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Electronic Comprehensive Validation Package (eCVP)

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COMPREHENSIVE VALIDATION PACKAGE

Modified TO-15

INVENTORY SHEET

Work Order #: 1502113AR1

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Comments:

Completed by:

Kara McKiernan	Kara McKiernan / Document Control	6/29/15
(Signature)	(Print Name & Title)	(Date)

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WORK ORDER #: 1502113AR1

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 #**	Bld 6 VI
DATE RECEIVED:	02/09/2015	**CONTACT:**	Brian Whittaker
DATE COMPLETED:	02/12/2015		
DATE REISSUED:	06/26/2015		

FRACTION #	NAME	TEST	RECEIPT VAC./PRES.	FINAL PRESSURE
01A	B6-5SS	Modified TO-15	5 "Hg	15 psi
02A	B6-3SS	Modified TO-15	3.5 "Hg	15 psi
03A	B6-3SSD	Modified TO-15	3.5 "Hg	15 psi
04A	B6-4SS	Modified TO-15	5.5 "Hg	15 psi
05A	Lab Blank	Modified TO-15	NA	NA
06A	CCV	Modified TO-15	NA	NA
07A	LCS	Modified TO-15	NA	NA
07AA	LCSD	Modified TO-15	NA	NA

CERTIFIED BY: Heidi Hayes

Technical Director

DATE: 06/26/15

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# 1502113AR1

Four 1 Liter Summa Canister (100% Certified) samples were received on February 09, 2015. 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 samples B6-5SS and B6-4SS due to the presence of high level target species.

Samples B6-3SS and B6-3SSD did not meet laboratory acceptance criteria for duplicate samples. According to the COC, these samples appear to be field duplicates.

As per project specific client request the laboratory has reported estimated values for target compound hits that are below the Reporting Limit but greater than the Method Detection Limit. All the canisters used for this project have been certified to the Reporting Limit for the target analytes included in this workorder. Concentrations that are below the level at which the canister was certified may be false positives.

The workorder was reissued on June 26, 2015 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. Ethanol and Hexachlorobutadiene exceeded the laboratory control limits of 70-130% in the continuing calibration verification (CCV) analyzed on 02/10/2015. As a result, the re-issued report contains qualified data for these compounds in all of the samples.

Due to the MDL study performed on instrument MSD-V, the reporting limit for alpha-Chlorotoluene

was raised from 0.10 ppbv to 0.50 ppbv.

2-Propanol exceeded the instrument's calibration range for sample B6-4SS and was flagged accordingly.

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
B6-5SS	1502113AR1-01	2/ 4/2015	2/ 9/2015	NA	6	2/10/2015	NA	Good
B6-3SS	1502113AR1-02	2/ 4/2015	2/ 9/2015	NA	6	2/10/2015	NA	Good
B6-3SSD	1502113AR1-03	2/ 4/2015	2/ 9/2015	NA	6	2/10/2015	NA	Good
B6-4SS	1502113AR1-04	2/ 6/2015	2/ 9/2015	NA	4	2/10/2015	NA	Good
Lab Blank	1502113AR1-05	NA	NA	NA	NA	2/10/2015	NA	Good
CCV	1502113AR1-06	NA	NA	NA	NA	2/10/2015	NA	Good
LCS	1502113AR1-07	NA	NA	NA	NA	2/10/2015	NA	Good
LCSD	1502113AR1-07	NA	NA	NA	NA	2/10/2015	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: B6-5SS

Lab ID#: 1502113AR1-01A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Chloromethane	12	2.3 J	25	4.7 J
Ethanol	12	650 J0	23	1200 J0
Acetone	12	150	29	360
2-Propanol	12	390	30	960
Carbon Disulfide	12	6.8 J	38	21 J
Methylene Chloride	4.8	6.1	17	21
Methyl tert-butyl ether	2.4	210	8.7	760
Hexane	2.4	1.5 J	8.5	5.2 J
2-Butanone (Methyl Ethyl Ketone)	12	3.4 J	36	10 J
Tetrahydrofuran	12	3.1 J	36	9.0 J
Chloroform	2.4	6.1	12	30
Benzene	2.4	1.9 J	7.7	6.1 J
Heptane	2.4	93	9.9	380
4-Methyl-2-pentanone	2.4	36	9.9	150
Toluene	2.4	880	9.1	3300
Ethyl Benzene	2.4	14	10	59
m,p-Xylene	2.4	39	10	170
o-Xylene	2.4	11	10	49
Cumene	2.4	0.99 J	12	4.8 J
Propylbenzene	2.4	1.2 J	12	6.0 J
4-Ethyltoluene	2.4	5.2	12	26
1,3,5-Trimethylbenzene	2.4	1.8 J	12	8.6 J
1,2,4-Trimethylbenzene	2.4	4.5	12	22

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Client Sample ID: B6-5SS

Lab ID#: 1502113AR1-01A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**v021017r1**	**Date of Collection:**	**2/4/15 3:49:00 PM**
Dil. Factor:	**24.2**	**Date of Analysis:**	**2/10/15 07:20 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	2.4	Not Detected	12	Not Detected
Freon 114	2.4	Not Detected	17	Not Detected
Chloromethane	12	2.3 J	25	4.7 J
Vinyl Chloride	2.4	Not Detected	6.2	Not Detected
1,3-Butadiene	2.4	Not Detected	5.4	Not Detected
Bromomethane	12	Not Detected	47	Not Detected
Chloroethane	12	Not Detected	32	Not Detected
Freon 11	2.4	Not Detected	14	Not Detected
Ethanol	12	650 J0	23	1200 J0
Freon 113	2.4	Not Detected	18	Not Detected
1,1-Dichloroethene	2.4	Not Detected	9.6	Not Detected
Acetone	12	150	29	360
2-Propanol	12	390	30	960
Carbon Disulfide	12	6.8 J	38	21 J
3-Chloropropene	12	Not Detected	38	Not Detected
Methylene Chloride	4.8	6.1	17	21
Methyl tert-butyl ether	2.4	210	8.7	760
trans-1,2-Dichloroethene	2.4	Not Detected	9.6	Not Detected
Hexane	2.4	1.5 J	8.5	5.2 J
1,1-Dichloroethane	2.4	Not Detected	9.8	Not Detected
2-Butanone (Methyl Ethyl Ketone)	12	3.4 J	36	10 J
cis-1,2-Dichloroethene	2.4	Not Detected	9.6	Not Detected
Tetrahydrofuran	12	3.1 J	36	9.0 J
Chloroform	2.4	6.1	12	30
1,1,1-Trichloroethane	2.4	Not Detected	13	Not Detected
Cyclohexane	2.4	Not Detected	8.3	Not Detected
Carbon Tetrachloride	2.4	Not Detected	15	Not Detected
2,2,4-Trimethylpentane	12	Not Detected	56	Not Detected
Benzene	2.4	1.9 J	7.7	6.1 J
1,2-Dichloroethane	2.4	Not Detected	9.8	Not Detected
Heptane	2.4	93	9.9	380
Trichloroethene	2.4	Not Detected	13	Not Detected
1,2-Dichloropropane	2.4	Not Detected	11	Not Detected
1,4-Dioxane	2.4	Not Detected	8.7	Not Detected
Bromodichloromethane	2.4	Not Detected	16	Not Detected
cis-1,3-Dichloropropene	2.4	Not Detected	11	Not Detected
4-Methyl-2-pentanone	2.4	36	9.9	150
Toluene	2.4	880	9.1	3300
trans-1,3-Dichloropropene	2.4	Not Detected	11	Not Detected
1,1,2-Trichloroethane	2.4	Not Detected	13	Not Detected
Tetrachloroethene	2.4	Not Detected	16	Not Detected
2-Hexanone	12	Not Detected	50	Not Detected

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Client Sample ID: B6-5SS

Lab ID#: 1502113AR1-01A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**v021017r1**	**Date of Collection:**	**2/4/15 3:49:00 PM**
Dil. Factor:	**24.2**	**Date of Analysis:**	**2/10/15 07:20 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Dibromochloromethane	2.4	Not Detected	21	Not Detected
1,2-Dibromoethane (EDB)	2.4	Not Detected	18	Not Detected
Chlorobenzene	2.4	Not Detected	11	Not Detected
Ethyl Benzene	2.4	14	10	59
m,p-Xylene	2.4	39	10	170
o-Xylene	2.4	11	10	49
Styrene	2.4	Not Detected	10	Not Detected
Bromoform	2.4	Not Detected	25	Not Detected
Cumene	2.4	0.99 J	12	4.8 J
1,1,2,2-Tetrachloroethane	2.4	Not Detected	17	Not Detected
Propylbenzene	2.4	1.2 J	12	6.0 J
4-Ethyltoluene	2.4	5.2	12	26
1,3,5-Trimethylbenzene	2.4	1.8 J	12	8.6 J
1,2,4-Trimethylbenzene	2.4	4.5	12	22
1,3-Dichlorobenzene	2.4	Not Detected	14	Not Detected
1,4-Dichlorobenzene	2.4	Not Detected	14	Not Detected
alpha-Chlorotoluene	12	Not Detected	63	Not Detected
1,2-Dichlorobenzene	2.4	Not Detected	14	Not Detected
1,2,4-Trichlorobenzene	12	Not Detected	90	Not Detected
Hexachlorobutadiene	12	Not Detected UJ	130	Not Detected UJ
Naphthalene	12	Not Detected	63	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: 1 Liter Summa Canister (100% Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	96	70-130
Toluene-d8	99	70-130
4-Bromofluorobenzene	86	70-130

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TO15/Modified TO-14A

Data file : /chem/msdv.i/10Feb2015.b/v021017r1.d
Lab Smp Id: 1502113Ar1-01A
Inj Date : 10-FEB-2015 19:20
Operator : ea Inst ID: msdv.i
Smp Info : 25mL# 37348
Misc Info : 5.0"Hg -> 15psi
Comment : Low Level GC-MS
Method : /chem/msdv.i/10Feb2015.b/v15l0123c.m
Meth Date : 26-Jun-2015 11:58 dbailey Quant Type: ISTD
Cal Date : 09-FEB-2015 14:14 Cal File: v020912.d
Als bottle: 1
Dil Factor: 24.20000
Integrator: HP RTE Compound Sublist: TO15Nmdl.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	15.934	(1.000)	130	190063	5.00000		80.00- 120.00	100.00
15.934	15.934	(1.000)	128	151270			0.00- 30.00	79.59
15.934	15.934	(1.000)	49	446918			0.00- 30.00	235.14
* 71 1,4-Difluorobenzene						CAS #: 540-36-3		
17.305	17.305	(1.000)	114	760250	5.00000		80.00- 120.00	100.00
17.305	17.305	(1.000)	88	117585			0.00- 30.00	15.47
* 92 Chlorobenzene-d5						CAS #: 3114-55-4		
22.205	22.205	(1.000)	117	564339	5.00000		80.00- 120.00	100.00
22.205	22.205	(1.000)	82	302482			0.00- 30.00	53.60
$ 65 1,2-Dichloroethane-d4						CAS #: 17060-07-0		
16.756	16.756	(1.052)	65	286395	4.80725	4.807	80.00- 120.00	100.00
16.756	16.756	(1.052)	67	138563			25.13- 85.13	48.38
$ 80 Toluene-d8						CAS #: 2037-26-5		
19.856	19.856	(1.147)	98	705106	4.95340	4.953	80.00- 120.00	100.00
19.856	19.856	(1.147)	70	75250			0.00- 40.74	10.67

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

$  80 Toluene-d8 (continued)
 19.856  19.856 (1.147)   100    451051                    36.73-  96.73    63.97
-------------------------------------------------------------------------------
$ 106 Bromofluorobenzene                            CAS #: 460-00-4
 23.678  23.704 (1.066)   174    227246 4.29727    4.297  80.00- 120.00   100.00
 23.678  23.704 (1.066)    95    295362                    95.17- 155.17   129.97
 23.678  23.704 (1.066)   176    221278                    64.74- 124.74    97.37
-------------------------------------------------------------------------------
    8 Chloromethane                                 CAS #: 74-87-3
  7.015   7.053 (0.440)    50      9232 0.09439    2.284  80.00- 120.00   100.00(a)
  7.053   7.053 (0.443)    52      2138                     1.57-  61.57    23.16
-------------------------------------------------------------------------------
   24 Ethanol                                       CAS #: 64-17-5
 12.074  12.102 (0.758)    45    934370 26.9065   651.14  80.00- 120.00   100.00
 12.074  12.102 (0.758)    46    370700                    9.93-  69.93    39.67
 12.074  12.102 (0.758)    43    183055                    0.00-  50.31    19.59
-------------------------------------------------------------------------------
   31 Acetone                                       CAS #: 67-64-1
 12.816  12.816 (0.804)    58    271643 6.18974   149.79  80.00- 120.00   100.00
 12.816  12.816 (0.804)    43   1008356                  326.03- 386.03   371.21
-------------------------------------------------------------------------------
   33 Carbon Disulfide                              CAS #: 75-15-0
 12.926  12.926 (0.811)    76     44983 0.27938    6.761  80.00- 120.00   100.00(a)
-------------------------------------------------------------------------------
   34 2-Propanol                                    CAS #: 67-63-0
 13.173  13.173 (0.827)    45   2797557 16.1058   389.76  80.00- 120.00   100.00
 13.173  13.173 (0.827)    43    495963                    0.00-  47.97    17.73
 13.173  13.173 (0.827)    59     83553                    0.00-  33.25     2.99
-------------------------------------------------------------------------------
   37 Methylene Chloride                            CAS #: 75-09-2
 13.640  13.640 (0.856)    84     13749 0.25371    6.140  80.00- 120.00   100.00
 13.640  13.640 (0.856)    49     29899                   198.57- 258.57   217.46
 13.640  13.640 (0.856)    51     10812                    41.48- 101.48    78.64
-------------------------------------------------------------------------------
   39 MTBE                                          CAS #: 1634-04-4
 13.997  13.997 (0.878)    73   1466385 8.65367   209.42  80.00- 120.00   100.00
 13.997  13.997 (0.878)    57    557368                    6.35-  66.35    38.01
 13.997  13.997 (0.878)    41    580526                    5.74-  65.74    39.59
-------------------------------------------------------------------------------
   43 Hexane                                        CAS #: 110-54-3
 14.381  14.381 (0.903)    57      9365 0.06111    1.479  80.00- 120.00   100.00(a)
 14.381  14.381 (0.903)    43      7475                    41.32- 101.32    79.82
 14.408  14.381 (0.904)    86       611                     0.00-  40.13     6.53
-------------------------------------------------------------------------------
   51 2-Butanone                                    CAS #: 78-93-3
 15.613  15.572 (0.980)    72      4249 0.14282    3.456  80.00- 120.00   100.00(a)
```

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

   51 2-Butanone (continued)
 15.613  15.572 (0.980)    43     38097                  687.17- 747.17   896.47
 15.592  15.572 (0.979)    57      2047                   23.39-  83.39    48.17
-------------------------------------------------------------------------------
   53 Tetrahydrofuran                                CAS #: 109-99-9
 15.934  15.934 (1.000)    42     16427 0.12652    3.062  80.00- 120.00   100.00(a)
 15.903  15.934 (0.998)    71      7475                    0.00-  51.83    45.51
 15.934  15.934 (1.000)    72      4741                    0.00-  54.16    28.86
-------------------------------------------------------------------------------
   55 Chloroform                                     CAS #: 67-66-3
 15.995  15.995 (1.004)    83     33540 0.25331    6.130  80.00- 120.00   100.00
 15.995  15.995 (1.004)    85     19844                   35.10-  95.10    59.16
-------------------------------------------------------------------------------
   64 Benzene                                        CAS #: 71-43-2
 16.756  16.756 (0.968)    78     14860 0.07873    1.905  80.00- 120.00   100.00(a)
 16.756  16.756 (0.968)    77      4520                    0.00-  53.39    30.42
-------------------------------------------------------------------------------
   69 Heptane                                        CAS #: 142-82-5
 16.948  16.975 (0.979)    57    343597 3.84511   93.052  80.00- 120.00   100.00
 16.948  16.975 (0.979)   100     68699                    0.00-  51.16    19.99
 16.948  16.975 (0.979)    43    778390                  180.62- 240.62   226.54
-------------------------------------------------------------------------------
   79 4-Methyl-2-pentanone                           CAS #: 108-10-1
 19.588  19.588 (1.132)    43    395065 1.49597   36.202  80.00- 120.00   100.00
 19.588  19.588 (1.132)    58    126676                    3.17-  63.17    32.06
 19.588  19.588 (1.132)    85     33115                    0.00-  40.09     8.38
-------------------------------------------------------------------------------
   81 Toluene                                        CAS #: 108-88-3
 19.991  19.991 (1.155)    91   7854286 36.5212   883.81  80.00- 120.00   100.00
 19.991  19.991 (1.155)    92   4641646                   28.34-  88.34    59.10
-------------------------------------------------------------------------------
   95 Ethyl Benzene                                  CAS #: 100-41-4
 22.315  22.315 (1.005)   106     46840 0.56215   13.604  80.00- 120.00   100.00
 22.315  22.315 (1.005)    91    141489                  260.31- 320.31   302.07
-------------------------------------------------------------------------------
   96 m,p-Xylene                                     CAS #: 108-38-3
 22.452  22.452 (1.011)   106    135454 1.60953   38.950  80.00- 120.00   100.00
 22.452  22.452 (1.011)    91    251318                  157.23- 217.23   185.54
-------------------------------------------------------------------------------
  100 o-Xylene                                       CAS #: 95-47-6
 23.002  23.002 (1.036)   106     36271 0.46882   11.345  80.00- 120.00   100.00
 23.002  23.002 (1.036)    91     73536                  167.76- 227.76   202.74
-------------------------------------------------------------------------------
  103 Cumene                                         CAS #: 98-82-8
 23.413  23.413 (1.054)   105      8933 0.04084   0.9883  80.00- 120.00   100.00(a)
 23.441  23.413 (1.056)   120      2656                    0.00-  59.93    29.73
-------------------------------------------------------------------------------
```

RT	EXP RT	(REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
111 Propylbenzene						CAS #: 103-65-1		
23.910	23.910	(1.077)	91	10369	0.05089	1.232	80.00- 120.00	100.00(a)
23.910	23.910	(1.077)	120	4028			0.00- 56.93	38.85
113 4-Ethyltoluene						CAS #: 622-96-8		
24.013	24.039	(1.081)	105	33488	0.21681	5.247	80.00- 120.00	100.00
24.013	24.039	(1.081)	120	12720			3.10- 63.10	37.98
114 1,3,5-Trimethylbenzene						CAS #: 108-67-8		
24.116	24.116	(1.086)	105	11640	0.07246	1.754	80.00- 120.00	100.00(a)
24.116	24.116	(1.086)	120	5779			0.00- 30.00	49.65
120 1,2,4-Trimethylbenzene						CAS #: 95-63-6		
24.529	24.529	(1.105)	105	26313	0.18527	4.483	80.00- 120.00	100.00
24.529	24.529	(1.105)	120	16725			0.00- 30.00	63.56

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: v021017r1.d
Lab Smp Id: 1502113Ar1-01A
Analysis Type: VOA
Quant Type: ISTD
Operator: ea
Method File: /chem/msdv.i/10Feb2015.b/v15l0123c.m
Misc Info: 5.0"Hg -> 15psi

Calibration Date: 10-FEB-2015
Calibration Time: 06:33

Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
54 Bromochloromethan	194946	116968	272924	190063	-2.50
71 1,4-Difluorobenze	822631	493579	1151683	760250	-7.58
92 Chlorobenzene-d5	670659	402395	938923	564339	-15.85

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: 26-Jun-2015 12:11

Eurofins Air Toxics Inc.

RECOVERY REPORT

Client Name:
Client SDG: 10Feb2015
Sample Matrix: GAS
Fraction: VOA
Lab Smp Id: 1502113Ar1-01A
Level: LOW
Operator: ea
Data Type: MS DATA
SampleType: SAMPLE
SpikeList File: AT12.spk
Quant Type: ISTD
Sublist File: TO15Nmdl.sub
Method File: /chem/msdv.i/10Feb2015.b/v15l0123c.m
Misc Info: 5.0"Hg -> 15psi

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 65 1,2-Dichloroethane	5.000	4.807	96.14	70-130
$ 80 Toluene-d8	5.000	4.953	99.07	70-130
$ 106 Bromofluorobenzene	5.000	4.297	85.95	70-130

Data File: /chem/msdv.i/10Feb2015.b/v021017r1.d

Date : 10-FEB-2015 19:20

Client ID:

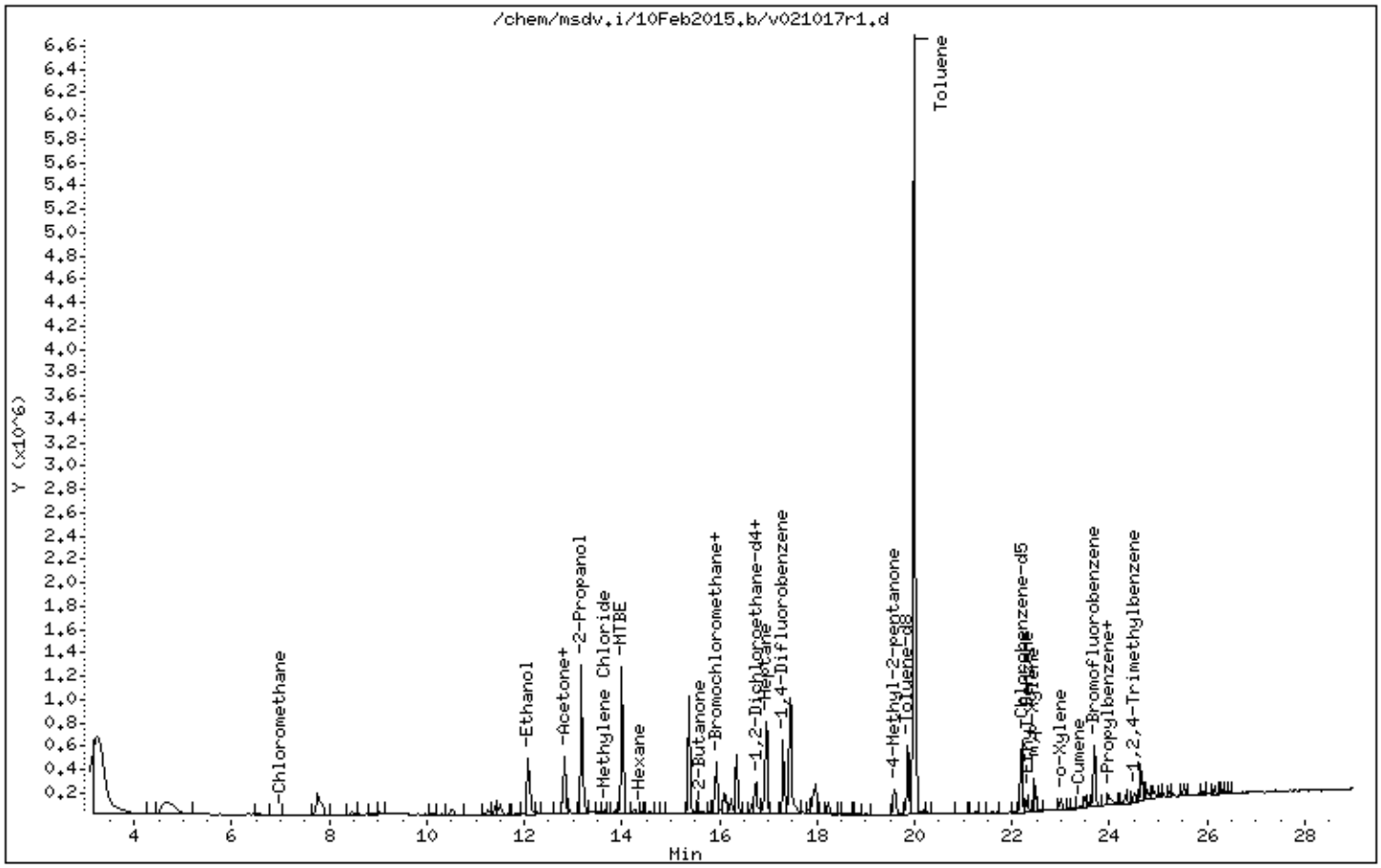
Instrument: msdv.i

Sample Info: 25mL# 37348

Operator: ea

Column phase: RTx-624

Column diameter: 0.32



Data File: /chem/msdv.i/10Feb2015.b/v021017r1.d

Date : 10-FEB-2015 19:20

Client ID:

Instrument: msdv.i

Sample Info: 25mL# 37348

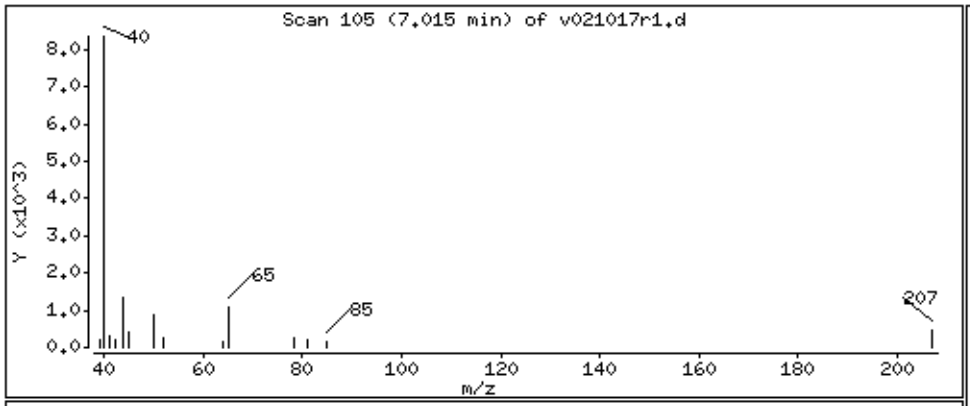
Operator: ea

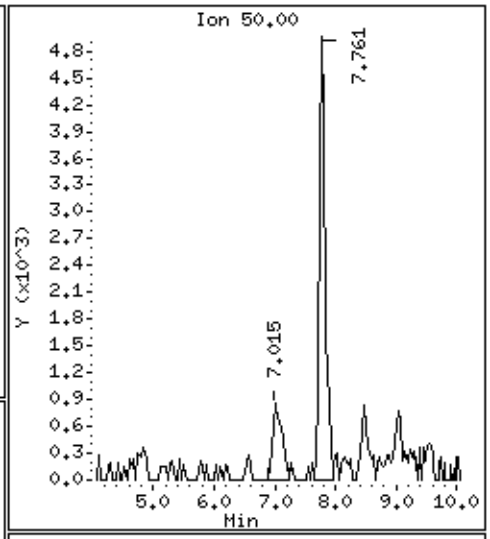
Column phase: RTx-624

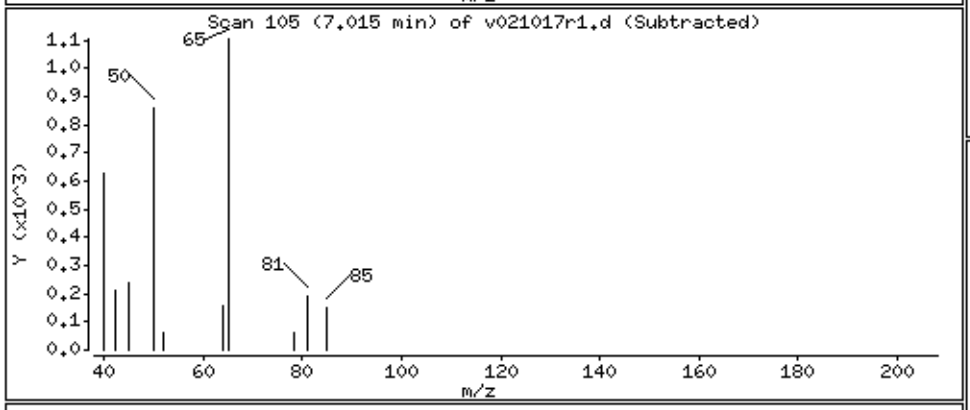
Column diameter: 0.32

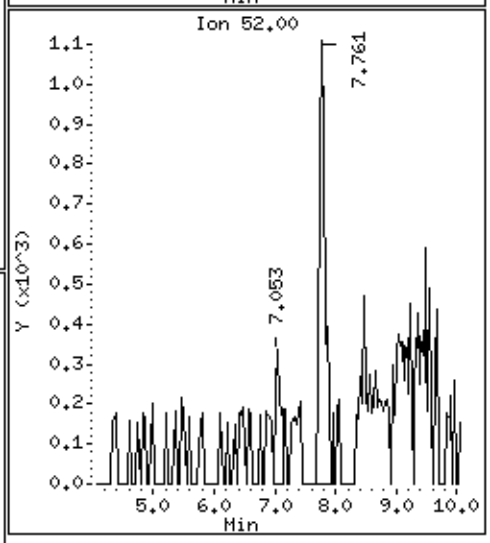
8 Chloromethane

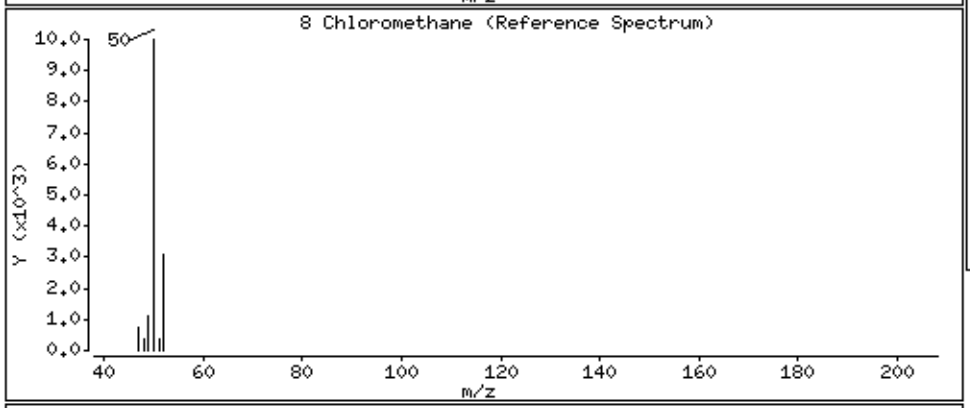
Concentration: 2.284 PPBV

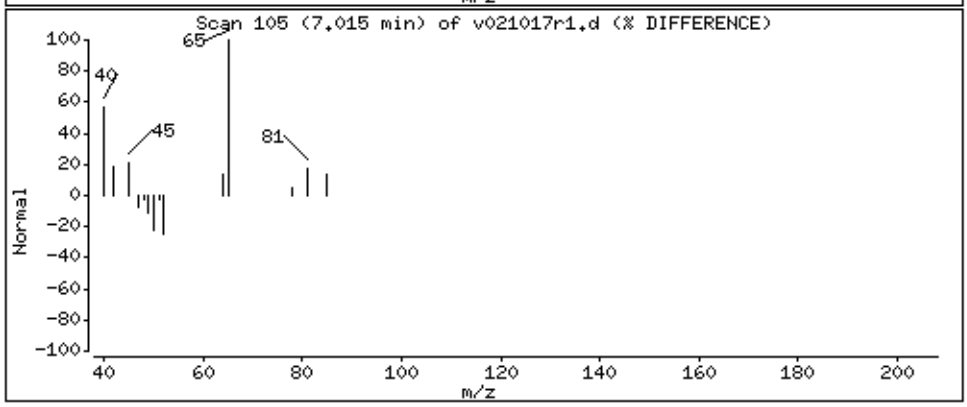












Data File: /chem/msdv.i/10Feb2015.b/v021017r1.d

Date : 10-FEB-2015 19:20

Client ID:

Instrument: msdv.i

Sample Info: 25mL# 37348

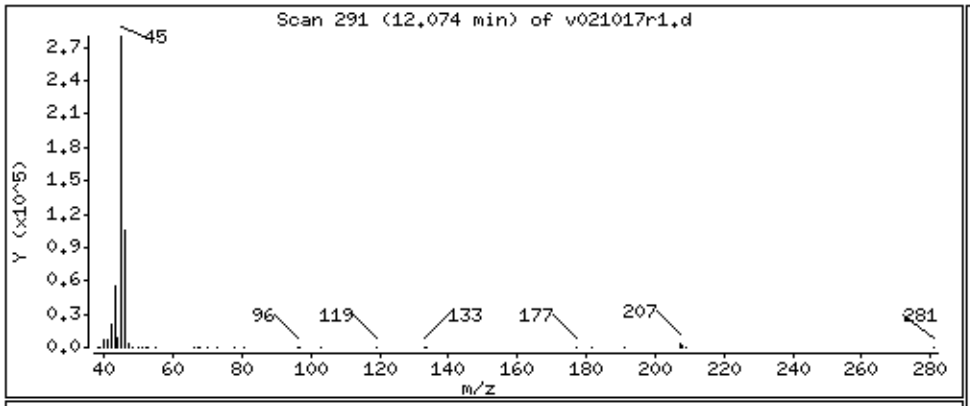
Operator: ea

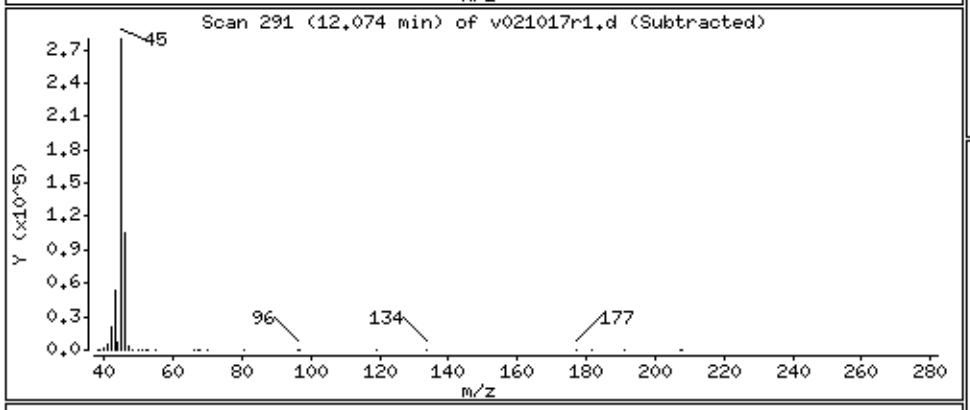
Column phase: RTx-624

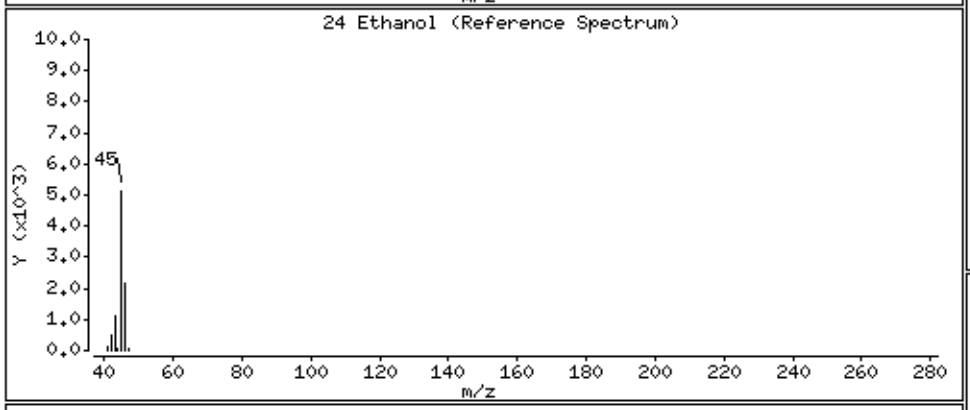
Column diameter: 0.32

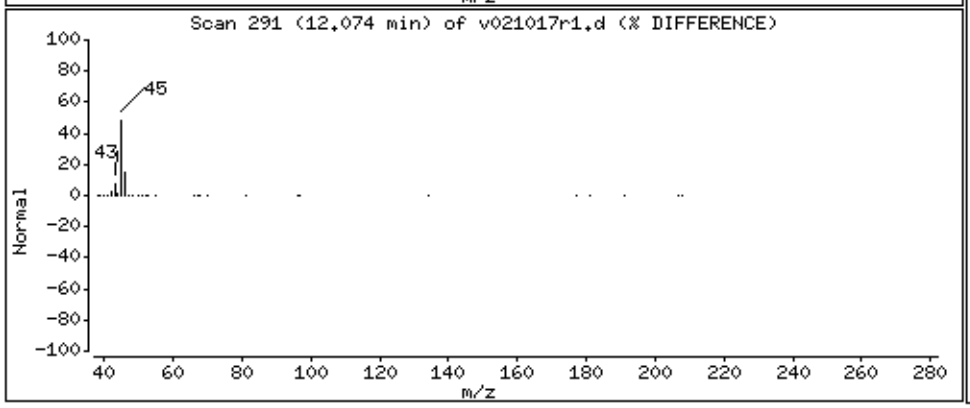
24 Ethanol

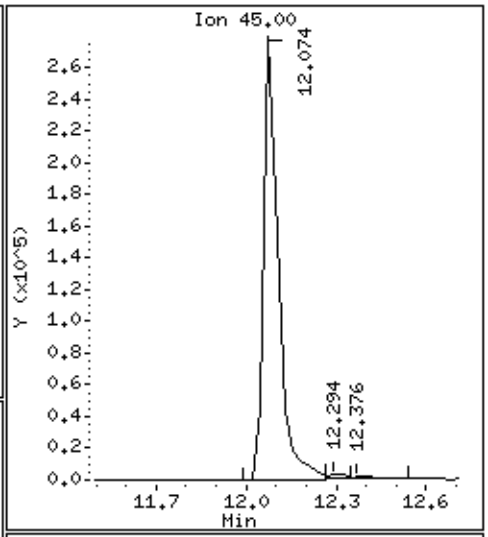
Concentration: 651.14 PPBV

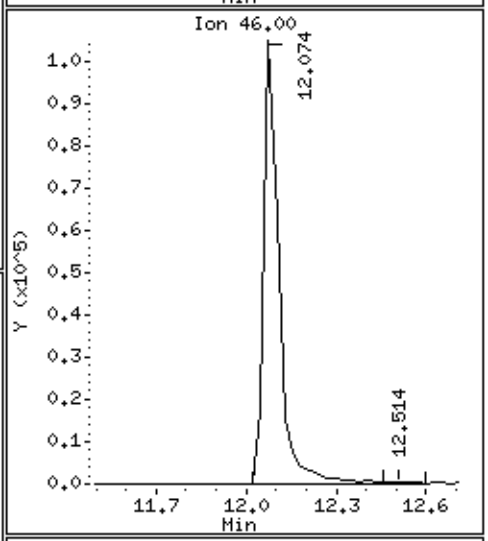


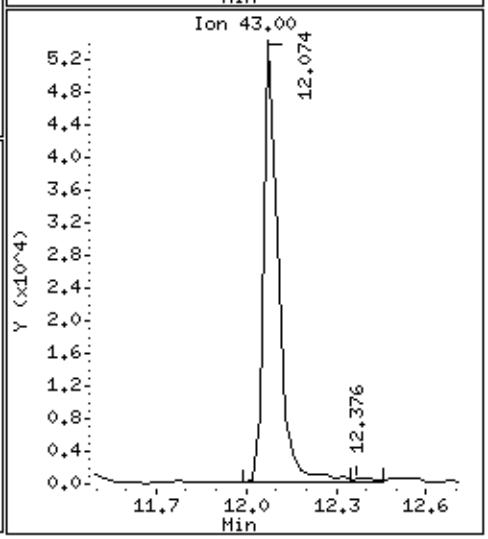












Data File: /chem/msdv.i/10Feb2015.b/v021017r1.d

Date : 10-FEB-2015 19:20

Client ID:

Instrument: msdv.i

Sample Info: 25mL# 37348

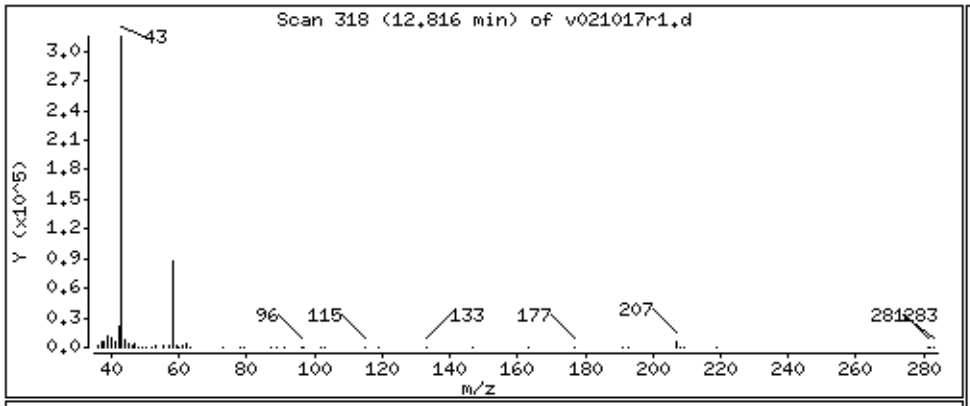
Operator: ea

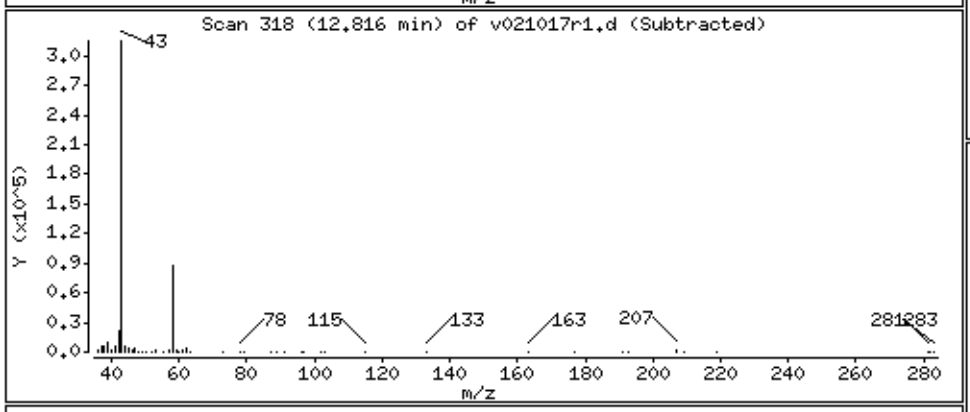
Column phase: RTx-624

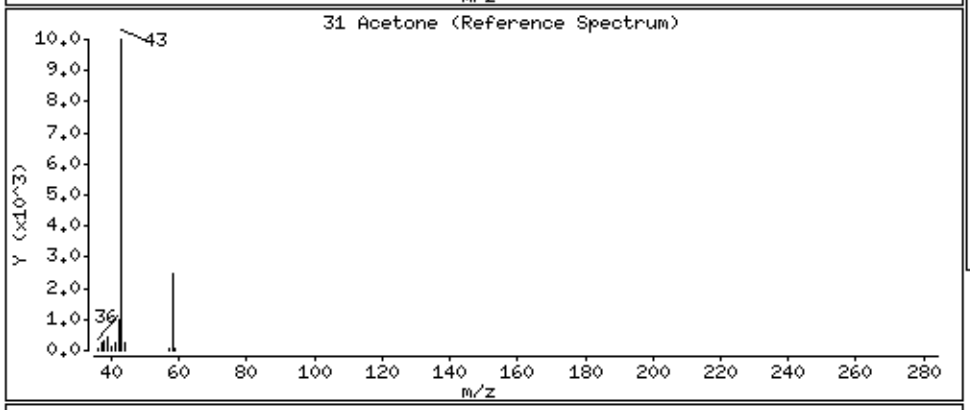
Column diameter: 0.32

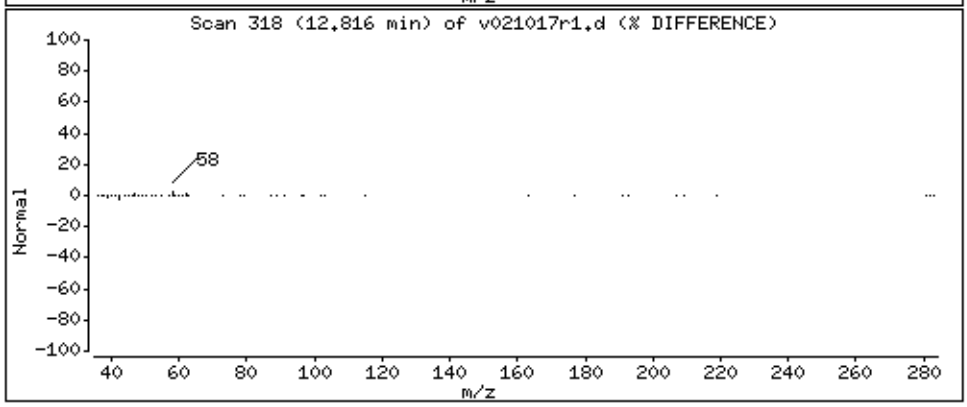
31 Acetone

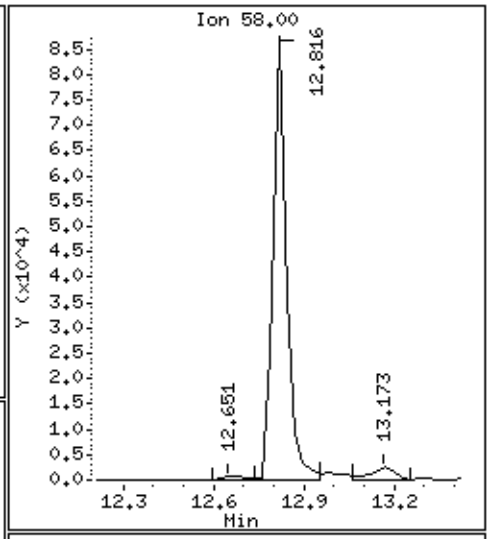
Concentration: 149.79 PPBV

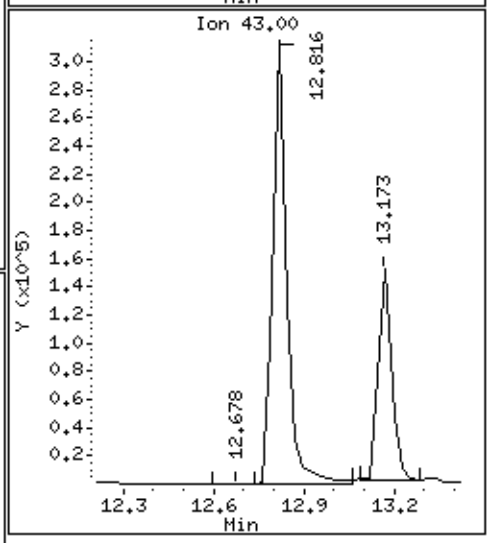












Data File: /chem/msdv.i/10Feb2015.b/v021017r1.d

Date : 10-FEB-2015 19:20

Client ID:

Instrument: msdv.i

Sample Info: 25mL# 37348

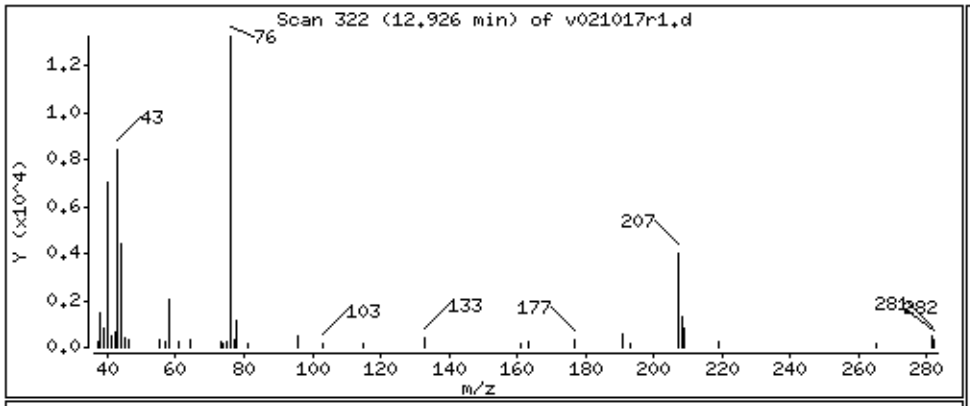
Operator: ea

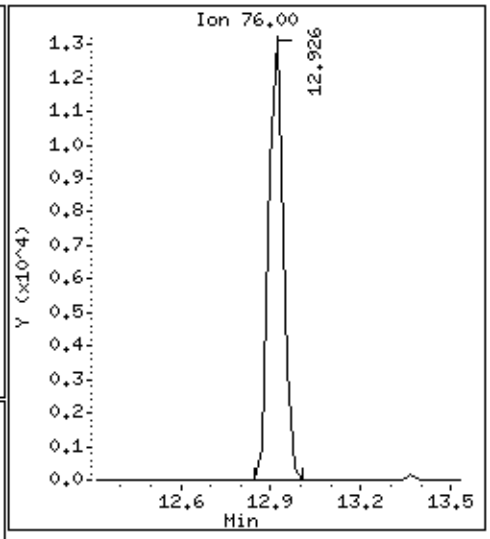
Column phase: RTx-624

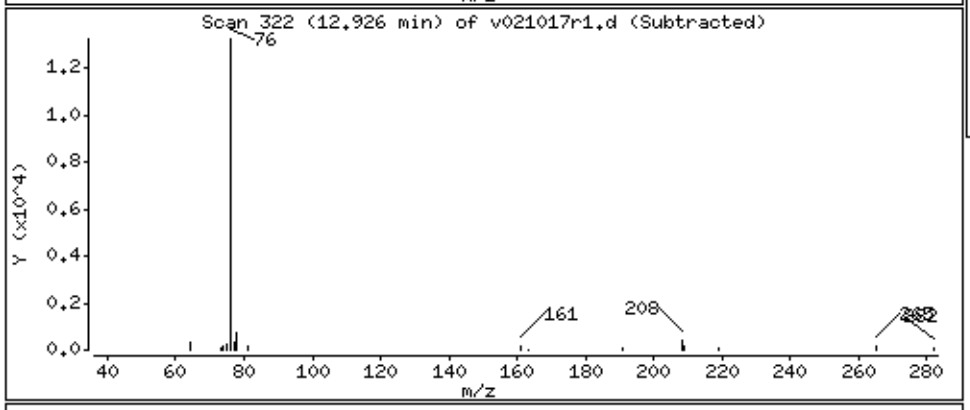
Column diameter: 0.32

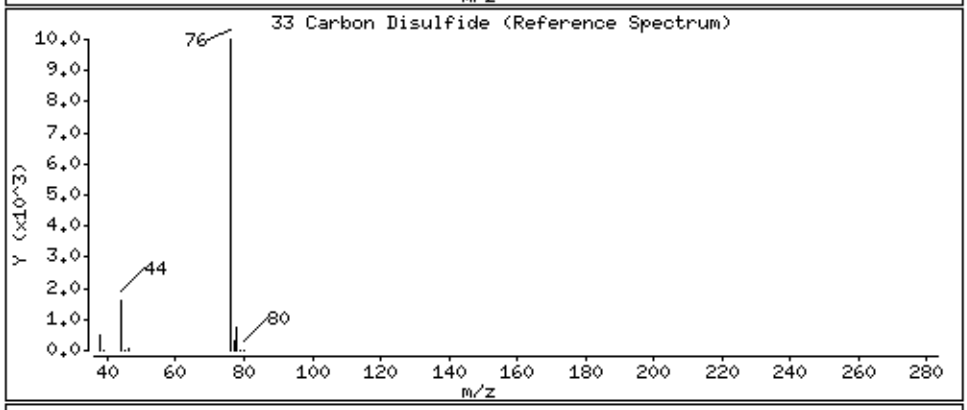
33 Carbon Disulfide

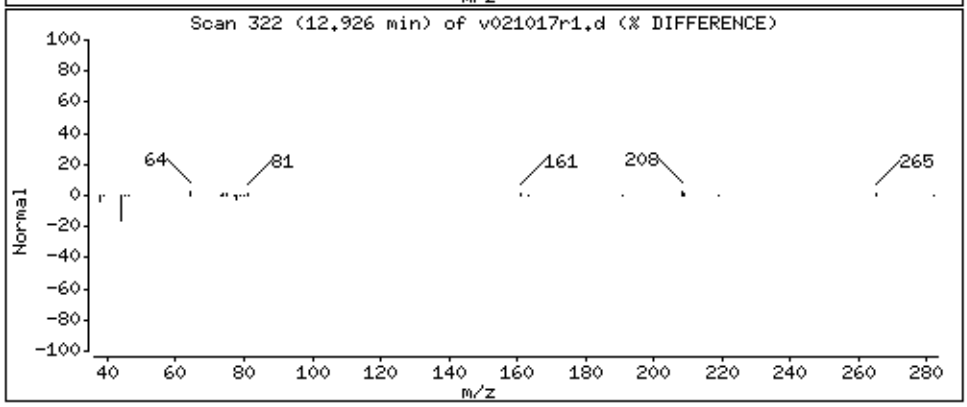
Concentration: 6.761 PPBV











Data File: /chem/msdv.i/10Feb2015.b/v021017r1.d

Date : 10-FEB-2015 19:20

Client ID:

Instrument: msdv.i

Sample Info: 25mL# 37348

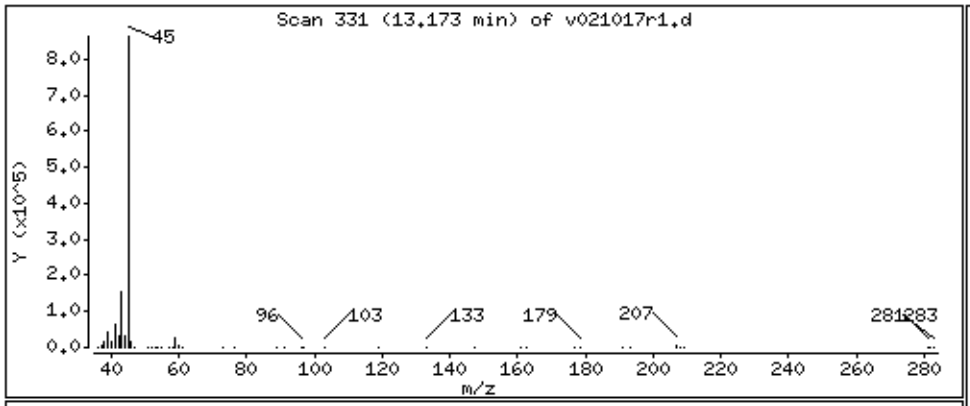
Operator: ea

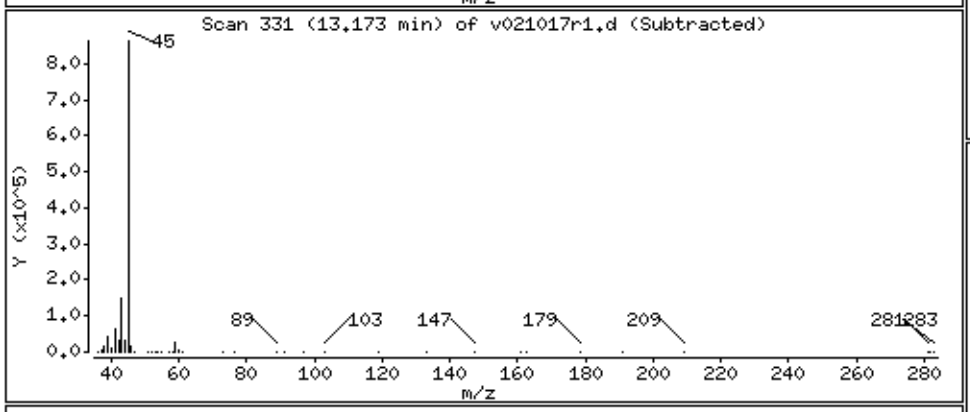
Column phase: RTx-624

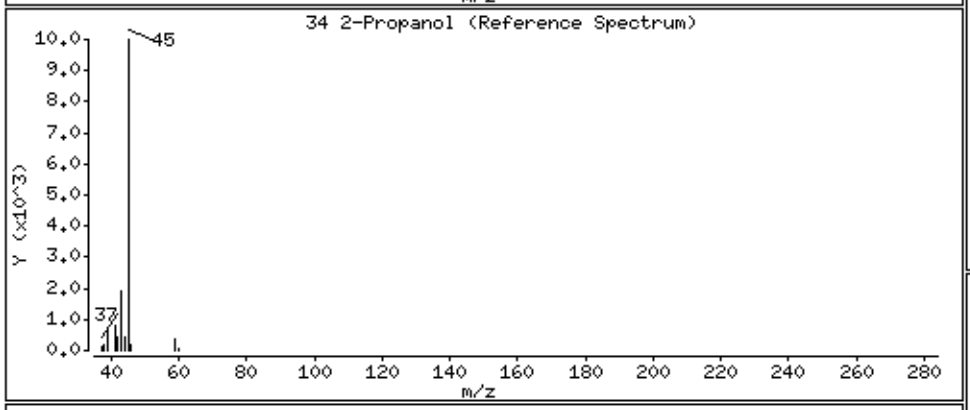
Column diameter: 0.32

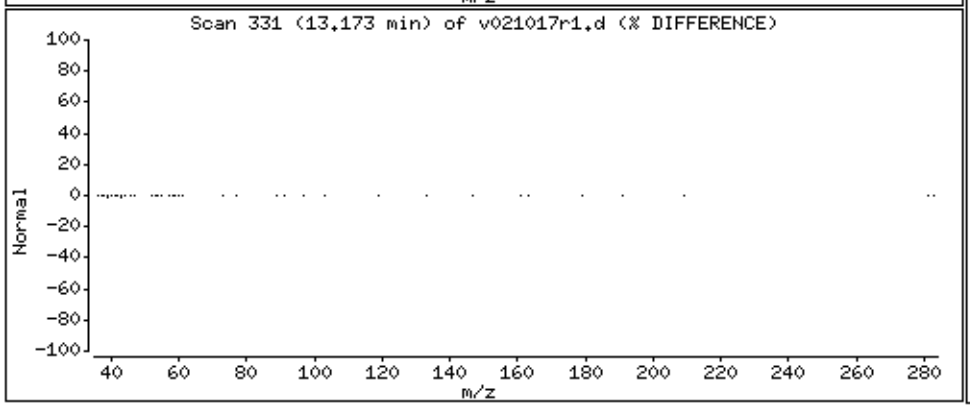
34 2-Propanol

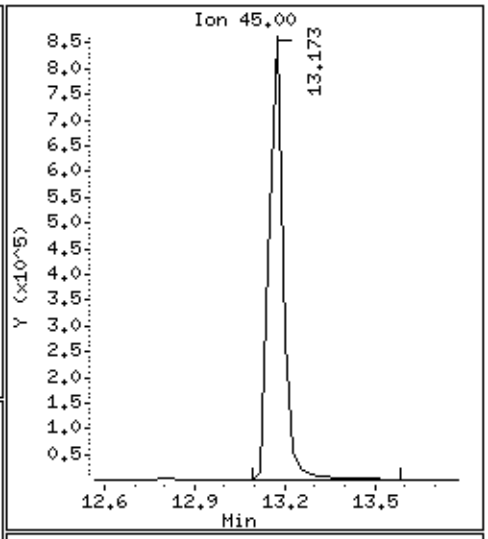
Concentration: 389.76 PPBV

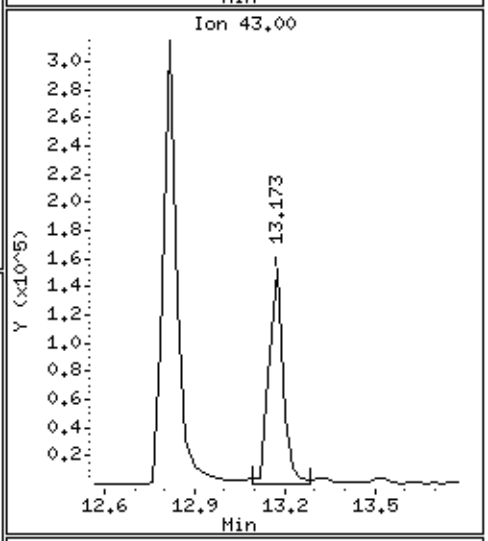


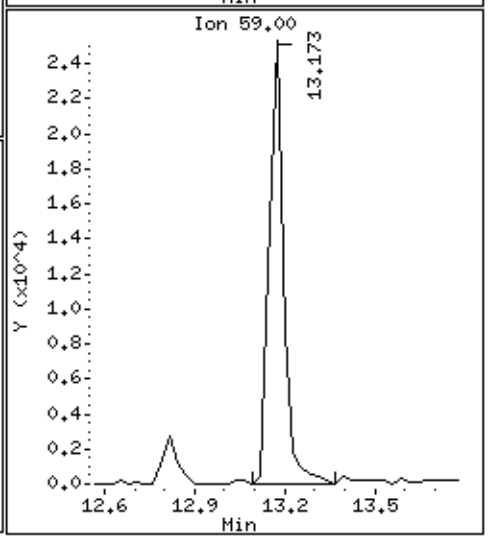












Data File: /chem/msdv.i/10Feb2015.b/v021017r1.d

Date : 10-FEB-2015 19:20

Client ID:

Instrument: msdv.i

Sample Info: 25mL# 37348

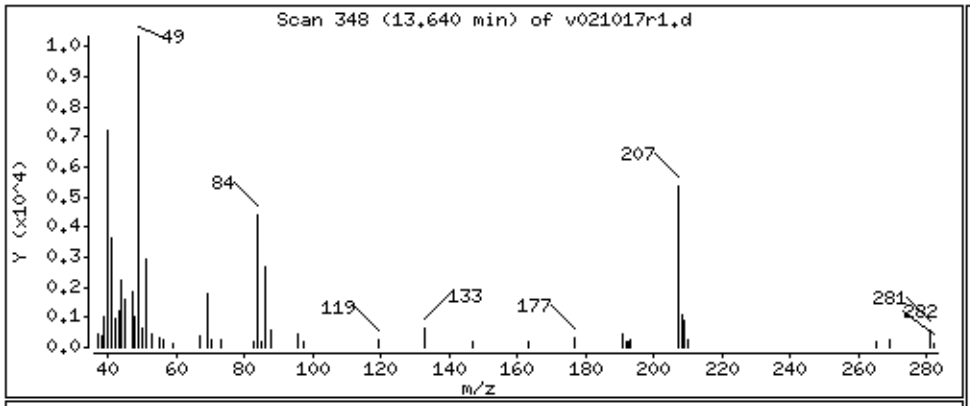
Operator: ea

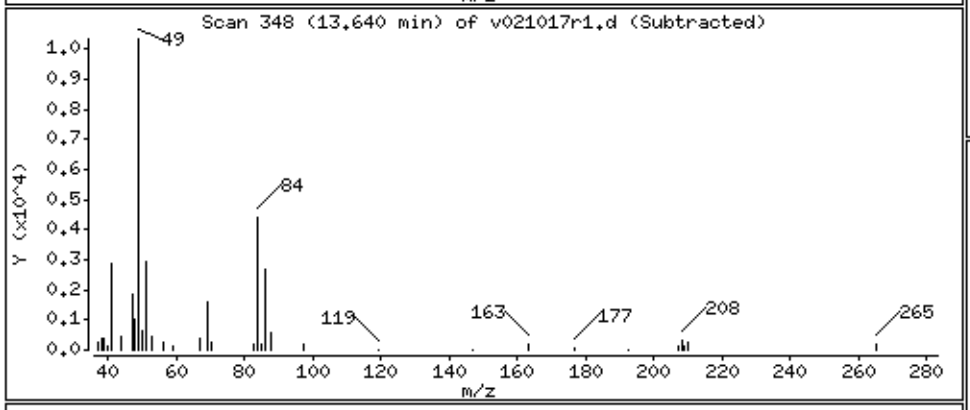
Column phase: RTx-624

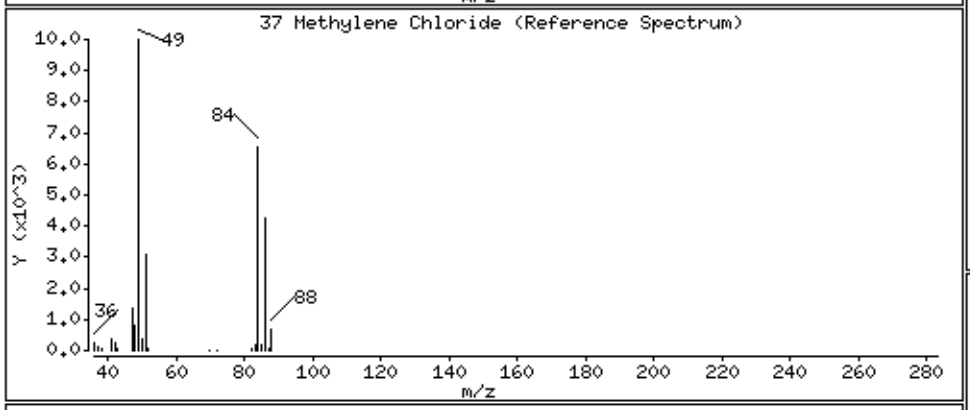
Column diameter: 0.32

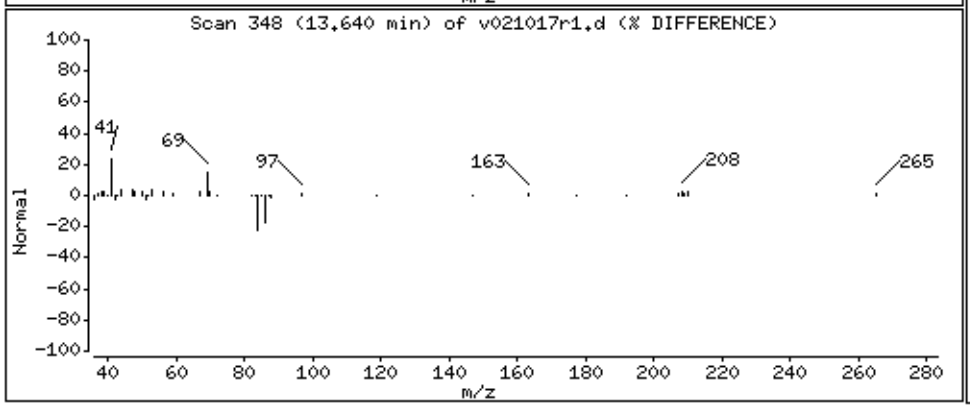
37 Methylene Chloride

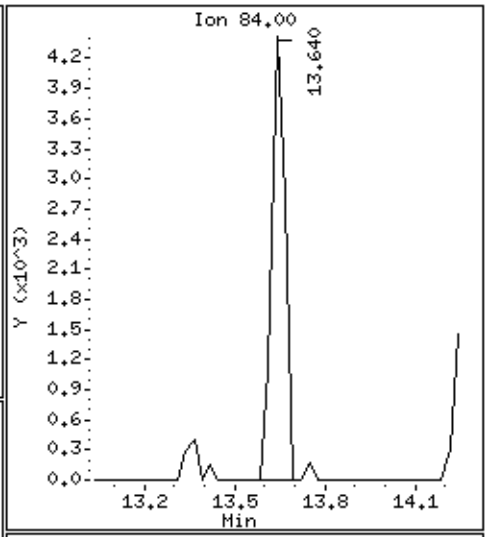
Concentration: 6.140 PPBV

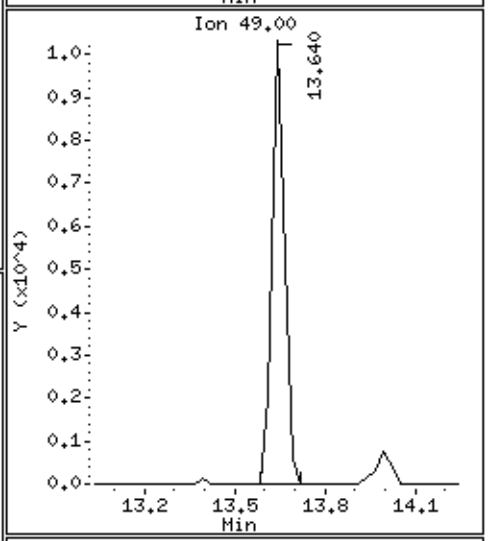


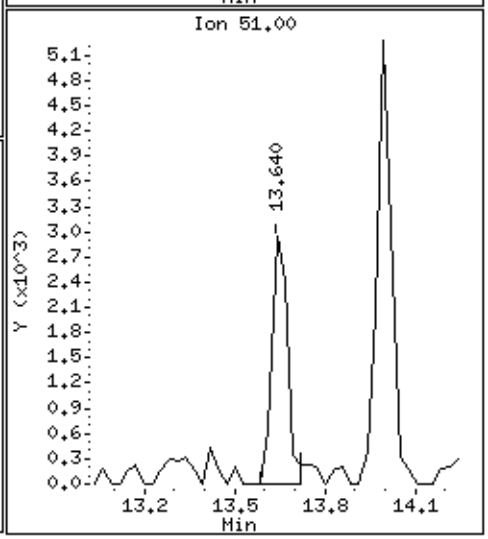












Data File: /chem/msdv.i/10Feb2015.b/v021017r1.d

Date : 10-FEB-2015 19:20

Client ID:

Instrument: msdv.i

Sample Info: 25mL# 37348

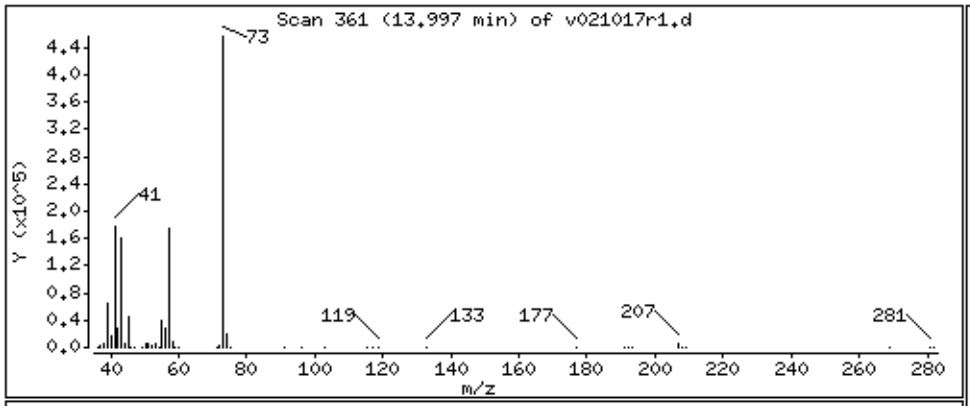
Operator: ea

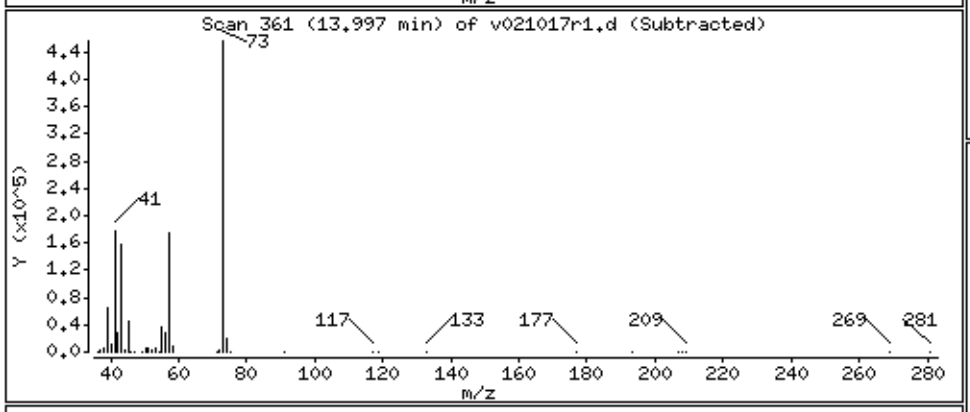
Column phase: RTx-624

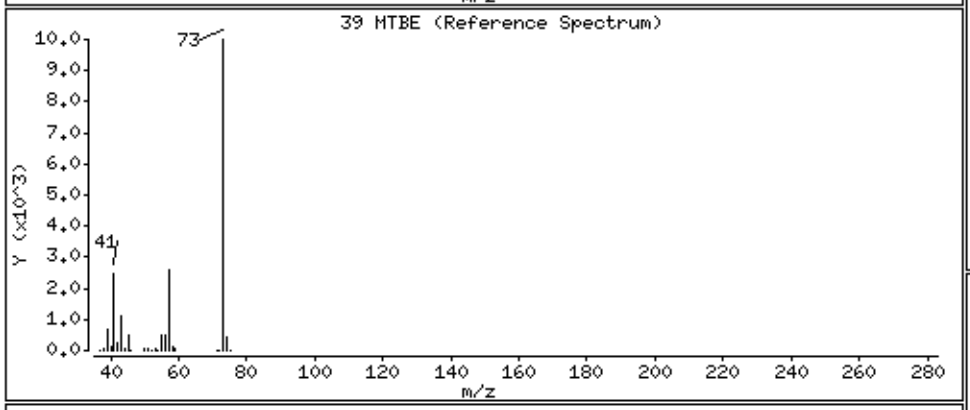
Column diameter: 0.32

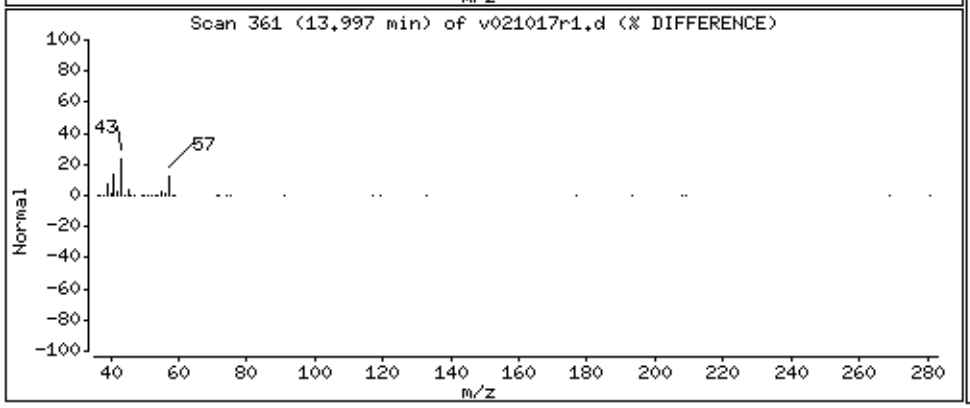
39 MTBE

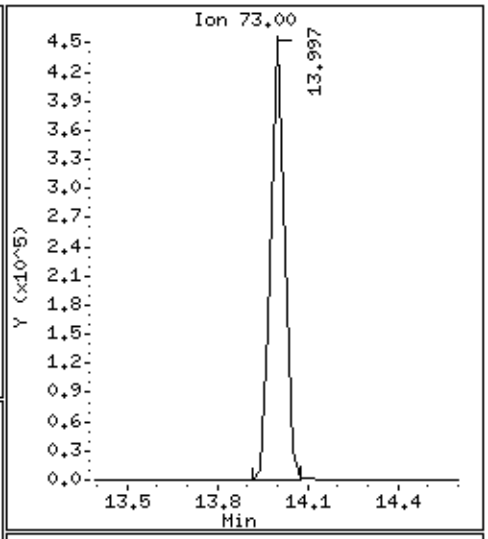
Concentration: 209.42 PPBV

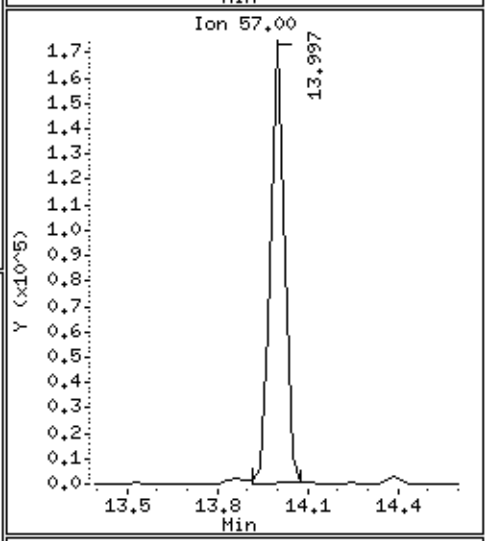


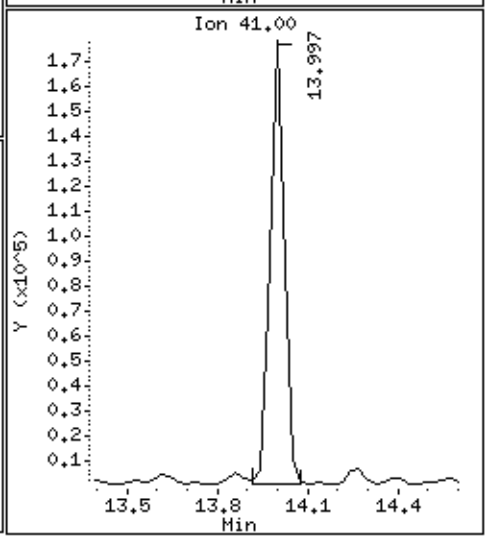












Data File: /chem/msdv.i/10Feb2015.b/v021017r1.d

Date : 10-FEB-2015 19:20

Client ID:

Instrument: msdv.i

Sample Info: 25mL# 37348

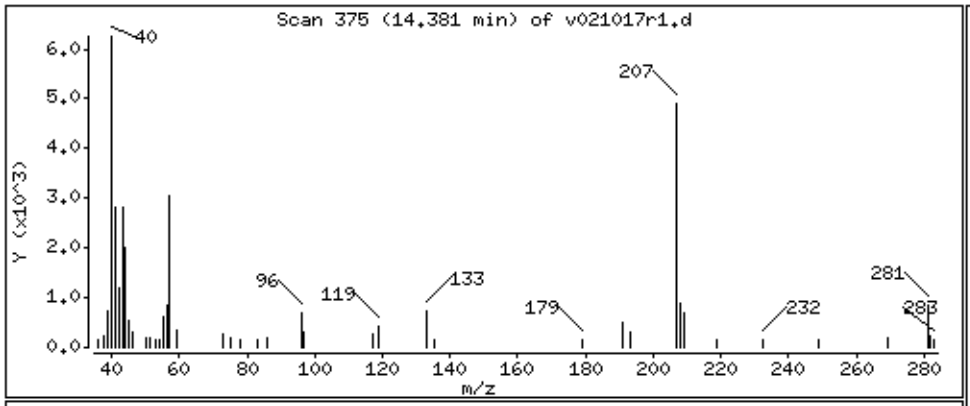
Operator: ea

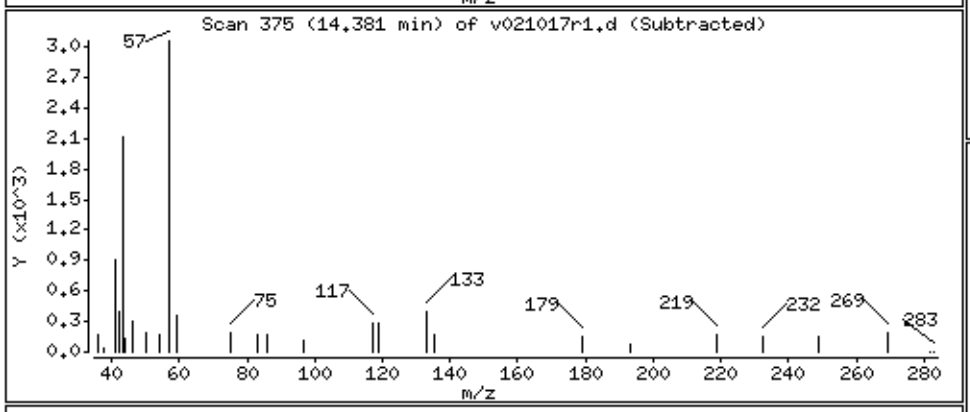
Column phase: RTx-624

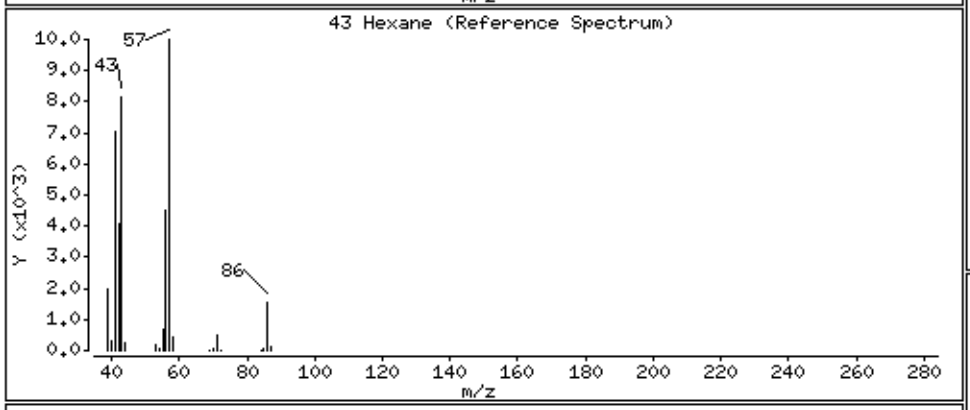
Column diameter: 0.32

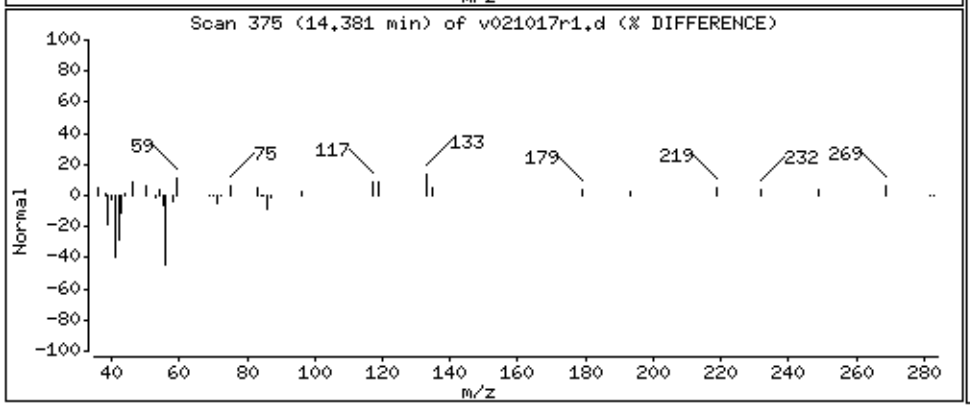
43 Hexane

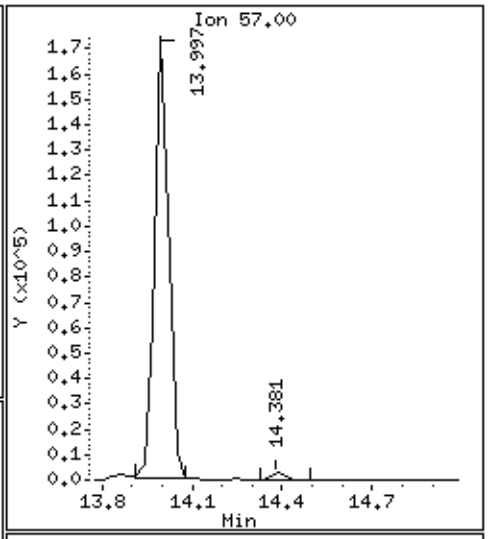
Concentration: 1.479 PPBV

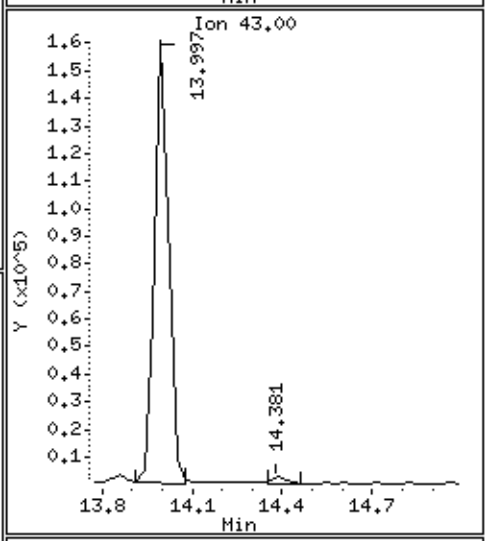


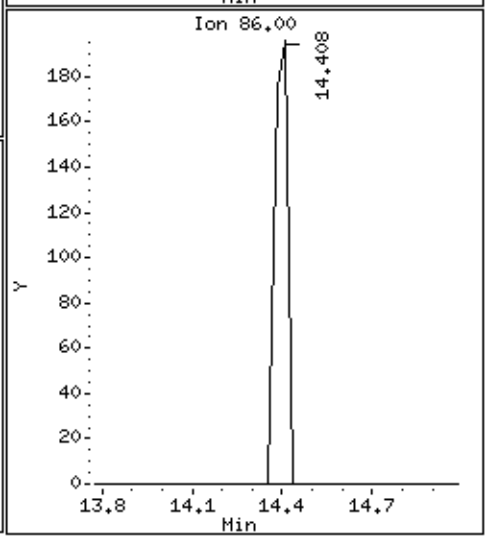












Data File: /chem/msdv.i/10Feb2015.b/v021017r1.d

Date : 10-FEB-2015 19:20

Client ID:

Instrument: msdv.i

Sample Info: 25mL# 37348

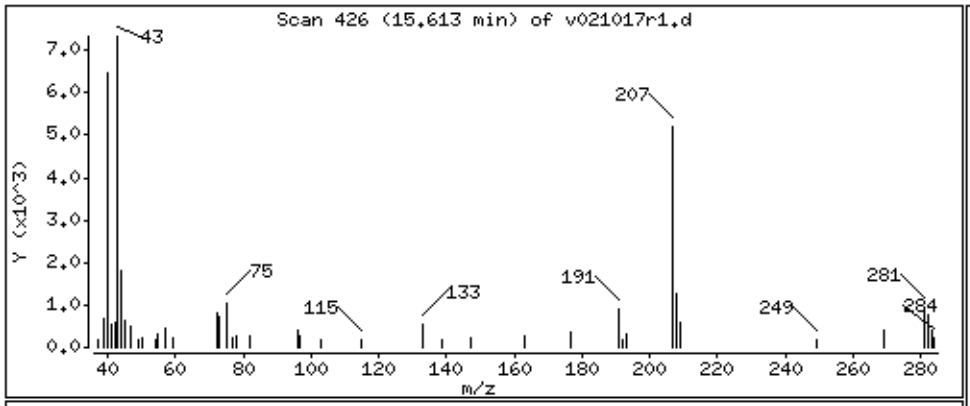
Operator: ea

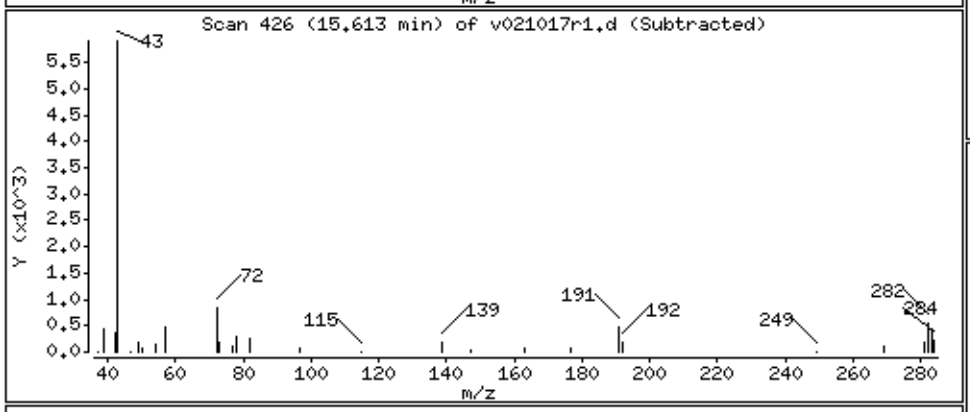
Column phase: RTx-624

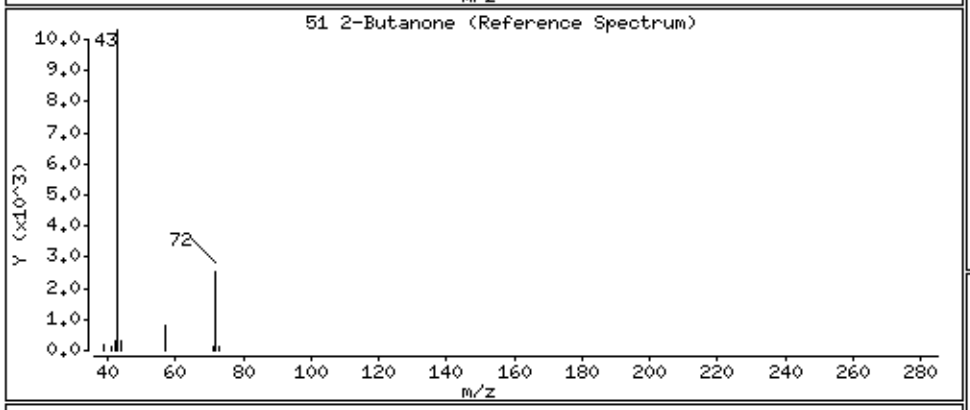
Column diameter: 0.32

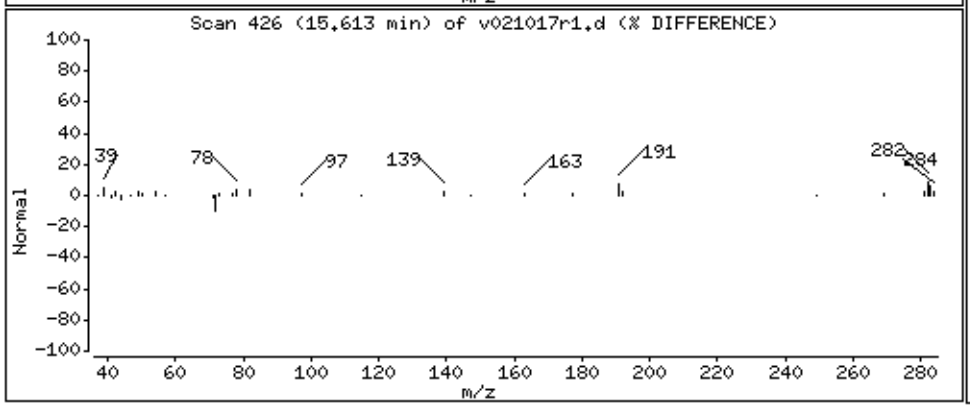
51 2-Butanone

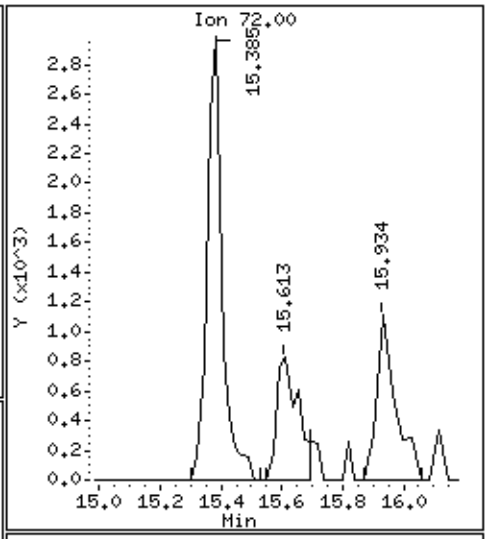
Concentration: 3.456 PPBV

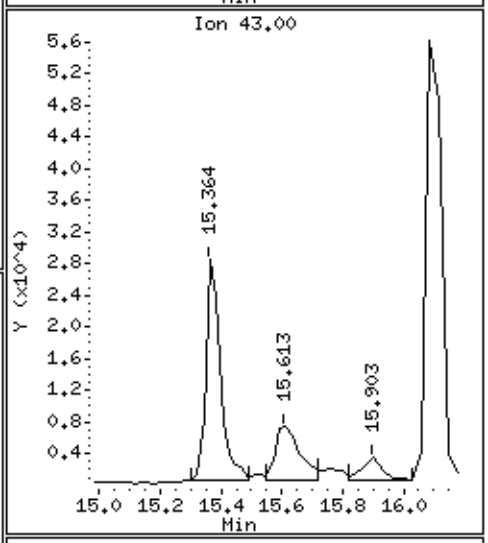


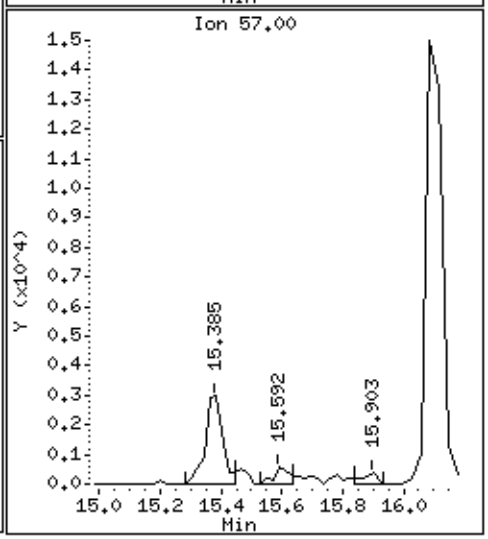












Data File: /chem/msdv.i/10Feb2015.b/v021017r1.d

Date : 10-FEB-2015 19:20

Client ID:

Instrument: msdv.i

Sample Info: 25mL# 37348

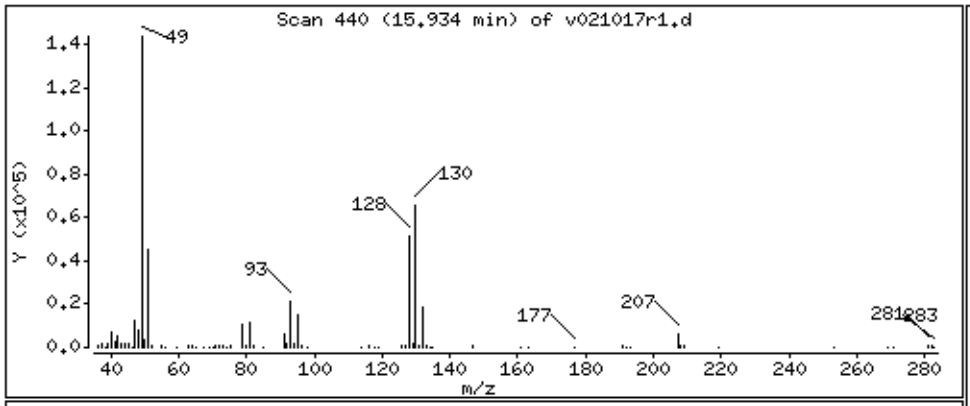
Operator: ea

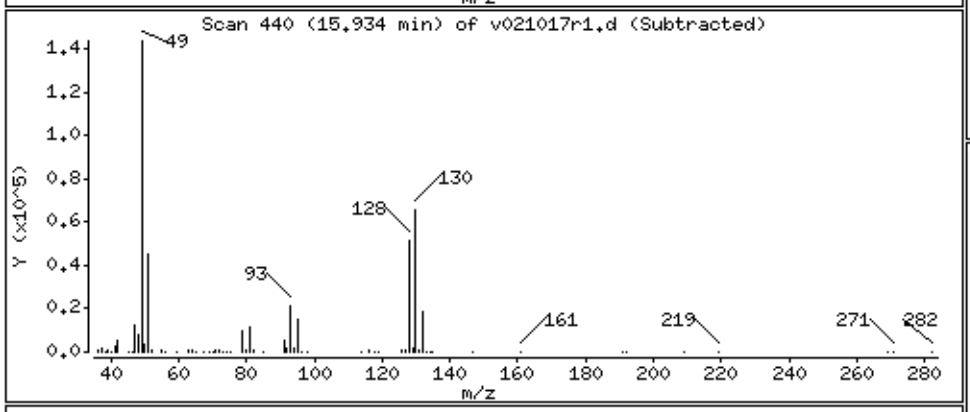
Column phase: RTx-624

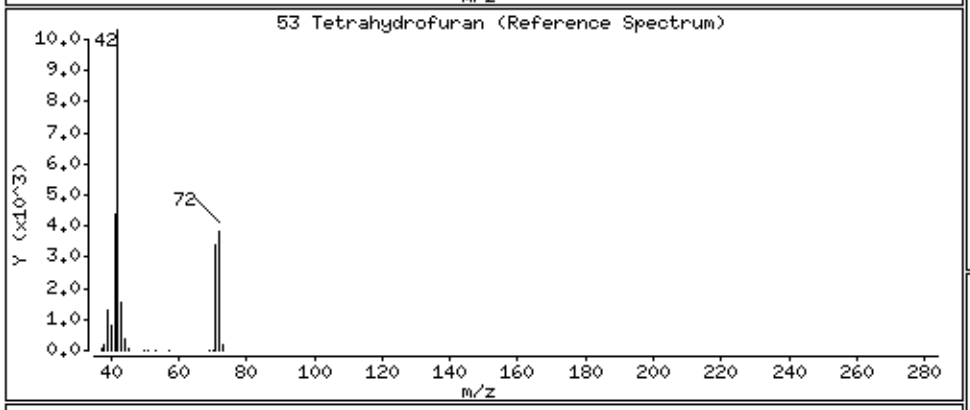
Column diameter: 0.32

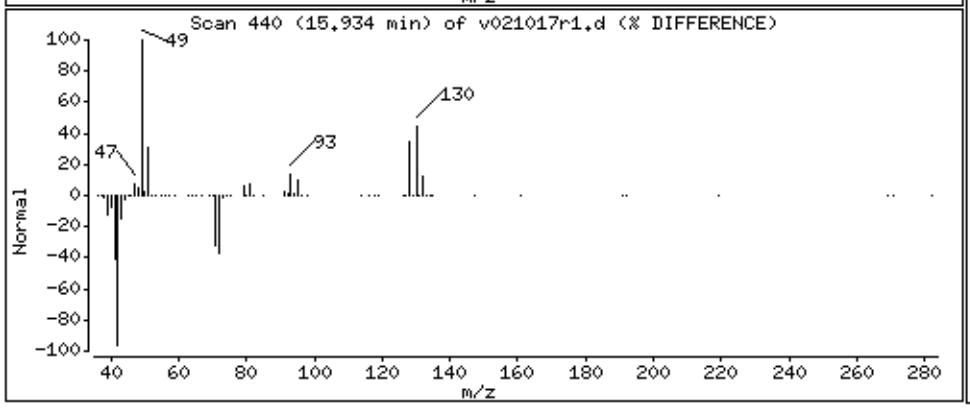
53 Tetrahydrofuran

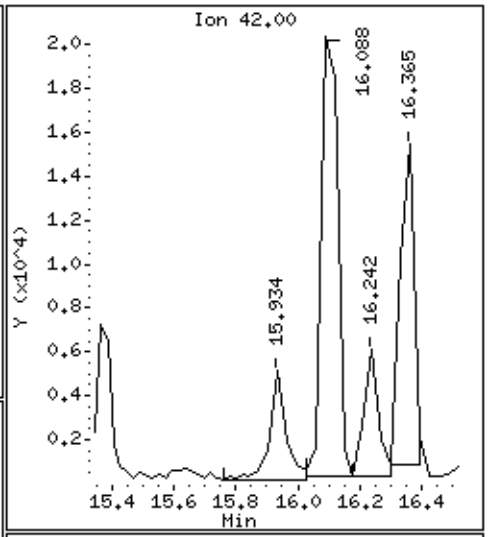
Concentration: 3.062 PPBV

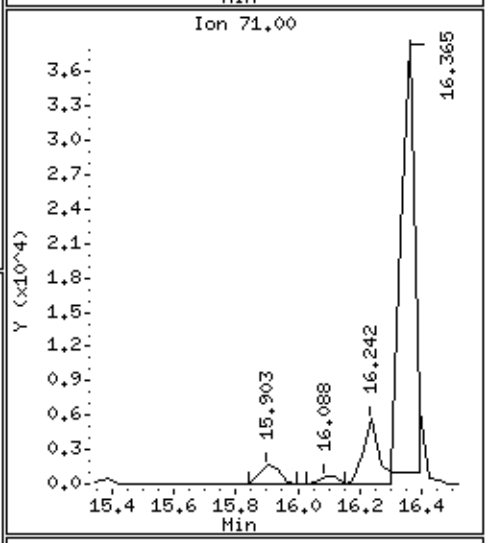


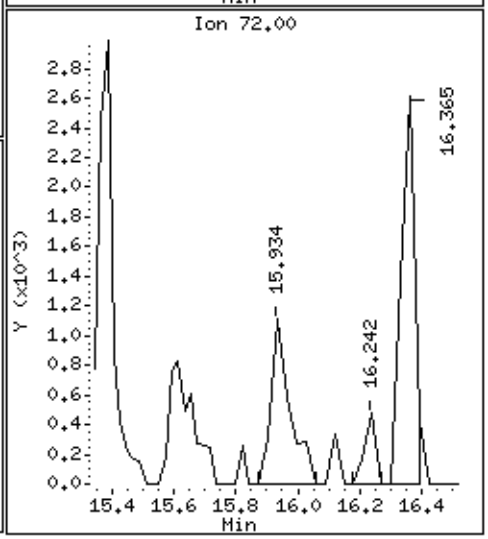












Data File: /chem/msdv.i/10Feb2015.b/v021017r1.d

Date : 10-FEB-2015 19:20

Client ID:

Instrument: msdv.i

Sample Info: 25mL# 37348

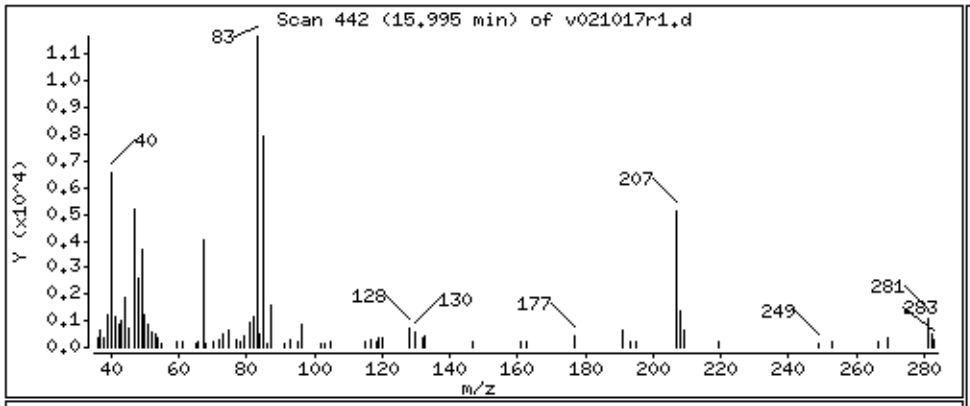
Operator: ea

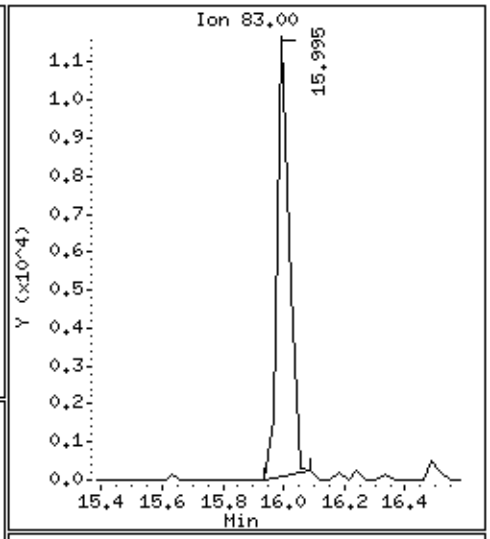
Column phase: RTx-624

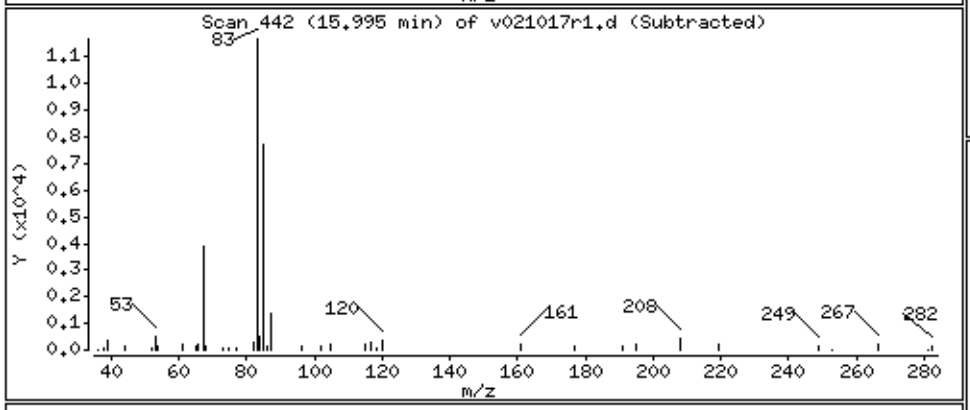
Column diameter: 0.32

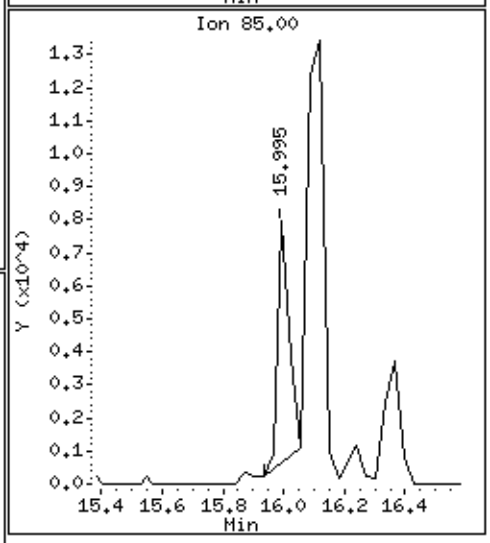
55 Chloroform

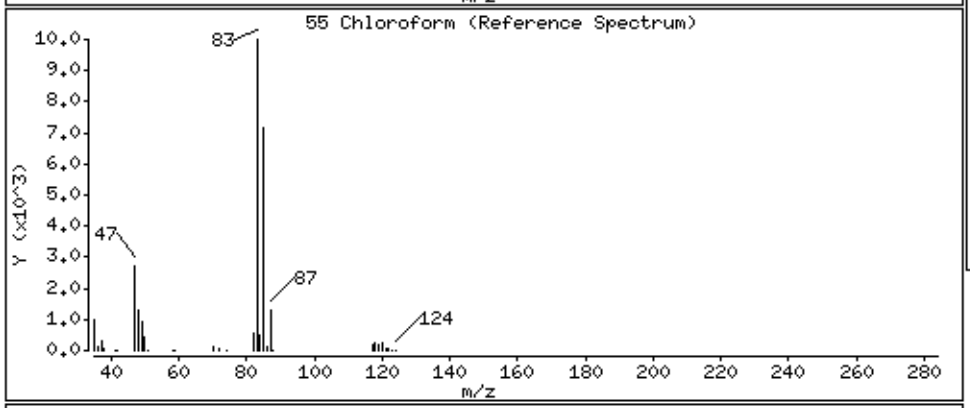
Concentration: 6.130 PPBV

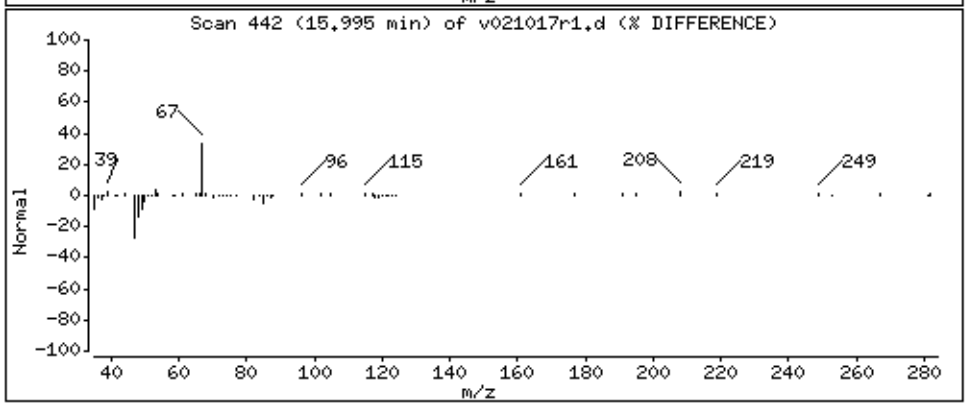












Data File: /chem/msdv.i/10Feb2015.b/v021017r1.d

Date : 10-FEB-2015 19:20

Client ID:

Instrument: msdv.i

Sample Info: 25mL# 37348

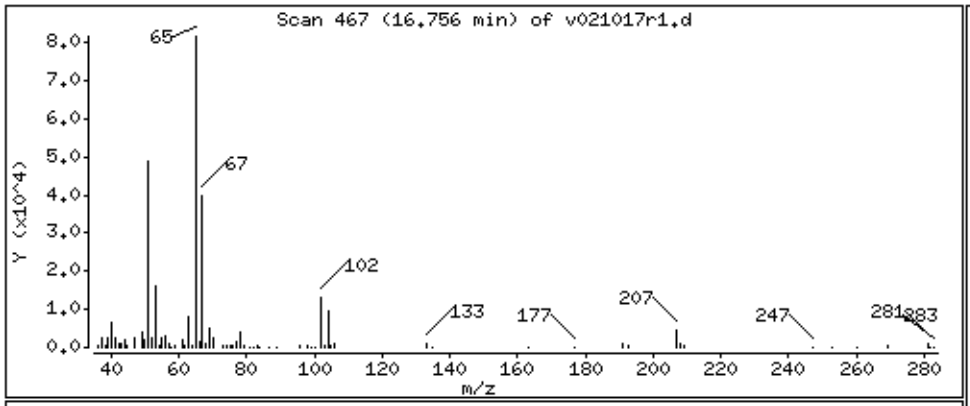
Operator: ea

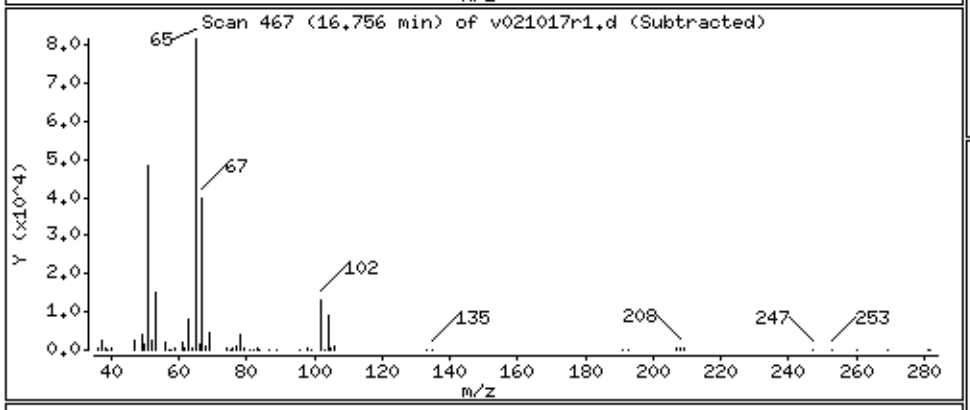
Column phase: RTx-624

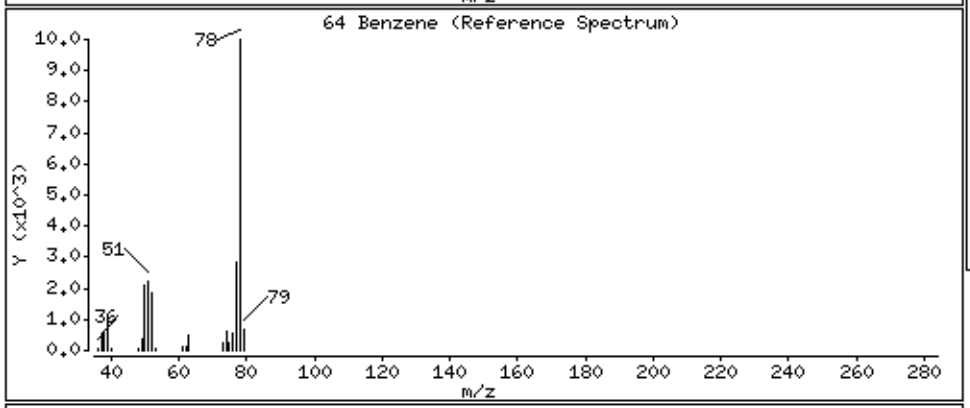
Column diameter: 0.32

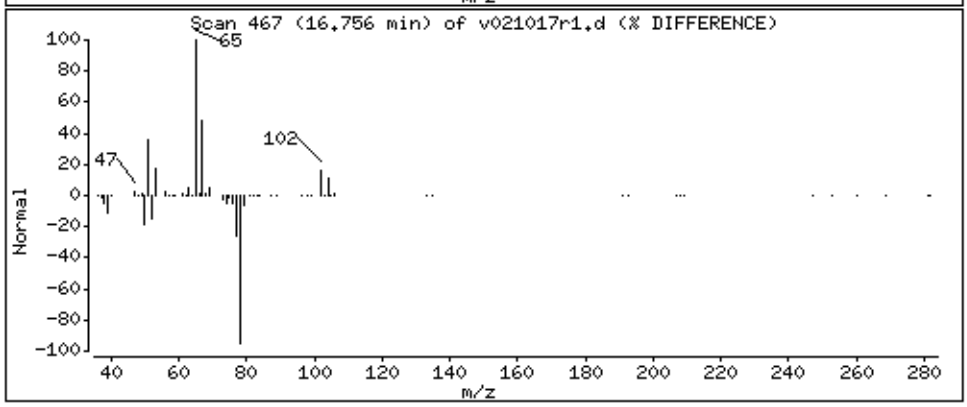
64 Benzene

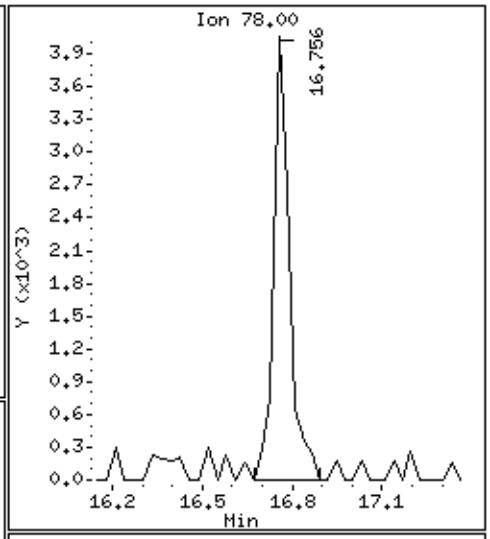
Concentration: 1.905 PPBV

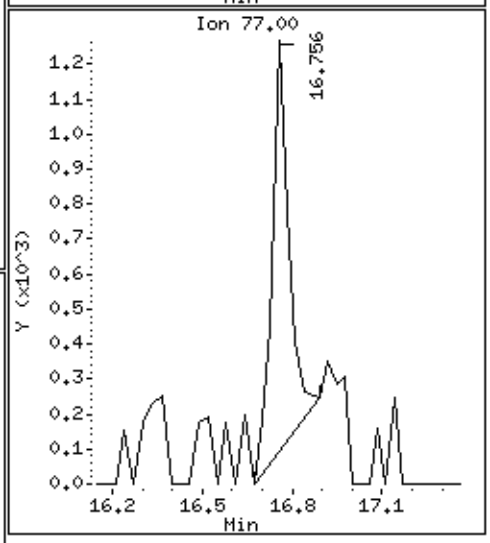












Data File: /chem/msdv.i/10Feb2015.b/v021017r1.d

Date : 10-FEB-2015 19:20

Client ID:

Instrument: msdv.i

Sample Info: 25mL# 37348

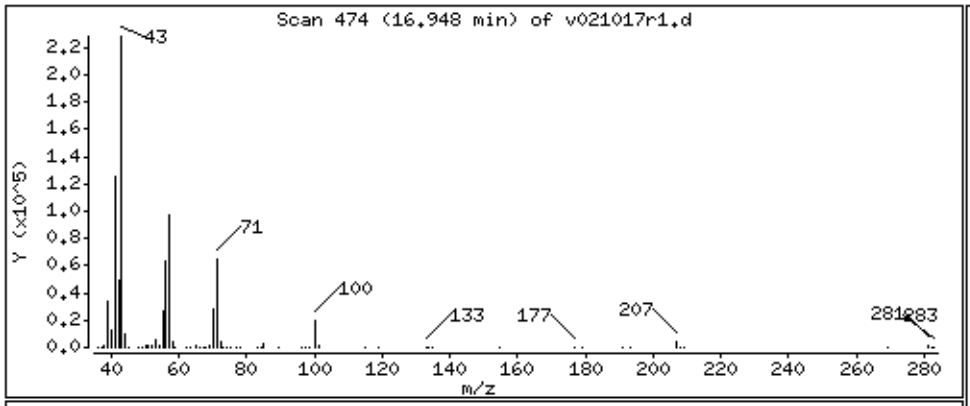
Operator: ea

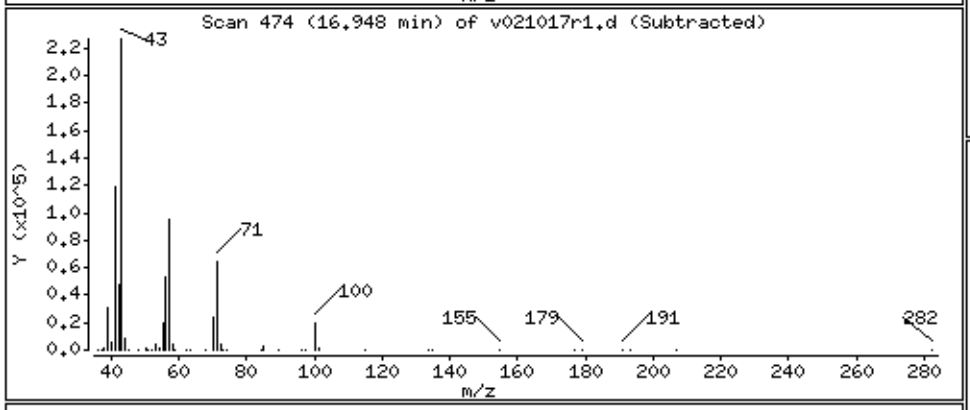
Column phase: RTx-624

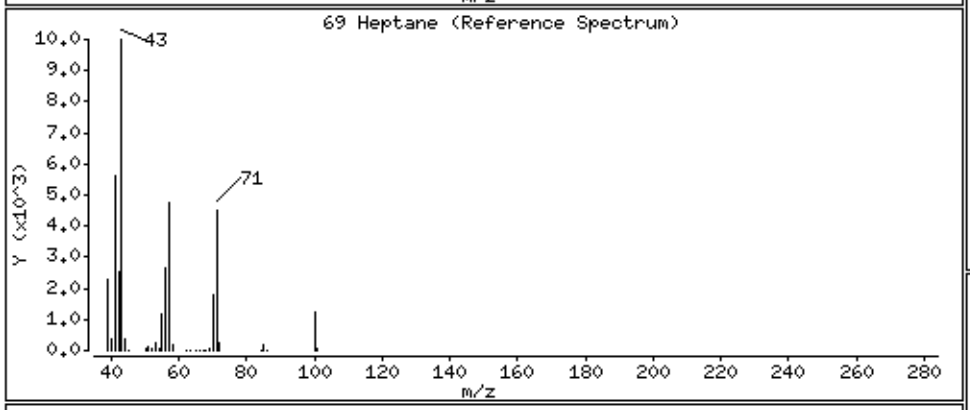
Column diameter: 0.32

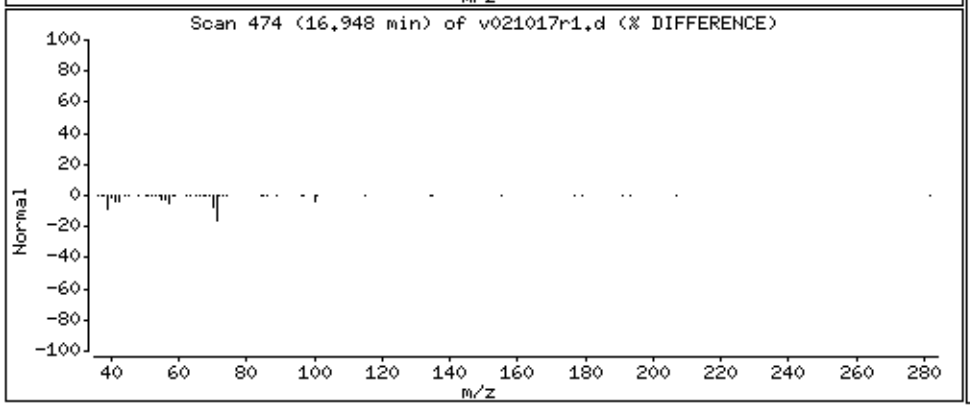
69 Heptane

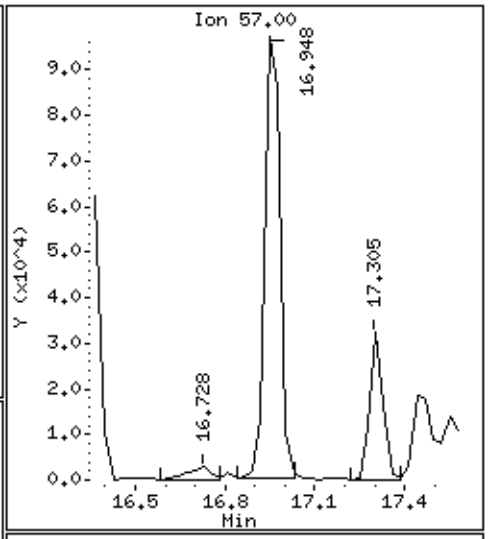
Concentration: 93.052 PPBV

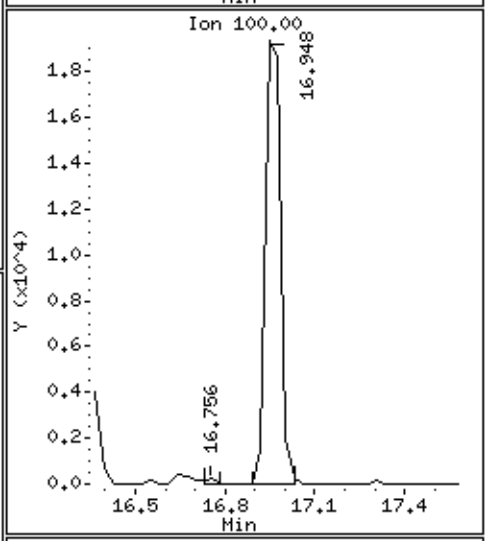


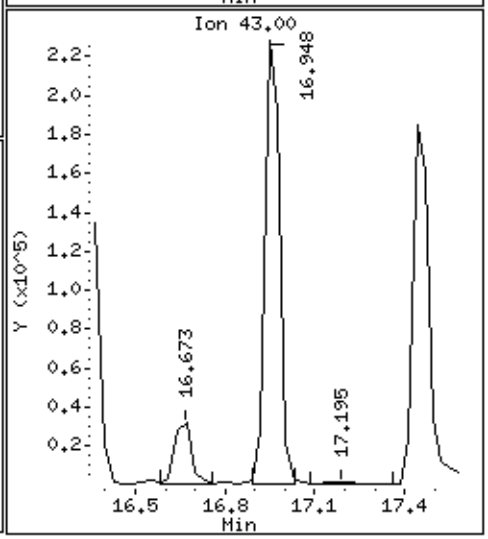












Data File: /chem/msdv.i/10Feb2015.b/v021017r1.d

Date : 10-FEB-2015 19:20

Client ID:

Instrument: msdv.i

Sample Info: 25mL# 37348

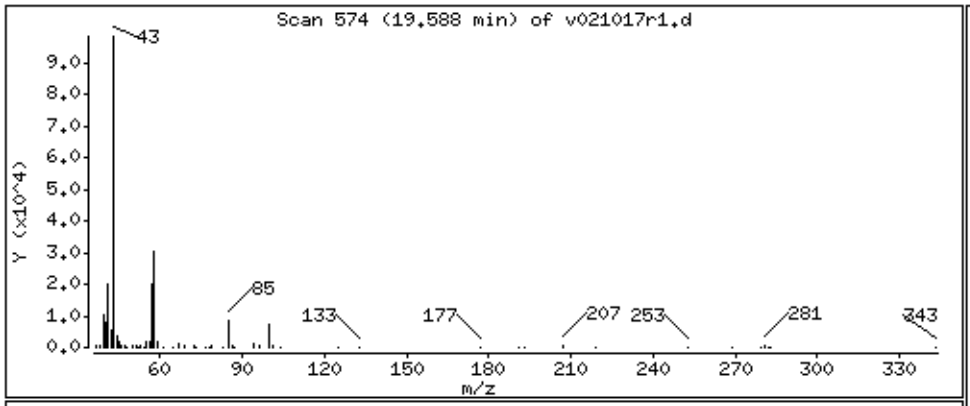
Operator: ea

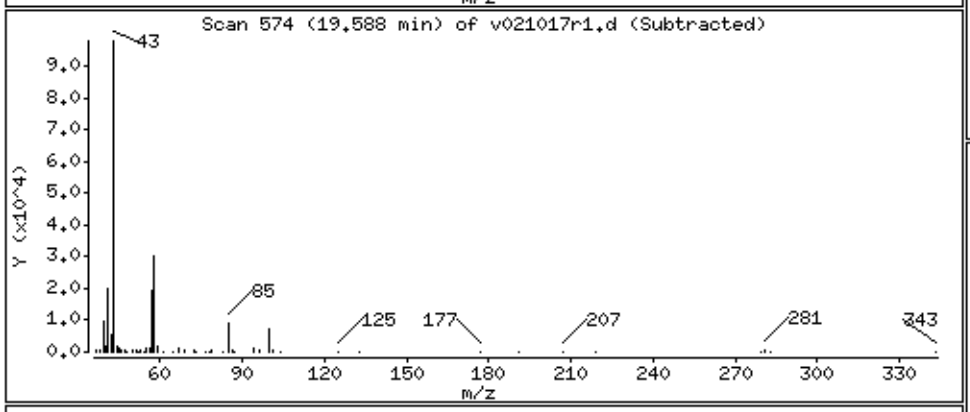
Column phase: RTx-624

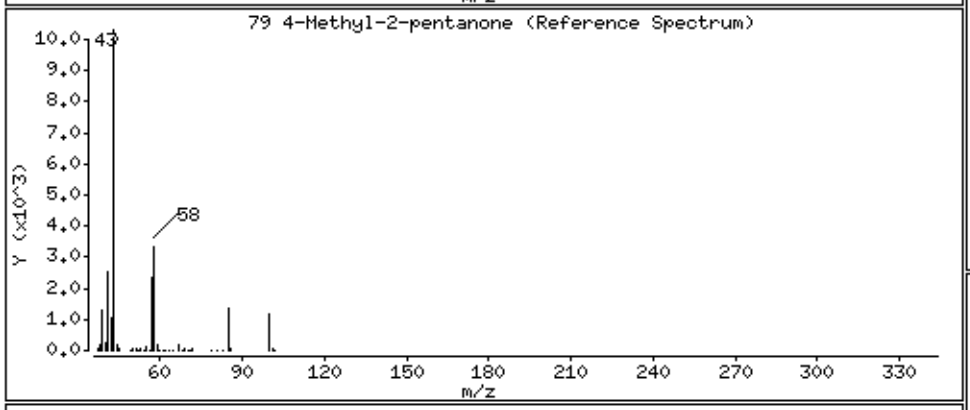
Column diameter: 0.32

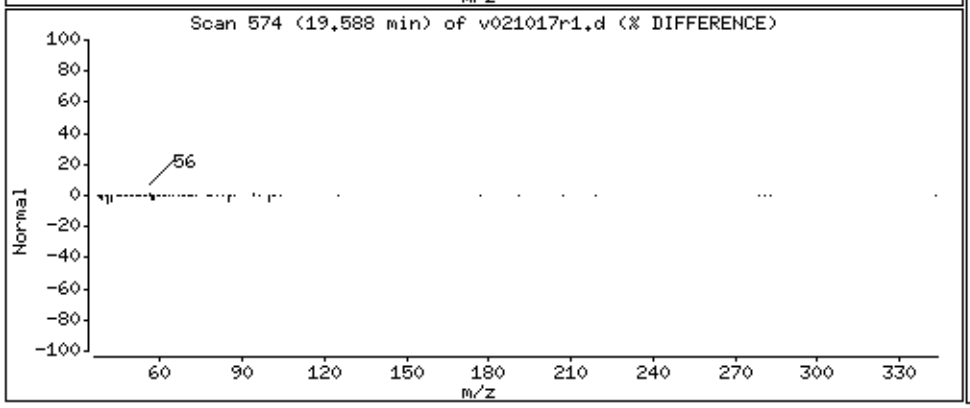
79 4-Methyl-2-pentanone

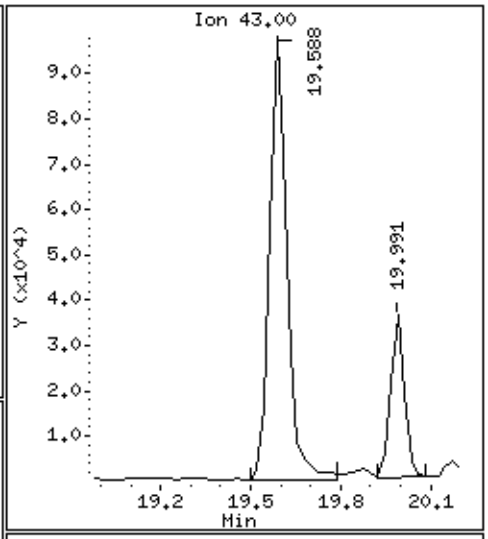
Concentration: 36.202 PPBV

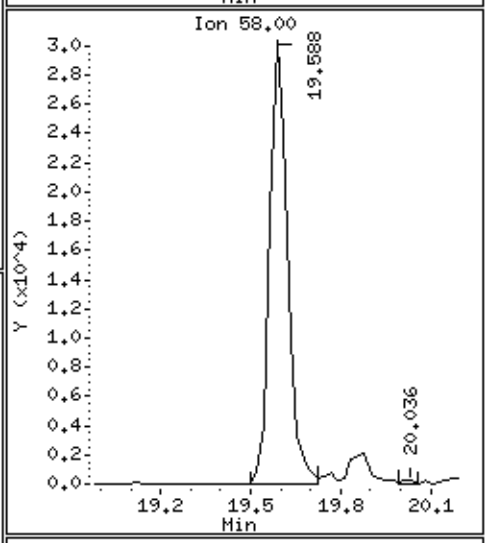


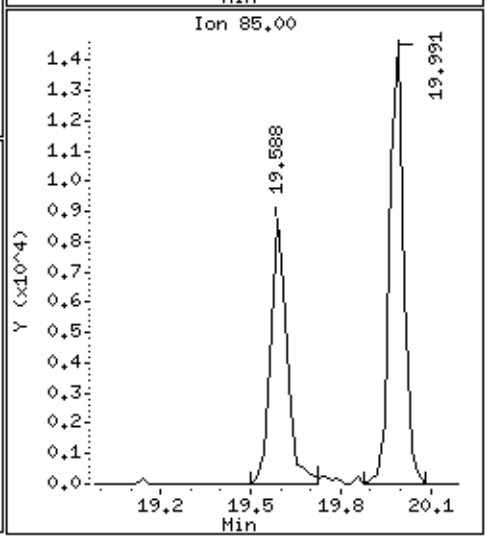












Data File: /chem/msdv.i/10Feb2015.b/v021017r1.d

Date : 10-FEB-2015 19:20

Client ID:

Instrument: msdv.i

Sample Info: 25mL# 37348

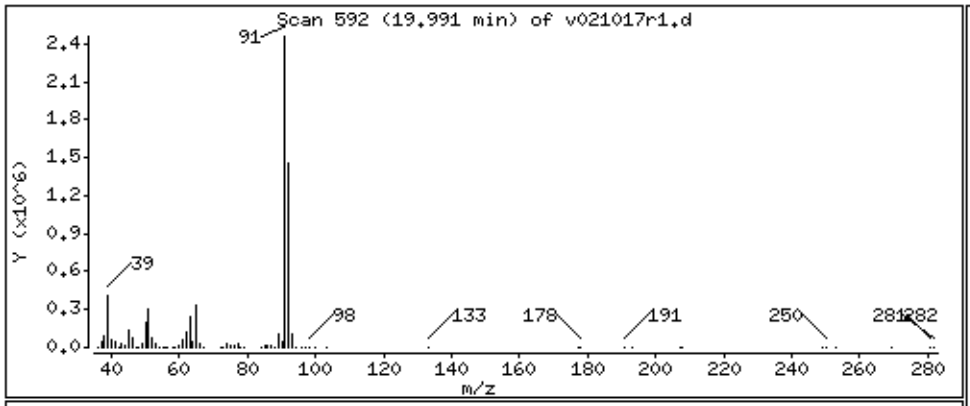
Operator: ea

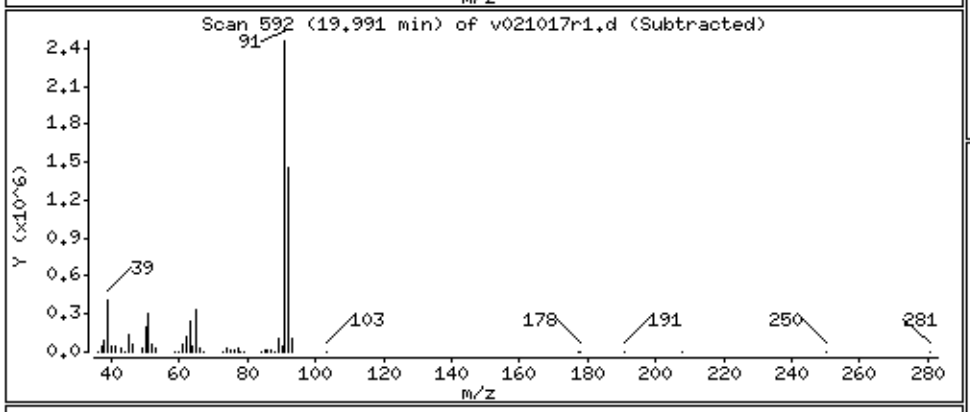
Column phase: RTx-624

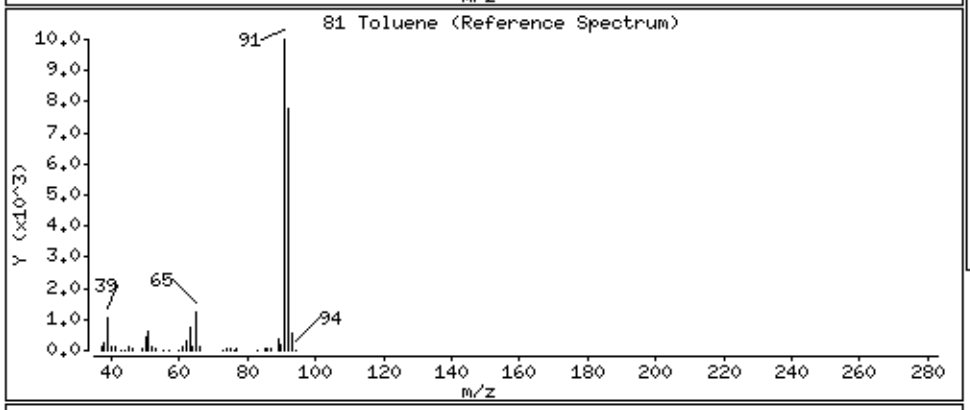
Column diameter: 0.32

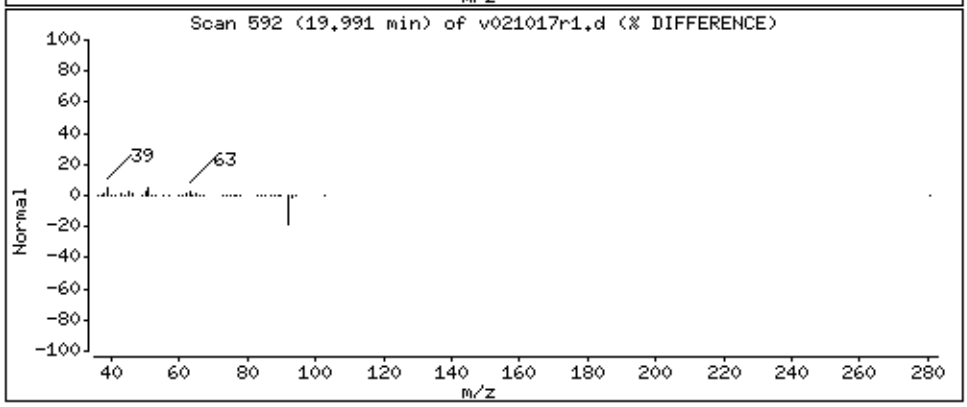
81 Toluene

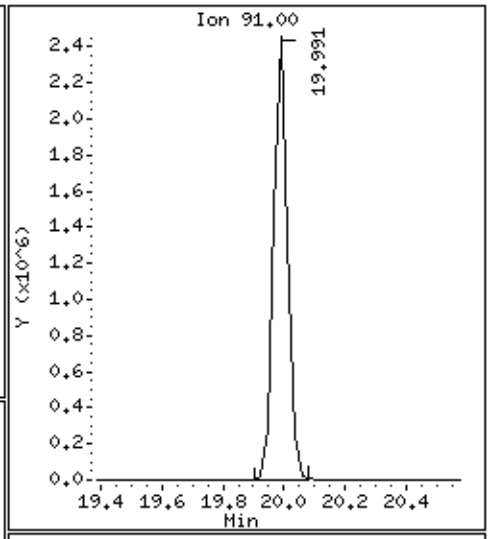
Concentration: 883.81 PPBV

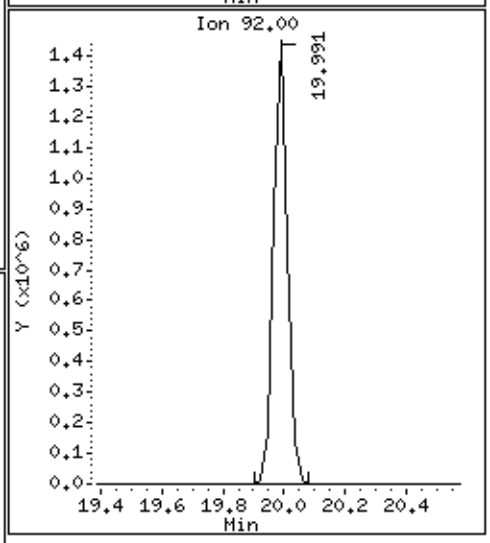












Data File: /chem/msdv.i/10Feb2015.b/v021017r1.d

Date : 10-FEB-2015 19:20

Client ID:

Instrument: msdv.i

Sample Info: 25mL# 37348

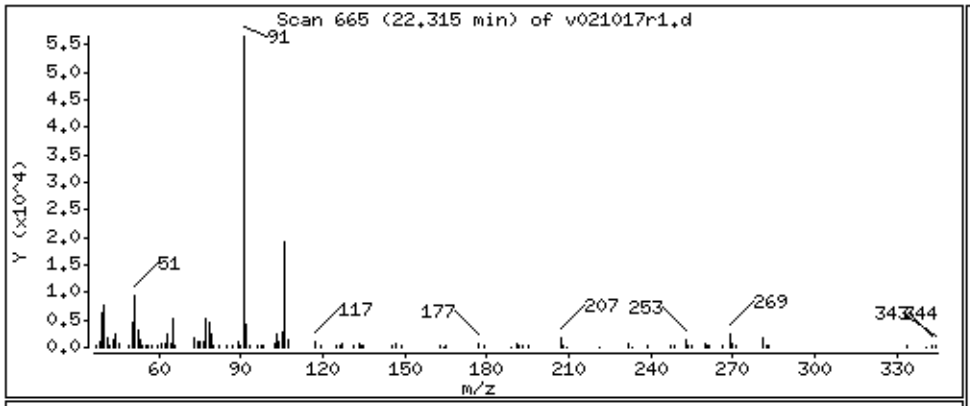
Operator: ea

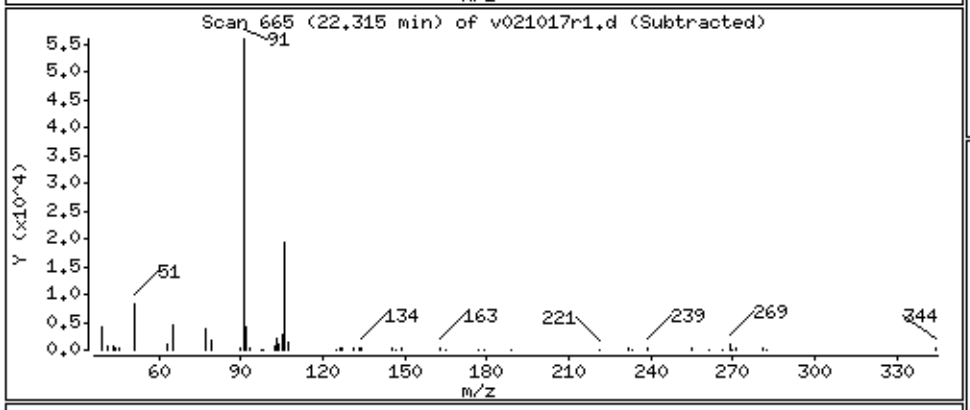
Column phase: RTx-624

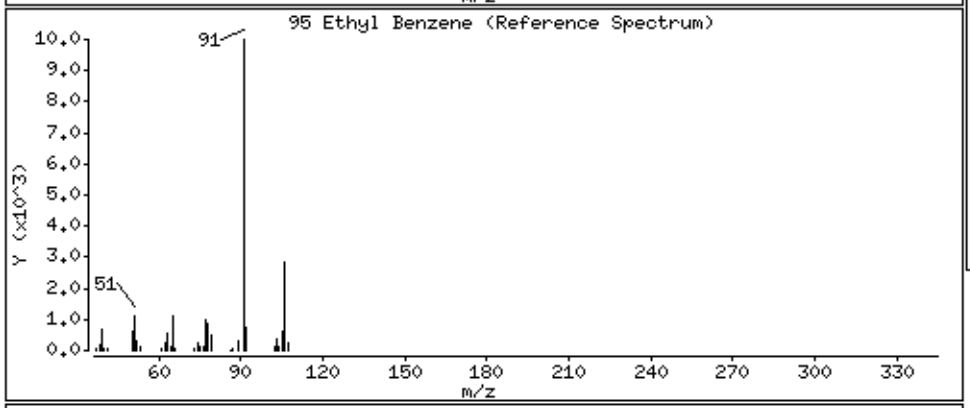
Column diameter: 0.32

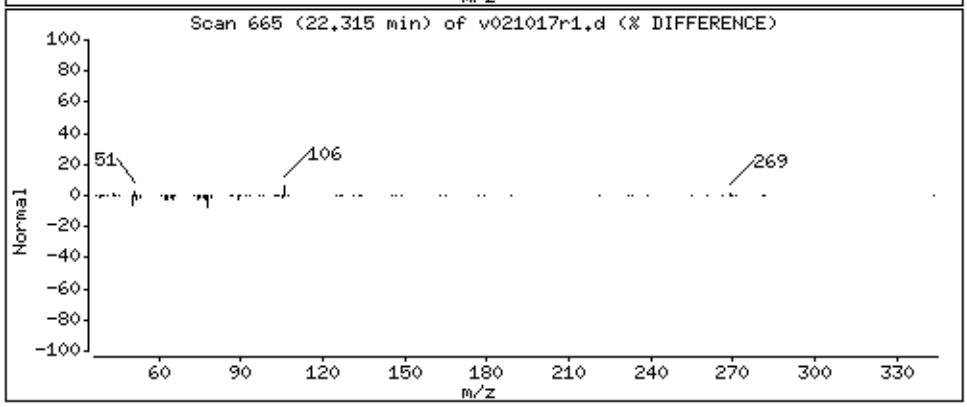
95 Ethyl Benzene

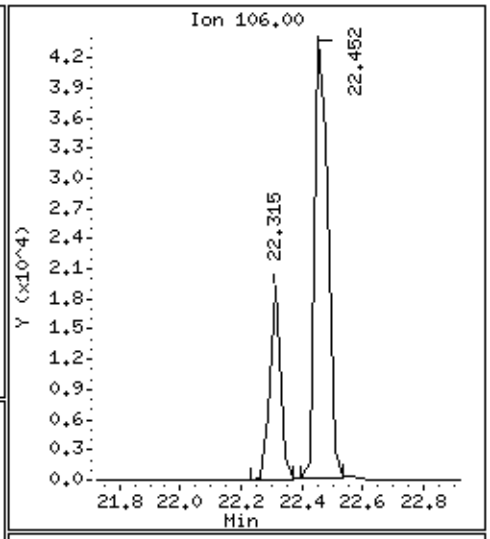
Concentration: 13.604 PPBV

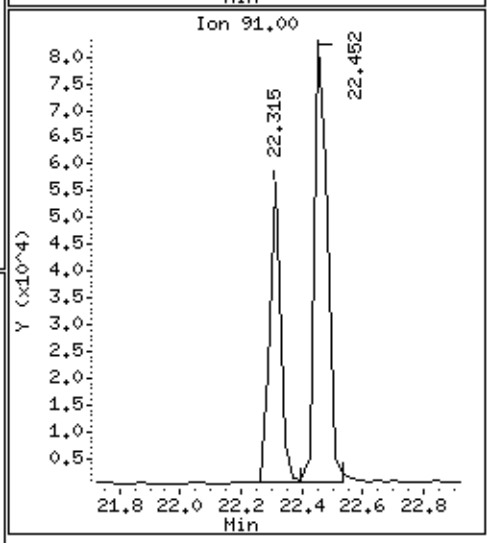












Data File: /chem/msdv.i/10Feb2015.b/v021017r1.d

Date : 10-FEB-2015 19:20

Client ID:

Instrument: msdv.i

Sample Info: 25mL# 37348

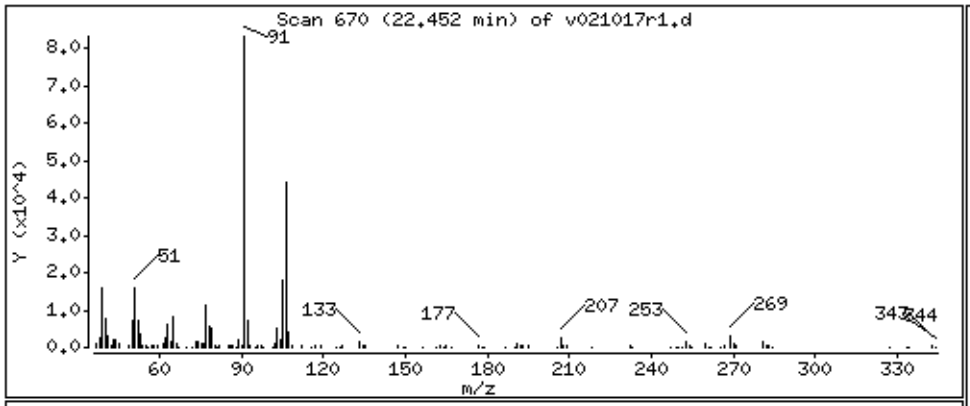
Operator: ea

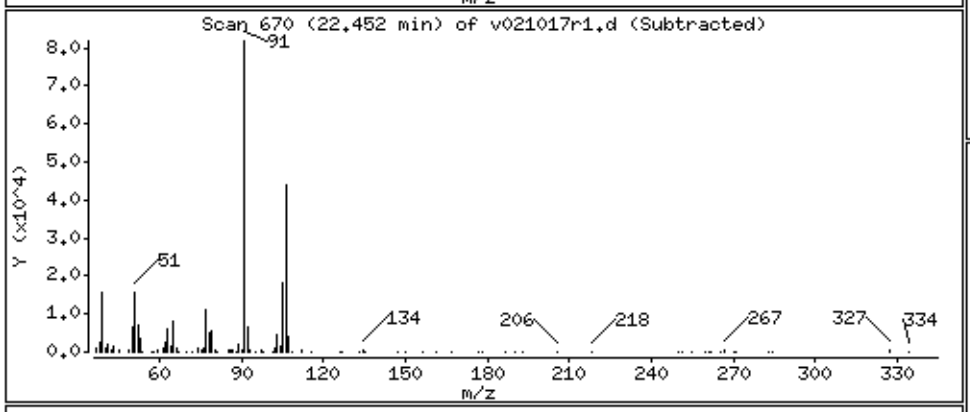
Column phase: RTx-624

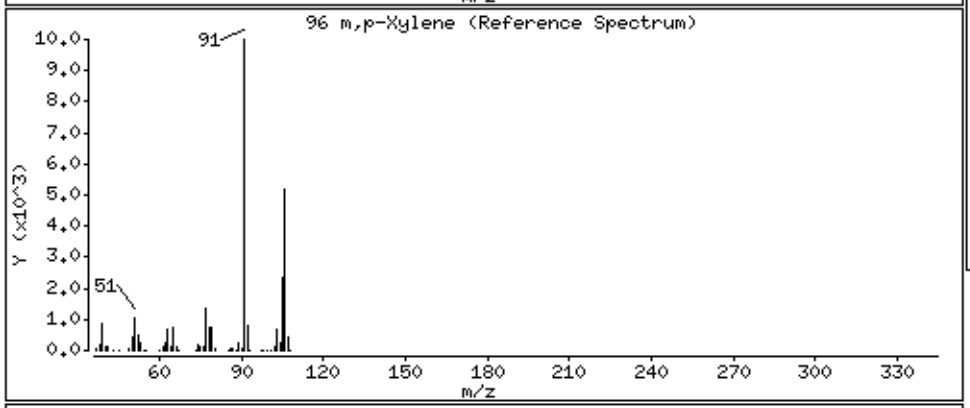
Column diameter: 0.32

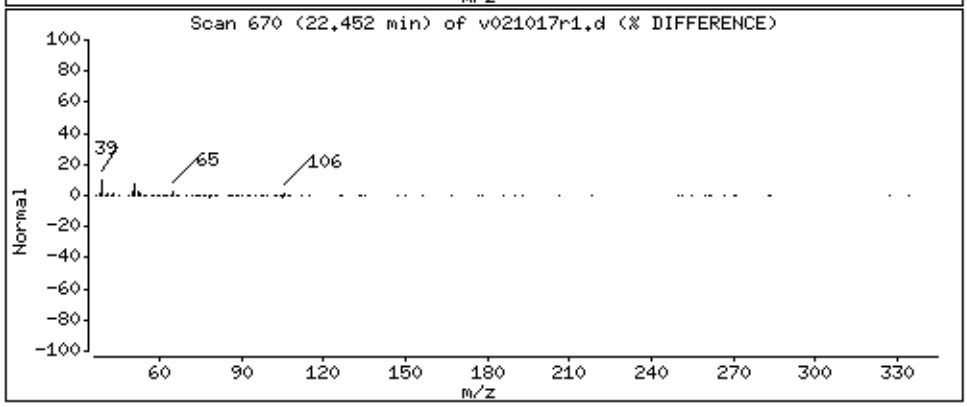
96 m,p-Xylene

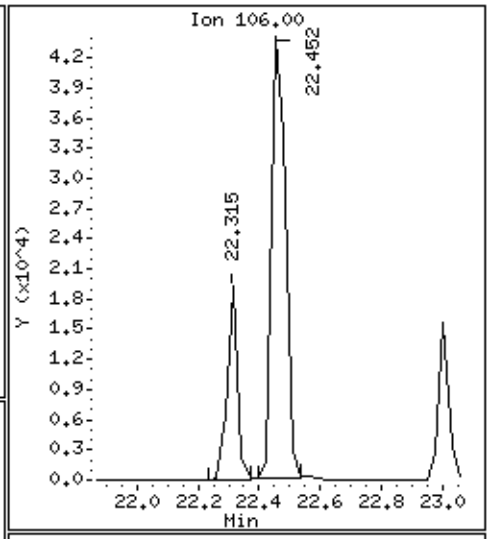
Concentration: 38.950 PPBV

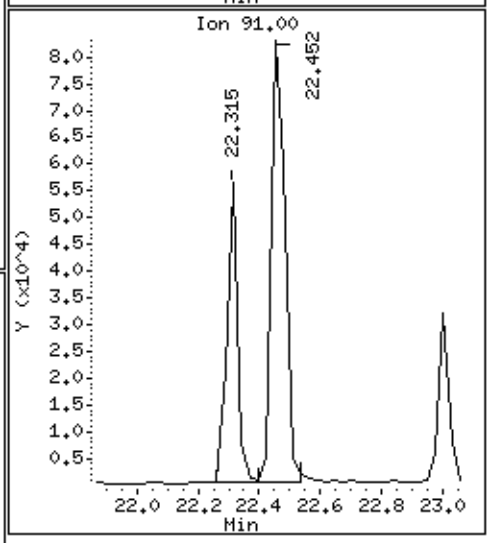












Data File: /chem/msdv.i/10Feb2015.b/v021017r1.d

Date : 10-FEB-2015 19:20

Client ID:

Instrument: msdv.i

Sample Info: 25mL# 37348

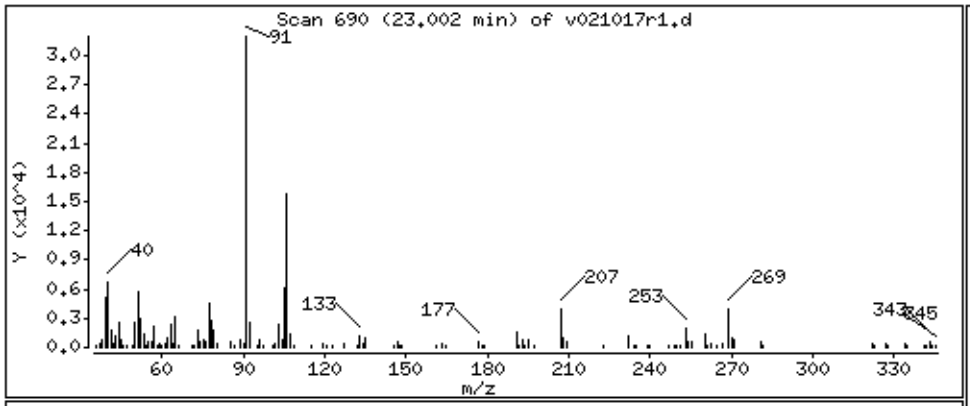
Operator: ea

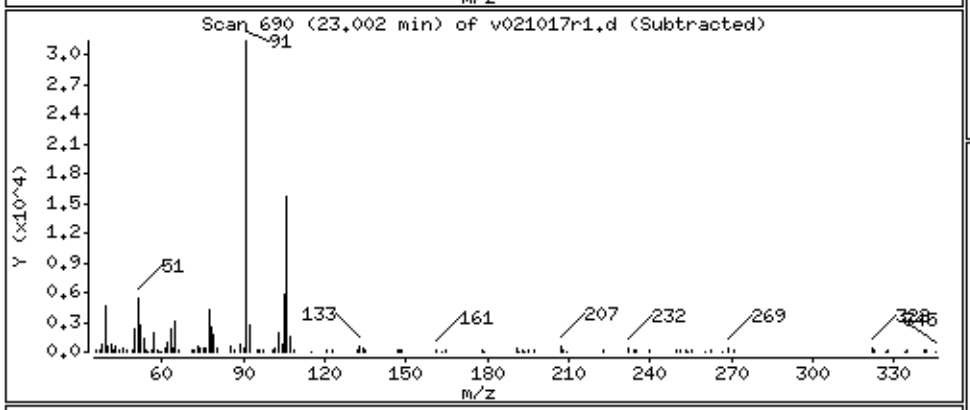
Column phase: RTx-624

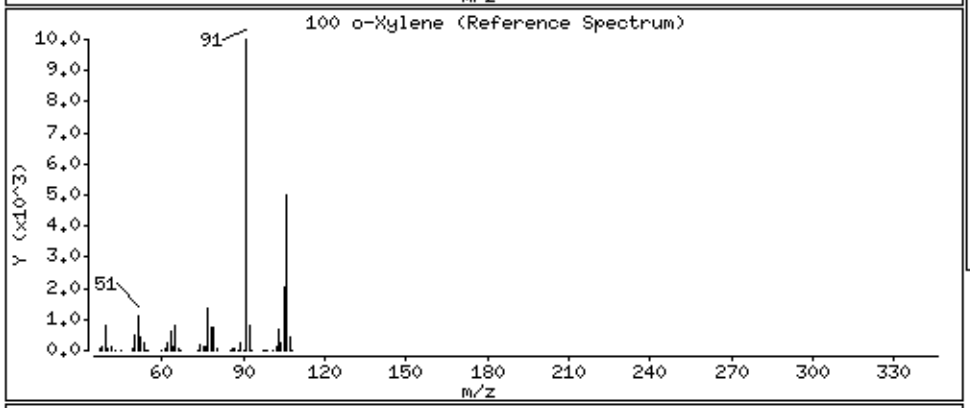
Column diameter: 0.32

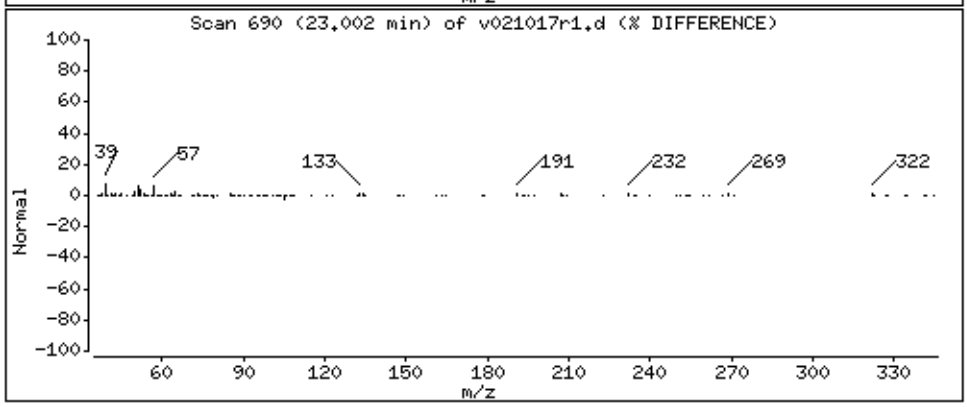
100 o-Xylene

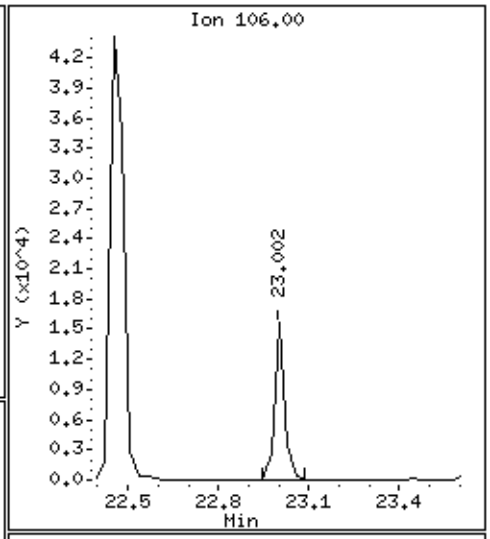
Concentration: 11.345 PPBV

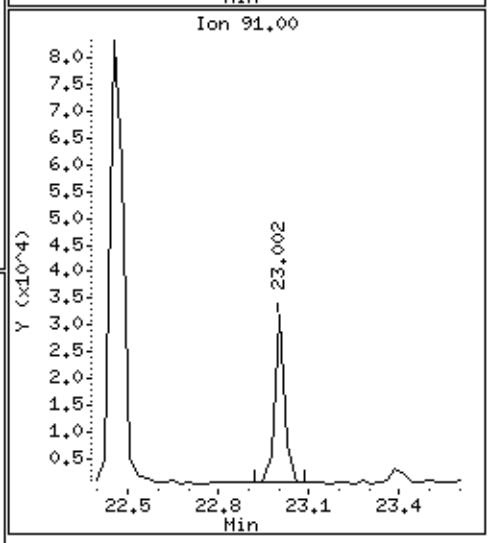












Data File: /chem/msdv.i/10Feb2015.b/v021017r1.d

Date : 10-FEB-2015 19:20

Client ID:

Instrument: msdv.i

Sample Info: 25mL# 37348

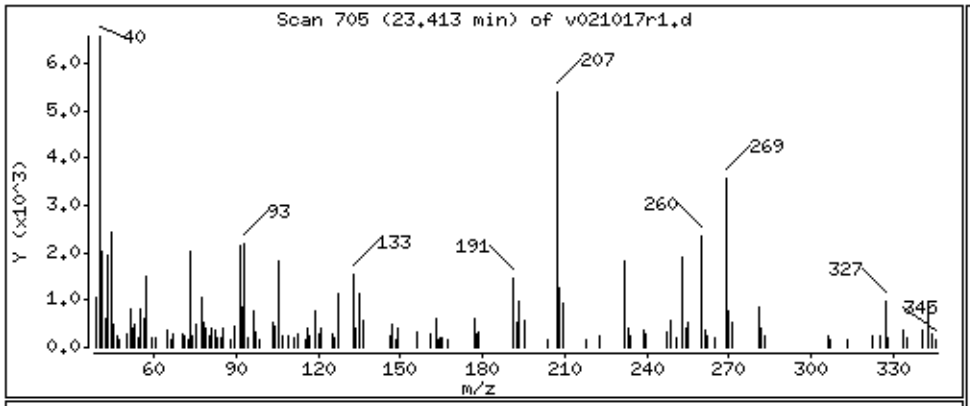
Operator: ea

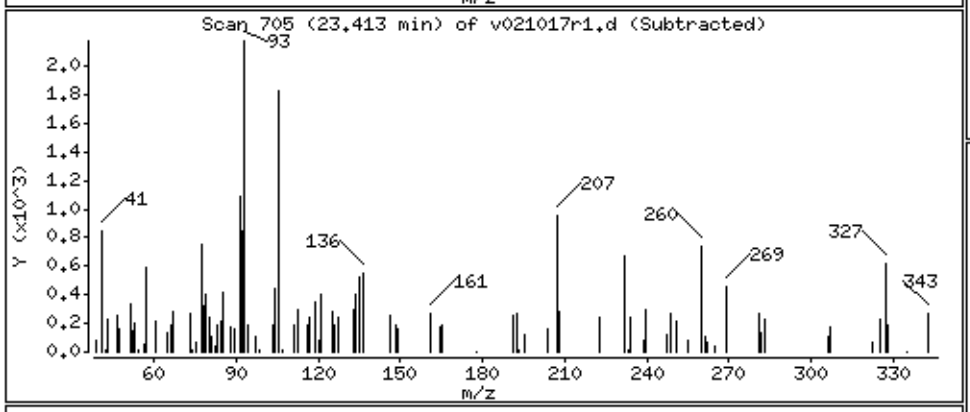
Column phase: RTx-624

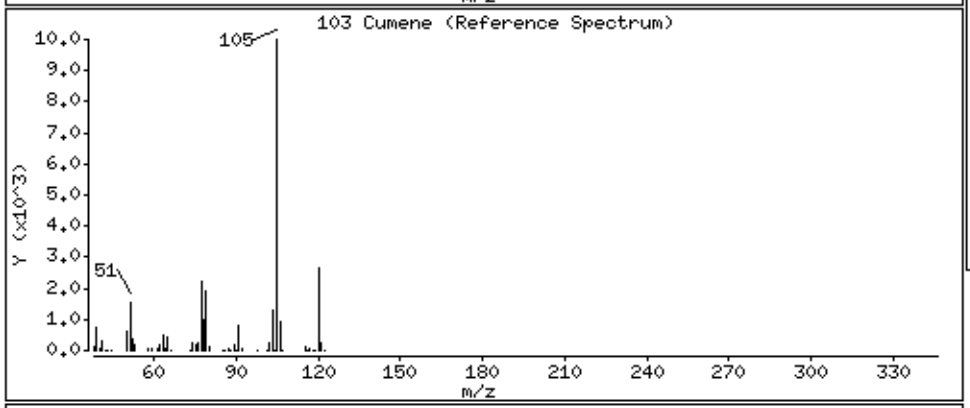
Column diameter: 0.32

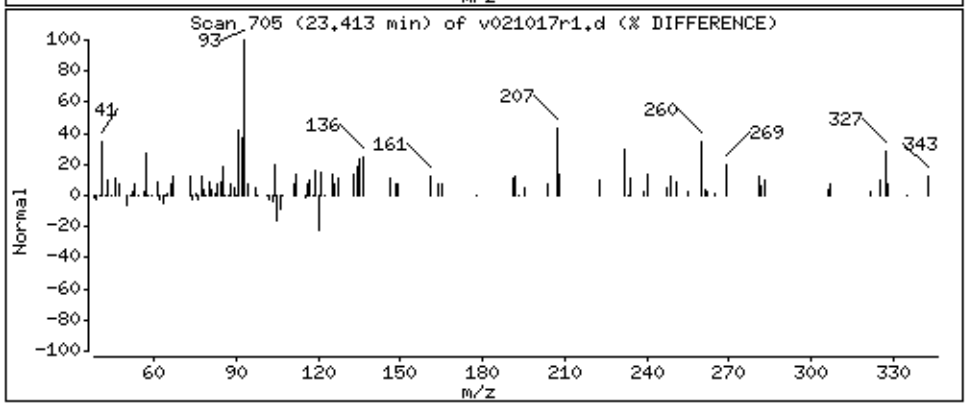
103 Cumene

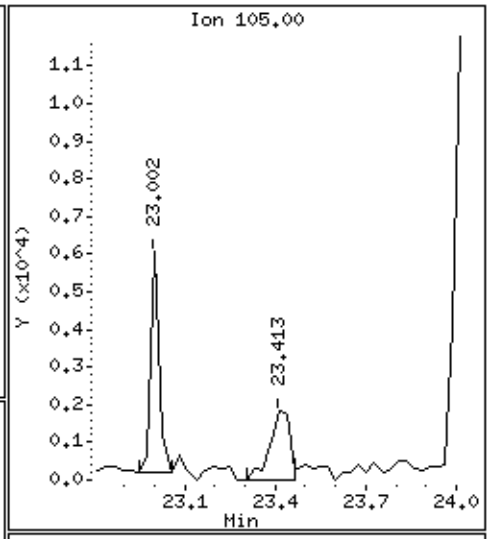
Concentration: 0.9883 PPBV

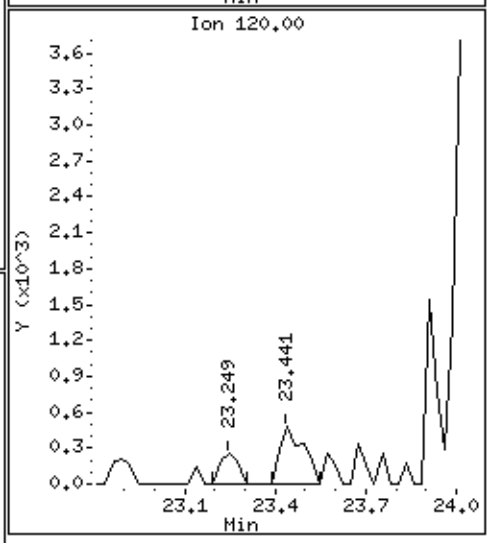












Data File: /chem/msdv.i/10Feb2015.b/v021017r1.d

Date : 10-FEB-2015 19:20

Client ID:

Instrument: msdv.i

Sample Info: 25mL# 37348

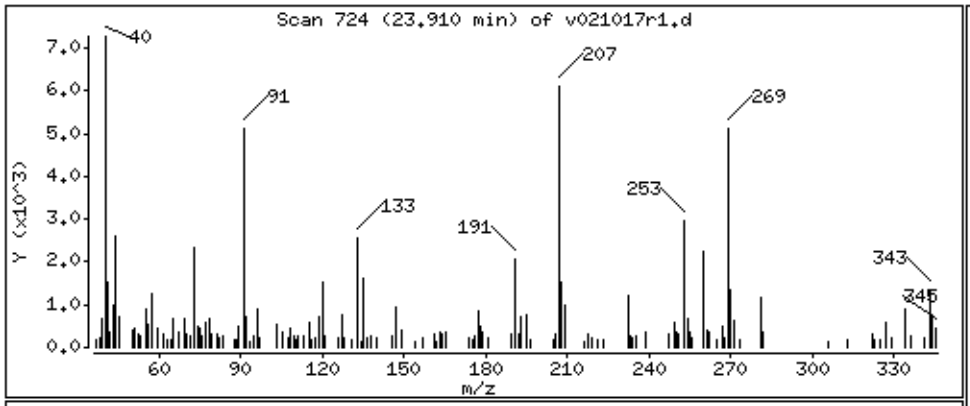
Operator: ea

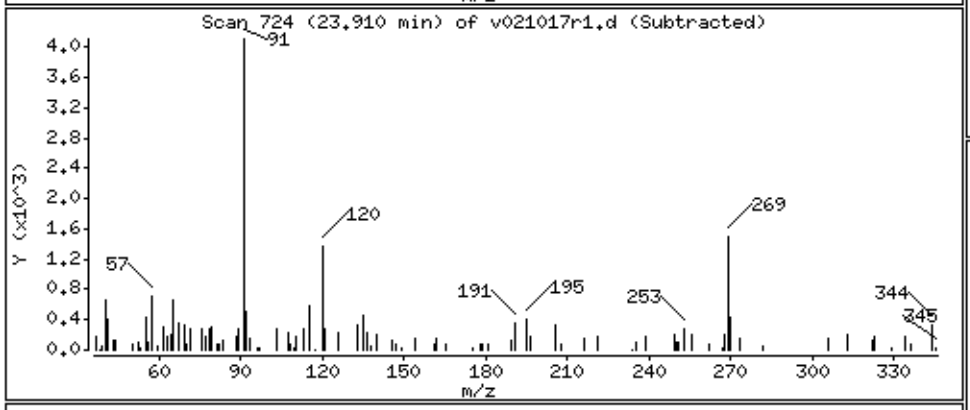
Column phase: RTx-624

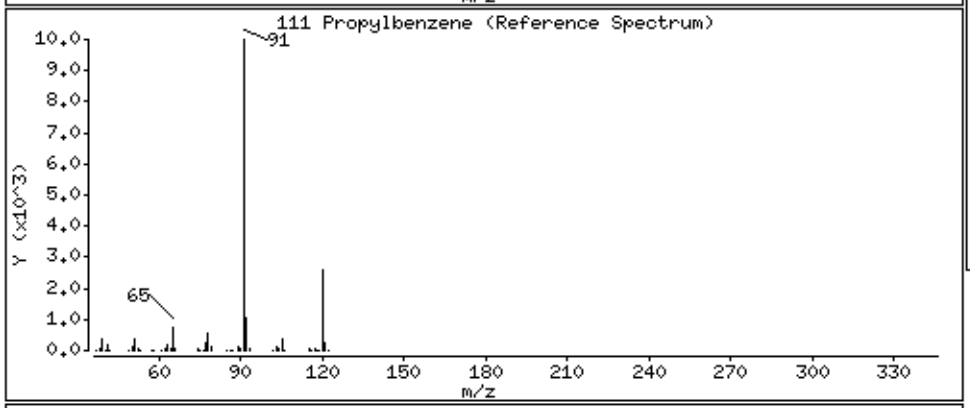
Column diameter: 0.32

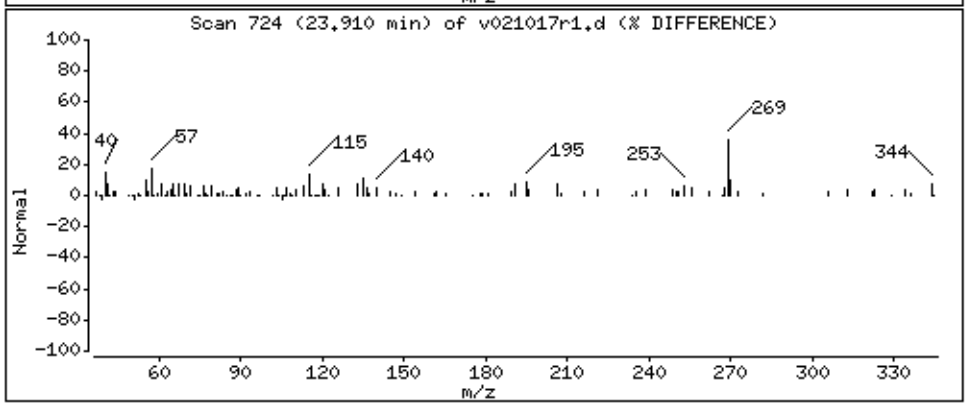
111 Propylbenzene

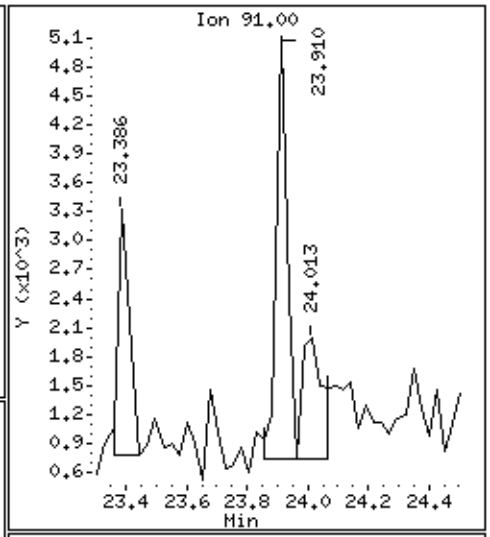
Concentration: 1.232 PPBV

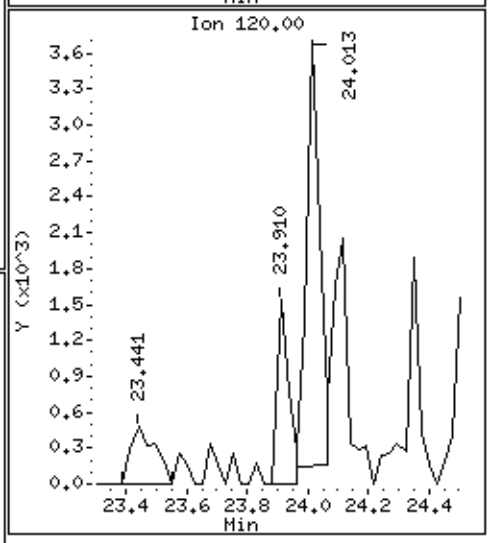












Data File: /chem/msdv.i/10Feb2015.b/v021017r1.d

Date : 10-FEB-2015 19:20

Client ID:

Instrument: msdv.i

Sample Info: 25mL# 37348

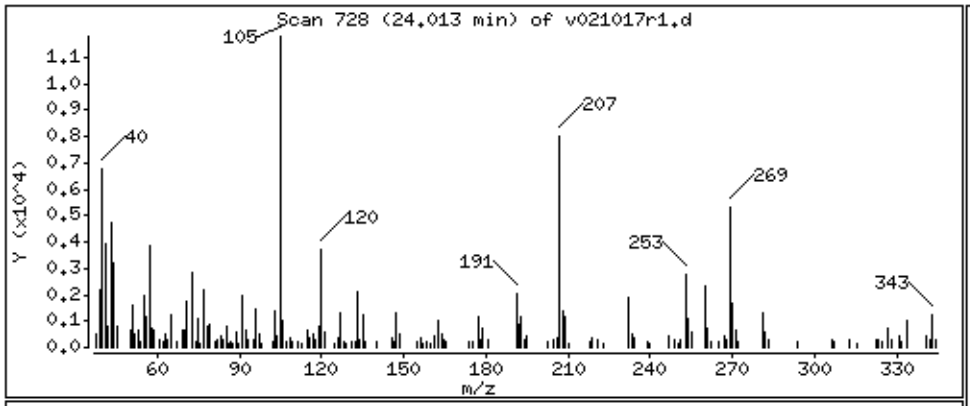
Operator: ea

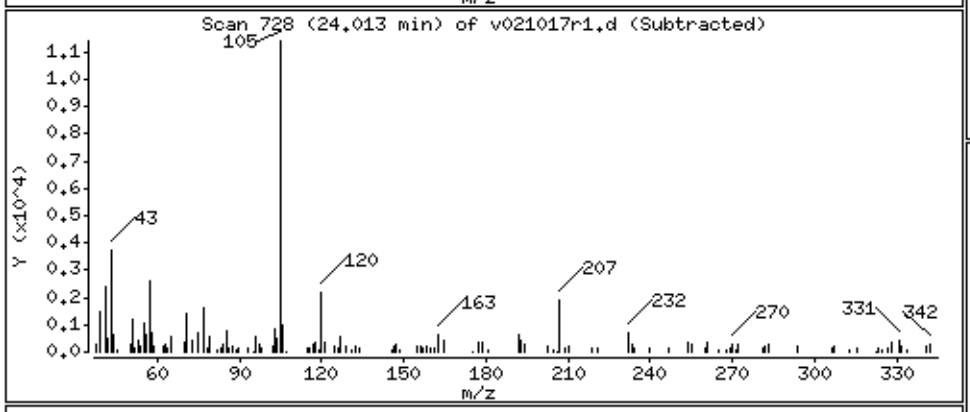
Column phase: RTx-624

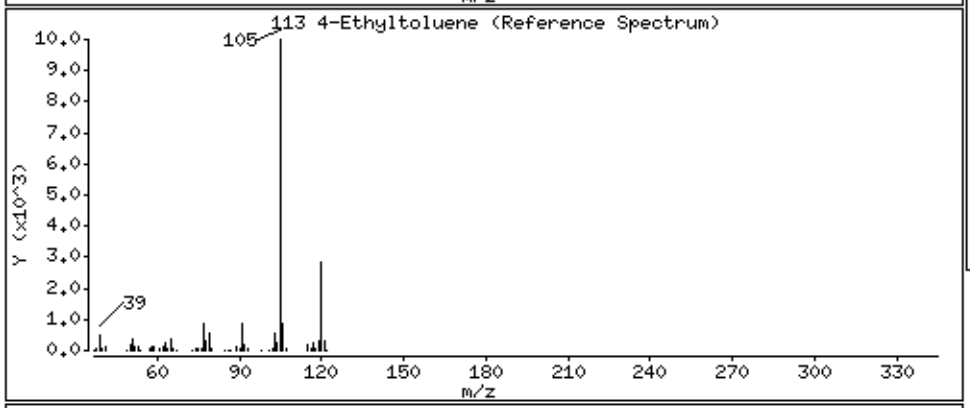
Column diameter: 0.32

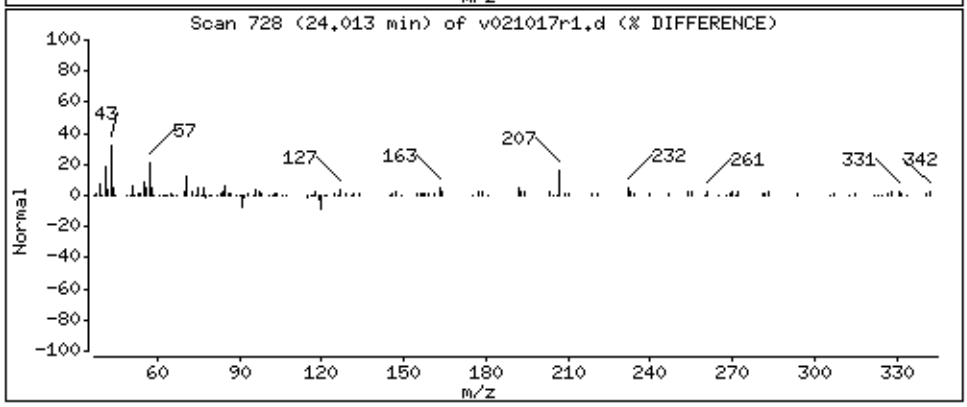
113 4-Ethyltoluene

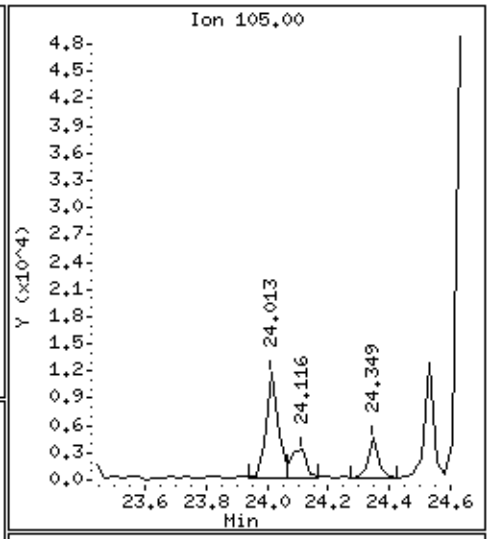
Concentration: 5.247 PPBV

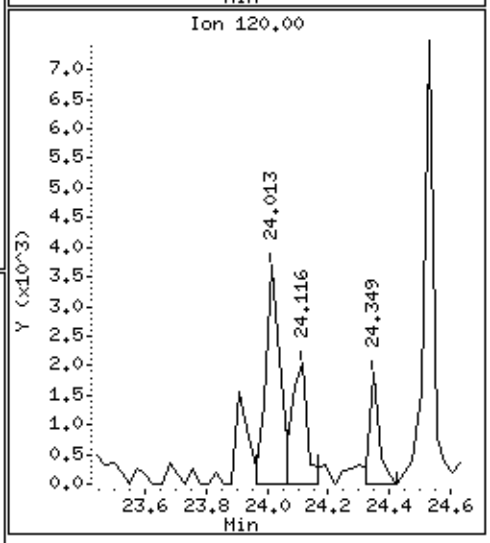












Data File: /chem/msdv.i/10Feb2015.b/v021017r1.d

Date : 10-FEB-2015 19:20

Client ID:

Instrument: msdv.i

Sample Info: 25mL# 37348

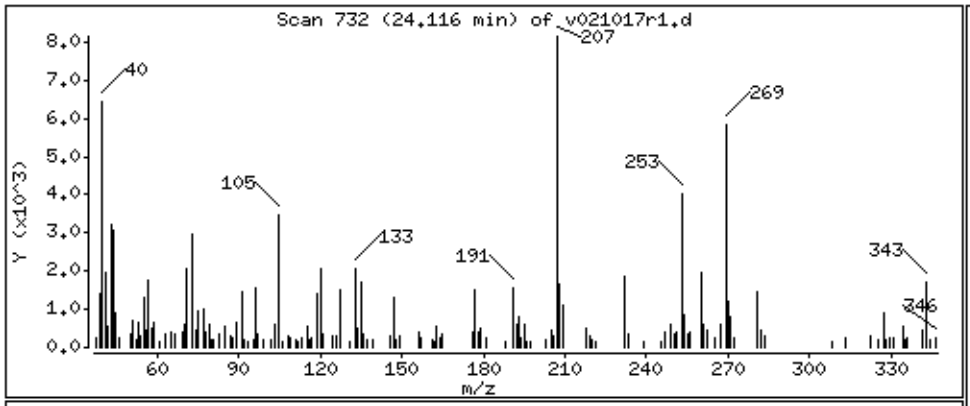
Operator: ea

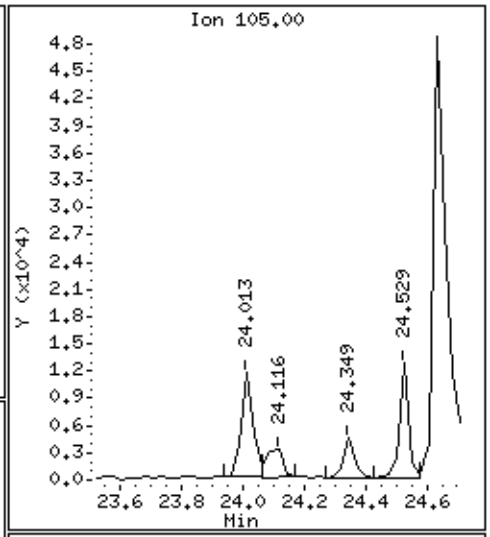
Column phase: RTx-624

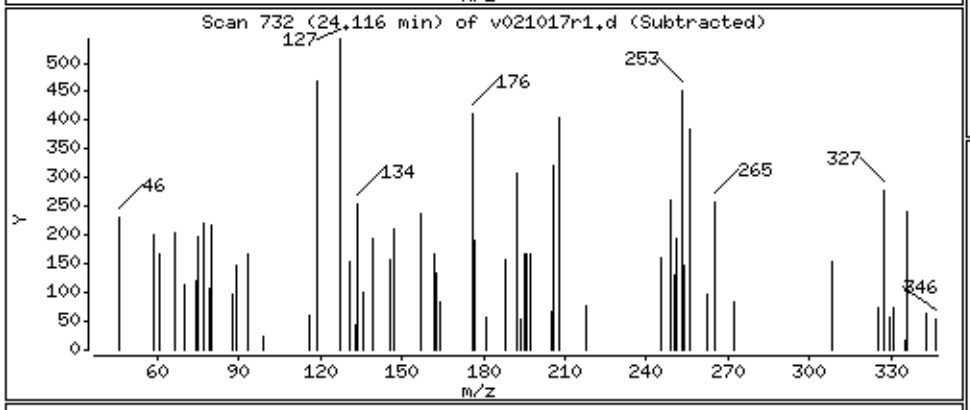
Column diameter: 0.32

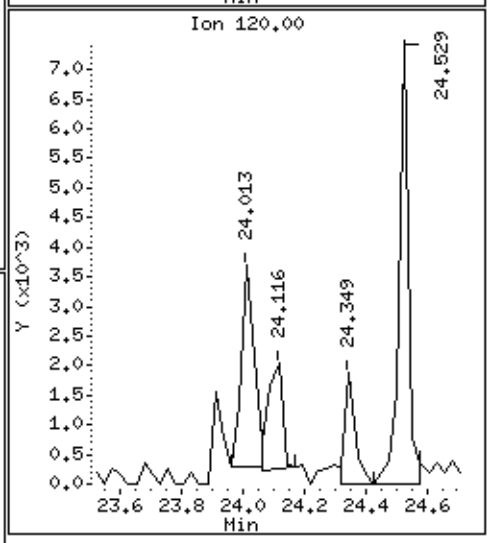
114 1,3,5-Trimethylbenzene

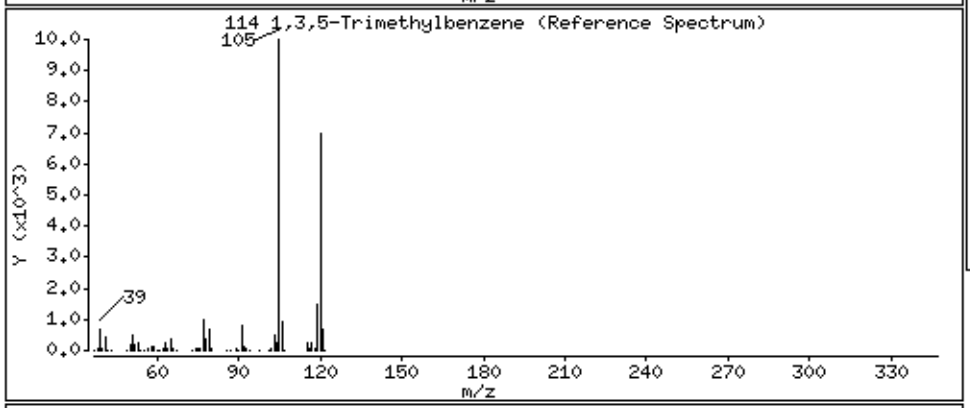
Concentration: 1.754 PPBV

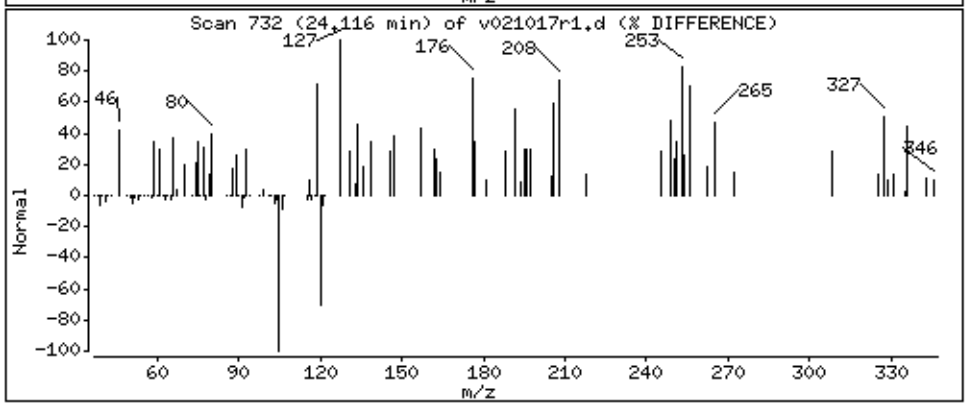












Data File: /chem/msdv.i/10Feb2015.b/v021017r1.d

Date : 10-FEB-2015 19:20

Client ID:

Instrument: msdv.i

Sample Info: 25mL# 37348

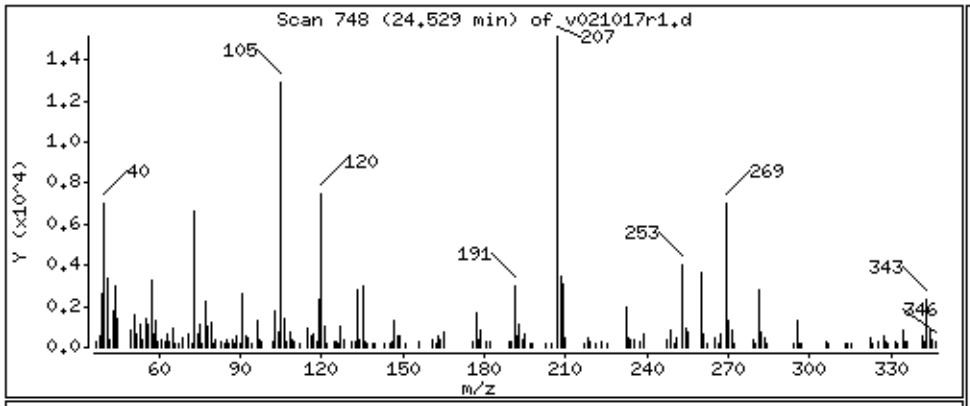
Operator: ea

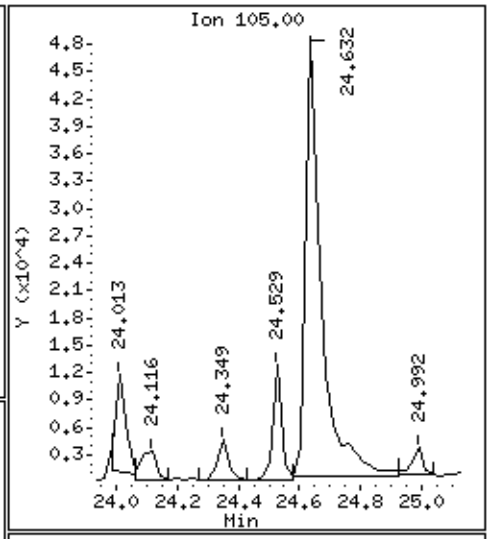
Column phase: RTx-624

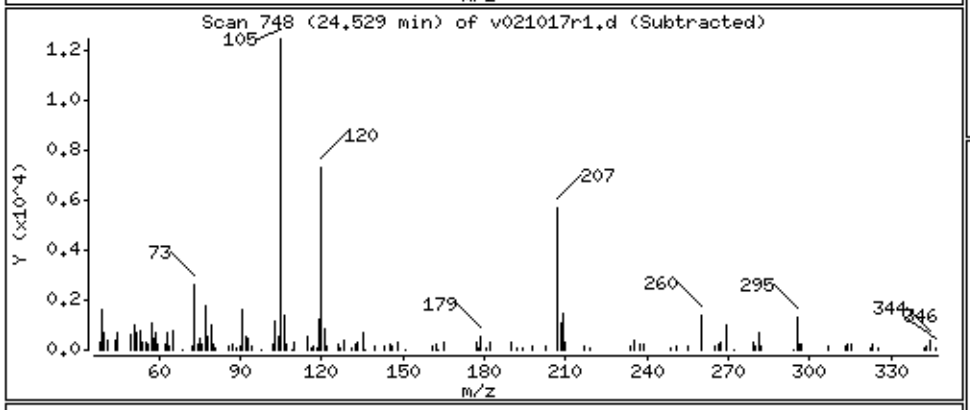
Column diameter: 0.32

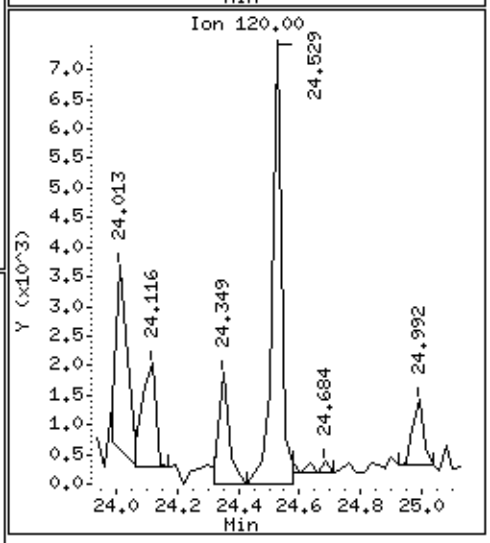
120 1,2,4-Trimethylbenzene

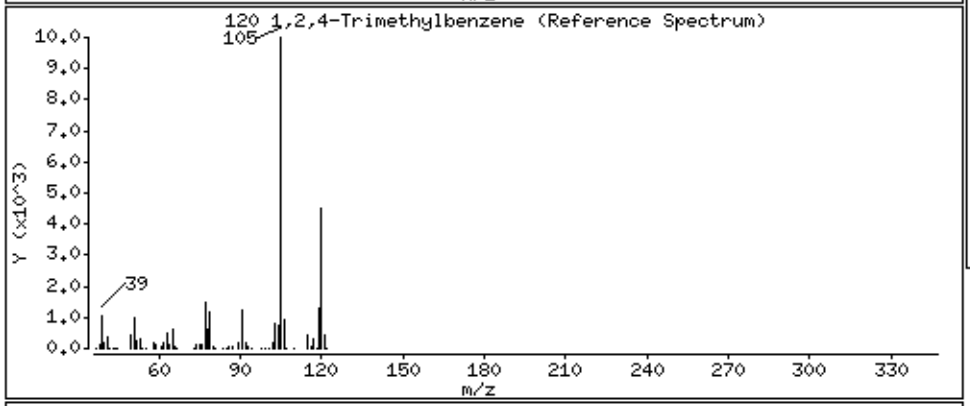
Concentration: 4.483 PPBV

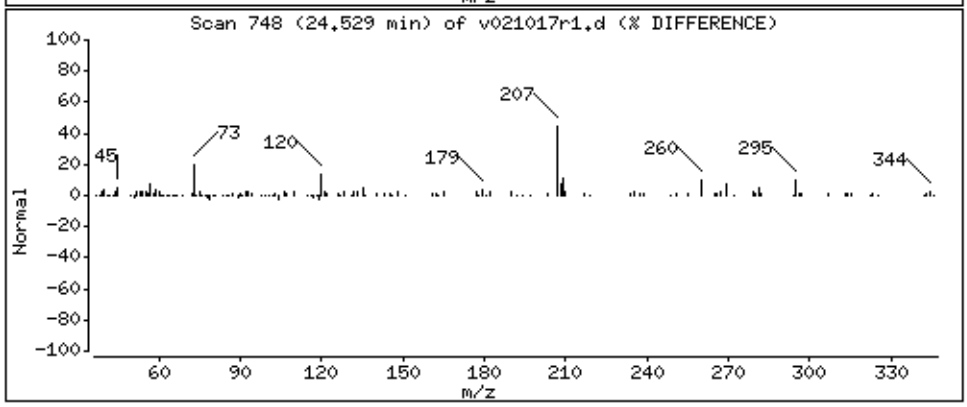












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Summary of Detected Compounds
MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: B6-3SS

Lab ID#: 1502113AR1-02A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.23	0.44	1.1	2.2
Chloromethane	1.1	0.72 J	2.4	1.5 J
Freon 11	0.23	0.18 J	1.3	0.99 J
Ethanol	1.1	16 J0	2.2	30 J0
Freon 113	0.23	0.059 J	1.8	0.45 J
Acetone	1.1	74	2.7	180
2-Propanol	1.1	58	2.8	140
Carbon Disulfide	1.1	0.21 J	3.6	0.65 J
Methylene Chloride	0.46	1.0	1.6	3.5
Methyl tert-butyl ether	0.23	2.1	0.82	7.6
Hexane	0.23	1.2	0.81	4.3
2-Butanone (Methyl Ethyl Ketone)	1.1	4.9	3.4	14
Chloroform	0.23	0.067 J	1.1	0.32 J
Cyclohexane	0.23	0.95	0.79	3.3
Carbon Tetrachloride	0.23	0.092 J	1.4	0.58 J
2,2,4-Trimethylpentane	1.1	1.8	5.3	8.3
Benzene	0.23	4.0	0.73	13
Heptane	0.23	0.77	0.94	3.1
Trichloroethene	0.23	0.14 J	1.2	0.73 J
1,4-Dioxane	0.23	0.17 J	0.82	0.62 J
4-Methyl-2-pentanone	0.23	0.65	0.94	2.7
Toluene	0.23	6.7	0.86	25
Chlorobenzene	0.23	0.11 J	1.0	0.50 J
Ethyl Benzene	0.23	12	0.99	54
m,p-Xylene	0.23	1.4	0.99	5.9
o-Xylene	0.23	0.42	0.99	1.8
Styrene	0.23	11	0.98	45
Cumene	0.23	0.10 J	1.1	0.51 J
Propylbenzene	0.23	0.16 J	1.1	0.79 J
4-Ethyltoluene	0.23	0.22 J	1.1	1.0 J
1,2,4-Trimethylbenzene	0.23	0.27	1.1	1.4

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Client Sample ID: B6-3SS

Lab ID#: 1502113AR1-02A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**v021016r1**	**Date of Collection:**	**2/4/15 4:37:00 PM**
Dil. Factor:	**2.29**	**Date of Analysis:**	**2/10/15 06:45 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.23	0.44	1.1	2.2
Freon 114	0.23	Not Detected	1.6	Not Detected
Chloromethane	1.1	0.72 J	2.4	1.5 J
Vinyl Chloride	0.23	Not Detected	0.58	Not Detected
1,3-Butadiene	0.23	Not Detected	0.51	Not Detected
Bromomethane	1.1	Not Detected	4.4	Not Detected
Chloroethane	1.1	Not Detected	3.0	Not Detected
Freon 11	0.23	0.18 J	1.3	0.99 J
Ethanol	1.1	16 J0	2.2	30 J0
Freon 113	0.23	0.059 J	1.8	0.45 J
1,1-Dichloroethene	0.23	Not Detected	0.91	Not Detected
Acetone	1.1	74	2.7	180
2-Propanol	1.1	58	2.8	140
Carbon Disulfide	1.1	0.21 J	3.6	0.65 J
3-Chloropropene	1.1	Not Detected	3.6	Not Detected
Methylene Chloride	0.46	1.0	1.6	3.5
Methyl tert-butyl ether	0.23	2.1	0.82	7.6
trans-1,2-Dichloroethene	0.23	Not Detected	0.91	Not Detected
Hexane	0.23	1.2	0.81	4.3
1,1-Dichloroethane	0.23	Not Detected	0.93	Not Detected
2-Butanone (Methyl Ethyl Ketone)	1.1	4.9	3.4	14
cis-1,2-Dichloroethene	0.23	Not Detected	0.91	Not Detected
Tetrahydrofuran	1.1	Not Detected	3.4	Not Detected
Chloroform	0.23	0.067 J	1.1	0.32 J
1,1,1-Trichloroethane	0.23	Not Detected	1.2	Not Detected
Cyclohexane	0.23	0.95	0.79	3.3
Carbon Tetrachloride	0.23	0.092 J	1.4	0.58 J
2,2,4-Trimethylpentane	1.1	1.8	5.3	8.3
Benzene	0.23	4.0	0.73	13
1,2-Dichloroethane	0.23	Not Detected	0.93	Not Detected
Heptane	0.23	0.77	0.94	3.1
Trichloroethene	0.23	0.14 J	1.2	0.73 J
1,2-Dichloropropane	0.23	Not Detected	1.0	Not Detected
1,4-Dioxane	0.23	0.17 J	0.82	0.62 J
Bromodichloromethane	0.23	Not Detected	1.5	Not Detected
cis-1,3-Dichloropropene	0.23	Not Detected	1.0	Not Detected
4-Methyl-2-pentanone	0.23	0.65	0.94	2.7
Toluene	0.23	6.7	0.86	25
trans-1,3-Dichloropropene	0.23	Not Detected	1.0	Not Detected
1,1,2-Trichloroethane	0.23	Not Detected	1.2	Not Detected
Tetrachloroethene	0.23	Not Detected	1.6	Not Detected
2-Hexanone	1.1	Not Detected	4.7	Not Detected

eurofins | Air Toxics

Client Sample ID: B6-3SS

Lab ID#: 1502113AR1-02A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**v021016r1**	**Date of Collection:**	**2/4/15 4:37:00 PM**
Dil. Factor:	**2.29**	**Date of Analysis:**	**2/10/15 06:45 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Dibromochloromethane	0.23	Not Detected	2.0	Not Detected
1,2-Dibromoethane (EDB)	0.23	Not Detected	1.8	Not Detected
Chlorobenzene	0.23	0.11 J	1.0	0.50 J
Ethyl Benzene	0.23	12	0.99	54
m,p-Xylene	0.23	1.4	0.99	5.9
o-Xylene	0.23	0.42	0.99	1.8
Styrene	0.23	11	0.98	45
Bromoform	0.23	Not Detected	2.4	Not Detected
Cumene	0.23	0.10 J	1.1	0.51 J
1,1,2,2-Tetrachloroethane	0.23	Not Detected	1.6	Not Detected
Propylbenzene	0.23	0.16 J	1.1	0.79 J
4-Ethyltoluene	0.23	0.22 J	1.1	1.0 J
1,3,5-Trimethylbenzene	0.23	Not Detected	1.1	Not Detected
1,2,4-Trimethylbenzene	0.23	0.27	1.1	1.4
1,3-Dichlorobenzene	0.23	Not Detected	1.4	Not Detected
1,4-Dichlorobenzene	0.23	Not Detected	1.4	Not Detected
alpha-Chlorotoluene	1.1	Not Detected	5.9	Not Detected
1,2-Dichlorobenzene	0.23	Not Detected	1.4	Not Detected
1,2,4-Trichlorobenzene	1.1	Not Detected	8.5	Not Detected
Hexachlorobutadiene	1.1	Not Detected UJ	12	Not Detected UJ
Naphthalene	1.1	Not Detected	6.0	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: 1 Liter Summa Canister (100% Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	102	70-130
Toluene-d8	98	70-130
4-Bromofluorobenzene	90	70-130

Eurofins Air Toxics Inc.

TO15/Modified TO-14A

Data file : /chem/msdv.i/10Feb2015.b/v021016r1.d
Lab Smp Id: 1502113Ar1-02A
Inj Date : 10-FEB-2015 18:45
Operator : ea Inst ID: msdv.i
Smp Info : 250mL# 37729
Misc Info : 3.5"Hg -> 15psi
Comment : Low Level GC-MS
Method : /chem/msdv.i/10Feb2015.b/v15l0123c.m
Meth Date : 26-Jun-2015 11:58 dbailey Quant Type: ISTD
Cal Date : 09-FEB-2015 14:14 Cal File: v020912.d
Als bottle: 1
Dil Factor: 2.29000
Integrator: HP RTE Compound Sublist: TO15Nmdl.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	184071	5.00000		80.00- 120.00	100.00
15.933	15.934	(1.000)	128	138041			0.00- 30.00	74.99
15.933	15.934	(1.000)	49	417615			0.00- 30.00	226.88
* 71 1,4-Difluorobenzene						CAS #: 540-36-3		
17.305	17.305	(1.000)	114	782084	5.00000		80.00- 120.00	100.00
17.305	17.305	(1.000)	88	121056			0.00- 30.00	15.48
* 92 Chlorobenzene-d5						CAS #: 3114-55-4		
22.205	22.205	(1.000)	117	583177	5.00000		80.00- 120.00	100.00
22.205	22.205	(1.000)	82	320197			0.00- 30.00	54.91
$ 65 1,2-Dichloroethane-d4						CAS #: 17060-07-0		
16.756	16.756	(1.052)	65	295720	5.12536	5.125	80.00- 120.00	100.00
16.756	16.756	(1.052)	67	144851			25.13- 85.13	48.98
$ 80 Toluene-d8						CAS #: 2037-26-5		
19.856	19.856	(1.147)	98	719322	4.91219	4.912	80.00- 120.00	100.00
19.856	19.856	(1.147)	70	79766			0.00- 40.74	11.09

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

$  80 Toluene-d8 (continued)
 19.856  19.856 (1.147)   100    473798                    36.73-  96.73    65.87
-------------------------------------------------------------------------------
$ 106 Bromofluorobenzene                            CAS #: 460-00-4
 23.678  23.704 (1.066)   174    245811 4.49819    4.498  80.00- 120.00   100.00
 23.678  23.704 (1.066)    95    310569                   95.17- 155.17   126.34
 23.678  23.704 (1.066)   176    233214                   64.74- 124.74    94.88
-------------------------------------------------------------------------------
    4 Dichlorodifluoromethane/Fr12                  CAS #: 75-71-8
  5.240   5.202 (0.329)    85     28146 0.19181   0.4392  80.00- 120.00   100.00
  5.240   5.202 (0.329)    87      8031                    1.73-  61.73    28.54
-------------------------------------------------------------------------------
    8 Chloromethane                                 CAS #: 74-87-3
  7.128   7.053 (0.447)    50     30006 0.31678   0.7254  80.00- 120.00   100.00(a)
  7.166   7.053 (0.450)    52     10807                    1.57-  61.57    36.02
-------------------------------------------------------------------------------
   20 Trichlorofluoromethane/Fr11                   CAS #: 75-69-4
 11.184  11.184 (0.702)   101     12026 0.07689   0.1761  80.00- 120.00   100.00(a)
 11.159  11.184 (0.700)   103      9786                   34.40-  94.40    81.37
-------------------------------------------------------------------------------
   24 Ethanol                                       CAS #: 64-17-5
 12.101  12.102 (0.760)    45    232684 6.91859   15.844  80.00- 120.00   100.00
 12.101  12.102 (0.760)    46     93112                    9.93-  69.93    40.02
 12.101  12.102 (0.760)    43     38744                    0.00-  50.31    16.65
-------------------------------------------------------------------------------
   28 Freon 113                                     CAS #: 76-13-1
 12.568  12.568 (0.789)   151      2893 0.02584  0.05918  80.00- 120.00   100.00(a)
 12.568  12.568 (0.789)   153      1654                   33.38-  93.38    57.18
 12.596  12.568 (0.791)   101      3604                   85.19- 145.19   124.54
-------------------------------------------------------------------------------
   31 Acetone                                       CAS #: 67-64-1
 12.816  12.816 (0.804)    58   1378095 32.4239   74.251  80.00- 120.00   100.00
 12.816  12.816 (0.804)    43   5072494                  326.03- 386.03   368.08
-------------------------------------------------------------------------------
   33 Carbon Disulfide                              CAS #: 75-15-0
 12.925  12.926 (0.811)    76     14164 0.09083   0.2080  80.00- 120.00   100.00(a)
-------------------------------------------------------------------------------
   34 2-Propanol                                    CAS #: 67-63-0
 13.173  13.173 (0.827)    45   4252886 25.2813   57.894  80.00- 120.00   100.00
 13.173  13.173 (0.827)    43    735077                    0.00-  47.97    17.28
 13.173  13.173 (0.827)    59    126279                    0.00-  33.25     2.97
-------------------------------------------------------------------------------
   37 Methylene Chloride                            CAS #: 75-09-2
 13.640  13.640 (0.856)    84     23192 0.44189    1.012  80.00- 120.00   100.00
 13.640  13.640 (0.856)    49     55896                  198.57- 258.57   241.01
 13.640  13.640 (0.856)    51     17773                   41.48- 101.48    76.63
-------------------------------------------------------------------------------
```

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
39 MTBE					CAS #: 1634-04-4		
13.997	13.997 (0.878)	73	151146	0.92100	2.109	80.00- 120.00	100.00
13.942	13.997 (0.875)	57	194872			6.35- 66.35	128.93
13.942	13.997 (0.875)	41	151204			5.74- 65.74	100.04
43 Hexane					CAS #: 110-54-3		
14.381	14.381 (0.903)	57	79195	0.53356	1.222	80.00- 120.00	100.00
14.381	14.381 (0.903)	43	74726			41.32- 101.32	94.36
14.381	14.381 (0.903)	86	9288			0.00- 40.13	11.73
51 2-Butanone					CAS #: 78-93-3		
15.592	15.572 (0.979)	72	61906	2.14856	4.920	80.00- 120.00	100.00
15.592	15.572 (0.979)	43	503686			687.17- 747.17	813.63
15.592	15.572 (0.979)	57	34012			23.39- 83.39	54.94
55 Chloroform					CAS #: 67-66-3		
15.995	15.995 (1.004)	83	3730	0.02909	0.06661	80.00- 120.00	100.00(a)
15.995	15.995 (1.004)	85	1056			35.10- 95.10	28.31
57 Cyclohexane					CAS #: 110-82-7		
16.242	16.242 (1.019)	84	36042	0.41358	0.9471	80.00- 120.00	100.00
16.242	16.242 (1.019)	56	96282			160.85- 220.85	267.13
16.242	16.242 (1.019)	41	53874			75.49- 135.49	149.47
59 Carbon Tetrachloride					CAS #: 56-23-5		
16.457	16.458 (1.033)	119	5265	0.04037	0.09245	80.00- 120.00	100.00(a)
16.427	16.458 (1.031)	117	2960			67.96- 127.96	56.23
	Sum of Peak Concentrations = 0.09245						
63 2,2,4-Trimethylpentane					CAS #: 540-84-1		
16.728	16.728 (1.050)	56	122259	0.77717	1.780	80.00- 120.00	100.00
16.728	16.728 (1.050)	57	351921			274.66- 334.66	287.85
16.728	16.728 (1.050)	41	100618			54.64- 114.64	82.30
64 Benzene					CAS #: 71-43-2		
16.756	16.756 (0.968)	78	341833	1.76059	4.032	80.00- 120.00	100.00
16.756	16.756 (0.968)	77	76525			0.00- 53.39	22.39
69 Heptane					CAS #: 142-82-5		
16.975	16.975 (0.981)	57	30814	0.33521	0.7676	80.00- 120.00	100.00
16.975	16.975 (0.981)	100	4995			0.00- 51.16	16.21
16.975	16.975 (0.981)	43	69742			180.62- 240.62	226.33
72 Trichloroethene					CAS #: 79-01-6		
17.717	17.717 (1.024)	130	5876	0.05930	0.1358	80.00- 120.00	100.00(a)
17.717	17.717 (1.024)	95	6512			62.98- 122.98	110.82

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

   72 Trichloroethene (continued)
 17.717  17.717 (1.024)    97      4308                    29.44-  89.44    73.31
-------------------------------------------------------------------------------
   75 1,4-Dioxane                                  CAS #: 123-91-1
 18.293  18.266 (1.057)    88      4156 0.07490   0.1715  80.00- 120.00   100.00(a)
 18.266  18.266 (1.056)    58      6772                    74.73- 134.73   162.94
 18.348  18.266 (1.060)    57      2402                     4.83-  64.83    57.79
-------------------------------------------------------------------------------
   79 4-Methyl-2-pentanone                         CAS #: 108-10-1
 19.587  19.588 (1.132)    43     77531 0.28539   0.6535  80.00- 120.00   100.00
 19.587  19.588 (1.132)    58     24077                     3.17-  63.17    31.06
 19.587  19.588 (1.132)    85      6681                     0.00-  40.09     8.62
-------------------------------------------------------------------------------
   81 Toluene                                      CAS #: 108-88-3
 19.991  19.991 (1.155)    91    645967 2.91979    6.686  80.00- 120.00   100.00
 19.991  19.991 (1.155)    92    384011                    28.34-  88.34    59.45
-------------------------------------------------------------------------------
   93 Chlorobenzene                                CAS #: 108-90-7
 22.233  22.233 (1.001)   112      8559 0.04697   0.1076  80.00- 120.00   100.00(a)
 22.233  22.233 (1.001)   114      2741                     1.75-  61.75    32.03
 22.205  22.233 (1.000)    77      9865                    24.73-  84.73   115.26
-------------------------------------------------------------------------------
   95 Ethyl Benzene                                CAS #: 100-41-4
 22.315  22.315 (1.005)   106    470128 5.45995   12.503  80.00- 120.00   100.00
 22.315  22.315 (1.005)    91   1384845                   260.31- 320.31   294.57
-------------------------------------------------------------------------------
   96 m,p-Xylene                                   CAS #: 108-38-3
 22.452  22.452 (1.011)   106     51745 0.59500    1.362  80.00- 120.00   100.00
 22.452  22.452 (1.011)    91    104914                   157.23- 217.23   202.75
-------------------------------------------------------------------------------
  100 o-Xylene                                     CAS #: 95-47-6
 23.001  23.002 (1.036)   106     14665 0.18343   0.4200  80.00- 120.00   100.00
 23.001  23.002 (1.036)    91     26921                   167.76- 227.76   183.58
-------------------------------------------------------------------------------
  101 Styrene                                      CAS #: 100-42-5
 23.029  23.029 (1.037)   104    556086 4.66434   10.681  80.00- 120.00   100.00
 23.029  23.029 (1.037)    78    236109                    17.96-  77.96    42.46
-------------------------------------------------------------------------------
  103 Cumene                                       CAS #: 98-82-8
 23.441  23.413 (1.056)   105     10208 0.04516   0.1034  80.00- 120.00   100.00(a)
 23.441  23.413 (1.056)   120      4241                     0.00-  59.93    41.55
-------------------------------------------------------------------------------
  111 Propylbenzene                                CAS #: 103-65-1
 23.910  23.910 (1.077)    91     14718 0.06990   0.1601  80.00- 120.00   100.00(a)
 23.910  23.910 (1.077)   120      2623                     0.00-  56.93    17.82
-------------------------------------------------------------------------------
```

RT	EXP RT	(REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
113 4-Ethyltoluene						CAS #: 622-96-8		
24.013	24.039	(1.081)	105	14984	0.09387	0.2150	80.00- 120.00	100.00(a)
24.013	24.039	(1.081)	120	6140			3.10- 63.10	40.98
120 1,2,4-Trimethylbenzene						CAS #: 95-63-6		
24.529	24.529	(1.105)	105	17612	0.12000	0.2748	80.00- 120.00	100.00
24.529	24.529	(1.105)	120	8214			0.00- 30.00	46.64

QC Flag Legend

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

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdv.i
Lab File ID: v021016r1.d
Lab Smp Id: 1502113Ar1-02A
Analysis Type: VOA
Quant Type: ISTD
Operator: ea
Method File: /chem/msdv.i/10Feb2015.b/v15l0123c.m
Misc Info: 3.5"Hg -> 15psi

Calibration Date: 10-FEB-2015
Calibration Time: 06:33

Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
54 Bromochloromethan	194946	116968	272924	184071	-5.58
71 1,4-Difluorobenze	822631	493579	1151683	782084	-4.93
92 Chlorobenzene-d5	670659	402395	938923	583177	-13.04

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: 26-Jun-2015 12:09

Eurofins Air Toxics Inc.

RECOVERY REPORT

Client Name:
Client SDG: 10Feb2015
Sample Matrix: GAS
Fraction: VOA
Lab Smp Id: 1502113Ar1-02A
Level: LOW
Operator: ea
Data Type: MS DATA
SampleType: SAMPLE
SpikeList File: AT12.spk
Quant Type: ISTD
Sublist File: TO15Nmdl.sub
Method File: /chem/msdv.i/10Feb2015.b/v15l0123c.m
Misc Info: 3.5"Hg -> 15psi

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 65 1,2-Dichloroethane	5.000	5.125	102.51	70-130
$ 80 Toluene-d8	5.000	4.912	98.24	70-130
$ 106 Bromofluorobenzene	5.000	4.498	89.96	70-130

Data File: /chem/msdv.i/10Feb2015.b/v021016r1.d

Date : 10-FEB-2015 18:45

Client ID:

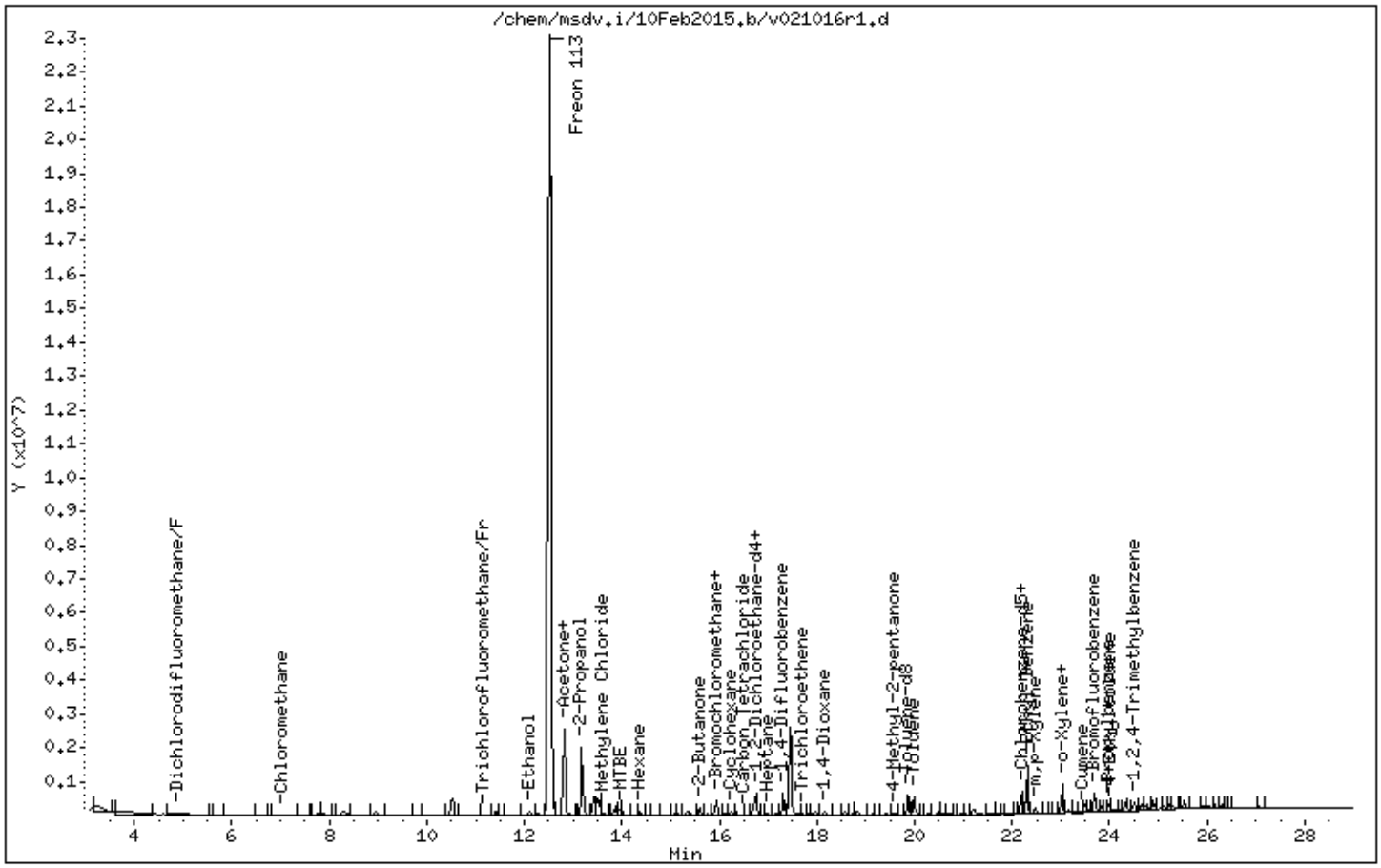
Instrument: msdv.i

Sample Info: 250mL# 37729

Operator: ea

Column phase: RTx-624

Column diameter: 0.32



Data File: /chem/msdv.i/10Feb2015.b/v021016r1.d

Date : 10-FEB-2015 18:45

Client ID:

Instrument: msdv.i

Sample Info: 250mL# 37729

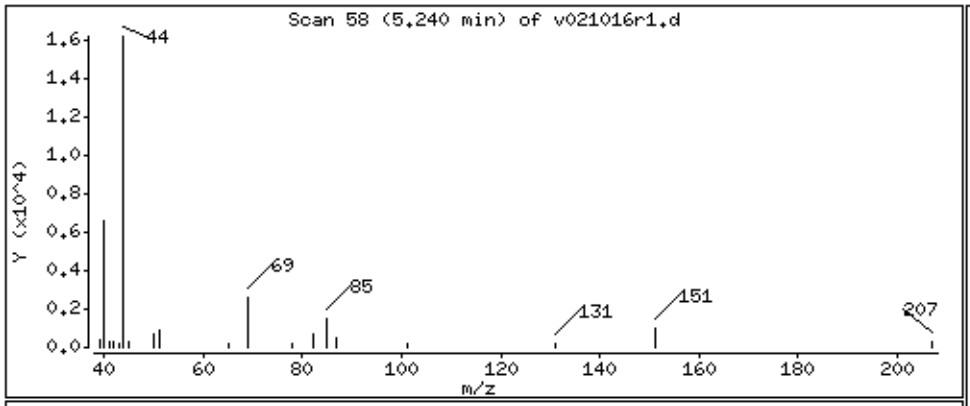
Operator: ea

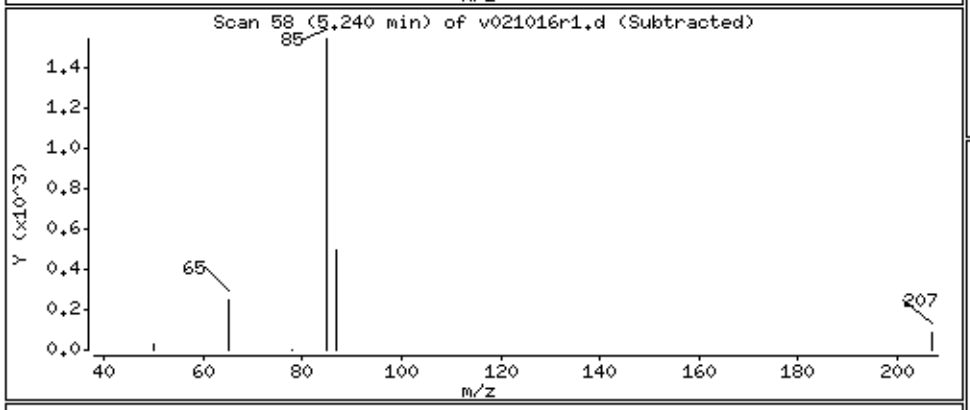
Column phase: RTx-624

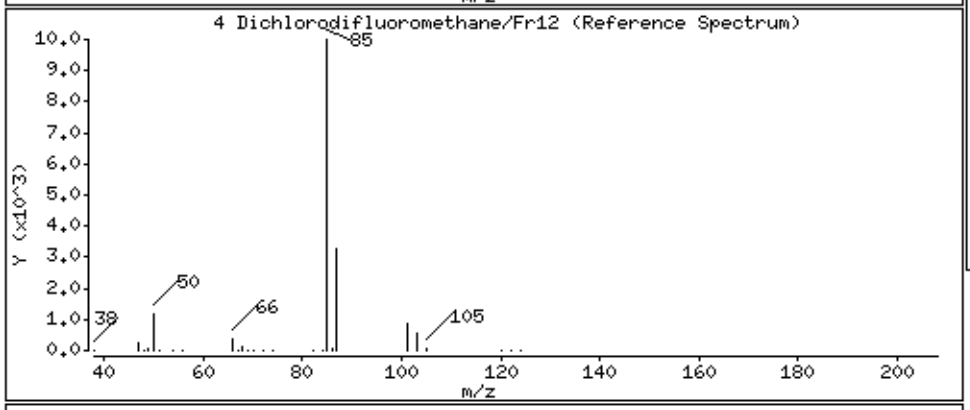
Column diameter: 0.32

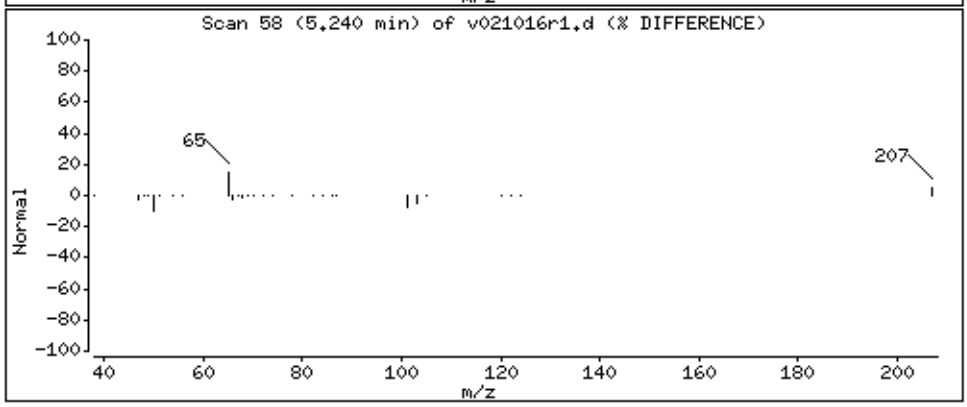
4 Dichlorodifluoromethane/Fr12

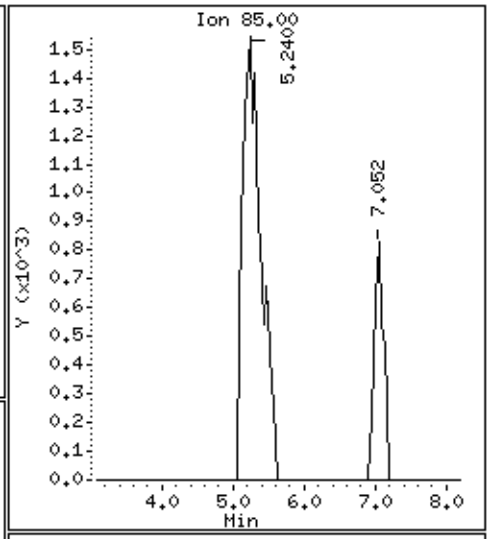
Concentration: 0.4392 PPBV

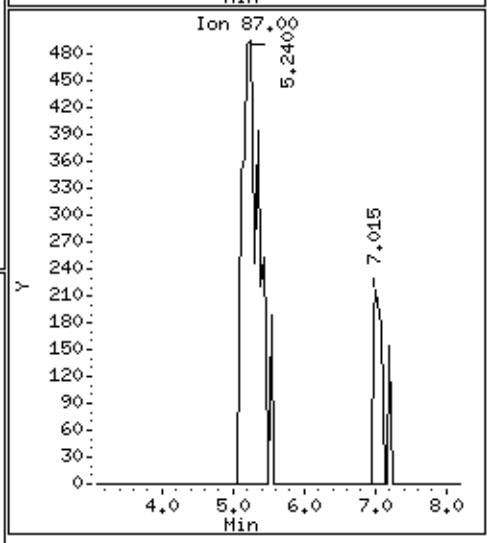












Data File: /chem/msdv.i/10Feb2015.b/v021016r1.d

Date : 10-FEB-2015 18:45

Client ID:

Instrument: msdv.i

Sample Info: 250mL# 37729

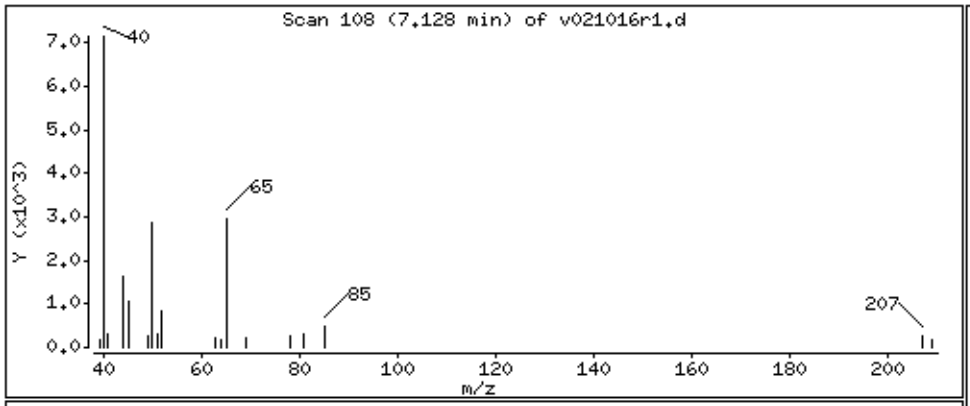
Operator: ea

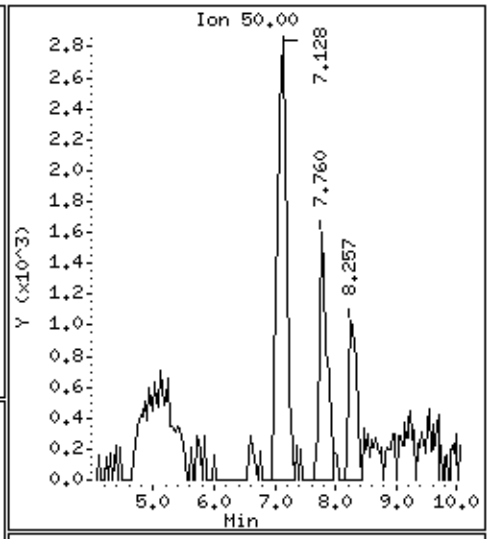
Column phase: RTx-624

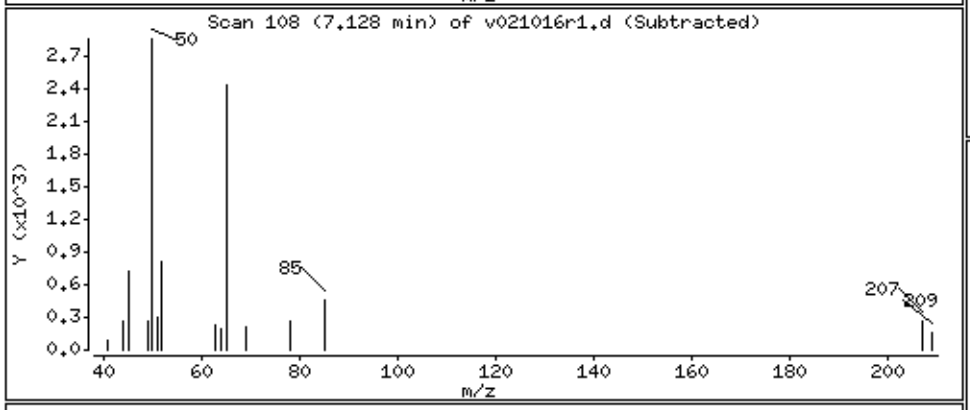
Column diameter: 0.32

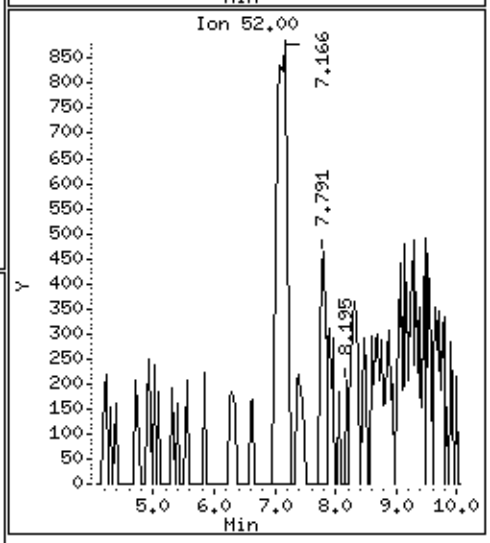
8 Chloromethane

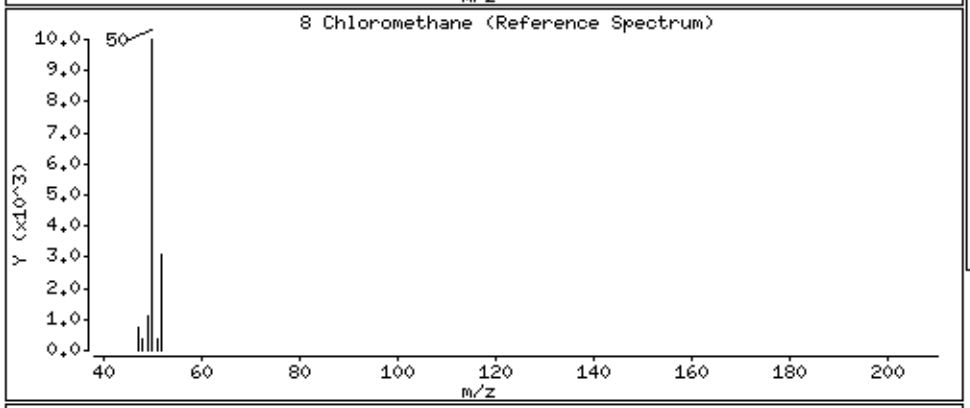
Concentration: 0.7254 PPBV

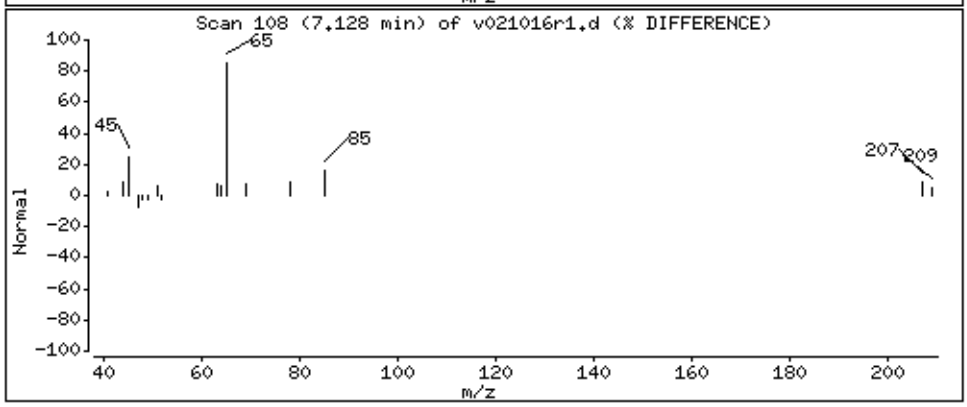












Data File: /chem/msdv.i/10Feb2015.b/v021016r1.d

Date : 10-FEB-2015 18:45

Client ID:

Instrument: msdv.i

Sample Info: 250mL# 37729

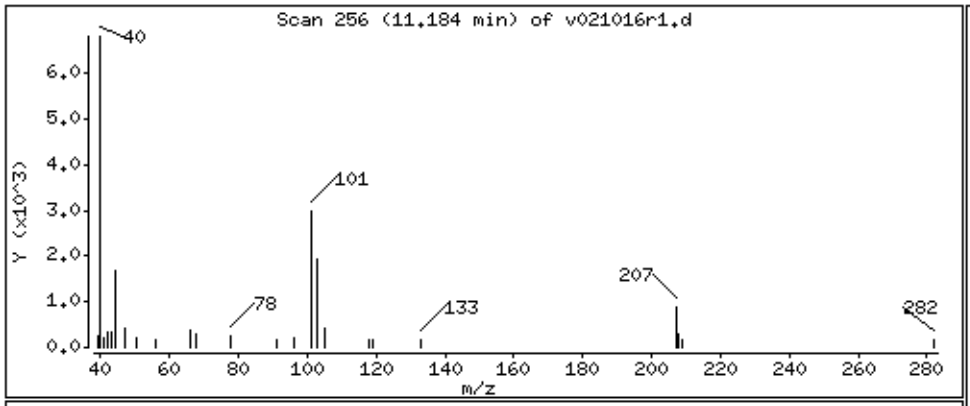
Operator: ea

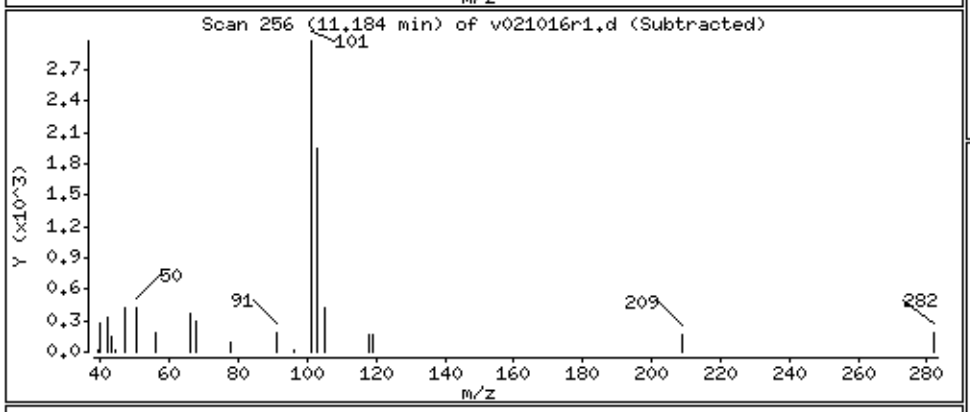
Column phase: RTx-624

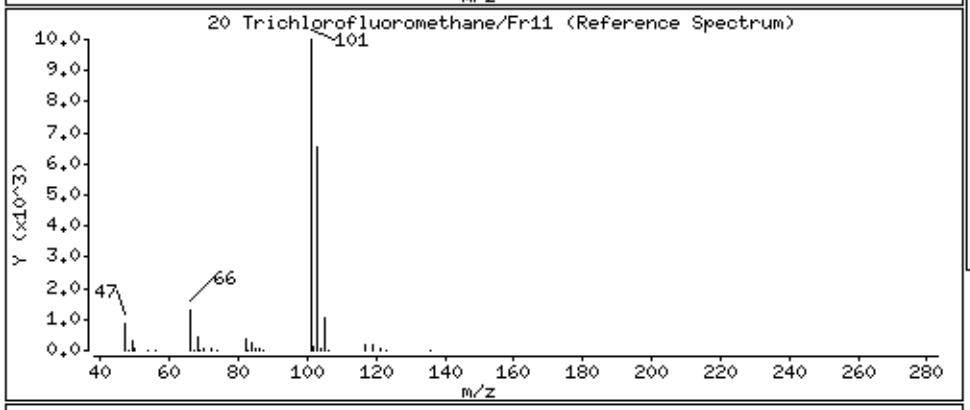
Column diameter: 0.32

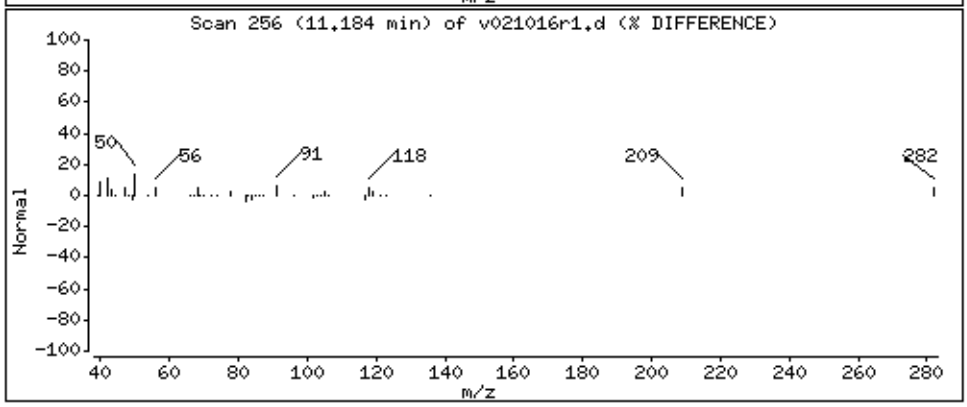
20 Trichlorofluoromethane/Fr11

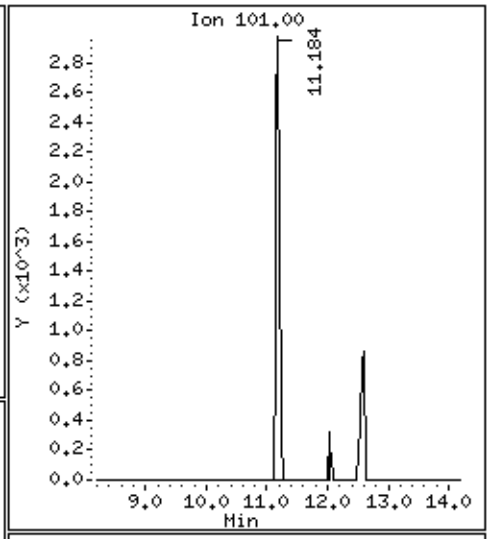
Concentration: 0.1761 PPBV

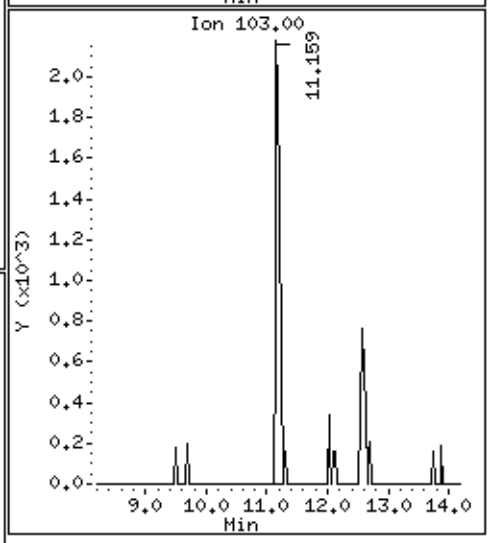












Data File: /chem/msdv.i/10Feb2015.b/v021016r1.d

Date : 10-FEB-2015 18:45

Client ID:

Instrument: msdv.i

Sample Info: 250mL# 37729

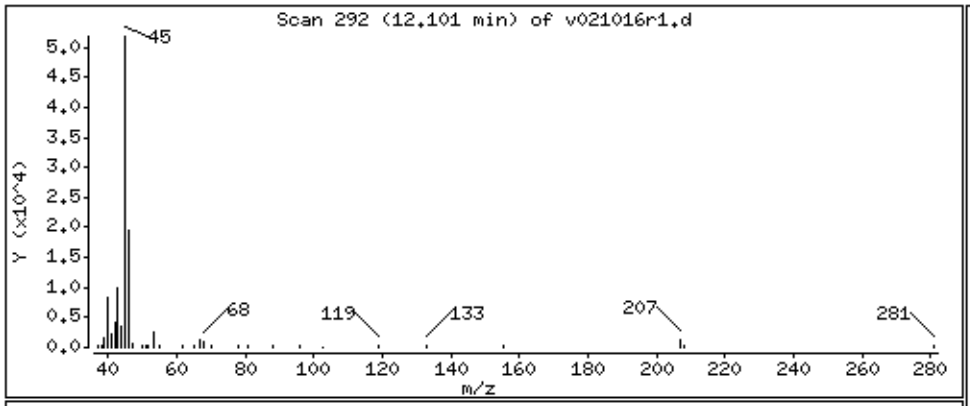
Operator: ea

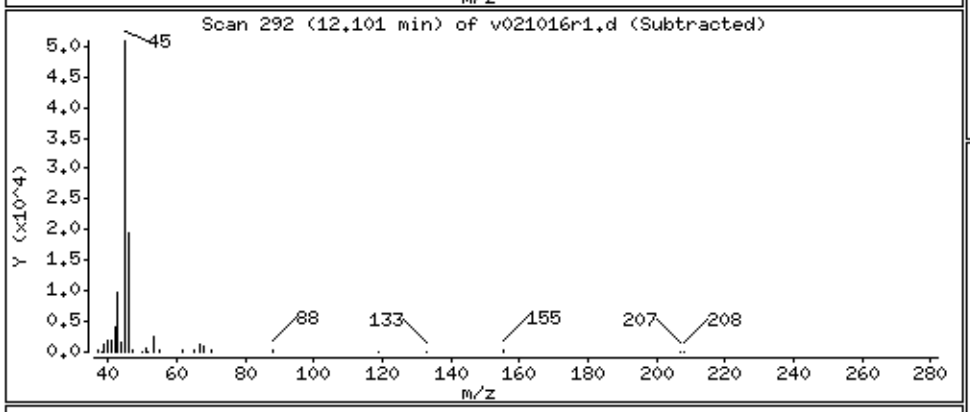
Column phase: RTx-624

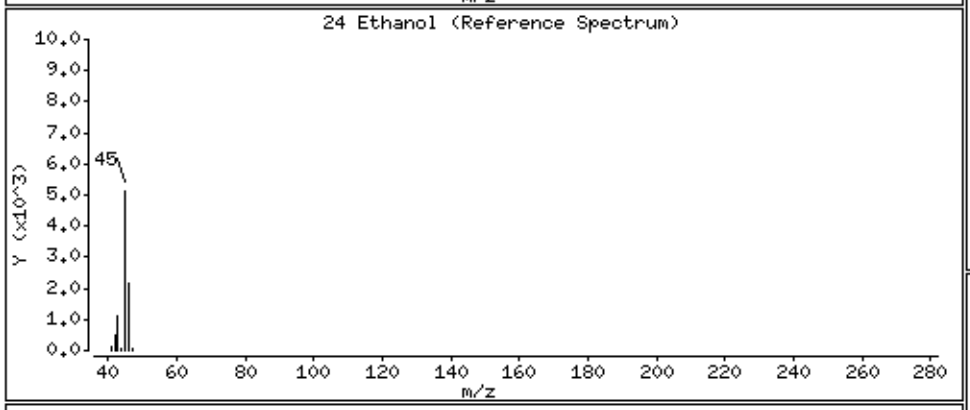
Column diameter: 0.32

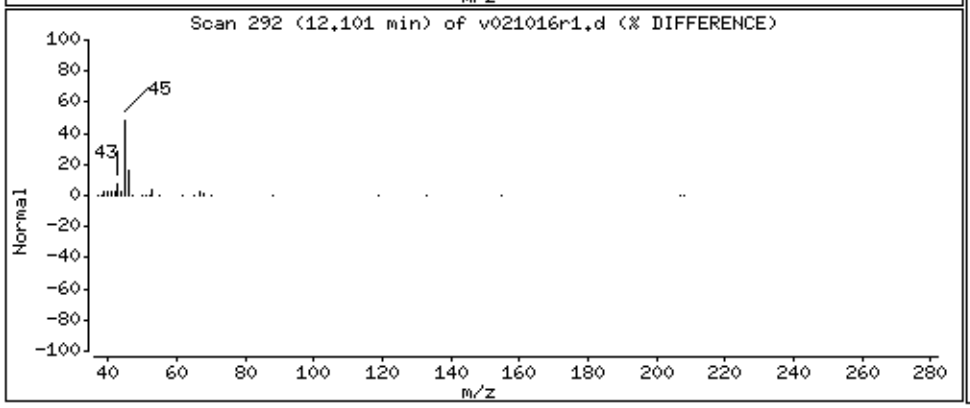
24 Ethanol

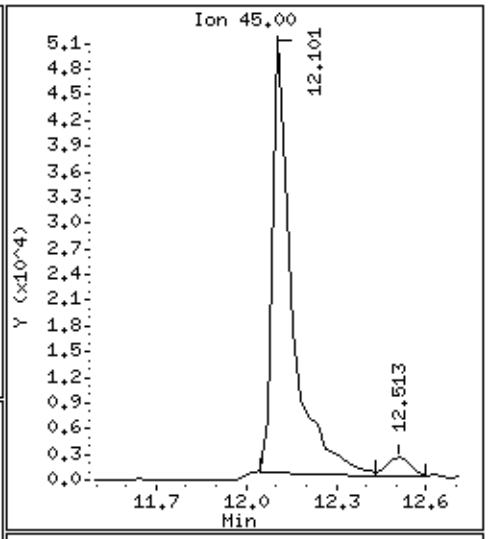
Concentration: 15.844 PPBV

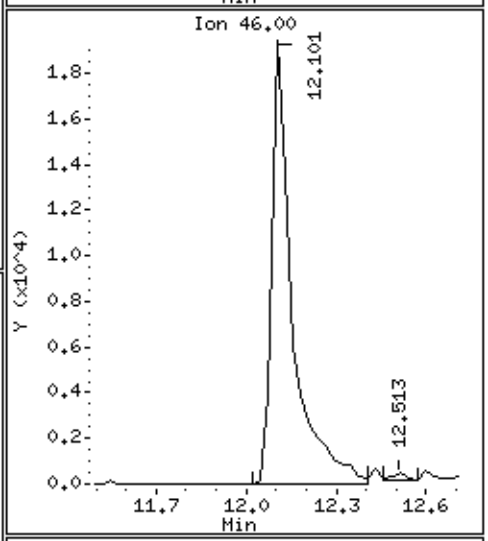


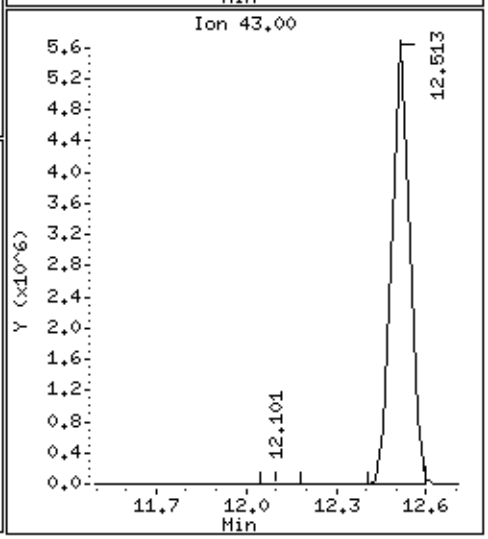












Data File: /chem/msdv.i/10Feb2015.b/v021016r1.d

Date : 10-FEB-2015 18:45

Client ID:

Instrument: msdv.i

Sample Info: 250mL# 37729

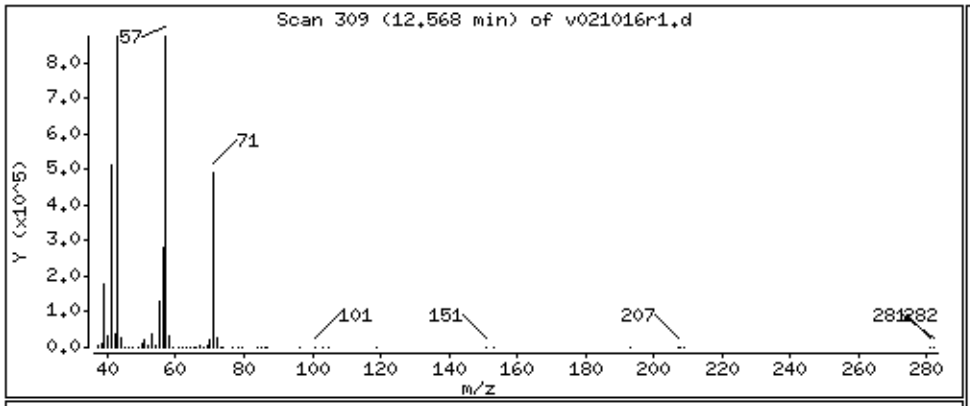
Operator: ea

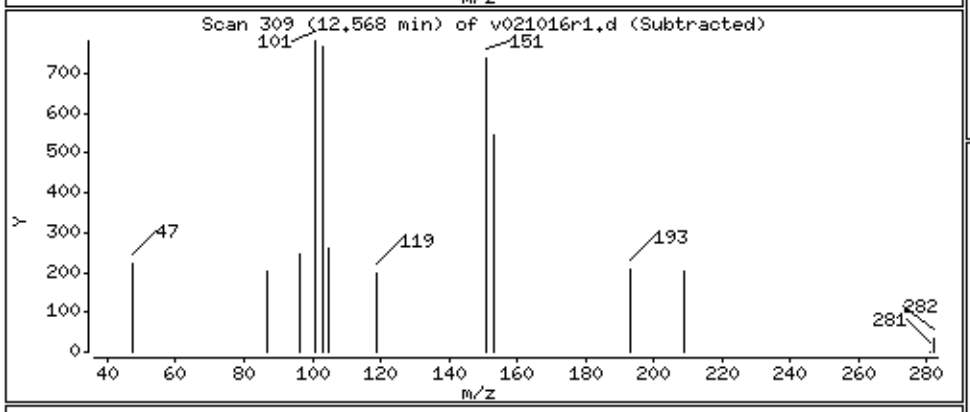
Column phase: RTx-624

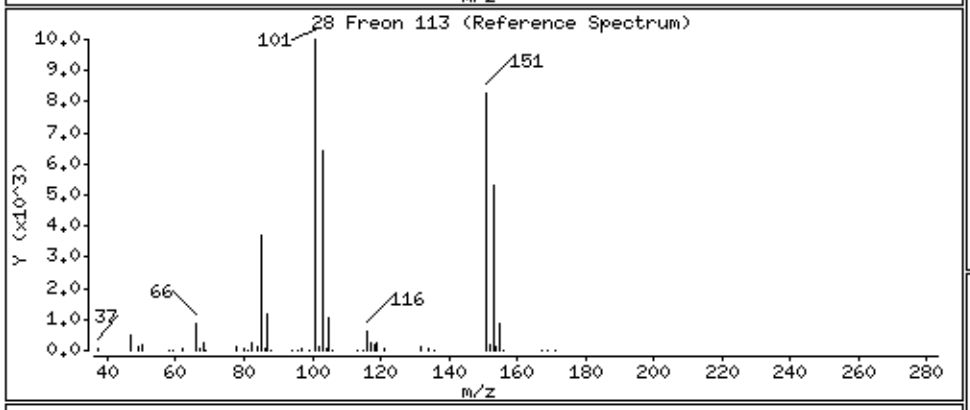
Column diameter: 0.32

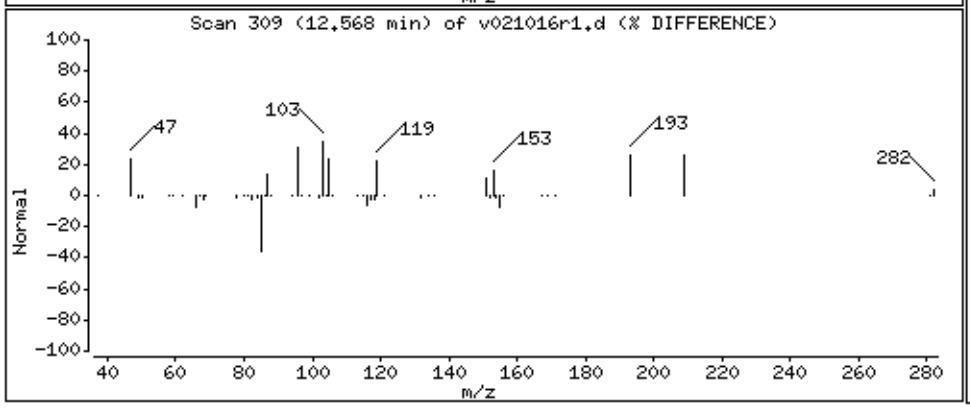
28 Freon 113

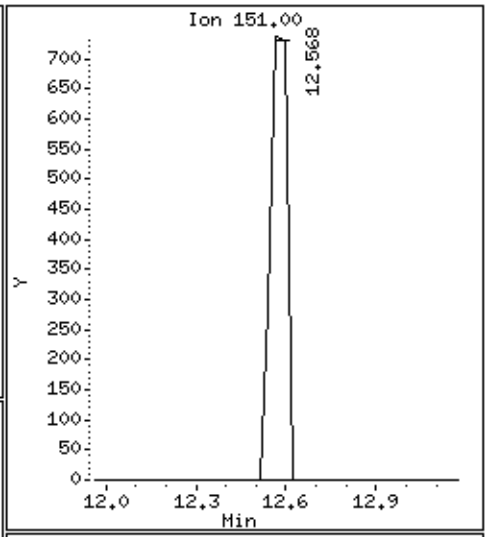
Concentration: 0.05918 PPBV

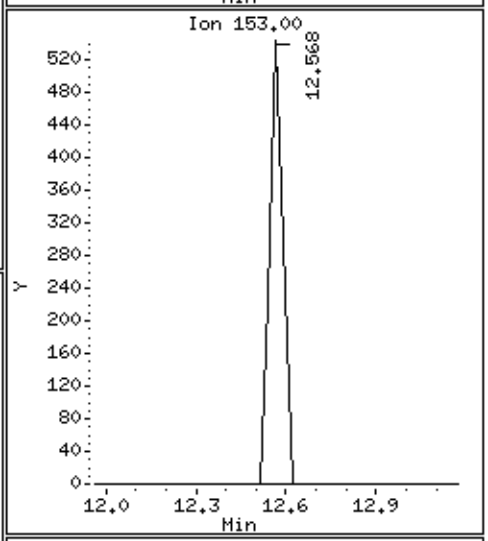


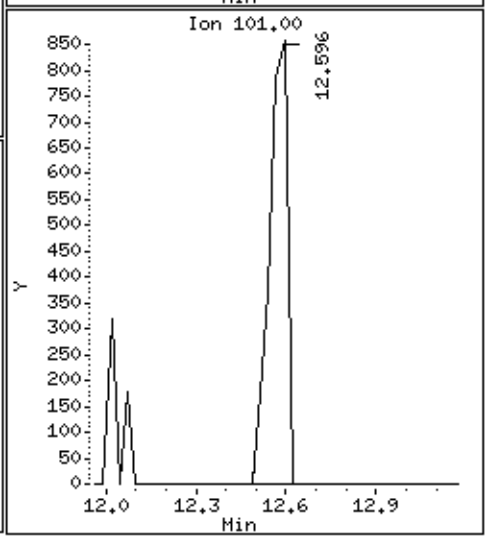












Data File: /chem/msdv.i/10Feb2015.b/v021016r1.d

Date : 10-FEB-2015 18:45

Client ID:

Instrument: msdv.i

Sample Info: 250mL# 37729

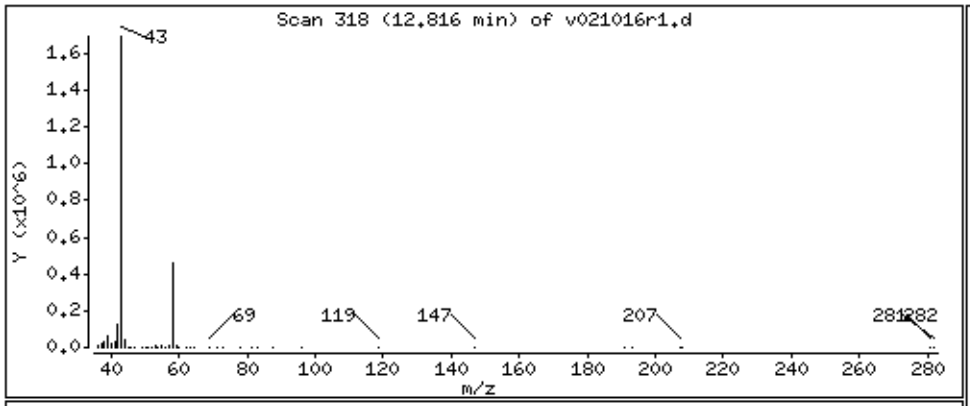
Operator: ea

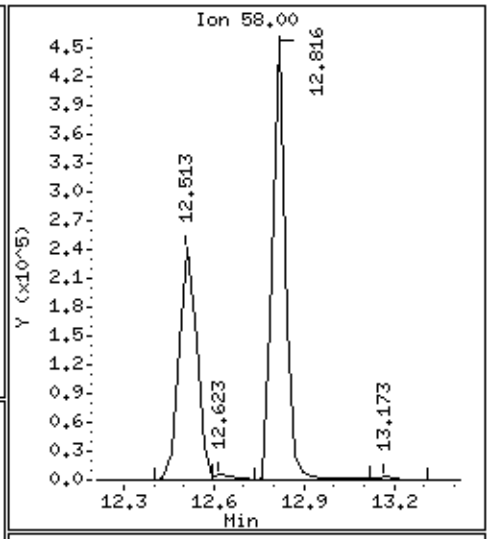
Column phase: RTx-624

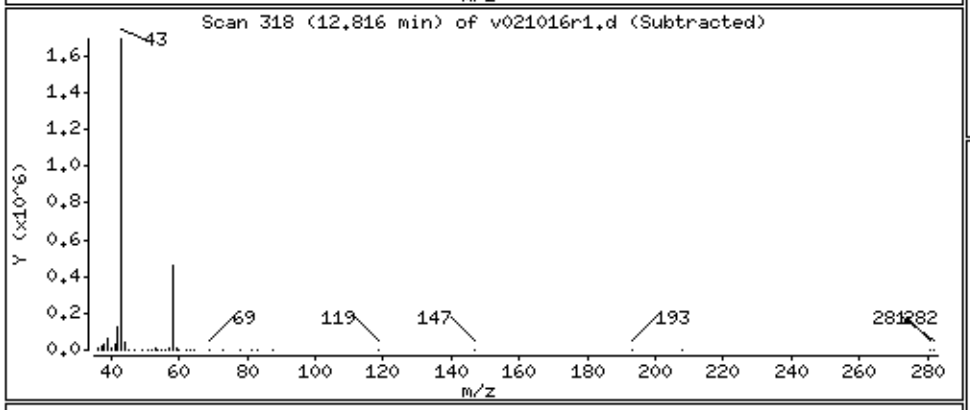
Column diameter: 0.32

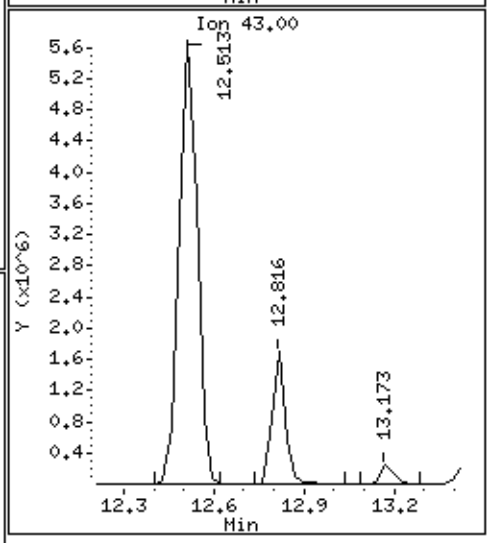
31 Acetone

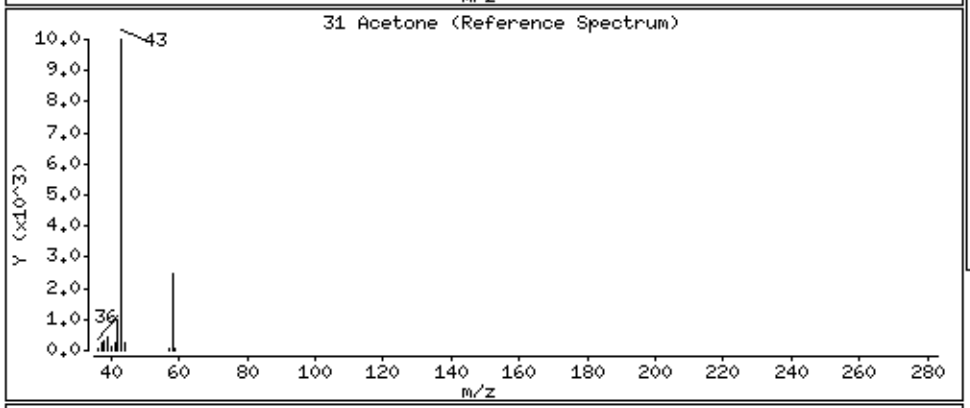
Concentration: 74.251 PPBV

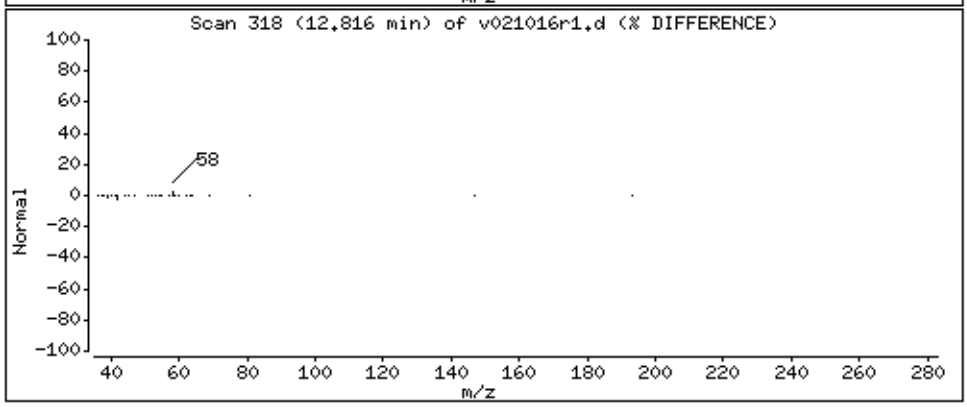












Data File: /chem/msdv.i/10Feb2015.b/v021016r1.d

Date : 10-FEB-2015 18:45

Client ID:

Instrument: msdv.i

Sample Info: 250mL# 37729

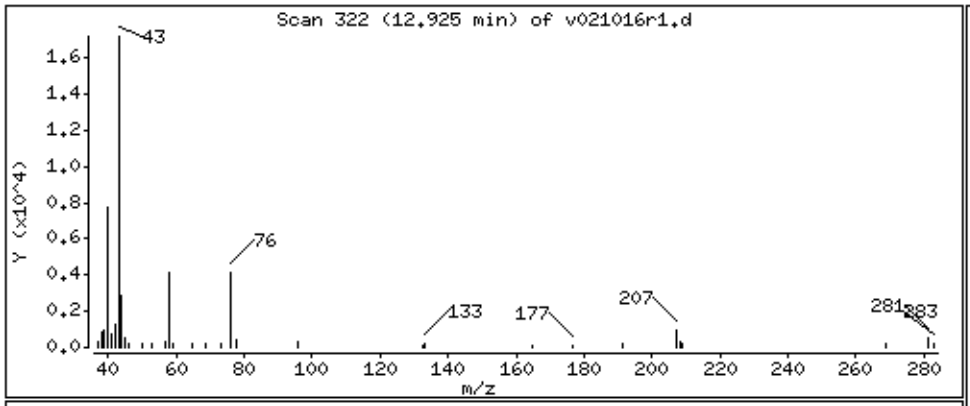
Operator: ea

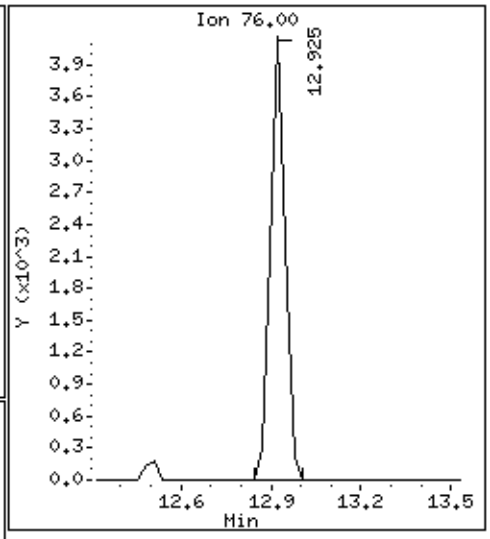
Column phase: RTx-624

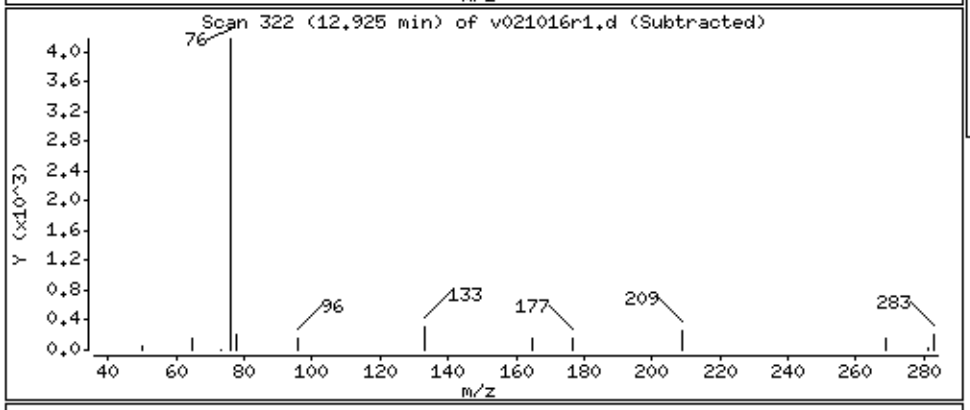
Column diameter: 0.32

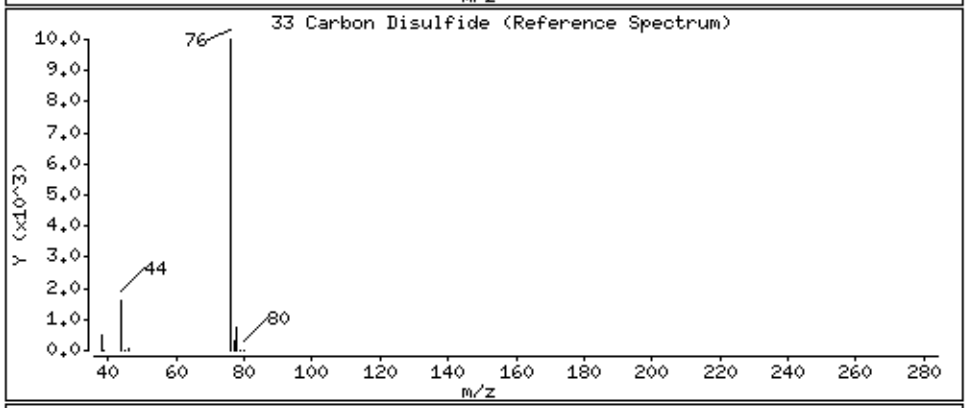
33 Carbon Disulfide

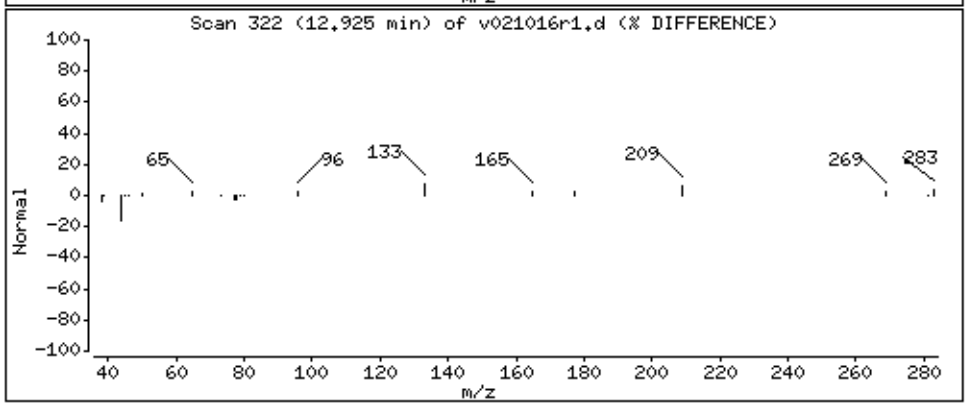
Concentration: 0.2080 PPBV











Data File: /chem/msdv.i/10Feb2015.b/v021016r1.d

Date : 10-FEB-2015 18:45

Client ID:

Instrument: msdv.i

Sample Info: 250mL# 37729

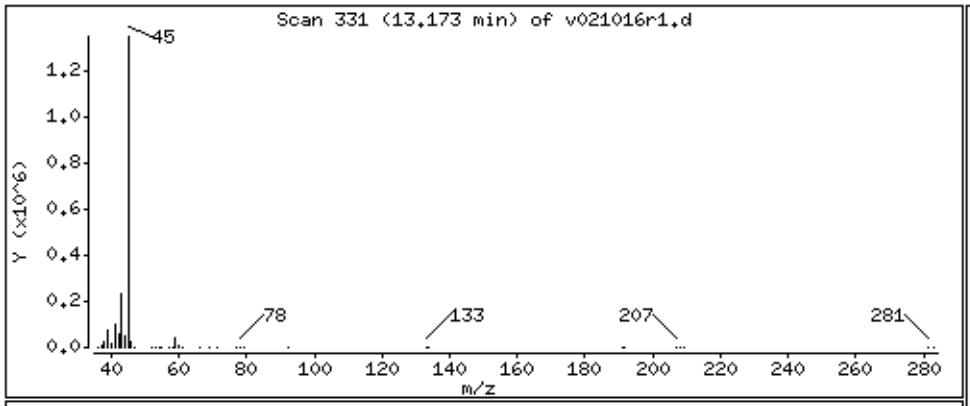
Operator: ea

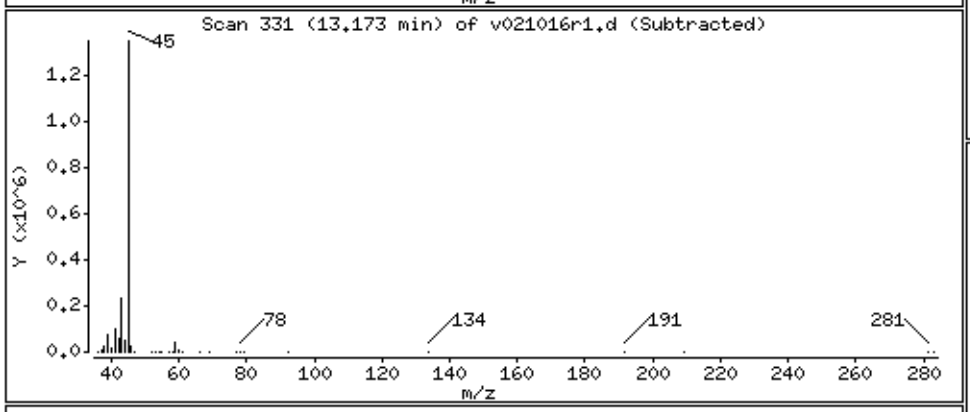
Column phase: RTx-624

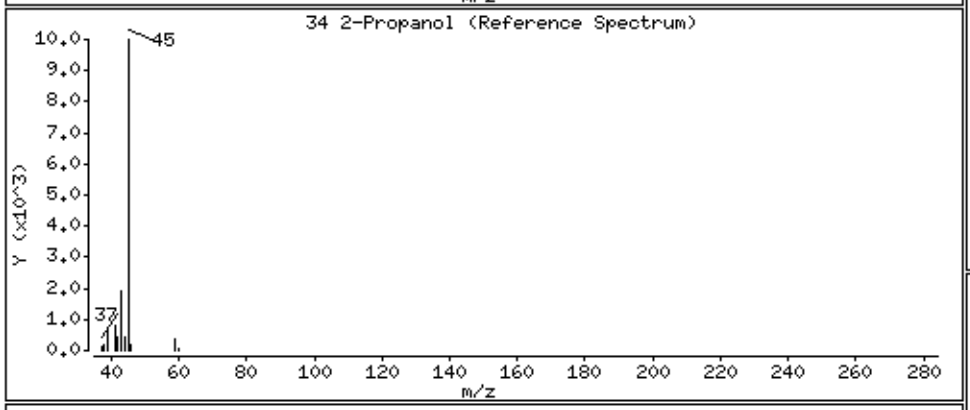
Column diameter: 0.32

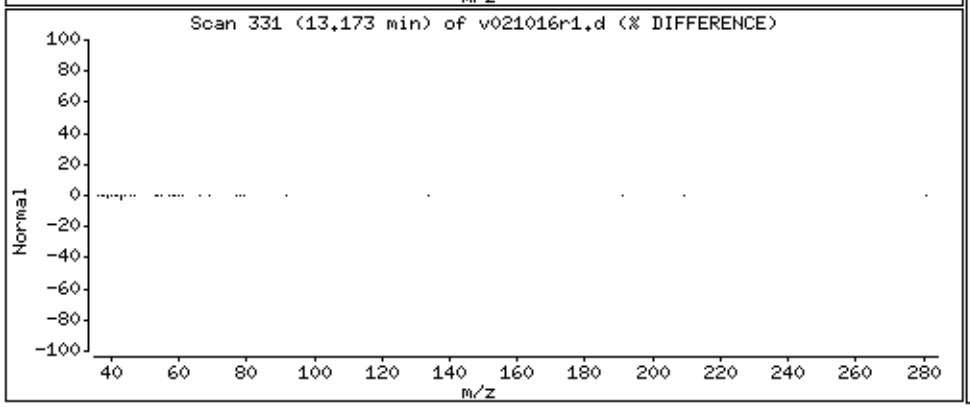
34 2-Propanol

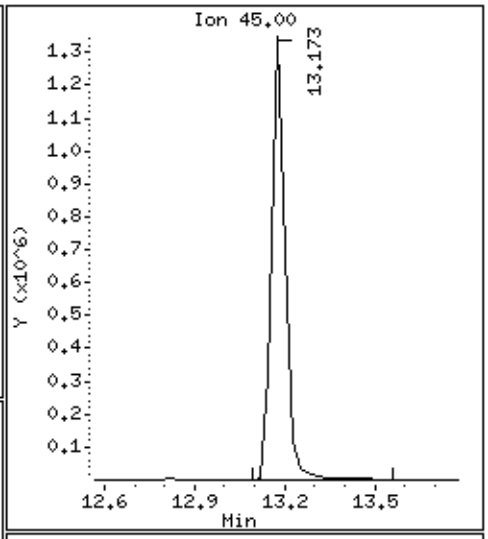
Concentration: 57.894 PPBV

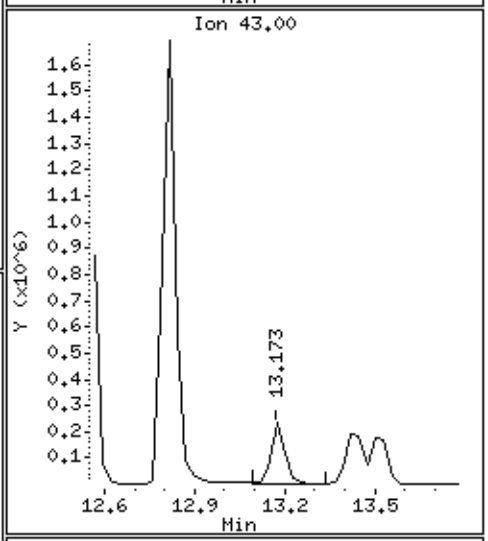


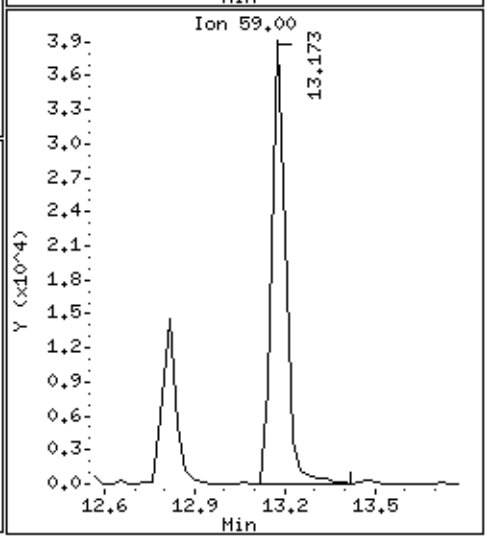












Data File: /chem/msdv.i/10Feb2015.b/v021016r1.d

Date : 10-FEB-2015 18:45

Client ID:

Instrument: msdv.i

Sample Info: 250mL# 37729

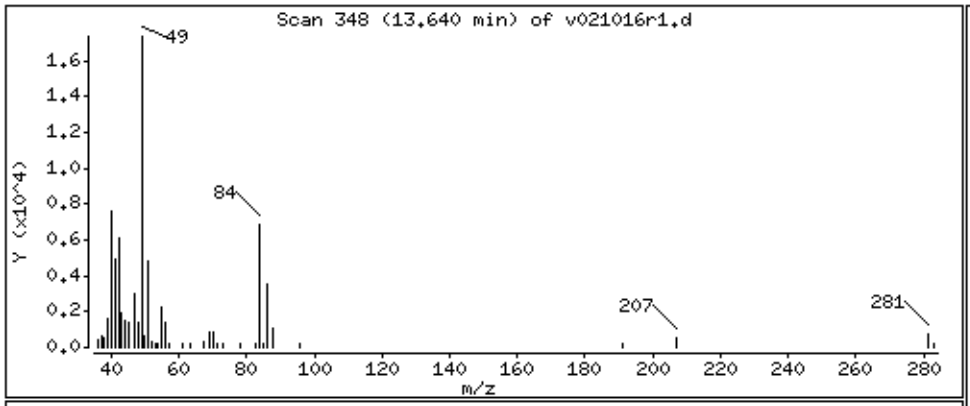
Operator: ea

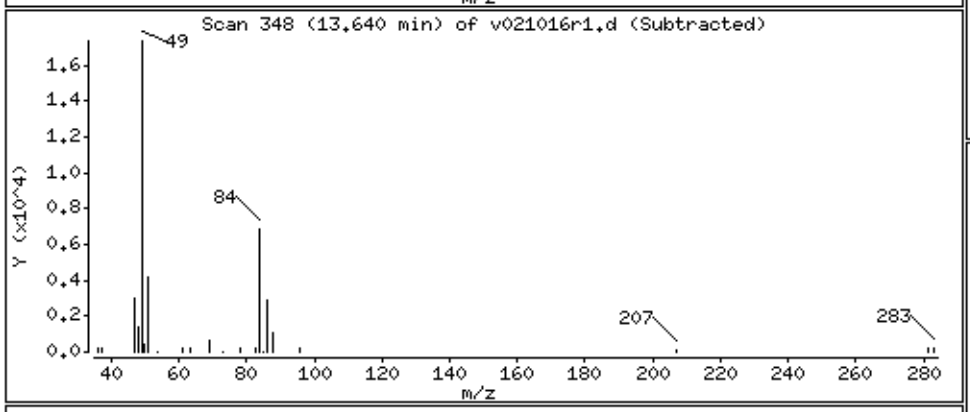
Column phase: RTx-624

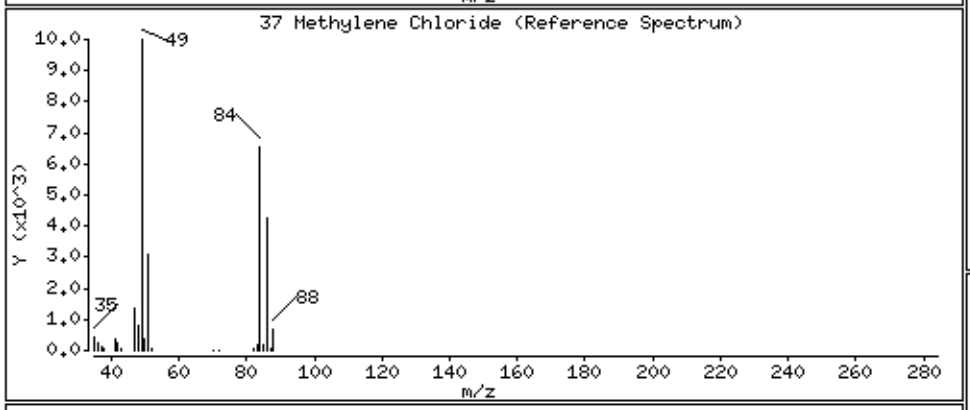
Column diameter: 0.32

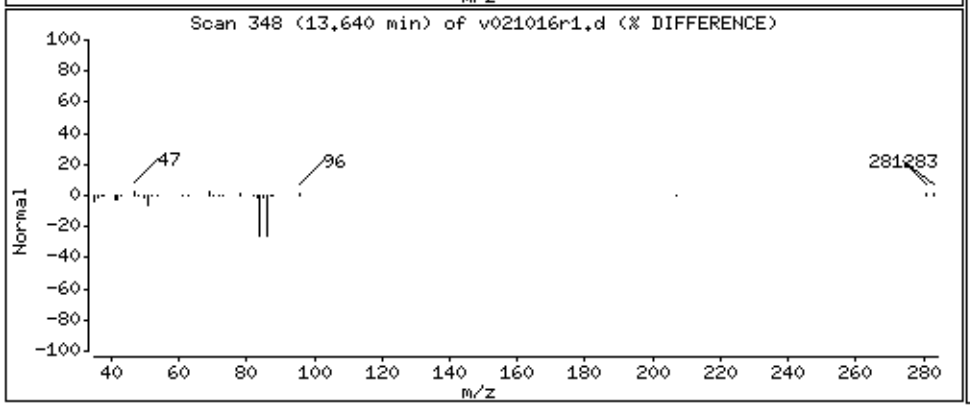
37 Methylene Chloride

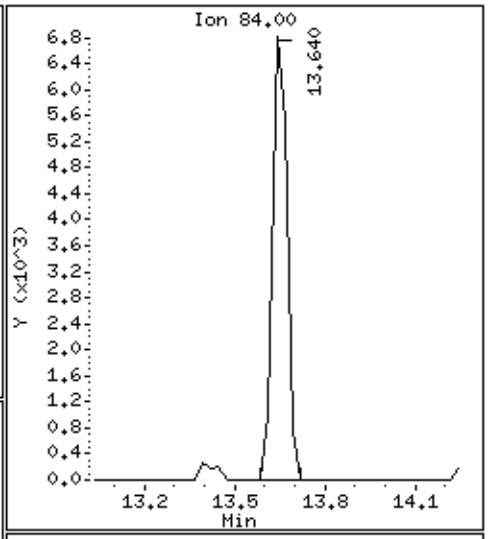
Concentration: 1.012 PPBV

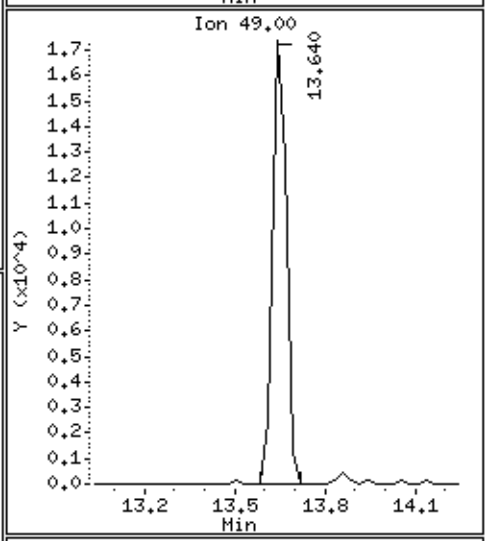


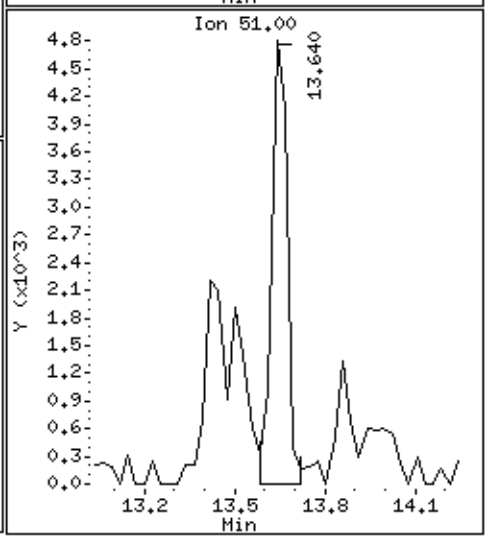












Data File: /chem/msdv.i/10Feb2015.b/v021016r1.d

Date : 10-FEB-2015 18:45

Client ID:

Instrument: msdv.i

Sample Info: 250mL# 37729

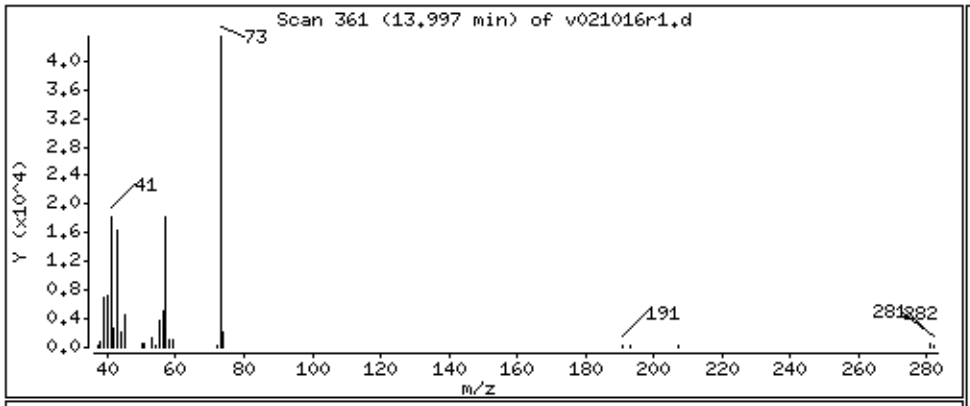
Operator: ea

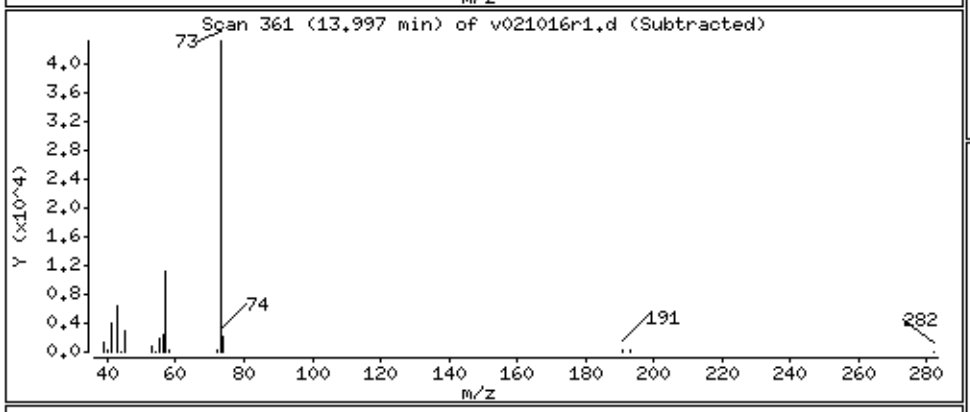
Column phase: RTx-624

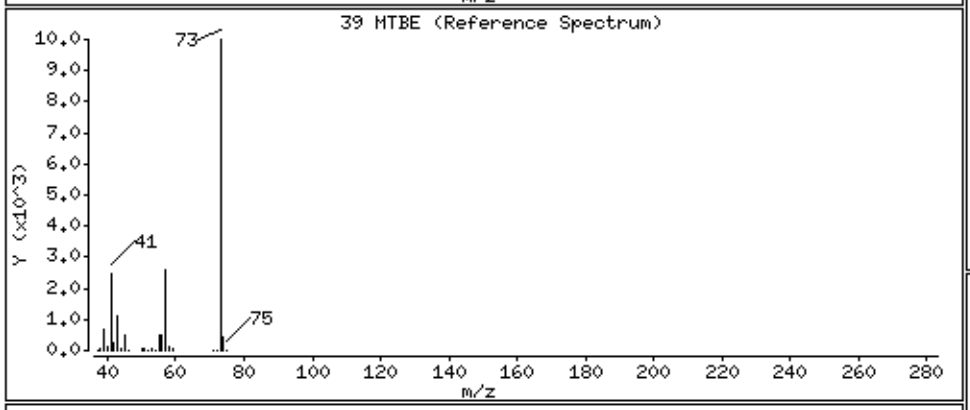
Column diameter: 0.32

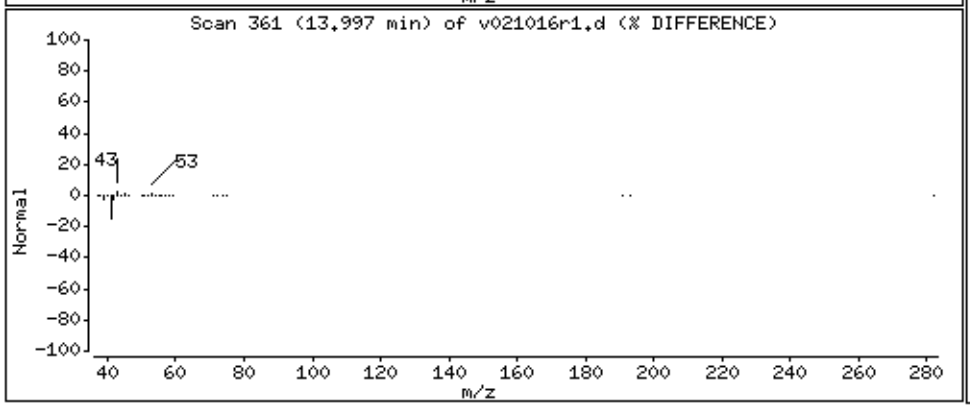
39 MTBE

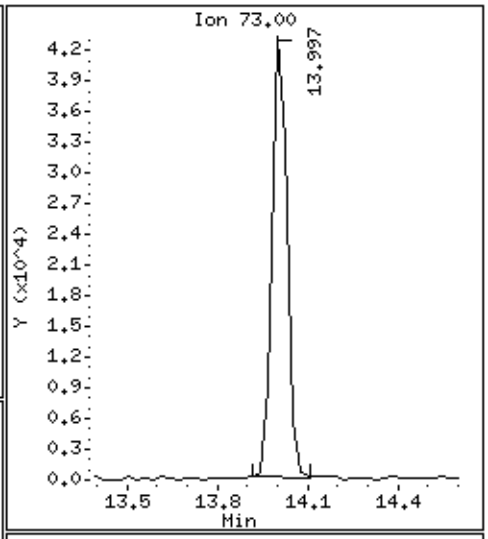
Concentration: 2.109 PPBV

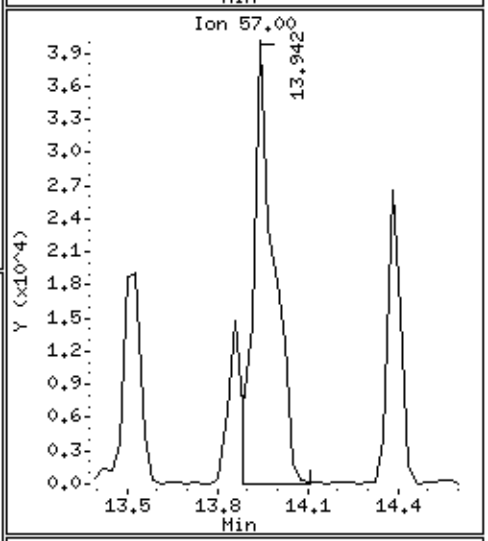


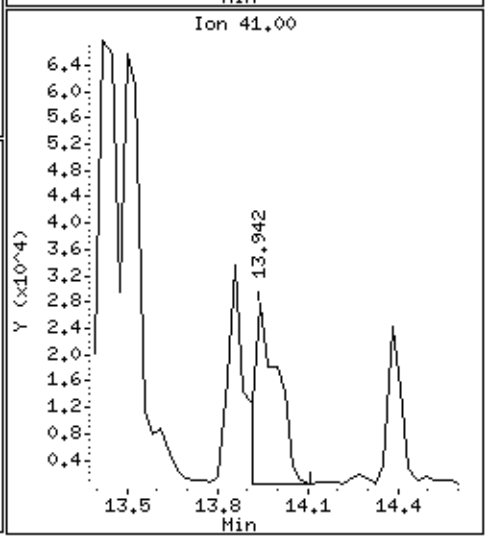












Data File: /chem/msdv.i/10Feb2015.b/v021016r1.d

Date : 10-FEB-2015 18:45

Client ID:

Instrument: msdv.i

Sample Info: 250mL# 37729

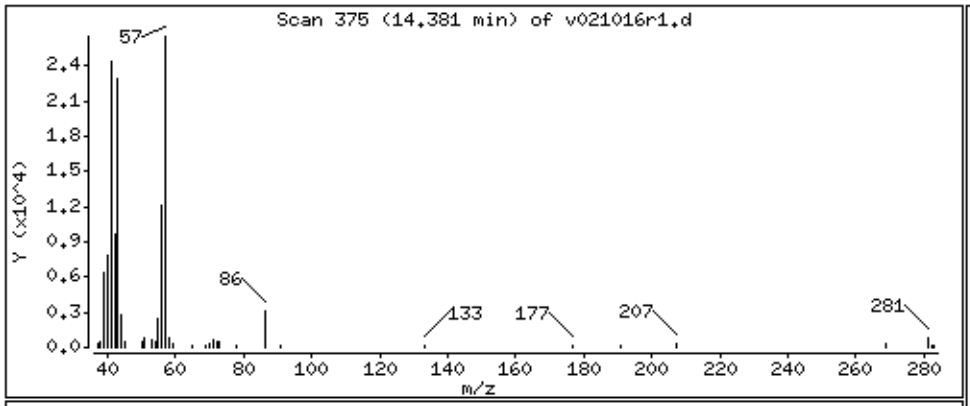
Operator: ea

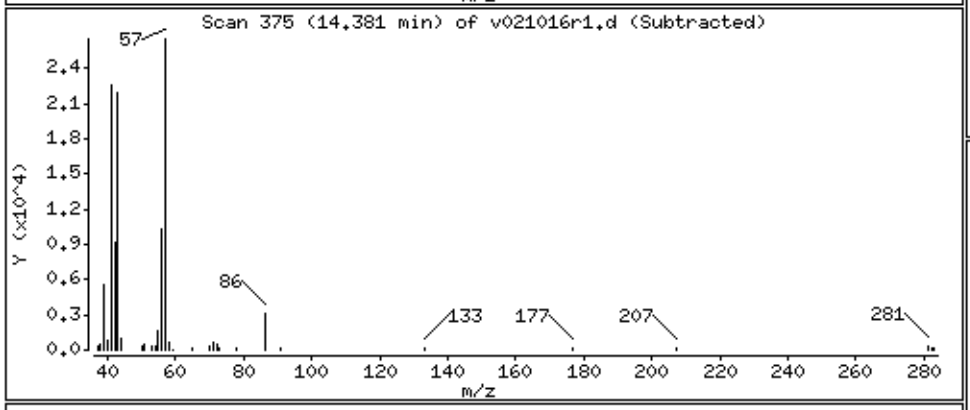
Column phase: RTx-624

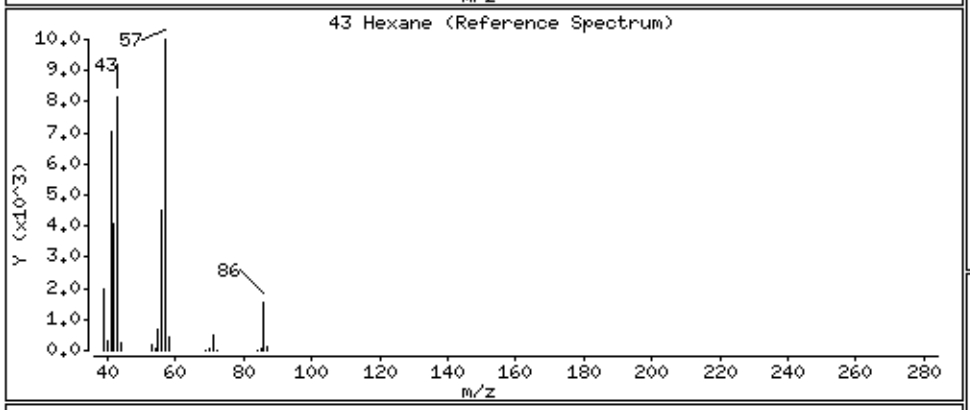
Column diameter: 0.32

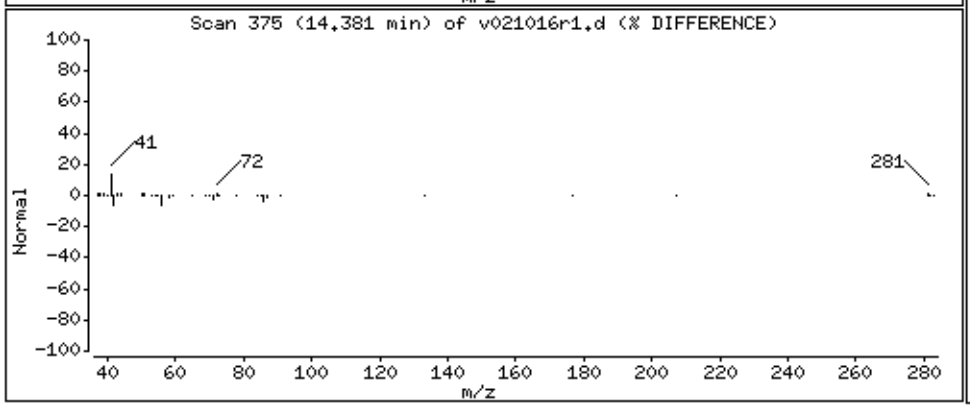
43 Hexane

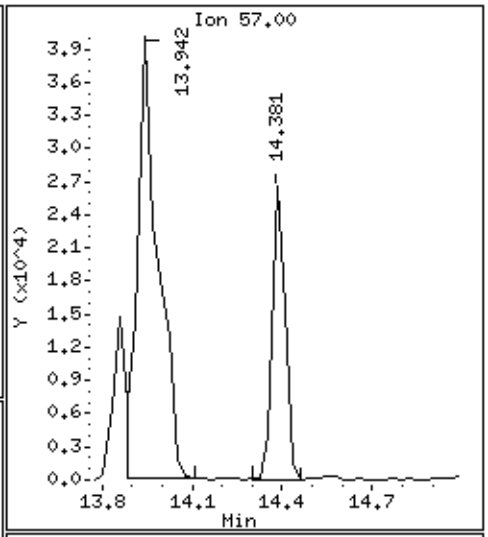
Concentration: 1.222 PPBV

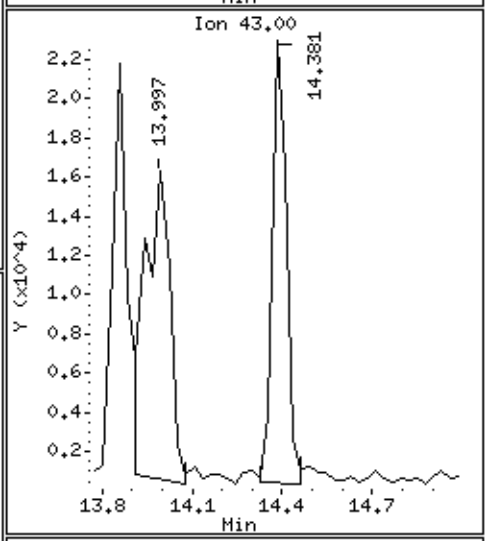


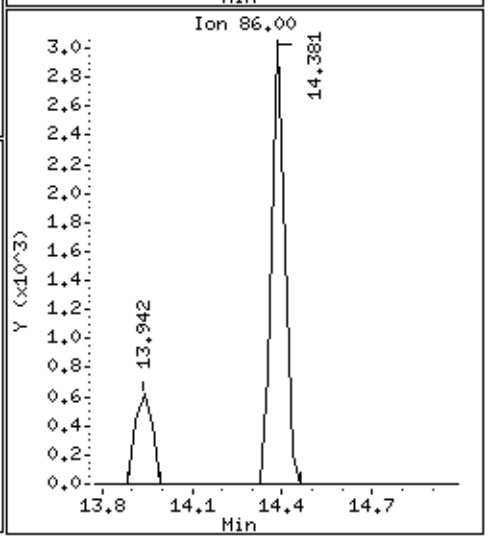












Data File: /chem/msdv.i/10Feb2015.b/v021016r1.d

Date : 10-FEB-2015 18:45

Client ID:

Instrument: msdv.i

Sample Info: 250mL# 37729

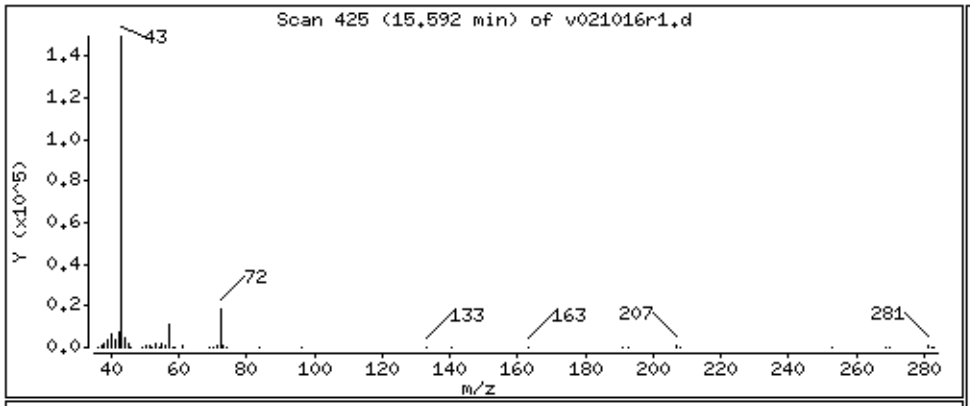
Operator: ea

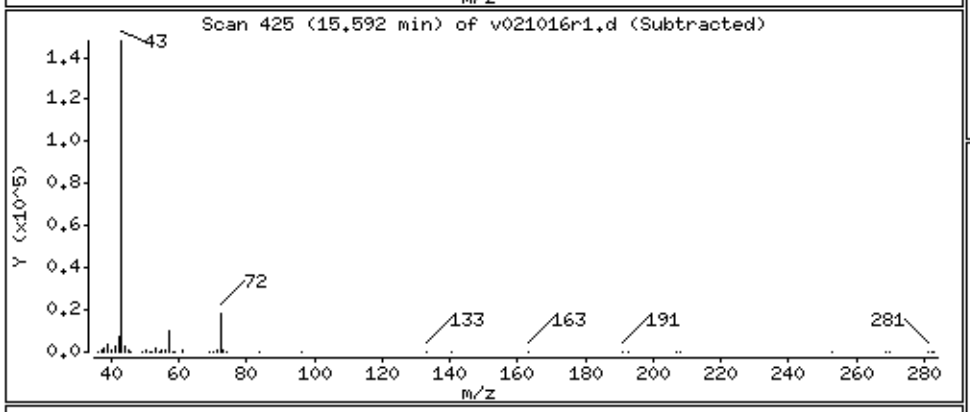
Column phase: RTx-624

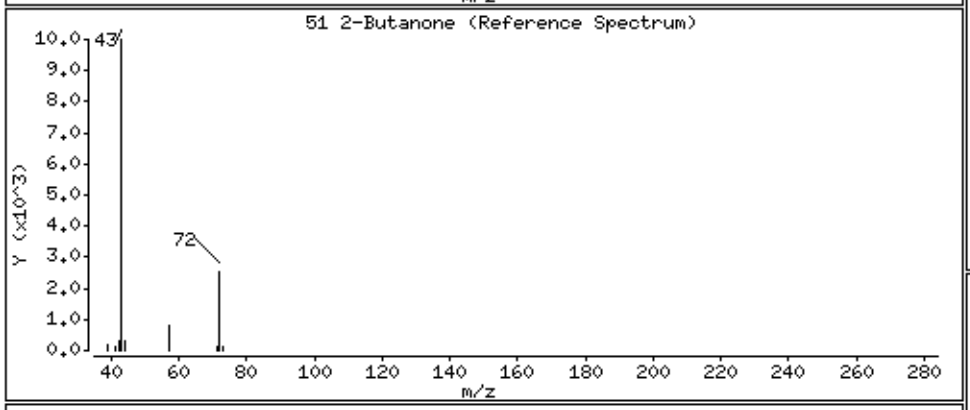
Column diameter: 0.32

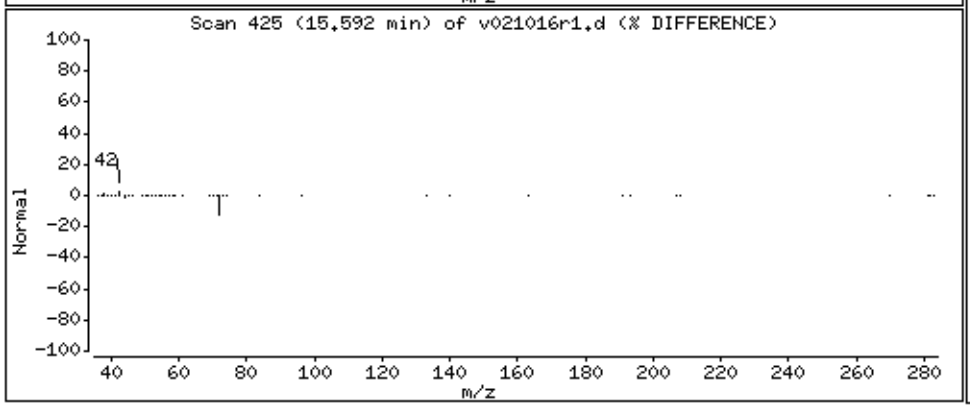
51 2-Butanone

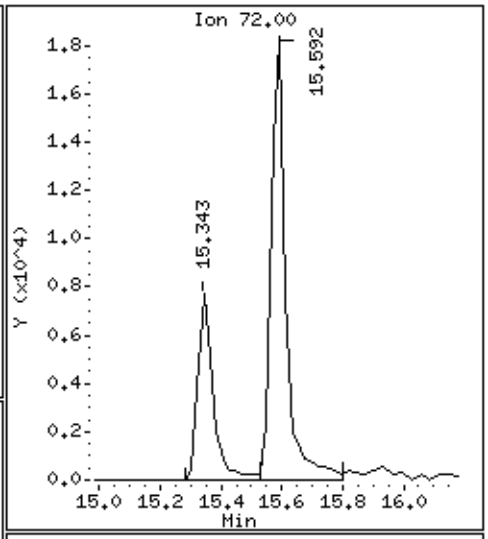
Concentration: 4.920 PPBV

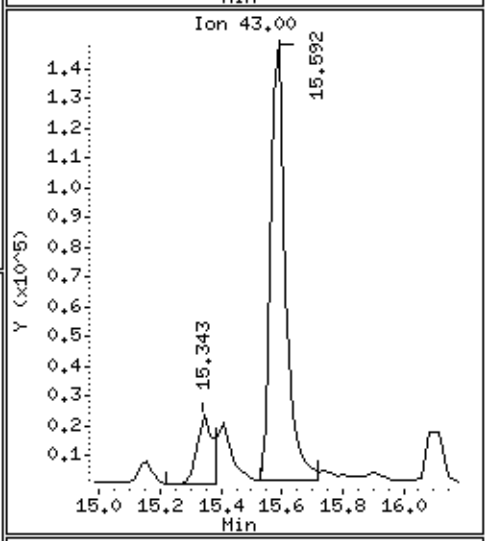


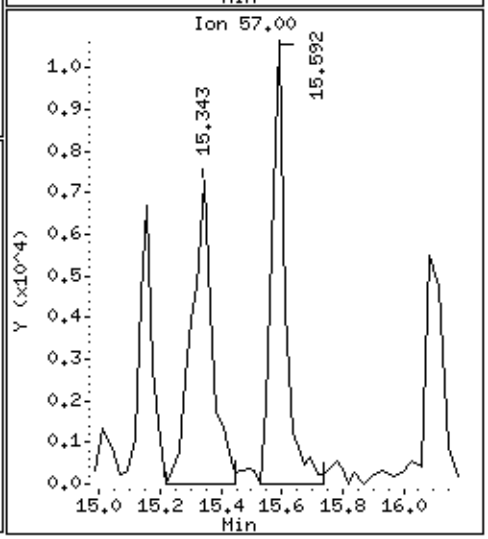












Data File: /chem/msdv.i/10Feb2015.b/v021016r1.d

Date : 10-FEB-2015 18:45

Client ID:

Instrument: msdv.i

Sample Info: 250mL# 37729

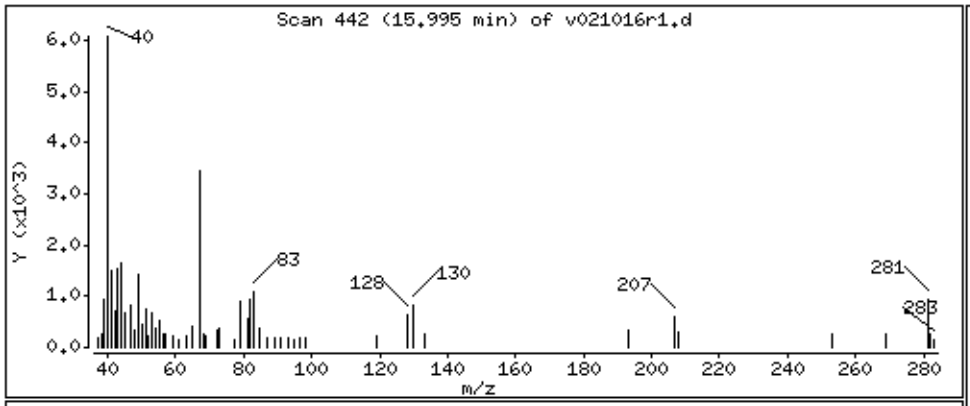
Operator: ea

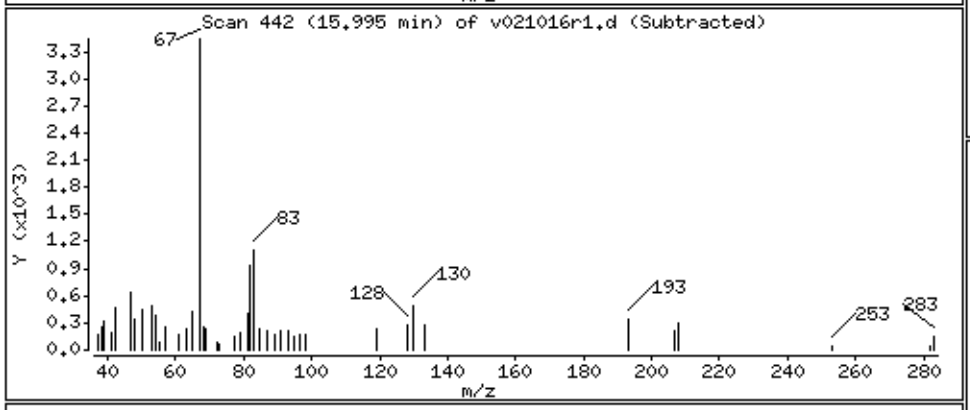
Column phase: RTx-624

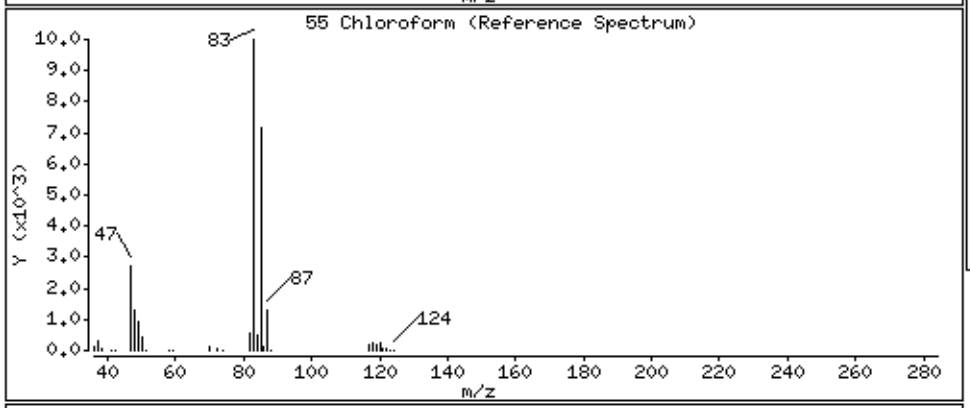
Column diameter: 0.32

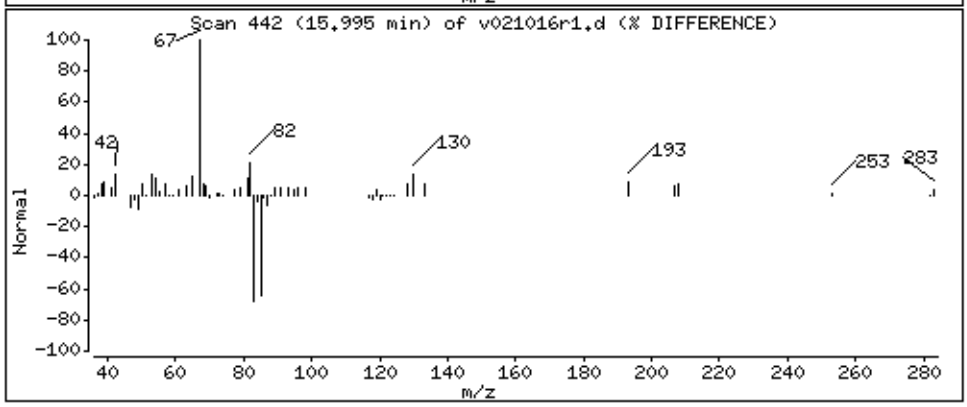
55 Chloroform

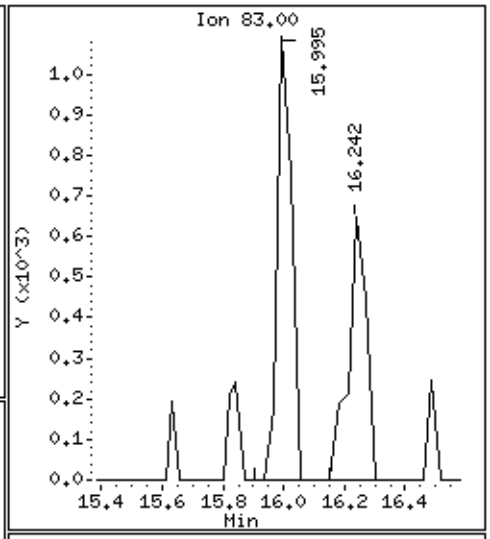
Concentration: 0.06661 PPBV

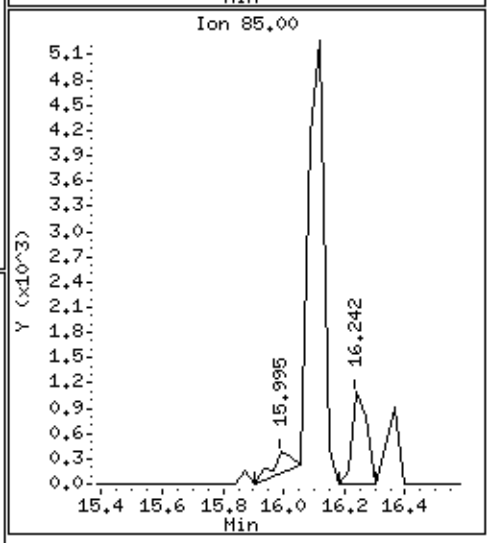












Data File: /chem/msdv.i/10Feb2015.b/v021016r1.d

Date : 10-FEB-2015 18:45

Client ID:

Instrument: msdv.i

Sample Info: 250mL# 37729

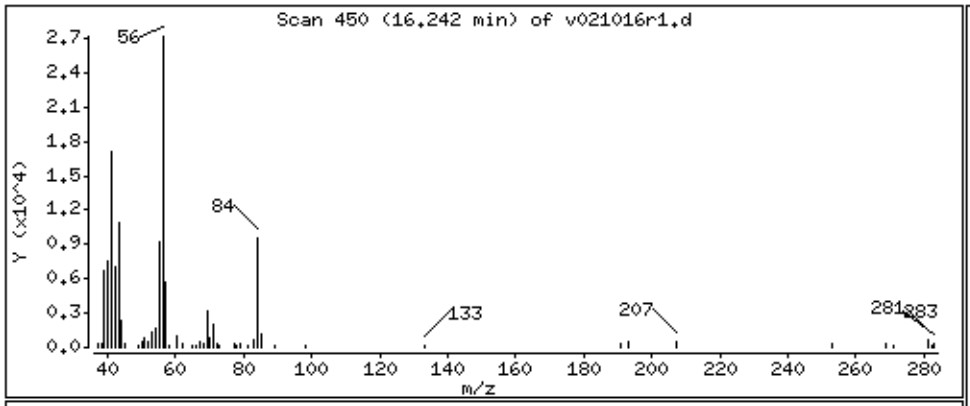
Operator: ea

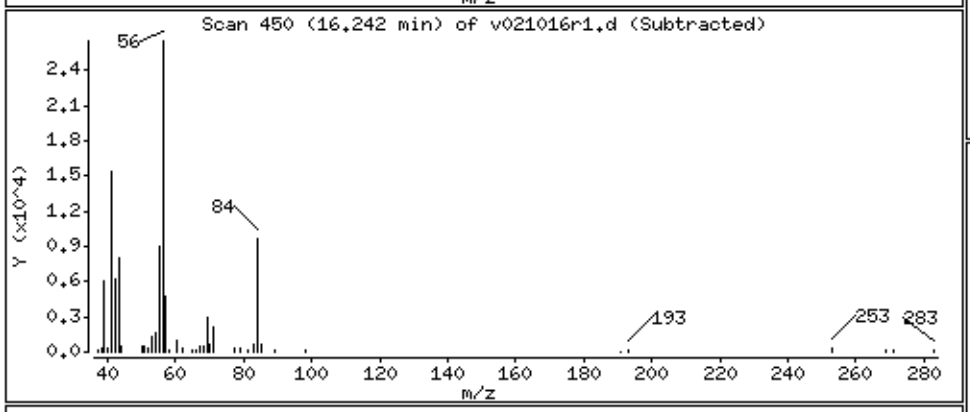
Column phase: RTx-624

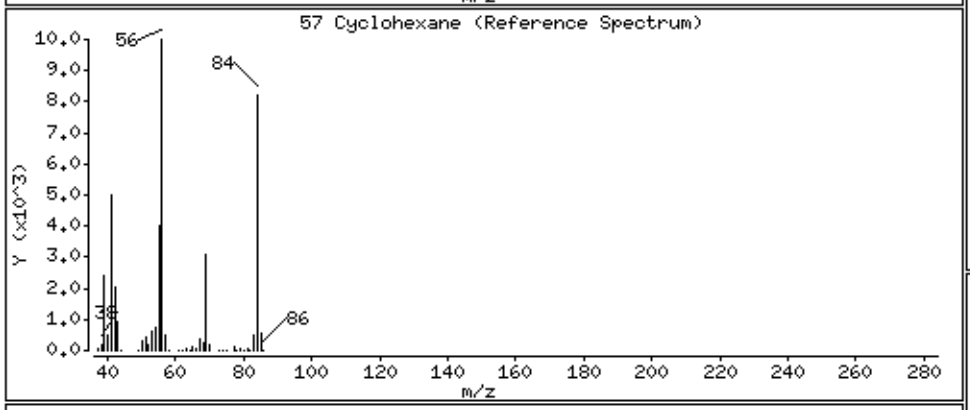
Column diameter: 0.32

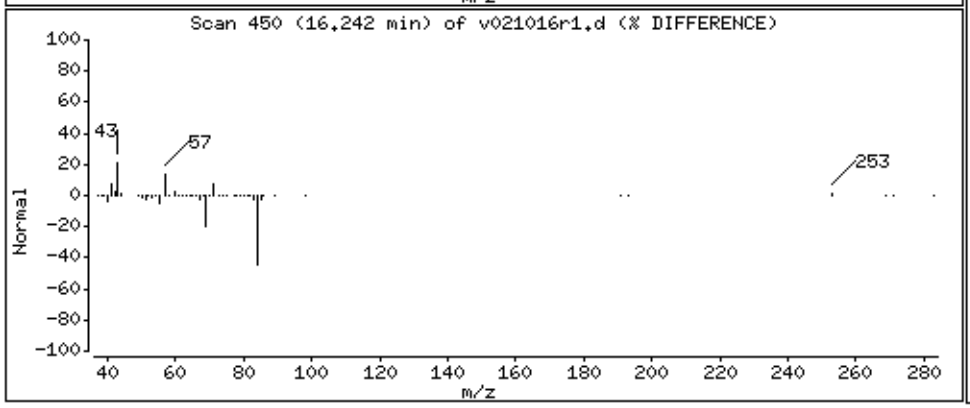
57 Cyclohexane

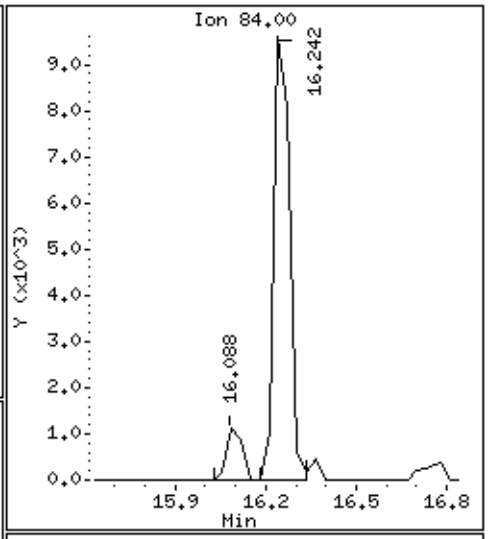
Concentration: 0.9471 PPBV

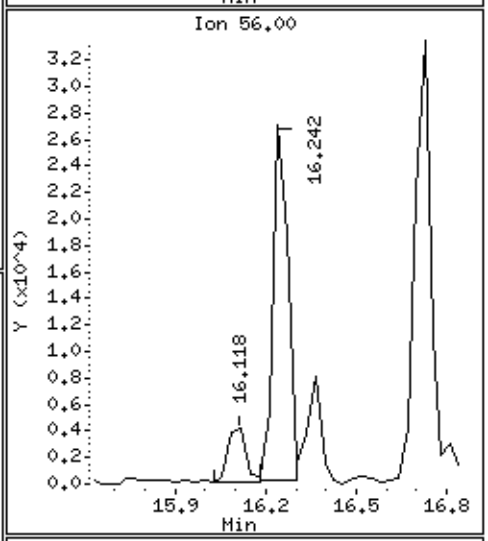


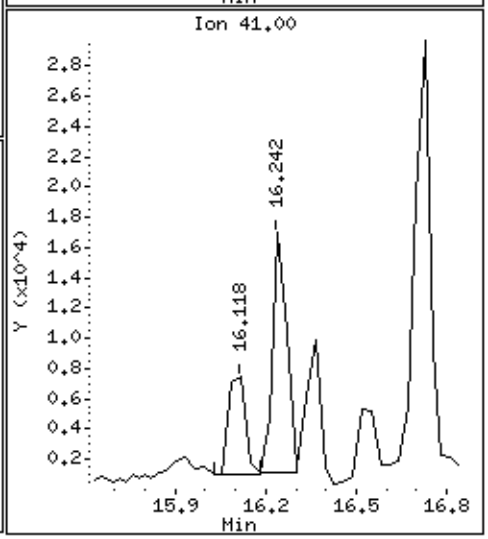












Data File: /chem/msdv.i/10Feb2015.b/v021016r1.d

Date : 10-FEB-2015 18:45

Client ID:

Instrument: msdv.i

Sample Info: 250mL# 37729

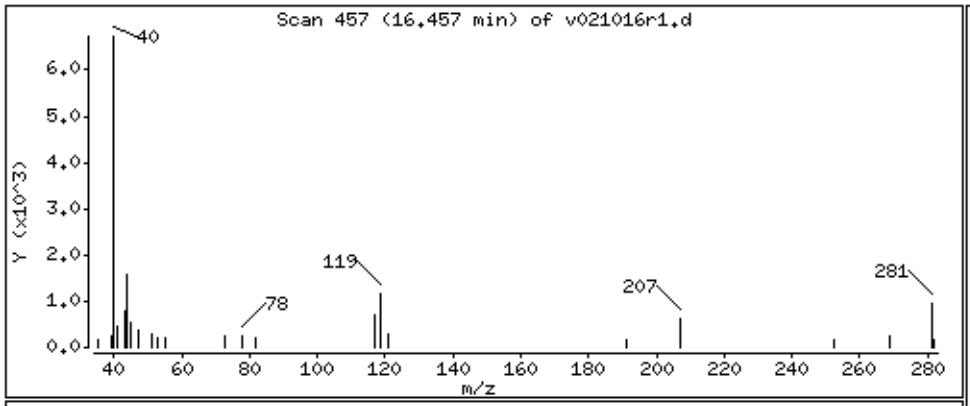
Operator: ea

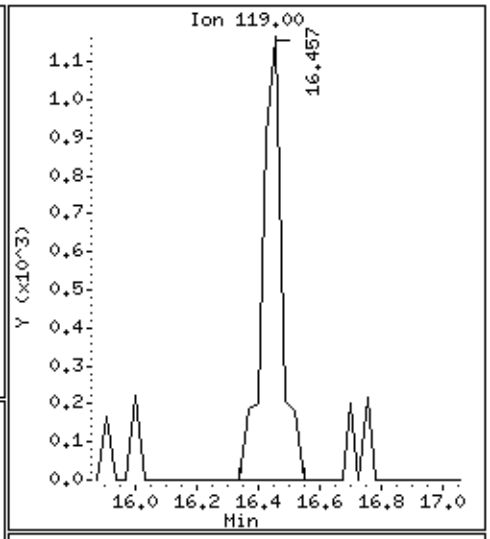
Column phase: RTx-624

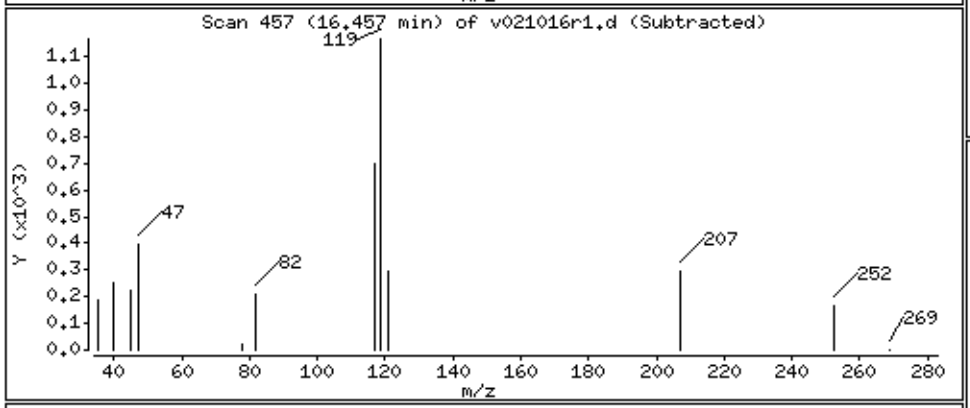
Column diameter: 0.32

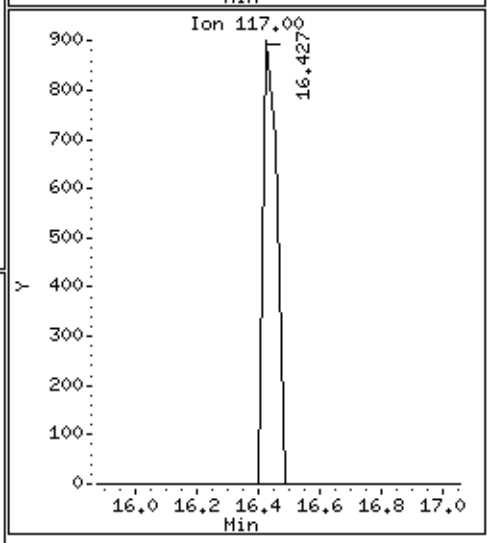
59 Carbon Tetrachloride

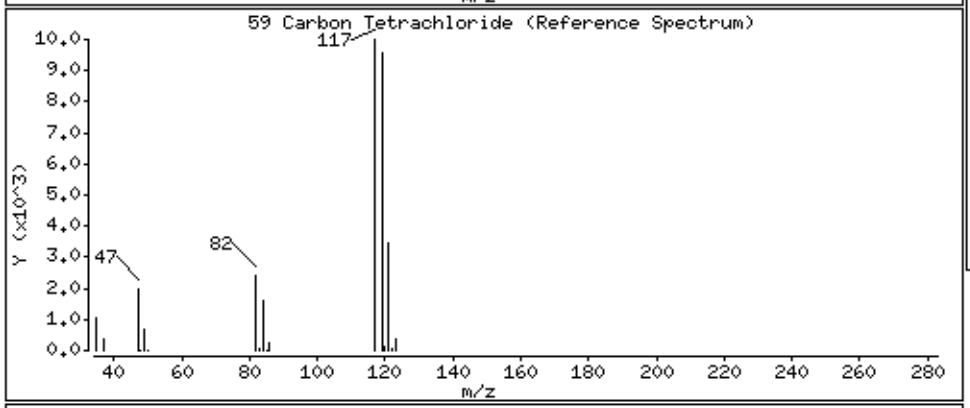
Concentration: 0.09245 PPBV

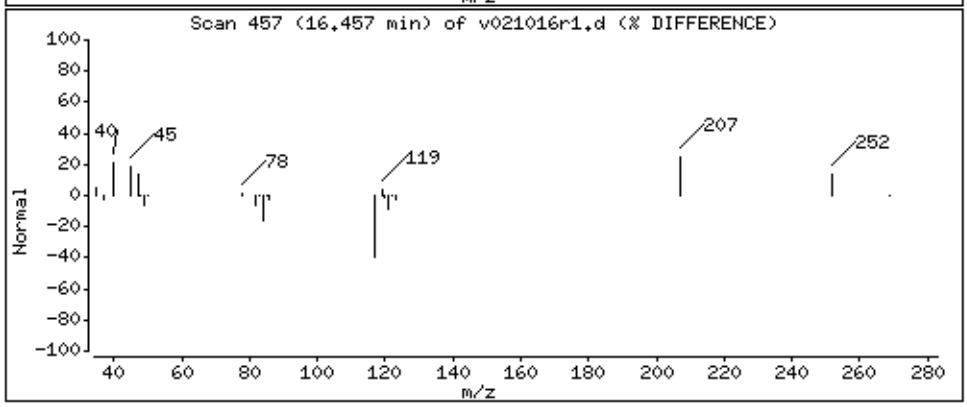












Data File: /chem/msdv.i/10Feb2015.b/v021016r1.d

Date : 10-FEB-2015 18:45

Client ID:

Instrument: msdv.i

Sample Info: 250mL# 37729

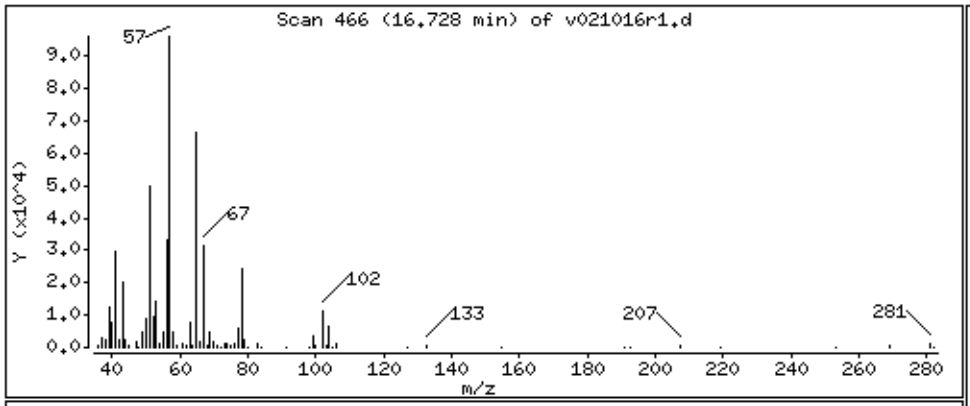
Operator: ea

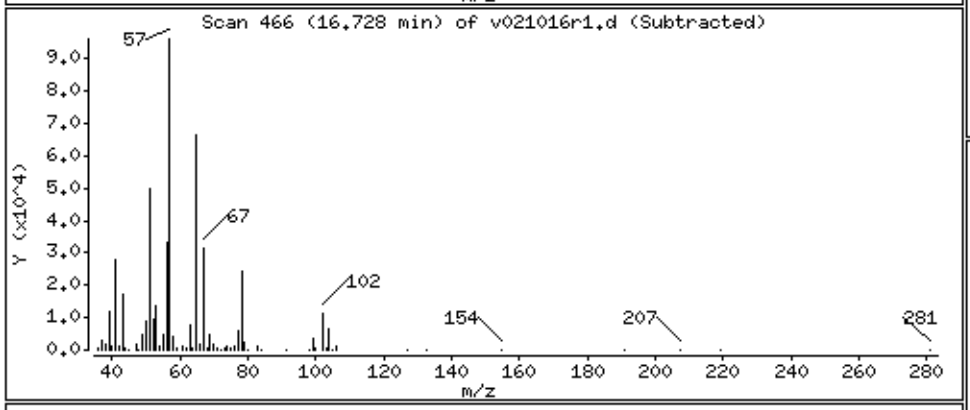
Column phase: RTx-624

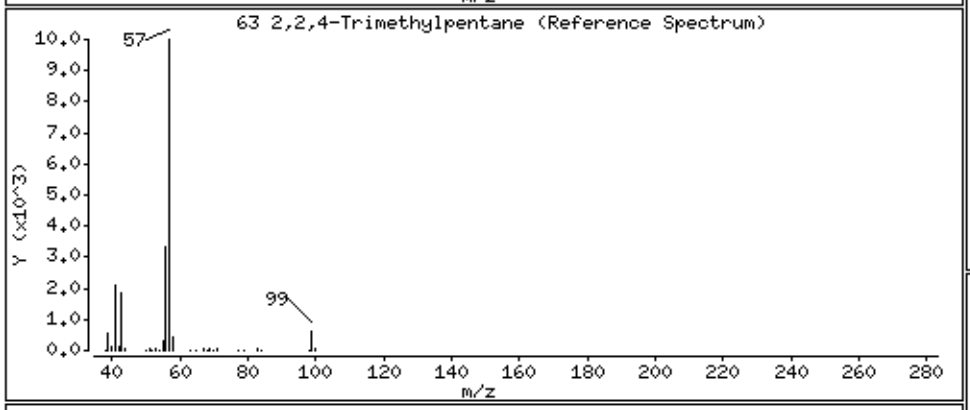
Column diameter: 0.32

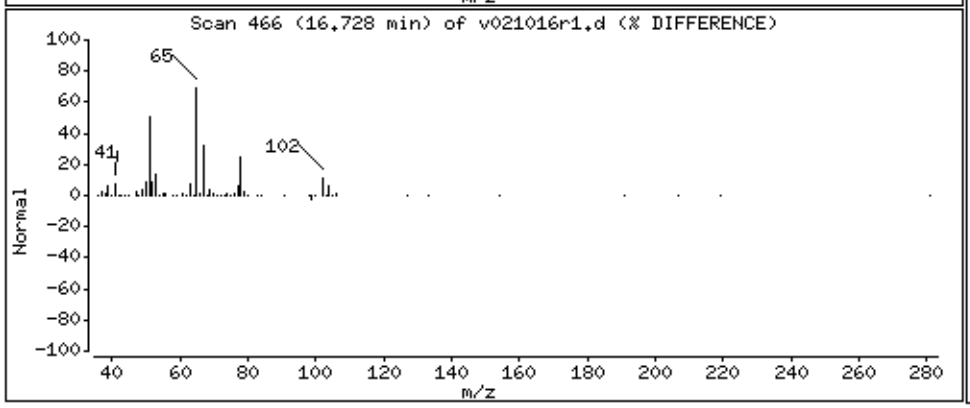
63 2,2,4-Trimethylpentane

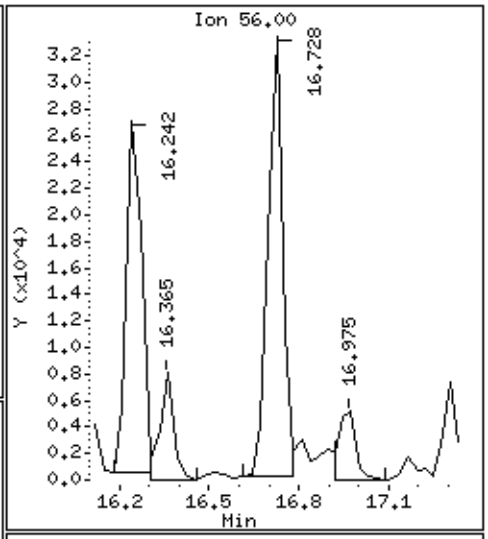
Concentration: 1.780 PPBV

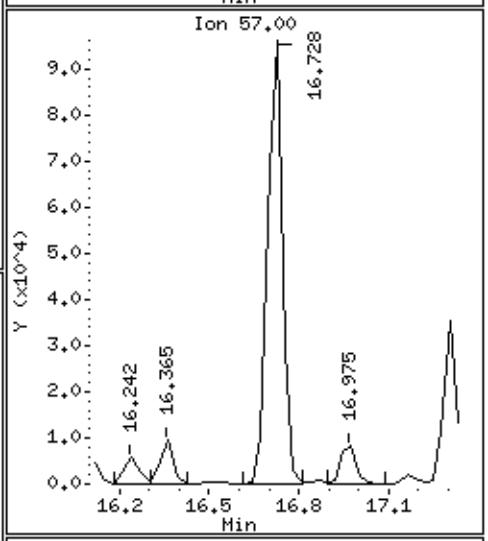


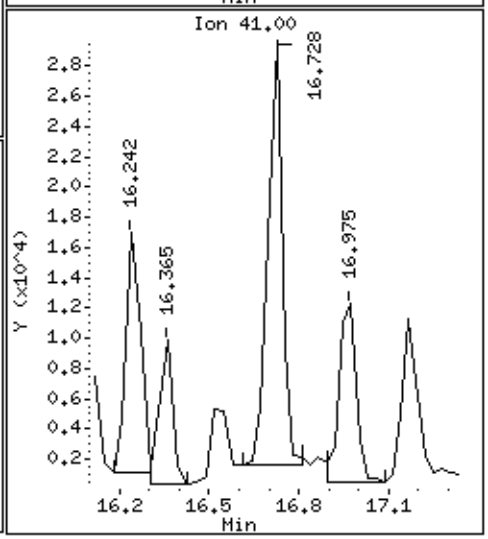












Data File: /chem/msdv.i/10Feb2015.b/v021016r1.d

Date : 10-FEB-2015 18:45

Client ID:

Instrument: msdv.i

Sample Info: 250mL# 37729

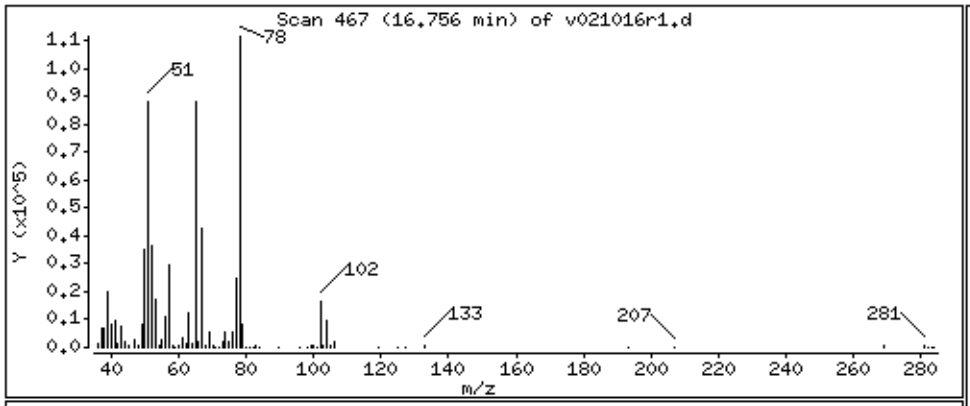
Operator: ea

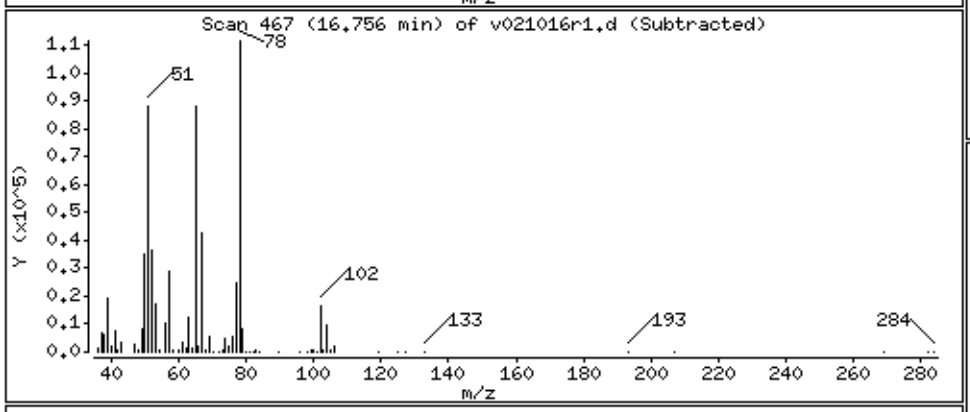
Column phase: RTx-624

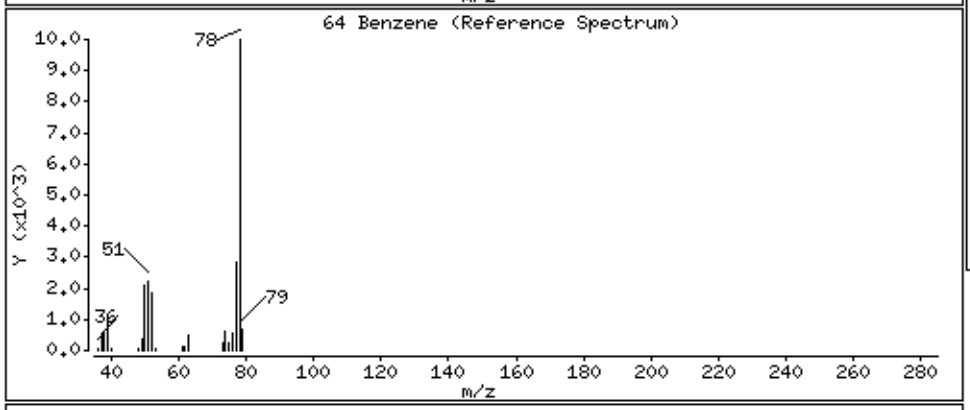
Column diameter: 0.32

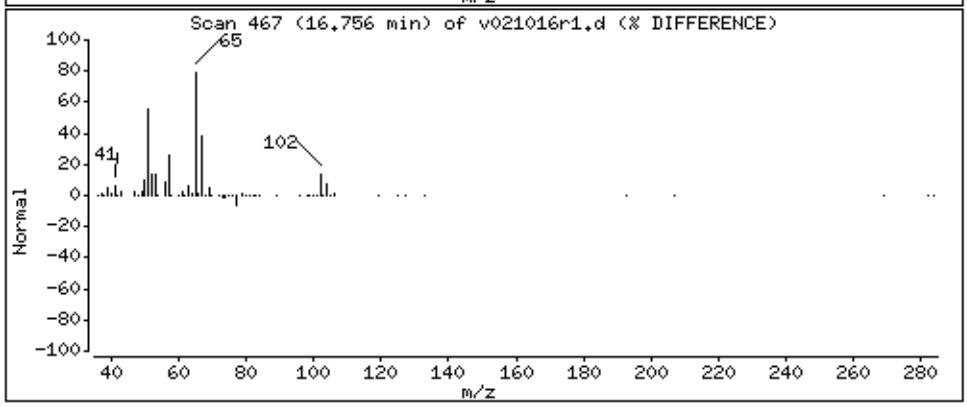
64 Benzene

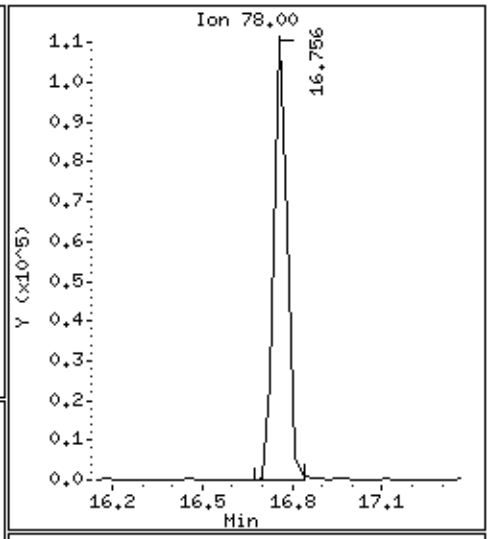
Concentration: 4.032 PPBV

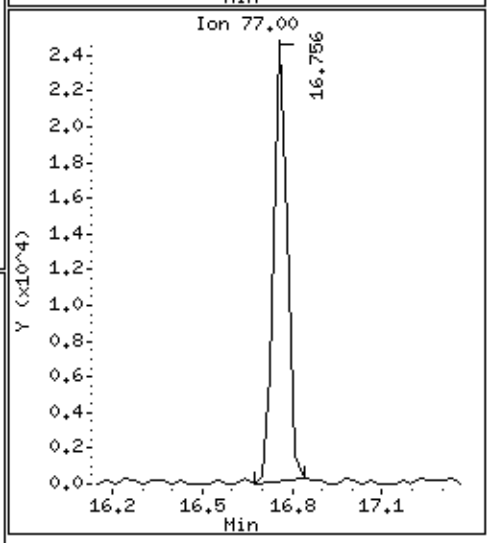












Data File: /chem/msdv.i/10Feb2015.b/v021016r1.d

Date : 10-FEB-2015 18:45

Client ID:

Instrument: msdv.i

Sample Info: 250mL# 37729

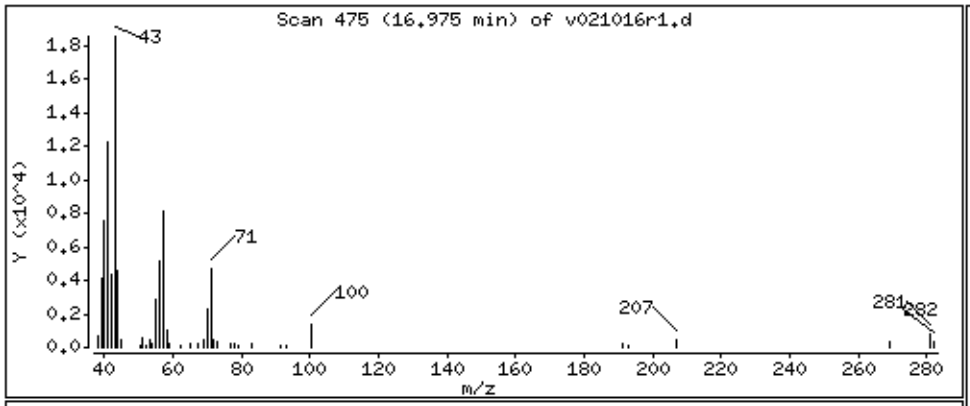
Operator: ea

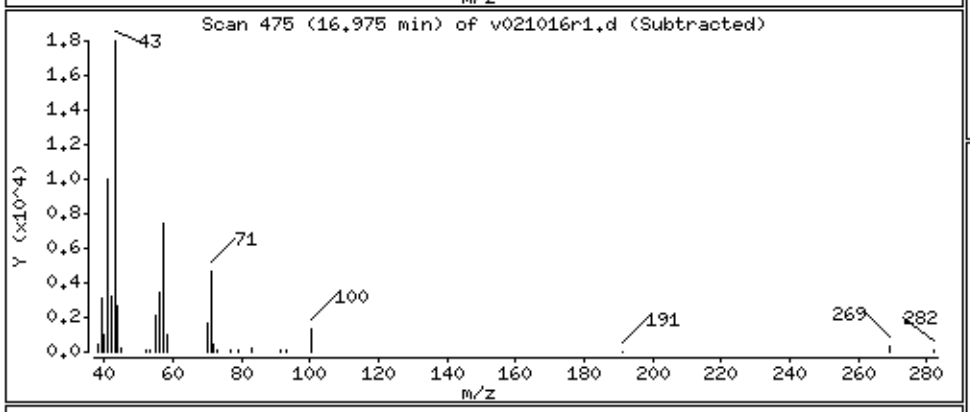
Column phase: RTx-624

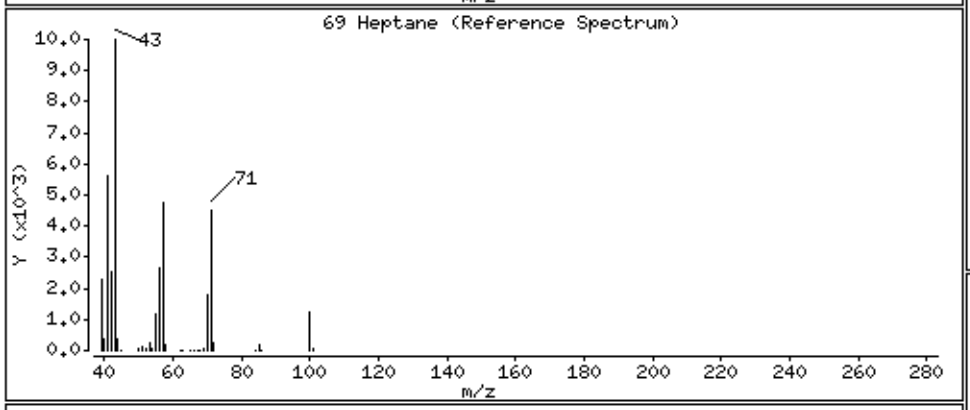
Column diameter: 0.32

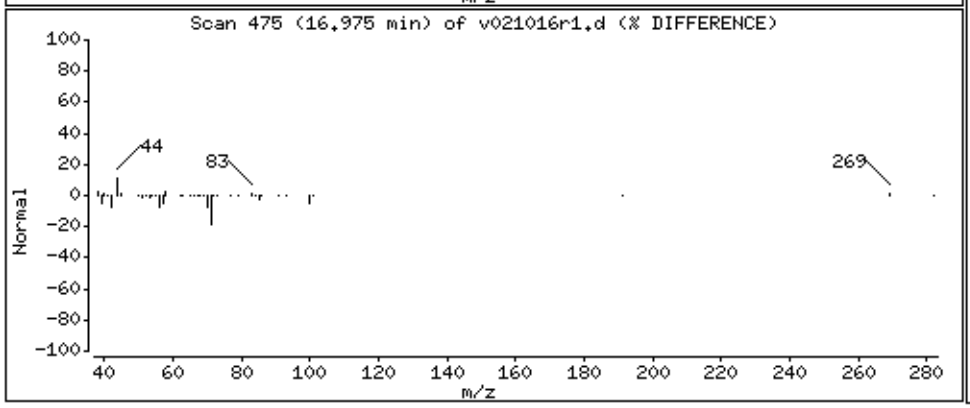
69 Heptane

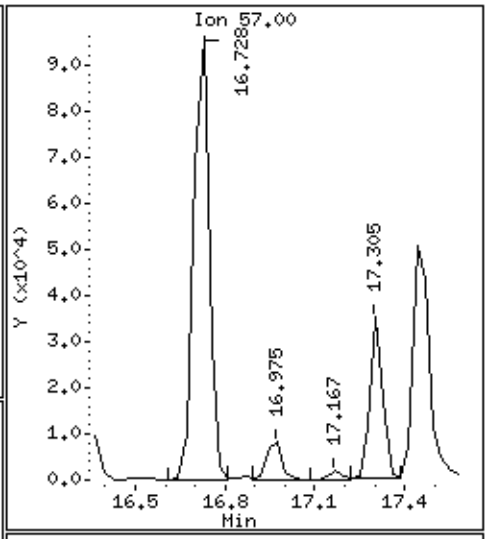
Concentration: 0.7676 PPBV

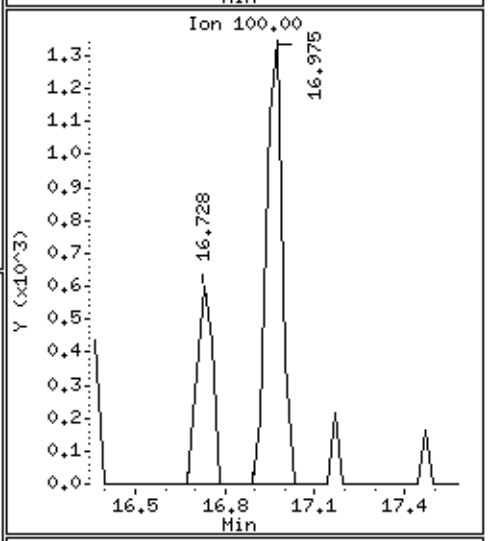


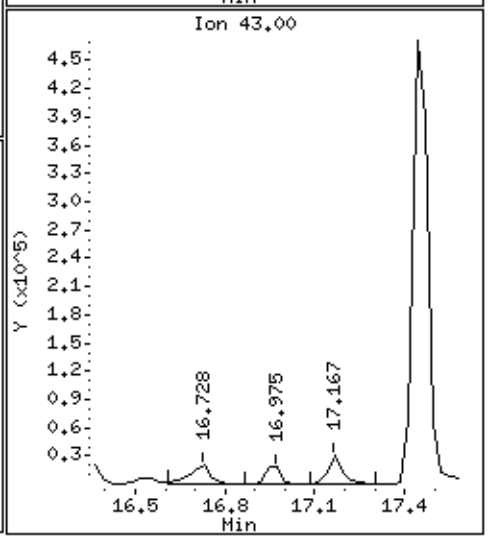












Data File: /chem/msdv.i/10Feb2015.b/v021016r1.d

Date : 10-FEB-2015 18:45

Client ID:

Instrument: msdv.i

Sample Info: 250mL# 37729

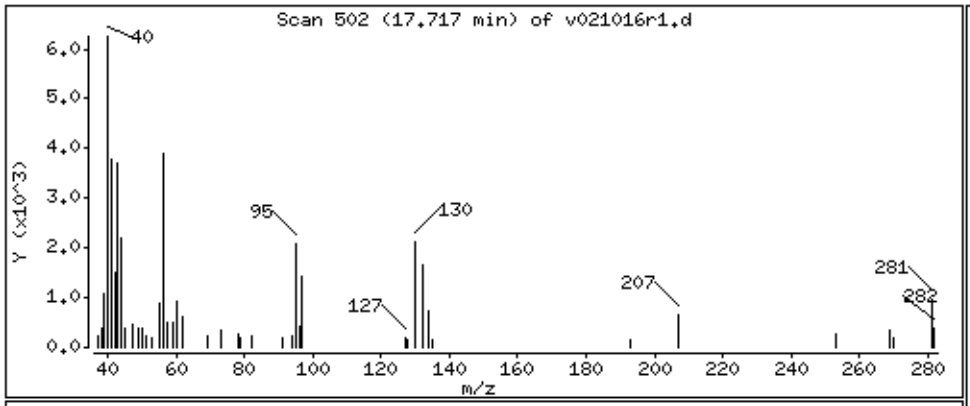
Operator: ea

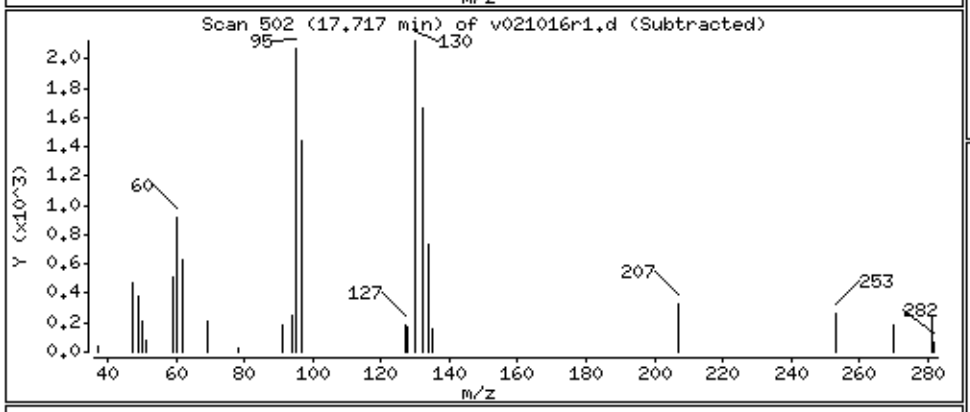
Column phase: RTx-624

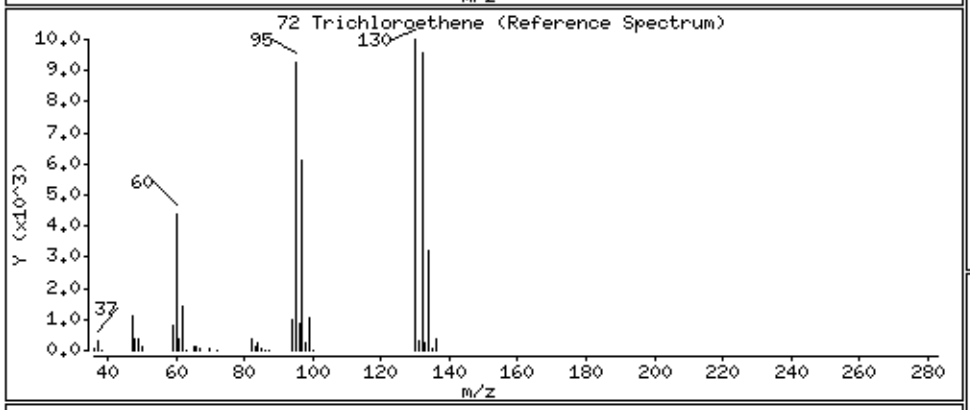
Column diameter: 0.32

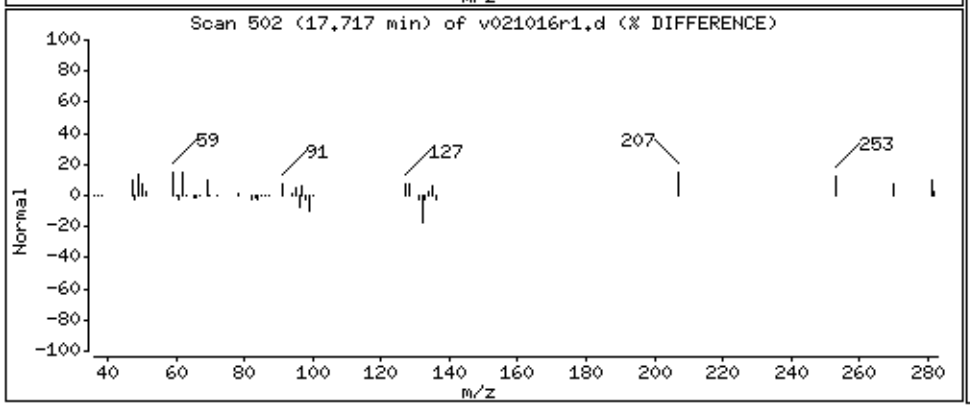
72 Trichloroethene

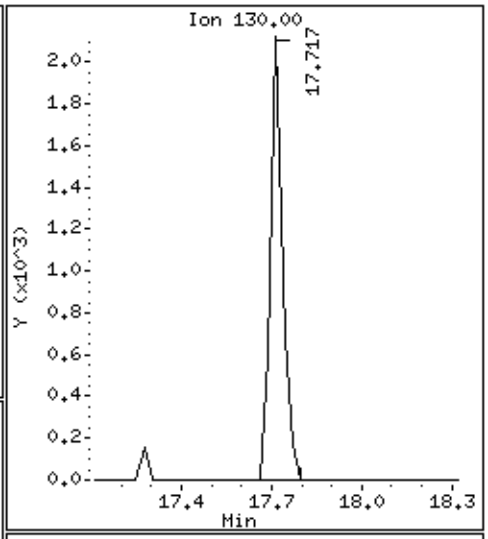
Concentration: 0.1358 PPBV

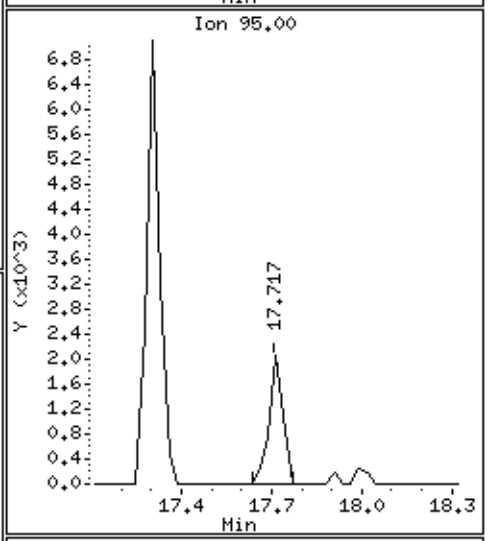


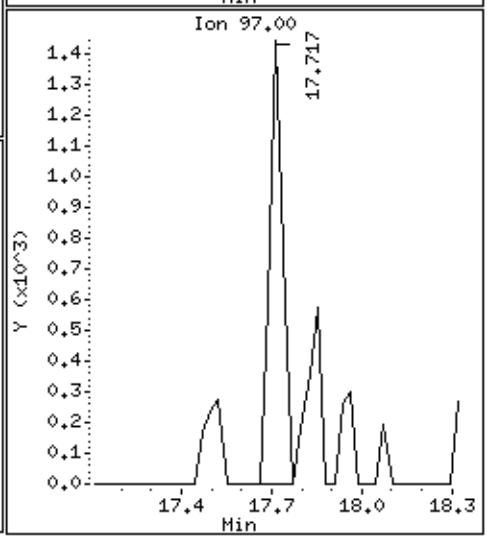












Data File: /chem/msdv.i/10Feb2015.b/v021016r1.d

Date : 10-FEB-2015 18:45

Client ID:

Instrument: msdv.i

Sample Info: 250mL# 37729

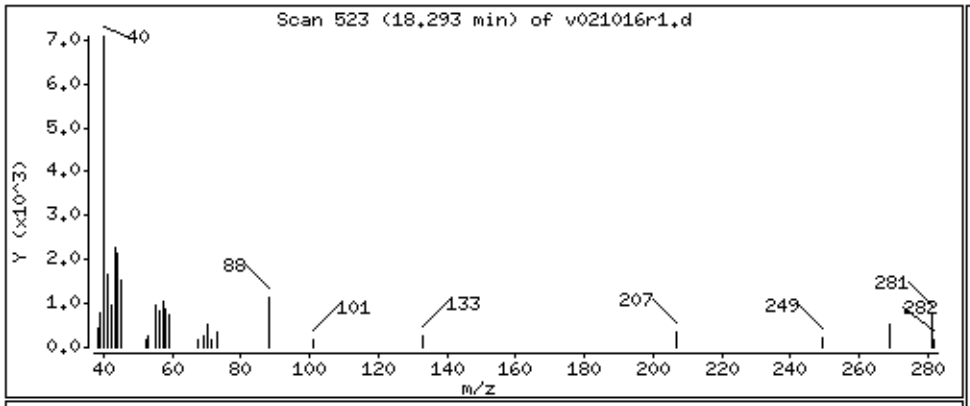
Operator: ea

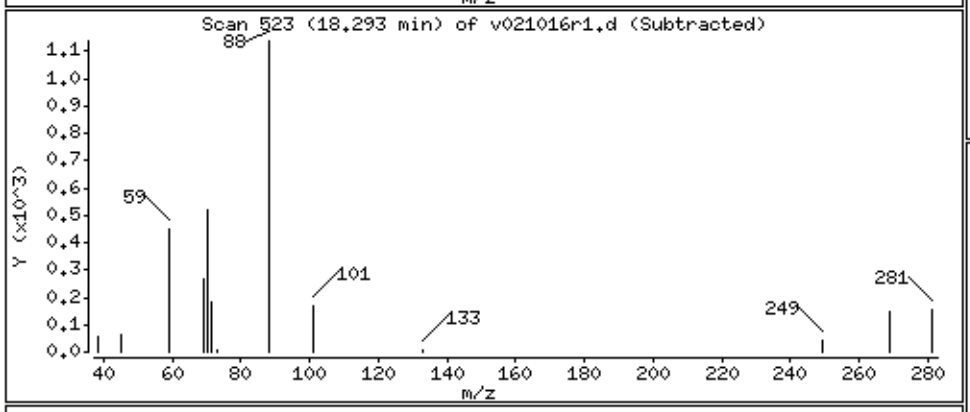
Column phase: RTx-624

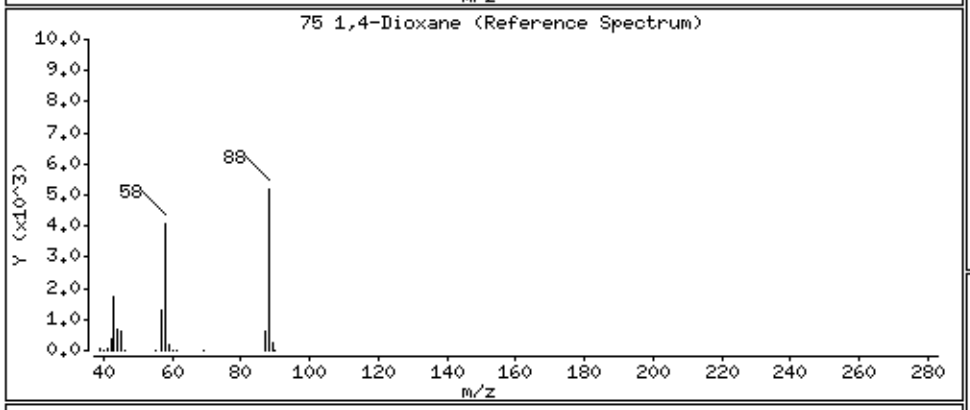
Column diameter: 0.32

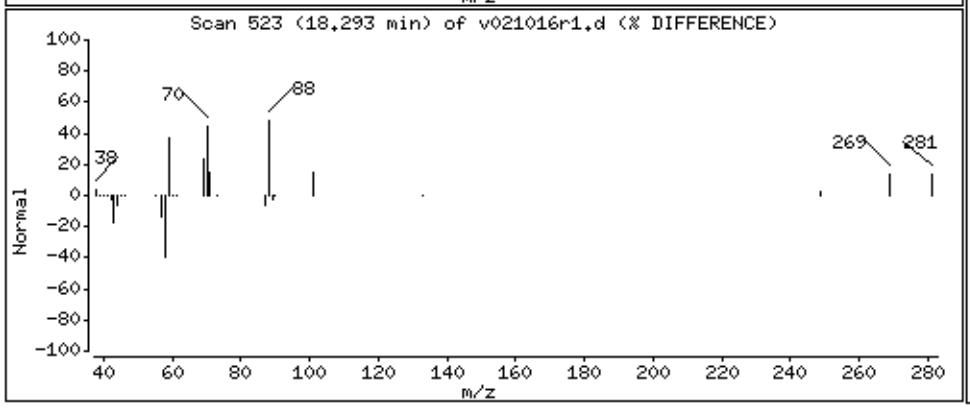
75 1,4-Dioxane

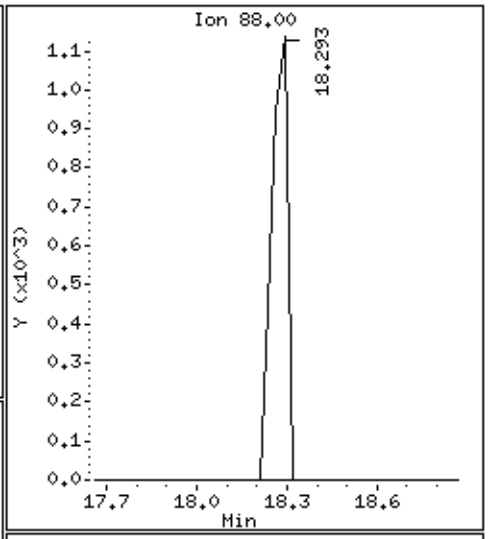
Concentration: 0.1715 PPBV

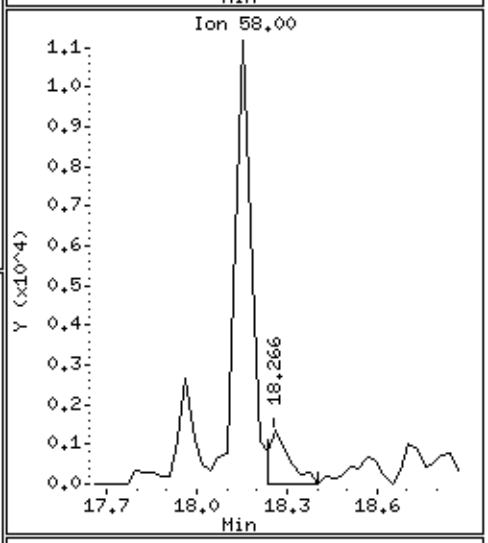


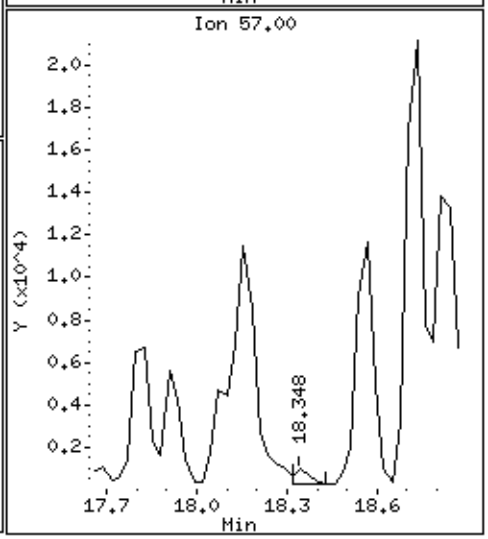












Data File: /chem/msdv.i/10Feb2015.b/v021016r1.d

Date : 10-FEB-2015 18:45

Client ID:

Instrument: msdv.i

Sample Info: 250mL# 37729

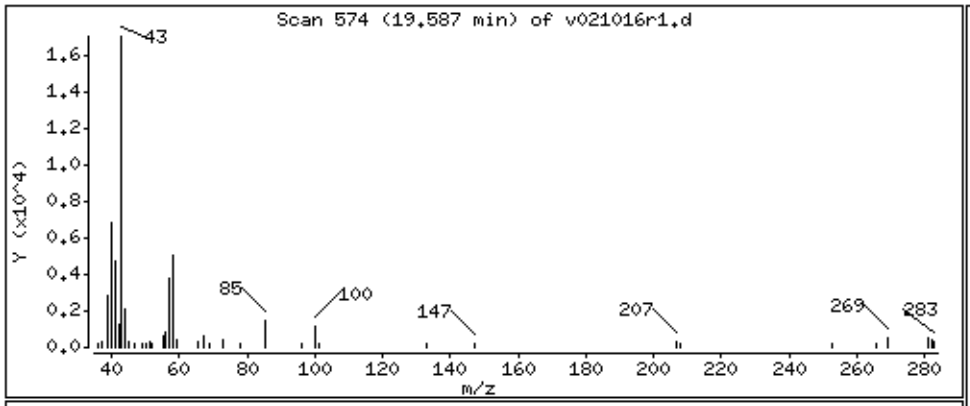
Operator: ea

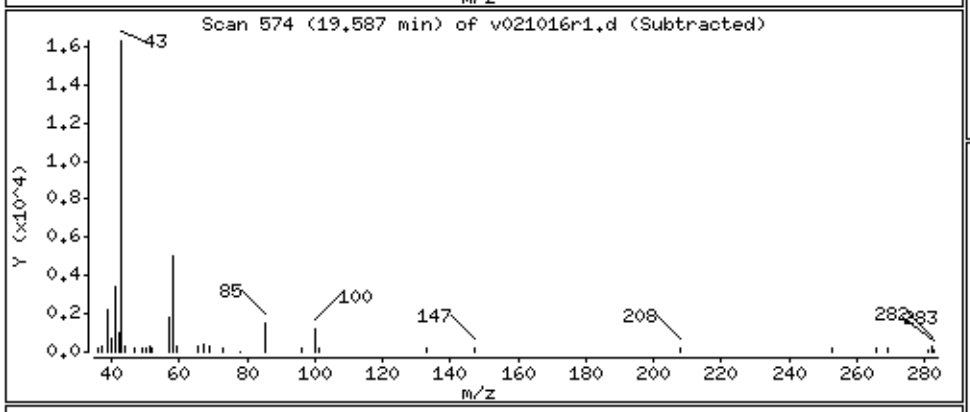
Column phase: RTx-624

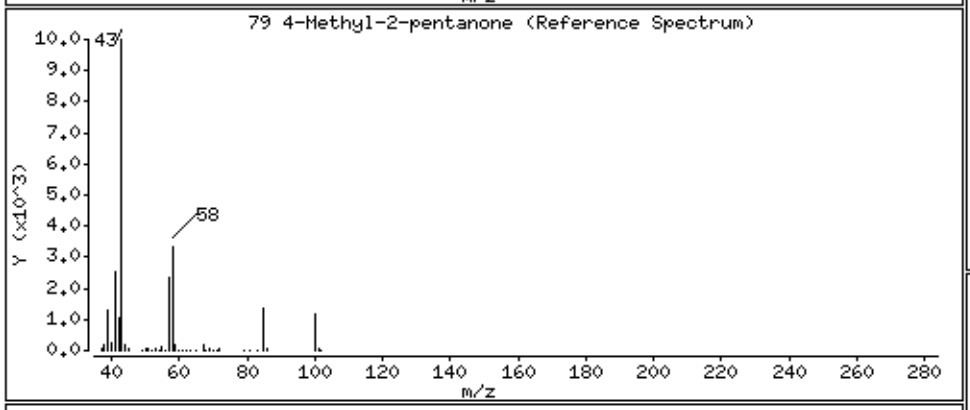
Column diameter: 0.32

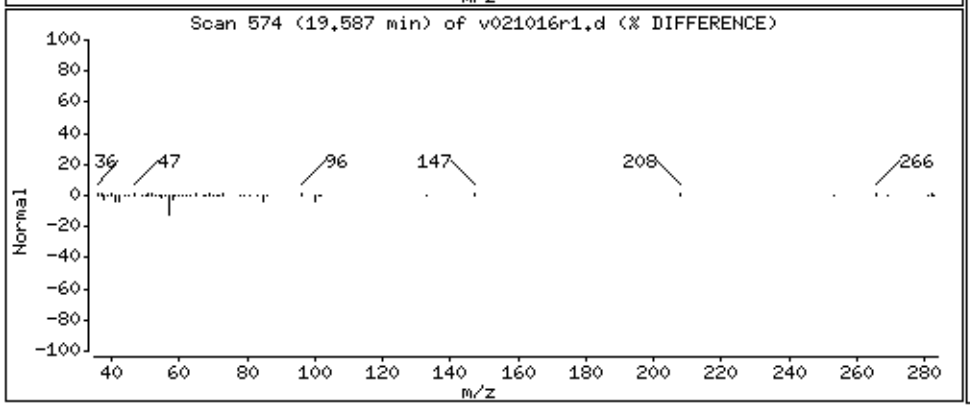
79 4-Methyl-2-pentanone

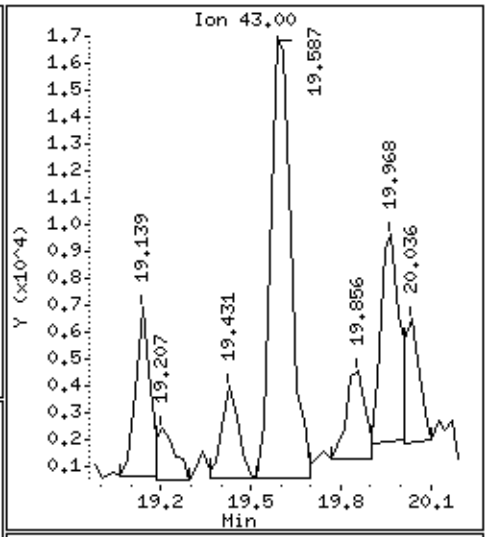
Concentration: 0.6535 PPBV

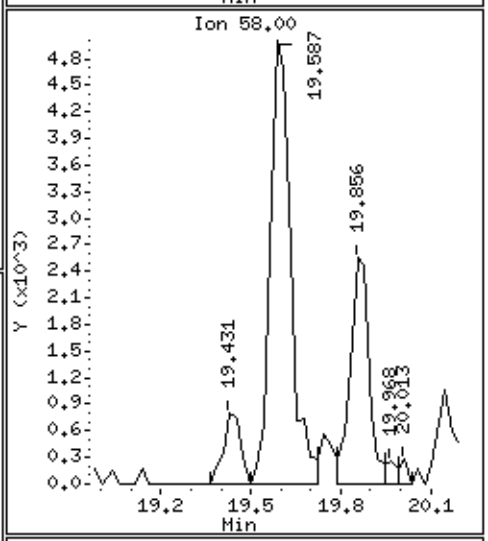


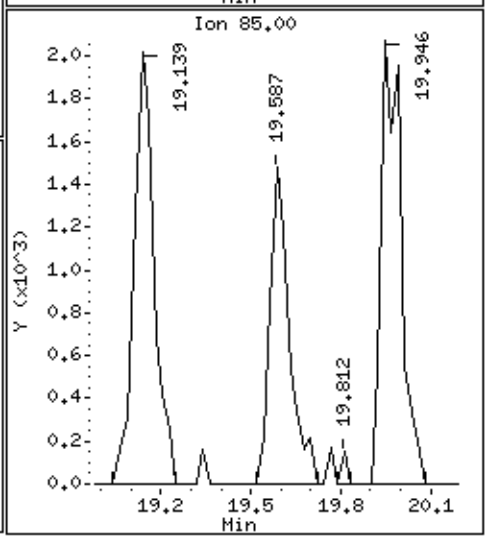












Data File: /chem/msdv.i/10Feb2015.b/v021016r1.d

Date : 10-FEB-2015 18:45

Client ID:

Instrument: msdv.i

Sample Info: 250mL# 37729

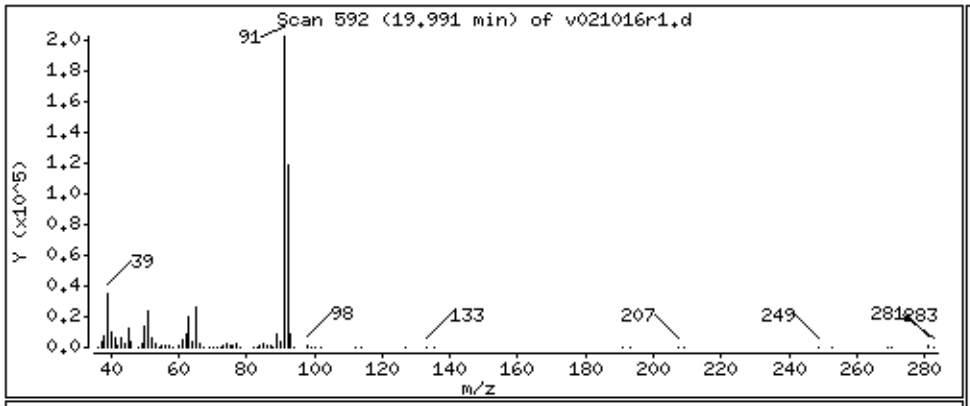
Operator: ea

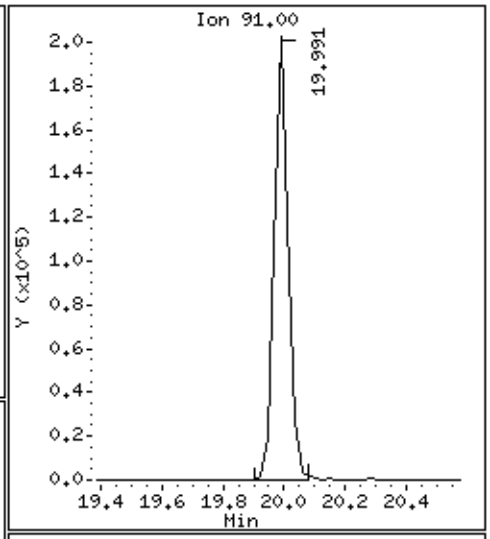
Column phase: RTx-624

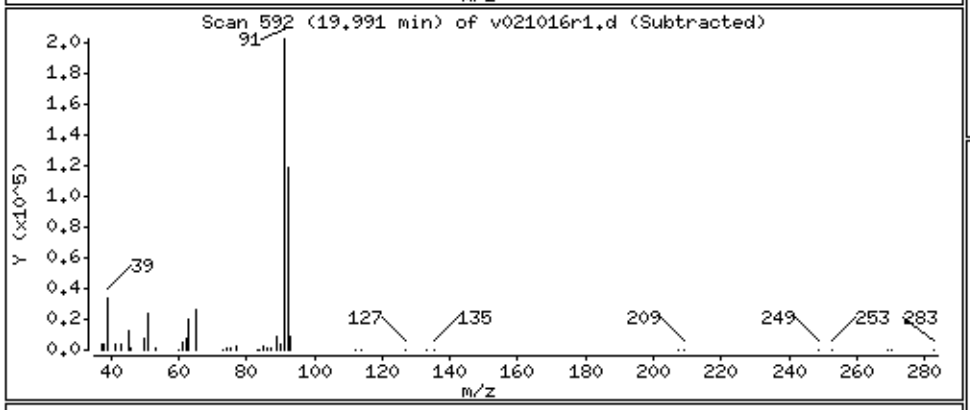
Column diameter: 0.32

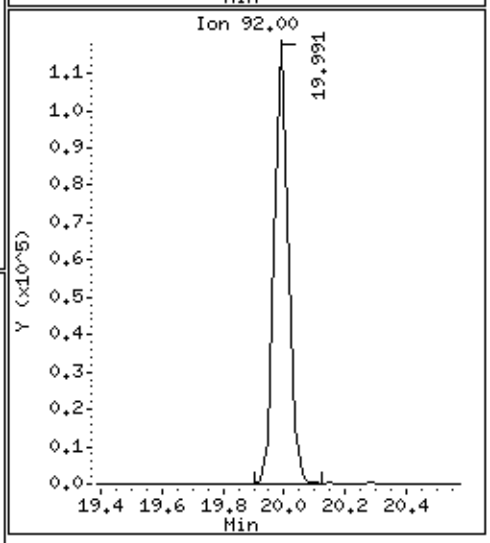
81 Toluene

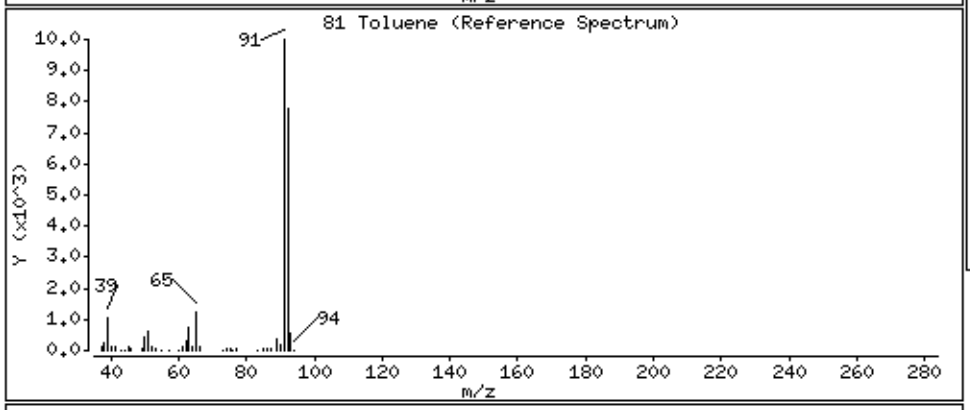
Concentration: 6.686 PPBV

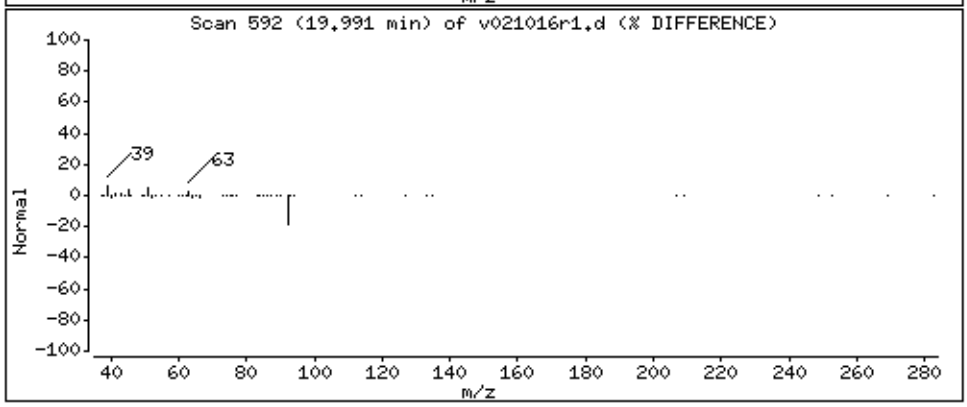












Data File: /chem/msdv.i/10Feb2015.b/v021016r1.d

Date : 10-FEB-2015 18:45

Client ID:

Instrument: msdv.i

Sample Info: 250mL# 37729

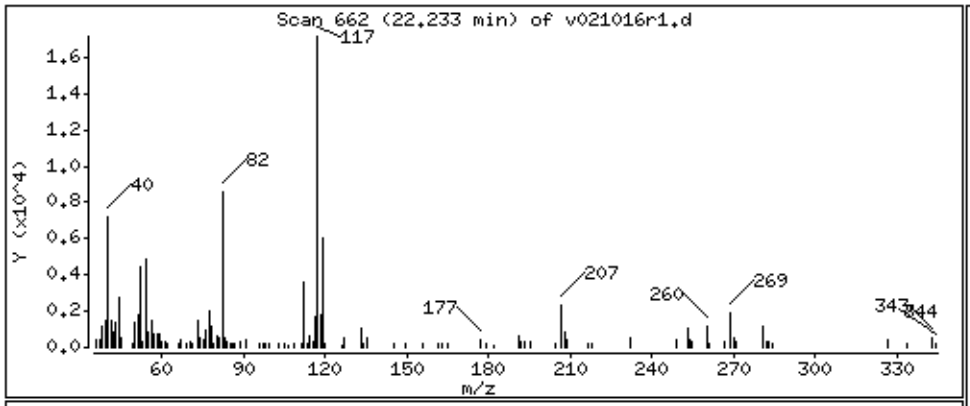
Operator: ea

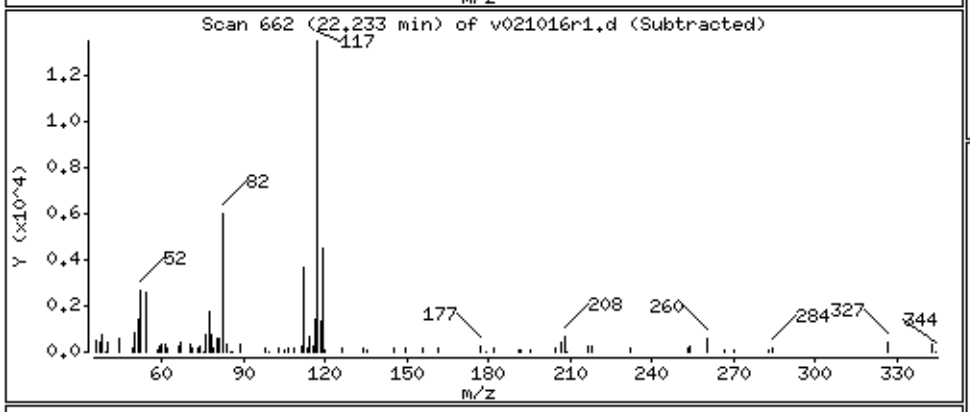
Column phase: RTx-624

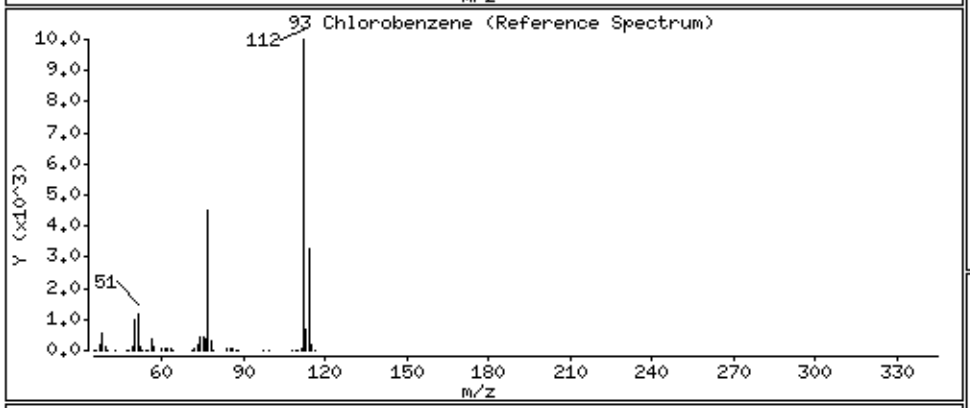
Column diameter: 0.32

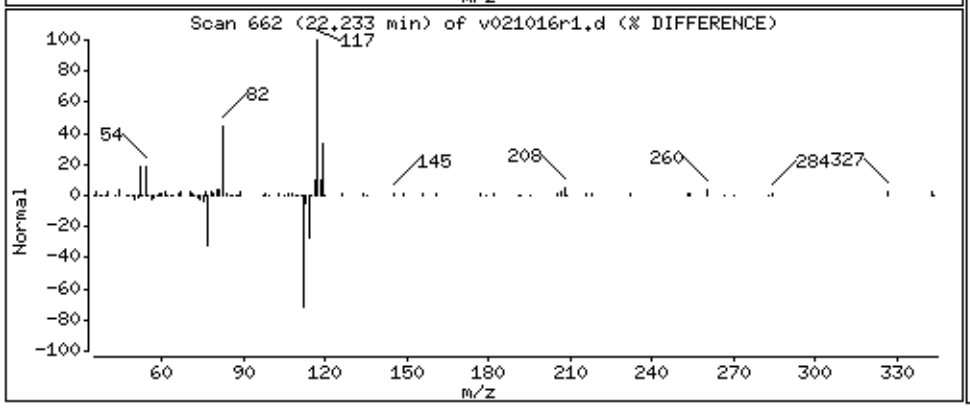
93 Chlorobenzene

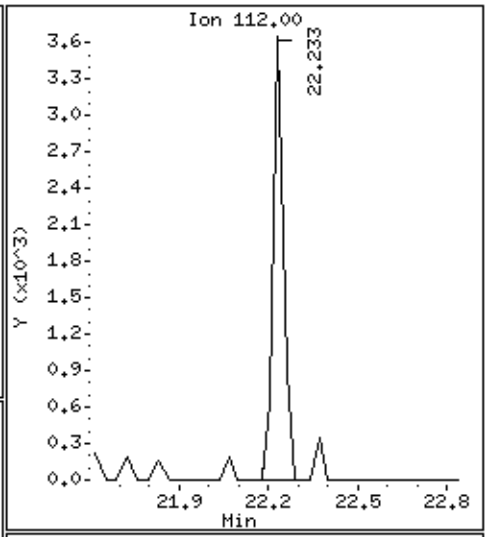
Concentration: 0.1076 PPBV

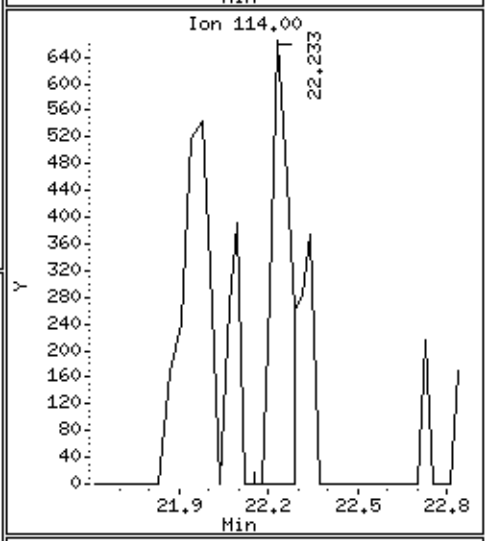


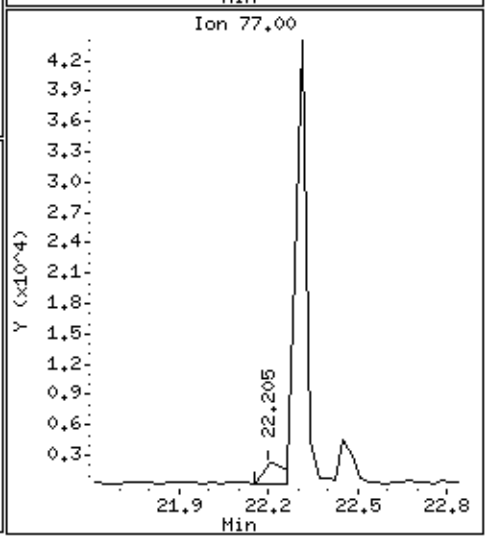












Data File: /chem/msdv.i/10Feb2015.b/v021016r1.d

Date : 10-FEB-2015 18:45

Client ID:

Instrument: msdv.i

Sample Info: 250mL# 37729

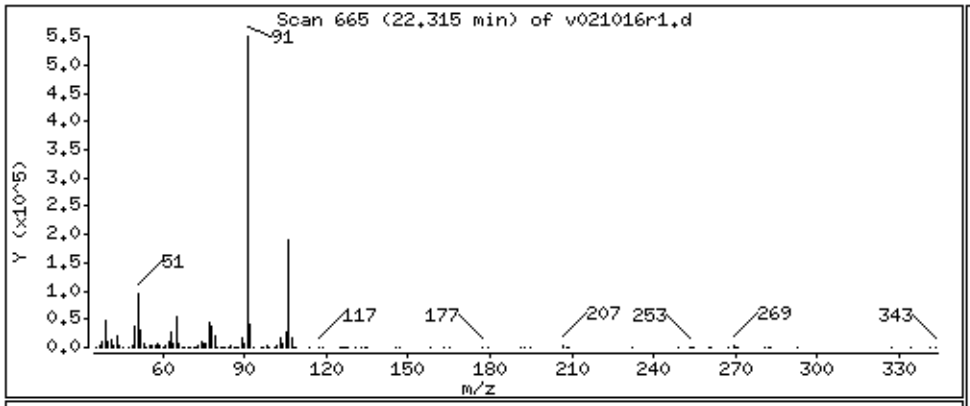
Operator: ea

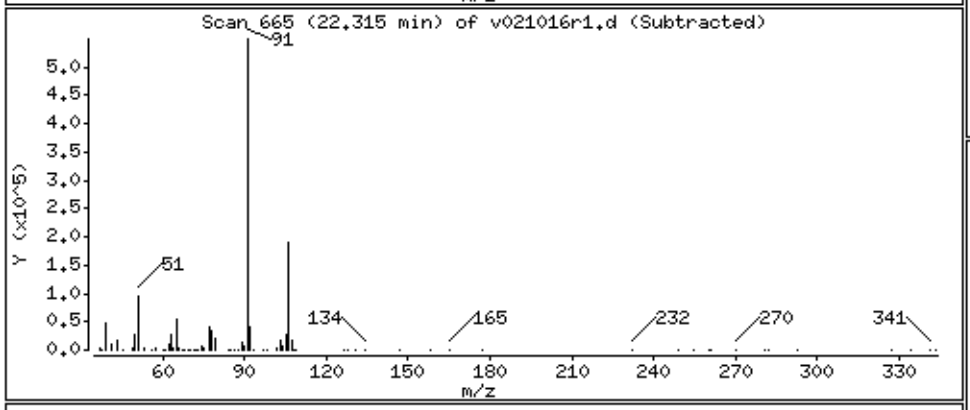
Column phase: RTx-624

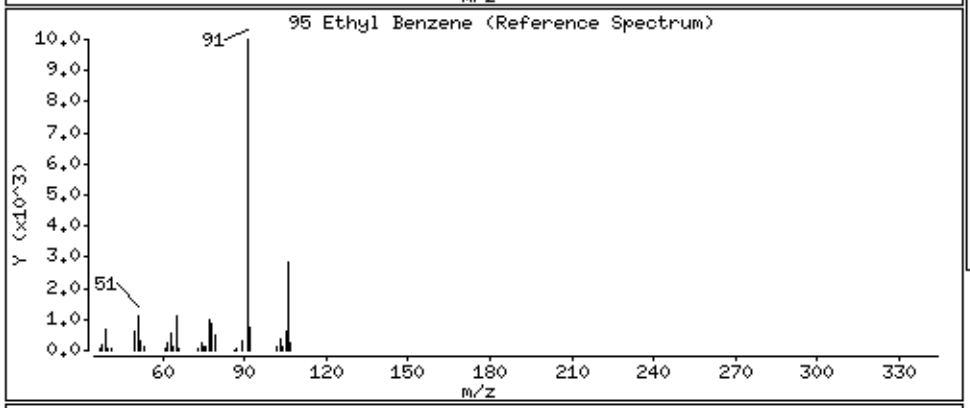
Column diameter: 0.32

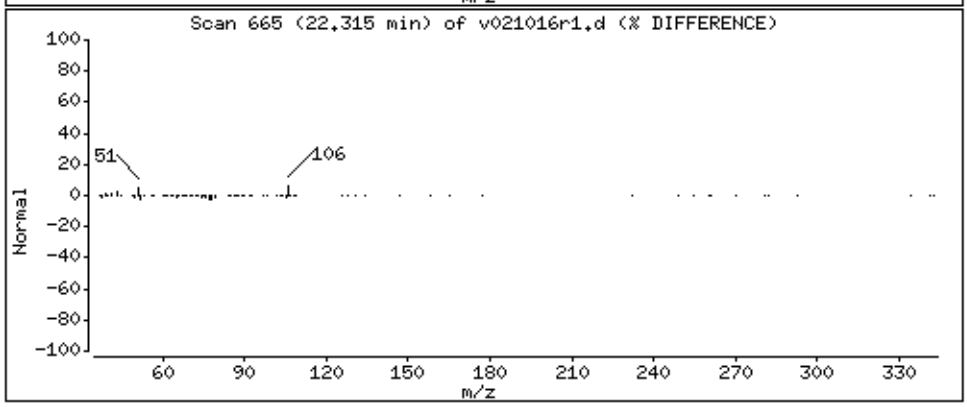
95 Ethyl Benzene

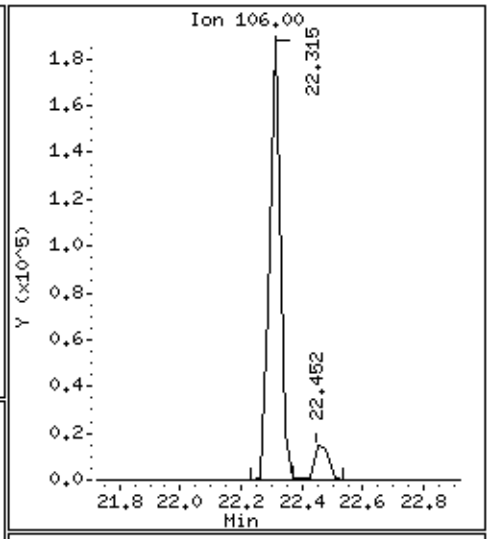
Concentration: 12.503 PPBV

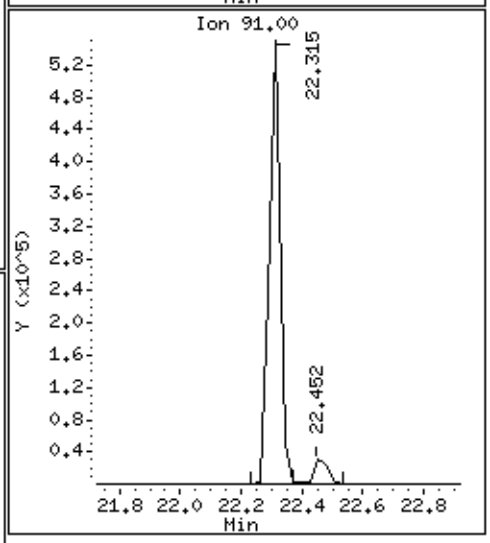












Data File: /chem/msdv.i/10Feb2015.b/v021016r1.d

Date : 10-FEB-2015 18:45

Client ID:

Instrument: msdv.i

Sample Info: 250mL# 37729

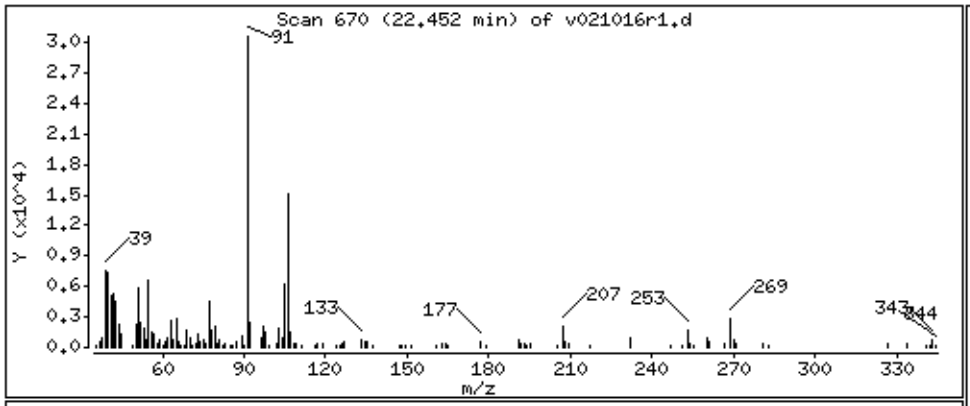
Operator: ea

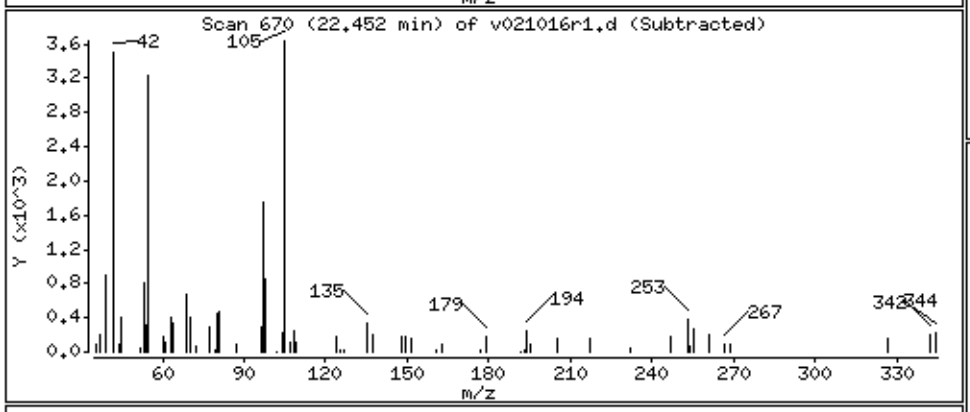
Column phase: RTx-624

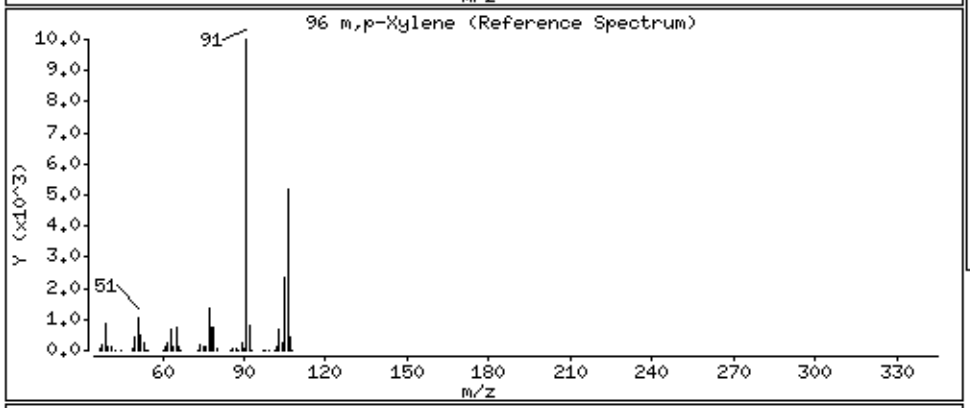
Column diameter: 0.32

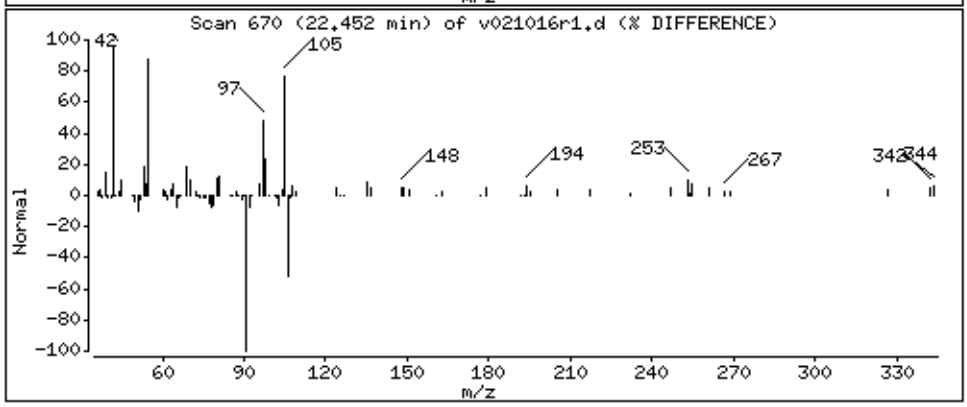
96 m,p-Xylene

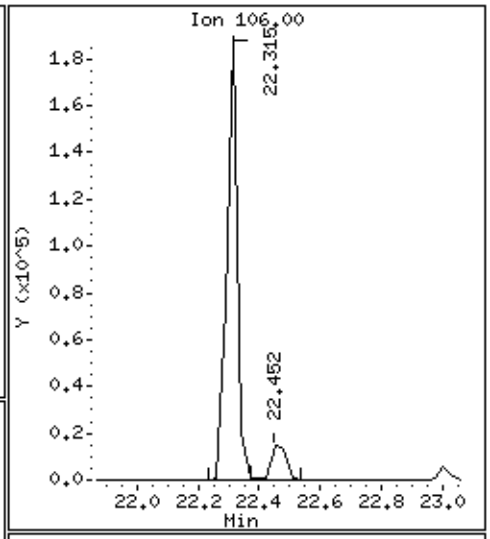
Concentration: 1.362 PPBV

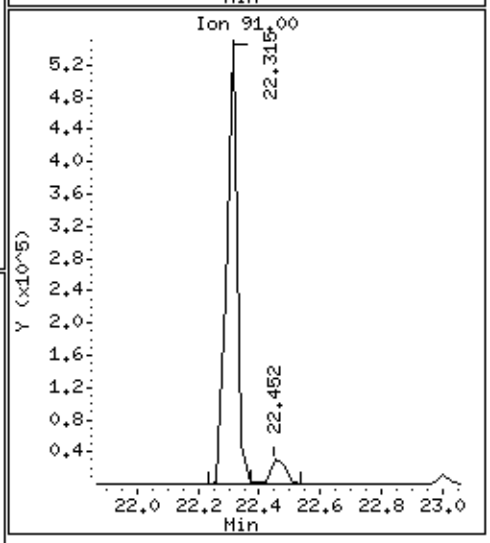












Data File: /chem/msdv.i/10Feb2015.b/v021016r1.d

Date : 10-FEB-2015 18:45

Client ID:

Instrument: msdv.i

Sample Info: 250mL# 37729

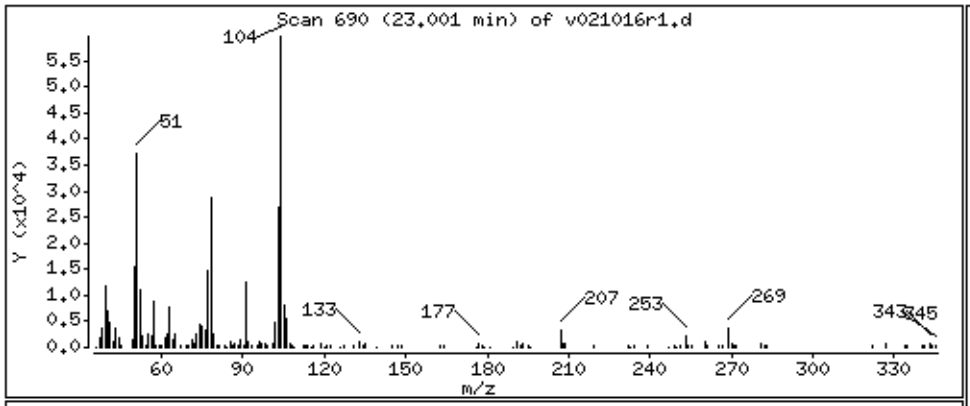
Operator: ea

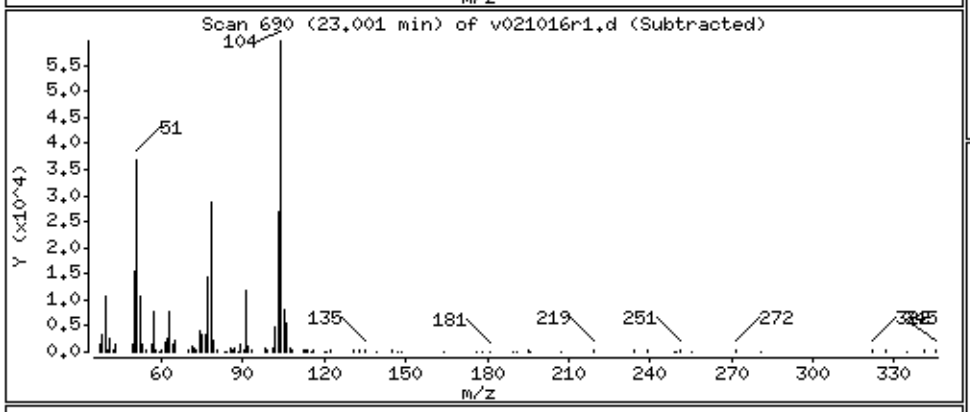
Column phase: RTx-624

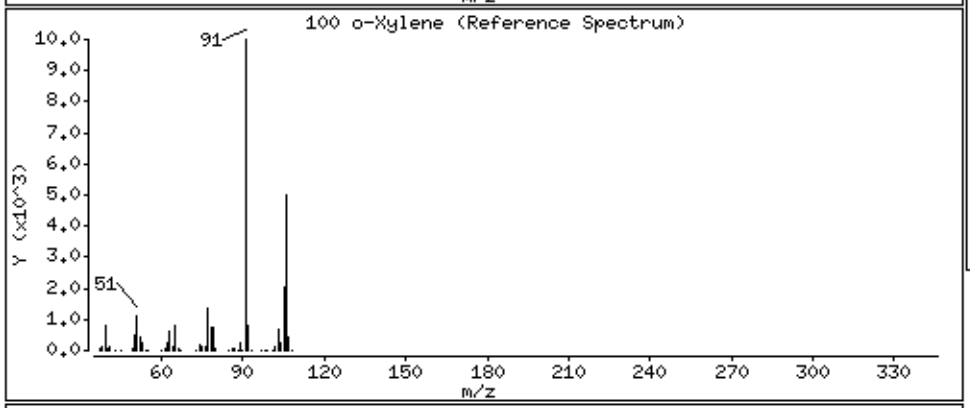
Column diameter: 0.32

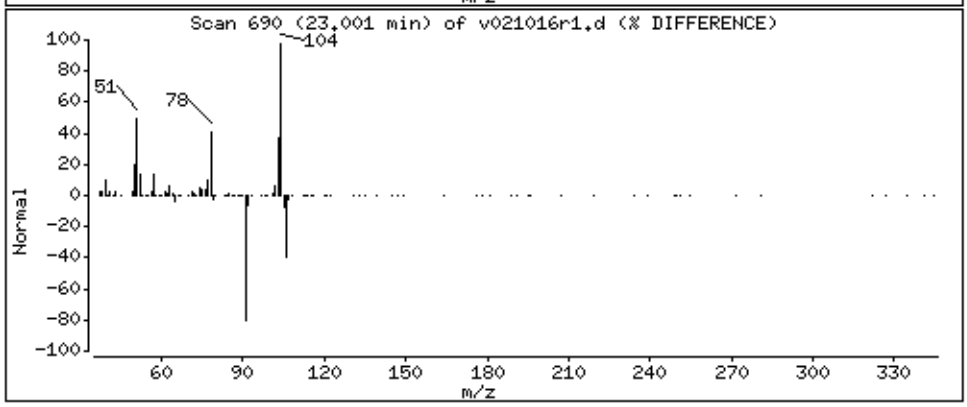
100 o-Xylene

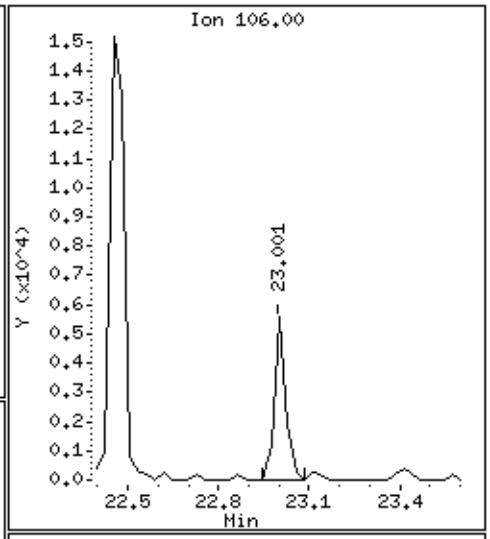
Concentration: 0.4200 PPBV

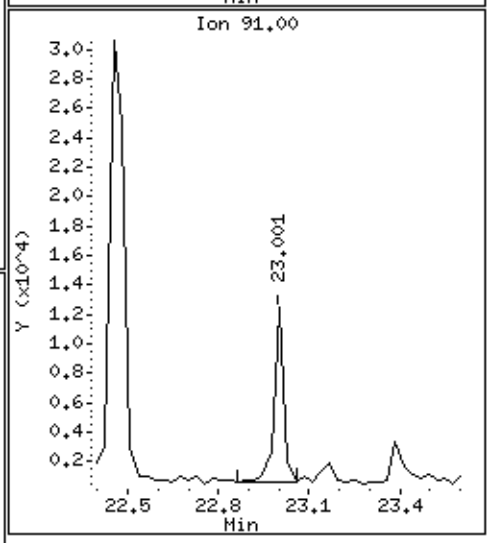












Data File: /chem/msdv.i/10Feb2015.b/v021016r1.d

Date : 10-FEB-2015 18:45

Client ID:

Instrument: msdv.i

Sample Info: 250mL# 37729

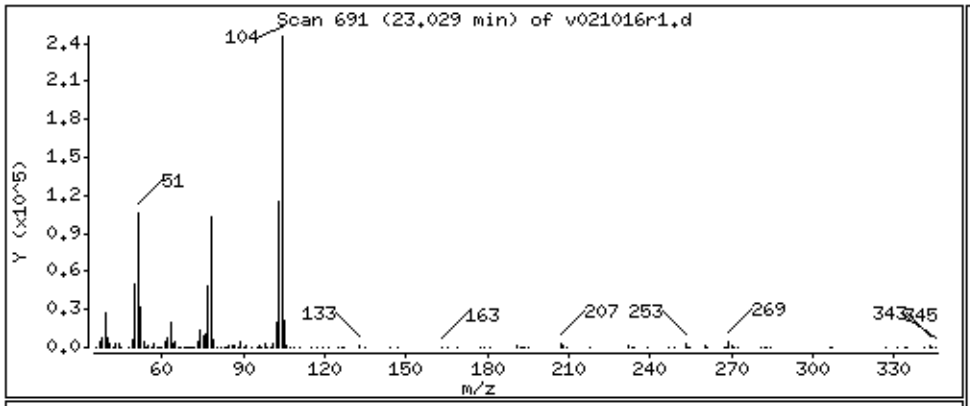
Operator: ea

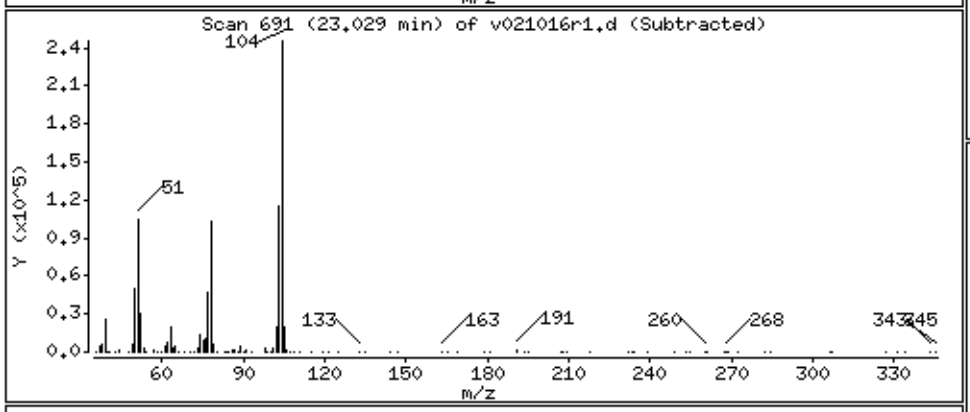
Column phase: RTx-624

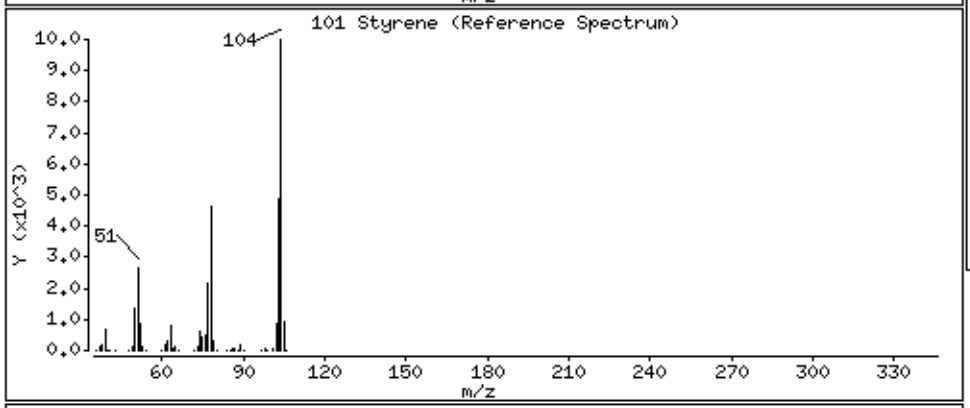
Column diameter: 0.32

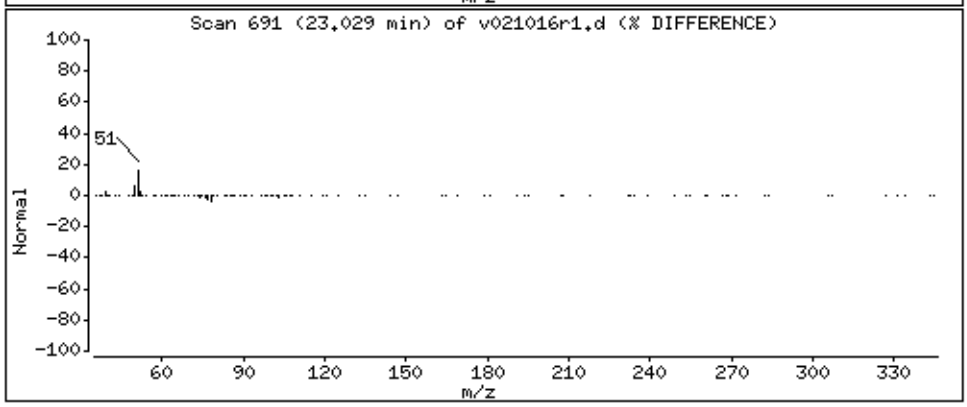
101 Styrene

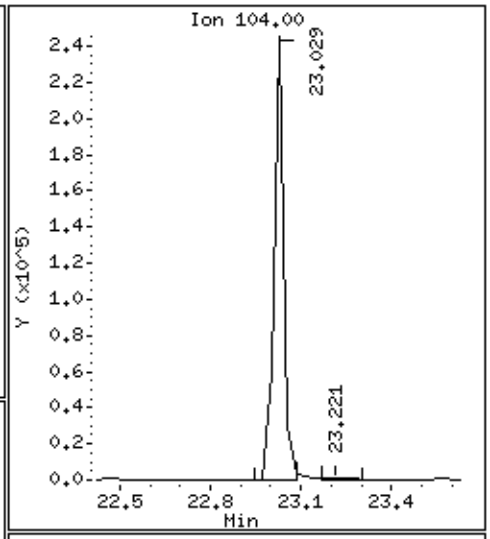
Concentration: 10.681 PPBV

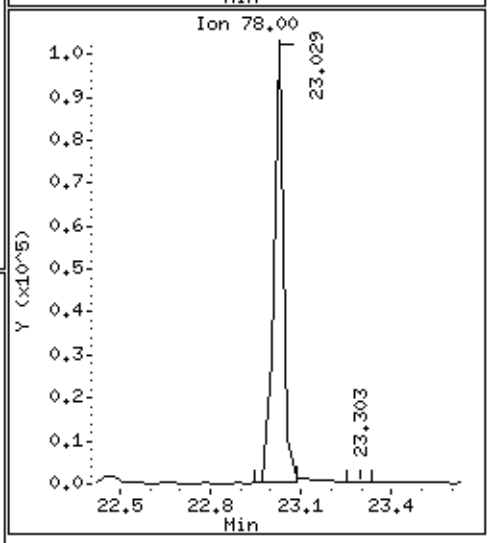












Data File: /chem/msdv.i/10Feb2015.b/v021016r1.d

Date : 10-FEB-2015 18:45

Client ID:

Instrument: msdv.i

Sample Info: 250mL# 37729

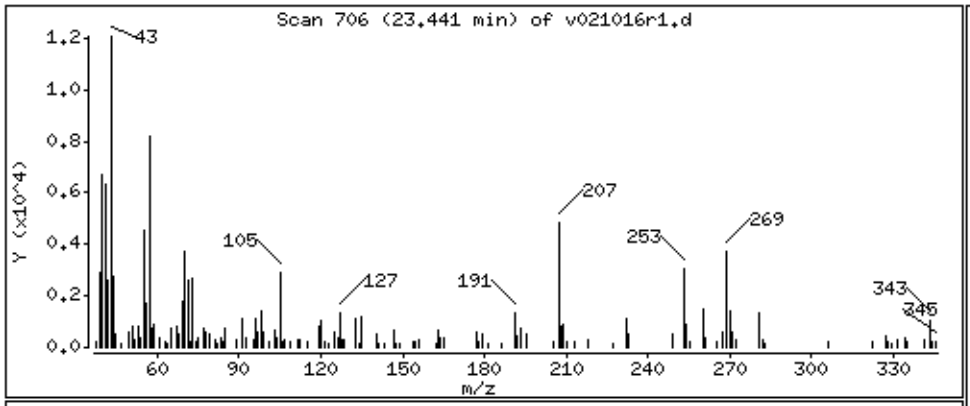
Operator: ea

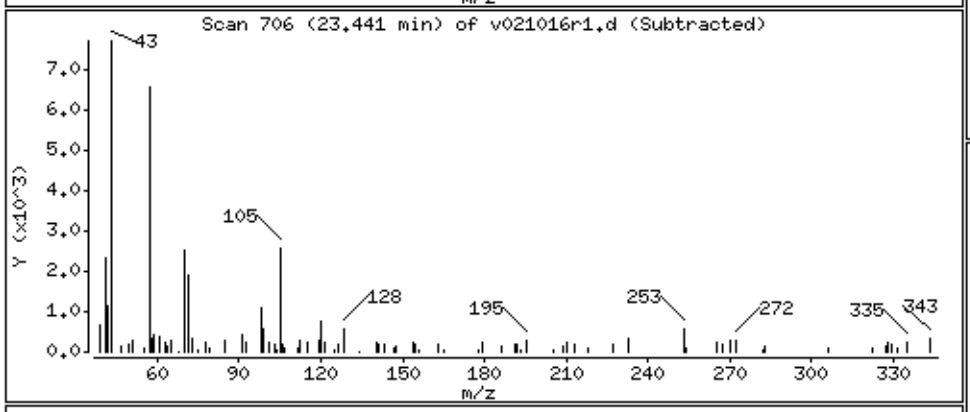
Column phase: RTx-624

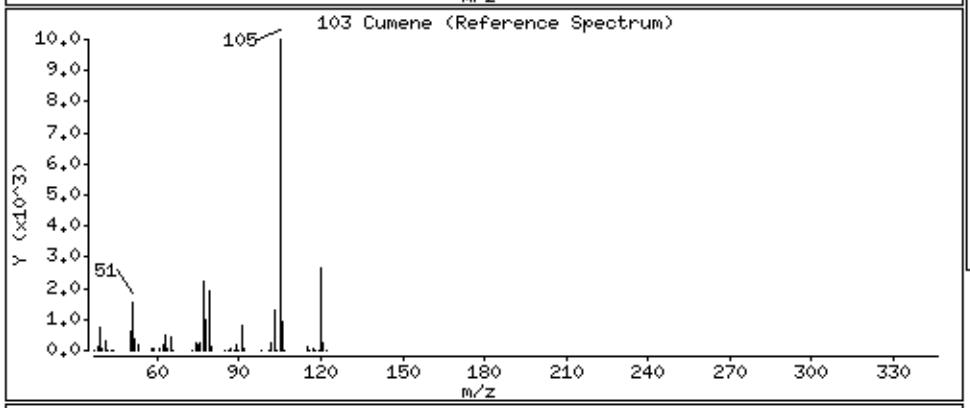
Column diameter: 0.32

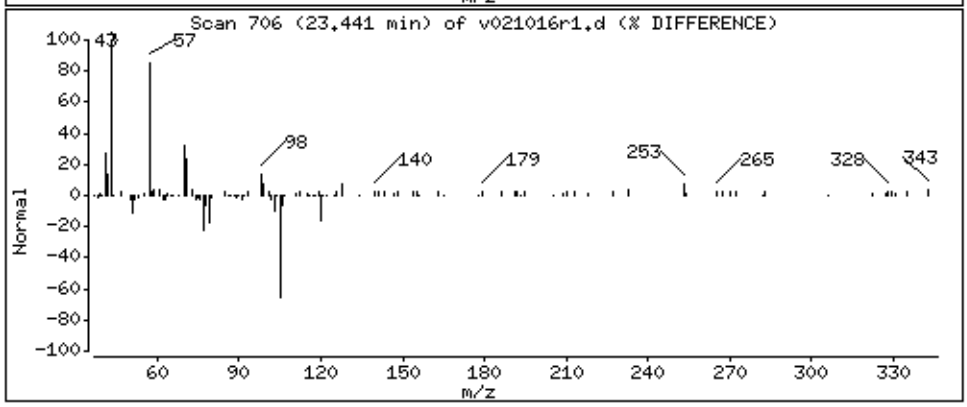
103 Cumene

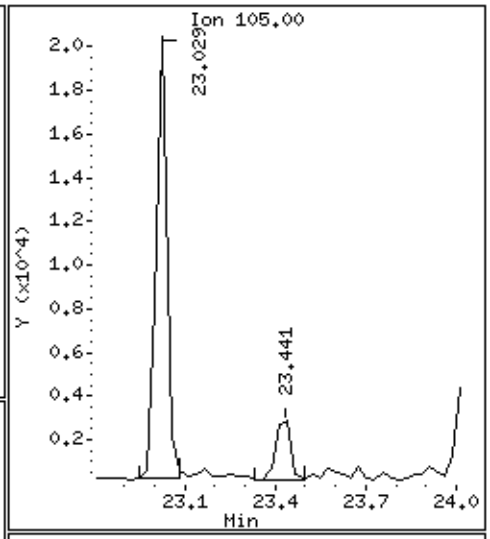
Concentration: 0.1034 PPBV

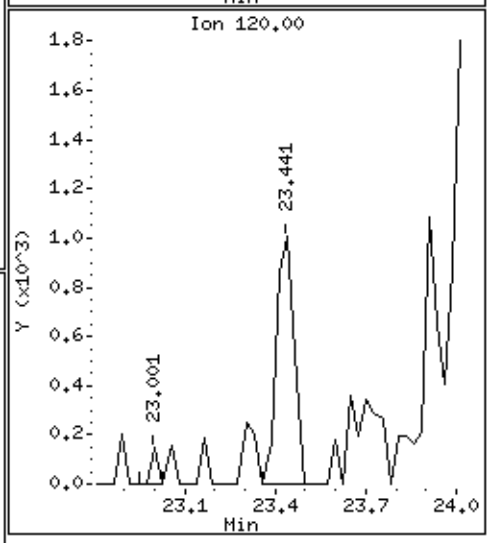












Data File: /chem/msdv.i/10Feb2015.b/v021016r1.d

Date : 10-FEB-2015 18:45

Client ID:

Instrument: msdv.i

Sample Info: 250mL# 37729

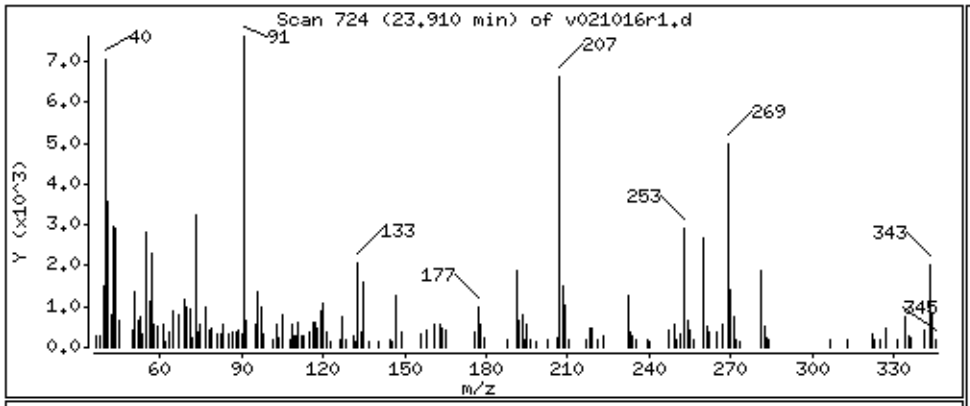
Operator: ea

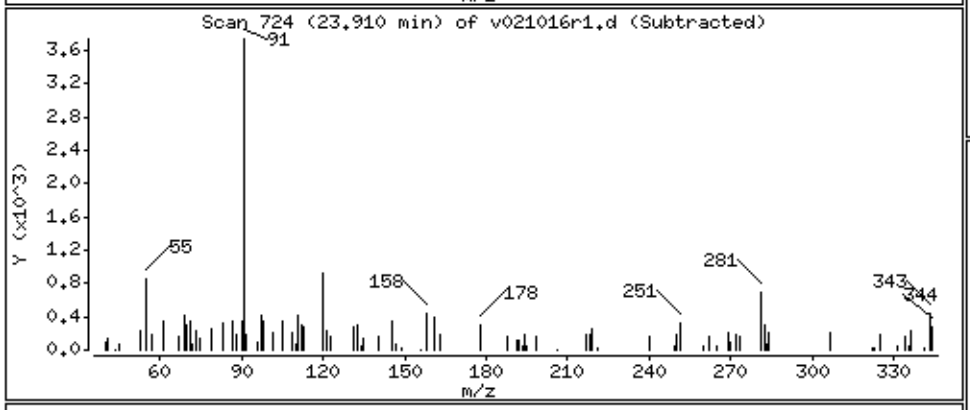
Column phase: RTx-624

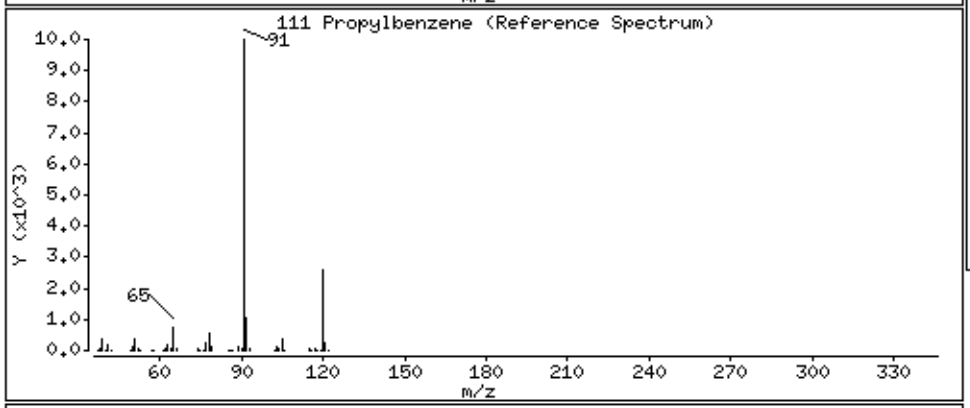
Column diameter: 0.32

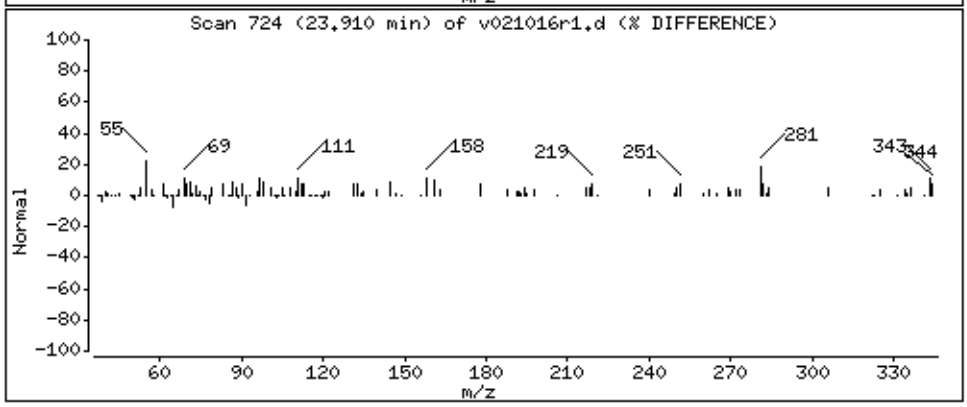
111 Propylbenzene

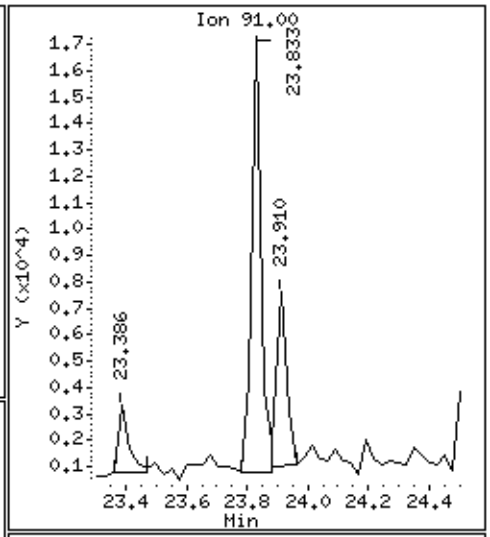
Concentration: 0.1601 PPBV

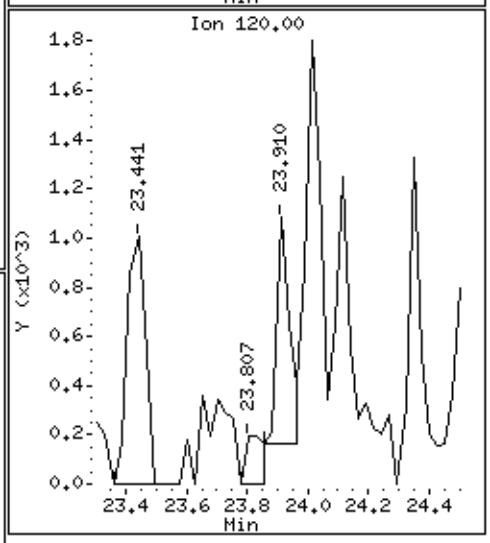












Data File: /chem/msdv.i/10Feb2015.b/v021016r1.d

Date : 10-FEB-2015 18:45

Client ID:

Instrument: msdv.i

Sample Info: 250mL# 37729

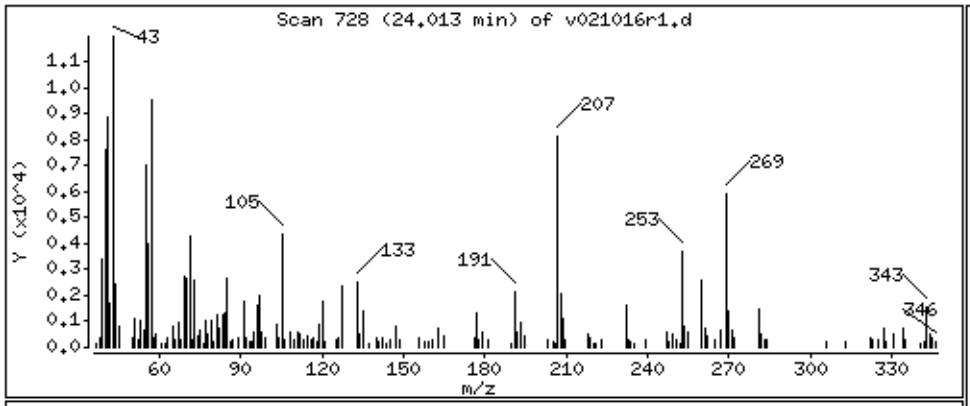
Operator: ea

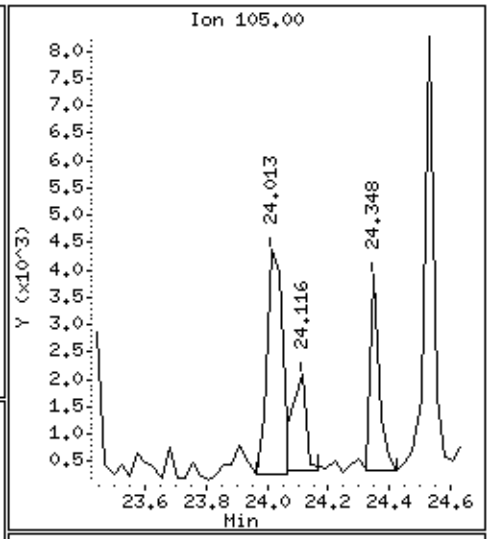
Column phase: RTx-624

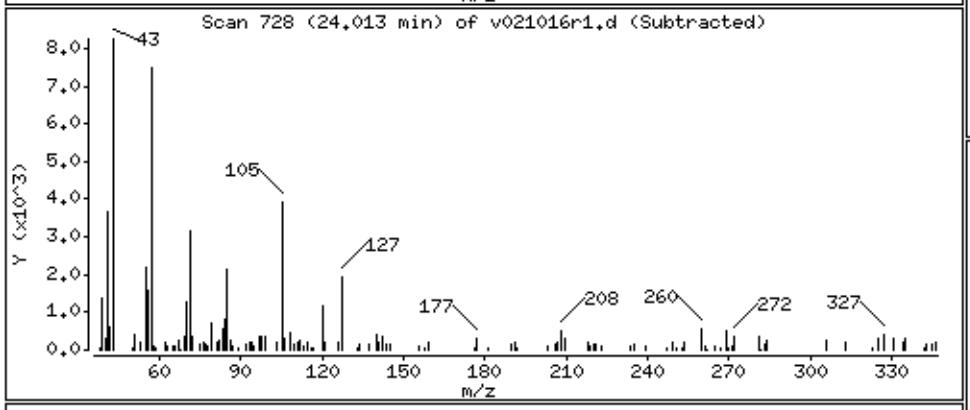
Column diameter: 0.32

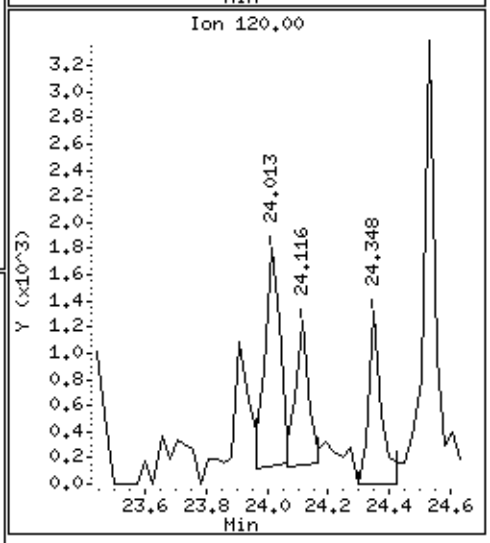
113 4-Ethyltoluene

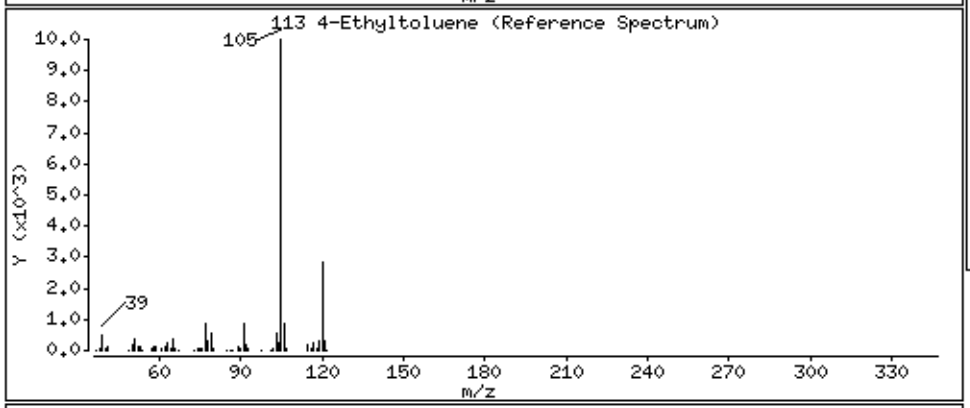
Concentration: 0.2150 PPBV

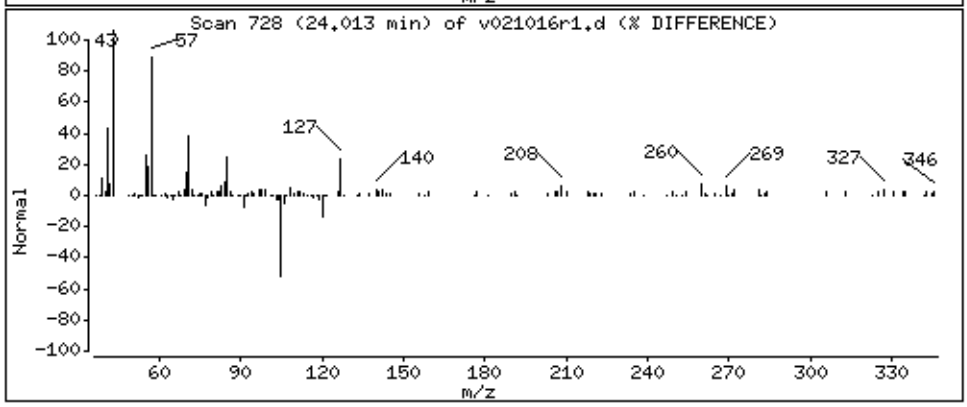












Data File: /chem/msdv.i/10Feb2015.b/v021016r1.d

Date : 10-FEB-2015 18:45

Client ID:

Instrument: msdv.i

Sample Info: 250mL# 37729

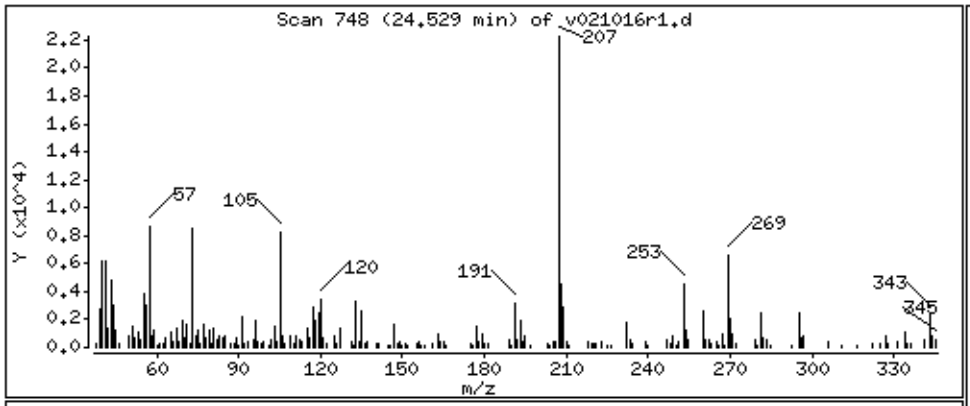
Operator: ea

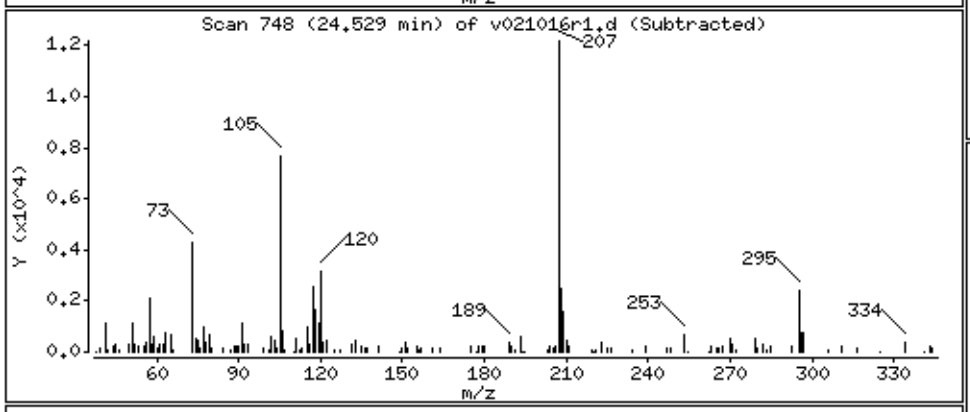
Column phase: RTx-624

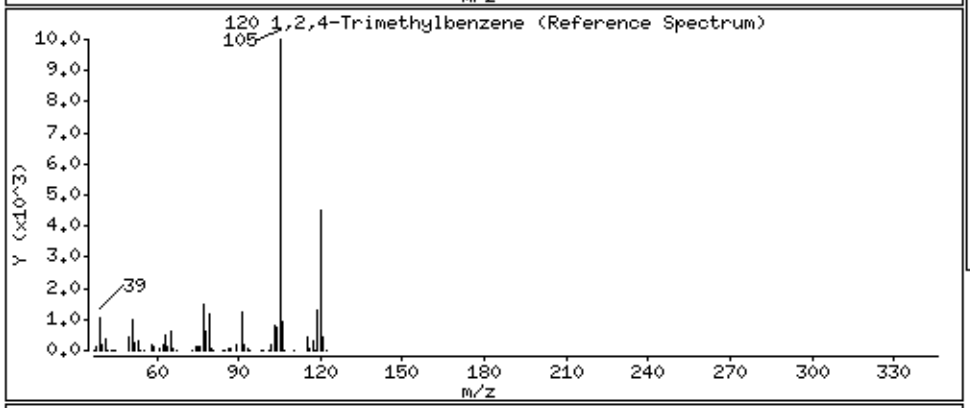
Column diameter: 0.32

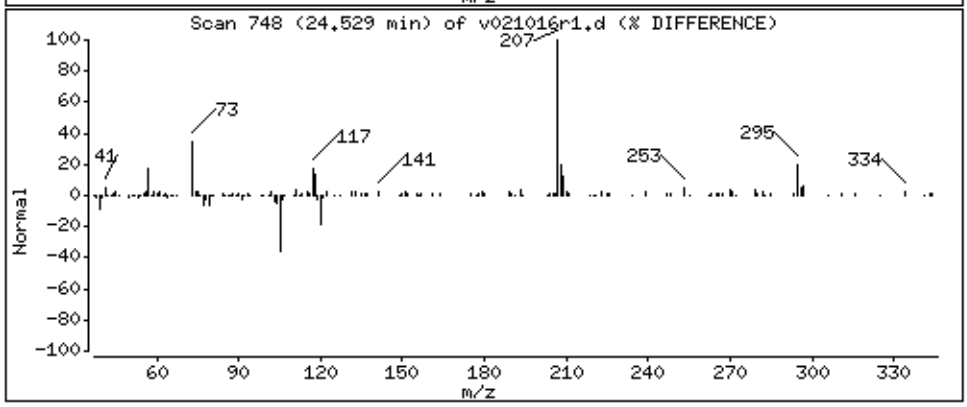
120 1,2,4-Trimethylbenzene

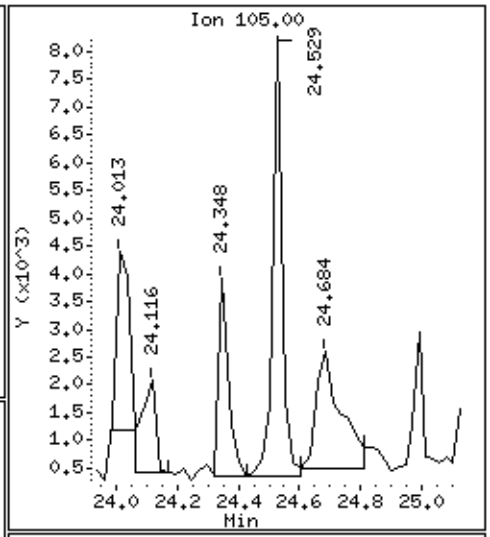
Concentration: 0.2748 PPBV

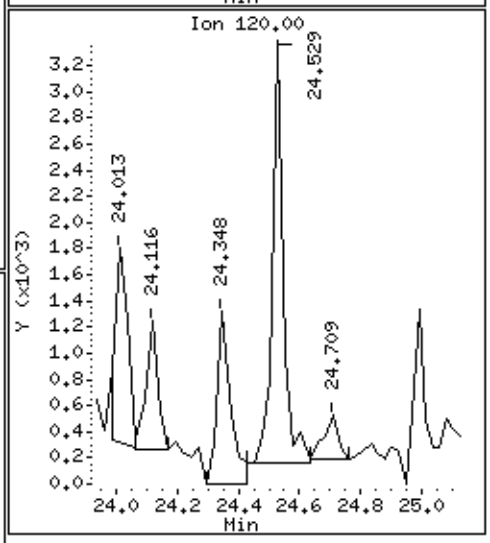












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Summary of Detected Compounds
MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: B6-3SSD

Lab ID#: 1502113AR1-03A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.23	0.47	1.1	2.3
Chloromethane	1.1	0.74 J	2.4	1.5 J
Freon 11	0.23	0.21 J	1.3	1.2 J
Ethanol	1.1	16 J0	2.2	30 J0
Freon 113	0.23	0.059 J	1.8	0.45 J
Acetone	1.1	76	2.7	180
2-Propanol	1.1	61	2.8	150
Methylene Chloride	0.46	1.0	1.6	3.6
Methyl tert-butyl ether	0.23	2.4	0.82	8.7
trans-1,2-Dichloroethene	0.23	0.063 J	0.91	0.25 J
Hexane	0.23	0.51	0.81	1.8
2-Butanone (Methyl Ethyl Ketone)	1.1	4.8	3.4	14
Tetrahydrofuran	1.1	0.26 J	3.4	0.75 J
Chloroform	0.23	0.050 J	1.1	0.24 J
Cyclohexane	0.23	0.38	0.79	1.3
Carbon Tetrachloride	0.23	0.078 J	1.4	0.49 J
Benzene	0.23	1.2	0.73	3.7
Heptane	0.23	0.28	0.94	1.1
Trichloroethene	0.23	0.16 J	1.2	0.89 J
1,4-Dioxane	0.23	0.22 J	0.82	0.80 J
4-Methyl-2-pentanone	0.23	0.68	0.94	2.8
Toluene	0.23	7.0	0.86	26
2-Hexanone	1.1	0.35 J	4.7	1.4 J
Chlorobenzene	0.23	0.12 J	1.0	0.55 J
Ethyl Benzene	0.23	13	0.99	57
m,p-Xylene	0.23	0.98	0.99	4.2
o-Xylene	0.23	0.43	0.99	1.9
Styrene	0.23	12	0.98	49
Cumene	0.23	0.060 J	1.1	0.29 J
Propylbenzene	0.23	0.057 J	1.1	0.28 J
4-Ethyltoluene	0.23	0.21 J	1.1	1.0 J
1,2,4-Trimethylbenzene	0.23	0.24	1.1	1.2

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Client Sample ID: B6-3SSD

Lab ID#: 1502113AR1-03A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**v021018r1**	**Date of Collection:**	**2/4/15 4:37:00 PM**
Dil. Factor:	**2.29**	**Date of Analysis:**	**2/10/15 08:21 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.23	0.47	1.1	2.3
Freon 114	0.23	Not Detected	1.6	Not Detected
Chloromethane	1.1	0.74 J	2.4	1.5 J
Vinyl Chloride	0.23	Not Detected	0.58	Not Detected
1,3-Butadiene	0.23	Not Detected	0.51	Not Detected
Bromomethane	1.1	Not Detected	4.4	Not Detected
Chloroethane	1.1	Not Detected	3.0	Not Detected
Freon 11	0.23	0.21 J	1.3	1.2 J
Ethanol	1.1	16 J0	2.2	30 J0
Freon 113	0.23	0.059 J	1.8	0.45 J
1,1-Dichloroethene	0.23	Not Detected	0.91	Not Detected
Acetone	1.1	76	2.7	180
2-Propanol	1.1	61	2.8	150
Carbon Disulfide	1.1	Not Detected	3.6	Not Detected
3-Chloropropene	1.1	Not Detected	3.6	Not Detected
Methylene Chloride	0.46	1.0	1.6	3.6
Methyl tert-butyl ether	0.23	2.4	0.82	8.7
trans-1,2-Dichloroethene	0.23	0.063 J	0.91	0.25 J
Hexane	0.23	0.51	0.81	1.8
1,1-Dichloroethane	0.23	Not Detected	0.93	Not Detected
2-Butanone (Methyl Ethyl Ketone)	1.1	4.8	3.4	14
cis-1,2-Dichloroethene	0.23	Not Detected	0.91	Not Detected
Tetrahydrofuran	1.1	0.26 J	3.4	0.75 J
Chloroform	0.23	0.050 J	1.1	0.24 J
1,1,1-Trichloroethane	0.23	Not Detected	1.2	Not Detected
Cyclohexane	0.23	0.38	0.79	1.3
Carbon Tetrachloride	0.23	0.078 J	1.4	0.49 J
2,2,4-Trimethylpentane	1.1	Not Detected	5.3	Not Detected
Benzene	0.23	1.2	0.73	3.7
1,2-Dichloroethane	0.23	Not Detected	0.93	Not Detected
Heptane	0.23	0.28	0.94	1.1
Trichloroethene	0.23	0.16 J	1.2	0.89 J
1,2-Dichloropropane	0.23	Not Detected	1.0	Not Detected
1,4-Dioxane	0.23	0.22 J	0.82	0.80 J
Bromodichloromethane	0.23	Not Detected	1.5	Not Detected
cis-1,3-Dichloropropene	0.23	Not Detected	1.0	Not Detected
4-Methyl-2-pentanone	0.23	0.68	0.94	2.8
Toluene	0.23	7.0	0.86	26
trans-1,3-Dichloropropene	0.23	Not Detected	1.0	Not Detected
1,1,2-Trichloroethane	0.23	Not Detected	1.2	Not Detected
Tetrachloroethene	0.23	Not Detected	1.6	Not Detected
2-Hexanone	1.1	0.35 J	4.7	1.4 J

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Client Sample ID: B6-3SSD

Lab ID#: 1502113AR1-03A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**v021018r1**	**Date of Collection:**	**2/4/15 4:37:00 PM**
Dil. Factor:	**2.29**	**Date of Analysis:**	**2/10/15 08:21 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Dibromochloromethane	0.23	Not Detected	2.0	Not Detected
1,2-Dibromoethane (EDB)	0.23	Not Detected	1.8	Not Detected
Chlorobenzene	0.23	0.12 J	1.0	0.55 J
Ethyl Benzene	0.23	13	0.99	57
m,p-Xylene	0.23	0.98	0.99	4.2
o-Xylene	0.23	0.43	0.99	1.9
Styrene	0.23	12	0.98	49
Bromoform	0.23	Not Detected	2.4	Not Detected
Cumene	0.23	0.060 J	1.1	0.29 J
1,1,2,2-Tetrachloroethane	0.23	Not Detected	1.6	Not Detected
Propylbenzene	0.23	0.057 J	1.1	0.28 J
4-Ethyltoluene	0.23	0.21 J	1.1	1.0 J
1,3,5-Trimethylbenzene	0.23	Not Detected	1.1	Not Detected
1,2,4-Trimethylbenzene	0.23	0.24	1.1	1.2
1,3-Dichlorobenzene	0.23	Not Detected	1.4	Not Detected
1,4-Dichlorobenzene	0.23	Not Detected	1.4	Not Detected
alpha-Chlorotoluene	1.1	Not Detected	5.9	Not Detected
1,2-Dichlorobenzene	0.23	Not Detected	1.4	Not Detected
1,2,4-Trichlorobenzene	1.1	Not Detected	8.5	Not Detected
Hexachlorobutadiene	1.1	Not Detected UJ	12	Not Detected UJ
Naphthalene	1.1	Not Detected	6.0	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: 1 Liter Summa Canister (100% Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	104	70-130
Toluene-d8	97	70-130
4-Bromofluorobenzene	90	70-130

Eurofins Air Toxics Inc.

TO15/Modified TO-14A

Data file : /chem/msdv.i/10Feb2015.b/v021018r1.d
Lab Smp Id: 1502113Ar1-03A
Inj Date : 10-FEB-2015 20:21
Operator : ea Inst ID: msdv.i
Smp Info : 250mL# 31754
Misc Info : 3.5"Hg -> 15psi
Comment : Low Level GC-MS
Method : /chem/msdv.i/10Feb2015.b/v15l0123c.m
Meth Date : 26-Jun-2015 11:58 dbailey Quant Type: ISTD
Cal Date : 09-FEB-2015 14:14 Cal File: v020912.d
Als bottle: 1
Dil Factor: 2.29000
Integrator: HP RTE Compound Sublist: TO15Nmdl.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	173118	5.00000		80.00- 120.00	100.00
15.933	15.934 (1.000)	128	132596			0.00- 30.00	76.59
15.933	15.934 (1.000)	49	381836			0.00- 30.00	220.56
* 71 1,4-Difluorobenzene						CAS #: 540-36-3	
17.305	17.305 (1.000)	114	760406	5.00000		80.00- 120.00	100.00
17.305	17.305 (1.000)	88	115252			0.00- 30.00	15.16
* 92 Chlorobenzene-d5						CAS #: 3114-55-4	
22.205	22.205 (1.000)	117	561683	5.00000		80.00- 120.00	100.00
22.205	22.205 (1.000)	82	309895			0.00- 30.00	55.17
$ 65 1,2-Dichloroethane-d4						CAS #: 17060-07-0	
16.756	16.756 (1.052)	65	280836	5.17534	5.175	80.00- 120.00	100.00
16.756	16.756 (1.052)	67	133222			25.13- 85.13	47.44
$ 80 Toluene-d8						CAS #: 2037-26-5	
19.856	19.856 (1.147)	98	689972	4.84609	4.846	80.00- 120.00	100.00
19.856	19.856 (1.147)	70	73076			0.00- 40.74	10.59

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

$  80 Toluene-d8 (continued)
 19.856  19.856 (1.147)   100    450986                    36.73-  96.73    65.36
-------------------------------------------------------------------------------
$ 106 Bromofluorobenzene                            CAS #: 460-00-4
 23.678  23.704 (1.066)   174    236248 4.48863    4.489  80.00- 120.00   100.00
 23.678  23.704 (1.066)    95    289131                    95.17- 155.17   122.38
 23.678  23.704 (1.066)   176    223358                    64.74- 124.74    94.54
-------------------------------------------------------------------------------
    4 Dichlorodifluoromethane/Fr12                  CAS #: 75-71-8
  5.315   5.202 (0.334)    85     28547 0.20685   0.4737  80.00- 120.00   100.00
  5.278   5.202 (0.331)    87      5125                     1.73-  61.73    17.95
-------------------------------------------------------------------------------
    8 Chloromethane                                 CAS #: 74-87-3
  7.128   7.053 (0.447)    50     28694 0.32209   0.7376  80.00- 120.00   100.00(a)
  7.090   7.053 (0.445)    52     10780                     1.57-  61.57    37.57
-------------------------------------------------------------------------------
   20 Trichlorofluoromethane/Fr11                   CAS #: 75-69-4
 11.183  11.184 (0.702)   101     13519 0.09190   0.2104  80.00- 120.00   100.00(a)
 11.183  11.184 (0.702)   103      8242                    34.40-  94.40    60.97
-------------------------------------------------------------------------------
   24 Ethanol                                       CAS #: 64-17-5
 12.101  12.102 (0.759)    45    221198 6.99319   16.014  80.00- 120.00   100.00
 12.101  12.102 (0.759)    46     90304                     9.93-  69.93    40.83
 12.101  12.102 (0.759)    43     45945                     0.00-  50.31    20.77
-------------------------------------------------------------------------------
   28 Freon 113                                     CAS #: 76-13-1
 12.568  12.568 (0.789)   151      2722 0.02585  0.05920  80.00- 120.00   100.00(a)
 12.568  12.568 (0.789)   153      1900                    33.38-  93.38    69.79
 12.568  12.568 (0.789)   101      3170                    85.19- 145.19   116.46
-------------------------------------------------------------------------------
   31 Acetone                                       CAS #: 67-64-1
 12.816  12.816 (0.804)    58   1333672 33.3640   76.404  80.00- 120.00   100.00
 12.816  12.816 (0.804)    43   5172346                  326.03- 386.03   387.83
-------------------------------------------------------------------------------
   34 2-Propanol                                    CAS #: 67-63-0
 13.173  13.173 (0.827)    45   4225852 26.7099   61.166  80.00- 120.00   100.00
 13.173  13.173 (0.827)    43    743490                     0.00-  47.97    17.59
 13.173  13.173 (0.827)    59    138237                     0.00-  33.25     3.27
-------------------------------------------------------------------------------
   37 Methylene Chloride                            CAS #: 75-09-2
 13.640  13.640 (0.856)    84     22508 0.45599    1.044  80.00- 120.00   100.00
 13.640  13.640 (0.856)    49     51476                   198.57- 258.57   228.69
 13.640  13.640 (0.856)    51     16173                    41.48- 101.48    71.85
-------------------------------------------------------------------------------
   39 MTBE                                          CAS #: 1634-04-4
 13.996  13.997 (0.878)    73    162038 1.04984    2.404  80.00- 120.00   100.00
```

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

   39 MTBE (continued)
 13.942  13.997 (0.875)    57    150647                     6.35-  66.35    92.97
 13.996  13.997 (0.878)    41    121954                     5.74-  65.74    75.26
-------------------------------------------------------------------------------
   40 trans-1,2-Dichloroethene                      CAS #: 156-60-5
 14.051  14.052 (0.882)    98       998 0.02742  0.06280  80.00- 120.00   100.00(a)
 14.051  14.052 (0.882)    61      3320                  272.66- 332.66   332.65
 14.051  14.052 (0.882)    96      4649                  128.53- 188.53   465.79
-------------------------------------------------------------------------------
   43 Hexane                                        CAS #: 110-54-3
 14.381  14.381 (0.903)    57     31117 0.22291   0.5105  80.00- 120.00   100.00
 14.381  14.381 (0.903)    43     37225                   41.32- 101.32   119.63
 14.381  14.381 (0.903)    86      2477                    0.00-  40.13     7.96
-------------------------------------------------------------------------------
   51 2-Butanone                                    CAS #: 78-93-3
 15.592  15.572 (0.979)    72     56855 2.09811    4.805  80.00- 120.00   100.00
 15.592  15.572 (0.979)    43    507175                  687.17- 747.17   892.04
 15.592  15.572 (0.979)    57     32845                   23.39-  83.39    57.77
-------------------------------------------------------------------------------
   53 Tetrahydrofuran                               CAS #: 109-99-9
 15.933  15.934 (1.000)    42     13216 0.11175   0.2559  80.00- 120.00   100.00(a)
 15.933  15.934 (1.000)    71      3619                    0.00-  51.83    27.39
 15.933  15.934 (1.000)    72      3837                    0.00-  54.16    29.04
-------------------------------------------------------------------------------
   55 Chloroform                                    CAS #: 67-66-3
 15.995  15.995 (1.004)    83      2620 0.02172  0.04975  80.00- 120.00   100.00(a)
 15.995  15.995 (1.004)    85       957                   35.10-  95.10    36.56
-------------------------------------------------------------------------------
   57 Cyclohexane                                   CAS #: 110-82-7
 16.242  16.242 (1.019)    84     13617 0.16614   0.3805  80.00- 120.00   100.00
 16.272  16.242 (1.021)    56     32042                  160.85- 220.85   235.31
 16.242  16.242 (1.019)    41     19256                   75.49- 135.49   141.41
-------------------------------------------------------------------------------
   59 Carbon Tetrachloride                          CAS #: 56-23-5
 16.457  16.458 (1.033)   119      4161 0.03392  0.07769  80.00- 120.00   100.00(a)
 16.457  16.458 (1.033)   117      3528                   67.96- 127.96    84.80
                   Sum of Peak Concentrations =  0.07769
-------------------------------------------------------------------------------
   64 Benzene                                       CAS #: 71-43-2
 16.756  16.756 (0.968)    78     96035 0.50872    1.165  80.00- 120.00   100.00
 16.756  16.756 (0.968)    77     23470                    0.00-  53.39    24.44
-------------------------------------------------------------------------------
   69 Heptane                                       CAS #: 142-82-5
 16.975  16.975 (0.981)    57     10922 0.12220   0.2798  80.00- 120.00   100.00
 16.975  16.975 (0.981)   100      2577                    0.00-  51.16    23.60
 16.975  16.975 (0.981)    43     25509                  180.62- 240.62   233.55
-------------------------------------------------------------------------------
```

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
72 Trichloroethene					CAS #: 79-01-6		
17.716	17.717 (1.024)	130	6978	0.07243	0.1658	80.00- 120.00	100.00(a)
17.716	17.717 (1.024)	95	5933			62.98- 122.98	85.01
17.716	17.717 (1.024)	97	3586			29.44- 89.44	51.39
75 1,4-Dioxane					CAS #: 123-91-1		
18.266	18.266 (1.056)	88	5203	0.09644	0.2208	80.00- 120.00	100.00(a)
18.266	18.266 (1.056)	58	5966			74.73- 134.73	114.67
18.348	18.266 (1.060)	57	317			4.83- 64.83	6.11
79 4-Methyl-2-pentanone					CAS #: 108-10-1		
19.587	19.588 (1.132)	43	79057	0.29930	0.6854	80.00- 120.00	100.00
19.610	19.588 (1.133)	58	22959			3.17- 63.17	29.04
19.587	19.588 (1.132)	85	6784			0.00- 40.09	8.58
81 Toluene					CAS #: 108-88-3		
19.991	19.991 (1.155)	91	662258	3.07877	7.050	80.00- 120.00	100.00
19.991	19.991 (1.155)	92	391525			28.34- 88.34	59.12
87 2-Hexanone					CAS #: 591-78-6		
21.044	21.045 (0.948)	58	15170	0.15219	0.3485	80.00- 120.00	100.00(a)
21.044	21.045 (0.948)	43	25980			184.27- 244.27	171.25
21.044	21.045 (0.948)	100	1196			0.00- 44.17	7.89
93 Chlorobenzene					CAS #: 108-90-7		
22.233	22.233 (1.001)	112	9143	0.05210	0.1193	80.00- 120.00	100.00(a)
22.233	22.233 (1.001)	114	2414			1.75- 61.75	26.41
22.205	22.233 (1.000)	77	10343			24.73- 84.73	113.11
95 Ethyl Benzene					CAS #: 100-41-4		
22.315	22.315 (1.005)	106	475586	5.73470	13.132	80.00- 120.00	100.00
22.315	22.315 (1.005)	91	1367385			260.31- 320.31	287.52
96 m,p-Xylene					CAS #: 108-38-3		
22.452	22.452 (1.011)	106	35765	0.42699	0.9778	80.00- 120.00	100.00
22.452	22.452 (1.011)	91	76504			157.23- 217.23	213.91
100 o-Xylene					CAS #: 95-47-6		
23.001	23.002 (1.036)	106	14445	0.18759	0.4296	80.00- 120.00	100.00
23.001	23.002 (1.036)	91	25633			167.76- 227.76	177.44
101 Styrene					CAS #: 100-42-5		
23.029	23.029 (1.037)	104	580387	5.05447	11.575	80.00- 120.00	100.00
23.029	23.029 (1.037)	78	238282			17.96- 77.96	41.06
103 Cumene					CAS #: 98-82-8		
23.413	23.413 (1.054)	105	5670	0.02604	0.05964	80.00- 120.00	100.00(a)

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
103 Cumene (continued)							
23.441	23.413 (1.056)	120	2281			0.00- 59.93	40.24
111 Propylbenzene					CAS #: 103-65-1		
23.910	23.910 (1.077)	91	5088	0.02509	0.05746	80.00- 120.00	100.00(a)
23.910	23.910 (1.077)	120	959			0.00- 56.93	18.86
113 4-Ethyltoluene					CAS #: 622-96-8		
24.013	24.039 (1.081)	105	14250	0.09269	0.2123	80.00- 120.00	100.00(a)
24.013	24.039 (1.081)	120	7013			3.10- 63.10	49.21
120 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
24.529	24.529 (1.105)	105	14834	0.10494	0.2403	80.00- 120.00	100.00
24.529	24.529 (1.105)	120	6829			0.00- 30.00	46.04

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: v021018r1.d
Lab Smp Id: 1502113Ar1-03A
Analysis Type: VOA
Quant Type: ISTD
Operator: ea
Method File: /chem/msdv.i/10Feb2015.b/v15l0123c.m
Misc Info: 3.5"Hg -> 15psi

Calibration Date: 10-FEB-2015
Calibration Time: 06:33

Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
54 Bromochloromethan	194946	116968	272924	173118	-11.20
71 1,4-Difluorobenze	822631	493579	1151683	760406	-7.56
92 Chlorobenzene-d5	670659	402395	938923	561683	-16.25

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: 26-Jun-2015 12:14

Eurofins Air Toxics Inc.

RECOVERY REPORT

Client Name:
Client SDG: 10Feb2015
Sample Matrix: GAS
Fraction: VOA
Lab Smp Id: 1502113Ar1-03A
Level: LOW
Operator: ea
Data Type: MS DATA
SampleType: SAMPLE
SpikeList File: AT12.spk
Quant Type: ISTD
Sublist File: TO15Nmdl.sub
Method File: /chem/msdv.i/10Feb2015.b/v15l0123c.m
Misc Info: 3.5"Hg -> 15psi

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 65 1,2-Dichloroethane	5.000	5.175	103.51	70-130
$ 80 Toluene-d8	5.000	4.846	96.92	70-130
$ 106 Bromofluorobenzene	5.000	4.489	89.77	70-130

Data File: /chem/msdv.i/10Feb2015.b/v021018r1.d

Date : 10-FEB-2015 20:21

Client ID:

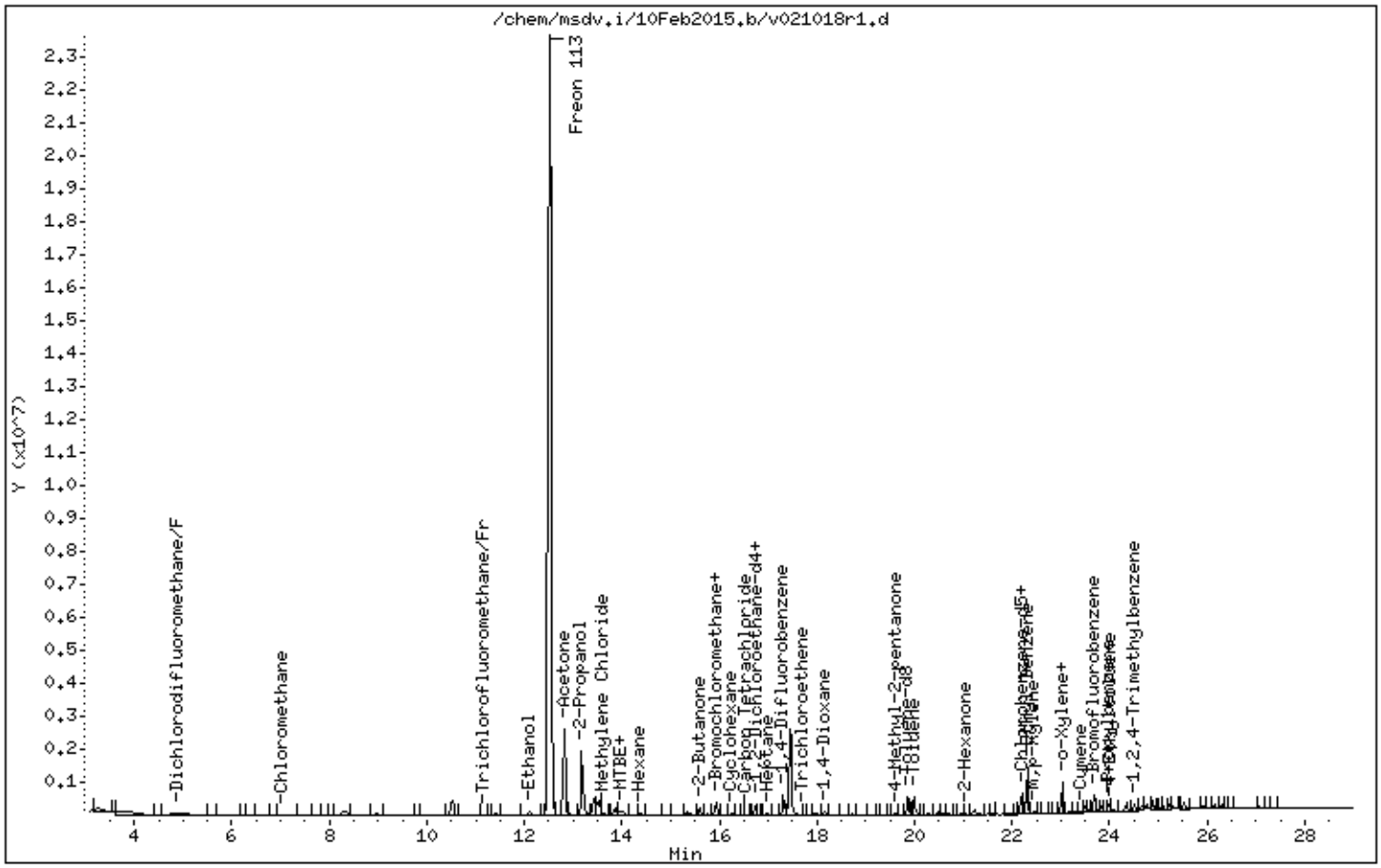
Instrument: msdv.i

Sample Info: 250mL# 31754

Operator: ea

Column phase: RTx-624

Column diameter: 0.32



Data File: /chem/msdv.i/10Feb2015.b/v021018r1.d

Date : 10-FEB-2015 20:21

Client ID:

Instrument: msdv.i

Sample Info: 250mL# 31754

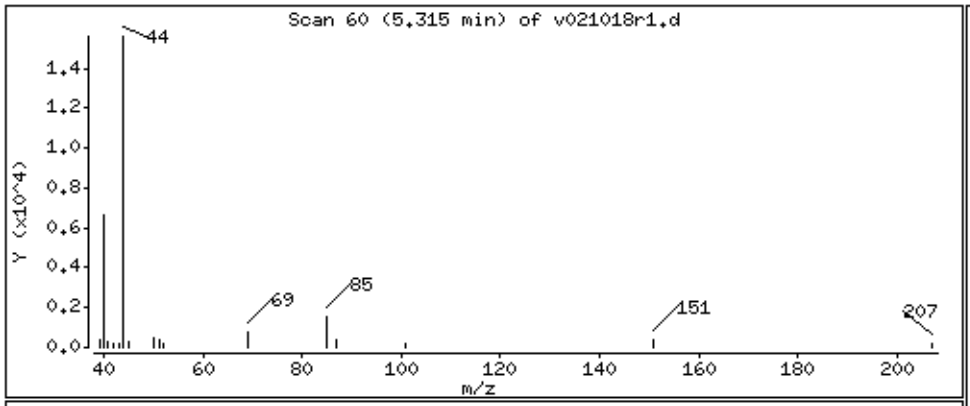
Operator: ea

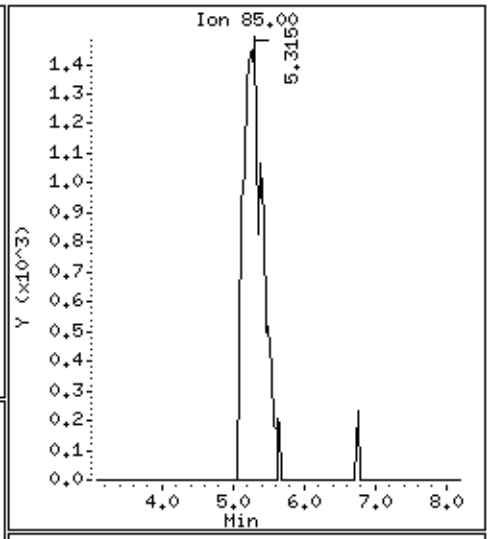
Column phase: RTx-624

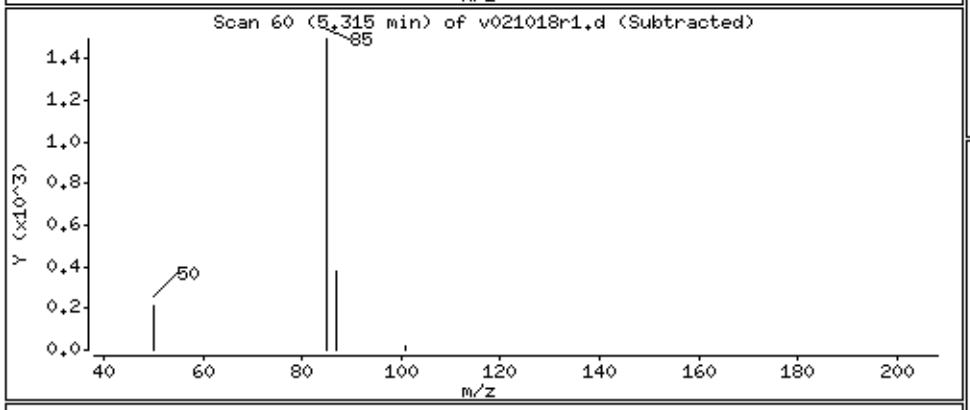
Column diameter: 0.32

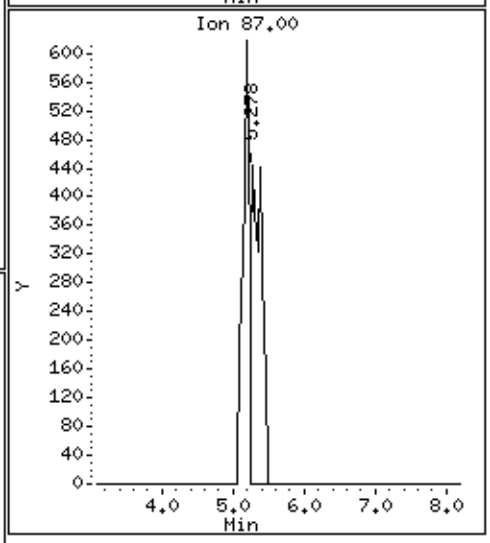
4 Dichlorodifluoromethane/Fr12

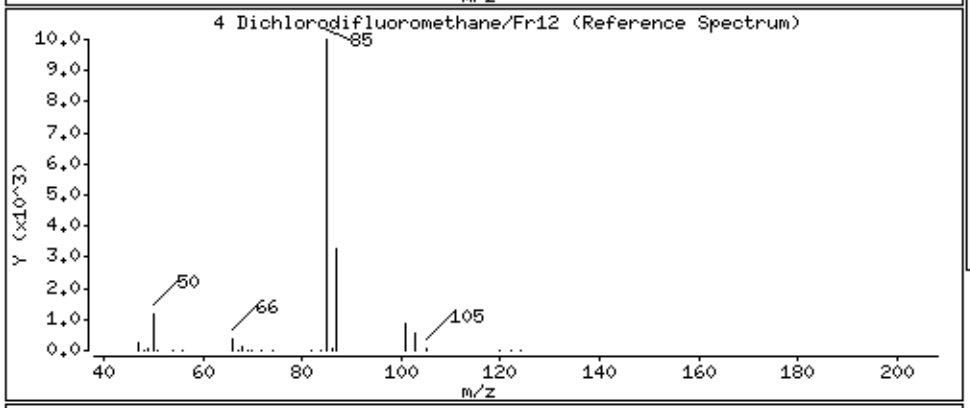
Concentration: 0.4737 PPBV

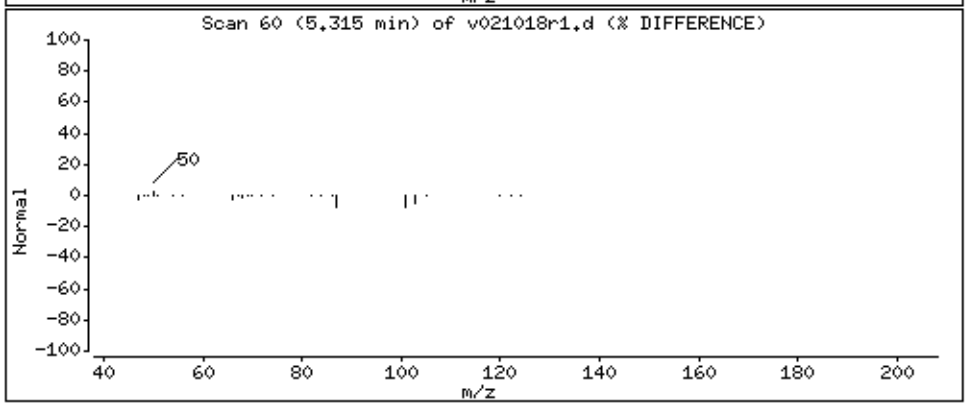












Data File: /chem/msdv.i/10Feb2015.b/v021018r1.d

Date : 10-FEB-2015 20:21

Client ID:

Instrument: msdv.i

Sample Info: 250mL# 31754

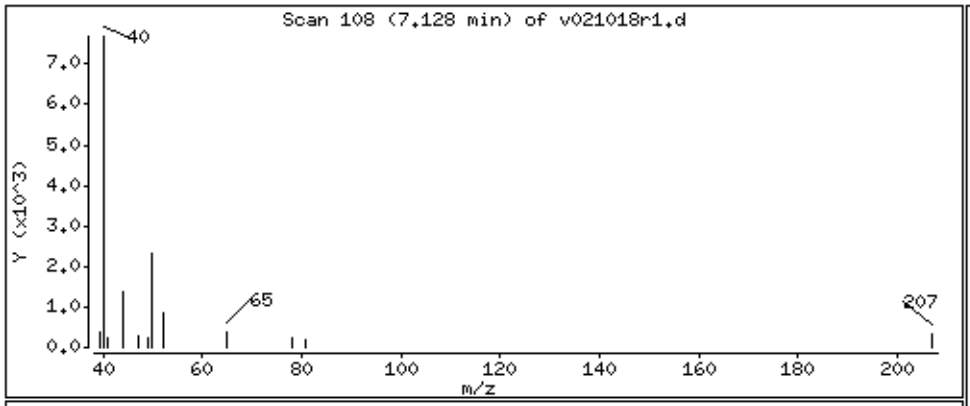
Operator: ea

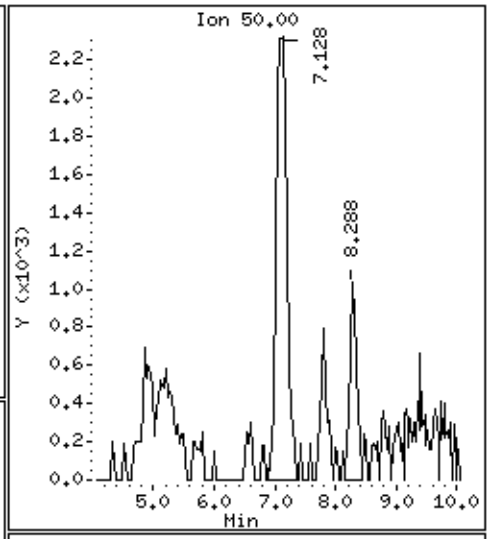
Column phase: RTx-624

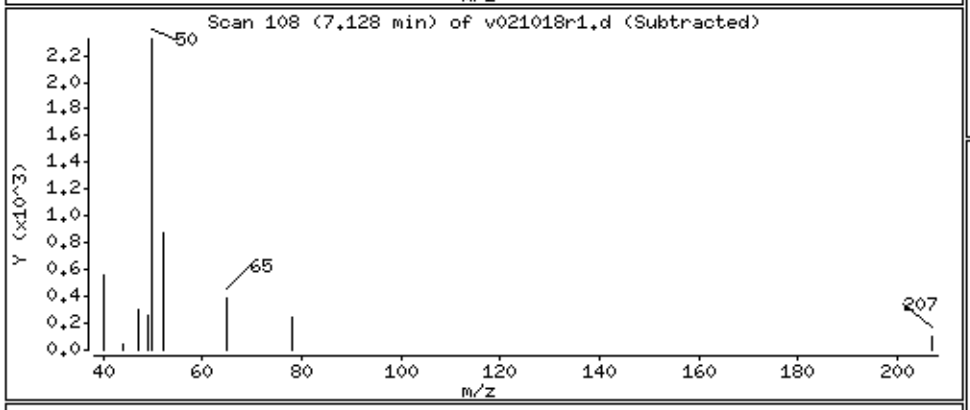
Column diameter: 0.32

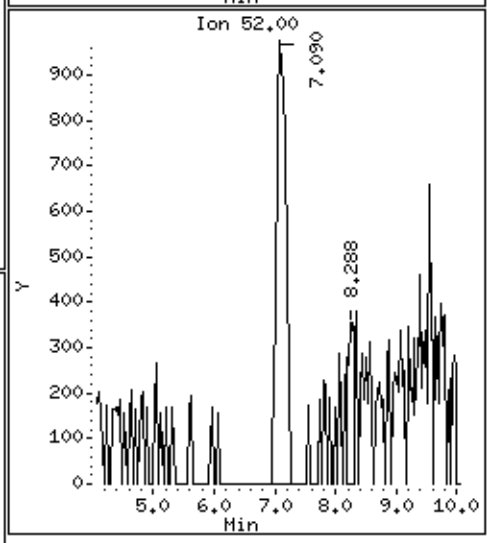
8 Chloromethane

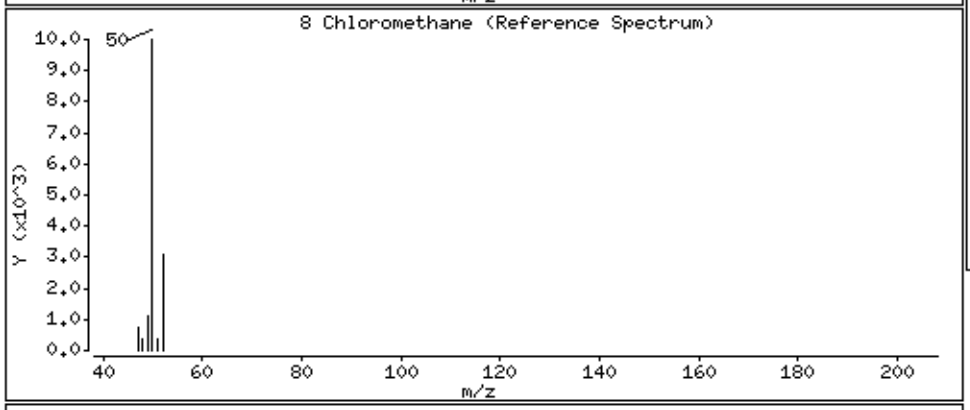
Concentration: 0.7376 PPBV

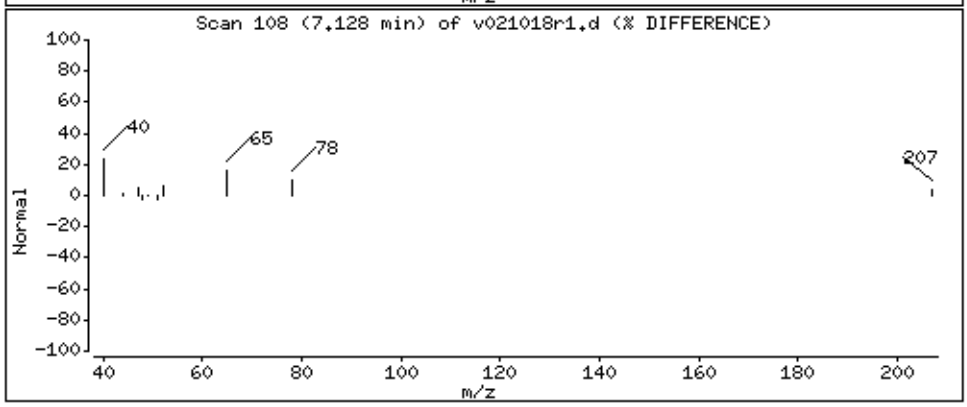












Data File: /chem/msdv.i/10Feb2015.b/v021018r1.d

Date : 10-FEB-2015 20:21

Client ID:

Instrument: msdv.i

Sample Info: 250mL# 31754

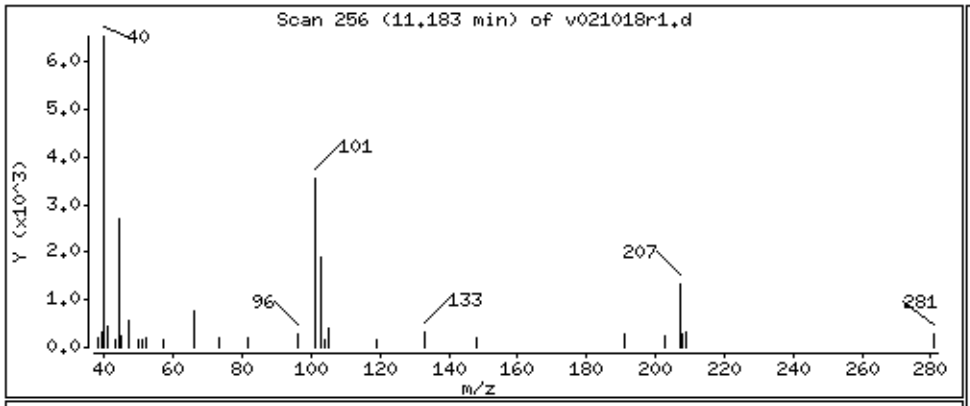
Operator: ea

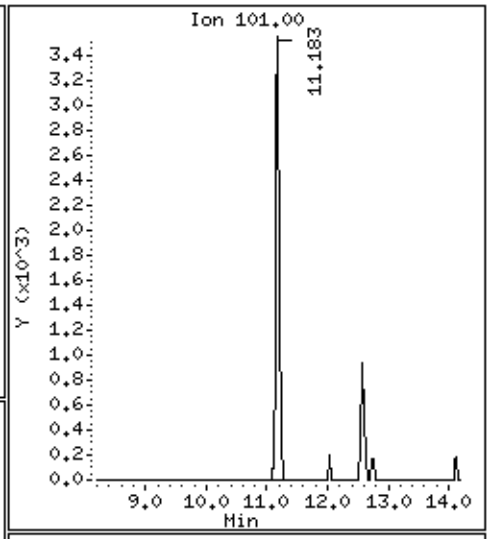
Column phase: RTx-624

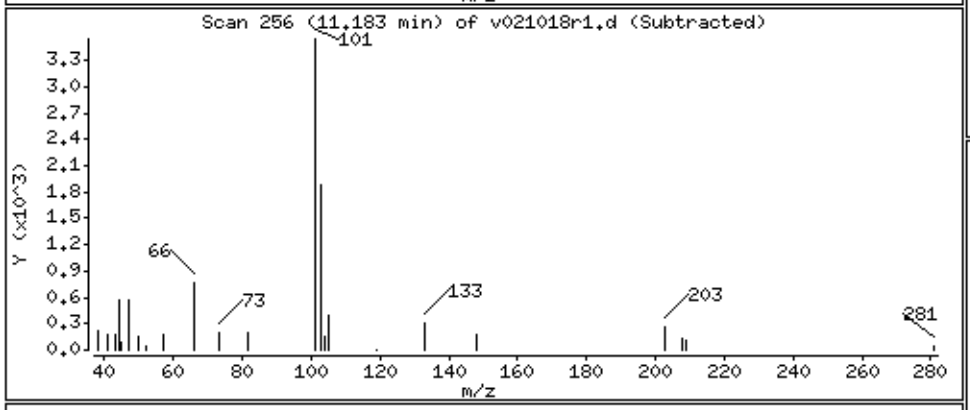
Column diameter: 0.32

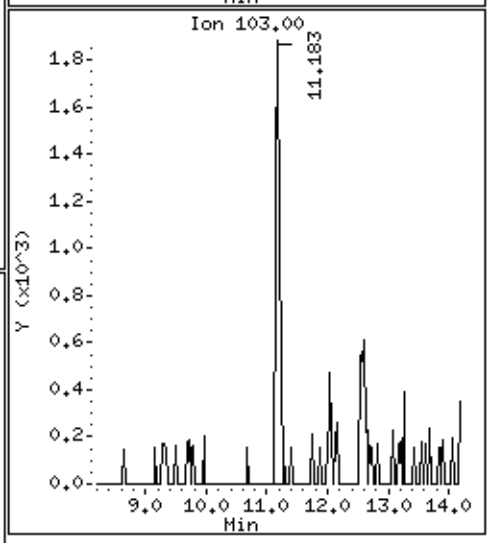
20 Trichlorofluoromethane/Fr11

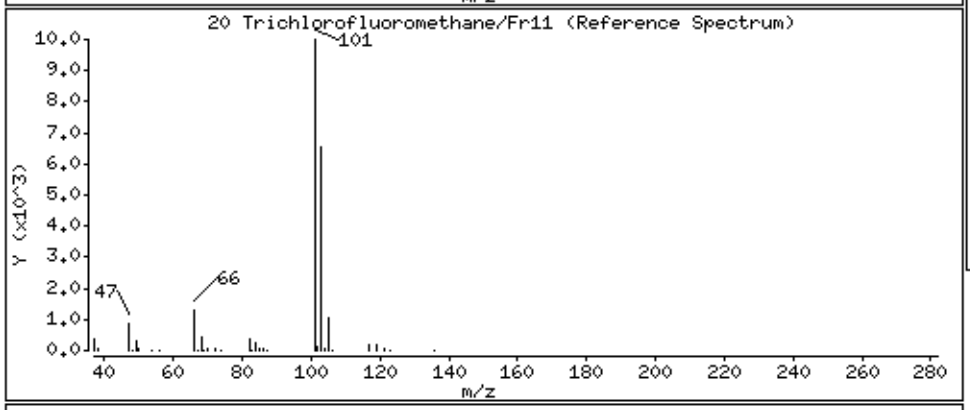
Concentration: 0.2104 PPBV

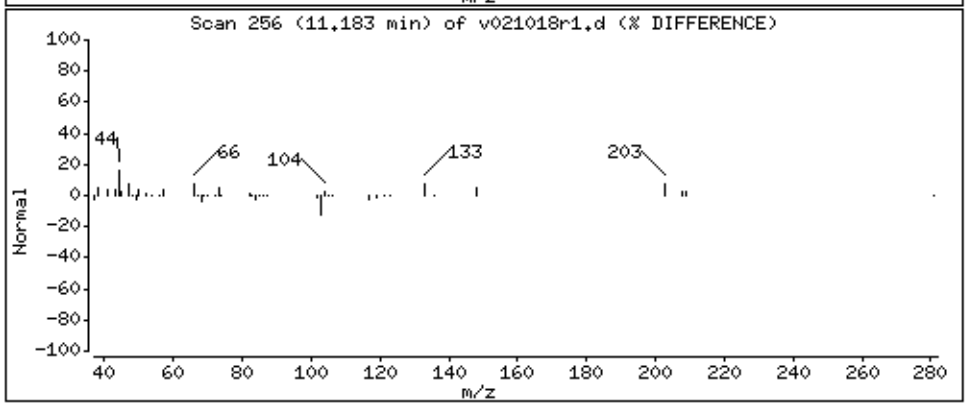












Data File: /chem/msdv.i/10Feb2015.b/v021018r1.d

Date : 10-FEB-2015 20:21

Client ID:

Instrument: msdv.i

Sample Info: 250mL# 31754

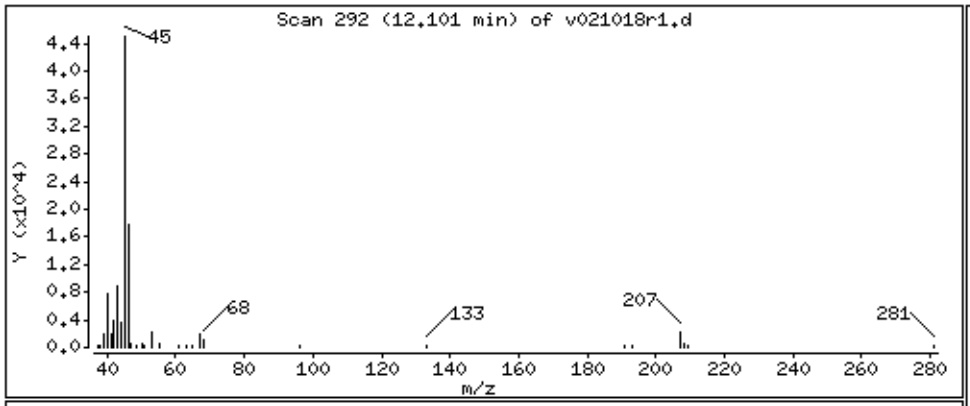
Operator: ea

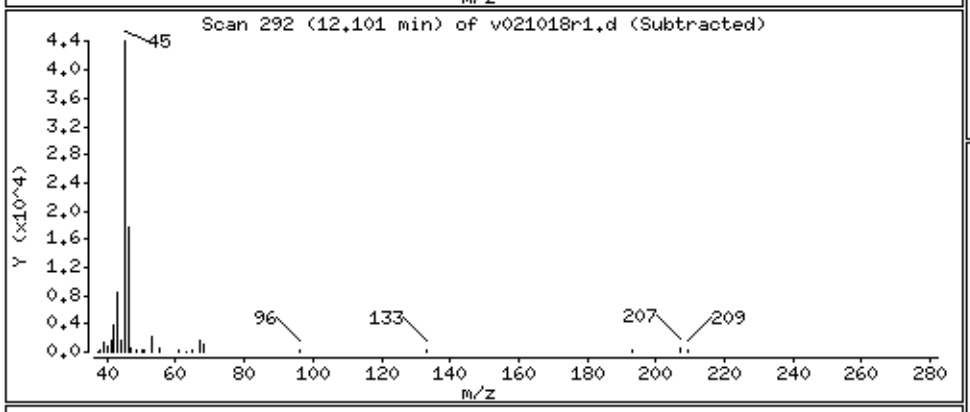
Column phase: RTx-624

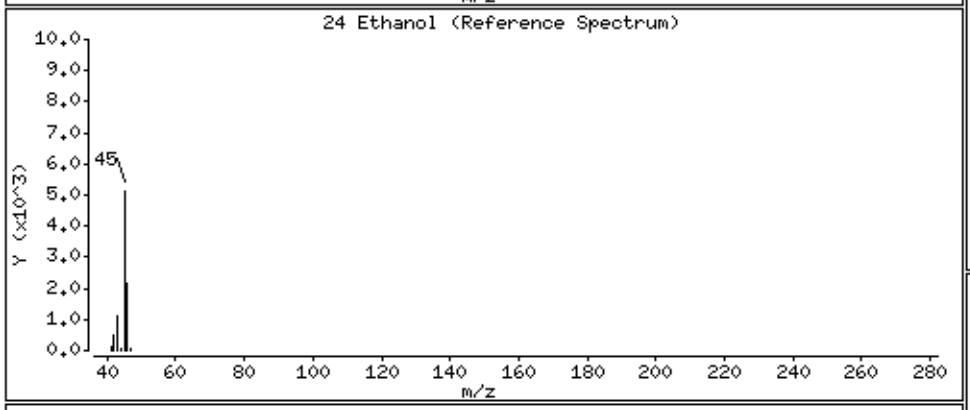
Column diameter: 0.32

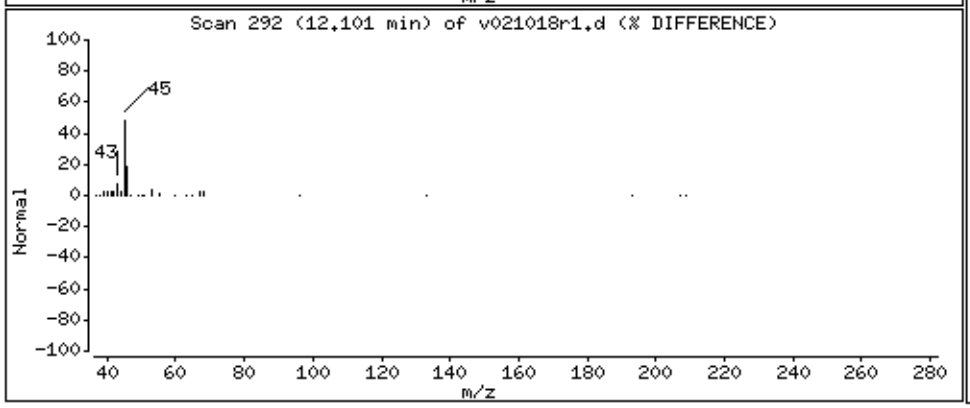
24 Ethanol

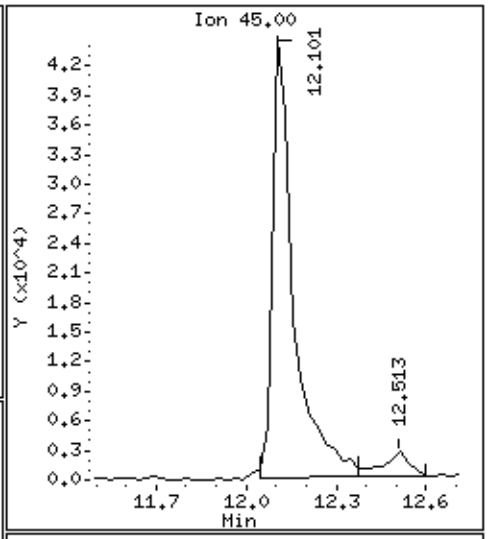
Concentration: 16.014 PPBV

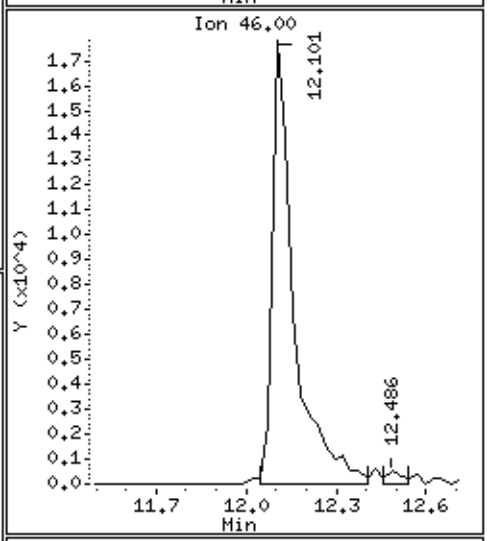


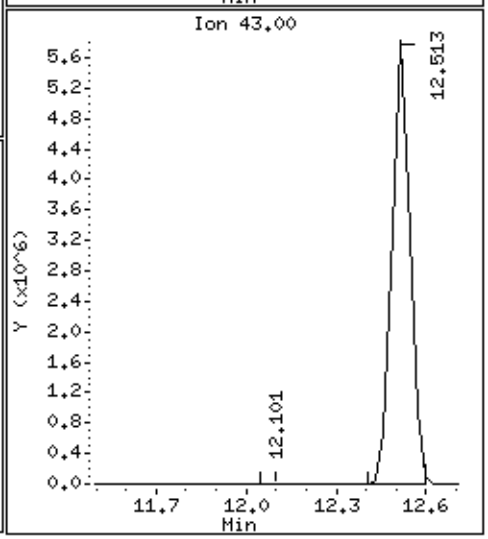












Data File: /chem/msdv.i/10Feb2015.b/v021018r1.d

Date : 10-FEB-2015 20:21

Client ID:

Instrument: msdv.i

Sample Info: 250mL# 31754

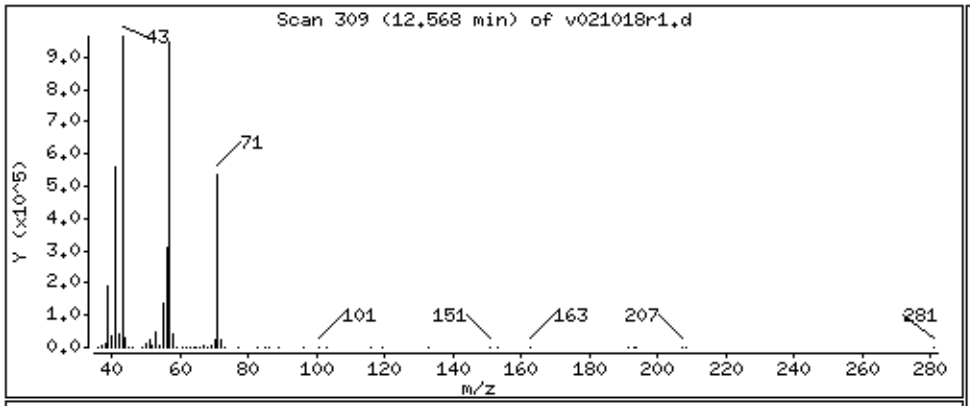
Operator: ea

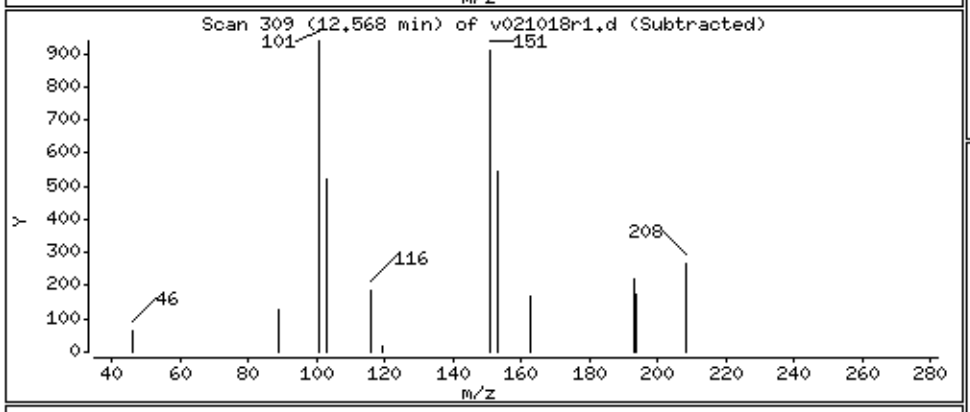
Column phase: RTx-624

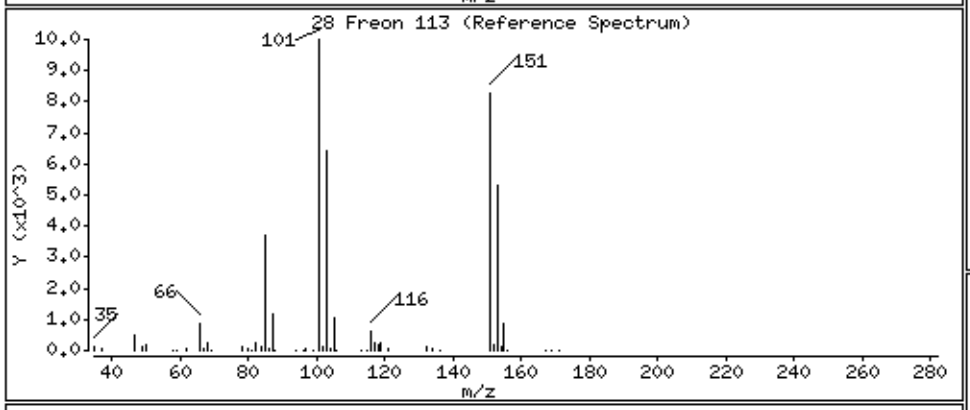
Column diameter: 0.32

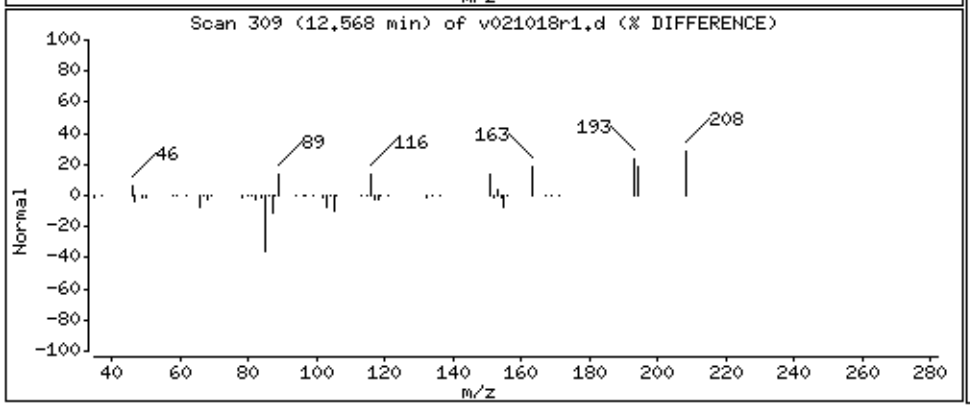
28 Freon 113

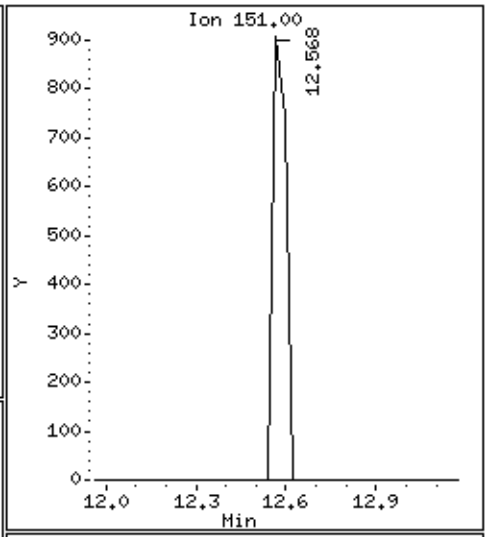
Concentration: 0.05920 PPBV

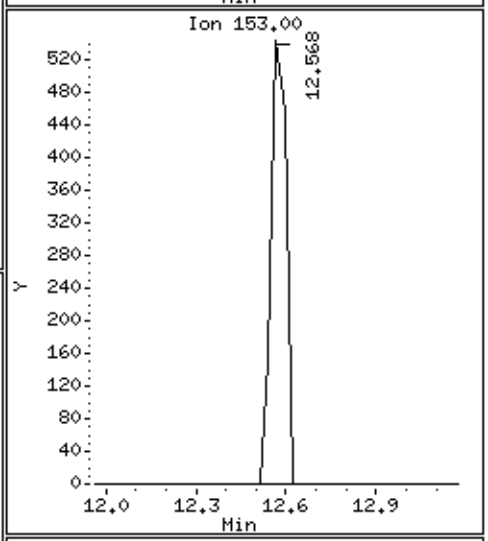


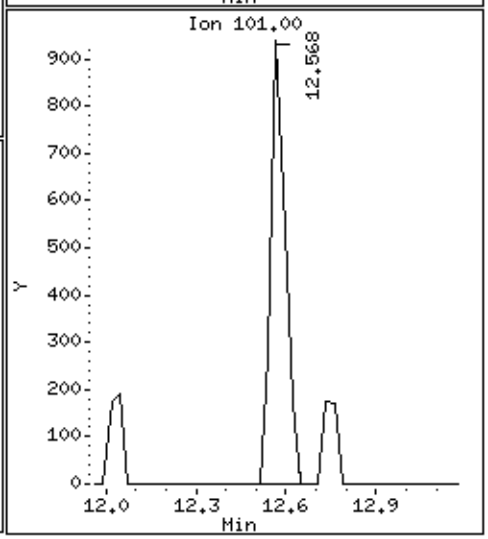












Data File: /chem/msdv.i/10Feb2015.b/v021018r1.d

Date : 10-FEB-2015 20:21

Client ID:

Instrument: msdv.i

Sample Info: 250mL# 31754

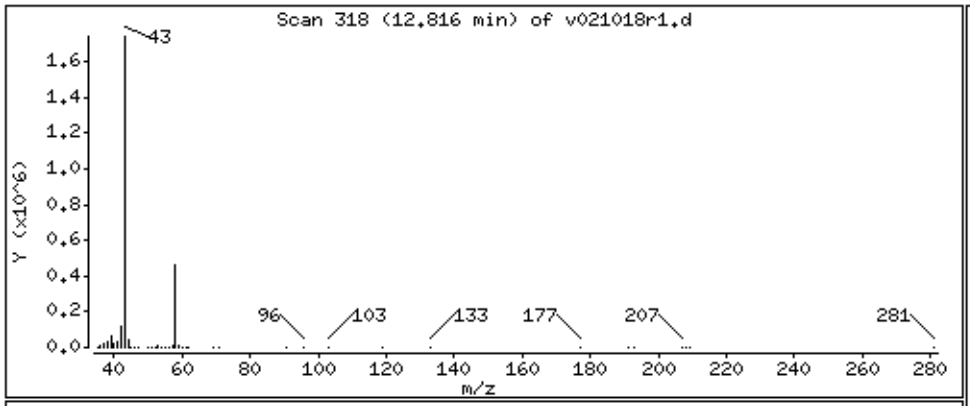
Operator: ea

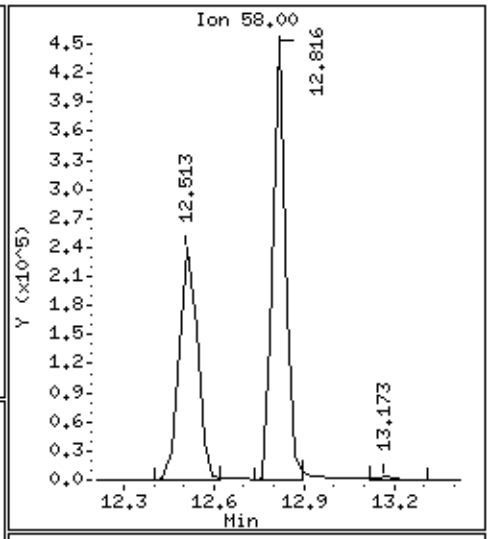
Column phase: RTx-624

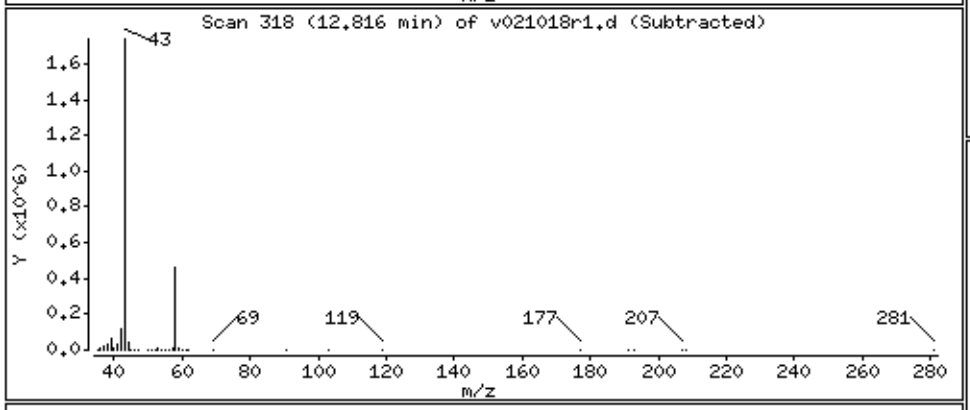
Column diameter: 0.32

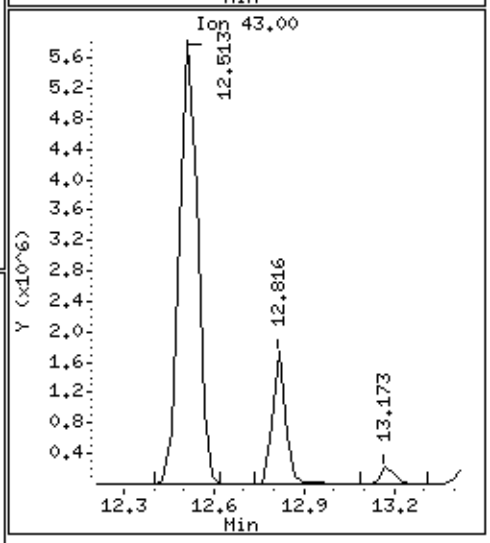
31 Acetone

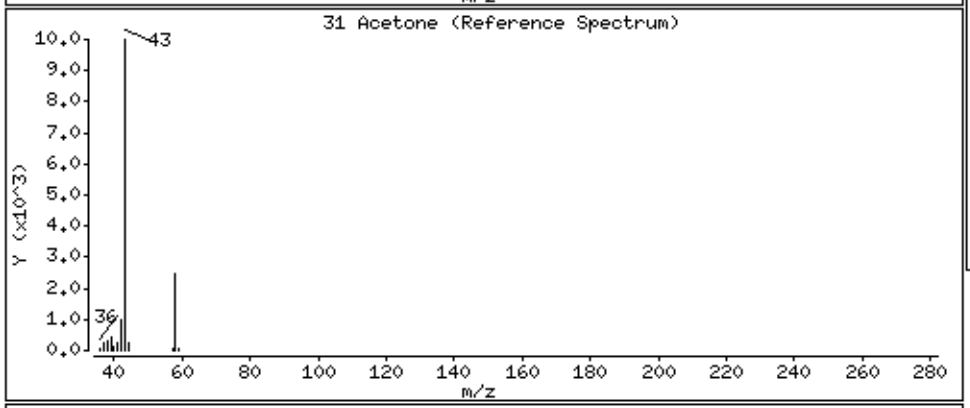
Concentration: 76.404 PPBV

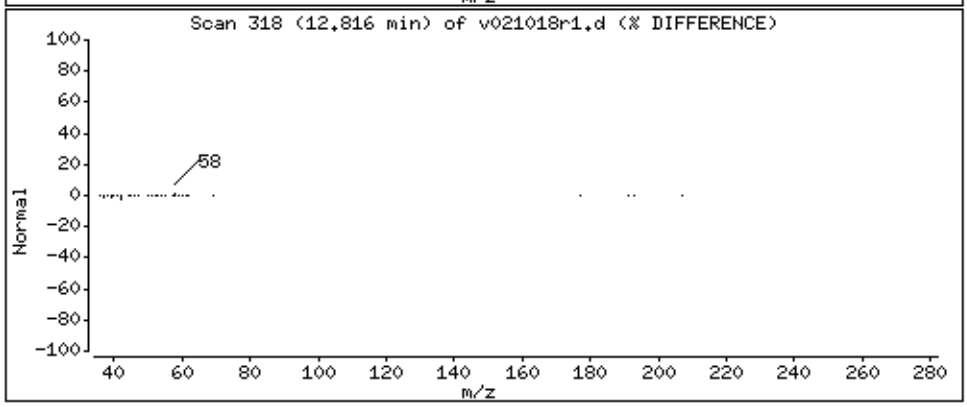












Data File: /chem/msdv.i/10Feb2015.b/v021018r1.d

Date : 10-FEB-2015 20:21

Client ID:

Instrument: msdv.i

Sample Info: 250mL# 31754

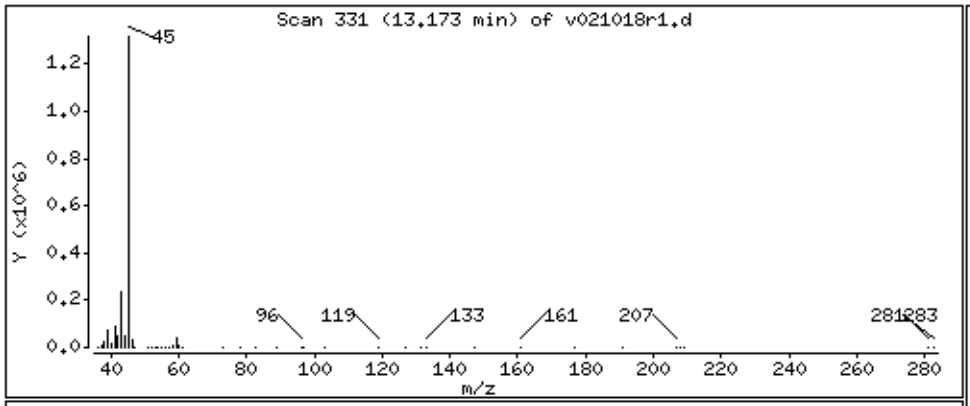
Operator: ea

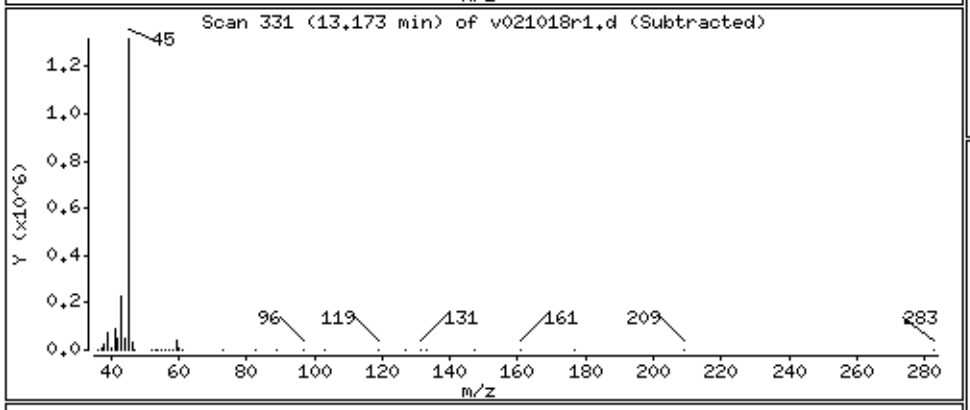
Column phase: RTx-624

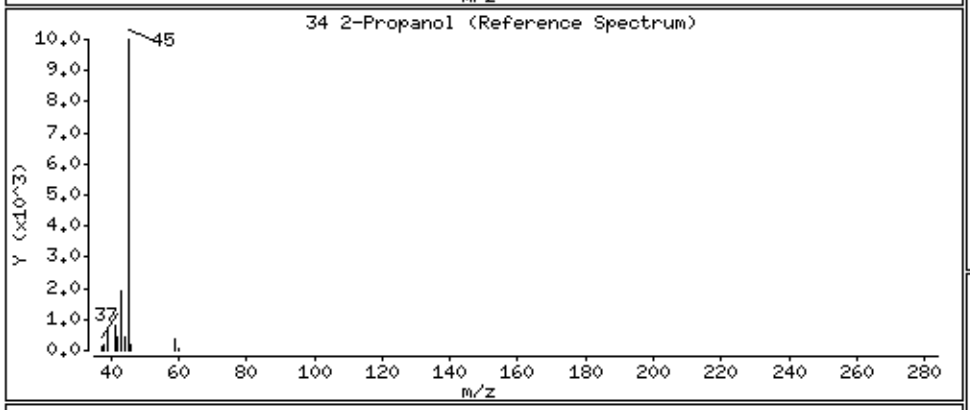
Column diameter: 0.32

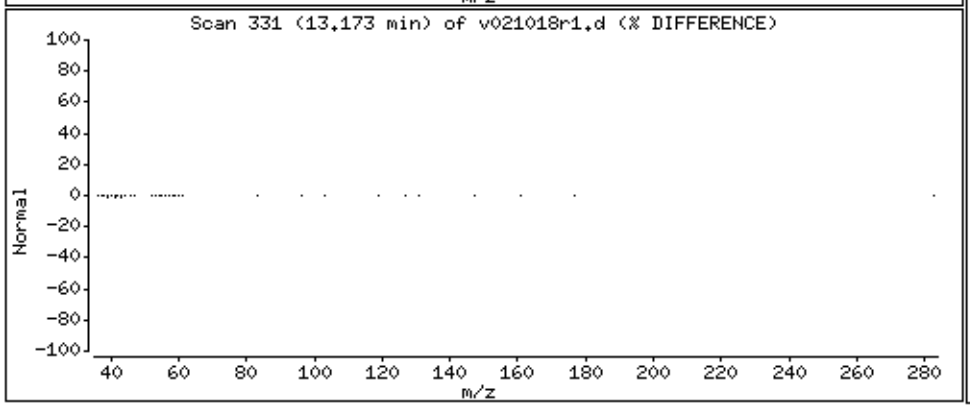
34 2-Propanol

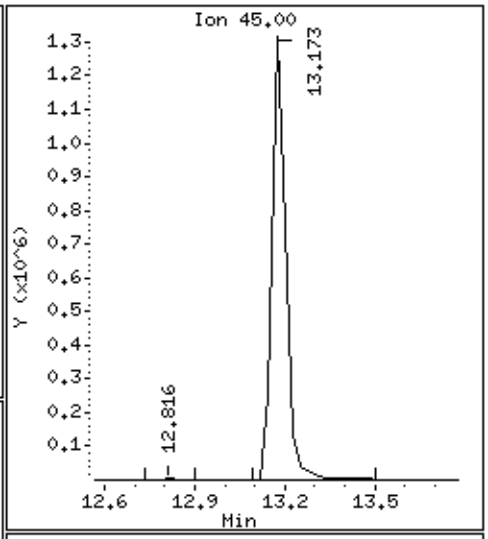
Concentration: 61.166 PPBV

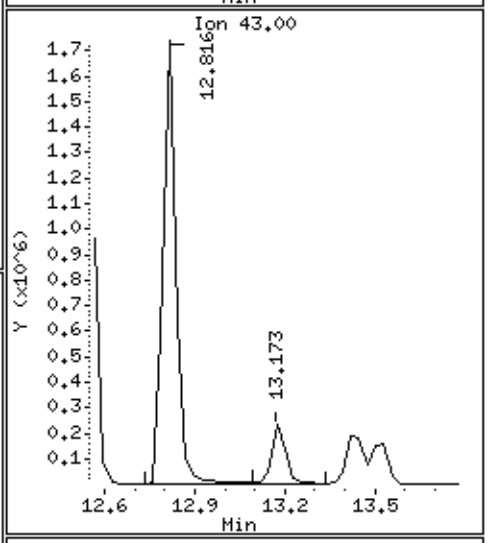


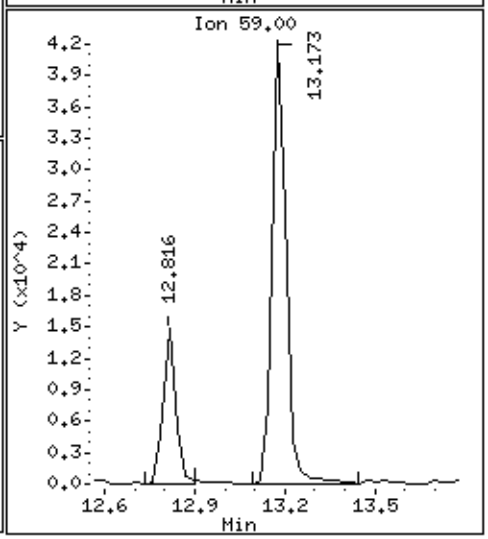












Data File: /chem/msdv.i/10Feb2015.b/v021018r1.d

Date : 10-FEB-2015 20:21

Client ID:

Instrument: msdv.i

Sample Info: 250mL# 31754

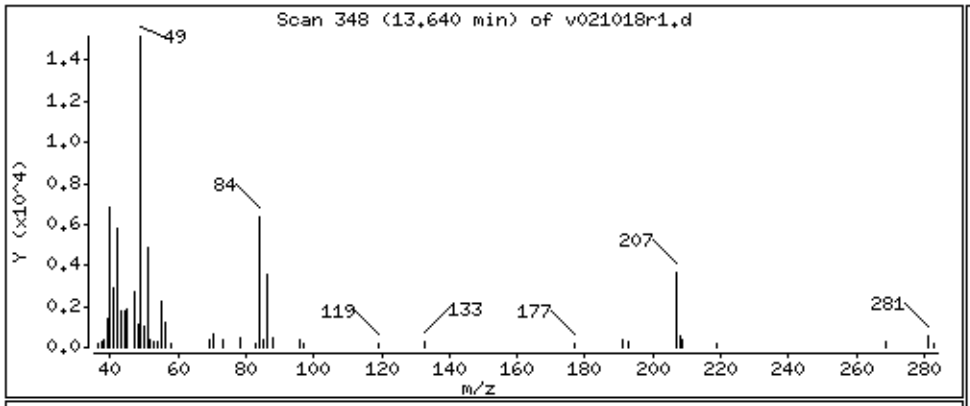
Operator: ea

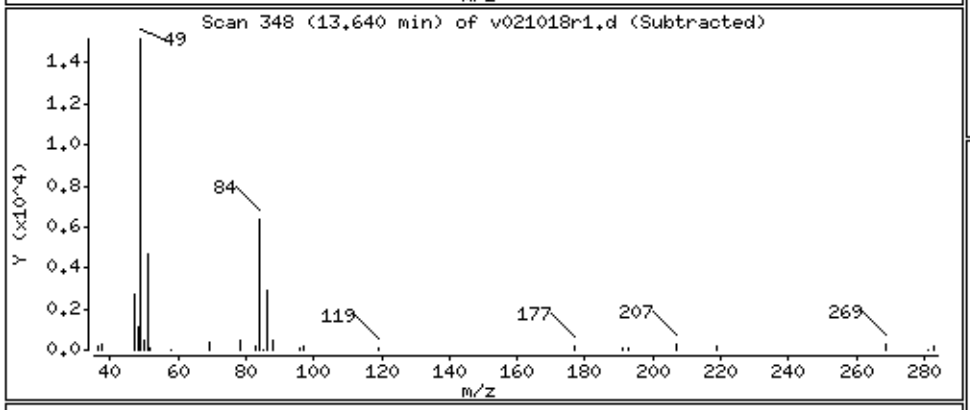
Column phase: RTx-624

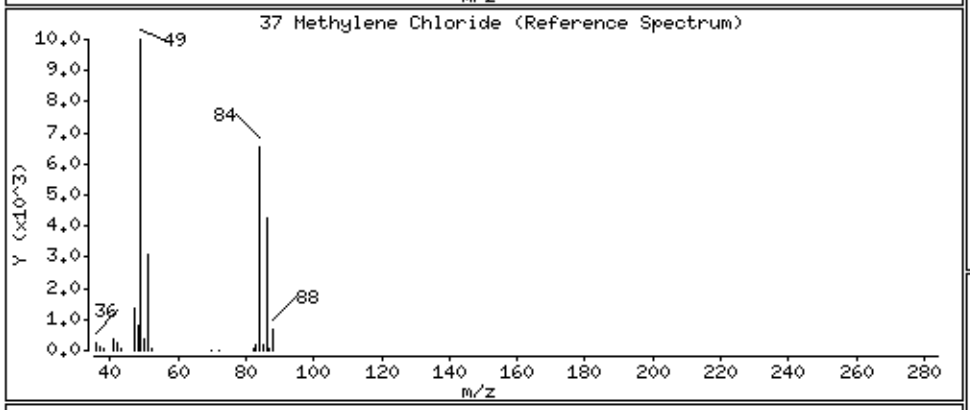
Column diameter: 0.32

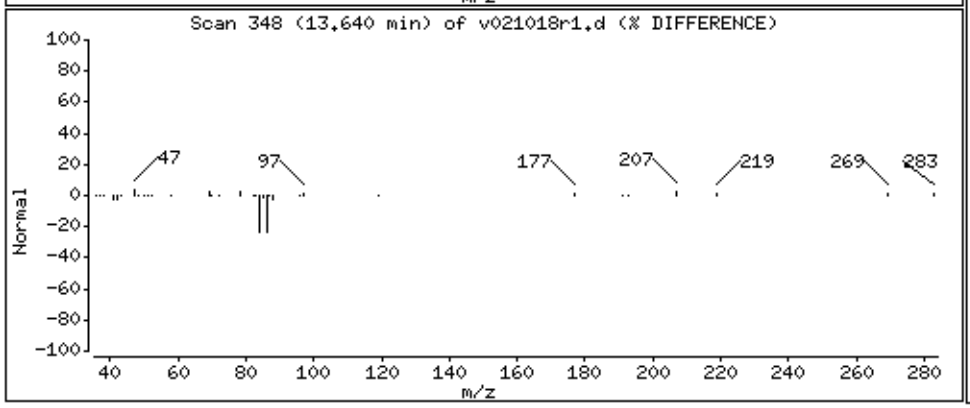
37 Methylene Chloride

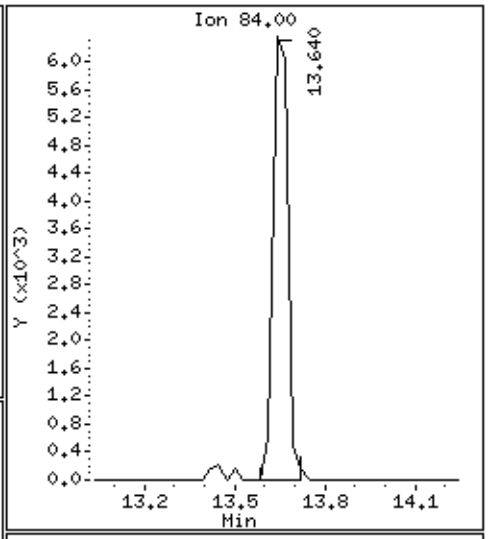
Concentration: 1.044 PPBV

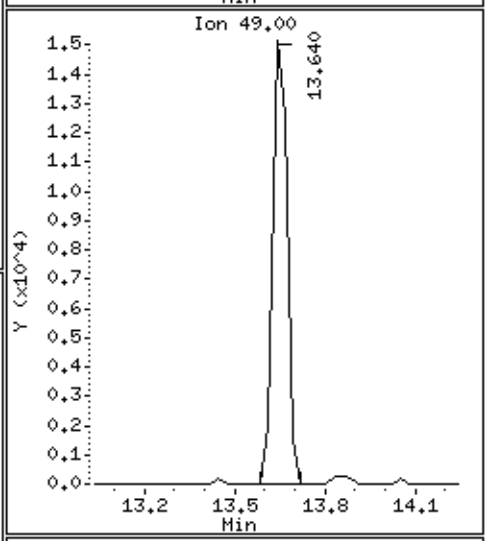


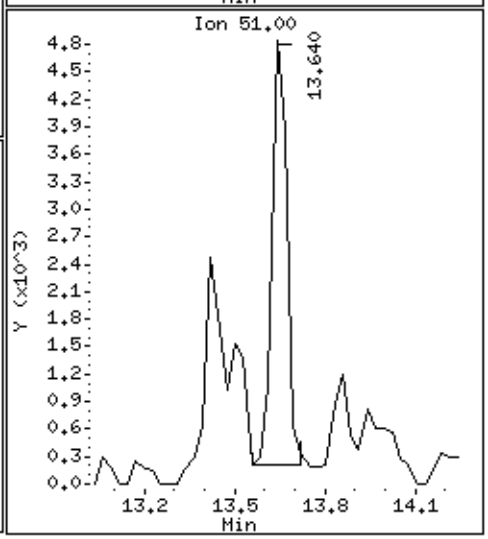












Data File: /chem/msdv.i/10Feb2015.b/v021018r1.d

Date : 10-FEB-2015 20:21

Client ID:

Instrument: msdv.i

Sample Info: 250mL# 31754

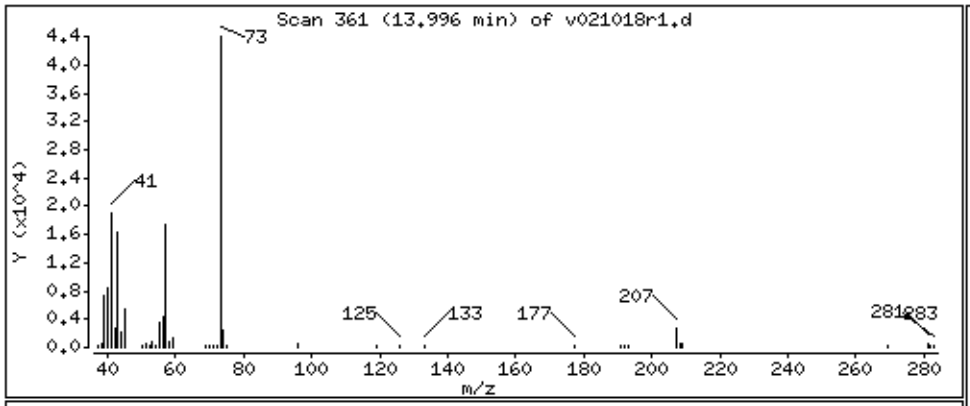
Operator: ea

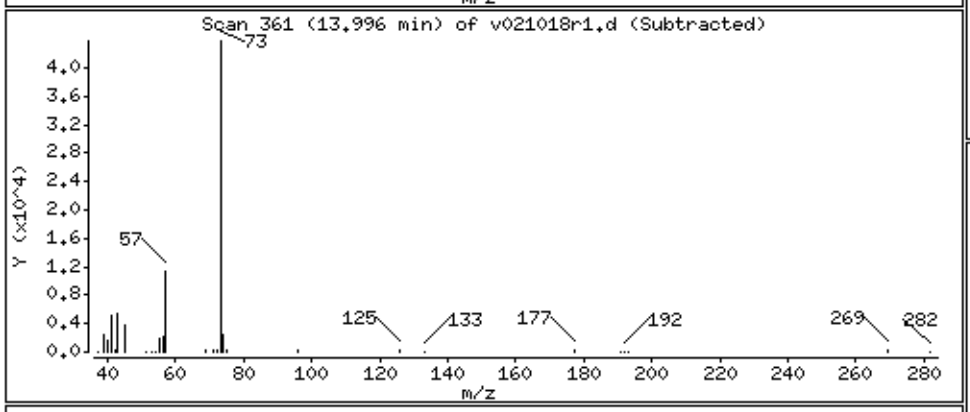
Column phase: RTx-624

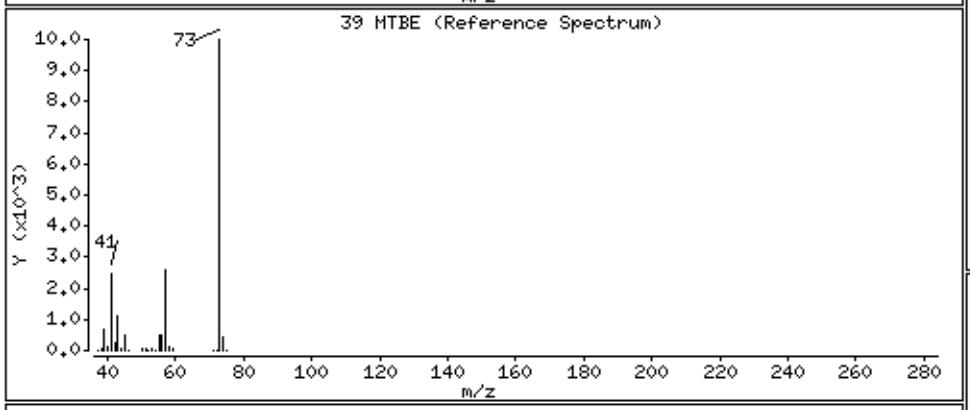
Column diameter: 0.32

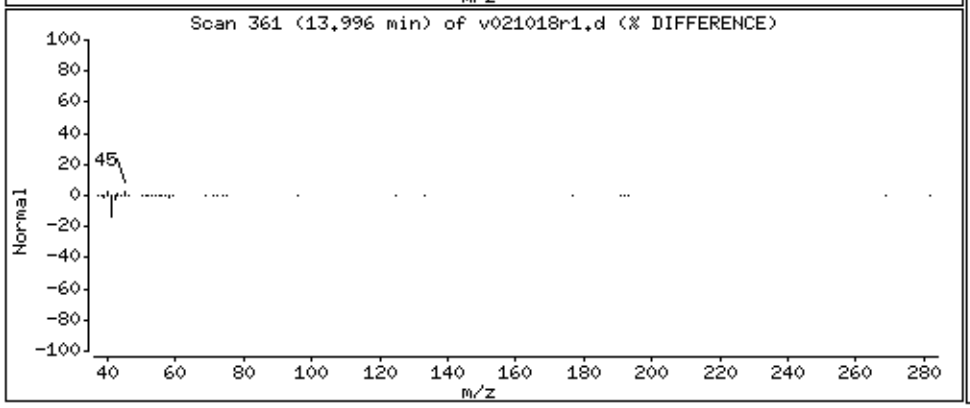
39 MTBE

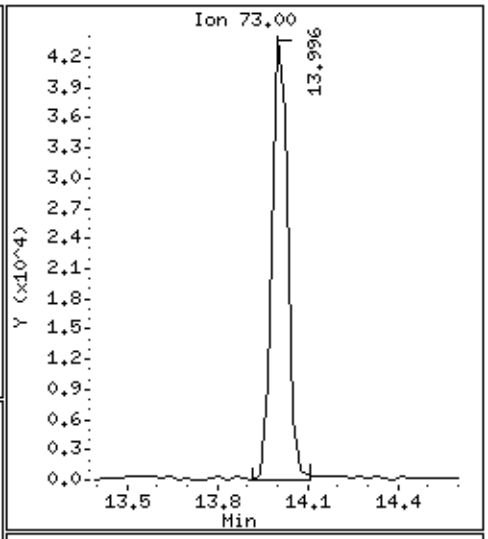
Concentration: 2.404 PPBV

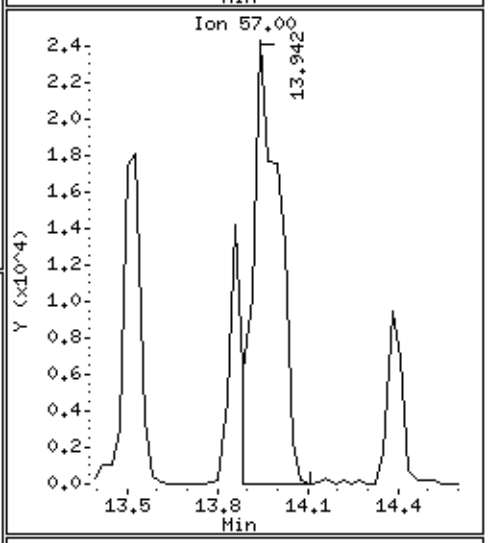


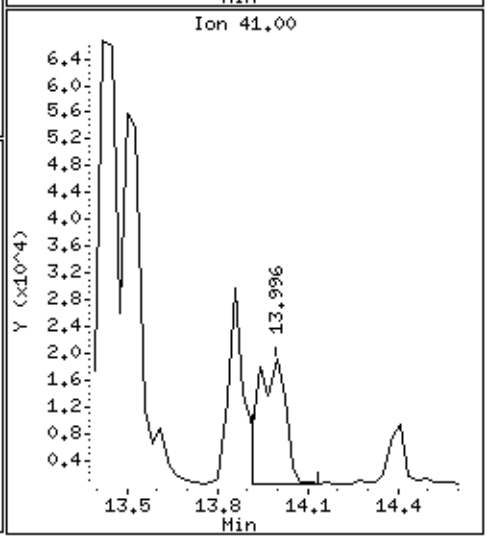












Data File: /chem/msdv.i/10Feb2015.b/v021018r1.d

Date : 10-FEB-2015 20:21

Client ID:

Instrument: msdv.i

Sample Info: 250mL# 31754

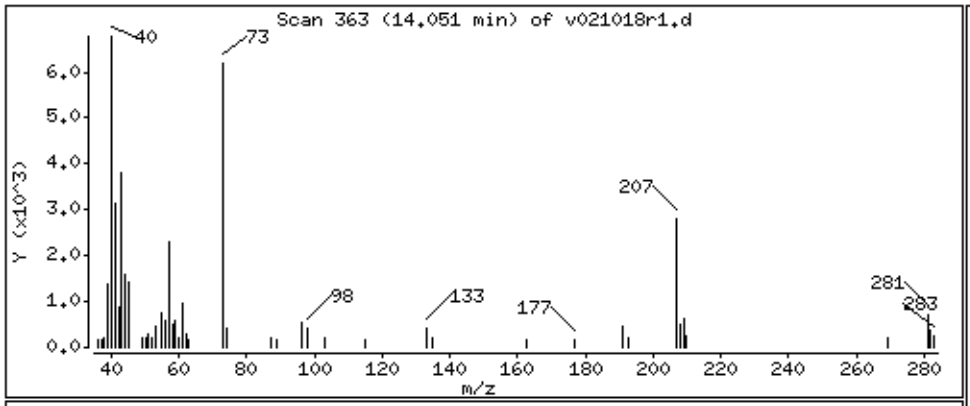
Operator: ea

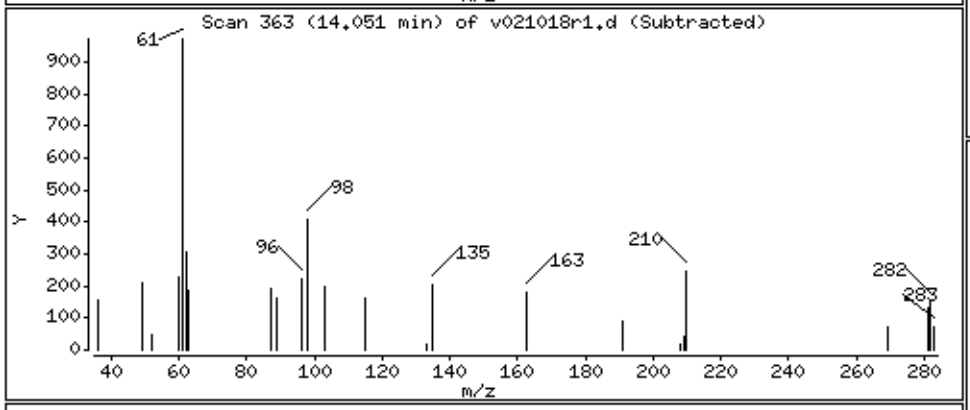
Column phase: RTx-624

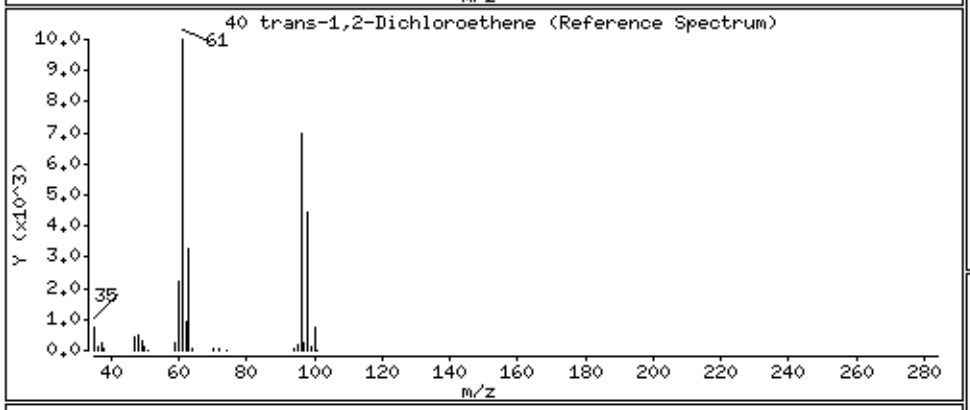
Column diameter: 0.32

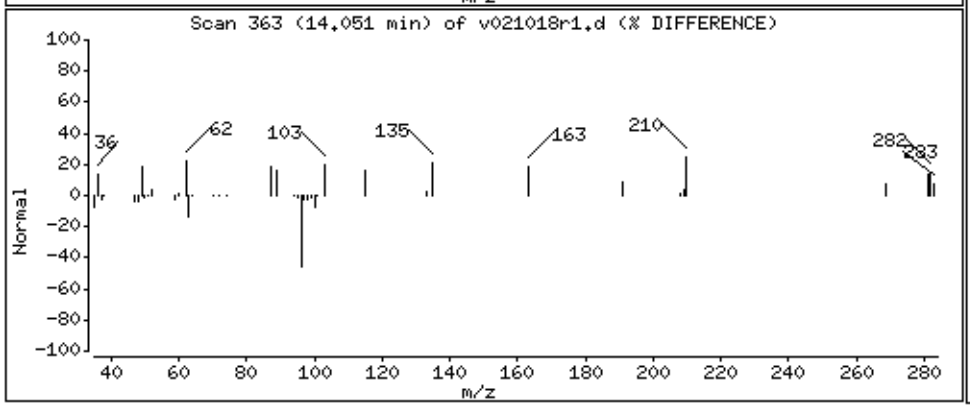
40 trans-1,2-Dichloroethene

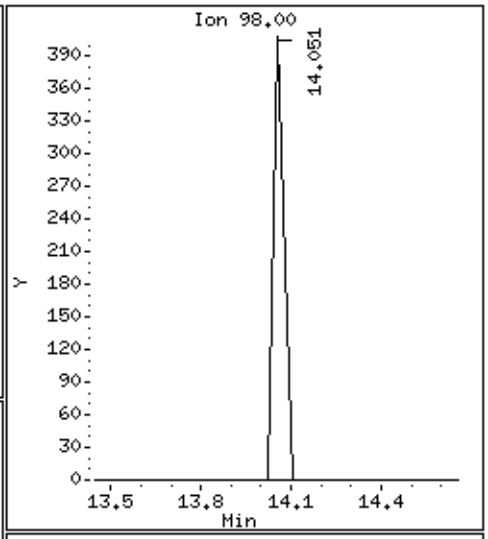
Concentration: 0.06280 PPBV

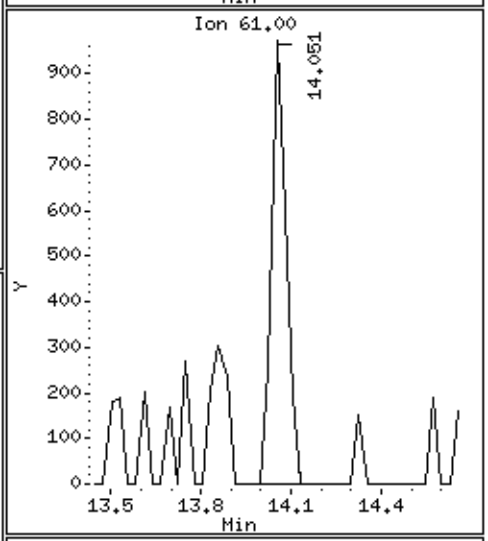


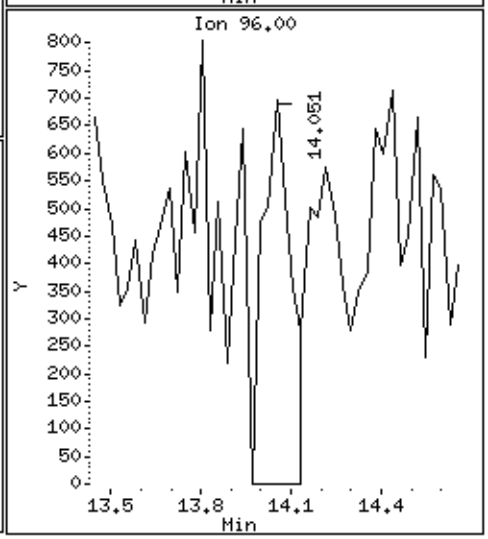












Data File: /chem/msdv.i/10Feb2015.b/v021018r1.d

Date : 10-FEB-2015 20:21

Client ID:

Instrument: msdv.i

Sample Info: 250mL# 31754

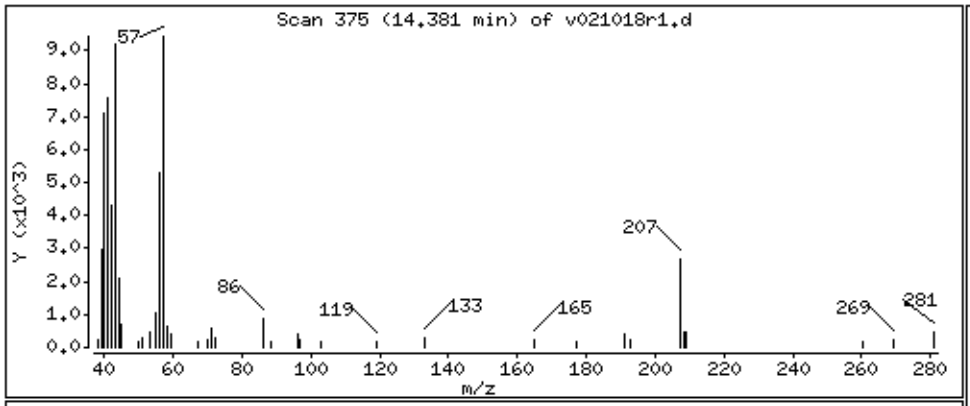
Operator: ea

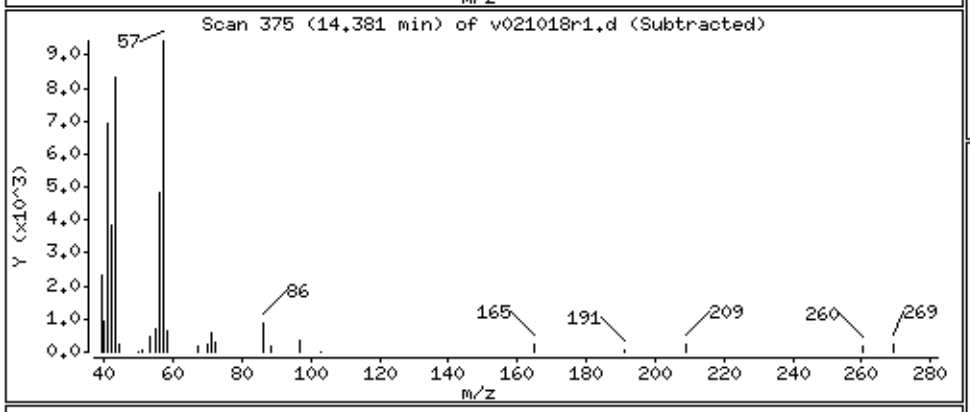
Column phase: RTx-624

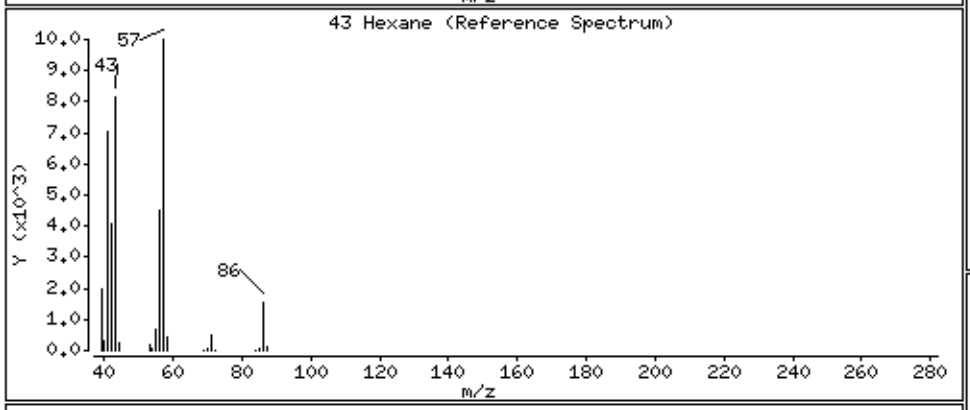
Column diameter: 0.32

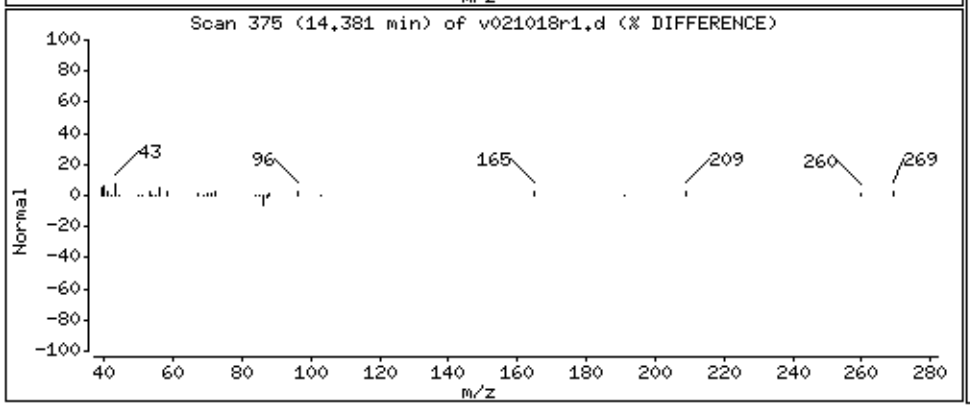
43 Hexane

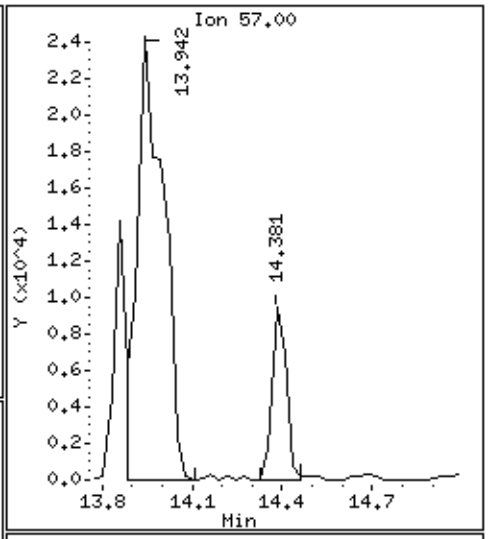
Concentration: 0.5105 PPBV

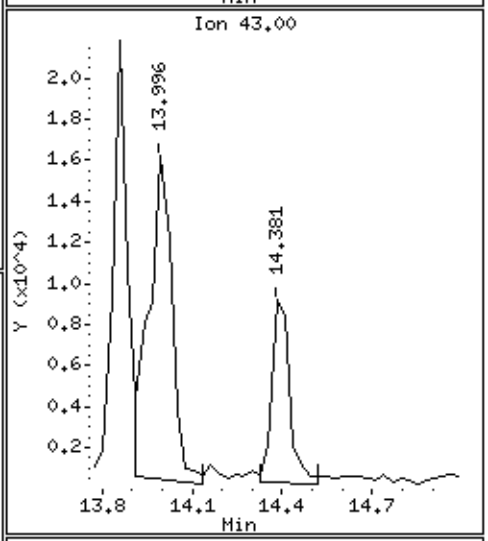


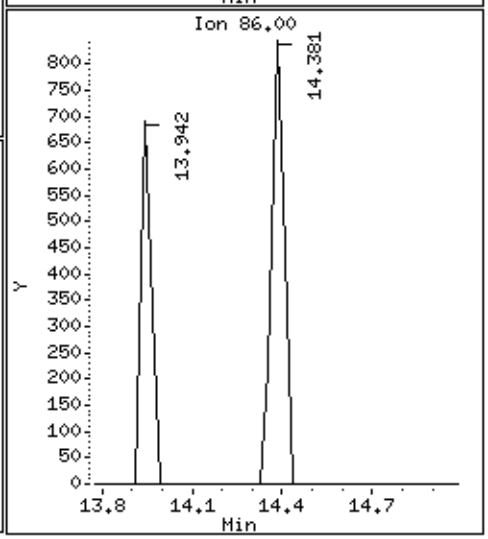












Data File: /chem/msdv.i/10Feb2015.b/v021018r1.d

Date : 10-FEB-2015 20:21

Client ID:

Instrument: msdv.i

Sample Info: 250mL# 31754

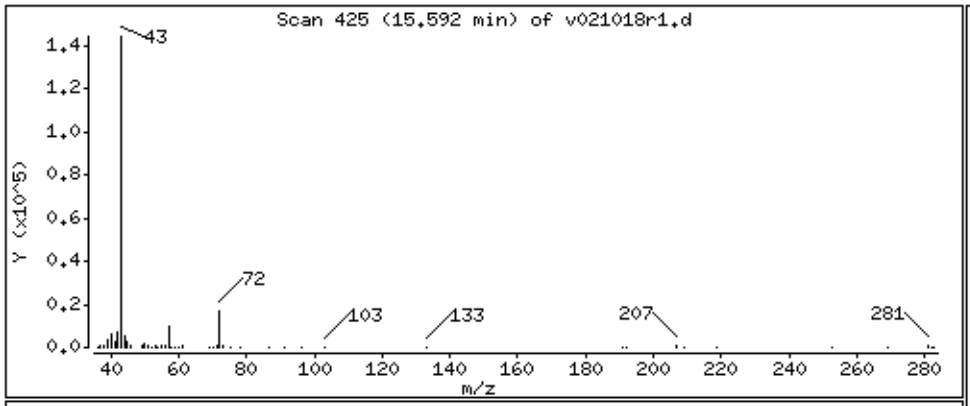
Operator: ea

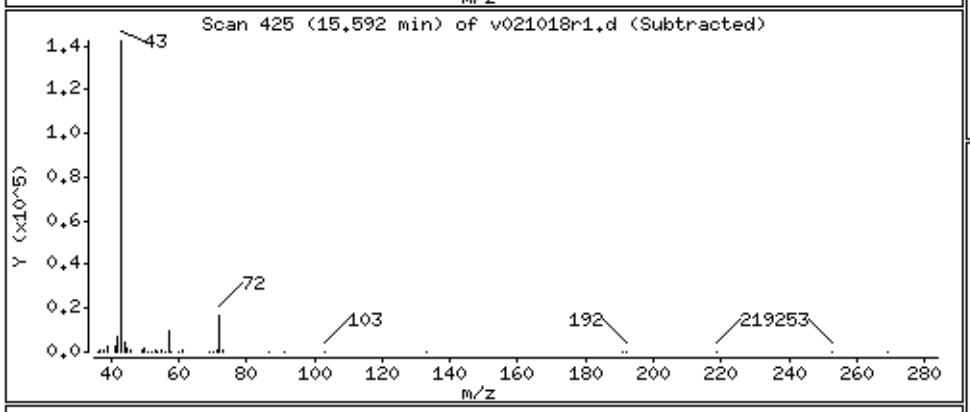
Column phase: RTx-624

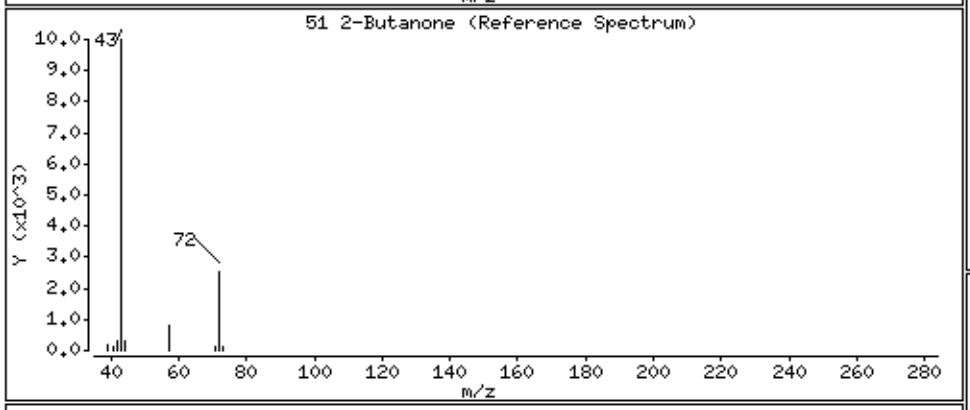
Column diameter: 0.32

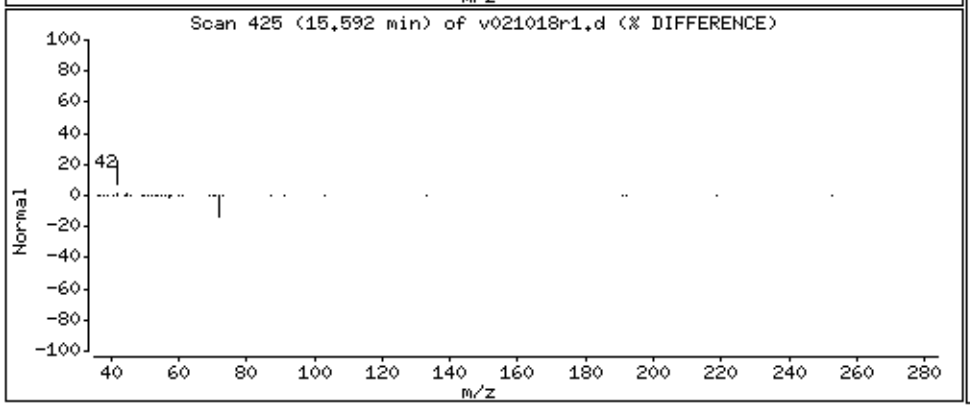
51 2-Butanone

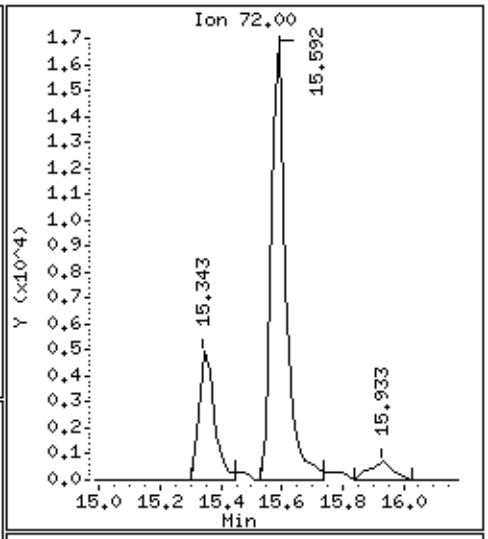
Concentration: 4.805 PPBV

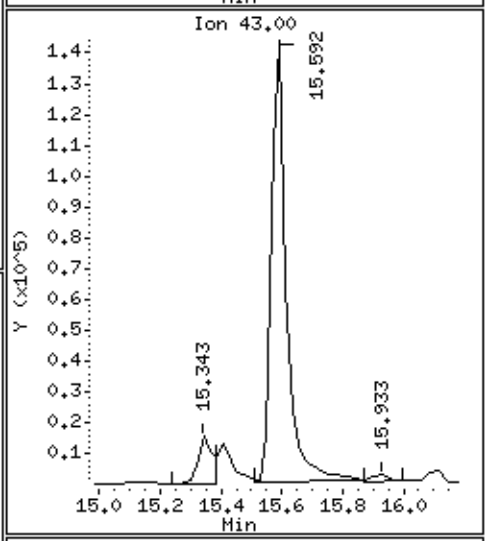


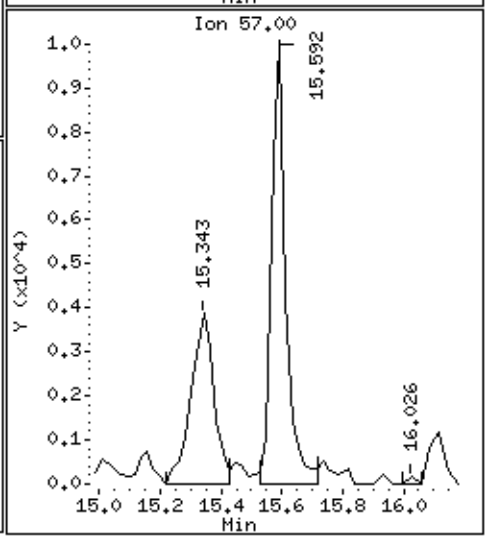












Data File: /chem/msdv.i/10Feb2015.b/v021018r1.d

Date : 10-FEB-2015 20:21

Client ID:

Instrument: msdv.i

Sample Info: 250mL# 31754

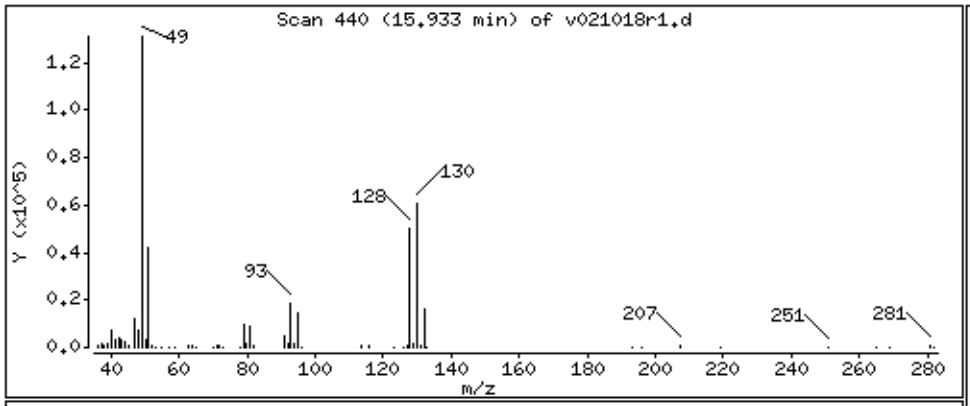
Operator: ea

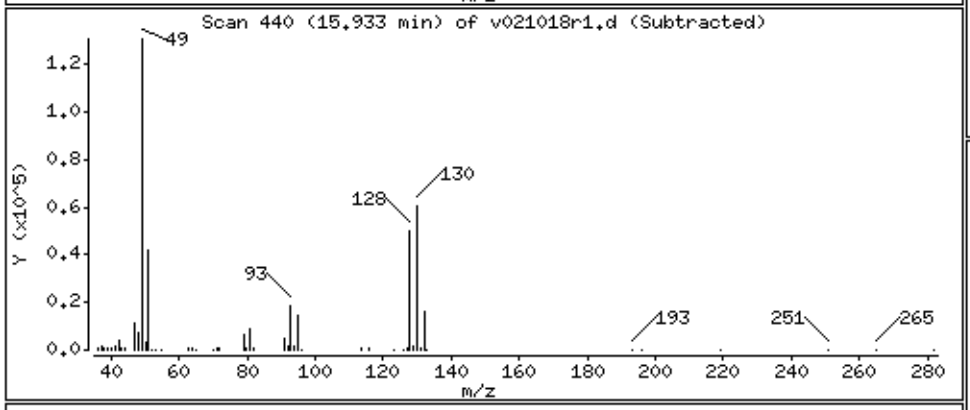
Column phase: RTx-624

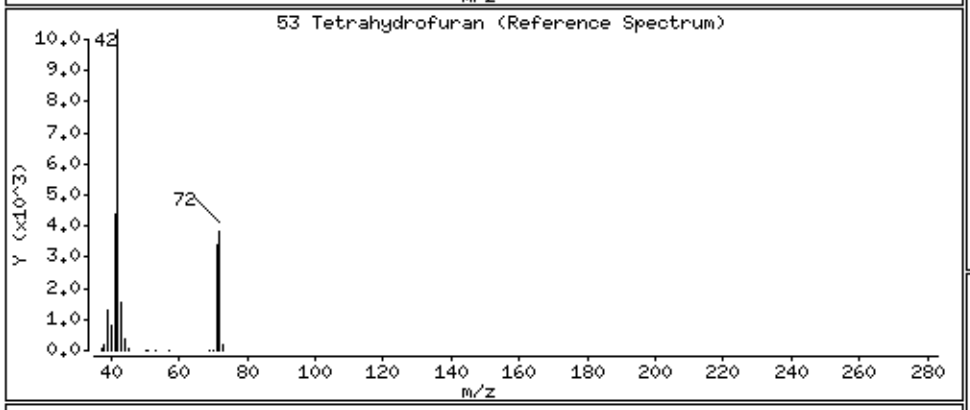
Column diameter: 0.32

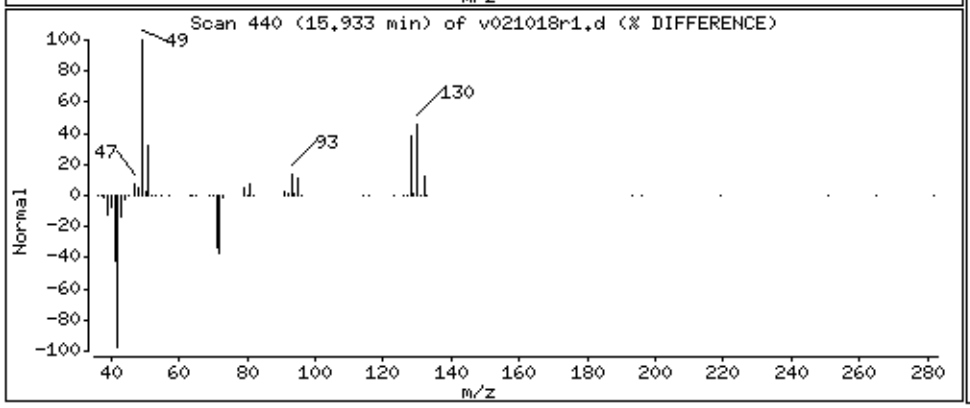
53 Tetrahydrofuran

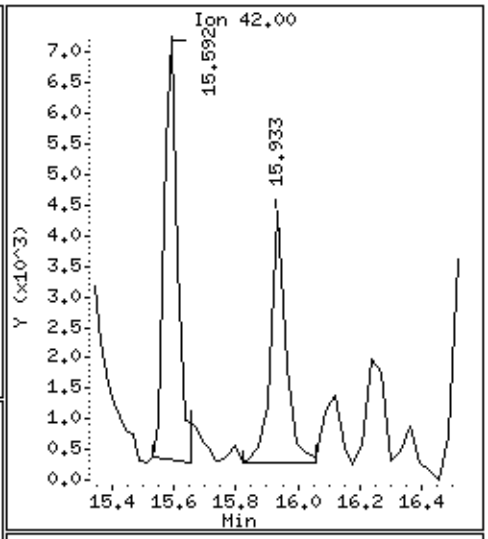
Concentration: 0.2559 PPBV

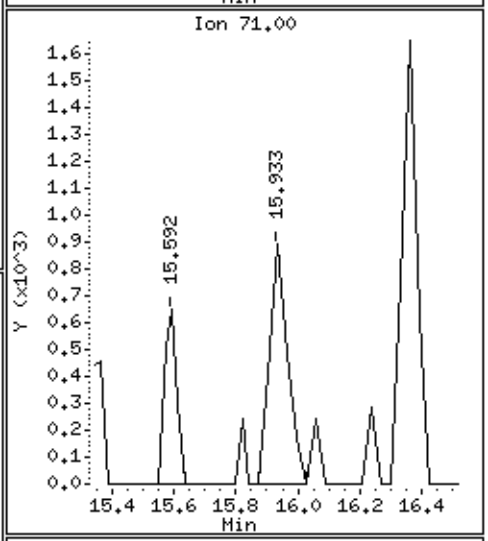


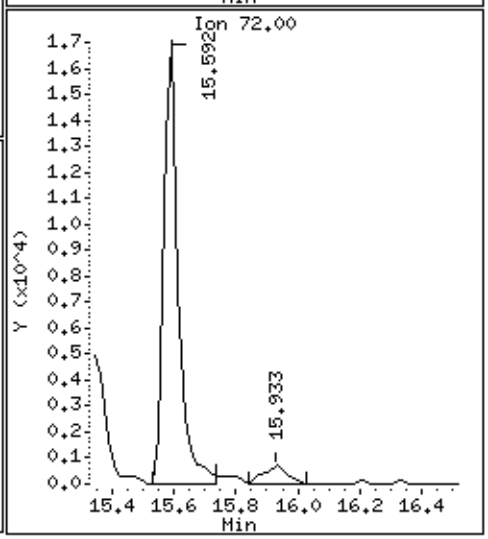












Data File: /chem/msdv.i/10Feb2015.b/v021018r1.d

Date : 10-FEB-2015 20:21

Client ID:

Instrument: msdv.i

Sample Info: 250mL# 31754

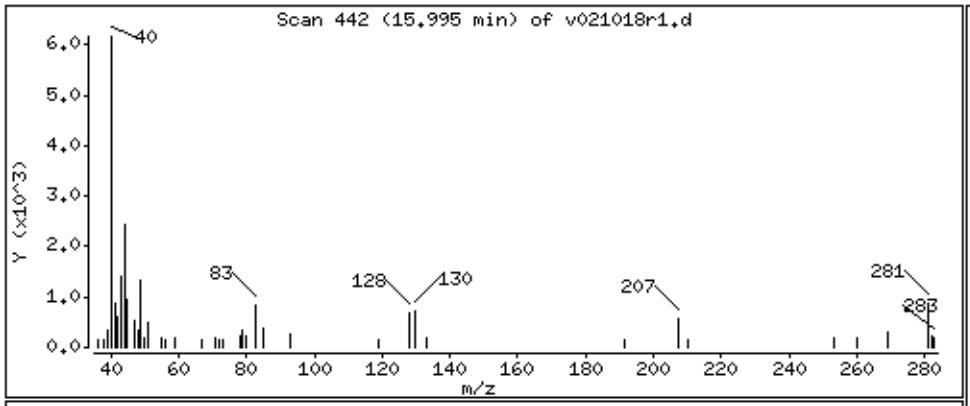
Operator: ea

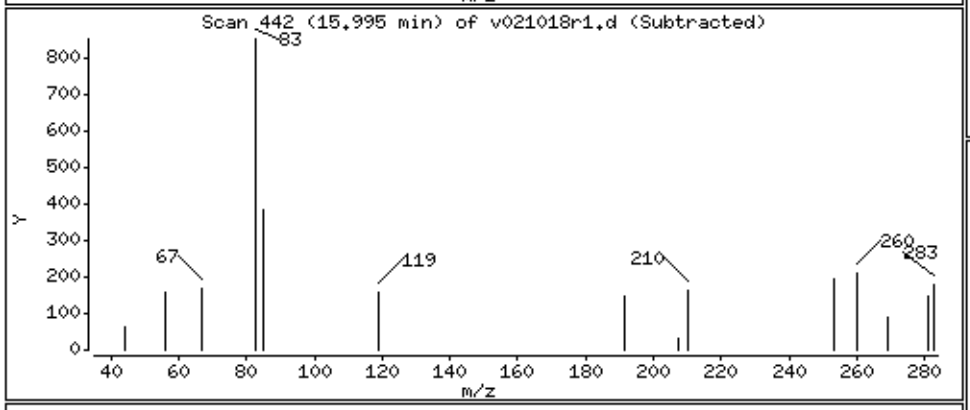
Column phase: RTx-624

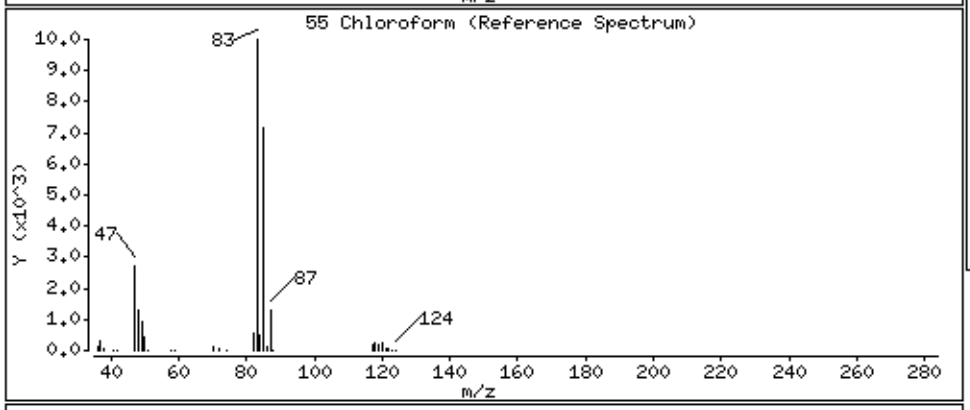
Column diameter: 0.32

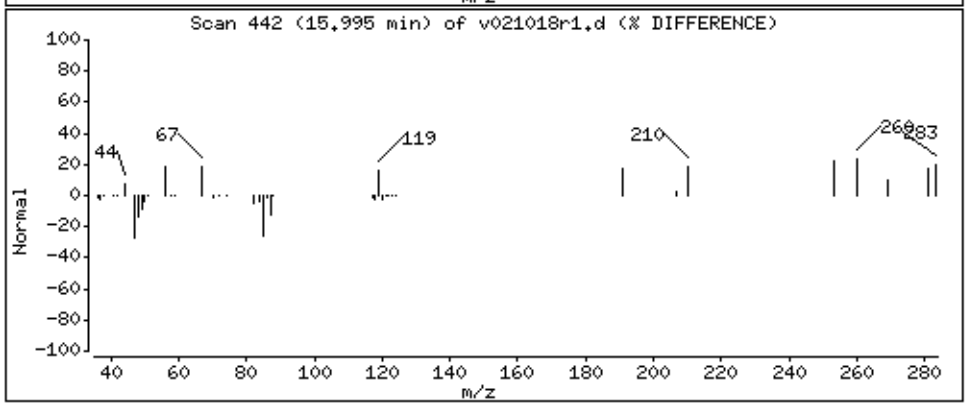
55 Chloroform

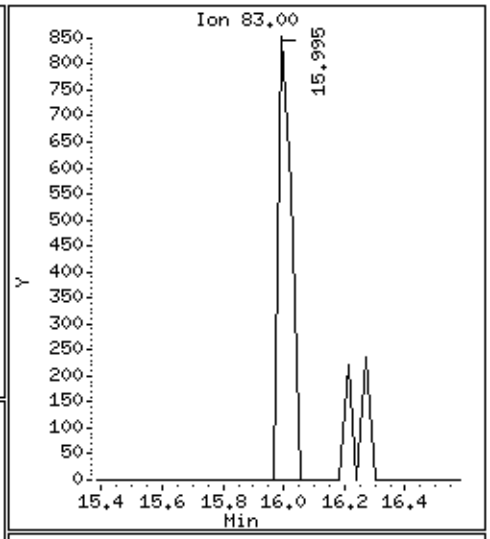
Concentration: 0.04975 PPBV

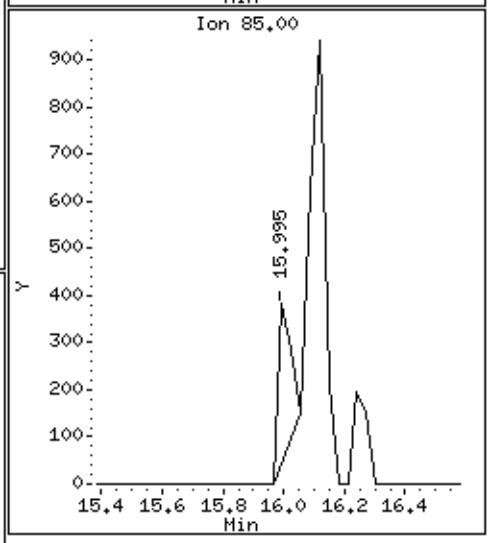












Data File: /chem/msdv.i/10Feb2015.b/v021018r1.d

Date : 10-FEB-2015 20:21

Client ID:

Instrument: msdv.i

Sample Info: 250mL# 31754

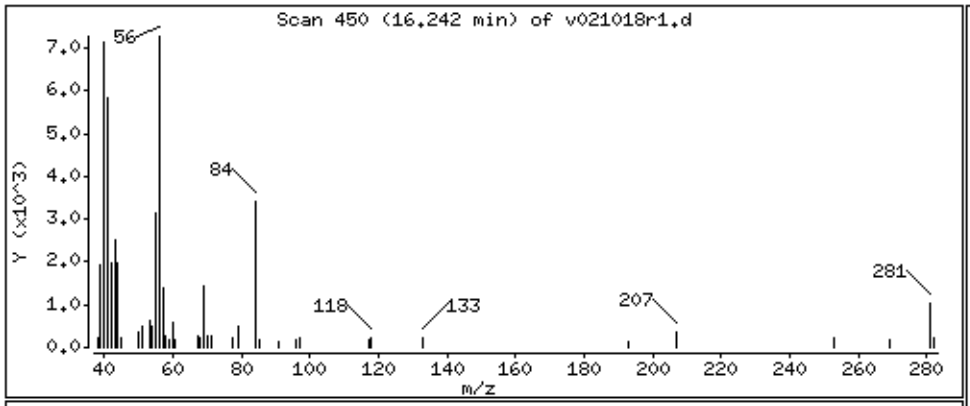
Operator: ea

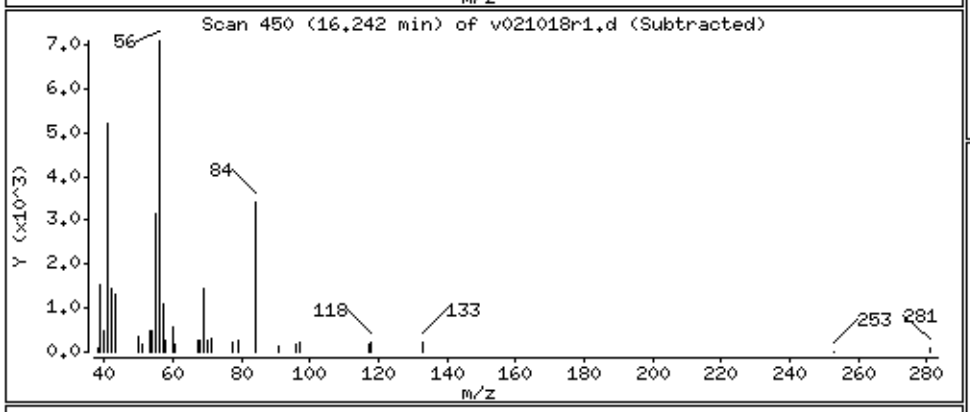
Column phase: RTx-624

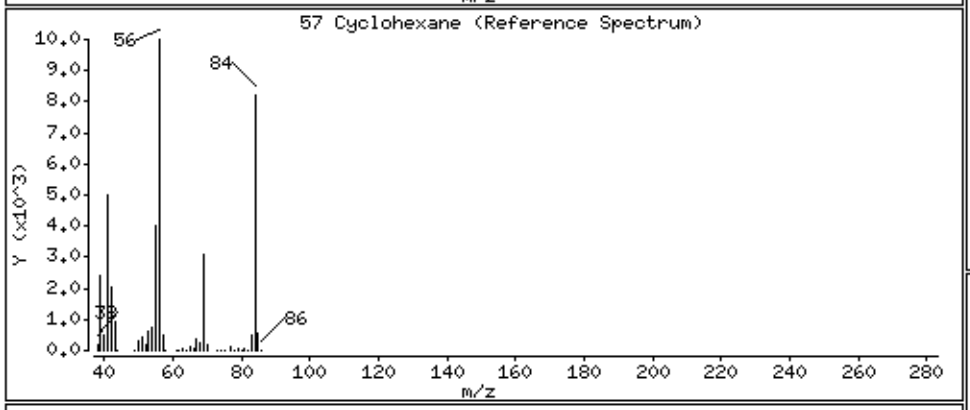
Column diameter: 0.32

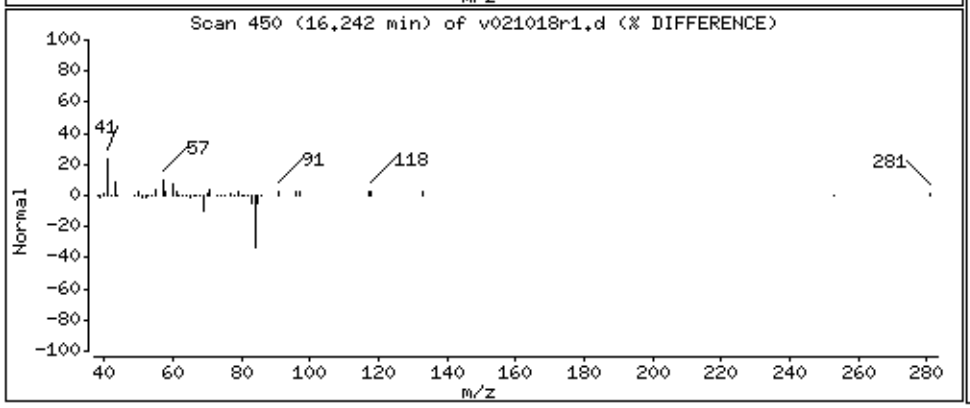
57 Cyclohexane

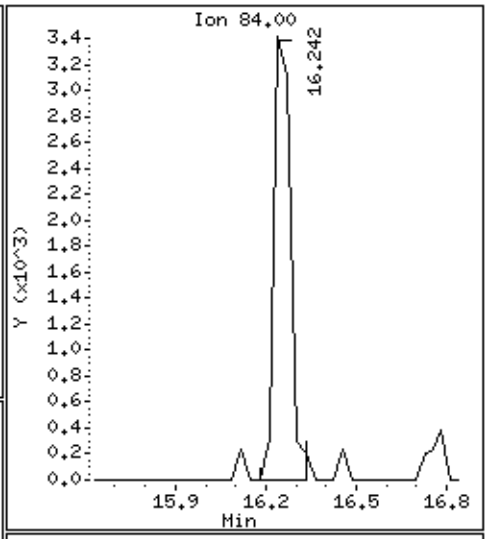
Concentration: 0.3805 PPBV

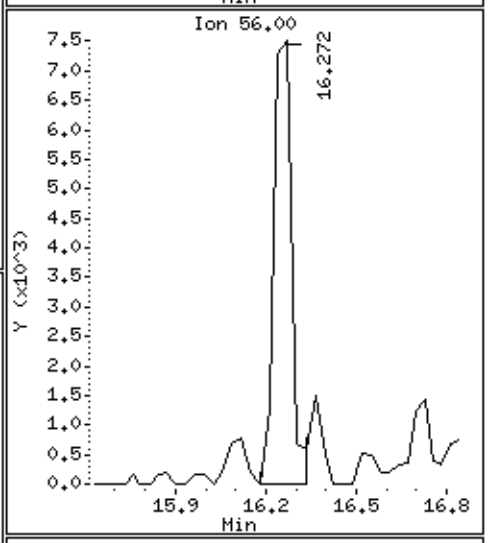


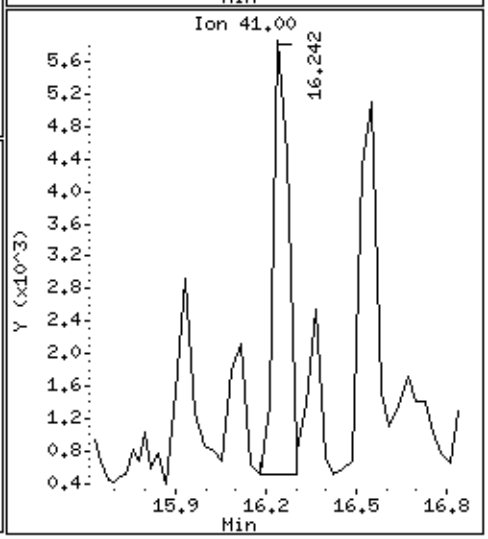












Data File: /chem/msdv.i/10Feb2015.b/v021018r1.d

Date : 10-FEB-2015 20:21

Client ID:

Instrument: msdv.i

Sample Info: 250mL# 31754

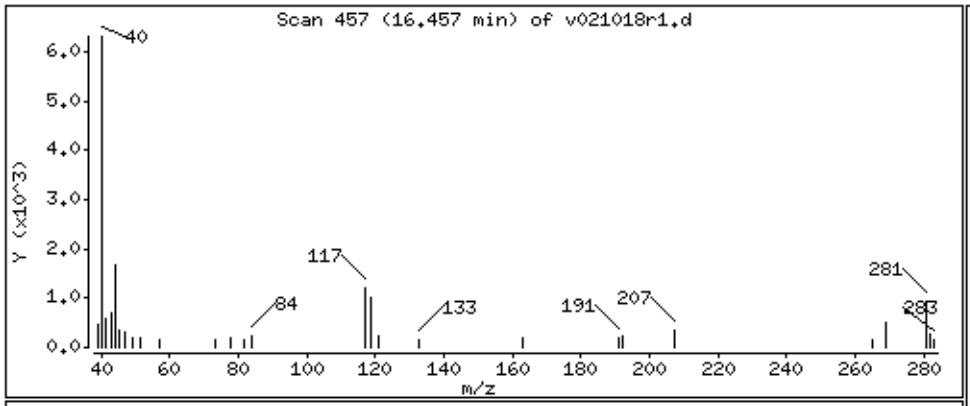
Operator: ea

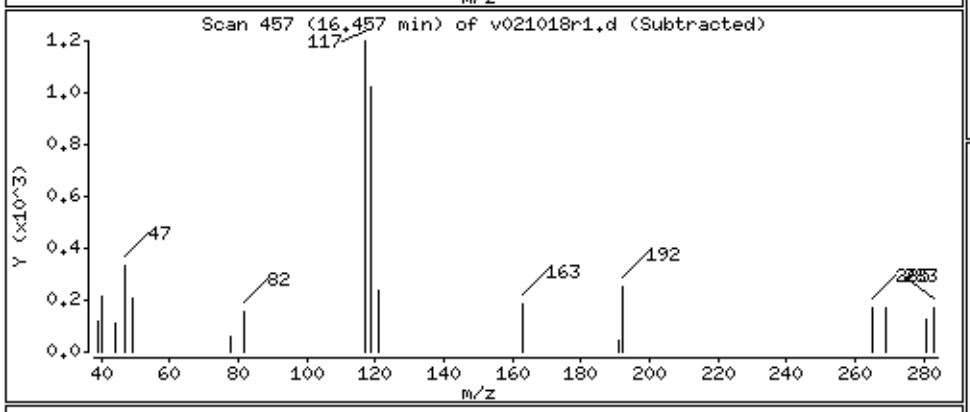
Column phase: RTx-624

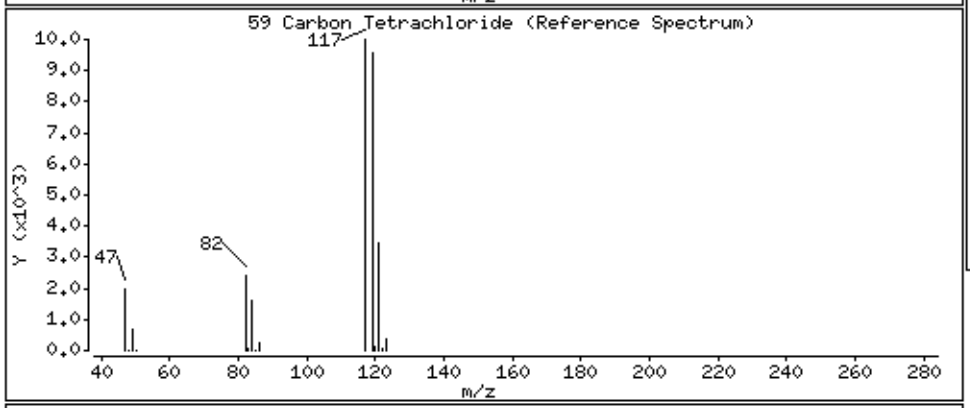
Column diameter: 0.32

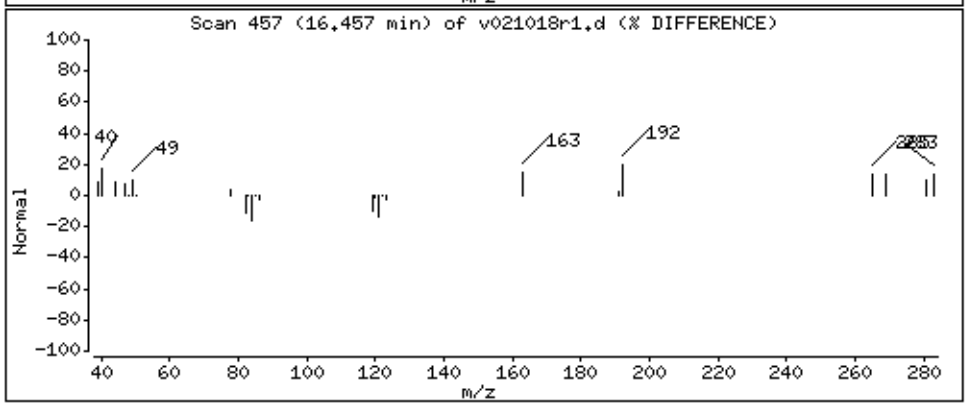
59 Carbon Tetrachloride

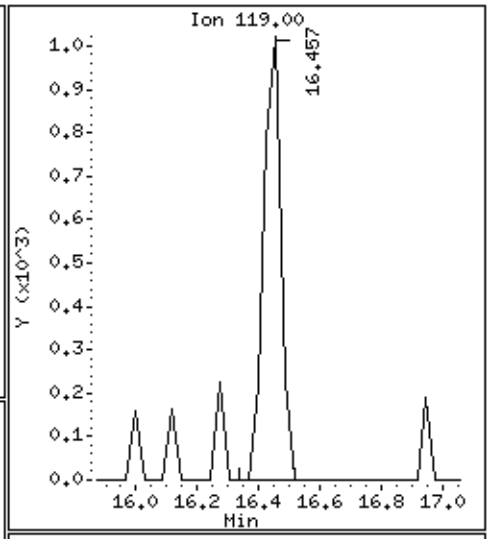
Concentration: 0.07769 PPBV

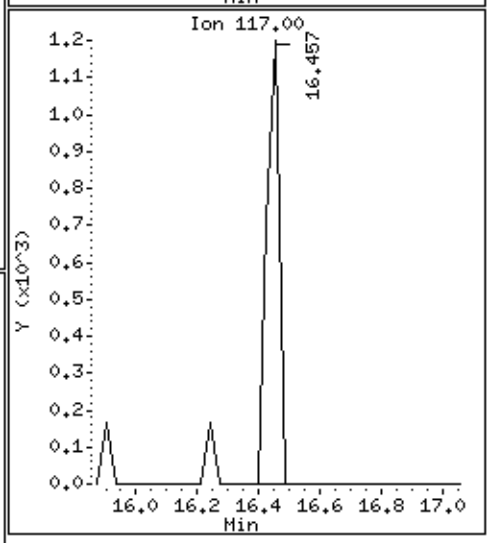












Data File: /chem/msdv.i/10Feb2015.b/v021018r1.d

Date : 10-FEB-2015 20:21

Client ID:

Instrument: msdv.i

Sample Info: 250mL# 31754

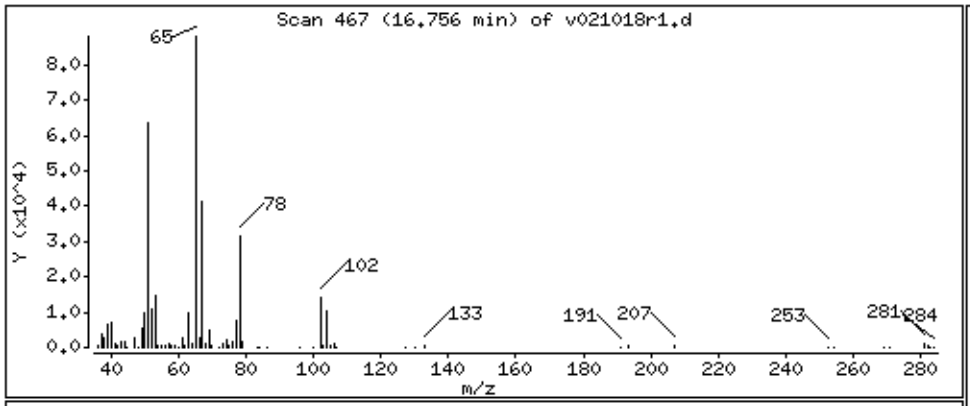
Operator: ea

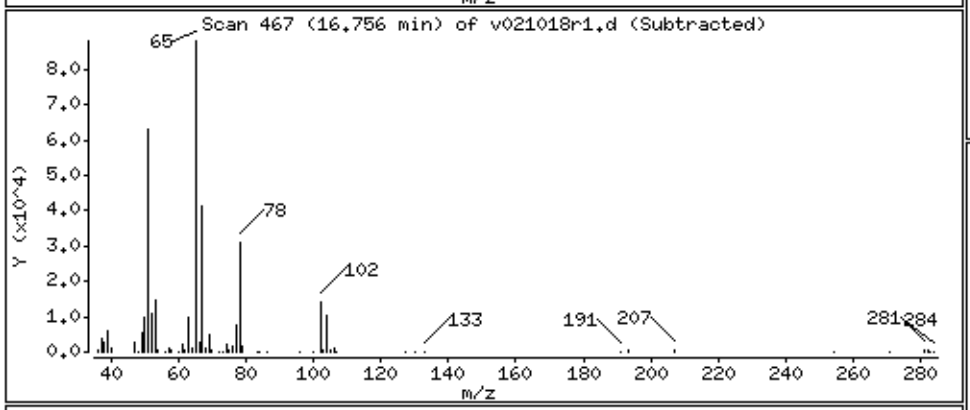
Column phase: RTx-624

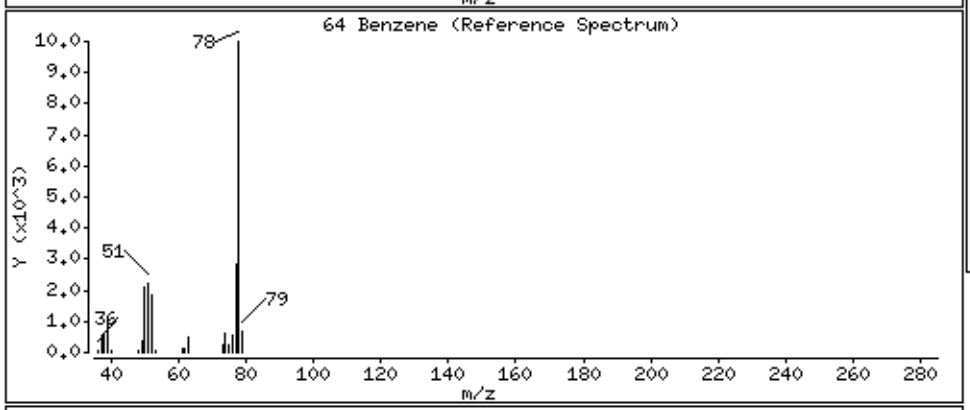
Column diameter: 0.32

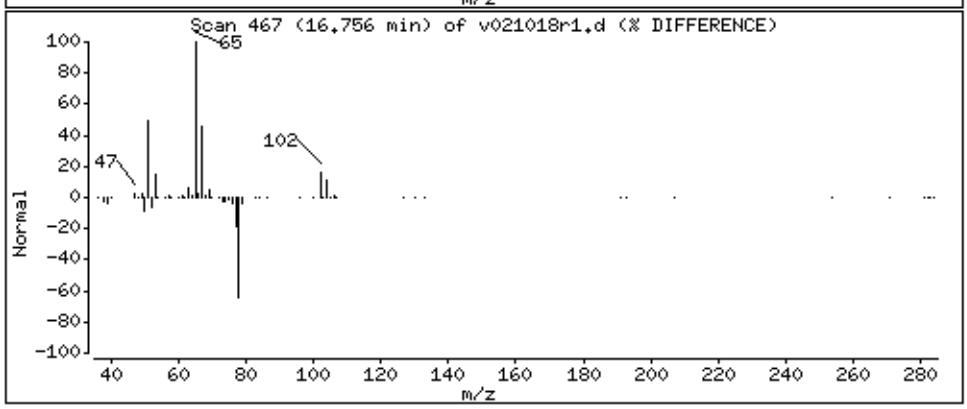
64 Benzene

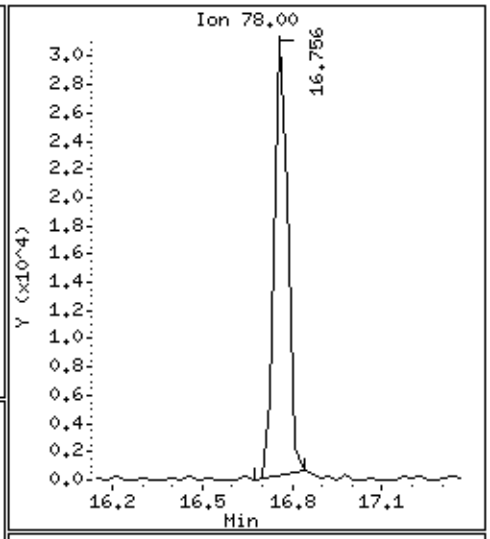
Concentration: 1.165 PPBV

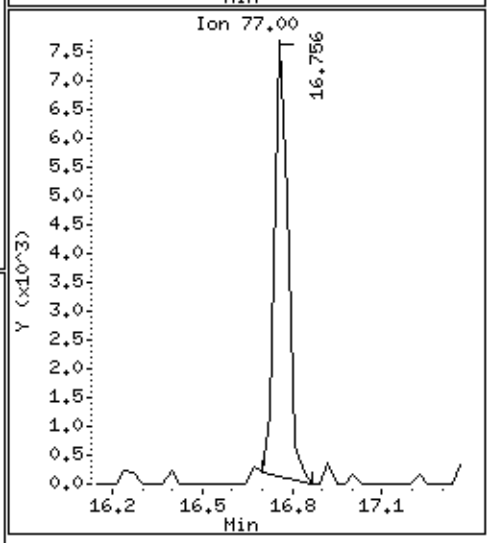












Data File: /chem/msdv.i/10Feb2015.b/v021018r1.d

Date : 10-FEB-2015 20:21

Client ID:

Instrument: msdv.i

Sample Info: 250mL# 31754

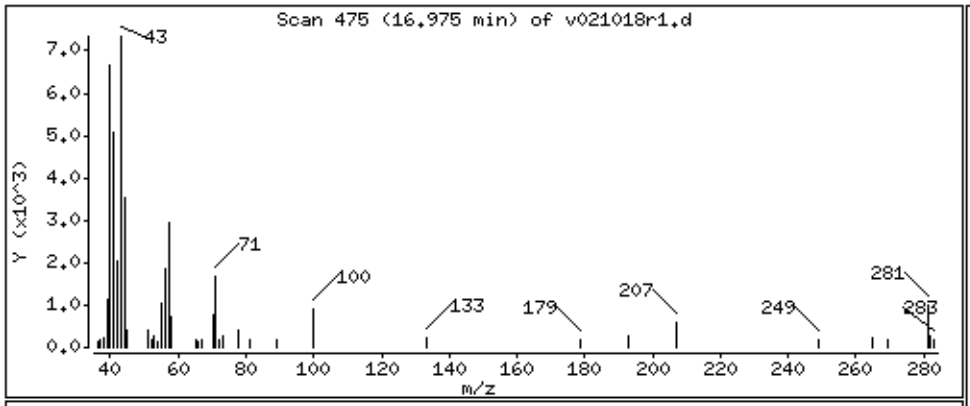
Operator: ea

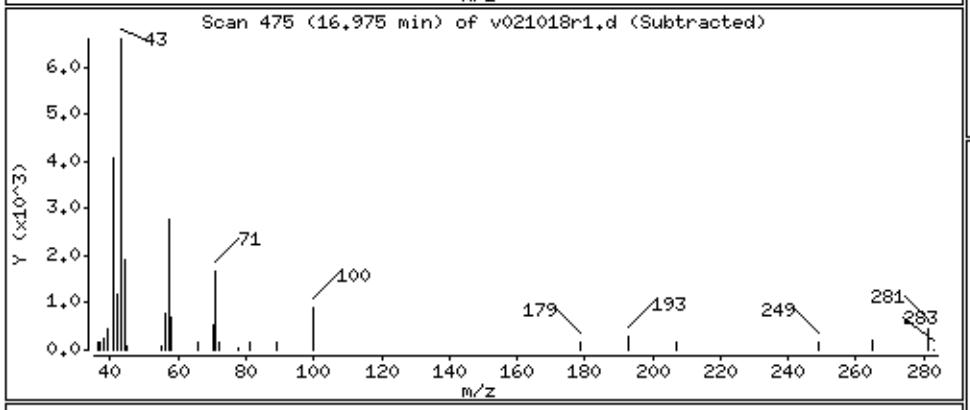
Column phase: RTx-624

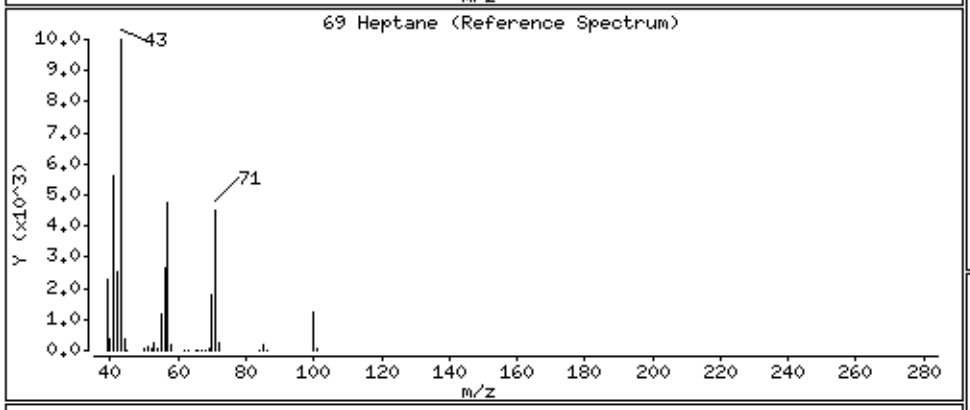
Column diameter: 0.32

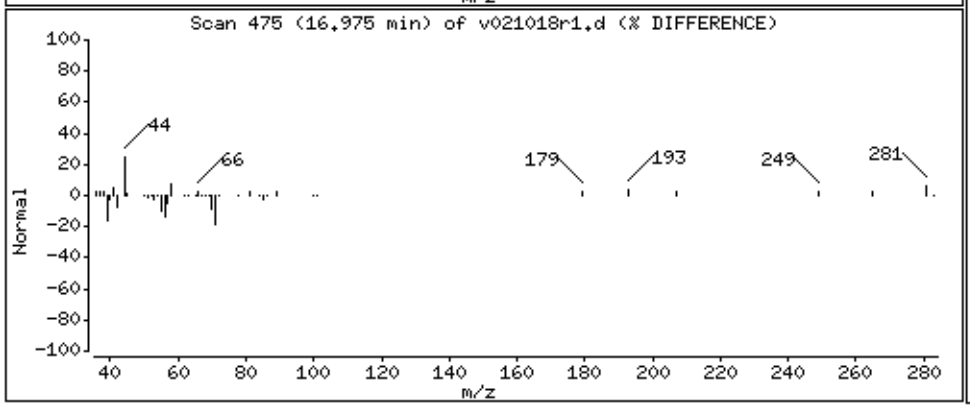
69 Heptane

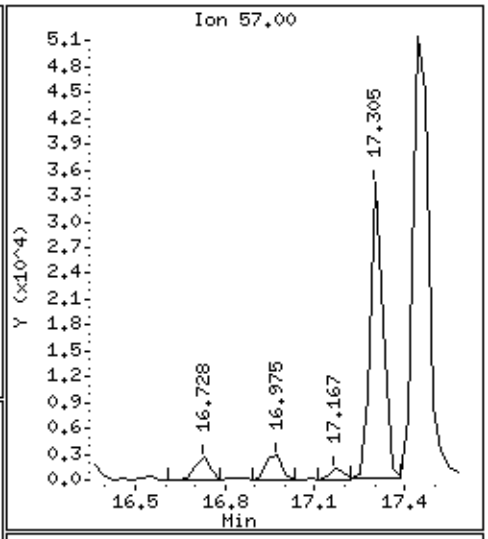
Concentration: 0.2798 PPBV

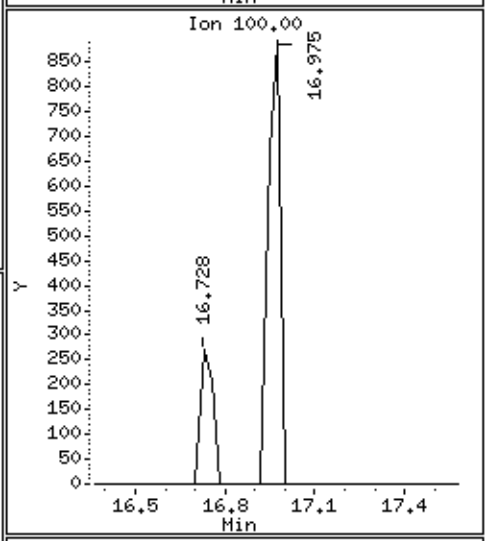


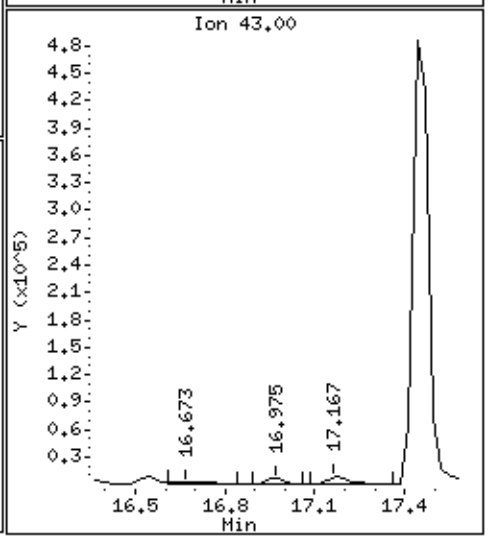












Data File: /chem/msdv.i/10Feb2015.b/v021018r1.d

Date : 10-FEB-2015 20:21

Client ID:

Instrument: msdv.i

Sample Info: 250mL# 31754

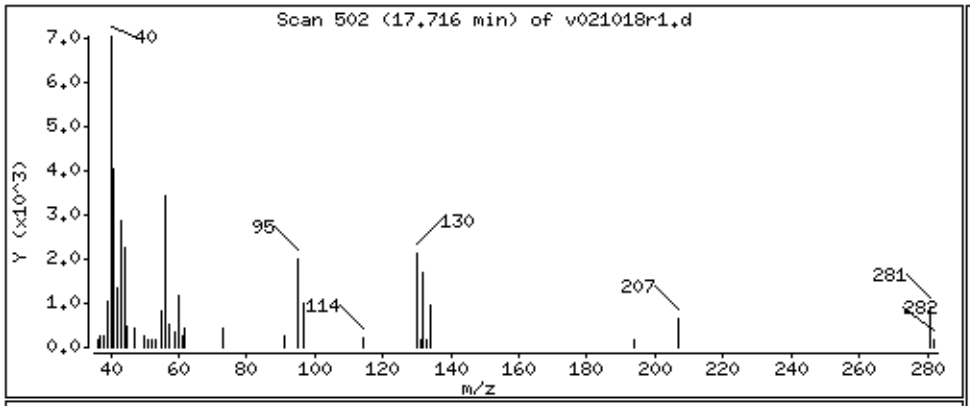
Operator: ea

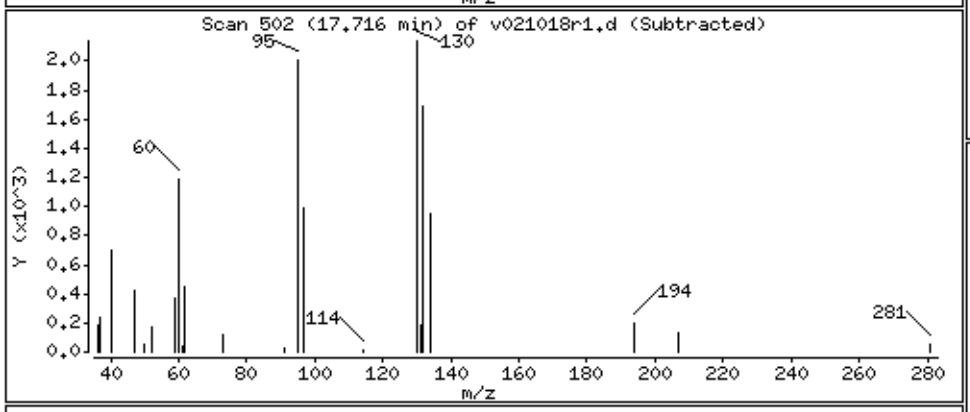
Column phase: RTx-624

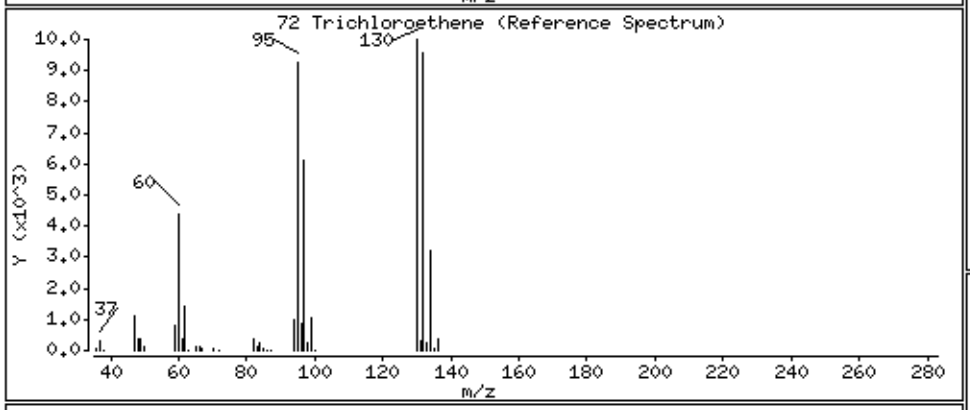
Column diameter: 0.32

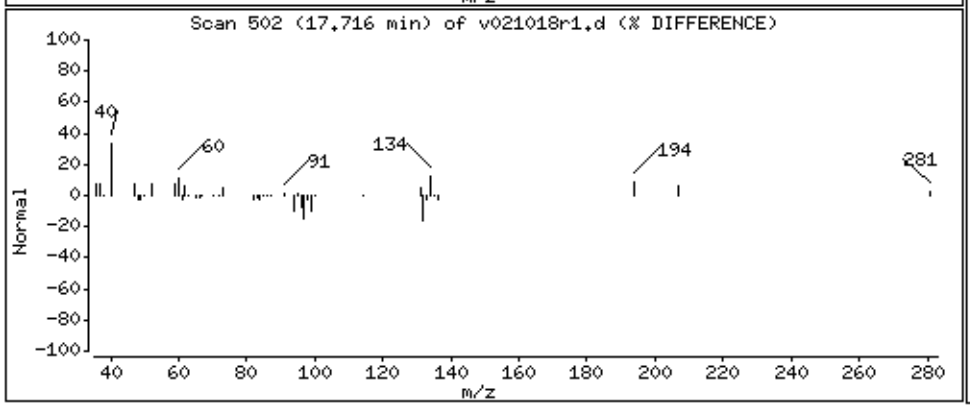
72 Trichloroethene

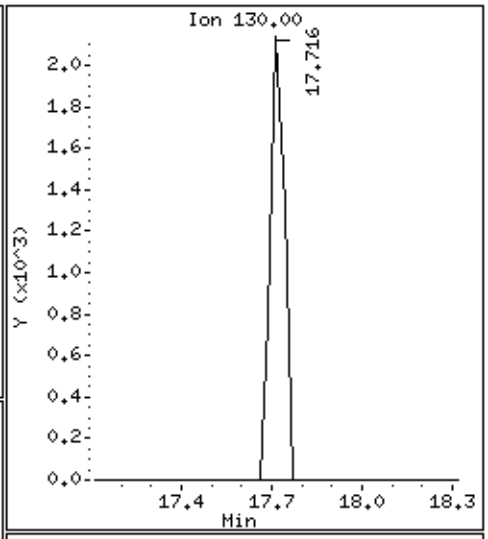
Concentration: 0.1658 PPBV

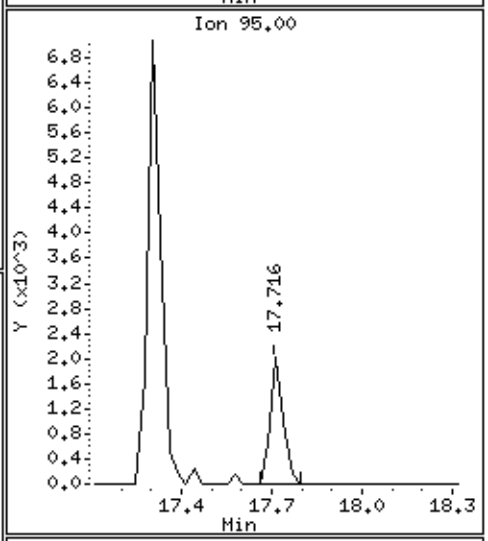


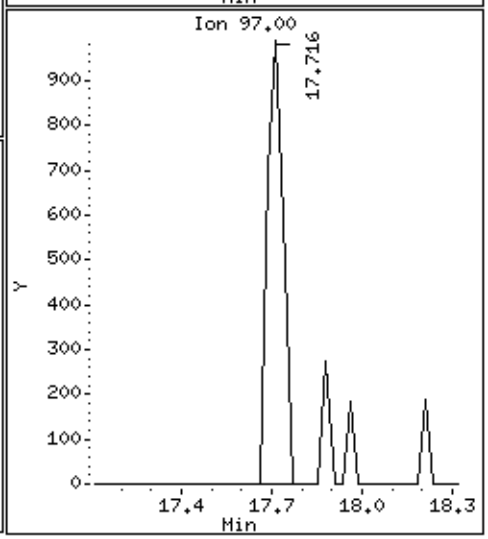












Data File: /chem/msdv.i/10Feb2015.b/v021018r1.d

Date : 10-FEB-2015 20:21

Client ID:

Instrument: msdv.i

Sample Info: 250mL# 31754

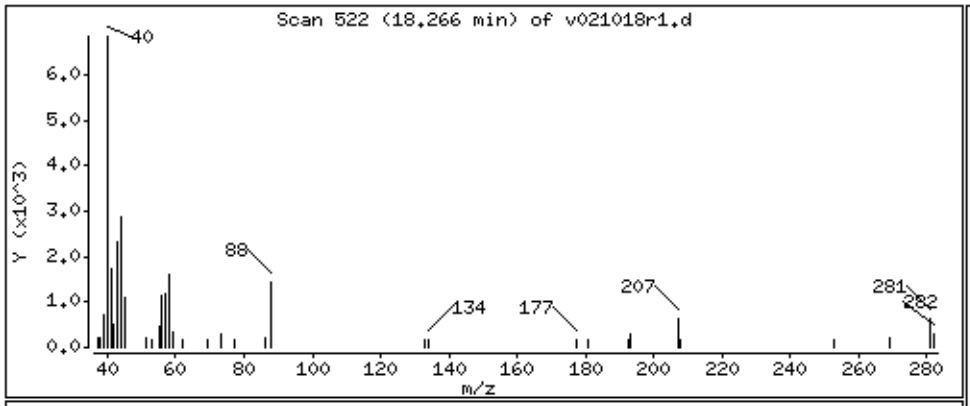
Operator: ea

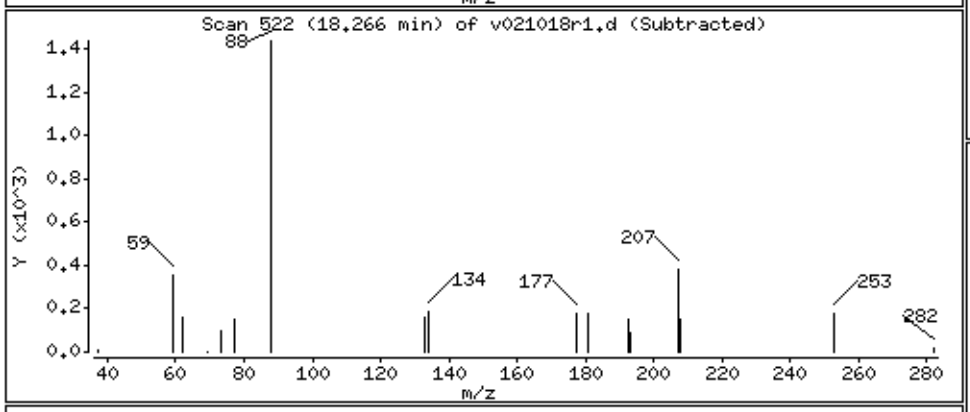
Column phase: RTx-624

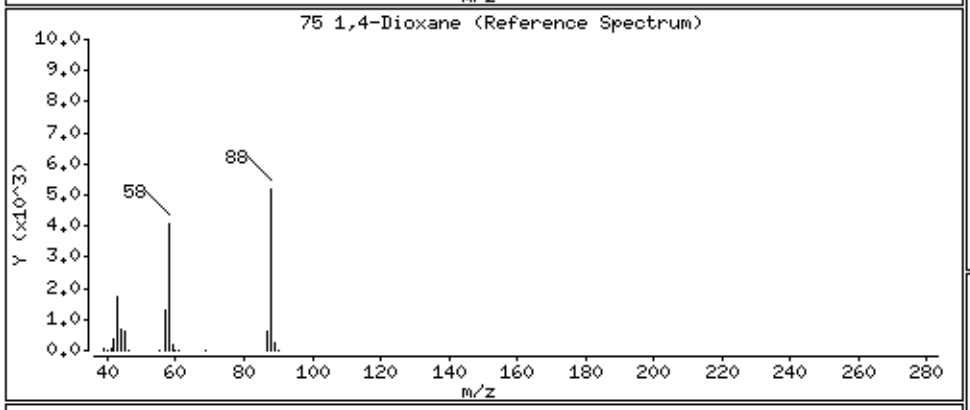
Column diameter: 0.32

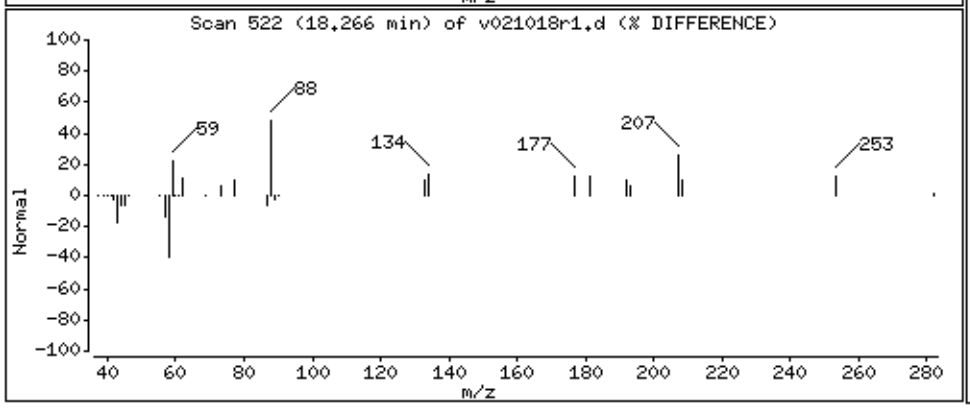
75 1,4-Dioxane

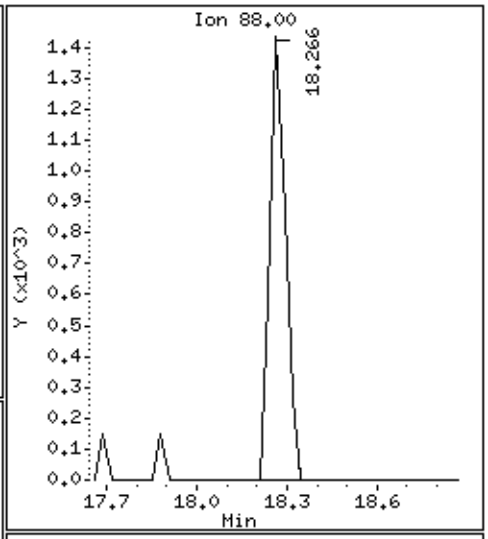
Concentration: 0.2208 PPBV

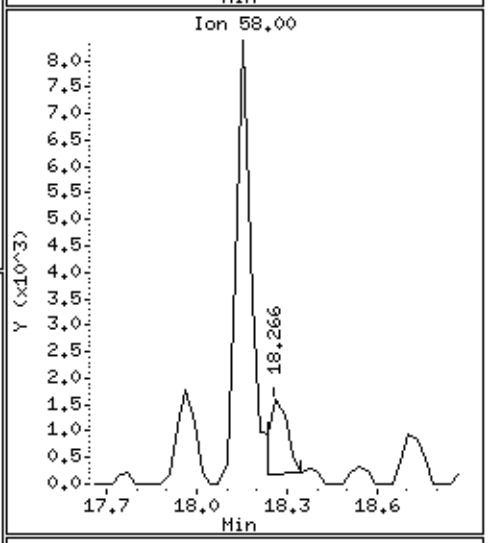


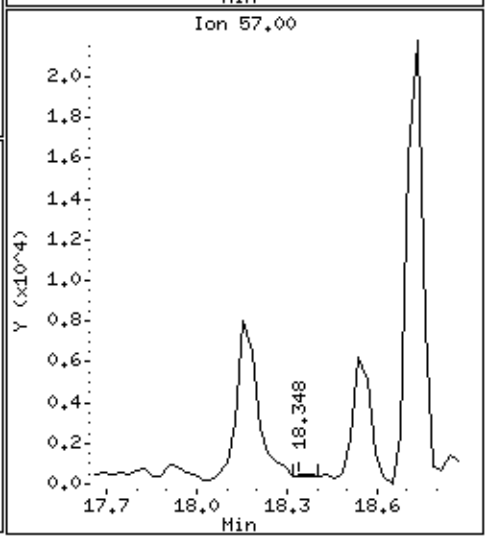












Data File: /chem/msdv.i/10Feb2015.b/v021018r1.d

Date : 10-FEB-2015 20:21

Client ID:

Instrument: msdv.i

Sample Info: 250mL# 31754

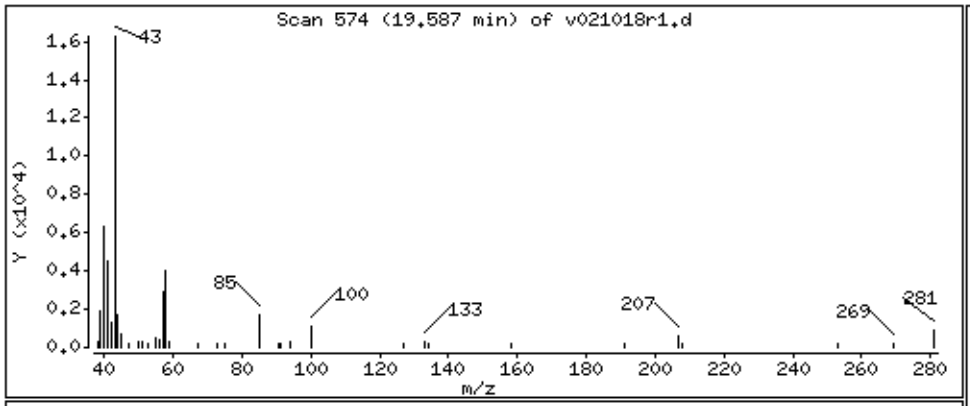
Operator: ea

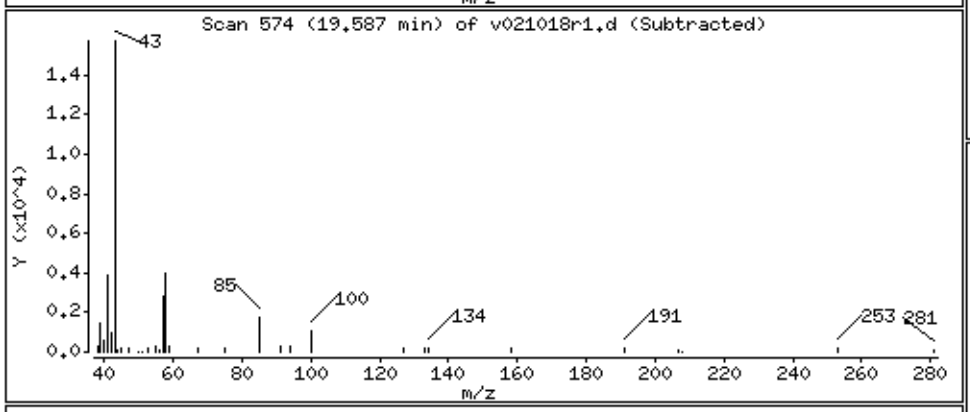
Column phase: RTx-624

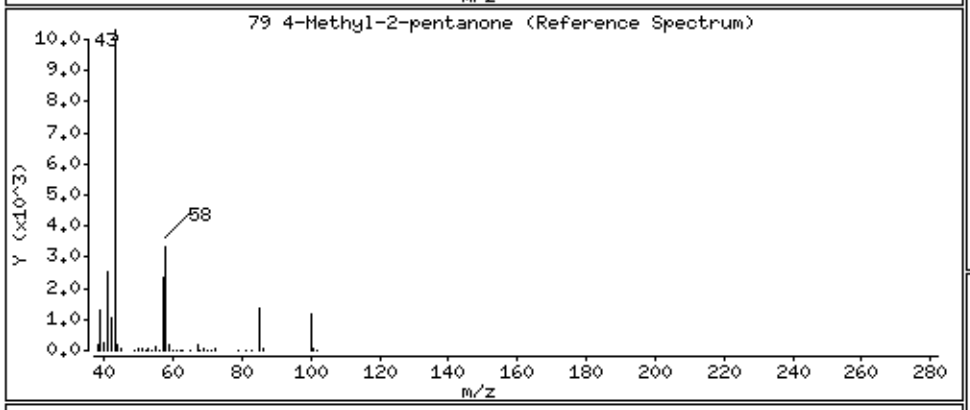
Column diameter: 0.32

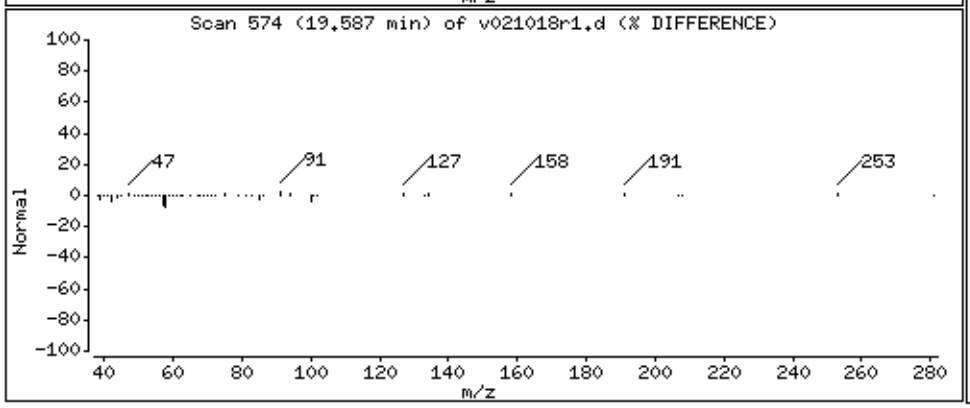
79 4-Methyl-2-pentanone

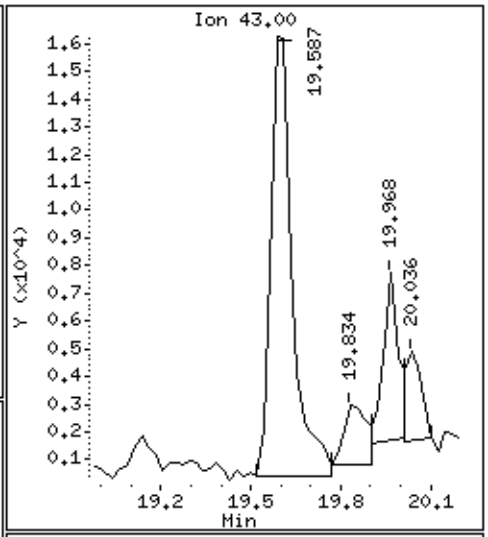
Concentration: 0.6854 PPBV

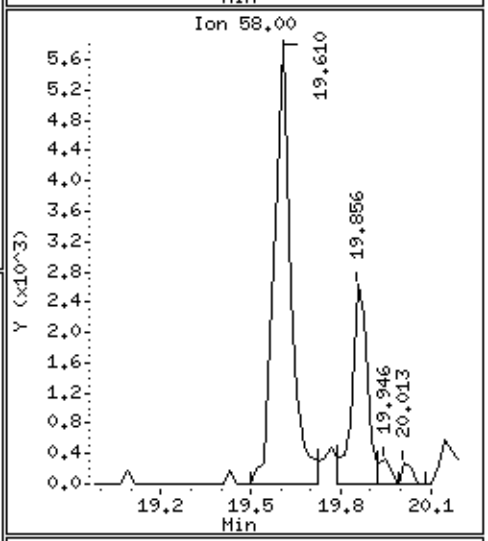


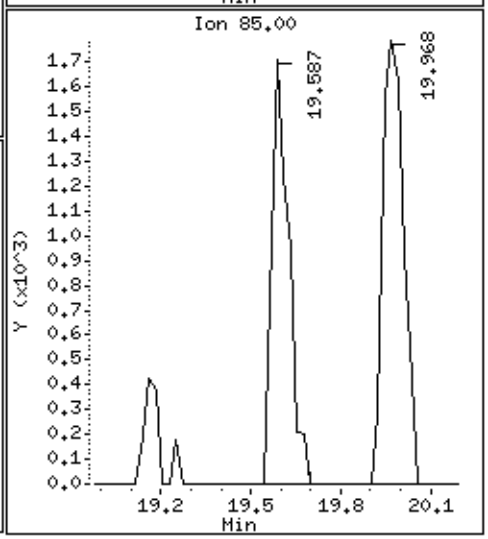












Data File: /chem/msdv.i/10Feb2015.b/v021018r1.d

Date : 10-FEB-2015 20:21

Client ID:

Instrument: msdv.i

Sample Info: 250mL# 31754

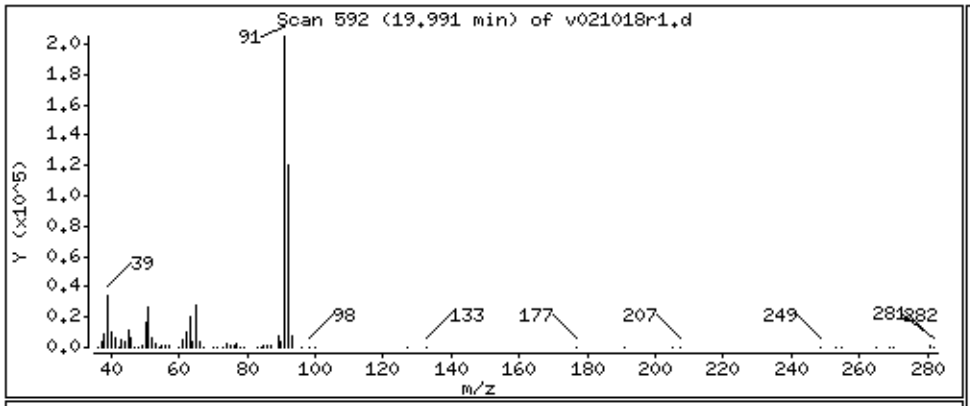
Operator: ea

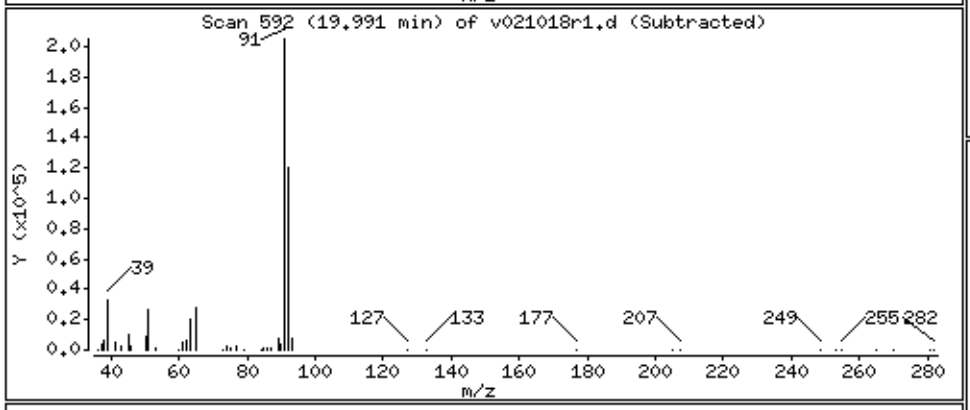
Column phase: RTx-624

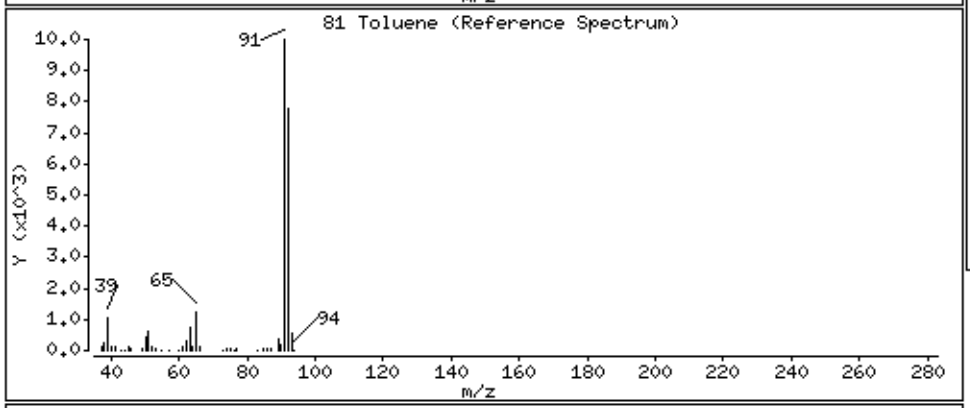
Column diameter: 0.32

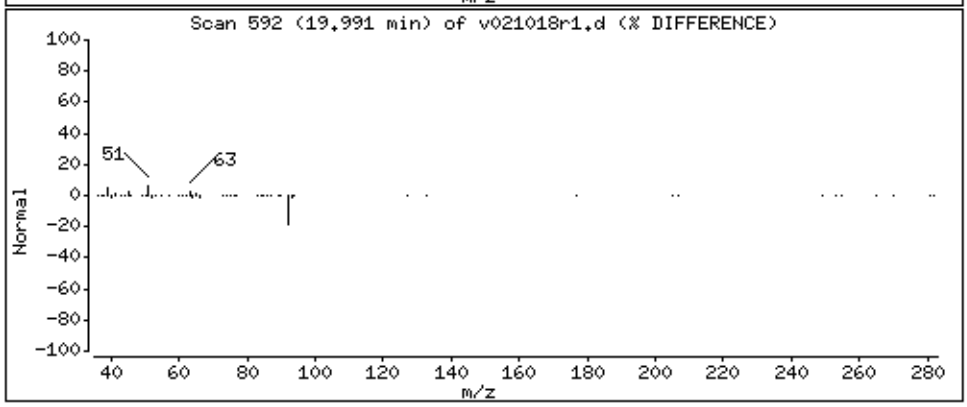
81 Toluene

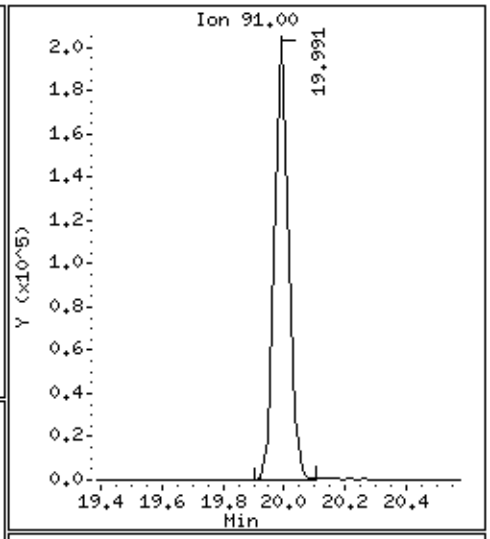
Concentration: 7.050 PPBV

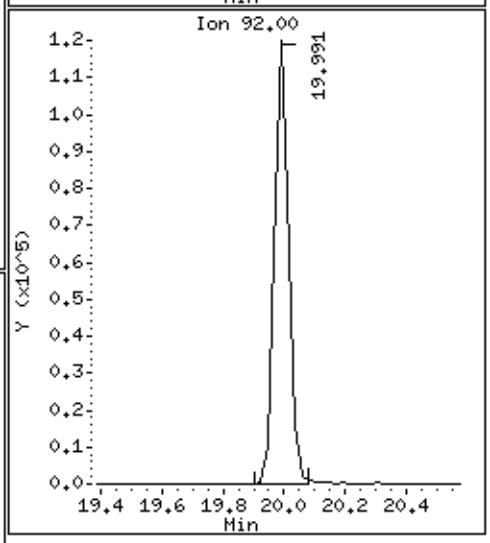












Data File: /chem/msdv.i/10Feb2015.b/v021018r1.d

Date : 10-FEB-2015 20:21

Client ID:

Instrument: msdv.i

Sample Info: 250mL# 31754

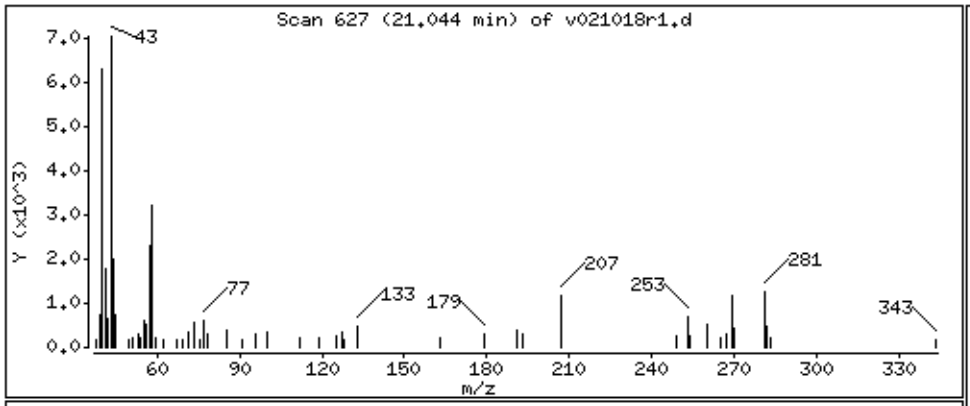
Operator: ea

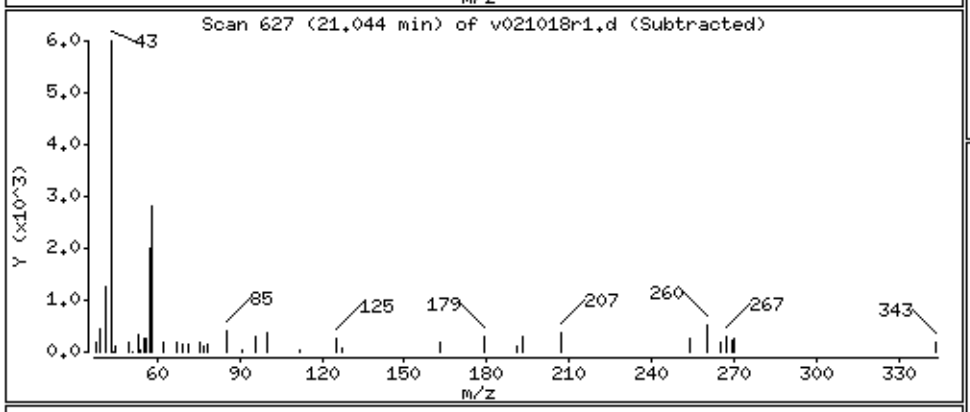
Column phase: RTx-624

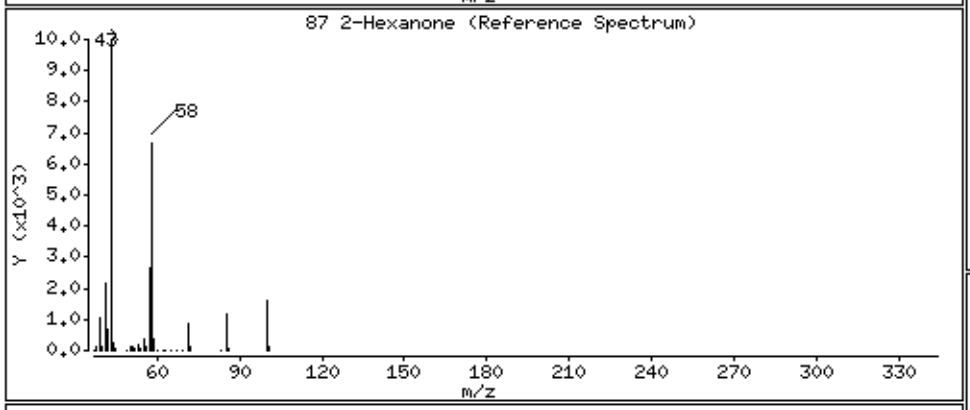
Column diameter: 0.32

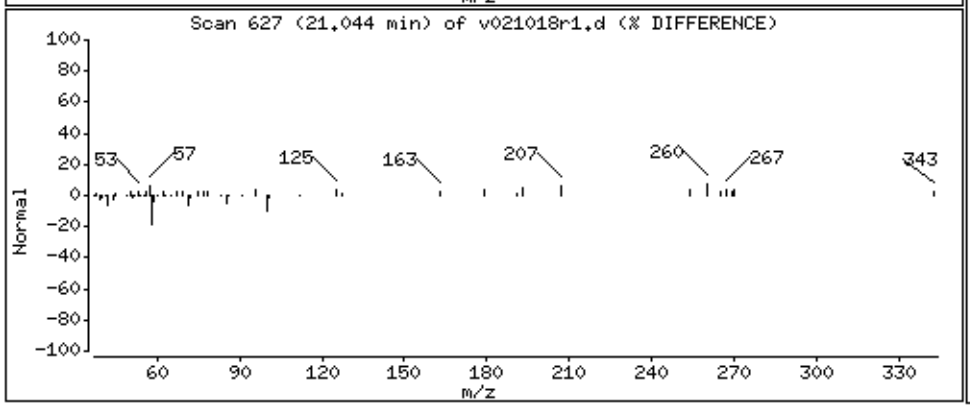
87 2-Hexanone

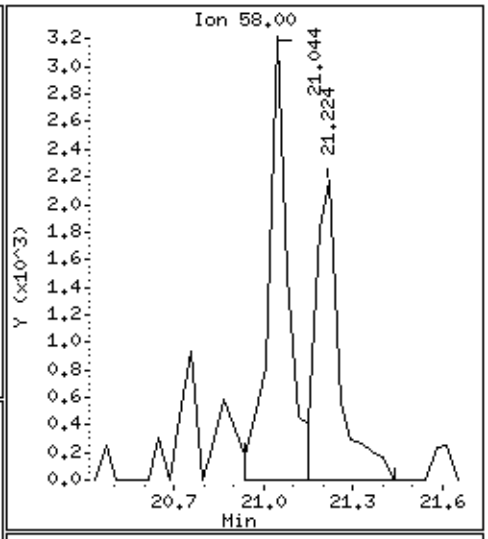
Concentration: 0.3485 PPBV

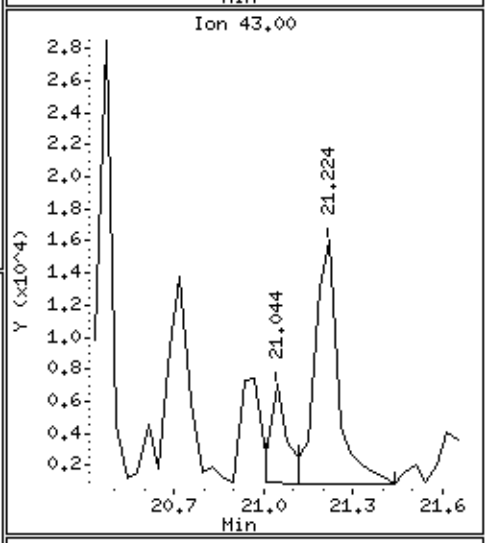


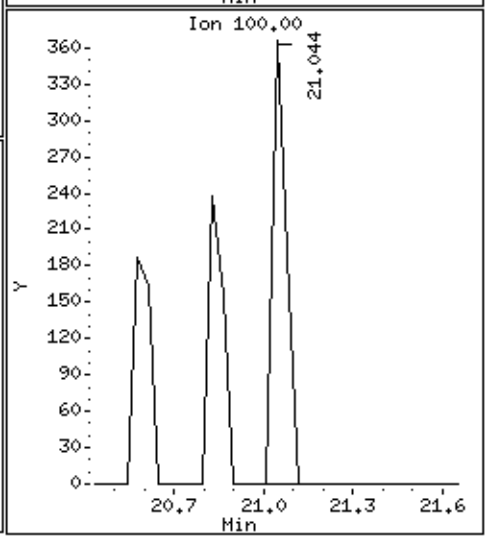












Data File: /chem/msdv.i/10Feb2015.b/v021018r1.d

Date : 10-FEB-2015 20:21

Client ID:

Instrument: msdv.i

Sample Info: 250mL# 31754

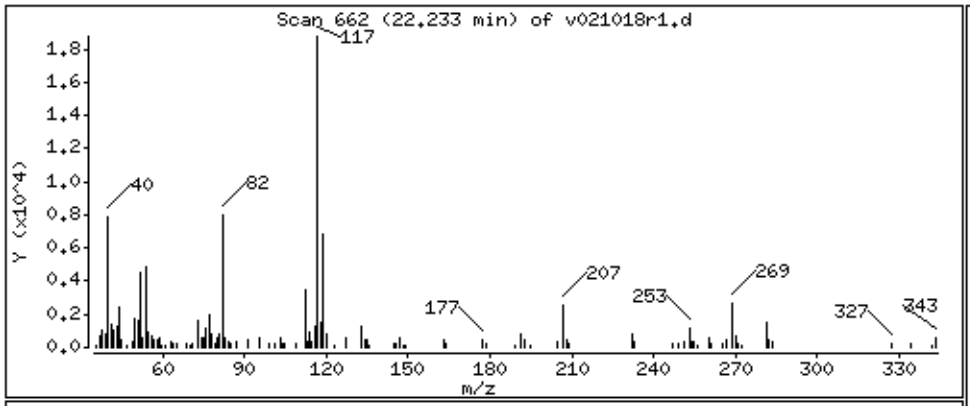
Operator: ea

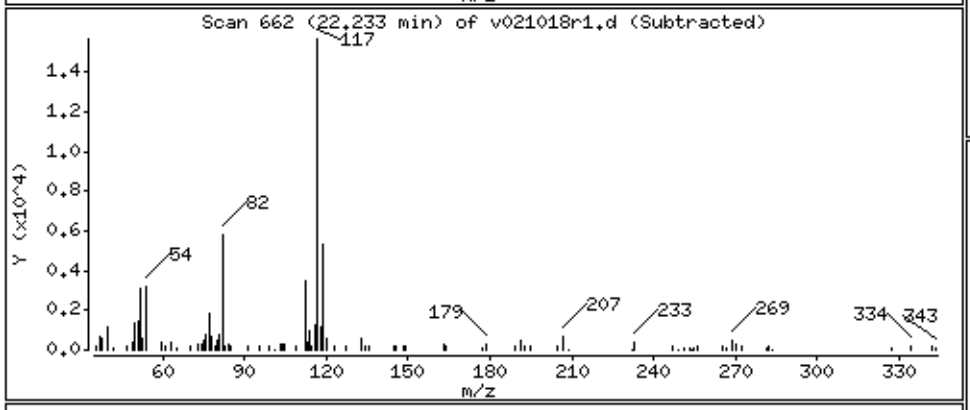
Column phase: RTx-624

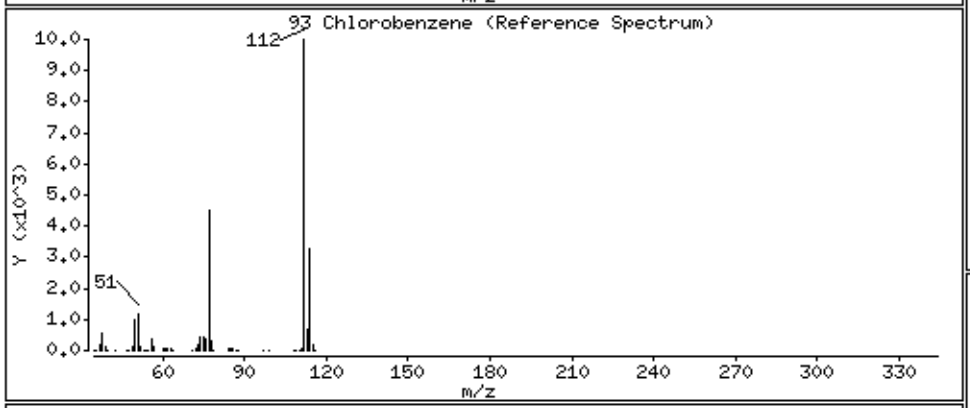
Column diameter: 0.32

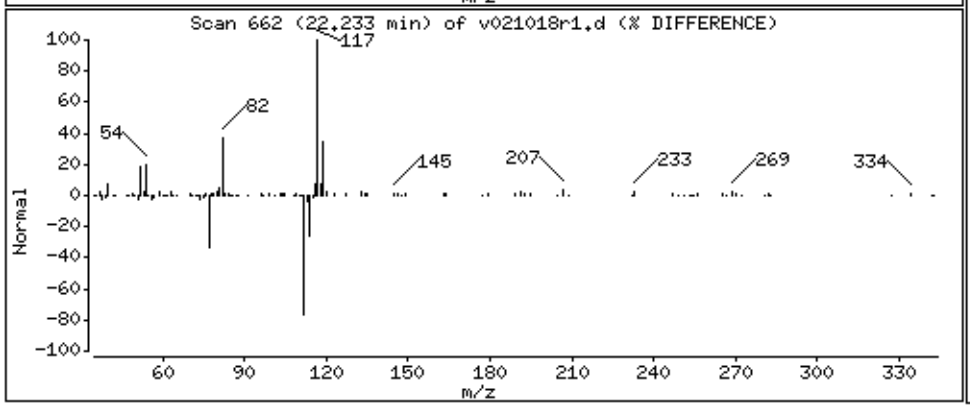
93 Chlorobenzene

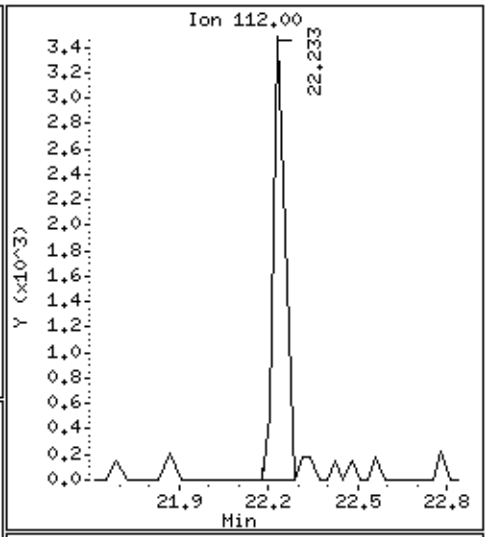
Concentration: 0.1193 PPBV

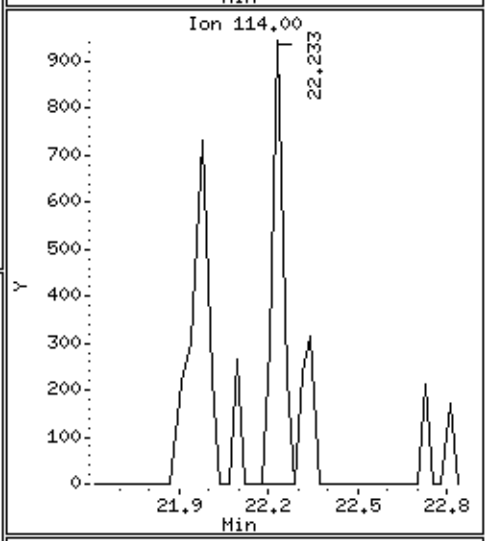


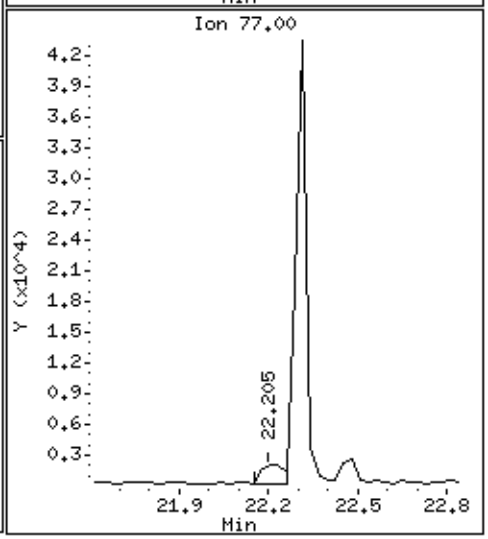












Data File: /chem/msdv.i/10Feb2015.b/v021018r1.d

Date : 10-FEB-2015 20:21

Client ID:

Instrument: msdv.i

Sample Info: 250mL# 31754

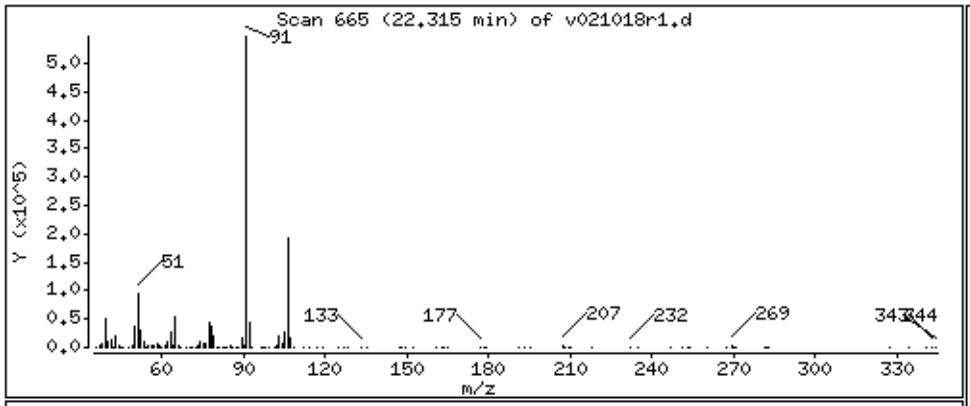
Operator: ea

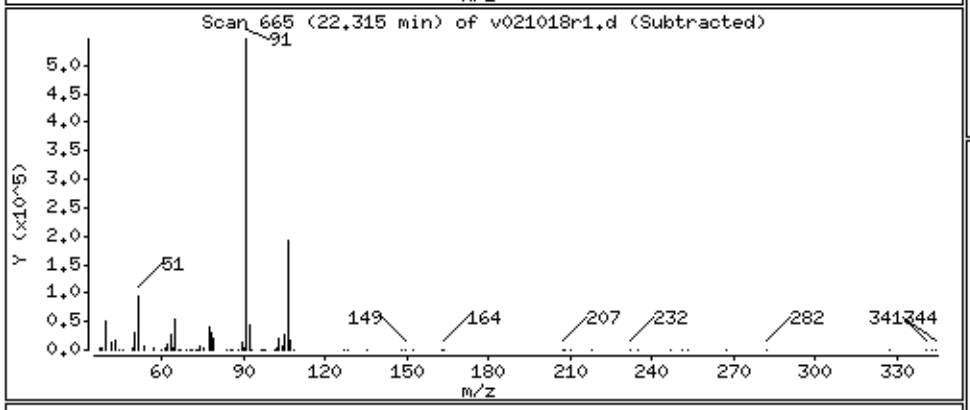
Column phase: RTx-624

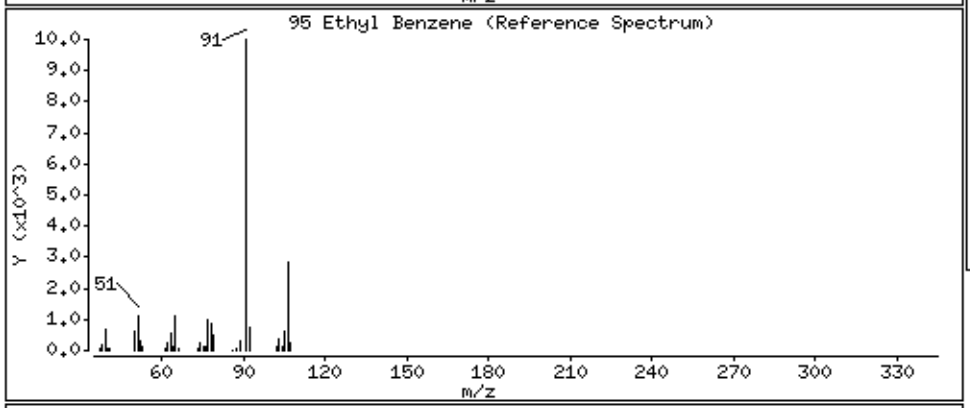
Column diameter: 0.32

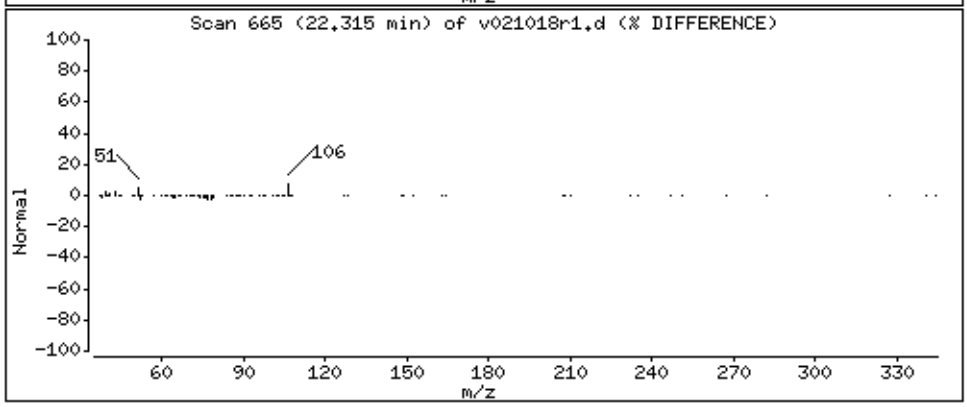
95 Ethyl Benzene

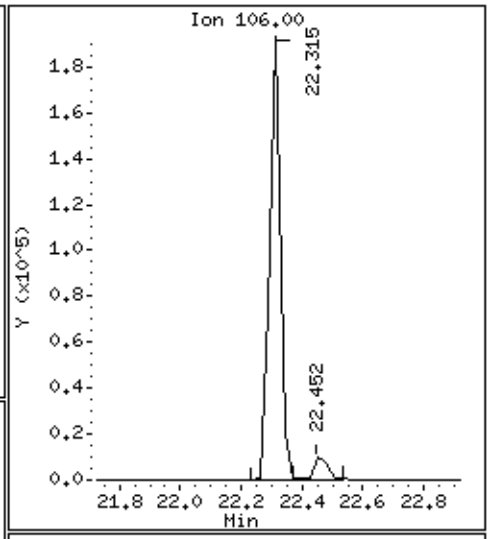
Concentration: 13.132 PPBV

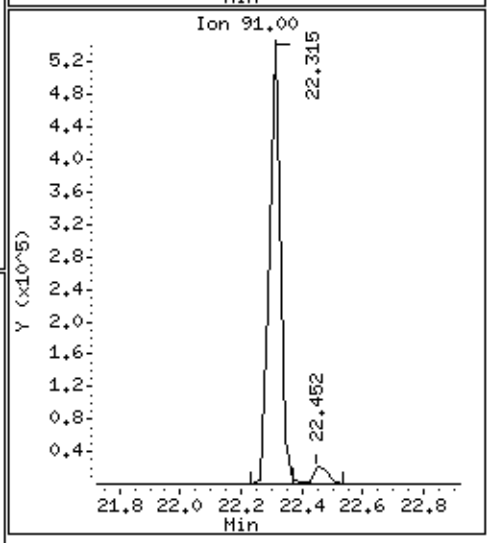












Data File: /chem/msdv.i/10Feb2015.b/v021018r1.d

Date : 10-FEB-2015 20:21

Client ID:

Instrument: msdv.i

Sample Info: 250mL# 31754

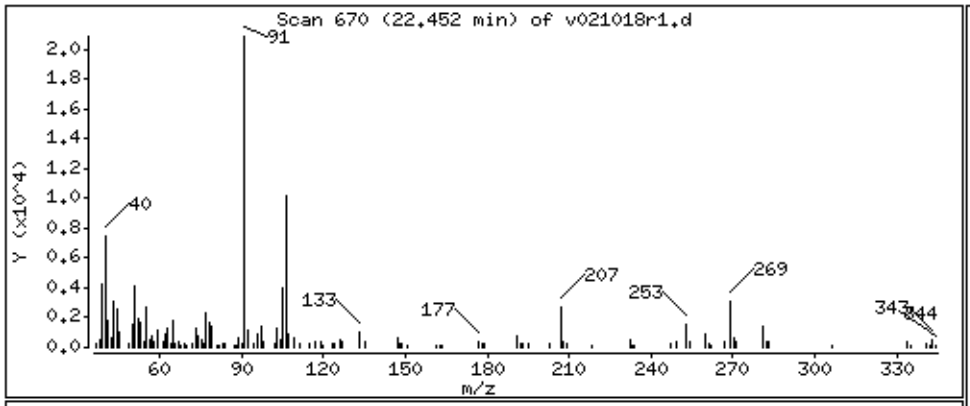
Operator: ea

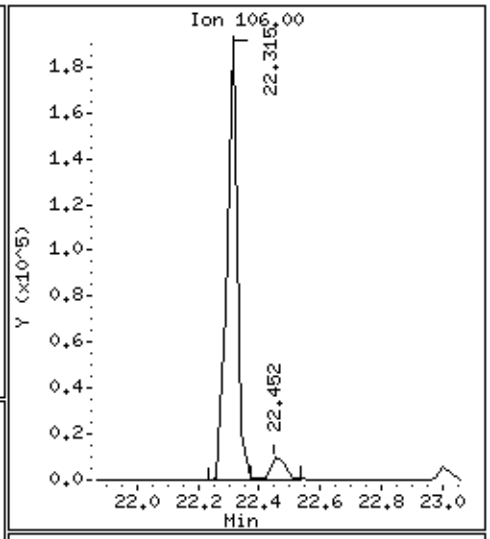
Column phase: RTx-624

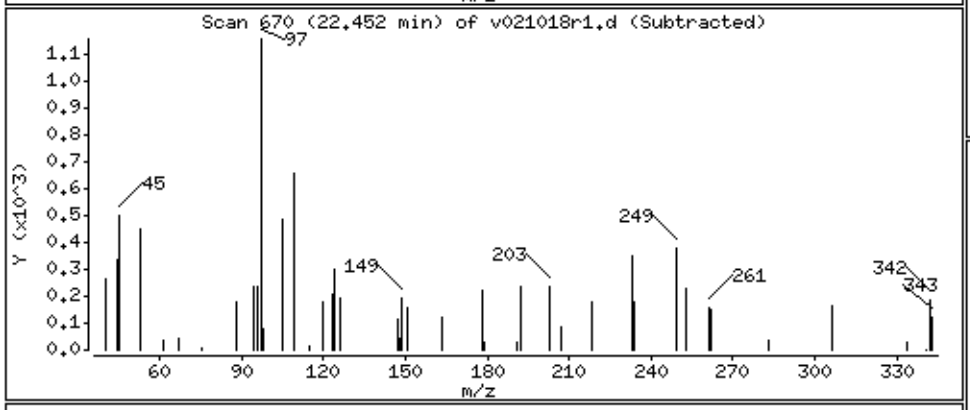
Column diameter: 0.32

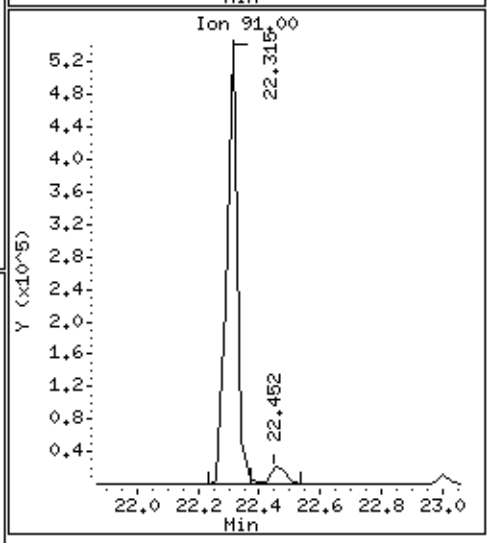
96 m,p-Xylene

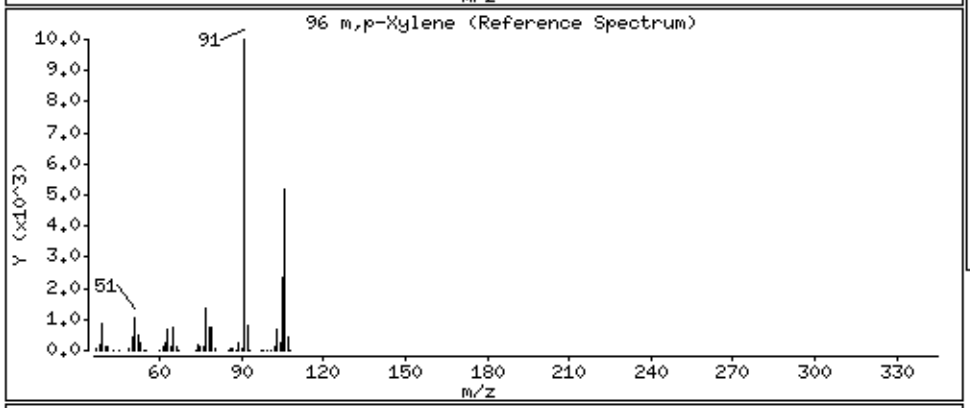
Concentration: 0.9778 PPBV

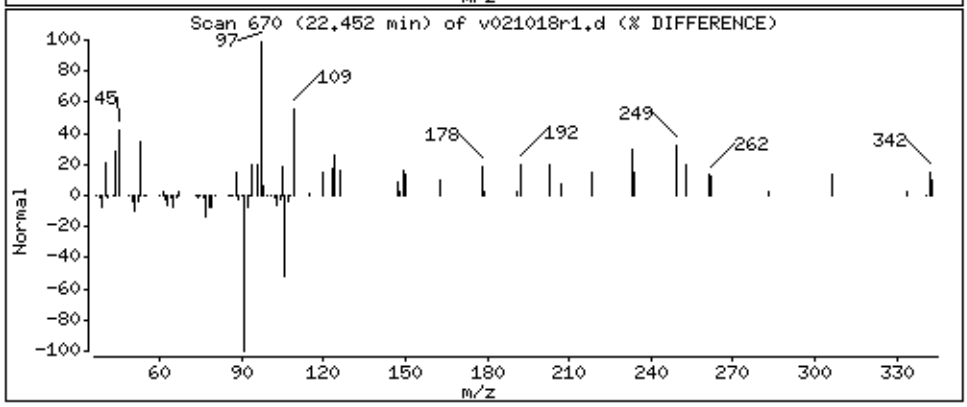












Data File: /chem/msdv.i/10Feb2015.b/v021018r1.d

Date : 10-FEB-2015 20:21

Client ID:

Instrument: msdv.i

Sample Info: 250mL# 31754

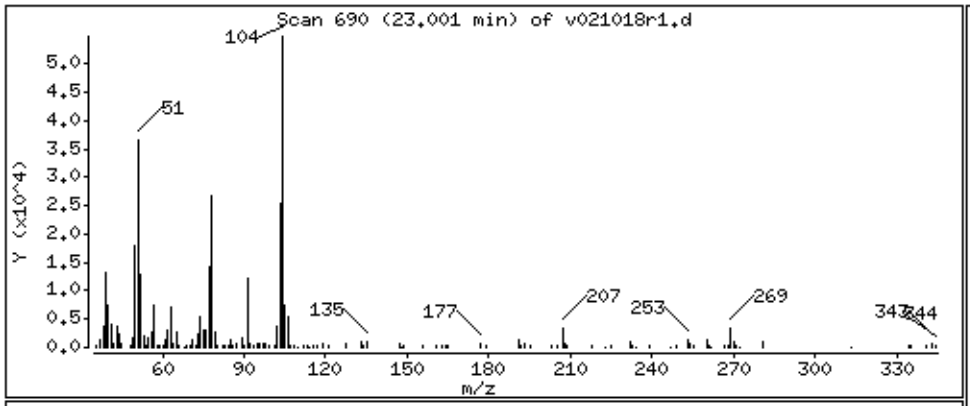
Operator: ea

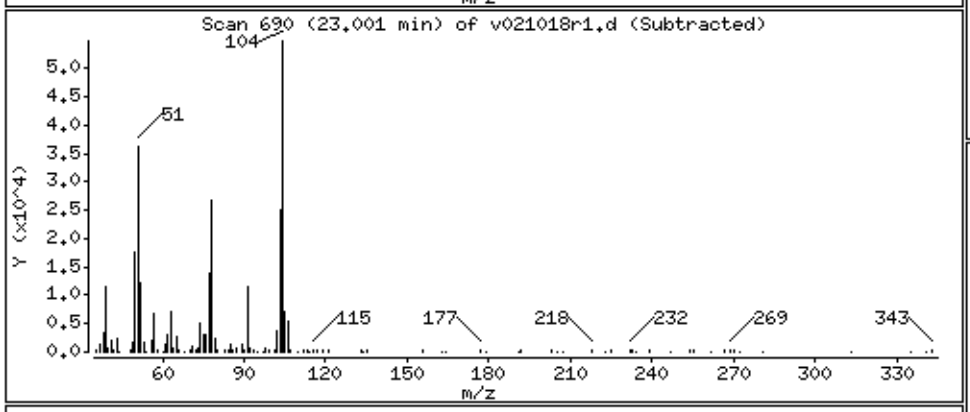
Column phase: RTx-624

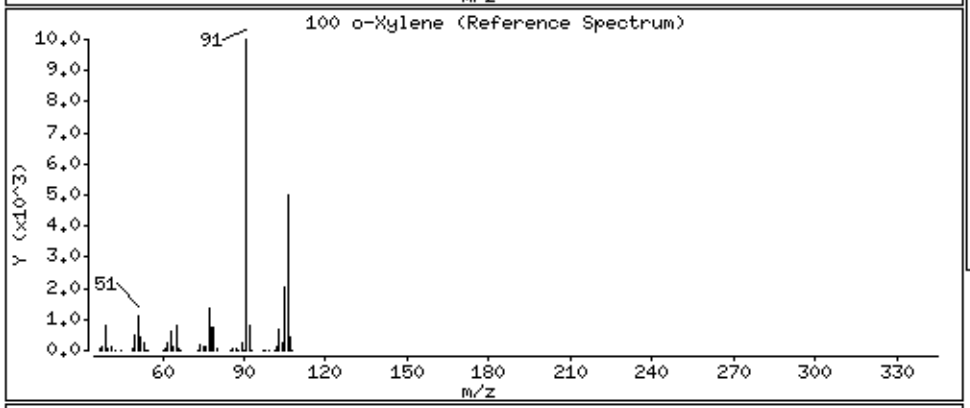
Column diameter: 0.32

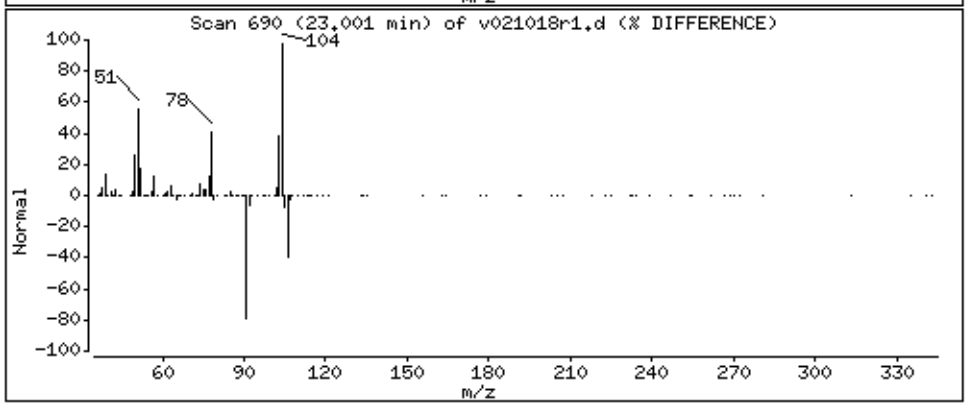
100 o-Xylene

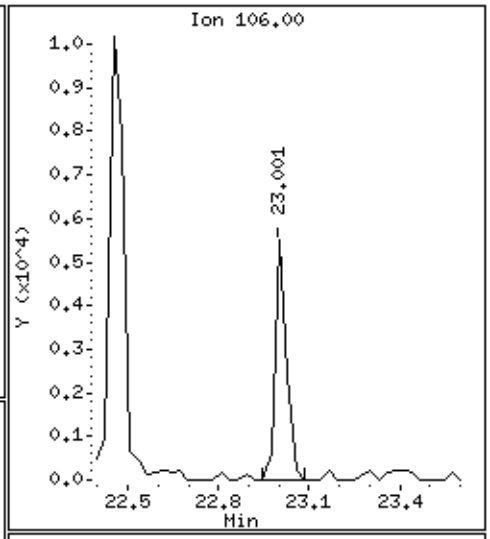
Concentration: 0.4296 PPBV

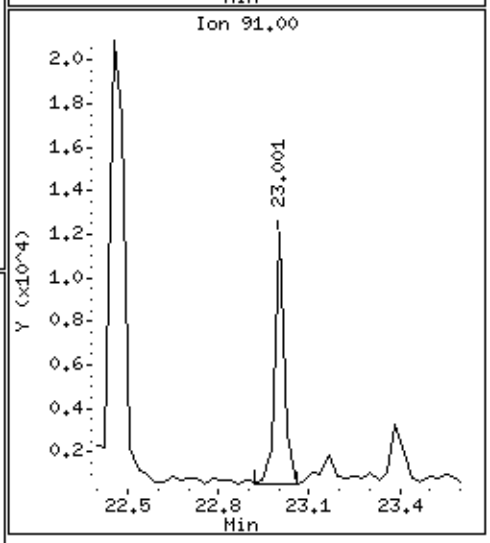












Data File: /chem/msdv.i/10Feb2015.b/v021018r1.d

Date : 10-FEB-2015 20:21

Client ID:

Instrument: msdv.i

Sample Info: 250mL# 31754

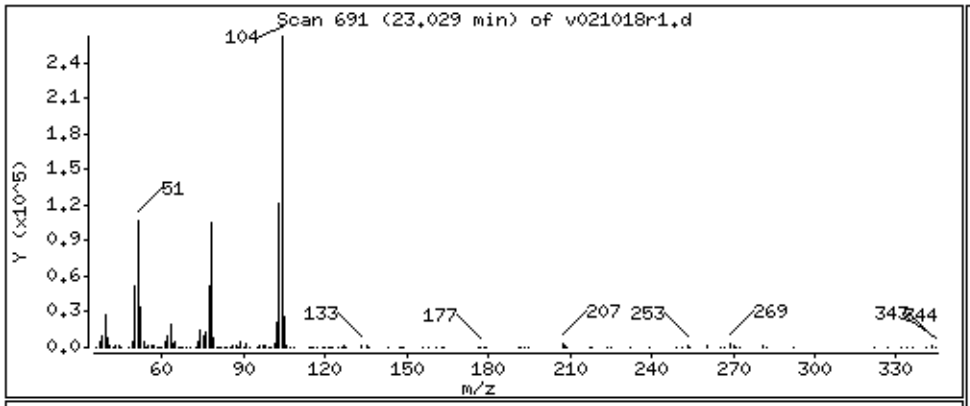
Operator: ea

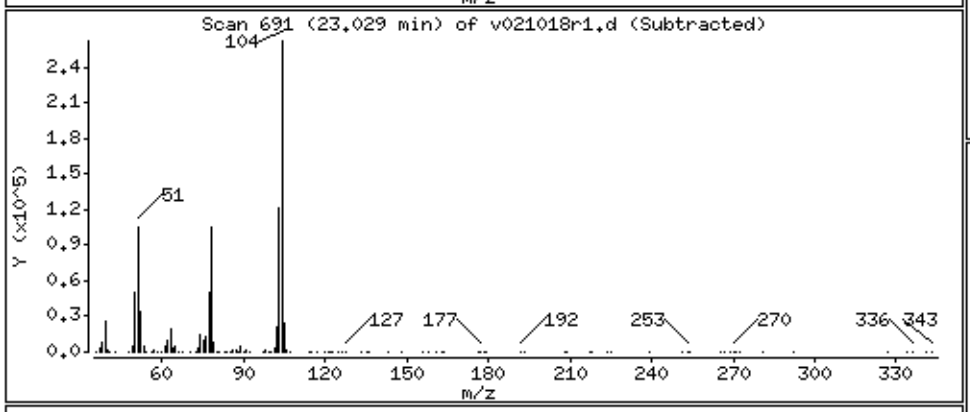
Column phase: RTx-624

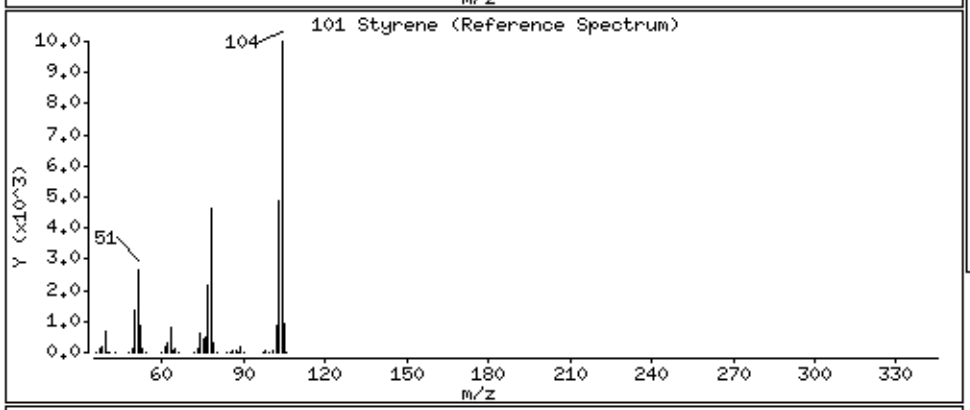
Column diameter: 0.32

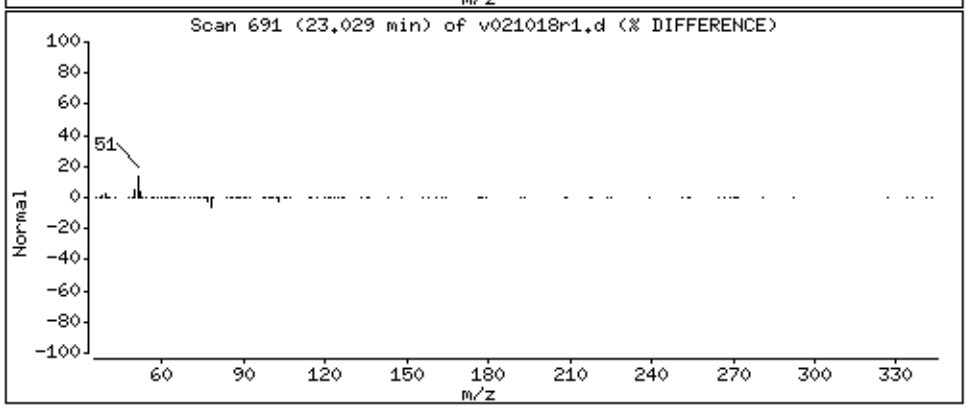
101 Styrene

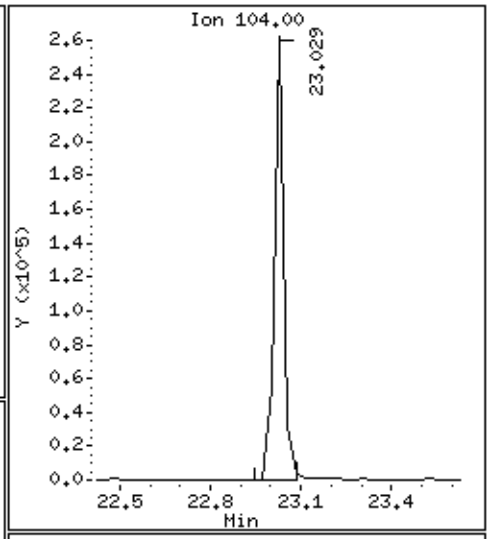
Concentration: 11.575 PPBV

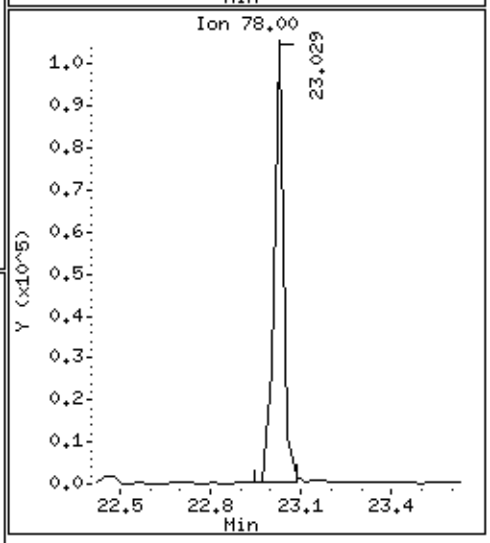












Data File: /chem/msdv.i/10Feb2015.b/v021018r1.d

Date : 10-FEB-2015 20:21

Client ID:

Instrument: msdv.i

Sample Info: 250mL# 31754

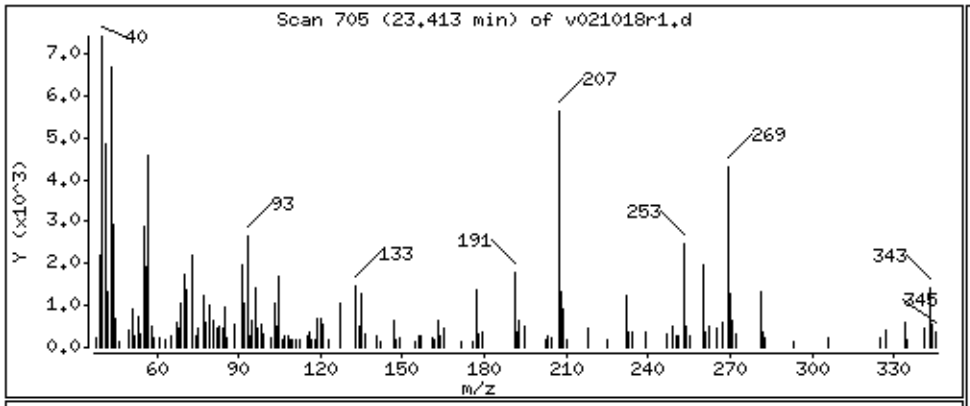
Operator: ea

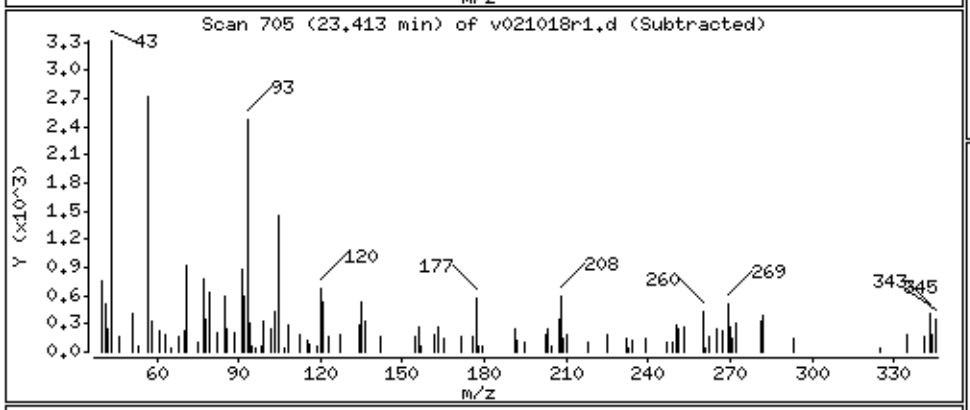
Column phase: RTx-624

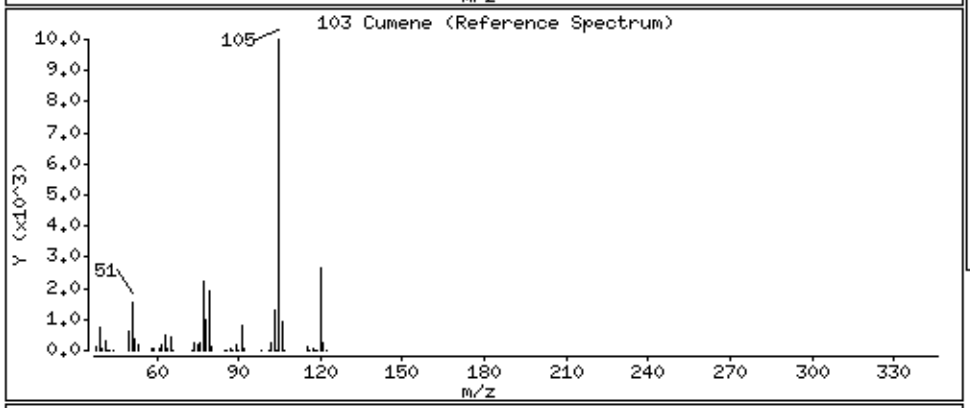
Column diameter: 0.32

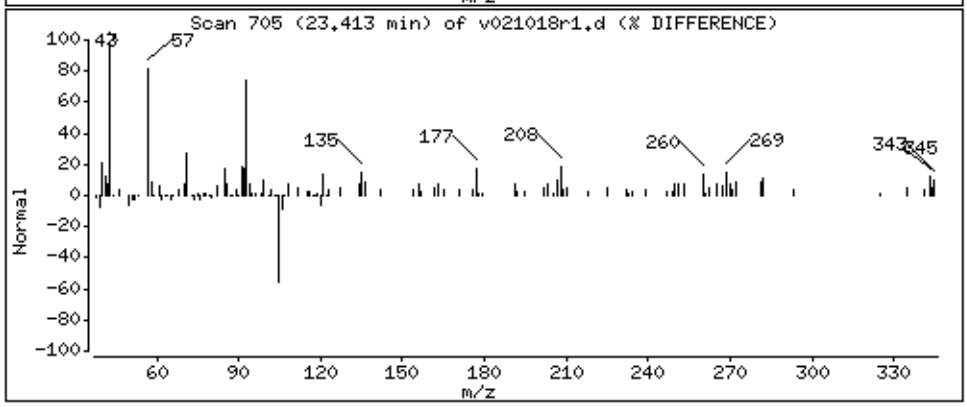
103 Cumene

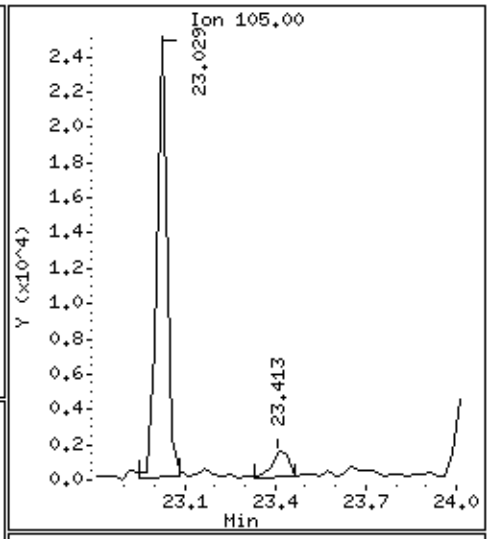
Concentration: 0.05964 PPBV

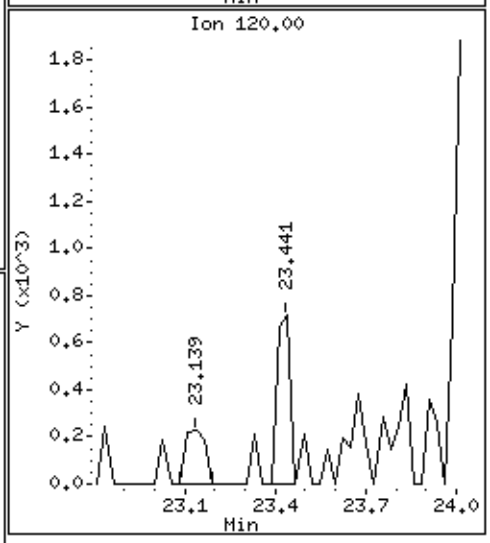












Data File: /chem/msdv.i/10Feb2015.b/v021018r1.d

Date : 10-FEB-2015 20:21

Client ID:

Instrument: msdv.i

Sample Info: 250mL# 31754

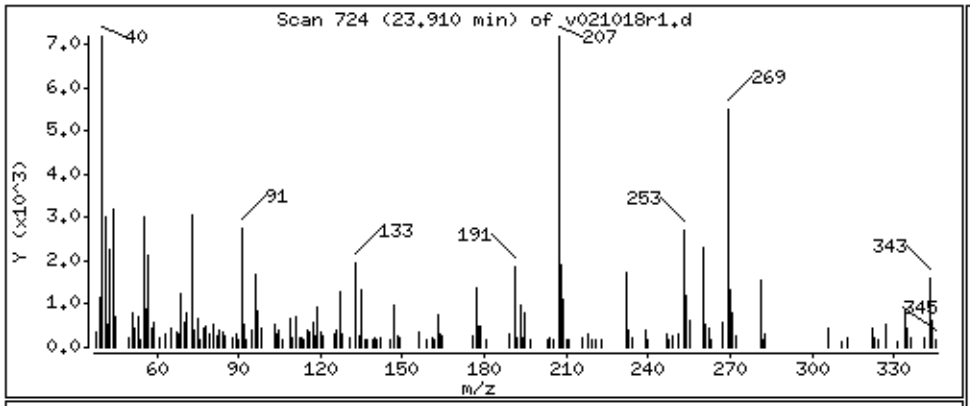
Operator: ea

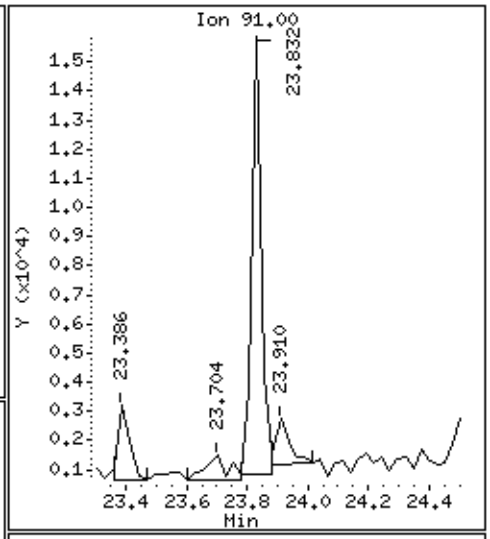
Column phase: RTx-624

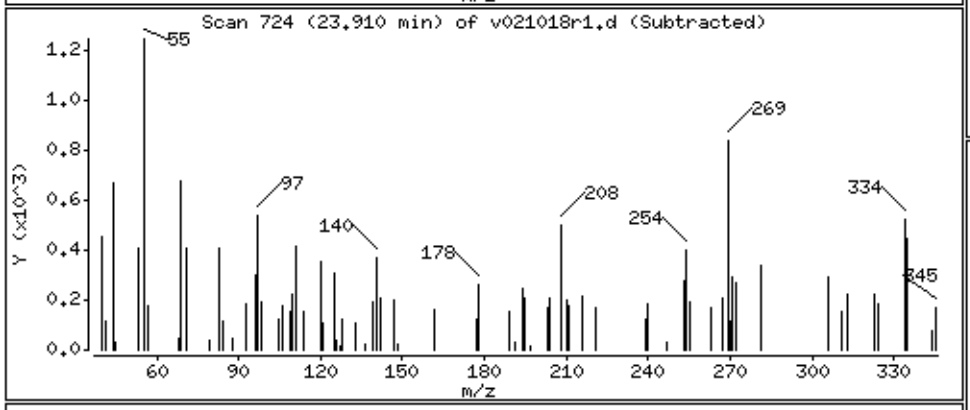
Column diameter: 0.32

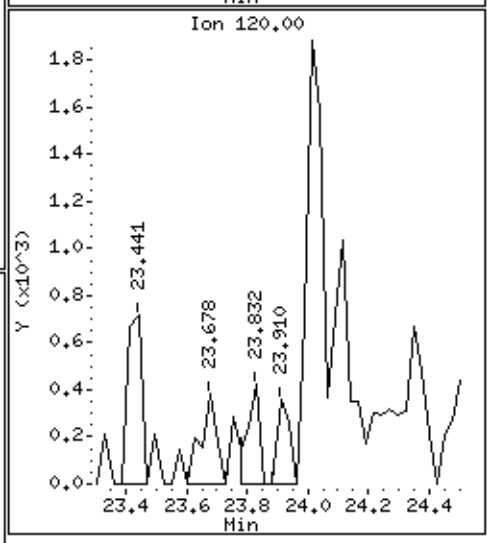
111 Propylbenzene

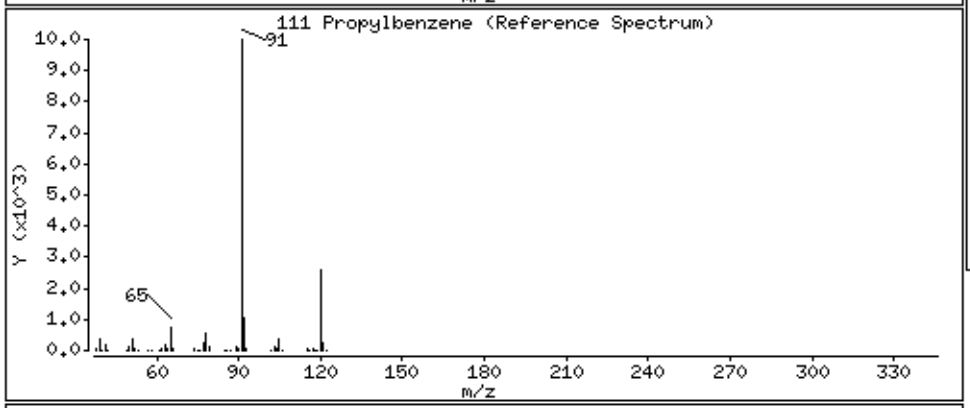
Concentration: 0.05746 PPBV

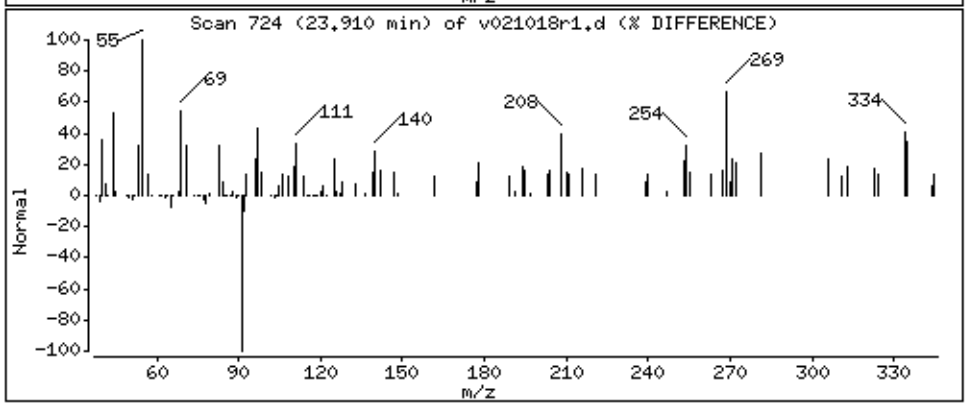












Data File: /chem/msdv.i/10Feb2015.b/v021018r1.d

Date : 10-FEB-2015 20:21

Client ID:

Instrument: msdv.i

Sample Info: 250mL# 31754

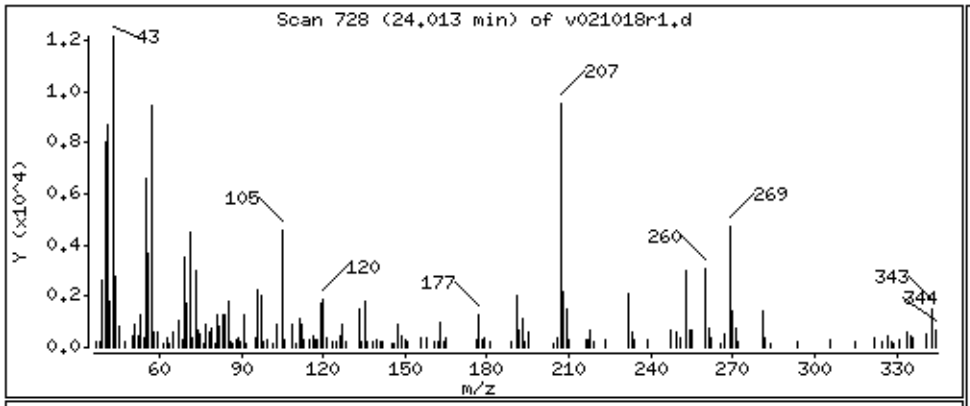
Operator: ea

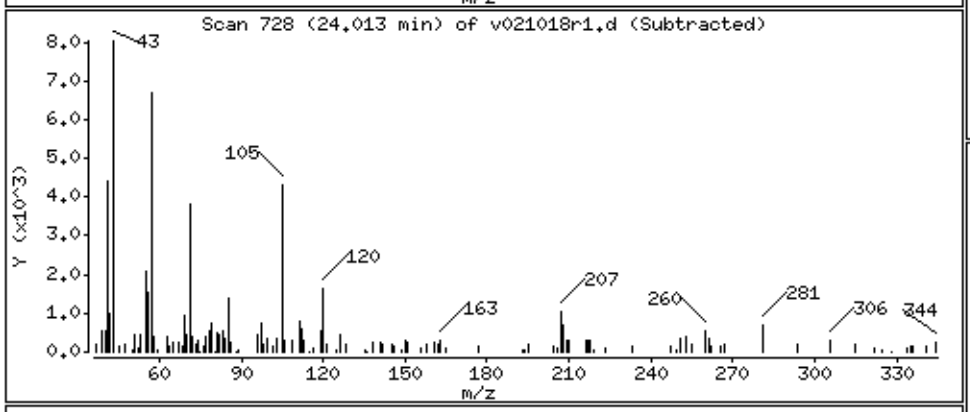
Column phase: RTx-624

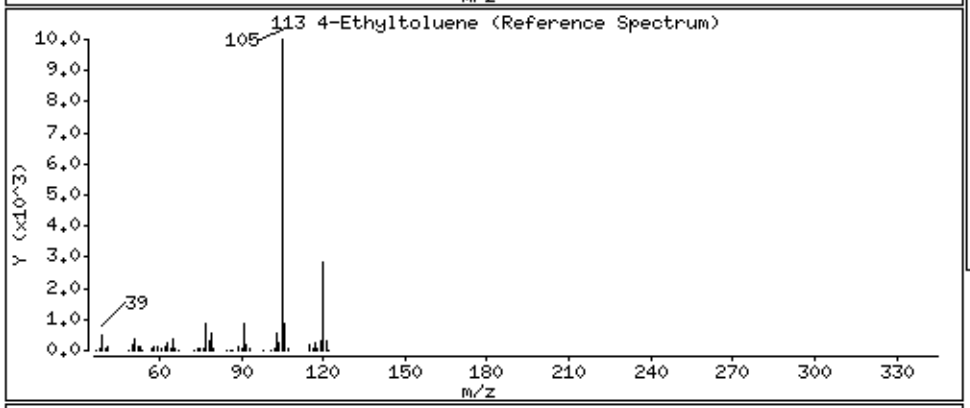
Column diameter: 0.32

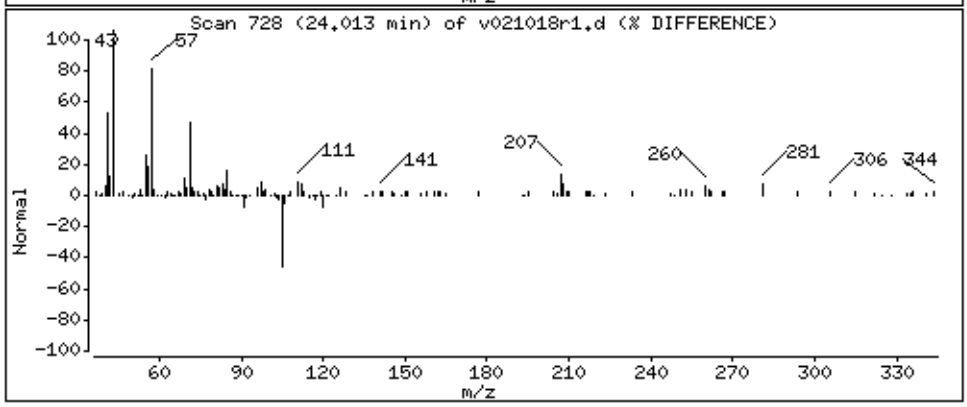
113 4-Ethyltoluene

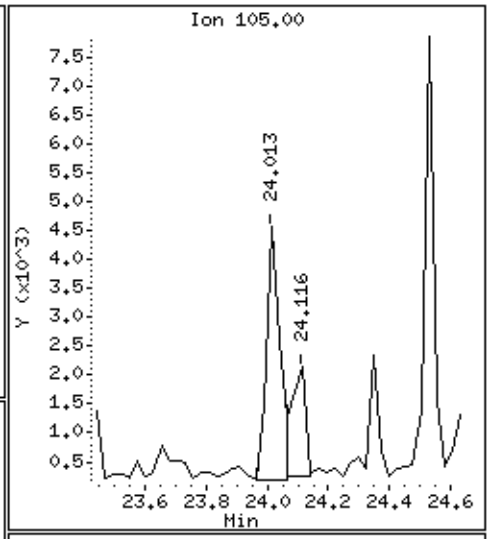
Concentration: 0.2123 PPBV

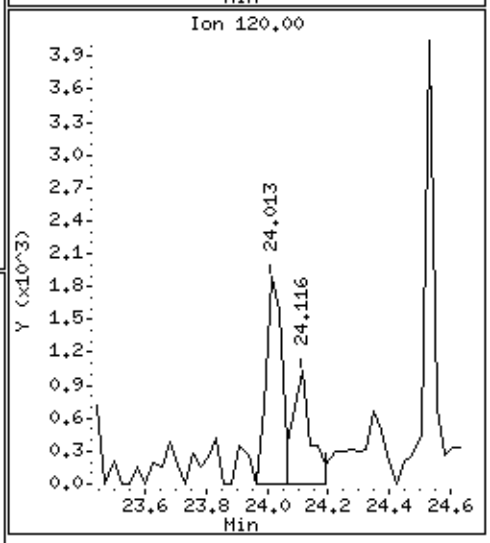












Data File: /chem/msdv.i/10Feb2015.b/v021018r1.d

Date : 10-FEB-2015 20:21

Client ID:

Instrument: msdv.i

Sample Info: 250mL# 31754

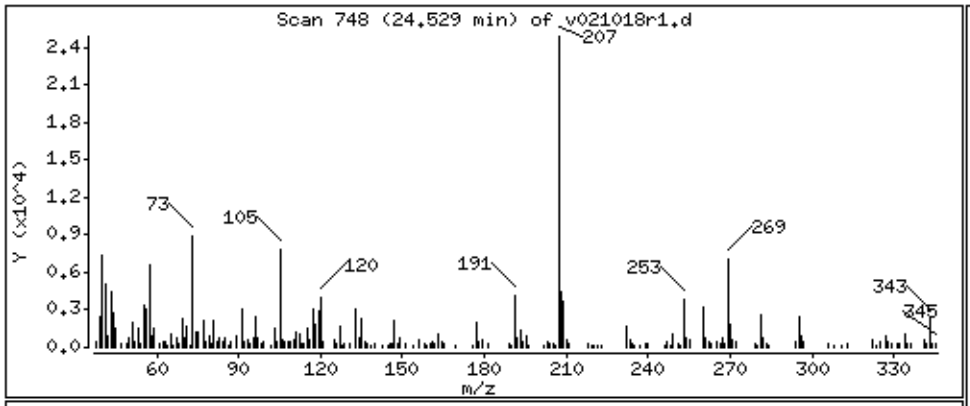
Operator: ea

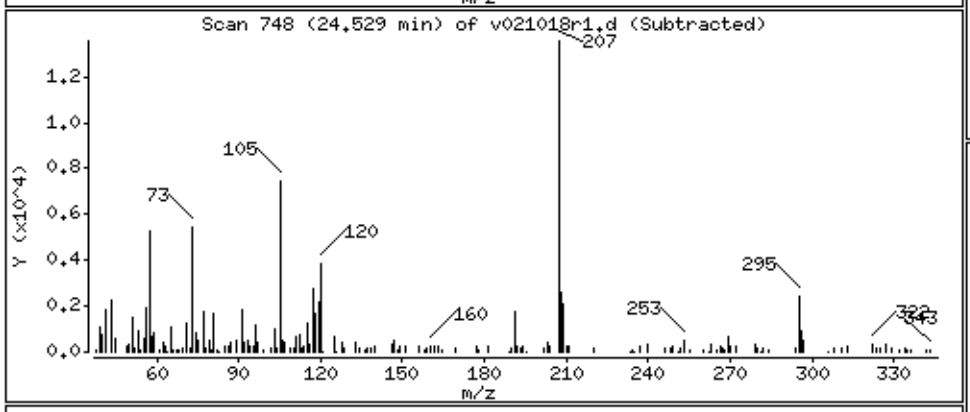
Column phase: RTx-624

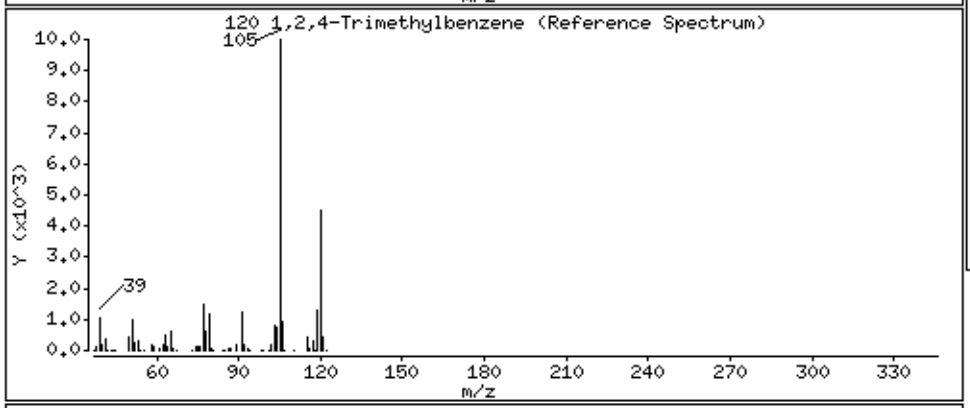
Column diameter: 0.32

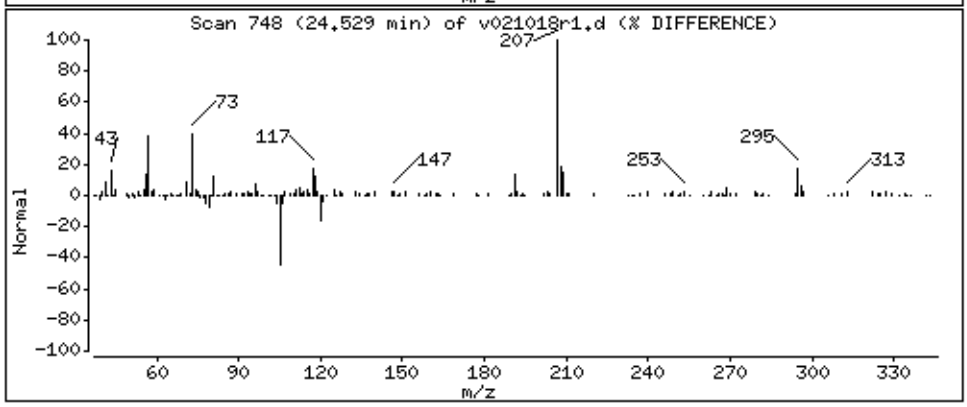
120 1,2,4-Trimethylbenzene

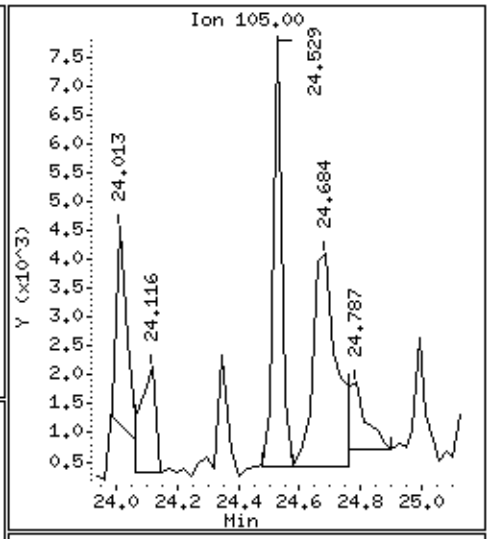
Concentration: 0.2403 PPBV

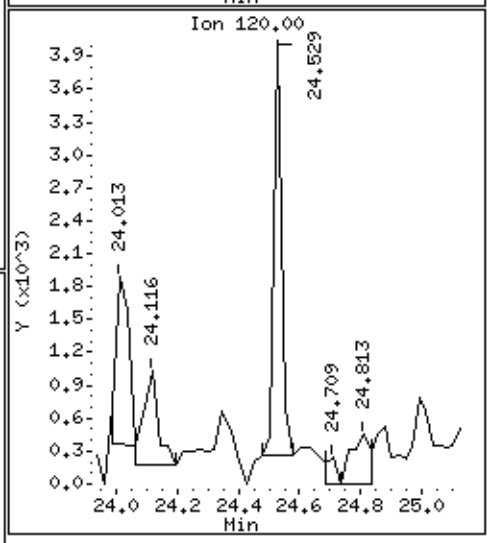












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Summary of Detected Compounds
MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: B6-4SS

Lab ID#: 1502113AR1-04A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Chloromethane	6.2	1.1 J	13	2.2 J
Ethanol	6.2	89 J0	12	170 J0
Acetone	6.2	170	15	400
2-Propanol	6.2	1900 E	15	4700 E
Methylene Chloride	2.5	1.1 J	8.6	3.7 J
Hexane	1.2	1.1 J	4.4	4.0 J
2-Butanone (Methyl Ethyl Ketone)	6.2	1.6 J	18	4.7 J
Chloroform	1.2	0.25 J	6.0	1.2 J
4-Methyl-2-pentanone	1.2	0.43 J	5.1	1.8 J
Toluene	1.2	2.5	4.7	9.5
Ethyl Benzene	1.2	1.8	5.4	8.0
m,p-Xylene	1.2	11	5.4	48
o-Xylene	1.2	4.1	5.4	18
Cumene	1.2	0.30 J	6.1	1.5 J
Propylbenzene	1.2	0.79 J	6.1	3.9 J
4-Ethyltoluene	1.2	2.4	6.1	12
1,3,5-Trimethylbenzene	1.2	1.1 J	6.1	5.3 J
1,2,4-Trimethylbenzene	1.2	3.7	6.1	18

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Client Sample ID: B6-4SS

Lab ID#: 1502113AR1-04A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**v021019r1**	**Date of Collection:**	**2/6/15 2:22:00 PM**
Dil. Factor:	**12.4**	**Date of Analysis:**	**2/10/15 08:55 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	1.2	Not Detected	6.1	Not Detected
Freon 114	1.2	Not Detected	8.7	Not Detected
Chloromethane	6.2	1.1 J	13	2.2 J
Vinyl Chloride	1.2	Not Detected	3.2	Not Detected
1,3-Butadiene	1.2	Not Detected	2.7	Not Detected
Bromomethane	6.2	Not Detected	24	Not Detected
Chloroethane	6.2	Not Detected	16	Not Detected
Freon 11	1.2	Not Detected	7.0	Not Detected
Ethanol	6.2	89 J0	12	170 J0
Freon 113	1.2	Not Detected	9.5	Not Detected
1,1-Dichloroethene	1.2	Not Detected	4.9	Not Detected
Acetone	6.2	170	15	400
2-Propanol	6.2	1900 E	15	4700 E
Carbon Disulfide	6.2	Not Detected	19	Not Detected
3-Chloropropene	6.2	Not Detected	19	Not Detected
Methylene Chloride	2.5	1.1 J	8.6	3.7 J
Methyl tert-butyl ether	1.2	Not Detected	4.5	Not Detected
trans-1,2-Dichloroethene	1.2	Not Detected	4.9	Not Detected
Hexane	1.2	1.1 J	4.4	4.0 J
1,1-Dichloroethane	1.2	Not Detected	5.0	Not Detected
2-Butanone (Methyl Ethyl Ketone)	6.2	1.6 J	18	4.7 J
cis-1,2-Dichloroethene	1.2	Not Detected	4.9	Not Detected
Tetrahydrofuran	6.2	Not Detected	18	Not Detected
Chloroform	1.2	0.25 J	6.0	1.2 J
1,1,1-Trichloroethane	1.2	Not Detected	6.8	Not Detected
Cyclohexane	1.2	Not Detected	4.3	Not Detected
Carbon Tetrachloride	1.2	Not Detected	7.8	Not Detected
2,2,4-Trimethylpentane	6.2	Not Detected	29	Not Detected
Benzene	1.2	Not Detected	4.0	Not Detected
1,2-Dichloroethane	1.2	Not Detected	5.0	Not Detected
Heptane	1.2	Not Detected	5.1	Not Detected
Trichloroethene	1.2	Not Detected	6.7	Not Detected
1,2-Dichloropropane	1.2	Not Detected	5.7	Not Detected
1,4-Dioxane	1.2	Not Detected	4.5	Not Detected
Bromodichloromethane	1.2	Not Detected	8.3	Not Detected
cis-1,3-Dichloropropene	1.2	Not Detected	5.6	Not Detected
4-Methyl-2-pentanone	1.2	0.43 J	5.1	1.8 J
Toluene	1.2	2.5	4.7	9.5
trans-1,3-Dichloropropene	1.2	Not Detected	5.6	Not Detected
1,1,2-Trichloroethane	1.2	Not Detected	6.8	Not Detected
Tetrachloroethene	1.2	Not Detected	8.4	Not Detected
2-Hexanone	6.2	Not Detected	25	Not Detected

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Client Sample ID: B6-4SS

Lab ID#: 1502113AR1-04A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**v021019r1**	**Date of Collection:**	**2/6/15 2:22:00 PM**
Dil. Factor:	**12.4**	**Date of Analysis:**	**2/10/15 08:55 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Dibromochloromethane	1.2	Not Detected	10	Not Detected
1,2-Dibromoethane (EDB)	1.2	Not Detected	9.5	Not Detected
Chlorobenzene	1.2	Not Detected	5.7	Not Detected
Ethyl Benzene	1.2	1.8	5.4	8.0
m,p-Xylene	1.2	11	5.4	48
o-Xylene	1.2	4.1	5.4	18
Styrene	1.2	Not Detected	5.3	Not Detected
Bromoform	1.2	Not Detected	13	Not Detected
Cumene	1.2	0.30 J	6.1	1.5 J
1,1,2,2-Tetrachloroethane	1.2	Not Detected	8.5	Not Detected
Propylbenzene	1.2	0.79 J	6.1	3.9 J
4-Ethyltoluene	1.2	2.4	6.1	12
1,3,5-Trimethylbenzene	1.2	1.1 J	6.1	5.3 J
1,2,4-Trimethylbenzene	1.2	3.7	6.1	18
1,3-Dichlorobenzene	1.2	Not Detected	7.4	Not Detected
1,4-Dichlorobenzene	1.2	Not Detected	7.4	Not Detected
alpha-Chlorotoluene	6.2	Not Detected	32	Not Detected
1,2-Dichlorobenzene	1.2	Not Detected	7.4	Not Detected
1,2,4-Trichlorobenzene	6.2	Not Detected	46	Not Detected
Hexachlorobutadiene	6.2	Not Detected UJ	66	Not Detected UJ
Naphthalene	6.2	Not Detected	32	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: 1 Liter Summa Canister (100% Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	97	70-130
Toluene-d8	97	70-130
4-Bromofluorobenzene	88	70-130

Eurofins Air Toxics Inc.

TO15/Modified TO-14A

Data file : /chem/msdv.i/10Feb2015.b/v021019r1.d
Lab Smp Id: 1502113Ar1-04A
Inj Date : 10-FEB-2015 20:55
Operator : ea Inst ID: msdv.i
Smp Info : 50mL# 11427
Misc Info : 5.5"Hg -> 15psi
Comment : Low Level GC-MS
Method : /chem/msdv.i/10Feb2015.b/v15l0123c.m
Meth Date : 26-Jun-2015 11:58 dbailey Quant Type: ISTD
Cal Date : 09-FEB-2015 14:14 Cal File: v020912.d
Als bottle: 1
Dil Factor: 12.40000
Integrator: HP RTE Compound Sublist: TO15Nmdl.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	15.934	(1.000)	130	193283	5.00000		80.00- 120.00	100.00
15.934	15.934	(1.000)	128	150785			0.00- 30.00	78.01
15.934	15.934	(1.000)	49	443260			0.00- 30.00	229.33
* 71 1,4-Difluorobenzene							CAS #: 540-36-3	
17.305	17.305	(1.000)	114	775265	5.00000		80.00- 120.00	100.00
17.305	17.305	(1.000)	88	114842			0.00- 30.00	14.81
* 92 Chlorobenzene-d5							CAS #: 3114-55-4	
22.205	22.205	(1.000)	117	570405	5.00000		80.00- 120.00	100.00
22.205	22.205	(1.000)	82	307657			0.00- 30.00	53.94
$ 65 1,2-Dichloroethane-d4							CAS #: 17060-07-0	
16.756	16.756	(1.052)	65	293913	4.85125	4.851	80.00- 120.00	100.00
16.756	16.756	(1.052)	67	140326			25.13- 85.13	47.74
$ 80 Toluene-d8							CAS #: 2037-26-5	
19.856	19.856	(1.147)	98	703416	4.84582	4.846	80.00- 120.00	100.00
19.879	19.856	(1.149)	70	71964			0.00- 40.74	10.23

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

$  80 Toluene-d8 (continued)
 19.856  19.856 (1.147)   100    443568                    36.73-  96.73    63.06
-------------------------------------------------------------------------------
$ 106 Bromofluorobenzene                            CAS #: 460-00-4
 23.678  23.704 (1.066)   174    235622 4.40828    4.408  80.00- 120.00   100.00
 23.678  23.704 (1.066)    95    289773                    95.17- 155.17   122.98
 23.678  23.704 (1.066)   176    227699                    64.74- 124.74    96.64
-------------------------------------------------------------------------------
    8 Chloromethane                                 CAS #: 74-87-3
  7.090   7.053 (0.445)    50      8704 0.08751    1.085  80.00- 120.00   100.00(a)
  7.128   7.053 (0.447)    52      2510                     1.57-  61.57    28.84
-------------------------------------------------------------------------------
   24 Ethanol                                       CAS #: 64-17-5
 12.102  12.102 (0.760)    45    252863 7.16024   88.787  80.00- 120.00   100.00
 12.102  12.102 (0.760)    46     95045                     9.93-  69.93    37.59
 12.102  12.102 (0.760)    43     50510                     0.00-  50.31    19.98
-------------------------------------------------------------------------------
   31 Acetone                                       CAS #: 67-64-1
 12.816  12.816 (0.804)    58    603619 13.5251   167.71  80.00- 120.00   100.00
 12.816  12.816 (0.804)    43   2310851                  326.03- 386.03   382.83
-------------------------------------------------------------------------------
   34 2-Propanol                                    CAS #: 67-63-0
 13.173  13.173 (0.827)    45  27026336 153.001   1897.2  80.00- 120.00   100.00(A)
 13.173  13.173 (0.827)    43   4791721                     0.00-  47.97    17.73
 13.173  13.173 (0.827)    59    876625                     0.00-  33.25     3.24
-------------------------------------------------------------------------------
   37 Methylene Chloride                            CAS #: 75-09-2
 13.640  13.640 (0.856)    84      4752 0.08623    1.069  80.00- 120.00   100.00(a)
 13.640  13.640 (0.856)    49     12403                   198.57- 258.57   260.99
 13.640  13.640 (0.856)    51      5014                    41.48- 101.48   105.52
-------------------------------------------------------------------------------
   43 Hexane                                        CAS #: 110-54-3
 14.381  14.381 (0.903)    57     14159 0.09085    1.126  80.00- 120.00   100.00(a)
 14.381  14.381 (0.903)    43     13872                    41.32- 101.32    97.98
 14.381  14.381 (0.903)    86       945                     0.00-  40.13     6.68
-------------------------------------------------------------------------------
   51 2-Butanone                                    CAS #: 78-93-3
 15.613  15.572 (0.980)    72      3915 0.12940    1.604  80.00- 120.00   100.00(a)
 15.613  15.572 (0.980)    43     45843                   687.17- 747.17  1170.89
 15.613  15.572 (0.980)    57      3462                    23.39-  83.39    88.44
-------------------------------------------------------------------------------
   55 Chloroform                                    CAS #: 67-66-3
 15.995  15.995 (1.004)    83      2764 0.02053   0.2545  80.00- 120.00   100.00(a)
 15.995  15.995 (1.004)    85      2122                    35.10-  95.10    76.79
-------------------------------------------------------------------------------
   79 4-Methyl-2-pentanone                          CAS #: 108-10-1
 19.610  19.588 (1.133)    43      9367 0.03478   0.4313  80.00- 120.00   100.00(a)
```

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
79 4-Methyl-2-pentanone (continued)							
19.588	19.588 (1.132)	58	1002			3.17- 63.17	10.70
19.632	19.588 (1.135)	85	514			0.00- 40.09	5.50
81 Toluene					CAS #: 108-88-3		
19.991	19.991 (1.155)	91	44779	0.20418	2.532	80.00- 120.00	100.00
19.991	19.991 (1.155)	92	28485			28.34- 88.34	63.61
95 Ethyl Benzene					CAS #: 100-41-4		
22.315	22.315 (1.005)	106	12512	0.14856	1.842	80.00- 120.00	100.00
22.315	22.315 (1.005)	91	40386			260.31- 320.31	322.78
96 m,p-Xylene					CAS #: 108-38-3		
22.452	22.452 (1.011)	106	76308	0.89709	11.124	80.00- 120.00	100.00
22.452	22.452 (1.011)	91	132876			157.23- 217.23	174.13
100 o-Xylene					CAS #: 95-47-6		
23.002	23.002 (1.036)	106	25769	0.32953	4.086	80.00- 120.00	100.00
23.002	23.002 (1.036)	91	52357			167.76- 227.76	203.18
103 Cumene					CAS #: 98-82-8		
23.413	23.413 (1.054)	105	5338	0.02414	0.2994	80.00- 120.00	100.00(a)
23.441	23.413 (1.056)	120	1418			0.00- 59.93	26.57
111 Propylbenzene					CAS #: 103-65-1		
23.910	23.910 (1.077)	91	13071	0.06347	0.7870	80.00- 120.00	100.00(a)
23.910	23.910 (1.077)	120	3887			0.00- 56.93	29.74
113 4-Ethyltoluene					CAS #: 622-96-8		
24.013	24.039 (1.081)	105	30416	0.19482	2.416	80.00- 120.00	100.00
24.013	24.039 (1.081)	120	11456			3.10- 63.10	37.66
114 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
24.116	24.116 (1.086)	105	14126	0.08700	1.079	80.00- 120.00	100.00(a)
24.116	24.116 (1.086)	120	6196			0.00- 30.00	43.86
120 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
24.529	24.529 (1.105)	105	43212	0.30102	3.733	80.00- 120.00	100.00
24.529	24.529 (1.105)	120	19578			0.00- 30.00	45.31

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: v021019r1.d
Lab Smp Id: 1502113Ar1-04A
Analysis Type: VOA
Quant Type: ISTD
Operator: ea
Method File: /chem/msdv.i/10Feb2015.b/v15l0123c.m
Misc Info: 5.5"Hg -> 15psi

Calibration Date: 10-FEB-2015
Calibration Time: 06:33

Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
54 Bromochloromethan	194946	116968	272924	193283	-0.85
71 1,4-Difluorobenze	822631	493579	1151683	775265	-5.76
92 Chlorobenzene-d5	670659	402395	938923	570405	-14.95

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: 26-Jun-2015 12:17

Eurofins Air Toxics Inc.

RECOVERY REPORT

Client Name:
Client SDG: 10Feb2015
Sample Matrix: GAS
Fraction: VOA
Lab Smp Id: 1502113Ar1-04A
Level: LOW
Operator: ea
Data Type: MS DATA
SampleType: SAMPLE
SpikeList File: AT12.spk
Quant Type: ISTD
Sublist File: TO15Nmdl.sub
Method File: /chem/msdv.i/10Feb2015.b/v15l0123c.m
Misc Info: 5.5"Hg -> 15psi

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 65 1,2-Dichloroethane	5.000	4.851	97.03	70-130
$ 80 Toluene-d8	5.000	4.846	96.92	70-130
$ 106 Bromofluorobenzene	5.000	4.408	88.17	70-130

Data File: /chem/msdv.i/10Feb2015.b/v021019r1.d

Date : 10-FEB-2015 20:55

Client ID:

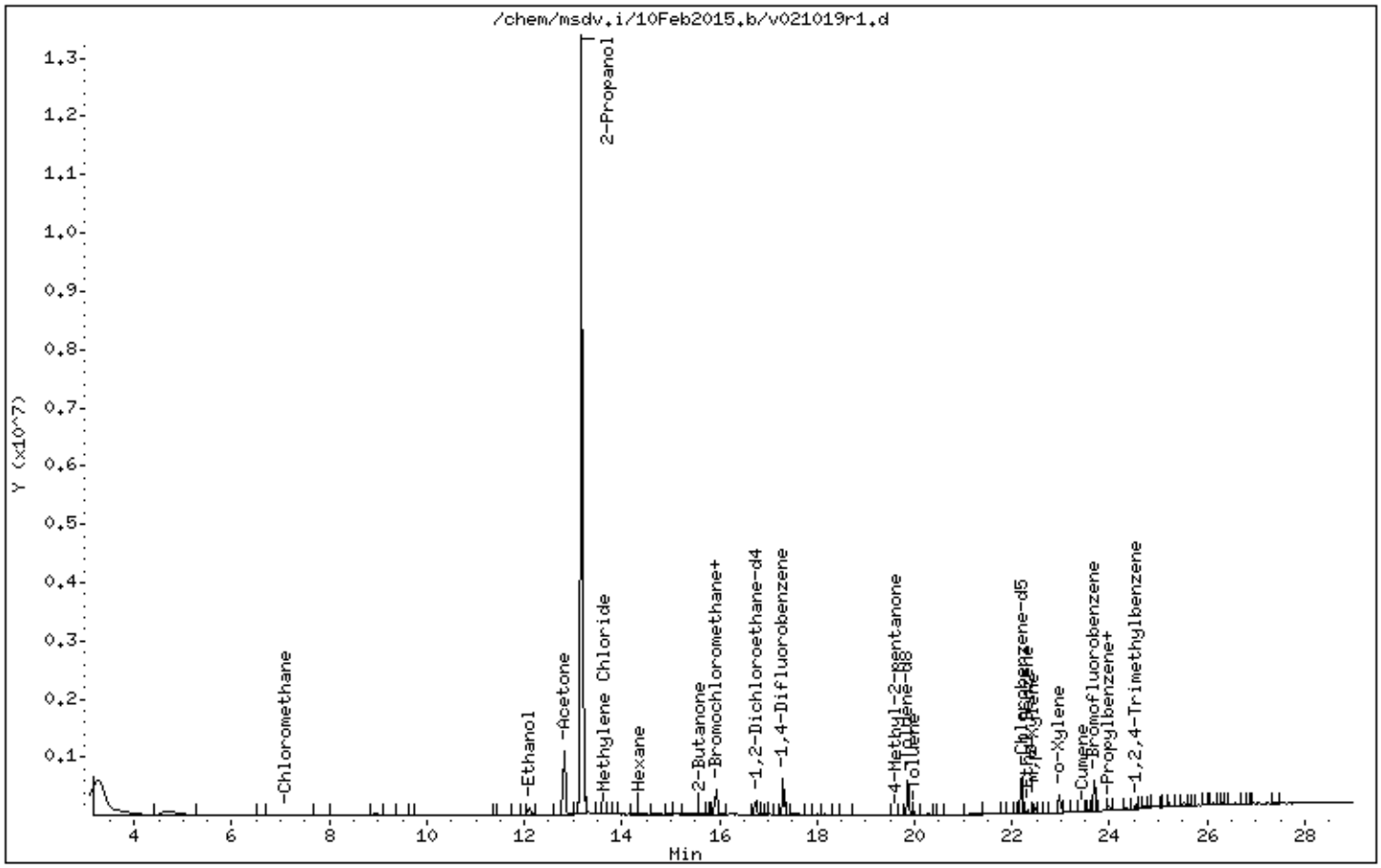
Instrument: msdv.i

Sample Info: 50mL# 11427

Operator: ea

Column phase: RTx-624

Column diameter: 0.32



Data File: /chem/msdv.i/10Feb2015.b/v021019r1.d

Date : 10-FEB-2015 20:55

Client ID:

Instrument: msdv.i

Sample Info: 50mL# 11427

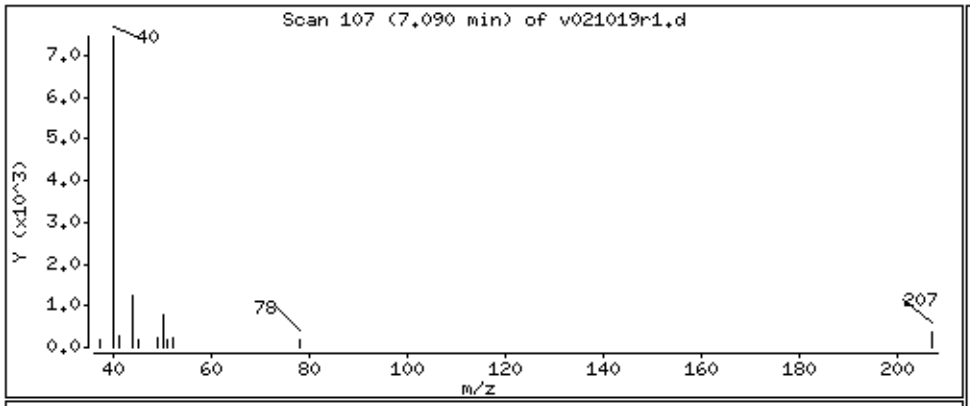
Operator: ea

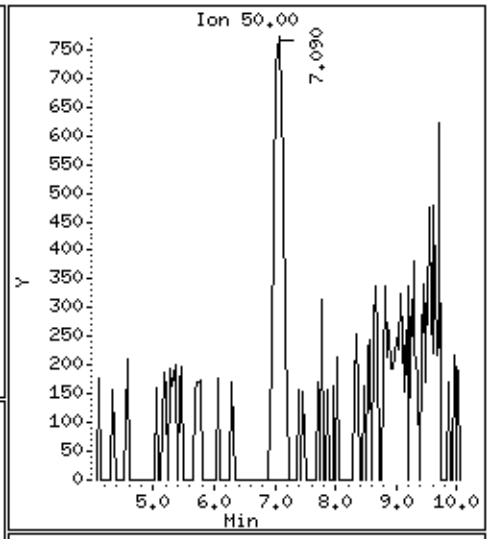
Column phase: RTx-624

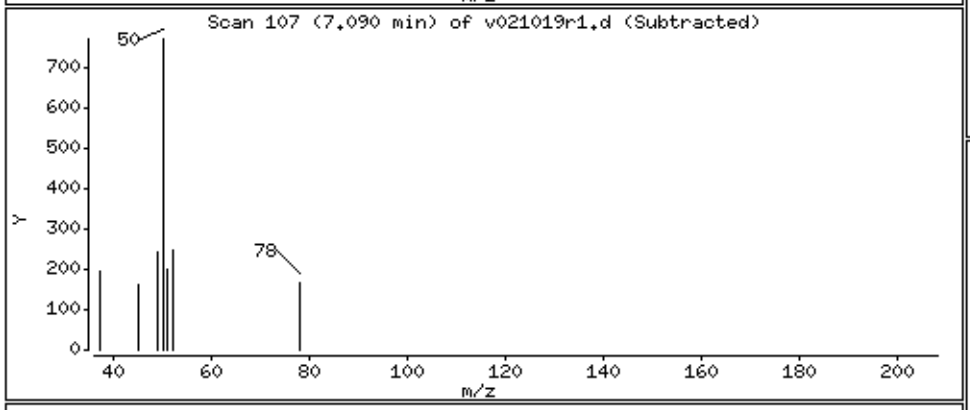
Column diameter: 0.32

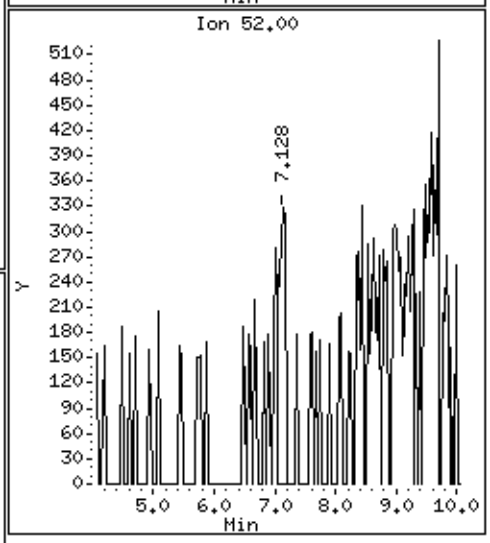
8 Chloromethane

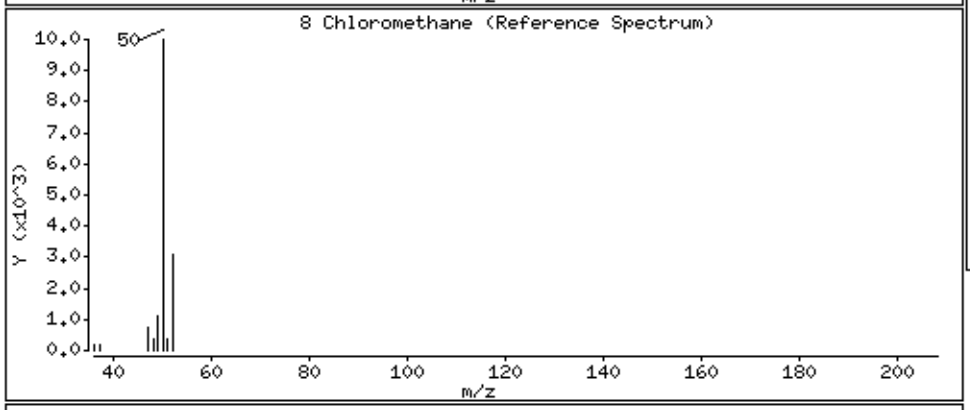
Concentration: 1.085 PPBV

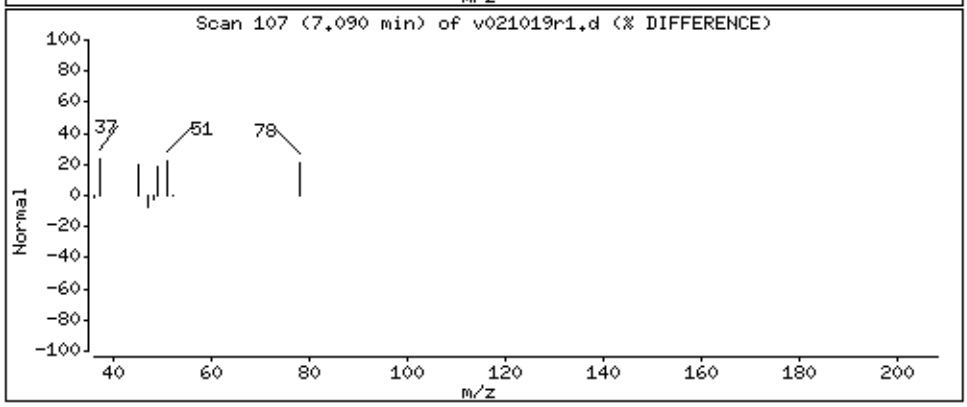












Data File: /chem/msdv.i/10Feb2015.b/v021019r1.d

Date : 10-FEB-2015 20:55

Client ID:

Instrument: msdv.i

Sample Info: 50mL# 11427

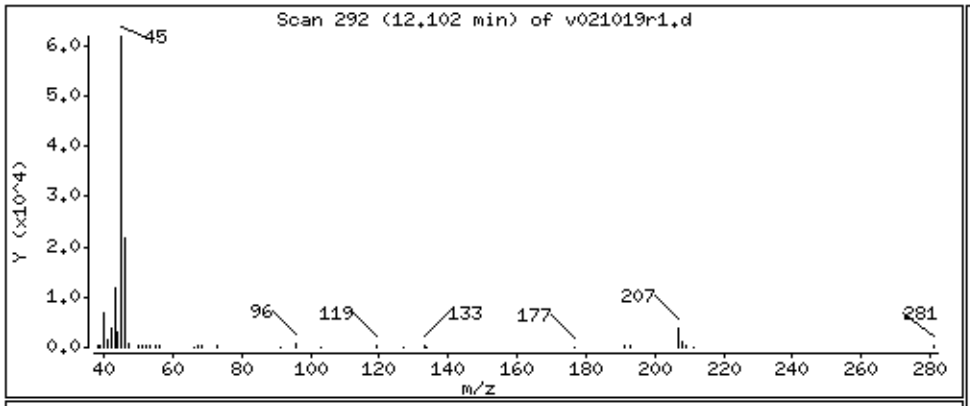
Operator: ea

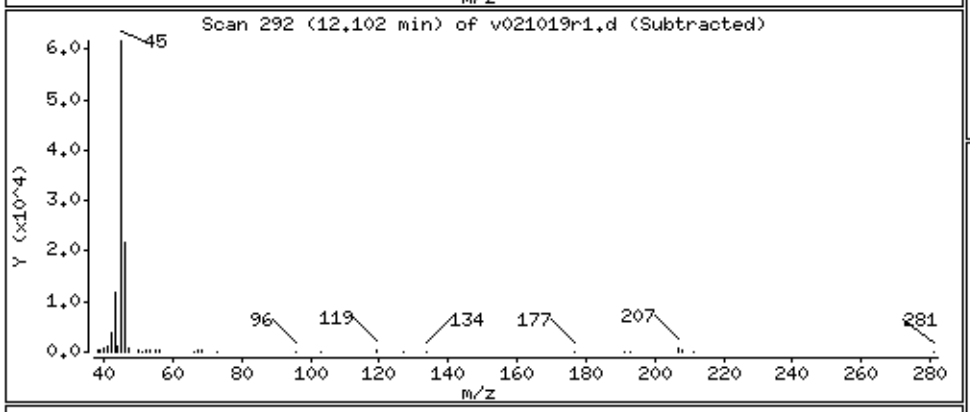
Column phase: RTx-624

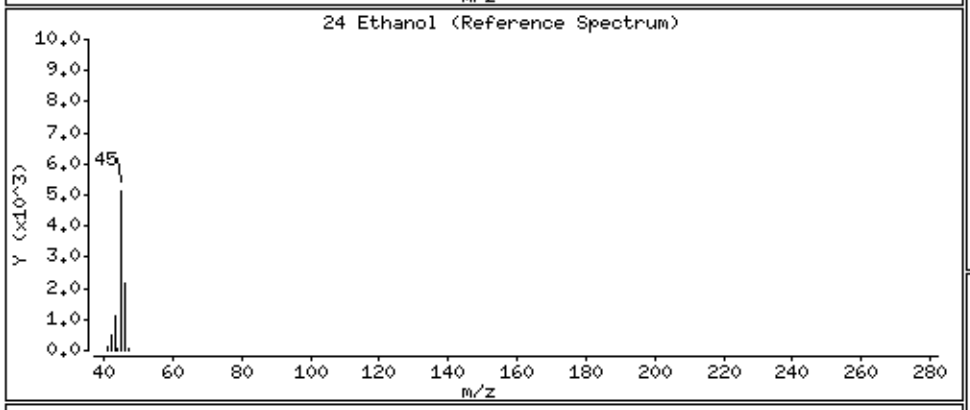
Column diameter: 0.32

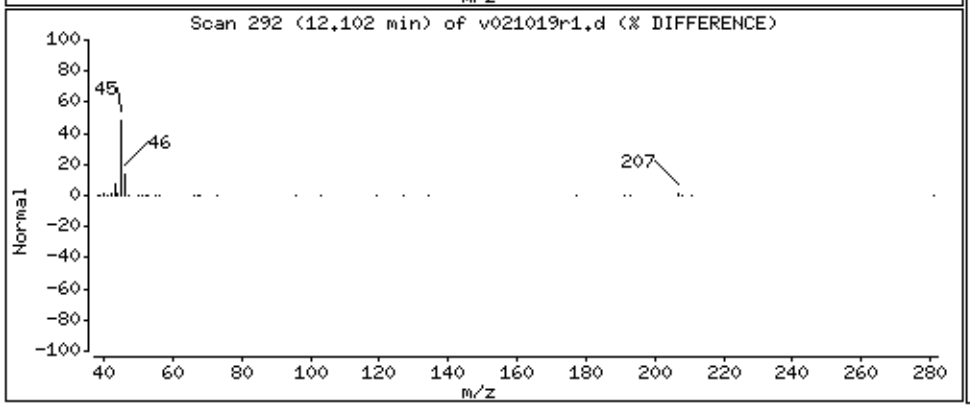
24 Ethanol

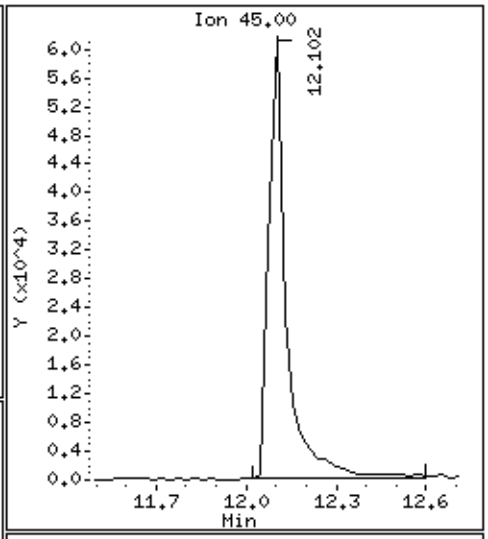
Concentration: 88.787 PPBV

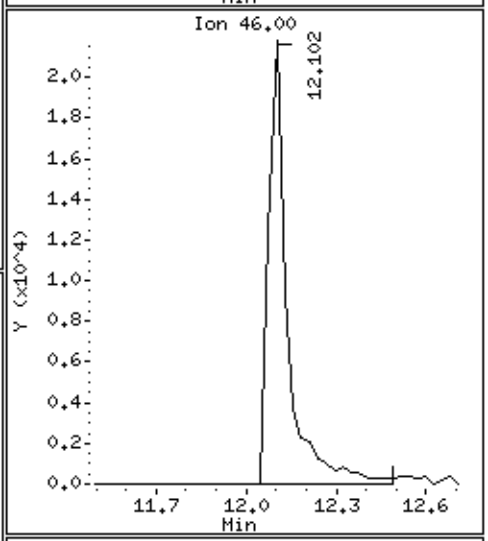


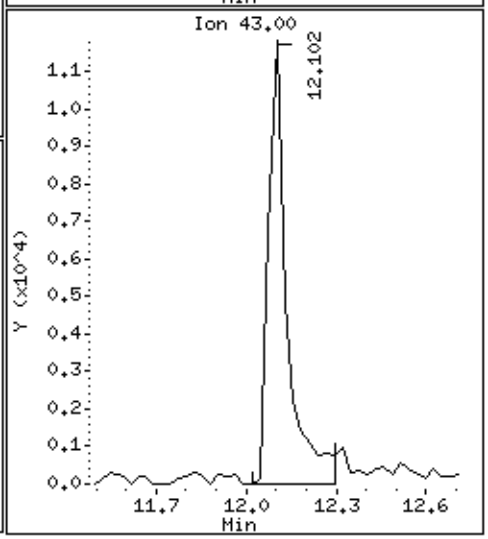












Data File: /chem/msdv.i/10Feb2015.b/v021019r1.d

Date : 10-FEB-2015 20:55

Client ID:

Instrument: msdv.i

Sample Info: 50mL# 11427

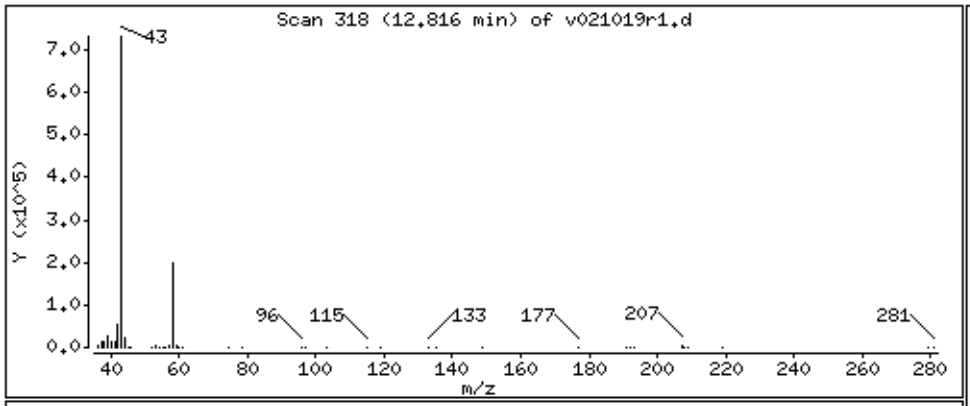
Operator: ea

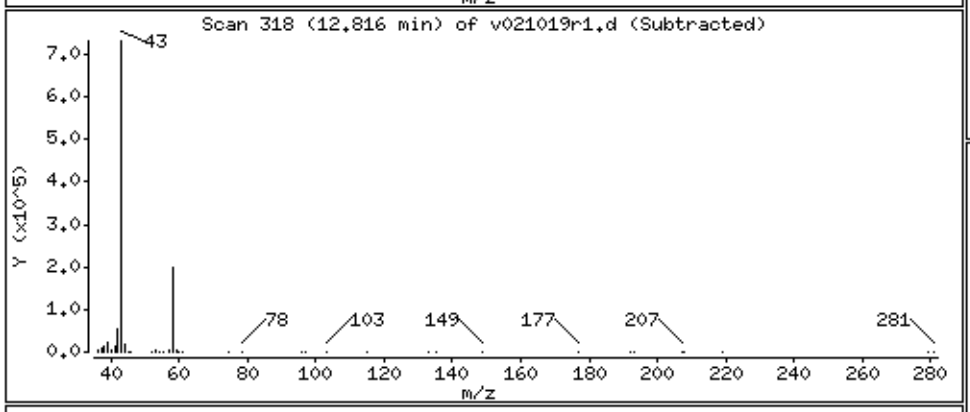
Column phase: RTx-624

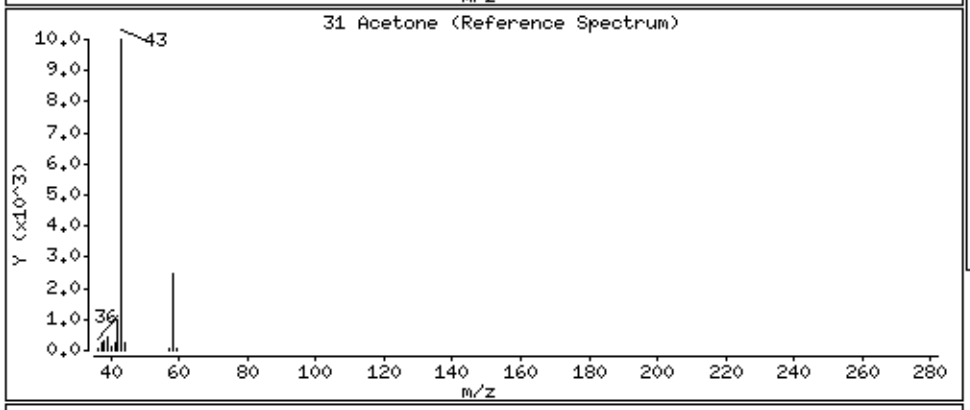
Column diameter: 0.32

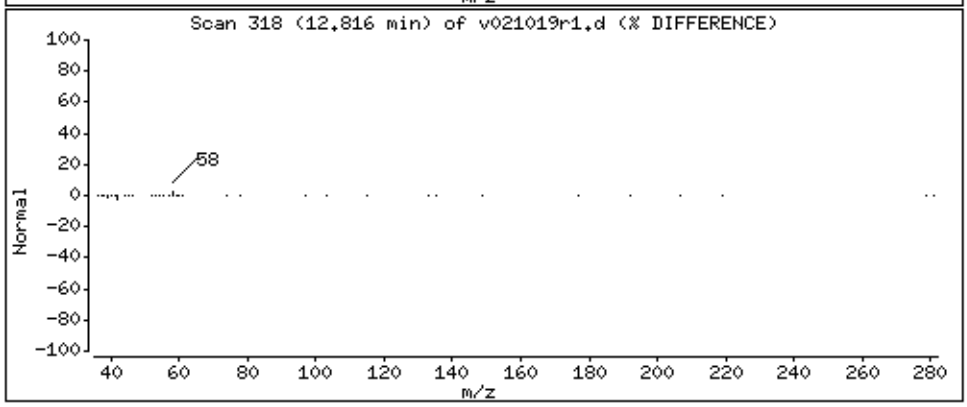
31 Acetone

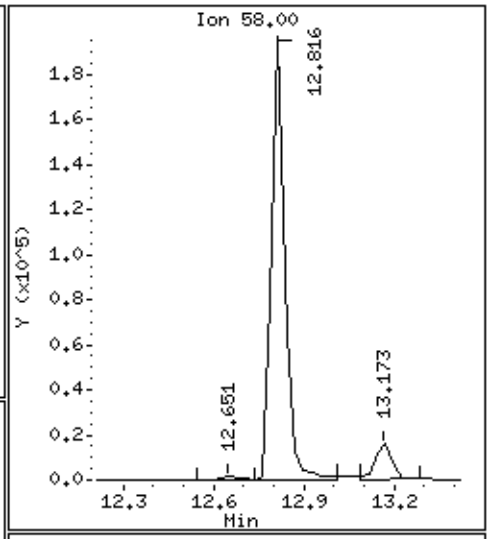
Concentration: 167.71 PPBV

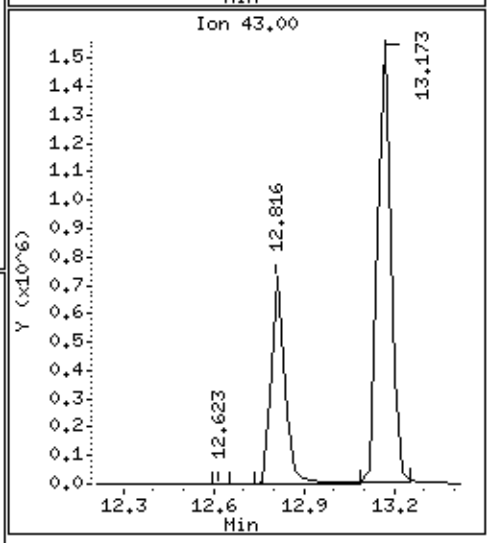












Data File: /chem/msdv.i/10Feb2015.b/v021019r1.d

Date : 10-FEB-2015 20:55

Client ID:

Instrument: msdv.i

Sample Info: 50mL# 11427

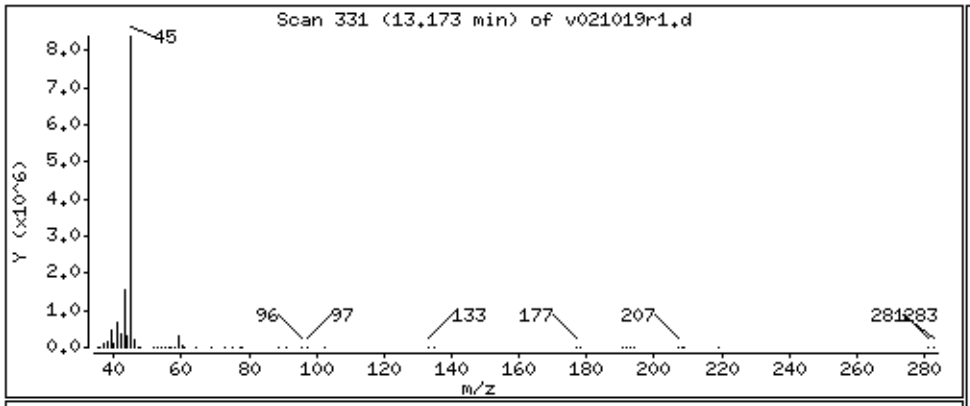
Operator: ea

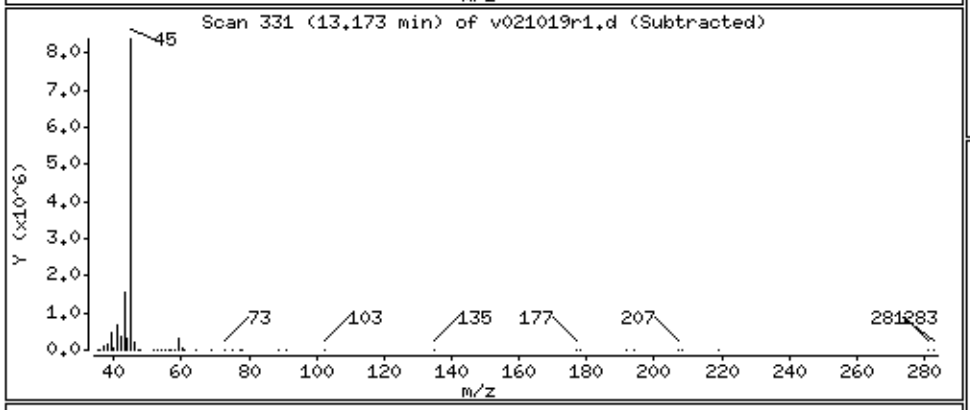
Column phase: RTx-624

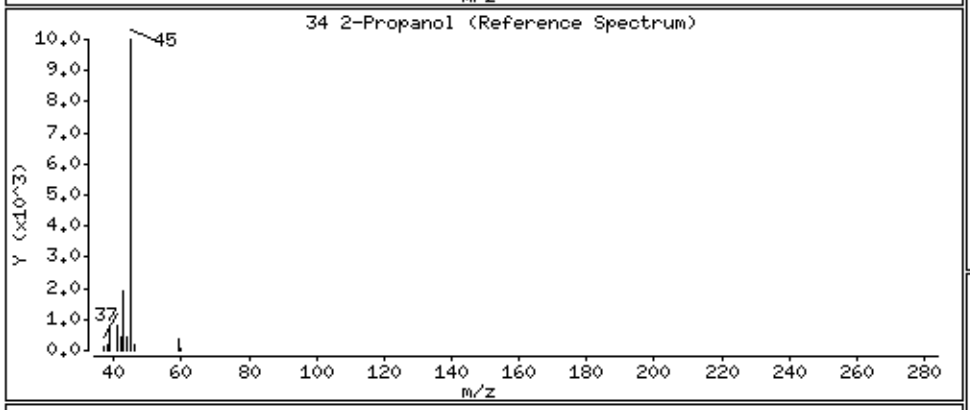
Column diameter: 0.32

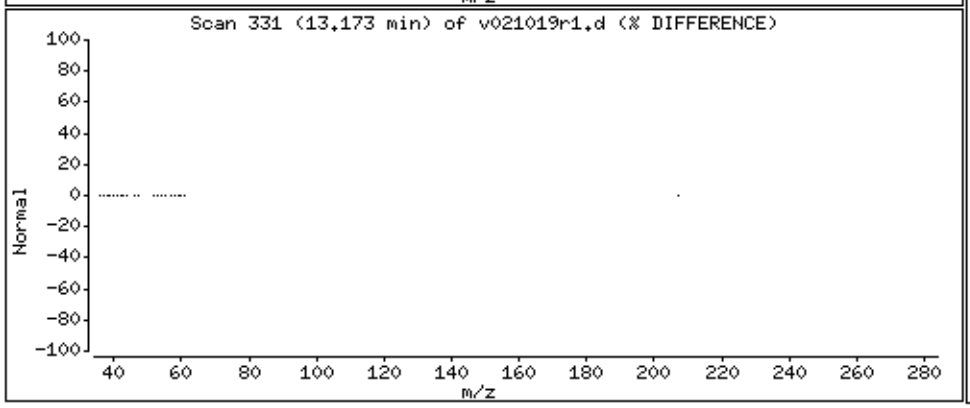
34 2-Propanol

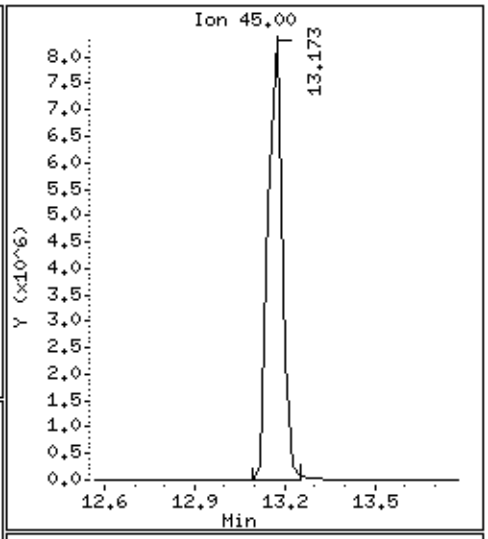
Concentration: 1897.2 PPBV

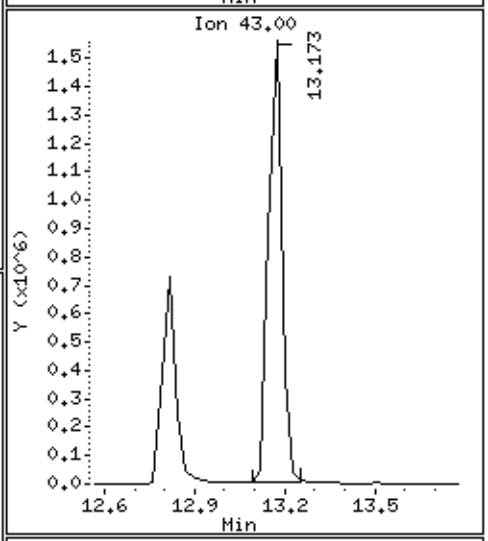


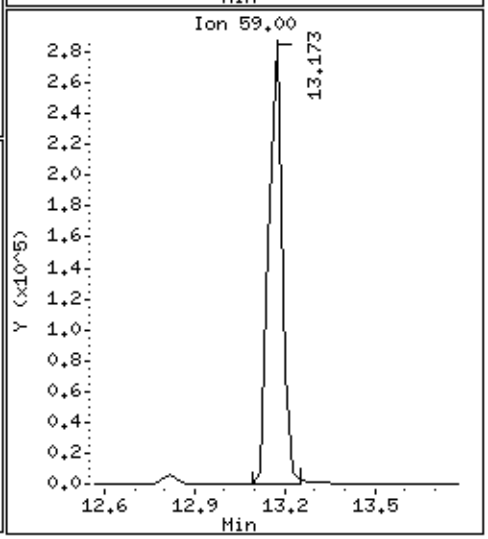












Data File: /chem/msdv.i/10Feb2015.b/v021019r1.d

Date : 10-FEB-2015 20:55

Client ID:

Instrument: msdv.i

Sample Info: 50mL# 11427

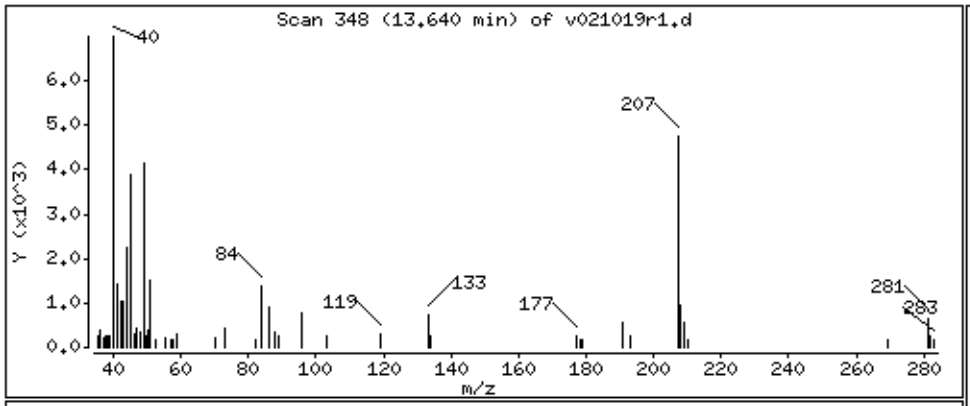
Operator: ea

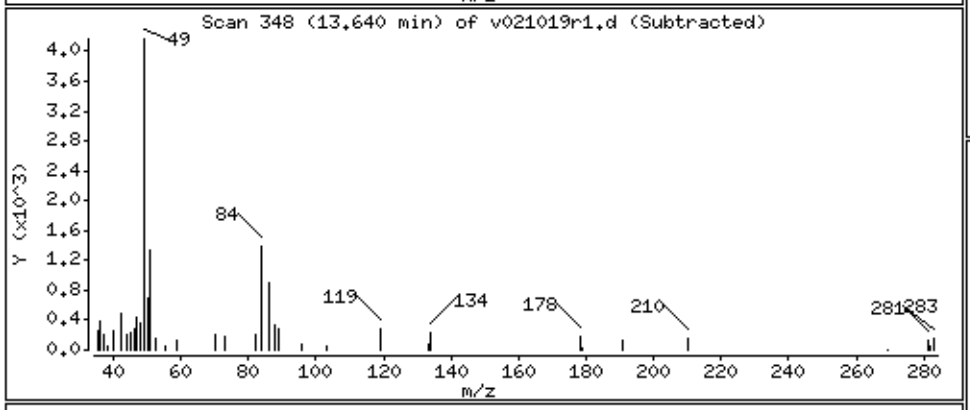
Column phase: RTx-624

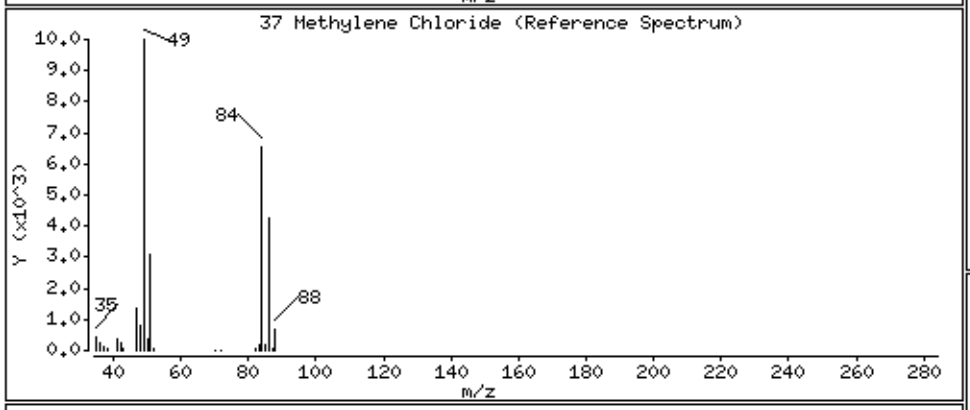
Column diameter: 0.32

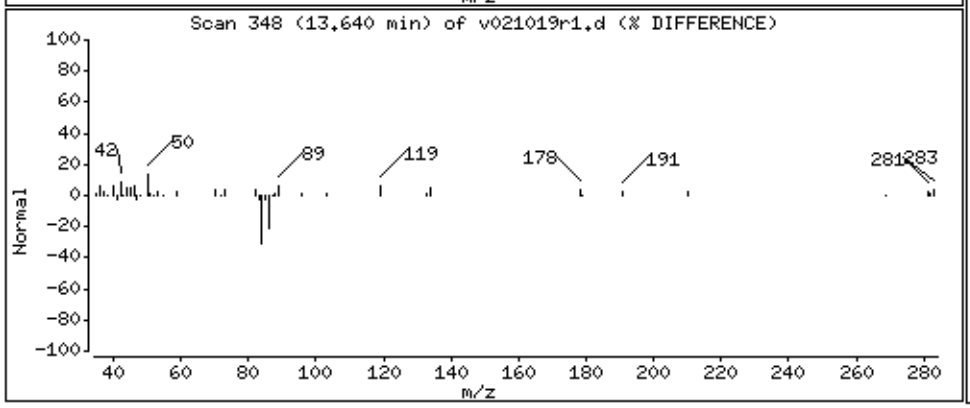
37 Methylene Chloride

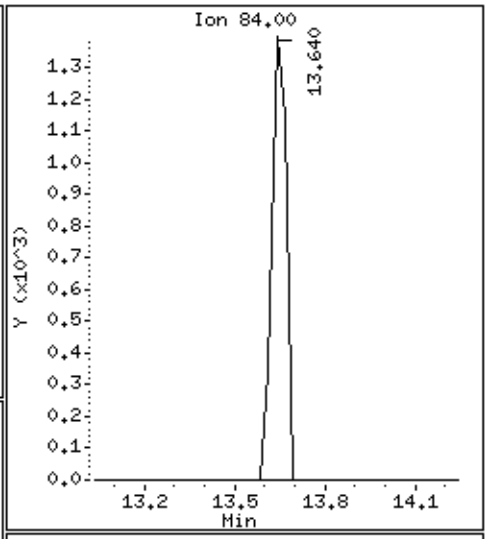
Concentration: 1.069 PPBV

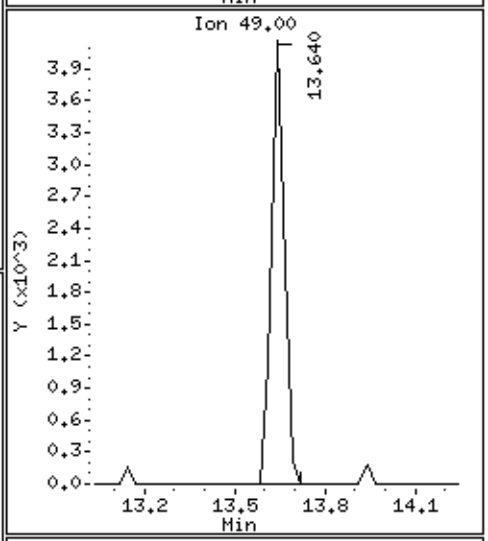


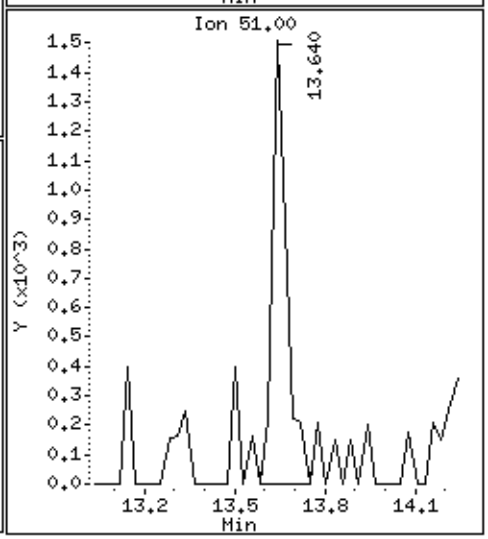












Data File: /chem/msdv.i/10Feb2015.b/v021019r1.d

Date : 10-FEB-2015 20:55

Client ID:

Instrument: msdv.i

Sample Info: 50mL# 11427

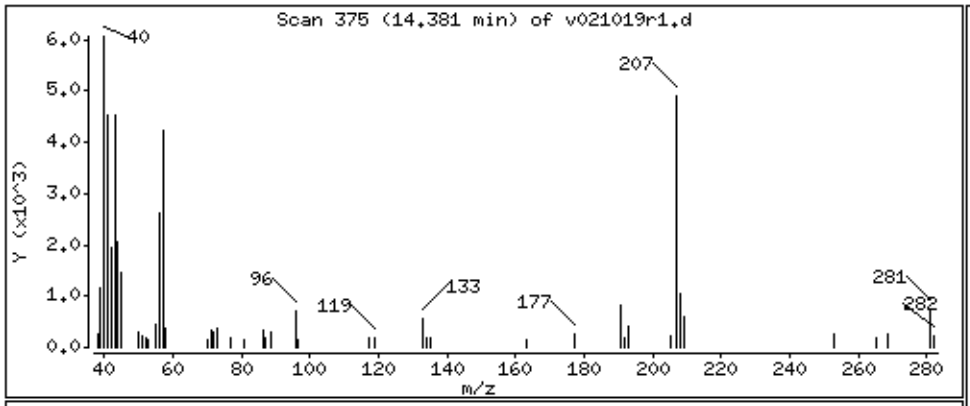
Operator: ea

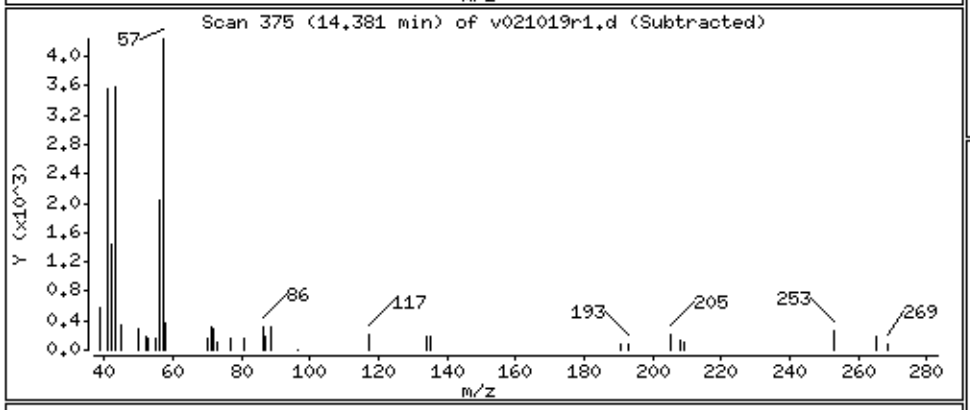
Column phase: RTx-624

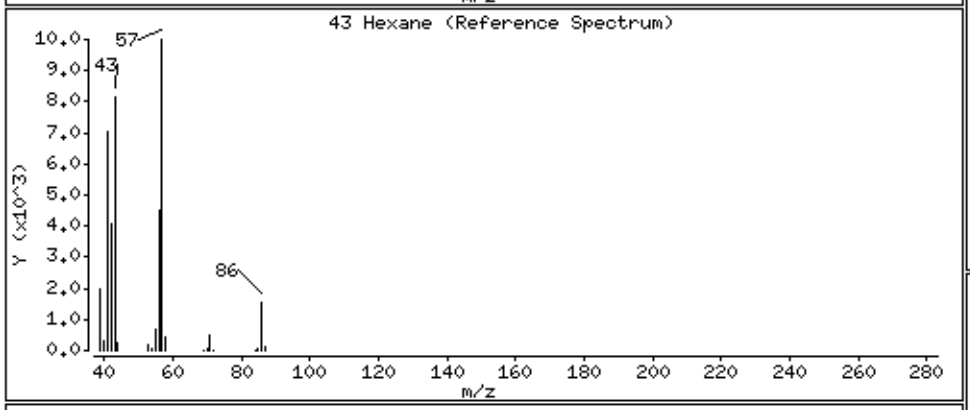
Column diameter: 0.32

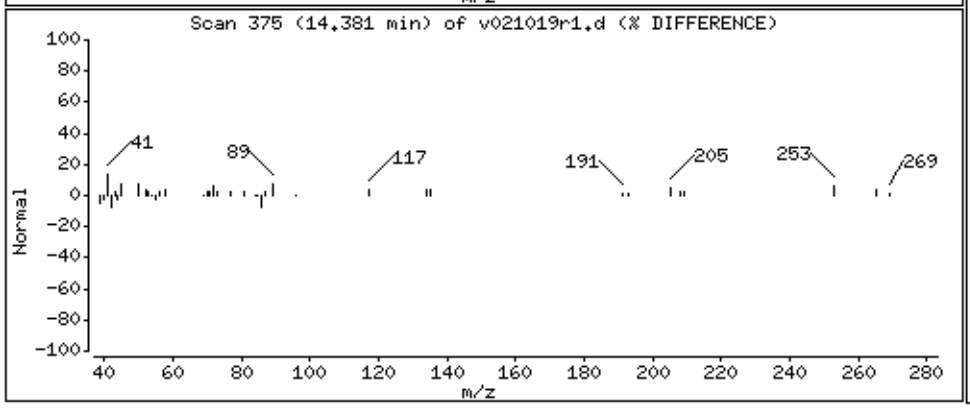
43 Hexane

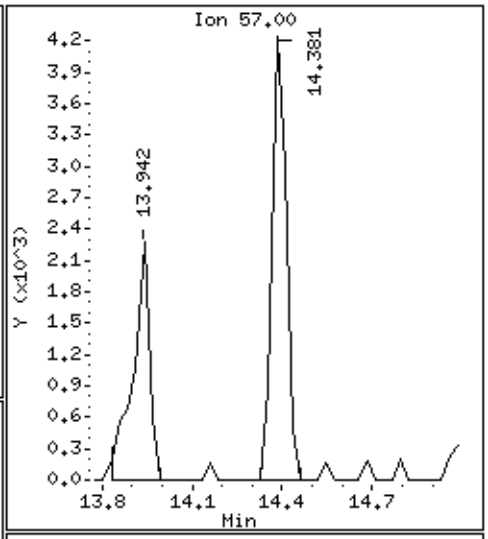
Concentration: 1.126 PPBV

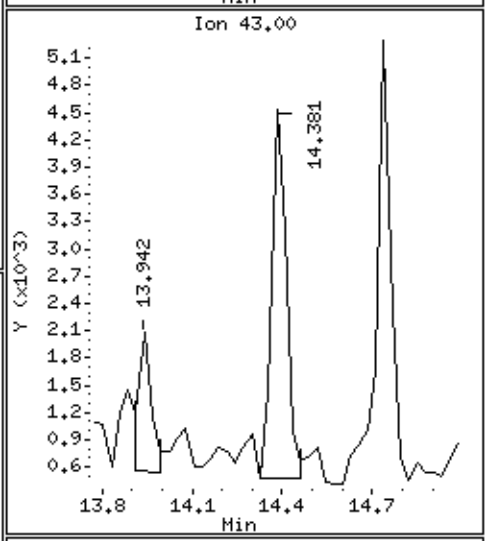


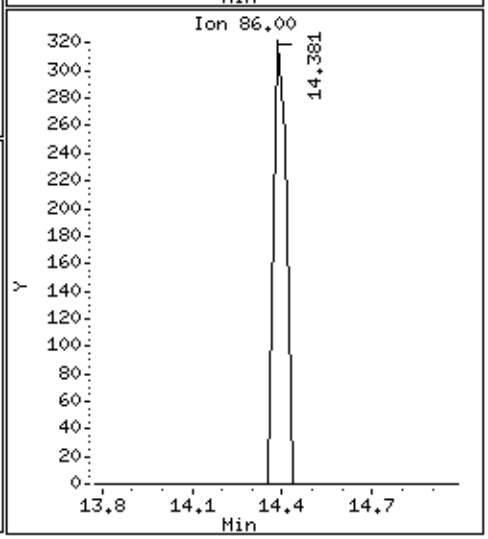












Data File: /chem/msdv.i/10Feb2015.b/v021019r1.d

Date : 10-FEB-2015 20:55

Client ID:

Instrument: msdv.i

Sample Info: 50mL# 11427

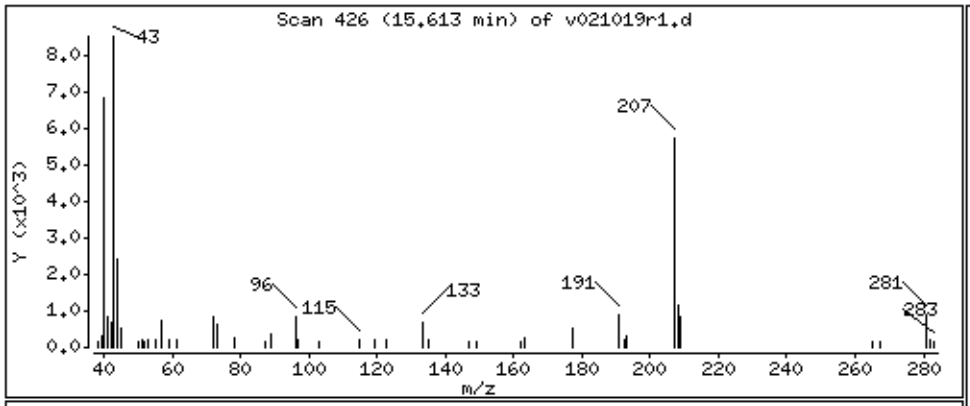
Operator: ea

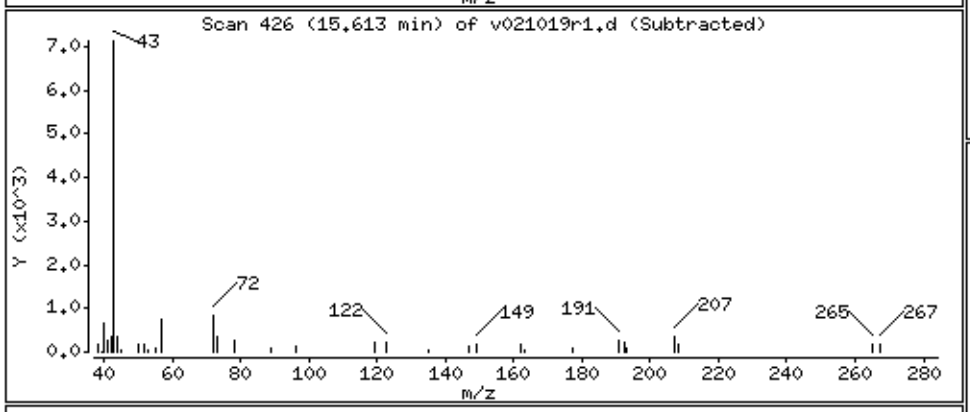
Column phase: RTx-624

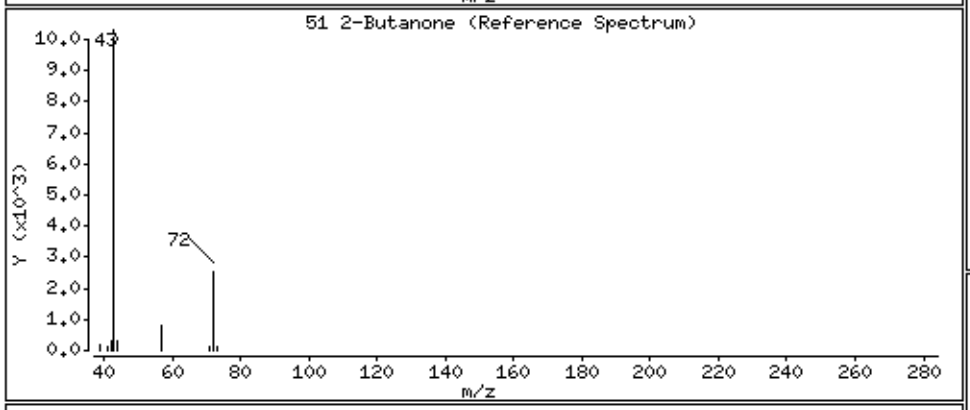
Column diameter: 0.32

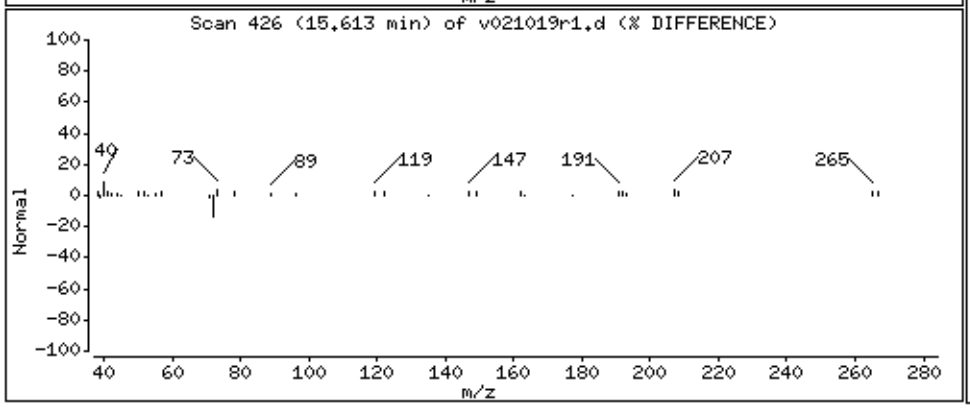
51 2-Butanone

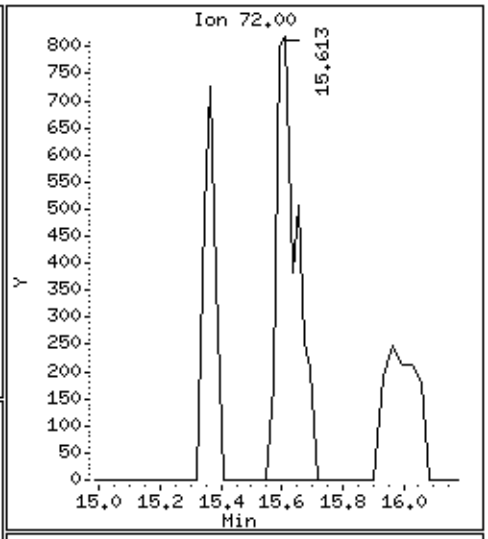
Concentration: 1.604 PPBV

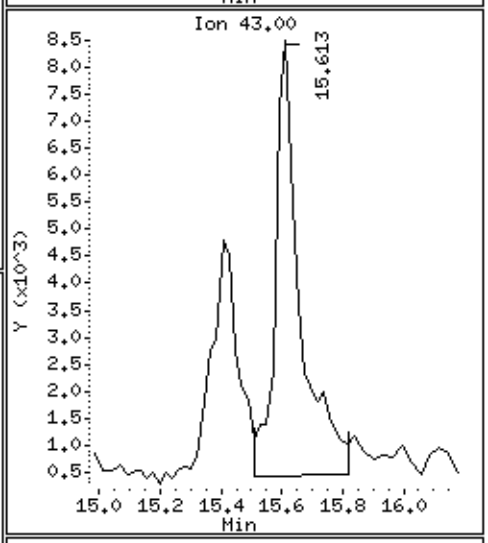


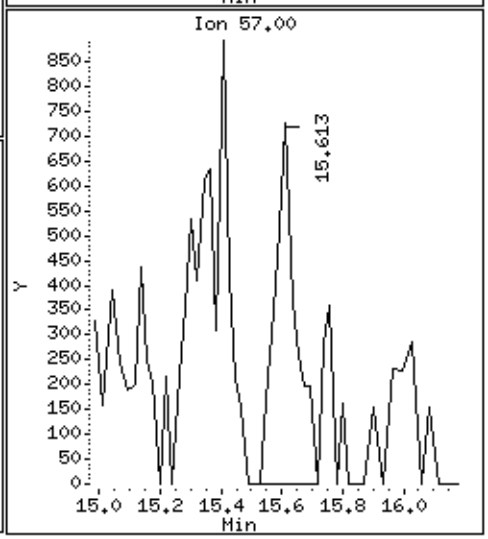












Data File: /chem/msdv.i/10Feb2015.b/v021019r1.d

Date : 10-FEB-2015 20:55

Client ID:

Instrument: msdv.i

Sample Info: 50mL# 11427

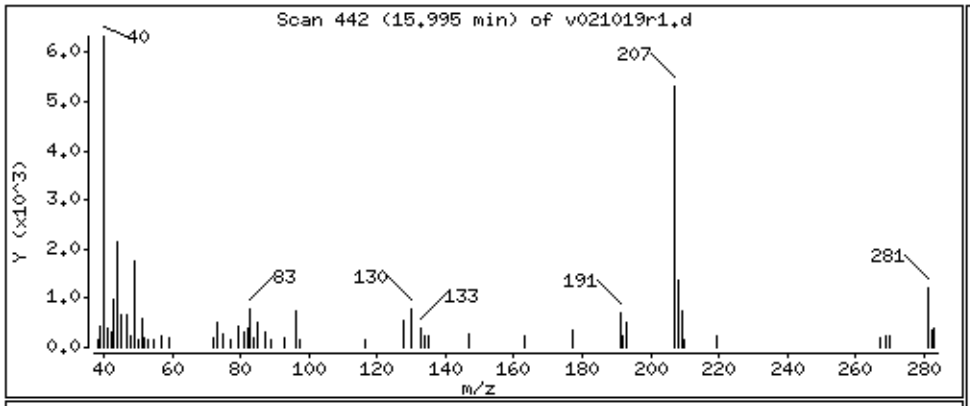
Operator: ea

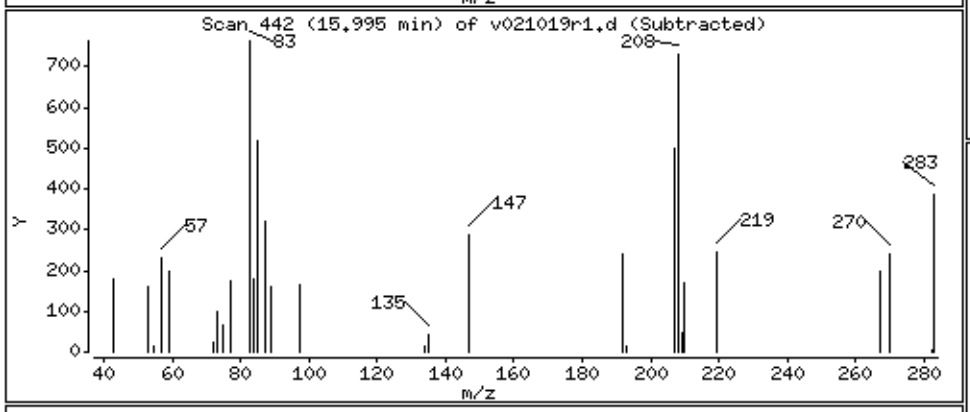
Column phase: RTx-624

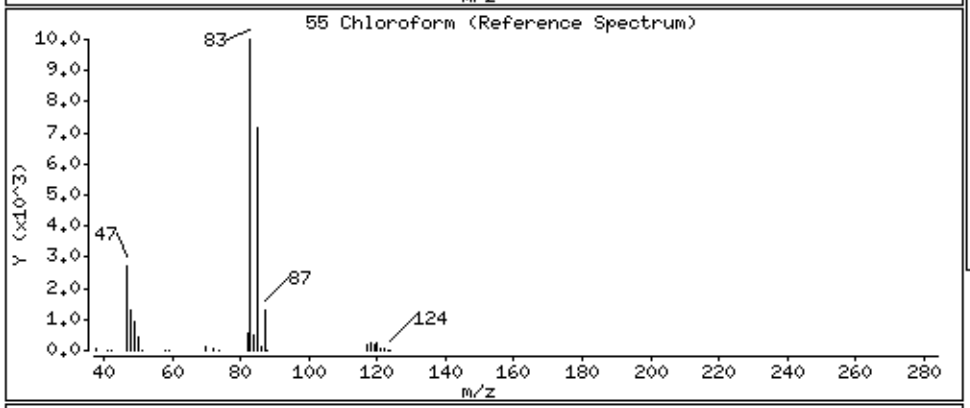
Column diameter: 0.32

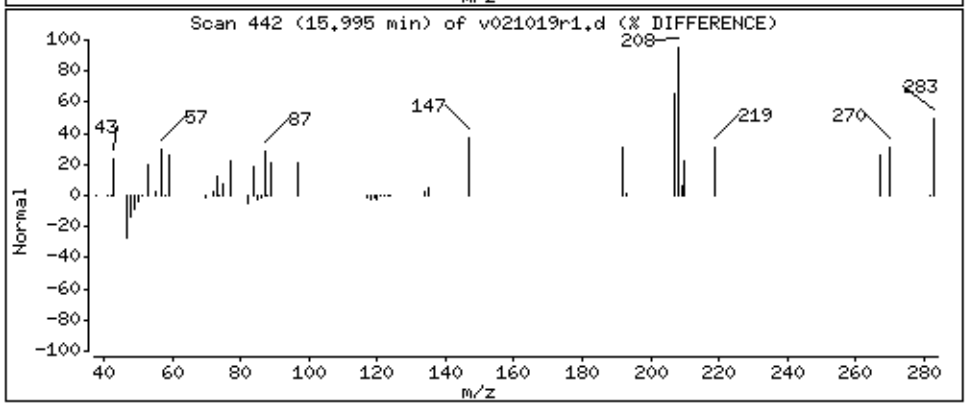
55 Chloroform

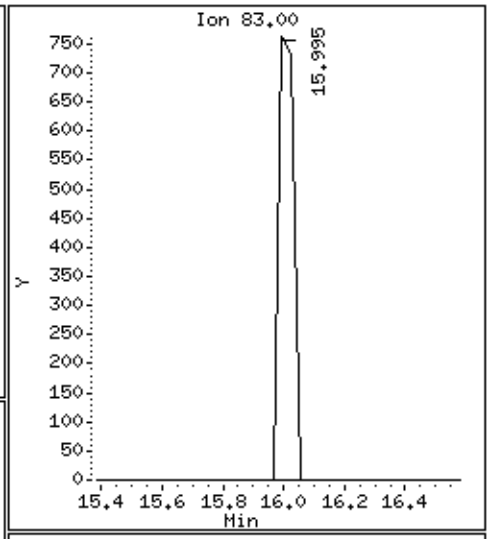
Concentration: 0.2545 PPBV

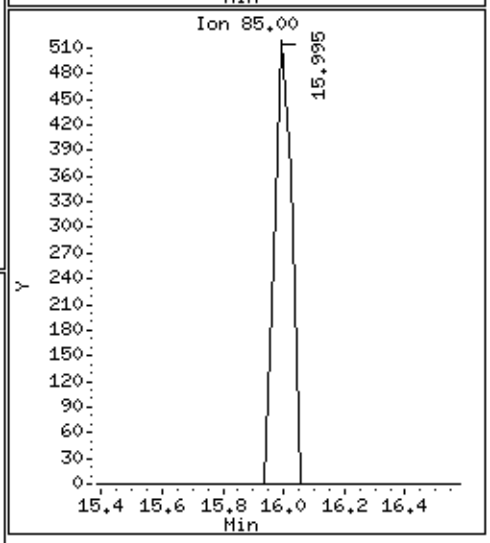












Data File: /chem/msdv.i/10Feb2015.b/v021019r1.d

Date : 10-FEB-2015 20:55

Client ID:

Instrument: msdv.i

Sample Info: 50mL# 11427

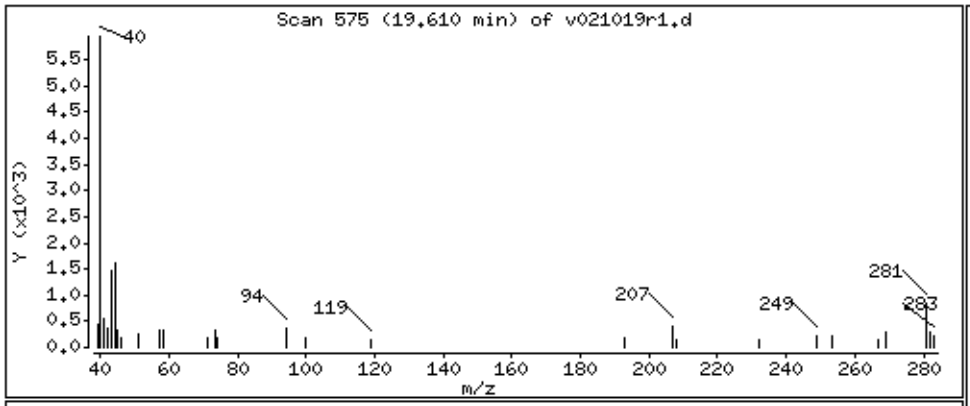
Operator: ea

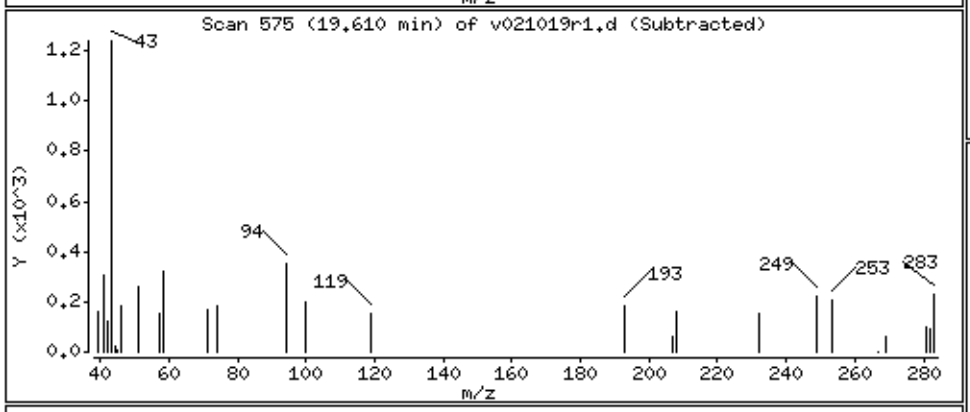
Column phase: RTx-624

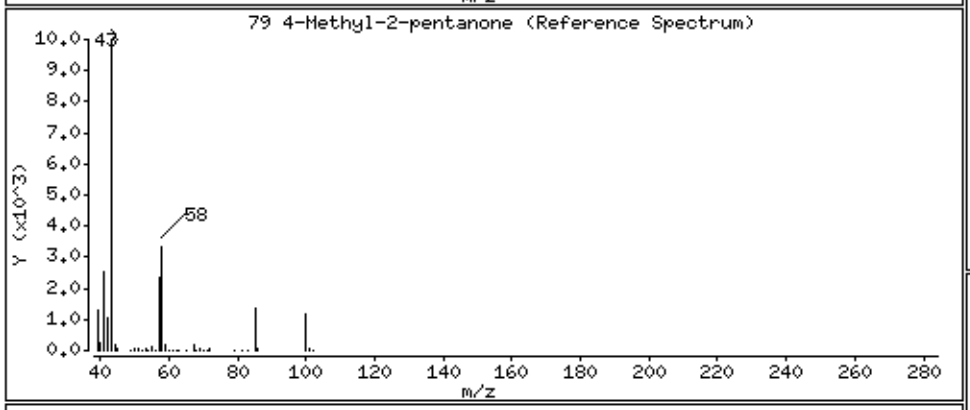
Column diameter: 0.32

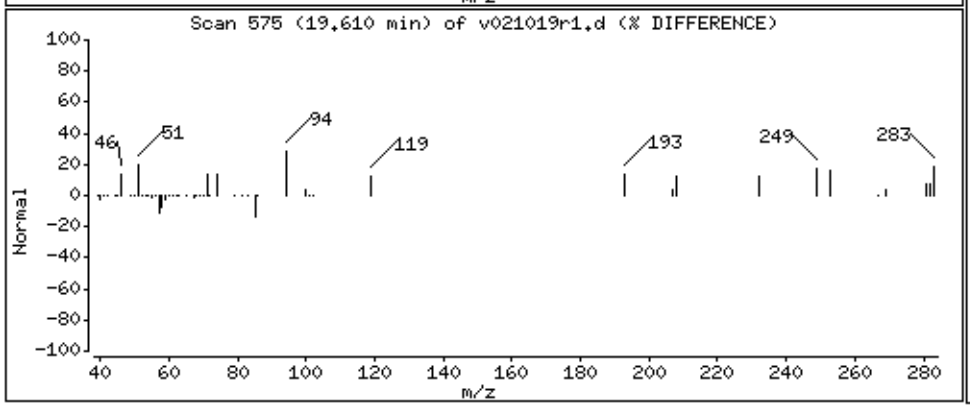
79 4-Methyl-2-pentanone

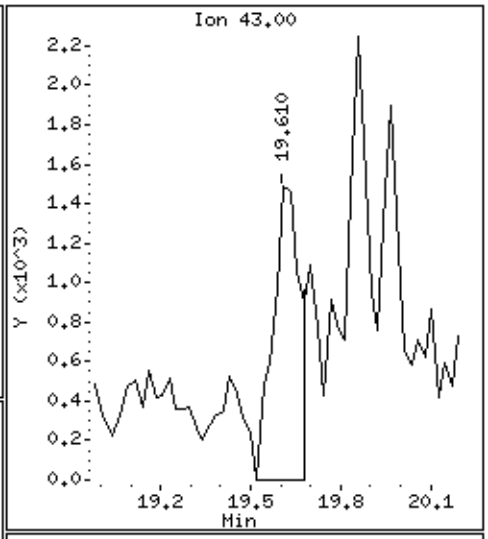
Concentration: 0.4313 PPBV

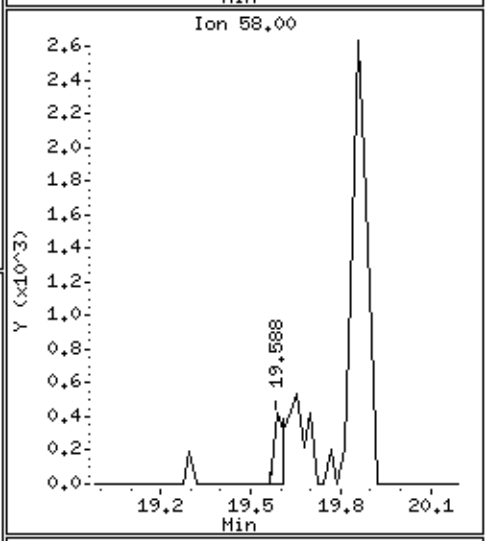


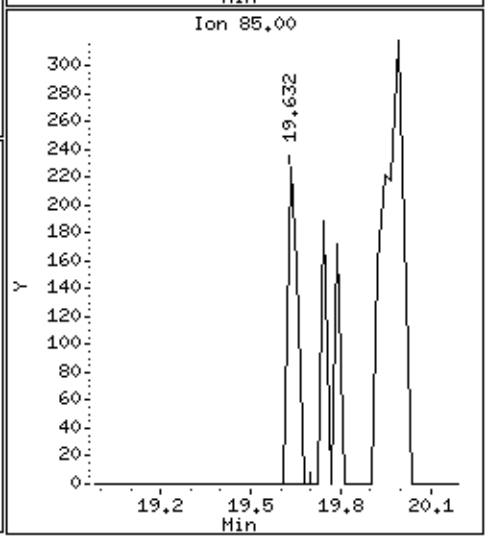












Data File: /chem/msdv.i/10Feb2015.b/v021019r1.d

Date : 10-FEB-2015 20:55

Client ID:

Instrument: msdv.i

Sample Info: 50mL# 11427

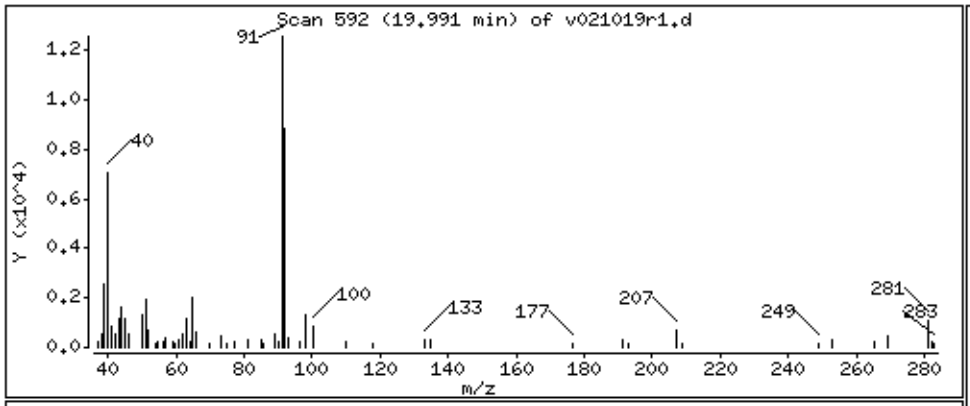
Operator: ea

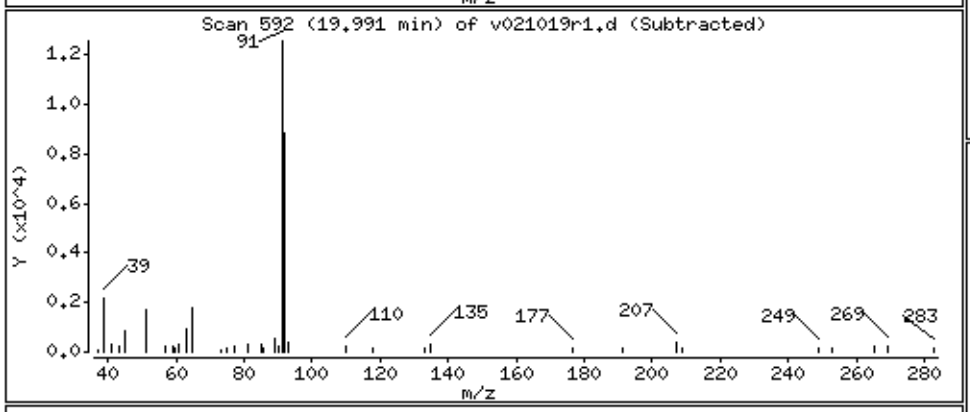
Column phase: RTx-624

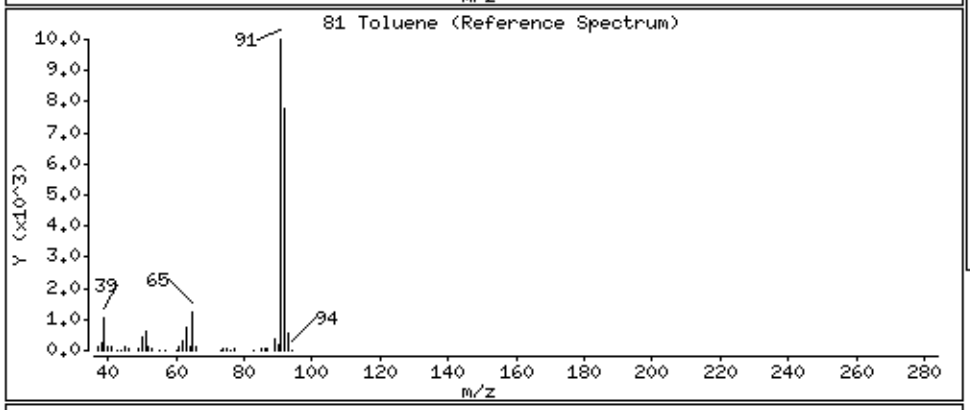
Column diameter: 0.32

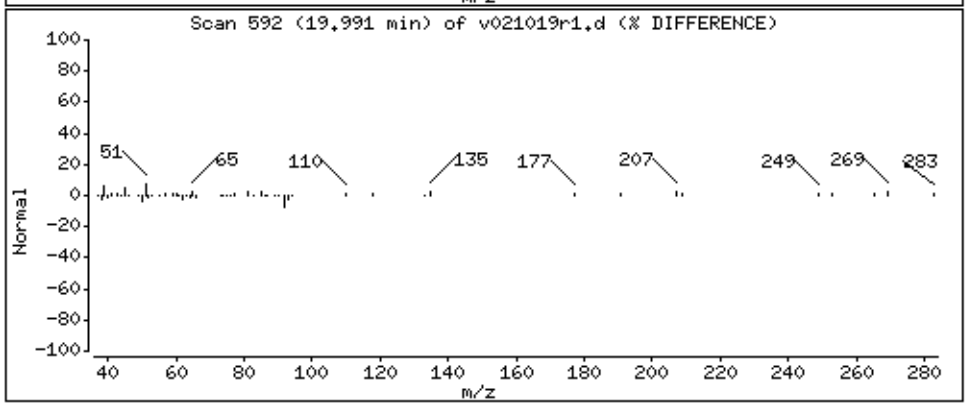
81 Toluene

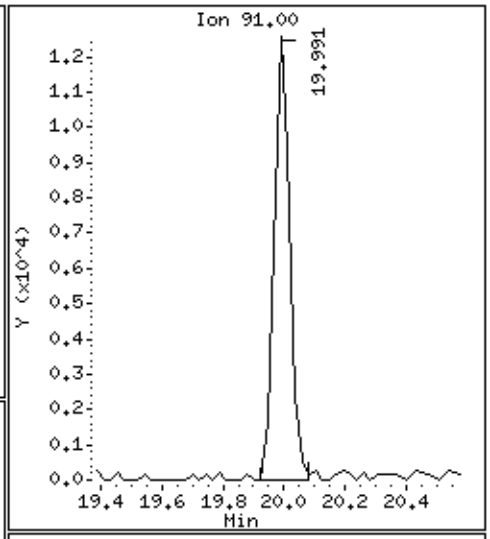
Concentration: 2.532 PPBV

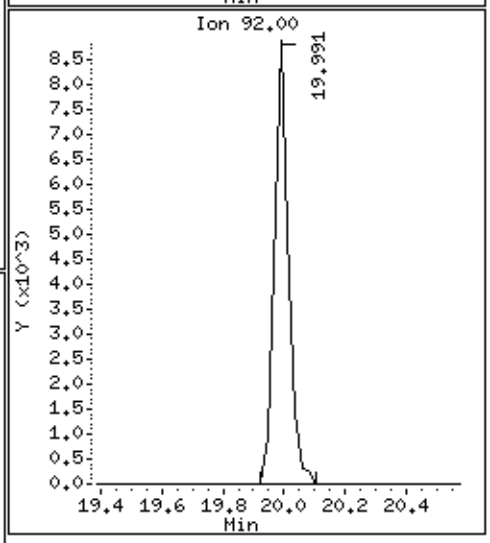












Data File: /chem/msdv.i/10Feb2015.b/v021019r1.d

Date : 10-FEB-2015 20:55

Client ID:

Instrument: msdv.i

Sample Info: 50mL# 11427

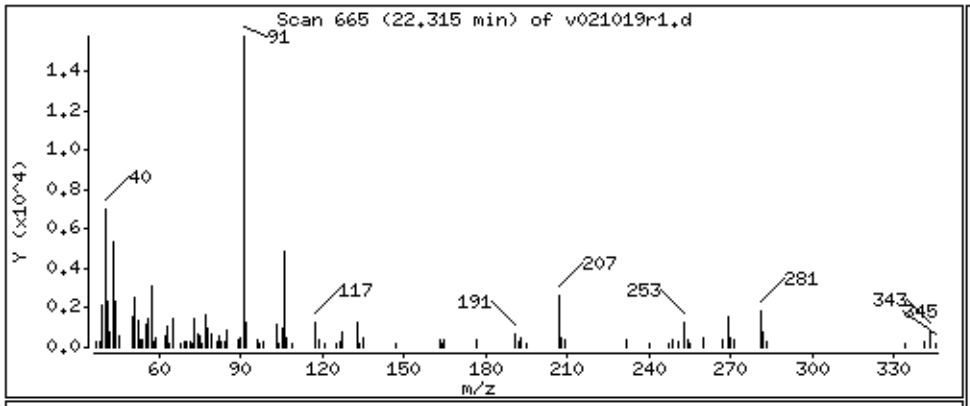
Operator: ea

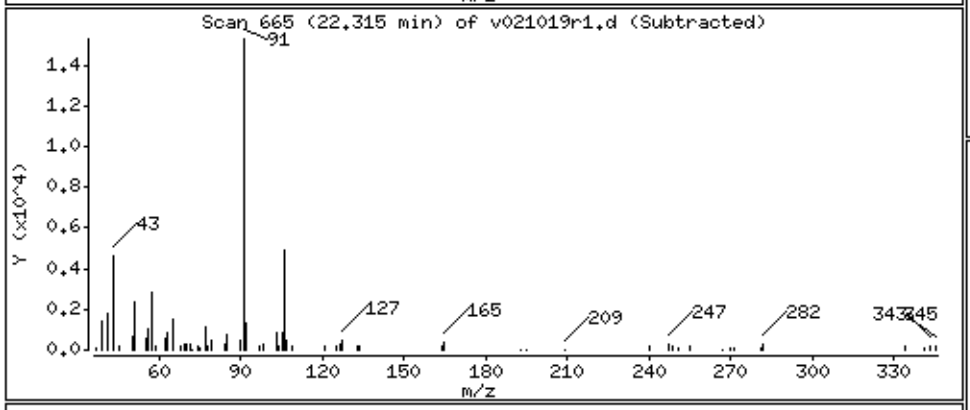
Column phase: RTx-624

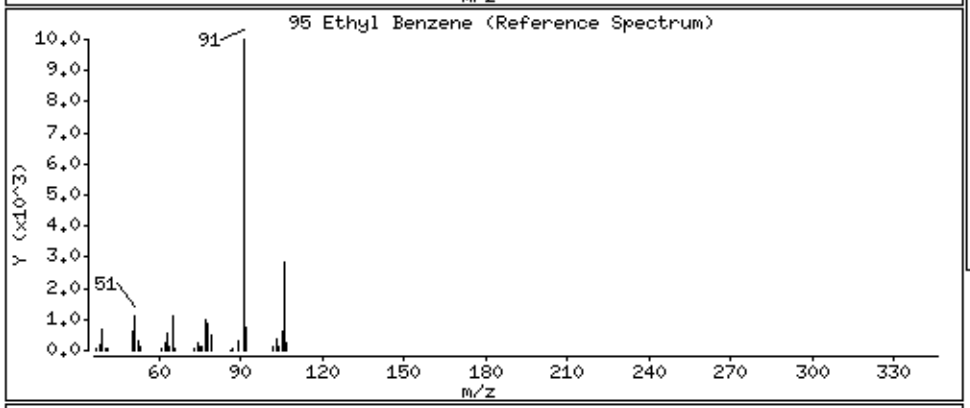
Column diameter: 0.32

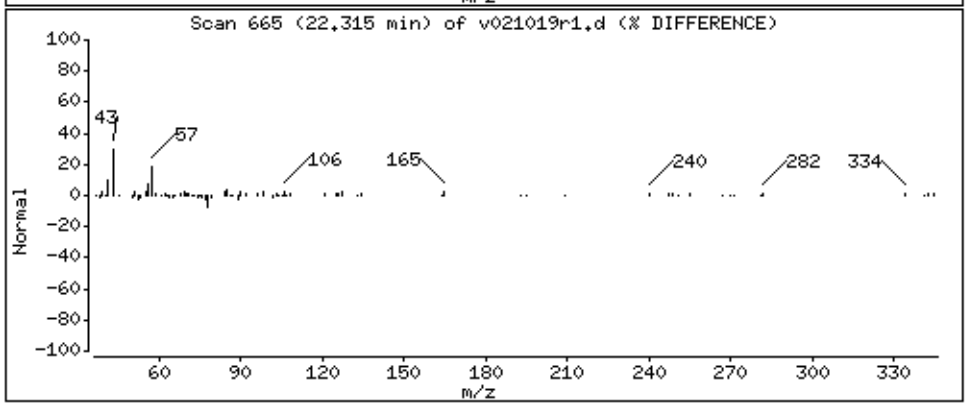
95 Ethyl Benzene

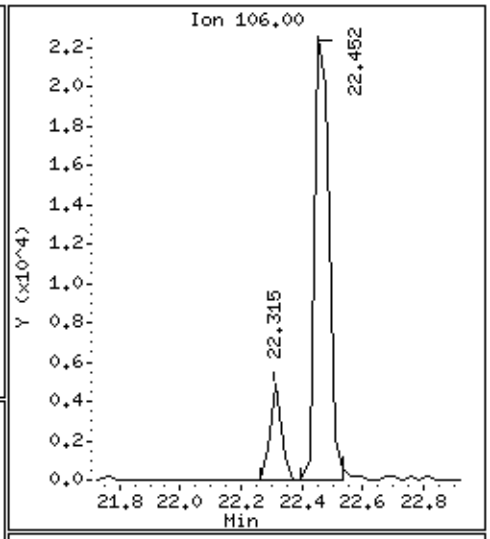
Concentration: 1.842 PPBV

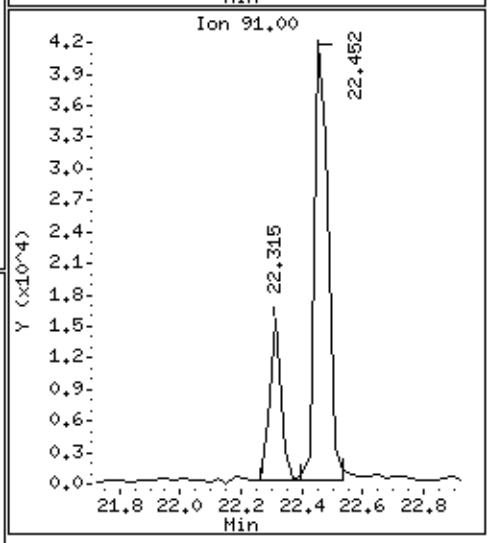












Data File: /chem/msdv.i/10Feb2015.b/v021019r1.d

Date : 10-FEB-2015 20:55

Client ID:

Instrument: msdv.i

Sample Info: 50mL# 11427

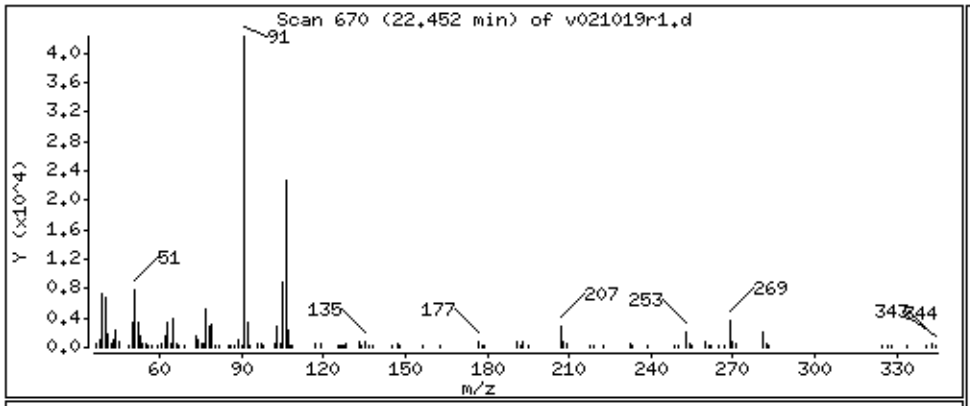
Operator: ea

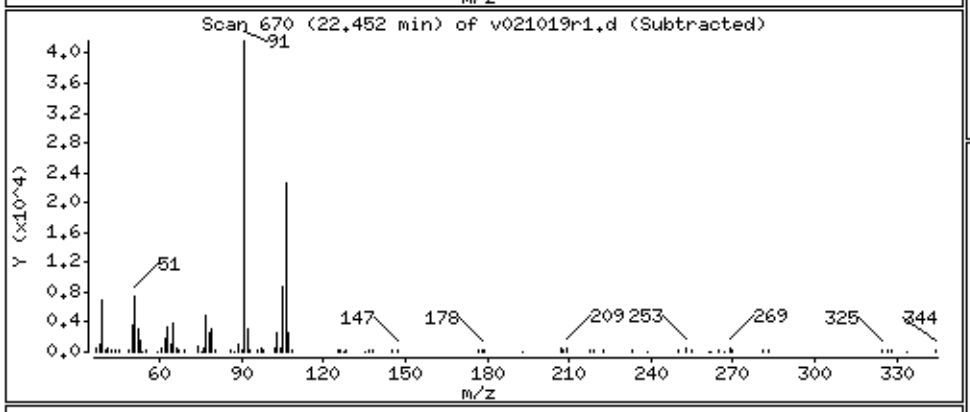
Column phase: RTx-624

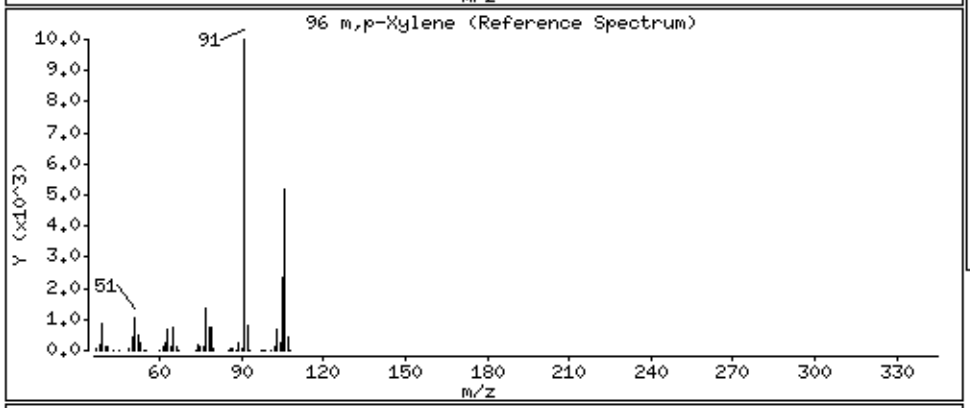
Column diameter: 0.32

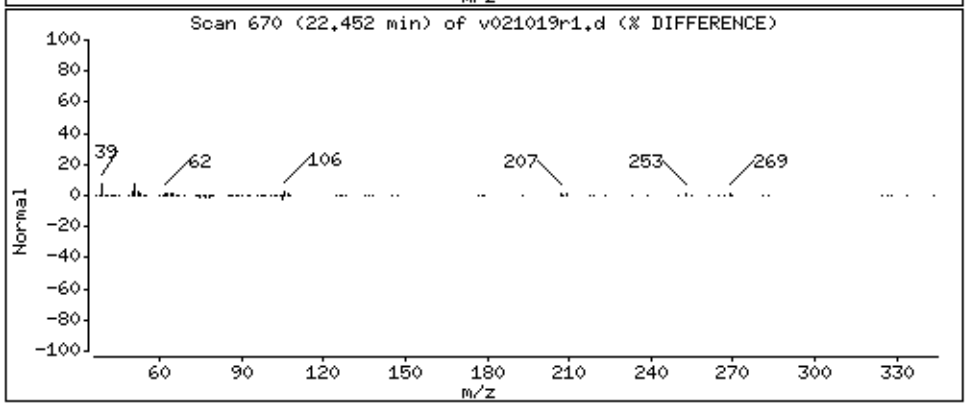
96 m,p-Xylene

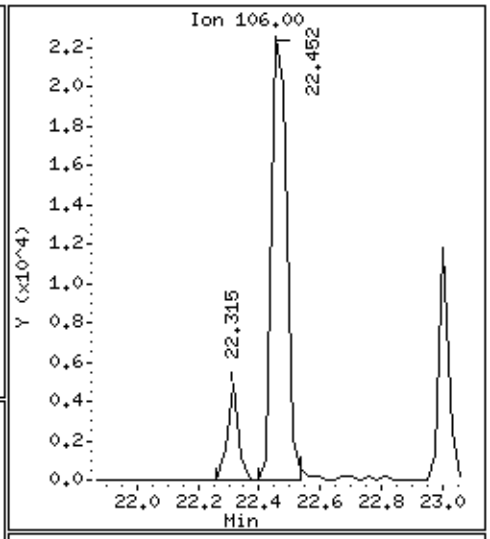
Concentration: 11.124 PPBV

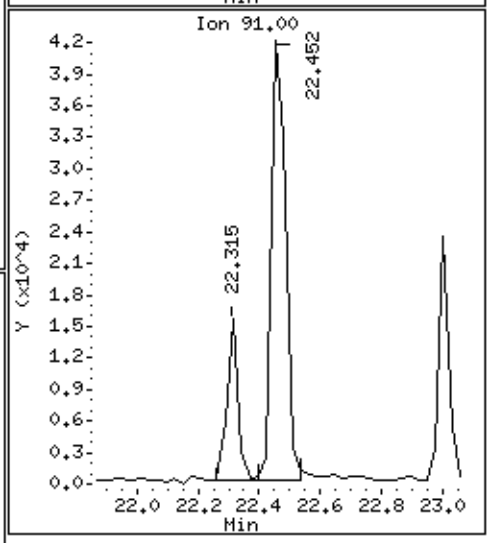












Data File: /chem/msdv.i/10Feb2015.b/v021019r1.d

Date : 10-FEB-2015 20:55

Client ID:

Instrument: msdv.i

Sample Info: 50mL# 11427

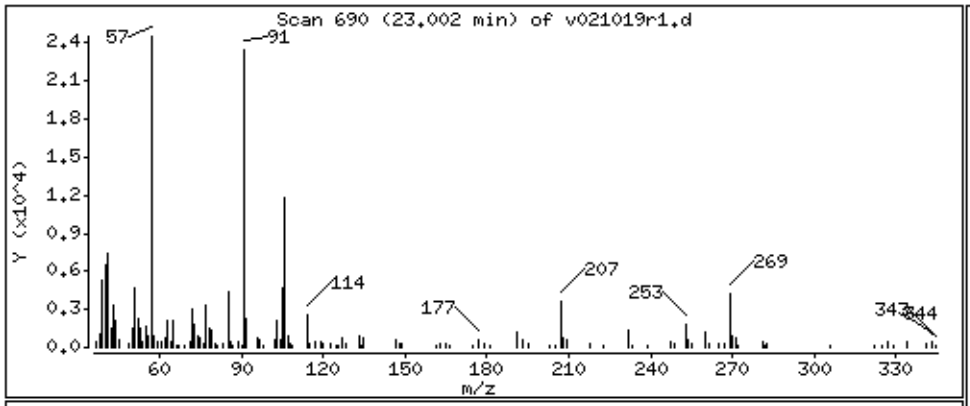
Operator: ea

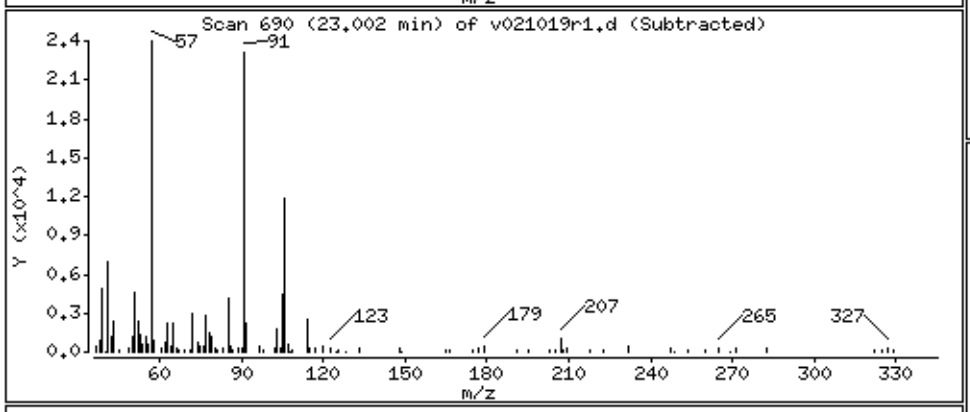
Column phase: RTx-624

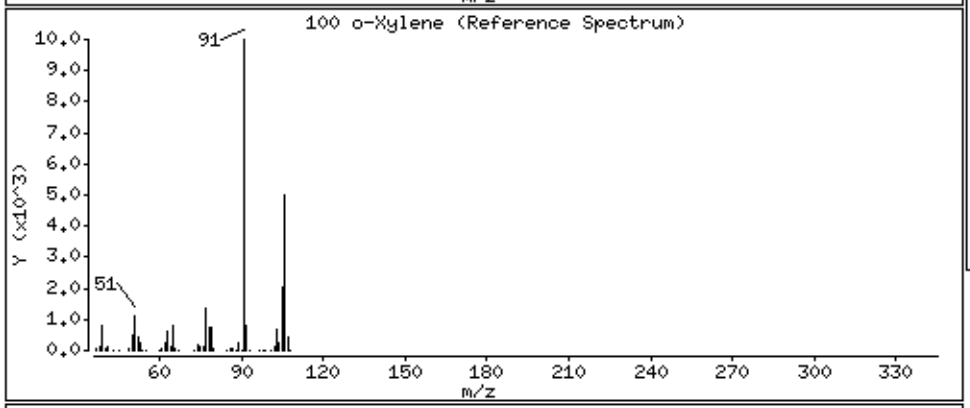
Column diameter: 0.32

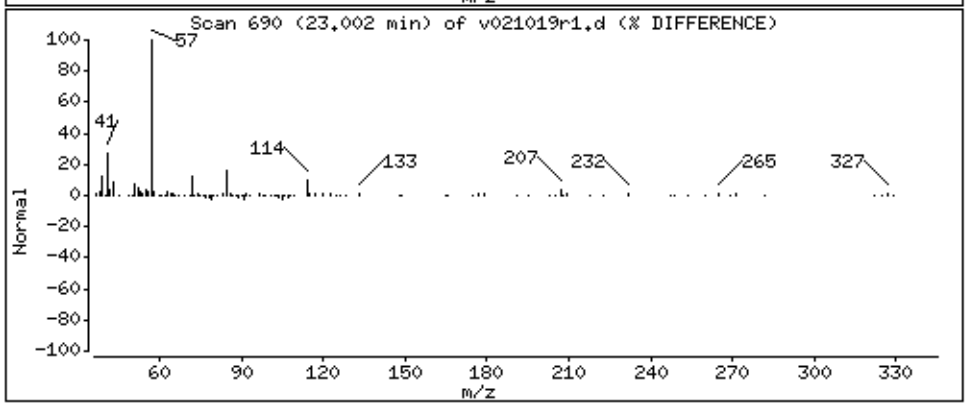
100 o-Xylene

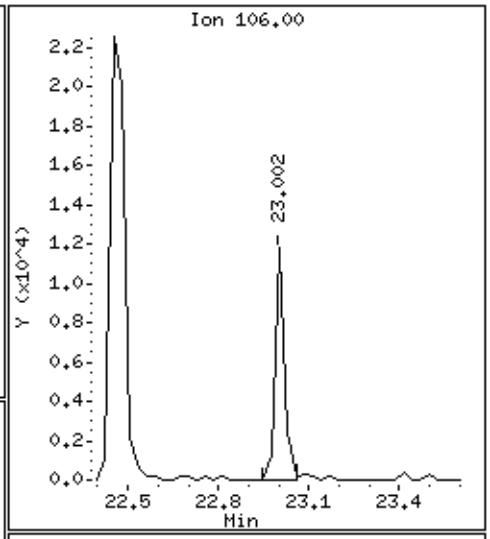
Concentration: 4.086 PPBV

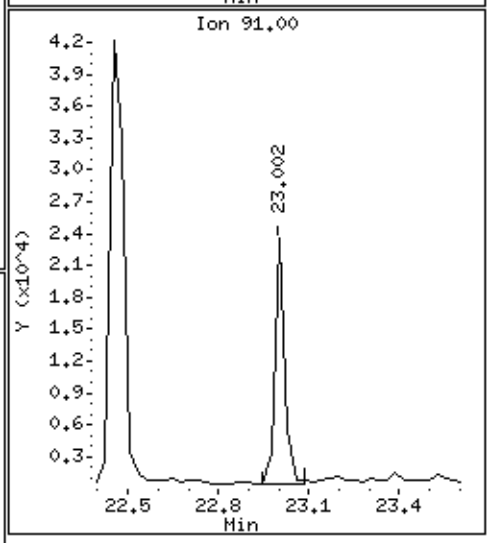












Data File: /chem/msdv.i/10Feb2015.b/v021019r1.d

Date : 10-FEB-2015 20:55

Client ID:

Instrument: msdv.i

Sample Info: 50mL# 11427

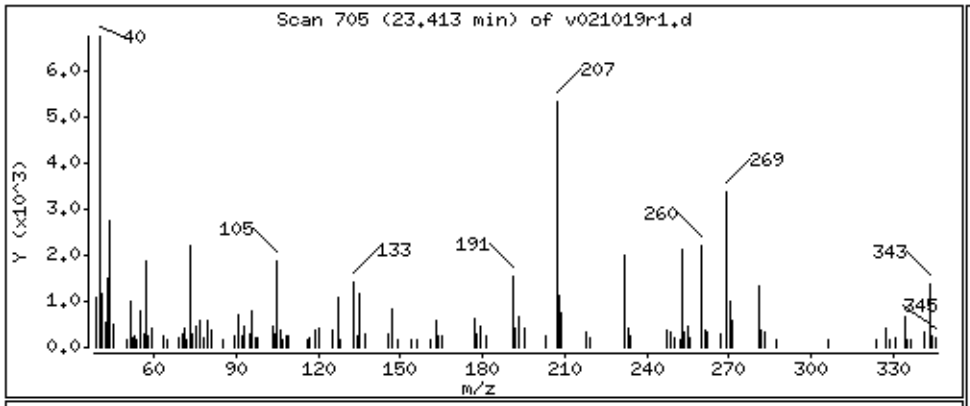
Operator: ea

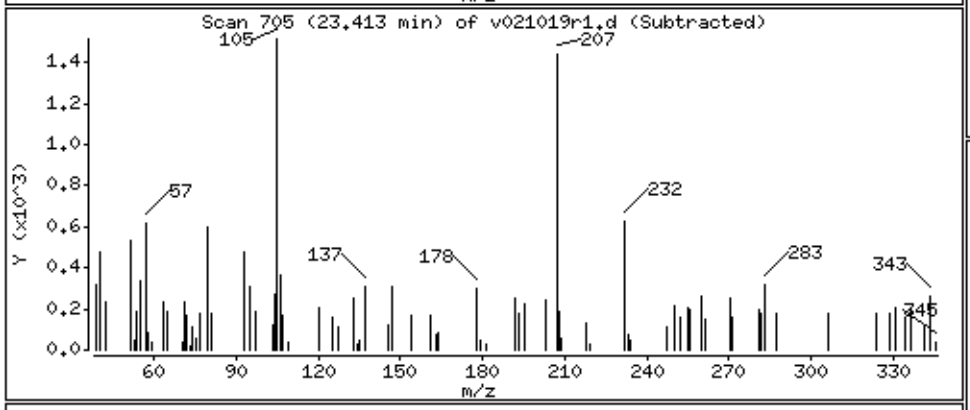
Column phase: RTx-624

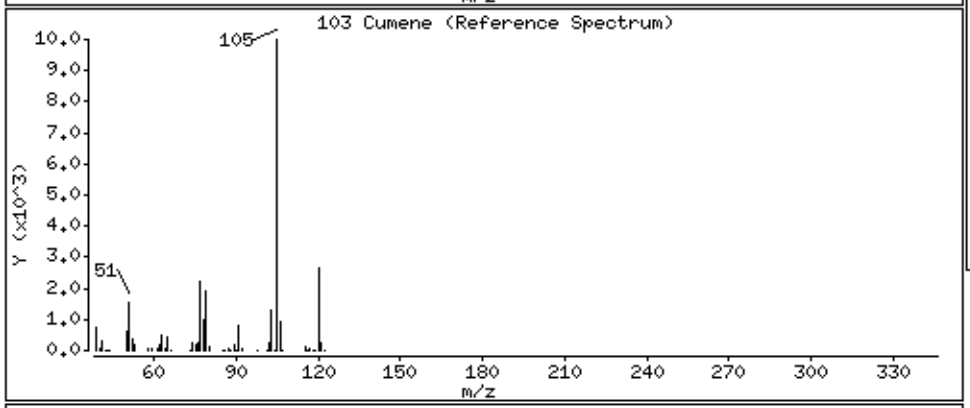
Column diameter: 0.32

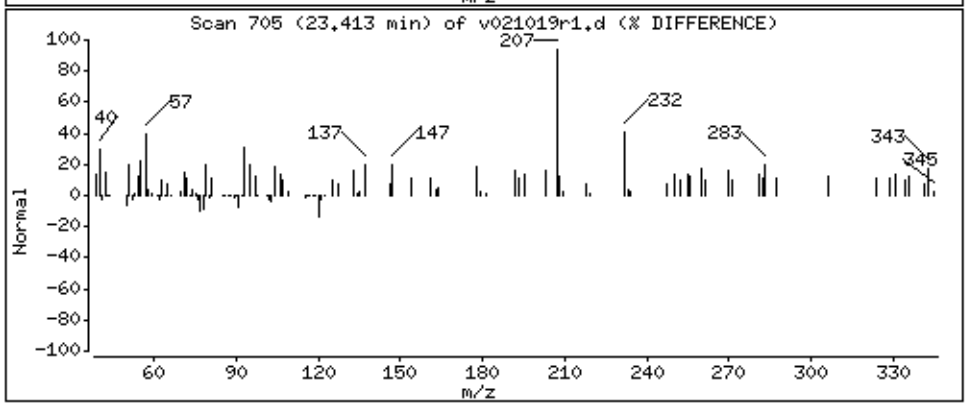
103 Cumene

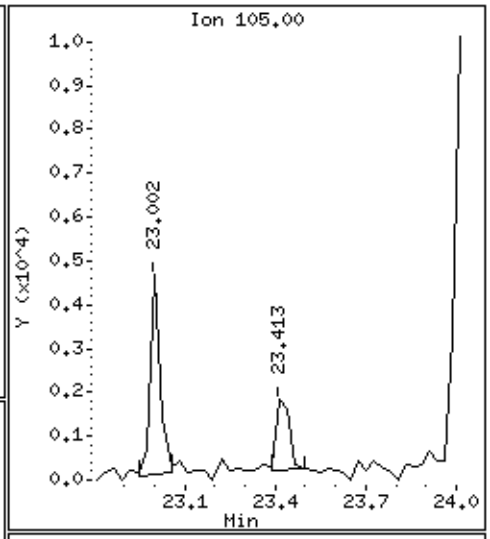
Concentration: 0.2994 PPBV

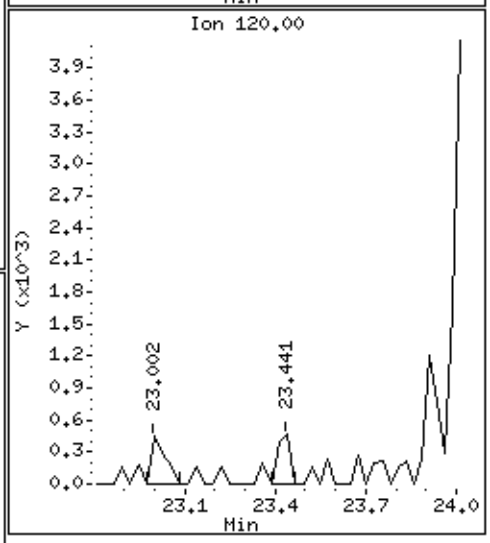












Data File: /chem/msdv.i/10Feb2015.b/v021019r1.d

Date : 10-FEB-2015 20:55

Client ID:

Instrument: msdv.i

Sample Info: 50mL# 11427

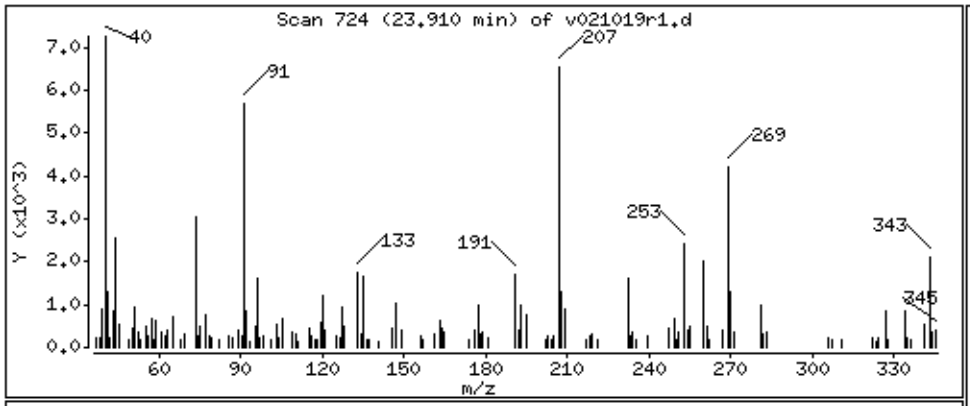
Operator: ea

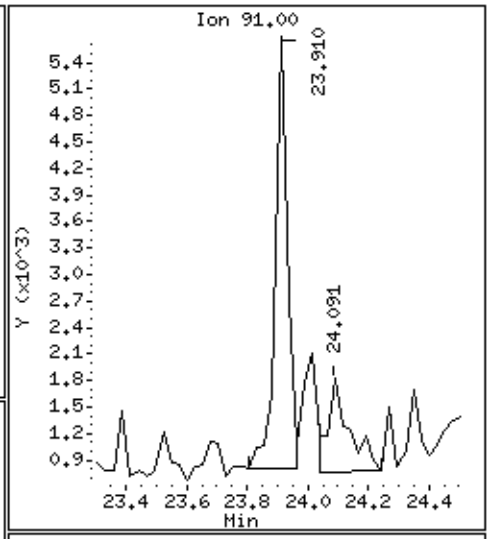
Column phase: RTx-624

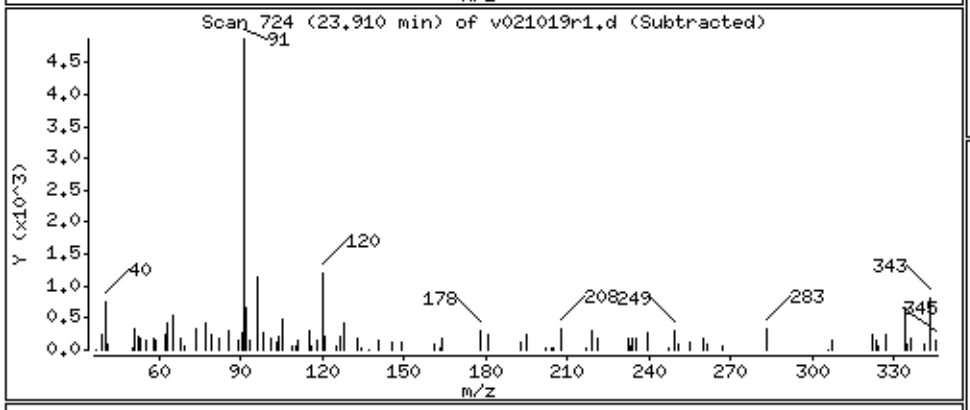
Column diameter: 0.32

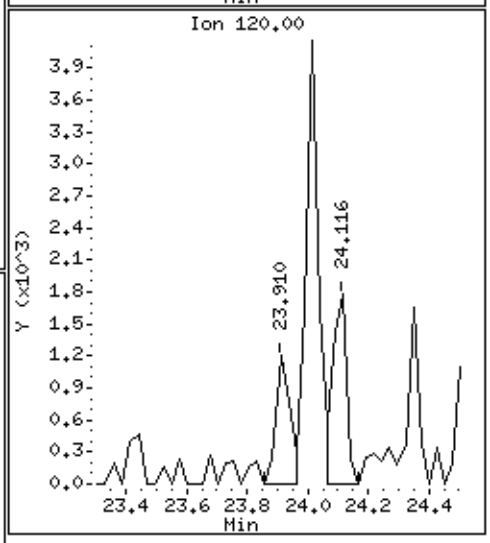
111 Propylbenzene

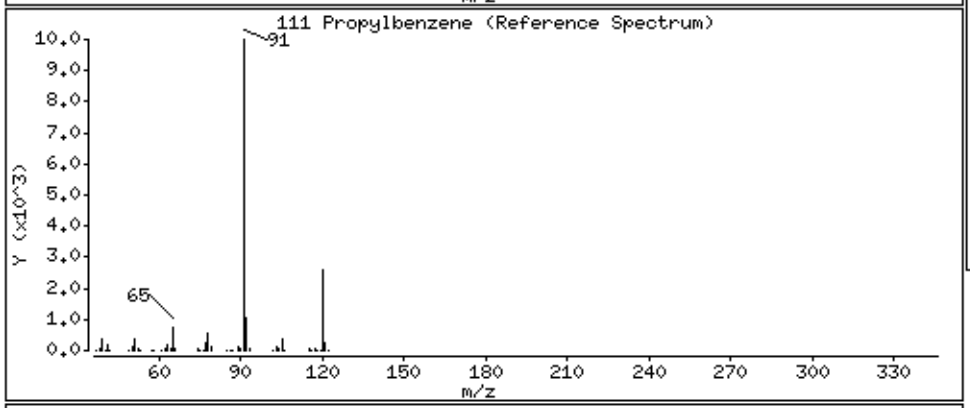
Concentration: 0.7870 PPBV

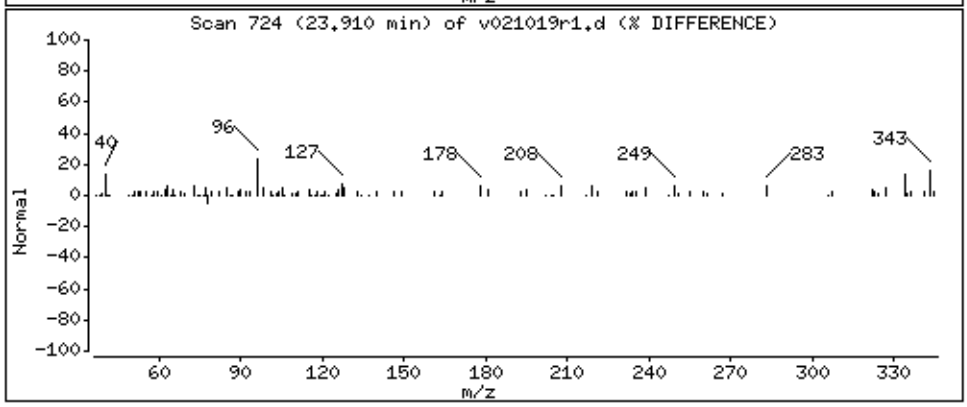












Data File: /chem/msdv.i/10Feb2015.b/v021019r1.d

Date : 10-FEB-2015 20:55

Client ID:

Instrument: msdv.i

Sample Info: 50mL# 11427

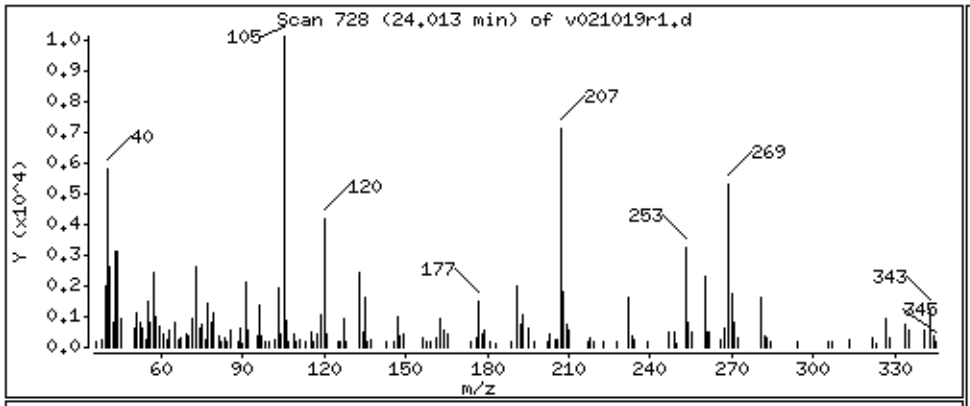
Operator: ea

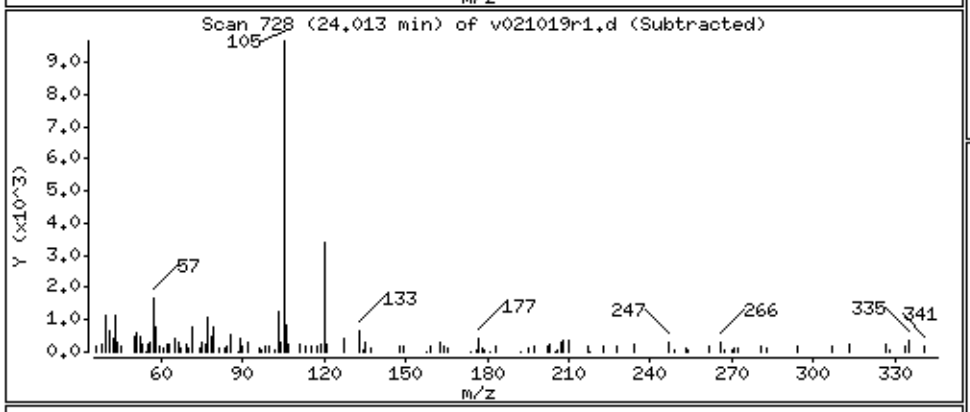
Column phase: RTx-624

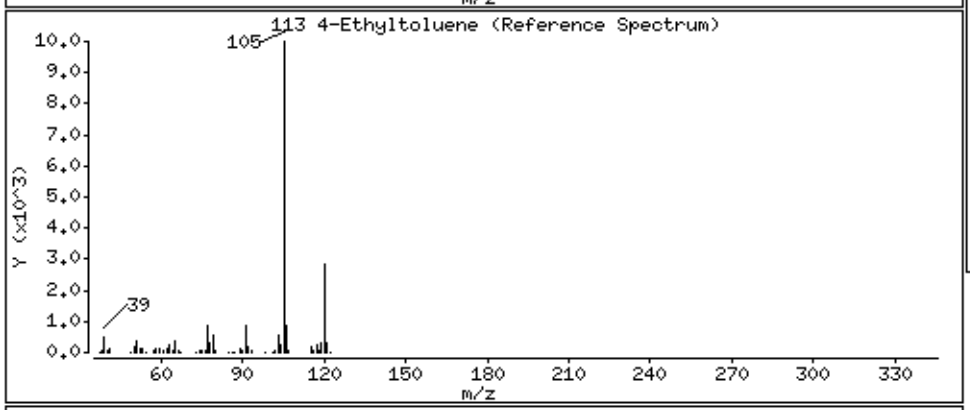
Column diameter: 0.32

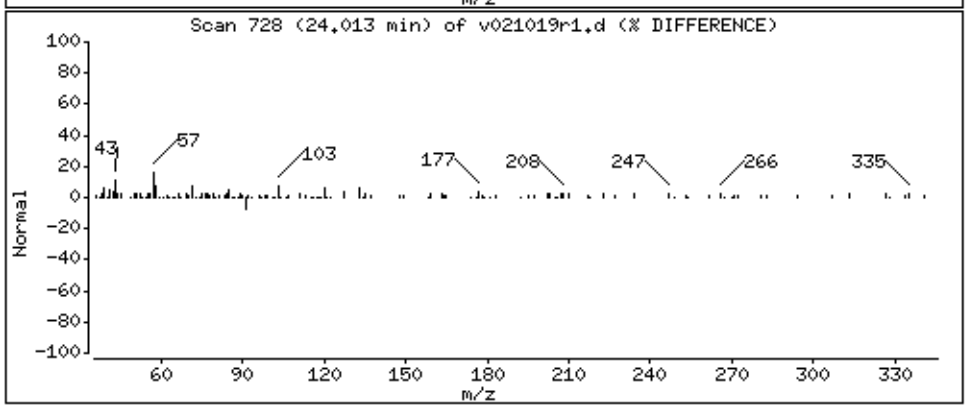
113 4-Ethyltoluene

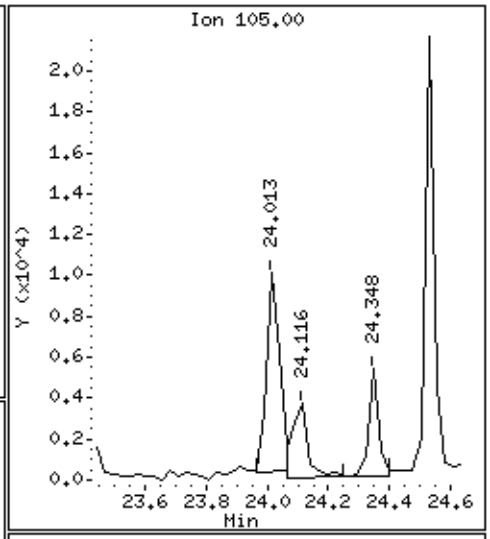
Concentration: 2.416 PPBV

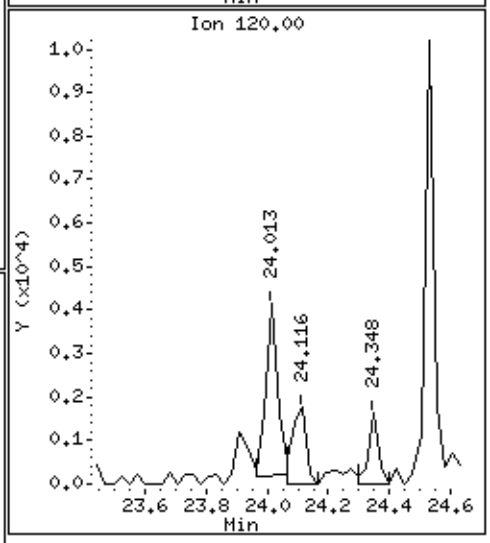












Data File: /chem/msdv.i/10Feb2015.b/v021019r1.d

Date : 10-FEB-2015 20:55

Client ID:

Instrument: msdv.i

Sample Info: 50mL# 11427

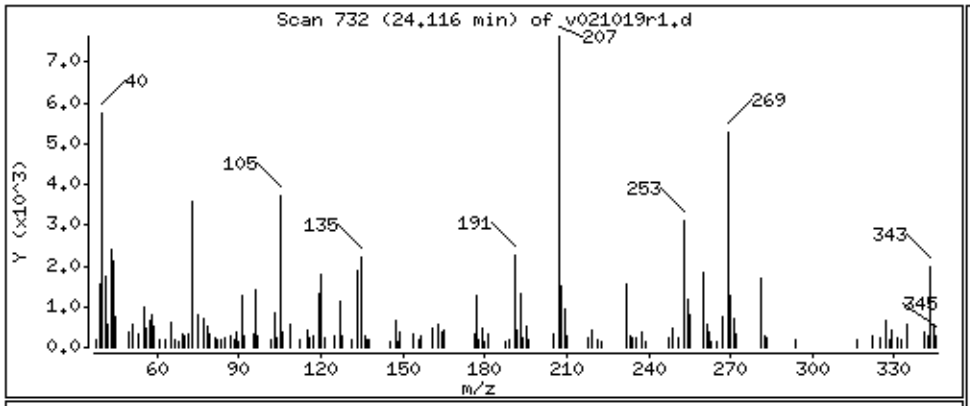
Operator: ea

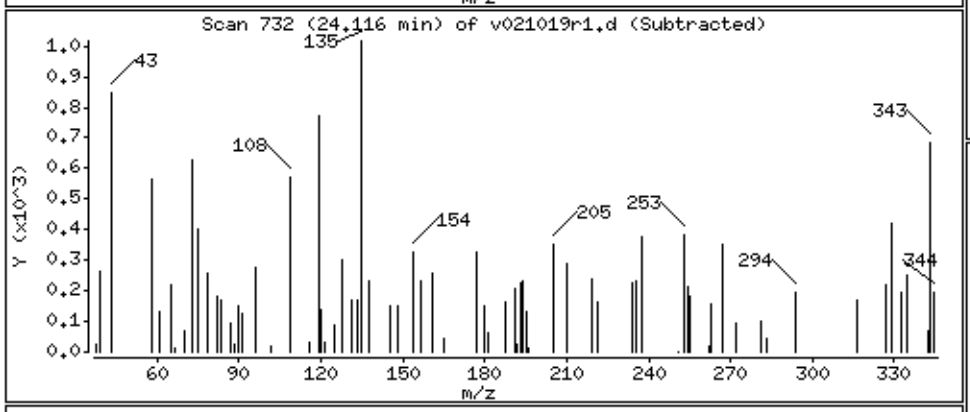
Column phase: RTx-624

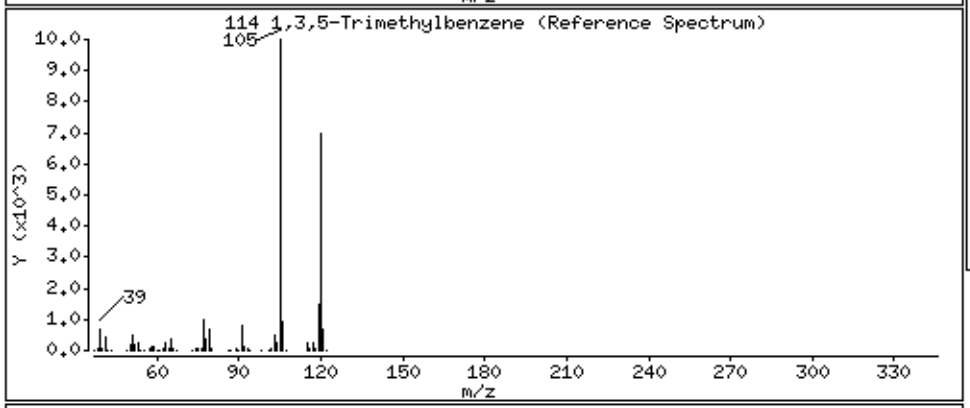
Column diameter: 0.32

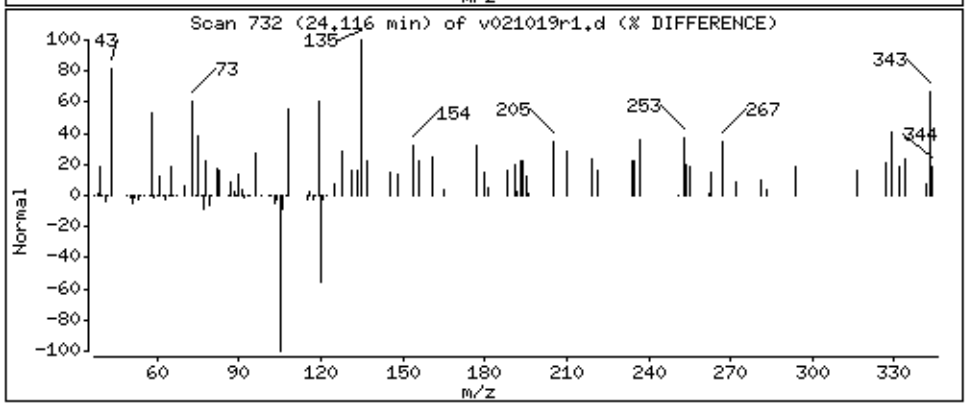
114 1,3,5-Trimethylbenzene

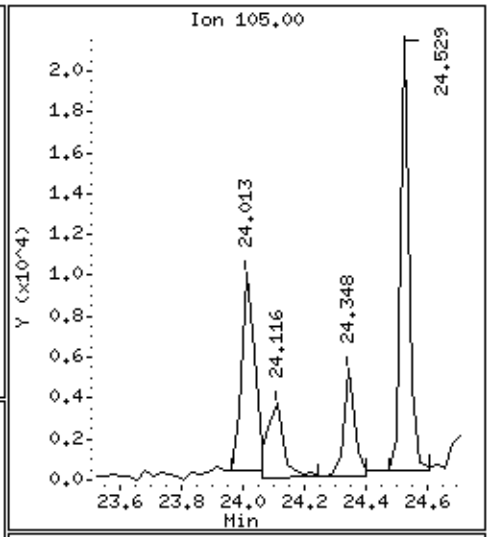
Concentration: 1.079 PPBV

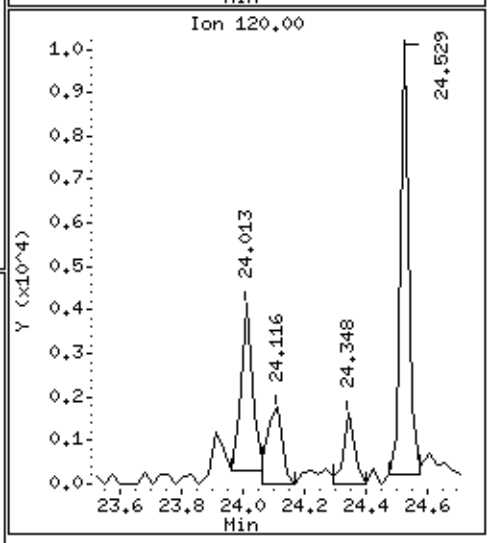












Data File: /chem/msdv.i/10Feb2015.b/v021019r1.d

Date : 10-FEB-2015 20:55

Client ID:

Instrument: msdv.i

Sample Info: 50mL# 11427

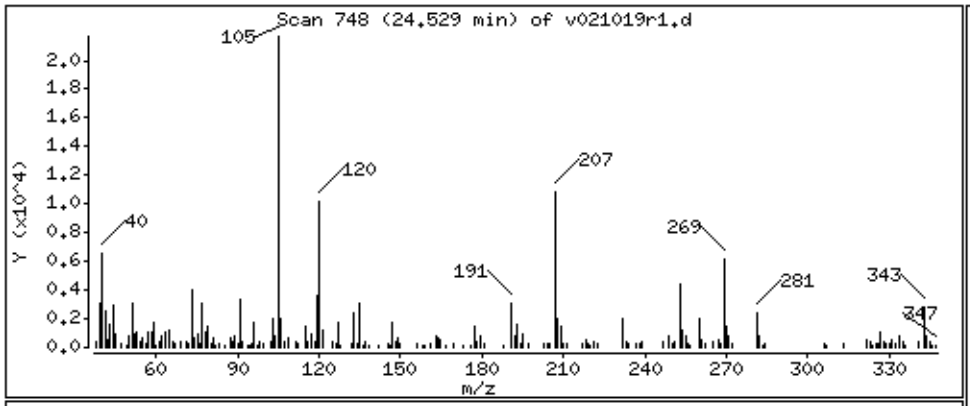
Operator: ea

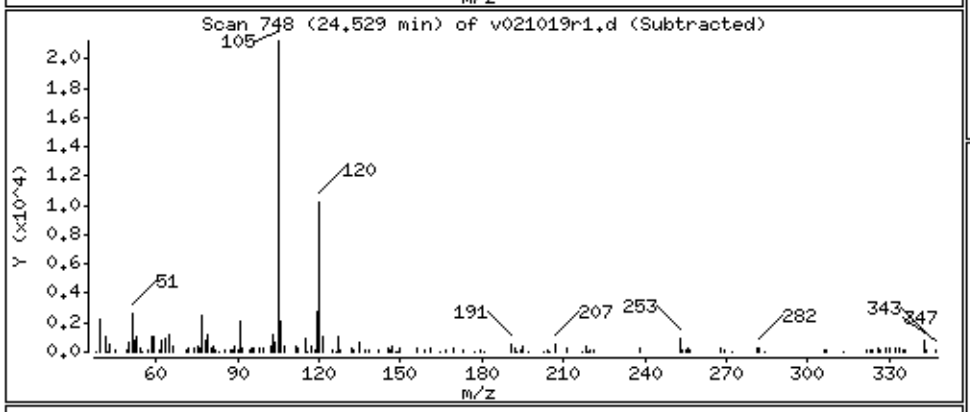
Column phase: RTx-624

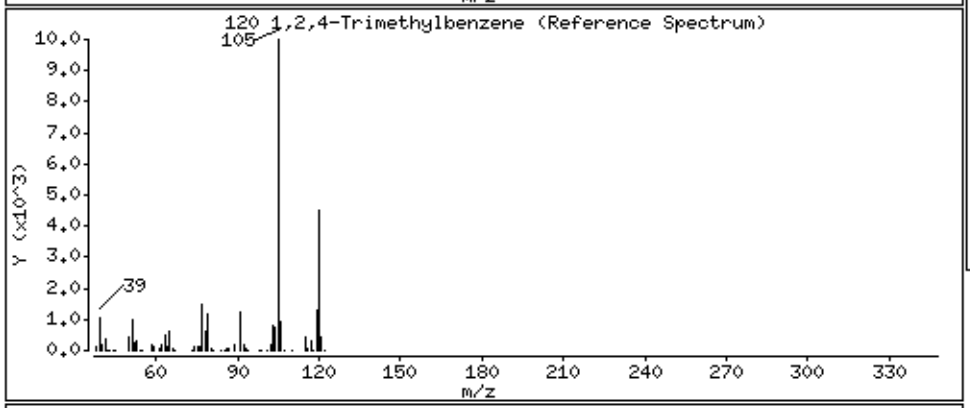
Column diameter: 0.32

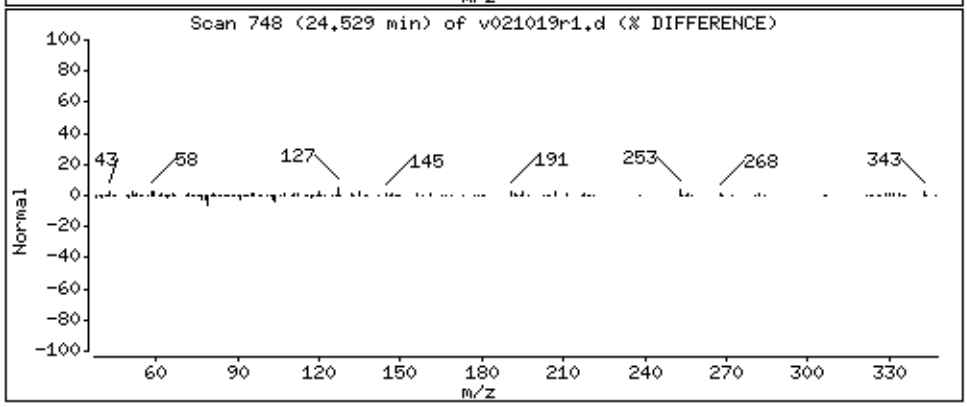
120 1,2,4-Trimethylbenzene

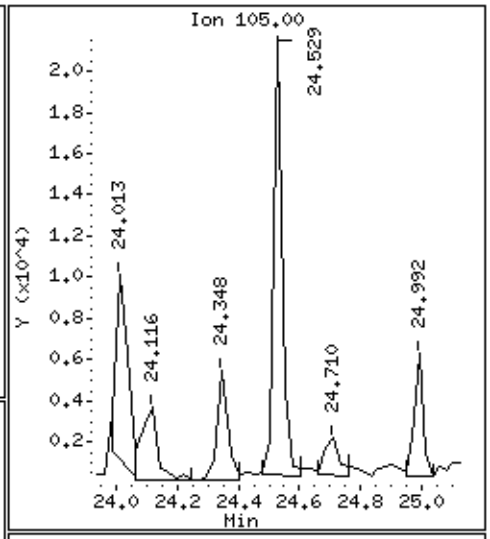
Concentration: 3.733 PPBV

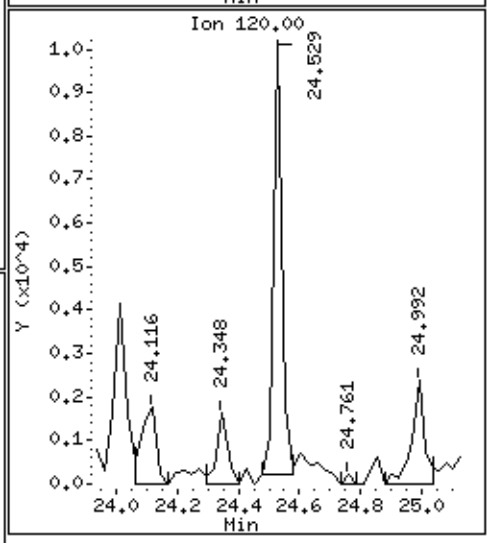












QC Results and Raw Data

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Client Sample ID: Lab Blank

Lab ID#: 1502113AR1-05A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**v021008r1**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 2/10/15 11:09 AM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.10	Not Detected	0.49	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	0.32 J	1.2	0.77 J
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	Not Detected	0.35	Not Detected
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#: 1502113AR1-05A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**v021008r1**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 2/10/15 11:09 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	0.60	Not Detected
1,4-Dichlorobenzene	0.10	Not Detected	0.60	Not Detected
alpha-Chlorotoluene	0.50	Not Detected	2.6	Not Detected
1,2-Dichlorobenzene	0.10	Not Detected	0.60	Not Detected
1,2,4-Trichlorobenzene	0.50	Not Detected	3.7	Not Detected
Hexachlorobutadiene	0.50	Not Detected UJ	5.3	Not Detected UJ
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	96	70-130
Toluene-d8	98	70-130
4-Bromofluorobenzene	84	70-130

Eurofins Air Toxics Inc.

TO15/Modified TO-14A

Data file : /chem/msdv.i/10Feb2015.b/v021008r1.d
Lab Smp Id: Lab Blank Client Smp ID: Lab Blank
Inj Date : 10-FEB-2015 11:09
Operator : ef Inst ID: msdv.i
Smp Info : 250mL# 34034
Misc Info : Humid
Comment : Low Level GC-MS
Method : /chem/msdv.i/10Feb2015.b/v15l0123c.m
Meth Date : 26-Jun-2015 11:58 dbailey Quant Type: ISTD
Cal Date : 09-FEB-2015 14:14 Cal File: v020912.d
Als bottle: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: TO15Nmdl.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	186065	5.00000		80.00- 120.00	100.00
15.933	15.934 (1.000)	128	142720			0.00- 30.00	76.70
15.933	15.934 (1.000)	49	420285			0.00- 30.00	225.88
* 71 1,4-Difluorobenzene						CAS #: 540-36-3	
17.305	17.305 (1.000)	114	745961	5.00000		80.00- 120.00	100.00
17.305	17.305 (1.000)	88	119766			0.00- 30.00	16.06
* 92 Chlorobenzene-d5						CAS #: 3114-55-4	
22.205	22.205 (1.000)	117	566358	5.00000		80.00- 120.00	100.00
22.205	22.205 (1.000)	82	297990			0.00- 30.00	52.62
$ 65 1,2-Dichloroethane-d4						CAS #: 17060-07-0	
16.756	16.756 (1.052)	65	280402	4.80779	4.808	80.00- 120.00	100.00
16.756	16.756 (1.052)	67	133041			25.13- 85.13	47.45
$ 80 Toluene-d8						CAS #: 2037-26-5	
19.856	19.856 (1.147)	98	685478	4.90775	4.908	80.00- 120.00	100.00
19.856	19.856 (1.147)	70	72350			0.00- 40.74	10.55

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
$ 80 Toluene-d8 (continued)							
19.879	19.856 (1.149)	100	442108			36.73- 96.73	64.50
$ 106 Bromofluorobenzene					CAS #: 460-00-4		
23.704	23.704 (1.067)	174	222649	4.19533	4.195	80.00- 120.00	100.00
23.678	23.704 (1.066)	95	290881			95.17- 155.17	130.65
23.704	23.704 (1.067)	176	223025			64.74- 124.74	100.17
31 Acetone					CAS #: 67-64-1		
12.871	12.816 (0.808)	58	13932	0.32428	0.3243	80.00- 120.00	100.00(a)
12.871	12.816 (0.808)	43	48877			326.03- 386.03	350.82

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: v021008r1.d
Lab Smp Id: Lab Blank
Analysis Type: VOA
Quant Type: ISTD
Operator: ef
Method File: /chem/msdv.i/10Feb2015.b/v15l0123c.m
Misc Info: Humid

Calibration Date: 10-FEB-2015
Calibration Time: 06:33
Client Smp ID: Lab Blank
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
54 Bromochloromethan	194946	116968	272924	186065	-4.56
71 1,4-Difluorobenze	822631	493579	1151683	745961	-9.32
92 Chlorobenzene-d5	670659	402395	938923	566358	-15.55

		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.

Report Date: 26-Jun-2015 12:04

Eurofins Air Toxics Inc.

RECOVERY REPORT

Client Name:
Client SDG: 10Feb2015
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: TO15Nmdl.sub
Method File: /chem/msdv.i/10Feb2015.b/v15l0123c.m
Misc Info: Humid

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 65 1,2-Dichloroethane	5.000	4.808	96.16	70-130
$ 80 Toluene-d8	5.000	4.908	98.16	70-130
$ 106 Bromofluorobenzene	5.000	4.195	83.91	70-130

Data File: /chem/msdv.i/10Feb2015.b/v021008r1.d

Date : 10-FEB-2015 11:09

Client ID: Lab Blank

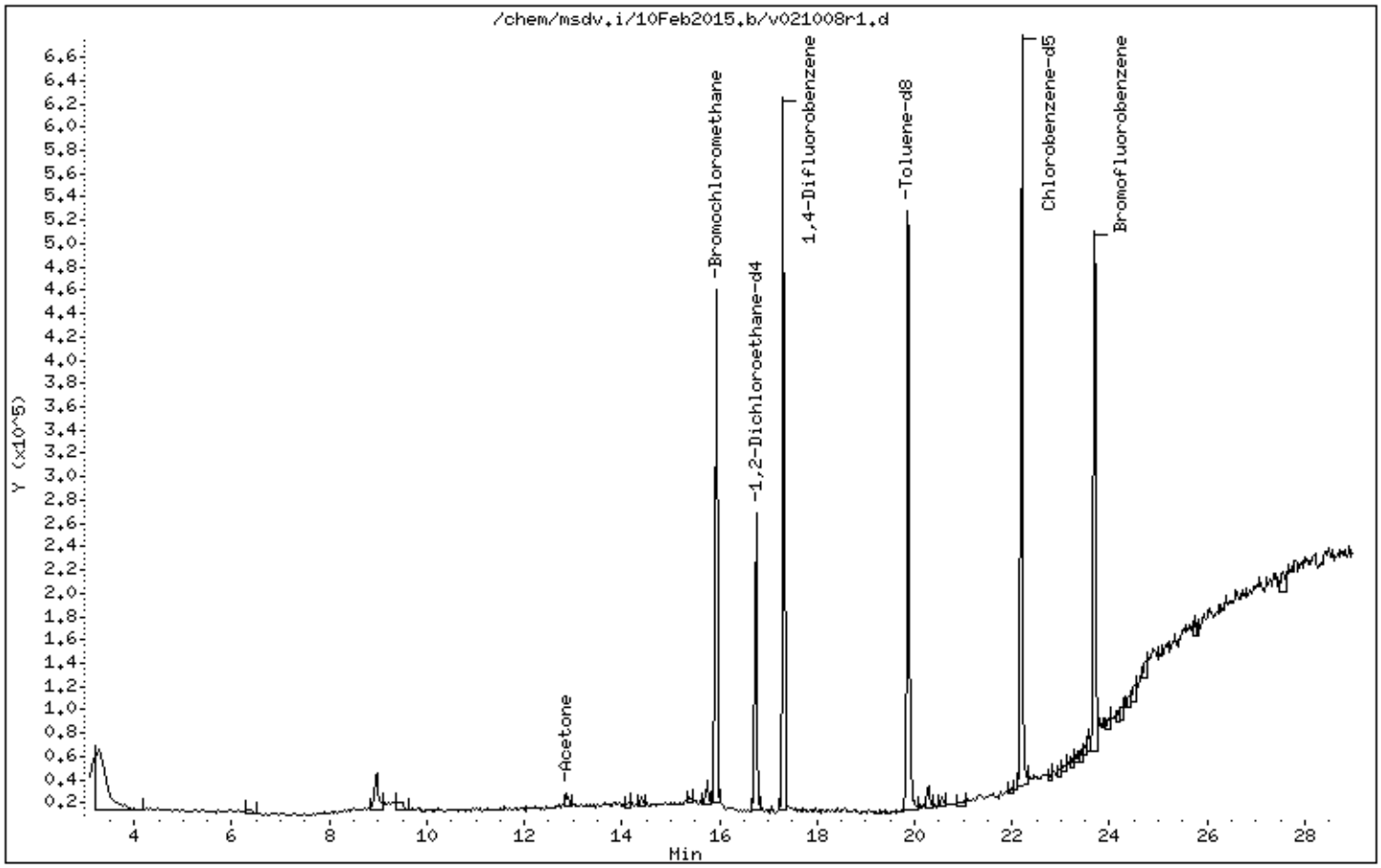
Instrument: msdv.i

Sample Info: 250mL# 34034

Operator: ef

Column phase: RTx-624

Column diameter: 0.32



Data File: /chem/msdv.i/10Feb2015.b/v021008r1.d

Date : 10-FEB-2015 11:09

Client ID: Lab Blank

Instrument: msdv.i

Sample Info: 250mL# 34034

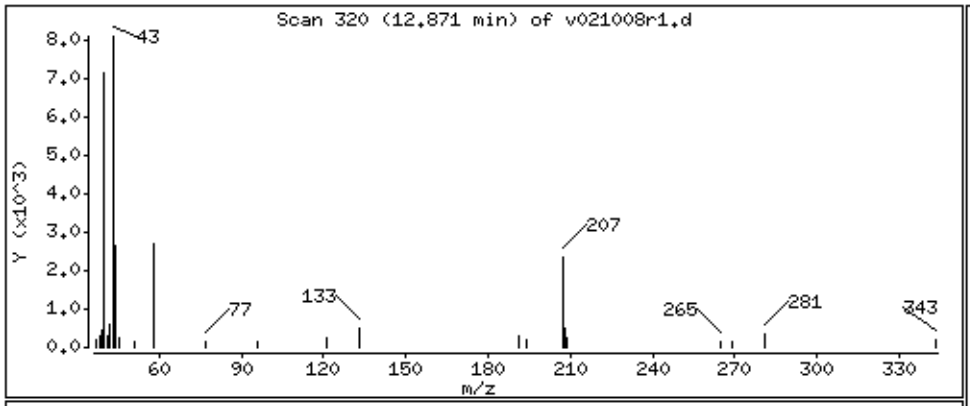
Operator: ef

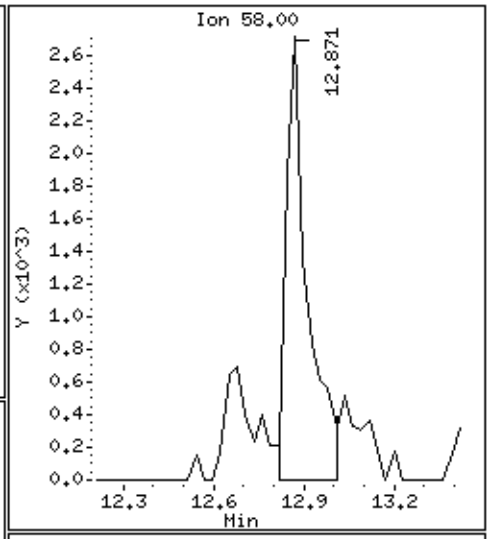
Column phase: RTx-624

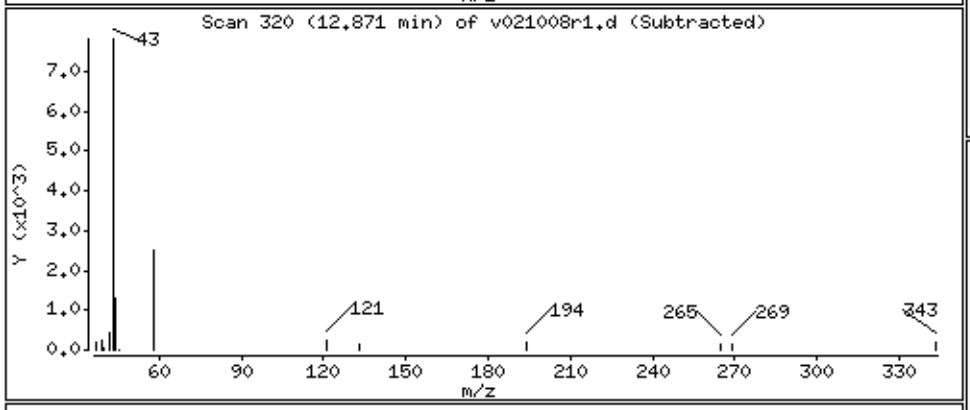
Column diameter: 0.32

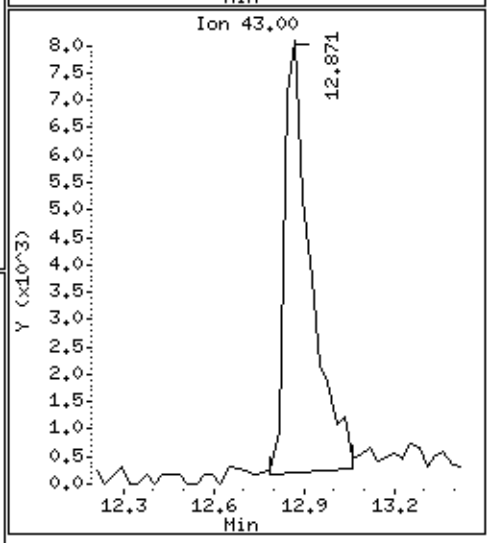
31 Acetone

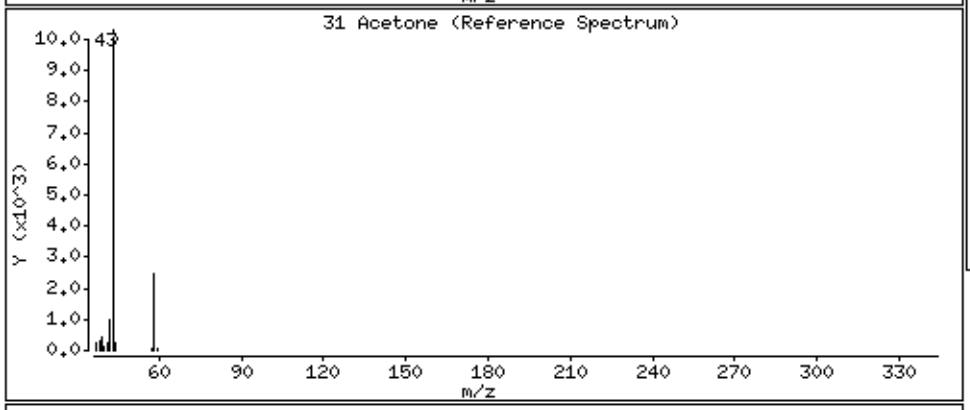
Concentration: 0.3243 PPBV

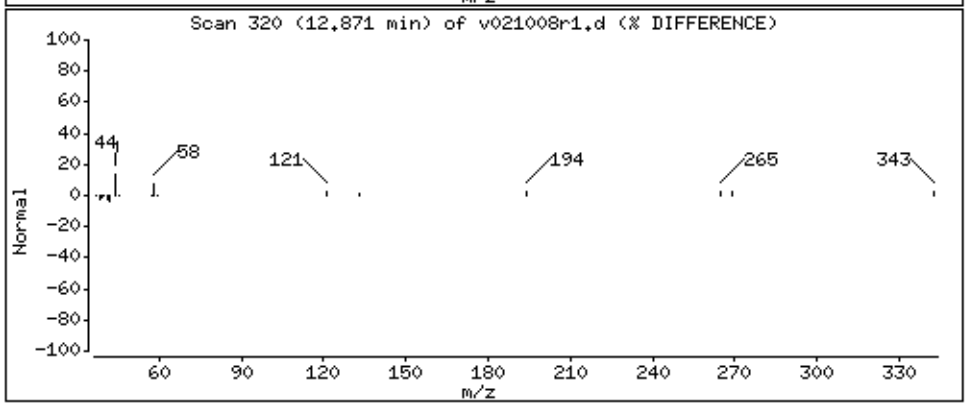












LEVEL-IV VALIDATABLE

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

SURROGATE RECOVERY FORM

Lab Name: AIR TOXICS LIMITED. SDG No.: 1502113AR1

	CLIENT SAMPLE NO.	SURROGATE % RECOVERY								
		1,2-Dichloroethane-d4	#	Toluene-d8	#	4-Bromofluorobenzene	#		#	TOTAL OUT
01	B6-5SS	96		99		86				0
02	B6-3SS	102		98		90				0
03	B6-3SSD	104		97		90				0
04	B6-4SS	97		97		88				0
05	Lab Blank	96		98		84				0
06	CCV	100		105		96				0
07	LCS	96		104		103				0
08	LCSD	97		99		102				0
09										0
10										0
11										0
12										0
13										0
14										0
15										0
16										0
17										0
18										0
19										0
20										0
21										0
22										0
23										0
24										0

Surrogate Recovery Limits

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:	1502113AR1
Lab File ID:	v021002.d	Date Analyzed:	02/10/2015
Instrument ID:	msdv.i	Time Analyzed:	06:33 AM

		Chlorobenzene-d5 Area	#	RT	#	1,4-Difluorobenzene Area	#	RT	#	Bromochloromethane Area	#	RT	#
	24-HOUR STD	670659		22.21		822631		17.3		194946		15.93	
	UPPER LIMIT	938923		22.54		1151683		17.63		272924		16.26	
	LOWER LIMIT	402395		21.88		493579		16.97		116968		15.60	
	CLIENT SAMPLE NO												
01	B6-5SS	564339		22.21		760250		17.3		190063		15.93	
02	B6-3SS	583177		22.21		782084		17.3		184071		15.93	
03	B6-3SSD	561683		22.21		760406		17.3		173118		15.93	
04	B6-4SS	570405		22.21		775265		17.3		193283		15.93	
05	Lab Blank	566358		22.21		745961		17.3		186065		15.93	
06	CCV	670659		22.21		822631		17.3		194946		15.93	
07	LCS	628205		22.21		776559		17.3		192530		15.93	
08	LCSD	617156		22.21		768739		17.3		193843		15.93	
09													
10													
11													
12													
13													
14													
15													
16													
17													
18													
19													
20													
21													
22													

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

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

* Designates values outside of QC limits

SAMPLE RESULTS/SAMPLE RESULTS DUPLICATE

Lab Name: Air Toxics Ltd.

Lab File ID: v021004.d & v021003.d

Lab Sample ID: &

Dilution: 1.00 & 1.00

Client Sample ID: LCS & LCSD

Date Analyzed: 2/10/15 & 2/10/15

CAS Number	Compound	Original Amount	Original Flags	Duplicate Amount	Duplicate Flags	RPD	Result Less Than 5X RL
71-55-6	1,1,1-Trichloroethane	93		93		0	
79-34-5	1,1,2,2-Tetrachloroethane	86		90		4.5	
79-00-5	1,1,2-Trichloroethane	99		97		2.0	
75-34-3	1,1-Dichloroethane	99		99		0	
75-35-4	1,1-Dichloroethene	96		98		2.1	
120-82-1	1,2,4-Trichlorobenzene	80		86		7.2	
95-63-6	1,2,4-Trimethylbenzene	86		94		8.9	
106-93-4	1,2-Dibromoethane (EDB)	99		98		1.0	
95-50-1	1,2-Dichlorobenzene	77		84		8.7	
107-06-2	1,2-Dichloroethane	96		96		0	
78-87-5	1,2-Dichloropropane	100		98		2.0	
108-67-8	1,3,5-Trimethylbenzene	82		89		8.2	
106-99-0	1,3-Butadiene	102		99		3.0	
541-73-1	1,3-Dichlorobenzene	84		92		9.1	
106-46-7	1,4-Dichlorobenzene	71		77		8.1	
123-91-1	1,4-Dioxane	81		84		3.6	
540-84-1	2,2,4-Trimethylpentane	97		99		2.0	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	98		94		4.2	
591-78-6	2-Hexanone	91		94		3.2	
67-63-0	2-Propanol	110		107		2.8	
107-05-1	3-Chloropropene	91		92		1.1	
622-96-8	4-Ethyltoluene	82		92		11	
108-10-1	4-Methyl-2-pentanone	100		102		2.0	
67-64-1	Acetone	96		93		3.2	
100-44-7	alpha-Chlorotoluene	91		99		8.4	
71-43-2	Benzene	92		94		2.2	
75-27-4	Bromodichloromethane	98		99		1.0	
75-25-2	Bromoform	94		98		4.2	
74-83-9	Bromomethane	104		104		0	
75-15-0	Carbon Disulfide	86		85		1.2	
56-23-5	Carbon Tetrachloride	89		90		1.1	
108-90-7	Chlorobenzene	92		92		0	
75-00-3	Chloroethane	103		102		0.98	
67-66-3	Chloroform	97		98		1.0	
74-87-3	Chloromethane	103		105		1.9	
156-59-2	cis-1,2-Dichloroethene	106		104		1.9	
10061-01-5	cis-1,3-Dichloropropene	88		92		4.4	
98-82-8	Cumene	87		92		5.6	
110-82-7	Cyclohexane	97		95		2.1	
124-48-1	Dibromochloromethane	96		97		1.0	
64-17-5	Ethanol	127		128		0.78	
100-41-4	Ethyl Benzene	85		92		7.9	
75-69-4	Freon 11	98		97		1.0	
76-13-1	Freon 113	96		96		0	
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: v021004.d & v021003.d

Lab Sample ID: &

Dilution: 1.00 & 1.00

Client Sample ID: LCS & LCSD

Date Analyzed: 2/10/15 & 2/10/15

CAS Number	Compound	Original Amount	Original Flags	Duplicate Amount	Duplicate Flags	RPD	Result Less Than 5X RL
75-71-8	Freon 12	99		99		0	
142-82-5	Heptane	98		102		4.0	
87-68-3	Hexachlorobutadiene	72		86		18	
110-54-3	Hexane	99		102		3.0	
108-38-3	m,p-Xylene	84		89		5.8	
1634-04-4	Methyl tert-butyl ether	95		95		0	
75-09-2	Methylene Chloride	97		95		2.1	
91-20-3	Naphthalene	67		86		25	
95-47-6	o-Xylene	91		95		4.3	
103-65-1	Propylbenzene	82		91		10	
100-42-5	Styrene	86		93		7.8	
127-18-4	Tetrachloroethene	92		95		3.2	
109-99-9	Tetrahydrofuran	104		103		0.97	
108-88-3	Toluene	94		97		3.1	
156-60-5	trans-1,2-Dichloroethene	86		85		1.2	
10061-02-6	trans-1,3-Dichloropropene	94		94		0	
79-01-6	Trichloroethene	97		101		4.0	
75-01-4	Vinyl Chloride	102		103		0.98	

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 : 23-JAN-2015 16:43
End Cal Date : 09-FEB-2015 14:14
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msdv.i/09Feb2015.b/v15l0123c.m
Cal Date : 09-Feb-2015 16:23 efinn
Curve Type : Average

Calibration File Names:
Level 5: /chem/msdv.i/23Jan2015.b/v012306a.d
Level 6: /chem/msdv.i/23Jan2015.b/v012307.d
Level 7: /chem/msdv.i/09Feb2015.b/v020910.d
Level 8: /chem/msdv.i/09Feb2015.b/v020911.d
Level 9: /chem/msdv.i/09Feb2015.b/v020912.d
Level 10: /chem/msdv.i/23Jan2015.b/v012311.d
Level 11: /chem/msdv.i/23Jan2015.b/v012312.d
Level 12: /chem/msdv.i/23Jan2015.b/v012313.d
Level 13: /chem/msdv.i/27Jan2015.b/v012707.d
Level 16: /chem/msdv.i/27Jan2015.b/v012708.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	4.000 Level 16				
1 Freon 134a	+++++	+++++	1.05579	0.96197	0.95348	+++++		
	+++++	+++++	1.00837	0.94819			0.98556	4.659
208 D-Limonene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++			+++++	+++++
2 Freon 152A	+++++	+++++	0.75156	0.63786	0.62506	+++++		
	+++++	+++++	0.67172	0.62622			0.66248	8.038
3 Propylene	+++++	+++++	2.14669	2.11709	2.22802	2.03575		
	1.85663	1.90263	+++++	+++++			2.04780	7.071
4 Dichlorodifluoromethane/Fr12	+++++	4.69575	3.89645	3.70258	4.36500	3.96886		
	3.61243	3.66094	+++++	+++++			3.98600	10.146
5 Freon 22	+++++	+++++	+++++	+++++	2.66601	+++++		
	+++++	+++++	2.82724	2.76524			2.75283	2.954

Eurofins Air Toxics Inc.

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Cal Date : 09-Feb-2015 16:23 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	4.000 Level 16				
6 Freon 114	3.42120	3.73148	3.28379	3.13738	3.70132	3.33663		
	3.05978	3.13618	+++++	+++++			3.35097	7.598
7 Isobutylene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++			+++++	+++++
8 Chloromethane	+++++	3.32024	2.60843	2.41706	2.76615	2.49220		
	2.23819	2.16871	+++++	+++++			2.57300	15.080
9 Butane	+++++	+++++	0.47309	0.45549	0.51149	0.45106		
	0.41651	0.43695	+++++	+++++			0.45743	7.121
10 Vinyl Chloride	+++++	2.15449	1.88838	1.84610	2.22777	2.02089		
	1.84475	1.86321	+++++	+++++			1.97794	8.040
11 1,3-Butadiene	+++++	2.24512	1.76413	1.81688	2.17563	1.93161		
	1.80842	1.86450	+++++	+++++			1.94375	9.800
12 Bromomethane	+++++	1.32009	1.08359	1.02192	1.44840	1.31753		
	1.21323	1.20470	+++++	+++++			1.22992	11.928
13 Vinyl Bromide	+++++	+++++	1.26332	1.08969	1.16352	+++++		
	+++++	+++++	+++++	+++++			1.17218	7.434
14 Freon 21	+++++	+++++	3.14056	2.97136	2.85387	+++++		
	+++++	+++++	2.93076	2.80170			2.93965	4.430
15 1-Pentene	+++++	+++++	1.96805	1.63048	1.85618	+++++		
	+++++	+++++	+++++	+++++			1.81824	9.457

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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	4.000 Level 16				
16 Pentane	+++++	+++++	5.45911	4.43675	4.97441	+++++		
	+++++	+++++	+++++	+++++			4.95676	10.317
17 Chloroethane	+++++	+++++	0.83275	0.79576	0.99609	0.89999		
	0.81083	0.82262	+++++	+++++			0.85967	8.829
18 Isopentane	+++++	+++++	1.93206	1.75645	2.13895	1.95650		
	1.77566	1.81239	+++++	+++++			1.89534	7.643
19 Diethyl Ether	+++++	+++++	0.70388	0.61943	0.67493	+++++		
	+++++	+++++	+++++	+++++			0.66608	6.443
20 Trichlorofluoromethane/Fr11	4.34032	5.06248	4.13386	3.90608	4.66731	4.16896		
	3.82591	3.88453	+++++	+++++			4.24868	10.120
21 Acrolein	+++++	+++++	0.52418	0.47644	0.64965	+++++		
	+++++	+++++	+++++	+++++			0.55009	16.264
22 Iodomethane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++			+++++	+++++
23 Methyl Acetate	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++			+++++	+++++
24 Ethanol	+++++	+++++	0.54280	0.95193	1.12106	0.99629		
	0.93128	0.93796	+++++	+++++			0.91355	21.324
25 2-Methylpentane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++			+++++	+++++

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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	4.000 Level 16				
26 Acetonitrile	+++++	+++++	1.78995	1.94020	3.03401	+++++		
	+++++	+++++	+++++	+++++			2.25472	30.117 <-
27 Cyclopentane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++			+++++	+++++
28 Freon 113	3.05266	3.31255	3.14344	2.88907	3.31917	3.01022		
	2.76441	2.83607	+++++	+++++			3.04095	6.856
29 2,4-Dimethylpentane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++			+++++	+++++
30 1,1-Dichloroethene	+++++	0.99462	0.97758	1.03786	1.16489	1.02558		
	0.96855	0.97862	+++++	+++++			1.02110	6.707
31 Acetone	+++++	+++++	1.31117	1.28772	1.16984	1.09472		
	1.01838	1.04525	+++++	+++++			1.15451	10.719
32 Acrylonitrile	+++++	+++++	1.34376	1.56492	2.02242	+++++		
	+++++	+++++	+++++	+++++			1.64370	21.057
33 Carbon Disulfide	+++++	+++++	4.20891	4.04658	4.73818	4.29612		
	3.99456	4.12998	+++++	+++++			4.23572	6.352
34 2-Propanol	+++++	+++++	4.44840	4.53817	4.96245	4.59854		
	4.39228	4.47723	+++++	+++++			4.56951	4.494
35 3-Chloroprene	+++++	0.70657	0.61881	0.51657	0.71644	0.67031		
	0.63822	0.65180	+++++	+++++			0.64553	10.354

Eurofins Air Toxics Inc.

INITIAL CALIBRATION DATA

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Integrator : HP RTE
Method file : /chem/msdv.i/09Feb2015.b/v15l0123c.m
Cal Date : 09-Feb-2015 16:23 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	4.000 Level 16				
36 Chloroprene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++			+++++	+++++
37 Methylene Chloride	+++++	1.62816	1.42059	1.31835	1.53476	1.43119		
	1.31873	1.32777	+++++	+++++			1.42565	8.373
38 tert-butyl alcohol	+++++	+++++	6.27237	5.92401	5.05657	4.68459		
	4.35732	4.49661	+++++	+++++			5.13191	15.436
39 MTBE	+++++	4.84625	4.27039	4.17425	5.02507	4.53050		
	4.17566	4.18245	+++++	+++++			4.45779	7.925
40 trans-1,2-Dichloroethene	+++++	0.97418	1.06530	1.00890	1.19446	1.09980		
	0.99743	1.01746	+++++	+++++			1.05108	7.249
41 1-Hexene	+++++	+++++	1.89158	1.60583	1.74521	+++++		
	+++++	+++++	+++++	+++++			1.74754	8.177
42 Ethyl Acetate	+++++	+++++	0.34525	0.35479	0.41652	+++++		
	+++++	+++++	+++++	+++++			0.37219	10.395
43 Hexane	+++++	4.39314	4.05525	3.79631	4.56638	4.06382		
	3.65651	3.69096	+++++	+++++			4.03177	8.654
44 Methyl Acrylate	+++++	+++++	3.86021	4.24192	5.66561	+++++		
	+++++	+++++	+++++	+++++			4.58924	20.733
45 Isopropyl ether	+++++	+++++	9.86439	8.96093	10.81973	9.74702		
	8.80502	8.79628	+++++	+++++			9.49890	8.428

Eurofins Air Toxics Inc.

INITIAL CALIBRATION DATA

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Method file : /chem/msdv.i/09Feb2015.b/v15l0123c.m
Cal Date : 09-Feb-2015 16:23 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	4.000 Level 16				
46 1,1-Dichloroethane	+++++	4.18620	3.50892	3.56336	4.14842	3.77995		
	3.47153	3.49538	+++++	+++++			3.73625	8.350
47 Vinyl Acetate	+++++	+++++	0.20600	0.32907	0.45437	0.44083		
	0.40286	0.42563	+++++	+++++			0.37646	25.096
48 2,3-Dimethylpentane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++			+++++	+++++
49 Ethyl-tert-butyl ether	+++++	+++++	7.41881	7.21509	8.35030	7.60156		
	6.95727	7.05020	+++++	+++++			7.43221	6.835
50 cis-1,2-Dichloroethene	+++++	1.43134	1.07597	1.12864	1.27821	1.17488		
	1.06158	1.09492	+++++	+++++			1.17793	11.365
51 2-Butanone	+++++	+++++	0.69578	0.82336	0.86602	0.78897		
	0.75565	0.76613	+++++	+++++			0.78265	7.493
52 Thiophene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++			+++++	+++++
53 Tetrahydrofuran	+++++	+++++	3.70325	3.60164	3.64864	3.32919		
	3.08349	3.12723	+++++	+++++			3.41557	7.992
55 Chloroform	+++++	3.60788	3.52552	3.36383	3.85471	3.50942		
	3.23411	3.28743	+++++	+++++			3.48327	6.098
56 1,1-Dicholoropropene	+++++	+++++	0.85150	0.91189	0.92110	+++++		
	+++++	+++++	0.87506	0.87289			0.88649	3.281

Eurofins Air Toxics Inc.

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Method file : /chem/msdv.i/09Feb2015.b/v15l0123c.m
Cal Date : 09-Feb-2015 16:23 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	4.000 Level 16				
57 Cyclohexane	+++++	2.92984	2.23906	2.17702	2.56907	2.35722		
	2.11920	2.17880	+++++	+++++			2.36717	12.280
58 1,1,1-Trichloroethane	4.64979	4.26610	3.65119	3.59023	4.13868	3.80791		
	3.46208	3.48174	+++++	+++++			3.88096	11.033
59 Carbon Tetrachloride	3.20801	3.68637	3.39549	3.31417	4.12179	3.74650		
	3.41698	3.45060	+++++	+++++			3.54249	8.318
60 Ethyl Acrylate	+++++	+++++	0.19945	0.22287	0.25786	+++++		
	+++++	+++++	+++++	+++++			0.22672	12.966
61 2-Chloroethyl Vinyl Ether	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++			+++++	+++++
62 2-Pentanone	+++++	+++++	7.36760	7.16178	8.60052	+++++		
	+++++	+++++	+++++	+++++			7.70997	10.092
63 2,2,4-Trimethylpentane	+++++	5.26032	4.03563	4.00276	4.68454	4.22568		
	3.88430	3.81881	+++++	+++++			4.27315	12.209
64 Benzene	+++++	1.60986	1.13970	1.12874	1.31989	1.20092		
	1.15492	1.13498	+++++	+++++			1.24129	14.161
66 tert-amyl methyl ether	+++++	+++++	0.30466	0.31954	0.35455	0.32347		
	0.30642	0.30513	+++++	+++++			0.31896	6.014
67 Methyl Methacrylate	+++++	+++++	3.54751	3.52869	3.91300	+++++		
	+++++	+++++	+++++	+++++			3.66306	5.914

Eurofins Air Toxics Inc.

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Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msdv.i/09Feb2015.b/v15l0123c.m
Cal Date : 09-Feb-2015 16:23 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	4.000 Level 16				
68 1,2-Dichloroethane	+++++	0.83967	0.72046	0.70755	0.80179	0.72592		
	0.68845	0.68793	+++++	+++++			0.73882	7.959
69 Heptane	+++++	0.66252	0.52586	0.53519	0.65399	0.60391		
	0.57655	0.55588	+++++	+++++			0.58770	9.313
70 Dibromomethane	+++++	+++++	0.82376	0.73993	0.74251	+++++		
	+++++	+++++	+++++	+++++			0.76873	6.201
72 Trichloroethene	0.53146	0.68906	0.62040	0.62892	0.70999	0.64540		
	0.62277	0.62005	+++++	+++++			0.63351	8.433
73 Methylcyclohexane	+++++	+++++	0.78111	0.74299	0.85816	0.78031		
	0.75789	0.74659	+++++	+++++			0.77784	5.471
74 1,2-Dichloropropane	+++++	0.63876	0.59213	0.55690	0.68126	0.61147		
	0.59269	0.59115	+++++	+++++			0.60919	6.599
75 1,4-Dioxane	+++++	0.47404	0.34976	0.39549	0.35097	0.30795		
	0.30274	0.30228	+++++	+++++			0.35475	17.671
76 Octane	+++++	+++++	0.49351	0.41494	0.41336	+++++		
	+++++	+++++	+++++	+++++			0.44060	10.401
77 Bromodichloromethane	0.82148	0.98183	0.89726	0.89772	1.01422	0.93281		
	0.90067	0.90226	+++++	+++++			0.91853	6.409
78 cis-1,3-Dichloropropene	+++++	0.79632	0.68925	0.70399	0.84281	0.78015		
	0.75098	0.76409	+++++	+++++			0.76108	6.956

Eurofins Air Toxics Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 23-JAN-2015 16:43
End Cal Date : 09-FEB-2015 14:14
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msdv.i/09Feb2015.b/v15l0123c.m
Cal Date : 09-Feb-2015 16:23 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	4.000 Level 16				
79 4-Methyl-2-pentanone	+++++	1.83927	1.79759	1.81327	1.78651	1.65849		
	1.64774	1.61501	+++++	+++++			1.73684	5.330
81 Toluene	+++++	1.58815	1.34907	1.34899	1.55016	1.41117		
	1.35647	1.29685	+++++	+++++			1.41441	7.870
82 trans-1,3-Dichloropropene	+++++	0.92606	0.76231	0.83549	0.93579	0.83992		
	0.81778	0.84624	+++++	+++++			0.85194	7.135
83 1,3-Dichloropropane	+++++	+++++	0.64680	0.67046	0.64482	+++++		
	+++++	+++++	0.63888	0.63169			0.64653	2.261
84 1,1,2-Trichloroethane	0.56916	0.76189	0.67219	0.63473	0.77626	0.68689		
	0.65988	0.68338	+++++	+++++			0.68055	9.751
85 Nonane	+++++	+++++	1.66029	1.40640	1.00796	+++++		
	+++++	+++++	+++++	+++++			1.35821	24.210
86 Tetrachloroethene	1.18728	1.08540	1.00896	0.93774	1.11913	0.97613		
	0.93539	0.94557	+++++	+++++			1.02445	9.293
87 2-Hexanone	+++++	+++++	0.82662	0.99945	0.89353	0.84115		
	0.86828	0.89486	+++++	+++++			0.88732	6.919
88 alpha-pinene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++			+++++	+++++
89 Dibromochloromethane	1.14800	1.38011	1.30231	1.24371	1.47841	1.35284		
	1.31732	1.36226	+++++	+++++			1.32312	7.406

Eurofins Air Toxics Inc.

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End Cal Date : 09-FEB-2015 14:14
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Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msdv.i/09Feb2015.b/v15l0123c.m
Cal Date : 09-Feb-2015 16:23 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	4.000 Level 16				
90 1,2-Dibromoethane	0.93522	1.19393	1.11808	1.13233	1.28861	1.14916		
	1.11927	1.15611	#####	#####			1.13659	8.681
91 1,1,1,2-Tetrachloroethane	#####	#####	0.96917	0.93657	0.84506	#####		
	#####	#####	0.87380	0.86428			0.89778	5.862
93 Chlorobenzene	#####	1.77612	1.50943	1.54786	1.69238	1.50634		
	1.45031	1.45315	#####	#####			1.56223	7.979
94 cis-1,4-dichloro-2-butene	#####	#####	#####	#####	#####	#####		
	#####	#####	#####	#####			#####	#####
95 Ethyl Benzene	#####	0.83751	0.76299	0.68517	0.79588	0.70560		
	0.68861	0.69193	#####	#####			0.73824	8.254
96 m,p-Xylene	#####	0.86231	0.73282	0.71670	0.78231	0.72015		
	0.71912	0.68600	#####	#####			0.74563	7.909
97 Bromobenzene	#####	#####	0.78884	0.72444	0.66782	#####		
	#####	#####	0.69852	0.69715			0.71535	6.390
98 trans-1,4-dichloro-2-butene	#####	#####	#####	#####	#####	#####		
	#####	#####	#####	#####			#####	#####
99 Decane	#####	#####	2.23541	2.01093	1.61944	#####		
	#####	#####	#####	#####			1.95526	15.943
100 o-Xylene	#####	0.76050	0.65344	0.62985	0.75468	0.67956		
	0.67395	0.64624	#####	#####			0.68546	7.591

Eurofins Air Toxics Inc.

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Method file : /chem/msdv.i/09Feb2015.b/v15l0123c.m
Cal Date : 09-Feb-2015 16:23 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	4.000 Level 16				
101 Styrene	+++++	1.12137	0.91031	0.91243	1.11467	1.02277		
	1.05805	1.01557	+++++	+++++			1.02217	8.405
102 Bromoform	1.11503	1.15423	1.09497	1.09420	1.34985	1.20735		
	1.19613	1.25792	+++++	+++++			1.18371	7.509
103 Cumene	+++++	2.09005	1.80658	1.80283	2.09485	1.89392		
	1.95890	1.91888	+++++	+++++			1.93800	6.178
104 Bis(2-Chloroethyl) Ether	+++++	+++++	0.75887	0.76637	0.74349	+++++		
	+++++	+++++	+++++	+++++			0.75624	1.543
105 1,2,3-Trichloropropane	+++++	+++++	0.43683	0.36355	0.35954	+++++		
	+++++	+++++	0.37697	0.36591			0.38056	8.438
107 2-Chlorotoluene	+++++	+++++	0.46243	0.40536	0.40386	+++++		
	+++++	+++++	0.43909	0.41208			0.42456	6.002
108 1,1,2,2-Tetrachloroethane	1.59448	1.63828	1.38665	1.28941	1.37781	1.21195		
	1.18904	1.21442	+++++	+++++			1.36276	12.731
109 4-Chlorotoluene	+++++	+++++	0.38571	0.34165	0.32573	+++++		
	+++++	+++++	0.35052	0.32748			0.34622	7.030
110 Undecane	+++++	+++++	2.52751	2.41280	2.20371	+++++		
	+++++	+++++	+++++	+++++			2.38134	6.894
111 Propylbenzene	+++++	2.41502	1.65965	1.59322	1.83696	1.69647		
	1.73932	1.69591	+++++	+++++			1.80522	15.456

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Integrator : HP RTE
Method file : /chem/msdv.i/09Feb2015.b/v15l0123c.m
Cal Date : 09-Feb-2015 16:23 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	4.000 Level 16				
112 Indan	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++			+++++	+++++
113 4-Ethyltoluene	+++++	1.71662	1.31907	1.25878	1.39664	1.28503		
	1.32622	1.27723	+++++	+++++			1.36851	11.689
114 1,3,5-Trimethylbenzene	1.92683	1.89227	1.49982	1.24129	1.41808	1.23236		
	1.19260	0.98245	+++++	+++++			1.42321	23.702
115 tert-Butylbenzene	+++++	+++++	1.09606	0.91731	0.89350	+++++		
	+++++	+++++	1.01603	0.88620			0.96182	9.490
116 p-Cymene	+++++	+++++	1.80892	1.30456	1.00403	+++++		
	+++++	+++++	1.25200	1.01605			1.27711	25.581
117 Indene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++			+++++	+++++
118 Hexachloroethane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++			+++++	+++++
119 sec-Butylbenzene	+++++	+++++	1.60764	1.18542	1.12696	+++++		
	+++++	+++++	1.23768	1.11054			1.25365	16.286
120 1,2,4-Trimethylbenzene	1.71629	1.75570	1.34023	1.16423	1.26955	1.04702		
	0.97659	0.79714	+++++	+++++			1.25834	27.025
121 1,2,3-trimethylbenzene	+++++	+++++	0.74295	0.61143	0.46590	+++++		
	+++++	+++++	0.55392	0.47644			0.57013	19.898

Eurofins Air Toxics Inc.

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Integrator : HP RTE
Method file : /chem/msdv.i/09Feb2015.b/v15l0123c.m
Cal Date : 09-Feb-2015 16:23 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	4.000 Level 16				
122 1,3-Dichlorobenzene	1.36399	0.82514	0.85338	0.86867	0.98859	0.91032		
	0.91967	0.87962	+++++	+++++			0.95117	18.290
123 Butylbenzene	+++++	+++++	0.60164	0.51295	0.31674	+++++		
	+++++	+++++	0.43053	0.33373			0.43912	27.427
124 1,4-Dichlorobenzene	1.43537	1.51250	0.91704	0.86333	0.88467	0.80571		
	0.84202	0.80188	+++++	+++++			1.00781	28.868
125 Dodecane	+++++	+++++	0.33794	0.33050	0.31638	+++++		
	+++++	+++++	+++++	+++++			0.32827	3.335
126 1,3,5-Trichlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++			+++++	+++++
127 alpha-chlorotoluene	+++++	+++++	0.99226	1.01947	1.27544	1.20767		
	1.26918	1.24914	+++++	+++++			1.16886	11.015
128 1,2-Dichlorobenzene	1.42545	1.13177	0.84889	0.87602	0.89006	0.82463		
	0.85779	0.80954	+++++	+++++			0.95802	22.381
129 1,2-dibromo-3-chloropropane	+++++	+++++	0.61698	0.56970	0.56845	+++++		
	+++++	+++++	0.59331	0.57660			0.58501	3.494
130 1,2,3-trichlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++			+++++	+++++
131 1,2,4-Trichlorobenzene	1.44218	0.98188	1.01547	0.97959	0.71144	0.64738		
	0.65037	0.51332	+++++	+++++			0.86770	34.387 <-

Eurofins Air Toxics Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 23-JAN-2015 16:43
End Cal Date : 09-FEB-2015 14:14
Quant Method : ISTD
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Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msdv.i/09Feb2015.b/v15l0123c.m
Cal Date : 09-Feb-2015 16:23 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	4.000 Level 16				
132 Hexachlorobutadiene	+++++	0.98848	0.66248	0.64604	0.49872	0.47866		
	0.54172	0.57472	+++++	+++++			0.62726	27.671
133 Naphthalene	+++++	+++++	+++++	1.88665	1.24650	1.15649		
	1.21161	1.00160	+++++	+++++			1.30057	26.201
204 Butyl Acetate	+++++	+++++	0.27119	0.27793	0.31297	+++++		
	+++++	+++++	0.29559	0.29298			0.29013	5.629
205 2-Heptanone	+++++	+++++	0.93908	0.81449	0.79716	+++++		
	+++++	+++++	0.81766	0.79115			0.83191	7.327
206 1-Butanol	+++++	+++++	0.31117	0.35929	0.72828	+++++		
	+++++	+++++	0.61915	0.70946			0.54547	36.123 <-
207 1-Methoxy-2-Propyl Acetate	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++			+++++	+++++
209 Cyclohexanone	+++++	+++++	0.73749	0.75470	0.76379	+++++		
	+++++	+++++	0.70270	0.76253			0.74424	3.424
210 1-Propanol	+++++	+++++	0.19809	0.26731	0.41746	+++++		
	+++++	+++++	0.32446	0.36604			0.31467	27.121
211 Cyclopentene	+++++	+++++	2.79855	2.56383	2.54224	+++++		
	+++++	+++++	2.54054	2.56226			2.60148	4.255
212 Pentachloroethane	+++++	+++++	0.60888	0.60306	0.56464	+++++		
	+++++	+++++	0.57664	0.57972			0.58659	3.185

Eurofins Air Toxics Inc.

INITIAL CALIBRATION DATA

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Integrator : HP RTE
Method file : /chem/msdv.i/09Feb2015.b/v15l0123c.m
Cal Date : 09-Feb-2015 16:23 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	4.000 Level 16				
213 Diisobutyl Ketone	+++++	+++++	2.14641	1.76812	1.08361	+++++		
	+++++	+++++	1.46845	1.18327			1.52997	28.489
214 Isobutanol	+++++	+++++	1.23818	1.34704	2.44603	+++++		
	+++++	+++++	1.49419	1.55670			1.61643	29.708
215 2,2-Dichloropropane	+++++	+++++	2.64968	2.71194	2.55664	+++++		
	+++++	+++++	2.58640	2.54422			2.60977	2.689
216 1,2-Dichlorotrifluoroethane	+++++	+++++	2.23514	2.14792	2.05459	+++++		
	+++++	+++++	2.14640	2.05872			2.12855	3.516
217 Freon 123	+++++	+++++	3.15559	3.25656	3.14820	+++++		
	+++++	+++++	3.25131	3.17752			3.19783	1.638
218 Freon 142b	+++++	+++++	2.65593	2.55956	2.42757	+++++		
	+++++	+++++	2.53981	2.46097			2.52877	3.541
$ 65 1,2-Dichloroethane-d4	1.51319	1.49873	1.55444	1.51671	1.53452	1.59522		
	1.56539	1.75989	+++++	+++++			1.56726	5.355
$ 80 Toluene-d8	0.93690	0.93590	0.93698	0.91928	0.95236	0.93554		
	0.93919	0.93339	+++++	+++++			0.93619	0.961
$ 106 Bromofluorobenzene	0.45313	0.43176	0.46169	0.46138	0.48032	0.47372		
	0.48997	0.49624	+++++	+++++			0.46853	4.478

Calibration History

Method : /chem/msdv.i/09Feb2015.b/v15l0123c.m
Start Cal Date: 23-JAN-2015 16:43
End Cal Date : 09-FEB-2015 14:14

Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 5 , Cal Amount: 0.05000		
23-JAN-2015 16:43	SpRL	/chem/msdv.i/23Jan2015.b/v012306a.d
23-JAN-2015 16:43	Level05	/chem/msdv.i/23Jan2015.b/v012306.d

Injection Date	Sublist	Calibration File
Cal Level: 6 , Cal Amount: 0.10000		
23-JAN-2015 17:30	Level#1	/chem/msdv.i/23Jan2015.b/v012307.d

Injection Date	Sublist	Calibration File
Cal Level: 7 , Cal Amount: 0.50000		
09-FEB-2015 12:34	AcroleinCRV	/chem/msdv.i/09Feb2015.b/v020910.d
09-FEB-2015 10:25	CombSp-AT1	/chem/msdv.i/09Feb2015.b/v020907.d
27-JAN-2015 11:30	AT1crv	/chem/msdv.i/27Jan2015.b/v012705.d
23-JAN-2015 18:15	HiLoFULLcrv	/chem/msdv.i/23Jan2015.b/v012308.d

Injection Date	Sublist	Calibration File
Cal Level: 8 , Cal Amount: 1.00000		
09-FEB-2015 13:13	AcroleinCRV	/chem/msdv.i/09Feb2015.b/v020911.d
09-FEB-2015 11:07	CombSp-AT1	/chem/msdv.i/09Feb2015.b/v020908.d
27-JAN-2015 12:09	AT1crv	/chem/msdv.i/27Jan2015.b/v012706.d
23-JAN-2015 19:01	HiLoFULLcrv	/chem/msdv.i/23Jan2015.b/v012309.d

Injection Date	Sublist	Calibration File
Cal Level: 9 , Cal Amount: 5.00000		
09-FEB-2015 14:14	AcroleinCRV	/chem/msdv.i/09Feb2015.b/v020912.d
09-FEB-2015 11:50	CombSp-AT1	/chem/msdv.i/09Feb2015.b/v020909.d
27-JAN-2015 14:21	AT1crv	/chem/msdv.i/27Jan2015.b/v012709.d
23-JAN-2015 19:41	HiLoFULLcrv	/chem/msdv.i/23Jan2015.b/v012310.d

Injection Date	Sublist	Calibration File
Cal Level: 10, Cal Amount: 10.00000		
23-JAN-2015 20:25	HiLoFULLcrv	/chem/msdv.i/23Jan2015.b/v012311.d

Cal Level: 11, Cal Amount: 20.00000		
23-JAN-2015 21:15	AT12	/chem/msdv.i/23Jan2015.b/v012312.d

Cal Level: 12, Cal Amount: 40.00000		
23-JAN-2015 22:26	HiLoFULLcrv	/chem/msdv.i/23Jan2015.b/v012313.d

Cal Level: 13, Cal Amount: 2.00000		
27-JAN-2015 12:52	AT1crv	/chem/msdv.i/27Jan2015.b/v012707.d

Cal Level: 16, Cal Amount: 4.00000		
27-JAN-2015 13:35	AT1crv	/chem/msdv.i/27Jan2015.b/v012708.d

Continuing Calibration
Ccal Level Mode: GLOBAL LEVEL 9

Ccal Level: 9 , Ccal Amount: 5.000		
09-FEB-2015 08:19	AT12	/chem/msdv.i/09Feb2015.b/v020904.d

Ccal Level: 8 , Ccal Amount: 1.000		
09-FEB-2015 13:13	AcroleinCCV	/chem/msdv.i/09Feb2015.b/v020911a.d

Ccal Level: 9 , Ccal Amount: 5.000		
09-FEB-2015 11:50	CombSp-AT1	/chem/msdv.i/09Feb2015.b/v020909.d

Ccal Level: 8 , Ccal Amount: 1.000		
09-FEB-2015 11:07	CombSpCCV	/chem/msdv.i/09Feb2015.b/v020908a.d

Ccal Level: 9 , Ccal Amount: 5.000		
09-FEB-2015 14:14	AcroleinCRV	/chem/msdv.i/09Feb2015.b/v020912.d

Ccal Level: 9 , Ccal Amount: 5.000		
09-FEB-2015 07:38	AT12	/chem/msdv.i/09Feb2015.b/v020903.d

Curve Name: V15L0123C

Initial Calibration Narrative

An initial calibration curve was analyzed on 1/23/15 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: Zero (0) out. Zero (0) out in AFCEE 4.0, DOD control limits, and in-house control limits.
File # V012403. Standard 2687-186; 10ppbv (50ppbv); 50mL load.

Important Note: Alpha-Chlorotoluene was included in the 0.5ppbv MDL due to poor peak quality in the 0.1 MDL and the most recent ICAL (V15L0123C). As a result, MSD-V has a raised reporting limit for alpha-Chlorotoluene (0.1ppbv -> 0.5ppbv).

The MDL for 1,2,4-Trichlorobenzene is greater than the special reporting limit associated with PID # 16769. Do not run samples from this project on MSD-V.

Naphthalene was calibrated at 0.1ppbv, 0.5ppbv, 1.0ppbv, 2.0ppbv, and 4.0ppbv.
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
Freon 114
1,3,5-Trimethylbenzene
1,2,4-Trimethylbenzene

A five (5) point initial calibration for the AT-1 special was run on 1/27/15 at levels 0.5ppbv, 1.0ppbv, 2.0ppbv, 4.0ppbv, and 5.0ppbv. Zero (0) out. The 0.5ppbv and 1.0ppbv points for Freon 22 were dropped due to the absence of the tertiary ion.
An ICV for the AT-1 special (minus Freons) was run on 1/27/15. Two (2) out: Butyl Acetate @ 156%, 1-Butanol @ 55%. File # V012721. Standard 2716-8; 1.0ppbv (5.0ppbv); 50mL load.

The 0.05ppbv ICAL point was requantified on 1/27/15 and now includes 1,2,4-Trimethylbenzene and 1,3,5-Trimethylbenzene.

A three (3) point initial calibration for the Combination Special (minus the AT-1 specials) was analyzed on 2/9/15 at levels 0.5ppbv, 1.0ppbv, and 5.0ppbv. Zero (0) out.

A three (3) point initial calibration for Acrolein was analyzed on 2/9/15 at levels 0.5ppbv, 1.0ppbv, and 5.0ppbv. The low point of the initial calibration for Acrolein was not integrated by the Target software therefore was manually integrated. A visual inspection must be performed to evaluate the presence/absence of Acrolein in all samples for which it is a target compound.

MDL was run 3/2/15-3/3/15. No MDL for Napthalene.

Eurofins Air Toxics Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 23-JAN-2015 16:43
End Cal Date : 09-FEB-2015 14:14
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msdv.i/09Feb2015.b/v1510123c.m
Cal Date : 09-Feb-2015 16:23 efinn
Curve Type : Average

Calibration File Names:
Level 5: /chem/msdv.i/23Jan2015.b/v012306a.d
Level 6: /chem/msdv.i/23Jan2015.b/v012307.d
Level 7: /chem/msdv.i/09Feb2015.b/v020910.d
Level 8: /chem/msdv.i/09Feb2015.b/v020911.d
Level 9: /chem/msdv.i/09Feb2015.b/v020912.d
Level 10: /chem/msdv.i/23Jan2015.b/v012311.d
Level 11: /chem/msdv.i/23Jan2015.b/v012312.d
Level 12: /chem/msdv.i/23Jan2015.b/v012313.d
Level 13: /chem/msdv.i/27Jan2015.b/v012707.d
Level 16: /chem/msdv.i/27Jan2015.b/v012708.d

EB 2/9/15
2/9/15

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	4.000 Level 16				
1 Freon 134a	+++++	+++++	1.05579	0.96197	0.95348	+++++		
	+++++	+++++	1.00837	0.94819			0.98556	4.659
208 D-Limonene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++			+++++	+++++
2 Freon 152A	+++++	+++++	0.75156	0.63786	0.62506	+++++		
	+++++	+++++	0.67172	0.62622			0.66248	8.038
3 Propylene	+++++	+++++	2.14669	2.11709	2.22802	2.03575		
	1.85663	1.90263	+++++	+++++			2.04780	7.071
4 Dichlorodifluoromethane/Fr12	+++++	4.69575	3.89645	3.70258	4.36500	3.96886		
	3.61243	3.66094	+++++	+++++			3.98600	10.146
5 Freon 22	+++++	+++++	+++++	+++++	2.66601	+++++		
	+++++	+++++	2.82724	2.76524			2.75283	2.954

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

BFB Verification of 176/174 m/z Ratio:	(512782/529833)x100 = 96.78
Tekmar Purge Flow:	—
Vacuum:	1/23/15

IS/S Std. #:	2687-266	Exp. Date:	4/9/15
BCM	LL: 253263	53M:	276969
1,4-DFB	1019789		1066528
CB-d5	833220		863413

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

File ID:	V012811
Compound:	Toluene-d8
Initials:	EF

Calculation Check:

ppbv of compound = $\frac{\text{Area}_{\text{Sample}}}{\text{Area}_{\text{IS}}} \times \frac{\text{Conc}_{\text{IS}}}{\text{RRF}}$ = (954,158) x (5.000) / (1019789) (0.93619) = 4.996

SOP# (Circle one): 6 / 83 / 38 / 91 / 109 Method (Circle one): TO-14A/TO-15/TO-17 Reported Result: 4.996

Method Name: V15L0123A / V15S0123A

	Use	File	Lab ID#	Can#	Pressure	Amt. Loaded	DF	Loaded By Initials	Date Analyzed	Time Analyzed	Reviewed By Initials	Comments/Standard Expiration Date
1	✓	V012801	BFB Tune check	2297-710	50 psig	2 mL	1.00	EF	1/23/15	1324	EF	
2	✓	02	ICAL level 1	2716-9	0.003 ppbv	15 mL	1.00	EF		1346	EF	Exp. 4/6/15
3	✓	03	2		0.005 ppbv	25 mL	1.00	EF		1424	GH	
4	✓	04	3		0.01 ppbv	50 mL	1.00	EF		1506	GH	
5	✓	05	4		0.02 ppbv	100 mL	1.00	EF		1549	GH	
6	✓	06	5		0.05 ppbv	250 mL	1.00	GH		1643	GH	
7	✓	07	6	2716-10	0.1 ppbv	25 mL	1.00	GH		1730	GH	
8	✓	08	7		0.5 ppbv	125 mL	1.00	GH		1815	GH	
9	✓	09	8		1.0 ppbv	75 mL	1.00	GH		1901	GH	
10	✓	10	9	2687-744	5.0 ppbv	25 mL	1.00	GH		1941	GH	
11	✓	11	10		10.0 ppbv	50 mL	1.00	GH		2025	GH	
12	✓	12	11		20.0 ppbv	100 mL	1.00	GH		2115	GH	
13	✓	13	12		40 ppbv	200 mL	1.00	GH		2226	GH	
14	X	14	System blank	34043	humid	250 mL	1.00	GH		2325	GH	

Reviewed _____ Date 1/23/15

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

BFB Verification of 176/174 m/z Ratio:	544,874 / 566,058 x 100 = 96.26
Tekmar Purge Flow:	
Vacuum:	1/24/15

IS/S Std. #:	2687-266	Exp. Date:	4/1/15
BCM	286,629 (LL)		306,972 (SIM)
1,4-DFB	1,105,428		1,178,141
CB-d5	881,154		908,552

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

File ID:	V012402
Compound:	Tol-d8
Initials:	

Calculation Check:

ppbv of compound = $\frac{\text{Area}_{\text{Sample}}}{\text{Area}_{\text{IS}}} \times \frac{\text{Conc}_{\text{IS}}}{\text{RRF}}$ = $\frac{(1033629)}{(1105428)} \times \frac{(5.00)}{(0.9361)}$ = 4.994

SOP# (Circle one): 6 / 83 / 38 / 91 / 109 Method (Circle one) TO-14A/TO-15/TO-17 Reported Result: 4.994

Method Name: V15L0123A / V15S0123A

	Use	File	Lab ID#	Can#	Pressure	Amt. Loaded	DF	Loaded By Initials	Date Analyzed	Time Analyzed	Reviewed By Initials	Comments/Standard Expiration Date
1	✓	V012401	BFB TUNE CHECK	2299-790	50ng	2.0ml	1.00		1/24/15	0701		
2	✓	02	CCV (50ppbv)	2687-244	5.0ppbv	25ml	1.00			0725		Exp: 4/6/15 LL OUT SIM
3	✓	03	ICV/LCS (50ppbv)	2687-1816	10ppbv	50ml	1.60			0804		Exp: 3/19/15 LL & OUT SIM & OUT
4	✓	04	LCSD (50ppbv)	↓	10ppbv	50ml	1.60			0840		↓ LL OUT SIM OUT
5	X	05	LAB BLANK	34634	[illegible]	25ml	1.00			0933		
6	✓	06	↓	↓	5.3" Hg ↓	↓	↓			1026		
7	✓	07	15012167-01AB	34746	5.3" Hg - 5.1psi	25ml	1.64			1121		5.3" Hg - 5psi
8	✓	08	-02AB	33537	4.7" Hg - 5.1psi	25ml	1.60			1227		
9	✓	09	-03AB	33898	4.5" Hg - 5psi	25ml	1.58			1306		
10	✓	10	-04AB	36038	3.9" Hg - 5.1psi	25ml	1.55			1345		
11	✓	11	-05AB	1700	5.5" Hg - 4.9psi	250ml	1.63			1427		05AB
12	✓	12	-06AB	34754	4.1" Hg - 4.9psi	250ML	1.58			1508		
13	✓	13	-07AB	33585	4.1" Hg - 5.1psi	250ML	1.56			1602		
14	✓	14	-08AB	9948	4.5" Hg - 5.2psi	250ML	1.59			1641		

Reviewed 1/24/15 Date

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

BFB Verification of 176/174 m/z Ratio: (775510/808917) X100 = 95.87%	
Tekmar Purge Flow:	
Vacuum:	1/27/15 ACT

IS/S Std. #: 2687-2660		Exp. Date: 4/9/15
BCM LL	2659760	SIm. 274508
1,4-DFB	10006128	10506538
CB-d5	792159	832728

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

File ID:	V012702
Compound:	Tol-d8
Initials:	ACT

Calculation Check:

ppbv of compound = $\frac{\text{Area}_{\text{sample}}}{\text{Area}_{\text{IS}}} \times \frac{\text{Conc}_{\text{IS}}}{\text{RRF}}$ = (937324) x (5000) = 4.976
(10006128) (0.93619)

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

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

Reported Result: 4.976

Method Name: V15L01234/V15S01234

	Use	File	Lab ID#	Can#	Pressure	Amt. Loaded	DF	Loaded By Initials	Date Analyzed	Time Analyzed	Reviewed By Initials	Comments/Standard Expiration Date
1	✓	V012701	BFB Tune Check	2699-770	50ng	2.0mL	1.00	ACT	1/27/15	0611	ACT	
2	✓	02	CCV (50ppbv)	2687-244	5.0ppbv	25mL		ACT		0633	ACT	Exp 4/6/15 LL: 1 out SIm: Ø out
3	✓	03	LCS	2687-186				ACT		0719	ACT	Exp 3/19/15 Ø out
4	/	04	LCSD					ACT		0801	EF	
5	/	05	ICAL LEVEL 7	2716-22	0.5 ppbv	25mL	1.00	EF		1180	EF	Exp. 4/7/15 AT.1
6	/	06	8		1.0 ppbv	50mL	1.00	EF		1209	EF	
7	/	07	13		2.0 ppbv	100mL	1.00	EF		1252	EF	
8	/	08	16		4.0 ppbv	200mL	1.00	EF		1335	EF	
9	/	09	9		5.0 ppbv	250mL	1.00	EF		1421	EF	
10		10	LAB Blank	34034	Humid	250mL	1.00	EF				
11												
12												
13												
14												EF 1/27/15

Reviewed

1/27/15
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	✓	V012715	1501251AB-01A	25247	6.0"Hg-5.0psi	250mL	1.68	MB	1/27/15	1947	MB	
16	✓	16	-02A	33382	5.5"Hg-5.0psi	250mL	1.64	MB		2022	MB	
17	✓	17	-03A	34235	5.0"Hg-5.0psi	250mL	1.61	MB		2057	MB	
18	✓	18	1501282AB-01A	4203	4.5"Hg-5.0psi	250mL	1.58	MB		2148	MB	
19	✓	19	-02A	34335	5.0"Hg-5.0psi	250mL	1.61	MB		2223	AT	
20	✓	20	-03A	5705	4.0"Hg-5.0psi	250mL	1.55	MB		2301	AT	
21	✓	21	1/28/15 AT ~~LCS~~ ICVsp	27Kg-8	1.0 ppbv	50mL	1.00	AT	1/28/15	0610	AT	Exp 4/28/15 AT-1 Cout
22												
23												
24												1/28/15
25												AT
26												
27												
28												
29												
30												
31												
32												
33												
34												
35												
36												

Reviewed

1/28/15
Date

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

BFB Verification of 176/174 m/z Ratio: (575295/602048) x 100 = 95.56%	
Tekmar Purge Flow:	
Vacuum:	2/9/15 ACT

IS/S Std. #:	2687-266	Exp. Date:	4/9/15
BCM L.L.	207288	SIM:	218480
1,4-DFB	801146		889367
CB-d5	584724		632341

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

File ID:	V020904
Compound:	Tol-d8
Initials:	ES

Calculation Check:

ppbv of compound = $\frac{\text{Area}_{\text{Sample}}}{\text{Area}_{\text{IS}}} \times \frac{\text{Conc}_{\text{IS}}}{\text{RRF}}$ = (727576) x (5.000) / (801146) (0.93619) = 4.850

SOP# (Circle one): 6 / 83 / 38 / 91 / 109 Method (Circle one) TO-14A/TO-15/TO-17 Reported Result: 4.850

Method Name: V15.01238/V15.01238A C ES 2/9/15

	Use	File	Lab ID#	Can#	Pressure	Amt. Loaded	DF	Loaded By Initials	Date Analyzed	Time Analyzed	Reviewed By Initials	Comments/Standard Expiration Date
1	✓	V020901	BFB Tune Check	2099-790	50ng	20µl	1.00	ACT	2/9/15	0635	ACT	
2	✓	02	~~CCV (50ppb)~~ 2/9/15 ACT System Blk. Humid Clim	Dry	250mL	↓		ACT		0659	ACT	
3	X	03	CCV (50ppbv)	2687-243	50ppbv	25mL	↓	ACT		0738	ES	carbon tet out low ~ 40%
4	✓	04	CCV (50ppbv)	2687-244	5.0ppbv	25mL	1.00	ES		0819	ES	Exp. 3/18/15 Φ out
5	✓	05	LCS (50ppbv)	2687-186	5.0ppbv	25mL	1.00	ES		0901	ES	Exp. 3/19/15 Φ out
6	✓	06	LCSD (50ppbv)	2687-186	5.0ppbv	25mL	1.00	ES		0944	ES	Exp. 3/19/15
7	✓	07	ICAL Level 7	2687-193	0.5ppbv	25mL	1.00	ES		1025	ES	Exp. 2/11/15 consb
8	✓	08	↓ 8	↓	1.0ppbv	50mL	1.00	ES		1107	ES	CCV ↓
9	✓	09	↓ 9		5.0ppbv	250mL	1.00	ES		1150	ES	8x Per mL.
10	✓	10	ICAL Level 7	2116-68	0.5ppbv	25mL	1.00	ES		1234	ES	Exp 3/2/15 Acetone
11	✓	11	↓ 8	↓	1.0ppbv	50mL	1.00	ES		1313	ES	↓
12	✓	12	↓ 9		5.0ppbv	250mL	1.00	ES		1414	ES	
13		~~13~~	~~LAB Blank~~	3403	~~Humid~~	~~250mL~~	~~1.00~~	~~ES~~		~~1512~~		
14		14	1501346-02A	6100010	7.3psi - 7.3psi	250mL	1.00	ES				ES 2/9/15

Reviewed Date 2/9/15

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/24Jan2015.b/v012403.d
Lab Smp Id: ICV Client Smp ID: ICV
Inj Date : 24-JAN-2015 08:04
Operator : sn Inst ID: msdv.i
Smp Info : 50mL #2687-186
Misc Info : 10ppbv (50ppbv)
Comment : Low Level GC-MS
Method : /chem/msdv.i/24Jan2015.b/v15l0123a.m
Meth Date : 05-Feb-2015 11:54 jscarbro Quant Type: ISTD
Cal Date : 23-JAN-2015 20:25 Cal File: v012311.d
Als bottle: 1 QC Sample: ICV
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		
15.934	15.934 (1.000)	130	255943	5.00000		80.00- 120.00	100.00
15.934	15.934 (1.000)	128	196875			48.09- 108.09	76.92
15.934	15.934 (1.000)	49	546906			196.04- 256.04	213.68
* 71 1,4-Difluorobenzene					CAS #: 540-36-3		
17.305	17.305 (1.000)	114	1024736	5.00000		80.00- 120.00	100.00
17.305	17.305 (1.000)	88	154990			0.00- 45.23	15.12
* 92 Chlorobenzene-d5					CAS #: 3114-55-4		
22.205	22.205 (1.000)	117	822638	5.00000		80.00- 120.00	100.00
22.205	22.205 (1.000)	82	445714			23.86- 83.86	54.18
$ 65 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
16.756	16.756 (1.052)	65	382128	4.76315	4.763	80.00- 120.00	100.00
16.756	16.756 (1.052)	67	212868			25.13- 85.13	55.71
$ 80 Toluene-d8					CAS #: 2037-26-5		
19.857	19.857 (1.147)	98	961123	5.00924	5.009	80.00- 120.00	100.00
19.857	19.857 (1.147)	70	101919			0.00- 40.74	10.60

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

$  80 Toluene-d8 (continued)
 19.857  19.857 (1.147)   100    625573                    36.73-  96.73    65.09
-------------------------------------------------------------------------------
$ 106 Bromofluorobenzene                            CAS #: 460-00-4
 23.704  23.704 (1.067)   174    387141 5.02223    5.022  80.00- 120.00   100.00
 23.678  23.678 (1.066)    95    481073                    95.17- 155.17   124.26
 23.704  23.704 (1.067)   176    363641                    64.74- 124.74    93.93
-------------------------------------------------------------------------------
    3 Propylene                                     CAS #: 115-07-1
  4.674   4.674 (0.293)    41    956561 9.12539    9.125  80.00- 120.00   100.00
  4.674   4.674 (0.293)    42    660892                    37.91-  97.91    69.09
  4.674   4.674 (0.293)    39    681985                    38.58-  98.58    71.30
-------------------------------------------------------------------------------
    4 Dichlorodifluoromethane/Fr12                  CAS #: 75-71-8
  5.202   5.202 (0.326)    85   1956155 9.58722    9.587  80.00- 120.00   100.00
  5.202   5.202 (0.326)    87    622652                     1.73-  61.73    31.83
-------------------------------------------------------------------------------
    6 Freon 114                                     CAS #: 76-14-2
  6.713   6.713 (0.421)   135   1647741 9.60606    9.606  80.00- 120.00   100.00
  6.713   6.713 (0.421)   137    525386                     2.34-  62.34    31.89
  6.713   6.713 (0.421)    85   1877247                    93.53- 153.53   113.93
-------------------------------------------------------------------------------
    8 Chloromethane                                 CAS #: 74-87-3
  7.053   7.053 (0.443)    50   1203295 9.13608    9.136  80.00- 120.00   100.00
  7.053   7.053 (0.443)    52    387526                     1.57-  61.57    32.21
-------------------------------------------------------------------------------
    9 Butane                                        CAS #: 106-97-8
  7.854   7.854 (0.493)    58    224996 9.60896    9.609  80.00- 120.00   100.00
  7.854   7.854 (0.493)    43   2019252                   879.44- 939.44   897.46
-------------------------------------------------------------------------------
   10 Vinyl Chloride                                CAS #: 75-01-4
  8.009   8.009 (0.503)    62    984044 9.71914    9.719  80.00- 120.00   100.00
  8.009   8.009 (0.503)    64    288156                     0.00-  59.13    29.28
-------------------------------------------------------------------------------
   11 1,3-Butadiene                                 CAS #: 106-99-0
  8.257   8.257 (0.518)    54    918890 9.23526    9.235  80.00- 120.00   100.00
  8.257   8.257 (0.518)    39    916671                    70.79- 130.79    99.76
-------------------------------------------------------------------------------
   12 Bromomethane                                  CAS #: 74-83-9
  9.835   9.835 (0.617)    94    634546 10.0789   10.079  80.00- 120.00   100.00
  9.835   9.835 (0.617)    96    597367                    64.45- 124.45    94.14
-------------------------------------------------------------------------------
   17 Chloroethane                                  CAS #: 75-00-3
 10.340  10.340 (0.649)    64    448164 10.1843   10.184  80.00- 120.00   100.00
 10.340  10.340 (0.649)    66    133250                     0.00-  59.36    29.73
-------------------------------------------------------------------------------
```

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	946664	9.75745	9.757	80.00- 120.00	100.00
10.533	10.533 (0.661)	43	1540191			135.34- 195.34	162.70
10.533	10.533 (0.661)	42	1311314			110.64- 170.64	138.52
20 Trichlorofluoromethane/Fr11					CAS #: 75-69-4		
11.184	11.160 (0.702)	101	2023425	9.30379	9.304	80.00- 120.00	100.00
11.184	11.184 (0.702)	103	1318171			34.40- 94.40	65.15
24 Ethanol					CAS #: 64-17-5		
12.102	12.102 (0.760)	45	535829	11.4583	11.458	80.00- 120.00	100.00
12.102	12.102 (0.760)	46	198804			9.93- 69.93	37.10
12.102	12.102 (0.760)	43	95140			0.00- 50.31	17.76
30 1,1-Dichloroethene					CAS #: 75-35-4		
12.569	12.569 (0.789)	98	493315	9.43806	9.438	80.00- 120.00	100.00
12.569	12.569 (0.789)	61	1647387			316.34- 376.34	333.94
12.569	12.569 (0.789)	96	783875			133.12- 193.12	158.90
28 Freon 113					CAS #: 76-13-1		
12.569	12.569 (0.789)	151	1410370	9.06046	9.060	80.00- 120.00	100.00
12.569	12.569 (0.789)	153	896284			33.38- 93.38	63.55
12.569	12.569 (0.789)	101	1622334			85.19- 145.19	115.03
31 Acetone					CAS #: 67-64-1		
12.816	12.816 (0.804)	58	547029	9.25632	9.256	80.00- 120.00	100.00
12.816	12.816 (0.804)	43	1880958			326.03- 386.03	343.85
33 Carbon Disulfide					CAS #: 75-15-0		
12.926	12.926 (0.811)	76	1805901	8.32901	8.329	80.00- 120.00	100.00
35 3-Chloroprene					CAS #: 107-05-1		
13.365	13.365 (0.839)	76	309922	9.37911	9.379	80.00- 120.00	100.00
13.365	13.365 (0.839)	41	1491266			456.88- 516.88	481.17
34 2-Propanol					CAS #: 67-63-0		
13.173	13.173 (0.827)	45	2392849	10.2299	10.230	80.00- 120.00	100.00
13.173	13.173 (0.827)	43	421273			0.00- 47.97	17.61
13.173	13.173 (0.827)	59	79394			0.00- 33.25	3.32
37 Methylene Chloride					CAS #: 75-09-2		
13.640	13.640 (0.856)	84	667407	9.14544	9.145	80.00- 120.00	100.00
13.640	13.640 (0.856)	49	1571654			198.57- 258.57	235.49
13.640	13.640 (0.856)	51	475032			41.48- 101.48	71.18
39 MTBE					CAS #: 1634-04-4		
13.997	13.997 (0.878)	73	2083426	9.13030	9.130	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	13.997 (0.878)	57	757608			6.35- 66.35	36.36
13.997	13.997 (0.878)	41	739664			5.74- 65.74	35.50
40 trans-1,2-Dichloroethene					CAS #: 156-60-5		
14.052	14.052 (0.882)	98	437961	8.14007	8.140	80.00- 120.00	100.00
14.052	14.052 (0.882)	61	1338586			272.66- 332.66	305.64
14.052	14.052 (0.882)	96	702964			128.53- 188.53	160.51
43 Hexane					CAS #: 110-54-3		
14.381	14.381 (0.903)	57	1911328	9.26119	9.261	80.00- 120.00	100.00
14.381	14.381 (0.903)	43	1374457			41.32- 101.32	71.91
14.381	14.381 (0.903)	86	192894			0.00- 40.13	10.09
46 1,1-Dichloroethane					CAS #: 75-34-3		
14.765	14.765 (0.927)	63	1779035	9.30197	9.302	80.00- 120.00	100.00
14.765	14.765 (0.927)	65	522924			0.00- 59.80	29.39
47 Vinyl Acetate					CAS #: 108-05-4		
14.793	14.793 (0.928)	86	198259	10.2882	10.288	80.00- 120.00	100.00
14.793	14.793 (0.928)	42	255466			166.91- 226.91	128.85
14.793	14.793 (0.928)	43	3574563			2680.08-2740.08	1802.98
50 cis-1,2-Dichloroethene					CAS #: 156-59-2		
15.592	15.592 (0.979)	98	597531	9.90983	9.910	80.00- 120.00	100.00
15.592	15.592 (0.979)	61	1673665			242.79- 302.79	280.10
15.592	15.592 (0.979)	96	951385			127.33- 187.33	159.22
51 2-Butanone					CAS #: 78-93-3		
15.572	15.572 (0.977)	72	379295	9.46749	9.467	80.00- 120.00	100.00
15.572	15.572 (0.977)	43	2651379			687.17- 747.17	699.03
15.572	15.572 (0.977)	57	186071			23.39- 83.39	49.06
53 Tetrahydrofuran					CAS #: 109-99-9		
15.934	15.934 (1.000)	42	1564026	8.94556	8.946	80.00- 120.00	100.00
15.934	15.934 (1.000)	71	337469			0.00- 51.83	21.58
15.934	15.934 (1.000)	72	363969			0.00- 54.16	23.27
55 Chloroform					CAS #: 67-66-3		
15.995	15.995 (1.004)	83	1623407	9.10472	9.105	80.00- 120.00	100.00
15.995	15.995 (1.004)	85	1038367			35.10- 95.10	63.96
57 Cyclohexane					CAS #: 110-82-7		
16.242	16.242 (1.019)	84	1107411	9.13915	9.139	80.00- 120.00	100.00
16.242	16.242 (1.019)	56	2102838			160.85- 220.85	189.89
16.242	16.242 (1.019)	41	1166379			75.49- 135.49	105.32

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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   1759747 8.85804    8.858  80.00- 120.00   100.00
 16.242  16.242 (1.019)    99   1106337                   33.24-  93.24    62.87
-------------------------------------------------------------------------------
   59 Carbon Tetrachloride                         CAS #: 56-23-5
 16.458  16.458 (1.033)   119   1717321 9.47044    9.470  80.00- 120.00   100.00
 16.458  16.458 (1.033)   117   1673690                   67.96- 127.96    97.46
                   Sum of Peak Concentrations =    9.470
-------------------------------------------------------------------------------
   63 2,2,4-Trimethylpentane                       CAS #: 540-84-1
 16.728  16.728 (1.050)    56   1974417 9.02646    9.026  80.00- 120.00   100.00
 16.728  16.728 (1.050)    57   5969086                  274.66- 334.66   302.32
 16.728  16.728 (1.050)    41   1573531                   54.64- 114.64    79.70
-------------------------------------------------------------------------------
   64 Benzene                                      CAS #: 71-43-2
 16.756  16.756 (0.968)    78   2251048 8.84852    8.848  80.00- 120.00   100.00
 16.756  16.756 (0.968)    77    514196                    0.00-  53.39    22.84
-------------------------------------------------------------------------------
   68 1,2-Dichloroethane                           CAS #: 107-06-2
 16.865  16.866 (0.975)    62   1371836 9.05981    9.060  80.00- 120.00   100.00
 16.865  16.866 (0.975)    64    406670                    0.00-  59.72    29.64
-------------------------------------------------------------------------------
   69 Heptane                                      CAS #: 142-82-5
 16.975  16.948 (0.981)    57   1123775 9.33003    9.330  80.00- 120.00   100.00
 16.975  16.975 (0.981)   100    246577                    0.00-  51.16    21.94
 16.948  16.948 (0.979)    43   2399314                  180.62- 240.62   213.50
-------------------------------------------------------------------------------
   72 Trichloroethene                              CAS #: 79-01-6
 17.717  17.717 (1.024)   130   1222748 9.41768    9.418  80.00- 120.00   100.00
 17.717  17.717 (1.024)    95   1130497                   62.98- 122.98    92.46
 17.717  17.717 (1.024)    97    728787                   29.44-  89.44    59.60
-------------------------------------------------------------------------------
   73 Methylcyclohexane                            CAS #: 108-87-2
 17.964  17.964 (1.038)    83   1499874 9.40853    9.408  80.00- 120.00   100.00
 17.964  17.964 (1.038)    98    703621                   16.83-  76.83    46.91
 17.964  17.964 (1.038)    55   1886636                   97.27- 157.27   125.79
-------------------------------------------------------------------------------
   74 1,2-Dichloropropane                          CAS #: 78-87-5
 18.156  18.156 (1.049)    63   1174357 9.40596    9.406  80.00- 120.00   100.00
 18.156  18.156 (1.049)    62    859650                   43.06- 103.06    73.20
 18.156  18.156 (1.049)    41    767152                   36.58-  96.58    65.33
-------------------------------------------------------------------------------
   75 1,4-Dioxane                                  CAS #: 123-91-1
 18.266  18.266 (1.056)    88    601545 8.27386    8.274  80.00- 120.00   100.00
 18.266  18.266 (1.056)    58    617410                   74.73- 134.73   102.64
 18.266  18.266 (1.056)    57    198511                    4.83-  64.83    33.00
-------------------------------------------------------------------------------
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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	1773598	9.42148	9.421	80.00- 120.00	100.00
18.568	18.568 (1.073)	85	1140070			33.73- 93.73	64.28
78 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
19.386	19.386 (1.120)	75	1407399	9.02282	9.023	80.00- 120.00	100.00
19.386	19.386 (1.120)	77	449042			0.66- 60.66	31.91
19.386	19.386 (1.120)	39	1045885			43.67- 103.67	74.31
79 4-Methyl-2-pentanone					CAS #: 108-10-1		
19.588	19.588 (1.132)	43	3272948	9.19470	9.195	80.00- 120.00	100.00
19.588	19.588 (1.132)	58	1105642			3.17- 63.17	33.78
19.588	19.588 (1.132)	85	328119			0.00- 40.09	10.03
81 Toluene					CAS #: 108-88-3		
19.991	19.991 (1.155)	91	2658754	9.17194	9.172	80.00- 120.00	100.00
19.991	19.991 (1.155)	92	1569150			28.34- 88.34	59.02
82 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
20.435	20.435 (0.920)	75	1288899	9.19540	9.195	80.00- 120.00	100.00
20.435	20.435 (0.920)	77	400004			1.98- 61.98	31.03
20.399	20.399 (0.919)	39	926812			41.22- 101.22	71.91
84 1,1,2-Trichloroethane					CAS #: 79-00-5		
20.758	20.722 (0.935)	97	1054133	9.41451	9.414	80.00- 120.00	100.00
20.758	20.722 (0.935)	99	648937			31.80- 91.80	61.56
20.722	20.722 (0.933)	83	872066			51.12- 111.12	82.73
86 Tetrachloroethene					CAS #: 127-18-4		
20.901	20.901 (0.941)	166	1518460	9.00895	9.009	80.00- 120.00	100.00
20.901	20.901 (0.941)	129	1179754			46.61- 106.61	77.69
20.901	20.901 (0.941)	131	1167681			46.38- 106.38	76.90
87 2-Hexanone					CAS #: 591-78-6		
21.009	21.045 (0.946)	58	1382216	9.46802	9.468	80.00- 120.00	100.00
21.009	21.045 (0.946)	43	2947464			184.27- 244.27	213.24
21.045	21.045 (0.948)	100	196876			0.00- 44.17	14.24
89 Dibromochloromethane					CAS #: 124-48-1		
21.367	21.367 (0.962)	129	2105044	9.66992	9.670	80.00- 120.00	100.00
21.367	21.367 (0.962)	127	1631621			48.71- 108.71	77.51
90 1,2-Dibromoethane					CAS #: 106-93-4		
21.583	21.583 (0.972)	107	1820796	9.73686	9.737	80.00- 120.00	100.00
21.583	21.583 (0.972)	109	1679410			63.80- 123.80	92.23

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	2311523	8.99321	8.993	80.00- 120.00	100.00
22.233	22.233 (1.001)	114	728363			1.75- 61.75	31.51
22.233	22.233 (1.001)	77	1258509			24.73- 84.73	54.45
95 Ethyl Benzene					CAS #: 100-41-4		
22.315	22.315 (1.005)	106	1064148	8.76125	8.761	80.00- 120.00	100.00
22.315	22.315 (1.005)	91	3080349			260.31- 320.31	289.47
96 m,p-Xylene					CAS #: 108-38-3		
22.452	22.452 (1.011)	106	1030741	8.40210	8.402	80.00- 120.00	100.00
22.452	22.452 (1.011)	91	1973030			157.23- 217.23	191.42
100 o-Xylene					CAS #: 95-47-6		
23.002	23.002 (1.036)	106	1037859	9.20273	9.203	80.00- 120.00	100.00
23.002	23.002 (1.036)	91	2000511			167.76- 227.76	192.75
101 Styrene					CAS #: 100-42-5		
23.029	23.029 (1.037)	104	1531942	9.10925	9.109	80.00- 120.00	100.00
23.029	23.029 (1.037)	78	725680			17.96- 77.96	47.37
102 Bromoform					CAS #: 75-25-2		
23.331	23.331 (1.051)	173	1899320	9.75245	9.752	80.00- 120.00	100.00
23.331	23.331 (1.051)	171	988130			22.04- 82.04	52.03
103 Cumene					CAS #: 98-82-8		
23.441	23.413 (1.056)	105	2828728	8.87153	8.872	80.00- 120.00	100.00
23.441	23.441 (1.056)	120	843144			0.00- 59.93	29.81
108 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
23.833	23.833 (1.073)	83	1922078	8.57264	8.573	80.00- 120.00	100.00
23.833	23.833 (1.073)	85	1249252			34.94- 94.94	64.99
111 Propylbenzene					CAS #: 103-65-1		
23.910	23.910 (1.077)	91	2469842	8.31572	8.316	80.00- 120.00	100.00
23.910	23.910 (1.077)	120	676687			0.00- 56.93	27.40
113 4-Ethyltoluene					CAS #: 622-96-8		
24.039	24.039 (1.083)	105	1868796	8.29992	8.300	80.00- 120.00	100.00
24.039	24.039 (1.083)	120	635460			3.10- 63.10	34.00
114 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
24.116	24.116 (1.086)	105	1806335	8.12490	8.125	80.00- 120.00	100.00
24.116	24.116 (1.086)	120	937706			21.49- 81.49	51.91
120 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
24.529	24.529 (1.105)	105	1572651	8.01274	8.013	80.00- 120.00	100.00

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                                        CONCENTRATIONS
                                        ON-COL    FINAL
   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    776332                   19.48-  79.48    49.36
-------------------------------------------------------------------------------
  122 1,3-Dichlorobenzene                          CAS #: 541-73-1
 24.902  24.902 (1.121)   146   1324732 8.46505    8.465  80.00- 120.00   100.00
 24.902  24.902 (1.121)   148    833105                   32.42-  92.42    62.89
 24.902  24.902 (1.121)   111    517741                    8.90-  68.90    39.08
-------------------------------------------------------------------------------
  124 1,4-Dichlorobenzene                          CAS #: 106-46-7
 24.992  24.992 (1.125)   146   1165836 7.03102    7.031  80.00- 120.00   100.00
 24.992  24.992 (1.125)   148    738329                   34.01-  94.01    63.33
 24.992  24.992 (1.125)   111    444476                    8.58-  68.58    38.13
-------------------------------------------------------------------------------
  127 alpha-chlorotoluene                          CAS #: 100-44-7
 25.127  25.127 (1.132)    91   1879190 9.77169    9.772  80.00- 120.00   100.00
 25.127  25.127 (1.132)   126    441947                    0.00-  54.03    23.52
-------------------------------------------------------------------------------
  128 1,2-Dichlorobenzene                          CAS #: 95-50-1
 25.396  25.396 (1.144)   146   1215508 7.71161    7.712  80.00- 120.00   100.00
 25.396  25.396 (1.144)   148    755232                   32.53-  92.53    62.13
 25.396  25.396 (1.144)   111    499385                   10.66-  70.66    41.08
-------------------------------------------------------------------------------
  131 1,2,4-Trichlorobenzene                       CAS #: 120-82-1
 27.077  27.077 (1.219)   180   1065269 7.46191    7.462  80.00- 120.00   100.00
 27.077  27.077 (1.219)   182   1024228                   66.06- 126.06    96.15
-------------------------------------------------------------------------------
  132 Hexachlorobutadiene                          CAS #: 87-68-3
 27.167  27.167 (1.223)   225    723505 7.01061    7.011  80.00- 120.00   100.00
 27.167  27.167 (1.223)   223    469705                   32.60-  92.60    64.92
-------------------------------------------------------------------------------
  133 Naphthalene                                  CAS #: 91-20-3
 27.368  27.368 (1.232)   128    155503 0.72672   0.7267  80.00- 120.00   100.00
 27.368  27.368 (1.232)   127     18326                    0.00-  44.62    11.78
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Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdv.i
Lab File ID: v012403.d
Lab Smp Id: ICV
Analysis Type: VOA
Quant Type: ISTD
Operator: sn
Method File: /chem/msdv.i/24Jan2015.b/v15l0123a.m
Misc Info: 10ppbv (50ppbv)

Calibration Date: 24-JAN-2015
Calibration Time: 07:25
Client Smp ID: ICV
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
54 Bromochloromethan	286629	171977	401281	255943	-10.71
71 1,4-Difluorobenze	1105428	663257	1547599	1024736	-7.30
92 Chlorobenzene-d5	881154	528692	1233616	822638	-6.64

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: 05-Feb-2015 11:55

Eurofins Air Toxics Inc.

RECOVERY REPORT

Client Name:
Client SDG: 24Jan2015
Sample Matrix: GAS
Fraction: VOA
Lab Smp Id: ICV
Client Smp ID: ICV
Level: LOW
Operator: sn
Data Type: MS DATA
SampleType: ICV
SpikeList File: AT12.spk
Quant Type: ISTD
Sublist File: AT12.sub
Method File: /chem/msdv.i/24Jan2015.b/v15l0123a.m
Misc Info: 10ppbv (50ppbv)

SPIKE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
4 Dichlorodifluorome	10.000	9.587	95.87	70-130
3 Propylene	10.000	9.125	91.25	60-140
6 Freon 114	10.000	9.606	96.06	70-130
8 Chloromethane	10.000	9.136	91.36	70-130
10 Vinyl Chloride	10.000	9.719	97.19	70-130
11 1,3-Butadiene	10.000	9.235	92.35	70-130
12 Bromomethane	10.000	10.079	100.79	70-130
17 Chloroethane	10.000	10.184	101.84	70-130
20 Trichlorofluoromet	10.000	9.304	93.04	70-130
24 Ethanol	10.000	11.458	114.58	70-130
28 Freon 113	10.000	9.060	90.60	70-130
30 1,1-Dichloroethene	10.000	9.438	94.38	70-130
31 Acetone	10.000	9.256	92.56	70-130
33 Carbon Disulfide	10.000	8.329	83.29	70-130
34 2-Propanol	10.000	10.230	102.30	70-130
35 3-Chloroprene	10.000	9.379	93.79	70-130
37 Methylene Chloride	10.000	9.145	91.45	70-130
39 MTBE	10.000	9.130	91.30	70-130
40 trans-1,2-Dichloro	10.000	8.140	81.40	70-130
43 Hexane	10.000	9.261	92.61	70-130
46 1,1-Dichloroethane	10.000	9.302	93.02	70-130
47 Vinyl Acetate	10.000	10.288	102.88	60-140
50 cis-1,2-Dichloroet	10.000	9.910	99.10	70-130
51 2-Butanone	10.000	9.467	94.67	70-130
53 Tetrahydrofuran	10.000	8.946	89.46	70-130
55 Chloroform	10.000	9.105	91.05	70-130
57 Cyclohexane	10.000	9.139	91.39	70-130
58 1,1,1-Trichloroeth	10.000	8.858	88.58	70-130
59 Carbon Tetrachlori	10.000	9.470	94.70	70-130
63 2,2,4-Trimethylpen	10.000	9.026	90.26	70-130
64 Benzene	10.000	8.848	88.49	70-130
69 Heptane	10.000	9.330	93.30	70-130
68 1,2-Dichloroethane	10.000	9.060	90.60	70-130

SPIKE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
72 Trichloroethene	10.000	9.418	94.18	70-130
74 1,2-Dichloropropan	10.000	9.406	94.06	70-130
75 1,4-Dioxane	10.000	8.274	82.74	70-130
77 Bromodichlorometha	10.000	9.421	94.21	70-130
78 cis-1,3-Dichloropr	10.000	9.023	90.23	70-130
79 4-Methyl-2-pentano	10.000	9.195	91.95	70-130
81 Toluene	10.000	9.172	91.72	70-130
82 trans-1,3-Dichloro	10.000	9.195	91.95	70-130
84 1,1,2-Trichloroeth	10.000	9.414	94.15	70-130
87 2-Hexanone	10.000	9.468	94.68	70-130
86 Tetrachloroethene	10.000	9.009	90.09	70-130
89 Dibromochlorometha	10.000	9.670	96.70	70-130
90 1,2-Dibromoethane	10.000	9.737	97.37	70-130
93 Chlorobenzene	10.000	8.993	89.93	70-130
95 Ethyl Benzene	10.000	8.761	87.61	70-130
96 m,p-Xylene	10.000	8.402	84.02	70-130
100 o-Xylene	10.000	9.203	92.03	70-130
101 Styrene	10.000	9.109	91.09	70-130
102 Bromoform	10.000	9.752	97.52	70-130
103 Cumene	10.000	8.872	88.72	70-130
108 1,1,2,2-Tetrachlor	10.000	8.573	85.73	70-130
111 Propylbenzene	10.000	8.316	83.16	70-130
113 4-Ethyltoluene	10.000	8.300	83.00	70-130
114 1,3,5-Trimethylben	10.000	8.125	81.25	70-130
120 1,2,4-Trimethylben	10.000	8.013	80.13	70-130
122 1,3-Dichlorobenzen	10.000	8.465	84.65	70-130
124 1,4-Dichlorobenzen	10.000	7.031	70.31	70-130
127 alpha-chlorotoluen	10.000	9.772	97.72	70-130
128 1,2-Dichlorobenzen	10.000	7.712	77.12	70-130
131 1,2,4-Trichloroben	10.000	7.462	74.62	70-130
132 Hexachlorobutadien	10.000	7.011	70.11	70-130
133 Naphthalene	1.000	0.7267	72.67	60-140
18 Isopentane	10.000	9.757	97.57	60-140
9 Butane	10.000	9.609	96.09	60-140
73 Methylcyclohexane	10.000	9.408	94.09	60-140

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 65 1,2-Dichloroethane	5.000	4.763	95.26	70-130
$ 80 Toluene-d8	5.000	5.009	100.18	70-130
$ 106 Bromofluorobenzene	5.000	5.022	100.44	70-130

Data File: /chem/msdv.i/24Jan2015.b/v012403.d

Date : 24-JAN-2015 08:04

Client ID: ICV

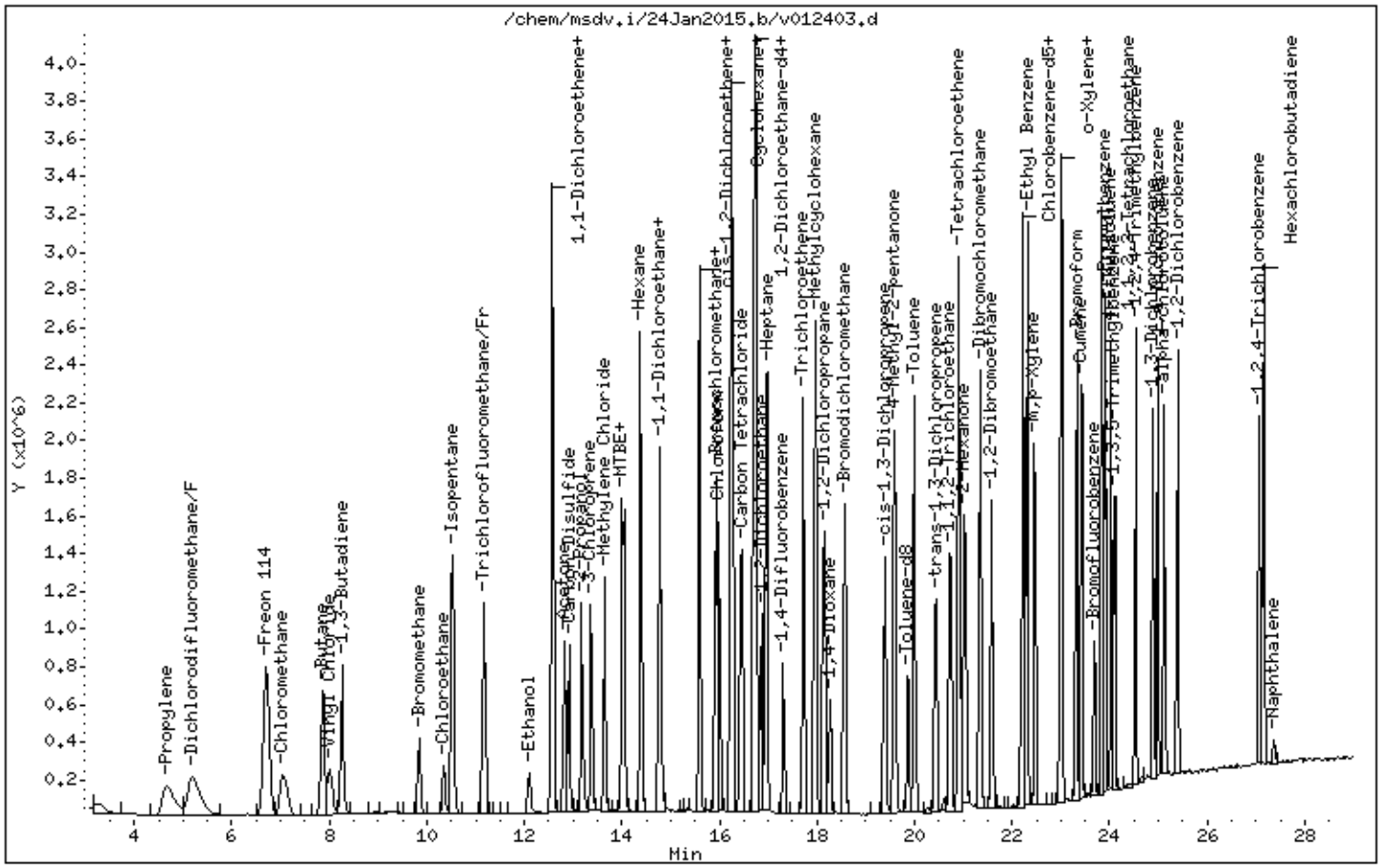
Instrument: msdv.i

Sample Info: 50mL #2687-186

Operator: sn

Column phase: RTx-624

Column diameter: 0.32



Data File: /chem/msdv.i/24Jan2015.b/v012403.d

Date : 24-JAN-2015 08:04

Client ID: ICV

Instrument: msdv.i

Sample Info: 50mL #2687-186

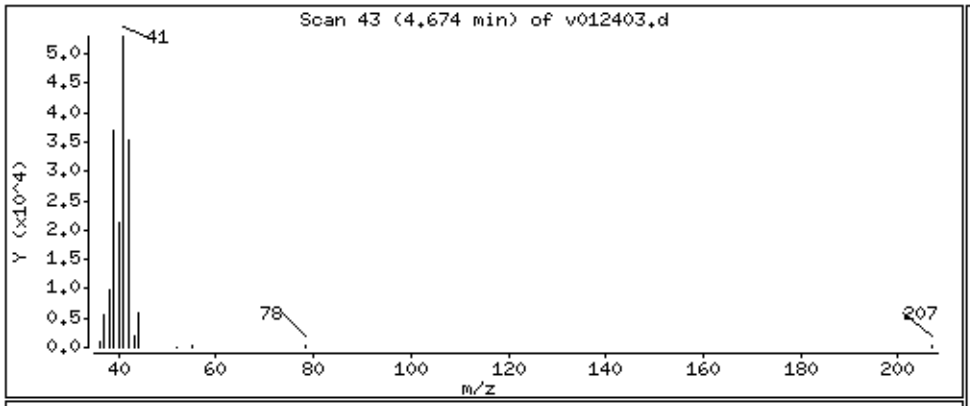
Operator: sn

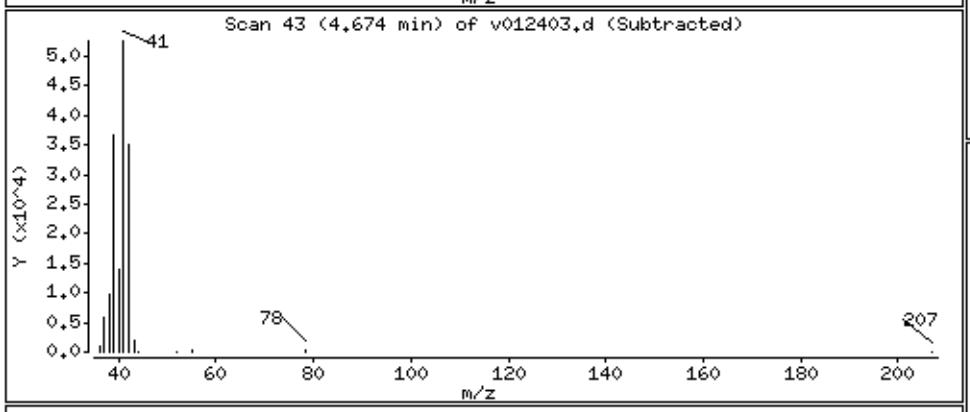
Column phase: RTx-624

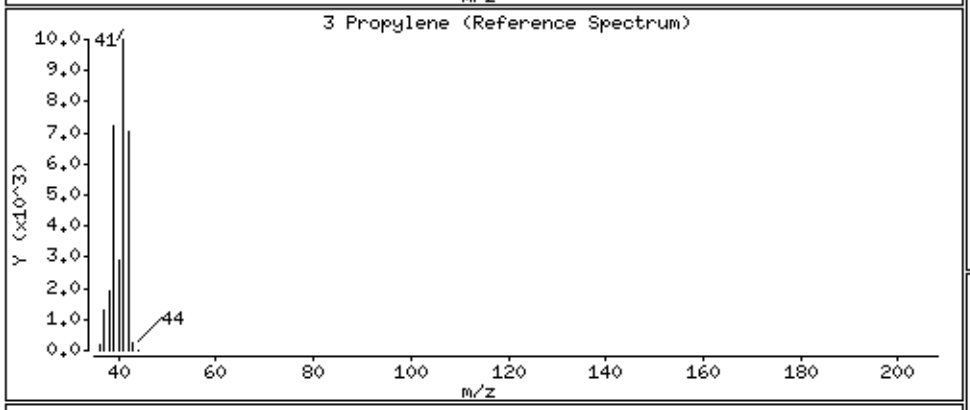
Column diameter: 0.32

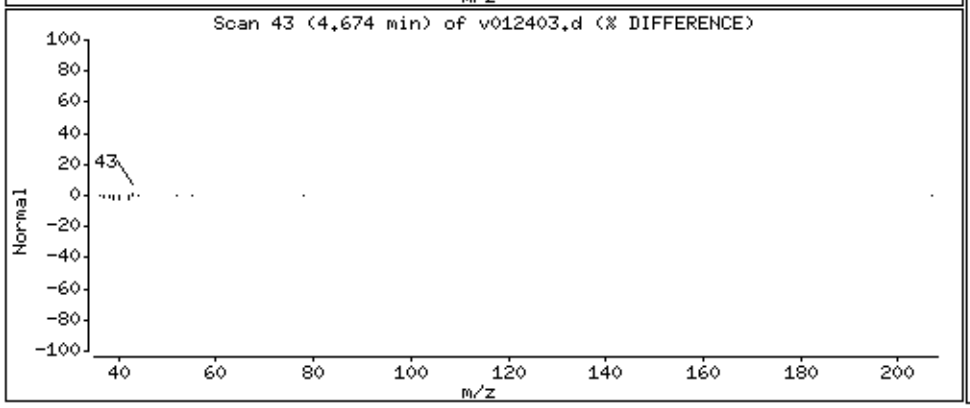
3 Propylene

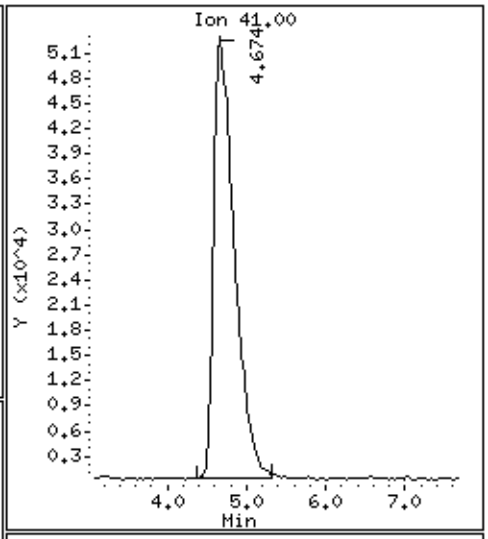
Concentration: 9.125 PPBV

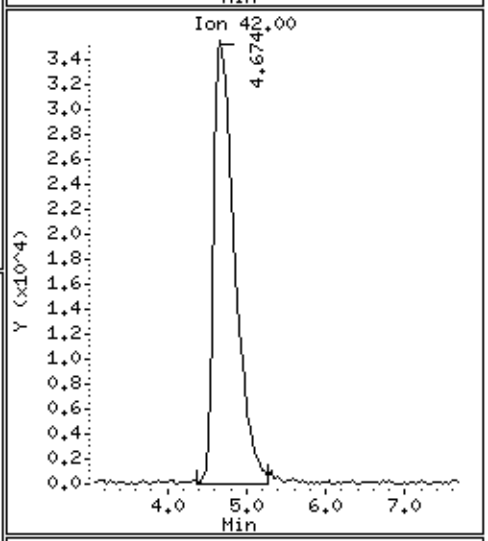


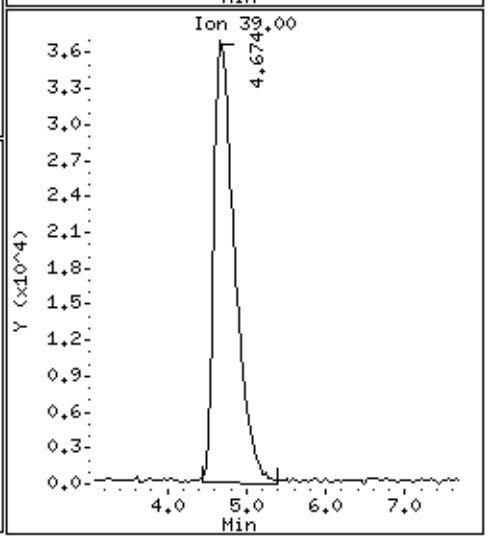












Data File: /chem/msdv.i/24Jan2015.b/v012403.d

Date : 24-JAN-2015 08:04

Client ID: ICV

Instrument: msdv.i

Sample Info: 50mL #2687-186

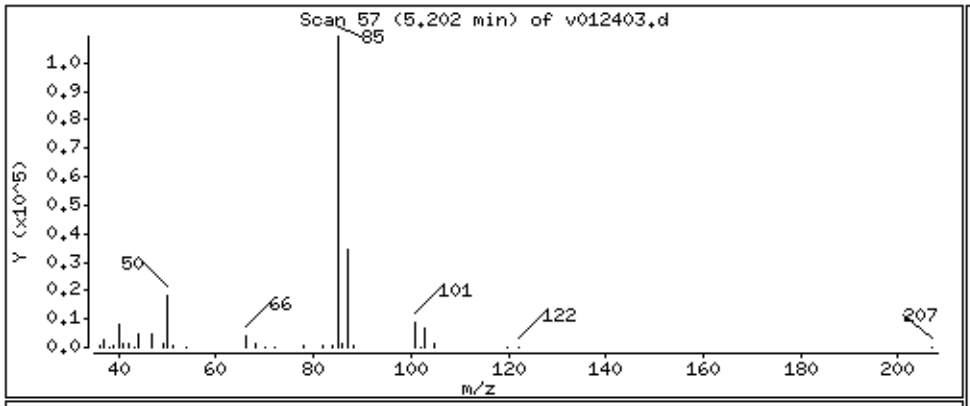
Operator: sn

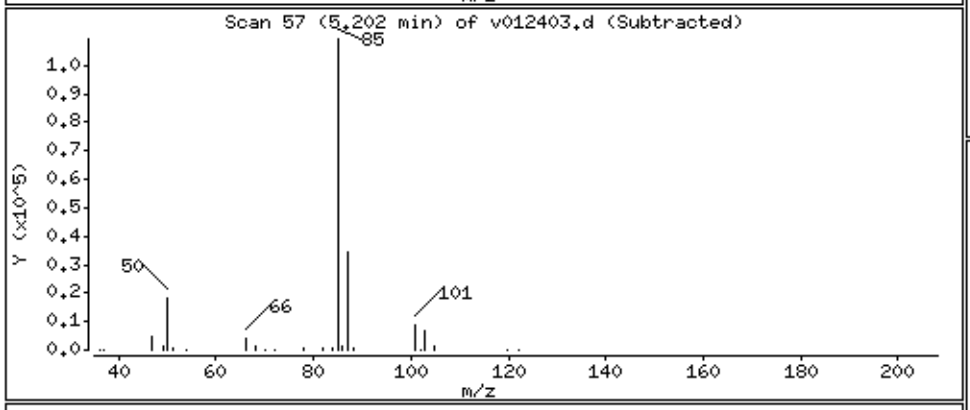
Column phase: RTx-624

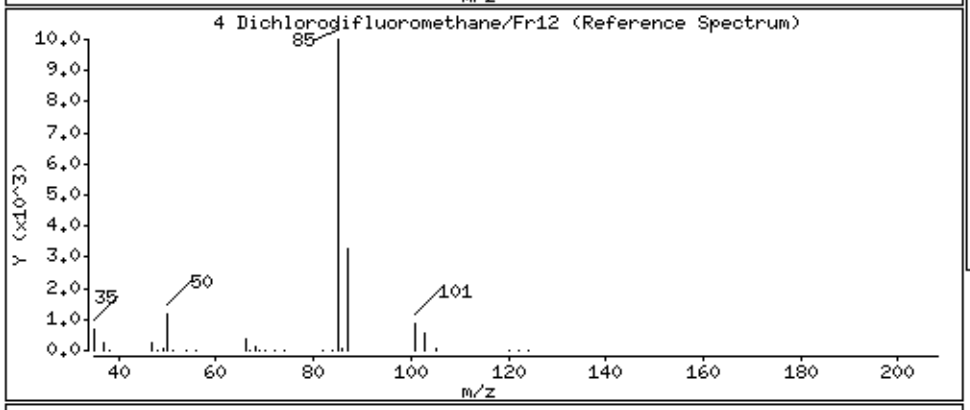
Column diameter: 0.32

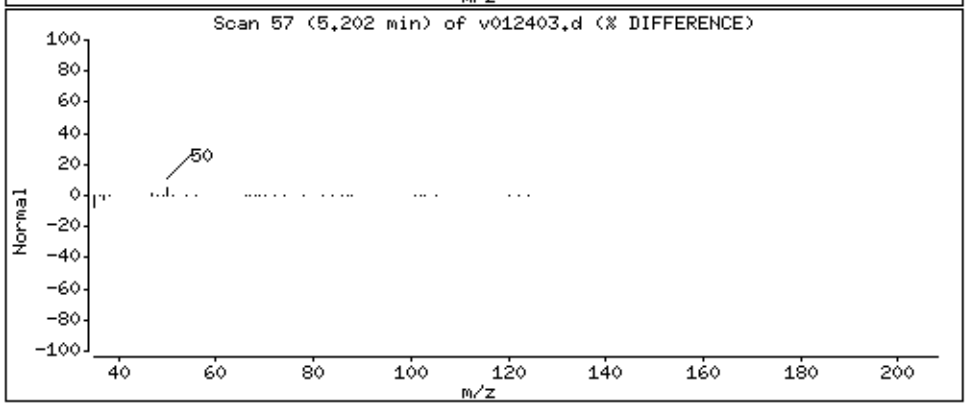
4 Dichlorodifluoromethane/Fr12

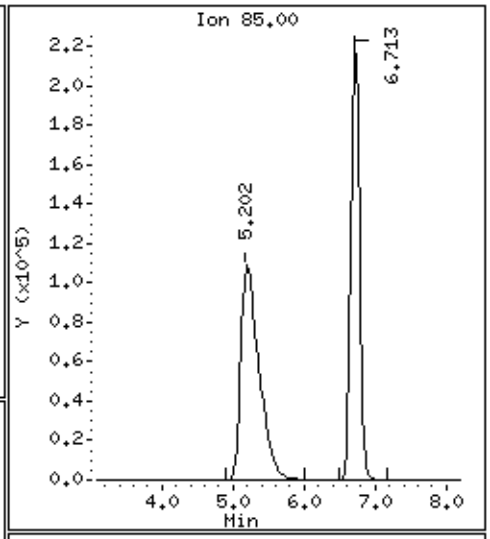
Concentration: 9.587 PPBV

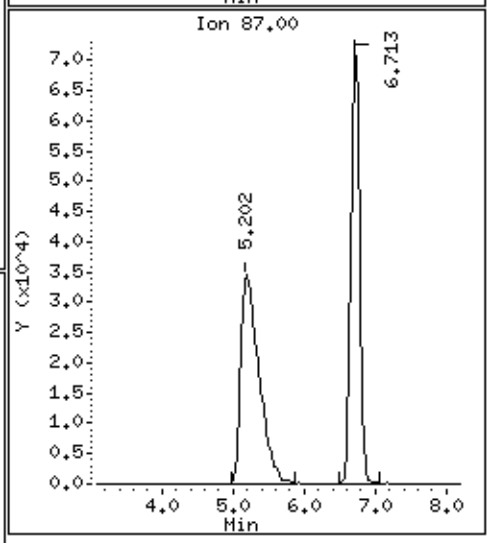












Data File: /chem/msdv.i/24Jan2015.b/v012403.d

Date : 24-JAN-2015 08:04

Client ID: ICV

Instrument: msdv.i

Sample Info: 50mL #2687-186

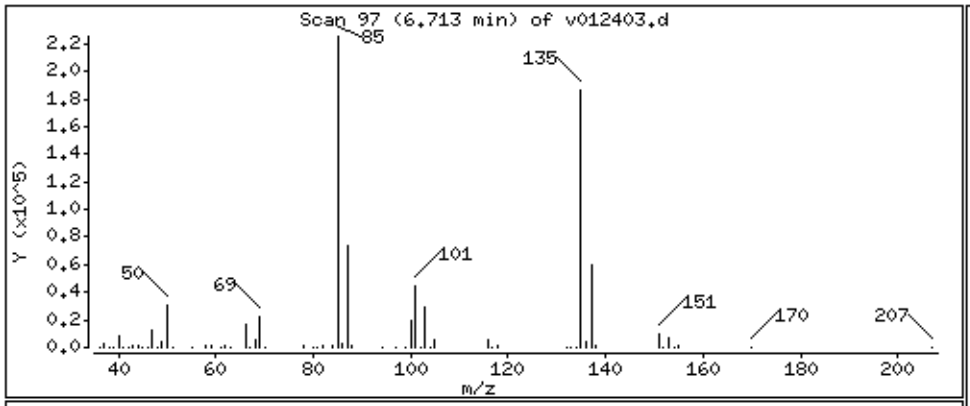
Operator: sn

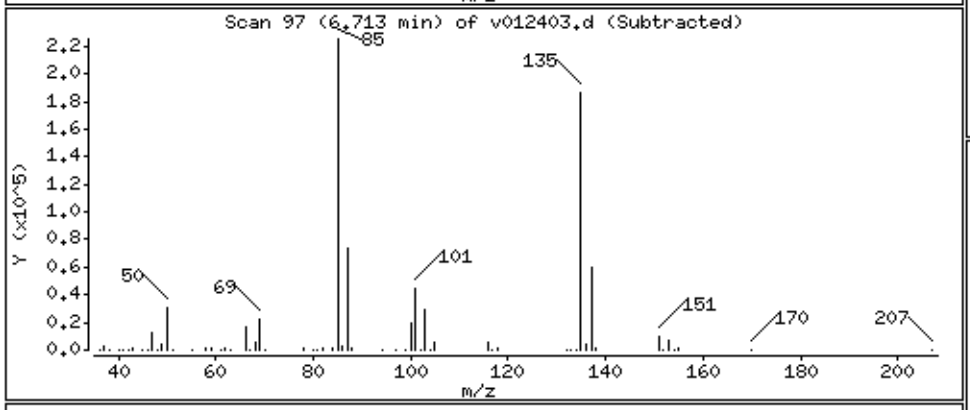
Column phase: RTx-624

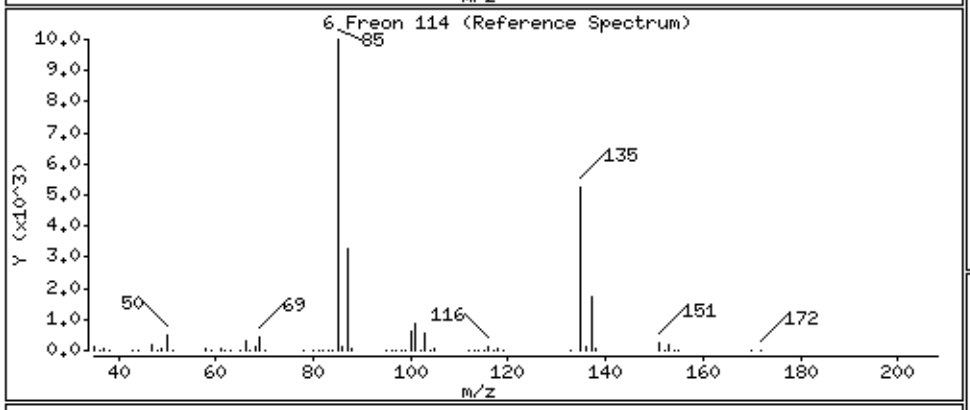
Column diameter: 0.32

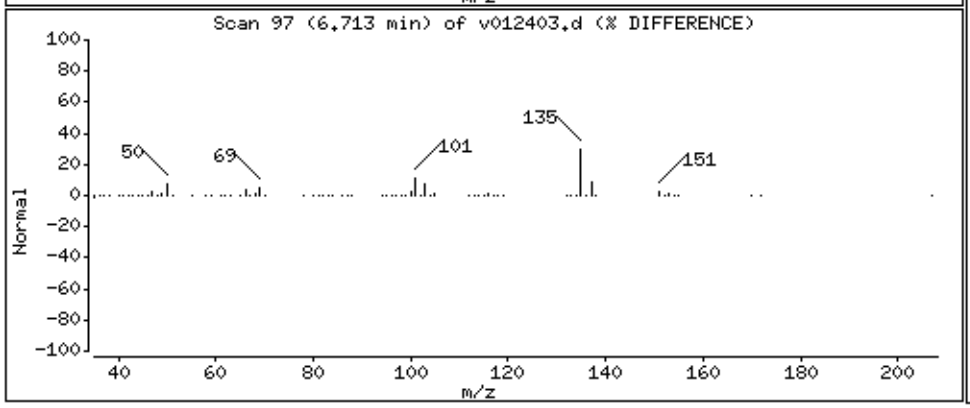
6 Freon 114

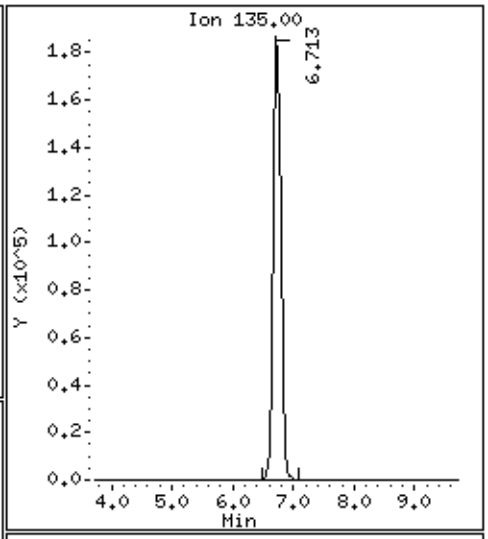
Concentration: 9.606 PPBV

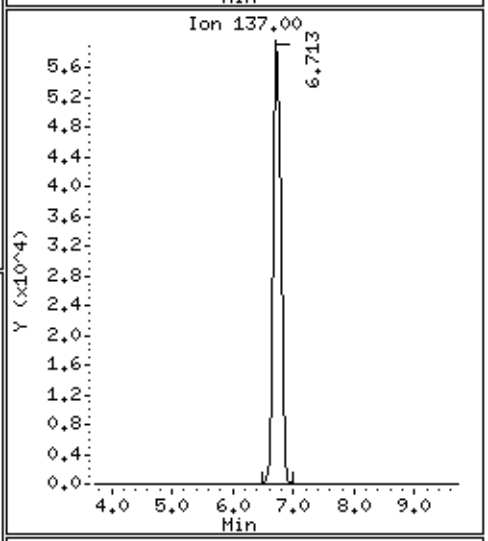


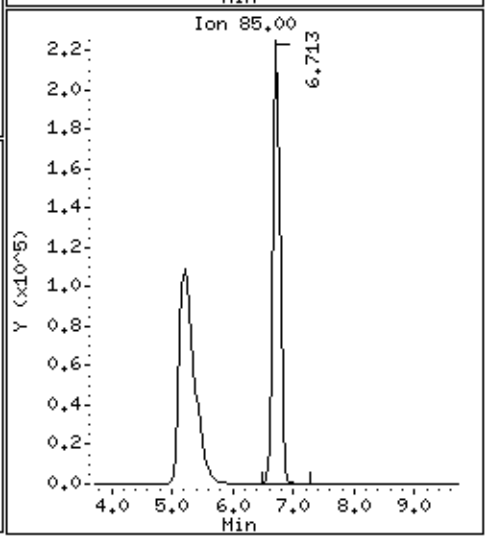












Data File: /chem/msdv.i/24Jan2015.b/v012403.d

Date : 24-JAN-2015 08:04

Client ID: ICV

Instrument: msdv.i

Sample Info: 50mL #2687-186

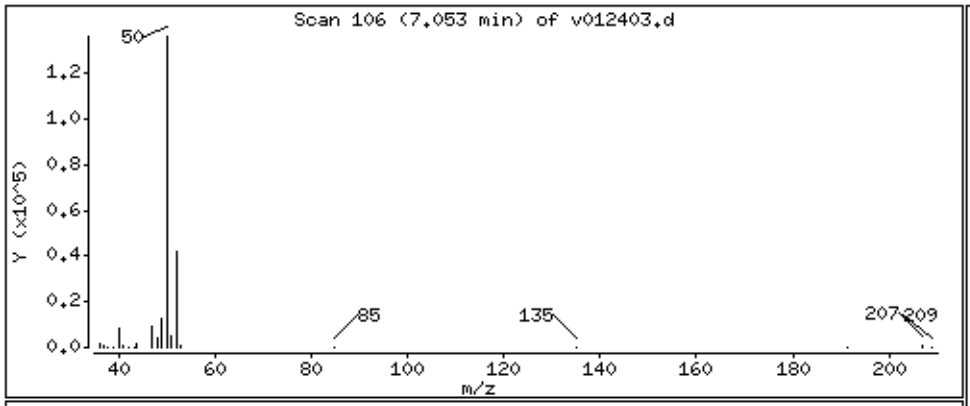
Operator: sn

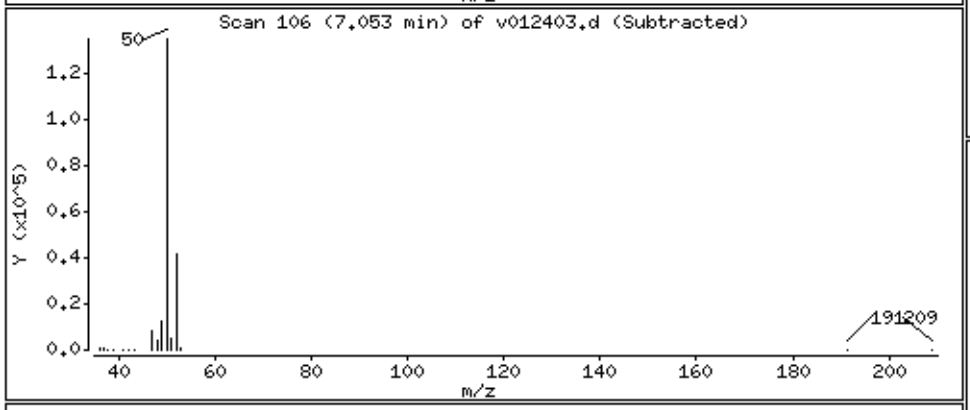
Column phase: RTx-624

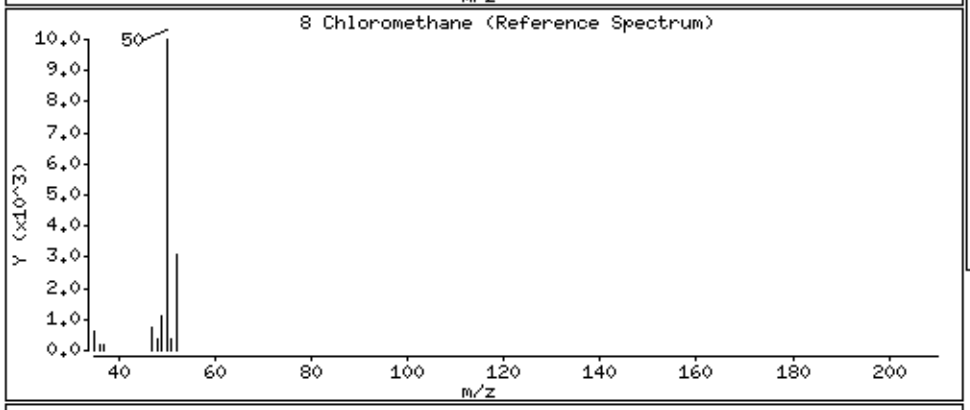
Column diameter: 0.32

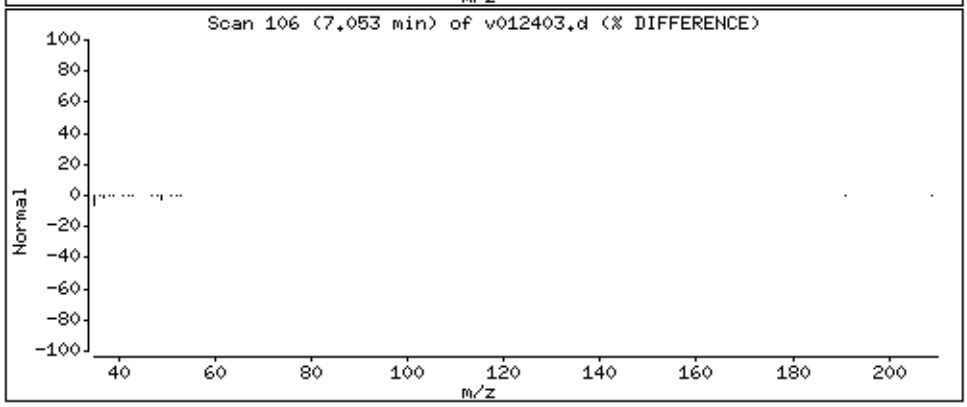
8 Chloromethane

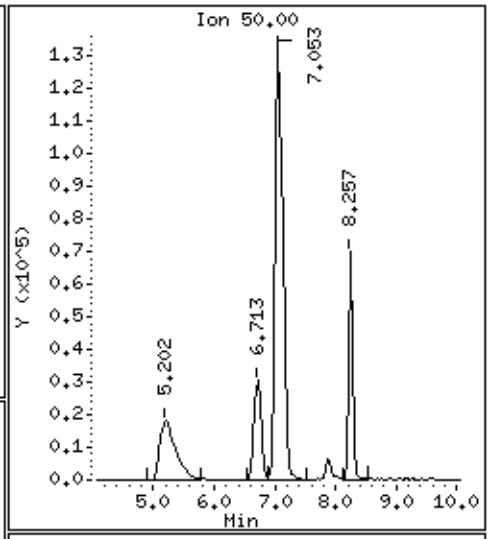
Concentration: 9.136 PPBV

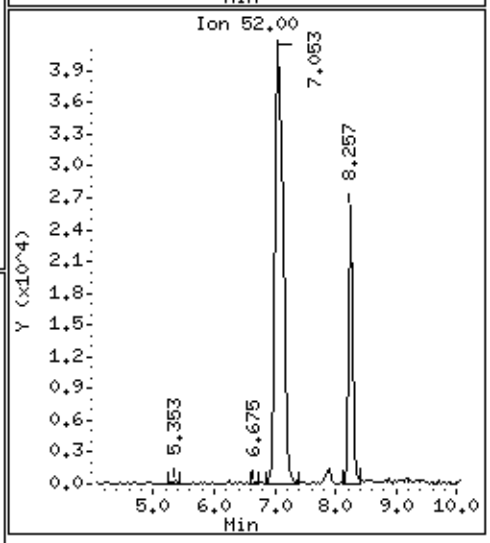












Data File: /chem/msdv.i/24Jan2015.b/v012403.d

Date : 24-JAN-2015 08:04

Client ID: ICV

Instrument: msdv.i

Sample Info: 50mL #2687-186

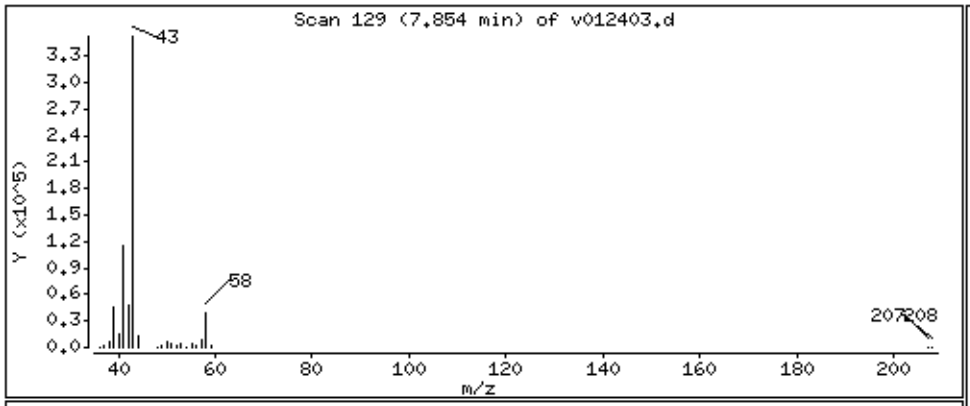
Operator: sn

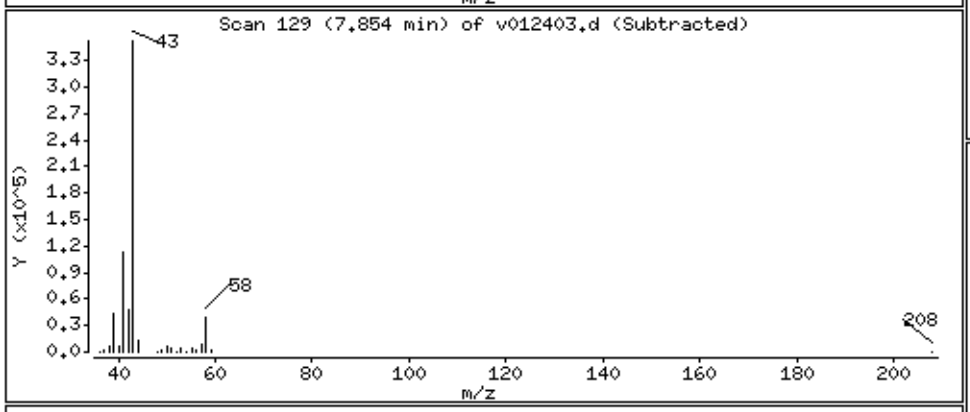
Column phase: RTx-624

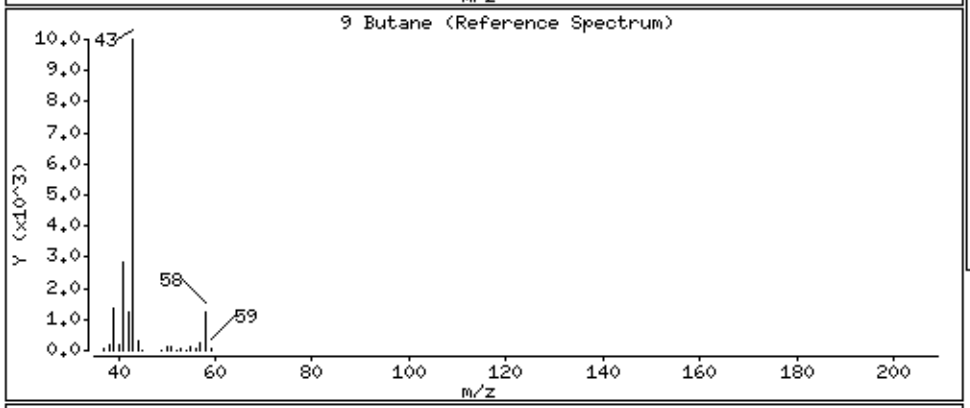
Column diameter: 0.32

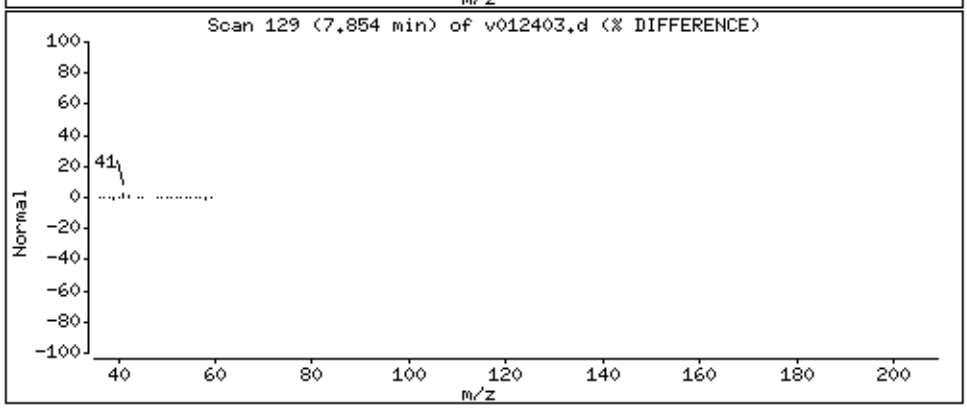
9 Butane

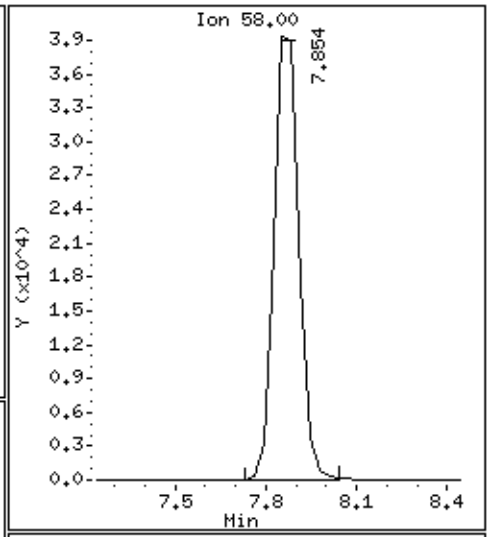
Concentration: 9.609 PPBV

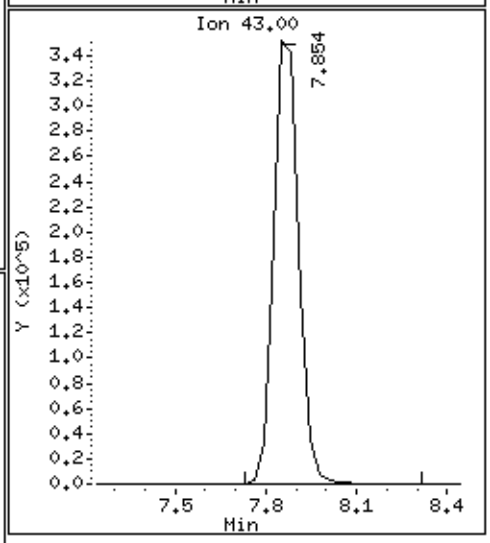












Data File: /chem/msdv.i/24Jan2015.b/v012403.d

Date : 24-JAN-2015 08:04

Client ID: ICV

Instrument: msdv.i

Sample Info: 50mL #2687-186

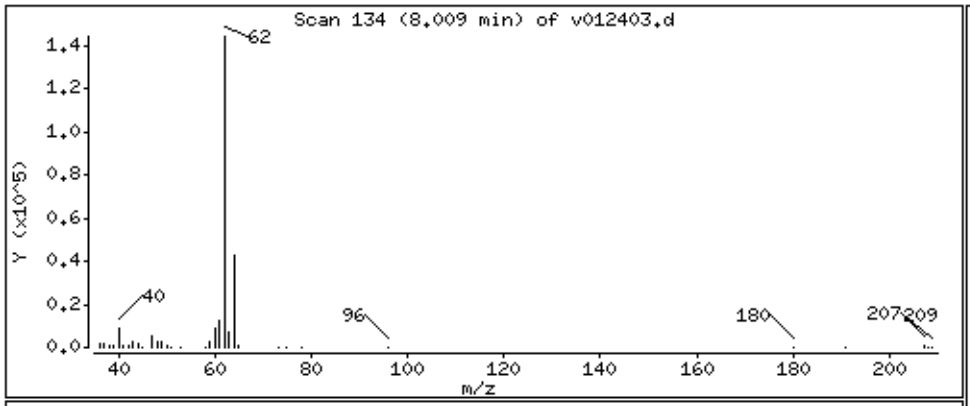
Operator: sn

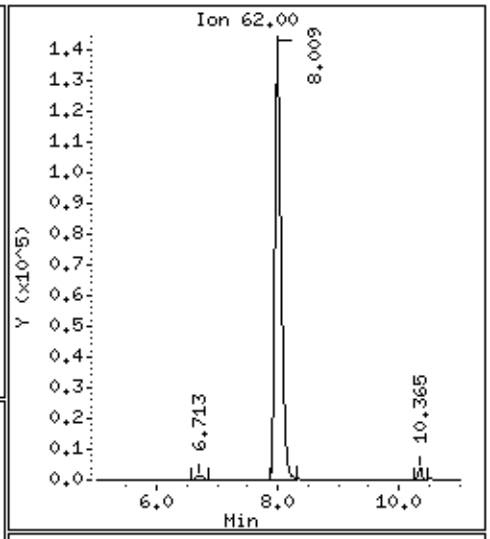
Column phase: RTx-624

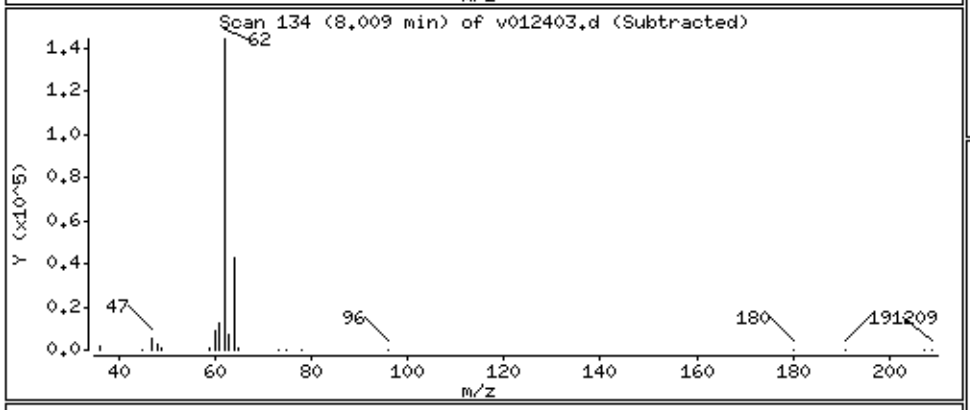
Column diameter: 0.32

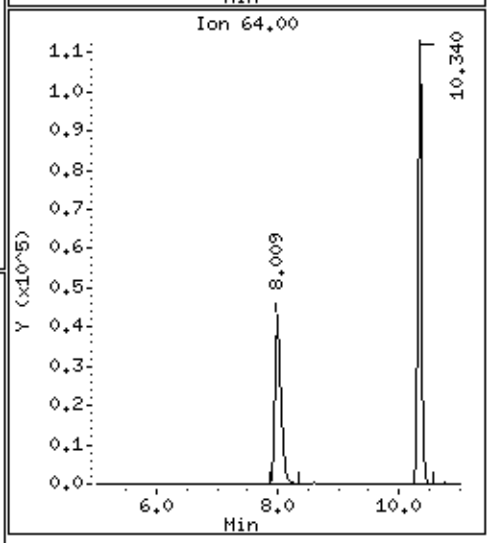
10 Vinyl Chloride

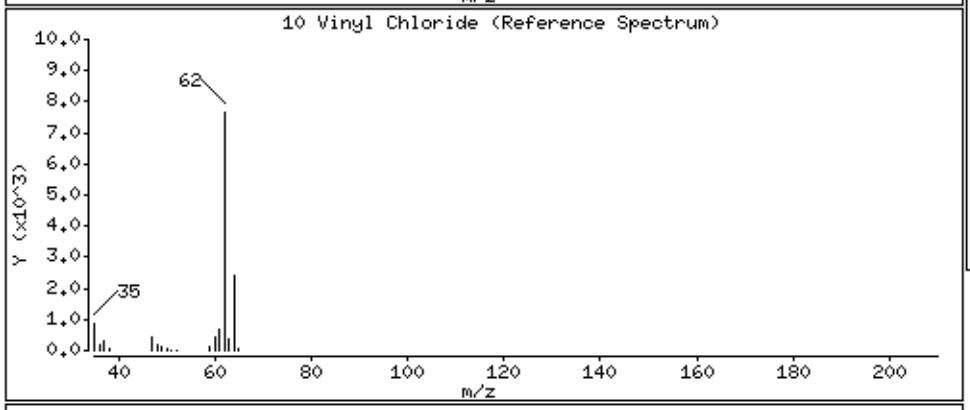
Concentration: 9.719 PPBV

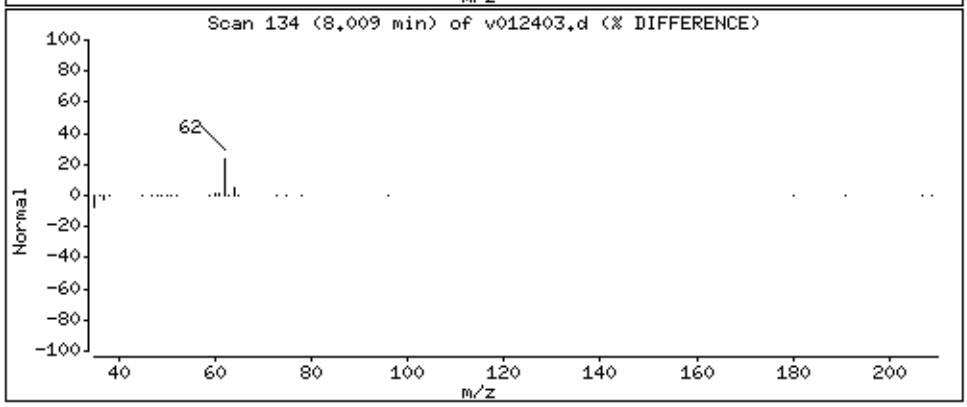












Data File: /chem/msdv.i/24Jan2015.b/v012403.d

Date : 24-JAN-2015 08:04

Client ID: ICV

Instrument: msdv.i

Sample Info: 50mL #2687-186

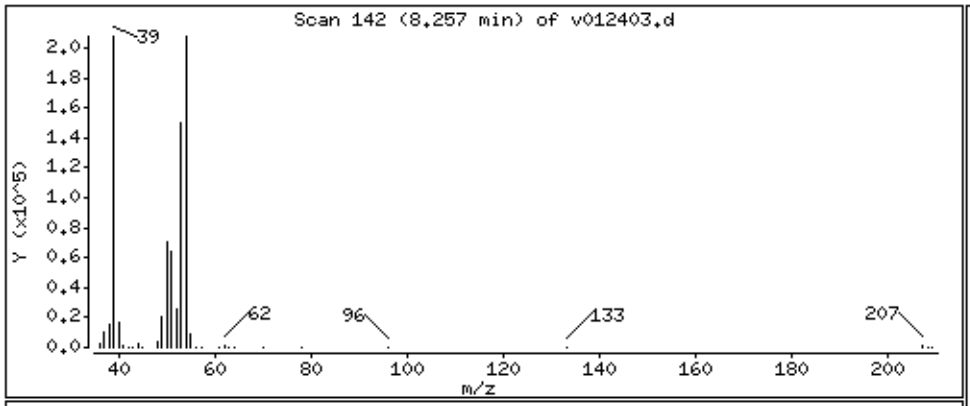
Operator: sn

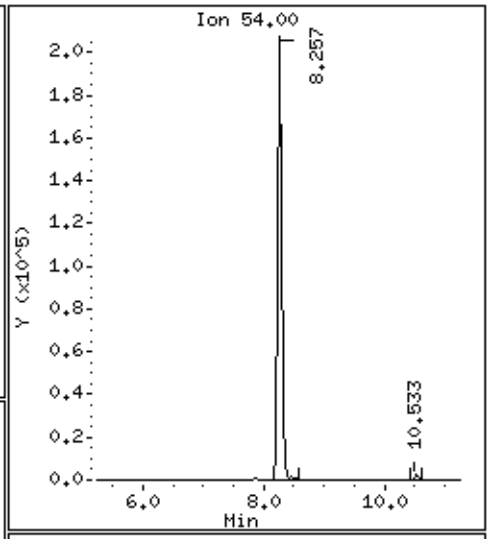
Column phase: RTx-624

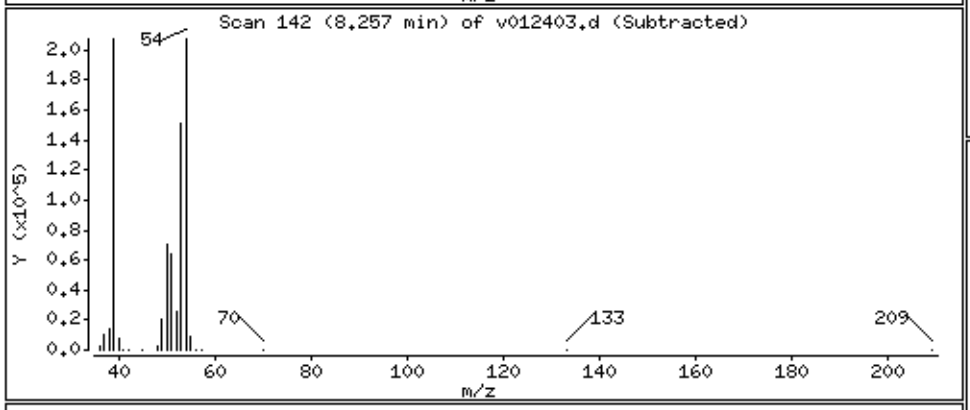
Column diameter: 0.32

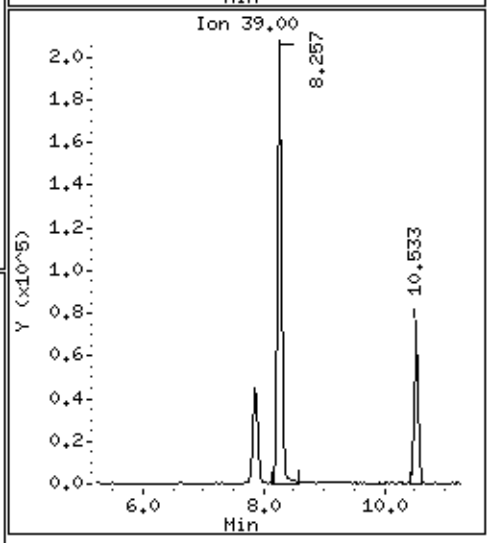
11 1,3-Butadiene

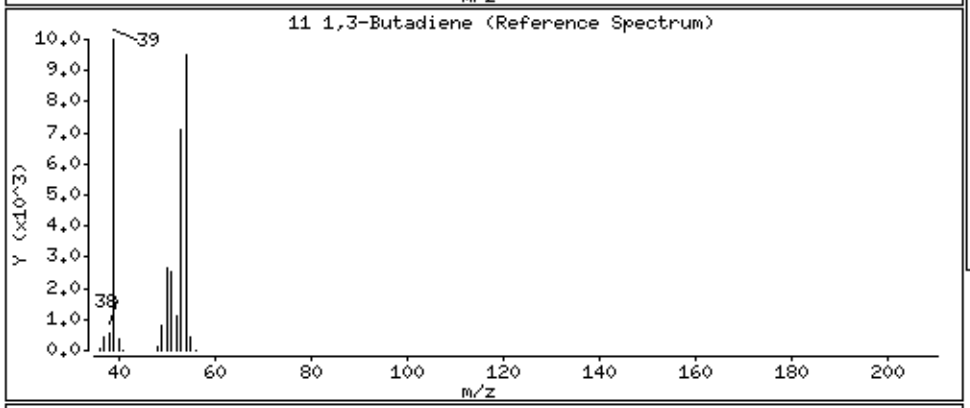
Concentration: 9.235 PPBV

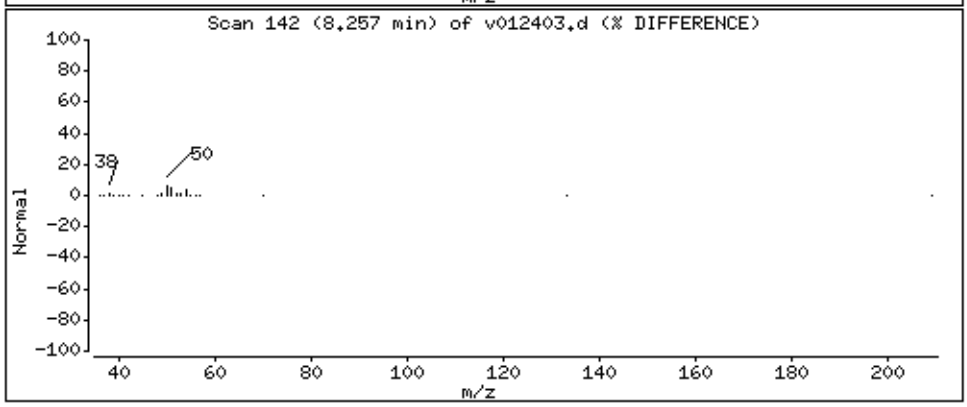












Data File: /chem/msdv.i/24Jan2015.b/v012403.d

Date : 24-JAN-2015 08:04

Client ID: ICV

Instrument: msdv.i

Sample Info: 50mL #2687-186

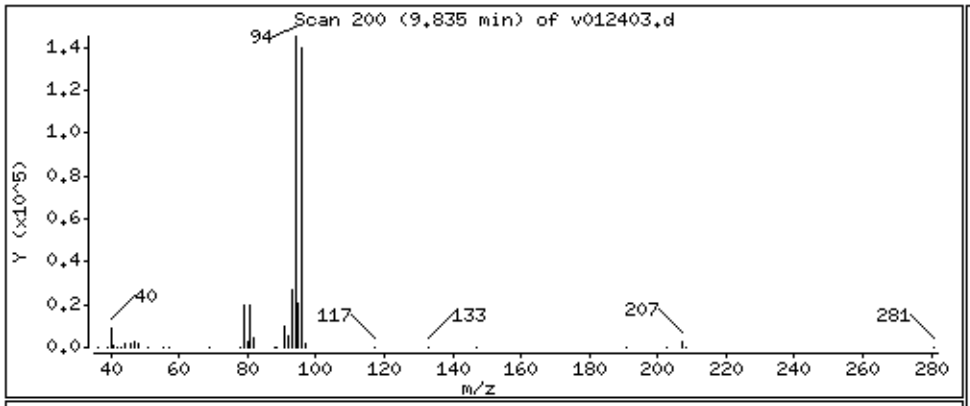
Operator: sn

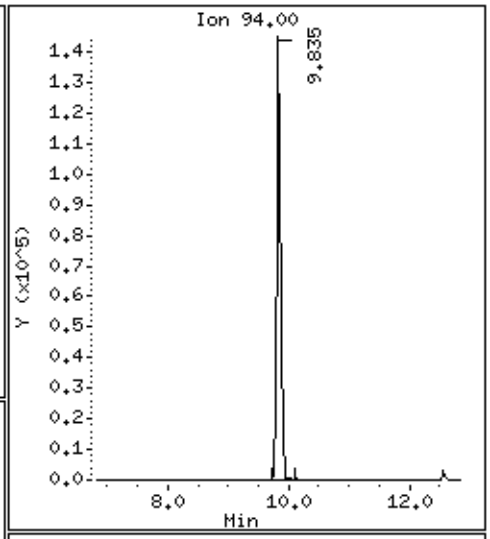
Column phase: RTx-624

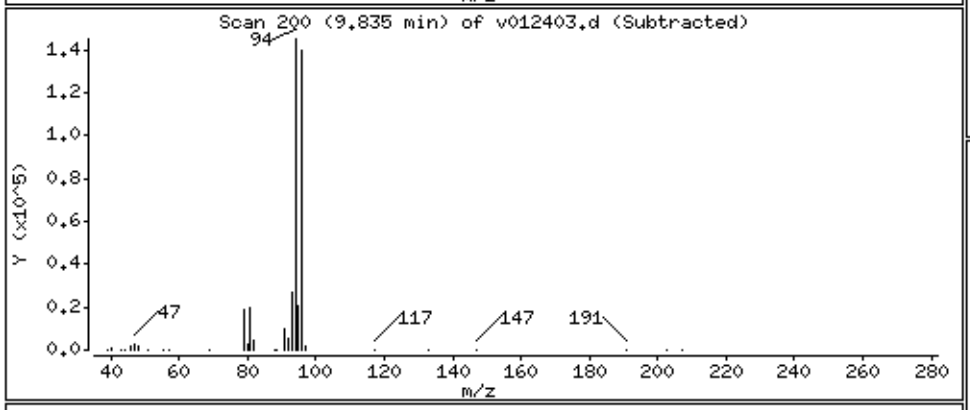
Column diameter: 0.32

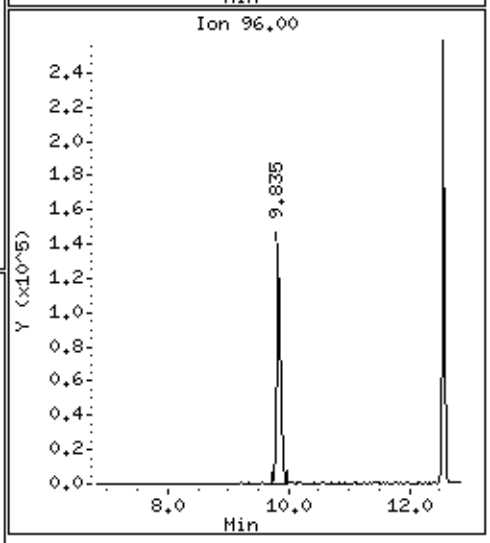
12 Bromomethane

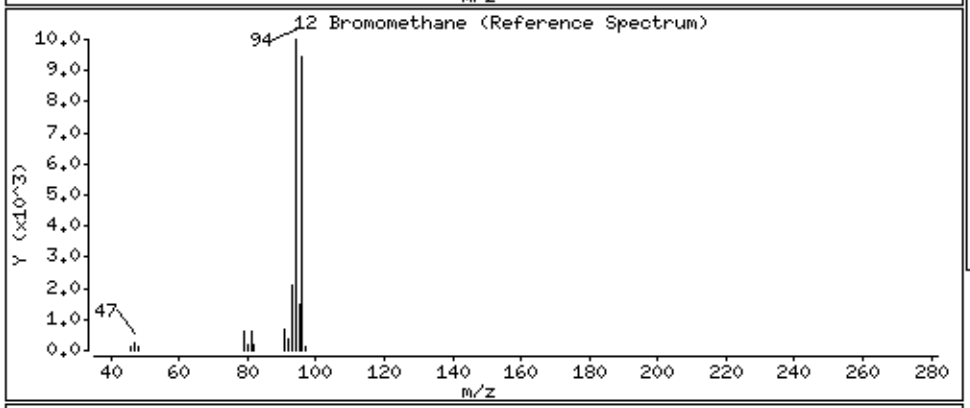
Concentration: 10.079 PPBV

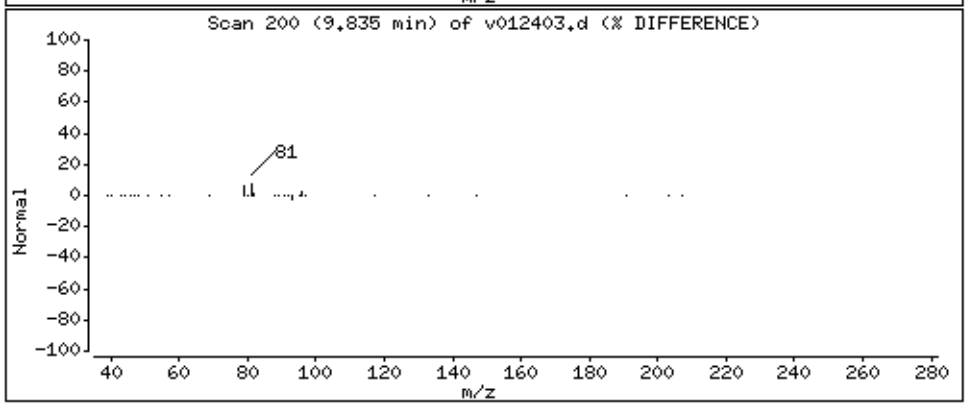












Data File: /chem/msdv.i/24Jan2015.b/v012403.d

Date : 24-JAN-2015 08:04

Client ID: ICV

Instrument: msdv.i

Sample Info: 50mL #2687-186

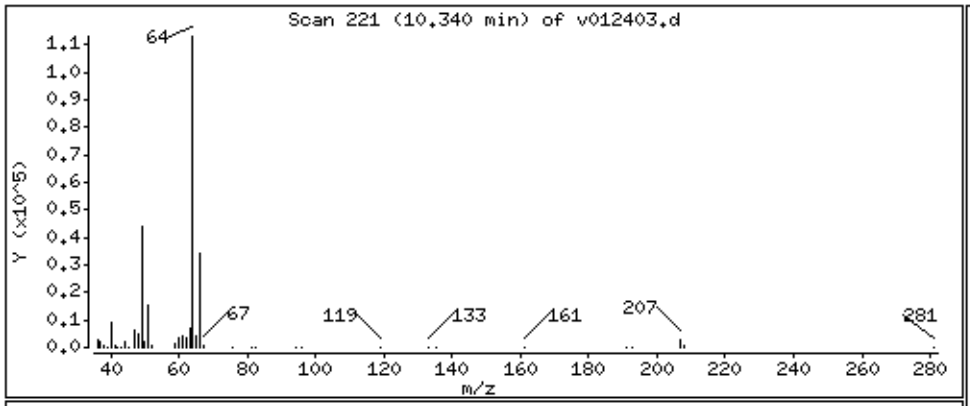
Operator: sn

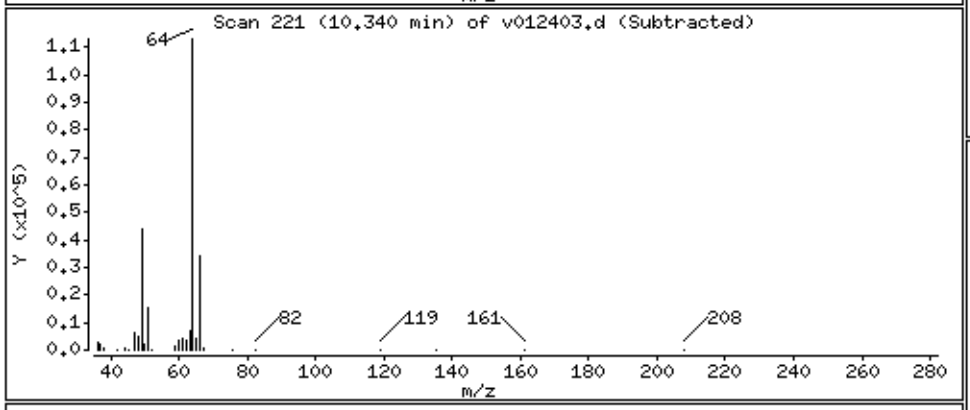
Column phase: RTx-624

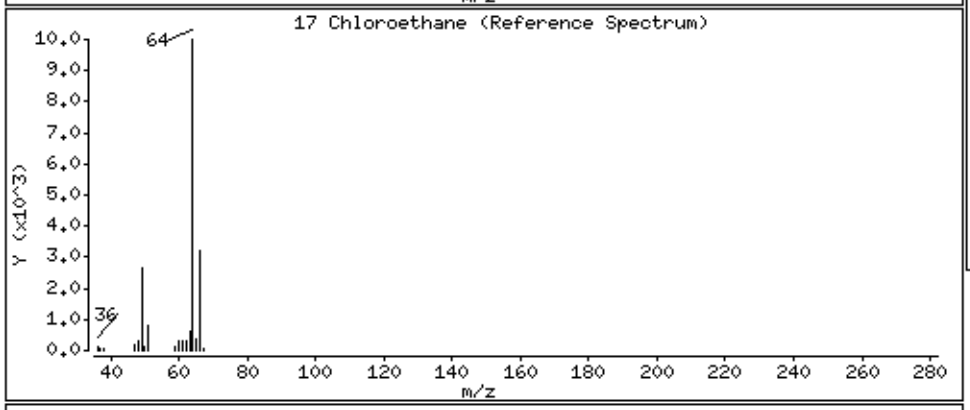
Column diameter: 0.32

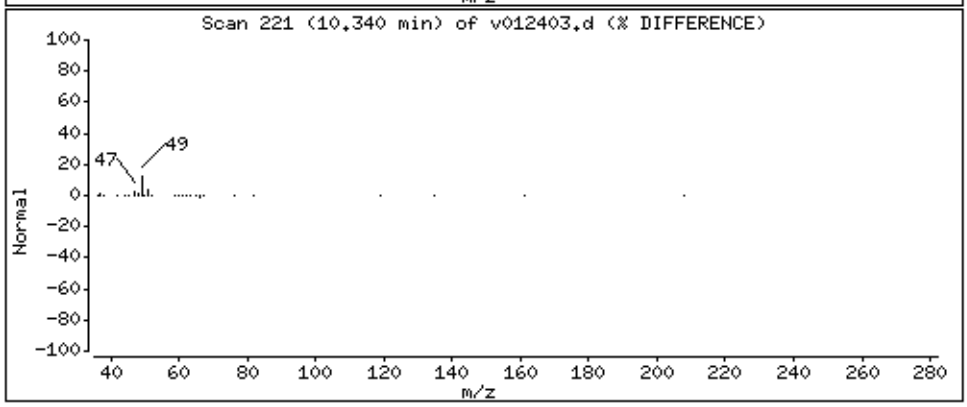
17 Chloroethane

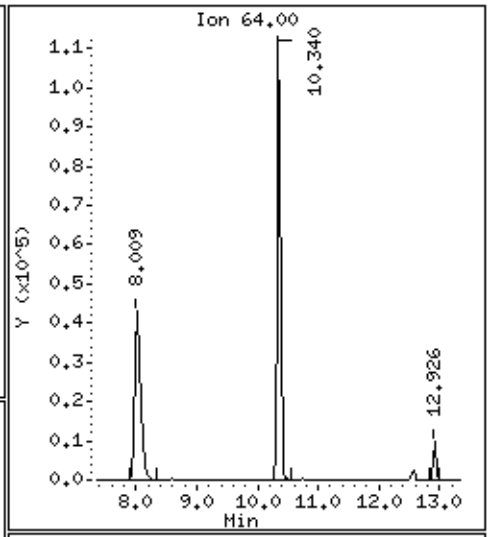
Concentration: 10.184 PPBV

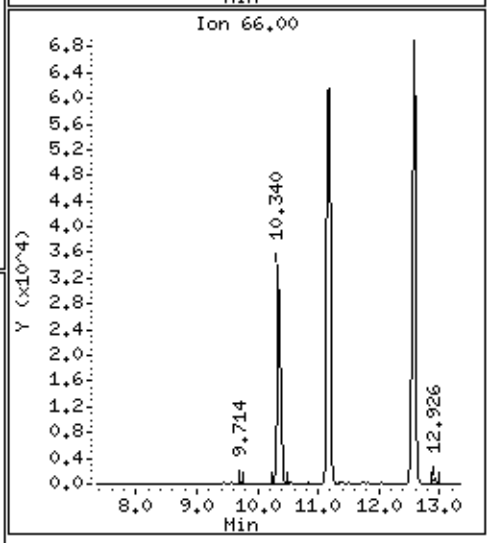












Data File: /chem/msdv.i/24Jan2015.b/v012403.d

Date : 24-JAN-2015 08:04

Client ID: ICV

Instrument: msdv.i

Sample Info: 50mL #2687-186

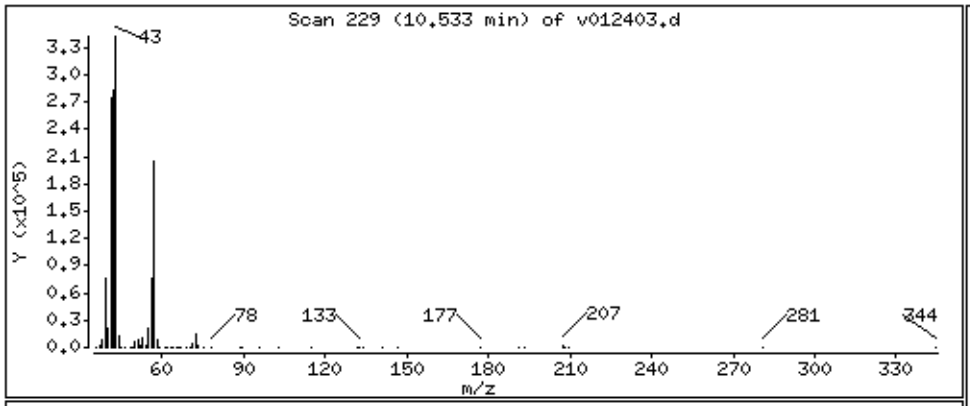
Operator: sn

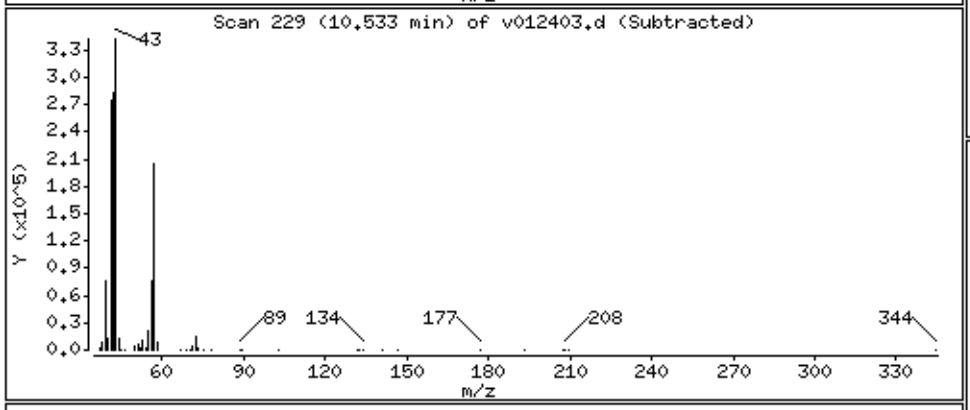
Column phase: RTx-624

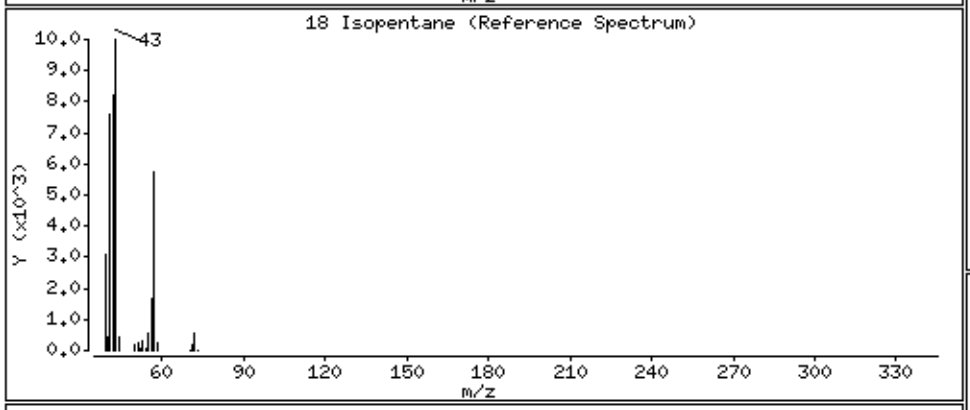
Column diameter: 0.32

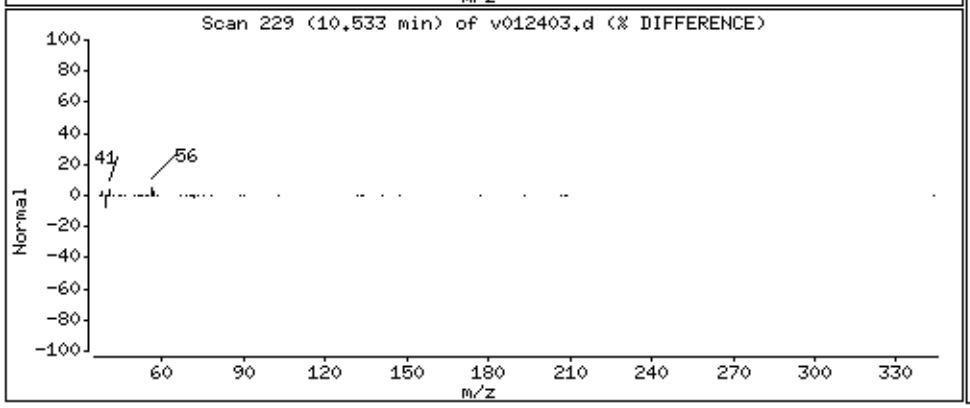
18 Isopentane

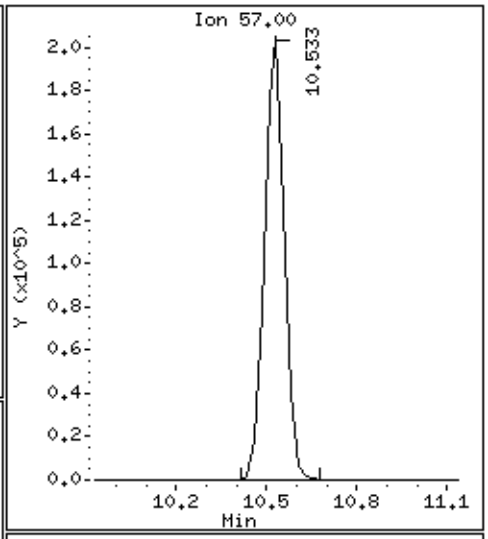
Concentration: 9.757 PPBV

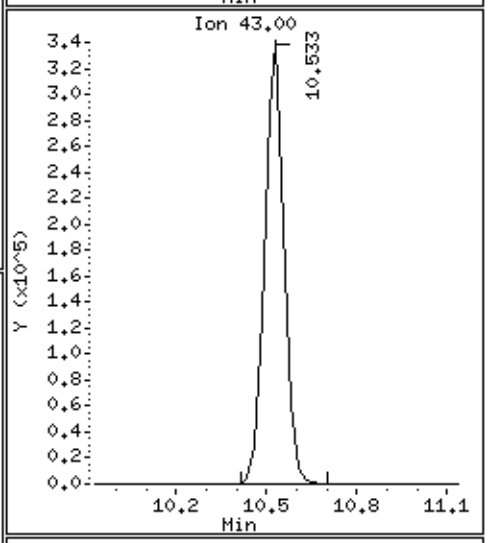


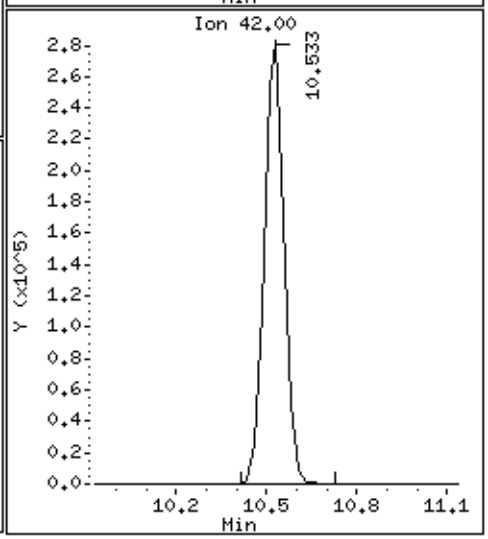












Data File: /chem/msdv.i/24Jan2015.b/v012403.d

Date : 24-JAN-2015 08:04

Client ID: ICV

Instrument: msdv.i

Sample Info: 50mL #2687-186

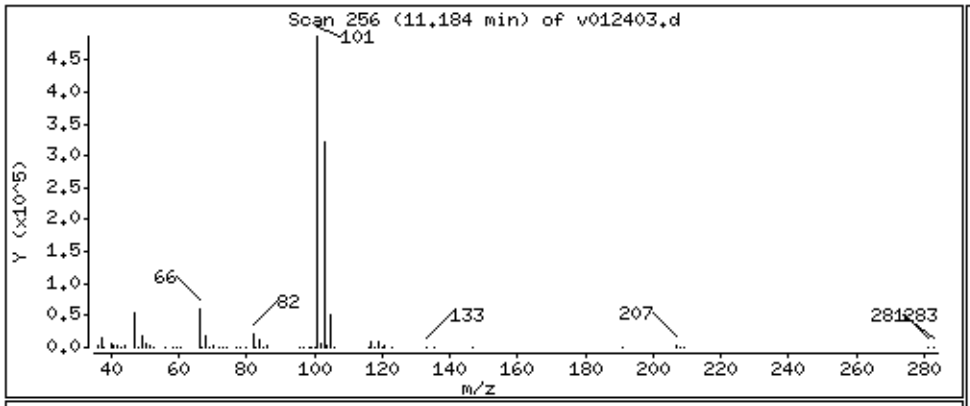
Operator: sn

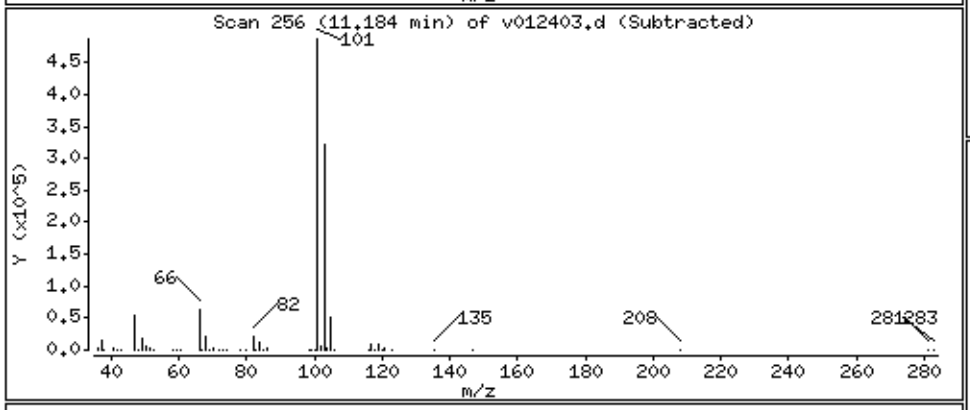
Column phase: RTx-624

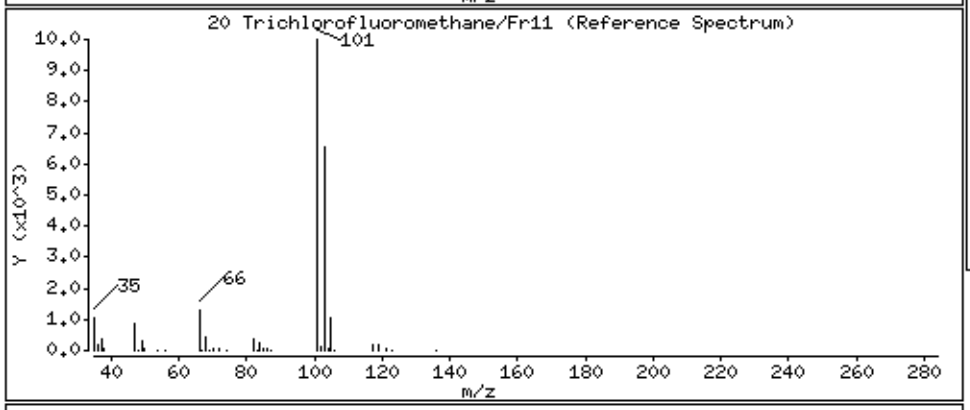
Column diameter: 0.32

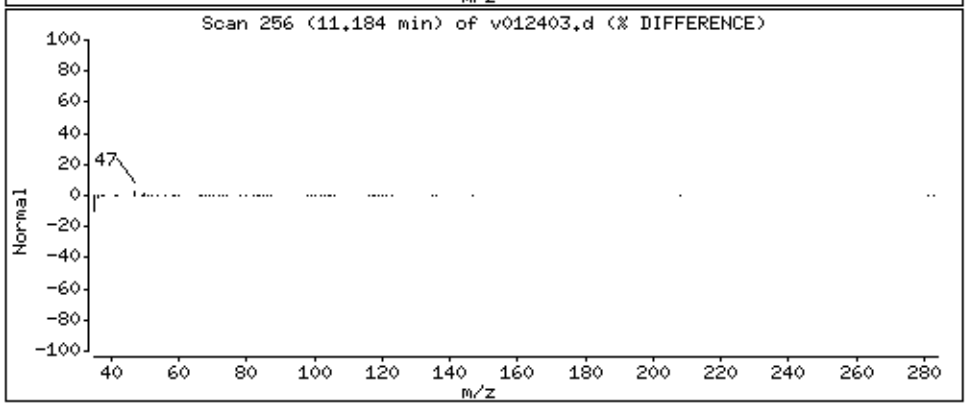
20 Trichlorofluoromethane/Fr11

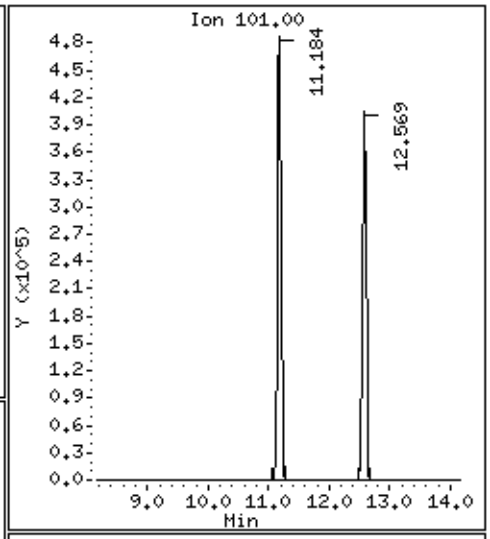
Concentration: 9.304 PPBV

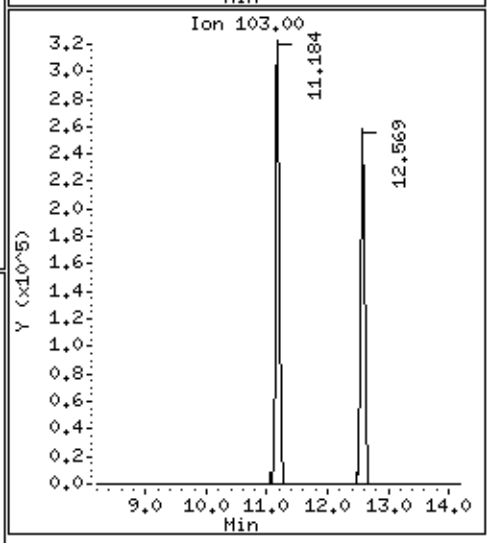












Data File: /chem/msdv.i/24Jan2015.b/v012403.d

Date : 24-JAN-2015 08:04

Client ID: ICV

Instrument: msdv.i

Sample Info: 50mL #2687-186

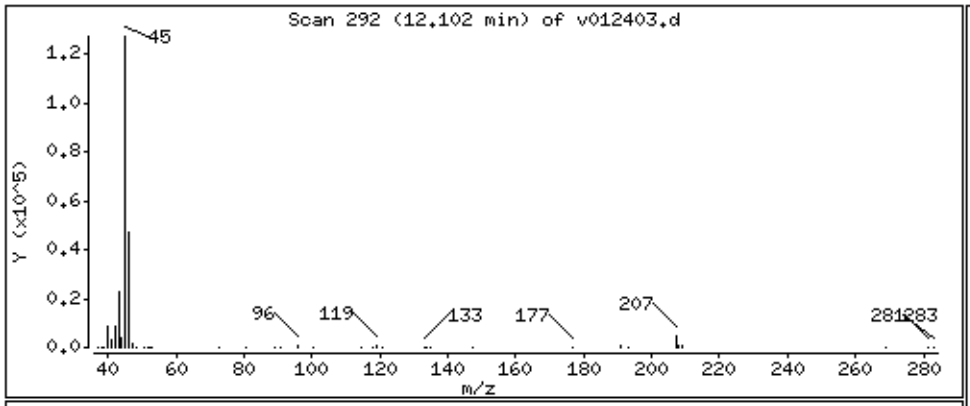
Operator: sn

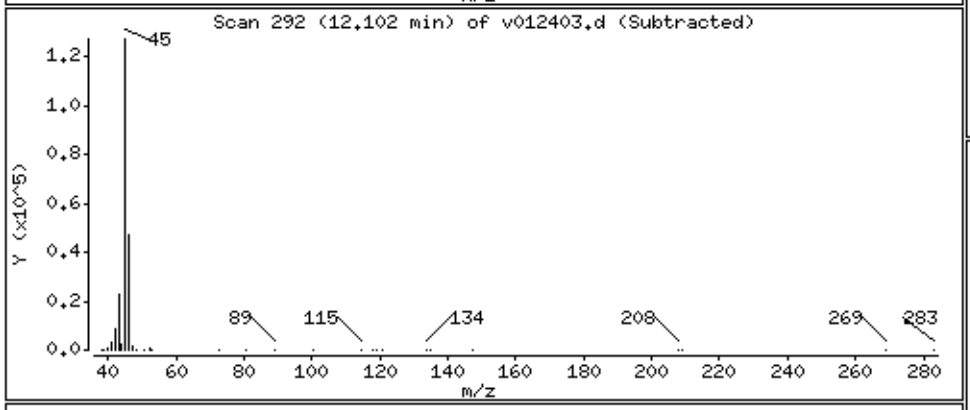
Column phase: RTx-624

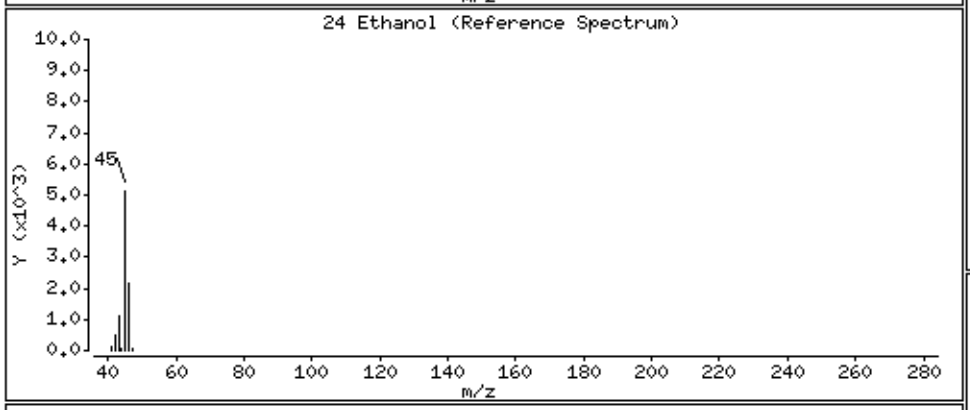
Column diameter: 0.32

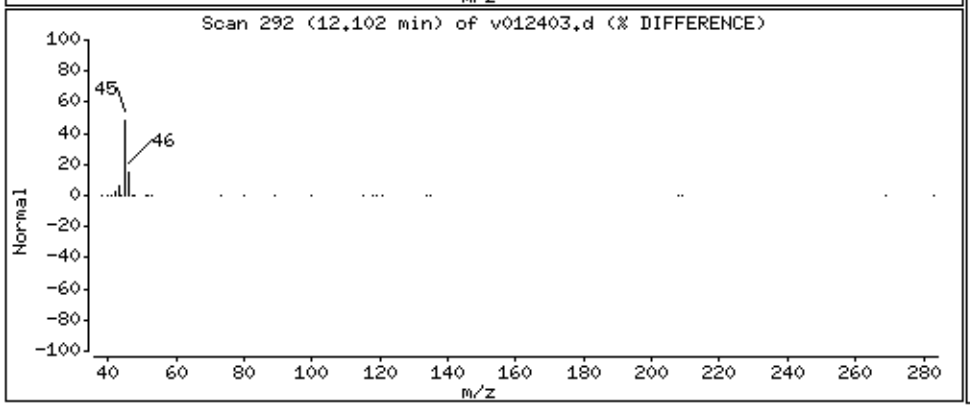
24 Ethanol

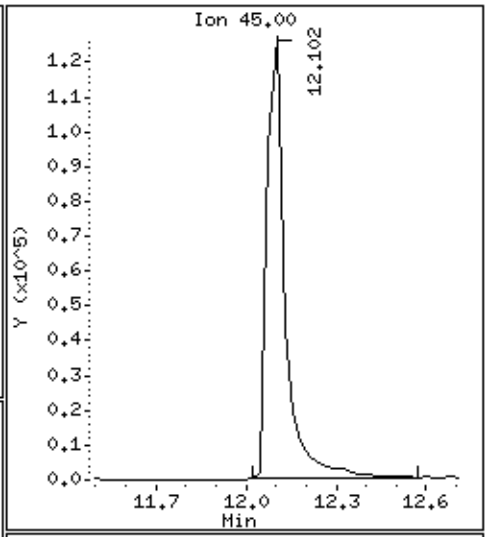
Concentration: 11.458 PPBV

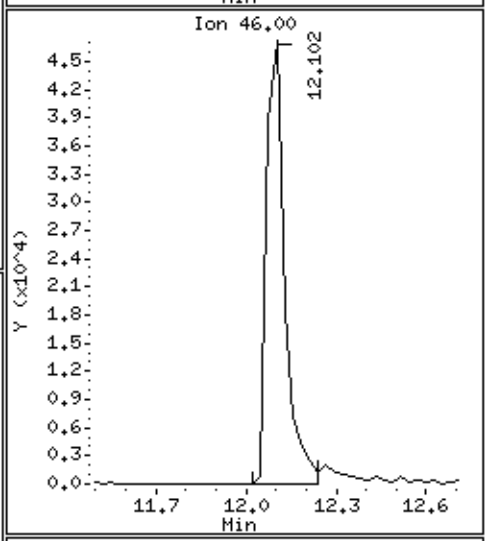


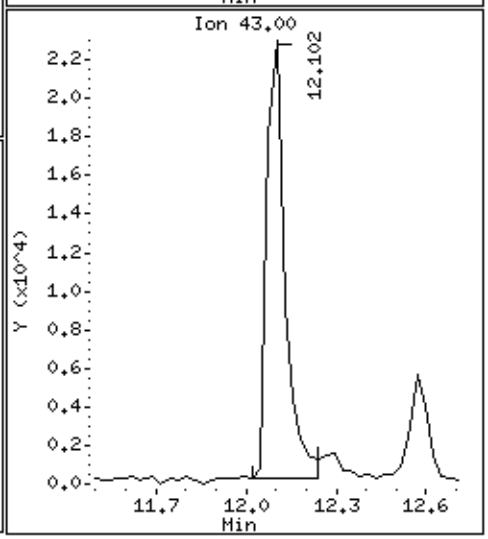












Data File: /chem/msdv.i/24Jan2015.b/v012403.d

Date : 24-JAN-2015 08:04

Client ID: ICV

Instrument: msdv.i

Sample Info: 50mL #2687-186

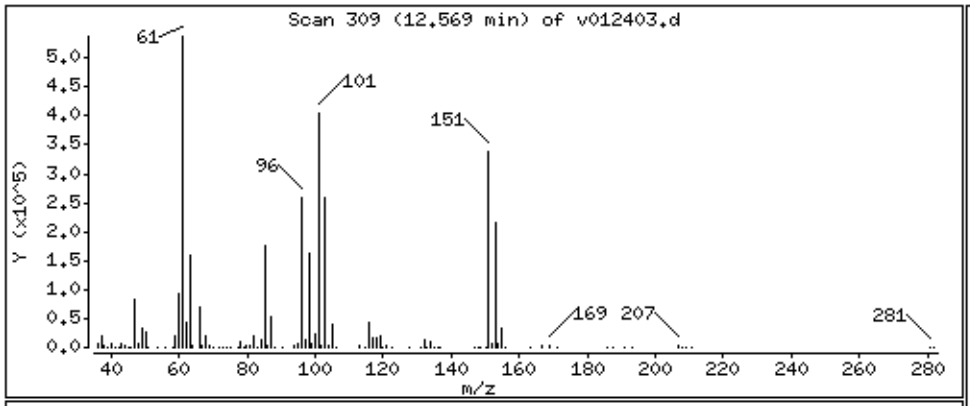
Operator: sn

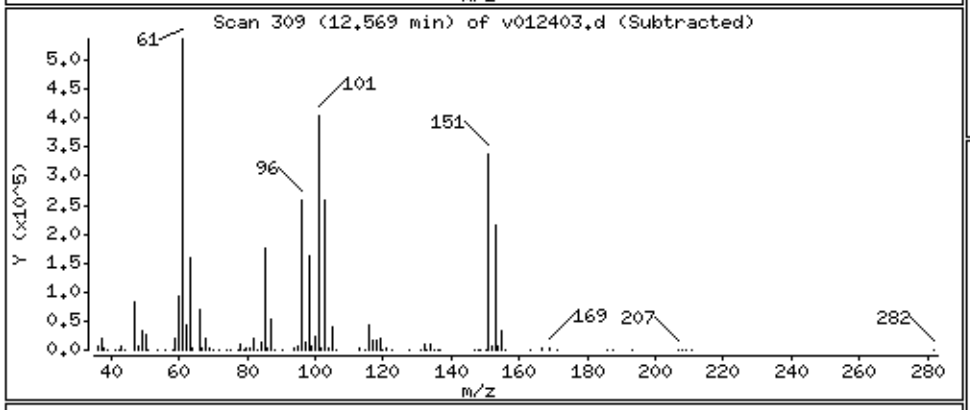
Column phase: RTx-624

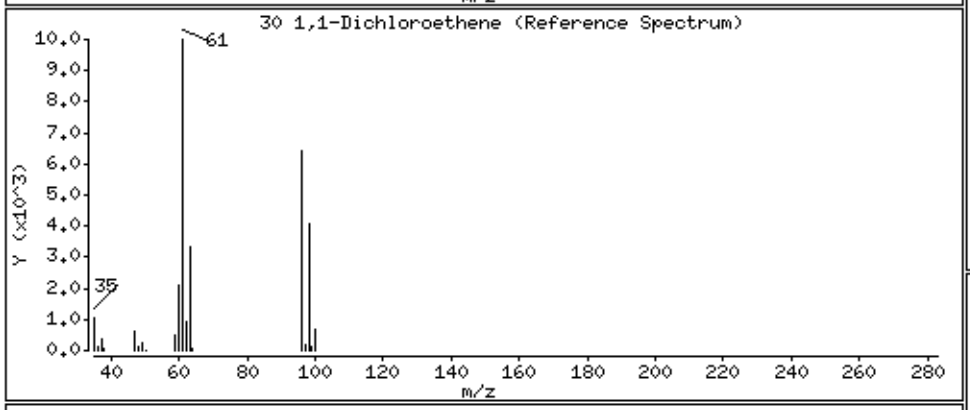
Column diameter: 0.32

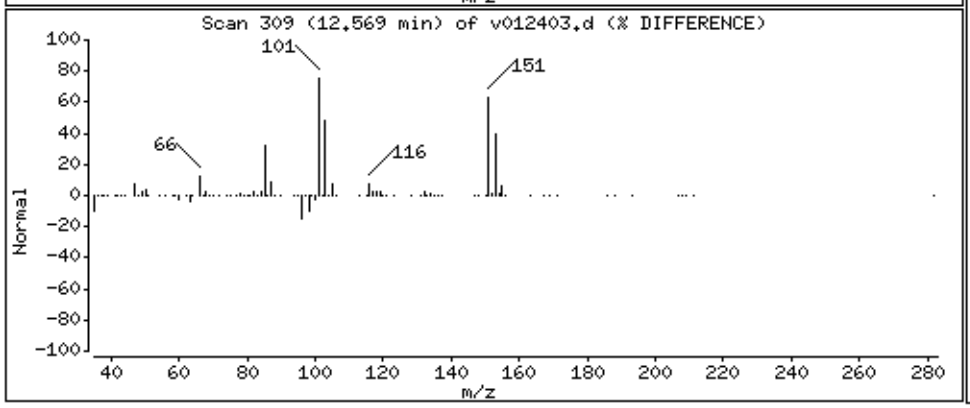
30 1,1-Dichloroethene

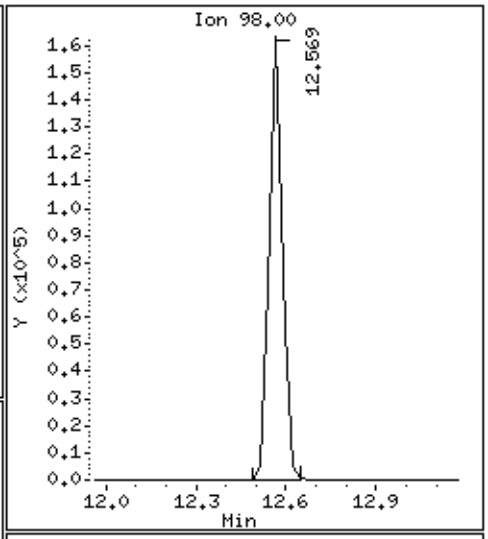
Concentration: 9.438 PPBV

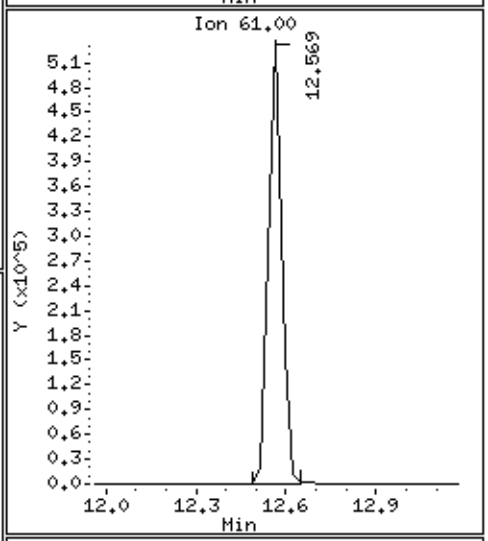


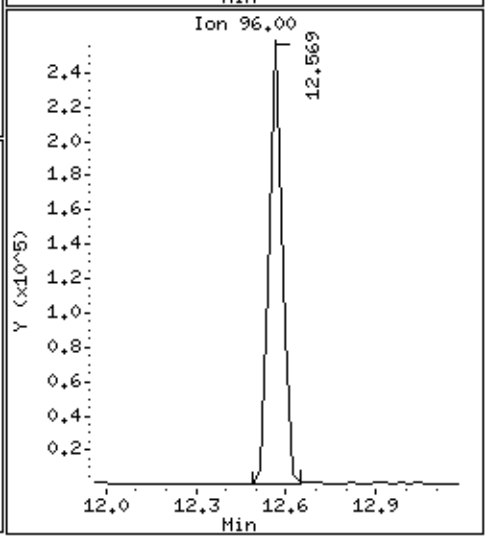












Data File: /chem/msdv.i/24Jan2015.b/v012403.d

Date : 24-JAN-2015 08:04

Client ID: ICV

Instrument: msdv.i

Sample Info: 50mL #2687-186

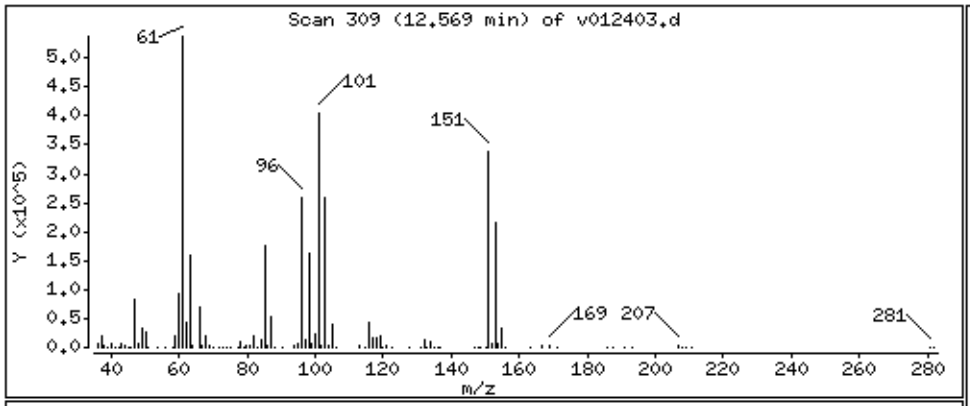
Operator: sn

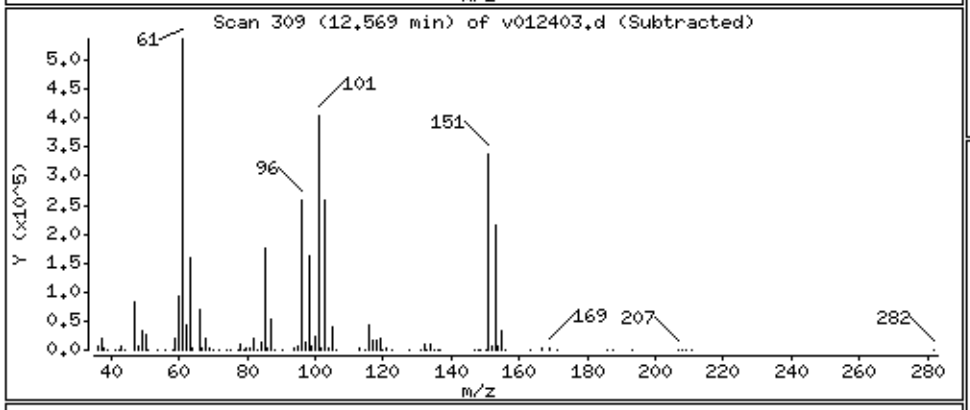
Column phase: RTx-624

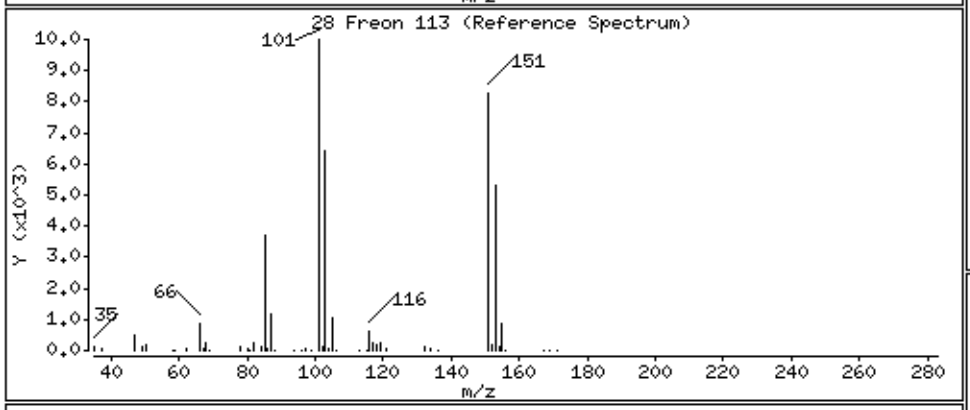
Column diameter: 0.32

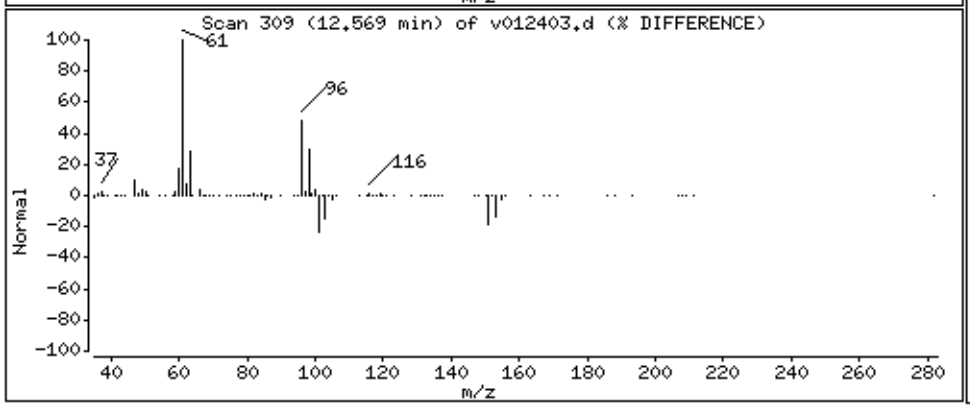
28 Freon 113

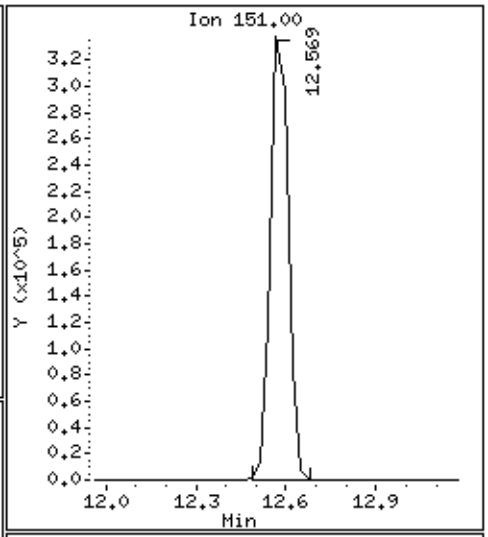
Concentration: 9.060 PPBV

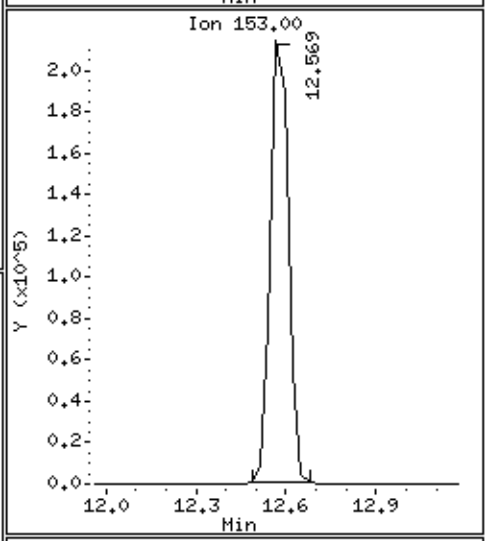


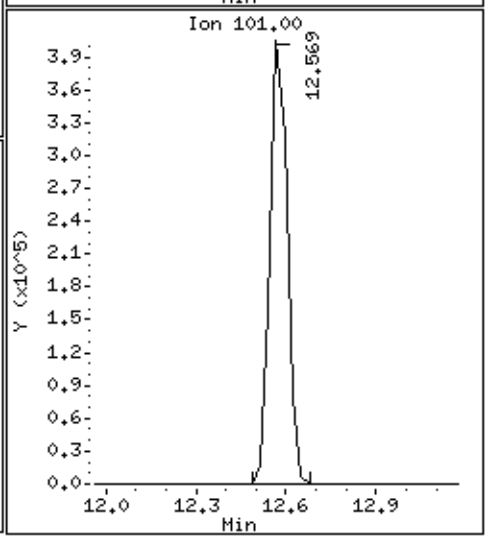












Data File: /chem/msdv.i/24Jan2015.b/v012403.d

Date : 24-JAN-2015 08:04

Client ID: ICV

Instrument: msdv.i

Sample Info: 50mL #2687-186

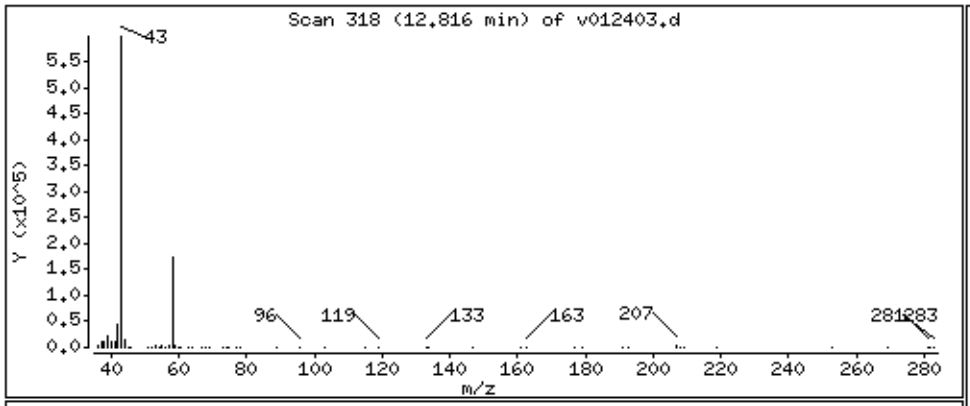
Operator: sn

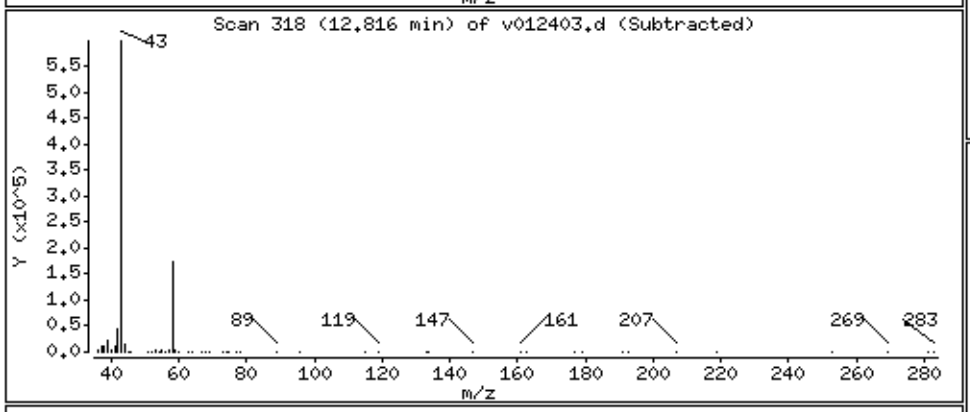
Column phase: RTx-624

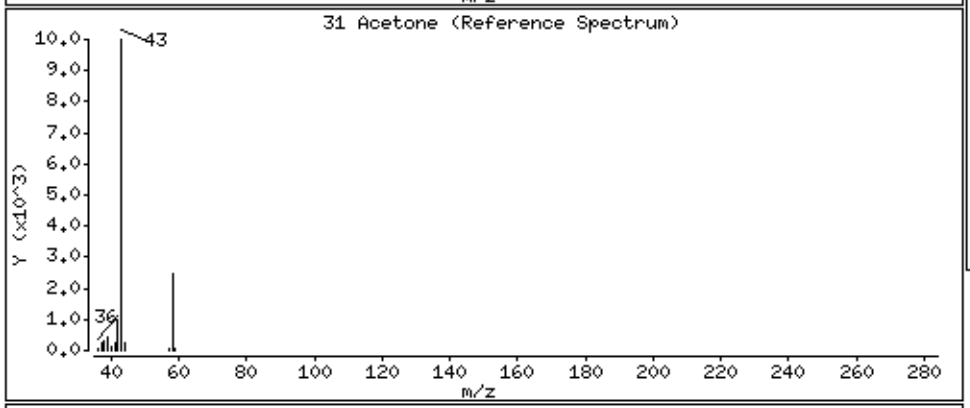
Column diameter: 0.32

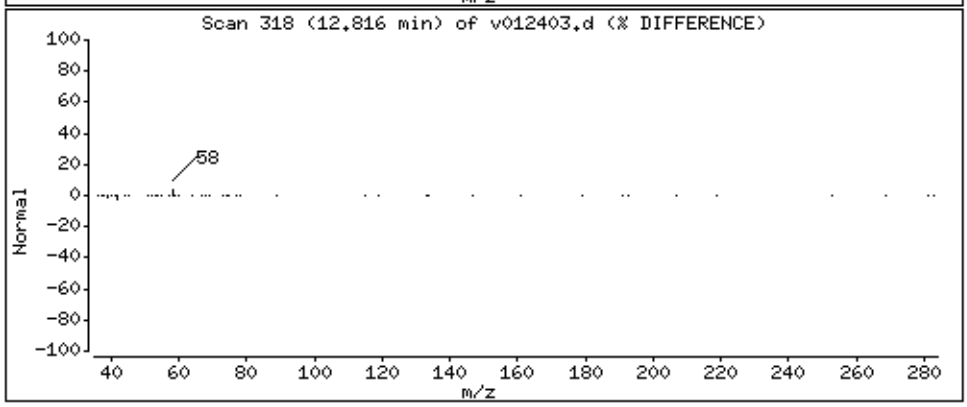
31 Acetone

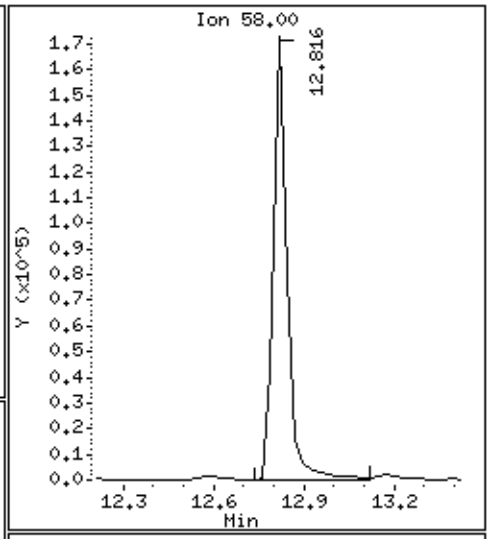
Concentration: 9.256 PPBV

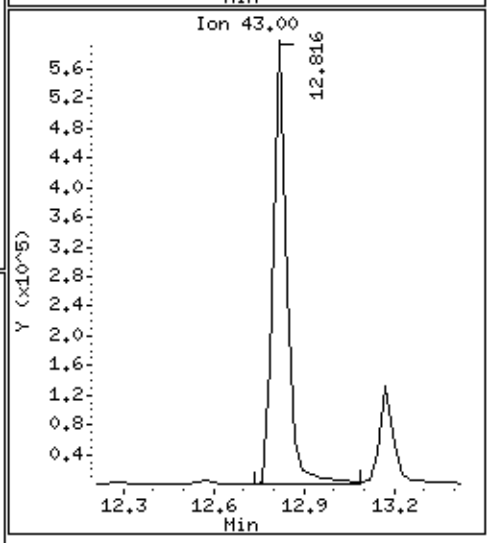












Data File: /chem/msdv.i/24Jan2015.b/v012403.d

Date : 24-JAN-2015 08:04

Client ID: ICV

Instrument: msdv.i

Sample Info: 50mL #2687-186

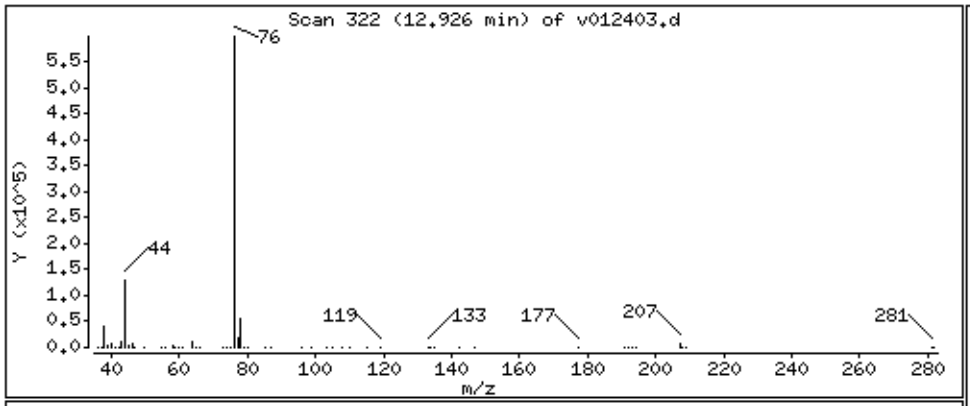
Operator: sn

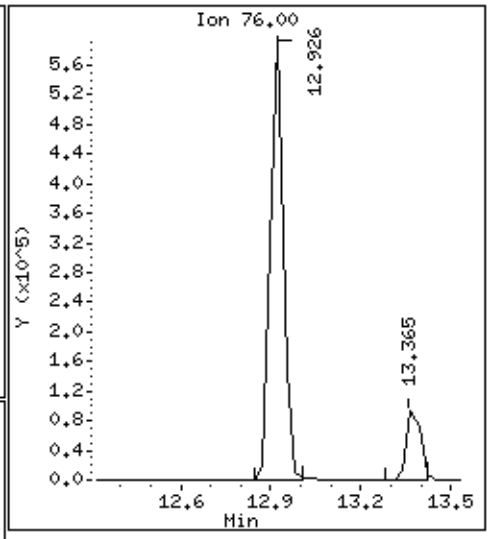
Column phase: RTx-624

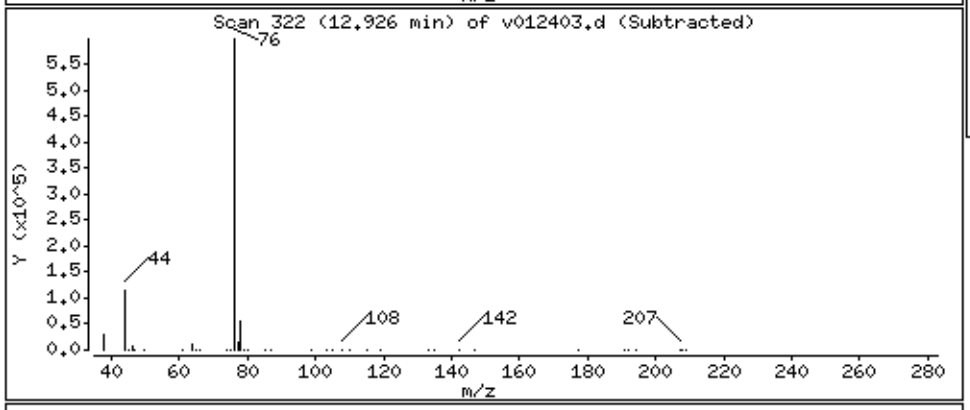
Column diameter: 0.32

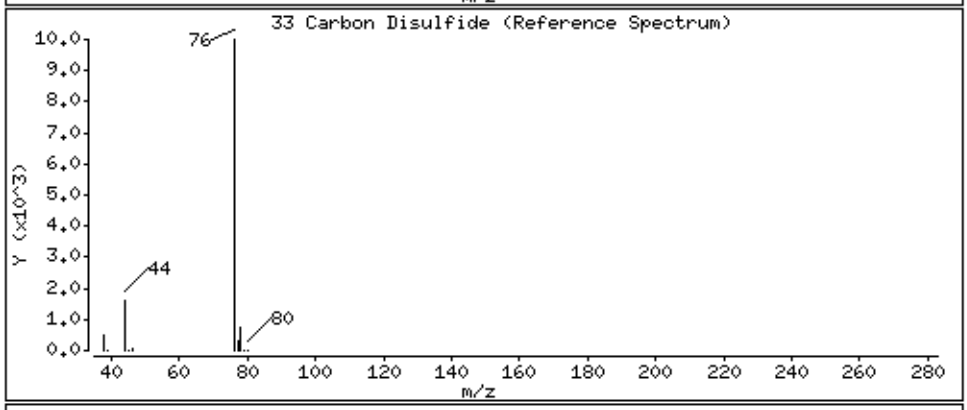
33 Carbon Disulfide

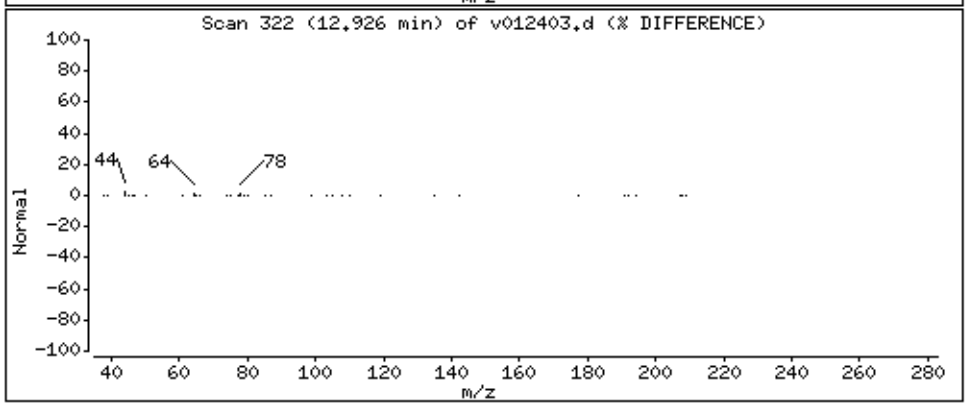
Concentration: 8.329 PPBV











Data File: /chem/msdv.i/24Jan2015.b/v012403.d

Date : 24-JAN-2015 08:04

Client ID: ICV

Instrument: msdv.i

Sample Info: 50mL #2687-186

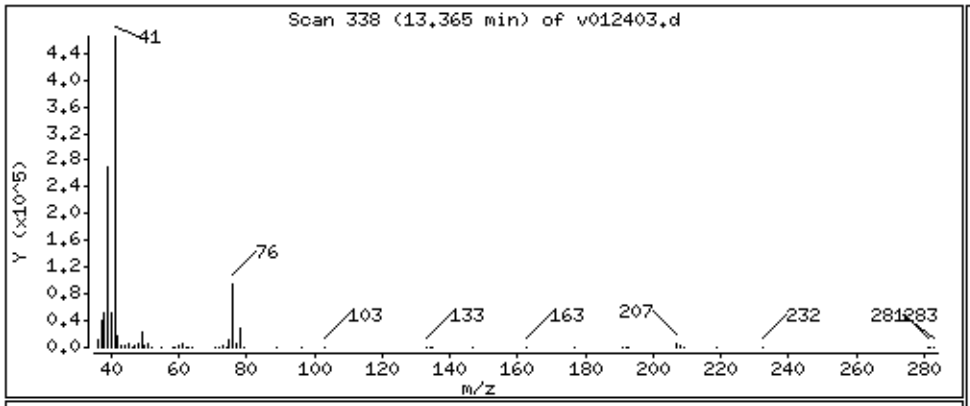
Operator: sn

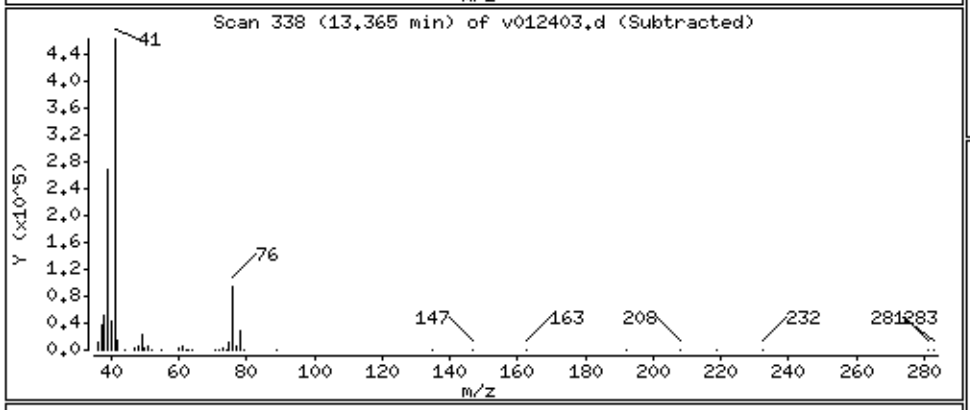
Column phase: RTx-624

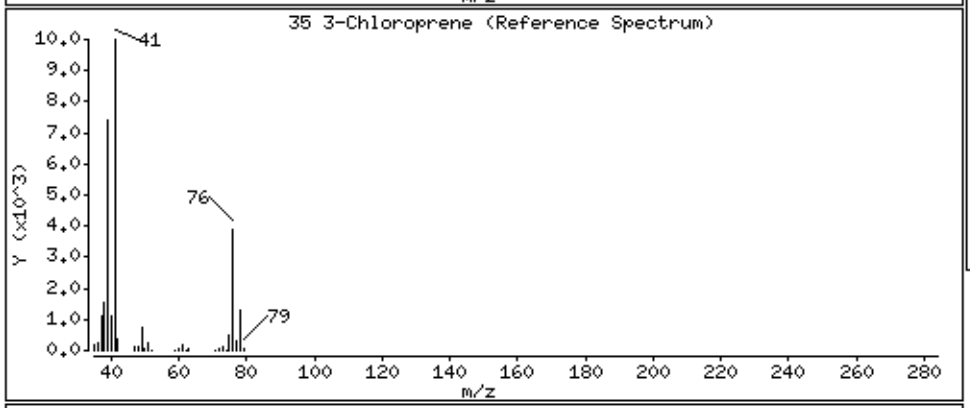
Column diameter: 0.32

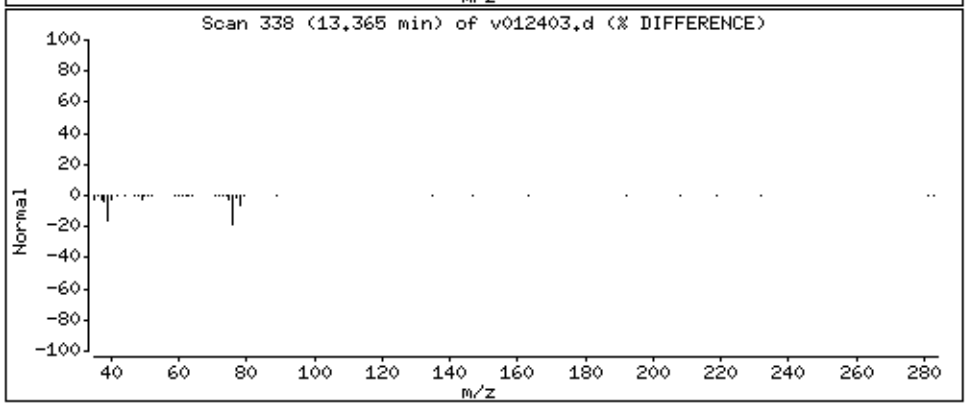
35 3-Chloroprene

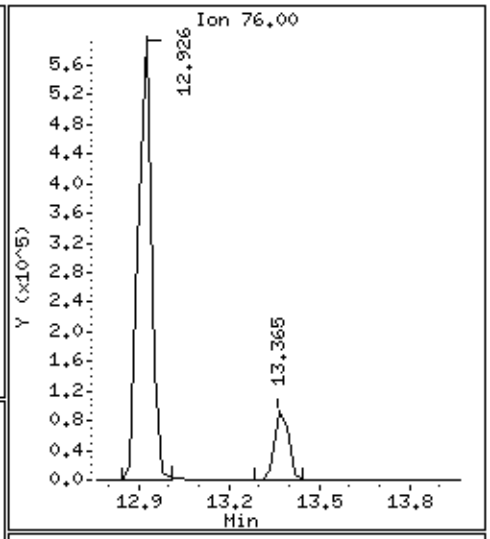
Concentration: 9.379 PPBV

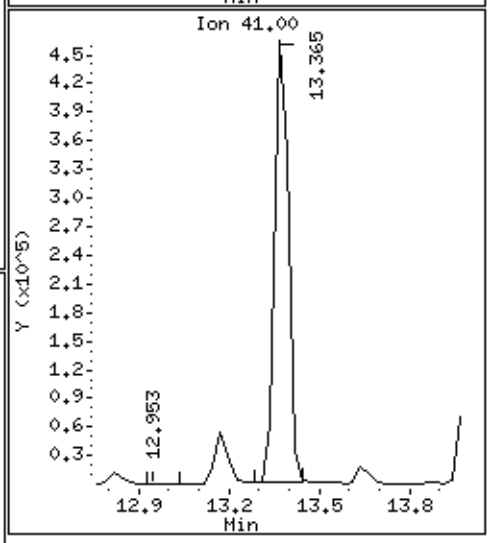












Data File: /chem/msdv.i/24Jan2015.b/v012403.d

Date : 24-JAN-2015 08:04

Client ID: ICV

Instrument: msdv.i

Sample Info: 50mL #2687-186

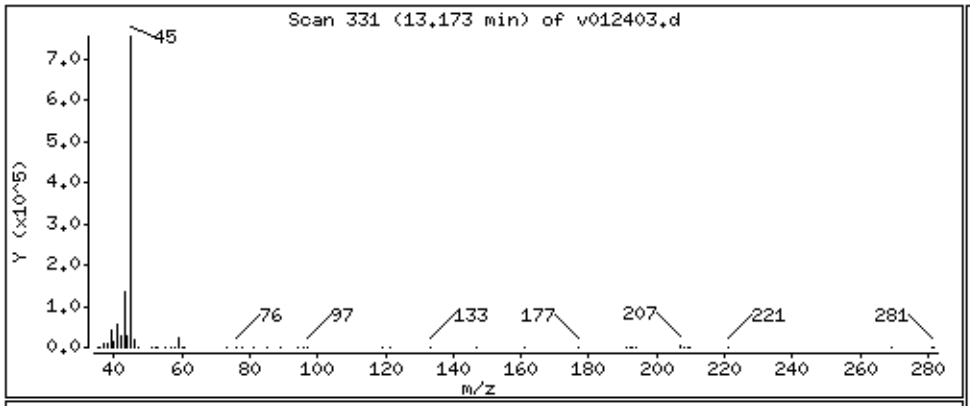
Operator: sn

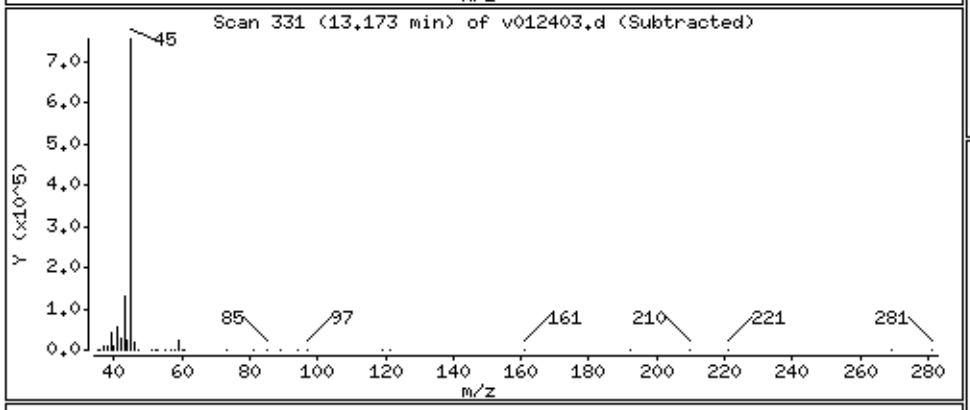
Column phase: RTx-624

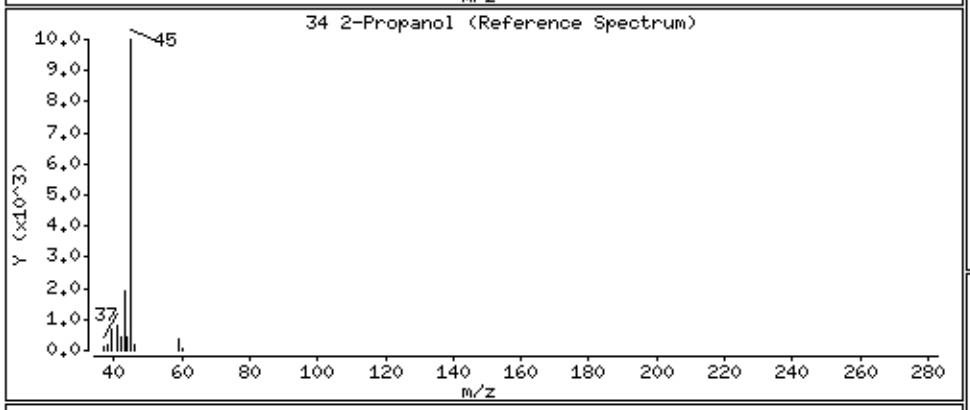
Column diameter: 0.32

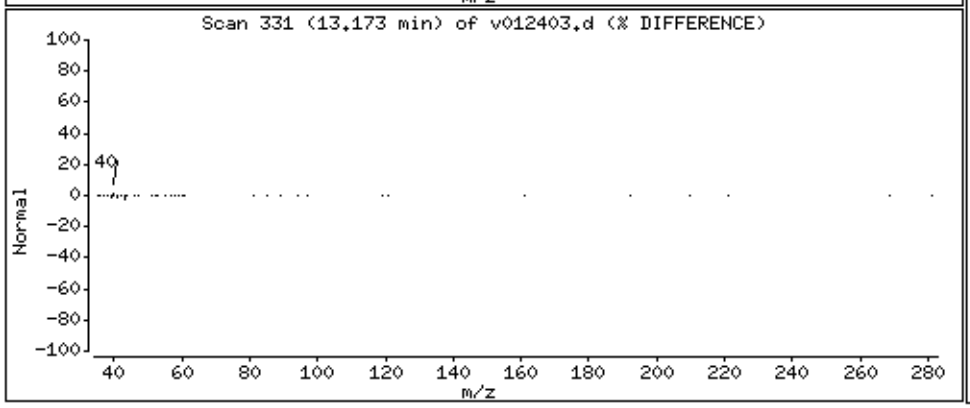
34 2-Propanol

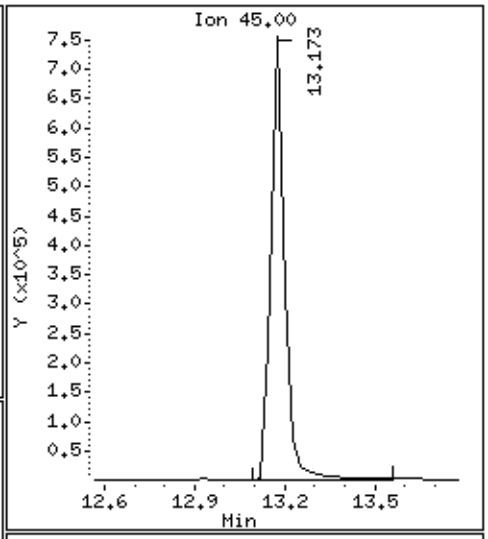
Concentration: 10.230 PPBV

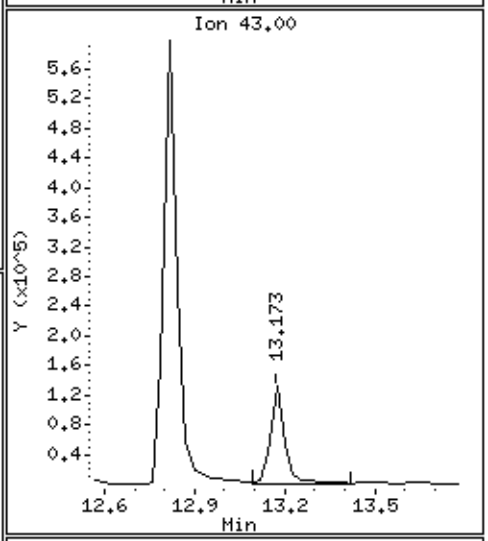


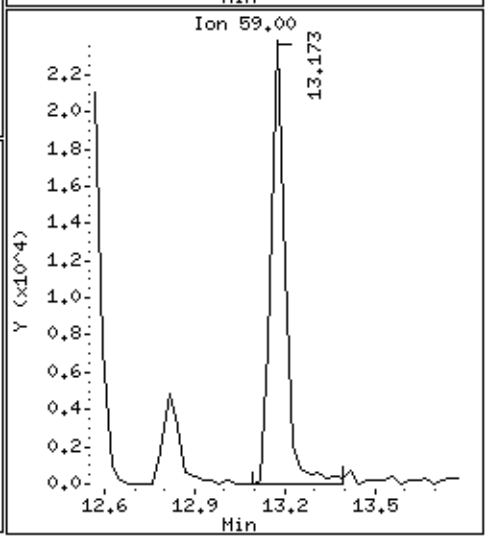












Data File: /chem/msdv.i/24Jan2015.b/v012403.d

Date : 24-JAN-2015 08:04

Client ID: ICV

Instrument: msdv.i

Sample Info: 50mL #2687-186

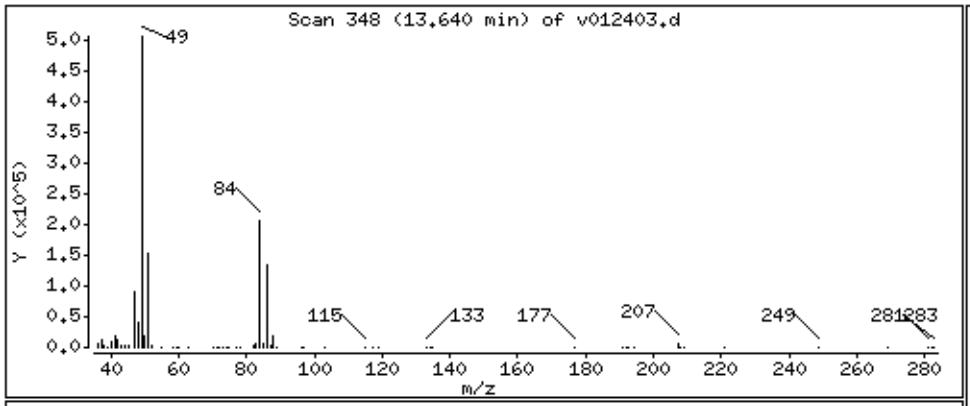
Operator: sn

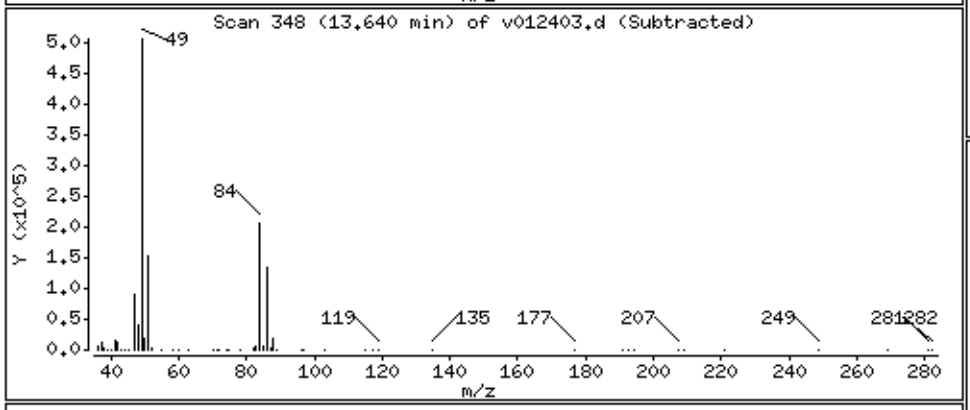
Column phase: RTx-624

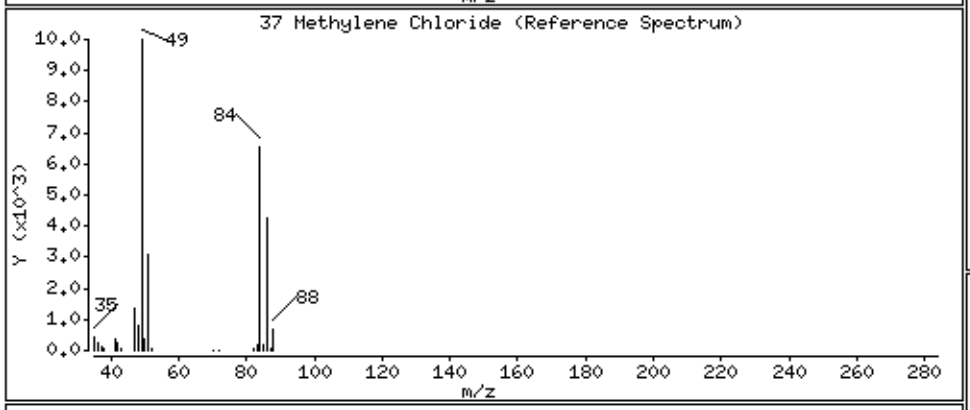
Column diameter: 0.32

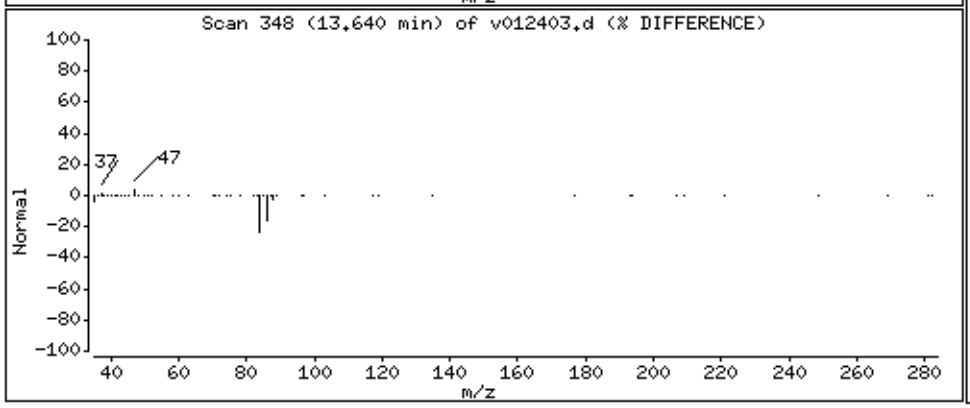
37 Methylene Chloride

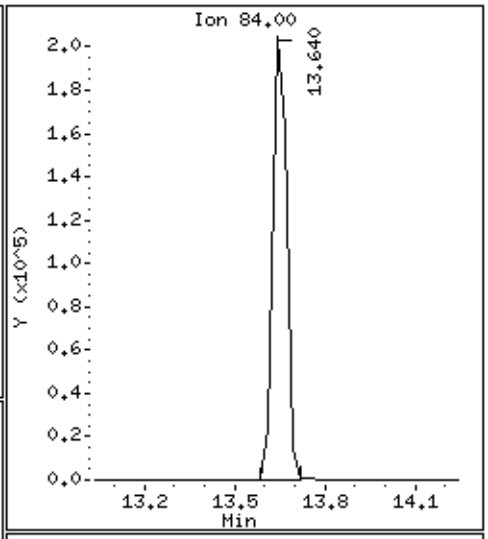
Concentration: 9.145 PPBV

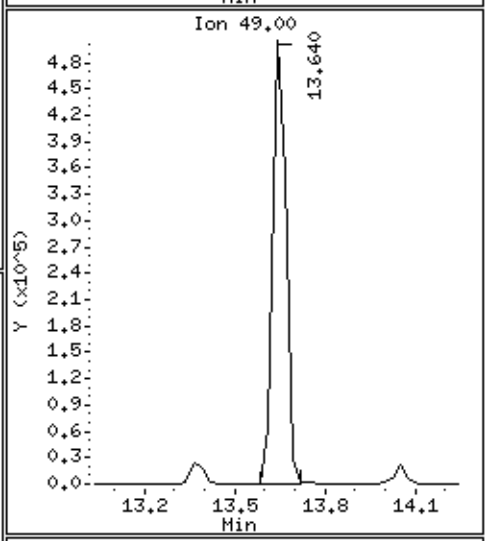


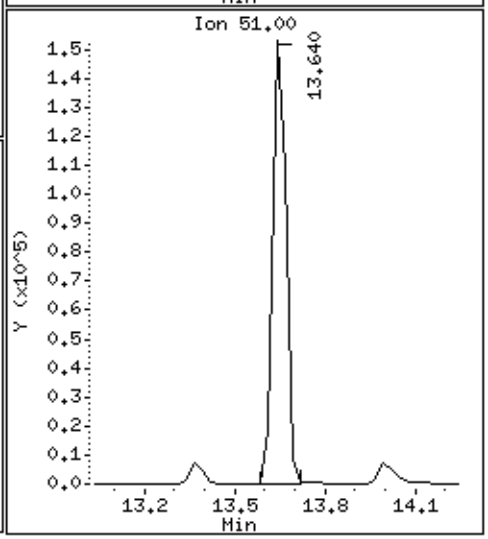












Data File: /chem/msdv.i/24Jan2015.b/v012403.d

Date : 24-JAN-2015 08:04

Client ID: ICV

Instrument: msdv.i

Sample Info: 50mL #2687-186

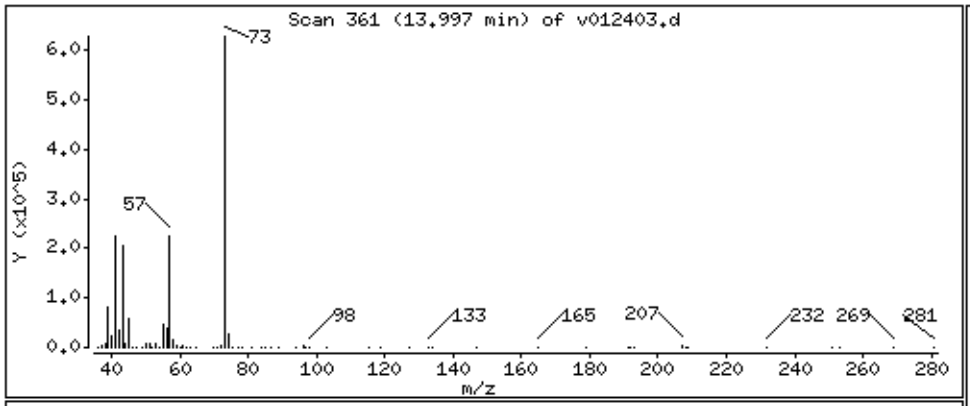
Operator: sn

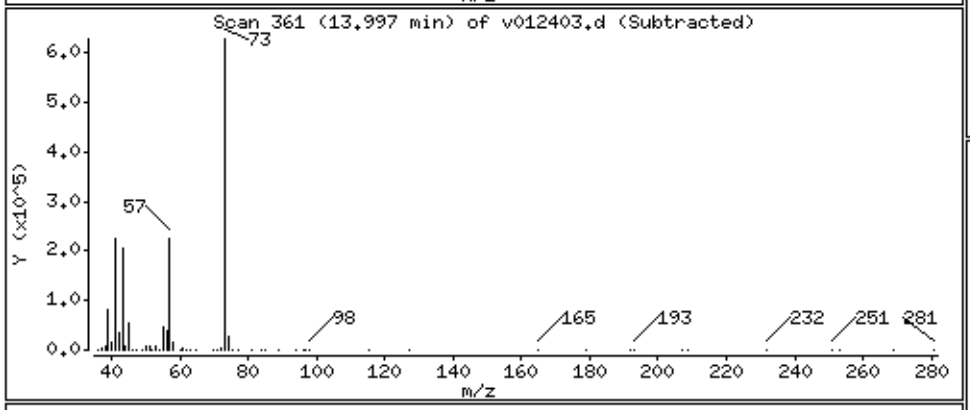
Column phase: RTx-624

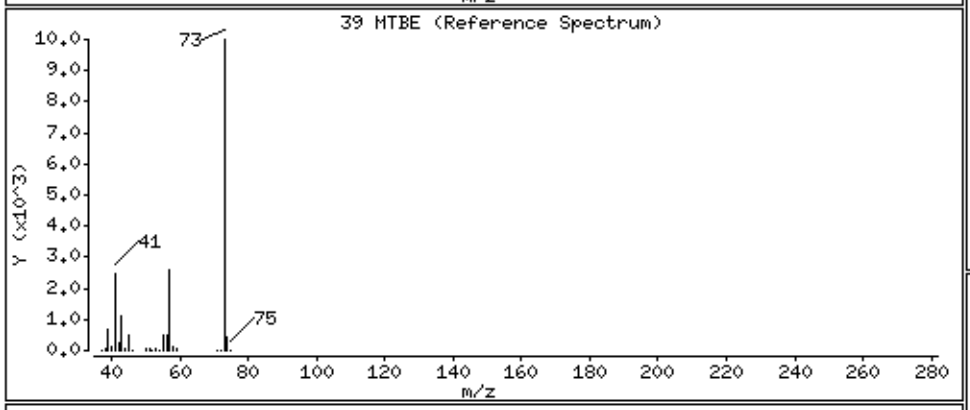
Column diameter: 0.32

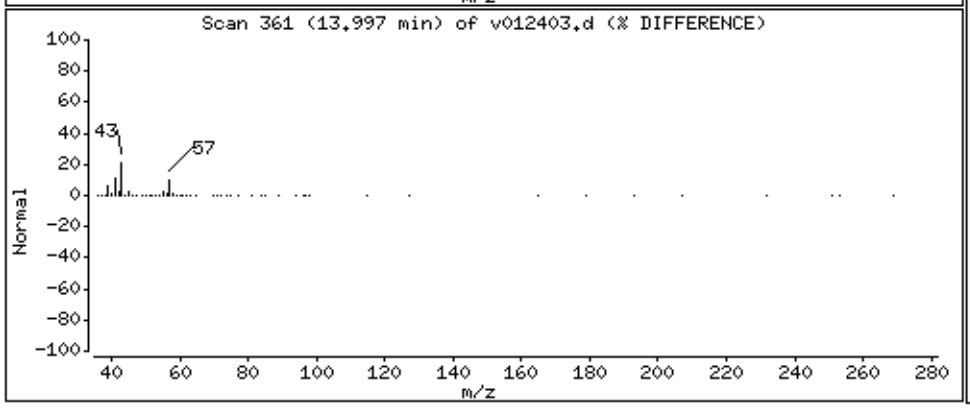
39 MTBE

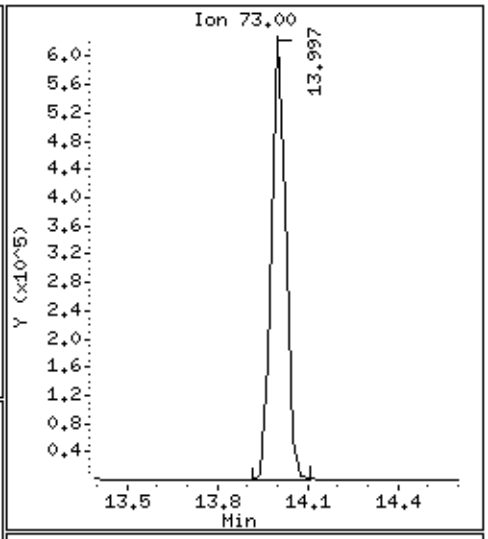
Concentration: 9.130 PPBV

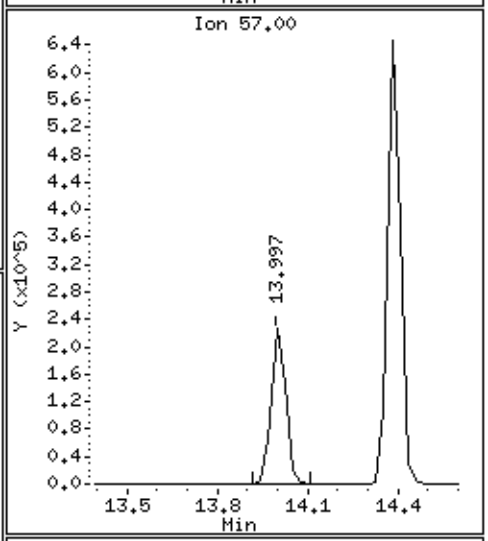


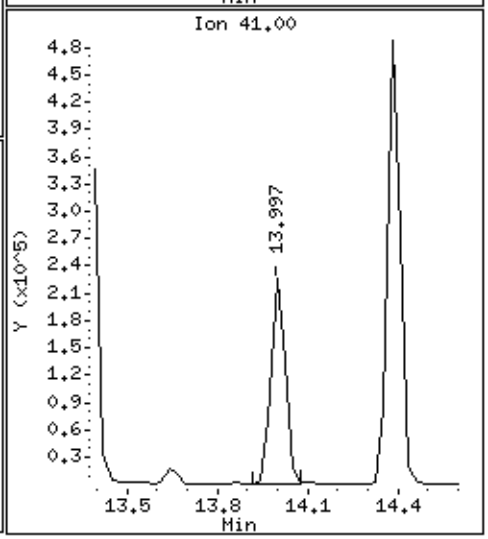












Data File: /chem/msdv.i/24Jan2015.b/v012403.d

Date : 24-JAN-2015 08:04

Client ID: ICV

Instrument: msdv.i

Sample Info: 50mL #2687-186

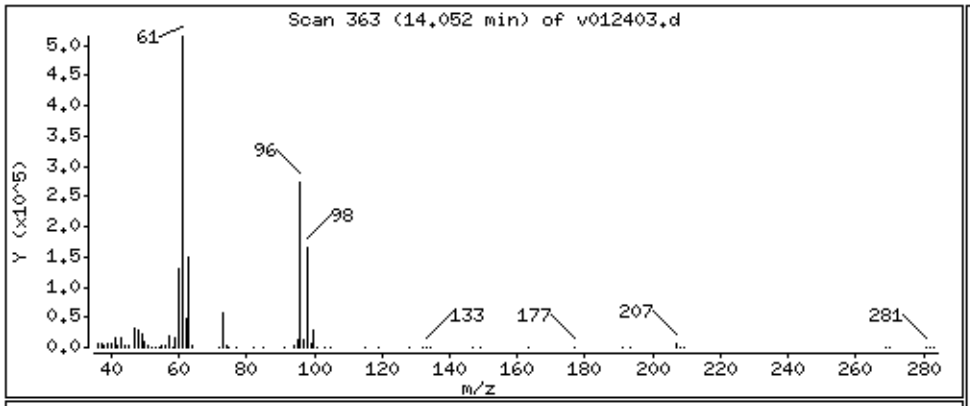
Operator: sn

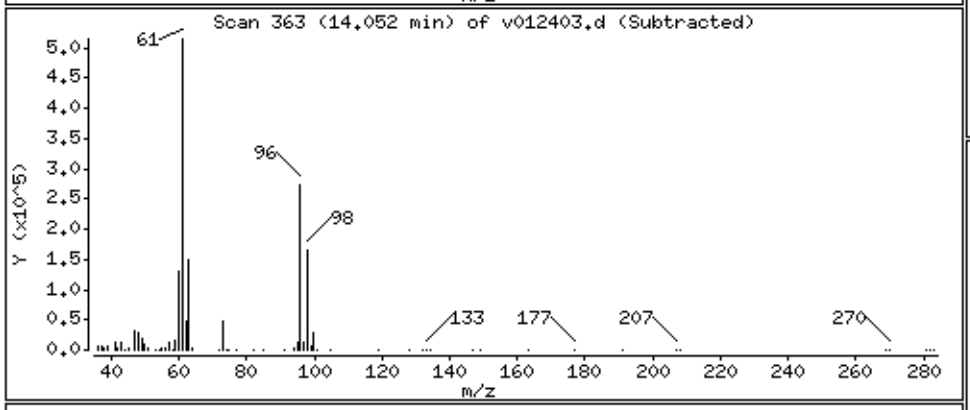
Column phase: RTx-624

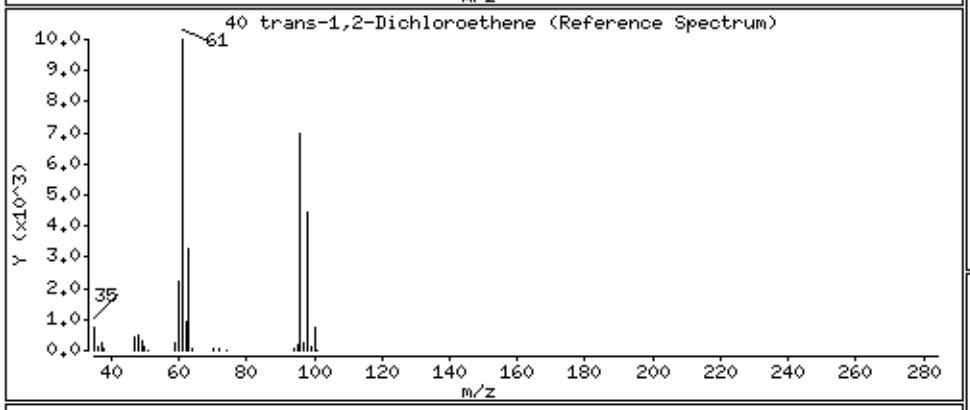
Column diameter: 0.32

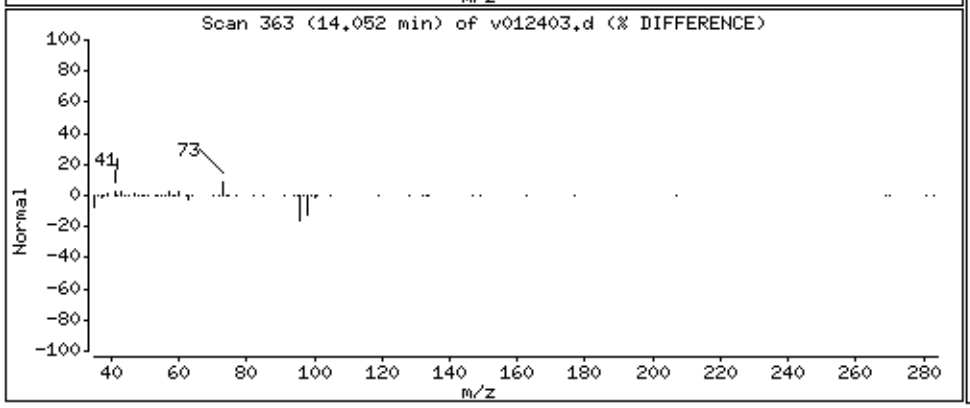
40 trans-1,2-Dichloroethene

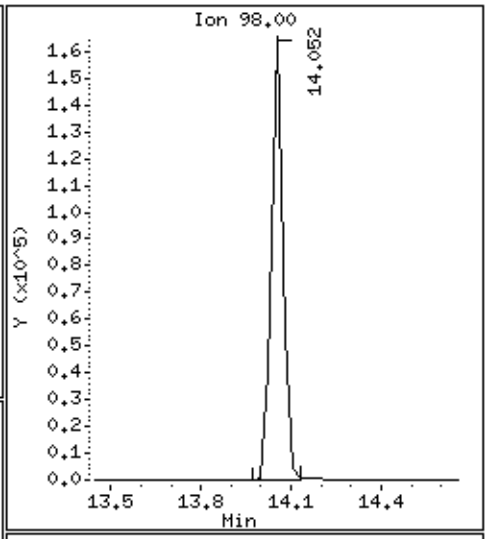
Concentration: 8.140 PPBV

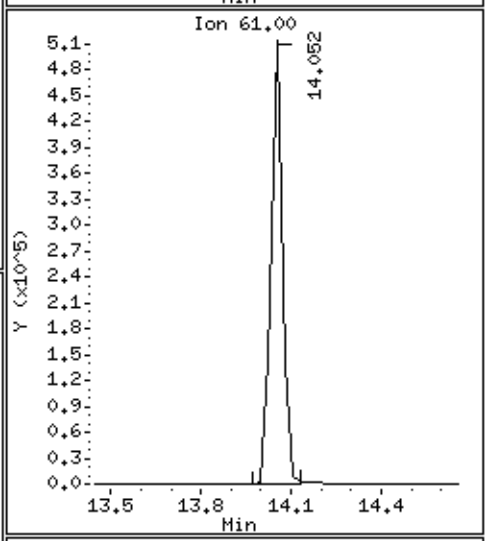


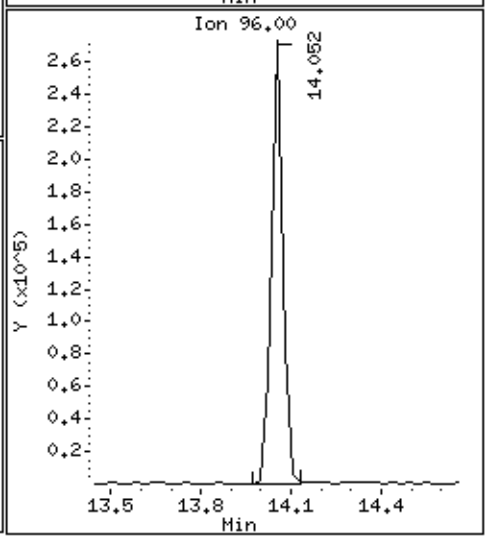












Data File: /chem/msdv.i/24Jan2015.b/v012403.d

Date : 24-JAN-2015 08:04

Client ID: ICV

Instrument: msdv.i

Sample Info: 50mL #2687-186

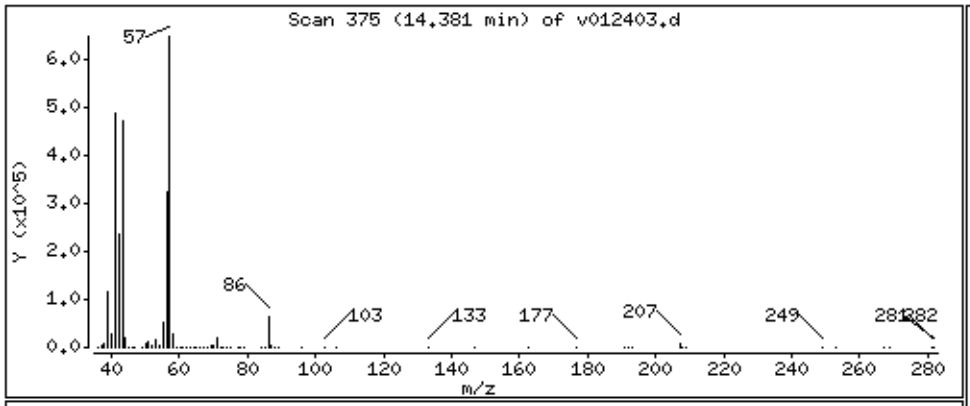
Operator: sn

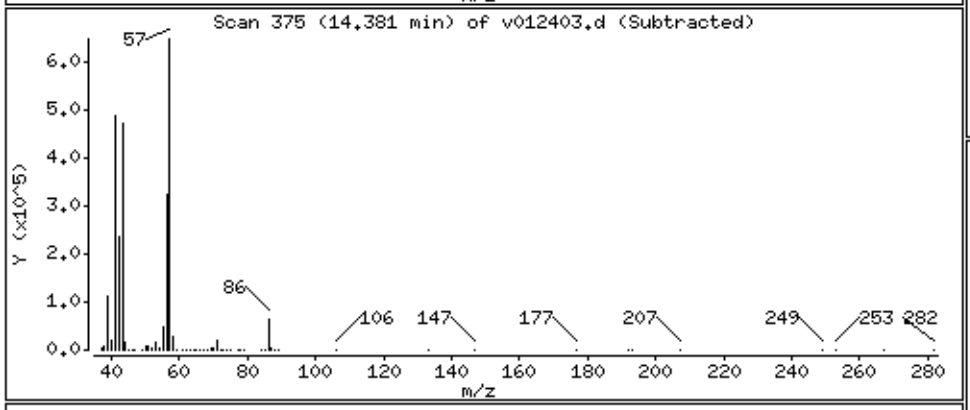
Column phase: RTx-624

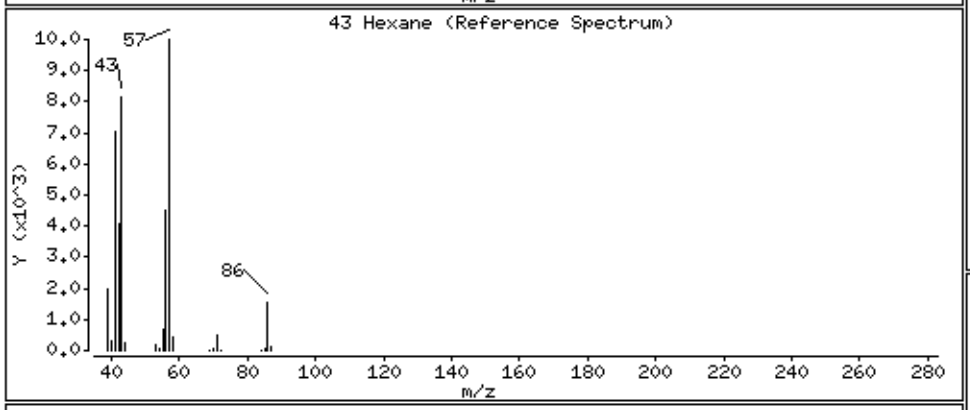
Column diameter: 0.32

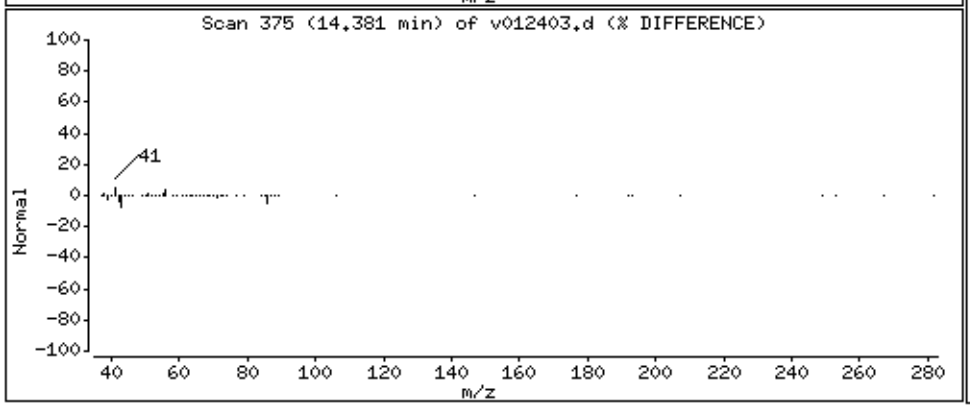
43 Hexane

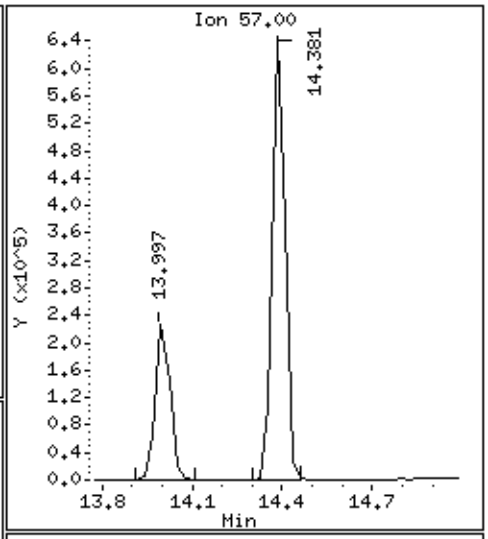
Concentration: 9.261 PPBV

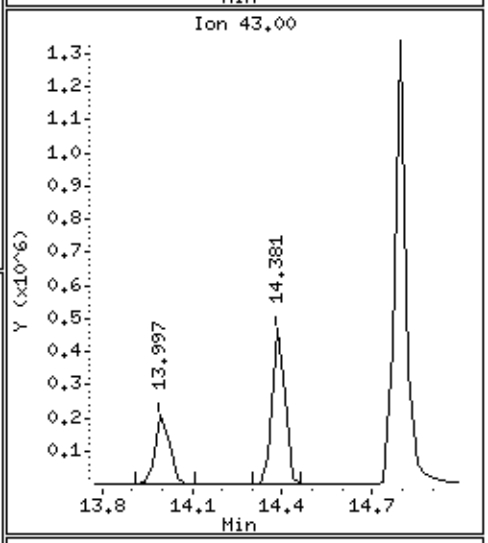


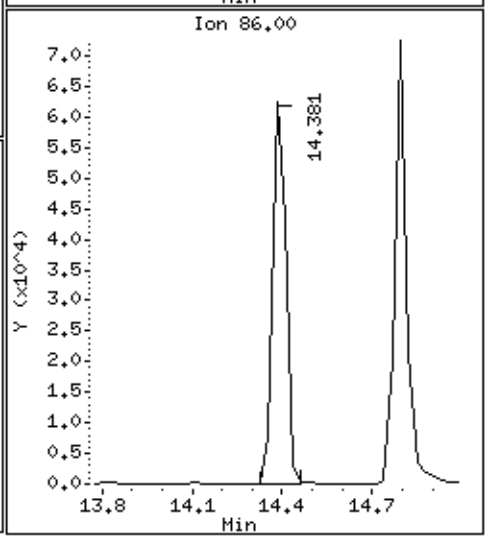












Data File: /chem/msdv.i/24Jan2015.b/v012403.d

Date : 24-JAN-2015 08:04

Client ID: ICV

Instrument: msdv.i

Sample Info: 50mL #2687-186

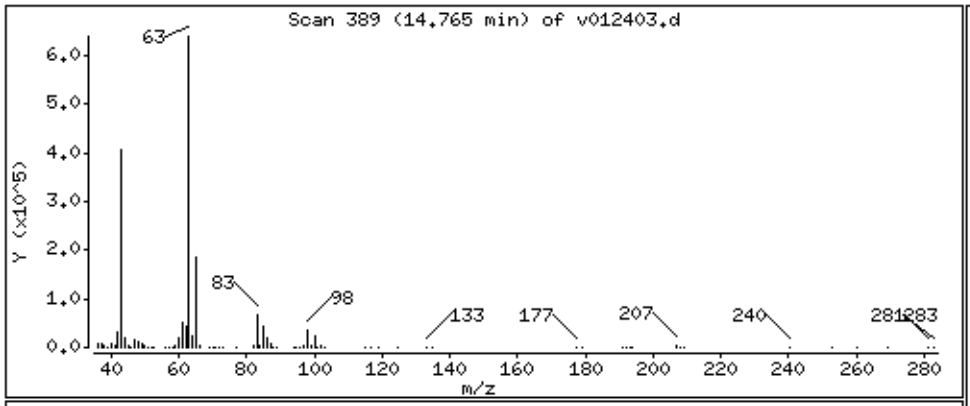
Operator: sn

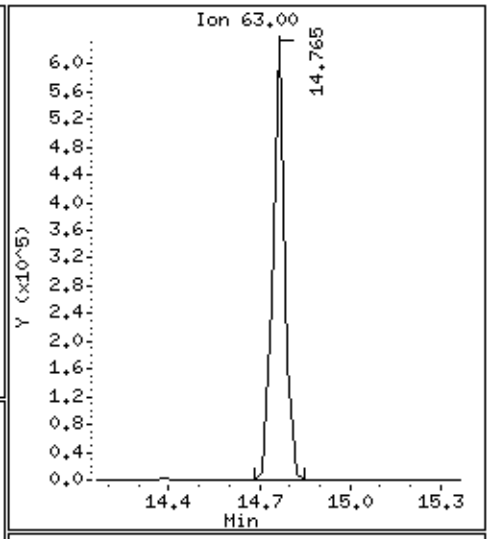
Column phase: RTx-624

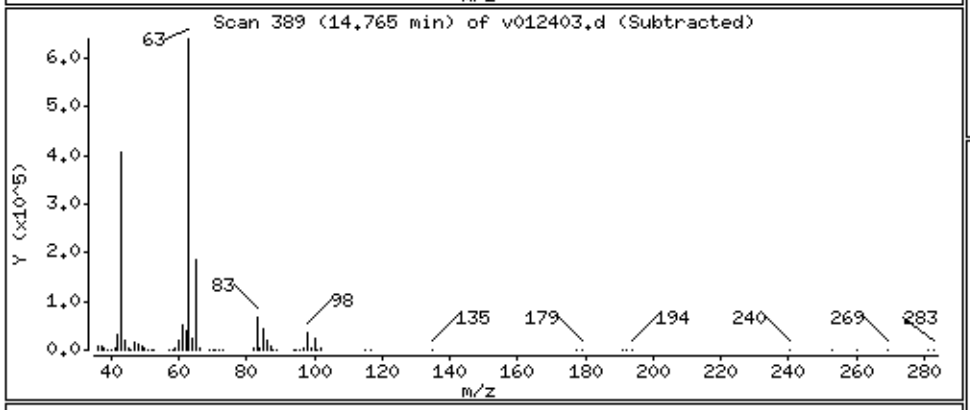
Column diameter: 0.32

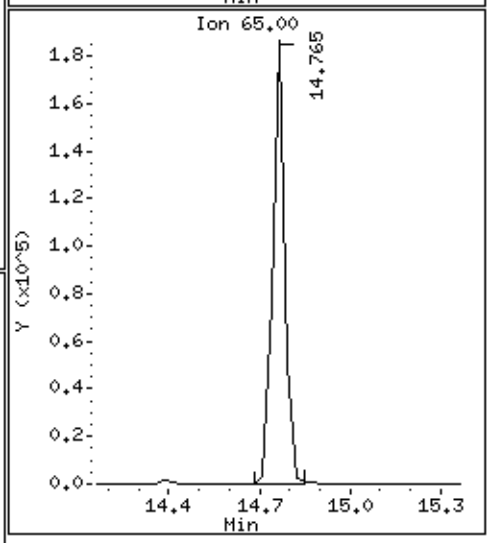
46 1,1-Dichloroethane

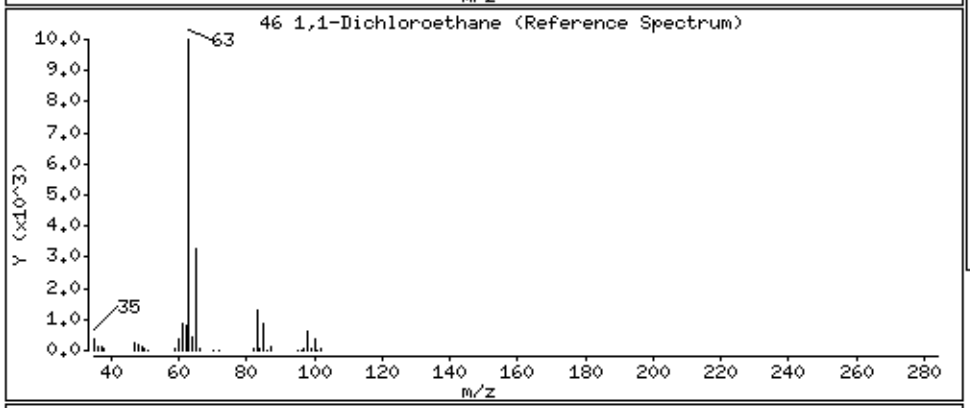
Concentration: 9.302 PPBV

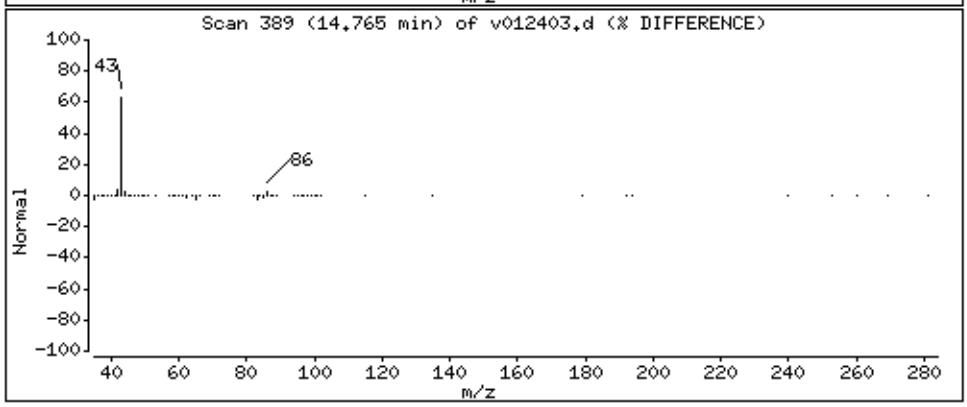












Data File: /chem/msdv.i/24Jan2015.b/v012403.d

Date : 24-JAN-2015 08:04

Client ID: ICV

Instrument: msdv.i

Sample Info: 50mL #2687-186

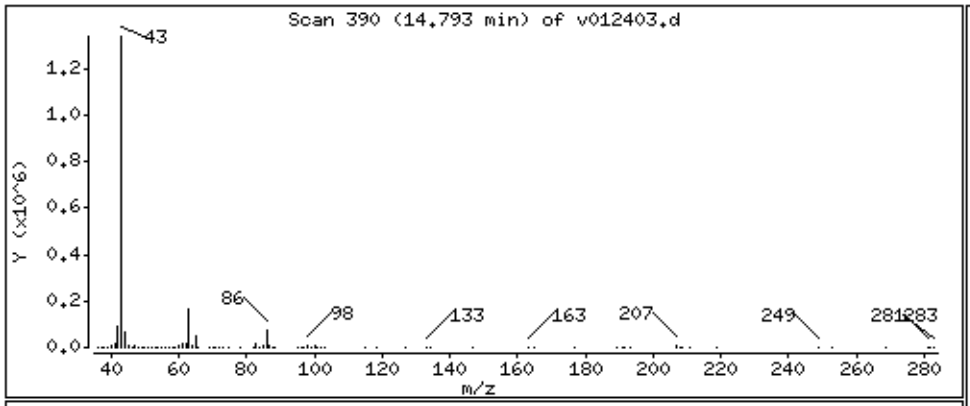
Operator: sn

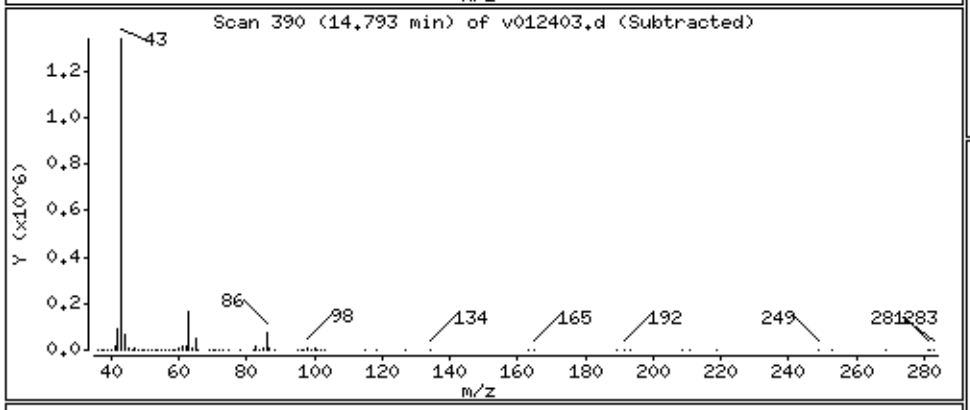
Column phase: RTx-624

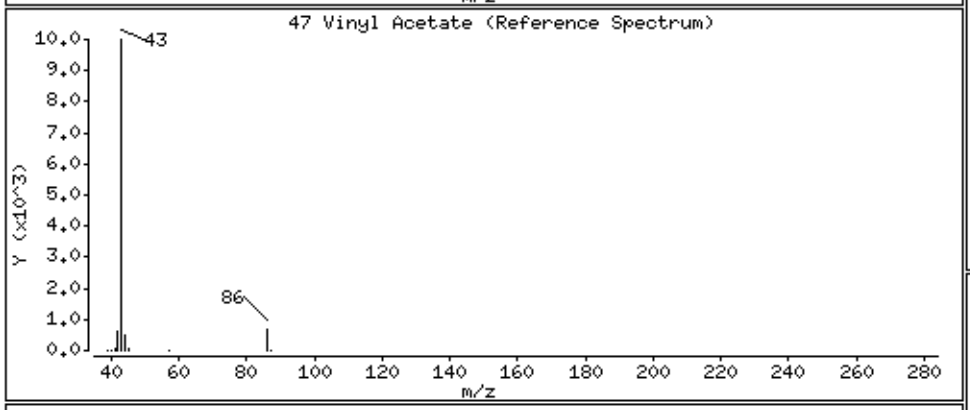
Column diameter: 0.32

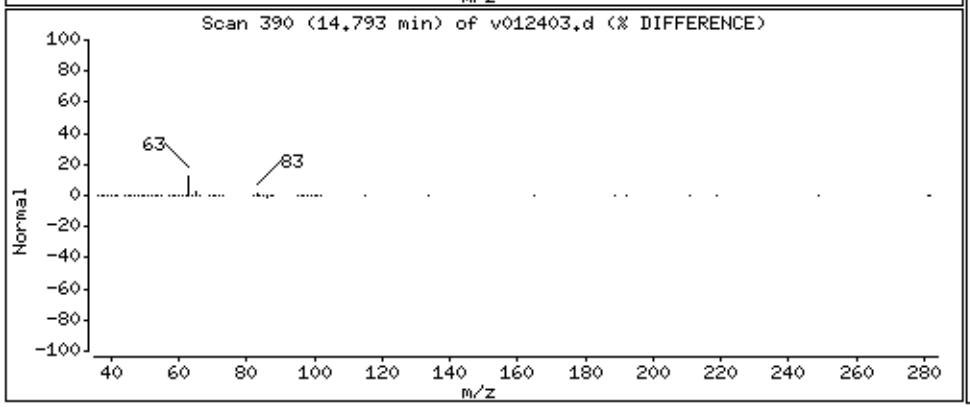
47 Vinyl Acetate

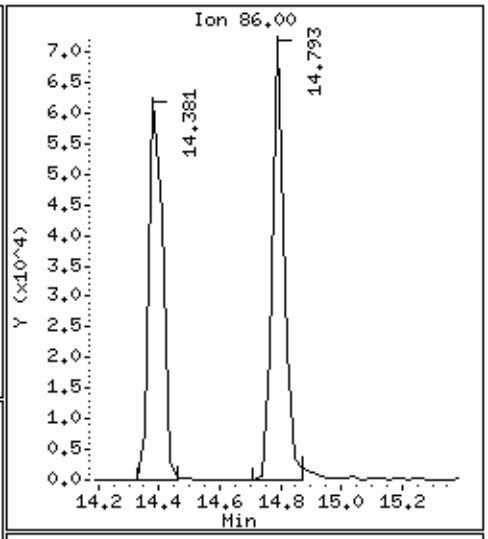
Concentration: 10.288 PPBV

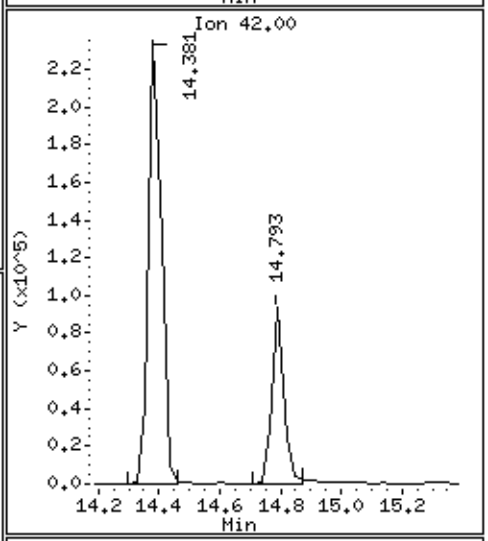


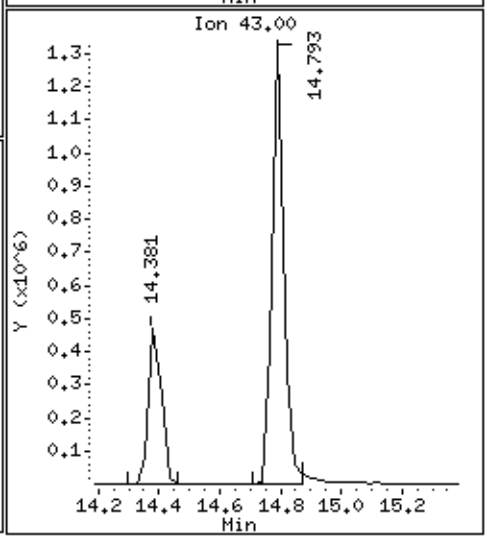












Data File: /chem/msdv.i/24Jan2015.b/v012403.d

Date : 24-JAN-2015 08:04

Client ID: ICV

Instrument: msdv.i

Sample Info: 50mL #2687-186

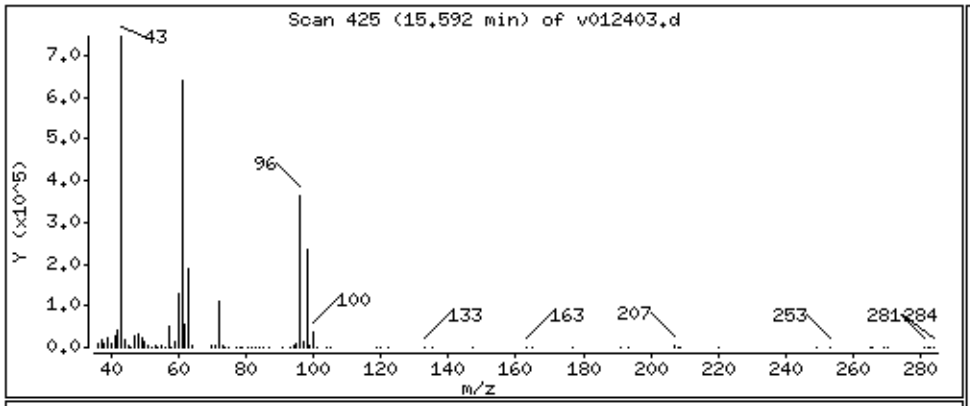
Operator: sn

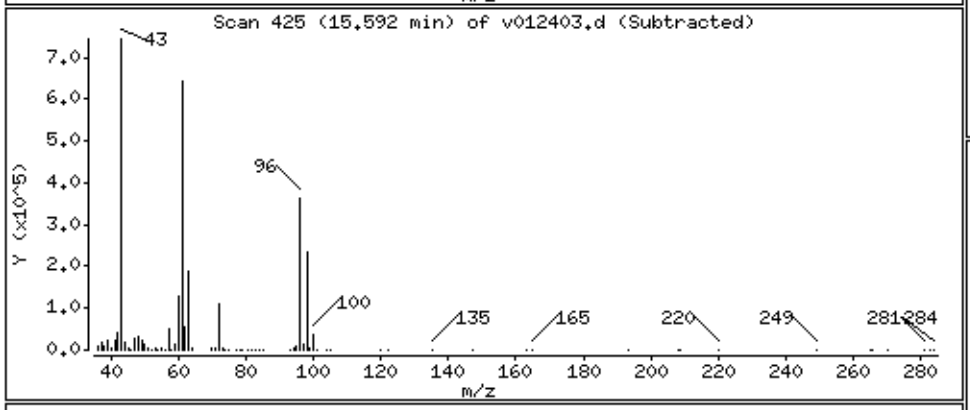
Column phase: RTx-624

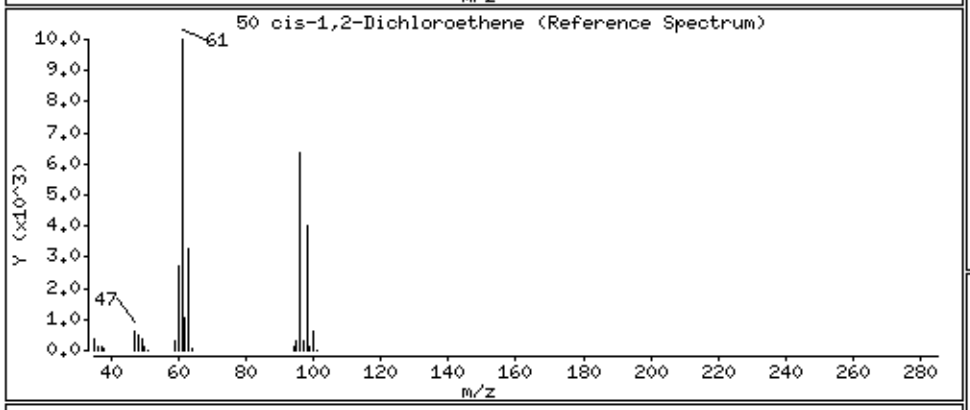
Column diameter: 0.32

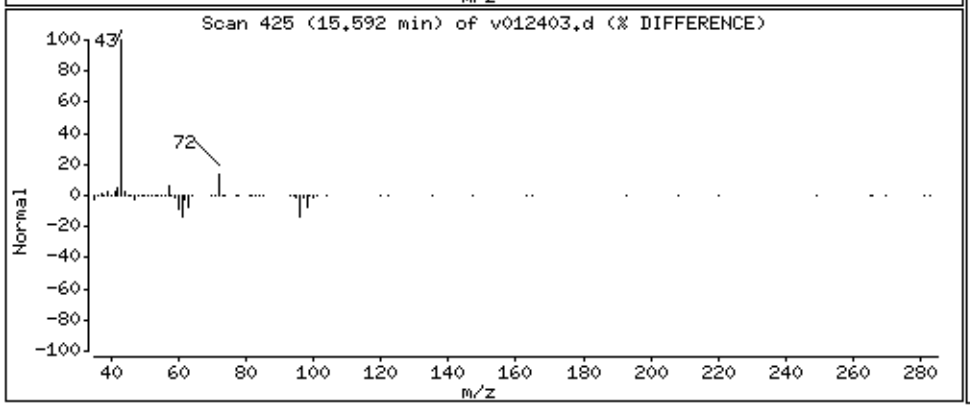
50 cis-1,2-Dichloroethene

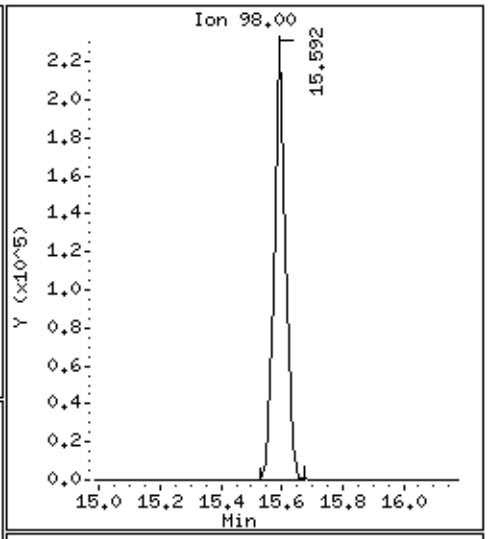
Concentration: 9.910 PPBV

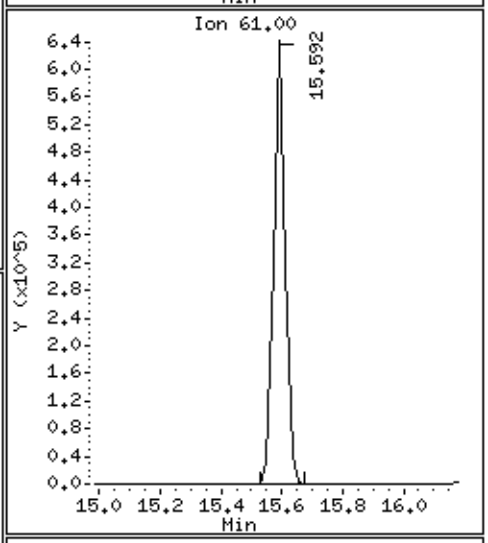


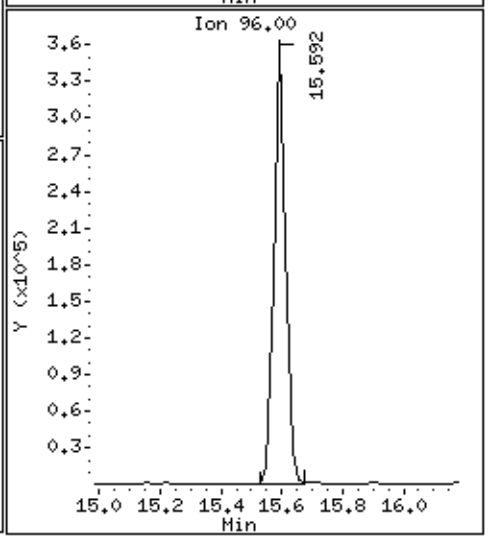












Data File: /chem/msdv.i/24Jan2015.b/v012403.d

Date : 24-JAN-2015 08:04

Client ID: ICV

Instrument: msdv.i

Sample Info: 50mL #2687-186

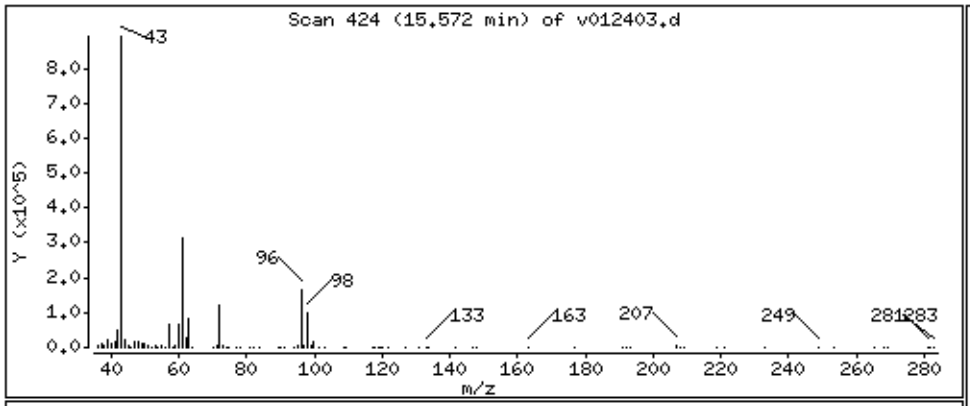
Operator: sn

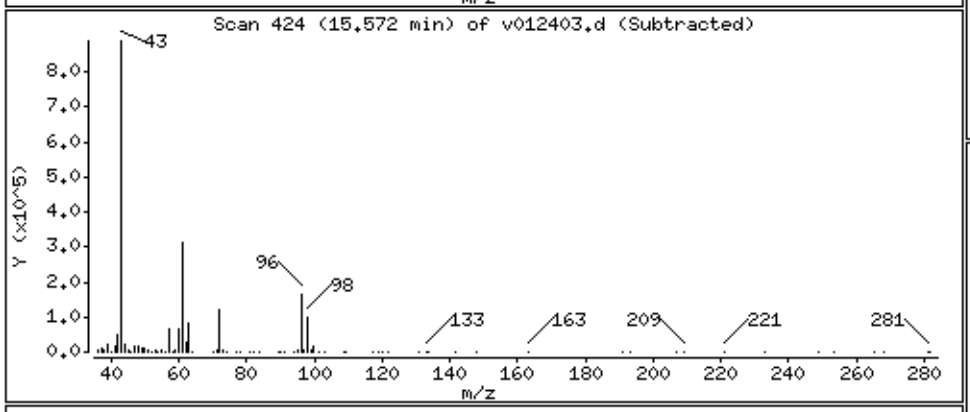
Column phase: RTx-624

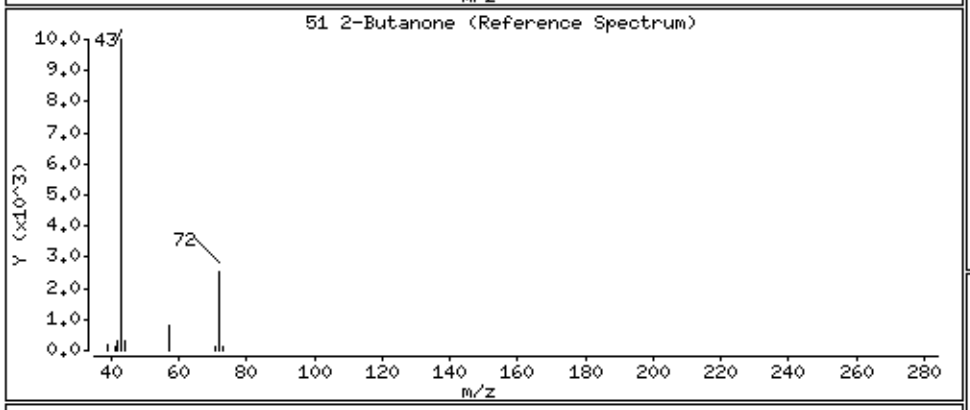
Column diameter: 0.32

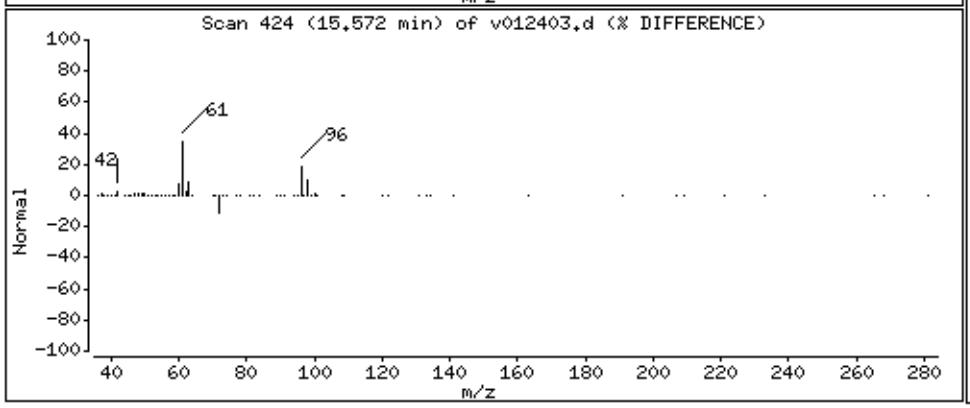
51 2-Butanone

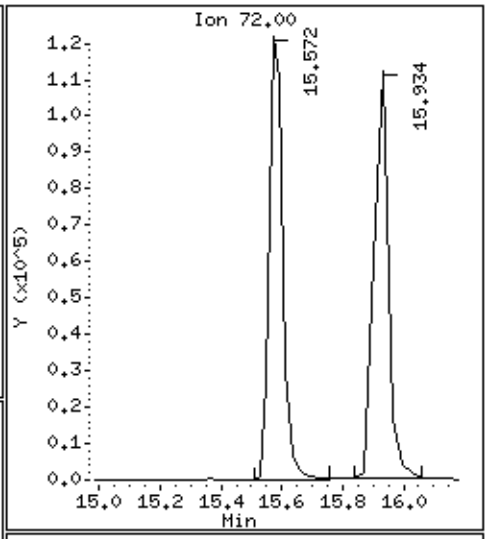
Concentration: 9.467 PPBV

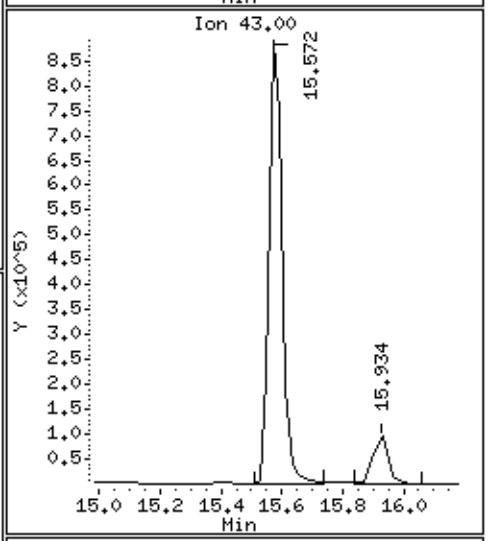


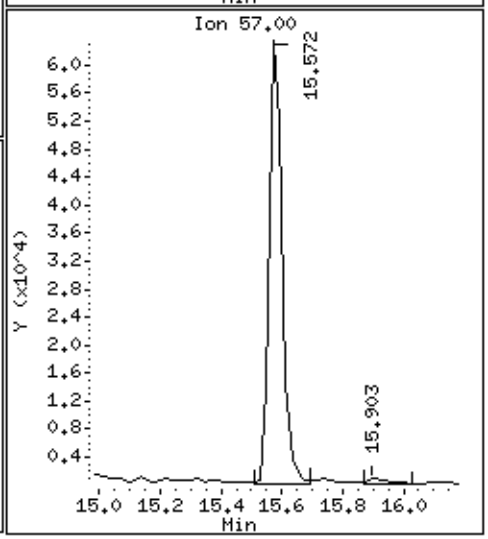












Data File: /chem/msdv.i/24Jan2015.b/v012403.d

Date : 24-JAN-2015 08:04

Client ID: ICV

Instrument: msdv.i

Sample Info: 50mL #2687-186

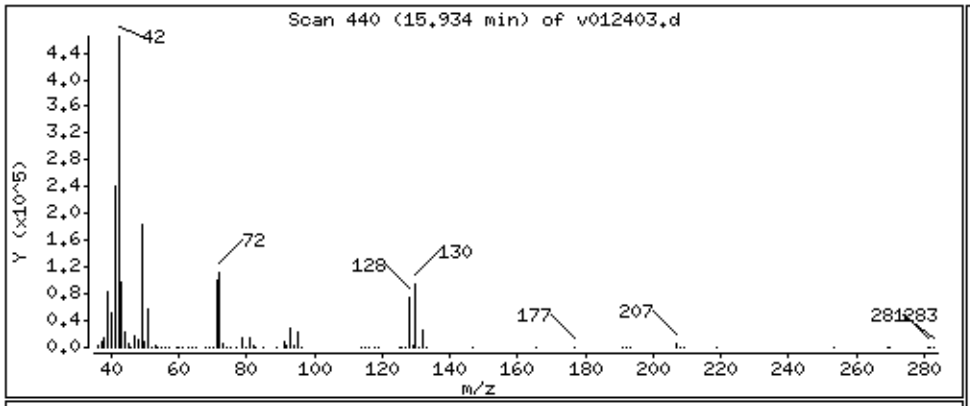
Operator: sn

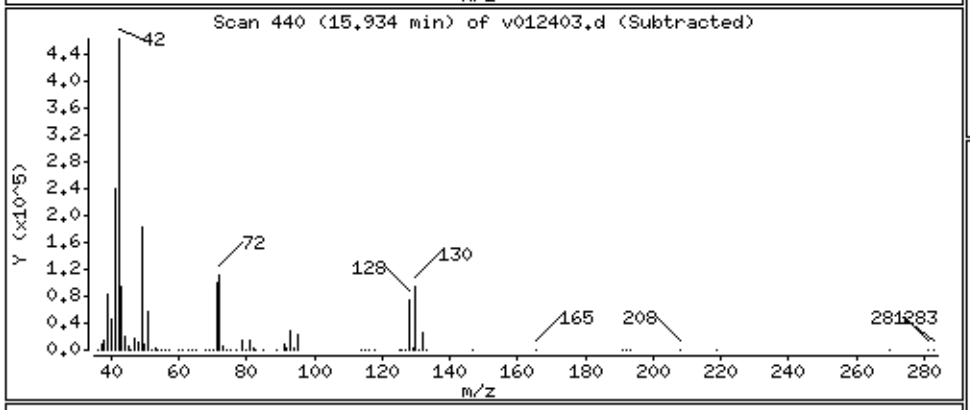
Column phase: RTx-624

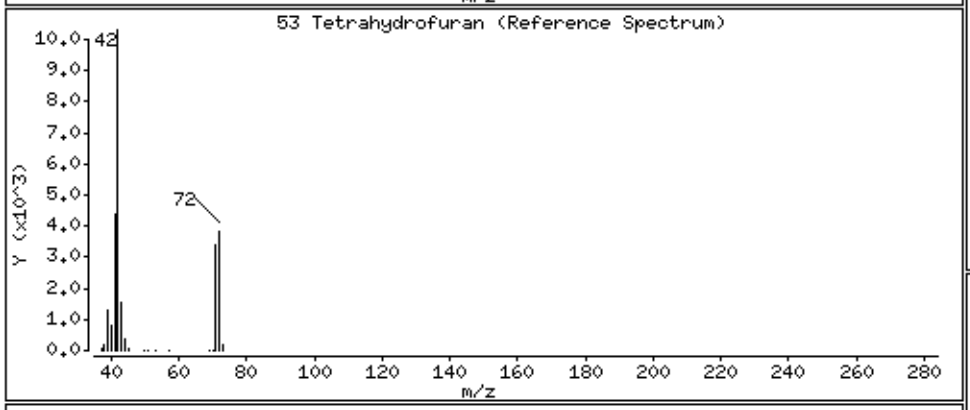
Column diameter: 0.32

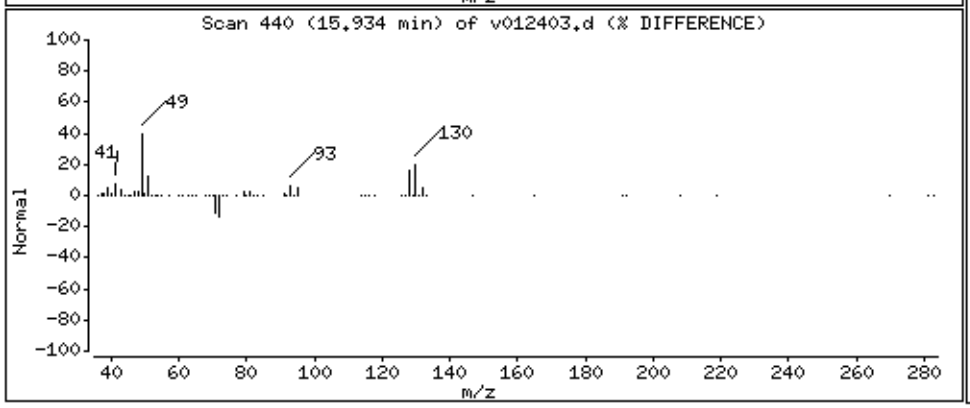
53 Tetrahydrofuran

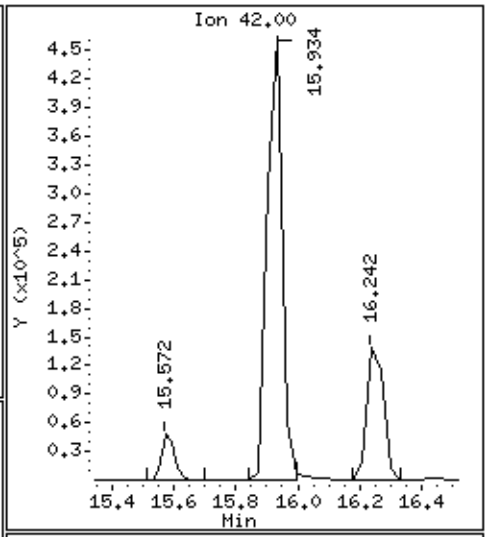
Concentration: 8.946 PPBV

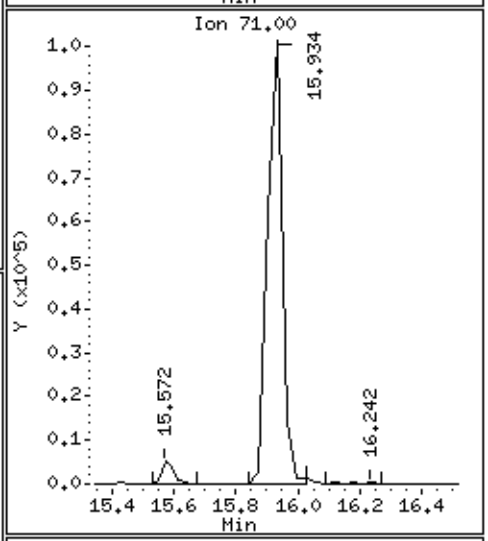


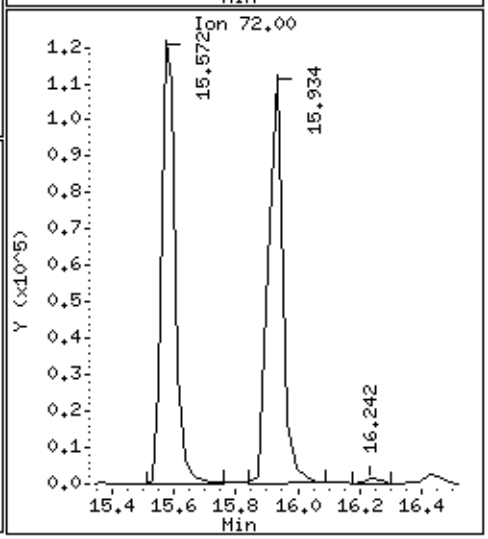












Data File: /chem/msdv.i/24Jan2015.b/v012403.d

Date : 24-JAN-2015 08:04

Client ID: ICV

Instrument: msdv.i

Sample Info: 50mL #2687-186

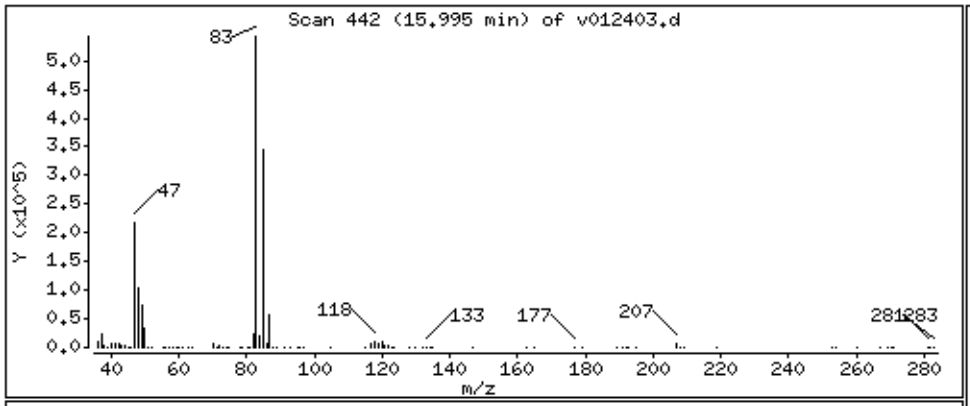
Operator: sn

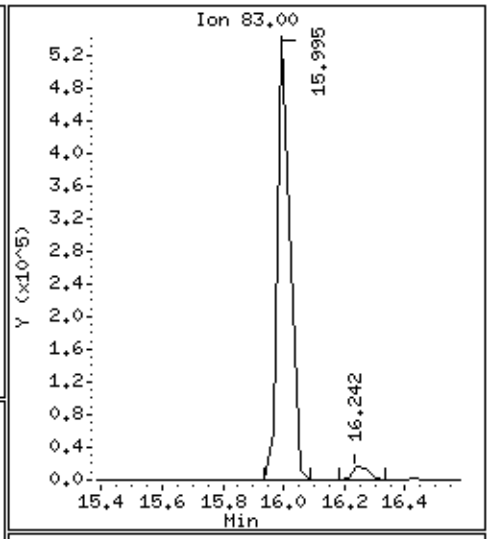
Column phase: RTx-624

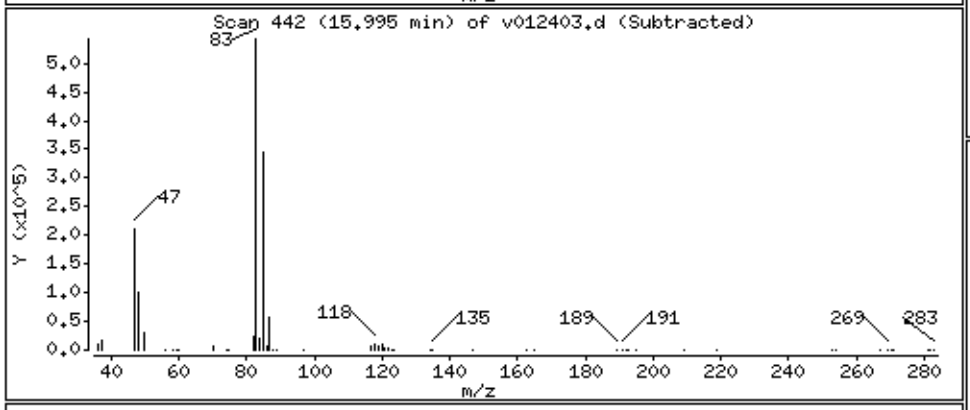
Column diameter: 0.32

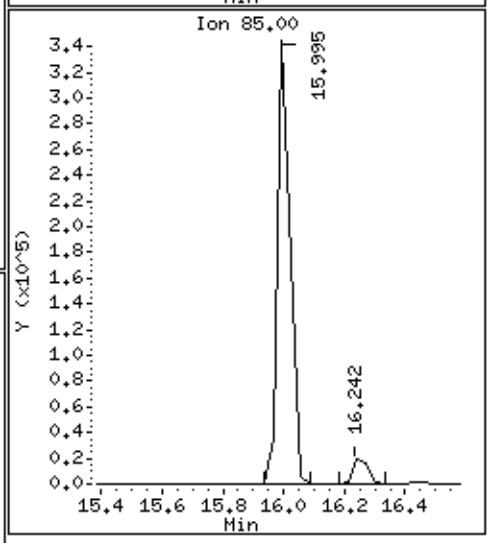
55 Chloroform

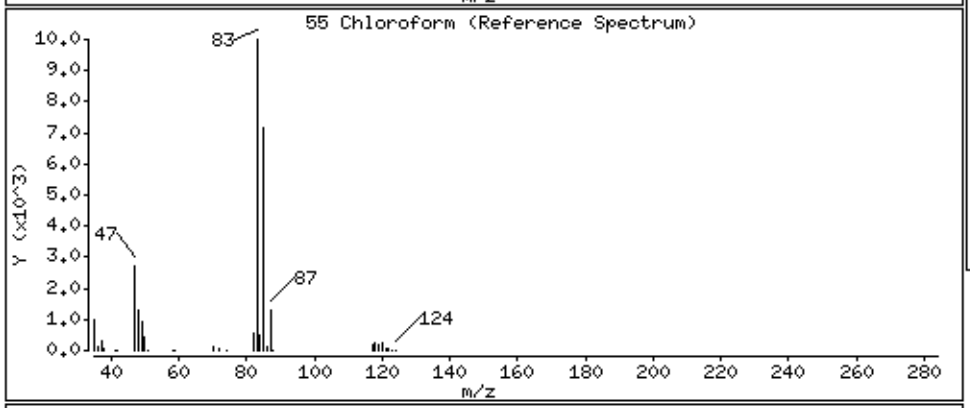
Concentration: 9.105 PPBV

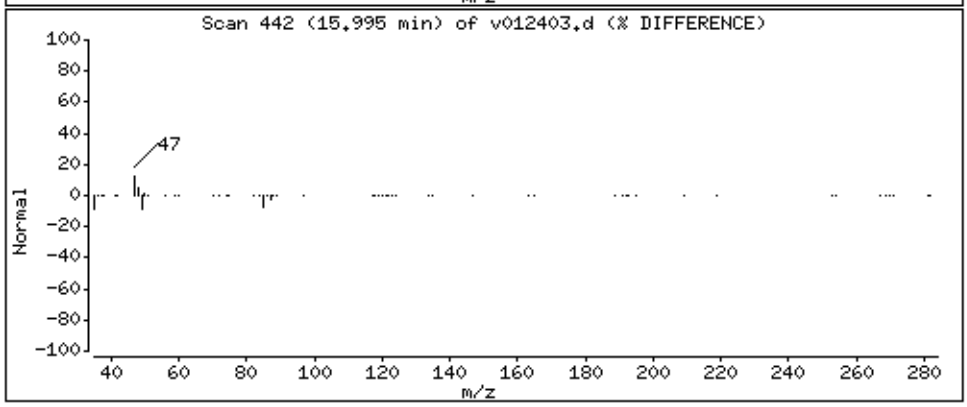












Data File: /chem/msdv.i/24Jan2015.b/v012403.d

Date : 24-JAN-2015 08:04

Client ID: ICV

Instrument: msdv.i

Sample Info: 50mL #2687-186

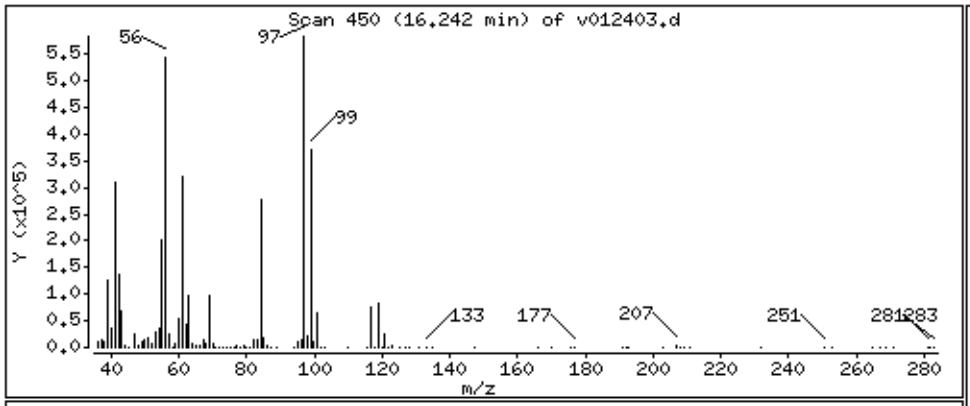
Operator: sn

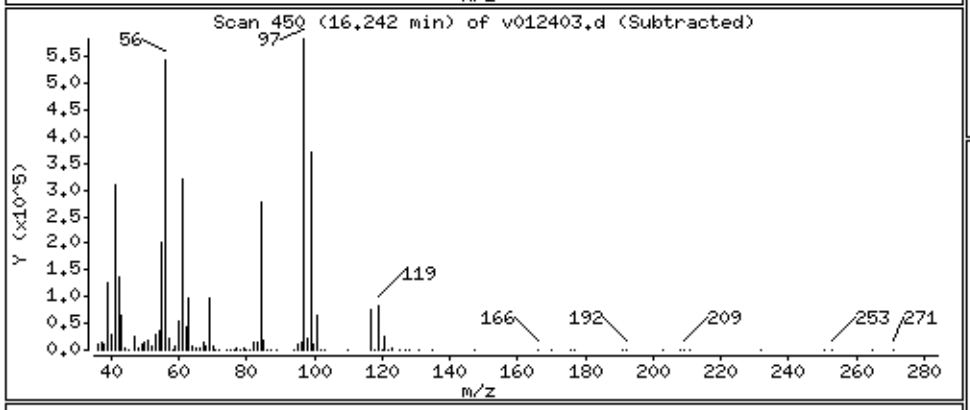
Column phase: RTx-624

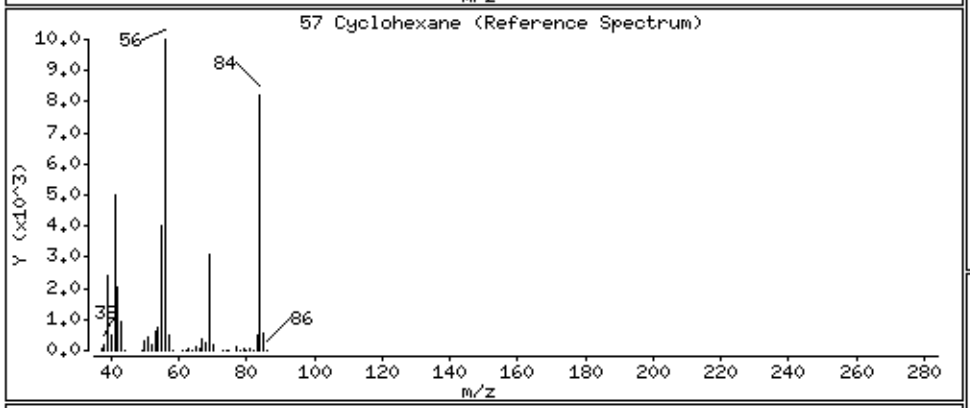
Column diameter: 0.32

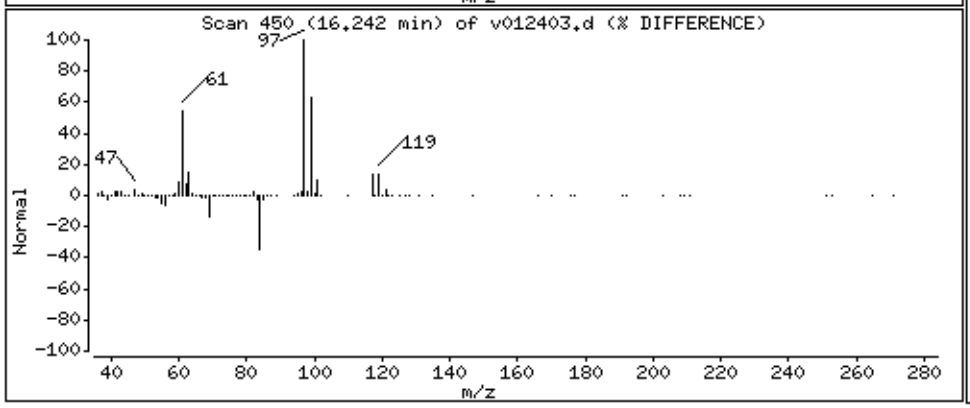
57 Cyclohexane

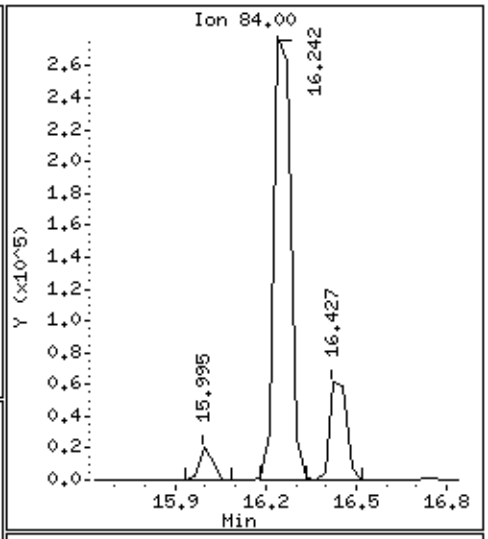
Concentration: 9.139 PPBV

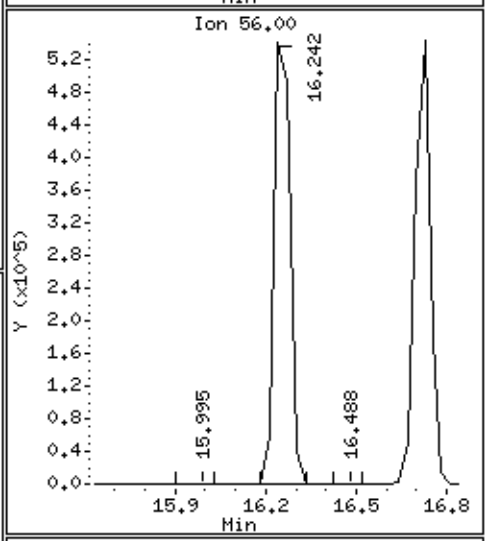


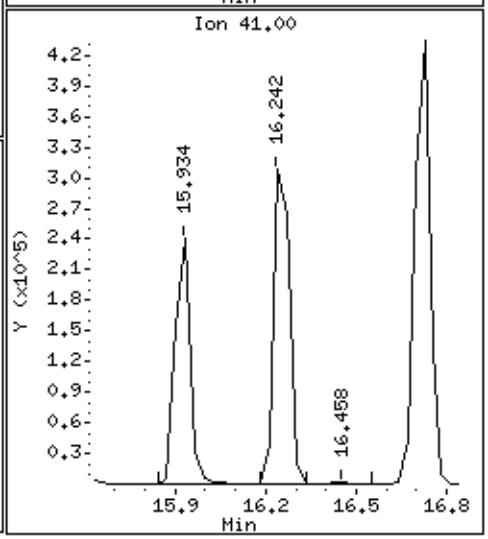












Data File: /chem/msdv.i/24Jan2015.b/v012403.d

Date : 24-JAN-2015 08:04

Client ID: ICV

Instrument: msdv.i

Sample Info: 50mL #2687-186

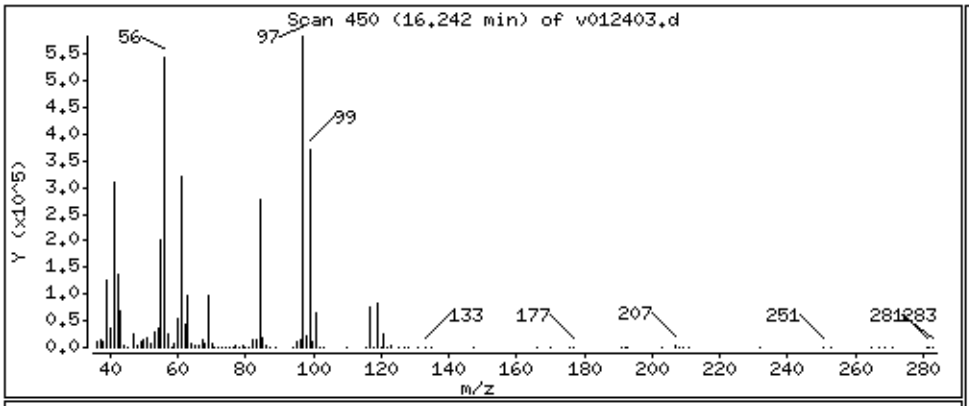
Operator: sn

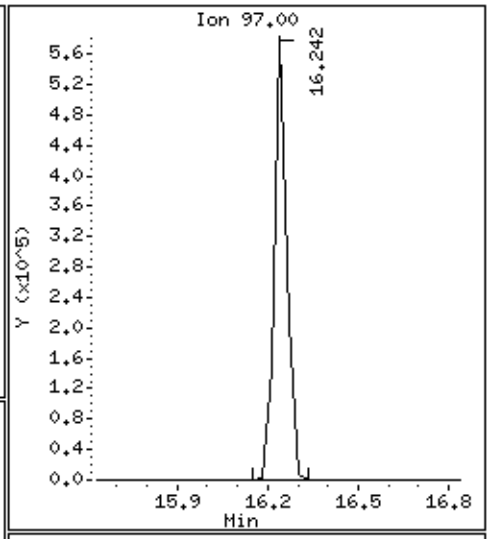
Column phase: RTx-624

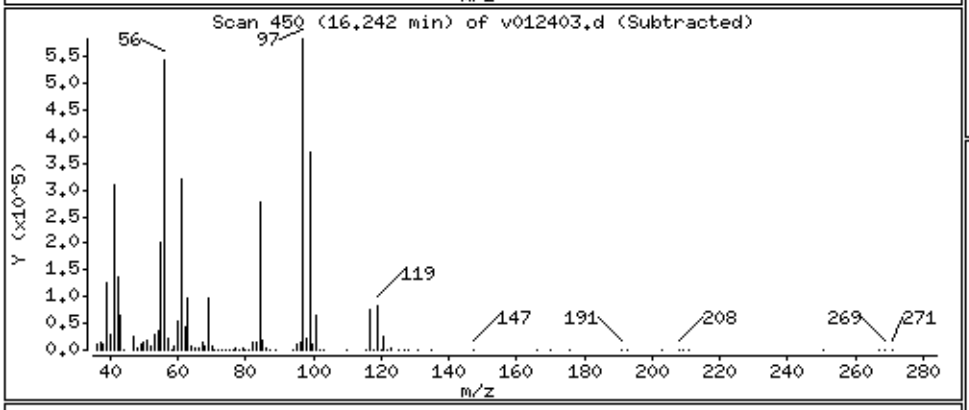
Column diameter: 0.32

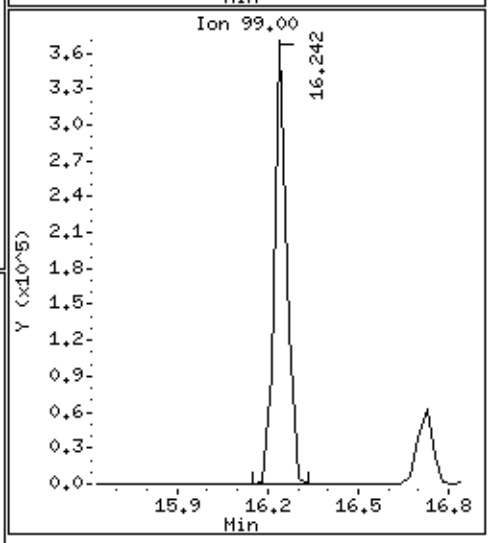
58 1,1,1-Trichloroethane

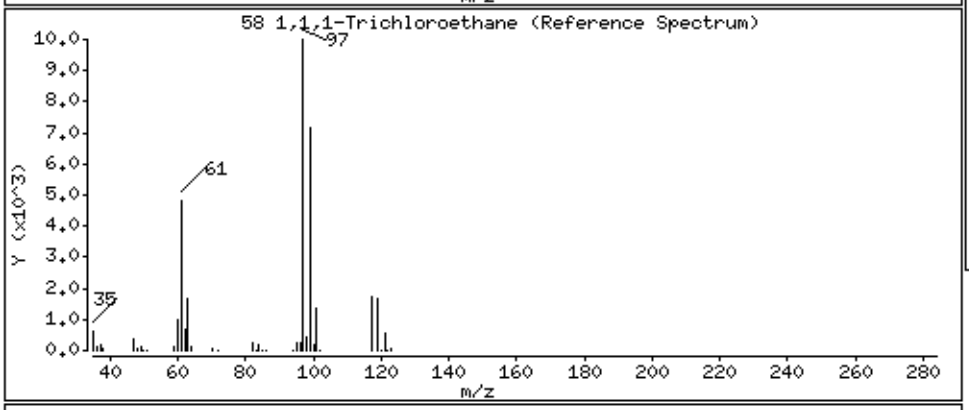
Concentration: 8.858 PPBV

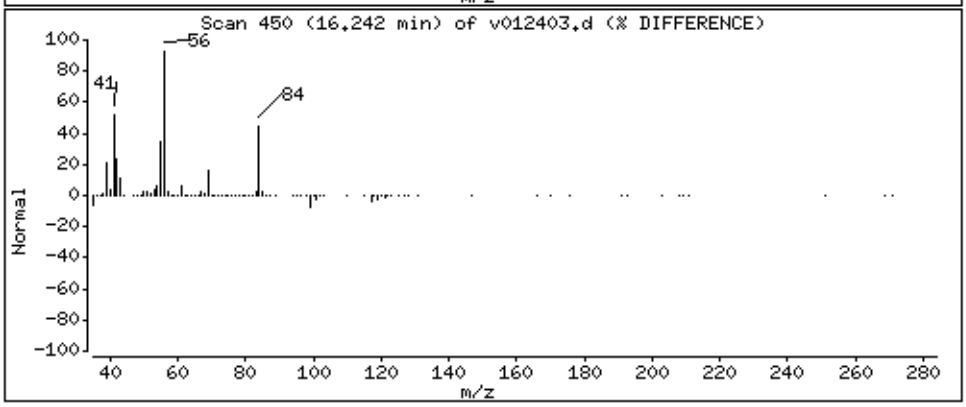












Data File: /chem/msdv.i/24Jan2015.b/v012403.d

Date : 24-JAN-2015 08:04

Client ID: ICV

Instrument: msdv.i

Sample Info: 50mL #2687-186

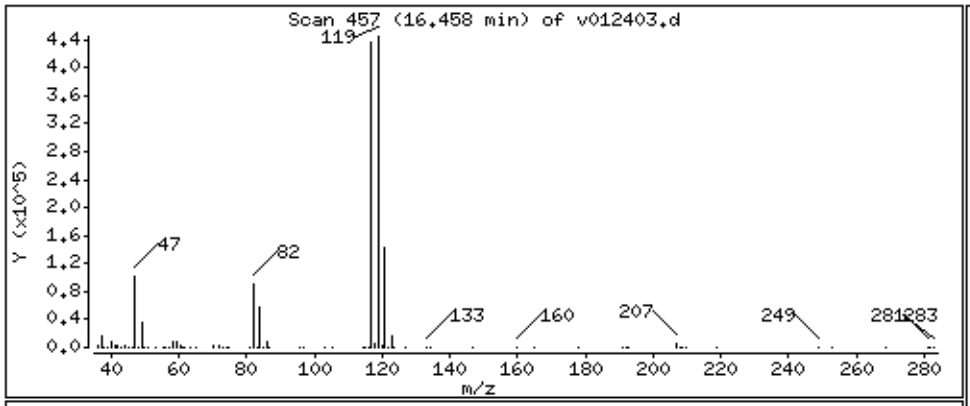
Operator: sn

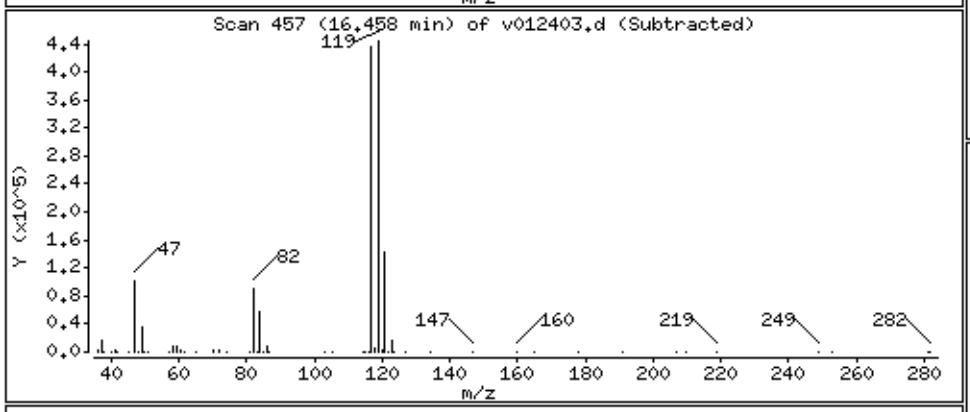
Column phase: RTx-624

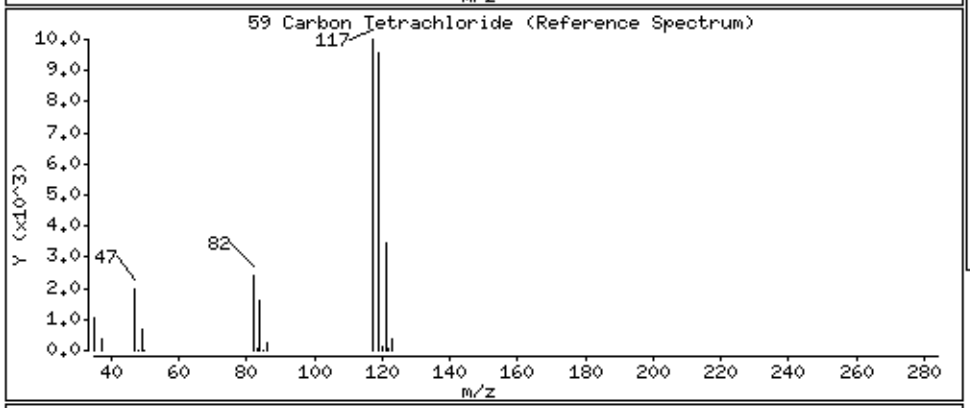
Column diameter: 0.32

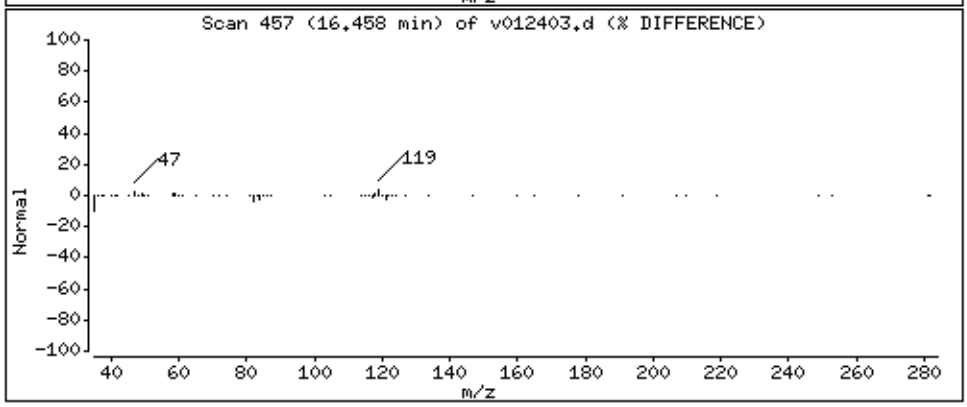
59 Carbon Tetrachloride

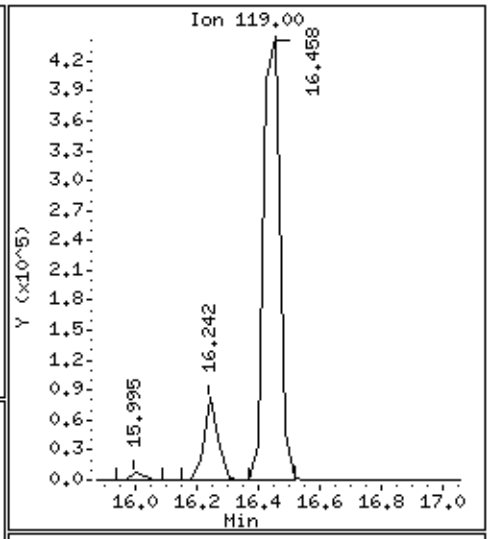
Concentration: 9.470 PPBV

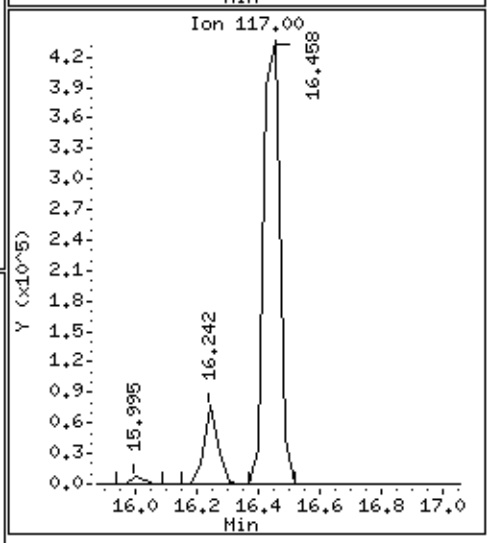












Data File: /chem/msdv.i/24Jan2015.b/v012403.d

Date : 24-JAN-2015 08:04

Client ID: ICV

Instrument: msdv.i

Sample Info: 50mL #2687-186

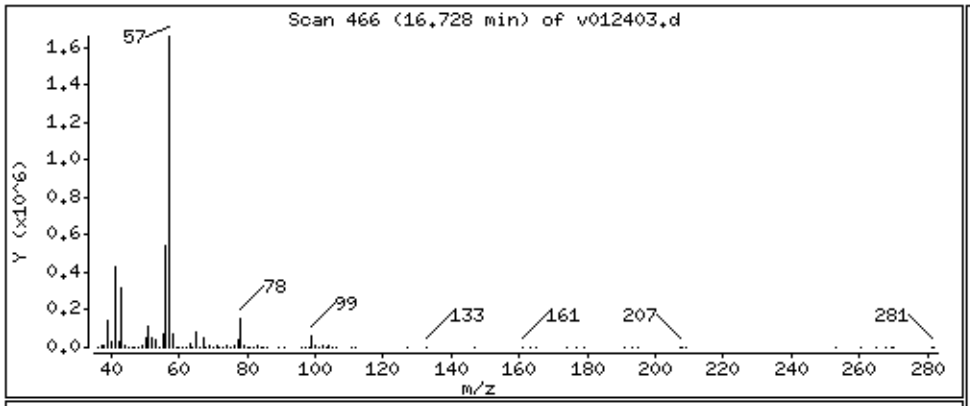
Operator: sn

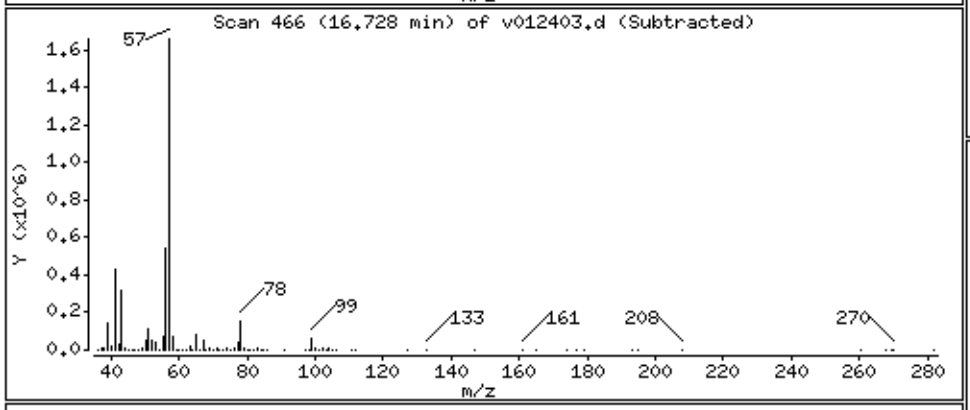
Column phase: RTx-624

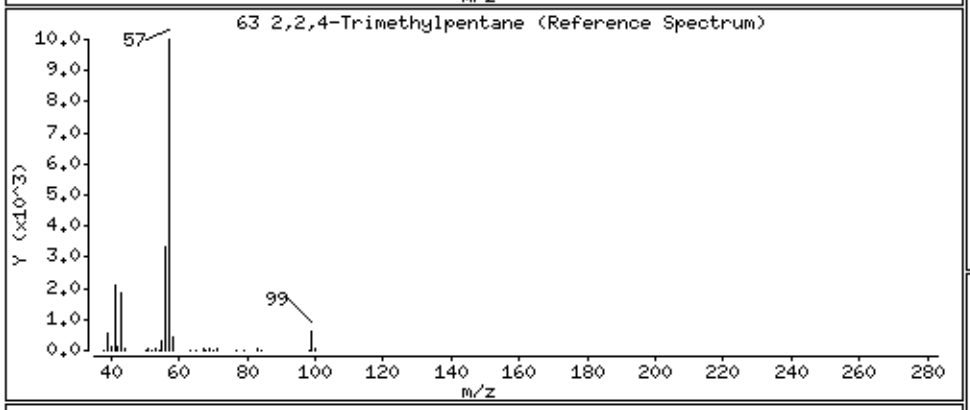
Column diameter: 0.32

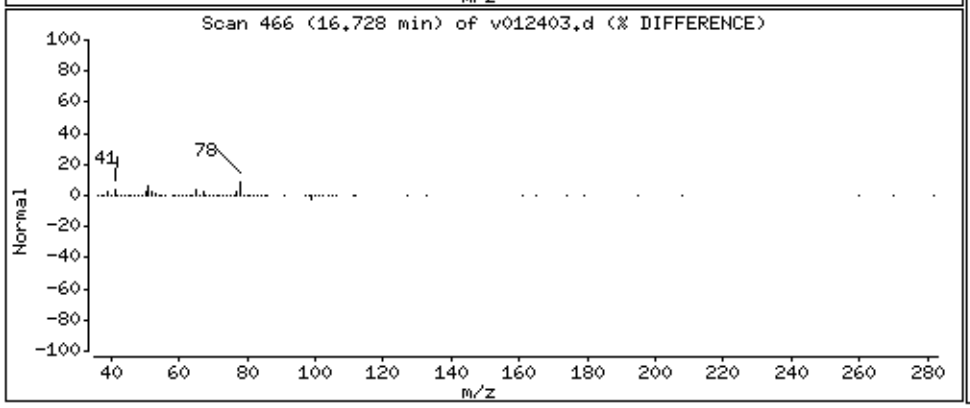
63 2,2,4-Trimethylpentane

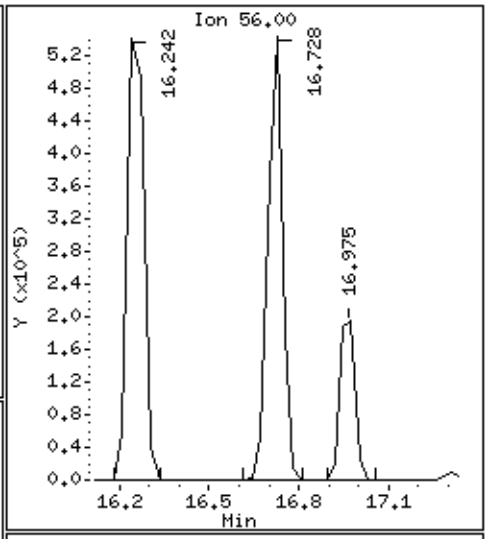
Concentration: 9.026 PPBV

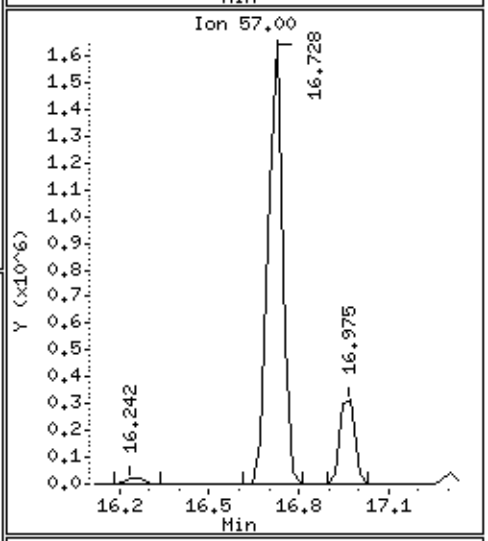


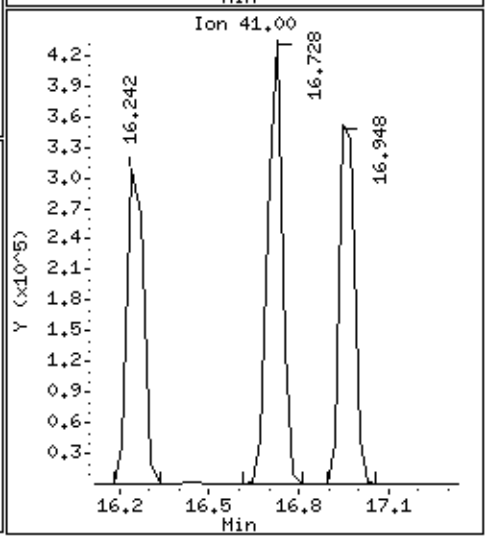












Data File: /chem/msdv.i/24Jan2015.b/v012403.d

Date : 24-JAN-2015 08:04

Client ID: ICV

Instrument: msdv.i

Sample Info: 50mL #2687-186

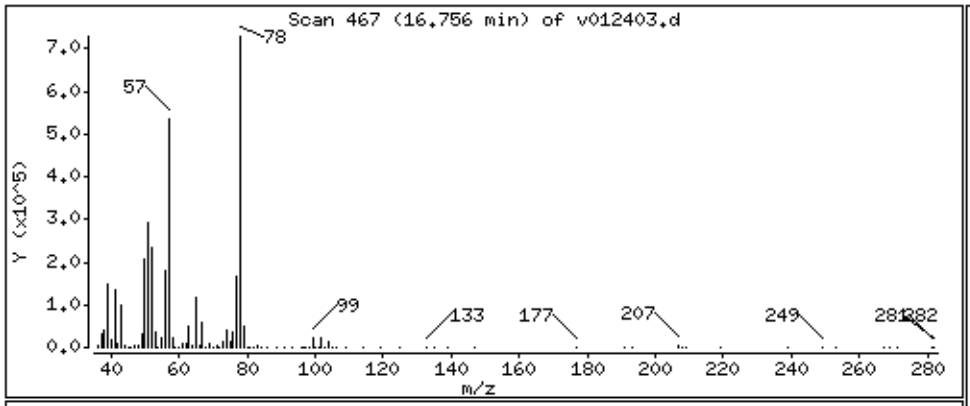
Operator: sn

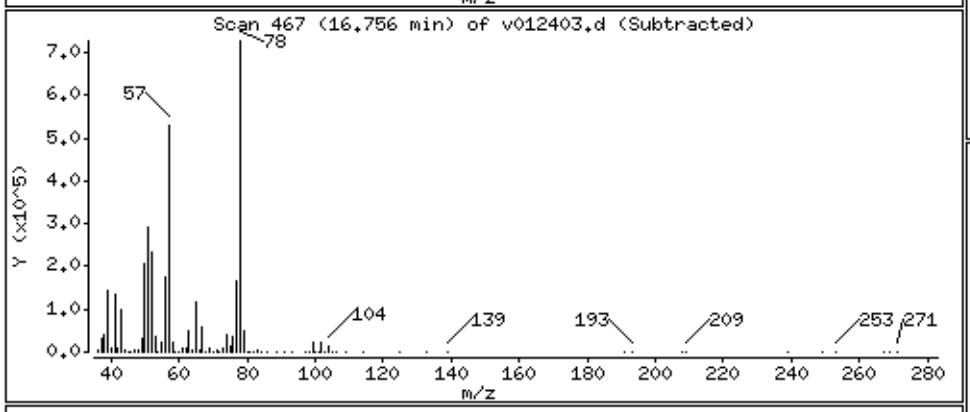
Column phase: RTx-624

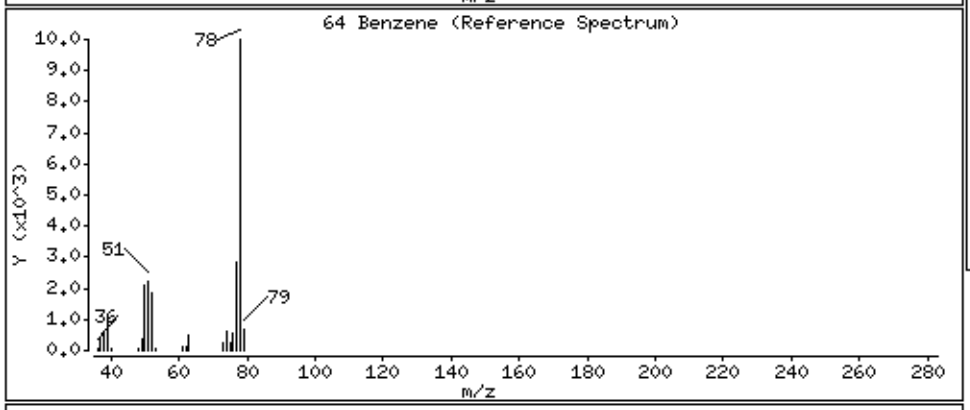
Column diameter: 0.32

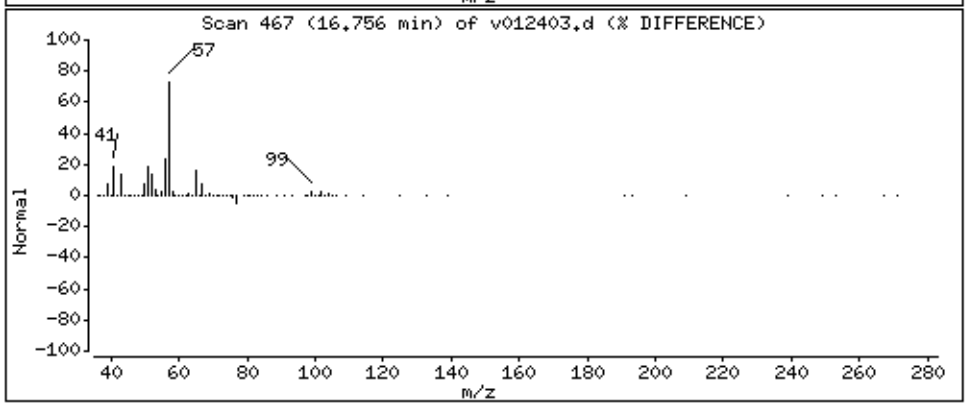
64 Benzene

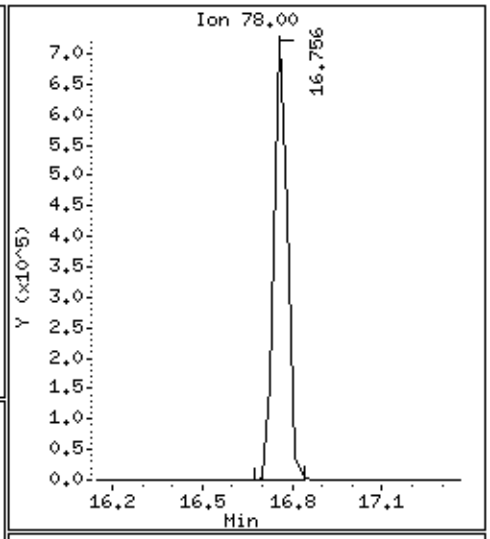
Concentration: 8.848 PPBV

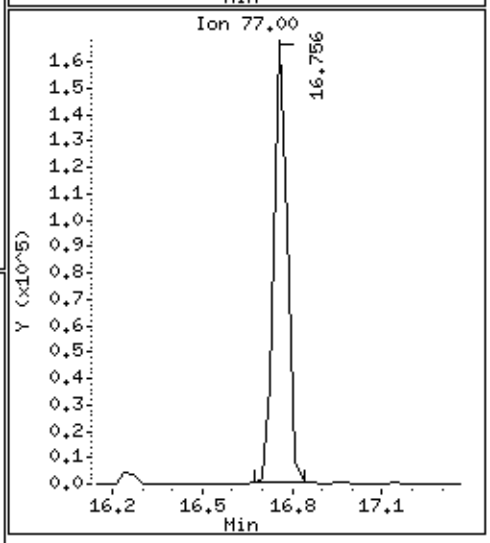












Data File: /chem/msdv.i/24Jan2015.b/v012403.d

Date : 24-JAN-2015 08:04

Client ID: ICV

Instrument: msdv.i

Sample Info: 50mL #2687-186

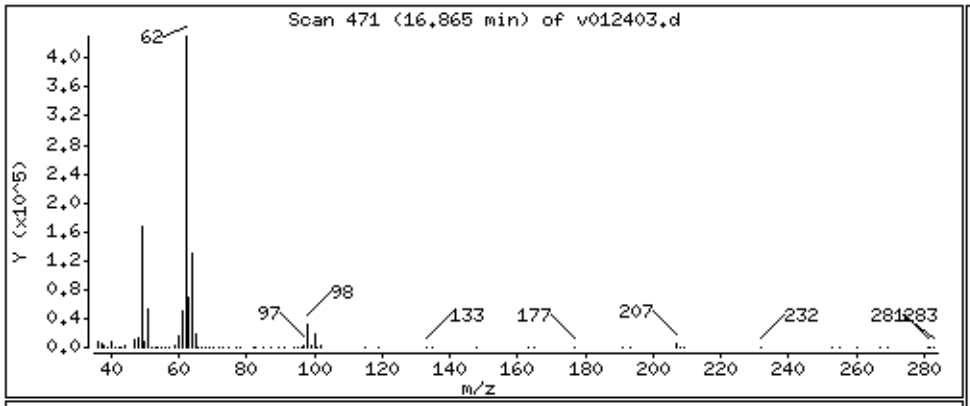
Operator: sn

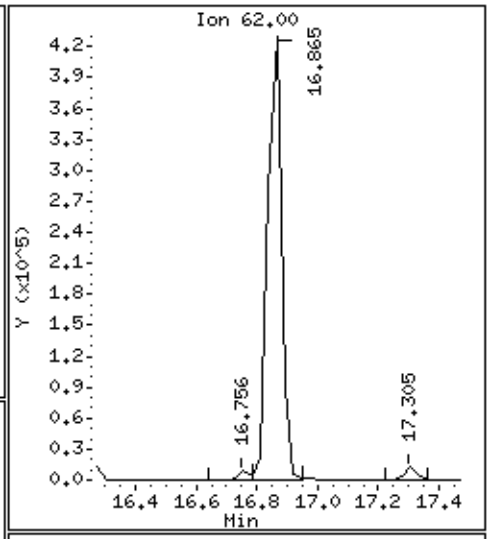
Column phase: RTx-624

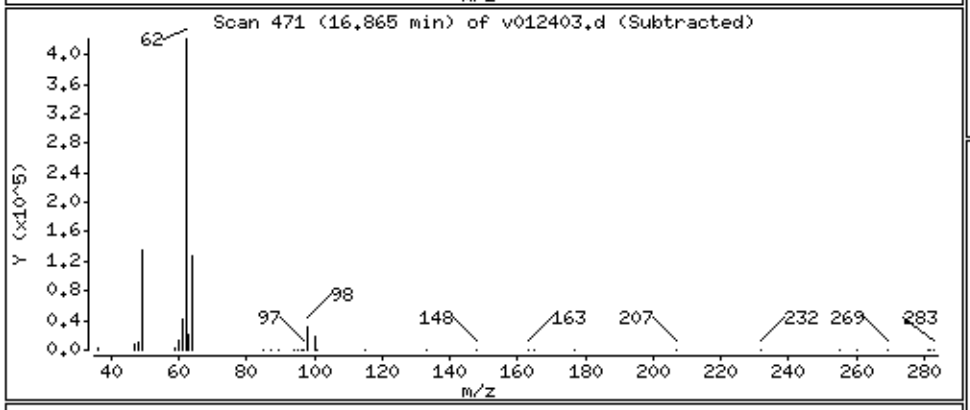
Column diameter: 0.32

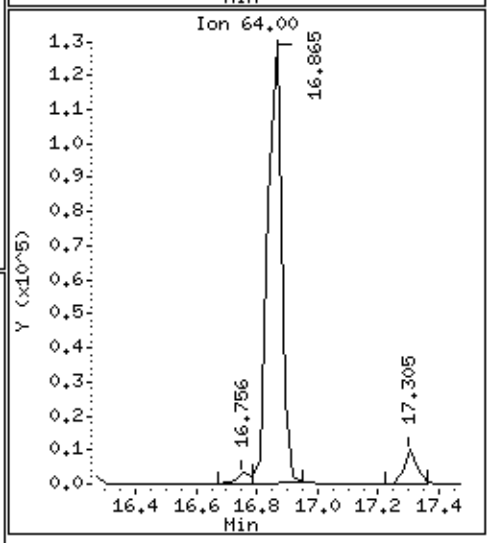
68 1,2-Dichloroethane

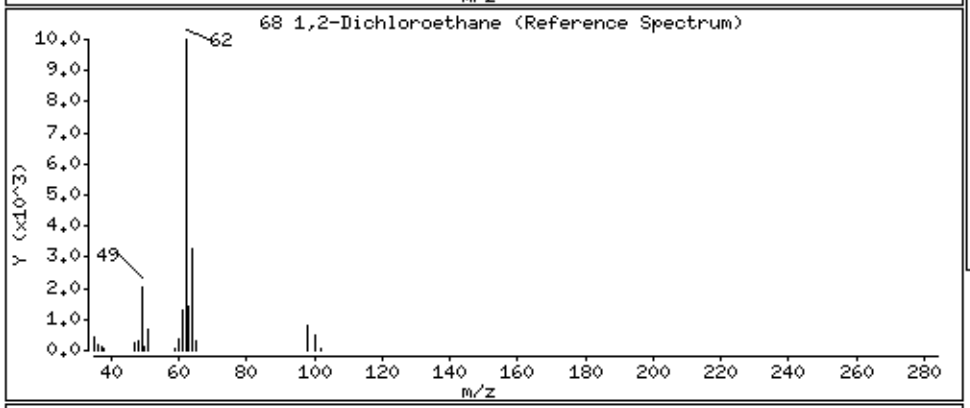
Concentration: 9.060 PPBV

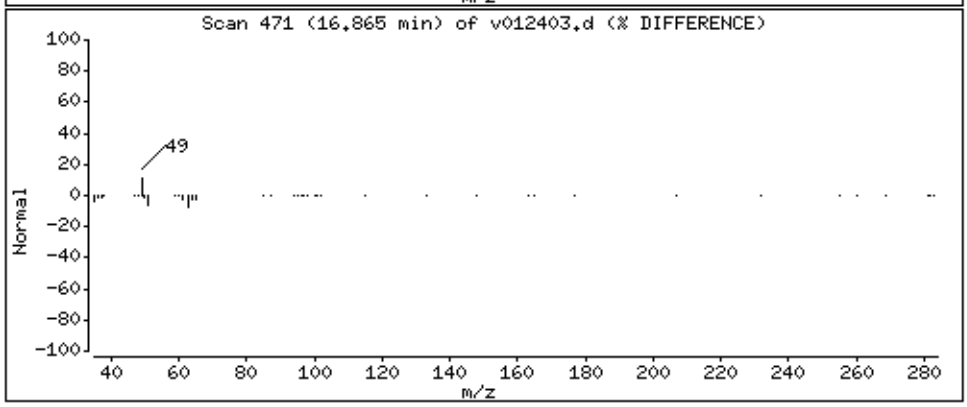












Data File: /chem/msdv.i/24Jan2015.b/v012403.d

Date : 24-JAN-2015 08:04

Client ID: ICV

Instrument: msdv.i

Sample Info: 50mL #2687-186

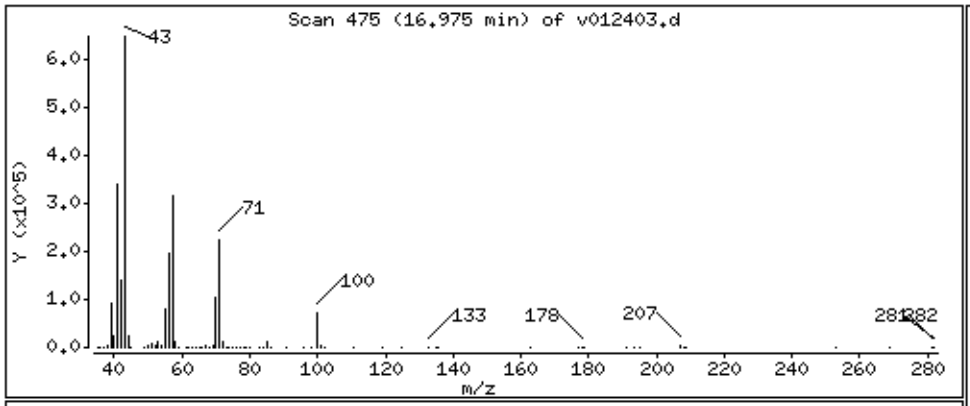
Operator: sn

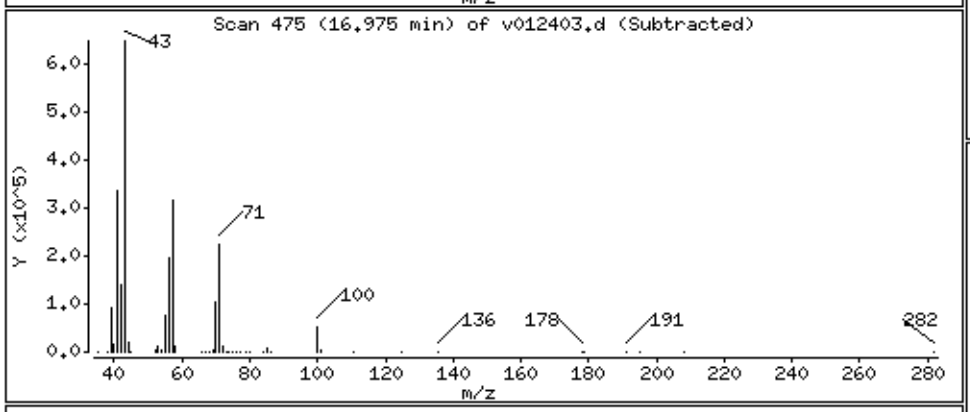
Column phase: RTx-624

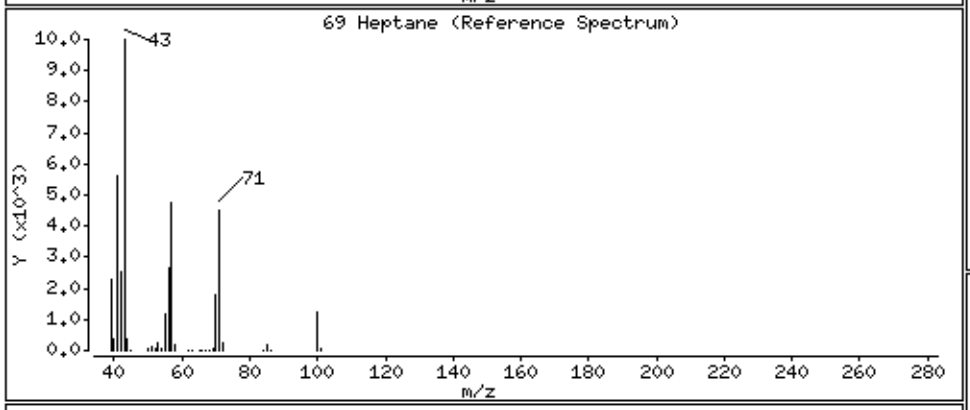
Column diameter: 0.32

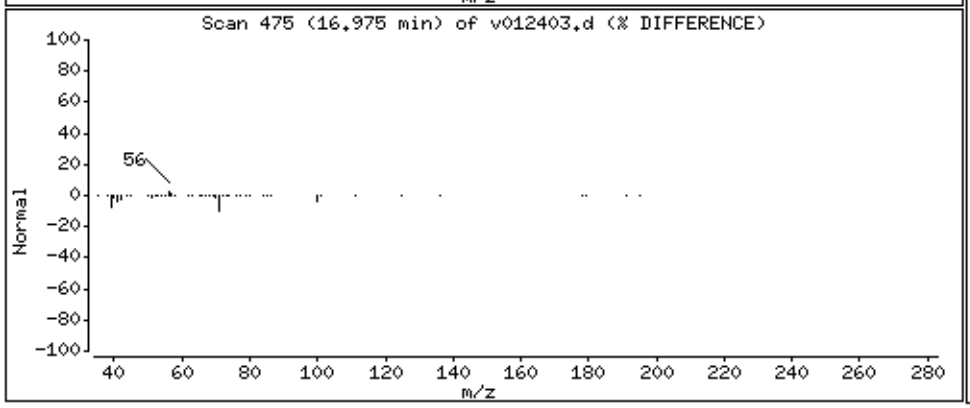
69 Heptane

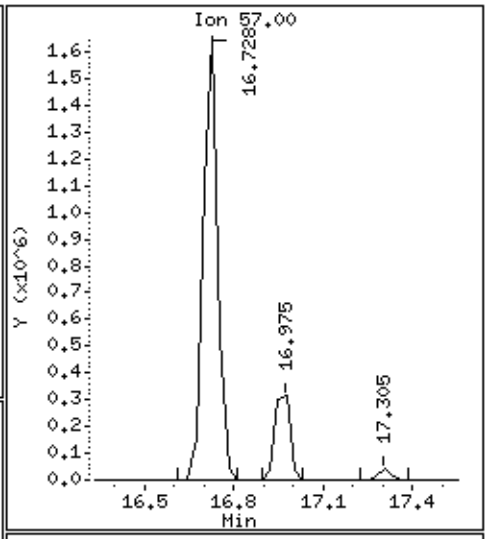
Concentration: 9.330 PPBV

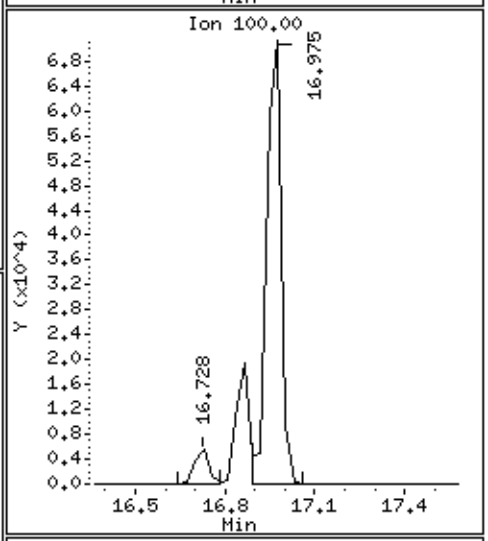


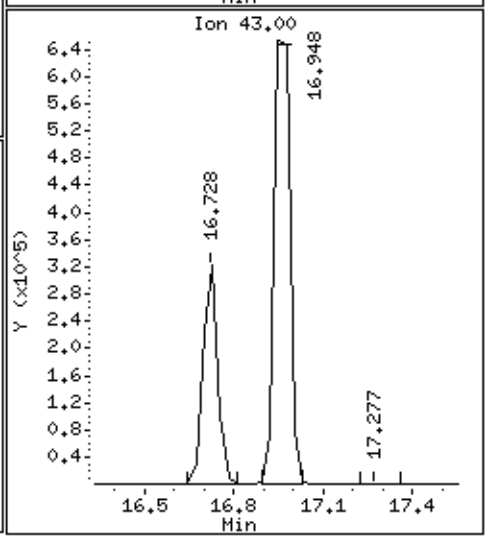












Data File: /chem/msdv.i/24Jan2015.b/v012403.d

Date : 24-JAN-2015 08:04

Client ID: ICV

Instrument: msdv.i

Sample Info: 50mL #2687-186

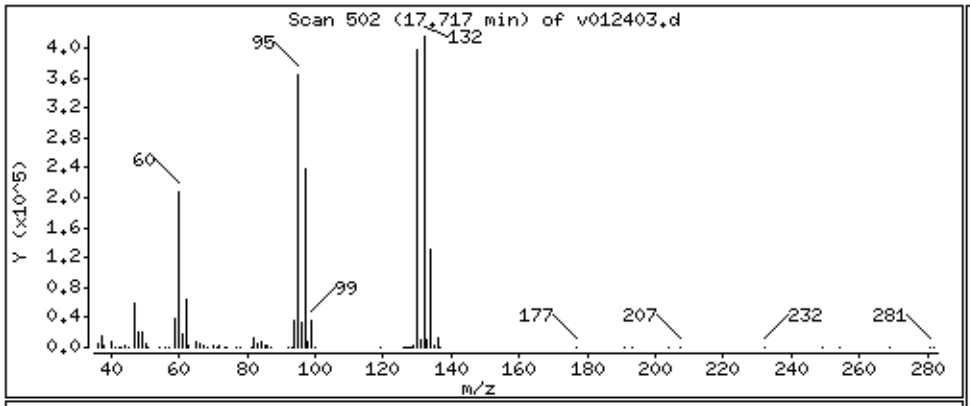
Operator: sn

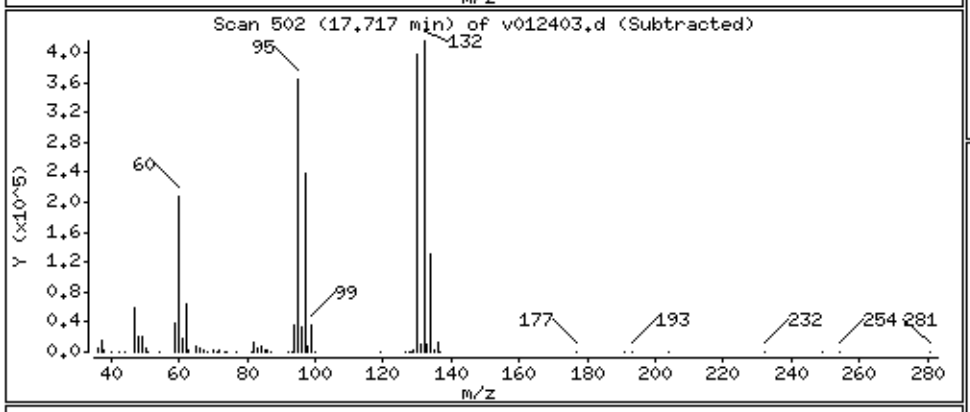
Column phase: RTx-624

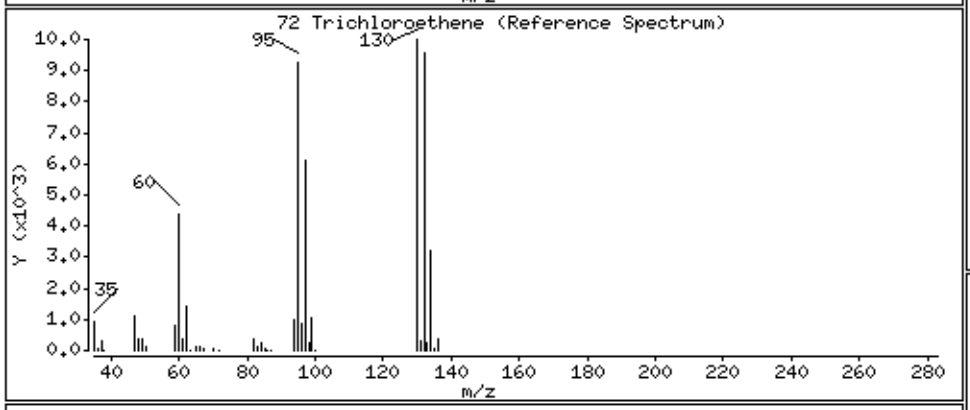
Column diameter: 0.32

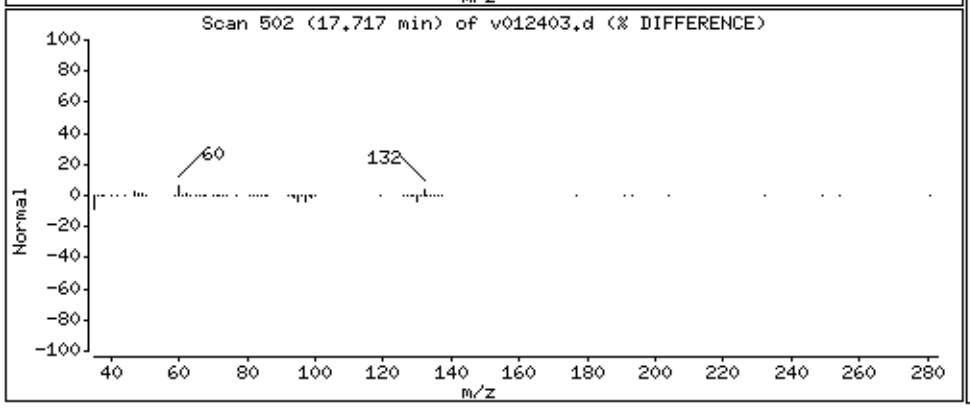
72 Trichloroethene

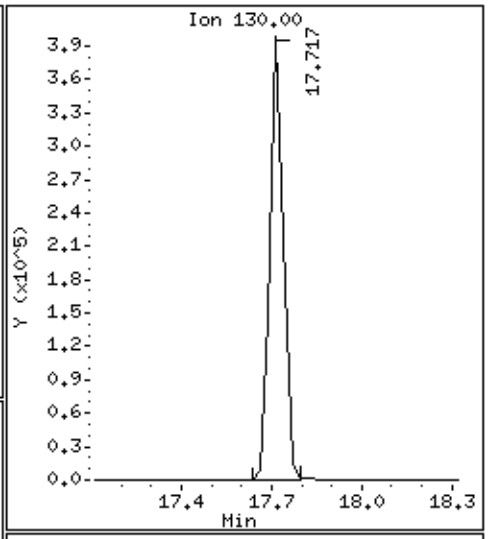
Concentration: 9.418 PPBV

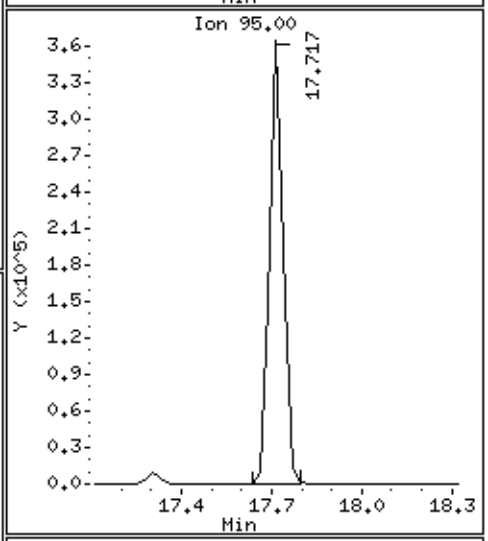


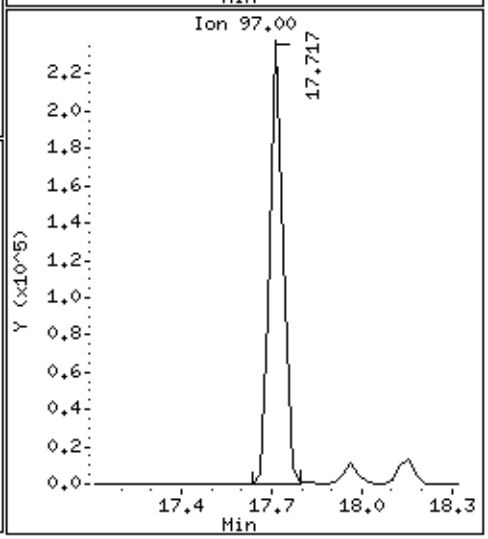












Data File: /chem/msdv.i/24Jan2015.b/v012403.d

Date : 24-JAN-2015 08:04

Client ID: ICV

Instrument: msdv.i

Sample Info: 50mL #2687-186

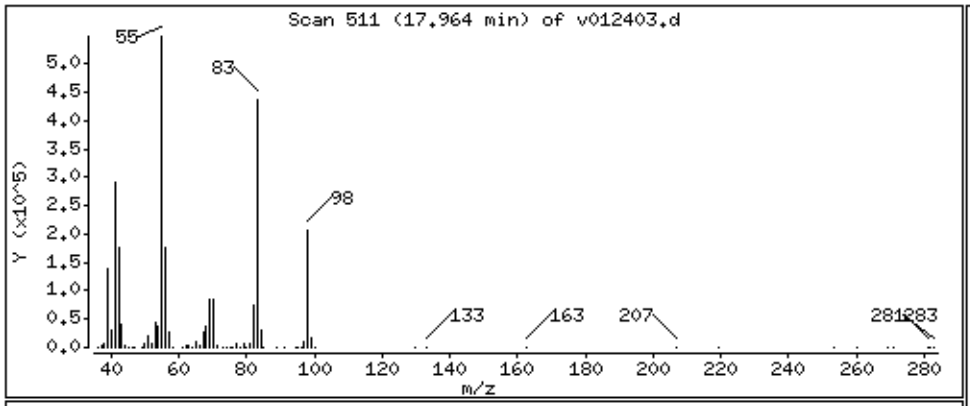
Operator: sn

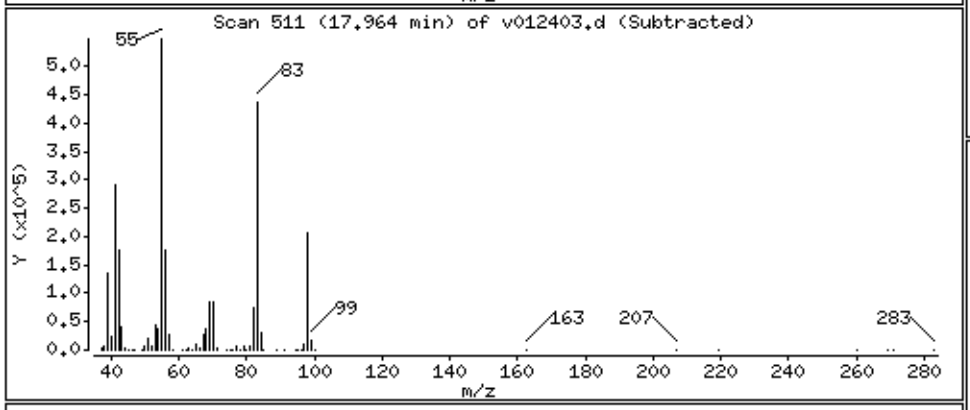
Column phase: RTx-624

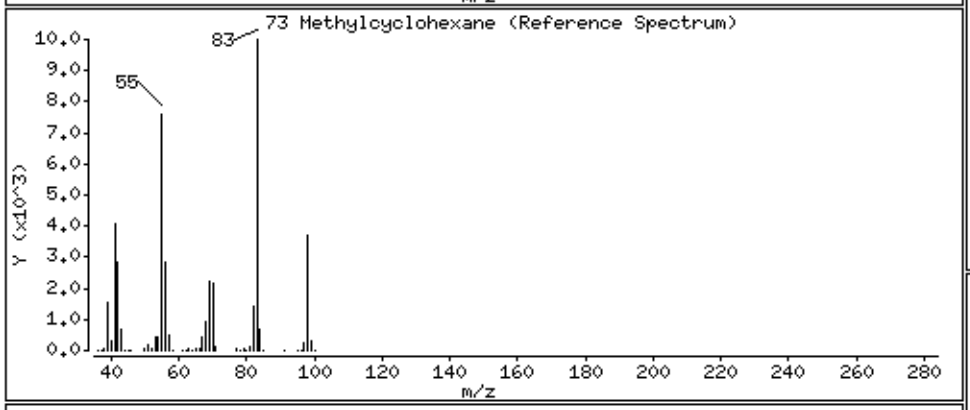
Column diameter: 0.32

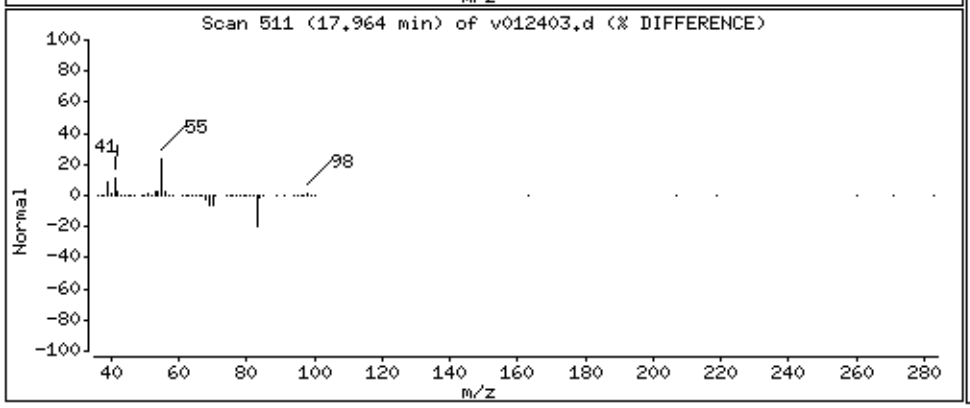
73 Methylcyclohexane

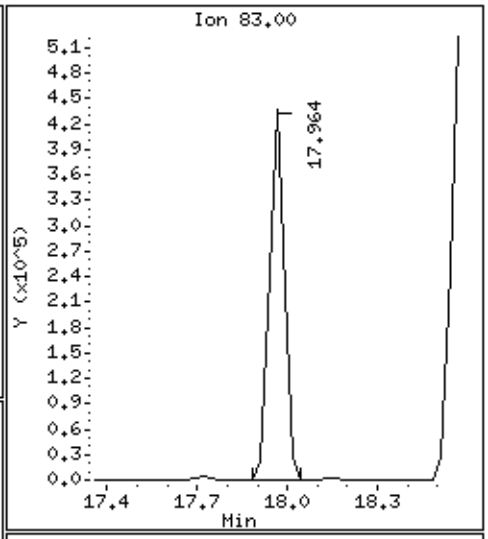
Concentration: 9.408 PPBV

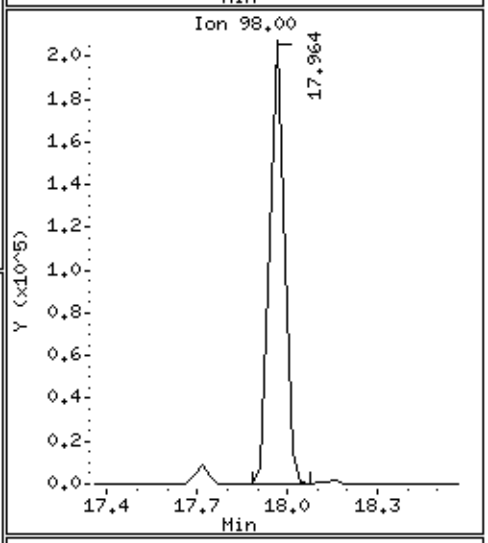


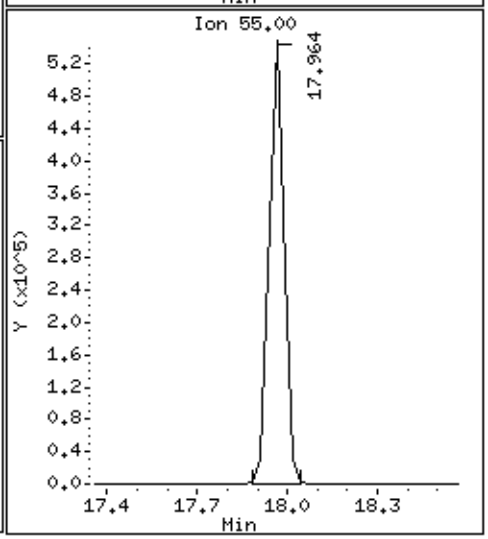












Data File: /chem/msdv.i/24Jan2015.b/v012403.d

Date : 24-JAN-2015 08:04

Client ID: ICV

Instrument: msdv.i

Sample Info: 50mL #2687-186

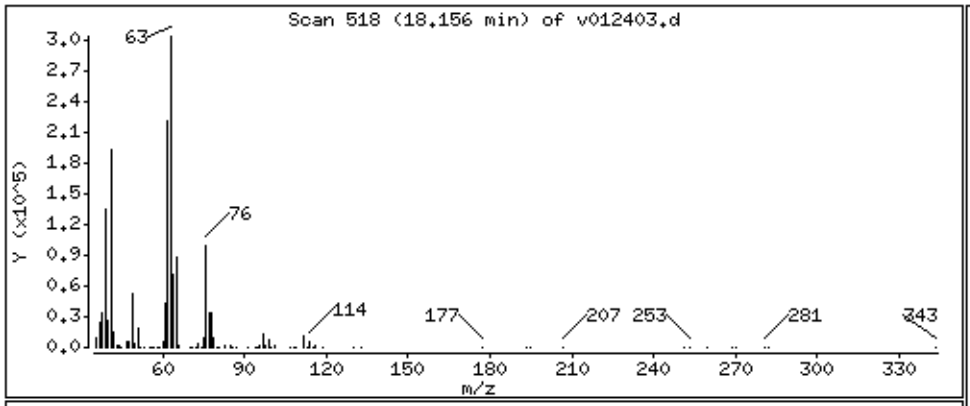
Operator: sn

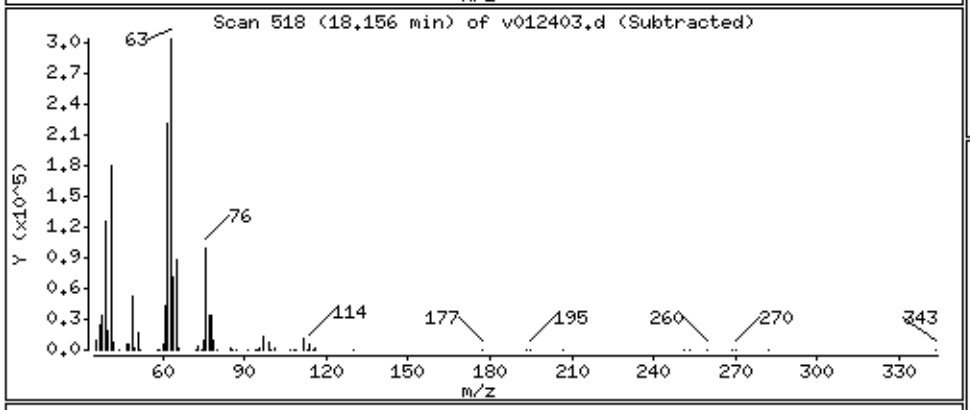
Column phase: RTx-624

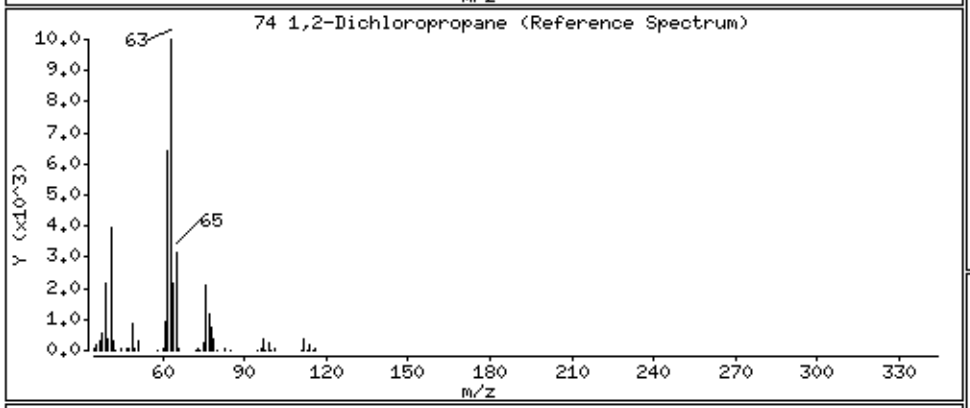
Column diameter: 0.32

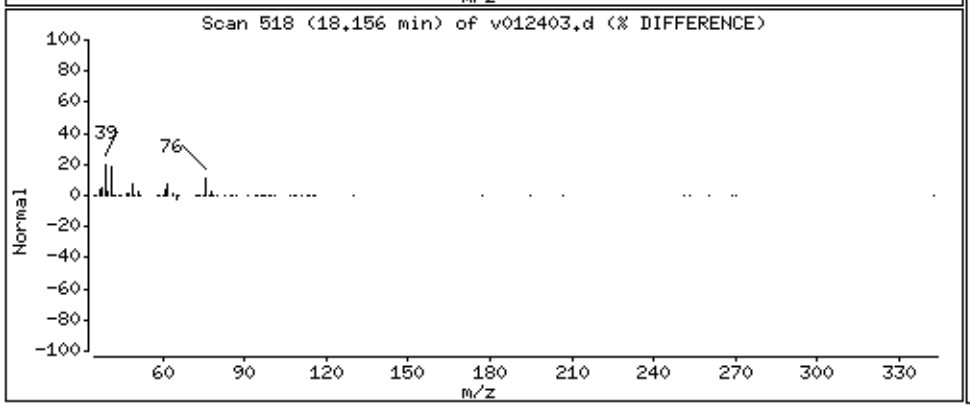
74 1,2-Dichloropropane

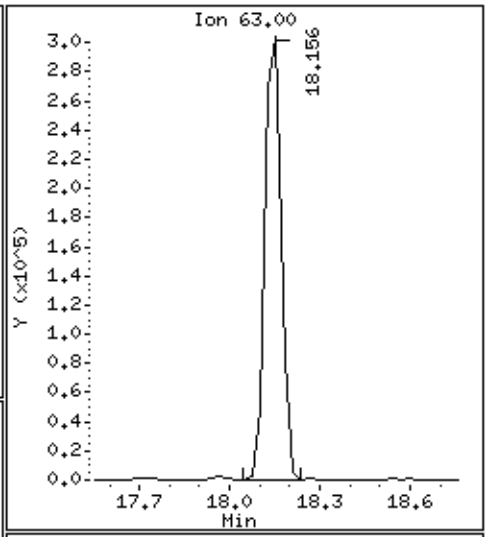
Concentration: 9.406 PPBV

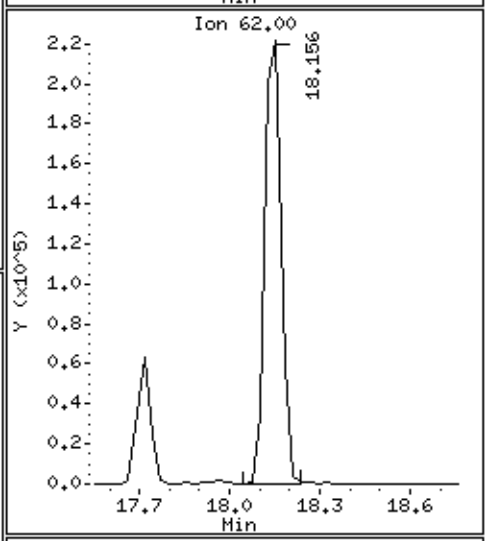


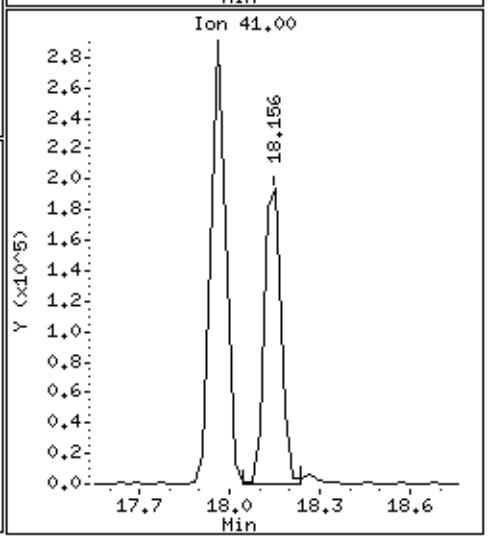












Data File: /chem/msdv.i/24Jan2015.b/v012403.d

Date : 24-JAN-2015 08:04

Client ID: ICV

Instrument: msdv.i

Sample Info: 50mL #2687-186

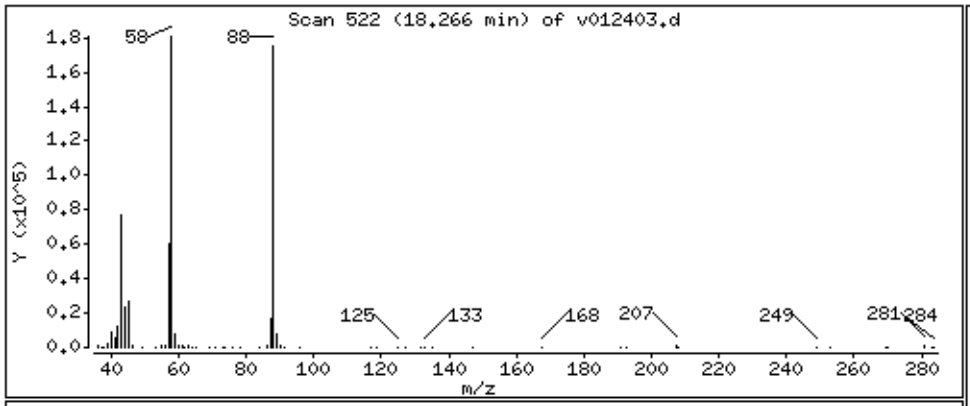
Operator: sn

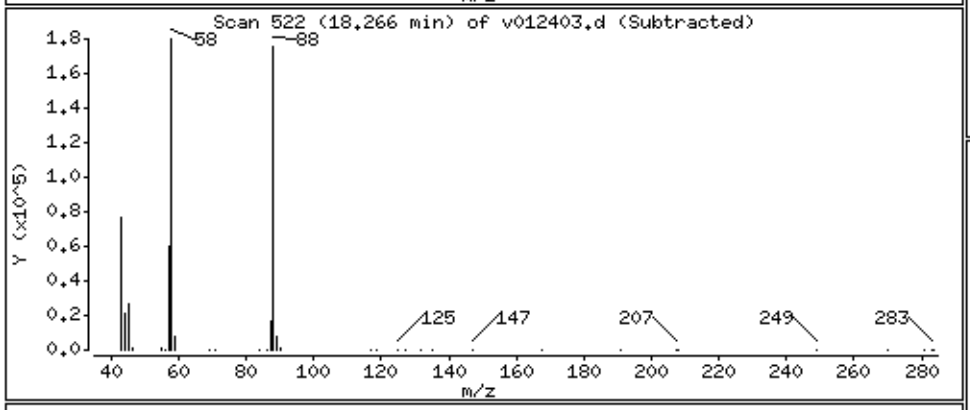
Column phase: RTx-624

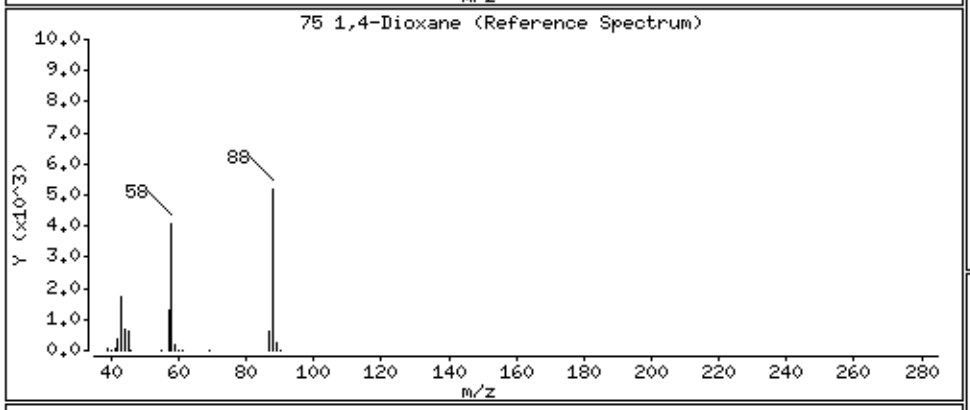
Column diameter: 0.32

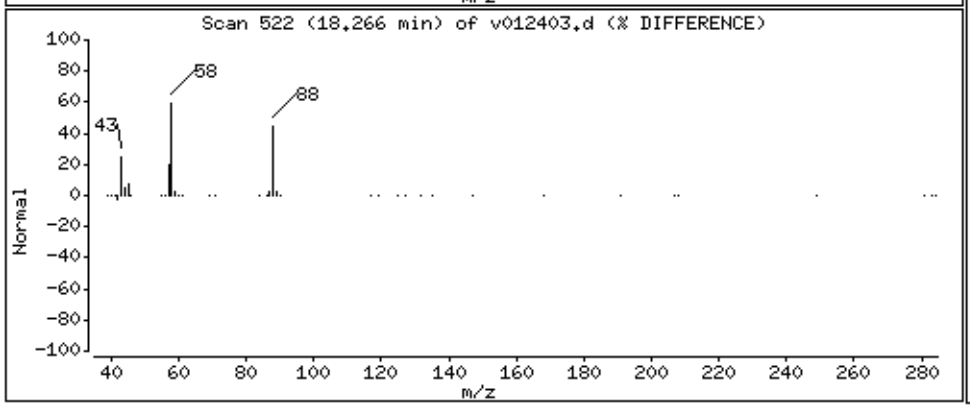
75 1,4-Dioxane

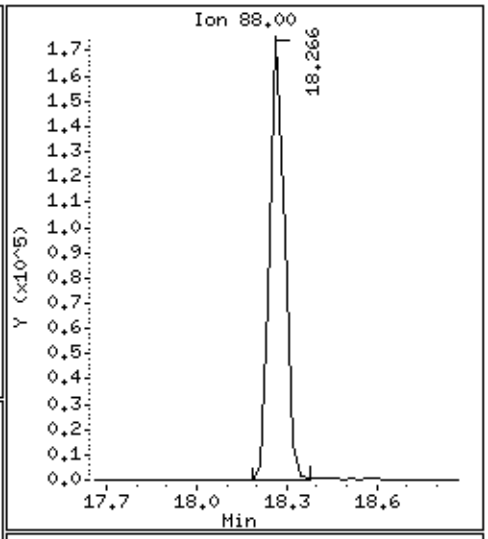
Concentration: 8.274 PPBV

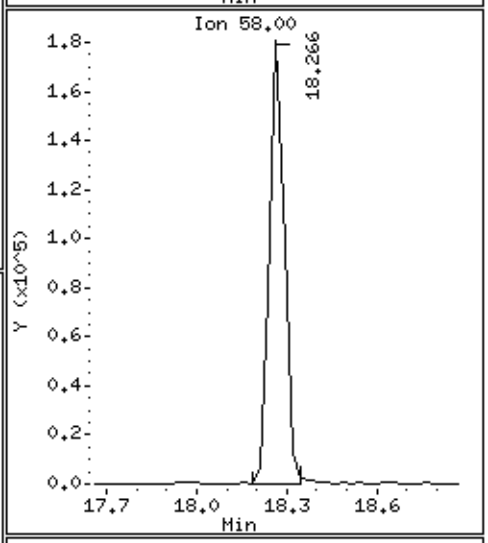


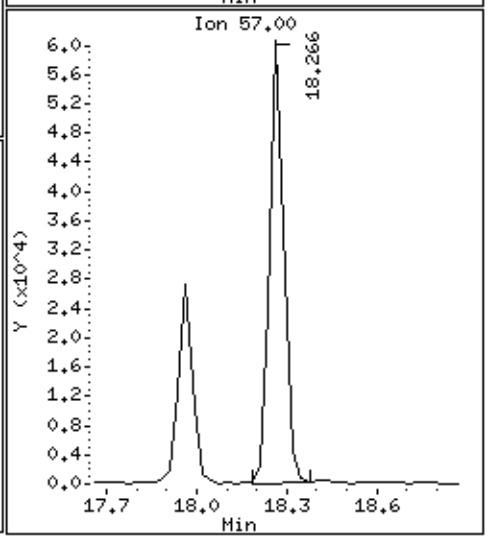












Data File: /chem/msdv.i/24Jan2015.b/v012403.d

Date : 24-JAN-2015 08:04

Client ID: ICV

Instrument: msdv.i

Sample Info: 50mL #2687-186

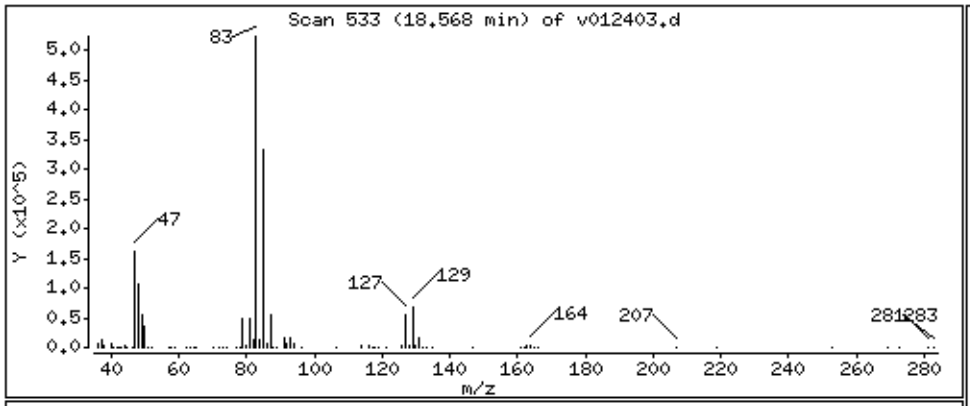
Operator: sn

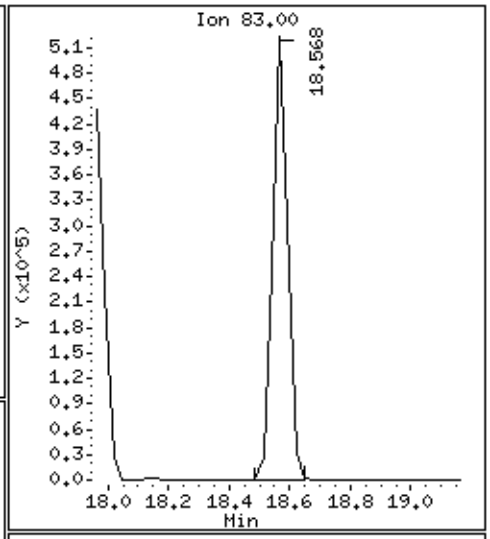
Column phase: RTx-624

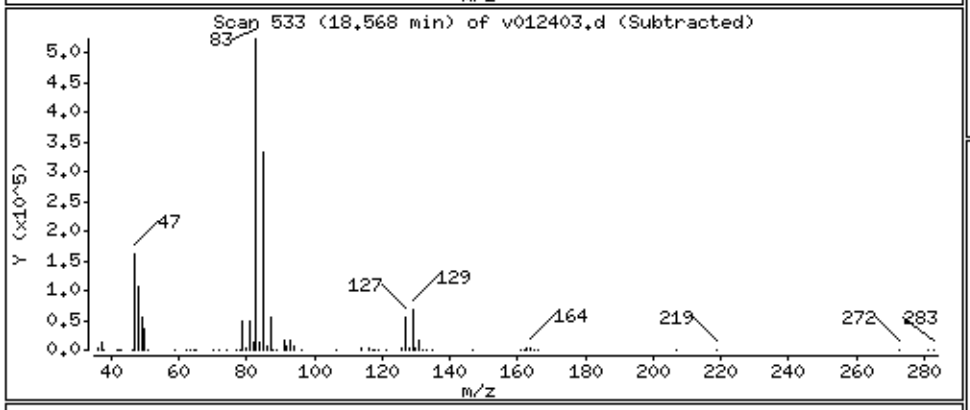
Column diameter: 0.32

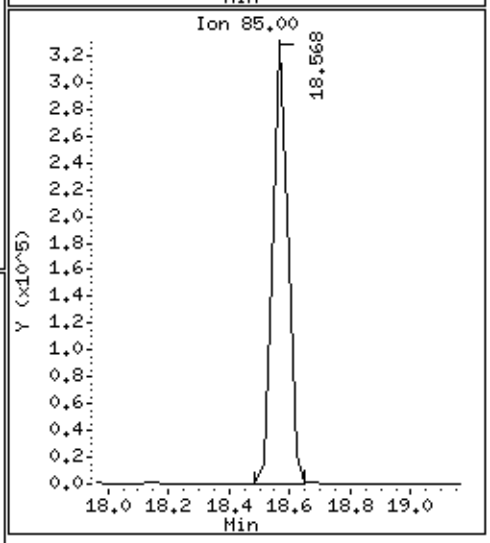
77 Bromodichloromethane

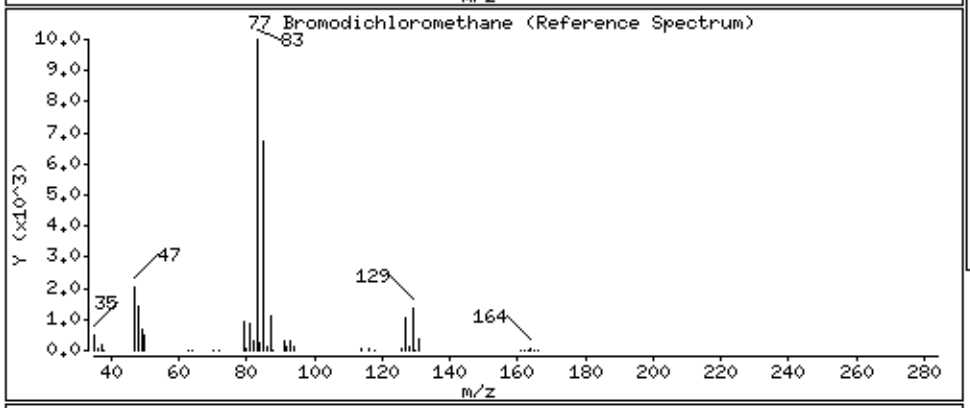
Concentration: 9.421 PPBV

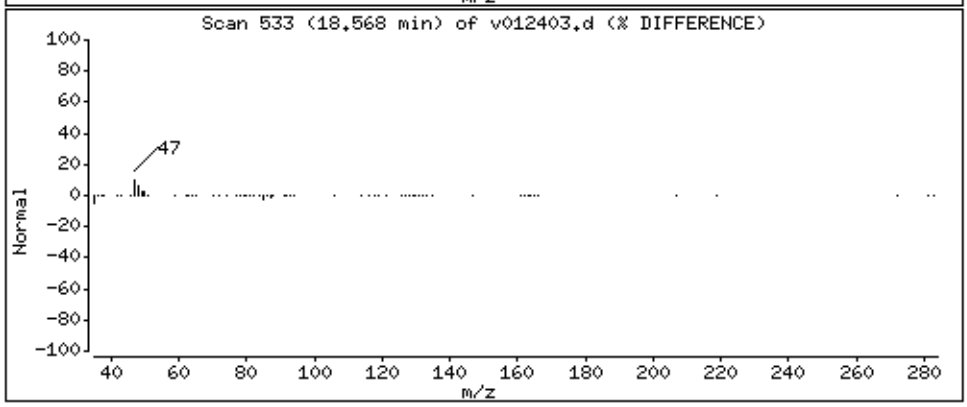












Data File: /chem/msdv.i/24Jan2015.b/v012403.d

Date : 24-JAN-2015 08:04

Client ID: ICV

Instrument: msdv.i

Sample Info: 50mL #2687-186

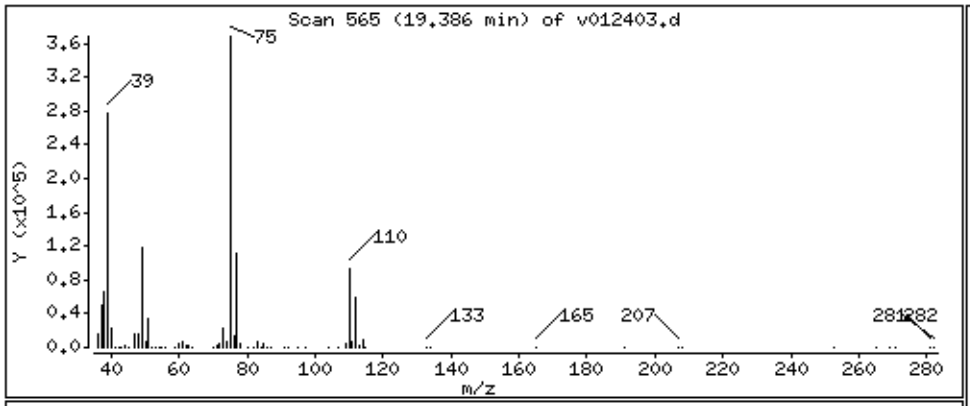
Operator: sn

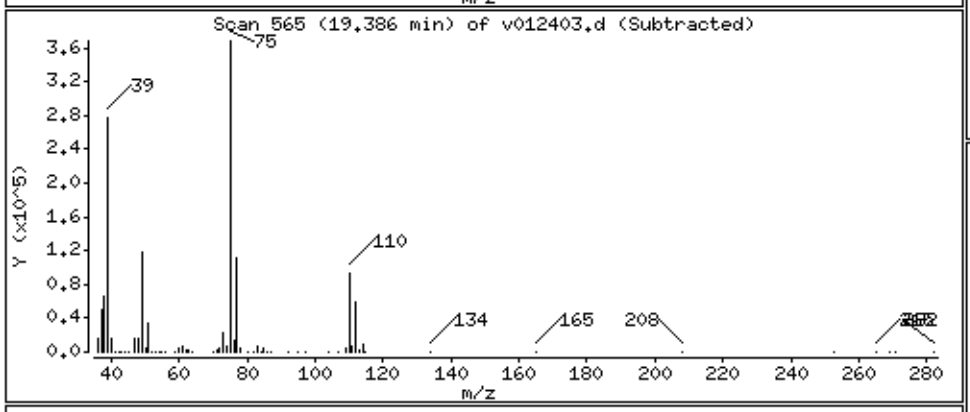
Column phase: RTx-624

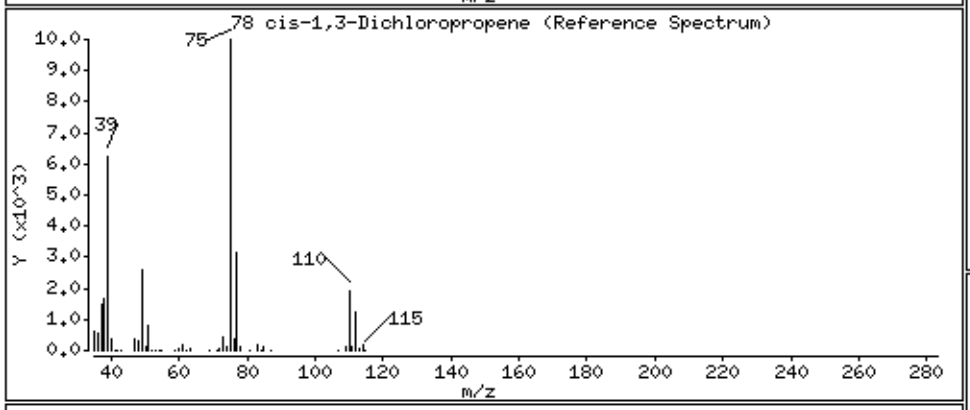
Column diameter: 0.32

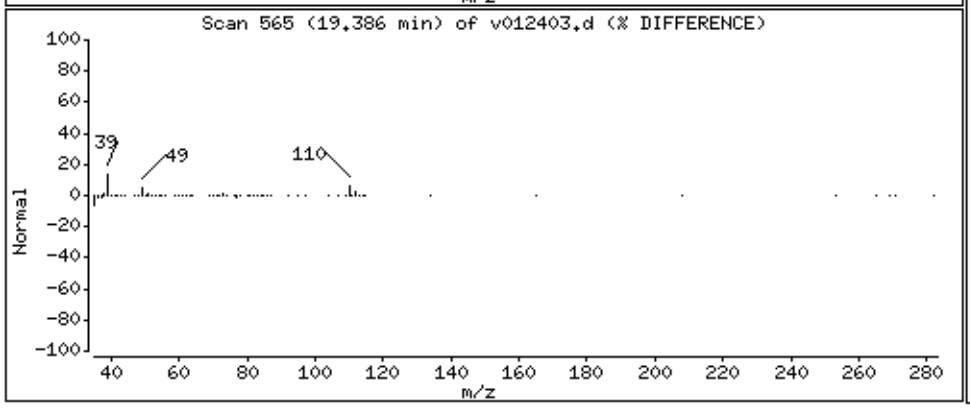
78 cis-1,3-Dichloropropene

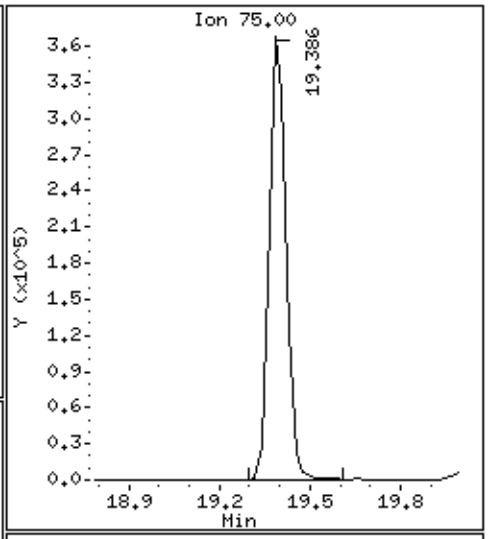
Concentration: 9.023 PPBV

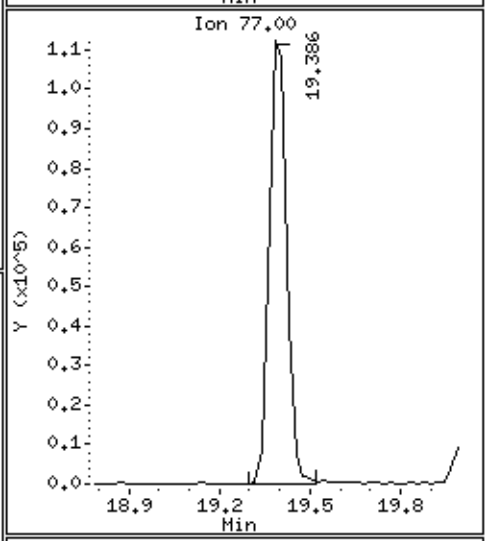


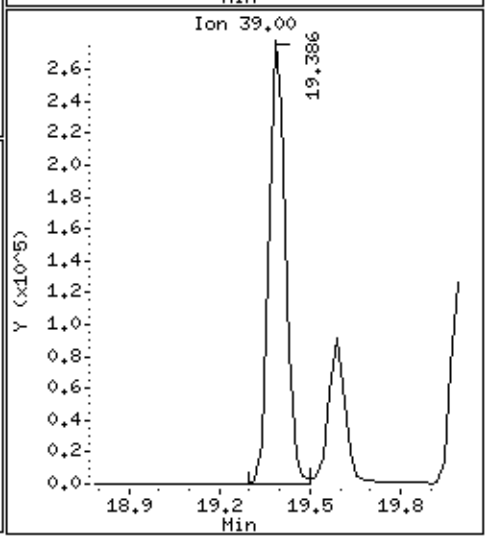












Data File: /chem/msdv.i/24Jan2015.b/v012403.d

Date : 24-JAN-2015 08:04

Client ID: ICV

Instrument: msdv.i

Sample Info: 50mL #2687-186

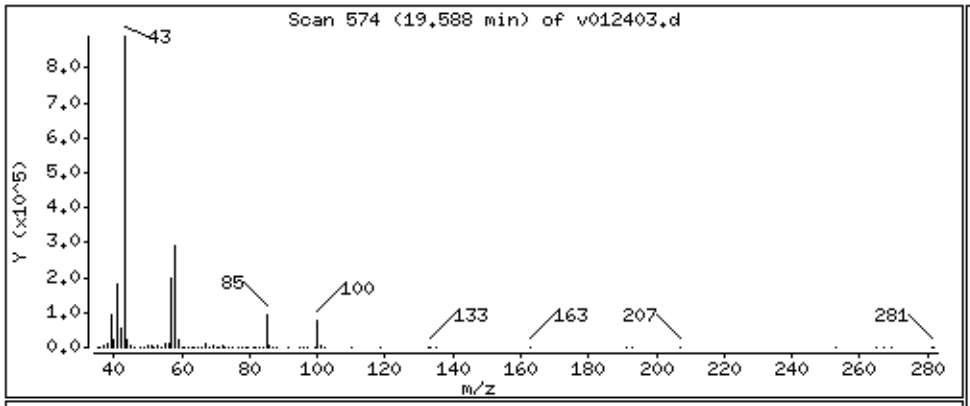
Operator: sn

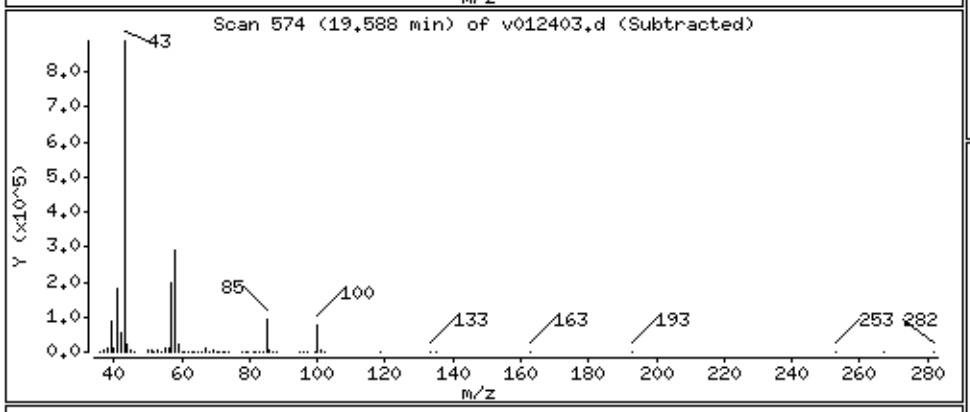
Column phase: RTx-624

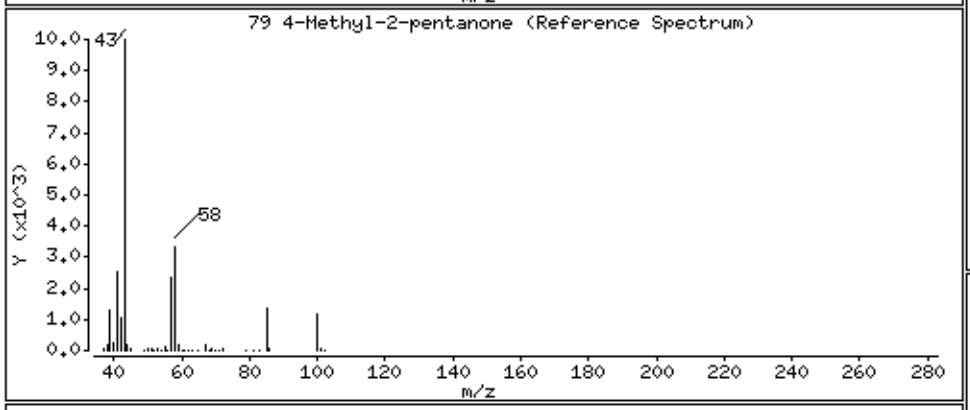
Column diameter: 0.32

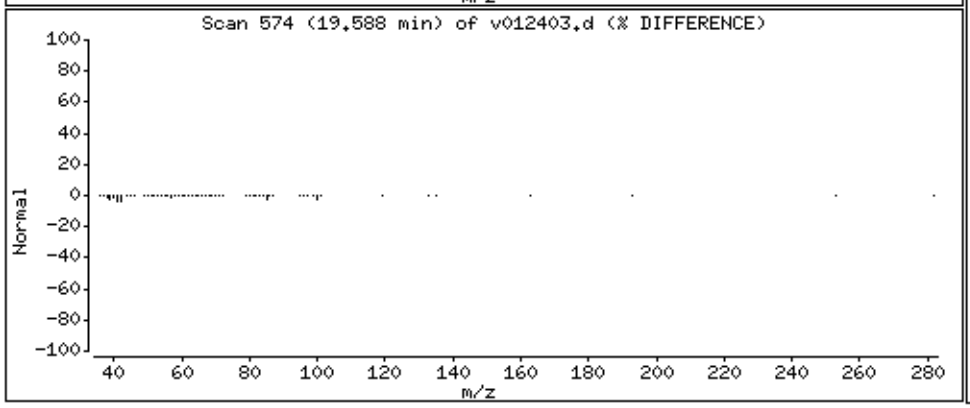
79 4-Methyl-2-pentanone

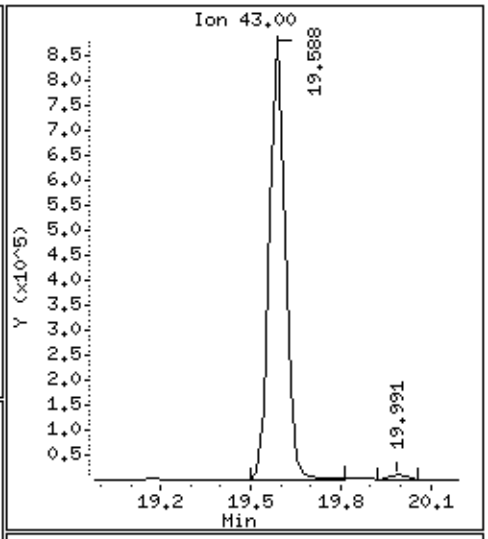
Concentration: 9.195 PPBV

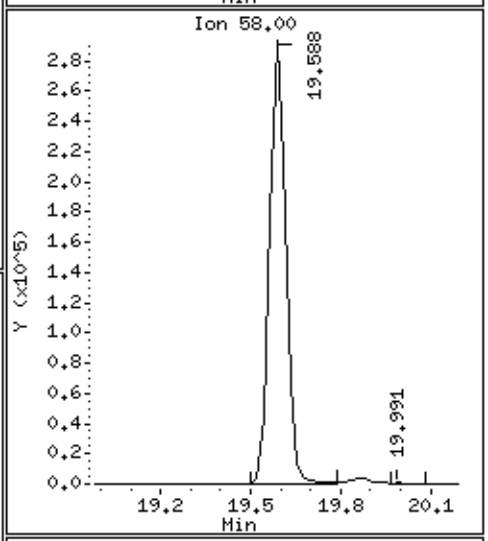


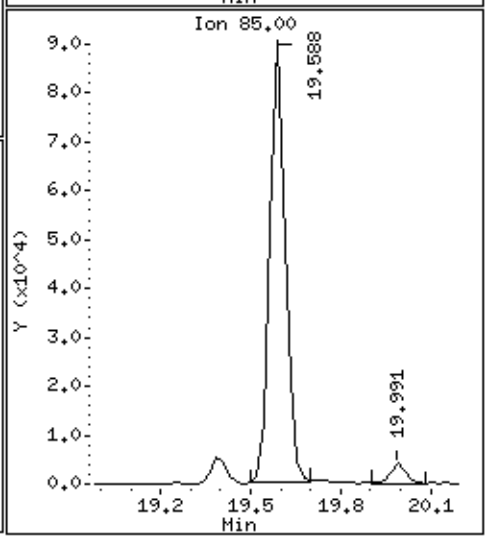












Data File: /chem/msdv.i/24Jan2015.b/v012403.d

Date : 24-JAN-2015 08:04

Client ID: ICV

Instrument: msdv.i

Sample Info: 50mL #2687-186

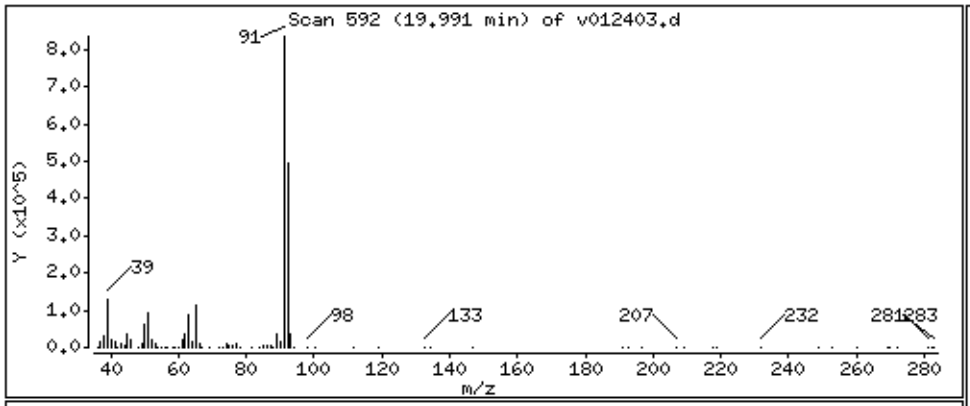
Operator: sn

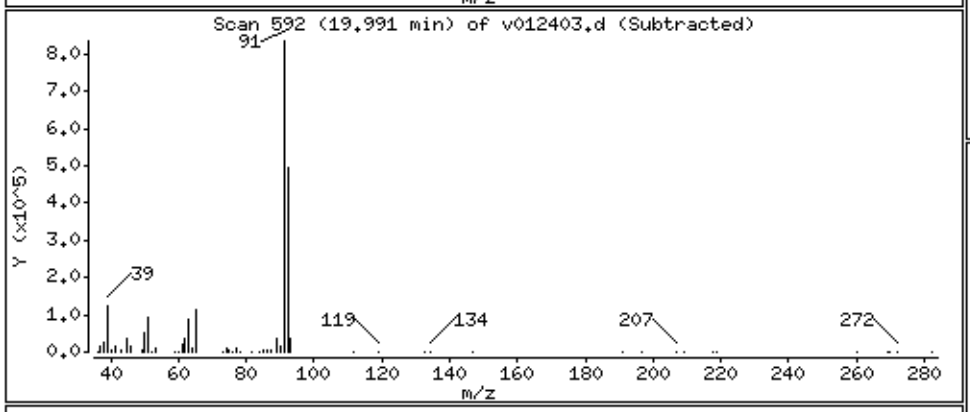
Column phase: RTx-624

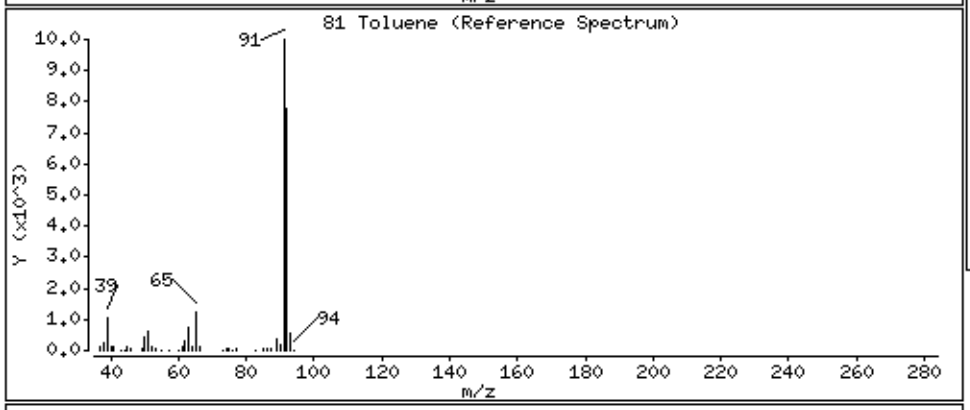
Column diameter: 0.32

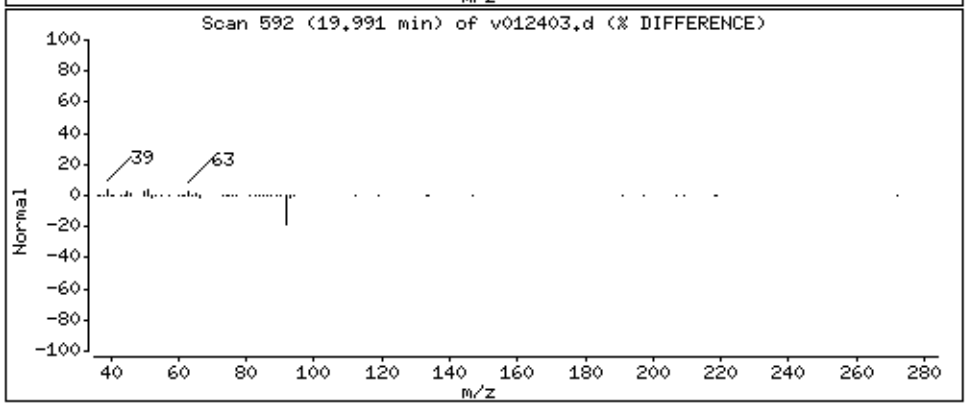
81 Toluene

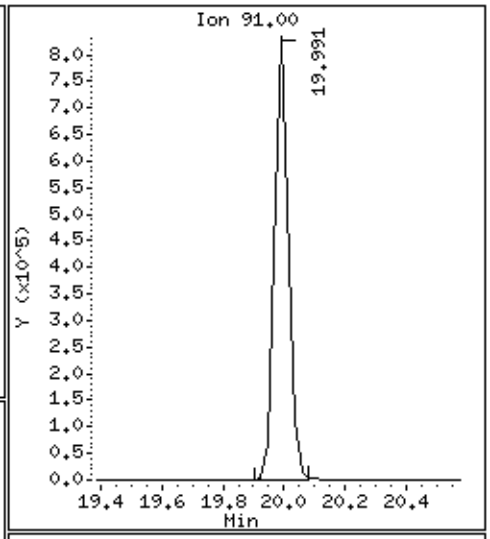
Concentration: 9.172 PPBV

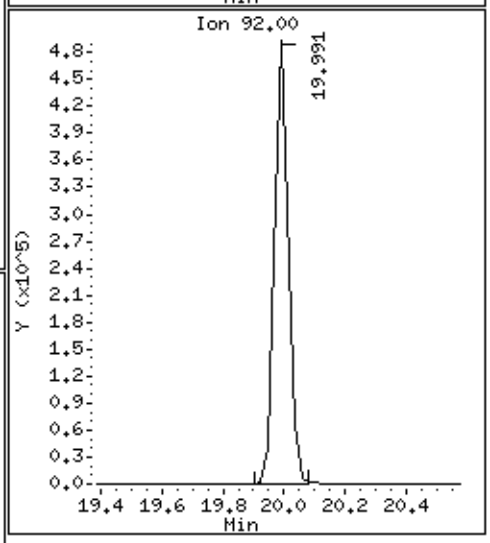












Data File: /chem/msdv.i/24Jan2015.b/v012403.d

Date : 24-JAN-2015 08:04

Client ID: ICV

Instrument: msdv.i

Sample Info: 50mL #2687-186

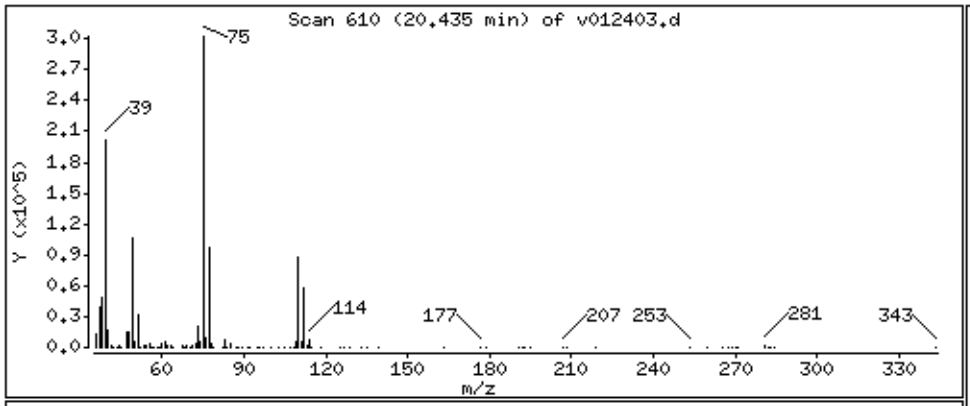
Operator: sn

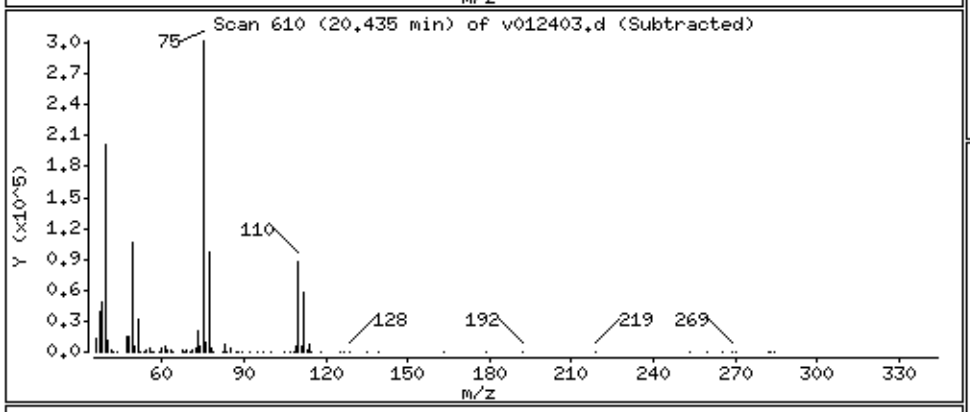
Column phase: RTx-624

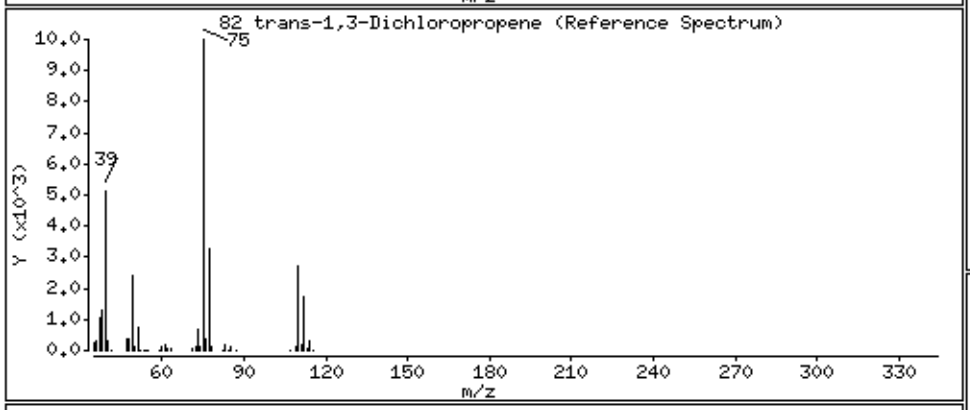
Column diameter: 0.32

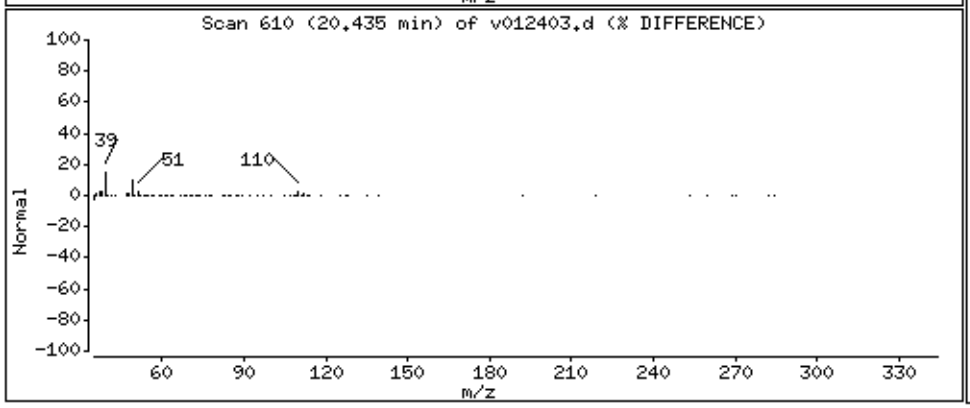
82 trans-1,3-Dichloropropene

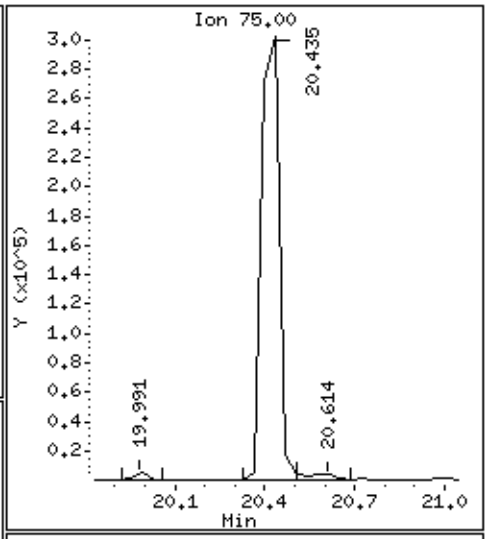
Concentration: 9.195 PPBV

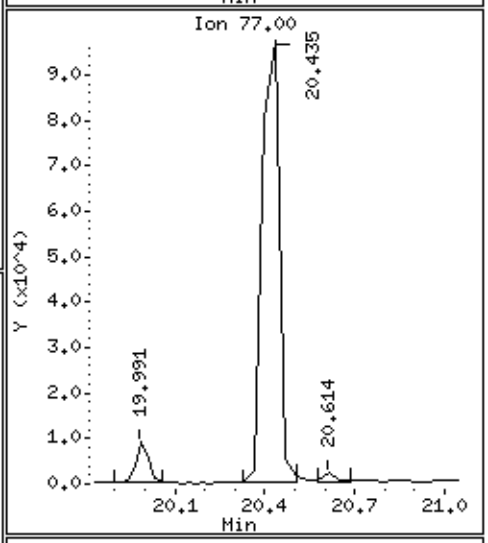


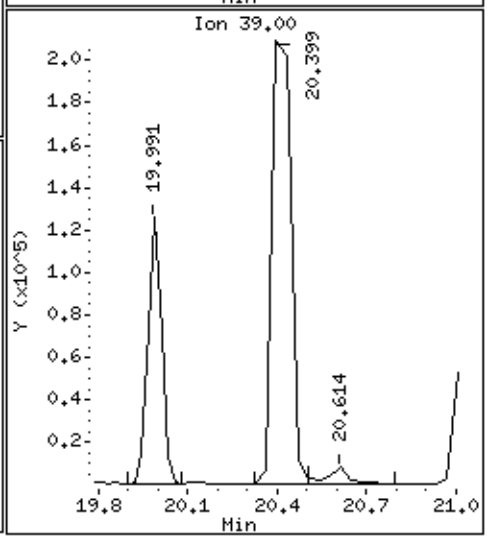












Data File: /chem/msdv.i/24Jan2015.b/v012403.d

Date : 24-JAN-2015 08:04

Client ID: ICV

Instrument: msdv.i

Sample Info: 50mL #2687-186

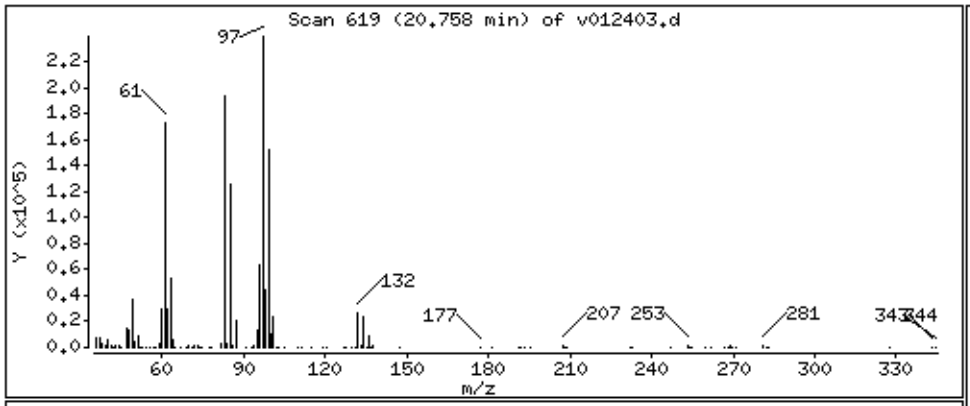
Operator: sn

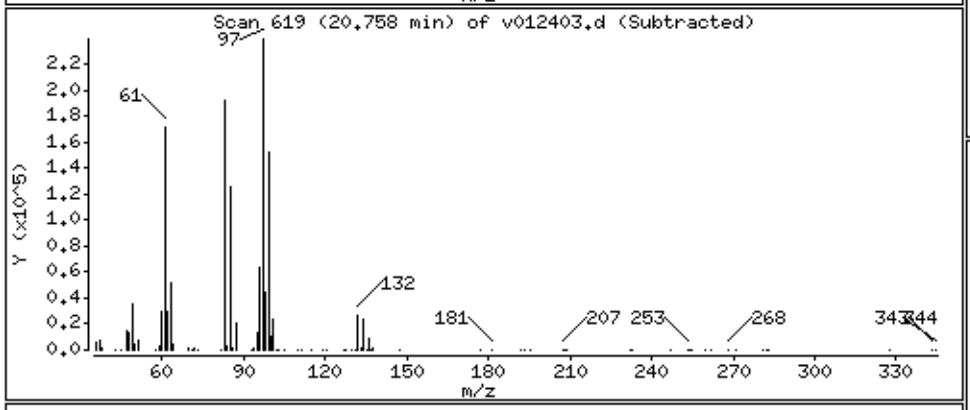
Column phase: RTx-624

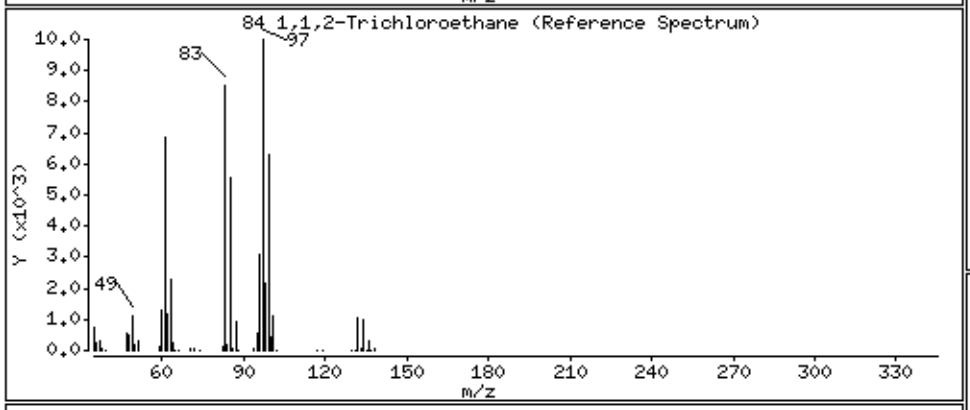
Column diameter: 0.32

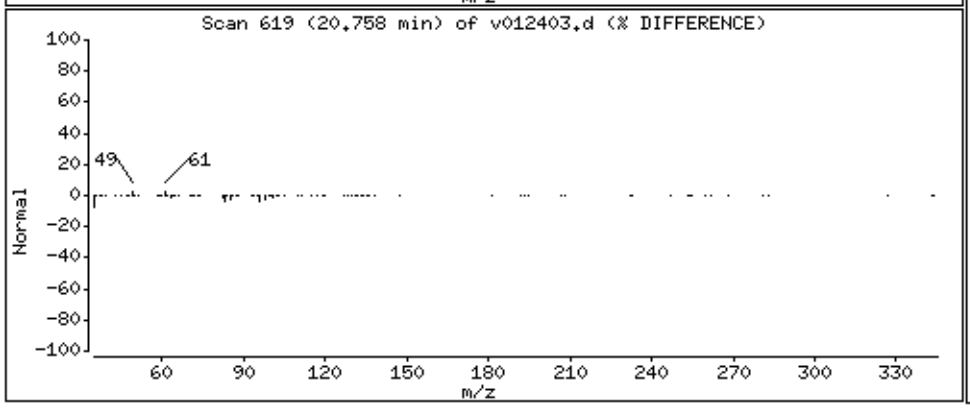
84 1,1,2-Trichloroethane

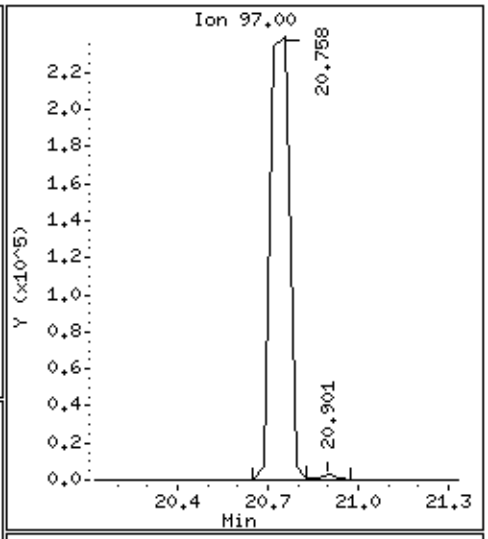
Concentration: 9.414 PPBV

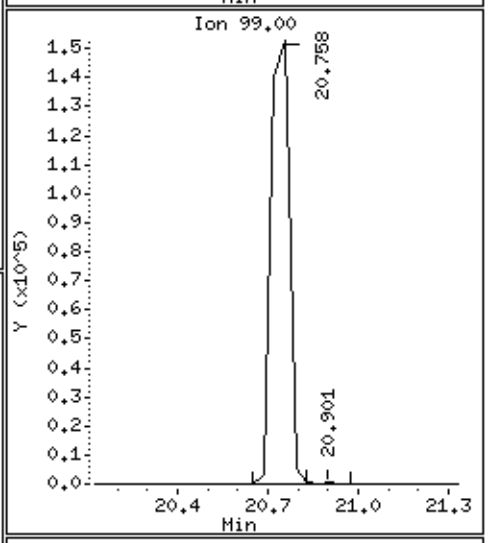


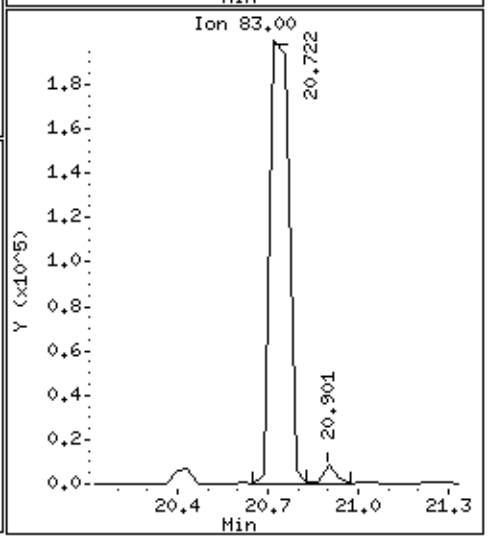












Data File: /chem/msdv.i/24Jan2015.b/v012403.d

Date : 24-JAN-2015 08:04

Client ID: ICV

Instrument: msdv.i

Sample Info: 50mL #2687-186

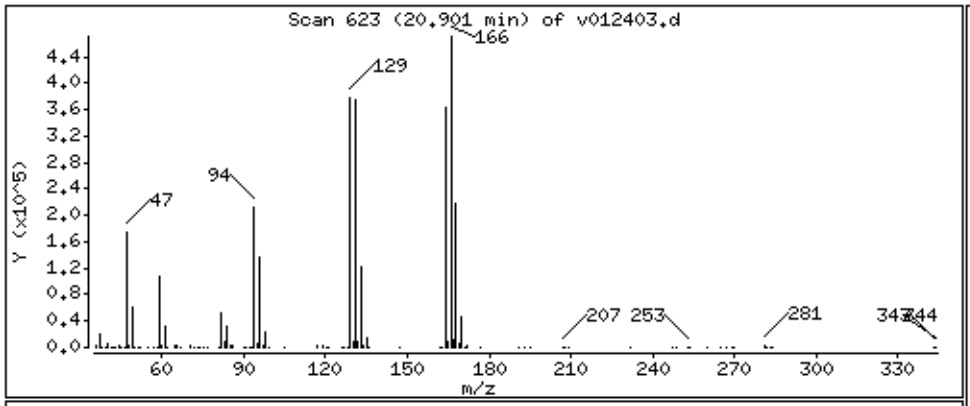
Operator: sn

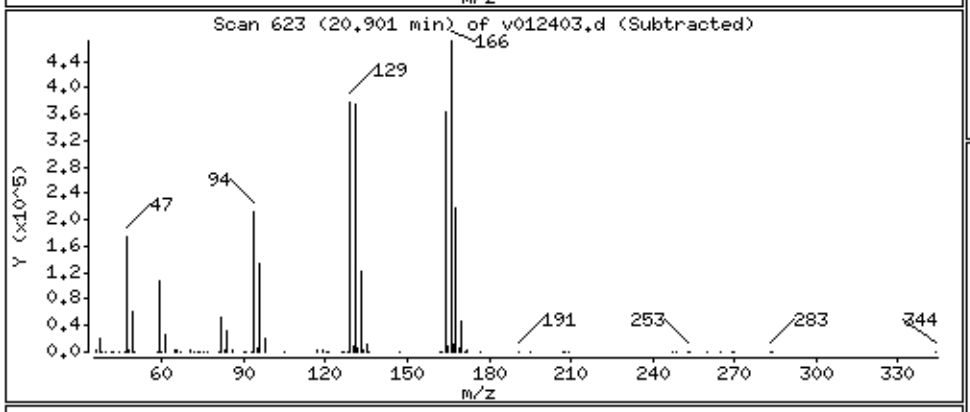
Column phase: RTx-624

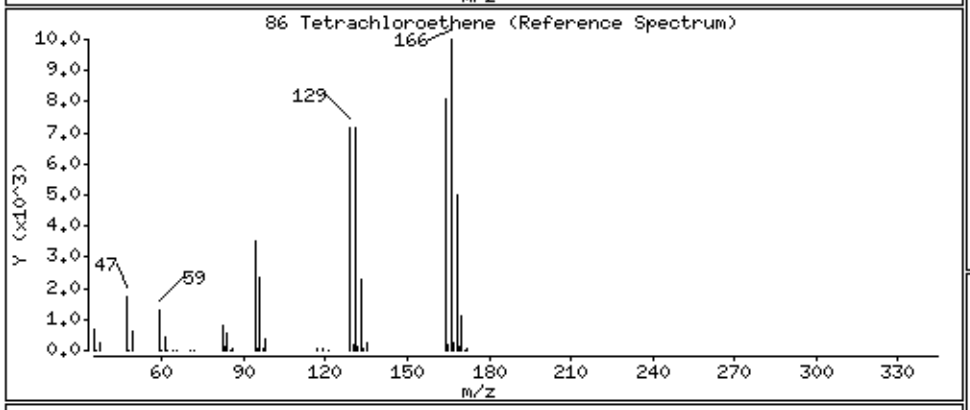
Column diameter: 0.32

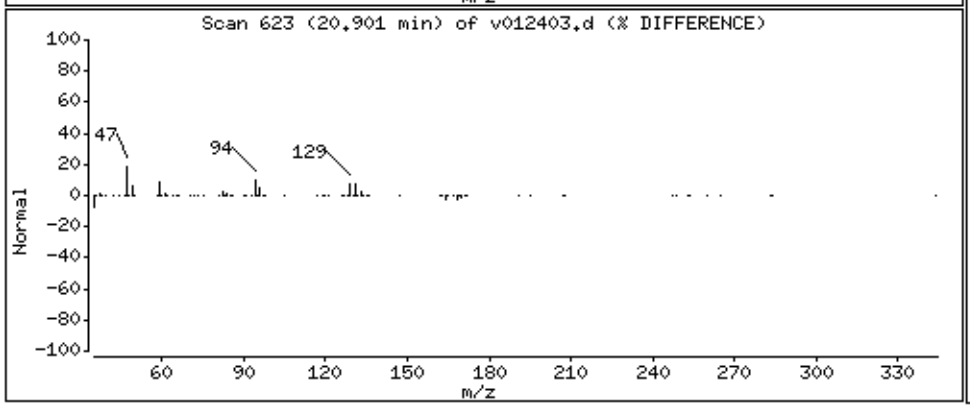
86 Tetrachloroethene

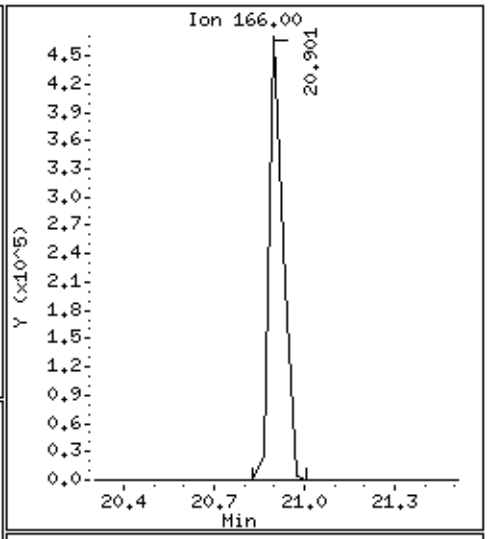
Concentration: 9.009 PPBV

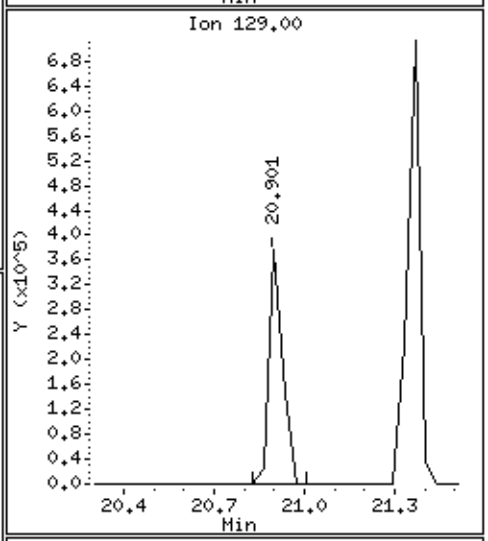


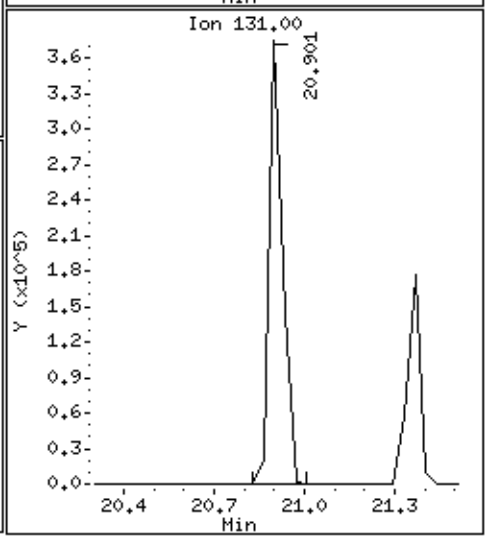












Data File: /chem/msdv.i/24Jan2015.b/v012403.d

Date : 24-JAN-2015 08:04

Client ID: ICV

Instrument: msdv.i

Sample Info: 50mL #2687-186

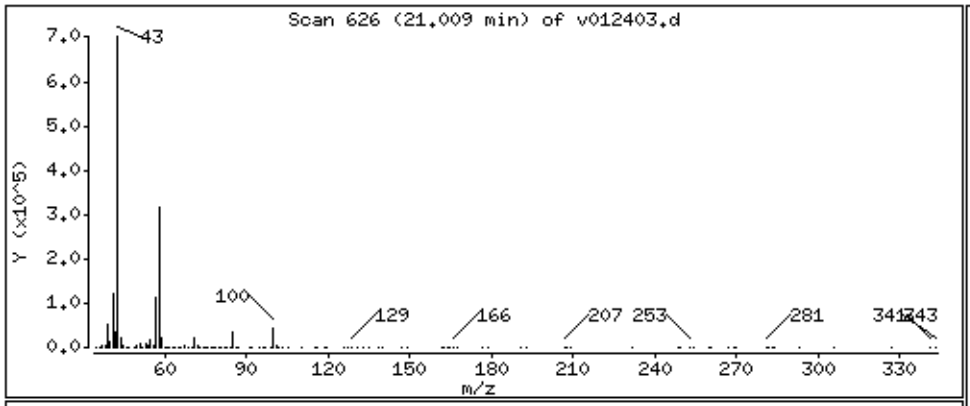
Operator: sn

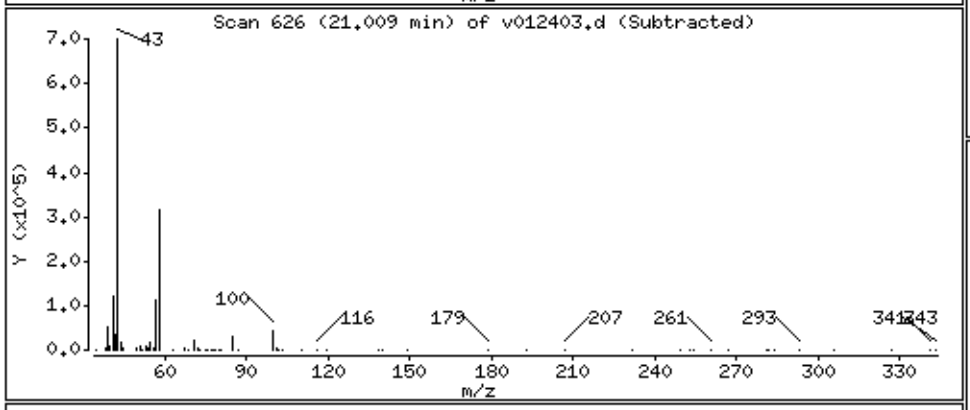
Column phase: RTx-624

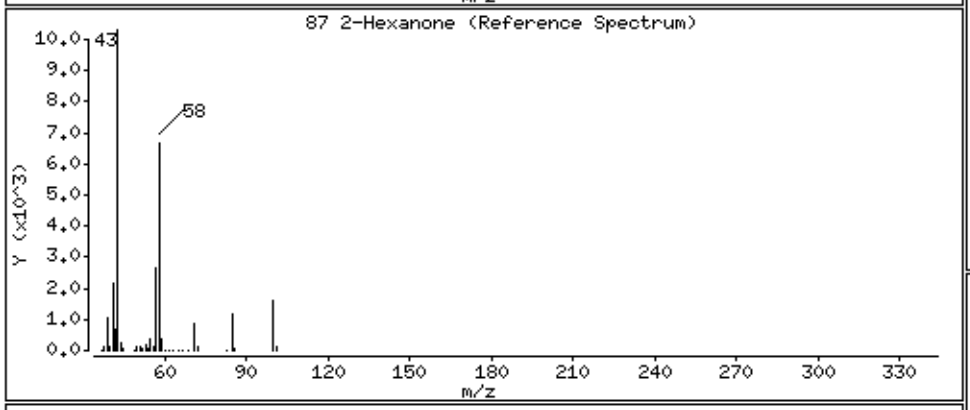
Column diameter: 0.32

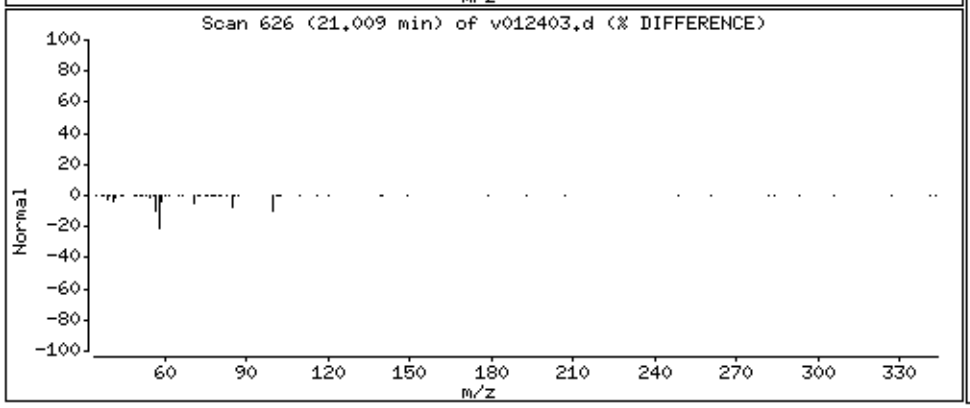
87 2-Hexanone

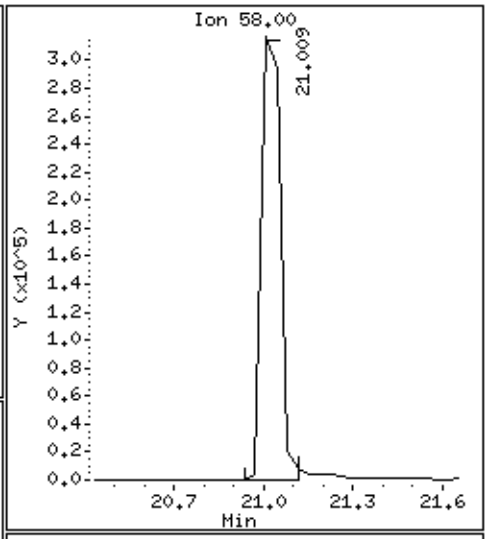
Concentration: 9.468 PPBV

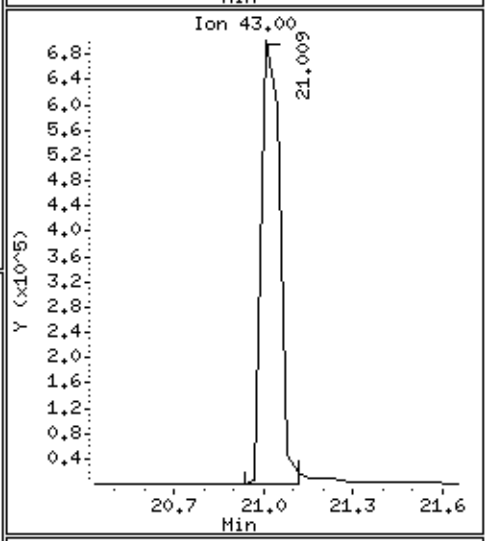


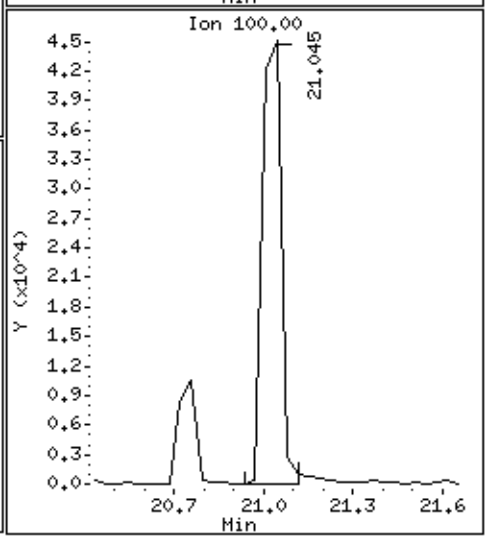












Data File: /chem/msdv.i/24Jan2015.b/v012403.d

Date : 24-JAN-2015 08:04

Client ID: ICV

Instrument: msdv.i

Sample Info: 50mL #2687-186

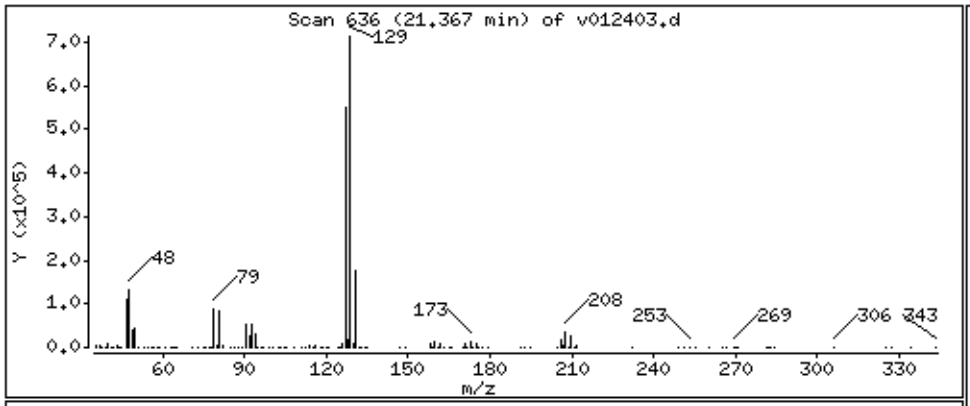
Operator: sn

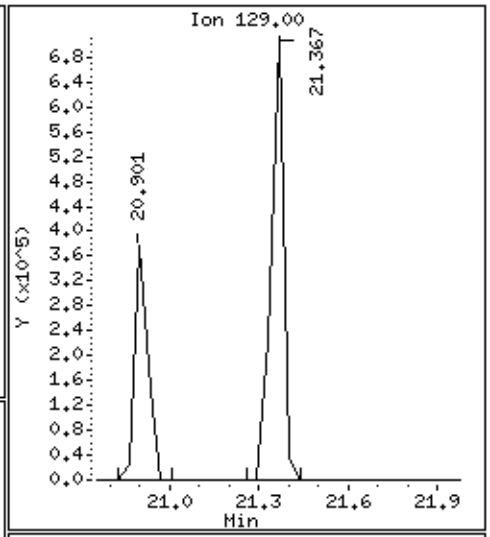
Column phase: RTx-624

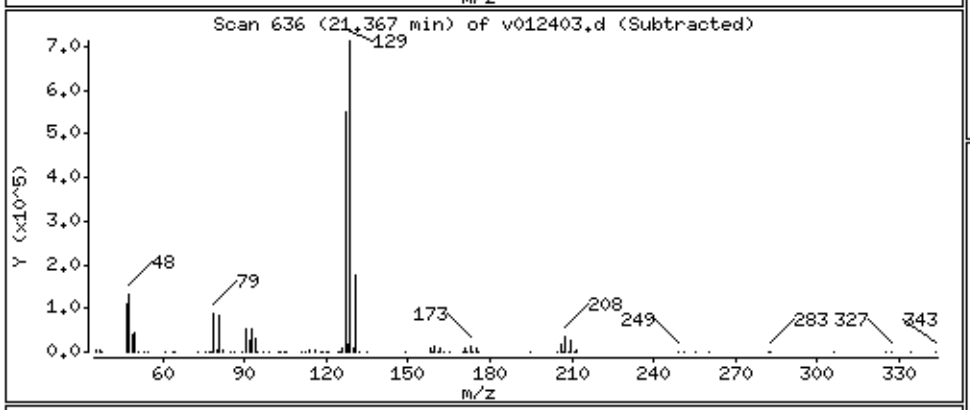
Column diameter: 0.32

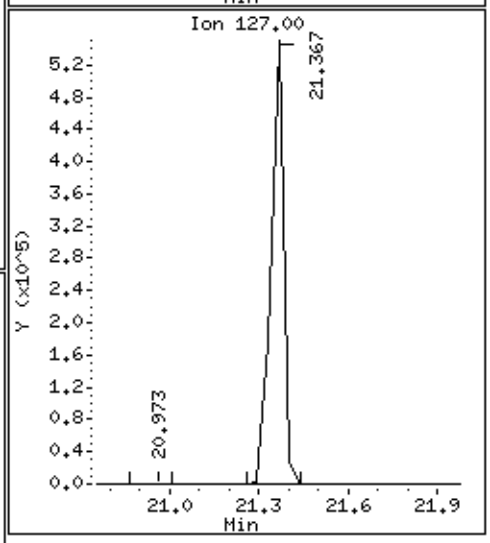
89 Dibromochloromethane

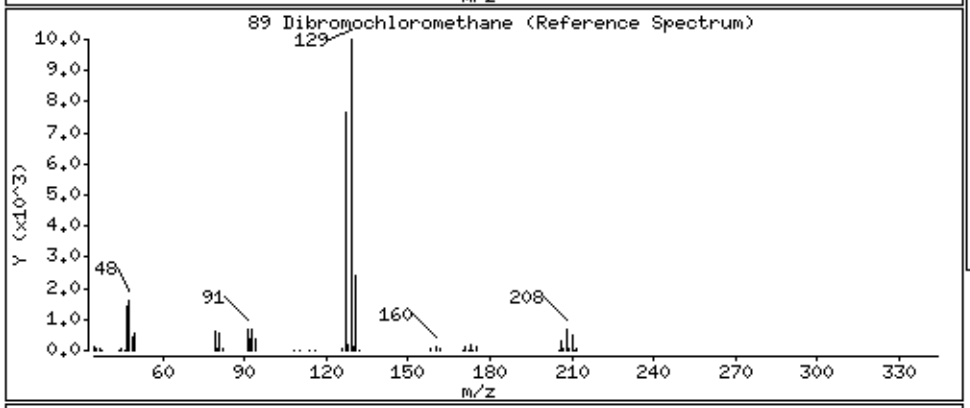
Concentration: 9.670 PPBV

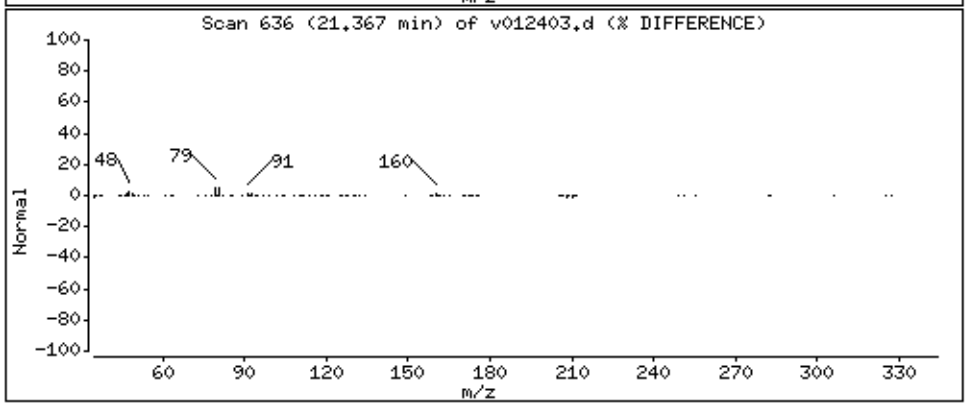












Data File: /chem/msdv.i/24Jan2015.b/v012403.d

Date : 24-JAN-2015 08:04

Client ID: ICV

Instrument: msdv.i

Sample Info: 50mL #2687-186

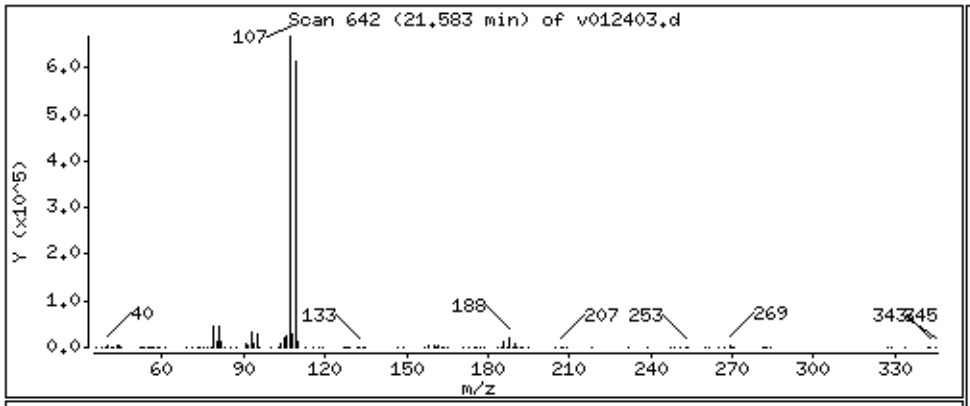
Operator: sn

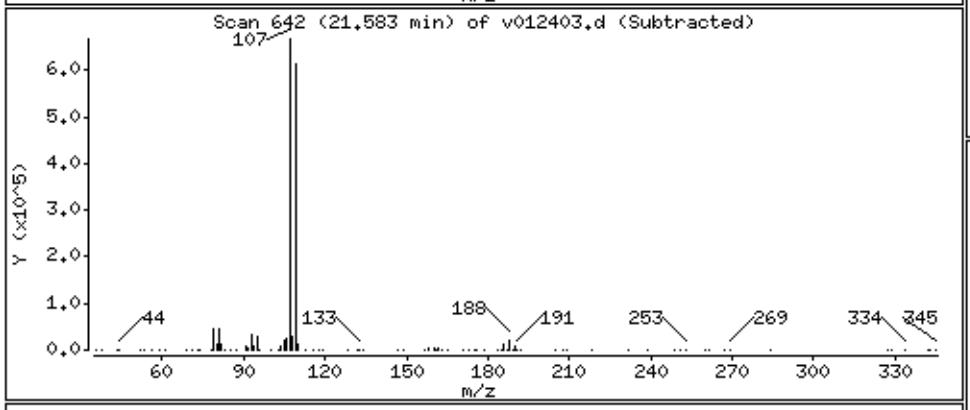
Column phase: RTx-624

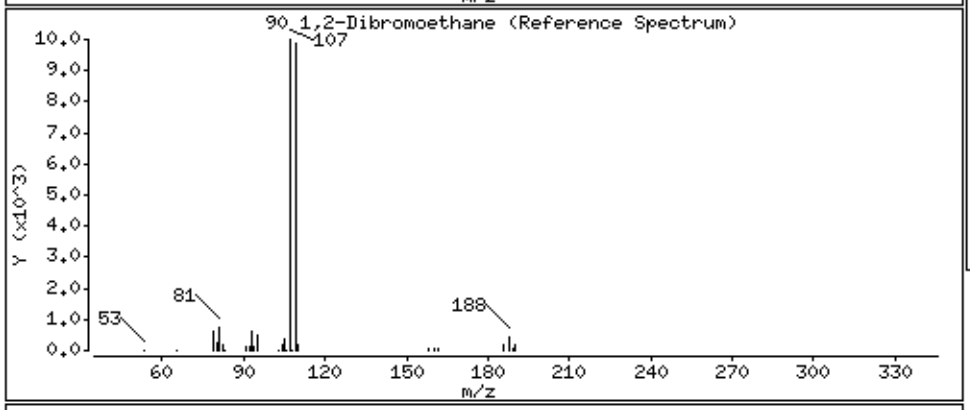
Column diameter: 0.32

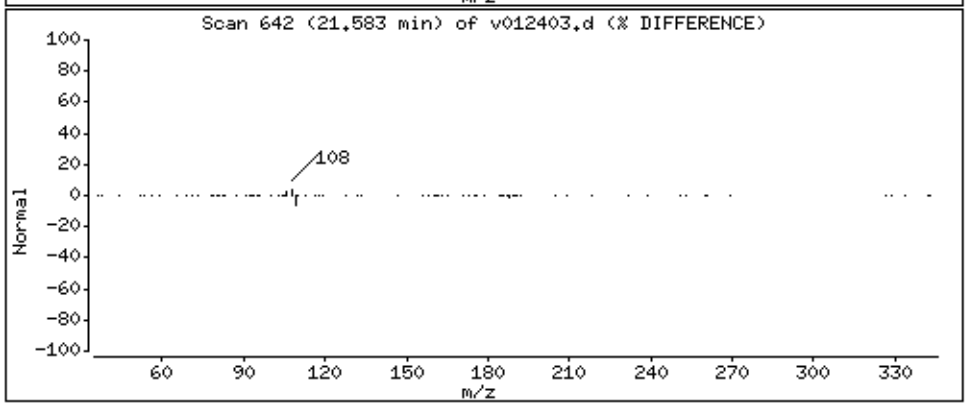
90 1,2-Dibromoethane

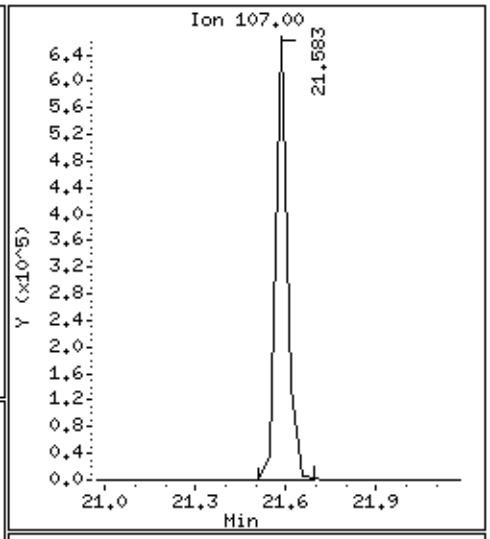
Concentration: 9.737 PPBV

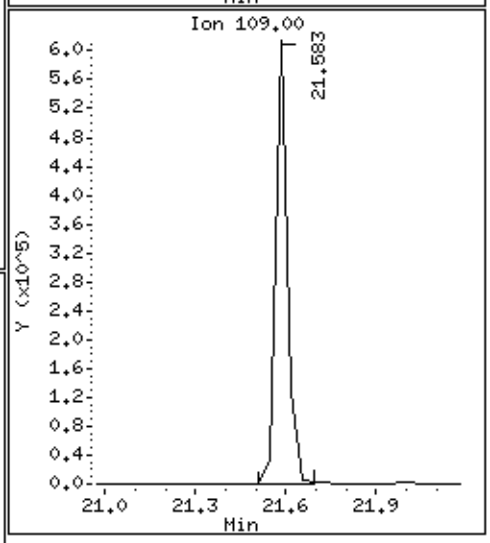












Data File: /chem/msdv.i/24Jan2015.b/v012403.d

Date : 24-JAN-2015 08:04

Client ID: ICV

Instrument: msdv.i

Sample Info: 50mL #2687-186

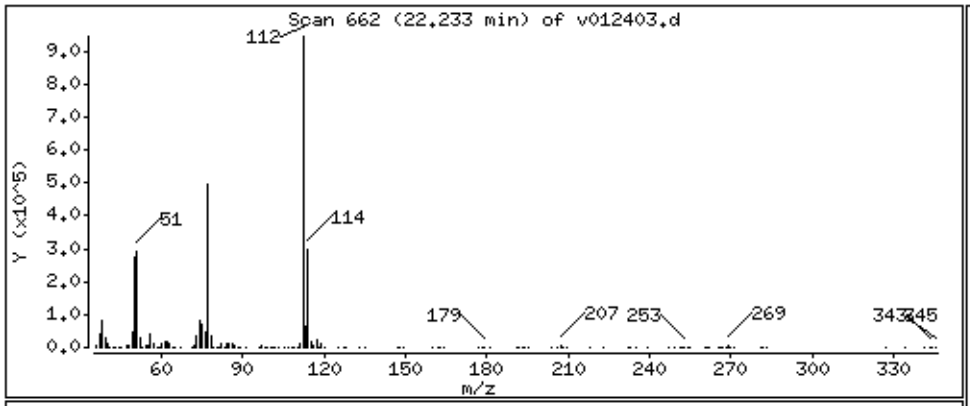
Operator: sn

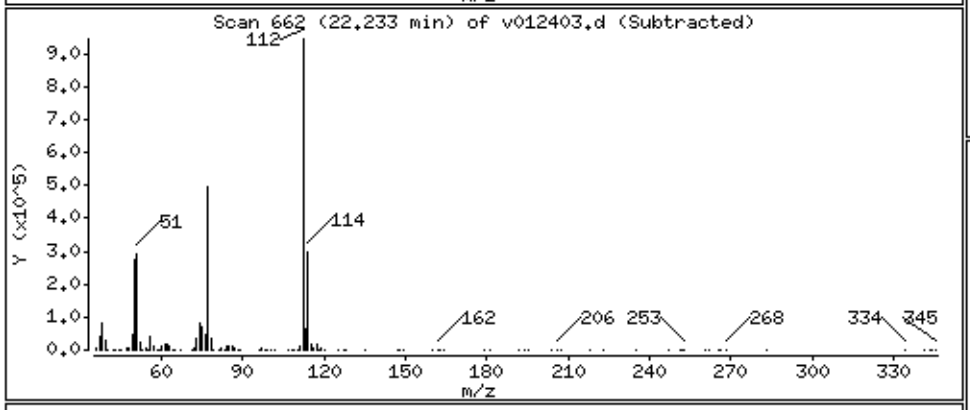
Column phase: RTx-624

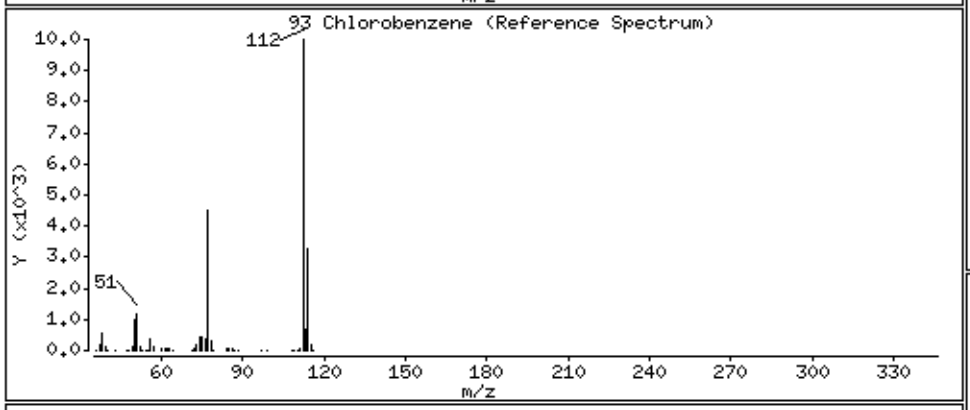
Column diameter: 0.32

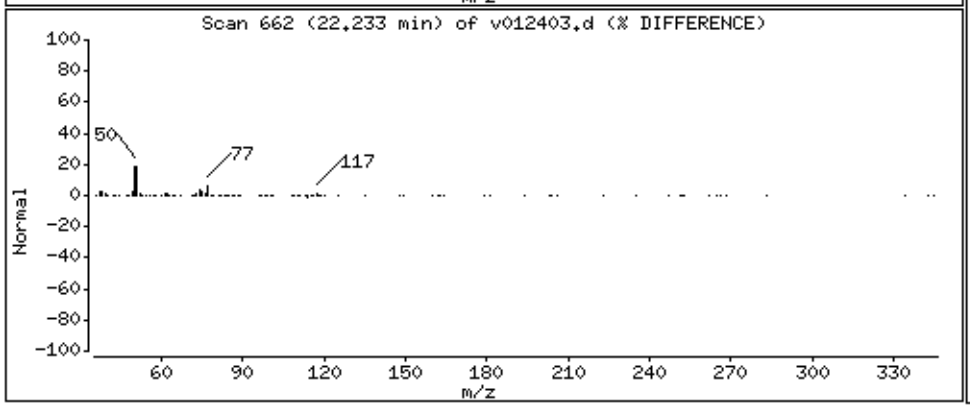
93 Chlorobenzene

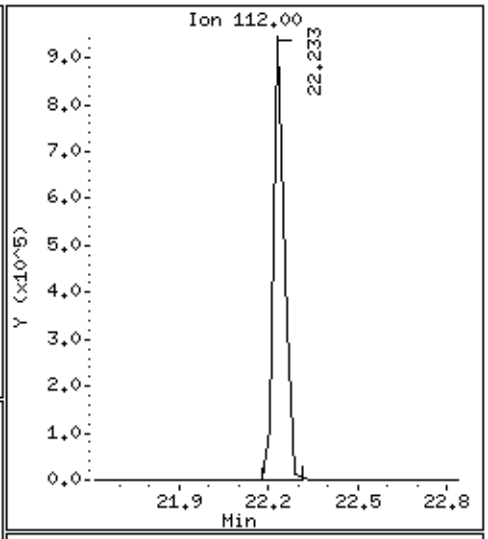
Concentration: 8.993 PPBV

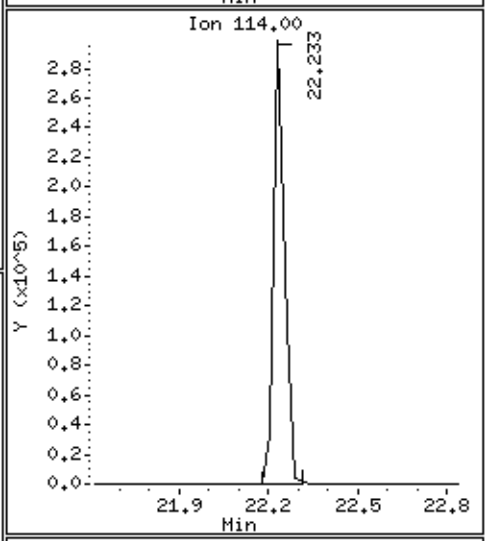


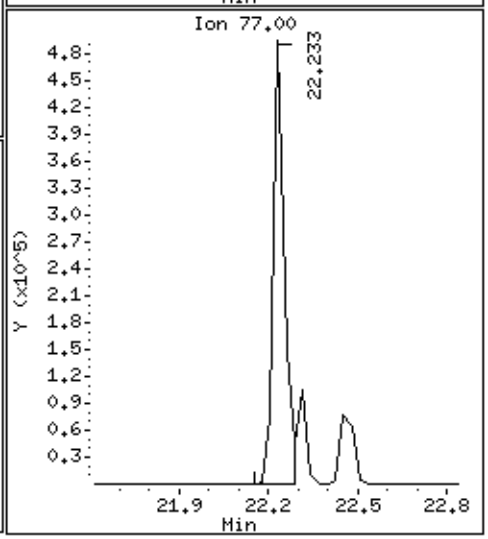












Data File: /chem/msdv.i/24Jan2015.b/v012403.d

Date : 24-JAN-2015 08:04

Client ID: ICV

Instrument: msdv.i

Sample Info: 50mL #2687-186

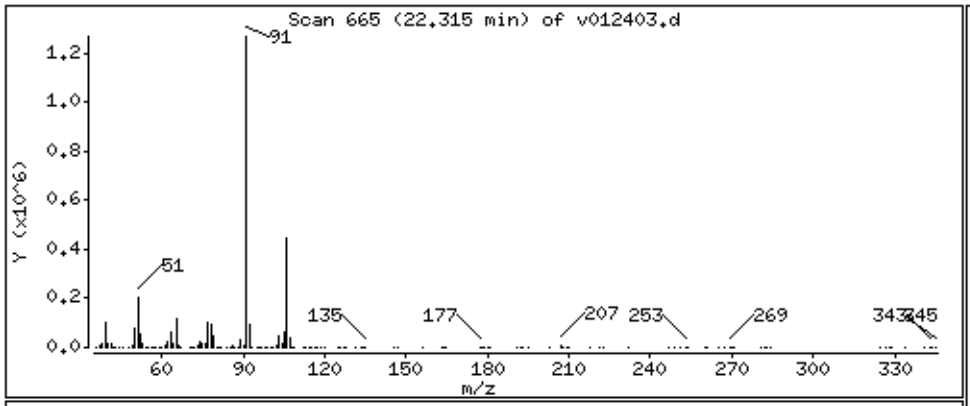
Operator: sn

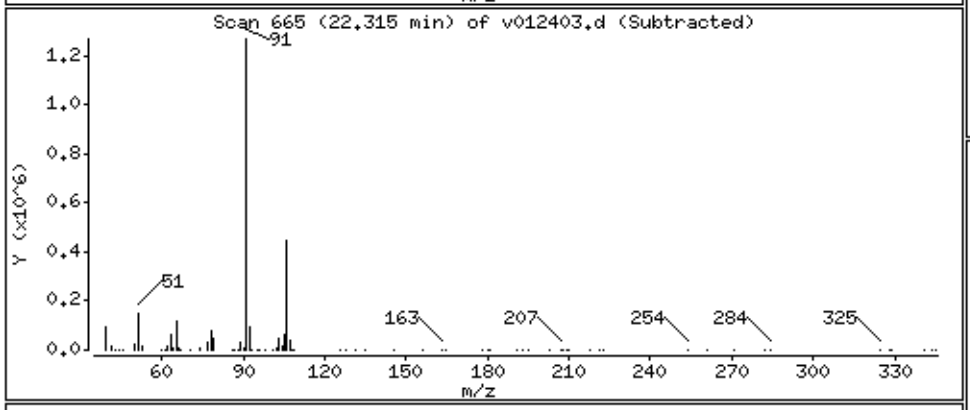
Column phase: RTx-624

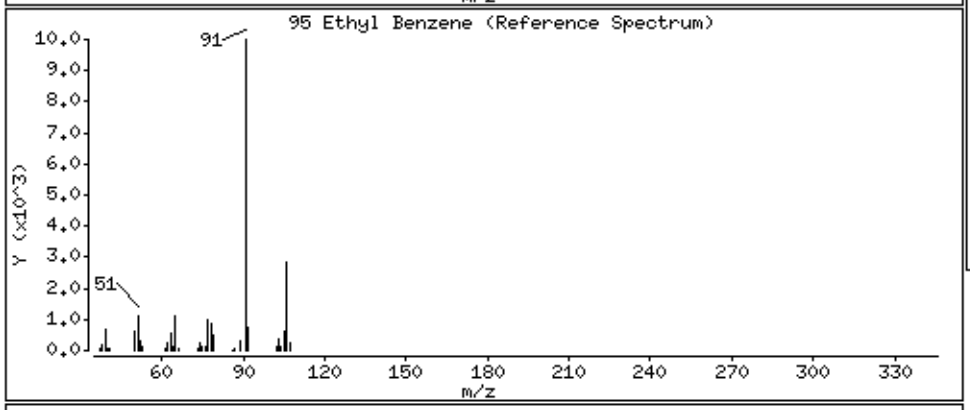
Column diameter: 0.32

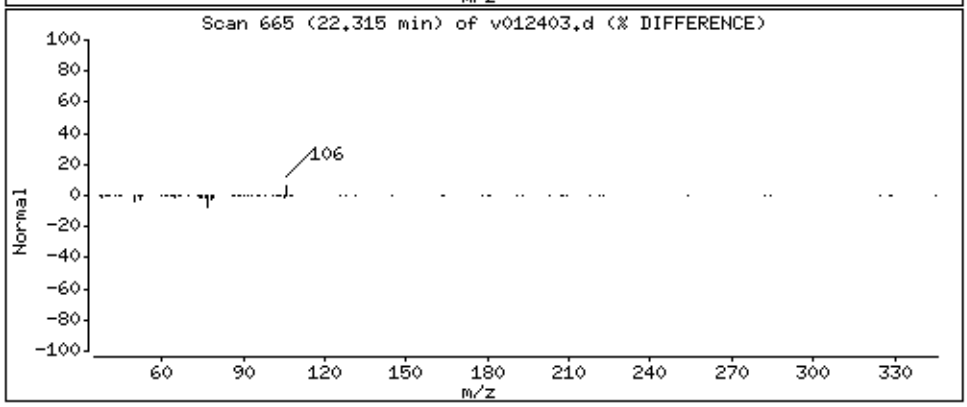
95 Ethyl Benzene

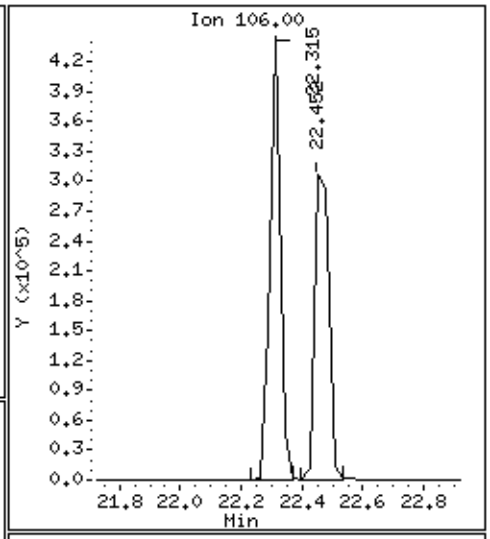
Concentration: 8.761 PPBV

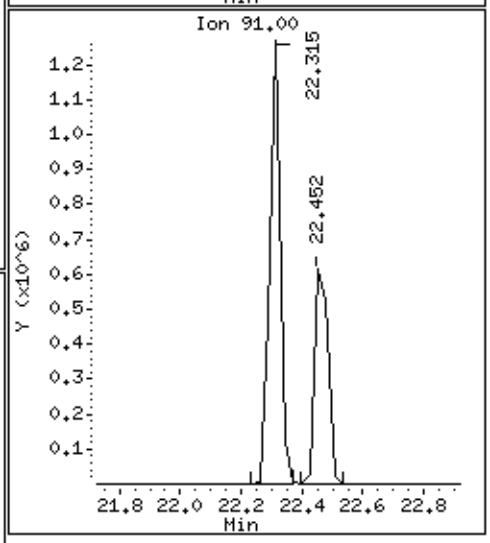












Data File: /chem/msdv.i/24Jan2015.b/v012403.d

Date : 24-JAN-2015 08:04

Client ID: ICV

Instrument: msdv.i

Sample Info: 50mL #2687-186

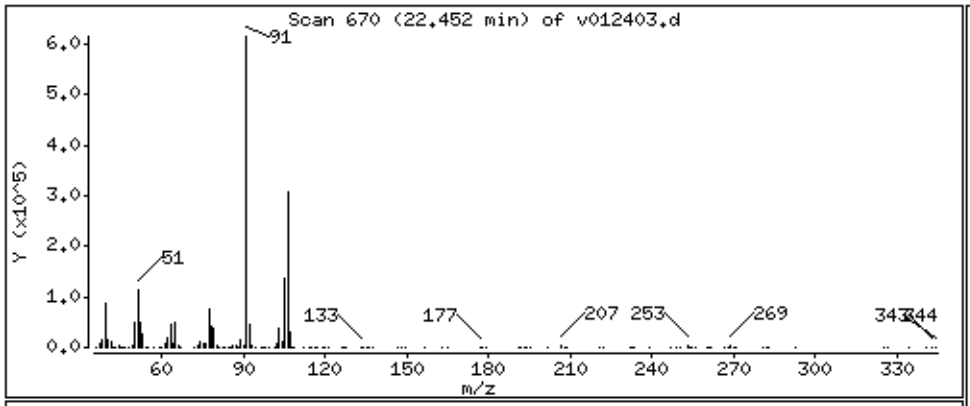
Operator: sn

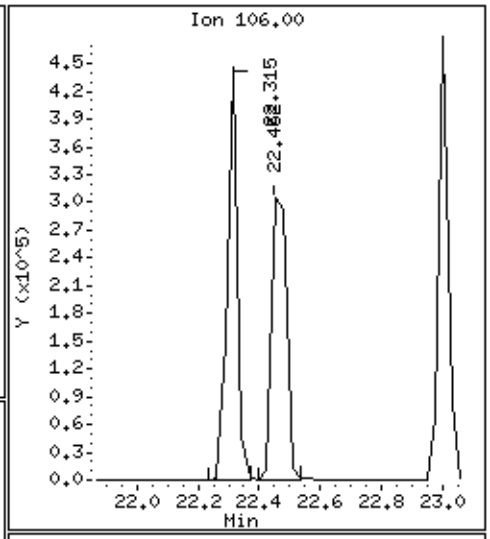
Column phase: RTx-624

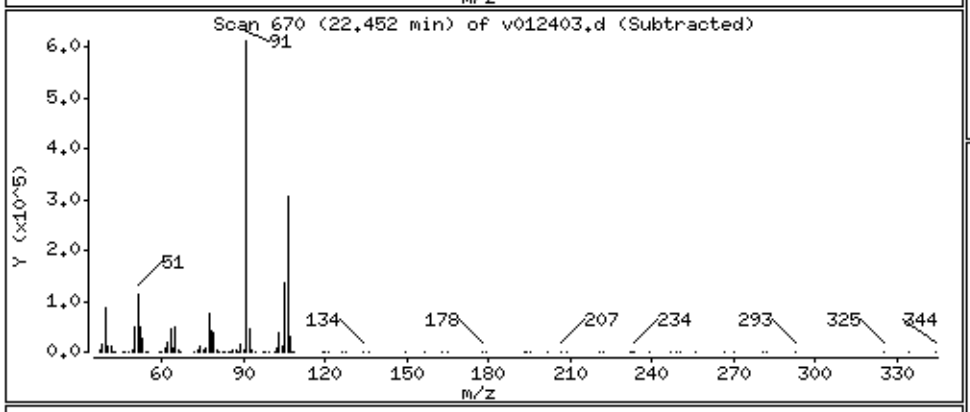
Column diameter: 0.32

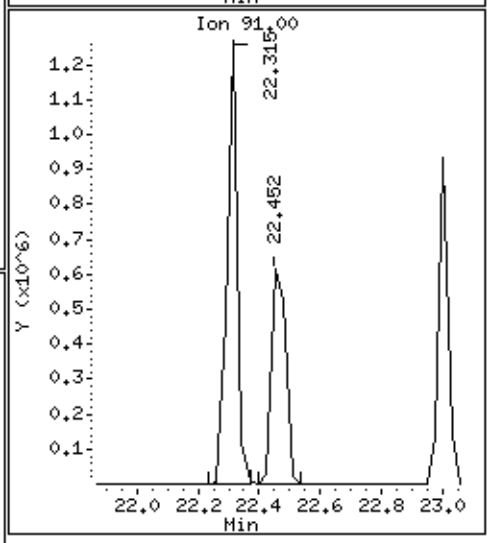
96 m,p-Xylene

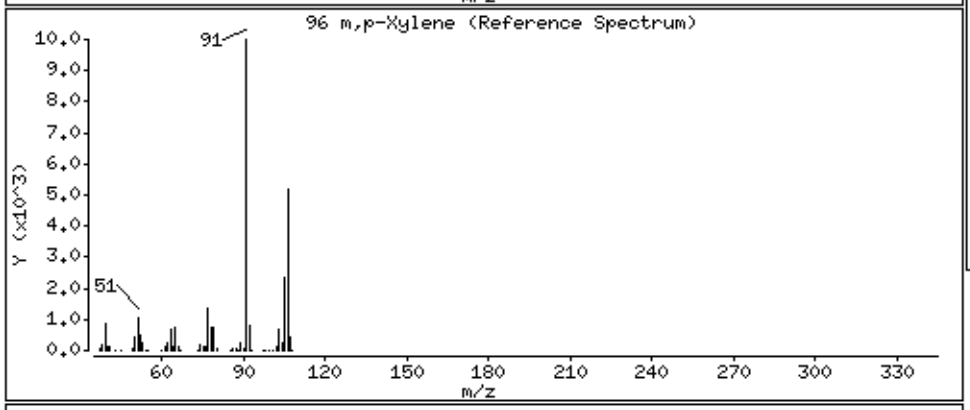
Concentration: 8.402 PPBV

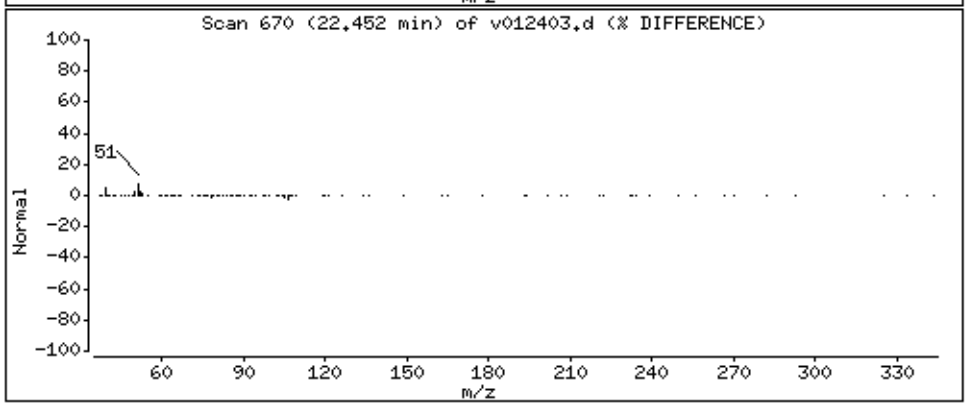












Data File: /chem/msdv.i/24Jan2015.b/v012403.d

Date : 24-JAN-2015 08:04

Client ID: ICV

Instrument: msdv.i

Sample Info: 50mL #2687-186

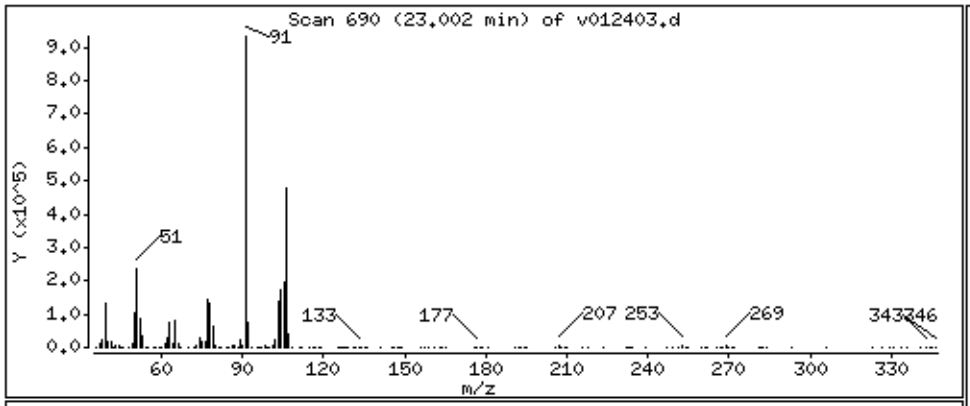
Operator: sn

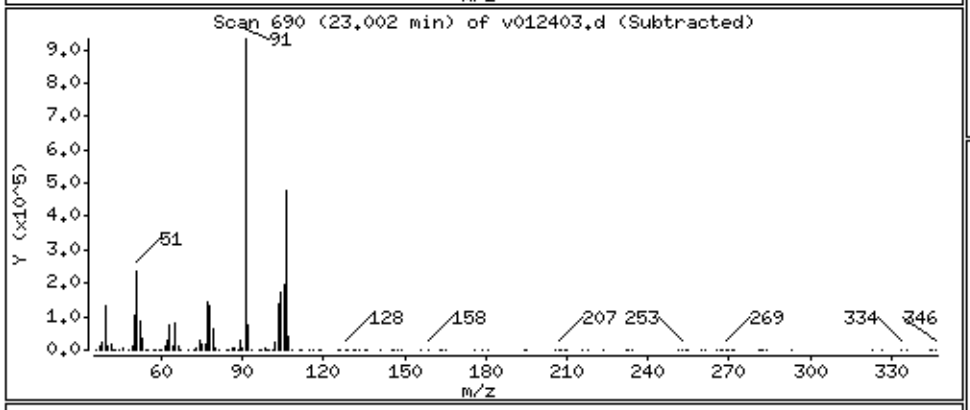
Column phase: RTx-624

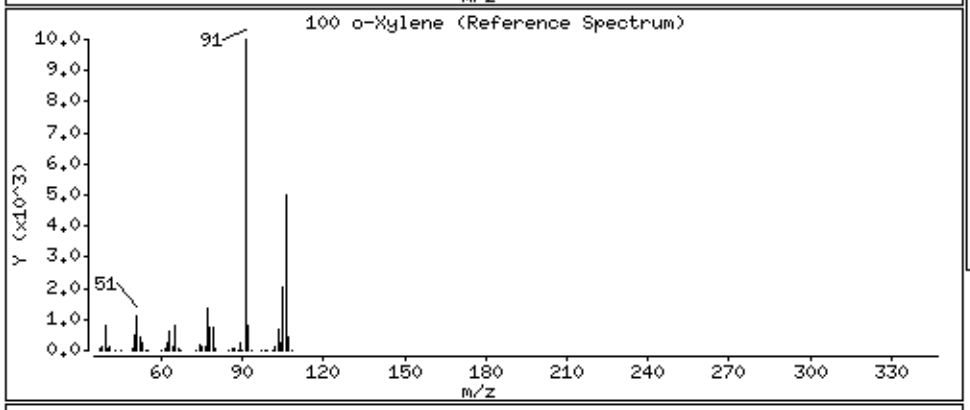
Column diameter: 0.32

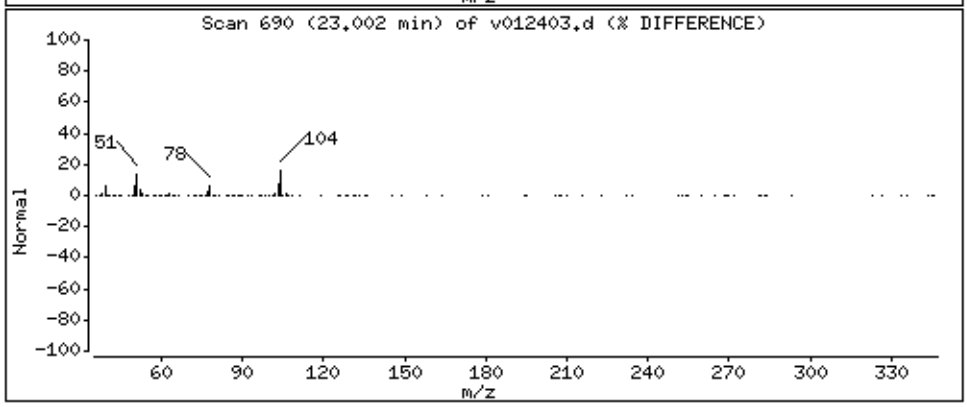
100 o-Xylene

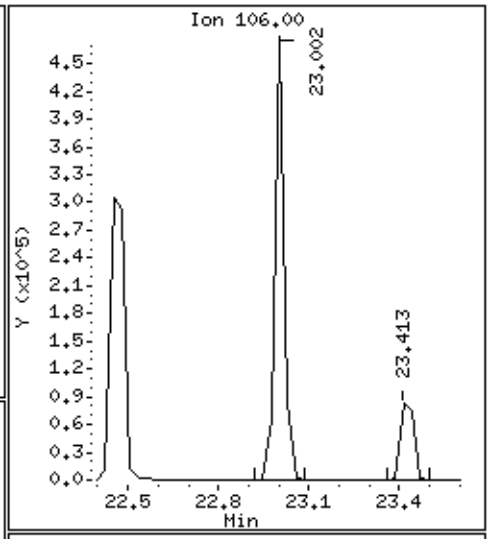
Concentration: 9.203 PPBV

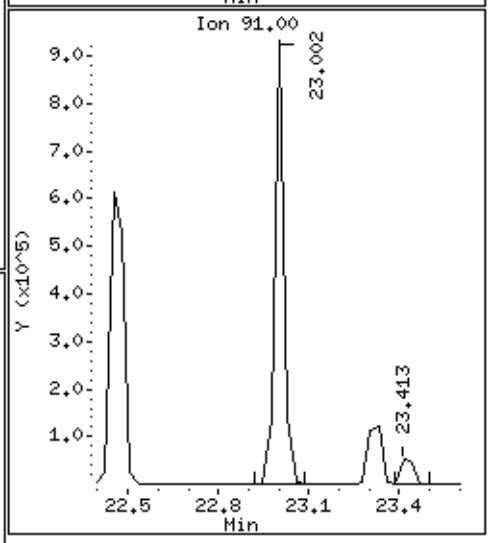












Data File: /chem/msdv.i/24Jan2015.b/v012403.d

Date : 24-JAN-2015 08:04

Client ID: ICV

Instrument: msdv.i

Sample Info: 50mL #2687-186

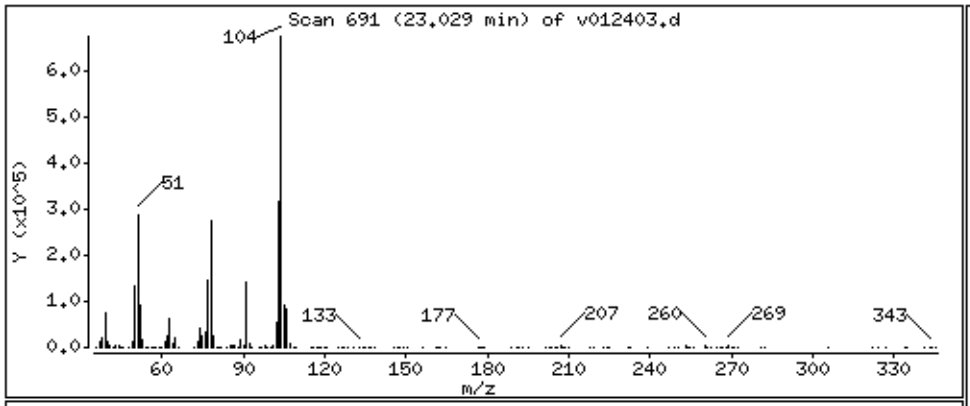
Operator: sn

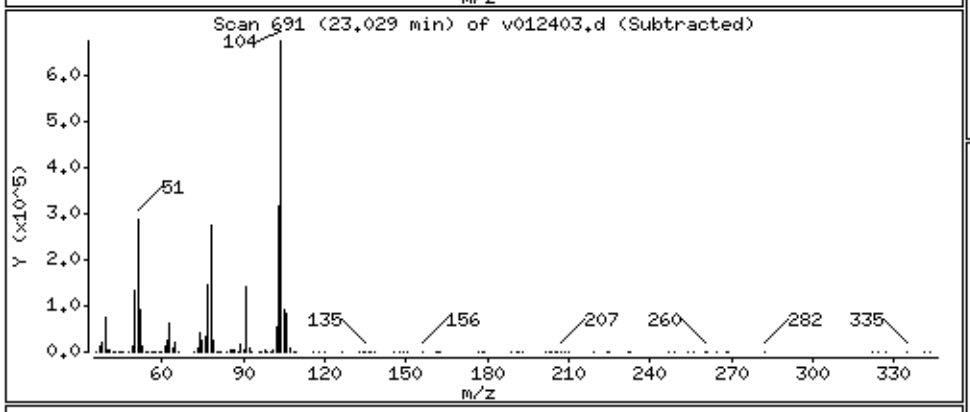
Column phase: RTx-624

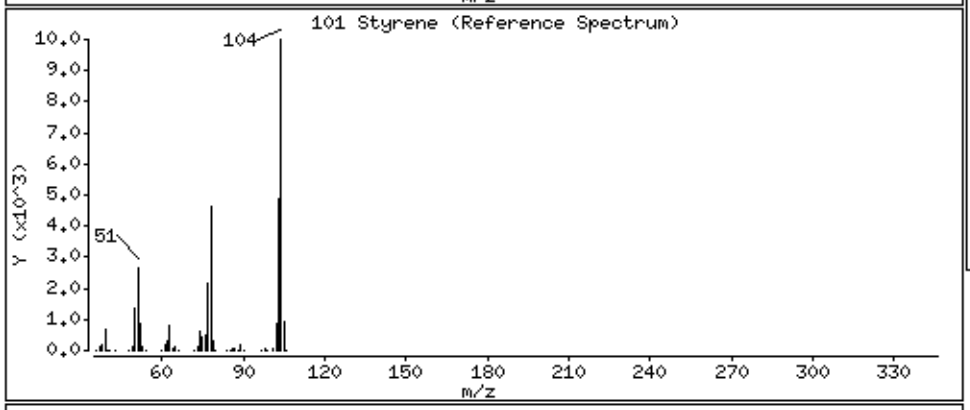
Column diameter: 0.32

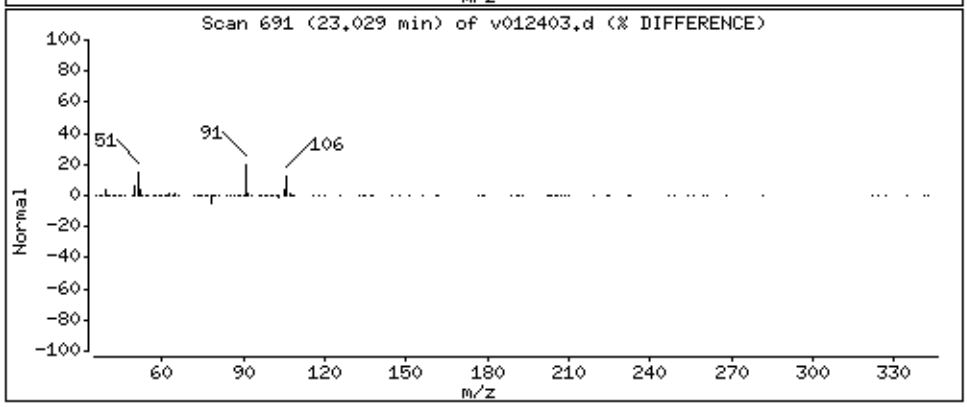
101 Styrene

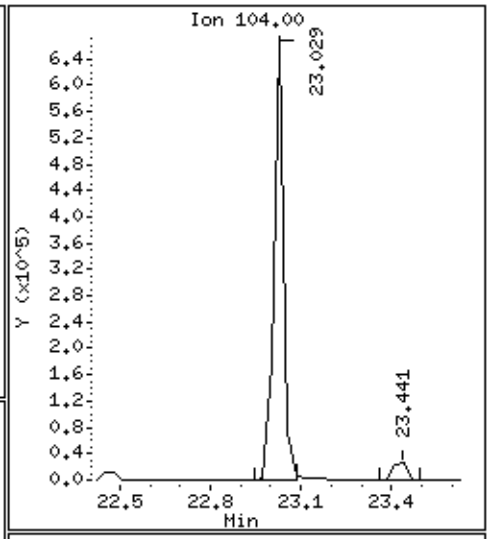
Concentration: 9.109 PPBV

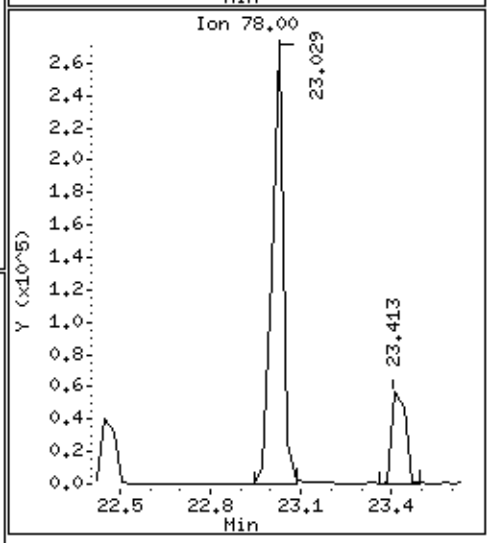












Data File: /chem/msdv.i/24Jan2015.b/v012403.d

Date : 24-JAN-2015 08:04

Client ID: ICV

Instrument: msdv.i

Sample Info: 50mL #2687-186

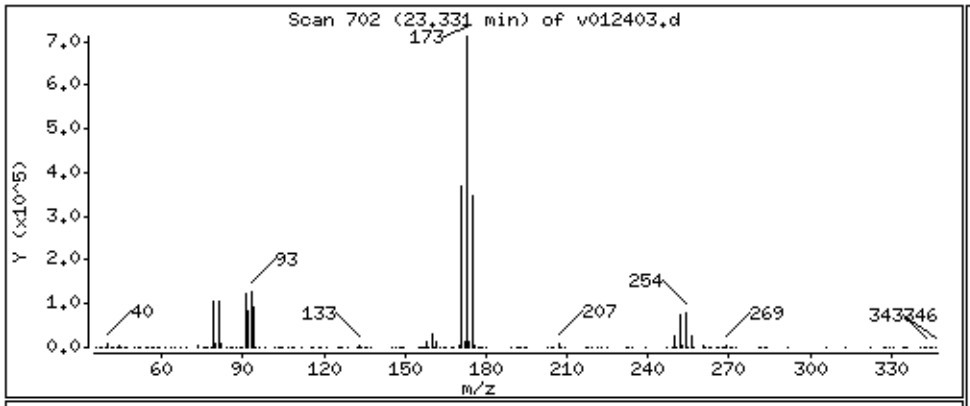
Operator: sn

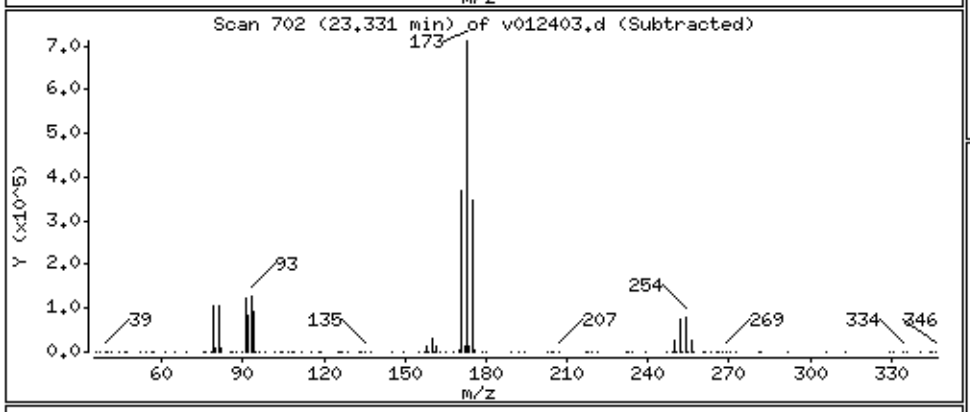
Column phase: RTx-624

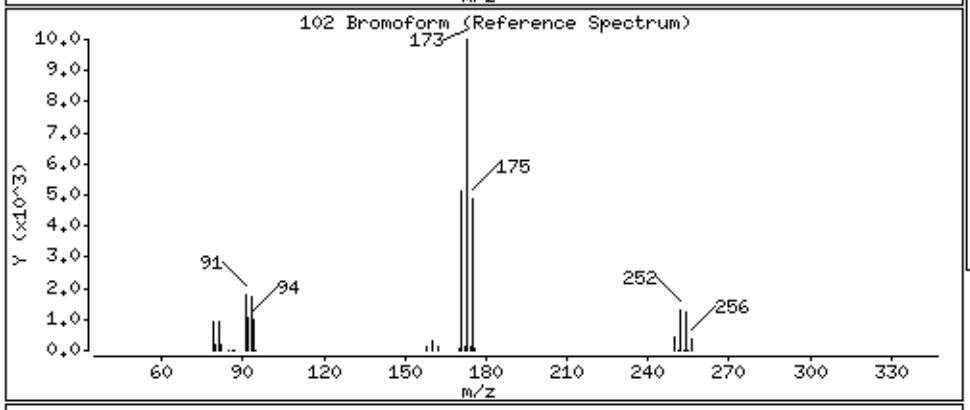
Column diameter: 0.32

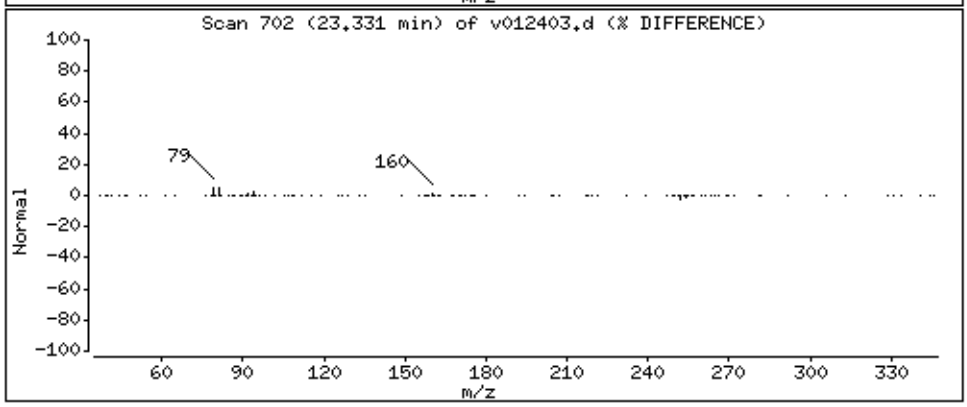
102 Bromoform

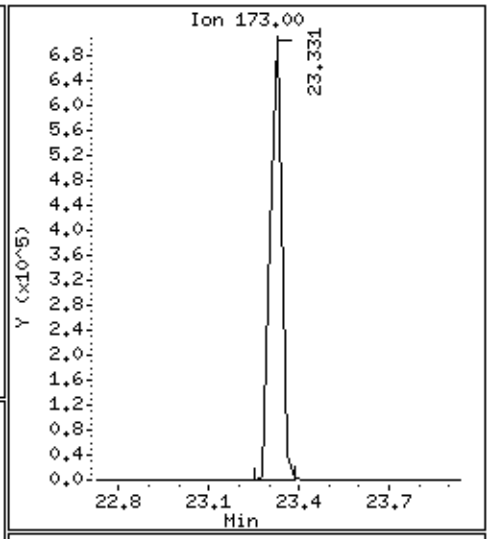
Concentration: 9.752 PPBV

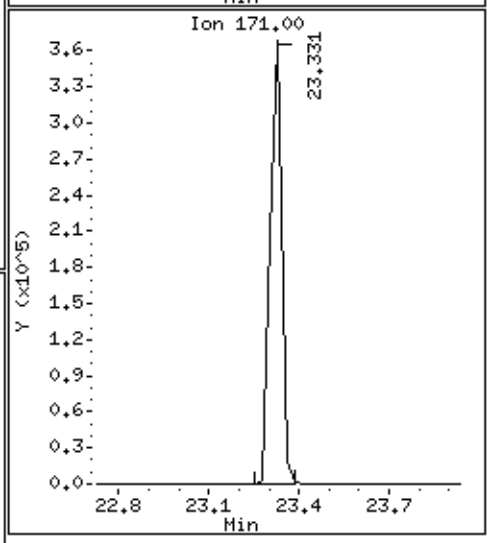












Data File: /chem/msdv.i/24Jan2015.b/v012403.d

Date : 24-JAN-2015 08:04

Client ID: ICV

Instrument: msdv.i

Sample Info: 50mL #2687-186

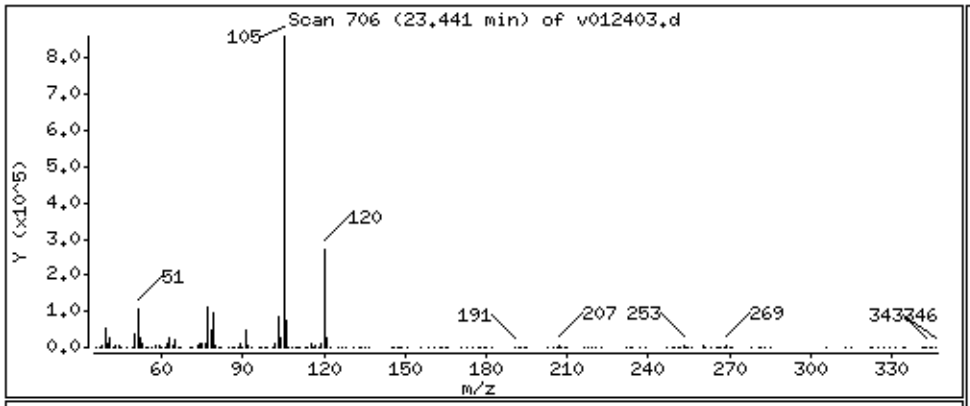
Operator: sn

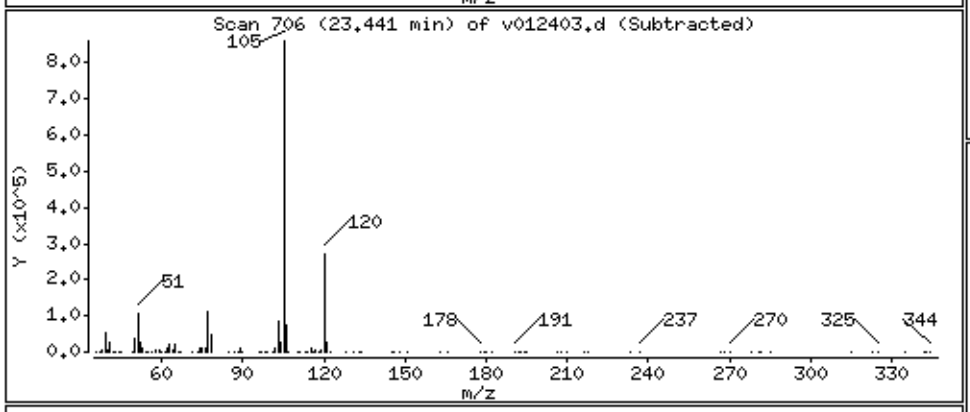
Column phase: RTx-624

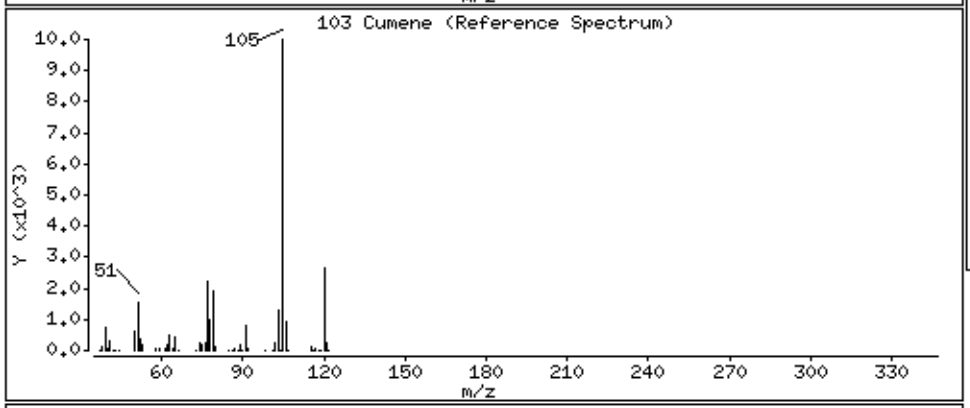
Column diameter: 0.32

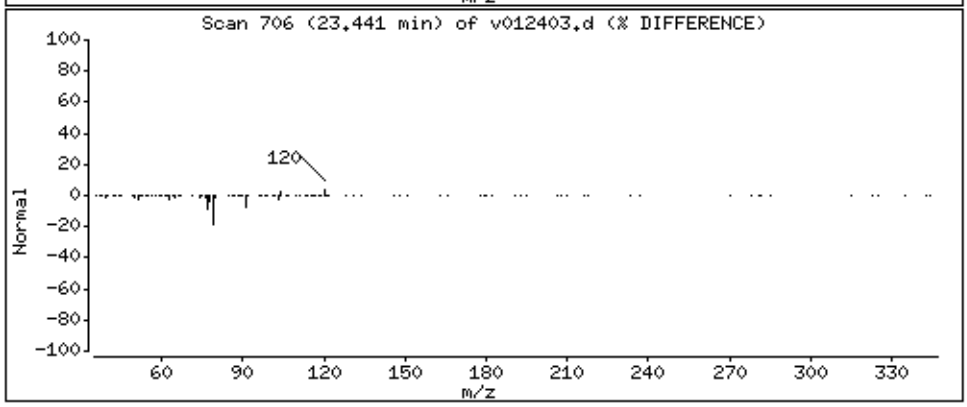
103 Cumene

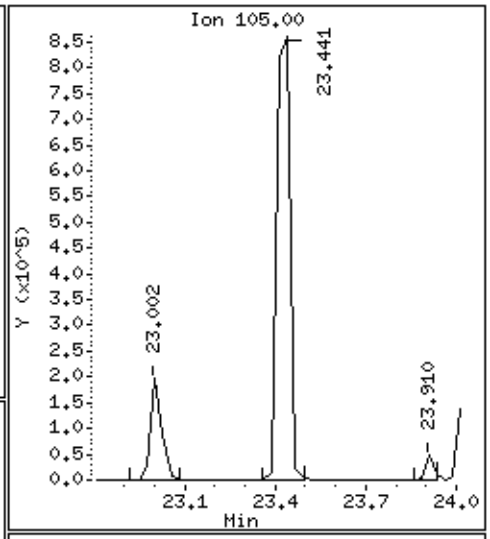
Concentration: 8.872 PPBV

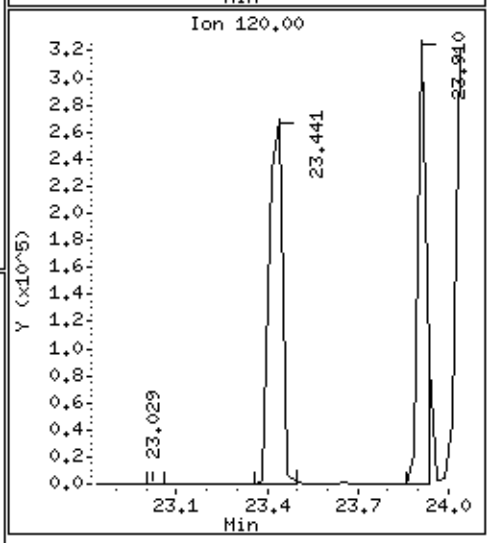












Data File: /chem/msdv.i/24Jan2015.b/v012403.d

Date : 24-JAN-2015 08:04

Client ID: ICV

Instrument: msdv.i

Sample Info: 50mL #2687-186

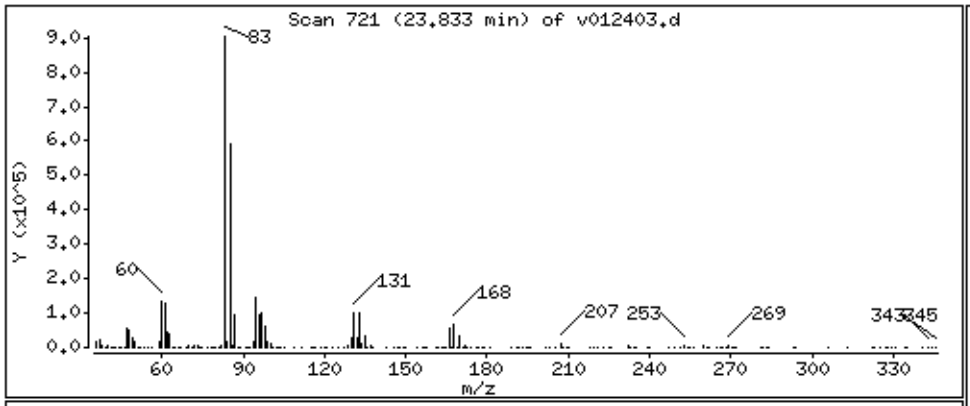
Operator: sn

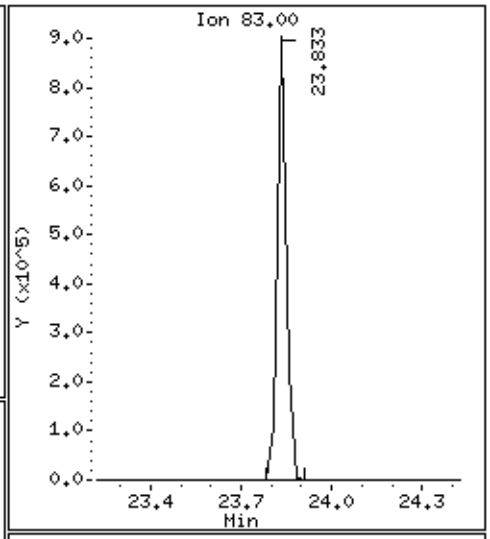
Column phase: RTx-624

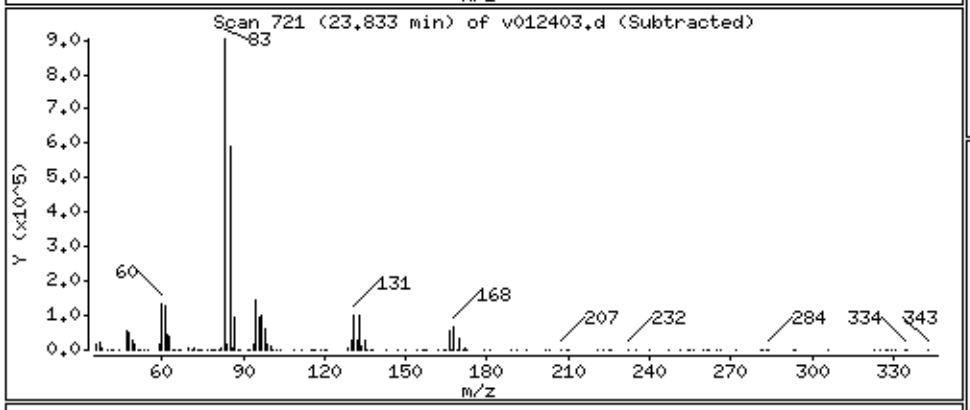
Column diameter: 0.32

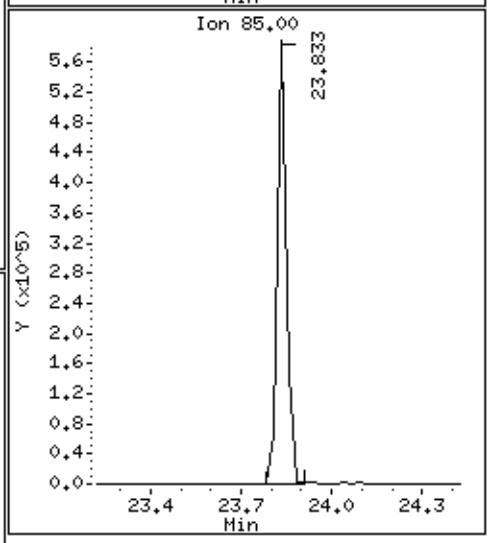
108 1,1,2,2-Tetrachloroethane

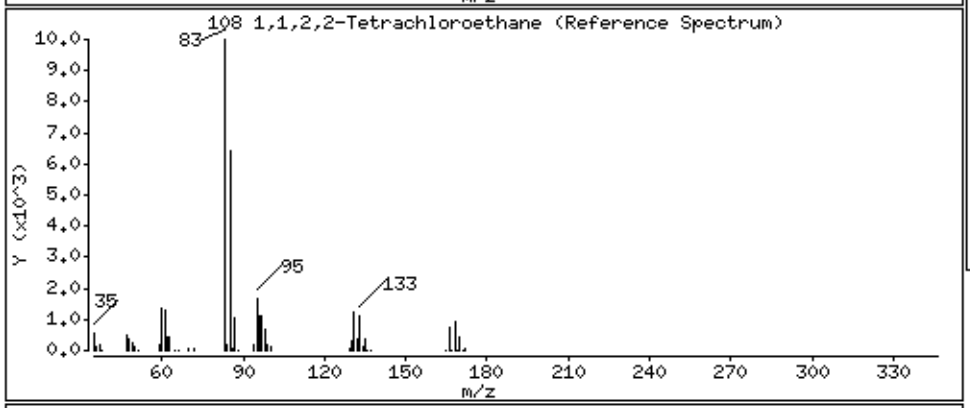
Concentration: 8.573 PPBV

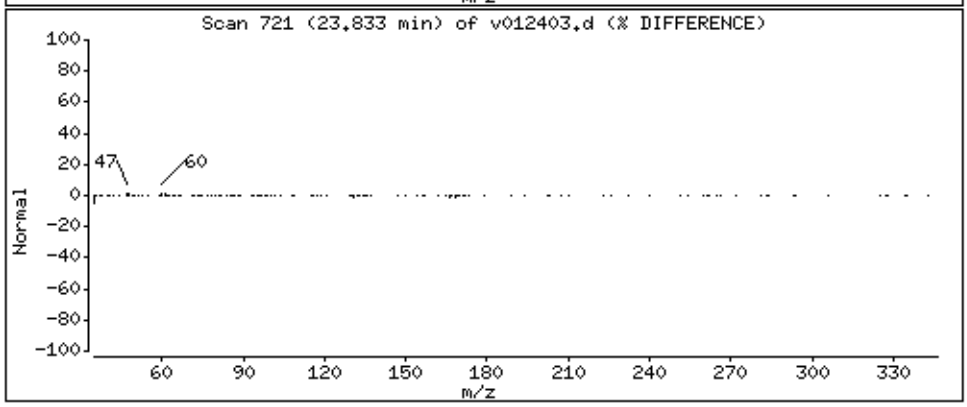












Data File: /chem/msdv.i/24Jan2015.b/v012403.d

Date : 24-JAN-2015 08:04

Client ID: ICV

Instrument: msdv.i

Sample Info: 50mL #2687-186

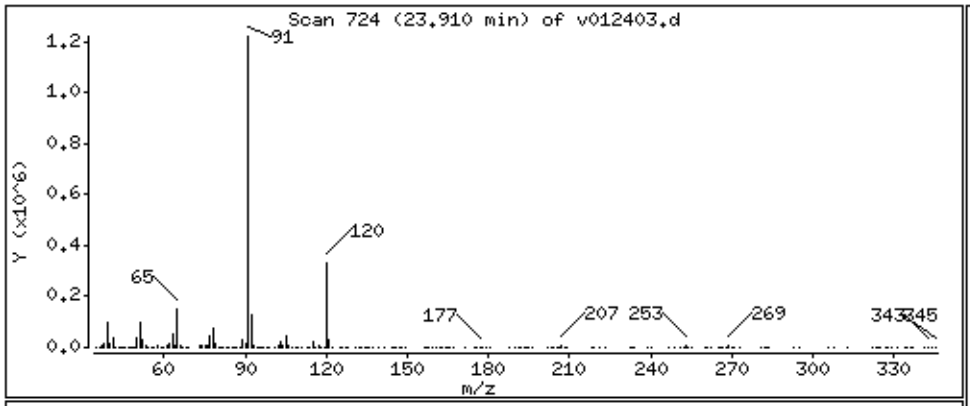
Operator: sn

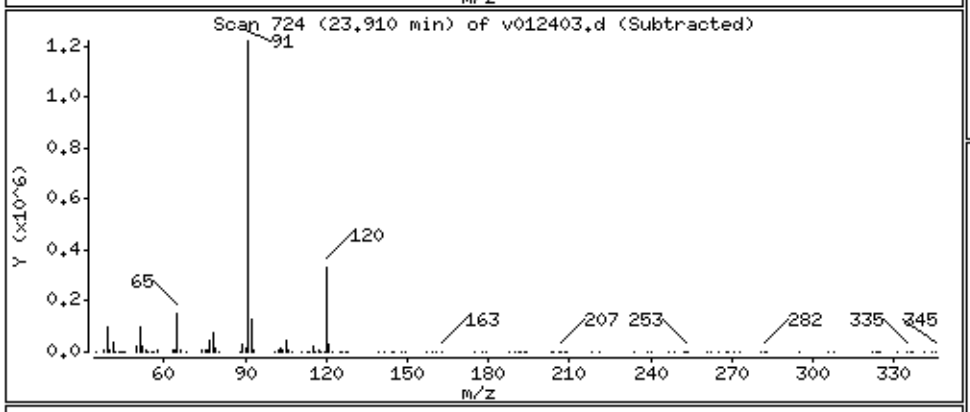
Column phase: RTx-624

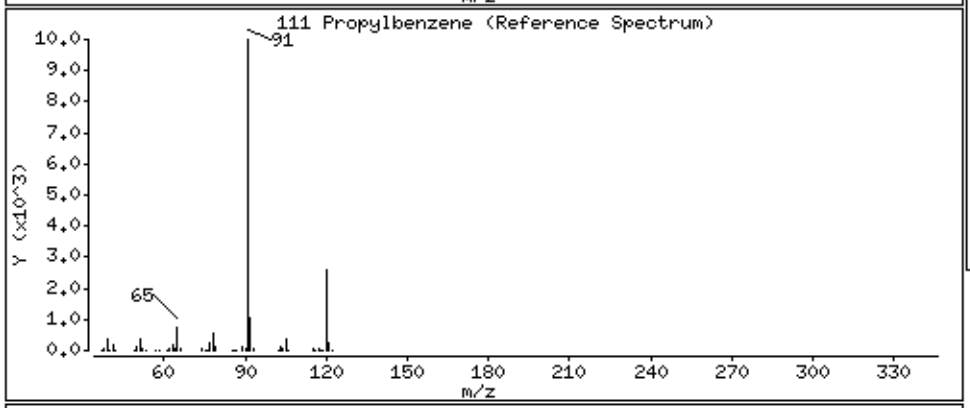
Column diameter: 0.32

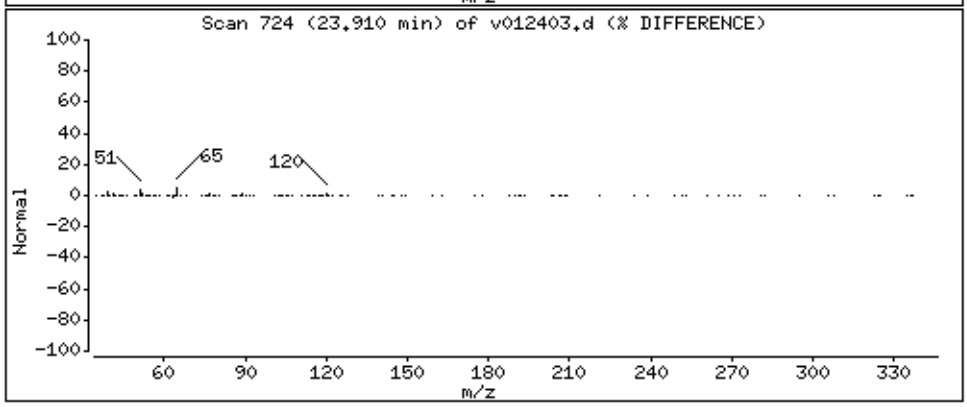
111 Propylbenzene

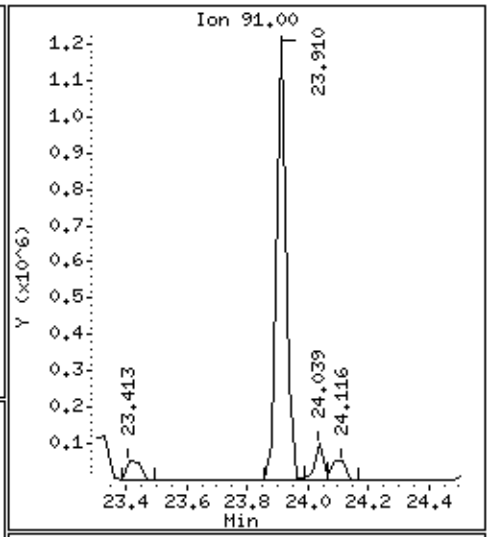
Concentration: 8.316 PPBV

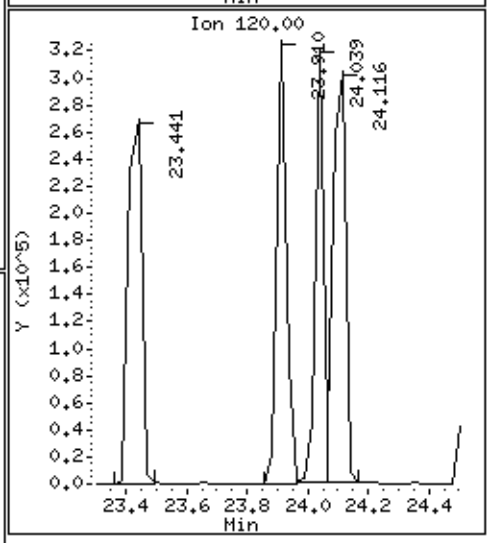












Data File: /chem/msdv.i/24Jan2015.b/v012403.d

Date : 24-JAN-2015 08:04

Client ID: ICV

Instrument: msdv.i

Sample Info: 50mL #2687-186

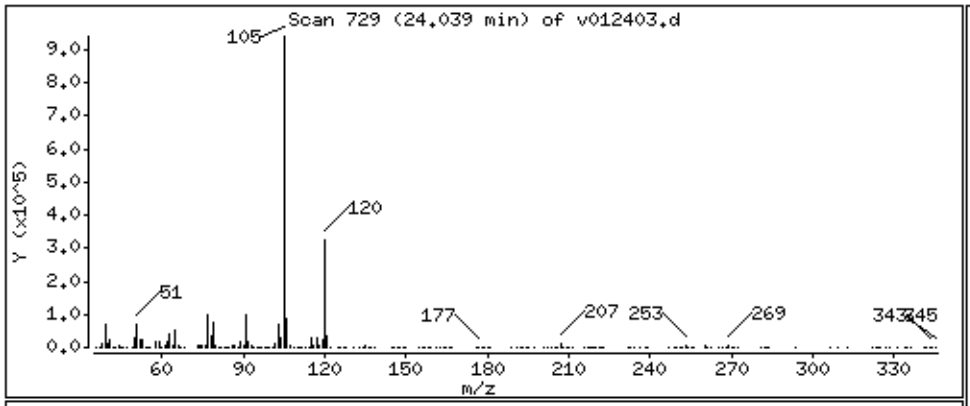
Operator: sn

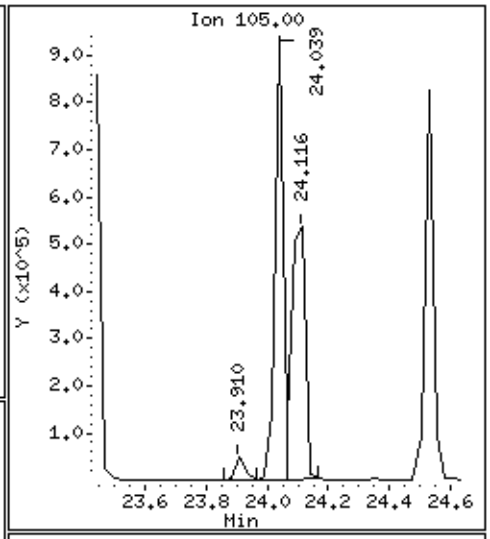
Column phase: RTx-624

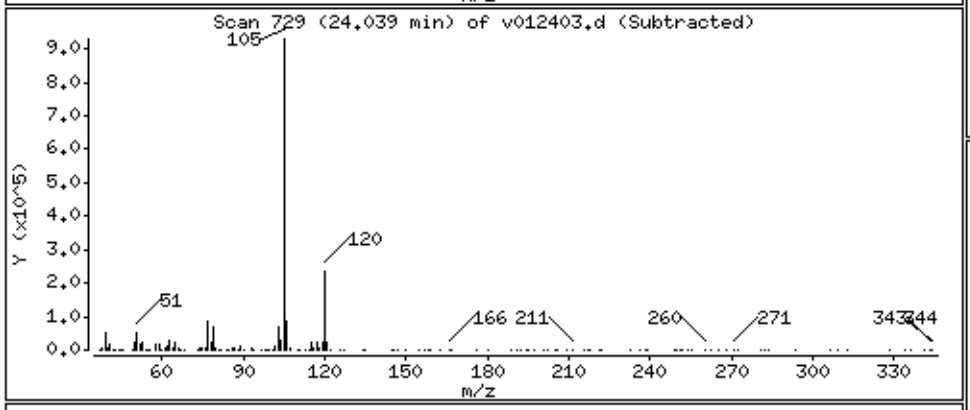
Column diameter: 0.32

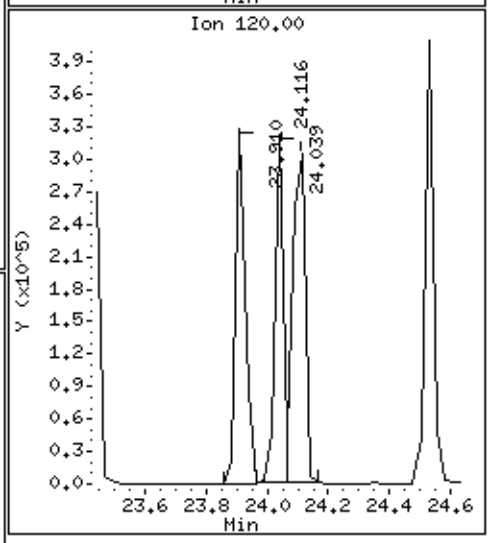
113 4-Ethyltoluene

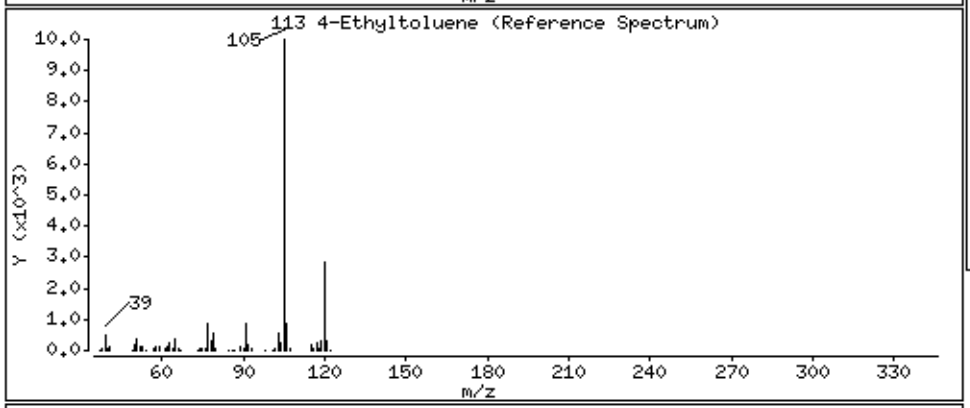
Concentration: 8.300 PPBV

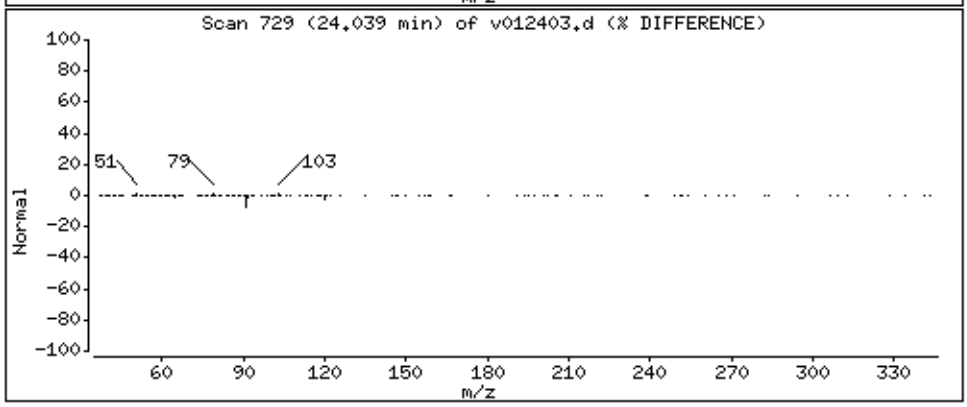












Data File: /chem/msdv.i/24Jan2015.b/v012403.d

Date : 24-JAN-2015 08:04

Client ID: ICV

Instrument: msdv.i

Sample Info: 50mL #2687-186

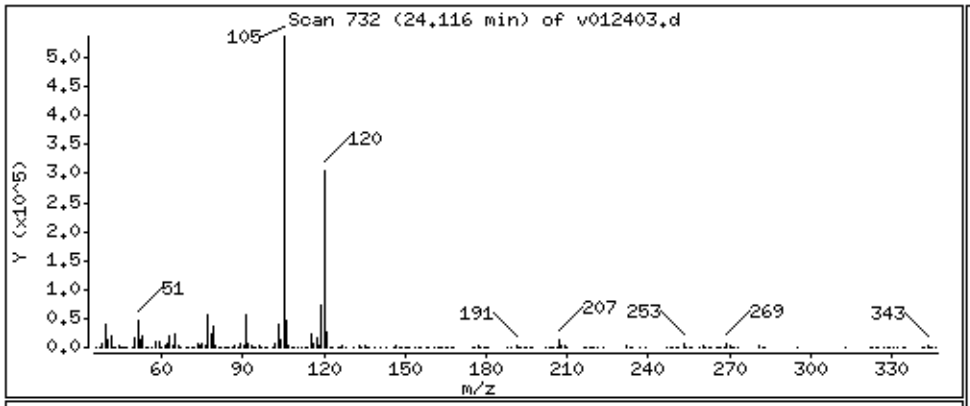
Operator: sn

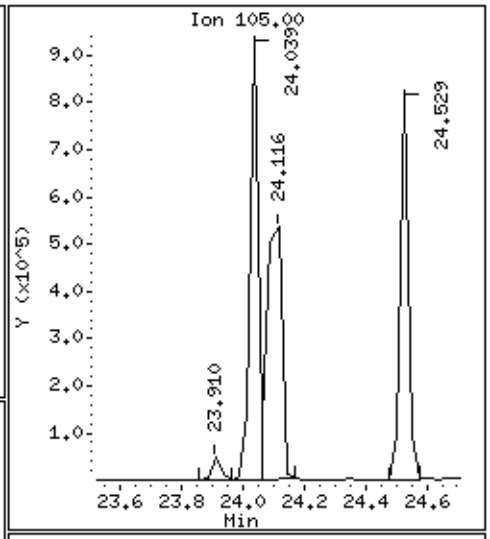
Column phase: RTx-624

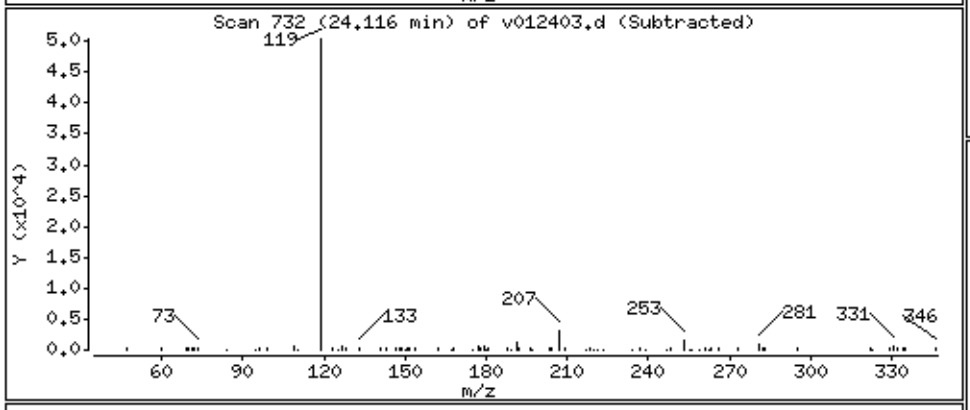
Column diameter: 0.32

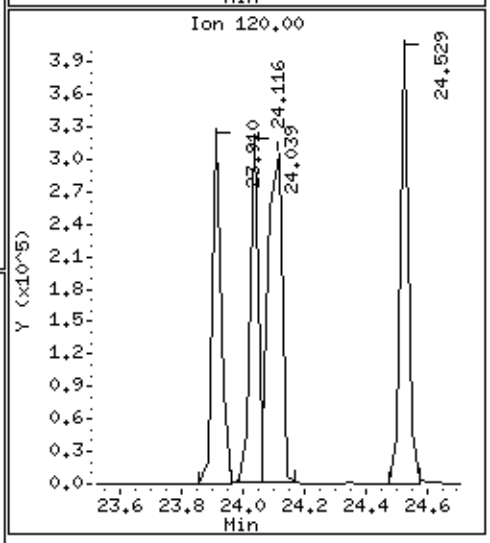
114 1,3,5-Trimethylbenzene

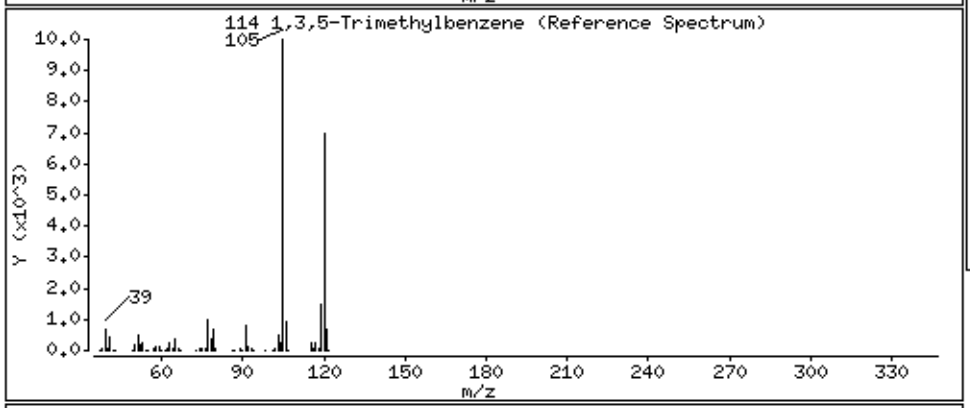
Concentration: 8.125 PPBV

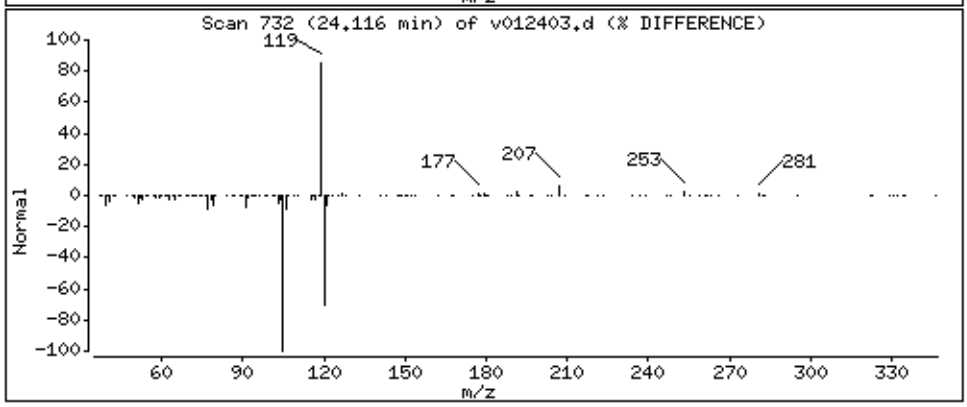












Data File: /chem/msdv.i/24Jan2015.b/v012403.d

Date : 24-JAN-2015 08:04

Client ID: ICV

Instrument: msdv.i

Sample Info: 50mL #2687-186

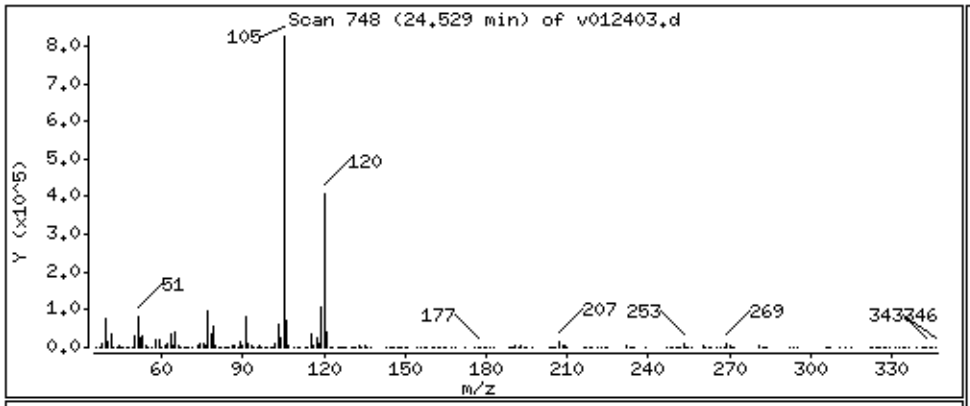
Operator: sn

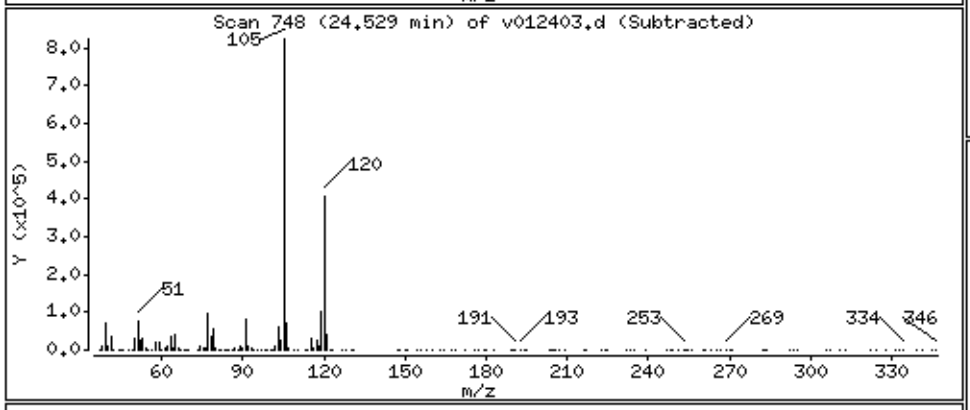
Column phase: RTx-624

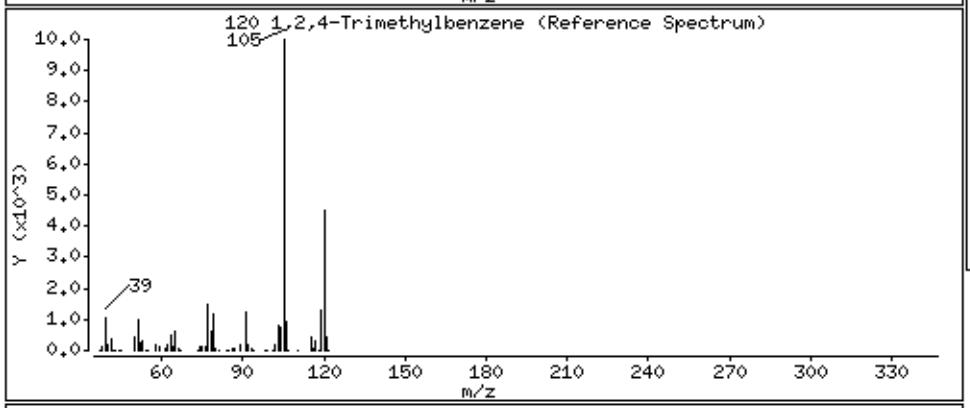
Column diameter: 0.32

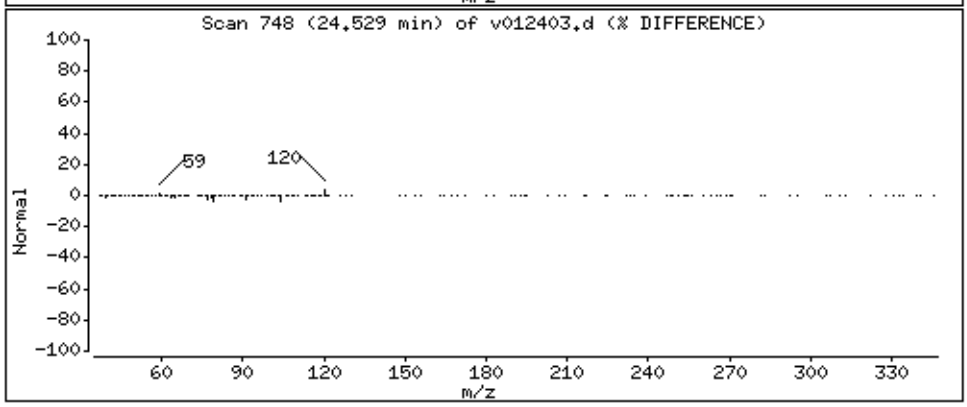
120 1,2,4-Trimethylbenzene

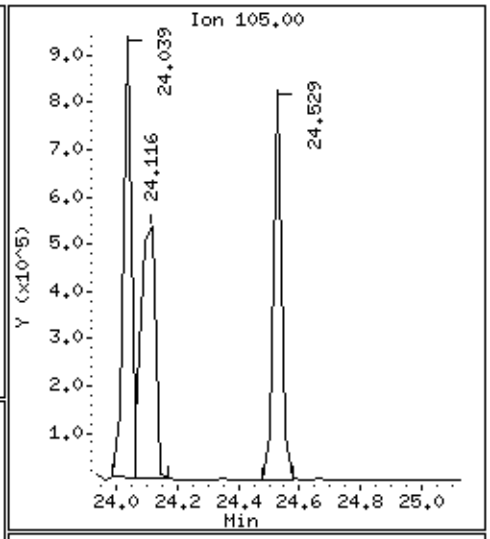
Concentration: 8.013 PPBV

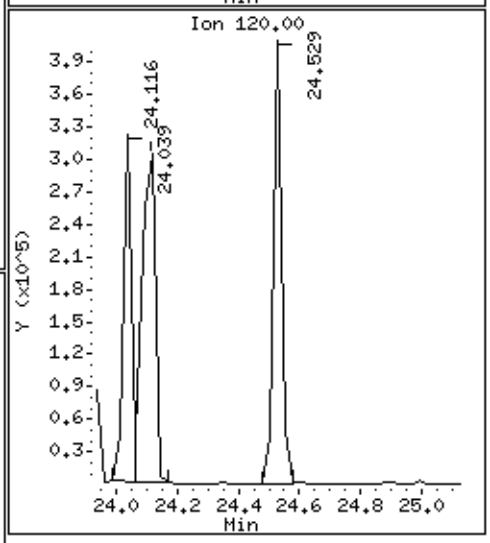












Data File: /chem/msdv.i/24Jan2015.b/v012403.d

Date : 24-JAN-2015 08:04

Client ID: ICV

Instrument: msdv.i

Sample Info: 50mL #2687-186

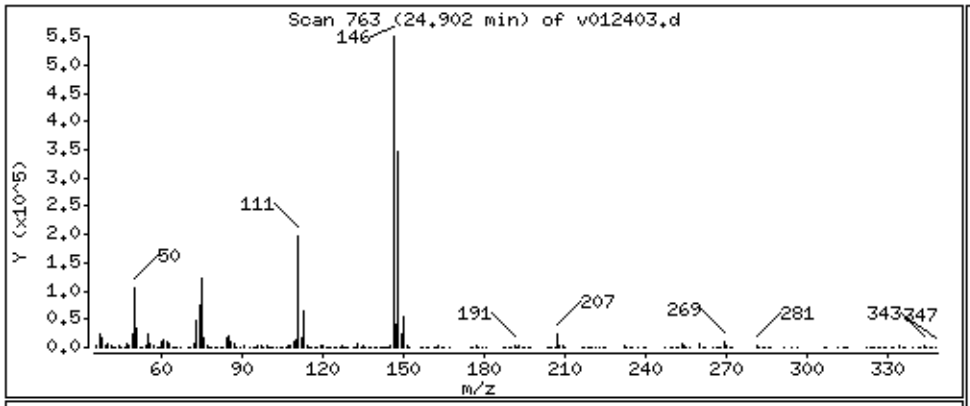
Operator: sn

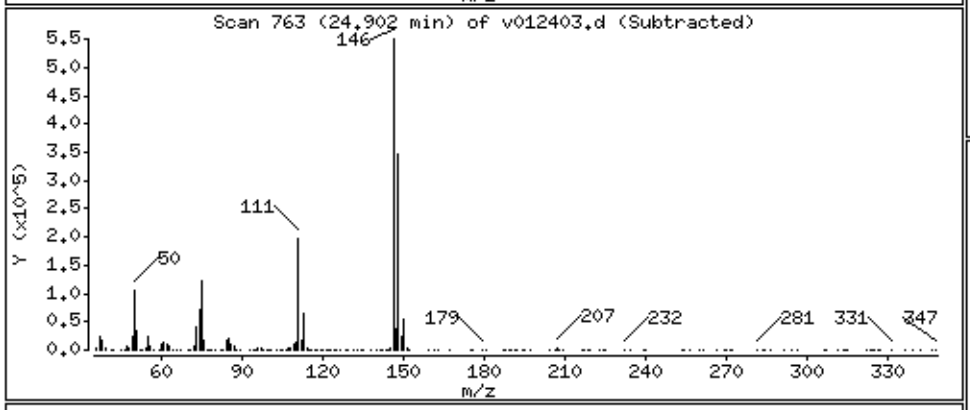
Column phase: RTx-624

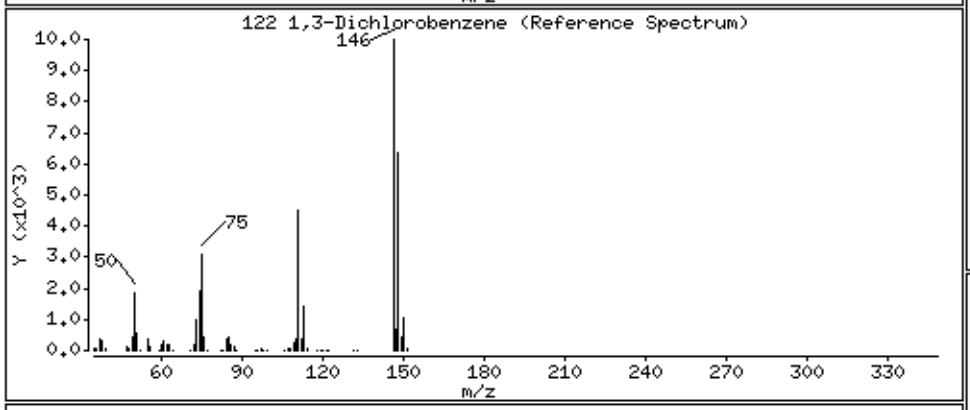
Column diameter: 0.32

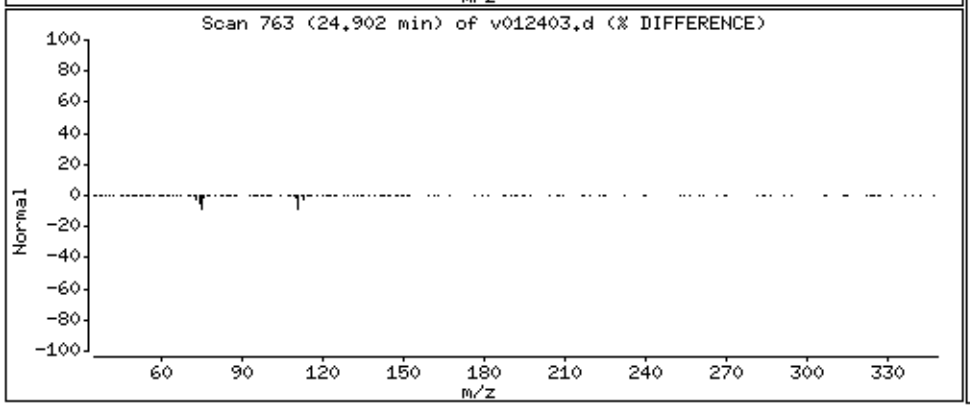
122 1,3-Dichlorobenzene

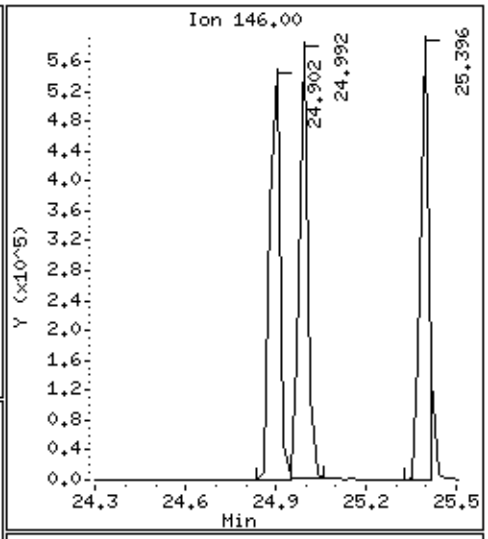
Concentration: 8.465 PPBV

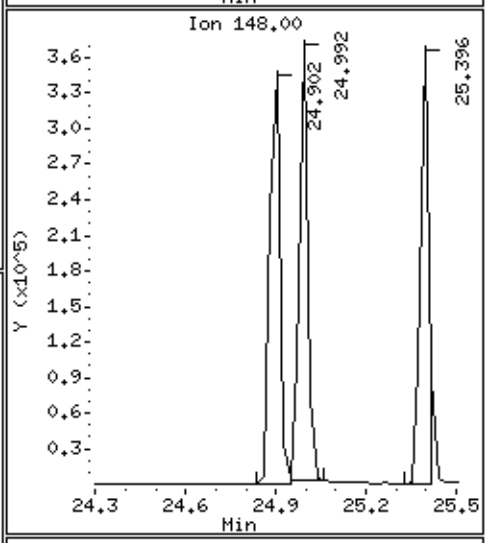


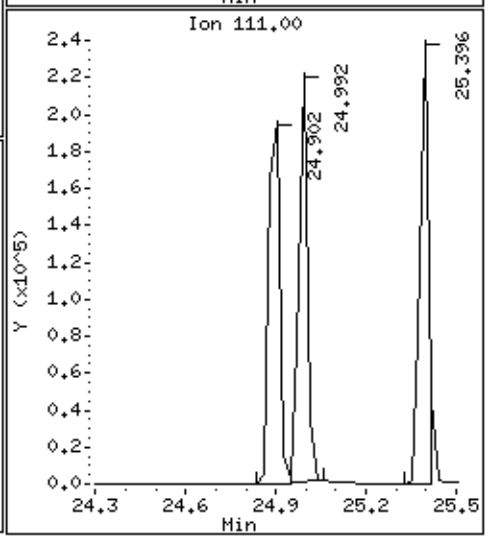












Data File: /chem/msdv.i/24Jan2015.b/v012403.d

Date : 24-JAN-2015 08:04

Client ID: ICV

Instrument: msdv.i

Sample Info: 50mL #2687-186

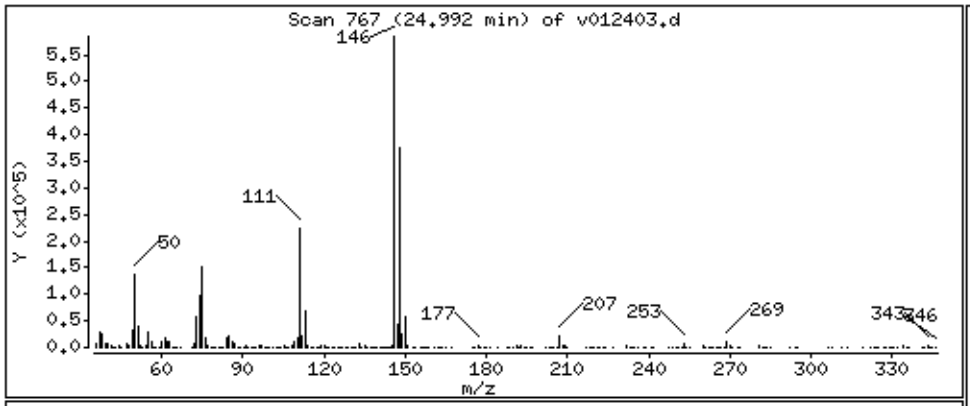
Operator: sn

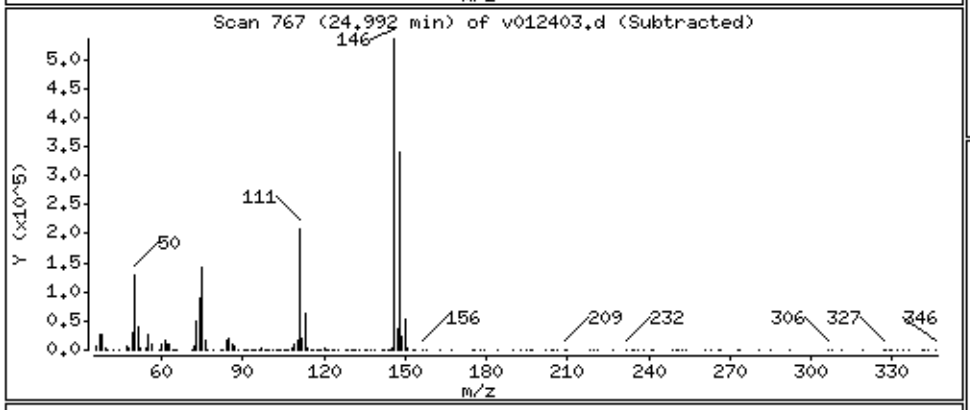
Column phase: RTx-624

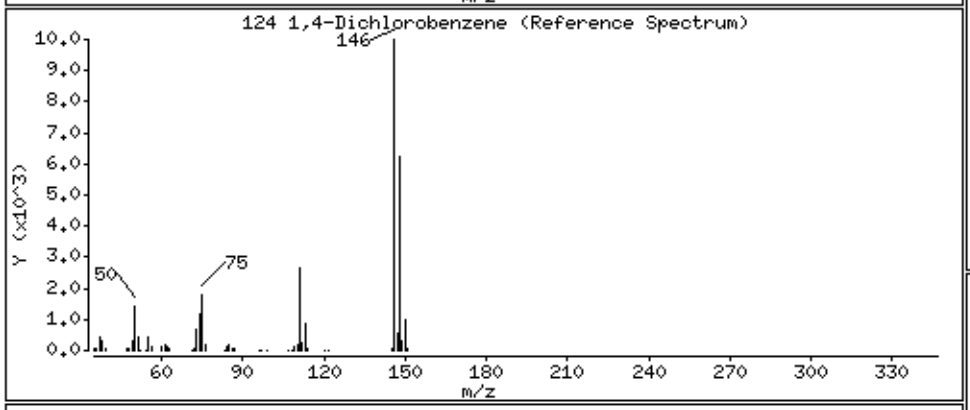
Column diameter: 0.32

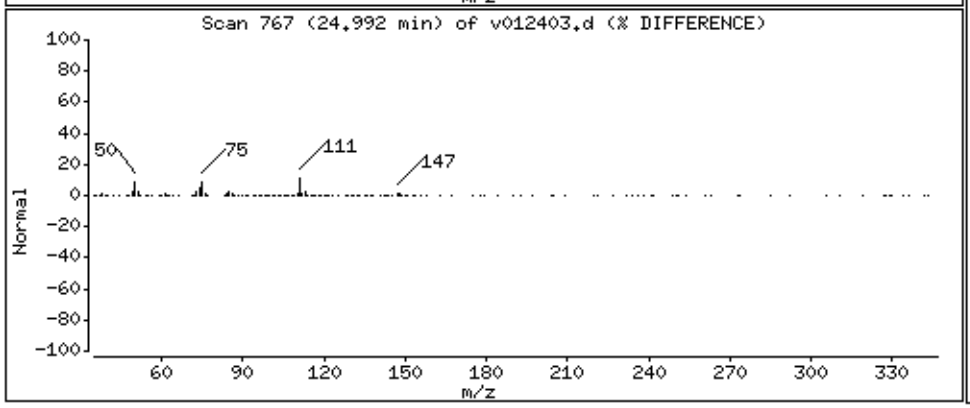
124 1,4-Dichlorobenzene

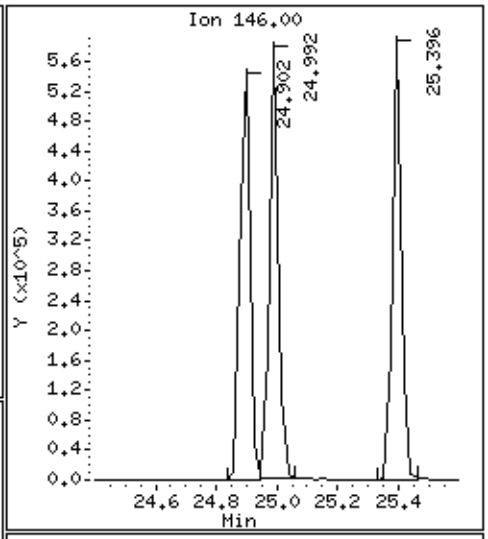
Concentration: 7.031 PPBV

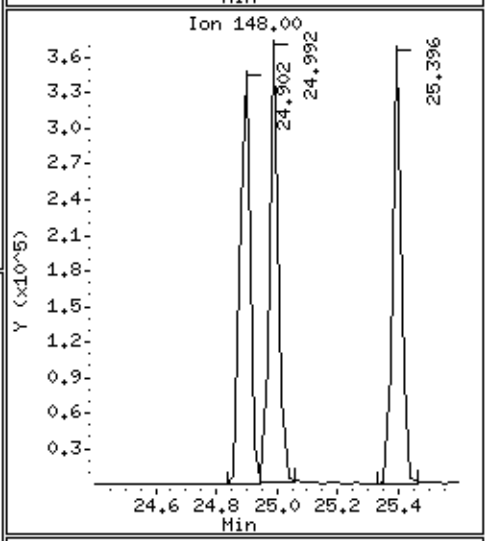


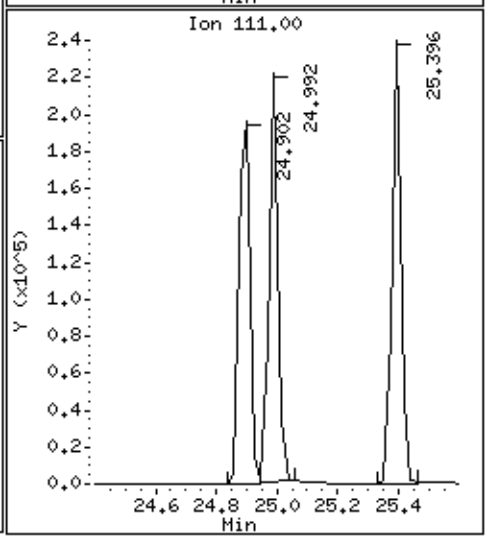












Data File: /chem/msdv.i/24Jan2015.b/v012403.d

Date : 24-JAN-2015 08:04

Client ID: ICV

Instrument: msdv.i

Sample Info: 50mL #2687-186

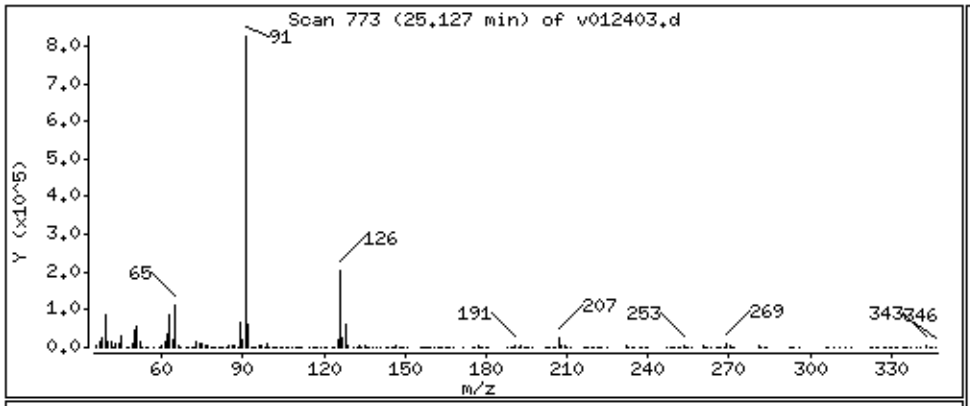
Operator: sn

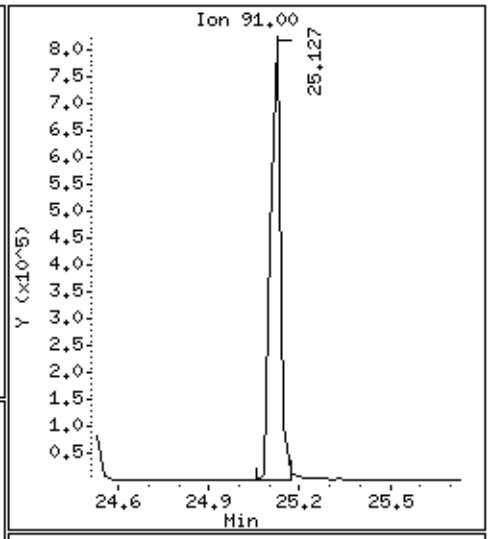
Column phase: RTx-624

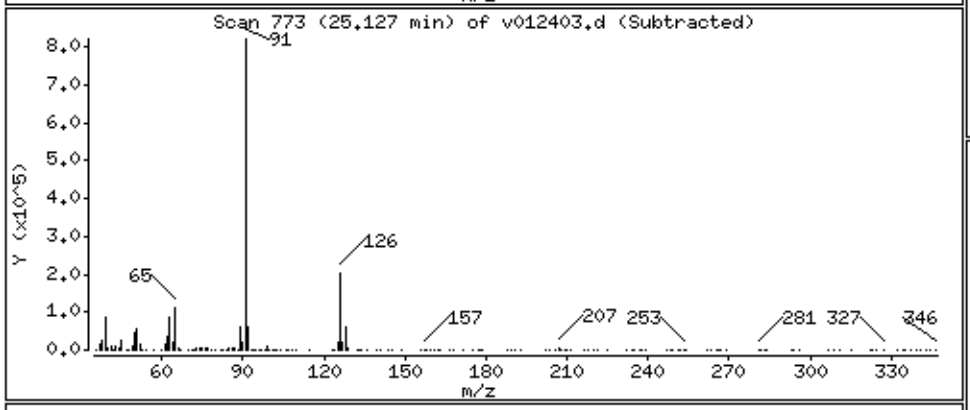
Column diameter: 0.32

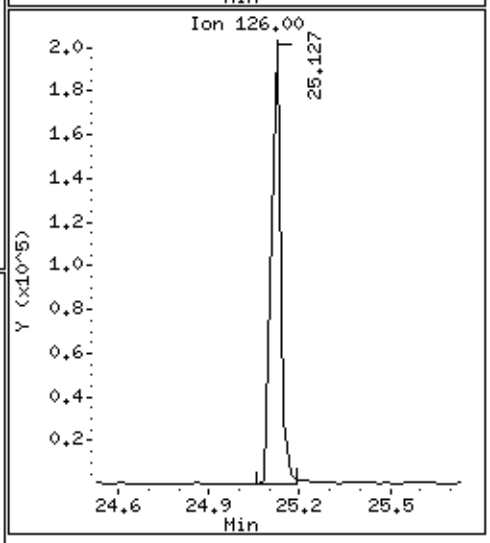
127 alpha-chlorotoluene

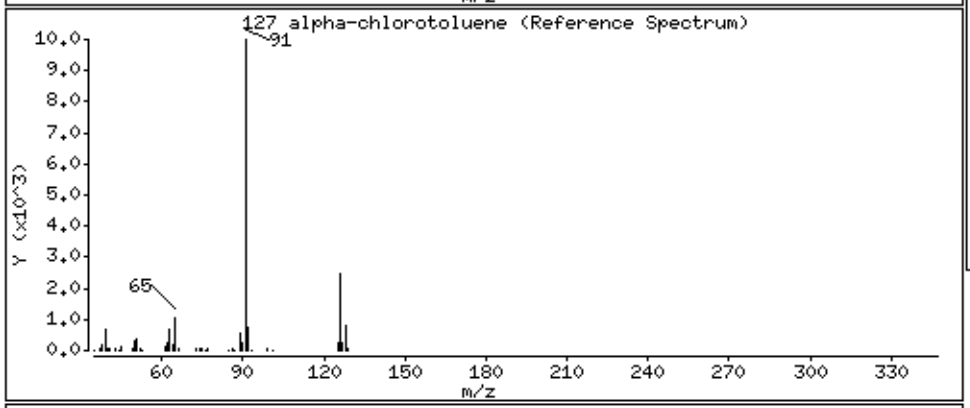
Concentration: 9.772 PPBV

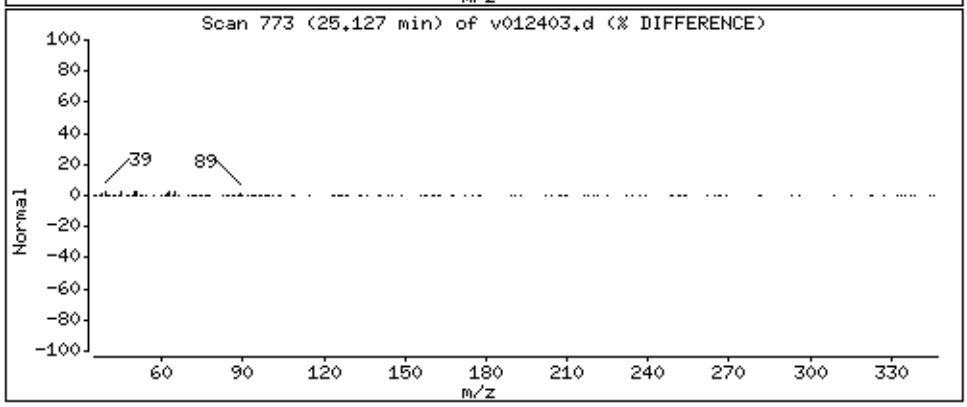












Data File: /chem/msdv.i/24Jan2015.b/v012403.d

Date : 24-JAN-2015 08:04

Client ID: ICV

Instrument: msdv.i

Sample Info: 50mL #2687-186

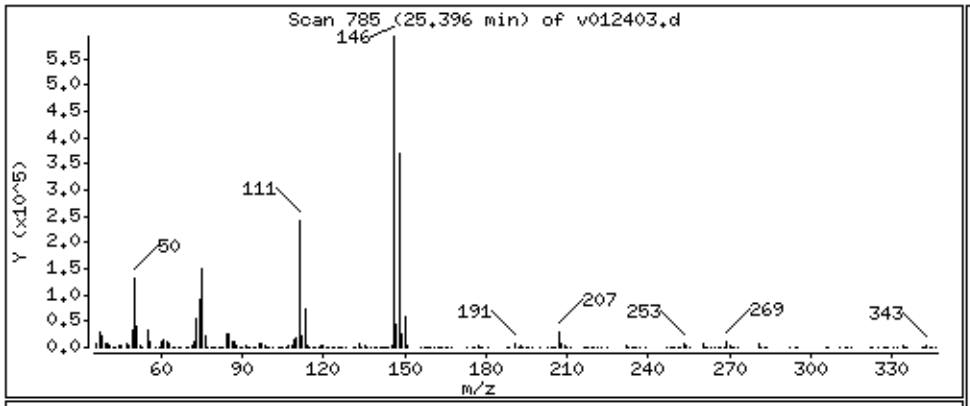
Operator: sn

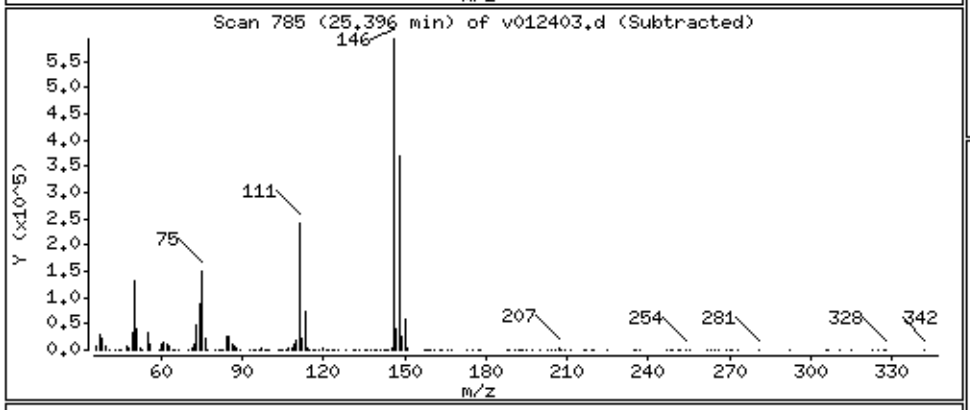
Column phase: RTx-624

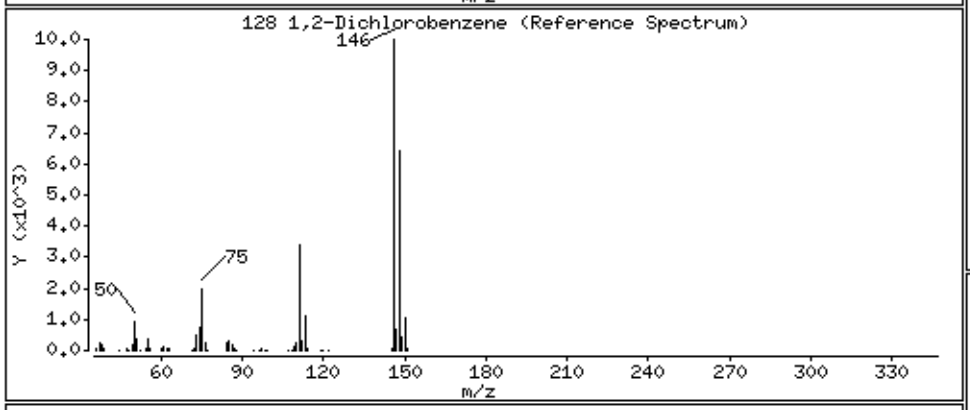
Column diameter: 0.32

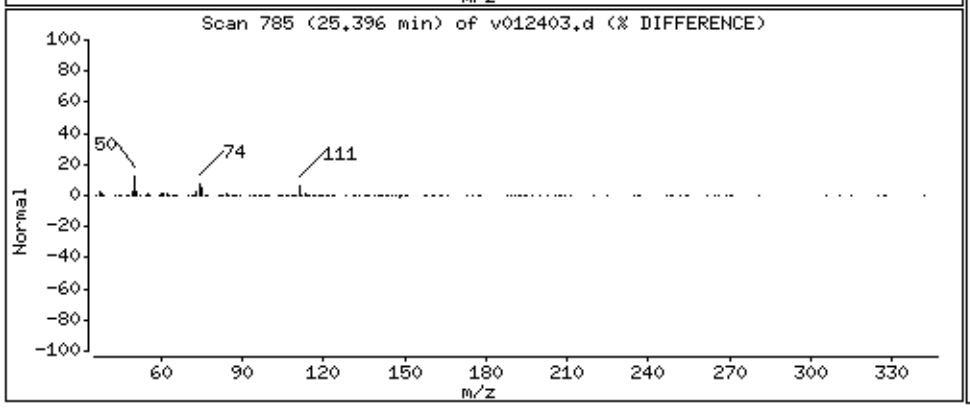
128 1,2-Dichlorobenzene

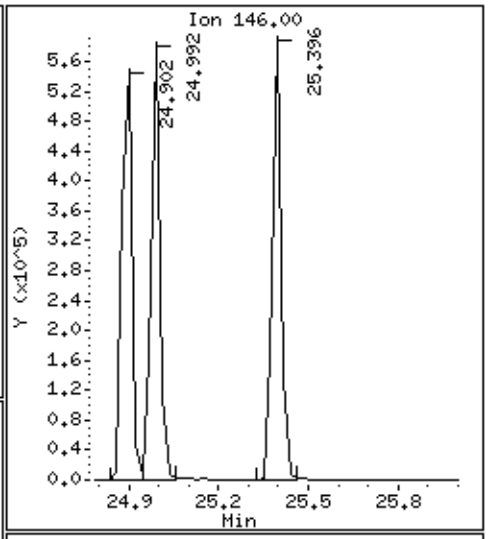
Concentration: 7.712 PPBV

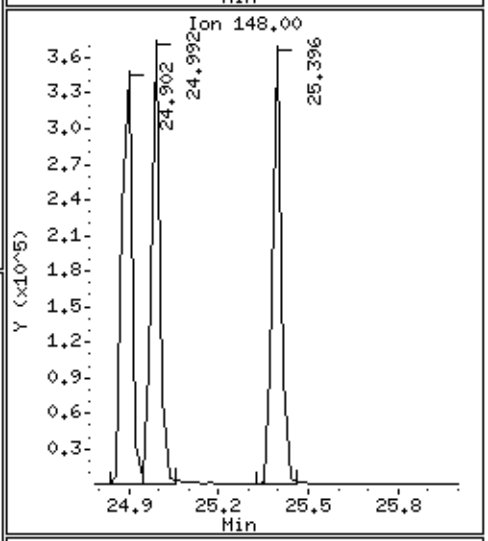


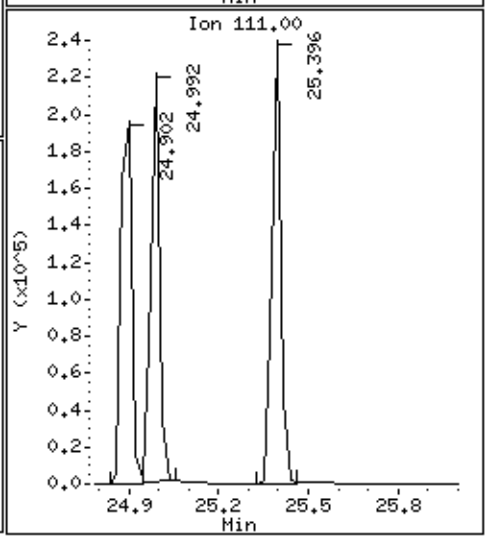












Data File: /chem/msdv.i/24Jan2015.b/v012403.d

Date : 24-JAN-2015 08:04

Client ID: ICV

Instrument: msdv.i

Sample Info: 50mL #2687-186

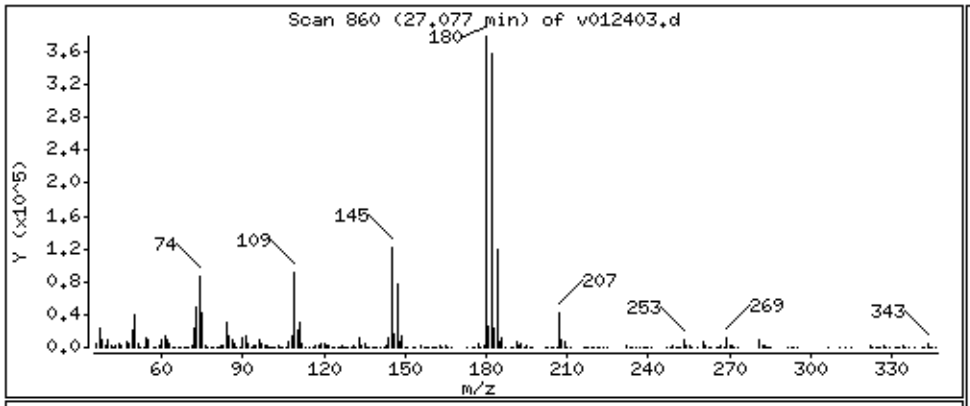
Operator: sn

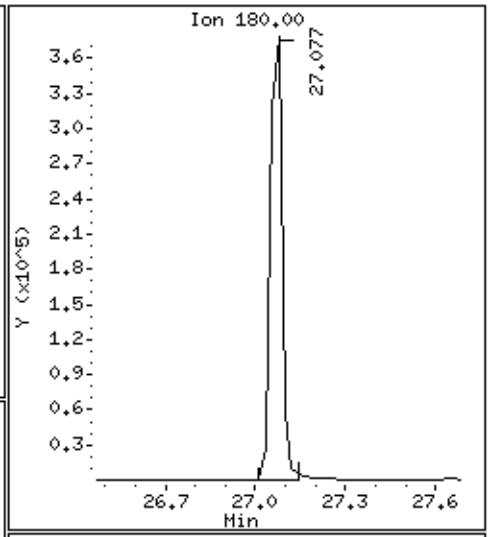
Column phase: RTx-624

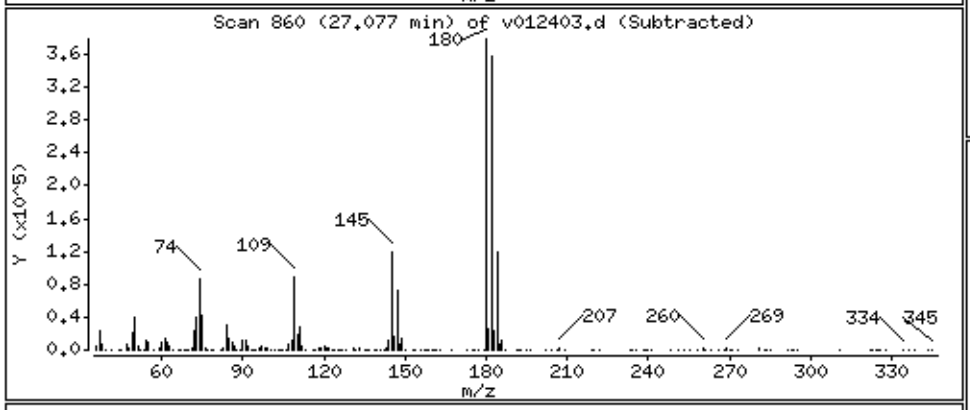
Column diameter: 0.32

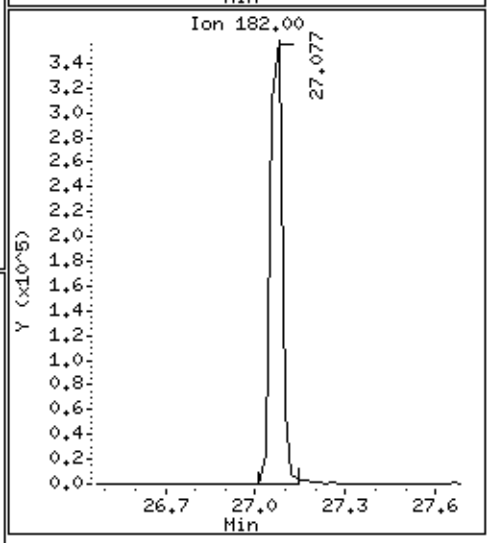
131 1,2,4-Trichlorobenzene

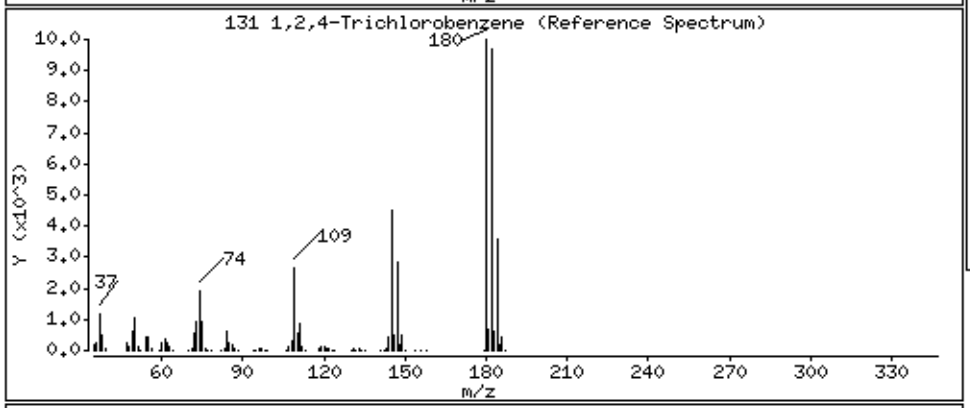
Concentration: 7.462 PPBV

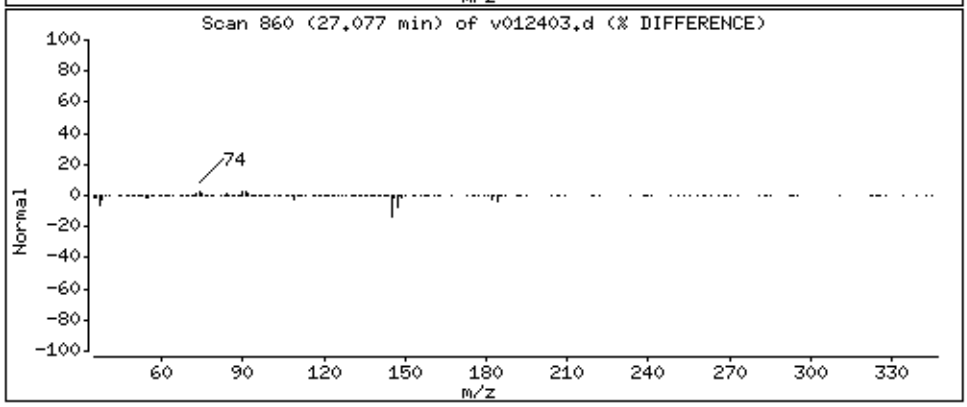












Data File: /chem/msdv.i/24Jan2015.b/v012403.d

Date : 24-JAN-2015 08:04

Client ID: ICV

Instrument: msdv.i

Sample Info: 50mL #2687-186

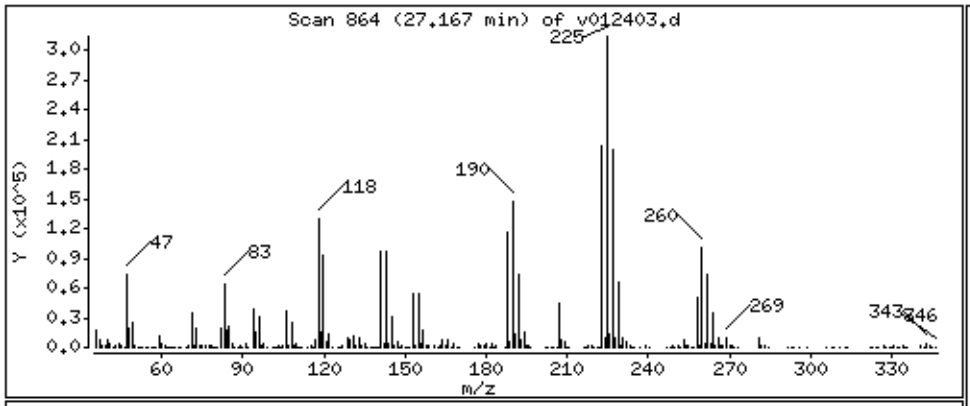
Operator: sn

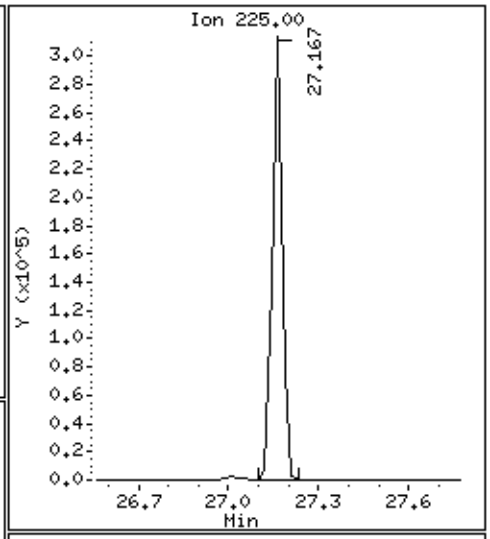
Column phase: RTx-624

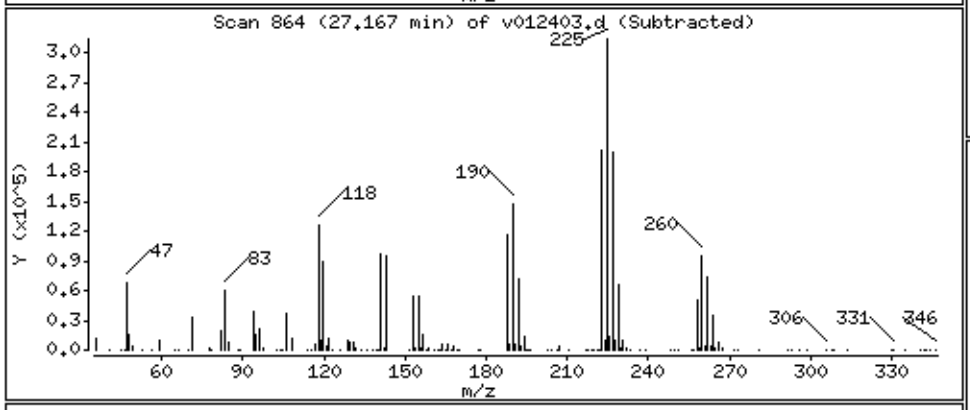
Column diameter: 0.32

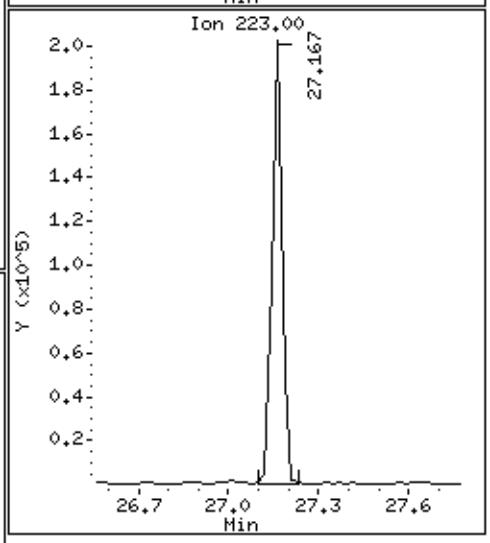
132 Hexachlorobutadiene

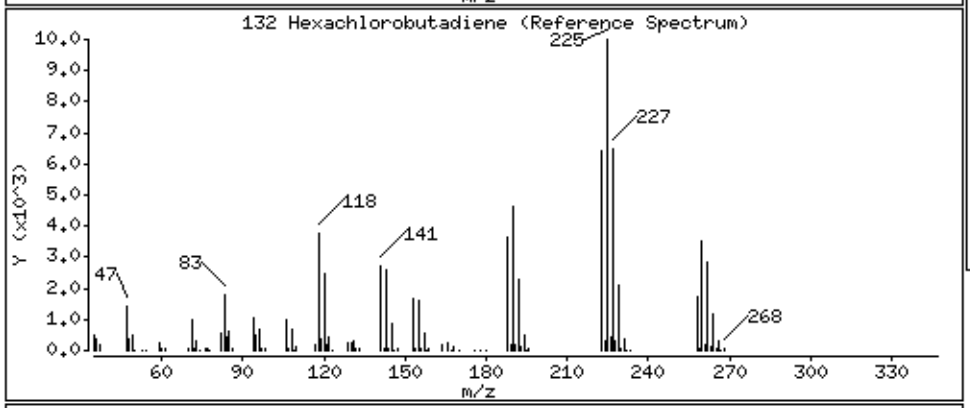
Concentration: 7.011 PPBV

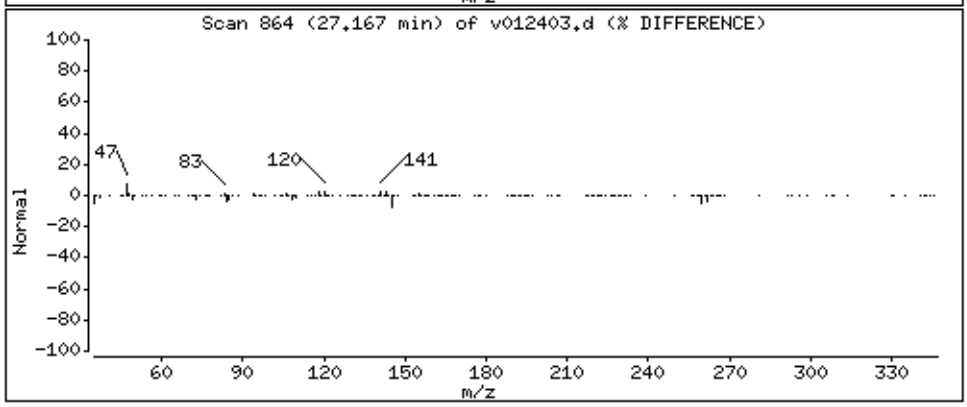












Data File: /chem/msdv.i/24Jan2015.b/v012403.d

Date : 24-JAN-2015 08:04

Client ID: ICV

Instrument: msdv.i

Sample Info: 50mL #2687-186

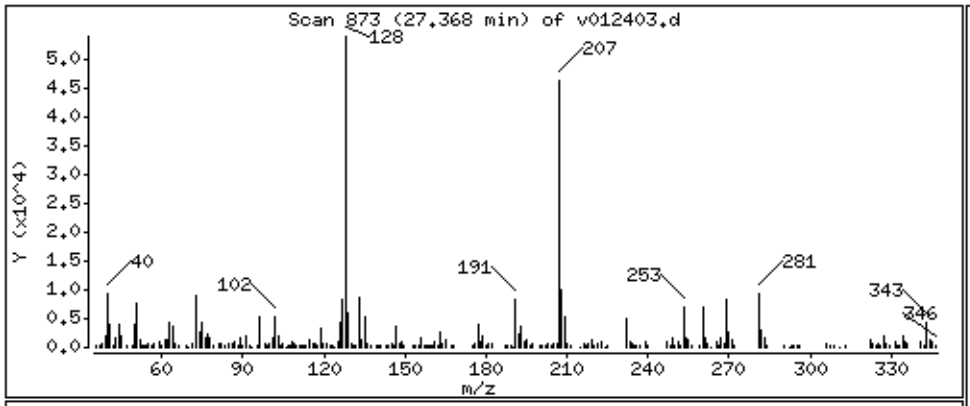
Operator: sn

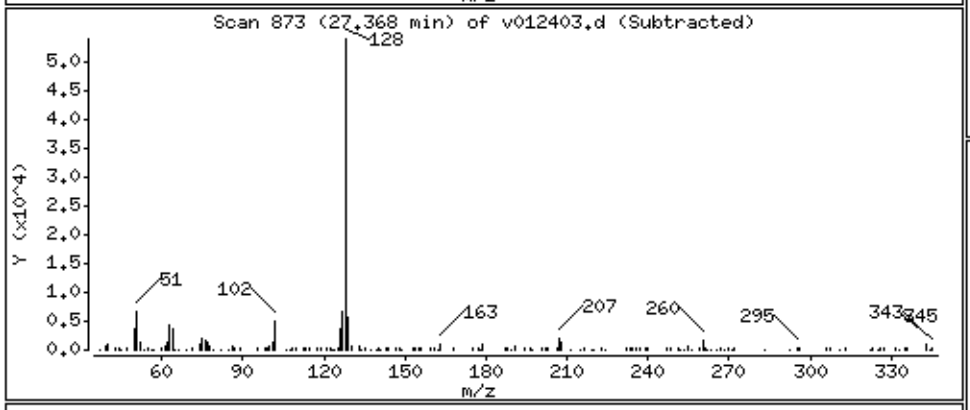
Column phase: RTx-624

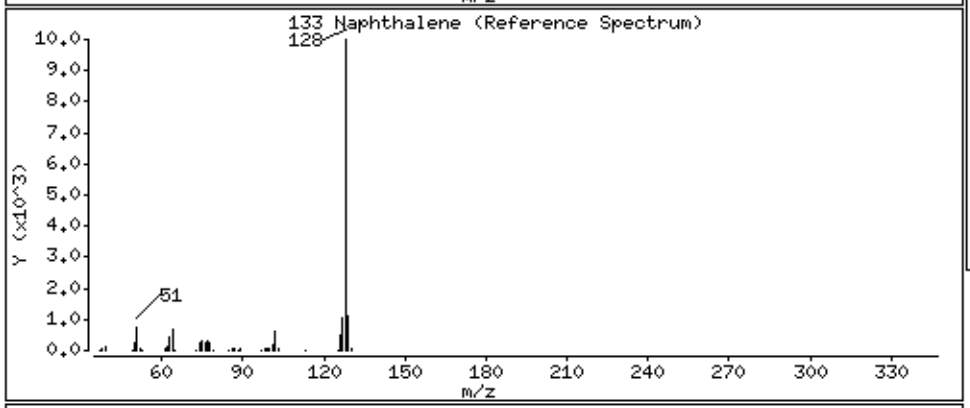
Column diameter: 0.32

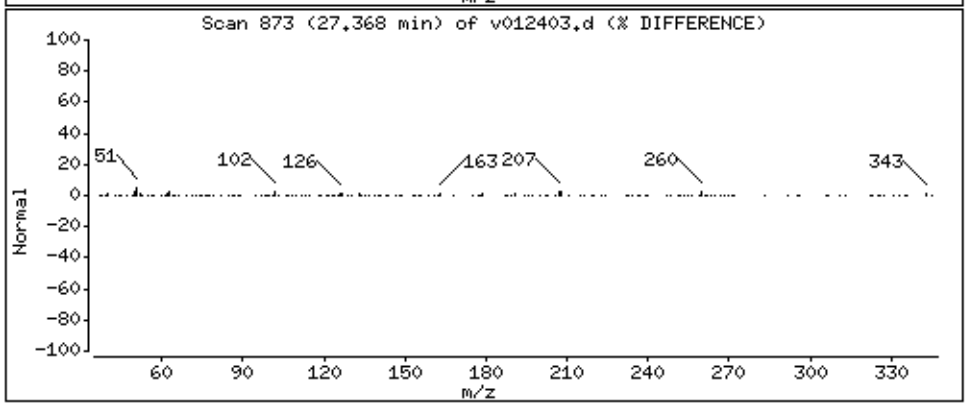
133 Naphthalene

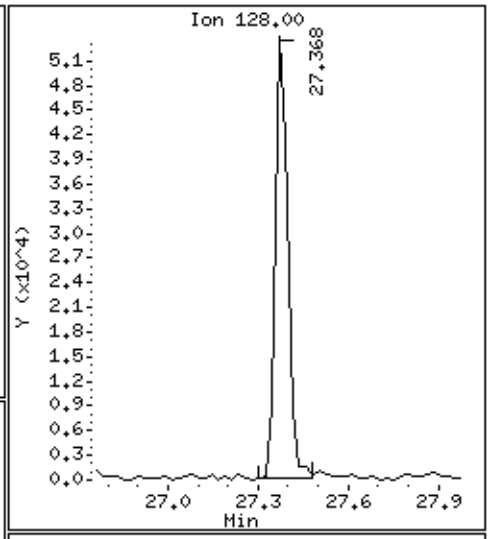
Concentration: 0.7267 PPBV

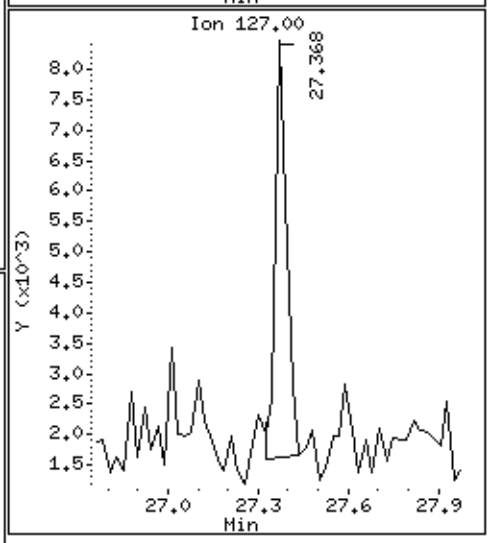












Eurofins Air Toxics Inc.

TO15/Modified TO-14A

Data file : /chem/msdv.i/23Jan2015.b/v012306a.d
Lab Smp Id: Client Smp ID: Level 5
Inj Date : 23-JAN-2015 16:43
Operator : gh Inst ID: msdv.i
Smp Info : 250mL# 2716-09
Misc Info : 0.05ppbv (0.05ppbv)
Comment : Low Level GC-MS
Method : /chem/msdv.i/23Jan2015.b/v15l0123b.m
Meth Date : 27-Jan-2015 13:54 efinn Quant Type: ISTD
Cal Date : 23-JAN-2015 16:43 Cal File: v012306a.d
Als bottle: 1 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SpRL.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	247194	5.00000		70.00- 130.00	100.00
15.934	15.934 (1.000)	128	190515			0.00- 30.00	77.07
15.934	15.934 (1.000)	49	510498			0.00- 30.00	206.52
* 71 1,4-Difluorobenzene						CAS #: 540-36-3	
17.305	17.305 (1.000)	114	1008912	5.00000		70.00- 130.00	100.00
17.305	17.305 (1.000)	88	158239			0.00- 30.00	15.68
* 92 Chlorobenzene-d5						CAS #: 3114-55-4	
22.205	22.205 (1.000)	117	806972	5.00000		70.00- 130.00	100.00
22.205	22.205 (1.000)	82	431536			0.00- 30.00	53.48
114 1,3,5-Trimethylbenzene						CAS #: 108-67-8	
24.116	24.116 (1.086)	105	15549	0.05000	0.06769	70.00- 130.00	100.00(a)
24.116	24.116 (1.086)	120	10692			0.00- 30.00	68.76
120 1,2,4-Trimethylbenzene						CAS #: 95-63-6	
24.529	24.529 (1.105)	105	13850	0.05000	0.06820	70.00- 130.00	100.00(a)
24.529	24.529 (1.105)	120	5812			0.00- 30.00	41.96

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: v012306a.d
Lab Smp Id:
Analysis Type: VOA
Quant Type: ISTD
Operator: gh
Method File: /chem/msdv.i/23Jan2015.b/v15l0123b.m
Misc Info: 0.05ppbv (0.05ppbv)

Calibration Date: 23-JAN-2015
Calibration Time: 16:43
Client Smp ID: Level 5
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
54 Bromochloromethan	247194	148316	346072	247194	0.00
71 1,4-Difluorobenze	1008912	605347	1412477	1008912	0.00
92 Chlorobenzene-d5	806972	484183	1129761	806972	0.00

		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/23Jan2015.b/v012306a.d

Date : 23-JAN-2015 16:43

Client ID: Level 5

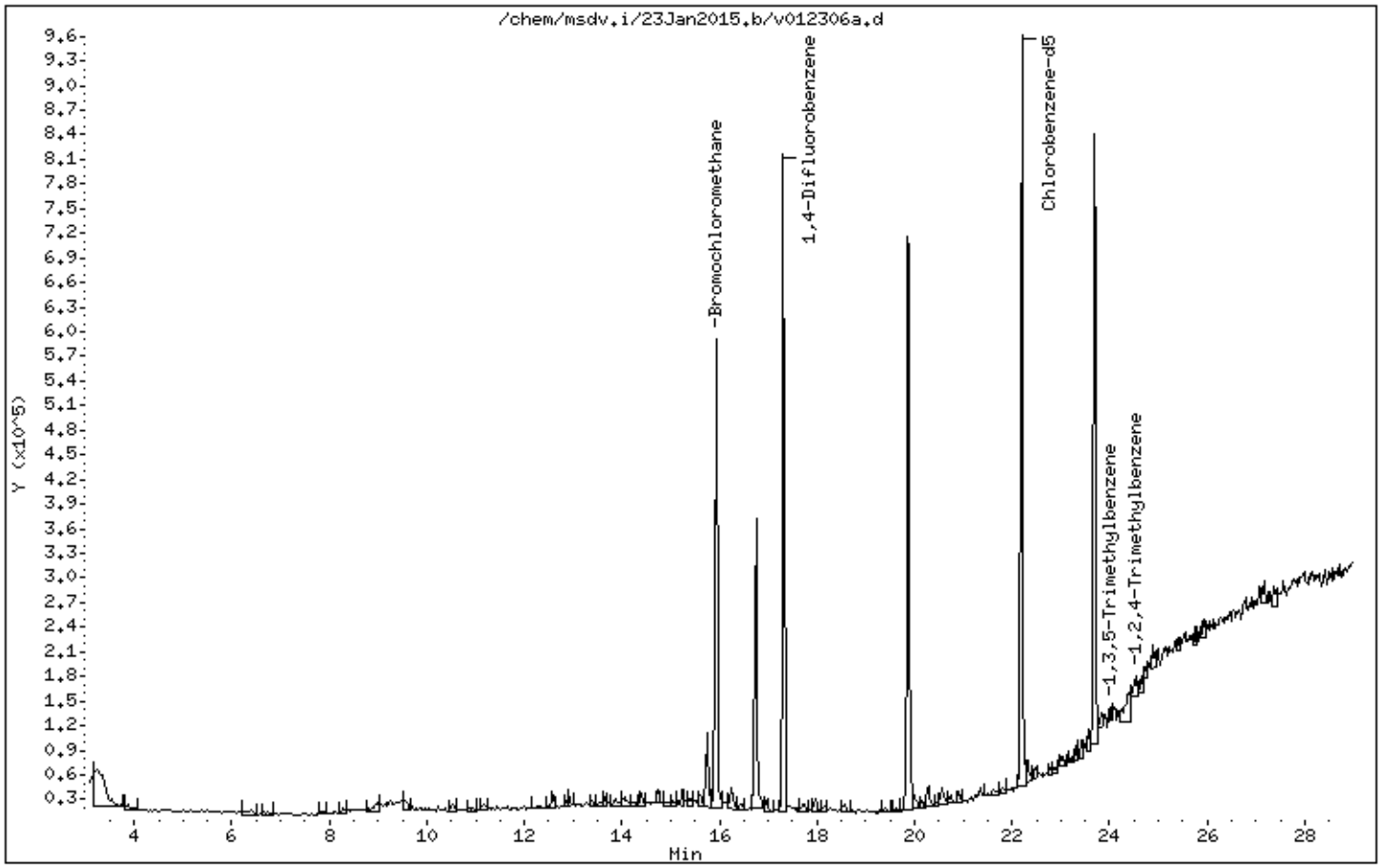
Instrument: msdv.i

Sample Info: 250mL# 2716-09

Operator: gh

Column phase: RTx-624

Column diameter: 0.32



Eurofins Air Toxics Inc.

TO15/Modified TO-14A

Data file : /chem/msdv.i/23Jan2015.b/v012306.d
Lab Smp Id: ICAL Client Smp ID: Level 5
Inj Date : 23-JAN-2015 16:43
Operator : gh Inst ID: msdv.i
Smp Info : 250mL# 2716-09
Misc Info : 0.05ppbv (0.05ppbv)
Comment : Low Level GC-MS
Method : /chem/msdv.i/23Jan2015.b/v15l0123a.m
Meth Date : 23-Jan-2015 23:20 ghehir Quant Type: ISTD
Cal Date : 23-JAN-2015 16:43 Cal File: v012306.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	247194	5.00000		80.00- 120.00	100.00
15.934	15.934 (1.000)	128	190515			48.09- 108.09	77.07
15.934	15.934 (1.000)	49	510498			196.04- 256.04	206.52
* 71 1,4-Difluorobenzene						CAS #: 540-36-3	
17.305	17.305 (1.000)	114	1008912	5.00000		80.00- 120.00	100.00
17.305	17.305 (1.000)	88	158239			0.00- 45.23	15.68
* 92 Chlorobenzene-d5						CAS #: 3114-55-4	
22.205	22.205 (1.000)	117	806972	5.00000		80.00- 120.00	100.00
22.205	22.205 (1.000)	82	431536			23.86- 83.86	53.48
$ 65 1,2-Dichloroethane-d4						CAS #: 17060-07-0	
16.756	16.756 (1.052)	65	374051	5.00000	4.868	80.00- 120.00	100.00
16.756	16.756 (1.052)	67	180995			25.13- 85.13	48.39
$ 80 Toluene-d8						CAS #: 2037-26-5	
19.856	19.879 (1.147)	98	945246	5.00000	5.004	80.00- 120.00	100.00
19.856	19.879 (1.147)	70	100297			0.00- 40.74	10.61

```
                                          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    610773                    36.73-  96.73    64.62
-------------------------------------------------------------------------------
$ 106 Bromofluorobenzene                            CAS #: 460-00-4
 23.704  23.704 (1.067)   174    365662 5.00000    4.889  80.00- 120.00   100.00
 23.678  23.704 (1.066)    95    458047                    95.17- 155.17   125.27
 23.704  23.704 (1.067)   176    335569                    64.74- 124.74    91.77
-------------------------------------------------------------------------------
    6 Freon 114                                     CAS #: 76-14-2
  6.750   6.713 (0.424)   135      8457 0.05000  0.05062  80.00- 120.00   100.00(a)
  6.750   6.713 (0.424)   137      1860                     2.34-  62.34    21.99
  6.750   6.713 (0.424)    85      9837                    93.53- 153.53   116.32
-------------------------------------------------------------------------------
   20 Trichlorofluoromethane/Fr11                   CAS #: 75-69-4
 11.184  11.184 (0.702)   101     10729 0.05000  0.05101  80.00- 120.00   100.00(a)
 11.160  11.184 (0.700)   103      8111                    34.40-  94.40    75.60
-------------------------------------------------------------------------------
   28 Freon 113                                     CAS #: 76-13-1
 12.568  12.569 (0.789)   151      7546 0.05000  0.05035  80.00- 120.00   100.00(a)
 12.568  12.569 (0.789)   153      4934                    33.38-  93.38    65.39
 12.568  12.569 (0.789)   101      7659                    85.19- 145.19   101.50
-------------------------------------------------------------------------------
   58 1,1,1-Trichloroethane                         CAS #: 71-55-6
 16.242  16.242 (1.019)    97     11494 0.05000  0.05498  80.00- 120.00   100.00(a)
 16.242  16.242 (1.019)    99      5642                    33.24-  93.24    49.09
-------------------------------------------------------------------------------
   59 Carbon Tetrachloride                          CAS #: 56-23-5
 16.458  16.458 (1.033)   119      7930 0.05000  0.04613  80.00- 120.00   100.00(a)
 16.458  16.458 (1.033)   117      7684                    67.96- 127.96    96.90
                   Sum of Peak Amounts =          0.0461
-------------------------------------------------------------------------------
   72 Trichloroethene                               CAS #: 79-01-6
 17.717  17.717 (1.024)   130      5362 0.05000  0.04516  80.00- 120.00   100.00(a)
 17.717  17.717 (1.024)    95      4878                    62.98- 122.98    90.97
 17.717  17.717 (1.024)    97      3201                    29.44-  89.44    59.70
-------------------------------------------------------------------------------
   77 Bromodichloromethane                          CAS #: 75-27-4
 18.568  18.568 (1.073)    83      8288 0.05000  0.04683  80.00- 120.00   100.00(a)
 18.568  18.568 (1.073)    85      4828                    33.73-  93.73    58.25
-------------------------------------------------------------------------------
   84 1,1,2-Trichloroethane                         CAS #: 79-00-5
 20.758  20.722 (0.935)    97      4593 0.05000  0.04531  80.00- 120.00   100.00(a)
 20.758  20.722 (0.935)    99      3151                    31.80-  91.80    68.60
 20.758  20.722 (0.935)    83      4249                    51.12- 111.12    92.51
-------------------------------------------------------------------------------
   86 Tetrachloroethene                             CAS #: 127-18-4
 20.901  20.901 (0.941)   166      9581 0.05000  0.05488  80.00- 120.00   100.00(a)
```

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
86 Tetrachloroethene (continued)							
20.901	20.901 (0.941)	129	6728			46.61- 106.61	70.22
20.901	20.901 (0.941)	131	5432			46.38- 106.38	56.70
89 Dibromochloromethane					CAS #: 124-48-1		
21.367	21.367 (0.962)	129	9264	0.05000	0.04590	80.00- 120.00	100.00(a)
21.367	21.367 (0.962)	127	9287			48.71- 108.71	100.25
90 1,2-Dibromoethane					CAS #: 106-93-4		
21.619	21.583 (0.974)	107	7547	0.05000	0.04487	80.00- 120.00	100.00(a)
21.619	21.583 (0.974)	109	7921			63.80- 123.80	104.96
102 Bromoform					CAS #: 75-25-2		
23.331	23.331 (1.051)	173	8998	0.05000	0.04801	80.00- 120.00	100.00(a)
23.331	23.331 (1.051)	171	4333			22.04- 82.04	48.16
108 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
23.833	23.833 (1.073)	83	12867	0.05000	0.05682	80.00- 120.00	100.00(a)
23.833	23.833 (1.073)	85	8626			34.94- 94.94	67.04
122 1,3-Dichlorobenzene					CAS #: 541-73-1		
24.902	24.902 (1.121)	146	11007	0.05000	0.05997	80.00- 120.00	100.00(a)
24.902	24.902 (1.121)	148	6184			32.42- 92.42	56.18
24.902	24.902 (1.121)	111	5206			8.90- 68.90	47.30
124 1,4-Dichlorobenzene					CAS #: 106-46-7		
25.014	24.992 (1.127)	146	11583	0.05000	0.06405	80.00- 120.00	100.00(a)
25.014	24.992 (1.127)	148	6281			34.01- 94.01	54.23
25.014	24.992 (1.127)	111	4316			8.58- 68.58	37.26
128 1,2-Dichlorobenzene					CAS #: 95-50-1		
25.396	25.396 (1.144)	146	11503	0.05000	0.06335	80.00- 120.00	100.00(a)
25.396	25.396 (1.144)	148	6563			32.53- 92.53	57.05
25.396	25.396 (1.144)	111	3866			10.66- 70.66	33.61
131 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
27.077	27.077 (1.219)	180	11638	0.05000	0.06902	80.00- 120.00	100.00(a)
27.077	27.077 (1.219)	182	10937			66.06- 126.06	93.98

QC Flag Legend

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

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdv.i
Lab File ID: v012306.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: gh
Method File: /chem/msdv.i/23Jan2015.b/v15l0123a.m
Misc Info: 0.05ppbv (0.05ppbv)

Calibration Date: 23-JAN-2015
Calibration Time: 20:25
Client Smp ID: Level 5
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
54 Bromochloromethan	253263	151958	354568	247194	-2.40
71 1,4-Difluorobenze	1019789	611873	1427705	1008912	-1.07
92 Chlorobenzene-d5	833326	499996	1166656	806972	-3.16

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/23Jan2015.b/v012306.d

Date : 23-JAN-2015 16:43

Client ID: Level 5

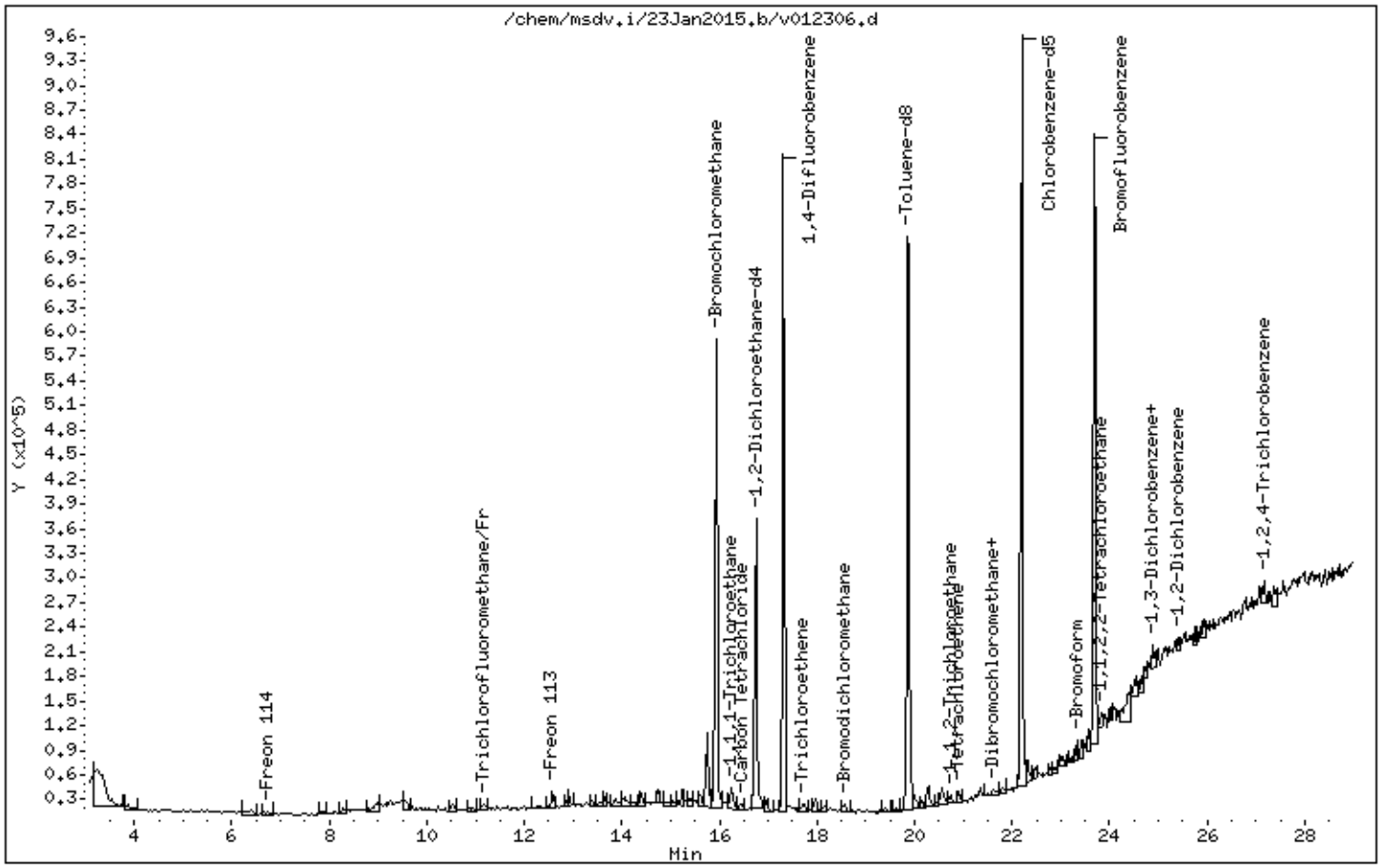
Instrument: msdv.i

Sample Info: 250mL# 2716-09

Operator: gh

Column phase: RTx-624

Column diameter: 0.32



Eurofins Air Toxics Inc.

TO15/Modified TO-14A

Data file : /chem/msdv.i/23Jan2015.b/v012307.d
Lab Smp Id: ICAL Client Smp ID: Level 6
Inj Date : 23-JAN-2015 17:30
Operator : gh Inst ID: msdv.i
Smp Info : 25mL# 2716-10
Misc Info : 0.1ppbv (1.0ppbv)
Comment : Low Level GC-MS
Method : /chem/msdv.i/23Jan2015.b/v15l0123a.m
Meth Date : 23-Jan-2015 23:13 ghehir Quant Type: ISTD
Cal Date : 23-JAN-2015 17:30 Cal File: v012307.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	247181	5.00000		80.00- 120.00	100.00
15.933	15.933 (1.000)	128	200404			47.40- 107.40	81.08
15.933	15.933 (1.000)	49	534381			167.26- 227.26	216.19
* 71 1,4-Difluorobenzene					CAS #: 540-36-3		
17.305	17.305 (1.000)	114	992946	5.00000		80.00- 120.00	100.00
17.305	17.305 (1.000)	88	156096			0.00- 46.18	15.72
* 92 Chlorobenzene-d5					CAS #: 3114-55-4		
22.205	22.205 (1.000)	117	788234	5.00000		80.00- 120.00	100.00
22.205	22.205 (1.000)	82	433113			25.73- 85.73	54.95
$ 65 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
16.756	16.756 (1.052)	65	370457	5.00000	4.880	80.00- 120.00	100.00
16.756	16.756 (1.052)	67	175093			26.63- 86.63	47.26
$ 80 Toluene-d8					CAS #: 2037-26-5		
19.879	19.879 (1.149)	98	929298	5.00000	4.999	80.00- 120.00	100.00
19.856	19.856 (1.147)	70	102282			0.00- 40.74	11.01

```
                                          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    607461                    33.76-  93.76    65.37
-------------------------------------------------------------------------------
$ 106 Bromofluorobenzene                            CAS #: 460-00-4
 23.704  23.704 (1.067)   174    340324 5.00000    4.767  80.00- 120.00   100.00
 23.678  23.678 (1.066)    95    437914                  108.04- 168.04   128.68
 23.704  23.704 (1.067)   176    329237                   67.04- 127.04    96.74
-------------------------------------------------------------------------------
    4 Dichlorodifluoromethane/Fr12                  CAS #: 75-71-8
  5.240   5.240 (0.329)    85     23214 0.10000   0.1084  80.00- 120.00   100.00
  5.202   5.202 (0.326)    87      5505                    2.42-  62.42    23.71
-------------------------------------------------------------------------------
    6 Freon 114                                     CAS #: 76-14-2
  6.713   6.713 (0.421)   135     18447 0.10000   0.1067  80.00- 120.00   100.00
  6.713   6.713 (0.421)   137      5483                    1.35-  61.35    29.72
  6.713   6.713 (0.421)    85     23419                  100.64- 160.64   126.95
-------------------------------------------------------------------------------
    8 Chloromethane                                 CAS #: 74-87-3
  7.052   7.052 (0.443)    50     16414 0.10000   0.1142  80.00- 120.00   100.00
  7.052   7.052 (0.443)    52      6130                    2.12-  62.12    37.35
-------------------------------------------------------------------------------
   10 Vinyl Chloride                                CAS #: 75-01-4
  8.008   8.008 (0.503)    62     10651 0.10000   0.1032  80.00- 120.00   100.00
  8.008   8.008 (0.503)    64      3645                    0.00-  59.60    34.22
-------------------------------------------------------------------------------
   11 1,3-Butadiene                                 CAS #: 106-99-0
  8.288   8.288 (0.520)    54     11099 0.10000   0.1075  80.00- 120.00   100.00
  8.288   8.288 (0.520)    39     11285                   66.22- 126.22   101.68
-------------------------------------------------------------------------------
   12 Bromomethane                                  CAS #: 74-83-9
  9.834   9.834 (0.617)    94      6526 0.10000   0.1001  80.00- 120.00   100.00
  9.834   9.834 (0.617)    96      6771                   63.75- 123.75   103.75
-------------------------------------------------------------------------------
   20 Trichlorofluoromethane/Fr11                   CAS #: 75-69-4
 11.183  11.183 (0.702)   101     25027 0.10000   0.1119  80.00- 120.00   100.00
 11.159  11.159 (0.700)   103     16191                   35.13-  95.13    64.69
-------------------------------------------------------------------------------
   28 Freon 113                                     CAS #: 76-13-1
 12.568  12.568 (0.789)   151     16376 0.10000   0.1060  80.00- 120.00   100.00
 12.568  12.568 (0.789)   153     11972                   33.83-  93.83    73.11
 12.596  12.596 (0.791)   101     20196                   86.15- 146.15   123.33
-------------------------------------------------------------------------------
   30 1,1-Dichloroethene                            CAS #: 75-35-4
 12.568  12.568 (0.789)    98      4917 0.10000  0.09847  80.00- 120.00   100.00(a)
 12.568  12.568 (0.789)    61     18830                  302.86- 362.86   382.96
 12.568  12.568 (0.789)    96     10841                  132.09- 192.09   220.48
-------------------------------------------------------------------------------
```

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
35 3-Chloroprene					CAS #: 107-05-1		
13.392	13.392 (0.841)	76	3493	0.10000	0.1026	80.00- 120.00	100.00(a)
13.392	13.392 (0.841)	41	15166			401.48- 461.48	434.18
37 Methylene Chloride					CAS #: 75-09-2		
13.640	13.640 (0.856)	84	8049	0.10000	0.1064	80.00- 120.00	100.00(a)
13.667	13.667 (0.858)	49	16929			177.28- 237.28	210.32
13.640	13.640 (0.856)	51	6341			32.93- 92.93	78.78
39 MTBE					CAS #: 1634-04-4		
14.024	14.024 (0.880)	73	23958	0.10000	0.1034	80.00- 120.00	100.00
14.024	14.024 (0.880)	57	10576			3.26- 63.26	44.14
14.024	14.024 (0.880)	41	11681			2.63- 62.63	48.76
40 trans-1,2-Dichloroethene					CAS #: 156-60-5		
14.051	14.051 (0.882)	98	4816	0.10000	0.09394	80.00- 120.00	100.00(a)
14.051	14.051 (0.882)	61	17742			262.11- 322.11	368.40
14.051	14.051 (0.882)	96	11123			128.28- 188.28	230.96
43 Hexane					CAS #: 110-54-3		
14.381	14.381 (0.903)	57	21718	0.10000	0.1039	80.00- 120.00	100.00
14.381	14.381 (0.903)	43	19517			36.69- 96.69	89.87
14.381	14.381 (0.903)	86	2375			0.00- 41.09	10.94
46 1,1-Dichloroethane					CAS #: 75-34-3		
14.765	14.765 (0.927)	63	20695	0.10000	0.1051	80.00- 120.00	100.00
14.765	14.765 (0.927)	65	5906			0.34- 60.34	28.54
50 cis-1,2-Dichloroethene					CAS #: 156-59-2		
15.592	15.592 (0.979)	98	7076	0.10000	0.1098	80.00- 120.00	100.00
15.592	15.592 (0.979)	61	18393			232.32- 292.32	259.93
15.592	15.592 (0.979)	96	14772			127.66- 187.66	208.76
55 Chloroform					CAS #: 67-66-3		
15.995	15.995 (1.004)	83	17836	0.10000	0.1014	80.00- 120.00	100.00
15.995	15.995 (1.004)	85	11845			34.22- 94.22	66.41
58 1,1,1-Trichloroethane					CAS #: 71-55-6		
16.242	16.242 (1.019)	97	21090	0.10000	0.1006	80.00- 120.00	100.00
16.242	16.242 (1.019)	99	14817			34.05- 94.05	70.26
57 Cyclohexane					CAS #: 110-82-7		
16.242	16.242 (1.019)	84	14484	0.10000	0.1108	80.00- 120.00	100.00
16.242	16.242 (1.019)	56	26034			145.90- 205.90	179.74
16.242	16.242 (1.019)	41	21137			62.61- 122.61	145.93

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

   59 Carbon Tetrachloride                          CAS #: 56-23-5
 16.457  16.457 (1.033)   119     18224 0.10000   0.1039  80.00- 120.00   100.00
 16.457  16.457 (1.033)   117     17945                   68.83- 128.83    98.47
                   Sum of Peak Amounts =           0.104
-------------------------------------------------------------------------------
   63 2,2,4-Trimethylpentane                        CAS #: 540-84-1
 16.728  16.728 (1.050)    56     26005 0.10000   0.1109  80.00- 120.00   100.00
 16.728  16.728 (1.050)    57     68951                  271.70- 331.70   265.15
 16.728  16.728 (1.050)    41     21375                   52.41- 112.41    82.20
-------------------------------------------------------------------------------
   64 Benzene                                       CAS #: 71-43-2
 16.756  16.756 (0.968)    78     31970 0.10000   0.1145  80.00- 120.00   100.00
 16.756  16.756 (0.968)    77      7863                    0.00-  53.49    24.59
-------------------------------------------------------------------------------
   68 1,2-Dichloroethane                            CAS #: 107-06-2
 16.865  16.865 (0.975)    62     16675 0.10000   0.1073  80.00- 120.00   100.00
 16.865  16.865 (0.975)    64      4845                    0.00-  59.91    29.06
-------------------------------------------------------------------------------
   69 Heptane                                       CAS #: 142-82-5
 16.975  16.975 (0.981)    57     13157 0.10000   0.1046  80.00- 120.00   100.00
 16.975  16.975 (0.981)   100      2941                    0.00-  53.77    22.35
 16.975  16.975 (0.981)    43     26942                  172.35- 232.35   204.77
-------------------------------------------------------------------------------
   72 Trichloroethene                               CAS #: 79-01-6
 17.716  17.716 (1.024)   130     13684 0.10000   0.1108  80.00- 120.00   100.00
 17.716  17.716 (1.024)    95     12543                   65.17- 125.17    91.66
 17.716  17.716 (1.024)    97      9251                   31.34-  91.34    67.60
-------------------------------------------------------------------------------
   74 1,2-Dichloropropane                           CAS #: 78-87-5
 18.156  18.156 (1.049)    63     12685 0.10000   0.1022  80.00- 120.00   100.00
 18.156  18.156 (1.049)    62     10146                   43.25- 103.25    79.98
 18.156  18.156 (1.049)    41     12524                   33.86-  93.86    98.73
-------------------------------------------------------------------------------
   75 1,4-Dioxane                                   CAS #: 123-91-1
 18.266  18.266 (1.056)    88      9414 0.10000   0.1212  80.00- 120.00   100.00
 18.293  18.293 (1.057)    58      8700                   73.29- 133.29    92.42
 18.293  18.293 (1.057)    57      3751                    3.70-  63.70    39.84
-------------------------------------------------------------------------------
   77 Bromodichloromethane                          CAS #: 75-27-4
 18.568  18.568 (1.073)    83     19498 0.10000   0.1076  80.00- 120.00   100.00
 18.568  18.568 (1.073)    85     12993                   33.07-  93.07    66.64
-------------------------------------------------------------------------------
   78 cis-1,3-Dichloropropene                       CAS #: 10061-01-5
 19.408  19.408 (1.122)    75     15814 0.10000   0.1010  80.00- 120.00   100.00
 19.408  19.408 (1.122)    77      4796                    0.97-  60.97    30.33
 19.408  19.408 (1.122)    39     10464                   40.23- 100.23    66.17
-------------------------------------------------------------------------------
```

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
79 4-Methyl-2-pentanone					CAS #: 108-10-1		
19.610	19.610 (1.133)	43	36526	0.10000	0.1052	80.00- 120.00	100.00
19.632	19.632 (1.135)	58	12403			6.07- 66.07	33.96
19.632	19.632 (1.135)	85	2155			0.00- 41.52	5.90
81 Toluene					CAS #: 108-88-3		
19.991	19.991 (1.155)	91	31539	0.10000	0.1059	80.00- 120.00	100.00
19.991	19.991 (1.155)	92	17658			28.55- 88.55	55.99
82 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
20.435	20.435 (0.920)	75	14599	0.10000	0.1049	80.00- 120.00	100.00
20.435	20.435 (0.920)	77	8825			1.39- 61.39	60.45
20.435	20.435 (0.920)	39	9740			36.57- 96.57	66.72
84 1,1,2-Trichloroethane					CAS #: 79-00-5		
20.757	20.757 (0.935)	97	12011	0.10000	0.1133	80.00- 120.00	100.00
20.757	20.757 (0.935)	99	8407			32.18- 92.18	69.99
20.757	20.757 (0.935)	83	10260			54.91- 114.91	85.42
86 Tetrachloroethene					CAS #: 127-18-4		
20.901	20.901 (0.941)	166	17111	0.10000	0.1002	80.00- 120.00	100.00
20.901	20.901 (0.941)	129	11661			50.27- 110.27	68.15
20.901	20.901 (0.941)	131	15105			49.16- 109.16	88.28
89 Dibromochloromethane					CAS #: 124-48-1		
21.367	21.367 (0.962)	129	21757	0.10000	0.1067	80.00- 120.00	100.00
21.367	21.367 (0.962)	127	16981			46.63- 106.63	78.05
90 1,2-Dibromoethane					CAS #: 106-93-4		
21.582	21.582 (0.972)	107	18822	0.10000	0.1092	80.00- 120.00	100.00
21.582	21.582 (0.972)	109	18073			62.25- 122.25	96.02
93 Chlorobenzene					CAS #: 108-90-7		
22.233	22.233 (1.001)	112	28000	0.10000	0.1082	80.00- 120.00	100.00
22.233	22.233 (1.001)	114	7926			1.87- 61.87	28.31
22.233	22.233 (1.001)	77	24302			27.42- 87.42	86.79
95 Ethyl Benzene					CAS #: 100-41-4		
22.315	22.315 (1.005)	106	13203	0.10000	0.1085	80.00- 120.00	100.00
22.315	22.315 (1.005)	91	32548			258.78- 318.78	246.52
96 m,p-Xylene					CAS #: 108-38-3		
22.480	22.480 (1.012)	106	13594	0.10000	0.1090	80.00- 120.00	100.00
22.480	22.480 (1.012)	91	24376			162.81- 222.81	179.31
100 o-Xylene					CAS #: 95-47-6		
23.001	23.001 (1.036)	106	11989	0.10000	0.1056	80.00- 120.00	100.00

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

  100 o-Xylene (continued)
 23.001  23.001 (1.036)    91     25330                  171.98- 231.98   211.28
-------------------------------------------------------------------------------
  101 Styrene                                      CAS #: 100-42-5
 23.029  23.029 (1.037)   104     17678 0.10000   0.1046  80.00- 120.00   100.00
 23.029  23.029 (1.037)    78     10810                   21.36-  81.36    61.15
-------------------------------------------------------------------------------
  102 Bromoform                                    CAS #: 75-25-2
 23.331  23.331 (1.051)   173     18196 0.10000  0.09960  80.00- 120.00   100.00(a)
 23.331  23.331 (1.051)   171     10132                   21.13-  81.13    55.68
-------------------------------------------------------------------------------
  103 Cumene                                       CAS #: 98-82-8
 23.441  23.441 (1.056)   105     32949 0.10000   0.1049  80.00- 120.00   100.00
 23.441  23.441 (1.056)   120     10217                    0.35-  60.35    31.01
-------------------------------------------------------------------------------
  108 1,1,2,2-Tetrachloroethane                    CAS #: 79-34-5
 23.832  23.832 (1.073)    83     25827 0.10000   0.1106  80.00- 120.00   100.00
 23.832  23.832 (1.073)    85     16265                   36.04-  96.04    62.98
-------------------------------------------------------------------------------
  111 Propylbenzene                                CAS #: 103-65-1
 23.910  23.910 (1.077)    91     38072 0.10000   0.1175  80.00- 120.00   100.00
 23.910  23.910 (1.077)   120      9072                    0.00-  56.65    23.83
-------------------------------------------------------------------------------
  113 4-Ethyltoluene                               CAS #: 622-96-8
 24.039  24.039 (1.083)   105     27062 0.10000   0.1144  80.00- 120.00   100.00
 24.039  24.039 (1.083)   120      9911                    3.46-  63.46    36.62
-------------------------------------------------------------------------------
  114 1,3,5-Trimethylbenzene                       CAS #: 108-67-8
 24.116  24.116 (1.086)   105     29831 0.10000   0.1211  80.00- 120.00   100.00
 24.116  24.116 (1.086)   120     16385                   21.43-  81.43    54.93
-------------------------------------------------------------------------------
  120 1,2,4-Trimethylbenzene                       CAS #: 95-63-6
 24.529  24.529 (1.105)   105     27678 0.10000   0.1253  80.00- 120.00   100.00
 24.529  24.529 (1.105)   120     15622                   18.67-  78.67    56.44
-------------------------------------------------------------------------------
  122 1,3-Dichlorobenzene                          CAS #: 541-73-1
 24.902  24.902 (1.121)   146     13008 0.10000  0.07987  80.00- 120.00   100.00(a)
 24.902  24.902 (1.121)   148     11673                   33.26-  93.26    89.74
 24.902  24.902 (1.121)   111      8703                    9.81-  69.81    66.90
-------------------------------------------------------------------------------
  124 1,4-Dichlorobenzene                          CAS #: 106-46-7
 24.992  24.992 (1.125)   146     23844 0.10000   0.1209  80.00- 120.00   100.00
 24.992  24.992 (1.125)   148     12682                   32.99-  92.99    53.19
 24.992  24.992 (1.125)   111      5729                    8.98-  68.98    24.03
-------------------------------------------------------------------------------
  127 alpha-chlorotoluene                          CAS #: 100-44-7
 25.149  25.149 (1.133)    91     15623 0.10000  0.08206  80.00- 120.00   100.00(a)
```

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
127 alpha-chlorotoluene (continued)							
25.126	25.126 (1.132)	126	5588			0.00- 53.33	35.77
128 1,2-Dichlorobenzene					CAS #: 95-50-1		
25.395	25.395 (1.144)	146	17842	0.10000	0.1004	80.00- 120.00	100.00
25.395	25.395 (1.144)	148	10842			33.33- 93.33	60.77
25.395	25.395 (1.144)	111	8755			12.11- 72.11	49.07
131 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
27.077	27.077 (1.219)	180	15479	0.10000	0.09590	80.00- 120.00	100.00(a)
27.077	27.077 (1.219)	182	13322			66.11- 126.11	86.06
132 Hexachlorobutadiene					CAS #: 87-68-3		
27.166	27.166 (1.223)	225	15583	0.10000	0.1347	80.00- 120.00	100.00(a)
27.166	27.166 (1.223)	223	8384			31.45- 91.45	53.80

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: v012307.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: gh
Method File: /chem/msdv.i/23Jan2015.b/v15l0123a.m
Misc Info: 0.1ppbv (1.0ppbv)

Calibration Date: 23-JAN-2015
Calibration Time: 20:25
Client Smp ID: Level 6
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
54 Bromochloromethan	253263	151958	354568	247181	-2.40
71 1,4-Difluorobenze	1019789	611873	1427705	992946	-2.63
92 Chlorobenzene-d5	833326	499996	1166656	788234	-5.41

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/23Jan2015.b/v012307.d

Date : 23-JAN-2015 17:30

Client ID: Level 6

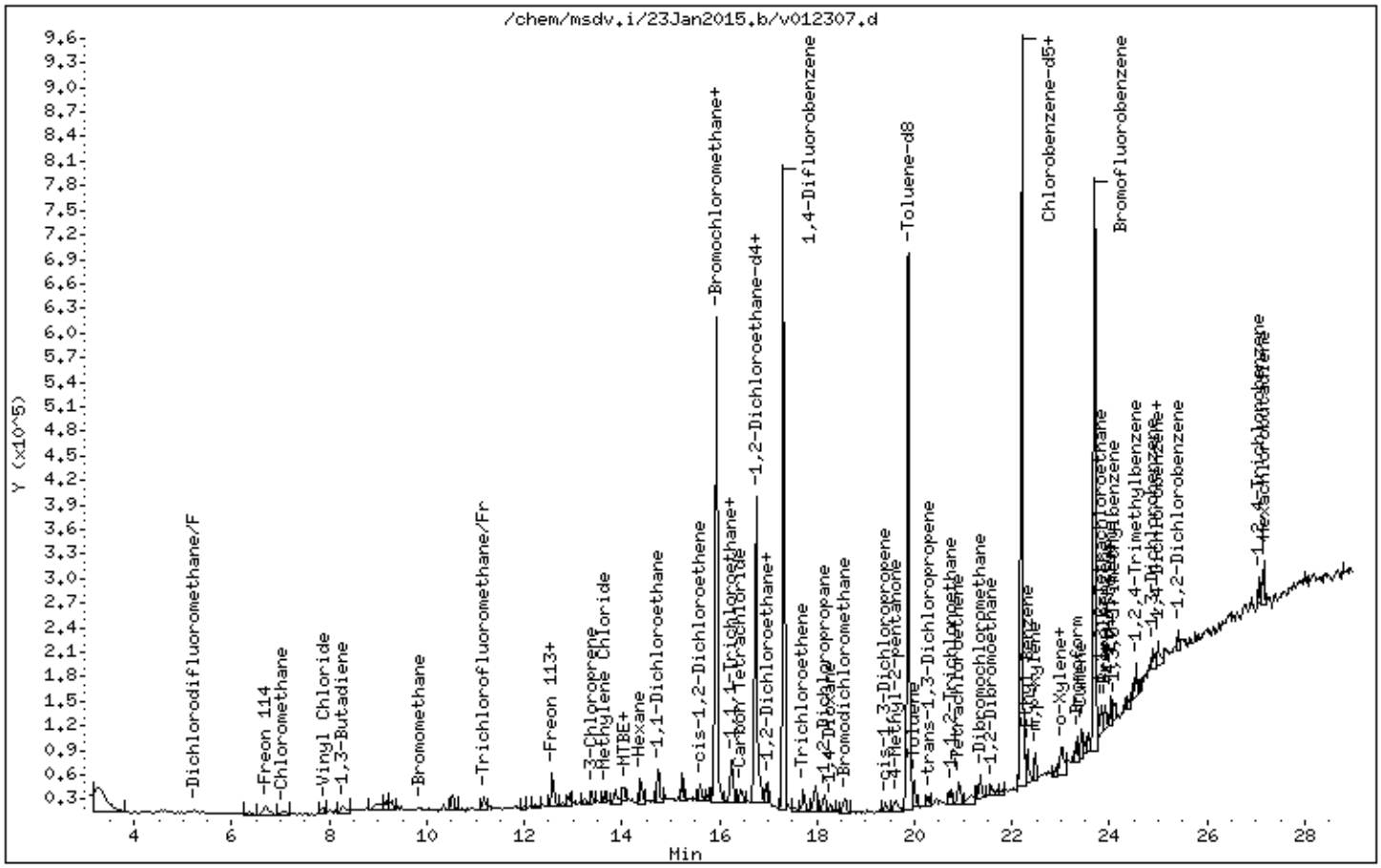
Instrument: msdv.i

Sample Info: 25mL# 2716-10

Operator: gh

Column phase: RTx-624

Column diameter: 0.32



Eurofins Air Toxics Inc.

TO15/Modified TO-14A

Data file : /chem/msdv.i/09Feb2015.b/v020910.d
Lab Smp Id: ICAL Client Smp ID: Level 7
Inj Date : 09-FEB-2015 12:34
Operator : ef Inst ID: msdv.i
Smp Info : 25mL# 2716-63
Misc Info : 0.5ppbv (5.0ppbv) Acrolein
Comment : Low Level GC-MS
Method : /chem/msdv.i/09Feb2015.b/v15l0123c.m
Meth Date : 09-Feb-2015 15:15 efinn Quant Type: ISTD
Cal Date : 09-FEB-2015 12:34 Cal File: v020910.d
Als bottle: 1 Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AcroleinCRV.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	197946	5.00000		70.00- 130.00	100.00
15.934	15.934 (1.000)	128	154019			0.00- 30.00	77.81
15.934	15.934 (1.000)	49	444808			0.00- 30.00	224.71
* 71 1,4-Difluorobenzene						CAS #: 540-36-3	
17.305	17.305 (1.000)	114	787719	5.00000		70.00- 130.00	100.00
17.305	17.305 (1.000)	88	114343			0.00- 30.00	14.52
* 92 Chlorobenzene-d5						CAS #: 3114-55-4	
22.205	22.205 (1.000)	117	557897	5.00000		70.00- 130.00	100.00
22.205	22.205 (1.000)	82	307827			0.00- 30.00	55.18
21 Acrolein						CAS #: 107-02-8	
12.596	12.596 (0.791)	56	10376	0.50000	0.4764	70.00- 130.00	100.00(a)
12.569	12.569 (0.789)	55	4486			0.00- 30.00	43.23

QC Flag Legend

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

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdv.i
Lab File ID: v020910.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: ef
Method File: /chem/msdv.i/09Feb2015.b/v15l0123c.m
Misc Info: 0.5ppbv (5.0ppbv) Acrolein

Calibration Date: 09-FEB-2015
Calibration Time: 08:19
Client Smp ID: Level 7
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
54 Bromochloromethan	207238	124343	290133	197946	-4.48
71 1,4-Difluorobenze	801146	480688	1121604	787719	-1.68
92 Chlorobenzene-d5	584724	350834	818614	557897	-4.59

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/09Feb2015.b/v020910.d

Date : 09-FEB-2015 12:34

Client ID: Level 7

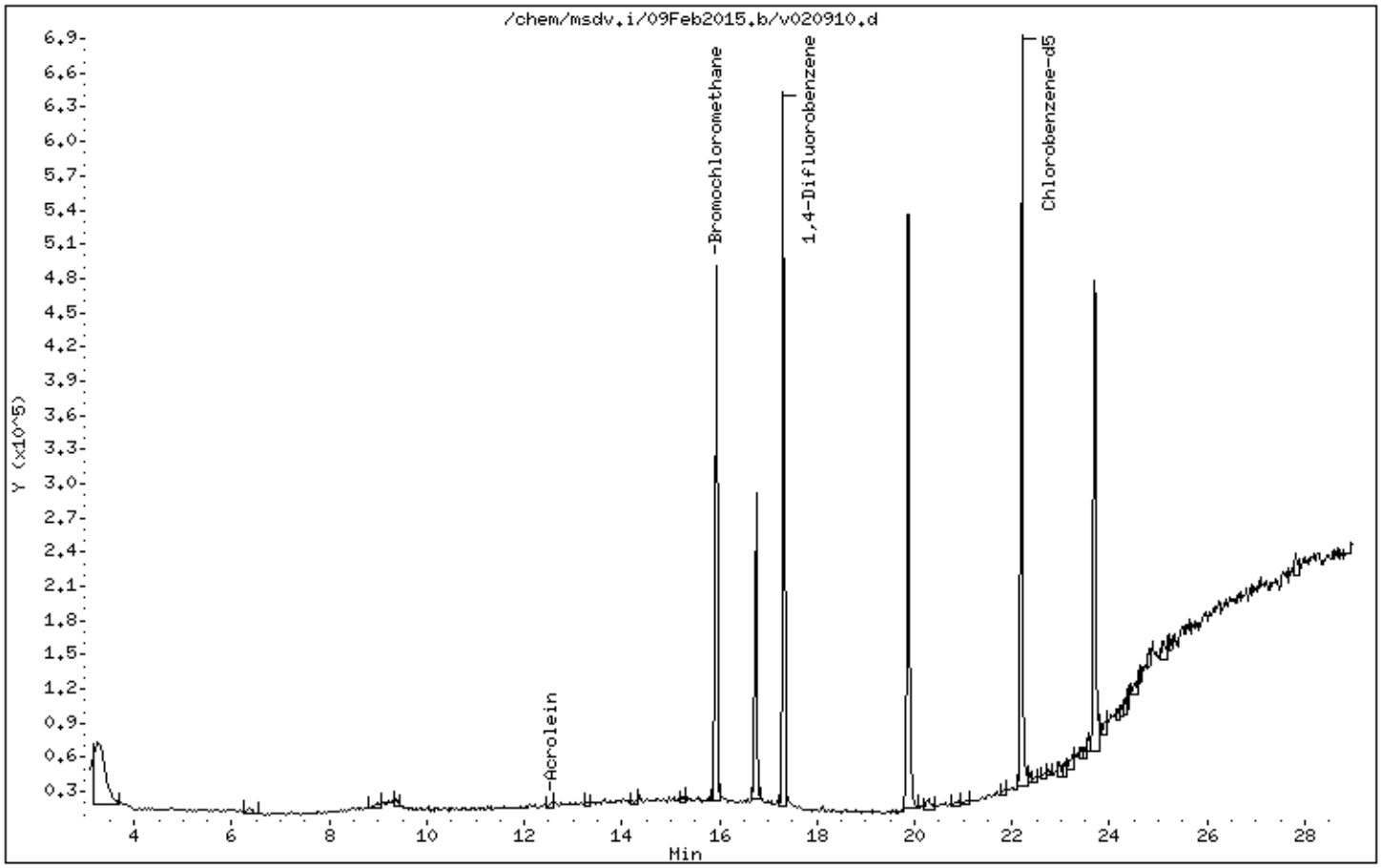
Instrument: msdv.i

Sample Info: 25mL# 2716-63

Operator: ef

Column phase: RTx-624

Column diameter: 0.32



Eurofins Air Toxics Inc.

TO15/Modified TO-14A

Data file : /chem/msdv.i/09Feb2015.b/v020907.d
Lab Smp Id: ICAL Client Smp ID: Level 7
Inj Date : 09-FEB-2015 10:25
Operator : ef Inst ID: msdv.i
Smp Info : 25mL# 2687-193
Misc Info : 0.5ppbv (5.0ppbv) Combo
Comment : Low Level GC-MS
Method : /chem/msdv.i/09Feb2015.b/v15l0123c.m
Meth Date : 09-Feb-2015 15:01 efinn Quant Type: ISTD
Cal Date : 09-FEB-2015 12:34 Cal File: v020910.d
Als bottle: 1 Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: CombSp-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	189223	5.00000		70.00- 130.00	100.00
15.933	15.933 (1.000)	128	153269			0.00- 30.00	81.00
15.933	15.933 (1.000)	49	438766			0.00- 30.00	231.88
* 71 1,4-Difluorobenzene						CAS #: 540-36-3	
17.305	17.305 (1.000)	114	752040	5.00000		70.00- 130.00	100.00
17.305	17.305 (1.000)	88	117760			0.00- 30.00	15.66
* 92 Chlorobenzene-d5						CAS #: 3114-55-4	
22.205	22.205 (1.000)	117	533383	5.00000		70.00- 130.00	100.00
22.205	22.205 (1.000)	82	292468			0.00- 30.00	54.83
13 Vinyl Bromide						CAS #: 593-60-2	
10.967	10.967 (0.688)	106	23905	0.50000	0.5389	70.00- 130.00	100.00
10.967	10.967 (0.688)	108	24703			0.00- 30.00	103.34
15 1-Pentene						CAS #: 109-67-1	
11.256	11.256 (0.706)	55	37240	0.50000	0.5412	70.00- 130.00	100.00
11.256	11.256 (0.706)	42	58486			0.00- 30.00	157.05

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
16 Pentane					CAS #: 109-66-0		
11.400	11.400 (0.715)	43	103299	0.50000	0.5507	70.00- 130.00	100.00
11.424	11.424 (0.717)	57	13533			0.00- 30.00	13.10
11.424	11.424 (0.717)	72	5794			0.00- 30.00	5.61
19 Diethyl Ether					CAS #: 60-29-7		
12.101	12.101 (0.760)	74	13319	0.50000	0.5284	70.00- 130.00	100.00
12.101	12.101 (0.760)	59	28884			0.00- 30.00	216.86
26 Acetonitrile					CAS #: 75-05-8		
13.502	13.502 (0.847)	41	33870	0.50000	0.3969	70.00- 130.00	100.00(a)
13.502	13.502 (0.847)	40	10847			0.00- 30.00	32.03
13.502	13.502 (0.847)	39	6847			0.00- 30.00	20.22
32 Acrylonitrile					CAS #: 107-13-1		
14.189	14.189 (0.890)	53	25427	0.50000	0.4088	70.00- 130.00	100.00(a)
14.189	14.189 (0.890)	52	30682			0.00- 30.00	120.67
41 1-Hexene					CAS #: 592-41-6		
14.271	14.271 (0.896)	55	35793	0.50000	0.5412	70.00- 130.00	100.00
14.271	14.271 (0.896)	41	56479			0.00- 30.00	157.79
14.271	14.271 (0.896)	84	8324			0.00- 30.00	23.26
42 Ethyl Acetate					CAS #: 141-78-6		
15.613	15.613 (0.980)	70	6533	0.50000	0.4638	70.00- 130.00	100.00(a)
15.613	15.613 (0.980)	43	134861			0.00- 30.00	2064.30
15.592	15.592 (0.979)	61	25162			0.00- 30.00	385.15
44 Methyl Acrylate					CAS #: 96-33-3		
15.696	15.696 (0.985)	55	73044	0.50000	0.4206	70.00- 130.00	100.00(a)
15.696	15.696 (0.985)	85	8587			0.00- 30.00	11.76
15.675	15.675 (0.984)	58	5340			0.00- 30.00	7.31
60 Ethyl Acrylate					CAS #: 140-88-5		
17.799	17.799 (1.117)	99	3774	0.50000	0.4398	70.00- 130.00	100.00(a)
17.799	17.799 (1.117)	45	8852			0.00- 30.00	234.55
17.771	17.771 (1.115)	55	84054			0.00- 30.00	2227.19
62 2-Pentanone					CAS #: 107-87-9		
17.964	17.964 (1.127)	43	139412	0.50000	0.4778	70.00- 130.00	100.00(a)
17.964	17.964 (1.127)	58	9474			0.00- 30.00	6.80
17.964	17.964 (1.127)	86	13392			0.00- 30.00	9.61
67 Methyl Methacrylate					CAS #: 80-62-6		
18.156	18.156 (1.139)	41	67127	0.50000	0.4842	70.00- 130.00	100.00(a)
18.156	18.156 (1.139)	69	31592			0.00- 30.00	47.06

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
67 Methyl Methacrylate (continued)							
18.156	18.156 (1.139)	100	10511			0.00- 30.00	15.66
70 Dibromomethane					CAS #: 74-95-3		
18.376	18.376 (0.828)	174	43938	0.50000	0.5358	70.00- 130.00	100.00
18.376	18.376 (0.828)	93	37966			0.00- 30.00	86.41
18.376	18.376 (0.828)	95	33513			0.00- 30.00	76.27
76 Octane					CAS #: 111-65-9		
19.968	19.968 (1.154)	57	37114	0.50000	0.5600	70.00- 130.00	100.00
19.946	19.946 (1.153)	85	24327			0.00- 30.00	65.55
19.968	19.968 (1.154)	43	107311			0.00- 30.00	289.14
85 Nonane					CAS #: 111-84-2		
22.343	22.343 (1.006)	43	88557	0.50000	0.6112	70.00- 130.00	100.00
22.343	22.343 (1.006)	57	72536			0.00- 30.00	81.91
22.343	22.343 (1.006)	85	17324			0.00- 30.00	19.56
99 Decane					CAS #: 124-18-5		
23.987	23.987 (1.080)	57	119233	0.50000	0.5716	70.00- 130.00	100.00
23.987	23.987 (1.080)	71	29476			0.00- 30.00	24.72
23.987	23.987 (1.080)	142	5341			0.00- 30.00	4.48
104 Bis(2-Chloroethyl) Ether					CAS #: 111-44-4		
24.787	24.787 (1.116)	93	40477	0.50000	0.5017	70.00- 130.00	100.00
24.787	24.787 (1.116)	95	12273			0.00- 30.00	30.32
24.787	24.787 (1.116)	63	37449			0.00- 30.00	92.52
110 Undecane					CAS #: 1120-21-4		
25.239	25.239 (1.137)	57	134813	0.50000	0.5307	70.00- 130.00	100.00
25.239	25.239 (1.137)	43	136852			0.00- 30.00	101.51
25.239	25.239 (1.137)	85	23593			0.00- 30.00	17.50
125 Dodecane					CAS #: 112-40-3		
26.315	26.315 (1.185)	85	18025	0.50000	0.5147	70.00- 130.00	100.00
26.315	26.315 (1.185)	57	76837			0.00- 30.00	426.28
26.315	26.315 (1.185)	43	73976			0.00- 30.00	410.41

QC Flag Legend

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

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdv.i
Lab File ID: v020907.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: ef
Method File: /chem/msdv.i/09Feb2015.b/v15l0123c.m
Misc Info: 0.5ppbv (5.0ppbv) Combo

Calibration Date: 09-FEB-2015
Calibration Time: 08:19
Client Smp ID: Level 7
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
54 Bromochloromethan	207238	124343	290133	189223	-8.69
71 1,4-Difluorobenze	801146	480688	1121604	752040	-6.13
92 Chlorobenzene-d5	584724	350834	818614	533383	-8.78

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.

Data File: /chem/msdv.i/09Feb2015.b/v020907.d

Date : 09-FEB-2015 10:25

Client ID: Level 7

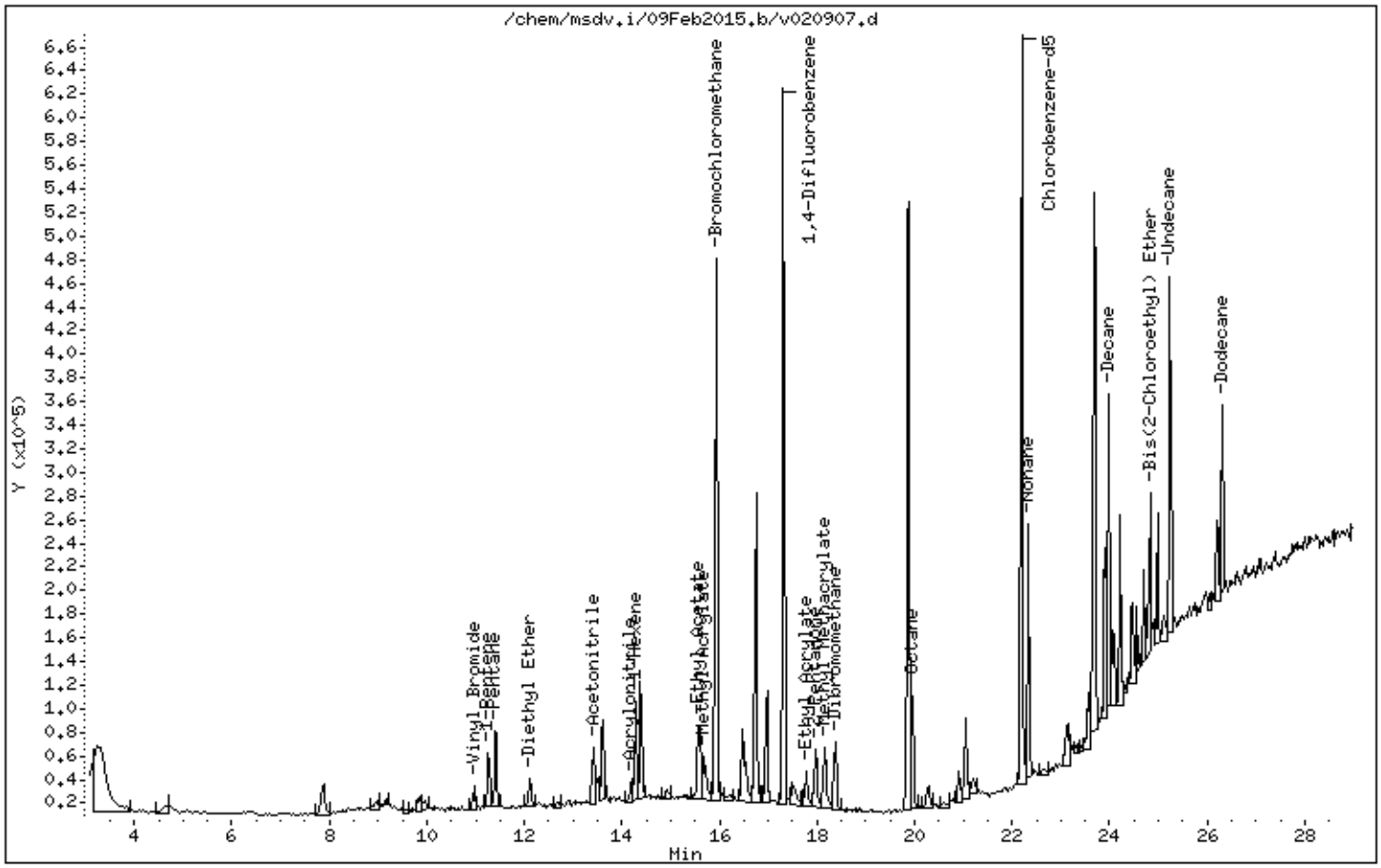
Instrument: msdv.i

Sample Info: 25mL# 2687-193

Operator: ef

Column phase: RTx-624

Column diameter: 0.32



Eurofins Air Toxics Inc.

TO15/Modified TO-14A

Data file : /chem/msdv.i/27Jan2015.b/v012705.d
Lab Smp Id: ICAL Client Smp ID: Level 7
Inj Date : 27-JAN-2015 11:30
Operator : ef Inst ID: msdv.i
Smp Info : 25mL# 2716-22
Misc Info : 0.5ppbv (5.0ppbv) AT-1
Comment : Low Level GC-MS
Method : /chem/msdv.i/27Jan2015.b/v15l0123b.m
Meth Date : 27-Jan-2015 16:35 efinn Quant Type: ISTD
Cal Date : 27-JAN-2015 11:30 Cal File: v012705.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	
15.934	15.934 (1.000)	130	240142	5.00000		80.00- 120.00	100.00
15.934	15.934 (1.000)	128	183414			0.00- 30.00	76.38
15.934	15.934 (1.000)	49	487674			0.00- 30.00	203.08
* 71 1,4-Difluorobenzene						CAS #: 540-36-3	
17.305	17.305 (1.000)	114	965779	5.00000		80.00- 120.00	100.00
17.305	17.305 (1.000)	88	143749			0.00- 30.00	14.88
* 92 Chlorobenzene-d5						CAS #: 3114-55-4	
22.205	22.205 (1.000)	117	752725	5.00000		80.00- 120.00	100.00
22.205	22.205 (1.000)	82	426782			0.00- 30.00	56.70
1 Freon 134a						CAS #: 811-97-2	
4.523	4.485 (0.284)	83	25354	0.50000	0.5356	80.00- 120.00	100.00
4.447	4.485 (0.279)	69	22244			0.00- 30.00	87.73
2 Freon 152A						CAS #: 75-37-6	
4.976	4.976 (0.312)	65	18048	0.50000	0.5672	80.00- 120.00	100.00
4.976	4.976 (0.312)	51	49144			0.00- 30.00	272.30

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
218 Freon 142b					CAS #: 75-68-3		
6.977	7.015 (0.438)	65	63780	0.50000	0.5251	80.00- 120.00	100.00
6.977	7.015 (0.438)	45	22647			0.00- 30.00	35.51
14 Freon 21					CAS #: 75-43-4		
11.280	11.280 (0.708)	67	75418	0.50000	0.5342	80.00- 120.00	100.00
11.280	11.280 (0.708)	69	23178			0.00- 30.00	30.73
11.280	11.280 (0.708)	47	10192			0.00- 30.00	13.51
216 1,2-Dichlorotrifluoroethane					CAS #: 354-23-4		
12.321	12.321 (0.773)	117	53675	0.50000	0.5250	80.00- 120.00	100.00
12.321	12.321 (0.773)	67	69718			0.00- 30.00	129.89
217 Freon 123					CAS #: 306-83-2		
12.514	12.514 (0.785)	83	75779	0.50000	0.4934	80.00- 120.00	100.00(a)
12.514	12.514 (0.785)	133	17348			0.00- 30.00	22.89
12.514	12.514 (0.785)	85	51927			0.00- 30.00	68.52
211 Cyclopentene					CAS #: 142-29-0		
13.420	13.420 (0.842)	67	67205	0.50000	0.5379	80.00- 120.00	100.00
13.420	13.420 (0.842)	68	23708			0.00- 30.00	35.28
13.420	13.420 (0.842)	53	22411			0.00- 30.00	33.35
210 1-Propanol					CAS #: 71-23-8		
14.930	14.903 (0.937)	59	4757	0.50000	0.3148	80.00- 120.00	100.00(a)
14.930	14.903 (0.937)	42	6071			0.00- 30.00	127.62
14.930	14.903 (0.937)	41	4240			0.00- 30.00	89.13
215 2,2-Dichloropropane					CAS #: 594-20-7		
15.551	15.551 (0.976)	77	63630	0.50000	0.5076	80.00- 120.00	100.00
15.551	15.551 (0.976)	79	22141			0.00- 30.00	34.80
15.551	15.551 (0.976)	97	14530			0.00- 30.00	22.84
56 1,1-Dicholoropropene					CAS #: 563-58-6		
16.458	16.458 (1.033)	110	20448	0.50000	0.4803	80.00- 120.00	100.00(a)
16.458	16.458 (1.033)	75	57229			0.00- 30.00	279.88
214 Isobutanol					CAS #: 78-83-1		
16.550	16.519 (1.039)	41	29734	0.50000	0.3830	80.00- 120.00	100.00(a)
16.550	16.519 (1.039)	43	45410			0.00- 30.00	152.72
16.458	16.519 (1.033)	39	60600			0.00- 30.00	203.81
206 1-Butanol					CAS #: 71-36-3		
17.497	17.470 (1.011)	56	30052	0.50000	0.2852	80.00- 120.00	100.00(a)
17.497	17.470 (1.011)	41	21138			0.00- 30.00	70.34
17.497	17.470 (1.011)	43	12934			0.00- 30.00	43.04

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
83 1,3-Dichloropropane					CAS #: 142-28-9		
21.045	21.045 (1.216)	76	62467	0.50000	0.5002	80.00- 120.00	100.00
21.045	21.045 (1.216)	41	77949			0.00- 30.00	124.78
21.045	21.045 (1.216)	78	22313			0.00- 30.00	35.72
204 Butyl Acetate					CAS #: 123-86-4		
21.152	21.152 (1.222)	56	26191	0.50000	0.4674	80.00- 120.00	100.00(a)
21.188	21.152 (1.224)	73	8196			0.00- 30.00	31.29
21.152	21.152 (1.222)	43	63250			0.00- 30.00	241.50
91 1,1,1,2-Tetrachloroethane					CAS #: 630-20-6		
22.343	22.343 (1.006)	131	72952	0.50000	0.5398	80.00- 120.00	100.00
22.343	22.343 (1.006)	117	60648			0.00- 30.00	83.13
22.315	22.343 (1.005)	95	28452			0.00- 30.00	39.00
205 2-Heptanone					CAS #: 110-43-0		
23.111	23.111 (1.041)	58	70687	0.50000	0.5644	80.00- 120.00	100.00
23.111	23.111 (1.041)	43	120761			0.00- 30.00	170.84
209 Cyclohexanone					CAS #: 108-94-1		
23.652	23.652 (1.065)	55	55513	0.50000	0.4955	80.00- 120.00	100.00(a)
23.652	23.652 (1.065)	98	14851			0.00- 30.00	26.75
23.652	23.652 (1.065)	42	36384			0.00- 30.00	65.54
97 Bromobenzene					CAS #: 108-86-1		
23.884	23.884 (1.076)	156	59378	0.50000	0.5514	80.00- 120.00	100.00
23.884	23.884 (1.076)	158	56295			0.00- 30.00	94.81
23.884	23.884 (1.076)	77	103817			0.00- 30.00	174.84
105 1,2,3-Trichloropropane					CAS #: 96-18-4		
23.910	23.910 (1.077)	110	32881	0.50000	0.5739	80.00- 120.00	100.00
23.910	23.910 (1.077)	75	75647			0.00- 30.00	230.06
23.910	23.910 (1.077)	61	27113			0.00- 30.00	82.46
107 2-Chlorotoluene					CAS #: 95-49-8		
24.065	24.065 (1.084)	126	34808	0.50000	0.5446	80.00- 120.00	100.00
24.065	24.065 (1.084)	91	91627			0.00- 30.00	263.24
24.065	24.065 (1.084)	65	12100			0.00- 30.00	34.76
109 4-Chlorotoluene					CAS #: 106-43-4		
24.194	24.194 (1.090)	126	29033	0.50000	0.5570	80.00- 120.00	100.00
24.194	24.194 (1.090)	91	73043			0.00- 30.00	251.59
24.194	24.194 (1.090)	63	12117			0.00- 30.00	41.74
213 Diisobutyl Ketone					CAS #: 108-83-8		
24.220	24.220 (1.091)	57	161566	0.50000	0.7014	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
213 Diisobutyl Ketone (continued)							
24.220	24.220 (1.091)	85	92235			0.00- 30.00	57.09
115 tert-Butylbenzene					CAS #: 98-06-6		
24.478	24.478 (1.102)	119	82503	0.50000	0.5698	80.00- 120.00	100.00
24.478	24.478 (1.102)	134	23273			0.00- 30.00	28.21
24.452	24.478 (1.101)	91	54892			0.00- 30.00	66.53
212 Pentachloroethane					CAS #: 76-01-7		
24.555	24.555 (1.106)	167	45832	0.50000	0.5190	80.00- 120.00	100.00
24.555	24.555 (1.106)	117	39890			0.00- 30.00	87.04
24.555	24.555 (1.106)	169	22087			0.00- 30.00	48.19
119 sec-Butylbenzene					CAS #: 135-98-8		
24.710	24.710 (1.113)	105	121011	0.50000	0.6412	80.00- 120.00	100.00
24.710	24.710 (1.113)	134	28242			0.00- 30.00	23.34
24.684	24.710 (1.112)	91	19416			0.00- 30.00	16.04
116 p-Cymene					CAS #: 99-87-6		
24.835	24.835 (1.118)	119	136162	0.50000	0.7082	80.00- 120.00	100.00
24.835	24.835 (1.118)	134	39002			0.00- 30.00	28.64
24.835	24.835 (1.118)	91	32325			0.00- 30.00	23.74
121 1,2,3-trimethylbenzene					CAS #: 526-73-8		
24.992	24.992 (1.125)	120	55924	0.50000	0.6516	80.00- 120.00	100.00
24.992	24.992 (1.125)	105	124082			0.00- 30.00	221.88
24.992	24.992 (1.125)	77	14173			0.00- 30.00	25.34
123 Butylbenzene					CAS #: 104-51-8		
25.261	25.261 (1.138)	134	45287	0.50000	0.6850	80.00- 120.00	100.00
25.261	25.261 (1.138)	91	143621			0.00- 30.00	317.14
25.261	25.261 (1.138)	92	77786			0.00- 30.00	171.76
129 1,2-dibromo-3-chloropropane					CAS #: 96-12-8		
26.203	26.203 (1.180)	157	46442	0.50000	0.5273	80.00- 120.00	100.00
26.203	26.203 (1.180)	75	36119			0.00- 30.00	77.77
26.225	26.203 (1.181)	155	34882			0.00- 30.00	75.11

QC Flag Legend

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

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdv.i
Lab File ID: v012705.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: ef
Method File: /chem/msdv.i/27Jan2015.b/v15l0123b.m
Misc Info: 0.5ppbv (5.0ppbv) AT-1

Calibration Date: 27-JAN-2015
Calibration Time: 06:33
Client Smp ID: Level 7
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
54 Bromochloromethan	265976	159586	372366	240142	-9.71
71 1,4-Difluorobenze	1006128	603677	1408579	965779	-4.01
92 Chlorobenzene-d5	792159	475295	1109023	752725	-4.98

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/27Jan2015.b/v012705.d

Date : 27-JAN-2015 11:30

Client ID: Level 7

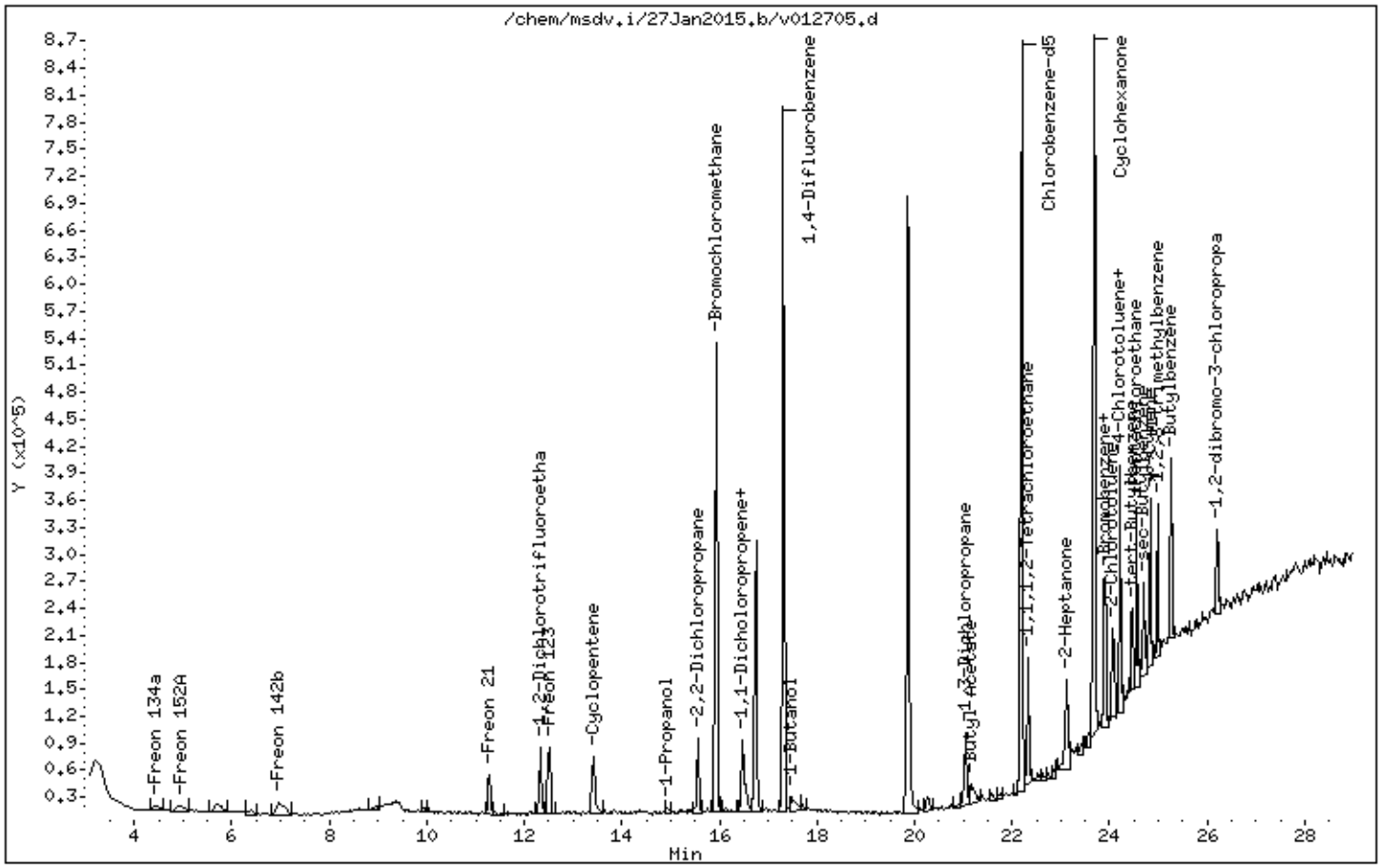
Instrument: msdv.i

Sample Info: 25mL# 2716-22

Operator: ef

Column phase: RTx-624

Column diameter: 0.32



Eurofins Air Toxics Inc.

TO15/Modified TO-14A

Data file : /chem/msdv.i/23Jan2015.b/v012308.d
Lab Smp Id: ICAL Client Smp ID: Level 7
Inj Date : 23-JAN-2015 18:15
Operator : gh Inst ID: msdv.i
Smp Info : 125mL# 2716-10
Misc Info : 0.5ppbv (1.0ppbv)
Comment : Low Level GC-MS
Method : /chem/msdv.i/23Jan2015.b/v15l0123a.m
Meth Date : 23-Jan-2015 23:13 ghehir Quant Type: ISTD
Cal Date : 23-JAN-2015 18:15 Cal File: v012308.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		
15.934	15.934 (1.000)	130	249319	5.00000		80.00- 120.00	100.00
15.934	15.934 (1.000)	128	194644			47.40- 107.40	78.07
15.934	15.934 (1.000)	49	553730			167.26- 227.26	222.10
* 71 1,4-Difluorobenzene					CAS #: 540-36-3		
17.305	17.305 (1.000)	114	1007670	5.00000		80.00- 120.00	100.00
17.305	17.305 (1.000)	88	158993			0.00- 46.18	15.78
* 92 Chlorobenzene-d5					CAS #: 3114-55-4		
22.205	22.205 (1.000)	117	784887	5.00000		80.00- 120.00	100.00
22.205	22.205 (1.000)	82	451550			25.73- 85.73	57.53
$ 65 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
16.756	16.756 (1.052)	65	387551	5.00000	5.046	80.00- 120.00	100.00
16.756	16.756 (1.052)	67	192650			26.63- 86.63	49.71
$ 80 Toluene-d8					CAS #: 2037-26-5		
19.879	19.879 (1.149)	98	944163	5.00000	5.003	80.00- 120.00	100.00
19.879	19.879 (1.149)	70	101076			0.00- 40.74	10.71

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
$ 80 Toluene-d8 (continued)							
19.857	19.857 (1.147)	100	610377			33.76- 93.76	64.65
$ 106 Bromofluorobenzene					CAS #: 460-00-4		
23.704	23.704 (1.067)	174	362373	5.00000	5.073	80.00- 120.00	100.00
23.678	23.678 (1.066)	95	454217			108.04- 168.04	125.35
23.704	23.704 (1.067)	176	350413			67.04- 127.04	96.70
3 Propylene					CAS #: 115-07-1		
4.711	4.711 (0.296)	41	53521	0.50000	0.5133	80.00- 120.00	100.00
4.674	4.674 (0.293)	42	42735			36.23- 96.23	79.85
4.749	4.749 (0.298)	39	35740			40.03- 100.03	66.78
4 Dichlorodifluoromethane/Fr12					CAS #: 75-71-8		
5.240	5.240 (0.329)	85	97146	0.50000	0.4653	80.00- 120.00	100.00
5.240	5.240 (0.329)	87	33710			2.42- 62.42	34.70
6 Freon 114					CAS #: 76-14-2		
6.713	6.713 (0.421)	135	81871	0.50000	0.4768	80.00- 120.00	100.00
6.750	6.750 (0.424)	137	25791			1.35- 61.35	31.50
6.713	6.713 (0.421)	85	101754			100.64- 160.64	124.29
8 Chloromethane					CAS #: 74-87-3		
7.128	7.128 (0.447)	50	65033	0.50000	0.4646	80.00- 120.00	100.00
7.090	7.090 (0.445)	52	21595			2.12- 62.12	33.21
9 Butane					CAS #: 106-97-8		
7.885	7.885 (0.495)	58	11795	0.50000	0.5119	80.00- 120.00	100.00
7.885	7.885 (0.495)	43	101059			783.54- 843.54	856.80
10 Vinyl Chloride					CAS #: 75-01-4		
8.009	8.009 (0.503)	62	47081	0.50000	0.4671	80.00- 120.00	100.00
8.009	8.009 (0.503)	64	12207			0.00- 59.60	25.93
11 1,3-Butadiene					CAS #: 106-99-0		
8.257	8.257 (0.518)	54	43983	0.50000	0.4454	80.00- 120.00	100.00
8.257	8.257 (0.518)	39	45225			66.22- 126.22	102.82
12 Bromomethane					CAS #: 74-83-9		
9.835	9.835 (0.617)	94	27016	0.50000	0.4368	80.00- 120.00	100.00
9.835	9.835 (0.617)	96	28200			63.75- 123.75	104.38
17 Chloroethane					CAS #: 75-00-3		
10.365	10.365 (0.650)	64	20762	0.50000	0.4806	80.00- 120.00	100.00
10.365	10.365 (0.650)	66	6806			0.00- 59.96	32.78

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	48170	0.50000	0.4968	80.00- 120.00	100.00
10.533	10.533 (0.661)	43	81855			125.71- 185.71	169.93
10.533	10.533 (0.661)	42	68690			102.09- 162.09	142.60
20 Trichlorofluoromethane/Fr11					CAS #: 75-69-4		
11.184	11.184 (0.702)	101	103065	0.50000	0.4670	80.00- 120.00	100.00
11.184	11.184 (0.702)	103	68018			35.13- 95.13	66.00
24 Ethanol					CAS #: 64-17-5		
12.156	12.156 (0.763)	45	13533	0.50000	0.3527	80.00- 120.00	100.00
12.184	12.184 (0.765)	46	7608			10.23- 70.23	56.22
12.211	12.211 (0.766)	43	4670			0.00- 50.98	34.51
30 1,1-Dichloroethene					CAS #: 75-35-4		
12.569	12.569 (0.789)	98	24373	0.50000	0.4892	80.00- 120.00	100.00
12.569	12.569 (0.789)	61	86015			302.86- 362.86	352.91
12.569	12.569 (0.789)	96	40039			132.09- 192.09	164.28
28 Freon 113					CAS #: 76-13-1		
12.569	12.569 (0.789)	151	78372	0.50000	0.5022	80.00- 120.00	100.00
12.569	12.569 (0.789)	153	46559			33.83- 93.83	59.41
12.569	12.569 (0.789)	101	83884			86.15- 146.15	107.03
31 Acetone					CAS #: 67-64-1		
12.843	12.843 (0.806)	58	32690	0.50000	0.5450	80.00- 120.00	100.00
12.843	12.843 (0.806)	43	113740			310.23- 370.23	347.94
33 Carbon Disulfide					CAS #: 75-15-0		
12.926	12.926 (0.811)	76	104936	0.50000	0.4949	80.00- 120.00	100.00
35 3-Chloroprene					CAS #: 107-05-1		
13.393	13.393 (0.841)	76	15428	0.50000	0.4651	80.00- 120.00	100.00
13.393	13.393 (0.841)	41	66163			401.48- 461.48	428.85
34 2-Propanol					CAS #: 67-63-0		
13.200	13.200 (0.828)	45	110907	0.50000	0.4917	80.00- 120.00	100.00
13.200	13.200 (0.828)	43	19698			0.00- 46.97	17.76
13.200	13.200 (0.828)	59	5527			0.00- 33.46	4.98
37 Methylene Chloride					CAS #: 75-09-2		
13.667	13.667 (0.858)	84	35418	0.50000	0.4756	80.00- 120.00	100.00
13.640	13.640 (0.856)	49	80879			177.28- 237.28	228.36
13.640	13.640 (0.856)	51	25175			32.93- 92.93	71.08
38 tert-butyl alcohol					CAS #: 75-65-0		
13.859	13.859 (0.870)	59	156382	0.50000	0.5724	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
38 tert-butyl alcohol (continued)							
13.859	13.859 (0.870)	41	37025			0.00- 51.49	23.68
13.859	13.859 (0.870)	57	14783			0.00- 40.02	9.45
39 MTBE					CAS #: 1634-04-4		
13.997	13.997 (0.878)	73	106469	0.50000	0.4694	80.00- 120.00	100.00
13.997	13.997 (0.878)	57	39986			3.26- 63.26	37.56
13.997	13.997 (0.878)	41	45912			2.63- 62.63	43.12
40 trans-1,2-Dichloroethene					CAS #: 156-60-5		
14.052	14.052 (0.882)	98	26560	0.50000	0.5090	80.00- 120.00	100.00
14.052	14.052 (0.882)	61	78811			262.11- 322.11	296.73
14.052	14.052 (0.882)	96	41333			128.28- 188.28	155.62
43 Hexane					CAS #: 110-54-3		
14.381	14.381 (0.903)	57	101105	0.50000	0.4862	80.00- 120.00	100.00
14.381	14.381 (0.903)	43	71958			36.69- 96.69	71.17
14.381	14.381 (0.903)	86	9810			0.00- 41.09	9.70
45 Isopropyl ether					CAS #: 108-20-3		
14.738	14.738 (0.925)	45	245938	0.50000	0.5030	80.00- 120.00	100.00
14.738	14.738 (0.925)	87	35272			0.00- 47.17	14.34
14.738	14.738 (0.925)	59	25028			0.00- 39.85	10.18
46 1,1-Dichloroethane					CAS #: 75-34-3		
14.765	14.765 (0.927)	63	87484	0.50000	0.4587	80.00- 120.00	100.00
14.765	14.765 (0.927)	65	24790			0.34- 60.34	28.34
47 Vinyl Acetate					CAS #: 108-05-4		
14.820	14.820 (0.930)	86	5136	0.50000	0.3185	80.00- 120.00	100.00
14.820	14.820 (0.930)	42	12032			147.97- 207.97	234.27
14.820	14.820 (0.930)	43	130279			2354.84-2414.84	2536.58
49 Ethyl-tert-butyl ether					CAS #: 637-92-3		
15.240	15.240 (0.956)	59	184965	0.50000	0.4939	80.00- 120.00	100.00
15.240	15.240 (0.956)	87	54188			0.00- 59.53	29.30
15.240	15.240 (0.956)	41	37564			0.00- 48.76	20.31
50 cis-1,2-Dichloroethene					CAS #: 156-59-2		
15.592	15.592 (0.979)	98	26826	0.50000	0.4383	80.00- 120.00	100.00
15.592	15.592 (0.979)	61	77251			232.32- 292.32	287.97
15.592	15.592 (0.979)	96	47838			127.66- 187.66	178.33
51 2-Butanone					CAS #: 78-93-3		
15.613	15.613 (0.980)	72	17347	0.50000	0.4686	80.00- 120.00	100.00
15.592	15.592 (0.979)	43	135197			621.62- 681.62	779.37

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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)
 15.613  15.613 (0.980)    57     13094                   17.09-  77.09    75.48
-------------------------------------------------------------------------------
   53 Tetrahydrofuran                                CAS #: 109-99-9
 15.934  15.934 (1.000)    42     92329 0.50000   0.5266  80.00- 120.00   100.00
 15.934  15.934 (1.000)    71     19375                    0.00-  54.64    20.98
 15.934  15.934 (1.000)    72     20773                    0.00-  57.57    22.50
-------------------------------------------------------------------------------
   55 Chloroform                                     CAS #: 67-66-3
 15.995  15.995 (1.004)    83     87898 0.50000   0.4969  80.00- 120.00   100.00
 15.995  15.995 (1.004)    85     59987                   34.22-  94.22    68.25
-------------------------------------------------------------------------------
   57 Cyclohexane                                    CAS #: 110-82-7
 16.273  16.273 (1.021)    84     55824 0.50000   0.4462  80.00- 120.00   100.00
 16.242  16.242 (1.019)    56    112156                  145.90- 205.90   200.91
 16.273  16.273 (1.021)    41     58435                   62.61- 122.61   104.68
-------------------------------------------------------------------------------
   58 1,1,1-Trichloroethane                          CAS #: 71-55-6
 16.242  16.242 (1.019)    97     91031 0.50000   0.4459  80.00- 120.00   100.00
 16.242  16.242 (1.019)    99     62574                   34.05-  94.05    68.74
-------------------------------------------------------------------------------
   59 Carbon Tetrachloride                           CAS #: 56-23-5
 16.458  16.458 (1.033)   119     84656 0.50000   0.4838  80.00- 120.00   100.00
 16.458  16.458 (1.033)   117     82117                   68.83- 128.83    97.00
                   Sum of Peak Amounts =           0.484
-------------------------------------------------------------------------------
   63 2,2,4-Trimethylpentane                         CAS #: 540-84-1
 16.728  16.728 (1.050)    56    100616 0.50000   0.4477  80.00- 120.00   100.00
 16.728  16.728 (1.050)    57    310736                  271.70- 331.70   308.83
 16.728  16.728 (1.050)    41     84933                   52.41- 112.41    84.41
-------------------------------------------------------------------------------
   64 Benzene                                        CAS #: 71-43-2
 16.756  16.756 (0.968)    78    114844 0.50000   0.4327  80.00- 120.00   100.00
 16.756  16.756 (0.968)    77     27630                    0.00-  53.49    24.06
-------------------------------------------------------------------------------
   66 tert-amyl methyl ether                         CAS #: 994-05-8
 16.811  16.811 (0.971)    87     30700 0.50000   0.4850  80.00- 120.00   100.00
 16.811  16.811 (0.971)    73    128521                  368.43- 428.43   418.64
 16.811  16.811 (0.971)    55     53151                  120.38- 180.38   173.13
-------------------------------------------------------------------------------
   68 1,2-Dichloroethane                             CAS #: 107-06-2
 16.865  16.865 (0.975)    62     72599 0.50000   0.4727  80.00- 120.00   100.00
 16.865  16.865 (0.975)    64     21623                    0.00-  59.91    29.78
-------------------------------------------------------------------------------
   69 Heptane                                        CAS #: 142-82-5
 16.975  16.975 (0.981)    57     52989 0.50000   0.4401  80.00- 120.00   100.00
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RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
69 Heptane (continued)							
16.948	16.948 (0.979)	100	11692			0.00- 53.77	22.06
16.975	16.975 (0.981)	43	127668			172.35- 232.35	240.93
72 Trichloroethene					CAS #: 79-01-6		
17.717	17.717 (1.024)	130	62516	0.50000	0.4990	80.00- 120.00	100.00
17.717	17.717 (1.024)	95	58885			65.17- 125.17	94.19
17.717	17.717 (1.024)	97	40444			31.34- 91.34	64.69
73 Methylcyclohexane					CAS #: 108-87-2		
17.964	17.964 (1.038)	83	78710	0.50000	0.5002	80.00- 120.00	100.00
17.964	17.964 (1.038)	98	33734			17.27- 77.27	42.86
17.964	17.964 (1.038)	55	98706			91.54- 151.54	125.40
74 1,2-Dichloropropane					CAS #: 78-87-5		
18.156	18.156 (1.049)	63	59667	0.50000	0.4821	80.00- 120.00	100.00
18.156	18.156 (1.049)	62	43207			43.25- 103.25	72.41
18.156	18.156 (1.049)	41	39928			33.86- 93.86	66.92
75 1,4-Dioxane					CAS #: 123-91-1		
18.266	18.266 (1.056)	88	35244	0.50000	0.4636	80.00- 120.00	100.00
18.266	18.266 (1.056)	58	41427			73.29- 133.29	117.54
18.266	18.266 (1.056)	57	16103			3.70- 63.70	45.69
77 Bromodichloromethane					CAS #: 75-27-4		
18.568	18.568 (1.073)	83	90414	0.50000	0.4939	80.00- 120.00	100.00
18.568	18.568 (1.073)	85	57413			33.07- 93.07	63.50
78 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
19.408	19.408 (1.122)	75	69454	0.50000	0.4563	80.00- 120.00	100.00
19.386	19.386 (1.120)	77	22525			0.97- 60.97	32.43
19.408	19.408 (1.122)	39	52958			40.23- 100.23	76.25
79 4-Methyl-2-pentanone					CAS #: 108-10-1		
19.588	19.588 (1.132)	43	181138	0.50000	0.5092	80.00- 120.00	100.00
19.588	19.588 (1.132)	58	59395			6.07- 66.07	32.79
19.588	19.588 (1.132)	85	15411			0.00- 41.52	8.51
81 Toluene					CAS #: 108-88-3		
19.991	19.991 (1.155)	91	135942	0.50000	0.4654	80.00- 120.00	100.00
19.991	19.991 (1.155)	92	77448			28.55- 88.55	56.97
82 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
20.435	20.435 (0.920)	75	59833	0.50000	0.4523	80.00- 120.00	100.00
20.435	20.435 (0.920)	77	20873			1.39- 61.39	34.89
20.435	20.435 (0.920)	39	41362			36.57- 96.57	69.13

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	52759	0.50000	0.4997	80.00- 120.00	100.00
20.758	20.758 (0.935)	99	33004			32.18- 92.18	62.56
20.758	20.758 (0.935)	83	45239			54.91- 114.91	85.75
86 Tetrachloroethene					CAS #: 127-18-4		
20.901	20.901 (0.941)	166	79192	0.50000	0.4739	80.00- 120.00	100.00
20.901	20.901 (0.941)	129	60612			50.27- 110.27	76.54
20.901	20.901 (0.941)	131	65538			49.16- 109.16	82.76
87 2-Hexanone					CAS #: 591-78-6		
21.045	21.045 (0.948)	58	64880	0.50000	0.4956	80.00- 120.00	100.00
21.045	21.045 (0.948)	43	128130			171.66- 231.66	197.49
21.045	21.045 (0.948)	100	8988			0.00- 44.23	13.85
89 Dibromochloromethane					CAS #: 124-48-1		
21.367	21.367 (0.962)	129	102217	0.50000	0.5025	80.00- 120.00	100.00
21.367	21.367 (0.962)	127	82137			46.63- 106.63	80.36
90 1,2-Dibromoethane					CAS #: 106-93-4		
21.583	21.583 (0.972)	107	87757	0.50000	0.5086	80.00- 120.00	100.00
21.583	21.583 (0.972)	109	82165			62.25- 122.25	93.63
93 Chlorobenzene					CAS #: 108-90-7		
22.233	22.233 (1.001)	112	118473	0.50000	0.4725	80.00- 120.00	100.00
22.233	22.233 (1.001)	114	33953			1.87- 61.87	28.66
22.233	22.233 (1.001)	77	69444			27.42- 87.42	58.62
95 Ethyl Benzene					CAS #: 100-41-4		
22.315	22.315 (1.005)	106	59886	0.50000	0.4963	80.00- 120.00	100.00
22.315	22.315 (1.005)	91	160363			258.78- 318.78	267.78
96 m,p-Xylene					CAS #: 108-38-3		
22.480	22.480 (1.012)	106	57518	0.50000	0.4748	80.00- 120.00	100.00
22.480	22.480 (1.012)	91	106968			162.81- 222.81	185.97
100 o-Xylene					CAS #: 95-47-6		
23.002	23.002 (1.036)	106	51288	0.50000	0.4682	80.00- 120.00	100.00
23.002	23.002 (1.036)	91	103816			171.98- 231.98	202.42
101 Styrene					CAS #: 100-42-5		
23.029	23.029 (1.037)	104	71449	0.50000	0.4470	80.00- 120.00	100.00
23.029	23.029 (1.037)	78	37151			21.36- 81.36	52.00
102 Bromoform					CAS #: 75-25-2		
23.331	23.331 (1.051)	173	85943	0.50000	0.4790	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	46173			21.13- 81.13	53.73
103 Cumene					CAS #: 98-82-8		
23.441	23.441 (1.056)	105	141796	0.50000	0.4680	80.00- 120.00	100.00
23.441	23.441 (1.056)	120	43970			0.35- 60.35	31.01
108 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
23.833	23.833 (1.073)	83	108836	0.50000	0.4756	80.00- 120.00	100.00
23.833	23.833 (1.073)	85	65898			36.04- 96.04	60.55
111 Propylbenzene					CAS #: 103-65-1		
23.910	23.910 (1.077)	91	130264	0.50000	0.4314	80.00- 120.00	100.00
23.910	23.910 (1.077)	120	36467			0.00- 56.65	27.99
113 4-Ethyltoluene					CAS #: 622-96-8		
24.039	24.039 (1.083)	105	103532	0.50000	0.4579	80.00- 120.00	100.00
24.039	24.039 (1.083)	120	32795			3.46- 63.46	31.68
114 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
24.116	24.116 (1.086)	105	117719	0.50000	0.4865	80.00- 120.00	100.00
24.116	24.116 (1.086)	120	60386			21.43- 81.43	51.30
120 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
24.529	24.529 (1.105)	105	105193	0.50000	0.4852	80.00- 120.00	100.00
24.529	24.529 (1.105)	120	52704			18.67- 78.67	50.10
122 1,3-Dichlorobenzene					CAS #: 541-73-1		
24.902	24.902 (1.121)	146	66981	0.50000	0.4318	80.00- 120.00	100.00
24.902	24.902 (1.121)	148	43504			33.26- 93.26	64.95
24.902	24.902 (1.121)	111	27264			9.81- 69.81	40.70
124 1,4-Dichlorobenzene					CAS #: 106-46-7		
24.992	24.992 (1.125)	146	71977	0.50000	0.3927	80.00- 120.00	100.00
24.992	24.992 (1.125)	148	33797			32.99- 92.99	46.96
24.992	24.992 (1.125)	111	27528			8.98- 68.98	38.25
127 alpha-chlorotoluene					CAS #: 100-44-7		
25.127	25.127 (1.132)	91	77881	0.50000	0.4510	80.00- 120.00	100.00
25.127	25.127 (1.132)	126	20928			0.00- 53.33	26.87
128 1,2-Dichlorobenzene					CAS #: 95-50-1		
25.396	25.396 (1.144)	146	66628	0.50000	0.4013	80.00- 120.00	100.00
25.396	25.396 (1.144)	148	46351			33.33- 93.33	69.57
25.396	25.396 (1.144)	111	27920			12.11- 72.11	41.90

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	79703	0.50000	0.4969	80.00- 120.00	100.00
27.077	27.077	(1.219)	182	70276			66.11- 126.11	88.17
132 Hexachlorobutadiene						CAS #: 87-68-3		
27.167	27.167	(1.223)	225	51997	0.50000	0.4666	80.00- 120.00	100.00
27.167	27.167	(1.223)	223	35366			31.45- 91.45	68.02

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdv.i
Lab File ID: v012308.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: gh
Method File: /chem/msdv.i/23Jan2015.b/v15l0123a.m
Misc Info: 0.5ppbv (1.0ppbv)

Calibration Date: 23-JAN-2015
Calibration Time: 20:25
Client Smp ID: Level 7
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
54 Bromochloromethan	253263	151958	354568	249319	-1.56
71 1,4-Difluorobenze	1019789	611873	1427705	1007670	-1.19
92 Chlorobenzene-d5	833326	499996	1166656	784887	-5.81

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/23Jan2015.b/v012308.d

Date : 23-JAN-2015 18:15

Client ID: Level 7

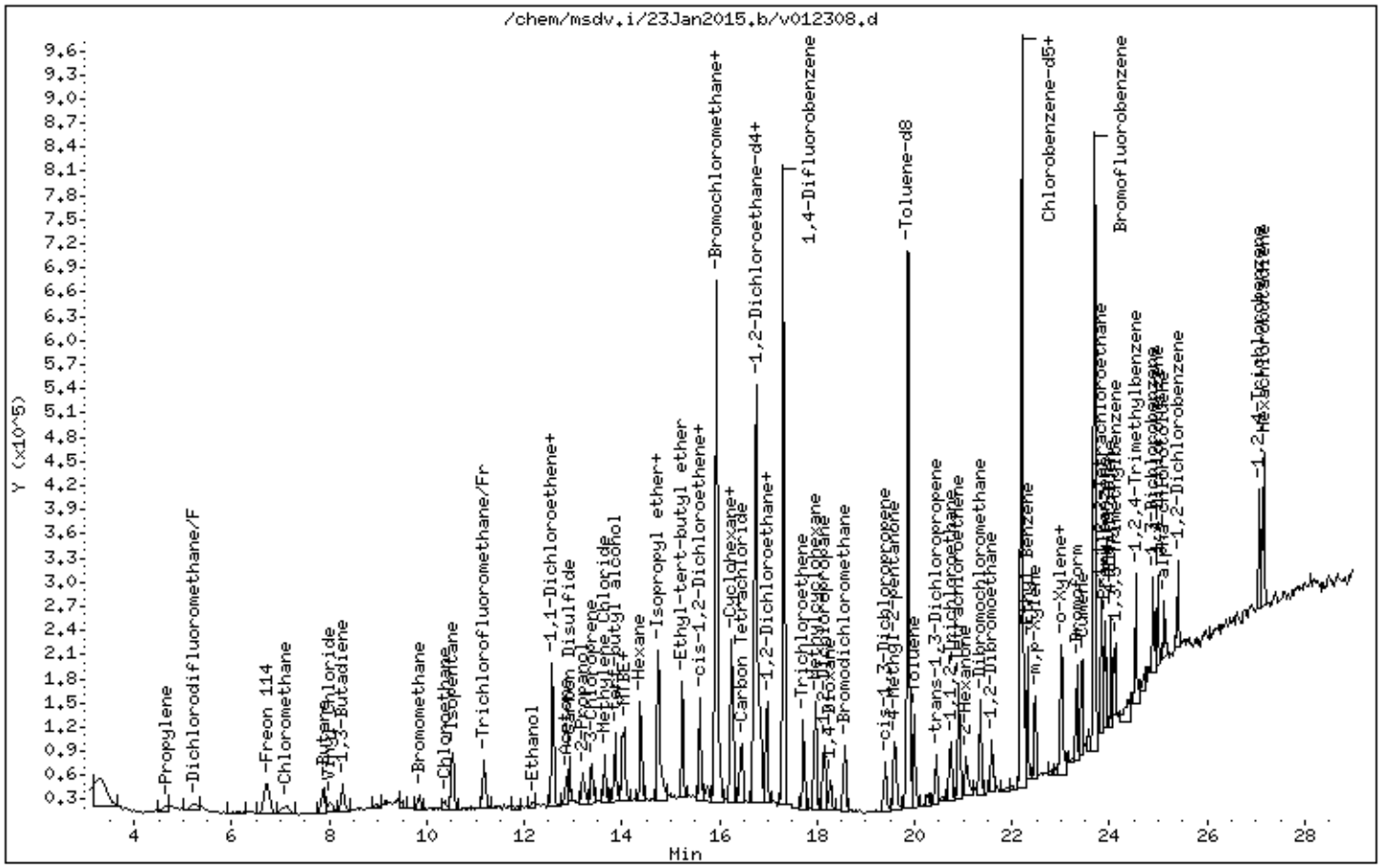
Instrument: msdv.i

Sample Info: 125mL# 2716-10

Operator: gh

Column phase: RTx-624

Column diameter: 0.32



Eurofins Air Toxics Inc.

TO15/Modified TO-14A

Data file : /chem/msdv.i/09Feb2015.b/v020911.d
Lab Smp Id: ICAL Client Smp ID: Level 8
Inj Date : 09-FEB-2015 13:13
Operator : ef Inst ID: msdv.i
Smp Info : 50mL# 2716-63
Misc Info : 1.0ppbv (5.0ppbv) Acrolein
Comment : Low Level GC-MS
Method : /chem/msdv.i/09Feb2015.b/v15l0123c.m
Meth Date : 09-Feb-2015 15:16 efinn Quant Type: ISTD
Cal Date : 09-FEB-2015 13:13 Cal File: v020911.d
Als bottle: 1 Calibration Sample, Level: 8
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AcroleinCRV.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	197676	5.00000		70.00- 130.00	100.00
15.933	15.933 (1.000)	128	147395			0.00- 30.00	74.56
15.933	15.933 (1.000)	49	441122			0.00- 30.00	223.15
* 71 1,4-Difluorobenzene						CAS #: 540-36-3	
17.305	17.305 (1.000)	114	775015	5.00000		70.00- 130.00	100.00
17.305	17.305 (1.000)	88	118394			0.00- 30.00	15.28
* 92 Chlorobenzene-d5						CAS #: 3114-55-4	
22.205	22.205 (1.000)	117	568405	5.00000		70.00- 130.00	100.00
22.205	22.205 (1.000)	82	322115			0.00- 30.00	56.67
21 Acrolein						CAS #: 107-02-8	
12.541	12.541 (0.787)	56	18836	1.00000	0.8661	70.00- 130.00	100.00
12.541	12.541 (0.787)	55	17085			0.00- 30.00	90.70

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdv.i
Lab File ID: v020911.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: ef
Method File: /chem/msdv.i/09Feb2015.b/v15l0123c.m
Misc Info: 1.0ppbv (5.0ppbv) Acrolein

Calibration Date: 09-FEB-2015
Calibration Time: 08:19
Client Smp ID: Level 8
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
54 Bromochloromethan	207238	124343	290133	197676	-4.61
71 1,4-Difluorobenze	801146	480688	1121604	775015	-3.26
92 Chlorobenzene-d5	584724	350834	818614	568405	-2.79

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/09Feb2015.b/v020911.d

Date : 09-FEB-2015 13:13

Client ID: Level 8

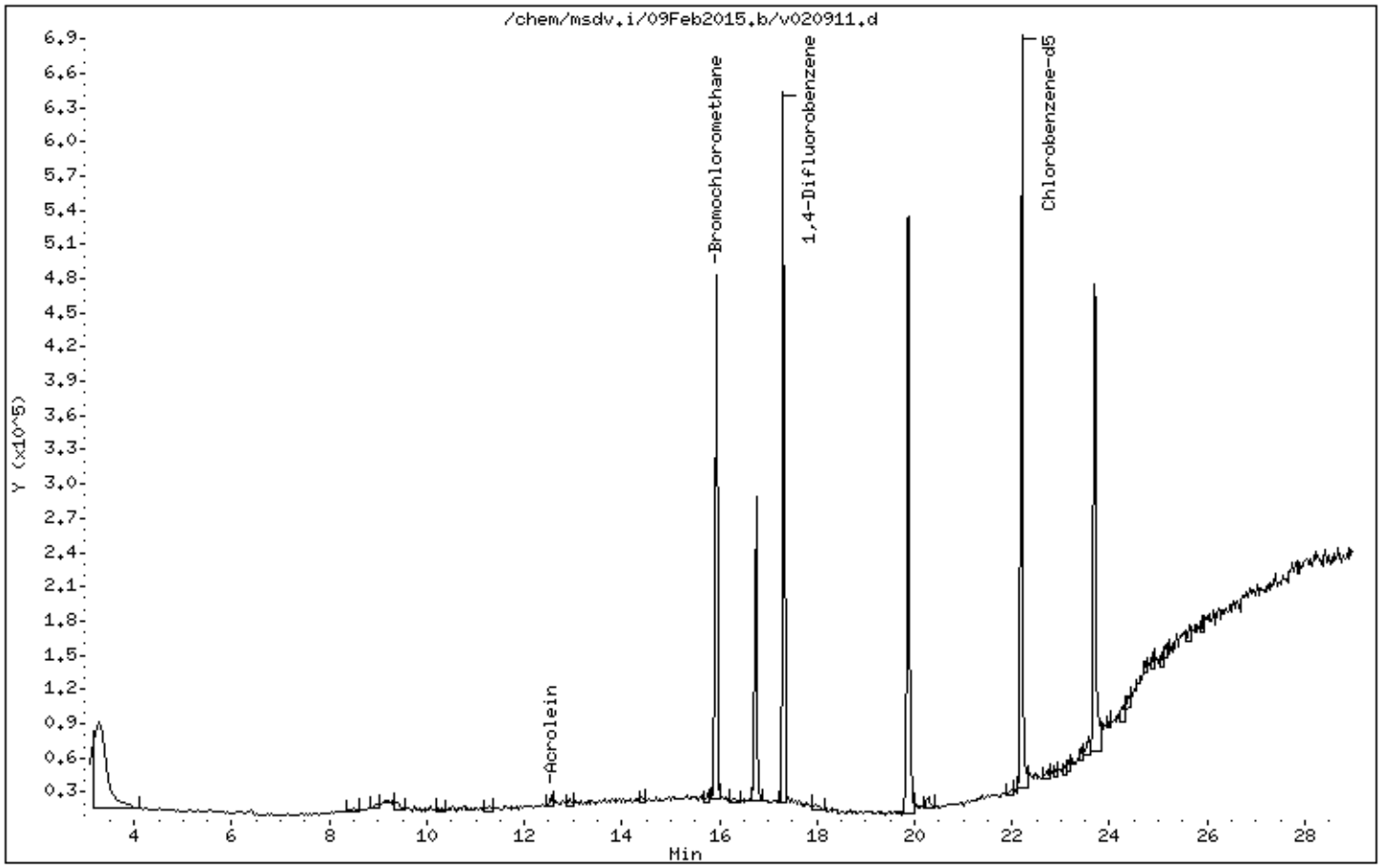
Instrument: msdv.i

Sample Info: 50mL# 2716-63

Operator: ef

Column phase: RTx-624

Column diameter: 0.32



Eurofins Air Toxics Inc.

TO15/Modified TO-14A

Data file : /chem/msdv.i/09Feb2015.b/v020908.d
Lab Smp Id: ICAL Client Smp ID: Level 8
Inj Date : 09-FEB-2015 11:07
Operator : ef Inst ID: msdv.i
Smp Info : 50mL# 2687-193
Misc Info : 1.0ppbv (5.0ppbv) Combo
Comment : Low Level GC-MS
Method : /chem/msdv.i/09Feb2015.b/v15l0123c.m
Meth Date : 09-Feb-2015 15:11 efinn Quant Type: ISTD
Cal Date : 09-FEB-2015 13:13 Cal File: v020911.d
Als bottle: 1 Calibration Sample, Level: 8
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: CombSp-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	202768	5.00000		70.00- 130.00	100.00
15.933	15.933 (1.000)	128	157920			0.00- 30.00	77.88
15.933	15.933 (1.000)	49	451294			0.00- 30.00	222.57
* 71 1,4-Difluorobenzene						CAS #: 540-36-3	
17.305	17.305 (1.000)	114	781616	5.00000		70.00- 130.00	100.00
17.305	17.305 (1.000)	88	122202			0.00- 30.00	15.63
* 92 Chlorobenzene-d5						CAS #: 3114-55-4	
22.205	22.205 (1.000)	117	550808	5.00000		70.00- 130.00	100.00
22.205	22.205 (1.000)	82	302111			0.00- 30.00	54.85
13 Vinyl Bromide						CAS #: 593-60-2	
10.967	10.967 (0.688)	106	44191	1.00000	0.9296	70.00- 130.00	100.00
10.967	10.967 (0.688)	108	45817			0.00- 30.00	103.68
15 1-Pentene						CAS #: 109-67-1	
11.256	11.256 (0.706)	55	66122	1.00000	0.8967	70.00- 130.00	100.00
11.256	11.256 (0.706)	42	108686			0.00- 30.00	164.37

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
16 Pentane					CAS #: 109-66-0		
11.400	11.400 (0.715)	43	179926	1.00000	0.8951	70.00- 130.00	100.00
11.400	11.400 (0.715)	57	26272			0.00- 30.00	14.60
11.400	11.400 (0.715)	72	9470			0.00- 30.00	5.26
19 Diethyl Ether					CAS #: 60-29-7		
12.101	12.101 (0.760)	74	25120	1.00000	0.9300	70.00- 130.00	100.00
12.101	12.101 (0.760)	59	53170			0.00- 30.00	211.66
26 Acetonitrile					CAS #: 75-05-8		
13.502	13.502 (0.847)	41	78682	1.00000	0.8605	70.00- 130.00	100.00
13.502	13.502 (0.847)	40	41970			0.00- 30.00	53.34
13.502	13.502 (0.847)	39	11676			0.00- 30.00	14.84
32 Acrylonitrile					CAS #: 107-13-1		
14.161	14.161 (0.889)	53	63463	1.00000	0.9521	70.00- 130.00	100.00
14.161	14.161 (0.889)	52	55432			0.00- 30.00	87.35
41 1-Hexene					CAS #: 592-41-6		
14.271	14.271 (0.896)	55	65122	1.00000	0.9189	70.00- 130.00	100.00
14.271	14.271 (0.896)	41	103829			0.00- 30.00	159.44
14.271	14.271 (0.896)	84	15444			0.00- 30.00	23.72
42 Ethyl Acetate					CAS #: 141-78-6		
15.592	15.592 (0.979)	70	14388	1.00000	0.9532	70.00- 130.00	100.00
15.592	15.592 (0.979)	43	299320			0.00- 30.00	2080.34
15.592	15.592 (0.979)	61	47300			0.00- 30.00	328.75
44 Methyl Acrylate					CAS #: 96-33-3		
15.696	15.696 (0.985)	55	172025	1.00000	0.9243	70.00- 130.00	100.00
15.696	15.696 (0.985)	85	16327			0.00- 30.00	9.49
15.675	15.675 (0.984)	58	13027			0.00- 30.00	7.57
60 Ethyl Acrylate					CAS #: 140-88-5		
17.771	17.771 (1.115)	99	9038	1.00000	0.9830	70.00- 130.00	100.00
17.771	17.771 (1.115)	45	21995			0.00- 30.00	243.36
17.771	17.771 (1.115)	55	184554			0.00- 30.00	2041.98
62 2-Pentanone					CAS #: 107-87-9		
17.964	17.964 (1.127)	43	290436	1.00000	0.9289	70.00- 130.00	100.00
17.964	17.964 (1.127)	58	20307			0.00- 30.00	6.99
17.964	17.964 (1.127)	86	26714			0.00- 30.00	9.20
67 Methyl Methacrylate					CAS #: 80-62-6		
18.156	18.156 (1.139)	41	143101	1.00000	0.9633	70.00- 130.00	100.00
18.156	18.156 (1.139)	69	64967			0.00- 30.00	45.40

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
67 Methyl Methacrylate (continued)							
18.156	18.156 (1.139)	100	21984			0.00- 30.00	15.36
70 Dibromomethane					CAS #: 74-95-3		
18.376	18.376 (0.828)	174	81512	1.00000	0.9625	70.00- 130.00	100.00
18.376	18.376 (0.828)	93	73270			0.00- 30.00	89.89
18.376	18.376 (0.828)	95	63377			0.00- 30.00	77.75
76 Octane					CAS #: 111-65-9		
19.968	19.968 (1.154)	57	64864	1.00000	0.9417	70.00- 130.00	100.00
19.968	19.968 (1.154)	85	44958			0.00- 30.00	69.31
19.946	19.946 (1.153)	43	190154			0.00- 30.00	293.16
85 Nonane					CAS #: 111-84-2		
22.343	22.343 (1.006)	43	154931	1.00000	1.035	70.00- 130.00	100.00
22.343	22.343 (1.006)	57	112235			0.00- 30.00	72.44
22.343	22.343 (1.006)	85	27813			0.00- 30.00	17.95
99 Decane					CAS #: 124-18-5		
23.987	23.987 (1.080)	57	221527	1.00000	1.028	70.00- 130.00	100.00
23.987	23.987 (1.080)	71	53637			0.00- 30.00	24.21
23.987	23.987 (1.080)	142	7034			0.00- 30.00	3.18
104 Bis(2-Chloroethyl) Ether					CAS #: 111-44-4		
24.787	24.787 (1.116)	93	84425	1.00000	1.013	70.00- 130.00	100.00
24.787	24.787 (1.116)	95	29003			0.00- 30.00	34.35
24.787	24.787 (1.116)	63	70826			0.00- 30.00	83.89
110 Undecane					CAS #: 1120-21-4		
25.239	25.239 (1.137)	57	265798	1.00000	1.013	70.00- 130.00	100.00
25.239	25.239 (1.137)	43	266232			0.00- 30.00	100.16
25.239	25.239 (1.137)	85	48163			0.00- 30.00	18.12
125 Dodecane					CAS #: 112-40-3		
26.315	26.315 (1.185)	85	36408	1.00000	1.007	70.00- 130.00	100.00
26.315	26.315 (1.185)	57	161531			0.00- 30.00	443.67
26.315	26.315 (1.185)	43	157740			0.00- 30.00	433.26

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdv.i
Lab File ID: v020908.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: ef
Method File: /chem/msdv.i/09Feb2015.b/v15l0123c.m
Misc Info: 1.0ppbv (5.0ppbv) Combo

Calibration Date: 09-FEB-2015
Calibration Time: 08:19
Client Smp ID: Level 8
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
54 Bromochloromethan	207238	124343	290133	202768	-2.16
71 1,4-Difluorobenze	801146	480688	1121604	781616	-2.44
92 Chlorobenzene-d5	584724	350834	818614	550808	-5.80

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/09Feb2015.b/v020908.d

Date : 09-FEB-2015 11:07

Client ID: Level 8

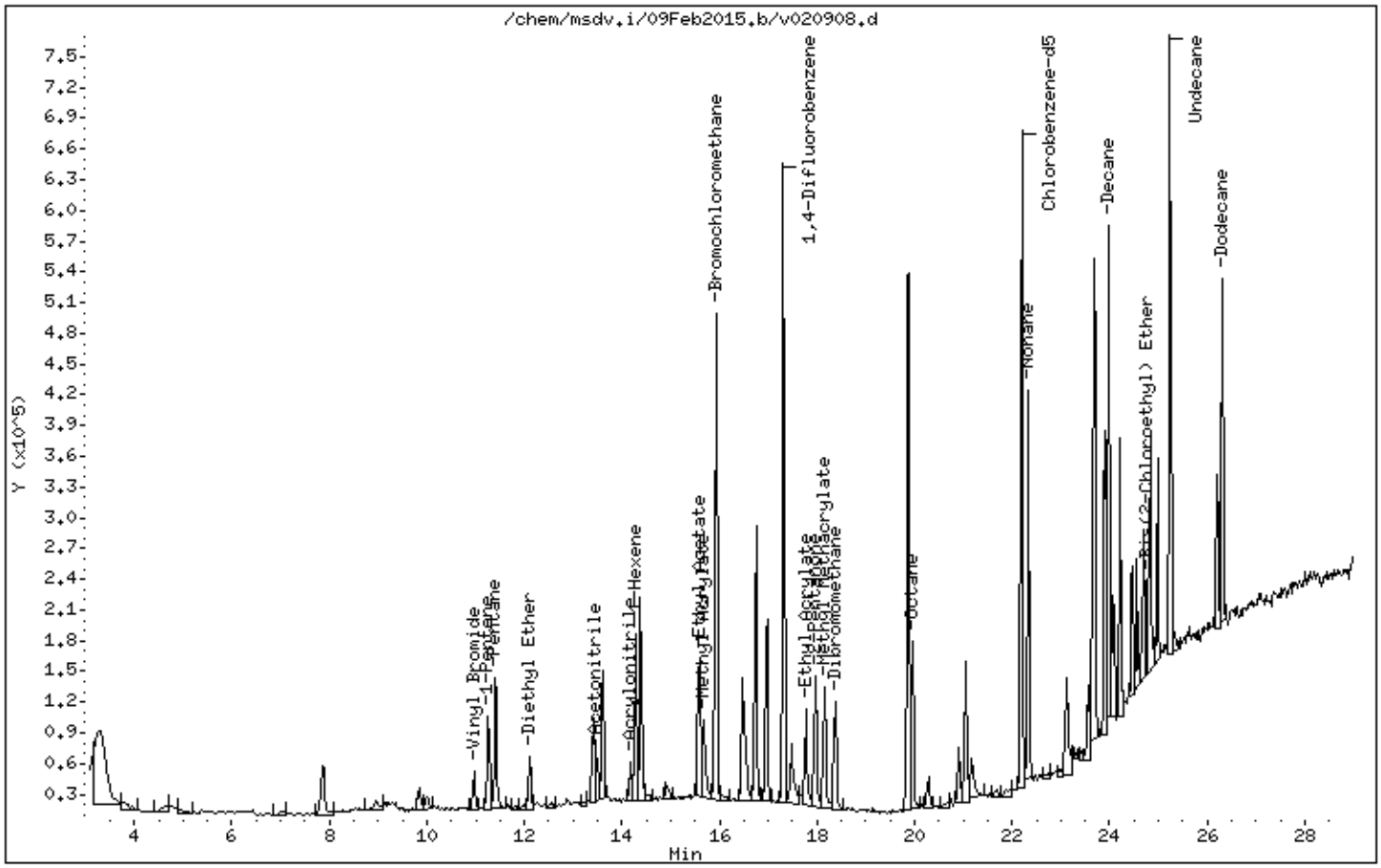
Instrument: msdv.i

Sample Info: 50mL# 2687-193

Operator: ef

Column phase: RTx-624

Column diameter: 0.32



Eurofins Air Toxics Inc.

TO15/Modified TO-14A

Data file : /chem/msdv.i/27Jan2015.b/v012706.d
Lab Smp Id: ICAL Client Smp ID: Level 8
Inj Date : 27-JAN-2015 12:09
Operator : ef Inst ID: msdv.i
Smp Info : 50mL# 2716-22
Misc Info : 1.0ppbv (5.0ppbv) AT-1
Comment : Low Level GC-MS
Method : /chem/msdv.i/27Jan2015.b/v15l0123b.m
Meth Date : 27-Jan-2015 16:35 efinn Quant Type: ISTD
Cal Date : 27-JAN-2015 12:09 Cal File: v012706.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	
15.934	15.934 (1.000)	130	239010	5.00000		70.00- 130.00	100.00
15.934	15.934 (1.000)	128	184345			0.00- 30.00	77.13
15.934	15.934 (1.000)	49	487136			0.00- 30.00	203.81
* 71 1,4-Difluorobenzene						CAS #: 540-36-3	
17.305	17.305 (1.000)	114	931417	5.00000		70.00- 130.00	100.00
17.305	17.305 (1.000)	88	144996			0.00- 30.00	15.57
* 92 Chlorobenzene-d5						CAS #: 3114-55-4	
22.205	22.205 (1.000)	117	734924	5.00000		70.00- 130.00	100.00
22.205	22.205 (1.000)	82	395127			0.00- 30.00	53.76
1 Freon 134a						CAS #: 811-97-2	
4.485	4.523 (0.281)	83	45984	1.00000	0.9761	70.00- 130.00	100.00
4.523	4.447 (0.284)	69	42565			0.00- 30.00	92.56
2 Freon 152A						CAS #: 75-37-6	
4.976	4.976 (0.312)	65	30491	1.00000	0.9628	70.00- 130.00	100.00
4.976	4.976 (0.312)	51	88526			0.00- 30.00	290.33

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
218 Freon 142b					CAS #: 75-68-3		
7.015	6.977 (0.440)	65	122352	1.00000	1.012	70.00- 130.00	100.00
7.015	6.977 (0.440)	45	36814			0.00- 30.00	30.09
14 Freon 21					CAS #: 75-43-4		
11.280	11.280 (0.708)	67	142037	1.00000	1.011	70.00- 130.00	100.00
11.280	11.280 (0.708)	69	42752			0.00- 30.00	30.10
11.280	11.280 (0.708)	47	19629			0.00- 30.00	13.82
216 1,2-Dichlorotrifluoroethane					CAS #: 354-23-4		
12.321	12.321 (0.773)	117	102675	1.00000	1.009	70.00- 130.00	100.00
12.321	12.321 (0.773)	67	134735			0.00- 30.00	131.22
217 Freon 123					CAS #: 306-83-2		
12.514	12.514 (0.785)	83	155670	1.00000	1.018	70.00- 130.00	100.00
12.514	12.514 (0.785)	133	35124			0.00- 30.00	22.56
12.514	12.514 (0.785)	85	99367			0.00- 30.00	63.83
211 Cyclopentene					CAS #: 142-29-0		
13.420	13.420 (0.842)	67	122556	1.00000	0.9855	70.00- 130.00	100.00
13.420	13.420 (0.842)	68	45931			0.00- 30.00	37.48
13.420	13.420 (0.842)	53	38767			0.00- 30.00	31.63
210 1-Propanol					CAS #: 71-23-8		
14.903	14.930 (0.935)	59	12778	1.00000	0.8495	70.00- 130.00	100.00
14.903	14.930 (0.935)	42	16320			0.00- 30.00	127.72
14.903	14.930 (0.935)	41	11397			0.00- 30.00	89.19
215 2,2-Dichloropropane					CAS #: 594-20-7		
15.551	15.551 (0.976)	77	129636	1.00000	1.039	70.00- 130.00	100.00
15.551	15.551 (0.976)	79	39272			0.00- 30.00	30.29
15.551	15.551 (0.976)	97	29437			0.00- 30.00	22.71
56 1,1-Dicholoropropene					CAS #: 563-58-6		
16.458	16.458 (1.033)	110	43590	1.00000	1.029	70.00- 130.00	100.00
16.458	16.458 (1.033)	75	107487			0.00- 30.00	246.59
214 Isobutanol					CAS #: 78-83-1		
16.519	16.550 (1.037)	41	64391	1.00000	0.8333	70.00- 130.00	100.00
16.519	16.550 (1.037)	43	96635			0.00- 30.00	150.08
16.458	16.458 (1.033)	39	117701			0.00- 30.00	182.79
206 1-Butanol					CAS #: 71-36-3		
17.470	17.497 (1.010)	56	66929	1.00000	0.6587	70.00- 130.00	100.00
17.470	17.497 (1.010)	41	52331			0.00- 30.00	78.19
17.470	17.497 (1.010)	43	52494			0.00- 30.00	78.43

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
83 1,3-Dichloropropane					CAS #: 142-28-9		
21.045	21.045 (1.216)	76	124896	1.00000	1.037	70.00- 130.00	100.00
21.045	21.045 (1.216)	41	134785			0.00- 30.00	107.92
21.045	21.045 (1.216)	78	42012			0.00- 30.00	33.64
204 Butyl Acetate					CAS #: 123-86-4		
21.152	21.152 (1.222)	56	51774	1.00000	0.9579	70.00- 130.00	100.00
21.152	21.188 (1.222)	73	11720			0.00- 30.00	22.64
21.152	21.152 (1.222)	43	138194			0.00- 30.00	266.92
91 1,1,1,2-Tetrachloroethane					CAS #: 630-20-6		
22.343	22.343 (1.006)	131	137661	1.00000	1.043	70.00- 130.00	100.00
22.343	22.343 (1.006)	117	103598			0.00- 30.00	75.26
22.343	22.315 (1.006)	95	49070			0.00- 30.00	35.65
205 2-Heptanone					CAS #: 110-43-0		
23.111	23.111 (1.041)	58	119717	1.00000	0.9790	70.00- 130.00	100.00
23.111	23.111 (1.041)	43	234583			0.00- 30.00	195.95
209 Cyclohexanone					CAS #: 108-94-1		
23.652	23.652 (1.065)	55	110930	1.00000	1.014	70.00- 130.00	100.00
23.652	23.652 (1.065)	98	30521			0.00- 30.00	27.51
23.652	23.652 (1.065)	42	73515			0.00- 30.00	66.27
97 Bromobenzene					CAS #: 108-86-1		
23.884	23.884 (1.076)	156	106482	1.00000	1.013	70.00- 130.00	100.00
23.884	23.884 (1.076)	158	99805			0.00- 30.00	93.73
23.884	23.884 (1.076)	77	183202			0.00- 30.00	172.05
105 1,2,3-Trichloropropane					CAS #: 96-18-4		
23.910	23.910 (1.077)	110	53437	1.00000	0.9553	70.00- 130.00	100.00
23.910	23.910 (1.077)	75	152494			0.00- 30.00	285.37
23.910	23.910 (1.077)	61	51442			0.00- 30.00	96.27
107 2-Chlorotoluene					CAS #: 95-49-8		
24.065	24.065 (1.084)	126	59582	1.00000	0.9548	70.00- 130.00	100.00
24.065	24.065 (1.084)	91	158130			0.00- 30.00	265.40
24.065	24.065 (1.084)	65	17432			0.00- 30.00	29.26
109 4-Chlorotoluene					CAS #: 106-43-4		
24.194	24.194 (1.090)	126	50217	1.00000	0.9868	70.00- 130.00	100.00
24.194	24.194 (1.090)	91	136886			0.00- 30.00	272.59
24.194	24.194 (1.090)	63	19874			0.00- 30.00	39.58
213 Diisobutyl Ketone					CAS #: 108-83-8		
24.220	24.220 (1.091)	57	259887	1.00000	1.156	70.00- 130.00	100.00

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

  213 Diisobutyl Ketone (continued)
 24.220  24.220 (1.091)    85    147292                     0.00-  30.00    56.68
-------------------------------------------------------------------------------
  115 tert-Butylbenzene                             CAS #: 98-06-6
 24.478  24.478 (1.102)   119    134830 1.00000   0.9537  70.00- 130.00   100.00
 24.478  24.478 (1.102)   134     32968                     0.00-  30.00    24.45
 24.478  24.452 (1.102)    91     88087                     0.00-  30.00    65.33
-------------------------------------------------------------------------------
  212 Pentachloroethane                             CAS #: 76-01-7
 24.555  24.555 (1.106)   167     88640 1.00000    1.028  70.00- 130.00   100.00
 24.555  24.555 (1.106)   117     79089                     0.00-  30.00    89.22
 24.555  24.555 (1.106)   169     44278                     0.00-  30.00    49.95
-------------------------------------------------------------------------------
  119 sec-Butylbenzene                              CAS #: 135-98-8
 24.710  24.710 (1.113)   105    174239 1.00000   0.9456  70.00- 130.00   100.00
 24.710  24.710 (1.113)   134     42831                     0.00-  30.00    24.58
 24.710  24.684 (1.113)    91     31475                     0.00-  30.00    18.06
-------------------------------------------------------------------------------
  116 p-Cymene                                      CAS #: 99-87-6
 24.835  24.835 (1.118)   119    191751 1.00000    1.021  70.00- 130.00   100.00
 24.835  24.835 (1.118)   134     57553                     0.00-  30.00    30.01
 24.835  24.835 (1.118)    91     45170                     0.00-  30.00    23.56
-------------------------------------------------------------------------------
  121 1,2,3-trimethylbenzene                        CAS #: 526-73-8
 24.992  24.992 (1.125)   120     89871 1.00000    1.072  70.00- 130.00   100.00
 24.992  24.992 (1.125)   105    192131                     0.00-  30.00   213.79
 24.992  24.992 (1.125)    77     21006                     0.00-  30.00    23.37
-------------------------------------------------------------------------------
  123 Butylbenzene                                  CAS #: 104-51-8
 25.261  25.261 (1.138)   134     75396 1.00000    1.168  70.00- 130.00   100.00
 25.261  25.261 (1.138)    91    225481                     0.00-  30.00   299.06
 25.261  25.261 (1.138)    92    119715                     0.00-  30.00   158.78
-------------------------------------------------------------------------------
  129 1,2-dibromo-3-chloropropane                   CAS #: 96-12-8
 26.203  26.203 (1.180)   157     83737 1.00000   0.9738  70.00- 130.00   100.00
 26.203  26.203 (1.180)    75     70283                     0.00-  30.00    83.93
 26.225  26.225 (1.181)   155     65331                     0.00-  30.00    78.02
-------------------------------------------------------------------------------
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Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdv.i
Lab File ID: v012706.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: ef
Method File: /chem/msdv.i/27Jan2015.b/v15l0123b.m
Misc Info: 1.0ppbv (5.0ppbv) AT-1

Calibration Date: 27-JAN-2015
Calibration Time: 06:33
Client Smp ID: Level 8
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
54 Bromochloromethan	265976	159586	372366	239010	-10.14
71 1,4-Difluorobenze	1006128	603677	1408579	931417	-7.43
92 Chlorobenzene-d5	792159	475295	1109023	734924	-7.23

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/27Jan2015.b/v012706.d

Date : 27-JAN-2015 12:09

Client ID: Level 8

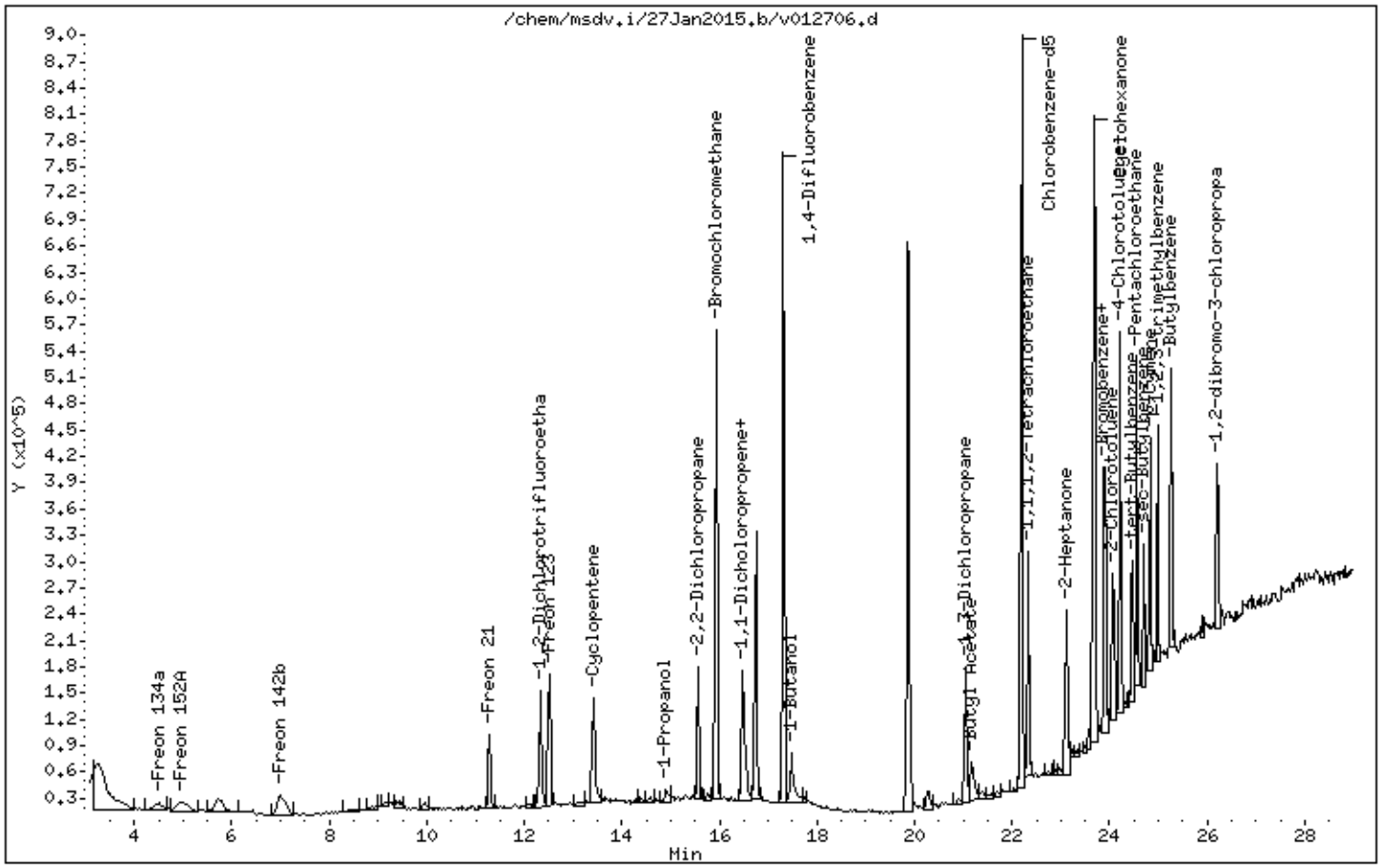
Instrument: msdv.i

Sample Info: 50mL# 2716-22

Operator: ef

Column phase: RTx-624

Column diameter: 0.32



Eurofins Air Toxics Inc.

TO15/Modified TO-14A

Data file : /chem/msdv.i/23Jan2015.b/v012309.d
Lab Smp Id: ICAL Client Smp ID: Level 8
Inj Date : 23-JAN-2015 19:01
Operator : gh Inst ID: msdv.i
Smp Info : 250mL# 2716-10
Misc Info : 1.0ppbv (1.0ppbv)
Comment : Low Level GC-MS
Method : /chem/msdv.i/23Jan2015.b/v15l0123a.m
Meth Date : 23-Jan-2015 23:20 ghehir Quant Type: ISTD
Cal Date : 23-JAN-2015 19:01 Cal File: v012309.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		
15.933	15.934 (1.000)	130	257226	5.00000		80.00- 120.00	100.00
15.933	15.934 (1.000)	128	193245			48.09- 108.09	75.13
15.933	15.934 (1.000)	49	552773			196.04- 256.04	214.90
* 71 1,4-Difluorobenzene					CAS #: 540-36-3		
17.305	17.305 (1.000)	114	1015757	5.00000		80.00- 120.00	100.00
17.305	17.305 (1.000)	88	164886			0.00- 45.23	16.23
* 92 Chlorobenzene-d5					CAS #: 3114-55-4		
22.205	22.205 (1.000)	117	790318	5.00000		80.00- 120.00	100.00
22.205	22.205 (1.000)	82	442633			23.86- 83.86	56.01
$ 65 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
16.756	16.756 (1.052)	65	390138	5.00000	4.938	80.00- 120.00	100.00
16.756	16.756 (1.052)	67	184013			25.13- 85.13	47.17
$ 80 Toluene-d8					CAS #: 2037-26-5		
19.879	19.879 (1.149)	98	933764	5.00000	4.927	80.00- 120.00	100.00
19.856	19.879 (1.147)	70	96738			0.00- 40.74	10.36

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
$ 80 Toluene-d8 (continued)							
19.856	19.879 (1.147)	100	614579			36.73- 96.73	65.82
$ 106 Bromofluorobenzene					CAS #: 460-00-4		
23.704	23.704 (1.067)	174	364633	5.00000	5.055	80.00- 120.00	100.00
23.678	23.704 (1.066)	95	467121			95.17- 155.17	128.11
23.704	23.704 (1.067)	176	367124			64.74- 124.74	100.68
3 Propylene					CAS #: 115-07-1		
4.711	4.674 (0.296)	41	108914	1.00000	1.008	80.00- 120.00	100.00
4.711	4.674 (0.296)	42	70985			37.91- 97.91	65.18
4.787	4.674 (0.300)	39	71388			38.58- 98.58	65.55
4 Dichlorodifluoromethane/Fr12					CAS #: 75-71-8		
5.202	5.202 (0.326)	85	190480	1.00000	0.9106	80.00- 120.00	100.00
5.202	5.202 (0.326)	87	62122			1.73- 61.73	32.61
6 Freon 114					CAS #: 76-14-2		
6.750	6.713 (0.424)	135	161403	1.00000	0.9276	80.00- 120.00	100.00
6.750	6.713 (0.424)	137	53882			2.34- 62.34	33.38
6.750	6.713 (0.424)	85	196286			93.53- 153.53	121.61
8 Chloromethane					CAS #: 74-87-3		
7.128	7.053 (0.447)	50	124346	1.00000	0.8921	80.00- 120.00	100.00
7.128	7.053 (0.447)	52	38409			1.57- 61.57	30.89
9 Butane					CAS #: 106-97-8		
7.885	7.885 (0.495)	58	23433	1.00000	0.9905	80.00- 120.00	100.00
7.885	7.885 (0.495)	43	195597			879.44- 939.44	834.71
10 Vinyl Chloride					CAS #: 75-01-4		
8.040	8.009 (0.505)	62	94973	1.00000	0.9336	80.00- 120.00	100.00
8.040	8.009 (0.505)	64	27835			0.00- 59.13	29.31
11 1,3-Butadiene					CAS #: 106-99-0		
8.288	8.257 (0.520)	54	93470	1.00000	0.9368	80.00- 120.00	100.00
8.257	8.257 (0.518)	39	95189			70.79- 130.79	101.84
12 Bromomethane					CAS #: 74-83-9		
9.834	9.835 (0.617)	94	52573	1.00000	0.8618	80.00- 120.00	100.00
9.834	9.835 (0.617)	96	55564			64.45- 124.45	105.69
17 Chloroethane					CAS #: 75-00-3		
10.364	10.340 (0.650)	64	40938	1.00000	0.9441	80.00- 120.00	100.00
10.364	10.340 (0.650)	66	13267			0.00- 59.36	32.41

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

   18 Isopentane                                     CAS #: 78-78-4
 10.533  10.533 (0.661)    57     90361 1.00000   0.9334  80.00- 120.00   100.00
 10.533  10.533 (0.661)    43    158336                  135.34- 195.34   175.23
 10.533  10.533 (0.661)    42    132665                  110.64- 170.64   146.82
-------------------------------------------------------------------------------
   20 Trichlorofluoromethane/Fr11                    CAS #: 75-69-4
 11.184  11.184 (0.702)   101    200949 1.00000   0.9037  80.00- 120.00   100.00
 11.184  11.184 (0.702)   103    130052                   34.40-  94.40    64.72
-------------------------------------------------------------------------------
   24 Ethanol                                        CAS #: 64-17-5
 12.156  12.102 (0.763)    45     48972 1.00000    1.146  80.00- 120.00   100.00
 12.156  12.102 (0.763)    46     15955                    9.93-  69.93    32.58
 12.156  12.102 (0.763)    43      6806                    0.00-  50.31    13.90
-------------------------------------------------------------------------------
   30 1,1-Dichloroethene                             CAS #: 75-35-4
 12.568  12.569 (0.789)    98     53393 1.00000    1.029  80.00- 120.00   100.00
 12.568  12.569 (0.789)    61    173300                  316.34- 376.34   324.57
 12.568  12.569 (0.789)    96     78152                  133.12- 193.12   146.37
-------------------------------------------------------------------------------
   28 Freon 113                                      CAS #: 76-13-1
 12.568  12.569 (0.789)   151    148629 1.00000   0.9375  80.00- 120.00   100.00
 12.568  12.569 (0.789)   153     92978                   33.38-  93.38    62.56
 12.568  12.569 (0.789)   101    178308                   85.19- 145.19   119.97
-------------------------------------------------------------------------------
   31 Acetone                                        CAS #: 67-64-1
 12.843  12.816 (0.806)    58     66247 1.00000    1.046  80.00- 120.00   100.00
 12.843  12.816 (0.806)    43    225123                  326.03- 386.03   339.82
-------------------------------------------------------------------------------
   33 Carbon Disulfide                               CAS #: 75-15-0
 12.926  12.926 (0.811)    76    208177 1.00000   0.9672  80.00- 120.00   100.00
-------------------------------------------------------------------------------
   35 3-Chloroprene                                  CAS #: 107-05-1
 13.392  13.365 (0.841)    76     26575 1.00000   0.8225  80.00- 120.00   100.00
 13.392  13.365 (0.841)    41    131653                  456.88- 516.88   495.40
-------------------------------------------------------------------------------
   34 2-Propanol                                     CAS #: 67-63-0
 13.200  13.173 (0.828)    45    233467 1.00000    1.002  80.00- 120.00   100.00
 13.200  13.173 (0.828)    43     44573                    0.00-  47.97    19.09
 13.200  13.173 (0.828)    59      8688                    0.00-  33.25     3.72
-------------------------------------------------------------------------------
   37 Methylene Chloride                             CAS #: 75-09-2
 13.667  13.640 (0.858)    84     67823 1.00000   0.9095  80.00- 120.00   100.00
 13.667  13.640 (0.858)    49    153876                  198.57- 258.57   226.88
 13.640  13.640 (0.856)    51     49955                   41.48- 101.48    73.65
-------------------------------------------------------------------------------
   38 tert-butyl alcohol                             CAS #: 75-65-0
 13.859  13.859 (0.870)    59    304762 1.00000    1.053  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     75251                     0.00-  53.29    24.69
 13.859  13.859 (0.870)    57     34160                     0.00-  40.72    11.21
-------------------------------------------------------------------------------
   39 MTBE                                          CAS #: 1634-04-4
 13.997  13.997 (0.878)    73    214745 1.00000   0.9369  80.00- 120.00   100.00
 13.997  13.997 (0.878)    57     81546                     6.35-  66.35    37.97
 13.997  13.997 (0.878)    41     82050                     5.74-  65.74    38.21
-------------------------------------------------------------------------------
   40 trans-1,2-Dichloroethene                      CAS #: 156-60-5
 14.051  14.052 (0.882)    98     51903 1.00000   0.9728  80.00- 120.00   100.00
 14.051  14.052 (0.882)    61    162180                   272.66- 332.66   312.47
 14.051  14.052 (0.882)    96     80722                   128.53- 188.53   155.52
-------------------------------------------------------------------------------
   43 Hexane                                        CAS #: 110-54-3
 14.381  14.381 (0.903)    57    195302 1.00000   0.9311  80.00- 120.00   100.00
 14.381  14.381 (0.903)    43    137771                    41.32- 101.32    70.54
 14.381  14.381 (0.903)    86     20300                     0.00-  40.13    10.39
-------------------------------------------------------------------------------
   45 Isopropyl ether                               CAS #: 108-20-3
 14.738  14.738 (0.925)    45    460997 1.00000   0.9409  80.00- 120.00   100.00
 14.738  14.738 (0.925)    87     74721                     0.00-  45.33    16.21
 14.738  14.738 (0.925)    59     42808                     0.00-  39.01     9.29
-------------------------------------------------------------------------------
   46 1,1-Dichloroethane                            CAS #: 75-34-3
 14.765  14.765 (0.927)    63    183318 1.00000   0.9478  80.00- 120.00   100.00
 14.765  14.765 (0.927)    65     55532                     0.00-  59.80    30.29
-------------------------------------------------------------------------------
   47 Vinyl Acetate                                 CAS #: 108-05-4
 14.820  14.793 (0.930)    86     16929 1.00000    1.012  80.00- 120.00   100.00
 14.820  14.793 (0.930)    42     22206                   166.91- 226.91   131.17
 14.793  14.793 (0.928)    43    343787                  2680.08-2740.08  2030.76
-------------------------------------------------------------------------------
   49 Ethyl-tert-butyl ether                        CAS #: 637-92-3
 15.240  15.240 (0.956)    59    371182 1.00000   0.9734  80.00- 120.00   100.00
 15.240  15.240 (0.956)    87    108562                     0.00-  59.23    29.25
 15.240  15.240 (0.956)    41     73284                     0.00-  49.94    19.74
-------------------------------------------------------------------------------
   50 cis-1,2-Dichloroethene                        CAS #: 156-59-2
 15.592  15.592 (0.979)    98     58063 1.00000   0.9384  80.00- 120.00   100.00
 15.592  15.592 (0.979)    61    157695                   242.79- 302.79   271.59
 15.592  15.592 (0.979)    96     90409                   127.33- 187.33   155.71
-------------------------------------------------------------------------------
   51 2-Butanone                                    CAS #: 78-93-3
 15.592  15.572 (0.979)    72     42358 1.00000    1.070  80.00- 120.00   100.00
 15.592  15.572 (0.979)    43    278109                   687.17- 747.17   656.57
```

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

   51 2-Butanone (continued)
 15.592  15.572 (0.979)    57     19608                    23.39-  83.39    46.29
-------------------------------------------------------------------------------
   53 Tetrahydrofuran                                CAS #: 109-99-9
 15.933  15.934 (1.000)    42    185287 1.00000    1.016  80.00- 120.00   100.00
 15.933  15.934 (1.000)    71     42039                     0.00-  51.83    22.69
 15.933  15.934 (1.000)    72     37762                     0.00-  54.16    20.38
-------------------------------------------------------------------------------
   55 Chloroform                                     CAS #: 67-66-3
 15.995  15.995 (1.004)    83    173053 1.00000   0.9606  80.00- 120.00   100.00
 15.995  15.995 (1.004)    85    110814                    35.10-  95.10    64.03
-------------------------------------------------------------------------------
   57 Cyclohexane                                    CAS #: 110-82-7
 16.273  16.242 (1.021)    84    111997 1.00000   0.8974  80.00- 120.00   100.00
 16.242  16.242 (1.019)    56    218547                   160.85- 220.85   195.14
 16.242  16.242 (1.019)    41    117435                    75.49- 135.49   104.86
-------------------------------------------------------------------------------
   58 1,1,1-Trichloroethane                          CAS #: 71-55-6
 16.242  16.242 (1.019)    97    184700 1.00000   0.8991  80.00- 120.00   100.00
 16.242  16.242 (1.019)    99    119197                    33.24-  93.24    64.54
-------------------------------------------------------------------------------
   59 Carbon Tetrachloride                           CAS #: 56-23-5
 16.457  16.458 (1.033)   119    170498 1.00000   0.9551  80.00- 120.00   100.00
 16.457  16.458 (1.033)   117    159394                    67.96- 127.96    93.49
                   Sum of Peak Amounts =           0.955
-------------------------------------------------------------------------------
   63 2,2,4-Trimethylpentane                         CAS #: 540-84-1
 16.728  16.728 (1.050)    56    205923 1.00000   0.9136  80.00- 120.00   100.00
 16.728  16.728 (1.050)    57    592878                   274.66- 334.66   287.91
 16.728  16.728 (1.050)    41    168907                    54.64- 114.64    82.02
-------------------------------------------------------------------------------
   64 Benzene                                        CAS #: 71-43-2
 16.756  16.756 (0.968)    78    229305 1.00000   0.8889  80.00- 120.00   100.00
 16.756  16.756 (0.968)    77     49983                     0.00-  53.39    21.80
-------------------------------------------------------------------------------
   66 tert-amyl methyl ether                         CAS #: 994-05-8
 16.811  16.811 (0.971)    87     64916 1.00000    1.012  80.00- 120.00   100.00
 16.811  16.811 (0.971)    73    251949                   366.24- 426.24   388.12
 16.811  16.811 (0.971)    55    107288                   130.44- 190.44   165.27
-------------------------------------------------------------------------------
   68 1,2-Dichloroethane                             CAS #: 107-06-2
 16.865  16.865 (0.975)    62    143739 1.00000   0.9454  80.00- 120.00   100.00
 16.865  16.865 (0.975)    64     45472                     0.00-  59.72    31.64
-------------------------------------------------------------------------------
   69 Heptane                                        CAS #: 142-82-5
 16.975  16.975 (0.981)    57    108724 1.00000   0.9198  80.00- 120.00   100.00
```

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)	100	22893			0.00- 51.16	21.06
16.975	16.975 (0.981)	43	233368			180.62- 240.62	214.64
72 Trichloroethene					CAS #: 79-01-6		
17.717	17.717 (1.024)	130	127765	1.00000	1.009	80.00- 120.00	100.00
17.717	17.717 (1.024)	95	113148			62.98- 122.98	88.56
17.717	17.717 (1.024)	97	72738			29.44- 89.44	56.93
73 Methylcyclohexane					CAS #: 108-87-2		
17.964	17.964 (1.038)	83	150940	1.00000	0.9673	80.00- 120.00	100.00
17.964	17.964 (1.038)	98	66076			16.83- 76.83	43.78
17.964	17.964 (1.038)	55	189976			97.27- 157.27	125.86
74 1,2-Dichloropropane					CAS #: 78-87-5		
18.156	18.156 (1.049)	63	113135	1.00000	0.9284	80.00- 120.00	100.00
18.156	18.156 (1.049)	62	83712			43.06- 103.06	73.99
18.156	18.156 (1.049)	41	80207			36.58- 96.58	70.89
75 1,4-Dioxane					CAS #: 123-91-1		
18.266	18.266 (1.056)	88	80344	1.00000	1.036	80.00- 120.00	100.00
18.266	18.266 (1.056)	58	80231			74.73- 134.73	99.86
18.266	18.266 (1.056)	57	24705			4.83- 64.83	30.75
77 Bromodichloromethane					CAS #: 75-27-4		
18.568	18.568 (1.073)	83	182374	1.00000	0.9906	80.00- 120.00	100.00
18.568	18.568 (1.073)	85	106321			33.73- 93.73	58.30
78 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
19.386	19.386 (1.120)	75	143017	1.00000	0.9482	80.00- 120.00	100.00
19.408	19.386 (1.122)	77	45081			0.66- 60.66	31.52
19.386	19.386 (1.120)	39	107624			43.67- 103.67	75.25
79 4-Methyl-2-pentanone					CAS #: 108-10-1		
19.588	19.588 (1.132)	43	368368	1.00000	1.020	80.00- 120.00	100.00
19.588	19.588 (1.132)	58	126847			3.17- 63.17	34.43
19.588	19.588 (1.132)	85	32839			0.00- 40.09	8.91
81 Toluene					CAS #: 108-88-3		
19.991	19.991 (1.155)	91	274050	1.00000	0.9471	80.00- 120.00	100.00
19.991	19.991 (1.155)	92	164978			28.34- 88.34	60.20
82 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
20.435	20.435 (0.920)	75	132060	1.00000	0.9935	80.00- 120.00	100.00
20.435	20.435 (0.920)	77	38370			1.98- 61.98	29.05
20.435	20.435 (0.920)	39	93005			41.22- 101.22	70.43

```
                                        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  20.722 (0.935)    97    100328 1.00000   0.9545  80.00- 120.00   100.00
 20.758  20.722 (0.935)    99     72264                   31.80-  91.80    72.03
 20.758  20.722 (0.935)    83     91812                   51.12- 111.12    91.51
-------------------------------------------------------------------------------
   86 Tetrachloroethene                              CAS #: 127-18-4
 20.901  20.901 (0.941)   166    148222 1.00000   0.9024  80.00- 120.00   100.00
 20.901  20.901 (0.941)   129    121102                   46.61- 106.61    81.70
 20.901  20.901 (0.941)   131    114516                   46.38- 106.38    77.26
-------------------------------------------------------------------------------
   87 2-Hexanone                                     CAS #: 591-78-6
 21.045  21.009 (0.948)    58    157977 1.00000    1.124  80.00- 120.00   100.00
 21.045  21.009 (0.948)    43    315885                  184.27- 244.27   199.96
 21.045  21.009 (0.948)   100     19716                    0.00-  44.17    12.48
-------------------------------------------------------------------------------
   89 Dibromochloromethane                           CAS #: 124-48-1
 21.367  21.367 (0.962)   129    196586 1.00000   0.9676  80.00- 120.00   100.00
 21.367  21.367 (0.962)   127    159206                   48.71- 108.71    80.99
-------------------------------------------------------------------------------
   90 1,2-Dibromoethane                              CAS #: 106-93-4
 21.583  21.583 (0.972)   107    178980 1.00000    1.024  80.00- 120.00   100.00
 21.583  21.583 (0.972)   109    167532                   63.80- 123.80    93.60
-------------------------------------------------------------------------------
   93 Chlorobenzene                                  CAS #: 108-90-7
 22.233  22.233 (1.001)   112    244661 1.00000   0.9766  80.00- 120.00   100.00
 22.233  22.233 (1.001)   114     74582                    1.75-  61.75    30.48
 22.233  22.233 (1.001)    77    155575                   24.73-  84.73    63.59
-------------------------------------------------------------------------------
   95 Ethyl Benzene                                  CAS #: 100-41-4
 22.315  22.315 (1.005)   106    108300 1.00000   0.9162  80.00- 120.00   100.00
 22.315  22.315 (1.005)    91    316297                  260.31- 320.31   292.06
-------------------------------------------------------------------------------
   96 m,p-Xylene                                     CAS #: 108-38-3
 22.480  22.452 (1.012)   106    113284 1.00000   0.9455  80.00- 120.00   100.00
 22.480  22.452 (1.012)    91    214226                  157.23- 217.23   189.11
-------------------------------------------------------------------------------
  100 o-Xylene                                       CAS #: 95-47-6
 23.001  23.002 (1.036)   106     99556 1.00000   0.9251  80.00- 120.00   100.00
 23.001  23.002 (1.036)    91    204506                  167.76- 227.76   205.42
-------------------------------------------------------------------------------
  101 Styrene                                        CAS #: 100-42-5
 23.029  23.029 (1.037)   104    144222 1.00000   0.9200  80.00- 120.00   100.00
 23.029  23.029 (1.037)    78     71832                   17.96-  77.96    49.81
-------------------------------------------------------------------------------
  102 Bromoform                                      CAS #: 75-25-2
 23.331  23.331 (1.051)   173    172953 1.00000   0.9656  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	92453			22.04- 82.04	53.46
103 Cumene					CAS #: 98-82-8		
23.441	23.441 (1.056)	105	284962	1.00000	0.9497	80.00- 120.00	100.00
23.441	23.441 (1.056)	120	86774			0.00- 59.93	30.45
108 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
23.833	23.833 (1.073)	83	203809	1.00000	0.9054	80.00- 120.00	100.00
23.833	23.833 (1.073)	85	135246			34.94- 94.94	66.36
111 Propylbenzene					CAS #: 103-65-1		
23.910	23.910 (1.077)	91	251830	1.00000	0.8654	80.00- 120.00	100.00
23.910	23.910 (1.077)	120	63937			0.00- 56.93	25.39
113 4-Ethyltoluene					CAS #: 622-96-8		
24.039	24.039 (1.083)	105	198968	1.00000	0.9024	80.00- 120.00	100.00
24.039	24.039 (1.083)	120	60244			3.10- 63.10	30.28
114 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
24.116	24.116 (1.086)	105	196203	1.00000	0.8465	80.00- 120.00	100.00
24.116	24.116 (1.086)	120	103995			21.49- 81.49	53.00
120 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
24.529	24.529 (1.105)	105	184022	1.00000	0.8775	80.00- 120.00	100.00
24.529	24.529 (1.105)	120	93934			19.48- 79.48	51.04
122 1,3-Dichlorobenzene					CAS #: 541-73-1		
24.902	24.902 (1.121)	146	137305	1.00000	0.9008	80.00- 120.00	100.00
24.902	24.902 (1.121)	148	86963			32.42- 92.42	63.34
24.902	24.902 (1.121)	111	52265			8.90- 68.90	38.06
124 1,4-Dichlorobenzene					CAS #: 106-46-7		
24.992	24.992 (1.125)	146	136461	1.00000	0.7800	80.00- 120.00	100.00
24.992	24.992 (1.125)	148	92648			34.01- 94.01	67.89
24.992	24.992 (1.125)	111	56288			8.58- 68.58	41.25
127 alpha-chlorotoluene					CAS #: 100-44-7		
25.127	25.127 (1.132)	91	161141	1.00000	0.9500	80.00- 120.00	100.00
25.127	25.127 (1.132)	126	38189			0.00- 54.03	23.70
128 1,2-Dichlorobenzene					CAS #: 95-50-1		
25.396	25.396 (1.144)	146	138467	1.00000	0.8577	80.00- 120.00	100.00
25.396	25.396 (1.144)	148	91750			32.53- 92.53	66.26
25.396	25.396 (1.144)	111	57755			10.66- 70.66	41.71

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	154837	1.00000	0.9667	80.00- 120.00	100.00
27.077	27.077 (1.219)	182	151603			66.06- 126.06	97.91
132 Hexachlorobutadiene					CAS #: 87-68-3		
27.167	27.167 (1.223)	225	102116	1.00000	0.9310	80.00- 120.00	100.00
27.167	27.167 (1.223)	223	64937			32.60- 92.60	63.59
133 Naphthalene					CAS #: 91-20-3		
27.391	27.368 (1.234)	128	29821	0.10000	0.1240	80.00- 120.00	100.00
27.391	27.368 (1.234)	127	9004			0.00- 44.62	30.19

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdv.i
Lab File ID: v012309.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: gh
Method File: /chem/msdv.i/23Jan2015.b/v15l0123a.m
Misc Info: 1.0ppbv (1.0ppbv)

Calibration Date: 23-JAN-2015
Calibration Time: 20:25
Client Smp ID: Level 8
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
54 Bromochloromethan	253263	151958	354568	257226	1.56
71 1,4-Difluorobenze	1019789	611873	1427705	1015757	-0.40
92 Chlorobenzene-d5	833326	499996	1166656	790318	-5.16

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/23Jan2015.b/v012309.d

Date : 23-JAN-2015 19:01

Client ID: Level 8

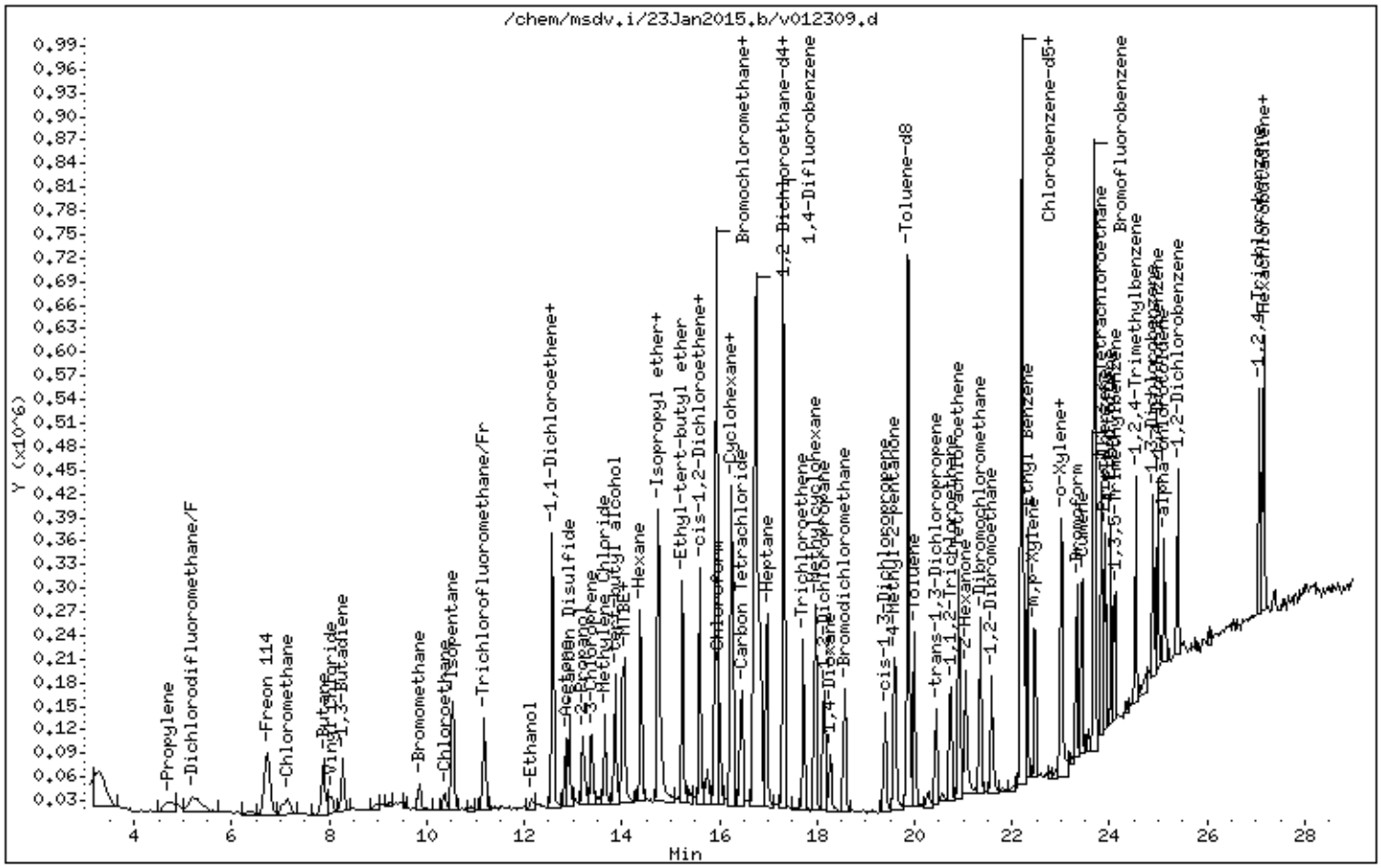
Instrument: msdv.i

Sample Info: 250mL# 2716-10

Operator: gh

Column phase: RTx-624

Column diameter: 0.32



Eurofins Air Toxics Inc.

TO15/Modified TO-14A

Data file : /chem/msdv.i/09Feb2015.b/v020912.d
Lab Smp Id: ICAL Client Smp ID: Level 9
Inj Date : 09-FEB-2015 14:14
Operator : ef Inst ID: msdv.i
Smp Info : 250mL# 2716-63
Misc Info : 5.0ppbv (5.0ppbv) Acrolein
Comment : Low Level GC-MS
Method : /chem/msdv.i/09Feb2015.b/v15l0123c.m
Meth Date : 09-Feb-2015 15:17 efinn Quant Type: ISTD
Cal Date : 09-FEB-2015 14:14 Cal File: v020912.d
Als bottle: 1 Calibration Sample, Level: 9
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AcroleinCRV.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	190168	5.00000		70.00- 130.00	100.00
15.934	15.934 (1.000)	128	148967			0.00- 30.00	78.33
15.934	15.934 (1.000)	49	422224			0.00- 30.00	222.03
* 71 1,4-Difluorobenzene					CAS #: 540-36-3		
17.305	17.305 (1.000)	114	790315	5.00000		70.00- 130.00	100.00
17.305	17.305 (1.000)	88	124406			0.00- 30.00	15.74
* 92 Chlorobenzene-d5					CAS #: 3114-55-4		
22.205	22.205 (1.000)	117	571695	5.00000		70.00- 130.00	100.00
22.205	22.205 (1.000)	82	317403			0.00- 30.00	55.52
21 Acrolein					CAS #: 107-02-8		
12.486	12.486 (0.784)	56	123543	5.00000	5.905	70.00- 130.00	100.00
12.514	12.514 (0.785)	55	88192			0.00- 30.00	71.39

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdv.i
Lab File ID: v020912.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: ef
Method File: /chem/msdv.i/09Feb2015.b/v15l0123c.m
Misc Info: 5.0ppbv (5.0ppbv) Acrolein

Calibration Date: 09-FEB-2015
Calibration Time: 08:19
Client Smp ID: Level 9
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
54 Bromochloromethan	207238	124343	290133	190168	-8.24
71 1,4-Difluorobenze	801146	480688	1121604	790315	-1.35
92 Chlorobenzene-d5	584724	350834	818614	571695	-2.23

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/09Feb2015.b/v020912.d

Date : 09-FEB-2015 14:14

Client ID: Level 9

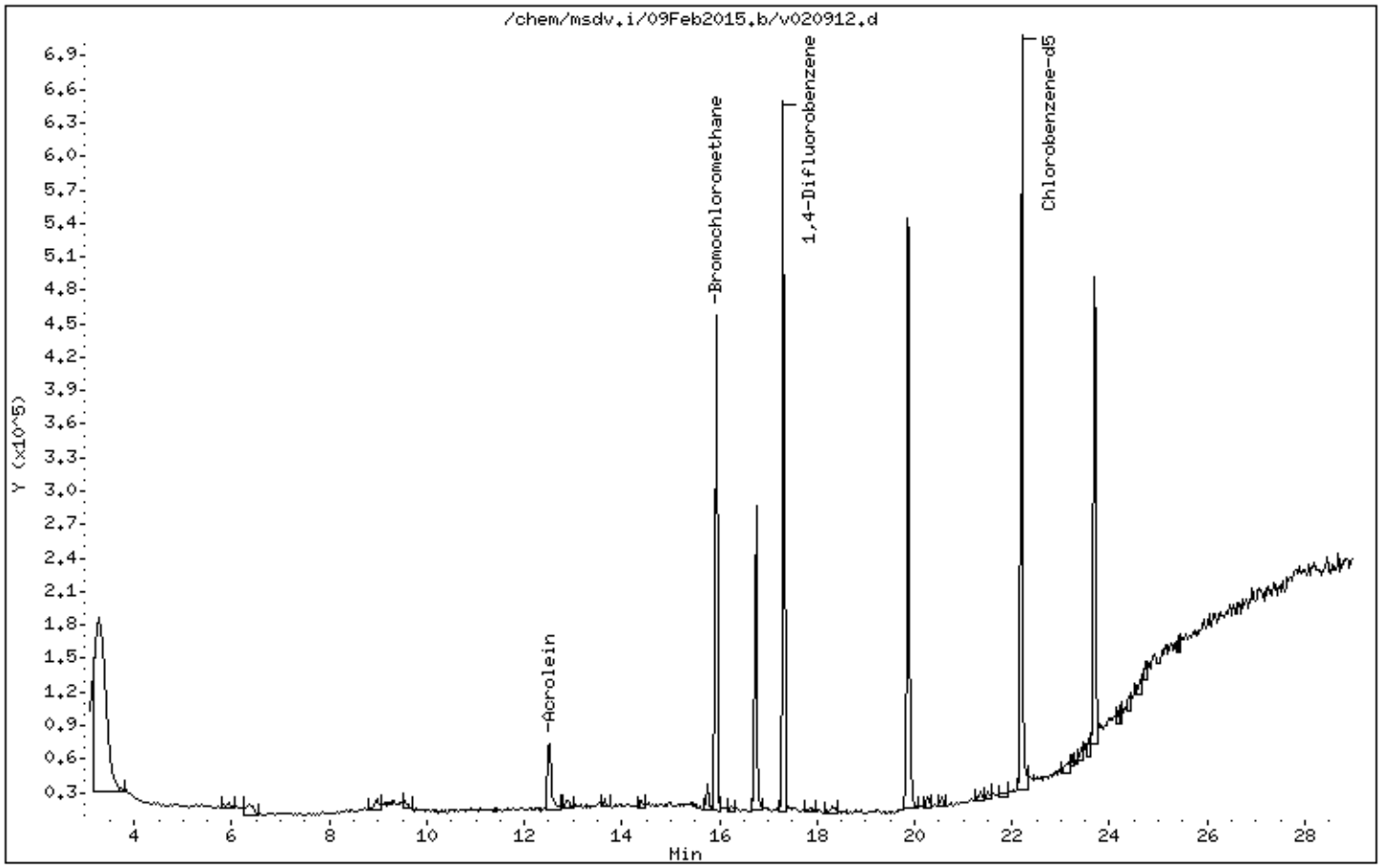
Instrument: msdv.i

Sample Info: 250mL# 2716-63

Operator: ef

Column phase: RTx-624

Column diameter: 0.32



Eurofins Air Toxics Inc.

TO15/Modified TO-14A

Data file : /chem/msdv.i/09Feb2015.b/v020909.d
Lab Smp Id: ICAL Client Smp ID: Level 9
Inj Date : 09-FEB-2015 11:50
Operator : ef Inst ID: msdv.i
Smp Info : 250mL# 2687-193
Misc Info : 5.0ppbv (5.0ppbv) Combo
Comment : Low Level GC-MS
Method : /chem/msdv.i/09Feb2015.b/v15l0123c.m
Meth Date : 09-Feb-2015 15:15 efinn Quant Type: ISTD
Cal Date : 09-FEB-2015 14:14 Cal File: v020912.d
Als bottle: 1 Calibration Sample, Level: 9
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: CombSp-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	187864	5.00000		70.00- 130.00	100.00
15.934	15.934 (1.000)	128	141734			0.00- 30.00	75.45
15.934	15.934 (1.000)	49	437504			0.00- 30.00	232.88
* 71 1,4-Difluorobenzene						CAS #: 540-36-3	
17.305	17.305 (1.000)	114	786486	5.00000		70.00- 130.00	100.00
17.305	17.305 (1.000)	88	119270			0.00- 30.00	15.16
* 92 Chlorobenzene-d5						CAS #: 3114-55-4	
22.205	22.205 (1.000)	117	566832	5.00000		70.00- 130.00	100.00
22.205	22.205 (1.000)	82	309227			0.00- 30.00	54.55
13 Vinyl Bromide						CAS #: 593-60-2	
10.967	10.967 (0.688)	106	218584	5.00000	4.963	70.00- 130.00	100.00
10.967	10.967 (0.688)	108	212910			0.00- 30.00	97.40
15 1-Pentene						CAS #: 109-67-1	
11.256	11.256 (0.706)	55	348709	5.00000	5.104	70.00- 130.00	100.00
11.256	11.256 (0.706)	42	529499			0.00- 30.00	151.85

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
16 Pentane					CAS #: 109-66-0		
11.400	11.400 (0.716)	43	934513	5.00000	5.018	70.00- 130.00	100.00
11.425	11.425 (0.717)	57	118767			0.00- 30.00	12.71
11.425	11.425 (0.717)	72	52445			0.00- 30.00	5.61
19 Diethyl Ether					CAS #: 60-29-7		
12.102	12.102 (0.760)	74	126795	5.00000	5.066	70.00- 130.00	100.00
12.102	12.102 (0.760)	59	278064			0.00- 30.00	219.30
26 Acetonitrile					CAS #: 75-05-8		
13.475	13.475 (0.846)	41	569982	5.00000	6.728	70.00- 130.00	100.00
13.475	13.475 (0.846)	40	240675			0.00- 30.00	42.23
13.420	13.420 (0.842)	39	255627			0.00- 30.00	44.85
32 Acrylonitrile					CAS #: 107-13-1		
14.161	14.161 (0.889)	53	379939	5.00000	6.152	70.00- 130.00	100.00
14.161	14.161 (0.889)	52	323266			0.00- 30.00	85.08
41 1-Hexene					CAS #: 592-41-6		
14.271	14.271 (0.896)	55	327862	5.00000	4.993	70.00- 130.00	100.00
14.271	14.271 (0.896)	41	528576			0.00- 30.00	161.22
14.271	14.271 (0.896)	84	80992			0.00- 30.00	24.70
42 Ethyl Acetate					CAS #: 141-78-6		
15.592	15.592 (0.979)	70	78249	5.00000	5.596	70.00- 130.00	100.00
15.592	15.592 (0.979)	43	1455017			0.00- 30.00	1859.47
15.592	15.592 (0.979)	61	251835			0.00- 30.00	321.84
44 Methyl Acrylate					CAS #: 96-33-3		
15.675	15.675 (0.984)	55	1064364	5.00000	6.173	70.00- 130.00	100.00
15.675	15.675 (0.984)	85	103007			0.00- 30.00	9.68
15.675	15.675 (0.984)	58	77192			0.00- 30.00	7.25
60 Ethyl Acrylate					CAS #: 140-88-5		
17.772	17.772 (1.115)	99	48443	5.00000	5.687	70.00- 130.00	100.00
17.772	17.772 (1.115)	45	115621			0.00- 30.00	238.67
17.772	17.772 (1.115)	55	1087469			0.00- 30.00	2244.84
62 2-Pentanone					CAS #: 107-87-9		
17.964	17.964 (1.127)	43	1615729	5.00000	5.578	70.00- 130.00	100.00
17.964	17.964 (1.127)	58	103233			0.00- 30.00	6.39
17.964	17.964 (1.127)	86	158239			0.00- 30.00	9.79
67 Methyl Methacrylate					CAS #: 80-62-6		
18.156	18.156 (1.139)	41	735111	5.00000	5.341	70.00- 130.00	100.00
18.156	18.156 (1.139)	69	319089			0.00- 30.00	43.41

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
67 Methyl Methacrylate (continued)							
18.156	18.156 (1.139)	100	118291			0.00- 30.00	16.09
70 Dibromomethane					CAS #: 74-95-3		
18.376	18.376 (0.828)	174	420880	5.00000	4.829	70.00- 130.00	100.00
18.376	18.376 (0.828)	93	378168			0.00- 30.00	89.85
18.376	18.376 (0.828)	95	333175			0.00- 30.00	79.16
76 Octane					CAS #: 111-65-9		
19.946	19.946 (1.153)	57	325101	5.00000	4.691	70.00- 130.00	100.00
19.969	19.969 (1.154)	85	231631			0.00- 30.00	71.25
19.946	19.946 (1.153)	43	947612			0.00- 30.00	291.48
85 Nonane					CAS #: 111-84-2		
22.343	22.343 (1.006)	43	571343	5.00000	3.710	70.00- 130.00	100.00
22.343	22.343 (1.006)	57	417589			0.00- 30.00	73.09
22.343	22.343 (1.006)	85	105819			0.00- 30.00	18.52
99 Decane					CAS #: 124-18-5		
23.987	23.987 (1.080)	57	917952	5.00000	4.141	70.00- 130.00	100.00
23.987	23.987 (1.080)	71	218214			0.00- 30.00	23.77
23.987	23.987 (1.080)	142	32050			0.00- 30.00	3.49
104 Bis(2-Chloroethyl) Ether					CAS #: 111-44-4		
24.761	24.761 (1.115)	93	421432	5.00000	4.916	70.00- 130.00	100.00
24.761	24.761 (1.115)	95	144481			0.00- 30.00	34.28
24.761	24.761 (1.115)	63	383702			0.00- 30.00	91.05
110 Undecane					CAS #: 1120-21-4		
25.239	25.239 (1.137)	57	1249132	5.00000	4.627	70.00- 130.00	100.00
25.239	25.239 (1.137)	43	1262442			0.00- 30.00	101.07
25.239	25.239 (1.137)	85	222807			0.00- 30.00	17.84
125 Dodecane					CAS #: 112-40-3		
26.315	26.315 (1.185)	85	179335	5.00000	4.819	70.00- 130.00	100.00
26.315	26.315 (1.185)	57	912411			0.00- 30.00	508.77
26.315	26.315 (1.185)	43	837726			0.00- 30.00	467.13

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdv.i
Lab File ID: v020909.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: ef
Method File: /chem/msdv.i/09Feb2015.b/v15l0123c.m
Misc Info: 5.0ppbv (5.0ppbv) Combo

Calibration Date: 09-FEB-2015
Calibration Time: 08:19
Client Smp ID: Level 9
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
54 Bromochloromethan	207238	124343	290133	187864	-9.35
71 1,4-Difluorobenze	801146	480688	1121604	786486	-1.83
92 Chlorobenzene-d5	584724	350834	818614	566832	-3.06

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/09Feb2015.b/v020909.d

Date : 09-FEB-2015 11:50

Client ID: Level 9

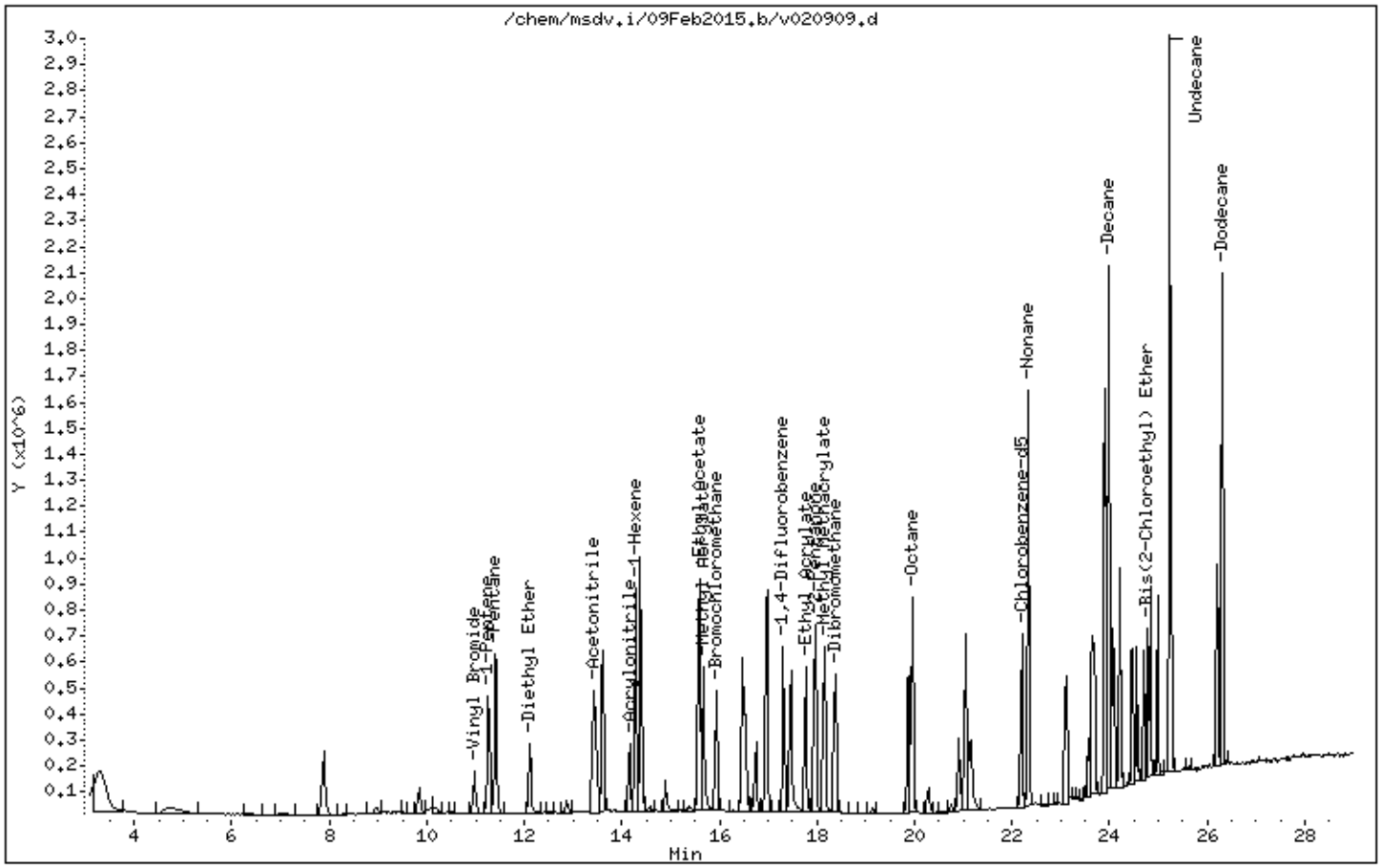
Instrument: msdv.i

Sample Info: 250mL# 2687-193

Operator: ef

Column phase: RTx-624

Column diameter: 0.32



Eurofins Air Toxics Inc.

TO15/Modified TO-14A

Data file : /chem/msdv.i/27Jan2015.b/v012709.d
Lab Smp Id: ICAL Client Smp ID: Level 9
Inj Date : 27-JAN-2015 14:21
Operator : ef Inst ID: msdv.i
Smp Info : 250mL# 2716-22
Misc Info : 5.0ppbv (5.0ppbv) AT-1
Comment : Low Level GC-MS
Method : /chem/msdv.i/27Jan2015.b/v15l0123b.m
Meth Date : 28-Jan-2015 08:22 efinn Quant Type: ISTD
Cal Date : 27-JAN-2015 14:21 Cal File: v012709.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	15.934 (1.000)	130	230970	5.00000		80.00- 120.00	100.00
15.934	15.934 (1.000)	128	182935			0.00- 30.00	79.20
15.934	15.934 (1.000)	49	485747			0.00- 30.00	210.31
* 71 1,4-Difluorobenzene						CAS #: 540-36-3	
17.305	17.305 (1.000)	114	947338	5.00000		80.00- 120.00	100.00
17.305	17.305 (1.000)	88	140610			0.00- 30.00	14.84
* 92 Chlorobenzene-d5						CAS #: 3114-55-4	
22.205	22.205 (1.000)	117	747374	5.00000		80.00- 120.00	100.00
22.205	22.205 (1.000)	82	419329			0.00- 30.00	56.11
1 Freon 134a						CAS #: 811-97-2	
4.560	4.560 (0.286)	83	220225	5.00000	4.837	80.00- 120.00	100.00
4.560	4.560 (0.286)	69	171717			0.00- 30.00	77.97
2 Freon 152A						CAS #: 75-37-6	
5.051	5.051 (0.317)	65	144369	5.00000	4.718	80.00- 120.00	100.00
5.051	5.051 (0.317)	51	377962			0.00- 30.00	261.80

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		
5.844	5.844 (0.367)	51	615768	5.00000	4.842	80.00- 120.00	100.00
5.806	5.806 (0.364)	67	58571			0.00- 30.00	9.51
5.882	5.882 (0.369)	85	2716			0.00- 30.00	0.44
218 Freon 142b					CAS #: 75-68-3		
7.015	7.015 (0.440)	65	560696	5.00000	4.800	80.00- 120.00	100.00
7.015	7.015 (0.440)	45	179277			0.00- 30.00	31.97
14 Freon 21					CAS #: 75-43-4		
11.280	11.280 (0.708)	67	659158	5.00000	4.854	80.00- 120.00	100.00
11.280	11.280 (0.708)	69	194438			0.00- 30.00	29.50
11.280	11.280 (0.708)	47	96382			0.00- 30.00	14.62
216 1,2-Dichlorotrifluoroethane					CAS #: 354-23-4		
12.349	12.349 (0.775)	117	474548	5.00000	4.826	80.00- 120.00	100.00
12.321	12.321 (0.773)	67	656268			0.00- 30.00	138.29
217 Freon 123					CAS #: 306-83-2		
12.514	12.514 (0.785)	83	727139	5.00000	4.922	80.00- 120.00	100.00
12.514	12.514 (0.785)	133	165761			0.00- 30.00	22.80
12.514	12.514 (0.785)	85	488874			0.00- 30.00	67.23
211 Cyclopentene					CAS #: 142-29-0		
13.420	13.420 (0.842)	67	587182	5.00000	4.886	80.00- 120.00	100.00
13.420	13.420 (0.842)	68	221586			0.00- 30.00	37.74
13.420	13.420 (0.842)	53	189979			0.00- 30.00	32.35
210 1-Propanol					CAS #: 71-23-8		
14.903	14.903 (0.935)	59	96420	5.00000	6.633	80.00- 120.00	100.00
14.903	14.903 (0.935)	42	94525			0.00- 30.00	98.03
14.903	14.903 (0.935)	41	61088			0.00- 30.00	63.36
215 2,2-Dichloropropane					CAS #: 594-20-7		
15.551	15.551 (0.976)	77	590506	5.00000	4.898	80.00- 120.00	100.00
15.551	15.551 (0.976)	79	193773			0.00- 30.00	32.81
15.551	15.551 (0.976)	97	129352			0.00- 30.00	21.91
56 1,1-Dicholoropropene					CAS #: 563-58-6		
16.458	16.458 (1.033)	110	212747	5.00000	5.195	80.00- 120.00	100.00
16.458	16.458 (1.033)	75	520411			0.00- 30.00	244.61
214 Isobutanol					CAS #: 78-83-1		
16.458	16.458 (1.033)	41	564959	5.00000	7.566	80.00- 120.00	100.00
16.519	16.519 (1.037)	43	523602			0.00- 30.00	92.68
16.519	16.519 (1.037)	39	356653			0.00- 30.00	63.13

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
206 1-Butanol					CAS #: 71-36-3		
17.470	17.470 (1.010)	56	689925	5.00000	6.676	80.00- 120.00	100.00
17.470	17.470 (1.010)	41	512059			0.00- 30.00	74.22
17.470	17.470 (1.010)	43	411862			0.00- 30.00	59.70
83 1,3-Dichloropropane					CAS #: 142-28-9		
21.045	21.045 (1.216)	76	610866	5.00000	4.987	80.00- 120.00	100.00
21.045	21.045 (1.216)	41	634168			0.00- 30.00	103.81
21.045	21.045 (1.216)	78	186361			0.00- 30.00	30.51
204 Butyl Acetate					CAS #: 123-86-4		
21.116	21.116 (1.220)	56	296487	5.00000	5.394	80.00- 120.00	100.00
21.116	21.116 (1.220)	73	66723			0.00- 30.00	22.50
21.116	21.116 (1.220)	43	774303			0.00- 30.00	261.16
91 1,1,1,2-Tetrachloroethane					CAS #: 630-20-6		
22.343	22.343 (1.006)	131	631577	5.00000	4.706	80.00- 120.00	100.00
22.343	22.343 (1.006)	117	420390			0.00- 30.00	66.56
22.343	22.343 (1.006)	95	228827			0.00- 30.00	36.23
205 2-Heptanone					CAS #: 110-43-0		
23.111	23.111 (1.041)	58	595777	5.00000	4.791	80.00- 120.00	100.00
23.111	23.111 (1.041)	43	1172304			0.00- 30.00	196.77
209 Cyclohexanone					CAS #: 108-94-1		
23.652	23.652 (1.065)	55	570840	5.00000	5.131	80.00- 120.00	100.00
23.652	23.652 (1.065)	98	160233			0.00- 30.00	28.07
23.652	23.652 (1.065)	42	395756			0.00- 30.00	69.33
97 Bromobenzene					CAS #: 108-86-1		
23.884	23.884 (1.076)	156	499112	5.00000	4.668	80.00- 120.00	100.00
23.884	23.884 (1.076)	158	480489			0.00- 30.00	96.27
23.884	23.884 (1.076)	77	911629			0.00- 30.00	182.65
105 1,2,3-Trichloropropane					CAS #: 96-18-4		
23.910	23.910 (1.077)	110	268709	5.00000	4.724	80.00- 120.00	100.00
23.910	23.910 (1.077)	75	727546			0.00- 30.00	270.76
23.910	23.910 (1.077)	61	251525			0.00- 30.00	93.60
107 2-Chlorotoluene					CAS #: 95-49-8		
24.065	24.065 (1.084)	126	301836	5.00000	4.756	80.00- 120.00	100.00
24.065	24.065 (1.084)	91	778942			0.00- 30.00	258.07
24.065	24.065 (1.084)	65	83110			0.00- 30.00	27.53
109 4-Chlorotoluene					CAS #: 106-43-4		
24.194	24.194 (1.090)	126	243445	5.00000	4.704	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
109 4-Chlorotoluene (continued)							
24.194	24.194 (1.090)	91	654549			0.00- 30.00	268.87
24.194	24.194 (1.090)	63	96997			0.00- 30.00	39.84
213 Diisobutyl Ketone					CAS #: 108-83-8		
24.220	24.220 (1.091)	57	809862	5.00000	3.541	80.00- 120.00	100.00
24.220	24.220 (1.091)	85	469599			0.00- 30.00	57.99
115 tert-Butylbenzene					CAS #: 98-06-6		
24.478	24.478 (1.102)	119	667775	5.00000	4.645	80.00- 120.00	100.00
24.478	24.478 (1.102)	134	166275			0.00- 30.00	24.90
24.478	24.478 (1.102)	91	394730			0.00- 30.00	59.11
212 Pentachloroethane					CAS #: 76-01-7		
24.555	24.555 (1.106)	167	422000	5.00000	4.813	80.00- 120.00	100.00
24.555	24.555 (1.106)	117	401206			0.00- 30.00	95.07
24.555	24.555 (1.106)	169	196514			0.00- 30.00	46.57
119 sec-Butylbenzene					CAS #: 135-98-8		
24.710	24.710 (1.113)	105	842260	5.00000	4.495	80.00- 120.00	100.00
24.710	24.710 (1.113)	134	195000			0.00- 30.00	23.15
24.710	24.710 (1.113)	91	126438			0.00- 30.00	15.01
116 p-Cymene					CAS #: 99-87-6		
24.835	24.835 (1.118)	119	750383	5.00000	3.931	80.00- 120.00	100.00
24.835	24.835 (1.118)	134	199676			0.00- 30.00	26.61
24.835	24.835 (1.118)	91	152810			0.00- 30.00	20.36
121 1,2,3-trimethylbenzene					CAS #: 526-73-8		
24.992	24.992 (1.125)	120	348202	5.00000	4.086	80.00- 120.00	100.00
24.992	24.992 (1.125)	105	718701			0.00- 30.00	206.40
24.992	24.992 (1.125)	77	81412			0.00- 30.00	23.38
123 Butylbenzene					CAS #: 104-51-8		
25.261	25.261 (1.138)	134	236726	5.00000	3.606	80.00- 120.00	100.00
25.261	25.261 (1.138)	91	750832			0.00- 30.00	317.17
25.261	25.261 (1.138)	92	394875			0.00- 30.00	166.81
129 1,2-dibromo-3-chloropropane					CAS #: 96-12-8		
26.203	26.203 (1.180)	157	424845	5.00000	4.858	80.00- 120.00	100.00
26.203	26.203 (1.180)	75	354451			0.00- 30.00	83.43
26.203	26.203 (1.180)	155	335995			0.00- 30.00	79.09

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdv.i
Lab File ID: v012709.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: ef
Method File: /chem/msdv.i/27Jan2015.b/v15l0123b.m
Misc Info: 5.0ppbv (5.0ppbv) AT-1

Calibration Date: 27-JAN-2015
Calibration Time: 14:21
Client Smp ID: Level 9
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
54 Bromochloromethan	230970	138582	323358	230970	0.00
71 1,4-Difluorobenze	947338	568403	1326273	947338	0.00
92 Chlorobenzene-d5	747374	448424	1046324	747374	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/27Jan2015.b/v012709.d

Date : 27-JAN-2015 14:21

Client ID: Level 9

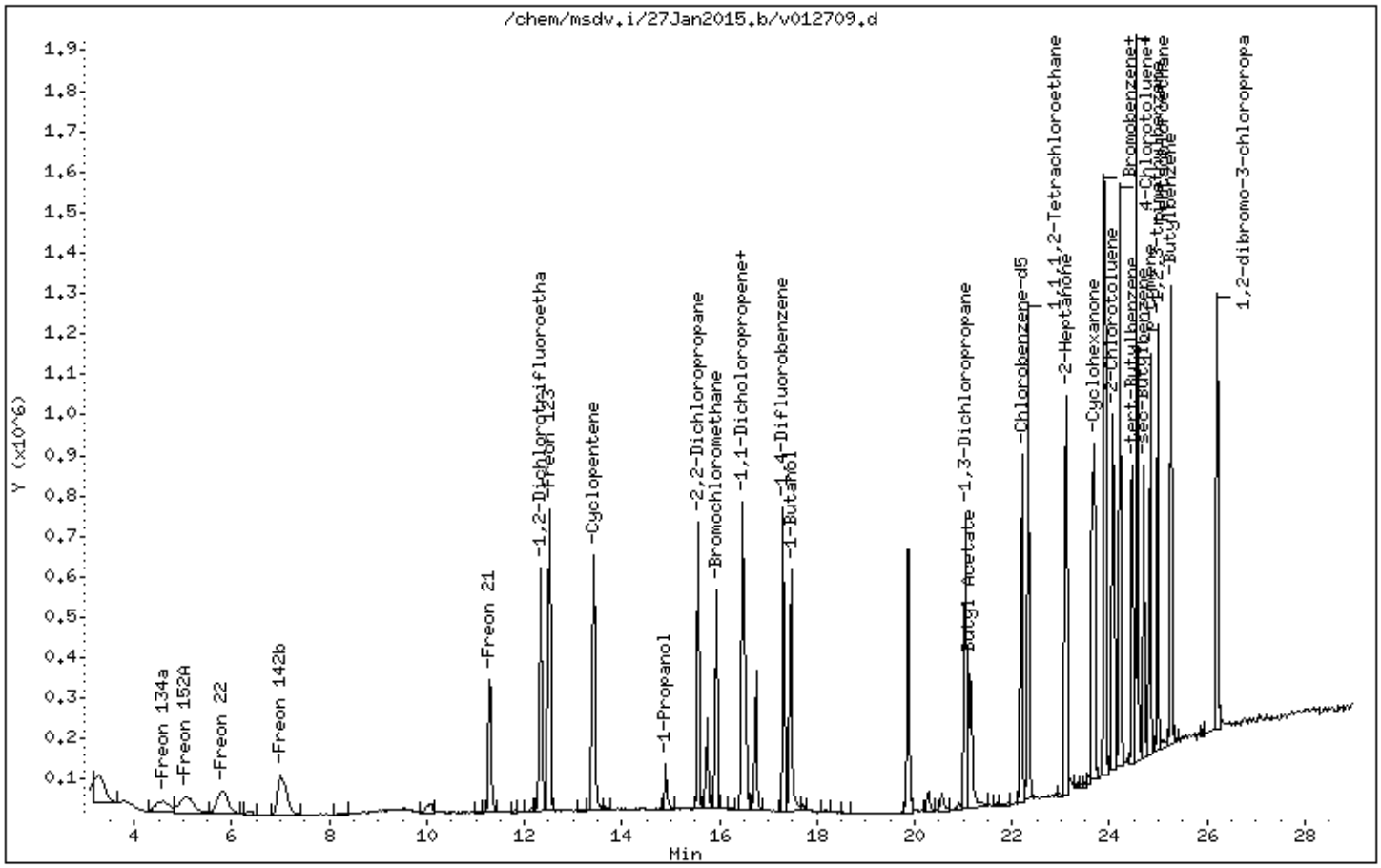
Instrument: msdv.i

Sample Info: 250mL# 2716-22

Operator: ef

Column phase: RTx-624

Column diameter: 0.32



Eurofins Air Toxics Inc.

TO15/Modified TO-14A

Data file : /chem/msdv.i/23Jan2015.b/v012310.d
Lab Smp Id: ICAL Client Smp ID: Level 9
Inj Date : 23-JAN-2015 19:41
Operator : gh Inst ID: msdv.i
Smp Info : 25mL# 2687-244
Misc Info : 5.0ppbv (50ppbv)
Comment : Low Level GC-MS
Method : /chem/msdv.i/23Jan2015.b/v15l0123a.m
Meth Date : 23-Jan-2015 23:20 ghehir Quant Type: ISTD
Cal Date : 23-JAN-2015 19:41 Cal File: v012310.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	15.934 (1.000)	130	250660	5.00000		80.00- 120.00	100.00
15.933	15.934 (1.000)	128	193066			48.09- 108.09	77.02
15.933	15.934 (1.000)	49	543500			196.04- 256.04	216.83
* 71 1,4-Difluorobenzene					CAS #: 540-36-3		
17.305	17.305 (1.000)	114	1006086	5.00000		80.00- 120.00	100.00
17.305	17.305 (1.000)	88	157869			0.00- 45.23	15.69
* 92 Chlorobenzene-d5					CAS #: 3114-55-4		
22.205	22.205 (1.000)	117	807172	5.00000		80.00- 120.00	100.00
22.205	22.205 (1.000)	82	453452			23.86- 83.86	56.18
$ 65 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
16.756	16.756 (1.052)	65	384644	5.00000	4.997	80.00- 120.00	100.00
16.756	16.756 (1.052)	67	204687			25.13- 85.13	53.21
$ 80 Toluene-d8					CAS #: 2037-26-5		
19.856	19.879 (1.147)	98	958159	5.00000	5.086	80.00- 120.00	100.00
19.856	19.879 (1.147)	70	103601			0.00- 40.74	10.81

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
$ 80 Toluene-d8 (continued)							
19.856	19.879 (1.147)	100	612678			36.73- 96.73	63.94
$ 106 Bromofluorobenzene					CAS #: 460-00-4		
23.704	23.704 (1.067)	174	387704	5.00000	5.217	80.00- 120.00	100.00
23.678	23.704 (1.066)	95	495513			95.17- 155.17	127.81
23.704	23.704 (1.067)	176	378936			64.74- 124.74	97.74
3 Propylene					CAS #: 115-07-1		
4.674	4.674 (0.293)	41	558475	5.00000	5.225	80.00- 120.00	100.00
4.674	4.674 (0.293)	42	389767			37.91- 97.91	69.79
4.674	4.674 (0.293)	39	380582			38.58- 98.58	68.15
4 Dichlorodifluoromethane/Fr12					CAS #: 75-71-8		
5.202	5.202 (0.326)	85	1094132	5.00000	5.290	80.00- 120.00	100.00
5.202	5.202 (0.326)	87	351991			1.73- 61.73	32.17
6 Freon 114					CAS #: 76-14-2		
6.713	6.713 (0.421)	135	927773	5.00000	5.387	80.00- 120.00	100.00
6.713	6.713 (0.421)	137	290060			2.34- 62.34	31.26
6.713	6.713 (0.421)	85	1150912			93.53- 153.53	124.05
8 Chloromethane					CAS #: 74-87-3		
7.052	7.053 (0.443)	50	693364	5.00000	5.083	80.00- 120.00	100.00
7.052	7.053 (0.443)	52	220897			1.57- 61.57	31.86
9 Butane					CAS #: 106-97-8		
7.885	7.885 (0.495)	58	128209	5.00000	5.409	80.00- 120.00	100.00
7.885	7.885 (0.495)	43	1135015			879.44- 939.44	885.28
10 Vinyl Chloride					CAS #: 75-01-4		
8.009	8.009 (0.503)	62	558413	5.00000	5.494	80.00- 120.00	100.00
8.009	8.009 (0.503)	64	166362			0.00- 59.13	29.79
11 1,3-Butadiene					CAS #: 106-99-0		
8.257	8.257 (0.518)	54	545343	5.00000	5.476	80.00- 120.00	100.00
8.257	8.257 (0.518)	39	545199			70.79- 130.79	99.97
12 Bromomethane					CAS #: 74-83-9		
9.834	9.835 (0.617)	94	363055	5.00000	5.848	80.00- 120.00	100.00
9.834	9.835 (0.617)	96	343548			64.45- 124.45	94.63
17 Chloroethane					CAS #: 75-00-3		
10.340	10.340 (0.649)	64	249679	5.00000	5.652	80.00- 120.00	100.00
10.340	10.340 (0.649)	66	72460			0.00- 59.36	29.02

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	536148	5.00000	5.496	80.00- 120.00	100.00
10.533	10.533 (0.661)	43	894764			135.34- 195.34	166.89
10.533	10.533 (0.661)	42	761965			110.64- 170.64	142.12
20 Trichlorofluoromethane/Fr11					CAS #: 75-69-4		
11.184	11.184 (0.702)	101	1169908	5.00000	5.328	80.00- 120.00	100.00
11.184	11.184 (0.702)	103	746685			34.40- 94.40	63.82
24 Ethanol					CAS #: 64-17-5		
12.101	12.102 (0.760)	45	281004	5.00000	6.207	80.00- 120.00	100.00
12.101	12.102 (0.760)	46	101279			9.93- 69.93	36.04
12.101	12.102 (0.760)	43	50368			0.00- 50.31	17.92
30 1,1-Dichloroethene					CAS #: 75-35-4		
12.568	12.569 (0.789)	98	291992	5.00000	5.600	80.00- 120.00	100.00
12.568	12.569 (0.789)	61	975350			316.34- 376.34	334.03
12.568	12.569 (0.789)	96	460540			133.12- 193.12	157.72
28 Freon 113					CAS #: 76-13-1		
12.568	12.569 (0.789)	151	831984	5.00000	5.317	80.00- 120.00	100.00
12.568	12.569 (0.789)	153	541211			33.38- 93.38	65.05
12.568	12.569 (0.789)	101	966949			85.19- 145.19	116.22
31 Acetone					CAS #: 67-64-1		
12.816	12.816 (0.804)	58	293231	5.00000	4.811	80.00- 120.00	100.00
12.816	12.816 (0.804)	43	1065328			326.03- 386.03	363.31
33 Carbon Disulfide					CAS #: 75-15-0		
12.926	12.926 (0.811)	76	1187672	5.00000	5.481	80.00- 120.00	100.00
35 3-Chloroprene					CAS #: 107-05-1		
13.365	13.365 (0.839)	76	179584	5.00000	5.547	80.00- 120.00	100.00
13.365	13.365 (0.839)	41	886966			456.88- 516.88	493.90
34 2-Propanol					CAS #: 67-63-0		
13.173	13.173 (0.827)	45	1243888	5.00000	5.351	80.00- 120.00	100.00
13.173	13.173 (0.827)	43	213841			0.00- 47.97	17.19
13.173	13.173 (0.827)	59	39724			0.00- 33.25	3.19
37 Methylene Chloride					CAS #: 75-09-2		
13.640	13.640 (0.856)	84	384703	5.00000	5.232	80.00- 120.00	100.00
13.640	13.640 (0.856)	49	897081			198.57- 258.57	233.19
13.640	13.640 (0.856)	51	275851			41.48- 101.48	71.70
38 tert-butyl alcohol					CAS #: 75-65-0		
13.859	13.859 (0.870)	59	1267479	5.00000	4.610	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
   ==   ====== ========  ====  ======== =======  =======   ============    =====

   38 tert-butyl alcohol (continued)
 13.859  13.859 (0.870)    41    303443                     0.00-  53.29    23.94
 13.859  13.859 (0.870)    57    142876                     0.00-  40.72    11.27
-------------------------------------------------------------------------------
   39 MTBE                                          CAS #: 1634-04-4
 13.997  13.997 (0.878)    73   1259583 5.00000    5.499  80.00- 120.00   100.00
 13.997  13.997 (0.878)    57    460677                     6.35-  66.35    36.57
 13.997  13.997 (0.878)    41    443905                     5.74-  65.74    35.24
-------------------------------------------------------------------------------
   40 trans-1,2-Dichloroethene                      CAS #: 156-60-5
 14.051  14.052 (0.882)    98    299404 5.00000    5.589  80.00- 120.00   100.00
 14.051  14.052 (0.882)    61    918060                   272.66- 332.66   306.63
 14.051  14.052 (0.882)    96    473721                   128.53- 188.53   158.22
-------------------------------------------------------------------------------
   43 Hexane                                        CAS #: 110-54-3
 14.381  14.381 (0.903)    57   1144608 5.00000    5.469  80.00- 120.00   100.00
 14.381  14.381 (0.903)    43    815179                    41.32- 101.32    71.22
 14.381  14.381 (0.903)    86    111359                     0.00-  40.13     9.73
-------------------------------------------------------------------------------
   45 Isopropyl ether                               CAS #: 108-20-3
 14.738  14.738 (0.925)    45   2712074 5.00000    5.493  80.00- 120.00   100.00
 14.738  14.738 (0.925)    87    413444                     0.00-  45.33    15.24
 14.738  14.738 (0.925)    59    250541                     0.00-  39.01     9.24
-------------------------------------------------------------------------------
   46 1,1-Dichloroethane                            CAS #: 75-34-3
 14.765  14.765 (0.927)    63   1039843 5.00000    5.405  80.00- 120.00   100.00
 14.765  14.765 (0.927)    65    320687                     0.00-  59.80    30.84
-------------------------------------------------------------------------------
   47 Vinyl Acetate                                 CAS #: 108-05-4
 14.793  14.793 (0.928)    86    113893 5.00000    6.354  80.00- 120.00   100.00
 14.793  14.793 (0.928)    42    251033                   166.91- 226.91   220.41
 14.793  14.793 (0.928)    43   3290640                  2680.08-2740.08  2889.24
-------------------------------------------------------------------------------
   49 Ethyl-tert-butyl ether                        CAS #: 637-92-3
 15.240  15.240 (0.956)    59   2093086 5.00000    5.460  80.00- 120.00   100.00
 15.240  15.240 (0.956)    87    607089                     0.00-  59.23    29.00
 15.240  15.240 (0.956)    41    435009                     0.00-  49.94    20.78
-------------------------------------------------------------------------------
   50 cis-1,2-Dichloroethene                        CAS #: 156-59-2
 15.592  15.592 (0.979)    98    320396 5.00000    5.248  80.00- 120.00   100.00
 15.592  15.592 (0.979)    61    876455                   242.79- 302.79   273.55
 15.592  15.592 (0.979)    96    518519                   127.33- 187.33   161.84
-------------------------------------------------------------------------------
   51 2-Butanone                                    CAS #: 78-93-3
 15.592  15.572 (0.979)    72    217077 5.00000    5.457  80.00- 120.00   100.00
 15.572  15.572 (0.977)    43   1548910                   687.17- 747.17   713.53
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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)
 15.572  15.572 (0.977)    57    108060                    23.39-  83.39    49.78
-------------------------------------------------------------------------------
   53 Tetrahydrofuran                                CAS #: 109-99-9
 15.933  15.934 (1.000)    42    914567 5.00000    5.109  80.00- 120.00   100.00
 15.933  15.934 (1.000)    71    202680                     0.00-  51.83    22.16
 15.933  15.934 (1.000)    72    227146                     0.00-  54.16    24.84
-------------------------------------------------------------------------------
   55 Chloroform                                     CAS #: 67-66-3
 15.995  15.995 (1.004)    83    966222 5.00000    5.395  80.00- 120.00   100.00
 15.995  15.995 (1.004)    85    637401                    35.10-  95.10    65.97
-------------------------------------------------------------------------------
   57 Cyclohexane                                    CAS #: 110-82-7
 16.242  16.242 (1.019)    84    643964 5.00000    5.234  80.00- 120.00   100.00
 16.242  16.242 (1.019)    56   1237423                   160.85- 220.85   192.16
 16.242  16.242 (1.019)    41    688887                    75.49- 135.49   106.98
-------------------------------------------------------------------------------
   58 1,1,1-Trichloroethane                          CAS #: 71-55-6
 16.242  16.242 (1.019)    97   1037401 5.00000    5.151  80.00- 120.00   100.00
 16.242  16.242 (1.019)    99    668731                    33.24-  93.24    64.46
-------------------------------------------------------------------------------
   59 Carbon Tetrachloride                           CAS #: 56-23-5
 16.457  16.458 (1.033)   119   1033167 5.00000    5.759  80.00- 120.00   100.00
 16.457  16.458 (1.033)   117   1000218                    67.96- 127.96    96.81
                   Sum of Peak Amounts =            5.76
-------------------------------------------------------------------------------
   63 2,2,4-Trimethylpentane                         CAS #: 540-84-1
 16.728  16.728 (1.050)    56   1174228 5.00000    5.273  80.00- 120.00   100.00
 16.728  16.728 (1.050)    57   3509157                   274.66- 334.66   298.85
 16.728  16.728 (1.050)    41    993347                    54.64- 114.64    84.60
-------------------------------------------------------------------------------
   64 Benzene                                        CAS #: 71-43-2
 16.756  16.756 (0.968)    78   1327921 5.00000    5.156  80.00- 120.00   100.00
 16.756  16.756 (0.968)    77    307179                     0.00-  53.39    23.13
-------------------------------------------------------------------------------
   66 tert-amyl methyl ether                         CAS #: 994-05-8
 16.811  16.811 (0.971)    87    356703 5.00000    5.445  80.00- 120.00   100.00
 16.811  16.811 (0.971)    73   1417400                   366.24- 426.24   397.36
 16.811  16.811 (0.971)    55    572372                   130.44- 190.44   160.46
-------------------------------------------------------------------------------
   68 1,2-Dichloroethane                             CAS #: 107-06-2
 16.865  16.865 (0.975)    62    806670 5.00000    5.281  80.00- 120.00   100.00
 16.865  16.865 (0.975)    64    238569                     0.00-  59.72    29.57
-------------------------------------------------------------------------------
   69 Heptane                                        CAS #: 142-82-5
 16.975  16.975 (0.981)    57    657966 5.00000    5.484  80.00- 120.00   100.00
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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)	100	139697			0.00- 51.16	21.23
16.975	16.975 (0.981)	43	1422123			180.62- 240.62	216.14
72 Trichloroethene					CAS #: 79-01-6		
17.717	17.717 (1.024)	130	714314	5.00000	5.568	80.00- 120.00	100.00
17.717	17.717 (1.024)	95	662558			62.98- 122.98	92.75
17.717	17.717 (1.024)	97	436497			29.44- 89.44	61.11
73 Methylcyclohexane					CAS #: 108-87-2		
17.964	17.964 (1.038)	83	863378	5.00000	5.427	80.00- 120.00	100.00
17.964	17.964 (1.038)	98	420297			16.83- 76.83	48.68
17.964	17.964 (1.038)	55	1116332			97.27- 157.27	129.30
74 1,2-Dichloropropane					CAS #: 78-87-5		
18.156	18.156 (1.049)	63	685404	5.00000	5.529	80.00- 120.00	100.00
18.156	18.156 (1.049)	62	509340			43.06- 103.06	74.31
18.156	18.156 (1.049)	41	451659			36.58- 96.58	65.90
75 1,4-Dioxane					CAS #: 123-91-1		
18.266	18.266 (1.056)	88	353107	5.00000	4.672	80.00- 120.00	100.00
18.266	18.266 (1.056)	58	353959			74.73- 134.73	100.24
18.266	18.266 (1.056)	57	116213			4.83- 64.83	32.91
77 Bromodichloromethane					CAS #: 75-27-4		
18.568	18.568 (1.073)	83	1020395	5.00000	5.487	80.00- 120.00	100.00
18.568	18.568 (1.073)	85	659064			33.73- 93.73	64.59
78 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
19.386	19.386 (1.120)	75	847941	5.00000	5.526	80.00- 120.00	100.00
19.386	19.386 (1.120)	77	265436			0.66- 60.66	31.30
19.386	19.386 (1.120)	39	630103			43.67- 103.67	74.31
79 4-Methyl-2-pentanone					CAS #: 108-10-1		
19.587	19.588 (1.132)	43	1797385	5.00000	5.021	80.00- 120.00	100.00
19.587	19.588 (1.132)	58	584627			3.17- 63.17	32.53
19.587	19.588 (1.132)	85	179830			0.00- 40.09	10.01
81 Toluene					CAS #: 108-88-3		
19.991	19.991 (1.155)	91	1559591	5.00000	5.347	80.00- 120.00	100.00
19.991	19.991 (1.155)	92	919042			28.34- 88.34	58.93
82 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
20.435	20.435 (0.920)	75	755346	5.00000	5.441	80.00- 120.00	100.00
20.435	20.435 (0.920)	77	241736			1.98- 61.98	32.00
20.435	20.435 (0.920)	39	542658			41.22- 101.22	71.84

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		
20.722	20.722 (0.933)	97	626576	5.00000	5.678	80.00- 120.00	100.00
20.758	20.722 (0.935)	99	392642			31.80- 91.80	62.66
20.722	20.722 (0.933)	83	525481			51.12- 111.12	83.87
86 Tetrachloroethene					CAS #: 127-18-4		
20.901	20.901 (0.941)	166	903329	5.00000	5.317	80.00- 120.00	100.00
20.901	20.901 (0.941)	129	687379			46.61- 106.61	76.09
20.901	20.901 (0.941)	131	702836			46.38- 106.38	77.81
87 2-Hexanone					CAS #: 591-78-6		
21.044	21.009 (0.948)	58	721236	5.00000	5.019	80.00- 120.00	100.00
21.044	21.009 (0.948)	43	1546901			184.27- 244.27	214.48
21.044	21.009 (0.948)	100	94619			0.00- 44.17	13.12
89 Dibromochloromethane					CAS #: 124-48-1		
21.367	21.367 (0.962)	129	1193331	5.00000	5.610	80.00- 120.00	100.00
21.367	21.367 (0.962)	127	919694			48.71- 108.71	77.07
90 1,2-Dibromoethane					CAS #: 106-93-4		
21.583	21.583 (0.972)	107	1040127	5.00000	5.670	80.00- 120.00	100.00
21.583	21.583 (0.972)	109	985712			63.80- 123.80	94.77
93 Chlorobenzene					CAS #: 108-90-7		
22.233	22.233 (1.001)	112	1366045	5.00000	5.268	80.00- 120.00	100.00
22.233	22.233 (1.001)	114	427065			1.75- 61.75	31.26
22.233	22.233 (1.001)	77	746491			24.73- 84.73	54.65
95 Ethyl Benzene					CAS #: 100-41-4		
22.315	22.315 (1.005)	106	642412	5.00000	5.254	80.00- 120.00	100.00
22.315	22.315 (1.005)	91	1855628			260.31- 320.31	288.85
96 m,p-Xylene					CAS #: 108-38-3		
22.452	22.452 (1.011)	106	631458	5.00000	5.127	80.00- 120.00	100.00
22.452	22.452 (1.011)	91	1214066			157.23- 217.23	192.26
100 o-Xylene					CAS #: 95-47-6		
23.001	23.002 (1.036)	106	609157	5.00000	5.425	80.00- 120.00	100.00
23.001	23.002 (1.036)	91	1189697			167.76- 227.76	195.30
101 Styrene					CAS #: 100-42-5		
23.029	23.029 (1.037)	104	899727	5.00000	5.484	80.00- 120.00	100.00
23.029	23.029 (1.037)	78	436452			17.96- 77.96	48.51
102 Bromoform					CAS #: 75-25-2		
23.331	23.331 (1.051)	173	1089565	5.00000	5.772	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	550108			22.04- 82.04	50.49
103 Cumene					CAS #: 98-82-8		
23.413	23.441 (1.054)	105	1690906	5.00000	5.406	80.00- 120.00	100.00
23.441	23.441 (1.056)	120	518497			0.00- 59.93	30.66
108 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
23.833	23.833 (1.073)	83	1112133	5.00000	4.864	80.00- 120.00	100.00
23.833	23.833 (1.073)	85	706389			34.94- 94.94	63.52
111 Propylbenzene					CAS #: 103-65-1		
23.910	23.910 (1.077)	91	1482743	5.00000	4.991	80.00- 120.00	100.00
23.910	23.910 (1.077)	120	386584			0.00- 56.93	26.07
113 4-Ethyltoluene					CAS #: 622-96-8		
24.039	24.039 (1.083)	105	1127332	5.00000	5.005	80.00- 120.00	100.00
24.039	24.039 (1.083)	120	388156			3.10- 63.10	34.43
114 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
24.116	24.116 (1.086)	105	1144636	5.00000	4.867	80.00- 120.00	100.00
24.116	24.116 (1.086)	120	595741			21.49- 81.49	52.05
120 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
24.529	24.529 (1.105)	105	1024745	5.00000	4.826	80.00- 120.00	100.00
24.529	24.529 (1.105)	120	508375			19.48- 79.48	49.61
122 1,3-Dichlorobenzene					CAS #: 541-73-1		
24.902	24.902 (1.121)	146	797964	5.00000	5.104	80.00- 120.00	100.00
24.902	24.902 (1.121)	148	502203			32.42- 92.42	62.94
24.902	24.902 (1.121)	111	307063			8.90- 68.90	38.48
124 1,4-Dichlorobenzene					CAS #: 106-46-7		
24.992	24.992 (1.125)	146	714083	5.00000	4.135	80.00- 120.00	100.00
24.992	24.992 (1.125)	148	450232			34.01- 94.01	63.05
24.992	24.992 (1.125)	111	267465			8.58- 68.58	37.46
127 alpha-chlorotoluene					CAS #: 100-44-7		
25.127	25.127 (1.132)	91	1029499	5.00000	5.675	80.00- 120.00	100.00
25.127	25.127 (1.132)	126	241440			0.00- 54.03	23.45
128 1,2-Dichlorobenzene					CAS #: 95-50-1		
25.396	25.396 (1.144)	146	718429	5.00000	4.453	80.00- 120.00	100.00
25.396	25.396 (1.144)	148	462758			32.53- 92.53	64.41
25.396	25.396 (1.144)	111	298450			10.66- 70.66	41.54

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	574251	5.00000	3.694	80.00- 120.00	100.00
27.077	27.077 (1.219)	182	553199			66.06- 126.06	96.33
132 Hexachlorobutadiene					CAS #: 87-68-3		
27.167	27.167 (1.223)	225	402549	5.00000	3.808	80.00- 120.00	100.00
27.167	27.167 (1.223)	223	252147			32.60- 92.60	62.64
133 Naphthalene					CAS #: 91-20-3		
27.368	27.368 (1.232)	128	100614	0.50000	0.4359	80.00- 120.00	100.00
27.368	27.368 (1.232)	127	16011			0.00- 44.62	15.91

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdv.i
Lab File ID: v012310.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: gh
Method File: /chem/msdv.i/23Jan2015.b/v15l0123a.m
Misc Info: 5.0ppbv (50ppbv)

Calibration Date: 23-JAN-2015
Calibration Time: 20:25
Client Smp ID: Level 9
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
54 Bromochloromethan	253263	151958	354568	250660	-1.03
71 1,4-Difluorobenze	1019789	611873	1427705	1006086	-1.34
92 Chlorobenzene-d5	833326	499996	1166656	807172	-3.14

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/23Jan2015.b/v012310.d

Date : 23-JAN-2015 19:41

Client ID: Level 9

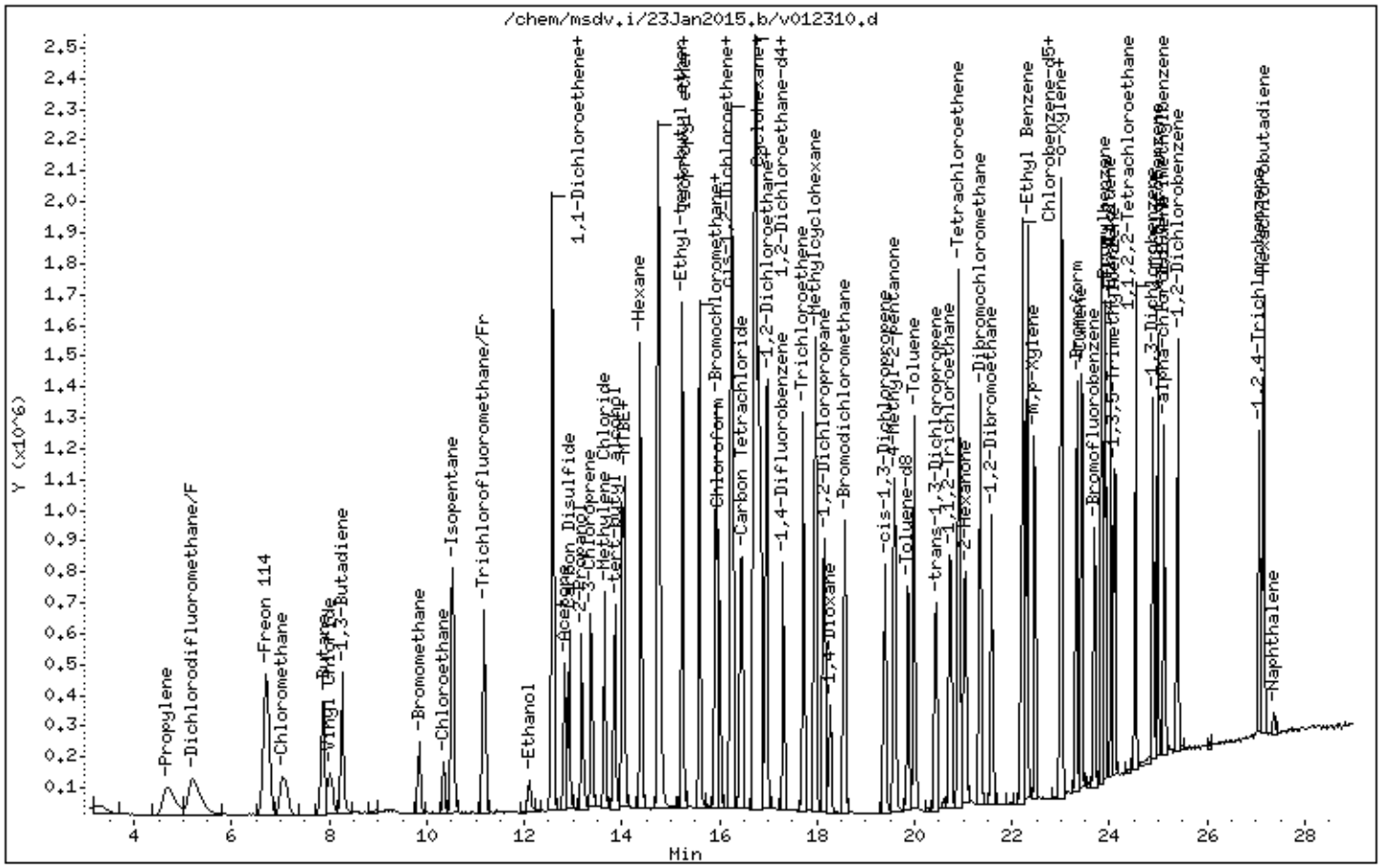
Instrument: msdv.i

Sample Info: 25mL# 2687-244

Operator: gh

Column phase: RTx-624

Column diameter: 0.32



Eurofins Air Toxics Inc.

TO15/Modified TO-14A

Data file : /chem/msdv.i/23Jan2015.b/v012311.d
Lab Smp Id: ICAL Client Smp ID: Level 10
Inj Date : 23-JAN-2015 20:25
Operator : gd Inst ID: msdv.i
Smp Info : 50mL# 2687-244
Misc Info : 10ppbv (50ppbv)
Comment : Low Level GC-MS
Method : /chem/msdv.i/23Jan2015.b/v15l0123a.m
Meth Date : 23-Jan-2015 23:20 ghehir Quant Type: ISTD
Cal Date : 23-JAN-2015 20:25 Cal File: v012311.d
Als bottle: 1 Calibration Sample, Level: 10
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	253263	5.00000		80.00- 120.00	100.00
15.934	15.934 (1.000)	128	197781			48.09- 108.09	78.09
15.934	15.934 (1.000)	49	572466			196.04- 256.04	226.04
* 71 1,4-Difluorobenzene					CAS #: 540-36-3		
17.305	17.305 (1.000)	114	1019789	5.00000		80.00- 120.00	100.00
17.305	17.305 (1.000)	88	155303			0.00- 45.23	15.23
* 92 Chlorobenzene-d5					CAS #: 3114-55-4		
22.205	22.205 (1.000)	117	833326	5.00000		80.00- 120.00	100.00
22.205	22.205 (1.000)	82	448858			23.86- 83.86	53.86
$ 65 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
16.756	16.756 (1.052)	65	404009	5.00000	5.089	80.00- 120.00	100.00
16.756	16.756 (1.052)	67	222736			25.13- 85.13	55.13
$ 80 Toluene-d8					CAS #: 2037-26-5		
19.879	19.879 (1.149)	98	954058	5.00000	4.996	80.00- 120.00	100.00
19.857	19.879 (1.147)	70	102445			0.00- 40.74	10.74

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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)
 19.857  19.879 (1.147)   100    636609                    36.73-  96.73    66.73
-------------------------------------------------------------------------------
$ 106 Bromofluorobenzene                            CAS #: 460-00-4
 23.704  23.704 (1.067)   174    394766 5.00000    5.055  80.00- 120.00   100.00
 23.678  23.704 (1.066)    95    494140                   95.17- 155.17   125.17
 23.704  23.704 (1.067)   176    373993                   64.74- 124.74    94.74
-------------------------------------------------------------------------------
    3 Propylene                                     CAS #: 115-07-1
  4.674   4.674 (0.293)    41   1031161 10.0000    9.941  80.00- 120.00   100.00
  4.674   4.674 (0.293)    42    700238                   37.91-  97.91    67.91
  4.674   4.674 (0.293)    39    707158                   38.58-  98.58    68.58
-------------------------------------------------------------------------------
    4 Dichlorodifluoromethane/Fr12                  CAS #: 75-71-8
  5.202   5.202 (0.326)    85   2010332 10.0000    9.957  80.00- 120.00   100.00
  5.202   5.202 (0.326)    87    637883                    1.73-  61.73    31.73
-------------------------------------------------------------------------------
    6 Freon 114                                     CAS #: 76-14-2
  6.713   6.713 (0.421)   135   1690089 10.0000    9.957  80.00- 120.00   100.00
  6.713   6.713 (0.421)   137    546636                    2.34-  62.34    32.34
  6.713   6.713 (0.421)    85   2087746                   93.53- 153.53   123.53
-------------------------------------------------------------------------------
    8 Chloromethane                                 CAS #: 74-87-3
  7.053   7.053 (0.443)    50   1262362 10.0000    9.686  80.00- 120.00   100.00
  7.053   7.053 (0.443)    52    398573                    1.57-  61.57    31.57
-------------------------------------------------------------------------------
    9 Butane                                        CAS #: 106-97-8
  7.885   7.885 (0.495)    58    228474 10.0000    9.861  80.00- 120.00   100.00
  7.885   7.885 (0.495)    43   2077844                  879.44- 939.44   909.44
-------------------------------------------------------------------------------
   10 Vinyl Chloride                                CAS #: 75-01-4
  8.009   8.009 (0.503)    62   1023632 10.0000   10.217  80.00- 120.00   100.00
  8.009   8.009 (0.503)    64    298142                    0.00-  59.13    29.13
-------------------------------------------------------------------------------
   11 1,3-Butadiene                                 CAS #: 106-99-0
  8.257   8.257 (0.518)    54    978410 10.0000    9.938  80.00- 120.00   100.00
  8.257   8.257 (0.518)    39    986099                   70.79- 130.79   100.79
-------------------------------------------------------------------------------
   12 Bromomethane                                  CAS #: 74-83-9
  9.835   9.835 (0.617)    94    667363 10.0000   10.712  80.00- 120.00   100.00
  9.835   9.835 (0.617)    96    630317                   64.45- 124.45    94.45
-------------------------------------------------------------------------------
   17 Chloroethane                                  CAS #: 75-00-3
 10.340  10.340 (0.649)    64    455867 10.0000   10.469  80.00- 120.00   100.00
 10.340  10.340 (0.649)    66    133823                    0.00-  59.36    29.36
-------------------------------------------------------------------------------
```

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	991020	10.0000	10.323	80.00- 120.00	100.00
10.533	10.533 (0.661)	43	1638529			135.34- 195.34	165.34
10.533	10.533 (0.661)	42	1393764			110.64- 170.64	140.64
20 Trichlorofluoromethane/Fr11					CAS #: 75-69-4		
11.184	11.184 (0.702)	101	2111688	10.0000	9.812	80.00- 120.00	100.00
11.184	11.184 (0.702)	103	1359879			34.40- 94.40	64.40
24 Ethanol					CAS #: 64-17-5		
12.102	12.102 (0.760)	45	504649	10.0000	10.906	80.00- 120.00	100.00
12.102	12.102 (0.760)	46	201496			9.93- 69.93	39.93
12.102	12.102 (0.760)	43	102502			0.00- 50.31	20.31
30 1,1-Dichloroethene					CAS #: 75-35-4		
12.569	12.569 (0.789)	98	519481	10.0000	10.044	80.00- 120.00	100.00
12.569	12.569 (0.789)	61	1799155			316.34- 376.34	346.34
12.569	12.569 (0.789)	96	847398			133.12- 193.12	163.12
28 Freon 113					CAS #: 76-13-1		
12.569	12.569 (0.789)	151	1524756	10.0000	9.899	80.00- 120.00	100.00
12.569	12.569 (0.789)	153	966319			33.38- 93.38	63.38
12.569	12.569 (0.789)	101	1756389			85.19- 145.19	115.19
31 Acetone					CAS #: 67-64-1		
12.816	12.816 (0.804)	58	554502	10.0000	9.482	80.00- 120.00	100.00
12.816	12.816 (0.804)	43	1974185			326.03- 386.03	356.03
33 Carbon Disulfide					CAS #: 75-15-0		
12.926	12.926 (0.811)	76	2176094	10.0000	10.142	80.00- 120.00	100.00
35 3-Chloroprene					CAS #: 107-05-1		
13.365	13.365 (0.839)	76	339530	10.0000	10.384	80.00- 120.00	100.00
13.365	13.365 (0.839)	41	1653096			456.88- 516.88	486.88
34 2-Propanol					CAS #: 67-63-0		
13.173	13.173 (0.827)	45	2329280	10.0000	10.064	80.00- 120.00	100.00
13.173	13.173 (0.827)	43	418535			0.00- 47.97	17.97
13.173	13.173 (0.827)	59	75702			0.00- 33.25	3.25
37 Methylene Chloride					CAS #: 75-09-2		
13.640	13.640 (0.856)	84	724936	10.0000	10.039	80.00- 120.00	100.00
13.640	13.640 (0.856)	49	1656989			198.57- 258.57	228.57
13.640	13.640 (0.856)	51	518153			41.48- 101.48	71.48
38 tert-butyl alcohol					CAS #: 75-65-0		
13.859	13.859 (0.870)	59	2372867	10.0000	9.128	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
   ==   ====== ========  ====  ======== =======  =======   ============    =====

   38 tert-butyl alcohol (continued)
 13.859  13.859 (0.870)    41    552620                     0.00-  53.29    23.29
 13.859  13.859 (0.870)    57    254400                     0.00-  40.72    10.72
-------------------------------------------------------------------------------
   39 MTBE                                          CAS #: 1634-04-4
 13.997  13.997 (0.878)    73   2294815 10.0000   10.163  80.00- 120.00   100.00
 13.997  13.997 (0.878)    57    834063                     6.35-  66.35    36.35
 13.997  13.997 (0.878)    41    820236                     5.74-  65.74    35.74
-------------------------------------------------------------------------------
   40 trans-1,2-Dichloroethene                      CAS #: 156-60-5
 14.052  14.052 (0.882)    98    557078 10.0000   10.464  80.00- 120.00   100.00
 14.052  14.052 (0.882)    61   1686037                   272.66- 332.66   302.66
 14.052  14.052 (0.882)    96    883147                   128.53- 188.53   158.53
-------------------------------------------------------------------------------
   43 Hexane                                        CAS #: 110-54-3
 14.381  14.381 (0.903)    57   2058433 10.0000   10.080  80.00- 120.00   100.00
 14.381  14.381 (0.903)    43   1468075                    41.32- 101.32    71.32
 14.381  14.381 (0.903)    86    208560                     0.00-  40.13    10.13
-------------------------------------------------------------------------------
   45 Isopropyl ether                               CAS #: 108-20-3
 14.738  14.738 (0.925)    45   4937121 10.0000   10.261  80.00- 120.00   100.00
 14.738  14.738 (0.925)    87    756757                     0.00-  45.33    15.33
 14.738  14.738 (0.925)    59    445046                     0.00-  39.01     9.01
-------------------------------------------------------------------------------
   46 1,1-Dichloroethane                            CAS #: 75-34-3
 14.765  14.765 (0.927)    63   1914641 10.0000   10.117  80.00- 120.00   100.00
 14.765  14.765 (0.927)    65    570626                     0.00-  59.80    29.80
-------------------------------------------------------------------------------
   47 Vinyl Acetate                                 CAS #: 108-05-4
 14.793  14.793 (0.928)    86    223291 10.0000   11.710  80.00- 120.00   100.00
 14.793  14.793 (0.928)    42    439693                   166.91- 226.91   196.91
 14.793  14.793 (0.928)    43   6051359                  2680.08-2740.08  2710.08
-------------------------------------------------------------------------------
   49 Ethyl-tert-butyl ether                        CAS #: 637-92-3
 15.240  15.240 (0.956)    59   3850390 10.0000   10.228  80.00- 120.00   100.00
 15.240  15.240 (0.956)    87   1125402                    0.00-  59.23    29.23
 15.240  15.240 (0.956)    41    767730                     0.00-  49.94    19.94
-------------------------------------------------------------------------------
   50 cis-1,2-Dichloroethene                        CAS #: 156-59-2
 15.592  15.592 (0.979)    98    595106 10.0000    9.974  80.00- 120.00   100.00
 15.592  15.592 (0.979)    61   1623410                   242.79- 302.79   272.79
 15.592  15.592 (0.979)    96    936266                   127.33- 187.33   157.33
-------------------------------------------------------------------------------
   51 2-Butanone                                    CAS #: 78-93-3
 15.572  15.572 (0.977)    72    399635 10.0000   10.081  80.00- 120.00   100.00
 15.572  15.572 (0.977)    43   2866074                   687.17- 747.17   717.17
```

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

   51 2-Butanone (continued)
 15.572  15.572 (0.977)    57    213367                    23.39-  83.39    53.39
-------------------------------------------------------------------------------
   53 Tetrahydrofuran                                CAS #: 109-99-9
 15.934  15.934 (1.000)    42   1686319 10.0000    9.747  80.00- 120.00   100.00
 15.934  15.934 (1.000)    71    368043                     0.00-  51.83    21.83
 15.934  15.934 (1.000)    72    407491                     0.00-  54.16    24.16
-------------------------------------------------------------------------------
   55 Chloroform                                     CAS #: 67-66-3
 15.995  15.995 (1.004)    83   1777613 10.0000   10.075  80.00- 120.00   100.00
 15.995  15.995 (1.004)    85   1157226                    35.10-  95.10    65.10
-------------------------------------------------------------------------------
   57 Cyclohexane                                    CAS #: 110-82-7
 16.242  16.242 (1.019)    84   1193991 10.0000    9.958  80.00- 120.00   100.00
 16.242  16.242 (1.019)    56   2278738                   160.85- 220.85   190.85
 16.242  16.242 (1.019)    41   1259580                    75.49- 135.49   105.49
-------------------------------------------------------------------------------
   58 1,1,1-Trichloroethane                          CAS #: 71-55-6
 16.242  16.242 (1.019)    97   1928804 10.0000    9.812  80.00- 120.00   100.00
 16.242  16.242 (1.019)    99   1219815                    33.24-  93.24    63.24
-------------------------------------------------------------------------------
   59 Carbon Tetrachloride                           CAS #: 56-23-5
 16.458  16.458 (1.033)   119   1897698 10.0000   10.576  80.00- 120.00   100.00
 16.458  16.458 (1.033)   117   1859001                    67.96- 127.96    97.96
                   Sum of Peak Amounts =            10.6
-------------------------------------------------------------------------------
   63 2,2,4-Trimethylpentane                         CAS #: 540-84-1
 16.728  16.728 (1.050)    56   2140419 10.0000    9.889  80.00- 120.00   100.00
 16.728  16.728 (1.050)    57   6520913                   274.66- 334.66   304.66
 16.728  16.728 (1.050)    41   1811614                    54.64- 114.64    84.64
-------------------------------------------------------------------------------
   64 Benzene                                        CAS #: 71-43-2
 16.756  16.756 (0.968)    78   2449375 10.0000    9.675  80.00- 120.00   100.00
 16.756  16.756 (0.968)    77    572948                     0.00-  53.39    23.39
-------------------------------------------------------------------------------
   66 tert-amyl methyl ether                         CAS #: 994-05-8
 16.811  16.811 (0.971)    87    659749 10.0000   10.141  80.00- 120.00   100.00
 16.811  16.811 (0.971)    73   2614168                   366.24- 426.24   396.24
 16.811  16.811 (0.971)    55   1058484                   130.44- 190.44   160.44
-------------------------------------------------------------------------------
   68 1,2-Dichloroethane                             CAS #: 107-06-2
 16.865  16.865 (0.975)    62   1480569 10.0000    9.825  80.00- 120.00   100.00
 16.865  16.865 (0.975)    64    440068                     0.00-  59.72    29.72
-------------------------------------------------------------------------------
   69 Heptane                                        CAS #: 142-82-5
 16.975  16.975 (0.981)    57   1231717 10.0000   10.276  80.00- 120.00   100.00
```

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)	100	260661			0.00- 51.16	21.16
16.948	16.975 (0.979)	43	2594278			180.62- 240.62	210.62
72 Trichloroethene					CAS #: 79-01-6		
17.717	17.717 (1.024)	130	1316337	10.0000	10.188	80.00- 120.00	100.00
17.717	17.717 (1.024)	95	1223939			62.98- 122.98	92.98
17.717	17.717 (1.024)	97	782491			29.44- 89.44	59.44
73 Methylcyclohexane					CAS #: 108-87-2		
17.964	17.964 (1.038)	83	1591493	10.0000	10.032	80.00- 120.00	100.00
17.964	17.964 (1.038)	98	745226			16.83- 76.83	46.83
17.964	17.964 (1.038)	55	2025525			97.27- 157.27	127.27
74 1,2-Dichloropropane					CAS #: 78-87-5		
18.156	18.156 (1.049)	63	1247140	10.0000	10.037	80.00- 120.00	100.00
18.156	18.156 (1.049)	62	911184			43.06- 103.06	73.06
18.156	18.156 (1.049)	41	830379			36.58- 96.58	66.58
75 1,4-Dioxane					CAS #: 123-91-1		
18.266	18.266 (1.056)	88	628086	10.0000	8.681	80.00- 120.00	100.00
18.266	18.266 (1.056)	58	657823			74.73- 134.73	104.73
18.266	18.266 (1.056)	57	218785			4.83- 64.83	34.83
77 Bromodichloromethane					CAS #: 75-27-4		
18.568	18.568 (1.073)	83	1902545	10.0000	10.155	80.00- 120.00	100.00
18.568	18.568 (1.073)	85	1212405			33.73- 93.73	63.73
78 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
19.386	19.386 (1.120)	75	1591175	10.0000	10.250	80.00- 120.00	100.00
19.386	19.386 (1.120)	77	487826			0.66- 60.66	30.66
19.386	19.386 (1.120)	39	1172217			43.67- 103.67	73.67
79 4-Methyl-2-pentanone					CAS #: 108-10-1		
19.588	19.588 (1.132)	43	3382610	10.0000	9.549	80.00- 120.00	100.00
19.588	19.588 (1.132)	58	1121890			3.17- 63.17	33.17
19.588	19.588 (1.132)	85	341437			0.00- 40.09	10.09
81 Toluene					CAS #: 108-88-3		
19.991	19.991 (1.155)	91	2878189	10.0000	9.977	80.00- 120.00	100.00
19.991	19.991 (1.155)	92	1679002			28.34- 88.34	58.34
82 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
20.435	20.435 (0.920)	75	1399858	10.0000	9.859	80.00- 120.00	100.00
20.435	20.435 (0.920)	77	447722			1.98- 61.98	31.98
20.399	20.435 (0.919)	39	996918			41.22- 101.22	71.22

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		
20.722	20.722 (0.933)	97	1144799	10.0000	10.093	80.00- 120.00	100.00
20.758	20.722 (0.935)	99	707498			31.80- 91.80	61.80
20.722	20.722 (0.933)	83	928702			51.12- 111.12	81.12
86 Tetrachloroethene					CAS #: 127-18-4		
20.901	20.901 (0.941)	166	1626874	10.0000	9.528	80.00- 120.00	100.00
20.901	20.901 (0.941)	129	1246379			46.61- 106.61	76.61
20.901	20.901 (0.941)	131	1242595			46.38- 106.38	76.38
87 2-Hexanone					CAS #: 591-78-6		
21.009	21.009 (0.946)	58	1401910	10.0000	9.480	80.00- 120.00	100.00
21.009	21.009 (0.946)	43	3003895			184.27- 244.27	214.27
21.045	21.009 (0.948)	100	198710			0.00- 44.17	14.17
89 Dibromochloromethane					CAS #: 124-48-1		
21.367	21.367 (0.962)	129	2254712	10.0000	10.225	80.00- 120.00	100.00
21.367	21.367 (0.962)	127	1774711			48.71- 108.71	78.71
90 1,2-Dibromoethane					CAS #: 106-93-4		
21.583	21.583 (0.972)	107	1915250	10.0000	10.111	80.00- 120.00	100.00
21.583	21.583 (0.972)	109	1796487			63.80- 123.80	93.80
93 Chlorobenzene					CAS #: 108-90-7		
22.233	22.233 (1.001)	112	2510547	10.0000	9.642	80.00- 120.00	100.00
22.233	22.233 (1.001)	114	797048			1.75- 61.75	31.75
22.233	22.233 (1.001)	77	1374038			24.73- 84.73	54.73
95 Ethyl Benzene					CAS #: 100-41-4		
22.315	22.315 (1.005)	106	1175994	10.0000	9.558	80.00- 120.00	100.00
22.315	22.315 (1.005)	91	3414058			260.31- 320.31	290.31
96 m,p-Xylene					CAS #: 108-38-3		
22.452	22.452 (1.011)	106	1200242	10.0000	9.658	80.00- 120.00	100.00
22.452	22.452 (1.011)	91	2247266			157.23- 217.23	187.23
100 o-Xylene					CAS #: 95-47-6		
23.002	23.002 (1.036)	106	1132590	10.0000	9.914	80.00- 120.00	100.00
23.002	23.002 (1.036)	91	2239837			167.76- 227.76	197.76
101 Styrene					CAS #: 100-42-5		
23.029	23.029 (1.037)	104	1704603	10.0000	10.006	80.00- 120.00	100.00
23.029	23.029 (1.037)	78	817579			17.96- 77.96	47.96
102 Bromoform					CAS #: 75-25-2		
23.331	23.331 (1.051)	173	2012226	10.0000	10.200	80.00- 120.00	100.00

```
                                          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   1047217                   22.04-  82.04    52.04
-------------------------------------------------------------------------------
  103 Cumene                                        CAS #: 98-82-8
 23.441  23.441 (1.056)   105   3156503 10.0000    9.772  80.00- 120.00   100.00
 23.441  23.441 (1.056)   120    944832                    0.00-  59.93    29.93
-------------------------------------------------------------------------------
  108 1,1,2,2-Tetrachloroethane                     CAS #: 79-34-5
 23.833  23.833 (1.073)    83   2019896 10.0000    8.893  80.00- 120.00   100.00
 23.833  23.833 (1.073)    85   1311756                   34.94-  94.94    64.94
-------------------------------------------------------------------------------
  111 Propylbenzene                                 CAS #: 103-65-1
 23.910  23.910 (1.077)    91   2827432 10.0000    9.398  80.00- 120.00   100.00
 23.910  23.910 (1.077)   120    761416                    0.00-  56.93    26.93
-------------------------------------------------------------------------------
  113 4-Ethyltoluene                                CAS #: 622-96-8
 24.039  24.039 (1.083)   105   2141695 10.0000    9.390  80.00- 120.00   100.00
 24.039  24.039 (1.083)   120    708963                    3.10-  63.10    33.10
-------------------------------------------------------------------------------
  114 1,3,5-Trimethylbenzene                        CAS #: 108-67-8
 24.116  24.116 (1.086)   105   2053915 10.0000    9.120  80.00- 120.00   100.00
 24.116  24.116 (1.086)   120   1057645                   21.49-  81.49    51.49
-------------------------------------------------------------------------------
  120 1,2,4-Trimethylbenzene                        CAS #: 95-63-6
 24.529  24.529 (1.105)   105   1745022 10.0000    8.777  80.00- 120.00   100.00
 24.529  24.529 (1.105)   120    863518                   19.48-  79.48    49.48
-------------------------------------------------------------------------------
  122 1,3-Dichlorobenzene                           CAS #: 541-73-1
 24.902  24.902 (1.121)   146   1517192 10.0000    9.570  80.00- 120.00   100.00
 24.902  24.902 (1.121)   148    946970                   32.42-  92.42    62.42
 24.902  24.902 (1.121)   111    590230                    8.90-  68.90    38.90
-------------------------------------------------------------------------------
  124 1,4-Dichlorobenzene                           CAS #: 106-46-7
 24.992  24.992 (1.125)   146   1342835 10.0000    7.995  80.00- 120.00   100.00
 24.992  24.992 (1.125)   148    859609                   34.01-  94.01    64.01
 24.992  24.992 (1.125)   111    518030                    8.58-  68.58    38.58
-------------------------------------------------------------------------------
  127 alpha-chlorotoluene                           CAS #: 100-44-7
 25.127  25.127 (1.132)    91   2012771 10.0000   10.332  80.00- 120.00   100.00
 25.127  25.127 (1.132)   126    483582                    0.00-  54.03    24.03
-------------------------------------------------------------------------------
  128 1,2-Dichlorobenzene                           CAS #: 95-50-1
 25.396  25.396 (1.144)   146   1374369 10.0000    8.608  80.00- 120.00   100.00
 25.396  25.396 (1.144)   148    859432                   32.53-  92.53    62.53
 25.396  25.396 (1.144)   111    558831                   10.66-  70.66    40.66
-------------------------------------------------------------------------------
```

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	1078958	10.0000	7.461	80.00- 120.00	100.00
27.077	27.077 (1.219)	182	1036479			66.06- 126.06	96.06
132 Hexachlorobutadiene					CAS #: 87-68-3		
27.167	27.167 (1.223)	225	797767	10.0000	7.631	80.00- 120.00	100.00
27.167	27.167 (1.223)	223	499421			32.60- 92.60	62.60
133 Naphthalene					CAS #: 91-20-3		
27.368	27.368 (1.232)	128	192746	1.00000	0.8892	80.00- 120.00	100.00
27.368	27.368 (1.232)	127	28171			0.00- 44.62	14.62

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdv.i
Lab File ID: v012311.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: gd
Method File: /chem/msdv.i/23Jan2015.b/v15l0123a.m
Misc Info: 10ppbv (50ppbv)

Calibration Date: 23-JAN-2015
Calibration Time: 20:25
Client Smp ID: Level 10
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
54 Bromochloromethan	253263	151958	354568	253263	0.00
71 1,4-Difluorobenze	1019789	611873	1427705	1019789	0.00
92 Chlorobenzene-d5	833326	499996	1166656	833326	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/23Jan2015.b/v012311.d

Date : 23-JAN-2015 20:25

Client ID: Level 10

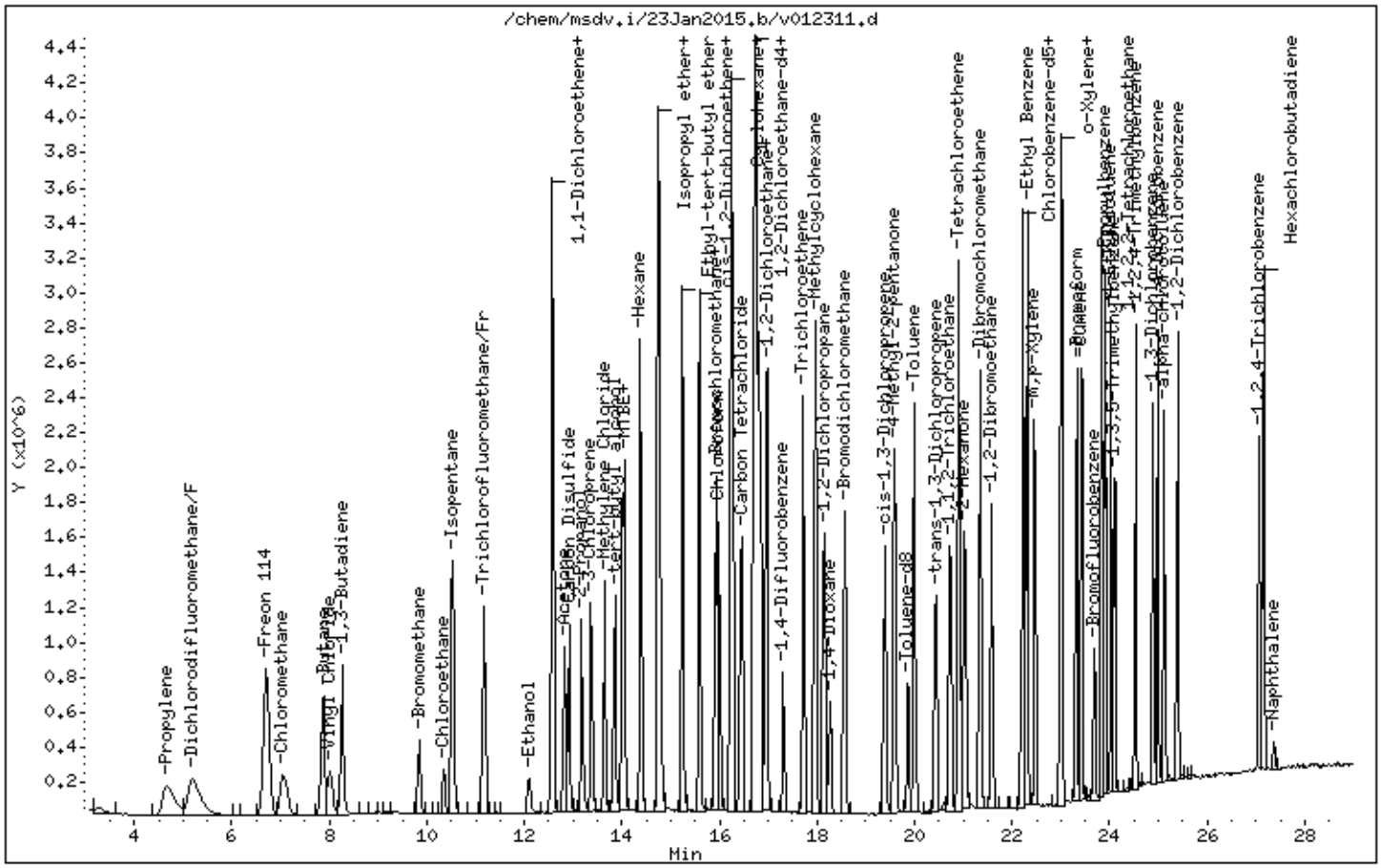
Instrument: msdv.i

Sample Info: 50mL# 2687-244

Operator: gd

Column phase: RTx-624

Column diameter: 0.32



Eurofins Air Toxics Inc.

TO15/Modified TO-14A

Data file : /chem/msdv.i/23Jan2015.b/v012312.d
Lab Smp Id: ICAL Client Smp ID: Level 11
Inj Date : 23-JAN-2015 21:15
Operator : gd Inst ID: msdv.i
Smp Info : 100mL# 2687-244; ICAL; Level 11
Misc Info : 20ppbv (50ppbv)
Comment : Low Level GC-MS
Method : /chem/msdv.i/23Jan2015.b/v15l0123a.m
Meth Date : 23-Jan-2015 23:13 ghehir Quant Type: ISTD
Cal Date : 23-JAN-2015 21:15 Cal File: v012312.d
Als bottle: 1 Calibration Sample, Level: 11
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	271310	5.00000		80.00- 120.00	100.00
15.934	15.934 (1.000)	128	204197			47.40- 107.40	75.26
15.934	15.934 (1.000)	49	603874			167.26- 227.26	222.58
* 71 1,4-Difluorobenzene						CAS #: 540-36-3	
17.305	17.305 (1.000)	114	1034601	5.00000		80.00- 120.00	100.00
17.305	17.305 (1.000)	88	160988			0.00- 46.18	15.56
* 92 Chlorobenzene-d5						CAS #: 3114-55-4	
22.205	22.205 (1.000)	117	847788	5.00000		80.00- 120.00	100.00
22.205	22.205 (1.000)	82	463347			25.73- 85.73	54.65
$ 65 1,2-Dichloroethane-d4						CAS #: 17060-07-0	
16.756	16.756 (1.052)	65	424707	5.00000	5.083	80.00- 120.00	100.00
16.756	16.756 (1.052)	67	260928			26.63- 86.63	61.44
$ 80 Toluene-d8						CAS #: 2037-26-5	
19.857	19.857 (1.147)	98	971686	5.00000	5.014	80.00- 120.00	100.00
19.857	19.857 (1.147)	70	101969			0.00- 40.74	10.49

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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)
 19.857  19.857 (1.147)   100    633654                    33.76-  93.76    65.21
-------------------------------------------------------------------------------
$ 106 Bromofluorobenzene                            CAS #: 460-00-4
 23.704  23.704 (1.067)   174    415394 5.00000    5.273  80.00- 120.00   100.00
 23.678  23.678 (1.066)    95    527216                  108.04- 168.04   126.92
 23.704  23.704 (1.067)   176    402107                    67.04- 127.04    96.80
-------------------------------------------------------------------------------
    3 Propylene                                     CAS #: 115-07-1
  4.711   4.711 (0.296)    41   2014887 20.0000   17.879  80.00- 120.00   100.00
  4.711   4.711 (0.296)    42   1371665                    36.23-  96.23    68.08
  4.674   4.674 (0.293)    39   1382657                    40.03- 100.03    68.62
-------------------------------------------------------------------------------
    4 Dichlorodifluoromethane/Fr12                  CAS #: 75-71-8
  5.202   5.202 (0.326)    85   3920353 20.0000   17.882  80.00- 120.00   100.00
  5.202   5.202 (0.326)    87   1256490                     2.42-  62.42    32.05
-------------------------------------------------------------------------------
    6 Freon 114                                     CAS #: 76-14-2
  6.713   6.713 (0.421)   135   3320592 20.0000   18.096  80.00- 120.00   100.00
  6.750   6.750 (0.424)   137   1061091                     1.35-  61.35    31.95
  6.713   6.713 (0.421)    85   4125174                   100.64- 160.64   124.23
-------------------------------------------------------------------------------
    8 Chloromethane                                 CAS #: 74-87-3
  7.090   7.090 (0.445)    50   2428975 20.0000   16.954  80.00- 120.00   100.00
  7.053   7.053 (0.443)    52    770104                     2.12-  62.12    31.70
-------------------------------------------------------------------------------
    9 Butane                                        CAS #: 106-97-8
  7.885   7.885 (0.495)    58    452008 20.0000   18.049  80.00- 120.00   100.00
  7.854   7.854 (0.493)    43   4074138                   783.54- 843.54   901.34
-------------------------------------------------------------------------------
   10 Vinyl Chloride                                CAS #: 75-01-4
  8.009   8.009 (0.503)    62   2001995 20.0000   18.475  80.00- 120.00   100.00
  8.009   8.009 (0.503)    64    579486                     0.00-  59.60    28.95
-------------------------------------------------------------------------------
   11 1,3-Butadiene                                 CAS #: 106-99-0
  8.257   8.257 (0.518)    54   1962565 20.0000   18.482  80.00- 120.00   100.00
  8.257   8.257 (0.518)    39   1941560                    66.22- 126.22    98.93
-------------------------------------------------------------------------------
   12 Bromomethane                                  CAS #: 74-83-9
  9.835   9.835 (0.617)    94   1316649 20.0000   19.661  80.00- 120.00   100.00
  9.835   9.835 (0.617)    96   1212467                    63.75- 123.75    92.09
-------------------------------------------------------------------------------
   17 Chloroethane                                  CAS #: 75-00-3
 10.340  10.340 (0.649)    64    879947 20.0000   18.702  80.00- 120.00   100.00
 10.340  10.340 (0.649)    66    260606                     0.00-  59.96    29.62
-------------------------------------------------------------------------------
```

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	1927022	20.0000	18.575	80.00- 120.00	100.00
10.533	10.533 (0.661)	43	3211536			125.71- 185.71	166.66
10.533	10.533 (0.661)	42	2730103			102.09- 162.09	141.67
20 Trichlorofluoromethane/Fr11					CAS #: 75-69-4		
11.160	11.160 (0.700)	101	4152033	20.0000	17.792	80.00- 120.00	100.00
11.184	11.184 (0.702)	103	2701346			35.13- 95.13	65.06
24 Ethanol					CAS #: 64-17-5		
12.074	12.074 (0.758)	45	1010662	20.0000	20.498	80.00- 120.00	100.00
12.074	12.074 (0.758)	46	382042			10.23- 70.23	37.80
12.074	12.074 (0.758)	43	200301			0.00- 50.98	19.82
30 1,1-Dichloroethene					CAS #: 75-35-4		
12.569	12.569 (0.789)	98	1051114	20.0000	18.840	80.00- 120.00	100.00
12.569	12.569 (0.789)	61	3503849			302.86- 362.86	333.35
12.569	12.569 (0.789)	96	1651802			132.09- 192.09	157.15
28 Freon 113					CAS #: 76-13-1		
12.569	12.569 (0.789)	151	3000046	20.0000	18.008	80.00- 120.00	100.00
12.569	12.569 (0.789)	153	1909833			33.83- 93.83	63.66
12.569	12.569 (0.789)	101	3453836			86.15- 146.15	115.13
31 Acetone					CAS #: 67-64-1		
12.816	12.816 (0.804)	58	1105191	20.0000	17.314	80.00- 120.00	100.00
12.816	12.816 (0.804)	43	3904666			310.23- 370.23	353.30
33 Carbon Disulfide					CAS #: 75-15-0		
12.926	12.926 (0.811)	76	4335059	20.0000	18.768	80.00- 120.00	100.00
35 3-Chloroprene					CAS #: 107-05-1		
13.365	13.365 (0.839)	76	692623	20.0000	19.806	80.00- 120.00	100.00
13.365	13.365 (0.839)	41	3360046			401.48- 461.48	485.12
34 2-Propanol					CAS #: 67-63-0		
13.173	13.173 (0.827)	45	4766679	20.0000	19.147	80.00- 120.00	100.00
13.173	13.173 (0.827)	43	827633			0.00- 46.97	17.36
13.173	13.173 (0.827)	59	149314			0.00- 33.46	3.13
37 Methylene Chloride					CAS #: 75-09-2		
13.640	13.640 (0.856)	84	1431134	20.0000	18.291	80.00- 120.00	100.00
13.640	13.640 (0.856)	49	3284205			177.28- 237.28	229.48
13.640	13.640 (0.856)	51	995814			32.93- 92.93	69.58
38 tert-butyl alcohol					CAS #: 75-65-0		
13.859	13.859 (0.870)	59	4728739	20.0000	16.571	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   1088476                     0.00-  51.49    23.02
 13.859  13.859 (0.870)    57    516257                     0.00-  40.02    10.92
-------------------------------------------------------------------------------
   39 MTBE                                          CAS #: 1634-04-4
 13.997  13.997 (0.878)    73   4531591 20.0000   18.543  80.00- 120.00   100.00
 13.997  13.997 (0.878)    57   1632608                     3.26-  63.26    36.03
 13.997  13.997 (0.878)    41   1583730                     2.63-  62.63    34.95
-------------------------------------------------------------------------------
   40 trans-1,2-Dichloroethene                      CAS #: 156-60-5
 14.052  14.052 (0.882)    98   1082446 20.0000   18.878  80.00- 120.00   100.00
 14.052  14.052 (0.882)    61   3253834                   262.11- 322.11   300.60
 14.052  14.052 (0.882)    96   1703899                   128.28- 188.28   157.41
-------------------------------------------------------------------------------
   43 Hexane                                        CAS #: 110-54-3
 14.381  14.381 (0.903)    57   3968193 20.0000   17.886  80.00- 120.00   100.00
 14.381  14.381 (0.903)    43   2849351                    36.69-  96.69    71.80
 14.381  14.381 (0.903)    86    413798                     0.00-  41.09    10.43
-------------------------------------------------------------------------------
   45 Isopropyl ether                               CAS #: 108-20-3
 14.738  14.738 (0.925)    45   9555557 20.0000   18.269  80.00- 120.00   100.00
 14.738  14.738 (0.925)    87   1506237                     0.00-  47.17    15.76
 14.738  14.738 (0.925)    59    879965                     0.00-  39.85     9.21
-------------------------------------------------------------------------------
   46 1,1-Dichloroethane                            CAS #: 75-34-3
 14.765  14.765 (0.927)    63   3767446 20.0000   18.385  80.00- 120.00   100.00
 14.765  14.765 (0.927)    65   1127578                     0.34-  60.34    29.93
-------------------------------------------------------------------------------
   47 Vinyl Acetate                                 CAS #: 108-05-4
 14.793  14.793 (0.928)    86    437200 20.0000   21.977  80.00- 120.00   100.00
 14.793  14.793 (0.928)    42    905697                   147.97- 207.97   207.16
 14.793  14.793 (0.928)    43  12040988                  2354.84-2414.84  2754.11
-------------------------------------------------------------------------------
   49 Ethyl-tert-butyl ether                        CAS #: 637-92-3
 15.240  15.240 (0.956)    59   7550306 20.0000   18.531  80.00- 120.00   100.00
 15.240  15.240 (0.956)    87   2240810                     0.00-  59.53    29.68
 15.240  15.240 (0.956)    41   1537822                     0.00-  48.76    20.37
-------------------------------------------------------------------------------
   50 cis-1,2-Dichloroethene                        CAS #: 156-59-2
 15.592  15.592 (0.979)    98   1152070 20.0000   17.815  80.00- 120.00   100.00
 15.592  15.592 (0.979)    61   3185371                   232.32- 292.32   276.49
 15.592  15.592 (0.979)    96   1819475                   127.66- 187.66   157.93
-------------------------------------------------------------------------------
   51 2-Butanone                                    CAS #: 78-93-3
 15.572  15.572 (0.977)    72    820060 20.0000   19.229  80.00- 120.00   100.00
 15.572  15.572 (0.977)    43   5676108                   621.62- 681.62   692.16
```

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

   51 2-Butanone (continued)
 15.572  15.572 (0.977)    57    395085                    17.09-  77.09    48.18
-------------------------------------------------------------------------------
   53 Tetrahydrofuran                                CAS #: 109-99-9
 15.934  15.934 (1.000)    42   3346329 20.0000   17.756  80.00- 120.00   100.00
 15.934  15.934 (1.000)    71    726811                     0.00-  54.64    21.72
 15.934  15.934 (1.000)    72    796950                     0.00-  57.57    23.82
-------------------------------------------------------------------------------
   55 Chloroform                                     CAS #: 67-66-3
 15.995  15.995 (1.004)    83   3509782 20.0000   18.397  80.00- 120.00   100.00
 15.995  15.995 (1.004)    85   2257801                    34.22-  94.22    64.33
-------------------------------------------------------------------------------
   57 Cyclohexane                                    CAS #: 110-82-7
 16.242  16.242 (1.019)    84   2299841 20.0000   17.670  80.00- 120.00   100.00
 16.242  16.242 (1.019)    56   4411880                   145.90- 205.90   191.83
 16.242  16.242 (1.019)    41   2445062                    62.61- 122.61   106.31
-------------------------------------------------------------------------------
   58 1,1,1-Trichloroethane                          CAS #: 71-55-6
 16.242  16.242 (1.019)    97   3757185 20.0000   17.583  80.00- 120.00   100.00
 16.242  16.242 (1.019)    99   2407356                    34.05-  94.05    64.07
-------------------------------------------------------------------------------
   59 Carbon Tetrachloride                           CAS #: 56-23-5
 16.458  16.458 (1.033)   119   3708243 20.0000   19.220  80.00- 120.00   100.00
 16.458  16.458 (1.033)   117   3651867                    68.83- 128.83    98.48
                   Sum of Peak Amounts =            19.2
-------------------------------------------------------------------------------
   63 2,2,4-Trimethylpentane                         CAS #: 540-84-1
 16.728  16.728 (1.050)    56   4215402 20.0000   17.863  80.00- 120.00   100.00
 16.728  16.728 (1.050)    57  12662456                   271.70- 331.70   300.39
 16.728  16.728 (1.050)    41   3541474                    52.41- 112.41    84.01
-------------------------------------------------------------------------------
   64 Benzene                                        CAS #: 71-43-2
 16.756  16.756 (0.968)    78   4779530 20.0000   18.346  80.00- 120.00   100.00
 16.756  16.756 (0.968)    77   1088908                     0.00-  53.49    22.78
-------------------------------------------------------------------------------
   66 tert-amyl methyl ether                         CAS #: 994-05-8
 16.811  16.811 (0.971)    87   1268097 20.0000   19.048  80.00- 120.00   100.00
 16.811  16.811 (0.971)    73   5139924                   368.43- 428.43   405.33
 16.811  16.811 (0.971)    55   1999119                   120.38- 180.38   157.65
-------------------------------------------------------------------------------
   68 1,2-Dichloroethane                             CAS #: 107-06-2
 16.866  16.866 (0.975)    62   2849074 20.0000   18.425  80.00- 120.00   100.00
 16.866  16.866 (0.975)    64    857842                     0.00-  59.91    30.11
-------------------------------------------------------------------------------
   69 Heptane                                        CAS #: 142-82-5
 16.948  16.948 (0.979)    57   2385987 20.0000   19.445  80.00- 120.00   100.00
```

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)	100	525094			0.00- 53.77	22.01
16.948	16.948 (0.979)	43	5098250			172.35- 232.35	213.67
72 Trichloroethene					CAS #: 79-01-6		
17.717	17.717 (1.024)	130	2577272	20.0000	19.602	80.00- 120.00	100.00
17.717	17.717 (1.024)	95	2390066			65.17- 125.17	92.74
17.717	17.717 (1.024)	97	1545992			31.34- 91.34	59.99
73 Methylcyclohexane					CAS #: 108-87-2		
17.964	17.964 (1.038)	83	3136452	20.0000	19.332	80.00- 120.00	100.00
17.964	17.964 (1.038)	98	1481700			17.27- 77.27	47.24
17.964	17.964 (1.038)	55	3926046			91.54- 151.54	125.17
74 1,2-Dichloropropane					CAS #: 78-87-5		
18.156	18.156 (1.049)	63	2452793	20.0000	19.363	80.00- 120.00	100.00
18.156	18.156 (1.049)	62	1814876			43.25- 103.25	73.99
18.156	18.156 (1.049)	41	1597231			33.86- 93.86	65.12
75 1,4-Dioxane					CAS #: 123-91-1		
18.266	18.266 (1.056)	88	1252844	20.0000	16.657	80.00- 120.00	100.00
18.266	18.266 (1.056)	58	1323143			73.29- 133.29	105.61
18.266	18.266 (1.056)	57	418629			3.70- 63.70	33.41
77 Bromodichloromethane					CAS #: 75-27-4		
18.568	18.568 (1.073)	83	3727345	20.0000	19.562	80.00- 120.00	100.00
18.568	18.568 (1.073)	85	2389222			33.07- 93.07	64.10
78 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
19.386	19.386 (1.120)	75	3107847	20.0000	19.747	80.00- 120.00	100.00
19.386	19.386 (1.120)	77	1019840			0.97- 60.97	32.82
19.386	19.386 (1.120)	39	2332175			40.23- 100.23	75.04
79 4-Methyl-2-pentanone					CAS #: 108-10-1		
19.588	19.588 (1.132)	43	6819014	20.0000	18.755	80.00- 120.00	100.00
19.588	19.588 (1.132)	58	2300536			6.07- 66.07	33.74
19.588	19.588 (1.132)	85	694914			0.00- 41.52	10.19
81 Toluene					CAS #: 108-88-3		
19.991	19.991 (1.155)	91	5613622	20.0000	18.919	80.00- 120.00	100.00
19.991	19.991 (1.155)	92	3267847			28.55- 88.55	58.21
82 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
20.435	20.435 (0.920)	75	2773205	20.0000	19.176	80.00- 120.00	100.00
20.435	20.435 (0.920)	77	877880			1.39- 61.39	31.66
20.399	20.399 (0.919)	39	1970337			36.57- 96.57	71.05

```
                                          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
 20.722  20.722 (0.933)    97   2237764 20.0000   19.404  80.00- 120.00   100.00
 20.722  20.722 (0.933)    99   1374524                   32.18-  92.18    61.42
 20.722  20.722 (0.933)    83   1854329                   54.91- 114.91    82.87
-------------------------------------------------------------------------------
   86 Tetrachloroethene                              CAS #: 127-18-4
 20.901  20.901 (0.941)   166   3172037 20.0000   18.062  80.00- 120.00   100.00
 20.901  20.901 (0.941)   129   2435197                   50.27- 110.27    76.77
 20.901  20.901 (0.941)   131   2433057                   49.16- 109.16    76.70
-------------------------------------------------------------------------------
   87 2-Hexanone                                     CAS #: 591-78-6
 21.009  21.009 (0.946)    58   2944468 20.0000   19.604  80.00- 120.00   100.00
 21.009  21.009 (0.946)    43   6310350                  171.66- 231.66   214.31
 21.009  21.009 (0.946)   100    412989                    0.00-  44.23    14.03
-------------------------------------------------------------------------------
   89 Dibromochloromethane                           CAS #: 124-48-1
 21.367  21.367 (0.962)   129   4467241 20.0000   19.997  80.00- 120.00   100.00
 21.367  21.367 (0.962)   127   3514763                   46.63- 106.63    78.68
-------------------------------------------------------------------------------
   90 1,2-Dibromoethane                              CAS #: 106-93-4
 21.583  21.583 (0.972)   107   3795604 20.0000   19.744  80.00- 120.00   100.00
 21.583  21.583 (0.972)   109   3544979                   62.25- 122.25    93.40
-------------------------------------------------------------------------------
   93 Chlorobenzene                                  CAS #: 108-90-7
 22.233  22.233 (1.001)   112   4918232 20.0000   18.354  80.00- 120.00   100.00
 22.233  22.233 (1.001)   114   1572117                    1.87-  61.87    31.97
 22.233  22.233 (1.001)    77   2682099                   27.42-  87.42    54.53
-------------------------------------------------------------------------------
   95 Ethyl Benzene                                  CAS #: 100-41-4
 22.315  22.315 (1.005)   106   2335168 20.0000   18.462  80.00- 120.00   100.00
 22.315  22.315 (1.005)    91   6764005                  258.78- 318.78   289.66
-------------------------------------------------------------------------------
   96 m,p-Xylene                                     CAS #: 108-38-3
 22.452  22.452 (1.011)   106   2438659 20.0000   19.035  80.00- 120.00   100.00
 22.452  22.452 (1.011)    91   4534153                  162.81- 222.81   185.93
-------------------------------------------------------------------------------
  100 o-Xylene                                       CAS #: 95-47-6
 23.002  23.002 (1.036)   106   2285483 20.0000   19.478  80.00- 120.00   100.00
 23.002  23.002 (1.036)    91   4549942                  171.98- 231.98   199.08
-------------------------------------------------------------------------------
  101 Styrene                                        CAS #: 100-42-5
 23.029  23.029 (1.037)   104   3587995 20.0000   20.680  80.00- 120.00   100.00
 23.029  23.029 (1.037)    78   1686088                   21.36-  81.36    46.99
-------------------------------------------------------------------------------
  102 Bromoform                                      CAS #: 75-25-2
 23.331  23.331 (1.051)   173   4056269 20.0000   20.392  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
   ==   ====== ========  ====  ======== =======  =======   ============    =====

  102 Bromoform (continued)
 23.331  23.331 (1.051)   171   2099050                    21.13-  81.13    51.75
-------------------------------------------------------------------------------
  103 Cumene                                        CAS #: 98-82-8
 23.441  23.441 (1.056)   105   6642923 20.0000   20.182  80.00- 120.00   100.00
 23.441  23.441 (1.056)   120   2022728                     0.35-  60.35    30.45
-------------------------------------------------------------------------------
  108 1,1,2,2-Tetrachloroethane                     CAS #: 79-34-5
 23.833  23.833 (1.073)    83   4032218 20.0000   17.183  80.00- 120.00   100.00
 23.833  23.833 (1.073)    85   2581610                    36.04-  96.04    64.02
-------------------------------------------------------------------------------
  111 Propylbenzene                                 CAS #: 103-65-1
 23.910  23.910 (1.077)    91   5898292 20.0000   19.077  80.00- 120.00   100.00
 23.910  23.910 (1.077)   120   1575121                     0.00-  56.65    26.70
-------------------------------------------------------------------------------
  113 4-Ethyltoluene                                CAS #: 622-96-8
 24.039  24.039 (1.083)   105   4497398 20.0000   19.169  80.00- 120.00   100.00
 24.039  24.039 (1.083)   120   1533548                     3.46-  63.46    34.10
-------------------------------------------------------------------------------
  114 1,3,5-Trimethylbenzene                        CAS #: 108-67-8
 24.116  24.116 (1.086)   105   4044279 20.0000   16.884  80.00- 120.00   100.00
 24.116  24.116 (1.086)   120   2131446                    21.43-  81.43    52.70
-------------------------------------------------------------------------------
  120 1,2,4-Trimethylbenzene                        CAS #: 95-63-6
 24.529  24.529 (1.105)   105   3311767 20.0000   15.515  80.00- 120.00   100.00
 24.529  24.529 (1.105)   120   1684428                    18.67-  78.67    50.86
-------------------------------------------------------------------------------
  122 1,3-Dichlorobenzene                           CAS #: 541-73-1
 24.902  24.902 (1.121)   146   3118730 20.0000   19.132  80.00- 120.00   100.00
 24.902  24.902 (1.121)   148   1974472                    33.26-  93.26    63.31
 24.902  24.902 (1.121)   111   1244481                     9.81-  69.81    39.90
-------------------------------------------------------------------------------
  124 1,4-Dichlorobenzene                           CAS #: 106-46-7
 24.992  24.992 (1.125)   146   2855431 20.0000   16.236  80.00- 120.00   100.00
 24.992  24.992 (1.125)   148   1842391                    32.99-  92.99    64.52
 24.992  24.992 (1.125)   111   1087505                     8.98-  68.98    38.09
-------------------------------------------------------------------------------
  127 alpha-chlorotoluene                           CAS #: 100-44-7
 25.127  25.127 (1.132)    91   4303969 20.0000   22.019  80.00- 120.00   100.00
 25.127  25.127 (1.132)   126   1027099                     0.00-  53.33    23.86
-------------------------------------------------------------------------------
  128 1,2-Dichlorobenzene                           CAS #: 95-50-1
 25.396  25.396 (1.144)   146   2908904 20.0000   17.520  80.00- 120.00   100.00
 25.396  25.396 (1.144)   148   1830301                    33.33-  93.33    62.92
 25.396  25.396 (1.144)   111   1164018                    12.11-  72.11    40.02
-------------------------------------------------------------------------------
```

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	2205491	20.0000	14.164	80.00- 120.00	100.00
27.077	27.077 (1.219)	182	2112073			66.11- 126.11	95.76
132 Hexachlorobutadiene					CAS #: 87-68-3		
27.167	27.167 (1.223)	225	1837043	20.0000	17.035	80.00- 120.00	100.00
27.167	27.167 (1.223)	223	1159187			31.45- 91.45	63.10
133 Naphthalene					CAS #: 91-20-3		
27.368	27.368 (1.232)	128	410874	2.00000	1.762	80.00- 120.00	100.00
27.368	27.368 (1.232)	127	55804			0.00- 43.32	13.58

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdv.i
Lab File ID: v012312.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: gd
Method File: /chem/msdv.i/23Jan2015.b/v15l0123a.m
Misc Info: 20ppbv (50ppbv)

Calibration Date: 23-JAN-2015
Calibration Time: 20:25
Client Smp ID: Level 11
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
54 Bromochloromethan	253263	151958	354568	271310	7.13
71 1,4-Difluorobenze	1019789	611873	1427705	1034601	1.45
92 Chlorobenzene-d5	833326	499996	1166656	847788	1.74

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/23Jan2015.b/v012312.d

Date : 23-JAN-2015 21:15

Client ID: Level 11

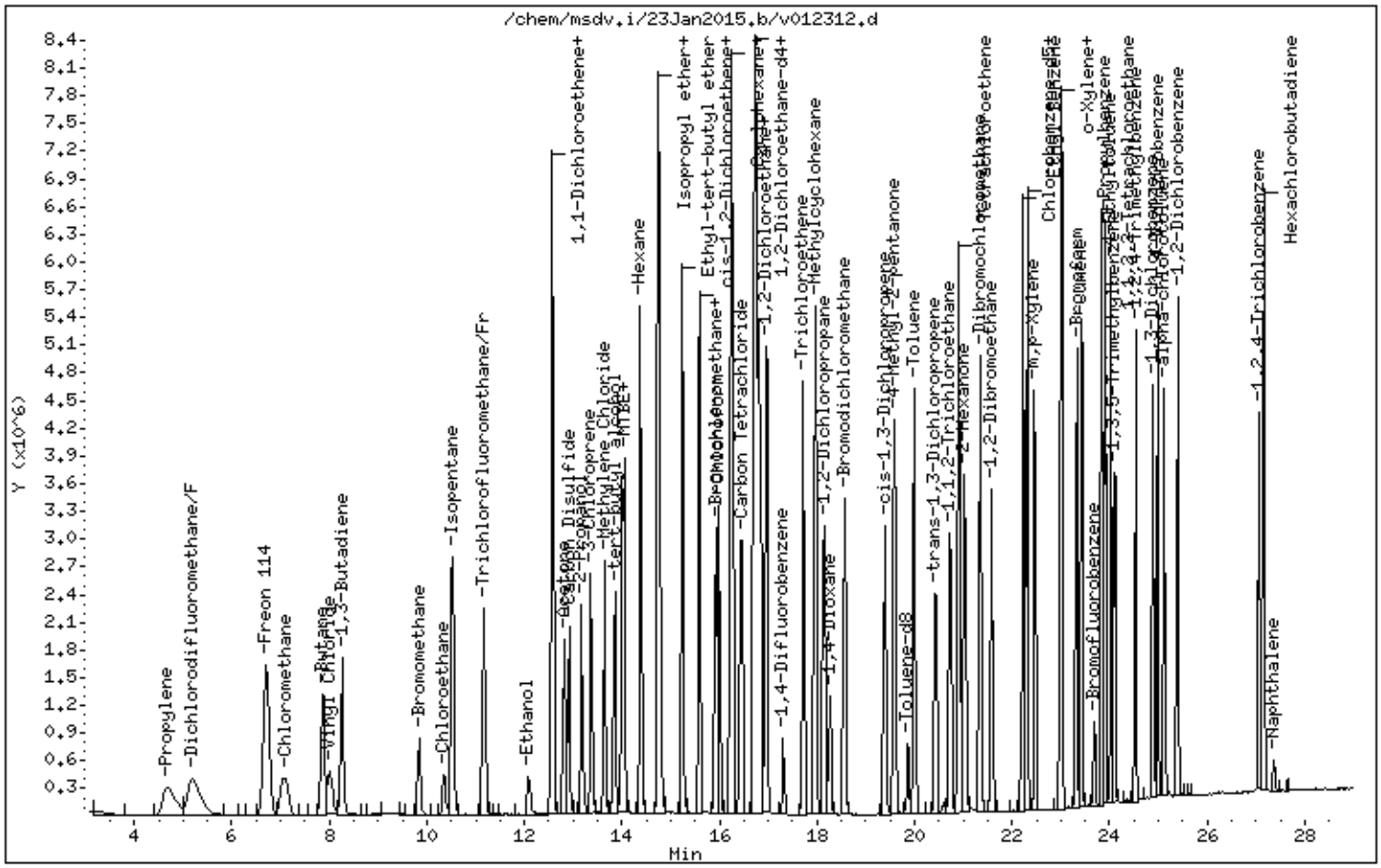
Instrument: msdv.i

Sample Info: 100mL# 2687-244; ICAL; Level 11

Operator: gd

Column phase: RTx-624

Column diameter: 0.32



Eurofins Air Toxics Inc.

TO15/Modified TO-14A

Data file : /chem/msdv.i/23Jan2015.b/v012313.d
Lab Smp Id: ICAL Client Smp ID: Level 12
Inj Date : 23-JAN-2015 22:26
Operator : gh Inst ID: msdv.i
Smp Info : 200mL# 2687-244
Misc Info : 40ppbv (50ppbv)
Comment : Low Level GC-MS
Method : /chem/msdv.i/23Jan2015.b/v15l0123a.m
Meth Date : 23-Jan-2015 23:14 ghehir Quant Type: ISTD
Cal Date : 23-JAN-2015 22:26 Cal File: v012313.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		
15.934	15.934 (1.000)	130	261625	5.00000		80.00- 120.00	100.00
15.934	15.934 (1.000)	128	207615			47.40- 107.40	79.36
15.934	15.934 (1.000)	49	625663			167.26- 227.26	239.14
* 71 1,4-Difluorobenzene					CAS #: 540-36-3		
17.305	17.305 (1.000)	114	1015137	5.00000		80.00- 120.00	100.00
17.305	17.305 (1.000)	88	160706			0.00- 46.18	15.83
* 92 Chlorobenzene-d5					CAS #: 3114-55-4		
22.205	22.205 (1.000)	117	801590	5.00000		80.00- 120.00	100.00
22.205	22.205 (1.000)	82	443277			25.73- 85.73	55.30
$ 65 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
16.756	16.756 (1.052)	65	460430	5.00000	5.614	80.00- 120.00	100.00
16.728	16.728 (1.050)	67	327283			26.63- 86.63	71.08
$ 80 Toluene-d8					CAS #: 2037-26-5		
19.857	19.857 (1.147)	98	947514	5.00000	4.985	80.00- 120.00	100.00
19.857	19.857 (1.147)	70	99538			0.00- 40.74	10.51

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

$  80 Toluene-d8 (continued)
 19.857  19.857 (1.147)   100    613805                    33.76-  93.76    64.78
-------------------------------------------------------------------------------
$ 106 Bromofluorobenzene                            CAS #: 460-00-4
 23.678  23.678 (1.066)   174    397780 5.00000    5.296  80.00- 120.00   100.00
 23.678  23.678 (1.066)    95    495486                  108.04- 168.04   124.56
 23.678  23.678 (1.066)   176    392335                   67.04- 127.04    98.63
-------------------------------------------------------------------------------
    3 Propylene                                     CAS #: 115-07-1
  4.711   4.711 (0.296)    41   3982212 40.0000   37.164  80.00- 120.00   100.00
  4.749   4.749 (0.298)    42   2695621                   36.23-  96.23    67.69
  4.749   4.749 (0.298)    39   2716466                   40.03- 100.03    68.22
-------------------------------------------------------------------------------
    4 Dichlorodifluoromethane/Fr12                  CAS #: 75-71-8
  5.202   5.202 (0.326)    85   7662338 40.0000   36.738  80.00- 120.00   100.00
  5.202   5.202 (0.326)    87   2430049                    2.42-  62.42    31.71
-------------------------------------------------------------------------------
    6 Freon 114                                     CAS #: 76-14-2
  6.750   6.750 (0.424)   135   6564024 40.0000   37.436  80.00- 120.00   100.00
  6.750   6.750 (0.424)   137   2081403                    1.35-  61.35    31.71
  6.713   6.713 (0.421)    85   8042419                  100.64- 160.64   122.52
-------------------------------------------------------------------------------
    8 Chloromethane                                 CAS #: 74-87-3
  7.090   7.090 (0.445)    50   4539110 40.0000   33.715  80.00- 120.00   100.00
  7.090   7.090 (0.445)    52   1489360                    2.12-  62.12    32.81
-------------------------------------------------------------------------------
    9 Butane                                        CAS #: 106-97-8
  7.885   7.885 (0.495)    58    914531 40.0000   38.209  80.00- 120.00   100.00
  7.885   7.885 (0.495)    43   8069352                  783.54- 843.54   882.35
-------------------------------------------------------------------------------
   10 Vinyl Chloride                                CAS #: 75-01-4
  8.009   8.009 (0.503)    62   3899689 40.0000   37.680  80.00- 120.00   100.00
  8.009   8.009 (0.503)    64   1116864                    0.00-  59.60    28.64
-------------------------------------------------------------------------------
   11 1,3-Butadiene                                 CAS #: 106-99-0
  8.257   8.257 (0.518)    54   3902402 40.0000   38.369  80.00- 120.00   100.00
  8.257   8.257 (0.518)    39   3846346                   66.22- 126.22    98.56
-------------------------------------------------------------------------------
   12 Bromomethane                                  CAS #: 74-83-9
  9.835   9.835 (0.617)    94   2521428 40.0000   39.180  80.00- 120.00   100.00
  9.835   9.835 (0.617)    96   2330053                   63.75- 123.75    92.41
-------------------------------------------------------------------------------
   17 Chloroethane                                  CAS #: 75-00-3
 10.365  10.365 (0.650)    64   1721734 40.0000   38.276  80.00- 120.00   100.00
 10.365  10.365 (0.650)    66    515452                    0.00-  59.96    29.94
-------------------------------------------------------------------------------
```

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	3793338	40.0000	38.250	80.00- 120.00	100.00
10.533	10.533 (0.661)	43	6282806			125.71- 185.71	165.63
10.533	10.533 (0.661)	42	5333655			102.09- 162.09	140.61
20 Trichlorofluoromethane/Fr11					CAS #: 75-69-4		
11.160	11.160 (0.700)	101	8130318	40.0000	36.572	80.00- 120.00	100.00
11.184	11.184 (0.702)	103	5248455			35.13- 95.13	64.55
24 Ethanol					CAS #: 64-17-5		
12.074	12.074 (0.758)	45	1963159	40.0000	41.069	80.00- 120.00	100.00(A)
12.074	12.074 (0.758)	46	780094			10.23- 70.23	39.74
12.074	12.074 (0.758)	43	384243			0.00- 50.98	19.57
30 1,1-Dichloroethene					CAS #: 75-35-4		
12.569	12.569 (0.789)	98	2048247	40.0000	38.336	80.00- 120.00	100.00
12.569	12.569 (0.789)	61	6875381			302.86- 362.86	335.67
12.569	12.569 (0.789)	96	3258521			132.09- 192.09	159.09
28 Freon 113					CAS #: 76-13-1		
12.569	12.569 (0.789)	151	5935890	40.0000	37.305	80.00- 120.00	100.00
12.569	12.569 (0.789)	153	3775721			33.83- 93.83	63.61
12.569	12.569 (0.789)	101	6764054			86.15- 146.15	113.95
31 Acetone					CAS #: 67-64-1		
12.816	12.816 (0.804)	58	2187703	40.0000	36.214	80.00- 120.00	100.00
12.816	12.816 (0.804)	43	7646847			310.23- 370.23	349.54
33 Carbon Disulfide					CAS #: 75-15-0		
12.926	12.926 (0.811)	76	8644053	40.0000	39.001	80.00- 120.00	100.00
35 3-Chloroprene					CAS #: 107-05-1		
13.365	13.365 (0.839)	76	1364222	40.0000	40.388	80.00- 120.00	100.00(A)
13.365	13.365 (0.839)	41	6748112			401.48- 461.48	494.65
34 2-Propanol					CAS #: 67-63-0		
13.173	13.173 (0.827)	45	9370832	40.0000	39.192	80.00- 120.00	100.00
13.173	13.173 (0.827)	43	1590955			0.00- 46.97	16.98
13.173	13.173 (0.827)	59	310271			0.00- 33.46	3.31
37 Methylene Chloride					CAS #: 75-09-2		
13.640	13.640 (0.856)	84	2779014	40.0000	37.254	80.00- 120.00	100.00
13.640	13.640 (0.856)	49	6355471			177.28- 237.28	228.70
13.640	13.640 (0.856)	51	1955416			32.93- 92.93	70.36
38 tert-butyl alcohol					CAS #: 75-65-0		
13.859	13.859 (0.870)	59	9411406	40.0000	35.048	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   2159667                     0.00-  51.49    22.95
 13.859  13.859 (0.870)    57   1027616                     0.00-  40.02    10.92
-------------------------------------------------------------------------------
   39 MTBE                                          CAS #: 1634-04-4
 13.997  13.997 (0.878)    73   8753862 40.0000   37.529  80.00- 120.00   100.00
 13.997  13.997 (0.878)    57   3191513                     3.26-  63.26    36.46
 13.997  13.997 (0.878)    41   3078488                     2.63-  62.63    35.17
-------------------------------------------------------------------------------
   40 trans-1,2-Dichloroethene                      CAS #: 156-60-5
 14.052  14.052 (0.882)    98   2129535 40.0000   38.720  80.00- 120.00   100.00
 14.052  14.052 (0.882)    61   6407449                   262.11- 322.11   300.88
 14.052  14.052 (0.882)    96   3370895                   128.28- 188.28   158.29
-------------------------------------------------------------------------------
   43 Hexane                                        CAS #: 110-54-3
 14.381  14.381 (0.903)    57   7725177 40.0000   36.619  80.00- 120.00   100.00
 14.381  14.381 (0.903)    43   5530693                    36.69-  96.69    71.59
 14.381  14.381 (0.903)    86    787874                     0.00-  41.09    10.20
-------------------------------------------------------------------------------
   45 Isopropyl ether                               CAS #: 108-20-3
 14.738  14.738 (0.925)    45  18410617 40.0000   37.041  80.00- 120.00   100.00
 14.738  14.738 (0.925)    87   2927785                     0.00-  47.17    15.90
 14.738  14.738 (0.925)    59   1708044                     0.00-  39.85     9.28
-------------------------------------------------------------------------------
   46 1,1-Dichloroethane                            CAS #: 75-34-3
 14.765  14.765 (0.927)    63   7315834 40.0000   37.421  80.00- 120.00   100.00
 14.765  14.765 (0.927)    65   2226781                     0.34-  60.34    30.44
-------------------------------------------------------------------------------
   47 Vinyl Acetate                                 CAS #: 108-05-4
 14.793  14.793 (0.928)    86    890835 40.0000   45.224  80.00- 120.00   100.00(A)
 14.793  14.793 (0.928)    42   1723364                   147.97- 207.97   193.45
 14.793  14.793 (0.928)    43  23374978                  2354.84-2414.84  2623.94
-------------------------------------------------------------------------------
   49 Ethyl-tert-butyl ether                        CAS #: 637-92-3
 15.240  15.240 (0.956)    59  14756073 40.0000   37.944  80.00- 120.00   100.00
 15.240  15.240 (0.956)    87   4357174                     0.00-  59.53    29.53
 15.240  15.240 (0.956)    41   2945461                     0.00-  48.76    19.96
-------------------------------------------------------------------------------
   50 cis-1,2-Dichloroethene                        CAS #: 156-59-2
 15.592  15.592 (0.979)    98   2291668 40.0000   37.181  80.00- 120.00   100.00
 15.592  15.592 (0.979)    61   6227951                   232.32- 292.32   271.76
 15.592  15.592 (0.979)    96   3608962                   127.66- 187.66   157.48
-------------------------------------------------------------------------------
   51 2-Butanone                                    CAS #: 78-93-3
 15.572  15.572 (0.977)    72   1603520 40.0000   39.156  80.00- 120.00   100.00
 15.572  15.572 (0.977)    43  11210428                   621.62- 681.62   699.11
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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)
 15.572  15.572 (0.977)    57    793342                    17.09-  77.09    49.48
-------------------------------------------------------------------------------
   53 Tetrahydrofuran                                CAS #: 109-99-9
 15.903  15.903 (0.998)    42   6545294 40.0000   36.623  80.00- 120.00   100.00
 15.934  15.934 (1.000)    71   1417655                     0.00-  54.64    21.66
 15.934  15.934 (1.000)    72   1557644                     0.00-  57.57    23.80
-------------------------------------------------------------------------------
   55 Chloroform                                     CAS #: 67-66-3
 15.995  15.995 (1.004)    83   6880587 40.0000   37.751  80.00- 120.00   100.00
 15.995  15.995 (1.004)    85   4414704                    34.22-  94.22    64.16
-------------------------------------------------------------------------------
   57 Cyclohexane                                    CAS #: 110-82-7
 16.242  16.242 (1.019)    84   4560231 40.0000   36.817  80.00- 120.00   100.00
 16.242  16.242 (1.019)    56   8669274                   145.90- 205.90   190.11
 16.242  16.242 (1.019)    41   4718852                    62.61- 122.61   103.48
-------------------------------------------------------------------------------
   58 1,1,1-Trichloroethane                          CAS #: 71-55-6
 16.242  16.242 (1.019)    97   7287277 40.0000   35.885  80.00- 120.00   100.00
 16.242  16.242 (1.019)    99   4612721                    34.05-  94.05    63.30
-------------------------------------------------------------------------------
   59 Carbon Tetrachloride                           CAS #: 56-23-5
 16.427  16.427 (1.031)   119   7222115 40.0000   38.962  80.00- 120.00   100.00
 16.427  16.427 (1.031)   117   7062649                    68.83- 128.83    97.79
                   Sum of Peak Amounts =              39
-------------------------------------------------------------------------------
   63 2,2,4-Trimethylpentane                         CAS #: 540-84-1
 16.728  16.728 (1.050)    56   7992762 40.0000   35.747  80.00- 120.00   100.00
 16.728  16.728 (1.050)    57  24077495                   271.70- 331.70   301.24
 16.728  16.728 (1.050)    41   6773428                    52.41- 112.41    84.74
-------------------------------------------------------------------------------
   64 Benzene                                        CAS #: 71-43-2
 16.756  16.756 (0.968)    78   9217276 40.0000   36.574  80.00- 120.00   100.00
 16.756  16.756 (0.968)    77   2127615                     0.00-  53.49    23.08
-------------------------------------------------------------------------------
   66 tert-amyl methyl ether                         CAS #: 994-05-8
 16.811  16.811 (0.971)    87   2478010 40.0000   38.266  80.00- 120.00   100.00
 16.811  16.811 (0.971)    73   9915029                   368.43- 428.43   400.12
 16.811  16.811 (0.971)    55   3894996                   120.38- 180.38   157.18
-------------------------------------------------------------------------------
   68 1,2-Dichloroethane                             CAS #: 107-06-2
 16.865  16.865 (0.975)    62   5586736 40.0000   37.244  80.00- 120.00   100.00
 16.865  16.865 (0.975)    64   1644369                     0.00-  59.91    29.43
-------------------------------------------------------------------------------
   69 Heptane                                        CAS #: 142-82-5
 16.948  16.948 (0.979)    57   4514327 40.0000   37.834  80.00- 120.00   100.00
```

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)	100	997491			0.00- 53.77	22.10
16.948	16.948 (0.979)	43	9593707			172.35- 232.35	212.52
72 Trichloroethene					CAS #: 79-01-6		
17.717	17.717 (1.024)	130	5035482	40.0000	39.150	80.00- 120.00	100.00
17.717	17.717 (1.024)	95	4679787			65.17- 125.17	92.94
17.717	17.717 (1.024)	97	2998245			31.34- 91.34	59.54
73 Methylcyclohexane					CAS #: 108-87-2		
17.964	17.964 (1.038)	83	6063169	40.0000	38.393	80.00- 120.00	100.00
17.964	17.964 (1.038)	98	2870129			17.27- 77.27	47.34
17.964	17.964 (1.038)	55	7614564			91.54- 151.54	125.59
74 1,2-Dichloropropane					CAS #: 78-87-5		
18.128	18.128 (1.048)	63	4800802	40.0000	38.815	80.00- 120.00	100.00
18.128	18.128 (1.048)	62	3526637			43.25- 103.25	73.46
18.128	18.128 (1.048)	41	3089136			33.86- 93.86	64.35
75 1,4-Dioxane					CAS #: 123-91-1		
18.266	18.266 (1.056)	88	2454844	40.0000	34.084	80.00- 120.00	100.00
18.266	18.266 (1.056)	58	2582937			73.29- 133.29	105.22
18.266	18.266 (1.056)	57	824851			3.70- 63.70	33.60
77 Bromodichloromethane					CAS #: 75-27-4		
18.568	18.568 (1.073)	83	7327337	40.0000	39.291	80.00- 120.00	100.00
18.568	18.568 (1.073)	85	4704648			33.07- 93.07	64.21
78 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
19.386	19.386 (1.120)	75	6205263	40.0000	40.158	80.00- 120.00	100.00(A)
19.386	19.386 (1.120)	77	1939520			0.97- 60.97	31.26
19.386	19.386 (1.120)	39	4585903			40.23- 100.23	73.90
79 4-Methyl-2-pentanone					CAS #: 108-10-1		
19.588	19.588 (1.132)	43	13115612	40.0000	37.194	80.00- 120.00	100.00
19.588	19.588 (1.132)	58	4490403			6.07- 66.07	34.24
19.588	19.588 (1.132)	85	1353440			0.00- 41.52	10.32
81 Toluene					CAS #: 108-88-3		
19.991	19.991 (1.155)	91	10531823	40.0000	36.675	80.00- 120.00	100.00
19.991	19.991 (1.155)	92	6187987			28.55- 88.55	58.76
82 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
20.399	20.399 (0.919)	75	5426695	40.0000	39.732	80.00- 120.00	100.00
20.399	20.399 (0.919)	77	1734995			1.39- 61.39	31.97
20.399	20.399 (0.919)	39	3863592			36.57- 96.57	71.20

```
                                        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
 20.722  20.722 (0.933)    97   4382344 40.0000   40.167  80.00- 120.00   100.00(A)
 20.722  20.722 (0.933)    99   2715875                   32.18-  92.18    61.97
 20.722  20.722 (0.933)    83   3654695                   54.91- 114.91    83.40
-------------------------------------------------------------------------------
   86 Tetrachloroethene                            CAS #: 127-18-4
 20.901  20.901 (0.941)   166   6063702 40.0000   36.920  80.00- 120.00   100.00
 20.901  20.901 (0.941)   129   4639922                   50.27- 110.27    76.52
 20.901  20.901 (0.941)   131   4664416                   49.16- 109.16    76.92
-------------------------------------------------------------------------------
   87 2-Hexanone                                   CAS #: 591-78-6
 21.009  21.009 (0.946)    58   5738479 40.0000   40.340  80.00- 120.00   100.00(A)
 21.009  21.009 (0.946)    43  12111354                  171.66- 231.66   211.06
 21.009  21.009 (0.946)   100    791859                    0.00-  44.23    13.80
-------------------------------------------------------------------------------
   89 Dibromochloromethane                         CAS #: 124-48-1
 21.367  21.367 (0.962)   129   8735810 40.0000   41.183  80.00- 120.00   100.00(A)
 21.367  21.367 (0.962)   127   6782221                   46.63- 106.63    77.64
-------------------------------------------------------------------------------
   90 1,2-Dibromoethane                            CAS #: 106-93-4
 21.583  21.583 (0.972)   107   7413786 40.0000   40.687  80.00- 120.00   100.00(A)
 21.583  21.583 (0.972)   109   6998810                   62.25- 122.25    94.40
-------------------------------------------------------------------------------
   93 Chlorobenzene                                CAS #: 108-90-7
 22.233  22.233 (1.001)   112   9318661 40.0000   37.207  80.00- 120.00   100.00
 22.233  22.233 (1.001)   114   2956997                    1.87-  61.87    31.73
 22.233  22.233 (1.001)    77   5017886                   27.42-  87.42    53.85
-------------------------------------------------------------------------------
   95 Ethyl Benzene                                CAS #: 100-41-4
 22.315  22.315 (1.005)   106   4437143 40.0000   37.491  80.00- 120.00   100.00
 22.315  22.315 (1.005)    91  12676436                  258.78- 318.78   285.69
-------------------------------------------------------------------------------
   96 m,p-Xylene                                   CAS #: 108-38-3
 22.452  22.452 (1.011)   106   4399104 40.0000   36.801  80.00- 120.00   100.00
 22.452  22.452 (1.011)    91   8242961                  162.81- 222.81   187.38
-------------------------------------------------------------------------------
  100 o-Xylene                                     CAS #: 95-47-6
 23.002  23.002 (1.036)   106   4144168 40.0000   37.711  80.00- 120.00   100.00
 23.002  23.002 (1.036)    91   8112184                  171.98- 231.98   195.75
-------------------------------------------------------------------------------
  101 Styrene                                      CAS #: 100-42-5
 23.029  23.029 (1.037)   104   6512544 40.0000   39.742  80.00- 120.00   100.00
 23.029  23.029 (1.037)    78   3086632                   21.36-  81.36    47.40
-------------------------------------------------------------------------------
  102 Bromoform                                    CAS #: 75-25-2
 23.331  23.331 (1.051)   173   8066678 40.0000   42.508  80.00- 120.00   100.00(A)
```

```
                                          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   4122710                    21.13-  81.13    51.11
-------------------------------------------------------------------------------
  103 Cumene                                        CAS #: 98-82-8
 23.413  23.413 (1.054)   105  12305214 40.0000   39.605  80.00- 120.00   100.00
 23.413  23.413 (1.054)   120   3700842                     0.35-  60.35    30.08
-------------------------------------------------------------------------------
  108 1,1,2,2-Tetrachloroethane                     CAS #: 79-34-5
 23.833  23.833 (1.073)    83   7787736 40.0000   35.646  80.00- 120.00   100.00
 23.833  23.833 (1.073)    85   4996188                    36.04-  96.04    64.15
-------------------------------------------------------------------------------
  111 Propylbenzene                                 CAS #: 103-65-1
 23.910  23.910 (1.077)    91  10875367 40.0000   37.578  80.00- 120.00   100.00
 23.910  23.910 (1.077)   120   2938341                     0.00-  56.65    27.02
-------------------------------------------------------------------------------
  113 4-Ethyltoluene                                CAS #: 622-96-8
 24.039  24.039 (1.083)   105   8190550 40.0000   37.332  80.00- 120.00   100.00
 24.039  24.039 (1.083)   120   2777829                     3.46-  63.46    33.92
-------------------------------------------------------------------------------
  114 1,3,5-Trimethylbenzene                        CAS #: 108-67-8
 24.091  24.091 (1.085)   105   6300195 40.0000   29.082  80.00- 120.00   100.00
 24.091  24.091 (1.085)   120   3304674                    21.43-  81.43    52.45
-------------------------------------------------------------------------------
  120 1,2,4-Trimethylbenzene                        CAS #: 95-63-6
 24.529  24.529 (1.105)   105   5111854 40.0000   26.729  80.00- 120.00   100.00
 24.529  24.529 (1.105)   120   2575529                    18.67-  78.67    50.38
-------------------------------------------------------------------------------
  122 1,3-Dichlorobenzene                           CAS #: 541-73-1
 24.902  24.902 (1.121)   146   5640788 40.0000   36.991  80.00- 120.00   100.00
 24.902  24.902 (1.121)   148   3561254                    33.26-  93.26    63.13
 24.880  24.880 (1.120)   111   2203498                     9.81-  69.81    39.06
-------------------------------------------------------------------------------
  124 1,4-Dichlorobenzene                           CAS #: 106-46-7
 24.992  24.992 (1.125)   146   5142245 40.0000   31.826  80.00- 120.00   100.00
 24.992  24.992 (1.125)   148   3254097                    32.99-  92.99    63.28
 24.992  24.992 (1.125)   111   1968299                     8.98-  68.98    38.28
-------------------------------------------------------------------------------
  127 alpha-chlorotoluene                           CAS #: 100-44-7
 25.127  25.127 (1.132)    91   8010390 40.0000   42.747  80.00- 120.00   100.00(A)
 25.127  25.127 (1.132)   126   1899637                     0.00-  53.33    23.71
-------------------------------------------------------------------------------
  128 1,2-Dichlorobenzene                           CAS #: 95-50-1
 25.396  25.396 (1.144)   146   5191357 40.0000   33.801  80.00- 120.00   100.00
 25.396  25.396 (1.144)   148   3280648                    33.33-  93.33    63.19
 25.396  25.396 (1.144)   111   2080776                    12.11-  72.11    40.08
-------------------------------------------------------------------------------
```

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	
27.055	27.055	(1.218)	180	3291771	40.0000	23.663	80.00- 120.00	100.00
27.055	27.055	(1.218)	182	3127395			66.11- 126.11	95.01
132 Hexachlorobutadiene							CAS #: 87-68-3	
27.167	27.167	(1.223)	225	3685524	40.0000	36.650	80.00- 120.00	100.00
27.167	27.167	(1.223)	223	2310345			31.45- 91.45	62.69
133 Naphthalene							CAS #: 91-20-3	
27.368	27.368	(1.232)	128	642299	4.00000	3.080	80.00- 120.00	100.00
27.368	27.368	(1.232)	127	83863			0.00- 43.32	13.06

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: v012313.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: gh
Method File: /chem/msdv.i/23Jan2015.b/v15l0123a.m
Misc Info: 40ppbv (50ppbv)

Calibration Date: 23-JAN-2015
Calibration Time: 20:25
Client Smp ID: Level 12
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
54 Bromochloromethan	253263	151958	354568	261625	3.30
71 1,4-Difluorobenze	1019789	611873	1427705	1015137	-0.46
92 Chlorobenzene-d5	833326	499996	1166656	801590	-3.81

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/23Jan2015.b/v012313.d

Date : 23-JAN-2015 22:26

Client ID: Level 12

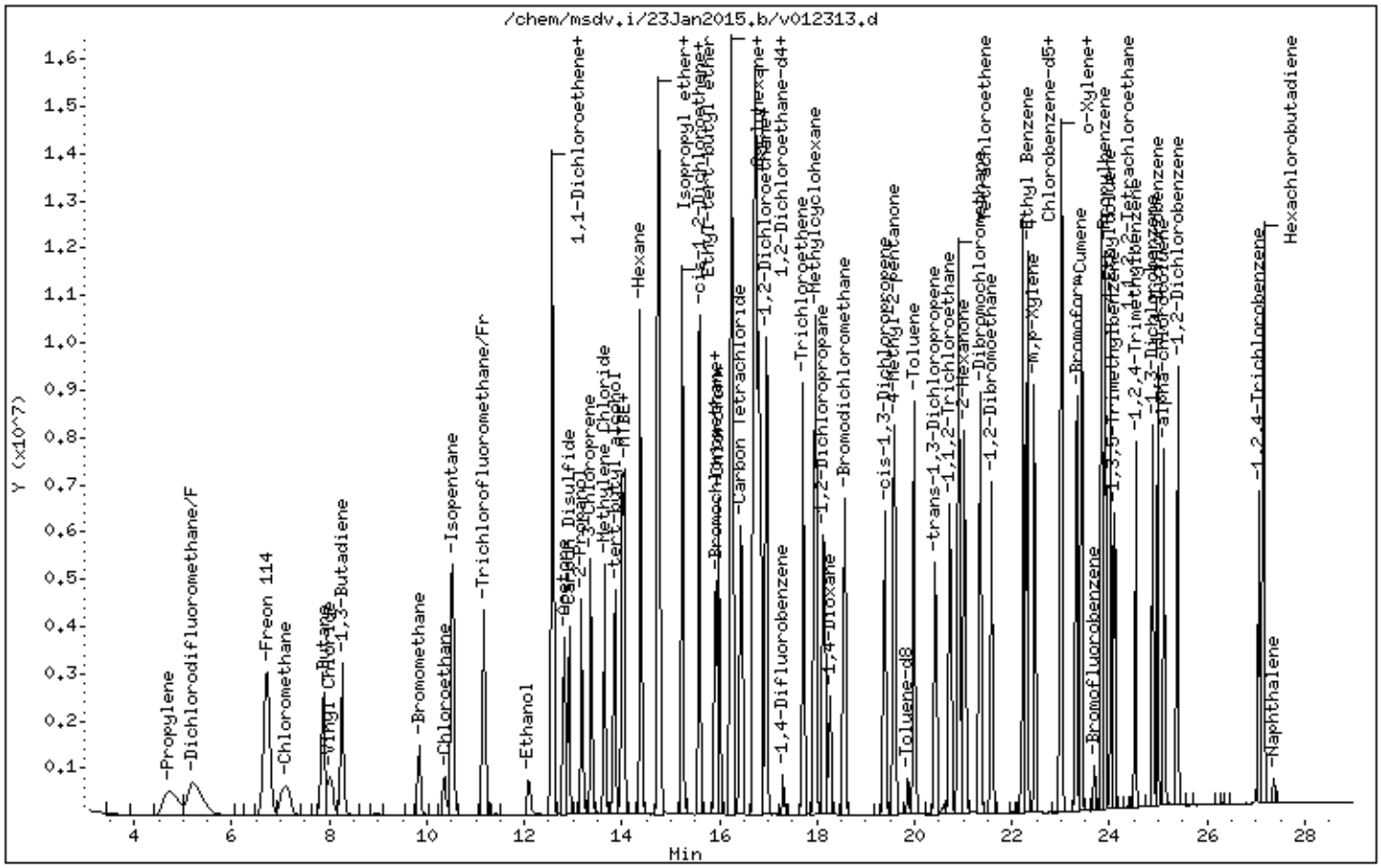
Instrument: msdv.i

Sample Info: 200mL# 2687-244

Operator: gh

Column phase: RTx-624

Column diameter: 0.32



Eurofins Air Toxics Inc.

TO15/Modified TO-14A

Data file : /chem/msdv.i/27Jan2015.b/v012707.d
Lab Smp Id: ICAL Client Smp ID: Level 13
Inj Date : 27-JAN-2015 12:52
Operator : ef Inst ID: msdv.i
Smp Info : 100mL# 2716-22
Misc Info : 2.0ppbv (5.0ppbv) AT-1
Comment : Low Level GC-MS
Method : /chem/msdv.i/27Jan2015.b/v15l0123b.m
Meth Date : 28-Jan-2015 08:21 efinn Quant Type: ISTD
Cal Date : 27-JAN-2015 12:52 Cal File: v012707.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	15.933 (1.000)	130	228109	5.00000		70.00- 130.00	100.00
15.933	15.933 (1.000)	128	186209			0.00- 30.00	81.63
15.933	15.933 (1.000)	49	501656			0.00- 30.00	219.92
* 71 1,4-Difluorobenzene						CAS #: 540-36-3	
17.305	17.305 (1.000)	114	938902	5.00000		70.00- 130.00	100.00
17.305	17.305 (1.000)	88	148083			0.00- 30.00	15.77
* 92 Chlorobenzene-d5						CAS #: 3114-55-4	
22.205	22.205 (1.000)	117	754579	5.00000		70.00- 130.00	100.00
22.205	22.205 (1.000)	82	427885			0.00- 30.00	56.71
1 Freon 134a						CAS #: 811-97-2	
4.522	4.522 (0.284)	83	92007	2.00000	2.046	70.00- 130.00	100.00
4.485	4.485 (0.281)	69	78316			0.00- 30.00	85.12
2 Freon 152A						CAS #: 75-37-6	
5.013	5.013 (0.315)	65	61290	2.00000	2.028	70.00- 130.00	100.00
5.013	5.013 (0.315)	51	164128			0.00- 30.00	267.79

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		
5.768	5.768 (0.362)	51	257968	2.00000	2.054	70.00- 130.00	100.00
5.731	5.731 (0.360)	67	24919			0.00- 30.00	9.66
5.768	5.768 (0.362)	85	2131			0.00- 30.00	0.83
218 Freon 142b					CAS #: 75-68-3		
7.015	7.015 (0.440)	65	231741	2.00000	2.009	70.00- 130.00	100.00
7.015	7.015 (0.440)	45	74730			0.00- 30.00	32.25
14 Freon 21					CAS #: 75-43-4		
11.280	11.280 (0.708)	67	267413	2.00000	1.994	70.00- 130.00	100.00
11.280	11.280 (0.708)	69	77386			0.00- 30.00	28.94
11.280	11.280 (0.708)	47	38143			0.00- 30.00	14.26
216 1,2-Dichlorotrifluoroethane					CAS #: 354-23-4		
12.321	12.321 (0.773)	117	195845	2.00000	2.017	70.00- 130.00	100.00
12.321	12.321 (0.773)	67	262010			0.00- 30.00	133.78
217 Freon 123					CAS #: 306-83-2		
12.513	12.513 (0.785)	83	296661	2.00000	2.033	70.00- 130.00	100.00
12.513	12.513 (0.785)	133	63605			0.00- 30.00	21.44
12.513	12.513 (0.785)	85	190022			0.00- 30.00	64.05
211 Cyclopentene					CAS #: 142-29-0		
13.420	13.420 (0.842)	67	231808	2.00000	1.953	70.00- 130.00	100.00
13.420	13.420 (0.842)	68	88318			0.00- 30.00	38.10
13.420	13.420 (0.842)	53	71942			0.00- 30.00	31.04
210 1-Propanol					CAS #: 71-23-8		
14.902	14.902 (0.935)	59	29605	2.00000	2.062	70.00- 130.00	100.00
14.902	14.902 (0.935)	42	34624			0.00- 30.00	116.95
14.902	14.902 (0.935)	41	20839			0.00- 30.00	70.39
215 2,2-Dichloropropane					CAS #: 594-20-7		
15.551	15.551 (0.976)	77	235992	2.00000	1.982	70.00- 130.00	100.00
15.551	15.551 (0.976)	79	75340			0.00- 30.00	31.92
15.551	15.551 (0.976)	97	54395			0.00- 30.00	23.05
56 1,1-Dicholoropropene					CAS #: 563-58-6		
16.457	16.457 (1.033)	110	79844	2.00000	1.974	70.00- 130.00	100.00
16.457	16.457 (1.033)	75	208958			0.00- 30.00	261.71
214 Isobutanol					CAS #: 78-83-1		
16.519	16.519 (1.037)	41	136335	2.00000	1.849	70.00- 130.00	100.00
16.519	16.519 (1.037)	43	206645			0.00- 30.00	151.57
16.457	16.457 (1.033)	39	227257			0.00- 30.00	166.69

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
206 1-Butanol					CAS #: 71-36-3		
17.469	17.469 (1.010)	56	232529	2.00000	2.270	70.00- 130.00	100.00
17.469	17.469 (1.010)	41	168839			0.00- 30.00	72.61
17.469	17.469 (1.010)	43	129745			0.00- 30.00	55.80
83 1,3-Dichloropropane					CAS #: 142-28-9		
21.044	21.044 (1.216)	76	239939	2.00000	1.976	70.00- 130.00	100.00
21.044	21.044 (1.216)	41	279123			0.00- 30.00	116.33
21.044	21.044 (1.216)	78	75429			0.00- 30.00	31.44
204 Butyl Acetate					CAS #: 123-86-4		
21.152	21.152 (1.222)	56	111012	2.00000	2.038	70.00- 130.00	100.00
21.152	21.152 (1.222)	73	25448			0.00- 30.00	22.92
21.152	21.152 (1.222)	43	287236			0.00- 30.00	258.74
91 1,1,1,2-Tetrachloroethane					CAS #: 630-20-6		
22.342	22.342 (1.006)	131	263739	2.00000	1.946	70.00- 130.00	100.00
22.342	22.342 (1.006)	117	165986			0.00- 30.00	62.94
22.342	22.342 (1.006)	95	91065			0.00- 30.00	34.53
205 2-Heptanone					CAS #: 110-43-0		
23.111	23.111 (1.041)	58	246797	2.00000	1.966	70.00- 130.00	100.00
23.111	23.111 (1.041)	43	486465			0.00- 30.00	197.11
209 Cyclohexanone					CAS #: 108-94-1		
23.652	23.652 (1.065)	55	212097	2.00000	1.888	70.00- 130.00	100.00
23.652	23.652 (1.065)	98	61145			0.00- 30.00	28.83
23.652	23.652 (1.065)	42	151270			0.00- 30.00	71.32
97 Bromobenzene					CAS #: 108-86-1		
23.884	23.884 (1.076)	156	210834	2.00000	1.953	70.00- 130.00	100.00
23.884	23.884 (1.076)	158	205388			0.00- 30.00	97.42
23.884	23.884 (1.076)	77	384530			0.00- 30.00	182.39
105 1,2,3-Trichloropropane					CAS #: 96-18-4		
23.910	23.910 (1.077)	110	113782	2.00000	1.981	70.00- 130.00	100.00
23.910	23.910 (1.077)	75	297039			0.00- 30.00	261.06
23.910	23.910 (1.077)	61	104066			0.00- 30.00	91.46
107 2-Chlorotoluene					CAS #: 95-49-8		
24.090	24.090 (1.085)	126	132531	2.00000	2.068	70.00- 130.00	100.00
24.065	24.065 (1.084)	91	328091			0.00- 30.00	247.56
24.065	24.065 (1.084)	65	36158			0.00- 30.00	27.28
109 4-Chlorotoluene					CAS #: 106-43-4		
24.194	24.194 (1.090)	126	105798	2.00000	2.025	70.00- 130.00	100.00

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

  109 4-Chlorotoluene (continued)
 24.194  24.194 (1.090)    91    289848                    0.00-  30.00   273.96
 24.194  24.194 (1.090)    63     43444                    0.00-  30.00    41.06
-------------------------------------------------------------------------------
  213 Diisobutyl Ketone                            CAS #: 108-83-8
 24.219  24.219 (1.091)    57    443224 2.00000    1.920  70.00- 130.00   100.00
 24.219  24.219 (1.091)    85    245095                    0.00-  30.00    55.30
-------------------------------------------------------------------------------
  115 tert-Butylbenzene                            CAS #: 98-06-6
 24.477  24.477 (1.102)   119    306669 2.00000    2.113  70.00- 130.00   100.00
 24.477  24.477 (1.102)   134     69840                    0.00-  30.00    22.77
 24.477  24.477 (1.102)    91    171693                    0.00-  30.00    55.99
-------------------------------------------------------------------------------
  212 Pentachloroethane                            CAS #: 76-01-7
 24.555  24.555 (1.106)   167    174048 2.00000    1.966  70.00- 130.00   100.00
 24.555  24.555 (1.106)   117    161406                    0.00-  30.00    92.74
 24.555  24.555 (1.106)   169     81643                    0.00-  30.00    46.91
-------------------------------------------------------------------------------
  119 sec-Butylbenzene                             CAS #: 135-98-8
 24.709  24.709 (1.113)   105    373572 2.00000    1.974  70.00- 130.00   100.00
 24.709  24.709 (1.113)   134     89777                    0.00-  30.00    24.03
 24.709  24.709 (1.113)    91     57921                    0.00-  30.00    15.50
-------------------------------------------------------------------------------
  116 p-Cymene                                     CAS #: 99-87-6
 24.835  24.835 (1.118)   119    377894 2.00000    1.961  70.00- 130.00   100.00
 24.835  24.835 (1.118)   134    110568                    0.00-  30.00    29.26
 24.835  24.835 (1.118)    91     81070                    0.00-  30.00    21.45
-------------------------------------------------------------------------------
  121 1,2,3-trimethylbenzene                       CAS #: 526-73-8
 24.992  24.992 (1.125)   120    167191 2.00000    1.943  70.00- 130.00   100.00
 24.992  24.992 (1.125)   105    367543                    0.00-  30.00   219.83
 24.992  24.992 (1.125)    77     40929                    0.00-  30.00    24.48
-------------------------------------------------------------------------------
  123 Butylbenzene                                 CAS #: 104-51-8
 25.261  25.261 (1.138)   134    129949 2.00000    1.961  70.00- 130.00   100.00
 25.261  25.261 (1.138)    91    410822                    0.00-  30.00   316.14
 25.261  25.261 (1.138)    92    224559                    0.00-  30.00   172.81
-------------------------------------------------------------------------------
  129 1,2-dibromo-3-chloropropane                  CAS #: 96-12-8
 26.202  26.202 (1.180)   157    179081 2.00000    2.028  70.00- 130.00   100.00
 26.202  26.202 (1.180)    75    146805                    0.00-  30.00    81.98
 26.202  26.202 (1.180)   155    132229                    0.00-  30.00    73.84
-------------------------------------------------------------------------------
```

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdv.i
Lab File ID: v012707.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: ef
Method File: /chem/msdv.i/27Jan2015.b/v15l0123b.m
Misc Info: 2.0ppbv (5.0ppbv) AT-1

Calibration Date: 27-JAN-2015
Calibration Time: 12:09
Client Smp ID: Level 13
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
54 Bromochloromethan	239010	143406	334614	228109	-4.56
71 1,4-Difluorobenze	931417	558850	1303984	938902	0.80
92 Chlorobenzene-d5	734924	440954	1028894	754579	2.67

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/27Jan2015.b/v012707.d

Date : 27-JAN-2015 12:52

Client ID: Level 13

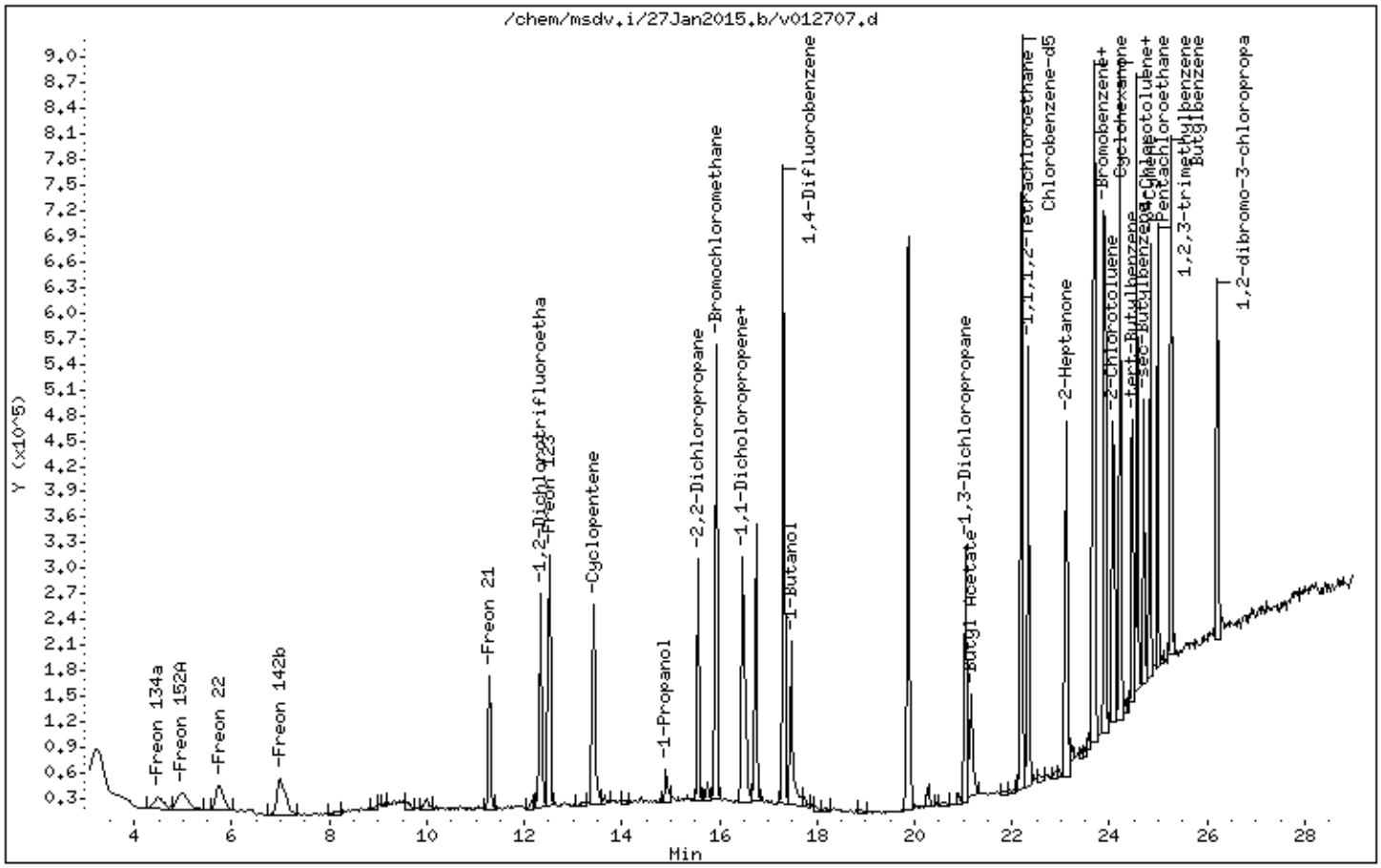
Instrument: msdv.i

Sample Info: 100mL# 2716-22

Operator: ef

Column phase: RTx-624

Column diameter: 0.32



Eurofins Air Toxics Inc.

TO15/Modified TO-14A

Data file : /chem/msdv.i/27Jan2015.b/v012708.d
Lab Smp Id: ICAL Client Smp ID: Level 16
Inj Date : 27-JAN-2015 13:35
Operator : ef Inst ID: msdv.i
Smp Info : 200mL# 2716-22
Misc Info : 4.0ppbv (5.0ppbv) AT-1
Comment : Low Level GC-MS
Method : /chem/msdv.i/27Jan2015.b/v15l0123b.m
Meth Date : 28-Jan-2015 08:21 efinn Quant Type: ISTD
Cal Date : 27-JAN-2015 13:35 Cal File: v012708.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	230717	5.00000		70.00- 130.00	100.00
15.934	15.934 (1.000)	128	188461			0.00- 30.00	81.68
15.934	15.934 (1.000)	49	492555			0.00- 30.00	213.49
* 71 1,4-Difluorobenzene						CAS #: 540-36-3	
17.305	17.305 (1.000)	114	951533	5.00000		70.00- 130.00	100.00
17.305	17.305 (1.000)	88	148045			0.00- 30.00	15.56
* 92 Chlorobenzene-d5						CAS #: 3114-55-4	
22.205	22.205 (1.000)	117	742580	5.00000		70.00- 130.00	100.00
22.205	22.205 (1.000)	82	411898			0.00- 30.00	55.47
1 Freon 134a						CAS #: 811-97-2	
4.560	4.560 (0.286)	83	175011	4.00000	3.848	70.00- 130.00	100.00
4.522	4.522 (0.284)	69	140483			0.00- 30.00	80.27
2 Freon 152A						CAS #: 75-37-6	
5.051	5.051 (0.317)	65	115584	4.00000	3.781	70.00- 130.00	100.00
5.051	5.051 (0.317)	51	316595			0.00- 30.00	273.91

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	510391	4.00000	4.018	70.00- 130.00	100.00
5.806	5.806 (0.364)	67	46476			0.00- 30.00	9.11
5.882	5.882 (0.369)	85	4619			0.00- 30.00	0.90
218 Freon 142b					CAS #: 75-68-3		
7.015	7.015 (0.440)	65	454230	4.00000	3.893	70.00- 130.00	100.00
7.015	7.015 (0.440)	45	146587			0.00- 30.00	32.27
14 Freon 21					CAS #: 75-43-4		
11.280	11.280 (0.708)	67	517120	4.00000	3.812	70.00- 130.00	100.00
11.280	11.280 (0.708)	69	161750			0.00- 30.00	31.28
11.280	11.280 (0.708)	47	75223			0.00- 30.00	14.55
216 1,2-Dichlorotrifluoroethane					CAS #: 354-23-4		
12.321	12.321 (0.773)	117	379985	4.00000	3.869	70.00- 130.00	100.00
12.321	12.321 (0.773)	67	533024			0.00- 30.00	140.28
217 Freon 123					CAS #: 306-83-2		
12.514	12.514 (0.785)	83	586486	4.00000	3.974	70.00- 130.00	100.00
12.514	12.514 (0.785)	133	139353			0.00- 30.00	23.76
12.514	12.514 (0.785)	85	374963			0.00- 30.00	63.93
211 Cyclopentene					CAS #: 142-29-0		
13.420	13.420 (0.842)	67	472926	4.00000	3.940	70.00- 130.00	100.00
13.420	13.420 (0.842)	68	166957			0.00- 30.00	35.30
13.420	13.420 (0.842)	53	150431			0.00- 30.00	31.81
210 1-Propanol					CAS #: 71-23-8		
14.903	14.903 (0.935)	59	67562	4.00000	4.653	70.00- 130.00	100.00
14.903	14.903 (0.935)	42	74895			0.00- 30.00	110.85
14.903	14.903 (0.935)	41	44001			0.00- 30.00	65.13
215 2,2-Dichloropropane					CAS #: 594-20-7		
15.551	15.551 (0.976)	77	469596	4.00000	3.900	70.00- 130.00	100.00
15.551	15.551 (0.976)	79	154419			0.00- 30.00	32.88
15.551	15.551 (0.976)	97	100963			0.00- 30.00	21.50
56 1,1-Dicholoropropene					CAS #: 563-58-6		
16.457	16.457 (1.033)	110	161113	4.00000	3.939	70.00- 130.00	100.00
16.457	16.457 (1.033)	75	414658			0.00- 30.00	257.37
214 Isobutanol					CAS #: 78-83-1		
16.519	16.519 (1.037)	41	287325	4.00000	3.852	70.00- 130.00	100.00
16.519	16.519 (1.037)	43	421616			0.00- 30.00	146.74
16.457	16.457 (1.033)	39	449684			0.00- 30.00	156.51

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
206 1-Butanol					CAS #: 71-36-3		
17.469	17.469 (1.010)	56	540062	4.00000	5.202	70.00- 130.00	100.00
17.469	17.469 (1.010)	41	411772			0.00- 30.00	76.25
17.469	17.469 (1.010)	43	318972			0.00- 30.00	59.06
83 1,3-Dichloropropane					CAS #: 142-28-9		
21.045	21.045 (1.216)	76	480861	4.00000	3.908	70.00- 130.00	100.00
21.045	21.045 (1.216)	41	525356			0.00- 30.00	109.25
21.045	21.045 (1.216)	78	150564			0.00- 30.00	31.31
204 Butyl Acetate					CAS #: 123-86-4		
21.152	21.152 (1.222)	56	223022	4.00000	4.039	70.00- 130.00	100.00
21.152	21.152 (1.222)	73	46616			0.00- 30.00	20.90
21.152	21.152 (1.222)	43	616741			0.00- 30.00	276.54
91 1,1,1,2-Tetrachloroethane					CAS #: 630-20-6		
22.343	22.343 (1.006)	131	513440	4.00000	3.851	70.00- 130.00	100.00
22.343	22.343 (1.006)	117	338173			0.00- 30.00	65.86
22.343	22.343 (1.006)	95	182681			0.00- 30.00	35.58
205 2-Heptanone					CAS #: 110-43-0		
23.111	23.111 (1.041)	58	469994	4.00000	3.804	70.00- 130.00	100.00
23.111	23.111 (1.041)	43	885797			0.00- 30.00	188.47
209 Cyclohexanone					CAS #: 108-94-1		
23.652	23.652 (1.065)	55	452990	4.00000	4.098	70.00- 130.00	100.00
23.652	23.652 (1.065)	98	131966			0.00- 30.00	29.13
23.652	23.652 (1.065)	42	312689			0.00- 30.00	69.03
97 Bromobenzene					CAS #: 108-86-1		
23.884	23.884 (1.076)	156	414150	4.00000	3.898	70.00- 130.00	100.00
23.884	23.884 (1.076)	158	386246			0.00- 30.00	93.26
23.884	23.884 (1.076)	77	717666			0.00- 30.00	173.29
105 1,2,3-Trichloropropane					CAS #: 96-18-4		
23.910	23.910 (1.077)	110	217371	4.00000	3.846	70.00- 130.00	100.00
23.910	23.910 (1.077)	75	581285			0.00- 30.00	267.42
23.910	23.910 (1.077)	61	196454			0.00- 30.00	90.38
107 2-Chlorotoluene					CAS #: 95-49-8		
24.091	24.091 (1.085)	126	244800	4.00000	3.882	70.00- 130.00	100.00
24.065	24.065 (1.084)	91	617544			0.00- 30.00	252.26
24.065	24.065 (1.084)	65	67830			0.00- 30.00	27.71
109 4-Chlorotoluene					CAS #: 106-43-4		
24.194	24.194 (1.090)	126	194544	4.00000	3.784	70.00- 130.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
109 4-Chlorotoluene (continued)							
24.194	24.194 (1.090)	91	515245			0.00- 30.00	264.85
24.194	24.194 (1.090)	63	76335			0.00- 30.00	39.24
213 Diisobutyl Ketone					CAS #: 108-83-8		
24.220	24.220 (1.091)	57	702936	4.00000	3.094	70.00- 130.00	100.00
24.220	24.220 (1.091)	85	395439			0.00- 30.00	56.26
115 tert-Butylbenzene					CAS #: 98-06-6		
24.477	24.477 (1.102)	119	526462	4.00000	3.686	70.00- 130.00	100.00
24.477	24.477 (1.102)	134	136853			0.00- 30.00	25.99
24.477	24.477 (1.102)	91	322379			0.00- 30.00	61.23
212 Pentachloroethane					CAS #: 76-01-7		
24.555	24.555 (1.106)	167	344388	4.00000	3.953	70.00- 130.00	100.00
24.555	24.555 (1.106)	117	318832			0.00- 30.00	92.58
24.555	24.555 (1.106)	169	160427			0.00- 30.00	46.58
119 sec-Butylbenzene					CAS #: 135-98-8		
24.710	24.710 (1.113)	105	659732	4.00000	3.543	70.00- 130.00	100.00
24.710	24.710 (1.113)	134	152279			0.00- 30.00	23.08
24.710	24.710 (1.113)	91	107702			0.00- 30.00	16.33
116 p-Cymene					CAS #: 99-87-6		
24.835	24.835 (1.118)	119	603600	4.00000	3.182	70.00- 130.00	100.00
24.835	24.835 (1.118)	134	179422			0.00- 30.00	29.73
24.835	24.835 (1.118)	91	135993			0.00- 30.00	22.53
121 1,2,3-trimethylbenzene					CAS #: 526-73-8		
24.992	24.992 (1.125)	120	283034	4.00000	3.343	70.00- 130.00	100.00
24.992	24.992 (1.125)	105	620073			0.00- 30.00	219.08
24.992	24.992 (1.125)	77	69266			0.00- 30.00	24.47
123 Butylbenzene					CAS #: 104-51-8		
25.261	25.261 (1.138)	134	198258	4.00000	3.040	70.00- 130.00	100.00
25.261	25.261 (1.138)	91	654380			0.00- 30.00	330.06
25.261	25.261 (1.138)	92	364076			0.00- 30.00	183.64
129 1,2-dibromo-3-chloropropane					CAS #: 96-12-8		
26.203	26.203 (1.180)	157	342537	4.00000	3.942	70.00- 130.00	100.00
26.203	26.203 (1.180)	75	283916			0.00- 30.00	82.89
26.203	26.203 (1.180)	155	272213			0.00- 30.00	79.47

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdv.i
Lab File ID: v012708.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: ef
Method File: /chem/msdv.i/27Jan2015.b/v15l0123b.m
Misc Info: 4.0ppbv (5.0ppbv) AT-1

Calibration Date: 27-JAN-2015
Calibration Time: 12:09
Client Smp ID: Level 16
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
54 Bromochloromethan	239010	143406	334614	230717	-3.47
71 1,4-Difluorobenze	931417	558850	1303984	951533	2.16
92 Chlorobenzene-d5	734924	440954	1028894	742580	1.04

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/27Jan2015.b/v012708.d

Date : 27-JAN-2015 13:35

Client ID: Level 16

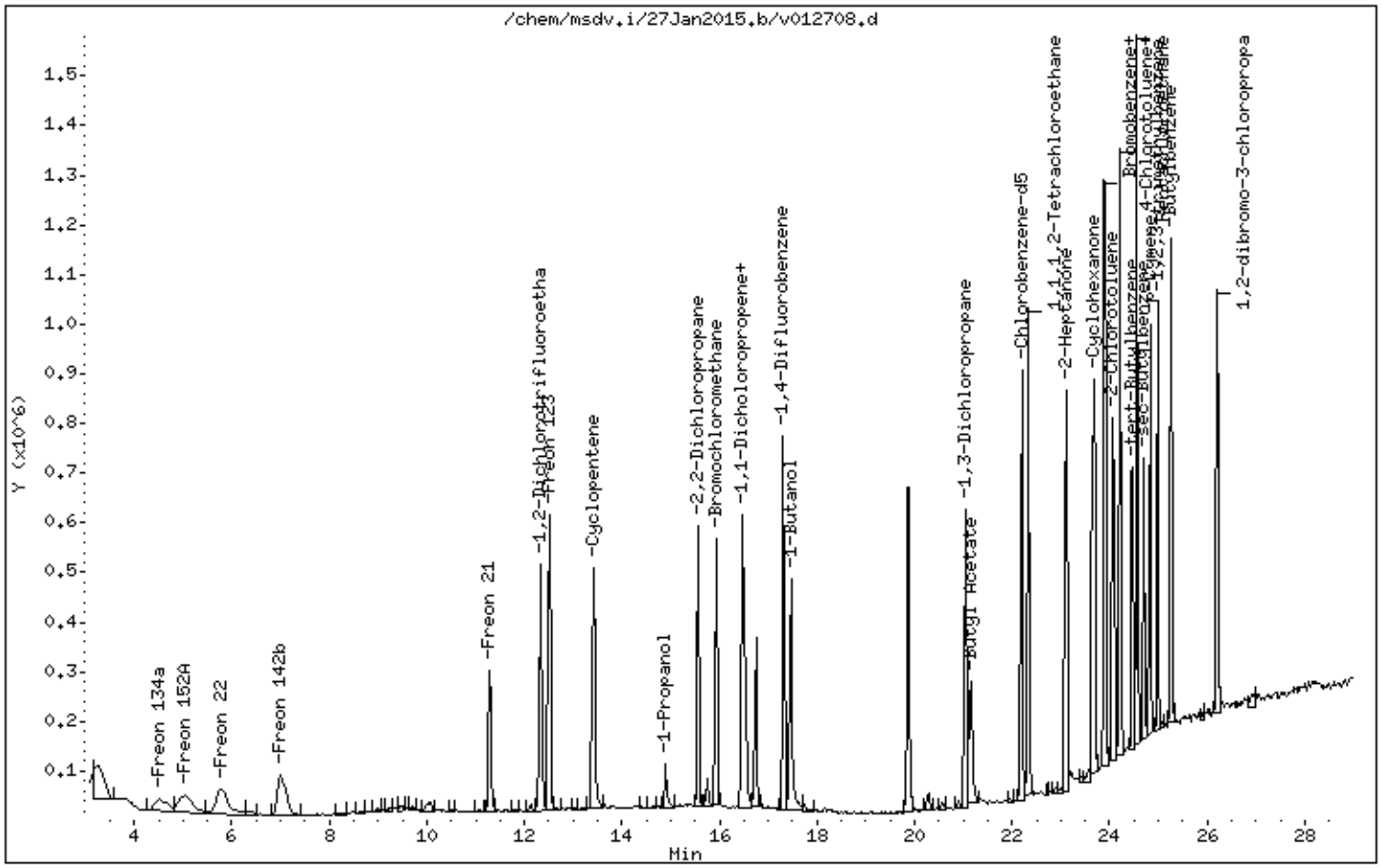
Instrument: msdv.i

Sample Info: 200mL# 2716-22

Operator: ef

Column phase: RTx-624

Column diameter: 0.32



TO-15 Low level MDL

~~0.5p~~ 2/20/14 83 0.1ppbv RLs Page 1

0.1ppbv (1.0ppbv); load amount: 25mL # 2612-31

MDL Verification: 0.09ppbv (~~50~~ 1.0 ppbv 2/20/14 83)

load amount: ~~25~~ 2/20/14 83 mL # 2612-300

22.5

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~~ 8/20/14 83

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/v14l0107a.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)
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/v14l0107a.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	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	2/21/14 483
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

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	AVG CONC	STD DEV	MDL	RL (ppbv)
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~~	~~69.22~~	~~100.50~~	~~30.41~~	~~91.16~~	~~500~~ 8/20/14
133 Naphthalene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	

8/20/14 New ~~RL~~ MDL for SP RL performed 8/19/14

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

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	127.60	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

$\bar{X} = 0.096$

$2\bar{X} = 0.2$

$3.4\bar{X} = 0.3$ 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
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	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~~
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

8/20/14 BS

~~500~~ New MDL for Special RL Performed 8/19/14

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/v14l0107a.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/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
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/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
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/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
	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

RL (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/v14l0107a.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/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
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-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	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#: 1502113AR1-06A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**v021002**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 2/10/15 06:33 AM**	

Compound	%Recovery
Freon 12	105
Freon 114	106
Chloromethane	113
Vinyl Chloride	109
1,3-Butadiene	112
Bromomethane	112
Chloroethane	109
Freon 11	102
Ethanol	139 Q
Freon 113	106
1,1-Dichloroethene	105
Acetone	100
2-Propanol	116
Carbon Disulfide	109
3-Chloropropene	105
Methylene Chloride	104
Methyl tert-butyl ether	106
trans-1,2-Dichloroethene	108
Hexane	108
1,1-Dichloroethane	107
2-Butanone (Methyl Ethyl Ketone)	106
cis-1,2-Dichloroethene	105
Tetrahydrofuran	113
Chloroform	107
1,1,1-Trichloroethane	102
Cyclohexane	104
Carbon Tetrachloride	95
2,2,4-Trimethylpentane	106
Benzene	97
1,2-Dichloroethane	99
Heptane	102
Trichloroethene	100
1,2-Dichloropropane	100
1,4-Dioxane	84
Bromodichloromethane	100
cis-1,3-Dichloropropene	98
4-Methyl-2-pentanone	102
Toluene	97
trans-1,3-Dichloropropene	94
1,1,2-Trichloroethane	99
Tetrachloroethene	97
2-Hexanone	88

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Client Sample ID: CCV

Lab ID#: 1502113AR1-06A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**v021002**	**Date of Collection: NA**
Dil. Factor:	**1.00**	**Date of Analysis: 2/10/15 06:33 AM**

Compound	%Recovery
Dibromochloromethane	98
1,2-Dibromoethane (EDB)	100
Chlorobenzene	93
Ethyl Benzene	90
m,p-Xylene	86
o-Xylene	89
Styrene	86
Bromoform	99
Cumene	89
1,1,2,2-Tetrachloroethane	87
Propylbenzene	83
4-Ethyltoluene	85
1,3,5-Trimethylbenzene	85
1,2,4-Trimethylbenzene	92
1,3-Dichlorobenzene	82
1,4-Dichlorobenzene	73
alpha-Chlorotoluene	92
1,2-Dichlorobenzene	77
1,2,4-Trichlorobenzene	74
Hexachlorobutadiene	68 Q
Naphthalene	84

Q = Exceeds Quality Control limits.

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	100	70-130
Toluene-d8	105	70-130
4-Bromofluorobenzene	96	70-130

Eurofins Air Toxics Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: msdv.i Injection Date: 10-FEB-2015 06:33
Lab File ID: v021002.d Init. Cal. Date(s): 23-JAN-2015 09-FEB-2015
Analysis Type: AIR Init. Cal. Times: 16:43 14:14
Lab Sample ID: CCV Quant Type: ISTD
Method: /chem/msdv.i/10Feb2015.b/v15l0123c.m

COMPOUND	RRF / AMOUNT	RF5	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
$ 65 1,2-Dichloroethane-d4	1.56726	1.57410	0.010	-0.43655	30.00000	Averaged	
$ 80 Toluene-d8	0.93619	0.98575	0.010	-5.29367	30.00000	Averaged	
$ 106 Bromofluorobenzene	0.46853	0.44789	0.010	4.40456	30.00000	Averaged	
3 Propylene	2.04780	2.44698	0.010	-19.49306	30.00000	Averaged	
4 Dichlorodifluoromethane/Fr1	3.98600	4.17407	0.010	-4.71817	30.00000	Averaged	
6 Freon 114	3.35097	3.54756	0.010	-5.86663	30.00000	Averaged	
8 Chloromethane	2.57300	2.91996	0.010	-13.48472	30.00000	Averaged	
9 Butane	0.45743	0.50366	0.010	-10.10582	30.00000	Averaged	
10 Vinyl Chloride	1.97794	2.16371	0.010	-9.39211	30.00000	Averaged	
11 1,3-Butadiene	1.94375	2.17672	0.010	-11.98512	30.00000	Averaged	
12 Bromomethane	1.22992	1.38452	0.010	-12.56948	30.00000	Averaged	
17 Chloroethane	0.85967	0.93621	0.010	-8.90360	30.00000	Averaged	
18 Isopentane	1.89534	2.13417	0.010	-12.60112	30.00000	Averaged	
20 Trichlorofluoromethane/Fr11	4.24868	4.31965	0.010	-1.67030	30.00000	Averaged	
24 Ethanol	0.91355	1.27275	0.010	-39.31837	30.00000	Averaged	<-
30 1,1-Dichloroethene	1.02110	1.07604	0.010	-5.38061	30.00000	Averaged	
28 Freon 113	3.04095	3.22143	0.010	-5.93499	30.00000	Averaged	
31 Acetone	1.15451	1.15226	0.010	0.19486	30.00000	Averaged	
33 Carbon Disulfide	4.23572	4.61014	0.010	-8.83953	30.00000	Averaged	
35 3-Chloroprene	0.64553	0.67960	0.010	-5.27734	30.00000	Averaged	
34 2-Propanol	4.56951	5.28358	0.010	-15.62685	30.00000	Averaged	
37 Methylene Chloride	1.42565	1.48771	0.010	-4.35345	30.00000	Averaged	
38 tert-butyl alcohol	5.13191	4.92294	0.010	4.07204	30.00000	Averaged	
39 MTBE	4.45779	4.73636	0.010	-6.24892	30.00000	Averaged	
40 trans-1,2-Dichloroethene	1.05108	1.13148	0.010	-7.64995	30.00000	Averaged	
43 Hexane	4.03177	4.36570	0.010	-8.28258	30.00000	Averaged	
45 Isopropyl ether	9.49890	11.05679	0.010	-16.40079	30.00000	Averaged	
46 1,1-Dichloroethane	3.73625	4.00438	0.010	-7.17640	30.00000	Averaged	
47 Vinyl Acetate	0.37646	0.43156	0.010	-14.63666	30.00000	Averaged	
49 Ethyl-tert-butyl ether	7.43221	8.02974	0.010	-8.03981	30.00000	Averaged	
50 cis-1,2-Dichloroethene	1.17793	1.23772	0.010	-5.07527	30.00000	Averaged	
51 2-Butanone	0.78265	0.82816	0.010	-5.81488	30.00000	Averaged	
53 Tetrahydrofuran	3.41557	3.86681	0.010	-13.21119	30.00000	Averaged	
55 Chloroform	3.48327	3.71605	0.010	-6.68272	30.00000	Averaged	
57 Cyclohexane	2.36717	2.45939	0.010	-3.89588	30.00000	Averaged	
58 1,1,1-Trichloroethane	3.88096	3.95125	0.010	-1.81114	30.00000	Averaged	

Eurofins Air Toxics Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: msdv.i Injection Date: 10-FEB-2015 06:33
Lab File ID: v021002.d Init. Cal. Date(s): 23-JAN-2015 09-FEB-2015
Analysis Type: AIR Init. Cal. Times: 16:43 14:14
Lab Sample ID: CCV Quant Type: ISTD
Method: /chem/msdv.i/10Feb2015.b/v15l0123c.m

COMPOUND	RRF / AMOUNT	RF5	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
59 Carbon Tetrachloride	3.54249	3.36123	0.010	5.11657	30.00000	Averaged
63 2,2,4-Trimethylpentane	4.27315	4.51023	0.010	-5.54821	30.00000	Averaged
64 Benzene	1.24129	1.20438	0.010	2.97356	30.00000	Averaged
66 tert-amyl methyl ether	0.31896	0.31442	0.010	1.42355	30.00000	Averaged
68 1,2-Dichloroethane	0.73882	0.73441	0.010	0.59786	30.00000	Averaged
69 Heptane	0.58770	0.59653	0.010	-1.50303	30.00000	Averaged
72 Trichloroethene	0.63351	0.63444	0.010	-0.14797	30.00000	Averaged
73 Methylcyclohexane	0.77784	0.76855	0.010	1.19431	30.00000	Averaged
74 1,2-Dichloropropane	0.60919	0.61269	0.010	-0.57461	30.00000	Averaged
75 1,4-Dioxane	0.35475	0.29779	0.010	16.05530	30.00000	Averaged
77 Bromodichloromethane	0.91853	0.91694	0.010	0.17307	30.00000	Averaged
78 cis-1,3-Dichloropropene	0.76108	0.74667	0.010	1.89410	30.00000	Averaged
79 4-Methyl-2-pentanone	1.73684	1.76291	0.010	-1.50106	30.00000	Averaged
81 Toluene	1.41441	1.37274	0.010	2.94590	30.00000	Averaged
82 trans-1,3-Dichloropropene	0.85194	0.80369	0.010	5.66332	30.00000	Averaged
84 1,1,2-Trichloroethane	0.68055	0.67227	0.010	1.21621	30.00000	Averaged
86 Tetrachloroethene	1.02445	0.98993	0.010	3.36936	30.00000	Averaged
87 2-Hexanone	0.88732	0.78436	0.010	11.60256	30.00000	Averaged
89 Dibromochloromethane	1.32312	1.29566	0.010	2.07549	30.00000	Averaged
90 1,2-Dibromoethane	1.13659	1.13621	0.010	0.03302	30.00000	Averaged
93 Chlorobenzene	1.56223	1.44905	0.010	7.24487	30.00000	Averaged
95 Ethyl Benzene	0.73824	0.66518	0.010	9.89647	30.00000	Averaged
96 m,p-Xylene	0.74563	0.63956	0.010	14.22583	30.00000	Averaged
100 o-Xylene	0.68546	0.61202	0.010	10.71469	30.00000	Averaged
101 Styrene	1.02217	0.87940	0.010	13.96716	30.00000	Averaged
102 Bromoform	1.18371	1.16815	0.010	1.31420	30.00000	Averaged
103 Cumene	1.93800	1.72620	0.010	10.92896	30.00000	Averaged
108 1,1,2,2-Tetrachloroethane	1.36276	1.19029	0.010	12.65570	30.00000	Averaged
111 Propylbenzene	1.80522	1.50410	0.010	16.68051	30.00000	Averaged
113 4-Ethyltoluene	1.36851	1.16641	0.010	14.76807	30.00000	Averaged
114 1,3,5-Trimethylbenzene	1.42321	1.20848	0.010	15.08781	30.00000	Averaged
120 1,2,4-Trimethylbenzene	1.25834	1.15747	0.010	8.01615	30.00000	Averaged
122 1,3-Dichlorobenzene	0.95117	0.78556	0.010	17.41174	30.00000	Averaged
124 1,4-Dichlorobenzene	1.00781	0.73553	0.010	27.01683	30.00000	Averaged
127 alpha-chlorotoluene	1.16886	1.08019	0.010	7.58574	30.00000	Averaged

Eurofins Air Toxics Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: msdv.i Injection Date: 10-FEB-2015 06:33
Lab File ID: v021002.d Init. Cal. Date(s): 23-JAN-2015 09-FEB-2015
Analysis Type: AIR Init. Cal. Times: 16:43 14:14
Lab Sample ID: CCV Quant Type: ISTD
Method: /chem/msdv.i/10Feb2015.b/v15l0123c.m

COMPOUND	RRF / AMOUNT	RF5	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
128 1,2-Dichlorobenzene	0.95802	0.74003	0.010	22.75376	30.00000	Averaged	
131 1,2,4-Trichlorobenzene	0.86770	0.64043	0.010	26.19194	30.00000	Averaged	
132 Hexachlorobutadiene	0.62726	0.42601	0.010	32.08376	30.00000	Averaged	<-
133 Naphthalene	1.30057	1.09030	0.010	16.16733	40.00000	Averaged	

Eurofins Air Toxics Inc.

TO15/Modified TO-14A

Data file : /chem/msdv.i/10Feb2015.b/v021002.d
Lab Smp Id: CCV Client Smp ID: CCV
Inj Date : 10-FEB-2015 06:33
Operator : act Inst ID: msdv.i
Smp Info : 25mL #2687-244
Misc Info : 5.0ppbv (50ppbv)
Comment : Low Level GC-MS
Method : /chem/msdv.i/10Feb2015.b/v15l0123c.m
Meth Date : 10-Feb-2015 09:21 atoyama Quant Type: ISTD
Cal Date : 09-FEB-2015 14:14 Cal File: v020912.d
Als bottle: 1 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT12.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

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	194946	5.00000		80.00- 120.00	100.00
15.934	15.934 (1.000)	128	141634			0.00- 30.00	72.65
15.934	15.934 (1.000)	49	444233			0.00- 30.00	227.87
* 71 1,4-Difluorobenzene						CAS #: 540-36-3	
17.305	17.305 (1.000)	114	822631	5.00000		80.00- 120.00	100.00
17.305	17.305 (1.000)	88	130687			0.00- 30.00	15.89
* 92 Chlorobenzene-d5						CAS #: 3114-55-4	
22.205	22.205 (1.000)	117	670659	5.00000		80.00- 120.00	100.00
22.205	22.205 (1.000)	82	360636			0.00- 30.00	53.77
$ 65 1,2-Dichloroethane-d4						CAS #: 17060-07-0	
16.756	16.756 (1.052)	65	306865	5.00000	5.022	80.00- 120.00	100.00
16.756	16.756 (1.052)	67	161542			25.13- 85.13	52.64
$ 80 Toluene-d8						CAS #: 2037-26-5	
19.856	19.856 (1.147)	98	810909	5.00000	5.265	80.00- 120.00	100.00
19.856	19.856 (1.147)	70	83485			0.00- 40.74	10.30

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

$  80 Toluene-d8 (continued)
 19.856  19.856 (1.147)   100    524827                    36.73-  96.73    64.72
-------------------------------------------------------------------------------
$ 106 Bromofluorobenzene                            CAS #: 460-00-4
 23.704  23.704 (1.067)   174    300381 5.00000    4.780  80.00- 120.00   100.00
 23.678  23.678 (1.066)    95    373530                   95.17- 155.17   124.35
 23.678  23.678 (1.066)   176    289897                   64.74- 124.74    96.51
-------------------------------------------------------------------------------
    3 Propylene                                     CAS #: 115-07-1
  4.674   4.674 (0.293)    41    477029 5.00000    5.975  80.00- 120.00   100.00
  4.674   4.674 (0.293)    42    320194                   37.91-  97.91    67.12
  4.711   4.711 (0.296)    39    315943                   38.58-  98.58    66.23
-------------------------------------------------------------------------------
    4 Dichlorodifluoromethane/Fr12                  CAS #: 75-71-8
  5.202   5.202 (0.326)    85    813718 5.00000    5.236  80.00- 120.00   100.00
  5.240   5.240 (0.329)    87    261175                    1.73-  61.73    32.10
-------------------------------------------------------------------------------
    6 Freon 114                                     CAS #: 76-14-2
  6.713   6.713 (0.421)   135    691582 5.00000    5.293  80.00- 120.00   100.00
  6.713   6.713 (0.421)   137    214799                    2.34-  62.34    31.06
  6.713   6.713 (0.421)    85    838946                   93.53- 153.53   121.31
-------------------------------------------------------------------------------
    8 Chloromethane                                 CAS #: 74-87-3
  7.053   7.053 (0.443)    50    569234 5.00000    5.674  80.00- 120.00   100.00
  7.053   7.053 (0.443)    52    178534                    1.57-  61.57    31.36
-------------------------------------------------------------------------------
    9 Butane                                        CAS #: 106-97-8
  7.854   7.854 (0.493)    58     98186 5.00000    5.505  80.00- 120.00   100.00
  7.885   7.885 (0.495)    43    926405                  879.44- 939.44   943.52
-------------------------------------------------------------------------------
   10 Vinyl Chloride                                CAS #: 75-01-4
  8.009   8.009 (0.503)    62    421807 5.00000    5.470  80.00- 120.00   100.00
  8.009   8.009 (0.503)    64    119031                    0.00-  59.13    28.22
-------------------------------------------------------------------------------
   11 1,3-Butadiene                                 CAS #: 106-99-0
  8.257   8.257 (0.518)    54    424342 5.00000    5.599  80.00- 120.00   100.00
  8.257   8.257 (0.518)    39    455551                   70.79- 130.79   107.35
-------------------------------------------------------------------------------
   12 Bromomethane                                  CAS #: 74-83-9
  9.834   9.834 (0.617)    94    269906 5.00000    5.628  80.00- 120.00   100.00
  9.834   9.834 (0.617)    96    250996                   64.45- 124.45    92.99
-------------------------------------------------------------------------------
   17 Chloroethane                                  CAS #: 75-00-3
 10.340  10.340 (0.649)    64    182511 5.00000    5.445  80.00- 120.00   100.00
 10.340  10.340 (0.649)    66     53242                    0.00-  59.36    29.17
-------------------------------------------------------------------------------
```

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	416048	5.00000	5.630	80.00- 120.00	100.00
10.533	10.533 (0.661)	43	731156			135.34- 195.34	175.74
10.533	10.533 (0.661)	42	622266			110.64- 170.64	149.57
20 Trichlorofluoromethane/Fr11					CAS #: 75-69-4		
11.184	11.184 (0.702)	101	842098	5.00000	5.084	80.00- 120.00	100.00
11.184	11.184 (0.702)	103	546959			34.40- 94.40	64.95
24 Ethanol					CAS #: 64-17-5		
12.102	12.102 (0.760)	45	248117	5.00000	6.966	80.00- 120.00	100.00
12.102	12.102 (0.760)	46	92682			9.93- 69.93	37.35
12.102	12.102 (0.760)	43	41040			0.00- 50.31	16.54
30 1,1-Dichloroethene					CAS #: 75-35-4		
12.568	12.568 (0.789)	98	209770	5.00000	5.269	80.00- 120.00	100.00
12.568	12.568 (0.789)	61	733190			316.34- 376.34	349.52
12.568	12.568 (0.789)	96	332891			133.12- 193.12	158.69
28 Freon 113					CAS #: 76-13-1		
12.568	12.568 (0.789)	151	628005	5.00000	5.297	80.00- 120.00	100.00
12.568	12.568 (0.789)	153	403859			33.38- 93.38	64.31
12.568	12.568 (0.789)	101	711709			85.19- 145.19	113.33
31 Acetone					CAS #: 67-64-1		
12.816	12.816 (0.804)	58	224629	5.00000	4.990	80.00- 120.00	100.00
12.816	12.816 (0.804)	43	866031			326.03- 386.03	385.54
33 Carbon Disulfide					CAS #: 75-15-0		
12.926	12.926 (0.811)	76	898728	5.00000	5.442	80.00- 120.00	100.00
35 3-Chloroprene					CAS #: 107-05-1		
13.365	13.365 (0.839)	76	132485	5.00000	5.264	80.00- 120.00	100.00
13.365	13.365 (0.839)	41	721633			456.88- 516.88	544.69
34 2-Propanol					CAS #: 67-63-0		
13.173	13.173 (0.827)	45	1030013	5.00000	5.781	80.00- 120.00	100.00
13.173	13.173 (0.827)	43	177398			0.00- 47.97	17.22
13.173	13.173 (0.827)	59	32758			0.00- 33.25	3.18
37 Methylene Chloride					CAS #: 75-09-2		
13.640	13.640 (0.856)	84	290024	5.00000	5.218	80.00- 120.00	100.00
13.640	13.640 (0.856)	49	720179			198.57- 258.57	248.32
13.640	13.640 (0.856)	51	222226			41.48- 101.48	76.62
38 tert-butyl alcohol					CAS #: 75-65-0		
13.859	13.859 (0.870)	59	959707	5.00000	4.796	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    244406                     0.00-  53.29    25.47
 13.859  13.859 (0.870)    57    102111                     0.00-  40.72    10.64
-------------------------------------------------------------------------------
   39 MTBE                                          CAS #: 1634-04-4
 13.997  13.997 (0.878)    73    923334 5.00000    5.312  80.00- 120.00   100.00
 13.997  13.997 (0.878)    57    361185                     6.35-  66.35    39.12
 13.997  13.997 (0.878)    41    360702                     5.74-  65.74    39.07
-------------------------------------------------------------------------------
   40 trans-1,2-Dichloroethene                      CAS #: 156-60-5
 14.052  14.052 (0.882)    98    220578 5.00000    5.382  80.00- 120.00   100.00
 14.052  14.052 (0.882)    61    673855                   272.66- 332.66   305.50
 14.052  14.052 (0.882)    96    352086                   128.53- 188.53   159.62
-------------------------------------------------------------------------------
   43 Hexane                                        CAS #: 110-54-3
 14.381  14.381 (0.903)    57    851076 5.00000    5.414  80.00- 120.00   100.00
 14.381  14.381 (0.903)    43    641852                    41.32- 101.32    75.42
 14.381  14.381 (0.903)    86     84045                     0.00-  40.13     9.88
-------------------------------------------------------------------------------
   45 Isopropyl ether                               CAS #: 108-20-3
 14.738  14.738 (0.925)    45   2155477 5.00000    5.820  80.00- 120.00   100.00
 14.738  14.738 (0.925)    87    298735                     0.00-  45.33    13.86
 14.738  14.738 (0.925)    59    186689                     0.00-  39.01     8.66
-------------------------------------------------------------------------------
   46 1,1-Dichloroethane                            CAS #: 75-34-3
 14.765  14.765 (0.927)    63    780638 5.00000    5.359  80.00- 120.00   100.00
 14.765  14.765 (0.927)    65    236510                     0.00-  59.80    30.30
-------------------------------------------------------------------------------
   47 Vinyl Acetate                                 CAS #: 108-05-4
 14.793  14.793 (0.928)    86     84131 5.00000    5.732  80.00- 120.00   100.00
 14.793  14.793 (0.928)    42    195724                   166.91- 226.91   232.64
 14.793  14.793 (0.928)    43   2642237                  2680.08-2740.08  3140.62
-------------------------------------------------------------------------------
   49 Ethyl-tert-butyl ether                        CAS #: 637-92-3
 15.240  15.240 (0.956)    59   1565366 5.00000    5.402  80.00- 120.00   100.00
 15.240  15.240 (0.956)    87    454415                     0.00-  59.23    29.03
 15.240  15.240 (0.956)    41    351934                     0.00-  49.94    22.48
-------------------------------------------------------------------------------
   50 cis-1,2-Dichloroethene                        CAS #: 156-59-2
 15.592  15.592 (0.979)    98    241288 5.00000    5.254  80.00- 120.00   100.00
 15.592  15.592 (0.979)    61    663318                   242.79- 302.79   274.91
 15.592  15.592 (0.979)    96    381963                   127.33- 187.33   158.30
-------------------------------------------------------------------------------
   51 2-Butanone                                    CAS #: 78-93-3
 15.572  15.572 (0.977)    72    161447 5.00000    5.291  80.00- 120.00   100.00
 15.572  15.572 (0.977)    43   1230919                   687.17- 747.17   762.43
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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)
 15.572  15.572 (0.977)    57     79017                    23.39-  83.39    48.94
-------------------------------------------------------------------------------
   53 Tetrahydrofuran                                CAS #: 109-99-9
 15.934  15.934 (1.000)    42    753819 5.00000    5.660  80.00- 120.00   100.00
 15.934  15.934 (1.000)    71    152613                     0.00-  51.83    20.25
 15.934  15.934 (1.000)    72    175140                     0.00-  54.16    23.23
-------------------------------------------------------------------------------
   55 Chloroform                                     CAS #: 67-66-3
 15.995  15.995 (1.004)    83    724429 5.00000    5.334  80.00- 120.00   100.00
 15.995  15.995 (1.004)    85    464467                    35.10-  95.10    64.11
-------------------------------------------------------------------------------
   57 Cyclohexane                                    CAS #: 110-82-7
 16.242  16.242 (1.019)    84    479449 5.00000    5.195  80.00- 120.00   100.00
 16.242  16.242 (1.019)    56    953461                   160.85- 220.85   198.87
 16.242  16.242 (1.019)    41    568966                    75.49- 135.49   118.67
-------------------------------------------------------------------------------
   58 1,1,1-Trichloroethane                          CAS #: 71-55-6
 16.242  16.242 (1.019)    97    770281 5.00000    5.090  80.00- 120.00   100.00
 16.242  16.242 (1.019)    99    477028                    33.24-  93.24    61.93
-------------------------------------------------------------------------------
   59 Carbon Tetrachloride                           CAS #: 56-23-5
 16.458  16.458 (1.033)   119    655259 5.00000    4.744  80.00- 120.00   100.00
 16.427  16.427 (1.031)   117    632282                    67.96- 127.96    96.49
                   Sum of Peak Amounts =            4.74
-------------------------------------------------------------------------------
   63 2,2,4-Trimethylpentane                         CAS #: 540-84-1
 16.728  16.728 (1.050)    56    879252 5.00000    5.277  80.00- 120.00   100.00
 16.728  16.728 (1.050)    57   2647003                   274.66- 334.66   301.05
 16.728  16.728 (1.050)    41    785258                    54.64- 114.64    89.31
-------------------------------------------------------------------------------
   64 Benzene                                        CAS #: 71-43-2
 16.756  16.756 (0.968)    78    990757 5.00000    4.851  80.00- 120.00   100.00
 16.756  16.756 (0.968)    77    223947                     0.00-  53.39    22.60
-------------------------------------------------------------------------------
   66 tert-amyl methyl ether                         CAS #: 994-05-8
 16.811  16.811 (0.971)    87    258654 5.00000    4.929  80.00- 120.00   100.00
 16.811  16.811 (0.971)    73   1041289                   366.24- 426.24   402.58
 16.811  16.811 (0.971)    55    437462                   130.44- 190.44   169.13
-------------------------------------------------------------------------------
   68 1,2-Dichloroethane                             CAS #: 107-06-2
 16.865  16.865 (0.975)    62    604146 5.00000    4.970  80.00- 120.00   100.00
 16.865  16.865 (0.975)    64    167706                     0.00-  59.72    27.76
-------------------------------------------------------------------------------
   69 Heptane                                        CAS #: 142-82-5
 16.975  16.975 (0.981)    57    490725 5.00000    5.075  80.00- 120.00   100.00
```

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)	100	105897			0.00- 51.16	21.58
16.948	16.948 (0.979)	43	1117929			180.62- 240.62	227.81
72 Trichloroethene					CAS #: 79-01-6		
17.717	17.717 (1.024)	130	521913	5.00000	5.007	80.00- 120.00	100.00
17.717	17.717 (1.024)	95	477784			62.98- 122.98	91.54
17.717	17.717 (1.024)	97	309993			29.44- 89.44	59.40
73 Methylcyclohexane					CAS #: 108-87-2		
17.964	17.964 (1.038)	83	632234	5.00000	4.940	80.00- 120.00	100.00
17.964	17.964 (1.038)	98	303828			16.83- 76.83	48.06
17.964	17.964 (1.038)	55	824279			97.27- 157.27	130.38
74 1,2-Dichloropropane					CAS #: 78-87-5		
18.156	18.156 (1.049)	63	504021	5.00000	5.029	80.00- 120.00	100.00
18.156	18.156 (1.049)	62	372959			43.06- 103.06	74.00
18.156	18.156 (1.049)	41	362342			36.58- 96.58	71.89
75 1,4-Dioxane					CAS #: 123-91-1		
18.266	18.266 (1.056)	88	244972	5.00000	4.197	80.00- 120.00	100.00
18.266	18.266 (1.056)	58	271799			74.73- 134.73	110.95
18.266	18.266 (1.056)	57	86854			4.83- 64.83	35.45
77 Bromodichloromethane					CAS #: 75-27-4		
18.568	18.568 (1.073)	83	754305	5.00000	4.991	80.00- 120.00	100.00
18.568	18.568 (1.073)	85	473963			33.73- 93.73	62.83
78 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
19.386	19.386 (1.120)	75	614233	5.00000	4.905	80.00- 120.00	100.00
19.386	19.386 (1.120)	77	194172			0.66- 60.66	31.61
19.386	19.386 (1.120)	39	503431			43.67- 103.67	81.96
79 4-Methyl-2-pentanone					CAS #: 108-10-1		
19.588	19.588 (1.132)	43	1450225	5.00000	5.075	80.00- 120.00	100.00
19.588	19.588 (1.132)	58	448519			3.17- 63.17	30.93
19.588	19.588 (1.132)	85	127984			0.00- 40.09	8.83
81 Toluene					CAS #: 108-88-3		
19.991	19.991 (1.155)	91	1129260	5.00000	4.853	80.00- 120.00	100.00
19.991	19.991 (1.155)	92	660974			28.34- 88.34	58.53
82 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
20.435	20.435 (0.920)	75	539004	5.00000	4.717	80.00- 120.00	100.00
20.435	20.435 (0.920)	77	177449			1.98- 61.98	32.92
20.399	20.399 (0.919)	39	422533			41.22- 101.22	78.39

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		
20.722	20.722 (0.933)	97	450865	5.00000	4.939	80.00- 120.00	100.00
20.722	20.722 (0.933)	99	283176			31.80- 91.80	62.81
20.722	20.722 (0.933)	83	376706			51.12- 111.12	83.55
86 Tetrachloroethene					CAS #: 127-18-4		
20.901	20.901 (0.941)	166	663907	5.00000	4.832	80.00- 120.00	100.00
20.901	20.901 (0.941)	129	497027			46.61- 106.61	74.86
20.901	20.901 (0.941)	131	490891			46.38- 106.38	73.94
87 2-Hexanone					CAS #: 591-78-6		
21.045	21.045 (0.948)	58	526041	5.00000	4.420	80.00- 120.00	100.00
21.009	21.009 (0.946)	43	1205817			184.27- 244.27	229.22
21.045	21.045 (0.948)	100	70651			0.00- 44.17	13.43
89 Dibromochloromethane					CAS #: 124-48-1		
21.367	21.367 (0.962)	129	868946	5.00000	4.896	80.00- 120.00	100.00
21.367	21.367 (0.962)	127	667172			48.71- 108.71	76.78
90 1,2-Dibromoethane					CAS #: 106-93-4		
21.583	21.583 (0.972)	107	762012	5.00000	4.998	80.00- 120.00	100.00
21.583	21.583 (0.972)	109	714532			63.80- 123.80	93.77
93 Chlorobenzene					CAS #: 108-90-7		
22.233	22.233 (1.001)	112	971817	5.00000	4.638	80.00- 120.00	100.00
22.233	22.233 (1.001)	114	313659			1.75- 61.75	32.28
22.233	22.233 (1.001)	77	536658			24.73- 84.73	55.22
95 Ethyl Benzene					CAS #: 100-41-4		
22.315	22.315 (1.005)	106	446109	5.00000	4.505	80.00- 120.00	100.00
22.315	22.315 (1.005)	91	1291198			260.31- 320.31	289.44
96 m,p-Xylene					CAS #: 108-38-3		
22.452	22.452 (1.011)	106	428925	5.00000	4.289	80.00- 120.00	100.00
22.452	22.452 (1.011)	91	819323			157.23- 217.23	191.02
100 o-Xylene					CAS #: 95-47-6		
23.002	23.002 (1.036)	106	410454	5.00000	4.464	80.00- 120.00	100.00
23.002	23.002 (1.036)	91	814153			167.76- 227.76	198.35
101 Styrene					CAS #: 100-42-5		
23.029	23.029 (1.037)	104	589776	5.00000	4.302	80.00- 120.00	100.00
23.029	23.029 (1.037)	78	298774			17.96- 77.96	50.66
102 Bromoform					CAS #: 75-25-2		
23.331	23.331 (1.051)	173	783433	5.00000	4.934	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
   ==   ====== ========  ====  ======== =======  =======   ============    =====

  102 Bromoform (continued)
 23.331  23.331 (1.051)   171    394179                   22.04-  82.04    50.31
-------------------------------------------------------------------------------
  103 Cumene                                        CAS #: 98-82-8
 23.413  23.413 (1.054)   105   1157690 5.00000    4.454  80.00- 120.00   100.00
 23.441  23.441 (1.056)   120    342841                    0.00-  59.93    29.61
-------------------------------------------------------------------------------
  108 1,1,2,2-Tetrachloroethane                     CAS #: 79-34-5
 23.833  23.833 (1.073)    83    798278 5.00000    4.367  80.00- 120.00   100.00
 23.833  23.833 (1.073)    85    507997                   34.94-  94.94    63.64
-------------------------------------------------------------------------------
  111 Propylbenzene                                 CAS #: 103-65-1
 23.910  23.910 (1.077)    91   1008739 5.00000    4.166  80.00- 120.00   100.00
 23.910  23.910 (1.077)   120    274347                    0.00-  56.93    27.20
-------------------------------------------------------------------------------
  113 4-Ethyltoluene                                CAS #: 622-96-8
 24.039  24.039 (1.083)   105    782264 5.00000    4.262  80.00- 120.00   100.00
 24.039  24.039 (1.083)   120    266153                    3.10-  63.10    34.02
-------------------------------------------------------------------------------
  114 1,3,5-Trimethylbenzene                        CAS #: 108-67-8
 24.116  24.116 (1.086)   105    810479 5.00000    4.246  80.00- 120.00   100.00
 24.116  24.116 (1.086)   120    420857                    0.00-  30.00    51.93
-------------------------------------------------------------------------------
  120 1,2,4-Trimethylbenzene                        CAS #: 95-63-6
 24.529  24.529 (1.105)   105    776270 5.00000    4.599  80.00- 120.00   100.00
 24.529  24.529 (1.105)   120    379364                    0.00-  30.00    48.87
-------------------------------------------------------------------------------
  122 1,3-Dichlorobenzene                           CAS #: 541-73-1
 24.902  24.902 (1.121)   146    526841 5.00000    4.129  80.00- 120.00   100.00
 24.902  24.902 (1.121)   148    334774                   32.42-  92.42    63.54
 24.902  24.902 (1.121)   111    209575                    8.90-  68.90    39.78
-------------------------------------------------------------------------------
  124 1,4-Dichlorobenzene                           CAS #: 106-46-7
 24.992  24.992 (1.125)   146    493293 5.00000    3.649  80.00- 120.00   100.00
 24.992  24.992 (1.125)   148    310521                   34.01-  94.01    62.95
 24.992  24.992 (1.125)   111    180987                    8.58-  68.58    36.69
-------------------------------------------------------------------------------
  127 alpha-chlorotoluene                           CAS #: 100-44-7
 25.127  25.127 (1.132)    91    724441 5.00000    4.621  80.00- 120.00   100.00
 25.127  25.127 (1.132)   126    173554                    0.00-  54.03    23.96
-------------------------------------------------------------------------------
  128 1,2-Dichlorobenzene                           CAS #: 95-50-1
 25.396  25.396 (1.144)   146    496310 5.00000    3.862  80.00- 120.00   100.00
 25.396  25.396 (1.144)   148    319120                   32.53-  92.53    64.30
 25.396  25.396 (1.144)   111    202719                   10.66-  70.66    40.85
-------------------------------------------------------------------------------
```

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	429513	5.00000	3.690	80.00- 120.00	100.00
27.077	27.077 (1.219)	182	400274			66.06- 126.06	93.19
132 Hexachlorobutadiene					CAS #: 87-68-3		
27.167	27.167 (1.223)	225	285708	5.00000	3.396	80.00- 120.00	100.00
27.167	27.167 (1.223)	223	179062			32.60- 92.60	62.67
133 Naphthalene					CAS #: 91-20-3		
27.368	27.368 (1.232)	128	73122	0.50000	0.4192	80.00- 120.00	100.00
27.368	27.368 (1.232)	127	13004			0.00- 44.62	17.78

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdv.i
Lab File ID: v021002.d
Lab Smp Id: CCV
Analysis Type: VOA
Quant Type: ISTD
Operator: act
Method File: /chem/msdv.i/10Feb2015.b/v15l0123c.m
Misc Info: 5.0ppbv (50ppbv)

Calibration Date: 10-FEB-2015
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	183110	109866	256354	194946	6.46
71 1,4-Difluorobenze	741121	444673	1037569	822631	11.00
92 Chlorobenzene-d5	565192	339115	791269	670659	18.66

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/10Feb2015.b/v021002.d

Date : 10-FEB-2015 06:33

Client ID: CCV

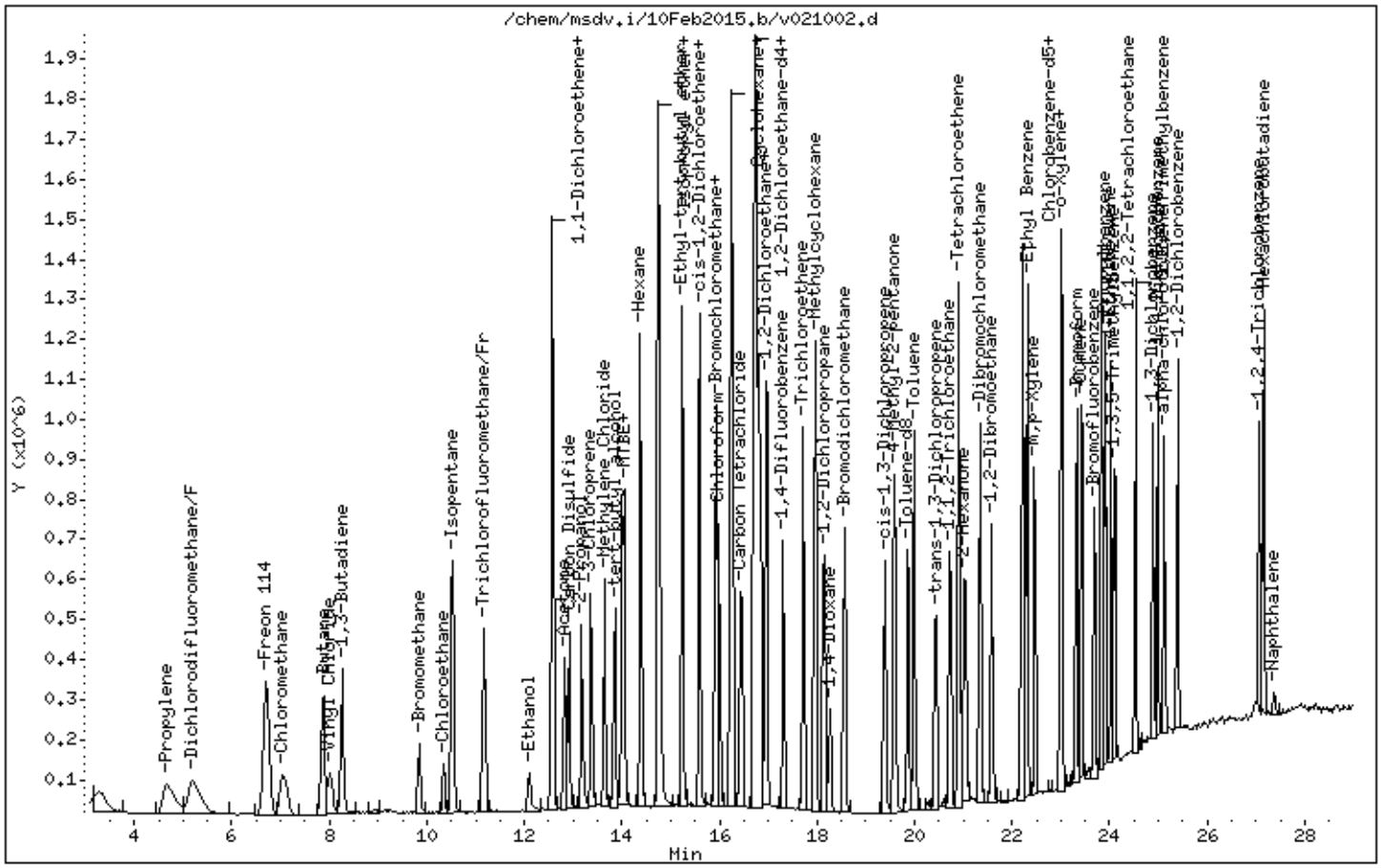
Instrument: msdv.i

Sample Info: 25mL #2687-244

Operator: act

Column phase: RTx-624

Column diameter: 0.32



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Client Sample ID: LCS

Lab ID#: 1502113AR1-07A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**v021003**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 2/10/15 07:14 AM**	

Compound	%Recovery	Method Limits
Freon 12	99	70-130
Freon 114	102	70-130
Chloromethane	103	70-130
Vinyl Chloride	102	70-130
1,3-Butadiene	102	70-130
Bromomethane	104	70-130
Chloroethane	103	70-130
Freon 11	98	70-130
Ethanol	127	70-130
Freon 113	96	70-130
1,1-Dichloroethene	96	70-130
Acetone	96	70-130
2-Propanol	110	70-130
Carbon Disulfide	86	70-130
3-Chloropropene	91	70-130
Methylene Chloride	97	70-130
Methyl tert-butyl ether	95	70-130
trans-1,2-Dichloroethene	86	70-130
Hexane	99	70-130
1,1-Dichloroethane	99	70-130
2-Butanone (Methyl Ethyl Ketone)	98	70-130
cis-1,2-Dichloroethene	106	70-130
Tetrahydrofuran	104	70-130
Chloroform	97	70-130
1,1,1-Trichloroethane	93	70-130
Cyclohexane	97	70-130
Carbon Tetrachloride	89	70-130
2,2,4-Trimethylpentane	97	70-130
Benzene	92	70-130
1,2-Dichloroethane	96	70-130
Heptane	98	70-130
Trichloroethene	97	70-130
1,2-Dichloropropane	100	70-130
1,4-Dioxane	81	70-130
Bromodichloromethane	98	70-130
cis-1,3-Dichloropropene	88	70-130
4-Methyl-2-pentanone	100	70-130
Toluene	94	70-130
trans-1,3-Dichloropropene	94	70-130
1,1,2-Trichloroethane	99	70-130
Tetrachloroethene	92	70-130
2-Hexanone	91	70-130

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Client Sample ID: LCS

Lab ID#: 1502113AR1-07A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**v021003**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 2/10/15 07:14 AM**	

Compound	**%Recovery**	**Method Limits**
Dibromochloromethane	96	70-130
1,2-Dibromoethane (EDB)	99	70-130
Chlorobenzene	92	70-130
Ethyl Benzene	85	70-130
m,p-Xylene	84	70-130
o-Xylene	91	70-130
Styrene	86	70-130
Bromoform	94	70-130
Cumene	87	70-130
1,1,2,2-Tetrachloroethane	86	70-130
Propylbenzene	82	70-130
4-Ethyltoluene	82	70-130
1,3,5-Trimethylbenzene	82	70-130
1,2,4-Trimethylbenzene	86	70-130
1,3-Dichlorobenzene	84	70-130
1,4-Dichlorobenzene	71	70-130
alpha-Chlorotoluene	91	70-130
1,2-Dichlorobenzene	77	70-130
1,2,4-Trichlorobenzene	80	70-130
Hexachlorobutadiene	72	70-130
Naphthalene	67	60-140

Container Type: NA - Not Applicable

Surrogates	**%Recovery**	**Method Limits**
1,2-Dichloroethane-d4	96	70-130
Toluene-d8	104	70-130
4-Bromofluorobenzene	103	70-130

Report Date: 10-Feb-2015 08:44

Eurofins Air Toxics Inc.

RECOVERY REPORT

Client Name:
Client SDG: 10Feb2015
Sample Matrix: GAS
Fraction: VOA
Lab Smp Id: LCS
Client Smp ID: LCS
Level: LOW
Operator: act
Data Type: MS DATA
SampleType: LCS
SpikeList File: AT12.spk
Quant Type: ISTD
Sublist File: AT12.sub
Method File: /chem/msdv.i/10Feb2015.b/v15l0123c.m
Misc Info: 5.0ppbv (50ppbv)

SPIKE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
4 Dichlorodifluorome	5.000	4.932	98.65	70-130
3 Propylene	5.000	5.392	107.83	60-140
6 Freon 114	5.000	5.117	102.35	70-130
8 Chloromethane	5.000	5.144	102.87	70-130
10 Vinyl Chloride	5.000	5.109	102.19	70-130
11 1,3-Butadiene	5.000	5.106	102.12	70-130
12 Bromomethane	5.000	5.212	104.25	70-130
17 Chloroethane	5.000	5.162	103.25	70-130
20 Trichlorofluoromet	5.000	4.924	98.49	70-130
24 Ethanol	5.000	6.350	127.00	70-130
28 Freon 113	5.000	4.804	96.07	70-130
30 1,1-Dichloroethene	5.000	4.794	95.89	70-130
31 Acetone	5.000	4.822	96.44	70-130
33 Carbon Disulfide	5.000	4.302	86.04	70-130
34 2-Propanol	5.000	5.496	109.93	70-130
35 3-Chloroprene	5.000	4.558	91.15	70-130
37 Methylene Chloride	5.000	4.832	96.64	70-130
39 MTBE	5.000	4.760	95.21	70-130
40 trans-1,2-Dichloro	5.000	4.328	86.56	70-130
43 Hexane	5.000	4.963	99.26	70-130
46 1,1-Dichloroethane	5.000	4.970	99.41	70-130
47 Vinyl Acetate	5.000	5.520	110.41	60-140
50 cis-1,2-Dichloroet	5.000	5.306	106.12	70-130
51 2-Butanone	5.000	4.911	98.23	70-130
53 Tetrahydrofuran	5.000	5.177	103.55	70-130
55 Chloroform	5.000	4.840	96.81	70-130
57 Cyclohexane	5.000	4.871	97.42	70-130
58 1,1,1-Trichloroeth	5.000	4.656	93.12	70-130
59 Carbon Tetrachlori	5.000	4.433	88.65	70-130
63 2,2,4-Trimethylpen	5.000	4.868	97.36	70-130
64 Benzene	5.000	4.612	92.23	70-130
69 Heptane	5.000	4.909	98.17	70-130
68 1,2-Dichloroethane	5.000	4.815	96.31	70-130

SPIKE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
72 Trichloroethene	5.000	4.860	97.20	70-130
74 1,2-Dichloropropan	5.000	4.980	99.61	70-130
75 1,4-Dioxane	5.000	4.048	80.95	70-130
77 Bromodichlorometha	5.000	4.884	97.68	70-130
78 cis-1,3-Dichloropr	5.000	4.398	87.96	70-130
79 4-Methyl-2-pentano	5.000	4.995	99.91	70-130
81 Toluene	5.000	4.686	93.72	70-130
82 trans-1,3-Dichloro	5.000	4.703	94.07	70-130
84 1,1,2-Trichloroeth	5.000	4.954	99.08	70-130
87 2-Hexanone	5.000	4.562	91.24	70-130
86 Tetrachloroethene	5.000	4.618	92.36	70-130
89 Dibromochlorometha	5.000	4.798	95.95	70-130
90 1,2-Dibromoethane	5.000	4.955	99.10	70-130
93 Chlorobenzene	5.000	4.598	91.96	70-130
95 Ethyl Benzene	5.000	4.256	85.11	70-130
96 m,p-Xylene	5.000	4.175	83.50	70-130
100 o-Xylene	5.000	4.535	90.71	70-130
101 Styrene	5.000	4.327	86.54	70-130
102 Bromoform	5.000	4.680	93.61	70-130
103 Cumene	5.000	4.372	87.43	70-130
108 1,1,2,2-Tetrachlor	5.000	4.293	85.85	70-130
111 Propylbenzene	5.000	4.116	82.32	70-130
113 4-Ethyltoluene	5.000	4.092	81.84	70-130
114 1,3,5-Trimethylben	5.000	4.090	81.79	70-130
120 1,2,4-Trimethylben	5.000	4.309	86.18	70-130
122 1,3-Dichlorobenzen	5.000	4.207	84.14	70-130
124 1,4-Dichlorobenzen	5.000	3.570	71.40	70-130
127 alpha-chlorotoluen	5.000	4.574	91.49	70-130
128 1,2-Dichlorobenzen	5.000	3.858	77.17	70-130
131 1,2,4-Trichloroben	5.000	4.002	80.05	70-130
132 Hexachlorobutadien	5.000	3.595	71.90	70-130
133 Naphthalene	0.5000	0.3352	67.05	60-140
18 Isopentane	5.000	5.237	104.73	60-140
9 Butane	5.000	5.102	102.03	60-140
73 Methylcyclohexane	5.000	4.872	97.43	60-140

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 65 1,2-Dichloroethane	5.000	4.781	95.62	70-130
$ 80 Toluene-d8	5.000	5.222	104.45	70-130
$ 106 Bromofluorobenzene	5.000	5.162	103.24	70-130

Eurofins Air Toxics Inc.

TO15/Modified TO-14A

Data file : /chem/msdv.i/10Feb2015.b/v021003.d
Lab Smp Id: LCS Client Smp ID: LCS
Inj Date : 10-FEB-2015 07:14
Operator : act Inst ID: msdv.i
Smp Info : 25mL #2687-186
Misc Info : 5.0ppbv (50ppbv)
Comment : Low Level GC-MS
Method : /chem/msdv.i/10Feb2015.b/v15l0123c.m
Meth Date : 10-Feb-2015 08:44 atoyama Quant Type: ISTD
Cal Date : 09-FEB-2015 14:14 Cal File: v020912.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	192530	5.00000		80.00- 120.00	100.00
15.933	15.934 (1.000)	128	148793			0.00- 30.00	77.28
15.933	15.934 (1.000)	49	434094			0.00- 30.00	225.47
* 71 1,4-Difluorobenzene					CAS #: 540-36-3		
17.305	17.305 (1.000)	114	776559	5.00000		80.00- 120.00	100.00
17.305	17.305 (1.000)	88	119371			0.00- 30.00	15.37
* 92 Chlorobenzene-d5					CAS #: 3114-55-4		
22.205	22.205 (1.000)	117	628205	5.00000		80.00- 120.00	100.00
22.205	22.205 (1.000)	82	353723			0.00- 30.00	56.31
$ 65 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
16.756	16.756 (1.052)	65	288521	4.78088	4.781	80.00- 120.00	100.00
16.756	16.756 (1.052)	67	151207			25.13- 85.13	52.41
$ 80 Toluene-d8					CAS #: 2037-26-5		
19.856	19.856 (1.147)	98	759329	5.22229	5.222	80.00- 120.00	100.00
19.856	19.856 (1.147)	70	80275			0.00- 40.74	10.57

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

$  80 Toluene-d8 (continued)
 19.856  19.856 (1.147)   100    492847                    36.73-  96.73    64.91
-------------------------------------------------------------------------------
$ 106 Bromofluorobenzene                            CAS #: 460-00-4
 23.704  23.704 (1.067)   174    303852 5.16175    5.162  80.00- 120.00   100.00
 23.678  23.678 (1.066)    95    380349                   95.17- 155.17   125.18
 23.704  23.678 (1.067)   176    297258                   64.74- 124.74    97.83
-------------------------------------------------------------------------------
    3 Propylene                                     CAS #: 115-07-1
  4.711   4.674 (0.296)    41    425136 5.39153    5.392  80.00- 120.00   100.00
  4.673   4.674 (0.293)    42    288813                   37.91-  97.91    67.93
  4.673   4.711 (0.293)    39    291515                   38.58-  98.58    68.57
-------------------------------------------------------------------------------
    4 Dichlorodifluoromethane/Fr12                  CAS #: 75-71-8
  5.202   5.202 (0.326)    85    757055 4.93244    4.932  80.00- 120.00   100.00
  5.202   5.240 (0.326)    87    239703                    1.73-  61.73    31.66
-------------------------------------------------------------------------------
    6 Freon 114                                     CAS #: 76-14-2
  6.750   6.713 (0.424)   135    660302 5.11734    5.117  80.00- 120.00   100.00
  6.713   6.713 (0.421)   137    209326                    2.34-  62.34    31.70
  6.713   6.713 (0.421)    85    759770                   93.53- 153.53   115.06
-------------------------------------------------------------------------------
    8 Chloromethane                                 CAS #: 74-87-3
  7.052   7.053 (0.443)    50    509597 5.14351    5.144  80.00- 120.00   100.00
  7.052   7.053 (0.443)    52    164651                    1.57-  61.57    32.31
-------------------------------------------------------------------------------
    9 Butane                                        CAS #: 106-97-8
  7.853   7.854 (0.493)    58     89858 5.10156    5.102  80.00- 120.00   100.00
  7.885   7.885 (0.495)    43    873196                  879.44- 939.44   971.75
-------------------------------------------------------------------------------
   10 Vinyl Chloride                                CAS #: 75-01-4
  8.009   8.009 (0.503)    62    389149 5.10945    5.109  80.00- 120.00   100.00
  8.009   8.009 (0.503)    64    115743                    0.00-  59.13    29.74
-------------------------------------------------------------------------------
   11 1,3-Butadiene                                 CAS #: 106-99-0
  8.257   8.257 (0.518)    54    382176 5.10615    5.106  80.00- 120.00   100.00
  8.257   8.257 (0.518)    39    403887                   70.79- 130.79   105.68
-------------------------------------------------------------------------------
   12 Bromomethane                                  CAS #: 74-83-9
  9.834   9.834 (0.617)    94    246861 5.21251    5.212  80.00- 120.00   100.00
  9.834   9.834 (0.617)    96    235675                   64.45- 124.45    95.47
-------------------------------------------------------------------------------
   17 Chloroethane                                  CAS #: 75-00-3
 10.340  10.340 (0.649)    64    170891 5.16248    5.162  80.00- 120.00   100.00
 10.340  10.340 (0.649)    66     51005                    0.00-  59.36    29.85
-------------------------------------------------------------------------------
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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	382183	5.23669	5.237	80.00- 120.00	100.00
10.533	10.533 (0.661)	43	677289			135.34- 195.34	177.22
10.533	10.533 (0.661)	42	572465			110.64- 170.64	149.79
20 Trichlorofluoromethane/Fr11					CAS #: 75-69-4		
11.183	11.184 (0.702)	101	805621	4.92434	4.924	80.00- 120.00	100.00
11.183	11.184 (0.702)	103	517236			34.40- 94.40	64.20
24 Ethanol					CAS #: 64-17-5		
12.101	12.102 (0.760)	45	223380	6.35012	6.350	80.00- 120.00	100.00
12.101	12.102 (0.760)	46	88006			9.93- 69.93	39.40
12.101	12.102 (0.760)	43	44957			0.00- 50.31	20.13
30 1,1-Dichloroethene					CAS #: 75-35-4		
12.568	12.568 (0.789)	98	188506	4.79434	4.794	80.00- 120.00	100.00
12.568	12.568 (0.789)	61	663939			316.34- 376.34	352.21
12.568	12.568 (0.789)	96	316459			133.12- 193.12	167.88
28 Freon 113					CAS #: 76-13-1		
12.568	12.568 (0.789)	151	562488	4.80370	4.804	80.00- 120.00	100.00
12.568	12.568 (0.789)	153	363901			33.38- 93.38	64.69
12.568	12.568 (0.789)	101	644394			85.19- 145.19	114.56
31 Acetone					CAS #: 67-64-1		
12.816	12.816 (0.804)	58	214355	4.82177	4.822	80.00- 120.00	100.00
12.816	12.816 (0.804)	43	785074			326.03- 386.03	366.25
33 Carbon Disulfide					CAS #: 75-15-0		
12.925	12.926 (0.811)	76	701667	4.30205	4.302	80.00- 120.00	100.00
35 3-Chloroprene					CAS #: 107-05-1		
13.365	13.365 (0.839)	76	113288	4.55762	4.558	80.00- 120.00	100.00
13.365	13.365 (0.839)	41	620117			456.88- 516.88	547.38
34 2-Propanol					CAS #: 67-63-0		
13.173	13.173 (0.827)	45	967104	5.49636	5.496	80.00- 120.00	100.00
13.173	13.173 (0.827)	43	173473			0.00- 47.97	17.94
13.173	13.173 (0.827)	59	27947			0.00- 33.25	2.89
37 Methylene Chloride					CAS #: 75-09-2		
13.640	13.640 (0.856)	84	265256	4.83197	4.832	80.00- 120.00	100.00
13.640	13.640 (0.856)	49	655378			198.57- 258.57	247.07
13.640	13.640 (0.856)	51	200946			41.48- 101.48	75.76
39 MTBE					CAS #: 1634-04-4		
13.997	13.997 (0.878)	73	817132	4.76040	4.760	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	13.997 (0.878)	57	303795			6.35- 66.35	37.18
13.997	13.997 (0.878)	41	318659			5.74- 65.74	39.00
40 trans-1,2-Dichloroethene					CAS #: 156-60-5		
14.051	14.052 (0.882)	98	175169	4.32808	4.328	80.00- 120.00	100.00
14.051	14.052 (0.882)	61	534095			272.66- 332.66	304.90
14.051	14.052 (0.882)	96	278663			128.53- 188.53	159.08
43 Hexane					CAS #: 110-54-3		
14.381	14.381 (0.903)	57	770462	4.96281	4.963	80.00- 120.00	100.00
14.381	14.381 (0.903)	43	585249			41.32- 101.32	75.96
14.381	14.381 (0.903)	86	74740			0.00- 40.13	9.70
46 1,1-Dichloroethane					CAS #: 75-34-3		
14.765	14.765 (0.927)	63	715076	4.97036	4.970	80.00- 120.00	100.00
14.765	14.765 (0.927)	65	217639			0.00- 59.80	30.44
47 Vinyl Acetate					CAS #: 108-05-4		
14.793	14.793 (0.928)	86	80026	5.52058	5.520	80.00- 120.00	100.00
14.793	14.793 (0.928)	42	108830			166.91- 226.91	135.99
14.793	14.793 (0.928)	43	1513018			2680.08-2740.08	1890.66
50 cis-1,2-Dichloroethene					CAS #: 156-59-2		
15.592	15.592 (0.979)	98	240673	5.30613	5.306	80.00- 120.00	100.00
15.592	15.592 (0.979)	61	678111			242.79- 302.79	281.76
15.592	15.592 (0.979)	96	386225			127.33- 187.33	160.48
51 2-Butanone					CAS #: 78-93-3		
15.592	15.572 (0.979)	72	148010	4.91127	4.911	80.00- 120.00	100.00
15.592	15.572 (0.979)	43	1139671			687.17- 747.17	770.00
15.592	15.572 (0.979)	57	76565			23.39- 83.39	51.73
53 Tetrahydrofuran					CAS #: 109-99-9		
15.933	15.934 (1.000)	42	680941	5.17747	5.177	80.00- 120.00	100.00
15.933	15.934 (1.000)	71	137915			0.00- 51.83	20.25
15.933	15.934 (1.000)	72	156156			0.00- 54.16	22.93
55 Chloroform					CAS #: 67-66-3		
15.995	15.995 (1.004)	83	649242	4.84051	4.840	80.00- 120.00	100.00
15.995	15.995 (1.004)	85	415750			35.10- 95.10	64.04
57 Cyclohexane					CAS #: 110-82-7		
16.242	16.242 (1.019)	84	443983	4.87089	4.871	80.00- 120.00	100.00
16.242	16.242 (1.019)	56	870085			160.85- 220.85	195.97
16.242	16.242 (1.019)	41	516152			75.49- 135.49	116.25

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	695785	4.65594	4.656	80.00- 120.00	100.00
16.242	16.242 (1.019)	99	438055			33.24- 93.24	62.96
59 Carbon Tetrachloride					CAS #: 56-23-5		
16.457	16.458 (1.033)	119	604650	4.43269	4.433	80.00- 120.00	100.00
16.457	16.427 (1.033)	117	590034			67.96- 127.96	97.58
	Sum of Peak Concentrations =				4.433		
63 2,2,4-Trimethylpentane					CAS #: 540-84-1		
16.728	16.728 (1.050)	56	801026	4.86822	4.868	80.00- 120.00	100.00
16.728	16.728 (1.050)	57	2425219			274.66- 334.66	302.76
16.728	16.728 (1.050)	41	674579			54.64- 114.64	84.21
64 Benzene					CAS #: 71-43-2		
16.756	16.756 (0.968)	78	889064	4.61165	4.612	80.00- 120.00	100.00
16.756	16.756 (0.968)	77	202553			0.00- 53.39	22.78
68 1,2-Dichloroethane					CAS #: 107-06-2		
16.865	16.865 (0.975)	62	552556	4.81538	4.815	80.00- 120.00	100.00
16.865	16.865 (0.975)	64	161117			0.00- 59.72	29.16
69 Heptane					CAS #: 142-82-5		
16.975	16.975 (0.981)	57	448042	4.90863	4.909	80.00- 120.00	100.00
16.975	16.975 (0.981)	100	99118			0.00- 51.16	22.12
16.975	16.948 (0.981)	43	1042679			180.62- 240.62	232.72
72 Trichloroethene					CAS #: 79-01-6		
17.716	17.717 (1.024)	130	478198	4.86018	4.860	80.00- 120.00	100.00
17.716	17.717 (1.024)	95	456901			62.98- 122.98	95.55
17.716	17.717 (1.024)	97	287749			29.44- 89.44	60.17
73 Methylcyclohexane					CAS #: 108-87-2		
17.964	17.964 (1.038)	83	588520	4.87154	4.872	80.00- 120.00	100.00
17.964	17.964 (1.038)	98	266842			16.83- 76.83	45.34
17.964	17.964 (1.038)	55	760214			97.27- 157.27	129.17
74 1,2-Dichloropropane					CAS #: 78-87-5		
18.156	18.156 (1.049)	63	471227	4.98047	4.980	80.00- 120.00	100.00
18.156	18.156 (1.049)	62	334742			43.06- 103.06	71.04
18.156	18.156 (1.049)	41	334469			36.58- 96.58	70.98
75 1,4-Dioxane					CAS #: 123-91-1		
18.266	18.266 (1.056)	88	223016	4.04775	4.048	80.00- 120.00	100.00
18.266	18.266 (1.056)	58	249410			74.73- 134.73	111.84
18.266	18.266 (1.056)	57	83009			4.83- 64.83	37.22

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	696743	4.88398	4.884	80.00- 120.00	100.00
18.568	18.568 (1.073)	85	444897			33.73- 93.73	63.85
78 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
19.386	19.386 (1.120)	75	519844	4.39780	4.398	80.00- 120.00	100.00
19.386	19.386 (1.120)	77	168559			0.66- 60.66	32.42
19.386	19.386 (1.120)	39	439072			43.67- 103.67	84.46
79 4-Methyl-2-pentanone					CAS #: 108-10-1		
19.587	19.588 (1.132)	43	1347542	4.99549	4.995	80.00- 120.00	100.00
19.587	19.588 (1.132)	58	413943			3.17- 63.17	30.72
19.587	19.588 (1.132)	85	123967			0.00- 40.09	9.20
81 Toluene					CAS #: 108-88-3		
19.991	19.991 (1.155)	91	1029421	4.68612	4.686	80.00- 120.00	100.00
19.991	19.991 (1.155)	92	611258			28.34- 88.34	59.38
82 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
20.435	20.435 (0.920)	75	503454	4.70347	4.703	80.00- 120.00	100.00
20.435	20.435 (0.920)	77	157730			1.98- 61.98	31.33
20.435	20.399 (0.920)	39	396190			41.22- 101.22	78.69
84 1,1,2-Trichloroethane					CAS #: 79-00-5		
20.722	20.722 (0.933)	97	423577	4.95384	4.954	80.00- 120.00	100.00
20.757	20.722 (0.935)	99	262459			31.80- 91.80	61.96
20.722	20.722 (0.933)	83	340800			51.12- 111.12	80.46
86 Tetrachloroethene					CAS #: 127-18-4		
20.901	20.901 (0.941)	166	594408	4.61809	4.618	80.00- 120.00	100.00
20.901	20.901 (0.941)	129	457134			46.61- 106.61	76.91
20.901	20.901 (0.941)	131	455475			46.38- 106.38	76.63
87 2-Hexanone					CAS #: 591-78-6		
21.044	21.045 (0.948)	58	508588	4.56201	4.562	80.00- 120.00	100.00
21.044	21.009 (0.948)	43	1150208			184.27- 244.27	226.16
21.044	21.045 (0.948)	100	65595			0.00- 44.17	12.90
89 Dibromochloromethane					CAS #: 124-48-1		
21.367	21.367 (0.962)	129	797561	4.79770	4.798	80.00- 120.00	100.00
21.367	21.367 (0.962)	127	631570			48.71- 108.71	79.19
90 1,2-Dibromoethane					CAS #: 106-93-4		
21.583	21.583 (0.972)	107	707569	4.95489	4.955	80.00- 120.00	100.00
21.583	21.583 (0.972)	109	654383			63.80- 123.80	92.48

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	902462	4.59783	4.598	80.00- 120.00	100.00
22.233	22.233 (1.001)	114	287741			1.75- 61.75	31.88
22.233	22.233 (1.001)	77	488246			24.73- 84.73	54.10
95 Ethyl Benzene					CAS #: 100-41-4		
22.315	22.315 (1.005)	106	394731	4.25571	4.256	80.00- 120.00	100.00
22.315	22.315 (1.005)	91	1191159			260.31- 320.31	301.76
96 m,p-Xylene					CAS #: 108-38-3		
22.452	22.452 (1.011)	106	391121	4.17500	4.175	80.00- 120.00	100.00
22.452	22.452 (1.011)	91	739540			157.23- 217.23	189.08
100 o-Xylene					CAS #: 95-47-6		
23.001	23.002 (1.036)	106	390605	4.53548	4.535	80.00- 120.00	100.00
23.001	23.002 (1.036)	91	766609			167.76- 227.76	196.26
101 Styrene					CAS #: 100-42-5		
23.029	23.029 (1.037)	104	555687	4.32691	4.327	80.00- 120.00	100.00
23.029	23.029 (1.037)	78	270550			17.96- 77.96	48.69
102 Bromoform					CAS #: 75-25-2		
23.331	23.331 (1.051)	173	696062	4.68027	4.680	80.00- 120.00	100.00
23.331	23.331 (1.051)	171	364059			22.04- 82.04	52.30
103 Cumene					CAS #: 98-82-8		
23.441	23.413 (1.056)	105	1064479	4.37171	4.372	80.00- 120.00	100.00
23.441	23.441 (1.056)	120	315789			0.00- 59.93	29.67
108 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
23.833	23.833 (1.073)	83	734984	4.29268	4.293	80.00- 120.00	100.00
23.833	23.833 (1.073)	85	475381			34.94- 94.94	64.68
111 Propylbenzene					CAS #: 103-65-1		
23.910	23.910 (1.077)	91	933564	4.11607	4.116	80.00- 120.00	100.00
23.910	23.910 (1.077)	120	257872			0.00- 56.93	27.62
113 4-Ethyltoluene					CAS #: 622-96-8		
24.039	24.039 (1.083)	105	703620	4.09221	4.092	80.00- 120.00	100.00
24.039	24.039 (1.083)	120	243024			3.10- 63.10	34.54
114 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
24.116	24.116 (1.086)	105	731285	4.08964	4.090	80.00- 120.00	100.00
24.116	24.116 (1.086)	120	386505			0.00- 30.00	52.85
120 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
24.529	24.529 (1.105)	105	681277	4.30916	4.309	80.00- 120.00	100.00

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	341695			0.00- 30.00	50.16
122 1,3-Dichlorobenzene					CAS #: 541-73-1		
24.902	24.902 (1.121)	146	502734	4.20676	4.207	80.00- 120.00	100.00
24.902	24.902 (1.121)	148	308564			32.42- 92.42	61.38
24.902	24.902 (1.121)	111	192682			8.90- 68.90	38.33
124 1,4-Dichlorobenzene					CAS #: 106-46-7		
24.992	24.992 (1.125)	146	452059	3.57012	3.570	80.00- 120.00	100.00
24.992	24.992 (1.125)	148	284437			34.01- 94.01	62.92
24.992	24.992 (1.125)	111	167361			8.58- 68.58	37.02
127 alpha-chlorotoluene					CAS #: 100-44-7		
25.126	25.127 (1.132)	91	671771	4.57433	4.574	80.00- 120.00	100.00
25.126	25.127 (1.132)	126	164545			0.00- 54.03	24.49
128 1,2-Dichlorobenzene					CAS #: 95-50-1		
25.395	25.396 (1.144)	146	464434	3.85850	3.858	80.00- 120.00	100.00
25.395	25.396 (1.144)	148	281060			32.53- 92.53	60.52
25.395	25.396 (1.144)	111	187208			10.66- 70.66	40.31
131 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
27.077	27.077 (1.219)	180	436351	4.00252	4.002	80.00- 120.00	100.00
27.077	27.077 (1.219)	182	407397			66.06- 126.06	93.36
132 Hexachlorobutadiene					CAS #: 87-68-3		
27.166	27.167 (1.223)	225	283328	3.59510	3.595	80.00- 120.00	100.00
27.166	27.167 (1.223)	223	181014			32.60- 92.60	63.89
133 Naphthalene					CAS #: 91-20-3		
27.368	27.368 (1.232)	128	54780	0.33524	0.3352	80.00- 120.00	100.00
27.368	27.368 (1.232)	127	4036			0.00- 44.62	7.37

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdv.i
Lab File ID: v021003.d
Lab Smp Id: LCS
Analysis Type: VOA
Quant Type: ISTD
Operator: act
Method File: /chem/msdv.i/10Feb2015.b/v15l0123c.m
Misc Info: 5.0ppbv (50ppbv)

Calibration Date: 10-FEB-2015
Calibration Time: 06:33
Client Smp ID: LCS
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
54 Bromochloromethan	194946	116968	272924	192530	-1.24
71 1,4-Difluorobenze	822631	493579	1151683	776559	-5.60
92 Chlorobenzene-d5	670659	402395	938923	628205	-6.33

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/10Feb2015.b/v021003.d

Date : 10-FEB-2015 07:14

Client ID: LCS

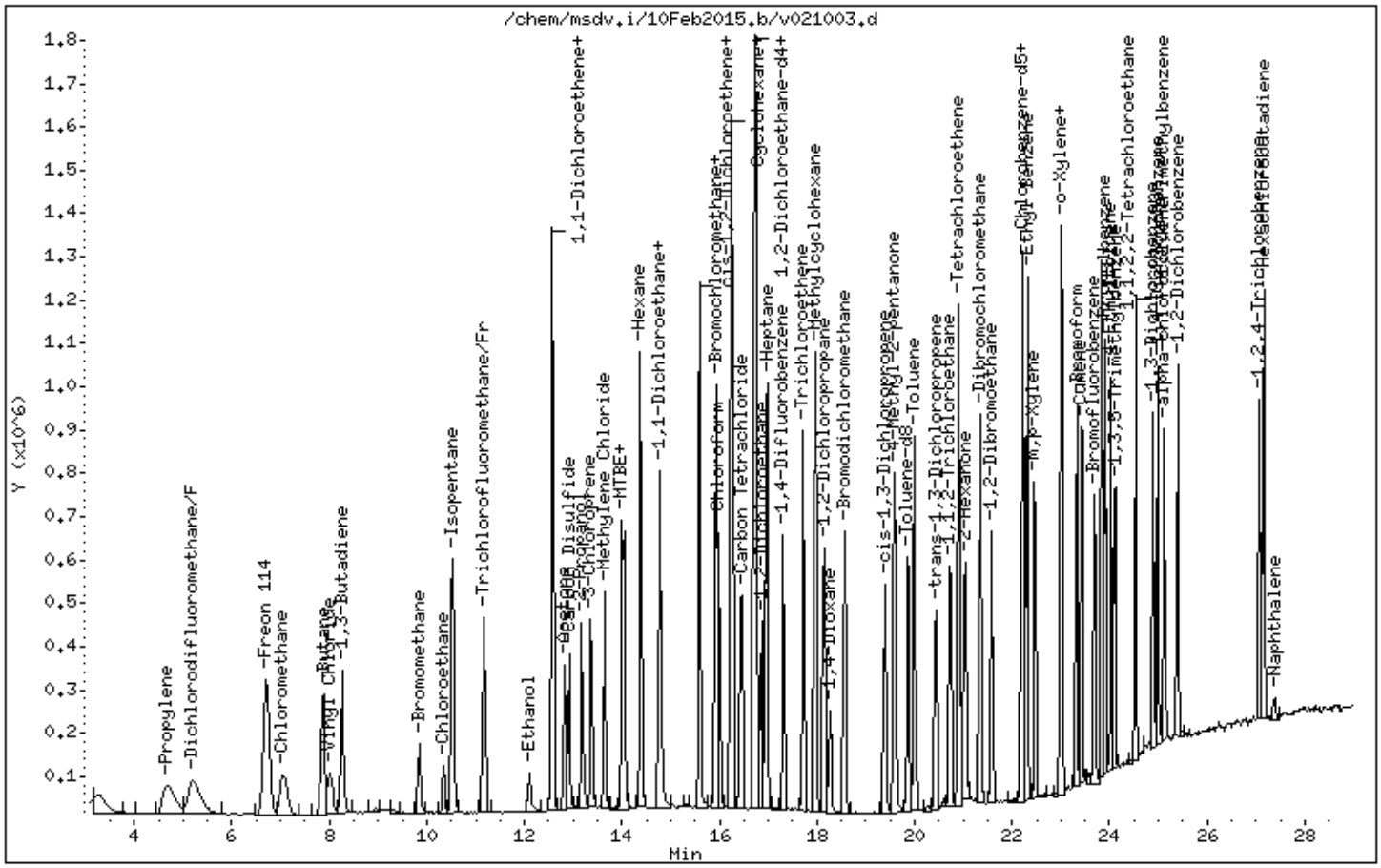
Instrument: msdv.i

Sample Info: 25mL #2687-186

Operator: act

Column phase: RTx-624

Column diameter: 0.32



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Client Sample ID: LCSD

Lab ID#: 1502113AR1-07AA

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**v021004**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 2/10/15 07:58 AM**	

Compound	%Recovery	Method Limits
Freon 12	99	70-130
Freon 114	100	70-130
Chloromethane	105	70-130
Vinyl Chloride	103	70-130
1,3-Butadiene	99	70-130
Bromomethane	104	70-130
Chloroethane	102	70-130
Freon 11	97	70-130
Ethanol	128	70-130
Freon 113	96	70-130
1,1-Dichloroethene	98	70-130
Acetone	93	70-130
2-Propanol	107	70-130
Carbon Disulfide	85	70-130
3-Chloropropene	92	70-130
Methylene Chloride	95	70-130
Methyl tert-butyl ether	95	70-130
trans-1,2-Dichloroethene	85	70-130
Hexane	102	70-130
1,1-Dichloroethane	99	70-130
2-Butanone (Methyl Ethyl Ketone)	94	70-130
cis-1,2-Dichloroethene	104	70-130
Tetrahydrofuran	103	70-130
Chloroform	98	70-130
1,1,1-Trichloroethane	93	70-130
Cyclohexane	95	70-130
Carbon Tetrachloride	90	70-130
2,2,4-Trimethylpentane	99	70-130
Benzene	94	70-130
1,2-Dichloroethane	96	70-130
Heptane	102	70-130
Trichloroethene	101	70-130
1,2-Dichloropropane	98	70-130
1,4-Dioxane	84	70-130
Bromodichloromethane	99	70-130
cis-1,3-Dichloropropene	92	70-130
4-Methyl-2-pentanone	102	70-130
Toluene	97	70-130
trans-1,3-Dichloropropene	94	70-130
1,1,2-Trichloroethane	97	70-130
Tetrachloroethene	95	70-130
2-Hexanone	94	70-130

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Client Sample ID: LCSD

Lab ID#: 1502113AR1-07AA

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**v021004**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 2/10/15 07:58 AM**	

Compound	**%Recovery**	**Method Limits**
Dibromochloromethane	97	70-130
1,2-Dibromoethane (EDB)	98	70-130
Chlorobenzene	92	70-130
Ethyl Benzene	92	70-130
m,p-Xylene	89	70-130
o-Xylene	95	70-130
Styrene	93	70-130
Bromoform	98	70-130
Cumene	92	70-130
1,1,2,2-Tetrachloroethane	90	70-130
Propylbenzene	91	70-130
4-Ethyltoluene	92	70-130
1,3,5-Trimethylbenzene	89	70-130
1,2,4-Trimethylbenzene	94	70-130
1,3-Dichlorobenzene	92	70-130
1,4-Dichlorobenzene	77	70-130
alpha-Chlorotoluene	99	70-130
1,2-Dichlorobenzene	84	70-130
1,2,4-Trichlorobenzene	86	70-130
Hexachlorobutadiene	86	70-130
Naphthalene	86	60-140

Container Type: NA - Not Applicable

Surrogates	**%Recovery**	**Method Limits**
1,2-Dichloroethane-d4	97	70-130
Toluene-d8	99	70-130
4-Bromofluorobenzene	102	70-130

Report Date: 10-Feb-2015 08:44

Eurofins Air Toxics Inc.

RECOVERY REPORT

Client Name:
Client SDG: 10Feb2015
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.sub
Method File: /chem/msdv.i/10Feb2015.b/v15l0123c.m
Misc Info: 5.0ppbv (50ppbv)

SPIKE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
4 Dichlorodifluorome	5.000	4.930	98.61	70-130
3 Propylene	5.000	5.285	105.70	60-140
6 Freon 114	5.000	4.987	99.73	70-130
8 Chloromethane	5.000	5.232	104.63	70-130
10 Vinyl Chloride	5.000	5.167	103.34	70-130
11 1,3-Butadiene	5.000	4.956	99.12	70-130
12 Bromomethane	5.000	5.213	104.27	70-130
17 Chloroethane	5.000	5.118	102.35	70-130
20 Trichlorofluoromet	5.000	4.851	97.02	70-130
24 Ethanol	5.000	6.376	127.53	70-130
28 Freon 113	5.000	4.819	96.38	70-130
30 1,1-Dichloroethene	5.000	4.882	97.64	70-130
31 Acetone	5.000	4.649	92.98	70-130
33 Carbon Disulfide	5.000	4.232	84.65	70-130
34 2-Propanol	5.000	5.374	107.48	70-130
35 3-Chloroprene	5.000	4.615	92.31	70-130
37 Methylene Chloride	5.000	4.739	94.78	70-130
39 MTBE	5.000	4.759	95.19	70-130
40 trans-1,2-Dichloro	5.000	4.273	85.46	70-130
43 Hexane	5.000	5.093	101.87	70-130
46 1,1-Dichloroethane	5.000	4.948	98.95	70-130
47 Vinyl Acetate	5.000	4.479	89.57	60-140
50 cis-1,2-Dichloroet	5.000	5.217	104.34	70-130
51 2-Butanone	5.000	4.683	93.67	70-130
53 Tetrahydrofuran	5.000	5.159	103.19	70-130
55 Chloroform	5.000	4.917	98.34	70-130
57 Cyclohexane	5.000	4.752	95.04	70-130
58 1,1,1-Trichloroeth	5.000	4.644	92.88	70-130
59 Carbon Tetrachlori	5.000	4.511	90.22	70-130
63 2,2,4-Trimethylpen	5.000	4.932	98.64	70-130
64 Benzene	5.000	4.692	93.84	70-130
69 Heptane	5.000	5.076	101.53	70-130
68 1,2-Dichloroethane	5.000	4.822	96.44	70-130

SPIKE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
72 Trichloroethene	5.000	5.050	101.00	70-130
74 1,2-Dichloropropan	5.000	4.918	98.37	70-130
75 1,4-Dioxane	5.000	4.208	84.16	70-130
77 Bromodichlorometha	5.000	4.950	99.01	70-130
78 cis-1,3-Dichloropr	5.000	4.576	91.53	70-130
79 4-Methyl-2-pentano	5.000	5.107	102.13	70-130
81 Toluene	5.000	4.843	96.85	70-130
82 trans-1,3-Dichloro	5.000	4.705	94.09	70-130
84 1,1,2-Trichloroeth	5.000	4.866	97.32	70-130
87 2-Hexanone	5.000	4.725	94.50	70-130
86 Tetrachloroethene	5.000	4.757	95.13	70-130
89 Dibromochlorometha	5.000	4.852	97.05	70-130
90 1,2-Dibromoethane	5.000	4.895	97.90	70-130
93 Chlorobenzene	5.000	4.617	92.34	70-130
95 Ethyl Benzene	5.000	4.602	92.04	70-130
96 m,p-Xylene	5.000	4.451	89.02	70-130
100 o-Xylene	5.000	4.770	95.39	70-130
101 Styrene	5.000	4.673	93.47	70-130
102 Bromoform	5.000	4.908	98.16	70-130
103 Cumene	5.000	4.598	91.96	70-130
108 1,1,2,2-Tetrachlor	5.000	4.479	89.58	70-130
111 Propylbenzene	5.000	4.532	90.65	70-130
113 4-Ethyltoluene	5.000	4.599	91.99	70-130
114 1,3,5-Trimethylben	5.000	4.470	89.39	70-130
120 1,2,4-Trimethylben	5.000	4.729	94.59	70-130
122 1,3-Dichlorobenzen	5.000	4.591	91.81	70-130
124 1,4-Dichlorobenzen	5.000	3.855	77.09	70-130
127 alpha-chlorotoluen	5.000	4.963	99.26	70-130
128 1,2-Dichlorobenzen	5.000	4.193	83.86	70-130
131 1,2,4-Trichloroben	5.000	4.312	86.24	70-130
132 Hexachlorobutadien	5.000	4.278	85.55	70-130
133 Naphthalene	0.5000	0.4310	86.20	60-140
18 Isopentane	5.000	5.146	102.92	60-140
9 Butane	5.000	5.315	106.31	60-140
73 Methylcyclohexane	5.000	4.938	98.77	60-140

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 65 1,2-Dichloroethane	5.000	4.864	97.29	70-130
$ 80 Toluene-d8	5.000	4.956	99.12	70-130
$ 106 Bromofluorobenzene	5.000	5.096	101.91	70-130

Eurofins Air Toxics Inc.

TO15/Modified TO-14A

Data file : /chem/msdv.i/10Feb2015.b/v021004.d
Lab Smp Id: LCSD Client Smp ID: LCSD
Inj Date : 10-FEB-2015 07:58
Operator : ef Inst ID: msdv.i
Smp Info : 25mL #2687-186
Misc Info : 5.0ppbv (50ppbv)
Comment : Low Level GC-MS
Method : /chem/msdv.i/10Feb2015.b/v15l0123c.m
Meth Date : 10-Feb-2015 08:44 atoyama Quant Type: ISTD
Cal Date : 09-FEB-2015 14:14 Cal File: v020912.d
Als bottle: 1 QC Sample: LCSD
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT12.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

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	193843	5.00000		80.00- 120.00	100.00
15.933	15.934 (1.000)	128	156105			0.00- 30.00	80.53
15.933	15.934 (1.000)	49	460715			0.00- 30.00	237.67
* 71 1,4-Difluorobenzene					CAS #: 540-36-3		
17.305	17.305 (1.000)	114	768739	5.00000		80.00- 120.00	100.00
17.305	17.305 (1.000)	88	116865			0.00- 30.00	15.20
* 92 Chlorobenzene-d5					CAS #: 3114-55-4		
22.205	22.205 (1.000)	117	617156	5.00000		80.00- 120.00	100.00
22.205	22.205 (1.000)	82	338450			0.00- 30.00	54.84
$ 65 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
16.755	16.756 (1.052)	65	295563	4.86439	4.864	80.00- 120.00	100.00
16.755	16.756 (1.052)	67	142150			25.13- 85.13	48.09
$ 80 Toluene-d8					CAS #: 2037-26-5		
19.879	19.856 (1.149)	98	713382	4.95620	4.956	80.00- 120.00	100.00
19.879	19.856 (1.149)	70	75913			0.00- 40.74	10.64

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
$ 80 Toluene-d8 (continued)							
19.856	19.856 (1.147)	100	475766			36.73- 96.73	66.69
$ 106 Bromofluorobenzene					CAS #: 460-00-4		
23.704	23.704 (1.067)	174	294677	5.09551	5.096	80.00- 120.00	100.00
23.678	23.678 (1.066)	95	368494			95.17- 155.17	125.05
23.704	23.678 (1.067)	176	286422			64.74- 124.74	97.20
3 Propylene					CAS #: 115-07-1		
4.673	4.674 (0.293)	41	419564	5.28482	5.285	80.00- 120.00	100.00
4.673	4.674 (0.293)	42	283313			37.91- 97.91	67.53
4.636	4.711 (0.291)	39	291189			38.58- 98.58	69.40
4 Dichlorodifluoromethane/Fr12					CAS #: 75-71-8		
5.202	5.202 (0.326)	85	761906	4.93042	4.930	80.00- 120.00	100.00
5.202	5.240 (0.326)	87	244675			1.73- 61.73	32.11
6 Freon 114					CAS #: 76-14-2		
6.713	6.713 (0.421)	135	647829	4.98666	4.987	80.00- 120.00	100.00
6.750	6.713 (0.424)	137	207140			2.34- 62.34	31.97
6.713	6.713 (0.421)	85	744941			93.53- 153.53	114.99
8 Chloromethane					CAS #: 74-87-3		
7.052	7.053 (0.443)	50	521857	5.23157	5.232	80.00- 120.00	100.00
7.052	7.053 (0.443)	52	161200			1.57- 61.57	30.89
9 Butane					CAS #: 106-97-8		
7.853	7.854 (0.493)	58	94262	5.31535	5.315	80.00- 120.00	100.00
7.853	7.885 (0.493)	43	878273			879.44- 939.44	931.74
10 Vinyl Chloride					CAS #: 75-01-4		
8.008	8.009 (0.503)	62	396221	5.16707	5.167	80.00- 120.00	100.00
8.008	8.009 (0.503)	64	112291			0.00- 59.13	28.34
11 1,3-Butadiene					CAS #: 106-99-0		
8.257	8.257 (0.518)	54	373472	4.95606	4.956	80.00- 120.00	100.00
8.257	8.257 (0.518)	39	400027			70.79- 130.79	107.11
12 Bromomethane					CAS #: 74-83-9		
9.834	9.834 (0.617)	94	248591	5.21348	5.213	80.00- 120.00	100.00
9.834	9.834 (0.617)	96	231892			64.45- 124.45	93.28
17 Chloroethane					CAS #: 75-00-3		
10.340	10.340 (0.649)	64	170559	5.11755	5.118	80.00- 120.00	100.00
10.340	10.340 (0.649)	66	52378			0.00- 59.36	30.71

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	378121	5.14594	5.146	80.00- 120.00	100.00
10.533	10.533 (0.661)	43	659275			135.34- 195.34	174.36
10.533	10.533 (0.661)	42	572145			110.64- 170.64	151.31
20 Trichlorofluoromethane/Fr11					CAS #: 75-69-4		
11.183	11.184 (0.702)	101	799012	4.85086	4.851	80.00- 120.00	100.00
11.183	11.184 (0.702)	103	524731			34.40- 94.40	65.67
24 Ethanol					CAS #: 64-17-5		
12.101	12.102 (0.759)	45	225830	6.37628	6.376	80.00- 120.00	100.00
12.101	12.102 (0.759)	46	85924			9.93- 69.93	38.05
12.101	12.102 (0.759)	43	39653			0.00- 50.31	17.56
30 1,1-Dichloroethene					CAS #: 75-35-4		
12.568	12.568 (0.789)	98	193252	4.88175	4.882	80.00- 120.00	100.00
12.568	12.568 (0.789)	61	668481			316.34- 376.34	345.91
12.568	12.568 (0.789)	96	312320			133.12- 193.12	161.61
28 Freon 113					CAS #: 76-13-1		
12.568	12.568 (0.789)	151	568156	4.81924	4.819	80.00- 120.00	100.00
12.568	12.568 (0.789)	153	358204			33.38- 93.38	63.05
12.568	12.568 (0.789)	101	640416			85.19- 145.19	112.72
31 Acetone					CAS #: 67-64-1		
12.816	12.816 (0.804)	58	208075	4.64880	4.649	80.00- 120.00	100.00
12.816	12.816 (0.804)	43	791734			326.03- 386.03	380.50
33 Carbon Disulfide					CAS #: 75-15-0		
12.925	12.926 (0.811)	76	695040	4.23255	4.232	80.00- 120.00	100.00
35 3-Chloroprene					CAS #: 107-05-1		
13.365	13.365 (0.839)	76	115505	4.61533	4.615	80.00- 120.00	100.00
13.365	13.365 (0.839)	41	632716			456.88- 516.88	547.78
34 2-Propanol					CAS #: 67-63-0		
13.173	13.173 (0.827)	45	952031	5.37404	5.374	80.00- 120.00	100.00
13.173	13.173 (0.827)	43	171505			0.00- 47.97	18.01
13.173	13.173 (0.827)	59	29471			0.00- 33.25	3.10
37 Methylene Chloride					CAS #: 75-09-2		
13.640	13.640 (0.856)	84	261932	4.73910	4.739	80.00- 120.00	100.00
13.640	13.640 (0.856)	49	662096			198.57- 258.57	252.77
13.640	13.640 (0.856)	51	197263			41.48- 101.48	75.31
39 MTBE					CAS #: 1634-04-4		
13.996	13.997 (0.878)	73	822537	4.75943	4.759	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	13.997 (0.878)	57	309908			6.35- 66.35	37.68
13.996	13.997 (0.878)	41	320357			5.74- 65.74	38.95
40 trans-1,2-Dichloroethene					CAS #: 156-60-5		
14.051	14.052 (0.882)	98	174116	4.27292	4.273	80.00- 120.00	100.00
14.051	14.052 (0.882)	61	537144			272.66- 332.66	308.50
14.051	14.052 (0.882)	96	269989			128.53- 188.53	155.06
43 Hexane					CAS #: 110-54-3		
14.381	14.381 (0.903)	57	796111	5.09329	5.093	80.00- 120.00	100.00
14.381	14.381 (0.903)	43	607122			41.32- 101.32	76.26
14.381	14.381 (0.903)	86	77350			0.00- 40.13	9.72
46 1,1-Dichloroethane					CAS #: 75-34-3		
14.765	14.765 (0.927)	63	716674	4.94772	4.948	80.00- 120.00	100.00
14.765	14.765 (0.927)	65	218469			0.00- 59.80	30.48
47 Vinyl Acetate					CAS #: 108-05-4		
14.793	14.793 (0.928)	86	65365	4.47865	4.479	80.00- 120.00	100.00
14.793	14.793 (0.928)	42	101888			166.91- 226.91	155.88
14.793	14.793 (0.928)	43	1454687			2680.08-2740.08	2225.48
50 cis-1,2-Dichloroethene					CAS #: 156-59-2		
15.592	15.592 (0.979)	98	238250	5.21713	5.217	80.00- 120.00	100.00
15.592	15.592 (0.979)	61	659853			242.79- 302.79	276.96
15.592	15.592 (0.979)	96	369244			127.33- 187.33	154.98
51 2-Butanone					CAS #: 78-93-3		
15.592	15.572 (0.979)	72	142102	4.68329	4.683	80.00- 120.00	100.00
15.592	15.572 (0.979)	43	1101066			687.17- 747.17	774.84
15.592	15.572 (0.979)	57	71881			23.39- 83.39	50.58
53 Tetrahydrofuran					CAS #: 109-99-9		
15.933	15.934 (1.000)	42	683205	5.15950	5.159	80.00- 120.00	100.00
15.933	15.934 (1.000)	71	131291			0.00- 51.83	19.22
15.933	15.934 (1.000)	72	142237			0.00- 54.16	20.82
55 Chloroform					CAS #: 67-66-3		
15.995	15.995 (1.004)	83	664032	4.91724	4.917	80.00- 120.00	100.00
15.995	15.995 (1.004)	85	412586			35.10- 95.10	62.13
57 Cyclohexane					CAS #: 110-82-7		
16.272	16.242 (1.021)	84	436118	4.75219	4.752	80.00- 120.00	100.00
16.242	16.242 (1.019)	56	871415			160.85- 220.85	199.81
16.242	16.242 (1.019)	41	518499			75.49- 135.49	118.89

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	698733	4.64399	4.644	80.00- 120.00	100.00
16.242	16.242 (1.019)	99	438992			33.24- 93.24	62.83
59 Carbon Tetrachloride					CAS #: 56-23-5		
16.457	16.458 (1.033)	119	619522	4.51095	4.511	80.00- 120.00	100.00
16.457	16.427 (1.033)	117	585370			67.96- 127.96	94.49
	Sum of Peak Concentrations =				4.511		
63 2,2,4-Trimethylpentane					CAS #: 540-84-1		
16.728	16.728 (1.050)	56	817027	4.93183	4.932	80.00- 120.00	100.00
16.728	16.728 (1.050)	57	2453549			274.66- 334.66	300.30
16.728	16.728 (1.050)	41	670596			54.64- 114.64	82.08
64 Benzene					CAS #: 71-43-2		
16.755	16.756 (0.968)	78	895480	4.69218	4.692	80.00- 120.00	100.00
16.755	16.756 (0.968)	77	204573			0.00- 53.39	22.85
68 1,2-Dichloroethane					CAS #: 107-06-2		
16.865	16.865 (0.975)	62	547734	4.82192	4.822	80.00- 120.00	100.00
16.865	16.865 (0.975)	64	157940			0.00- 59.72	28.84
69 Heptane					CAS #: 142-82-5		
16.975	16.975 (0.981)	57	458681	5.07631	5.076	80.00- 120.00	100.00
16.975	16.975 (0.981)	100	97077			0.00- 51.16	21.16
16.975	16.948 (0.981)	43	1035075			180.62- 240.62	225.66
72 Trichloroethene					CAS #: 79-01-6		
17.716	17.717 (1.024)	130	491864	5.04993	5.050	80.00- 120.00	100.00
17.716	17.717 (1.024)	95	441114			62.98- 122.98	89.68
17.716	17.717 (1.024)	97	284562			29.44- 89.44	57.85
73 Methylcyclohexane					CAS #: 108-87-2		
17.964	17.964 (1.038)	83	590590	4.93840	4.938	80.00- 120.00	100.00
17.964	17.964 (1.038)	98	277184			16.83- 76.83	46.93
17.964	17.964 (1.038)	55	766119			97.27- 157.27	129.72
74 1,2-Dichloropropane					CAS #: 78-87-5		
18.156	18.156 (1.049)	63	460678	4.91851	4.918	80.00- 120.00	100.00
18.156	18.156 (1.049)	62	346907			43.06- 103.06	75.30
18.156	18.156 (1.049)	41	338894			36.58- 96.58	73.56
75 1,4-Dioxane					CAS #: 123-91-1		
18.266	18.266 (1.056)	88	229501	4.20782	4.208	80.00- 120.00	100.00
18.266	18.266 (1.056)	58	252897			74.73- 134.73	110.19
18.266	18.266 (1.056)	57	79381			4.83- 64.83	34.59

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	699090	4.95028	4.950	80.00- 120.00	100.00
18.568	18.568 (1.073)	85	444068			33.73- 93.73	63.52
78 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
19.386	19.386 (1.120)	75	535512	4.57644	4.576	80.00- 120.00	100.00
19.386	19.386 (1.120)	77	172111			0.66- 60.66	32.14
19.386	19.386 (1.120)	39	438474			43.67- 103.67	81.88
79 4-Methyl-2-pentanone					CAS #: 108-10-1		
19.587	19.588 (1.132)	43	1363665	5.10668	5.107	80.00- 120.00	100.00
19.587	19.588 (1.132)	58	420628			3.17- 63.17	30.85
19.587	19.588 (1.132)	85	121897			0.00- 40.09	8.94
81 Toluene					CAS #: 108-88-3		
19.991	19.991 (1.155)	91	1053086	4.84261	4.843	80.00- 120.00	100.00
19.991	19.991 (1.155)	92	611787			28.34- 88.34	58.09
82 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
20.435	20.435 (0.920)	75	494733	4.70475	4.705	80.00- 120.00	100.00
20.435	20.435 (0.920)	77	150345			1.98- 61.98	30.39
20.435	20.399 (0.920)	39	384166			41.22- 101.22	77.65
84 1,1,2-Trichloroethane					CAS #: 79-00-5		
20.757	20.722 (0.935)	97	408747	4.86598	4.866	80.00- 120.00	100.00
20.757	20.722 (0.935)	99	249598			31.80- 91.80	61.06
20.722	20.722 (0.933)	83	353798			51.12- 111.12	86.56
86 Tetrachloroethene					CAS #: 127-18-4		
20.901	20.901 (0.941)	166	601477	4.75667	4.757	80.00- 120.00	100.00
20.901	20.901 (0.941)	129	465228			46.61- 106.61	77.35
20.901	20.901 (0.941)	131	464107			46.38- 106.38	77.16
87 2-Hexanone					CAS #: 591-78-6		
21.044	21.045 (0.948)	58	517490	4.72497	4.725	80.00- 120.00	100.00
21.044	21.009 (0.948)	43	1185993			184.27- 244.27	229.18
21.044	21.045 (0.948)	100	67642			0.00- 44.17	13.07
89 Dibromochloromethane					CAS #: 124-48-1		
21.367	21.367 (0.962)	129	792455	4.85233	4.852	80.00- 120.00	100.00
21.367	21.367 (0.962)	127	626238			48.71- 108.71	79.03
90 1,2-Dibromoethane					CAS #: 106-93-4		
21.582	21.583 (0.972)	107	686718	4.89497	4.895	80.00- 120.00	100.00
21.582	21.583 (0.972)	109	654780			63.80- 123.80	95.35

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	890333	4.61724	4.617	80.00- 120.00	100.00
22.233	22.233 (1.001)	114	297044			1.75- 61.75	33.36
22.233	22.233 (1.001)	77	566607			24.73- 84.73	63.64
95 Ethyl Benzene					CAS #: 100-41-4		
22.315	22.315 (1.005)	106	419340	4.60197	4.602	80.00- 120.00	100.00
22.315	22.315 (1.005)	91	1216374			260.31- 320.31	290.07
96 m,p-Xylene					CAS #: 108-38-3		
22.480	22.452 (1.012)	106	409660	4.45118	4.451	80.00- 120.00	100.00
22.452	22.452 (1.011)	91	788305			157.23- 217.23	192.43
100 o-Xylene					CAS #: 95-47-6		
23.001	23.002 (1.036)	106	403535	4.76951	4.770	80.00- 120.00	100.00
23.001	23.002 (1.036)	91	770999			167.76- 227.76	191.06
101 Styrene					CAS #: 100-42-5		
23.029	23.029 (1.037)	104	589626	4.67337	4.673	80.00- 120.00	100.00
23.029	23.029 (1.037)	78	292892			17.96- 77.96	49.67
102 Bromoform					CAS #: 75-25-2		
23.331	23.331 (1.051)	173	717106	4.90810	4.908	80.00- 120.00	100.00
23.331	23.331 (1.051)	171	366291			22.04- 82.04	51.08
103 Cumene					CAS #: 98-82-8		
23.441	23.413 (1.056)	105	1099934	4.59820	4.598	80.00- 120.00	100.00
23.441	23.441 (1.056)	120	332196			0.00- 59.93	30.20
108 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
23.832	23.833 (1.073)	83	753364	4.47880	4.479	80.00- 120.00	100.00
23.832	23.833 (1.073)	85	485714			34.94- 94.94	64.47
111 Propylbenzene					CAS #: 103-65-1		
23.910	23.910 (1.077)	91	1009891	4.53230	4.532	80.00- 120.00	100.00
23.910	23.910 (1.077)	120	264136			0.00- 56.93	26.15
113 4-Ethyltoluene					CAS #: 622-96-8		
24.039	24.039 (1.083)	105	776906	4.59933	4.599	80.00- 120.00	100.00
24.039	24.039 (1.083)	120	265430			3.10- 63.10	34.17
114 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
24.116	24.116 (1.086)	105	785188	4.46970	4.470	80.00- 120.00	100.00
24.116	24.116 (1.086)	120	407292			0.00- 30.00	51.87
120 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
24.529	24.529 (1.105)	105	734578	4.72948	4.729	80.00- 120.00	100.00

```
                                        CONCENTRATIONS
                                        ON-COL    FINAL
   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    352767                     0.00-  30.00    48.02
-------------------------------------------------------------------------------
  122 1,3-Dichlorobenzene                          CAS #: 541-73-1
 24.902  24.902 (1.121)   146    538963 4.59065    4.591  80.00- 120.00   100.00
 24.902  24.902 (1.121)   148    337038                   32.42-  92.42    62.53
 24.902  24.902 (1.121)   111    203446                    8.90-  68.90    37.75
-------------------------------------------------------------------------------
  124 1,4-Dichlorobenzene                          CAS #: 106-46-7
 24.992  24.992 (1.125)   146    479504 3.85467    3.855  80.00- 120.00   100.00
 24.992  24.992 (1.125)   148    308091                   34.01-  94.01    64.25
 24.992  24.992 (1.125)   111    183814                    8.58-  68.58    38.33
-------------------------------------------------------------------------------
  127 alpha-chlorotoluene                          CAS #: 100-44-7
 25.126  25.127 (1.132)    91    716002 4.96280    4.963  80.00- 120.00   100.00
 25.126  25.127 (1.132)   126    171684                    0.00-  54.03    23.98
-------------------------------------------------------------------------------
  128 1,2-Dichlorobenzene                          CAS #: 95-50-1
 25.395  25.396 (1.144)   146    495844 4.19321    4.193  80.00- 120.00   100.00
 25.395  25.396 (1.144)   148    315200                   32.53-  92.53    63.57
 25.395  25.396 (1.144)   111    198608                   10.66-  70.66    40.05
-------------------------------------------------------------------------------
  131 1,2,4-Trichlorobenzene                       CAS #: 120-82-1
 27.077  27.077 (1.219)   180    461845 4.31222    4.312  80.00- 120.00   100.00
 27.077  27.077 (1.219)   182    448566                   66.06- 126.06    97.12
-------------------------------------------------------------------------------
  132 Hexachlorobutadiene                          CAS #: 87-68-3
 27.166  27.167 (1.223)   225    331188 4.27762    4.278  80.00- 120.00   100.00
 27.166  27.167 (1.223)   223    206618                   32.60-  92.60    62.39
-------------------------------------------------------------------------------
  133 Naphthalene                                  CAS #: 91-20-3
 27.368  27.368 (1.232)   128     69191 0.43101   0.4310  80.00- 120.00   100.00
 27.368  27.368 (1.232)   127     11991                    0.00-  44.62    17.33
-------------------------------------------------------------------------------
```

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdv.i
Lab File ID: v021004.d
Lab Smp Id: LCSD
Analysis Type: VOA
Quant Type: ISTD
Operator: ef
Method File: /chem/msdv.i/10Feb2015.b/v15l0123c.m
Misc Info: 5.0ppbv (50ppbv)

Calibration Date: 10-FEB-2015
Calibration Time: 06:33
Client Smp ID: LCSD
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
54 Bromochloromethan	194946	116968	272924	193843	-0.57
71 1,4-Difluorobenze	822631	493579	1151683	768739	-6.55
92 Chlorobenzene-d5	670659	402395	938923	617156	-7.98

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/10Feb2015.b/v021004.d

Date : 10-FEB-2015 07:58

Client ID: LCSD

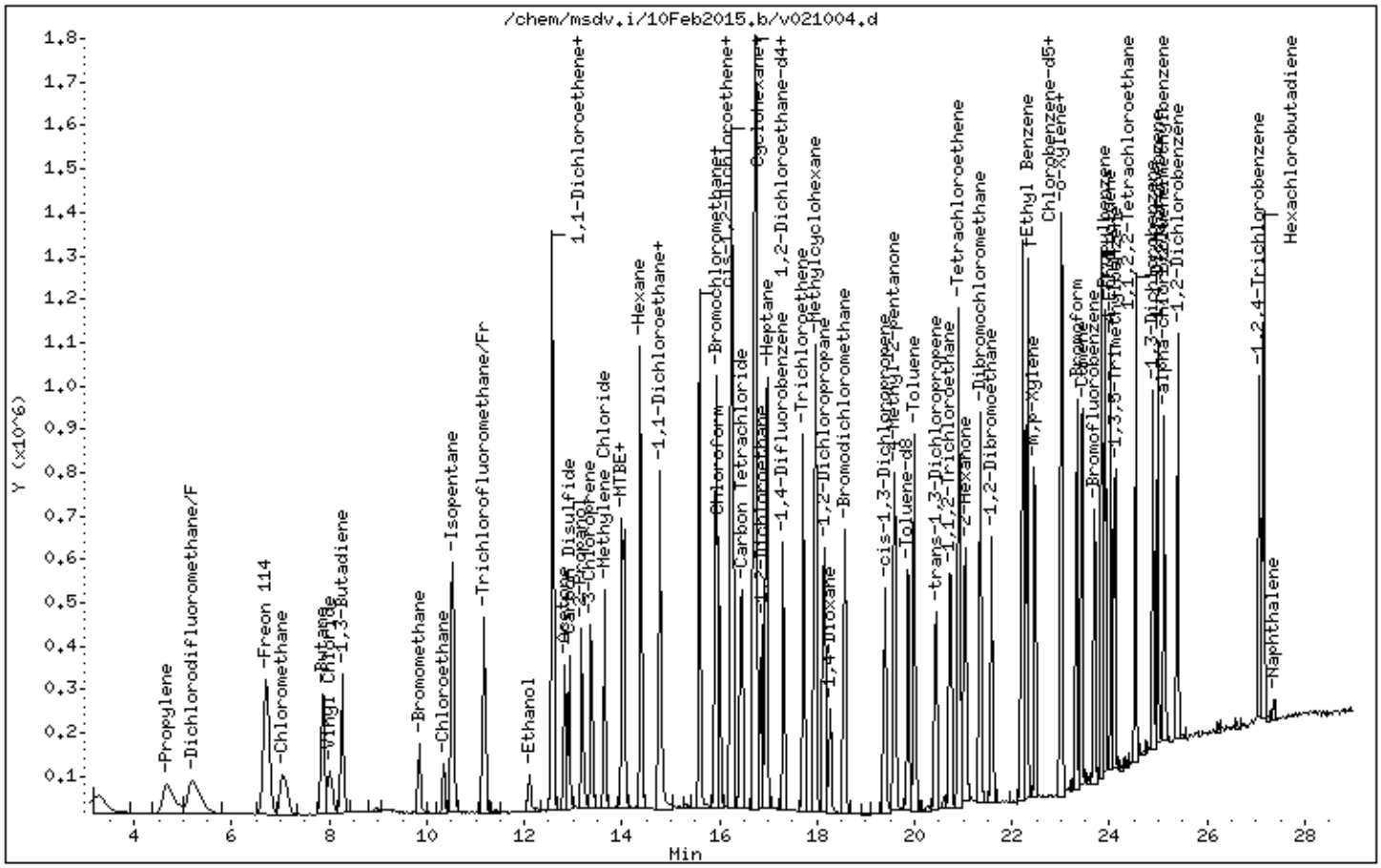
Instrument: msdv.i

Sample Info: 25mL #2687-186

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: (540315/563520) x100 = 95.88%	
Tekmar Purge Flow:	
Vacuum:	2/10/15 ACT

IS/S Std. #:	2687-266	Exp. Date:	4/9/15
BCM LL:	194946	SIM:	201695
1,4-DFB	822631		874016
CB-d5	670659		688218

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

File ID:	V021002
Compound:	Tol-d8
Initials:	ACT

Calculation Check:

ppbv of compound = $\frac{\text{Area}_{\text{Sample}}}{\text{Area}_{\text{IS}}} \times \frac{\text{Conc}_{\text{IS}}}{\text{RRF}}$ = (810909) x (5.000) = 5.265
(822631) (0.93619)

SOP# (Circle one): 6 / 83 / 38 / 91 / 109 Method (Circle one): TO-14A/TO-15/TO-17 Reported Result: 5.265

Method Name: V15_0123C/V15_01234

	Use	File	Lab ID#	Can#	Pressure	Amt. Loaded	DF	Loaded By Initials	Date Analyzed	Time Analyzed	Reviewed By Initials	Comments/Standard Expiration Date
1	✓	V021001	BFB Tune Check	2299-790	50ng	2.0ml	1.00	ACT	2/10/15	0615	ACT	
2	✓	02	CCV (50ppbv)	2687-244	5.0ppbv	25mL		ACT		0633	ACT	Exp 4/9/15 LL: 2 out SIM: Ø out
3	✓	03	LCS (50ppbv)	2687-186	5.0ppbv	25mL		ACT		0714	~~ET~~	Exp 3/19/15 LL: 4 out SIM: 1 out
4	✓	04	LCSD (50ppbv)	2687-186	5.0ppbv	25mL		ET		0758	~~ET~~	Exp 3/19/15
5	✓	05	CCVsp (5.0ppbv)	2716-22	1.0ppbv	50mL	1.00	ET		0842	~~ET~~	Exp. 4/7/15 AT: 1
6	✓	06	LCSsp (5.0ppbv)	2716-8	1.0ppbv	50mL	1.00	ET		0924	~~ET~~	Exp. 4/19/15 AT: 1
7	✗	07	LAB Blank	34034	Humid	250mL	1.00	ET		1013	~~ET~~	1,1,2-TCA > 1/2 RL
8	✓	08	LAB Blank	34034	Humid	250mL	1.00	ET		1109	~~ET~~	
9	✓	09	1502126-01A	33559	0.1psi · 5.2psi	250mL	1.34	ET		1159	~~ET~~	
10	✓	10	~~1502106~~ 1502106 -01AB	34721	6.0"Hg · 5.0psi	125mL	3.36	ET		1323	~~ET~~	
11	✓	11	-02AB	33589	5.5"Hg · 5.0psi	125mL	3.28	ET		1414	~~ET~~	
12	✓	12	-03AB	9934	5.5"Hg · 5.0psi	125mL	3.28	ET		1458	~~ET~~	
13	✓	13	-04AB	34505	7.0"Hg · 5.0psi	125mL	~~4.50~~ 3.28	ET		1548	~~ET~~	DF = 3.5
14	✓	14	1502103 -01AB	35978	7.5"Hg · 5.0psi	125mL	3.58	ET		1632	ET	3rd Surr - ok within 70-130 dil MTC

Reviewed 2/10/15 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	✓	V021015	1502108 - 02AB	33817	5.5"Hg - 5psi	125ml	~~1.00~~ 2/10/15	EA	2/10/15	1728	EA	DF = 3.28 dil NTC
16	✓	16	1502113A - 02A	37729	3.5"Hg - 15psi	250mL	2.29	EA		1845	ED	
17	✓	17	- 01A	37348	5.0"Hg - 15psi	25ml	24.2	EA		1920	EA	dil TC
18	✓	18	- 03A	31754	3.5"Hg - 15psi	250ml	2.29	EA		2021	ED	
19	✓	19	- 04A	11427	5.5"Hg - 15psi	50ml	12.4	EA		2055	ED	dil TC "E" 2propanol
20	✓	20	1501406 - 06A	9025	3.2"Hg - 5.6psi	250ml	1.55	EA		2157	EA	2-propanol ND
21	✓	21	- 07A	33989	3.5"Hg - 5.1psi		1.52	EA		2232	EA	
22	✓	22	- 08A	12687	3.1"Hg - 5.4psi		1.52	EA		2309	AGT	
23	✓	23	1502113A - 02A	37729	3.5"Hg - 15psi		2.29	EA	2/11/15	0002	AGT	
24	✓	24	1501406 - 09A	33999	3.1"Hg → 5.3psi		1.52	AGT		0520	AGT	
25	✓	25	↓ - 10A	35170	2.2"Hg → 4.8psi		1.43	AGT		0559	AGT	
26												
27												
28												
29												2/11/15
30												AGT
31												
32												
33												
34												
35												
36												

Reviewed

2/11/15
Date

Eurofins Air Toxics Inc.

Data file : /var/chem/msdv.i/23Jan2015.b/v012301.d
Lab Smp Id: Client Smp ID: BFB
Inj Date : 23-JAN-2015 13:24
Operator : ef Inst ID: msdv.i
Smp Info : 2.0uL# 2299-790; BFB; BFB
Misc Info : 50ng
Comment :
Method : /var/chem/msdv.i/23Jan2015.b/bfb60.m
Meth Date : 23-Jan-2015 13:41 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	6.640	0.000	95	719915			100.00- 100.00	100.00
6.640	6.640	0.000	50	201618			8.00- 40.00	28.01
6.640	6.640	0.000	75	323608			30.00- 66.00	44.95
6.640	6.640	0.000	96	48236			5.00- 9.00	6.70
6.640	6.640	0.000	173	3608			0.00- 1.99	0.68
6.640	6.640	0.000	174	529833			50.00- 120.00	73.60
6.640	6.640	0.000	175	38619			4.00- 9.00	7.29
6.640	6.640	0.000	176	512782			93.00- 101.00	96.78
6.640	6.640	0.000	177	32944			5.00- 9.00	6.42

Data File: /var/chem/msdv.i/23Jan2015.b/v012301.d

Date : 23-JAN-2015 13:24

Client ID: BFB

Instrument: msdv.i

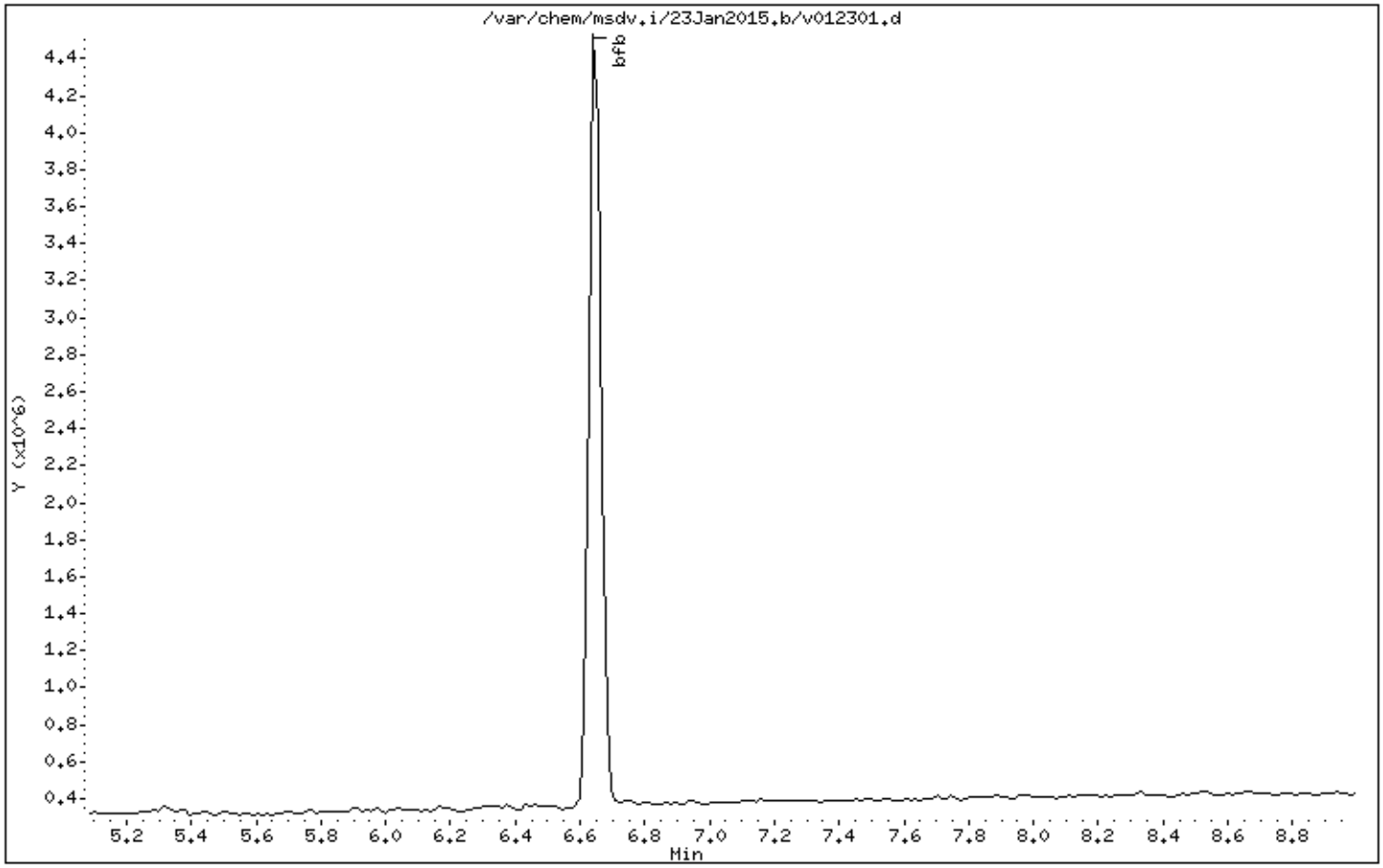
Sample Info: 2.0uL# 2299-790; BFB; BFB

Volume Injected (uL): 1.0

Operator: ef

Column phase:

Column diameter: 2.00



Data File: /var/chem/msdv.i/23Jan2015.b/v012301.d

Date : 23-JAN-2015 13:24

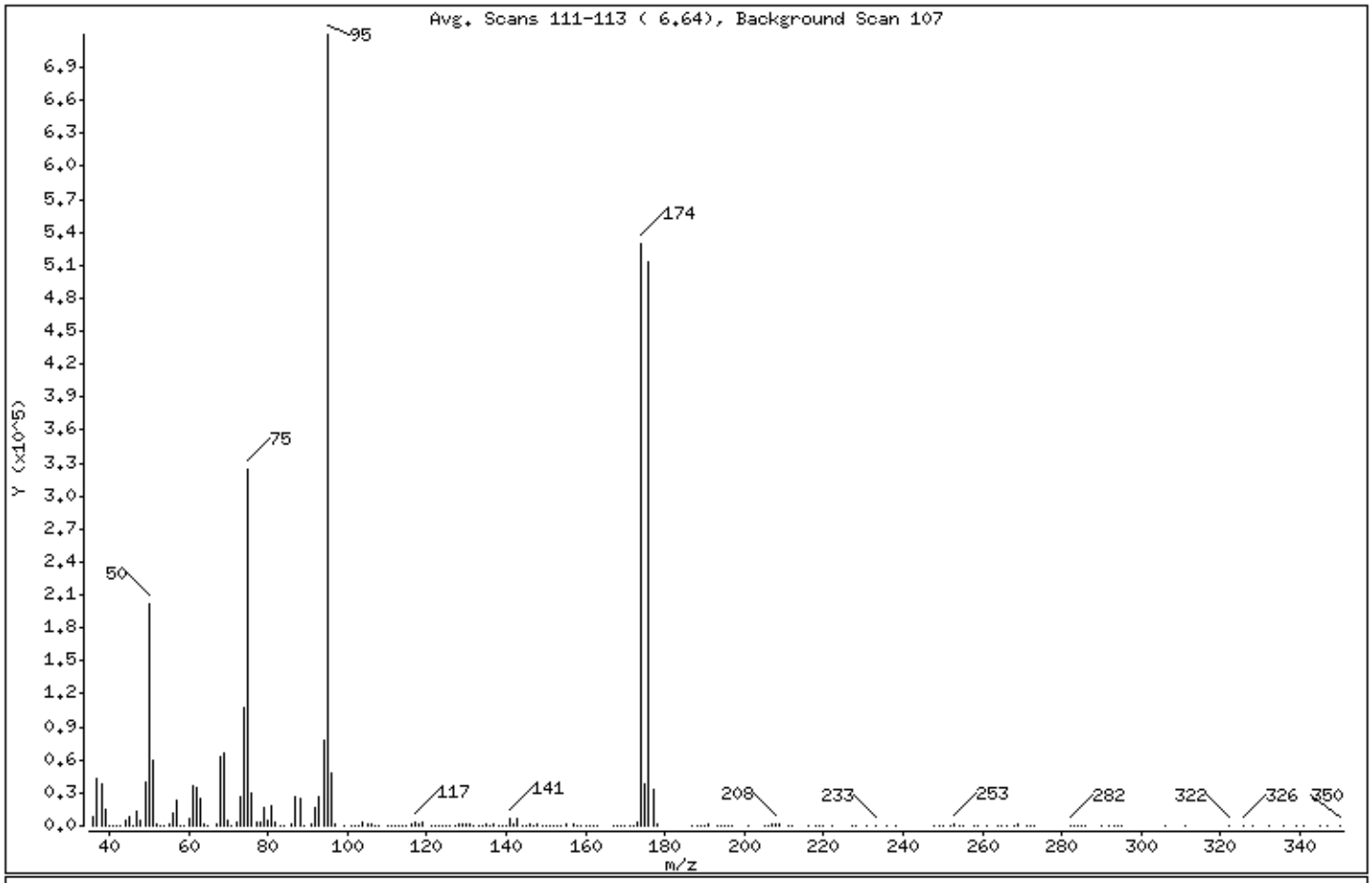
Client ID: BFB Instrument: msdv.i

Sample Info: 2.0uL# 2299-790; BFB; 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	28.01
75	30.00 - 66.00% of mass 95	44.95
96	5.00 - 9.00% of mass 95	6.70
173	Less than 1.99% of mass 174	0.50 (0.68)
174	50.00 - 120.00% of mass 95	73.60
175	4.00 - 9.00% of mass 174	5.36 (7.29)
176	93.00 - 101.00% of mass 174	71.23 (96.78)
177	5.00 - 9.00% of mass 176	4.58 (6.42)

Data File: /var/chem/msdv.i/23Jan2015.b/v012301.d

Date : 23-JAN-2015 13:24

Client ID: BFB

Instrument: msdv.i

Sample Info: 2.0uL# 2299-790; BFB; BFB

Volume Injected (uL): 1.0

Operator: ef

Column phase:

Column diameter: 2.00

Data File: v012301.d
Spectrum: Avg. Scans 111-113 (6.64), Background Scan 107
Location of Maximum: 95.00
Number of points: 201

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	7670	89.00	41	145.00	565	220.00	362
37.00	42720	91.00	2336	146.00	895	222.00	78
38.00	37528	92.00	17304	147.00	633	227.00	88
39.00	14911	93.00	25992	148.00	1510	228.00	74
40.00	6	94.00	77824	149.00	180	231.00	50
41.00	464	95.00	719872	150.00	772	233.00	499
42.00	42	96.00	48232	151.00	58	236.00	82
43.00	685	97.00	1982	152.00	329	238.00	205
44.00	4257	99.00	216	153.00	391	248.00	149
45.00	8338	101.00	61	154.00	496	249.00	128
46.00	654	102.00	164	155.00	1588	250.00	84
47.00	13675	103.00	504	157.00	962	252.00	97
48.00	5236	104.00	2756	158.00	448	253.00	1460
49.00	39464	105.00	835	159.00	701	254.00	290
50.00	201600	106.00	2326	160.00	198	255.00	558
51.00	59648	107.00	475	161.00	465	258.00	50
52.00	1959	108.00	172	162.00	364	259.00	54
53.00	18	110.00	656	163.00	159	261.00	326
54.00	71	111.00	519	167.00	84	264.00	222
55.00	2308	112.00	215	168.00	221	265.00	48
56.00	11444	113.00	482	169.00	200	266.00	141
57.00	23960	114.00	61	170.00	248	268.00	560
58.00	788	115.00	758	171.00	188	269.00	1263
59.00	431	116.00	2481	172.00	617	271.00	302
60.00	7097	117.00	4033	173.00	3608	272.00	254
61.00	36440	118.00	1986	174.00	529792	273.00	181
62.00	34328	119.00	3428	175.00	38616	282.00	747
63.00	25336	121.00	127	176.00	512768	283.00	194
64.00	1983	122.00	352	177.00	32944	284.00	335
65.00	127	123.00	34	178.00	1018	285.00	20
67.00	1509	124.00	545	187.00	272	286.00	65
68.00	63416	125.00	324	188.00	56	290.00	133
69.00	65944	126.00	81	189.00	23	292.00	154
70.00	4901	127.00	267	190.00	136	293.00	243
71.00	234	128.00	2160	191.00	1122	294.00	204

Data File: /var/chem/msdv.i/23Jan2015.b/v012301.d

Date : 23-JAN-2015 13:24

Client ID: BFB

Instrument: msdv.i

Sample Info: 2.0uL# 2299-790; BFB; BFB

Volume Injected (uL): 1.0

Operator: ef

Column phase:

Column diameter: 2.00

Data File: v012301.d
Spectrum: Avg. Scans 111-113 (6.64), Background Scan 107
Location of Maximum: 95.00
Number of points: 201

m/z	Y	m/z	Y	m/z	Y	m/z	Y
72.00	3281	129.00	1310	193.00	274	295.00	152
73.00	26112	130.00	2278	194.00	222	306.00	468
74.00	108040	131.00	953	195.00	289	311.00	147
75.00	323584	132.00	124	196.00	168	322.00	583
76.00	29296	133.00	4	197.00	108	326.00	249
77.00	3819	134.00	300	201.00	103	328.00	145
78.00	2584	135.00	1871	205.00	17	332.00	48
79.00	16472	136.00	280	206.00	76	336.00	98
80.00	4212	137.00	890	207.00	1210	339.00	92
81.00	17408	138.00	355	208.00	1423	341.00	181
82.00	3481	139.00	555	209.00	1091	345.00	37
83.00	290	140.00	79	211.00	139	347.00	60
84.00	130	141.00	7221	212.00	50	350.00	51
86.00	843	142.00	938	216.00	116		
87.00	25984	143.00	7128	218.00	500		
88.00	24456	144.00	631	219.00	376		

Eurofins Air Toxics Inc.

Data file : /var/chem/msdv.i/24Jan2015.b/v012401.d
Lab Smp Id: Client Smp ID: BFB
Inj Date : 24-JAN-2015 07:01
Operator : sn Inst ID: msdv.i
Smp Info : 2.0uL# 2299-790; BFB; BFB
Misc Info : 50ng
Comment :
Method : /var/chem/msdv.i/24Jan2015.b/bfb60.m
Meth Date : 24-Jan-2015 07:18 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	
6.626	6.640	-0.014	95	745025			100.00- 100.00	100.00
6.626	6.640	-0.014	50	199182			8.00- 40.00	26.73
6.626	6.640	-0.014	75	332040			30.00- 66.00	44.57
6.626	6.640	-0.014	96	46592			5.00- 9.00	6.25
6.626	6.640	-0.014	173	3364			0.00- 1.99	0.59
6.626	6.640	-0.014	174	566058			50.00- 120.00	75.98
6.626	6.640	-0.014	175	38768			4.00- 9.00	6.85
6.626	6.640	-0.014	176	544874			93.00- 101.00	96.26
6.626	6.640	-0.014	177	35837			5.00- 9.00	6.58

Data File: /chem/msdv.i/24Jan2015.b/v012401.d

Date : 24-JAN-2015 07:01

Client ID: BFB

Instrument: msdv.i

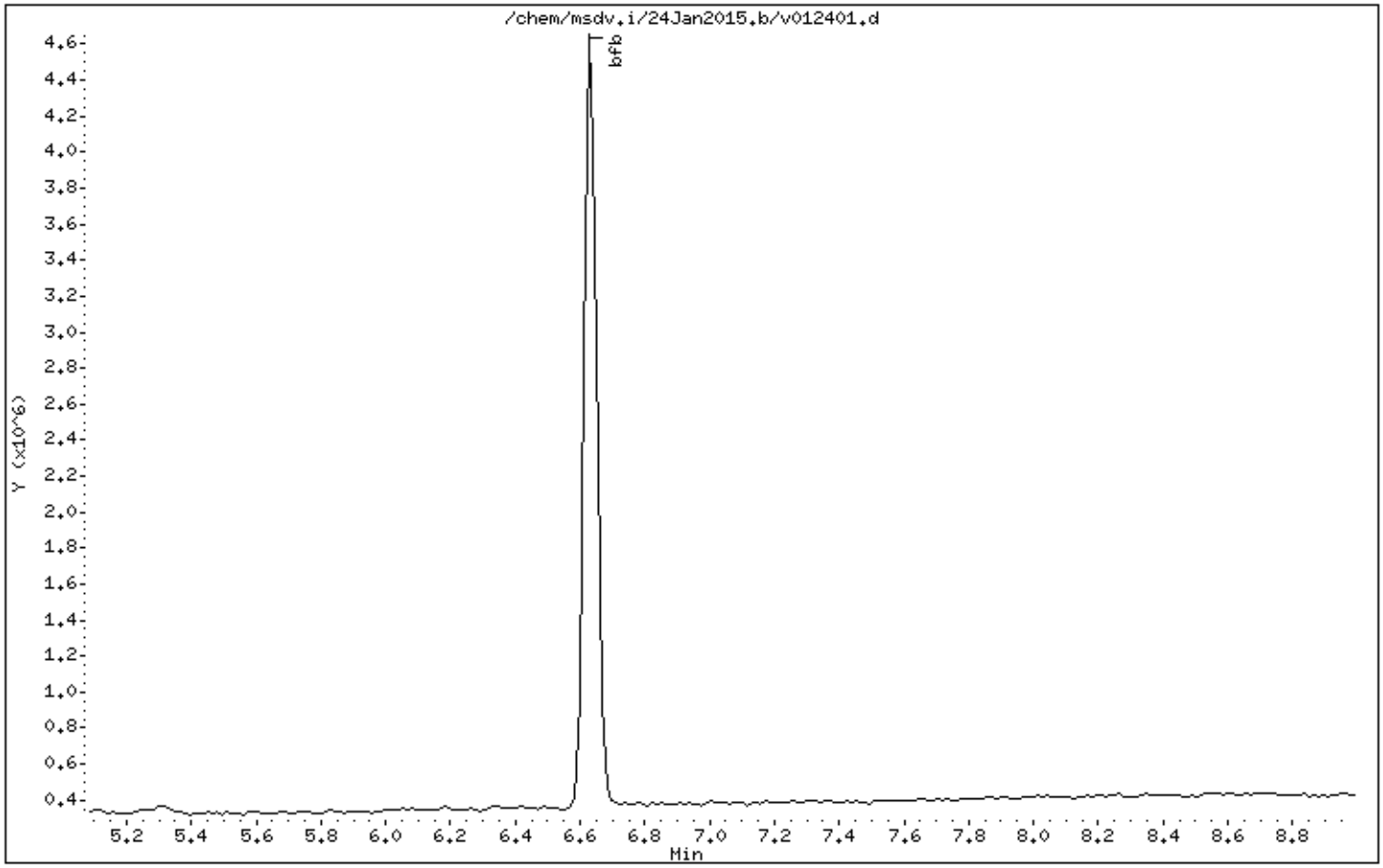
Sample Info: 2.0uL# 2299-790; BFB; BFB

Volume Injected (uL): 1.0

Operator: sn

Column phase:

Column diameter: 2.00



Data File: /chem/msdv.i/24Jan2015.b/v012401.d

Date : 24-JAN-2015 07:01

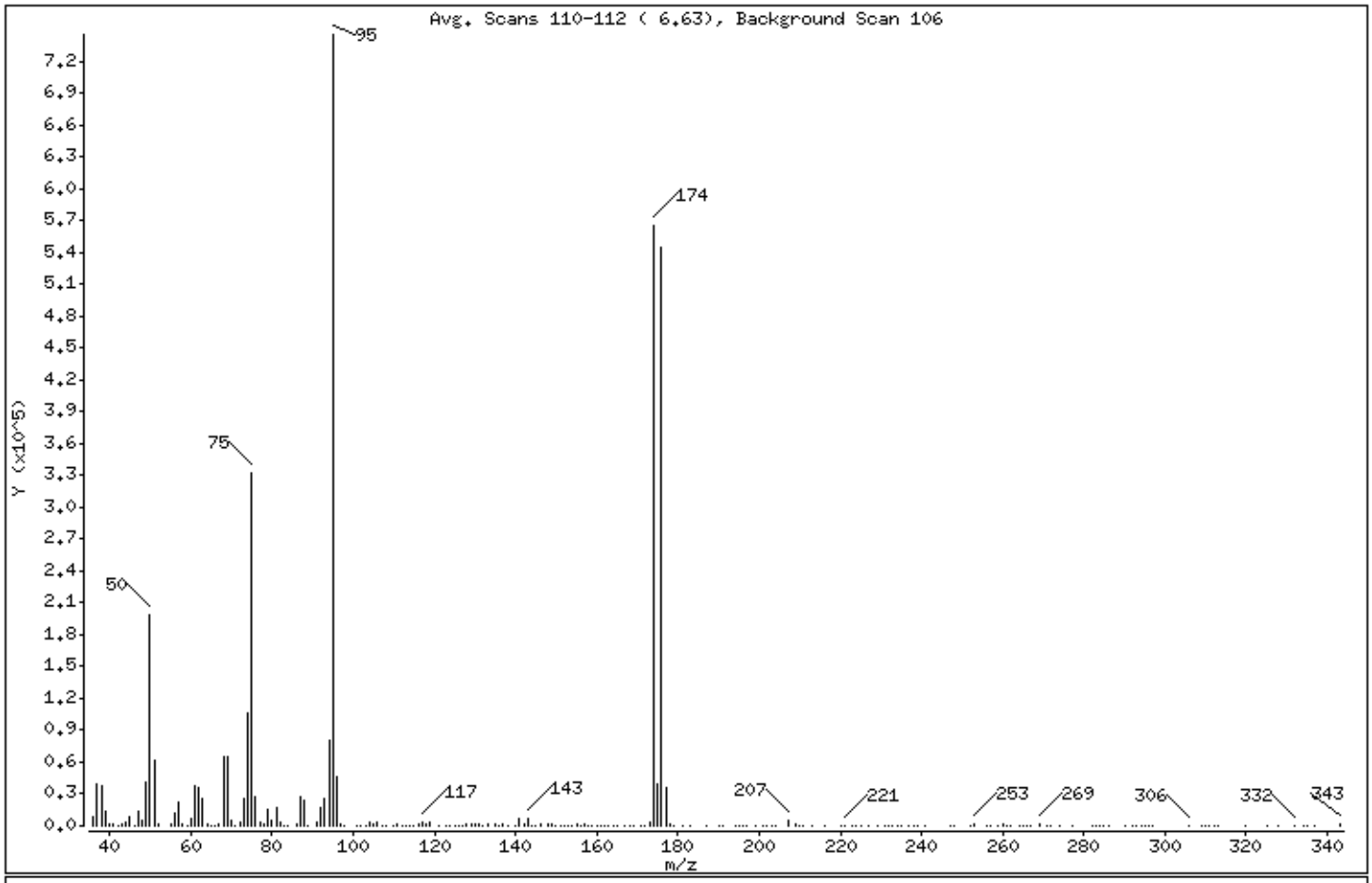
Client ID: BFB Instrument: msdv.i

Sample Info: 2.0uL# 2299-790; BFB; BFB

Volume Injected (uL): 1.0 Operator: sn

Column phase: Column diameter: 2.00

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	8.00 - 40.00% of mass 95	26.73
75	30.00 - 66.00% of mass 95	44.57
96	5.00 - 9.00% of mass 95	6.25
173	Less than 1.99% of mass 174	0.45 (0.59)
174	50.00 - 120.00% of mass 95	75.98
175	4.00 - 9.00% of mass 174	5.20 (6.85)
176	93.00 - 101.00% of mass 174	73.13 (96.26)
177	5.00 - 9.00% of mass 176	4.81 (6.58)

Data File: /chem/msdv.i/24Jan2015.b/v012401.d

Date : 24-JAN-2015 07:01

Client ID: BFB

Instrument: msdv.i

Sample Info: 2.0uL# 2299-790; BFB; BFB

Volume Injected (uL): 1.0

Operator: sn

Column phase:

Column diameter: 2.00

Data File: v012401.d
Spectrum: Avg. Scans 110-112 (6.63), Background Scan 106
Location of Maximum: 95.00
Number of points: 211

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	7733	93.00	25832	154.00	310	233.00	54
37.00	40080	94.00	80496	155.00	1240	234.00	334
38.00	37200	95.00	745024	156.00	416	235.00	77
39.00	13533	96.00	46592	157.00	1264	237.00	13
40.00	1310	97.00	1151	158.00	234	238.00	59
41.00	972	98.00	26	159.00	379	239.00	16
42.00	170	101.00	32	160.00	220	241.00	66
43.00	1514	102.00	263	161.00	687	247.00	12
44.00	3446	103.00	383	162.00	432	248.00	240
45.00	9384	104.00	2876	163.00	694	252.00	377
46.00	640	105.00	1011	164.00	284	253.00	1750
47.00	13942	106.00	2740	165.00	58	256.00	86
48.00	5485	107.00	612	167.00	118	257.00	199
49.00	40256	108.00	274	168.00	137	259.00	76
50.00	199168	110.00	402	169.00	172	260.00	964
51.00	61944	111.00	862	171.00	421	261.00	255
52.00	2389	112.00	331	172.00	459	262.00	160
55.00	2297	113.00	711	173.00	3364	264.00	59
56.00	12757	114.00	69	174.00	566016	265.00	349
57.00	22648	115.00	554	175.00	38768	266.00	230
58.00	1012	116.00	2228	176.00	544832	267.00	390
59.00	61	117.00	3966	177.00	35832	269.00	1043
60.00	6772	118.00	2447	178.00	938	271.00	316
61.00	37400	119.00	3248	179.00	18	272.00	89
62.00	35440	121.00	35	181.00	73	274.00	55
63.00	25896	123.00	256	183.00	111	277.00	145
64.00	2149	124.00	664	187.00	237	282.00	228
65.00	244	125.00	32	190.00	5	283.00	170
66.00	29	126.00	211	191.00	279	284.00	47
67.00	1738	127.00	196	194.00	247	285.00	221
68.00	64664	128.00	2132	195.00	611	286.00	193
69.00	65888	129.00	1309	196.00	12	290.00	40
70.00	4823	130.00	2533	197.00	3	292.00	56
71.00	199	131.00	1356	199.00	95	293.00	104
72.00	3102	132.00	204	201.00	105	294.00	112

Data File: /chem/msdv.i/24Jan2015.b/v012401.d

Date : 24-JAN-2015 07:01

Client ID: BFB

Instrument: msdv.i

Sample Info: 2.0uL# 2299-790; BFB; BFB

Volume Injected (uL): 1.0

Operator: sn

Column phase:

Column diameter: 2.00

Data File: v012401.d
Spectrum: Avg. Scans 110-112 (6.63), Background Scan 106
Location of Maximum: 95.00
Number of points: 211

m/z	Y	m/z	Y	m/z	Y	m/z	Y
73.00	26408	133.00	1071	202.00	14	295.00	160
74.00	106288	135.00	1882	203.00	138	296.00	166
75.00	332032	136.00	479	204.00	17	297.00	129
76.00	27280	137.00	1204	207.00	5533	306.00	452
77.00	3275	138.00	262	209.00	935	309.00	215
78.00	2245	140.00	660	210.00	100	310.00	102
79.00	15827	141.00	6501	211.00	31	311.00	61
80.00	5313	142.00	1018	213.00	62	312.00	232
81.00	16375	143.00	7628	216.00	15	313.00	225
82.00	2806	144.00	662	220.00	362	320.00	52
83.00	465	145.00	711	221.00	412	325.00	160
84.00	31	146.00	1284	223.00	143	328.00	239
86.00	893	148.00	1204	224.00	121	332.00	303
87.00	28184	149.00	980	225.00	151	334.00	105
88.00	24560	150.00	707	227.00	59	335.00	19
89.00	599	151.00	129	229.00	70	337.00	122
91.00	3090	152.00	591	231.00	168	343.00	909
92.00	17808	153.00	531	232.00	355		

Eurofins Air Toxics Inc.

Data file : /var/chem/msdv.i/27Jan2015.b/v012701.d
Lab Smp Id: Client Smp ID: BFB
Inj Date : 27-JAN-2015 06:11
Operator : act Inst ID: msdv.i
Smp Info : 2.0uL# 2299-790; BFB; BFB
Misc Info : 50ng
Comment :
Method : /var/chem/msdv.i/27Jan2015.b/bfb60.m
Meth Date : 27-Jan-2015 06:27 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	997207			100.00- 100.00	100.00
6.640	6.640	0.000	50	269079			8.00- 40.00	26.98
6.640	6.640	0.000	75	445256			30.00- 66.00	44.65
6.640	6.640	0.000	96	64888			5.00- 9.00	6.51
6.640	6.640	0.000	173	5118			0.00- 1.99	0.63
6.640	6.640	0.000	174	808917			50.00- 120.00	81.12
6.640	6.640	0.000	175	56986			4.00- 9.00	7.04
6.640	6.640	0.000	176	775510			93.00- 101.00	95.87
6.640	6.640	0.000	177	51807			5.00- 9.00	6.68

Data File: /chem/msdv.i/27Jan2015.b/v012701.d

Date : 27-JAN-2015 06:11

Client ID: BFB

Instrument: msdv.i

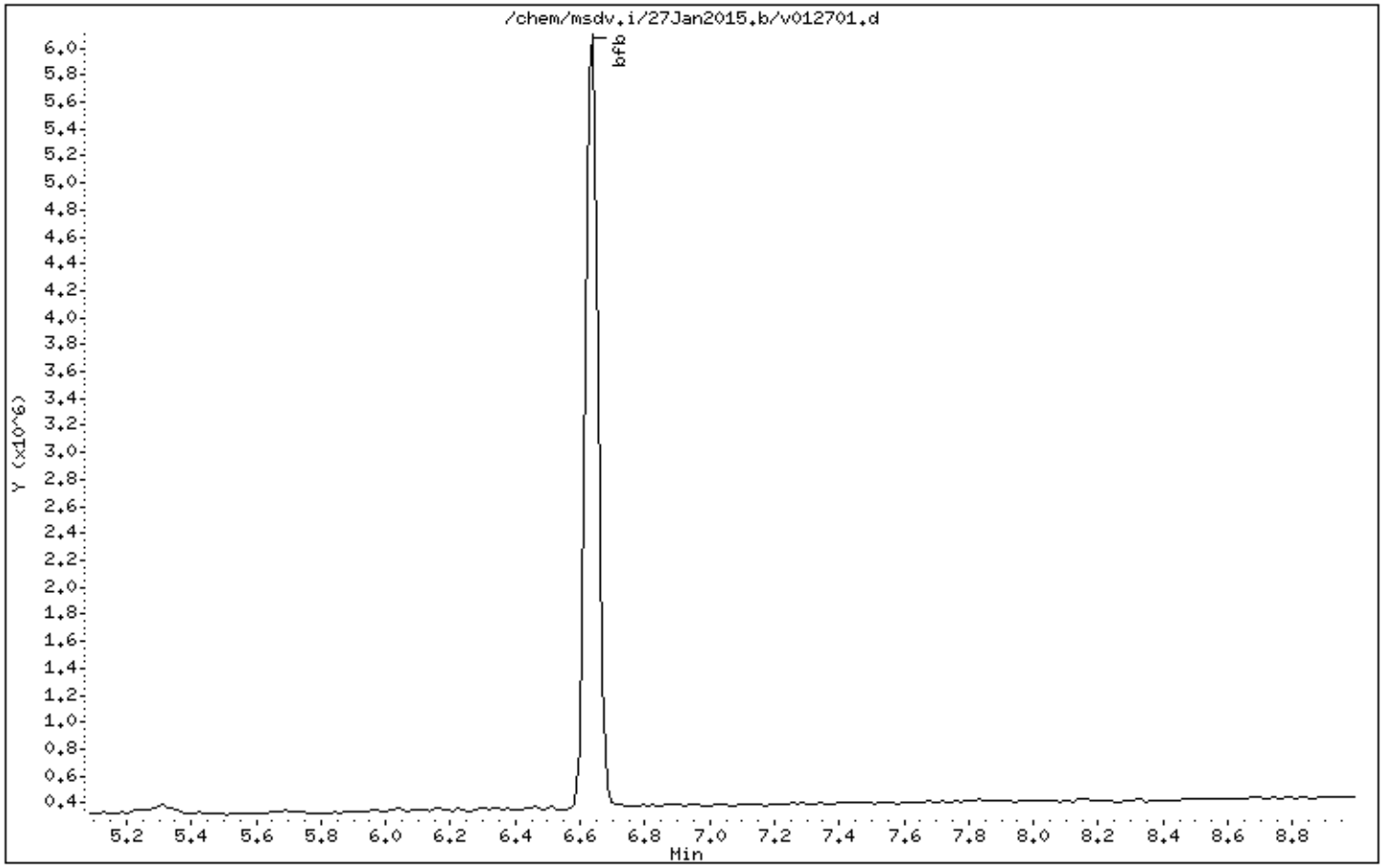
Sample Info: 2.0uL# 2299-790; BFB; BFB

Volume Injected (uL): 1.0

Operator: act

Column phase:

Column diameter: 2.00



Data File: /chem/msdv.i/27Jan2015.b/v012701.d

Date : 27-JAN-2015 06:11

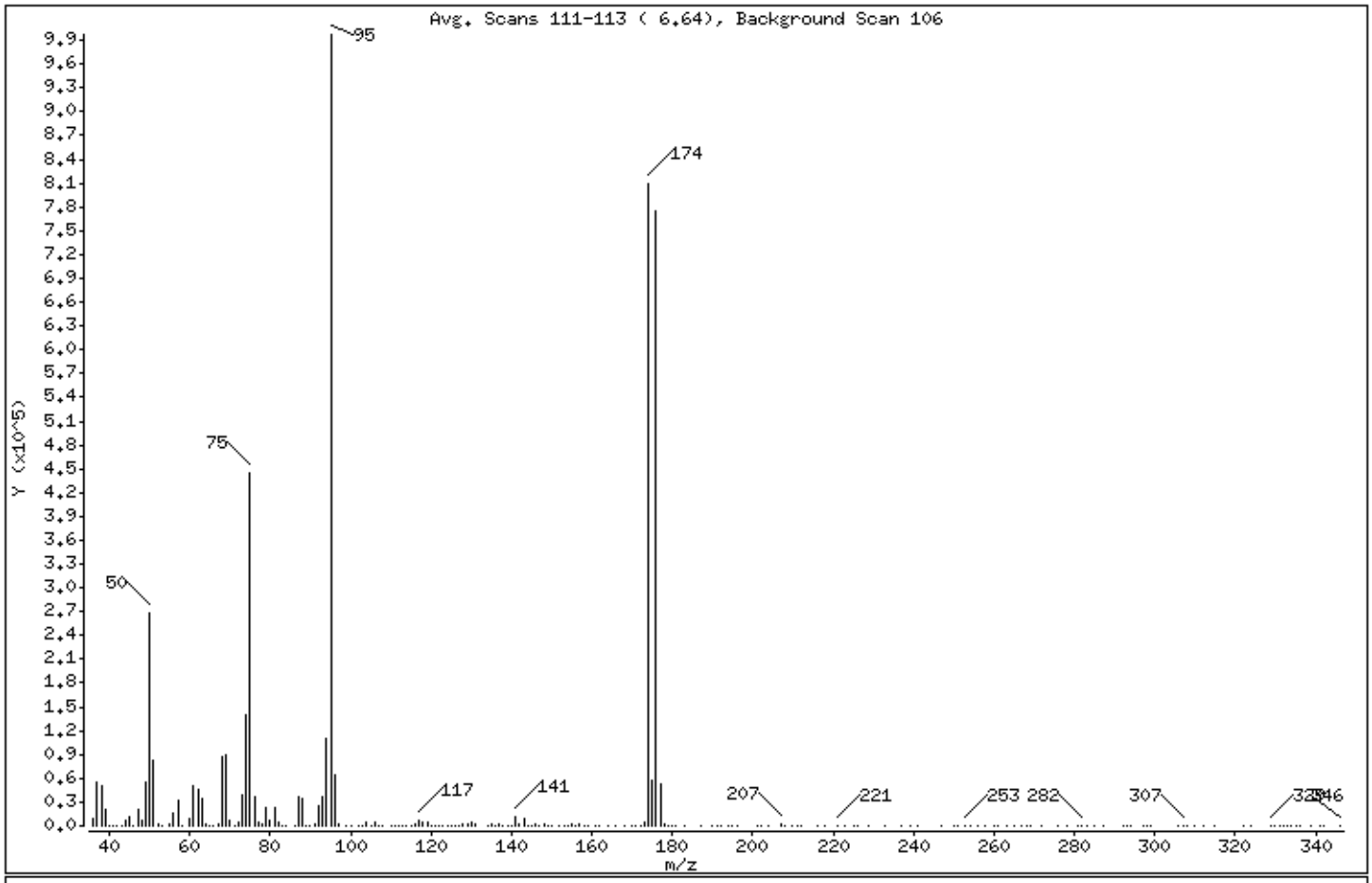
Client ID: BFB Instrument: msdv.i

Sample Info: 2.0uL# 2299-790; BFB; BFB

Volume Injected (uL): 1.0 Operator: act

Column phase: Column diameter: 2.00

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	8.00 - 40.00% of mass 95	26.98
75	30.00 - 66.00% of mass 95	44.65
96	5.00 - 9.00% of mass 95	6.51
173	Less than 1.99% of mass 174	0.51 (0.63)
174	50.00 - 120.00% of mass 95	81.12
175	4.00 - 9.00% of mass 174	5.71 (7.04)
176	93.00 - 101.00% of mass 174	77.77 (95.87)
177	5.00 - 9.00% of mass 176	5.20 (6.68)

Data File: /chem/msdv.i/27Jan2015.b/v012701.d

Date : 27-JAN-2015 06:11

Client ID: BFB

Instrument: msdv.i

Sample Info: 2.0uL# 2299-790; BFB; BFB

Volume Injected (uL): 1.0

Operator: act

Column phase:

Column diameter: 2.00

Data File: v012701.d
Spectrum: Avg. Scans 111-113 (6.64), Background Scan 106
Location of Maximum: 95.00
Number of points: 207

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	9940	91.00	2838	148.00	1832	237.00	50
37.00	54928	92.00	24960	149.00	632	239.00	85
38.00	50944	93.00	36752	150.00	927	241.00	154
39.00	19568	94.00	109448	152.00	423	247.00	549
40.00	972	95.00	997184	153.00	676	250.00	94
41.00	785	96.00	64888	154.00	293	251.00	479
42.00	228	97.00	2022	155.00	2737	253.00	714
43.00	665	99.00	219	156.00	267	254.00	196
44.00	6446	100.00	74	157.00	1635	256.00	178
45.00	11561	102.00	438	158.00	409	258.00	78
46.00	834	103.00	608	159.00	846	260.00	666
47.00	20176	104.00	3491	161.00	902	261.00	328
48.00	6535	105.00	1118	162.00	325	263.00	101
49.00	55064	106.00	4029	164.00	37	265.00	371
50.00	269056	107.00	1016	166.00	189	267.00	572
51.00	81848	108.00	380	168.00	111	268.00	191
52.00	3433	110.00	366	170.00	408	269.00	994
53.00	176	111.00	724	171.00	366	272.00	51
55.00	3142	112.00	431	172.00	843	276.00	53
56.00	16880	113.00	1108	173.00	5118	278.00	89
57.00	32016	114.00	76	174.00	808896	281.00	158
58.00	973	115.00	1039	175.00	56984	282.00	1007
60.00	9132	116.00	2972	176.00	775488	283.00	132
61.00	51096	117.00	5988	177.00	51800	285.00	81
62.00	46632	118.00	3552	178.00	2074	287.00	79
63.00	33600	119.00	4673	179.00	416	292.00	132
64.00	3147	120.00	99	180.00	171	293.00	119
65.00	489	121.00	17	181.00	229	294.00	117
66.00	162	122.00	440	183.00	67	297.00	2
67.00	1624	123.00	546	187.00	194	298.00	69
68.00	87776	124.00	677	190.00	24	299.00	74
69.00	89832	125.00	554	191.00	680	306.00	41
70.00	6021	126.00	339	192.00	334	307.00	265
71.00	441	127.00	482	194.00	532	308.00	31
72.00	4415	128.00	3140	195.00	301	310.00	54

Data File: /chem/msdv.i/27Jan2015.b/v012701.d

Date : 27-JAN-2015 06:11

Client ID: BFB

Instrument: msdv.i

Sample Info: 2.0uL# 2299-790; BFB; BFB

Volume Injected (uL): 1.0

Operator: act

Column phase:

Column diameter: 2.00

Data File: v012701.d
Spectrum: Avg. Scans 111-113 (6.64), Background Scan 106
Location of Maximum: 95.00
Number of points: 207

m/z	Y	m/z	Y	m/z	Y	m/z	Y
73.00	37864	129.00	1771	196.00	161	312.00	60
74.00	140864	130.00	3831	201.00	110	315.00	68
75.00	445248	131.00	1465	202.00	107	322.00	257
76.00	37072	134.00	247	204.00	108	324.00	95
77.00	4317	135.00	2319	207.00	1957	329.00	380
78.00	3265	136.00	186	208.00	783	330.00	156
79.00	22656	137.00	1574	210.00	174	331.00	33
80.00	6752	138.00	83	211.00	105	332.00	49
81.00	22920	139.00	473	212.00	56	333.00	64
82.00	5370	140.00	595	216.00	361	334.00	3
83.00	515	141.00	10323	218.00	270	335.00	116
84.00	282	142.00	1454	221.00	363	336.00	38
86.00	1097	143.00	9961	223.00	128	339.00	54
87.00	36816	144.00	600	225.00	263	341.00	112
88.00	35264	145.00	391	226.00	50	342.00	125
89.00	1133	146.00	1679	229.00	78	346.00	55
90.00	188	147.00	606	233.00	126		

Eurofins Air Toxics Inc.

Data file : /chem/msdv.i/09Feb2015.b/v020901.d
Lab Smp Id: BFB Client Smp ID: BFB
Inj Date : 09-FEB-2015 06:35
Operator : act Inst ID: msdv.i
Smp Info : 2.0uL# 2299-790; BFB; BFB
Misc Info : 50ng
Comment :
Method : /chem/msdv.i/09Feb2015.b/bfb60.m
Meth Date : 06-Feb-2015 06:24 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	
6.626	6.640	-0.014	95	801139			100.00- 100.00	100.00
6.626	6.640	-0.014	50	233841			8.00- 40.00	29.19
6.626	6.640	-0.014	75	361085			30.00- 66.00	45.07
6.626	6.640	-0.014	96	53282			5.00- 9.00	6.65
6.626	6.640	-0.014	173	4497			0.00- 1.99	0.75
6.626	6.640	-0.014	174	602048			50.00- 120.00	75.15
6.626	6.640	-0.014	175	42822			4.00- 9.00	7.11
6.626	6.640	-0.014	176	575295			93.00- 101.00	95.56
6.626	6.640	-0.014	177	38321			5.00- 9.00	6.66

Data File: /chem/msdv.i/09Feb2015.b/v020901.d

Date : 09-FEB-2015 06:35

Client ID: BFB

Instrument: msdv.i

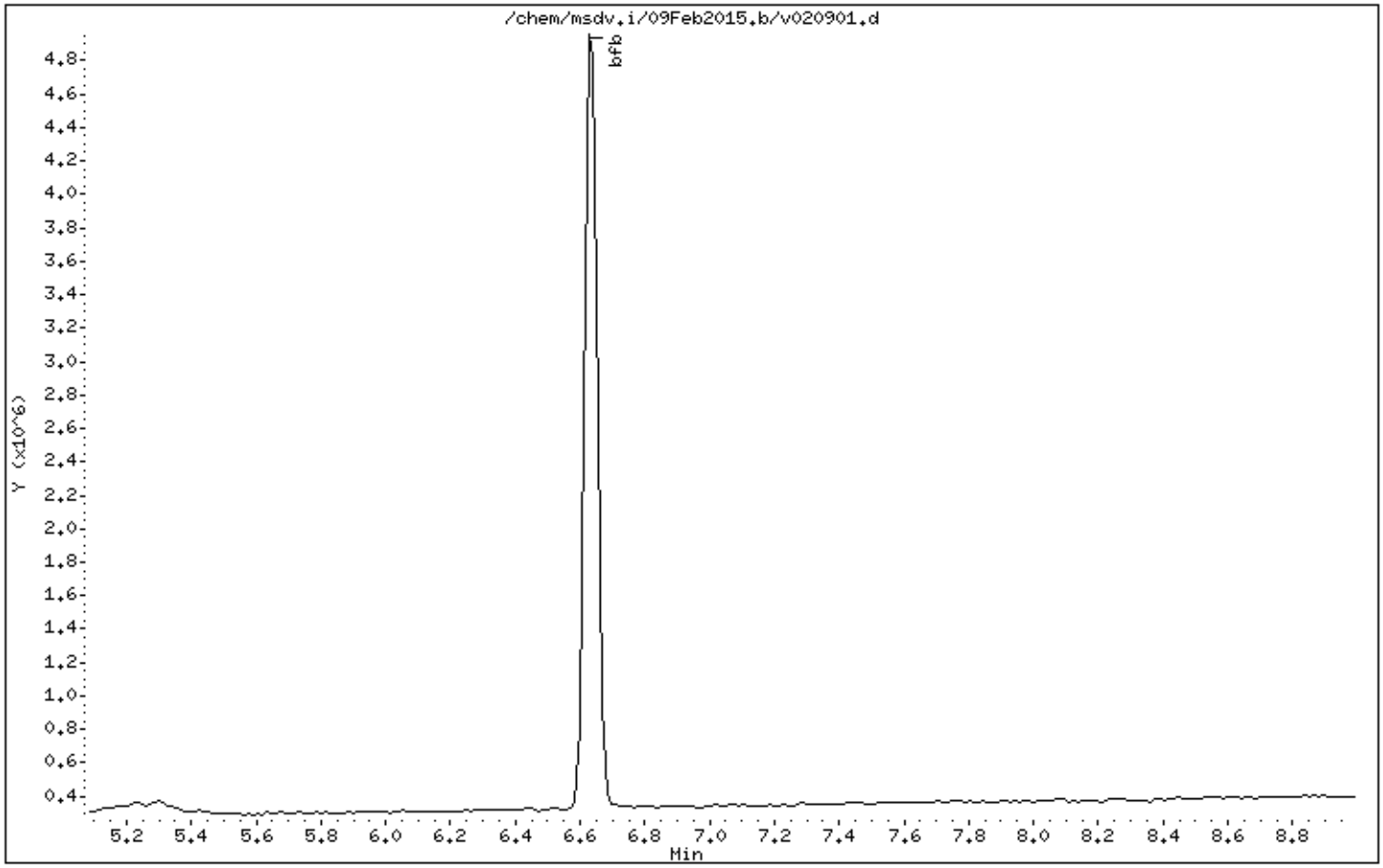
Sample Info: 2.0uL# 2299-790; BFB; BFB

Volume Injected (uL): 1.0

Operator: act

Column phase:

Column diameter: 2.00



Data File: /chem/msdv.i/09Feb2015.b/v020901.d

Date : 09-FEB-2015 06:35

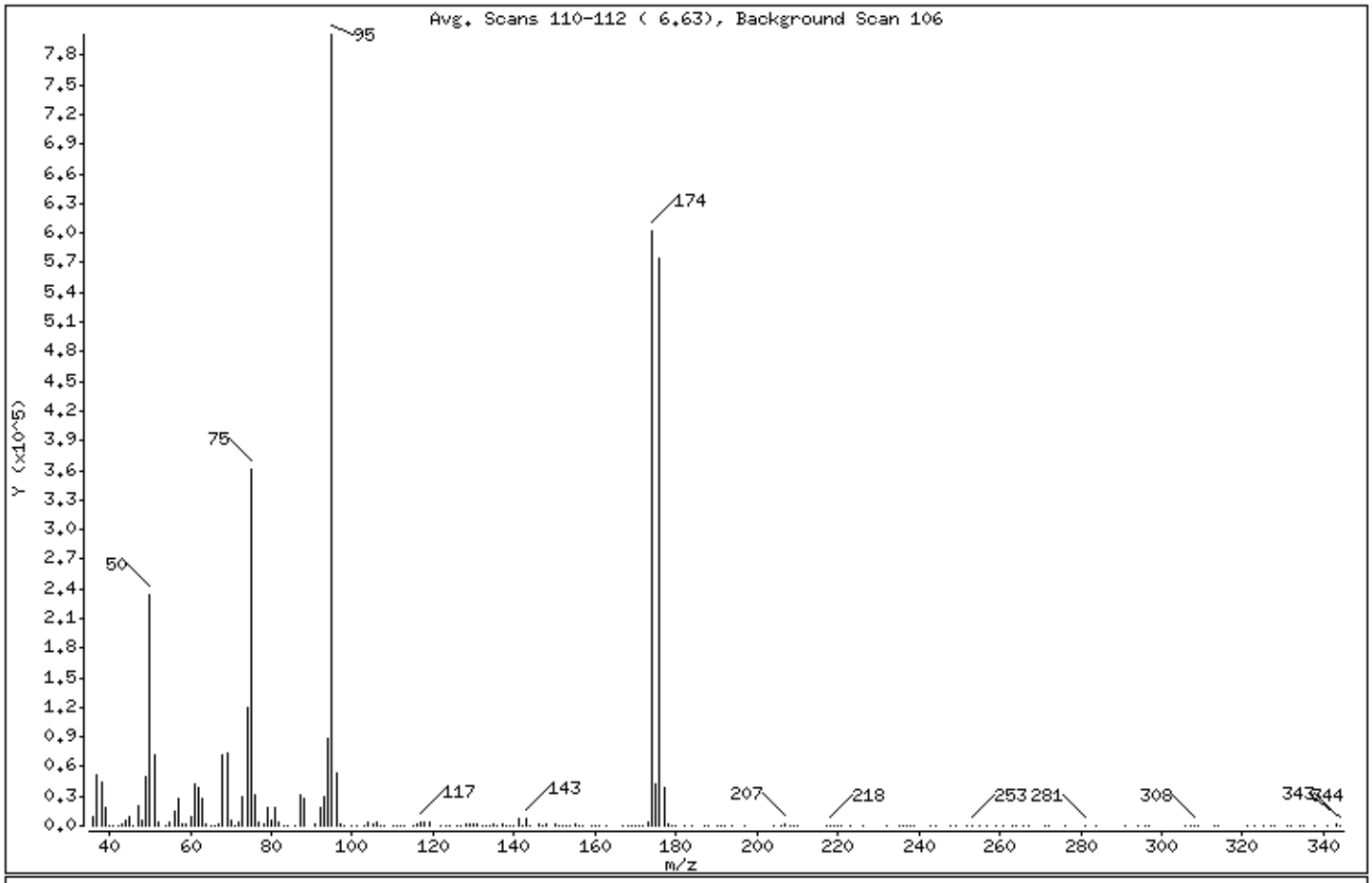
Client ID: BFB | Instrument: msdv.i

Sample Info: 2.0uL# 2299-790; BFB; BFB

Volume Injected (uL): 1.0 | Operator: act

Column phase: | Column diameter: 2.00

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	8.00 - 40.00% of mass 95	29.19
75	30.00 - 66.00% of mass 95	45.07
96	5.00 - 9.00% of mass 95	6.65
173	Less than 1.99% of mass 174	0.56 (0.75)
174	50.00 - 120.00% of mass 95	75.15
175	4.00 - 9.00% of mass 174	5.35 (7.11)
176	93.00 - 101.00% of mass 174	71.81 (95.56)
177	5.00 - 9.00% of mass 176	4.78 (6.66)

Data File: /chem/msdv.i/09Feb2015.b/v020901.d

Date : 09-FEB-2015 06:35

Client ID: BFB

Instrument: msdv.i

Sample Info: 2.0uL# 2299-790; BFB; BFB

Volume Injected (uL): 1.0

Operator: act

Column phase:

Column diameter: 2.00

Data File: v020901.d
Spectrum: Avg. Scans 110-112 (6.63), Background Scan 106
Location of Maximum: 95.00
Number of points: 197

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	8641	88.00	28264	148.00	1408	235.00	39
37.00	50960	91.00	2129	150.00	987	236.00	67
38.00	44280	92.00	19248	151.00	150	237.00	175
39.00	17696	93.00	29696	152.00	334	238.00	53
40.00	602	94.00	87848	153.00	559	239.00	49
41.00	143	95.00	801088	154.00	400	243.00	54
42.00	357	96.00	53280	155.00	1647	244.00	61
43.00	1605	97.00	1624	156.00	256	248.00	20
44.00	5027	98.00	75	157.00	886	249.00	244
45.00	9946	100.00	63	159.00	860	252.00	135
46.00	534	101.00	13	160.00	208	253.00	611
47.00	19464	103.00	551	161.00	864	255.00	141
48.00	6163	104.00	3187	163.00	97	257.00	70
49.00	48896	105.00	1346	167.00	162	259.00	69
50.00	233792	106.00	3036	168.00	170	261.00	88
51.00	72400	107.00	517	169.00	227	263.00	112
52.00	3309	108.00	483	170.00	377	264.00	112
54.00	124	110.00	80	171.00	328	266.00	145
55.00	3525	111.00	305	172.00	682	267.00	155
56.00	15167	112.00	296	173.00	4497	271.00	62
57.00	27024	113.00	543	174.00	602048	272.00	78
58.00	1184	115.00	715	175.00	42816	276.00	56
59.00	949	116.00	2362	176.00	575232	281.00	687
60.00	8567	117.00	3833	177.00	38320	284.00	108
61.00	41520	118.00	2802	178.00	1081	291.00	71
62.00	39592	119.00	3689	179.00	230	294.00	25
63.00	27416	122.00	295	180.00	348	296.00	51
64.00	2526	123.00	300	182.00	80	297.00	145
65.00	374	124.00	610	184.00	66	306.00	55
66.00	191	126.00	326	187.00	128	307.00	92
67.00	1469	127.00	526	188.00	20	308.00	234
68.00	72168	128.00	2176	190.00	85	309.00	56
69.00	73584	129.00	1224	191.00	134	313.00	27
70.00	5644	130.00	2431	192.00	633	314.00	57
71.00	598	131.00	1230	194.00	37	321.00	57

Data File: /chem/msdv.i/09Feb2015.b/v020901.d

Date : 09-FEB-2015 06:35

Client ID: BFB

Instrument: msdv.i

Sample Info: 2.0uL# 2299-790; BFB; BFB

Volume Injected (uL): 1.0

Operator: act

Column phase:

Column diameter: 2.00

Data File: v020901.d
Spectrum: Avg. Scans 110-112 (6.63), Background Scan 106
Location of Maximum: 95.00
Number of points: 197

m/z	Y	m/z	Y	m/z	Y	m/z	Y
72.00	3507	132.00	482	197.00	346	323.00	218
73.00	30352	133.00	769	204.00	87	325.00	20
74.00	118880	134.00	530	206.00	305	327.00	555
75.00	361024	135.00	1604	207.00	1328	328.00	345
76.00	30688	136.00	253	208.00	469	331.00	188
77.00	3952	137.00	1219	209.00	205	332.00	14
78.00	1680	138.00	144	210.00	112	334.00	260
79.00	18752	139.00	561	217.00	314	335.00	177
80.00	5321	140.00	569	218.00	435	338.00	55
81.00	19176	141.00	6960	219.00	179	341.00	348
82.00	4570	142.00	864	220.00	52	343.00	1911
83.00	624	143.00	7239	221.00	266	344.00	255
84.00	1	144.00	735	223.00	213		
86.00	787	146.00	1249	226.00	50		
87.00	30952	147.00	55	232.00	206		

Eurofins Air Toxics Inc.

Data file : /var/chem/msdv.i/10Feb2015.b/v021001.d
Lab Smp Id: Client Smp ID: BFB
Inj Date : 10-FEB-2015 06:15
Operator : act Inst ID: msdv.i
Smp Info : 2.0uL# 2299-790; BFB; BFB
Misc Info : 50ng
Comment :
Method : /var/chem/msdv.i/10Feb2015.b/bfb60.m
Meth Date : 10-Feb-2015 06:31 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	
6.626	6.640	-0.014	95	737893			100.00- 100.00	100.00
6.626	6.640	-0.014	50	217838			8.00- 40.00	29.52
6.626	6.640	-0.014	75	332955			30.00- 66.00	45.12
6.626	6.640	-0.014	96	47077			5.00- 9.00	6.38
6.626	6.640	-0.014	173	3811			0.00- 1.99	0.68
6.626	6.640	-0.014	174	563520			50.00- 120.00	76.37
6.626	6.640	-0.014	175	40212			4.00- 9.00	7.14
6.626	6.640	-0.014	176	540315			93.00- 101.00	95.88
6.626	6.640	-0.014	177	37015			5.00- 9.00	6.85

Data File: /chem/msdv.i/10Feb2015.b/v021001.d

Date : 10-FEB-2015 06:15

Client ID: BFB

Instrument: msdv.i

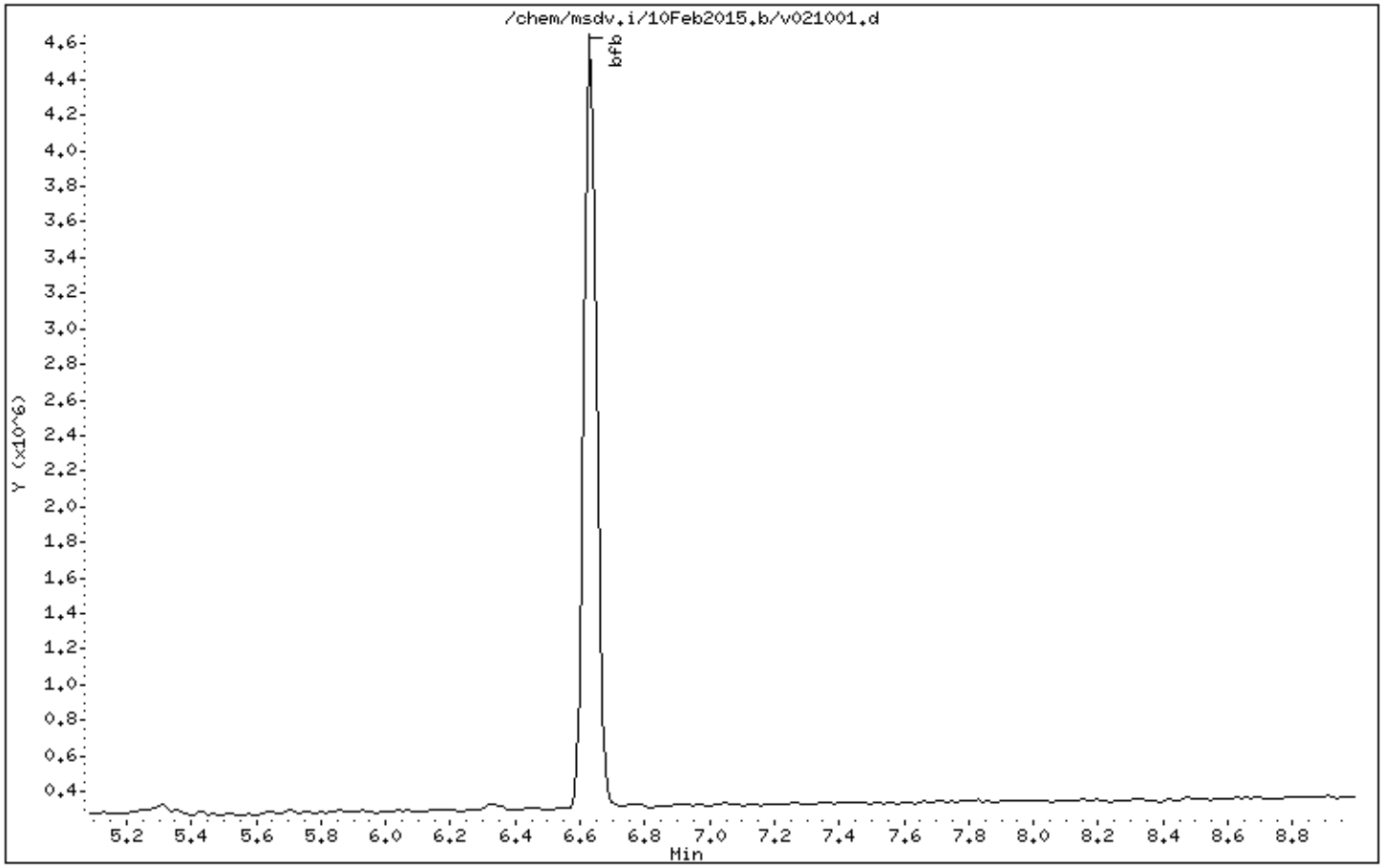
Sample Info: 2.0uL# 2299-790; BFB; BFB

Volume Injected (uL): 1.0

Operator: act

Column phase:

Column diameter: 2.00



Data File: /chem/msdv.i/10Feb2015.b/v021001.d

Date : 10-FEB-2015 06:15

Client ID: BFB

Instrument: msdv.i

Sample Info: 2.0uL# 2299-790; BFB; BFB

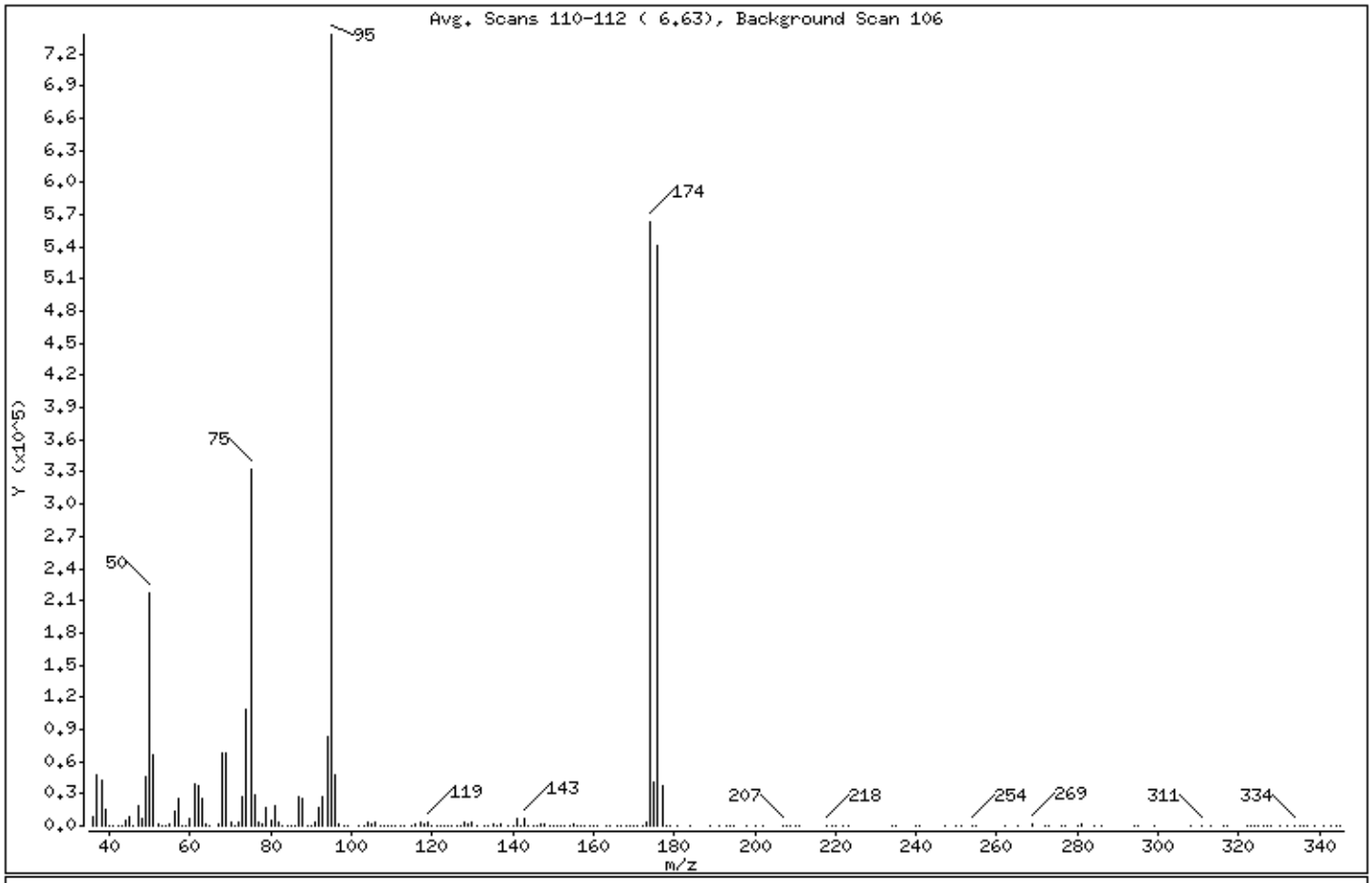
Volume Injected (uL): 1.0

Operator: act

Column phase:

Column diameter: 2.00

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	8.00 - 40.00% of mass 95	29.52
75	30.00 - 66.00% of mass 95	45.12
96	5.00 - 9.00% of mass 95	6.38
173	Less than 1.99% of mass 174	0.52 (0.68)
174	50.00 - 120.00% of mass 95	76.37
175	4.00 - 9.00% of mass 174	5.45 (7.14)
176	93.00 - 101.00% of mass 174	73.22 (95.88)
177	5.00 - 9.00% of mass 176	5.02 (6.85)

Data File: /chem/msdv.i/10Feb2015.b/v021001.d

Date : 10-FEB-2015 06:15

Client ID: BFB

Instrument: msdv.i

Sample Info: 2.0uL# 2299-790; BFB; BFB

Volume Injected (uL): 1.0

Operator: act

Column phase:

Column diameter: 2.00

Data File: v021001.d
Spectrum: Avg. Scans 110-112 (6.63), Background Scan 106
Location of Maximum: 95.00
Number of points: 202

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	8075	88.00	25136	144.00	775	220.00	98
37.00	47168	89.00	219	145.00	648	222.00	120
38.00	43008	90.00	221	146.00	838	223.00	180
39.00	16105	91.00	2604	147.00	1240	234.00	79
40.00	598	92.00	17720	148.00	1817	235.00	6
41.00	275	93.00	27128	149.00	203	240.00	81
42.00	213	94.00	82848	150.00	573	241.00	58
43.00	752	95.00	737856	151.00	142	247.00	265
44.00	4907	96.00	47072	152.00	323	250.00	171
45.00	9104	97.00	1970	153.00	615	251.00	4
46.00	454	98.00	255	154.00	358	254.00	490
47.00	17840	99.00	118	155.00	1794	255.00	205
48.00	6241	102.00	245	156.00	289	262.00	145
49.00	45464	103.00	47	157.00	771	265.00	395
50.00	217792	104.00	3088	158.00	375	269.00	1994
51.00	66736	105.00	1074	159.00	719	272.00	97
52.00	2417	106.00	2988	160.00	282	273.00	56
53.00	189	107.00	523	161.00	469	276.00	62
54.00	25	108.00	362	163.00	153	277.00	150
55.00	2510	109.00	366	164.00	166	280.00	53
56.00	13513	110.00	631	166.00	79	281.00	1014
57.00	25216	111.00	446	167.00	245	284.00	196
58.00	795	112.00	70	168.00	148	286.00	61
59.00	296	113.00	722	169.00	100	294.00	233
60.00	7423	115.00	705	170.00	224	295.00	80
61.00	38848	116.00	2262	171.00	515	299.00	58
62.00	37792	117.00	3876	172.00	417	308.00	60
63.00	25944	118.00	2424	173.00	3811	311.00	234
64.00	2184	119.00	4090	174.00	563520	313.00	76
65.00	344	120.00	347	175.00	40208	316.00	58
67.00	1787	121.00	90	176.00	540288	317.00	52
68.00	67368	122.00	8	177.00	37008	322.00	495
69.00	68576	123.00	386	178.00	620	323.00	107
70.00	3869	124.00	604	179.00	480	324.00	105
71.00	273	125.00	489	181.00	8	325.00	159

Data File: /chem/msdv.i/10Feb2015.b/v021001.d

Date : 10-FEB-2015 06:15

Client ID: BFB

Instrument: msdv.i

Sample Info: 2.0uL# 2299-790; BFB; BFB

Volume Injected (uL): 1.0

Operator: act

Column phase:

Column diameter: 2.00

Data File: v021001.d
Spectrum: Avg. Scans 110-112 (6.63), Background Scan 106
Location of Maximum: 95.00
Number of points: 202

m/z	Y	m/z	Y	m/z	Y	m/z	Y
72.00	2945	126.00	325	184.00	59	326.00	187
73.00	27952	127.00	63	189.00	9	327.00	340
74.00	108064	128.00	2922	191.00	9	328.00	96
75.00	332928	129.00	933	193.00	372	330.00	68
76.00	29184	130.00	2580	194.00	149	332.00	293
77.00	3384	131.00	832	195.00	234	334.00	576
78.00	2232	133.00	387	198.00	52	335.00	157
79.00	16720	134.00	223	200.00	55	336.00	107
80.00	5234	135.00	1980	202.00	244	337.00	54
81.00	18216	136.00	25	207.00	658	339.00	112
82.00	3954	137.00	1339	208.00	82	341.00	384
83.00	145	139.00	66	209.00	183	343.00	434
84.00	115	140.00	433	210.00	17	344.00	349
85.00	29	141.00	6714	211.00	121	345.00	219
86.00	842	142.00	684	218.00	406		
87.00	27504	143.00	6895	219.00	367		

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)
Company AMAI Email ttaylor@amaiconsult.com
Address 110 Corporate Pk Dr City White Plains State NY Zip 10604
Phone 914-251-0400 Fax

Project Info:
P.O. #
Project #
Project Name Bld 6 VI

Turn Around Time:
☐ Normal
☒ Rush 3 days
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	B6-5SS	37348	2/4/15	1549	see below	30	5		
02A	B6-3SS	37729	2/4/15	1637	↓	30	5		
03A	B6-3SSD	31754	2/4/15	1637	↓	30	5		
04A	B6-4SS	11427	2/6/15	1422	↓	30	5		

Relinquished by: (signature)	Date/Time	Received by: (signature)	Date/Time
[signature]	2/6/15 : 1515	[signature]	2.9.15 715
Relinquished by: (signature)	Date/Time	Received by: (signature)	Date/Time
Relinquished by: (signature)	Date/Time	Received by: (signature)	Date/Time

Notes:
Methane via ASTM D-1946.
Acetone, Benzene, Ethylbenzene, Isopropyl Alcohol, Methanol, MIBK, Toluene, Xylene via TO-15.
Report results to MDL.

Lab Use Only	Shipper Name	Air Bill #	Temp (°C)	Condition	Custody Seals Intact?	Work Order #
	FedEx	772853181434	NA	Good	Yes No None	1502113

Form 1293 rev.11

eurofins | Air Toxics

SAMPLE RECEIPT SUMMARY

WORKORDER 1502113AR1

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: 06/29/15
Date Completed: 6/26/15
Date Received: 2/9/15
PO#:
Project#: Bld 6 VI

Total $: $ 155.00
Logged By: CC

Fraction	Sample #	Analysis	Collected	Receipt Vac./Pres.	Amount$
01A	B6-5SS	Modified TO-15	2/4/2015	5 "Hg	$0.00
02A	B6-3SS	Modified TO-15	2/4/2015	3.5 "Hg	$0.00
03A	B6-3SSD	Modified TO-15	2/4/2015	3.5 "Hg	$0.00
04A	B6-4SS	Modified TO-15	2/6/2015	5.5 "Hg	$0.00
05A	Lab Blank	Modified TO-15	NA	NA	$0.00
06A	CCV	Modified TO-15	NA	NA	$0.00
07A	LCS	Modified TO-15	NA	NA	$0.00
07AA	LCSD	Modified TO-15	NA	NA	$0.00

Misc. Charges	Reissue Charges (1) @ $135.00 each.	$135.00
	eCVP (4) @ $5.00 each.	$20.00

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

REMARKS: A 50% surcharge is applied for a 72 hour turnaround time.

TERMS:

Reporting Method: Modified TO-15-LL + Naph

Sample Discrepancy Report

Identification

Initiated By: ACT **Project ID:**19256 **PM**: BSW **Date:** 2/11/2015 **Discrepancy Type:** ☐ **1.** ☐ **2.** ☒ **3.**

Workorder(s) affected:1502113A **Sample(s) affected:** 02A & 03A

1. Sample Receipt Discrepancies

Narration Not Required:

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

1.2. ☐ No brass cap on canister.

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

Notify Lab for further determination:

1.4. ☐ Tedlar bag received with minimal volume.

Initials: _____ Date: _____

Narration Required in Lab Narrative and Sample Confirmation:

1.5. ☐ COC was not filled out in ink.

1.6. ☐ COC improperly relinquished / received.

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

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

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

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

1.11. ☐ Other (describe below).

Describe the Discrepancy: _____

2. Sample Receipt/Screening Discrepancies requiring PM notification

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

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

2.1. ☐ COC was not received with samples.

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

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

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

2.5. ☐ Samples were received expired.

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

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

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

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

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

2.11. ☐ Environmental Supply Company valves

2.12. ☐ Sorbent samples-sampling volume was not provided

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

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

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

2.15. ☐ Canister sample received with a vacuum difference >5.0"Hg between the receipt vac. And the final vac. reported on the COC, indicating loss of vacuum.

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

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

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

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

2.20. ☐ Other (describe below)

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

Describe the Discrepancy:

3. Lab Discrepancies requiring Team Leader/PM notification

Document in Analytical Notes of Lab Narrative

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

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

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

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

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

3.5. ☐ VOST tube saturated; bag dilution necessary.

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

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

3.8. ☐ Reporting Limit was raised.

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

3.10. ☒ Other (describe below).

Initials: ACT **Date:** 2/11/2015 **Notify Receiving:** ☐ **Notify PM:** ☒

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

Describe the Discrepancy: 02A & 03A (Field dups) do not meet RPD criteria for Benzene (110%). 02A was re-analyzed for confirmation.

How Does this Affect Client:

Project Manager Use Only

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

Action:

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

PM Initials:_____ Date: _____

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

Client Notification:

PM Initials:BSW Person notified: Terry Taylor Date: 2/11/2015

☐ Waiting for Client Reply

Comments: **Narrate and proceed.**

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

☐ **Additional notifications attached.**

Additional Comments:

_____

Other Records

$$\text{Dilution Factor} = \frac{\text{Final Pressure}}{\text{Initial Vacuum}} = \frac{14.7\text{psi} + \text{Final Pressure (psi)}}{14.7\text{psi} - [\text{Init. Pressure ("Hg)})*(14.7\text{psi}/30\text{"Hg})]}$$

$$\text{Dilution Factor} = \frac{\text{Final Pressure}}{\text{Initial Pressure}} = \frac{14.7\text{psi} + \text{Final Pressure (psi)}}{14.7\text{psi} + \text{Initial Pressure (psi)}}$$

Initial Vacuum (" of Hg)	5 psi Final Pressure Dilution Factor	15 psi Final Pressure Dilution Factor
0.0	1.34	2.02
0.2	1.35	2.03
0.4	1.36	2.05
0.5	1.36	2.05
0.6	1.37	2.06
0.8	1.38	2.08
1.0	1.39	2.09
1.2	1.40	2.10
1.4	1.40	2.12
1.5	1.41	2.13
1.6	1.42	2.13
1.8	1.42	2.15
2.0	1.44	2.16
2.2	1.45	2.18
2.4	1.46	2.20
2.5	1.46	2.20
2.6	1.47	2.21
2.8	1.48	2.23
3.0	1.49	2.24
3.2	1.50	2.26
3.4	1.51	2.28
3.5	1.52	2.29
3.6	1.52	2.30
3.8	1.53	2.31
4.0	1.55	2.33
4.2	1.56	2.35
4.4	1.57	2.37
4.5	1.58	2.38
4.6	1.58	2.39
4.8	1.60	2.40
5.0	1.61	2.42
5.2	1.62	2.44
5.4	1.63	2.46
5.5	1.64	2.47
5.6	1.65	2.48
5.8	1.66	2.50
6.0	1.68	2.52
6.2	1.69	2.55
6.4	1.70	2.57
6.5	1.71	2.58
6.6	1.72	2.59
6.8	1.73	2.61
7.0	1.75	2.64
7.2	1.76	2.66
7.4	1.78	2.68
7.5	1.79	2.69
7.6	1.79	2.70

Initial Vacuum (" of Hg)	5 psi Final Pressure Dilution Factor	15 psi Final Pressure Dilution Factor
7.7	1.80	2.72
7.8	1.81	2.73
8.0	1.83	2.76
8.2	1.84	2.78
8.4	1.86	2.81
8.5	1.87	2.82
8.6	1.88	2.83
8.8	1.90	2.86
9.0	1.91	2.89
9.2	1.93	2.91
9.4	1.95	2.94
9.5	1.96	2.96
9.6	1.97	2.97
9.8	1.99	3.00
10.0	2.01	3.03
10.2	2.03	3.06
10.4	2.05	3.09
10.5	2.06	3.11
10.6	2.07	3.12
10.8	2.09	3.16
11.0	2.12	3.19
11.2	2.14	3.22
11.4	2.16	3.26
11.5	2.17	3.28
11.6	2.18	3.29
11.8	2.21	3.33
12.0	2.23	3.37
12.2	2.26	3.40
12.4	2.28	3.44
12.5	2.30	3.46
12.6	2.31	3.48
12.8	2.34	3.52
13.0	2.36	3.56
13.2	2.39	3.61
13.4	2.42	3.65
13.5	2.44	3.67
13.6	2.45	3.70
13.8	2.48	3.74
14.0	2.51	3.79
14.2	2.54	3.84
14.4	2.58	3.88
14.5	2.59	3.91
14.6	2.61	3.94
14.8	2.64	3.99
15.0	2.68	4.04
15.2	2.72	4.10
15.4	2.75	4.15

Initial Vacuum (" of Hg)	5 psi Final Pressure Dilution Factor	15 psi Final Pressure Dilution Factor
15.5	2.77	4.18
15.6	2.79	4.21
15.8	2.83	4.27
16.0	2.87	4.33
16.2	2.91	4.39
16.4	2.96	4.46
16.5	2.98	4.49
16.6	3.00	4.52
16.8	3.05	4.59
17.0	3.09	4.66
17.2	3.14	4.74
17.4	3.19	4.81
17.5	3.22	4.85
17.6	3.24	4.89
17.8	3.30	4.97
18.0	3.35	5.05
18.2	3.41	5.14
18.4	3.47	5.22
18.5	3.50	5.27
18.6	3.53	5.32
18.8	3.59	5.41
19.0	3.65	5.51
19.2	3.72	5.61
19.4	3.79	5.72
19.5	3.83	5.77
19.6	3.87	5.83
19.8	3.94	5.94
20.0	4.02	6.06
20.2	4.10	6.18
20.4	4.19	6.31
20.5	4.23	6.38
20.6	4.28	6.45
20.8	4.37	6.59
21.0	4.47	6.73
21.2	4.57	6.89
21.4	4.67	7.05
21.5	4.73	7.13
21.6	4.79	7.22
21.8	4.90	7.39
22.0	5.03	7.58
22.4	5.29	7.98

Initial Vacuum (" of Hg)	5 psi Final Pressure Dilution Factor	15 psi Final Pressure Dilution Factor
22.5	5.36	8.08
22.6	5.43	8.19
22.8	5.58	8.42
23.0	5.74	8.66
23.2	5.91	8.91
23.4	6.09	9.18
23.5	6.19	9.32
23.6	6.28	9.47
23.8	6.48	9.78
24.0	6.70	10.10
24.2	6.93	10.45
24.4	7.18	10.82
24.5	7.31	11.02
24.6	7.45	11.22
24.8	7.73	11.66
25.0	8.04	12.12
25.2	8.38	12.63
25.4	8.74	13.18
25.5	8.93	13.47
25.6	9.14	13.78
25.8	9.57	14.43
26.0	10.05	15.15
26.2	10.58	15.95
26.4	11.17	16.84
26.5	11.49	17.32
26.6	11.82	17.83
26.8	12.56	18.94
27.0	13.40	20.20
27.2	14.36	21.65
27.4	15.46	23.31
27.5	16.08	24.24
27.6	16.75	25.26
27.8	18.27	27.55
28.0	20.10	30.31
28.2	22.34	33.67
28.4	25.13	37.88
28.5	26.80	40.41
28.6	28.72	43.29
28.8	33.50	50.51
29.0	40.20	60.61

Compound List

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: 1L# 37348w/160mL# FC00682
Can#: 99897-37348
Date : 01/29/15 9:59
Data File: o012837.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: 1L# 37729w/160mL# FC00550
Can#: 99897-37729
Date : 01/28/15 14:31
Data File: i012813sim.d

www.airtoxics.com
1-800-985-5955

Name	CAS	Conc.	Units
Ethyl Benzene	100-41-4	ND	ppbv
m,p-Xylene	108-38-3	ND	ppbv
Chloroform	67-66-3	ND	ppbv
Benzene	71-43-2	ND	ppbv
Bromodichloromethane	75-27-4	ND	ppbv
Naphthalene	91-20-3	ND	ppbv
o-Xylene	95-47-6	ND	ppbv
1,2-Dichloroethane-d4	17060-07-0	111.00	% Recovery
Toluene-d8	2037-26-5	107.00	% Recovery
4-Bromofluorobenzene	460-00-4	96.00	% Recovery

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Media Certification Report

Canister Number: 1L# 31754w/160mL# 40779
Can#: 99897-31754
Date : 01/29/15 9:29
Data File: o012836.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	102.00	% Recovery

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Media Certification Report

Canister Number: 1L# 11427w/160mL# FC00840
Can#: 99897-11427
Date : 01/28/15 13:52
Data File: i012812sim.d

www.airtoxics.com
1-800-985-5955

Name	CAS	Conc.	Units
Ethyl Benzene	100-41-4	ND	ppbv
m,p-Xylene	108-38-3	ND	ppbv
Chloroform	67-66-3	ND	ppbv
Benzene	71-43-2	ND	ppbv
Bromodichloromethane	75-27-4	ND	ppbv
Naphthalene	91-20-3	ND	ppbv
o-Xylene	95-47-6	ND	ppbv
1,2-Dichloroethane-d4	17060-07-0	101.00	% Recovery
Toluene-d8	2037-26-5	105.00	% Recovery
4-Bromofluorobenzene	460-00-4	98.00	% Recovery

Eurofins Air Toxics, Inc.	Data Review Checklist			Release Date: 12/30/14
Workorder # 1502113A	Form F1.27	Revision #10	Revision date: 12/30/14	Page 1 of 2

S1	S2	S3	S4	D	Section 1 – Spec Out				
					Initials/Instrument/Date	S1: EB 2/10/15 MSDV	S2:	S3:	S4:
✓					Daily QC and ICAL met Criteria				
✓					Lumen QC and ICAL evaluation report initialed and in folder				
NA					Manual Integrations included and approved				
✓				✓	Chain of Custody verified for special comments (add comments below)				
✓					Non-standard Target sublist printed				

Profile, analyses, reporting, special notes and unusual circumstances:

Ø out in QC. J-flags to MDL.

A1	A2	A3	A4	D	Section 2 – Sample Analysis				
					Initials/Date	A1: EB 2/10/15	A2:	A3:	A4:
✓				✓	Internal Standard/Surrogate Recoveries, Dilution Factors, Load Volumes, Initial/Final Pressures, and Canister #s Verified				
NO				NA	a) Tedlar Bag IDs verified against COC b) Tedlar Bag ID confirmed with loading sequence/leg of instrument				
NA				NA	Manual Integrations/Bag or Can Dilution Forms/Re-pressurization Forms/Bag-Can Transfer Forms present (circle all that apply)				
✓					12/24 Hr clock time & Hold Time met for all samples				
✓				✓	Re-analysis of sample(s) 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: O/A dil TC, OVA dil TC & 2propanol
OA LCS Full Wad – IB FD needs confirmation
OA: Re-run as confirmation

D1	D2	D3	D4	T	3T	Section 3 – Target Data Reduction	Technical Review Needed? Circle one: Yes/No		T:	
						Initials/Instrument/Date	D1: AG 2/11/15	D2:	D3:	D4:
NA						CAR # (if applicable)				
✓						Spectra Verified *(documentation of spectral defense included if applicable)*				
NA						TICs resemble reference spectra/ TICs between sample dups. are consistent *(if applicable)*				
✓						Lab Narrative is correct				
NA						TPH/NMOC calculations complete and included in folder				

Special notes:

A	3T	Section 4- Atlas Data Entry	Lumen verified and included in folder	Circle one: Yes/No
		Initials/Date: VB 2/12/15	3rd Tier: *(needed only for DOD or per client request)*	
✓		Sample Discrepancy Report (SDR) complete and approved *(if applicable)*		
NA		Manually entered results are checked		
	✓	At least one result per sample is verified against Target quant sheets		
	✓	Appropriate data qualifier flags are applied		
	✓	Final Invoice is correct/ Final PDF report, COC and EDD reviewed and correct		

Special Notes:

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: to report additional compounds per client request.
1502113AR1	

W	T	3T	Q	
✓				Reissue Request form Present
NA	✓			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 - #
✓				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)
HOB 6/26/15	N/A	N/A	N/A

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