00
24.116	24.116 (1.086)	120	179858			20.44- 80.44	46.55
120 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
24.529	24.529 (1.105)	105	351827	5.00000	5.606	80.00- 120.00	100.00

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

  120 1,2,4-Trimethylbenzene (continued)
 24.529  24.529 (1.105)   120    156202                    19.27-  79.27    44.40
-------------------------------------------------------------------------------
  122 1,3-Dichlorobenzene                          CAS #: 541-73-1
 24.902  24.902 (1.121)   146    204897 5.00000    3.384  80.00- 120.00   100.00
 24.902  24.902 (1.121)   148    132756                    38.48-  98.48    64.79
 24.902  24.902 (1.121)   111     90055                    10.49-  70.49    43.95
-------------------------------------------------------------------------------
  124 1,4-Dichlorobenzene                          CAS #: 106-46-7
 24.992  24.992 (1.125)   146    179618 5.00000    3.155  80.00- 120.00   100.00
 24.992  24.992 (1.125)   148    119735                    38.92-  98.92    66.66
 24.992  24.992 (1.125)   111     76082                    11.61-  71.61    42.36
-------------------------------------------------------------------------------
  127 alpha-chlorotoluene                          CAS #: 100-44-7
 25.126  25.126 (1.132)    91    202926 5.00000    3.337  80.00- 120.00   100.00
 25.126  25.126 (1.132)   126     41212                     0.00-  52.82    20.31
-------------------------------------------------------------------------------
  128 1,2-Dichlorobenzene                          CAS #: 95-50-1
 25.395  25.395 (1.144)   146    172816 5.00000    3.076  80.00- 120.00   100.00
 25.395  25.395 (1.144)   148    110365                    33.86-  93.86    63.86
 25.395  25.395 (1.144)   111     77780                    15.01-  75.01    45.01
-------------------------------------------------------------------------------
  131 1,2,4-Trichlorobenzene                       CAS #: 120-82-1
 27.077  27.077 (1.219)   180    155799 5.00000    3.779  80.00- 120.00   100.00
 27.077  27.077 (1.219)   182    145460                    64.14- 124.14    93.36
-------------------------------------------------------------------------------
  132 Hexachlorobutadiene                          CAS #: 87-68-3
 27.166  27.166 (1.223)   225    105201 5.00000    3.051  80.00- 120.00   100.00
 27.166  27.166 (1.223)   223     67568                    44.27- 104.27    64.23
-------------------------------------------------------------------------------
  133 Naphthalene                                  CAS #: 91-20-3
 27.368  27.368 (1.232)   128     38535 0.50000   0.3947  80.00- 120.00   100.00
 27.368  27.368 (1.232)   127      6327                     0.00-  47.41    16.42
-------------------------------------------------------------------------------
```

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdv.i
Lab File ID: v121602.d
Lab Smp Id: CCV
Analysis Type: VOA
Quant Type: ISTD
Operator: ef
Method File: /chem/msdv.i/16Dec2014.b/v14l1006d.m
Misc Info: 5.0ppbv (50ppbv)

Calibration Date: 16-DEC-2014
Calibration Time: 08:42
Client Smp ID: CCV
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
54 Bromochloromethan	109722	65833	153611	109722	0.00
71 1,4-Difluorobenze	445503	267302	623704	445503	0.00
92 Chlorobenzene-d5	361081	216649	505513	361081	0.00

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
54 Bromochloromethan	15.93	15.60	16.26	15.93	0.00
71 1,4-Difluorobenze	17.30	16.97	17.63	17.30	0.00
92 Chlorobenzene-d5	22.21	21.88	22.54	22.21	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/msdv.i/16Dec2014.b/v121602.d

Date : 16-DEC-2014 08:42

Client ID: CCV

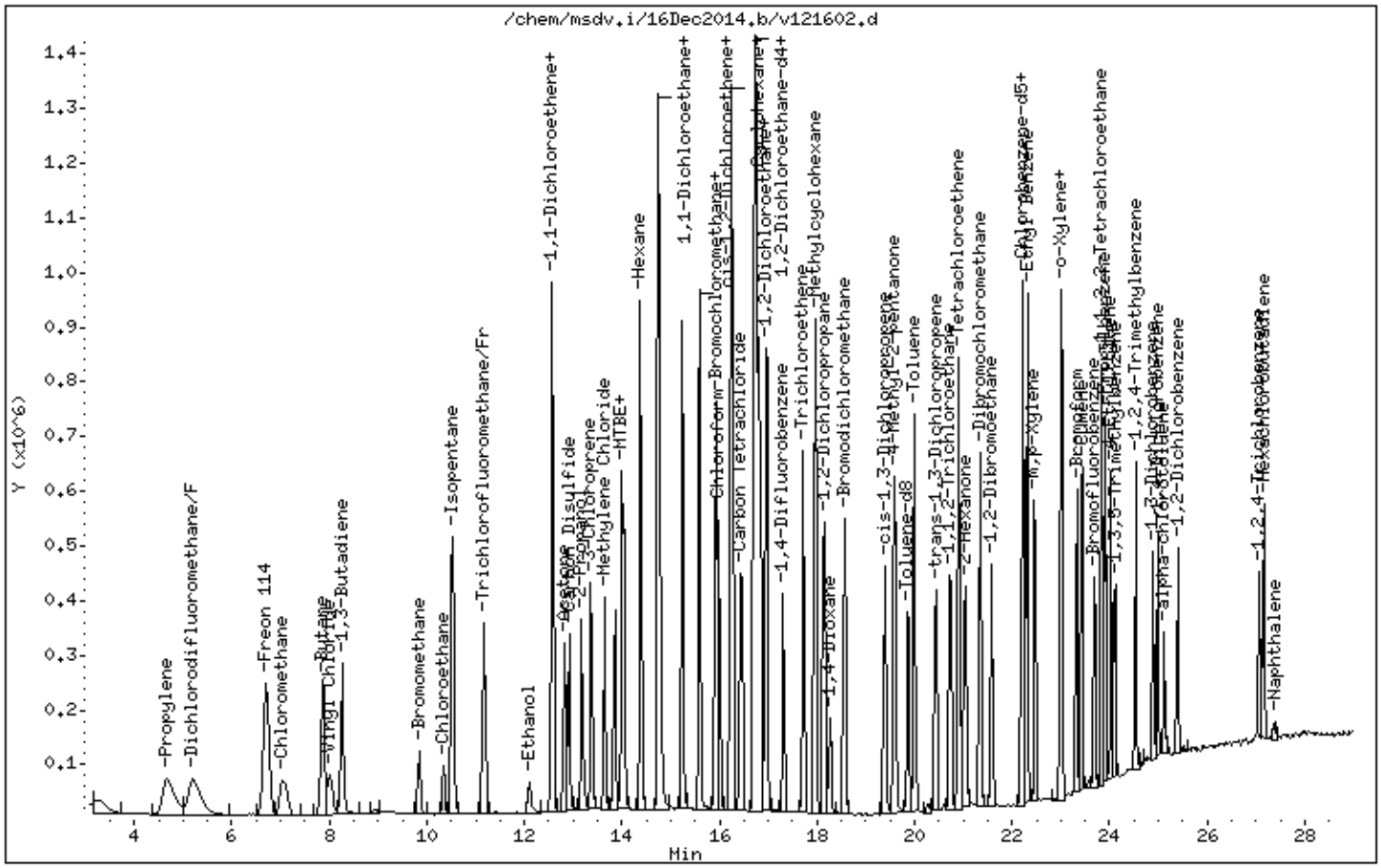
Instrument: msdv.i

Sample Info: 25mL #2687-48

Operator: ef

Column phase: RTx-624

Column diameter: 0.32



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Client Sample ID: LCS

Lab ID#: 1412152AR1-11A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**v121603**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 12/16/14 09:39 AM**	

Compound	%Recovery	Method Limits
Freon 12	110	70-130
Freon 114	102	70-130
Chloromethane	110	70-130
Vinyl Chloride	118	70-130
1,3-Butadiene	108	70-130
Bromomethane	115	70-130
Chloroethane	117	70-130
Freon 11	104	70-130
Ethanol	149 Q	70-130
Freon 113	101	70-130
1,1-Dichloroethene	108	70-130
Acetone	110	70-130
2-Propanol	124	70-130
Carbon Disulfide	111	70-130
3-Chloropropene	108	70-130
Methylene Chloride	114	70-130
Methyl tert-butyl ether	108	70-130
trans-1,2-Dichloroethene	108	70-130
Hexane	107	70-130
1,1-Dichloroethane	108	70-130
2-Butanone (Methyl Ethyl Ketone)	121	70-130
cis-1,2-Dichloroethene	109	70-130
Tetrahydrofuran	112	70-130
Chloroform	107	70-130
1,1,1-Trichloroethane	102	70-130
Cyclohexane	108	70-130
Carbon Tetrachloride	77	70-130
2,2,4-Trimethylpentane	106	70-130
Benzene	108	70-130
1,2-Dichloroethane	102	70-130
Heptane	106	70-130
Trichloroethene	99	70-130
1,2-Dichloropropane	110	70-130
1,4-Dioxane	112	70-130
Bromodichloromethane	106	70-130
cis-1,3-Dichloropropene	120	70-130
4-Methyl-2-pentanone	118	70-130
Toluene	107	70-130
trans-1,3-Dichloropropene	101	70-130
1,1,2-Trichloroethane	103	70-130
Tetrachloroethene	98	70-130
2-Hexanone	111	70-130

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Client Sample ID: LCS

Lab ID#: 1412152AR1-11A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**v121603**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 12/16/14 09:39 AM**	

Compound	%Recovery	Method Limits
Dibromochloromethane	92	70-130
1,2-Dibromoethane (EDB)	104	70-130
Chlorobenzene	99	70-130
Ethyl Benzene	103	70-130
m,p-Xylene	100	70-130
o-Xylene	106	70-130
Styrene	110	70-130
Bromoform	95	70-130
Cumene	103	70-130
1,1,2,2-Tetrachloroethane	103	70-130
Propylbenzene	106	70-130
4-Ethyltoluene	103	70-130
1,3,5-Trimethylbenzene	125	70-130
1,2,4-Trimethylbenzene	143 Q	70-130
1,3-Dichlorobenzene	97	70-130
1,4-Dichlorobenzene	92	70-130
alpha-Chlorotoluene	167 Q	70-130
1,2-Dichlorobenzene	97	70-130
1,2,4-Trichlorobenzene	116	70-130
Hexachlorobutadiene	88	70-130
Naphthalene	75	60-140

Q = Exceeds Quality Control limits.

Container Type: NA - Not Applicable

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

Report Date: 16-Dec-2014 10:18

Eurofins Air Toxics Inc.

RECOVERY REPORT

Client Name:
Client SDG: 16Dec2014
Sample Matrix: GAS
Fraction: VOA
Lab Smp Id: LCS
Client Smp ID: LCS
Level: LOW
Operator: ef
Data Type: MS DATA
SampleType: LCS
SpikeList File: AT12.spk
Quant Type: ISTD
Sublist File: AT12-Oxy.sub
Method File: /chem/msdv.i/16Dec2014.b/v14l1006d.m
Misc Info: 5.0ppbv (50ppbv)

SPIKE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
4 Dichlorodifluorome	5.000	5.477	109.55	70-130
3 Propylene	5.000	5.932	118.65	60-140
6 Freon 114	5.000	5.084	101.69	70-130
8 Chloromethane	5.000	5.503	110.05	70-130
10 Vinyl Chloride	5.000	5.883	117.67	70-130
11 1,3-Butadiene	5.000	5.423	108.45	70-130
12 Bromomethane	5.000	5.750	115.00	70-130
17 Chloroethane	5.000	5.848	116.96	70-130
20 Trichlorofluoromet	5.000	5.176	103.51	70-130
24 Ethanol	5.000	7.456	149.13*	70-130
28 Freon 113	5.000	5.037	100.74	70-130
30 1,1-Dichloroethene	5.000	5.429	108.59	70-130
31 Acetone	5.000	5.510	110.21	70-130
33 Carbon Disulfide	5.000	5.549	110.99	70-130
34 2-Propanol	5.000	6.180	123.60	70-130
35 3-Chloroprene	5.000	5.403	108.05	70-130
37 Methylene Chloride	5.000	5.677	113.55	70-130
39 MTBE	5.000	5.415	108.30	70-130
40 trans-1,2-Dichloro	5.000	5.406	108.13	70-130
43 Hexane	5.000	5.334	106.68	70-130
46 1,1-Dichloroethane	5.000	5.406	108.13	70-130
47 Vinyl Acetate	5.000	5.824	116.48	60-140
50 cis-1,2-Dichloroet	5.000	5.460	109.21	70-130
51 2-Butanone	5.000	6.057	121.14	70-130
53 Tetrahydrofuran	5.000	5.628	112.56	70-130
55 Chloroform	5.000	5.358	107.15	70-130
57 Cyclohexane	5.000	5.406	108.12	70-130
58 1,1,1-Trichloroeth	5.000	5.086	101.73	70-130
59 Carbon Tetrachlori	5.000	3.870	77.40	70-130
63 2,2,4-Trimethylpen	5.000	5.310	106.20	70-130
64 Benzene	5.000	5.407	108.13	70-130
69 Heptane	5.000	5.315	106.30	70-130
68 1,2-Dichloroethane	5.000	5.127	102.54	70-130

SPIKE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
72 Trichloroethene	5.000	4.955	99.11	70-130
74 1,2-Dichloropropan	5.000	5.478	109.56	70-130
75 1,4-Dioxane	5.000	5.604	112.08	70-130
77 Bromodichlorometha	5.000	5.285	105.70	70-130
78 cis-1,3-Dichloropr	5.000	5.977	119.54	70-130
79 4-Methyl-2-pentano	5.000	5.902	118.04	70-130
81 Toluene	5.000	5.368	107.35	70-130
82 trans-1,3-Dichloro	5.000	5.056	101.12	70-130
84 1,1,2-Trichloroeth	5.000	5.138	102.75	70-130
87 2-Hexanone	5.000	5.553	111.07	70-130
86 Tetrachloroethene	5.000	4.881	97.63	70-130
89 Dibromochlorometha	5.000	4.622	92.45	70-130
90 1,2-Dibromoethane	5.000	5.208	104.16	70-130
93 Chlorobenzene	5.000	4.956	99.13	70-130
95 Ethyl Benzene	5.000	5.148	102.96	70-130
96 m,p-Xylene	5.000	5.015	100.30	70-130
100 o-Xylene	5.000	5.310	106.19	70-130
101 Styrene	5.000	5.504	110.09	70-130
102 Bromoform	5.000	4.732	94.65	70-130
103 Cumene	5.000	5.132	102.64	70-130
108 1,1,2,2-Tetrachlor	5.000	5.170	103.39	70-130
111 Propylbenzene	5.000	5.284	105.67	70-130
113 4-Ethyltoluene	5.000	5.170	103.39	70-130
114 1,3,5-Trimethylben	5.000	6.252	125.04	70-130
120 1,2,4-Trimethylben	5.000	7.142	142.85*	70-130
122 1,3-Dichlorobenzen	5.000	4.844	96.88	70-130
124 1,4-Dichlorobenzen	5.000	4.587	91.74	70-130
127 alpha-chlorotoluen	5.000	8.345	166.91*	70-130
128 1,2-Dichlorobenzen	5.000	4.838	96.75	70-130
131 1,2,4-Trichloroben	5.000	5.816	116.33	70-130
132 Hexachlorobutadien	5.000	4.412	88.25	70-130
133 Naphthalene	0.5000	0.3766	75.31	60-140
18 Isopentane	5.000	5.577	111.54	60-140
9 Butane	5.000	5.715	114.30	60-140
73 Methylcyclohexane	5.000	5.486	109.71	60-140

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 65 1,2-Dichloroethane	5.000	5.053	101.06	70-130
$ 80 Toluene-d8	5.000	5.353	107.05	70-130
$ 106 Bromofluorobenzene	5.000	5.056	101.12	70-130

Eurofins Air Toxics Inc.

TO15/Modified TO-14A

Data file : /chem/msdv.i/16Dec2014.b/v121603.d
Lab Smp Id: LCS Client Smp ID: LCS
Inj Date : 16-DEC-2014 09:39
Operator : ef Inst ID: msdv.i
Smp Info : 25mL #2677-274
Misc Info : 5.0ppbv (50ppbv)
Comment : Low Level GC-MS
Method : /chem/msdv.i/16Dec2014.b/v14l1006d.m
Meth Date : 16-Dec-2014 10:10 efinn Quant Type: ISTD
Cal Date : 03-NOV-2014 11:17 Cal File: v110307.d
Als bottle: 1 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT12-Oxy.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
* 54 Bromochloromethane						CAS #: 74-97-5	
15.933	15.933 (1.000)	130	108561	5.00000		80.00- 120.00	100.00
15.933	15.933 (1.000)	128	83979			47.55- 107.55	77.36
15.933	15.933 (1.000)	49	282342			213.64- 273.64	260.08
* 71 1,4-Difluorobenzene						CAS #: 540-36-3	
17.305	17.305 (1.000)	114	440956	5.00000		80.00- 120.00	100.00
17.305	17.305 (1.000)	88	75717			0.00- 46.17	17.17
* 92 Chlorobenzene-d5						CAS #: 3114-55-4	
22.205	22.205 (1.000)	117	353604	5.00000		80.00- 120.00	100.00
22.205	22.205 (1.000)	82	228389			28.56- 88.56	64.59
$ 65 1,2-Dichloroethane-d4						CAS #: 17060-07-0	
16.756	16.756 (1.052)	65	201329	5.05314	5.053	80.00- 120.00	100.00
16.756	16.756 (1.052)	67	110885			28.37- 88.37	55.08
$ 80 Toluene-d8						CAS #: 2037-26-5	
19.879	19.879 (1.149)	98	453802	5.35274	5.353	80.00- 120.00	100.00
19.856	19.879 (1.147)	70	57301			0.00- 41.90	12.63

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

$  80 Toluene-d8 (continued)
 19.856  19.879 (1.147)   100    286631                    34.60-  94.60    63.16
-------------------------------------------------------------------------------
$ 106 Bromofluorobenzene                            CAS #: 460-00-4
 23.704  23.704 (1.067)   174    153744 5.05579    5.056  80.00- 120.00   100.00
 23.678  23.704 (1.066)    95    217006                  113.85- 173.85   141.15
 23.704  23.704 (1.067)   176    147775                    68.89- 128.89    96.12
-------------------------------------------------------------------------------
    3 Propylene                                     CAS #: 115-07-1
  4.673   4.711 (0.293)    41    361329 5.93256    5.932  80.00- 120.00   100.00
  4.673   4.711 (0.293)    42    234756                    35.18-  95.18    64.97
  4.673   4.711 (0.293)    39    259956                    44.12- 104.12    71.94
-------------------------------------------------------------------------------
    4 Dichlorodifluoromethane/Fr12                  CAS #: 75-71-8
  5.202   5.202 (0.326)    85    557108 5.47744    5.477  80.00- 120.00   100.00
  5.202   5.202 (0.326)    87    177706                     1.57-  61.57    31.90
-------------------------------------------------------------------------------
    6 Freon 114                                     CAS #: 76-14-2
  6.713   6.713 (0.421)   135    369321 5.08454    5.084  80.00- 120.00   100.00
  6.713   6.713 (0.421)   137    117655                     0.53-  60.53    31.86
  6.713   6.713 (0.421)    85    534361                  121.37- 181.37   144.69
-------------------------------------------------------------------------------
    8 Chloromethane                                 CAS #: 74-87-3
  7.052   7.052 (0.443)    50    337278 5.50265    5.503  80.00- 120.00   100.00
  7.052   7.052 (0.443)    52    103093                     1.81-  61.81    30.57
-------------------------------------------------------------------------------
    9 Butane                                        CAS #: 106-97-8
  7.853   7.884 (0.493)    58     58705 5.71516    5.715  80.00- 120.00   100.00
  7.853   7.884 (0.493)    43    673843                 1065.18-1125.18  1147.84
-------------------------------------------------------------------------------
   10 Vinyl Chloride                                CAS #: 75-01-4
  8.009   8.009 (0.503)    62    269090 5.88338    5.883  80.00- 120.00   100.00
  8.009   8.009 (0.503)    64     81732                     0.00-  59.52    30.37
-------------------------------------------------------------------------------
   11 1,3-Butadiene                                 CAS #: 106-99-0
  8.257   8.257 (0.518)    54    243144 5.42263    5.423  80.00- 120.00   100.00
  8.257   8.257 (0.518)    39    361274                  107.15- 167.15   148.58
-------------------------------------------------------------------------------
   12 Bromomethane                                  CAS #: 74-83-9
  9.834   9.834 (0.617)    94    161232 5.75016    5.750  80.00- 120.00   100.00
  9.834   9.834 (0.617)    96    153558                    60.42- 120.42    95.24
-------------------------------------------------------------------------------
   17 Chloroethane                                  CAS #: 75-00-3
 10.340  10.340 (0.649)    64    124305 5.84793    5.848  80.00- 120.00   100.00
 10.340  10.340 (0.649)    66     37440                     0.00-  59.90    30.12
-------------------------------------------------------------------------------
```

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
18 Isopentane					CAS #: 78-78-4		
10.533	10.533 (0.661)	57	244196	5.57690	5.577	80.00- 120.00	100.00
10.533	10.533 (0.661)	43	516487			171.32- 231.32	211.50
10.533	10.533 (0.661)	42	459158			150.03- 210.03	188.03
20 Trichlorofluoromethane/Fr11					CAS #: 75-69-4		
11.184	11.183 (0.702)	101	541869	5.17575	5.176	80.00- 120.00	100.00
11.184	11.183 (0.702)	103	359727			34.11- 94.11	66.39
24 Ethanol					CAS #: 64-17-5		
12.101	12.101 (0.760)	45	165484	7.45648	7.456	80.00- 120.00	100.00(R)
12.101	12.101 (0.760)	46	63278			8.51- 68.51	38.24
12.101	12.101 (0.760)	43	31445			0.00- 54.10	19.00
30 1,1-Dichloroethene					CAS #: 75-35-4		
12.568	12.568 (0.789)	98	127026	5.42950	5.429	80.00- 120.00	100.00
12.568	12.568 (0.789)	61	451790			320.65- 380.65	355.67
12.568	12.568 (0.789)	96	203023			134.30- 194.30	159.83
28 Freon 113					CAS #: 76-13-1		
12.568	12.568 (0.789)	151	317441	5.03710	5.037	80.00- 120.00	100.00
12.568	12.568 (0.789)	153	199686			33.65- 93.65	62.91
12.568	12.568 (0.789)	101	422962			96.37- 156.37	133.24
31 Acetone					CAS #: 67-64-1		
12.816	12.816 (0.804)	58	141344	5.51057	5.510	80.00- 120.00	100.00
12.816	12.816 (0.804)	43	638255			413.15- 473.15	451.56
33 Carbon Disulfide					CAS #: 75-15-0		
12.925	12.925 (0.811)	76	552200	5.54928	5.549	80.00- 120.00	100.00
35 3-Chloroprene					CAS #: 107-05-1		
13.365	13.365 (0.839)	76	77581	5.40260	5.403	80.00- 120.00	100.00
13.365	13.365 (0.839)	41	463473			547.03- 607.03	597.40
34 2-Propanol					CAS #: 67-63-0		
13.173	13.173 (0.827)	45	734039	6.18014	6.180	80.00- 120.00	100.00
13.173	13.173 (0.827)	43	145018			0.00- 50.74	19.76
13.173	13.173 (0.827)	59	22174			0.00- 32.83	3.02
37 Methylene Chloride					CAS #: 75-09-2		
13.640	13.640 (0.856)	84	187380	5.67745	5.677	80.00- 120.00	100.00
13.640	13.640 (0.856)	49	454113			212.37- 272.37	242.35
13.640	13.640 (0.856)	51	131026			43.31- 103.31	69.93
39 MTBE					CAS #: 1634-04-4		
13.997	13.996 (0.878)	73	641224	5.41521	5.415	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
39 MTBE (continued)							
13.997	13.996 (0.878)	57	201070			2.99- 62.99	31.36
13.997	13.996 (0.878)	41	274341			12.12- 72.12	42.78
40 trans-1,2-Dichloroethene					CAS #: 156-60-5		
14.051	14.051 (0.882)	98	119678	5.40651	5.406	80.00- 120.00	100.00
14.051	14.051 (0.882)	61	364111			293.73- 353.73	304.24
14.051	14.051 (0.882)	96	191992			146.88- 206.88	160.42
43 Hexane					CAS #: 110-54-3		
14.381	14.381 (0.903)	57	505413	5.33416	5.334	80.00- 120.00	100.00
14.381	14.381 (0.903)	43	462362			57.65- 117.65	91.48
14.381	14.381 (0.903)	86	56790			0.00- 40.67	11.24
46 1,1-Dichloroethane					CAS #: 75-34-3		
14.765	14.765 (0.927)	63	497111	5.40648	5.406	80.00- 120.00	100.00
14.765	14.765 (0.927)	65	151198			0.37- 60.37	30.42
47 Vinyl Acetate					CAS #: 108-05-4		
14.793	14.793 (0.928)	86	54658	5.82379	5.824	80.00- 120.00	100.00
14.793	14.793 (0.928)	42	95110			220.92- 280.92	174.01
14.793	14.793 (0.928)	43	1167492			3282.47-3342.47	2135.98
50 cis-1,2-Dichloroethene					CAS #: 156-59-2		
15.592	15.592 (0.979)	98	160404	5.46057	5.460	80.00- 120.00	100.00
15.592	15.592 (0.979)	61	440369			248.69- 308.69	274.54
15.592	15.592 (0.979)	96	256870			126.98- 186.98	160.14
51 2-Butanone					CAS #: 78-93-3		
15.592	15.571 (0.979)	72	115638	6.05711	6.057	80.00- 120.00	100.00
15.592	15.571 (0.979)	43	888824			794.80- 854.80	768.63
15.571	15.571 (0.977)	57	51035			18.01- 78.01	44.13
53 Tetrahydrofuran					CAS #: 109-99-9		
15.933	15.933 (1.000)	42	553685	5.62806	5.628	80.00- 120.00	100.00
15.933	15.933 (1.000)	71	107037			0.00- 49.03	19.33
15.933	15.933 (1.000)	72	117980			0.00- 51.35	21.31
55 Chloroform					CAS #: 67-66-3		
15.995	15.995 (1.004)	83	490161	5.35769	5.358	80.00- 120.00	100.00
15.995	15.995 (1.004)	85	310499			33.33- 93.33	63.35
57 Cyclohexane					CAS #: 110-82-7		
16.242	16.242 (1.019)	84	311074	5.40622	5.406	80.00- 120.00	100.00
16.242	16.242 (1.019)	56	565968			157.43- 217.43	181.94
16.242	16.242 (1.019)	41	441708			105.99- 165.99	141.99

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

   58 1,1,1-Trichloroethane                        CAS #: 71-55-6
 16.242  16.242 (1.019)    97    485904 5.08627    5.086  80.00- 120.00   100.00
 16.242  16.242 (1.019)    99    310203                   32.16-  92.16    63.84
-------------------------------------------------------------------------------
   59 Carbon Tetrachloride                         CAS #: 56-23-5
 16.457  16.457 (1.033)   119    354626 3.86987    3.870  80.00- 120.00   100.00
 16.457  16.457 (1.033)   117    362794                   69.67- 129.67   102.30
                   Sum of Peak Concentrations =    3.870
-------------------------------------------------------------------------------
   63 2,2,4-Trimethylpentane                       CAS #: 540-84-1
 16.728  16.728 (1.050)    56    532435 5.30985    5.310  80.00- 120.00   100.00
 16.728  16.728 (1.050)    57   1612398                  258.69- 318.69   302.83
 16.728  16.728 (1.050)    41    593364                   79.91- 139.91   111.44
-------------------------------------------------------------------------------
   64 Benzene                                      CAS #: 71-43-2
 16.756  16.756 (0.968)    78    703551 5.40660    5.407  80.00- 120.00   100.00
 16.756  16.756 (0.968)    77    169379                    0.00-  53.73    24.07
-------------------------------------------------------------------------------
   68 1,2-Dichloroethane                           CAS #: 107-06-2
 16.865  16.865 (0.975)    62    404307 5.12686    5.127  80.00- 120.00   100.00
 16.865  16.865 (0.975)    64    123221                    1.11-  61.11    30.48
-------------------------------------------------------------------------------
   69 Heptane                                      CAS #: 142-82-5
 16.948  16.948 (0.979)    57    298074 5.31478    5.315  80.00- 120.00   100.00
 16.975  16.948 (0.981)   100     63562                    0.00-  51.27    21.32
 16.948  16.948 (0.979)    43    805864                  235.24- 295.24   270.36
-------------------------------------------------------------------------------
   72 Trichloroethene                              CAS #: 79-01-6
 17.716  17.716 (1.024)   130    290281 4.95545    4.955  80.00- 120.00   100.00
 17.716  17.716 (1.024)    95    308677                   71.16- 131.16   106.34
 17.716  17.716 (1.024)    97    199535                   33.04-  93.04    68.74
-------------------------------------------------------------------------------
   73 Methylcyclohexane                            CAS #: 108-87-2
 17.964  17.964 (1.038)    83    421990 5.48575    5.486  80.00- 120.00   100.00
 17.964  17.964 (1.038)    98    184197                   15.02-  75.02    43.65
 17.964  17.964 (1.038)    55    519413                   95.64- 155.64   123.09
-------------------------------------------------------------------------------
   74 1,2-Dichloropropane                          CAS #: 78-87-5
 18.156  18.156 (1.049)    63    326990 5.47786    5.478  80.00- 120.00   100.00
 18.156  18.156 (1.049)    62    236327                   45.17- 105.17    72.27
 18.156  18.156 (1.049)    41    293475                   61.13- 121.13    89.75
-------------------------------------------------------------------------------
   75 1,4-Dioxane                                  CAS #: 123-91-1
 18.266  18.266 (1.056)    88    168120 5.60408    5.604  80.00- 120.00   100.00
 18.266  18.266 (1.056)    58    165297                   72.13- 132.13    98.32
 18.266  18.266 (1.056)    57     58786                    4.41-  64.41    34.97
-------------------------------------------------------------------------------
```

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
77 Bromodichloromethane					CAS #: 75-27-4		
18.568	18.568 (1.073)	83	522291	5.28502	5.285	80.00- 120.00	100.00
18.568	18.568 (1.073)	85	330473			32.12- 92.12	63.27
78 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
19.386	19.386 (1.120)	75	403686	5.97686	5.977	80.00- 120.00	100.00
19.386	19.386 (1.120)	77	125149			1.25- 61.25	31.00
19.386	19.386 (1.120)	39	419560			72.10- 132.10	103.93
79 4-Methyl-2-pentanone					CAS #: 108-10-1		
19.587	19.587 (1.132)	43	1084029	5.90185	5.902	80.00- 120.00	100.00
19.587	19.587 (1.132)	58	288546			0.00- 57.24	26.62
19.587	19.587 (1.132)	85	90218			0.00- 38.20	8.32
81 Toluene					CAS #: 108-88-3		
19.991	19.991 (1.155)	91	771000	5.36764	5.368	80.00- 120.00	100.00
19.991	19.991 (1.155)	92	443643			28.60- 88.60	57.54
82 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
20.435	20.435 (0.920)	75	368531	5.05613	5.056	80.00- 120.00	100.00
20.435	20.435 (0.920)	77	121621			5.48- 65.48	33.00
20.435	20.435 (0.920)	39	365133			67.43- 127.43	99.08
84 1,1,2-Trichloroethane					CAS #: 79-00-5		
20.757	20.757 (0.935)	97	285957	5.13760	5.138	80.00- 120.00	100.00
20.757	20.757 (0.935)	99	174887			32.13- 92.13	61.16
20.757	20.757 (0.935)	83	256262			58.79- 118.79	89.62
86 Tetrachloroethene					CAS #: 127-18-4		
20.901	20.901 (0.941)	166	351267	4.88129	4.881	80.00- 120.00	100.00
20.901	20.901 (0.941)	129	282590			47.04- 107.04	80.45
20.901	20.901 (0.941)	131	271409			46.95- 106.95	77.27
87 2-Hexanone					CAS #: 591-78-6		
21.044	21.044 (0.948)	58	346123	5.55327	5.553	80.00- 120.00	100.00
21.044	21.044 (0.948)	43	929869			242.48- 302.48	268.65
21.044	21.044 (0.948)	100	48777			0.00- 43.88	14.09
89 Dibromochloromethane					CAS #: 124-48-1		
21.367	21.367 (0.962)	129	478846	4.62234	4.622	80.00- 120.00	100.00
21.367	21.367 (0.962)	127	374577			50.38- 110.38	78.23
90 1,2-Dibromoethane					CAS #: 106-93-4		
21.583	21.583 (0.972)	107	451574	5.20793	5.208	80.00- 120.00	100.00
21.583	21.583 (0.972)	109	413363			62.69- 122.69	91.54

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
93 Chlorobenzene					CAS #: 108-90-7		
22.233	22.233 (1.001)	112	575542	4.95641	4.956	80.00- 120.00	100.00
22.233	22.233 (1.001)	114	186159			1.62- 61.62	32.35
22.233	22.233 (1.001)	77	381232			36.56- 96.56	66.24
95 Ethyl Benzene					CAS #: 100-41-4		
22.315	22.315 (1.005)	106	268318	5.14817	5.148	80.00- 120.00	100.00
22.315	22.315 (1.005)	91	864873			292.36- 352.36	322.33
96 m,p-Xylene					CAS #: 108-38-3		
22.452	22.452 (1.011)	106	257722	5.01476	5.015	80.00- 120.00	100.00
22.452	22.452 (1.011)	91	548900			164.15- 224.15	212.98
100 o-Xylene					CAS #: 95-47-6		
23.001	23.001 (1.036)	106	253914	5.30954	5.310	80.00- 120.00	100.00
23.001	23.001 (1.036)	91	549066			186.63- 246.63	216.24
101 Styrene					CAS #: 100-42-5		
23.029	23.029 (1.037)	104	385110	5.50451	5.504	80.00- 120.00	100.00
23.029	23.029 (1.037)	78	205104			28.70- 88.70	53.26
102 Bromoform					CAS #: 75-25-2		
23.331	23.331 (1.051)	173	415525	4.73248	4.732	80.00- 120.00	100.00
23.331	23.331 (1.051)	171	210582			20.40- 80.40	50.68
103 Cumene					CAS #: 98-82-8		
23.441	23.441 (1.056)	105	716714	5.13222	5.132	80.00- 120.00	100.00
23.441	23.441 (1.056)	120	194781			0.00- 57.73	27.18
108 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
23.833	23.832 (1.073)	83	554588	5.16974	5.170	80.00- 120.00	100.00
23.833	23.832 (1.073)	85	356104			34.81- 94.81	64.21
111 Propylbenzene					CAS #: 103-65-1		
23.910	23.910 (1.077)	91	654488	5.28363	5.284	80.00- 120.00	100.00
23.910	23.910 (1.077)	120	143352			0.00- 53.83	21.90
113 4-Ethyltoluene					CAS #: 622-96-8		
24.039	24.039 (1.083)	105	469785	5.16960	5.170	80.00- 120.00	100.00
24.039	24.039 (1.083)	120	143462			0.18- 60.18	30.54
114 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
24.116	24.116 (1.086)	105	474389	6.25220	6.252	80.00- 120.00	100.00
24.116	24.116 (1.086)	120	216026			20.44- 80.44	45.54
120 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
24.529	24.529 (1.105)	105	438921	7.14235	7.142	80.00- 120.00	100.00(R)

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
120 1,2,4-Trimethylbenzene (continued)							
24.529	24.529 (1.105)	120	195518			19.27- 79.27	44.55
122 1,3-Dichlorobenzene					CAS #: 541-73-1		
24.902	24.902 (1.121)	146	287239	4.84411	4.844	80.00- 120.00	100.00
24.902	24.902 (1.121)	148	183972			38.48- 98.48	64.05
24.902	24.902 (1.121)	111	121857			10.49- 70.49	42.42
124 1,4-Dichlorobenzene					CAS #: 106-46-7		
24.992	24.992 (1.125)	146	255691	4.58683	4.587	80.00- 120.00	100.00
24.992	24.992 (1.125)	148	165132			38.92- 98.92	64.58
24.992	24.992 (1.125)	111	107969			11.61- 71.61	42.23
127 alpha-chlorotoluene					CAS #: 100-44-7		
25.126	25.126 (1.132)	91	497047	8.34549	8.345	80.00- 120.00	100.00(R)
25.126	25.126 (1.132)	126	92591			0.00- 52.82	18.63
128 1,2-Dichlorobenzene					CAS #: 95-50-1		
25.395	25.395 (1.144)	146	266149	4.83759	4.838	80.00- 120.00	100.00
25.395	25.395 (1.144)	148	166958			33.86- 93.86	62.73
25.395	25.395 (1.144)	111	116265			15.01- 75.01	43.68
131 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
27.077	27.077 (1.219)	180	234834	5.81634	5.816	80.00- 120.00	100.00
27.077	27.077 (1.219)	182	233179			64.14- 124.14	99.30
132 Hexachlorobutadiene					CAS #: 87-68-3		
27.166	27.166 (1.223)	225	148999	4.41248	4.412	80.00- 120.00	100.00
27.166	27.166 (1.223)	223	93341			44.27- 104.27	62.65
133 Naphthalene					CAS #: 91-20-3		
27.391	27.368 (1.234)	128	36005	0.37656	0.3766	80.00- 120.00	100.00
27.391	27.368 (1.234)	127	6502			0.00- 47.41	18.06

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdv.i
Lab File ID: v121603.d
Lab Smp Id: LCS
Analysis Type: VOA
Quant Type: ISTD
Operator: ef
Method File: /chem/msdv.i/16Dec2014.b/v14l1006d.m
Misc Info: 5.0ppbv (50ppbv)

Calibration Date: 16-DEC-2014
Calibration Time: 08:42
Client Smp ID: LCS
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
54 Bromochloromethan	109722	65833	153611	108561	-1.06
71 1,4-Difluorobenze	445503	267302	623704	440956	-1.02
92 Chlorobenzene-d5	361081	216649	505513	353604	-2.07

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
54 Bromochloromethan	15.93	15.60	16.26	15.93	0.00
71 1,4-Difluorobenze	17.30	16.97	17.63	17.30	0.00
92 Chlorobenzene-d5	22.21	21.88	22.54	22.21	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/msdv.i/16Dec2014.b/v121603.d

Date : 16-DEC-2014 09:39

Client ID: LCS

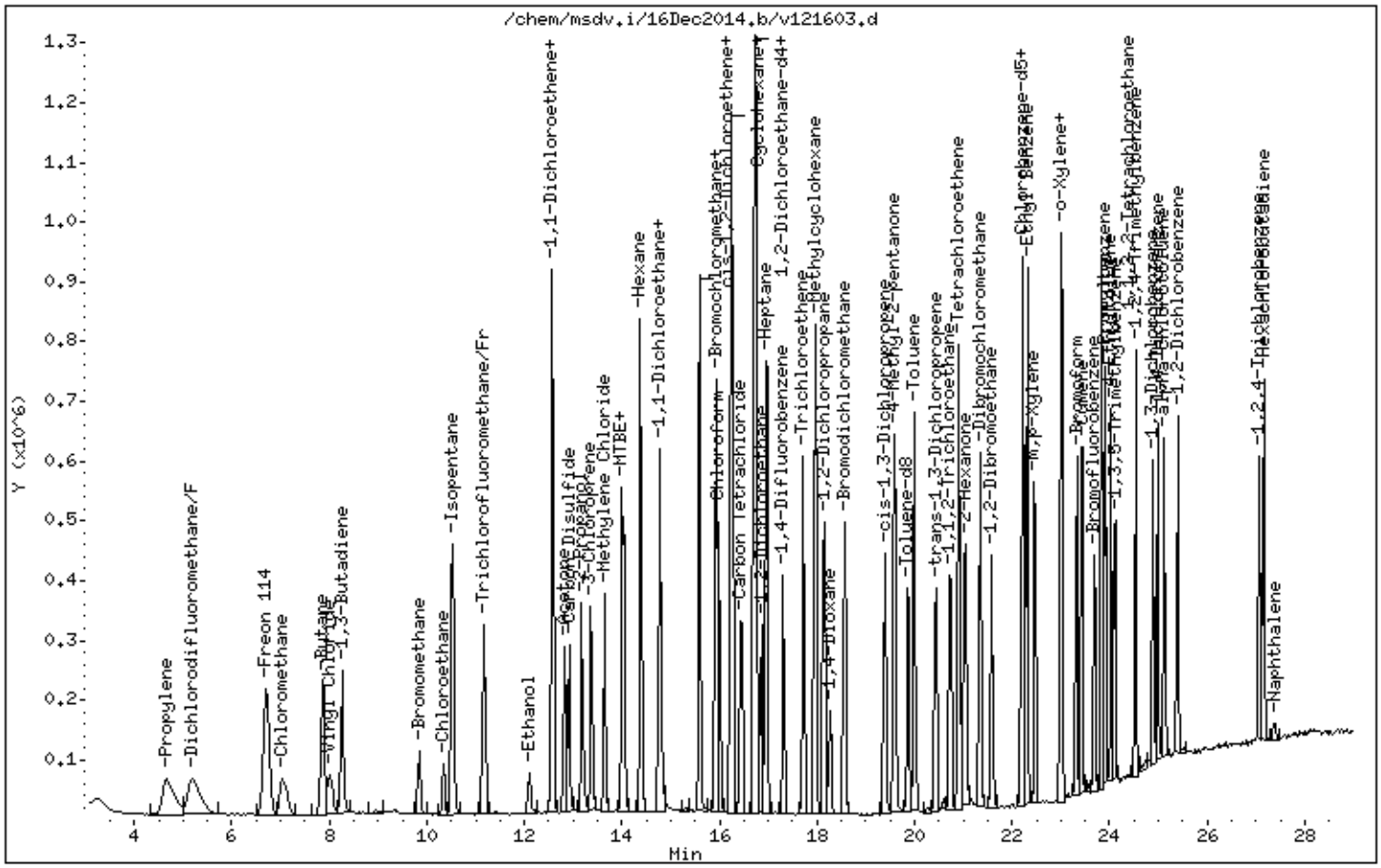
Instrument: msdv.i

Sample Info: 25mL #2677-274

Operator: ef

Column phase: RTx-624

Column diameter: 0.32



eurofins | Air Toxics

Client Sample ID: LCSD

Lab ID#: 1412152AR1-11AA

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**v121604**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 12/16/14 10:21 AM**	

Compound	%Recovery	Method Limits
Freon 12	108	70-130
Freon 114	100	70-130
Chloromethane	107	70-130
Vinyl Chloride	115	70-130
1,3-Butadiene	113	70-130
Bromomethane	111	70-130
Chloroethane	117	70-130
Freon 11	104	70-130
Ethanol	152 Q	70-130
Freon 113	102	70-130
1,1-Dichloroethene	109	70-130
Acetone	112	70-130
2-Propanol	126	70-130
Carbon Disulfide	110	70-130
3-Chloropropene	107	70-130
Methylene Chloride	114	70-130
Methyl tert-butyl ether	110	70-130
trans-1,2-Dichloroethene	106	70-130
Hexane	108	70-130
1,1-Dichloroethane	107	70-130
2-Butanone (Methyl Ethyl Ketone)	111	70-130
cis-1,2-Dichloroethene	109	70-130
Tetrahydrofuran	111	70-130
Chloroform	105	70-130
1,1,1-Trichloroethane	102	70-130
Cyclohexane	104	70-130
Carbon Tetrachloride	77	70-130
2,2,4-Trimethylpentane	102	70-130
Benzene	110	70-130
1,2-Dichloroethane	102	70-130
Heptane	107	70-130
Trichloroethene	101	70-130
1,2-Dichloropropane	110	70-130
1,4-Dioxane	112	70-130
Bromodichloromethane	105	70-130
cis-1,3-Dichloropropene	122	70-130
4-Methyl-2-pentanone	118	70-130
Toluene	109	70-130
trans-1,3-Dichloropropene	101	70-130
1,1,2-Trichloroethane	103	70-130
Tetrachloroethene	97	70-130
2-Hexanone	110	70-130

eurofins | Air Toxics

Client Sample ID: LCSD

Lab ID#: 1412152AR1-11AA

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**v121604**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 12/16/14 10:21 AM**	

Compound	**%Recovery**	**Method Limits**
Dibromochloromethane	95	70-130
1,2-Dibromoethane (EDB)	103	70-130
Chlorobenzene	98	70-130
Ethyl Benzene	102	70-130
m,p-Xylene	100	70-130
o-Xylene	104	70-130
Styrene	108	70-130
Bromoform	93	70-130
Cumene	104	70-130
1,1,2,2-Tetrachloroethane	101	70-130
Propylbenzene	106	70-130
4-Ethyltoluene	102	70-130
1,3,5-Trimethylbenzene	126	70-130
1,2,4-Trimethylbenzene	142 Q	70-130
1,3-Dichlorobenzene	95	70-130
1,4-Dichlorobenzene	89	70-130
alpha-Chlorotoluene	159 Q	70-130
1,2-Dichlorobenzene	96	70-130
1,2,4-Trichlorobenzene	117	70-130
Hexachlorobutadiene	88	70-130
Naphthalene	75	60-140

Q = Exceeds Quality Control limits.

Container Type: NA - Not Applicable

Surrogates	**%Recovery**	**Method Limits**
1,2-Dichloroethane-d4	99	70-130
Toluene-d8	106	70-130
4-Bromofluorobenzene	98	70-130

Report Date: 16-Dec-2014 11:00

Eurofins Air Toxics Inc.

RECOVERY REPORT

Client Name:
Client SDG: 16Dec2014
Sample Matrix: GAS
Fraction: VOA
Lab Smp Id: LCSD
Client Smp ID: LCSD
Level: LOW
Operator: ef
Data Type: MS DATA
SampleType: LCSD
SpikeList File: AT12.spk
Quant Type: ISTD
Sublist File: AT12-Oxy.sub
Method File: /chem/msdv.i/16Dec2014.b/v14l1006d.m
Misc Info: 5.0ppbv (50ppbv)

SPIKE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
4 Dichlorodifluorome	5.000	5.396	107.93	70-130
3 Propylene	5.000	5.765	115.31	60-140
6 Freon 114	5.000	4.990	99.80	70-130
8 Chloromethane	5.000	5.331	106.61	70-130
10 Vinyl Chloride	5.000	5.748	114.95	70-130
11 1,3-Butadiene	5.000	5.660	113.20	70-130
12 Bromomethane	5.000	5.542	110.84	70-130
17 Chloroethane	5.000	5.860	117.21	70-130
20 Trichlorofluoromet	5.000	5.194	103.89	70-130
24 Ethanol	5.000	7.609	152.18*	70-130
28 Freon 113	5.000	5.094	101.87	70-130
30 1,1-Dichloroethene	5.000	5.464	109.29	70-130
31 Acetone	5.000	5.582	111.64	70-130
33 Carbon Disulfide	5.000	5.528	110.57	70-130
34 2-Propanol	5.000	6.311	126.23	70-130
35 3-Chloroprene	5.000	5.356	107.12	70-130
37 Methylene Chloride	5.000	5.718	114.37	70-130
39 MTBE	5.000	5.488	109.76	70-130
40 trans-1,2-Dichloro	5.000	5.317	106.34	70-130
43 Hexane	5.000	5.412	108.24	70-130
46 1,1-Dichloroethane	5.000	5.349	106.97	70-130
47 Vinyl Acetate	5.000	5.591	111.82	60-140
50 cis-1,2-Dichloroet	5.000	5.470	109.40	70-130
51 2-Butanone	5.000	5.539	110.79	70-130
53 Tetrahydrofuran	5.000	5.537	110.74	70-130
55 Chloroform	5.000	5.274	105.49	70-130
57 Cyclohexane	5.000	5.221	104.42	70-130
58 1,1,1-Trichloroeth	5.000	5.105	102.09	70-130
59 Carbon Tetrachlori	5.000	3.839	76.77	70-130
63 2,2,4-Trimethylpen	5.000	5.114	102.28	70-130
64 Benzene	5.000	5.496	109.93	70-130
69 Heptane	5.000	5.354	107.07	70-130
68 1,2-Dichloroethane	5.000	5.110	102.20	70-130

SPIKE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
72 Trichloroethene	5.000	5.051	101.03	70-130
74 1,2-Dichloropropan	5.000	5.518	110.35	70-130
75 1,4-Dioxane	5.000	5.590	111.81	70-130
77 Bromodichlorometha	5.000	5.239	104.78	70-130
78 cis-1,3-Dichloropr	5.000	6.108	122.16	70-130
79 4-Methyl-2-pentano	5.000	5.911	118.22	70-130
81 Toluene	5.000	5.469	109.38	70-130
82 trans-1,3-Dichloro	5.000	5.049	100.98	70-130
84 1,1,2-Trichloroeth	5.000	5.174	103.49	70-130
87 2-Hexanone	5.000	5.482	109.64	70-130
86 Tetrachloroethene	5.000	4.869	97.38	70-130
89 Dibromochlorometha	5.000	4.771	95.42	70-130
90 1,2-Dibromoethane	5.000	5.152	103.03	70-130
93 Chlorobenzene	5.000	4.922	98.44	70-130
95 Ethyl Benzene	5.000	5.105	102.09	70-130
96 m,p-Xylene	5.000	5.016	100.33	70-130
100 o-Xylene	5.000	5.184	103.68	70-130
101 Styrene	5.000	5.388	107.75	70-130
102 Bromoform	5.000	4.654	93.09	70-130
103 Cumene	5.000	5.209	104.18	70-130
108 1,1,2,2-Tetrachlor	5.000	5.039	100.77	70-130
111 Propylbenzene	5.000	5.291	105.82	70-130
113 4-Ethyltoluene	5.000	5.086	101.71	70-130
114 1,3,5-Trimethylben	5.000	6.315	126.31	70-130
120 1,2,4-Trimethylben	5.000	7.124	142.48*	70-130
122 1,3-Dichlorobenzen	5.000	4.774	95.49	70-130
124 1,4-Dichlorobenzen	5.000	4.439	88.79	70-130
127 alpha-chlorotoluen	5.000	7.964	159.28*	70-130
128 1,2-Dichlorobenzen	5.000	4.811	96.22	70-130
131 1,2,4-Trichloroben	5.000	5.849	116.98	70-130
132 Hexachlorobutadien	5.000	4.387	87.75	70-130
133 Naphthalene	0.5000	0.3736	74.71	60-140
18 Isopentane	5.000	5.464	109.27	60-140
9 Butane	5.000	5.660	113.20	60-140
73 Methylcyclohexane	5.000	5.470	109.41	60-140

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 65 1,2-Dichloroethane	5.000	4.954	99.08	70-130
$ 80 Toluene-d8	5.000	5.299	105.99	70-130
$ 106 Bromofluorobenzene	5.000	4.906	98.12	70-130

Eurofins Air Toxics Inc.

TO15/Modified TO-14A

Data file : /chem/msdv.i/16Dec2014.b/v121604.d
Lab Smp Id: LCSD Client Smp ID: LCSD
Inj Date : 16-DEC-2014 10:21
Operator : ef Inst ID: msdv.i
Smp Info : 25mL #2677-274
Misc Info : 5.0ppbv (50ppbv)
Comment : Low Level GC-MS
Method : /chem/msdv.i/16Dec2014.b/v14l1006d.m
Meth Date : 16-Dec-2014 10:10 efinn Quant Type: ISTD
Cal Date : 03-NOV-2014 11:17 Cal File: v110307.d
Als bottle: 1 QC Sample: LCSD
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT12-Oxy.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
* 54 Bromochloromethane					CAS #: 74-97-5		
15.933	15.933 (1.000)	130	110022	5.00000		80.00- 120.00	100.00
15.933	15.933 (1.000)	128	83865			47.55- 107.55	76.23
15.933	15.933 (1.000)	49	275878			213.64- 273.64	250.75
* 71 1,4-Difluorobenzene					CAS #: 540-36-3		
17.305	17.305 (1.000)	114	437786	5.00000		80.00- 120.00	100.00
17.305	17.305 (1.000)	88	73613			0.00- 46.17	16.81
* 92 Chlorobenzene-d5					CAS #: 3114-55-4		
22.205	22.205 (1.000)	117	352217	5.00000		80.00- 120.00	100.00
22.205	22.205 (1.000)	82	225479			28.56- 88.56	64.02
$ 65 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
16.756	16.756 (1.052)	65	200038	4.95407	4.954	80.00- 120.00	100.00
16.756	16.756 (1.052)	67	109633			28.37- 88.37	54.81
$ 80 Toluene-d8					CAS #: 2037-26-5		
19.856	19.879 (1.147)	98	446047	5.29936	5.299	80.00- 120.00	100.00
19.856	19.879 (1.147)	70	54313			0.00- 41.90	12.18

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

$  80 Toluene-d8 (continued)
 19.879  19.879 (1.149)   100    282792                    34.60-  94.60    63.40
-------------------------------------------------------------------------------
$ 106 Bromofluorobenzene                            CAS #: 460-00-4
 23.704  23.704 (1.067)   174    148599 4.90582    4.906  80.00- 120.00   100.00
 23.678  23.704 (1.066)    95    212691                  113.85- 173.85   143.13
 23.704  23.704 (1.067)   176    145003                    68.89- 128.89    97.58
-------------------------------------------------------------------------------
    3 Propylene                                     CAS #: 115-07-1
  4.673   4.711 (0.293)    41    355876 5.76544    5.765  80.00- 120.00   100.00
  4.673   4.711 (0.293)    42    228647                    35.18-  95.18    64.25
  4.673   4.711 (0.293)    39    254185                    44.12- 104.12    71.43
-------------------------------------------------------------------------------
    4 Dichlorodifluoromethane/Fr12                  CAS #: 75-71-8
  5.202   5.202 (0.326)    85    556264 5.39652    5.396  80.00- 120.00   100.00
  5.202   5.202 (0.326)    87    174357                     1.57-  61.57    31.34
-------------------------------------------------------------------------------
    6 Freon 114                                     CAS #: 76-14-2
  6.750   6.713 (0.424)   135    367336 4.99006    4.990  80.00- 120.00   100.00
  6.713   6.713 (0.421)   137    119048                     0.53-  60.53    32.41
  6.713   6.713 (0.421)    85    537620                  121.37- 181.37   146.36
-------------------------------------------------------------------------------
    8 Chloromethane                                 CAS #: 74-87-3
  7.052   7.052 (0.443)    50    331136 5.33069    5.331  80.00- 120.00   100.00
  7.052   7.052 (0.443)    52    104025                     1.81-  61.81    31.41
-------------------------------------------------------------------------------
    9 Butane                                        CAS #: 106-97-8
  7.885   7.884 (0.495)    58     58919 5.65982    5.660  80.00- 120.00   100.00
  7.854   7.884 (0.493)    43    687600                 1065.18-1125.18  1167.02
-------------------------------------------------------------------------------
   10 Vinyl Chloride                                CAS #: 75-01-4
  8.009   8.009 (0.503)    62    266418 5.74761    5.748  80.00- 120.00   100.00
  8.009   8.009 (0.503)    64     79315                     0.00-  59.52    29.77
-------------------------------------------------------------------------------
   11 1,3-Butadiene                                 CAS #: 106-99-0
  8.257   8.257 (0.518)    54    257213 5.66021    5.660  80.00- 120.00   100.00
  8.257   8.257 (0.518)    39    356549                  107.15- 167.15   138.62
-------------------------------------------------------------------------------
   12 Bromomethane                                  CAS #: 74-83-9
  9.834   9.834 (0.617)    94    157485 5.54194    5.542  80.00- 120.00   100.00
  9.834   9.834 (0.617)    96    151661                    60.42- 120.42    96.30
-------------------------------------------------------------------------------
   17 Chloroethane                                  CAS #: 75-00-3
 10.340  10.340 (0.649)    64    126250 5.86056    5.860  80.00- 120.00   100.00
 10.340  10.340 (0.649)    66     37090                     0.00-  59.90    29.38
-------------------------------------------------------------------------------
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RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
18 Isopentane					CAS #: 78-78-4		
10.533	10.533 (0.661)	57	242453	5.46356	5.464	80.00- 120.00	100.00
10.533	10.533 (0.661)	43	525041			171.32- 231.32	216.55
10.533	10.533 (0.661)	42	467009			150.03- 210.03	192.62
20 Trichlorofluoromethane/Fr11					CAS #: 75-69-4		
11.184	11.183 (0.702)	101	551160	5.19459	5.194	80.00- 120.00	100.00
11.184	11.183 (0.702)	103	357467			34.11- 94.11	64.86
24 Ethanol					CAS #: 64-17-5		
12.101	12.101 (0.759)	45	171145	7.60913	7.609	80.00- 120.00	100.00(R)
12.101	12.101 (0.759)	46	65960			8.51- 68.51	38.54
12.101	12.101 (0.759)	43	36948			0.00- 54.10	21.59
30 1,1-Dichloroethene					CAS #: 75-35-4		
12.568	12.568 (0.789)	98	129564	5.46443	5.464	80.00- 120.00	100.00
12.568	12.568 (0.789)	61	453641			320.65- 380.65	350.13
12.568	12.568 (0.789)	96	212158			134.30- 194.30	163.75
28 Freon 113					CAS #: 76-13-1		
12.568	12.568 (0.789)	151	325318	5.09355	5.094	80.00- 120.00	100.00
12.568	12.568 (0.789)	153	204268			33.65- 93.65	62.79
12.568	12.568 (0.789)	101	427734			96.37- 156.37	131.48
31 Acetone					CAS #: 67-64-1		
12.816	12.816 (0.804)	58	145105	5.58206	5.582	80.00- 120.00	100.00
12.816	12.816 (0.804)	43	632492			413.15- 473.15	435.89
33 Carbon Disulfide					CAS #: 75-15-0		
12.925	12.925 (0.811)	76	557523	5.52838	5.528	80.00- 120.00	100.00
35 3-Chloroprene					CAS #: 107-05-1		
13.365	13.365 (0.839)	76	77948	5.35612	5.356	80.00- 120.00	100.00
13.365	13.365 (0.839)	41	471588			547.03- 607.03	605.00
34 2-Propanol					CAS #: 67-63-0		
13.173	13.173 (0.827)	45	759728	6.31148	6.311	80.00- 120.00	100.00
13.173	13.173 (0.827)	43	147974			0.00- 50.74	19.48
13.173	13.173 (0.827)	59	21236			0.00- 32.83	2.80
37 Methylene Chloride					CAS #: 75-09-2		
13.640	13.640 (0.856)	84	191274	5.71848	5.718	80.00- 120.00	100.00
13.640	13.640 (0.856)	49	451223			212.37- 272.37	235.90
13.640	13.640 (0.856)	51	133407			43.31- 103.31	69.75
39 MTBE					CAS #: 1634-04-4		
13.997	13.996 (0.878)	73	658617	5.48824	5.488	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
39 MTBE (continued)							
13.997	13.996 (0.878)	57	205017			2.99- 62.99	31.13
13.997	13.996 (0.878)	41	277340			12.12- 72.12	42.11
40 trans-1,2-Dichloroethene					CAS #: 156-60-5		
14.051	14.051 (0.882)	98	119275	5.31675	5.317	80.00- 120.00	100.00
14.051	14.051 (0.882)	61	362256			293.73- 353.73	303.72
14.051	14.051 (0.882)	96	191294			146.88- 206.88	160.38
43 Hexane					CAS #: 110-54-3		
14.381	14.381 (0.903)	57	519676	5.41186	5.412	80.00- 120.00	100.00
14.381	14.381 (0.903)	43	458795			57.65- 117.65	88.28
14.381	14.381 (0.903)	86	53268			0.00- 40.67	10.25
46 1,1-Dichloroethane					CAS #: 75-34-3		
14.765	14.765 (0.927)	63	498413	5.34866	5.349	80.00- 120.00	100.00
14.765	14.765 (0.927)	65	152165			0.37- 60.37	30.53
47 Vinyl Acetate					CAS #: 108-05-4		
14.793	14.793 (0.928)	86	53179	5.59093	5.591	80.00- 120.00	100.00
14.793	14.793 (0.928)	42	100014			220.92- 280.92	188.07
14.793	14.793 (0.928)	43	1169352			3282.47-3342.47	2198.89
50 cis-1,2-Dichloroethene					CAS #: 156-59-2		
15.592	15.592 (0.979)	98	162843	5.46998	5.470	80.00- 120.00	100.00
15.592	15.592 (0.979)	61	451722			248.69- 308.69	277.40
15.592	15.592 (0.979)	96	264621			126.98- 186.98	162.50
51 2-Butanone					CAS #: 78-93-3		
15.592	15.571 (0.979)	72	107174	5.53925	5.539	80.00- 120.00	100.00
15.572	15.571 (0.977)	43	888181			794.80- 854.80	828.72
15.592	15.571 (0.979)	57	50617			18.01- 78.01	47.23
53 Tetrahydrofuran					CAS #: 109-99-9		
15.933	15.933 (1.000)	42	552070	5.53712	5.537	80.00- 120.00	100.00
15.933	15.933 (1.000)	71	106545			0.00- 49.03	19.30
15.933	15.933 (1.000)	72	114504			0.00- 51.35	20.74
55 Chloroform					CAS #: 67-66-3		
15.995	15.995 (1.004)	83	489031	5.27436	5.274	80.00- 120.00	100.00
15.995	15.995 (1.004)	85	315478			33.33- 93.33	64.51
57 Cyclohexane					CAS #: 110-82-7		
16.242	16.242 (1.019)	84	304466	5.22112	5.221	80.00- 120.00	100.00
16.242	16.242 (1.019)	56	570641			157.43- 217.43	187.42
16.242	16.242 (1.019)	41	437081			105.99- 165.99	143.56

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
58 1,1,1-Trichloroethane					CAS #: 71-55-6		
16.242	16.242 (1.019)	97	494219	5.10461	5.105	80.00- 120.00	100.00
16.242	16.242 (1.019)	99	314656			32.16- 92.16	63.67
59 Carbon Tetrachloride					CAS #: 56-23-5		
16.457	16.457 (1.033)	119	356505	3.83872	3.839	80.00- 120.00	100.00
16.457	16.457 (1.033)	117	370985			69.67- 129.67	104.06
	Sum of Peak Concentrations =				3.839		
63 2,2,4-Trimethylpentane					CAS #: 540-84-1		
16.728	16.728 (1.050)	56	519722	5.11424	5.114	80.00- 120.00	100.00
16.728	16.728 (1.050)	57	1586388			258.69- 318.69	305.24
16.728	16.728 (1.050)	41	590080			79.91- 139.91	113.54
64 Benzene					CAS #: 71-43-2		
16.756	16.756 (0.968)	78	710079	5.49628	5.496	80.00- 120.00	100.00
16.756	16.756 (0.968)	77	171439			0.00- 53.73	24.14
68 1,2-Dichloroethane					CAS #: 107-06-2		
16.865	16.865 (0.975)	62	400063	5.10978	5.110	80.00- 120.00	100.00
16.865	16.865 (0.975)	64	123247			1.11- 61.11	30.81
69 Heptane					CAS #: 142-82-5		
16.975	16.948 (0.981)	57	298097	5.35366	5.354	80.00- 120.00	100.00
16.975	16.948 (0.981)	100	68119			0.00- 51.27	22.85
16.948	16.948 (0.979)	43	791791			235.24- 295.24	265.62
72 Trichloroethene					CAS #: 79-01-6		
17.717	17.716 (1.024)	130	293769	5.05130	5.051	80.00- 120.00	100.00
17.717	17.716 (1.024)	95	310234			71.16- 131.16	105.60
17.717	17.716 (1.024)	97	200393			33.04- 93.04	68.21
73 Methylcyclohexane					CAS #: 108-87-2		
17.964	17.964 (1.038)	83	417782	5.47037	5.470	80.00- 120.00	100.00
17.964	17.964 (1.038)	98	183277			15.02- 75.02	43.87
17.964	17.964 (1.038)	55	510118			95.64- 155.64	122.10
74 1,2-Dichloropropane					CAS #: 78-87-5		
18.156	18.156 (1.049)	63	326998	5.51766	5.518	80.00- 120.00	100.00
18.156	18.156 (1.049)	62	238125			45.17- 105.17	72.82
18.156	18.156 (1.049)	41	304917			61.13- 121.13	93.25
75 1,4-Dioxane					CAS #: 123-91-1		
18.266	18.266 (1.056)	88	166503	5.59038	5.590	80.00- 120.00	100.00
18.266	18.266 (1.056)	58	161858			72.13- 132.13	97.21
18.266	18.266 (1.056)	57	54291			4.41- 64.41	32.61

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
77 Bromodichloromethane					CAS #: 75-27-4		
18.568	18.568 (1.073)	83	514031	5.23910	5.239	80.00- 120.00	100.00
18.568	18.568 (1.073)	85	331220			32.12- 92.12	64.44
78 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
19.386	19.386 (1.120)	75	409576	6.10797	6.108	80.00- 120.00	100.00
19.386	19.386 (1.120)	77	123595			1.25- 61.25	30.18
19.386	19.386 (1.120)	39	413116			72.10- 132.10	100.86
79 4-Methyl-2-pentanone					CAS #: 108-10-1		
19.587	19.587 (1.132)	43	1077948	5.91124	5.911	80.00- 120.00	100.00
19.587	19.587 (1.132)	58	280990			0.00- 57.24	26.07
19.587	19.587 (1.132)	85	87552			0.00- 38.20	8.12
81 Toluene					CAS #: 108-88-3		
19.991	19.991 (1.155)	91	779890	5.46884	5.469	80.00- 120.00	100.00
19.991	19.991 (1.155)	92	438284			28.60- 88.60	56.20
82 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
20.435	20.435 (0.920)	75	366583	5.04921	5.049	80.00- 120.00	100.00
20.435	20.435 (0.920)	77	116091			5.48- 65.48	31.67
20.435	20.435 (0.920)	39	363094			67.43- 127.43	99.05
84 1,1,2-Trichloroethane					CAS #: 79-00-5		
20.757	20.757 (0.935)	97	286869	5.17427	5.174	80.00- 120.00	100.00
20.757	20.757 (0.935)	99	180033			32.13- 92.13	62.76
20.722	20.757 (0.933)	83	254887			58.79- 118.79	88.85
86 Tetrachloroethene					CAS #: 127-18-4		
20.901	20.901 (0.941)	166	349013	4.86907	4.869	80.00- 120.00	100.00
20.901	20.901 (0.941)	129	276766			47.04- 107.04	79.30
20.901	20.901 (0.941)	131	275799			46.95- 106.95	79.02
87 2-Hexanone					CAS #: 591-78-6		
21.044	21.044 (0.948)	58	340337	5.48195	5.482	80.00- 120.00	100.00
21.044	21.044 (0.948)	43	909337			242.48- 302.48	267.19
21.044	21.044 (0.948)	100	47333			0.00- 43.88	13.91
89 Dibromochloromethane					CAS #: 124-48-1		
21.367	21.367 (0.962)	129	492284	4.77077	4.771	80.00- 120.00	100.00
21.367	21.367 (0.962)	127	369980			50.38- 110.38	75.16
90 1,2-Dibromoethane					CAS #: 106-93-4		
21.583	21.583 (0.972)	107	444948	5.15172	5.152	80.00- 120.00	100.00
21.583	21.583 (0.972)	109	411108			62.69- 122.69	92.39

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
93 Chlorobenzene					CAS #: 108-90-7		
22.233	22.233 (1.001)	112	569320	4.92213	4.922	80.00- 120.00	100.00
22.233	22.233 (1.001)	114	184835			1.62- 61.62	32.47
22.233	22.233 (1.001)	77	387353			36.56- 96.56	68.04
95 Ethyl Benzene					CAS #: 100-41-4		
22.315	22.315 (1.005)	106	265007	5.10465	5.105	80.00- 120.00	100.00
22.315	22.315 (1.005)	91	840496			292.36- 352.36	317.16
96 m,p-Xylene					CAS #: 108-38-3		
22.480	22.452 (1.012)	106	256790	5.01629	5.016	80.00- 120.00	100.00
22.452	22.452 (1.011)	91	540405			164.15- 224.15	210.45
100 o-Xylene					CAS #: 95-47-6		
23.001	23.001 (1.036)	106	246931	5.18386	5.184	80.00- 120.00	100.00
23.001	23.001 (1.036)	91	543168			186.63- 246.63	219.97
101 Styrene					CAS #: 100-42-5		
23.029	23.029 (1.037)	104	375448	5.38754	5.388	80.00- 120.00	100.00
23.029	23.029 (1.037)	78	201734			28.70- 88.70	53.73
102 Bromoform					CAS #: 75-25-2		
23.331	23.331 (1.051)	173	407069	4.65443	4.654	80.00- 120.00	100.00
23.331	23.331 (1.051)	171	211266			20.40- 80.40	51.90
103 Cumene					CAS #: 98-82-8		
23.441	23.441 (1.056)	105	724613	5.20921	5.209	80.00- 120.00	100.00
23.441	23.441 (1.056)	120	188383			0.00- 57.73	26.00
108 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
23.833	23.832 (1.073)	83	538403	5.03863	5.039	80.00- 120.00	100.00
23.833	23.832 (1.073)	85	338674			34.81- 94.81	62.90
111 Propylbenzene					CAS #: 103-65-1		
23.910	23.910 (1.077)	91	652827	5.29097	5.291	80.00- 120.00	100.00
23.910	23.910 (1.077)	120	146432			0.00- 53.83	22.43
113 4-Ethyltoluene					CAS #: 622-96-8		
24.039	24.039 (1.083)	105	460332	5.08552	5.086	80.00- 120.00	100.00
24.039	24.039 (1.083)	120	138546			0.18- 60.18	30.10
114 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
24.116	24.116 (1.086)	105	477307	6.31543	6.315	80.00- 120.00	100.00
24.116	24.116 (1.086)	120	225497			20.44- 80.44	47.24
120 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
24.529	24.529 (1.105)	105	436062	7.12377	7.124	80.00- 120.00	100.00(R)

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
120 1,2,4-Trimethylbenzene (continued)							
24.529	24.529 (1.105)	120	195831			19.27- 79.27	44.91
122 1,3-Dichlorobenzene					CAS #: 541-73-1		
24.902	24.902 (1.121)	146	281987	4.77427	4.774	80.00- 120.00	100.00
24.902	24.902 (1.121)	148	181496			38.48- 98.48	64.36
24.902	24.902 (1.121)	111	120499			10.49- 70.49	42.73
124 1,4-Dichlorobenzene					CAS #: 106-46-7		
24.992	24.992 (1.125)	146	246499	4.43935	4.439	80.00- 120.00	100.00
24.992	24.992 (1.125)	148	158270			38.92- 98.92	64.21
24.992	24.992 (1.125)	111	101605			11.61- 71.61	41.22
127 alpha-chlorotoluene					CAS #: 100-44-7		
25.127	25.126 (1.132)	91	472458	7.96389	7.964	80.00- 120.00	100.00(R)
25.127	25.126 (1.132)	126	92585			0.00- 52.82	19.60
128 1,2-Dichlorobenzene					CAS #: 95-50-1		
25.396	25.395 (1.144)	146	263652	4.81107	4.811	80.00- 120.00	100.00
25.396	25.395 (1.144)	148	164864			33.86- 93.86	62.53
25.396	25.395 (1.144)	111	115548			15.01- 75.01	43.83
131 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
27.077	27.077 (1.219)	180	235232	5.84914	5.849	80.00- 120.00	100.00
27.077	27.077 (1.219)	182	229507			64.14- 124.14	97.57
132 Hexachlorobutadiene					CAS #: 87-68-3		
27.167	27.166 (1.223)	225	147571	4.38742	4.387	80.00- 120.00	100.00
27.167	27.166 (1.223)	223	94769			44.27- 104.27	64.22
133 Naphthalene					CAS #: 91-20-3		
27.391	27.368 (1.234)	128	35579	0.37357	0.3736	80.00- 120.00	100.00
27.391	27.368 (1.234)	127	6747			0.00- 47.41	18.97

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdv.i
Lab File ID: v121604.d
Lab Smp Id: LCSD
Analysis Type: VOA
Quant Type: ISTD
Operator: ef
Method File: /chem/msdv.i/16Dec2014.b/v14l1006d.m
Misc Info: 5.0ppbv (50ppbv)

Calibration Date: 16-DEC-2014
Calibration Time: 08:42
Client Smp ID: LCSD
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
54 Bromochloromethan	109722	65833	153611	110022	0.27
71 1,4-Difluorobenze	445503	267302	623704	437786	-1.73
92 Chlorobenzene-d5	361081	216649	505513	352217	-2.45

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
54 Bromochloromethan	15.93	15.60	16.26	15.93	0.00
71 1,4-Difluorobenze	17.30	16.97	17.63	17.30	0.00
92 Chlorobenzene-d5	22.21	21.88	22.54	22.21	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/msdv.i/16Dec2014.b/v121604.d

Date : 16-DEC-2014 10:21

Client ID: LCSD

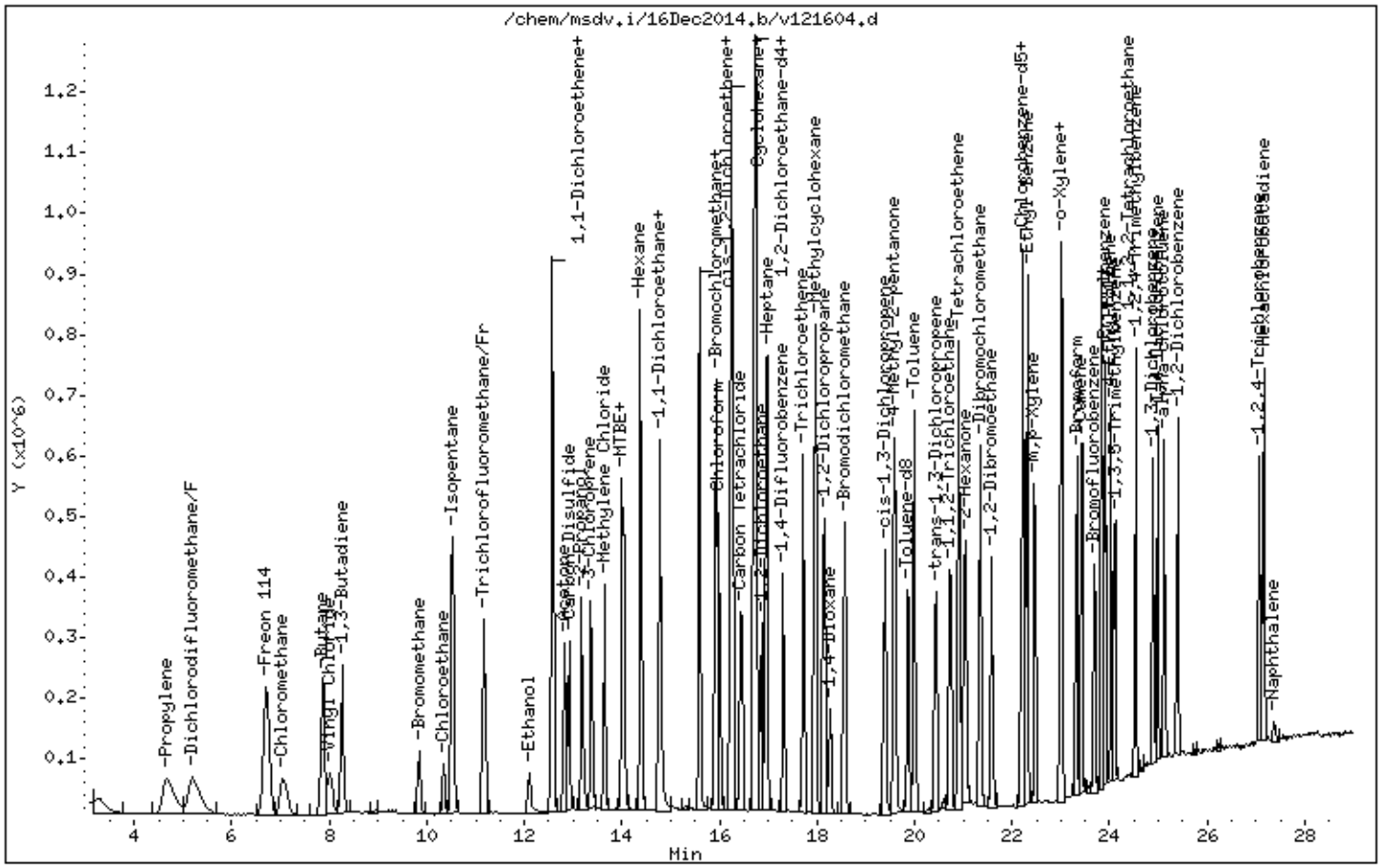
Instrument: msdv.i

Sample Info: 25mL #2677-274

Operator: ef

Column phase: RTx-624

Column diameter: 0.32



Eurofins Air Toxics, Inc. **MSD-V** **Logbook #2684**

BFB Verification of 176/174 m/z Ratio:	(296931/308480) x100 96.27
Tekmar Purge Flow:	
Vacuum:	12/15/14

IS/S Std. #:	2687-136	Exp. Date:	3/3/15
BCM	109722	Std:	116142
1,4-DFB	445503		475072
CB-d5	368081		385227

Verified CCV IS vs ICAL mid-point (-40%D): 88

File ID:	V121601
Compound:	Toluene-d8
Initials:	88

Calculation Check:

ppbv of compound = $\frac{\text{Area}_{\text{Sample}}}{\text{Area}_{\text{IS}}} \times \frac{\text{Conc}_{\text{IS}}}{\text{RRF}}$ = (441653) x (5.000) = 5.156
(4455038) (0.96131)

SOP# (Circle one): 6 / 83 / 38 / 91 / 109 Method (Circle one): TO-14A/TO-15/TO-17 Reported Result: 5.156

Method Name: V14L-1001ID / V14L-1006A

	Use	File	Lab ID#	Can#	Pressure	Amt. Loaded	DF	Loaded By Initials	Date Analyzed	Time Analyzed	Reviewed By Initials	Comments/Standard Expiration Date
1	✓	V121601	BFB Tune check	2299-720	50mg	2µL	1.00	88	12/16/14	0720	88	
2	✓	02	CCV (50ppbv)	2687-48	5.0ppbv	25mL	1.00	88		0842	88	Exp. 1/27/15 Std: 2 amt; lot: 6 amt, Standard out
3	✓	03	LCS (50ppbv)	2677-274	5.0ppbv	25mL	1.00	88		0939	88	Exp. 1/5/15 Std: 2 amt; lot: 3 amt
4	✓	04	LCSD (50ppbv)	2677-274	5.0ppbv	25mL	1.00	88		1021	88	Exp. 1/3/15 88 initial ~~OK FOR SHORT LIST~~
5	✓	05	LAB Blank	25313	Humid	250mL	1.00	88		1111	88	OK FOR SHORT LIST
6	✓	06	141214L - 01AB	24493	6.7"Hg - 5.3psi	250mL	1.75	88		1201	88	"E" Stay (NT)
7	✓	07	↓ - 02AB	12685	6.7"Hg - 5.0psi	250mL	1.74	88		1336	88	"E" Stay (NT)
8	✓	08	- 03AB	4250	6.7"Hg - 5.1psi	250mL	1.75	88		1313	88	
9	✗	09	141215IA - 01A	34723	4.5"Hg - 5.0psi	~~250mL~~ 100mL 88 initial	3.95	88		1355	88	OUT OF RANGE PAGE SOMC
10	✓	10	System Blank	25313	Humid	250mL	1.00	88		1444	SL	NEXT WORK ORDER SRL FOR 4L TARGETS
11	✓	11	141215IA - 01A	34723	4.5"Hg - 5.0psi	50ml	7.90	SL		1527	SL	DILTC
12	✓	12	- 02A	35255	16"Hg - 5.0psi	250ml	2.87	SL		1613 12/16/14	SL	
13	✓	13	- 03A	34450	3.0"Hg - 5.0psi	125ml	2.98	SL		1652	SL	DILTC
14	✓	14	- 04A	11651	8.0"Hg - 5.0psi	250ml	1.83	SL		1737	SL	

Reviewed 12/16/14 Date

	Use	File	Lab ID#	Can#	Pressure	Amt. Loaded	DF	Loaded By Initials	Date Analyzed	Time Analyzed	Reviewed By Initials	Comments/Standard Expiration Date
15	✓	V121615	1412151A-05A	34440	5.0"Hg-5psi	250ml	1.61	LW	12/16/14	1814	LW	
16	✓	16	1412152A-01A	~~3554~~ 33654	6.9"Hg-4.9psi	250ml	1.73	LW		1901	LW	CAN#33654
17	✓	17	-02A	8/12/16/14 25244	7.6"Hg-5.1psi	250ml	1.80	LW		1943	LW	
18	✓	18	-03A	940	4.7"Hg-4.9psi	250ml	1.58	LW		2041	LW	
19	✓	19	-04A	33889	8.0"Hg-4.5psi	250ml	1.78	LW		2139	LW	
20	✓	20	-05A	3737	6.7"Hg-5.2psi	250ml	1.74	LW		2219	AG	"E" NTC
21	✓	21	-06A	12019	7.3"Hg-4.3psi	125ml	3.42	LW		2254	AG	D.L.TC "E" NTC
22	✓	22	-07A	5695	5.5"Hg→5.3psi	250mL	1.67	AG	12/17/14	0522	AG	
23	✓	23	-08A	25248	6.9"Hg→5psi	250mL	1.74	AG		0603	AG	"E" NTC
24												
25												
26												
27												
28												
29												
30												
31												
32												
33												
34												
35												
36												

Reviewed

12/17/14
Date

Eurofins Air Toxics Inc.

Data file : /var/chem/msdv.i/06Oct2014.b/v100601.d
Lab Smp Id: Client Smp ID: BFB
Inj Date : 06-OCT-2014 11:34
Operator : ef Inst ID: msdv.i
Smp Info : 2.0uL #2299-788; BFB Tune Check; BFB
Misc Info : 50ng
Comment :
Method : /chem/msdv.i/06Oct2014.b/bfb60.m
Meth Date : 05-Nov-2013 15:13 sblack 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		
6.640	7.354	-0.714	95	424320			100.00- 100.00	100.00
6.640	7.354	-0.714	50	134182			8.00- 40.00	31.62
6.640	7.354	-0.714	75	218899			30.00- 66.00	51.59
6.640	7.354	-0.714	96	28017			5.00- 9.00	6.60
6.640	7.354	-0.714	173	2899			0.00- 1.99	0.92
6.640	7.354	-0.714	174	316330			50.00- 120.00	74.55
6.640	7.354	-0.714	175	22940			4.00- 9.00	7.25
6.640	7.354	-0.714	176	303064			93.00- 101.00	95.81
6.640	7.354	-0.714	177	19307			5.00- 9.00	6.37

Data File: /var/chem/msdv.i/06Oct2014.b/v100601.d

Date : 06-OCT-2014 11:34

Client ID: BFB

Instrument: msdv.i

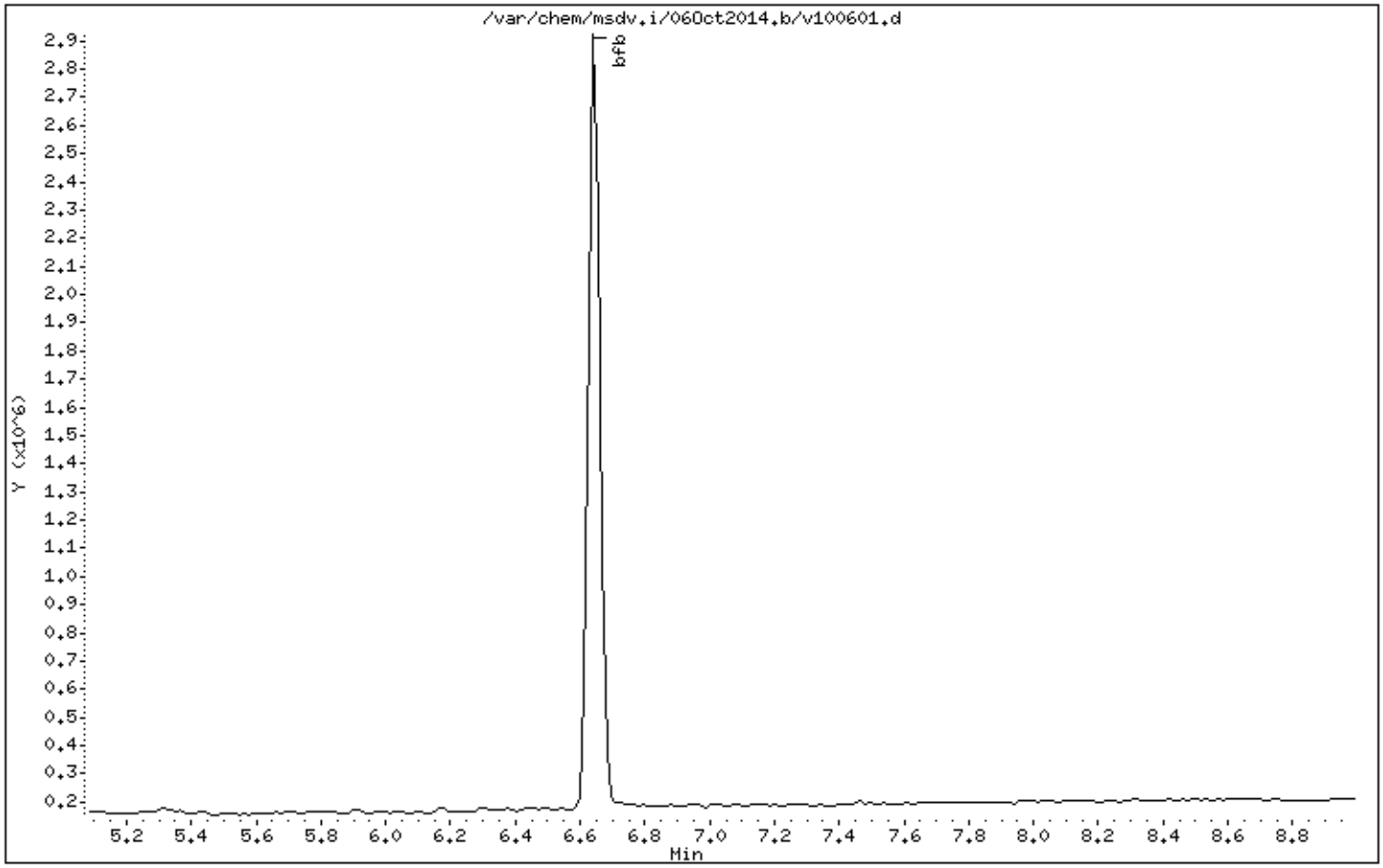
Sample Info: 2.0uL #2299-788; BFB Tune Check; BFB

Volume Injected (uL): 1.0

Operator: ef

Column phase:

Column diameter: 2.00



Data File: /var/chem/msdv.i/06Oct2014.b/v100601.d

Date : 06-OCT-2014 11:34

Client ID: BFB

Instrument: msdv.i

Sample Info: 2.0uL #2299-788; BFB Tune Check; BFB

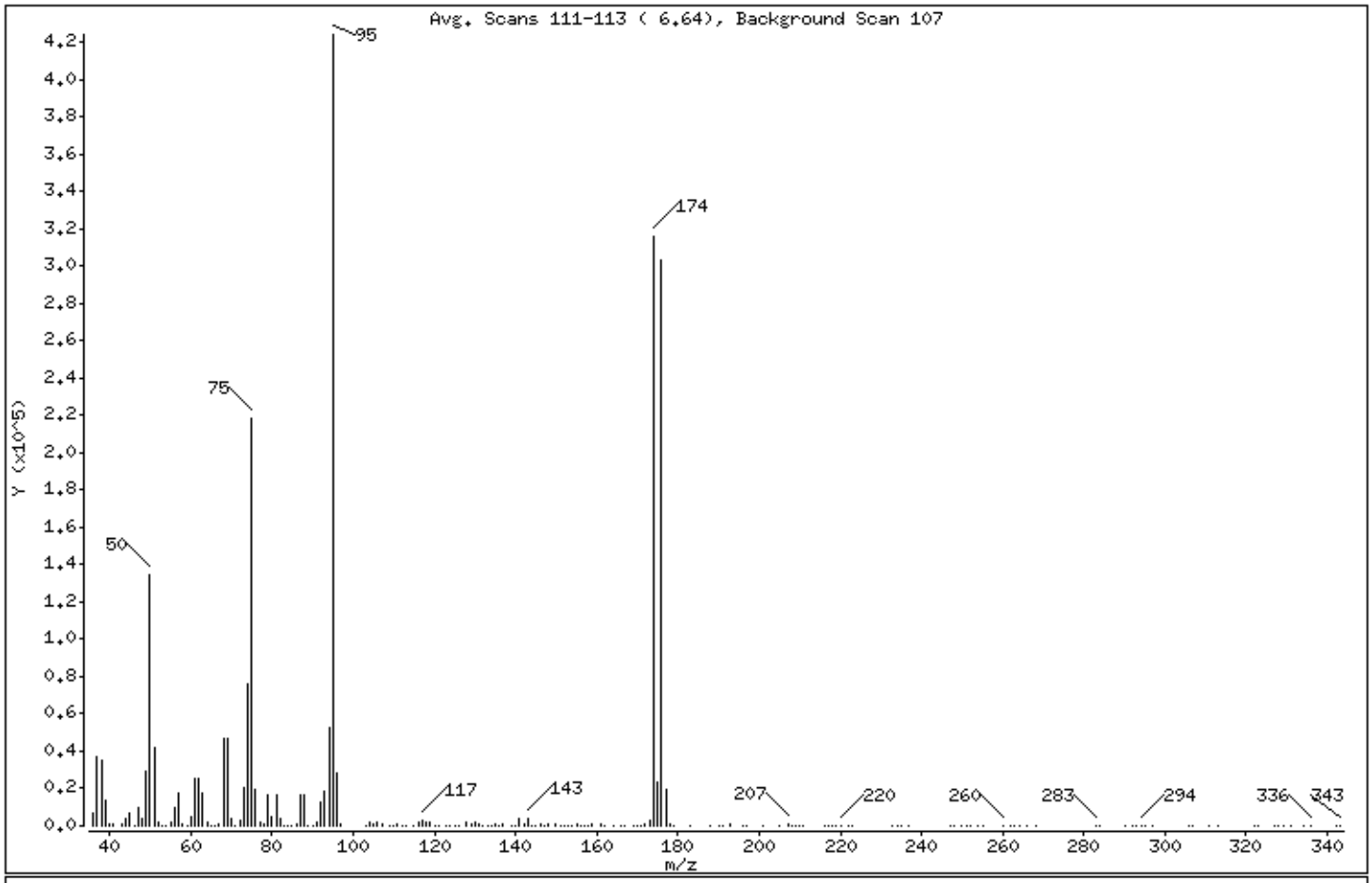
Volume Injected (uL): 1.0

Operator: ef

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	31.62
75	30.00 - 66.00% of mass 95	51.59
96	5.00 - 9.00% of mass 95	6.60
173	Less than 1.99% of mass 174	0.68 (0.92)
174	50.00 - 120.00% of mass 95	74.55
175	4.00 - 9.00% of mass 174	5.41 (7.25)
176	93.00 - 101.00% of mass 174	71.42 (95.81)
177	5.00 - 9.00% of mass 176	4.55 (6.37)

Data File: /var/chem/msdv.i/06Oct2014.b/v100601.d

Date : 06-OCT-2014 11:34

Client ID: BFB

Instrument: msdv.i

Sample Info: 2.0uL #2299-788; BFB Tune Check; BFB

Volume Injected (uL): 1.0

Operator: ef

Column phase:

Column diameter: 2.00

Data File: v100601.d
Spectrum: Avg. Scans 111-113 (6.64), Background Scan 107
Location of Maximum: 95.00
Number of points: 188

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	6940	85.00	176	143.00	4387	218.00	19
37.00	37288	86.00	565	144.00	262	219.00	69
38.00	35496	87.00	17024	145.00	144	220.00	220
39.00	13468	88.00	16137	146.00	839	222.00	61
40.00	695	89.00	146	147.00	417	223.00	152
41.00	550	90.00	29	148.00	701	233.00	6
43.00	720	91.00	2245	150.00	559	234.00	88
44.00	3864	92.00	12550	151.00	276	235.00	122
45.00	6797	93.00	18264	152.00	281	237.00	90
46.00	308	94.00	52376	153.00	377	247.00	75
47.00	9778	95.00	424320	154.00	361	248.00	135
48.00	3733	96.00	28016	155.00	947	250.00	14
49.00	28976	97.00	877	156.00	104	251.00	17
50.00	134144	103.00	364	157.00	487	252.00	43
51.00	41728	104.00	2330	158.00	336	254.00	228
52.00	1592	105.00	532	159.00	702	255.00	166
53.00	24	106.00	2211	161.00	524	260.00	352
54.00	15	107.00	670	162.00	53	262.00	124
55.00	1568	109.00	250	164.00	121	263.00	53
56.00	9614	110.00	424	166.00	170	264.00	64
57.00	17376	111.00	622	167.00	192	266.00	78
58.00	800	112.00	417	169.00	104	268.00	47
59.00	219	113.00	441	170.00	311	283.00	296
60.00	5126	115.00	423	171.00	277	284.00	35
61.00	25520	116.00	1644	172.00	744	290.00	52
62.00	25080	117.00	2855	173.00	2899	292.00	53
63.00	17680	118.00	1751	174.00	316288	293.00	186
64.00	1628	119.00	2031	175.00	22936	294.00	260
65.00	238	120.00	194	176.00	303040	295.00	52
66.00	76	121.00	101	177.00	19304	297.00	56
67.00	1263	123.00	306	178.00	783	306.00	143
68.00	47192	124.00	295	179.00	215	307.00	128
69.00	46624	125.00	307	183.00	64	311.00	55
70.00	3686	126.00	257	188.00	51	313.00	45
71.00	381	128.00	1753	190.00	130	322.00	178

Data File: /var/chem/msdv.i/06Oct2014.b/v100601.d

Date : 06-OCT-2014 11:34

Client ID: BFB

Instrument: msdv.i

Sample Info: 2.0uL #2299-788; BFB Tune Check; BFB

Volume Injected (uL): 1.0

Operator: ef

Column phase:

Column diameter: 2.00

Data File: v100601.d
Spectrum: Avg. Scans 111-113 (6.64), Background Scan 107
Location of Maximum: 95.00
Number of points: 188

m/z	Y	m/z	Y	m/z	Y	m/z	Y
72.00	2612	129.00	648	191.00	175	323.00	57
73.00	20376	130.00	1497	193.00	519	327.00	20
74.00	76072	131.00	556	196.00	11	328.00	24
75.00	218880	132.00	350	197.00	131	329.00	64
76.00	19776	133.00	250	201.00	76	331.00	98
77.00	2140	134.00	253	205.00	33	334.00	170
78.00	1305	135.00	1078	207.00	1034	336.00	226
79.00	16373	136.00	51	208.00	25	342.00	160
80.00	4590	137.00	1084	209.00	195	343.00	223
81.00	16148	139.00	76	210.00	14		
82.00	3628	140.00	380	211.00	214		
83.00	263	141.00	4080	216.00	184		
84.00	73	142.00	604	217.00	203		

Eurofins Air Toxics Inc.

Data file : /var/chem/msdv.i/07Oct2014.b/v100701.d
Lab Smp Id: Client Smp ID: BFB
Inj Date : 07-OCT-2014 12:07
Operator : ef Inst ID: msdv.i
Smp Info : 2.0uL #2299-788; BFB Tune Check; BFB
Misc Info : 50ng
Comment :
Method : /var/chem/msdv.i/07Oct2014.b/bfb60.m
Meth Date : 07-Oct-2014 12:24 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	
6.640	7.354	-0.714	95	413060			100.00- 100.00	100.00
6.640	7.354	-0.714	50	127442			8.00- 40.00	30.85
6.640	7.354	-0.714	75	213688			30.00- 66.00	51.73
6.640	7.354	-0.714	96	26957			5.00- 9.00	6.53
6.640	7.354	-0.714	173	3076			0.00- 1.99	1.01
6.640	7.354	-0.714	174	305706			50.00- 120.00	74.01
6.640	7.354	-0.714	175	22600			4.00- 9.00	7.39
6.640	7.354	-0.714	176	296216			93.00- 101.00	96.90
6.640	7.354	-0.714	177	19348			5.00- 9.00	6.53

Data File: /var/chem/msdv.i/07Oct2014.b/v100701.d

Date : 07-OCT-2014 12:07

Client ID: BFB

Instrument: msdv.i

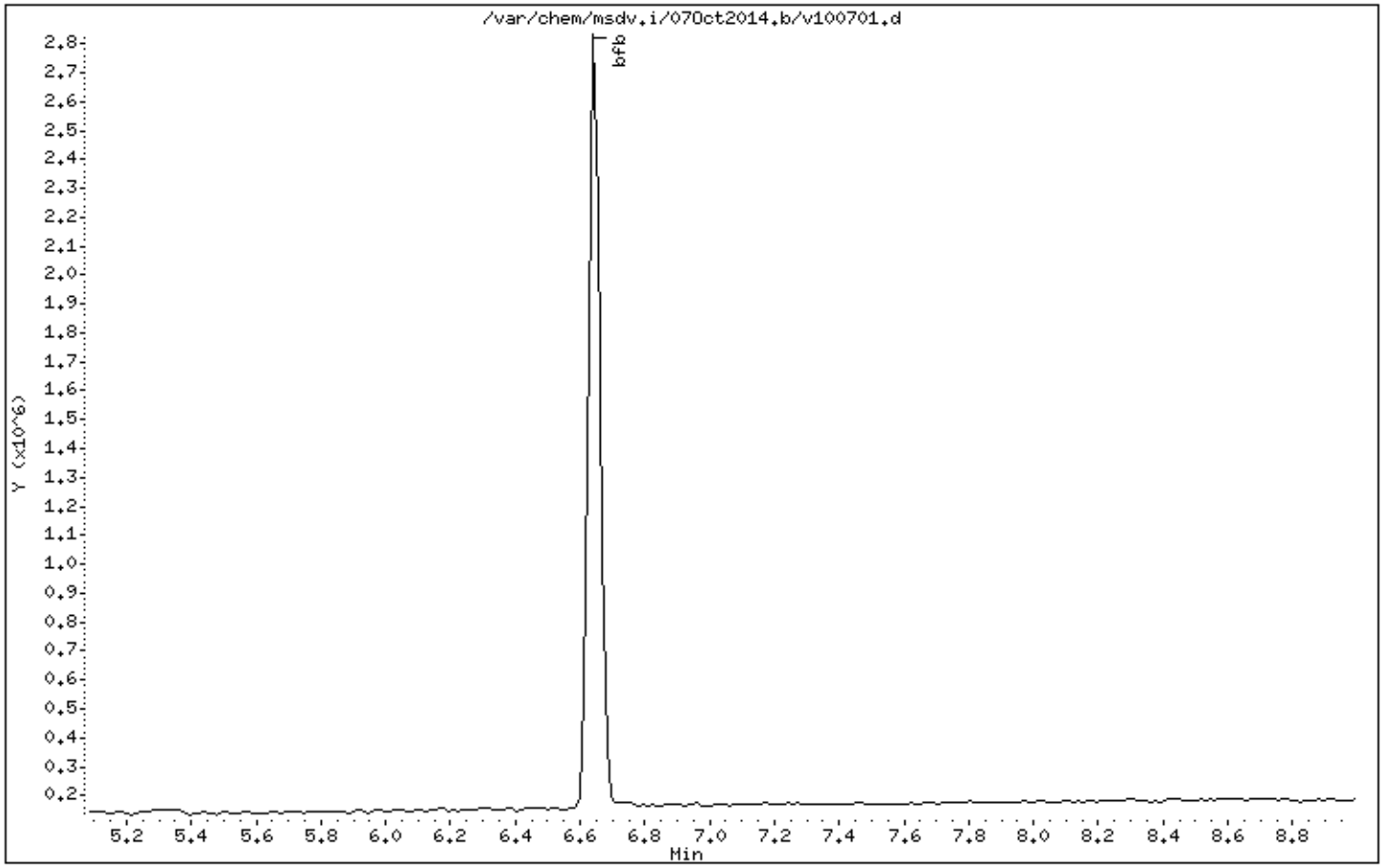
Sample Info: 2.0uL #2299-788; BFB Tune Check; BFB

Volume Injected (uL): 1.0

Operator: ef

Column phase:

Column diameter: 2.00



Data File: /var/chem/msdv.i/07Oct2014.b/v100701.d

Date : 07-OCT-2014 12:07

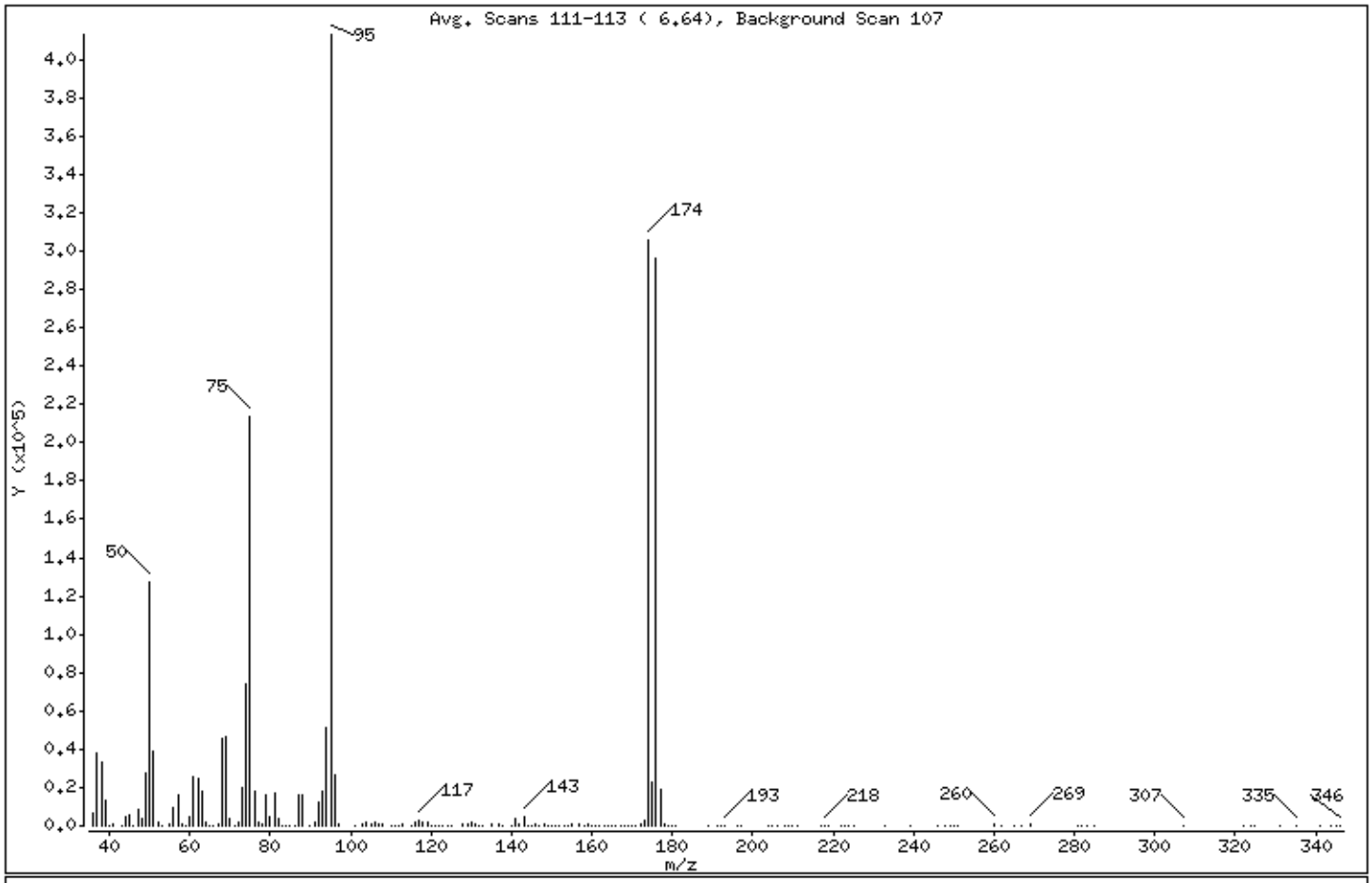
Client ID: BFB Instrument: msdv.i

Sample Info: 2.0uL #2299-788; BFB Tune Check; BFB

Volume Injected (uL): 1.0 Operator: ef

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	30.85
75	30.00 - 66.00% of mass 95	51.73
96	5.00 - 9.00% of mass 95	6.53
173	Less than 1.99% of mass 174	0.74 (1.01)
174	50.00 - 120.00% of mass 95	74.01
175	4.00 - 9.00% of mass 174	5.47 (7.39)
176	93.00 - 101.00% of mass 174	71.71 (96.90)
177	5.00 - 9.00% of mass 176	4.68 (6.53)

Data File: /var/chem/msdv.i/07Oct2014.b/v100701.d

Date : 07-OCT-2014 12:07

Client ID: BFB

Instrument: msdv.i

Sample Info: 2.0uL #2299-788; BFB Tune Check; BFB

Volume Injected (uL): 1.0

Operator: ef

Column phase:

Column diameter: 2.00

Data File: v100701.d
Spectrum: Avg. Scans 111-113 (6.64), Background Scan 107
Location of Maximum: 95.00
Number of points: 177

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	6316	83.00	246	140.00	206	196.00	31
37.00	37616	84.00	74	141.00	4201	197.00	138
38.00	32936	85.00	277	142.00	541	204.00	34
39.00	13037	86.00	416	143.00	4329	205.00	101
40.00	365	87.00	16038	144.00	354	206.00	130
41.00	790	88.00	15874	145.00	281	208.00	189
43.00	385	90.00	216	146.00	511	209.00	67
44.00	4932	91.00	2155	147.00	172	210.00	107
45.00	5873	92.00	12235	148.00	1112	211.00	78
46.00	472	93.00	18448	149.00	363	217.00	56
47.00	8537	94.00	50928	150.00	397	218.00	129
48.00	3864	95.00	413056	151.00	3	219.00	119
49.00	27448	96.00	26952	152.00	214	222.00	50
50.00	127440	97.00	570	153.00	242	223.00	8
51.00	39056	101.00	177	154.00	308	224.00	62
52.00	1508	103.00	538	155.00	937	225.00	63
53.00	130	104.00	1987	157.00	480	233.00	46
55.00	1336	105.00	565	158.00	366	239.00	80
56.00	9295	106.00	2061	159.00	561	246.00	53
57.00	16480	107.00	746	160.00	55	248.00	111
58.00	569	108.00	503	161.00	247	249.00	59
59.00	359	110.00	416	162.00	93	250.00	2
60.00	4764	111.00	324	163.00	353	251.00	205
61.00	25248	112.00	214	164.00	106	260.00	617
62.00	24488	113.00	531	165.00	22	262.00	94
63.00	17808	115.00	375	166.00	150	265.00	201
64.00	1664	116.00	1520	167.00	82	267.00	190
65.00	168	117.00	2958	168.00	83	269.00	820
66.00	82	118.00	1632	169.00	179	281.00	171
67.00	1176	119.00	2179	170.00	243	282.00	182
68.00	45216	120.00	69	171.00	200	283.00	99
69.00	46544	121.00	136	172.00	717	285.00	58
70.00	3535	122.00	139	173.00	3076	307.00	72
71.00	253	123.00	55	174.00	305664	322.00	157
72.00	2347	124.00	264	175.00	22600	324.00	68

Data File: /var/chem/msdv.i/07Oct2014.b/v100701.d

Date : 07-OCT-2014 12:07

Client ID: BFB

Instrument: msdv.i

Sample Info: 2.0uL #2299-788; BFB Tune Check; BFB

Volume Injected (uL): 1.0

Operator: ef

Column phase:

Column diameter: 2.00

Data File: v100701.d
Spectrum: Avg. Scans 111-113 (6.64), Background Scan 107
Location of Maximum: 95.00
Number of points: 177

m/z	Y	m/z	Y	m/z	Y	m/z	Y
73.00	19664	125.00	115	176.00	296192	325.00	50
74.00	73824	128.00	1235	177.00	19344	331.00	154
75.00	213632	129.00	786	178.00	566	335.00	161
76.00	18376	130.00	1571	179.00	159	341.00	56
77.00	1967	131.00	708	180.00	129	344.00	140
78.00	1359	132.00	80	181.00	155	345.00	51
79.00	16600	133.00	395	189.00	39	346.00	59
80.00	4447	135.00	1014	191.00	297		
81.00	16672	137.00	910	192.00	39		
82.00	3742	138.00	142	193.00	333		

Eurofins Air Toxics Inc.

Data file : /var/chem/msdv.i/17Oct2014.b/v101701.d
Lab Smp Id: Client Smp ID: BFB
Inj Date : 17-OCT-2014 09:24
Operator : ef Inst ID: msdv.i
Smp Info : 2.0uL #2299-788; BFB Tune Check; BFB
Misc Info : 50ng
Comment :
Method : /var/chem/msdv.i/17Oct2014.b/bfb60.m
Meth Date : 17-Oct-2014 09:41 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	
6.640	7.354	-0.714	95	439849			100.00- 100.00	100.00
6.640	7.354	-0.714	50	129573			8.00- 40.00	29.46
6.640	7.354	-0.714	75	221565			30.00- 66.00	50.37
6.640	7.354	-0.714	96	29500			5.00- 9.00	6.71
6.640	7.354	-0.714	173	2476			0.00- 1.99	0.71
6.640	7.354	-0.714	174	348458			50.00- 120.00	79.22
6.640	7.354	-0.714	175	25528			4.00- 9.00	7.33
6.640	7.354	-0.714	176	337362			93.00- 101.00	96.82
6.640	7.354	-0.714	177	22060			5.00- 9.00	6.54

Data File: /chem/msdv.i/17Oct2014.b/v101701.d

Date : 17-OCT-2014 09:24

Client ID: BFB

Instrument: msdv.i

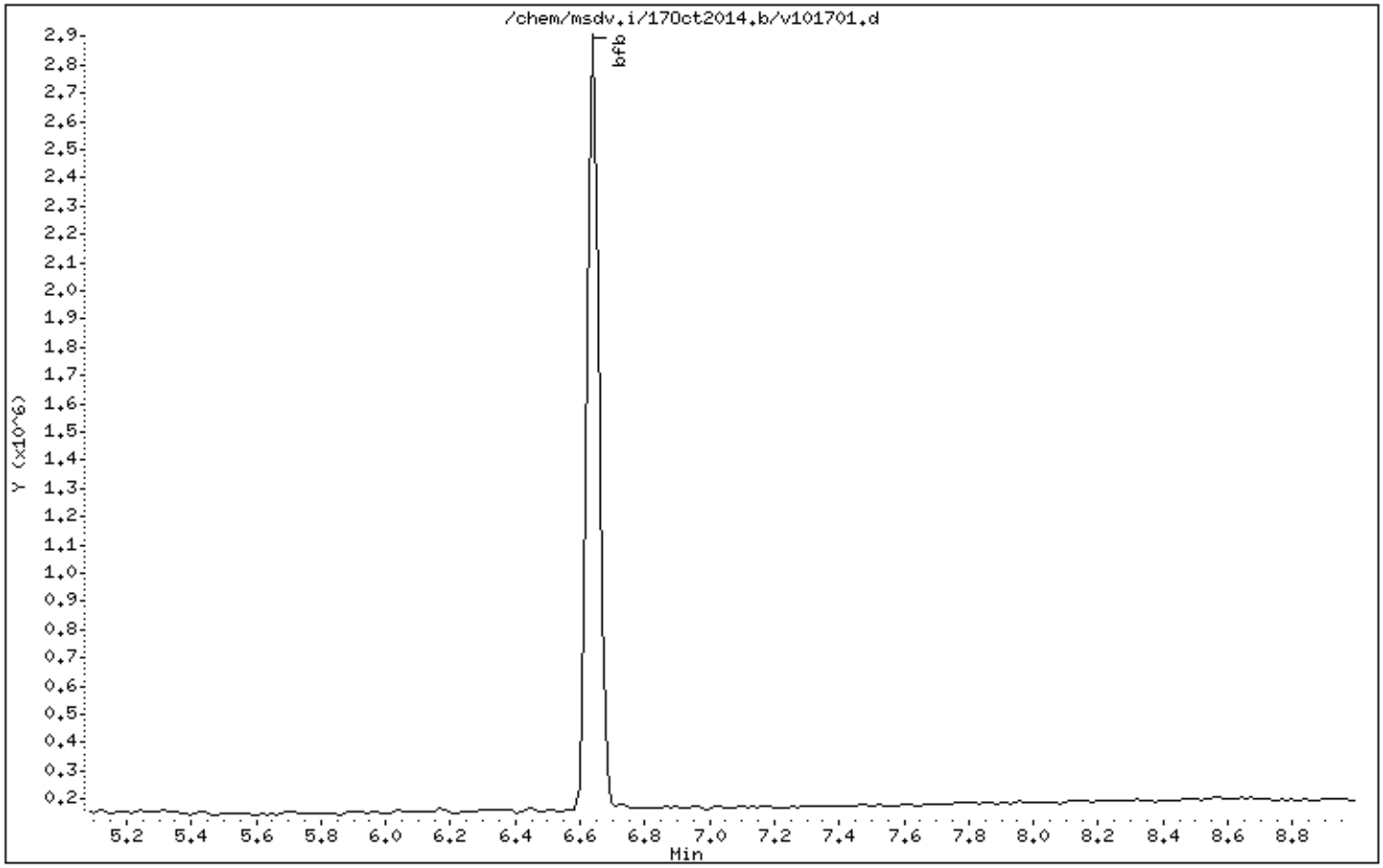
Sample Info: 2.0uL #2299-788; BFB Tune Check; BFB

Volume Injected (uL): 1.0

Operator: ef

Column phase:

Column diameter: 2.00



Data File: /chem/msdv.i/17Oct2014.b/v101701.d

Date : 17-OCT-2014 09:24

Client ID: BFB

Instrument: msdv.i

Sample Info: 2.0uL #2299-788; BFB Tune Check; BFB

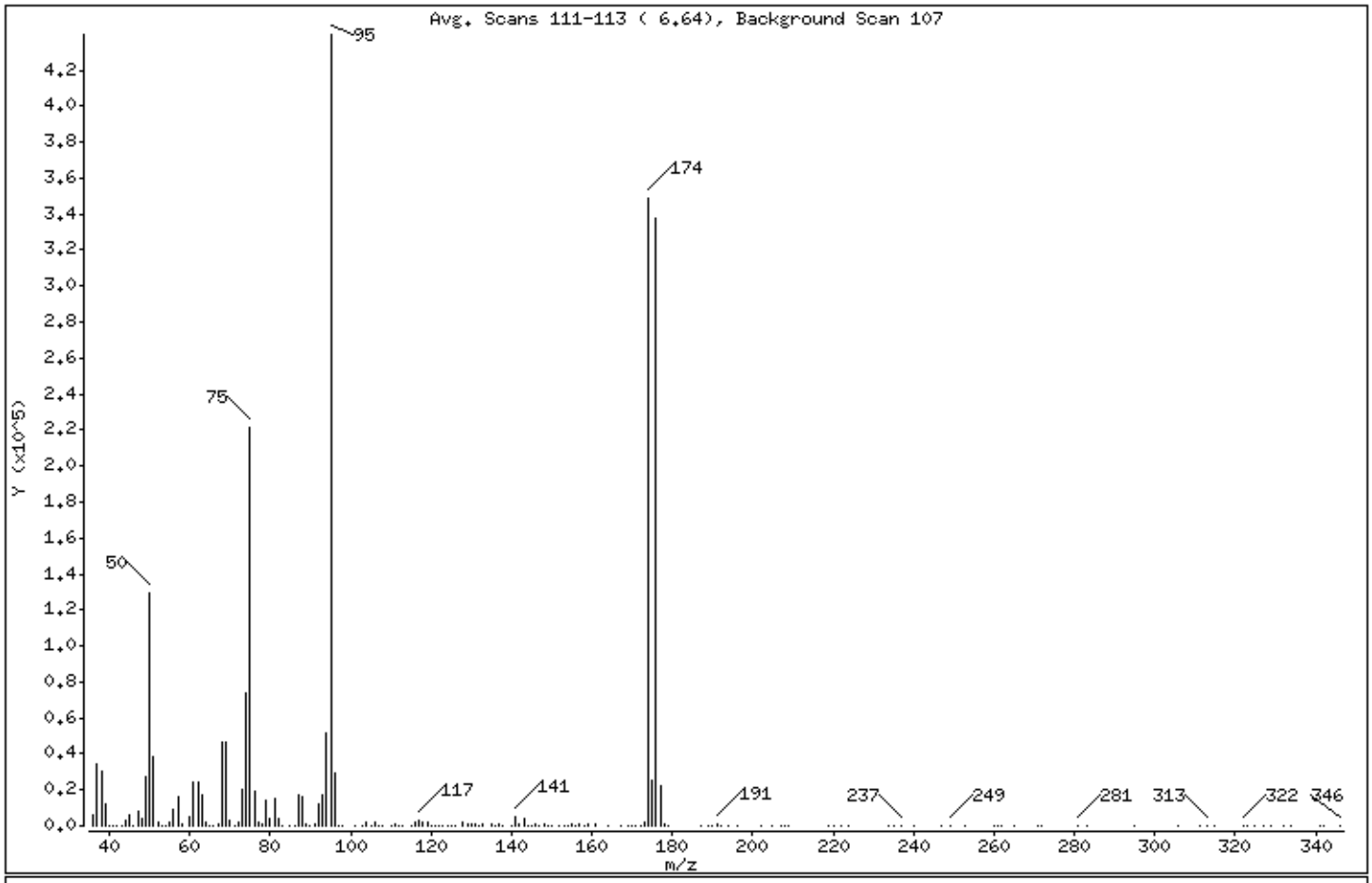
Volume Injected (uL): 1.0

Operator: ef

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	29.46
75	30.00 - 66.00% of mass 95	50.37
96	5.00 - 9.00% of mass 95	6.71
173	Less than 1.99% of mass 174	0.56 (0.71)
174	50.00 - 120.00% of mass 95	79.22
175	4.00 - 9.00% of mass 174	5.80 (7.33)
176	93.00 - 101.00% of mass 174	76.70 (96.82)
177	5.00 - 9.00% of mass 176	5.02 (6.54)

Data File: /chem/msdv.i/17Oct2014.b/v101701.d

Date : 17-OCT-2014 09:24

Client ID: BFB

Instrument: msdv.i

Sample Info: 2.0uL #2299-788; BFB Tune Check; BFB

Volume Injected (uL): 1.0

Operator: ef

Column phase:

Column diameter: 2.00

Data File: v101701.d
Spectrum: Avg. Scans 111-113 (6.64), Background Scan 107
Location of Maximum: 95.00
Number of points: 173

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	6152	81.00	15579	132.00	29	194.00	56
37.00	34752	82.00	3693	133.00	694	196.00	204
38.00	30296	83.00	465	135.00	962	202.00	65
39.00	11895	85.00	78	136.00	166	205.00	77
40.00	213	86.00	455	137.00	698	207.00	493
41.00	233	87.00	17008	138.00	65	208.00	350
42.00	187	88.00	16624	140.00	370	209.00	223
43.00	474	89.00	532	141.00	4577	219.00	18
44.00	3480	90.00	57	142.00	562	220.00	38
45.00	5705	91.00	1443	143.00	4446	222.00	50
46.00	478	92.00	12085	144.00	353	224.00	57
47.00	8386	93.00	17288	145.00	263	234.00	23
48.00	3708	94.00	52064	146.00	551	235.00	26
49.00	27744	95.00	439808	147.00	65	237.00	58
50.00	129568	96.00	29496	148.00	899	240.00	50
51.00	38896	97.00	424	149.00	303	247.00	159
52.00	1636	98.00	57	150.00	328	249.00	335
53.00	48	101.00	44	152.00	257	253.00	26
54.00	50	103.00	360	153.00	341	260.00	294
55.00	1646	104.00	1950	154.00	411	261.00	232
56.00	9115	105.00	357	155.00	993	262.00	10
57.00	16306	106.00	2132	156.00	78	265.00	9
58.00	782	107.00	341	157.00	519	271.00	7
60.00	5095	108.00	153	158.00	260	272.00	92
61.00	24112	110.00	253	159.00	564	281.00	265
62.00	24440	111.00	542	161.00	566	283.00	29
63.00	17488	112.00	491	164.00	22	295.00	51
64.00	1724	113.00	412	167.00	50	306.00	30
65.00	114	115.00	472	169.00	50	311.00	50
66.00	89	116.00	1768	170.00	107	313.00	72
67.00	1293	117.00	2682	171.00	153	315.00	56
68.00	46056	118.00	1668	172.00	367	322.00	191
69.00	46824	119.00	2431	173.00	2476	323.00	78
70.00	3474	120.00	76	174.00	348416	325.00	79
71.00	356	121.00	147	175.00	25528	327.00	178

Data File: /chem/msdv.i/17Oct2014.b/v101701.d

Date : 17-OCT-2014 09:24

Client ID: BFB

Instrument: msdv.i

Sample Info: 2.0uL #2299-788; BFB Tune Check; BFB

Volume Injected (uL): 1.0

Operator: ef

Column phase:

Column diameter: 2.00

Data File: v101701.d
Spectrum: Avg. Scans 111-113 (6.64), Background Scan 107
Location of Maximum: 95.00
Number of points: 173

m/z	Y	m/z	Y	m/z	Y	m/z	Y
72.00	2316	122.00	111	176.00	337344	329.00	45
73.00	20368	123.00	99	177.00	22056	332.00	51
74.00	73920	124.00	306	178.00	659	334.00	85
75.00	221504	125.00	128	179.00	68	341.00	39
76.00	18984	126.00	72	187.00	55	342.00	104
77.00	2279	128.00	1518	189.00	12	346.00	8
78.00	1378	129.00	897	190.00	60		
79.00	14440	130.00	1498	191.00	536		
80.00	4392	131.00	738	192.00	98		

Eurofins Air Toxics Inc.

Data file : /chem/msdv.i/22Oct2014.b/v102201.d
Lab Smp Id: Client Smp ID: BFB
Inj Date : 22-OCT-2014 09:04
Operator : ef Inst ID: msdv.i
Smp Info : 2.0uL #2299-788; BFB Tune Check; BFB
Misc Info : 50ng
Comment :
Method : /chem/msdv.i/22Oct2014.b/bfb60.m
Meth Date : 22-Oct-2014 09:24 efinn 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	
6.640	6.640	0.000	95	406442			100.00- 100.00	100.00
6.640	6.640	0.000	50	119178			8.00- 40.00	29.32
6.640	6.640	0.000	75	198888			30.00- 66.00	48.93
6.640	6.640	0.000	96	26670			5.00- 9.00	6.56
6.640	6.640	0.000	173	2672			0.00- 1.99	0.82
6.640	6.640	0.000	174	324864			50.00- 120.00	79.93
6.640	6.640	0.000	175	23832			4.00- 9.00	7.34
6.640	6.640	0.000	176	314611			93.00- 101.00	96.84
6.640	6.640	0.000	177	20719			5.00- 9.00	6.59

Data File: /chem/msdv.i/22Oct2014.b/v102201.d

Date : 22-OCT-2014 09:04

Client ID: BFB

Instrument: msdv.i

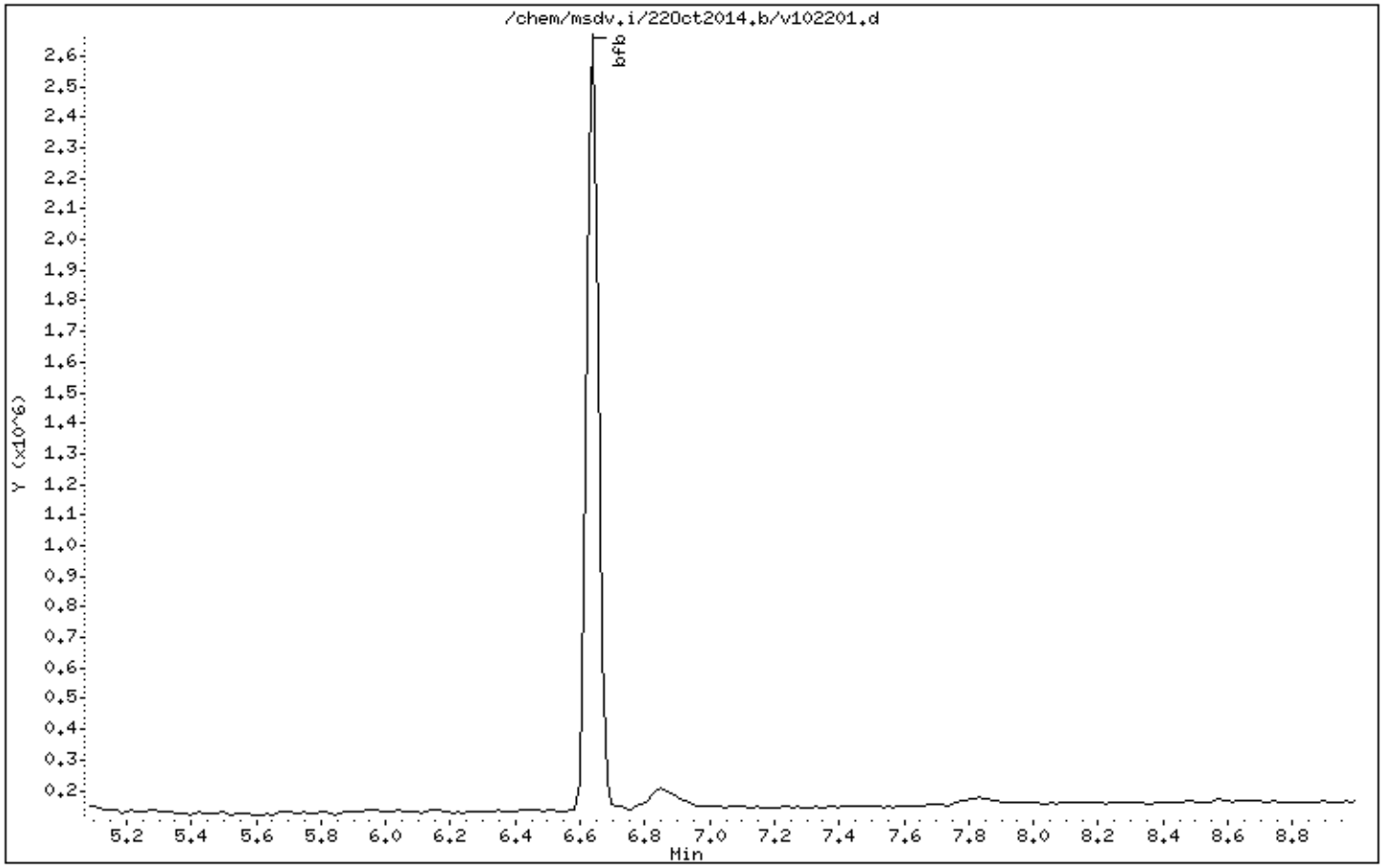
Sample Info: 2.0uL #2299-788; BFB Tune Check; BFB

Volume Injected (uL): 1.0

Operator: ef

Column phase:

Column diameter: 2.00



Data File: /chem/msdv.i/22Oct2014.b/v102201.d

Date : 22-OCT-2014 09:04

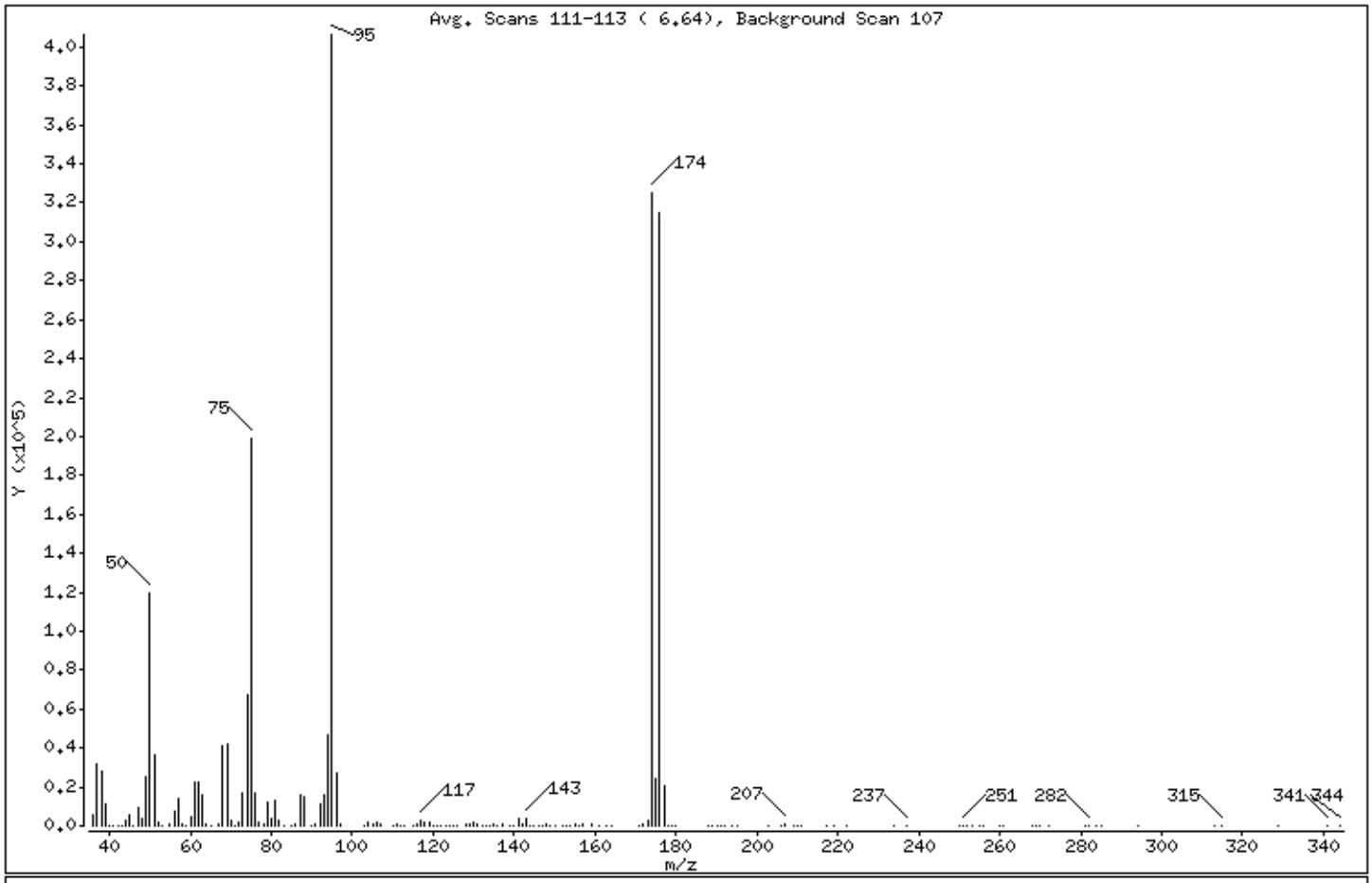
Client ID: BFB Instrument: msdv.i

Sample Info: 2.0uL #2299-788; BFB Tune Check; BFB

Volume Injected (uL): 1.0 Operator: ef

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	29.32
75	30.00 - 66.00% of mass 95	48.93
96	5.00 - 9.00% of mass 95	6.56
173	Less than 1.99% of mass 174	0.66 (0.82)
174	50.00 - 120.00% of mass 95	79.93
175	4.00 - 9.00% of mass 174	5.86 (7.34)
176	93.00 - 101.00% of mass 174	77.41 (96.84)
177	5.00 - 9.00% of mass 176	5.10 (6.59)

Data File: /chem/msdv.i/22Oct2014.b/v102201.d

Date : 22-OCT-2014 09:04

Client ID: BFB

Instrument: msdv.i

Sample Info: 2.0uL #2299-788; BFB Tune Check; BFB

Volume Injected (uL): 1.0

Operator: ef

Column phase:

Column diameter: 2.00

Data File: v102201.d
Spectrum: Avg. Scans 111-113 (6.64), Background Scan 107
Location of Maximum: 95.00
Number of points: 161

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	5786	79.00	12606	131.00	625	190.00	59
37.00	32208	80.00	3897	132.00	126	191.00	207
38.00	28432	81.00	12852	133.00	368	192.00	36
39.00	10873	82.00	2973	134.00	55	194.00	8
40.00	30	83.00	384	135.00	950	195.00	151
41.00	75	85.00	21	136.00	107	203.00	77
42.00	157	86.00	489	137.00	737	206.00	111
43.00	402	87.00	15795	139.00	201	207.00	909
44.00	3150	88.00	15274	140.00	313	209.00	336
45.00	5365	90.00	55	141.00	3835	210.00	27
46.00	403	91.00	1197	142.00	505	211.00	174
47.00	9358	92.00	10908	143.00	3911	217.00	64
48.00	3582	93.00	16303	144.00	293	219.00	28
49.00	25456	94.00	46840	145.00	243	222.00	110
50.00	119176	95.00	406400	146.00	466	234.00	93
51.00	36552	96.00	26664	147.00	112	237.00	143
52.00	1414	97.00	759	148.00	827	250.00	89
53.00	129	103.00	190	149.00	213	251.00	221
55.00	1396	104.00	1792	150.00	449	252.00	70
56.00	7917	105.00	584	152.00	250	253.00	71
57.00	14254	106.00	1801	153.00	310	255.00	70
58.00	715	107.00	600	154.00	327	256.00	50
59.00	338	110.00	416	155.00	930	260.00	174
60.00	4511	111.00	522	156.00	115	261.00	143
61.00	22616	112.00	315	157.00	819	268.00	67
62.00	22216	113.00	408	159.00	546	269.00	26
63.00	16316	115.00	378	161.00	398	270.00	65
64.00	1384	116.00	1311	163.00	141	272.00	38
65.00	85	117.00	2570	164.00	141	281.00	11
67.00	1033	118.00	1692	171.00	120	282.00	133
68.00	41224	119.00	2213	172.00	570	284.00	28
69.00	41960	120.00	40	173.00	2672	285.00	52
70.00	3069	121.00	47	174.00	324864	294.00	54
71.00	140	122.00	133	175.00	23832	313.00	41
72.00	2127	123.00	240	176.00	314560	315.00	55

Data File: /chem/msdv.i/22Oct2014.b/v102201.d

Date : 22-OCT-2014 09:04

Client ID: BFB

Instrument: msdv.i

Sample Info: 2.0uL #2299-788; BFB Tune Check; BFB

Volume Injected (uL): 1.0

Operator: ef

Column phase:

Column diameter: 2.00

Data File: v102201.d
Spectrum: Avg. Scans 111-113 (6.64), Background Scan 107
Location of Maximum: 95.00
Number of points: 161

m/z	Y	m/z	Y	m/z	Y	m/z	Y
73.00	17240	124.00	307	177.00	20712	329.00	5
74.00	67016	125.00	172	178.00	317	341.00	35
75.00	198848	126.00	95	179.00	103	344.00	12
76.00	16632	128.00	1339	180.00	181		
77.00	1756	129.00	764	188.00	72		
78.00	1332	130.00	1471	189.00	14		

Eurofins Air Toxics Inc.

Data file : /var/chem/msdv.i/03Nov2014.b/v110301.d
Lab Smp Id: Client Smp ID: BFB
Inj Date : 03-NOV-2014 06:27
Operator : act Inst ID: msdv.i
Smp Info : 2.0uL #2299-790; BFB Tune Check; BFB
Misc Info : 50ng
Comment :
Method : /var/chem/msdv.i/03Nov2014.b/bfb60.m
Meth Date : 03-Nov-2014 06:43 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	
6.640	6.640	0.000	95	297249			100.00- 100.00	100.00
6.640	6.640	0.000	50	90872			8.00- 40.00	30.57
6.640	6.640	0.000	75	146503			30.00- 66.00	49.29
6.640	6.640	0.000	96	19513			5.00- 9.00	6.56
6.640	6.640	0.000	173	2077			0.00- 1.99	0.90
6.640	6.640	0.000	174	231786			50.00- 120.00	77.98
6.640	6.640	0.000	175	16999			4.00- 9.00	7.33
6.640	6.640	0.000	176	222829			93.00- 101.00	96.14
6.640	6.640	0.000	177	14533			5.00- 9.00	6.52

Data File: /chem/msdv.i/03Nov2014.b/v110301.d

Date : 03-NOV-2014 06:27

Client ID: BFB

Instrument: msdv.i

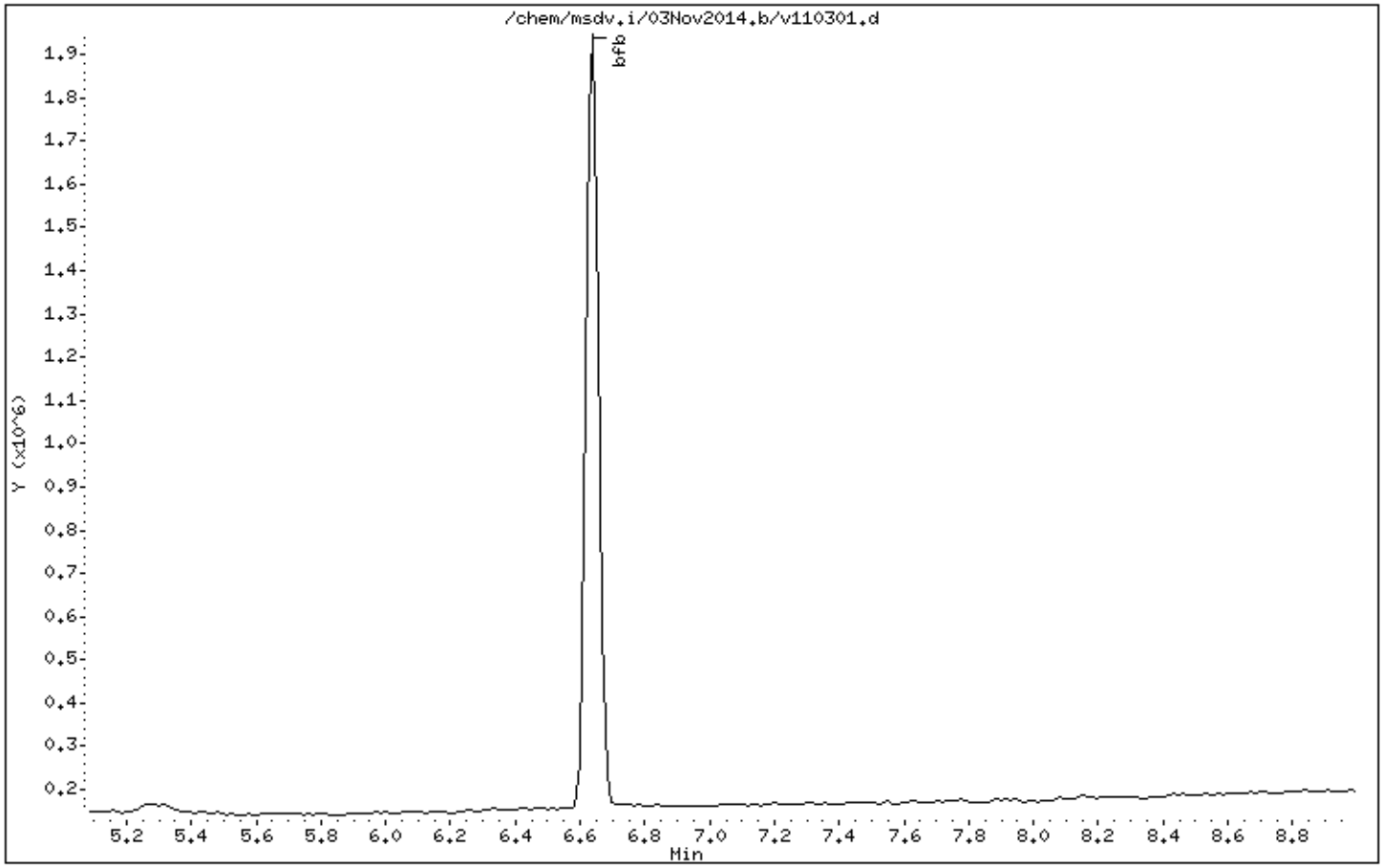
Sample Info: 2.0uL #2299-790; BFB Tune Check; BFB

Volume Injected (uL): 1.0

Operator: act

Column phase:

Column diameter: 2.00



Data File: /chem/msdv.i/03Nov2014.b/v110301.d

Date : 03-NOV-2014 06:27

Client ID: BFB

Instrument: msdv.i

Sample Info: 2.0uL #2299-790; BFB Tune Check; BFB

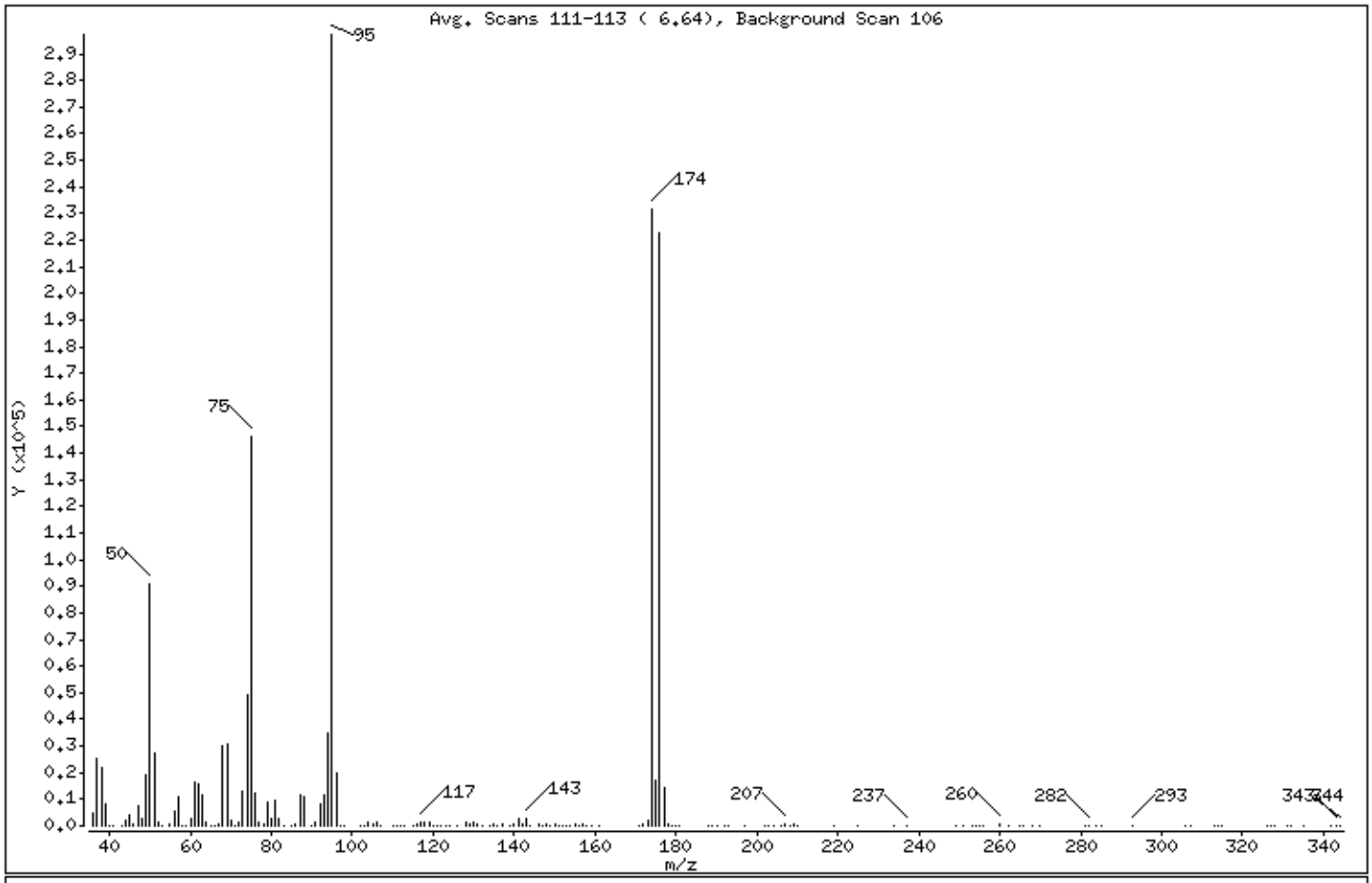
Volume Injected (uL): 1.0

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	30.57
75	30.00 - 66.00% of mass 95	49.29
96	5.00 - 9.00% of mass 95	6.56
173	Less than 1.99% of mass 174	0.70 (0.90)
174	50.00 - 120.00% of mass 95	77.98
175	4.00 - 9.00% of mass 174	5.72 (7.33)
176	93.00 - 101.00% of mass 174	74.96 (96.14)
177	5.00 - 9.00% of mass 176	4.89 (6.52)

Data File: /chem/msdv.i/03Nov2014.b/v110301.d

Date : 03-NOV-2014 06:27

Client ID: BFB

Instrument: msdv.i

Sample Info: 2.0uL #2299-790; BFB Tune Check; BFB

Volume Injected (uL): 1.0

Operator: act

Column phase:

Column diameter: 2.00

Data File: v110301.d
Spectrum: Avg. Scans 111-113 (6.64), Background Scan 106
Location of Maximum: 95.00
Number of points: 170

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	4551	81.00	9352	135.00	846	204.00	139
37.00	25488	82.00	2392	136.00	69	206.00	79
38.00	22144	83.00	209	137.00	470	207.00	410
39.00	8022	85.00	19	139.00	224	208.00	336
40.00	111	86.00	413	140.00	348	209.00	352
41.00	15	87.00	11840	141.00	2865	210.00	132
43.00	220	88.00	10918	142.00	498	219.00	15
44.00	2309	90.00	122	143.00	2924	225.00	50
45.00	4069	91.00	1131	144.00	275	234.00	68
46.00	371	92.00	7899	146.00	621	237.00	109
47.00	7299	93.00	11583	147.00	44	249.00	114
48.00	2696	94.00	34888	148.00	574	251.00	58
49.00	19056	95.00	297216	149.00	246	253.00	187
50.00	90872	96.00	19512	150.00	366	254.00	48
51.00	27360	97.00	169	151.00	109	255.00	112
52.00	1178	98.00	6	152.00	66	256.00	58
53.00	138	102.00	142	153.00	192	260.00	433
55.00	572	103.00	25	154.00	297	262.00	7
56.00	5285	104.00	1180	155.00	749	265.00	94
57.00	10862	105.00	381	156.00	149	266.00	52
58.00	338	106.00	1362	157.00	550	268.00	52
59.00	210	107.00	248	158.00	235	270.00	6
60.00	2954	110.00	278	159.00	222	281.00	60
61.00	16345	111.00	141	161.00	128	282.00	270
62.00	16033	112.00	163	171.00	61	284.00	9
63.00	11508	113.00	198	172.00	426	285.00	115
64.00	1030	115.00	334	173.00	2077	293.00	123
65.00	83	116.00	1000	174.00	231744	306.00	111
66.00	213	117.00	1699	175.00	16992	307.00	53
67.00	615	118.00	1095	176.00	222784	313.00	98
68.00	30048	119.00	1606	177.00	14533	314.00	51
69.00	30768	120.00	77	178.00	402	315.00	54
70.00	2218	121.00	131	179.00	25	326.00	74
71.00	328	122.00	62	180.00	56	327.00	267
72.00	1360	123.00	134	181.00	47	328.00	44

Data File: /chem/msdv.i/03Nov2014.b/v110301.d

Date : 03-NOV-2014 06:27

Client ID: BFB

Instrument: msdv.i

Sample Info: 2.0uL #2299-790; BFB Tune Check; BFB

Volume Injected (uL): 1.0

Operator: act

Column phase:

Column diameter: 2.00

Data File: v110301.d
Spectrum: Avg. Scans 111-113 (6.64), Background Scan 106
Location of Maximum: 95.00
Number of points: 170

m/z	Y	m/z	Y	m/z	Y	m/z	Y
73.00	13082	124.00	292	188.00	56	331.00	2
74.00	49288	126.00	53	189.00	104	332.00	50
75.00	146496	128.00	1270	190.00	52	335.00	175
76.00	12323	129.00	570	192.00	25	342.00	82
77.00	1704	130.00	1078	193.00	111	343.00	327
78.00	950	131.00	497	197.00	212	344.00	144
79.00	9001	132.00	29	202.00	125		
80.00	2825	134.00	218	203.00	172		

Eurofins Air Toxics Inc.

Data file : /var/chem/msdv.i/16Dec2014.b/v121601.d
Lab Smp Id: Client Smp ID: BFB
Inj Date : 16-DEC-2014 08:20
Operator : ef Inst ID: msdv.i
Smp Info : 2.0uL #2299-790; BFB Tune Check; BFB
Misc Info : 50ng
Comment :
Method : /var/chem/msdv.i/16Dec2014.b/bfb60.m
Meth Date : 16-Dec-2014 08:36 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	
6.640	6.640	0.000	95	441578			100.00- 100.00	100.00
6.640	6.640	0.000	50	143532			8.00- 40.00	32.50
6.640	6.640	0.000	75	231819			30.00- 66.00	52.50
6.640	6.640	0.000	96	28955			5.00- 9.00	6.56
6.640	6.640	0.000	173	3591			0.00- 1.99	1.16
6.640	6.640	0.000	174	308480			50.00- 120.00	69.86
6.640	6.640	0.000	175	22533			4.00- 9.00	7.30
6.640	6.640	0.000	176	296989			93.00- 101.00	96.27
6.640	6.640	0.000	177	18711			5.00- 9.00	6.30

Data File: /chem/msdv.i/16Dec2014.b/v121601.d

Date : 16-DEC-2014 08:20

Client ID: BFB

Instrument: msdv.i

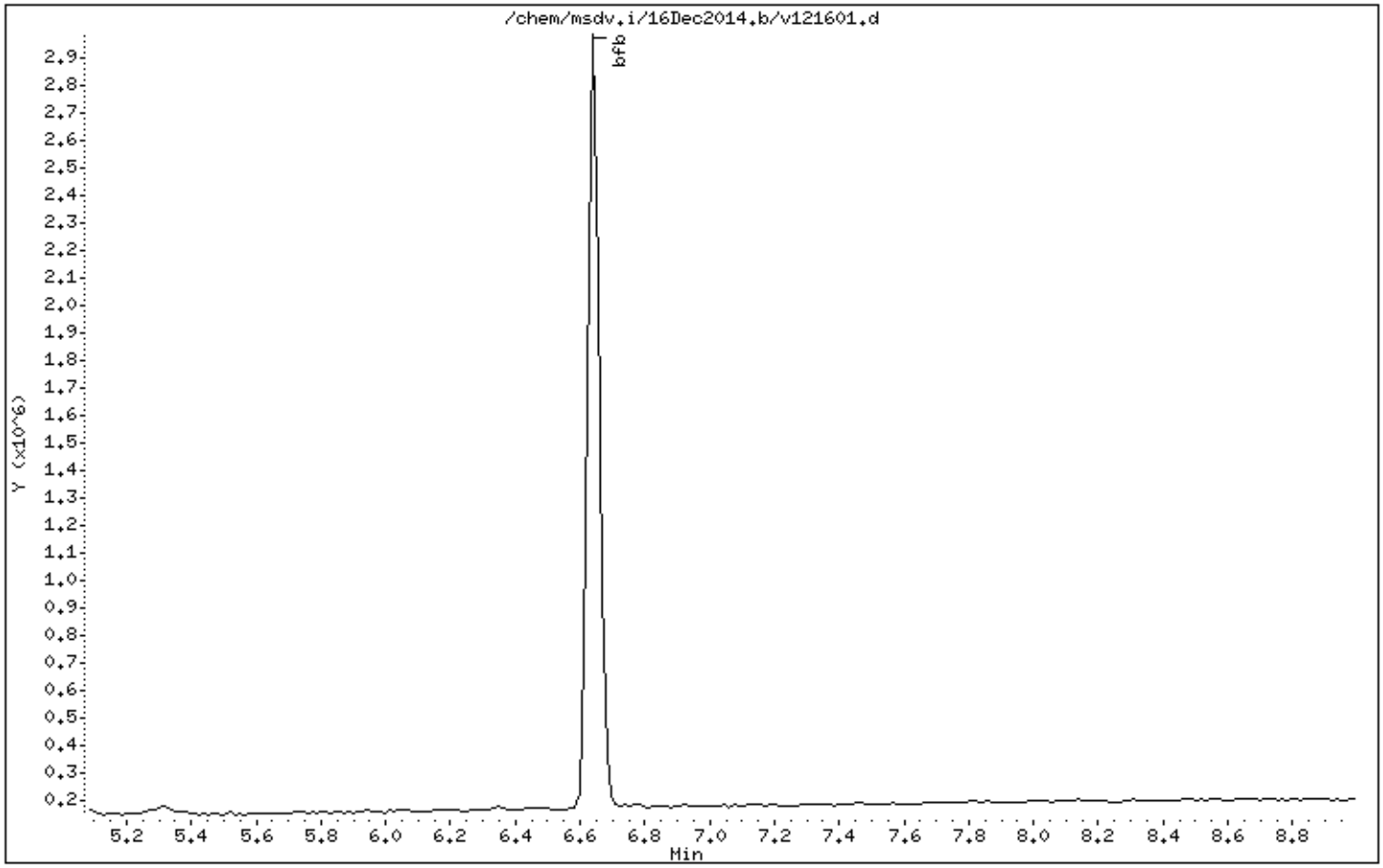
Sample Info: 2.0uL #2299-790; BFB Tune Check; BFB

Volume Injected (uL): 1.0

Operator: ef

Column phase:

Column diameter: 2.00



Data File: /chem/msdv.i/16Dec2014.b/v121601.d

Date : 16-DEC-2014 08:20

Client ID: BFB

Instrument: msdv.i

Sample Info: 2.0uL #2299-790; BFB Tune Check; BFB

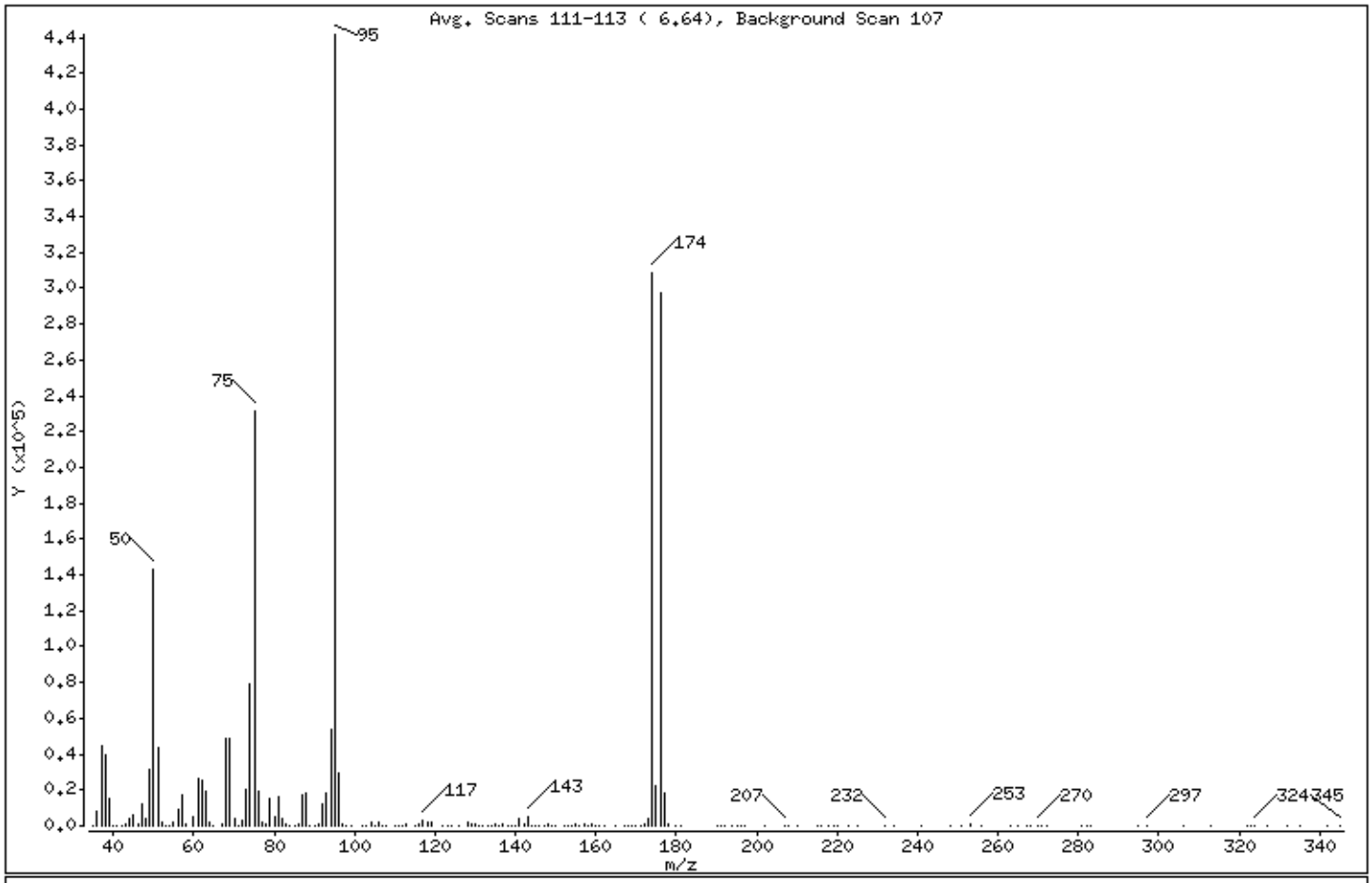
Volume Injected (uL): 1.0

Operator: ef

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	32.50
75	30.00 - 66.00% of mass 95	52.50
96	5.00 - 9.00% of mass 95	6.56
173	Less than 1.99% of mass 174	0.81 (1.16)
174	50.00 - 120.00% of mass 95	69.86
175	4.00 - 9.00% of mass 174	5.10 (7.30)
176	93.00 - 101.00% of mass 174	67.26 (96.27)
177	5.00 - 9.00% of mass 176	4.24 (6.30)

Data File: /chem/msdv.i/16Dec2014.b/v121601.d

Date : 16-DEC-2014 08:20

Client ID: BFB

Instrument: msdv.i

Sample Info: 2.0uL #2299-790; BFB Tune Check; BFB

Volume Injected (uL): 1.0

Operator: ef

Column phase:

Column diameter: 2.00

Data File: v121601.d
Spectrum: Avg. Scans 111-113 (6.64), Background Scan 107
Location of Maximum: 95.00
Number of points: 179

m/z	Y	m/z	Y	m/z	Y	m/z	Y
35.00	55	82.00	3828	135.00	865	194.00	273
36.00	8354	83.00	567	136.00	147	195.00	80
37.00	44528	84.00	58	137.00	1037	196.00	121
38.00	39696	85.00	72	138.00	87	197.00	73
39.00	15219	86.00	606	139.00	310	202.00	60
40.00	332	87.00	17352	140.00	333	207.00	496
41.00	17	88.00	17968	141.00	4097	208.00	173
42.00	154	89.00	87	142.00	645	210.00	3
43.00	579	90.00	116	143.00	4571	215.00	62
44.00	4394	91.00	1140	144.00	215	216.00	239
45.00	6575	92.00	12400	145.00	207	218.00	46
46.00	572	93.00	18296	146.00	492	219.00	60
47.00	11938	94.00	53664	147.00	282	220.00	188
48.00	4308	95.00	441536	148.00	1004	223.00	1
49.00	31016	96.00	28952	149.00	144	225.00	163
50.00	143488	97.00	758	150.00	239	232.00	263
51.00	43712	98.00	150	152.00	179	234.00	126
52.00	1834	99.00	50	153.00	493	241.00	62
53.00	119	102.00	98	154.00	327	248.00	65
54.00	149	103.00	95	155.00	906	251.00	109
55.00	1712	104.00	1991	156.00	304	253.00	701
56.00	9417	105.00	424	157.00	585	256.00	130
57.00	17232	106.00	2063	158.00	23	263.00	59
58.00	640	107.00	234	159.00	682	265.00	60
60.00	5063	108.00	186	160.00	56	267.00	189
61.00	26584	110.00	260	161.00	350	268.00	66
62.00	25440	111.00	470	162.00	37	270.00	383
63.00	19080	112.00	485	165.00	20	271.00	53
64.00	1832	113.00	632	167.00	126	272.00	298
65.00	228	115.00	368	168.00	144	281.00	80
67.00	1324	116.00	1451	169.00	61	282.00	19
68.00	48984	117.00	2540	170.00	272	283.00	207
69.00	48496	118.00	1610	171.00	99	295.00	50
70.00	3590	119.00	2137	172.00	751	297.00	110
71.00	218	122.00	146	173.00	3591	306.00	24

Data File: /chem/msdv.i/16Dec2014.b/v121601.d

Date : 16-DEC-2014 08:20

Client ID: BFB

Instrument: msdv.i

Sample Info: 2.0uL #2299-790; BFB Tune Check; BFB

Volume Injected (uL): 1.0

Operator: ef

Column phase:

Column diameter: 2.00

Data File: v121601.d
Spectrum: Avg. Scans 111-113 (6.64), Background Scan 107
Location of Maximum: 95.00
Number of points: 179

m/z	Y	m/z	Y	m/z	Y	m/z	Y
72.00	2566	123.00	255	174.00	308480	313.00	77
73.00	20656	124.00	357	175.00	22528	322.00	160
74.00	79144	126.00	145	176.00	296960	323.00	208
75.00	231808	128.00	1702	177.00	18704	324.00	216
76.00	19496	129.00	1017	178.00	645	327.00	139
77.00	2325	130.00	1516	180.00	153	332.00	58
78.00	1448	131.00	384	181.00	49	335.00	71
79.00	15698	132.00	62	190.00	125	342.00	130
80.00	4702	133.00	115	191.00	187	345.00	9
81.00	16034	134.00	100	192.00	91		

Shipping/ Receiving Documents

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

eurofins | Air Toxics

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 1 of 1

Project Manager Terry Taylor
Collected by: (Print and Sign) AM
Company AMAI Email
Address 110 Corporate Pk City White Plains State NY Zip 10604
Phone 914-391-1225 Fax

Project Info:
P.O. #
Project # Building 5 VI
Project Name BMS Hawthorne

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	BSIA-8(2014)	33654	12/9/14	1126	see notes	28.5	6.5		
02A	BSIA-10(2014)	25261	12/9/14	1148	"	30+	9.5		
03A	BSIA-6(2014)	940	12/9/14	1329	"	27.5	5		
04A	BSIA-7(2014)	33889	12/9/14	1420	"	30	8		
05A	BSIA-2(2014)	3737	12/9/14	1445	"	30+	8		
06A	BSIA-1(2014)	12019	12/9/14	1452	"	30	8		
07A	BSIA-AA(2014)	5695	12/9/14	1508	"	29.5	5		
08A	BSIA-4(2014)	25248	12/9/14	1517	"	30+	7"		

Relinquished by: (signature) Date/Time	Received by: (signature) Date/Time
12/9/14 1520	12/10/14 FAIL ~~10/10/14~~ 1010 AM
Relinquished by: (signature) Date/Time	Received by: (signature) Date/Time
Relinquished by: (signature) Date/Time	Received by: (signature) Date/Time

Notes: Acetone, Benzene, Ethylbenzene, toluene, xylene, Methanol, MIBK, Isopropyl ~~Alcohol~~ Alcohol via TO-15, Methane via ASTM D-1946

Lab Use Only	Shipper Name	Air Bill #	Temp (°C)	Condition	Custody Seals Intact?	Work Order #
	FedEx	7721 4722 6347	NA	Good	Yes No None	1412152

Form 1293 rev.11

eurofins | Air Toxics

SAMPLE RECEIPT SUMMARY

WORKORDER 1412152AR1

Client

Mr. Terry Taylor
Anderson Mulholland &
Associates, Inc.
2700 Westchester Avenue
Suite 417
Purchase, NY 10577
Sales Rep: N/A

Phone

(914) 251-0400

Fax

Date Promised: 06/25/15
Date Completed: 7/1/15
Date Received: 12/10/14
PO#:
Project#: Building 5 VI BMS Humacao

Total $: $ 175.00
Logged By: JCW

Fraction	Sample #	Analysis	Collected	Receipt Vac./Pres.	Amount$
01A	B5IA- 8 (2014)	Modified TO-15	12/9/2014	6.9 "Hg	$0.00
02A	B5IA-10 (2014)	Modified TO-15	12/9/2014	7.6 "Hg	$0.00
03A	B5IA-6 (2014)	Modified TO-15	12/9/2014	4.7 "Hg	$0.00
04A	B5IA-7 (2014)	Modified TO-15	12/9/2014	8 "Hg	$0.00
05A	B5IA-2 (2014)	Modified TO-15	12/9/2014	6.7 "Hg	$0.00
06A	B5IA-1 (2014)	Modified TO-15	12/9/2014	7.3 "Hg	$0.00
07A	B5IA-AA (2014)	Modified TO-15	12/9/2014	5.5 "Hg	$0.00
08A	B5IA-4 (2014)	Modified TO-15	12/9/2014	6.9 "Hg	$0.00
09A	Lab Blank	Modified TO-15	NA	NA	$0.00
10A	CCV	Modified TO-15	NA	NA	$0.00
11A	LCS	Modified TO-15	NA	NA	$0.00
11AA	LCSD	Modified TO-15	NA	NA	$0.00

Misc. Charges	Reissue Charges (1) @ $135.00 each.	$135.00
	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

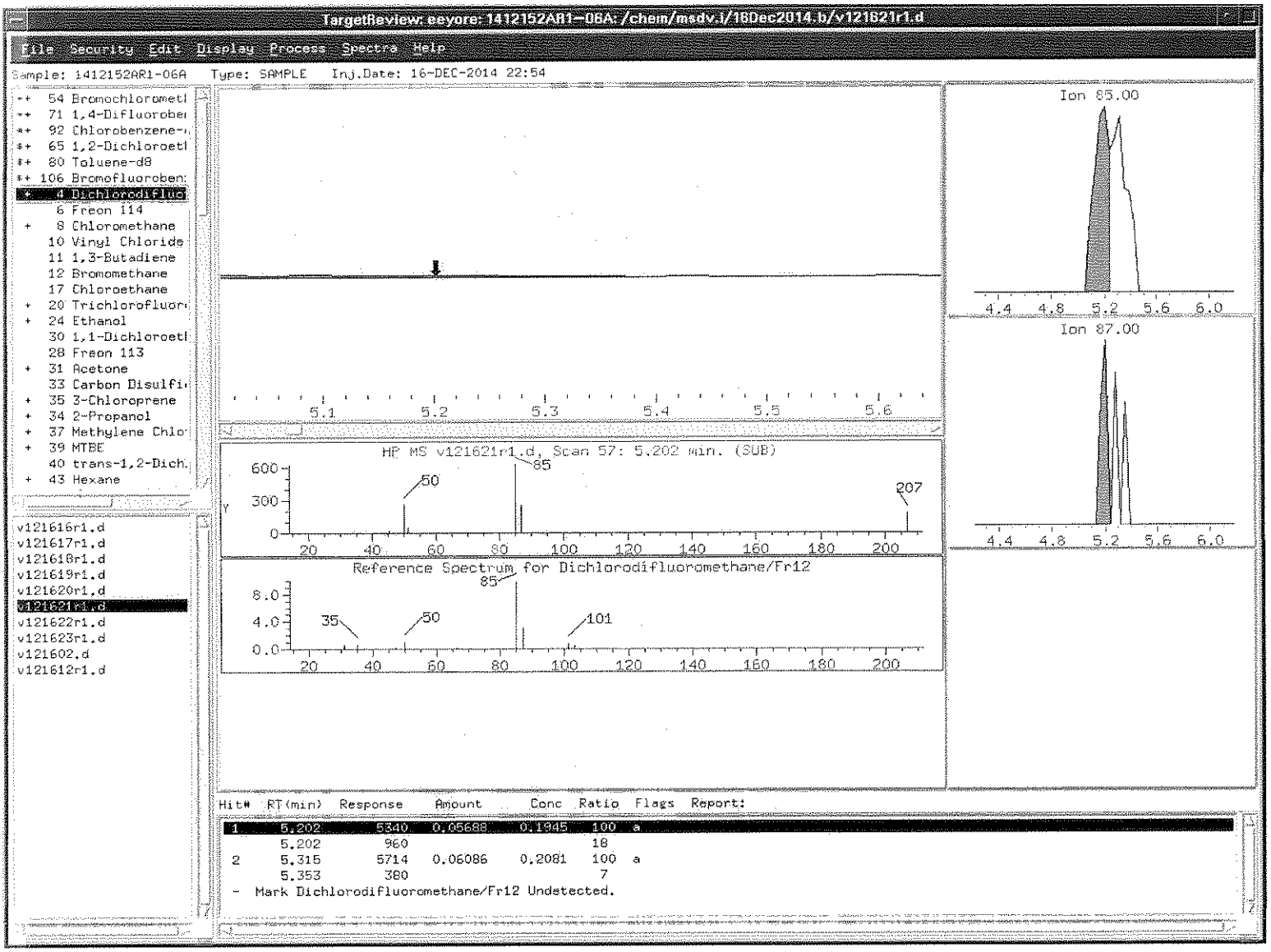
BILL TO: Accounts Payable
Anderson Mulholland & Associates, Inc.
2700 Westchester Avenue
Suite 417
Purchase, NY 10577

Analysis Code: pptv

TERMS:

Reporting Method: Modified TO-15-LL + Naph

Other Records


TargetReview: eeyore: 1412152AR1-06A: /chem/msdv.i/18Dec2014.b/v121621r1.d
File Security Edit Display Process Spectra Help
Sample: 1412152AR1-06A Type: SAMPLE Inj.Date: 16-DEC-2014 22:54
54 Bromochlorometh
71 1,4-Difluorobe
92 Chlorobenzene-
65 1,2-Dichloroeth
80 Toluene-d8
106 Bromofluoroben
4 Dichlorodifluo
6 Freon 114
8 Chloromethane
10 Vinyl Chloride
11 1,3-Butadiene
12 Bromomethane
17 Chloroethane
20 Trichlorofluor
24 Ethanol
30 1,1-Dichloroeth
28 Freon 113
31 Acetone
33 Carbon Disulfi
35 3-Chloroprene
34 2-Propanol
37 Methylene Chlo
39 MTBE
40 trans-1,2-Dich
43 Hexane
v121616r1.d
v121617r1.d
v121618r1.d
v121619r1.d
v121620r1.d
v121621r1.d
v121622r1.d
v121623r1.d
v121602.d
v121612r1.d
Ion 85.00
Ion 87.00
HP MS v121621r1.d, Scan 57: 5.202 min. (SUB)
Reference Spectrum for Dichlorodifluoromethane/Fr12
Hit# RT(min) Response Amount Conc Ratio Flags Report:
1 5.202 5340 0.05688 0.1945 100 a
5.202 960 18
2 5.315 5714 0.06086 0.2081 100 a
5.353 380 7
- Mark Dichlorodifluoromethane/Fr12 Undetected.

Before

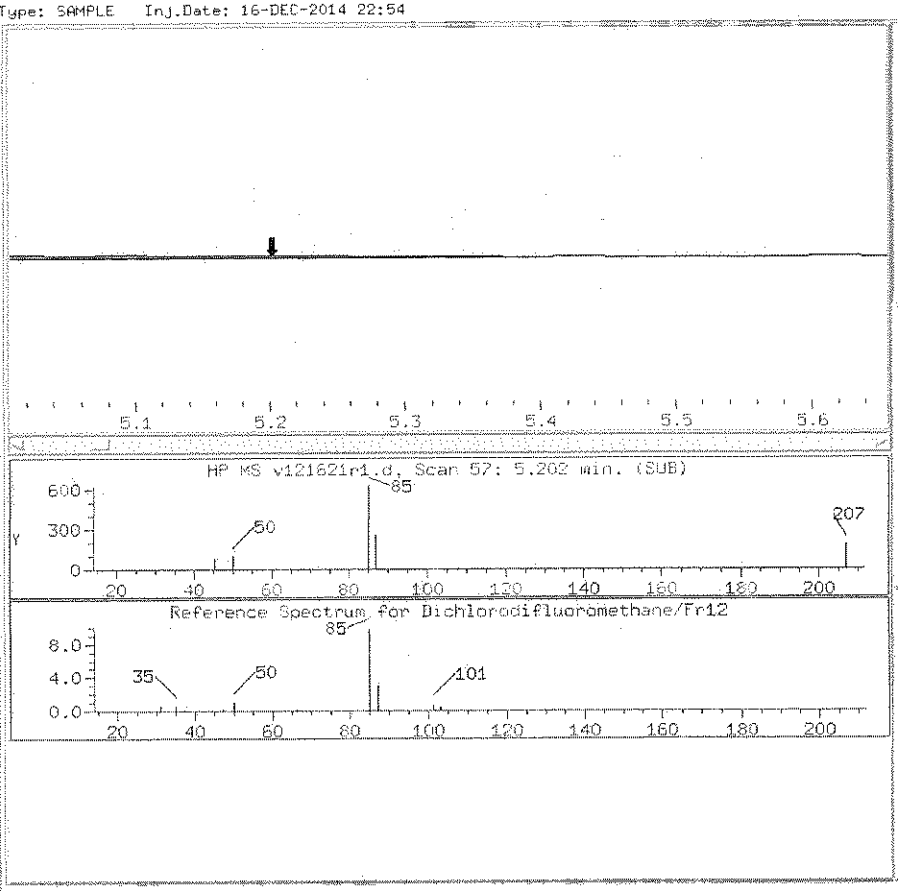
TargetReview: eeyore: 1412152AR1-DBA:/chem/msdv.i/16Dec2014.b/v121621r1.d

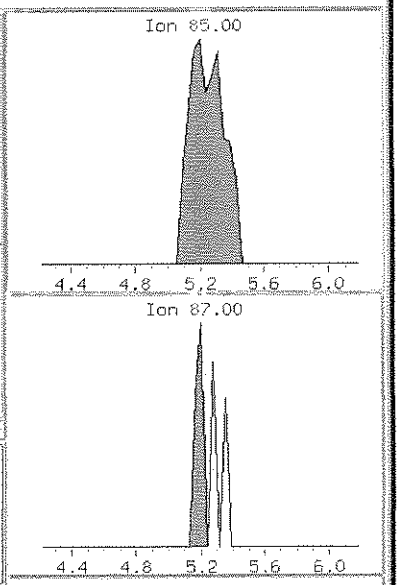
File Security Edit Display Process Spectra Help

Sample: 1412152AR1-06A Type: SAMPLE Inj.Date: 16-DEC-2014 22:54

- 54 Bromochloromethl
- 71 1,4-Difluorobe
- 92 Chlorobenzene-
- 65 1,2-Dichloroetl
- 80 Toluene-d8
- 106 Bromofluoroben
- 4 Dichlorodifluo
- 6 Freon 114
- 8 Chloromethane
- 10 Vinyl Chloride
- 11 1,3-Butadiene
- 12 Bromomethane
- 17 Chloroethane
- 20 Trichlorofluor
- 24 Ethanol
- 30 1,1-Dichloroetl
- 28 Freon 113
- 31 Acetone
- 33 Carbon Disulfi
- 35 3-Chloroprene
- 34 2-Propanol
- 37 Methylene Chlo
- 39 MTBE
- 40 trans-1,2-Dich
- 43 Hexane

v121616r1.d
v121617r1.d
v121618r1.d
v121619r1.d
v121620r1.d
v121621r1.d
v121622r1.d
v121623r1.d
v121602.d
v121612r1.d





Hit#	RT(min)	Response	Amount	Conc	Ratio	Flags	Report:
1	5.202	9969	0.1062	0.3631	100	aM	
	5.202	960			10		

- Mark Dichlorodifluoromethane/Fr12 Undetected.

After 83 7/1/15

Correct Baseline	
Split Peak	
Merge Peak	✓
Zoom In	
Change Parameter	
System Peak Subtraction	
Peak Misidentified	
Corrected Peak Integration	

$$\text{Dilution Factor} = \frac{\text{Final Pressure}}{\text{Initial Vacuum}} = \frac{14.7\text{psi} + \text{Final Pressure (psi)}}{14.7\text{psi} - [\text{Init. Pressure ("Hg)})*(14.7\text{psi}/30\text{"Hg})]}$$

$$\text{Dilution Factor} = \frac{\text{Final Pressure}}{\text{Initial Pressure}} = \frac{14.7\text{psi} + \text{Final Pressure (psi)}}{14.7\text{psi} + \text{Initial Pressure (psi)}}$$

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

Modified TO-15-LL + Naph

CAS Number	Compound	Detection Limit ppbv	Type
75-71-8	Freon 12	0.10	
76-14-2	Freon 114	0.10	
75-35-4	1,1-Dichloroethene	0.10	
67-64-1	Acetone	0.50	
67-63-0	2-Propanol	0.50	
75-15-0	Carbon Disulfide	0.50	
75-09-2	Methylene Chloride	0.20	
1634-04-4	Methyl tert-butyl ether	0.10	
156-60-5	trans-1,2-Dichloroethene	0.10	
110-54-3	Hexane	0.10	
75-34-3	1,1-Dichloroethane	0.10	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	0.50	
156-59-2	cis-1,2-Dichloroethene	0.10	
109-99-9	Tetrahydrofuran	0.50	
67-66-3	Chloroform	0.10	
71-55-6	1,1,1-Trichloroethane	0.10	
110-82-7	Cyclohexane	0.10	
56-23-5	Carbon Tetrachloride	0.10	
71-43-2	Benzene	0.10	
107-06-2	1,2-Dichloroethane	0.10	
142-82-5	Heptane	0.10	
79-01-6	Trichloroethene	0.10	
78-87-5	1,2-Dichloropropane	0.10	
123-91-1	1,4-Dioxane	0.10	
75-27-4	Bromodichloromethane	0.10	
10061-01-5	cis-1,3-Dichloropropene	0.10	
108-10-1	4-Methyl-2-pentanone	0.10	
108-88-3	Toluene	0.10	
10061-02-6	trans-1,3-Dichloropropene	0.10	
79-00-5	1,1,2-Trichloroethane	0.10	
127-18-4	Tetrachloroethene	0.10	
591-78-6	2-Hexanone	0.50	
124-48-1	Dibromochloromethane	0.10	
106-93-4	1,2-Dibromoethane (EDB)	0.10	
108-90-7	Chlorobenzene	0.10	
100-41-4	Ethyl Benzene	0.10	
108-38-3	m,p-Xylene	0.10	
95-47-6	o-Xylene	0.10	
100-42-5	Styrene	0.10	
75-25-2	Bromoform	0.10	
98-82-8	Cumene	0.10	
79-34-5	1,1,2,2-Tetrachloroethane	0.10	
103-65-1	Propylbenzene	0.10	
622-96-8	4-Ethyltoluene	0.10	
108-67-8	1,3,5-Trimethylbenzene	0.10	
95-63-6	1,2,4-Trimethylbenzene	0.10	

Compound List

Modified TO-15-LL + Naph

CAS Number	Compound	Detection Limit ppbv	Type
541-73-1	1,3-Dichlorobenzene	0.10	
106-46-7	1,4-Dichlorobenzene	0.10	
100-44-7	alpha-Chlorotoluene	0.10	
95-50-1	1,2-Dichlorobenzene	0.10	
120-82-1	1,2,4-Trichlorobenzene	0.50	
87-68-3	Hexachlorobutadiene	0.50	
91-20-3	Naphthalene	0.50	
17060-07-0	1,2-Dichloroethane-d4		
2037-26-5	Toluene-d8		
460-00-4	4-Bromofluorobenzene		
107-05-1	3-Chloropropene	0.50	
540-84-1	2,2,4-Trimethylpentane	0.50	
74-87-3	Chloromethane	0.50	
75-01-4	Vinyl Chloride	0.10	
106-99-0	1,3-Butadiene	0.10	
74-83-9	Bromomethane	0.50	
75-00-3	Chloroethane	0.50	
75-69-4	Freon 11	0.10	
64-17-5	Ethanol	0.50	
76-13-1	Freon 113	0.10	

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Media Certification Report

Canister Number: 6L#33654 w/24hrs#40302
Can#: 99058-33654
Date : 11/26/14 21:49
Data File: o112615.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
4-Bromofluorobenzene	460-00-4	100.00	% Recovery

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Media Certification Report

Canister Number: 6L#25261 w/24hrs#40129
Can#: 99058-25261
Date : 11/26/14 20:43
Data File: o112613.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
4-Bromofluorobenzene	460-00-4	99.00	% Recovery

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Media Certification Report

Canister Number: 6L#940 w/24hrs#40519
Can#: 99058-940
Date : 11/26/14 23:29
Data File: o112618.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
4-Bromofluorobenzene	460-00-4	99.00	% Recovery

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Media Certification Report

Canister Number: 6L#33889 w/24hrs#40429
Can#: 99058-33889
Date : 11/26/14 22:23
Data File: o112616.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
4-Bromofluorobenzene	460-00-4	101.00	% Recovery

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Media Certification Report

Canister Number: 6L#3737 w/24hrs#40234
Can#: 99058-3737
Date : 11/26/14 19:44
Data File: o112611.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
4-Bromofluorobenzene	460-00-4	101.00	% Recovery

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Media Certification Report

Canister Number: 6L#12019 w/24hrs#40618
Can#: 99058-12019
Date : 11/26/14 16:46
Data File: o112605.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
4-Bromofluorobenzene	460-00-4	98.00	% Recovery

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Media Certification Report

Canister Number: 6L#5695 w/24hrs#30593
Can#: 99058-5695
Date : 11/26/14 17:45
Data File: o112607.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
4-Bromofluorobenzene	460-00-4	100.00	% Recovery

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Media Certification Report

Canister Number: 6L# 25248w/24hrs#40535
Can#: 99058-25248
Date : 11/26/14 22:53
Data File: o112617.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
4-Bromofluorobenzene	460-00-4	98.00	% Recovery

Eurofins Air Toxics, Inc.	Data Review Checklist			Release Date: 07/14/14
Workorder # 1412152A	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: SB MBX 12/16/14	S2:	S3:	S4:
✓					Daily QC and ICAL met Criteria				
✓					Lumen QC and ICAL evaluation report initialed and in folder				
N/A					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:

Ø out in QC (short list). J-flag naphthalene to MDL.

A1	A2	A3	A4	D	Section 2 – Sample Analysis				
					Initials/Date	A1: LN 12/18/14	A2: AS 12/17/14	A3:	A4:
✓	✓			✓	Internal Standard/Surrogate Recoveries, Dilution Factors, Load Volumes, Initial/Final Pressures, and Canister #s Verified				
NA	NA			NA	Manual Integrations/Bag or Can Dilution Forms/Re-pressurization Forms/Bag-Can Transfer Forms present (circle all that apply)				
✓	✓				12/24 Hr clock time & Hold Time met for all samples				
NA	NA			NA	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: 01A-04A ok (full loads)
A2: 05A, 07A-08A ok full loads. 06A - dil TC

D1	D2	D3	D4	T	3T	Section 3 – Target Data Reduction	Technical Review Needed? Circle one: Yes/No		T:	
						Initials/Instrument/ Date	D1: AT 12/23/14	D2:	D3:	D4:
NA						CAR # (if applicable)				
✓						Spectra Verified *(documentation of spectral defense included if applicable)*				
NA						TICs resemble reference spectra/ TICs between sample dups. are consistent *(if applicable)*				
✓						Lab Narrative is correct				
NA						TPH/NMOC calculations complete and included in folder				

Special notes: Tol, 2-propanol, 4-methyl-2-pentanone + Acetone E flagged for 08A
Tol, 2-propanol + Acetone E flagged for 03A-06A.

A	3T	Section 4- Atlas Data Entry	Lumen verified and included in folder	Circle one: Yes/No
		Initials/Date: VB 12/23/14	3rd Tier: *(needed only for DOD or per client request)*	
NA		Sample Discrepancy Report (SDR) complete and approved *(if applicable)*		
NA		Manually entered results are checked		
✓		At least one result per sample is verified against Target quant sheets		
✓		Appropriate data qualifier flags are applied		
✓		Final Invoice is correct/ Final PDF report, COC and EDD reviewed and correct		

Special Notes:

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

Eurofins Air Toxics, Inc.	Reissued - Data Review Checklist			Release Date 01/29/14
	Form F 1.27	Revision #8	Revision date 01/29/14	Page 2 of 2

Workorder # :				Reason for Reissue:
1412152AR1				Report Full list TO15 + Naph + JFlag MDL
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)
NA				Corrective Action issued - #
NA				The reissued workorder has been approved by QA Manager or a Technical Director

Additional Comments: Flag MDL, Multiple SOP exceedances (Narrative approved by SS) Raised RL for 12 & 2-chlorotoluene 0.1ppbv → 0.5ppbv

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)
SS 7/1/15			

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