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Electronic Comprehensive Validation Package (eCVP)

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COMPREHENSIVE VALIDATION PACKAGE

Modified TO-15

INVENTORY SHEET

Work Order #: 1503058BR1

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Comments:

Completed by:

Kara McKiernan	Kara McKiernan / Document Control	6/30/15
(Signature)	(Print Name & Title)	(Date)

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WORK ORDER #: 1503058BR1

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 #**	
DATE RECEIVED:	03/04/2015	**CONTACT:**	Brian Whittaker
DATE COMPLETED:	03/09/2015		
DATE REISSUED:	06/26/2015		

FRACTION #	NAME	TEST	RECEIPT VAC./PRES.	FINAL PRESSURE
05A	B6-1SS	Modified TO-15	4.3 "Hg	14.9 psi
06A	B6-2SS	Modified TO-15	3.1 "Hg	14.9 psi
07A	B6-2SSDup	Modified TO-15	5.1 "Hg	15 psi
08A	Lab Blank	Modified TO-15	NA	NA
09A	CCV	Modified TO-15	NA	NA
10A	LCS	Modified TO-15	NA	NA
10AA	LCSD	Modified TO-15	NA	NA

CERTIFIED BY: Heidi Mayo

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

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LABORATORY NARRATIVE
EPA Method TO-15
Anderson Mulholland & Associates, Inc.
Workorder# 1503058BR1

Three 1 Liter Summa Canister (100% Certified) samples were received on March 04, 2015. Three 1 Liter Summa Canister (100% Certified) and one 6 Liter Summa Canister (100% Certified) samples were received on March 04, 2015. The laboratory performed analysis via EPA Method TO-15 using GC/MS in the full scan mode.

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

Receiving Notes

There were no receiving discrepancies.

Analytical Notes

As per client project requirements, the laboratory has reported estimated values for target compound hits that are below the Reporting Limit but greater than the Method Detection Limit. Concentrations that are below the level at which the canister was certified (0.2 ppbv for compounds reported at 0.5 ppbv and 0.8 ppbv for compounds reported at 2.0 ppbv) may be false positives.

Dilution was performed on samples B6-1SS, B6-2SS and B6-2SSDup due to the presence of high level target species.

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. The Laboratory Control Spike (LCS) analyzed on 03/05/2015 did not meet the laboratory control limits of 70-130% for 1,2,4-Trichlorobenzene and Hexachlorobutadiene. The LCS recovery results are flagged accordingly.

The Relative Percent Difference (RPD) of the LCS/LCSD exceeded acceptance limits for 1,2,4-Trichlorobenzene, Hexachlorobutadiene, and Naphthalene.

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
B6-1SS	1503058BR1-05	3/ 2/2015	3/ 4/2015	NA	4	3/ 6/2015	NA	Good
B6-2SS	1503058BR1-06	3/ 2/2015	3/ 4/2015	NA	3	3/ 5/2015	NA	Good
B6-2SSDup	1503058BR1-07	3/ 2/2015	3/ 4/2015	NA	3	3/ 5/2015	NA	Good
Lab Blank	1503058BR1-08	NA	NA	NA	NA	3/ 5/2015	NA	Good
CCV	1503058BR1-09	NA	NA	NA	NA	3/ 5/2015	NA	Good
LCS	1503058BR1-10	NA	NA	NA	NA	3/ 5/2015	NA	Good
LCSD	1503058BR1-10	NA	NA	NA	NA	3/ 5/2015	NA	Good

Sample Results and Raw Data

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

Client Sample ID: B6-1SS

Lab ID#: 1503058BR1-05A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 11	3.4	1.4 J	19	7.8 J
Ethanol	13	18	25	35
Acetone	34	140	80	330
2-Propanol	13	970	33	2400
Carbon Disulfide	13	2.5 J	42	7.9 J
Hexane	3.4	1.9 J	12	6.7 J
Chloroform	3.4	3.6	16	18
Cyclohexane	3.4	0.54 J	12	1.9 J
Benzene	3.4	1.2 J	11	3.9 J
4-Methyl-2-pentanone	3.4	1.3 J	14	5.4 J
Toluene	3.4	2.8 J	13	11 J
Tetrachloroethene	3.4	0.85 J	23	5.7 J
Ethyl Benzene	3.4	0.74 J	14	3.2 J
m,p-Xylene	3.4	2.5 J	14	11 J
o-Xylene	3.4	7.2	14	31
Styrene	3.4	0.43 J	14	1.8 J
Bromoform	3.4	0.87 J	35	9.0 J
4-Ethyltoluene	3.4	2.4 J	16	12 J
1,3,5-Trimethylbenzene	3.4	0.98 J	16	4.8 J
1,2,4-Trimethylbenzene	3.4	2.0 J	16	10 J
Naphthalene	6.7	0.49 J	35	2.6 J

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Client Sample ID: B6-1SS

Lab ID#: 1503058BR1-05A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**j030523r1**	**Date of Collection:**	**3/2/15 4:35:00 PM**
Dil. Factor:	**6.72**	**Date of Analysis:**	**3/6/15 12:05 AM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	3.4	Not Detected	17	Not Detected
Freon 114	3.4	Not Detected	23	Not Detected
Chloromethane	34	Not Detected	69	Not Detected
Vinyl Chloride	3.4	Not Detected	8.6	Not Detected
1,3-Butadiene	3.4	Not Detected	7.4	Not Detected
Bromomethane	34	Not Detected	130	Not Detected
Chloroethane	13	Not Detected	35	Not Detected
Freon 11	3.4	1.4 J	19	7.8 J
Ethanol	13	18	25	35
Freon 113	3.4	Not Detected	26	Not Detected
1,1-Dichloroethene	3.4	Not Detected	13	Not Detected
Acetone	34	140	80	330
2-Propanol	13	970	33	2400
Carbon Disulfide	13	2.5 J	42	7.9 J
3-Chloropropene	13	Not Detected	42	Not Detected
Methylene Chloride	34	Not Detected	120	Not Detected
Methyl tert-butyl ether	3.4	Not Detected	12	Not Detected
trans-1,2-Dichloroethene	3.4	Not Detected	13	Not Detected
Hexane	3.4	1.9 J	12	6.7 J
1,1-Dichloroethane	3.4	Not Detected	14	Not Detected
2-Butanone (Methyl Ethyl Ketone)	13	Not Detected	40	Not Detected
cis-1,2-Dichloroethene	3.4	Not Detected	13	Not Detected
Tetrahydrofuran	3.4	Not Detected	9.9	Not Detected
Chloroform	3.4	3.6	16	18
1,1,1-Trichloroethane	3.4	Not Detected	18	Not Detected
Cyclohexane	3.4	0.54 J	12	1.9 J
Carbon Tetrachloride	3.4	Not Detected	21	Not Detected
2,2,4-Trimethylpentane	3.4	Not Detected	16	Not Detected
Benzene	3.4	1.2 J	11	3.9 J
1,2-Dichloroethane	3.4	Not Detected	14	Not Detected
Heptane	3.4	Not Detected	14	Not Detected
Trichloroethene	3.4	Not Detected	18	Not Detected
1,2-Dichloropropane	3.4	Not Detected	16	Not Detected
1,4-Dioxane	13	Not Detected	48	Not Detected
Bromodichloromethane	3.4	Not Detected	22	Not Detected
cis-1,3-Dichloropropene	3.4	Not Detected	15	Not Detected
4-Methyl-2-pentanone	3.4	1.3 J	14	5.4 J
Toluene	3.4	2.8 J	13	11 J
trans-1,3-Dichloropropene	3.4	Not Detected	15	Not Detected
1,1,2-Trichloroethane	3.4	Not Detected	18	Not Detected
Tetrachloroethene	3.4	0.85 J	23	5.7 J
2-Hexanone	13	Not Detected	55	Not Detected

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Client Sample ID: B6-1SS

Lab ID#: 1503058BR1-05A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**j030523r1**	**Date of Collection:**	**3/2/15 4:35:00 PM**
Dil. Factor:	**6.72**	**Date of Analysis:**	**3/6/15 12:05 AM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Dibromochloromethane	3.4	Not Detected	29	Not Detected
1,2-Dibromoethane (EDB)	3.4	Not Detected	26	Not Detected
Chlorobenzene	3.4	Not Detected	15	Not Detected
Ethyl Benzene	3.4	0.74 J	14	3.2 J
m,p-Xylene	3.4	2.5 J	14	11 J
o-Xylene	3.4	7.2	14	31
Styrene	3.4	0.43 J	14	1.8 J
Bromoform	3.4	0.87 J	35	9.0 J
Cumene	3.4	Not Detected	16	Not Detected
1,1,2,2-Tetrachloroethane	3.4	Not Detected	23	Not Detected
Propylbenzene	3.4	Not Detected	16	Not Detected
4-Ethyltoluene	3.4	2.4 J	16	12 J
1,3,5-Trimethylbenzene	3.4	0.98 J	16	4.8 J
1,2,4-Trimethylbenzene	3.4	2.0 J	16	10 J
1,3-Dichlorobenzene	3.4	Not Detected	20	Not Detected
1,4-Dichlorobenzene	3.4	Not Detected	20	Not Detected
alpha-Chlorotoluene	3.4	Not Detected	17	Not Detected
1,2-Dichlorobenzene	3.4	Not Detected	20	Not Detected
1,2,4-Trichlorobenzene	13	Not Detected	100	Not Detected
Hexachlorobutadiene	13	Not Detected	140	Not Detected
Naphthalene	6.7	0.49 J	35	2.6 J

J = Estimated value.

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

Surrogates	%Recovery	Method Limits
Toluene-d8	98	70-130
1,2-Dichloroethane-d4	102	70-130
4-Bromofluorobenzene	100	70-130

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EPA TO-15/MODIFIED EPA TO-14A

Data file : /chem/msdj.i/05mar15.b/j030523r1.d
Lab Smp Id: 1503058Br1-05A
Inj Date : 06-MAR-2015 00:05
Operator : md Inst ID: msdj.i
Smp Info : 70ml 36415
Misc Info : 4.3 Hg->14.9 psi
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msdj.i/05mar15.b/j15q0304a.m
Meth Date : 26-Jun-2015 14:00 dbailey Quant Type: ISTD
Cal Date : 04-MAR-2015 12:36 Cal File: j030408.d
Als bottle: 5
Dil Factor: 6.72000
Integrator: HP RTE Compound Sublist: TO15Nmdl.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Name	Value	Description
DF	6.72000	Dilution Factor

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
* 98 Bromochloromethane						CAS #: 74-97-5	
5.494	5.494 (1.000)	130	117187	25.0000		80.00- 120.00	100.00
5.494	5.494 (1.000)	128	89860			48.40- 108.40	76.68
5.494	5.494 (1.000)	49	127361			84.80- 144.80	108.68
* 123 1,4-Difluorobenzene						CAS #: 540-36-3	
6.404	6.404 (1.000)	114	488745	25.0000		80.00- 120.00	100.00
6.404	6.404 (1.000)	88	71350			0.00- 45.38	14.60
* 163 Chlorobenzene-d5						CAS #: 3114-55-4	
8.894	8.894 (1.000)	117	465056	25.0000		80.00- 120.00	100.00
8.894	8.894 (1.000)	82	230628			20.55- 80.55	49.59
$ 117 1,2-Dichloroethane-d4						CAS #: 17060-07-0	
6.040	6.054 (1.099)	65	136825	25.4820	25.482	80.00- 120.00	100.00
6.040	6.054 (1.099)	67	73853			28.68- 88.68	53.98

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
$ 146 Toluene-d8						CAS #: 2037-26-5	
7.635	7.635 (1.192)	98	490479	24.5938	24.594	80.00- 120.00	100.00
7.635	7.635 (1.192)	70	49749			0.00- 40.26	10.14
7.635	7.635 (1.192)	100	325004			38.16- 98.16	66.26
$ 177 4-Bromofluorobenzene						CAS #: 460-00-4	
9.888	9.888 (1.112)	174	301914	24.9941	24.994	80.00- 120.00	100.00
9.874	9.888 (1.110)	95	324878			82.57- 142.57	107.61
9.888	9.888 (1.112)	176	295371			67.45- 127.45	97.83
35 Freon 11						CAS #: 75-69-4	
2.472	2.486 (0.450)	101	2658	0.20793	1.397	80.00- 120.00	100.00(a)
2.458	2.486 (0.447)	103	1627			34.53- 94.53	61.22
42 Ethanol						CAS #: 64-17-5	
2.850	2.850 (0.519)	45	5533	2.76319	18.569	80.00- 120.00	100.00
2.850	2.850 (0.519)	43	1576			0.00- 48.78	28.49
2.850	2.850 (0.519)	46	2065			9.14- 69.14	37.33
52 Acetone						CAS #: 67-64-1	
3.353	3.354 (0.610)	58	46811	20.7107	139.18	80.00- 120.00	100.00
3.340	3.354 (0.608)	43	143575			270.02- 330.02	306.71
56 Carbon Disulfide						CAS #: 75-15-0	
3.409	3.424 (0.621)	76	5567	0.37716	2.534	80.00- 120.00	100.00(a)
57 2-Propanol						CAS #: 67-63-0	
3.521	3.536 (0.641)	45	1199146	144.424	970.53	80.00- 120.00	100.00
3.521	3.536 (0.641)	43	255155			0.00- 47.69	21.28
3.521	3.536 (0.641)	59	50652			0.00- 33.85	4.22
78 Hexane						CAS #: 110-54-3	
4.333	4.347 (0.789)	57	2379	0.28421	1.910	80.00- 120.00	100.00(a)
4.319	4.347 (0.786)	43	3320			32.33- 92.33	139.57
0.000	4.347 (0.000)	86	0			0.00- 47.05	0.00
100 Chloroform						CAS #: 67-66-3	
5.550	5.564 (1.010)	83	6281	0.53983	3.628	80.00- 120.00	100.00
5.550	5.564 (1.010)	85	3944			36.39- 96.39	62.80
102 Cyclohexane						CAS #: 110-82-7	
5.648	5.662 (1.028)	84	651	0.08095	0.5440	80.00- 120.00	100.00(a)
5.662	5.662 (1.031)	56	1434			85.96- 145.96	220.30
5.662	5.662 (1.031)	41	1461			27.64- 87.64	224.40
116 Benzene						CAS #: 71-43-2	
6.012	6.026 (0.939)	78	3187	0.18163	1.220	80.00- 120.00	100.00(a)

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

  116 Benzene (continued)
  6.012   6.026 (0.939)    77       731                     0.00-  52.91    22.94
-------------------------------------------------------------------------------
  145 4-Methyl-2-pentanone                        CAS #: 108-10-1
  7.565   7.565 (1.181)    58      1158 0.19578    1.316  80.00- 120.00   100.00(a)
  7.565   7.565 (1.181)    43      3397                  220.64- 280.64   293.23
  7.579   7.565 (1.184)    85       499                   17.04-  77.04    43.12
-------------------------------------------------------------------------------
  147 Toluene                                     CAS #: 108-88-3
  7.691   7.691 (1.201)    91     10153 0.41909    2.816  80.00- 120.00   100.00(a)
  7.691   7.691 (1.201)    92      6173                   27.98-  87.98    60.80
-------------------------------------------------------------------------------
  156 Tetrachloroethene                           CAS #: 127-18-4
  8.139   8.139 (0.915)   166      1611 0.12596   0.8464  80.00- 120.00   100.00(a)
  8.139   8.139 (0.915)   129       997                   41.30- 101.30    61.91
  8.139   8.139 (0.915)   131       915                   39.67-  99.67    56.80
-------------------------------------------------------------------------------
  167 Ethyl Benzene                               CAS #: 100-41-4
  8.964   8.964 (1.008)   106      1159 0.10993   0.7388  80.00- 120.00   100.00(a)
  8.964   8.964 (1.008)    91      4597                  278.96- 338.96   396.57
-------------------------------------------------------------------------------
  169 m,p-Xylene                                  CAS #: 108-38-3
  9.062   9.062 (1.019)   106      4874 0.37313    2.507  80.00- 120.00   100.00(a)
  9.062   9.062 (1.019)    91      8772                  158.57- 218.57   179.97
-------------------------------------------------------------------------------
  171 o-Xylene                                    CAS #: 95-47-6
  9.398   9.398 (1.057)   106     13252 1.07779    7.243  80.00- 120.00   100.00
  9.398   9.398 (1.057)    91     28399                  173.40- 233.40   214.30
-------------------------------------------------------------------------------
  172 Styrene                                     CAS #: 100-42-5
  9.426   9.426 (1.060)   104      1318 0.06376   0.4284  80.00- 120.00   100.00(a)
  9.412   9.426 (1.058)    78      1858                   15.95-  75.95   141.00
-------------------------------------------------------------------------------
  174 Bromoform                                   CAS #: 75-25-2
  9.636   9.636 (1.083)   173      2246 0.12987   0.8728  80.00- 120.00   100.00(a)
  9.636   9.636 (1.083)   171      1204                   22.23-  82.23    53.62
-------------------------------------------------------------------------------
  188 4-Ethyltoluene                              CAS #: 622-96-8
 10.112  10.126 (1.137)   120      4346 0.35545    2.389  80.00- 120.00   100.00(a)
 10.112  10.126 (1.137)   105     13520                  292.39- 352.39   311.05
-------------------------------------------------------------------------------
  190 1,3,5-Trimethylbenzene                      CAS #: 108-67-8
 10.181  10.182 (1.145)   120      2421 0.14530   0.9764  80.00- 120.00   100.00(a)
 10.181  10.182 (1.145)   105      5842                  169.92- 229.92   241.33
-------------------------------------------------------------------------------
  196 1,2,4-Trimethylbenzene                      CAS #: 95-63-6
 10.503  10.503 (1.181)   120      4547 0.30457    2.047  80.00- 120.00   100.00(a)
```

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
196 1,2,4-Trimethylbenzene (continued)							
10.503	10.503 (1.181)	105	8952			182.08- 242.08	196.87
228 Naphthalene					CAS #: 91-20-3		
12.910	12.910 (1.451)	128	2226	0.07277	0.4890	80.00- 120.00	100.00(a)
0.000	12.910 (0.000)	127	0			0.00- 42.14	0.00

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: msdj.i
Lab File ID: j030523r1.d
Lab Smp Id: 1503058Br1-05A
Analysis Type: VOA
Quant Type: ISTD
Operator: md
Method File: /chem/msdj.i/05mar15.b/j15q0304a.m
Misc Info: 4.3 Hg->14.9 psi

Calibration Date: 05-MAR-2015
Calibration Time: 09:28

Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
98 Bromochloromethan	140692	84415	196969	117187	-16.71
123 1,4-Difluorobenze	614418	368651	860185	488745	-20.45
163 Chlorobenzene-d5	577173	346304	808042	465056	-19.43

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
98 Bromochloromethan	5.49	5.16	5.82	5.49	0.00
123 1,4-Difluorobenze	6.40	6.07	6.73	6.40	0.00
163 Chlorobenzene-d5	8.89	8.56	9.22	8.89	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 16:17

Eurofins Air Toxics Inc.

RECOVERY REPORT

Client Name: Client SDG: 05mar15
Sample Matrix: GAS Fraction: VOA
Lab Smp Id: 1503058Br1-05A
Level: LOW Operator: md
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: 2926Spectra.spk Quant Type: ISTD
Sublist File: TO15Nmdl.sub
Method File: /chem/msdj.i/05mar15.b/j15q0304a.m
Misc Info: 4.3 Hg->14.9 psi

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 117 1,2-Dichloroethane	25.000	25.482	101.93	70-130
$ 146 Toluene-d8	25.000	24.594	98.38	70-130
$ 177 4-Bromofluorobenze	25.000	24.994	99.98	70-130

Data File: /chem/msdj.i/05mar15.b/j030523r1.d

Date : 06-MAR-2015 00:05

Client ID:

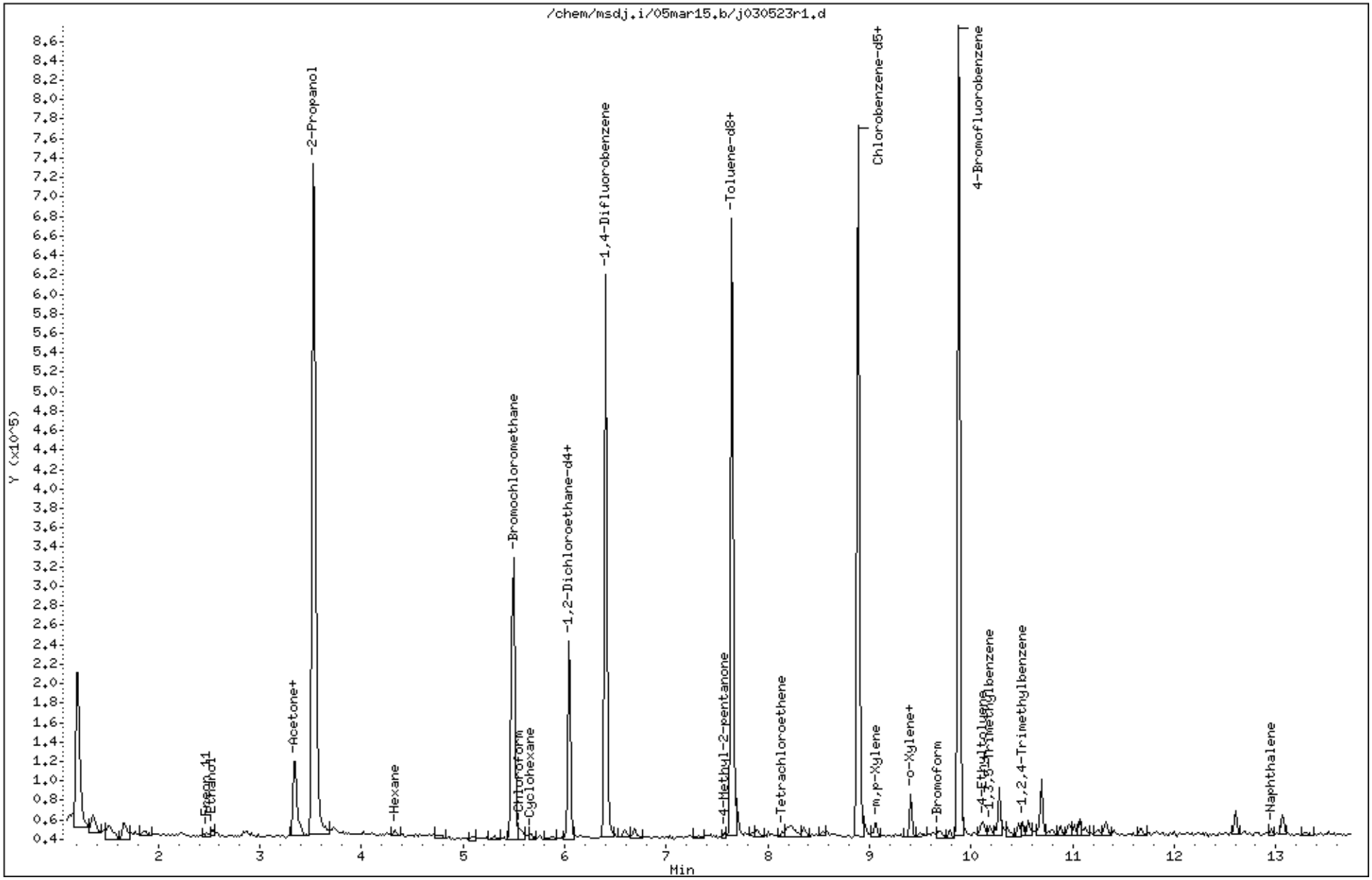
Instrument: msdj.i

Sample Info: 70ml 36415

Operator: md

Column phase: RTX-624

Column diameter: 0.25



Data File: /chem/msdj.i/05mar15.b/j030523r1.d

Date : 06-MAR-2015 00:05

Client ID:

Instrument: msdj.i

Sample Info: 70ml 36415

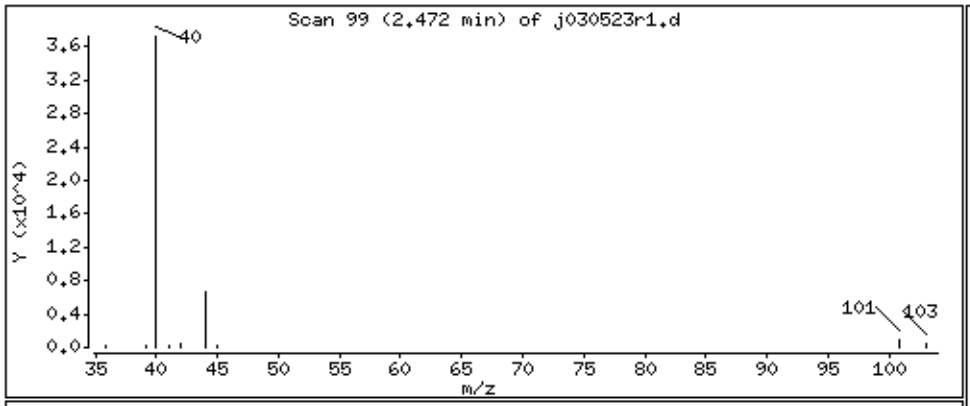
Operator: md

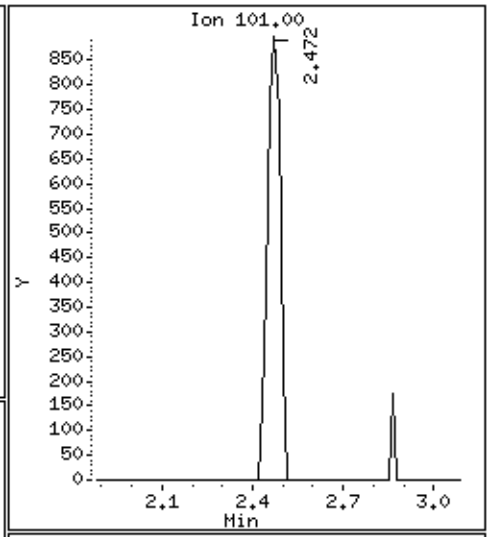
Column phase: RTX-624

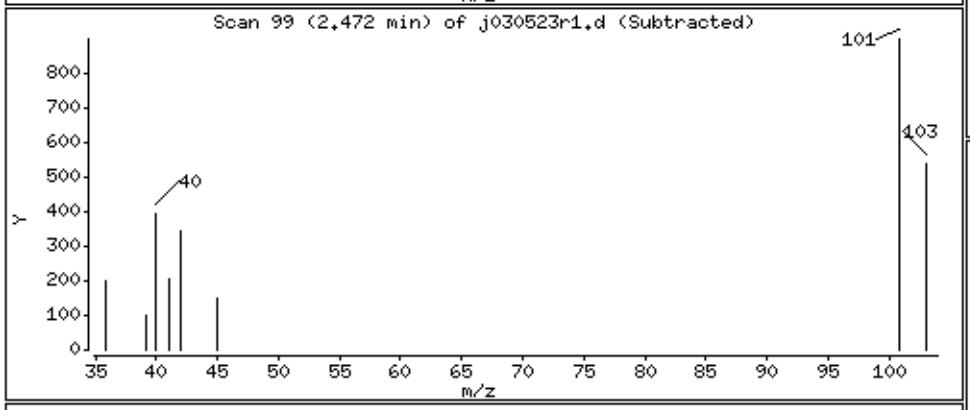
Column diameter: 0.25

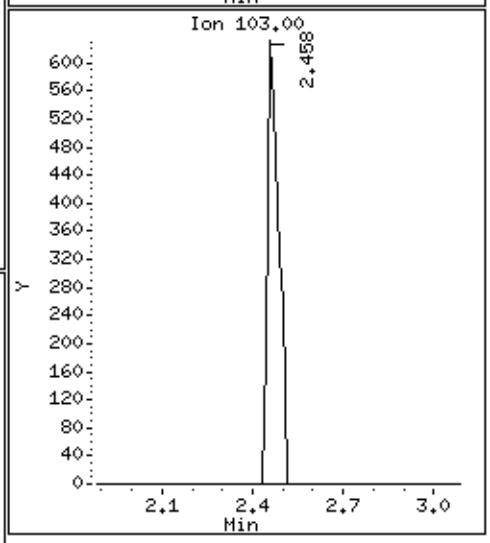
35 Freon 11

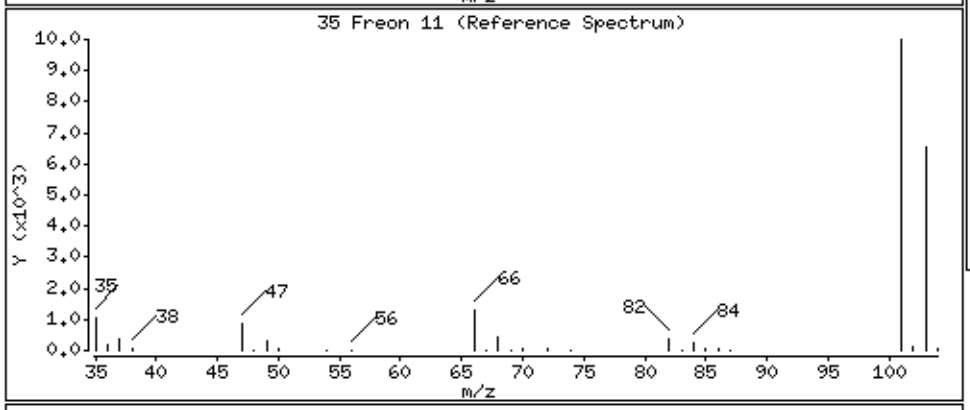
Concentration: 1.397 PPBV

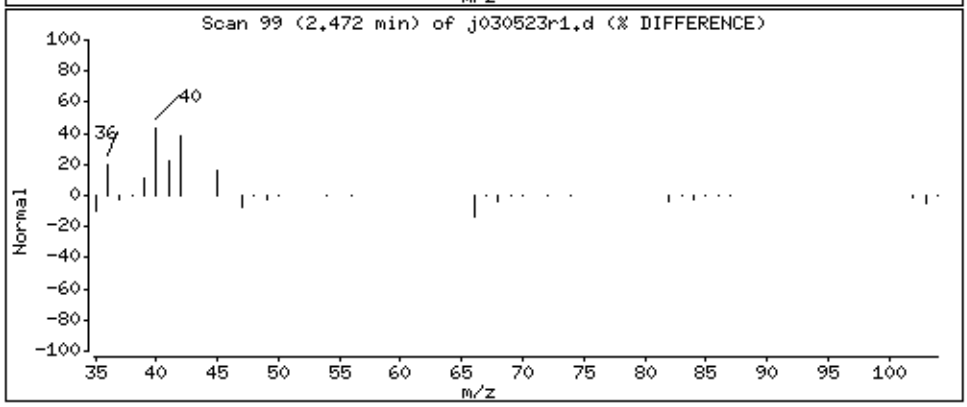












Data File: /chem/msdj.i/05mar15.b/j030523r1.d

Date : 06-MAR-2015 00:05

Client ID:

Instrument: msdj.i

Sample Info: 70ml 36415

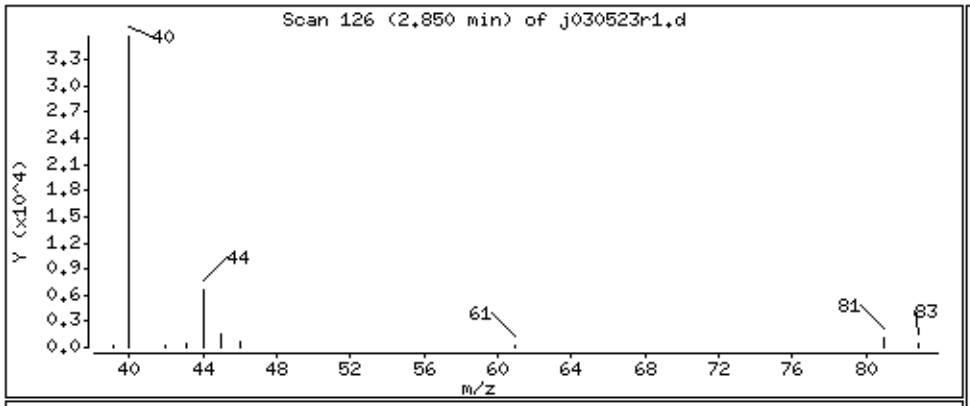
Operator: md

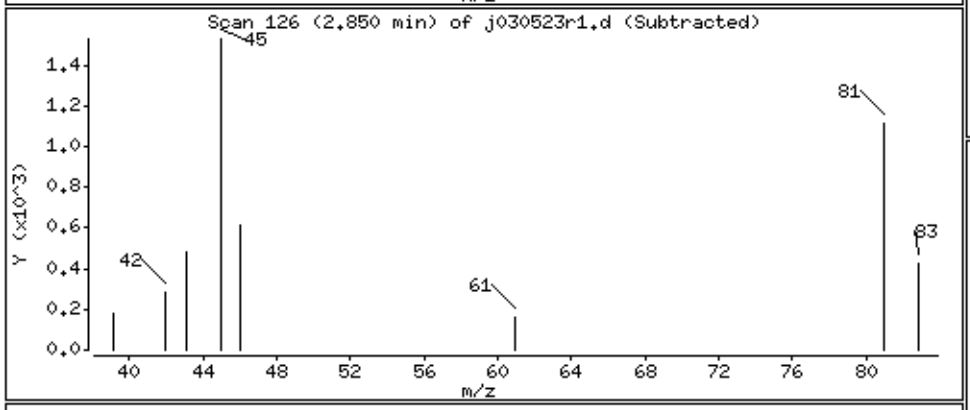
Column phase: RTX-624

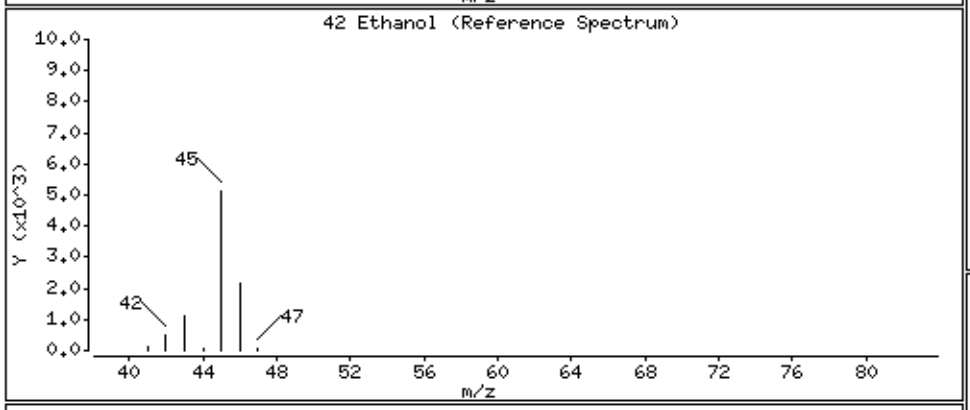
Column diameter: 0.25

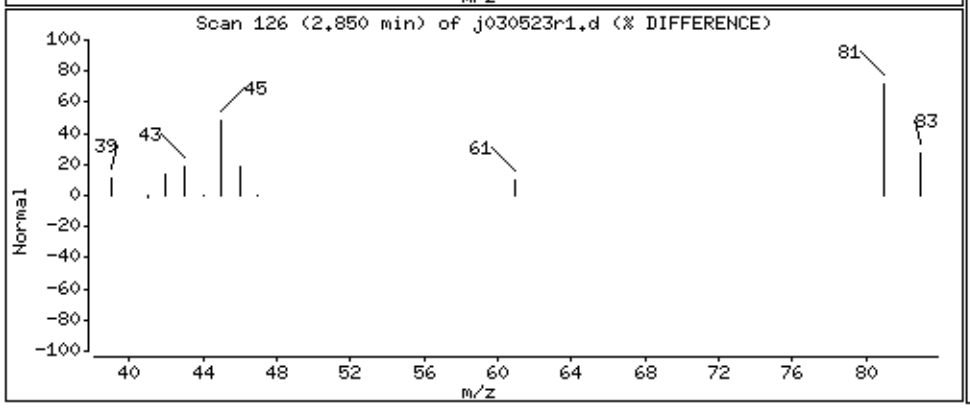
42 Ethanol

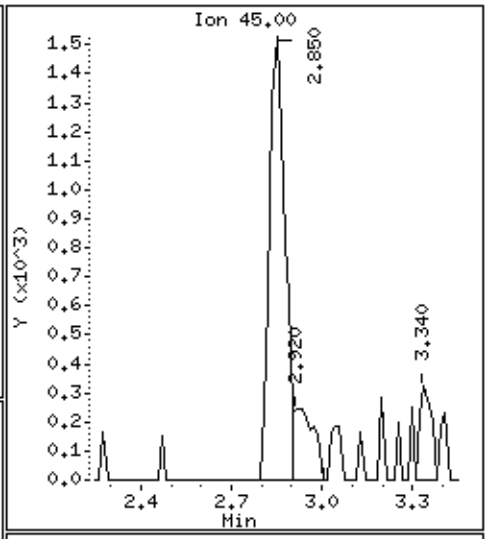
Concentration: 18.569 PPBV

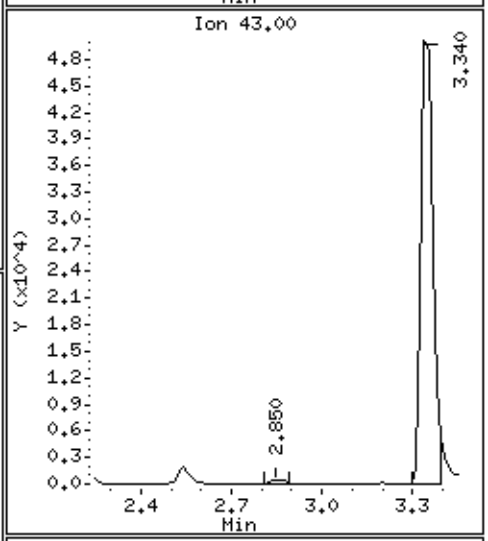


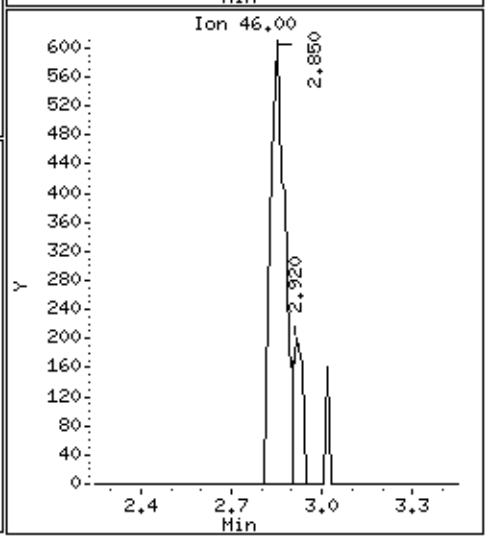












Data File: /chem/msdj.i/05mar15.b/j030523r1.d

Date : 06-MAR-2015 00:05

Client ID:

Instrument: msdj.i

Sample Info: 70ml 36415

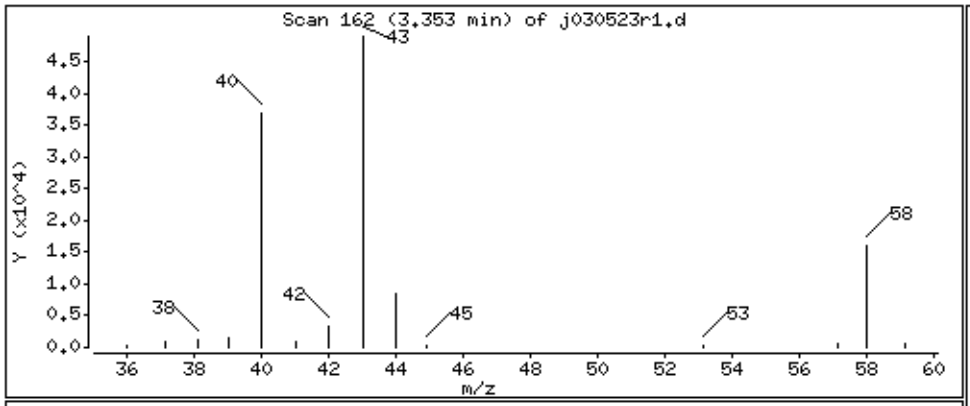
Operator: md

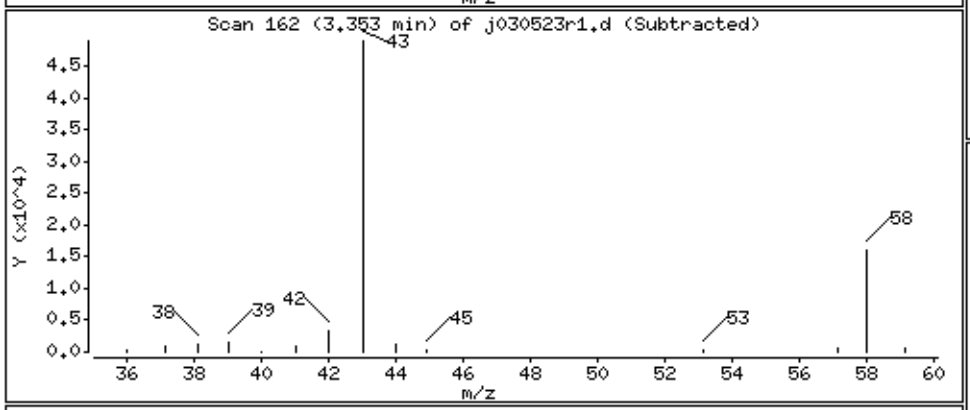
Column phase: RTX-624

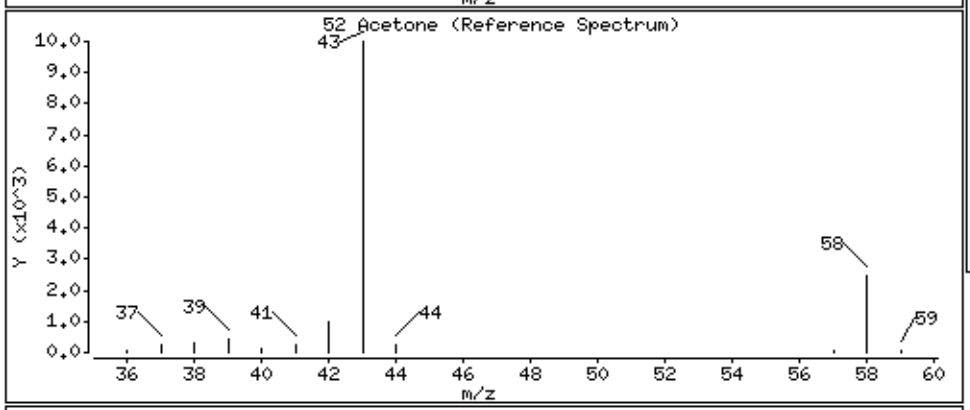
Column diameter: 0.25

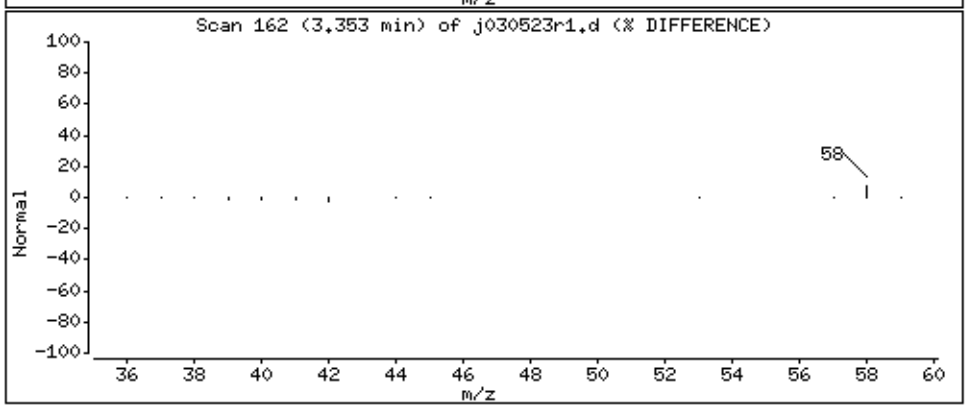
52 Acetone

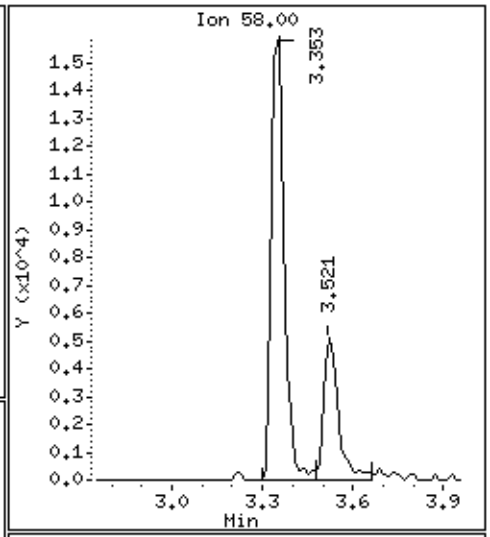
Concentration: 139.18 PPBV

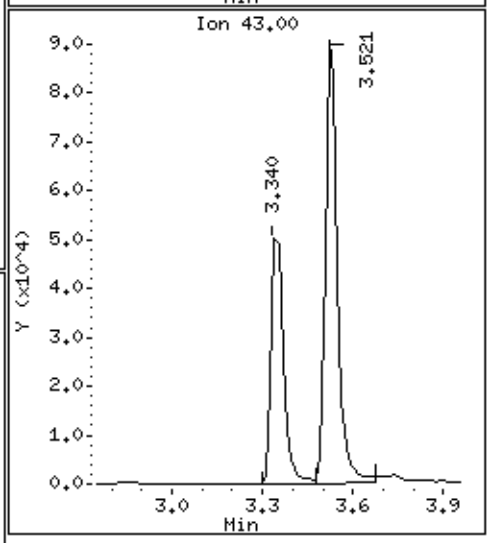












Data File: /chem/msdj.i/05mar15.b/j030523r1.d

Date : 06-MAR-2015 00:05

Client ID:

Instrument: msdj.i

Sample Info: 70ml 36415

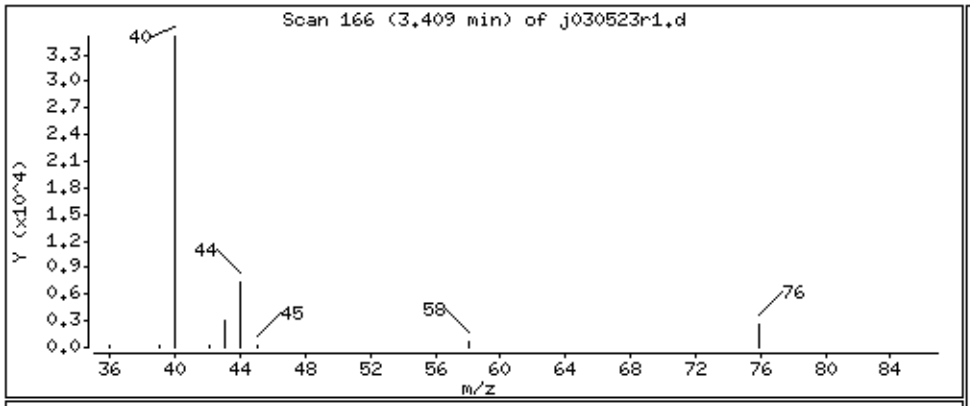
Operator: md

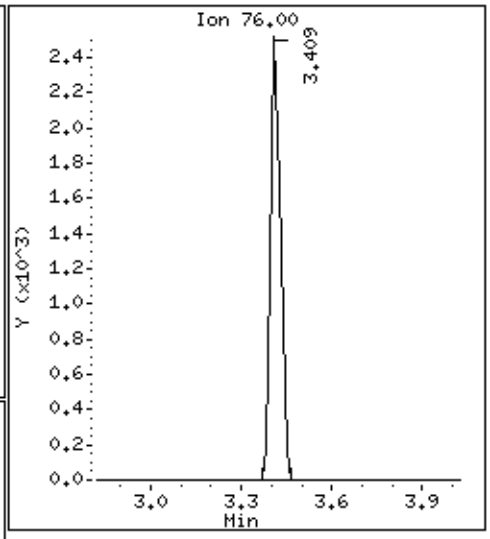
Column phase: RTX-624

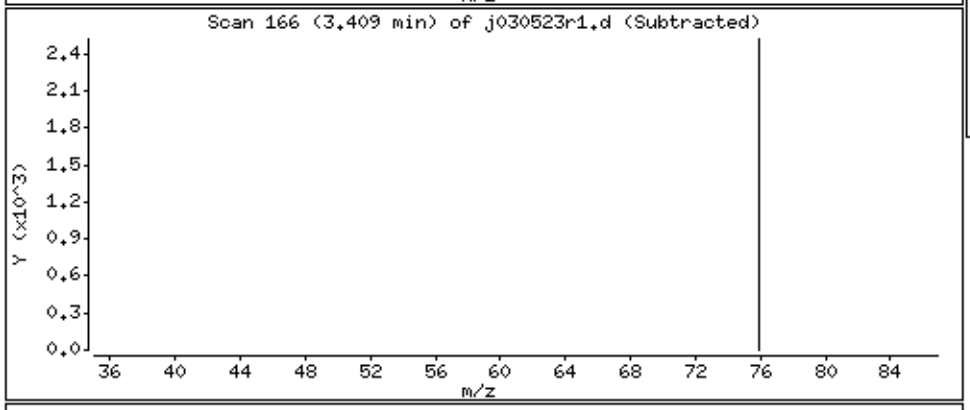
Column diameter: 0.25

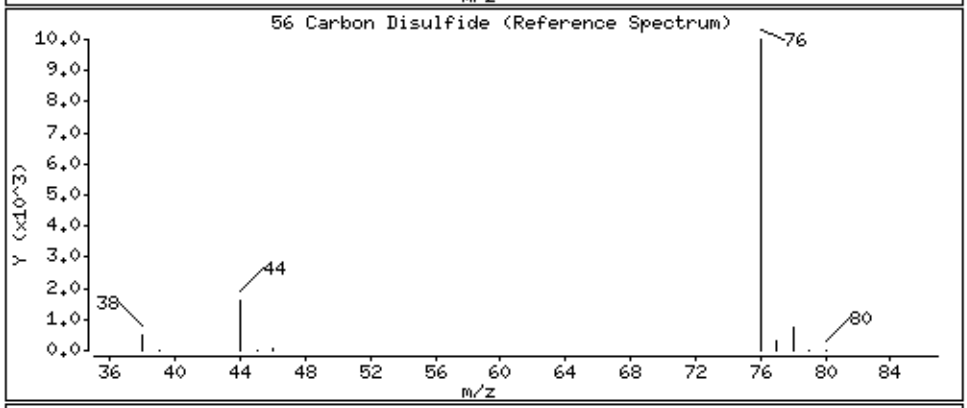
56 Carbon Disulfide

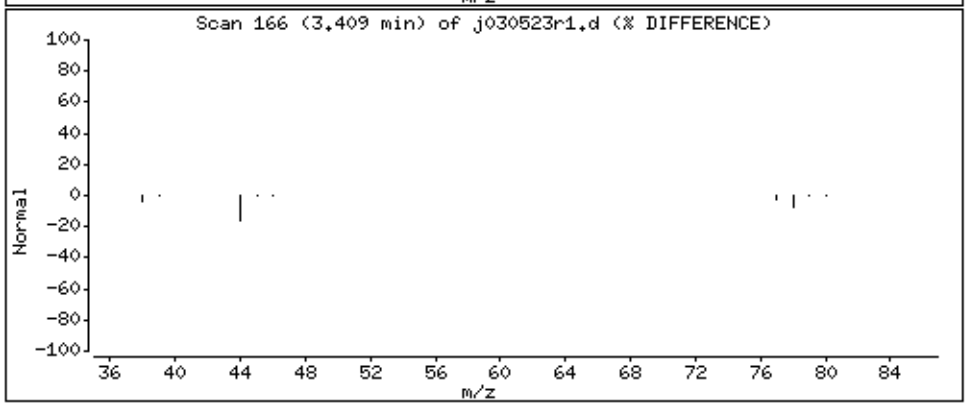
Concentration: 2.534 PPBV











Data File: /chem/msdj.i/05mar15.b/j030523r1.d

Date : 06-MAR-2015 00:05

Client ID:

Instrument: msdj.i

Sample Info: 70ml 36415

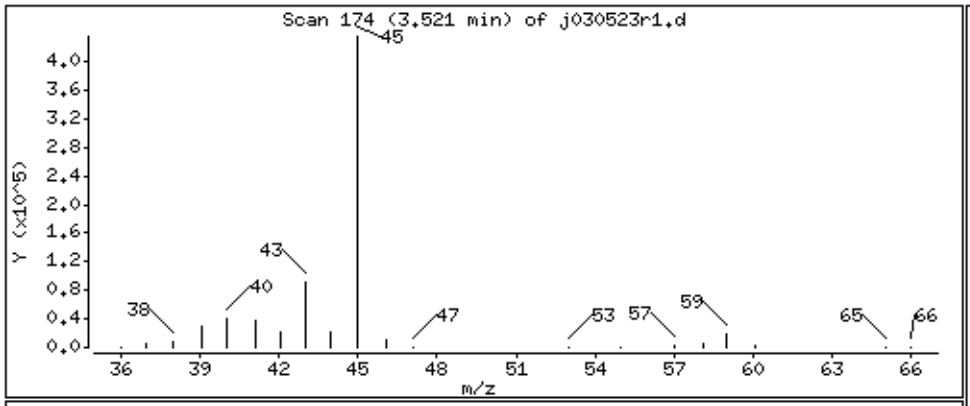
Operator: md

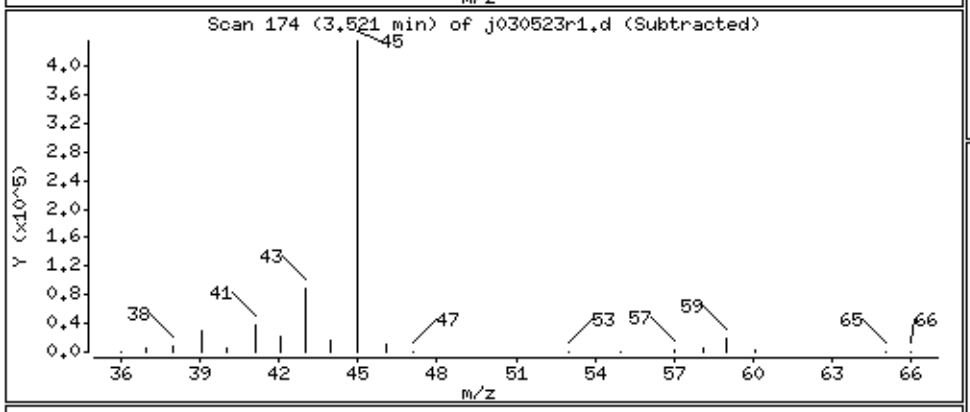
Column phase: RTX-624

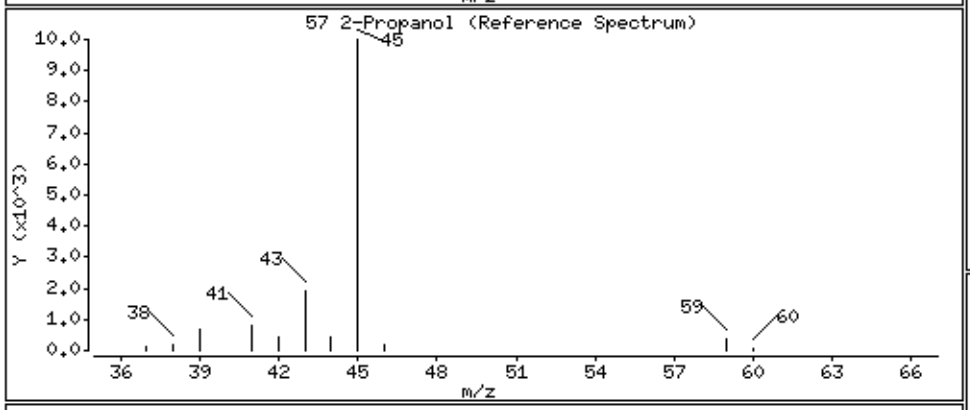
Column diameter: 0.25

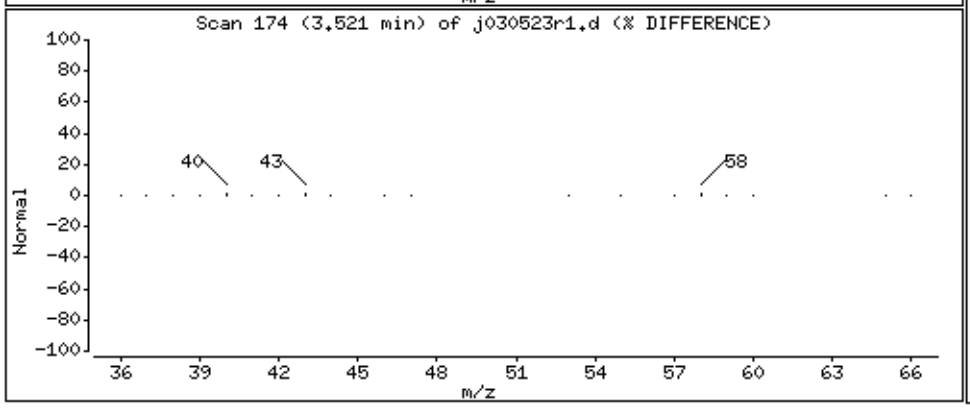
57 2-Propanol

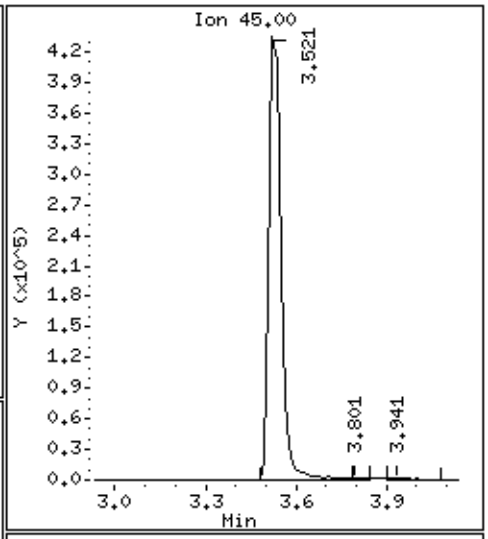
Concentration: 970.53 PPBV

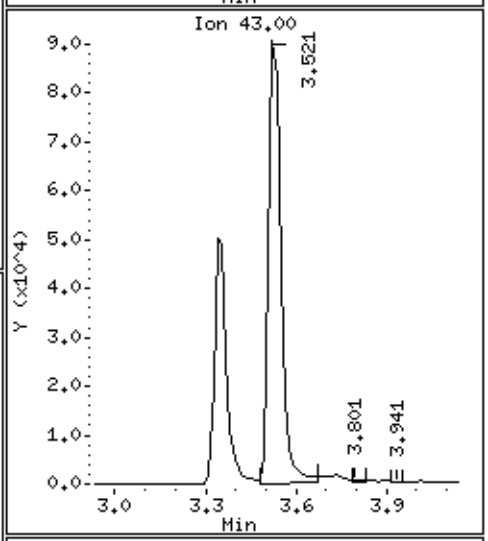


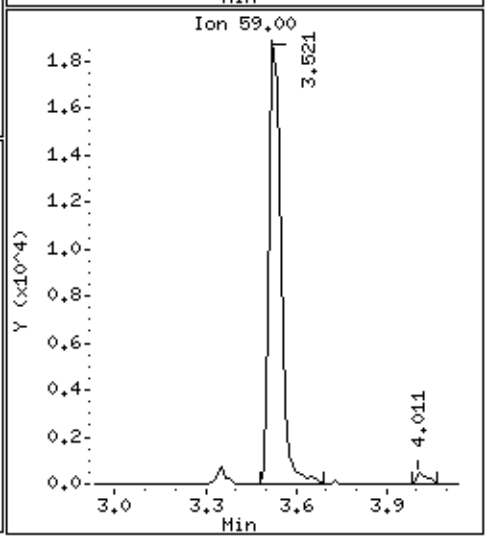












Data File: /chem/msdj.i/05mar15.b/j030523r1.d

Date : 06-MAR-2015 00:05

Client ID:

Instrument: msdj.i

Sample Info: 70ml 36415

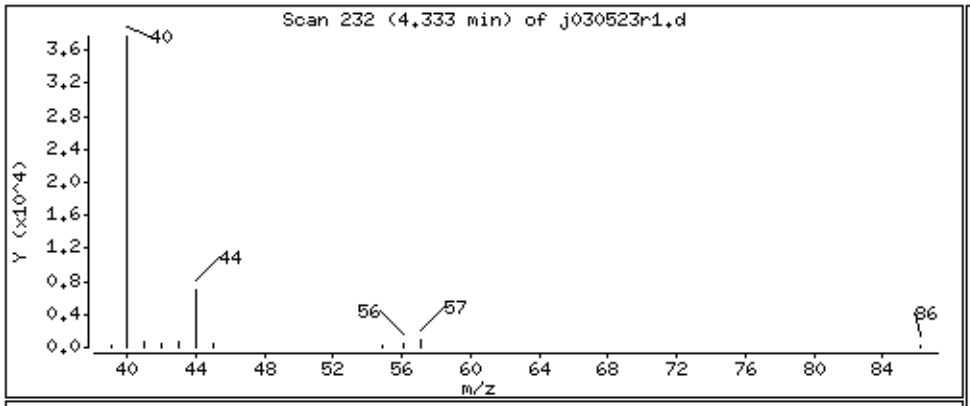
Operator: md

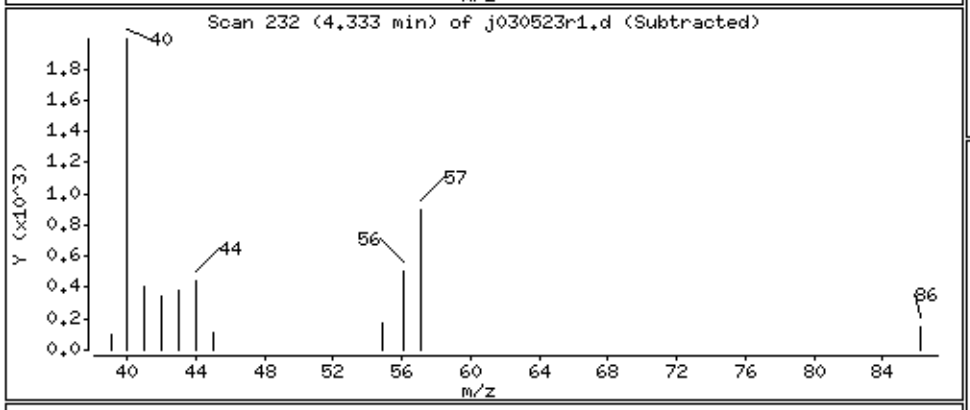
Column phase: RTX-624

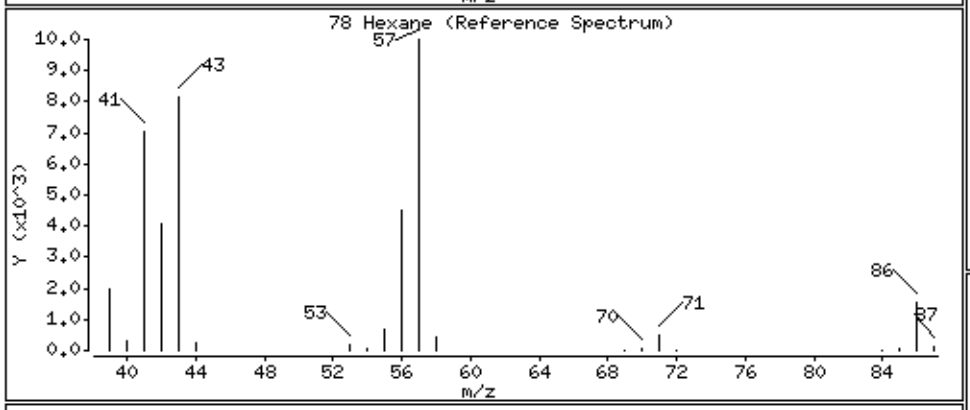
Column diameter: 0.25

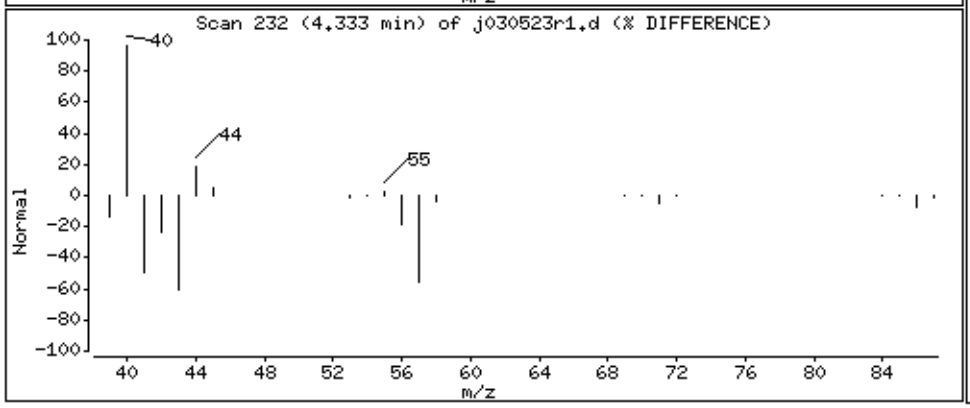
78 Hexane

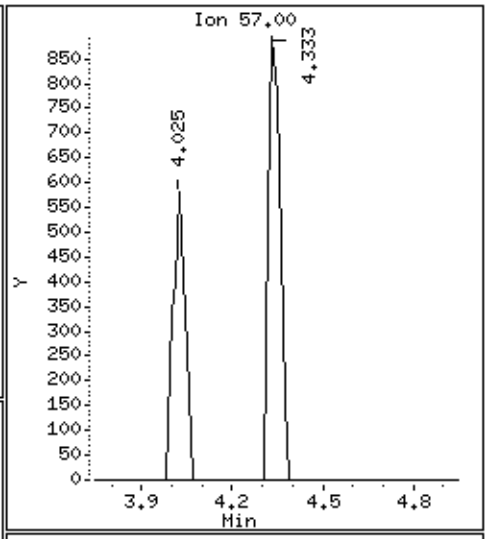
Concentration: 1.910 PPBV

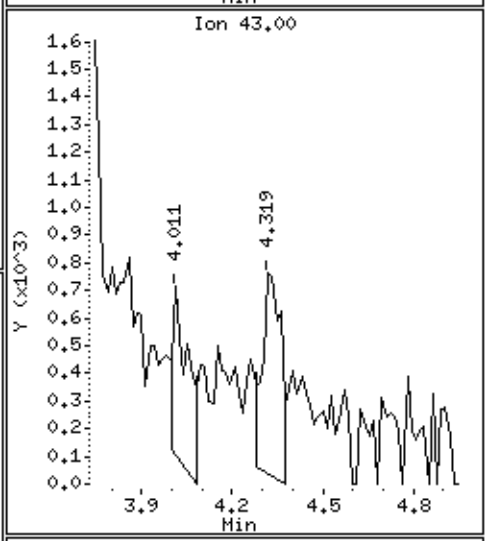


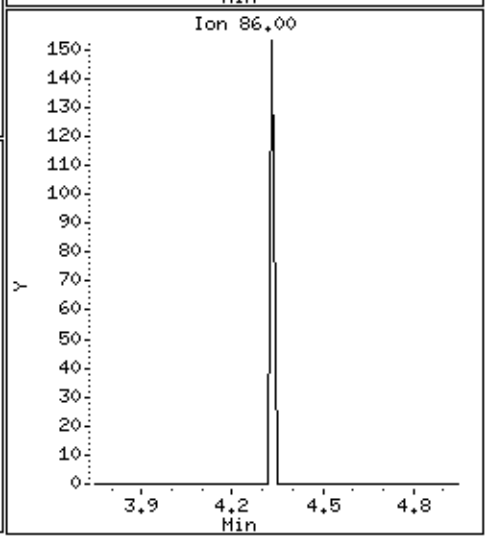












Data File: /chem/msdj.i/05mar15.b/j030523r1.d

Date : 06-MAR-2015 00:05

Client ID:

Instrument: msdj.i

Sample Info: 70ml 36415

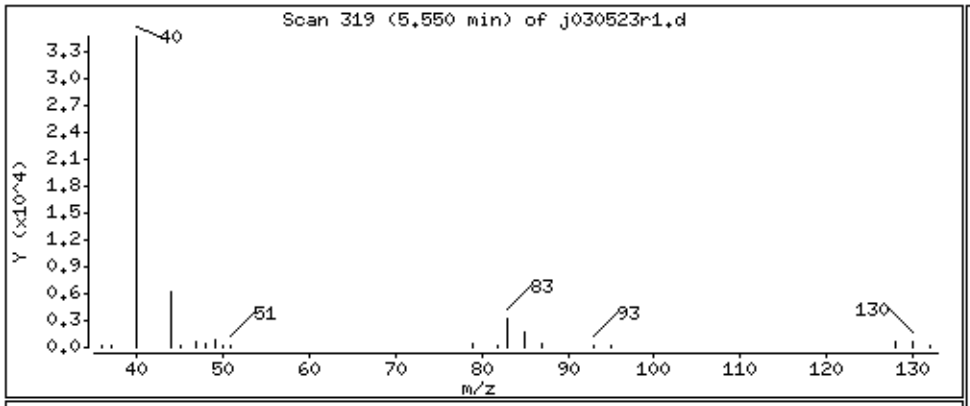
Operator: md

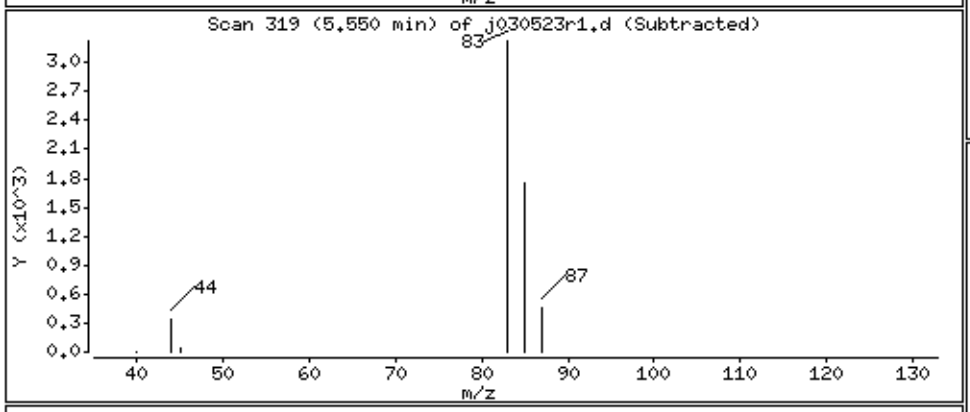
Column phase: RTX-624

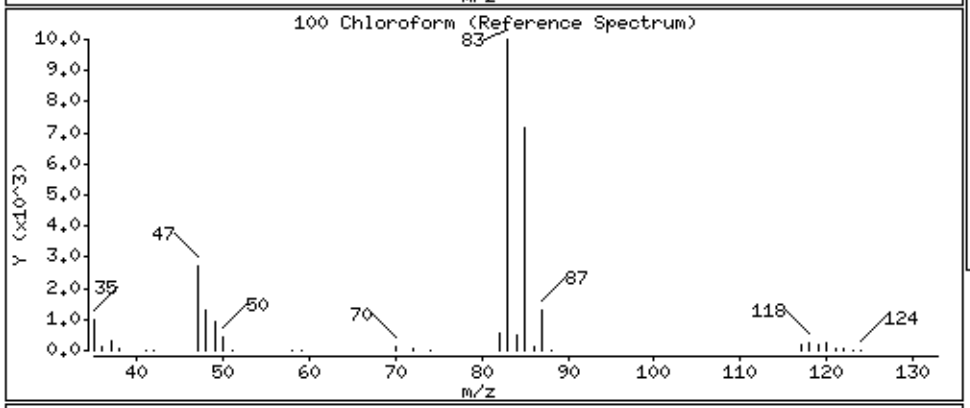
Column diameter: 0.25

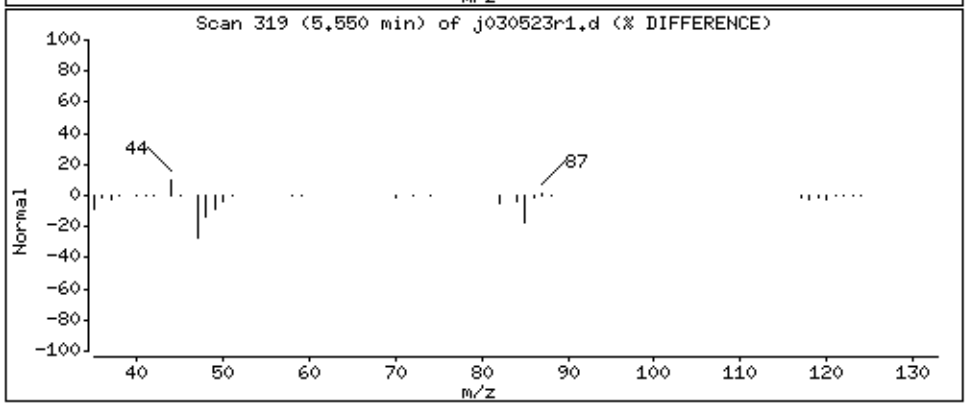
100 Chloroform

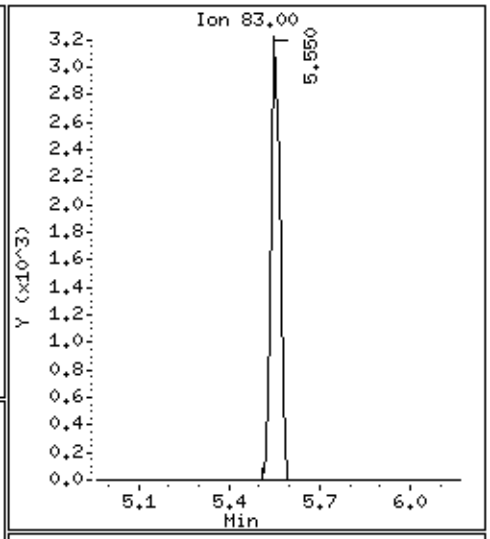
Concentration: 3.628 PPBV

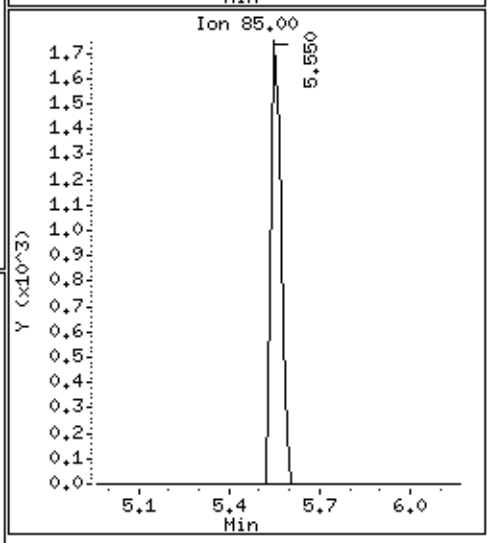












Data File: /chem/msdj.i/05mar15.b/j030523r1.d

Date : 06-MAR-2015 00:05

Client ID:

Instrument: msdj.i

Sample Info: 70ml 36415

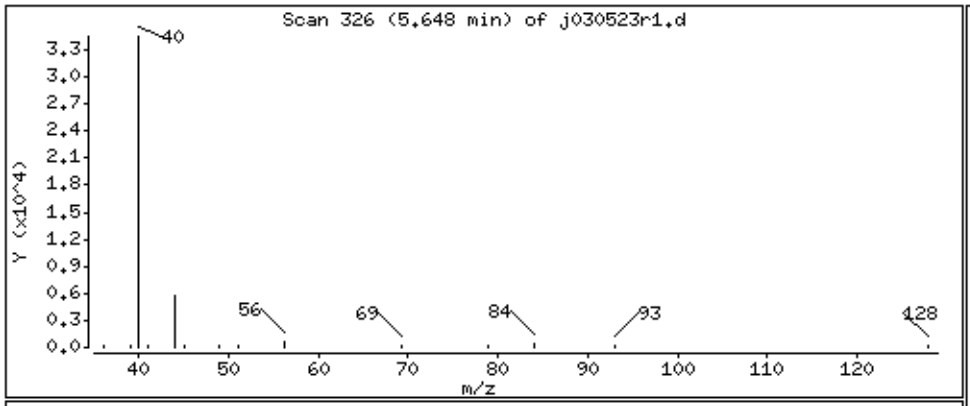
Operator: md

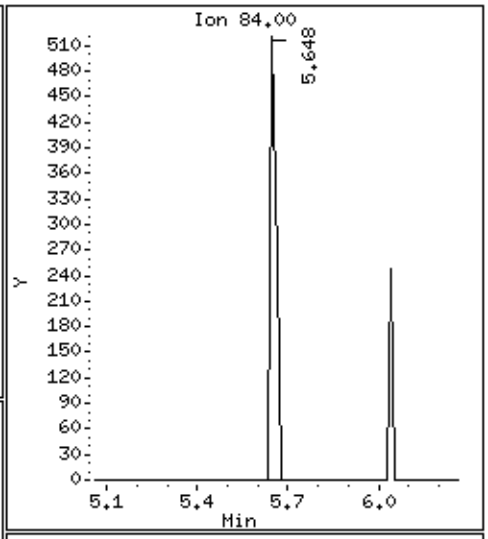
Column phase: RTX-624

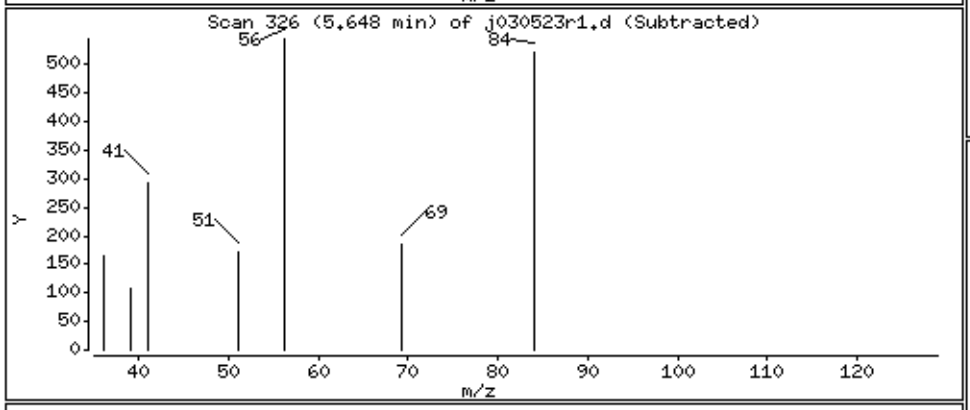
Column diameter: 0.25

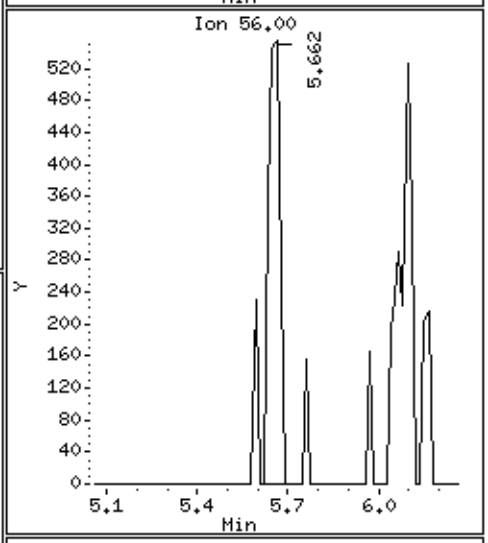
102 Cyclohexane

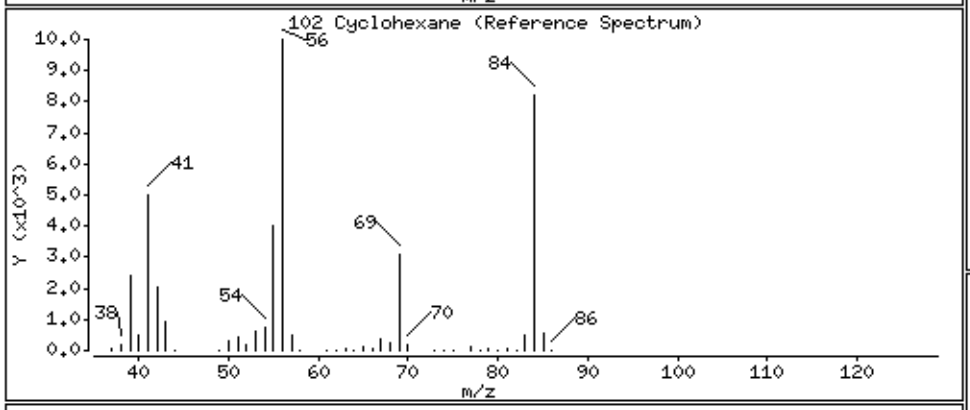
Concentration: 0.5440 PPBV

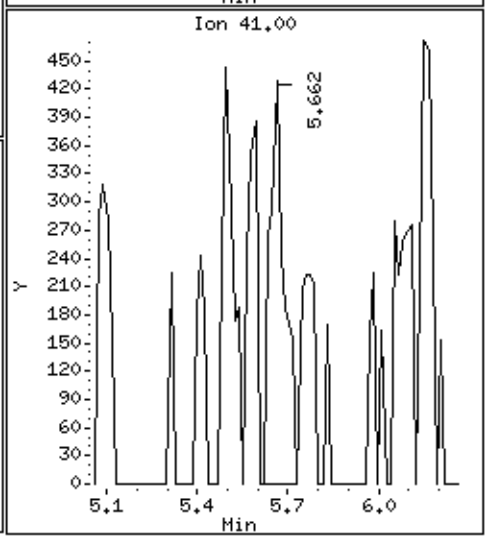


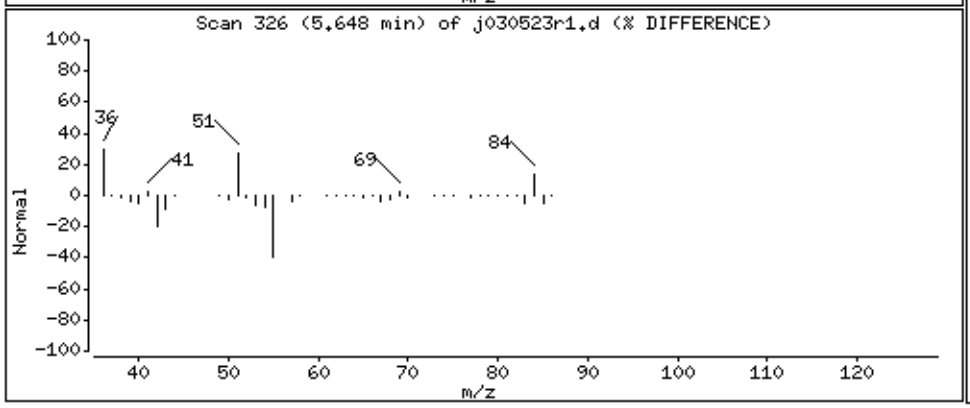












Data File: /chem/msdj.i/05mar15.b/j030523r1.d

Date : 06-MAR-2015 00:05

Client ID:

Instrument: msdj.i

Sample Info: 70ml 36415

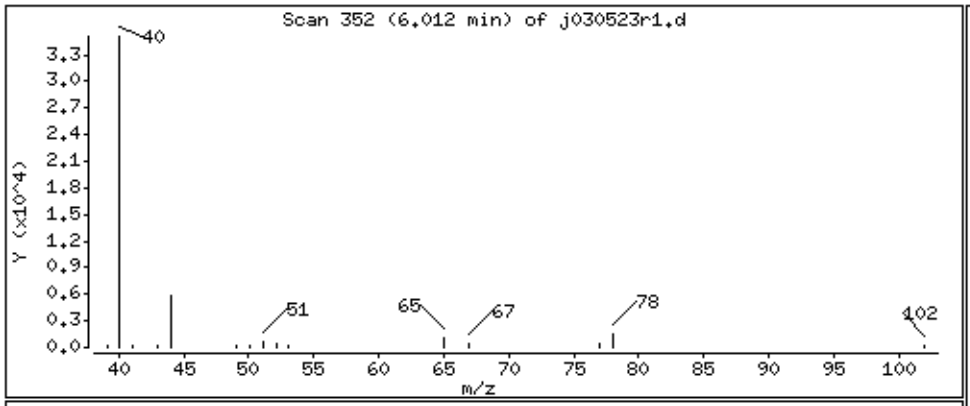
Operator: md

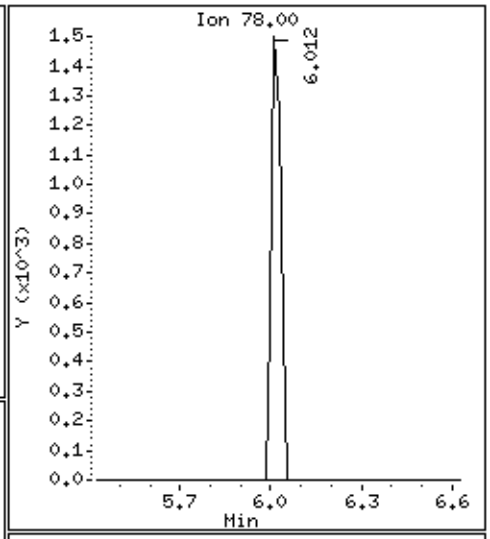
Column phase: RTX-624

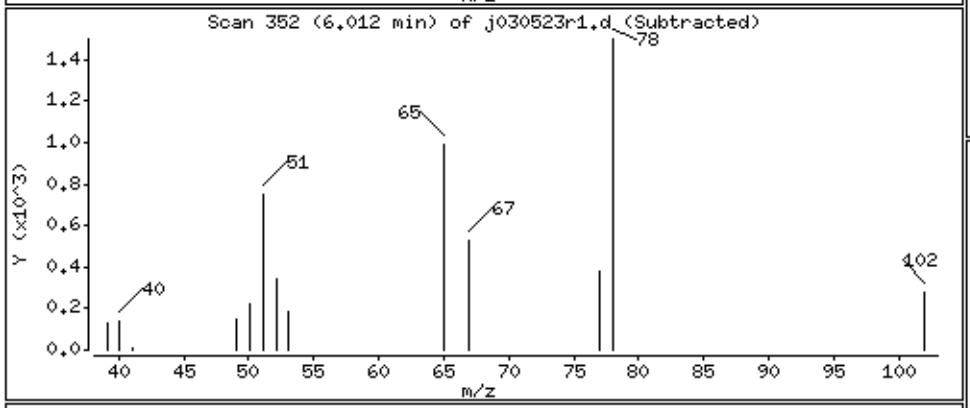
Column diameter: 0.25

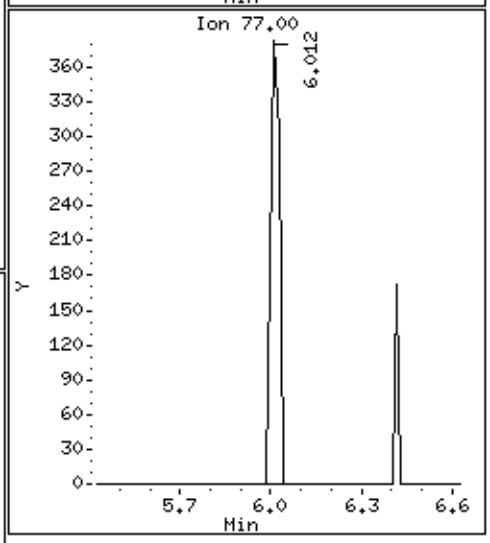
116 Benzene

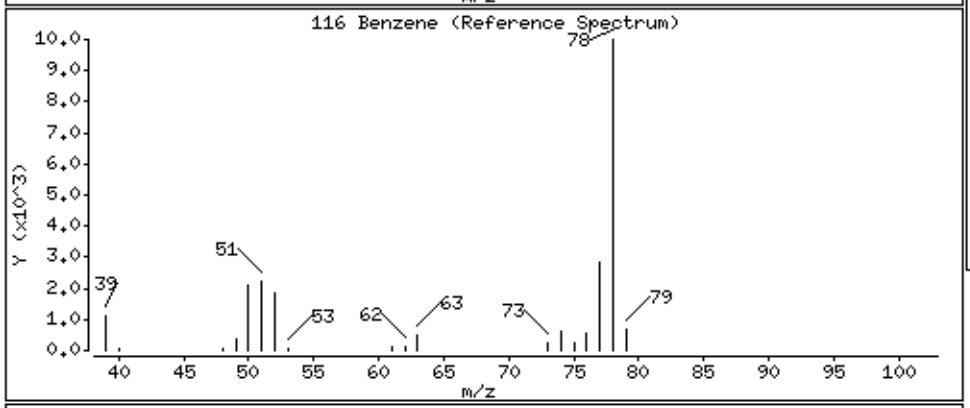
Concentration: 1.220 PPBV

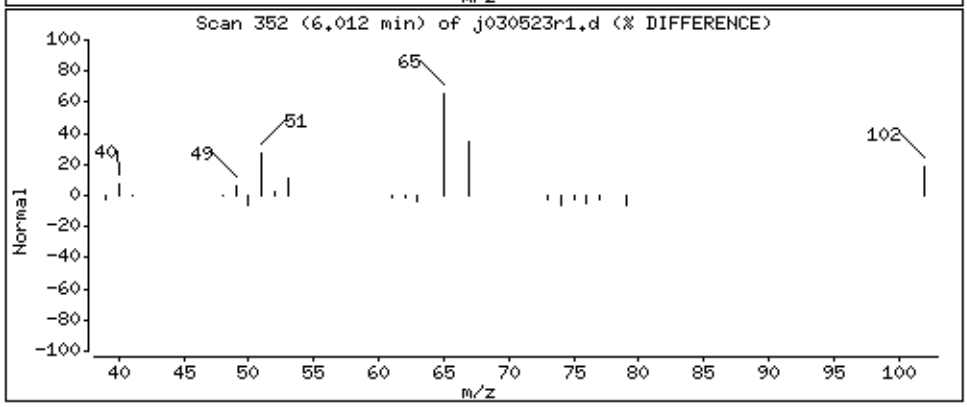












Data File: /chem/msdj.i/05mar15.b/j030523r1.d

Date : 06-MAR-2015 00:05

Client ID:

Instrument: msdj.i

Sample Info: 70ml 36415

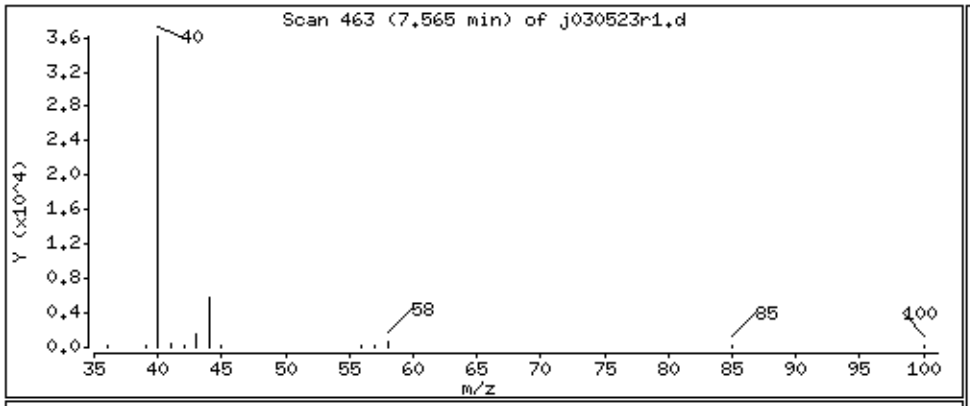
Operator: md

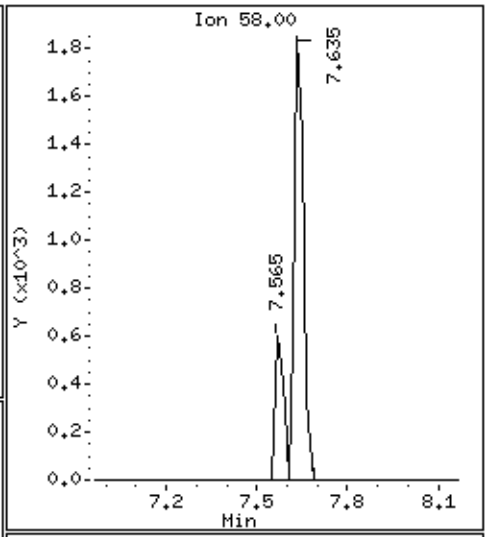
Column phase: RTX-624

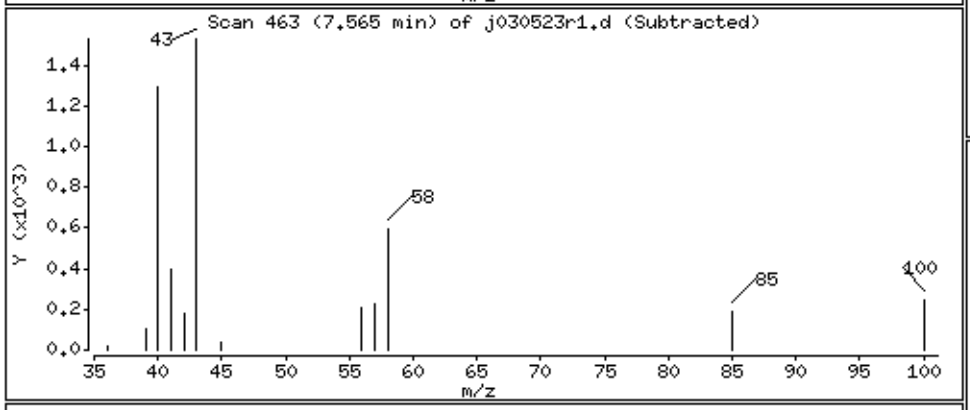
Column diameter: 0.25

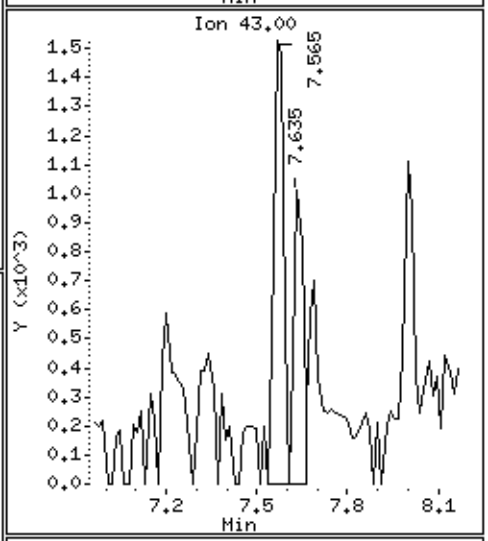
145 4-Methyl-2-pentanone

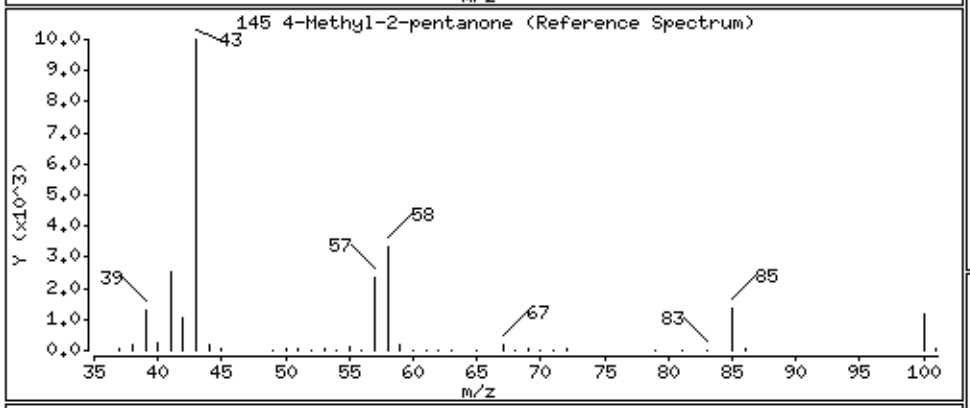
Concentration: 1.316 PPBV

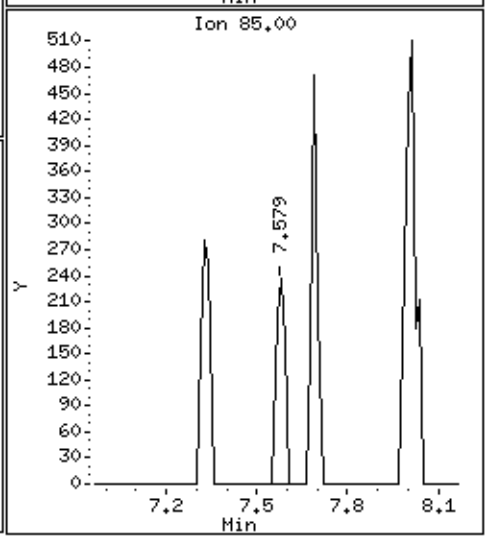


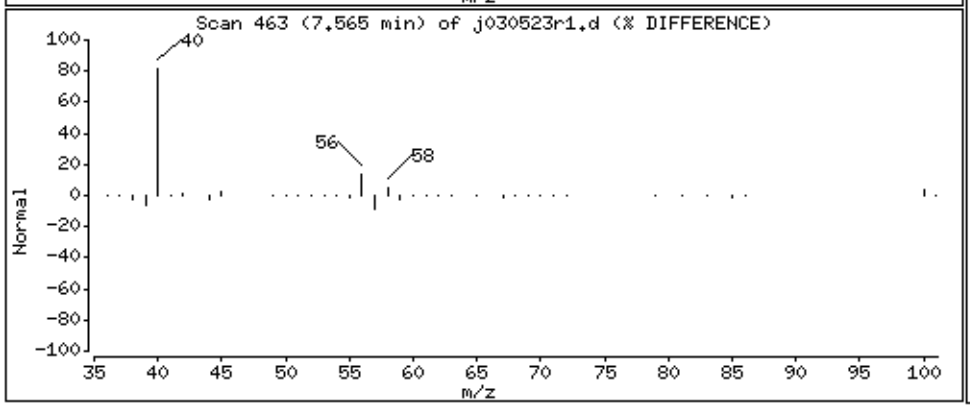












Data File: /chem/msdj.i/05mar15.b/j030523r1.d

Date : 06-MAR-2015 00:05

Client ID:

Instrument: msdj.i

Sample Info: 70ml 36415

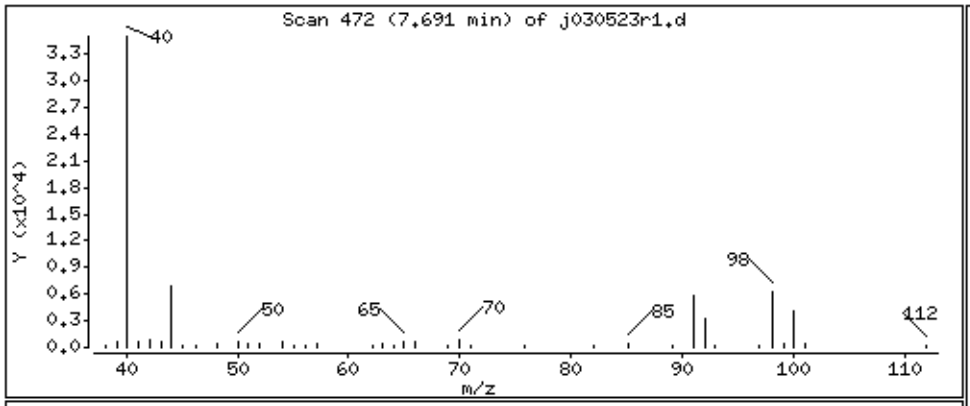
Operator: md

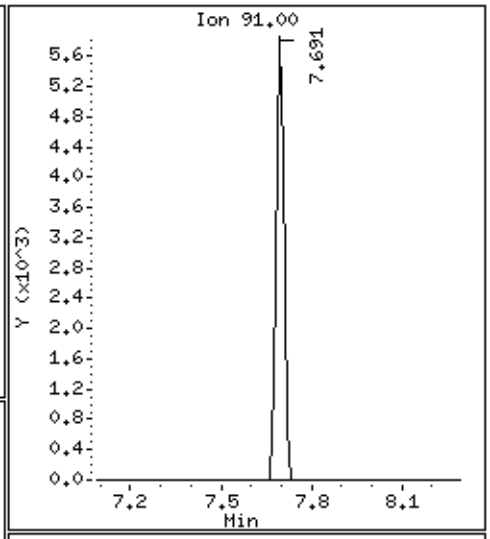
Column phase: RTX-624

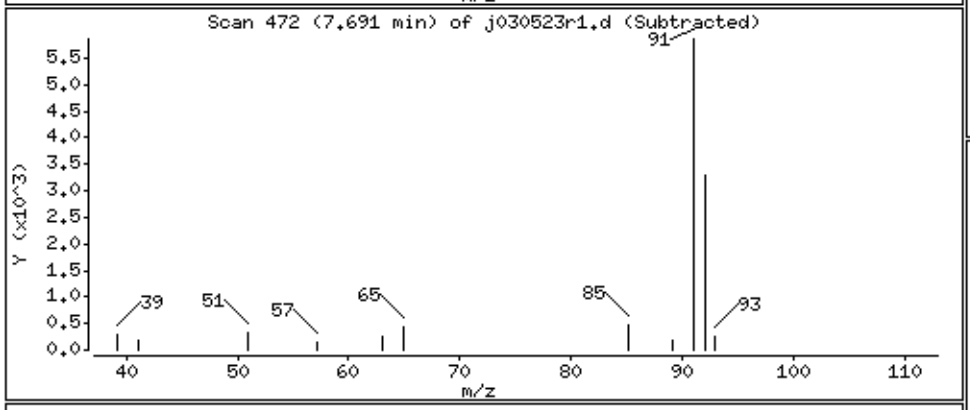
Column diameter: 0.25

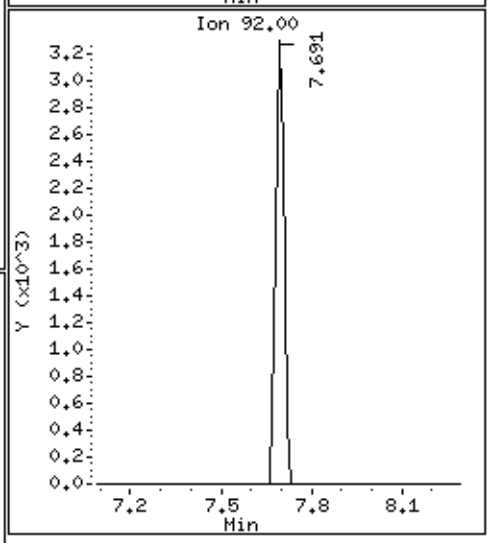
147 Toluene

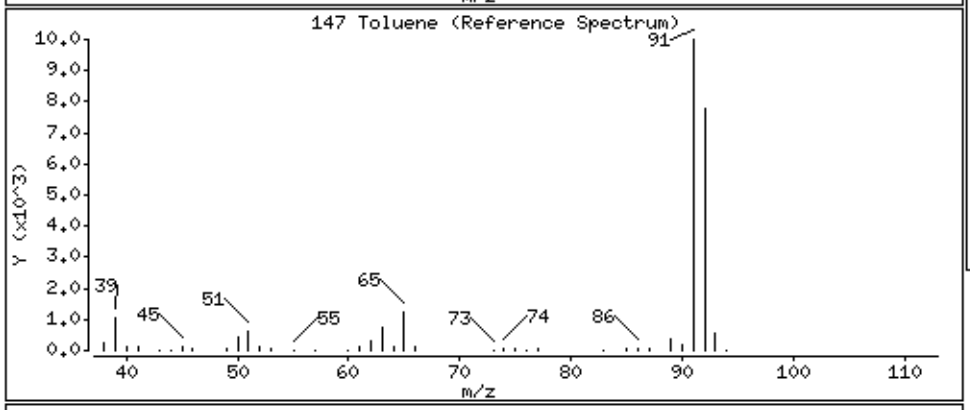
Concentration: 2.816 PPBV

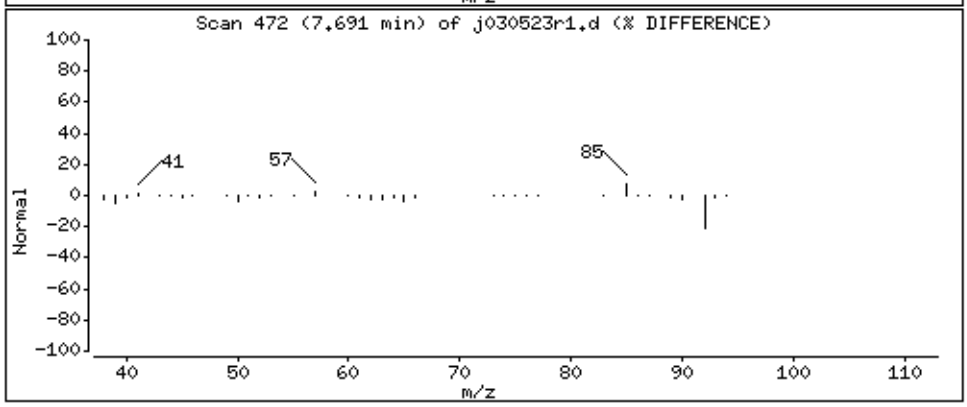












Data File: /chem/msdj.i/05mar15.b/j030523r1.d

Date : 06-MAR-2015 00:05

Client ID:

Instrument: msdj.i

Sample Info: 70ml 36415

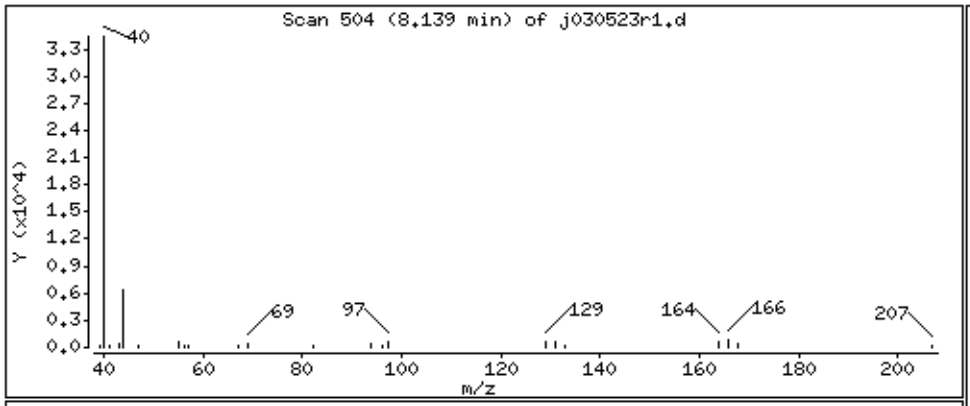
Operator: md

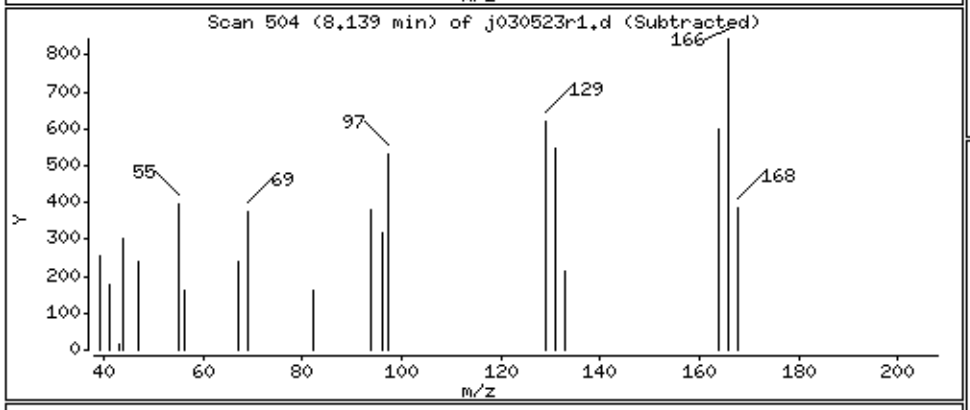
Column phase: RTX-624

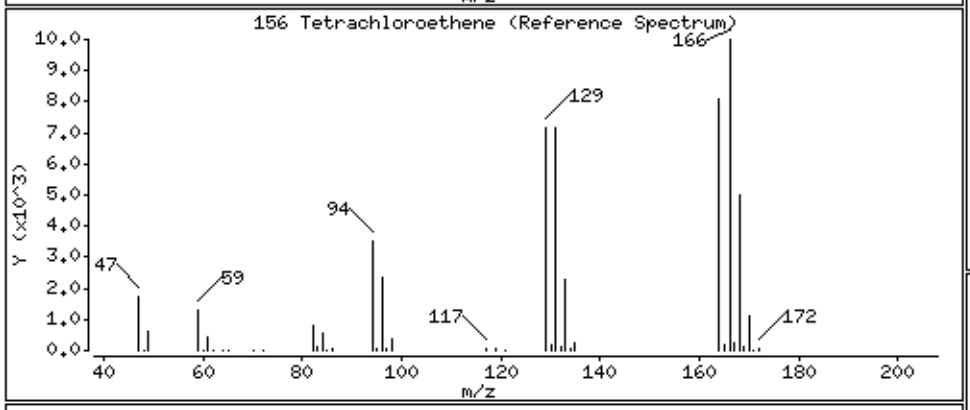
Column diameter: 0.25

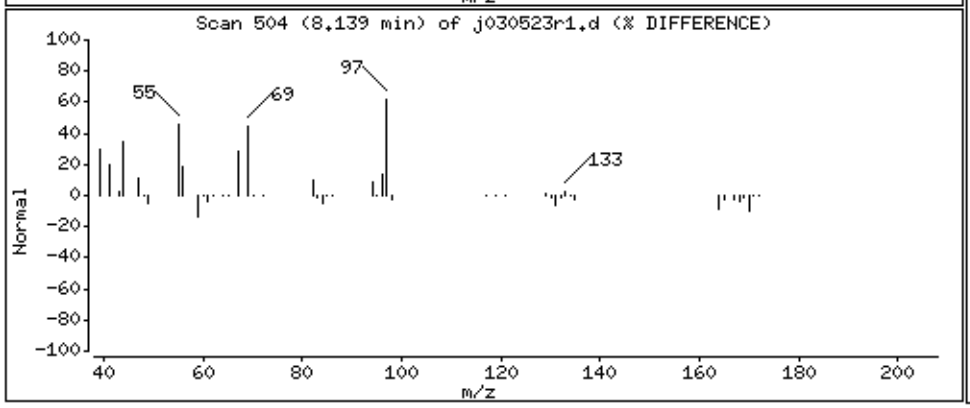
156 Tetrachloroethene

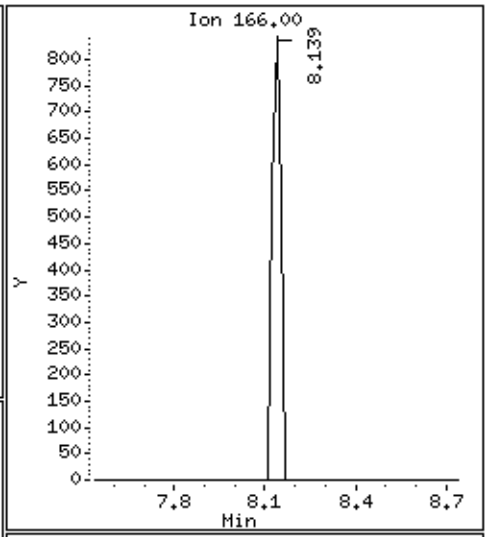
Concentration: 0.8464 PPBV

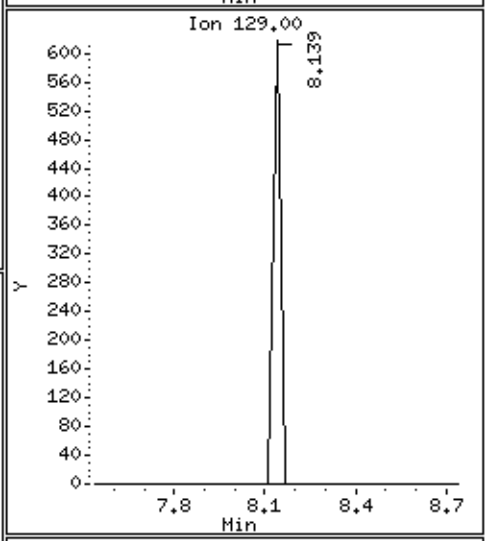


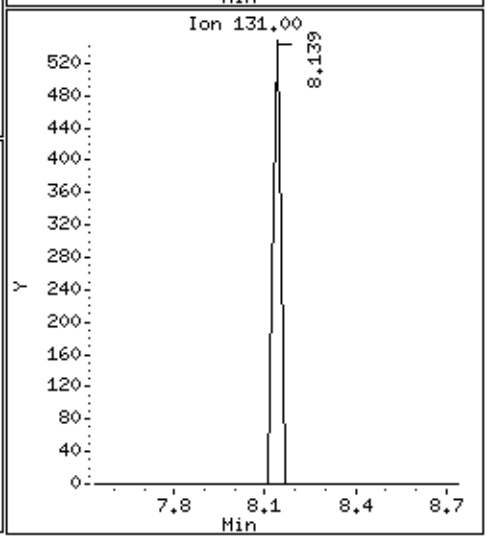












Data File: /chem/msdj.i/05mar15.b/j030523r1.d

Date : 06-MAR-2015 00:05

Client ID:

Instrument: msdj.i

Sample Info: 70ml 36415

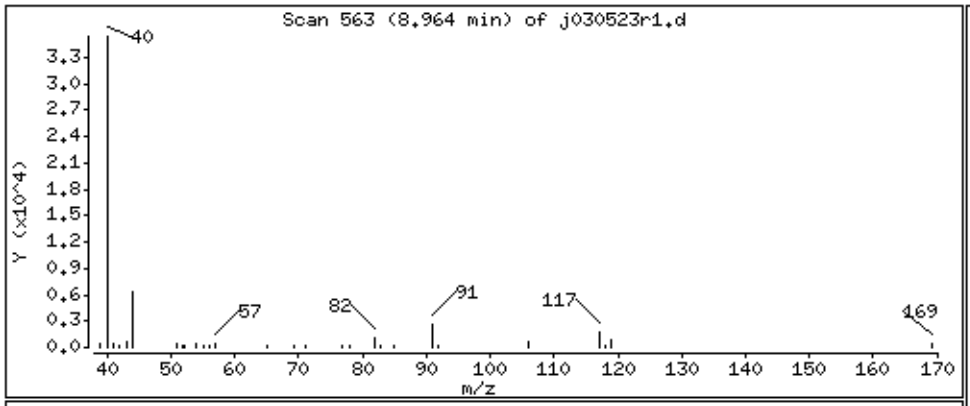
Operator: md

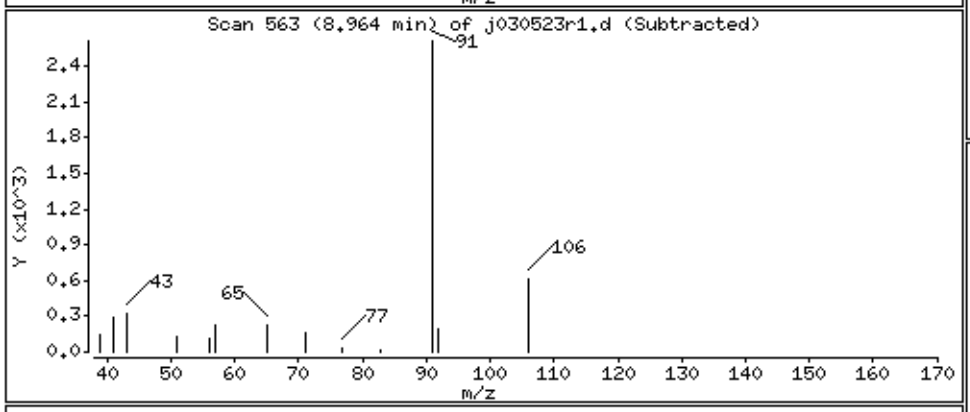
Column phase: RTX-624

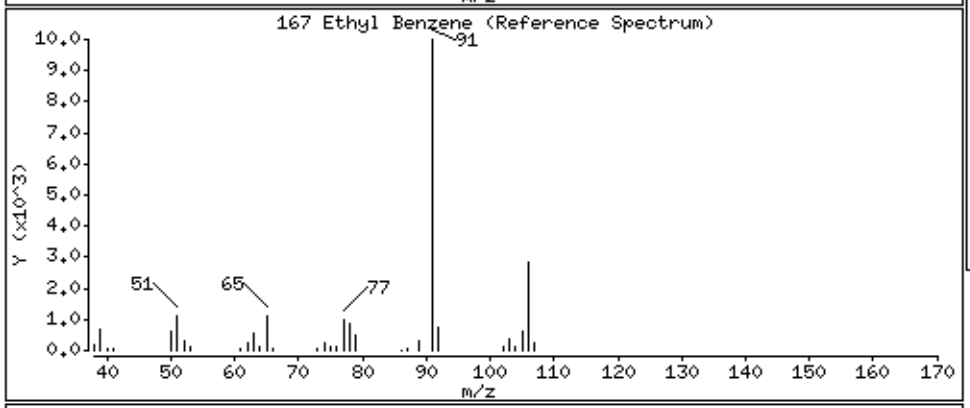
Column diameter: 0.25

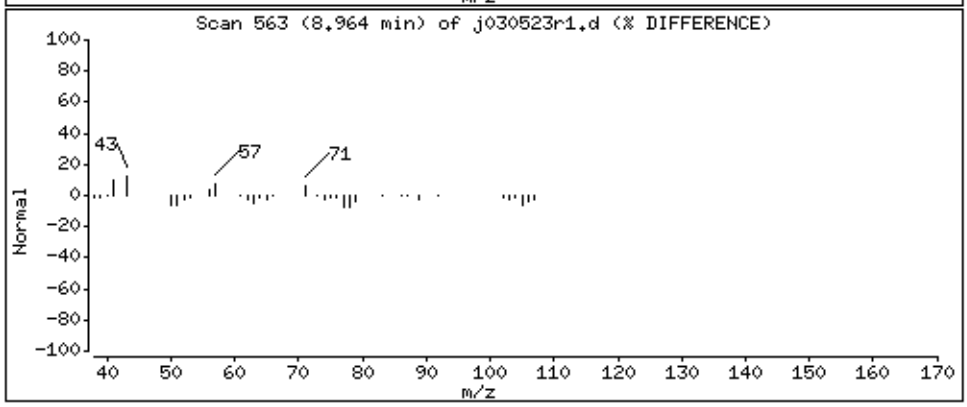
167 Ethyl Benzene

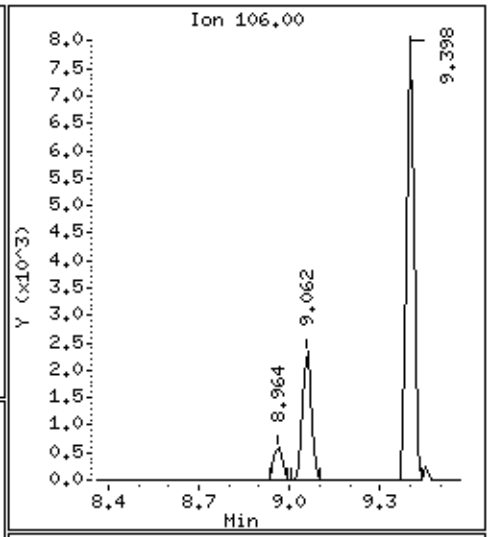
Concentration: 0.7388 PPBV

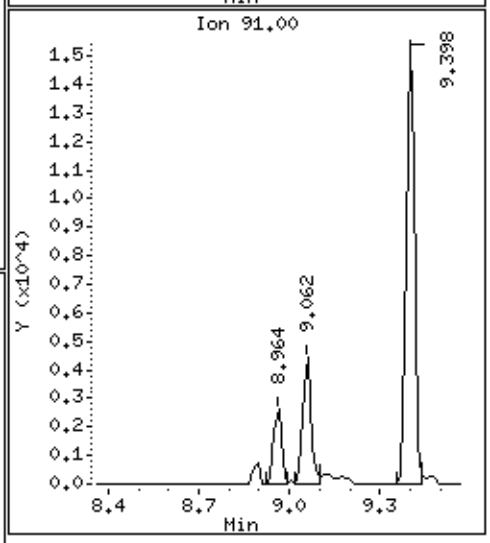












Data File: /chem/msdj.i/05mar15.b/j030523r1.d

Date : 06-MAR-2015 00:05

Client ID:

Instrument: msdj.i

Sample Info: 70ml 36415

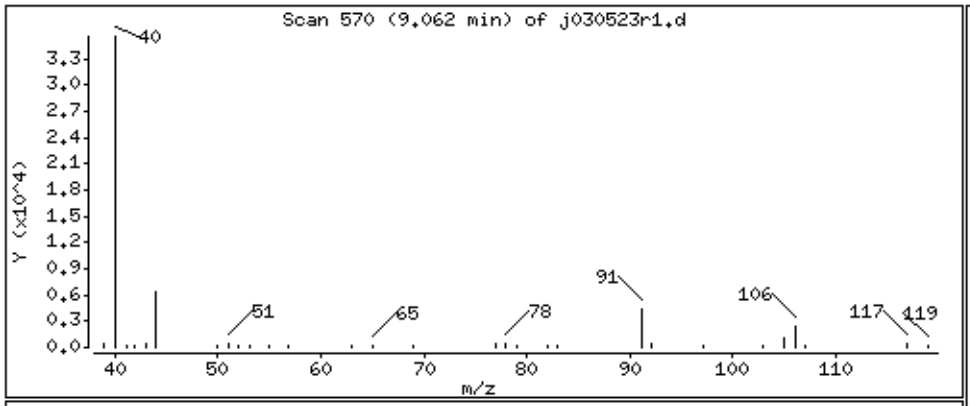
Operator: md

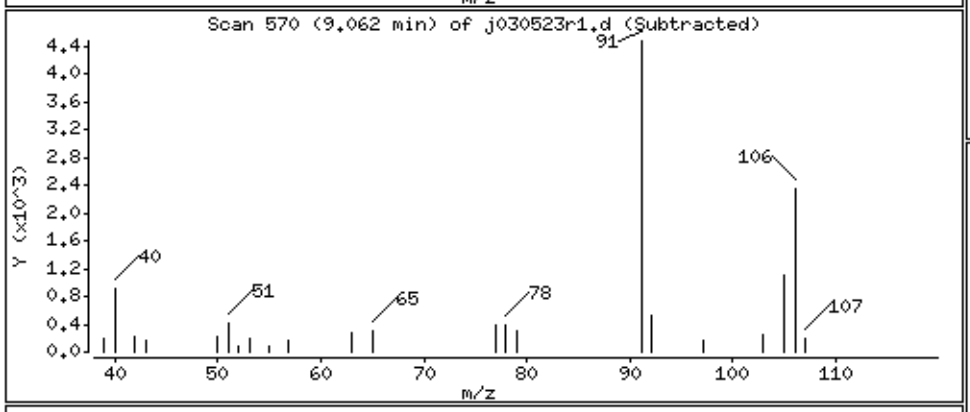
Column phase: RTX-624

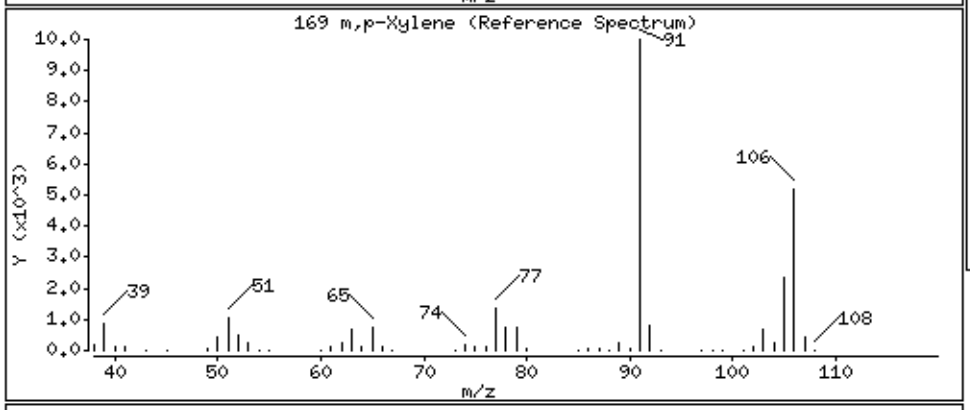
Column diameter: 0.25

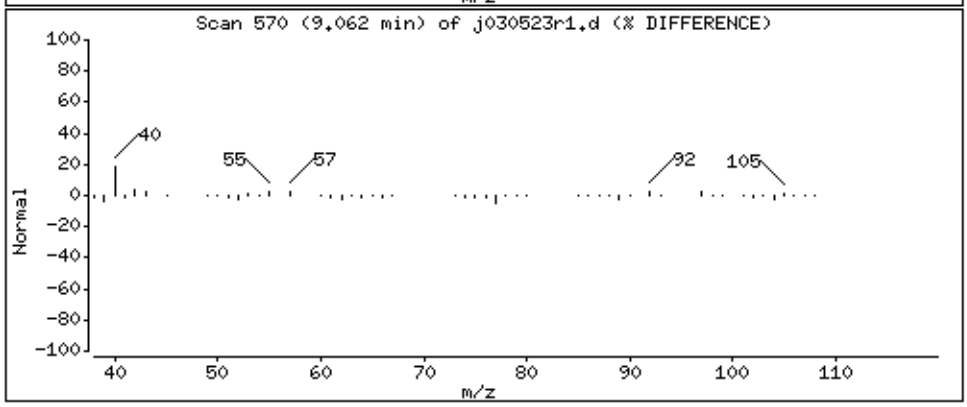
169 m,p-Xylene

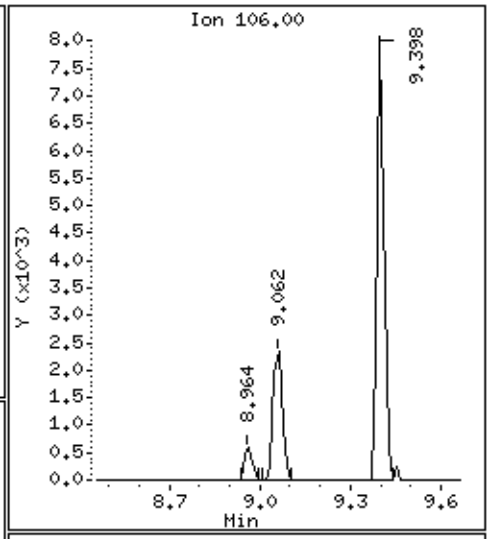
Concentration: 2.507 PPBV

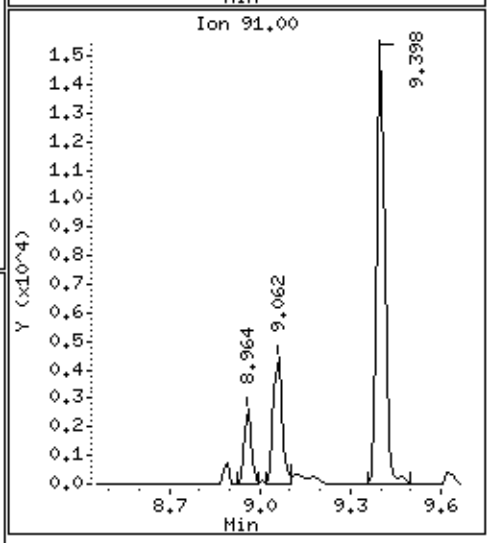












Data File: /chem/msdj.i/05mar15.b/j030523r1.d

Date : 06-MAR-2015 00:05

Client ID:

Instrument: msdj.i

Sample Info: 70ml 36415

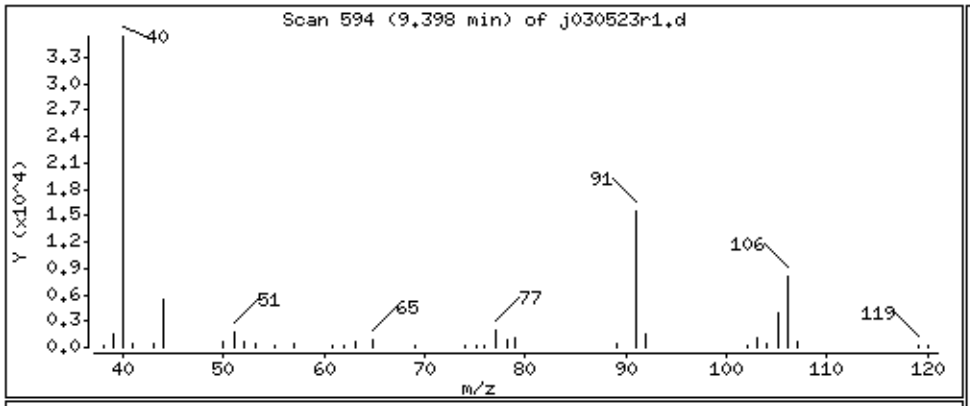
Operator: md

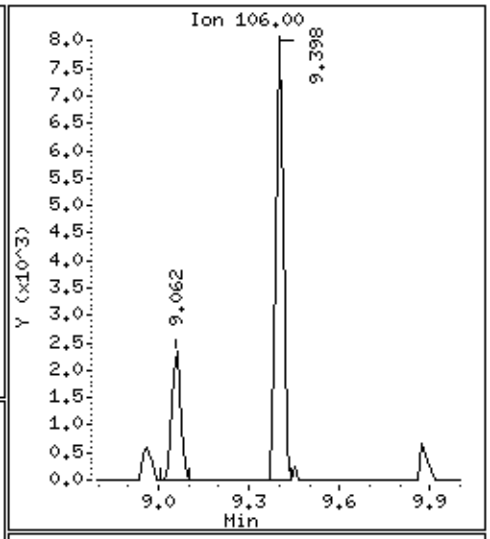
Column phase: RTX-624

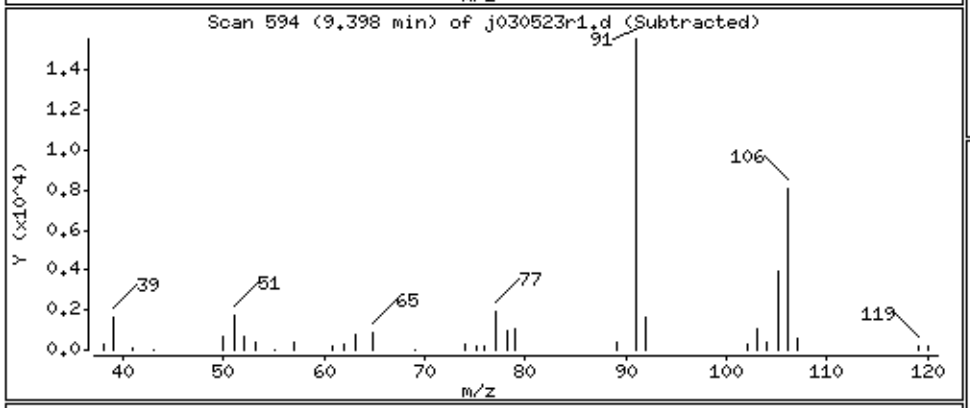
Column diameter: 0.25

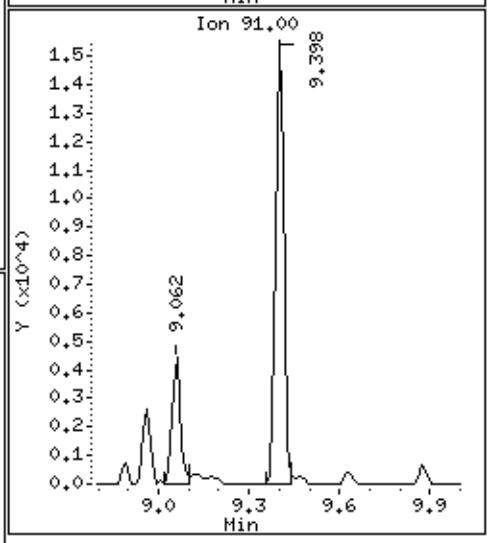
171 o-Xylene

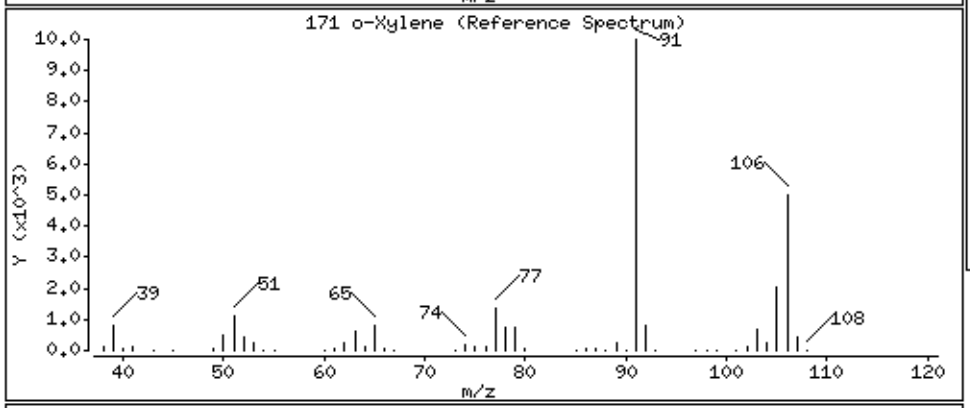
Concentration: 7.243 PPBV

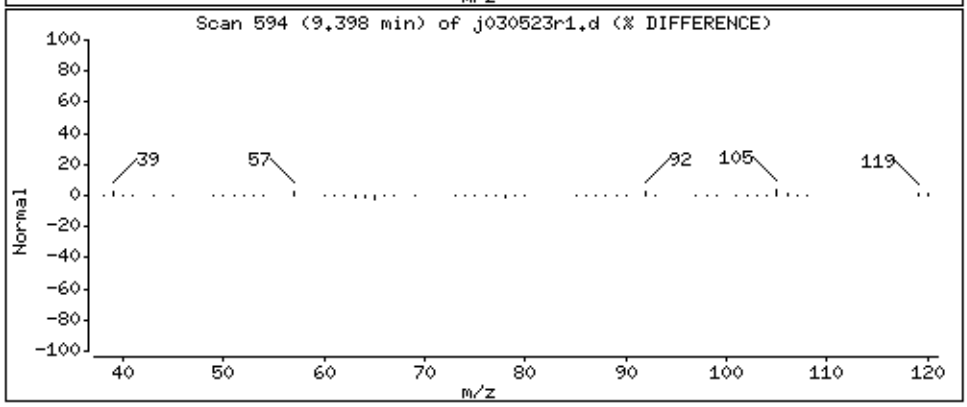












Data File: /chem/msdj.i/05mar15.b/j030523r1.d

Date : 06-MAR-2015 00:05

Client ID:

Instrument: msdj.i

Sample Info: 70ml 36415

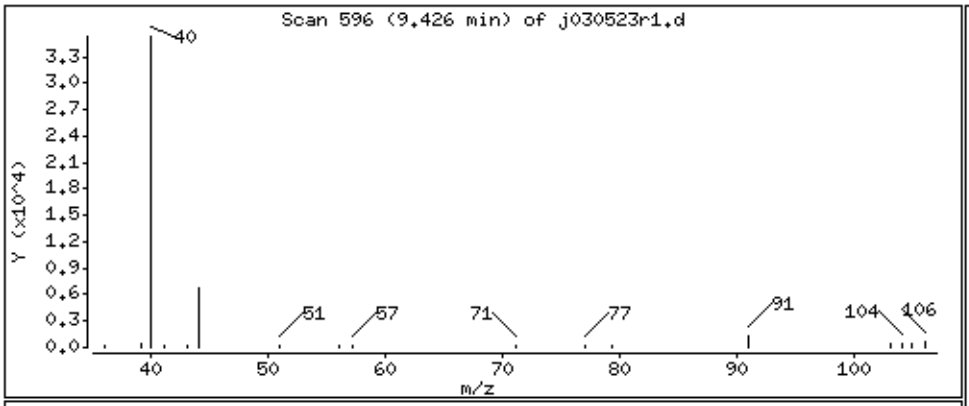
Operator: md

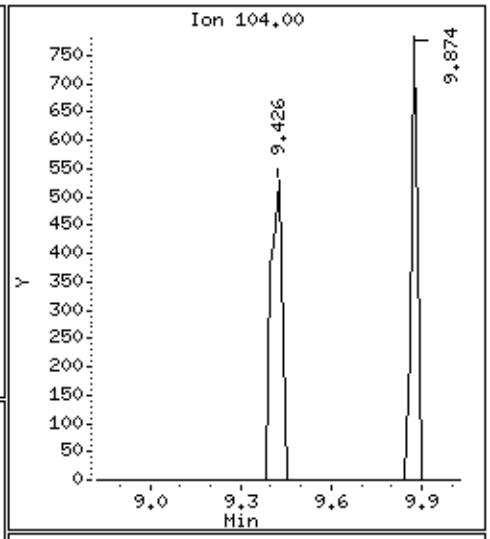
Column phase: RTX-624

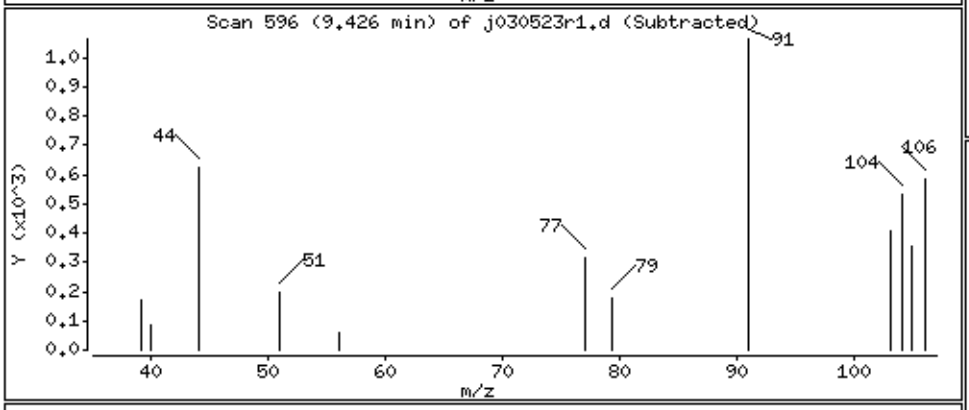
Column diameter: 0.25

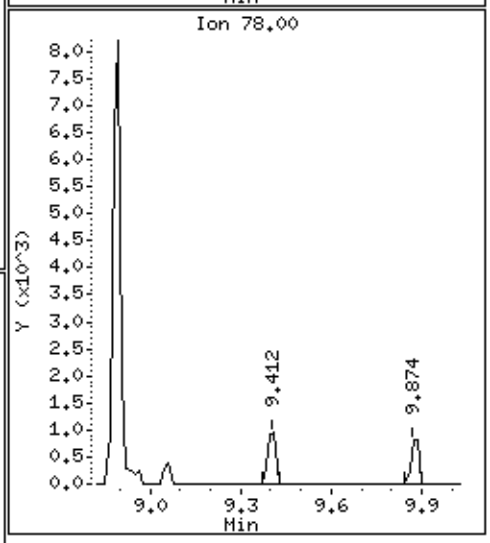
172 Styrene

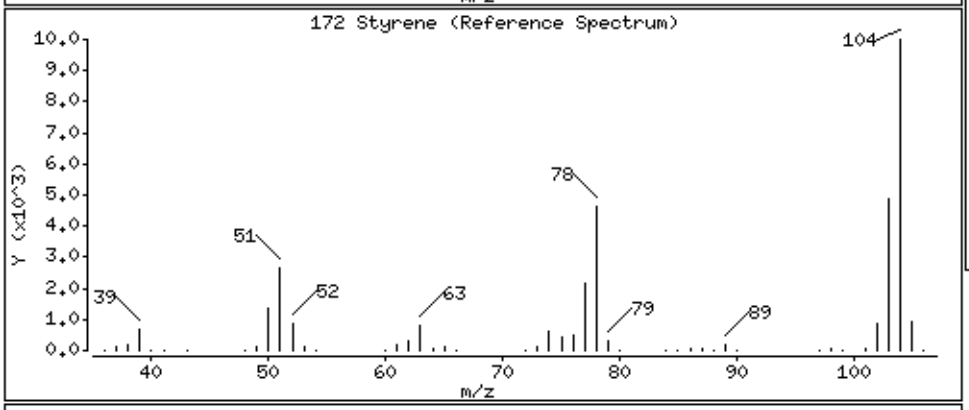
Concentration: 0.4284 PPBV

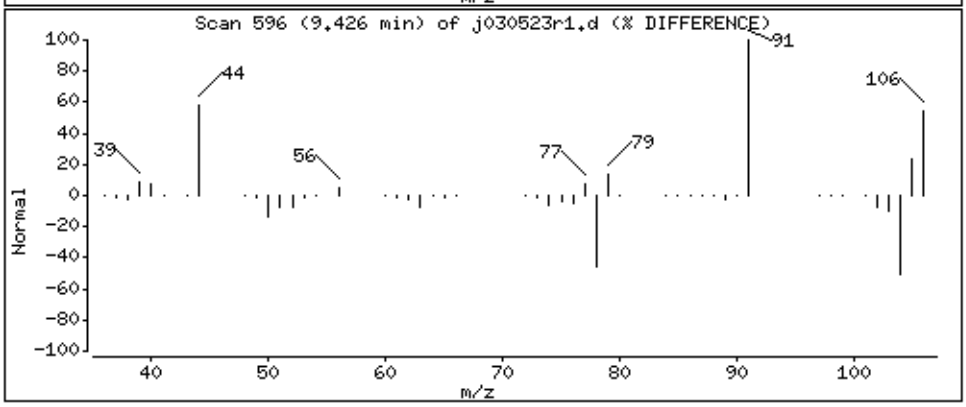












Data File: /chem/msdj.i/05mar15.b/j030523r1.d

Date : 06-MAR-2015 00:05

Client ID:

Instrument: msdj.i

Sample Info: 70ml 36415

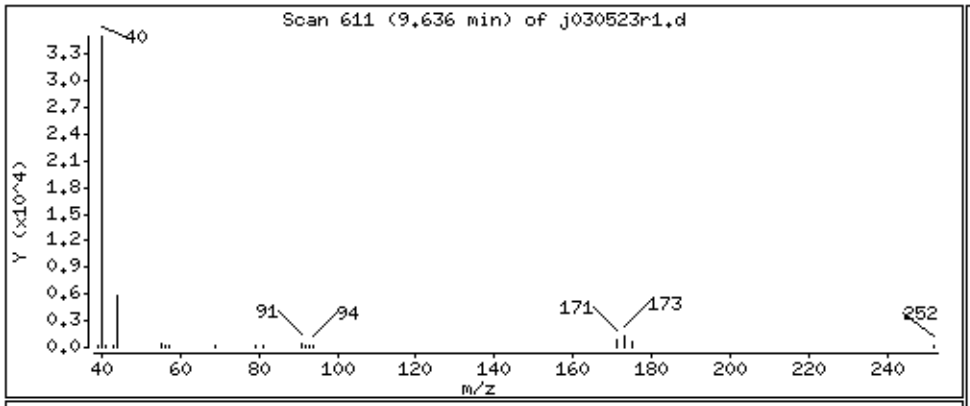
Operator: md

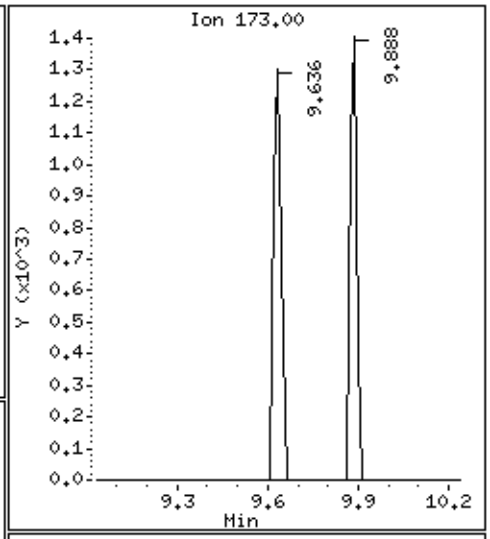
Column phase: RTX-624

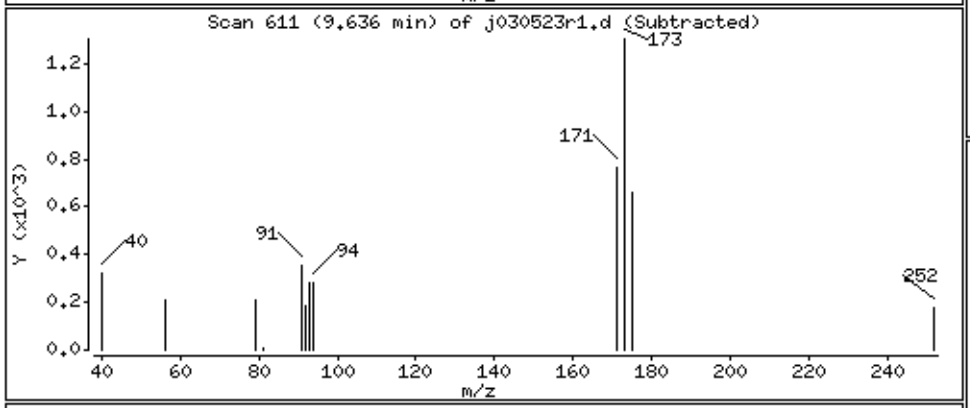
Column diameter: 0.25

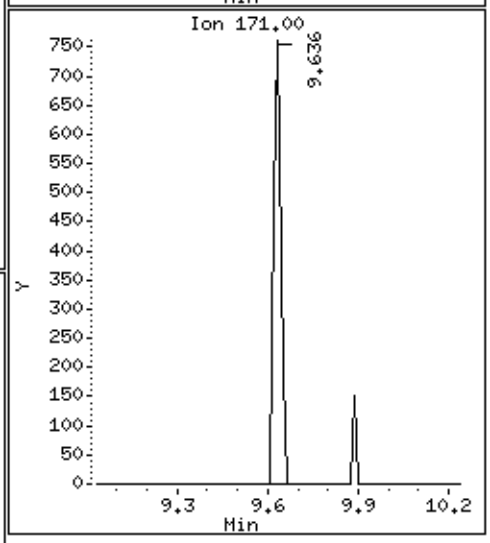
174 Bromoform

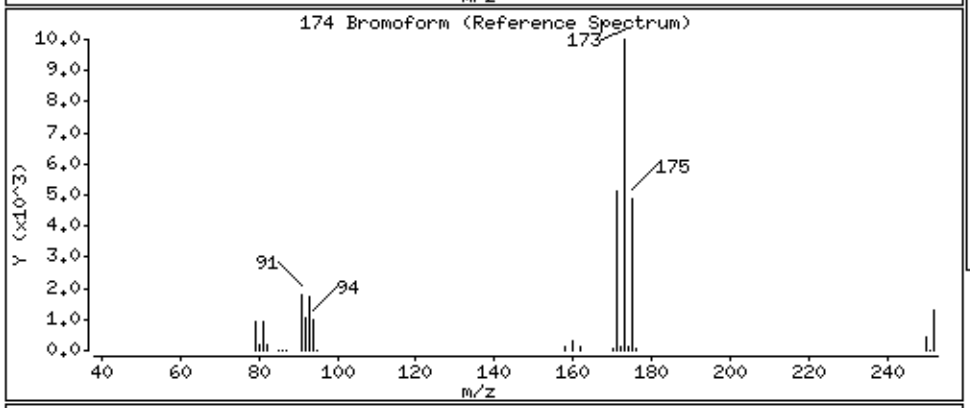
Concentration: 0.8728 PPBV

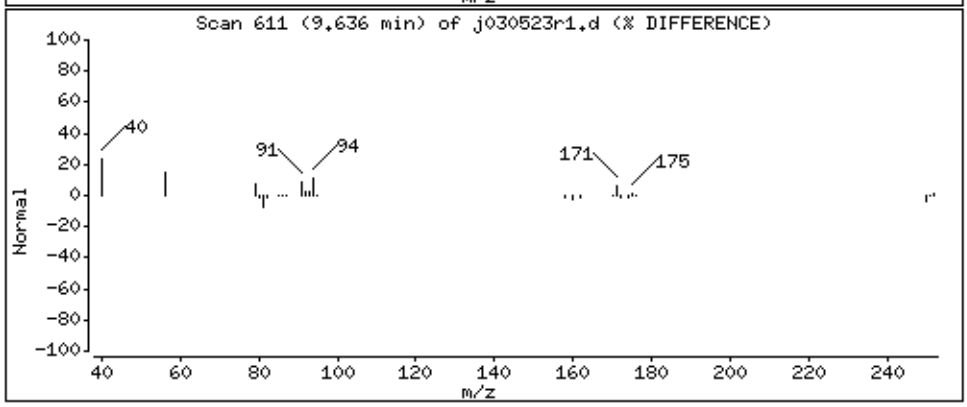












Data File: /chem/msdj.i/05mar15.b/j030523r1.d

Date : 06-MAR-2015 00:05

Client ID:

Instrument: msdj.i

Sample Info: 70ml 36415

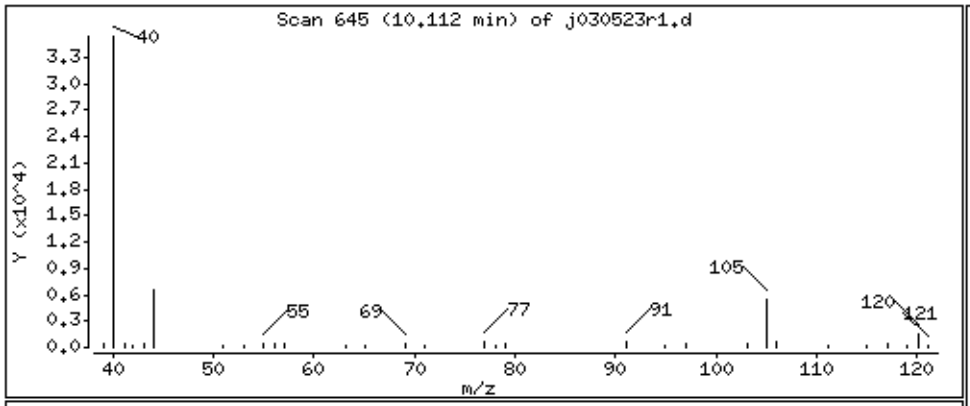
Operator: md

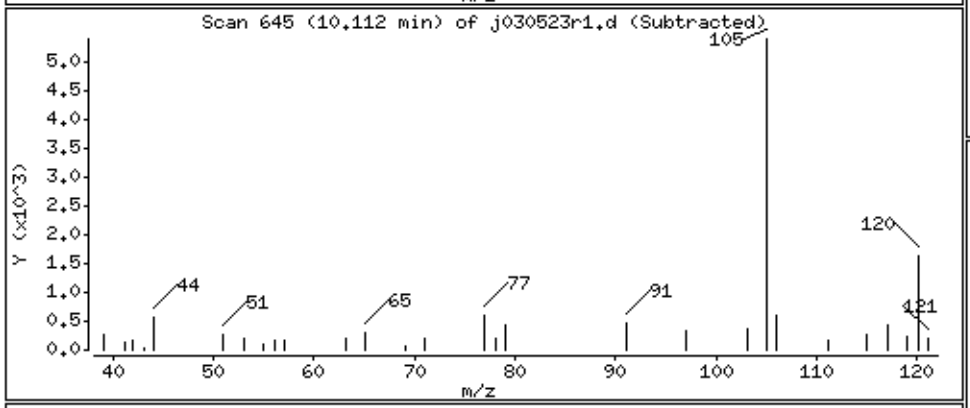
Column phase: RTX-624

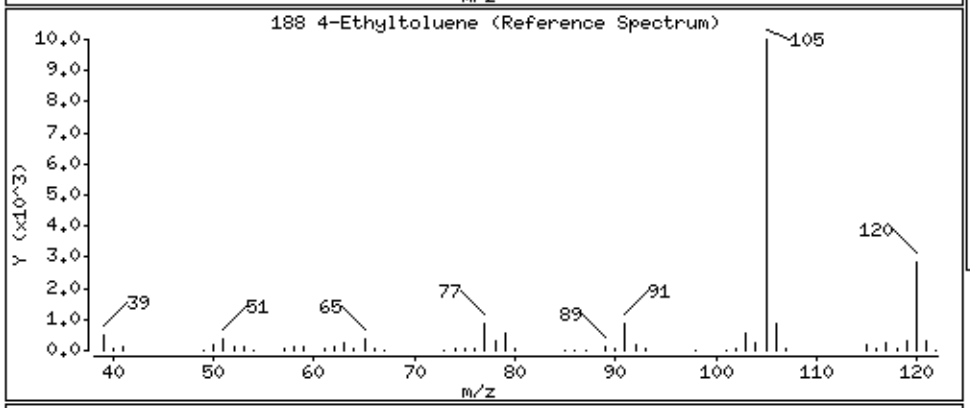
Column diameter: 0.25

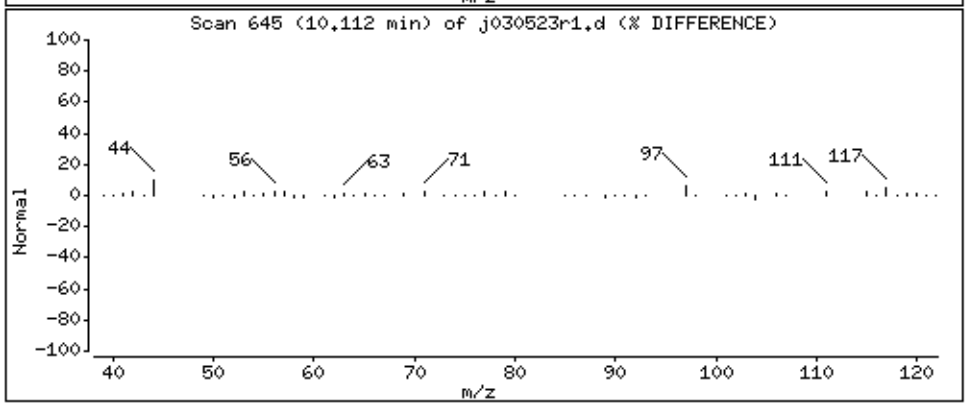
188 4-Ethyltoluene

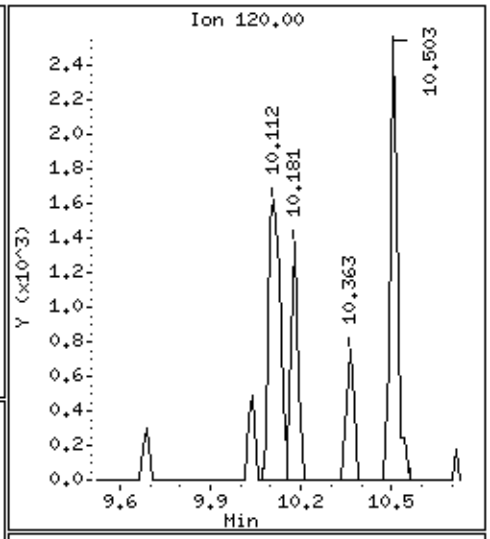
Concentration: 2.389 PPBV

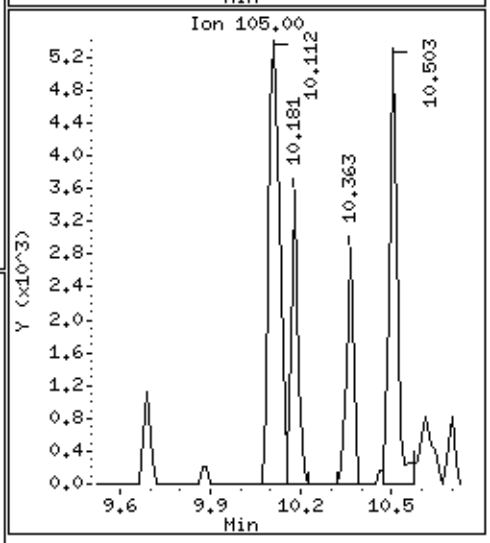












Data File: /chem/msdj.i/05mar15.b/j030523r1.d

Date : 06-MAR-2015 00:05

Client ID:

Instrument: msdj.i

Sample Info: 70ml 36415

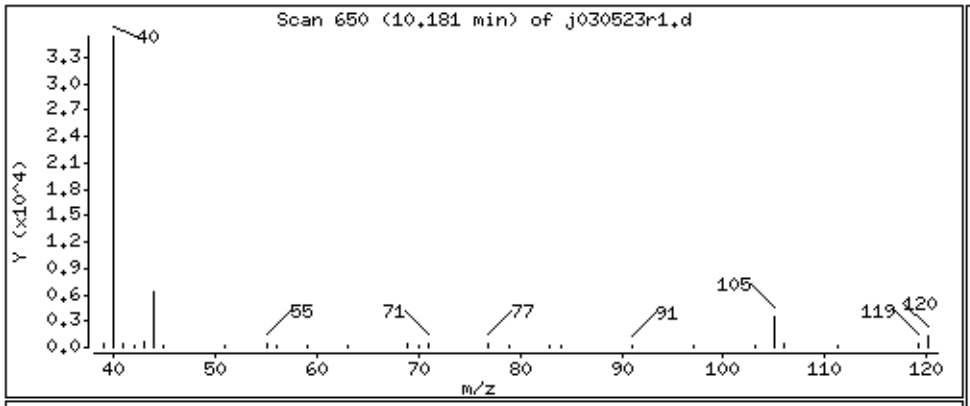
Operator: md

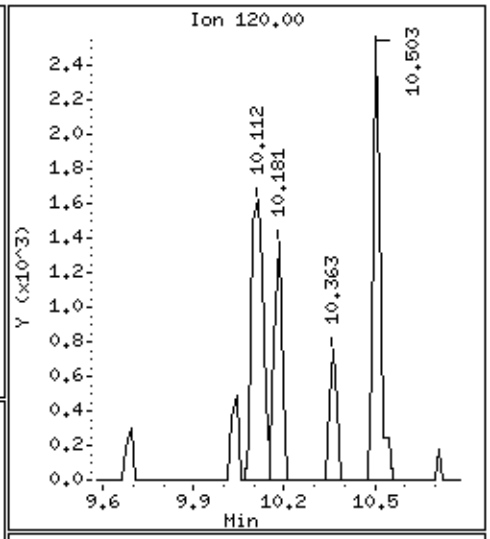
Column phase: RTX-624

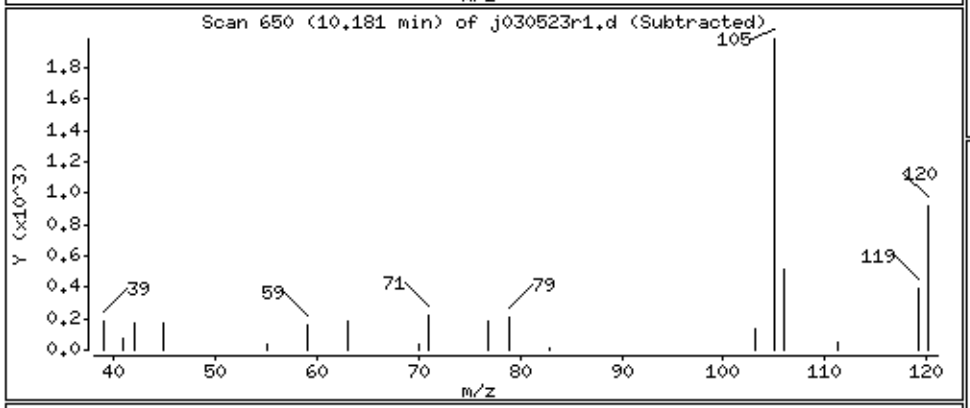
Column diameter: 0.25

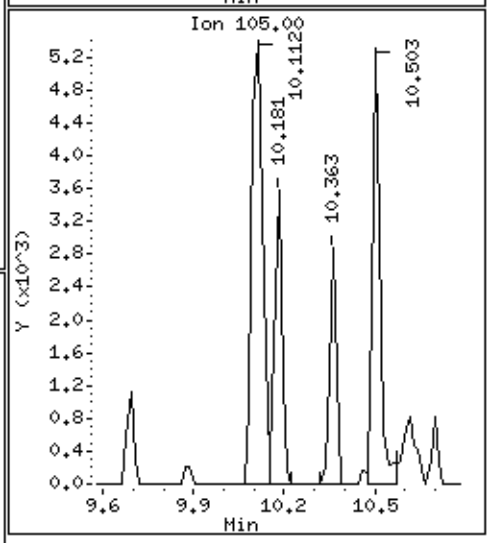
190 1,3,5-Trimethylbenzene

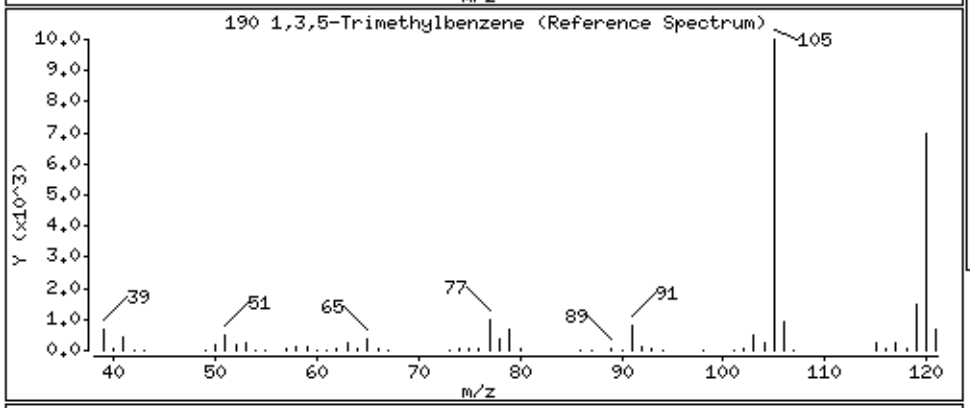
Concentration: 0.9764 PPBV

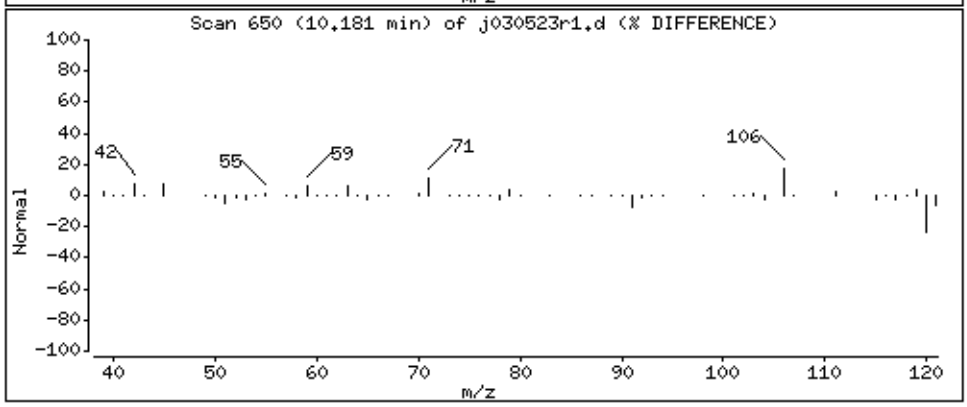












Data File: /chem/msdj.i/05mar15.b/j030523r1.d

Date : 06-MAR-2015 00:05

Client ID:

Instrument: msdj.i

Sample Info: 70ml 36415

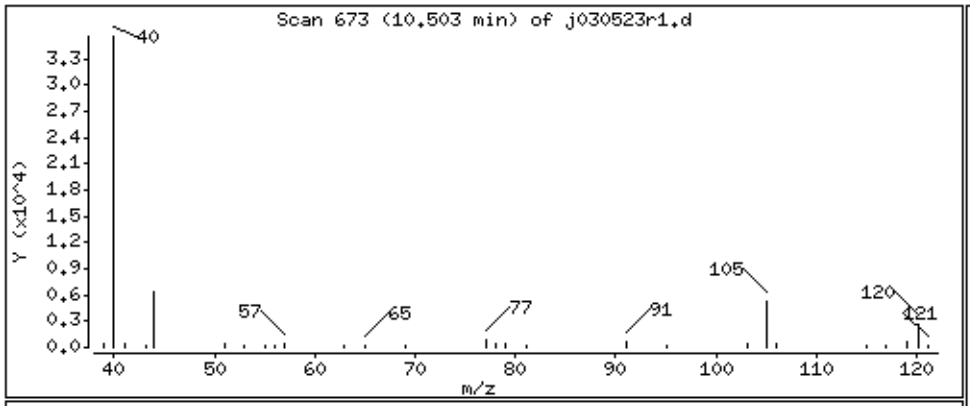
Operator: md

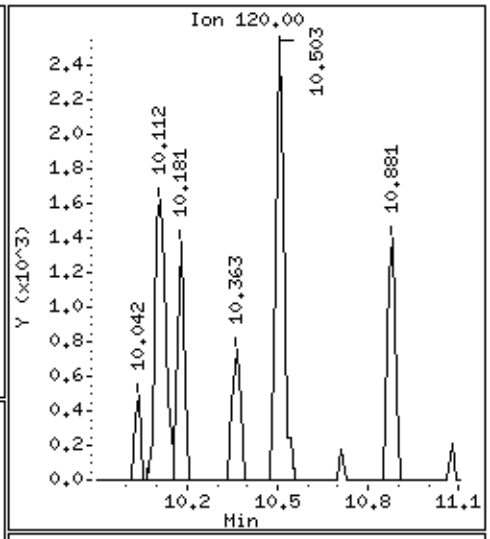
Column phase: RTX-624

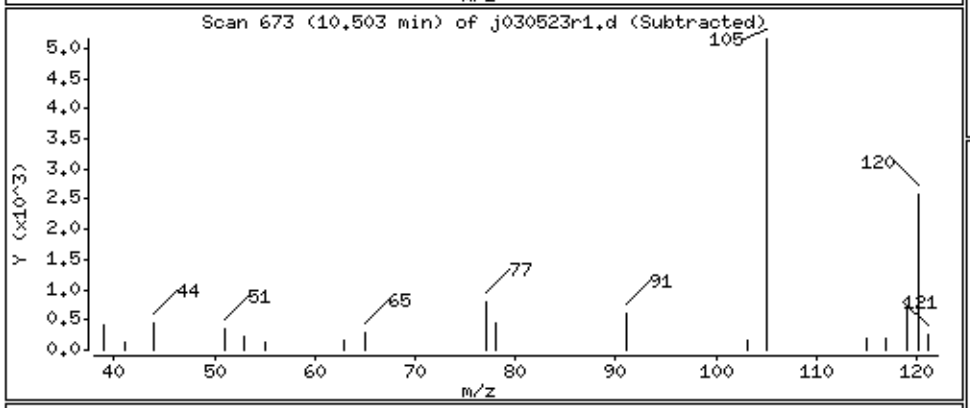
Column diameter: 0.25

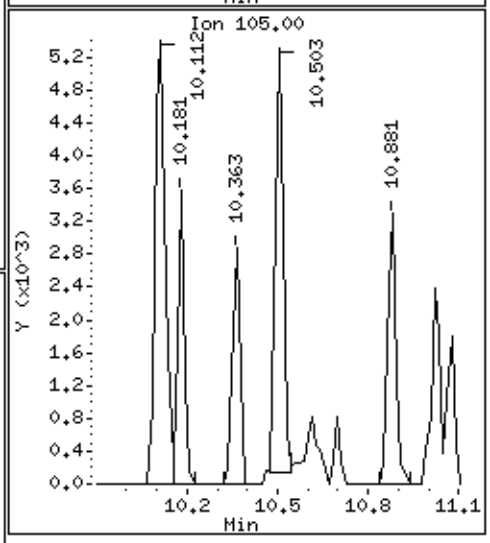
196 1,2,4-Trimethylbenzene

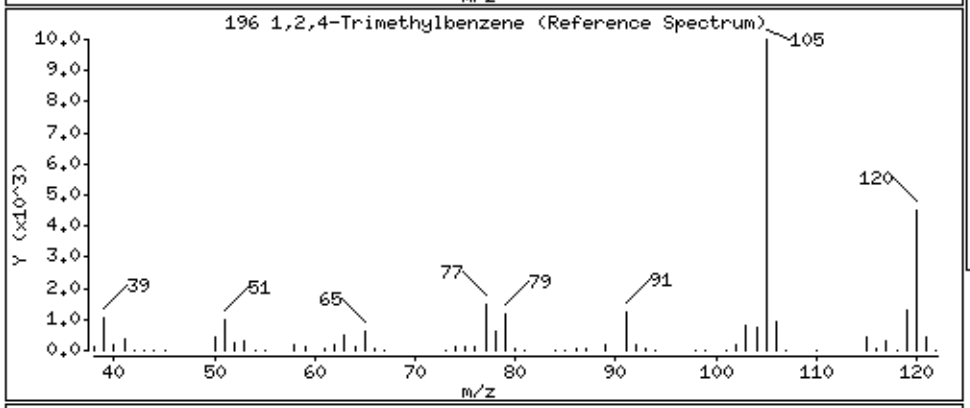
Concentration: 2.047 PPBV

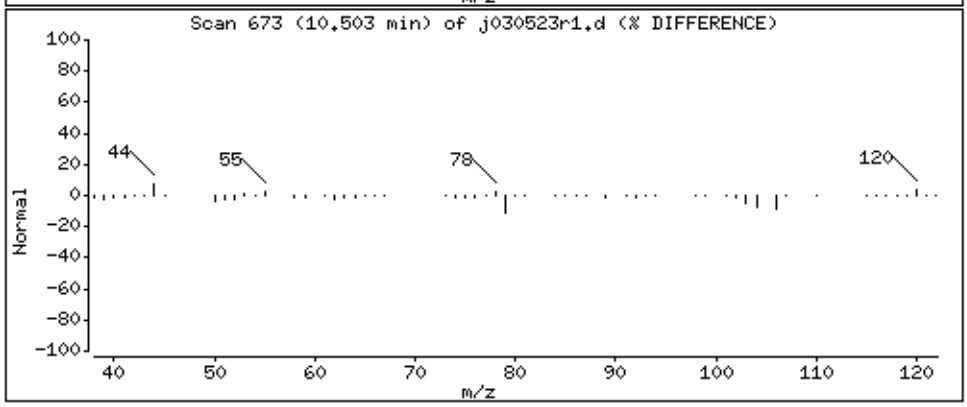












Data File: /chem/msdj.i/05mar15.b/j030523r1.d

Date : 06-MAR-2015 00:05

Client ID:

Instrument: msdj.i

Sample Info: 70ml 36415

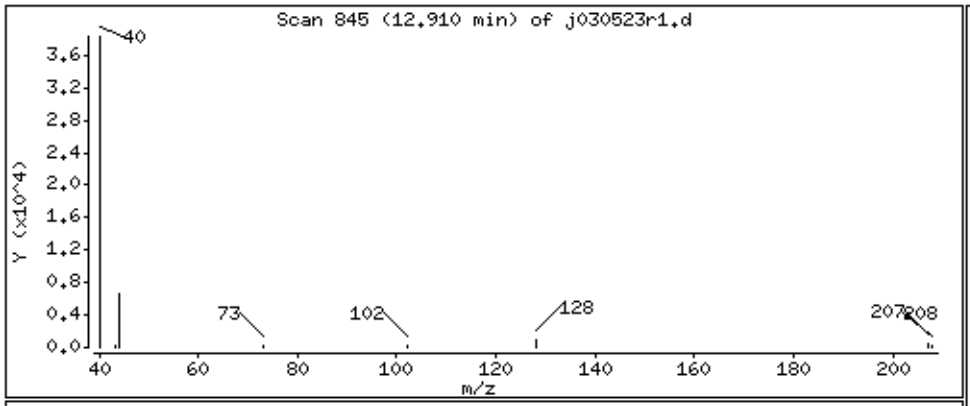
Operator: md

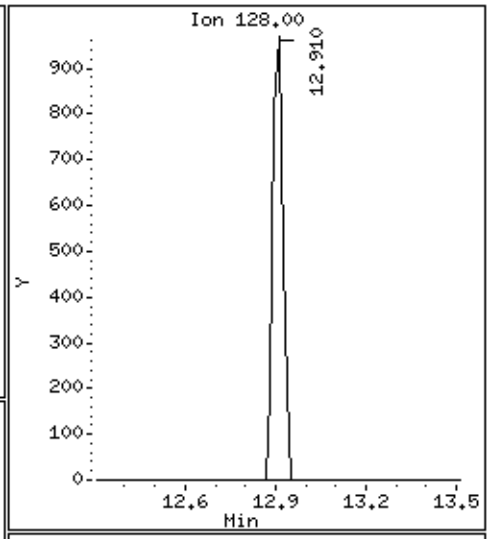
Column phase: RTX-624

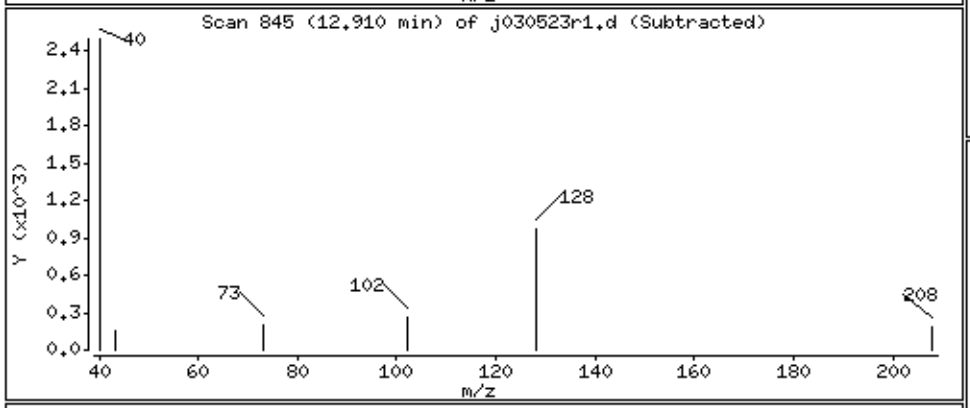
Column diameter: 0.25

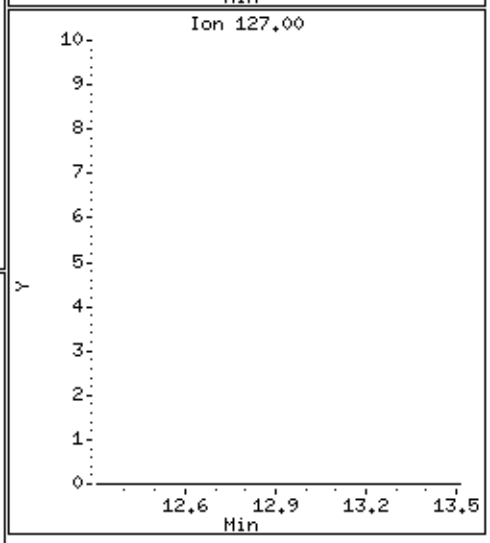
228 Naphthalene

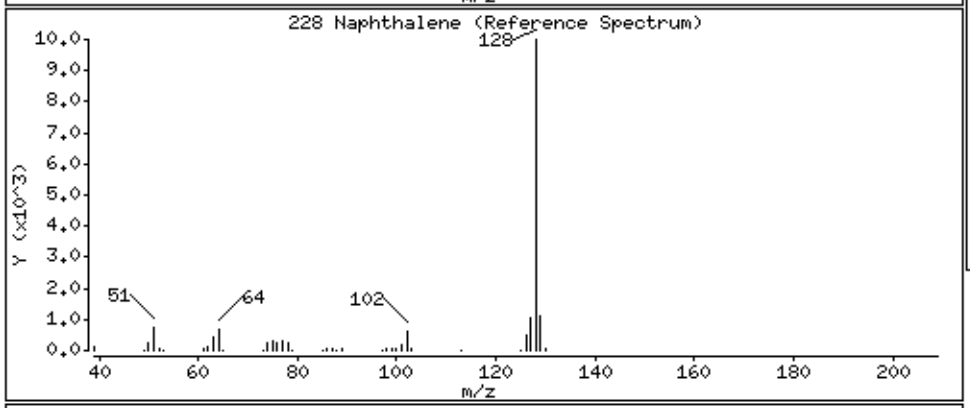
Concentration: 0.4890 PPBV

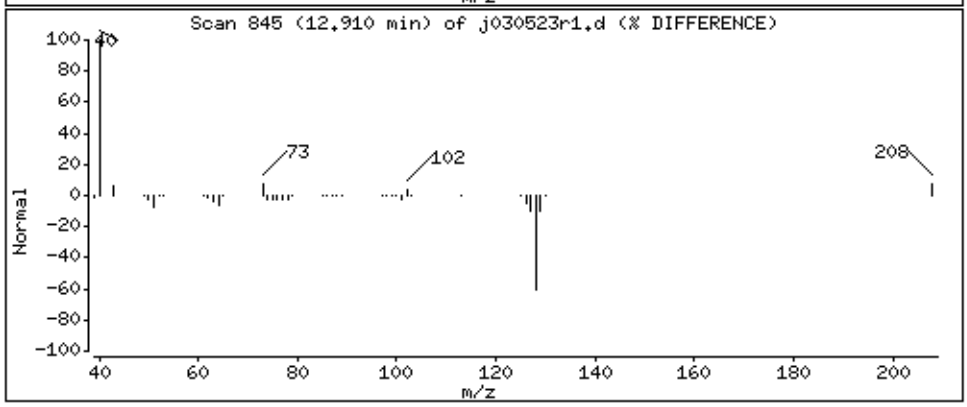












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Summary of Detected Compounds
EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: B6-2SS

Lab ID#: 1503058BR1-06A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	1.5	0.48 J	7.4	2.4 J
Freon 11	1.5	0.52 J	8.4	2.9 J
Ethanol	6.0	14	11	27
Acetone	15	160	36	390
2-Propanol	6.0	210	15	530
Carbon Disulfide	6.0	2.1 J	19	6.6 J
2-Butanone (Methyl Ethyl Ketone)	6.0	91	18	270
Tetrahydrofuran	1.5	18	4.4	53
Chloroform	1.5	2.8	7.3	14
Cyclohexane	1.5	0.34 J	5.1	1.2 J
2,2,4-Trimethylpentane	1.5	0.36 J	7.0	1.7 J
Benzene	1.5	0.32 J	4.8	1.0 J
4-Methyl-2-pentanone	1.5	3.3	6.1	14
Toluene	1.5	1.8	5.6	7.0
Tetrachloroethene	1.5	1.3 J	10	8.8 J
Ethyl Benzene	1.5	130	6.5	560
m,p-Xylene	1.5	410	6.5	1800
o-Xylene	1.5	86	6.5	370
Cumene	1.5	1.0 J	7.3	4.9 J
Propylbenzene	1.5	0.87 J	7.3	4.3 J
4-Ethyltoluene	1.5	4.4	7.3	22
1,3,5-Trimethylbenzene	1.5	1.7	7.3	8.5
1,2,4-Trimethylbenzene	1.5	17	7.3	82
Naphthalene	3.0	27	16	140

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Client Sample ID: B6-2SS

Lab ID#: 1503058BR1-06A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**j030521r1**	**Date of Collection:**	**3/2/15 3:08:00 PM**
Dil. Factor:	**2.99**	**Date of Analysis:**	**3/5/15 11:12 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	1.5	0.48 J	7.4	2.4 J
Freon 114	1.5	Not Detected	10	Not Detected
Chloromethane	15	Not Detected	31	Not Detected
Vinyl Chloride	1.5	Not Detected	3.8	Not Detected
1,3-Butadiene	1.5	Not Detected	3.3	Not Detected
Bromomethane	15	Not Detected	58	Not Detected
Chloroethane	6.0	Not Detected	16	Not Detected
Freon 11	1.5	0.52 J	8.4	2.9 J
Ethanol	6.0	14	11	27
Freon 113	1.5	Not Detected	11	Not Detected
1,1-Dichloroethene	1.5	Not Detected	5.9	Not Detected
Acetone	15	160	36	390
2-Propanol	6.0	210	15	530
Carbon Disulfide	6.0	2.1 J	19	6.6 J
3-Chloropropene	6.0	Not Detected	19	Not Detected
Methylene Chloride	15	Not Detected	52	Not Detected
Methyl tert-butyl ether	1.5	Not Detected	5.4	Not Detected
trans-1,2-Dichloroethene	1.5	Not Detected	5.9	Not Detected
Hexane	1.5	Not Detected	5.3	Not Detected
1,1-Dichloroethane	1.5	Not Detected	6.0	Not Detected
2-Butanone (Methyl Ethyl Ketone)	6.0	91	18	270
cis-1,2-Dichloroethene	1.5	Not Detected	5.9	Not Detected
Tetrahydrofuran	1.5	18	4.4	53
Chloroform	1.5	2.8	7.3	14
1,1,1-Trichloroethane	1.5	Not Detected	8.2	Not Detected
Cyclohexane	1.5	0.34 J	5.1	1.2 J
Carbon Tetrachloride	1.5	Not Detected	9.4	Not Detected
2,2,4-Trimethylpentane	1.5	0.36 J	7.0	1.7 J
Benzene	1.5	0.32 J	4.8	1.0 J
1,2-Dichloroethane	1.5	Not Detected	6.0	Not Detected
Heptane	1.5	Not Detected	6.1	Not Detected
Trichloroethene	1.5	Not Detected	8.0	Not Detected
1,2-Dichloropropane	1.5	Not Detected	6.9	Not Detected
1,4-Dioxane	6.0	Not Detected	22	Not Detected
Bromodichloromethane	1.5	Not Detected	10	Not Detected
cis-1,3-Dichloropropene	1.5	Not Detected	6.8	Not Detected
4-Methyl-2-pentanone	1.5	3.3	6.1	14
Toluene	1.5	1.8	5.6	7.0
trans-1,3-Dichloropropene	1.5	Not Detected	6.8	Not Detected
1,1,2-Trichloroethane	1.5	Not Detected	8.2	Not Detected
Tetrachloroethene	1.5	1.3 J	10	8.8 J
2-Hexanone	6.0	Not Detected	24	Not Detected

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Client Sample ID: B6-2SS

Lab ID#: 1503058BR1-06A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**j030521r1**	**Date of Collection:**	**3/2/15 3:08:00 PM**
Dil. Factor:	**2.99**	**Date of Analysis:**	**3/5/15 11:12 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Dibromochloromethane	1.5	Not Detected	13	Not Detected
1,2-Dibromoethane (EDB)	1.5	Not Detected	11	Not Detected
Chlorobenzene	1.5	Not Detected	6.9	Not Detected
Ethyl Benzene	1.5	130	6.5	560
m,p-Xylene	1.5	410	6.5	1800
o-Xylene	1.5	86	6.5	370
Styrene	1.5	Not Detected	6.4	Not Detected
Bromoform	1.5	Not Detected	15	Not Detected
Cumene	1.5	1.0 J	7.3	4.9 J
1,1,2,2-Tetrachloroethane	1.5	Not Detected	10	Not Detected
Propylbenzene	1.5	0.87 J	7.3	4.3 J
4-Ethyltoluene	1.5	4.4	7.3	22
1,3,5-Trimethylbenzene	1.5	1.7	7.3	8.5
1,2,4-Trimethylbenzene	1.5	17	7.3	82
1,3-Dichlorobenzene	1.5	Not Detected	9.0	Not Detected
1,4-Dichlorobenzene	1.5	Not Detected	9.0	Not Detected
alpha-Chlorotoluene	1.5	Not Detected	7.7	Not Detected
1,2-Dichlorobenzene	1.5	Not Detected	9.0	Not Detected
1,2,4-Trichlorobenzene	6.0	Not Detected	44	Not Detected
Hexachlorobutadiene	6.0	Not Detected	64	Not Detected
Naphthalene	3.0	27	16	140

J = Estimated value.

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

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

Eurofins Air Toxics Inc.

EPA TO-15/MODIFIED EPA TO-14A

Data file : /chem/msdj.i/05mar15.b/j030521r1.d
Lab Smp Id: 1503058Br1-06A
Inj Date : 05-MAR-2015 23:12
Operator : md Inst ID: msdj.i
Smp Info : 150ml 33398
Misc Info : 3.1 Hg->14.9 psi
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msdj.i/05mar15.b/j15q0304a.m
Meth Date : 26-Jun-2015 14:00 dbailey Quant Type: ISTD
Cal Date : 04-MAR-2015 12:36 Cal File: j030408.d
Als bottle: 3
Dil Factor: 2.99000
Integrator: HP RTE Compound Sublist: TO15Nmdl.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Name	Value	Description
DF	2.99000	Dilution Factor

RT	EXP RT	(REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
* 98 Bromochloromethane							CAS #: 74-97-5	
5.480	5.494	(1.000)	130	124559	25.0000		80.00- 120.00	100.00
5.480	5.494	(1.000)	128	93469			48.40- 108.40	75.04
5.480	5.494	(1.000)	49	137400			84.80- 144.80	110.31
* 123 1,4-Difluorobenzene							CAS #: 540-36-3	
6.404	6.404	(1.000)	114	520310	25.0000		80.00- 120.00	100.00
6.404	6.404	(1.000)	88	75238			0.00- 45.38	14.46
* 163 Chlorobenzene-d5							CAS #: 3114-55-4	
8.894	8.894	(1.000)	117	505538	25.0000		80.00- 120.00	100.00
8.894	8.894	(1.000)	82	252445			20.55- 80.55	49.94
$ 117 1,2-Dichloroethane-d4							CAS #: 17060-07-0	
6.040	6.054	(1.102)	65	141765	24.8394	24.839	80.00- 120.00	100.00
6.040	6.054	(1.102)	67	76327			28.68- 88.68	53.84

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
$ 146 Toluene-d8						CAS #: 2037-26-5	
7.635	7.635 (1.192)	98	525271	24.7406	24.740	80.00- 120.00	100.00
7.635	7.635 (1.192)	70	51594			0.00- 40.26	9.82
7.635	7.635 (1.192)	100	344729			38.16- 98.16	65.63
$ 177 4-Bromofluorobenzene						CAS #: 460-00-4	
9.888	9.888 (1.112)	174	318985	24.2927	24.293	80.00- 120.00	100.00
9.874	9.888 (1.110)	95	346536			82.57- 142.57	108.64
9.888	9.888 (1.112)	176	315240			67.45- 127.45	98.83
11 Freon 12						CAS #: 75-71-8	
1.367	1.409 (0.249)	85	2019	0.16112	0.4817	80.00- 120.00	100.00(a)
1.381	1.409 (0.252)	87	266			2.74- 62.74	13.18
35 Freon 11						CAS #: 75-69-4	
2.444	2.486 (0.446)	101	2348	0.17281	0.5167	80.00- 120.00	100.00(a)
2.444	2.486 (0.446)	103	1644			34.53- 94.53	70.04
42 Ethanol						CAS #: 64-17-5	
2.822	2.850 (0.515)	45	10369	4.87182	14.567	80.00- 120.00	100.00
2.822	2.850 (0.515)	43	3329			0.00- 48.78	32.11
2.822	2.850 (0.515)	46	4032			9.14- 69.14	38.89
52 Acetone						CAS #: 67-64-1	
3.325	3.354 (0.607)	58	132483	55.1456	164.88	80.00- 120.00	100.00
3.325	3.354 (0.607)	43	395478			270.02- 330.02	298.51
56 Carbon Disulfide						CAS #: 75-15-0	
3.395	3.424 (0.620)	76	11177	0.71242	2.130	80.00- 120.00	100.00(a)
57 2-Propanol						CAS #: 67-63-0	
3.507	3.536 (0.640)	45	634324	71.8756	214.91	80.00- 120.00	100.00
3.507	3.536 (0.640)	43	155175			0.00- 47.69	24.46
3.521	3.536 (0.643)	59	26599			0.00- 33.85	4.19
92 2-Butanone						CAS #: 78-93-3	
5.270	5.284 (0.962)	72	94700	30.5213	91.259	80.00- 120.00	100.00
5.270	5.284 (0.962)	43	358170			345.28- 405.28	378.21
5.270	5.284 (0.962)	57	28398			0.64- 60.64	29.99
99 Tetrahydrofuran						CAS #: 109-99-9	
5.480	5.494 (1.000)	42	41129	5.98478	17.894	80.00- 120.00	100.00
5.480	5.494 (1.000)	71	17654			10.18- 70.18	42.92
5.480	5.494 (1.000)	72	18808			13.63- 73.63	45.73
100 Chloroform						CAS #: 67-66-3	
5.550	5.564 (1.013)	83	11549	0.93385	2.792	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
100 Chloroform (continued)							
5.550	5.564 (1.013)	85	7904			36.39- 96.39	68.45
102 Cyclohexane					CAS #: 110-82-7		
5.634	5.662 (1.028)	84	989	0.11570	0.3459	80.00- 120.00	100.00(a)
5.648	5.662 (1.031)	56	2390			85.96- 145.96	241.67
5.634	5.662 (1.028)	41	1992			27.64- 87.64	201.42
113 2,2,4-Trimethylpentane					CAS #: 540-84-1		
5.984	5.998 (1.092)	57	3112	0.12079	0.3612	80.00- 120.00	100.00(a)
5.984	5.998 (1.092)	56	1796			0.00- 59.67	57.74
5.984	5.998 (1.092)	41	2459			0.00- 50.74	79.04
116 Benzene					CAS #: 71-43-2		
6.012	6.026 (0.939)	78	2030	0.10867	0.3249	80.00- 120.00	100.00(a)
6.012	6.026 (0.939)	77	582			0.00- 52.91	28.69
145 4-Methyl-2-pentanone					CAS #: 108-10-1		
7.565	7.565 (1.181)	58	7037	1.11757	3.342	80.00- 120.00	100.00
7.565	7.565 (1.181)	43	16811			220.64- 280.64	238.89
7.565	7.565 (1.181)	85	2956			17.04- 77.04	42.01
147 Toluene					CAS #: 108-88-3		
7.691	7.691 (1.201)	91	15978	0.61952	1.852	80.00- 120.00	100.00
7.691	7.691 (1.201)	92	9605			27.98- 87.98	60.12
156 Tetrachloroethene					CAS #: 127-18-4		
8.139	8.139 (0.915)	166	6015	0.43263	1.294	80.00- 120.00	100.00(a)
8.139	8.139 (0.915)	129	3460			41.30- 101.30	57.51
8.139	8.139 (0.915)	131	3942			39.67- 99.67	65.54
167 Ethyl Benzene					CAS #: 100-41-4		
8.964	8.964 (1.008)	106	497384	43.4001	129.77	80.00- 120.00	100.00
8.964	8.964 (1.008)	91	1519263			278.96- 338.96	305.45
169 m,p-Xylene					CAS #: 108-38-3		
9.062	9.062 (1.019)	106	1946590	137.088	409.89	80.00- 120.00	100.00
9.062	9.062 (1.019)	91	3783474			158.57- 218.57	194.36
171 o-Xylene					CAS #: 95-47-6		
9.398	9.398 (1.057)	106	386034	28.8820	86.357	80.00- 120.00	100.00
9.398	9.398 (1.057)	91	796457			173.40- 233.40	206.32
175 Cumene					CAS #: 98-82-8		
9.692	9.692 (1.090)	105	13928	0.33466	1.001	80.00- 120.00	100.00(a)
9.692	9.692 (1.090)	120	3952			0.00- 57.55	28.38

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
175 Cumene (continued)							
9.678	9.692 (1.088)	51	1365			0.00- 38.22	9.81
182 Propylbenzene					CAS #: 103-65-1		
10.027	10.028 (1.127)	91	14399	0.29183	0.8726	80.00- 120.00	100.00(a)
10.041	10.028 (1.129)	120	3406			0.00- 54.81	23.66
10.041	10.028 (1.129)	105	605			0.00- 33.86	4.20
188 4-Ethyltoluene					CAS #: 622-96-8		
10.111	10.126 (1.137)	120	19771	1.48755	4.448	80.00- 120.00	100.00
10.111	10.126 (1.137)	105	59606			292.39- 352.39	301.48
190 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
10.181	10.182 (1.145)	120	10489	0.57909	1.731	80.00- 120.00	100.00
10.181	10.182 (1.145)	105	20237			169.92- 229.92	192.94
196 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
10.503	10.503 (1.181)	120	90503	5.57660	16.674	80.00- 120.00	100.00
10.503	10.503 (1.181)	105	190319			182.08- 242.08	210.29
228 Naphthalene					CAS #: 91-20-3		
12.910	12.910 (1.451)	128	300454	9.03555	27.016	80.00- 120.00	100.00
12.910	12.910 (1.451)	127	37605			0.00- 42.14	12.52

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: msdj.i
Lab File ID: j030521r1.d
Lab Smp Id: 1503058Br1-06A
Analysis Type: VOA
Quant Type: ISTD
Operator: md
Method File: /chem/msdj.i/05mar15.b/j15q0304a.m
Misc Info: 3.1 Hg->14.9 psi

Calibration Date: 05-MAR-2015
Calibration Time: 09:28

Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
98 Bromochloromethan	140692	84415	196969	124559	-11.47
123 1,4-Difluorobenze	614418	368651	860185	520310	-15.32
163 Chlorobenzene-d5	577173	346304	808042	505538	-12.41

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
98 Bromochloromethan	5.49	5.16	5.82	5.48	-0.26
123 1,4-Difluorobenze	6.40	6.07	6.73	6.40	0.00
163 Chlorobenzene-d5	8.89	8.56	9.22	8.89	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 16:13

Eurofins Air Toxics Inc.

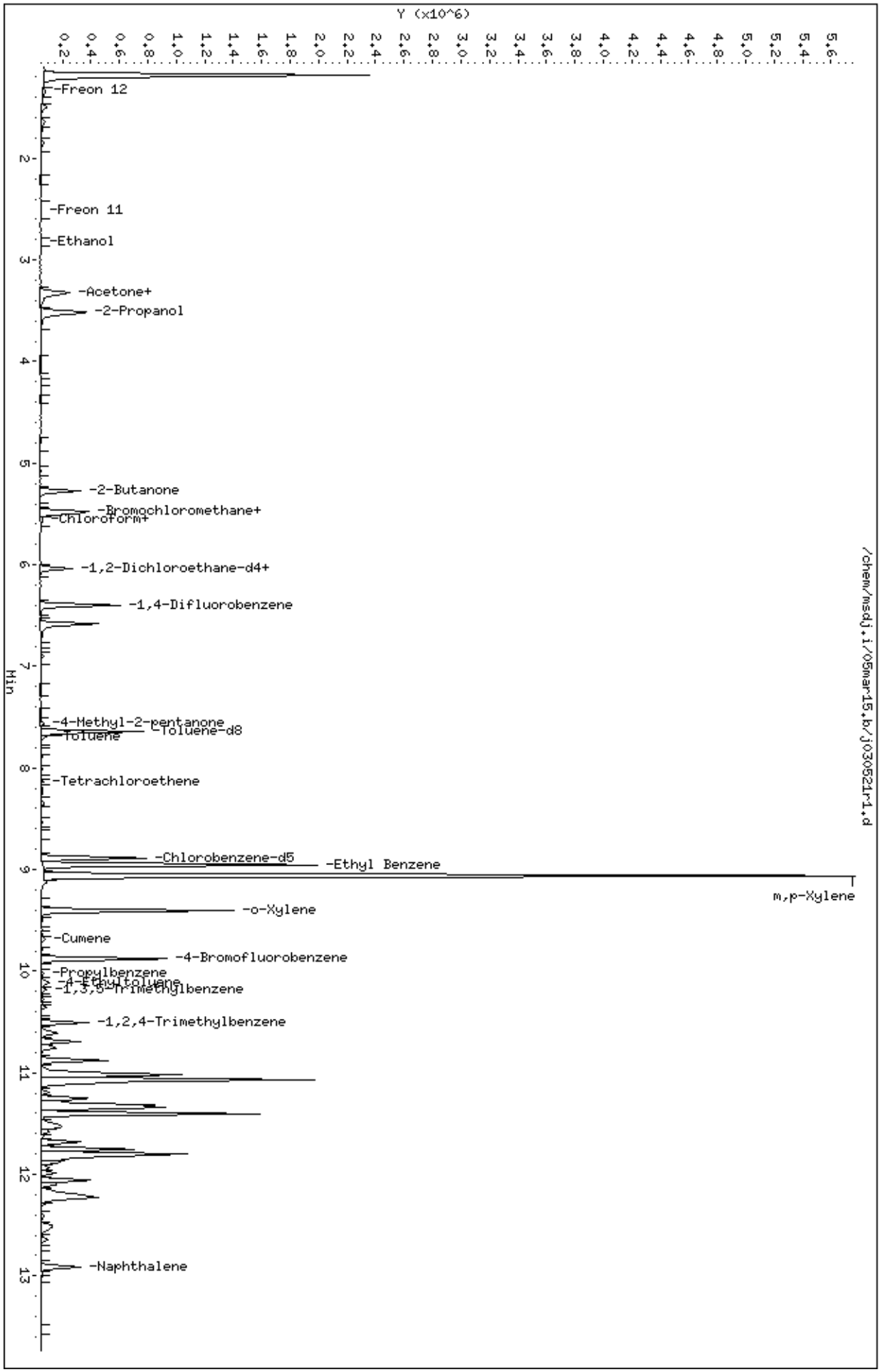
RECOVERY REPORT

Client Name: Client SDG: 05mar15
Sample Matrix: GAS Fraction: VOA
Lab Smp Id: 1503058Br1-06A
Level: LOW Operator: md
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: 2926Spectra.spk Quant Type: ISTD
Sublist File: TO15Nmdl.sub
Method File: /chem/msdj.i/05mar15.b/j15q0304a.m
Misc Info: 3.1 Hg->14.9 psi

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 117 1,2-Dichloroethane	25.000	24.839	99.36	70-130
$ 146 Toluene-d8	25.000	24.740	98.96	70-130
$ 177 4-Bromofluorobenze	25.000	24.293	97.17	70-130

Data File: /chem/msdj.i/05mar15.b/j030521r1.d
Date : 05-MAR-2015 23:12
Client ID:
Sample Info: 150ml 33398
Column phase: RTX-624

Instrument: msdj.i
Operator: md
Column diameter: 0.25



Page 1

Data File: /chem/msdj.i/05mar15.b/j030521r1.d

Date : 05-MAR-2015 23:12

Client ID:

Instrument: msdj.i

Sample Info: 150ml 33398

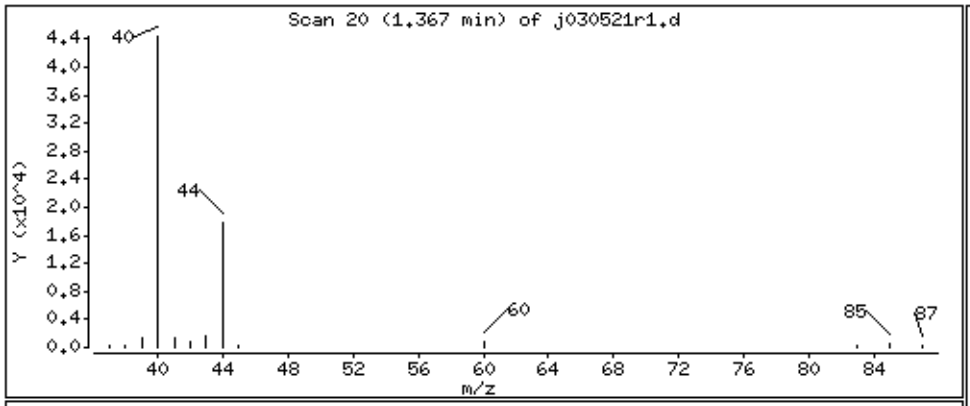
Operator: md

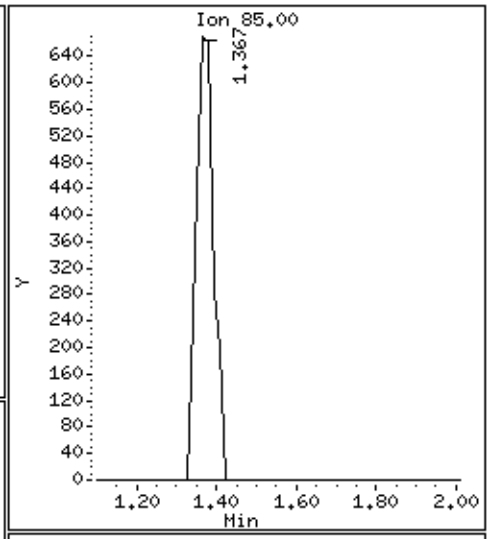
Column phase: RTX-624

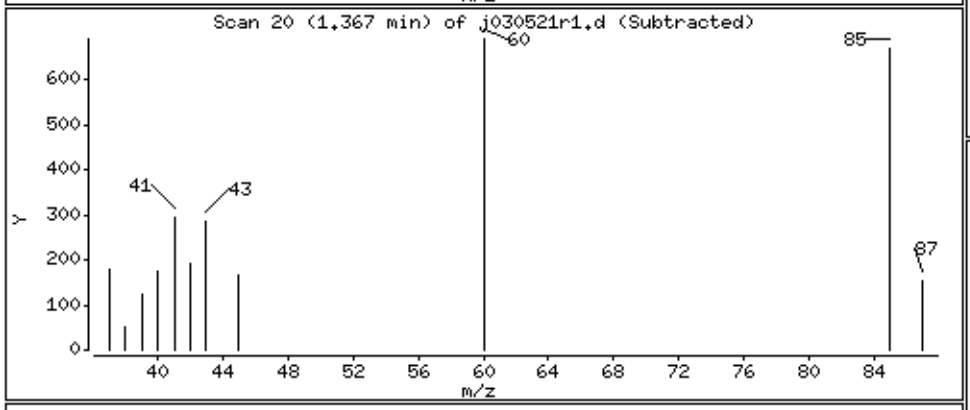
Column diameter: 0.25

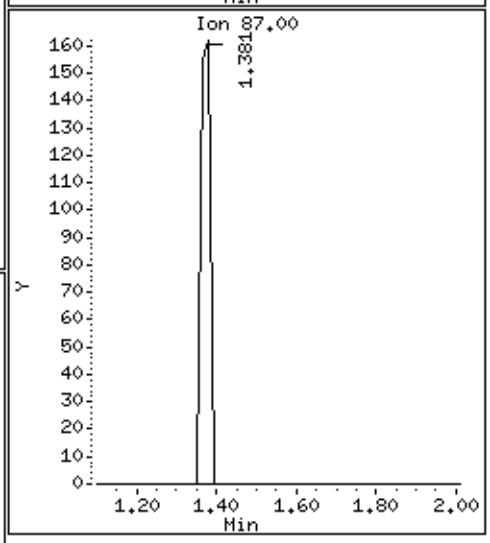
11 Freon 12

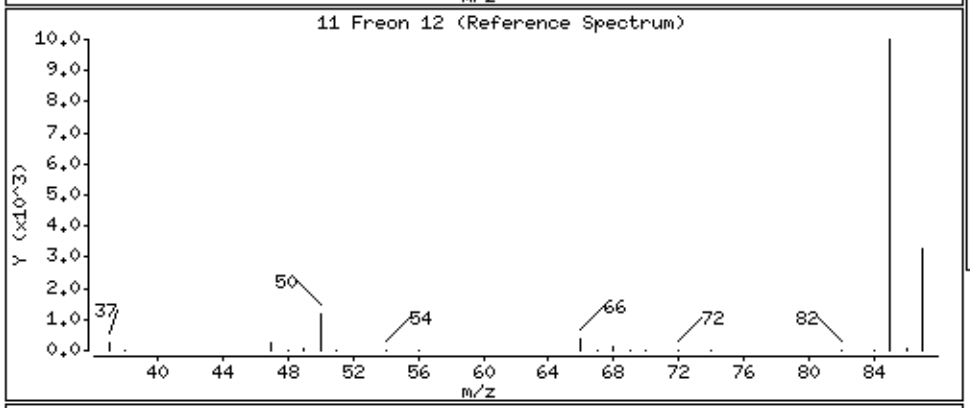
Concentration: 0.4817 PPBV

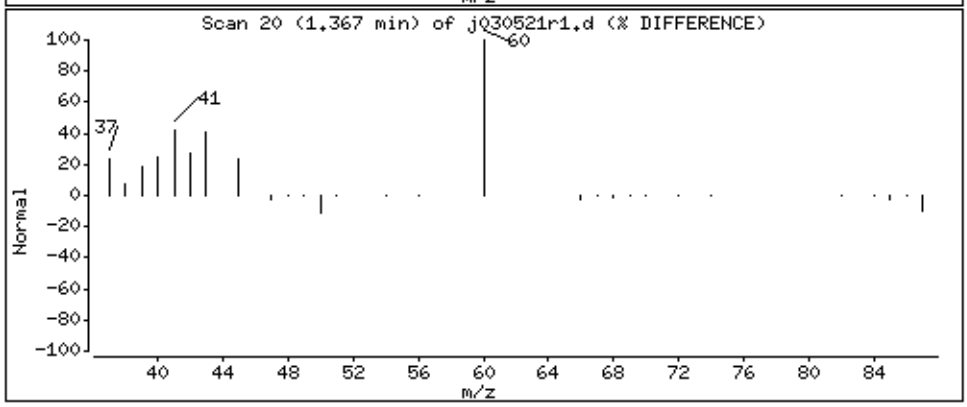












Data File: /chem/msdj.i/05mar15.b/j030521r1.d

Date : 05-MAR-2015 23:12

Client ID:

Instrument: msdj.i

Sample Info: 150ml 33398

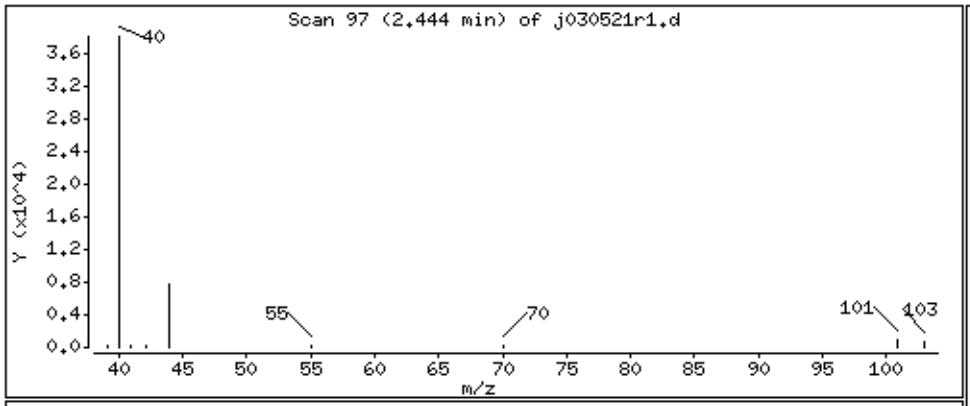
Operator: md

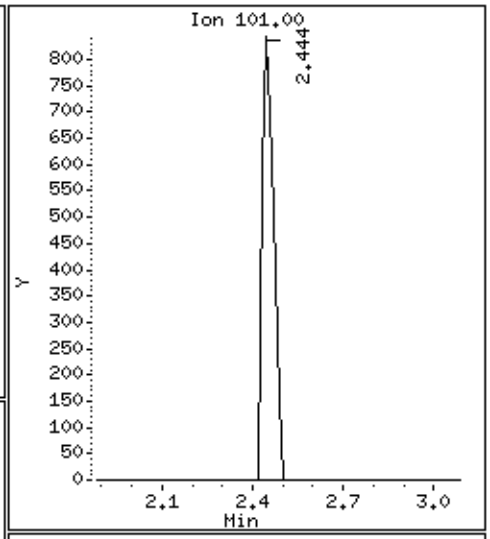
Column phase: RTX-624

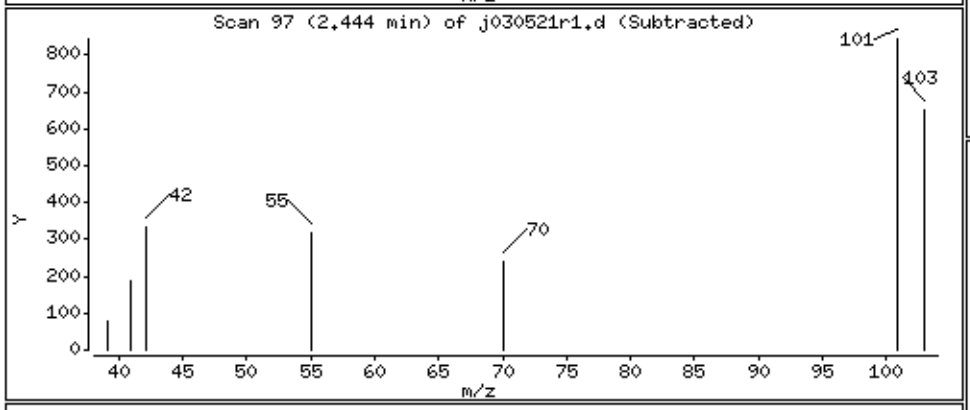
Column diameter: 0.25

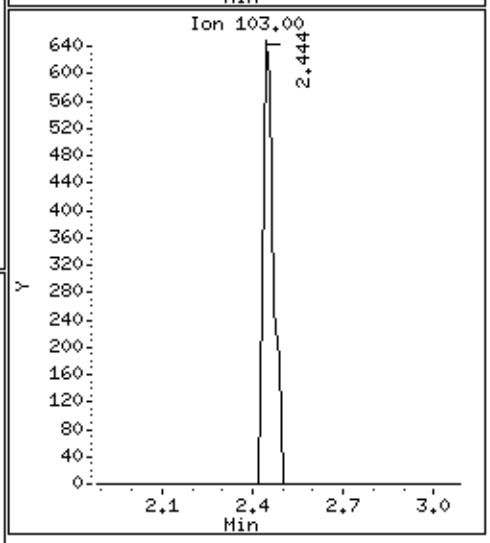
35 Freon 11

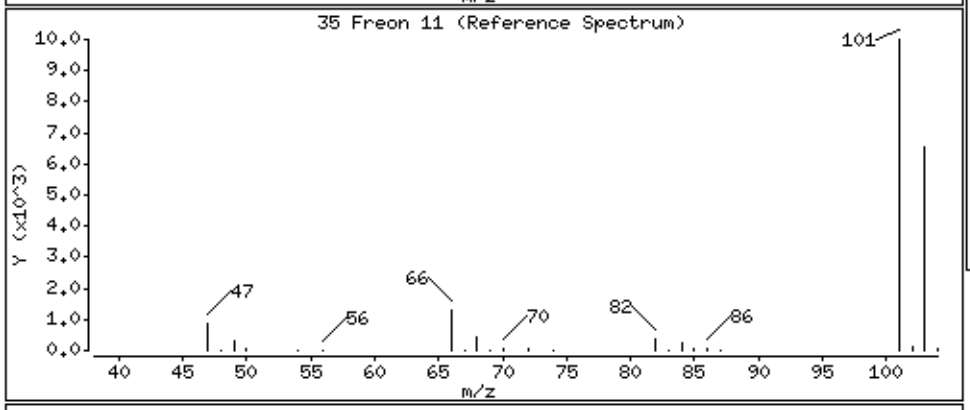
Concentration: 0.5167 PPBV

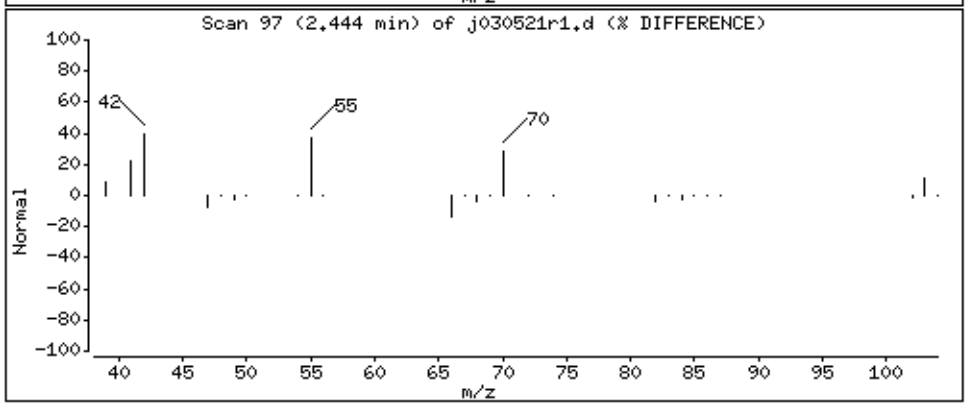












Data File: /chem/msdj.i/05mar15.b/j030521r1.d

Date : 05-MAR-2015 23:12

Client ID:

Instrument: msdj.i

Sample Info: 150ml 33398

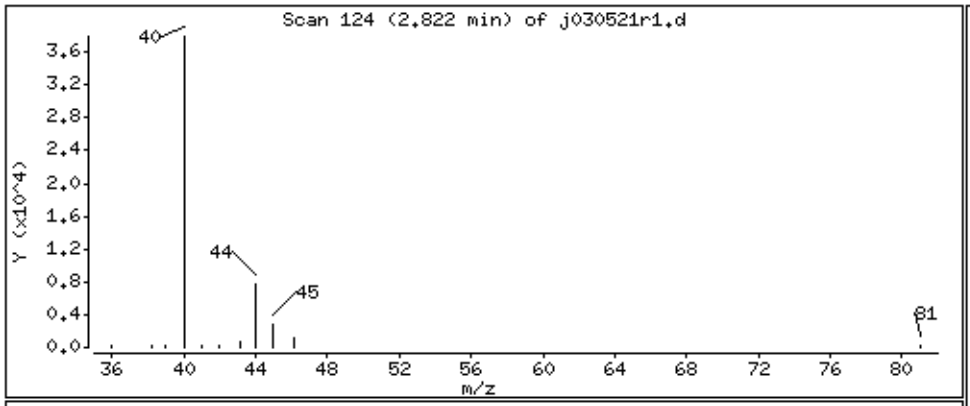
Operator: md

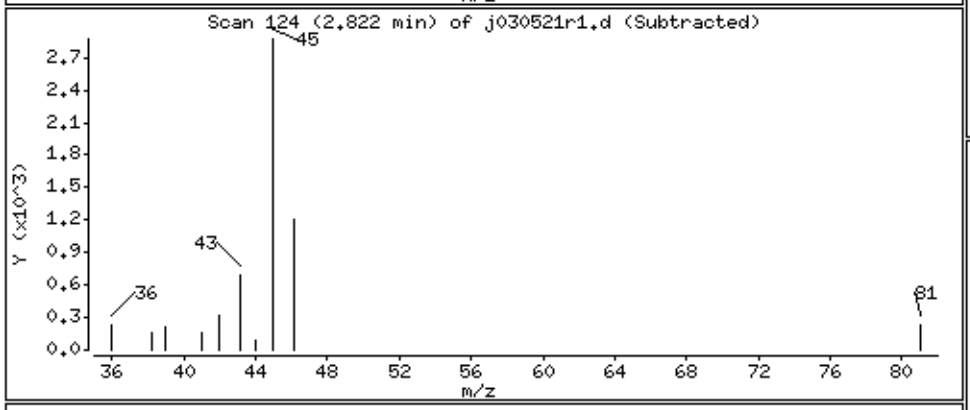
Column phase: RTX-624

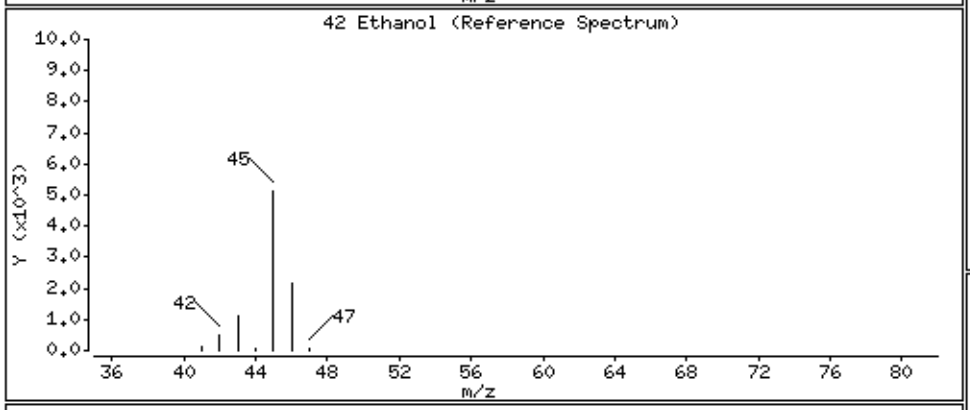
Column diameter: 0.25

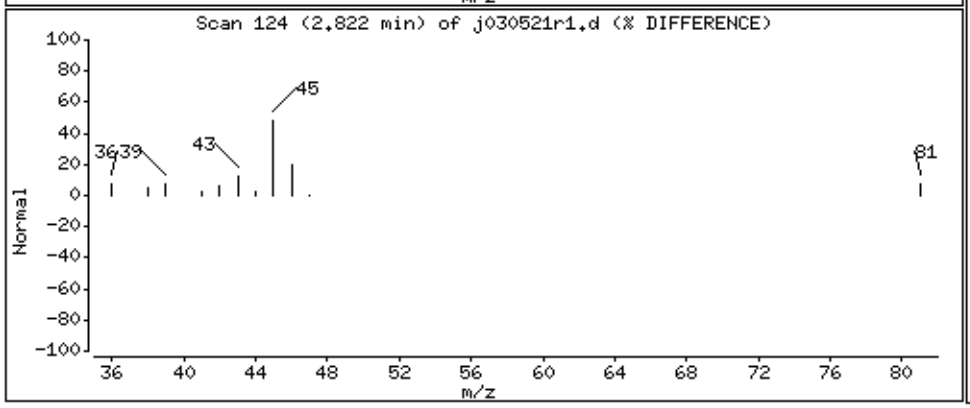
42 Ethanol

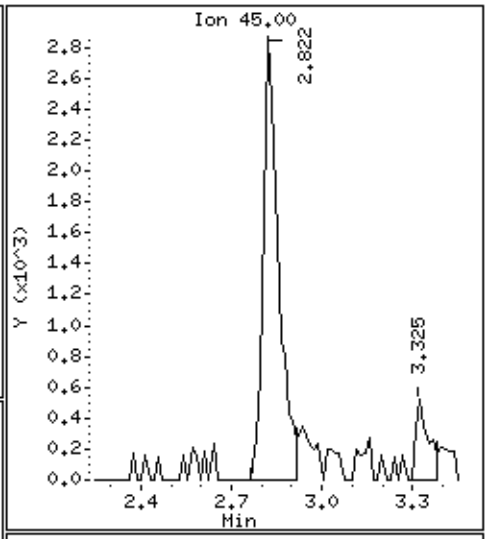
Concentration: 14.567 PPBV

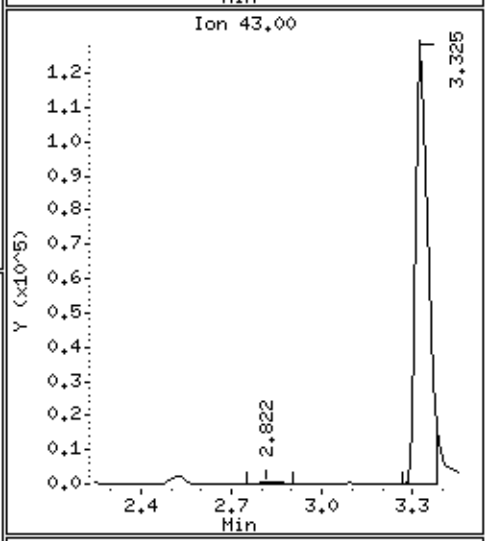


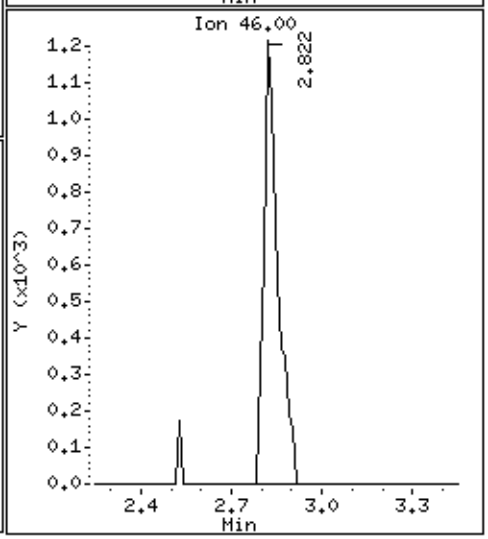












Data File: /chem/msdj.i/05mar15.b/j030521r1.d

Date : 05-MAR-2015 23:12

Client ID:

Instrument: msdj.i

Sample Info: 150ml 33398

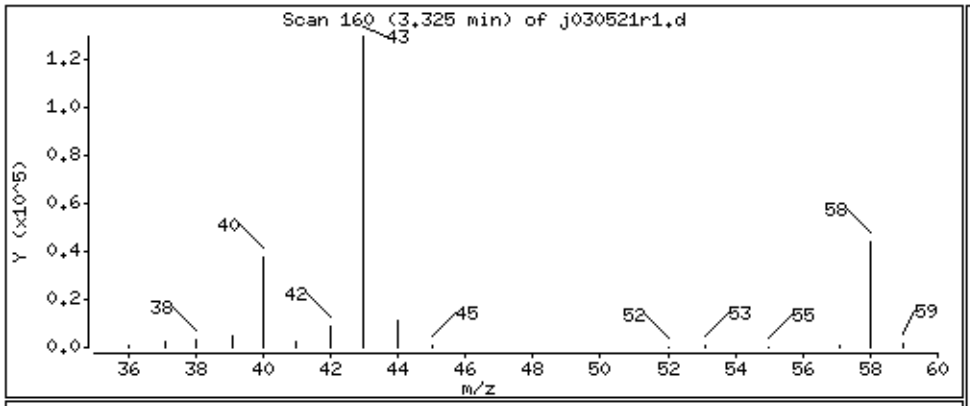
Operator: md

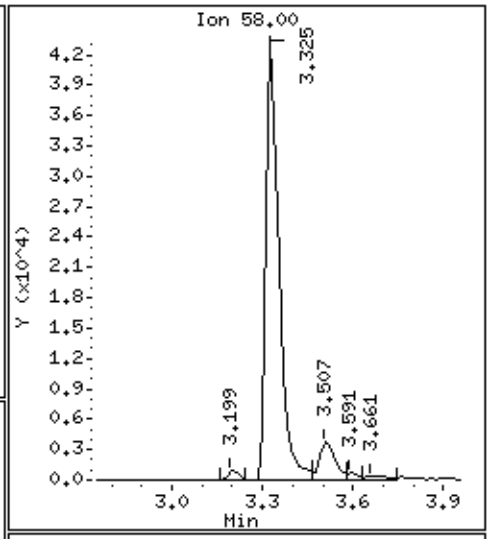
Column phase: RTX-624

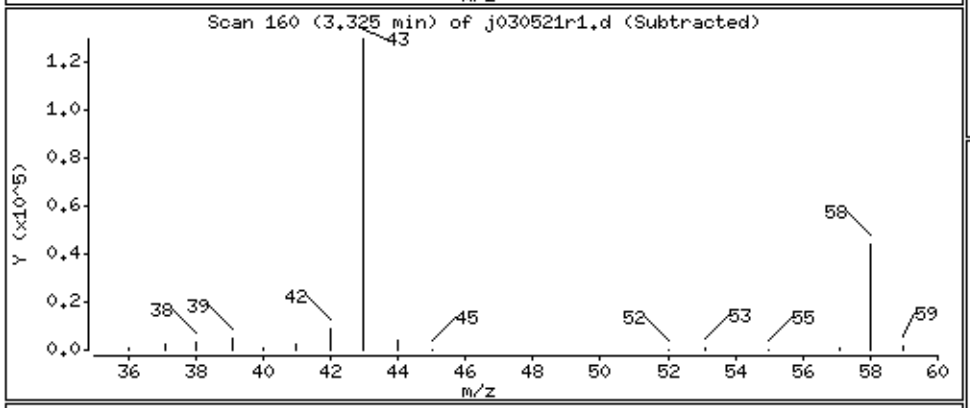
Column diameter: 0.25

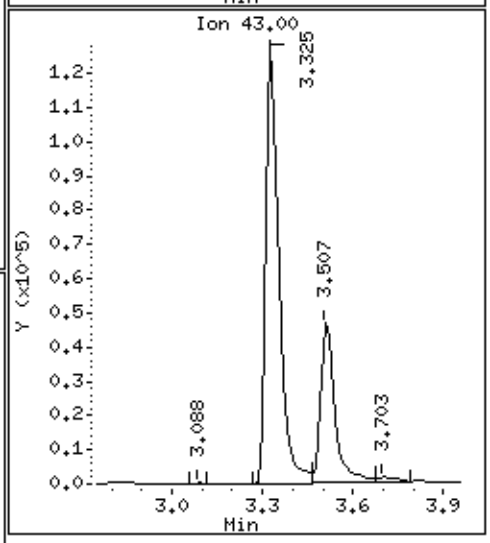
52 Acetone

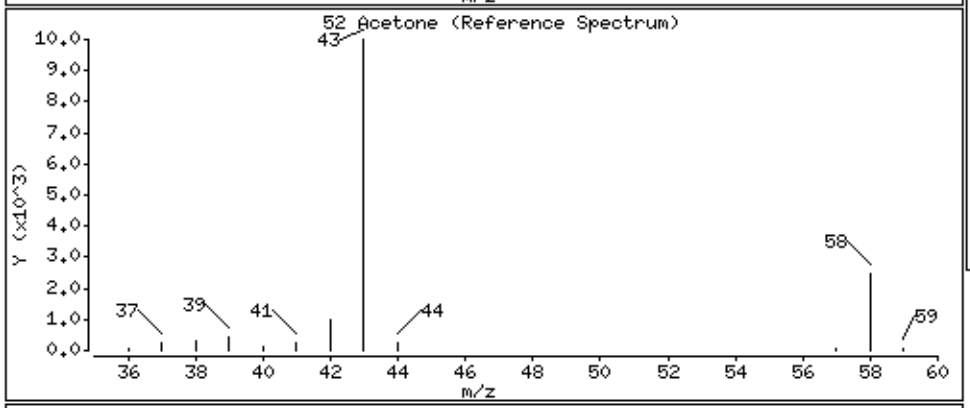
Concentration: 164.88 PPBV

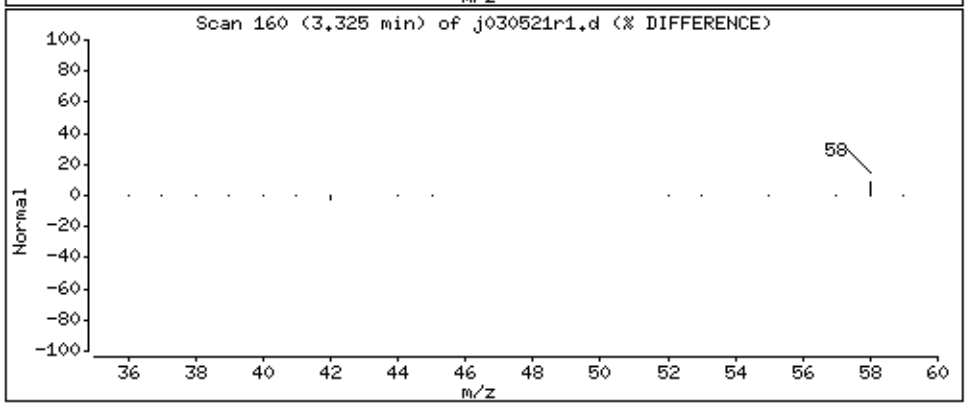












Data File: /chem/msdj.i/05mar15.b/j030521r1.d

Date : 05-MAR-2015 23:12

Client ID:

Instrument: msdj.i

Sample Info: 150ml 33398

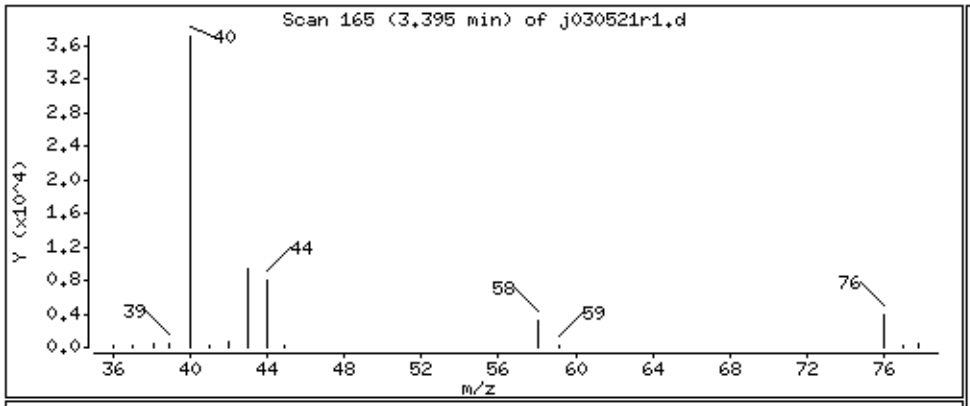
Operator: md

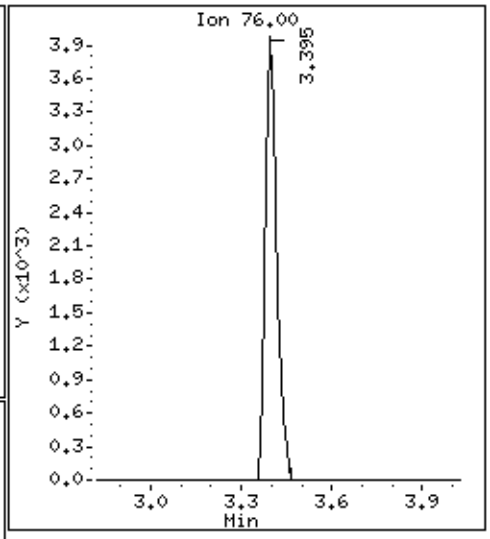
Column phase: RTX-624

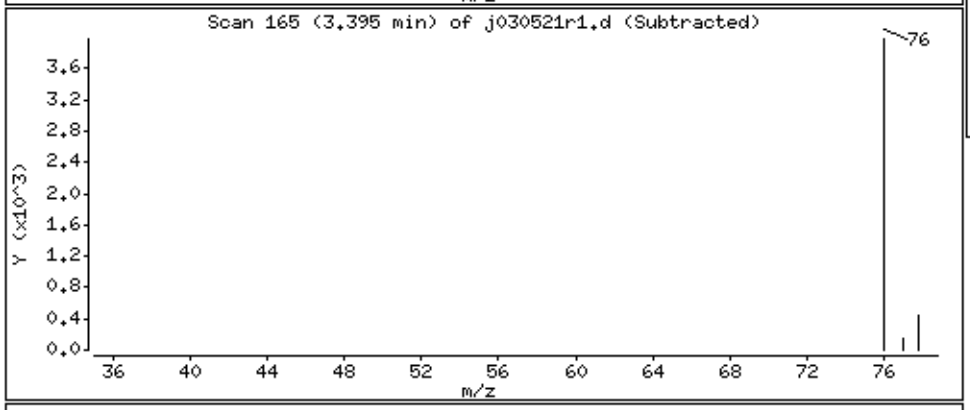
Column diameter: 0.25

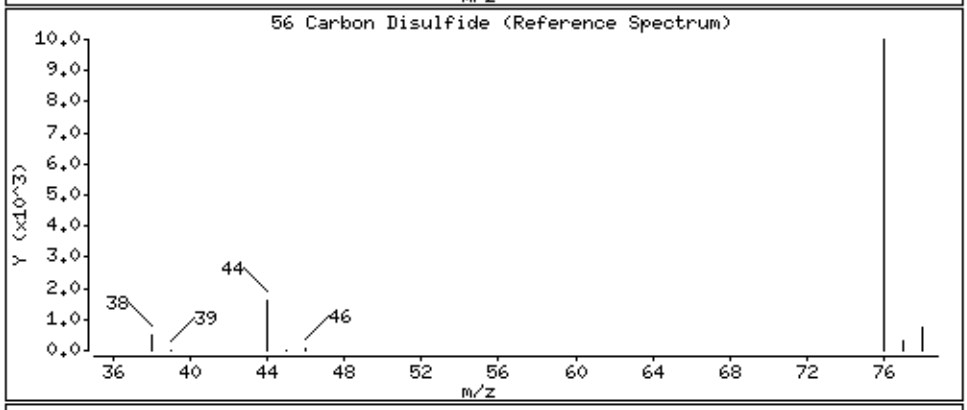
56 Carbon Disulfide

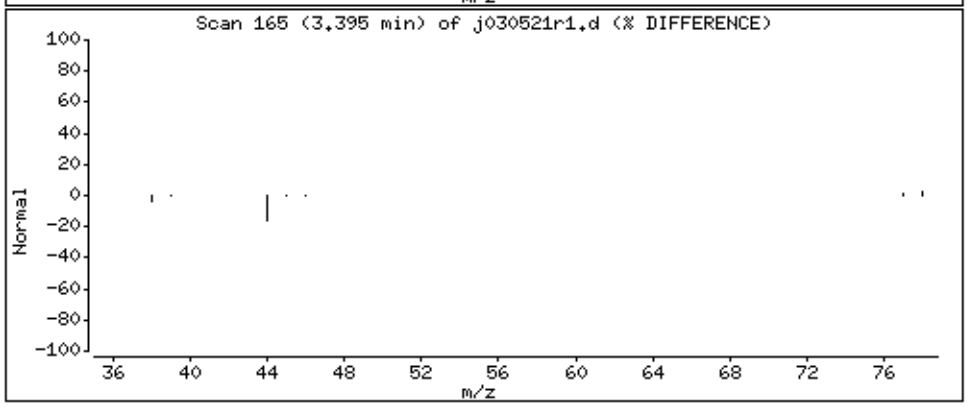
Concentration: 2.130 PPBV











Data File: /chem/msdj.i/05mar15.b/j030521r1.d

Date : 05-MAR-2015 23:12

Client ID:

Instrument: msdj.i

Sample Info: 150ml 33398

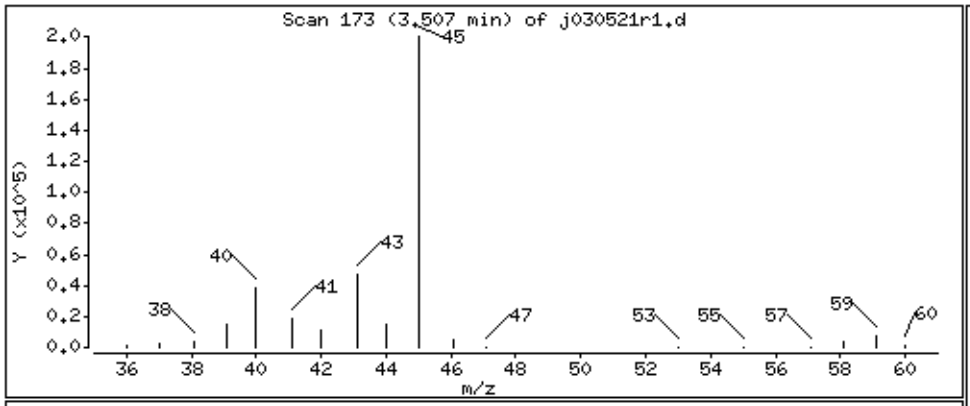
Operator: md

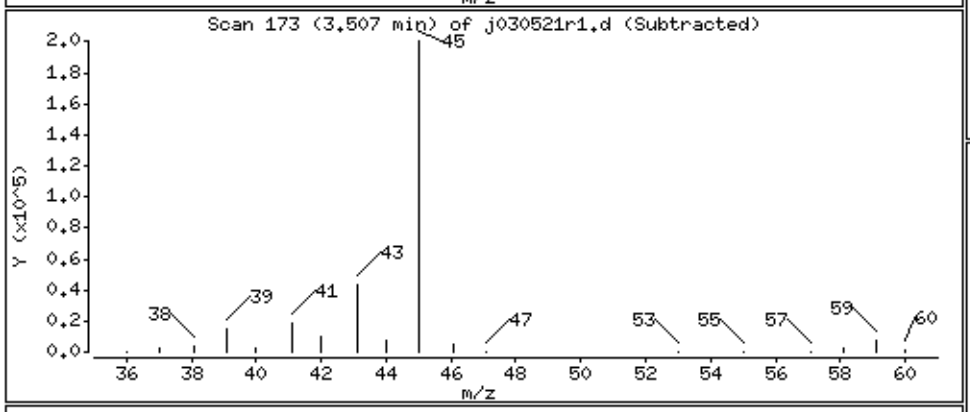
Column phase: RTX-624

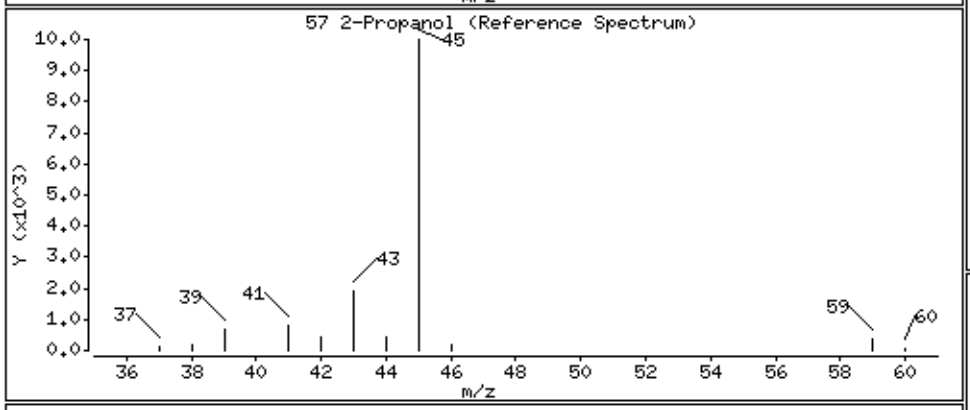
Column diameter: 0.25

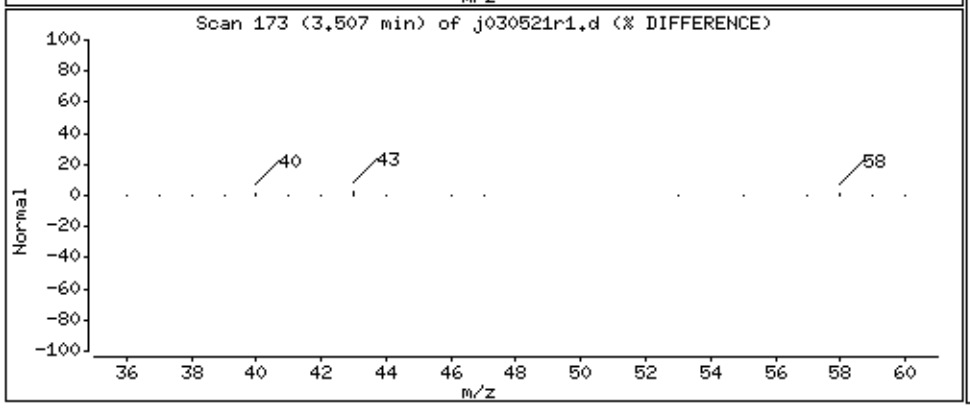
57 2-Propanol

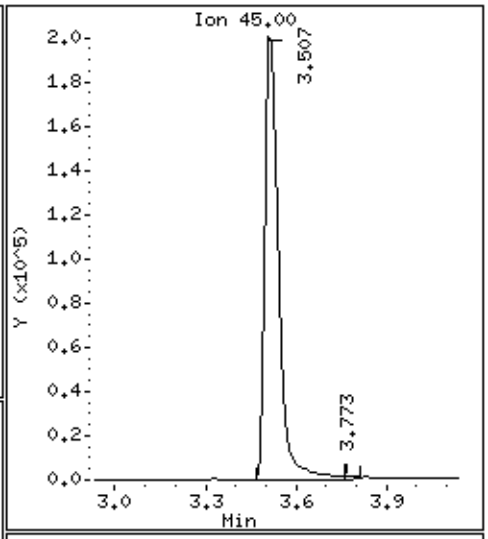
Concentration: 214.91 PPBV

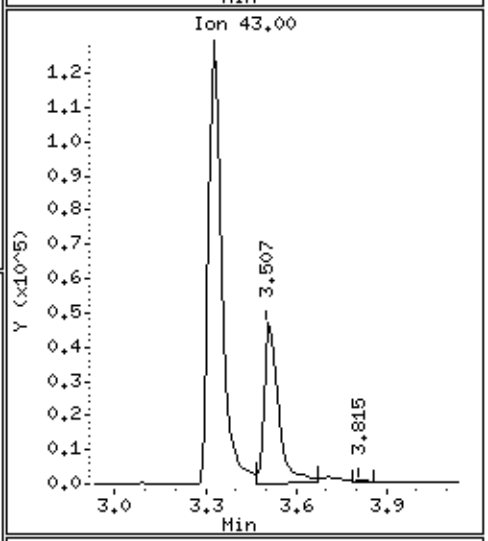


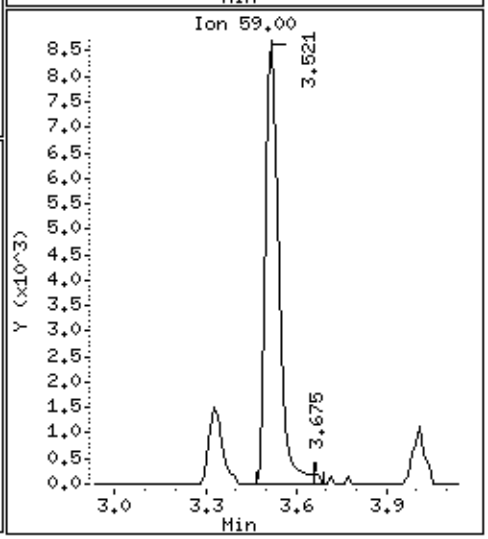












Data File: /chem/msdj.i/05mar15.b/j030521r1.d

Date : 05-MAR-2015 23:12

Client ID:

Instrument: msdj.i

Sample Info: 150ml 33398

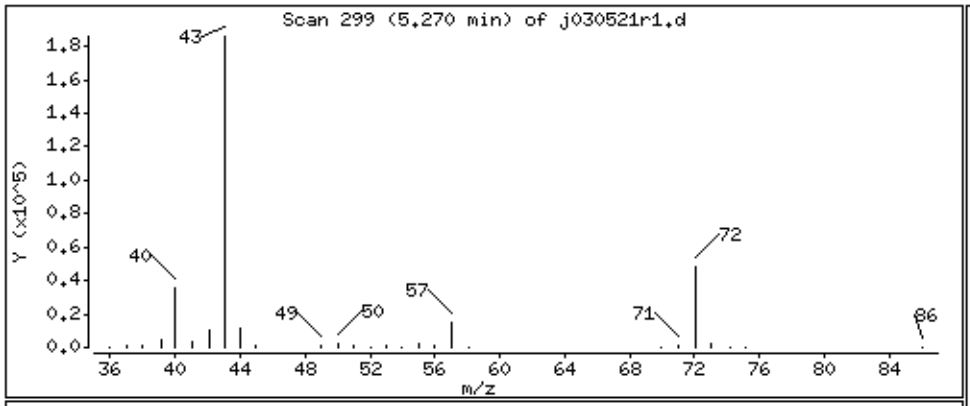
Operator: md

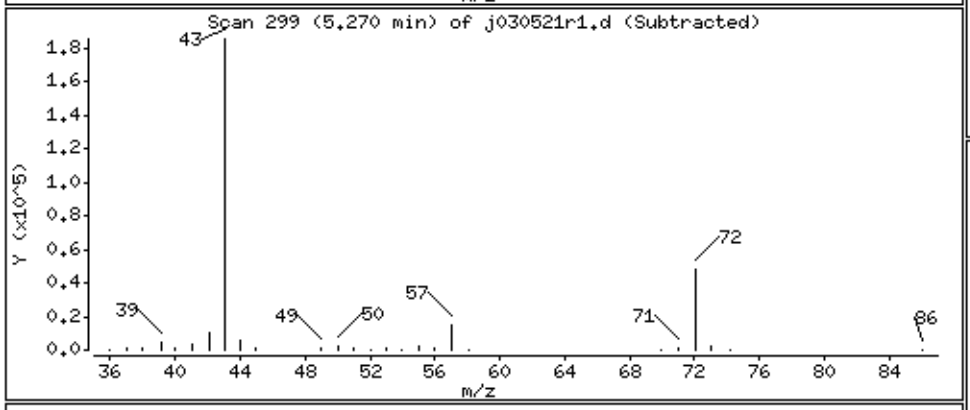
Column phase: RTX-624

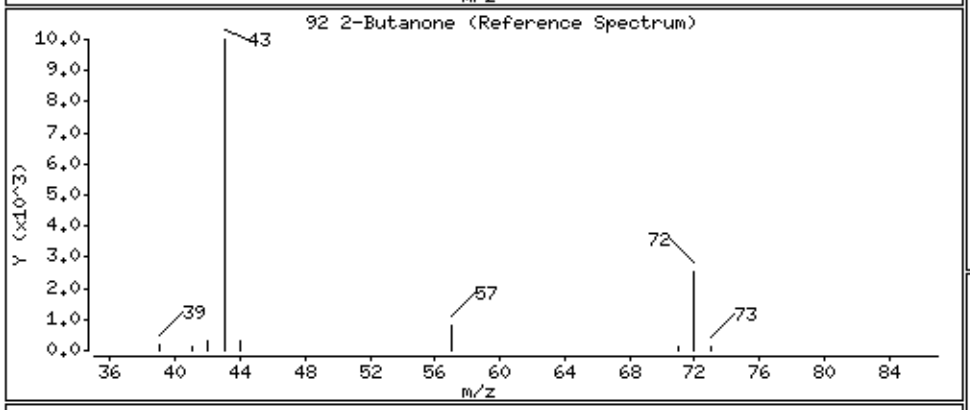
Column diameter: 0.25

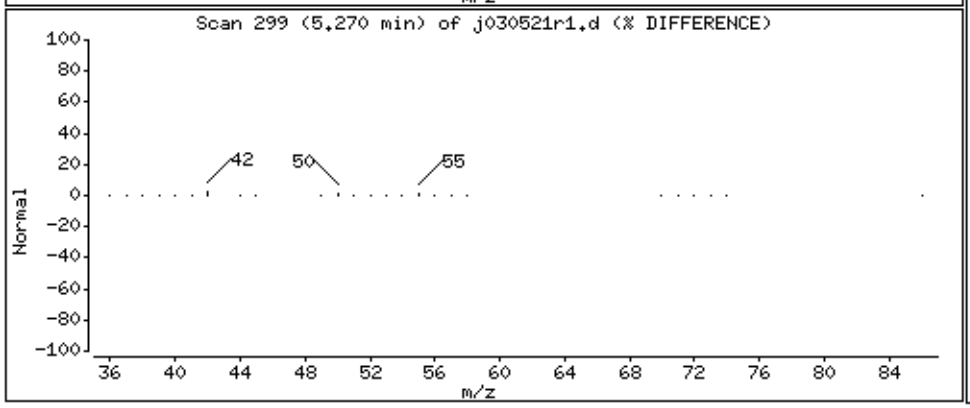
92 2-Butanone

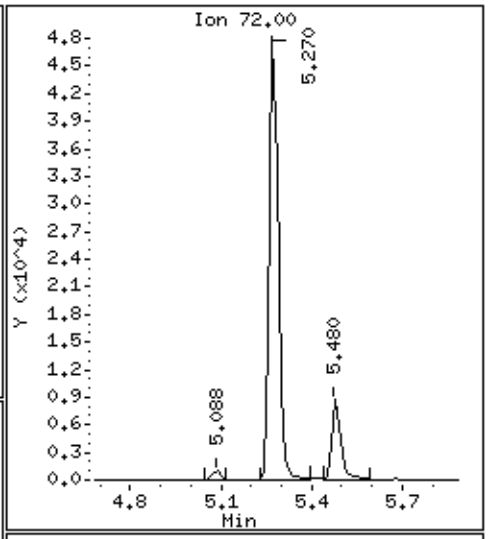
Concentration: 91.259 PPBV

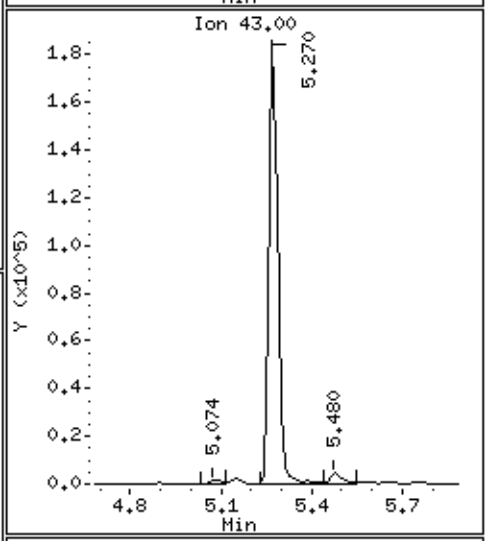


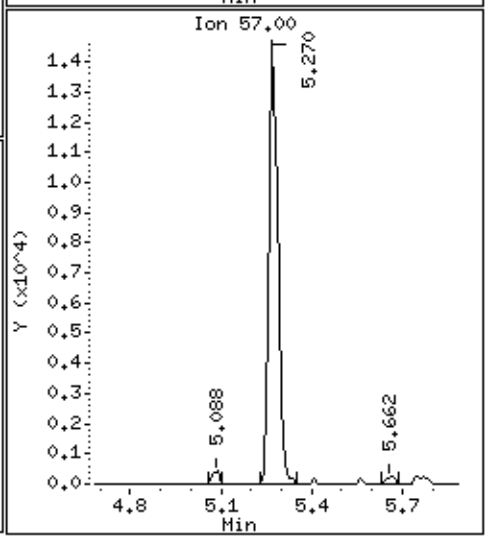












Data File: /chem/msdj.i/05mar15.b/j030521r1.d

Date : 05-MAR-2015 23:12

Client ID:

Instrument: msdj.i

Sample Info: 150ml 33398

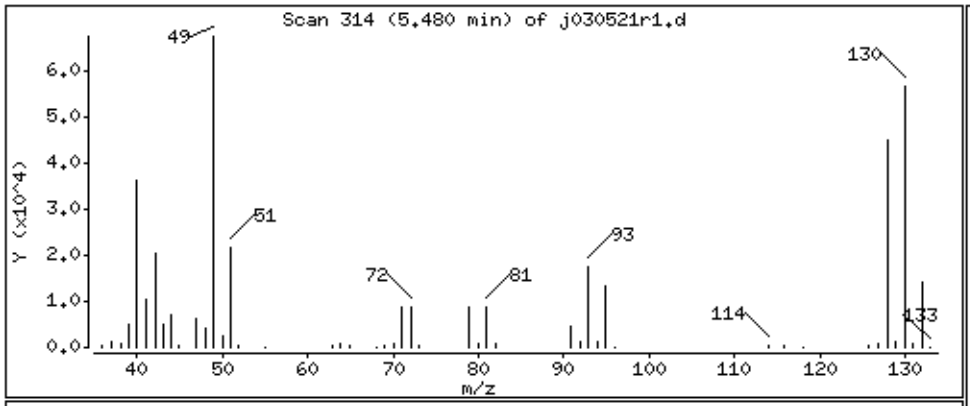
Operator: md

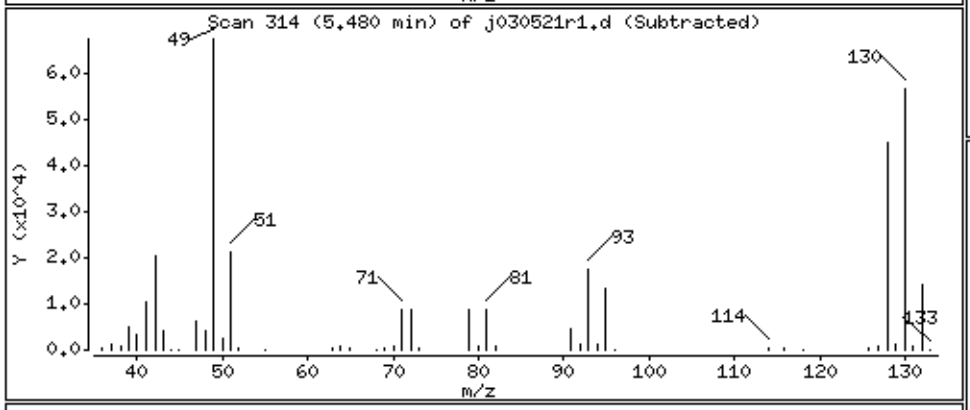
Column phase: RTX-624

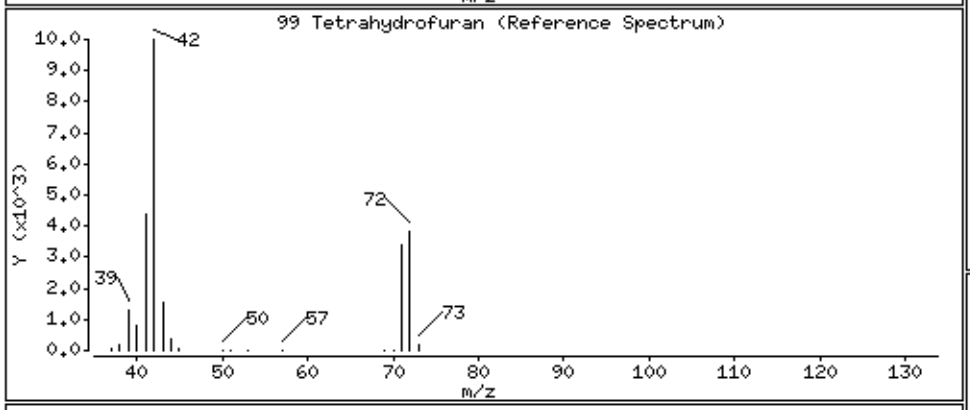
Column diameter: 0.25

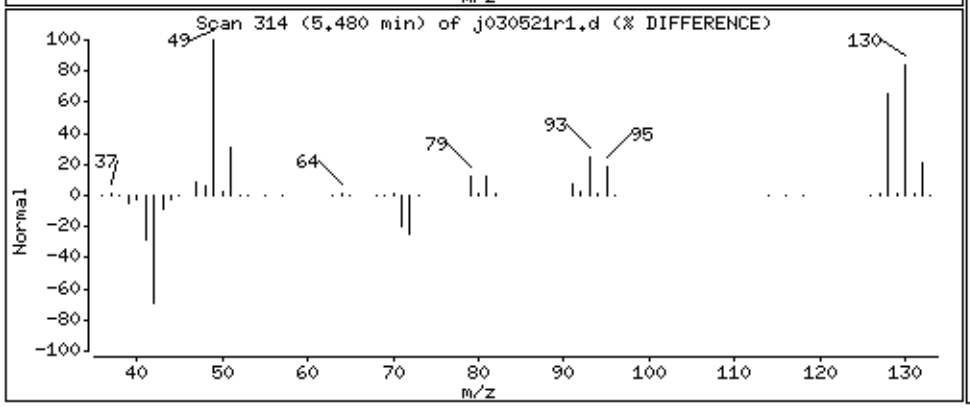
99 Tetrahydrofuran

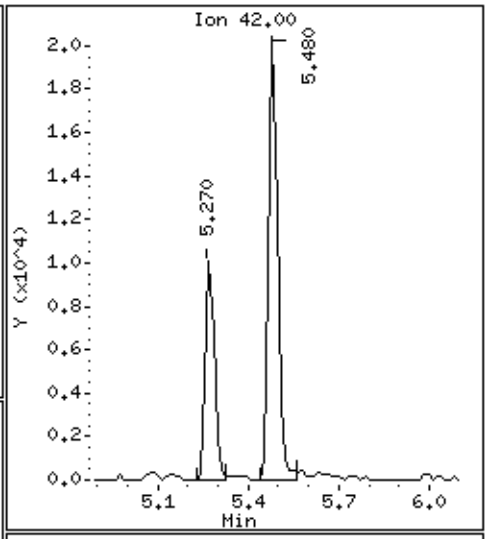
Concentration: 17.894 PPBV

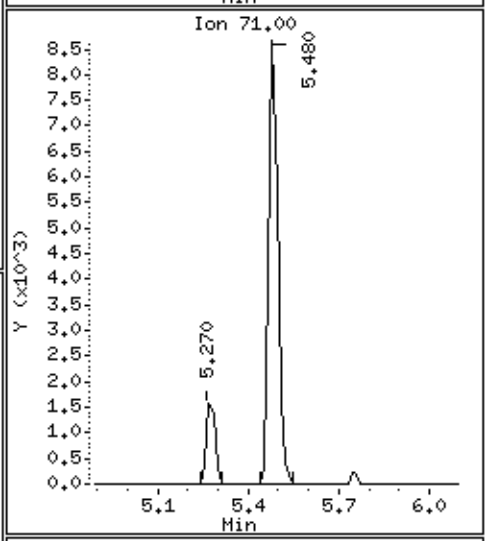


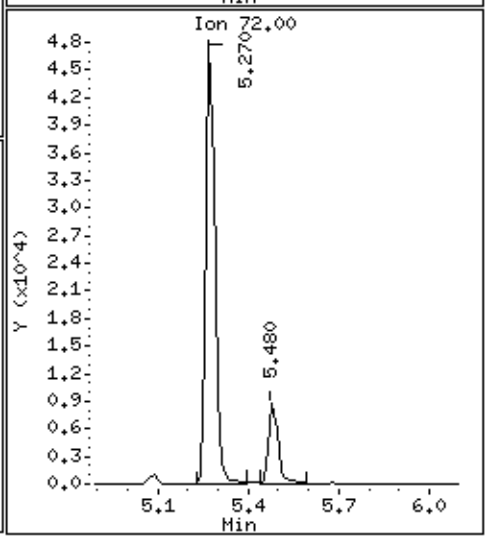












Data File: /chem/msdj.i/05mar15.b/j030521r1.d

Date : 05-MAR-2015 23:12

Client ID:

Instrument: msdj.i

Sample Info: 150ml 33398

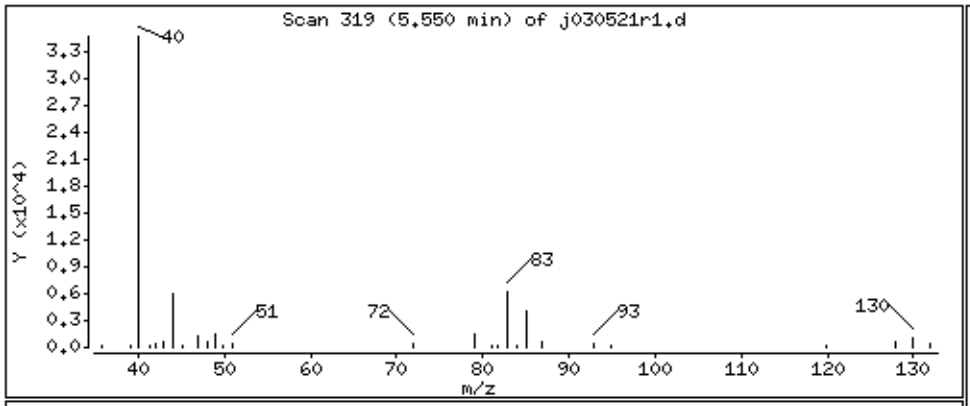
Operator: md

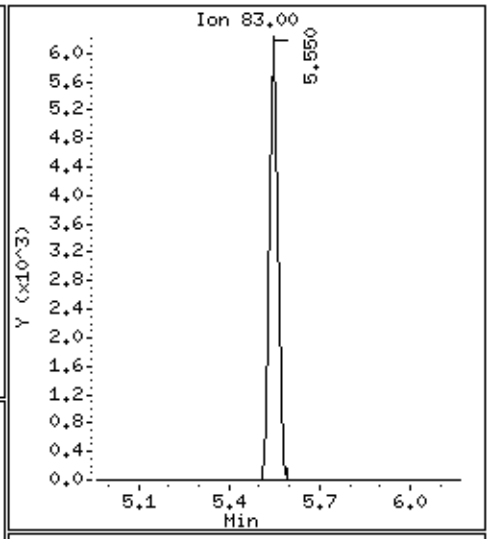
Column phase: RTX-624

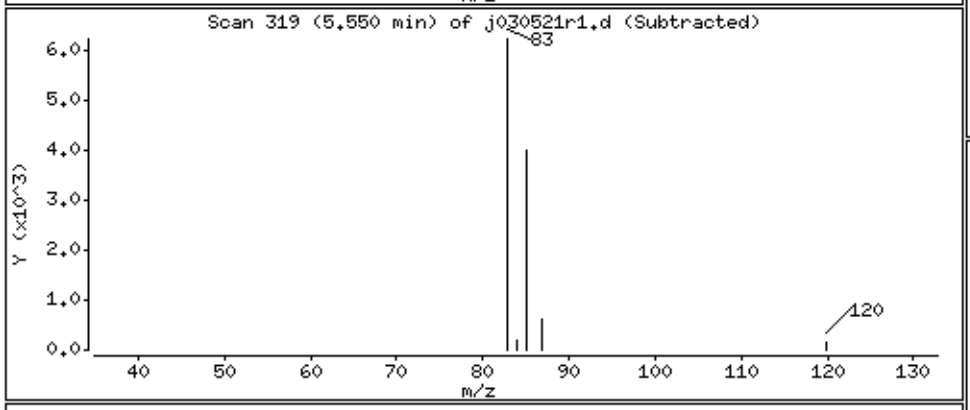
Column diameter: 0.25

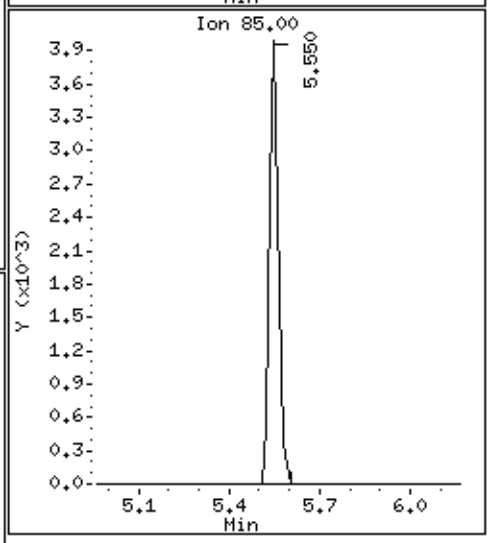
100 Chloroform

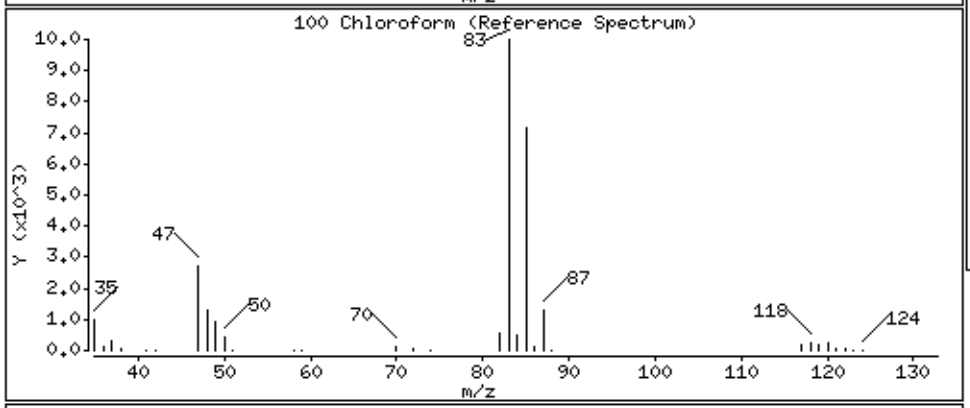
Concentration: 2.792 PPBV

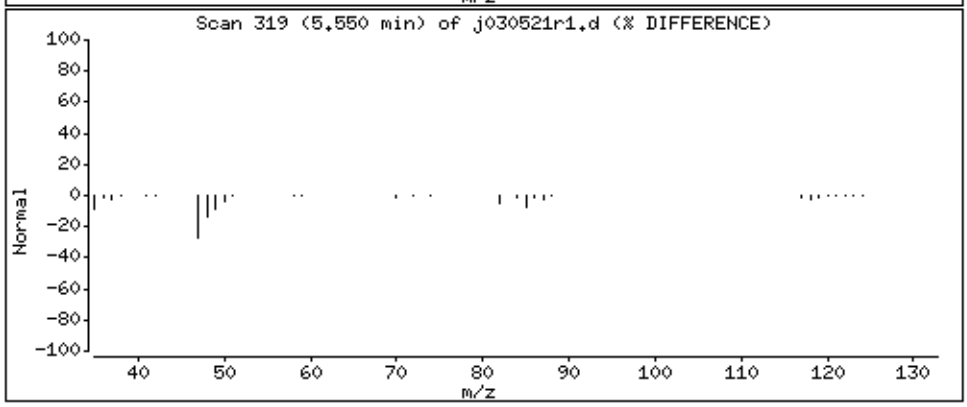












Data File: /chem/msdj.i/05mar15.b/j030521r1.d

Date : 05-MAR-2015 23:12

Client ID:

Instrument: msdj.i

Sample Info: 150ml 33398

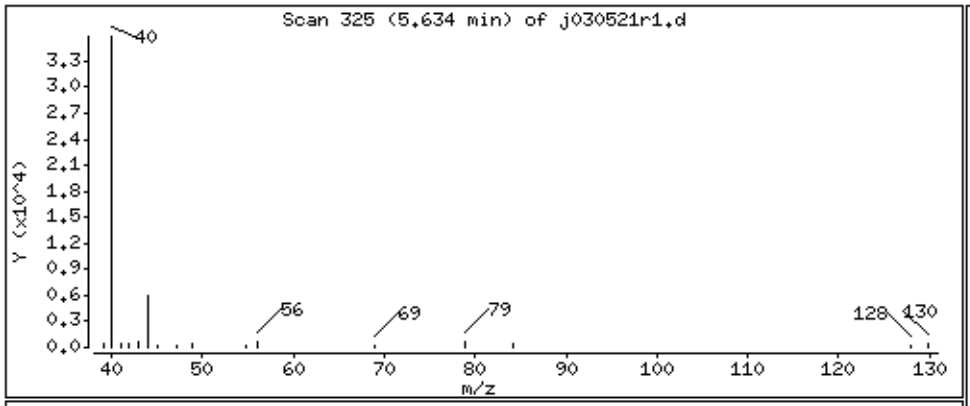
Operator: md

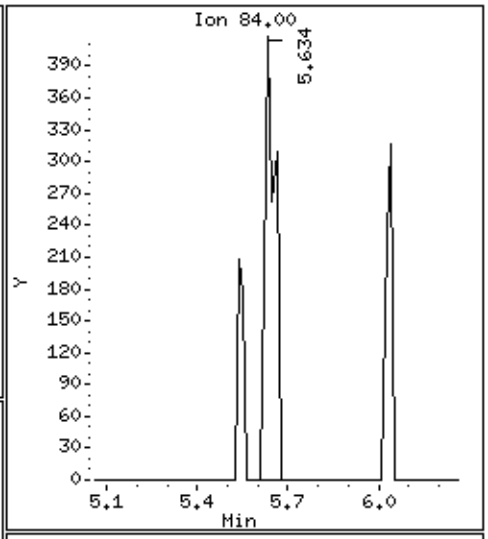
Column phase: RTX-624

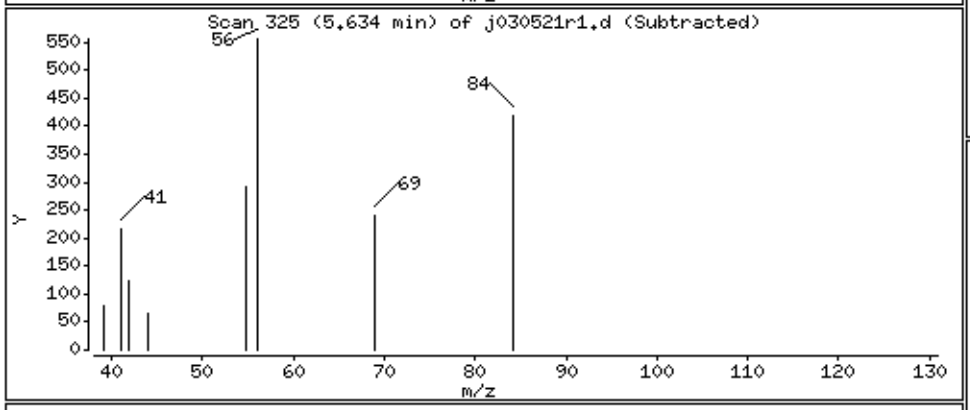
Column diameter: 0.25

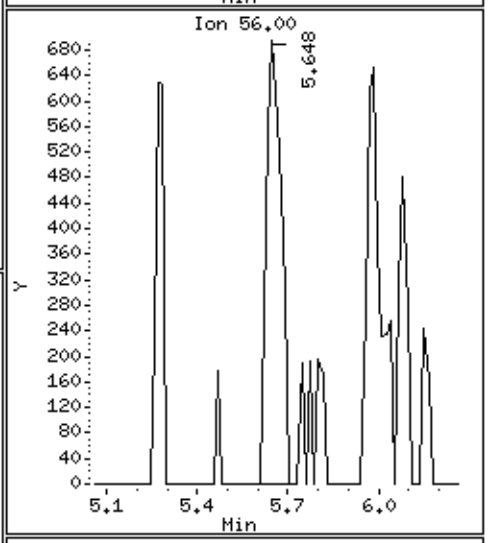
102 Cyclohexane

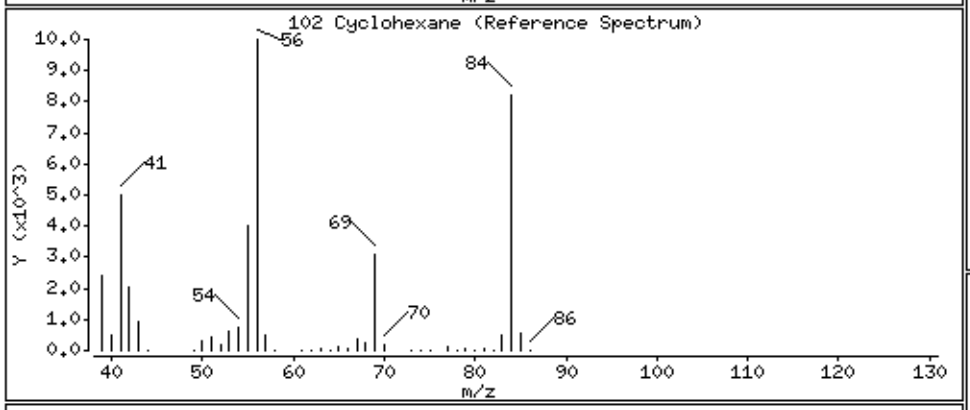
Concentration: 0.3459 PPBV

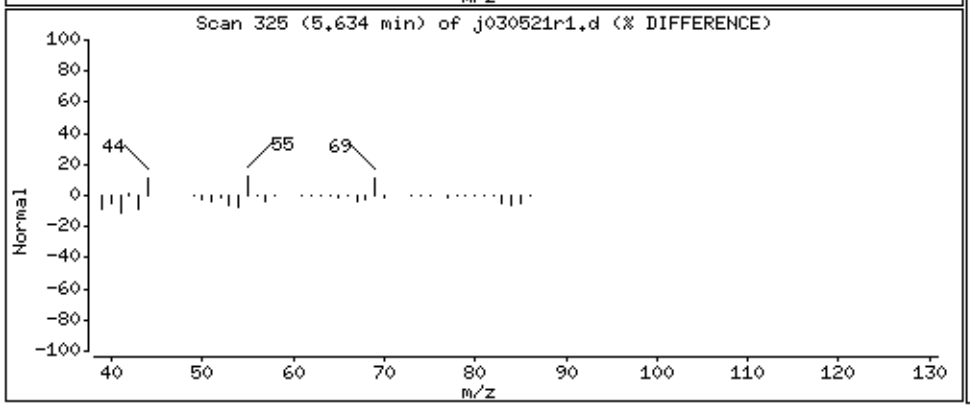


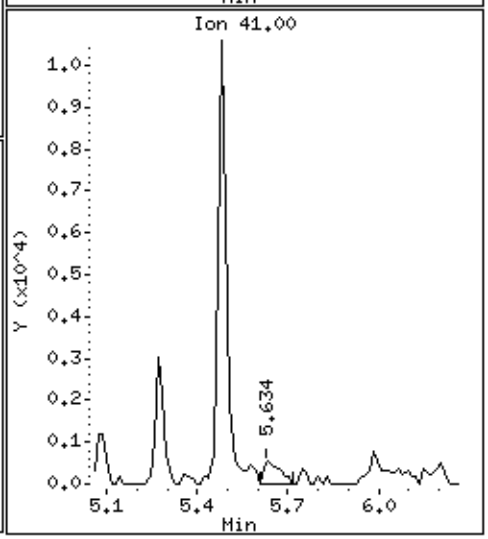












Data File: /chem/msdj.i/05mar15.b/j030521r1.d

Date : 05-MAR-2015 23:12

Client ID:

Instrument: msdj.i

Sample Info: 150ml 33398

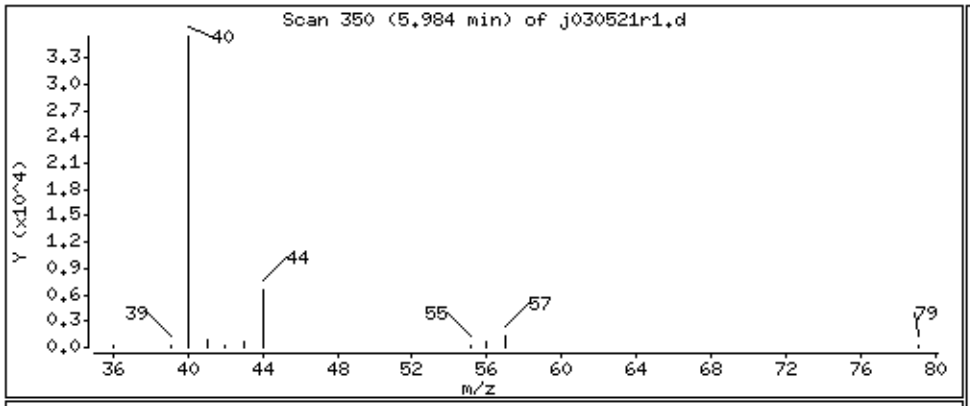
Operator: md

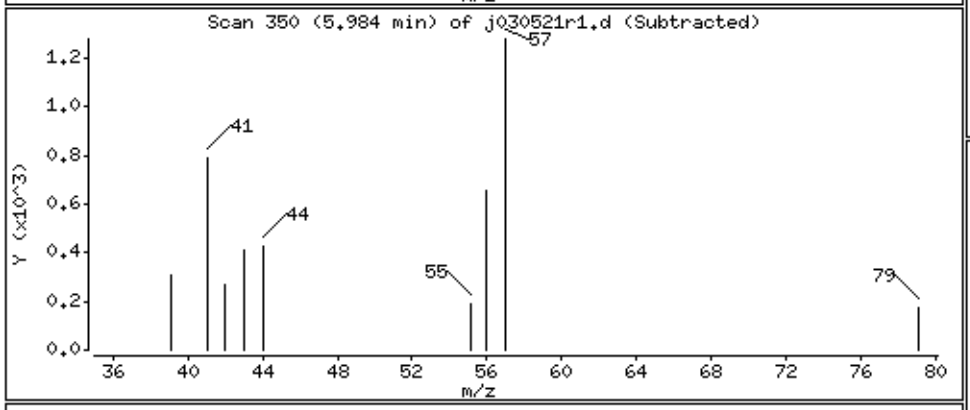
Column phase: RTX-624

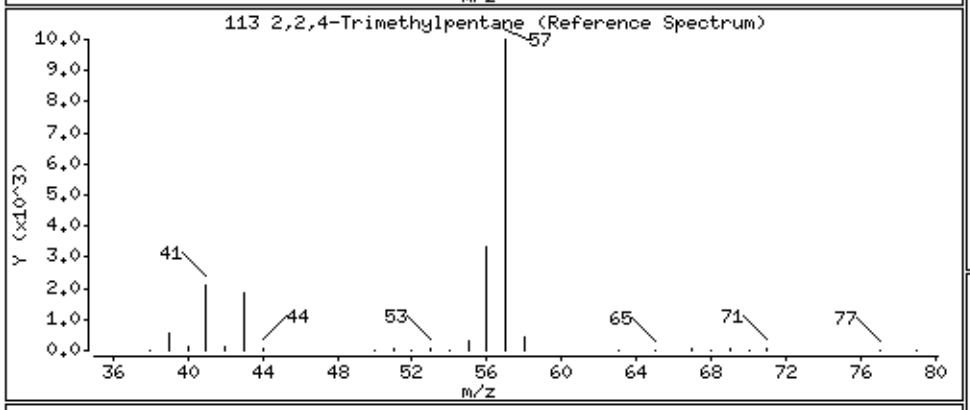
Column diameter: 0.25

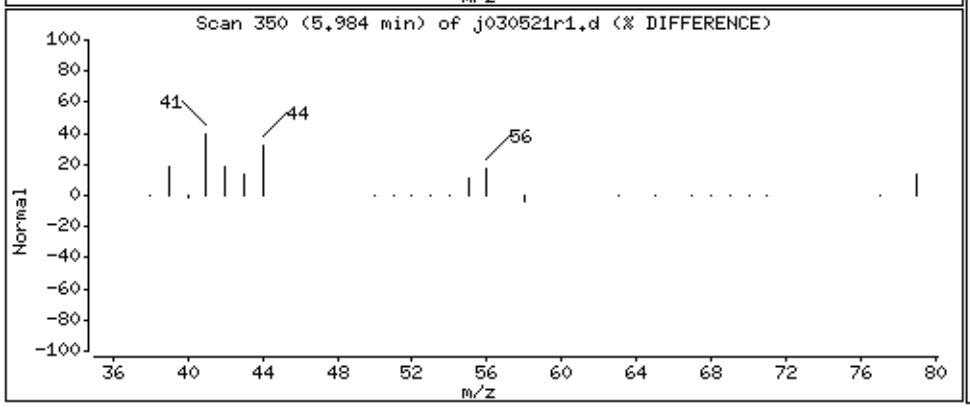
113 2,2,4-Trimethylpentane

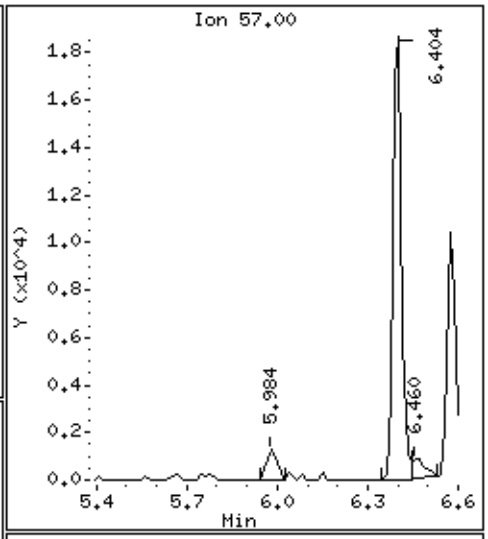
Concentration: 0.3612 PPBV

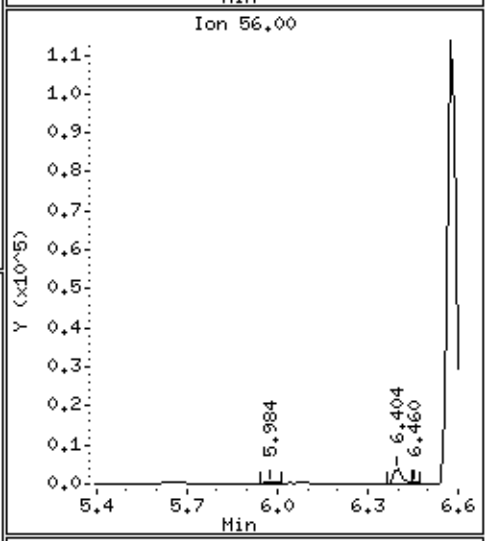


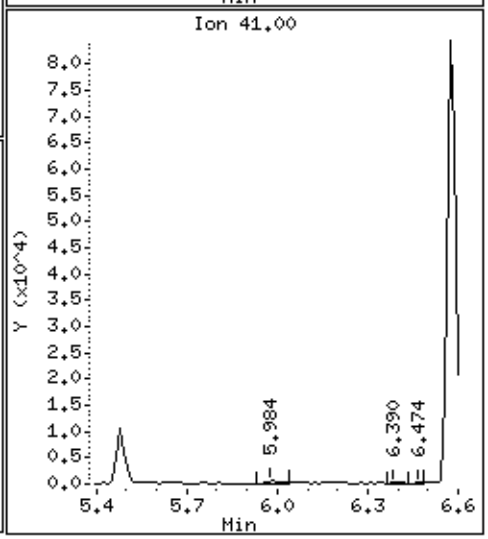












Data File: /chem/msdj.i/05mar15.b/j030521r1.d

Date : 05-MAR-2015 23:12

Client ID:

Instrument: msdj.i

Sample Info: 150ml 33398

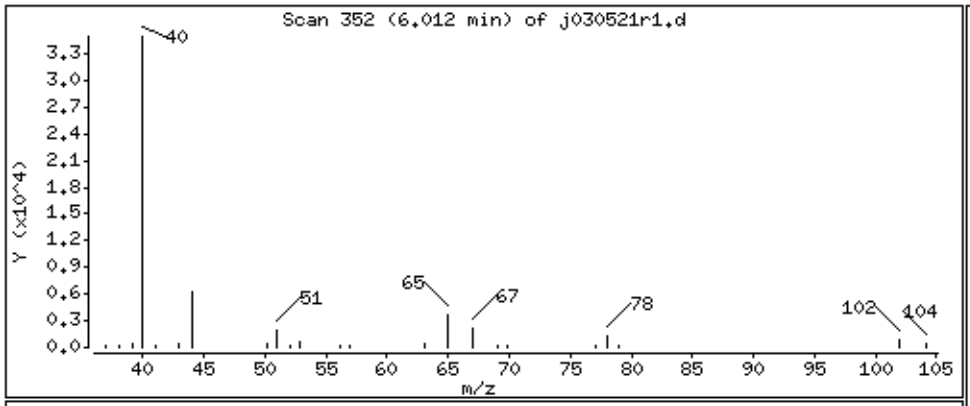
Operator: md

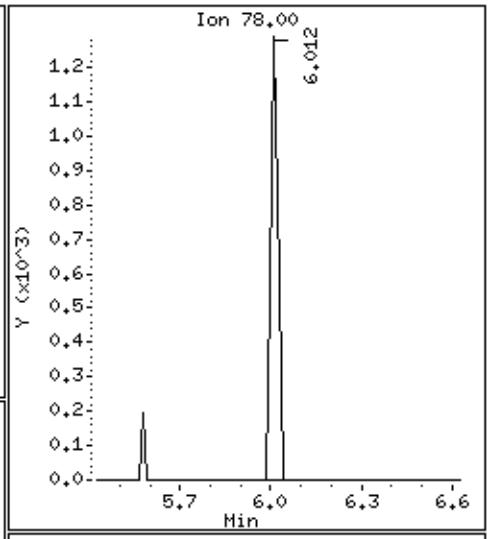
Column phase: RTX-624

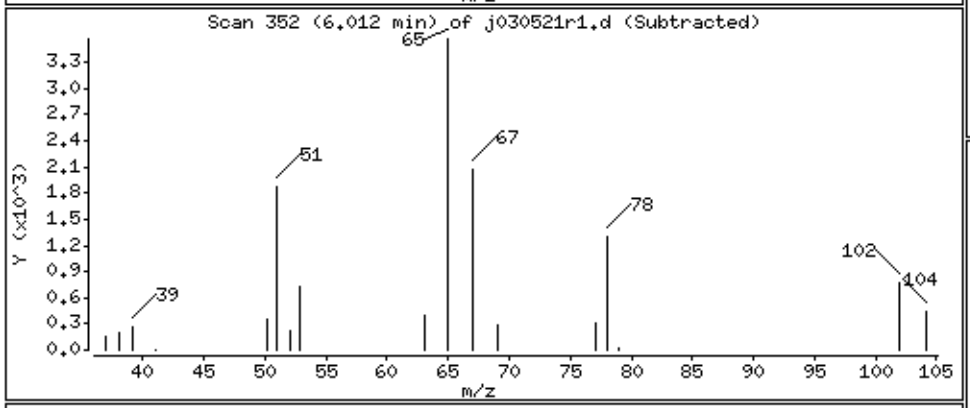
Column diameter: 0.25

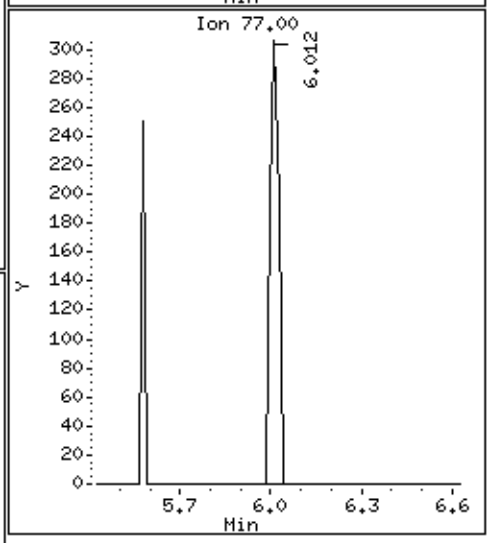
116 Benzene

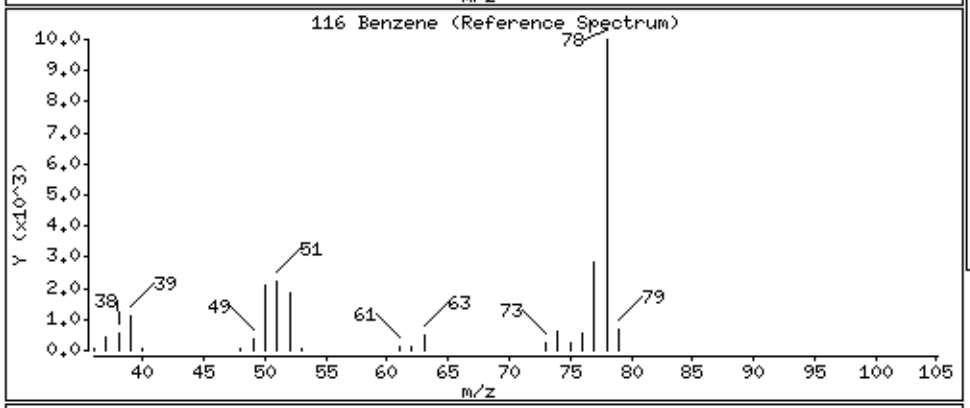
Concentration: 0.3249 PPBV

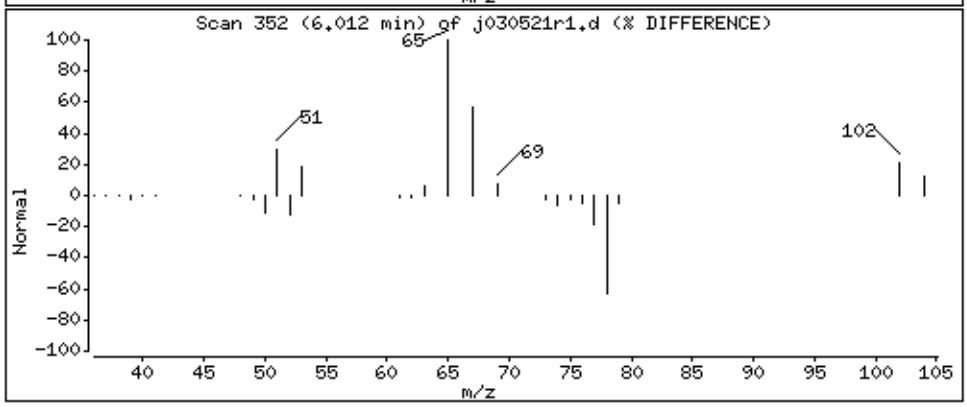












Data File: /chem/msdj.i/05mar15.b/j030521r1.d

Date : 05-MAR-2015 23:12

Client ID:

Instrument: msdj.i

Sample Info: 150ml 33398

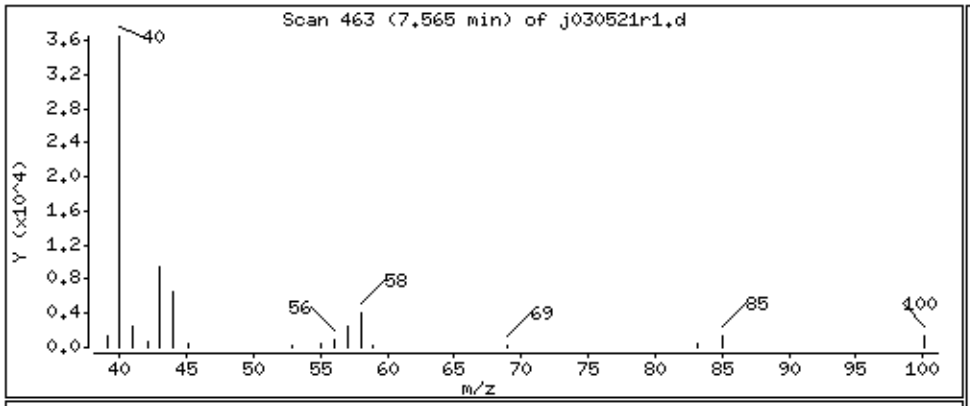
Operator: md

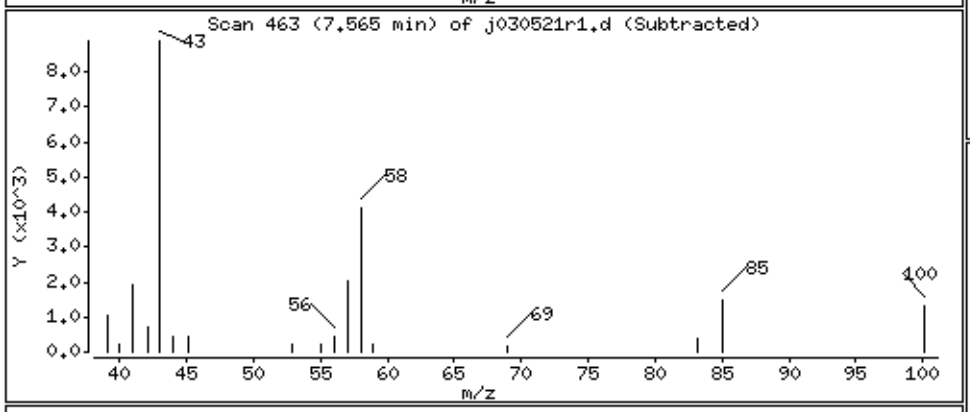
Column phase: RTX-624

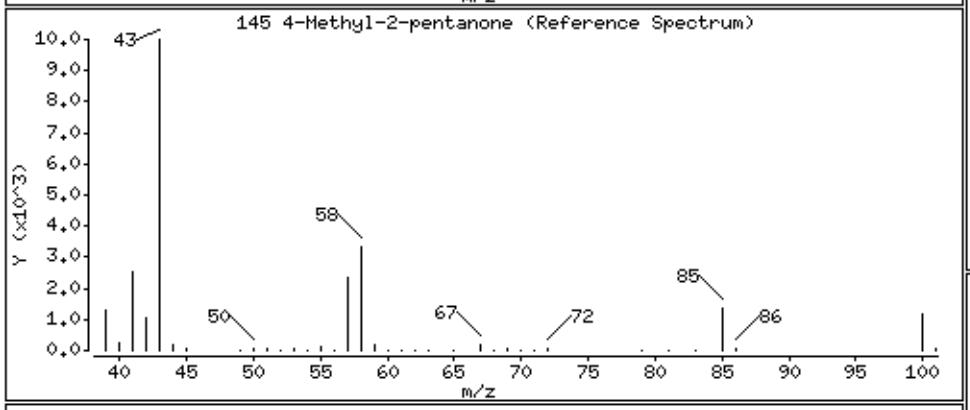
Column diameter: 0.25

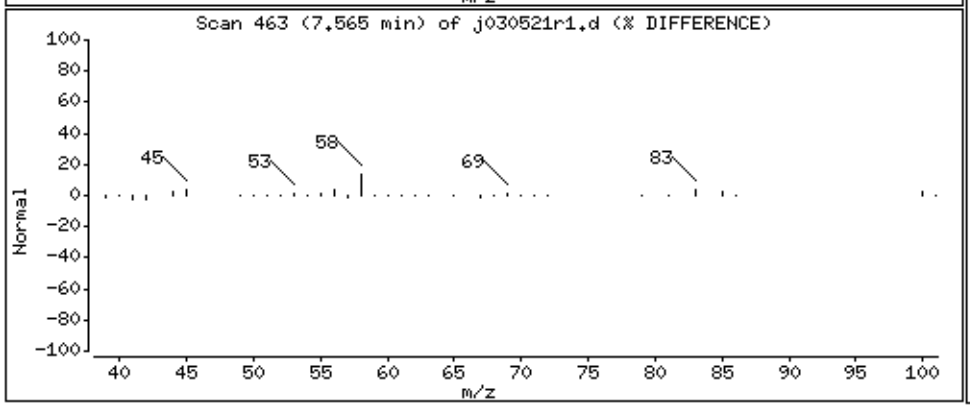
145 4-Methyl-2-pentanone

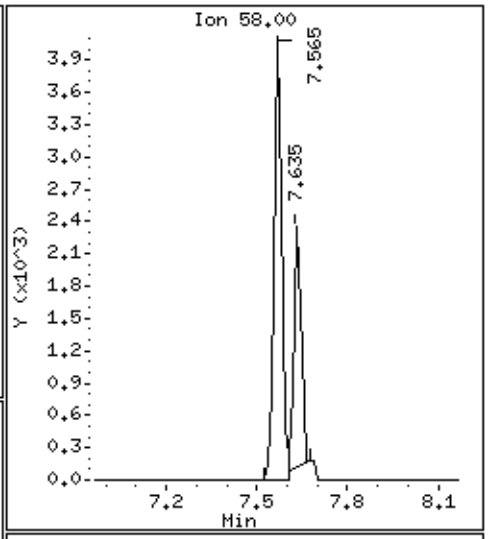
Concentration: 3.342 PPBV

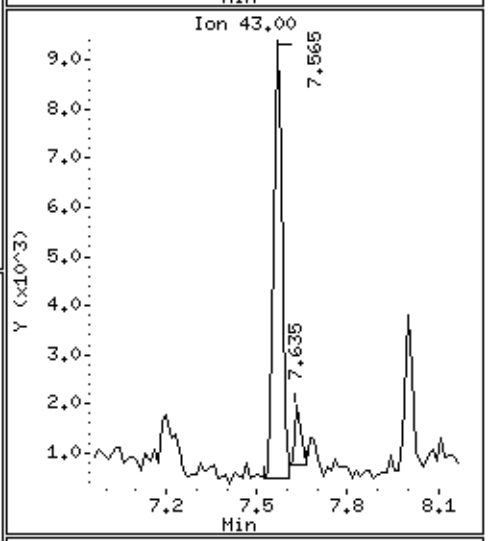


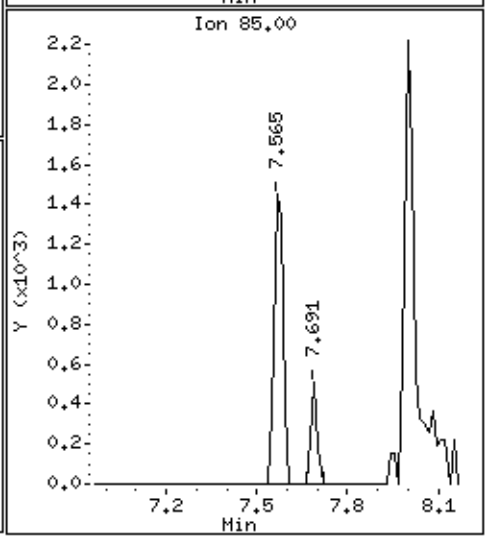












Data File: /chem/msdj.i/05mar15.b/j030521r1.d

Date : 05-MAR-2015 23:12

Client ID:

Instrument: msdj.i

Sample Info: 150ml 33398

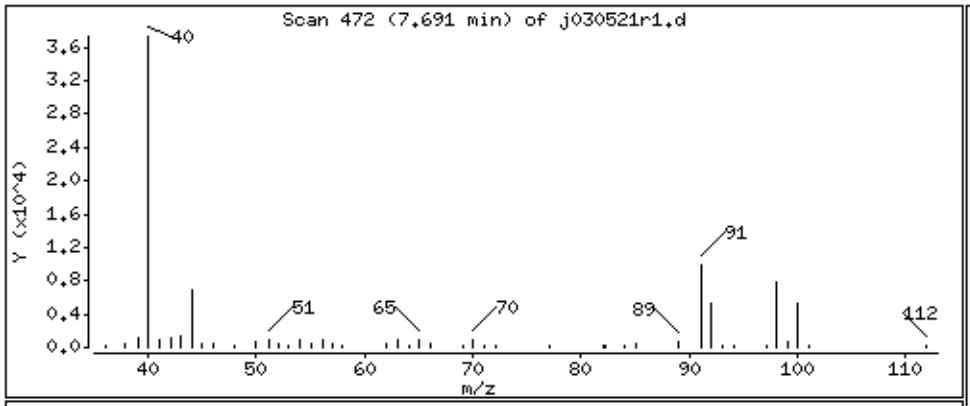
Operator: md

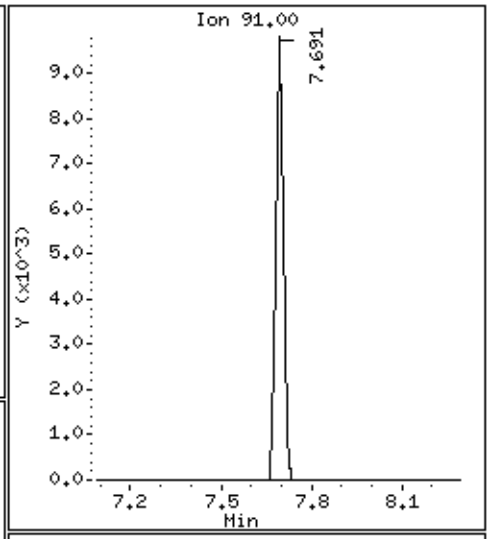
Column phase: RTX-624

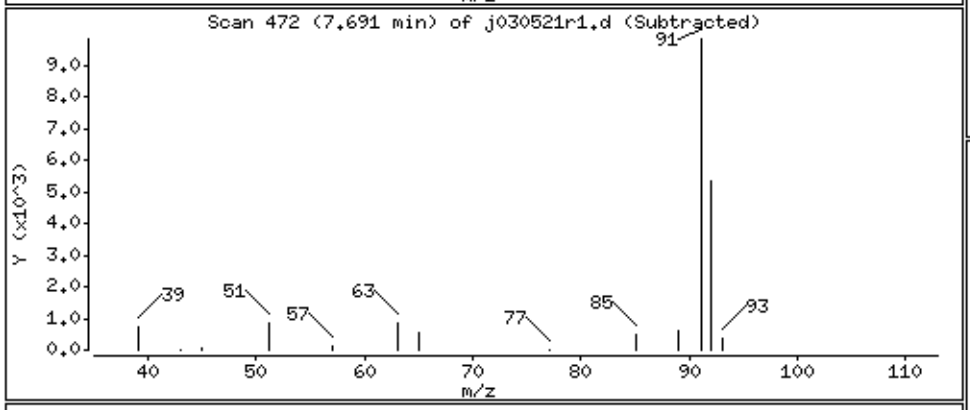
Column diameter: 0.25

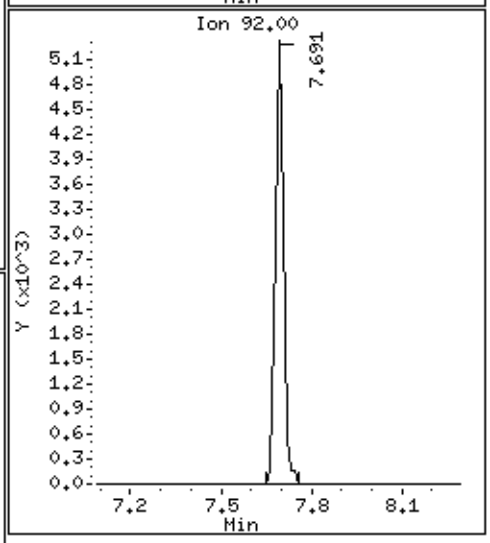
147 Toluene

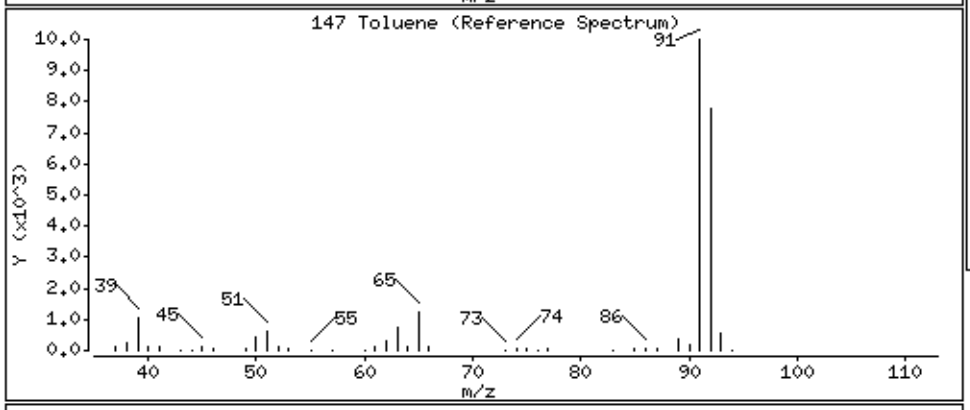
Concentration: 1.852 PPBV

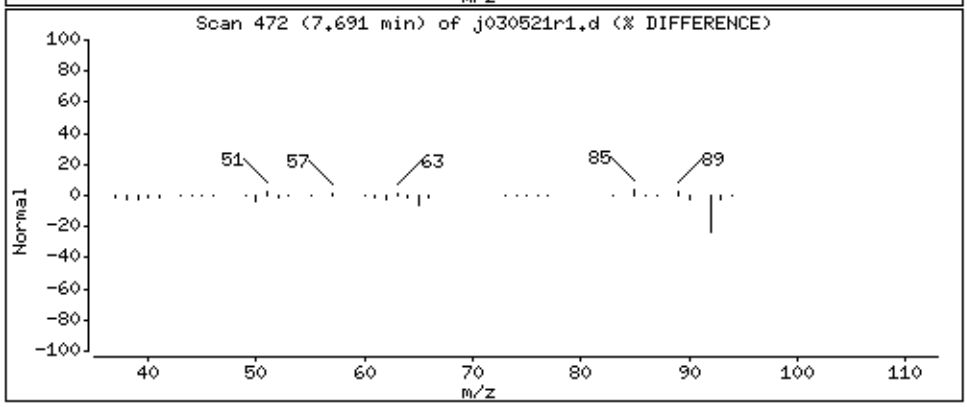












Data File: /chem/msdj.i/05mar15.b/j030521r1.d

Date : 05-MAR-2015 23:12

Client ID:

Instrument: msdj.i

Sample Info: 150ml 33398

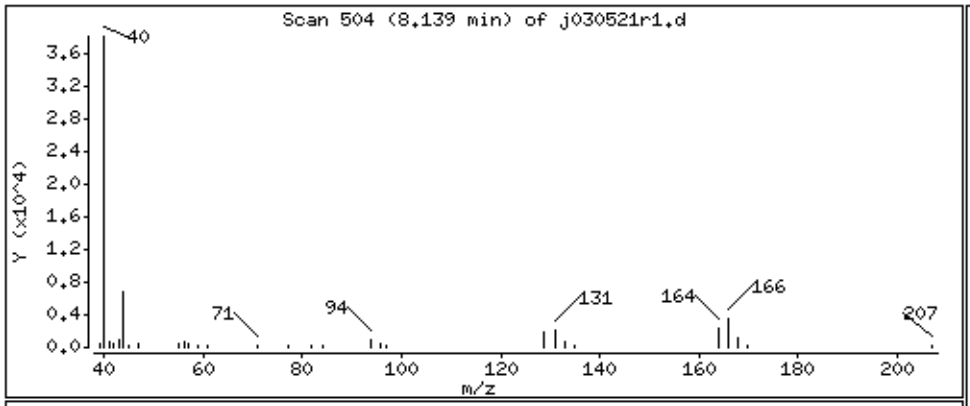
Operator: md

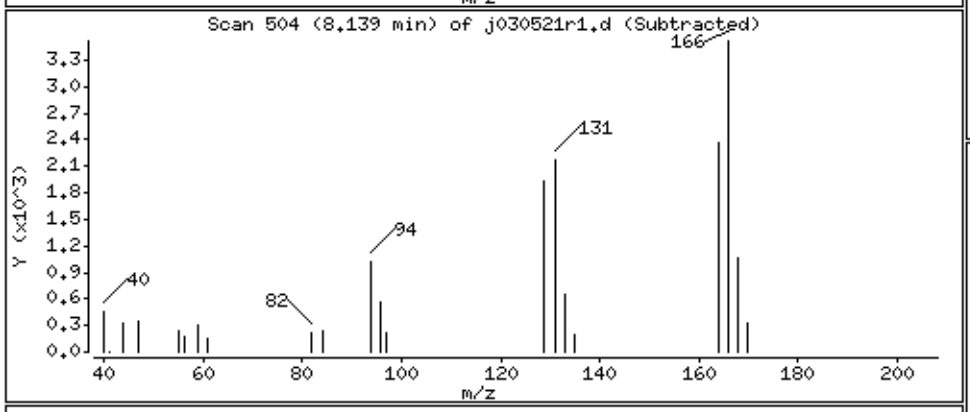
Column phase: RTX-624

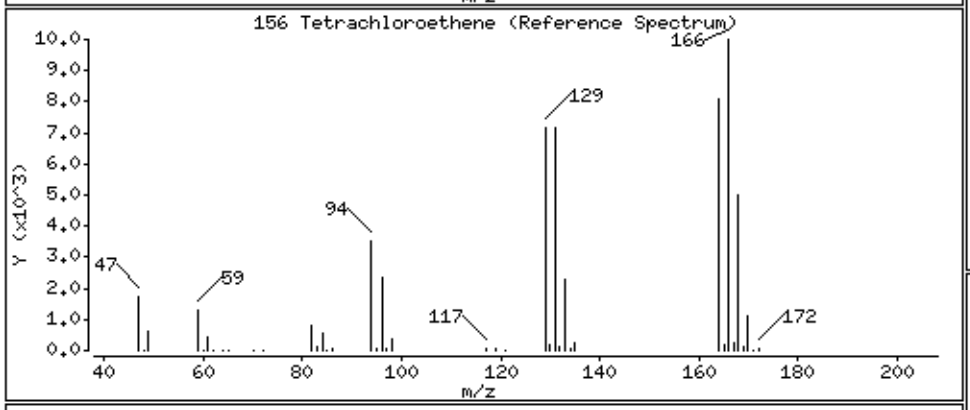
Column diameter: 0.25

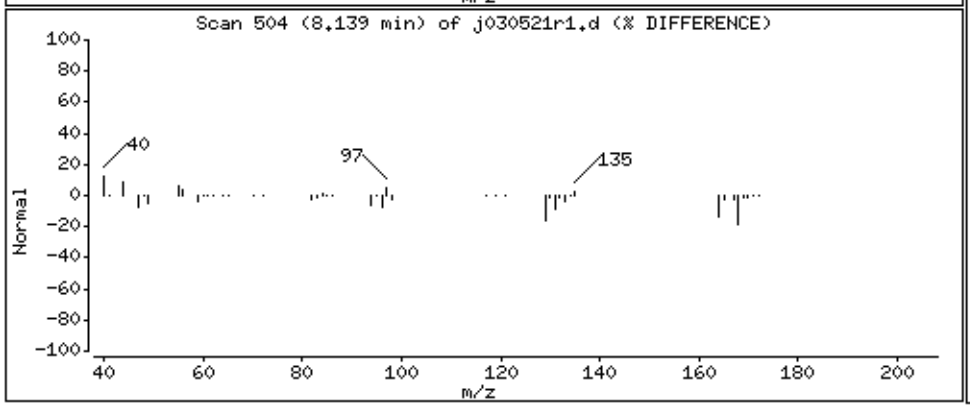
156 Tetrachloroethene

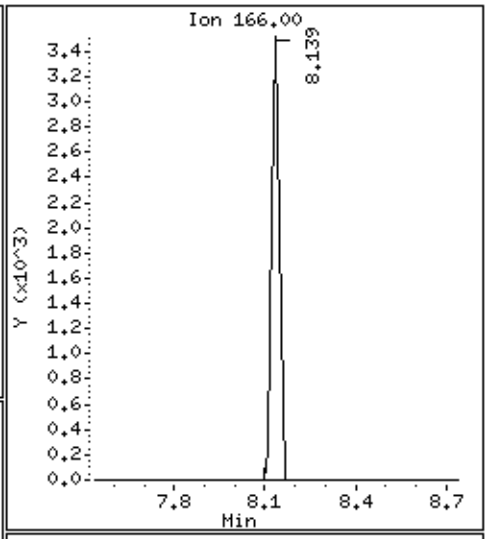
Concentration: 1.294 PPBV

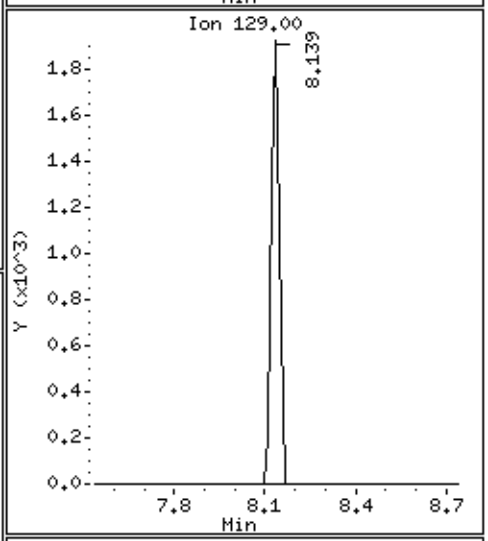


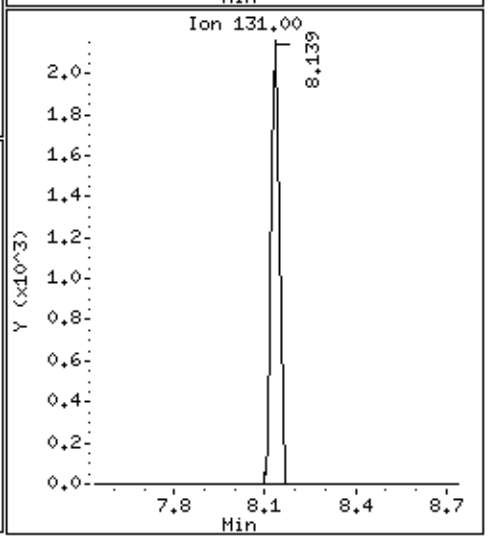












Data File: /chem/msdj.i/05mar15.b/j030521r1.d

Date : 05-MAR-2015 23:12

Client ID:

Instrument: msdj.i

Sample Info: 150ml 33398

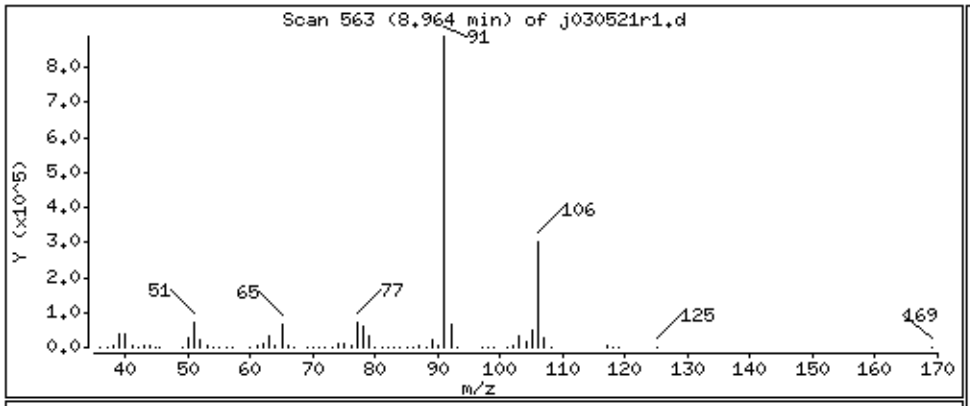
Operator: md

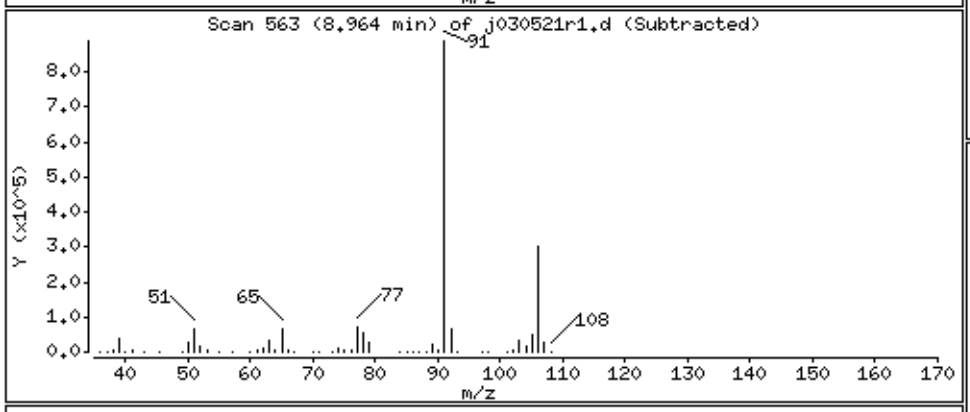
Column phase: RTX-624

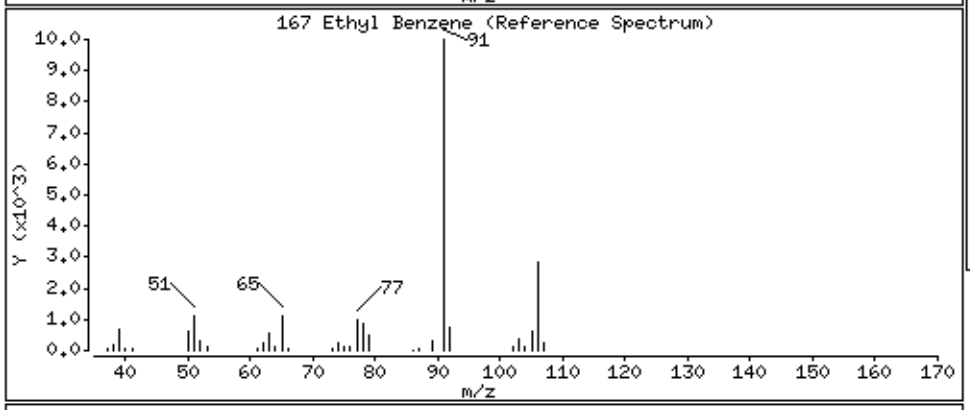
Column diameter: 0.25

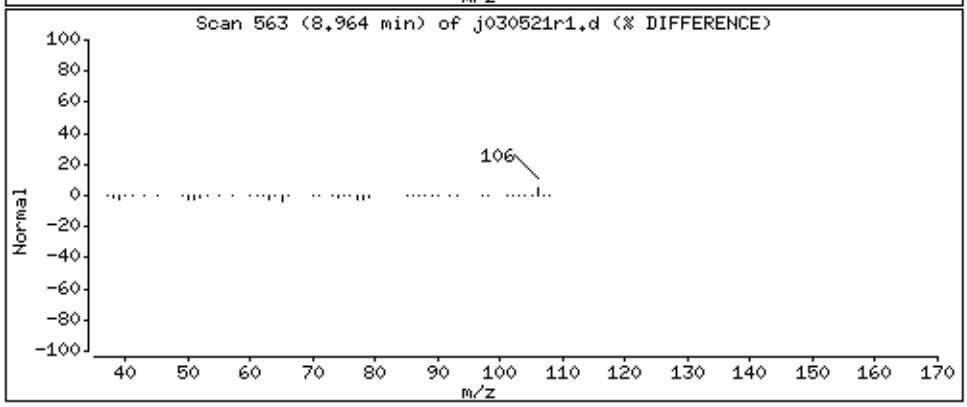
167 Ethyl Benzene

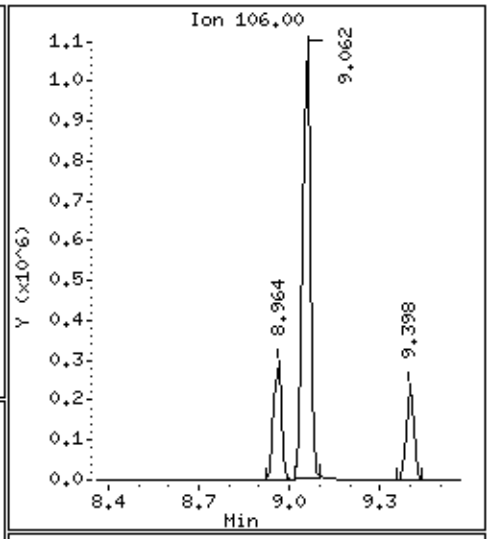
Concentration: 129.77 PPBV

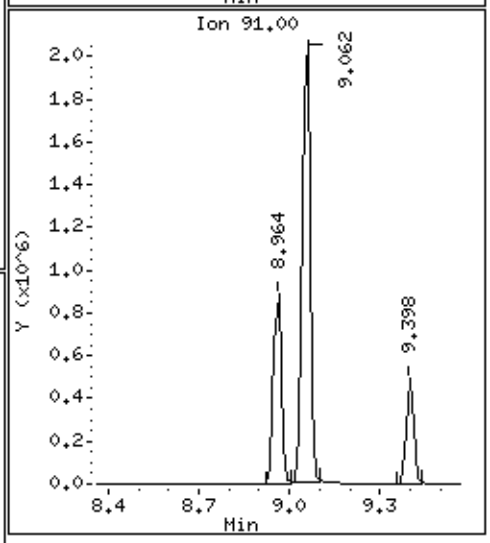












Data File: /chem/msdj.i/05mar15.b/j030521r1.d

Date : 05-MAR-2015 23:12

Client ID:

Instrument: msdj.i

Sample Info: 150ml 33398

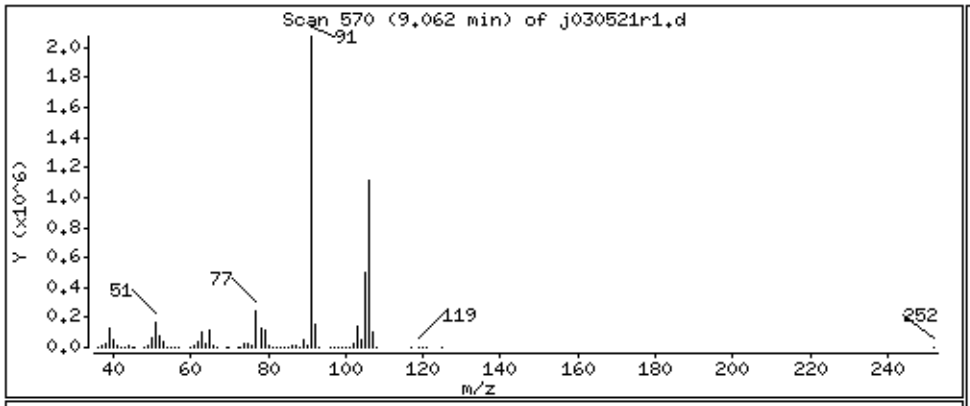
Operator: md

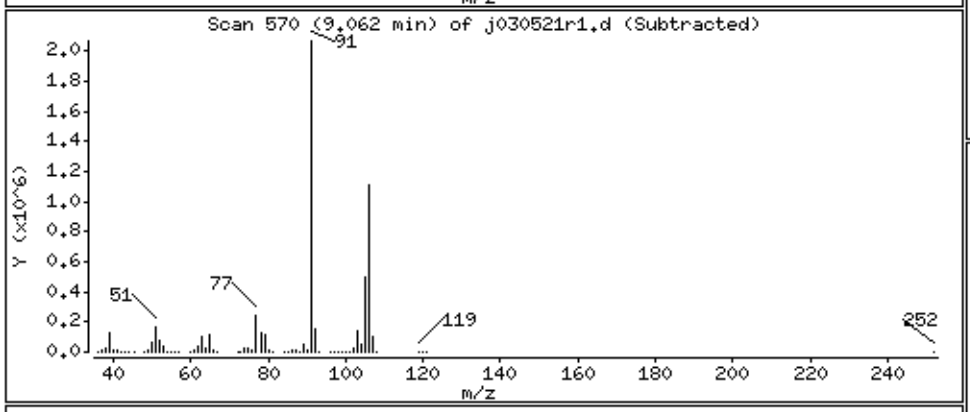
Column phase: RTX-624

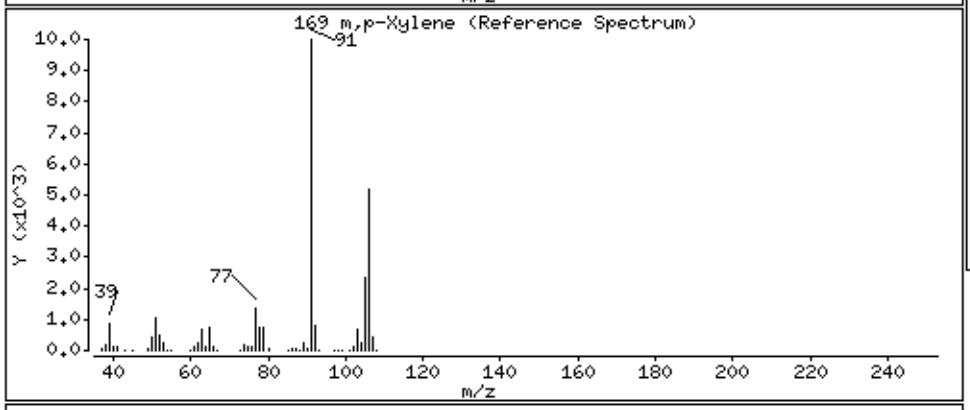
Column diameter: 0.25

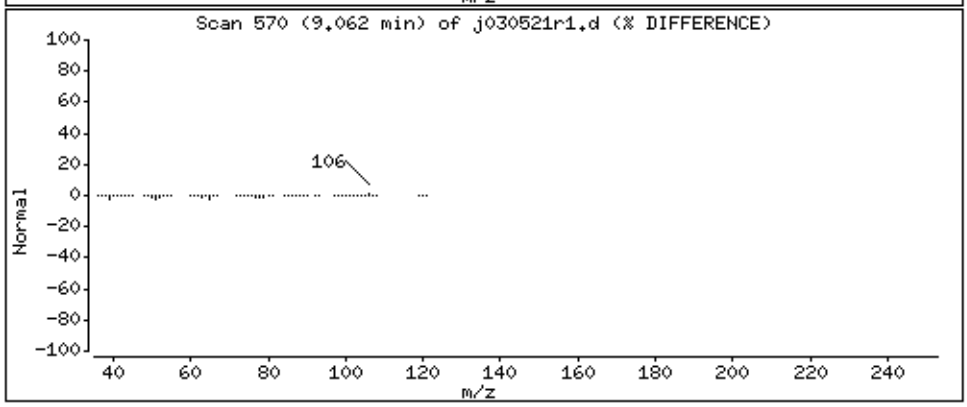
169 m,p-Xylene

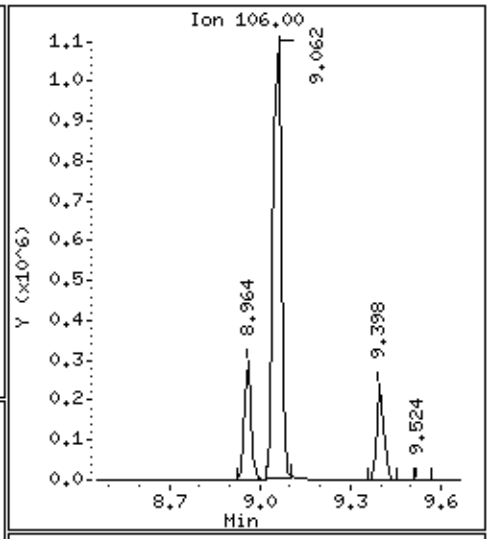
Concentration: 409.89 PPBV

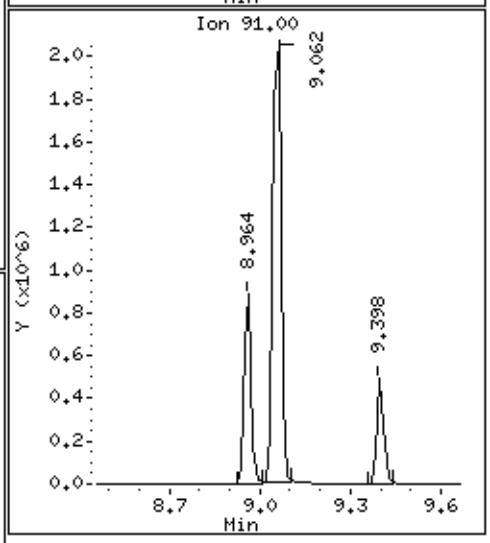












Data File: /chem/msdj.i/05mar15.b/j030521r1.d

Date : 05-MAR-2015 23:12

Client ID:

Instrument: msdj.i

Sample Info: 150ml 33398

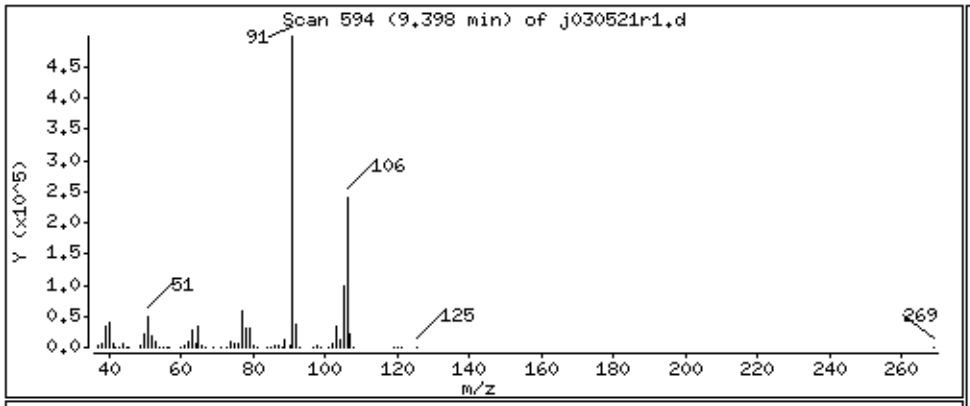
Operator: md

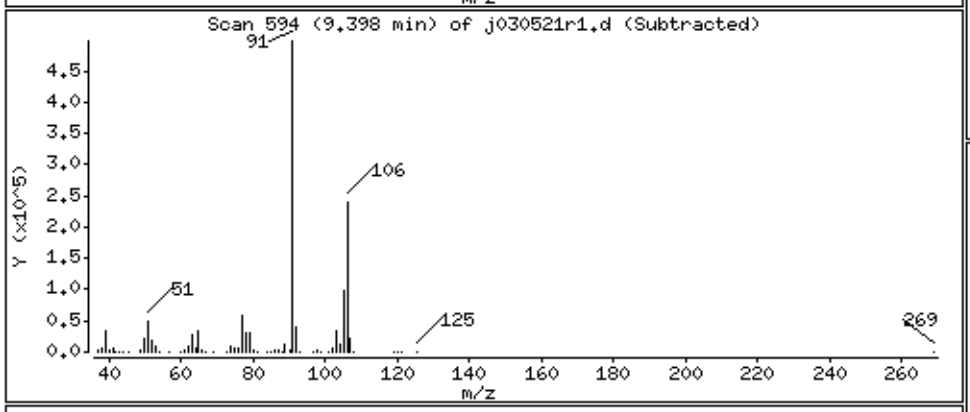
Column phase: RTX-624

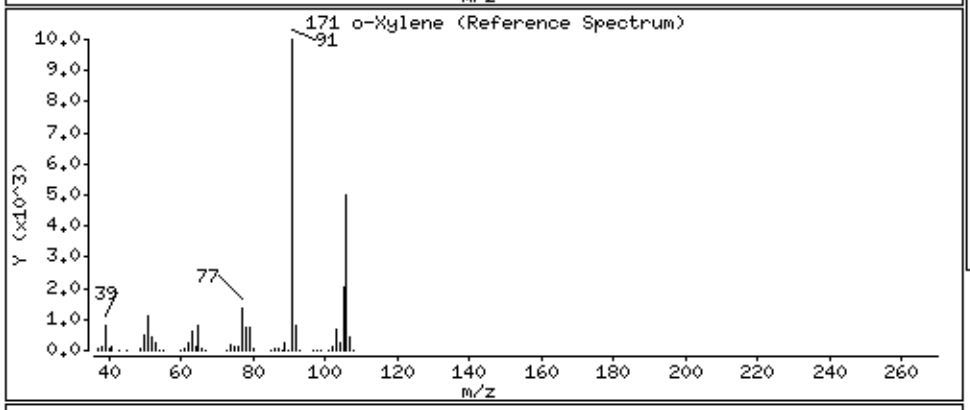
Column diameter: 0.25

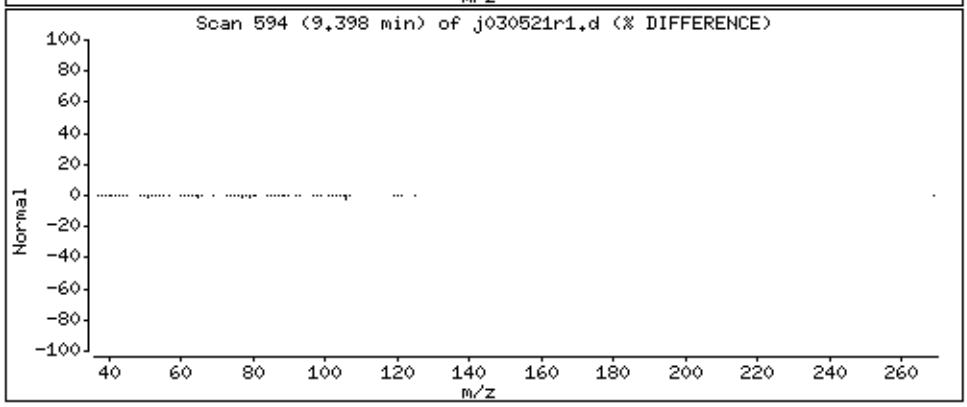
171 o-Xylene

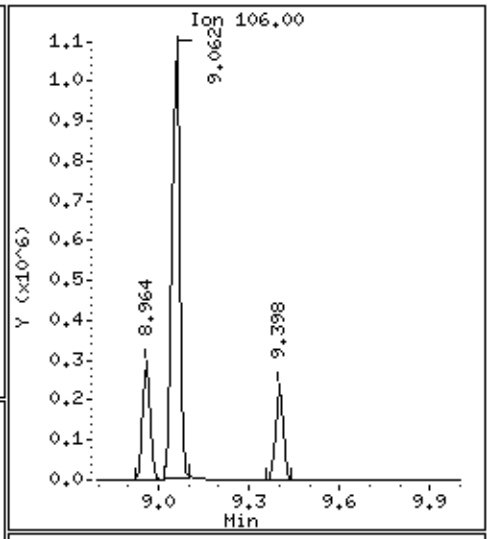
Concentration: 86.357 PPBV

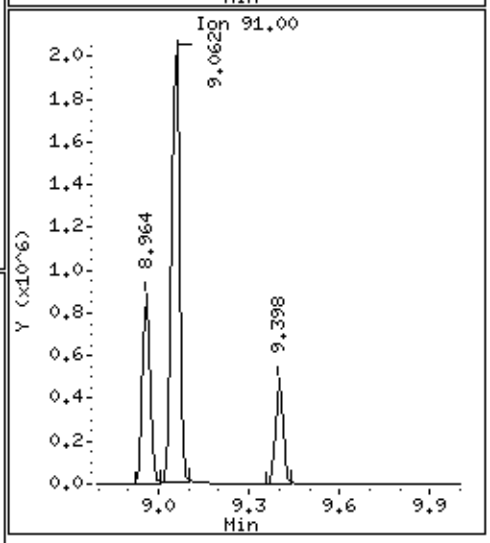












Data File: /chem/msdj.i/05mar15.b/j030521r1.d

Date : 05-MAR-2015 23:12

Client ID:

Instrument: msdj.i

Sample Info: 150ml 33398

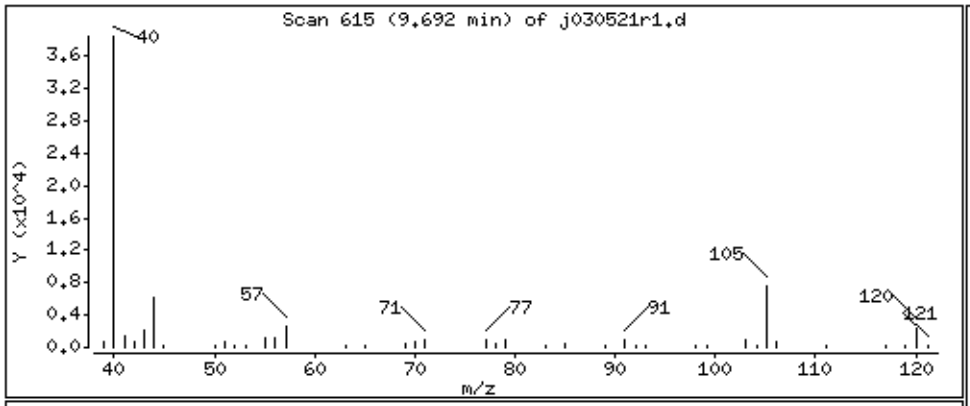
Operator: md

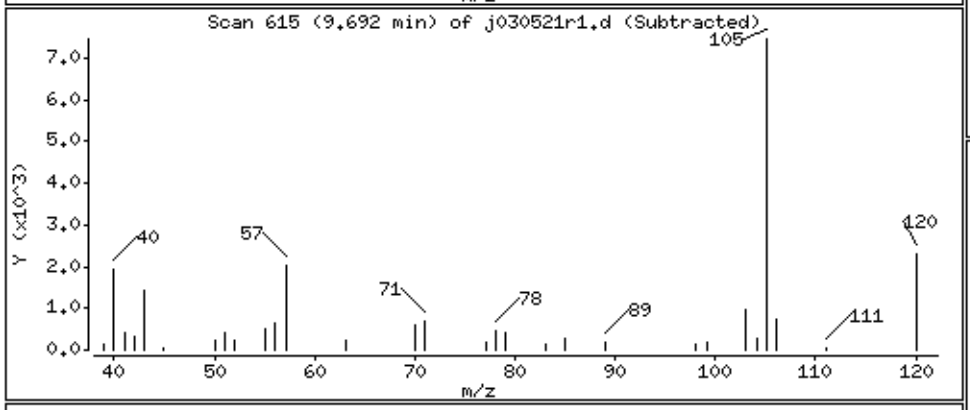
Column phase: RTX-624

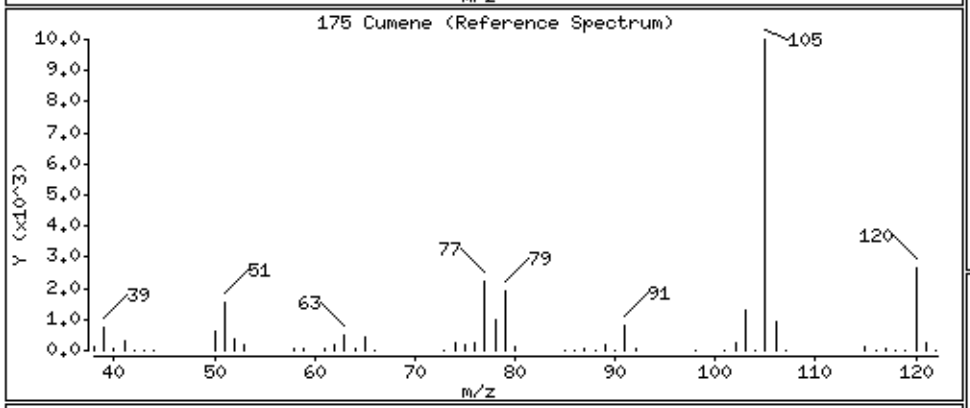
Column diameter: 0.25

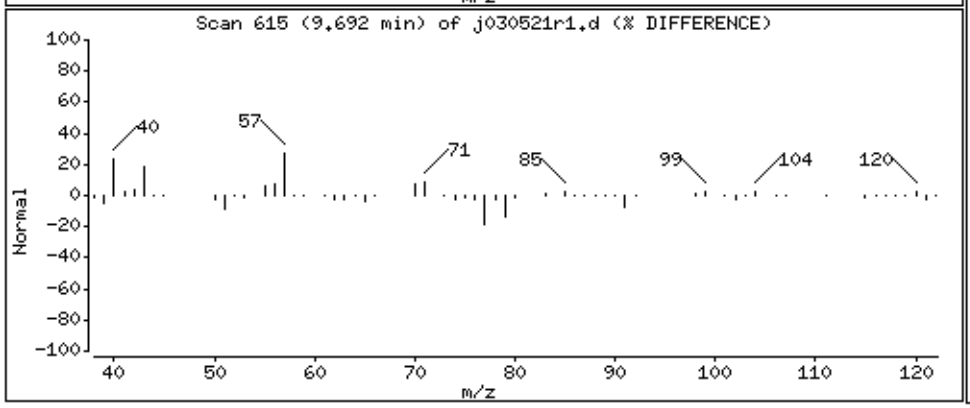
175 Cumene

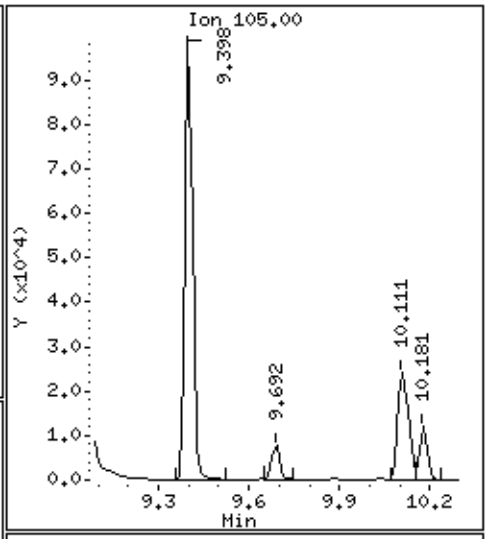
Concentration: 1.001 PPBV

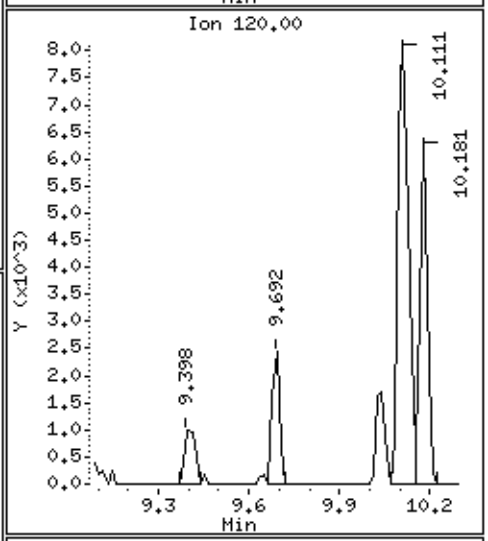


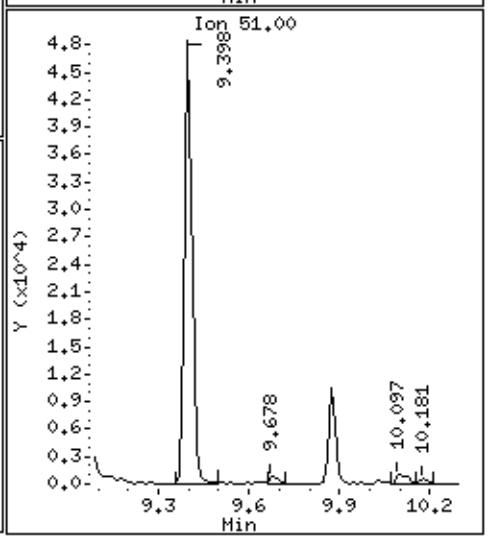












Data File: /chem/msdj.i/05mar15.b/j030521r1.d

Date : 05-MAR-2015 23:12

Client ID:

Instrument: msdj.i

Sample Info: 150ml 33398

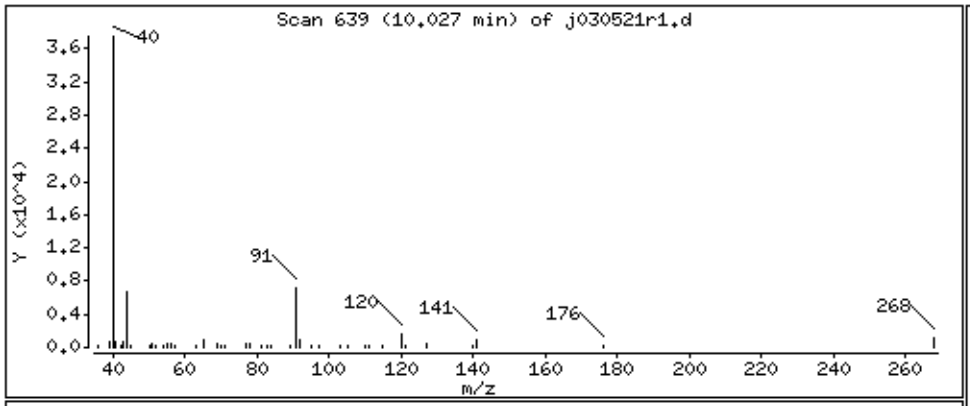
Operator: md

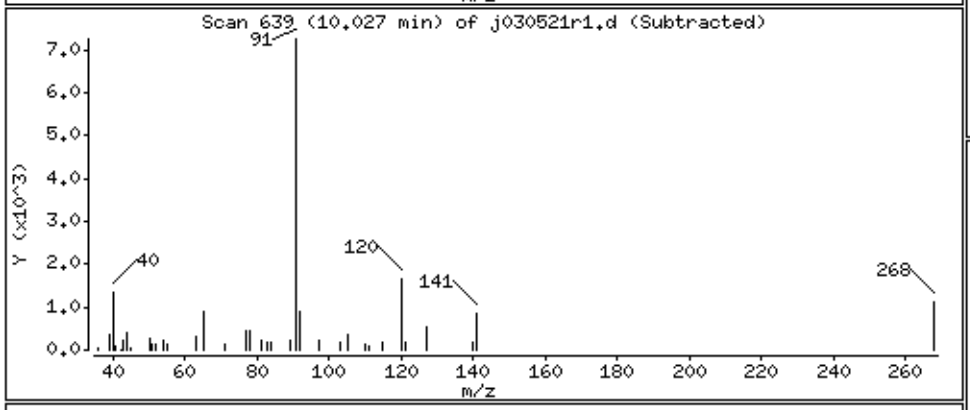
Column phase: RTX-624

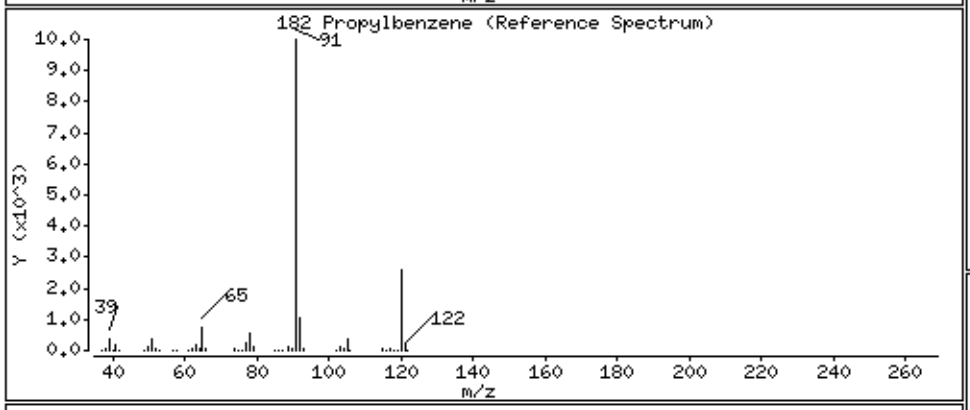
Column diameter: 0.25

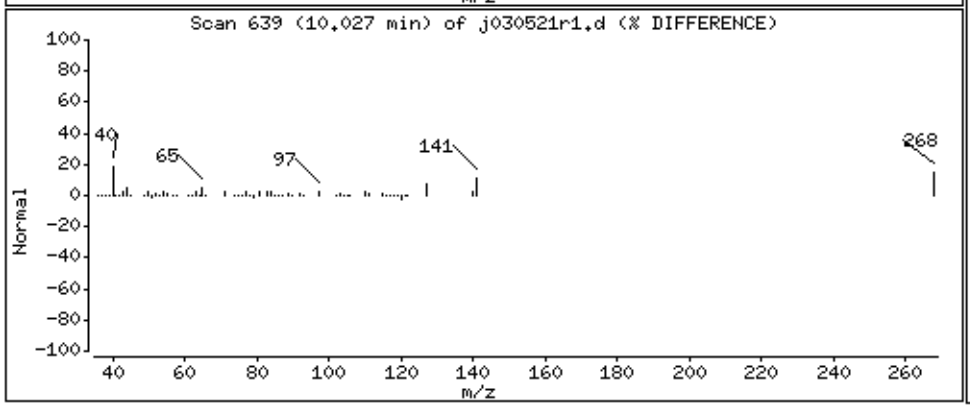
182 Propylbenzene

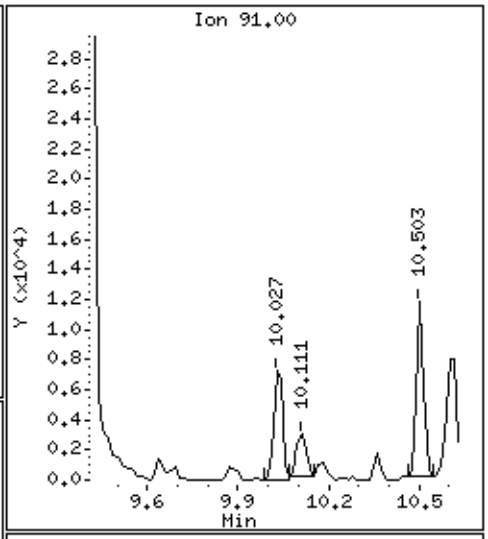
Concentration: 0.8726 PPBV

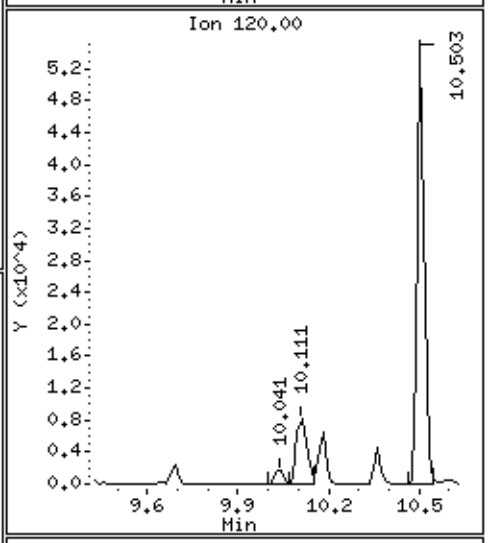


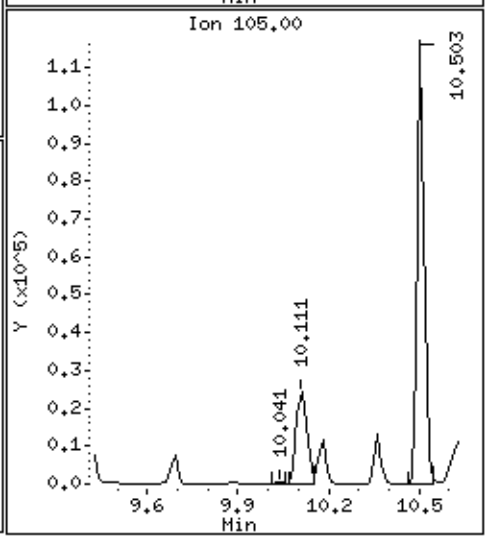












Data File: /chem/msdj.i/05mar15.b/j030521r1.d

Date : 05-MAR-2015 23:12

Client ID:

Instrument: msdj.i

Sample Info: 150ml 33398

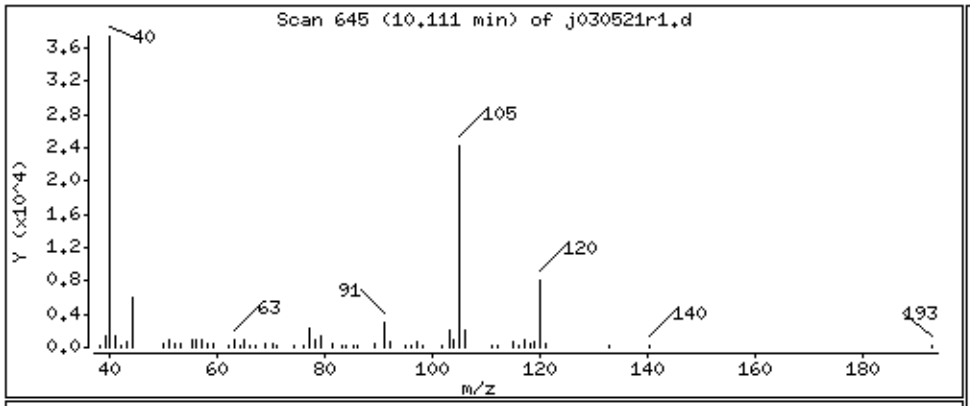
Operator: md

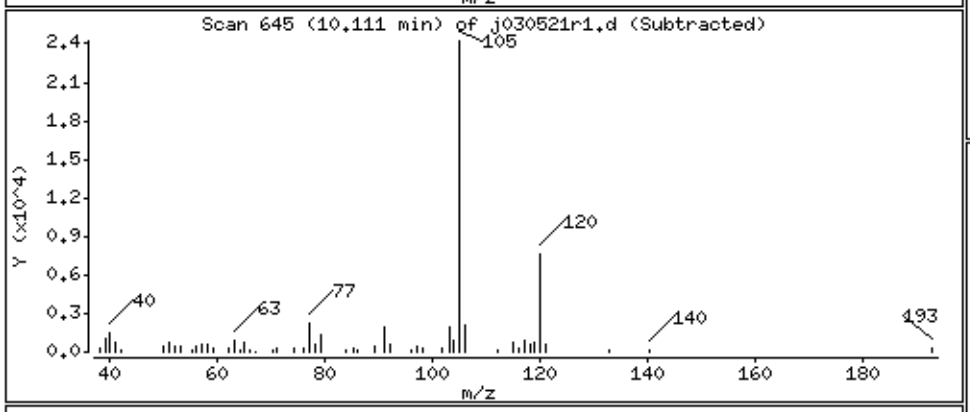
Column phase: RTX-624

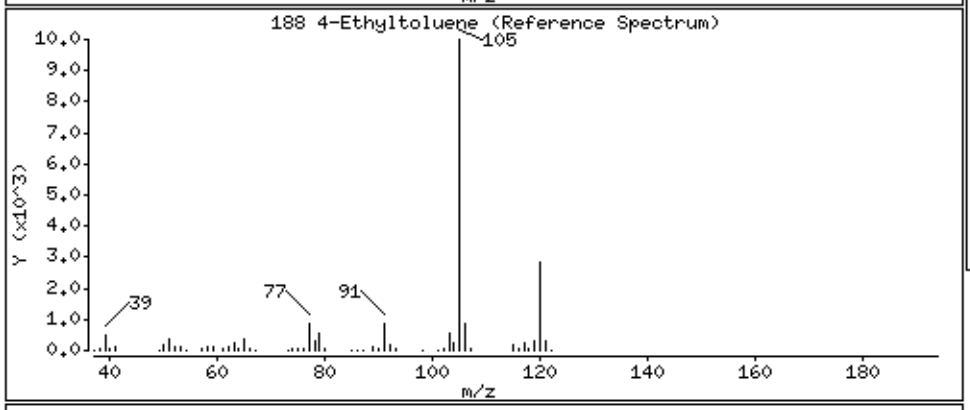
Column diameter: 0.25

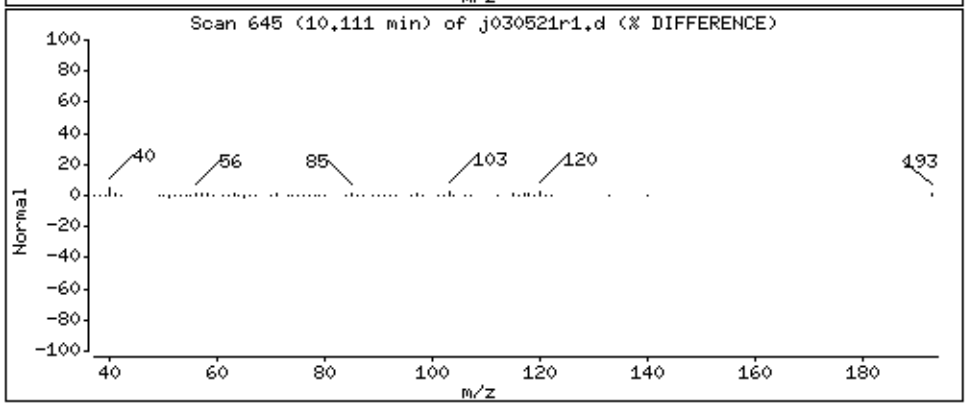
188 4-Ethyltoluene

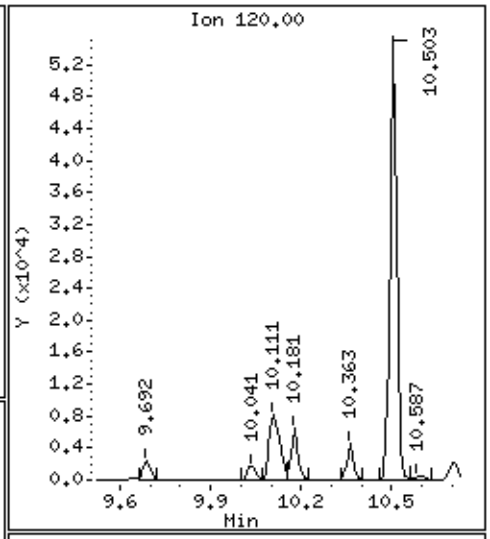
Concentration: 4.448 PPBV

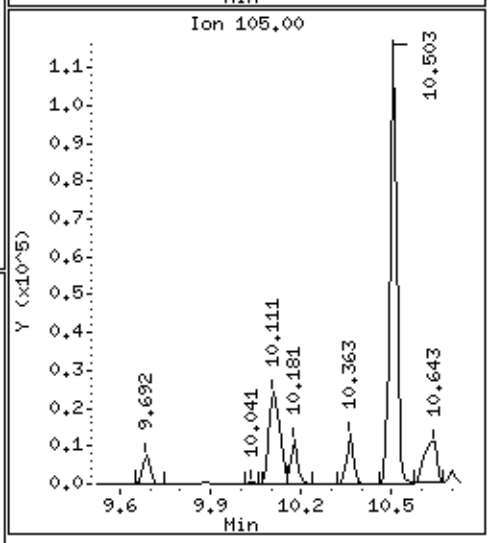












Data File: /chem/msdj.i/05mar15.b/j030521r1.d

Date : 05-MAR-2015 23:12

Client ID:

Instrument: msdj.i

Sample Info: 150ml 33398

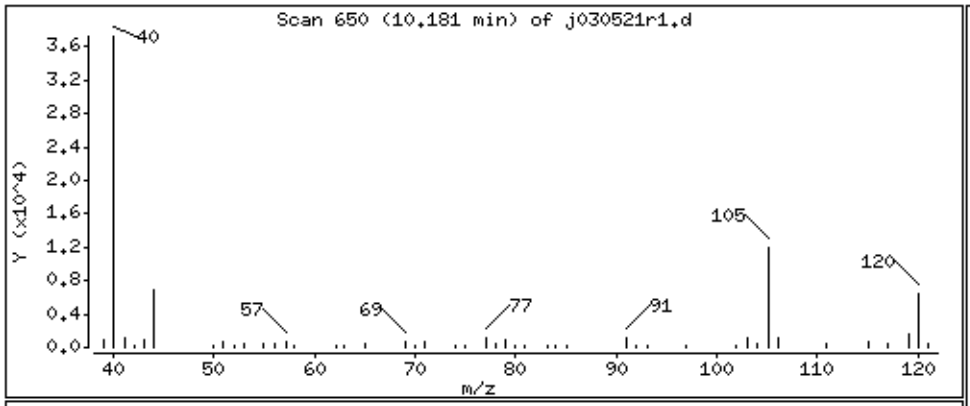
Operator: md

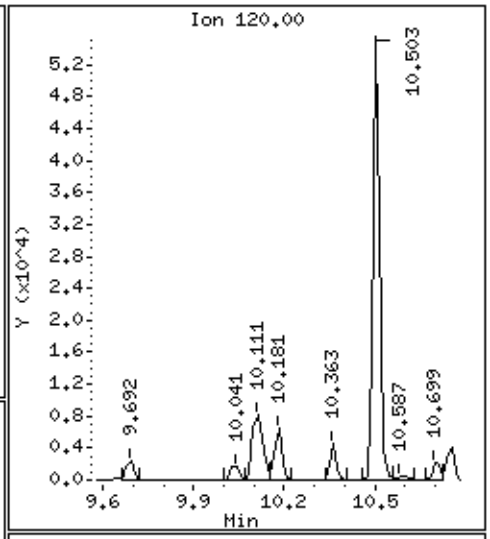
Column phase: RTX-624

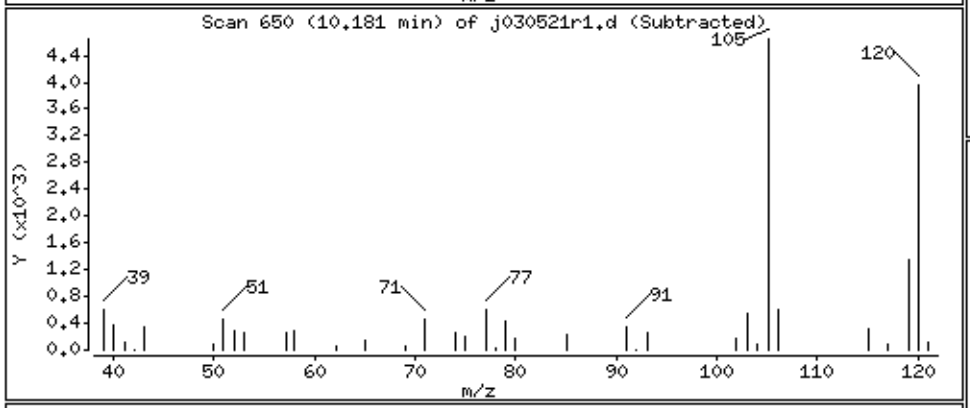
Column diameter: 0.25

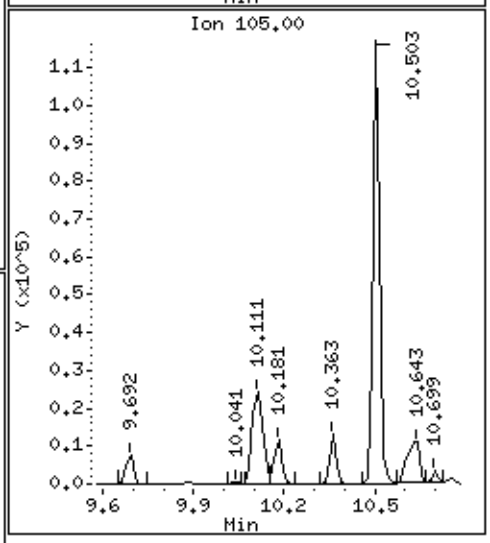
190 1,3,5-Trimethylbenzene

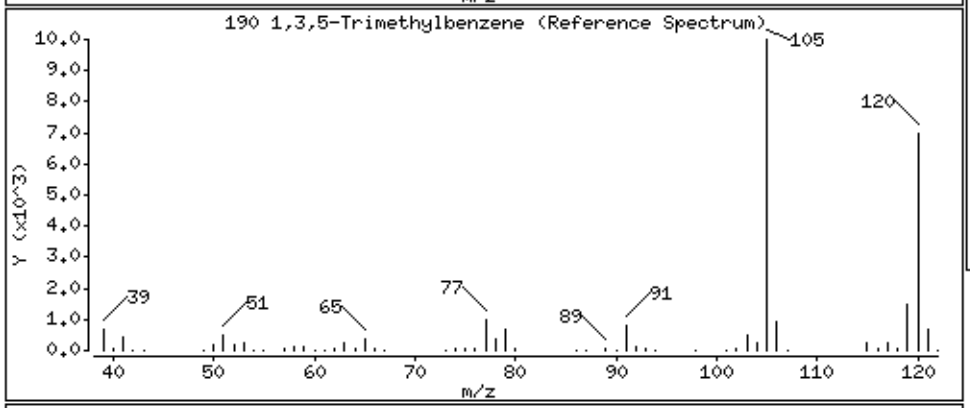
Concentration: 1.731 PPBV

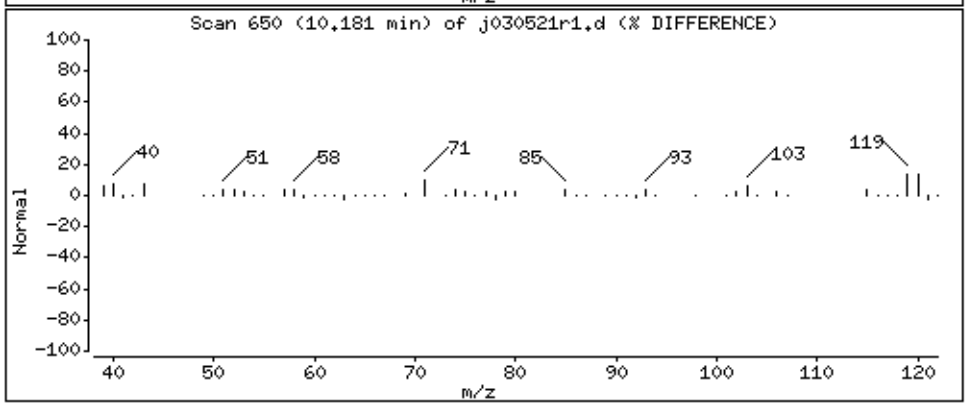












Data File: /chem/msdj.i/05mar15.b/j030521r1.d

Date : 05-MAR-2015 23:12

Client ID:

Instrument: msdj.i

Sample Info: 150ml 33398

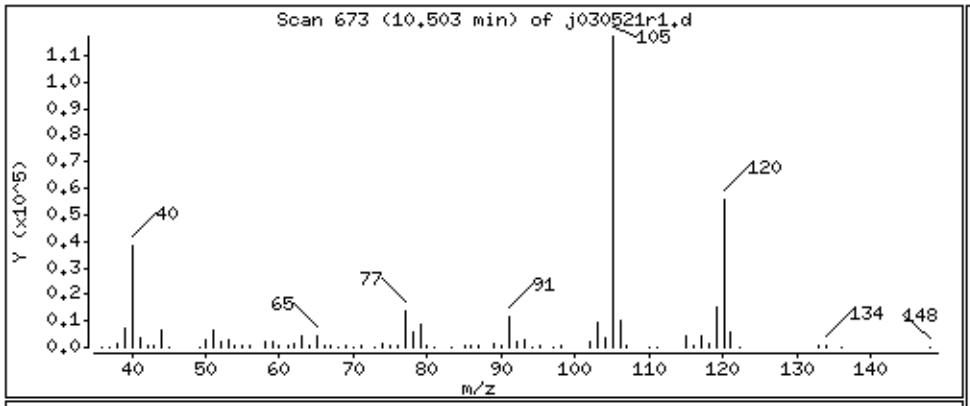
Operator: md

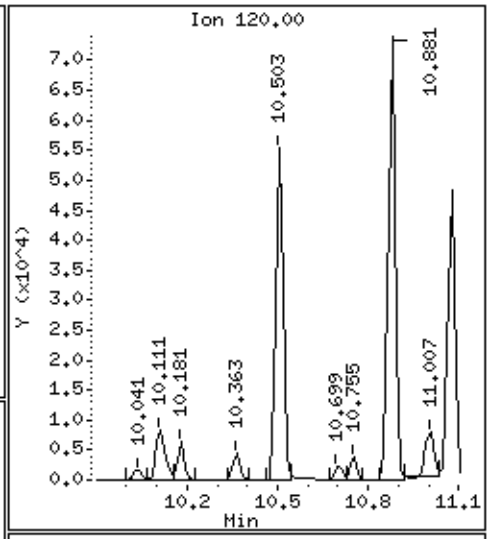
Column phase: RTX-624

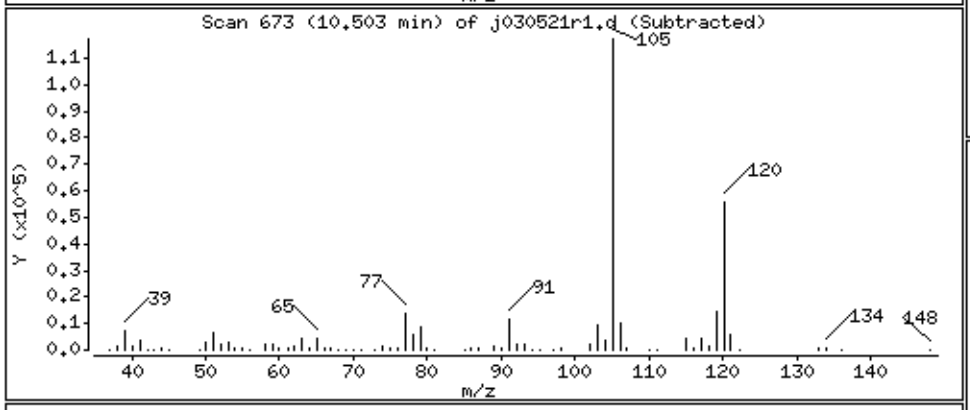
Column diameter: 0.25

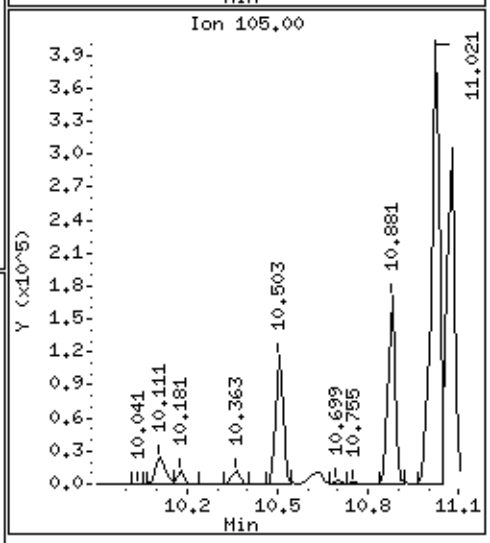
196 1,2,4-Trimethylbenzene

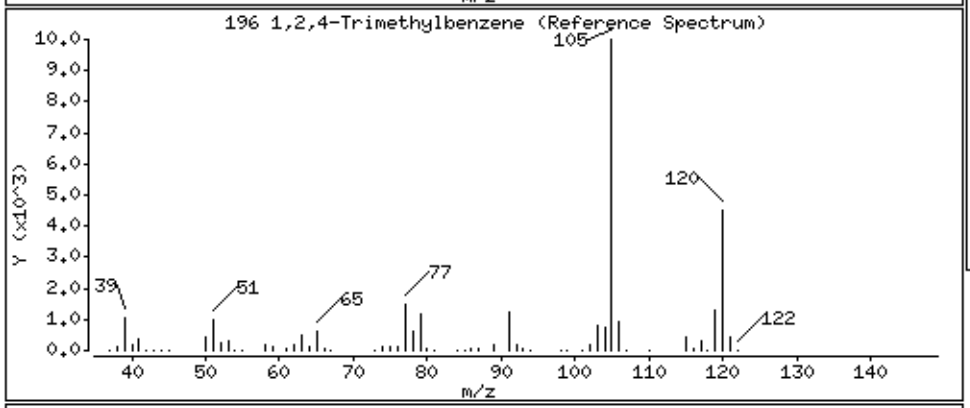
Concentration: 16.674 PPBV

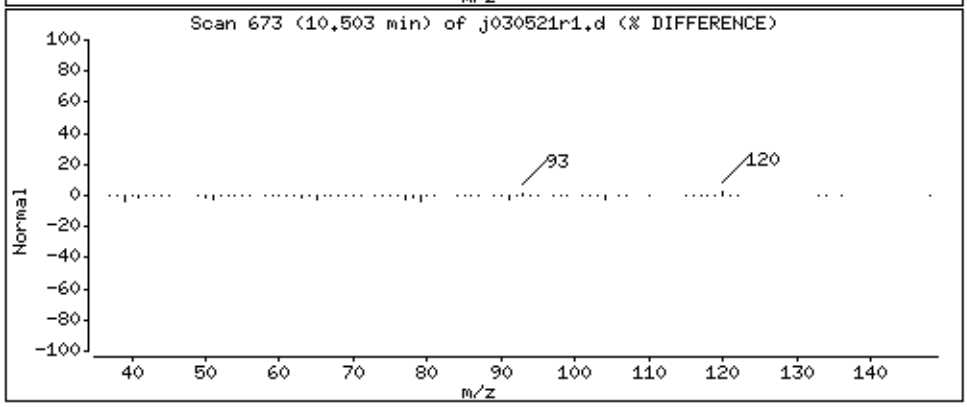












Data File: /chem/msdj.i/05mar15.b/j030521r1.d

Date : 05-MAR-2015 23:12

Client ID:

Instrument: msdj.i

Sample Info: 150ml 33398

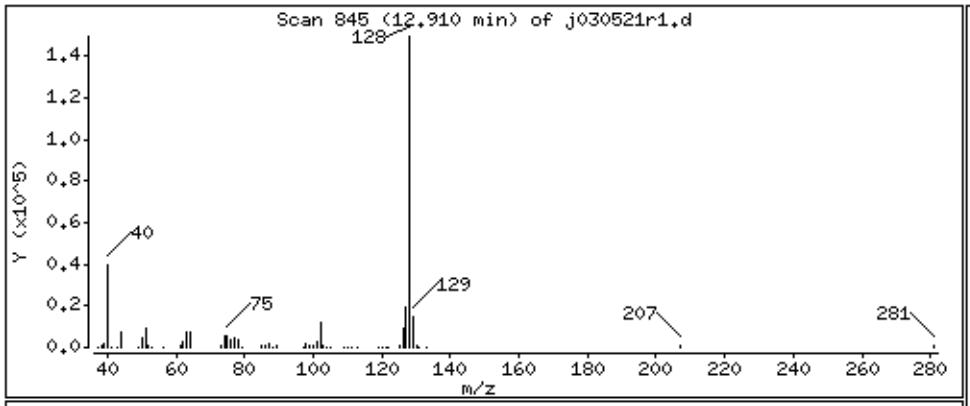
Operator: md

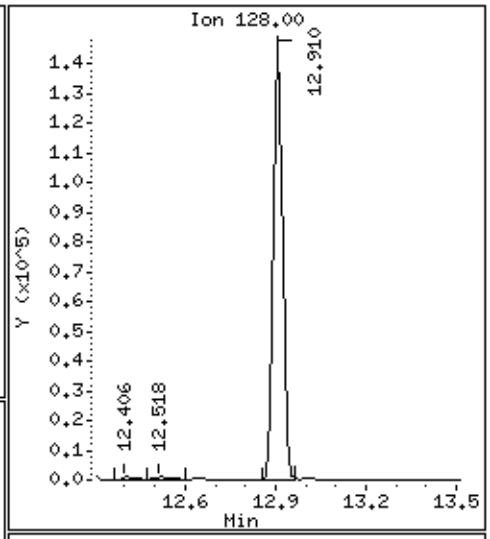
Column phase: RTX-624

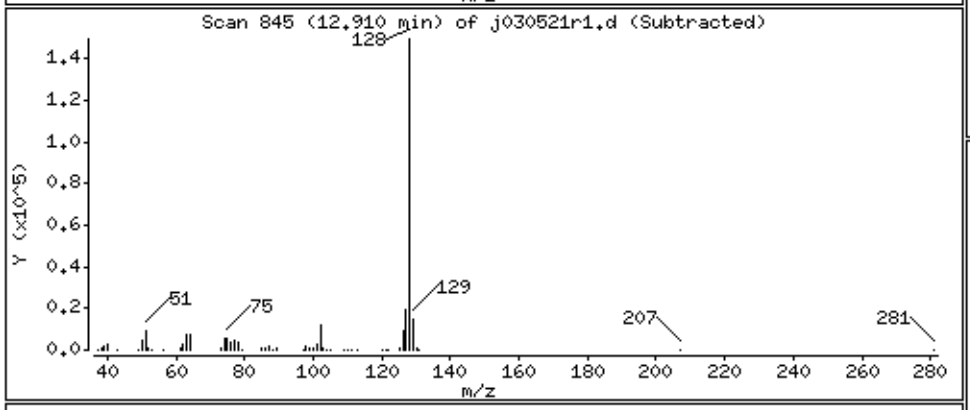
Column diameter: 0.25

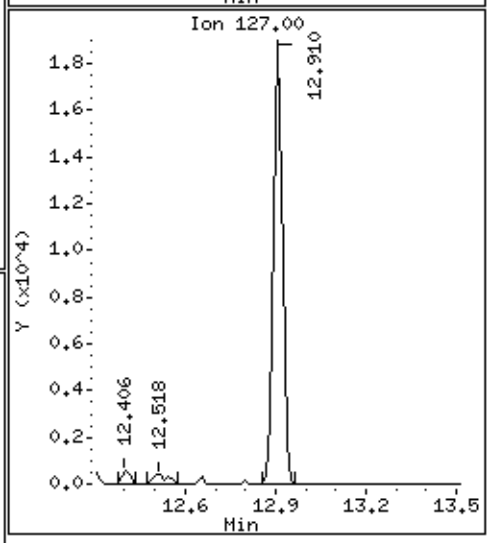
228 Naphthalene

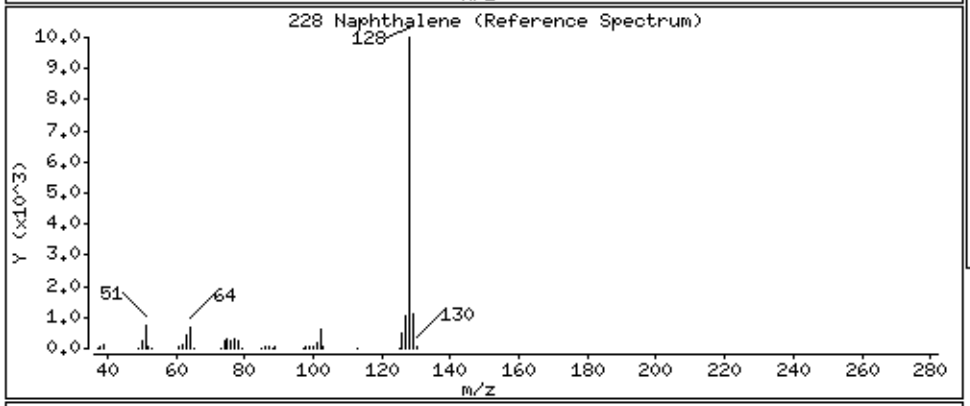
Concentration: 27.016 PPBV

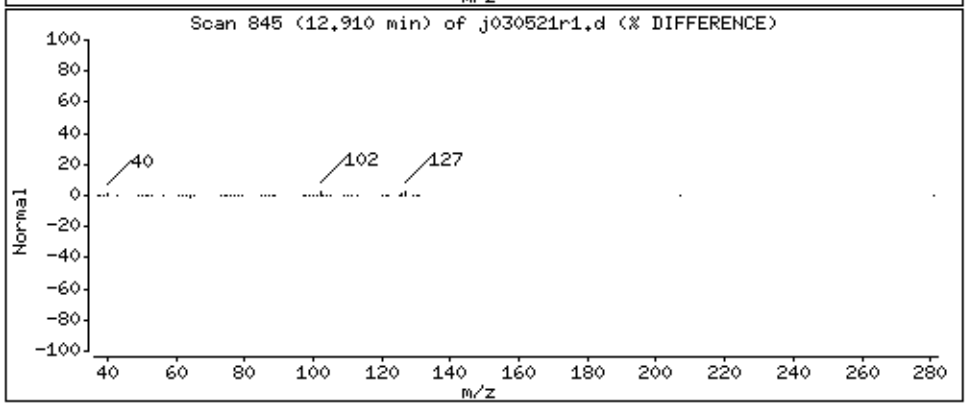












eurofins | Air Toxics

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

Client Sample ID: B6-2SSDup

Lab ID#: 1503058BR1-07A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Ethanol	9.7	20	18	37
Acetone	24	140	58	320
2-Propanol	9.7	660	24	1600
2-Butanone (Methyl Ethyl Ketone)	9.7	70	29	210
Tetrahydrofuran	2.4	14	7.2	40
Chloroform	2.4	2.2 J	12	11 J
2,2,4-Trimethylpentane	2.4	0.39 J	11	1.8 J
4-Methyl-2-pentanone	2.4	2.8	10	12
Toluene	2.4	1.7 J	9.2	6.4 J
Tetrachloroethene	2.4	0.32 J	16	2.2 J
Ethyl Benzene	2.4	100	10	450
m,p-Xylene	2.4	320	10	1400
o-Xylene	2.4	68	10	300
Cumene	2.4	0.81 J	12	4.0 J
Propylbenzene	2.4	0.71 J	12	3.5 J
4-Ethyltoluene	2.4	3.5	12	17
1,3,5-Trimethylbenzene	2.4	1.5 J	12	7.4 J
1,2,4-Trimethylbenzene	2.4	12	12	58
Naphthalene	4.9	19	26	100

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Client Sample ID: B6-2SSDup

Lab ID#: 1503058BR1-07A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**j030522r1**	**Date of Collection:**	**3/2/15 3:08:00 PM**
Dil. Factor:	**4.87**	**Date of Analysis:**	**3/5/15 11:39 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	24	Not Detected	50	Not Detected
Vinyl Chloride	2.4	Not Detected	6.2	Not Detected
1,3-Butadiene	2.4	Not Detected	5.4	Not Detected
Bromomethane	24	Not Detected	94	Not Detected
Chloroethane	9.7	Not Detected	26	Not Detected
Freon 11	2.4	Not Detected	14	Not Detected
Ethanol	9.7	20	18	37
Freon 113	2.4	Not Detected	19	Not Detected
1,1-Dichloroethene	2.4	Not Detected	9.6	Not Detected
Acetone	24	140	58	320
2-Propanol	9.7	660	24	1600
Carbon Disulfide	9.7	Not Detected	30	Not Detected
3-Chloropropene	9.7	Not Detected	30	Not Detected
Methylene Chloride	24	Not Detected	84	Not Detected
Methyl tert-butyl ether	2.4	Not Detected	8.8	Not Detected
trans-1,2-Dichloroethene	2.4	Not Detected	9.6	Not Detected
Hexane	2.4	Not Detected	8.6	Not Detected
1,1-Dichloroethane	2.4	Not Detected	9.8	Not Detected
2-Butanone (Methyl Ethyl Ketone)	9.7	70	29	210
cis-1,2-Dichloroethene	2.4	Not Detected	9.6	Not Detected
Tetrahydrofuran	2.4	14	7.2	40
Chloroform	2.4	2.2 J	12	11 J
1,1,1-Trichloroethane	2.4	Not Detected	13	Not Detected
Cyclohexane	2.4	Not Detected	8.4	Not Detected
Carbon Tetrachloride	2.4	Not Detected	15	Not Detected
2,2,4-Trimethylpentane	2.4	0.39 J	11	1.8 J
Benzene	2.4	Not Detected	7.8	Not Detected
1,2-Dichloroethane	2.4	Not Detected	9.8	Not Detected
Heptane	2.4	Not Detected	10	Not Detected
Trichloroethene	2.4	Not Detected	13	Not Detected
1,2-Dichloropropane	2.4	Not Detected	11	Not Detected
1,4-Dioxane	9.7	Not Detected	35	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	2.8	10	12
Toluene	2.4	1.7 J	9.2	6.4 J
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	0.32 J	16	2.2 J
2-Hexanone	9.7	Not Detected	40	Not Detected

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Client Sample ID: B6-2SSDup

Lab ID#: 1503058BR1-07A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**j030522r1**	**Date of Collection:**	**3/2/15 3:08:00 PM**
Dil. Factor:	**4.87**	**Date of Analysis:**	**3/5/15 11:39 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	19	Not Detected
Chlorobenzene	2.4	Not Detected	11	Not Detected
Ethyl Benzene	2.4	100	10	450
m,p-Xylene	2.4	320	10	1400
o-Xylene	2.4	68	10	300
Styrene	2.4	Not Detected	10	Not Detected
Bromoform	2.4	Not Detected	25	Not Detected
Cumene	2.4	0.81 J	12	4.0 J
1,1,2,2-Tetrachloroethane	2.4	Not Detected	17	Not Detected
Propylbenzene	2.4	0.71 J	12	3.5 J
4-Ethyltoluene	2.4	3.5	12	17
1,3,5-Trimethylbenzene	2.4	1.5 J	12	7.4 J
1,2,4-Trimethylbenzene	2.4	12	12	58
1,3-Dichlorobenzene	2.4	Not Detected	15	Not Detected
1,4-Dichlorobenzene	2.4	Not Detected	15	Not Detected
alpha-Chlorotoluene	2.4	Not Detected	13	Not Detected
1,2-Dichlorobenzene	2.4	Not Detected	15	Not Detected
1,2,4-Trichlorobenzene	9.7	Not Detected	72	Not Detected
Hexachlorobutadiene	9.7	Not Detected	100	Not Detected
Naphthalene	4.9	19	26	100

J = Estimated value.

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

Surrogates	%Recovery	Method Limits
Toluene-d8	99	70-130
1,2-Dichloroethane-d4	99	70-130
4-Bromofluorobenzene	101	70-130

Eurofins Air Toxics Inc.

EPA TO-15/MODIFIED EPA TO-14A

Data file : /chem/msdj.i/05mar15.b/j030522r1.d
Lab Smp Id: 1503058Br1-07A
Inj Date : 05-MAR-2015 23:39
Operator : md Inst ID: msdj.i
Smp Info : 100ml 12379
Misc Info : 5.1 Hg->15 psi
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msdj.i/05mar15.b/j15q0304a.m
Meth Date : 26-Jun-2015 14:00 dbailey Quant Type: ISTD
Cal Date : 04-MAR-2015 12:36 Cal File: j030408.d
Als bottle: 4
Dil Factor: 4.87000
Integrator: HP RTE Compound Sublist: TO15Nmdl.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Name	Value	Description
DF	4.87000	Dilution Factor

RT	EXP RT	(REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
* 98 Bromochloromethane						CAS #: 74-97-5		
5.494	5.494	(1.000)	130	138301	25.0000		80.00- 120.00	100.00
5.494	5.494	(1.000)	128	105426			48.40- 108.40	76.23
5.480	5.494	(1.000)	49	151905			84.80- 144.80	109.84
* 123 1,4-Difluorobenzene						CAS #: 540-36-3		
6.404	6.404	(1.000)	114	572528	25.0000		80.00- 120.00	100.00
6.404	6.404	(1.000)	88	84284			0.00- 45.38	14.72
* 163 Chlorobenzene-d5						CAS #: 3114-55-4		
8.894	8.894	(1.000)	117	545567	25.0000		80.00- 120.00	100.00
8.894	8.894	(1.000)	82	268792			20.55- 80.55	49.27
$ 117 1,2-Dichloroethane-d4						CAS #: 17060-07-0		
6.040	6.054	(1.099)	65	156913	24.7617	24.762	80.00- 120.00	100.00
6.040	6.054	(1.099)	67	85841			28.68- 88.68	54.71

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
$ 146 Toluene-d8						CAS #: 2037-26-5	
7.635	7.635 (1.192)	98	576420	24.6735	24.673	80.00- 120.00	100.00
7.635	7.635 (1.192)	70	59109			0.00- 40.26	10.25
7.635	7.635 (1.192)	100	384651			38.16- 98.16	66.73
$ 177 4-Bromofluorobenzene						CAS #: 460-00-4	
9.888	9.888 (1.112)	174	356725	25.1736	25.174	80.00- 120.00	100.00
9.874	9.888 (1.110)	95	391114			82.57- 142.57	109.64
9.888	9.888 (1.112)	176	352534			67.45- 127.45	98.83
42 Ethanol						CAS #: 64-17-5	
2.836	2.850 (0.516)	45	9606	4.06487	19.796	80.00- 120.00	100.00
2.836	2.850 (0.516)	43	3102			0.00- 48.78	32.30
2.836	2.850 (0.516)	46	3793			9.14- 69.14	39.49
52 Acetone						CAS #: 67-64-1	
3.339	3.354 (0.608)	58	75083	28.1476	137.08	80.00- 120.00	100.00
3.339	3.354 (0.608)	43	231923			270.02- 330.02	308.89
57 2-Propanol						CAS #: 67-63-0	
3.521	3.536 (0.641)	45	1326504	135.372	659.26	80.00- 120.00	100.00
3.521	3.536 (0.641)	43	281262			0.00- 47.69	21.20
3.521	3.536 (0.641)	59	53680			0.00- 33.85	4.05
92 2-Butanone						CAS #: 78-93-3	
5.284	5.284 (0.962)	72	49596	14.3963	70.110	80.00- 120.00	100.00
5.284	5.284 (0.962)	43	197429			345.28- 405.28	398.07
5.284	5.284 (0.962)	57	15166			0.64- 60.64	30.58
99 Tetrahydrofuran						CAS #: 109-99-9	
5.480	5.494 (0.997)	42	21570	2.82683	13.767	80.00- 120.00	100.00
5.494	5.494 (1.000)	71	9365			10.18- 70.18	43.42
5.480	5.494 (0.997)	72	10007			13.63- 73.63	46.39
100 Chloroform						CAS #: 67-66-3	
5.550	5.564 (1.010)	83	6254	0.45545	2.218	80.00- 120.00	100.00(a)
5.550	5.564 (1.010)	85	4505			36.39- 96.39	72.04
113 2,2,4-Trimethylpentane						CAS #: 540-84-1	
5.984	5.998 (1.089)	57	2295	0.08023	0.3907	80.00- 120.00	100.00(a)
5.998	5.998 (1.092)	56	760			0.00- 59.67	33.12
5.970	5.998 (1.087)	41	2387			0.00- 50.74	103.99
145 4-Methyl-2-pentanone						CAS #: 108-10-1	
7.579	7.565 (1.184)	58	4000	0.57731	2.812	80.00- 120.00	100.00
7.565	7.565 (1.181)	43	9166			220.64- 280.64	229.12

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

  145 4-Methyl-2-pentanone (continued)
  7.579   7.565 (1.184)    85      1586                    17.04-  77.04    39.66
-------------------------------------------------------------------------------
  147 Toluene                                      CAS #: 108-88-3
  7.691   7.691 (1.201)    91      9902 0.34891    1.699  80.00- 120.00   100.00(a)
  7.691   7.691 (1.201)    92      5427                    27.98-  87.98    54.81
-------------------------------------------------------------------------------
  156 Tetrachloroethene                            CAS #: 127-18-4
  8.139   8.139 (0.915)   166       995 0.06632   0.3230  80.00- 120.00   100.00(a)
  8.139   8.139 (0.915)   129       596                    41.30- 101.30    59.94
  8.139   8.139 (0.915)   131       747                    39.67-  99.67    75.13
-------------------------------------------------------------------------------
  167 Ethyl Benzene                                CAS #: 100-41-4
  8.964   8.964 (1.008)   106    264472 21.3838   104.14  80.00- 120.00   100.00
  8.964   8.964 (1.008)    91    798437                   278.96- 338.96   301.90
-------------------------------------------------------------------------------
  169 m,p-Xylene                                   CAS #: 108-38-3
  9.062   9.062 (1.019)   106   1023119 66.7660   325.15  80.00- 120.00   100.00
  9.062   9.062 (1.019)    91   1944355                   158.57- 218.57   190.04
-------------------------------------------------------------------------------
  171 o-Xylene                                     CAS #: 95-47-6
  9.398   9.398 (1.057)   106    203008 14.0741   68.541  80.00- 120.00   100.00
  9.398   9.398 (1.057)    91    409947                   173.40- 233.40   201.94
-------------------------------------------------------------------------------
  175 Cumene                                       CAS #: 98-82-8
  9.692   9.692 (1.090)   105      7468 0.16627   0.8097  80.00- 120.00   100.00(a)
  9.692   9.692 (1.090)   120      1807                     0.00-  57.55    24.20
  9.678   9.692 (1.088)    51       584                     0.00-  38.22     7.82
-------------------------------------------------------------------------------
  182 Propylbenzene                                CAS #: 103-65-1
 10.028  10.028 (1.127)    91      7736 0.14528   0.7075  80.00- 120.00   100.00(a)
 10.028  10.028 (1.127)   120      1912                     0.00-  54.81    24.72
 10.042  10.028 (1.129)   105       329                     0.00-  33.86     4.27
-------------------------------------------------------------------------------
  188 4-Ethyltoluene                               CAS #: 622-96-8
 10.111  10.126 (1.137)   120     10372 0.72312    3.522  80.00- 120.00   100.00
 10.111  10.126 (1.137)   105     30797                   292.39- 352.39   296.90
-------------------------------------------------------------------------------
  190 1,3,5-Trimethylbenzene                       CAS #: 108-67-8
 10.181  10.182 (1.145)   120      6056 0.30982    1.509  80.00- 120.00   100.00(a)
 10.181  10.182 (1.145)   105     10114                   169.92- 229.92   167.01
-------------------------------------------------------------------------------
  196 1,2,4-Trimethylbenzene                       CAS #: 95-63-6
 10.503  10.503 (1.181)   120     42731 2.43981   11.882  80.00- 120.00   100.00
 10.503  10.503 (1.181)   105     96142                   182.08- 242.08   224.99
-------------------------------------------------------------------------------
```

RT	EXP RT	(REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
228 Naphthalene						CAS #: 91-20-3		
12.910	12.910	(1.451)	128	142153	3.96131	19.292	80.00- 120.00	100.00
12.910	12.910	(1.451)	127	17662			0.00- 42.14	12.42

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: msdj.i
Lab File ID: j030522r1.d
Lab Smp Id: 1503058Br1-07A
Analysis Type: VOA
Quant Type: ISTD
Operator: md
Method File: /chem/msdj.i/05mar15.b/j15q0304a.m
Misc Info: 5.1 Hg->15 psi

Calibration Date: 05-MAR-2015
Calibration Time: 09:28

Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
98 Bromochloromethan	140692	84415	196969	138301	-1.70
123 1,4-Difluorobenze	614418	368651	860185	572528	-6.82
163 Chlorobenzene-d5	577173	346304	808042	545567	-5.48

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
98 Bromochloromethan	5.49	5.16	5.82	5.49	0.00
123 1,4-Difluorobenze	6.40	6.07	6.73	6.40	0.00
163 Chlorobenzene-d5	8.89	8.56	9.22	8.89	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 16:20

Eurofins Air Toxics Inc.

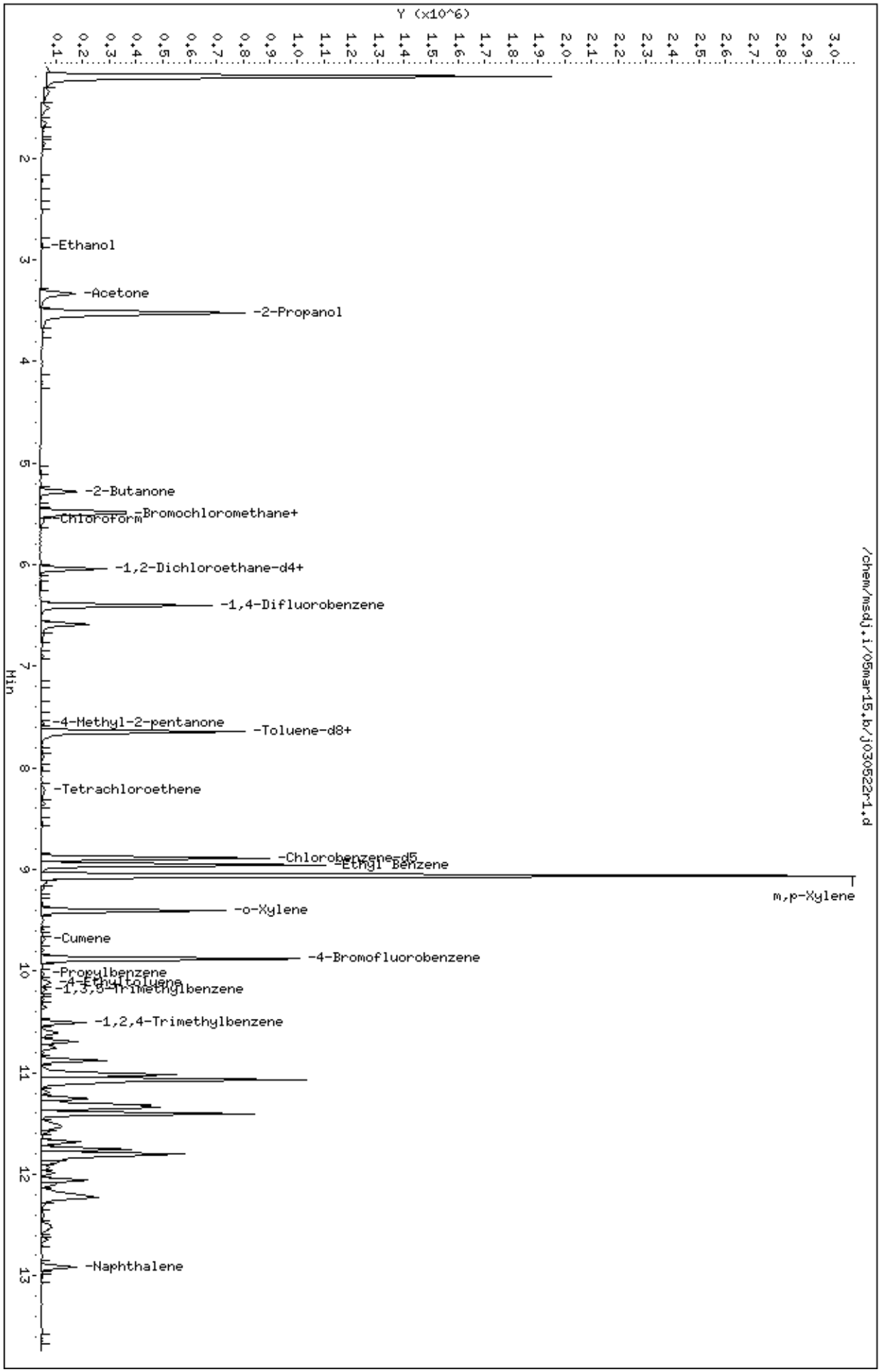
RECOVERY REPORT

Client Name: Client SDG: 05mar15
Sample Matrix: GAS Fraction: VOA
Lab Smp Id: 1503058Br1-07A
Level: LOW Operator: md
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: 2926Spectra.spk Quant Type: ISTD
Sublist File: TO15Nmdl.sub
Method File: /chem/msdj.i/05mar15.b/j15q0304a.m
Misc Info: 5.1 Hg->15 psi

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 117 1,2-Dichloroethane	25.000	24.762	99.05	70-130
$ 146 Toluene-d8	25.000	24.673	98.69	70-130
$ 177 4-Bromofluorobenze	25.000	25.174	100.69	70-130

Data File: /chem/msdj.i/05mar15.b/j030522r1.d
Date : 05-MAR-2015 23:39
Client ID:
Sample Info: 100ml 12379
Column phase: RTX-624

Instrument: msdj.i
Operator: md
Column diameter: 0.25



Data File: /chem/msdj.i/05mar15.b/j030522r1.d

Date : 05-MAR-2015 23:39

Client ID:

Instrument: msdj.i

Sample Info: 100ml 12379

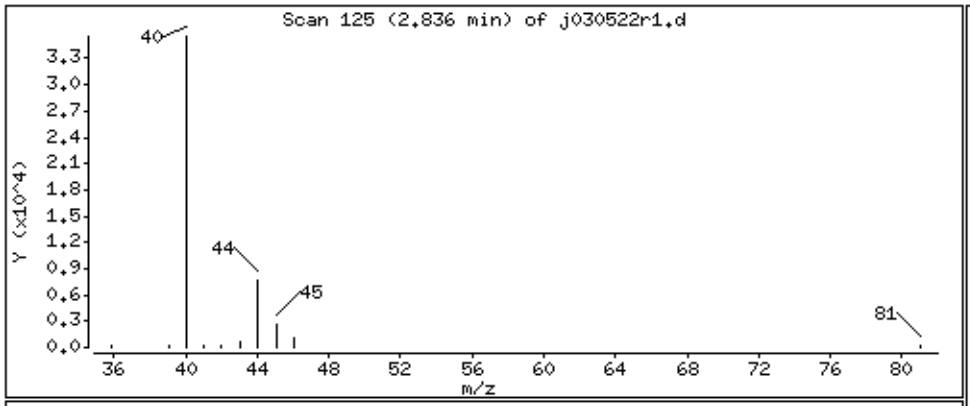
Operator: md

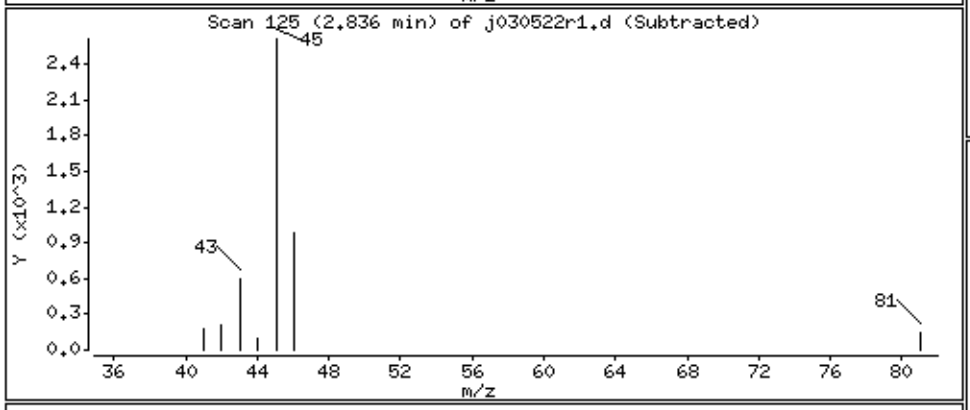
Column phase: RTX-624

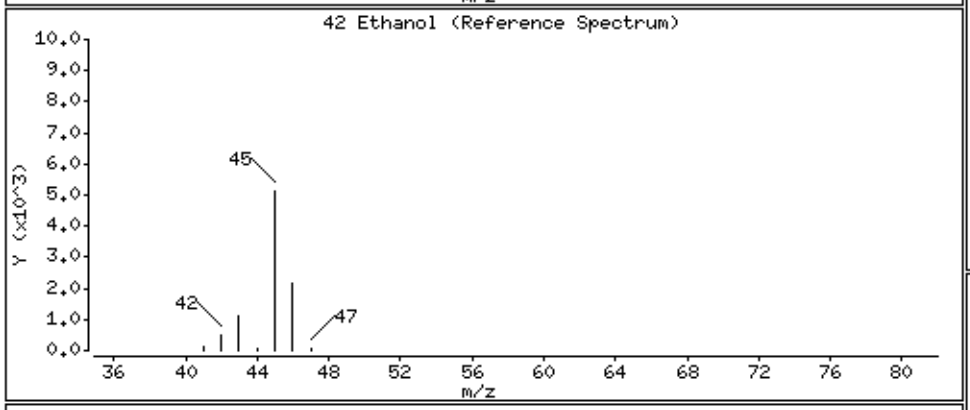
Column diameter: 0.25

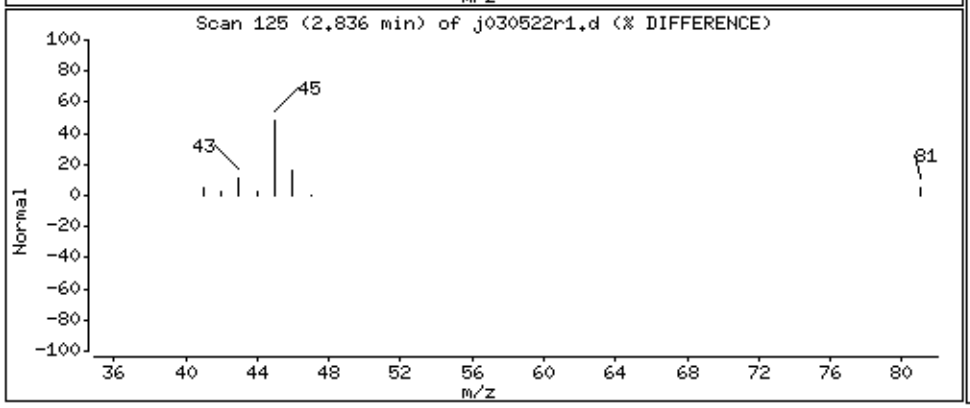
42 Ethanol

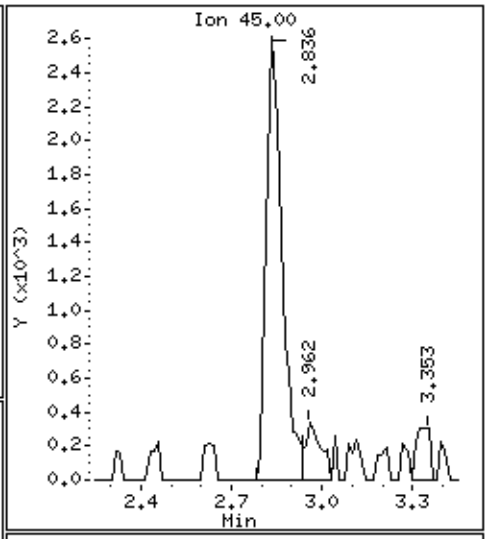
Concentration: 19.796 PPBV

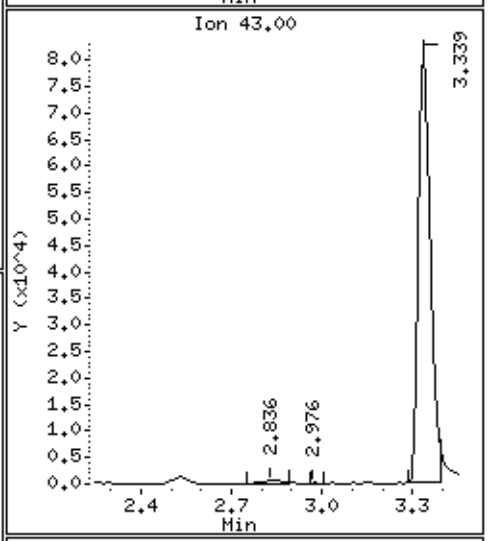


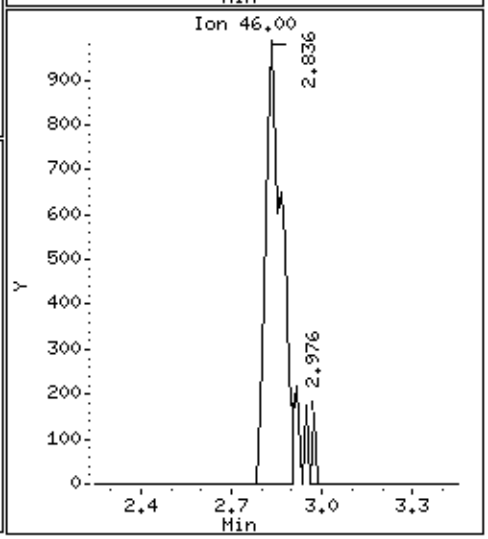












Data File: /chem/msdj.i/05mar15.b/j030522r1.d

Date : 05-MAR-2015 23:39

Client ID:

Instrument: msdj.i

Sample Info: 100ml 12379

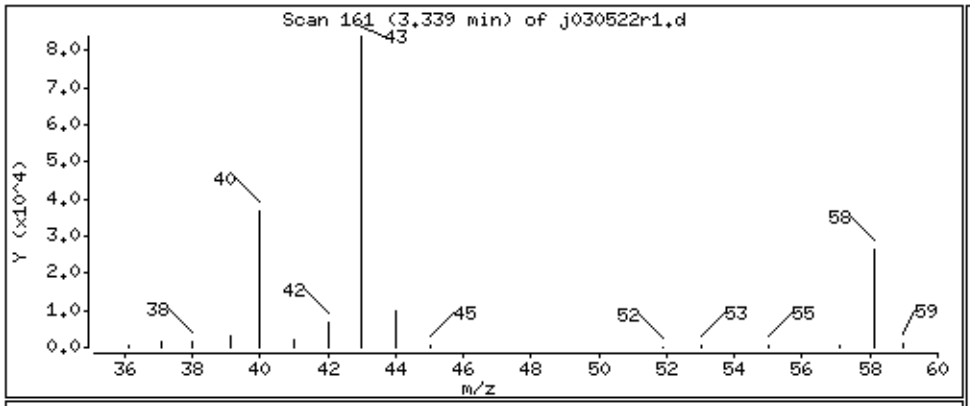
Operator: md

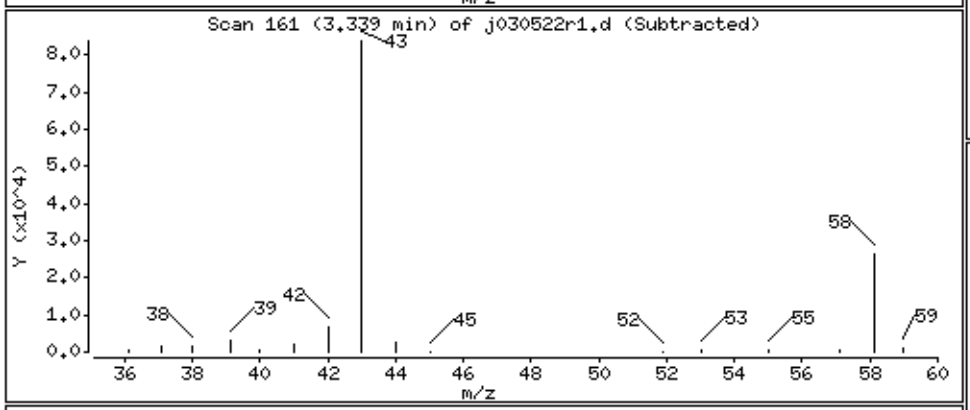
Column phase: RTX-624

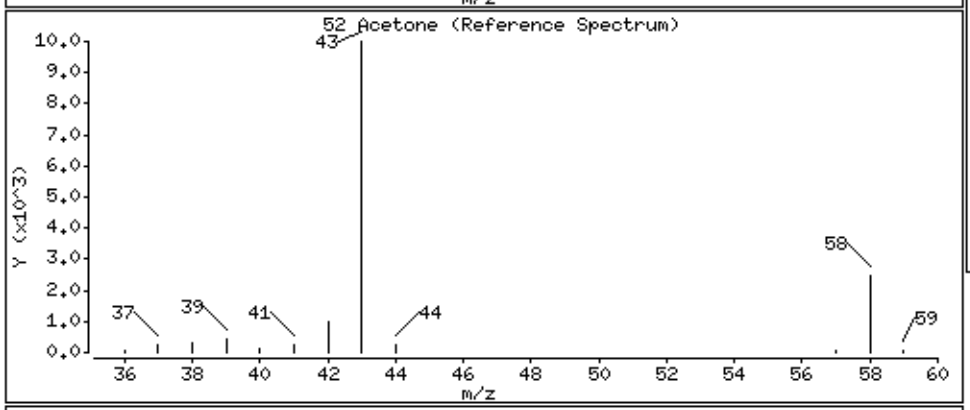
Column diameter: 0.25

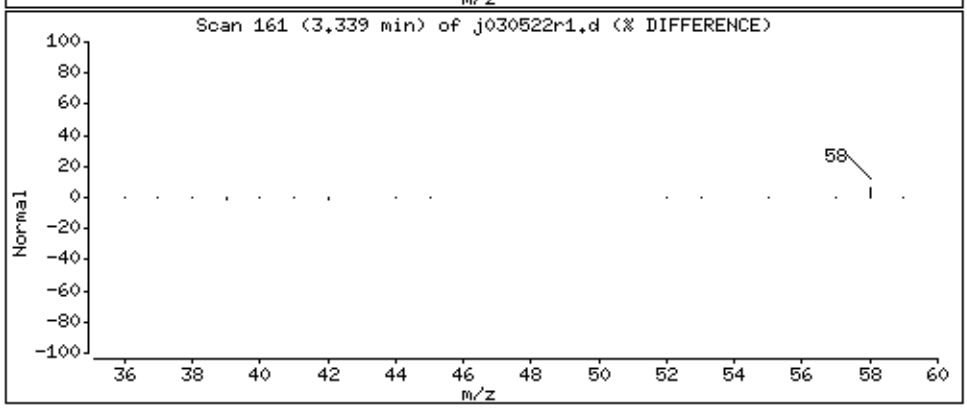
52 Acetone

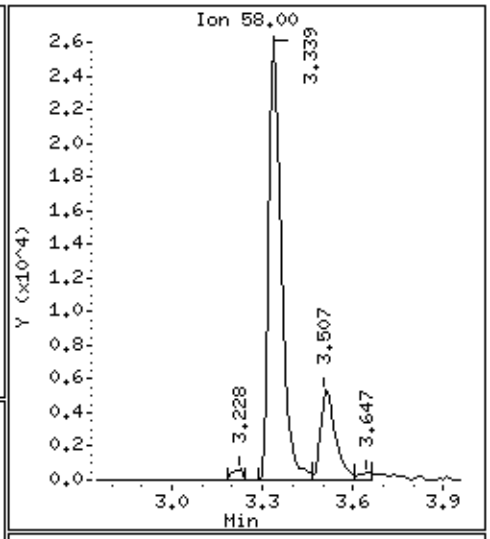
Concentration: 137.08 PPBV

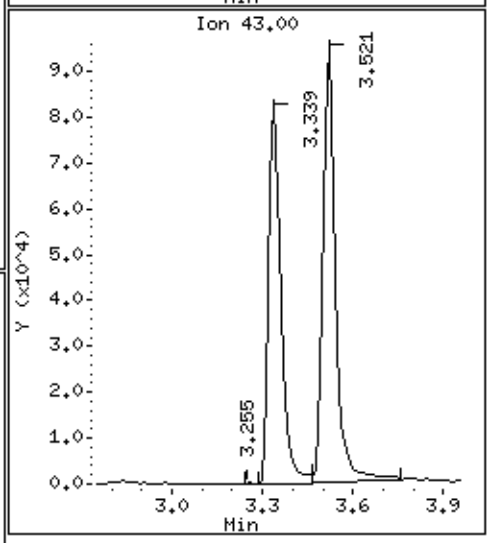












Data File: /chem/msdj.i/05mar15.b/j030522r1.d

Date : 05-MAR-2015 23:39

Client ID:

Instrument: msdj.i

Sample Info: 100ml 12379

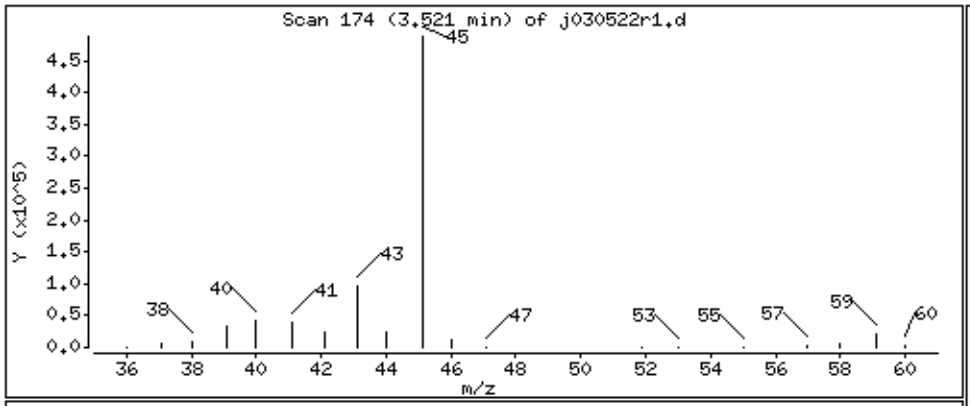
Operator: md

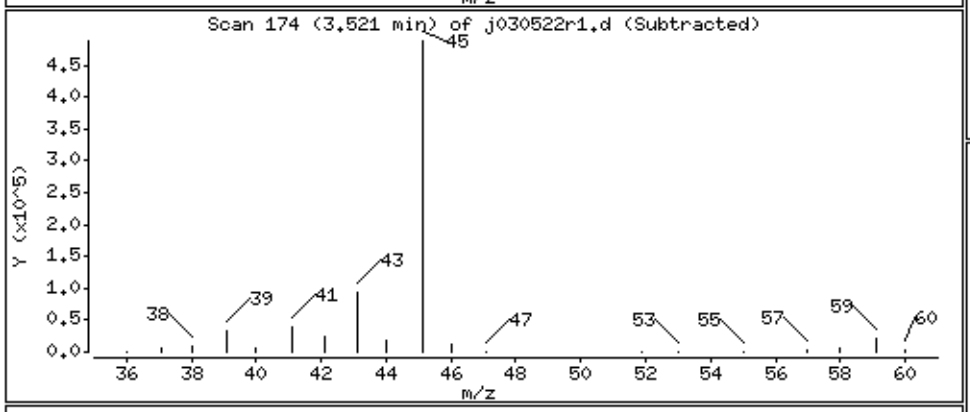
Column phase: RTX-624

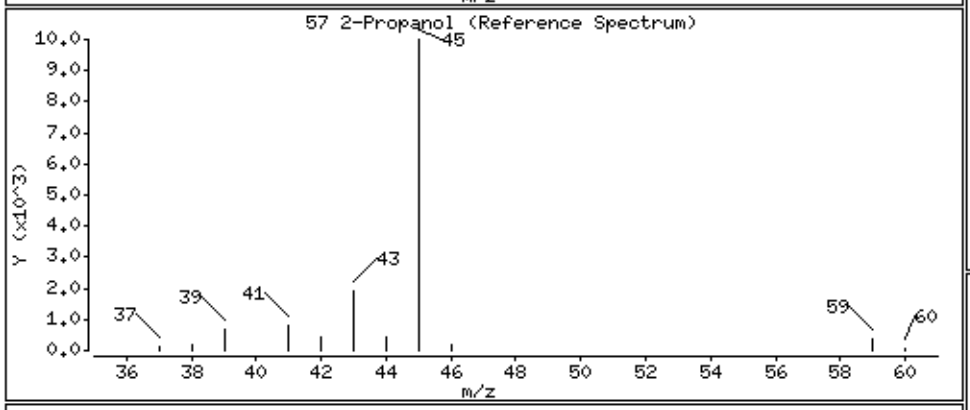
Column diameter: 0.25

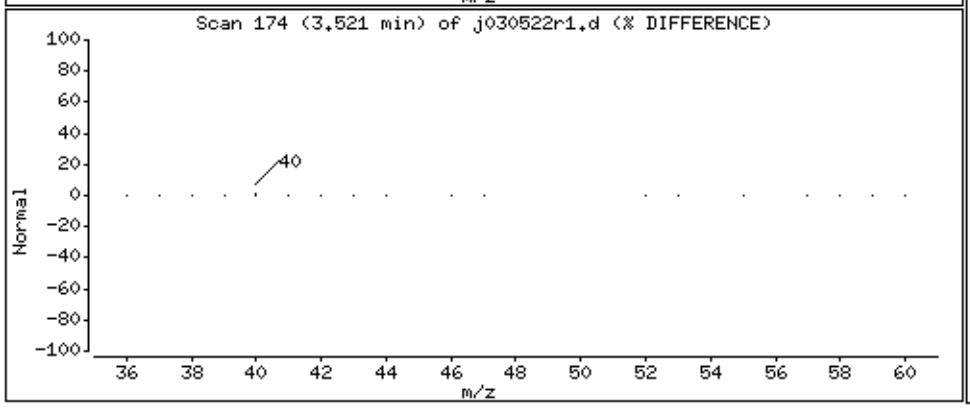
57 2-Propanol

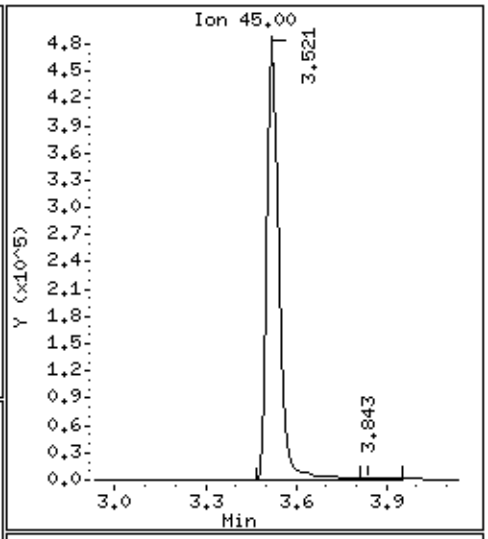
Concentration: 659.26 PPBV

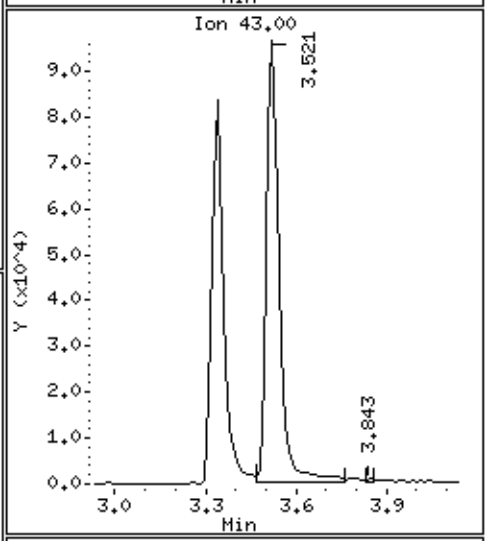


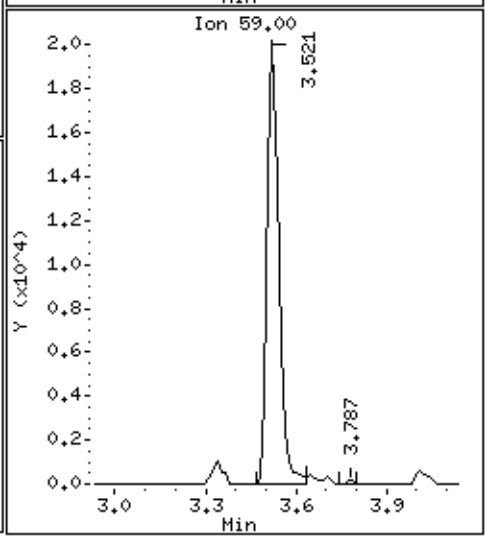












Data File: /chem/msdj.i/05mar15.b/j030522r1.d

Date : 05-MAR-2015 23:39

Client ID:

Instrument: msdj.i

Sample Info: 100ml 12379

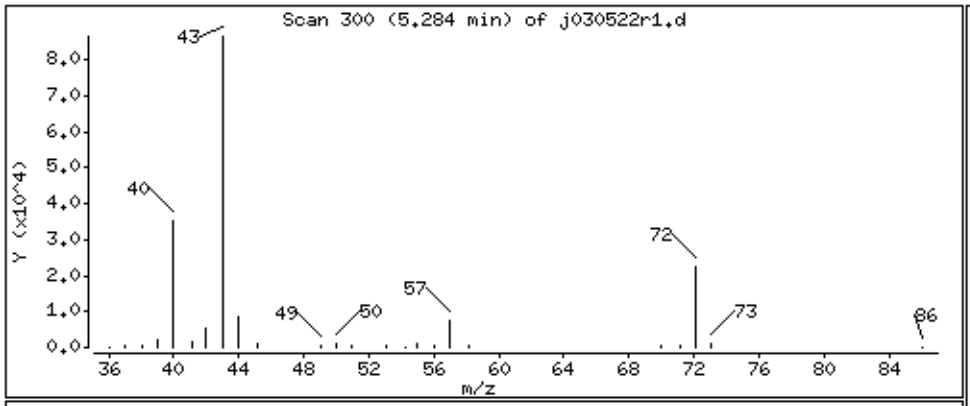
Operator: md

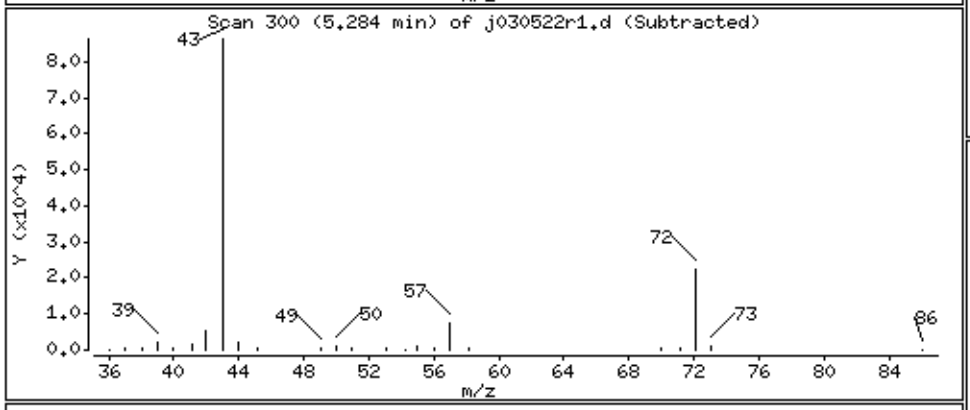
Column phase: RTX-624

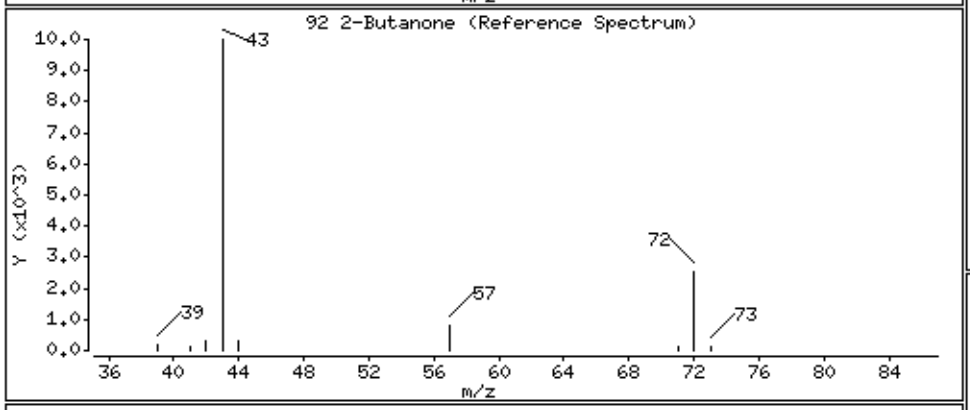
Column diameter: 0.25

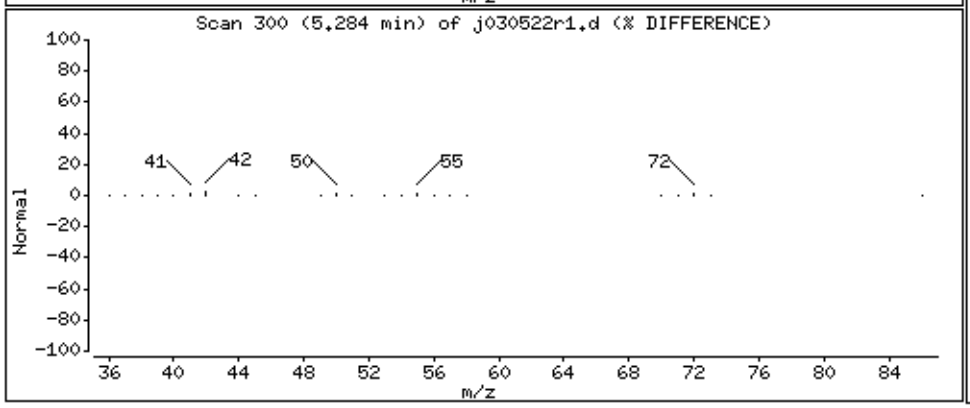
92 2-Butanone

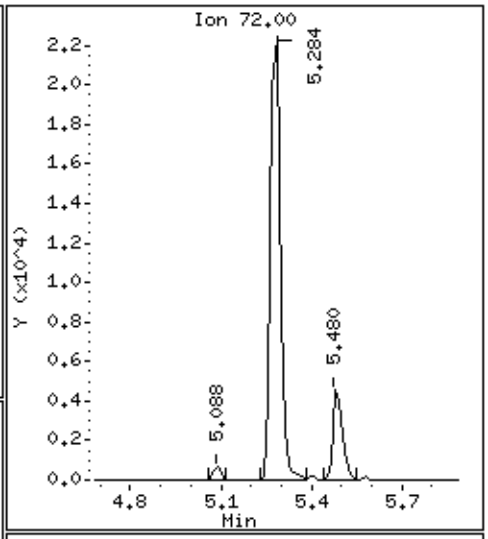
Concentration: 70.110 PPBV

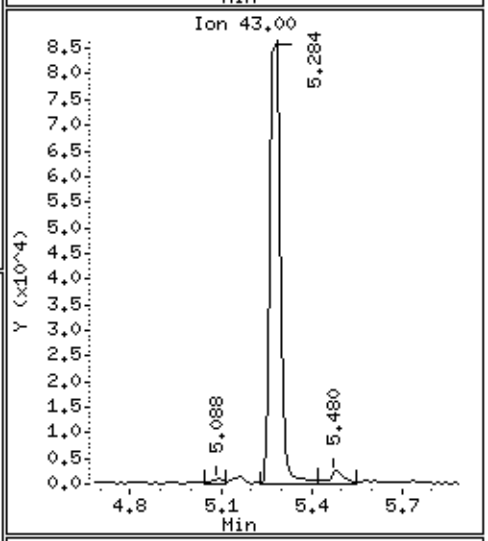


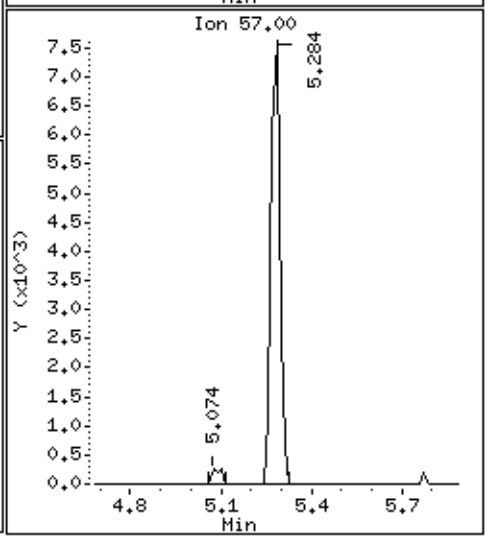












Data File: /chem/msdj.i/05mar15.b/j030522r1.d

Date : 05-MAR-2015 23:39

Client ID:

Instrument: msdj.i

Sample Info: 100ml 12379

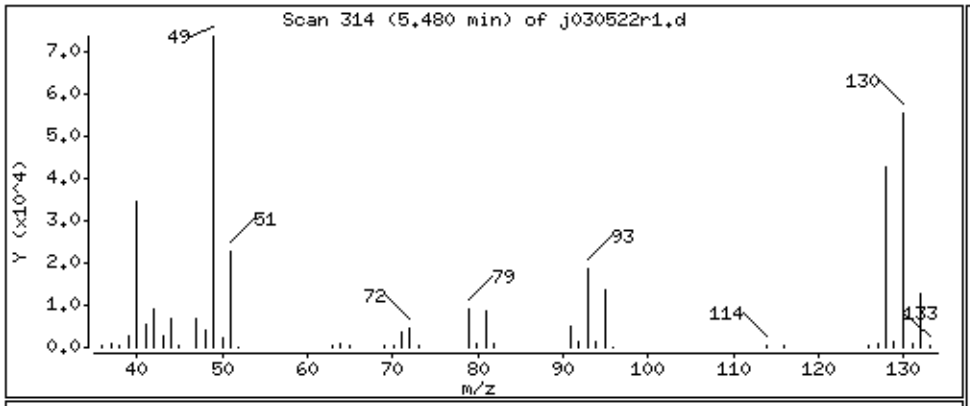
Operator: md

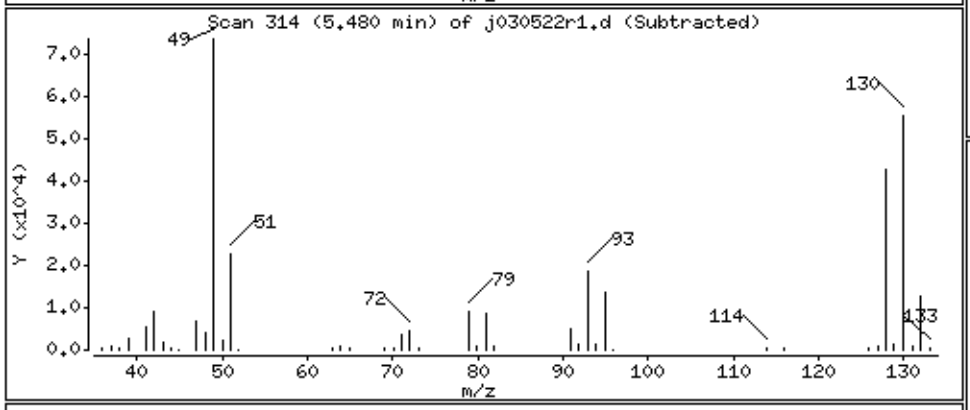
Column phase: RTX-624

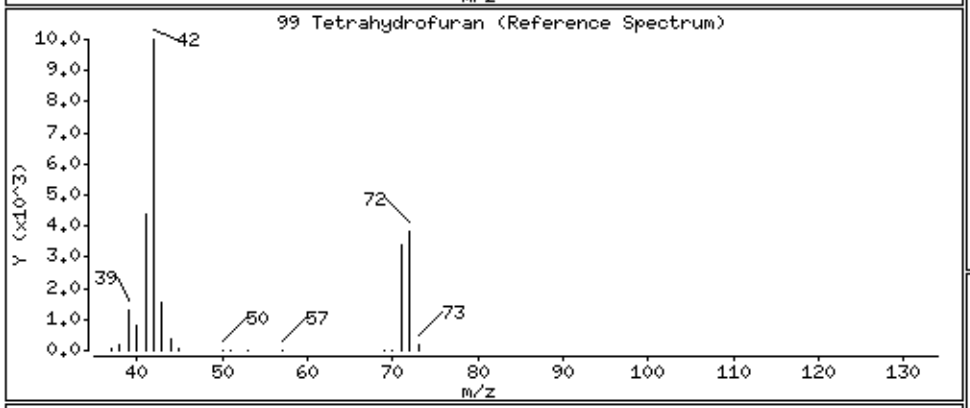
Column diameter: 0.25

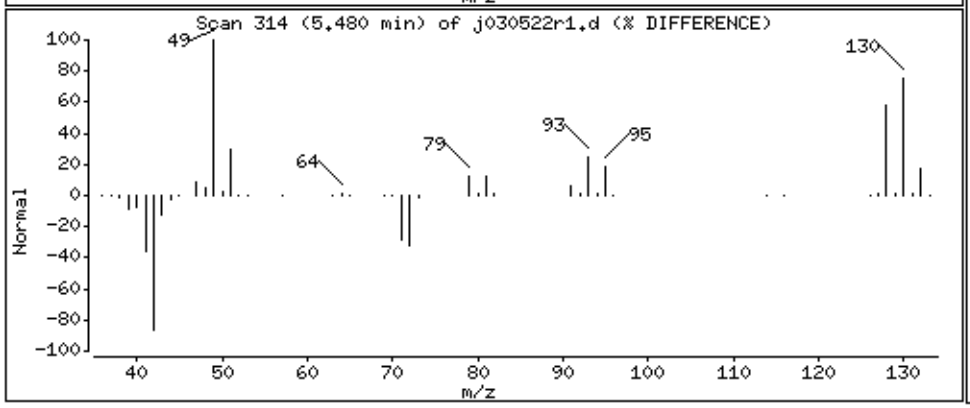
99 Tetrahydrofuran

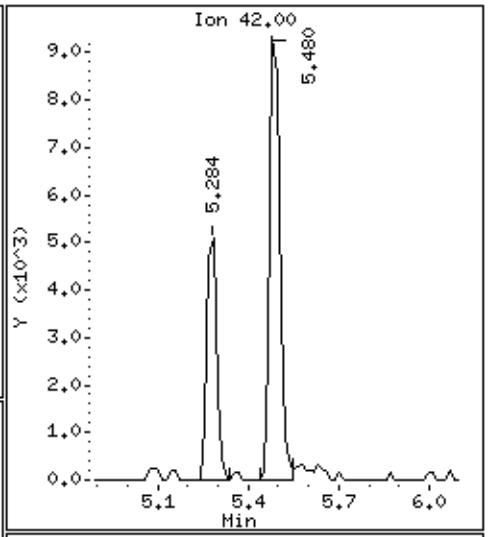
Concentration: 13.767 PPBV

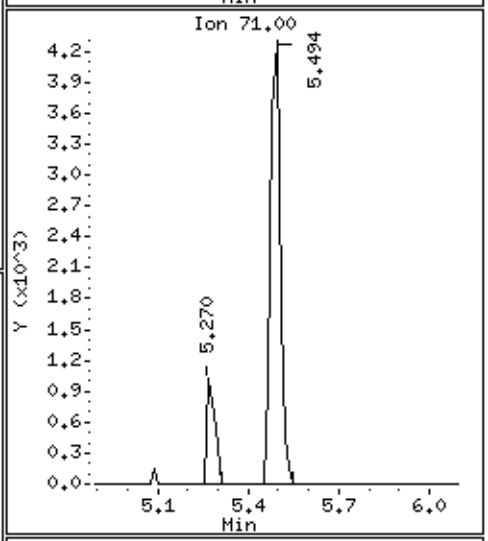


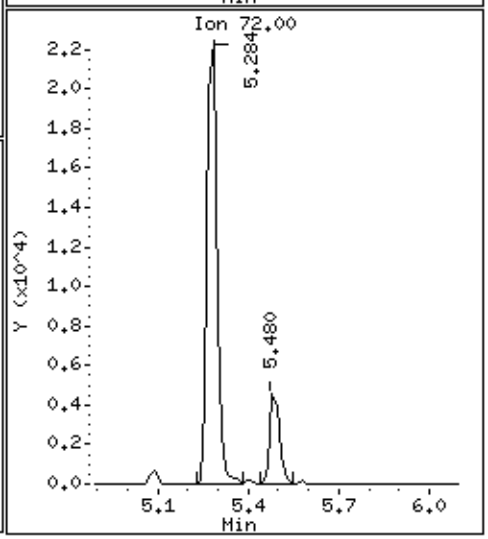












Data File: /chem/msdj.i/05mar15.b/j030522r1.d

Date : 05-MAR-2015 23:39

Client ID:

Instrument: msdj.i

Sample Info: 100ml 12379

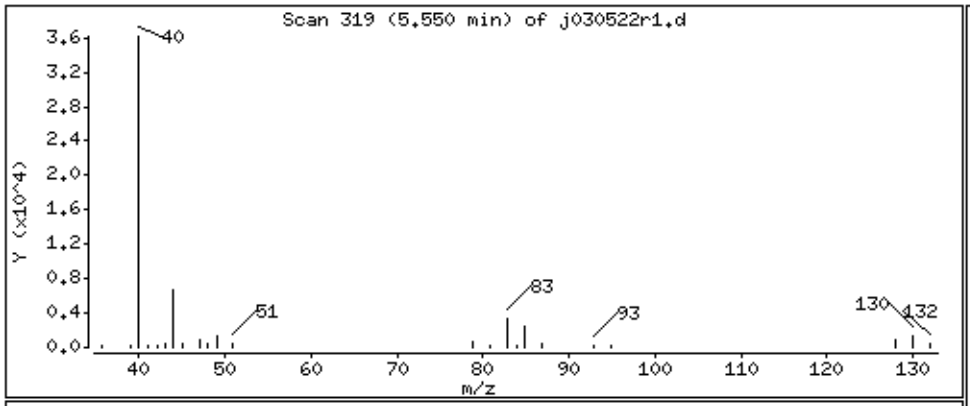
Operator: md

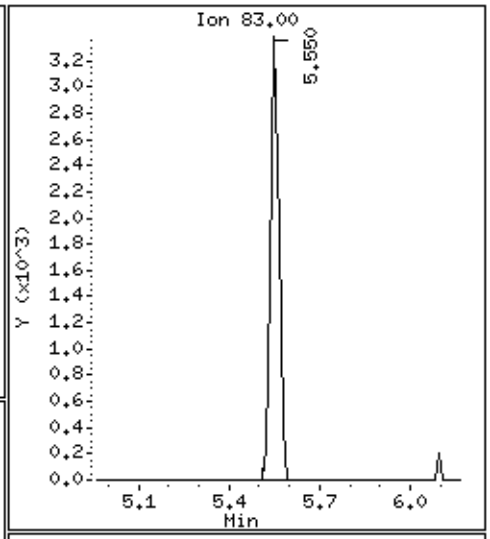
Column phase: RTX-624

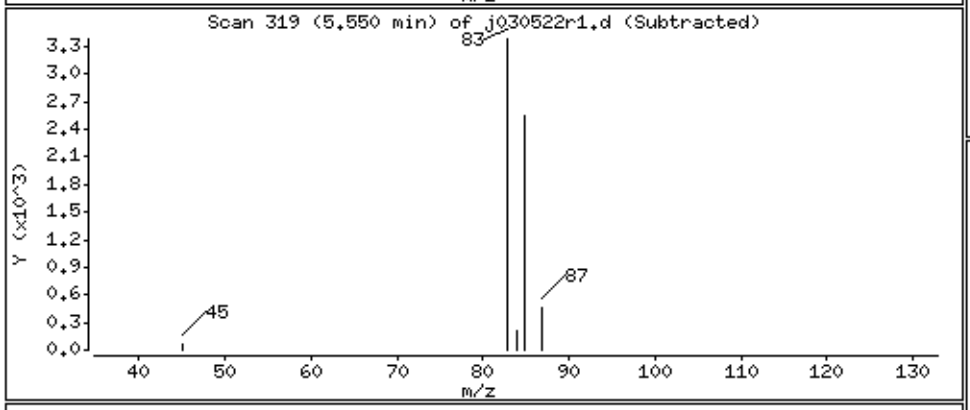
Column diameter: 0.25

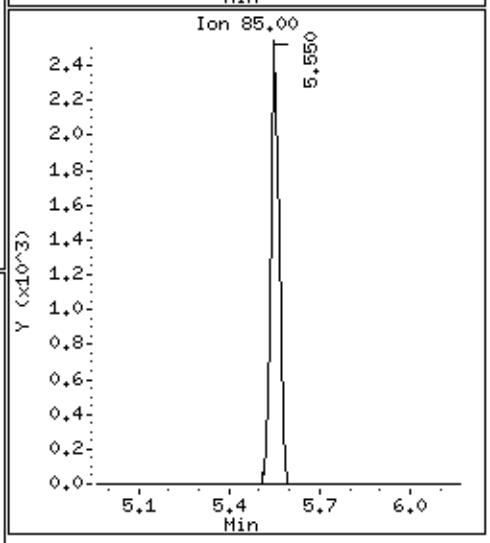
100 Chloroform

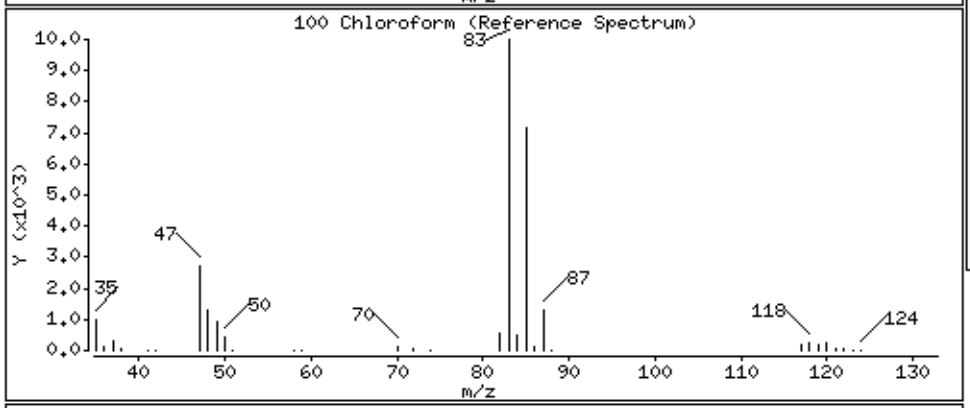
Concentration: 2.218 PPBV

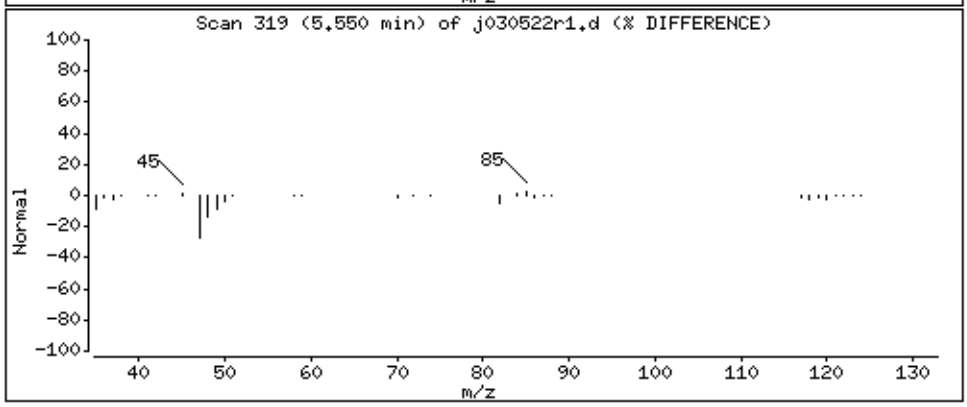












Data File: /chem/msdj.i/05mar15.b/j030522r1.d

Date : 05-MAR-2015 23:39

Client ID:

Instrument: msdj.i

Sample Info: 100ml 12379

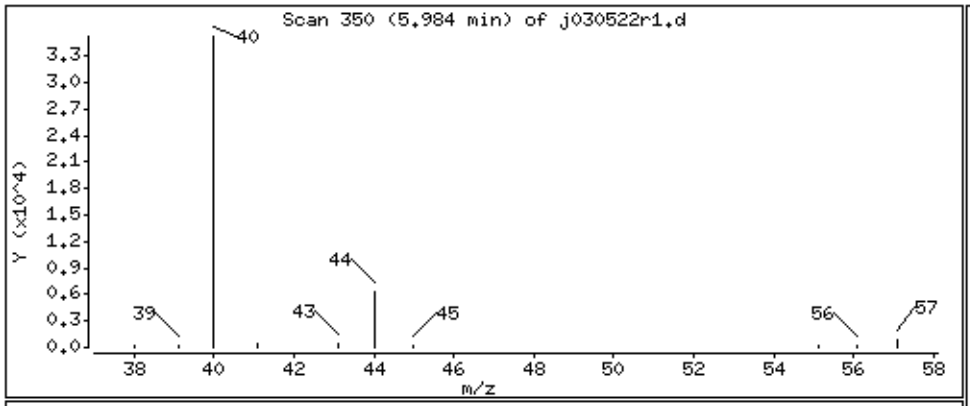
Operator: md

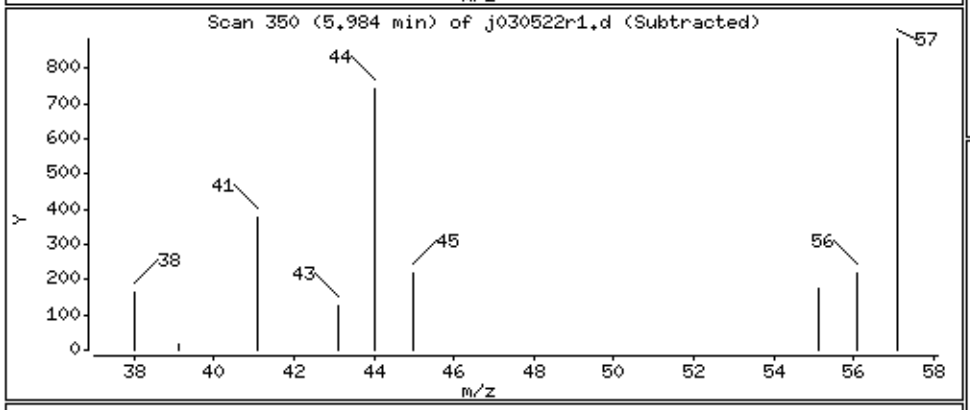
Column phase: RTX-624

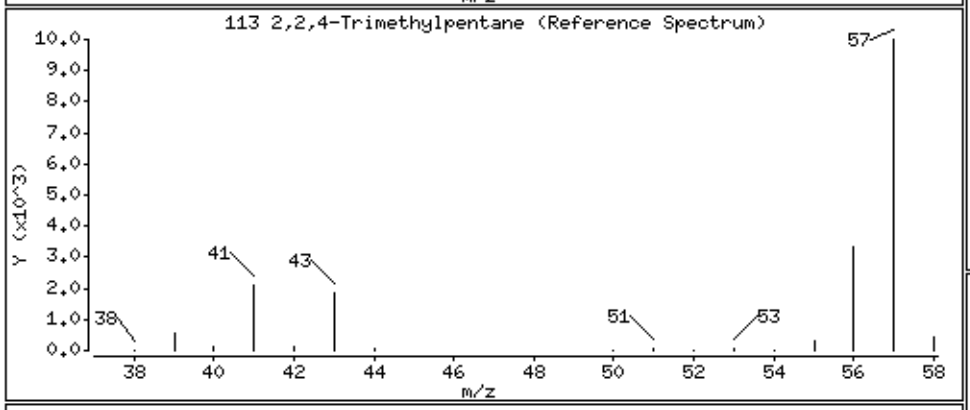
Column diameter: 0.25

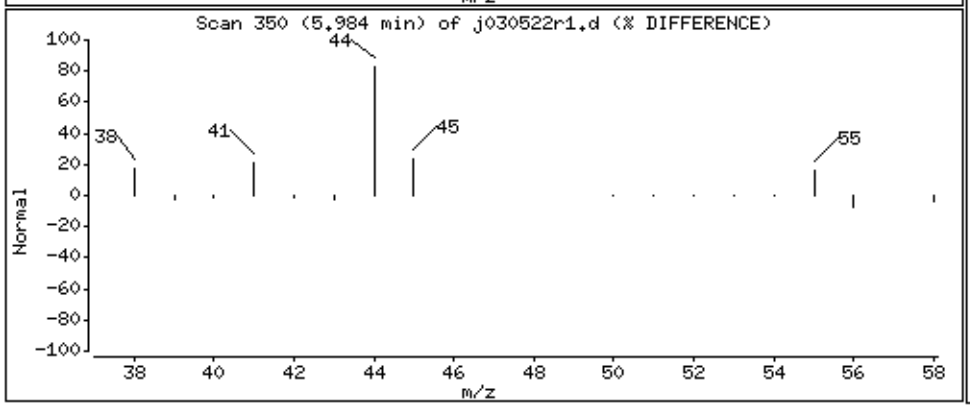
113 2,2,4-Trimethylpentane

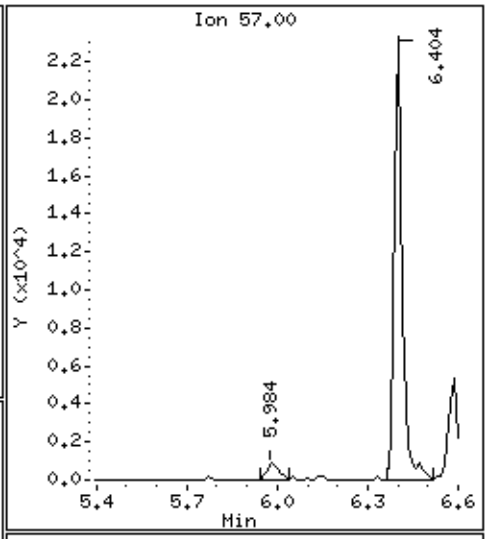
Concentration: 0.3907 PPBV

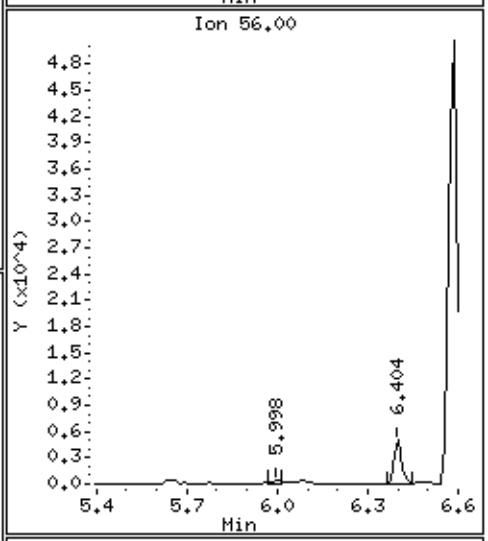


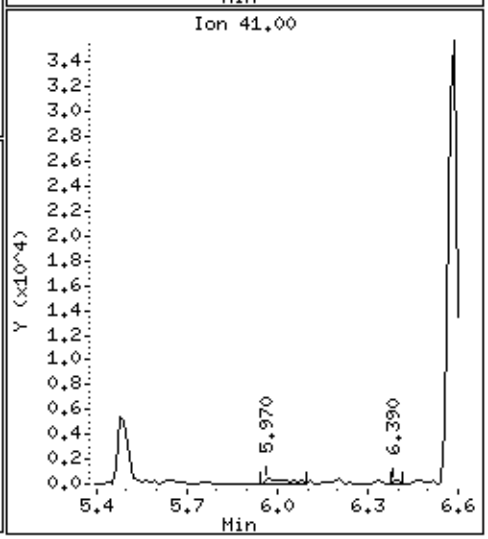












Data File: /chem/msdj.i/05mar15.b/j030522r1.d

Date : 05-MAR-2015 23:39

Client ID:

Instrument: msdj.i

Sample Info: 100ml 12379

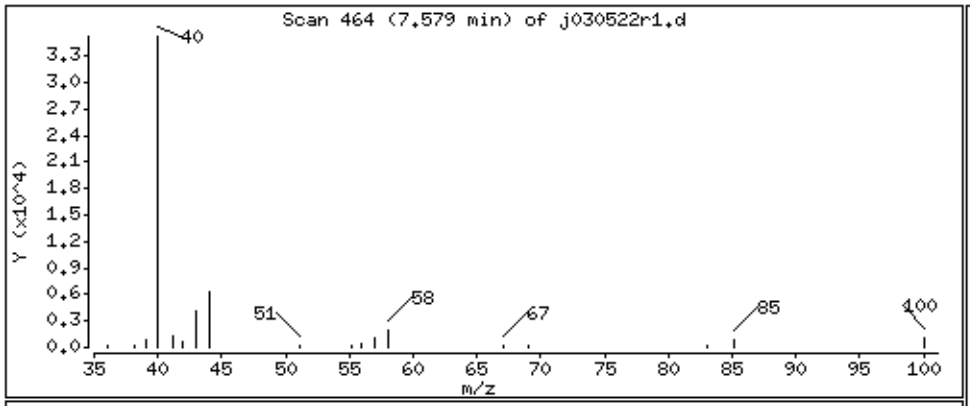
Operator: md

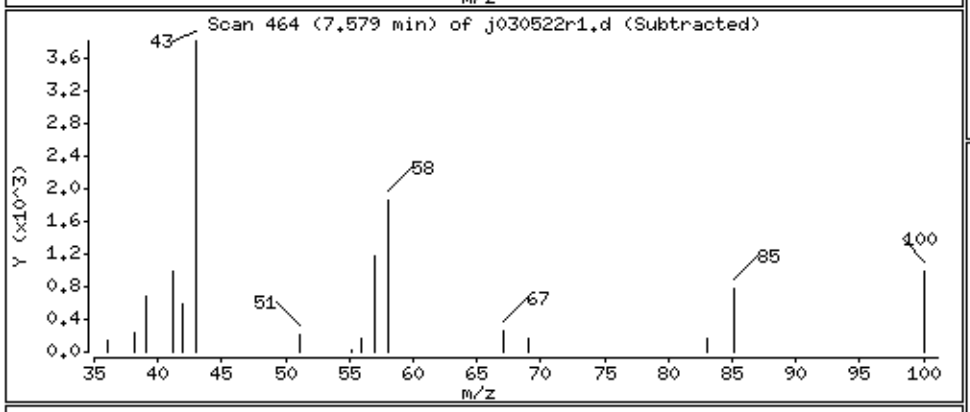
Column phase: RTX-624

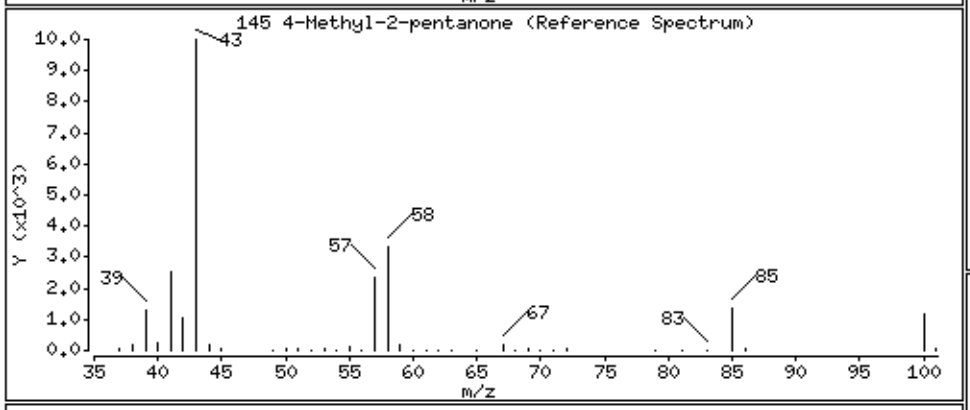
Column diameter: 0.25

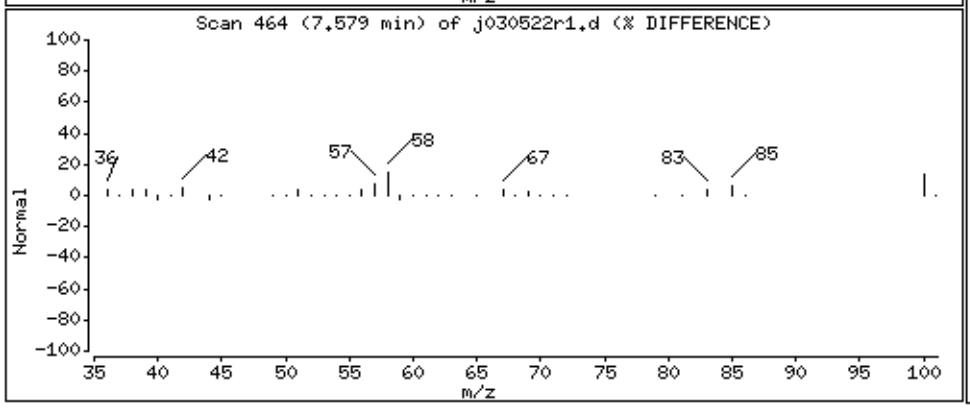
145 4-Methyl-2-pentanone

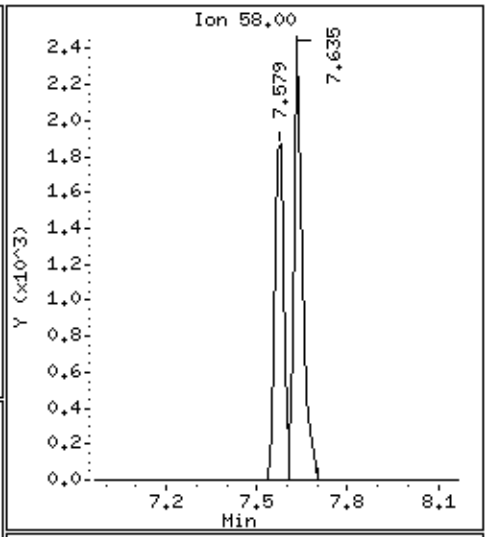
Concentration: 2.812 PPBV

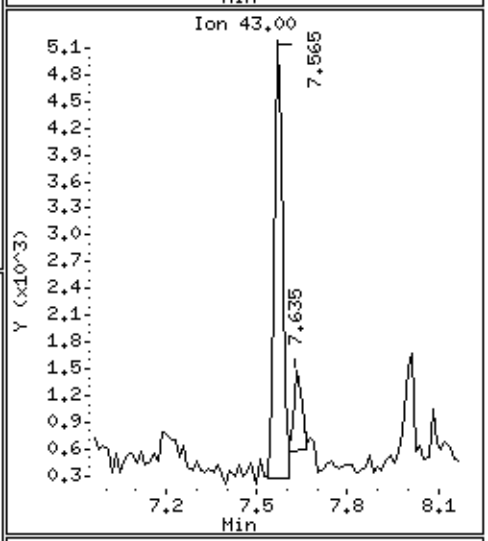


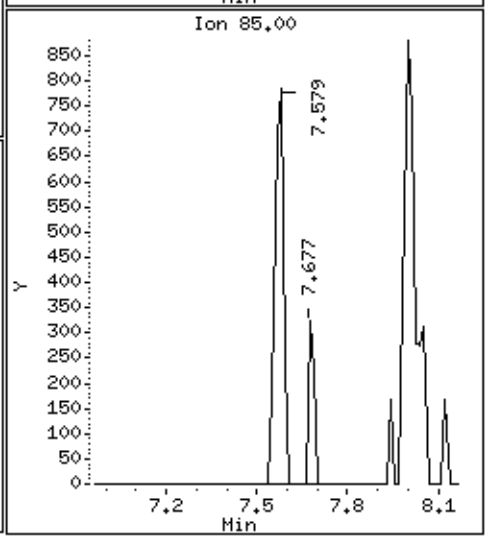












Data File: /chem/msdj.i/05mar15.b/j030522r1.d

Date : 05-MAR-2015 23:39

Client ID:

Instrument: msdj.i

Sample Info: 100ml 12379

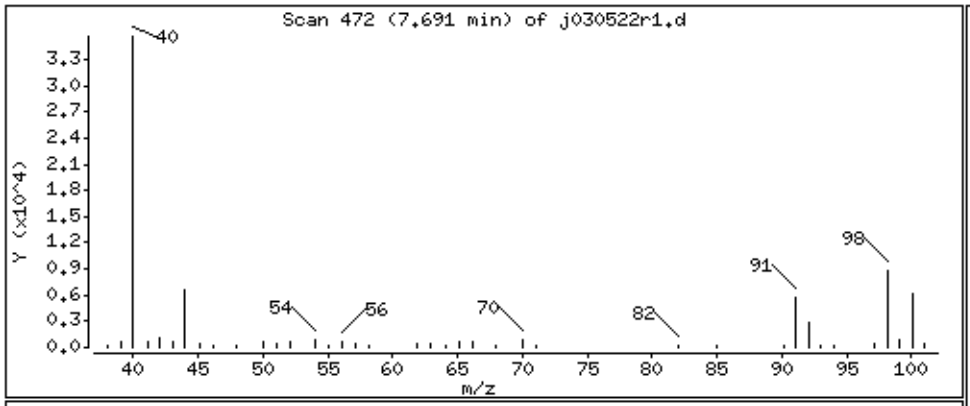
Operator: md

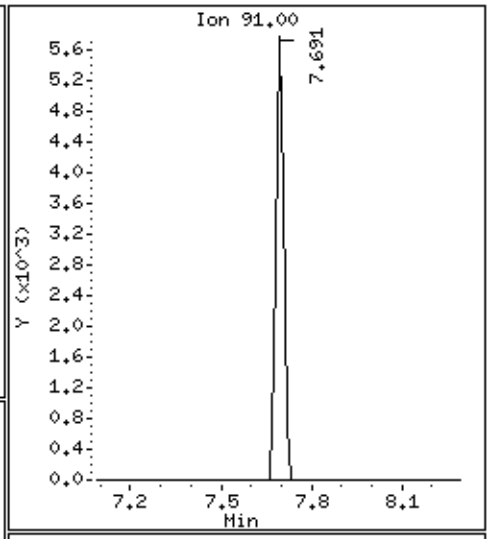
Column phase: RTX-624

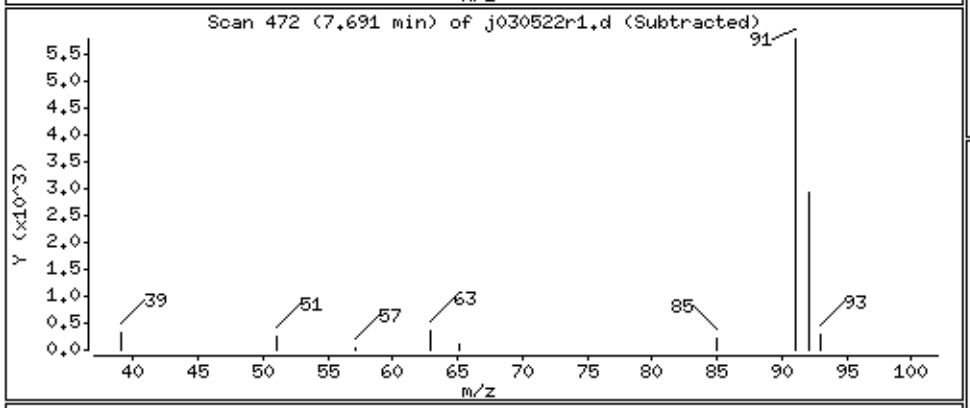
Column diameter: 0.25

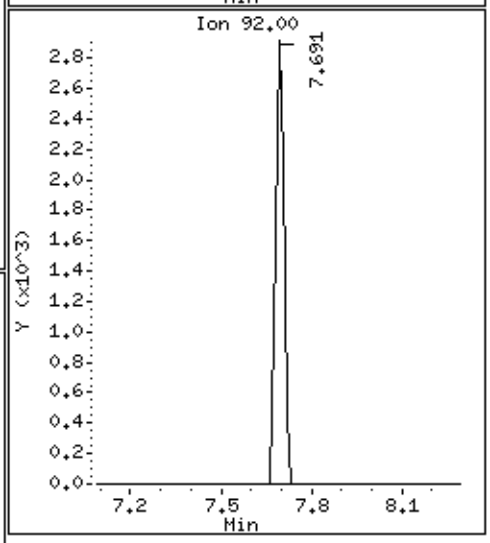
147 Toluene

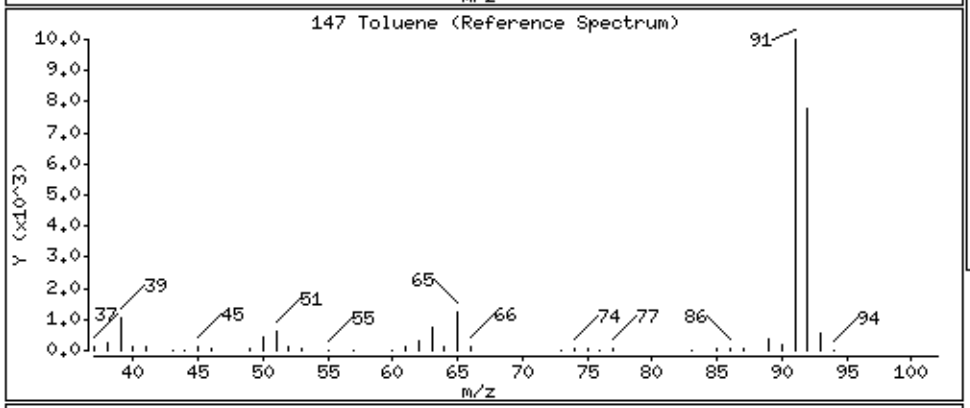
Concentration: 1.699 PPBV

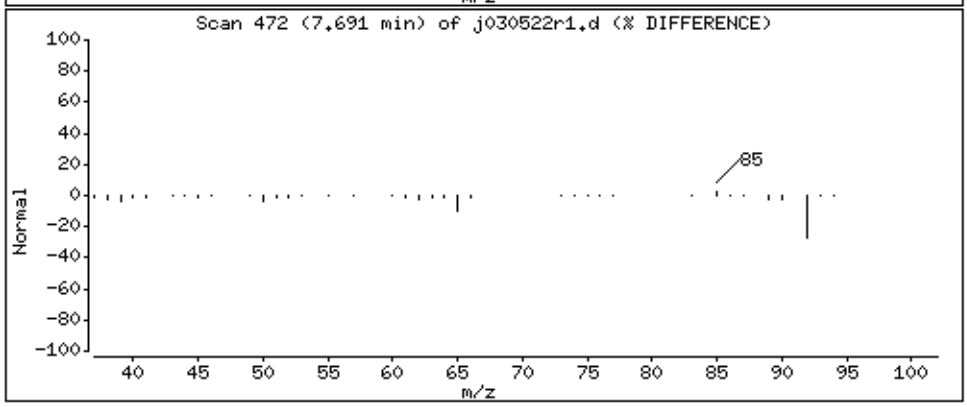












Data File: /chem/msdj.i/05mar15.b/j030522r1.d

Date : 05-MAR-2015 23:39

Client ID:

Instrument: msdj.i

Sample Info: 100ml 12379

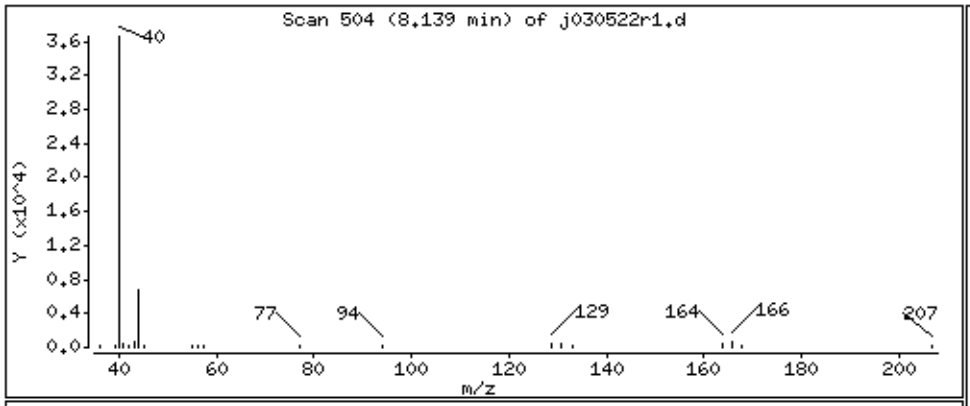
Operator: md

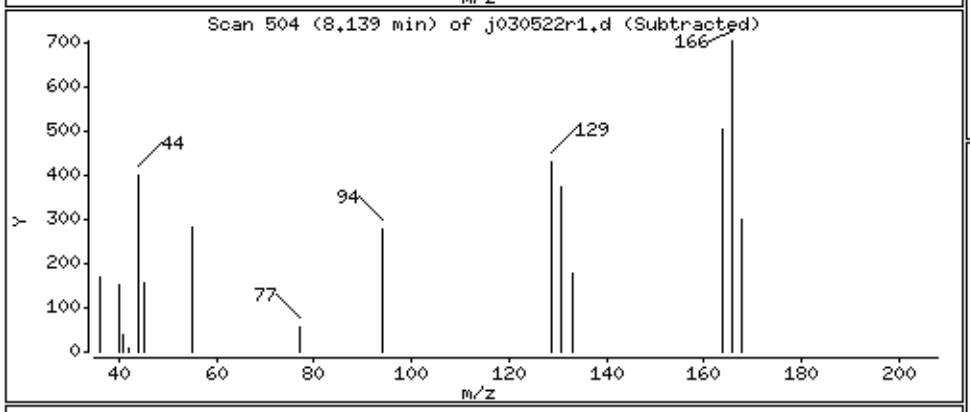
Column phase: RTX-624

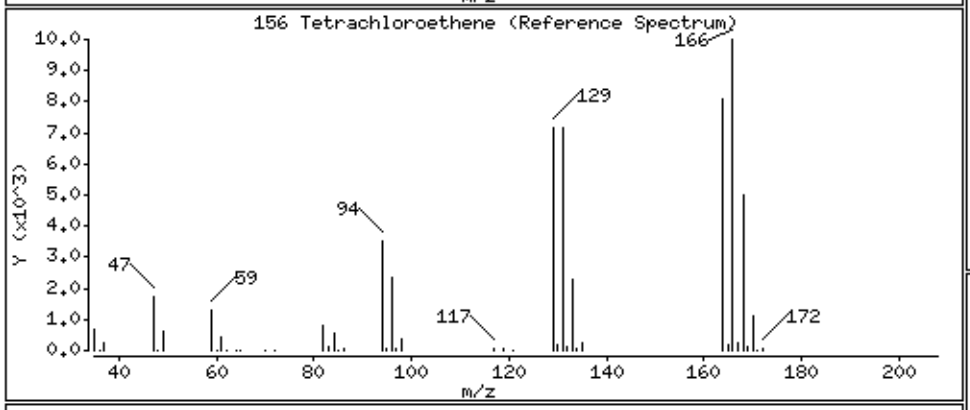
Column diameter: 0.25

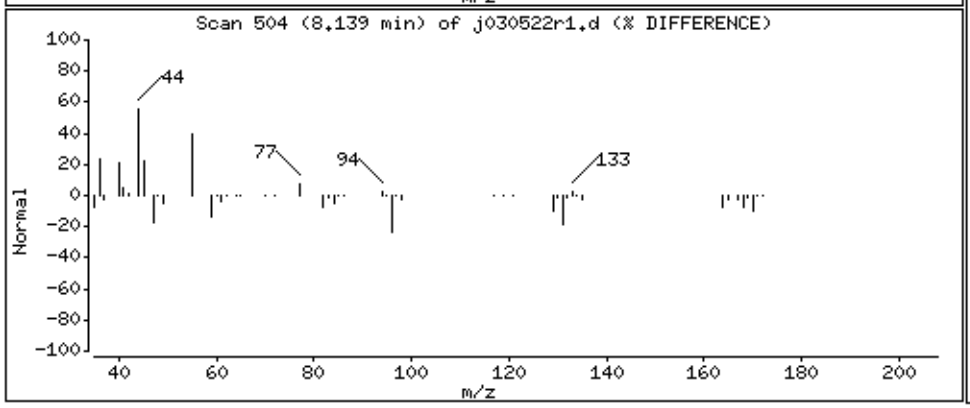
156 Tetrachloroethene

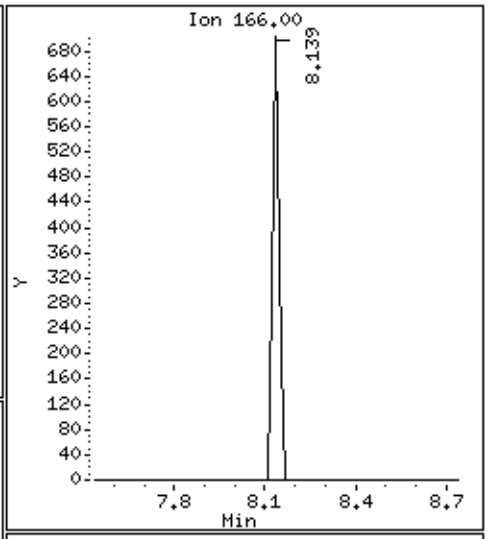
Concentration: 0.3230 PPBV

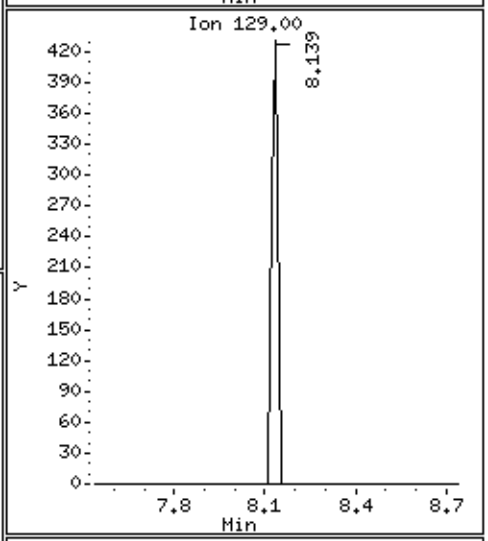


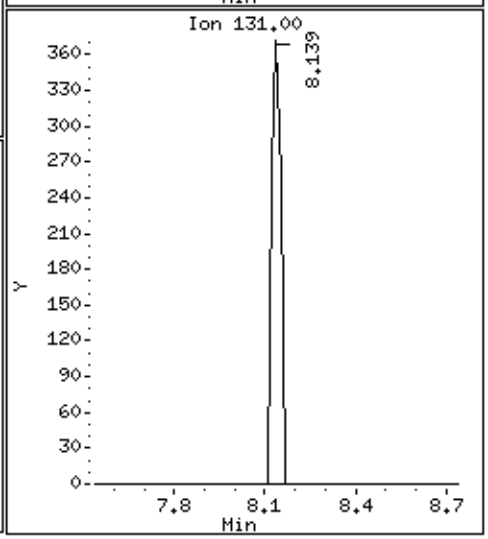












Data File: /chem/msdj.i/05mar15.b/j030522r1.d

Date : 05-MAR-2015 23:39

Client ID:

Instrument: msdj.i

Sample Info: 100ml 12379

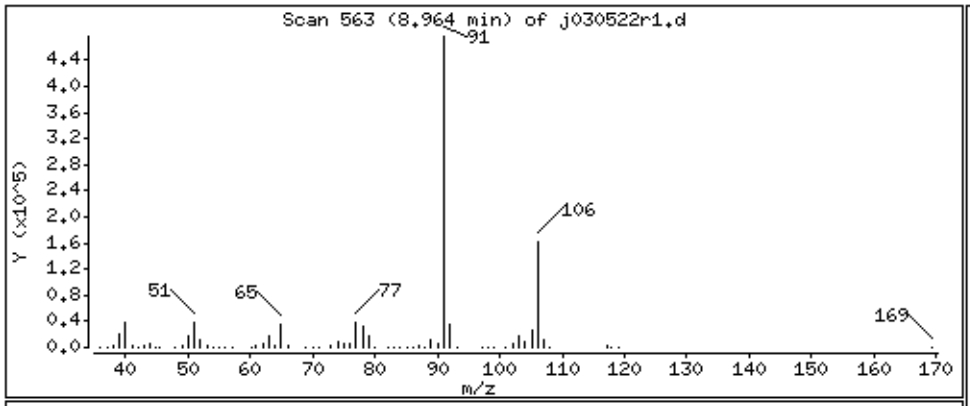
Operator: md

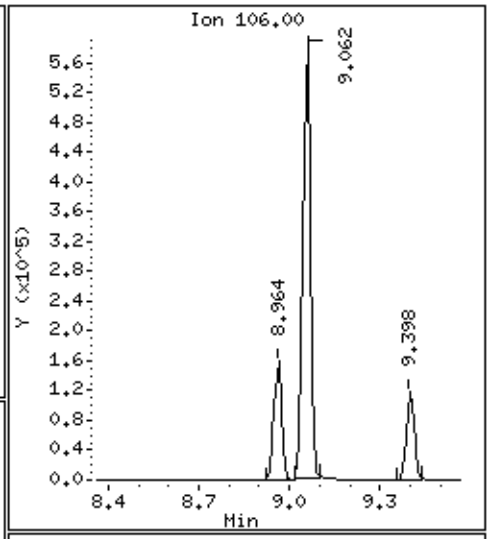
Column phase: RTX-624

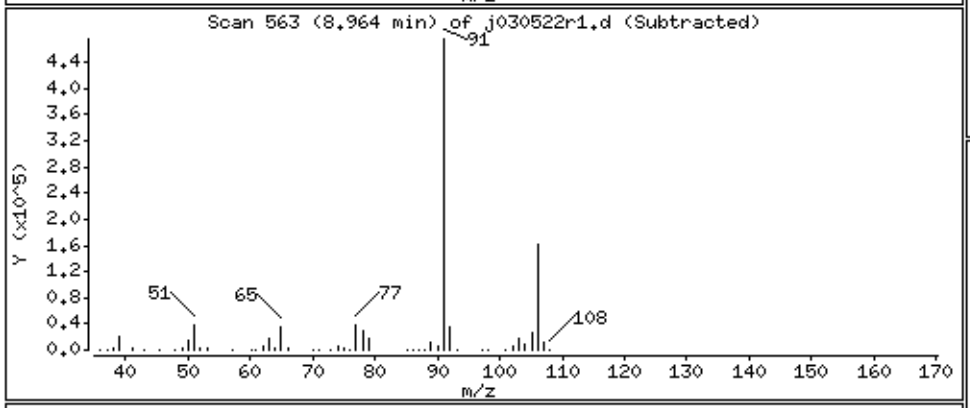
Column diameter: 0.25

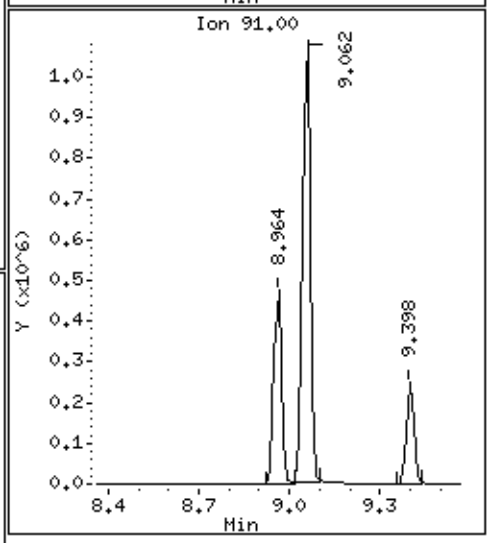
167 Ethyl Benzene

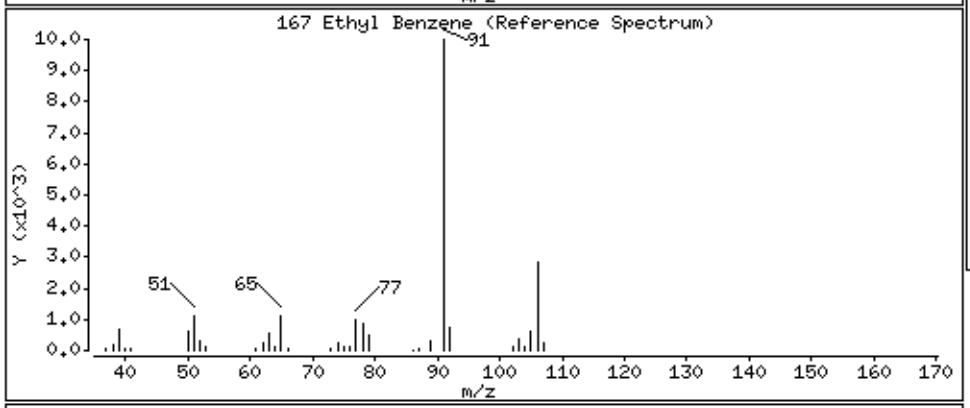
Concentration: 104.14 PPBV

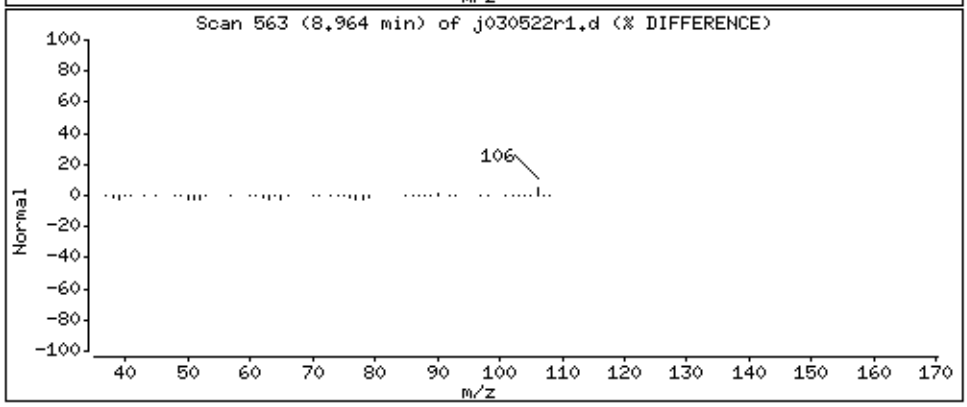












Data File: /chem/msdj.i/05mar15.b/j030522r1.d

Date : 05-MAR-2015 23:39

Client ID:

Instrument: msdj.i

Sample Info: 100ml 12379

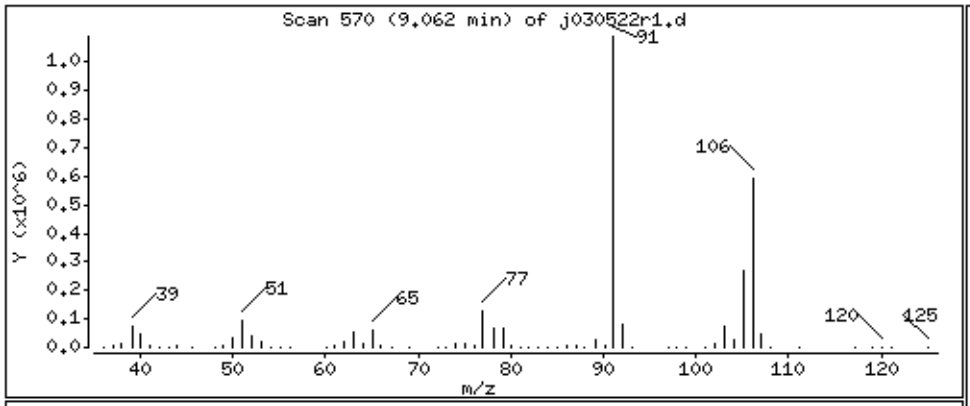
Operator: md

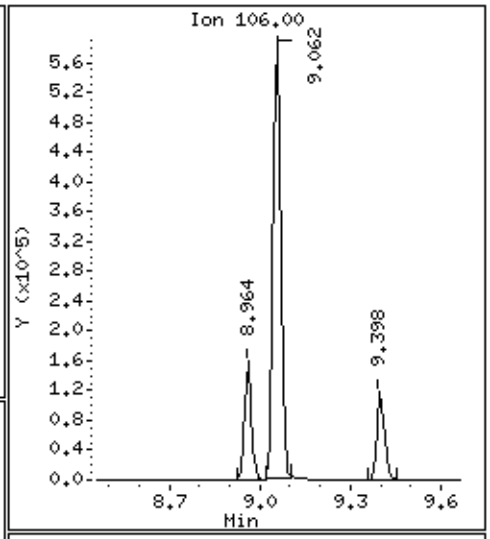
Column phase: RTX-624

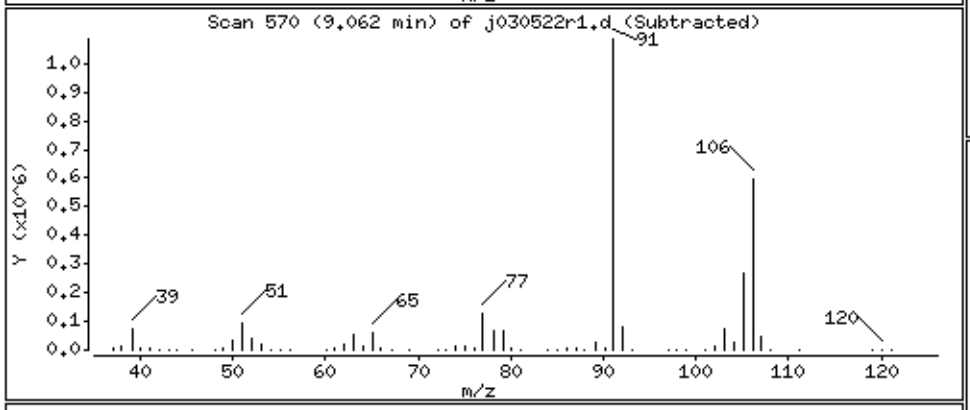
Column diameter: 0.25

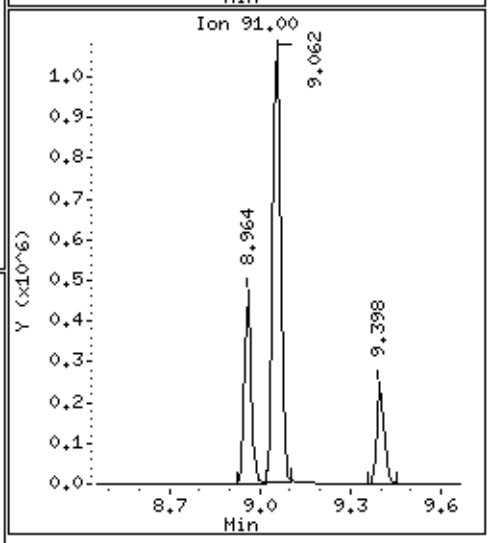
169 m,p-Xylene

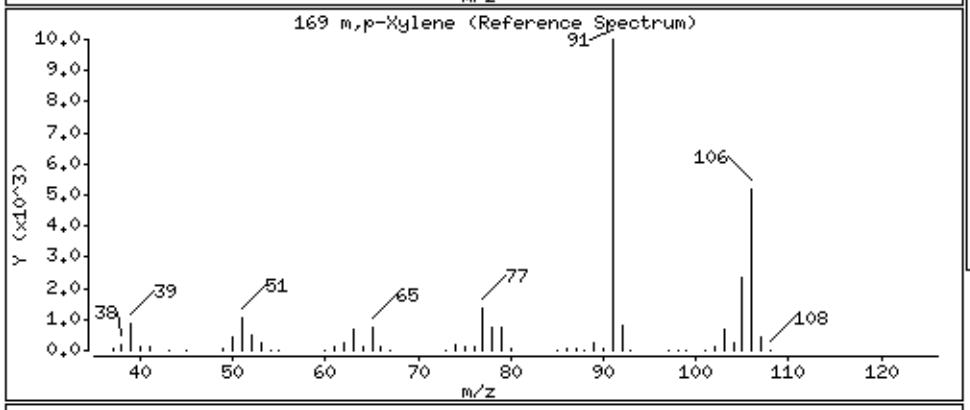
Concentration: 325.15 PPBV

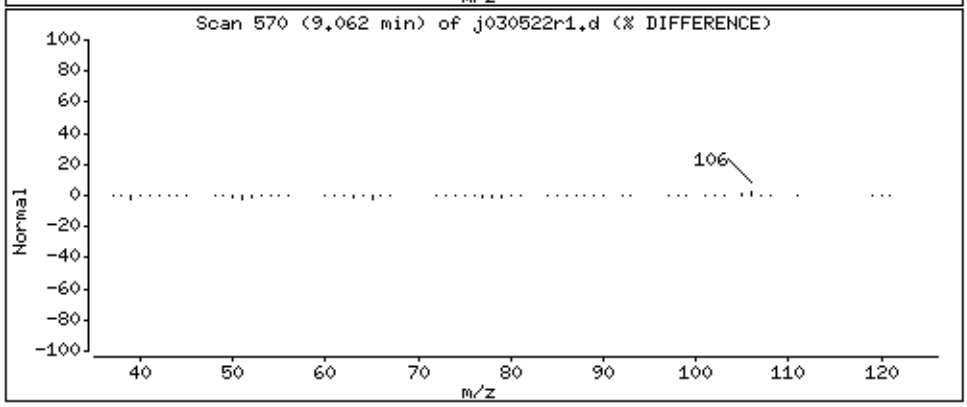












Data File: /chem/msdj.i/05mar15.b/j030522r1.d

Date : 05-MAR-2015 23:39

Client ID:

Instrument: msdj.i

Sample Info: 100ml 12379

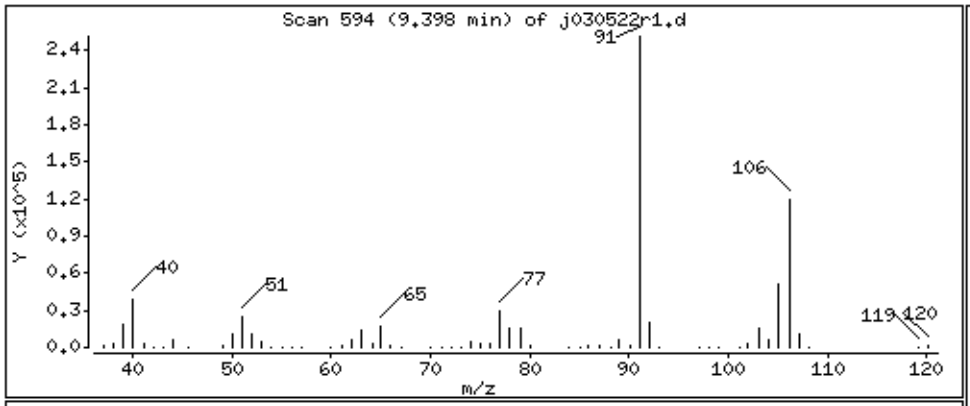
Operator: md

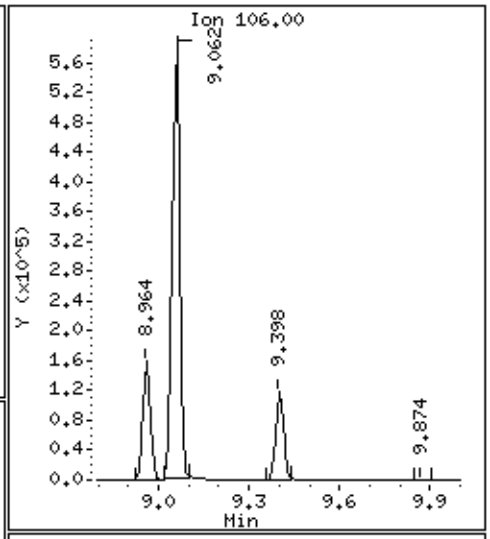
Column phase: RTX-624

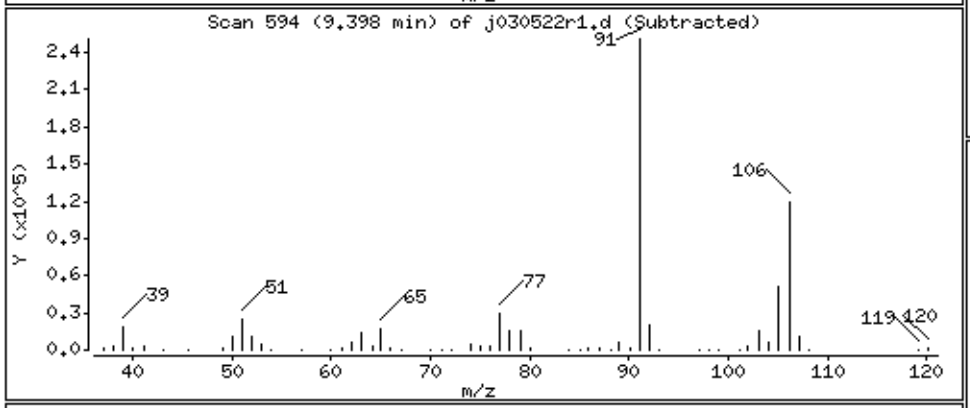
Column diameter: 0.25

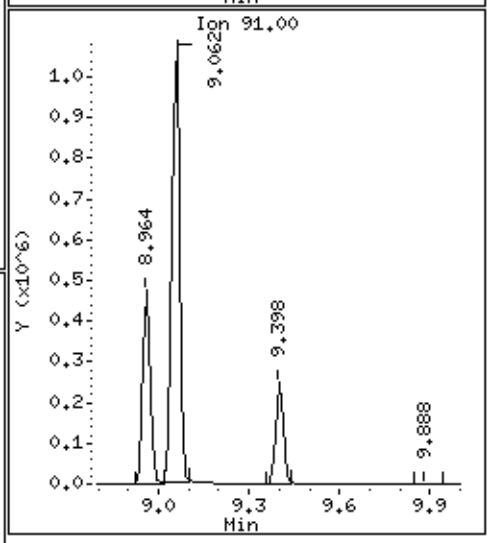
171 o-Xylene

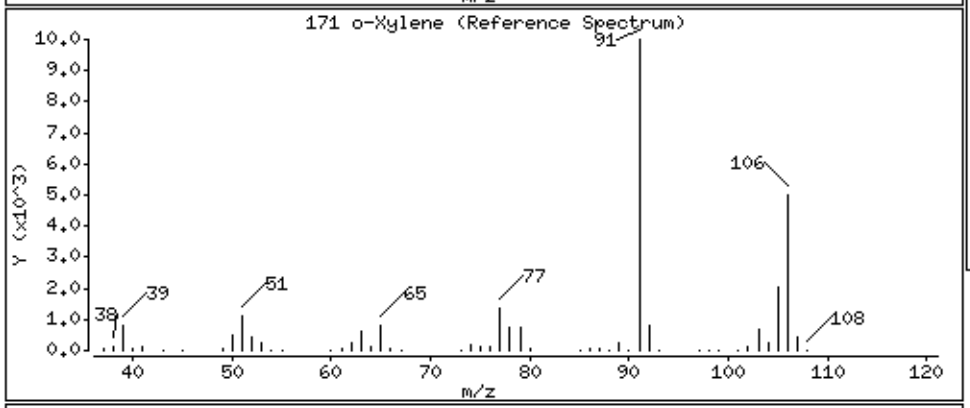
Concentration: 68.541 PPBV

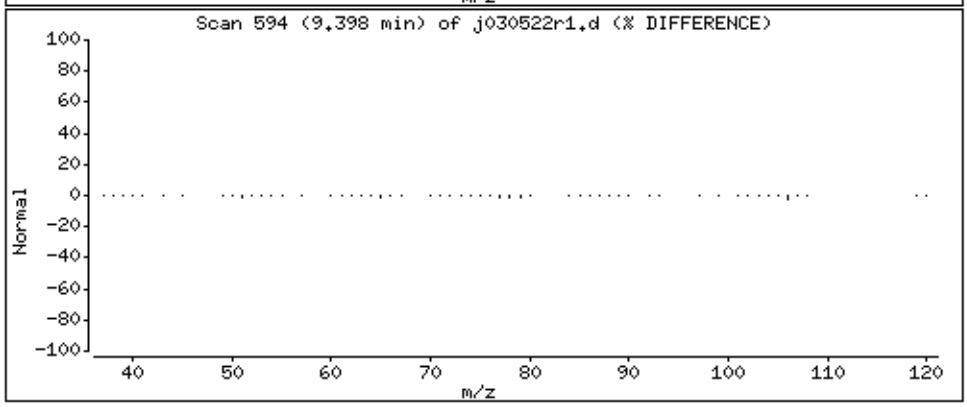












Data File: /chem/msdj.i/05mar15.b/j030522r1.d

Date : 05-MAR-2015 23:39

Client ID:

Instrument: msdj.i

Sample Info: 100ml 12379

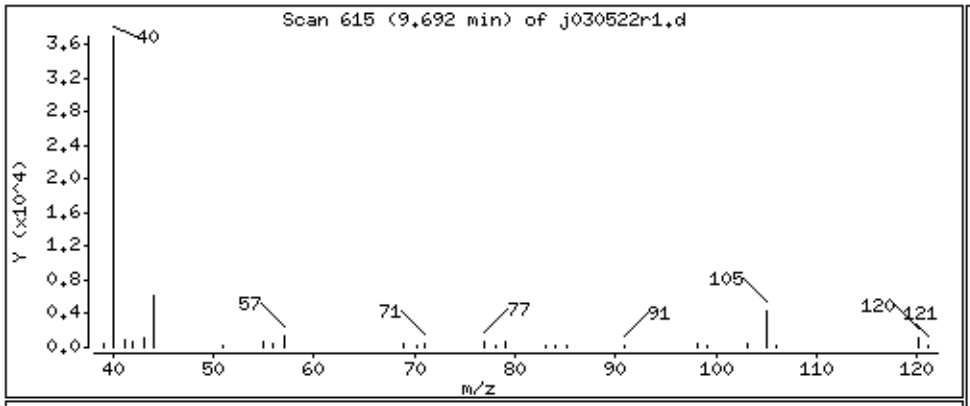
Operator: md

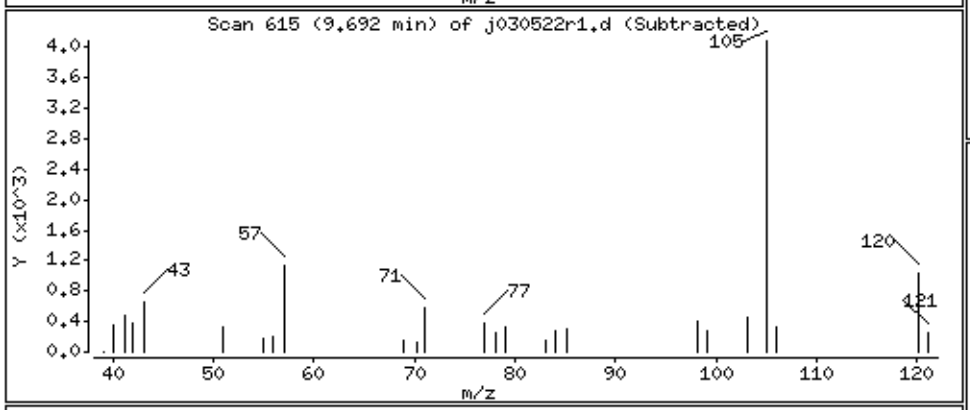
Column phase: RTX-624

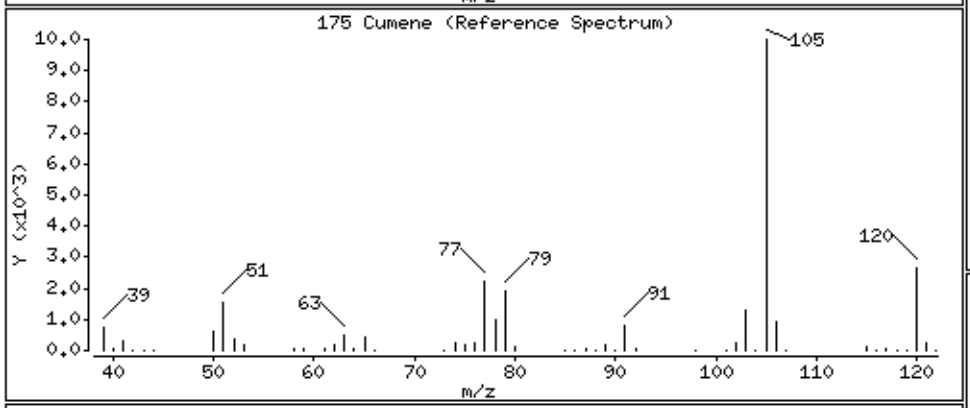
Column diameter: 0.25

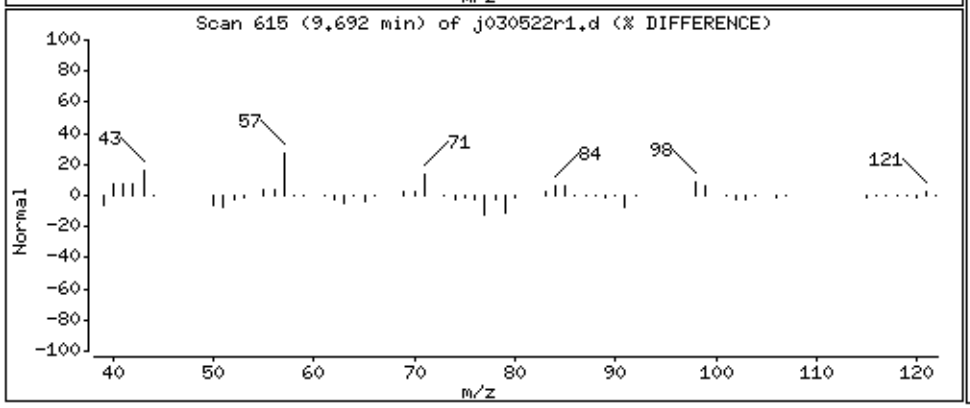
175 Cumene

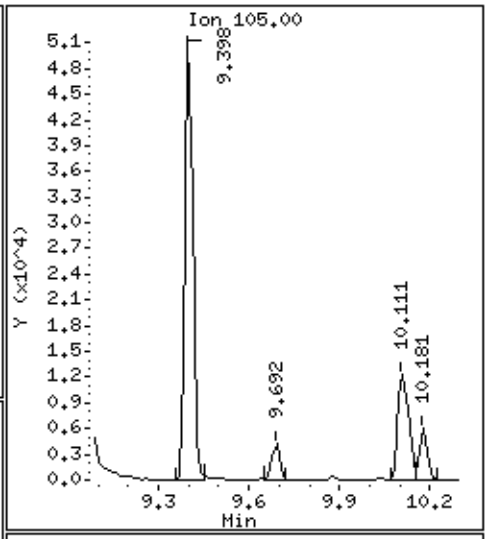
Concentration: 0.8097 PPBV

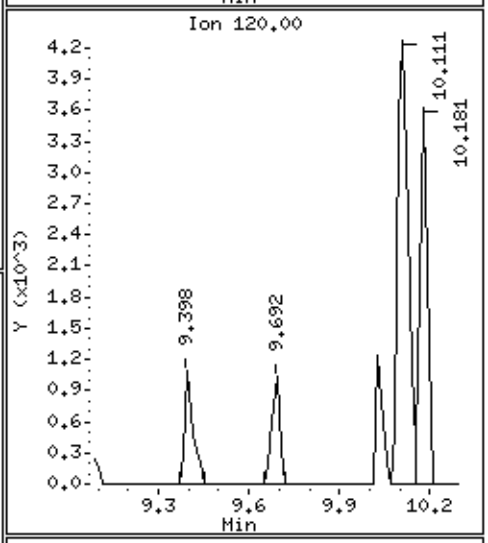


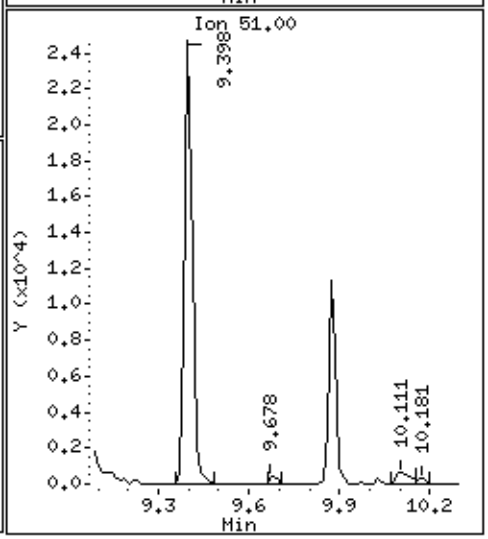












Data File: /chem/msdj.i/05mar15.b/j030522r1.d

Date : 05-MAR-2015 23:39

Client ID:

Instrument: msdj.i

Sample Info: 100ml 12379

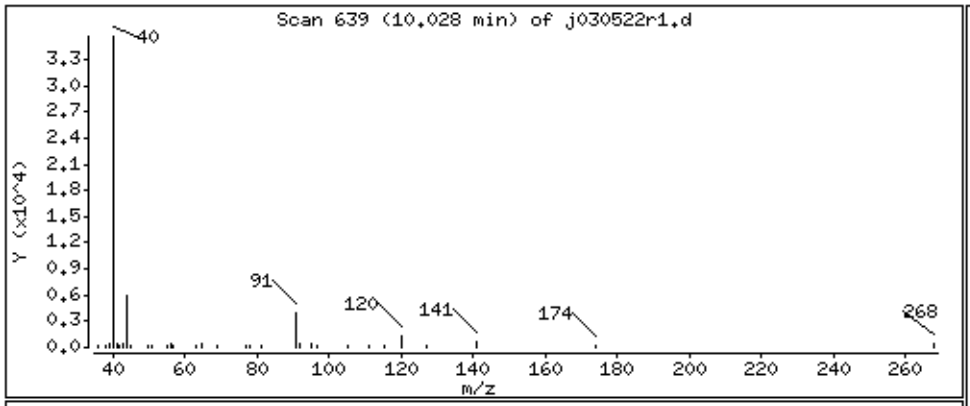
Operator: md

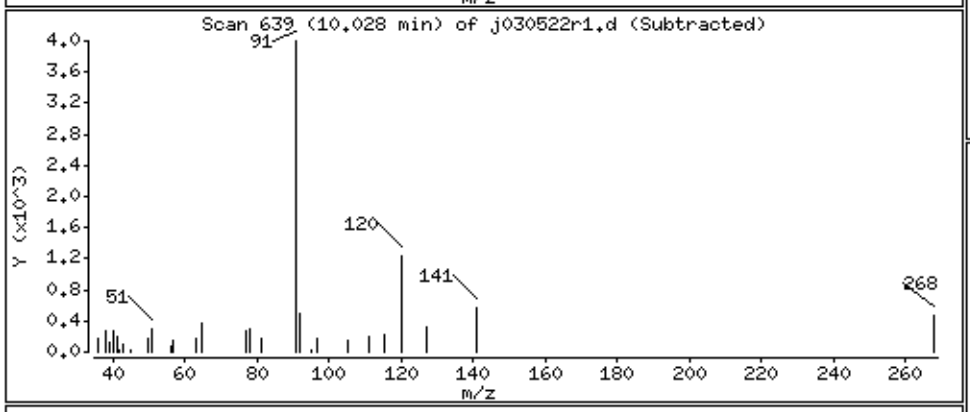
Column phase: RTX-624

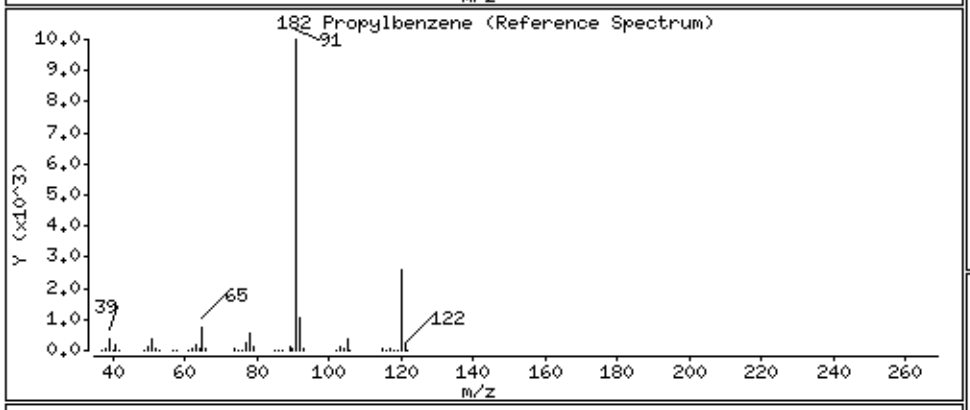
Column diameter: 0.25

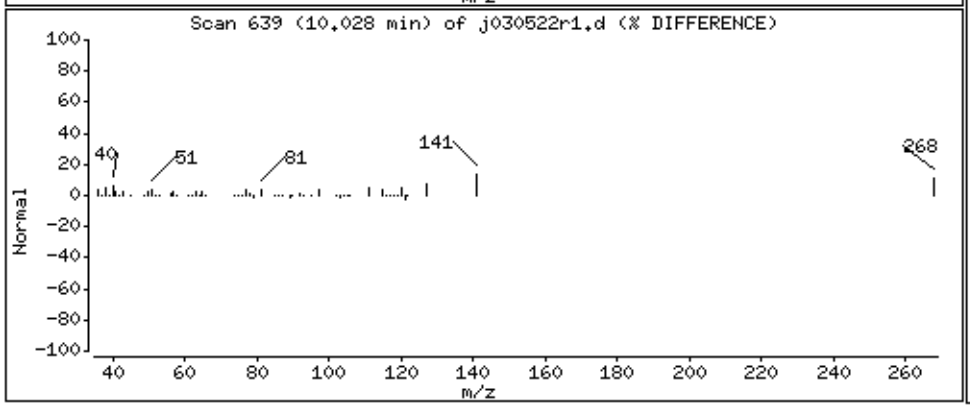
182 Propylbenzene

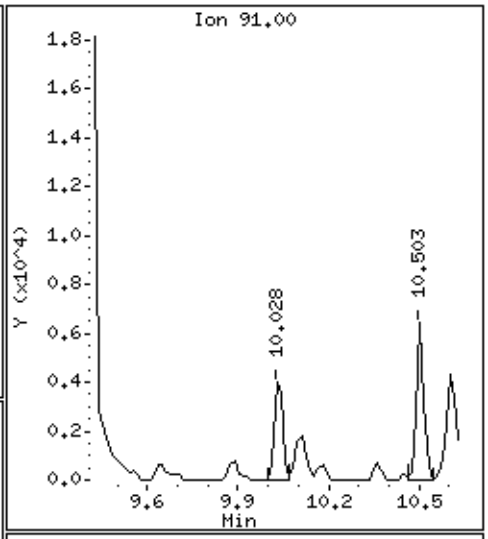
Concentration: 0.7075 PPBV

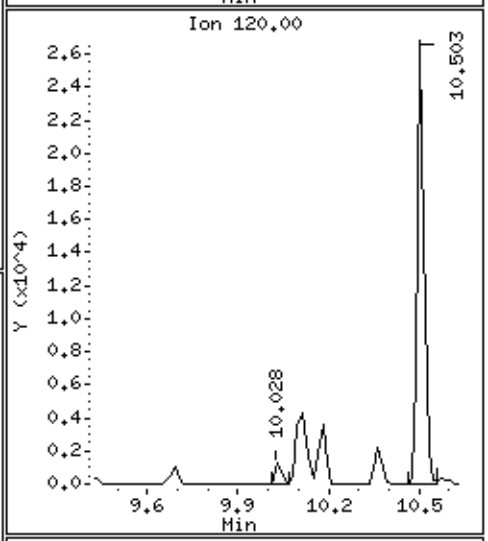


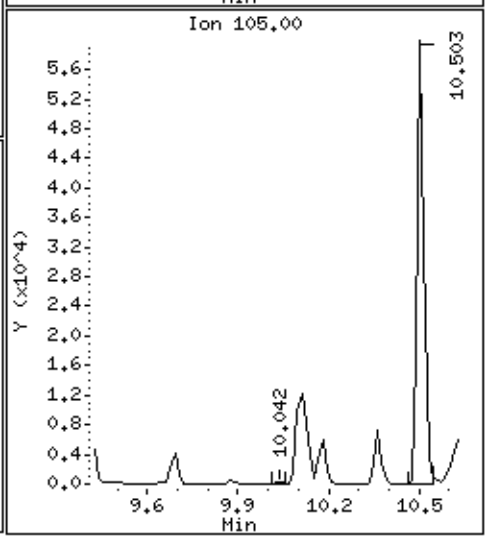












Data File: /chem/msdj.i/05mar15.b/j030522r1.d

Date : 05-MAR-2015 23:39

Client ID:

Instrument: msdj.i

Sample Info: 100ml 12379

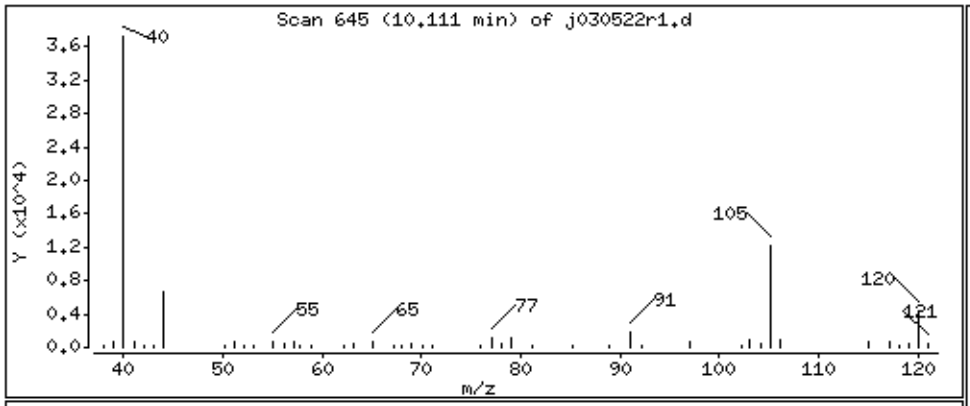
Operator: md

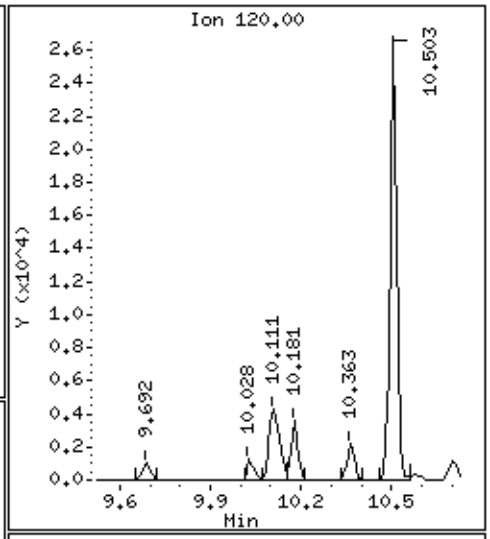
Column phase: RTX-624

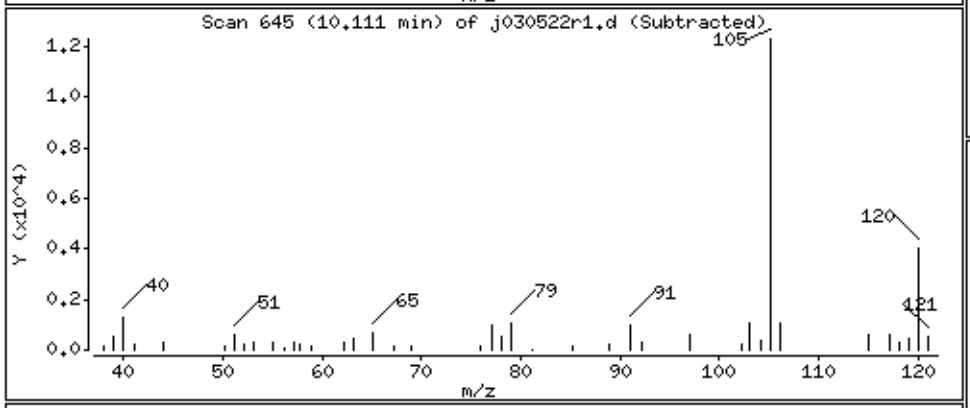
Column diameter: 0.25

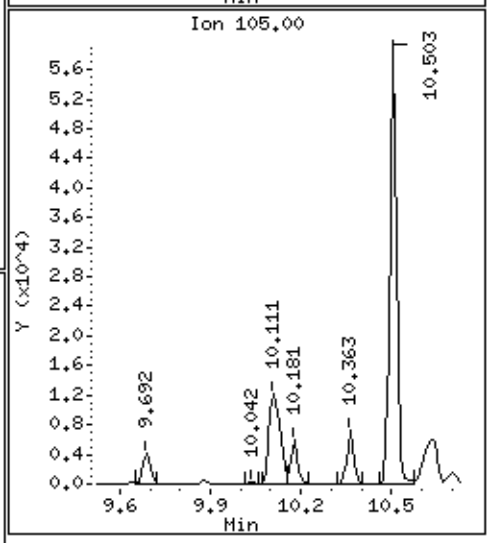
188 4-Ethyltoluene

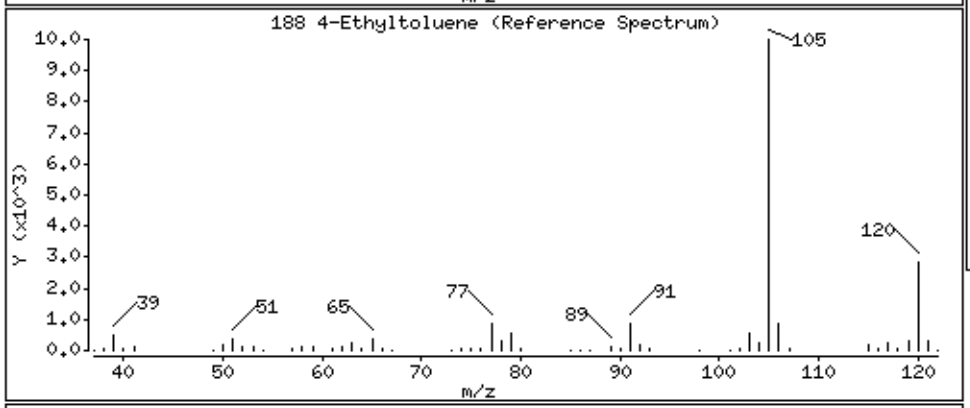
Concentration: 3.522 PPBV

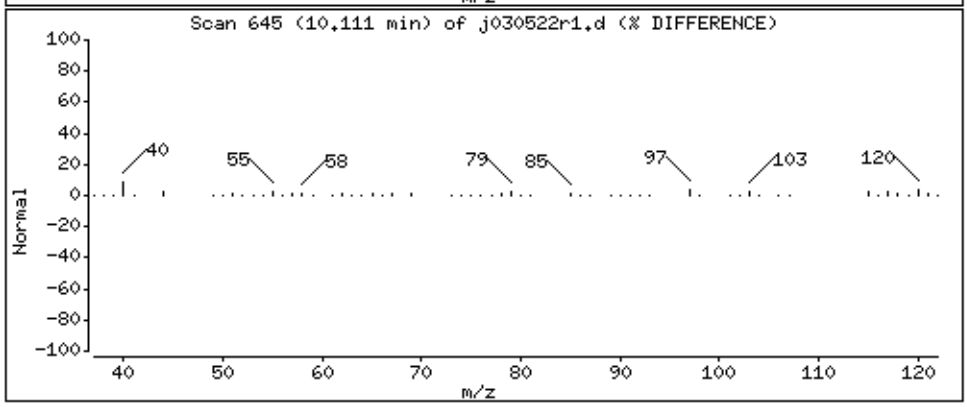












Data File: /chem/msdj.i/05mar15.b/j030522r1.d

Date : 05-MAR-2015 23:39

Client ID:

Instrument: msdj.i

Sample Info: 100ml 12379

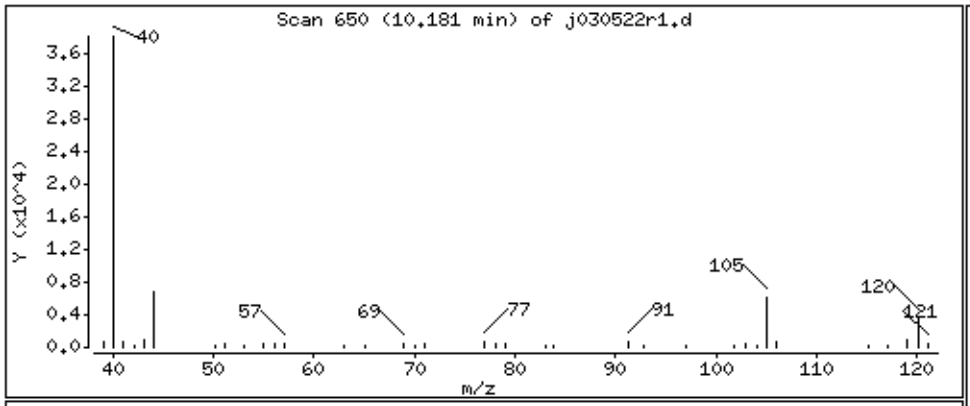
Operator: md

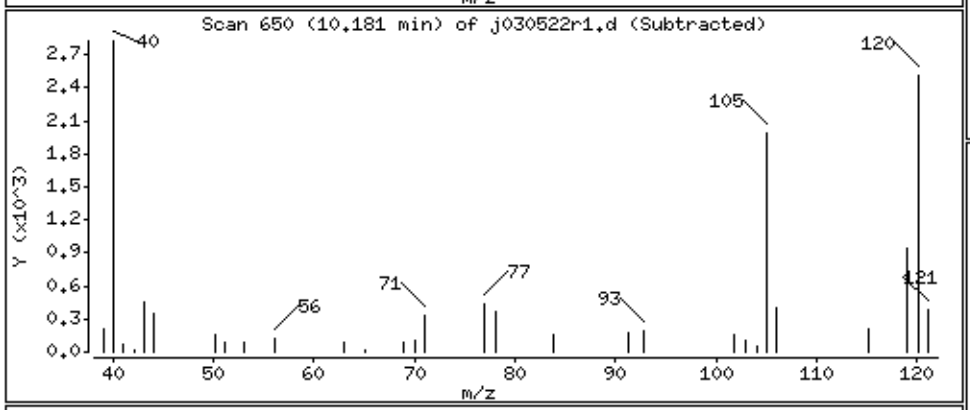
Column phase: RTX-624

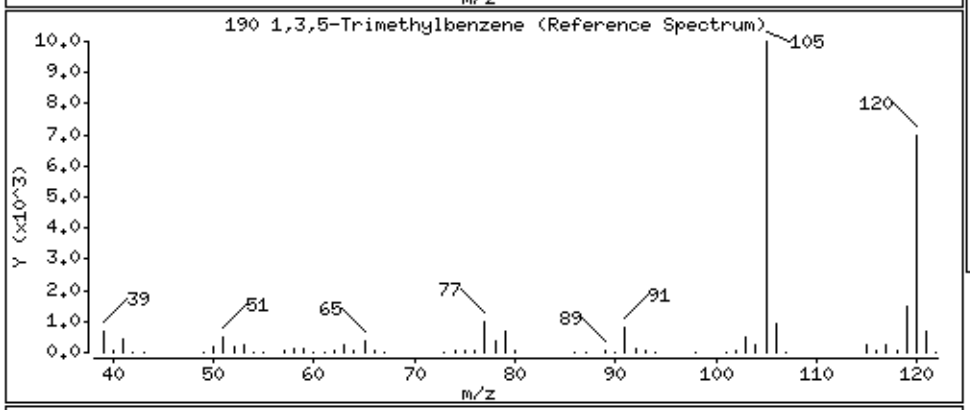
Column diameter: 0.25

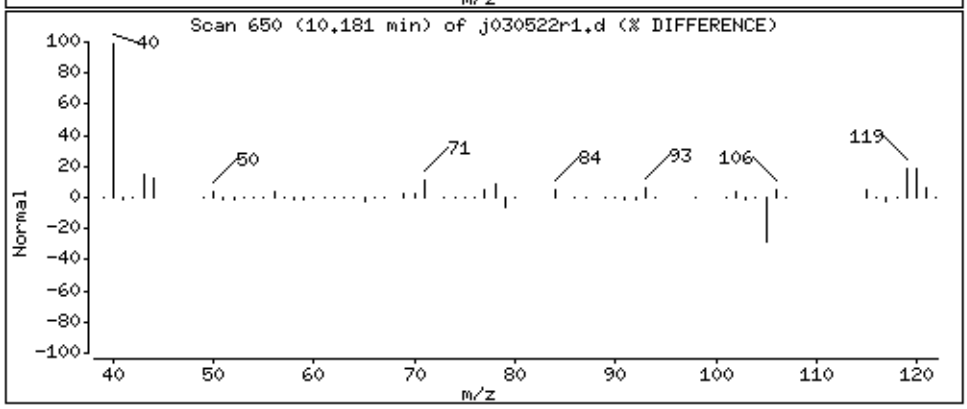
190 1,3,5-Trimethylbenzene

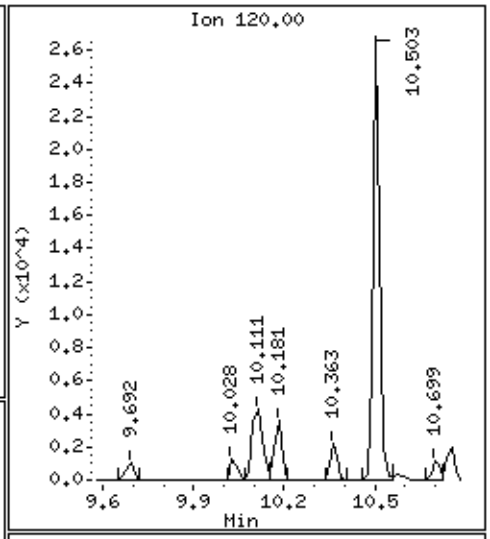
Concentration: 1.509 PPBV

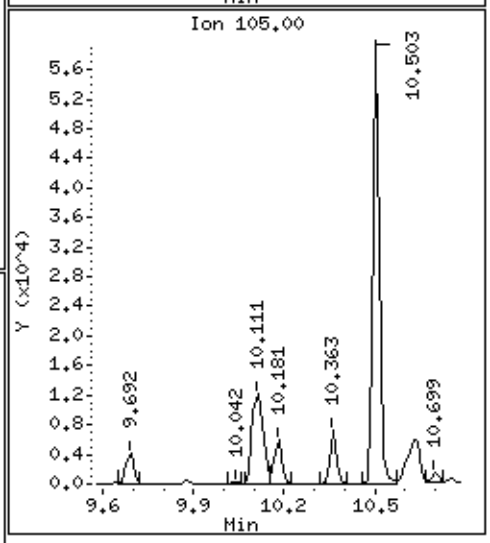












Data File: /chem/msdj.i/05mar15.b/j030522r1.d

Date : 05-MAR-2015 23:39

Client ID:

Instrument: msdj.i

Sample Info: 100ml 12379

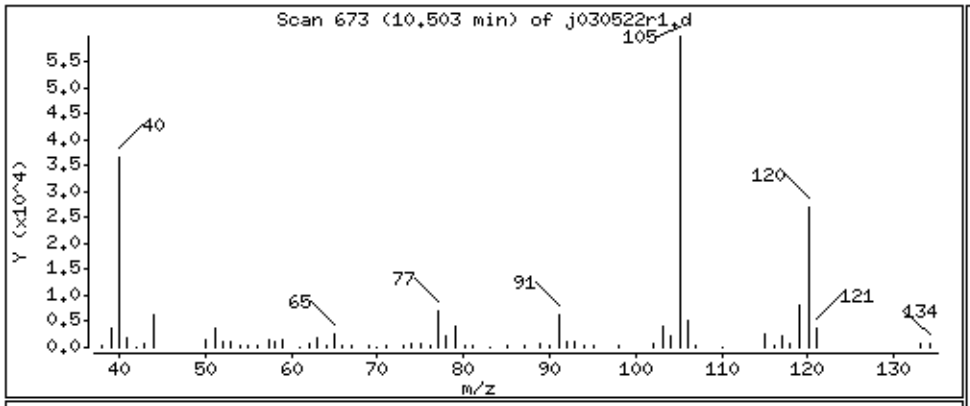
Operator: md

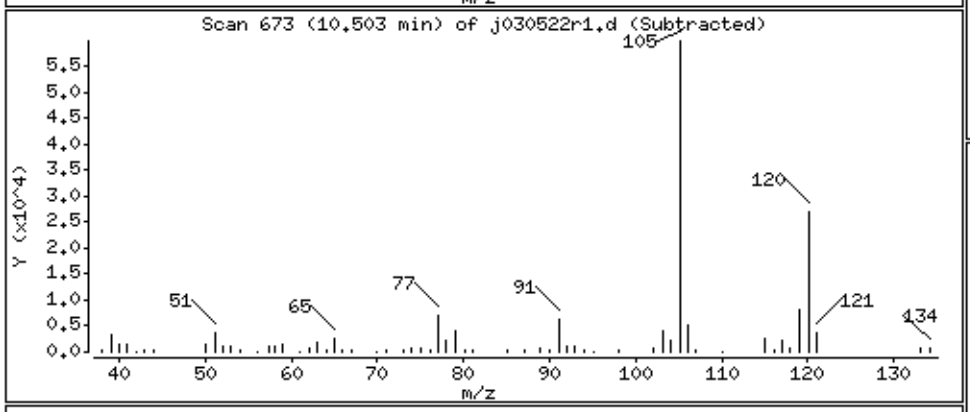
Column phase: RTX-624

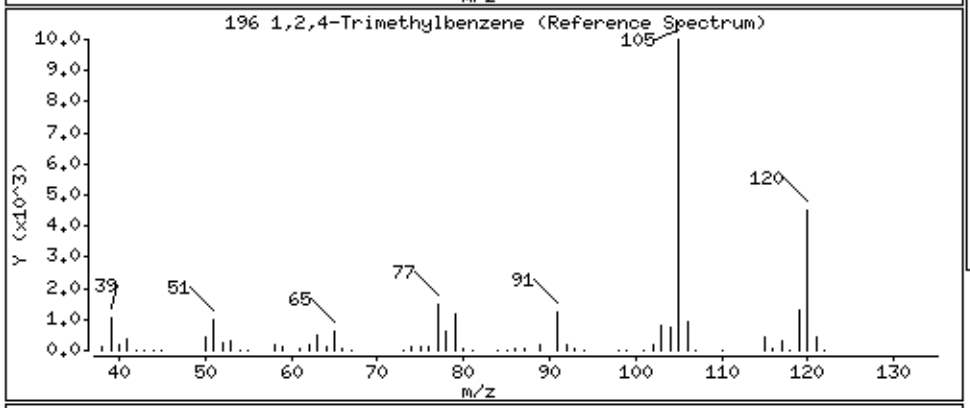
Column diameter: 0.25

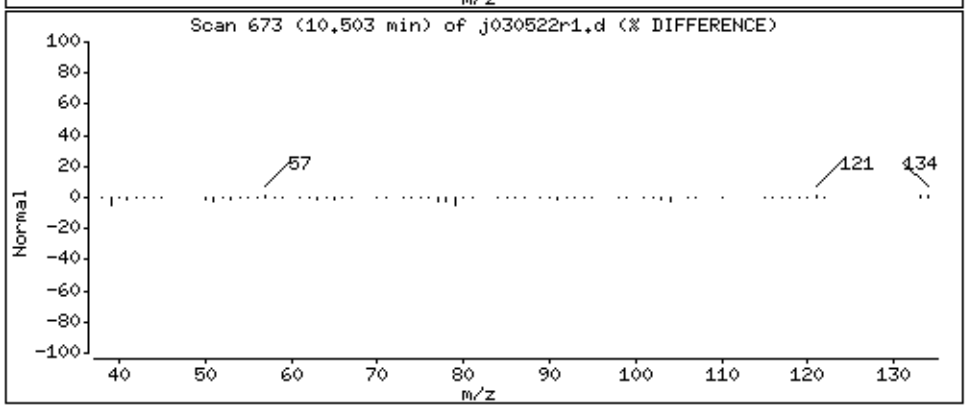
196 1,2,4-Trimethylbenzene

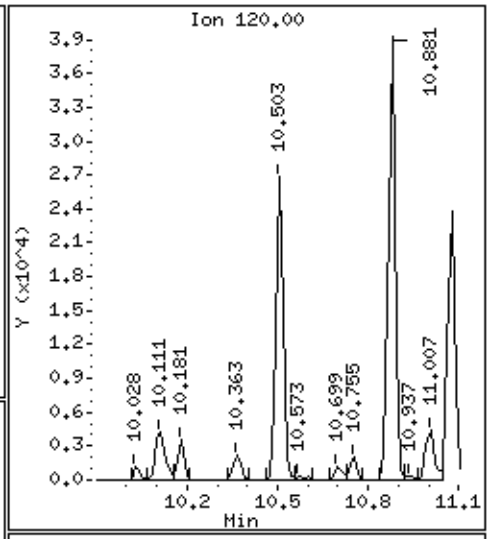
Concentration: 11.882 PPBV

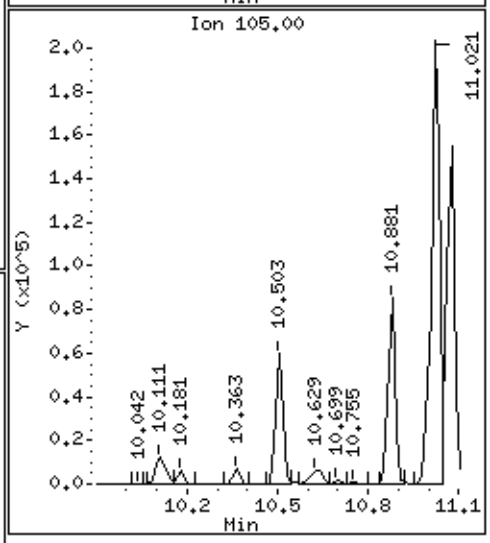












Data File: /chem/msdj.i/05mar15.b/j030522r1.d

Date : 05-MAR-2015 23:39

Client ID:

Instrument: msdj.i

Sample Info: 100ml 12379

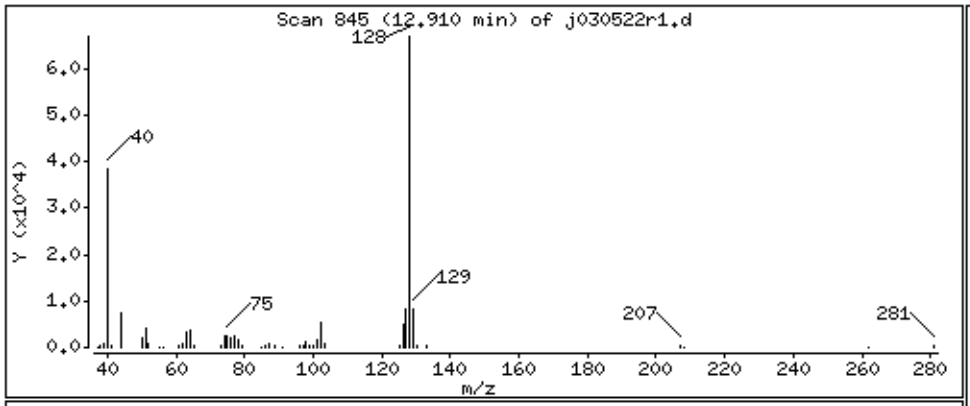
Operator: md

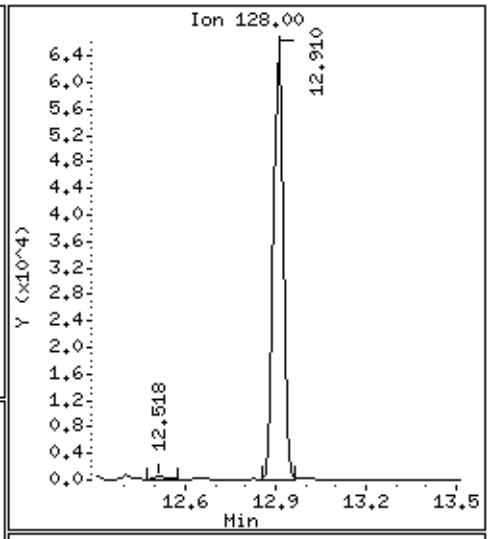
Column phase: RTX-624

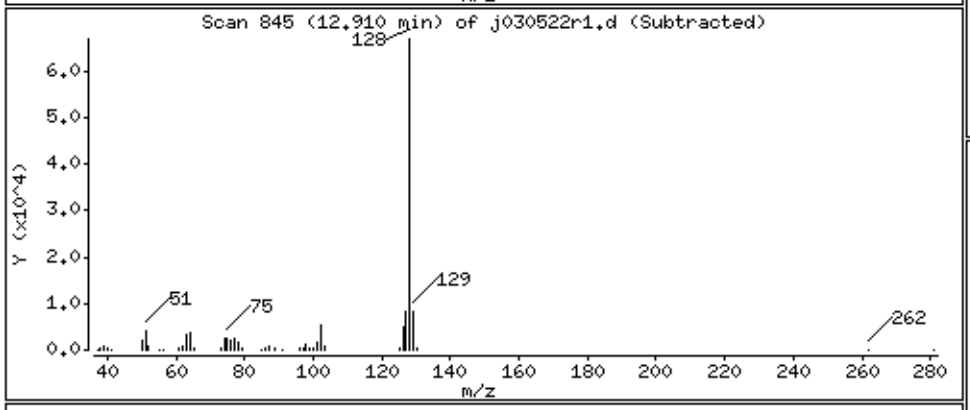
Column diameter: 0.25

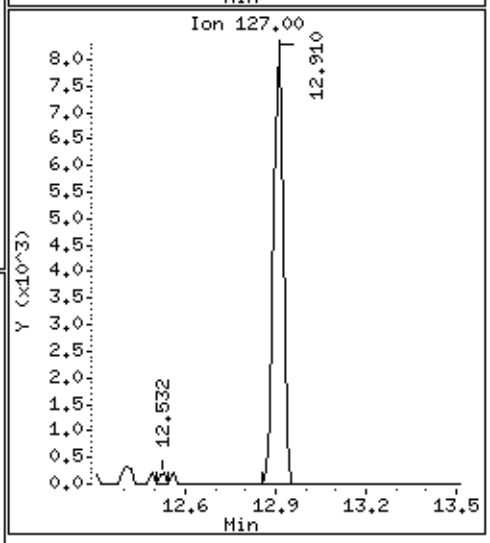
228 Naphthalene

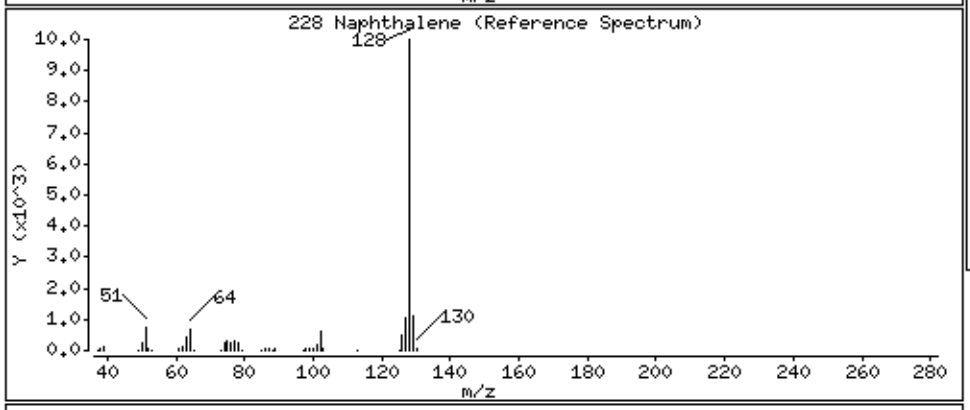
Concentration: 19.292 PPBV

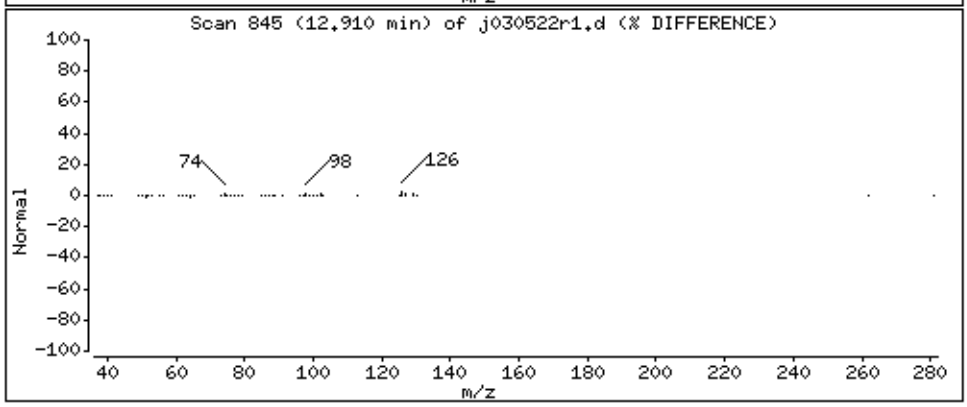












QC Results and Raw Data

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Client Sample ID: Lab Blank

Lab ID#: 1503058BR1-08A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**j030508r1**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 3/5/15 01:48 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.50	Not Detected	2.5	Not Detected
Freon 114	0.50	Not Detected	3.5	Not Detected
Chloromethane	5.0	Not Detected	10	Not Detected
Vinyl Chloride	0.50	Not Detected	1.3	Not Detected
1,3-Butadiene	0.50	Not Detected	1.1	Not Detected
Bromomethane	5.0	0.34 J	19	1.3 J
Chloroethane	2.0	Not Detected	5.3	Not Detected
Freon 11	0.50	Not Detected	2.8	Not Detected
Ethanol	2.0	Not Detected	3.8	Not Detected
Freon 113	0.50	Not Detected	3.8	Not Detected
1,1-Dichloroethene	0.50	Not Detected	2.0	Not Detected
Acetone	5.0	Not Detected	12	Not Detected
2-Propanol	2.0	Not Detected	4.9	Not Detected
Carbon Disulfide	2.0	Not Detected	6.2	Not Detected
3-Chloropropene	2.0	Not Detected	6.3	Not Detected
Methylene Chloride	5.0	Not Detected	17	Not Detected
Methyl tert-butyl ether	0.50	Not Detected	1.8	Not Detected
trans-1,2-Dichloroethene	0.50	Not Detected	2.0	Not Detected
Hexane	0.50	Not Detected	1.8	Not Detected
1,1-Dichloroethane	0.50	Not Detected	2.0	Not Detected
2-Butanone (Methyl Ethyl Ketone)	2.0	Not Detected	5.9	Not Detected
cis-1,2-Dichloroethene	0.50	Not Detected	2.0	Not Detected
Tetrahydrofuran	0.50	Not Detected	1.5	Not Detected
Chloroform	0.50	Not Detected	2.4	Not Detected
1,1,1-Trichloroethane	0.50	Not Detected	2.7	Not Detected
Cyclohexane	0.50	Not Detected	1.7	Not Detected
Carbon Tetrachloride	0.50	Not Detected	3.1	Not Detected
2,2,4-Trimethylpentane	0.50	Not Detected	2.3	Not Detected
Benzene	0.50	Not Detected	1.6	Not Detected
1,2-Dichloroethane	0.50	Not Detected	2.0	Not Detected
Heptane	0.50	Not Detected	2.0	Not Detected
Trichloroethene	0.50	Not Detected	2.7	Not Detected
1,2-Dichloropropane	0.50	Not Detected	2.3	Not Detected
1,4-Dioxane	2.0	Not Detected	7.2	Not Detected
Bromodichloromethane	0.50	Not Detected	3.4	Not Detected
cis-1,3-Dichloropropene	0.50	Not Detected	2.3	Not Detected
4-Methyl-2-pentanone	0.50	Not Detected	2.0	Not Detected
Toluene	0.50	Not Detected	1.9	Not Detected
trans-1,3-Dichloropropene	0.50	Not Detected	2.3	Not Detected
1,1,2-Trichloroethane	0.50	Not Detected	2.7	Not Detected
Tetrachloroethene	0.50	Not Detected	3.4	Not Detected
2-Hexanone	2.0	Not Detected	8.2	Not Detected

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Client Sample ID: Lab Blank

Lab ID#: 1503058BR1-08A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**j030508r1**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 3/5/15 01:48 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Dibromochloromethane	0.50	Not Detected	4.2	Not Detected
1,2-Dibromoethane (EDB)	0.50	Not Detected	3.8	Not Detected
Chlorobenzene	0.50	Not Detected	2.3	Not Detected
Ethyl Benzene	0.50	Not Detected	2.2	Not Detected
m,p-Xylene	0.50	0.058 J	2.2	0.25 J
o-Xylene	0.50	Not Detected	2.2	Not Detected
Styrene	0.50	Not Detected	2.1	Not Detected
Bromoform	0.50	Not Detected	5.2	Not Detected
Cumene	0.50	0.078 J	2.4	0.38 J
1,1,2,2-Tetrachloroethane	0.50	Not Detected	3.4	Not Detected
Propylbenzene	0.50	0.14 J	2.4	0.68 J
4-Ethyltoluene	0.50	0.085 J	2.4	0.42 J
1,3,5-Trimethylbenzene	0.50	0.26 J	2.4	1.3 J
1,2,4-Trimethylbenzene	0.50	0.22 J	2.4	1.1 J
1,3-Dichlorobenzene	0.50	Not Detected	3.0	Not Detected
1,4-Dichlorobenzene	0.50	Not Detected	3.0	Not Detected
alpha-Chlorotoluene	0.50	Not Detected	2.6	Not Detected
1,2-Dichlorobenzene	0.50	Not Detected	3.0	Not Detected
1,2,4-Trichlorobenzene	2.0	Not Detected	15	Not Detected
Hexachlorobutadiene	2.0	Not Detected	21	Not Detected
Naphthalene	1.0	Not Detected	5.2	Not Detected

J = Estimated value.

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	100	70-130
1,2-Dichloroethane-d4	102	70-130
4-Bromofluorobenzene	99	70-130

Eurofins Air Toxics Inc.

EPA TO-15/MODIFIED EPA TO-14A

Data file : /chem/msdj.i/05mar15.b/j030508r1.d
Lab Smp Id: Lab Blank Client Smp ID: Lab Blank
Inj Date : 05-MAR-2015 13:48
Operator : sg Inst ID: msdj.i
Smp Info : 200ml #34343
Misc Info : Humid
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msdj.i/05mar15.b/j15q0304a.m
Meth Date : 26-Jun-2015 14:00 dbailey Quant Type: ISTD
Cal Date : 04-MAR-2015 12:36 Cal File: j030408.d
Als bottle: 12
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

Name	Value	Description
DF	1.00000	Dilution Factor

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
* 98 Bromochloromethane						CAS #: 74-97-5	
5.508	5.494 (1.000)	130	129110	25.0000		80.00- 120.00	100.00
5.508	5.494 (1.000)	128	102172			48.40- 108.40	79.14
5.494	5.494 (1.000)	49	145323			84.80- 144.80	112.56
* 123 1,4-Difluorobenzene						CAS #: 540-36-3	
6.404	6.404 (1.000)	114	569384	25.0000		80.00- 120.00	100.00
6.404	6.404 (1.000)	88	85785			0.00- 45.38	15.07
* 163 Chlorobenzene-d5						CAS #: 3114-55-4	
8.894	8.894 (1.000)	117	537656	25.0000		80.00- 120.00	100.00
8.894	8.894 (1.000)	82	271247			20.55- 80.55	50.45
$ 117 1,2-Dichloroethane-d4						CAS #: 17060-07-0	
6.054	6.054 (1.099)	65	151449	25.6008	25.601	80.00- 120.00	100.00
6.054	6.054 (1.099)	67	83552			28.68- 88.68	55.17

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
$ 146 Toluene-d8						CAS #: 2037-26-5	
7.649	7.635 (1.194)	98	579809	24.9556	24.956	80.00- 120.00	100.00
7.649	7.635 (1.194)	70	56934			0.00- 40.26	9.82
7.649	7.635 (1.194)	100	380352			38.16- 98.16	65.60
$ 177 4-Bromofluorobenzene						CAS #: 460-00-4	
9.888	9.888 (1.112)	174	346588	24.8181	24.818	80.00- 120.00	100.00
9.888	9.888 (1.112)	95	381323			82.57- 142.57	110.02
9.888	9.888 (1.112)	176	334188			67.45- 127.45	96.42
29 Bromomethane						CAS #: 74-83-9	
2.150	2.122 (0.390)	94	1442	0.34578	0.3458	80.00- 120.00	100.00(a)
2.150	2.122 (0.390)	96	1026			62.83- 122.83	71.18
169 m,p-Xylene						CAS #: 108-38-3	
9.062	9.062 (1.019)	106	872	0.05774	0.05774	80.00- 120.00	100.00(a)
9.062	9.062 (1.019)	91	1594			158.57- 218.57	182.76
175 Cumene						CAS #: 98-82-8	
9.720	9.692 (1.093)	105	3462	0.07821	0.07821	80.00- 120.00	100.00(a)
9.692	9.692 (1.090)	120	1384			0.00- 57.55	39.99
9.888	9.692 (1.112)	51	18619			0.00- 38.22	537.80
182 Propylbenzene						CAS #: 103-65-1	
10.056	10.028 (1.131)	91	7309	0.13928	0.1393	80.00- 120.00	100.00(a)
10.056	10.028 (1.131)	120	784			0.00- 54.81	10.74
10.139	10.028 (1.140)	105	3228			0.00- 33.86	44.17
188 4-Ethyltoluene						CAS #: 622-96-8	
10.153	10.126 (1.142)	120	1200	0.08489	0.08489	80.00- 120.00	100.00(a)
10.139	10.126 (1.140)	105	3225			292.39- 352.39	268.65
190 1,3,5-Trimethylbenzene						CAS #: 108-67-8	
10.195	10.182 (1.146)	120	5036	0.26143	0.2614	80.00- 120.00	100.00(a)
10.195	10.182 (1.146)	105	10685			169.92- 229.92	212.15
196 1,2,4-Trimethylbenzene						CAS #: 95-63-6	
10.531	10.503 (1.184)	120	3881	0.22485	0.2248	80.00- 120.00	100.00(a)
10.517	10.503 (1.182)	105	8550			182.08- 242.08	220.30

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: msdj.i
Lab File ID: j030508r1.d
Lab Smp Id: Lab Blank
Analysis Type: VOA
Quant Type: ISTD
Operator: sg
Method File: /chem/msdj.i/05mar15.b/j15q0304a.m
Misc Info: Humid

Calibration Date: 05-MAR-2015
Calibration Time: 09:28
Client Smp ID: Lab Blank
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
98 Bromochloromethan	140692	84415	196969	129110	-8.23
123 1,4-Difluorobenze	614418	368651	860185	569384	-7.33
163 Chlorobenzene-d5	577173	346304	808042	537656	-6.85

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
98 Bromochloromethan	5.49	5.16	5.82	5.51	0.25
123 1,4-Difluorobenze	6.40	6.07	6.73	6.40	0.00
163 Chlorobenzene-d5	8.89	8.56	9.22	8.89	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 14:03

Eurofins Air Toxics Inc.

RECOVERY REPORT

Client Name:
Client SDG: 05mar15
Sample Matrix: GAS
Fraction: VOA
Lab Smp Id: Lab Blank
Client Smp ID: Lab Blank
Level: LOW
Operator: sg
Data Type: MS DATA
SampleType: SAMPLE
SpikeList File: 2926Spectra.spk
Quant Type: ISTD
Sublist File: TO15Nmdl.sub
Method File: /chem/msdj.i/05mar15.b/j15q0304a.m
Misc Info: Humid

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 117 1,2-Dichloroethane	25.000	25.601	102.40	70-130
$ 146 Toluene-d8	25.000	24.956	99.82	70-130
$ 177 4-Bromofluorobenze	25.000	24.818	99.27	70-130

Data File: /chem/msdj.i/05mar15.b/j030508r1.d

Page 1

Date : 05-MAR-2015 13:48

Client ID: Lab Blank

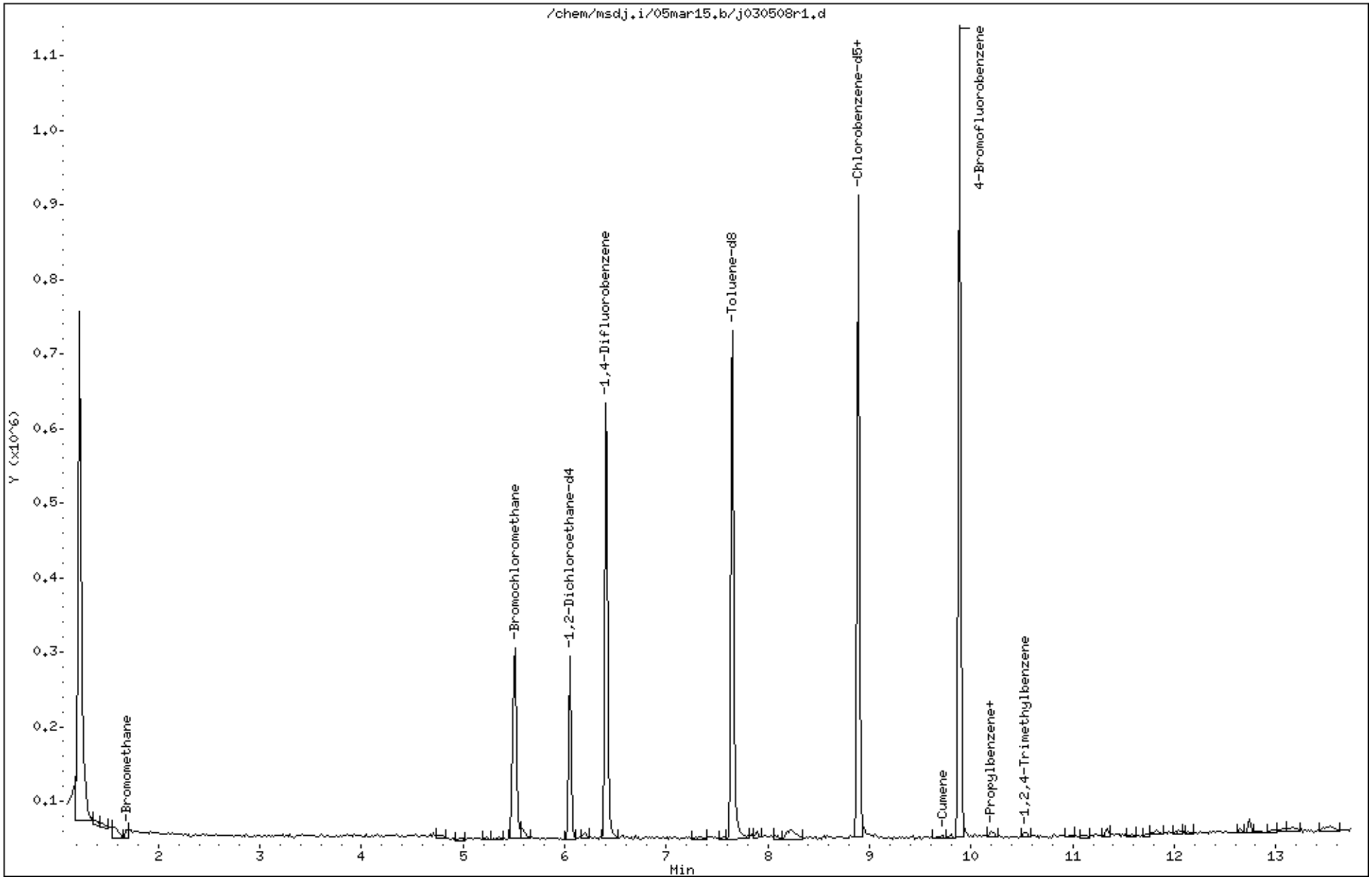
Instrument: msdj.i

Sample Info: 200ml #34343

Operator: sg

Column phase: RTX-624

Column diameter: 0.25



Data File: /chem/msdj.i/05mar15.b/j030508r1.d

Date : 05-MAR-2015 13:48

Client ID: Lab Blank

Instrument: msdj.i

Sample Info: 200ml #34343

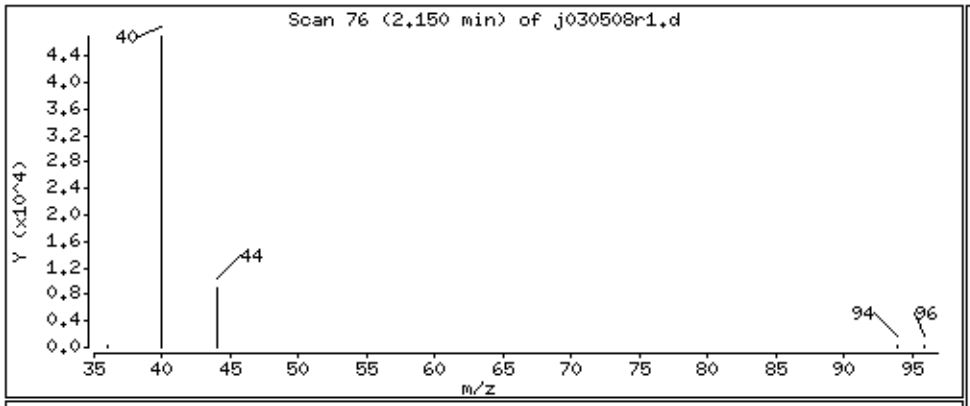
Operator: sg

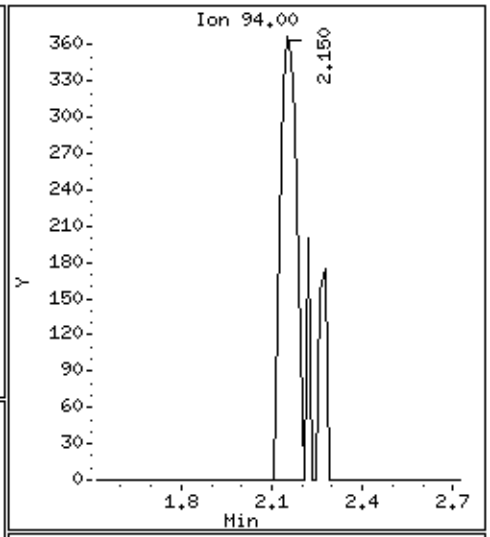
Column phase: RTX-624

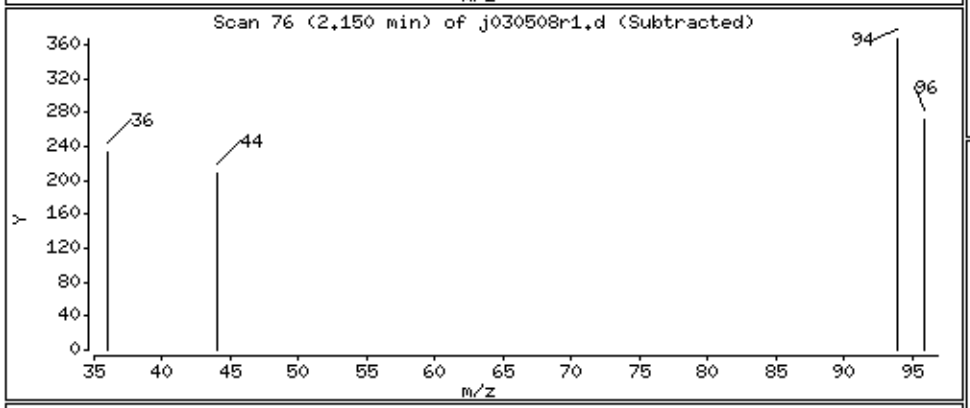
Column diameter: 0.25

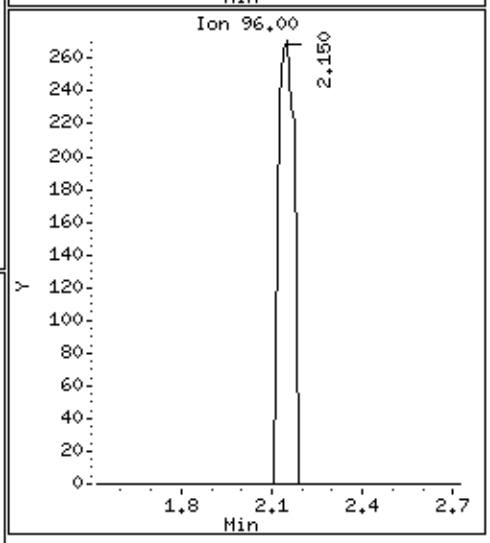
29 Bromomethane

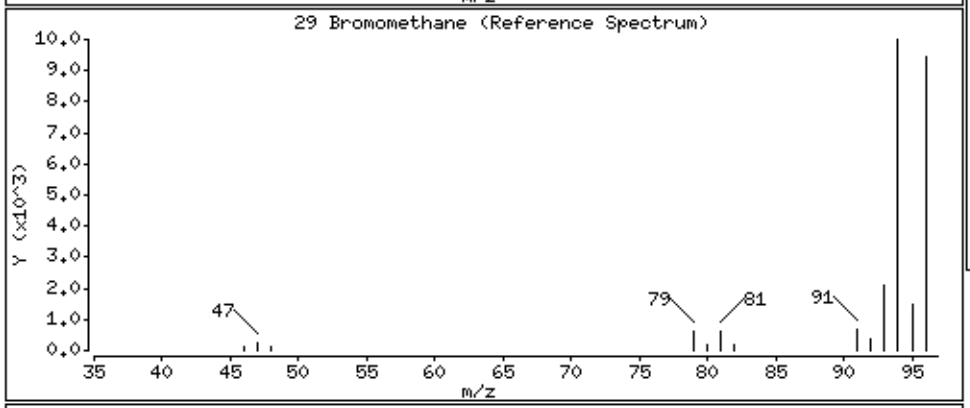
Concentration: 0.3458 PPBV

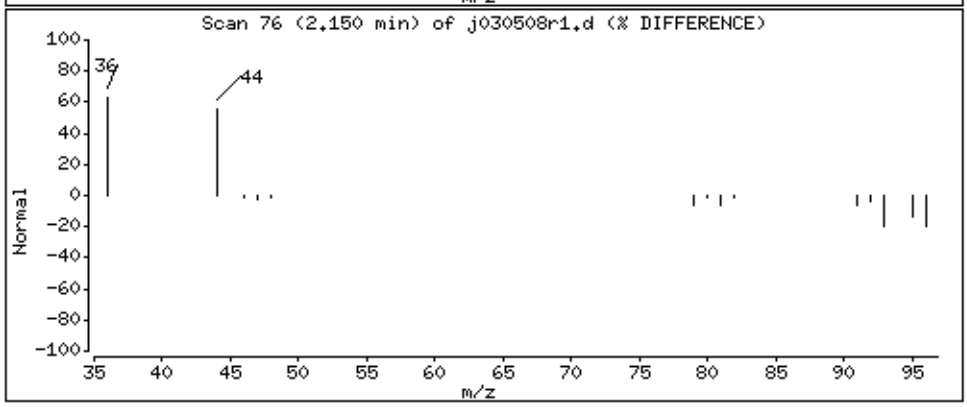












Data File: /chem/msdj.i/05mar15.b/j030508r1.d

Date : 05-MAR-2015 13:48

Client ID: Lab Blank

Instrument: msdj.i

Sample Info: 200ml #34343

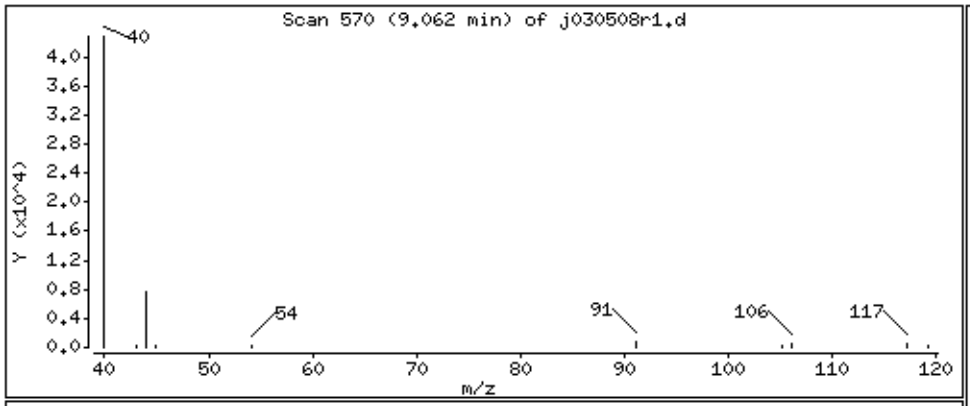
Operator: sg

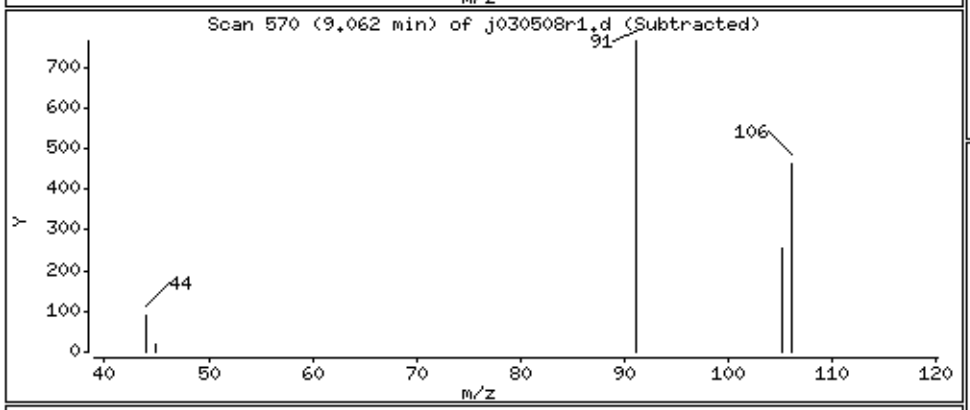
Column phase: RTX-624

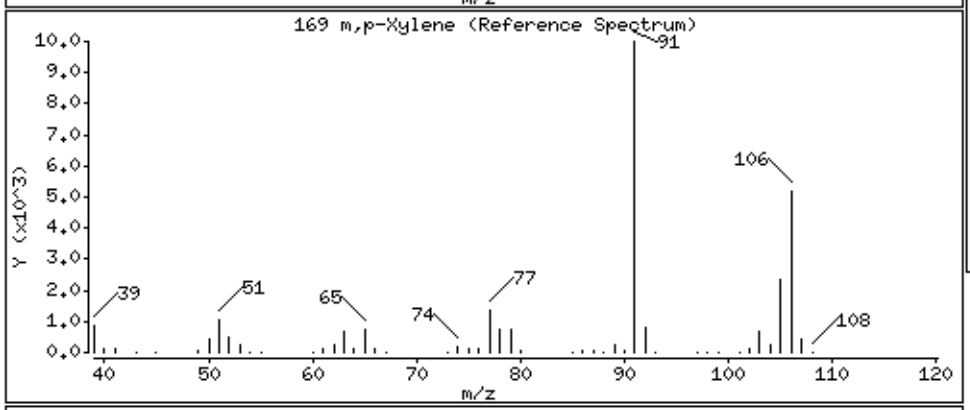
Column diameter: 0.25

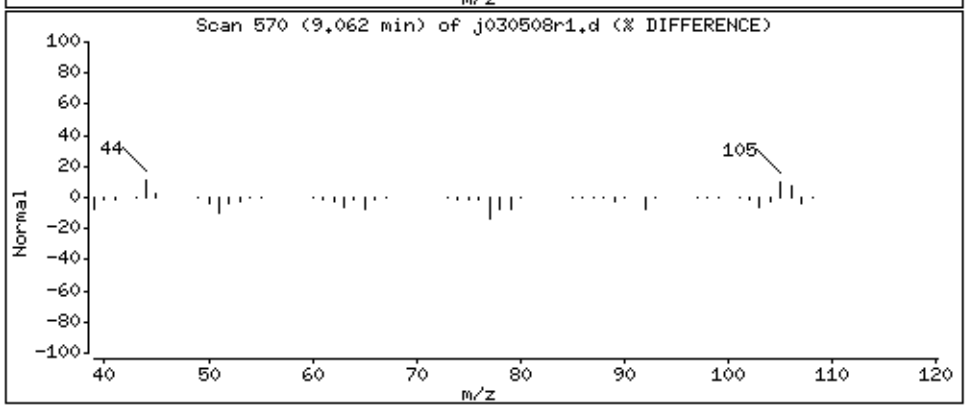
169 m,p-Xylene

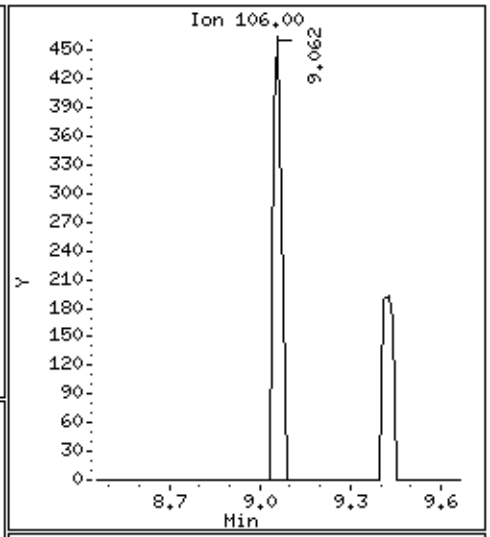
Concentration: 0.05774 PPBV

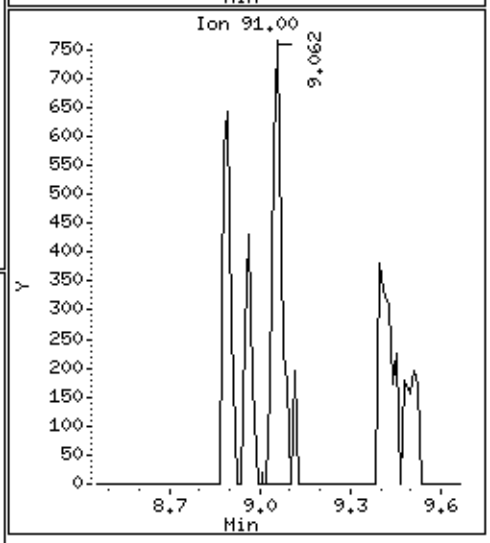












Data File: /chem/msdj.i/05mar15.b/j030508r1.d

Date : 05-MAR-2015 13:48

Client ID: Lab Blank

Instrument: msdj.i

Sample Info: 200ml #34343

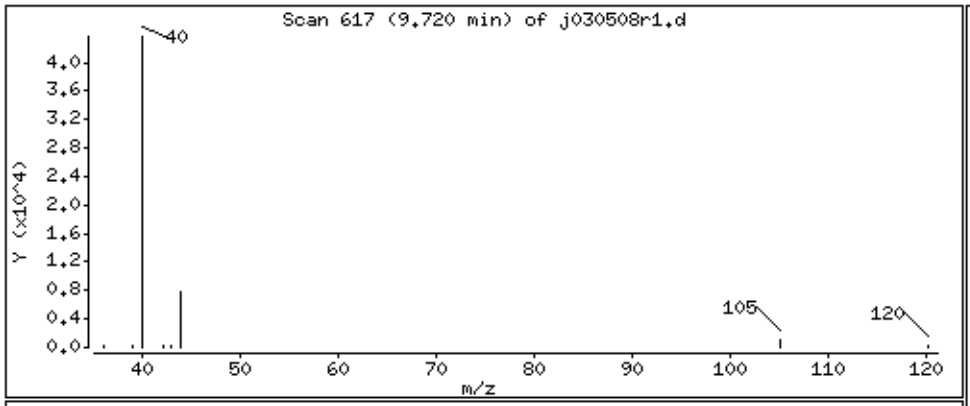
Operator: sg

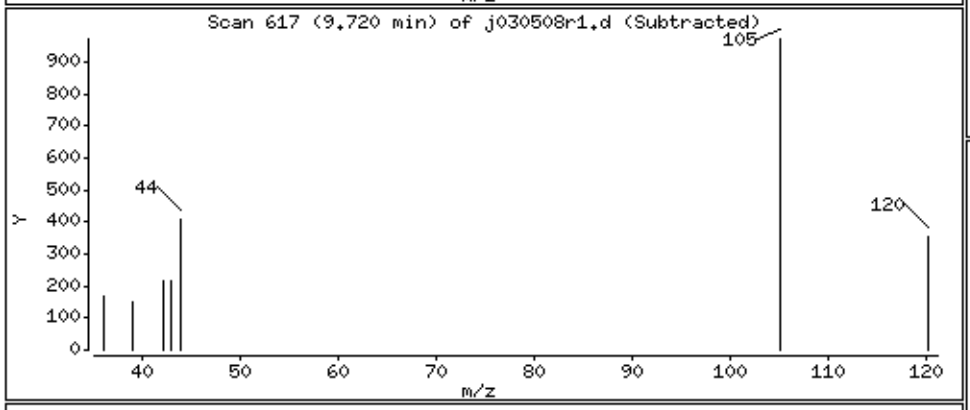
Column phase: RTX-624

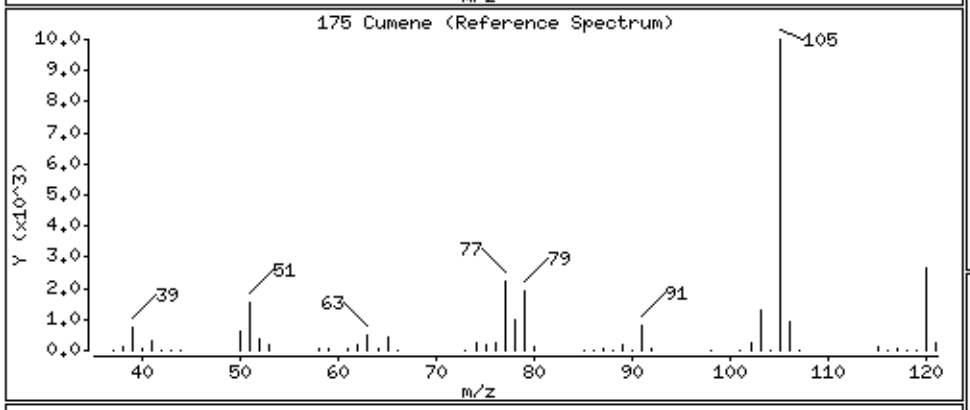
Column diameter: 0.25

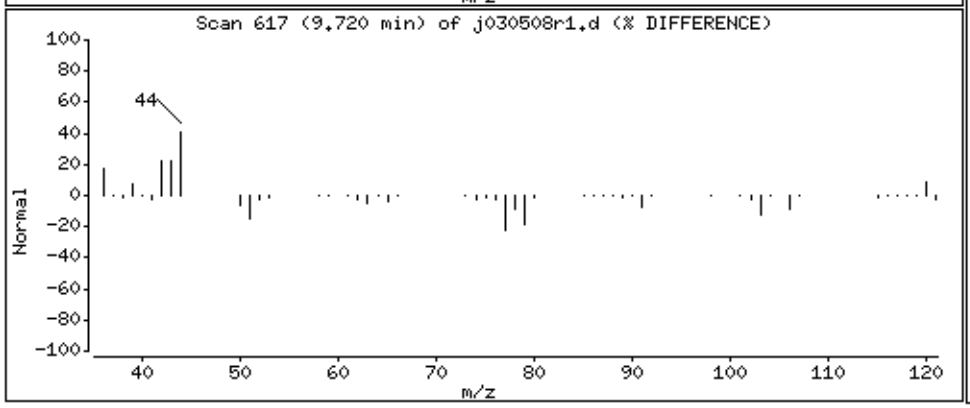
175 Cumene

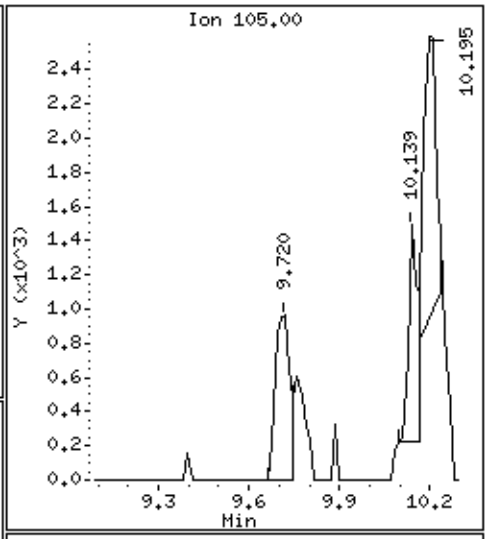
Concentration: 0.07821 PPBV

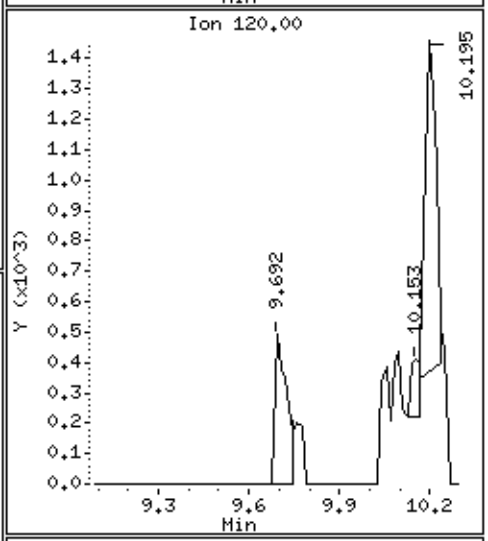


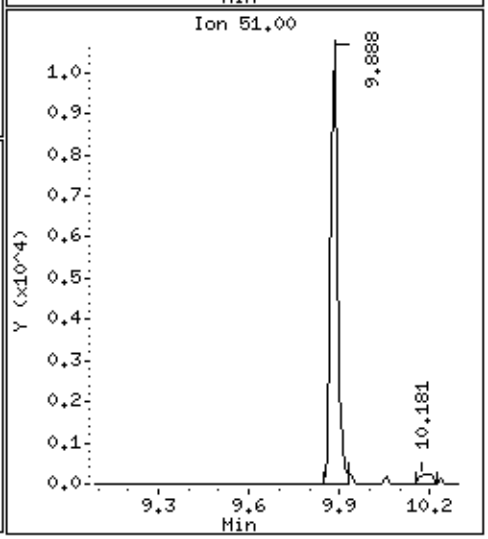












Data File: /chem/msdj.i/05mar15.b/j030508r1.d

Date : 05-MAR-2015 13:48

Client ID: Lab Blank

Instrument: msdj.i

Sample Info: 200ml #34343

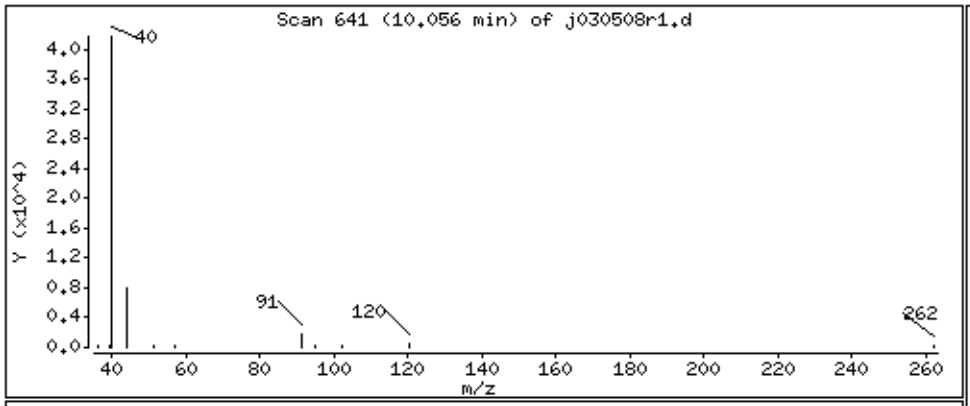
Operator: sg

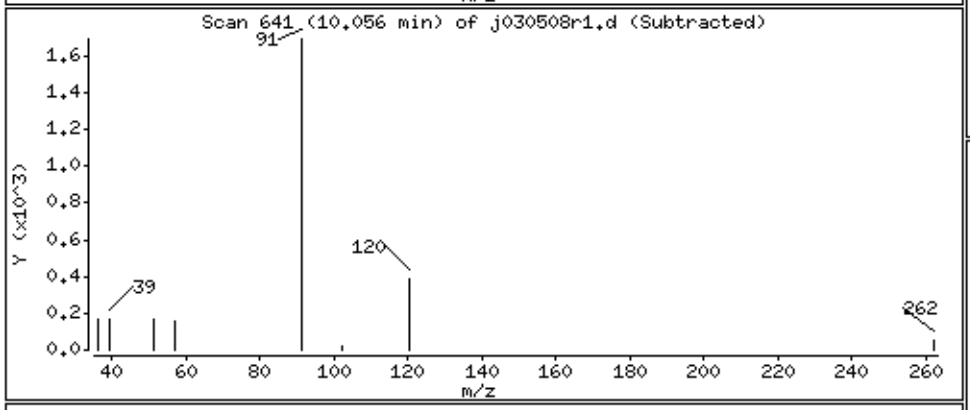
Column phase: RTX-624

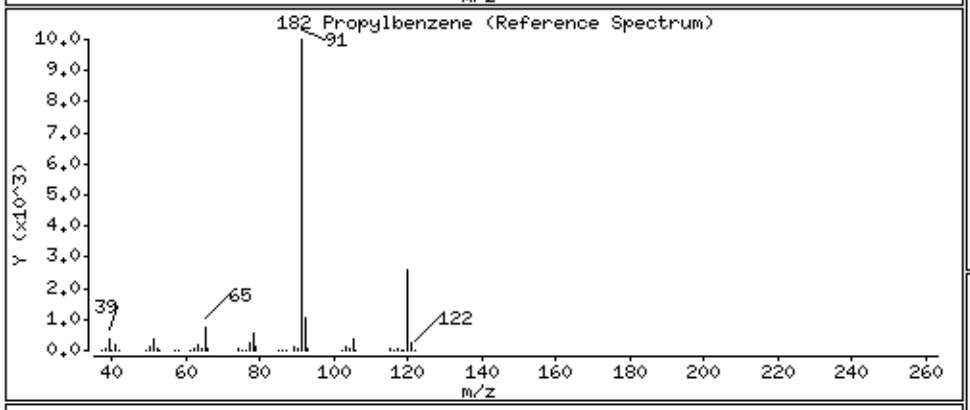
Column diameter: 0.25

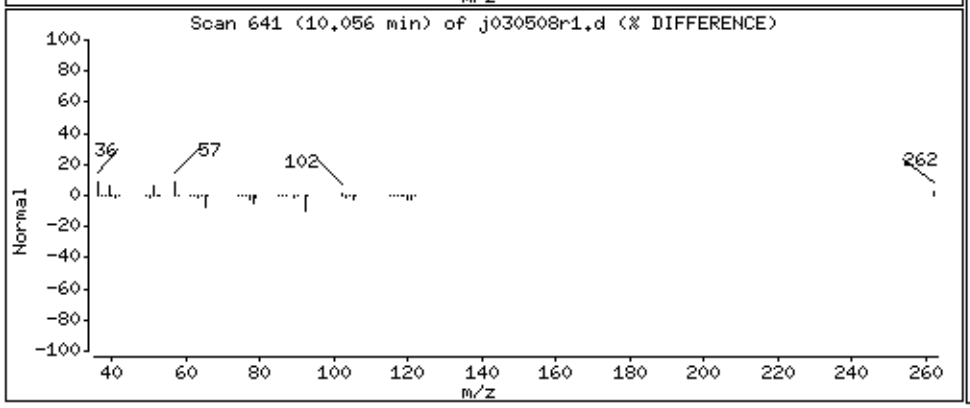
182 Propylbenzene

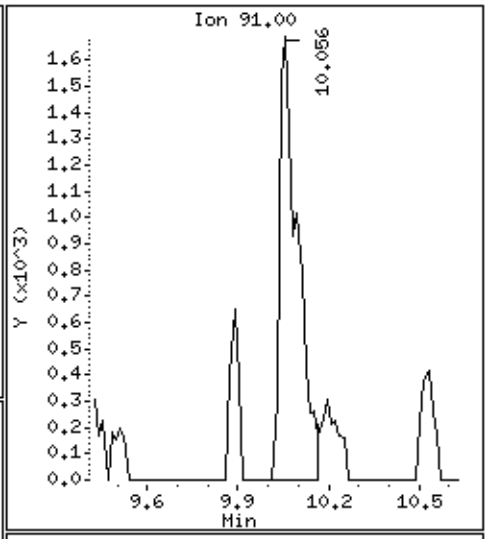
Concentration: 0.1393 PPBV

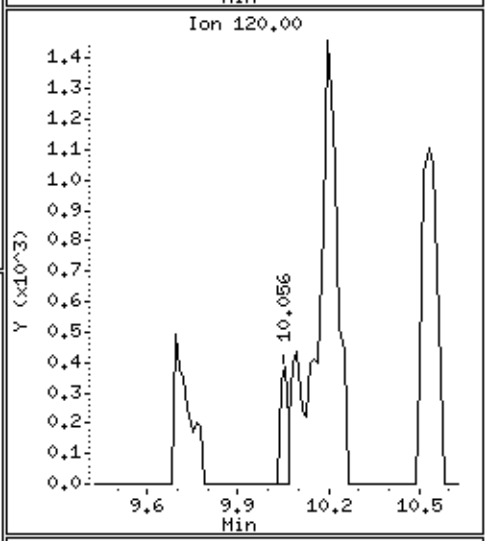


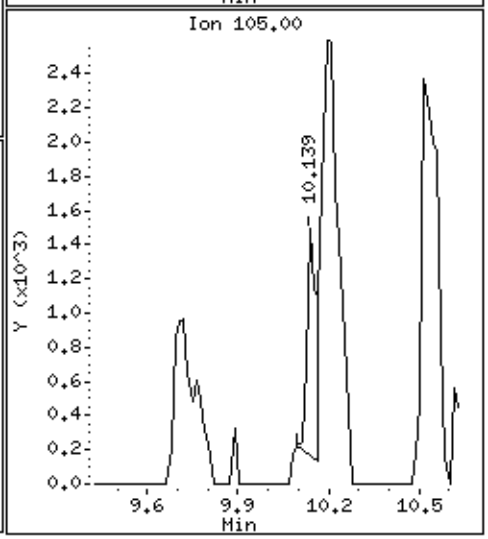












Data File: /chem/msdj.i/05mar15.b/j030508r1.d

Date : 05-MAR-2015 13:48

Client ID: Lab Blank

Instrument: msdj.i

Sample Info: 200ml #34343

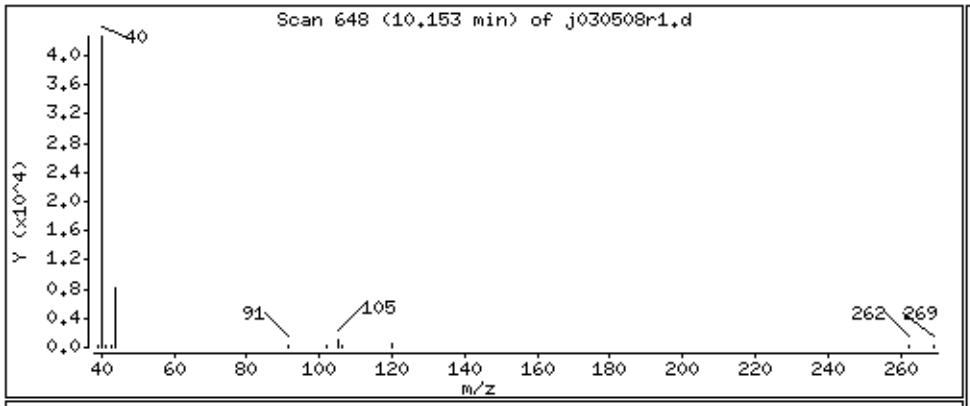
Operator: sg

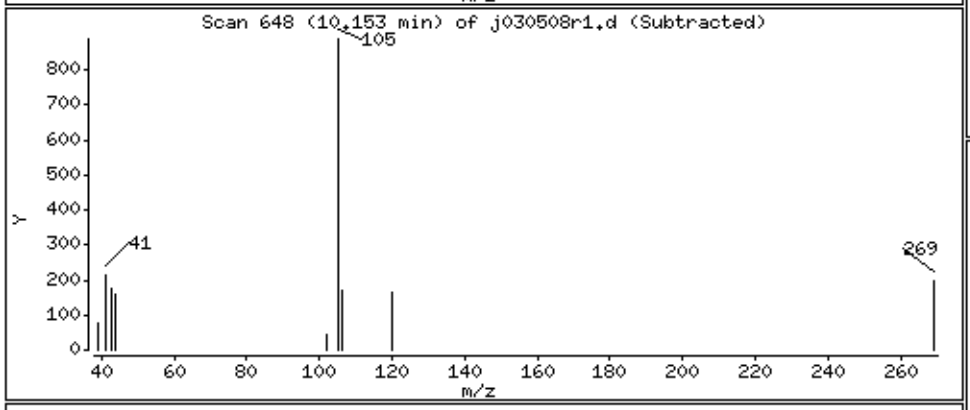
Column phase: RTX-624

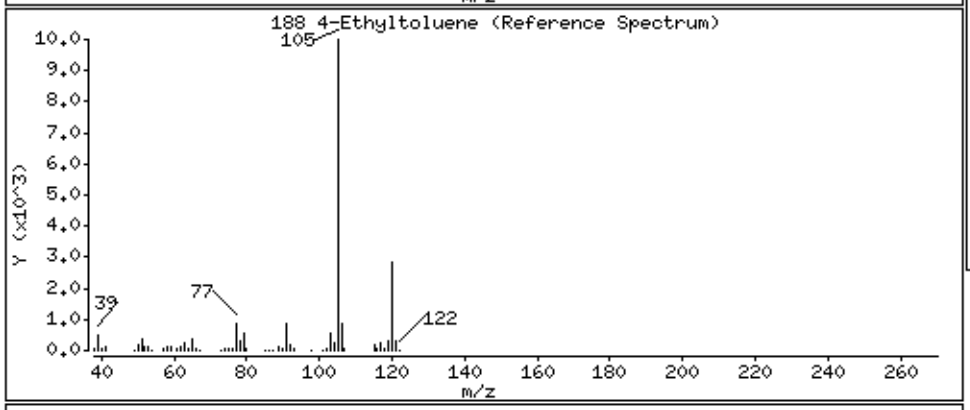
Column diameter: 0.25

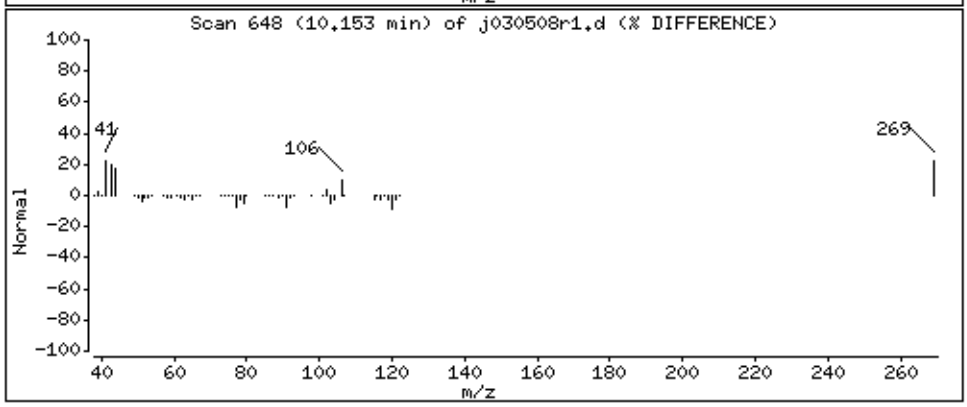
188 4-Ethyltoluene

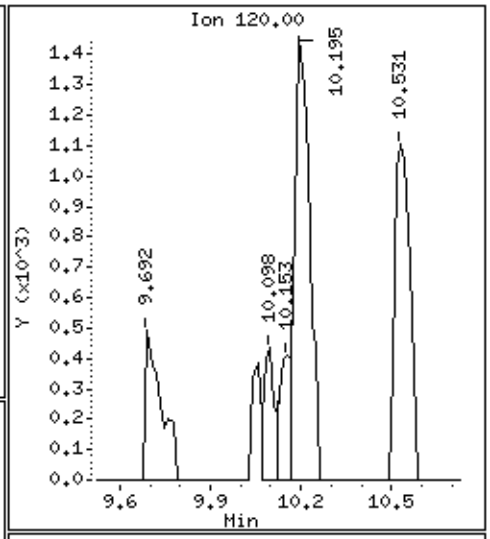
Concentration: 0.08489 PPBV

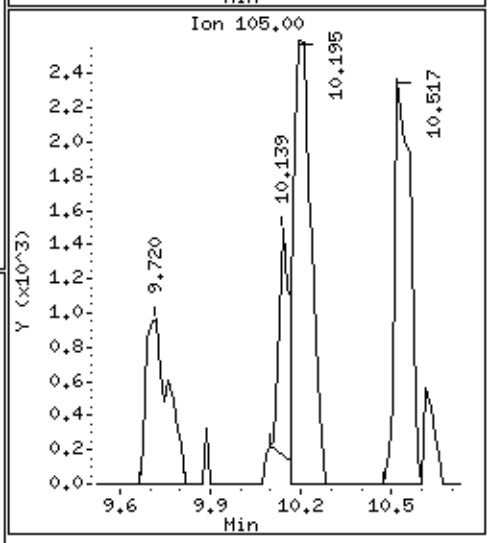












Data File: /chem/msdj.i/05mar15.b/j030508r1.d

Date : 05-MAR-2015 13:48

Client ID: Lab Blank

Instrument: msdj.i

Sample Info: 200ml #34343

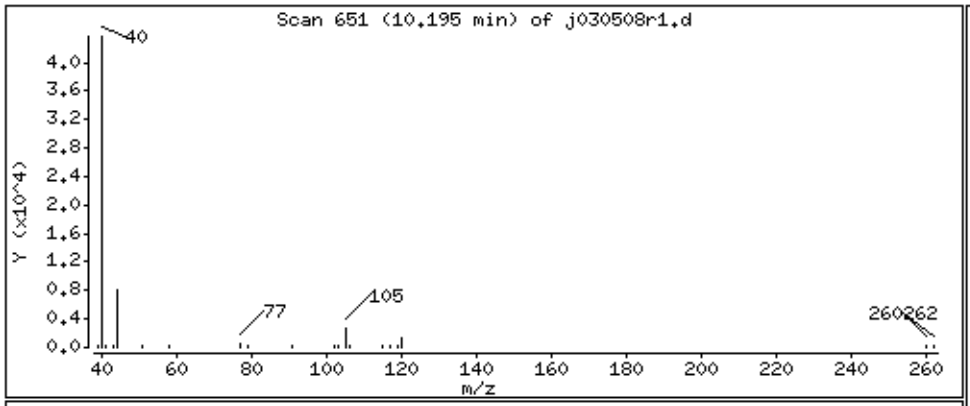
Operator: sg

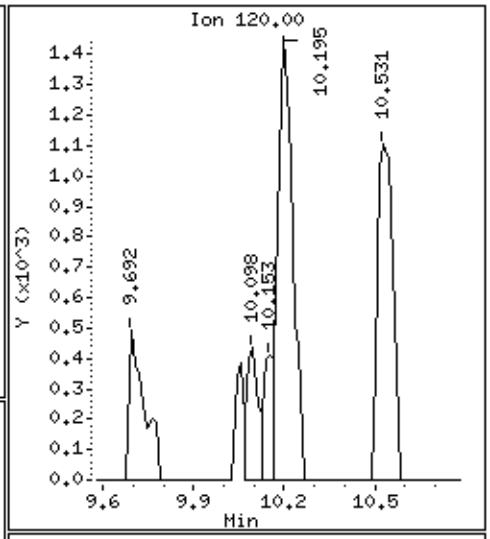
Column phase: RTX-624

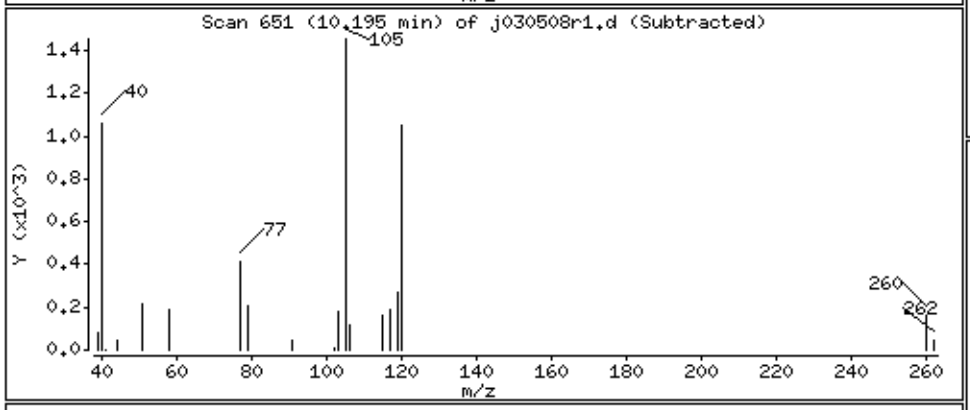
Column diameter: 0.25

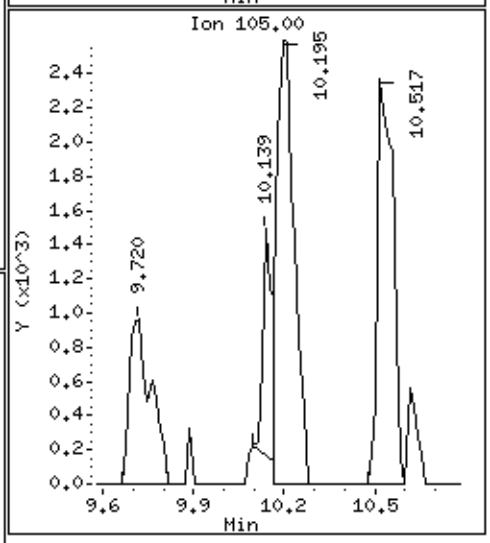
190 1,3,5-Trimethylbenzene

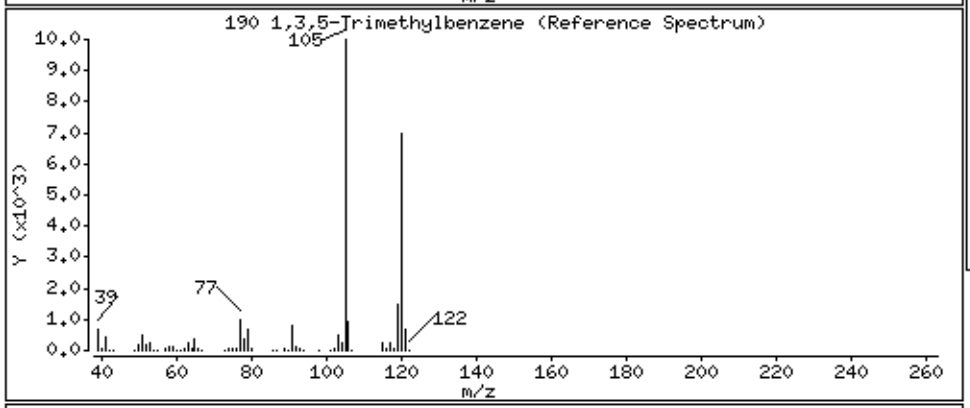
Concentration: 0.2614 PPBV

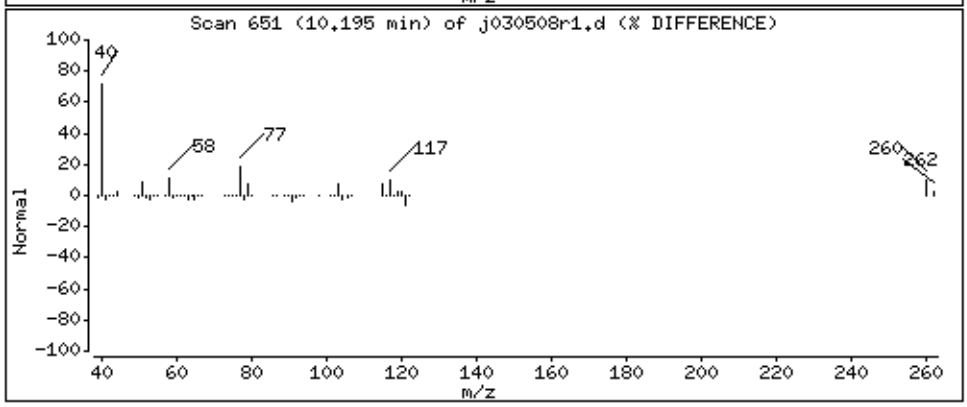












Data File: /chem/msdj.i/05mar15.b/j030508r1.d

Date : 05-MAR-2015 13:48

Client ID: Lab Blank

Instrument: msdj.i

Sample Info: 200ml #34343

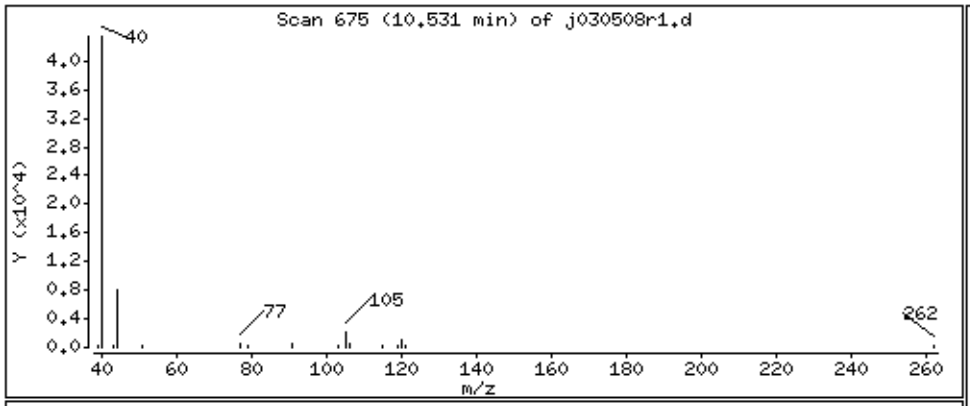
Operator: sg

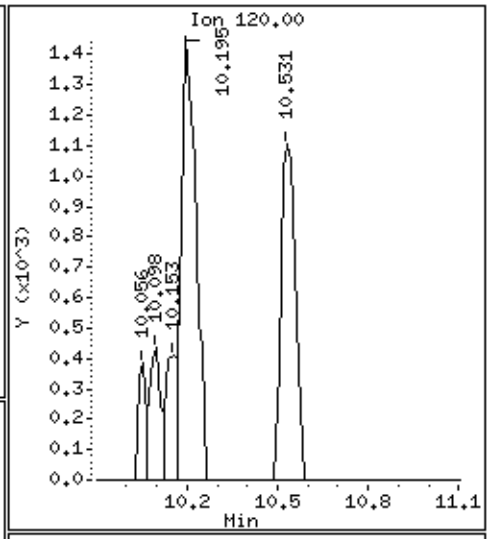
Column phase: RTX-624

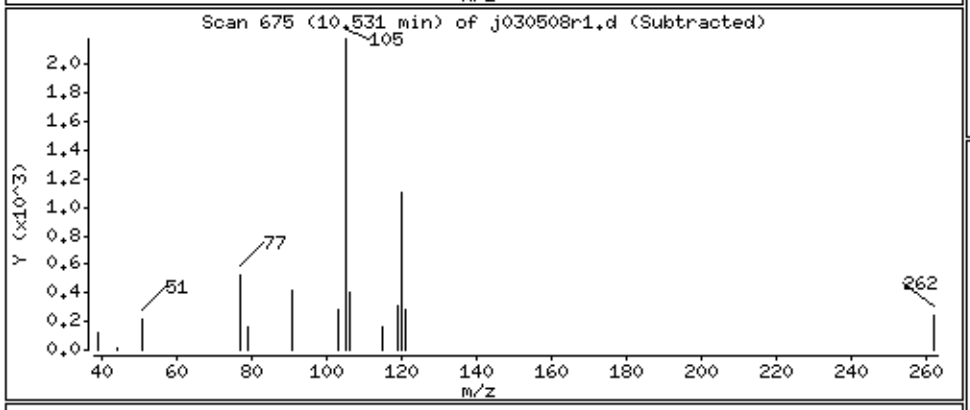
Column diameter: 0.25

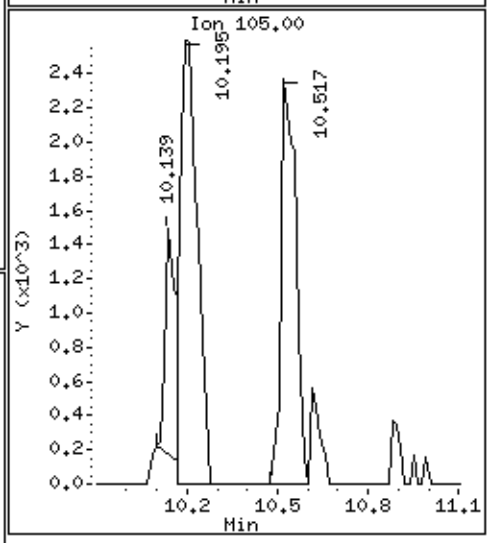
196 1,2,4-Trimethylbenzene

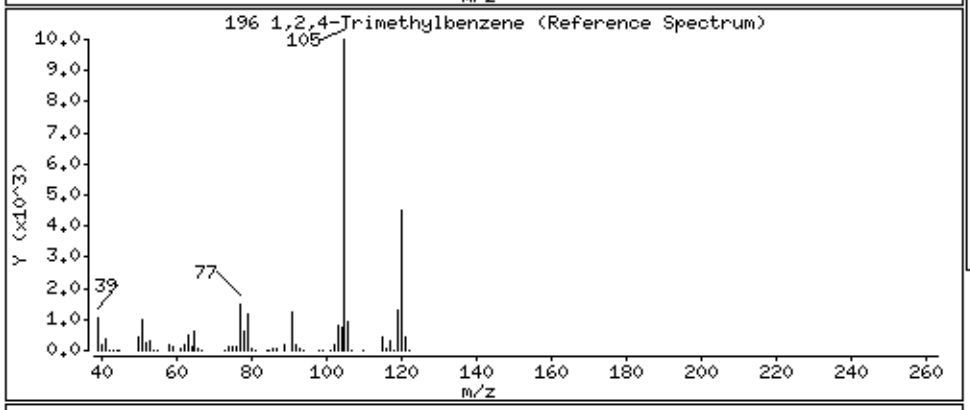
Concentration: 0.2248 PPBV

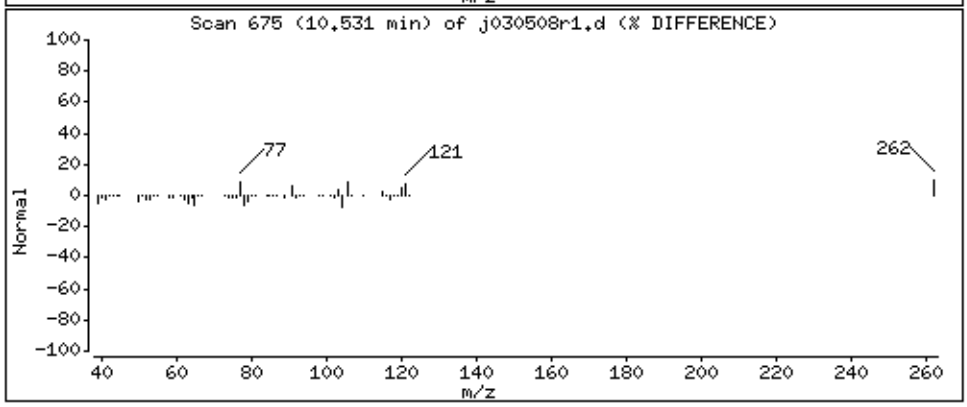












LEVEL-IV VALIDATABLE

EPA METHOD TO-15 GC/MS FULL SCAN

SURROGATE RECOVERY FORM

Lab Name: AIR TOXICS LIMITED. SDG No.: 1503058BR1

	CLIENT SAMPLE NO.	SURROGATE % RECOVERY								
		1,2-Dichloroethane-d4	#	Toluene-d8	#	4-Bromofluorobenzene	#		#	TOTAL OUT
01	B6-1SS	102		98		100				0
02	B6-2SS	99		99		97				0
03	B6-2SSDup	99		99		101				0
04	Lab Blank	102		100		99				0
05	CCV	103		100		99				0
06	LCS	104		99		99				0
07	LCSD	102		100		99				0
08										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

EPA Method TO-15 GC/MS Full Scan

INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name:	AIR TOXICS, LTD	SDG No:	1503058BR1
Lab File ID:	j030502.d	Date Analyzed:	03/05/2015
Instrument ID:	msdj.i	Time Analyzed:	09:28 AM

		Chlorobenzene-d5 Area	#	RT	#	1,4-Difluorobenzene Area	#	RT	#	Bromochloromethane Area	#	RT	#
	24-HOUR STD	577173		8.89		614418		6.4		140692		5.49	
	UPPER LIMIT	808042		09.22		860185		06.73		196969		05.82	
	LOWER LIMIT	346304		08.56		368651		06.07		84415		05.16	
	CLIENT SAMPLE NO												
01	B6-1SS	465056		8.89		488745		6.4		117187		5.49	
02	B6-2SS	505538		8.89		520310		6.4		124559		5.48	
03	B6-2SSDup	545567		8.89		572528		6.4		138301		5.49	
04	Lab Blank	537656		8.89		569384		6.4		129110		5.51	
05	CCV	577173		8.89		614418		6.4		140692		5.49	
06	LCS	566801		8.89		605128		6.4		135720		5.48	
07	LCSD	428602		8.89		454238		6.4		103421		5.48	
08													
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: j030505.d & j030504.d

Lab Sample ID: &

Dilution: 1.00 & 1.00

Client Sample ID: LCS & LCSD

Date Analyzed: 3/5/15 & 3/5/15

CAS Number	Compound	Original Amount	Original Flags	Duplicate Amount	Duplicate Flags	RPD	Result Less Than 5X RL
71-55-6	1,1,1-Trichloroethane	106		101		4.8	
79-34-5	1,1,2,2-Tetrachloroethane	111		114		2.7	
79-00-5	1,1,2-Trichloroethane	101		100		1.0	
75-34-3	1,1-Dichloroethane	106		101		4.8	
75-35-4	1,1-Dichloroethene	111		105		5.6	
120-82-1	1,2,4-Trichlorobenzene	150		101		-->39<--	
95-63-6	1,2,4-Trimethylbenzene	99		101		2.0	
106-93-4	1,2-Dibromoethane (EDB)	100		99		1.0	
95-50-1	1,2-Dichlorobenzene	100		101		1.0	
107-06-2	1,2-Dichloroethane	101		98		3.0	
78-87-5	1,2-Dichloropropane	103		100		3.0	
108-67-8	1,3,5-Trimethylbenzene	96		100		4.1	
106-99-0	1,3-Butadiene	108		103		4.7	
541-73-1	1,3-Dichlorobenzene	97		100		3.0	
106-46-7	1,4-Dichlorobenzene	98		101		3.0	
123-91-1	1,4-Dioxane	104		99		4.9	
540-84-1	2,2,4-Trimethylpentane	104		106		1.9	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	102		100		2.0	
591-78-6	2-Hexanone	102		100		2.0	
67-63-0	2-Propanol	115		110		4.4	
107-05-1	3-Chloropropene	102		98		4.0	
622-96-8	4-Ethyltoluene	106		107		0.94	
108-10-1	4-Methyl-2-pentanone	98		97		1.0	
67-64-1	Acetone	109		108		0.92	
100-44-7	alpha-Chlorotoluene	102		106		3.8	
71-43-2	Benzene	104		100		3.9	
75-27-4	Bromodichloromethane	105		101		3.9	
75-25-2	Bromoform	101		100		1.0	
74-83-9	Bromomethane	121		121		0	
75-15-0	Carbon Disulfide	96		92		4.2	
56-23-5	Carbon Tetrachloride	107		101		5.8	
108-90-7	Chlorobenzene	100		98		2.0	
75-00-3	Chloroethane	113		113		0	
67-66-3	Chloroform	105		101		3.9	
74-87-3	Chloromethane	119		119		0	
156-59-2	cis-1,2-Dichloroethene	121		113		6.8	
10061-01-5	cis-1,3-Dichloropropene	96		94		2.1	
98-82-8	Cumene	98		97		1.0	
110-82-7	Cyclohexane	107		104		2.8	
124-48-1	Dibromochloromethane	104		101		2.9	
64-17-5	Ethanol	105		100		4.9	
100-41-4	Ethyl Benzene	100		99		1.0	
75-69-4	Freon 11	111		108		2.7	
76-13-1	Freon 113	105		101		3.9	
76-14-2	Freon 114	114		109		4.5	

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: j030505.d & j030504.d

Lab Sample ID: &

Dilution: 1.00 & 1.00

Client Sample ID: LCS & LCSD

Date Analyzed: 3/5/15 & 3/5/15

CAS Number	Compound	Original Amount	Original Flags	Duplicate Amount	Duplicate Flags	RPD	Result Less Than 5X RL
75-71-8	Freon 12	113		110		2.7	
142-82-5	Heptane	99		99		0	
87-68-3	Hexachlorobutadiene	149		101		-->38<--	
110-54-3	Hexane	110		105		4.6	
108-38-3	m,p-Xylene	99		96		3.1	
1634-04-4	Methyl tert-butyl ether	106		103		2.9	
75-09-2	Methylene Chloride	107		105		1.9	
91-20-3	Naphthalene	123		84		-->38<--	
95-47-6	o-Xylene	101		100		1.0	
103-65-1	Propylbenzene	100		100		0	
100-42-5	Styrene	101		102		0.98	
127-18-4	Tetrachloroethene	104		101		2.9	
109-99-9	Tetrahydrofuran	104		99		4.9	
108-88-3	Toluene	101		99		2.0	
156-60-5	trans-1,2-Dichloroethene	93		87		6.7	
10061-02-6	trans-1,3-Dichloropropene	101		99		2.0	
79-01-6	Trichloroethene	89		86		3.4	
75-01-4	Vinyl Chloride	112		111		0.90	

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 : 04-MAR-2015 10:17
End Cal Date : 04-MAR-2015 12:36
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msdj.i/04mar15.b/j15q0304a.m
Cal Date : 04-Mar-2015 13:39 mskidmor
Curve Type : Average

Calibration File Names:
Level 2: /chem/msdj.i/04mar15.b/j030403.d
Level 3: /chem/msdj.i/04mar15.b/j030404.d
Level 5: /chem/msdj.i/04mar15.b/j030405.d
Level 6: /chem/msdj.i/04mar15.b/j030406.d
Level 7: /chem/msdj.i/04mar15.b/j030407.d
Level 8: /chem/msdj.i/04mar15.b/j030408.d

Compound	0.50000 Level 2	2.000 Level 3	20.000 Level 5	50.000 Level 6	100.000 Level 7	200.000 Level 8	___ RRF	% RSD
1 Dimethyl Ether	++++++	++++++	++++++	++++++	++++++	++++++	++++++	++++++
2 Freon 14	++++++	++++++	++++++	++++++	++++++	++++++	++++++	++++++
3 Acetaldehyde	++++++	++++++	++++++	++++++	++++++	++++++	++++++	++++++
4 Hexafluoropropene	++++++	++++++	++++++	++++++	++++++	++++++	++++++	++++++
5 Freon 13	++++++	++++++	++++++	++++++	++++++	++++++	++++++	++++++
6 Freon 143a	++++++	++++++	++++++	++++++	++++++	++++++	++++++	++++++
7 Freon 134a	++++++	++++++	++++++	++++++	++++++	++++++	++++++	++++++
8 Propane	++++++	++++++	++++++	++++++	++++++	++++++	++++++	++++++
9 Propylene	++++++	0.81955	0.74360	0.74549	0.69948	0.68699	0.73902	7.037
10 1,1-Difluoroethane	++++++	++++++	++++++	++++++	++++++	++++++	++++++	++++++
11 Freon 12	2.75352	2.61928	2.57491	2.50086	2.37809	2.26420	2.51514	6.959
12 Vinyl Fluoride	++++++	++++++	++++++	++++++	++++++	++++++	++++++	++++++
13 Chlorodifluoromethane	++++++	++++++	++++++	++++++	++++++	++++++	++++++	++++++
14 Ethylene Oxide	++++++	++++++	++++++	++++++	++++++	++++++	++++++	++++++
15 Freon 114	2.62594	2.30663	2.34362	2.28130	2.15528	2.04013	2.29215	8.652
16 Freon 142b	++++++	++++++	++++++	++++++	++++++	++++++	++++++	++++++
17 Chloromethane	++++++	0.71042	0.77321	0.76851	0.72729	0.61028	0.71794	9.172
18 Isobutane	++++++	++++++	++++++	++++++	++++++	++++++	++++++	++++++
19 Isobutylene	++++++	++++++	++++++	++++++	++++++	++++++	++++++	++++++
20 2-Butene	++++++	++++++	++++++	++++++	++++++	++++++	++++++	++++++
21 trans-2-butene	++++++	++++++	++++++	++++++	++++++	++++++	++++++	++++++
22 1-Butene	++++++	++++++	++++++	++++++	++++++	++++++	++++++	++++++
23 Butane	++++++	0.21268	0.19230	0.19556	0.18966	0.18111	0.19426	5.975
24 cis-2-Butene	++++++	++++++	++++++	++++++	++++++	++++++	++++++	++++++
25 Vinyl Chloride	0.95486	1.04650	1.01613	1.02749	0.96267	0.94018	0.99130	4.451

Eurofins Air Toxics Inc.

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Method file : /chem/msdj.i/04mar15.b/j15q0304a.m
Cal Date : 04-Mar-2015 13:39 mskidmor
Curve Type : Average

Compound	0.50000 Level 2	2.000 Level 3	20.000 Level 5	50.000 Level 6	100.000 Level 7	200.000 Level 8	___ RRF	% RSD
26 1,3-Butadiene	0.79745	0.79196	0.79146	0.77794	0.72708	0.71588	0.76696	4.692
27 3-Methyl-1-butene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
28 Methanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
29 Bromomethane	+++++	0.67972	0.91139	0.87781	0.82811	0.74049	0.80750	11.907
30 Chloroethane	+++++	0.56671	0.51482	0.51659	0.47697	0.46437	0.50789	7.896
31 Isopentane	+++++	1.31880	1.19729	1.16834	1.09922	1.08107	1.17294	8.062
32 Vinyl Bromide	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
33 2-Chloropropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
34 Pentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
35 Freon 11	2.95980	2.82931	2.77126	2.72059	2.56989	2.51149	2.72706	6.087
36 1-Pentene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
37 Dichlorofluoromethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
38 2,3-Dimethylbutane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
39 Isoprene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
40 2-Methyl-2-butene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
41 trans-2-Pentene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
42 Ethanol	+++++	0.59837	0.40231	0.39516	0.36951	0.37056	0.42718	22.660
43 1,2-Dichloro-1-fluoroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
44 Ethyl Ether	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
45 cis-2-Pentene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
46 Acrolein	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
47 Freon 123a	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
48 Freon 123	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
49 Freon 113	2.47177	2.45251	2.25929	2.19331	2.07489	2.03280	2.24743	8.236
50 1,1-Dichloroethene	0.73672	0.69975	0.70491	0.71123	0.67320	0.66687	0.69878	3.679
51 2,2-Dimethylbutane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
52 Acetone	+++++	0.51295	0.51119	0.49536	0.45988	0.43155	0.48219	7.349
53 Iodomethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
54 Bromoethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
55 4-Methyl-1-pentene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
56 Carbon Disulfide	+++++	3.47142	3.22967	3.20242	2.96677	2.87406	3.14887	7.484
57 2-Propanol	+++++	1.84234	1.78362	1.83198	1.73247	1.66614	1.77131	4.134
58 3-Chloropropene	+++++	0.59421	0.53118	0.55513	0.52099	0.51350	0.54300	6.013

Eurofins Air Toxics Inc.

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Integrator : HP RTE
Method file : /chem/msdj.i/04mar15.b/j15q0304a.m
Cal Date : 04-Mar-2015 13:39 mskidmor
Curve Type : Average

Compound	0.50000 Level 2	2.000 Level 3	20.000 Level 5	50.000 Level 6	100.000 Level 7	200.000 Level 8	___ RRF	% RSD
59 Cyclopentene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
60 2-Methylpentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
61 Methyl Acetate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
62 3-Methylpentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
63 Acetonitrile	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
64 Cyclopentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
65 1-Chloropropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
66 Methylene Chloride	+++++	1.31427	1.23970	1.22933	1.13705	1.09557	1.20318	7.235
67 2-Methyl-1-pentene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
68 2,4-Dimethylpentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
69 2,3-Dimethylpentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
70 tert-Butyl chloride	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
71 tert-Butyl alcohol	+++++	2.15876	2.14871	2.17186	2.03339	2.02514	2.10758	3.417
72 Methyl tert-butyl ether	2.95189	3.28236	3.18181	3.10378	2.96793	2.94331	3.07185	4.584
73 trans-1,2-Dichloroethene	0.85531	0.79045	0.77897	0.76455	0.72119	0.71076	0.77021	6.796
74 Acrylonitrile	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
75 trans-2-Hexene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
76 1-Hexene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
77 cis-2-Hexene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
78 Hexane	1.89893	1.75570	1.84815	1.80178	1.71320	1.69667	1.78574	4.414
79 Methylcyclopentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
80 sec-Butyl chloride	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
81 2,3,4-Trimethylpentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
82 1,1-Dichloroethane	2.39487	2.20034	2.10852	2.09176	1.95673	1.89912	2.10856	8.420
83 Isopropyl ether	+++++	4.14660	3.88651	3.81573	3.60385	3.54966	3.80047	6.296
84 1-Propanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
85 Chloroprene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
86 Vinyl Acetate	+++++	0.32965	0.32657	0.32540	0.30688	0.30077	0.31786	4.116
87 Butanal	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
88 Ethyl-tert-butyl ether	+++++	3.74864	3.74444	3.67136	3.48196	3.45119	3.61952	3.961
89 Isobutyl chloride	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
90 2,2-Dichloropropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
91 cis-1,2-Dichloroethene	0.84201	0.83335	0.87775	0.87331	0.81077	0.79264	0.83831	4.015

Eurofins Air Toxics Inc.

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Method file : /chem/msdj.i/04mar15.b/j15q0304a.m
Cal Date : 04-Mar-2015 13:39 mskidmor
Curve Type : Average

Compound	0.50000 Level 2	2.000 Level 3	20.000 Level 5	50.000 Level 6	100.000 Level 7	200.000 Level 8	___ RRF	% RSD
92 2-Butanone	+++++	0.70173	0.62153	0.62601	0.58639	0.57808	0.62275	7.853
93 Methyl Acrylate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
94 Ethyl Acetate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
95 Methacrylonitrile	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
96 2-Chloropentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
97 2-Butanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
99 Tetrahydrofuran	1.52051	1.49568	1.35759	1.36892	1.28193	1.25128	1.37932	7.937
100 Chloroform	2.64032	2.68598	2.51212	2.46378	2.31212	2.27865	2.48216	6.696
101 1-Bromopropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
102 Cyclohexane	1.84466	1.77960	1.72413	1.72937	1.62118	1.59494	1.71565	5.498
103 1,1,1-Trichloroethane	2.69746	2.77083	2.63221	2.58181	2.40095	2.40027	2.58059	5.935
104 Chloroacetonitrile	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
105 n-Butylchloride	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
106 Carbon Tetrachloride	2.99933	2.81259	2.89350	2.76569	2.65249	2.61075	2.78906	5.237
107 1,1-Dichloropropene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
108 Thiophene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
109 2-Methylhexane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
110 3-Methylhexane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
111 Cyclohexene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
113 2,2,4-Trimethylpentane	4.95396	5.60288	5.43707	4.94607	5.13030	4.95579	5.17101	5.490
114 1-Methoxy-2-propanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
115 Isobutanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
116 Benzene	0.91404	0.90798	0.90698	0.90358	0.86641	0.88626	0.89754	1.995
118 1-Heptene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
119 tert-Amyl methyl ether	+++++	0.90506	0.93091	0.90099	0.86807	0.86692	0.89439	3.030
120 1,2-Dichloroethane	0.38743	0.37422	0.35756	0.35817	0.33742	0.34215	0.35949	5.265
121 Heptane	0.34232	0.33202	0.33170	0.32069	0.30850	0.31620	0.32524	3.796
122 2,3-Dichloro-1-propene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
124 n-Butanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
125 Trichloroethene	0.59326	0.49491	0.47304	0.46144	0.44050	0.44522	0.48473	11.699
126 Bromodichloroethene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
127 Methylcyclohexane	+++++	2.39289	2.49365	2.41970	2.30773	2.27780	2.37836	3.660
128 Ethyl acrylate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

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Compound	0.50000 Level 2	2.000 Level 3	20.000 Level 5	50.000 Level 6	100.000 Level 7	200.000 Level 8	___ RRF	% RSD
129 2-Methylheptane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
130 3-Methylheptane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
131 2-Pentanone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
132 1,2-Dichloropropane	0.36479	0.36958	0.35543	0.34423	0.32749	0.33290	0.34907	4.893
133 1-Bromo-2-Chloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
134 Methyl Methacrylate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
135 Diethyl Ketone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
136 1,4-Dioxane	+++++	0.24296	0.22770	0.23249	0.22399	0.22385	0.23020	3.457
137 Dibromomethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
138 Bromodichloromethane	0.69379	0.67110	0.65956	0.66542	0.62281	0.63672	0.65823	3.844
139 2-Nitropropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
140 bis(chloromethyl) Ether	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
141 1-Octene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
142 Epichlorohydrin	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
143 2-Chloroethyl Vinyl Ether	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
144 cis-1,3-Dichloropropene	0.62303	0.60670	0.59592	0.60604	0.57336	0.58428	0.59822	2.958
145 4-Methyl-2-pentanone	0.34836	0.31920	0.29636	0.28793	0.28006	0.28337	0.30255	8.747
147 Toluene	1.31807	1.32145	1.22232	1.20315	1.15598	1.21433	1.23922	5.367
148 Octane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
149 Vinyl Cyclohexene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
150 trans-1,3-Dichloropropene	0.59563	0.56211	0.56794	0.57972	0.53648	0.55448	0.56606	3.611
151 Ethyl Methacrylate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
152 1-Chloro-2-Bromopropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
153 1-Nitropropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
154 Bromodichloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
155 1,1,2-Trichloroethane	0.47331	0.48797	0.45759	0.45284	0.42134	0.43240	0.45424	5.458
156 Tetrachloroethene	0.69234	0.70640	0.70706	0.69361	0.65110	0.67476	0.68755	3.111
157 1,3-Dichloropropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
158 2-Hexanone	+++++	0.46019	0.43378	0.43035	0.40751	0.42210	0.43079	4.482
159 Butyl Acetate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
160 Dibromochloromethane	0.91753	0.88848	0.88269	0.87876	0.82374	0.84725	0.87308	3.778
161 1,2-Dibromoethane (EDB)	0.78424	0.73222	0.72430	0.71452	0.66635	0.68978	0.71857	5.602
162 1-Nonene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

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Compound	0.50000 Level 2	2.000 Level 3	20.000 Level 5	50.000 Level 6	100.000 Level 7	200.000 Level 8	___ RRF	% RSD
164 1-Chlorohexane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
165 Chlorobenzene	1.20455	1.10388	1.11207	1.10539	1.03448	1.06267	1.10384	5.239
166 Butyl Ether	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
167 Ethyl Benzene	0.59045	0.60118	0.57098	0.56304	0.52778	0.54703	0.56674	4.791
168 1,1,1,2-Tetrachloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
169 m,p-Xylene	0.74177	0.72468	0.71925	0.69781	0.65450	0.67520	0.70220	4.674
170 Nonane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
171 o-Xylene	0.66736	0.70051	0.67652	0.65542	0.62329	0.64275	0.66097	4.076
172 Styrene	1.13514	1.07361	1.17843	1.10705	1.06183	1.11151	1.11126	3.809
173 2-Heptanone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
174 Bromoform	0.98543	0.94999	0.95131	0.92495	0.86759	0.89867	0.92966	4.520
175 Cumene	2.11869	2.14185	2.11851	1.99562	1.95434	2.01985	2.05814	3.793
176 Cyclohexanone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
178 1-Decene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
179 alpha-Pinene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
180 Bromobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
181 1,1,2,2-Tetrachloroethane	0.92699	0.86414	0.92879	0.88828	0.84259	0.87257	0.88723	3.921
182 Propylbenzene	2.52179	2.49085	2.45495	2.40684	2.32302	2.44275	2.44003	2.856
183 1,4-Dichloro-2-Butene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
184 trans-1,4-Dichloro-2-butene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
185 1,2,3-Trichloropropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
186 3-Ethyltoluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
187 Decane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
188 4-Ethyltoluene	0.66656	0.67633	0.67527	0.65934	0.62368	0.64243	0.65727	3.138
189 2-Chlorotoluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
190 1,3,5-Trimethylbenzene	0.94555	0.89251	0.90099	0.89428	0.85332	0.88767	0.89572	3.306
191 4-Chlorotoluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
192 beta-Pinene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
193 Diisobutyl Ketone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
194 alpha Methyl Styrene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
195 tert-Butylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
196 1,2,4-Trimethylbenzene	0.74016	0.84603	0.82216	0.80988	0.78339	0.81375	0.80256	4.566
197 Pentachloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

Eurofins Air Toxics Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 04-MAR-2015 10:17
End Cal Date : 04-MAR-2015 12:36
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msdj.i/04mar15.b/j15q0304a.m
Cal Date : 04-Mar-2015 13:39 mskidmor
Curve Type : Average

Compound	0.50000 Level 2	2.000 Level 3	20.000 Level 5	50.000 Level 6	100.000 Level 7	200.000 Level 8	___ RRF	% RSD
198 Limonene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
199 D-Limonene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
200 Benzaldehyde	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
201 Indan	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
202 Indene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
203 sec-Butylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
204 Isobutylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
205 2-Ethyltoluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
206 bis(2-Chloroethyl) Ether	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
207 p-Cymene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
208 1,3-Dichlorobenzene	1.37237	1.31060	1.30246	1.30635	1.22882	1.28678	1.30123	3.543
209 1,4-Dichlorobenzene	1.27602	1.30618	1.29493	1.31160	1.22735	1.30009	1.28603	2.429
210 1,2,3-Trimethylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
211 1-Undecene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
212 alpha-Chlorotoluene	1.59043	1.58057	1.56969	1.60522	1.53467	1.62366	1.58404	1.938
213 Butylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
214 1,2-Dichlorobenzene	1.21838	1.22700	1.23895	1.23933	1.17041	1.21522	1.21822	2.092
215 Undecane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
216 4-Ethyl-1,2-dimethylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
217 Hexachloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
218 1,3-Diethylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
219 1,4-Diethylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
220 1,2,4,5-tetramethylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
221 1,2-Dibromo-3-chloropropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
222 1-Dodecene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
223 Nitrobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
224 1,3,5-Trichlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
225 Dodecane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
226 1,2,4-Trichlorobenzene	+++++	1.04391	0.84372	0.96990	1.03852	1.13426	1.00606	10.727
227 Hexachlorobutadiene	+++++	0.79488	0.64621	0.70677	0.77460	0.83230	0.75095	9.883
228 Naphthalene	+++++	2.02525	1.32724	1.52283	1.61146	1.73526	1.64441	15.792
229 1,2,3-Trichlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
230 Tridecane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

Eurofins Air Toxics Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 04-MAR-2015 10:17
End Cal Date : 04-MAR-2015 12:36
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msdj.i/04mar15.b/j15q0304a.m
Cal Date : 04-Mar-2015 13:39 mskidmor
Curve Type : Average

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

Eurofins Air Toxics Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 04-MAR-2015 10:17
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Quant Method : ISTD
Origin : Disabled
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Integrator : HP RTE
Method file : /chem/msdj.i/04mar15.b/j15q0304a.m
Cal Date : 04-Mar-2015 13:39 mskidmor
Curve Type : Average

Compound	0.50000 Level 2	2.000 Level 3	20.000 Level 5	50.000 Level 6	100.000 Level 7	200.000 Level 8	___ RRF	% RSD
264 C8-C10 Aliphatic ref Decane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
265 C10-C12 Aliphatic ref Dodecan	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
266 C8-C10 Aromatic	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
267 C8-C10 Aromatic ref 1,2,3-TMB	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
268 C10-C12 Aromatic	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
269 C10-C12 Aromatic 1,2,4,5-TMB	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
270 C10-C12 Aromatic Naphthalene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
$ 112 Benzene-d6	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
$ 117 1,2-Dichloroethane-d4	1.13562	1.16257	1.15870	1.17382	1.10039	1.14187	1.14550	2.281
$ 146 Toluene-d8	1.02483	1.02548	1.01206	1.01665	1.02186	1.01985	1.02012	0.502
$ 177 4-Bromofluorobenzene	0.64092	0.65857	0.64789	0.64153	0.64721	0.65998	0.64935	1.264

Calibration History

Method : /chem/msdj.i/04mar15.b/j15q0304a.m
Start Cal Date: 04-MAR-2015 10:17
End Cal Date : 04-MAR-2015 12:36

Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 2 , Cal Amount: 0.50000		
04-MAR-2015 10:17	Level2	/chem/msdj.i/04mar15.b/j030403.d
Cal Level: 3 , Cal Amount: 2.00000		
04-MAR-2015 10:49	AT12mdl	/chem/msdj.i/04mar15.b/j030404.d
Cal Level: 5 , Cal Amount: 20.00000		
04-MAR-2015 11:12	AT12mdl	/chem/msdj.i/04mar15.b/j030405.d
Cal Level: 6 , Cal Amount: 50.00000		
04-MAR-2015 11:37	AT12	/chem/msdj.i/04mar15.b/j030406.d
Cal Level: 7 , Cal Amount: 100.00000		
04-MAR-2015 12:04	AT12	/chem/msdj.i/04mar15.b/j030407.d
Cal Level: 8 , Cal Amount: 200.00000		
04-MAR-2015 12:36	AT12	/chem/msdj.i/04mar15.b/j030408.d

Continuing Calibration
Ccal Level Mode: GLOBAL LEVEL 6

Ccal Level: 6 , Ccal Amount: 50.000		
04-MAR-2015 11:37	AT12	/chem/msdj.i/04mar15.b/j030406a.d
Ccal Level: 6 , Ccal Amount: 50.000		

```
+=================================================================================+
|04-MAR-2015 11:37 |AT12              |/chem/msdj.i/04mar15.b/j030406.d        |
+------------------+------------------+----------------------------------------+
```

Eurofins Air Toxics Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 04-MAR-2015 10:17
End Cal Date : 04-MAR-2015 12:36
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msdj.i/04mar15.b/j15q0304a.m
Cal Date : 04-Mar-2015 13:39 mskidmor
Curve Type : Average

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Calibration File Names:
Level 2: /chem/msdj.i/04mar15.b/j030403.d
Level 3: /chem/msdj.i/04mar15.b/j030404.d
Level 5: /chem/msdj.i/04mar15.b/j030405.d
Level 6: /chem/msdj.i/04mar15.b/j030406.d
Level 7: /chem/msdj.i/04mar15.b/j030407.d
Level 8: /chem/msdj.i/04mar15.b/j030408.d

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

Compound	0.50000 Level 2	2.000 Level 3	20.000 Level 5	50.000 Level 6	100.000 Level 7	200.000 Level 8	RRF	% RSD
1 Dimethyl Ether	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
2 Freon 14	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
3 Acetaldehyde	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
4 Hexafluoropropene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
5 Freon 13	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
6 Freon 143a	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
7 Freon 134a	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
8 Propane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
9 Propylene	+++++	0.81955	0.74360	0.74549	0.69948	0.68699	0.73902	7.037
10 1,1-Difluoroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
11 Freon 12	2.75352	2.61928	2.57491	2.50086	2.37809	2.26420	2.51514	6.959
12 Vinyl Fluoride	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
13 Chlorodifluoromethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
14 Ethylene Oxide	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
15 Freon 114	2.62594	2.30663	2.34362	2.28130	2.15528	2.04013	2.29215	8.652
16 Freon 142b	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
17 Chloromethane	+++++	0.71042	0.77321	0.76851	0.72729	0.61028	0.71794	9.172
18 Isobutane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
19 Isobutylene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
20 2-Butene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
21 trans-2-butene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
22 1-Butene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
23 Butane	+++++	0.21268	0.19230	0.19556	0.18966	0.18111	0.19426	5.975
24 cis-2-Butene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
25 Vinyl Chloride	0.95486	1.04650	1.01613	1.02749	0.96267	0.94018	0.99130	4.451

Initial Calibration Narrative
J15Q0304A.M

A 6-point initial AT-11 initial calibration was analyzed on MSD-J on 03/04/15.

ICAL: 0 out

Calibration levels:

- **Naphthalene:** 0.2ppbv, 2.0ppbv, 5.0ppbv, 10ppbv, 20ppbv

ICV: 0 Out:
File #J030411; 50ml of #2716-98 (200ppbv)

OK for DOD

OK for AFCEE

Applicable MDL studies:
- AT11 MDL: 5/1/2014 and 5/2/2014

MSDJ

BFB Verification of 176/174 ratio: (131170/137376) * 100 = 95.48%			
IS/S Std.#:	2716-122	Exp. Date:	5/19/2015
BCM	138152		
1,4-DFB	594563		
CB-d5	557711		

Method TO-15/TO-14			
SOP#	6	Load (mLs)	200
Vacuum:	1.32X 10-5		

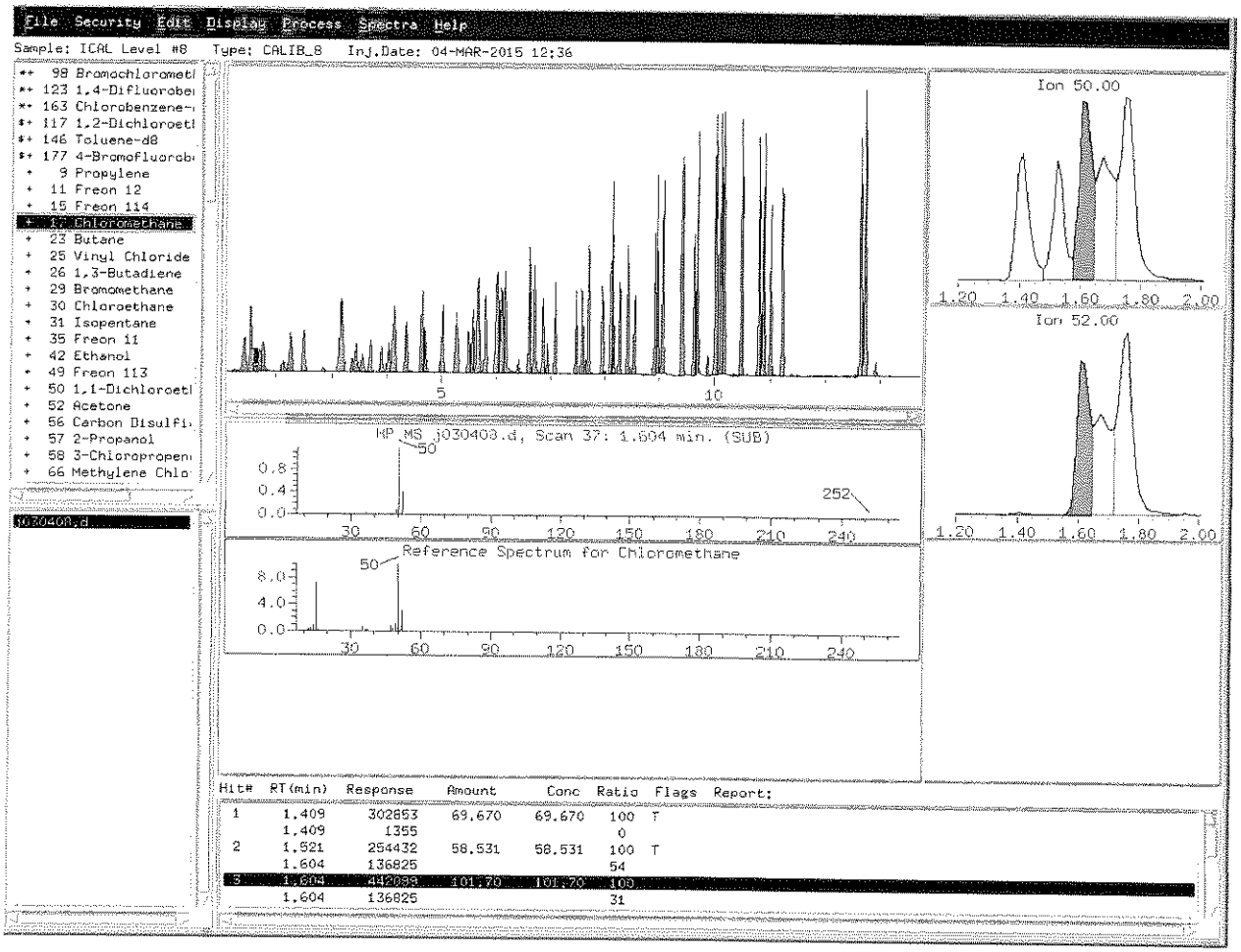
Surrogate# 2716-122		Exp. Date:	5/19/2015
Surrogate#	NA	Exp. Date:	NA

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

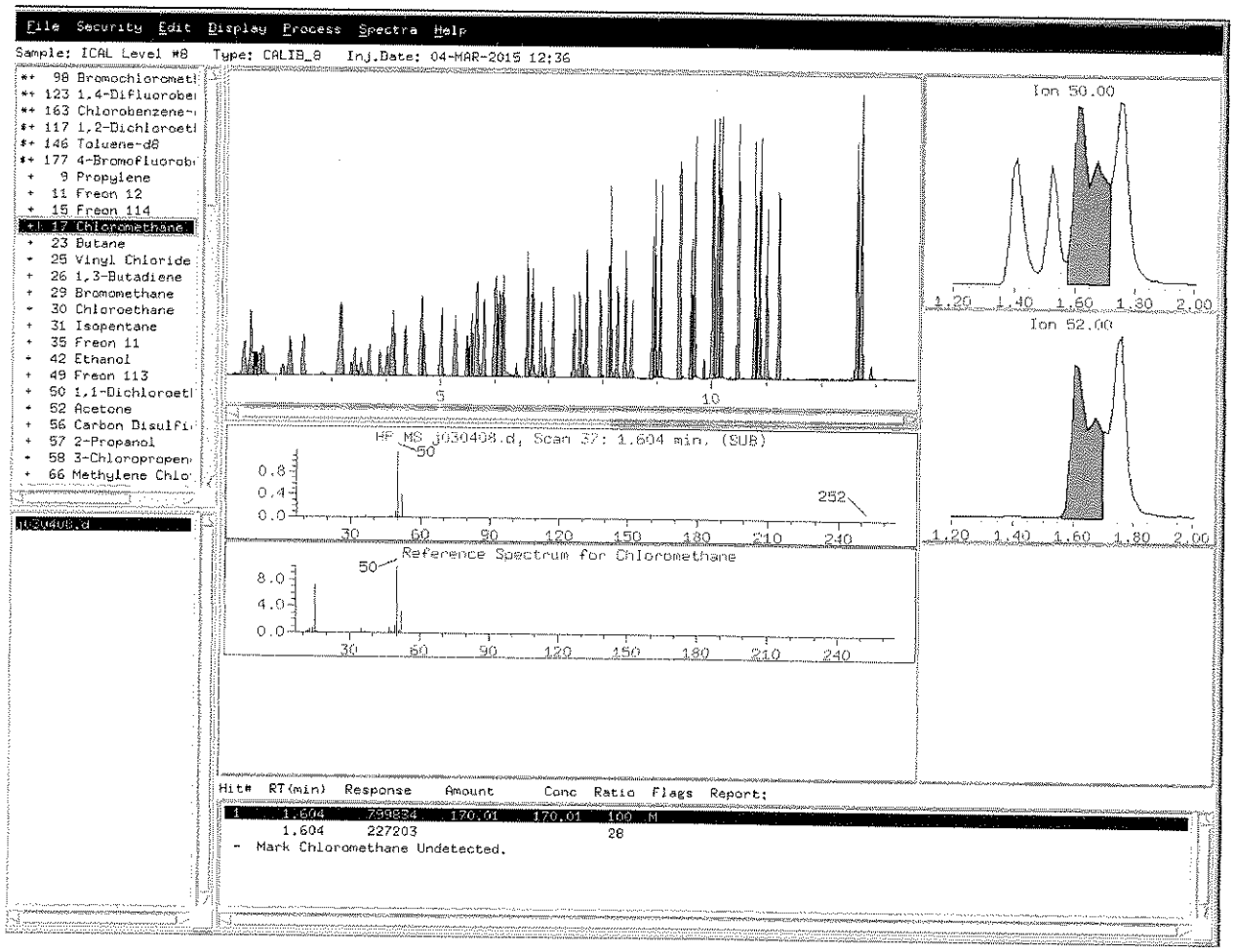
Method(*.m): J15q0304a.m

Use	File #	Enter/Scan Sample IDs	Canister#	Cart Pos.	Pressure	Amount	DF	Verify Load	Loaded Init	Date Analyzed	Time Analyzed	Review Init	Comments
√	J030401	BFB Tune Check	#2716-122	12	36ng	1.0ml	1.00	mjs	mjs	3/4/2015	0748	mjs	
√	J030402	System Blank	34343	12	Humid	200mL	1.00	mjs	mjs	3/4/2015	0855	mjs	
√	J030403	ICAL Level #2	#2716-155	1	0.5ppbv(2.0ppbv)	50ml	1.00	mjs	mjs	3/4/2015	1017	mjs	Exp. 5/6/15
√	J030404	ICAL Level #3	#2716-50	1	2.0ppbv(2.0ppbv)	200ml	1.00	mjs	mjs	3/4/2015	1049	mjs	
√	J030405	ICAL Level #5	#2716-50	13	20ppbv(200ppbv)	20ml	1.00	mjs	mjs	3/4/2015	1112	mjs	Exp. 5/6/15
√	J030406	ICAL Level #6	#2716-50	13	50ppbv(200ppbv)	50ml	1.00	mjs	mjs	3/4/2015	1137	mjs	
√	J030407	ICAL Level #7	#2716-50	13	100ppbv(200ppbv)	100ml	1.00	mjs	mjs	3/4/2015	1204	mjs	
√	J030408	ICAL Level #8	#2716-50	13	200ppbv(200ppbv)	200ml	1.00	mjs	mjs	3/4/2015	1236	mjs	
X	J030409	System Blank	34343	12	Humid	200mL	1.00	mjs	mjs	3/4/2015	1309	mjs	
√	J030410	System Blank	34343	12	Humid	200mL	1.00	mjs	mjs	3/4/2015	1403	mjs	
√	J030411	ICV	#2716-98	14	50ppbv(200ppbv)	50ml	1.00	mjs	mjs	3/4/2015	1428	mjs	Exp. 5/16/15

MB 3/5/15



Before MB
3/4/15



fo 3/4/15

After MB 3/4/15

Corrected Peak Integration

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

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

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

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

Eurofins Air Toxics Inc.

EPA TO-15/MODIFIED EPA TO-14A

Data file : /chem/msdj.i/04mar15.b/j030411.d
Lab Smp Id: ICV Client Smp ID: ICV
Inj Date : 04-MAR-2015 14:28
Operator : mjs Inst ID: msdj.i
Smp Info : 50ml #2716-98
Misc Info : 50ppbv(200ppbv)
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msdj.i/04mar15.b/j15q0304a.m
Meth Date : 04-Mar-2015 13:56 mskidmor Quant Type: ISTD
Cal Date : 04-MAR-2015 12:36 Cal File: j030408.d
Als bottle: 14 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT12.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
* 98 Bromochloromethane						CAS #: 74-97-5	
5.480	5.494 (1.000)	130	137577	25.0000		80.00- 120.00	100.00
5.480	5.494 (1.000)	128	107887			48.40- 108.40	78.42
5.480	5.494 (1.000)	49	156938			84.80- 144.80	114.07
* 123 1,4-Difluorobenzene						CAS #: 540-36-3	
6.404	6.404 (1.000)	114	601947	25.0000		80.00- 120.00	100.00
6.404	6.404 (1.000)	88	89900			0.00- 45.38	14.93
* 163 Chlorobenzene-d5						CAS #: 3114-55-4	
8.894	8.894 (1.000)	117	571404	25.0000		80.00- 120.00	100.00
8.894	8.894 (1.000)	82	284773			20.55- 80.55	49.84
$ 117 1,2-Dichloroethane-d4						CAS #: 17060-07-0	
6.040	6.054 (1.102)	65	161075	25.5522	25.552	80.00- 120.00	100.00
6.040	6.054 (1.102)	67	88843			28.68- 88.68	55.16

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
$ 146 Toluene-d8						CAS #: 2037-26-5	
7.635	7.649 (1.192)	98	613055	24.9591	24.959	80.00- 120.00	100.00
7.635	7.649 (1.192)	70	60887			0.00- 40.26	9.93
7.635	7.649 (1.192)	100	421788			38.16- 98.16	68.80
$ 177 4-Bromofluorobenzene						CAS #: 460-00-4	
9.888	9.888 (1.112)	174	365715	24.6411	24.641	80.00- 120.00	100.00
9.888	9.888 (1.112)	95	401419			82.57- 142.57	109.76
9.888	9.888 (1.112)	176	360285			67.45- 127.45	98.52
9 Propylene						CAS #: 115-07-1	
1.339	1.381 (0.244)	41	210682	51.8041	51.804	80.00- 120.00	100.00
1.339	1.381 (0.244)	42	138451			35.76- 95.76	65.72
1.339	1.381 (0.244)	39	145393			37.69- 97.69	69.01
11 Freon 12						CAS #: 75-71-8	
1.367	1.409 (0.249)	85	760369	54.9359	54.936	80.00- 120.00	100.00
1.367	1.409 (0.249)	87	246438			2.74- 62.74	32.41
15 Freon 114						CAS #: 76-14-2	
1.493	1.535 (0.272)	135	700517	55.5354	55.535	80.00- 120.00	100.00
1.493	1.535 (0.272)	137	225247			1.49- 61.49	32.15
17 Chloromethane						CAS #: 74-87-3	
1.576	1.619 (0.288)	50	229485	58.0841	58.084	80.00- 120.00	100.00
1.576	1.619 (0.288)	52	73578			1.90- 61.90	32.06
23 Butane						CAS #: 106-97-8	
1.646	1.689 (0.300)	58	58897	55.0930	55.093	80.00- 120.00	100.00
1.646	1.689 (0.300)	43	428207			699.33- 759.33	727.04
25 Vinyl Chloride						CAS #: 75-01-4	
1.688	1.731 (0.308)	62	300607	55.1044	55.104	80.00- 120.00	100.00
1.688	1.731 (0.308)	64	95134			0.48- 60.48	31.65
26 1,3-Butadiene						CAS #: 106-99-0	
1.716	1.758 (0.313)	54	220338	52.2047	52.205	80.00- 120.00	100.00
1.716	1.758 (0.313)	39	218264			69.90- 129.90	99.06
29 Bromomethane						CAS #: 74-83-9	
2.080	2.122 (0.380)	94	258612	58.1967	58.197	80.00- 120.00	100.00
2.080	2.122 (0.380)	96	239814			62.83- 122.83	92.73
30 Chloroethane						CAS #: 75-00-3	
2.192	2.248 (0.400)	64	150567	53.8705	53.870	80.00- 120.00	100.00
2.206	2.248 (0.403)	66	48796			1.30- 61.30	32.41

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
30 Chloroethane (continued)							
2.192	2.248 (0.400)	49	39542			0.00- 55.56	26.26
31 Isopentane					CAS #: 78-78-4		
2.220	2.262 (0.405)	43	339884	52.6559	52.656	80.00- 120.00	100.00
2.220	2.262 (0.405)	57	235345			39.25- 99.25	69.24
35 Freon 11					CAS #: 75-69-4		
2.458	2.500 (0.449)	101	808956	53.9045	53.904	80.00- 120.00	100.00
2.458	2.500 (0.449)	103	514818			34.53- 94.53	63.64
42 Ethanol					CAS #: 64-17-5		
2.808	2.850 (0.512)	45	120260	51.1570	51.157	80.00- 120.00	100.00
2.808	2.850 (0.512)	43	23694			0.00- 48.78	19.70
2.808	2.850 (0.512)	46	45190			9.14- 69.14	37.58
49 Freon 113					CAS #: 76-13-1		
3.116	3.158 (0.569)	151	633417	51.2151	51.215	80.00- 120.00	100.00
3.116	3.158 (0.569)	153	401963			33.29- 93.29	63.46
3.116	3.158 (0.569)	101	707687			83.98- 143.98	111.73
50 1,1-Dichloroethene					CAS #: 75-35-4		
3.158	3.200 (0.576)	98	206004	53.5710	53.571	80.00- 120.00	100.00
3.158	3.200 (0.576)	96	327891			129.90- 189.90	159.17
3.144	3.200 (0.574)	61	495672			210.75- 270.75	240.61
52 Acetone					CAS #: 67-64-1		
3.325	3.368 (0.607)	58	143330	54.0153	54.015	80.00- 120.00	100.00
3.325	3.368 (0.607)	43	425975			270.02- 330.02	297.20
56 Carbon Disulfide					CAS #: 75-15-0		
3.395	3.438 (0.620)	76	803245	46.3541	46.354	80.00- 120.00	100.00
57 2-Propanol					CAS #: 67-63-0		
3.507	3.549 (0.640)	45	547668	56.1846	56.184	80.00- 120.00	100.00
3.507	3.549 (0.640)	43	103904			0.00- 47.69	18.97
3.507	3.549 (0.640)	59	21875			0.00- 33.85	3.99
58 3-Chloropropene					CAS #: 107-05-1		
3.661	3.703 (0.668)	76	148380	49.6557	49.656	80.00- 120.00	100.00
3.661	3.703 (0.668)	41	366214			215.96- 275.96	246.81
66 Methylene Chloride					CAS #: 75-09-2		
3.857	3.885 (0.704)	49	348368	52.6139	52.614	80.00- 120.00	100.00
3.857	3.885 (0.704)	84	289409			51.17- 111.17	83.08
3.857	3.885 (0.704)	51	105872			0.00- 59.41	30.39

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
72 Methyl tert-butyl ether					CAS #: 1634-04-4		
4.081	4.109 (0.745)	73	875645	51.7991	51.799	80.00- 120.00	100.00
4.081	4.109 (0.745)	57	199818			0.00- 52.57	22.82
4.081	4.109 (0.745)	41	177577			0.00- 50.82	20.28
73 trans-1,2-Dichloroethene					CAS #: 156-60-5		
4.109	4.137 (0.750)	98	189652	44.7450	44.745	80.00- 120.00	100.00
4.109	4.137 (0.750)	61	403922			185.75- 245.75	212.98
4.109	4.137 (0.750)	96	298052			128.77- 188.77	157.16
78 Hexane					CAS #: 110-54-3		
4.319	4.347 (0.788)	57	519867	52.9016	52.902	80.00- 120.00	100.00
4.319	4.347 (0.788)	43	316755			32.33- 92.33	60.93
4.319	4.347 (0.788)	86	84952			0.00- 47.05	16.34
82 1,1-Dichloroethane					CAS #: 75-34-3		
4.627	4.655 (0.844)	63	591902	51.0104	51.010	80.00- 120.00	100.00
4.627	4.655 (0.844)	65	187683			1.83- 61.83	31.71
86 Vinyl Acetate					CAS #: 108-05-4		
4.683	4.697 (0.854)	86	96028	54.8987	54.899	80.00- 120.00	100.00
4.683	4.697 (0.854)	43	917385			1027.99-1087.99	955.33
91 cis-1,2-Dichloroethene					CAS #: 156-59-2		
5.242	5.256 (0.957)	98	268782	58.2629	58.263	80.00- 120.00	100.00
5.242	5.256 (0.957)	96	422883			120.40- 180.40	157.33
5.242	5.256 (0.957)	61	519505			156.78- 216.78	193.28
92 2-Butanone					CAS #: 78-93-3		
5.270	5.284 (0.962)	72	174319	50.8659	50.866	80.00- 120.00	100.00
5.270	5.284 (0.962)	43	660264			345.28- 405.28	378.77
5.270	5.284 (0.962)	57	53636			0.64- 60.64	30.77
99 Tetrahydrofuran					CAS #: 109-99-9		
5.480	5.494 (1.000)	42	383759	50.5578	50.558	80.00- 120.00	100.00
5.480	5.494 (1.000)	71	159749			10.18- 70.18	41.63
5.480	5.494 (1.000)	72	167227			13.63- 73.63	43.58
100 Chloroform					CAS #: 67-66-3		
5.550	5.564 (1.013)	83	700055	51.2503	51.250	80.00- 120.00	100.00
5.550	5.564 (1.013)	85	459158			36.39- 96.39	65.59
102 Cyclohexane					CAS #: 110-82-7		
5.648	5.662 (1.031)	84	490781	51.9821	51.982	80.00- 120.00	100.00
5.634	5.662 (1.028)	56	577896			85.96- 145.96	117.75
5.634	5.662 (1.028)	41	285199			27.64- 87.64	58.11

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
103 1,1,1-Trichloroethane					CAS #: 71-55-6		
5.662	5.690 (1.033)	97	739588	52.0793	52.079	80.00- 120.00	100.00
5.662	5.690 (1.033)	99	466032			34.56- 94.56	63.01
106 Carbon Tetrachloride					CAS #: 56-23-5		
5.788	5.802 (1.056)	119	791250	51.5525	51.552	80.00- 120.00	100.00
5.788	5.802 (1.056)	117	822965			75.97- 135.97	104.01
113 2,2,4-Trimethylpentane					CAS #: 540-84-1		
5.984	5.998 (1.092)	57	1402837	49.2976	49.298	80.00- 120.00	100.00
5.984	5.998 (1.092)	56	450301			0.00- 59.67	32.10
5.984	5.998 (1.092)	41	322688			0.00- 50.74	23.00
116 Benzene					CAS #: 71-43-2		
6.012	6.026 (0.939)	78	1107175	51.2321	51.232	80.00- 120.00	100.00
6.012	6.026 (0.939)	77	256366			0.00- 52.91	23.15
120 1,2-Dichloroethane					CAS #: 107-06-2		
6.110	6.124 (0.954)	62	434915	50.2454	50.245	80.00- 120.00	100.00
6.110	6.124 (0.954)	64	137364			2.46- 62.46	31.58
121 Heptane					CAS #: 142-82-5		
6.152	6.166 (0.961)	71	383859	49.0175	49.017	80.00- 120.00	100.00
6.152	6.166 (0.961)	43	678223			142.43- 202.43	176.69
6.152	6.166 (0.961)	57	485462			86.91- 146.91	126.47
125 Trichloroethene					CAS #: 79-01-6		
6.600	6.600 (1.031)	95	514616	44.0927	44.093	80.00- 120.00	100.00
6.600	6.600 (1.031)	130	573004			82.54- 142.54	111.35
6.600	6.600 (1.031)	97	330386			35.40- 95.40	64.20
127 Methylcyclohexane					CAS #: 108-87-2		
6.698	6.698 (1.222)	83	689423	52.6748	52.675	80.00- 120.00	100.00
6.698	6.698 (1.222)	98	329794			16.94- 76.94	47.84
6.684	6.698 (1.220)	55	528592			46.96- 106.96	76.67
132 1,2-Dichloropropane					CAS #: 78-87-5		
6.837	6.852 (1.068)	63	430194	51.1840	51.184	80.00- 120.00	100.00
6.837	6.852 (1.068)	62	306371			41.52- 101.52	71.22
6.837	6.852 (1.068)	41	203653			17.88- 77.88	47.34
136 1,4-Dioxane					CAS #: 123-91-1		
6.935	6.935 (1.083)	88	286730	51.7315	51.732	80.00- 120.00	100.00
6.935	6.935 (1.083)	58	185858			35.49- 95.49	64.82
6.935	6.935 (1.083)	57	59947			0.00- 50.66	20.91

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
138 Bromodichloromethane					CAS #: 75-27-4		
7.075	7.075 (1.105)	83	824587	52.0282	52.028	80.00- 120.00	100.00
7.075	7.075 (1.105)	85	542003			34.46- 94.46	65.73
144 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
7.453	7.467 (1.164)	75	699035	48.5310	48.531	80.00- 120.00	100.00
7.453	7.467 (1.164)	77	220187			1.77- 61.77	31.50
7.453	7.467 (1.164)	39	287127			11.11- 71.11	41.07
145 4-Methyl-2-pentanone					CAS #: 108-10-1		
7.565	7.579 (1.181)	58	358980	49.2789	49.279	80.00- 120.00	100.00
7.565	7.579 (1.181)	43	885597			220.64- 280.64	246.70
7.565	7.579 (1.181)	85	168178			17.04- 77.04	46.85
147 Toluene					CAS #: 108-88-3		
7.691	7.705 (1.201)	91	1500162	50.2774	50.277	80.00- 120.00	100.00
7.691	7.705 (1.201)	92	875392			27.98- 87.98	58.35
150 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
7.943	7.943 (0.893)	75	650653	50.2902	50.290	80.00- 120.00	100.00
7.943	7.943 (0.893)	77	210630			1.64- 61.64	32.37
7.943	7.943 (0.893)	39	265538			10.07- 70.07	40.81
155 1,1,2-Trichloroethane					CAS #: 79-00-5		
8.097	8.111 (0.910)	97	518908	49.9805	49.980	80.00- 120.00	100.00
8.097	8.111 (0.910)	99	323687			32.91- 92.91	62.38
8.097	8.111 (0.910)	83	449399			55.03- 115.03	86.60
156 Tetrachloroethene					CAS #: 127-18-4		
8.139	8.139 (0.915)	166	798836	50.8338	50.834	80.00- 120.00	100.00
8.139	8.139 (0.915)	129	561983			41.30- 101.30	70.35
8.139	8.139 (0.915)	131	553147			39.67- 99.67	69.24
158 2-Hexanone					CAS #: 591-78-6		
8.265	8.265 (0.929)	58	502861	51.0719	51.072	80.00- 120.00	100.00
8.265	8.265 (0.929)	43	869577			147.18- 207.18	172.93
8.265	8.265 (0.929)	100	113750			0.00- 52.59	22.62
160 Dibromochloromethane					CAS #: 124-48-1		
8.419	8.419 (0.946)	129	1011741	50.7008	50.701	80.00- 120.00	100.00
8.419	8.419 (0.946)	127	792082			47.74- 107.74	78.29
161 1,2-Dibromoethane (EDB)					CAS #: 106-93-4		
8.530	8.545 (0.959)	107	822207	50.0620	50.062	80.00- 120.00	100.00
8.530	8.545 (0.959)	109	776981			63.55- 123.55	94.50

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
165 Chlorobenzene					CAS #: 108-90-7		
8.908	8.922 (1.002)	112	1251573	49.6074	49.607	80.00- 120.00	100.00
8.908	8.922 (1.002)	114	396644			1.75- 61.75	31.69
8.908	8.922 (1.002)	77	657264			22.27- 82.27	52.52
167 Ethyl Benzene					CAS #: 100-41-4		
8.964	8.964 (1.008)	106	650169	50.1922	50.192	80.00- 120.00	100.00
8.964	8.964 (1.008)	91	1961608			278.96- 338.96	301.71
169 m,p-Xylene					CAS #: 108-38-3		
9.062	9.062 (1.019)	106	780793	48.6485	48.648	80.00- 120.00	100.00
9.062	9.062 (1.019)	91	1501580			158.57- 218.57	192.31
171 o-Xylene					CAS #: 95-47-6		
9.398	9.398 (1.057)	106	779089	51.5703	51.570	80.00- 120.00	100.00
9.398	9.398 (1.057)	91	1547420			173.40- 233.40	198.62
172 Styrene					CAS #: 100-42-5		
9.426	9.426 (1.060)	104	1318750	51.9210	51.921	80.00- 120.00	100.00
9.426	9.426 (1.060)	78	587902			15.95- 75.95	44.58
174 Bromoform					CAS #: 75-25-2		
9.636	9.636 (1.083)	173	1081723	50.9085	50.908	80.00- 120.00	100.00
9.636	9.636 (1.083)	171	556760			22.23- 82.23	51.47
175 Cumene					CAS #: 98-82-8		
9.692	9.692 (1.090)	105	2289799	48.6764	48.676	80.00- 120.00	100.00
9.692	9.692 (1.090)	120	623887			0.00- 57.55	27.25
9.692	9.692 (1.090)	51	182287			0.00- 38.22	7.96
181 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
10.014	10.014 (1.126)	83	1157660	57.0878	57.088	80.00- 120.00	100.00
10.014	10.014 (1.126)	85	762970			36.69- 96.69	65.91
182 Propylbenzene					CAS #: 103-65-1		
10.042	10.028 (1.129)	91	2833698	50.8106	50.811	80.00- 120.00	100.00
10.042	10.028 (1.129)	120	710763			0.00- 54.81	25.08
10.042	10.028 (1.129)	105	105517			0.00- 33.86	3.72
188 4-Ethyltoluene					CAS #: 622-96-8		
10.139	10.126 (1.140)	120	817465	54.4155	54.415	80.00- 120.00	100.00
10.139	10.126 (1.140)	105	2574386			292.39- 352.39	314.92
190 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
10.181	10.182 (1.145)	120	1010071	49.3375	49.337	80.00- 120.00	100.00
10.181	10.182 (1.145)	105	1998071			169.92- 229.92	197.81

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
196 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
10.517	10.503 (1.182)	120	929119	50.6510	50.651	80.00- 120.00	100.00
10.517	10.503 (1.182)	105	1986547			182.08- 242.08	213.81
208 1,3-Dichlorobenzene					CAS #: 541-73-1		
10.811	10.797 (1.216)	146	1498238	50.3759	50.376	80.00- 120.00	100.00
10.811	10.797 (1.216)	148	952926			34.06- 94.06	63.60
10.811	10.797 (1.216)	111	542271			6.19- 66.19	36.19
209 1,4-Dichlorobenzene					CAS #: 106-46-7		
10.895	10.881 (1.225)	146	1504198	51.1743	51.174	80.00- 120.00	100.00
10.895	10.881 (1.225)	148	965947			33.53- 93.53	64.22
10.895	10.881 (1.225)	111	532943			5.17- 65.17	35.43
212 alpha-Chlorotoluene					CAS #: 100-44-7		
11.007	10.993 (1.238)	91	1925032	53.1702	53.170	80.00- 120.00	100.00
11.007	10.993 (1.238)	126	434043			0.00- 52.56	22.55
214 1,2-Dichlorobenzene					CAS #: 95-50-1		
11.217	11.203 (1.261)	146	1439031	51.6824	51.682	80.00- 120.00	100.00
11.217	11.203 (1.261)	148	914076			33.19- 93.19	63.52
11.217	11.203 (1.261)	111	540941			8.29- 68.29	37.59
226 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
12.658	12.630 (1.423)	180	1295310	56.3309	56.331	80.00- 120.00	100.00
12.658	12.630 (1.423)	182	1236628			66.05- 126.05	95.47
227 Hexachlorobutadiene					CAS #: 87-68-3		
12.742	12.714 (1.433)	225	979239	57.0522	57.052	80.00- 120.00	100.00
12.742	12.714 (1.433)	223	612443			33.34- 93.34	62.54
228 Naphthalene					CAS #: 91-20-3		
12.924	12.910 (1.453)	128	170891	4.54681	4.547	80.00- 120.00	100.00
12.924	12.910 (1.453)	127	23594			0.00- 42.14	13.81

Report Date: 04-Mar-2015 15:10

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdj.i
Lab File ID: j030411.d
Lab Smp Id: ICV
Analysis Type: VOA
Quant Type: ISTD
Operator: mjs
Method File: /chem/msdj.i/04mar15.b/j15q0304a.m
Misc Info: 50ppbv(200ppbv)

Calibration Date: 04-MAR-2015
Calibration Time: 11:37
Client Smp ID: ICV
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
98 Bromochloromethan	138152	82891	193413	137577	-0.42
123 1,4-Difluorobenze	594563	356738	832388	601947	1.24
163 Chlorobenzene-d5	557711	334627	780795	571404	2.46

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
98 Bromochloromethan	5.49	5.16	5.82	5.48	-0.26
123 1,4-Difluorobenze	6.40	6.07	6.73	6.40	0.00
163 Chlorobenzene-d5	8.89	8.56	9.22	8.89	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: 04-Mar-2015 15:10

Eurofins Air Toxics Inc.

RECOVERY REPORT

Client Name:
Client SDG: 04mar15
Sample Matrix: GAS
Fraction: VOA
Lab Smp Id: ICV
Client Smp ID: ICV
Level: LOW
Operator: mjs
Data Type: MS DATA
SampleType: LCS
SpikeList File: 2926Spectra.spk
Quant Type: ISTD
Sublist File: AT12.sub
Method File: /chem/msdj.i/04mar15.b/j15q0304a.m
Misc Info: 50ppbv(200ppbv)

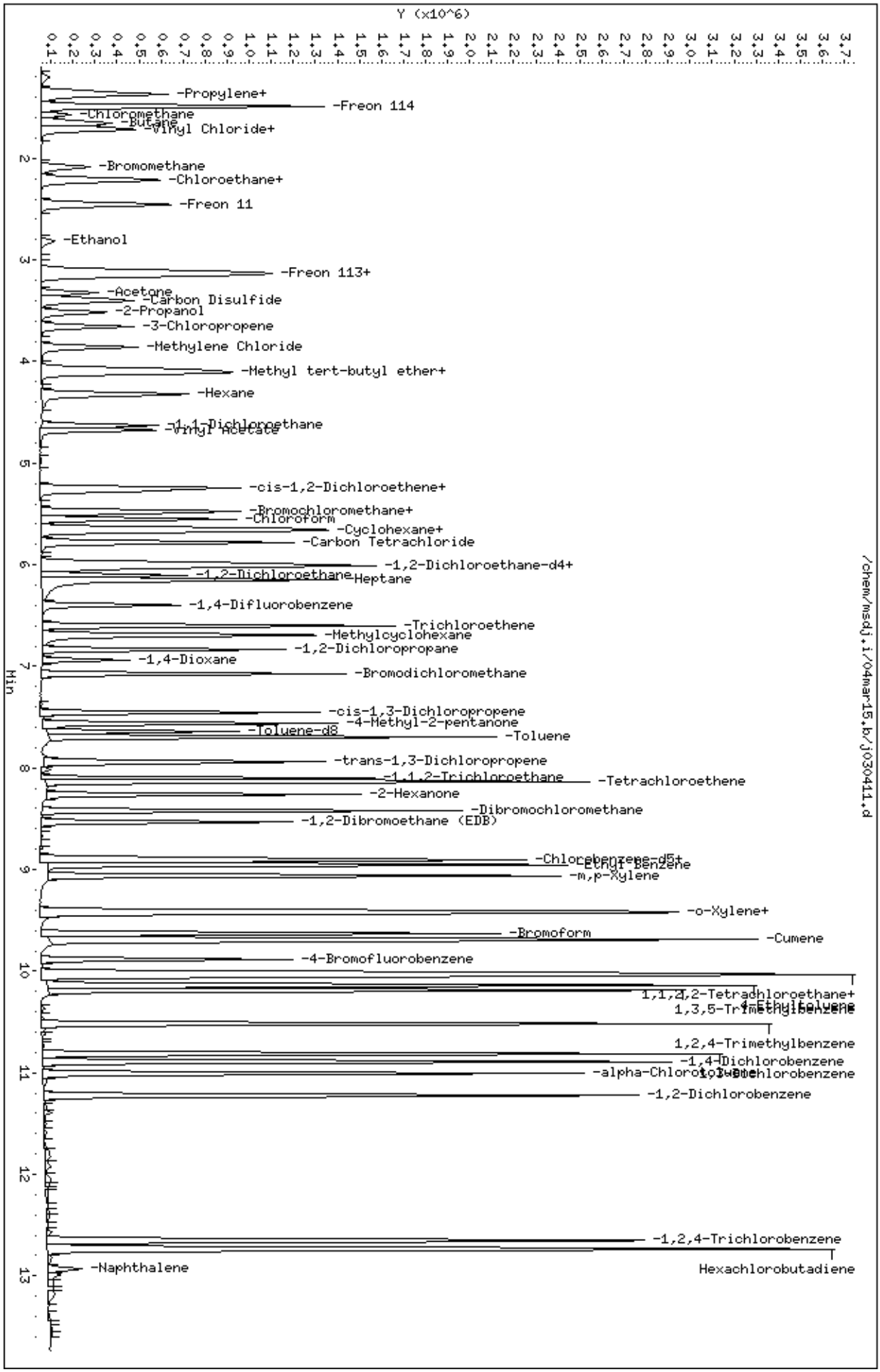
SPIKE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
9 Propylene	50.000	51.804	103.61	60-140
11 Freon 12	50.000	54.936	109.87	70-130
15 Freon 114	50.000	55.535	111.07	70-130
17 Chloromethane	50.000	58.084	116.17	70-130
23 Butane	50.000	55.093	110.19	60-140
25 Vinyl Chloride	50.000	55.104	110.21	70-130
26 1,3-Butadiene	50.000	52.205	104.41	70-130
29 Bromomethane	50.000	58.197	116.39	70-130
30 Chloroethane	50.000	53.870	107.74	70-130
31 Isopentane	50.000	52.656	105.31	60-140
35 Freon 11	50.000	53.904	107.81	70-130
42 Ethanol	50.000	51.157	102.31	70-130
49 Freon 113	50.000	51.215	102.43	70-130
50 1,1-Dichloroethene	50.000	53.571	107.14	70-130
52 Acetone	50.000	54.015	108.03	70-130
56 Carbon Disulfide	50.000	46.354	92.71	70-130
57 2-Propanol	50.000	56.184	112.37	70-130
58 3-Chloropropene	50.000	49.656	99.31	70-130
66 Methylene Chloride	50.000	52.614	105.23	70-130
72 Methyl tert-butyl	50.000	51.799	103.60	70-130
73 trans-1,2-Dichloro	50.000	44.745	89.49	70-130
78 Hexane	50.000	52.902	105.80	70-130
82 1,1-Dichloroethane	50.000	51.010	102.02	70-130
86 Vinyl Acetate	50.000	54.899	109.80	60-140
91 cis-1,2-Dichloroet	50.000	58.263	116.53	70-130
92 2-Butanone	50.000	50.866	101.73	70-130
99 Tetrahydrofuran	50.000	50.558	101.12	70-130
100 Chloroform	50.000	51.250	102.50	70-130
103 1,1,1-Trichloroeth	50.000	52.079	104.16	70-130
106 Carbon Tetrachlori	50.000	51.552	103.11	70-130
102 Cyclohexane	50.000	51.982	103.96	70-130
113 2,2,4-Trimethylpen	50.000	49.298	98.60	70-130
116 Benzene	50.000	51.232	102.46	70-130

SPIKE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
120 1,2-Dichloroethane	50.000	50.245	100.49	70-130
121 Heptane	50.000	49.017	98.03	70-130
125 Trichloroethene	50.000	44.093	88.19	70-130
127 Methylcyclohexane	50.000	52.675	105.35	60-140
132 1,2-Dichloropropan	50.000	51.184	102.37	70-130
136 1,4-Dioxane	50.000	51.732	103.46	70-130
138 Bromodichlorometha	50.000	52.028	104.06	70-130
144 cis-1,3-Dichloropr	50.000	48.531	97.06	70-130
145 4-Methyl-2-pentano	50.000	49.279	98.56	70-130
147 Toluene	50.000	50.277	100.55	70-130
150 trans-1,3-Dichloro	50.000	50.290	100.58	70-130
155 1,1,2-Trichloroeth	50.000	49.980	99.96	70-130
156 Tetrachloroethene	50.000	50.834	101.67	70-130
158 2-Hexanone	50.000	51.072	102.14	70-130
160 Dibromochlorometha	50.000	50.701	101.40	70-130
161 1,2-Dibromoethane	50.000	50.062	100.12	70-130
165 Chlorobenzene	50.000	49.607	99.21	70-130
167 Ethyl Benzene	50.000	50.192	100.38	70-130
169 m,p-Xylene	50.000	48.648	97.30	70-130
171 o-Xylene	50.000	51.570	103.14	70-130
172 Styrene	50.000	51.921	103.84	70-130
174 Bromoform	50.000	50.908	101.82	70-130
175 Cumene	50.000	48.676	97.35	70-130
181 1,1,2,2-Tetrachlor	50.000	57.088	114.18	70-130
182 Propylbenzene	50.000	50.811	101.62	70-130
188 4-Ethyltoluene	50.000	54.415	108.83	70-130
190 1,3,5-Trimethylben	50.000	49.337	98.67	70-130
196 1,2,4-Trimethylben	50.000	50.651	101.30	70-130
208 1,3-Dichlorobenzen	50.000	50.376	100.75	70-130
209 1,4-Dichlorobenzen	50.000	51.174	102.35	70-130
212 alpha-Chlorotoluen	50.000	53.170	106.34	70-130
214 1,2-Dichlorobenzen	50.000	51.682	103.36	70-130
226 1,2,4-Trichloroben	50.000	56.331	112.66	70-130
227 Hexachlorobutadien	50.000	57.052	114.10	70-130
228 Naphthalene	5.000	4.547	90.94	60-140

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 117 1,2-Dichloroethane	25.000	25.552	102.21	70-130
$ 146 Toluene-d8	25.000	24.959	99.84	70-130
$ 177 4-Bromofluorobenze	25.000	24.641	98.56	70-130

Data File: /chem/msdj.i/04mar15.b/j030411.d
Date : 04-MAR-2015 14:28
Client ID: ICV
Sample Info: 50ml #2716-98
Column phase: RTX-624

Instrument: msdj.i
Operator: mjs
Column diameter: 0.25



Eurofins Air Toxics Inc.

EPA TO-15/MODIFIED EPA TO-14A

Data file : /chem/msdj.i/04mar15.b/j030403.d
Lab Smp Id: ICAL Level #2 Client Smp ID: ICAL Level #2
Inj Date : 04-MAR-2015 10:17
Operator : mjs Inst ID: msdj.i
Smp Info : 50ml #2716-155
Misc Info : 0.5ppbv(2.0ppbv)
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msdj.i/04mar15.b/j15q0304a.m
Meth Date : 04-Mar-2015 12:55 mskidmor Quant Type: ISTD
Cal Date : 04-MAR-2015 10:17 Cal File: j030403.d
Als bottle: 1 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: Level2.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor

RT	EXP RT	(REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
* 98 Bromochloromethane							CAS #: 74-97-5	
5.494	5.494	(1.000)	130	139131	25.0000		80.00- 120.00	100.00
5.494	5.494	(1.000)	128	106305			48.40- 108.40	76.41
5.494	5.494	(1.000)	49	154346			84.80- 144.80	110.94
* 123 1,4-Difluorobenzene							CAS #: 540-36-3	
6.404	6.404	(1.000)	114	596364	25.0000		80.00- 120.00	100.00
6.404	6.404	(1.000)	88	88060			0.00- 45.38	14.77
* 163 Chlorobenzene-d5							CAS #: 3114-55-4	
8.894	8.894	(1.000)	117	560416	25.0000		80.00- 120.00	100.00
8.894	8.894	(1.000)	82	286724			20.55- 80.55	51.16
$ 117 1,2-Dichloroethane-d4							CAS #: 17060-07-0	
6.054	6.054	(1.102)	65	158000	25.0000	24.586	80.00- 120.00	100.00
6.054	6.054	(1.102)	67	90607			28.68- 88.68	57.35

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
$ 146 Toluene-d8					CAS #: 2037-26-5		
7.635	7.635 (1.192)	98	611173	25.0000	25.100	80.00- 120.00	100.00
7.635	7.635 (1.192)	70	61699			0.00- 40.26	10.10
7.635	7.635 (1.192)	100	405076			38.16- 98.16	66.28
$ 177 4-Bromofluorobenzene					CAS #: 460-00-4		
9.888	9.888 (1.112)	174	359184	25.0000	24.988	80.00- 120.00	100.00
9.874	9.874 (1.110)	95	400249			82.57- 142.57	111.43
9.888	9.888 (1.112)	176	356105			67.45- 127.45	99.14
11 Freon 12					CAS #: 75-71-8		
1.409	1.409 (0.256)	85	7662	0.50000	0.5240	80.00- 120.00	100.00
1.395	1.395 (0.254)	87	2595			2.74- 62.74	33.87
15 Freon 114					CAS #: 76-14-2		
1.521	1.521 (0.277)	135	7307	0.50000	0.5351	80.00- 120.00	100.00
1.521	1.521 (0.277)	137	2470			1.49- 61.49	33.80
25 Vinyl Chloride					CAS #: 75-01-4		
1.730	1.730 (0.315)	62	2657	0.50000	0.4817	80.00- 120.00	100.00(a)
1.716	1.716 (0.312)	64	1394			0.48- 60.48	52.47
26 1,3-Butadiene					CAS #: 106-99-0		
1.744	1.744 (0.318)	54	2219	0.50000	0.5062	80.00- 120.00	100.00
1.744	1.744 (0.318)	39	2927			69.90- 129.90	131.91
35 Freon 11					CAS #: 75-69-4		
2.486	2.486 (0.452)	101	8236	0.50000	0.5210	80.00- 120.00	100.00
2.486	2.486 (0.452)	103	5170			34.53- 94.53	62.77
49 Freon 113					CAS #: 76-13-1		
3.158	3.158 (0.575)	151	6878	0.50000	0.5298	80.00- 120.00	100.00
3.158	3.158 (0.575)	153	4038			33.29- 93.29	58.71
3.158	3.158 (0.575)	101	7518			83.98- 143.98	109.31
50 1,1-Dichloroethene					CAS #: 75-35-4		
3.186	3.186 (0.580)	98	2050	0.50000	0.5088	80.00- 120.00	100.00
3.186	3.186 (0.580)	96	3270			129.90- 189.90	159.51
3.186	3.186 (0.580)	61	5216			210.75- 270.75	254.44
72 Methyl tert-butyl ether					CAS #: 1634-04-4		
4.109	4.109 (0.748)	73	8214	0.50000	0.4874	80.00- 120.00	100.00(a)
4.109	4.109 (0.748)	57	1927			0.00- 52.57	23.46
4.109	4.109 (0.748)	41	2750			0.00- 50.82	33.48
73 trans-1,2-Dichloroethene					CAS #: 156-60-5		
4.123	4.123 (0.750)	98	2380	0.50000	0.5280	80.00- 120.00	100.00

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

   73 trans-1,2-Dichloroethene (continued)
  4.123   4.123 (0.750)    61      4817                  185.75- 245.75   202.39
  4.137   4.137 (0.753)    96      3781                  128.77- 188.77   158.87
-------------------------------------------------------------------------------
   78 Hexane                                        CAS #: 110-54-3
  4.347   4.347 (0.791)    57      5284 0.50000   0.5131  80.00- 120.00   100.00
  4.333   4.333 (0.789)    43      3930                   32.33-  92.33    74.38
  4.347   4.347 (0.791)    86       833                    0.00-  47.05    15.76
-------------------------------------------------------------------------------
   82 1,1-Dichloroethane                            CAS #: 75-34-3
  4.655   4.655 (0.847)    63      6664 0.50000   0.5338  80.00- 120.00   100.00
  4.641   4.641 (0.845)    65      2017                    1.83-  61.83    30.27
-------------------------------------------------------------------------------
   91 cis-1,2-Dichloroethene                        CAS #: 156-59-2
  5.256   5.256 (0.957)    98      2343 0.50000   0.4909  80.00- 120.00   100.00(a)
  5.256   5.256 (0.957)    96      3900                  120.40- 180.40   166.45
  5.256   5.256 (0.957)    61      4590                  156.78- 216.78   195.90
-------------------------------------------------------------------------------
   99 Tetrahydrofuran                               CAS #: 109-99-9
  5.508   5.508 (1.003)    42      4231 0.50000   0.5262  80.00- 120.00   100.00
  5.494   5.494 (1.000)    71      1724                   10.18-  70.18    40.75
  5.494   5.494 (1.000)    72      1577                   13.63-  73.63    37.27
-------------------------------------------------------------------------------
  100 Chloroform                                    CAS #: 67-66-3
  5.564   5.564 (1.013)    83      7347 0.50000   0.5173  80.00- 120.00   100.00
  5.564   5.564 (1.013)    85      4861                   36.39-  96.39    66.16
-------------------------------------------------------------------------------
  102 Cyclohexane                                   CAS #: 110-82-7
  5.662   5.662 (1.031)    84      5133 0.50000   0.5161  80.00- 120.00   100.00
  5.648   5.648 (1.028)    56      6070                   85.96- 145.96   118.25
  5.648   5.648 (1.028)    41      3469                   27.64-  87.64    67.58
-------------------------------------------------------------------------------
  103 1,1,1-Trichloroethane                         CAS #: 71-55-6
  5.676   5.676 (1.033)    97      7506 0.50000   0.5110  80.00- 120.00   100.00
  5.690   5.690 (1.036)    99      4667                   34.56-  94.56    62.18
-------------------------------------------------------------------------------
  106 Carbon Tetrachloride                          CAS #: 56-23-5
  5.802   5.802 (1.056)   119      8346 0.50000   0.5203  80.00- 120.00   100.00
  5.802   5.802 (1.056)   117      8308                   75.97- 135.97    99.54
-------------------------------------------------------------------------------
  113 2,2,4-Trimethylpentane                        CAS #: 540-84-1
  5.998   5.998 (1.092)    57     13785 0.50000   0.5004  80.00- 120.00   100.00
  5.984   5.984 (1.089)    56      4295                    0.00-  59.67    31.16
  5.984   5.984 (1.089)    41      3799                    0.00-  50.74    27.56
-------------------------------------------------------------------------------
  116 Benzene                                       CAS #: 71-43-2
  6.026   6.026 (0.941)    78     10902 0.50000   0.5029  80.00- 120.00   100.00
```

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
116 Benzene (continued)							
6.026	6.026 (0.941)	77	2871			0.00- 52.91	26.33
120 1,2-Dichloroethane					CAS #: 107-06-2		
6.124	6.124 (0.956)	62	4621	0.50000	0.5196	80.00- 120.00	100.00
6.124	6.124 (0.956)	64	1679			2.46- 62.46	36.33
121 Heptane					CAS #: 142-82-5		
6.166	6.166 (0.963)	71	4083	0.50000	0.5163	80.00- 120.00	100.00
6.166	6.166 (0.963)	43	7131			142.43- 202.43	174.65
6.166	6.166 (0.963)	57	3514			86.91- 146.91	86.06
125 Trichloroethene					CAS #: 79-01-6		
6.600	6.600 (1.031)	95	7076	0.50000	0.5625	80.00- 120.00	100.00
6.600	6.600 (1.031)	130	6444			82.54- 142.54	91.07
6.600	6.600 (1.031)	97	3842			35.40- 95.40	54.30
132 1,2-Dichloropropane					CAS #: 78-87-5		
6.837	6.837 (1.068)	63	4351	0.50000	0.5145	80.00- 120.00	100.00
6.851	6.851 (1.070)	62	3936			41.52- 101.52	90.46
6.851	6.851 (1.070)	41	2277			17.88- 77.88	52.33
138 Bromodichloromethane					CAS #: 75-27-4		
7.075	7.075 (1.105)	83	8275	0.50000	0.5104	80.00- 120.00	100.00
7.075	7.075 (1.105)	85	5618			34.46- 94.46	67.89
144 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
7.467	7.467 (1.166)	75	7431	0.50000	0.5069	80.00- 120.00	100.00
7.467	7.467 (1.166)	77	2585			1.77- 61.77	34.79
7.453	7.453 (1.164)	39	3216			11.11- 71.11	43.28
145 4-Methyl-2-pentanone					CAS #: 108-10-1		
7.579	7.579 (1.184)	58	4155	0.50000	0.5475	80.00- 120.00	100.00
7.579	7.579 (1.184)	43	10321			220.64- 280.64	248.40
7.579	7.579 (1.184)	85	1685			17.04- 77.04	40.55
147 Toluene					CAS #: 108-88-3		
7.691	7.691 (1.201)	91	15721	0.50000	0.5228	80.00- 120.00	100.00
7.691	7.691 (1.201)	92	8908			27.98- 87.98	56.66
150 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
7.943	7.943 (0.893)	75	6676	0.50000	0.5068	80.00- 120.00	100.00
7.943	7.943 (0.893)	77	5701			1.64- 61.64	85.40
7.943	7.943 (0.893)	39	3358			10.07- 70.07	50.30
155 1,1,2-Trichloroethane					CAS #: 79-00-5		
8.111	8.111 (0.912)	97	5305	0.50000	0.5110	80.00- 120.00	100.00

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

  155 1,1,2-Trichloroethane (continued)
  8.111   8.111 (0.912)    99      3110                    32.91-  92.91    58.62
  8.097   8.097 (0.910)    83      3938                    55.03- 115.03    74.23
-------------------------------------------------------------------------------
  156 Tetrachloroethene                            CAS #: 127-18-4
  8.139   8.139 (0.915)   166      7760 0.50000   0.4995  80.00- 120.00   100.00(a)
  8.139   8.139 (0.915)   129      5671                    41.30- 101.30    73.08
  8.139   8.139 (0.915)   131      5427                    39.67-  99.67    69.94
-------------------------------------------------------------------------------
  160 Dibromochloromethane                         CAS #: 124-48-1
  8.419   8.419 (0.946)   129     10284 0.50000   0.5108  80.00- 120.00   100.00
  8.419   8.419 (0.946)   127      8111                    47.74- 107.74    78.87
-------------------------------------------------------------------------------
  161 1,2-Dibromoethane (EDB)                      CAS #: 106-93-4
  8.544   8.544 (0.961)   107      8790 0.50000   0.5232  80.00- 120.00   100.00
  8.530   8.530 (0.959)   109      7751                    63.55- 123.55    88.18
-------------------------------------------------------------------------------
  165 Chlorobenzene                                CAS #: 108-90-7
  8.922   8.922 (1.003)   112     13501 0.50000   0.5215  80.00- 120.00   100.00
  8.908   8.908 (1.002)   114      4446                     1.75-  61.75    32.93
  8.908   8.908 (1.002)    77     11920                    22.27-  82.27    88.29
-------------------------------------------------------------------------------
  167 Ethyl Benzene                                CAS #: 100-41-4
  8.964   8.964 (1.008)   106      6618 0.50000   0.5119  80.00- 120.00   100.00
  8.964   8.964 (1.008)    91     20221                   278.96- 338.96   305.55
-------------------------------------------------------------------------------
  169 m,p-Xylene                                   CAS #: 108-38-3
  9.062   9.062 (1.019)   106      8314 0.50000   0.5153  80.00- 120.00   100.00
  9.062   9.062 (1.019)    91     15172                   158.57- 218.57   182.49
-------------------------------------------------------------------------------
  171 o-Xylene                                     CAS #: 95-47-6
  9.398   9.398 (1.057)   106      7480 0.50000   0.5045  80.00- 120.00   100.00
  9.398   9.398 (1.057)    91     15299                   173.40- 233.40   204.53
-------------------------------------------------------------------------------
  172 Styrene                                      CAS #: 100-42-5
  9.426   9.426 (1.060)   104     12723 0.50000   0.5063  80.00- 120.00   100.00
  9.426   9.426 (1.060)    78      5482                    15.95-  75.95    43.09
-------------------------------------------------------------------------------
  174 Bromoform                                    CAS #: 75-25-2
  9.636   9.636 (1.083)   173     11045 0.50000   0.5158  80.00- 120.00   100.00
  9.636   9.636 (1.083)   171      5907                    22.23-  82.23    53.48
-------------------------------------------------------------------------------
  175 Cumene                                       CAS #: 98-82-8
  9.692   9.692 (1.090)   105     23747 0.50000   0.5150  80.00- 120.00   100.00
  9.692   9.692 (1.090)   120      6675                     0.00-  57.55    28.11
  9.678   9.678 (1.088)    51      2289                     0.00-  38.22     9.64
-------------------------------------------------------------------------------
```

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
181 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
10.014	10.014 (1.126)	83	10390	0.50000	0.5107	80.00- 120.00	100.00
10.014	10.014 (1.126)	85	7324			36.69- 96.69	70.49
182 Propylbenzene					CAS #: 103-65-1		
10.028	10.028 (1.127)	91	28265	0.50000	0.5117	80.00- 120.00	100.00
10.042	10.042 (1.129)	120	7076			0.00- 54.81	25.03
10.028	10.028 (1.127)	105	1257			0.00- 33.86	4.45
188 4-Ethyltoluene					CAS #: 622-96-8		
10.126	10.126 (1.138)	120	7471	0.50000	0.5027	80.00- 120.00	100.00
10.126	10.126 (1.138)	105	23427			292.39- 352.39	313.57
190 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
10.182	10.182 (1.145)	120	10598	0.50000	0.5139	80.00- 120.00	100.00
10.182	10.182 (1.145)	105	20639			169.92- 229.92	194.74
196 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
10.503	10.503 (1.181)	120	8296	0.50000	0.4775	80.00- 120.00	100.00(a)
10.503	10.503 (1.181)	105	19546			182.08- 242.08	235.61
208 1,3-Dichlorobenzene					CAS #: 541-73-1		
10.797	10.797 (1.214)	146	15382	0.50000	0.5123	80.00- 120.00	100.00
10.797	10.797 (1.214)	148	10095			34.06- 94.06	65.63
10.797	10.797 (1.214)	111	5379			6.19- 66.19	34.97
209 1,4-Dichlorobenzene					CAS #: 106-46-7		
10.881	10.881 (1.223)	146	14302	0.50000	0.4931	80.00- 120.00	100.00(a)
10.881	10.881 (1.223)	148	10041			33.53- 93.53	70.21
10.881	10.881 (1.223)	111	5213			5.17- 65.17	36.45
212 alpha-Chlorotoluene					CAS #: 100-44-7		
10.993	10.993 (1.236)	91	17826	0.50000	0.4977	80.00- 120.00	100.00(a)
11.007	11.007 (1.238)	126	4403			0.00- 52.56	24.70
214 1,2-Dichlorobenzene					CAS #: 95-50-1		
11.217	11.217 (1.261)	146	13656	0.50000	0.4957	80.00- 120.00	100.00(a)
11.217	11.217 (1.261)	148	9540			33.19- 93.19	69.86
11.217	11.217 (1.261)	111	5307			8.29- 68.29	38.86

QC Flag Legend

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

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdj.i
Lab File ID: j030403.d
Lab Smp Id: ICAL Level #2
Analysis Type: VOA
Quant Type: ISTD
Operator: mjs
Method File: /chem/msdj.i/04mar15.b/j15q0304a.m
Misc Info: 0.5ppbv(2.0ppbv)

Calibration Date: 04-MAR-2015
Calibration Time: 11:37
Client Smp ID: ICAL Level #2
Level: LOW
Sample Type: AIR

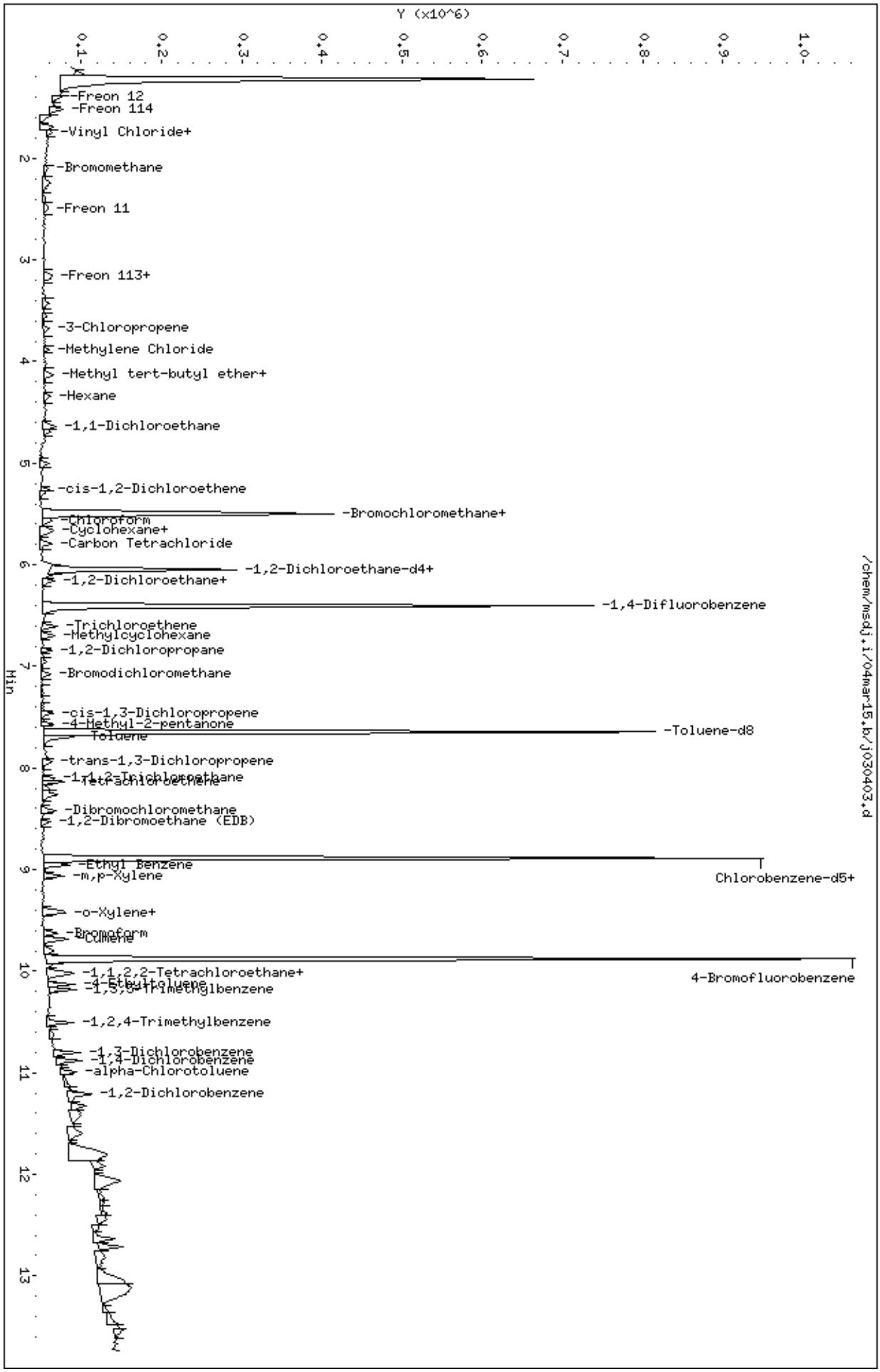
COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
98 Bromochloromethan	138152	82891	193413	139131	0.71
123 1,4-Difluorobenze	594563	356738	832388	596364	0.30
163 Chlorobenzene-d5	557711	334627	780795	560416	0.49

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
98 Bromochloromethan	5.49	5.16	5.82	5.49	0.00
123 1,4-Difluorobenze	6.40	6.07	6.73	6.40	0.00
163 Chlorobenzene-d5	8.89	8.56	9.22	8.89	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/msdj.i/04mar15.b/j030403.d
Date : 04-MAR-2015 10:17
Client ID: ICAL Level #2
Sample Info: 50ml #2716-155
Column phase: RTX-624

Instrument: msdj.i
Operator: mjs
Column diameter: 0.25



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Eurofins Air Toxics Inc.

EPA TO-15/MODIFIED EPA TO-14A

Data file : /chem/msdj.i/04mar15.b/j030404.d
Lab Smp Id: ICAL Level #3 Client Smp ID: ICAL Level #3
Inj Date : 04-MAR-2015 10:49
Operator : mjs Inst ID: msdj.i
Smp Info : 200ml #2716-50
Misc Info : 2.0ppbv(2.0ppbv)
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msdj.i/04mar15.b/j15q0304a.m
Meth Date : 04-Mar-2015 12:55 mskidmor Quant Type: ISTD
Cal Date : 04-MAR-2015 10:49 Cal File: j030404.d
Als bottle: 1 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT12mdl.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
* 98 Bromochloromethane						CAS #: 74-97-5	
5.494	5.494 (1.000)	130	132298	25.0000		80.00- 120.00	100.00
5.494	5.494 (1.000)	128	103085			48.40- 108.40	77.92
5.480	5.480 (1.000)	49	143811			84.80- 144.80	108.70
* 123 1,4-Difluorobenzene						CAS #: 540-36-3	
6.404	6.404 (1.000)	114	576166	25.0000		80.00- 120.00	100.00
6.404	6.404 (1.000)	88	87225			0.00- 45.38	15.14
* 163 Chlorobenzene-d5						CAS #: 3114-55-4	
8.894	8.894 (1.000)	117	545427	25.0000		80.00- 120.00	100.00
8.894	8.894 (1.000)	82	279351			20.55- 80.55	51.22
$ 117 1,2-Dichloroethane-d4						CAS #: 17060-07-0	
6.040	6.040 (1.099)	65	153806	25.0000	25.113	80.00- 120.00	100.00
6.040	6.040 (1.099)	67	84936			28.68- 88.68	55.22

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
$ 146 Toluene-d8					CAS #: 2037-26-5		
7.635	7.635 (1.192)	98	590845	25.0000	25.077	80.00- 120.00	100.00
7.635	7.635 (1.192)	70	61139			0.00- 40.26	10.35
7.635	7.635 (1.192)	100	399762			38.16- 98.16	67.66
$ 177 4-Bromofluorobenzene					CAS #: 460-00-4		
9.888	9.888 (1.112)	174	359204	25.0000	25.447	80.00- 120.00	100.00
9.874	9.874 (1.110)	95	394992			82.57- 142.57	109.96
9.888	9.888 (1.112)	176	348150			67.45- 127.45	96.92
9 Propylene					CAS #: 115-07-1		
1.353	1.353 (0.246)	41	8674	2.00000	2.095	80.00- 120.00	100.00
1.353	1.353 (0.246)	42	5230			35.76- 95.76	60.30
1.339	1.339 (0.244)	39	6487			37.69- 97.69	74.79
11 Freon 12					CAS #: 75-71-8		
1.381	1.381 (0.251)	85	27722	2.00000	1.996	80.00- 120.00	100.00
1.381	1.381 (0.251)	87	9394			2.74- 62.74	33.89
15 Freon 114					CAS #: 76-14-2		
1.507	1.507 (0.274)	135	24413	2.00000	1.918	80.00- 120.00	100.00
1.507	1.507 (0.274)	137	8445			1.49- 61.49	34.59
17 Chloromethane					CAS #: 74-87-3		
1.576	1.576 (0.287)	50	7519	2.00000	1.921	80.00- 120.00	100.00(a)
1.590	1.590 (0.289)	52	2458			1.90- 61.90	32.69
23 Butane					CAS #: 106-97-8		
1.646	1.646 (0.300)	58	2251	2.00000	2.084	80.00- 120.00	100.00
1.660	1.660 (0.302)	43	17564			699.33- 759.33	780.28
25 Vinyl Chloride					CAS #: 75-01-4		
1.702	1.702 (0.310)	62	11076	2.00000	2.073	80.00- 120.00	100.00
1.702	1.702 (0.310)	64	4059			0.48- 60.48	36.65
26 1,3-Butadiene					CAS #: 106-99-0		
1.730	1.730 (0.315)	54	8382	2.00000	2.007	80.00- 120.00	100.00
1.730	1.730 (0.315)	39	9640			69.90- 129.90	115.01
29 Bromomethane					CAS #: 74-83-9		
2.094	2.094 (0.381)	94	7194	2.00000	1.746	80.00- 120.00	100.00(a)
2.108	2.108 (0.384)	96	6833			62.83- 122.83	94.98
30 Chloroethane					CAS #: 75-00-3		
2.206	2.206 (0.402)	64	5998	2.00000	2.092	80.00- 120.00	100.00
2.220	2.220 (0.404)	66	1604			1.30- 61.30	26.74

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
30 Chloroethane (continued)							
2.206	2.206 (0.402)	49	1090			0.00- 55.56	18.17
31 Isopentane					CAS #: 78-78-4		
2.220	2.220 (0.404)	43	13958	2.00000	2.121	80.00- 120.00	100.00
2.220	2.220 (0.404)	57	9504			39.25- 99.25	68.09
35 Freon 11					CAS #: 75-69-4		
2.458	2.458 (0.447)	101	29945	2.00000	1.995	80.00- 120.00	100.00
2.458	2.458 (0.447)	103	19626			34.53- 94.53	65.54
42 Ethanol					CAS #: 64-17-5		
2.836	2.836 (0.516)	45	6333	2.00000	2.409	80.00- 120.00	100.00
2.836	2.836 (0.516)	43	1216			0.00- 48.78	19.20
2.850	2.850 (0.519)	46	1739			9.14- 69.14	27.46
49 Freon 113					CAS #: 76-13-1		
3.116	3.116 (0.567)	151	25957	2.00000	2.067	80.00- 120.00	100.00
3.130	3.130 (0.570)	153	15896			33.29- 93.29	61.24
3.130	3.130 (0.570)	101	27767			83.98- 143.98	106.97
50 1,1-Dichloroethene					CAS #: 75-35-4		
3.172	3.172 (0.577)	98	7406	2.00000	1.955	80.00- 120.00	100.00
3.158	3.158 (0.575)	96	12784			129.90- 189.90	172.62
3.158	3.158 (0.575)	61	20124			210.75- 270.75	271.73
52 Acetone					CAS #: 67-64-1		
3.353	3.353 (0.610)	58	5429	2.00000	2.035	80.00- 120.00	100.00(a)
3.353	3.353 (0.610)	43	19178			270.02- 330.02	353.25
56 Carbon Disulfide					CAS #: 75-15-0		
3.409	3.409 (0.621)	76	36741	2.00000	2.081	80.00- 120.00	100.00
57 2-Propanol					CAS #: 67-63-0		
3.535	3.535 (0.643)	45	19499	2.00000	2.006	80.00- 120.00	100.00
3.535	3.535 (0.643)	43	4798			0.00- 47.69	24.61
3.535	3.535 (0.643)	59	606			0.00- 33.85	3.11
58 3-Chloropropene					CAS #: 107-05-1		
3.675	3.675 (0.669)	76	6289	2.00000	2.068	80.00- 120.00	100.00
3.661	3.661 (0.666)	41	15196			215.96- 275.96	241.63
66 Methylene Chloride					CAS #: 75-09-2		
3.871	3.871 (0.705)	49	13910	2.00000	2.067	80.00- 120.00	100.00(a)
3.871	3.871 (0.705)	84	10983			51.17- 111.17	78.96
3.871	3.871 (0.705)	51	4700			0.00- 59.41	33.79

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

   71 tert-Butyl alcohol                           CAS #: 75-65-0
  4.011   4.011 (0.730)    59     22848 2.00000    1.994  80.00- 120.00   100.00(a)
  4.011   4.011 (0.730)    41      5871                     0.00-  51.64    25.70
  4.011   4.011 (0.730)    57      2374                     0.00-  40.45    10.39
-------------------------------------------------------------------------------
   72 Methyl tert-butyl ether                      CAS #: 1634-04-4
  4.095   4.095 (0.745)    73     34740 2.00000    2.109  80.00- 120.00   100.00
  4.095   4.095 (0.745)    57      8427                     0.00-  52.57    24.26
  4.095   4.095 (0.745)    41      8331                     0.00-  50.82    23.98
-------------------------------------------------------------------------------
   73 trans-1,2-Dichloroethene                     CAS #: 156-60-5
  4.123   4.123 (0.750)    98      8366 2.00000    1.968  80.00- 120.00   100.00
  4.109   4.109 (0.748)    61     19005                   185.75- 245.75   227.17
  4.123   4.123 (0.750)    96     13303                   128.77- 188.77   159.01
-------------------------------------------------------------------------------
   78 Hexane                                       CAS #: 110-54-3
  4.333   4.333 (0.789)    57     18582 2.00000    1.931  80.00- 120.00   100.00
  4.333   4.333 (0.789)    43     13529                    32.33-  92.33    72.81
  4.333   4.333 (0.789)    86      3602                     0.00-  47.05    19.38
-------------------------------------------------------------------------------
   82 1,1-Dichloroethane                           CAS #: 75-34-3
  4.641   4.641 (0.845)    63     23288 2.00000    1.974  80.00- 120.00   100.00
  4.641   4.641 (0.845)    65      7130                     1.83-  61.83    30.62
-------------------------------------------------------------------------------
   83 Isopropyl ether                              CAS #: 108-20-3
  4.627   4.627 (0.842)    45     43887 2.00000    2.083  80.00- 120.00   100.00
  4.627   4.627 (0.842)    87     11774                     0.00-  58.50    26.83
  4.627   4.627 (0.842)    59      4763                     0.00-  41.54    10.85
-------------------------------------------------------------------------------
   86 Vinyl Acetate                                CAS #: 108-05-4
  4.683   4.683 (0.852)    86      3489 2.00000    2.013  80.00- 120.00   100.00
  4.683   4.683 (0.852)    43     36124                  1027.99-1087.99  1035.37
-------------------------------------------------------------------------------
   88 Ethyl-tert-butyl ether                       CAS #: 637-92-3
  4.990   4.990 (0.908)    59     39675 2.00000    2.021  80.00- 120.00   100.00
  4.990   4.990 (0.908)    87     17086                    13.39-  73.39    43.06
  4.990   4.990 (0.908)    41      7405                     0.00-  46.90    18.66
-------------------------------------------------------------------------------
   91 cis-1,2-Dichloroethene                       CAS #: 156-59-2
  5.242   5.242 (0.954)    98      8820 2.00000    1.962  80.00- 120.00   100.00
  5.242   5.242 (0.954)    96     15593                   120.40- 180.40   176.79
  5.242   5.242 (0.954)    61     18228                   156.78- 216.78   206.67
-------------------------------------------------------------------------------
   92 2-Butanone                                   CAS #: 78-93-3
  5.284   5.284 (0.962)    72      7427 2.00000    2.114  80.00- 120.00   100.00
  5.284   5.284 (0.962)    43     27933                   345.28- 405.28   376.10
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RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
92 2-Butanone (continued)							
5.284	5.284 (0.962)	57	2259			0.64- 60.64	30.42
99 Tetrahydrofuran					CAS #: 109-99-9		
5.494	5.494 (1.000)	42	15830	2.00000	2.046	80.00- 120.00	100.00
5.494	5.494 (1.000)	71	5784			10.18- 70.18	36.54
5.494	5.494 (1.000)	72	6811			13.63- 73.63	43.03
100 Chloroform					CAS #: 67-66-3		
5.550	5.550 (1.010)	83	28428	2.00000	2.069	80.00- 120.00	100.00
5.550	5.550 (1.010)	85	17877			36.39- 96.39	62.89
102 Cyclohexane					CAS #: 110-82-7		
5.648	5.648 (1.028)	84	18835	2.00000	1.994	80.00- 120.00	100.00
5.648	5.648 (1.028)	56	21868			85.96- 145.96	116.10
5.648	5.648 (1.028)	41	12745			27.64- 87.64	67.67
103 1,1,1-Trichloroethane					CAS #: 71-55-6		
5.676	5.676 (1.033)	97	29326	2.00000	2.065	80.00- 120.00	100.00
5.676	5.676 (1.033)	99	16478			34.56- 94.56	56.19
106 Carbon Tetrachloride					CAS #: 56-23-5		
5.788	5.788 (1.053)	119	29768	2.00000	1.967	80.00- 120.00	100.00
5.788	5.788 (1.053)	117	30776			75.97- 135.97	103.39
113 2,2,4-Trimethylpentane					CAS #: 540-84-1		
5.984	5.984 (1.089)	57	59300	2.00000	2.168	80.00- 120.00	100.00
5.984	5.984 (1.089)	56	18712			0.00- 59.67	31.55
5.984	5.984 (1.089)	41	14301			0.00- 50.74	24.12
116 Benzene					CAS #: 71-43-2		
6.012	6.012 (0.939)	78	41852	2.00000	1.999	80.00- 120.00	100.00
6.012	6.012 (0.939)	77	9783			0.00- 52.91	23.38
119 tert-Amyl methyl ether					CAS #: 994-05-8		
6.082	6.082 (1.107)	87	9579	2.00000	2.004	80.00- 120.00	100.00
6.082	6.082 (1.107)	73	39405			376.47- 436.47	411.37
6.082	6.082 (1.107)	55	11663			75.02- 135.02	121.76
120 1,2-Dichloroethane					CAS #: 107-06-2		
6.110	6.110 (0.954)	62	17249	2.00000	2.005	80.00- 120.00	100.00
6.110	6.110 (0.954)	64	5754			2.46- 62.46	33.36
121 Heptane					CAS #: 142-82-5		
6.152	6.152 (0.961)	71	15304	2.00000	2.002	80.00- 120.00	100.00
6.152	6.152 (0.961)	43	27594			142.43- 202.43	180.31

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
121 Heptane (continued)							
6.152	6.152 (0.961)	57	16541			86.91- 146.91	108.08
125 Trichloroethene					CAS #: 79-01-6		
6.600	6.600 (1.031)	95	22812	2.00000	1.916	80.00- 120.00	100.00
6.600	6.600 (1.031)	130	24876			82.54- 142.54	109.05
6.600	6.600 (1.031)	97	14347			35.40- 95.40	62.89
127 Methylcyclohexane					CAS #: 108-87-2		
6.697	6.697 (1.219)	83	25326	2.00000	1.989	80.00- 120.00	100.00(a)
6.697	6.697 (1.219)	98	11951			16.94- 76.94	47.19
6.697	6.697 (1.219)	55	20188			46.96- 106.96	79.71
132 1,2-Dichloropropane					CAS #: 78-87-5		
6.837	6.837 (1.068)	63	17035	2.00000	2.056	80.00- 120.00	100.00
6.837	6.837 (1.068)	62	11088			41.52- 101.52	65.09
6.837	6.837 (1.068)	41	8147			17.88- 77.88	47.83
136 1,4-Dioxane					CAS #: 123-91-1		
6.935	6.935 (1.083)	88	11199	2.00000	2.044	80.00- 120.00	100.00
6.935	6.935 (1.083)	58	6991			35.49- 95.49	62.43
6.935	6.935 (1.083)	57	2460			0.00- 50.66	21.97
138 Bromodichloromethane					CAS #: 75-27-4		
7.075	7.075 (1.105)	83	30933	2.00000	1.983	80.00- 120.00	100.00
7.075	7.075 (1.105)	85	21064			34.46- 94.46	68.10
144 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
7.453	7.453 (1.164)	75	27965	2.00000	1.983	80.00- 120.00	100.00
7.453	7.453 (1.164)	77	9630			1.77- 61.77	34.44
7.453	7.453 (1.164)	39	11865			11.11- 71.11	42.43
145 4-Methyl-2-pentanone					CAS #: 108-10-1		
7.565	7.565 (1.181)	58	14713	2.00000	2.004	80.00- 120.00	100.00
7.565	7.565 (1.181)	43	36392			220.64- 280.64	247.35
7.565	7.565 (1.181)	85	6361			17.04- 77.04	43.23
147 Toluene					CAS #: 108-88-3		
7.691	7.691 (1.201)	91	60910	2.00000	2.063	80.00- 120.00	100.00
7.691	7.691 (1.201)	92	33910			27.98- 87.98	55.67
150 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
7.943	7.943 (0.893)	75	24527	2.00000	1.941	80.00- 120.00	100.00
7.943	7.943 (0.893)	77	22871			1.64- 61.64	93.25
7.943	7.943 (0.893)	39	10393			10.07- 70.07	42.37

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

  155 1,1,2-Trichloroethane                        CAS #: 79-00-5
  8.111   8.111 (0.912)    97     21292 2.00000    2.070  80.00- 120.00   100.00
  8.111   8.111 (0.912)    99     12458                   32.91-  92.91    58.51
  8.097   8.097 (0.910)    83     16987                   55.03- 115.03    79.78
-------------------------------------------------------------------------------
  156 Tetrachloroethene                            CAS #: 127-18-4
  8.139   8.139 (0.915)   166     30823 2.00000    2.026  80.00- 120.00   100.00
  8.139   8.139 (0.915)   129     22161                   41.30- 101.30    71.90
  8.139   8.139 (0.915)   131     21110                   39.67-  99.67    68.49
-------------------------------------------------------------------------------
  158 2-Hexanone                                   CAS #: 591-78-6
  8.265   8.265 (0.929)    58     20080 2.00000    2.067  80.00- 120.00   100.00
  8.265   8.265 (0.929)    43     36613                  147.18- 207.18   182.34
  8.265   8.265 (0.929)   100      5057                    0.00-  52.59    25.18
-------------------------------------------------------------------------------
  160 Dibromochloromethane                         CAS #: 124-48-1
  8.418   8.418 (0.946)   129     38768 2.00000    1.986  80.00- 120.00   100.00
  8.418   8.418 (0.946)   127     30117                   47.74- 107.74    77.69
-------------------------------------------------------------------------------
  161 1,2-Dibromoethane (EDB)                      CAS #: 106-93-4
  8.530   8.530 (0.959)   107     31950 2.00000    1.969  80.00- 120.00   100.00
  8.530   8.530 (0.959)   109     29709                   63.55- 123.55    92.99
-------------------------------------------------------------------------------
  165 Chlorobenzene                                CAS #: 108-90-7
  8.908   8.908 (1.002)   112     48167 2.00000    1.940  80.00- 120.00   100.00
  8.908   8.908 (1.002)   114     16233                    1.75-  61.75    33.70
  8.908   8.908 (1.002)    77     30639                   22.27-  82.27    63.61
-------------------------------------------------------------------------------
  167 Ethyl Benzene                                CAS #: 100-41-4
  8.964   8.964 (1.008)   106     26232 2.00000    2.056  80.00- 120.00   100.00
  8.964   8.964 (1.008)    91     77924                  278.96- 338.96   297.06
-------------------------------------------------------------------------------
  169 m,p-Xylene                                   CAS #: 108-38-3
  9.062   9.062 (1.019)   106     31621 2.00000    2.009  80.00- 120.00   100.00
  9.062   9.062 (1.019)    91     61948                  158.57- 218.57   195.91
-------------------------------------------------------------------------------
  171 o-Xylene                                     CAS #: 95-47-6
  9.398   9.398 (1.057)   106     30566 2.00000    2.077  80.00- 120.00   100.00
  9.398   9.398 (1.057)    91     60307                  173.40- 233.40   197.30
-------------------------------------------------------------------------------
  172 Styrene                                      CAS #: 100-42-5
  9.426   9.426 (1.060)   104     46846 2.00000    1.943  80.00- 120.00   100.00
  9.426   9.426 (1.060)    78     23168                   15.95-  75.95    49.46
-------------------------------------------------------------------------------
  174 Bromoform                                    CAS #: 75-25-2
  9.636   9.636 (1.083)   173     41452 2.00000    1.993  80.00- 120.00   100.00
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                                          AMOUNTS
                                       CAL-AMT   ON-COL
   RT   EXP RT (REL RT)  MASS  RESPONSE ( PPBV)  ( PPBV)   TARGET RANGE    RATIO
   ==   ====== ========  ====  ======== =======  =======   ============    =====

  174 Bromoform (continued)
  9.636   9.636 (1.083)   171     21240                    22.23-  82.23    51.24
-------------------------------------------------------------------------------
  175 Cumene                                        CAS #: 98-82-8
  9.692   9.692 (1.090)   105     93458 2.00000    2.054  80.00- 120.00   100.00
  9.692   9.692 (1.090)   120     25069                     0.00-  57.55    26.82
  9.692   9.692 (1.090)    51      8769                     0.00-  38.22     9.38
-------------------------------------------------------------------------------
  181 1,1,2,2-Tetrachloroethane                     CAS #: 79-34-5
 10.014  10.014 (1.126)    83     37706 2.00000    1.935  80.00- 120.00   100.00
 10.014  10.014 (1.126)    85     26851                    36.69-  96.69    71.21
-------------------------------------------------------------------------------
  182 Propylbenzene                                 CAS #: 103-65-1
 10.028  10.028 (1.127)    91    108686 2.00000    2.014  80.00- 120.00   100.00
 10.028  10.028 (1.127)   120     26064                     0.00-  54.81    23.98
 10.028  10.028 (1.127)   105      4848                     0.00-  33.86     4.46
-------------------------------------------------------------------------------
  188 4-Ethyltoluene                                CAS #: 622-96-8
 10.125  10.125 (1.138)   120     29511 2.00000    2.027  80.00- 120.00   100.00
 10.125  10.125 (1.138)   105     93067                   292.39- 352.39   315.36
-------------------------------------------------------------------------------
  190 1,3,5-Trimethylbenzene                        CAS #: 108-67-8
 10.181  10.181 (1.145)   120     38944 2.00000    1.960  80.00- 120.00   100.00
 10.181  10.181 (1.145)   105     80691                   169.92- 229.92   207.20
-------------------------------------------------------------------------------
  196 1,2,4-Trimethylbenzene                        CAS #: 95-63-6
 10.503  10.503 (1.181)   120     36916 2.00000    2.118  80.00- 120.00   100.00
 10.503  10.503 (1.181)   105     74247                   182.08- 242.08   201.12
-------------------------------------------------------------------------------
  208 1,3-Dichlorobenzene                           CAS #: 541-73-1
 10.797  10.797 (1.214)   146     57187 2.00000    1.971  80.00- 120.00   100.00
 10.797  10.797 (1.214)   148     37292                    34.06-  94.06    65.21
 10.797  10.797 (1.214)   111     21178                     6.19-  66.19    37.03
-------------------------------------------------------------------------------
  209 1,4-Dichlorobenzene                           CAS #: 106-46-7
 10.881  10.881 (1.223)   146     56994 2.00000    2.013  80.00- 120.00   100.00
 10.881  10.881 (1.223)   148     35340                    33.53-  93.53    62.01
 10.881  10.881 (1.223)   111     21034                     5.17-  65.17    36.91
-------------------------------------------------------------------------------
  212 alpha-Chlorotoluene                           CAS #: 100-44-7
 10.993  10.993 (1.236)    91     68967 2.00000    1.986  80.00- 120.00   100.00
 10.993  10.993 (1.236)   126     15780                     0.00-  52.56    22.88
-------------------------------------------------------------------------------
  214 1,2-Dichlorobenzene                           CAS #: 95-50-1
 11.217  11.217 (1.261)   146     53539 2.00000    1.998  80.00- 120.00   100.00
 11.217  11.217 (1.261)   148     34292                    33.19-  93.19    64.05
```

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
214 1,2-Dichlorobenzene (continued)							
11.203	11.203 (1.260)	111	21324			8.29- 68.29	39.83
226 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
12.630	12.630 (1.420)	180	45550	2.00000	2.074	80.00- 120.00	100.00
12.630	12.630 (1.420)	182	45110			66.05- 126.05	99.03
227 Hexachlorobutadiene					CAS #: 87-68-3		
12.714	12.714 (1.429)	225	34684	2.00000	2.117	80.00- 120.00	100.00
12.714	12.714 (1.429)	223	22641			33.34- 93.34	65.28
228 Naphthalene					CAS #: 91-20-3		
12.910	12.910 (1.451)	128	8837	0.20000	0.2283	80.00- 120.00	100.00(a)
12.910	12.910 (1.451)	127	1788			0.00- 42.14	20.23

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: msdj.i
Lab File ID: j030404.d
Lab Smp Id: ICAL Level #3
Analysis Type: VOA
Quant Type: ISTD
Operator: mjs
Method File: /chem/msdj.i/04mar15.b/j15q0304a.m
Misc Info: 2.0ppbv(2.0ppbv)

Calibration Date: 04-MAR-2015
Calibration Time: 11:37
Client Smp ID: ICAL Level #3
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
98 Bromochloromethan	138152	82891	193413	132298	-4.24
123 1,4-Difluorobenze	594563	356738	832388	576166	-3.09
163 Chlorobenzene-d5	557711	334627	780795	545427	-2.20

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
98 Bromochloromethan	5.49	5.16	5.82	5.49	0.00
123 1,4-Difluorobenze	6.40	6.07	6.73	6.40	0.00
163 Chlorobenzene-d5	8.89	8.56	9.22	8.89	0.00

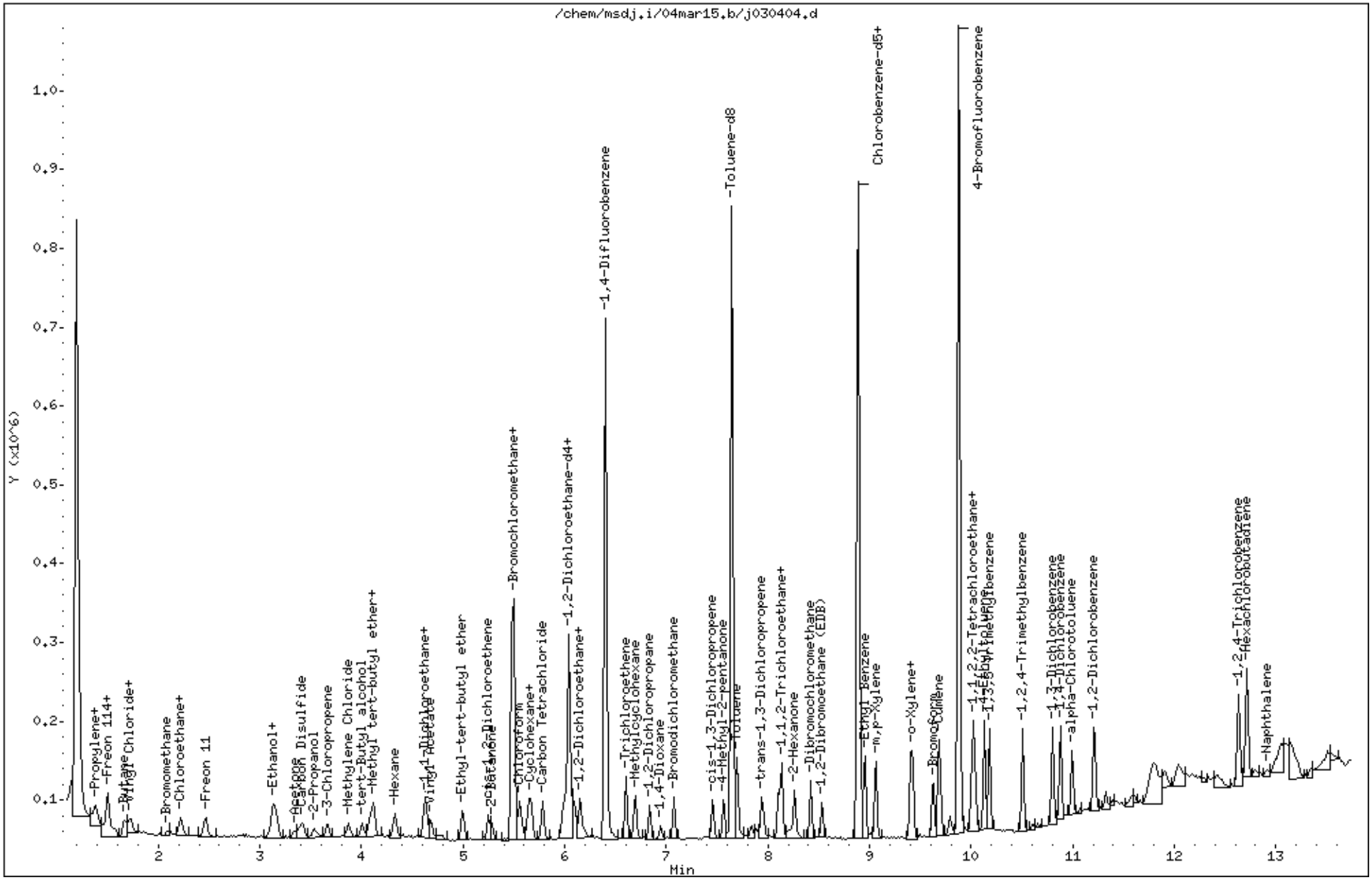
AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msdj.i/04mar15.b/j030404.d
Date : 04-MAR-2015 10:49
Client ID: ICAL Level #3
Sample Info: 200ml #2716-50

Column phase: RTX-624

Instrument: msdj.i

Operator: mjs
Column diameter: 0.25



Eurofins Air Toxics Inc.

EPA TO-15/MODIFIED EPA TO-14A

Data file : /chem/msdj.i/04mar15.b/j030405.d
Lab Smp Id: ICAL Level #5 Client Smp ID: ICAL Level #5
Inj Date : 04-MAR-2015 11:12
Operator : mjs Inst ID: msdj.i
Smp Info : 20ml #2716-50
Misc Info : 20ppbv(200ppbv)
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msdj.i/04mar15.b/j15q0304a.m
Meth Date : 04-Mar-2015 12:55 mskidmor Quant Type: ISTD
Cal Date : 04-MAR-2015 11:12 Cal File: j030405.d
Als bottle: 13 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT12mdl.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
* 98 Bromochloromethane						CAS #: 74-97-5	
5.480	5.480 (1.000)	130	134602	25.0000		80.00- 120.00	100.00
5.480	5.480 (1.000)	128	104091			48.40- 108.40	77.33
5.480	5.480 (1.000)	49	152566			84.80- 144.80	113.35
* 123 1,4-Difluorobenzene						CAS #: 540-36-3	
6.404	6.404 (1.000)	114	589171	25.0000		80.00- 120.00	100.00
6.404	6.404 (1.000)	88	89178			0.00- 45.38	15.14
* 163 Chlorobenzene-d5						CAS #: 3114-55-4	
8.894	8.894 (1.000)	117	556362	25.0000		80.00- 120.00	100.00
8.894	8.894 (1.000)	82	281503			20.55- 80.55	50.60
$ 117 1,2-Dichloroethane-d4						CAS #: 17060-07-0	
6.040	6.040 (1.102)	65	155963	25.0000	25.022	80.00- 120.00	100.00
6.040	6.040 (1.102)	67	90651			28.68- 88.68	58.12

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
$ 146 Toluene-d8						CAS #: 2037-26-5	
7.635	7.635 (1.192)	98	596274	25.0000	24.811	80.00- 120.00	100.00
7.635	7.635 (1.192)	70	58413			0.00- 40.26	9.80
7.635	7.635 (1.192)	100	409802			38.16- 98.16	68.73
$ 177 4-Bromofluorobenzene						CAS #: 460-00-4	
9.874	9.874 (1.110)	174	360464	25.0000	25.026	80.00- 120.00	100.00
9.874	9.874 (1.110)	95	392615			82.57- 142.57	108.92
9.874	9.874 (1.110)	176	348877			67.45- 127.45	96.79
9 Propylene						CAS #: 115-07-1	
1.339	1.339 (0.244)	41	80072	20.0000	19.326	80.00- 120.00	100.00
1.339	1.339 (0.244)	42	53109			35.76- 95.76	66.33
1.339	1.339 (0.244)	39	55855			37.69- 97.69	69.76
11 Freon 12						CAS #: 75-71-8	
1.367	1.367 (0.249)	85	277270	20.0000	19.715	80.00- 120.00	100.00
1.367	1.367 (0.249)	87	92055			2.74- 62.74	33.20
15 Freon 114						CAS #: 76-14-2	
1.493	1.493 (0.272)	135	252365	20.0000	19.617	80.00- 120.00	100.00
1.493	1.493 (0.272)	137	77287			1.49- 61.49	30.63
17 Chloromethane						CAS #: 74-87-3	
1.577	1.577 (0.288)	50	83261	20.0000	20.599	80.00- 120.00	100.00
1.577	1.577 (0.288)	52	27297			1.90- 61.90	32.78
23 Butane						CAS #: 106-97-8	
1.647	1.647 (0.300)	58	20707	20.0000	19.212	80.00- 120.00	100.00
1.647	1.647 (0.300)	43	152941			699.33- 759.33	738.60
25 Vinyl Chloride						CAS #: 75-01-4	
1.689	1.689 (0.308)	62	109419	20.0000	20.097	80.00- 120.00	100.00
1.689	1.689 (0.308)	64	35082			0.48- 60.48	32.06
26 1,3-Butadiene						CAS #: 106-99-0	
1.716	1.716 (0.313)	54	85226	20.0000	20.044	80.00- 120.00	100.00
1.716	1.716 (0.313)	39	83807			69.90- 129.90	98.34
29 Bromomethane						CAS #: 74-83-9	
2.080	2.080 (0.380)	94	98140	20.0000	22.149	80.00- 120.00	100.00
2.080	2.080 (0.380)	96	90472			62.83- 122.83	92.19
30 Chloroethane						CAS #: 75-00-3	
2.206	2.206 (0.403)	64	55437	20.0000	19.328	80.00- 120.00	100.00
2.206	2.206 (0.403)	66	18220			1.30- 61.30	32.87

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
30 Chloroethane (continued)							
2.206	2.206 (0.403)	49	14359			0.00- 55.56	25.90
31 Isopentane					CAS #: 78-78-4		
2.220	2.220 (0.405)	43	128926	20.0000	19.498	80.00- 120.00	100.00
2.220	2.220 (0.405)	57	87165			39.25- 99.25	67.61
35 Freon 11					CAS #: 75-69-4		
2.458	2.458 (0.449)	101	298414	20.0000	19.653	80.00- 120.00	100.00
2.458	2.458 (0.449)	103	192055			34.53- 94.53	64.36
42 Ethanol					CAS #: 64-17-5		
2.808	2.808 (0.512)	45	43321	20.0000	17.293	80.00- 120.00	100.00
2.808	2.808 (0.512)	43	9806			0.00- 48.78	22.64
2.808	2.808 (0.512)	46	16806			9.14- 69.14	38.79
49 Freon 113					CAS #: 76-13-1		
3.116	3.116 (0.569)	151	243284	20.0000	19.275	80.00- 120.00	100.00
3.116	3.116 (0.569)	153	158191			33.29- 93.29	65.02
3.116	3.116 (0.569)	101	280144			83.98- 143.98	115.15
50 1,1-Dichloroethene					CAS #: 75-35-4		
3.158	3.158 (0.576)	98	75906	20.0000	19.769	80.00- 120.00	100.00
3.158	3.158 (0.576)	96	125077			129.90- 189.90	164.78
3.158	3.158 (0.576)	61	186273			210.75- 270.75	245.40
52 Acetone					CAS #: 67-64-1		
3.326	3.326 (0.607)	58	55046	20.0000	20.185	80.00- 120.00	100.00
3.326	3.326 (0.607)	43	159768			270.02- 330.02	290.24
56 Carbon Disulfide					CAS #: 75-15-0		
3.396	3.396 (0.620)	76	347776	20.0000	19.567	80.00- 120.00	100.00
57 2-Propanol					CAS #: 67-63-0		
3.521	3.521 (0.643)	45	192063	20.0000	19.608	80.00- 120.00	100.00
3.521	3.521 (0.643)	43	37204			0.00- 47.69	19.37
3.521	3.521 (0.643)	59	8005			0.00- 33.85	4.17
58 3-Chloropropene					CAS #: 107-05-1		
3.661	3.661 (0.668)	76	57198	20.0000	18.965	80.00- 120.00	100.00
3.661	3.661 (0.668)	41	145595			215.96- 275.96	254.55
66 Methylene Chloride					CAS #: 75-09-2		
3.857	3.857 (0.704)	49	133493	20.0000	19.661	80.00- 120.00	100.00
3.857	3.857 (0.704)	84	112079			51.17- 111.17	83.96
3.857	3.857 (0.704)	51	41156			0.00- 59.41	30.83

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
71 tert-Butyl alcohol					CAS #: 75-65-0		
3.997	3.997 (0.729)	59	231377	20.0000	19.898	80.00- 120.00	100.00
3.997	3.997 (0.729)	41	54803			0.00- 51.64	23.69
3.997	3.997 (0.729)	57	25595			0.00- 40.45	11.06
72 Methyl tert-butyl ether					CAS #: 1634-04-4		
4.081	4.081 (0.745)	73	342622	20.0000	20.331	80.00- 120.00	100.00
4.081	4.081 (0.745)	57	76996			0.00- 52.57	22.47
4.081	4.081 (0.745)	41	71335			0.00- 50.82	20.82
73 trans-1,2-Dichloroethene					CAS #: 156-60-5		
4.109	4.109 (0.750)	98	83881	20.0000	19.540	80.00- 120.00	100.00
4.109	4.109 (0.750)	61	175208			185.75- 245.75	208.88
4.109	4.109 (0.750)	96	131308			128.77- 188.77	156.54
78 Hexane					CAS #: 110-54-3		
4.319	4.319 (0.788)	57	199012	20.0000	20.241	80.00- 120.00	100.00
4.319	4.319 (0.788)	43	122906			32.33- 92.33	61.76
4.319	4.319 (0.788)	86	32590			0.00- 47.05	16.38
82 1,1-Dichloroethane					CAS #: 75-34-3		
4.627	4.627 (0.844)	63	227049	20.0000	19.178	80.00- 120.00	100.00
4.627	4.627 (0.844)	65	72308			1.83- 61.83	31.85
83 Isopropyl ether					CAS #: 108-20-3		
4.613	4.613 (0.842)	45	418506	20.0000	19.680	80.00- 120.00	100.00
4.613	4.613 (0.842)	87	122425			0.00- 58.50	29.25
4.613	4.613 (0.842)	59	50157			0.00- 41.54	11.98
86 Vinyl Acetate					CAS #: 108-05-4		
4.683	4.683 (0.854)	86	35166	20.0000	19.961	80.00- 120.00	100.00
4.683	4.683 (0.854)	43	376162			1027.99-1087.99	1069.68
88 Ethyl-tert-butyl ether					CAS #: 637-92-3		
4.991	4.991 (0.911)	59	403207	20.0000	20.123	80.00- 120.00	100.00
4.991	4.991 (0.911)	87	176448			13.39- 73.39	43.76
4.991	4.991 (0.911)	41	67170			0.00- 46.90	16.66
91 cis-1,2-Dichloroethene					CAS #: 156-59-2		
5.242	5.242 (0.957)	98	94518	20.0000	20.494	80.00- 120.00	100.00
5.242	5.242 (0.957)	96	147108			120.40- 180.40	155.64
5.242	5.242 (0.957)	61	179489			156.78- 216.78	189.90
92 2-Butanone					CAS #: 78-93-3		
5.270	5.270 (0.962)	72	66927	20.0000	19.131	80.00- 120.00	100.00
5.270	5.270 (0.962)	43	257872			345.28- 405.28	385.30

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
92 2-Butanone (continued)							
5.270	5.270 (0.962)	57	20424			0.64- 60.64	30.52
99 Tetrahydrofuran					CAS #: 109-99-9		
5.480	5.480 (1.000)	42	146188	20.0000	18.912	80.00- 120.00	100.00
5.480	5.480 (1.000)	71	60520			10.18- 70.18	41.40
5.480	5.480 (1.000)	72	64819			13.63- 73.63	44.34
100 Chloroform					CAS #: 67-66-3		
5.550	5.550 (1.013)	83	270509	20.0000	19.507	80.00- 120.00	100.00
5.550	5.550 (1.013)	85	180205			36.39- 96.39	66.62
102 Cyclohexane					CAS #: 110-82-7		
5.648	5.648 (1.031)	84	185657	20.0000	19.488	80.00- 120.00	100.00
5.648	5.648 (1.031)	56	218511			85.96- 145.96	117.70
5.634	5.634 (1.028)	41	109765			27.64- 87.64	59.12
103 1,1,1-Trichloroethane					CAS #: 71-55-6		
5.676	5.676 (1.036)	97	283441	20.0000	19.713	80.00- 120.00	100.00
5.676	5.676 (1.036)	99	181999			34.56- 94.56	64.21
106 Carbon Tetrachloride					CAS #: 56-23-5		
5.788	5.788 (1.056)	119	311577	20.0000	20.179	80.00- 120.00	100.00
5.788	5.788 (1.056)	117	326257			75.97- 135.97	104.71
113 2,2,4-Trimethylpentane					CAS #: 540-84-1		
5.984	5.984 (1.092)	57	585472	20.0000	20.772	80.00- 120.00	100.00
5.984	5.984 (1.092)	56	177240			0.00- 59.67	30.27
5.984	5.984 (1.092)	41	126045			0.00- 50.74	21.53
116 Benzene					CAS #: 71-43-2		
6.012	6.012 (0.939)	78	427491	20.0000	19.974	80.00- 120.00	100.00
6.012	6.012 (0.939)	77	97727			0.00- 52.91	22.86
119 tert-Amyl methyl ether					CAS #: 994-05-8		
6.082	6.082 (1.110)	87	100242	20.0000	20.408	80.00- 120.00	100.00
6.082	6.082 (1.110)	73	401745			376.47- 436.47	400.78
6.082	6.082 (1.110)	55	105304			75.02- 135.02	105.05
120 1,2-Dichloroethane					CAS #: 107-06-2		
6.110	6.110 (0.954)	62	168532	20.0000	19.362	80.00- 120.00	100.00
6.110	6.110 (0.954)	64	55984			2.46- 62.46	33.22
121 Heptane					CAS #: 142-82-5		
6.152	6.152 (0.961)	71	156341	20.0000	20.001	80.00- 120.00	100.00
6.152	6.152 (0.961)	43	263115			142.43- 202.43	168.30

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
121 Heptane (continued)							
6.152	6.152 (0.961)	57	177386			86.91- 146.91	113.46
125 Trichloroethene					CAS #: 79-01-6		
6.600	6.600 (1.031)	95	222963	20.0000	18.710	80.00- 120.00	100.00
6.600	6.600 (1.031)	130	247040			82.54- 142.54	110.80
6.600	6.600 (1.031)	97	141720			35.40- 95.40	63.56
127 Methylcyclohexane					CAS #: 108-87-2		
6.698	6.698 (1.222)	83	268520	20.0000	20.478	80.00- 120.00	100.00
6.698	6.698 (1.222)	98	130211			16.94- 76.94	48.49
6.684	6.684 (1.220)	55	209099			46.96- 106.96	77.87
132 1,2-Dichloropropane					CAS #: 78-87-5		
6.838	6.838 (1.068)	63	167527	20.0000	19.828	80.00- 120.00	100.00
6.838	6.838 (1.068)	62	118232			41.52- 101.52	70.57
6.838	6.838 (1.068)	41	78283			17.88- 77.88	46.73
136 1,4-Dioxane					CAS #: 123-91-1		
6.935	6.935 (1.083)	88	107322	20.0000	19.430	80.00- 120.00	100.00
6.935	6.935 (1.083)	58	69804			35.49- 95.49	65.04
6.935	6.935 (1.083)	57	23822			0.00- 50.66	22.20
138 Bromodichloromethane					CAS #: 75-27-4		
7.075	7.075 (1.105)	83	310876	20.0000	19.616	80.00- 120.00	100.00
7.075	7.075 (1.105)	85	204232			34.46- 94.46	65.70
144 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
7.453	7.453 (1.164)	75	280878	20.0000	19.605	80.00- 120.00	100.00
7.453	7.453 (1.164)	77	91319			1.77- 61.77	32.51
7.453	7.453 (1.164)	39	118018			11.11- 71.11	42.02
145 4-Methyl-2-pentanone					CAS #: 108-10-1		
7.565	7.565 (1.181)	58	139685	20.0000	18.939	80.00- 120.00	100.00
7.565	7.565 (1.181)	43	349490			220.64- 280.64	250.20
7.565	7.565 (1.181)	85	64955			17.04- 77.04	46.50
147 Toluene					CAS #: 108-88-3		
7.691	7.691 (1.201)	91	576123	20.0000	19.306	80.00- 120.00	100.00
7.691	7.691 (1.201)	92	339876			27.98- 87.98	58.99
150 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
7.943	7.943 (0.893)	75	252786	20.0000	19.708	80.00- 120.00	100.00
7.943	7.943 (0.893)	77	80599			1.64- 61.64	31.88
7.943	7.943 (0.893)	39	101937			10.07- 70.07	40.33

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
155 1,1,2-Trichloroethane					CAS #: 79-00-5		
8.097	8.097 (0.910)	97	203670	20.0000	19.558	80.00- 120.00	100.00
8.097	8.097 (0.910)	99	127957			32.91- 92.91	62.83
8.097	8.097 (0.910)	83	175883			55.03- 115.03	86.36
156 Tetrachloroethene					CAS #: 127-18-4		
8.139	8.139 (0.915)	166	314707	20.0000	20.206	80.00- 120.00	100.00
8.139	8.139 (0.915)	129	217402			41.30- 101.30	69.08
8.139	8.139 (0.915)	131	215278			39.67- 99.67	68.41
158 2-Hexanone					CAS #: 591-78-6		
8.265	8.265 (0.929)	58	193070	20.0000	19.653	80.00- 120.00	100.00
8.265	8.265 (0.929)	43	343872			147.18- 207.18	178.11
8.265	8.265 (0.929)	100	44890			0.00- 52.59	23.25
160 Dibromochloromethane					CAS #: 124-48-1		
8.419	8.419 (0.946)	129	392877	20.0000	19.794	80.00- 120.00	100.00
8.419	8.419 (0.946)	127	302968			47.74- 107.74	77.12
161 1,2-Dibromoethane (EDB)					CAS #: 106-93-4		
8.531	8.531 (0.959)	107	322379	20.0000	19.607	80.00- 120.00	100.00
8.531	8.531 (0.959)	109	300470			63.55- 123.55	93.20
165 Chlorobenzene					CAS #: 108-90-7		
8.908	8.908 (1.002)	112	494973	20.0000	19.657	80.00- 120.00	100.00
8.908	8.908 (1.002)	114	160205			1.75- 61.75	32.37
8.908	8.908 (1.002)	77	263039			22.27- 82.27	53.14
167 Ethyl Benzene					CAS #: 100-41-4		
8.964	8.964 (1.008)	106	254138	20.0000	19.641	80.00- 120.00	100.00
8.964	8.964 (1.008)	91	790630			278.96- 338.96	311.10
169 m,p-Xylene					CAS #: 108-38-3		
9.062	9.062 (1.019)	106	320132	20.0000	19.955	80.00- 120.00	100.00
9.062	9.062 (1.019)	91	613927			158.57- 218.57	191.77
171 o-Xylene					CAS #: 95-47-6		
9.398	9.398 (1.057)	106	301111	20.0000	20.046	80.00- 120.00	100.00
9.398	9.398 (1.057)	91	613364			173.40- 233.40	203.70
172 Styrene					CAS #: 100-42-5		
9.426	9.426 (1.060)	104	524506	20.0000	20.977	80.00- 120.00	100.00
9.426	9.426 (1.060)	78	235471			15.95- 75.95	44.89
174 Bromoform					CAS #: 75-25-2		
9.622	9.622 (1.082)	173	423416	20.0000	19.966	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
174 Bromoform (continued)							
9.622	9.622 (1.082)	171	215175			22.23- 82.23	50.82
175 Cumene					CAS #: 98-82-8		
9.692	9.692 (1.090)	105	942928	20.0000	20.237	80.00- 120.00	100.00
9.692	9.692 (1.090)	120	259588			0.00- 57.55	27.53
9.678	9.678 (1.088)	51	76247			0.00- 38.22	8.09
181 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
10.014	10.014 (1.126)	83	413394	20.0000	20.593	80.00- 120.00	100.00
10.014	10.014 (1.126)	85	270985			36.69- 96.69	65.55
182 Propylbenzene					CAS #: 103-65-1		
10.028	10.028 (1.127)	91	1092673	20.0000	19.889	80.00- 120.00	100.00
10.028	10.028 (1.127)	120	275091			0.00- 54.81	25.18
10.028	10.028 (1.127)	105	44272			0.00- 33.86	4.05
188 4-Ethyltoluene					CAS #: 622-96-8		
10.126	10.126 (1.138)	120	300557	20.0000	20.176	80.00- 120.00	100.00
10.126	10.126 (1.138)	105	966805			292.39- 352.39	321.67
190 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
10.182	10.182 (1.145)	120	401020	20.0000	19.838	80.00- 120.00	100.00
10.182	10.182 (1.145)	105	807752			169.92- 229.92	201.42
196 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
10.503	10.503 (1.181)	120	365934	20.0000	20.437	80.00- 120.00	100.00
10.503	10.503 (1.181)	105	772054			182.08- 242.08	210.98
208 1,3-Dichlorobenzene					CAS #: 541-73-1		
10.797	10.797 (1.214)	146	579713	20.0000	19.690	80.00- 120.00	100.00
10.797	10.797 (1.214)	148	368755			34.06- 94.06	63.61
10.797	10.797 (1.214)	111	204649			6.19- 66.19	35.30
209 1,4-Dichlorobenzene					CAS #: 106-46-7		
10.881	10.881 (1.223)	146	576359	20.0000	19.965	80.00- 120.00	100.00
10.881	10.881 (1.223)	148	362535			33.53- 93.53	62.90
10.881	10.881 (1.223)	111	207332			5.17- 65.17	35.97
212 alpha-Chlorotoluene					CAS #: 100-44-7		
10.993	10.993 (1.236)	91	698652	20.0000	19.788	80.00- 120.00	100.00
10.993	10.993 (1.236)	126	155827			0.00- 52.56	22.30
214 1,2-Dichlorobenzene					CAS #: 95-50-1		
11.203	11.203 (1.260)	146	551445	20.0000	20.131	80.00- 120.00	100.00
11.203	11.203 (1.260)	148	346099			33.19- 93.19	62.76

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
214 1,2-Dichlorobenzene (continued)							
11.203	11.203 (1.260)	111	207003			8.29- 68.29	37.54
226 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
12.630	12.630 (1.420)	180	375530	20.0000	17.716	80.00- 120.00	100.00
12.630	12.630 (1.420)	182	360373			66.05- 126.05	95.96
227 Hexachlorobutadiene					CAS #: 87-68-3		
12.714	12.714 (1.429)	225	287620	20.0000	18.052	80.00- 120.00	100.00
12.714	12.714 (1.429)	223	179143			33.34- 93.34	62.28
228 Naphthalene					CAS #: 91-20-3		
12.910	12.910 (1.451)	128	59074	2.00000	1.633	80.00- 120.00	100.00(a)
12.910	12.910 (1.451)	127	7896			0.00- 42.14	13.37

QC Flag Legend

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

Report Date: 04-Mar-2015 12:55

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdj.i
Lab File ID: j030405.d
Lab Smp Id: ICAL Level #5
Analysis Type: VOA
Quant Type: ISTD
Operator: mjs
Method File: /chem/msdj.i/04mar15.b/j15q0304a.m
Misc Info: 20ppbv(200ppbv)

Calibration Date: 04-MAR-2015
Calibration Time: 11:37
Client Smp ID: ICAL Level #5
Level: LOW
Sample Type: AIR

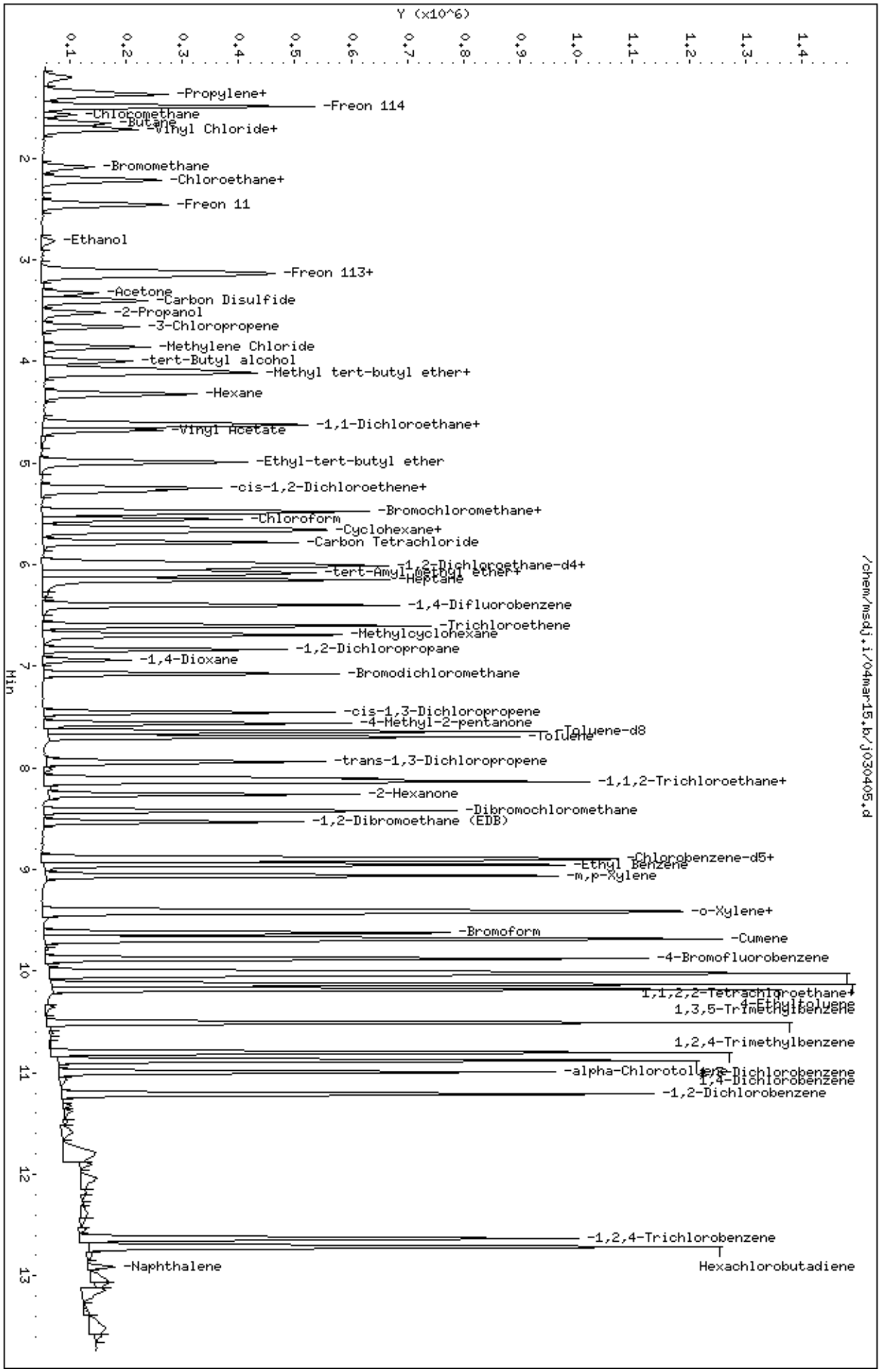
COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
98 Bromochloromethan	138152	82891	193413	134602	-2.57
123 1,4-Difluorobenze	594563	356738	832388	589171	-0.91
163 Chlorobenzene-d5	557711	334627	780795	556362	-0.24

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
98 Bromochloromethan	5.49	5.16	5.82	5.48	-0.26
123 1,4-Difluorobenze	6.40	6.07	6.73	6.40	0.00
163 Chlorobenzene-d5	8.89	8.56	9.22	8.89	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/msdj.i/04mar15.b/j030405.d
Date : 04-MAR-2015 11:12
Client ID: ICAL Level #5
Sample Info: 20ml #2716-50
Column phase: RTX-624

Instrument: msdj.i
Operator: mjs
Column diameter: 0.25



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Eurofins Air Toxics Inc.

EPA TO-15/MODIFIED EPA TO-14A

Data file : /chem/msdj.i/04mar15.b/j030406.d
Lab Smp Id: ICAL Level #6 Client Smp ID: ICAL Level #6
Inj Date : 04-MAR-2015 11:37
Operator : mjs Inst ID: msdj.i
Smp Info : 50ml #2716-50
Misc Info : 50ppbv(200ppbv)
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msdj.i/04mar15.b/j15q0304a.m
Meth Date : 04-Mar-2015 12:54 mskidmor Quant Type: ISTD
Cal Date : 04-MAR-2015 11:37 Cal File: j030406.d
Als bottle: 13 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT12.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
* 98 Bromochloromethane						CAS #: 74-97-5	
5.494	5.494 (1.000)	130	138152	25.0000		80.00- 120.00	100.00
5.494	5.494 (1.000)	128	108317			48.40- 108.40	78.40
5.494	5.494 (1.000)	49	158601			84.80- 144.80	114.80
* 123 1,4-Difluorobenzene						CAS #: 540-36-3	
6.404	6.404 (1.000)	114	594563	25.0000		80.00- 120.00	100.00
6.404	6.404 (1.000)	88	91419			0.00- 45.38	15.38
* 163 Chlorobenzene-d5						CAS #: 3114-55-4	
8.894	8.894 (1.000)	117	557711	25.0000		80.00- 120.00	100.00
8.894	8.894 (1.000)	82	281942			20.55- 80.55	50.55
$ 117 1,2-Dichloroethane-d4						CAS #: 17060-07-0	
6.054	6.054 (1.102)	65	162166	25.0000	25.000	80.00- 120.00	100.00
6.054	6.054 (1.102)	67	95157			28.68- 88.68	58.68

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
$ 146 Toluene-d8					CAS #: 2037-26-5		
7.649	7.649 (1.194)	98	604463	25.0000	25.000	80.00- 120.00	100.00
7.635	7.635 (1.192)	70	62022			0.00- 40.26	10.26
7.649	7.649 (1.194)	100	412024			38.16- 98.16	68.16
$ 177 4-Bromofluorobenzene					CAS #: 460-00-4		
9.888	9.888 (1.112)	174	357789	25.0000	25.000	80.00- 120.00	100.00
9.874	9.874 (1.110)	95	402762			82.57- 142.57	112.57
9.888	9.888 (1.112)	176	348674			67.45- 127.45	97.45
9 Propylene					CAS #: 115-07-1		
1.381	1.381 (0.251)	41	205982	50.0000	50.000	80.00- 120.00	100.00
1.381	1.381 (0.251)	42	135445			35.76- 95.76	65.76
1.381	1.381 (0.251)	39	139433			37.69- 97.69	67.69
11 Freon 12					CAS #: 75-71-8		
1.409	1.409 (0.256)	85	690997	50.0000	50.000	80.00- 120.00	100.00
1.409	1.409 (0.256)	87	226204			2.74- 62.74	32.74
15 Freon 114					CAS #: 76-14-2		
1.535	1.535 (0.279)	135	630332	50.0000	50.000	80.00- 120.00	100.00
1.535	1.535 (0.279)	137	198474			1.49- 61.49	31.49
17 Chloromethane					CAS #: 74-87-3		
1.619	1.619 (0.295)	50	212343	50.0000	50.000	80.00- 120.00	100.00
1.619	1.619 (0.295)	52	67730			1.90- 61.90	31.90
23 Butane					CAS #: 106-97-8		
1.689	1.689 (0.307)	58	54034	50.0000	50.000	80.00- 120.00	100.00
1.689	1.689 (0.307)	43	394087			699.33- 759.33	729.33
25 Vinyl Chloride					CAS #: 75-01-4		
1.731	1.731 (0.315)	62	283899	50.0000	50.000	80.00- 120.00	100.00
1.744	1.744 (0.318)	64	86535			0.48- 60.48	30.48
26 1,3-Butadiene					CAS #: 106-99-0		
1.758	1.758 (0.320)	54	214948	50.0000	50.000	80.00- 120.00	100.00
1.758	1.758 (0.320)	39	214739			69.90- 129.90	99.90
29 Bromomethane					CAS #: 74-83-9		
2.122	2.122 (0.386)	94	242543	50.0000	50.000	80.00- 120.00	100.00
2.122	2.122 (0.386)	96	225149			62.83- 122.83	92.83
30 Chloroethane					CAS #: 75-00-3		
2.248	2.248 (0.409)	64	142736	50.0000	50.000	80.00- 120.00	100.00
2.248	2.248 (0.409)	66	44674			1.30- 61.30	31.30

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
30 Chloroethane (continued)							
2.248	2.248 (0.409)	49	36478			0.00- 55.56	25.56
31 Isopentane					CAS #: 78-78-4		
2.262	2.262 (0.412)	43	322817	50.0000	50.000	80.00- 120.00	100.00
2.262	2.262 (0.412)	57	223566			39.25- 99.25	69.25
35 Freon 11					CAS #: 75-69-4		
2.500	2.500 (0.455)	101	751709	50.0000	50.000	80.00- 120.00	100.00
2.500	2.500 (0.455)	103	485103			34.53- 94.53	64.53
42 Ethanol					CAS #: 64-17-5		
2.850	2.850 (0.519)	45	109185	50.0000	50.000	80.00- 120.00	100.00
2.864	2.864 (0.521)	43	20502			0.00- 48.78	18.78
2.864	2.864 (0.521)	46	42734			9.14- 69.14	39.14
49 Freon 113					CAS #: 76-13-1		
3.158	3.158 (0.575)	151	606021	50.0000	50.000	80.00- 120.00	100.00
3.158	3.158 (0.575)	153	383543			33.29- 93.29	63.29
3.158	3.158 (0.575)	101	690766			83.98- 143.98	113.98
50 1,1-Dichloroethene					CAS #: 75-35-4		
3.200	3.200 (0.582)	98	196516	50.0000	50.000	80.00- 120.00	100.00
3.200	3.200 (0.582)	96	314238			129.90- 189.90	159.90
3.200	3.200 (0.582)	61	473111			210.75- 270.75	240.75
52 Acetone					CAS #: 67-64-1		
3.368	3.368 (0.613)	58	136869	50.0000	50.000	80.00- 120.00	100.00
3.368	3.368 (0.613)	43	410630			270.02- 330.02	300.02
56 Carbon Disulfide					CAS #: 75-15-0		
3.438	3.438 (0.626)	76	884842	50.0000	50.000	80.00- 120.00	100.00
57 2-Propanol					CAS #: 67-63-0		
3.549	3.549 (0.646)	45	506184	50.0000	50.000	80.00- 120.00	100.00
3.549	3.549 (0.646)	43	89553			0.00- 47.69	17.69
3.549	3.549 (0.646)	59	19474			0.00- 33.85	3.85
58 3-Chloropropene					CAS #: 107-05-1		
3.703	3.703 (0.674)	76	153385	50.0000	50.000	80.00- 120.00	100.00
3.689	3.689 (0.671)	41	377267			215.96- 275.96	245.96
66 Methylene Chloride					CAS #: 75-09-2		
3.885	3.885 (0.707)	49	339670	50.0000	50.000	80.00- 120.00	100.00
3.885	3.885 (0.707)	84	275711			51.17- 111.17	81.17
3.885	3.885 (0.707)	51	99900			0.00- 59.41	29.41

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
71 tert-Butyl alcohol					CAS #: 75-65-0		
4.025	4.025 (0.733)	59	600094	50.0000	50.000	80.00- 120.00	100.00
4.025	4.025 (0.733)	41	129841			0.00- 51.64	21.64
4.025	4.025 (0.733)	57	62702			0.00- 40.45	10.45
72 Methyl tert-butyl ether					CAS #: 1634-04-4		
4.109	4.109 (0.748)	73	857588	50.0000	50.000	80.00- 120.00	100.00
4.109	4.109 (0.748)	57	193580			0.00- 52.57	22.57
4.109	4.109 (0.748)	41	178544			0.00- 50.82	20.82
73 trans-1,2-Dichloroethene					CAS #: 156-60-5		
4.137	4.137 (0.753)	98	211248	50.0000	50.000	80.00- 120.00	100.00
4.137	4.137 (0.753)	61	455773			185.75- 245.75	215.75
4.137	4.137 (0.753)	96	335404			128.77- 188.77	158.77
78 Hexane					CAS #: 110-54-3		
4.347	4.347 (0.791)	57	497839	50.0000	50.000	80.00- 120.00	100.00
4.347	4.347 (0.791)	43	310296			32.33- 92.33	62.33
4.361	4.361 (0.794)	86	84906			0.00- 47.05	17.05
82 1,1-Dichloroethane					CAS #: 75-34-3		
4.655	4.655 (0.847)	63	577963	50.0000	50.000	80.00- 120.00	100.00
4.655	4.655 (0.847)	65	183965			1.83- 61.83	31.83
83 Isopropyl ether					CAS #: 108-20-3		
4.641	4.641 (0.845)	45	1054301	50.0000	50.000	80.00- 120.00	100.00
4.641	4.641 (0.845)	87	300508			0.00- 58.50	28.50
4.641	4.641 (0.845)	59	121656			0.00- 41.54	11.54
86 Vinyl Acetate					CAS #: 108-05-4		
4.697	4.697 (0.855)	86	89910	50.0000	50.000	80.00- 120.00	100.00
4.697	4.697 (0.855)	43	951240			1027.99-1087.99	1057.99
88 Ethyl-tert-butyl ether					CAS #: 637-92-3		
5.005	5.005 (0.911)	59	1014412	50.0000	50.000	80.00- 120.00	100.00
5.005	5.005 (0.911)	87	440136			13.39- 73.39	43.39
5.005	5.005 (0.911)	41	171404			0.00- 46.90	16.90
91 cis-1,2-Dichloroethene					CAS #: 156-59-2		
5.256	5.256 (0.957)	98	241300	50.0000	50.000	80.00- 120.00	100.00
5.256	5.256 (0.957)	96	362926			120.40- 180.40	150.40
5.256	5.256 (0.957)	61	450697			156.78- 216.78	186.78
92 2-Butanone					CAS #: 78-93-3		
5.284	5.284 (0.962)	72	172969	50.0000	50.000	80.00- 120.00	100.00
5.284	5.284 (0.962)	43	649112			345.28- 405.28	375.28

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
92 2-Butanone (continued)							
5.284	5.284 (0.962)	57	53005			0.64- 60.64	30.64
99 Tetrahydrofuran					CAS #: 109-99-9		
5.494	5.494 (1.000)	42	378237	50.0000	50.000	80.00- 120.00	100.00
5.494	5.494 (1.000)	71	151988			10.18- 70.18	40.18
5.494	5.494 (1.000)	72	165008			13.63- 73.63	43.63
100 Chloroform					CAS #: 67-66-3		
5.564	5.564 (1.013)	83	680752	50.0000	50.000	80.00- 120.00	100.00
5.564	5.564 (1.013)	85	451968			36.39- 96.39	66.39
102 Cyclohexane					CAS #: 110-82-7		
5.662	5.662 (1.031)	84	477832	50.0000	50.000	80.00- 120.00	100.00
5.662	5.662 (1.031)	56	554100			85.96- 145.96	115.96
5.662	5.662 (1.031)	41	275403			27.64- 87.64	57.64
103 1,1,1-Trichloroethane					CAS #: 71-55-6		
5.690	5.690 (1.036)	97	713364	50.0000	50.000	80.00- 120.00	100.00
5.690	5.690 (1.036)	99	460558			34.56- 94.56	64.56
106 Carbon Tetrachloride					CAS #: 56-23-5		
5.802	5.802 (1.056)	119	764171	50.0000	50.000	80.00- 120.00	100.00
5.802	5.802 (1.056)	117	809759			75.97- 135.97	105.97
113 2,2,4-Trimethylpentane					CAS #: 540-84-1		
5.998	5.998 (1.092)	57	1366619	50.0000	50.000	80.00- 120.00	100.00
5.998	5.998 (1.092)	56	405439			0.00- 59.67	29.67
5.998	5.998 (1.092)	41	283425			0.00- 50.74	20.74
116 Benzene					CAS #: 71-43-2		
6.026	6.026 (0.941)	78	1074475	50.0000	50.000	80.00- 120.00	100.00
6.026	6.026 (0.941)	77	246164			0.00- 52.91	22.91
119 tert-Amyl methyl ether					CAS #: 994-05-8		
6.096	6.096 (1.109)	87	248947	50.0000	50.000	80.00- 120.00	100.00
6.096	6.096 (1.109)	73	1011902			376.47- 436.47	406.47
6.096	6.096 (1.109)	55	261438			75.02- 135.02	105.02
120 1,2-Dichloroethane					CAS #: 107-06-2		
6.124	6.124 (0.956)	62	425915	50.0000	50.000	80.00- 120.00	100.00
6.124	6.124 (0.956)	64	138232			2.46- 62.46	32.46
121 Heptane					CAS #: 142-82-5		
6.166	6.166 (0.963)	71	381346	50.0000	50.000	80.00- 120.00	100.00
6.166	6.166 (0.963)	43	657564			142.43- 202.43	172.43

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
121 Heptane (continued)							
6.166	6.166 (0.963)	57	445844			86.91- 146.91	116.91
125 Trichloroethene					CAS #: 79-01-6		
6.600	6.600 (1.031)	95	548707	50.0000	50.000	80.00- 120.00	100.00
6.600	6.600 (1.031)	130	617518			82.54- 142.54	112.54
6.600	6.600 (1.031)	97	358880			35.40- 95.40	65.40
127 Methylcyclohexane					CAS #: 108-87-2		
6.698	6.698 (1.219)	83	668574	50.0000	50.000	80.00- 120.00	100.00
6.698	6.698 (1.219)	98	313835			16.94- 76.94	46.94
6.698	6.698 (1.219)	55	514511			46.96- 106.96	76.96
132 1,2-Dichloropropane					CAS #: 78-87-5		
6.852	6.852 (1.070)	63	409329	50.0000	50.000	80.00- 120.00	100.00
6.852	6.852 (1.070)	62	292760			41.52- 101.52	71.52
6.852	6.852 (1.070)	41	196006			17.88- 77.88	47.88
136 1,4-Dioxane					CAS #: 123-91-1		
6.935	6.935 (1.083)	88	276456	50.0000	50.000	80.00- 120.00	100.00
6.935	6.935 (1.083)	58	181055			35.49- 95.49	65.49
6.935	6.935 (1.083)	57	57126			0.00- 50.66	20.66
138 Bromodichloromethane					CAS #: 75-27-4		
7.075	7.075 (1.105)	83	791267	50.0000	50.000	80.00- 120.00	100.00
7.075	7.075 (1.105)	85	510060			34.46- 94.46	64.46
144 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
7.467	7.467 (1.166)	75	720657	50.0000	50.000	80.00- 120.00	100.00
7.467	7.467 (1.166)	77	228959			1.77- 61.77	31.77
7.467	7.467 (1.166)	39	296234			11.11- 71.11	41.11
145 4-Methyl-2-pentanone					CAS #: 108-10-1		
7.579	7.579 (1.184)	58	342381	50.0000	50.000	80.00- 120.00	100.00
7.579	7.579 (1.184)	43	858128			220.64- 280.64	250.64
7.579	7.579 (1.184)	85	161057			17.04- 77.04	47.04
147 Toluene					CAS #: 108-88-3		
7.705	7.705 (1.203)	91	1430696	50.0000	50.000	80.00- 120.00	100.00
7.705	7.705 (1.203)	92	829494			27.98- 87.98	57.98
150 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
7.943	7.943 (0.893)	75	646637	50.0000	50.000	80.00- 120.00	100.00
7.943	7.943 (0.893)	77	204578			1.64- 61.64	31.64
7.943	7.943 (0.893)	39	259090			10.07- 70.07	40.07

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

  155 1,1,2-Trichloroethane                          CAS #: 79-00-5
  8.111   8.111 (0.912)    97    505104 50.0000   50.000  80.00- 120.00   100.00
  8.111   8.111 (0.912)    99    317785                   32.91-  92.91    62.91
  8.111   8.111 (0.912)    83    429482                   55.03- 115.03    85.03
-------------------------------------------------------------------------------
  156 Tetrachloroethene                              CAS #: 127-18-4
  8.139   8.139 (0.915)   166    773665 50.0000   50.000  80.00- 120.00   100.00
  8.139   8.139 (0.915)   129    551623                   41.30- 101.30    71.30
  8.139   8.139 (0.915)   131    539026                   39.67-  99.67    69.67
-------------------------------------------------------------------------------
  158 2-Hexanone                                     CAS #: 591-78-6
  8.265   8.265 (0.929)    58    480026 50.0000   50.000  80.00- 120.00   100.00
  8.265   8.265 (0.929)    43    850514                  147.18- 207.18   177.18
  8.279   8.279 (0.931)   100    108456                    0.00-  52.59    22.59
-------------------------------------------------------------------------------
  160 Dibromochloromethane                           CAS #: 124-48-1
  8.419   8.419 (0.946)   129    980187 50.0000   50.000  80.00- 120.00   100.00
  8.419   8.419 (0.946)   127    761971                   47.74- 107.74    77.74
-------------------------------------------------------------------------------
  161 1,2-Dibromoethane (EDB)                        CAS #: 106-93-4
  8.545   8.545 (0.961)   107    796994 50.0000   50.000  80.00- 120.00   100.00
  8.545   8.545 (0.961)   109    745619                   63.55- 123.55    93.55
-------------------------------------------------------------------------------
  165 Chlorobenzene                                  CAS #: 108-90-7
  8.922   8.922 (1.003)   112   1232977 50.0000   50.000  80.00- 120.00   100.00
  8.922   8.922 (1.003)   114    391525                    1.75-  61.75    31.75
  8.908   8.908 (1.002)    77    644465                   22.27-  82.27    52.27
-------------------------------------------------------------------------------
  167 Ethyl Benzene                                  CAS #: 100-41-4
  8.964   8.964 (1.008)   106    628027 50.0000   50.000  80.00- 120.00   100.00
  8.964   8.964 (1.008)    91   1940358                  278.96- 338.96   308.96
-------------------------------------------------------------------------------
  169 m,p-Xylene                                     CAS #: 108-38-3
  9.062   9.062 (1.019)   106    778354 50.0000   50.000  80.00- 120.00   100.00
  9.062   9.062 (1.019)    91   1467754                  158.57- 218.57   188.57
-------------------------------------------------------------------------------
  171 o-Xylene                                       CAS #: 95-47-6
  9.398   9.398 (1.057)   106    731070 50.0000   50.000  80.00- 120.00   100.00
  9.398   9.398 (1.057)    91   1486967                  173.40- 233.40   203.40
-------------------------------------------------------------------------------
  172 Styrene                                        CAS #: 100-42-5
  9.426   9.426 (1.060)   104   1234827 50.0000   50.000  80.00- 120.00   100.00
  9.426   9.426 (1.060)    78    567358                   15.95-  75.95    45.95
-------------------------------------------------------------------------------
  174 Bromoform                                      CAS #: 75-25-2
  9.636   9.636 (1.083)   173   1031715 50.0000   50.000  80.00- 120.00   100.00
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                                        AMOUNTS
                                     CAL-AMT   ON-COL
   RT   EXP RT (REL RT)  MASS  RESPONSE ( PPBV)  ( PPBV)   TARGET RANGE    RATIO
   ==   ====== ========  ====  ======== =======  =======   ============    =====

  174 Bromoform (continued)
  9.636   9.636 (1.083)   171    538882                    22.23-  82.23    52.23
-------------------------------------------------------------------------------
  175 Cumene                                        CAS #: 98-82-8
  9.692   9.692 (1.090)   105   2225958 50.0000   50.000  80.00- 120.00   100.00
  9.692   9.692 (1.090)   120    613267                     0.00-  57.55    27.55
  9.692   9.692 (1.090)    51    182930                     0.00-  38.22     8.22
-------------------------------------------------------------------------------
  181 1,1,2,2-Tetrachloroethane                     CAS #: 79-34-5
 10.014  10.014 (1.126)    83    990811 50.0000   50.000  80.00- 120.00   100.00
 10.014  10.014 (1.126)    85    660769                    36.69-  96.69    66.69
-------------------------------------------------------------------------------
  182 Propylbenzene                                 CAS #: 103-65-1
 10.028  10.028 (1.127)    91   2684642 50.0000   50.000  80.00- 120.00   100.00
 10.042  10.042 (1.129)   120    666000                     0.00-  54.81    24.81
 10.028  10.028 (1.127)   105    103560                     0.00-  33.86     3.86
-------------------------------------------------------------------------------
  188 4-Ethyltoluene                                CAS #: 622-96-8
 10.126  10.126 (1.138)   120    735447 50.0000   50.000  80.00- 120.00   100.00
 10.126  10.126 (1.138)   105   2370976                   292.39- 352.39   322.39
-------------------------------------------------------------------------------
  190 1,3,5-Trimethylbenzene                        CAS #: 108-67-8
 10.182  10.182 (1.145)   120    997496 50.0000   50.000  80.00- 120.00   100.00
 10.182  10.182 (1.145)   105   1994152                   169.92- 229.92   199.92
-------------------------------------------------------------------------------
  196 1,2,4-Trimethylbenzene                        CAS #: 95-63-6
 10.503  10.503 (1.181)   120    903361 50.0000   50.000  80.00- 120.00   100.00
 10.503  10.503 (1.181)   105   1915853                   182.08- 242.08   212.08
-------------------------------------------------------------------------------
  208 1,3-Dichlorobenzene                           CAS #: 541-73-1
 10.797  10.797 (1.214)   146   1457130 50.0000   50.000  80.00- 120.00   100.00
 10.797  10.797 (1.214)   148    933443                    34.06-  94.06    64.06
 10.797  10.797 (1.214)   111    527373                     6.19-  66.19    36.19
-------------------------------------------------------------------------------
  209 1,4-Dichlorobenzene                           CAS #: 106-46-7
 10.881  10.881 (1.223)   146   1462986 50.0000   50.000  80.00- 120.00   100.00
 10.881  10.881 (1.223)   148    929413                    33.53-  93.53    63.53
 10.881  10.881 (1.223)   111    514585                     5.17-  65.17    35.17
-------------------------------------------------------------------------------
  212 alpha-Chlorotoluene                           CAS #: 100-44-7
 10.993  10.993 (1.236)    91   1790496 50.0000   50.000  80.00- 120.00   100.00
 10.993  10.993 (1.236)   126    403968                     0.00-  52.56    22.56
-------------------------------------------------------------------------------
  214 1,2-Dichlorobenzene                           CAS #: 95-50-1
 11.203  11.203 (1.260)   146   1382372 50.0000   50.000  80.00- 120.00   100.00
 11.203  11.203 (1.260)   148    873537                    33.19-  93.19    63.19
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RT	EXP RT	(REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
214 1,2-Dichlorobenzene (continued)								
11.203	11.203	(1.260)	111	529331			8.29- 68.29	38.29
226 1,2,4-Trichlorobenzene						CAS #: 120-82-1		
12.630	12.630	(1.420)	180	1081846	50.0000	50.000	80.00- 120.00	100.00
12.630	12.630	(1.420)	182	1039109			66.05- 126.05	96.05
227 Hexachlorobutadiene						CAS #: 87-68-3		
12.714	12.714	(1.429)	225	788348	50.0000	50.000	80.00- 120.00	100.00
12.714	12.714	(1.429)	223	499306			33.34- 93.34	63.34
228 Naphthalene						CAS #: 91-20-3		
12.910	12.910	(1.451)	128	169860	5.00000	5.000	80.00- 120.00	100.00
12.910	12.910	(1.451)	127	20614			0.00- 42.14	12.14

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdj.i
Lab File ID: j030406.d
Lab Smp Id: ICAL Level #6
Analysis Type: VOA
Quant Type: ISTD
Operator: mjs
Method File: /chem/msdj.i/04mar15.b/j15q0304a.m
Misc Info: 50ppbv(200ppbv)

Calibration Date: 04-MAR-2015
Calibration Time: 11:37
Client Smp ID: ICAL Level #6
Level: LOW
Sample Type: AIR

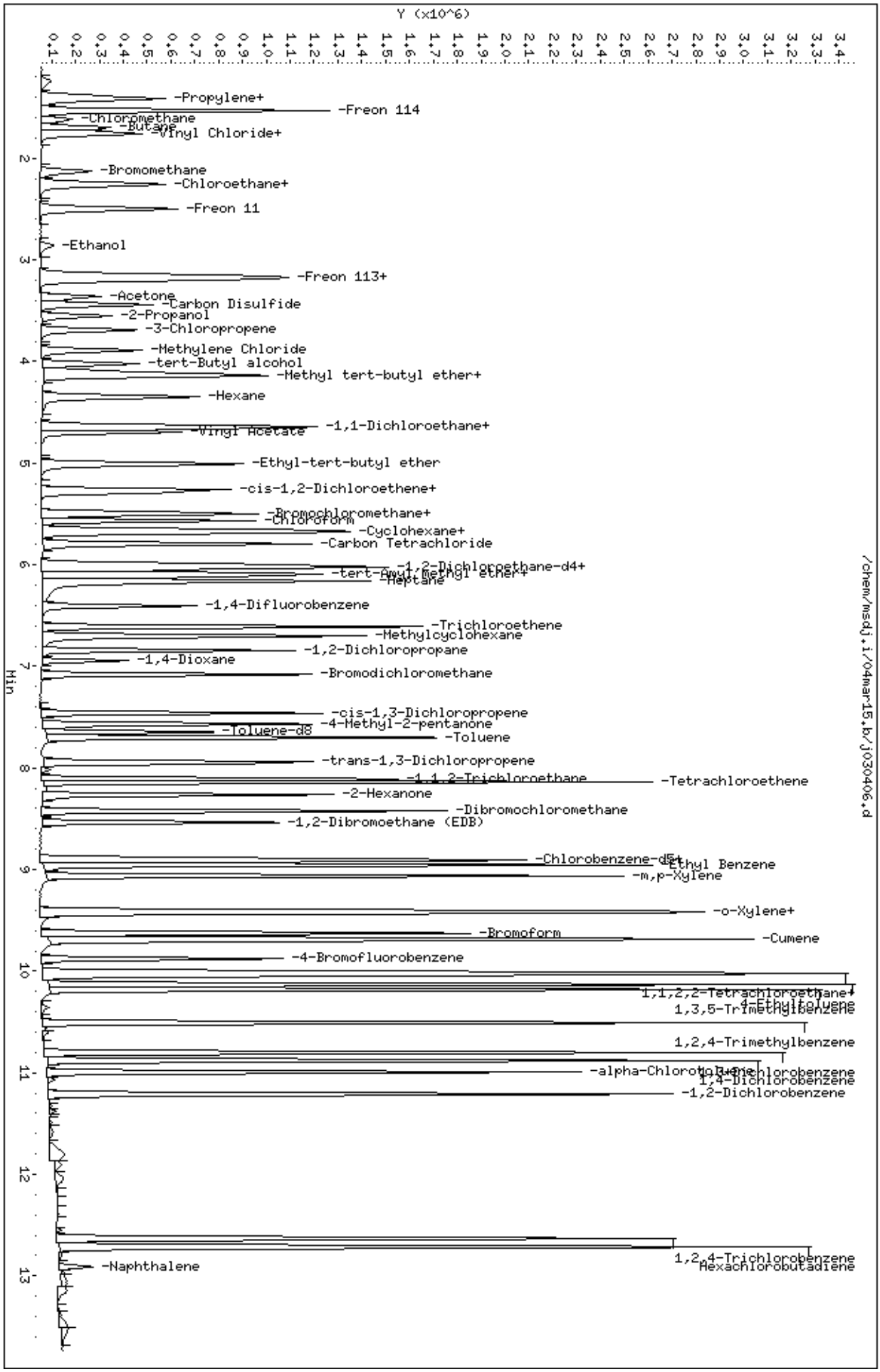
COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
98 Bromochloromethan	138152	82891	193413	138152	0.00
123 1,4-Difluorobenze	594563	356738	832388	594563	0.00
163 Chlorobenzene-d5	557711	334627	780795	557711	0.00

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
98 Bromochloromethan	5.49	5.16	5.82	5.49	0.00
123 1,4-Difluorobenze	6.40	6.07	6.73	6.40	0.00
163 Chlorobenzene-d5	8.89	8.56	9.22	8.89	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/msdj.i/04mar15.b/j030406.d
Date : 04-MAR-2015 11:37
Client ID: ICAL Level #6
Sample Info: 50ml #2716-50
Column phase: RTX-624

Instrument: msdj.i
Operator: mjs
Column diameter: 0.25



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Eurofins Air Toxics Inc.

EPA TO-15/MODIFIED EPA TO-14A

Data file : /chem/msdj.i/04mar15.b/j030407.d
Lab Smp Id: ICAL Level #7 Client Smp ID: ICAL Level #7
Inj Date : 04-MAR-2015 12:04
Operator : mjs Inst ID: msdj.i
Smp Info : 100ml #2716-50
Misc Info : 100ppbv(200ppbv)
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msdj.i/04mar15.b/j15q0304a.m
Meth Date : 04-Mar-2015 12:55 mskidmor Quant Type: ISTD
Cal Date : 04-MAR-2015 12:04 Cal File: j030407.d
Als bottle: 13 Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT12.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
* 98 Bromochloromethane						CAS #: 74-97-5	
5.494	5.494 (1.000)	130	136594	25.0000		80.00- 120.00	100.00
5.494	5.494 (1.000)	128	105375			48.40- 108.40	77.14
5.480	5.480 (1.000)	49	155972			84.80- 144.80	114.19
* 123 1,4-Difluorobenzene						CAS #: 540-36-3	
6.404	6.404 (1.000)	114	584687	25.0000		80.00- 120.00	100.00
6.404	6.404 (1.000)	88	88690			0.00- 45.38	15.17
* 163 Chlorobenzene-d5						CAS #: 3114-55-4	
8.894	8.894 (1.000)	117	558173	25.0000		80.00- 120.00	100.00
8.894	8.894 (1.000)	82	284705			20.55- 80.55	51.01
$ 117 1,2-Dichloroethane-d4						CAS #: 17060-07-0	
6.040	6.040 (1.099)	65	150306	25.0000	24.000	80.00- 120.00	100.00
6.040	6.040 (1.099)	67	97184			28.68- 88.68	64.66

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
$ 146 Toluene-d8					CAS #: 2037-26-5		
7.635	7.635 (1.192)	98	597467	25.0000	25.041	80.00- 120.00	100.00
7.635	7.635 (1.192)	70	61190			0.00- 40.26	10.24
7.635	7.635 (1.192)	100	405784			38.16- 98.16	67.92
$ 177 4-Bromofluorobenzene					CAS #: 460-00-4		
9.888	9.888 (1.112)	174	361257	25.0000	24.999	80.00- 120.00	100.00
9.874	9.874 (1.110)	95	402444			82.57- 142.57	111.40
9.888	9.888 (1.112)	176	356540			67.45- 127.45	98.69
9 Propylene					CAS #: 115-07-1		
1.353	1.353 (0.246)	41	382177	100.000	93.012	80.00- 120.00	100.00
1.353	1.353 (0.246)	42	253759			35.76- 95.76	66.40
1.353	1.353 (0.246)	39	267168			37.69- 97.69	69.91
11 Freon 12					CAS #: 75-71-8		
1.381	1.381 (0.251)	85	1299333	100.000	92.701	80.00- 120.00	100.00
1.381	1.381 (0.251)	87	421396			2.74- 62.74	32.43
15 Freon 114					CAS #: 76-14-2		
1.507	1.507 (0.274)	135	1177593	100.000	92.006	80.00- 120.00	100.00
1.507	1.507 (0.274)	137	372945			1.49- 61.49	31.67
17 Chloromethane					CAS #: 74-87-3		
1.591	1.591 (0.289)	50	397374	100.000	97.641	80.00- 120.00	100.00
1.591	1.591 (0.289)	52	126748			1.90- 61.90	31.90
23 Butane					CAS #: 106-97-8		
1.660	1.660 (0.302)	58	103628	100.000	96.008	80.00- 120.00	100.00
1.660	1.660 (0.302)	43	748692			699.33- 759.33	722.48
25 Vinyl Chloride					CAS #: 75-01-4		
1.702	1.702 (0.310)	62	525982	100.000	96.120	80.00- 120.00	100.00
1.702	1.702 (0.310)	64	159996			0.48- 60.48	30.42
26 1,3-Butadiene					CAS #: 106-99-0		
1.730	1.730 (0.315)	54	397259	100.000	93.554	80.00- 120.00	100.00
1.730	1.730 (0.315)	39	396311			69.90- 129.90	99.76
29 Bromomethane					CAS #: 74-83-9		
2.094	2.094 (0.381)	94	452460	100.000	100.47	80.00- 120.00	100.00
2.094	2.094 (0.381)	96	426037			62.83- 122.83	94.16
30 Chloroethane					CAS #: 75-00-3		
2.220	2.220 (0.404)	64	260607	100.000	91.942	80.00- 120.00	100.00
2.206	2.206 (0.402)	66	84694			1.30- 61.30	32.50

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
30 Chloroethane (continued)							
2.220	2.220 (0.404)	49	68487			0.00- 55.56	26.28
31 Isopentane					CAS #: 78-78-4		
2.234	2.234 (0.407)	43	600590	100.000	91.915	80.00- 120.00	100.00
2.234	2.234 (0.407)	57	422872			39.25- 99.25	70.41
35 Freon 11					CAS #: 75-69-4		
2.472	2.472 (0.450)	101	1404125	100.000	92.770	80.00- 120.00	100.00
2.472	2.472 (0.450)	103	914362			34.53- 94.53	65.12
42 Ethanol					CAS #: 64-17-5		
2.822	2.822 (0.514)	45	201890	100.000	83.725	80.00- 120.00	100.00
2.822	2.822 (0.514)	43	38528			0.00- 48.78	19.08
2.822	2.822 (0.514)	46	78527			9.14- 69.14	38.90
49 Freon 113					CAS #: 76-13-1		
3.130	3.130 (0.570)	151	1133671	100.000	90.592	80.00- 120.00	100.00
3.130	3.130 (0.570)	153	728578			33.29- 93.29	64.27
3.130	3.130 (0.570)	101	1287589			83.98- 143.98	113.58
50 1,1-Dichloroethene					CAS #: 75-35-4		
3.172	3.172 (0.577)	98	367819	100.000	95.467	80.00- 120.00	100.00
3.172	3.172 (0.577)	96	583487			129.90- 189.90	158.63
3.158	3.158 (0.575)	61	884801			210.75- 270.75	240.55
52 Acetone					CAS #: 67-64-1		
3.340	3.340 (0.608)	58	251265	100.000	92.933	80.00- 120.00	100.00
3.340	3.340 (0.608)	43	746494			270.02- 330.02	297.09
56 Carbon Disulfide					CAS #: 75-15-0		
3.409	3.409 (0.621)	76	1620970	100.000	92.205	80.00- 120.00	100.00
57 2-Propanol					CAS #: 67-63-0		
3.521	3.521 (0.641)	45	946581	100.000	96.377	80.00- 120.00	100.00
3.521	3.521 (0.641)	43	166824			0.00- 47.69	17.62
3.521	3.521 (0.641)	59	39528			0.00- 33.85	4.18
58 3-Chloropropene					CAS #: 107-05-1		
3.675	3.675 (0.669)	76	284657	100.000	94.661	80.00- 120.00	100.00
3.675	3.675 (0.669)	41	704397			215.96- 275.96	247.45
66 Methylene Chloride					CAS #: 75-09-2		
3.871	3.871 (0.705)	49	621255	100.000	92.436	80.00- 120.00	100.00
3.871	3.871 (0.705)	84	503261			51.17- 111.17	81.01
3.871	3.871 (0.705)	51	186068			0.00- 59.41	29.95

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
71 tert-Butyl alcohol					CAS #: 75-65-0		
4.011	4.011 (0.730)	59	1110998	100.000	95.546	80.00- 120.00	100.00
3.997	3.997 (0.728)	41	241550			0.00- 51.64	21.74
4.011	4.011 (0.730)	57	113748			0.00- 40.45	10.24
72 Methyl tert-butyl ether					CAS #: 1634-04-4		
4.095	4.095 (0.745)	73	1621608	100.000	95.815	80.00- 120.00	100.00
4.095	4.095 (0.745)	57	373206			0.00- 52.57	23.01
4.095	4.095 (0.745)	41	336985			0.00- 50.82	20.78
73 trans-1,2-Dichloroethene					CAS #: 156-60-5		
4.123	4.123 (0.750)	98	394041	100.000	92.213	80.00- 120.00	100.00
4.123	4.123 (0.750)	61	839957			185.75- 245.75	213.16
4.123	4.123 (0.750)	96	623035			128.77- 188.77	158.11
78 Hexane					CAS #: 110-54-3		
4.333	4.333 (0.789)	57	936054	100.000	94.990	80.00- 120.00	100.00
4.333	4.333 (0.789)	43	573669			32.33- 92.33	61.29
4.333	4.333 (0.789)	86	156995			0.00- 47.05	16.77
82 1,1-Dichloroethane					CAS #: 75-34-3		
4.641	4.641 (0.845)	63	1069110	100.000	90.992	80.00- 120.00	100.00
4.641	4.641 (0.845)	65	337286			1.83- 61.83	31.55
83 Isopropyl ether					CAS #: 108-20-3		
4.613	4.613 (0.840)	45	1969059	100.000	93.287	80.00- 120.00	100.00
4.627	4.627 (0.842)	87	563016			0.00- 58.50	28.59
4.613	4.613 (0.840)	59	229532			0.00- 41.54	11.66
86 Vinyl Acetate					CAS #: 108-05-4		
4.683	4.683 (0.852)	86	167672	100.000	95.267	80.00- 120.00	100.00
4.683	4.683 (0.852)	43	1686456			1027.99-1087.99	1005.81
88 Ethyl-tert-butyl ether					CAS #: 637-92-3		
4.991	4.991 (0.908)	59	1902462	100.000	95.094	80.00- 120.00	100.00
4.991	4.991 (0.908)	87	820203			13.39- 73.39	43.11
4.991	4.991 (0.908)	41	320982			0.00- 46.90	16.87
91 cis-1,2-Dichloroethene					CAS #: 156-59-2		
5.242	5.242 (0.954)	98	442983	100.000	95.672	80.00- 120.00	100.00
5.242	5.242 (0.954)	96	691151			120.40- 180.40	156.02
5.242	5.242 (0.954)	61	836173			156.78- 216.78	188.76
92 2-Butanone					CAS #: 78-93-3		
5.270	5.270 (0.959)	72	320390	100.000	92.503	80.00- 120.00	100.00
5.270	5.270 (0.959)	43	1221931			345.28- 405.28	381.39

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
92 2-Butanone (continued)							
5.270	5.270 (0.959)	57	99558			0.64- 60.64	31.07
99 Tetrahydrofuran					CAS #: 109-99-9		
5.480	5.480 (0.997)	42	700416	100.000	91.245	80.00- 120.00	100.00
5.480	5.480 (0.997)	71	290712			10.18- 70.18	41.51
5.480	5.480 (0.997)	72	306103			13.63- 73.63	43.70
100 Chloroform					CAS #: 67-66-3		
5.550	5.550 (1.010)	83	1263289	100.000	91.647	80.00- 120.00	100.00
5.550	5.550 (1.010)	85	834017			36.39- 96.39	66.02
102 Cyclohexane					CAS #: 110-82-7		
5.648	5.648 (1.028)	84	885775	100.000	93.183	80.00- 120.00	100.00
5.648	5.648 (1.028)	56	1020959			85.96- 145.96	115.26
5.648	5.648 (1.028)	41	514945			27.64- 87.64	58.13
103 1,1,1-Trichloroethane					CAS #: 71-55-6		
5.676	5.676 (1.033)	97	1311819	100.000	91.756	80.00- 120.00	100.00
5.676	5.676 (1.033)	99	841086			34.56- 94.56	64.12
106 Carbon Tetrachloride					CAS #: 56-23-5		
5.788	5.788 (1.053)	119	1449259	100.000	93.903	80.00- 120.00	100.00
5.788	5.788 (1.053)	117	1508851			75.97- 135.97	104.11
113 2,2,4-Trimethylpentane					CAS #: 540-84-1		
5.984	5.984 (1.089)	57	2803075	100.000	98.394	80.00- 120.00	100.00
5.984	5.984 (1.089)	56	822184			0.00- 59.67	29.33
5.984	5.984 (1.089)	41	579677			0.00- 50.74	20.68
116 Benzene					CAS #: 71-43-2		
6.012	6.012 (0.939)	78	2026324	100.000	96.290	80.00- 120.00	100.00
6.012	6.012 (0.939)	77	456549			0.00- 52.91	22.53
119 tert-Amyl methyl ether					CAS #: 994-05-8		
6.082	6.082 (1.107)	87	474291	100.000	96.317	80.00- 120.00	100.00
6.082	6.082 (1.107)	73	1914885			376.47- 436.47	403.74
6.082	6.082 (1.107)	55	488686			75.02- 135.02	103.04
120 1,2-Dichloroethane					CAS #: 107-06-2		
6.110	6.110 (0.954)	62	789140	100.000	92.963	80.00- 120.00	100.00
6.110	6.110 (0.954)	64	255406			2.46- 62.46	32.37
121 Heptane					CAS #: 142-82-5		
6.152	6.152 (0.961)	71	721499	100.000	94.328	80.00- 120.00	100.00
6.152	6.152 (0.961)	43	1227995			142.43- 202.43	170.20

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
121 Heptane (continued)							
6.152	6.152 (0.961)	57	799724			86.91- 146.91	110.84
125 Trichloroethene					CAS #: 79-01-6		
6.600	6.600 (1.031)	95	1030212	100.000	89.417	80.00- 120.00	100.00
6.600	6.600 (1.031)	130	1144545			82.54- 142.54	111.10
6.600	6.600 (1.031)	97	658285			35.40- 95.40	63.90
127 Methylcyclohexane					CAS #: 108-87-2		
6.698	6.698 (1.219)	83	1260886	100.000	96.016	80.00- 120.00	100.00
6.698	6.698 (1.219)	98	599251			16.94- 76.94	47.53
6.698	6.698 (1.219)	55	959670			46.96- 106.96	76.11
132 1,2-Dichloropropane					CAS #: 78-87-5		
6.837	6.837 (1.068)	63	765908	100.000	92.956	80.00- 120.00	100.00
6.837	6.837 (1.068)	62	545298			41.52- 101.52	71.20
6.837	6.837 (1.068)	41	360083			17.88- 77.88	47.01
136 1,4-Dioxane					CAS #: 123-91-1		
6.935	6.935 (1.083)	88	523850	100.000	96.636	80.00- 120.00	100.00
6.935	6.935 (1.083)	58	338387			35.49- 95.49	64.60
6.935	6.935 (1.083)	57	110433			0.00- 50.66	21.08
138 Bromodichloromethane					CAS #: 75-27-4		
7.075	7.075 (1.105)	83	1456601	100.000	94.004	80.00- 120.00	100.00
7.075	7.075 (1.105)	85	953572			34.46- 94.46	65.47
144 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
7.453	7.453 (1.164)	75	1340953	100.000	95.400	80.00- 120.00	100.00
7.453	7.453 (1.164)	77	428922			1.77- 61.77	31.99
7.453	7.453 (1.164)	39	551686			11.11- 71.11	41.14
145 4-Methyl-2-pentanone					CAS #: 108-10-1		
7.565	7.565 (1.181)	58	654985	100.000	91.408	80.00- 120.00	100.00
7.565	7.565 (1.181)	43	1614056			220.64- 280.64	246.43
7.565	7.565 (1.181)	85	300814			17.04- 77.04	45.93
147 Toluene					CAS #: 108-88-3		
7.691	7.691 (1.201)	91	2703535	100.000	92.910	80.00- 120.00	100.00
7.691	7.691 (1.201)	92	1558454			27.98- 87.98	57.65
150 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
7.943	7.943 (0.893)	75	1197802	100.000	94.389	80.00- 120.00	100.00
7.943	7.943 (0.893)	77	388216			1.64- 61.64	32.41
7.943	7.943 (0.893)	39	484280			10.07- 70.07	40.43

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
155 1,1,2-Trichloroethane					CAS #: 79-00-5		
8.097	8.097 (0.910)	97	940724	100.000	91.874	80.00- 120.00	100.00
8.097	8.097 (0.910)	99	591688			32.91- 92.91	62.90
8.097	8.097 (0.910)	83	801664			55.03- 115.03	85.22
156 Tetrachloroethene					CAS #: 127-18-4		
8.139	8.139 (0.915)	166	1453708	100.000	94.348	80.00- 120.00	100.00
8.139	8.139 (0.915)	129	1025307			41.30- 101.30	70.53
8.139	8.139 (0.915)	131	999681			39.67- 99.67	68.77
158 2-Hexanone					CAS #: 591-78-6		
8.265	8.265 (0.929)	58	909845	100.000	94.122	80.00- 120.00	100.00
8.265	8.265 (0.929)	43	1608283			147.18- 207.18	176.76
8.265	8.265 (0.929)	100	207254			0.00- 52.59	22.78
160 Dibromochloromethane					CAS #: 124-48-1		
8.419	8.419 (0.946)	129	1839162	100.000	93.794	80.00- 120.00	100.00
8.419	8.419 (0.946)	127	1407941			47.74- 107.74	76.55
161 1,2-Dibromoethane (EDB)					CAS #: 106-93-4		
8.530	8.530 (0.959)	107	1487762	100.000	91.996	80.00- 120.00	100.00
8.530	8.530 (0.959)	109	1411439			63.55- 123.55	94.87
165 Chlorobenzene					CAS #: 108-90-7		
8.908	8.908 (1.002)	112	2309666	100.000	93.022	80.00- 120.00	100.00
8.908	8.908 (1.002)	114	735068			1.75- 61.75	31.83
8.908	8.908 (1.002)	77	1221593			22.27- 82.27	52.89
167 Ethyl Benzene					CAS #: 100-41-4		
8.964	8.964 (1.008)	106	1178363	100.000	92.481	80.00- 120.00	100.00
8.964	8.964 (1.008)	91	3662724			278.96- 338.96	310.83
169 m,p-Xylene					CAS #: 108-38-3		
9.062	9.062 (1.019)	106	1461289	100.000	92.495	80.00- 120.00	100.00
9.062	9.062 (1.019)	91	2837374			158.57- 218.57	194.17
171 o-Xylene					CAS #: 95-47-6		
9.398	9.398 (1.057)	106	1391607	100.000	93.781	80.00- 120.00	100.00
9.398	9.398 (1.057)	91	2873267			173.40- 233.40	206.47
172 Styrene					CAS #: 100-42-5		
9.426	9.426 (1.060)	104	2370738	100.000	95.556	80.00- 120.00	100.00
9.426	9.426 (1.060)	78	1074411			15.95- 75.95	45.32
174 Bromoform					CAS #: 75-25-2		
9.636	9.636 (1.083)	173	1937059	100.000	92.706	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
174 Bromoform (continued)							
9.636	9.636 (1.083)	171	1005323			22.23- 82.23	51.90
175 Cumene					CAS #: 98-82-8		
9.692	9.692 (1.090)	105	4363435	100.000	94.604	80.00- 120.00	100.00
9.692	9.692 (1.090)	120	1201970			0.00- 57.55	27.55
9.692	9.692 (1.090)	51	361134			0.00- 38.22	8.28
181 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
10.014	10.014 (1.126)	83	1881235	100.000	94.656	80.00- 120.00	100.00
10.014	10.014 (1.126)	85	1246927			36.69- 96.69	66.28
182 Propylbenzene					CAS #: 103-65-1		
10.028	10.028 (1.127)	91	5186599	100.000	95.226	80.00- 120.00	100.00
10.028	10.028 (1.127)	120	1274413			0.00- 54.81	24.57
10.028	10.028 (1.127)	105	199450			0.00- 33.86	3.85
188 4-Ethyltoluene					CAS #: 622-96-8		
10.126	10.126 (1.138)	120	1392484	100.000	94.463	80.00- 120.00	100.00
10.126	10.126 (1.138)	105	4534724			292.39- 352.39	325.66
190 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
10.181	10.181 (1.145)	120	1905201	100.000	95.096	80.00- 120.00	100.00
10.181	10.181 (1.145)	105	3847137			169.92- 229.92	201.93
196 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
10.503	10.503 (1.181)	120	1749070	100.000	97.884	80.00- 120.00	100.00
10.503	10.503 (1.181)	105	3680572			182.08- 242.08	210.43
208 1,3-Dichlorobenzene					CAS #: 541-73-1		
10.797	10.797 (1.214)	146	2743579	100.000	94.226	80.00- 120.00	100.00
10.797	10.797 (1.214)	148	1748594			34.06- 94.06	63.73
10.797	10.797 (1.214)	111	1000835			6.19- 66.19	36.48
209 1,4-Dichlorobenzene					CAS #: 106-46-7		
10.881	10.881 (1.223)	146	2740288	100.000	95.646	80.00- 120.00	100.00
10.881	10.881 (1.223)	148	1760807			33.53- 93.53	64.26
10.881	10.881 (1.223)	111	970005			5.17- 65.17	35.40
212 alpha-Chlorotoluene					CAS #: 100-44-7		
10.993	10.993 (1.236)	91	3426455	100.000	97.371	80.00- 120.00	100.00
10.993	10.993 (1.236)	126	768840			0.00- 52.56	22.44
214 1,2-Dichlorobenzene					CAS #: 95-50-1		
11.203	11.203 (1.260)	146	2613173	100.000	96.029	80.00- 120.00	100.00
11.203	11.203 (1.260)	148	1655942			33.19- 93.19	63.37

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
214 1,2-Dichlorobenzene (continued)							
11.203	11.203 (1.260)	111	997040			8.29- 68.29	38.15
226 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
12.630	12.630 (1.420)	180	2318688	100.000	106.62	80.00- 120.00	100.00
12.630	12.630 (1.420)	182	2211297			66.05- 126.05	95.37
227 Hexachlorobutadiene					CAS #: 87-68-3		
12.714	12.714 (1.429)	225	1729452	100.000	106.02	80.00- 120.00	100.00
12.714	12.714 (1.429)	223	1087448			33.34- 93.34	62.88
228 Naphthalene					CAS #: 91-20-3		
12.910	12.910 (1.451)	128	359789	10.0000	9.937	80.00- 120.00	100.00
12.910	12.910 (1.451)	127	45936			0.00- 42.14	12.77

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdj.i
Lab File ID: j030407.d
Lab Smp Id: ICAL Level #7
Analysis Type: VOA
Quant Type: ISTD
Operator: mjs
Method File: /chem/msdj.i/04mar15.b/j15q0304a.m
Misc Info: 100ppbv(200ppbv)

Calibration Date: 04-MAR-2015
Calibration Time: 11:37
Client Smp ID: ICAL Level #7
Level: LOW
Sample Type: AIR

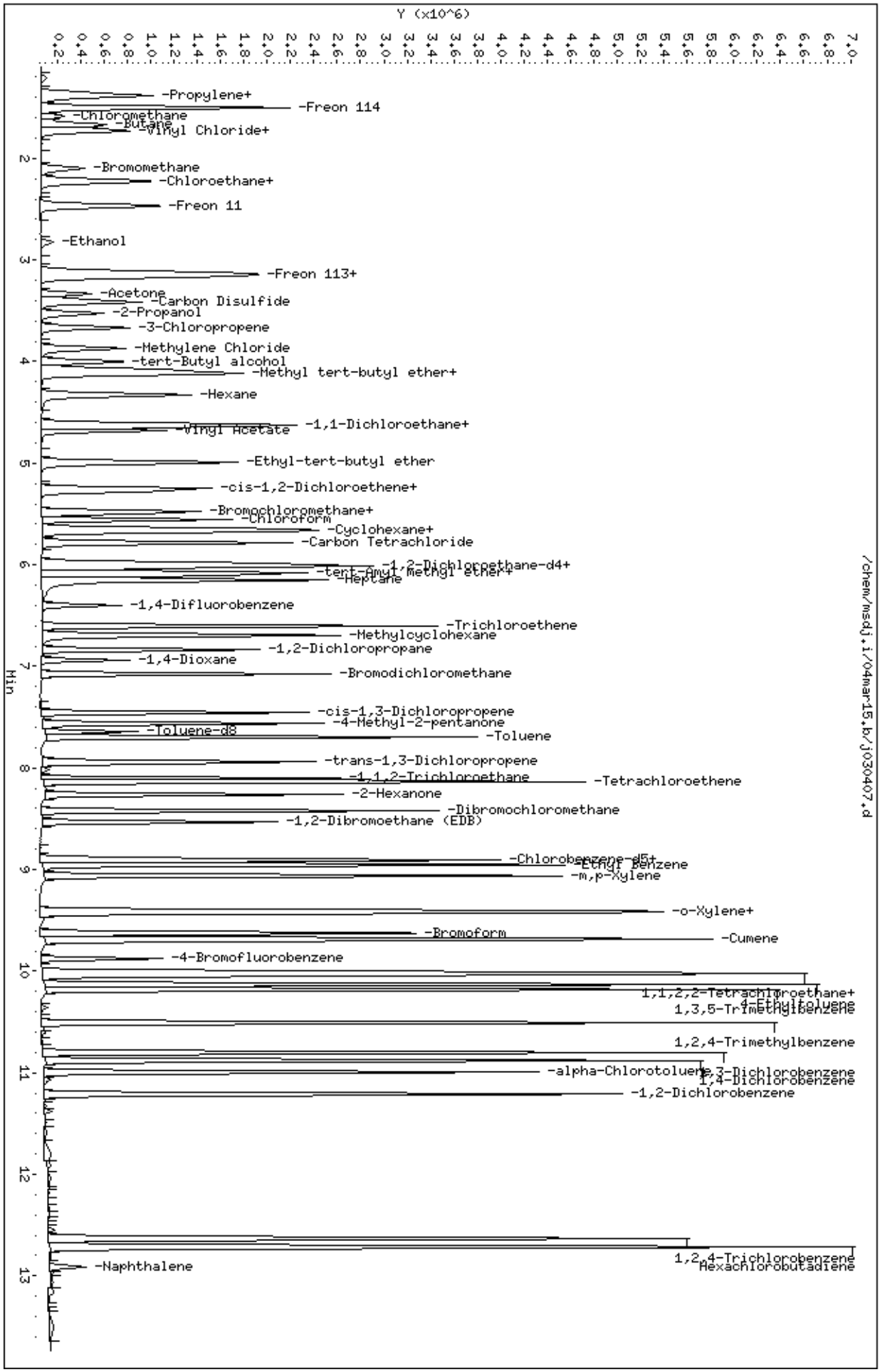
COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
98 Bromochloromethan	138152	82891	193413	136594	-1.13
123 1,4-Difluorobenze	594563	356738	832388	584687	-1.66
163 Chlorobenzene-d5	557711	334627	780795	558173	0.08

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
98 Bromochloromethan	5.49	5.16	5.82	5.49	0.00
123 1,4-Difluorobenze	6.40	6.07	6.73	6.40	0.00
163 Chlorobenzene-d5	8.89	8.56	9.22	8.89	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/msdj.i/04mar15.b/j030407.d
Date : 04-MAR-2015 12:04
Client ID: ICAL Level #7
Sample Info: 100ml #2716-50
Column phase: RTX-624

Instrument: msdj.i
Operator: mjs
Column diameter: 0.25



Eurofins Air Toxics Inc.

EPA TO-15/MODIFIED EPA TO-14A

Data file : /chem/msdj.i/04mar15.b/j030408.d
Lab Smp Id: ICAL Level #8 Client Smp ID: ICAL Level #8
Inj Date : 04-MAR-2015 12:36
Operator : mjs Inst ID: msdj.i
Smp Info : 200ml #2716-50
Misc Info : 200ppbv(200ppbv)
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msdj.i/04mar15.b/j15q0304a.m
Meth Date : 04-Mar-2015 13:33 mskidmor Quant Type: ISTD
Cal Date : 04-MAR-2015 12:36 Cal File: j030408.d
Als bottle: 13 Calibration Sample, Level: 8
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT12.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
* 98 Bromochloromethane						CAS #: 74-97-5	
5.494	5.494 (1.000)	130	163824	25.0000		80.00- 120.00	100.00
5.494	5.494 (1.000)	128	126686			48.40- 108.40	77.33
5.494	5.494 (1.000)	49	162570			84.80- 144.80	99.23
* 123 1,4-Difluorobenzene						CAS #: 540-36-3	
6.404	6.404 (1.000)	114	679874	25.0000		80.00- 120.00	100.00
6.404	6.404 (1.000)	88	104283			0.00- 45.38	15.34
* 163 Chlorobenzene-d5						CAS #: 3114-55-4	
8.894	8.894 (1.000)	117	643478	25.0000		80.00- 120.00	100.00
8.894	8.894 (1.000)	82	326928			20.55- 80.55	50.81
$ 117 1,2-Dichloroethane-d4						CAS #: 17060-07-0	
6.054	6.054 (1.102)	65	187066	25.0000	24.921	80.00- 120.00	100.00
6.054	6.054 (1.102)	67	129860			28.68- 88.68	69.42

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

$ 146 Toluene-d8                                      CAS #: 2037-26-5
  7.649   7.649 (1.194)    98    693372 25.0000   24.993  80.00- 120.00   100.00
  7.635   7.649 (1.192)    70     71565                    0.00-  40.26    10.32
  7.649   7.649 (1.194)   100    484896                   38.16-  98.16    69.93
-------------------------------------------------------------------------------
$ 177 4-Bromofluorobenzene                            CAS #: 460-00-4
  9.888   9.888 (1.112)   174    424680 25.0000   25.409  80.00- 120.00   100.00
  9.874   9.888 (1.110)    95    458814                   82.57- 142.57   108.04
  9.888   9.888 (1.112)   176    407189                   67.45- 127.45    95.88
-------------------------------------------------------------------------------
    9 Propylene                                       CAS #: 115-07-1
  1.367   1.367 (0.249)    41    900366 200.000   185.92  80.00- 120.00   100.00
  1.367   1.367 (0.249)    42    587482                   35.76-  95.76    65.25
  1.367   1.367 (0.249)    39    622492                   37.69-  97.69    69.14
-------------------------------------------------------------------------------
   11 Freon 12                                        CAS #: 75-71-8
  1.409   1.409 (0.256)    85   2967446 200.000   180.04  80.00- 120.00   100.00
  1.409   1.409 (0.256)    87    955824                    2.74-  62.74    32.21
-------------------------------------------------------------------------------
   15 Freon 114                                       CAS #: 76-14-2
  1.534   1.534 (0.279)   135   2673776 200.000   178.01  80.00- 120.00   100.00
  1.534   1.534 (0.279)   137    855146                    1.49-  61.49    31.98
-------------------------------------------------------------------------------
   17 Chloromethane                                   CAS #: 74-87-3
  1.604   1.604 (0.292)    50    799833 200.000   170.01  80.00- 120.00   100.00(M)
  1.604   1.604 (0.292)    52    227203                    1.90-  61.90    28.41
-------------------------------------------------------------------------------
   23 Butane                                          CAS #: 106-97-8
  1.688   1.688 (0.307)    58    237363 200.000   186.46  80.00- 120.00   100.00
  1.688   1.688 (0.307)    43   1714032                  699.33- 759.33   722.11
-------------------------------------------------------------------------------
   25 Vinyl Chloride                                  CAS #: 75-01-4
  1.730   1.730 (0.315)    62   1232187 200.000   189.68  80.00- 120.00   100.00
  1.730   1.730 (0.315)    64    383275                    0.48-  60.48    31.11
-------------------------------------------------------------------------------
   26 1,3-Butadiene                                   CAS #: 106-99-0
  1.758   1.758 (0.320)    54    938226 200.000   186.68  80.00- 120.00   100.00
  1.758   1.758 (0.320)    39    917601                   69.90- 129.90    97.80
-------------------------------------------------------------------------------
   29 Bromomethane                                    CAS #: 74-83-9
  2.122   2.122 (0.386)    94    970479 200.000   183.40  80.00- 120.00   100.00
  2.122   2.122 (0.386)    96    904438                   62.83- 122.83    93.19
-------------------------------------------------------------------------------
   30 Chloroethane                                    CAS #: 75-00-3
  2.234   2.234 (0.407)    64    608598 200.000   182.86  80.00- 120.00   100.00
  2.234   2.234 (0.407)    66    192425                    1.30-  61.30    31.62
```

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
30 Chloroethane (continued)							
2.234	2.234 (0.407)	49	158605			0.00- 55.56	26.06
31 Isopentane					CAS #: 78-78-4		
2.248	2.248 (0.409)	43	1416839	200.000	184.33	80.00- 120.00	100.00
2.248	2.248 (0.409)	57	986217			39.25- 99.25	69.61
35 Freon 11					CAS #: 75-69-4		
2.486	2.486 (0.452)	101	3291536	200.000	184.19	80.00- 120.00	100.00
2.486	2.486 (0.452)	103	2117687			34.53- 94.53	64.34
42 Ethanol					CAS #: 64-17-5		
2.850	2.850 (0.519)	45	485648	200.000	173.49	80.00- 120.00	100.00
2.850	2.850 (0.519)	43	89734			0.00- 48.78	18.48
2.850	2.850 (0.519)	46	189116			9.14- 69.14	38.94
49 Freon 113					CAS #: 76-13-1		
3.158	3.158 (0.575)	151	2664175	200.000	180.90	80.00- 120.00	100.00
3.158	3.158 (0.575)	153	1706643			33.29- 93.29	64.06
3.144	3.158 (0.572)	101	3024367			83.98- 143.98	113.52
50 1,1-Dichloroethene					CAS #: 75-35-4		
3.186	3.186 (0.580)	98	873997	200.000	190.87	80.00- 120.00	100.00
3.186	3.186 (0.580)	96	1369584			129.90- 189.90	156.70
3.186	3.186 (0.580)	61	2090117			210.75- 270.75	239.14
52 Acetone					CAS #: 67-64-1		
3.353	3.353 (0.610)	58	565590	200.000	179.00	80.00- 120.00	100.00
3.353	3.353 (0.610)	43	1641458			270.02- 330.02	290.22
56 Carbon Disulfide					CAS #: 75-15-0		
3.437	3.437 (0.626)	76	3766719	200.000	182.54	80.00- 120.00	100.00
57 2-Propanol					CAS #: 67-63-0		
3.549	3.549 (0.646)	45	2183629	200.000	188.12	80.00- 120.00	100.00
3.549	3.549 (0.646)	43	387850			0.00- 47.69	17.76
3.549	3.549 (0.646)	59	85032			0.00- 33.85	3.89
58 3-Chloropropene					CAS #: 107-05-1		
3.689	3.689 (0.671)	76	672988	200.000	189.13	80.00- 120.00	100.00
3.689	3.689 (0.671)	41	1631221			215.96- 275.96	242.38
66 Methylene Chloride					CAS #: 75-09-2		
3.885	3.885 (0.707)	49	1435845	200.000	182.11	80.00- 120.00	100.00
3.885	3.885 (0.707)	84	1183140			51.17- 111.17	82.40
3.885	3.885 (0.707)	51	419946			0.00- 59.41	29.25

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
71 tert-Butyl alcohol					CAS #: 75-65-0		
4.025	4.025 (0.733)	59	2654136	200.000	192.18	80.00- 120.00	100.00
4.025	4.025 (0.733)	41	554559			0.00- 51.64	20.89
4.025	4.025 (0.733)	57	268710			0.00- 40.45	10.12
72 Methyl tert-butyl ether					CAS #: 1634-04-4		
4.109	4.109 (0.748)	73	3857480	200.000	191.63	80.00- 120.00	100.00
4.109	4.109 (0.748)	57	869447			0.00- 52.57	22.54
4.095	4.109 (0.745)	41	800623			0.00- 50.82	20.76
73 trans-1,2-Dichloroethene					CAS #: 156-60-5		
4.137	4.137 (0.753)	98	931521	200.000	184.56	80.00- 120.00	100.00
4.137	4.137 (0.753)	61	1982995			185.75- 245.75	212.88
4.137	4.137 (0.753)	96	1482819			128.77- 188.77	159.18
78 Hexane					CAS #: 110-54-3		
4.347	4.347 (0.791)	57	2223645	200.000	190.02	80.00- 120.00	100.00
4.347	4.347 (0.791)	43	1359996			32.33- 92.33	61.16
4.347	4.347 (0.791)	86	372267			0.00- 47.05	16.74
82 1,1-Dichloroethane					CAS #: 75-34-3		
4.655	4.655 (0.847)	63	2488971	200.000	180.13	80.00- 120.00	100.00
4.655	4.655 (0.847)	65	793299			1.83- 61.83	31.87
83 Isopropyl ether					CAS #: 108-20-3		
4.627	4.627 (0.842)	45	4652159	200.000	186.80	80.00- 120.00	100.00
4.627	4.627 (0.842)	87	1336511			0.00- 58.50	28.73
4.627	4.627 (0.842)	59	531317			0.00- 41.54	11.42
86 Vinyl Acetate					CAS #: 108-05-4		
4.697	4.697 (0.855)	86	394184	200.000	189.25	80.00- 120.00	100.00
4.697	4.697 (0.855)	43	4237016			1027.99-1087.99	1074.88
88 Ethyl-tert-butyl ether					CAS #: 637-92-3		
5.004	5.004 (0.911)	59	4523105	200.000	190.70	80.00- 120.00	100.00
5.004	5.004 (0.911)	87	1961899			13.39- 73.39	43.38
5.004	5.004 (0.911)	41	747786			0.00- 46.90	16.53
91 cis-1,2-Dichloroethene					CAS #: 156-59-2		
5.256	5.256 (0.957)	98	1038826	200.000	189.10	80.00- 120.00	100.00
5.256	5.256 (0.957)	96	1622228			120.40- 180.40	156.16
5.256	5.256 (0.957)	61	1991654			156.78- 216.78	191.72
92 2-Butanone					CAS #: 78-93-3		
5.284	5.284 (0.962)	72	757625	200.000	185.65	80.00- 120.00	100.00
5.284	5.284 (0.962)	43	2869985			345.28- 405.28	378.81

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

   92 2-Butanone (continued)
  5.284   5.284 (0.962)    57    235692                     0.64-  60.64    31.11
-------------------------------------------------------------------------------
   99 Tetrahydrofuran                                CAS #: 109-99-9
  5.480   5.480 (0.997)    42   1639922 200.000   181.44  80.00- 120.00   100.00
  5.480   5.480 (0.997)    71    682875                    10.18-  70.18    41.64
  5.480   5.480 (0.997)    72    713036                    13.63-  73.63    43.48
-------------------------------------------------------------------------------
  100 Chloroform                                     CAS #: 67-66-3
  5.564   5.564 (1.013)    83   2986381 200.000   183.60  80.00- 120.00   100.00
  5.564   5.564 (1.013)    85   1975150                    36.39-  96.39    66.14
-------------------------------------------------------------------------------
  102 Cyclohexane                                    CAS #: 110-82-7
  5.648   5.648 (1.028)    84   2090318 200.000   185.93  80.00- 120.00   100.00
  5.648   5.648 (1.028)    56   2446271                    85.96- 145.96   117.03
  5.648   5.648 (1.028)    41   1206338                    27.64-  87.64    57.71
-------------------------------------------------------------------------------
  103 1,1,1-Trichloroethane                          CAS #: 71-55-6
  5.676   5.676 (1.033)    97   3145772 200.000   186.02  80.00- 120.00   100.00
  5.676   5.676 (1.033)    99   2015664                    34.56-  94.56    64.08
-------------------------------------------------------------------------------
  106 Carbon Tetrachloride                           CAS #: 56-23-5
  5.802   5.802 (1.056)   119   3421633 200.000   187.21  80.00- 120.00   100.00
  5.802   5.802 (1.056)   117   3524430                    75.97- 135.97   103.00
-------------------------------------------------------------------------------
  113 2,2,4-Trimethylpentane                         CAS #: 540-84-1
  5.984   5.984 (1.089)    57   6495015 200.000   191.68  80.00- 120.00   100.00
  5.984   5.984 (1.089)    56   1938679                     0.00-  59.67    29.85
  5.984   5.984 (1.089)    41   1375672                     0.00-  50.74    21.18
-------------------------------------------------------------------------------
  116 Benzene                                        CAS #: 71-43-2
  6.026   6.026 (0.941)    78   4820379 200.000   197.49  80.00- 120.00   100.00
  6.026   6.026 (0.941)    77   1101057                     0.00-  52.91    22.84
-------------------------------------------------------------------------------
  119 tert-Amyl methyl ether                         CAS #: 994-05-8
  6.082   6.082 (1.107)    87   1136180 200.000   193.86  80.00- 120.00   100.00
  6.082   6.082 (1.107)    73   4607978                   376.47- 436.47   405.57
  6.082   6.082 (1.107)    55   1134870                    75.02- 135.02    99.88
-------------------------------------------------------------------------------
  120 1,2-Dichloroethane                             CAS #: 107-06-2
  6.124   6.124 (0.956)    62   1860939 200.000   190.35  80.00- 120.00   100.00
  6.124   6.124 (0.956)    64    591732                     2.46-  62.46    31.80
-------------------------------------------------------------------------------
  121 Heptane                                        CAS #: 142-82-5
  6.166   6.166 (0.963)    71   1719792 200.000   194.44  80.00- 120.00   100.00
  6.166   6.166 (0.963)    43   2926369                   142.43- 202.43   170.16
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RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
121 Heptane (continued)							
6.166	6.166 (0.963)	57	1867887			86.91- 146.91	108.61
125 Trichloroethene					CAS #: 79-01-6		
6.600	6.600 (1.031)	95	2421549	200.000	183.70	80.00- 120.00	100.00
6.600	6.600 (1.031)	130	2710543			82.54- 142.54	111.93
6.600	6.600 (1.031)	97	1571412			35.40- 95.40	64.89
127 Methylcyclohexane					CAS #: 108-87-2		
6.697	6.697 (1.219)	83	2985272	200.000	191.54	80.00- 120.00	100.00
6.697	6.697 (1.219)	98	1418950			16.94- 76.94	47.53
6.697	6.697 (1.219)	55	2310501			46.96- 106.96	77.40
132 1,2-Dichloropropane					CAS #: 78-87-5		
6.851	6.851 (1.070)	63	1810653	200.000	190.74	80.00- 120.00	100.00
6.851	6.851 (1.070)	62	1289015			41.52- 101.52	71.19
6.851	6.851 (1.070)	41	855462			17.88- 77.88	47.25
136 1,4-Dioxane					CAS #: 123-91-1		
6.935	6.935 (1.083)	88	1217518	200.000	194.48	80.00- 120.00	100.00
6.935	6.935 (1.083)	58	793299			35.49- 95.49	65.16
6.935	6.935 (1.083)	57	251336			0.00- 50.66	20.64
138 Bromodichloromethane					CAS #: 75-27-4		
7.075	7.075 (1.105)	83	3463091	200.000	193.46	80.00- 120.00	100.00
7.075	7.075 (1.105)	85	2266475			34.46- 94.46	65.45
144 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
7.467	7.467 (1.166)	75	3177877	200.000	195.34	80.00- 120.00	100.00
7.467	7.467 (1.166)	77	1015363			1.77- 61.77	31.95
7.453	7.467 (1.164)	39	1311231			11.11- 71.11	41.26
145 4-Methyl-2-pentanone					CAS #: 108-10-1		
7.565	7.565 (1.181)	58	1541240	200.000	187.32	80.00- 120.00	100.00
7.565	7.565 (1.181)	43	3796046			220.64- 280.64	246.30
7.579	7.565 (1.184)	85	704577			17.04- 77.04	45.71
147 Toluene					CAS #: 108-88-3		
7.691	7.691 (1.201)	91	6604733	200.000	195.98	80.00- 120.00	100.00
7.705	7.691 (1.203)	92	3813514			27.98- 87.98	57.74
150 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
7.943	7.943 (0.893)	75	2854365	200.000	195.91	80.00- 120.00	100.00
7.943	7.943 (0.893)	77	901694			1.64- 61.64	31.59
7.943	7.943 (0.893)	39	1139319			10.07- 70.07	39.92

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

  155 1,1,2-Trichloroethane                        CAS #: 79-00-5
  8.111   8.111 (0.912)    97   2225923 200.000   190.38  80.00- 120.00   100.00
  8.111   8.111 (0.912)    99   1383241                   32.91-  92.91    62.14
  8.111   8.111 (0.912)    83   1908182                   55.03- 115.03    85.73
-------------------------------------------------------------------------------
  156 Tetrachloroethene                            CAS #: 127-18-4
  8.139   8.139 (0.915)   166   3473567 200.000   196.28  80.00- 120.00   100.00
  8.139   8.139 (0.915)   129   2428943                   41.30- 101.30    69.93
  8.139   8.139 (0.915)   131   2376688                   39.67-  99.67    68.42
-------------------------------------------------------------------------------
  158 2-Hexanone                                   CAS #: 591-78-6
  8.265   8.265 (0.929)    58   2172913 200.000   195.97  80.00- 120.00   100.00
  8.265   8.265 (0.929)    43   3819047                  147.18- 207.18   175.76
  8.279   8.265 (0.931)   100    483793                    0.00-  52.59    22.26
-------------------------------------------------------------------------------
  160 Dibromochloromethane                         CAS #: 124-48-1
  8.418   8.418 (0.946)   129   4361480 200.000   194.08  80.00- 120.00   100.00
  8.418   8.418 (0.946)   127   3364708                   47.74- 107.74    77.15
-------------------------------------------------------------------------------
  161 1,2-Dibromoethane (EDB)                      CAS #: 106-93-4
  8.544   8.544 (0.961)   107   3550880 200.000   191.99  80.00- 120.00   100.00
  8.544   8.544 (0.961)   109   3337310                   63.55- 123.55    93.99
-------------------------------------------------------------------------------
  165 Chlorobenzene                                CAS #: 108-90-7
  8.922   8.922 (1.003)   112   5470462 200.000   192.54  80.00- 120.00   100.00
  8.922   8.922 (1.003)   114   1741470                    1.75-  61.75    31.83
  8.908   8.922 (1.002)    77   2868621                   22.27-  82.27    52.44
-------------------------------------------------------------------------------
  167 Ethyl Benzene                                CAS #: 100-41-4
  8.964   8.964 (1.008)   106   2816017 200.000   193.04  80.00- 120.00   100.00
  8.964   8.964 (1.008)    91   8774856                  278.96- 338.96   311.61
-------------------------------------------------------------------------------
  169 m,p-Xylene                                   CAS #: 108-38-3
  9.062   9.062 (1.019)   106   3475831 200.000   192.31  80.00- 120.00   100.00
  9.062   9.062 (1.019)    91   6735395                  158.57- 218.57   193.78
-------------------------------------------------------------------------------
  171 o-Xylene                                     CAS #: 95-47-6
  9.398   9.398 (1.057)   106   3308758 200.000   194.48  80.00- 120.00   100.00
  9.398   9.398 (1.057)    91   6858954                  173.40- 233.40   207.30
-------------------------------------------------------------------------------
  172 Styrene                                      CAS #: 100-42-5
  9.426   9.426 (1.060)   104   5721850 200.000   200.04  80.00- 120.00   100.00(A)
  9.426   9.426 (1.060)    78   2572896                   15.95-  75.95    44.97
-------------------------------------------------------------------------------
  174 Bromoform                                    CAS #: 75-25-2
  9.636   9.636 (1.083)   173   4626199 200.000   193.33  80.00- 120.00   100.00
```

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

  174 Bromoform (continued)
  9.636   9.636 (1.083)   171   2379776                    22.23-  82.23    51.44
-------------------------------------------------------------------------------
  175 Cumene                                        CAS #: 98-82-8
  9.692   9.692 (1.090)   105  10397840 200.000   196.28  80.00- 120.00   100.00
  9.692   9.692 (1.090)   120   2833510                     0.00-  57.55    27.25
  9.692   9.692 (1.090)    51    834673                     0.00-  38.22     8.03
-------------------------------------------------------------------------------
  181 1,1,2,2-Tetrachloroethane                     CAS #: 79-34-5
 10.014  10.014 (1.126)    83   4491858 200.000   196.70  80.00- 120.00   100.00
 10.014  10.014 (1.126)    85   2959473                    36.69-  96.69    65.89
-------------------------------------------------------------------------------
  182 Propylbenzene                                 CAS #: 103-65-1
 10.028  10.028 (1.127)    91  12574833 200.000   200.22  80.00- 120.00   100.00(A)
 10.042  10.028 (1.129)   120   3010213                     0.00-  54.81    23.94
 10.042  10.028 (1.129)   105    469328                     0.00-  33.86     3.73
-------------------------------------------------------------------------------
  188 4-Ethyltoluene                                CAS #: 622-96-8
 10.126  10.126 (1.138)   120   3307140 200.000   195.48  80.00- 120.00   100.00
 10.126  10.126 (1.138)   105  10933155                   292.39- 352.39   330.59
-------------------------------------------------------------------------------
  190 1,3,5-Trimethylbenzene                        CAS #: 108-67-8
 10.181  10.181 (1.145)   120   4569578 200.000   198.20  80.00- 120.00   100.00
 10.181  10.181 (1.145)   105   9261853                   169.92- 229.92   202.69
-------------------------------------------------------------------------------
  196 1,2,4-Trimethylbenzene                        CAS #: 95-63-6
 10.503  10.503 (1.181)   120   4189059 200.000   202.79  80.00- 120.00   100.00(A)
 10.503  10.503 (1.181)   105   8992735                   182.08- 242.08   214.67
-------------------------------------------------------------------------------
  208 1,3-Dichlorobenzene                           CAS #: 541-73-1
 10.797  10.797 (1.214)   146   6624136 200.000   197.78  80.00- 120.00   100.00
 10.797  10.797 (1.214)   148   4182521                    34.06-  94.06    63.14
 10.797  10.797 (1.214)   111   2399287                     6.19-  66.19    36.22
-------------------------------------------------------------------------------
  209 1,4-Dichlorobenzene                           CAS #: 106-46-7
 10.881  10.881 (1.223)   146   6692627 200.000   202.19  80.00- 120.00   100.00(A)
 10.881  10.881 (1.223)   148   4234288                    33.53-  93.53    63.27
 10.881  10.881 (1.223)   111   2337252                     5.17-  65.17    34.92
-------------------------------------------------------------------------------
  212 alpha-Chlorotoluene                           CAS #: 100-44-7
 10.993  10.993 (1.236)    91   8358327 200.000   205.00  80.00- 120.00   100.00(A)
 10.993  10.993 (1.236)   126   1865524                     0.00-  52.56    22.32
-------------------------------------------------------------------------------
  214 1,2-Dichlorobenzene                           CAS #: 95-50-1
 11.217  11.217 (1.261)   146   6255747 200.000   199.51  80.00- 120.00   100.00
 11.217  11.217 (1.261)   148   3945670                    33.19-  93.19    63.07
```

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

  214 1,2-Dichlorobenzene (continued)
 11.203  11.217 (1.260)   111   2366789                     8.29-  68.29    37.83
-------------------------------------------------------------------------------
  226 1,2,4-Trichlorobenzene                        CAS #: 120-82-1
 12.630  12.630 (1.420)   180   5838986 200.000   225.49  80.00- 120.00   100.00(A)
 12.630  12.630 (1.420)   182   5546178                   66.05- 126.05    94.99
-------------------------------------------------------------------------------
  227 Hexachlorobutadiene                           CAS #: 87-68-3
 12.714  12.714 (1.429)   225   4284552 200.000   221.66  80.00- 120.00   100.00(A)
 12.714  12.714 (1.429)   223   2694485                   33.34-  93.34    62.89
-------------------------------------------------------------------------------
  228 Naphthalene                                   CAS #: 91-20-3
 12.910  12.910 (1.451)   128    893283 20.0000   21.105  80.00- 120.00   100.00(A)
 12.910  12.910 (1.451)   127    113457                    0.00-  42.14    12.70
-------------------------------------------------------------------------------
```

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
M - Compound response manually integrated.

Report Date: 04-Mar-2015 13:38

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdj.i
Lab File ID: j030408.d
Lab Smp Id: ICAL Level #8
Analysis Type: VOA
Quant Type: ISTD
Operator: mjs
Method File: /chem/msdj.i/04mar15.b/j15q0304a.m
Misc Info: 200ppbv(200ppbv)

Calibration Date: 04-MAR-2015
Calibration Time: 11:37
Client Smp ID: ICAL Level #8
Level: LOW
Sample Type: AIR

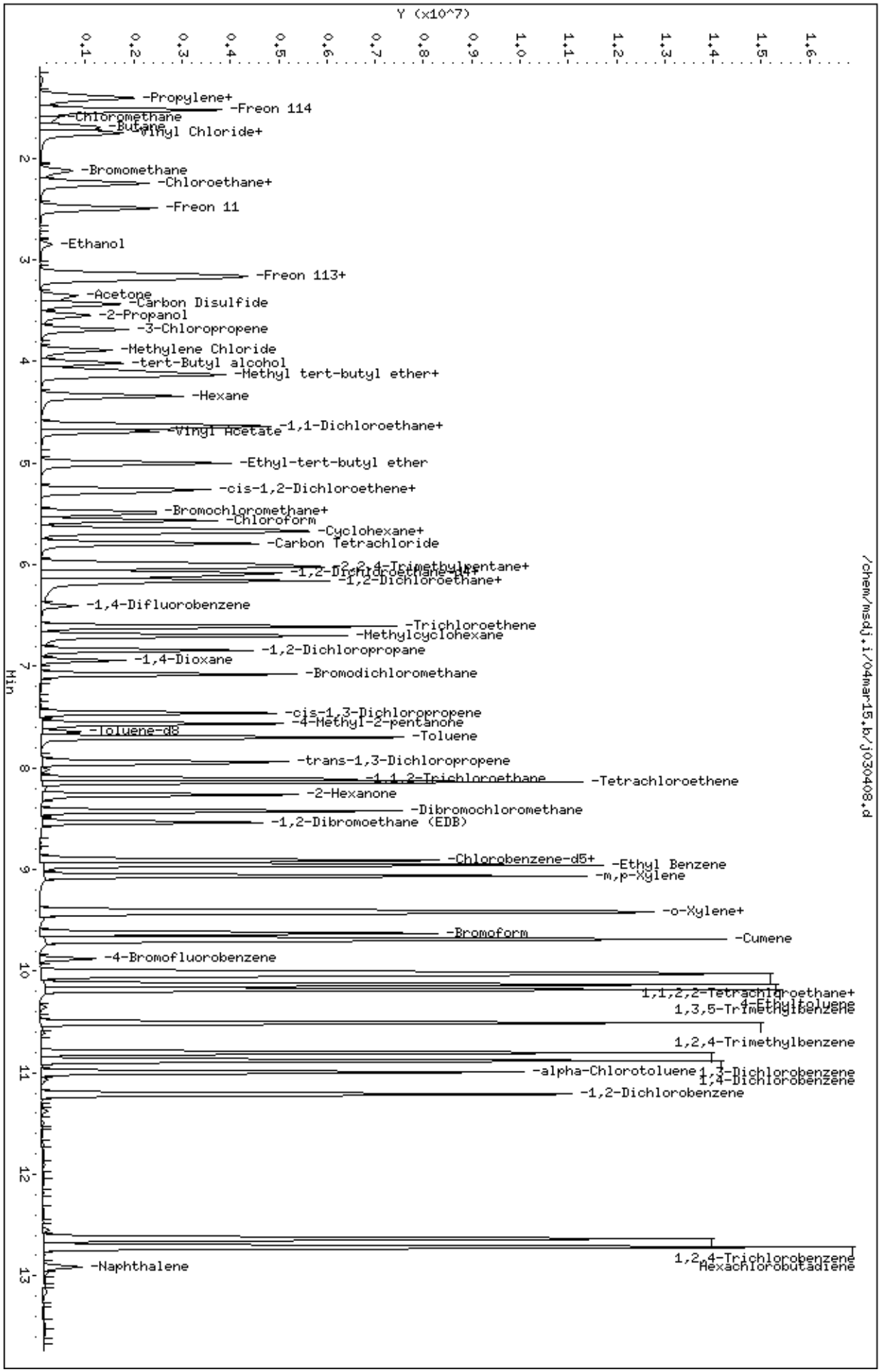
COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
98 Bromochloromethan	138152	82891	193413	163824	18.58
123 1,4-Difluorobenze	594563	356738	832388	679874	14.35
163 Chlorobenzene-d5	557711	334627	780795	643478	15.38

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
98 Bromochloromethan	5.49	5.16	5.82	5.49	0.00
123 1,4-Difluorobenze	6.40	6.07	6.73	6.40	0.00
163 Chlorobenzene-d5	8.89	8.56	9.22	8.89	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/msdj.i/04mar15.b/j030408.d
Date : 04-MAR-2015 12:36
Client ID: ICAL Level #8
Sample Info: 200ml #2716-50
Column phase: RTX-624

Instrument: msdj.i
Operator: mjs
Column diameter: 0.25



Page 1

Report Date : 02-May-2014 08:48

0.5 ppbv RL
#2649-168 (2.0 ppbv) = 50mL

Eurofins Air Toxics Inc.
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msdj.i/01may14.b/j14q0501a.m
Batch File: /chem/msdj.i/01may14.b
Inst ID: msdj.i

MDL Verification at 0.2 ppbv
(20mL of #2649-173 [2.0 ppbv])
J050219

ID:	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08
FILENAME:	j050123	j050124	j050125	j050126	j050127	j050128	j050129	j050130
INJ.DATE:	01-MAY-2014	01-MAY-2014	01-MAY-2014	01-MAY-2014	01-MAY-2014	01-MAY-2014	01-MAY-2014	01-MAY-2014
INJ.TIME:	20:34	21:00	21:27	21:53	22:20	22:47	23:14	23:43

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	AVG CONC	STD DEV	MDL	RL (ppbv)
1 Dimethyl Ether	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
210 Propane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
207 2-Chloropropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
205 Hexafluoropropene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
2 Acetaldehyde	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
3 Freon 13	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
4 2-Methyl-1-Butene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
5 Freon 134a	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
6 Propylene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
7 Dichlorodifluoromethan	519.36	568.44	544.54	576.88	556.51	652.70	576.35	595.15	573.74	39.36	118.00	0.5
8 Freon 152a	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
9 Freon 22	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
10 Freon 114	500.46	580.01	581.04	558.42	599.52	625.83	518.87	545.86	563.75	41.52	124.46	0.5
11 Isobutane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
12 Freon142b	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
13 Chloromethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
14 Butane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	

Reviewer 1 [signature] Date: 5/5/14
Reviewer 2 Lamar Owenby Date: 5/6/14

$\bar{X}$ = 94.709 pptv

$\bar{X}$ = 0.094709 ppbv

Eurofins Air Toxics Inc.
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msdj.i/01may14.b/j14q0501a.m
Batch File: /chem/msdj.i/01may14.b
Inst ID: msdj.i

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	AVG CONC	STD DEV	MDL	
15 Vinyl Chloride	539.09	562.87	566.60	625.30	633.12	632.93	595.10	640.67	599.46	39.10	117.22	0.5
16 Freon 143a	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
17 Propanal	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
18 1,3-Butadiene	533.65	666.75	652.85	595.98	793.83	735.54	724.95	764.00	683.44	88.17	264.32	0.5
19 Freon 14	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
20 Vinyl Fluoride	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
21 Bromoethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
22 Isobutylene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
23 2,3-Dimethylbutane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
24 Bromomethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
25 Chloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
26 Isopentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
27 Freon143a	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
28 Trichlorofluoromethane	557.61	522.15	572.10	587.82	630.97	669.27	587.67	604.60	591.52	44.95	134.75	0.5
206 2,3-Dichloro-1-propene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
29 Ethanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
30 Methanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
31 Dichlorofluoromethane/	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
32 2,4-Dimethylpentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
33 Freon 113	520.25	535.48	547.93	544.04	569.73	630.89	590.04	583.43	565.22	35.73	107.11	0.5
34 1,1-Dichloroethene	555.63	659.94	645.40	630.36	665.76	695.22	528.23	568.01	618.57	60.18	180.42	0.5
35 2-Butanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	

Eurofins Air Toxics Inc.
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msdj.i/01may14.b/j14q0501a.m
Batch File: /chem/msdj.i/01may14.b
Inst ID: msdj.i

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	AVG CONC	STD DEV	MDL	
36 3-Methyl-1-Hexene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
37 Vinyl Bromide	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
38 Acetone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
39 Methacrylonitrile	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
40 Carbon Disulfide	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
41 2-Propanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
42 Pentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
43 1-Pentene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
44 3-Chloropropene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
45 Cyclopentene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
46 Methylene Chloride	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
47 Acrolein	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
48 tert-Butyl-Alcohol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
49 Ethyl Ether	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
50 MTBE	479.02	483.09	503.14	566.29	470.88	543.71	556.41	531.58	516.77	37.46	112.29	0.5
51 2-Methylpentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
52 trans-1,2-Dichloroethe	519.00	527.14	586.79	613.45	529.96	590.84	584.86	634.26	573.29	42.94	128.74	0.5
53 Freon123a	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
54 Freon123	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
55 Iodomethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
56 2,3,4-Trimethylpentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
57 Methyl acetate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
58 Hexane	545.03	496.33	539.56	561.81	552.41	574.52	564.46	561.41	549.44	24.19	72.54	0.5
59 Pentanal	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	

Eurofins Air Toxics Inc.
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msdj.i/01may14.b/j14q0501a.m
Batch File: /chem/msdj.i/01may14.b
Inst ID: msdj.i

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	AVG CONC	STD DEV	MDL	
60 2,4,4-Trimethyl-1-pent	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
61 Cyclopentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
62 Acetonitrile	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
63 Isopropyl ether	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
64 1,1-Dichloroethane	550.93	568.76	530.94	553.30	580.62	621.76	573.21	557.20	567.09	26.91	80.67	0.5
65 Vinyl Acetate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
66 2,4,4-Trimethyl-2-pent	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
67 1-Propanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
68 Chloroprene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
69 Butanal	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
70 Acrylonitrile	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
71 1-Hexene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
72 t-Butylethyl Ether	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
73 2,2-Dichloropropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
74 cis-1,2-Dichloroethene	517.40	480.19	524.27	561.24	584.17	555.16	618.71	515.85	544.62	44.04	132.03	0.5
75 2-Butanone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
76 2,3-Dimethylpentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
77 1-Bromo-2-Chloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
78 Tetrahydrofuran	639.09	740.65	685.37	742.25	769.73	851.30	729.63	665.52	727.94	66.48	199.30	0.5
* 79 Bromochloromethane	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	0.00	0.00	
80 Chloroform	479.78	521.21	533.18	553.70	503.68	578.10	582.98	530.91	535.44	35.35	105.99	0.5
81 Ethyl Acetate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
82 Methyl Acrylate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	

Eurofins Air Toxics Inc.
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msdj.i/01may14.b/j14q0501a.m
Batch File: /chem/msdj.i/01may14.b
Inst ID: msdj.i

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	AVG CONC	STD DEV	MDL	
83 Cyclohexane	537.40	493.91	550.42	562.34	533.05	561.24	515.21	573.18	540.85	26.59	79.71	0.5
84 Thiophene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
85 1,1,1-Trichloroethane	513.33	506.49	510.61	459.28	453.44	505.15	478.07	503.07	491.18	24.06	72.13	0.5
86 Carbon Tetrachloride	463.09	491.32	472.38	511.56	492.65	518.61	500.88	450.12	487.58	23.87	71.56	↓
87 1,1-Dichloropropene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
88 Isobutanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
89 2,2,4-Trimethylpentane	471.31	494.87	476.26	496.34	452.76	540.30	495.75	487.06	489.33	25.52	76.50	0.5
90 Benzene	527.90	466.27	536.06	497.13	485.31	546.90	562.10	512.65	516.79	32.52	97.49	↓
$ 91 1,2-Dichloroethane-d4	26066.14	26145.92	26852.11	27680.50	26132.80	27515.78	26836.11	26072.05	26662.68	663.56	1989.36	
92 2-Pentanone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
93 tert-amyl-Methyl Ether	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
94 1,2-Dichloroethane	572.22	562.01	529.20	561.58	563.05	580.71	537.81	586.08	561.58	19.62	58.82	0.5
95 Heptane	588.87	597.95	549.49	562.91	585.76	685.57	641.38	593.72	600.70	43.63	130.81	0.5
96 Ethyl acrylate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
97 Methyl Methacrylate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
98 Dibromomethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
99 Epichlorohydrin	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
* 100 1,4-Difluorobenzene	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	0.00	0.00	
101 2-Chloroethyl vinyl et	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
102 1-Butanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
103 Octane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
104 Trichloroethene	582.44	551.49	529.70	559.08	605.42	628.06	603.10	561.68	577.62	32.88	98.57	0.5
105 Methyl Cyclohexane	453.97	503.97	471.12	466.31	456.83	499.46	507.33	512.71	483.96	24.28	72.78	↓
106 1,2-Dichloropropane	496.28	507.77	473.14	557.72	492.33	523.80	585.44	551.26	523.47	38.31	114.85	

Eurofins Air Toxics Inc.
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msdj.i/01may14.b/j14q0501a.m
Batch File: /chem/msdj.i/01may14.b
Inst ID: msdj.i

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	AVG CONC	STD DEV	MDL	
107 1,4-Dioxane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
108 Bromodichloromethane	456.03	479.92	483.51	498.62	510.38	558.77	508.76	546.75	505.34	34.24	102.65	0.5
109 Nonane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
110 cis-1,3-Dichloropropen	489.00	417.59	469.93	439.54	504.83	498.74	485.04	466.61	471.41	29.99	89.92	0.5
111 Cyclohexanone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
112 4-Methyl-2-pentanone	542.29	536.53	492.89	495.03	445.33	509.01	553.43	508.87	510.42	34.50	103.44	0.5
113 trans-1,4-dichloro-2-b	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
$ 114 Toluene-d8	25057.28	24254.32	24874.69	24450.76	25123.35	24794.68	25142.24	24882.73	24822.50	319.82	958.83	
115 Toluene	454.33	488.00	467.36	516.61	489.29	571.05	503.44	505.07	499.39	35.39	106.11	0.5
116 tert-Butylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
117 bis(2-chloroethyl)ethe	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
118 trans-1,3-Dichloroprop	456.47	438.17	393.85	427.69	447.98	478.12	486.08	479.00	450.92	31.08	93.19	0.5
119 alpha-Pinene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
120 1,1,2-Trichloroethane	466.23	446.68	450.80	512.53	495.56	528.86	462.77	518.65	485.26	32.53	97.54	0.5
121 Decane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
122 Tetrachloroethene	452.07	460.21	442.44	428.29	463.63	499.32	477.71	450.83	459.31	21.81	65.39	0.5
123 1,3-Dichloropropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
124 Alphamethylstyrene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
125 2-Hexanone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
126 Butyl Acetate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
127 beta-Pinene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
128 Dibromochloromethane	433.97	466.62	438.14	403.73	477.15	450.09	458.16	441.93	446.22	22.58	67.70	0.5
129 Dodecane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
130 1,2-Dibromoethane	455.46	449.54	461.23	497.25	459.53	473.35	493.48	467.02	469.61	17.44	52.28	0.5

Eurofins Air Toxics Inc.
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msdj.i/01may14.b/j14q0501a.m
Batch File: /chem/msdj.i/01may14.b
Inst ID: msdj.i

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	AVG CONC	STD DEV	MDL	
131 D-Limonene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
132 Hexachloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
133 Undecane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
* 134 Chlorobenzene-d5	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	0.00	0.00	
135 Chlorobenzene	492.52	505.97	440.49	486.60	493.65	472.57	490.08	472.77	481.83	20.02	60.01	0.5
136 Indan	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
137 Ethyl Benzene	418.52	463.59	431.71	484.75	455.43	462.73	488.03	533.75	467.31	35.80	107.33	0.5
138 1,1,1,2-Tetrachloroeth	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
139 Indene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
140 m,p-Xylene	455.67	460.82	464.45	443.02	484.55	476.86	462.09	467.49	464.37	12.66	37.96	0.5
141 o-Xylene	422.56	478.50	416.72	433.64	401.88	489.48	475.54	407.40	440.72	35.03	105.03	↓
142 Styrene	399.11	438.04	423.87	415.30	442.21	437.70	411.89	420.40	423.56	14.98	44.90	
143 2-Heptanone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
144 1,2,3-Trichlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
145 Bromoform	421.15	419.10	384.48	390.17	393.82	425.94	343.38	426.02	400.51	28.64	85.86	0.5
146 Aniline	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
147 Cumene	419.15	436.79	414.01	423.54	476.62	461.09	439.21	426.52	437.12	21.69	65.03	0.5
148 Isooctyl Alcohol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
$ 149 Bromofluorobenzene	23236.02	24047.94	23062.75	23530.64	23252.98	22994.23	23192.81	23022.39	23292.47	349.86	1048.87	
150 2-Methylnaphthalene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
151 1,1,2,2-Tetrachloroeth	408.82	428.83	431.36	429.65	439.89	446.57	444.43	456.53	435.76	14.49	43.45	0.5
152 Bromobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
153 Propylbenzene	416.80	489.33	431.04	447.58	456.86	509.60	480.10	475.75	463.38	31.05	93.09	0.5
154 1,2,3-Trichloropropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	

Eurofins Air Toxics Inc.
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msdj.i/01may14.b/j14q0501a.m
Batch File: /chem/msdj.i/01may14.b
Inst ID: msdj.i

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	AVG CONC	STD DEV	MDL	
155 4-Ethyltoluene	425.09	457.72	411.24	439.61	449.21	453.73	409.79	476.34	440.34	23.51	70.48	0.5
156 1,3,5-Trimethylbenzene	447.19	433.03	415.64	442.09	442.44	471.66	406.93	446.56	438.19	20.06	60.14	↓
157 2-Chlorotoluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
158 4-Chlorotoluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
159 Diisobutyl Ketone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
160 Quinoline	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
161 p-Cymene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
162 1,2,4-Trimethylbenzene	421.82	430.11	427.18	425.03	431.18	429.28	429.09	449.93	430.45	8.43	25.29	0.5
163 Pentachloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
164 sec-Butylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
165 1,3-Dichlorobenzene	411.31	449.79	414.67	417.43	430.56	470.80	451.65	447.45	436.71	21.42	64.22	0.5
166 1,4-Dichlorobenzene	426.08	429.74	437.22	439.64	393.66	444.47	443.80	362.90	422.19	29.02	87.00	↓
167 1,2,3-Trimethylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
168 alpha-Chlorotoluene	284.28	323.26	303.96	314.76	299.56	360.10	352.79	326.24	320.62	25.94	77.76	0.5
169 1,3,5-Trichlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
170 Butylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
171 1,2-Dichlorobenzene	436.72	483.63	431.78	460.25	422.53	486.52	429.17	412.80	445.43	27.99	83.91	0.5
172 Isooctyl Acrylate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
173 1,2-Dibromo-3-Chloropr	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
174 1,2,4-Trichlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
175 Hexachlorobutadiene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
176 Naphthalene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	

Report Date : 02-May-2014 21:26

2.0 ppbv RL

#2649-173 (2.0 ppbv) = 200mL

Eurofins Air Toxics Inc.
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msdj.i/02may14.b/j14q0501a.m
Batch File: /chem/msdj.i/02may14.b
Inst ID: msdj.i

MDL Verification at 0.7ppbv
(70 mL of #2649-173 [2.0ppbv])
J050220

ID:	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08
FILENAME:	j050210	j050211	j050212	j050213	j050214	j050215	j050216	j050217
INJ.DATE:	02-MAY-2014	02-MAY-2014	02-MAY-2014	02-MAY-2014	02-MAY-2014	02-MAY-2014	02-MAY-2014	02-MAY-2014
INJ.TIME:	17:46	18:12	18:40	19:07	19:34	20:02	20:28	20:55

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	AVG CONC	STD DEV	MDL	
1 Dimethyl Ether	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
210 Propane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
207 2-Chloropropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
205 Hexafluoropropene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
2 Acetaldehyde	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
3 Freon 13	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
4 2-Methyl-1-Butene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
5 Freon 134a	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
6 Propylene	2002.75	2079.70	2069.04	2196.61	2112.83	2349.59	2244.83	2390.48	2180.73	139.30	417.63	2000
7 Dichlorodifluoromethan	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
8 Freon 152a	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
9 Freon 22	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
10 Freon 114	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
11 Isobutane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
12 Freon142b	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
13 Chloromethane	1923.56	1943.48	2094.92	2306.70	2041.08	2062.61	2402.01	2253.60	2128.49	173.84	521.19	5000
14 Butane	2356.08	2246.40	2527.14	2091.55	2738.57	2721.25	2561.10	2653.74	2486.98	234.36	702.61	2000

Reviewer 1 [signature] Date: 5/5/14
Reviewer 2 Laura Dillery Date: 5/6/14

Mean recovered concentration between 1 + 20 for all compounds.

$\bar{x}$ = 348 ppbv = 0.348 ppbv

$2\bar{x}$ = 0.7 ppbv

Eurofins Air Toxics Inc.
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msdj.i/02may14.b/j14q0501a.m
Batch File: /chem/msdj.i/02may14.b
Inst ID: msdj.i

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	AVG CONC	STD DEV	MDL	
15 Vinyl Chloride	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
16 Freon 143a	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
17 Propanal	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
18 1,3-Butadiene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
19 Freon 14	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
20 Vinyl Fluoride	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
21 Bromoethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
22 Isobutylene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
23 2,3-Dimethylbutane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
24 Bromomethane	1666.91	1592.19	1640.00	1800.28	1759.32	1632.83	1682.80	1800.82	1696.89	79.99	239.81	2000
25 Chloroethane	1853.09	1995.15	2008.00	2234.66	2118.63	2228.91	2234.63	2093.16	2095.78	138.12	414.10	2000
26 Isopentane	2082.65	2165.05	2116.05	2174.19	2298.86	2328.80	2373.24	2399.04	2242.23	122.14	366.18	2000
27 Freon143a	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
28 Trichlorofluoromethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
206 2,3-Dichloro-1-propene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
29 Ethanol	2470.63	2211.69	2209.11	2274.77	2372.68	2256.03	2486.94	2209.76	2311.45	116.54	349.38	2000
30 Methanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
31 Dichlorofluoromethane/	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
32 2,4-Dimethylpentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
33 Freon 113	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
34 1,1-Dichloroethene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
35 2-Butanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	

Eurofins Air Toxics Inc.
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msdj.i/02may14.b/j14q0501a.m
Batch File: /chem/msdj.i/02may14.b
Inst ID: msdj.i

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	AVG CONC	STD DEV	MDL	
36 3-Methyl-1-Hexene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
37 Vinyl Bromide	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
38 Acetone	2623.25	2531.16	2315.83	2790.14	2524.96	2664.27	2634.53	2814.99	2612.39	159.52	478.25	5000
39 Methacrylonitrile	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
40 Carbon Disulfide	1963.40	1969.81	2029.33	2094.36	2052.49	2083.61	2214.29	2148.81	2069.51	85.50	256.33	2000
41 2-Propanol	1929.99	2119.25	2145.84	2248.22	2129.29	2177.55	2250.74	2374.09	2171.87	129.14	387.16	2000
42 Pentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
43 1-Pentene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
44 3-Chloropropene	1828.58	1867.18	1809.01	1890.88	1900.65	2040.65	1941.93	1939.63	1902.31	73.30	219.75	2000
45 Cyclopentene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
46 Methylene Chloride	1979.42	2071.81	2145.57	2193.34	2284.69	2371.48	2339.96	2473.29	2232.45	164.98	494.61	5000
47 Acrolein	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
48 tert-Butyl-Alcohol	1769.44	1847.39	1803.15	1875.71	1940.93	1938.67	1988.95	2068.33	1904.07	99.33	297.80	2000
49 Ethyl Ether	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
50 MTBE	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
51 2-Methylpentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
52 trans-1,2-Dichloroethe	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
53 Freon123a	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
54 Freon123	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
55 Iodomethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
56 2,3,4-Trimethylpentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
57 Methyl acetate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
58 Hexane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
59 Pentanal	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	

Eurofins Air Toxics Inc.
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msdj.i/02may14.b/j14q0501a.m
Batch File: /chem/msdj.i/02may14.b
Inst ID: msdj.i

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	AVG CONC	STD DEV	MDL	
60 2,4,4-Trimethyl-1-pent	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
61 Cyclopentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
62 Acetonitrile	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
63 Isopropyl ether	1773.16	1788.71	1935.38	1909.73	1884.11	2000.69	2050.53	2154.19	1937.06	129.00	386.75	2000
64 1,1-Dichloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
65 Vinyl Acetate	2039.49	2259.02	2209.37	2077.45	2165.34	2049.80	2257.10	2125.00	2147.82	88.82	266.27	2600
66 2,4,4-Trimethyl-2-pent	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
67 1-Propanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
68 Chloroprene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
69 Butanal	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
70 Acrylonitrile	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
71 1-Hexene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
72 t-Butylethyl Ether	1619.27	1623.39	1636.82	1665.65	1733.54	1709.50	1780.89	1811.03	1697.51	73.29	219.71	2000
73 2,2-Dichloropropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
74 cis-1,2-Dichloroethene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
75 2-Butanone	1527.51	1850.14	1841.05	1798.23	1758.88	1813.17	1678.28	1875.61	1767.86	115.01	344.79	2000
76 2,3-Dimethylpentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
77 1-Bromo-2-Chloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
78 Tetrahydrofuran	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
* 79 Bromochloromethane	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	0.00	0.00	
80 Chloroform	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
81 Ethyl Acetate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
82 Methyl Acrylate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	

Eurofins Air Toxics Inc.
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msdj.i/02may14.b/j14q0501a.m
Batch File: /chem/msdj.i/02may14.b
Inst ID: msdj.i

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	AVG CONC	STD DEV	MDL	
83 Cyclohexane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
84 Thiophene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
85 1,1,1-Trichloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
86 Carbon Tetrachloride	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
87 1,1-Dichloropropene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
88 Isobutanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
89 2,2,4-Trimethylpentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
90 Benzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
$ 91 1,2-Dichloroethane-d4	26301.04	27303.52	26725.16	27715.46	27995.20	27339.12	26978.86	27240.00	27199.79	536.15	1607.39	
92 2-Pentanone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
93 tert-amyl-Methyl Ether	1624.73	1560.84	1533.59	1703.07	1608.85	1681.74	1762.97	1654.61	1641.30	75.43	226.15	2000
94 1,2-Dichloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
95 Heptane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
96 Ethyl acrylate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
97 Methyl Methacrylate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
98 Dibromomethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
99 Epichlorohydrin	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
* 100 1,4-Difluorobenzene	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	0.00	0.00	
101 2-Chloroethyl vinyl et	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
102 1-Butanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
103 Octane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
104 Trichloroethene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
105 Methyl Cyclohexane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
106 1,2-Dichloropropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	

Eurofins Air Toxics Inc.
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msdj.i/02may14.b/j14q0501a.m
Batch File: /chem/msdj.i/02may14.b
Inst ID: msdj.i

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	AVG CONC	STD DEV	MDL	
107 1,4-Dioxane	1676.85	1748.79	1869.16	1676.19	1834.39	1913.07	1904.74	1974.35	1824.69	112.35	336.83	2000
108 Bromodichloromethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
109 Nonane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
110 cis-1,3-Dichloropropen	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
111 Cyclohexanone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
112 4-Methyl-2-pentanone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
113 trans-1,4-dichloro-2-b	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
$ 114 Toluene-d8	25546.00	25107.02	25083.88	24885.57	25414.56	25672.75	24992.08	25006.91	25213.60	290.14	869.85	
115 Toluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
116 tert-Butylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
117 bis(2-chloroethyl)ethe	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
118 trans-1,3-Dichloroprop	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
119 alpha-Pinene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
120 1,1,2-Trichloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
121 Decane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
122 Tetrachloroethene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
123 1,3-Dichloropropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
124 Alphamethylstyrene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
125 2-Hexanone	1650.03	1593.39	1669.32	1725.18	1735.63	1751.58	1748.47	1743.35	1702.12	58.02	173.93	2000
126 Butyl Acetate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
127 beta-Pinene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
128 Dibromochloromethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
129 Dodecane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
130 1,2-Dibromoethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	

Eurofins Air Toxics Inc.
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msdj.i/02may14.b/j14q0501a.m
Batch File: /chem/msdj.i/02may14.b
Inst ID: msdj.i

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	AVG CONC	STD DEV	MDL
131 D-Limonene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
132 Hexachloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
133 Undecane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
* 134 Chlorobenzene-d5	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	25000.00	0.00	0.00
135 Chlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
136 Indan	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
137 Ethyl Benzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
138 1,1,1,2-Tetrachloroeth	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
139 Indene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
140 m,p-Xylene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
141 o-Xylene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
142 Styrene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
143 2-Heptanone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
144 1,2,3-Trichlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
145 Bromoform	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
146 Aniline	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
147 Cumene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
148 Isooctyl Alcohol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
$ 149 Bromofluorobenzene	22383.90	22447.39	23177.60	23149.63	22968.58	23268.68	22681.73	22743.81	22852.67	339.19	1016.88
150 2-Methylnaphthalene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
151 1,1,2,2-Tetrachloroeth	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
152 Bromobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
153 Propylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
154 1,2,3-Trichloropropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

Eurofins Air Toxics Inc.
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msdj.i/02may14.b/j14q0501a.m
Batch File: /chem/msdj.i/02may14.b
Inst ID: msdj.i

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	AVG CONC	STD DEV	MDL	
155 4-Ethyltoluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
156 1,3,5-Trimethylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
157 2-Chlorotoluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
158 4-Chlorotoluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
159 Diisobutyl Ketone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
160 Quinoline	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
161 p-Cymene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
162 1,2,4-Trimethylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
163 Pentachloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
164 sec-Butylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
165 1,3-Dichlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
166 1,4-Dichlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
167 1,2,3-Trimethylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
168 alpha-Chlorotoluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
169 1,3,5-Trichlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
170 Butylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
171 1,2-Dichlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
172 Isooctyl Acrylate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
173 1,2-Dibromo-3-Chloropr	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
174 1,2,4-Trichlorobenzene	1411.36	1542.32	1632.98	1640.84	1737.03	1725.78	1802.20	1798.59	1661.39	134.40	402.92	2000
175 Hexachlorobutadiene	1274.35	1378.44	1551.13	1505.97	1579.35	1704.35	1600.54	1616.71	1526.35	138.65	415.69	2000
176 Naphthalene	191.99	180.79	186.93	215.23	201.30	206.36	221.82	224.88	203.66	16.33	48.94	2000

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Client Sample ID: CCV

Lab ID#: 1503058BR1-09A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**j030502**	**Date of Collection: NA**
Dil. Factor:	**1.00**	**Date of Analysis: 3/5/15 09:28 AM**

Compound	%Recovery
Freon 12	104
Freon 114	102
Chloromethane	117
Vinyl Chloride	106
1,3-Butadiene	105
Bromomethane	113
Chloroethane	101
Freon 11	100
Ethanol	93
Freon 113	98
1,1-Dichloroethene	103
Acetone	105
2-Propanol	103
Carbon Disulfide	101
3-Chloropropene	101
Methylene Chloride	104
Methyl tert-butyl ether	101
trans-1,2-Dichloroethene	100
Hexane	102
1,1-Dichloroethane	97
2-Butanone (Methyl Ethyl Ketone)	98
cis-1,2-Dichloroethene	102
Tetrahydrofuran	99
Chloroform	99
1,1,1-Trichloroethane	100
Cyclohexane	99
Carbon Tetrachloride	100
2,2,4-Trimethylpentane	94
Benzene	100
1,2-Dichloroethane	96
Heptane	98
Trichloroethene	95
1,2-Dichloropropane	99
1,4-Dioxane	99
Bromodichloromethane	99
cis-1,3-Dichloropropene	98
4-Methyl-2-pentanone	92
Toluene	96
trans-1,3-Dichloropropene	98
1,1,2-Trichloroethane	97
Tetrachloroethene	98
2-Hexanone	98

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Client Sample ID: CCV

Lab ID#: 1503058BR1-09A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**j030502**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 3/5/15 09:28 AM**	

Compound	**%Recovery**
Dibromochloromethane	98
1,2-Dibromoethane (EDB)	98
Chlorobenzene	97
Ethyl Benzene	96
m,p-Xylene	94
o-Xylene	96
Styrene	98
Bromoform	97
Cumene	94
1,1,2,2-Tetrachloroethane	97
Propylbenzene	96
4-Ethyltoluene	97
1,3,5-Trimethylbenzene	96
1,2,4-Trimethylbenzene	97
1,3-Dichlorobenzene	96
1,4-Dichlorobenzene	98
alpha-Chlorotoluene	98
1,2-Dichlorobenzene	97
1,2,4-Trichlorobenzene	108
Hexachlorobutadiene	106
Naphthalene	102

Container Type: NA - Not Applicable

Surrogates	**%Recovery**	**Method Limits**
Toluene-d8	100	70-130
1,2-Dichloroethane-d4	103	70-130
4-Bromofluorobenzene	99	70-130

Eurofins Air Toxics Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: msdj.i Injection Date: 05-MAR-2015 09:28
Lab File ID: j030502.d Init. Cal. Date(s): 04-MAR-2015 04-MAR-2015
Analysis Type: AIR Init. Cal. Times: 10:17 12:36
Lab Sample ID: CCV Quant Type: ISTD
Method: /chem/msdj.i/05mar15.b/j15q0304a.m

COMPOUND	RRF / AMOUNT	RF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
$ 117 1,2-Dichloroethane-d4	1.14550	1.18223	0.010	-3.20672	30.00000	Averaged
$ 146 Toluene-d8	1.02012	1.02202	0.010	-0.18589	30.00000	Averaged
$ 177 4-Bromofluorobenzene	0.64935	0.64126	0.010	1.24645	30.00000	Averaged
9 Propylene	0.73902	0.78110	0.010	-5.69326	30.00000	Averaged
11 Freon 12	2.51514	2.60867	0.010	-3.71871	30.00000	Averaged
15 Freon 114	2.29215	2.33945	0.010	-2.06359	30.00000	Averaged
17 Chloromethane	0.71794	0.84018	0.010	-17.02510	30.00000	Averaged
23 Butane	0.19426	0.19862	0.010	-2.24360	30.00000	Averaged
25 Vinyl Chloride	0.99130	1.05022	0.010	-5.94280	30.00000	Averaged
26 1,3-Butadiene	0.76696	0.80877	0.010	-5.45109	30.00000	Averaged
29 Bromomethane	0.80750	0.91433	0.010	-13.22928	30.00000	Averaged
30 Chloroethane	0.50789	0.51450	0.010	-1.30135	30.00000	Averaged
31 Isopentane	1.17294	1.19749	0.010	-2.09275	30.00000	Averaged
35 Freon 11	2.72706	2.73249	0.010	-0.19938	30.00000	Averaged
42 Ethanol	0.42718	0.39922	0.010	6.54608	30.00000	Averaged
49 Freon 113	2.24743	2.20496	0.010	1.88979	30.00000	Averaged
50 1,1-Dichloroethene	0.69878	0.72080	0.010	-3.15157	30.00000	Averaged
52 Acetone	0.48219	0.50694	0.010	-5.13388	30.00000	Averaged
56 Carbon Disulfide	3.14887	3.18832	0.010	-1.25297	30.00000	Averaged
57 2-Propanol	1.77131	1.81786	0.010	-2.62806	30.00000	Averaged
58 3-Chloropropene	0.54300	0.54750	0.010	-0.82866	30.00000	Averaged
66 Methylene Chloride	1.20318	1.25512	0.010	-4.31664	30.00000	Averaged
71 tert-Butyl alcohol	2.10758	2.13999	0.010	-1.53802	30.00000	Averaged
72 Methyl tert-butyl ether	3.07185	3.10581	0.010	-1.10542	30.00000	Averaged
73 trans-1,2-Dichloroethene	0.77021	0.76978	0.010	0.05472	30.00000	Averaged
78 Hexane	1.78574	1.82936	0.010	-2.44301	30.00000	Averaged
82 1,1-Dichloroethane	2.10856	2.05466	0.010	2.55597	30.00000	Averaged
83 Isopropyl ether	3.80047	3.82877	0.010	-0.74471	30.00000	Averaged
86 Vinyl Acetate	0.31786	0.33251	0.010	-4.61040	30.00000	Averaged
88 Ethyl-tert-butyl ether	3.61952	3.65338	0.010	-0.93564	30.00000	Averaged
91 cis-1,2-Dichloroethene	0.83831	0.85270	0.010	-1.71751	30.00000	Averaged
92 2-Butanone	0.62275	0.61097	0.010	1.89128	30.00000	Averaged
99 Tetrahydrofuran	1.37932	1.36973	0.010	0.69544	30.00000	Averaged
100 Chloroform	2.48216	2.45771	0.010	0.98514	30.00000	Averaged
102 Cyclohexane	1.71565	1.69839	0.010	1.00587	30.00000	Averaged
103 1,1,1-Trichloroethane	2.58059	2.59183	0.010	-0.43561	30.00000	Averaged

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CONTINUING CALIBRATION COMPOUNDS

Instrument ID: msdj.i Injection Date: 05-MAR-2015 09:28
Lab File ID: j030502.d Init. Cal. Date(s): 04-MAR-2015 04-MAR-2015
Analysis Type: AIR Init. Cal. Times: 10:17 12:36
Lab Sample ID: CCV Quant Type: ISTD
Method: /chem/msdj.i/05mar15.b/j15q0304a.m

COMPOUND	RRF / AMOUNT	RF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
106 Carbon Tetrachloride	2.78906	2.78693	0.010	0.07644	30.00000	Averaged
113 2,2,4-Trimethylpentane	5.17101	4.85610	0.010	6.09001	30.00000	Averaged
116 Benzene	0.89754	0.89910	0.010	-0.17320	30.00000	Averaged
119 tert-Amyl methyl ether	0.89439	0.90830	0.010	-1.55526	30.00000	Averaged
120 1,2-Dichloroethane	0.35949	0.34442	0.010	4.19332	30.00000	Averaged
121 Heptane	0.32524	0.31929	0.010	1.82933	30.00000	Averaged
125 Trichloroethene	0.48473	0.45894	0.010	5.31965	30.00000	Averaged
127 Methylcyclohexane	2.37836	2.39325	0.010	-0.62638	30.00000	Averaged
132 1,2-Dichloropropane	0.34907	0.34543	0.010	1.04182	30.00000	Averaged
136 1,4-Dioxane	0.23020	0.22874	0.010	0.63185	30.00000	Averaged
138 Bromodichloromethane	0.65823	0.64908	0.010	1.39101	30.00000	Averaged
144 cis-1,3-Dichloropropene	0.59822	0.58973	0.010	1.41893	30.00000	Averaged
145 4-Methyl-2-pentanone	0.30255	0.27879	0.010	7.85198	30.00000	Averaged
147 Toluene	1.23922	1.19298	0.010	3.73082	30.00000	Averaged
150 trans-1,3-Dichloropropene	0.56606	0.55759	0.010	1.49583	30.00000	Averaged
155 1,1,2-Trichloroethane	0.45424	0.44104	0.010	2.90653	30.00000	Averaged
156 Tetrachloroethene	0.68755	0.67633	0.010	1.63154	30.00000	Averaged
158 2-Hexanone	0.43079	0.42136	0.010	2.18796	30.00000	Averaged
160 Dibromochloromethane	0.87308	0.85743	0.010	1.79225	30.00000	Averaged
161 1,2-Dibromoethane (EDB)	0.71857	0.70068	0.010	2.49000	30.00000	Averaged
165 Chlorobenzene	1.10384	1.07159	0.010	2.92198	30.00000	Averaged
167 Ethyl Benzene	0.56674	0.54182	0.010	4.39724	30.00000	Averaged
169 m,p-Xylene	0.70220	0.65859	0.010	6.21100	30.00000	Averaged
171 o-Xylene	0.66097	0.63751	0.010	3.54946	30.00000	Averaged
172 Styrene	1.11126	1.08969	0.010	1.94133	30.00000	Averaged
174 Bromoform	0.92966	0.90285	0.010	2.88359	30.00000	Averaged
175 Cumene	2.05814	1.93465	0.010	6.00020	30.00000	Averaged
181 1,1,2,2-Tetrachloroethane	0.88723	0.86068	0.010	2.99158	30.00000	Averaged
182 Propylbenzene	2.44003	2.33689	0.010	4.22713	30.00000	Averaged
188 4-Ethyltoluene	0.65727	0.63606	0.010	3.22683	30.00000	Averaged
190 1,3,5-Trimethylbenzene	0.89572	0.86051	0.010	3.93066	30.00000	Averaged
196 1,2,4-Trimethylbenzene	0.80256	0.77725	0.010	3.15450	30.00000	Averaged
208 1,3-Dichlorobenzene	1.30123	1.24644	0.010	4.21091	30.00000	Averaged
209 1,4-Dichlorobenzene	1.28603	1.26330	0.010	1.76692	30.00000	Averaged
212 alpha-Chlorotoluene	1.58404	1.54554	0.010	2.43041	30.00000	Averaged

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CONTINUING CALIBRATION COMPOUNDS

Instrument ID: msdj.i Injection Date: 05-MAR-2015 09:28
Lab File ID: j030502.d Init. Cal. Date(s): 04-MAR-2015 04-MAR-2015
Analysis Type: AIR Init. Cal. Times: 10:17 12:36
Lab Sample ID: CCV Quant Type: ISTD
Method: /chem/msdj.i/05mar15.b/j15q0304a.m

COMPOUND	RRF / AMOUNT	RF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
214 1,2-Dichlorobenzene	1.21822	1.18476	0.010	2.74598	30.00000	Averaged
226 1,2,4-Trichlorobenzene	1.00606	1.08531	0.010	-7.87761	30.00000	Averaged
227 Hexachlorobutadiene	0.75095	0.79917	0.010	-6.42005	30.00000	Averaged
228 Naphthalene	1.64441	1.66992	0.010	-1.55115	30.00000	Averaged

Eurofins Air Toxics Inc.

EPA TO-15/MODIFIED EPA TO-14A

Data file : /chem/msdj.i/05mar15.b/j030502.d
Lab Smp Id: CCV Client Smp ID: CCV
Inj Date : 05-MAR-2015 09:28
Operator : sg Inst ID: msdj.i
Smp Info : 50ml #2716-50
Misc Info : 50ppbv(200ppbv)
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msdj.i/05mar15.b/j15q0304a.m
Meth Date : 05-Mar-2015 11:19 mskidmor Quant Type: ISTD
Cal Date : 04-MAR-2015 12:36 Cal File: j030408.d
Als bottle: 13 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT12.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
* 98 Bromochloromethane						CAS #: 74-97-5	
5.494	5.494 (1.000)	130	140692	25.0000		80.00- 120.00	100.00
5.494	5.494 (1.000)	128	108491			48.40- 108.40	77.11
5.494	5.494 (1.000)	49	165833			84.80- 144.80	117.87
* 123 1,4-Difluorobenzene						CAS #: 540-36-3	
6.404	6.404 (1.000)	114	614418	25.0000		80.00- 120.00	100.00
6.404	6.404 (1.000)	88	91639			0.00- 45.38	14.91
* 163 Chlorobenzene-d5						CAS #: 3114-55-4	
8.894	8.894 (1.000)	117	577173	25.0000		80.00- 120.00	100.00
8.894	8.894 (1.000)	82	290991			20.55- 80.55	50.42
$ 117 1,2-Dichloroethane-d4						CAS #: 17060-07-0	
6.054	6.054 (1.102)	65	166330	25.0000	25.802	80.00- 120.00	100.00
6.054	6.054 (1.102)	67	97795			28.68- 88.68	58.80

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
$ 146 Toluene-d8					CAS #: 2037-26-5		
7.635	7.635 (1.192)	98	627946	25.0000	25.046	80.00- 120.00	100.00
7.635	7.635 (1.192)	70	61745			0.00- 40.26	9.83
7.635	7.635 (1.192)	100	422854			38.16- 98.16	67.34
$ 177 4-Bromofluorobenzene					CAS #: 460-00-4		
9.888	9.888 (1.112)	174	370117	25.0000	24.688	80.00- 120.00	100.00
9.874	9.874 (1.110)	95	408878			82.57- 142.57	110.47
9.888	9.888 (1.112)	176	366260			67.45- 127.45	98.96
9 Propylene					CAS #: 115-07-1		
1.367	1.367 (0.249)	41	219788	50.0000	52.847	80.00- 120.00	100.00
1.367	1.367 (0.249)	42	141665			35.76- 95.76	64.46
1.367	1.367 (0.249)	39	149822			37.69- 97.69	68.17
11 Freon 12					CAS #: 75-71-8		
1.409	1.409 (0.256)	85	734039	50.0000	51.859	80.00- 120.00	100.00
1.409	1.409 (0.256)	87	235463			2.74- 62.74	32.08
15 Freon 114					CAS #: 76-14-2		
1.521	1.521 (0.277)	135	658284	50.0000	51.032	80.00- 120.00	100.00
1.521	1.521 (0.277)	137	208389			1.49- 61.49	31.66
17 Chloromethane					CAS #: 74-87-3		
1.605	1.605 (0.292)	50	236412	50.0000	58.512	80.00- 120.00	100.00
1.605	1.605 (0.292)	52	73360			1.90- 61.90	31.03
23 Butane					CAS #: 106-97-8		
1.689	1.689 (0.307)	58	55889	50.0000	51.122	80.00- 120.00	100.00
1.689	1.689 (0.307)	43	421984			699.33- 759.33	755.04
25 Vinyl Chloride					CAS #: 75-01-4		
1.731	1.731 (0.315)	62	295514	50.0000	52.971	80.00- 120.00	100.00
1.731	1.731 (0.315)	64	89209			0.48- 60.48	30.19
26 1,3-Butadiene					CAS #: 106-99-0		
1.745	1.745 (0.318)	54	227575	50.0000	52.726	80.00- 120.00	100.00
1.745	1.745 (0.318)	39	216397			69.90- 129.90	95.09
29 Bromomethane					CAS #: 74-83-9		
2.122	2.122 (0.386)	94	257278	50.0000	56.615	80.00- 120.00	100.00
2.122	2.122 (0.386)	96	242477			62.83- 122.83	94.25
30 Chloroethane					CAS #: 75-00-3		
2.234	2.234 (0.407)	64	144773	50.0000	50.651	80.00- 120.00	100.00
2.234	2.234 (0.407)	66	46639			1.30- 61.30	32.22

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
30 Chloroethane (continued)							
2.234	2.234 (0.407)	49	37382			0.00- 55.56	25.82
31 Isopentane					CAS #: 78-78-4		
2.248	2.248 (0.409)	43	336955	50.0000	51.046	80.00- 120.00	100.00
2.248	2.248 (0.409)	57	233732			39.25- 99.25	69.37
35 Freon 11					CAS #: 75-69-4		
2.486	2.486 (0.452)	101	768880	50.0000	50.100	80.00- 120.00	100.00
2.486	2.486 (0.452)	103	502505			34.53- 94.53	65.36
42 Ethanol					CAS #: 64-17-5		
2.850	2.850 (0.519)	45	112333	50.0000	46.727	80.00- 120.00	100.00
2.850	2.850 (0.519)	43	20647			0.00- 48.78	18.38
2.850	2.850 (0.519)	46	41937			9.14- 69.14	37.33
49 Freon 113					CAS #: 76-13-1		
3.158	3.158 (0.575)	151	620440	50.0000	49.055	80.00- 120.00	100.00
3.158	3.158 (0.575)	153	399162			33.29- 93.29	64.34
3.144	3.144 (0.572)	101	704389			83.98- 143.98	113.53
50 1,1-Dichloroethene					CAS #: 75-35-4		
3.186	3.186 (0.580)	98	202822	50.0000	51.576	80.00- 120.00	100.00
3.186	3.186 (0.580)	96	325447			129.90- 189.90	160.46
3.186	3.186 (0.580)	61	483834			210.75- 270.75	238.55
52 Acetone					CAS #: 67-64-1		
3.354	3.354 (0.610)	58	142645	50.0000	52.567	80.00- 120.00	100.00
3.354	3.354 (0.610)	43	421786			270.02- 330.02	295.69
56 Carbon Disulfide					CAS #: 75-15-0		
3.424	3.424 (0.623)	76	897143	50.0000	50.626	80.00- 120.00	100.00
57 2-Propanol					CAS #: 67-63-0		
3.536	3.536 (0.643)	45	511517	50.0000	51.314	80.00- 120.00	100.00
3.536	3.536 (0.643)	43	92216			0.00- 47.69	18.03
3.550	3.550 (0.646)	59	20602			0.00- 33.85	4.03
58 3-Chloropropene					CAS #: 107-05-1		
3.689	3.689 (0.671)	76	154058	50.0000	50.414	80.00- 120.00	100.00
3.689	3.689 (0.671)	41	387030			215.96- 275.96	251.22
66 Methylene Chloride					CAS #: 75-09-2		
3.885	3.885 (0.707)	49	353171	50.0000	52.158	80.00- 120.00	100.00
3.885	3.885 (0.707)	84	283126			51.17- 111.17	80.17
3.885	3.885 (0.707)	51	105885			0.00- 59.41	29.98

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
71 tert-Butyl alcohol					CAS #: 75-65-0		
4.025	4.025 (0.733)	59	602159	50.0000	50.769	80.00- 120.00	100.00
4.025	4.025 (0.733)	41	143917			0.00- 51.64	23.90
4.025	4.025 (0.733)	57	59209			0.00- 40.45	9.83
72 Methyl tert-butyl ether					CAS #: 1634-04-4		
4.109	4.109 (0.748)	73	873924	50.0000	50.553	80.00- 120.00	100.00
4.109	4.109 (0.748)	57	200686			0.00- 52.57	22.96
4.109	4.109 (0.748)	41	180882			0.00- 50.82	20.70
73 trans-1,2-Dichloroethene					CAS #: 156-60-5		
4.137	4.137 (0.753)	98	216605	50.0000	49.973	80.00- 120.00	100.00
4.137	4.137 (0.753)	61	461293			185.75- 245.75	212.97
4.137	4.137 (0.753)	96	337801			128.77- 188.77	155.95
78 Hexane					CAS #: 110-54-3		
4.347	4.347 (0.791)	57	514754	50.0000	51.222	80.00- 120.00	100.00
4.347	4.347 (0.791)	43	317009			32.33- 92.33	61.58
4.347	4.347 (0.791)	86	87154			0.00- 47.05	16.93
82 1,1-Dichloroethane					CAS #: 75-34-3		
4.655	4.655 (0.847)	63	578149	50.0000	48.722	80.00- 120.00	100.00
4.655	4.655 (0.847)	65	181920			1.83- 61.83	31.47
83 Isopropyl ether					CAS #: 108-20-3		
4.627	4.627 (0.842)	45	1077356	50.0000	50.372	80.00- 120.00	100.00
4.641	4.641 (0.845)	87	309062			0.00- 58.50	28.69
4.641	4.641 (0.845)	59	125413			0.00- 41.54	11.64
86 Vinyl Acetate					CAS #: 108-05-4		
4.697	4.697 (0.855)	86	93563	50.0000	52.305	80.00- 120.00	100.00
4.697	4.697 (0.855)	43	959160			1027.99-1087.99	1025.15
88 Ethyl-tert-butyl ether					CAS #: 637-92-3		
5.005	5.005 (0.911)	59	1028004	50.0000	50.468	80.00- 120.00	100.00
5.005	5.005 (0.911)	87	446844			13.39- 73.39	43.47
5.005	5.005 (0.911)	41	177237			0.00- 46.90	17.24
91 cis-1,2-Dichloroethene					CAS #: 156-59-2		
5.256	5.256 (0.957)	98	239937	50.0000	50.859	80.00- 120.00	100.00
5.256	5.256 (0.957)	96	380451			120.40- 180.40	158.56
5.256	5.256 (0.957)	61	456315			156.78- 216.78	190.18
92 2-Butanone					CAS #: 78-93-3		
5.284	5.284 (0.962)	72	171917	50.0000	49.054	80.00- 120.00	100.00
5.284	5.284 (0.962)	43	667065			345.28- 405.28	388.02

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
92 2-Butanone (continued)							
5.284	5.284 (0.962)	57	54966			0.64- 60.64	31.97
99 Tetrahydrofuran					CAS #: 109-99-9		
5.494	5.494 (1.000)	42	385419	50.0000	49.652	80.00- 120.00	100.00
5.494	5.494 (1.000)	71	157233			10.18- 70.18	40.80
5.494	5.494 (1.000)	72	162729			13.63- 73.63	42.22
100 Chloroform					CAS #: 67-66-3		
5.564	5.564 (1.013)	83	691560	50.0000	49.507	80.00- 120.00	100.00
5.564	5.564 (1.013)	85	456351			36.39- 96.39	65.99
102 Cyclohexane					CAS #: 110-82-7		
5.662	5.662 (1.031)	84	477900	50.0000	49.497	80.00- 120.00	100.00
5.648	5.648 (1.028)	56	567626			85.96- 145.96	118.78
5.648	5.648 (1.028)	41	283692			27.64- 87.64	59.36
103 1,1,1-Trichloroethane					CAS #: 71-55-6		
5.676	5.676 (1.033)	97	729299	50.0000	50.218	80.00- 120.00	100.00
5.676	5.676 (1.033)	99	458819			34.56- 94.56	62.91
106 Carbon Tetrachloride					CAS #: 56-23-5		
5.802	5.802 (1.056)	119	784197	50.0000	49.962	80.00- 120.00	100.00
5.802	5.802 (1.056)	117	806751			75.97- 135.97	102.88
113 2,2,4-Trimethylpentane					CAS #: 540-84-1		
5.998	5.998 (1.092)	57	1366428	50.0000	46.955	80.00- 120.00	100.00
5.998	5.998 (1.092)	56	449479			0.00- 59.67	32.89
5.998	5.998 (1.092)	41	280130			0.00- 50.74	20.50
116 Benzene					CAS #: 71-43-2		
6.026	6.026 (0.941)	78	1104844	50.0000	50.087	80.00- 120.00	100.00
6.026	6.026 (0.941)	77	250528			0.00- 52.91	22.68
119 tert-Amyl methyl ether					CAS #: 994-05-8		
6.096	6.096 (1.109)	87	255581	50.0000	50.778	80.00- 120.00	100.00
6.096	6.096 (1.109)	73	1033024			376.47- 436.47	404.19
6.082	6.082 (1.107)	55	265689			75.02- 135.02	103.95
120 1,2-Dichloroethane					CAS #: 107-06-2		
6.124	6.124 (0.956)	62	423233	50.0000	47.903	80.00- 120.00	100.00
6.124	6.124 (0.956)	64	139194			2.46- 62.46	32.89
121 Heptane					CAS #: 142-82-5		
6.166	6.166 (0.963)	71	392354	50.0000	49.085	80.00- 120.00	100.00
6.166	6.166 (0.963)	43	678288			142.43- 202.43	172.88

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
121 Heptane (continued)							
6.166	6.166 (0.963)	57	446717			86.91- 146.91	113.86
125 Trichloroethene					CAS #: 79-01-6		
6.600	6.600 (1.031)	95	563965	50.0000	47.340	80.00- 120.00	100.00
6.600	6.600 (1.031)	130	630631			82.54- 142.54	111.82
6.600	6.600 (1.031)	97	360515			35.40- 95.40	63.93
127 Methylcyclohexane					CAS #: 108-87-2		
6.698	6.698 (1.219)	83	673423	50.0000	50.313	80.00- 120.00	100.00
6.698	6.698 (1.219)	98	319141			16.94- 76.94	47.39
6.698	6.698 (1.219)	55	520176			46.96- 106.96	77.24
132 1,2-Dichloropropane					CAS #: 78-87-5		
6.852	6.852 (1.070)	63	424480	50.0000	49.479	80.00- 120.00	100.00
6.852	6.852 (1.070)	62	292147			41.52- 101.52	68.82
6.852	6.852 (1.070)	41	201262			17.88- 77.88	47.41
136 1,4-Dioxane					CAS #: 123-91-1		
6.936	6.936 (1.083)	88	281087	50.0000	49.684	80.00- 120.00	100.00
6.936	6.936 (1.083)	58	181840			35.49- 95.49	64.69
6.936	6.936 (1.083)	57	59283			0.00- 50.66	21.09
138 Bromodichloromethane					CAS #: 75-27-4		
7.075	7.075 (1.105)	83	797608	50.0000	49.304	80.00- 120.00	100.00
7.075	7.075 (1.105)	85	518247			34.46- 94.46	64.98
144 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
7.467	7.467 (1.166)	75	724685	50.0000	49.290	80.00- 120.00	100.00
7.467	7.467 (1.166)	77	231311			1.77- 61.77	31.92
7.453	7.453 (1.164)	39	300858			11.11- 71.11	41.52
145 4-Methyl-2-pentanone					CAS #: 108-10-1		
7.565	7.565 (1.181)	58	342587	50.0000	46.074	80.00- 120.00	100.00
7.565	7.565 (1.181)	43	851889			220.64- 280.64	248.66
7.579	7.579 (1.184)	85	163726			17.04- 77.04	47.79
147 Toluene					CAS #: 108-88-3		
7.691	7.691 (1.201)	91	1465980	50.0000	48.134	80.00- 120.00	100.00
7.691	7.691 (1.201)	92	851951			27.98- 87.98	58.11
150 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
7.943	7.943 (0.893)	75	643656	50.0000	49.252	80.00- 120.00	100.00
7.943	7.943 (0.893)	77	205217			1.64- 61.64	31.88
7.943	7.943 (0.893)	39	257412			10.07- 70.07	39.99

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

  155 1,1,2-Trichloroethane                        CAS #: 79-00-5
  8.111   8.111 (0.912)    97    509111 50.0000   48.547  80.00- 120.00   100.00
  8.111   8.111 (0.912)    99    314541                   32.91-  92.91    61.78
  8.111   8.111 (0.912)    83    433248                   55.03- 115.03    85.10
-------------------------------------------------------------------------------
  156 Tetrachloroethene                            CAS #: 127-18-4
  8.139   8.139 (0.915)   166    780717 50.0000   49.184  80.00- 120.00   100.00
  8.139   8.139 (0.915)   129    557973                   41.30- 101.30    71.47
  8.139   8.139 (0.915)   131    544276                   39.67-  99.67    69.71
-------------------------------------------------------------------------------
  158 2-Hexanone                                   CAS #: 591-78-6
  8.265   8.265 (0.929)    58    486397 50.0000   48.906  80.00- 120.00   100.00
  8.265   8.265 (0.929)    43    865285                  147.18- 207.18   177.90
  8.279   8.279 (0.931)   100    108248                    0.00-  52.59    22.26
-------------------------------------------------------------------------------
  160 Dibromochloromethane                         CAS #: 124-48-1
  8.419   8.419 (0.946)   129    989768 50.0000   49.104  80.00- 120.00   100.00
  8.419   8.419 (0.946)   127    766750                   47.74- 107.74    77.47
-------------------------------------------------------------------------------
  161 1,2-Dibromoethane (EDB)                      CAS #: 106-93-4
  8.531   8.531 (0.959)   107    808825 50.0000   48.755  80.00- 120.00   100.00
  8.531   8.531 (0.959)   109    753234                   63.55- 123.55    93.13
-------------------------------------------------------------------------------
  165 Chlorobenzene                                CAS #: 108-90-7
  8.922   8.922 (1.003)   112   1236983 50.0000   48.539  80.00- 120.00   100.00
  8.922   8.922 (1.003)   114    393657                    1.75-  61.75    31.82
  8.908   8.908 (1.002)    77    645866                   22.27-  82.27    52.21
-------------------------------------------------------------------------------
  167 Ethyl Benzene                                CAS #: 100-41-4
  8.964   8.964 (1.008)   106    625451 50.0000   47.801  80.00- 120.00   100.00
  8.964   8.964 (1.008)    91   1941096                  278.96- 338.96   310.35
-------------------------------------------------------------------------------
  169 m,p-Xylene                                   CAS #: 108-38-3
  9.062   9.062 (1.019)   106    760240 50.0000   46.894  80.00- 120.00   100.00
  9.062   9.062 (1.019)    91   1475686                  158.57- 218.57   194.11
-------------------------------------------------------------------------------
  171 o-Xylene                                     CAS #: 95-47-6
  9.398   9.398 (1.057)   106    735910 50.0000   48.225  80.00- 120.00   100.00
  9.398   9.398 (1.057)    91   1509658                  173.40- 233.40   205.14
-------------------------------------------------------------------------------
  172 Styrene                                      CAS #: 100-42-5
  9.426   9.426 (1.060)   104   1257876 50.0000   49.029  80.00- 120.00   100.00
  9.426   9.426 (1.060)    78    574458                   15.95-  75.95    45.67
-------------------------------------------------------------------------------
  174 Bromoform                                    CAS #: 75-25-2
  9.636   9.636 (1.083)   173   1042200 50.0000   48.558  80.00- 120.00   100.00
```

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

  174 Bromoform (continued)
  9.636   9.636 (1.083)   171    539794                    22.23-  82.23    51.79
-------------------------------------------------------------------------------
  175 Cumene                                        CAS #: 98-82-8
  9.692   9.692 (1.090)   105   2233258 50.0000   47.000  80.00- 120.00   100.00
  9.692   9.692 (1.090)   120    617875                     0.00-  57.55    27.67
  9.692   9.692 (1.090)    51    180999                     0.00-  38.22     8.10
-------------------------------------------------------------------------------
  181 1,1,2,2-Tetrachloroethane                     CAS #: 79-34-5
 10.014  10.014 (1.126)    83    993528 50.0000   48.504  80.00- 120.00   100.00
 10.014  10.014 (1.126)    85    663971                    36.69-  96.69    66.83
-------------------------------------------------------------------------------
  182 Propylbenzene                                 CAS #: 103-65-1
 10.028  10.028 (1.127)    91   2697579 50.0000   47.886  80.00- 120.00   100.00
 10.042  10.042 (1.129)   120    672505                     0.00-  54.81    24.93
 10.028  10.028 (1.127)   105    102710                     0.00-  33.86     3.81
-------------------------------------------------------------------------------
  188 4-Ethyltoluene                                CAS #: 622-96-8
 10.126  10.126 (1.138)   120    734234 50.0000   48.386  80.00- 120.00   100.00
 10.126  10.126 (1.138)   105   2362448                   292.39- 352.39   321.76
-------------------------------------------------------------------------------
  190 1,3,5-Trimethylbenzene                        CAS #: 108-67-8
 10.182  10.182 (1.145)   120    993328 50.0000   48.035  80.00- 120.00   100.00
 10.182  10.182 (1.145)   105   1975973                   169.92- 229.92   198.92
-------------------------------------------------------------------------------
  196 1,2,4-Trimethylbenzene                        CAS #: 95-63-6
 10.503  10.503 (1.181)   120    897212 50.0000   48.423  80.00- 120.00   100.00
 10.503  10.503 (1.181)   105   1899827                   182.08- 242.08   211.75
-------------------------------------------------------------------------------
  208 1,3-Dichlorobenzene                           CAS #: 541-73-1
 10.797  10.797 (1.214)   146   1438821 50.0000   47.894  80.00- 120.00   100.00
 10.797  10.797 (1.214)   148    916562                    34.06-  94.06    63.70
 10.797  10.797 (1.214)   111    533615                     6.19-  66.19    37.09
-------------------------------------------------------------------------------
  209 1,4-Dichlorobenzene                           CAS #: 106-46-7
 10.881  10.881 (1.223)   146   1458289 50.0000   49.116  80.00- 120.00   100.00
 10.881  10.881 (1.223)   148    934315                    33.53-  93.53    64.07
 10.881  10.881 (1.223)   111    520049                     5.17-  65.17    35.66
-------------------------------------------------------------------------------
  212 alpha-Chlorotoluene                           CAS #: 100-44-7
 10.993  10.993 (1.236)    91   1784090 50.0000   48.785  80.00- 120.00   100.00
 10.993  10.993 (1.236)   126    404833                     0.00-  52.56    22.69
-------------------------------------------------------------------------------
  214 1,2-Dichlorobenzene                           CAS #: 95-50-1
 11.217  11.217 (1.261)   146   1367627 50.0000   48.627  80.00- 120.00   100.00
 11.217  11.217 (1.261)   148    872014                    33.19-  93.19    63.76
```

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

  214 1,2-Dichlorobenzene (continued)
 11.203  11.203 (1.260)   111    527742                    8.29-  68.29    38.59
-------------------------------------------------------------------------------
  226 1,2,4-Trichlorobenzene                       CAS #: 120-82-1
 12.630  12.630 (1.420)   180   1252828 50.0000   53.939  80.00- 120.00   100.00
 12.630  12.630 (1.420)   182   1191713                   66.05- 126.05    95.12
-------------------------------------------------------------------------------
  227 Hexachlorobutadiene                          CAS #: 87-68-3
 12.714  12.714 (1.429)   225    922513 50.0000   53.210  80.00- 120.00   100.00
 12.714  12.714 (1.429)   223    582553                   33.34-  93.34    63.15
-------------------------------------------------------------------------------
  228 Naphthalene                                  CAS #: 91-20-3
 12.910  12.910 (1.451)   128    192766 5.00000    5.078  80.00- 120.00   100.00
 12.910  12.910 (1.451)   127     26451                    0.00-  42.14    13.72
-------------------------------------------------------------------------------
```

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdj.i
Lab File ID: j030502.d
Lab Smp Id: CCV
Analysis Type: VOA
Quant Type: ISTD
Operator: sg
Method File: /chem/msdj.i/05mar15.b/j15q0304a.m
Misc Info: 50ppbv(200ppbv)

Calibration Date: 05-MAR-2015
Calibration Time: 09:28
Client Smp ID: CCV
Level: LOW
Sample Type: AIR

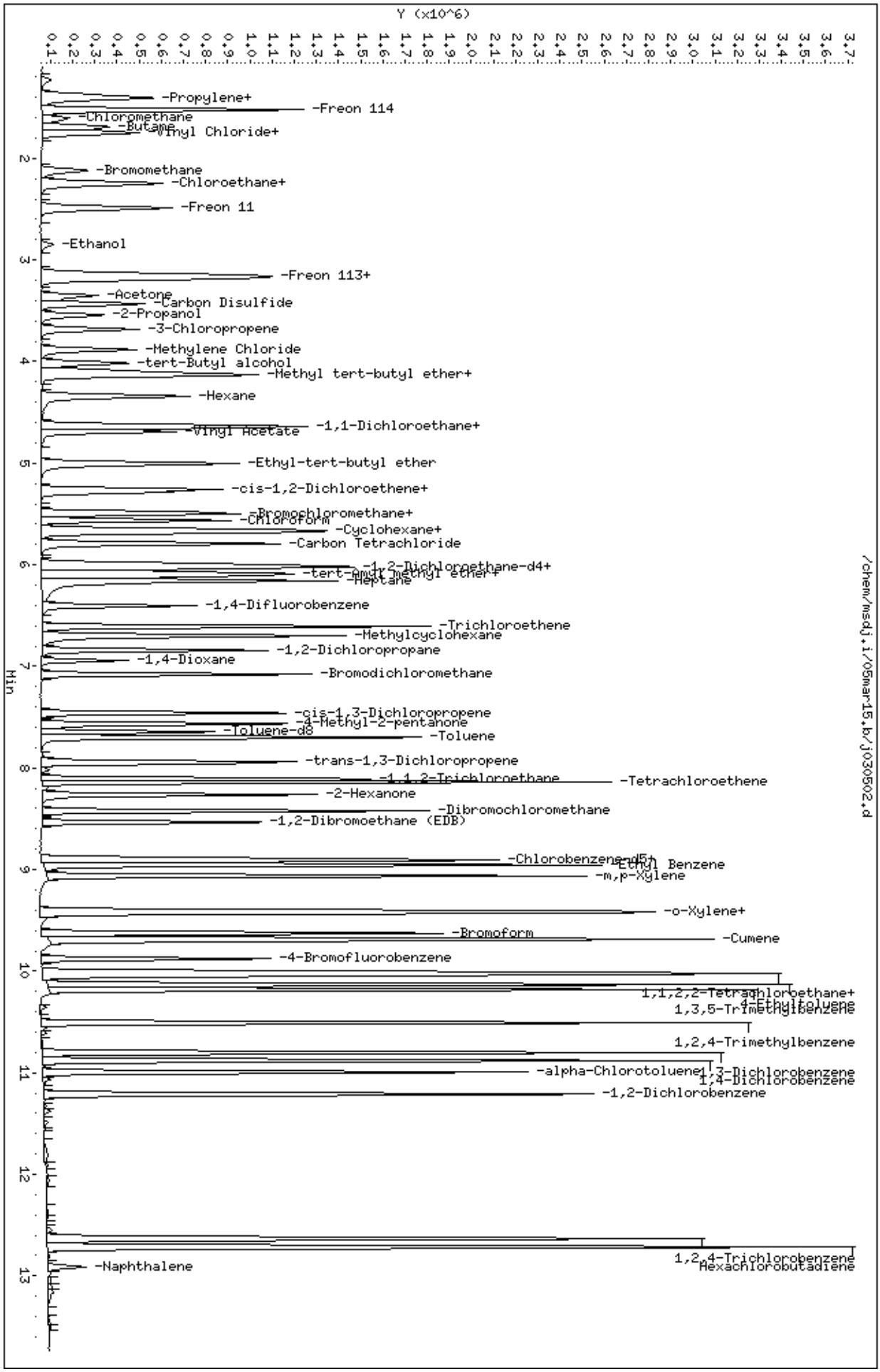
COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
98 Bromochloromethan	140692	84415	196969	140692	0.00
123 1,4-Difluorobenze	614418	368651	860185	614418	0.00
163 Chlorobenzene-d5	577173	346304	808042	577173	0.00

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
98 Bromochloromethan	5.49	5.16	5.82	5.49	0.00
123 1,4-Difluorobenze	6.40	6.07	6.73	6.40	0.00
163 Chlorobenzene-d5	8.89	8.56	9.22	8.89	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/msdj.i/05mar15.b/j030502.d
Date : 05-MAR-2015 09:28
Client ID: CCV
Sample Info: 50ml #2716-50
Column phase: RTX-624

Instrument: msdj.i
Operator: sg
Column diameter: 0.25



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Client Sample ID: LCS

Lab ID#: 1503058BR1-10A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**j030504**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 3/5/15 10:28 AM**	

Compound	%Recovery	Method Limits
Freon 12	113	70-130
Freon 114	114	70-130
Chloromethane	119	70-130
Vinyl Chloride	112	70-130
1,3-Butadiene	108	70-130
Bromomethane	121	70-130
Chloroethane	113	70-130
Freon 11	111	70-130
Ethanol	105	70-130
Freon 113	105	70-130
1,1-Dichloroethene	111	70-130
Acetone	109	70-130
2-Propanol	115	70-130
Carbon Disulfide	96	70-130
3-Chloropropene	102	70-130
Methylene Chloride	107	70-130
Methyl tert-butyl ether	106	70-130
trans-1,2-Dichloroethene	93	70-130
Hexane	110	70-130
1,1-Dichloroethane	106	70-130
2-Butanone (Methyl Ethyl Ketone)	102	70-130
cis-1,2-Dichloroethene	121	70-130
Tetrahydrofuran	104	70-130
Chloroform	105	70-130
1,1,1-Trichloroethane	106	70-130
Cyclohexane	107	70-130
Carbon Tetrachloride	107	70-130
2,2,4-Trimethylpentane	104	70-130
Benzene	104	70-130
1,2-Dichloroethane	101	70-130
Heptane	99	70-130
Trichloroethene	89	70-130
1,2-Dichloropropane	103	70-130
1,4-Dioxane	104	70-130
Bromodichloromethane	105	70-130
cis-1,3-Dichloropropene	96	70-130
4-Methyl-2-pentanone	98	70-130
Toluene	101	70-130
trans-1,3-Dichloropropene	101	70-130
1,1,2-Trichloroethane	101	70-130
Tetrachloroethene	104	70-130
2-Hexanone	102	70-130

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Client Sample ID: LCS

Lab ID#: 1503058BR1-10A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**j030504**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 3/5/15 10:28 AM**	

Compound	**%Recovery**	**Method Limits**
Dibromochloromethane	104	70-130
1,2-Dibromoethane (EDB)	100	70-130
Chlorobenzene	100	70-130
Ethyl Benzene	100	70-130
m,p-Xylene	99	70-130
o-Xylene	101	70-130
Styrene	101	70-130
Bromoform	101	70-130
Cumene	98	70-130
1,1,2,2-Tetrachloroethane	111	70-130
Propylbenzene	100	70-130
4-Ethyltoluene	106	70-130
1,3,5-Trimethylbenzene	96	70-130
1,2,4-Trimethylbenzene	99	70-130
1,3-Dichlorobenzene	97	70-130
1,4-Dichlorobenzene	98	70-130
alpha-Chlorotoluene	102	70-130
1,2-Dichlorobenzene	100	70-130
1,2,4-Trichlorobenzene	150 Q	70-130
Hexachlorobutadiene	149 Q	70-130
Naphthalene	123	60-140

Q = Exceeds Quality Control limits.

Container Type: NA - Not Applicable

Surrogates	**%Recovery**	**Method Limits**
Toluene-d8	99	70-130
1,2-Dichloroethane-d4	104	70-130
4-Bromofluorobenzene	99	70-130

Report Date: 05-Mar-2015 12:36

Eurofins Air Toxics Inc.

RECOVERY REPORT

Client Name:
Client SDG: 05mar15
Sample Matrix: GAS
Fraction: VOA
Lab Smp Id: LCS
Client Smp ID: LCS
Level: LOW
Operator: sg
Data Type: MS DATA
SampleType: LCS
SpikeList File: 2926Spectra.spk
Quant Type: ISTD
Sublist File: AT12.sub
Method File: /chem/msdj.i/05mar15.b/j15q0304a.m
Misc Info: 50ppbv(200ppbv)

SPIKE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
9 Propylene	50.000	53.791	107.58	60-140
11 Freon 12	50.000	56.733	113.47	70-130
15 Freon 114	50.000	57.017	114.03	70-130
17 Chloromethane	50.000	59.366	118.73	70-130
23 Butane	50.000	56.305	112.61	60-140
25 Vinyl Chloride	50.000	56.076	112.15	70-130
26 1,3-Butadiene	50.000	54.029	108.06	70-130
29 Bromomethane	50.000	60.484	120.97	70-130
30 Chloroethane	50.000	56.629	113.26	70-130
31 Isopentane	50.000	54.433	108.87	60-140
35 Freon 11	50.000	55.387	110.77	70-130
42 Ethanol	50.000	52.496	104.99	70-130
49 Freon 113	50.000	52.366	104.73	70-130
50 1,1-Dichloroethene	50.000	55.727	111.45	70-130
52 Acetone	50.000	54.657	109.31	70-130
56 Carbon Disulfide	50.000	47.984	95.97	70-130
57 2-Propanol	50.000	57.398	114.80	70-130
58 3-Chloropropene	50.000	51.181	102.36	70-130
66 Methylene Chloride	50.000	53.691	107.38	70-130
72 Methyl tert-butyl	50.000	52.968	105.94	70-130
73 trans-1,2-Dichloro	50.000	46.635	93.27	70-130
78 Hexane	50.000	54.916	109.83	70-130
82 1,1-Dichloroethane	50.000	53.088	106.18	70-130
86 Vinyl Acetate	50.000	56.364	112.73	60-140
91 cis-1,2-Dichloroet	50.000	60.441	120.88	70-130
92 2-Butanone	50.000	51.196	102.39	70-130
99 Tetrahydrofuran	50.000	52.049	104.10	70-130
100 Chloroform	50.000	52.677	105.35	70-130
103 1,1,1-Trichloroeth	50.000	53.142	106.29	70-130
106 Carbon Tetrachlori	50.000	53.559	107.12	70-130
102 Cyclohexane	50.000	53.497	106.99	70-130
113 2,2,4-Trimethylpen	50.000	52.211	104.42	70-130
116 Benzene	50.000	51.852	103.70	70-130

SPIKE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
120 1,2-Dichloroethane	50.000	50.645	101.29	70-130
121 Heptane	50.000	49.503	99.01	70-130
125 Trichloroethene	50.000	44.344	88.69	70-130
127 Methylcyclohexane	50.000	54.385	108.77	60-140
132 1,2-Dichloropropan	50.000	51.483	102.97	70-130
136 1,4-Dioxane	50.000	51.974	103.95	70-130
138 Bromodichlorometha	50.000	52.700	105.40	70-130
144 cis-1,3-Dichloropr	50.000	48.181	96.36	70-130
145 4-Methyl-2-pentano	50.000	49.108	98.22	70-130
147 Toluene	50.000	50.743	101.49	70-130
150 trans-1,3-Dichloro	50.000	50.705	101.41	70-130
155 1,1,2-Trichloroeth	50.000	50.592	101.18	70-130
156 Tetrachloroethene	50.000	51.799	103.60	70-130
158 2-Hexanone	50.000	51.268	102.54	70-130
160 Dibromochlorometha	50.000	51.807	103.61	70-130
161 1,2-Dibromoethane	50.000	50.284	100.57	70-130
165 Chlorobenzene	50.000	50.010	100.02	70-130
167 Ethyl Benzene	50.000	49.918	99.84	70-130
169 m,p-Xylene	50.000	49.592	99.18	70-130
171 o-Xylene	50.000	50.562	101.12	70-130
172 Styrene	50.000	50.473	100.95	70-130
174 Bromoform	50.000	50.305	100.61	70-130
175 Cumene	50.000	49.023	98.05	70-130
181 1,1,2,2-Tetrachlor	50.000	55.585	111.17	70-130
182 Propylbenzene	50.000	49.845	99.69	70-130
188 4-Ethyltoluene	50.000	52.780	105.56	70-130
190 1,3,5-Trimethylben	50.000	48.113	96.23	70-130
196 1,2,4-Trimethylben	50.000	49.375	98.75	70-130
208 1,3-Dichlorobenzen	50.000	48.675	97.35	70-130
209 1,4-Dichlorobenzen	50.000	49.249	98.50	70-130
212 alpha-Chlorotoluen	50.000	50.870	101.74	70-130
214 1,2-Dichlorobenzen	50.000	49.981	99.96	70-130
226 1,2,4-Trichloroben	50.000	74.796	149.59*	70-130
227 Hexachlorobutadien	50.000	74.550	149.10*	70-130
228 Naphthalene	5.000	6.150	123.00	60-140

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 117 1,2-Dichloroethane	25.000	25.943	103.77	70-130
$ 146 Toluene-d8	25.000	24.860	99.44	70-130
$ 177 4-Bromofluorobenze	25.000	24.759	99.04	70-130

Eurofins Air Toxics Inc.

EPA TO-15/MODIFIED EPA TO-14A

Data file : /chem/msdj.i/05mar15.b/j030504.d
Lab Smp Id: LCS Client Smp ID: LCS
Inj Date : 05-MAR-2015 10:28
Operator : sg Inst ID: msdj.i
Smp Info : 50ml #2716-98
Misc Info : 50ppbv(200ppbv)
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msdj.i/05mar15.b/j15q0304a.m
Meth Date : 05-Mar-2015 12:20 mskidmor Quant Type: ISTD
Cal Date : 04-MAR-2015 12:36 Cal File: j030408.d
Als bottle: 14 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT12.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
* 98 Bromochloromethane					CAS #: 74-97-5		
5.480	5.494 (1.000)	130	135720	25.0000		80.00- 120.00	100.00
5.480	5.494 (1.000)	128	106665			48.40- 108.40	78.59
5.480	5.494 (1.000)	49	158314			84.80- 144.80	116.65
* 123 1,4-Difluorobenzene					CAS #: 540-36-3		
6.404	6.404 (1.000)	114	605128	25.0000		80.00- 120.00	100.00
6.404	6.404 (1.000)	88	93424			0.00- 45.38	15.44
* 163 Chlorobenzene-d5					CAS #: 3114-55-4		
8.894	8.894 (1.000)	117	566801	25.0000		80.00- 120.00	100.00
8.894	8.894 (1.000)	82	283597			20.55- 80.55	50.03
$ 117 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
6.040	6.054 (1.102)	65	161331	25.9430	25.943	80.00- 120.00	100.00
6.040	6.054 (1.102)	67	94144			28.68- 88.68	58.35

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
$ 146 Toluene-d8					CAS #: 2037-26-5		
7.635	7.635 (1.192)	98	613859	24.8605	24.860	80.00- 120.00	100.00
7.635	7.635 (1.192)	70	60978			0.00- 40.26	9.93
7.635	7.635 (1.192)	100	411429			38.16- 98.16	67.02
$ 177 4-Bromofluorobenzene					CAS #: 460-00-4		
9.888	9.888 (1.112)	174	364511	24.7594	24.759	80.00- 120.00	100.00
9.888	9.874 (1.112)	95	401214			82.57- 142.57	110.07
9.888	9.888 (1.112)	176	355435			67.45- 127.45	97.51
9 Propylene					CAS #: 115-07-1		
1.339	1.367 (0.244)	41	215810	53.7911	53.791	80.00- 120.00	100.00
1.339	1.367 (0.244)	42	139414			35.76- 95.76	64.60
1.339	1.367 (0.244)	39	150422			37.69- 97.69	69.70
11 Freon 12					CAS #: 75-71-8		
1.381	1.409 (0.252)	85	774640	56.7327	56.733	80.00- 120.00	100.00
1.381	1.409 (0.252)	87	249259			2.74- 62.74	32.18
15 Freon 114					CAS #: 76-14-2		
1.492	1.521 (0.272)	135	709499	57.0171	57.017	80.00- 120.00	100.00
1.492	1.521 (0.272)	137	225709			1.49- 61.49	31.81
17 Chloromethane					CAS #: 74-87-3		
1.576	1.605 (0.288)	50	231382	59.3656	59.366	80.00- 120.00	100.00
1.576	1.605 (0.288)	52	71242			1.90- 61.90	30.79
23 Butane					CAS #: 106-97-8		
1.646	1.689 (0.300)	58	59380	56.3048	56.305	80.00- 120.00	100.00
1.646	1.689 (0.300)	43	440564			699.33- 759.33	741.94
25 Vinyl Chloride					CAS #: 75-01-4		
1.702	1.731 (0.311)	62	301776	56.0756	56.076	80.00- 120.00	100.00
1.702	1.731 (0.311)	64	96640			0.48- 60.48	32.02
26 1,3-Butadiene					CAS #: 106-99-0		
1.716	1.745 (0.313)	54	224959	54.0288	54.029	80.00- 120.00	100.00
1.716	1.745 (0.313)	39	225851			69.90- 129.90	100.40
29 Bromomethane					CAS #: 74-83-9		
2.080	2.122 (0.380)	94	265147	60.4837	60.484	80.00- 120.00	100.00
2.094	2.122 (0.382)	96	244038			62.83- 122.83	92.04
30 Chloroethane					CAS #: 75-00-3		
2.206	2.234 (0.403)	64	156141	56.6292	56.629	80.00- 120.00	100.00
2.206	2.234 (0.403)	66	47876			1.30- 61.30	30.66

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
30 Chloroethane (continued)							
2.206	2.234 (0.403)	49	40085			0.00- 55.56	25.67
31 Isopentane					CAS #: 78-78-4		
2.220	2.248 (0.405)	43	346614	54.4333	54.433	80.00- 120.00	100.00
2.220	2.248 (0.405)	57	243142			39.25- 99.25	70.15
35 Freon 11					CAS #: 75-69-4		
2.458	2.486 (0.448)	101	819985	55.3870	55.387	80.00- 120.00	100.00
2.458	2.486 (0.448)	103	530808			34.53- 94.53	64.73
42 Ethanol					CAS #: 64-17-5		
2.822	2.850 (0.515)	45	121743	52.4964	52.496	80.00- 120.00	100.00
2.822	2.850 (0.515)	43	22329			0.00- 48.78	18.34
2.822	2.850 (0.515)	46	48451			9.14- 69.14	39.80
49 Freon 113					CAS #: 76-13-1		
3.130	3.158 (0.571)	151	638905	52.3656	52.366	80.00- 120.00	100.00
3.130	3.158 (0.571)	153	414459			33.29- 93.29	64.87
3.130	3.144 (0.571)	101	721142			83.98- 143.98	112.87
50 1,1-Dichloroethene					CAS #: 75-35-4		
3.158	3.186 (0.576)	98	211404	55.7275	55.727	80.00- 120.00	100.00
3.158	3.186 (0.576)	96	331898			129.90- 189.90	157.00
3.158	3.186 (0.576)	61	496134			210.75- 270.75	234.69
52 Acetone					CAS #: 67-64-1		
3.325	3.354 (0.607)	58	143076	54.6573	54.657	80.00- 120.00	100.00
3.325	3.354 (0.607)	43	428958			270.02- 330.02	299.81
56 Carbon Disulfide					CAS #: 75-15-0		
3.409	3.424 (0.622)	76	820258	47.9835	47.984	80.00- 120.00	100.00
57 2-Propanol					CAS #: 67-63-0		
3.521	3.536 (0.643)	45	551948	57.3984	57.398	80.00- 120.00	100.00
3.521	3.536 (0.643)	43	103721			0.00- 47.69	18.79
3.521	3.550 (0.643)	59	22414			0.00- 33.85	4.06
58 3-Chloropropene					CAS #: 107-05-1		
3.661	3.689 (0.668)	76	150874	51.1811	51.181	80.00- 120.00	100.00
3.661	3.689 (0.668)	41	372514			215.96- 275.96	246.90
66 Methylene Chloride					CAS #: 75-09-2		
3.857	3.885 (0.704)	49	350702	53.6911	53.691	80.00- 120.00	100.00
3.857	3.885 (0.704)	84	284651			51.17- 111.17	81.17
3.857	3.885 (0.704)	51	108329			0.00- 59.41	30.89

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
72 Methyl tert-butyl ether					CAS #: 1634-04-4		
4.081	4.109 (0.745)	73	883321	52.9682	52.968	80.00- 120.00	100.00
4.081	4.109 (0.745)	57	198452			0.00- 52.57	22.47
4.081	4.109 (0.745)	41	182371			0.00- 50.82	20.65
73 trans-1,2-Dichloroethene					CAS #: 156-60-5		
4.109	4.137 (0.750)	98	194995	46.6351	46.635	80.00- 120.00	100.00
4.109	4.137 (0.750)	61	402525			185.75- 245.75	206.43
4.109	4.137 (0.750)	96	302112			128.77- 188.77	154.93
78 Hexane					CAS #: 110-54-3		
4.333	4.347 (0.791)	57	532374	54.9155	54.916	80.00- 120.00	100.00
4.333	4.347 (0.791)	43	323086			32.33- 92.33	60.69
4.333	4.347 (0.791)	86	87761			0.00- 47.05	16.48
82 1,1-Dichloroethane					CAS #: 75-34-3		
4.641	4.655 (0.847)	63	607700	53.0885	53.088	80.00- 120.00	100.00
4.627	4.655 (0.844)	65	192685			1.83- 61.83	31.71
86 Vinyl Acetate					CAS #: 108-05-4		
4.683	4.697 (0.854)	86	97260	56.3638	56.364	80.00- 120.00	100.00
4.683	4.697 (0.854)	43	924786			1027.99-1087.99	950.84
91 cis-1,2-Dichloroethene					CAS #: 156-59-2		
5.242	5.256 (0.957)	98	275067	60.4411	60.441	80.00- 120.00	100.00
5.242	5.256 (0.957)	96	425676			120.40- 180.40	154.75
5.242	5.256 (0.957)	61	518952			156.78- 216.78	188.66
92 2-Butanone					CAS #: 78-93-3		
5.270	5.284 (0.962)	72	173081	51.1957	51.196	80.00- 120.00	100.00
5.270	5.284 (0.962)	43	667692			345.28- 405.28	385.77
5.270	5.284 (0.962)	57	54328			0.64- 60.64	31.39
99 Tetrahydrofuran					CAS #: 109-99-9		
5.480	5.494 (1.000)	42	389745	52.0490	52.049	80.00- 120.00	100.00
5.480	5.494 (1.000)	71	156965			10.18- 70.18	40.27
5.480	5.494 (1.000)	72	169136			13.63- 73.63	43.40
100 Chloroform					CAS #: 67-66-3		
5.550	5.564 (1.013)	83	709837	52.6774	52.677	80.00- 120.00	100.00
5.550	5.564 (1.013)	85	472760			36.39- 96.39	66.60
102 Cyclohexane					CAS #: 110-82-7		
5.648	5.662 (1.031)	84	498264	53.4968	53.497	80.00- 120.00	100.00
5.648	5.648 (1.031)	56	580882			85.96- 145.96	116.58
5.648	5.648 (1.031)	41	292577			27.64- 87.64	58.72

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
103 1,1,1-Trichloroethane					CAS #: 71-55-6		
5.676	5.676 (1.036)	97	744500	53.1425	53.142	80.00- 120.00	100.00
5.676	5.676 (1.036)	99	469747			34.56- 94.56	63.10
106 Carbon Tetrachloride					CAS #: 56-23-5		
5.788	5.802 (1.056)	119	810948	53.5589	53.559	80.00- 120.00	100.00
5.788	5.802 (1.056)	117	846152			75.97- 135.97	104.34
113 2,2,4-Trimethylpentane					CAS #: 540-84-1		
5.984	5.998 (1.092)	57	1465701	52.2115	52.211	80.00- 120.00	100.00
5.984	5.998 (1.092)	56	473259			0.00- 59.67	32.29
5.984	5.998 (1.092)	41	344287			0.00- 50.74	23.49
116 Benzene					CAS #: 71-43-2		
6.012	6.026 (0.939)	78	1126499	51.8523	51.852	80.00- 120.00	100.00
6.012	6.026 (0.939)	77	261085			0.00- 52.91	23.18
120 1,2-Dichloroethane					CAS #: 107-06-2		
6.110	6.124 (0.954)	62	440691	50.6451	50.645	80.00- 120.00	100.00
6.110	6.124 (0.954)	64	144630			2.46- 62.46	32.82
121 Heptane					CAS #: 142-82-5		
6.152	6.166 (0.961)	71	389708	49.5028	49.503	80.00- 120.00	100.00
6.152	6.166 (0.961)	43	682560			142.43- 202.43	175.15
6.152	6.166 (0.961)	57	471268			86.91- 146.91	120.93
125 Trichloroethene					CAS #: 79-01-6		
6.600	6.600 (1.031)	95	520289	44.3444	44.344	80.00- 120.00	100.00
6.600	6.600 (1.031)	130	584988			82.54- 142.54	112.44
6.600	6.600 (1.031)	97	337890			35.40- 95.40	64.94
127 Methylcyclohexane					CAS #: 108-87-2		
6.697	6.698 (1.222)	83	702195	54.3848	54.385	80.00- 120.00	100.00
6.697	6.698 (1.222)	98	334200			16.94- 76.94	47.59
6.697	6.698 (1.222)	55	538078			46.96- 106.96	76.63
132 1,2-Dichloropropane					CAS #: 78-87-5		
6.837	6.852 (1.068)	63	434991	51.4827	51.483	80.00- 120.00	100.00
6.837	6.852 (1.068)	62	307502			41.52- 101.52	70.69
6.837	6.852 (1.068)	41	200730			17.88- 77.88	46.15
136 1,4-Dioxane					CAS #: 123-91-1		
6.935	6.936 (1.083)	88	289599	51.9745	51.974	80.00- 120.00	100.00
6.935	6.936 (1.083)	58	178716			35.49- 95.49	61.71
6.935	6.936 (1.083)	57	60641			0.00- 50.66	20.94

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
138 Bromodichloromethane					CAS #: 75-27-4		
7.075	7.075 (1.105)	83	839644	52.6998	52.700	80.00- 120.00	100.00
7.075	7.075 (1.105)	85	545450			34.46- 94.46	64.96
144 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
7.453	7.467 (1.164)	75	697664	48.1812	48.181	80.00- 120.00	100.00
7.453	7.467 (1.164)	77	223203			1.77- 61.77	31.99
7.453	7.453 (1.164)	39	286497			11.11- 71.11	41.07
145 4-Methyl-2-pentanone					CAS #: 108-10-1		
7.565	7.565 (1.181)	58	359625	49.1079	49.108	80.00- 120.00	100.00
7.565	7.565 (1.181)	43	898507			220.64- 280.64	249.85
7.565	7.579 (1.181)	85	168711			17.04- 77.04	46.91
147 Toluene					CAS #: 108-88-3		
7.691	7.691 (1.201)	91	1522043	50.7426	50.743	80.00- 120.00	100.00
7.691	7.691 (1.201)	92	885544			27.98- 87.98	58.18
150 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
7.943	7.943 (0.893)	75	650738	50.7052	50.705	80.00- 120.00	100.00
7.943	7.943 (0.893)	77	209462			1.64- 61.64	32.19
7.943	7.943 (0.893)	39	266715			10.07- 70.07	40.99
155 1,1,2-Trichloroethane					CAS #: 79-00-5		
8.097	8.111 (0.910)	97	521027	50.5922	50.592	80.00- 120.00	100.00
8.097	8.111 (0.910)	99	328863			32.91- 92.91	63.12
8.097	8.111 (0.910)	83	446363			55.03- 115.03	85.67
156 Tetrachloroethene					CAS #: 127-18-4		
8.139	8.139 (0.915)	166	807452	51.7994	51.799	80.00- 120.00	100.00
8.139	8.139 (0.915)	129	562523			41.30- 101.30	69.67
8.139	8.139 (0.915)	131	549748			39.67- 99.67	68.08
158 2-Hexanone					CAS #: 591-78-6		
8.265	8.265 (0.929)	58	500725	51.2680	51.268	80.00- 120.00	100.00
8.265	8.265 (0.929)	43	877260			147.18- 207.18	175.20
8.265	8.279 (0.929)	100	114516			0.00- 52.59	22.87
160 Dibromochloromethane					CAS #: 124-48-1		
8.418	8.419 (0.946)	129	1025491	51.8071	51.807	80.00- 120.00	100.00
8.418	8.419 (0.946)	127	788197			47.74- 107.74	76.86
161 1,2-Dibromoethane (EDB)					CAS #: 106-93-4		
8.530	8.531 (0.959)	107	819209	50.2846	50.284	80.00- 120.00	100.00
8.530	8.531 (0.959)	109	771483			63.55- 123.55	94.17

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
165 Chlorobenzene					CAS #: 108-90-7		
8.908	8.922 (1.002)	112	1251576	50.0103	50.010	80.00- 120.00	100.00
8.908	8.922 (1.002)	114	402626			1.75- 61.75	32.17
8.908	8.908 (1.002)	77	648617			22.27- 82.27	51.82
167 Ethyl Benzene					CAS #: 100-41-4		
8.964	8.964 (1.008)	106	641403	49.9176	49.918	80.00- 120.00	100.00
8.964	8.964 (1.008)	91	1982898			278.96- 338.96	309.15
169 m,p-Xylene					CAS #: 108-38-3		
9.062	9.062 (1.019)	106	789523	49.5920	49.592	80.00- 120.00	100.00
9.062	9.062 (1.019)	91	1513766			158.57- 218.57	191.73
171 o-Xylene					CAS #: 95-47-6		
9.398	9.398 (1.057)	106	757697	50.5616	50.562	80.00- 120.00	100.00
9.398	9.398 (1.057)	91	1554851			173.40- 233.40	205.21
172 Styrene					CAS #: 100-42-5		
9.426	9.426 (1.060)	104	1271641	50.4729	50.473	80.00- 120.00	100.00
9.426	9.426 (1.060)	78	582479			15.95- 75.95	45.81
174 Bromoform					CAS #: 75-25-2		
9.636	9.636 (1.083)	173	1060299	50.3055	50.305	80.00- 120.00	100.00
9.636	9.636 (1.083)	171	547192			22.23- 82.23	51.61
175 Cumene					CAS #: 98-82-8		
9.692	9.692 (1.090)	105	2287513	49.0227	49.023	80.00- 120.00	100.00
9.692	9.692 (1.090)	120	634242			0.00- 57.55	27.73
9.692	9.692 (1.090)	51	186119			0.00- 38.22	8.14
181 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
10.014	10.014 (1.126)	83	1118104	55.5849	55.585	80.00- 120.00	100.00
10.014	10.014 (1.126)	85	737265			36.69- 96.69	65.94
182 Propylbenzene					CAS #: 103-65-1		
10.042	10.028 (1.129)	91	2757467	49.8453	49.845	80.00- 120.00	100.00
10.042	10.042 (1.129)	120	680483			0.00- 54.81	24.68
10.042	10.028 (1.129)	105	105984			0.00- 33.86	3.84
188 4-Ethyltoluene					CAS #: 622-96-8		
10.139	10.126 (1.140)	120	786517	52.7806	52.780	80.00- 120.00	100.00
10.139	10.126 (1.140)	105	2474674			292.39- 352.39	314.64
190 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
10.181	10.182 (1.145)	120	977069	48.1130	48.113	80.00- 120.00	100.00
10.181	10.182 (1.145)	105	1953266			169.92- 229.92	199.91

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
196 1,2,4-Trimethylbenzene						CAS #: 95-63-6	
10.517	10.503 (1.182)	120	898417	49.3751	49.375	80.00- 120.00	100.00
10.517	10.503 (1.182)	105	1909544			182.08- 242.08	212.55
208 1,3-Dichlorobenzene						CAS #: 541-73-1	
10.811	10.797 (1.216)	146	1435987	48.6749	48.675	80.00- 120.00	100.00
10.811	10.797 (1.216)	148	914182			34.06- 94.06	63.66
10.811	10.797 (1.216)	111	524774			6.19- 66.19	36.54
209 1,4-Dichlorobenzene						CAS #: 106-46-7	
10.895	10.881 (1.225)	146	1435934	49.2486	49.249	80.00- 120.00	100.00
10.895	10.881 (1.225)	148	915690			33.53- 93.53	63.77
10.895	10.881 (1.225)	111	506019			5.17- 65.17	35.24
212 alpha-Chlorotoluene						CAS #: 100-44-7	
11.007	10.993 (1.238)	91	1826937	50.8706	50.870	80.00- 120.00	100.00
11.007	10.993 (1.238)	126	414017			0.00- 52.56	22.66
214 1,2-Dichlorobenzene						CAS #: 95-50-1	
11.217	11.217 (1.261)	146	1380440	49.9808	49.981	80.00- 120.00	100.00
11.217	11.217 (1.261)	148	884577			33.19- 93.19	64.08
11.217	11.203 (1.261)	111	528079			8.29- 68.29	38.25
226 1,2,4-Trichlorobenzene						CAS #: 120-82-1	
12.658	12.630 (1.423)	180	1706054	74.7959	74.796	80.00- 120.00	100.00(R)
12.658	12.630 (1.423)	182	1629958			66.05- 126.05	95.54
227 Hexachlorobutadiene						CAS #: 87-68-3	
12.742	12.714 (1.433)	225	1269272	74.5506	74.550	80.00- 120.00	100.00(R)
12.742	12.714 (1.433)	223	794752			33.34- 93.34	62.61
228 Naphthalene						CAS #: 91-20-3	
12.924	12.910 (1.453)	128	229290	6.15014	6.150	80.00- 120.00	100.00
12.924	12.910 (1.453)	127	30359			0.00- 42.14	13.24

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

Report Date: 05-Mar-2015 12:36

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdj.i
Lab File ID: j030504.d
Lab Smp Id: LCS
Analysis Type: VOA
Quant Type: ISTD
Operator: sg
Method File: /chem/msdj.i/05mar15.b/j15q0304a.m
Misc Info: 50ppbv(200ppbv)

Calibration Date: 05-MAR-2015
Calibration Time: 09:28
Client Smp ID: LCS
Level: LOW
Sample Type: AIR

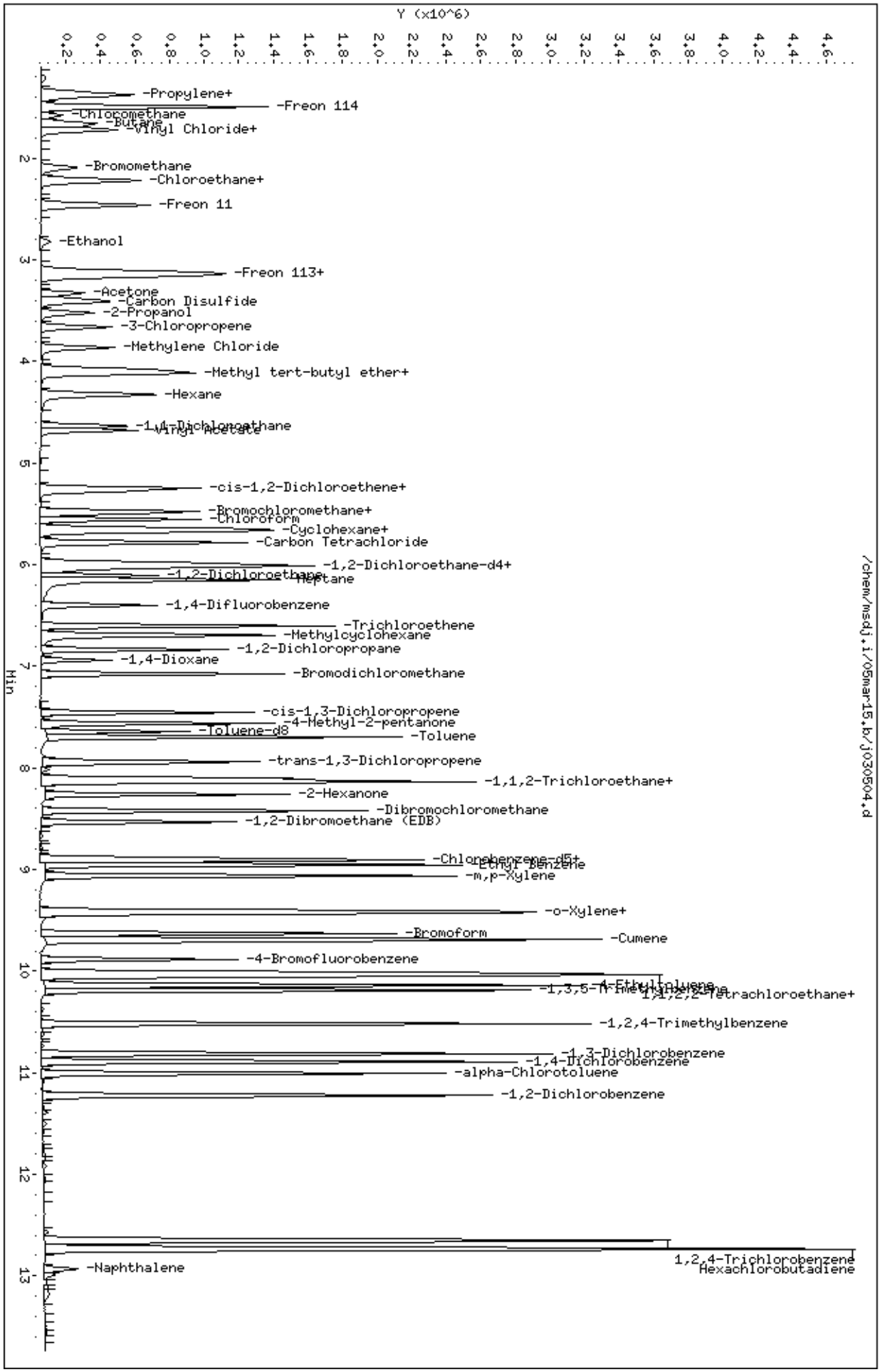
COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
98 Bromochloromethan	140692	84415	196969	135720	-3.53
123 1,4-Difluorobenze	614418	368651	860185	605128	-1.51
163 Chlorobenzene-d5	577173	346304	808042	566801	-1.80

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
98 Bromochloromethan	5.49	5.16	5.82	5.48	-0.26
123 1,4-Difluorobenze	6.40	6.07	6.73	6.40	0.00
163 Chlorobenzene-d5	8.89	8.56	9.22	8.89	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/msdj.i/05mar15.b/j030504.d
Date : 05-MAR-2015 10:28
Client ID: LCS
Sample Info: 50ml #2716-98
Column phase: RTX-624

Instrument: msdj.i
Operator: sg
Column diameter: 0.25



Page 1

Data File: /chem/msdj.i/05mar15.b/j030504.d

Date : 05-MAR-2015 10:28

Client ID: LCS

Instrument: msdj.i

Sample Info: 50ml #2716-98

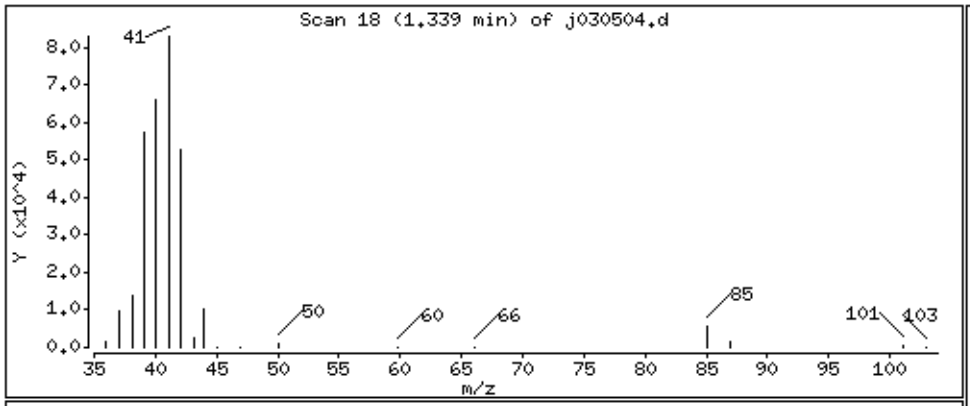
Operator: sg

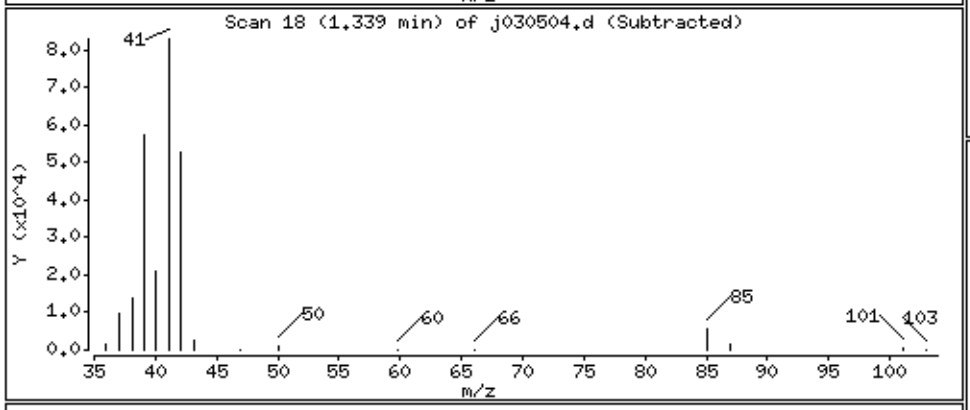
Column phase: RTX-624

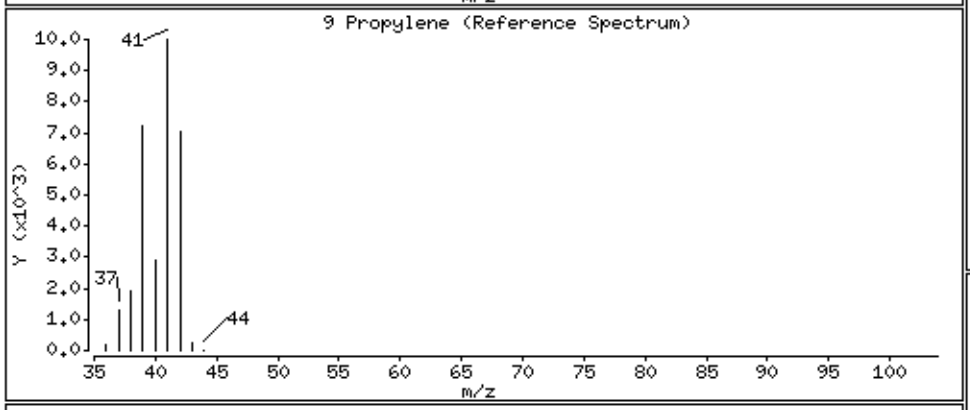
Column diameter: 0.25

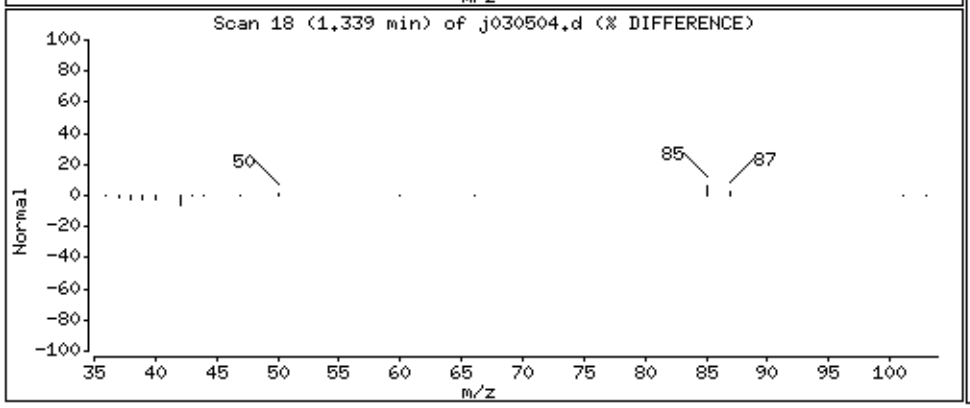
9 Propylene

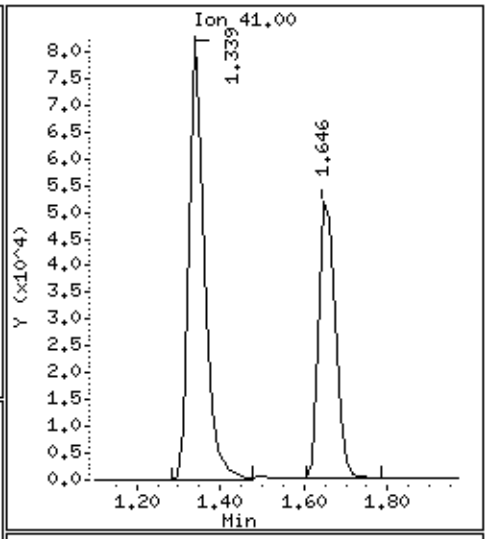
Concentration: 53.791 PPBV

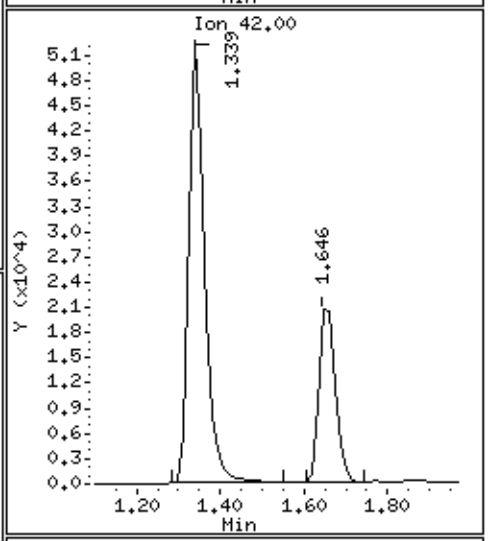


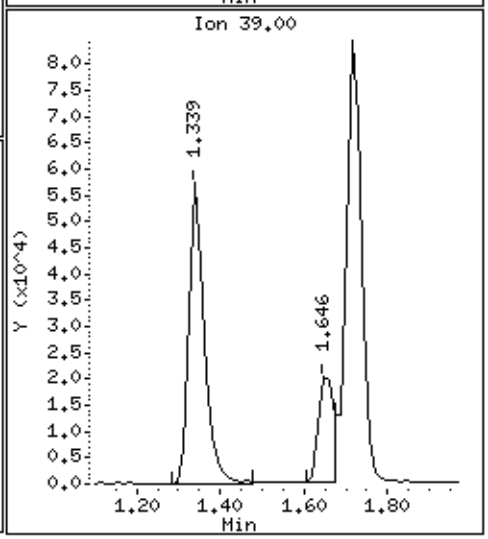












Data File: /chem/msdj.i/05mar15.b/j030504.d

Date : 05-MAR-2015 10:28

Client ID: LCS

Instrument: msdj.i

Sample Info: 50ml #2716-98

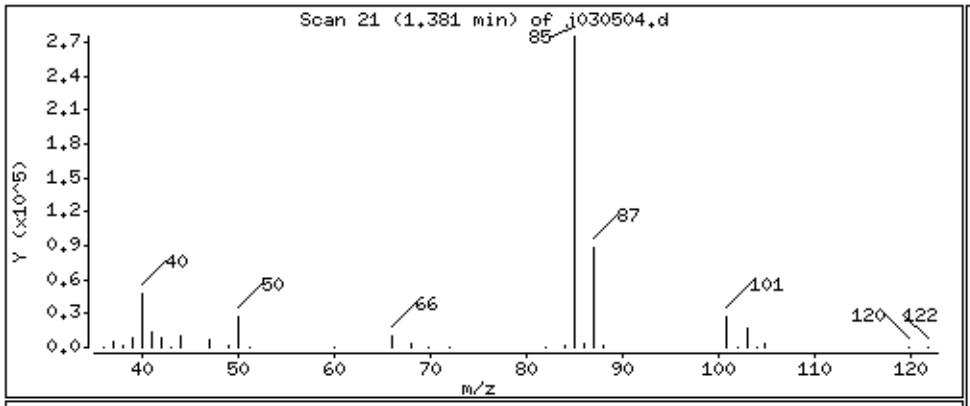
Operator: sg

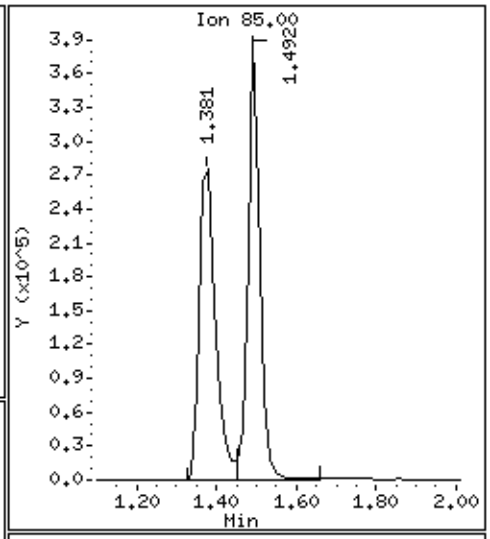
Column phase: RTX-624

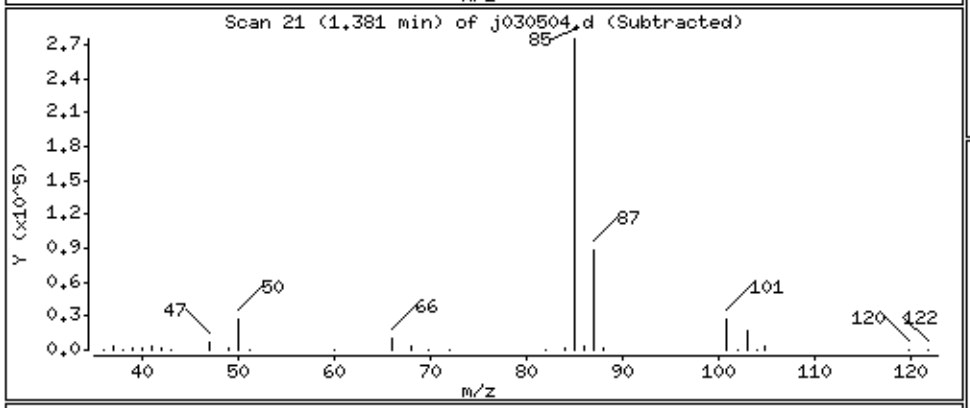
Column diameter: 0.25

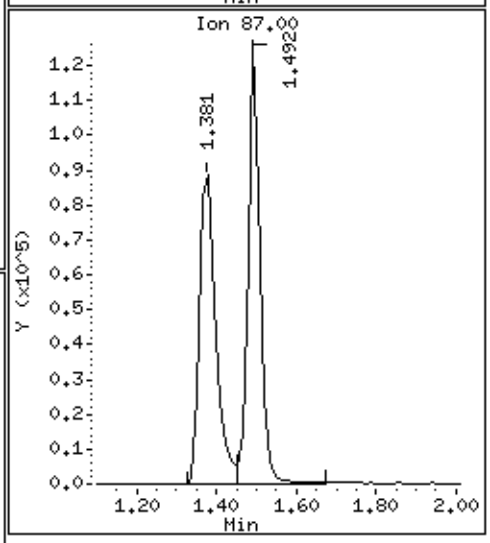
11 Freon 12

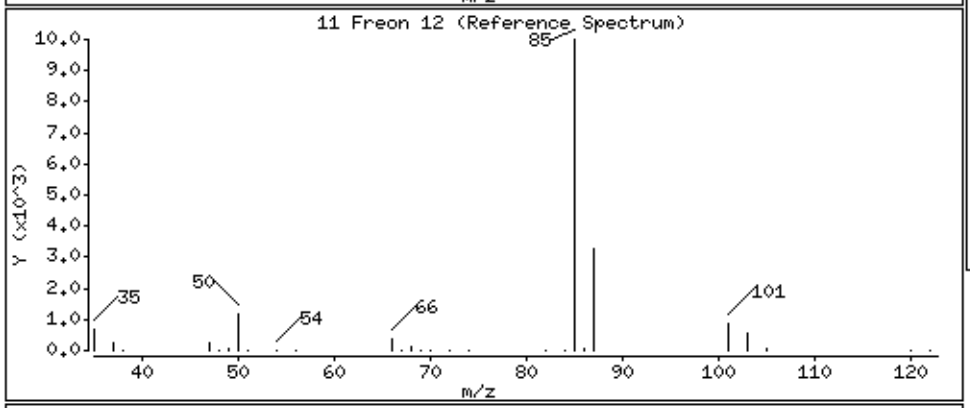
Concentration: 56.733 PPBV

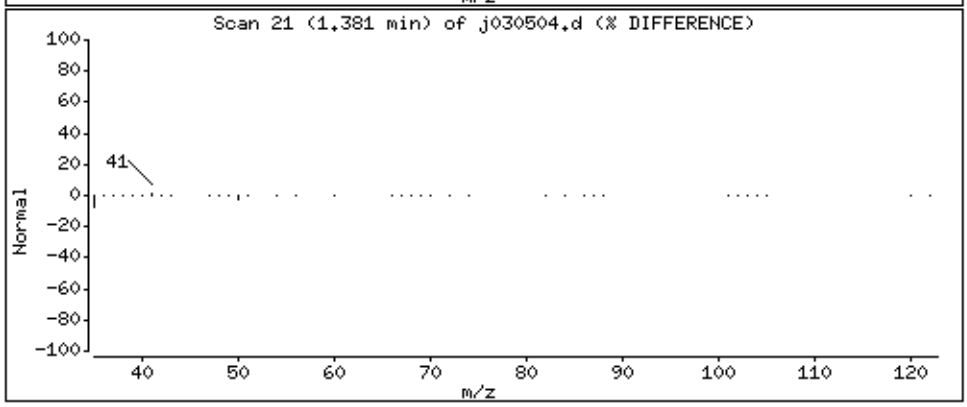












Data File: /chem/msdj.i/05mar15.b/j030504.d

Date : 05-MAR-2015 10:28

Client ID: LCS

Instrument: msdj.i

Sample Info: 50ml #2716-98

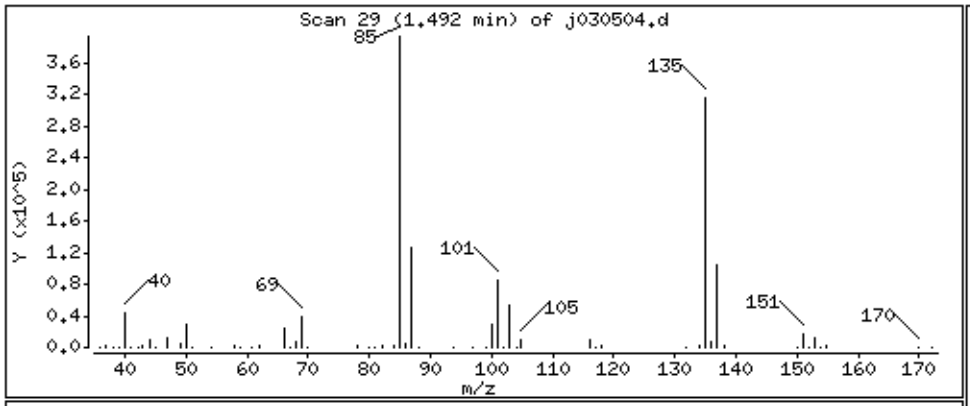
Operator: sg

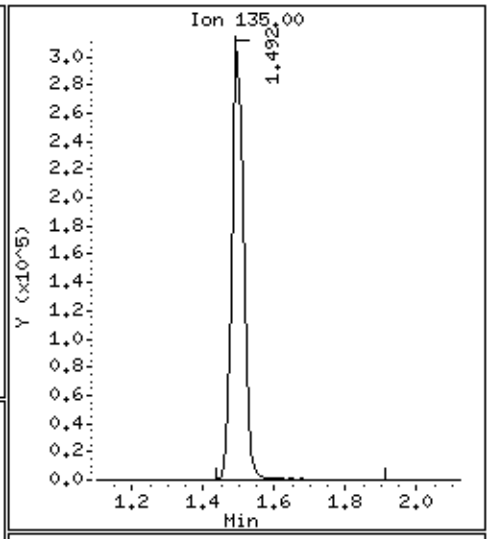
Column phase: RTX-624

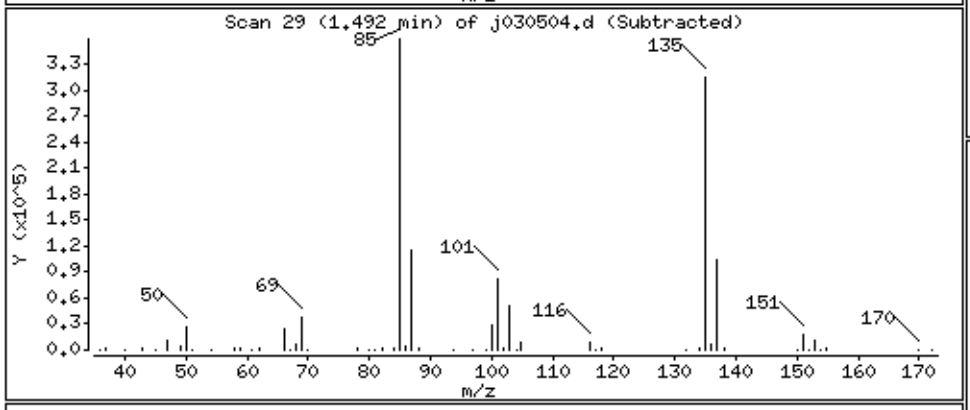
Column diameter: 0.25

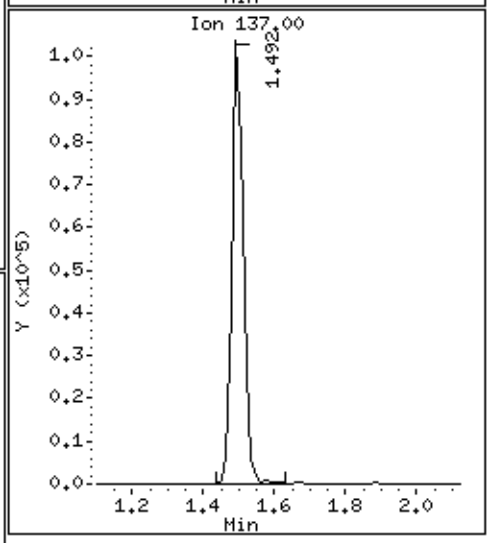
15 Freon 114

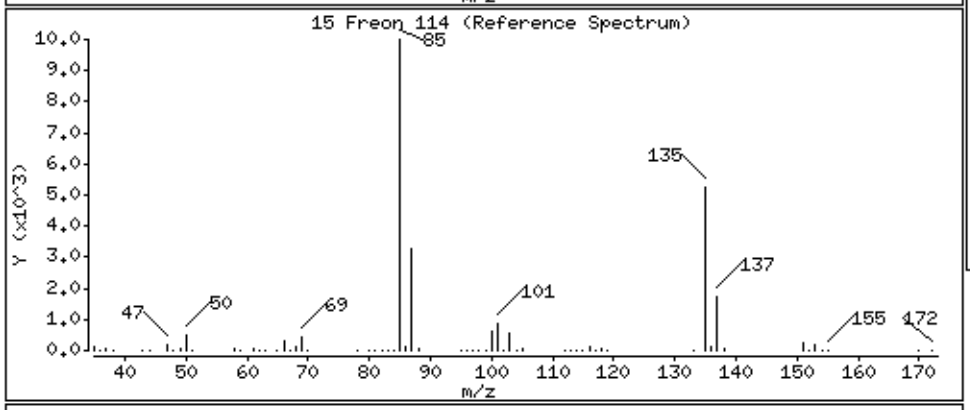
Concentration: 57.017 PPBV

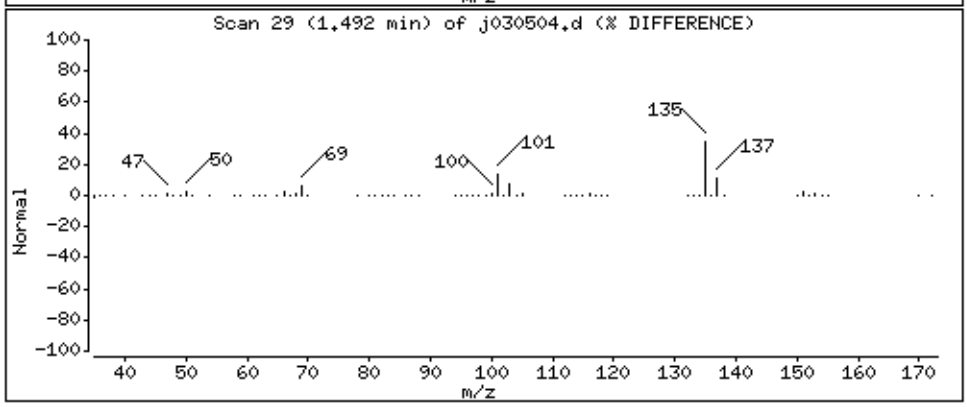












Data File: /chem/msdj.i/05mar15.b/j030504.d

Date : 05-MAR-2015 10:28

Client ID: LCS

Instrument: msdj.i

Sample Info: 50ml #2716-98

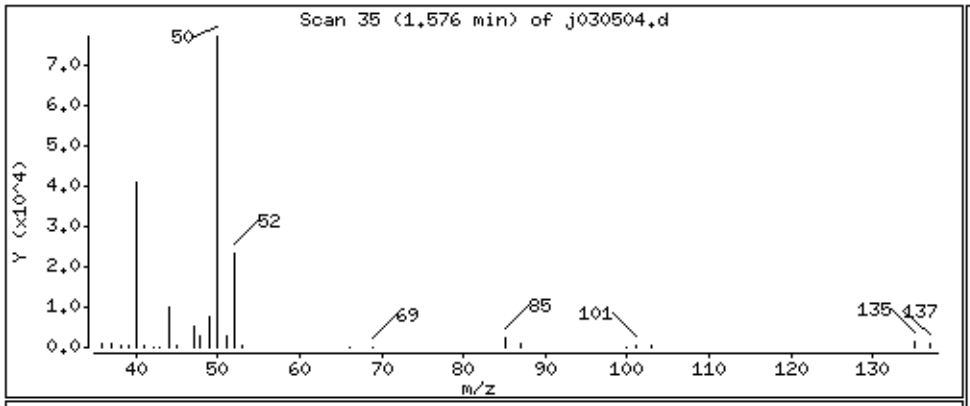
Operator: sg

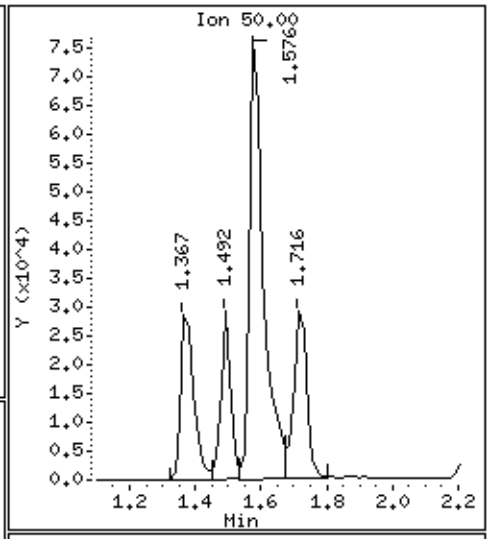
Column phase: RTX-624

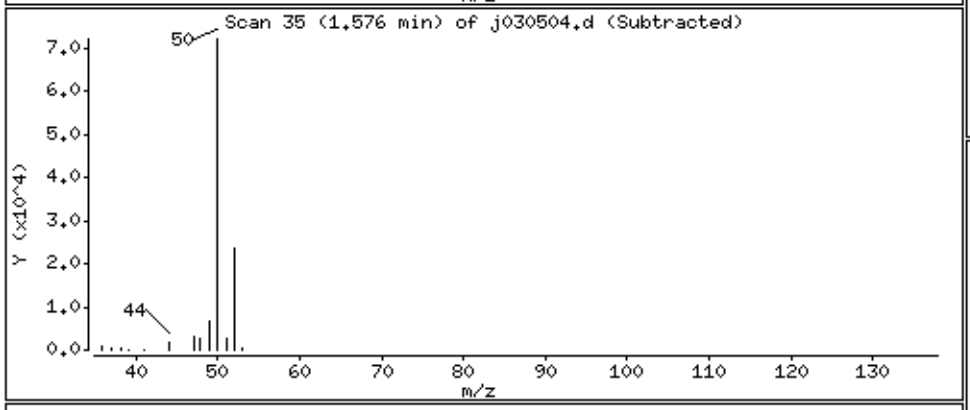
Column diameter: 0.25

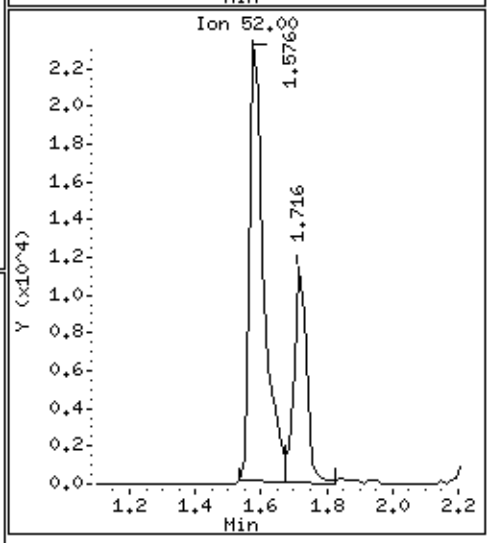
17 Chloromethane

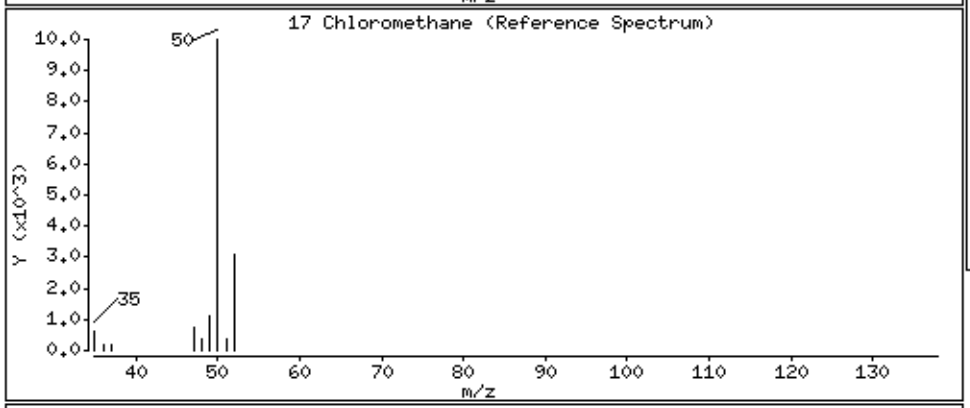
Concentration: 59.366 PPBV

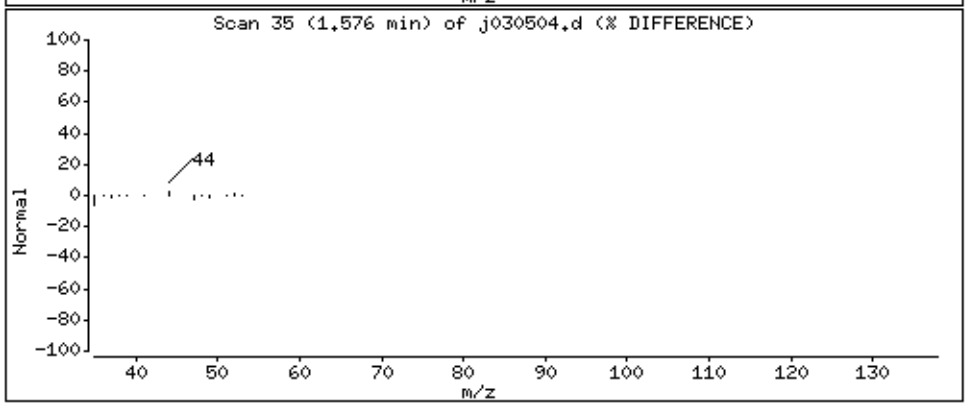












Data File: /chem/msdj.i/05mar15.b/j030504.d

Date : 05-MAR-2015 10:28

Client ID: LCS

Instrument: msdj.i

Sample Info: 50ml #2716-98

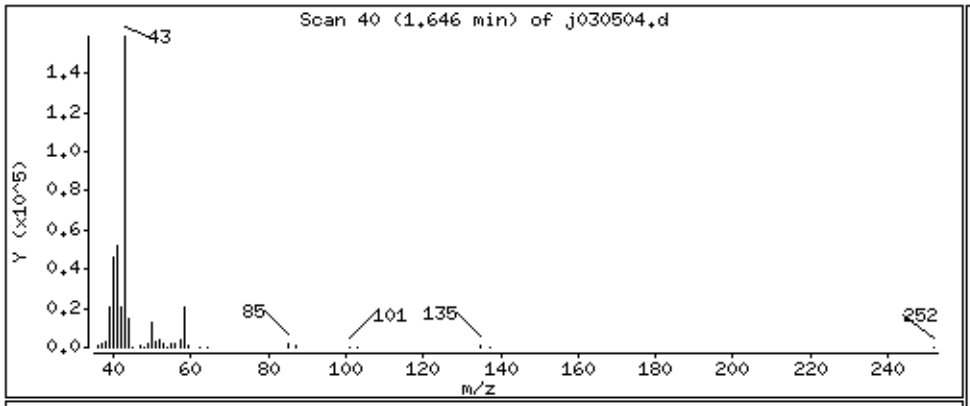
Operator: sg

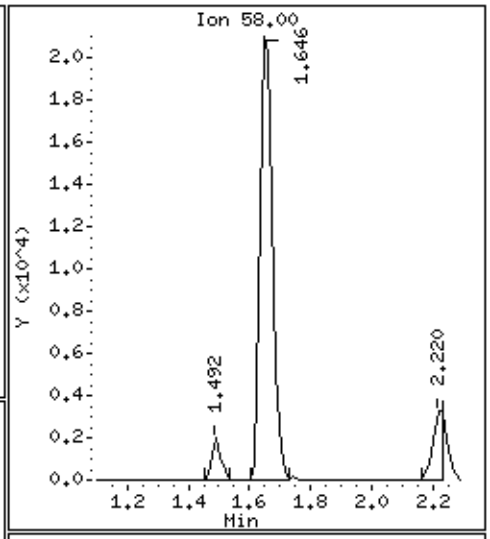
Column phase: RTX-624

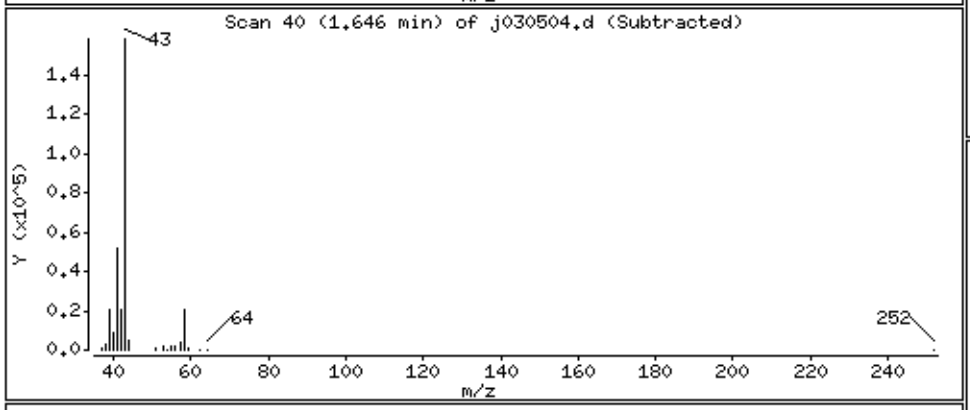
Column diameter: 0.25

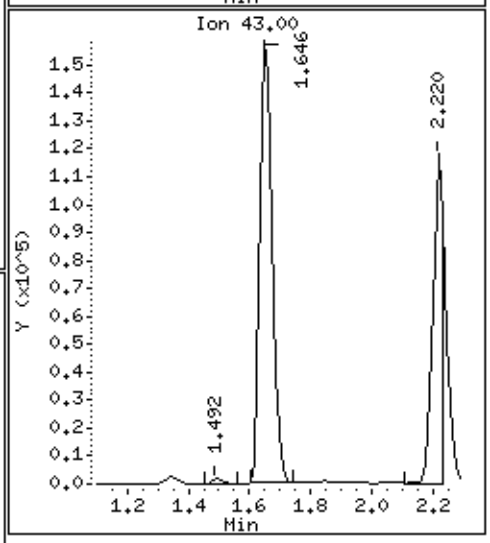
23 Butane

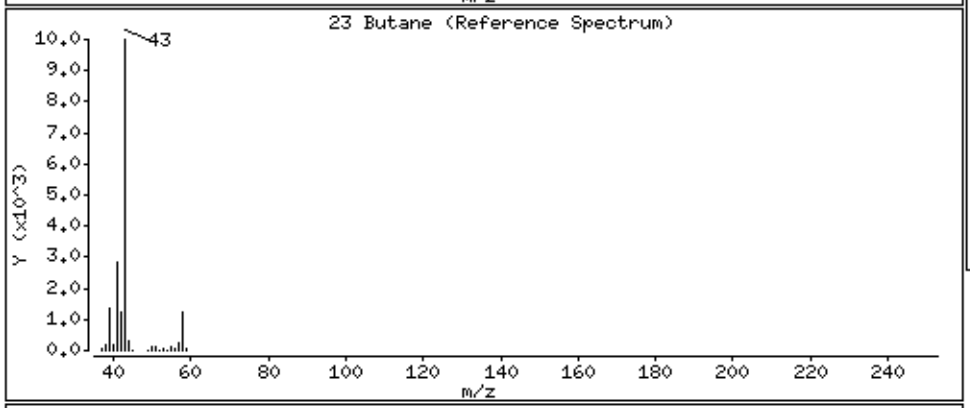
Concentration: 56.305 PPBV

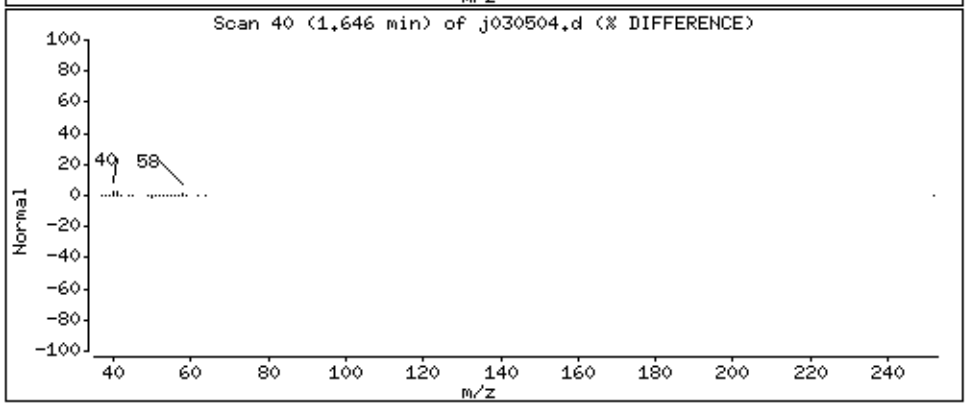












Data File: /chem/msdj.i/05mar15.b/j030504.d

Date : 05-MAR-2015 10:28

Client ID: LCS

Instrument: msdj.i

Sample Info: 50ml #2716-98

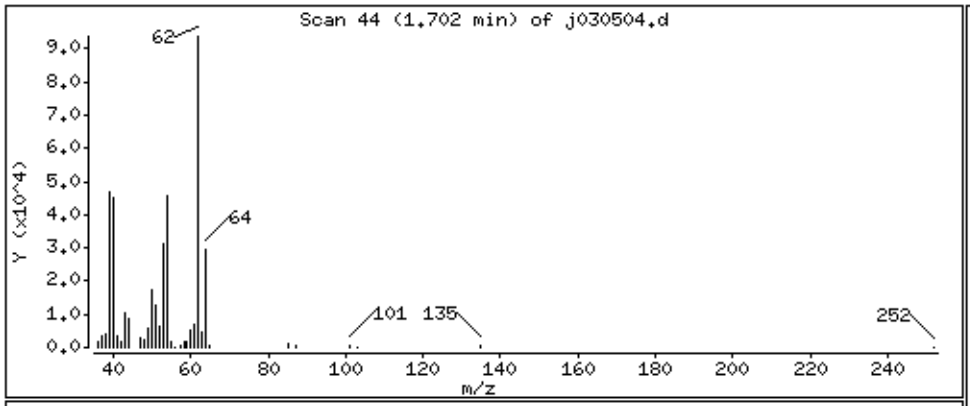
Operator: sg

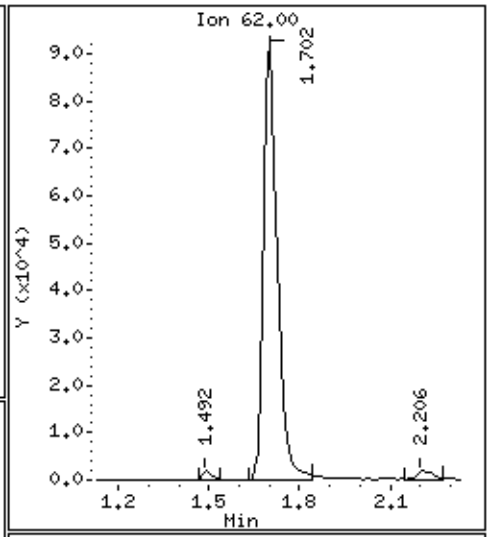
Column phase: RTX-624

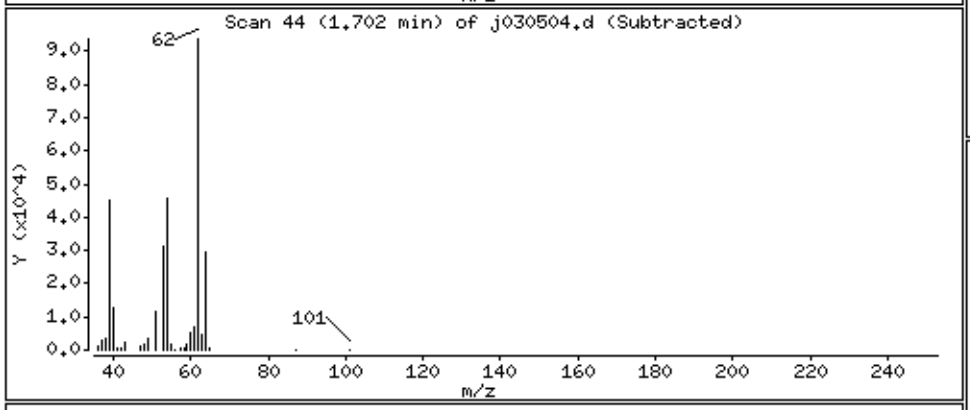
Column diameter: 0.25

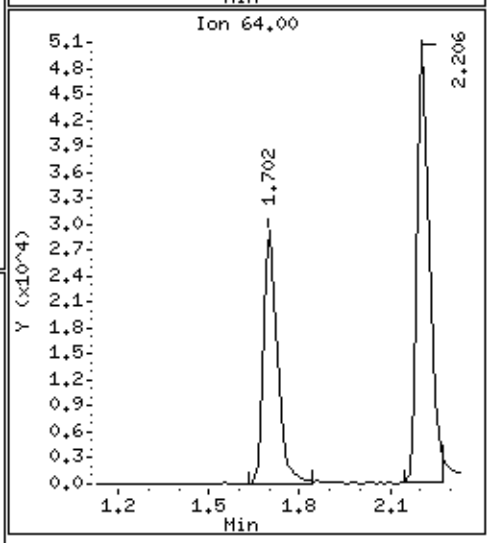
25 Vinyl Chloride

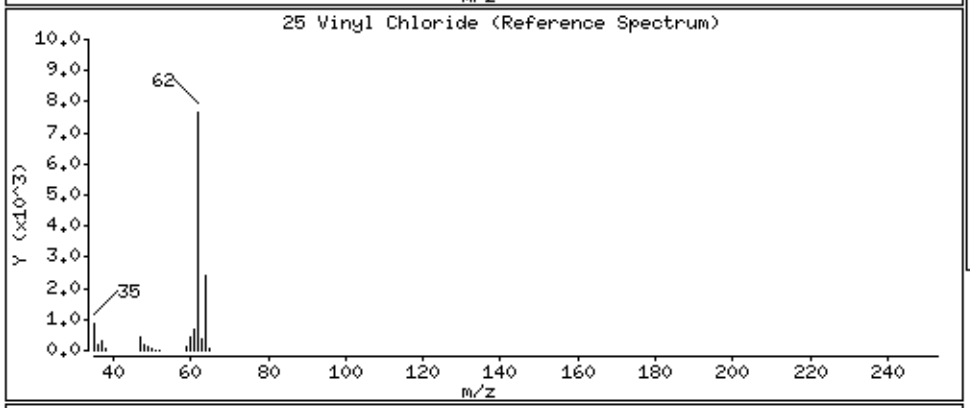
Concentration: 56.076 PPBV

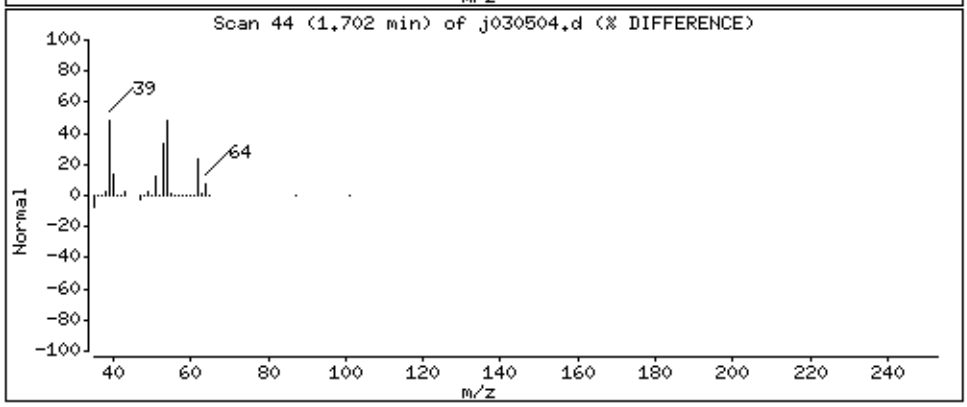












Data File: /chem/msdj.i/05mar15.b/j030504.d

Date : 05-MAR-2015 10:28

Client ID: LCS

Instrument: msdj.i

Sample Info: 50ml #2716-98

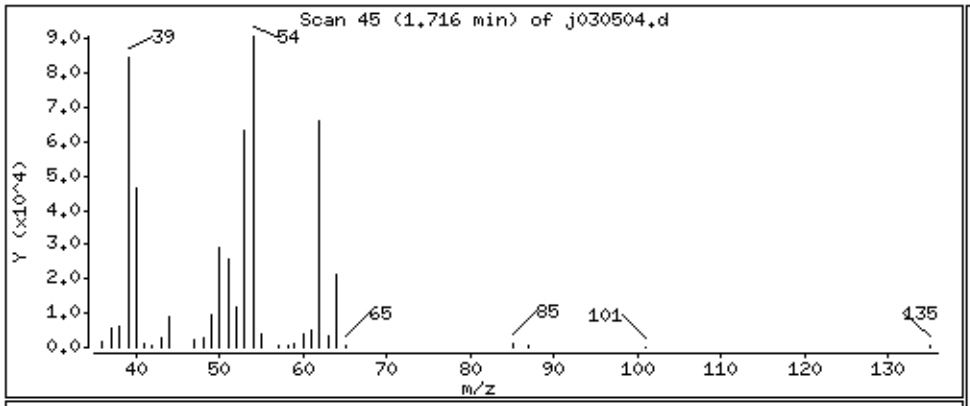
Operator: sg

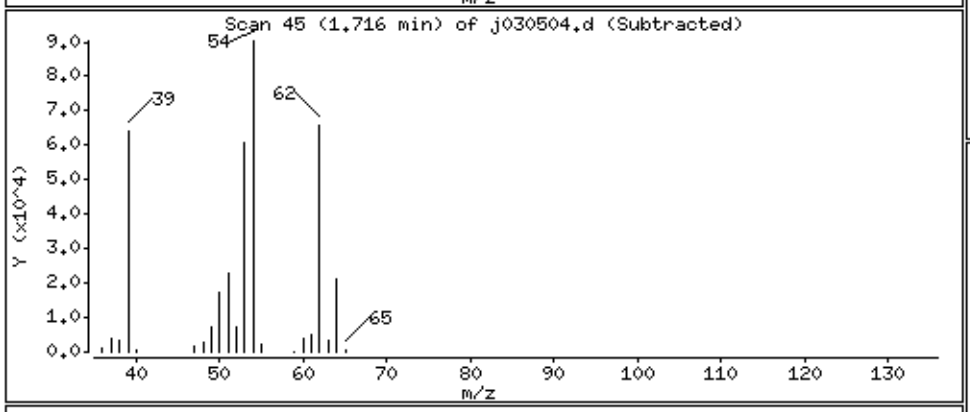
Column phase: RTX-624

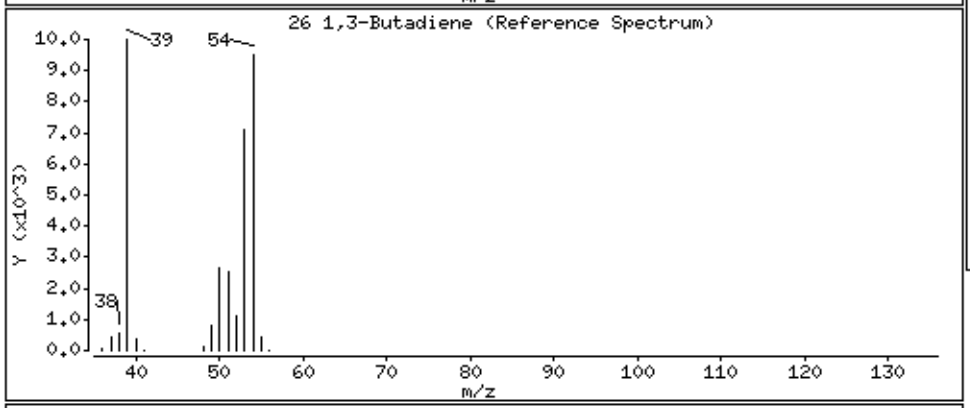
Column diameter: 0.25

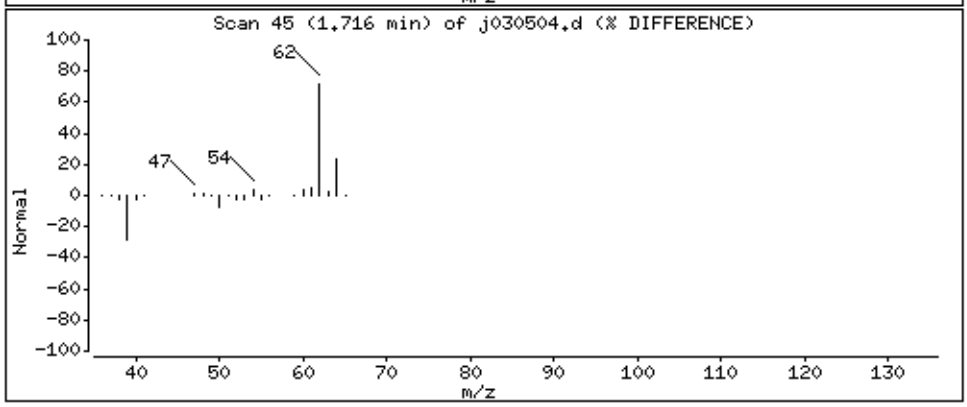
26 1,3-Butadiene

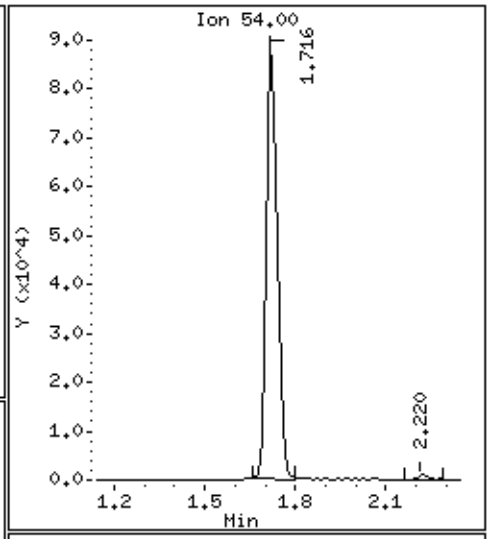
Concentration: 54.029 PPBV

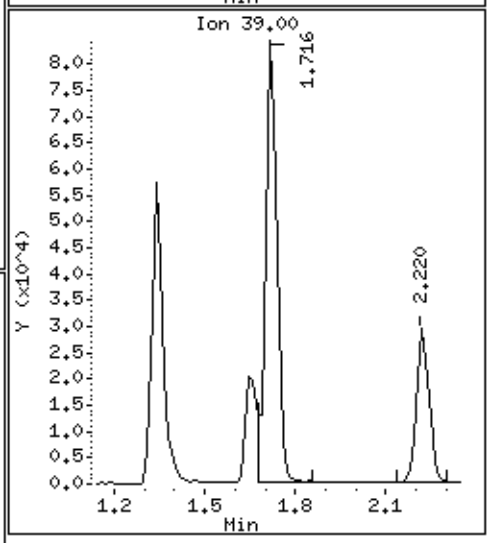












Data File: /chem/msdj.i/05mar15.b/j030504.d

Date : 05-MAR-2015 10:28

Client ID: LCS

Instrument: msdj.i

Sample Info: 50ml #2716-98

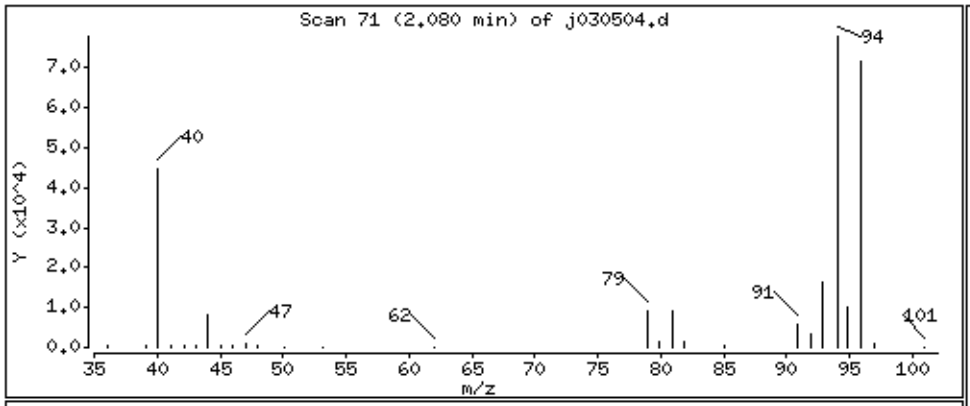
Operator: sg

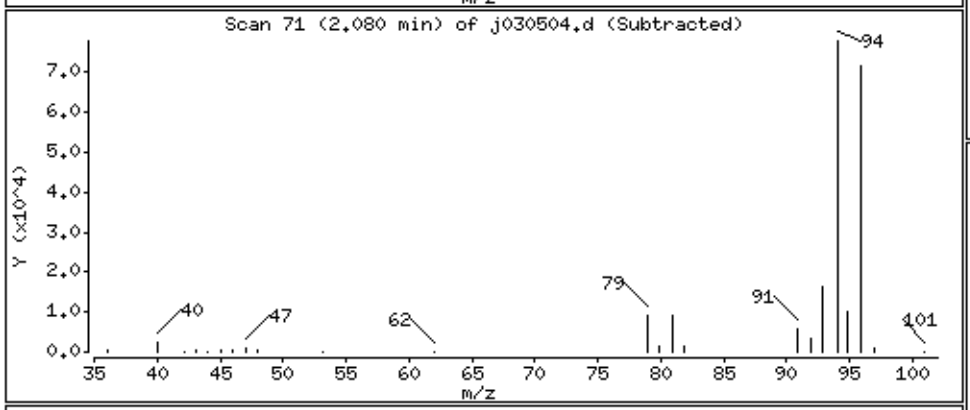
Column phase: RTX-624

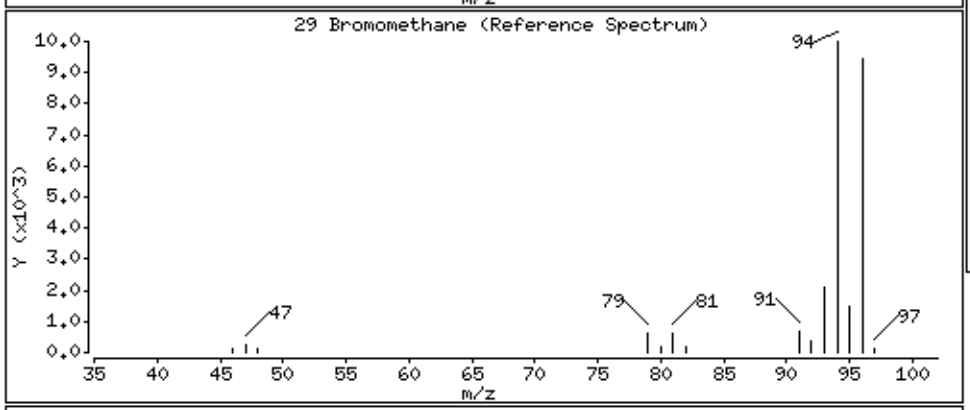
Column diameter: 0.25

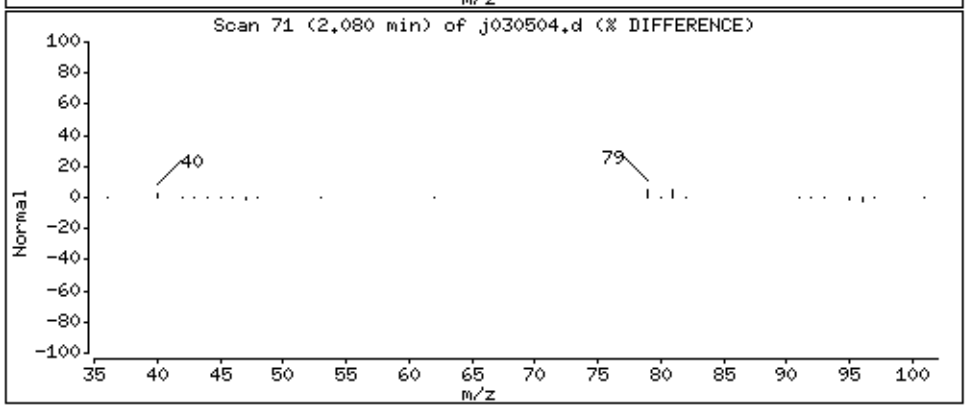
29 Bromomethane

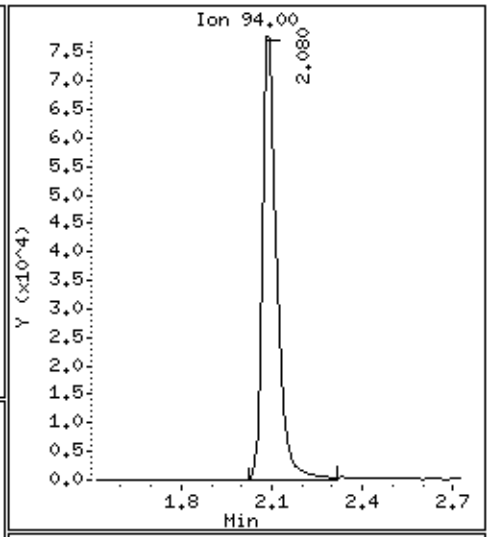
Concentration: 60.484 PPBV

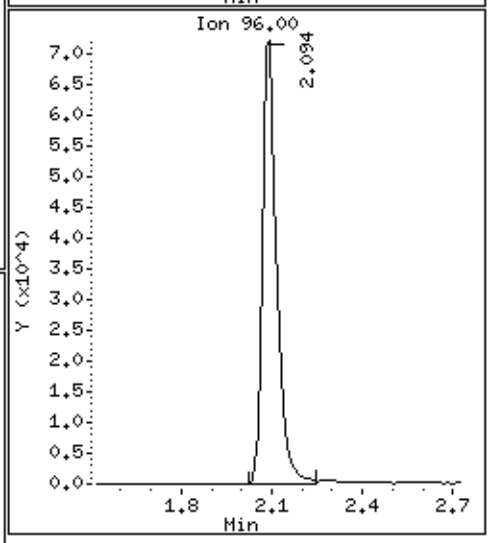












Data File: /chem/msdj.i/05mar15.b/j030504.d

Date : 05-MAR-2015 10:28

Client ID: LCS

Instrument: msdj.i

Sample Info: 50ml #2716-98

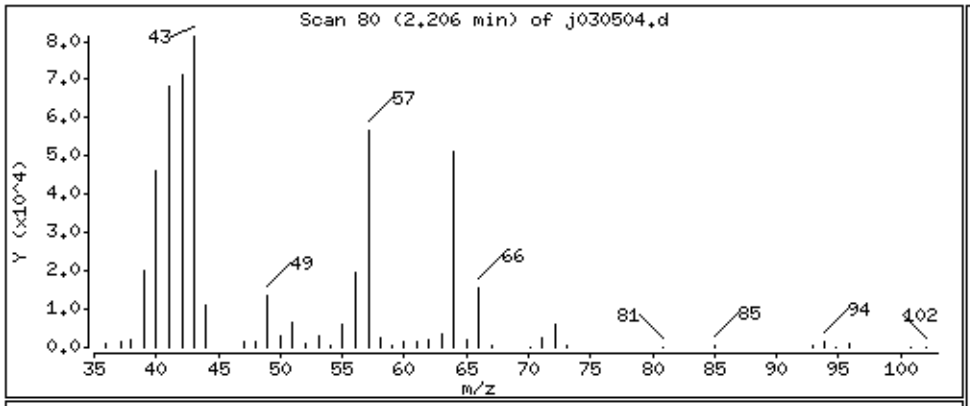
Operator: sg

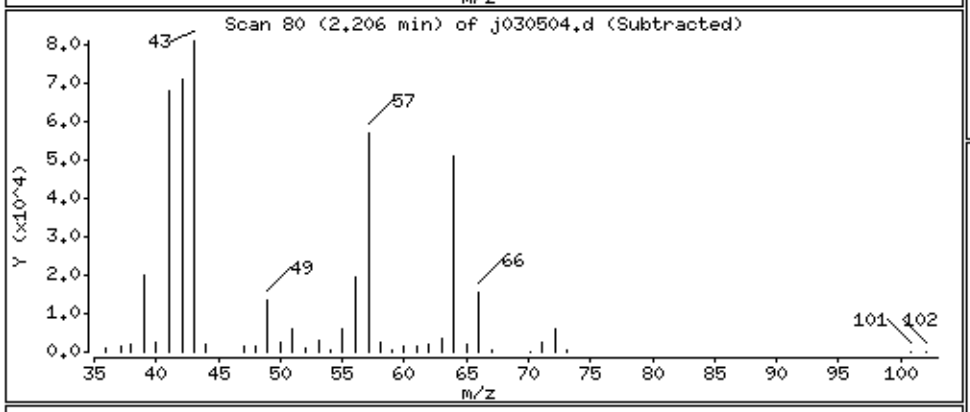
Column phase: RTX-624

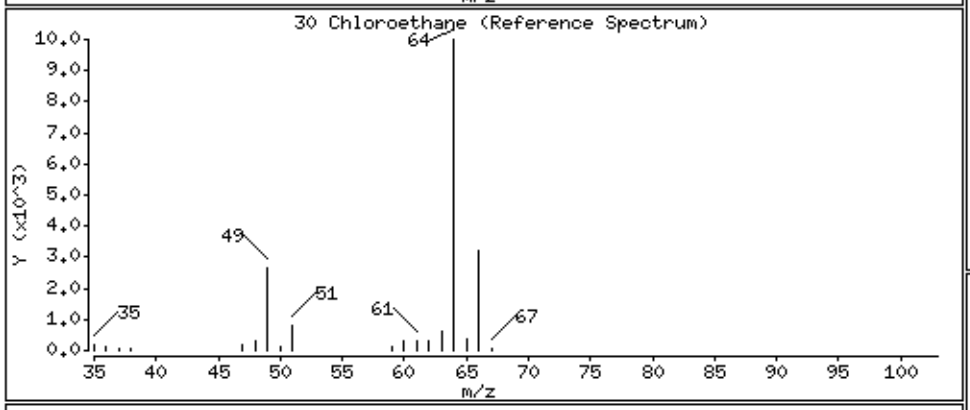
Column diameter: 0.25

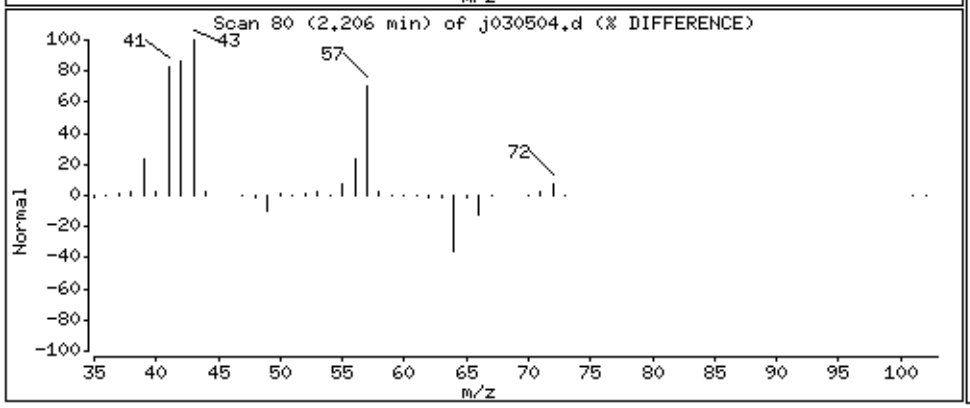
30 Chloroethane

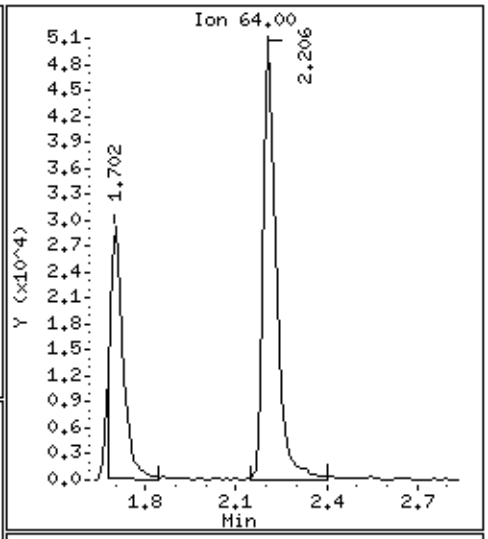
Concentration: 56.629 PPBV

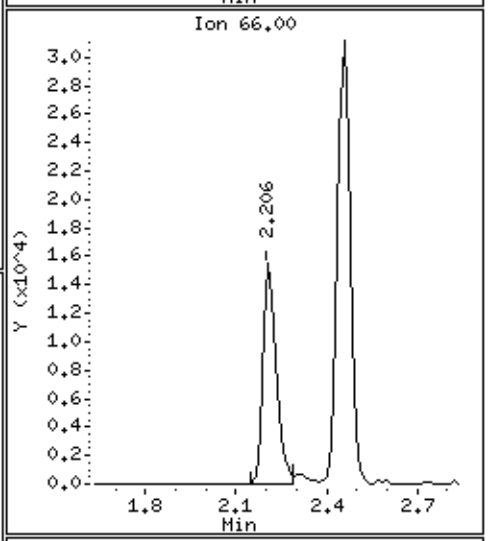


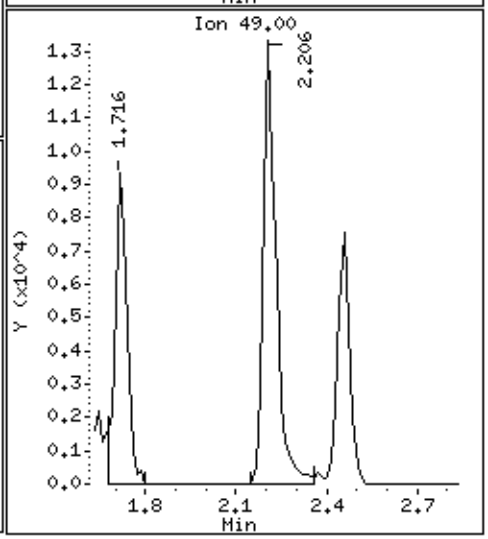












Data File: /chem/msdj.i/05mar15.b/j030504.d

Date : 05-MAR-2015 10:28

Client ID: LCS

Instrument: msdj.i

Sample Info: 50ml #2716-98

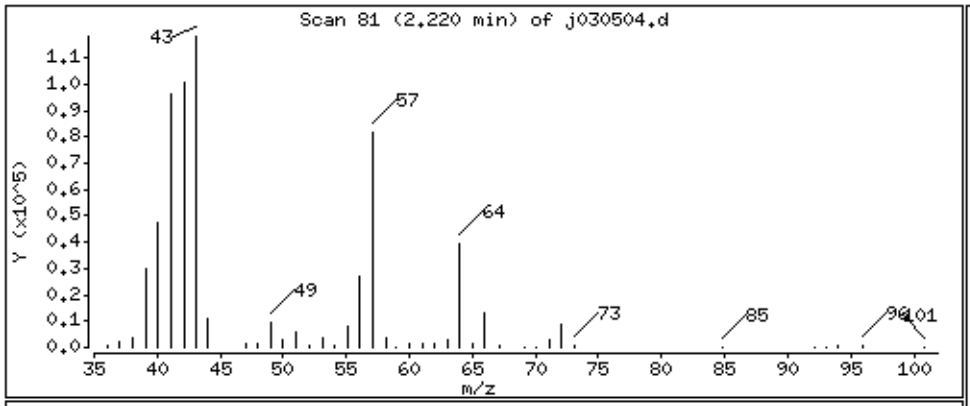
Operator: sg

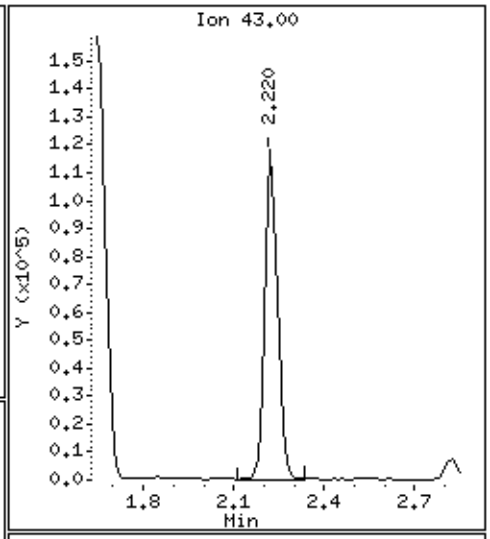
Column phase: RTX-624

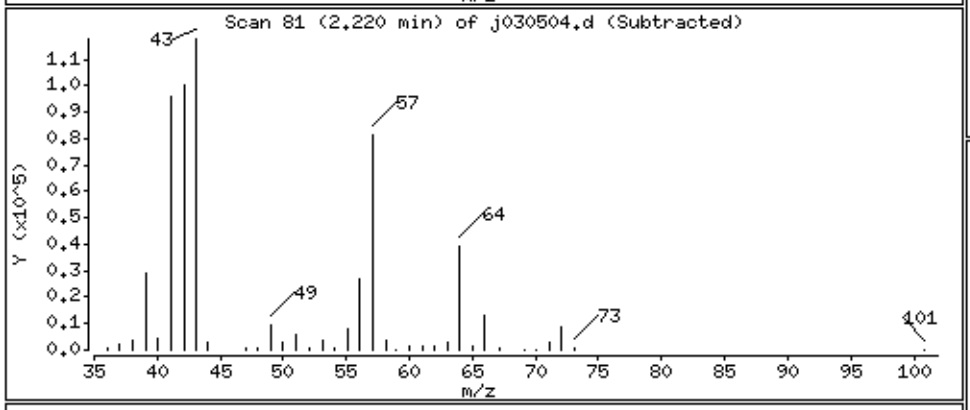
Column diameter: 0.25

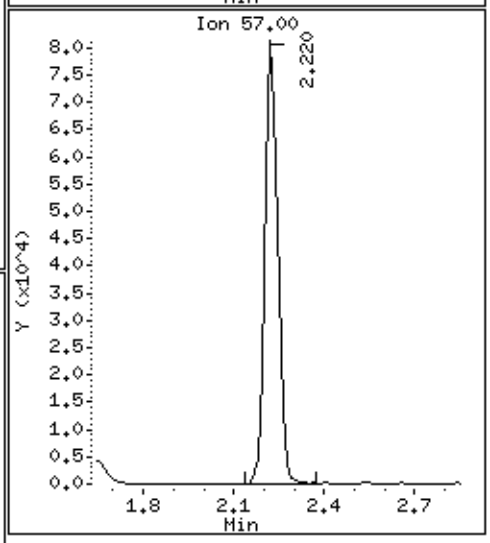
31 Isopentane

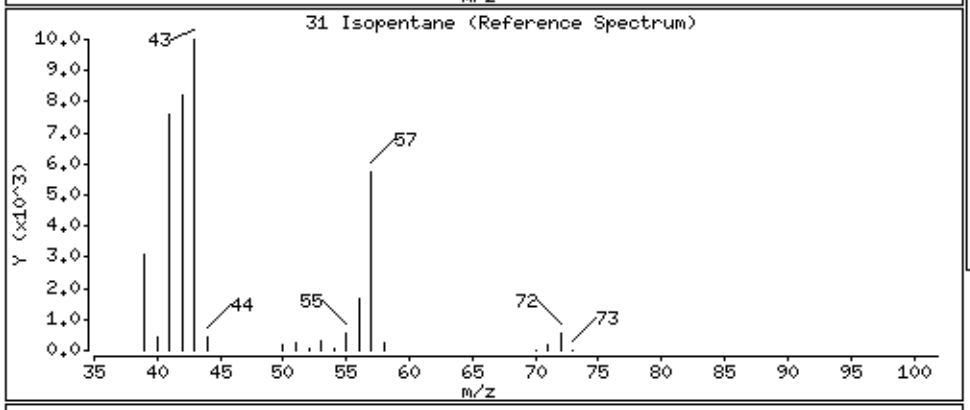
Concentration: 54.433 PPBV

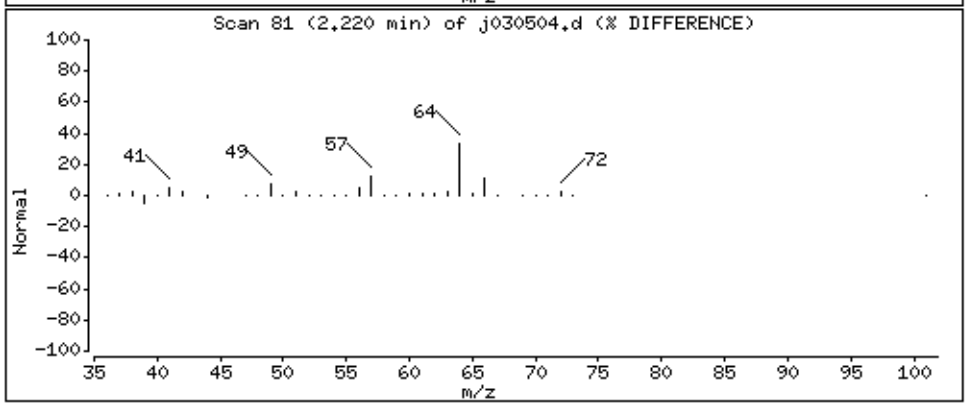












Data File: /chem/msdj.i/05mar15.b/j030504.d

Date : 05-MAR-2015 10:28

Client ID: LCS

Instrument: msdj.i

Sample Info: 50ml #2716-98

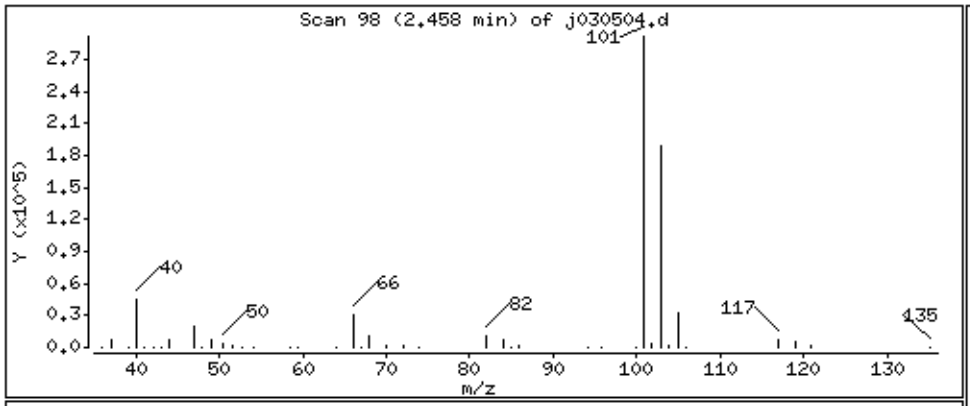
Operator: sg

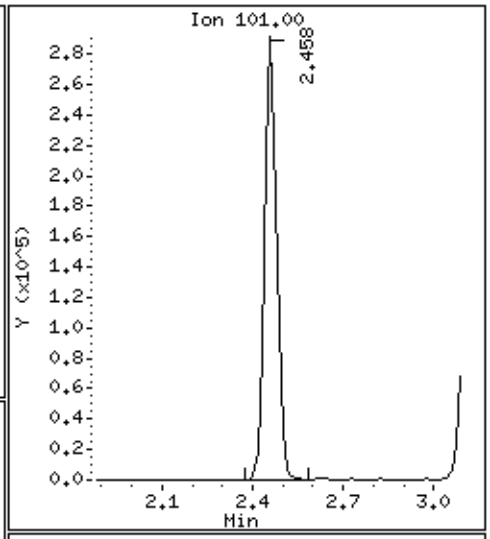
Column phase: RTX-624

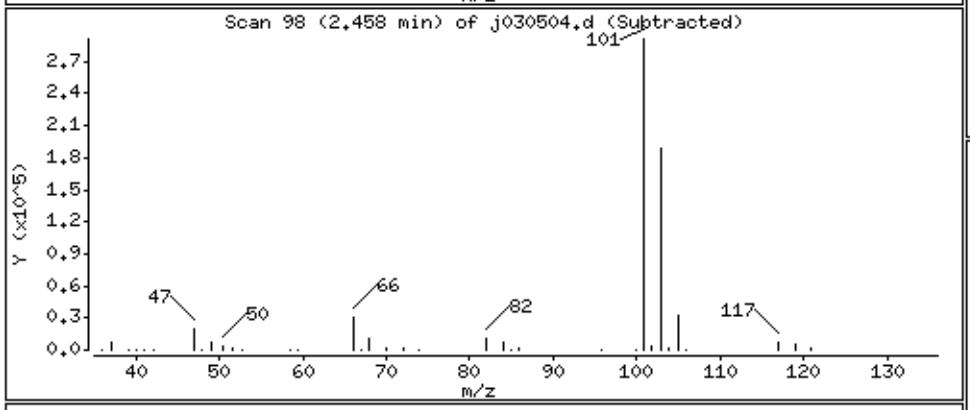
Column diameter: 0.25

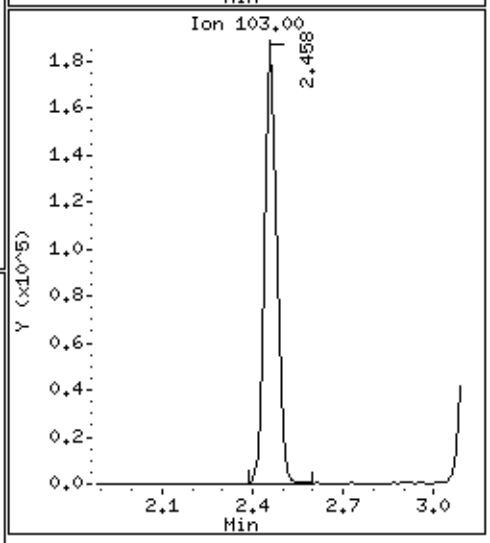
35 Freon 11

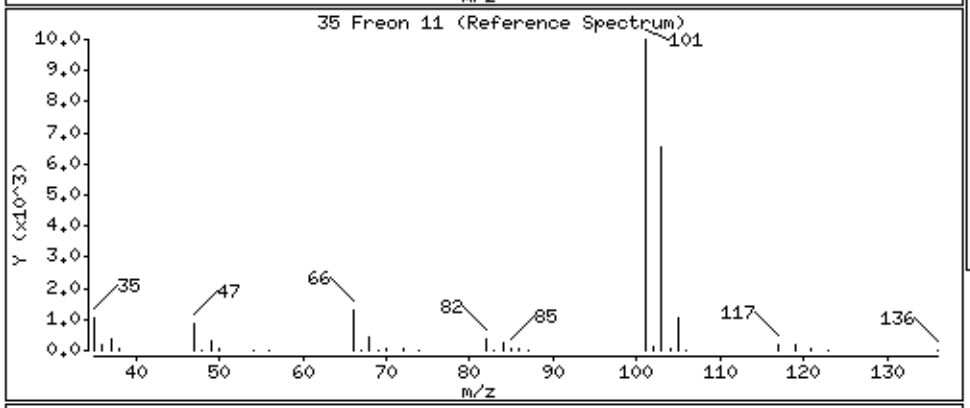
Concentration: 55.387 PPBV

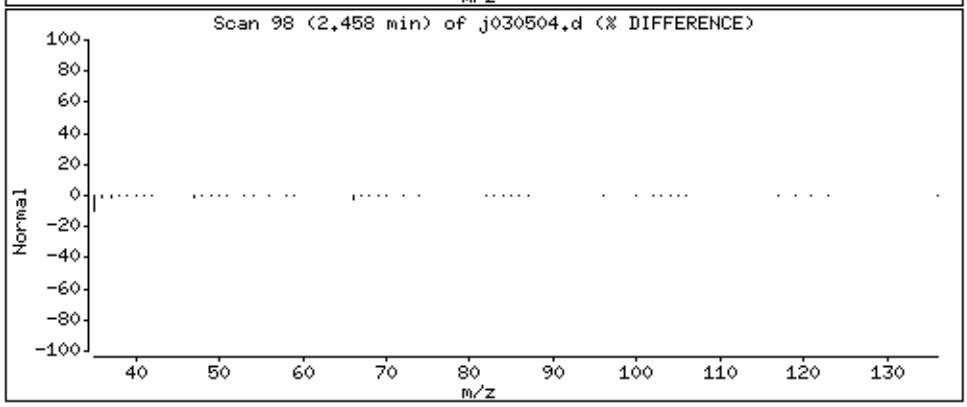












Data File: /chem/msdj.i/05mar15.b/j030504.d

Date : 05-MAR-2015 10:28

Client ID: LCS

Instrument: msdj.i

Sample Info: 50ml #2716-98

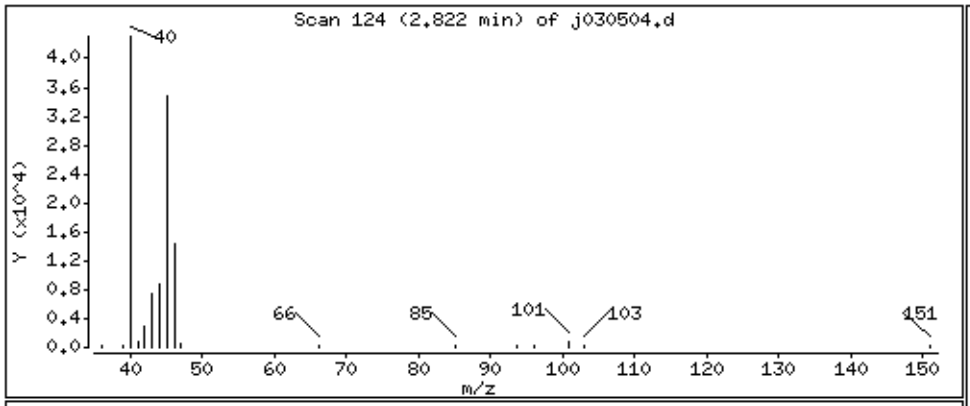
Operator: sg

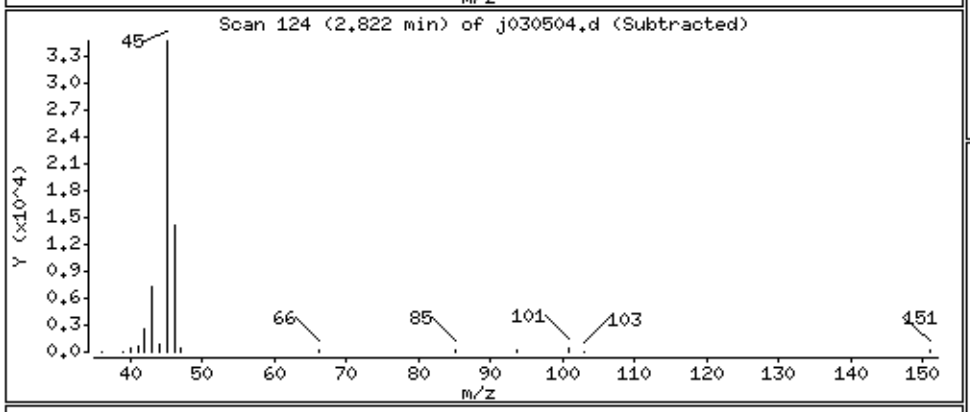
Column phase: RTX-624

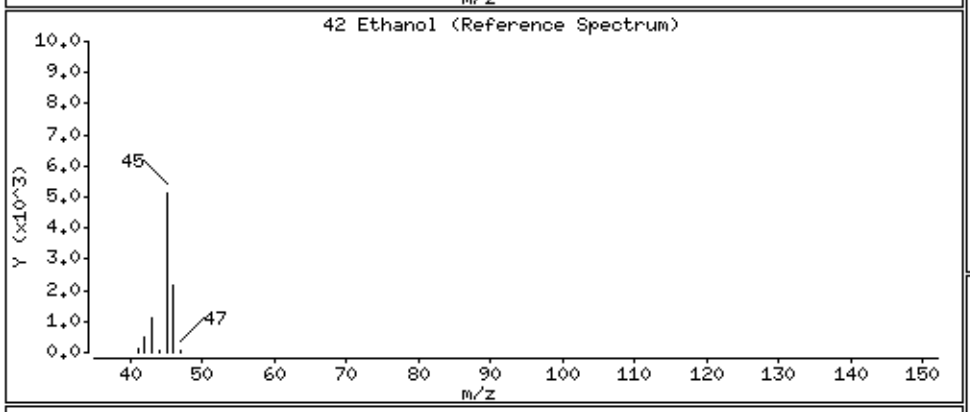
Column diameter: 0.25

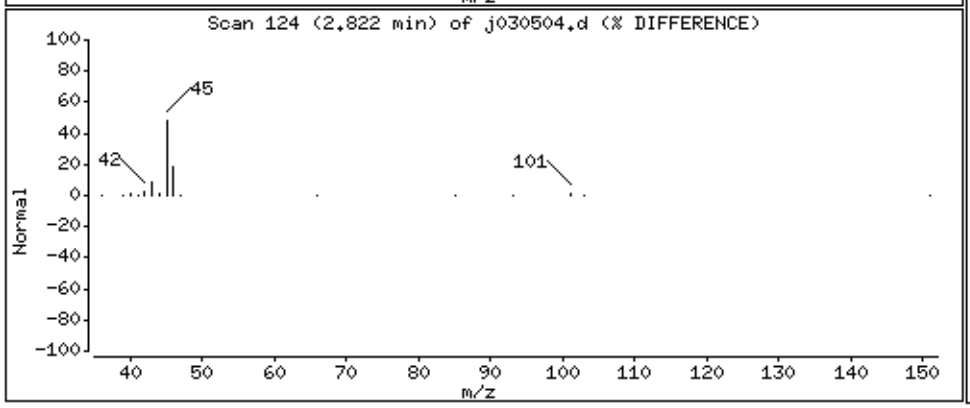
42 Ethanol

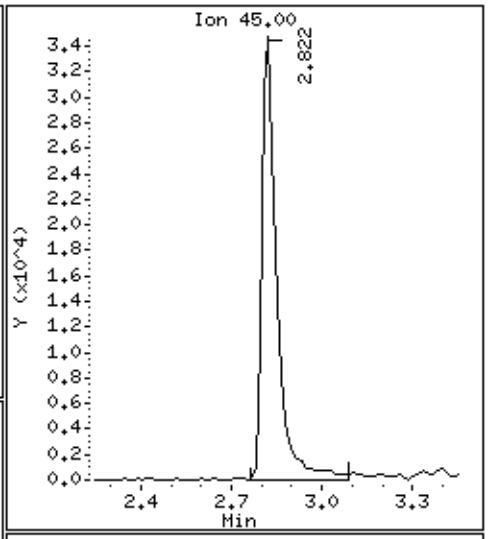
Concentration: 52.496 PPBV

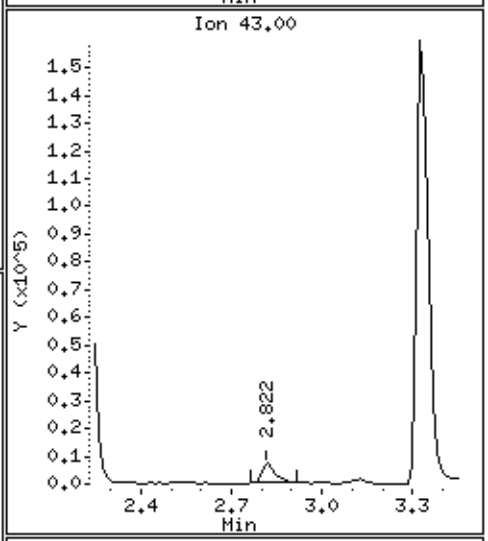


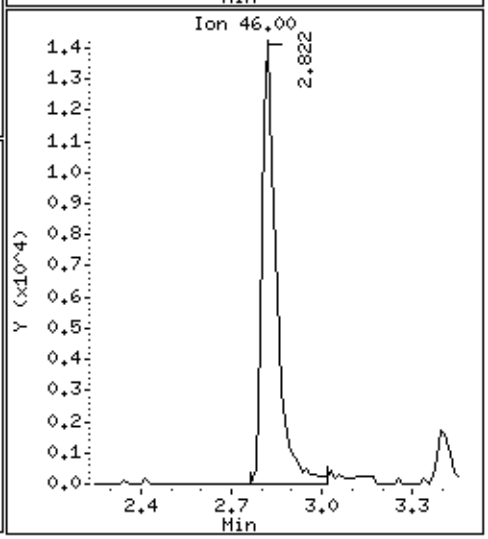












Data File: /chem/msdj.i/05mar15.b/j030504.d

Date : 05-MAR-2015 10:28

Client ID: LCS

Instrument: msdj.i

Sample Info: 50ml #2716-98

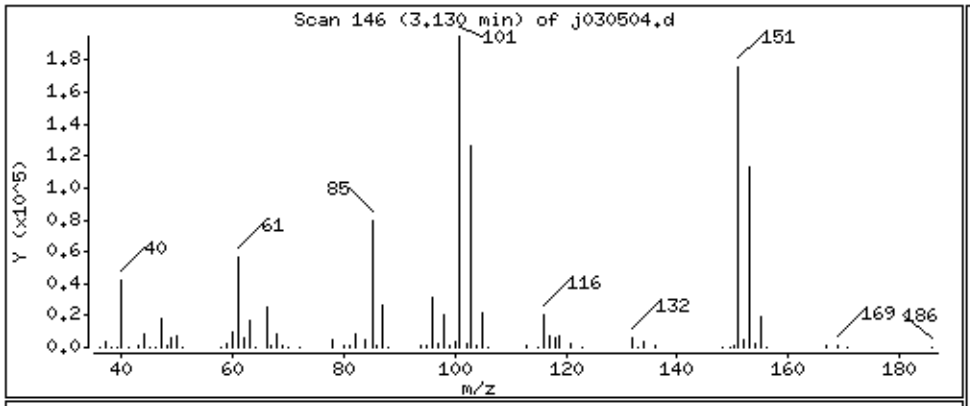
Operator: sg

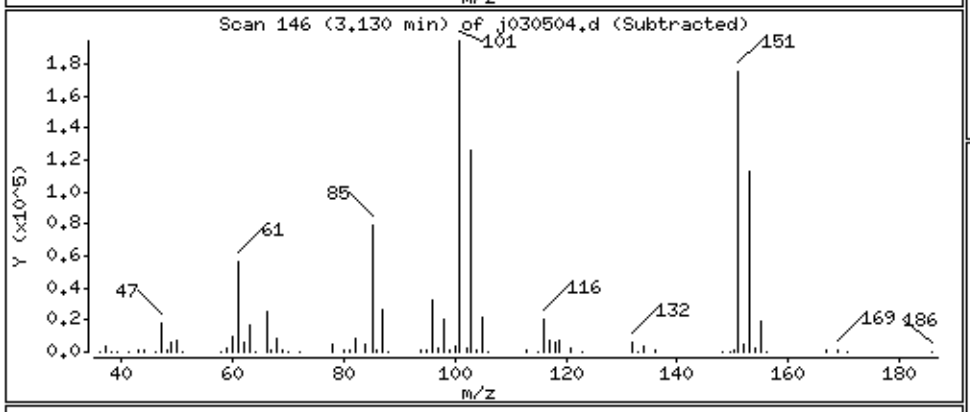
Column phase: RTX-624

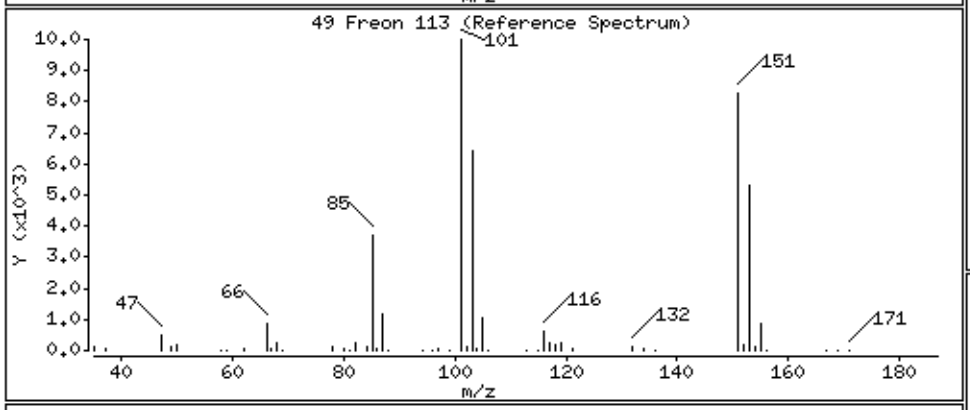
Column diameter: 0.25

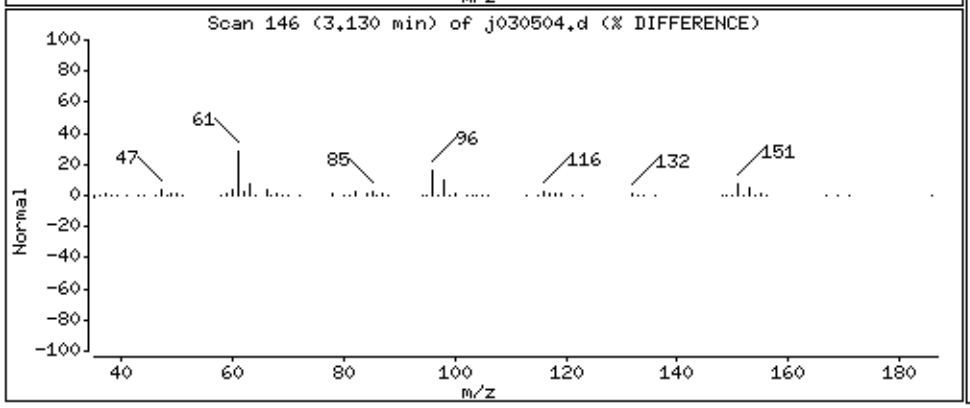
49 Freon 113

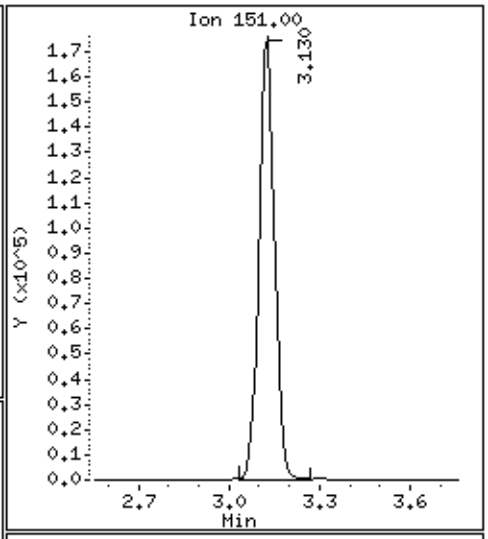
Concentration: 52.366 PPBV

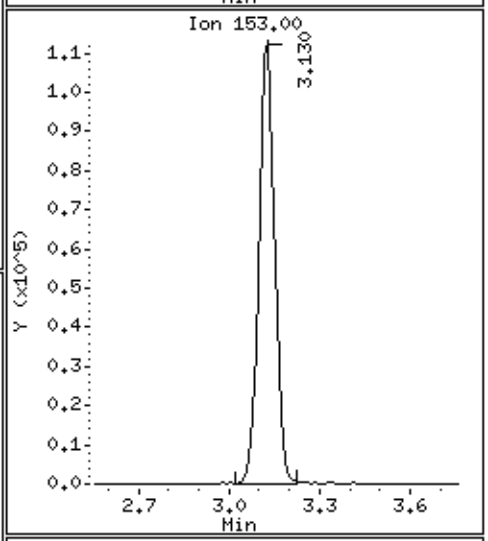


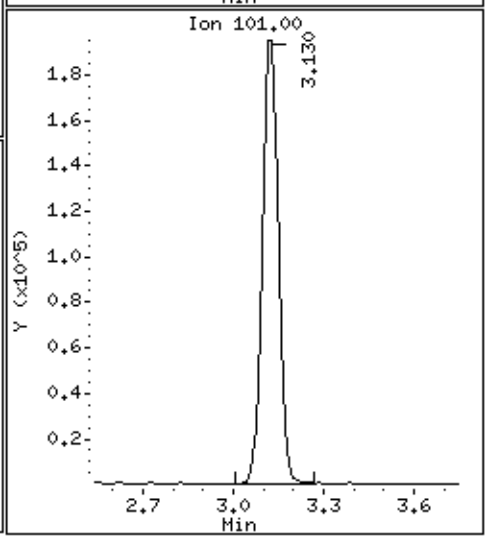












Data File: /chem/msdj.i/05mar15.b/j030504.d

Date : 05-MAR-2015 10:28

Client ID: LCS

Instrument: msdj.i

Sample Info: 50ml #2716-98

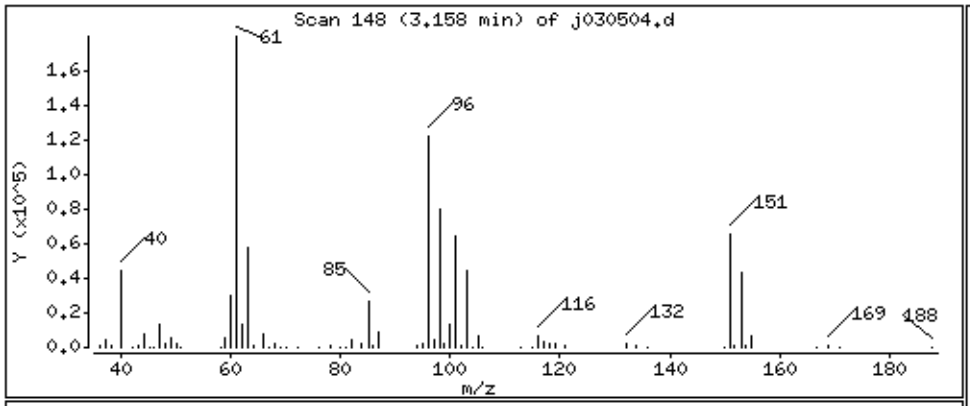
Operator: sg

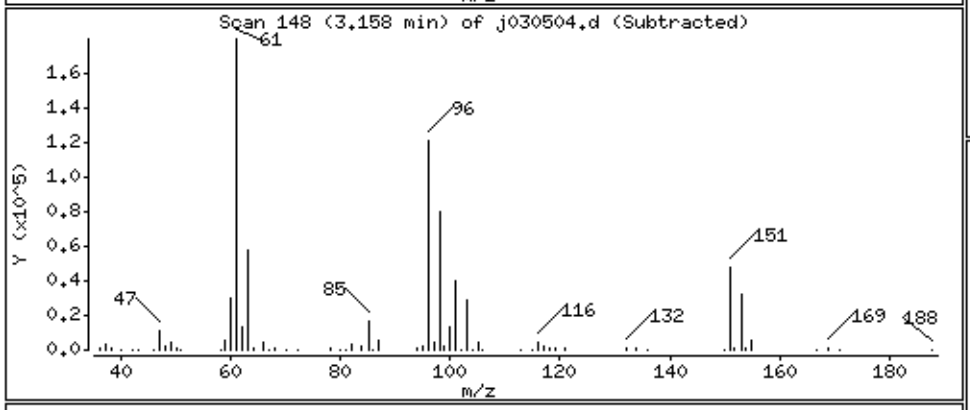
Column phase: RTX-624

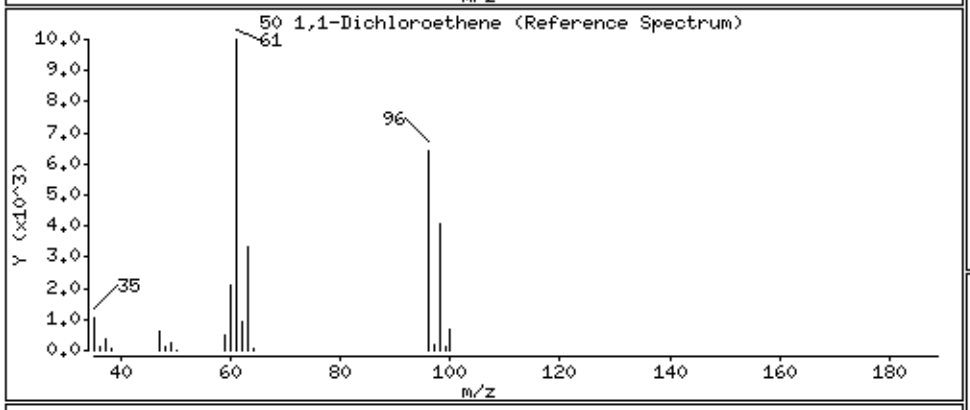
Column diameter: 0.25

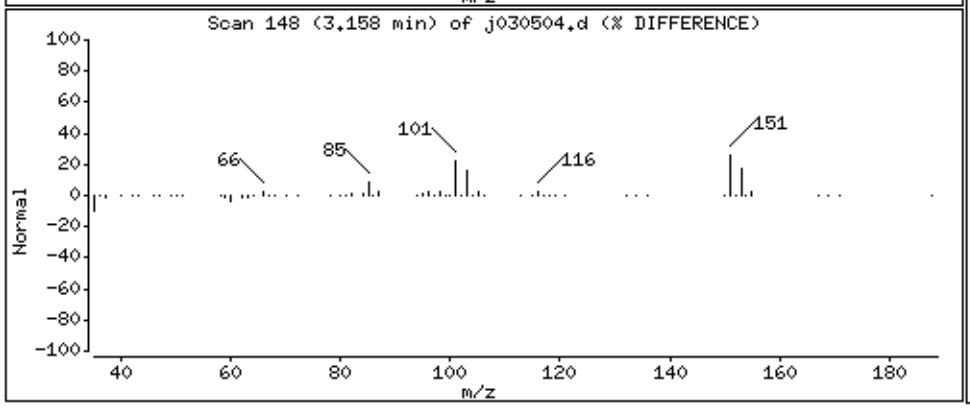
50 1,1-Dichloroethene

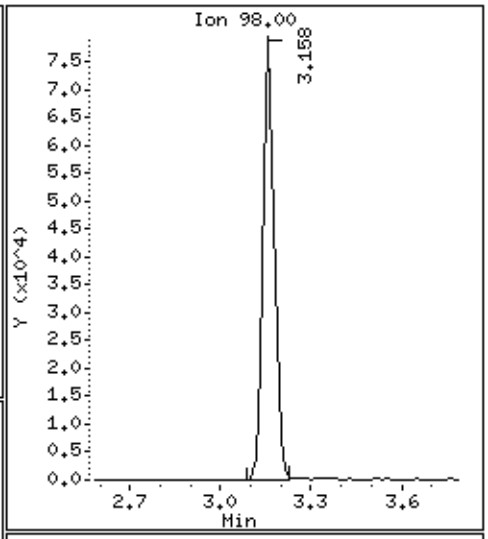
Concentration: 55.727 PPBV

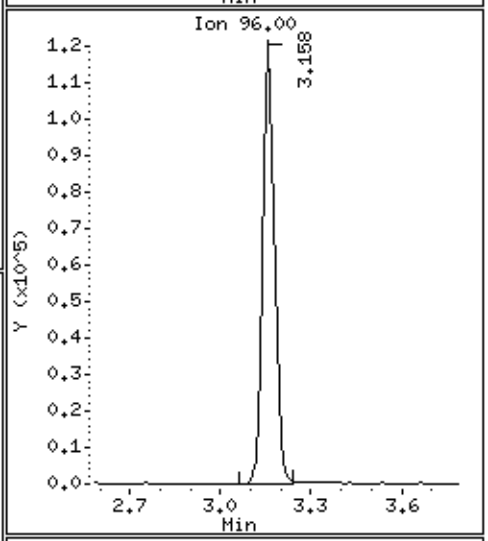


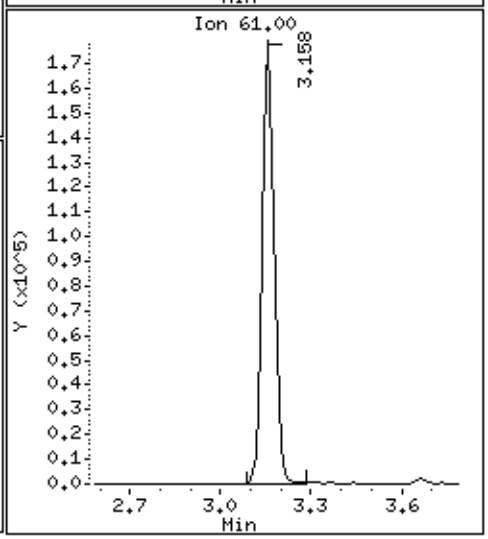












Data File: /chem/msdj.i/05mar15.b/j030504.d

Date : 05-MAR-2015 10:28

Client ID: LCS

Instrument: msdj.i

Sample Info: 50ml #2716-98

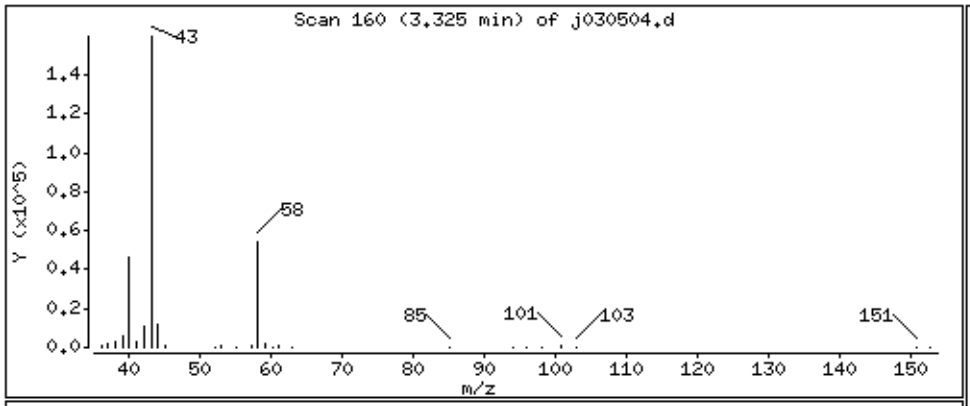
Operator: sg

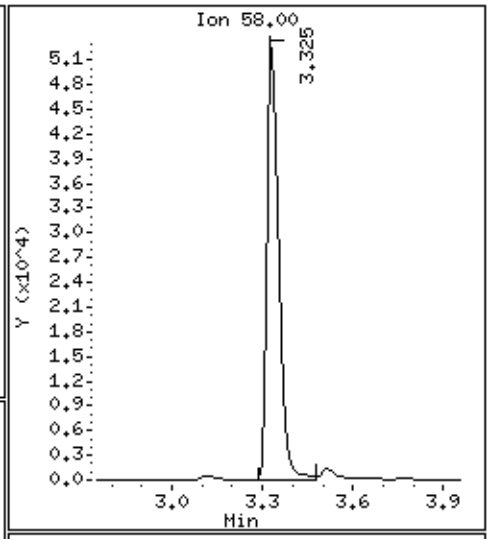
Column phase: RTX-624

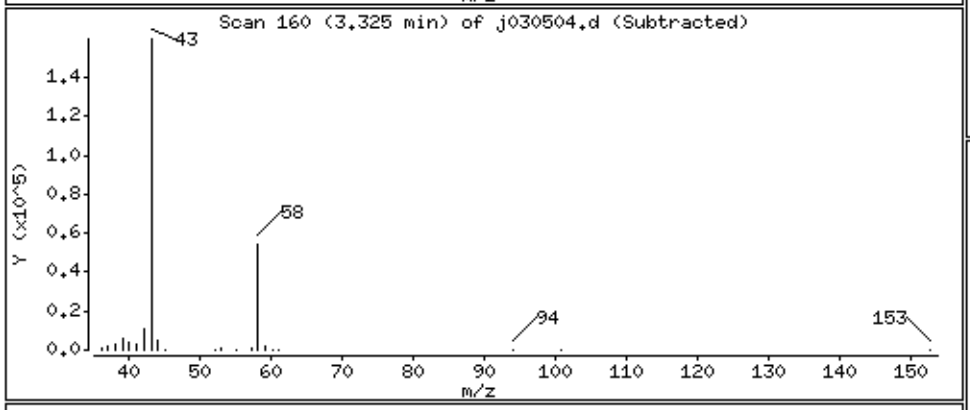
Column diameter: 0.25

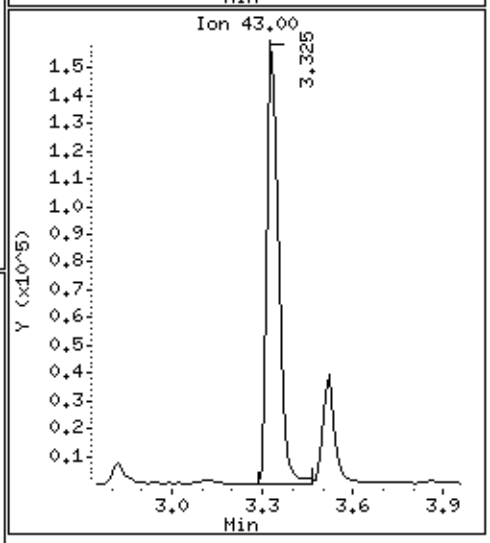
52 Acetone

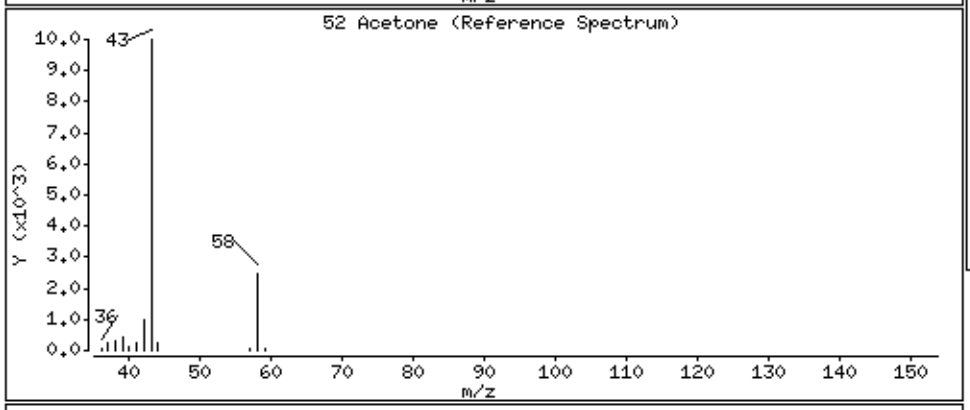
Concentration: 54.657 PPBV

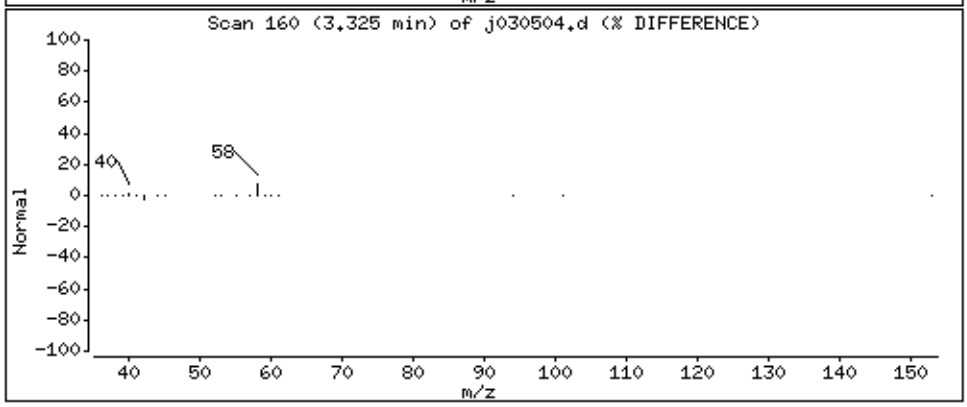












Data File: /chem/msdj.i/05mar15.b/j030504.d

Date : 05-MAR-2015 10:28

Client ID: LCS

Instrument: msdj.i

Sample Info: 50ml #2716-98

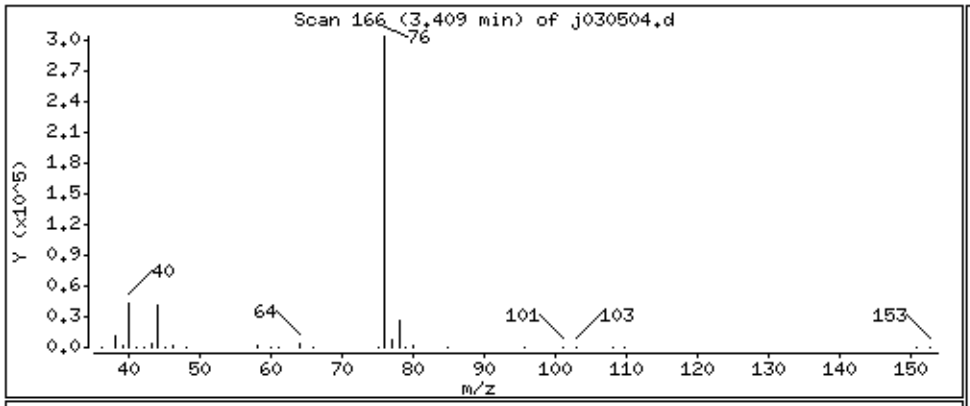
Operator: sg

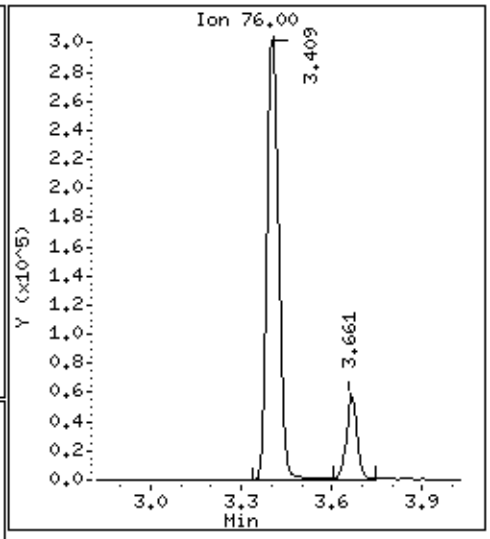
Column phase: RTX-624

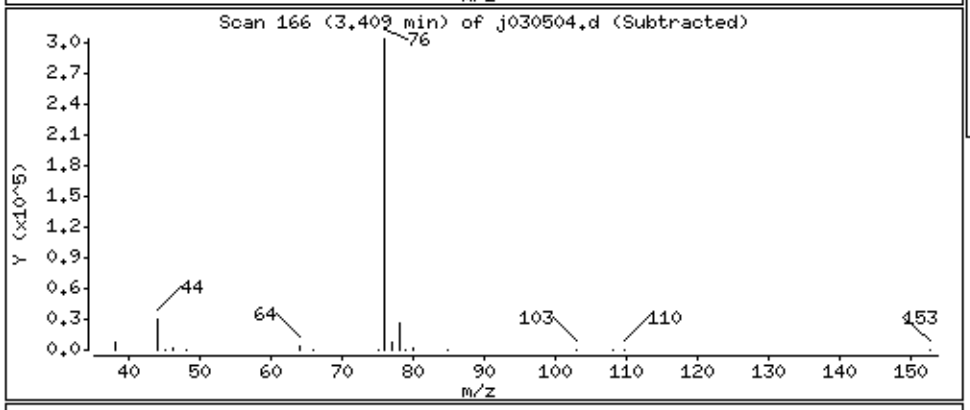
Column diameter: 0.25

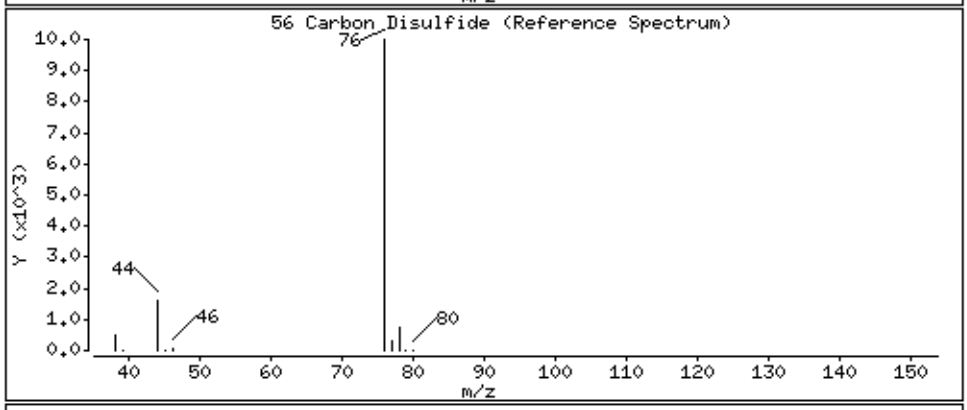
56 Carbon Disulfide

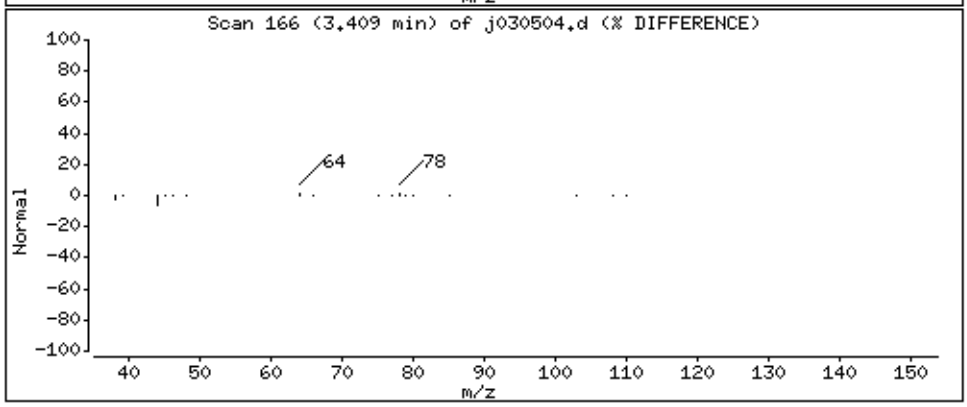
Concentration: 47.984 PPBV











Data File: /chem/msdj.i/05mar15.b/j030504.d

Date : 05-MAR-2015 10:28

Client ID: LCS

Instrument: msdj.i

Sample Info: 50ml #2716-98

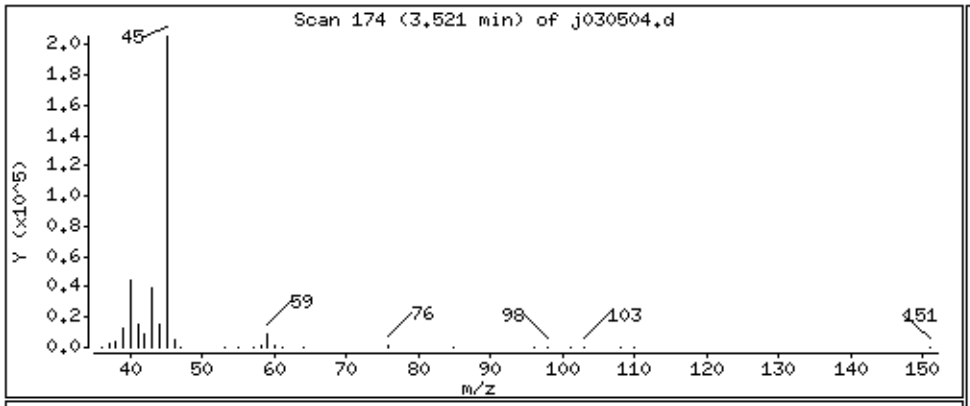
Operator: sg

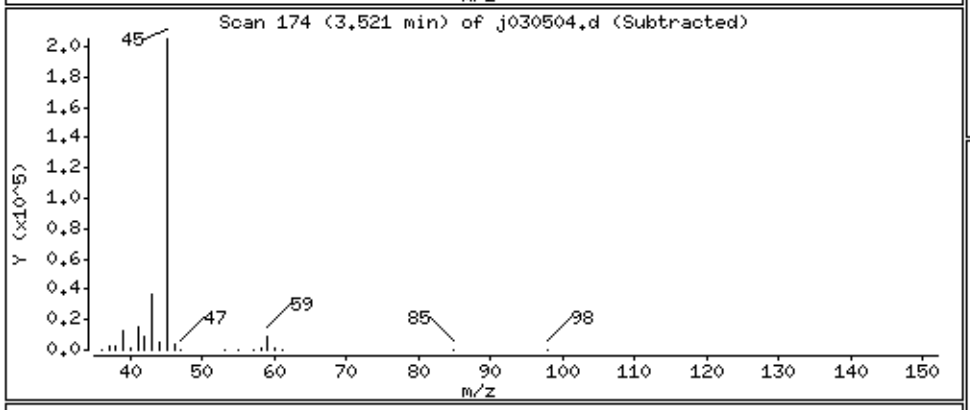
Column phase: RTX-624

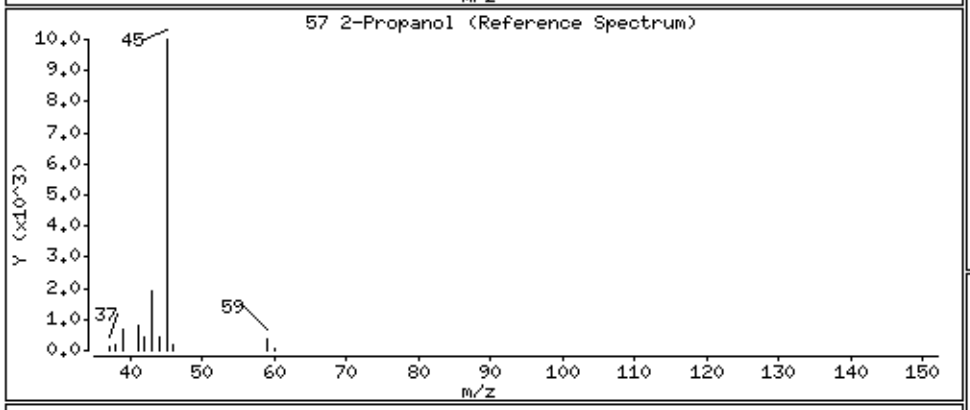
Column diameter: 0.25

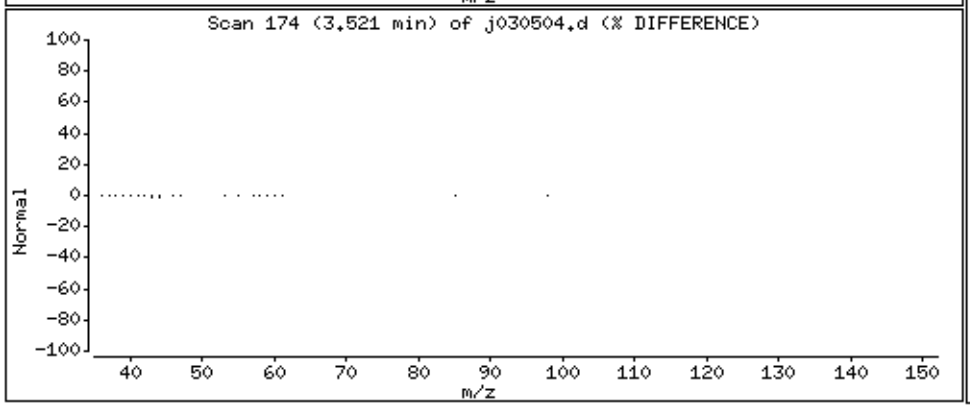
57 2-Propanol

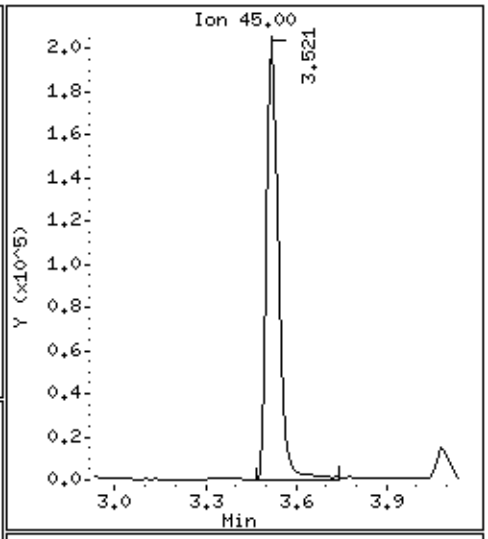
Concentration: 57.398 PPBV

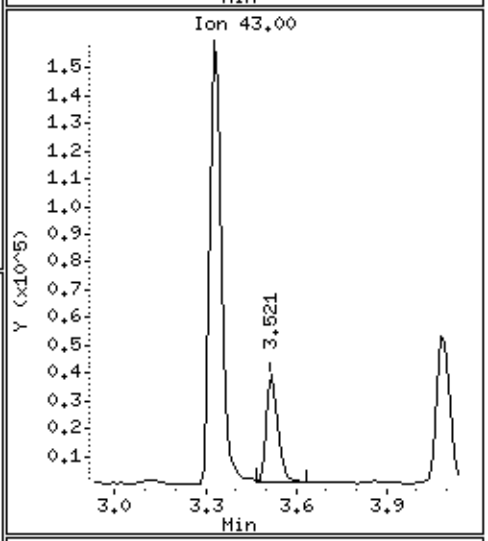


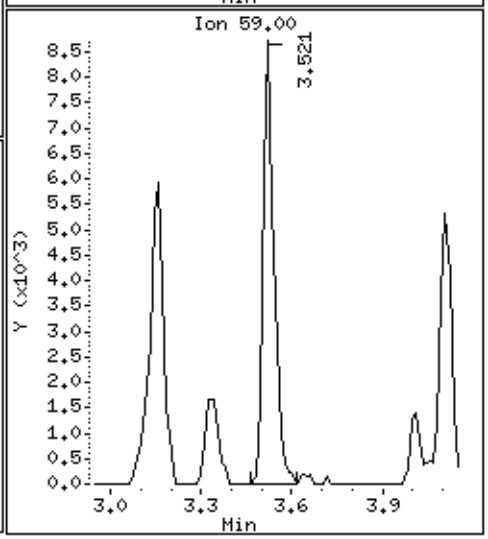












Data File: /chem/msdj.i/05mar15.b/j030504.d

Date : 05-MAR-2015 10:28

Client ID: LCS

Instrument: msdj.i

Sample Info: 50ml #2716-98

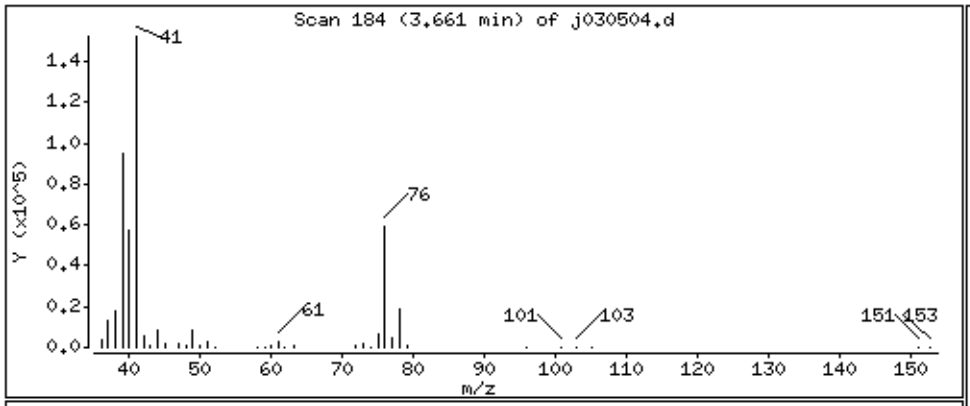
Operator: sg

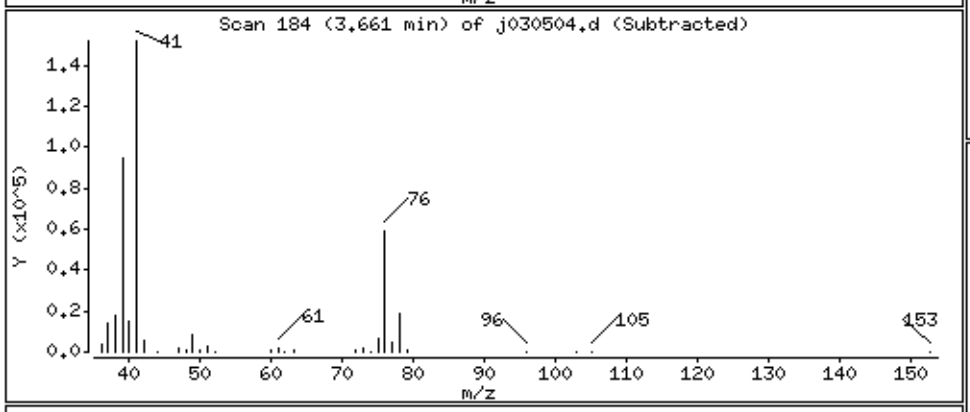
Column phase: RTX-624

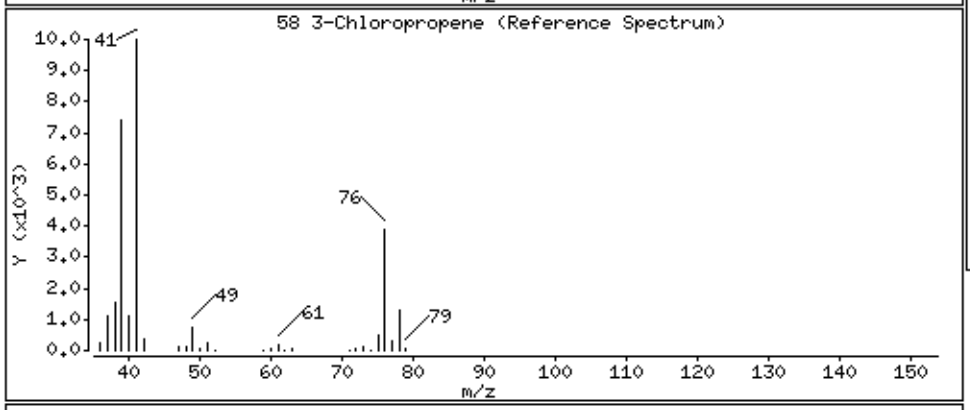
Column diameter: 0.25

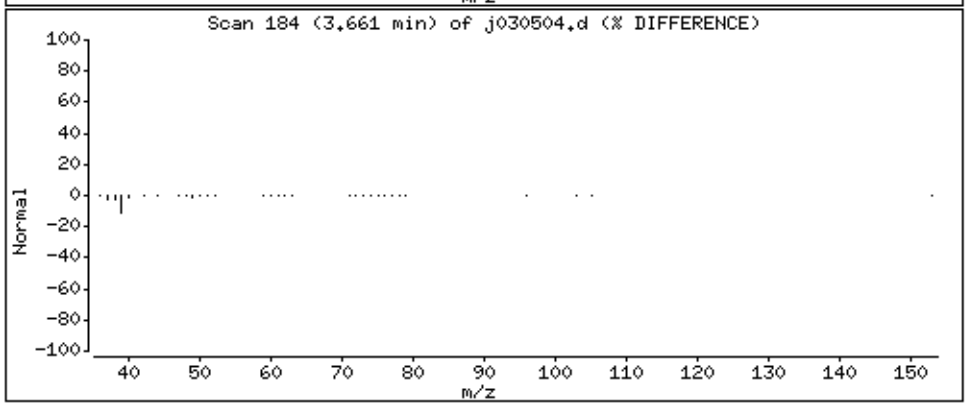
58 3-Chloropropene

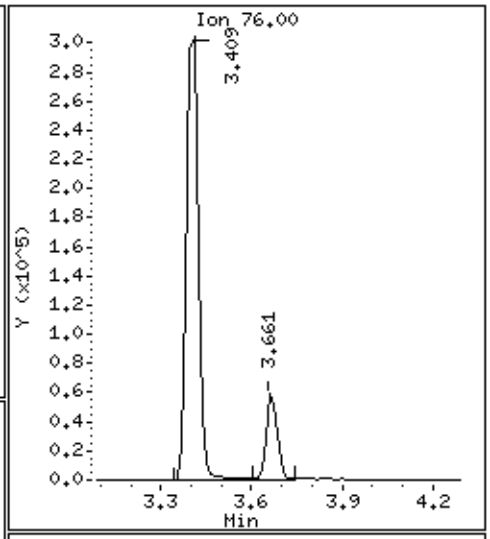
Concentration: 51.181 PPBV

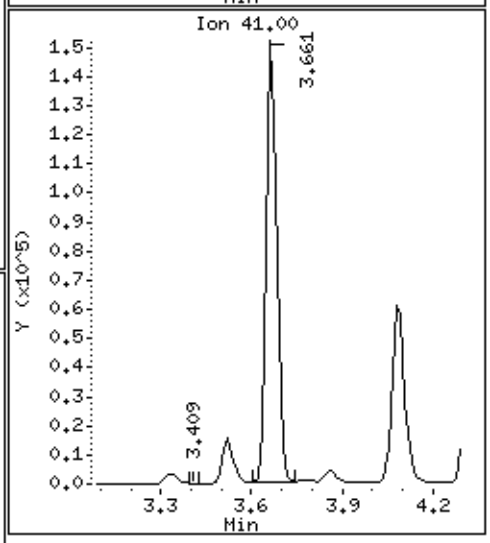












Data File: /chem/msdj.i/05mar15.b/j030504.d

Date : 05-MAR-2015 10:28

Client ID: LCS

Instrument: msdj.i

Sample Info: 50ml #2716-98

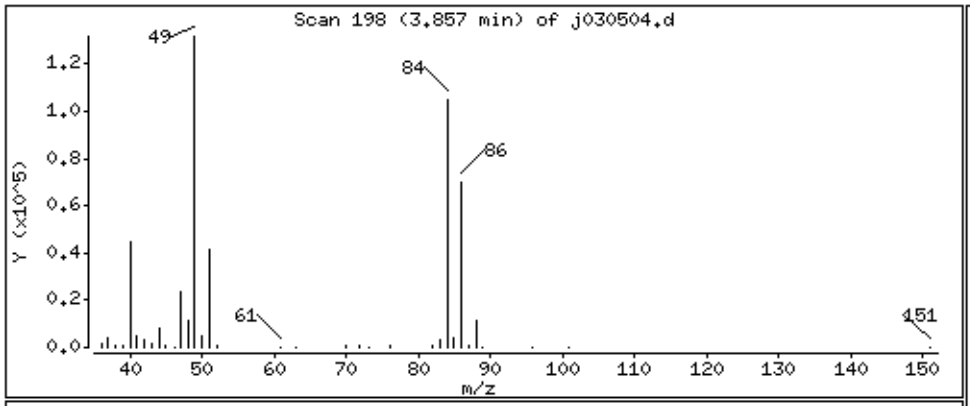
Operator: sg

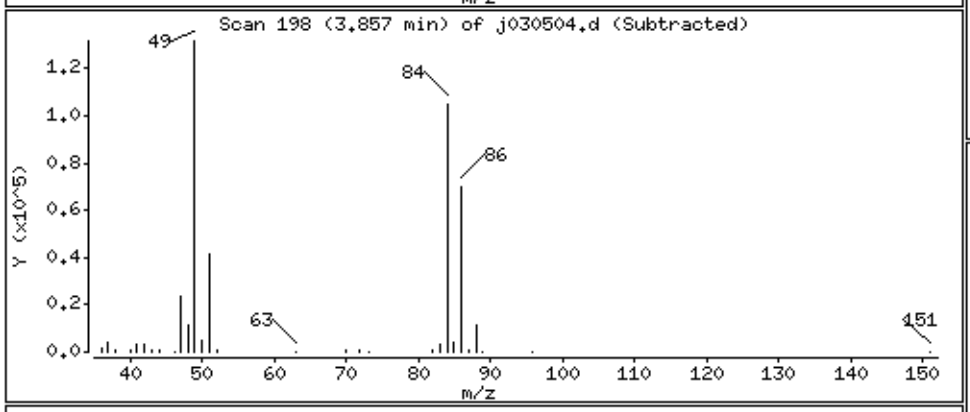
Column phase: RTX-624

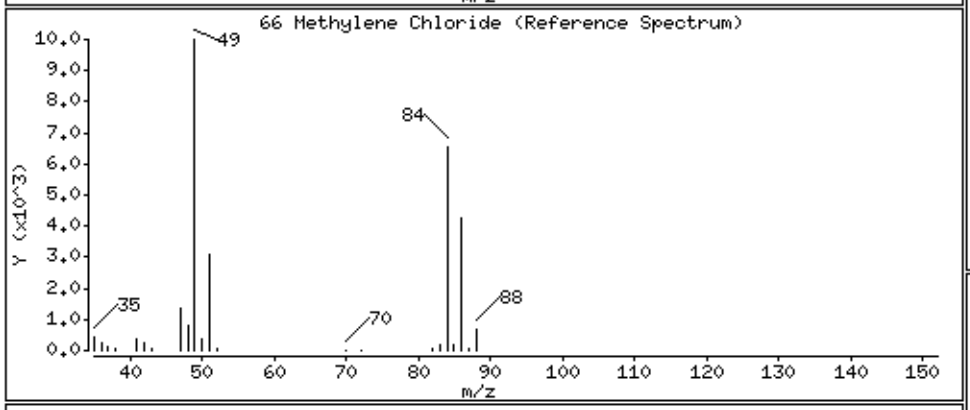
Column diameter: 0.25

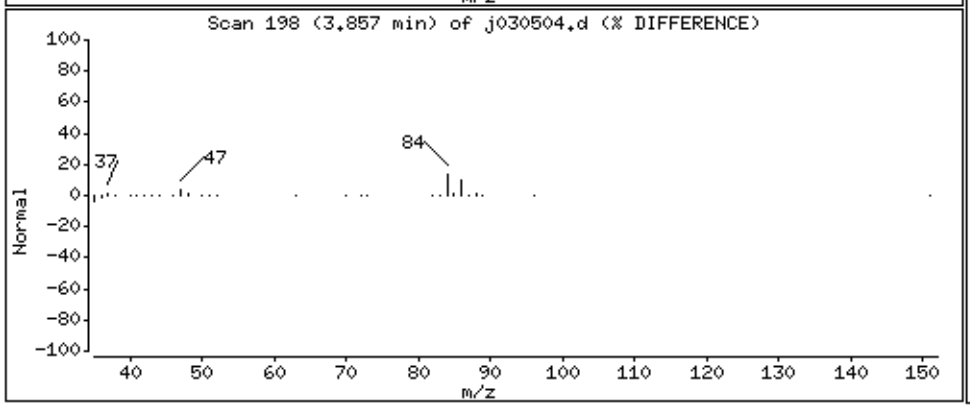
66 Methylene Chloride

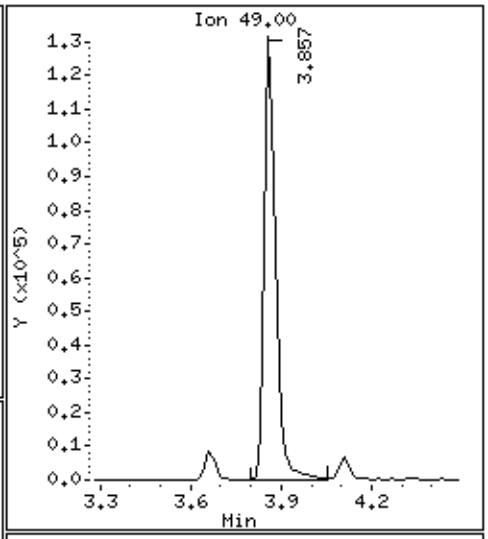
Concentration: 53.691 PPBV

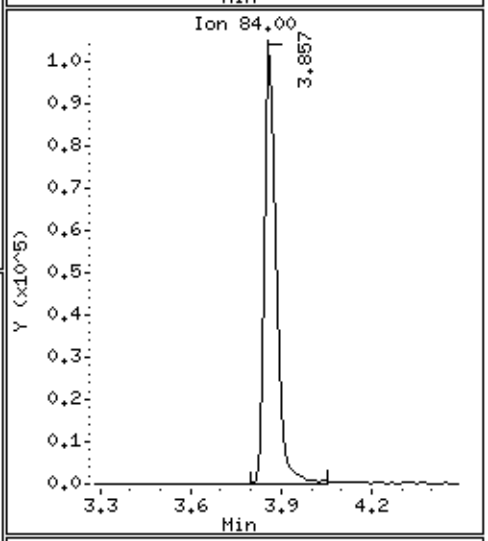


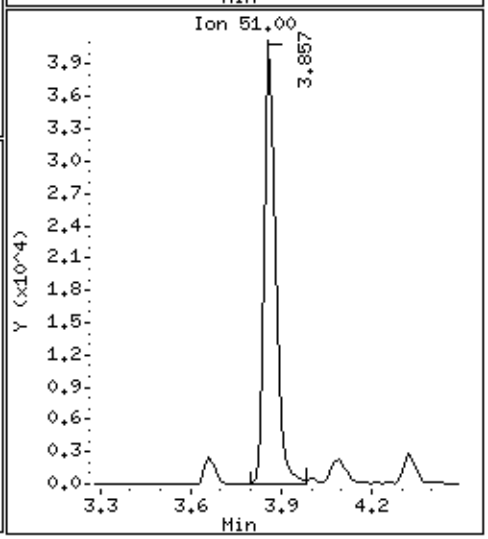












Data File: /chem/msdj.i/05mar15.b/j030504.d

Date : 05-MAR-2015 10:28

Client ID: LCS

Instrument: msdj.i

Sample Info: 50ml #2716-98

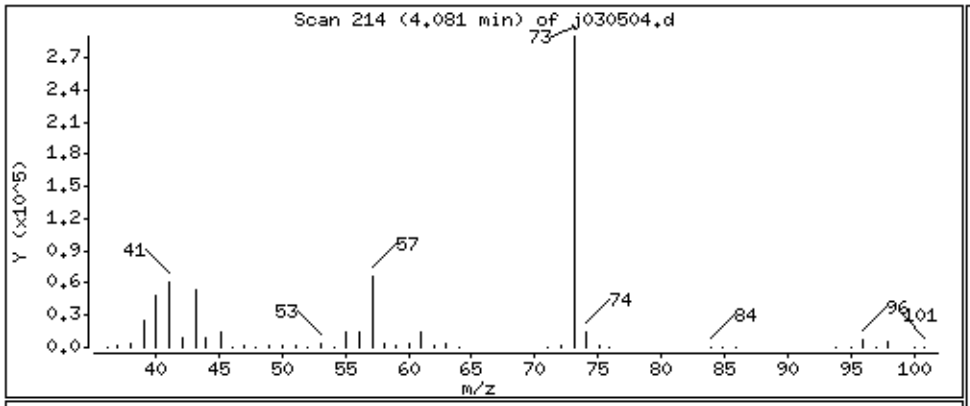
Operator: sg

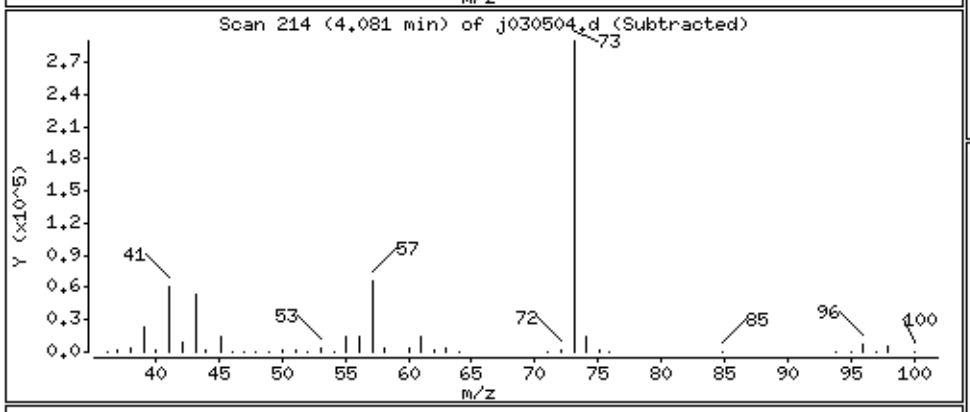
Column phase: RTX-624

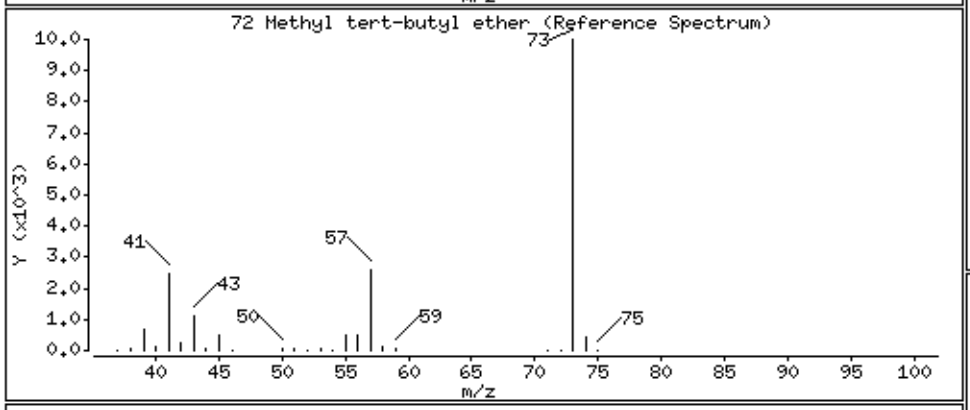
Column diameter: 0.25

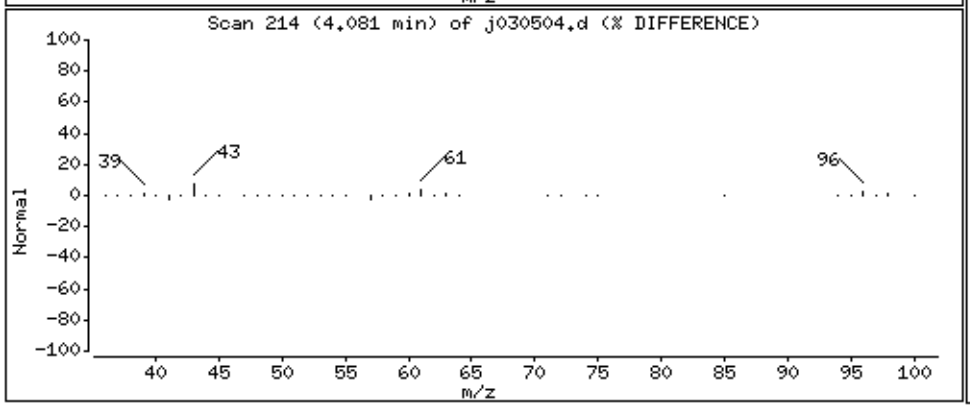
72 Methyl tert-butyl ether

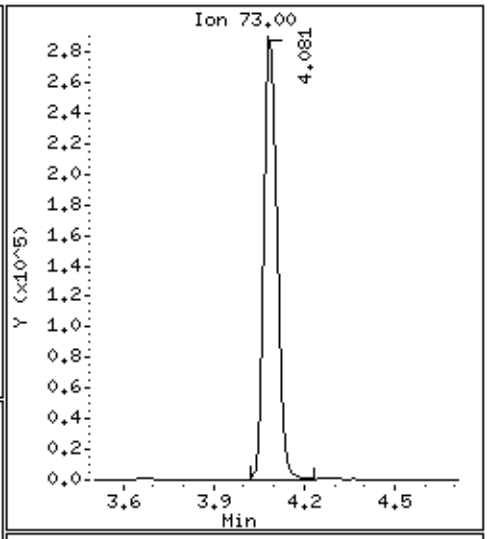
Concentration: 52.968 PPBV

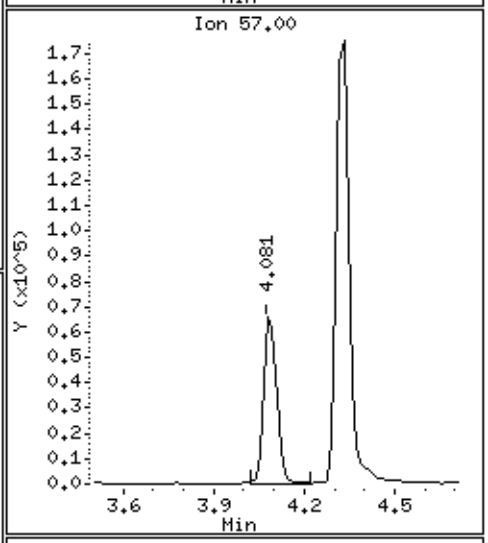


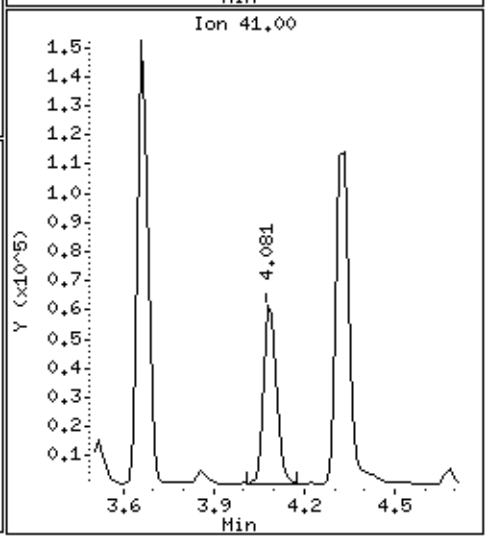












Data File: /chem/msdj.i/05mar15.b/j030504.d

Date : 05-MAR-2015 10:28

Client ID: LCS

Instrument: msdj.i

Sample Info: 50ml #2716-98

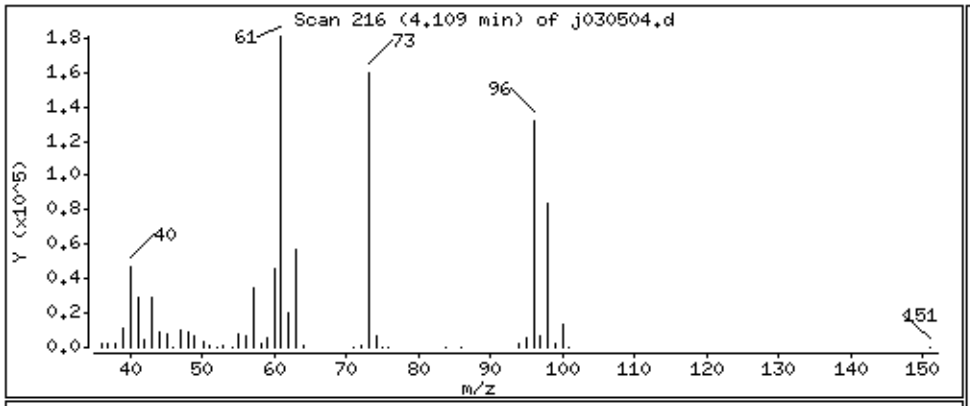
Operator: sg

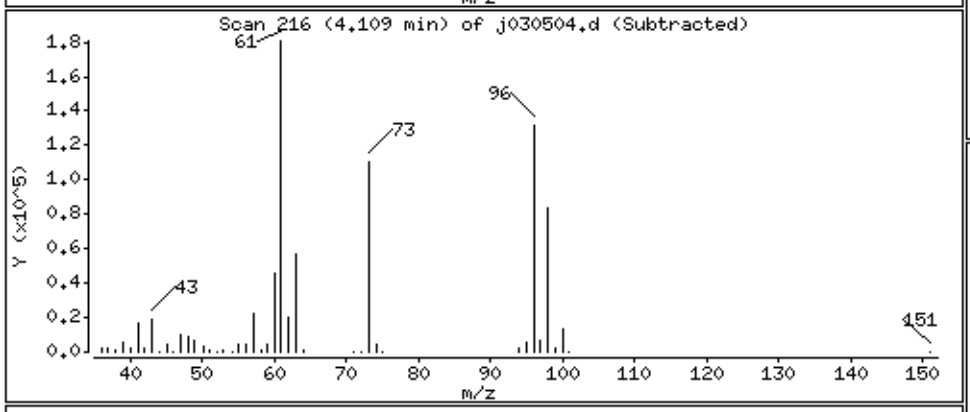
Column phase: RTX-624

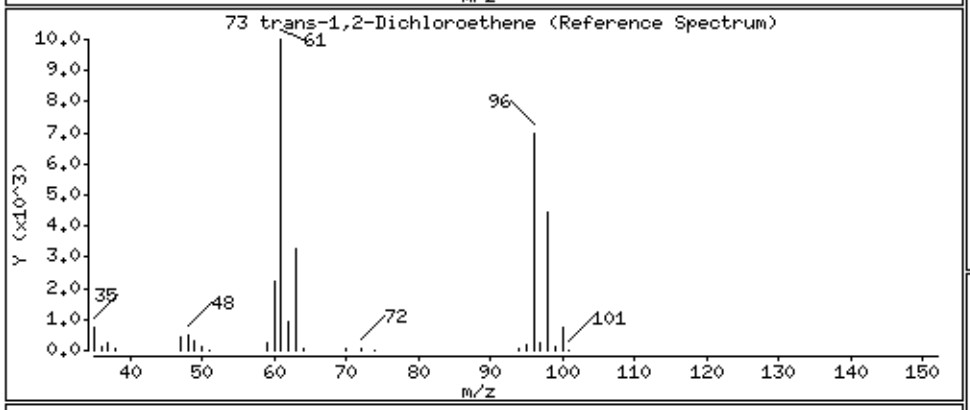
Column diameter: 0.25

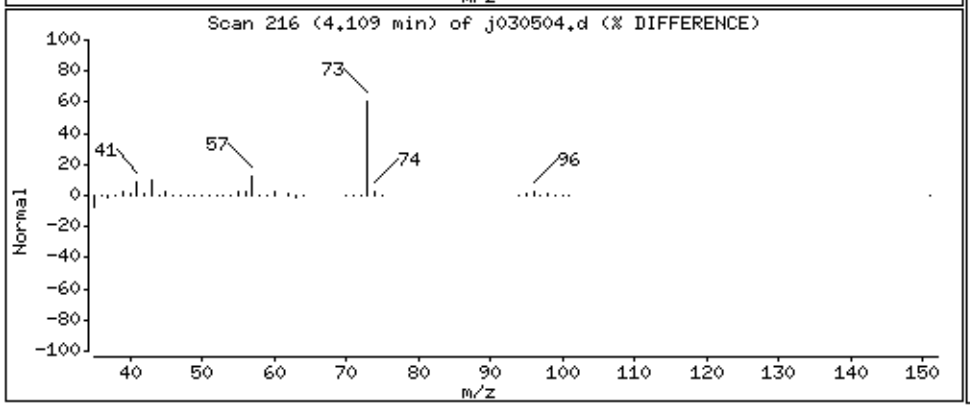
73 trans-1,2-Dichloroethene

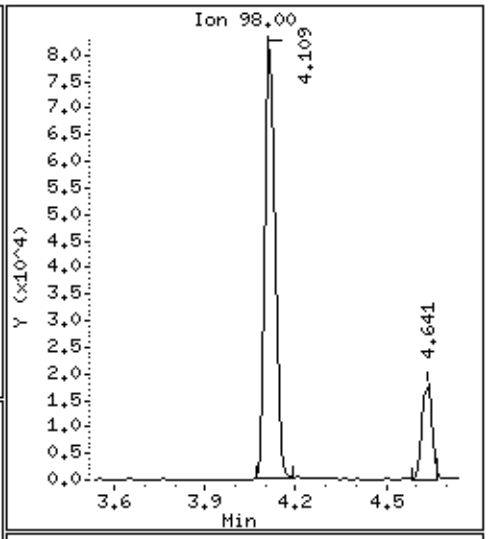
Concentration: 46.635 PPBV

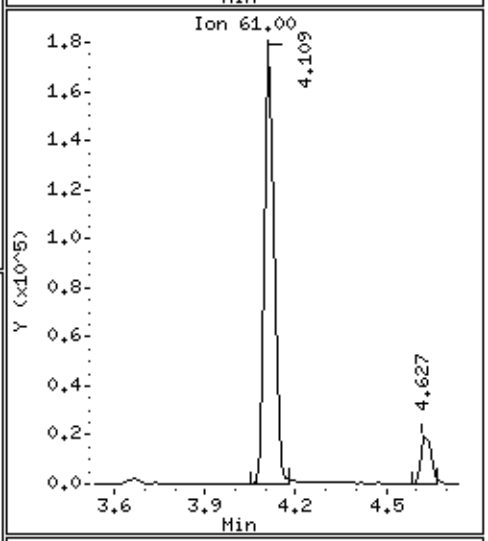


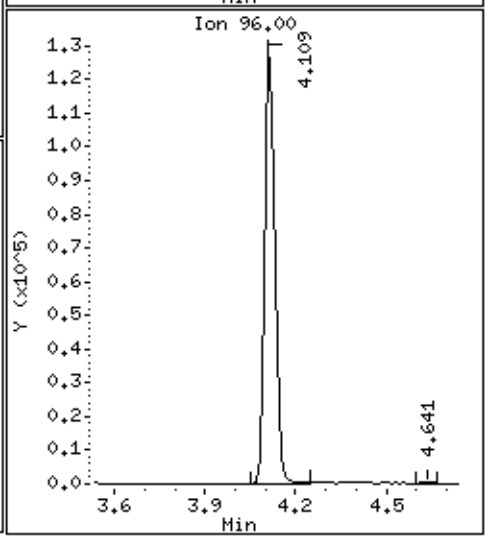












Data File: /chem/msdj.i/05mar15.b/j030504.d

Date : 05-MAR-2015 10:28

Client ID: LCS

Instrument: msdj.i

Sample Info: 50ml #2716-98

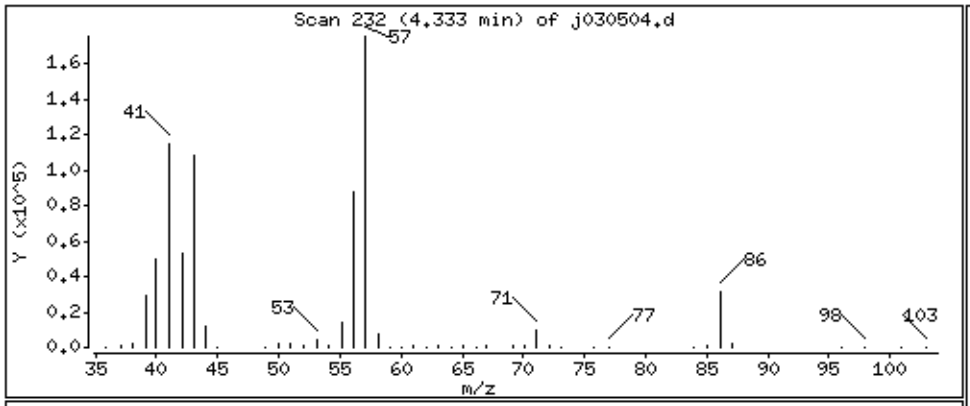
Operator: sg

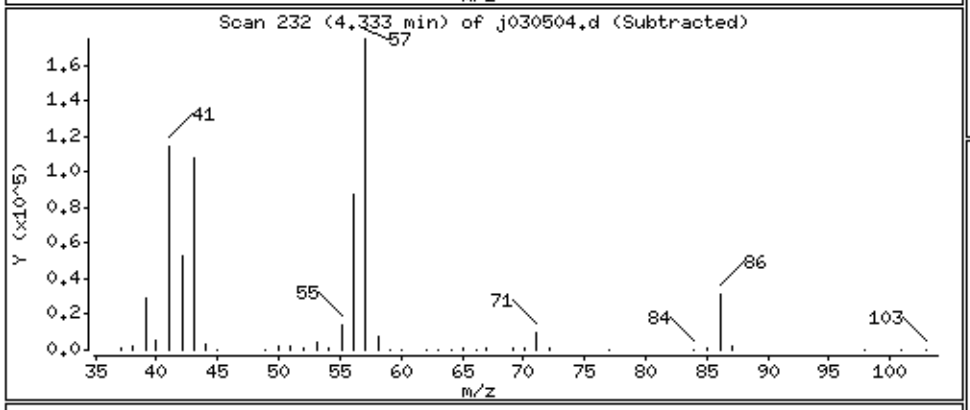
Column phase: RTX-624

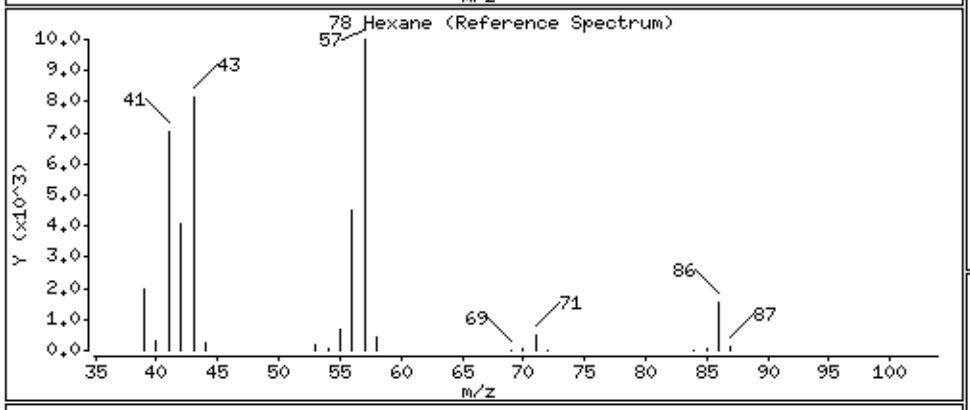
Column diameter: 0.25

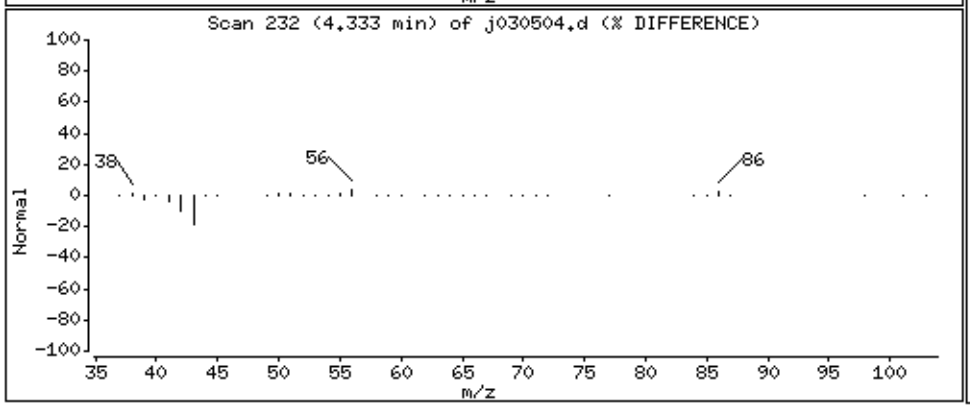
78 Hexane

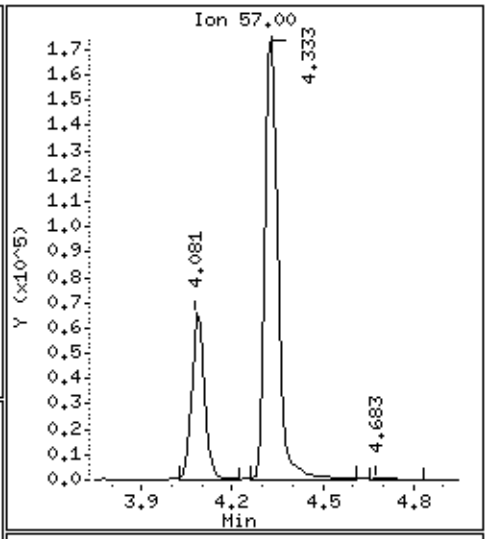
Concentration: 54.916 PPBV

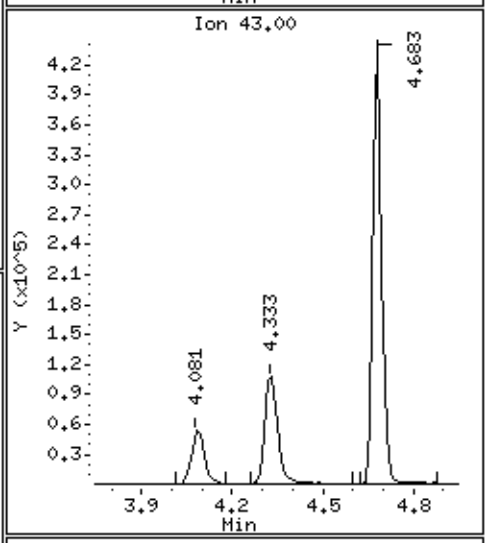


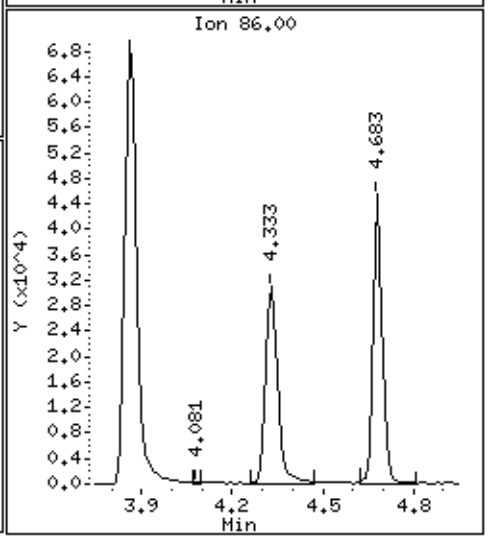












Data File: /chem/msdj.i/05mar15.b/j030504.d

Date : 05-MAR-2015 10:28

Client ID: LCS

Instrument: msdj.i

Sample Info: 50ml #2716-98

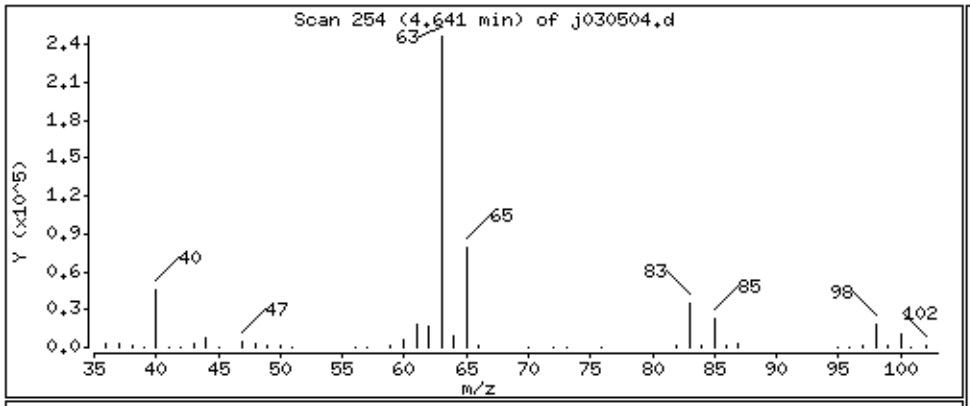
Operator: sg

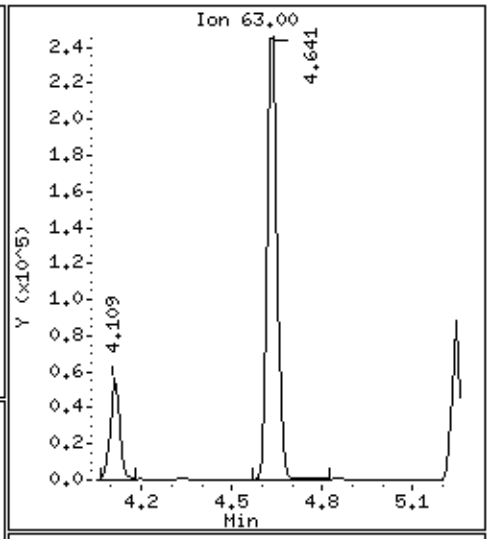
Column phase: RTX-624

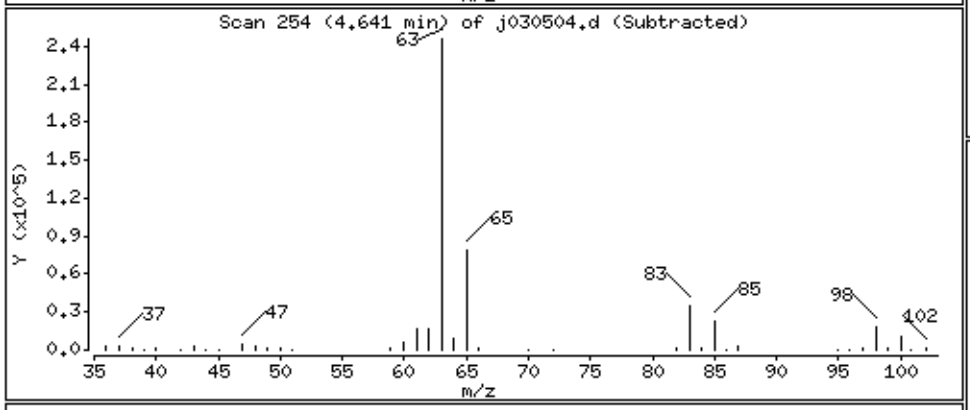
Column diameter: 0.25

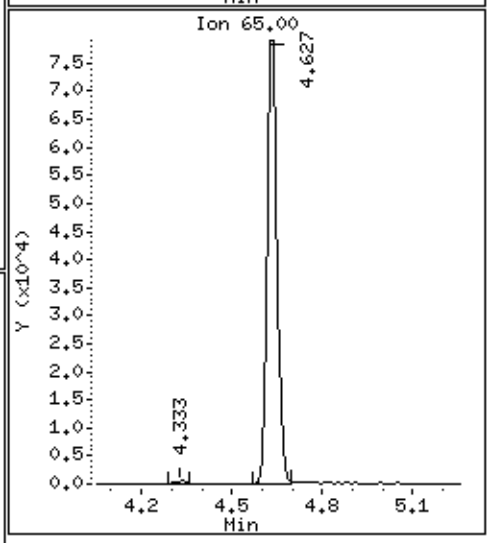
82 1,1-Dichloroethane

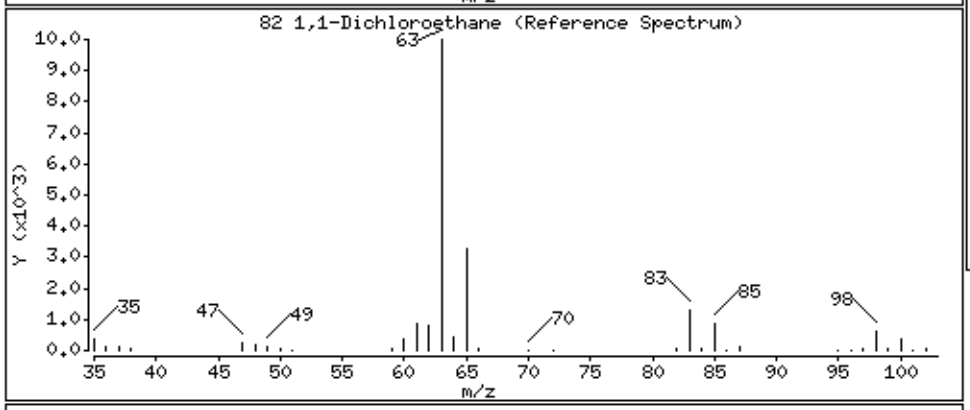
Concentration: 53.088 PPBV

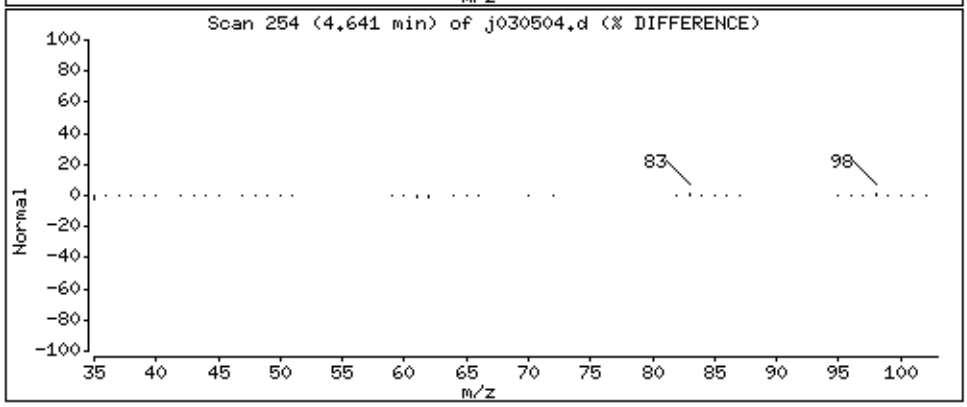












Data File: /chem/msdj.i/05mar15.b/j030504.d

Date : 05-MAR-2015 10:28

Client ID: LCS

Instrument: msdj.i

Sample Info: 50ml #2716-98

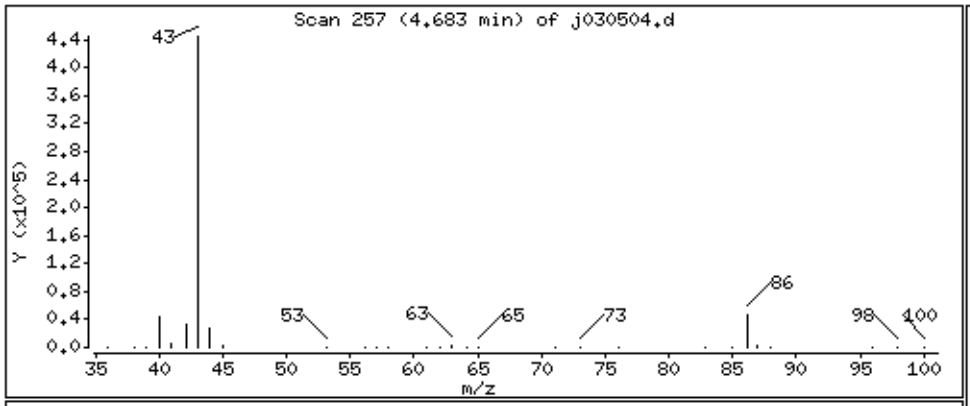
Operator: sg

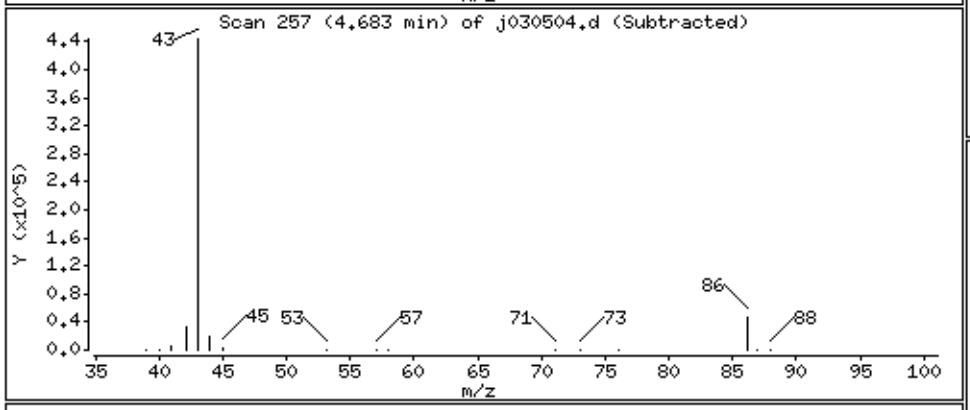
Column phase: RTX-624

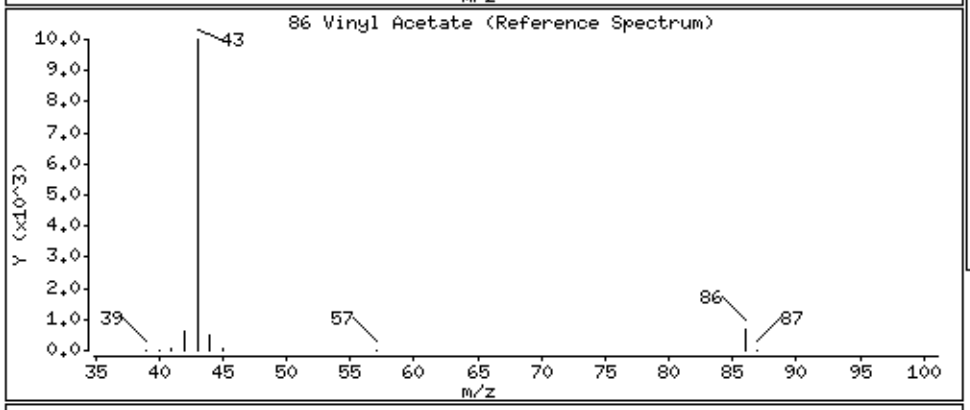
Column diameter: 0.25

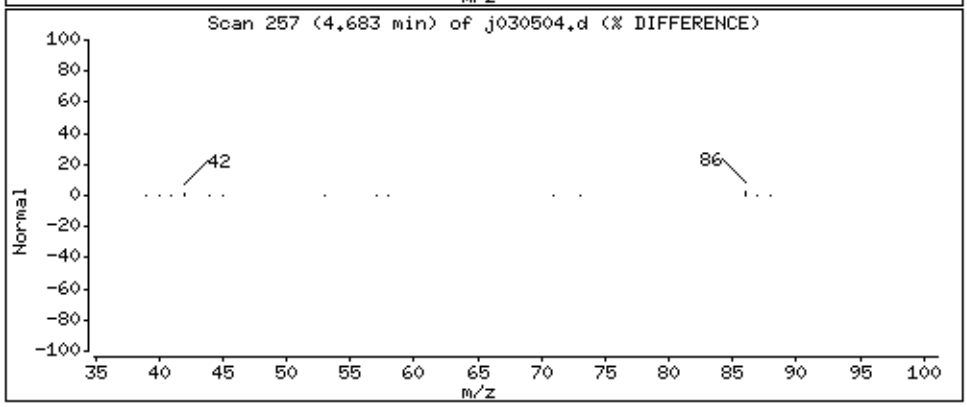
86 Vinyl Acetate

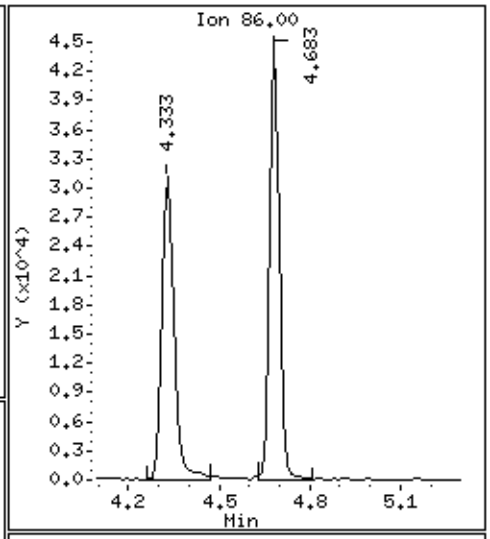
Concentration: 56.364 PPBV

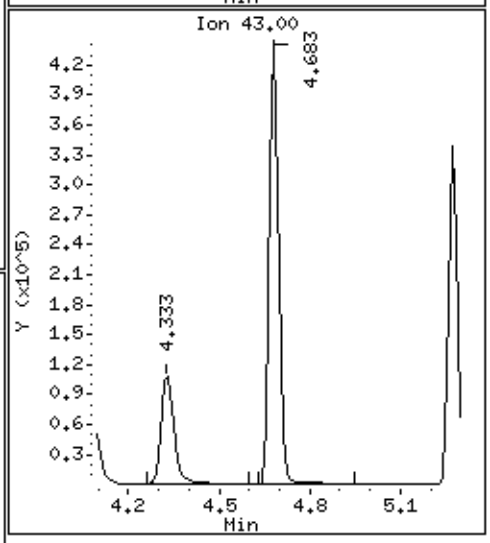












Data File: /chem/msdj.i/05mar15.b/j030504.d

Date : 05-MAR-2015 10:28

Client ID: LCS

Instrument: msdj.i

Sample Info: 50ml #2716-98

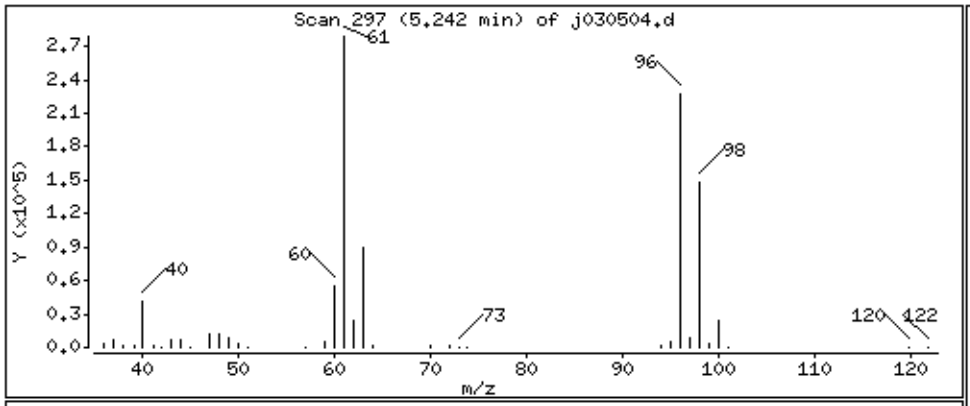
Operator: sg

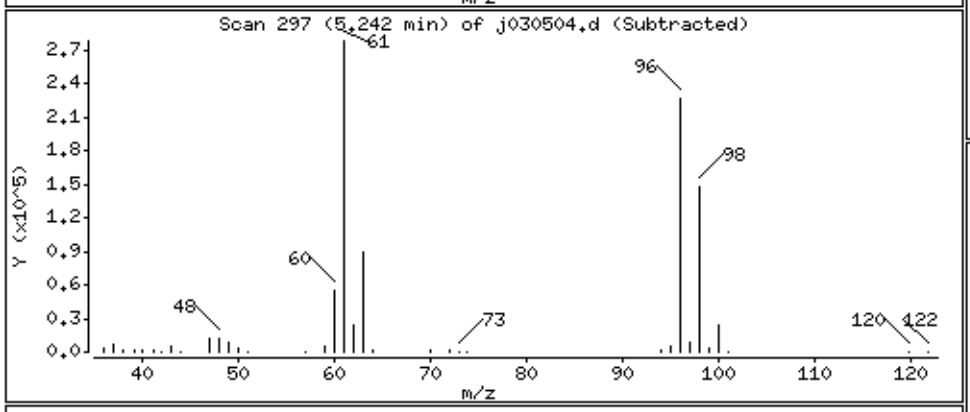
Column phase: RTX-624

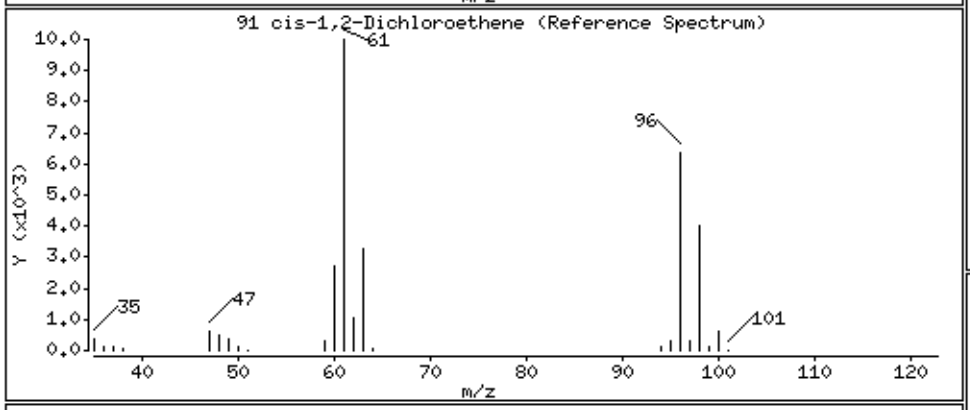
Column diameter: 0.25

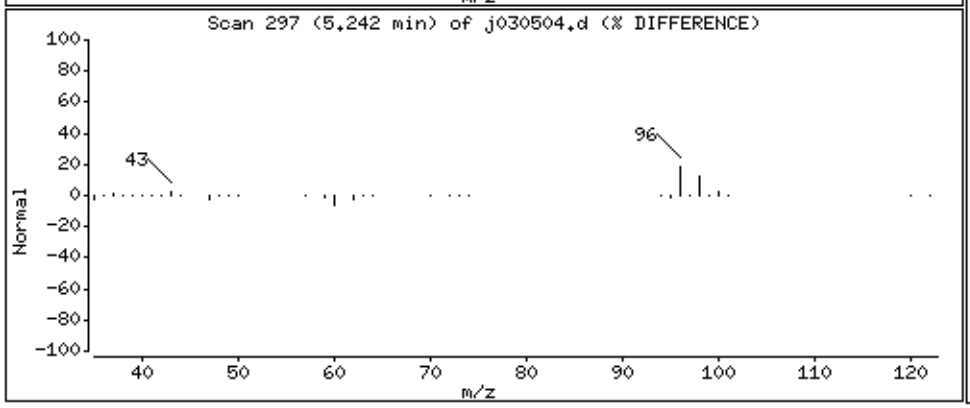
91 cis-1,2-Dichloroethene

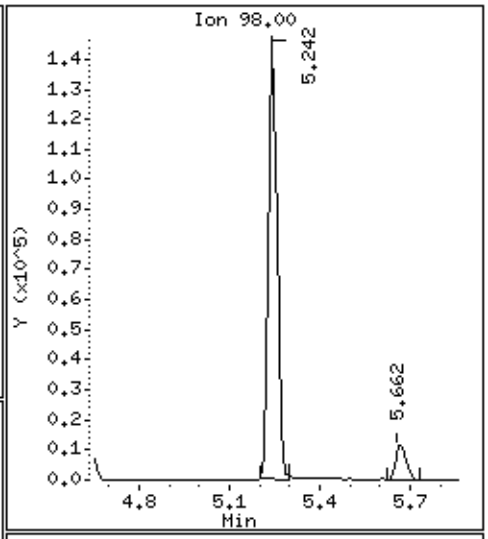
Concentration: 60.441 PPBV

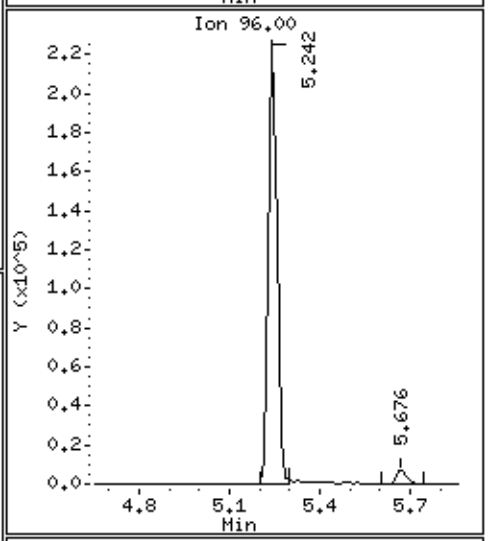


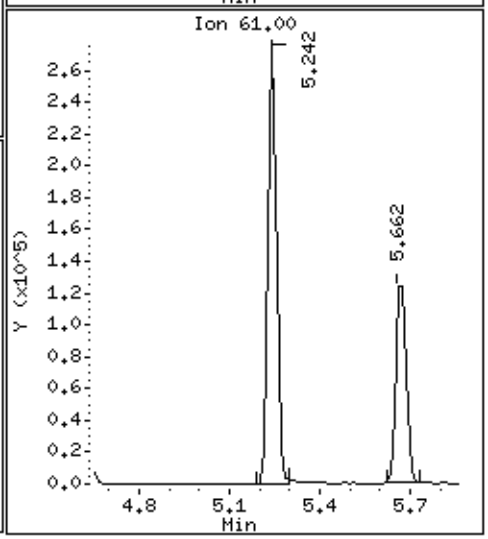












Data File: /chem/msdj.i/05mar15.b/j030504.d

Date : 05-MAR-2015 10:28

Client ID: LCS

Instrument: msdj.i

Sample Info: 50ml #2716-98

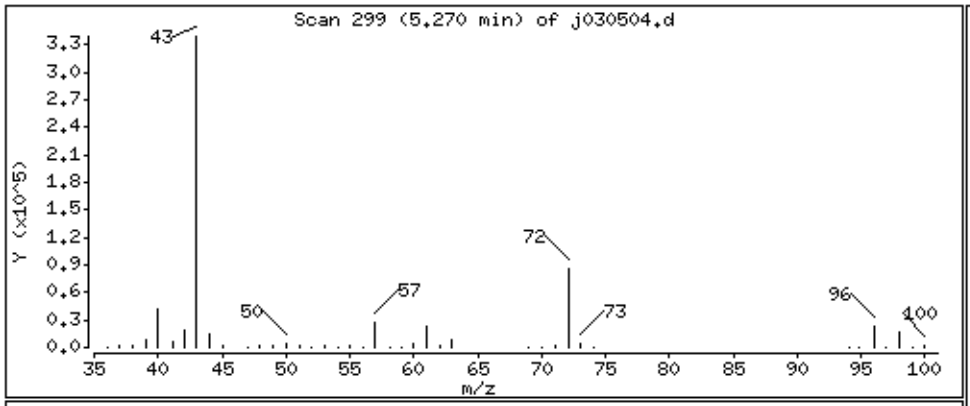
Operator: sg

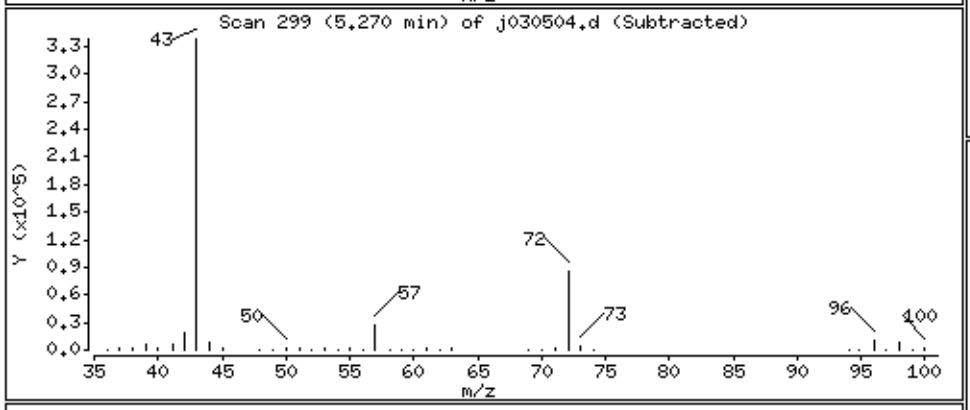
Column phase: RTX-624

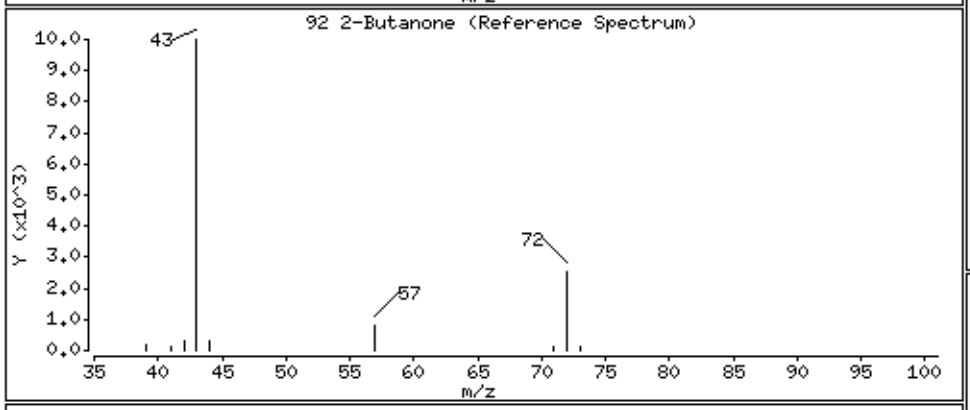
Column diameter: 0.25

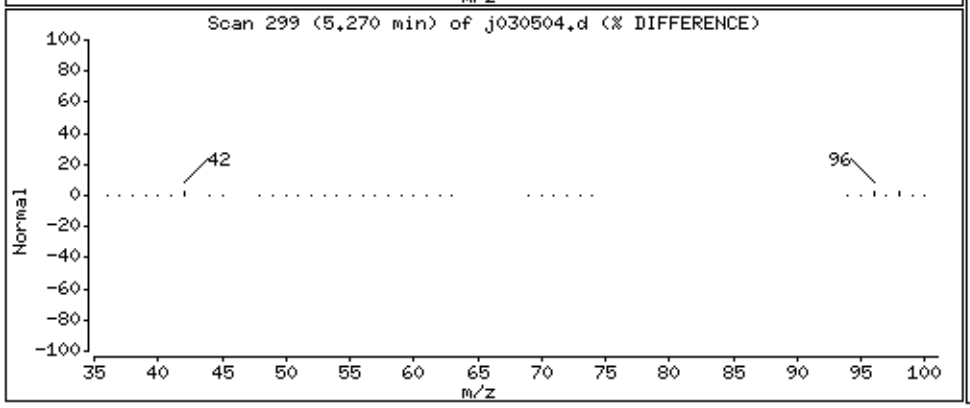
92 2-Butanone

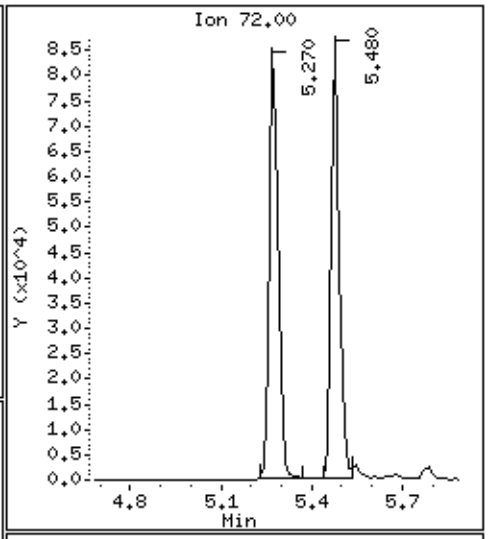
Concentration: 51.196 PPBV

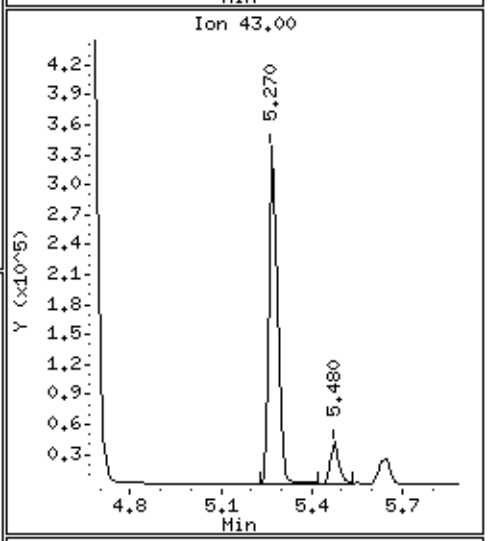


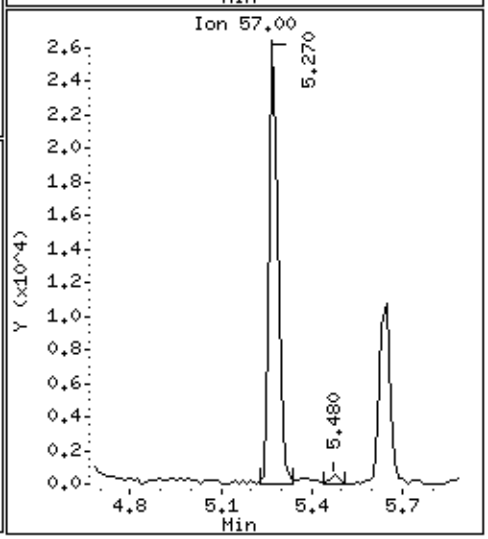












Data File: /chem/msdj.i/05mar15.b/j030504.d

Date : 05-MAR-2015 10:28

Client ID: LCS

Instrument: msdj.i

Sample Info: 50ml #2716-98

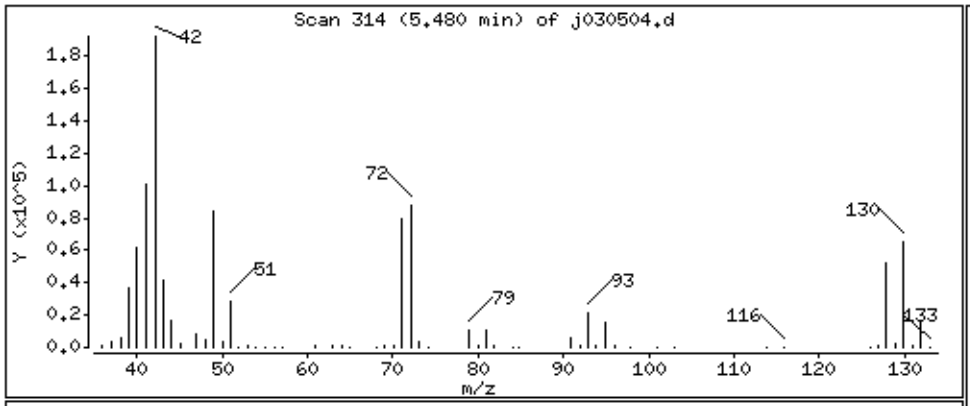
Operator: sg

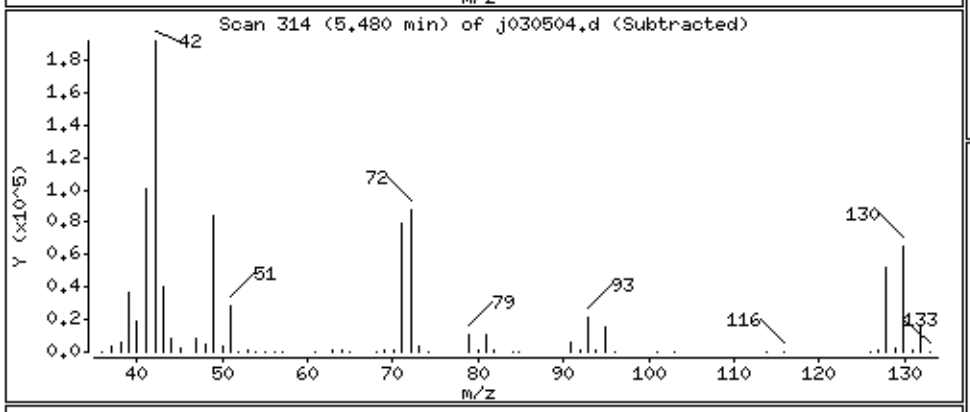
Column phase: RTX-624

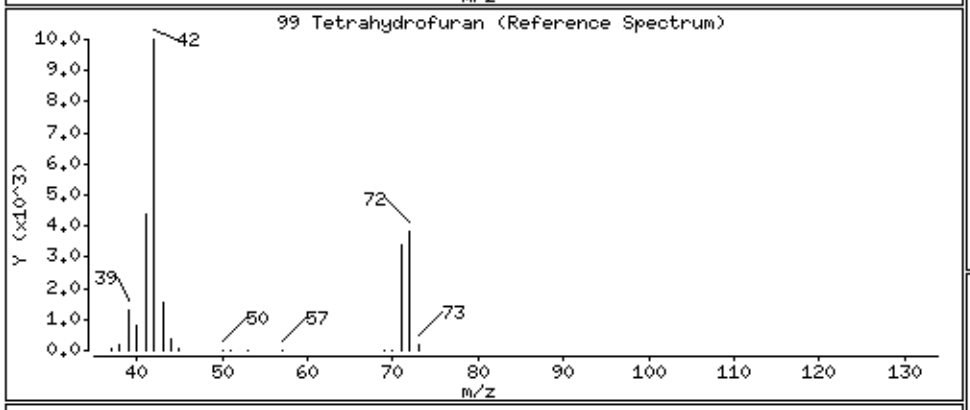
Column diameter: 0.25

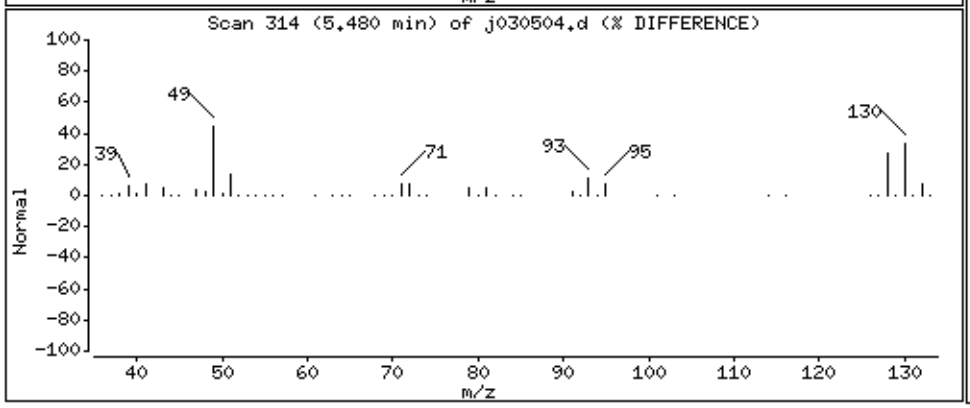
99 Tetrahydrofuran

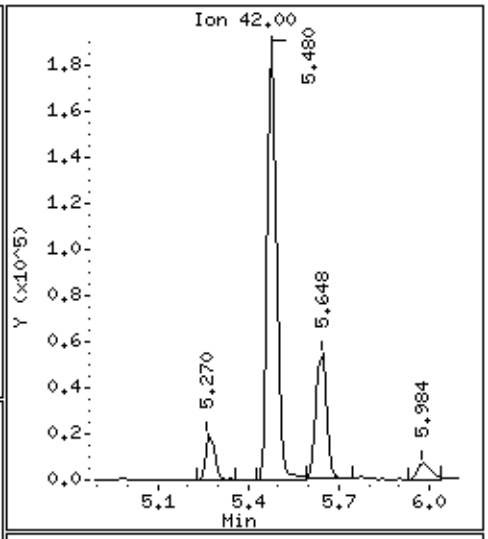
Concentration: 52.049 PPBV

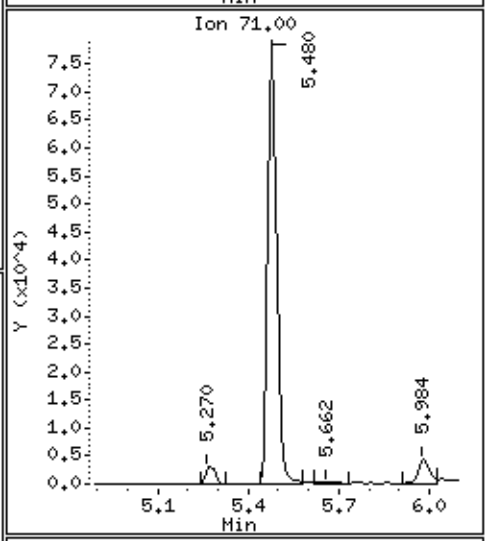


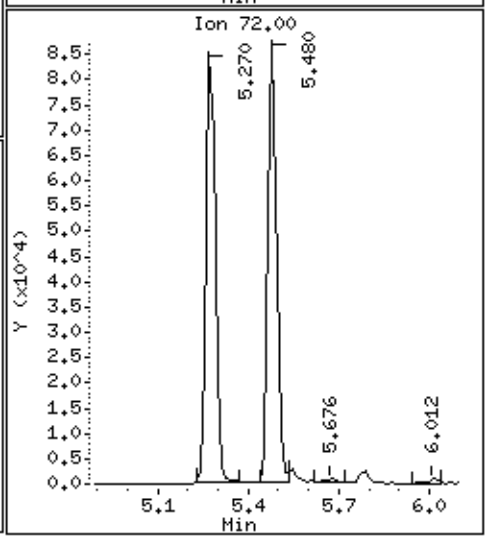












Data File: /chem/msdj.i/05mar15.b/j030504.d

Date : 05-MAR-2015 10:28

Client ID: LCS

Instrument: msdj.i

Sample Info: 50ml #2716-98

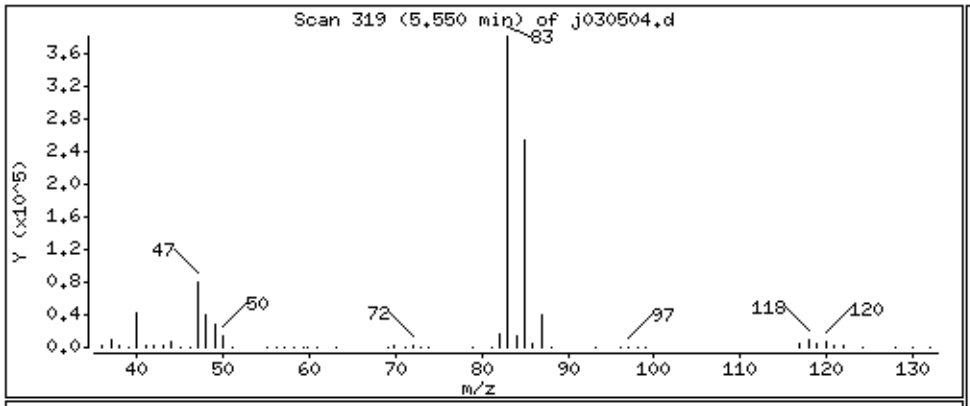
Operator: sg

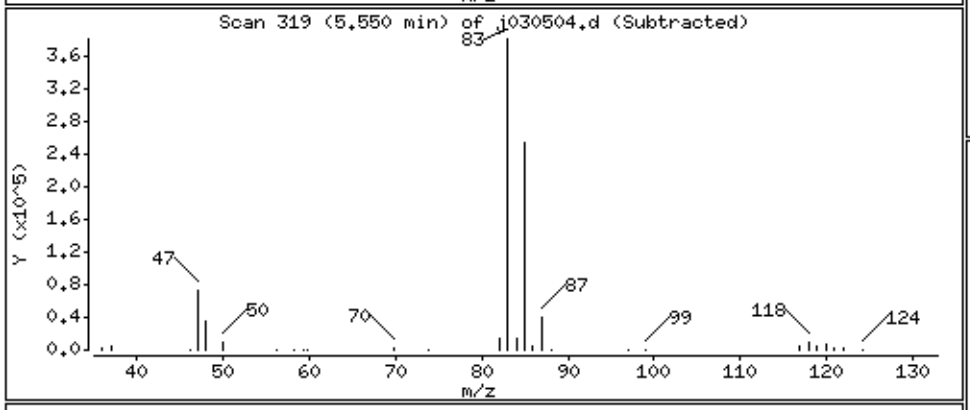
Column phase: RTX-624

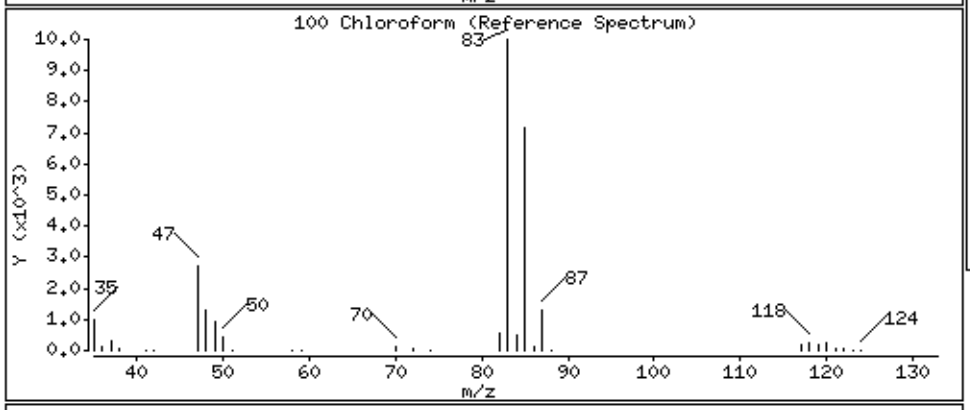
Column diameter: 0.25

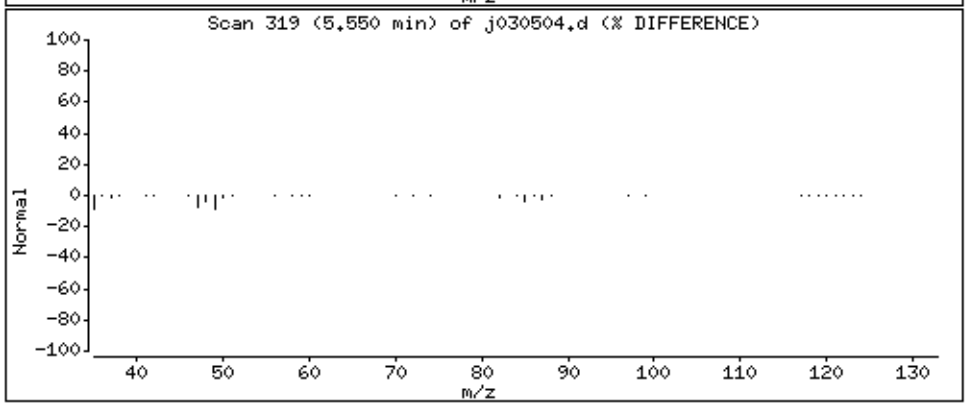
100 Chloroform

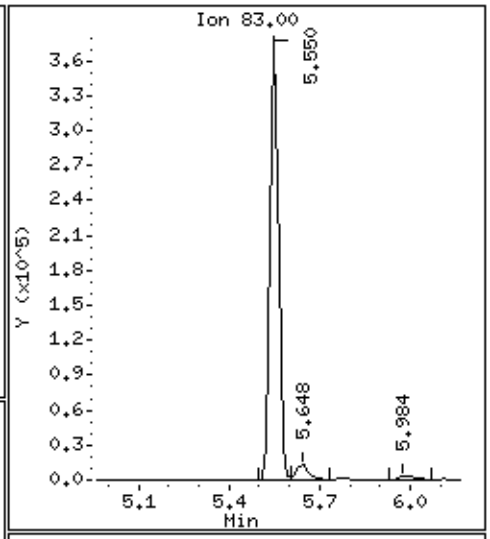
Concentration: 52.677 PPBV

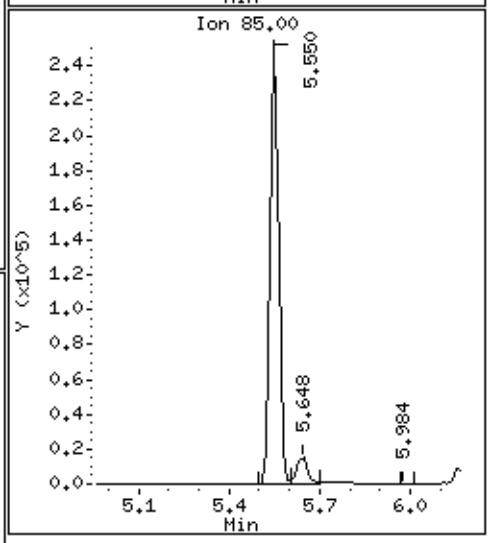












Data File: /chem/msdj.i/05mar15.b/j030504.d

Date : 05-MAR-2015 10:28

Client ID: LCS

Instrument: msdj.i

Sample Info: 50ml #2716-98

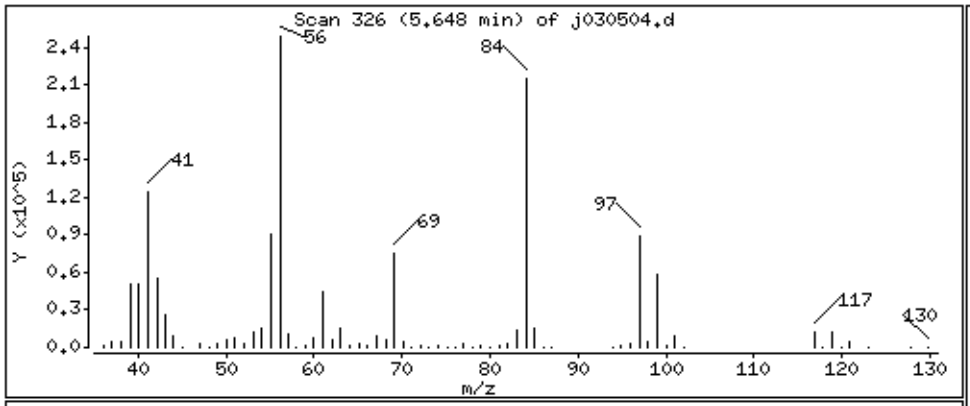
Operator: sg

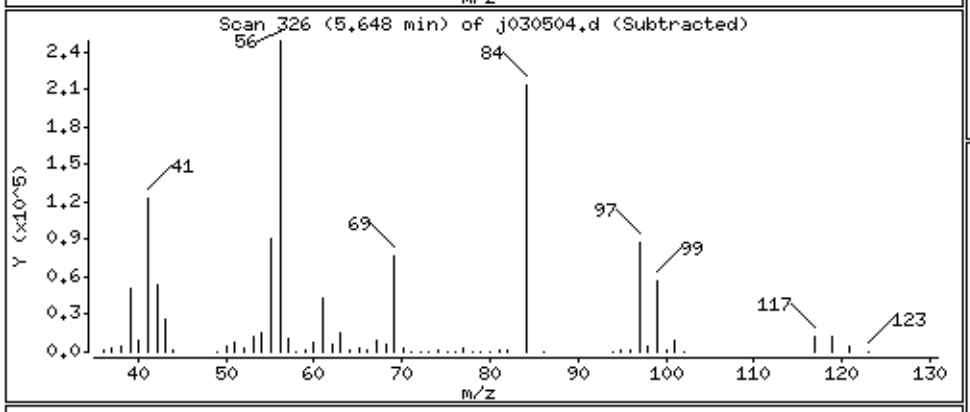
Column phase: RTX-624

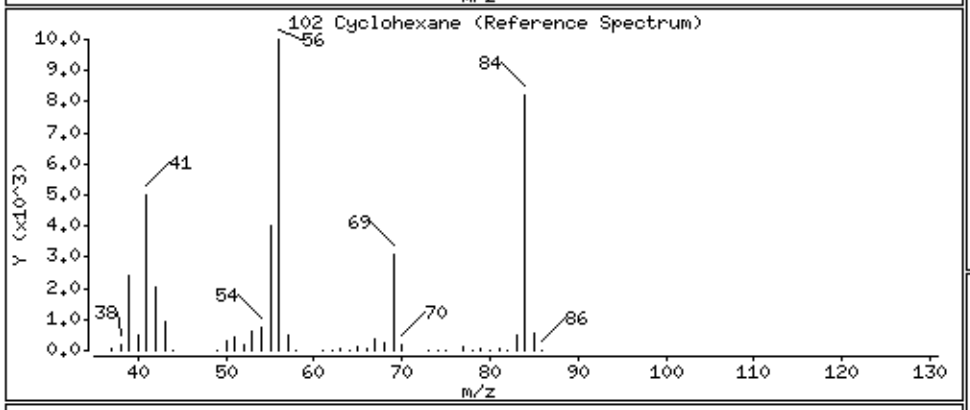
Column diameter: 0.25

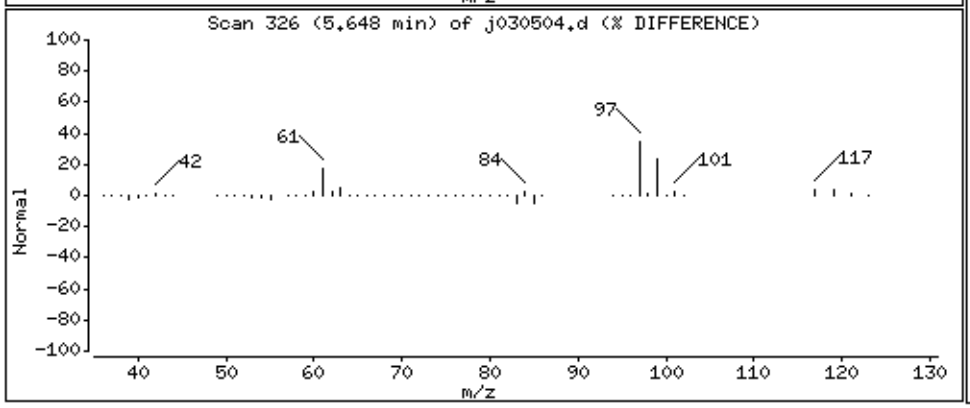
102 Cyclohexane

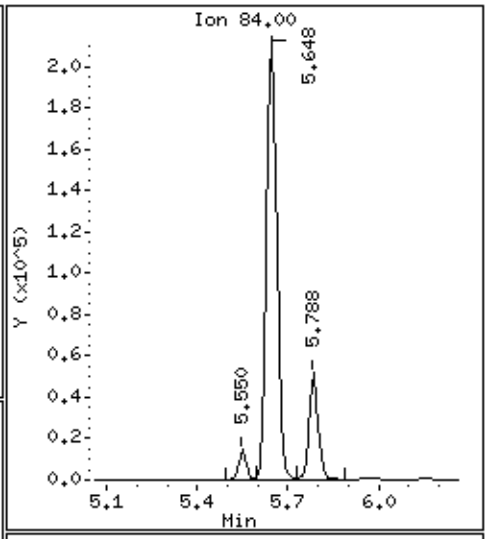
Concentration: 53.497 PPBV

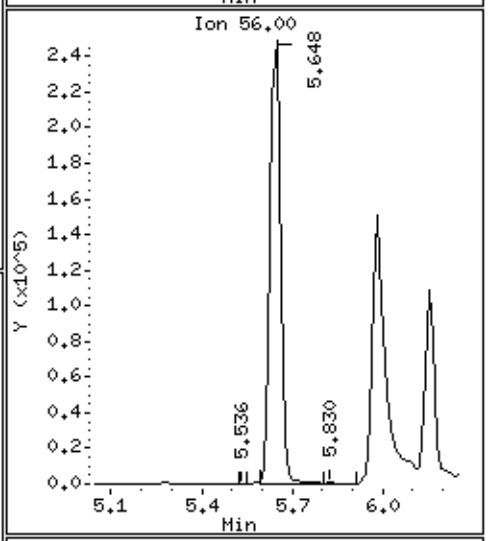


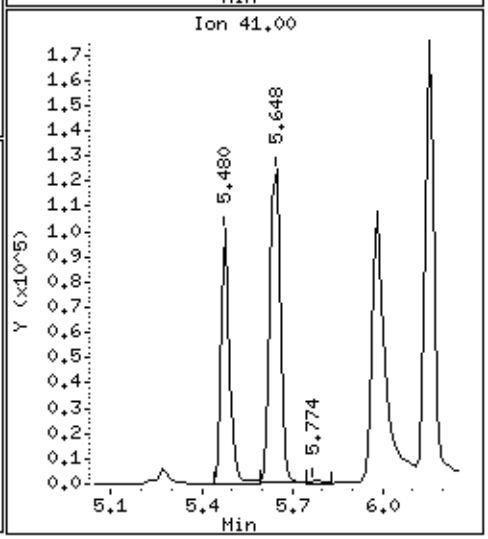












Data File: /chem/msdj.i/05mar15.b/j030504.d

Date : 05-MAR-2015 10:28

Client ID: LCS

Instrument: msdj.i

Sample Info: 50ml #2716-98

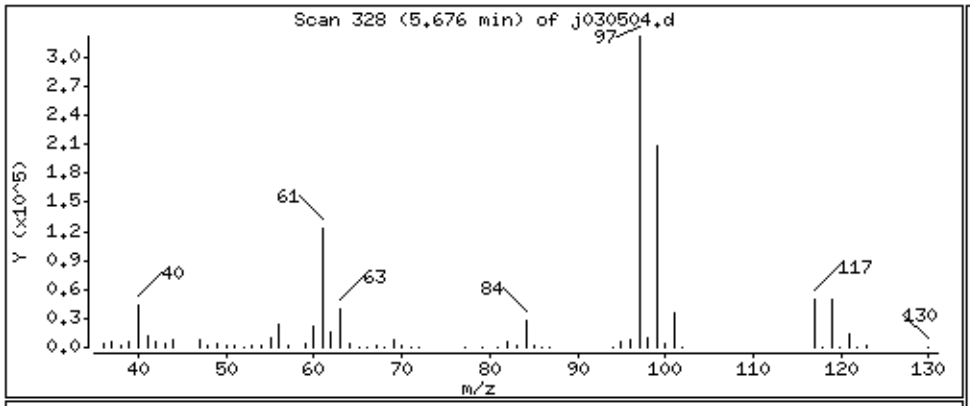
Operator: sg

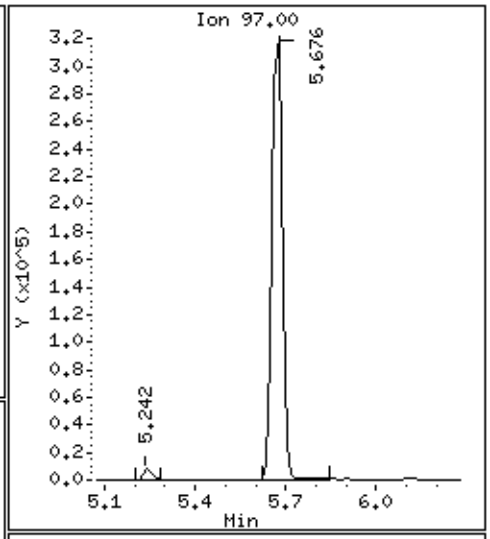
Column phase: RTX-624

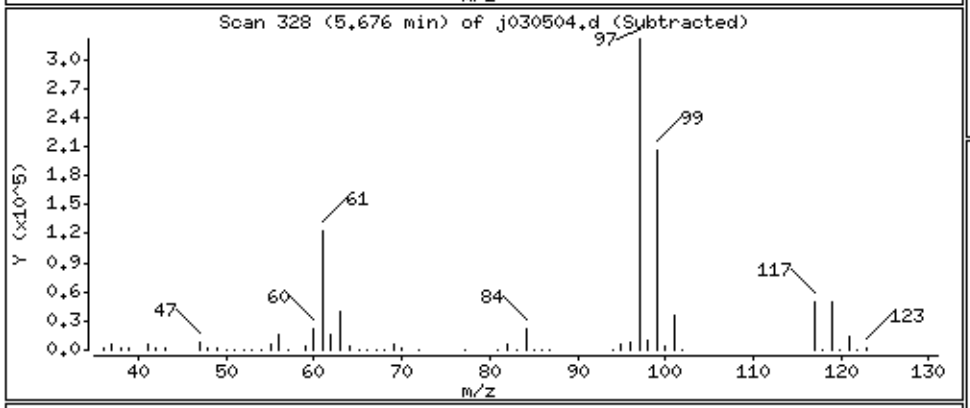
Column diameter: 0.25

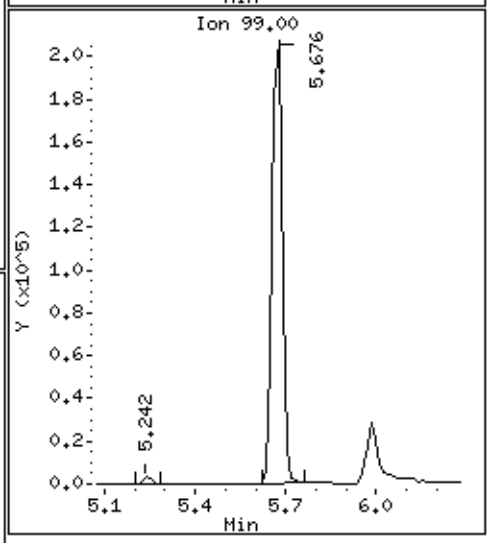
103 1,1,1-Trichloroethane

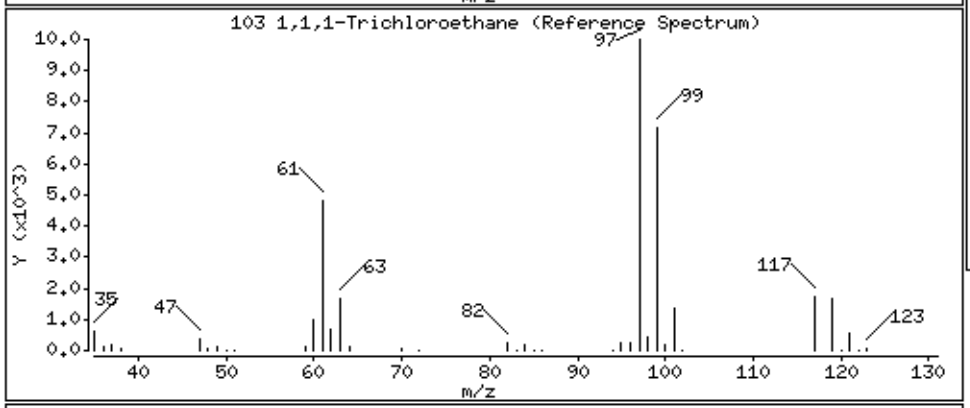
Concentration: 53.142 PPBV

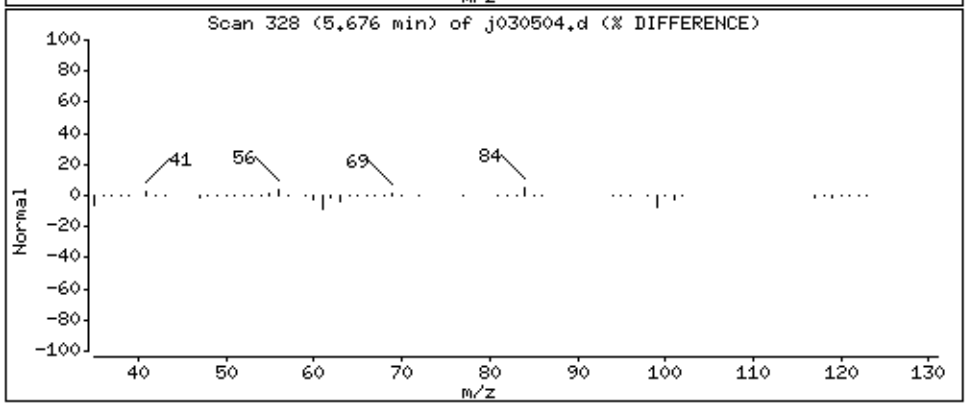












Data File: /chem/msdj.i/05mar15.b/j030504.d

Date : 05-MAR-2015 10:28

Client ID: LCS

Instrument: msdj.i

Sample Info: 50ml #2716-98

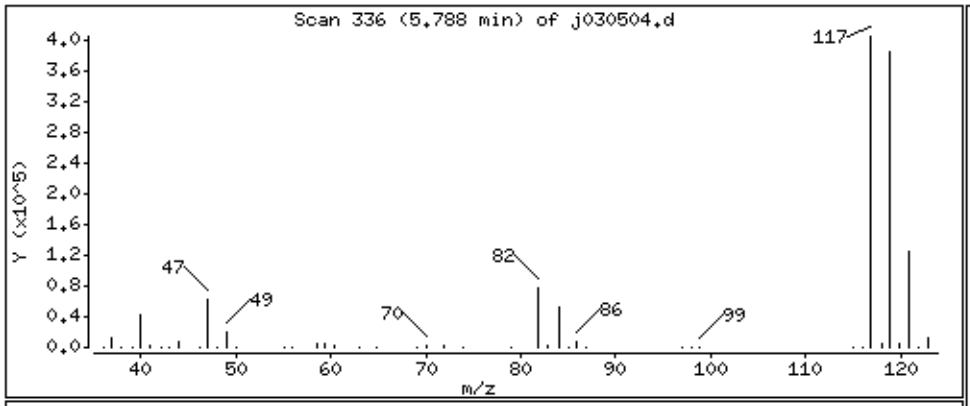
Operator: sg

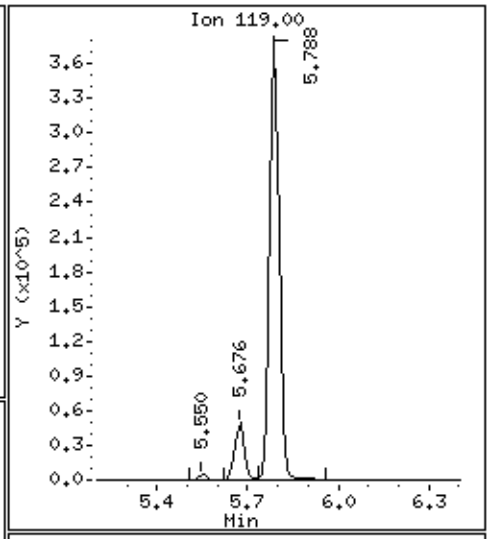
Column phase: RTX-624

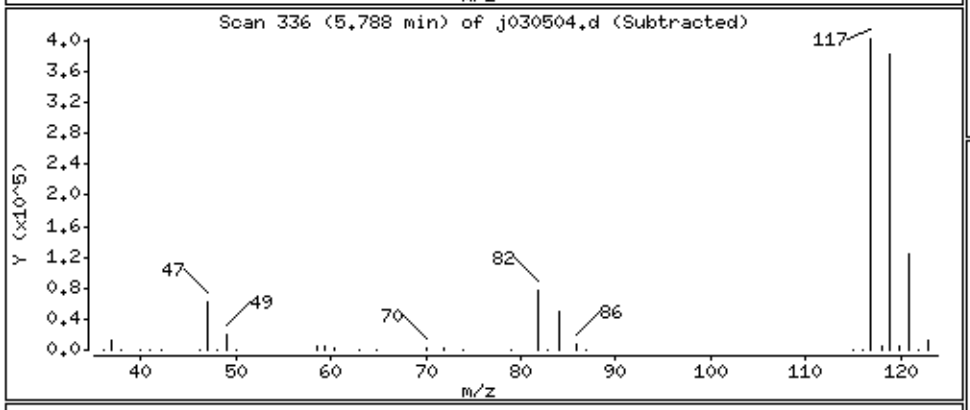
Column diameter: 0.25

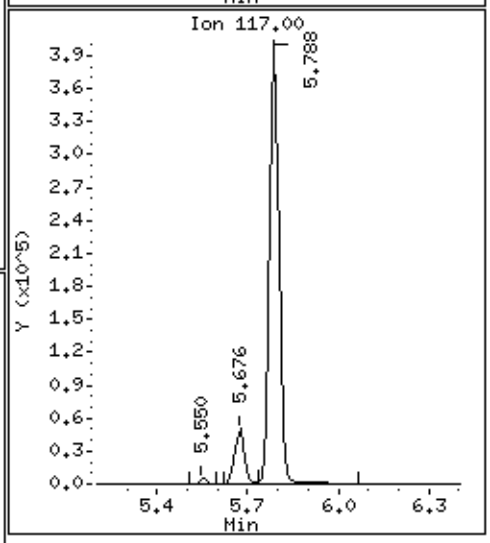
106 Carbon Tetrachloride

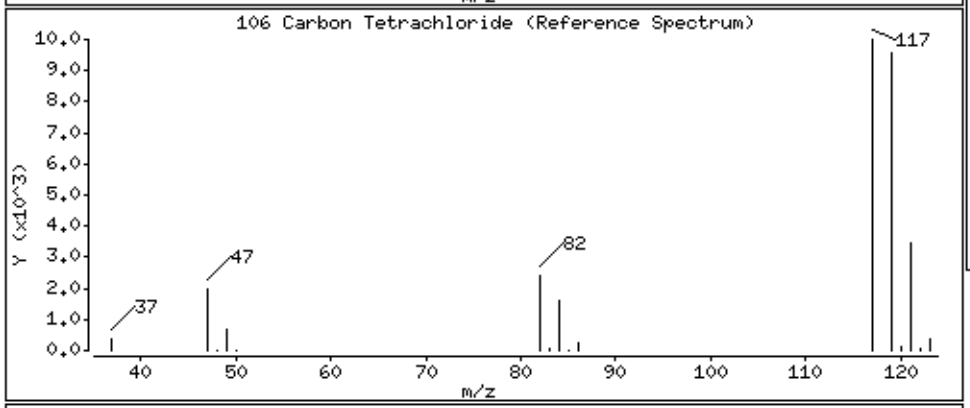
Concentration: 53.559 PPBV

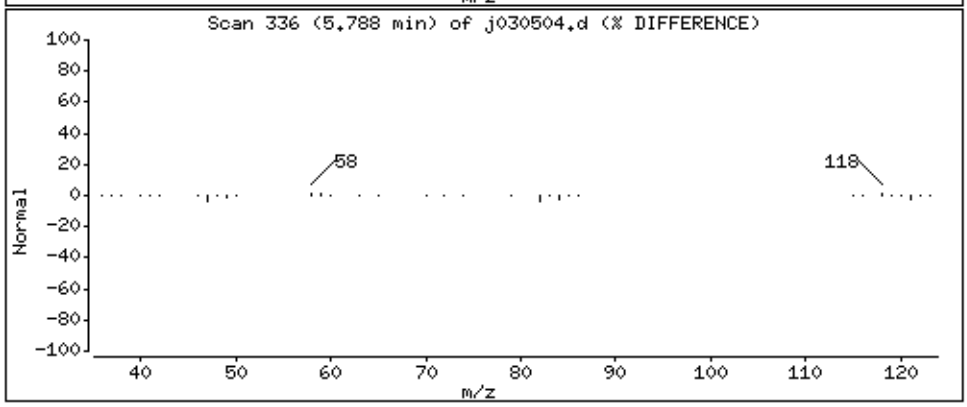












Data File: /chem/msdj.i/05mar15.b/j030504.d

Date : 05-MAR-2015 10:28

Client ID: LCS

Instrument: msdj.i

Sample Info: 50ml #2716-98

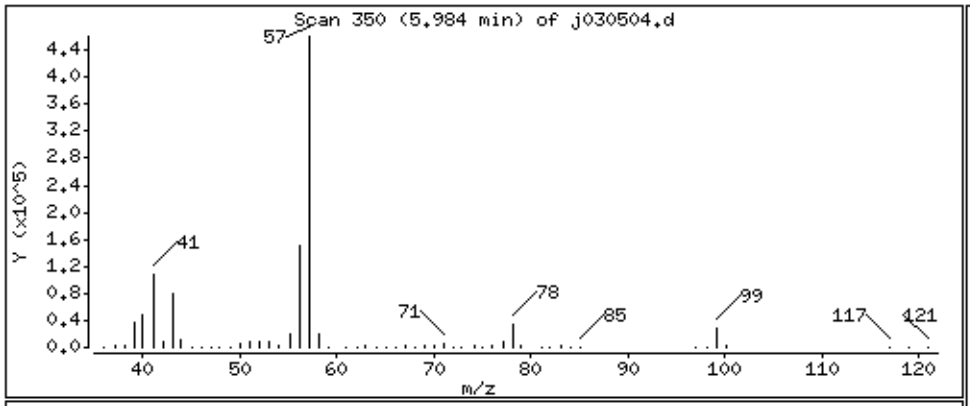
Operator: sg

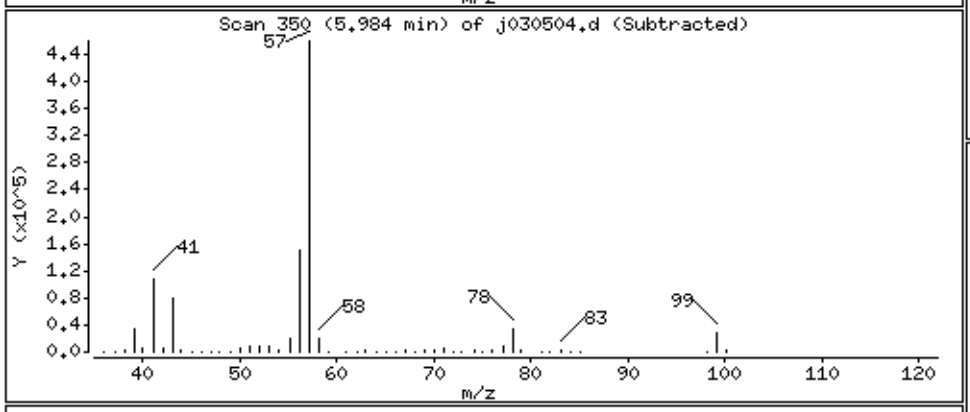
Column phase: RTX-624

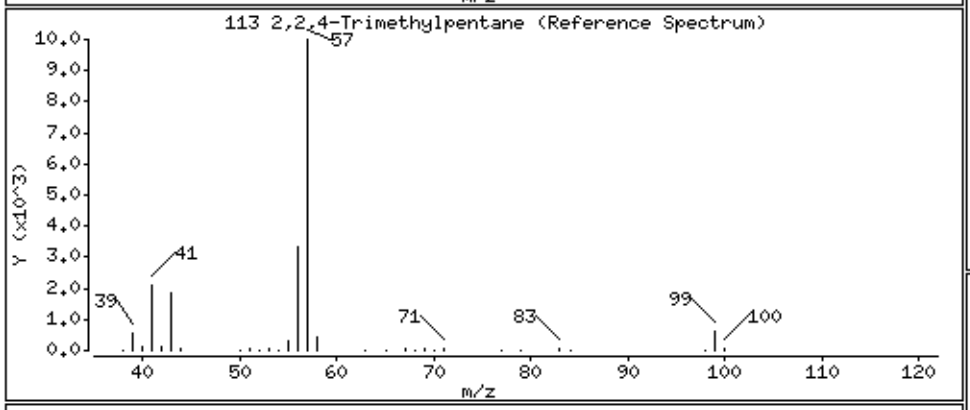
Column diameter: 0.25

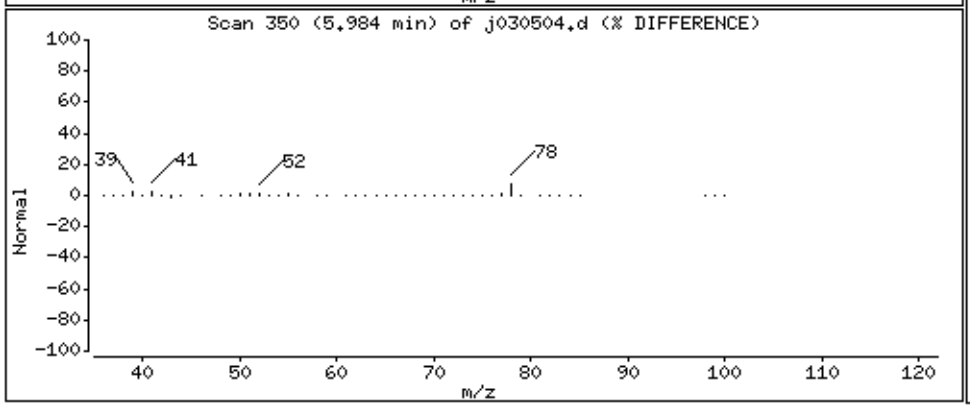
113 2,2,4-Trimethylpentane

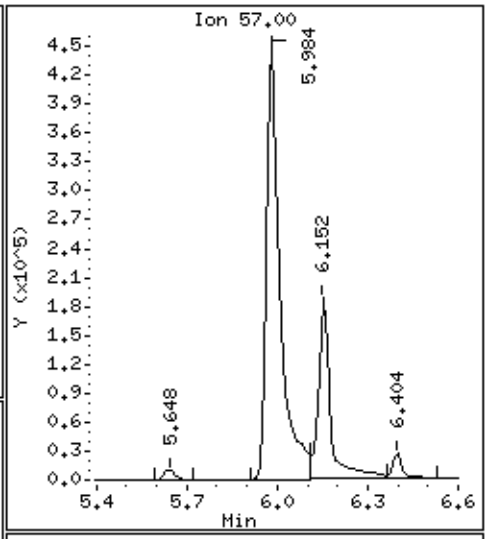
Concentration: 52.211 PPBV

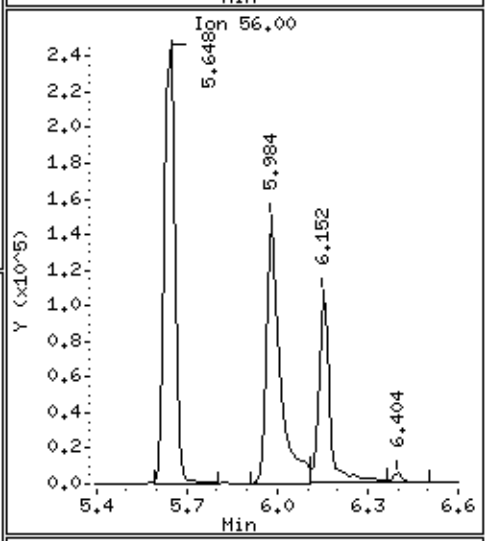


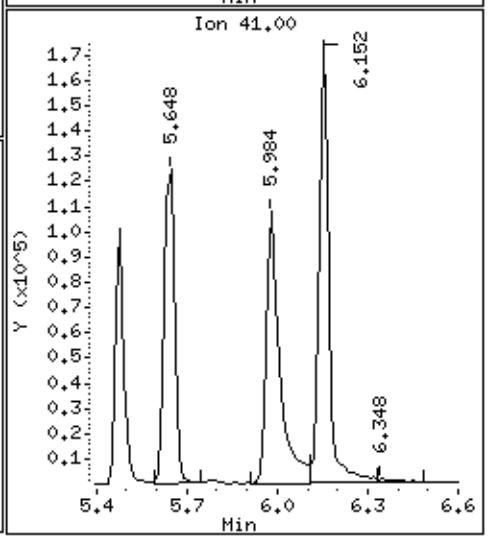












Data File: /chem/msdj.i/05mar15.b/j030504.d

Date : 05-MAR-2015 10:28

Client ID: LCS

Instrument: msdj.i

Sample Info: 50ml #2716-98

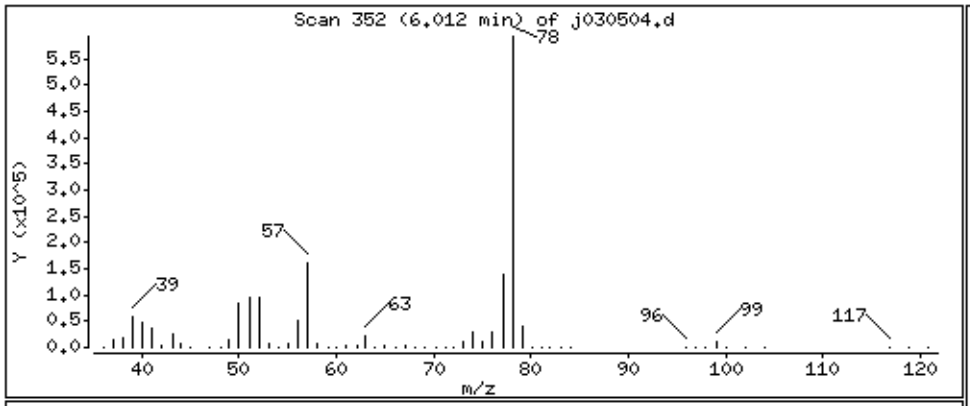
Operator: sg

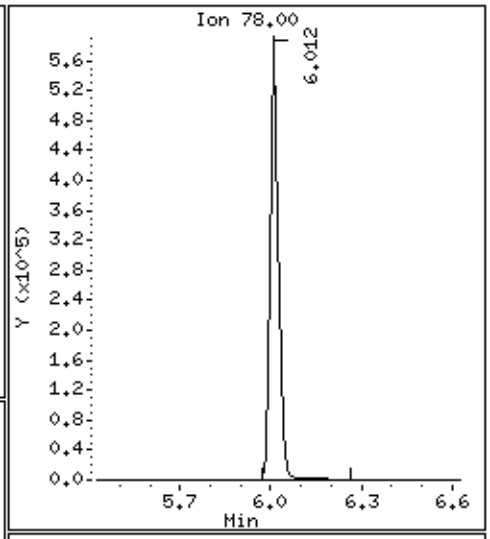
Column phase: RTX-624

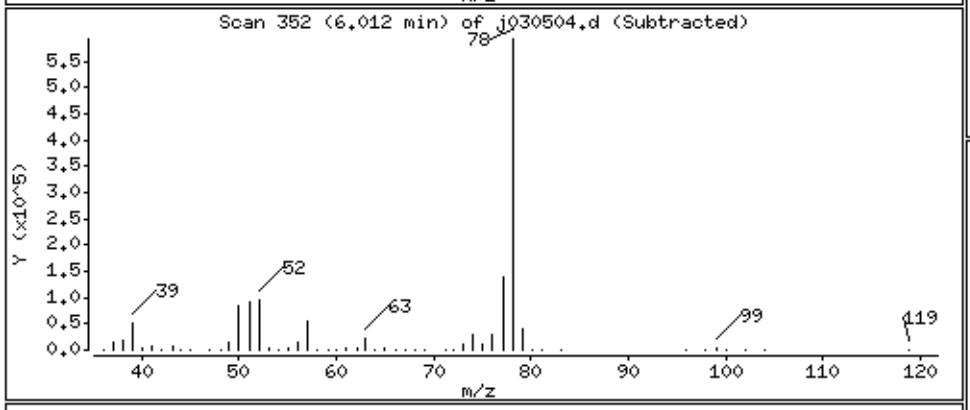
Column diameter: 0.25

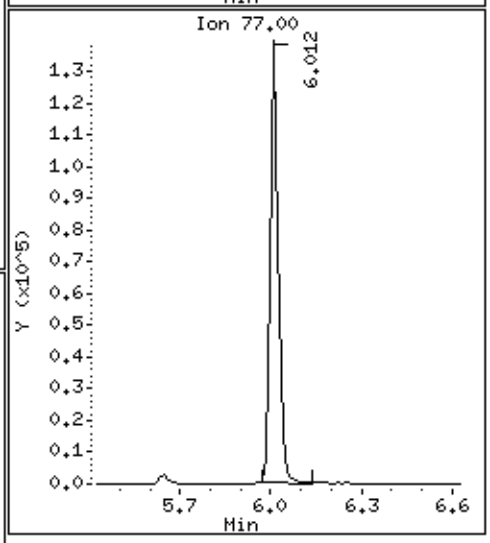
116 Benzene

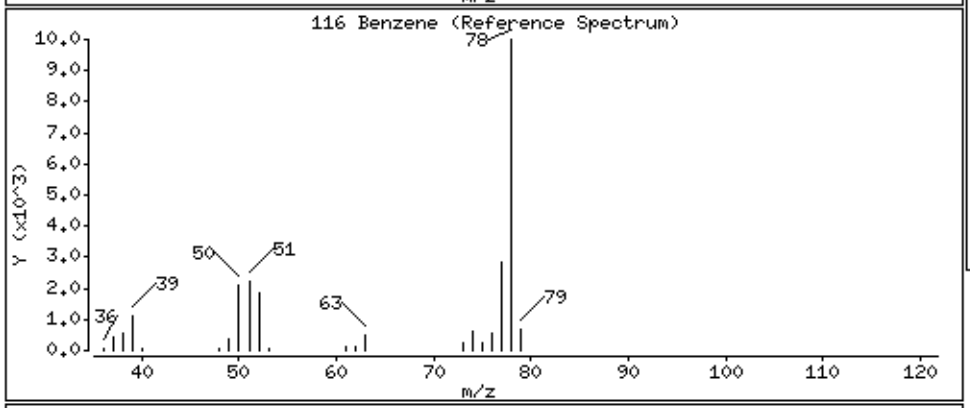
Concentration: 51.852 PPBV

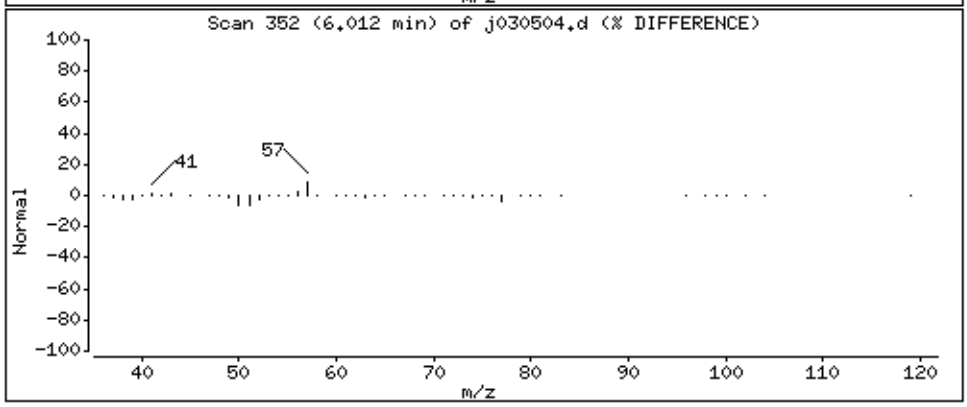












Data File: /chem/msdj.i/05mar15.b/j030504.d

Date : 05-MAR-2015 10:28

Client ID: LCS

Instrument: msdj.i

Sample Info: 50ml #2716-98

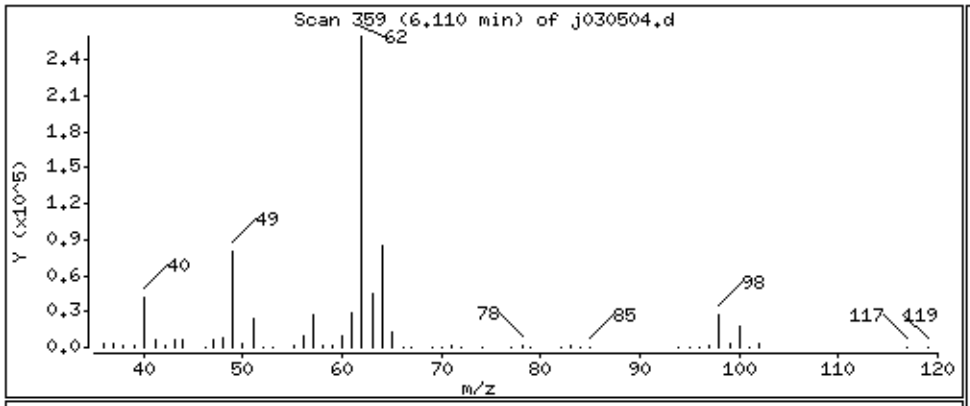
Operator: sg

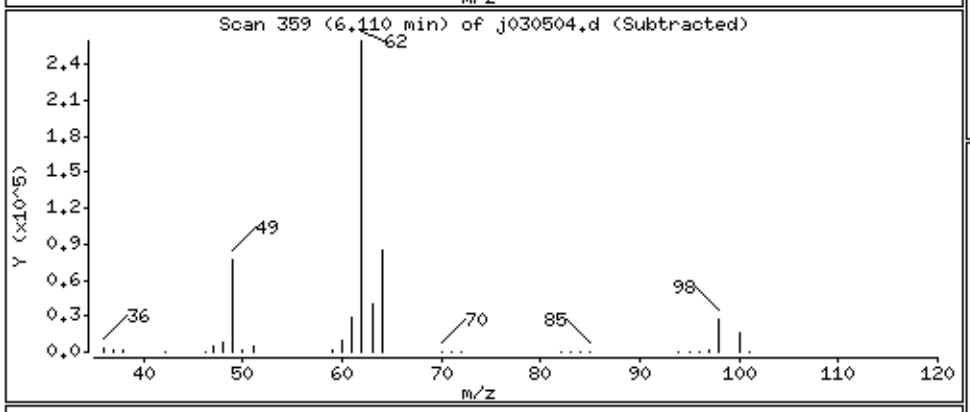
Column phase: RTX-624

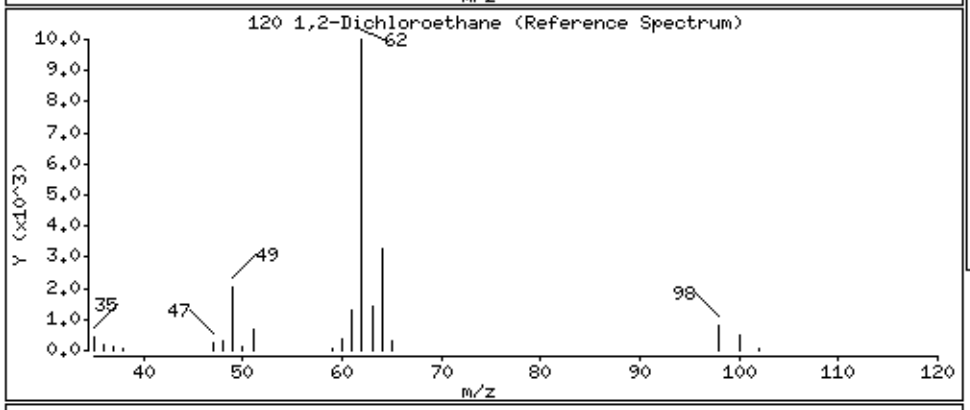
Column diameter: 0.25

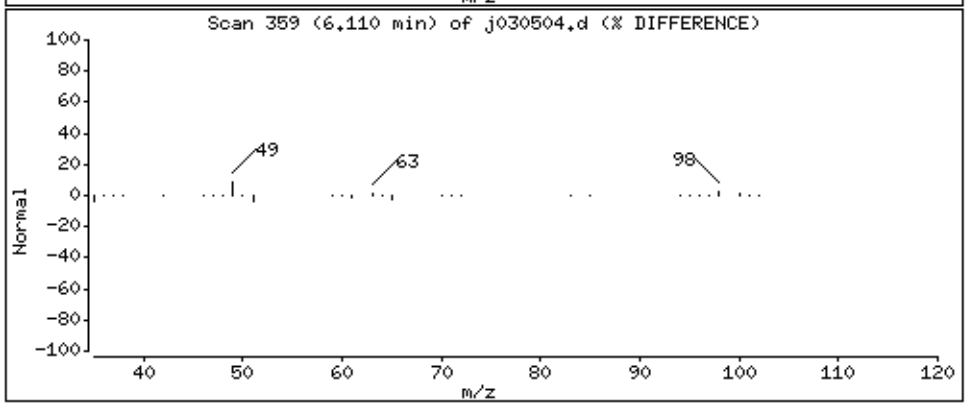
120 1,2-Dichloroethane

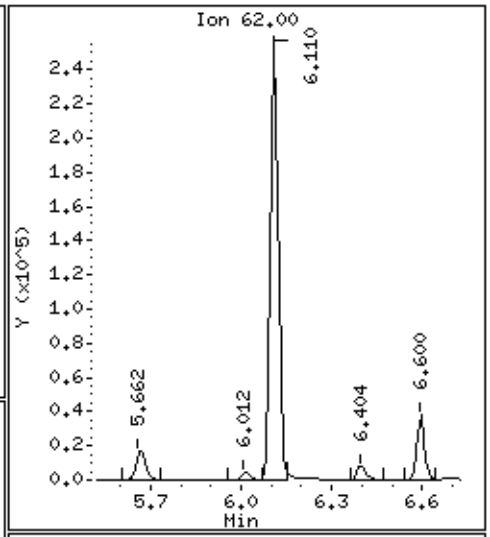
Concentration: 50.645 PPBV

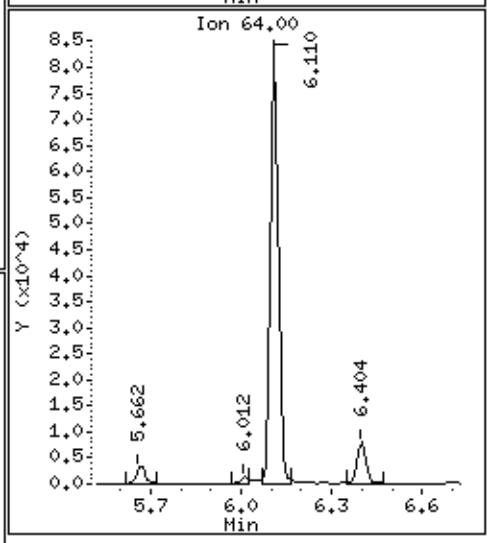












Data File: /chem/msdj.i/05mar15.b/j030504.d

Date : 05-MAR-2015 10:28

Client ID: LCS

Instrument: msdj.i

Sample Info: 50ml #2716-98

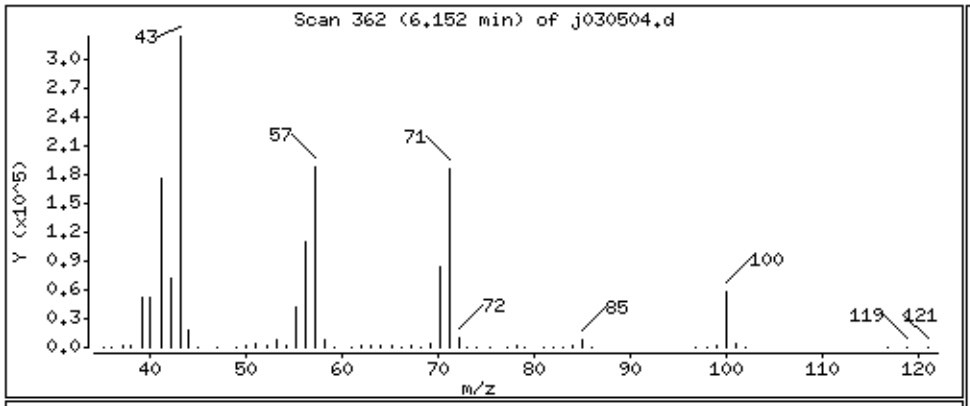
Operator: sg

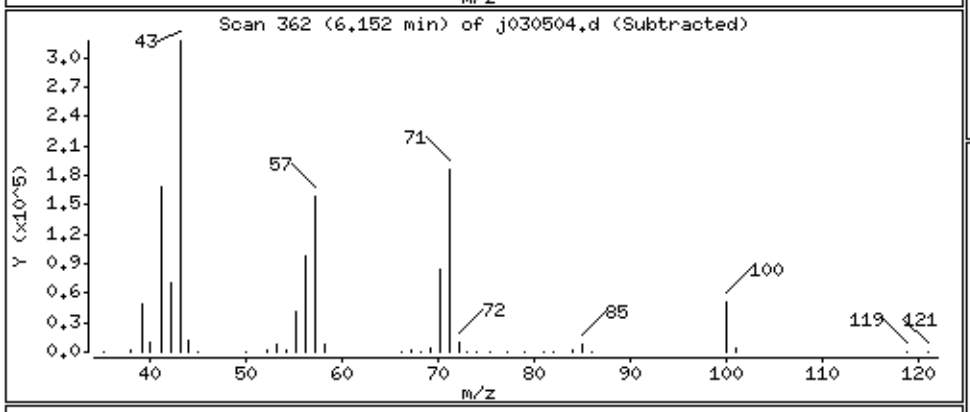
Column phase: RTX-624

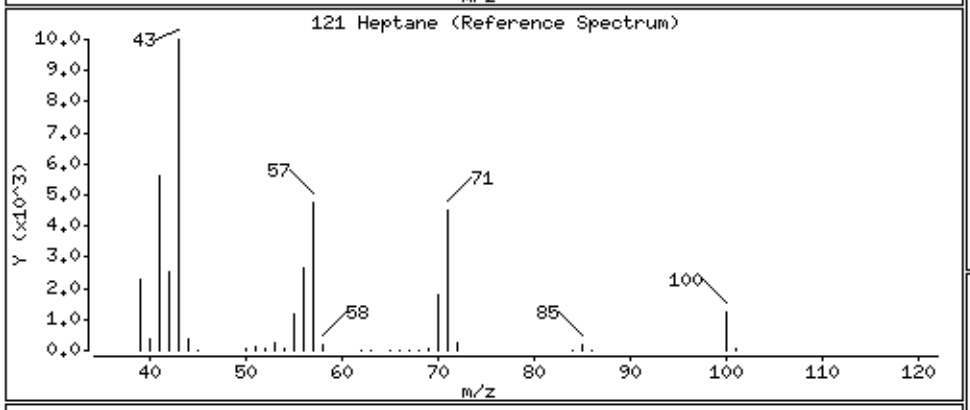
Column diameter: 0.25

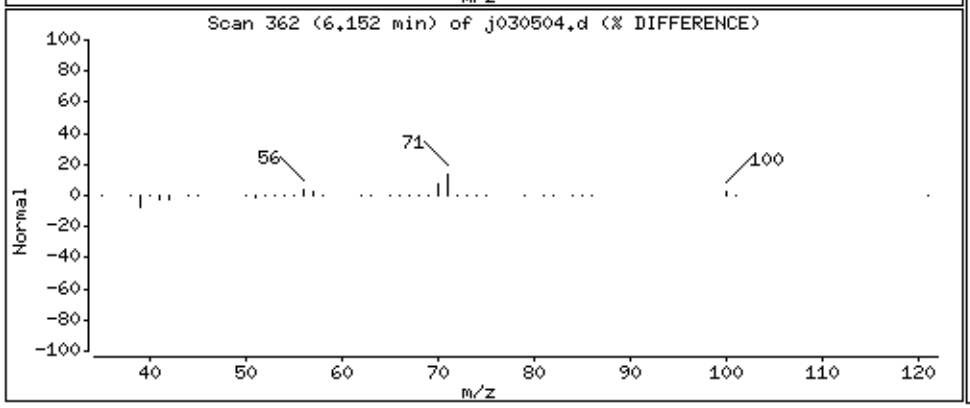
121 Heptane

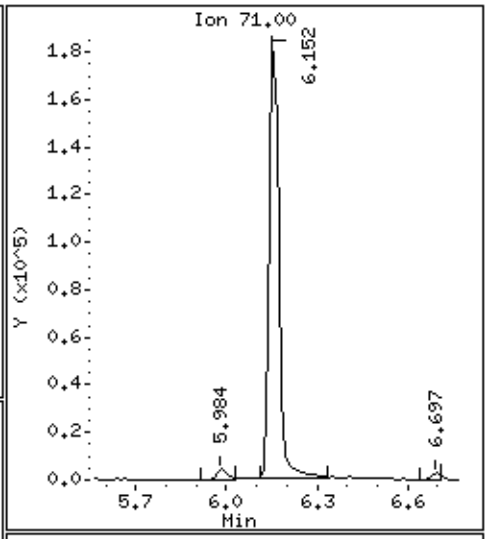
Concentration: 49.503 PPBV

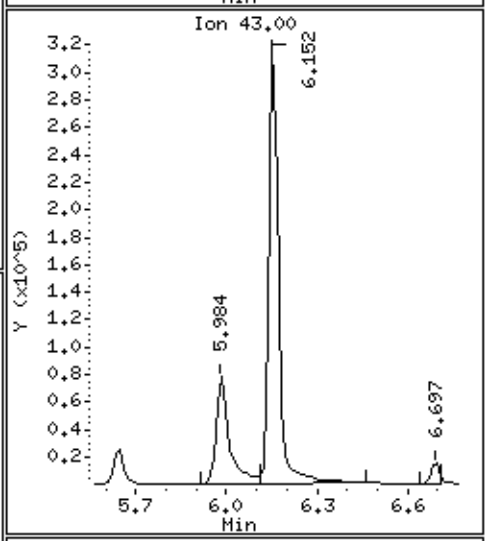


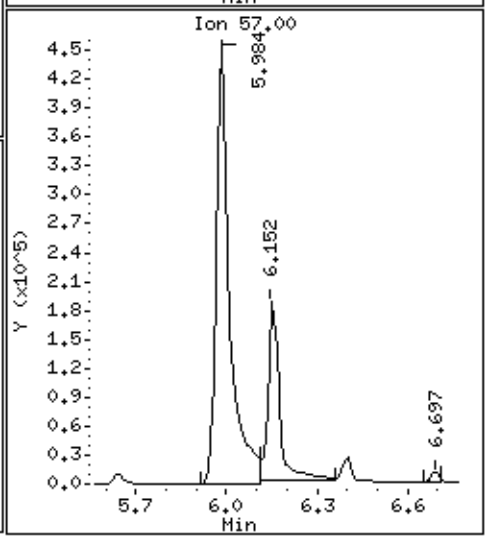












Data File: /chem/msdj.i/05mar15.b/j030504.d

Date : 05-MAR-2015 10:28

Client ID: LCS

Instrument: msdj.i

Sample Info: 50ml #2716-98

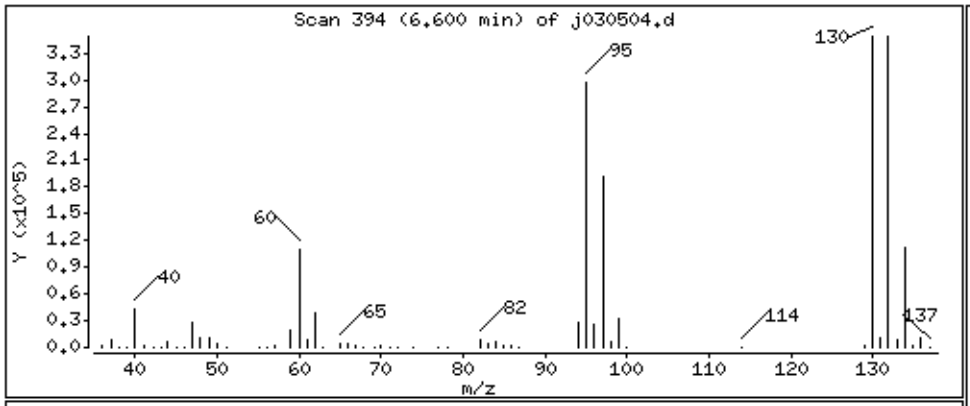
Operator: sg

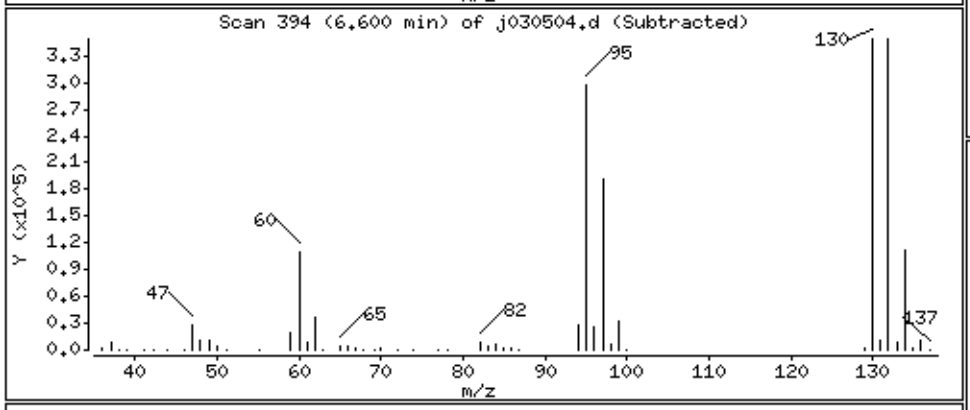
Column phase: RTX-624

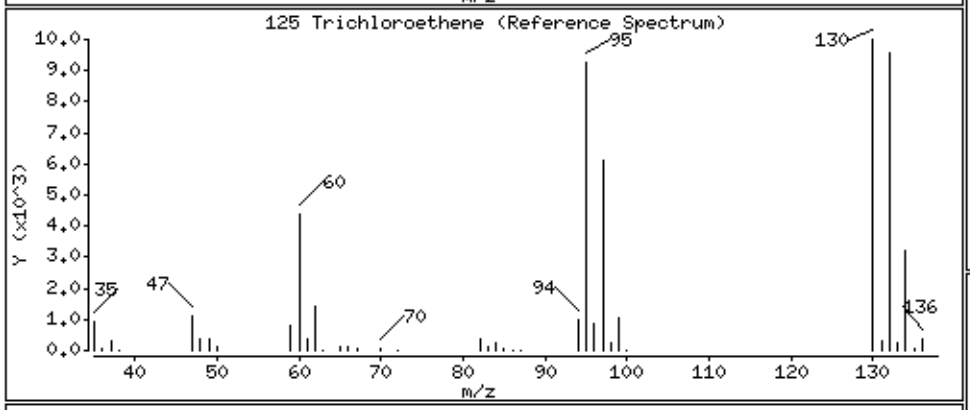
Column diameter: 0.25

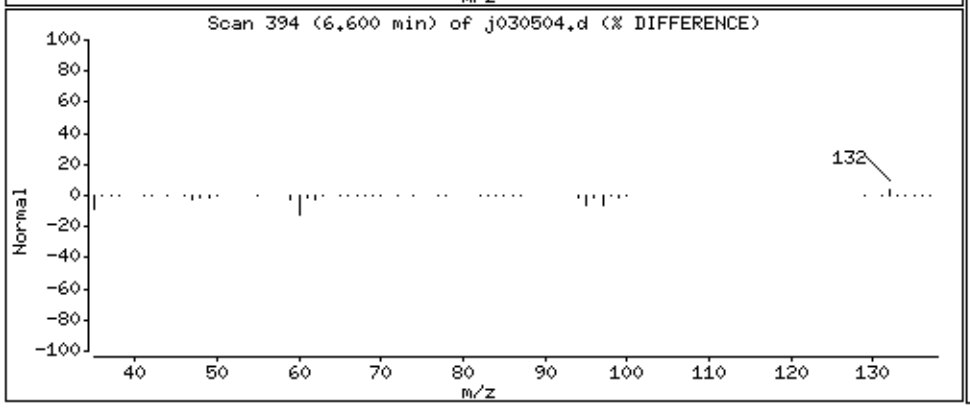
125 Trichloroethene

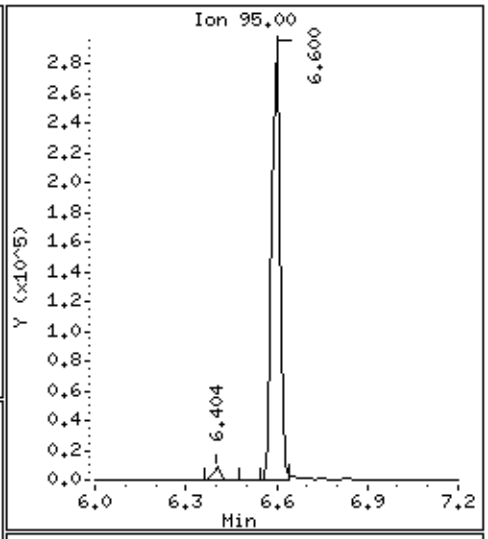
Concentration: 44.344 PPBV

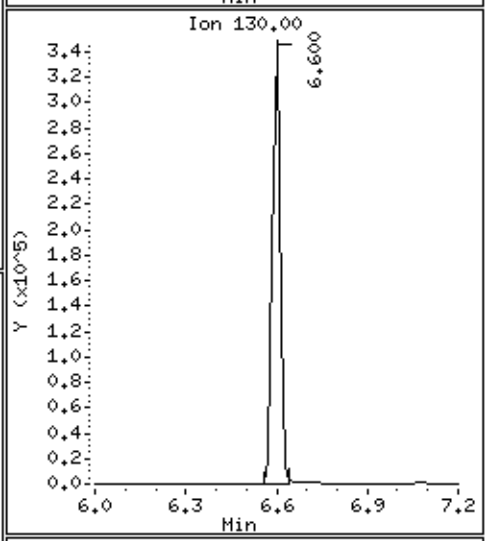


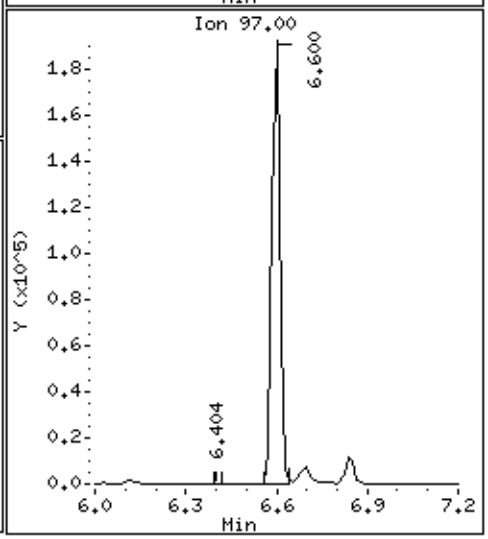












Data File: /chem/msdj.i/05mar15.b/j030504.d

Date : 05-MAR-2015 10:28

Client ID: LCS

Instrument: msdj.i

Sample Info: 50ml #2716-98

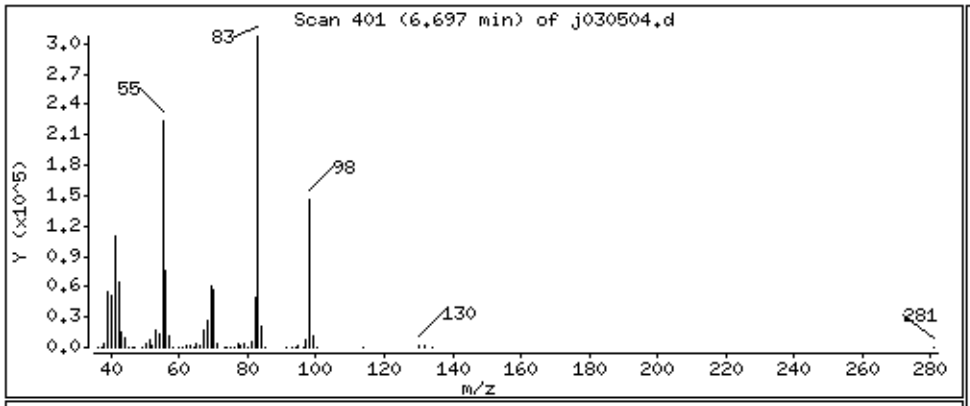
Operator: sg

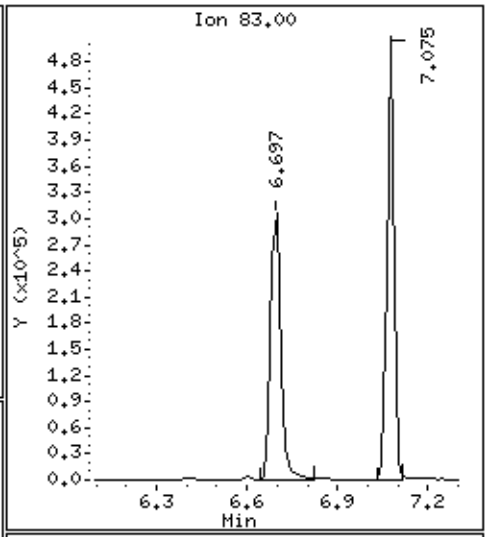
Column phase: RTX-624

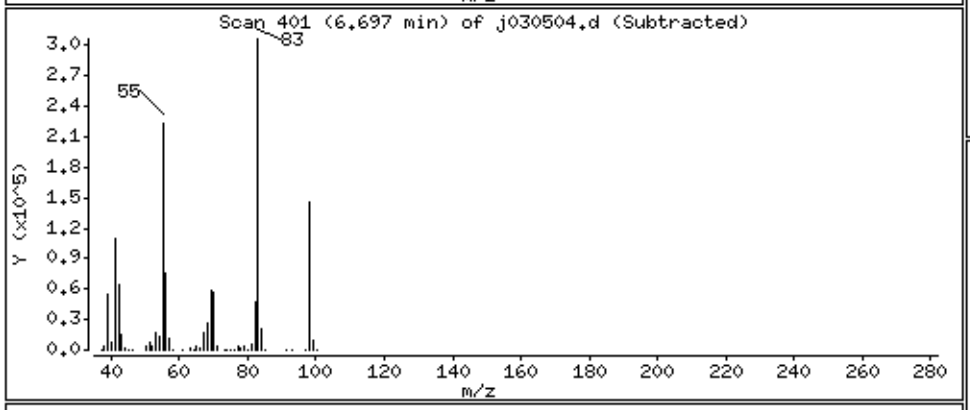
Column diameter: 0.25

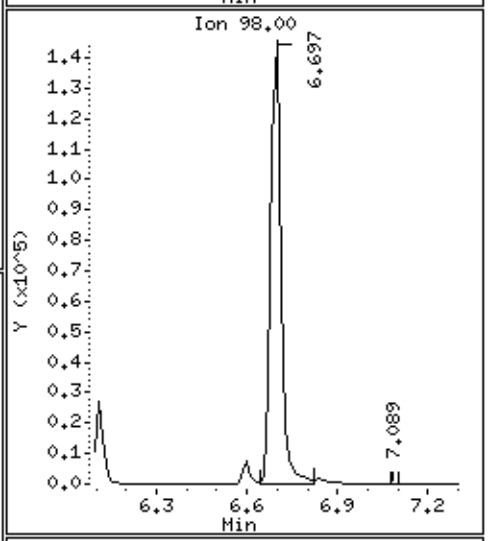
127 Methylcyclohexane

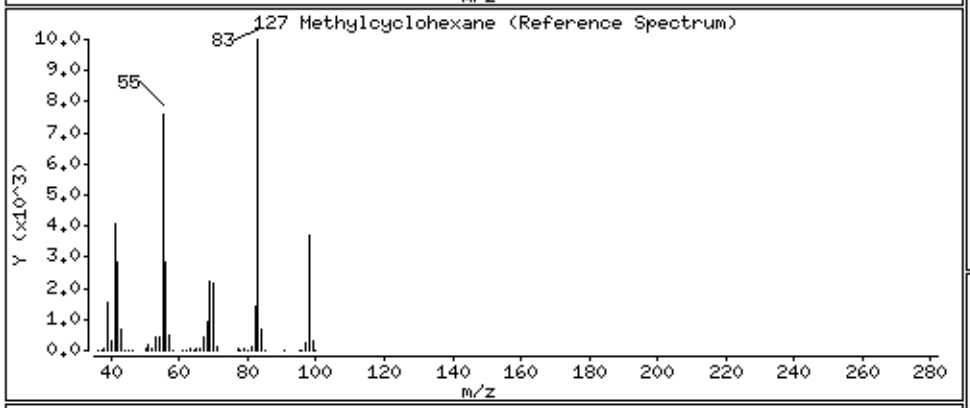
Concentration: 54.385 PPBV

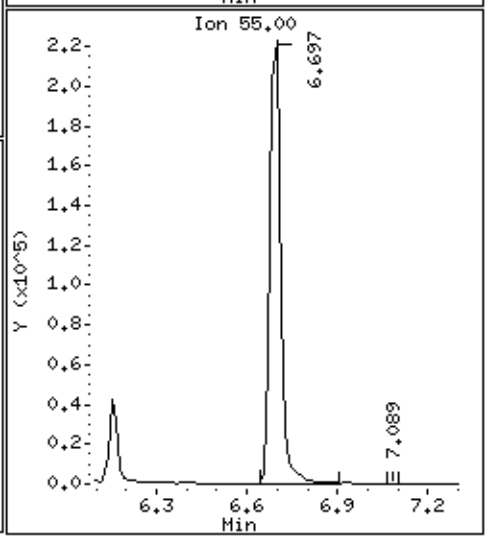


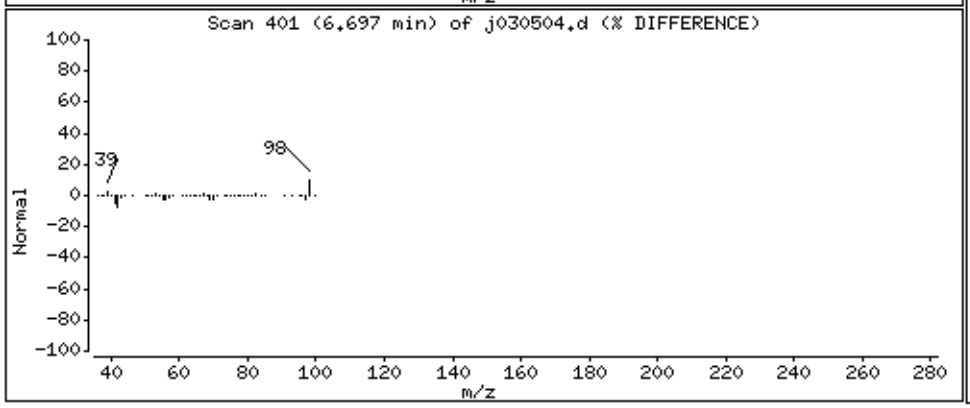












Data File: /chem/msdj.i/05mar15.b/j030504.d

Date : 05-MAR-2015 10:28

Client ID: LCS

Instrument: msdj.i

Sample Info: 50ml #2716-98

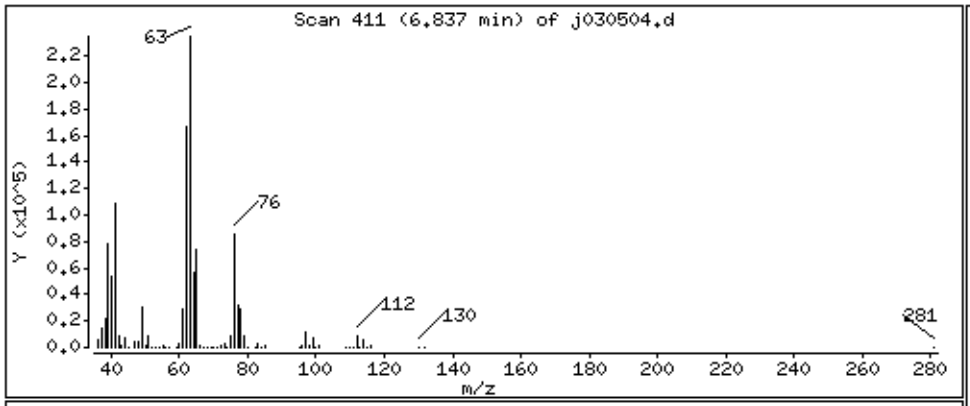
Operator: sg

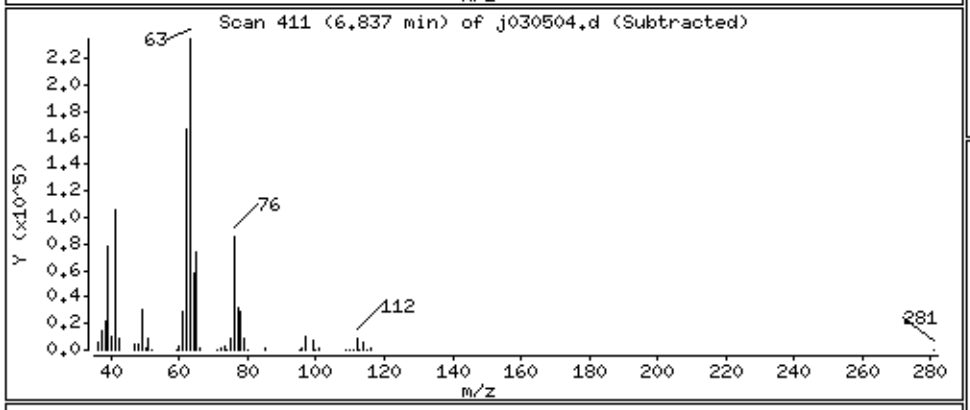
Column phase: RTX-624

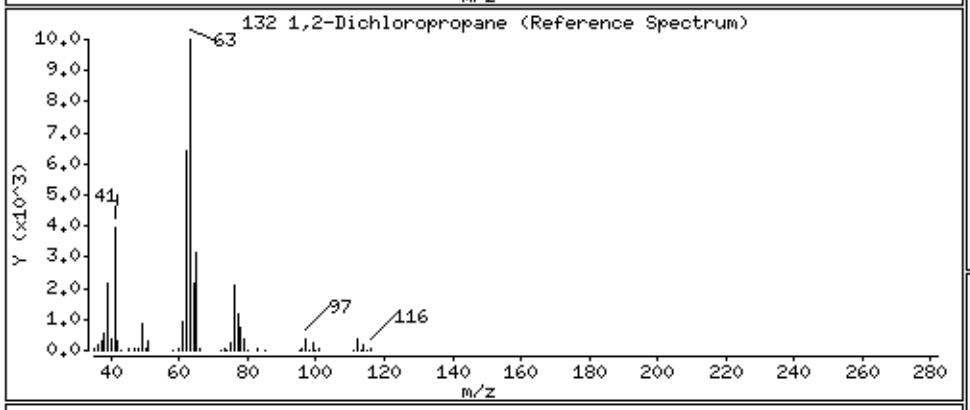
Column diameter: 0.25

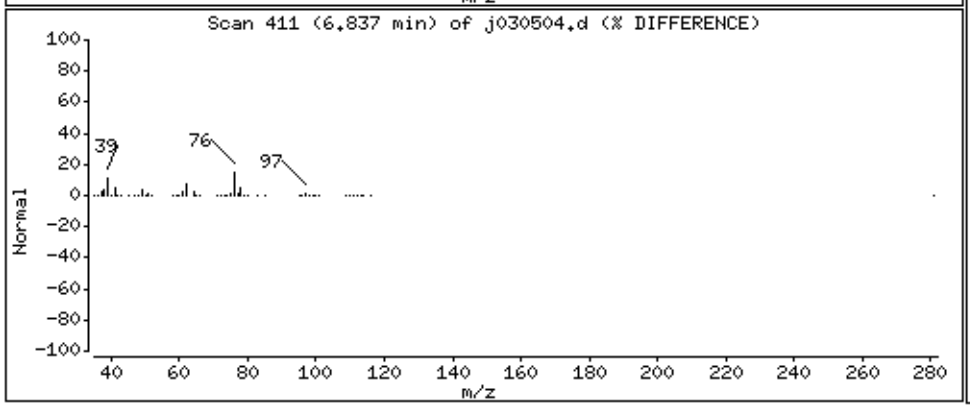
132 1,2-Dichloropropane

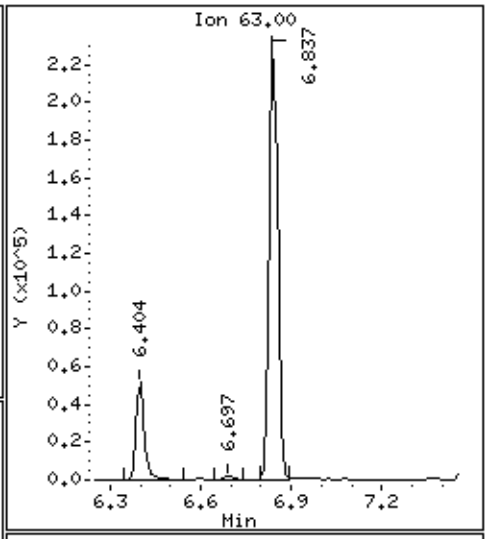
Concentration: 51.483 PPBV

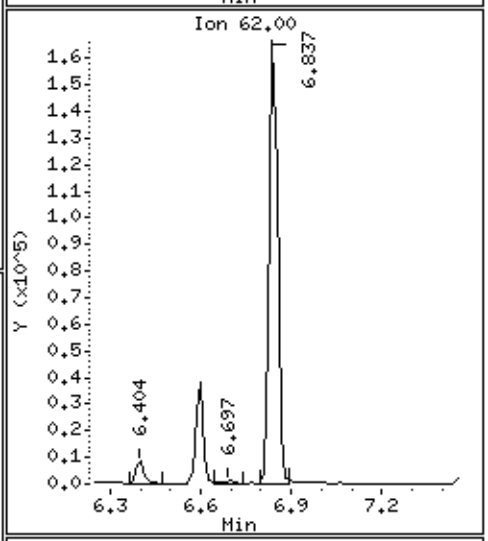


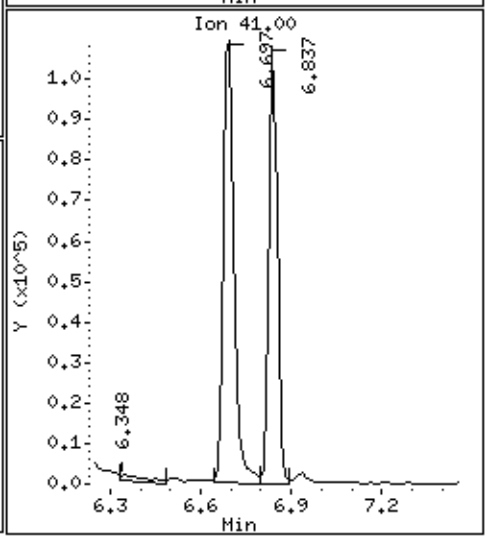












Data File: /chem/msdj.i/05mar15.b/j030504.d

Date : 05-MAR-2015 10:28

Client ID: LCS

Instrument: msdj.i

Sample Info: 50ml #2716-98

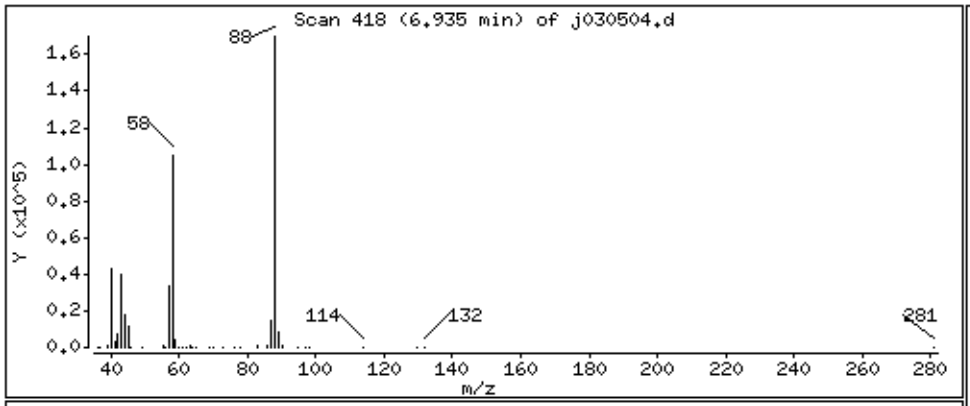
Operator: sg

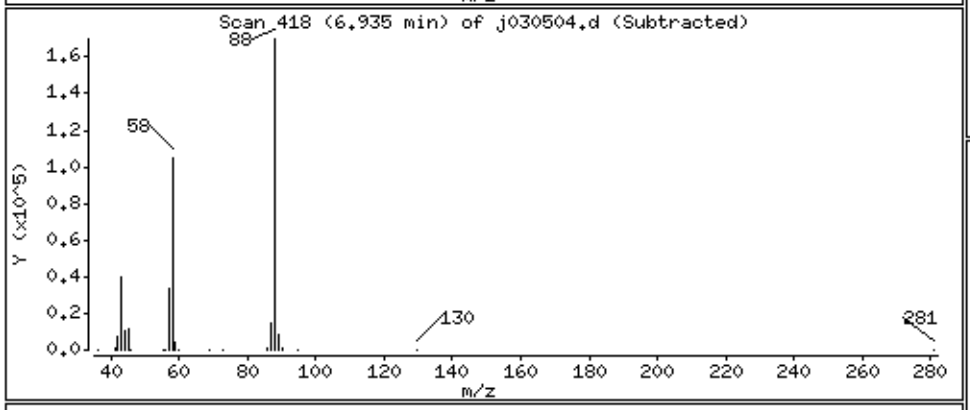
Column phase: RTX-624

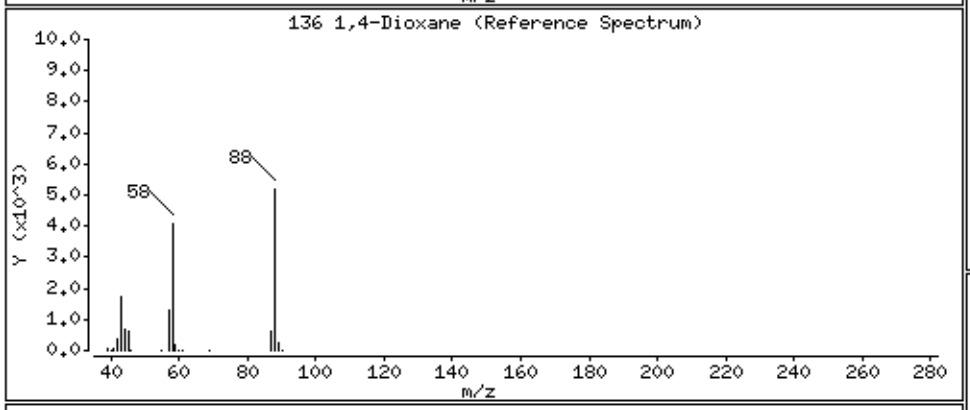
Column diameter: 0.25

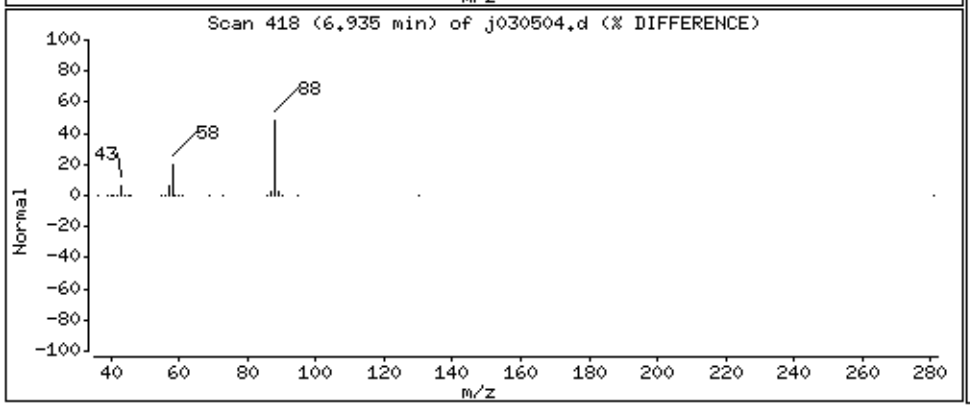
136 1,4-Dioxane

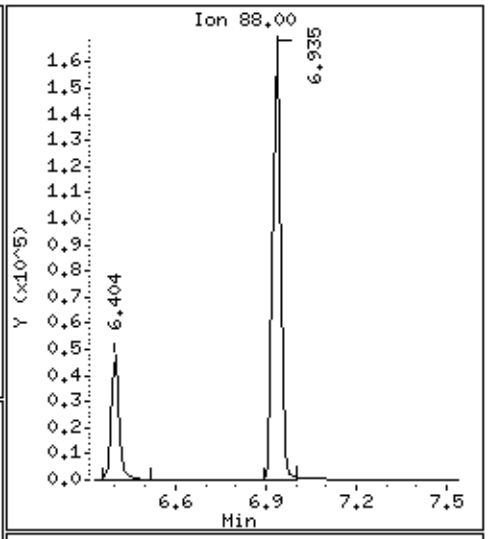
Concentration: 51.974 PPBV

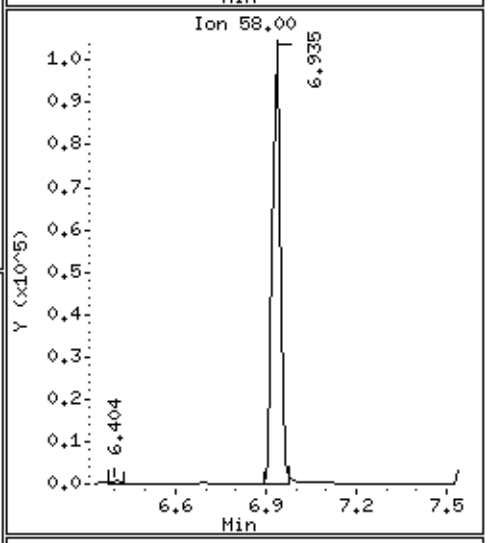


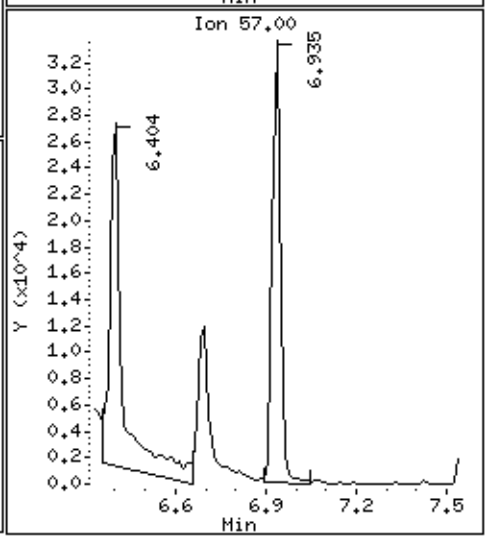












Data File: /chem/msdj.i/05mar15.b/j030504.d

Date : 05-MAR-2015 10:28

Client ID: LCS

Instrument: msdj.i

Sample Info: 50ml #2716-98

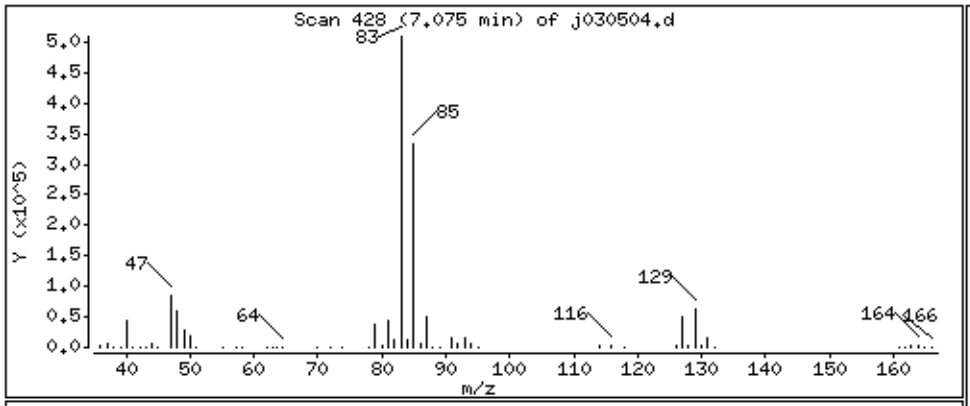
Operator: sg

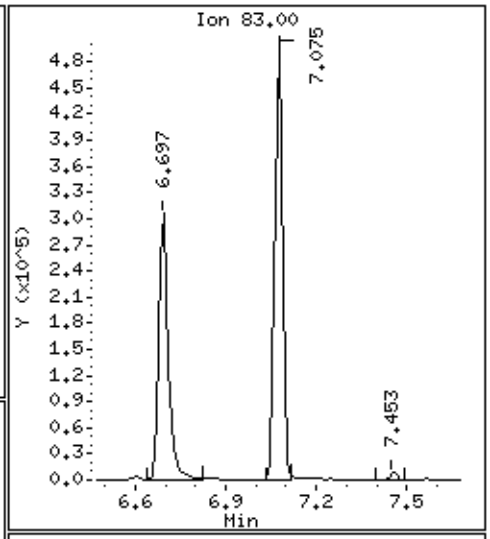
Column phase: RTX-624

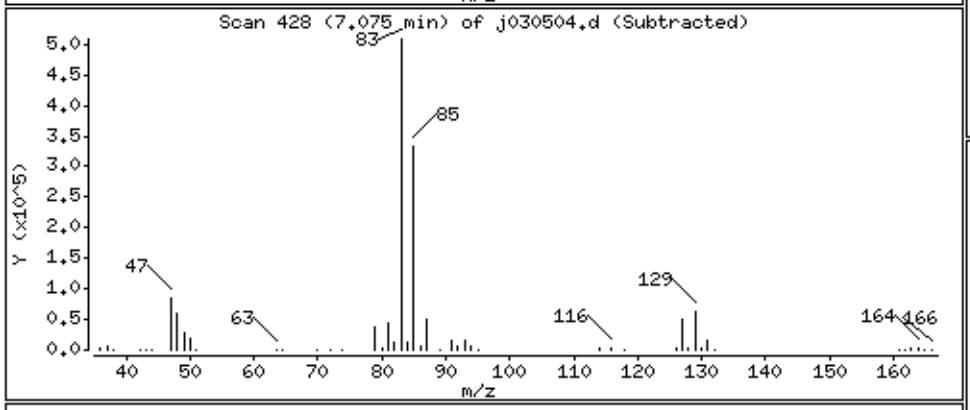
Column diameter: 0.25

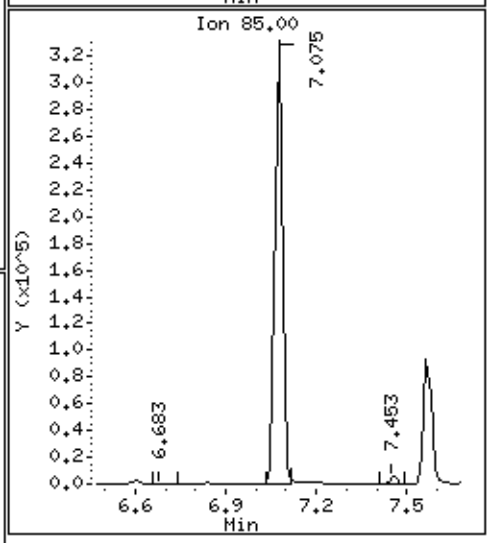
138 Bromodichloromethane

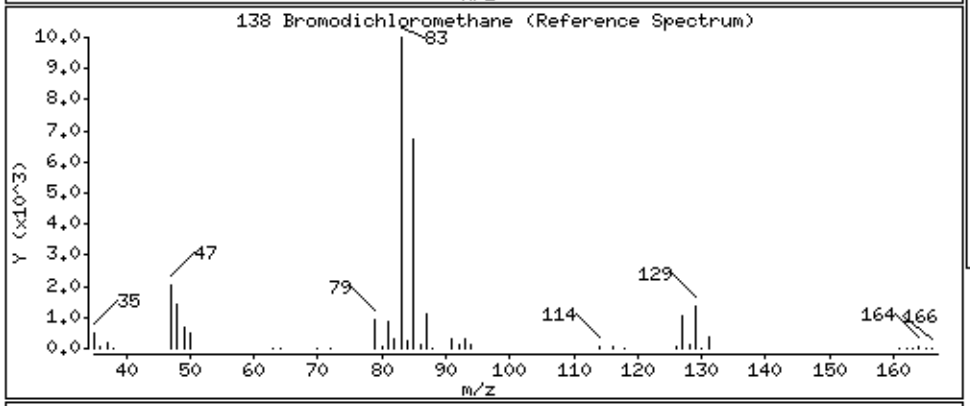
Concentration: 52.700 PPBV

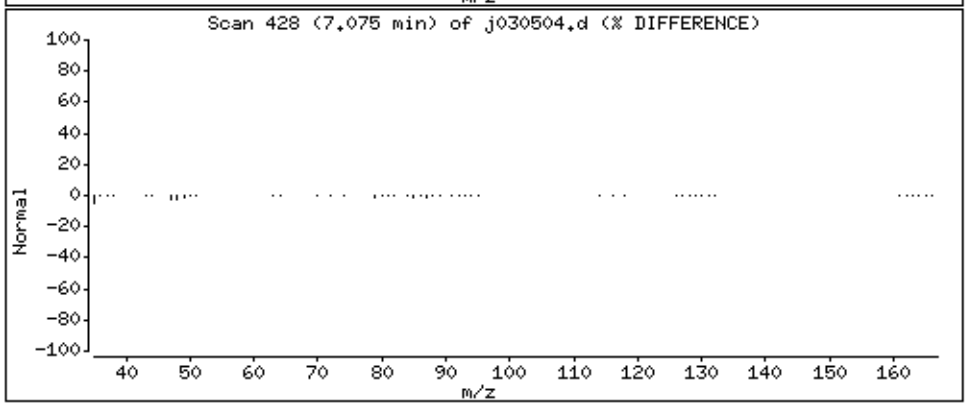












Data File: /chem/msdj.i/05mar15.b/j030504.d

Date : 05-MAR-2015 10:28

Client ID: LCS

Instrument: msdj.i

Sample Info: 50ml #2716-98

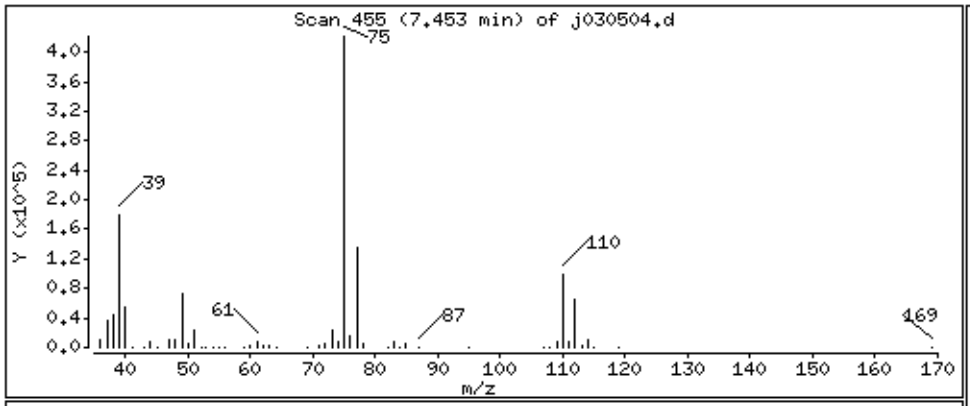
Operator: sg

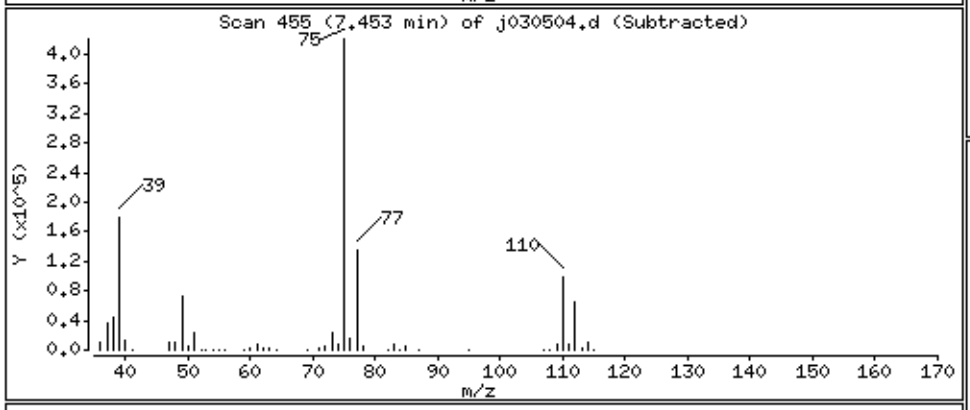
Column phase: RTX-624

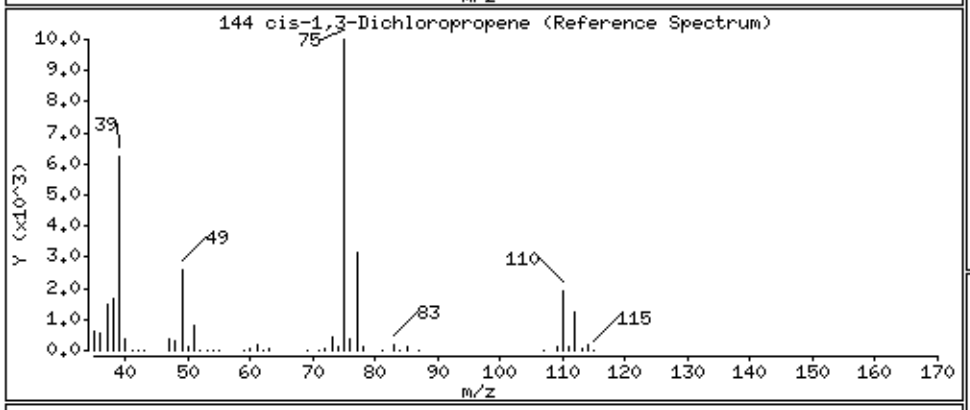
Column diameter: 0.25

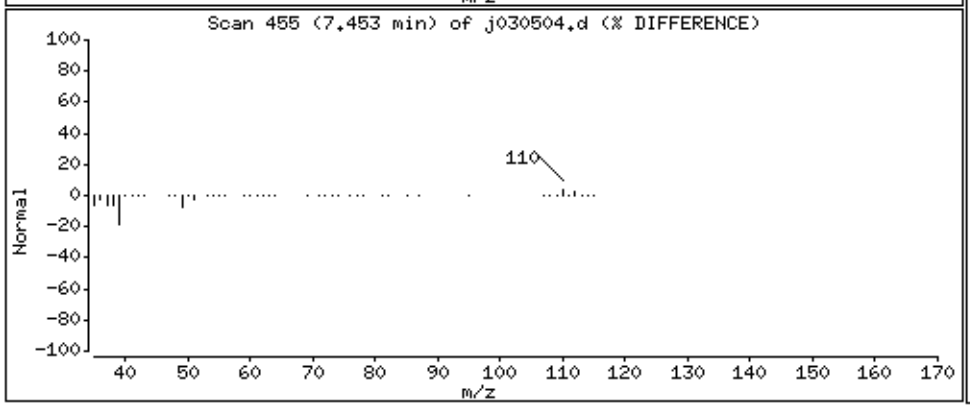
144 cis-1,3-Dichloropropene

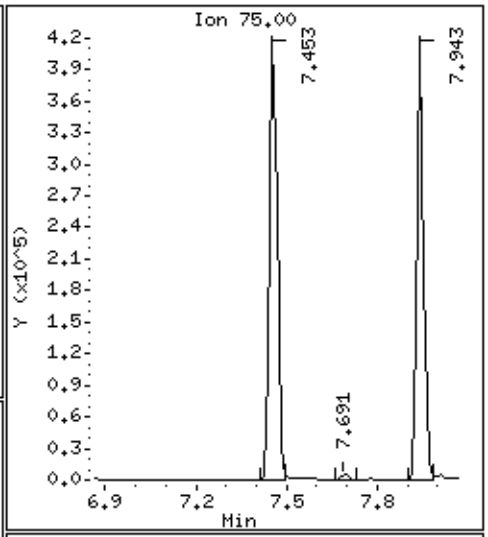
Concentration: 48.181 PPBV

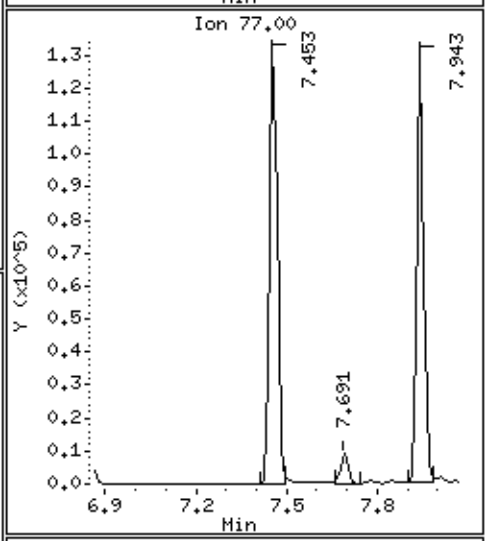


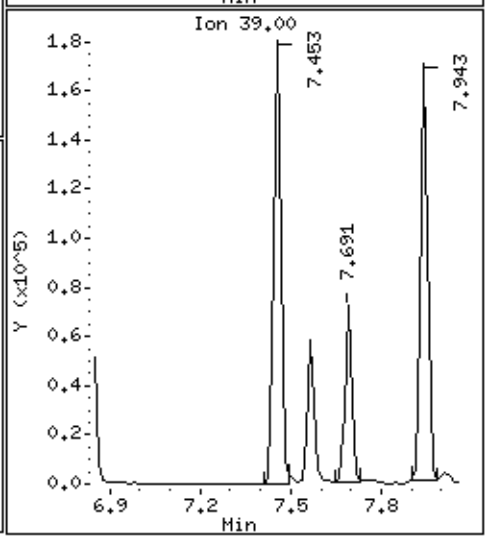












Data File: /chem/msdj.i/05mar15.b/j030504.d

Date : 05-MAR-2015 10:28

Client ID: LCS

Instrument: msdj.i

Sample Info: 50ml #2716-98

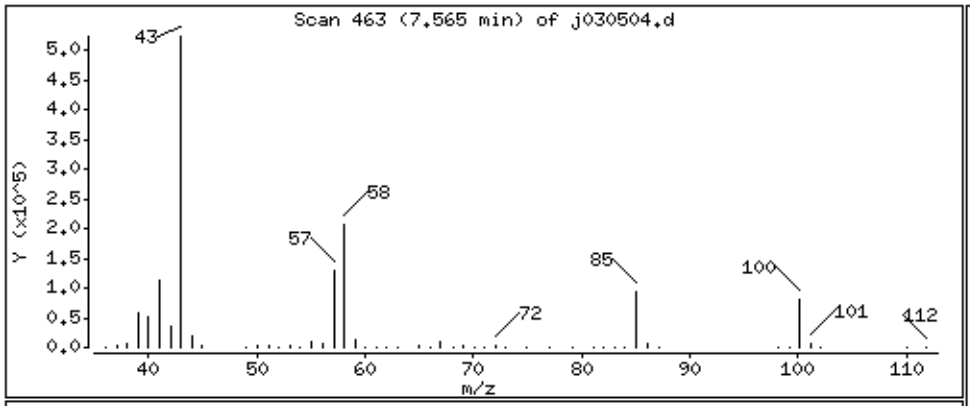
Operator: sg

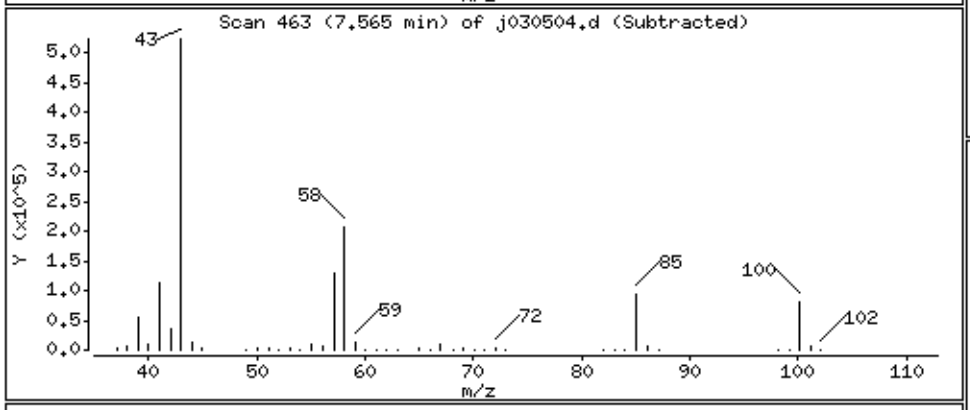
Column phase: RTX-624

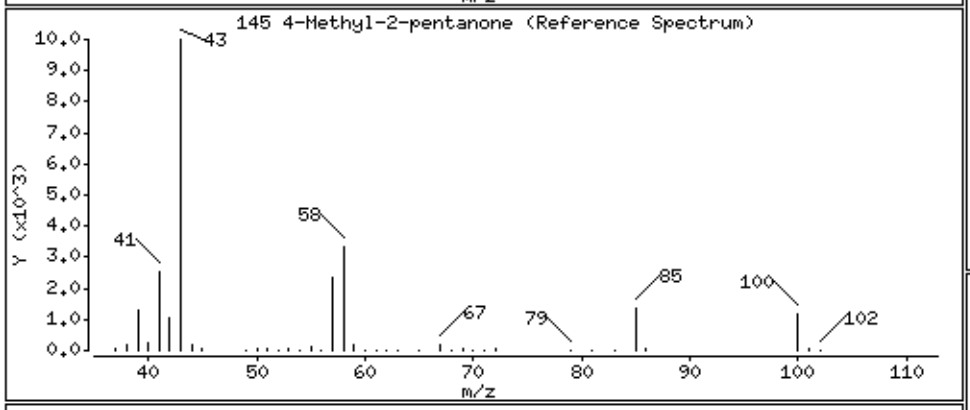
Column diameter: 0.25

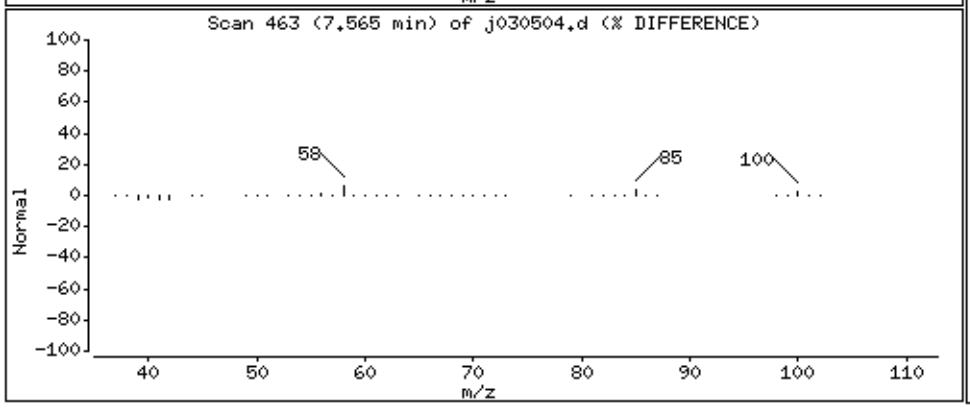
145 4-Methyl-2-pentanone

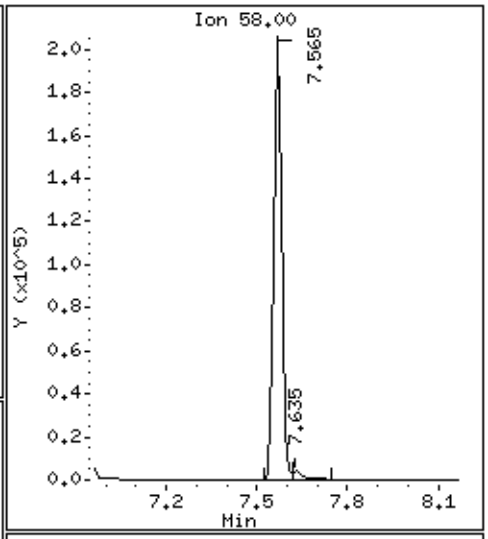
Concentration: 49.108 PPBV

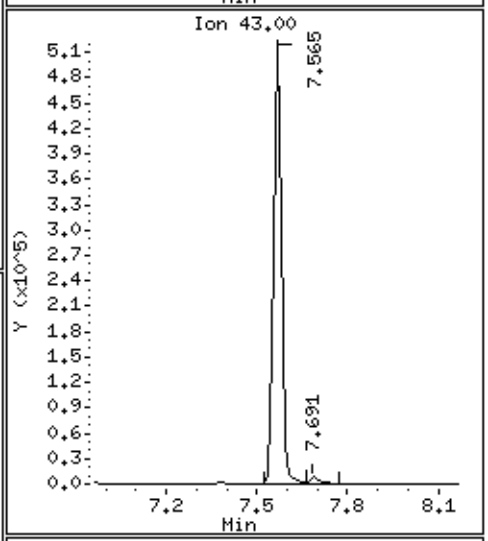


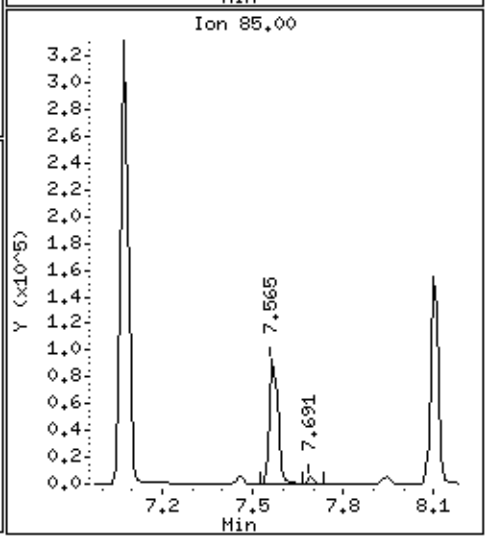












Data File: /chem/msdj.i/05mar15.b/j030504.d

Date : 05-MAR-2015 10:28

Client ID: LCS

Instrument: msdj.i

Sample Info: 50ml #2716-98

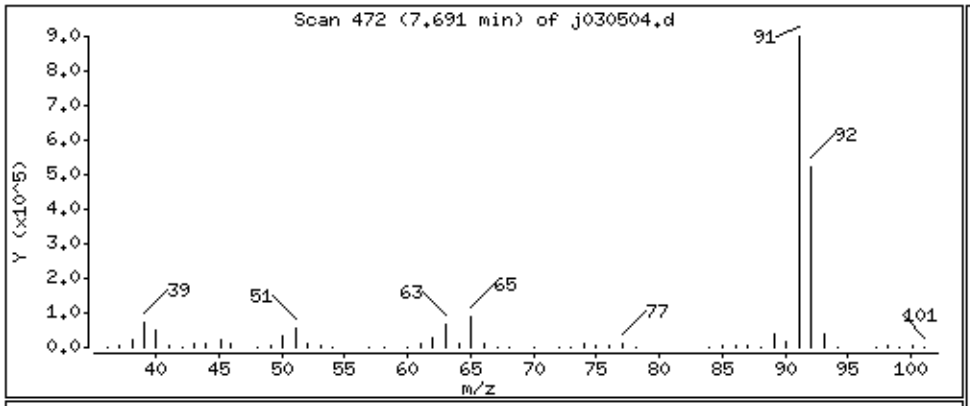
Operator: sg

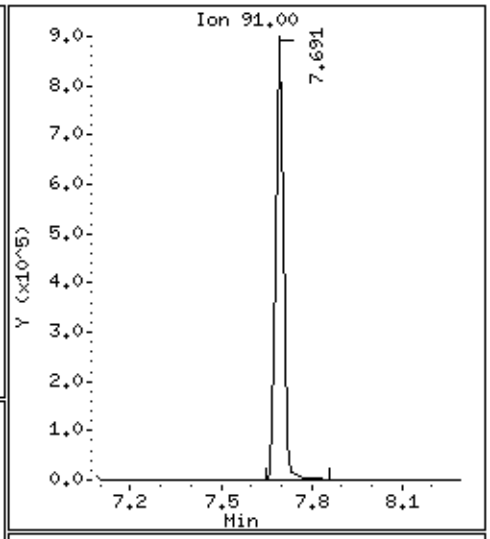
Column phase: RTX-624

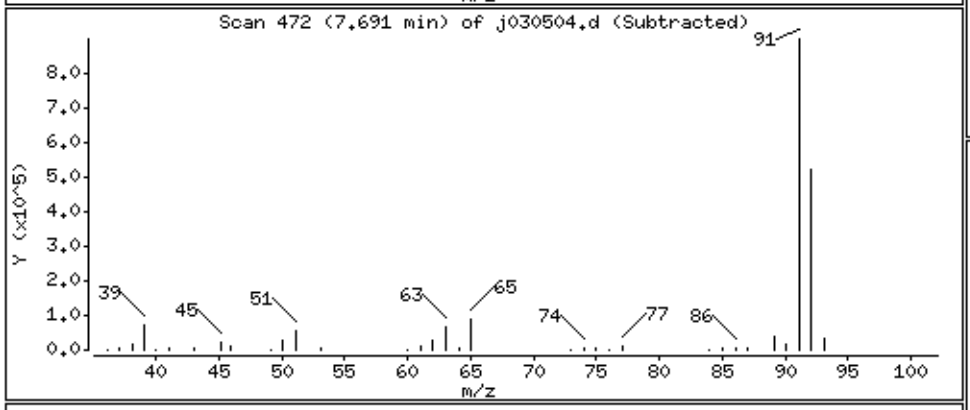
Column diameter: 0.25

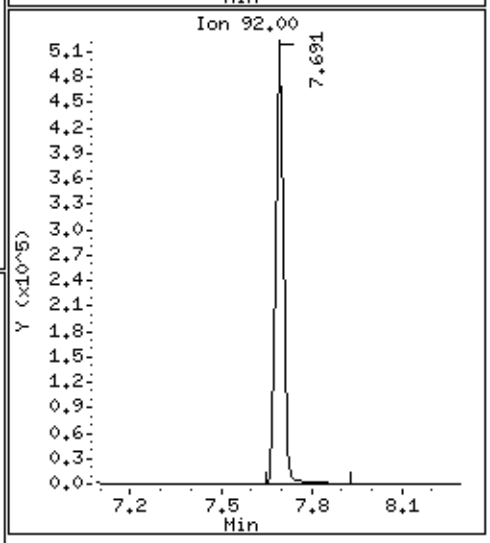
147 Toluene

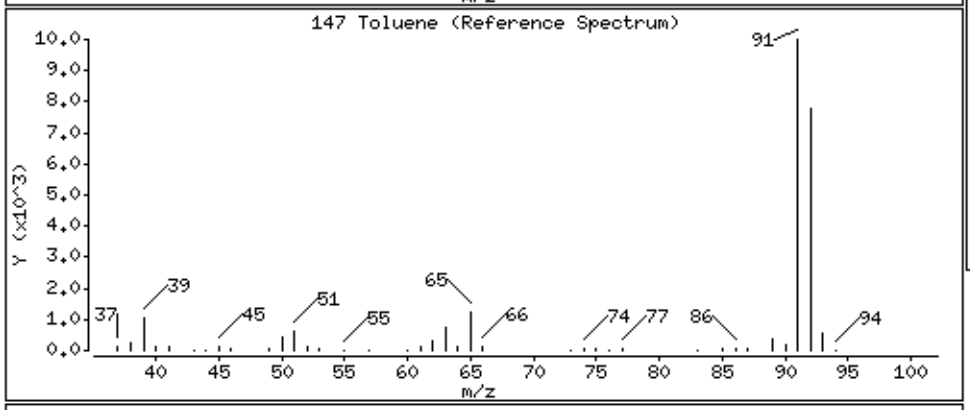
Concentration: 50.743 PPBV

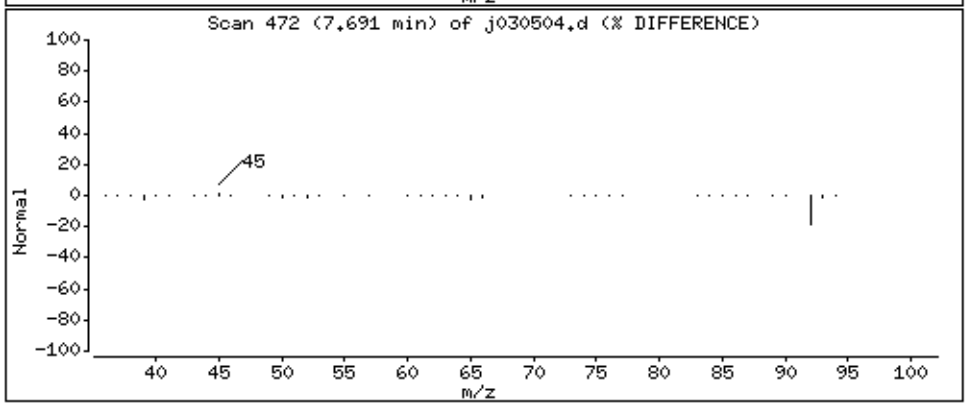












Data File: /chem/msdj.i/05mar15.b/j030504.d

Date : 05-MAR-2015 10:28

Client ID: LCS

Instrument: msdj.i

Sample Info: 50ml #2716-98

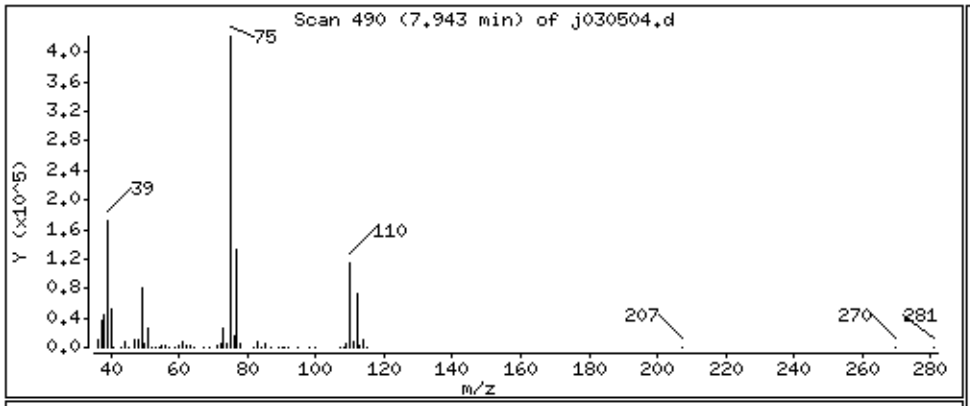
Operator: sg

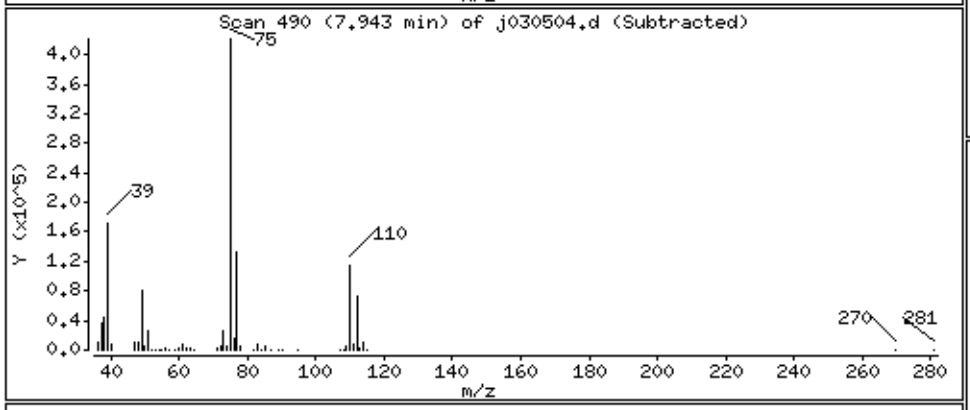
Column phase: RTX-624

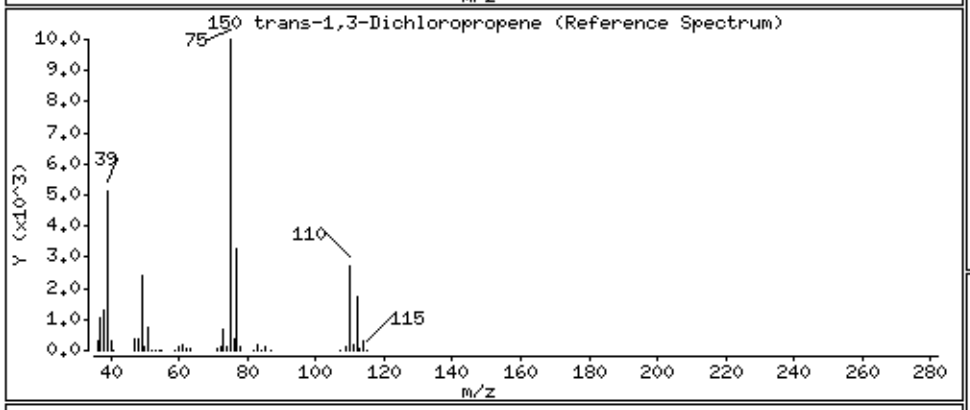
Column diameter: 0.25

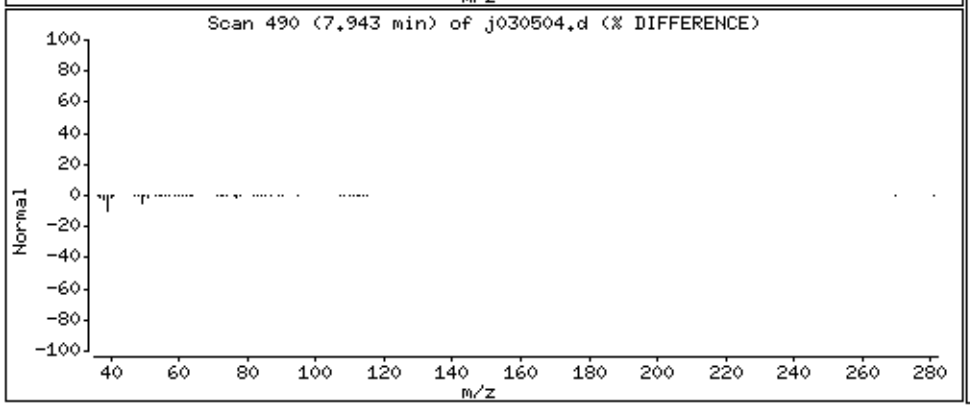
150 trans-1,3-Dichloropropene

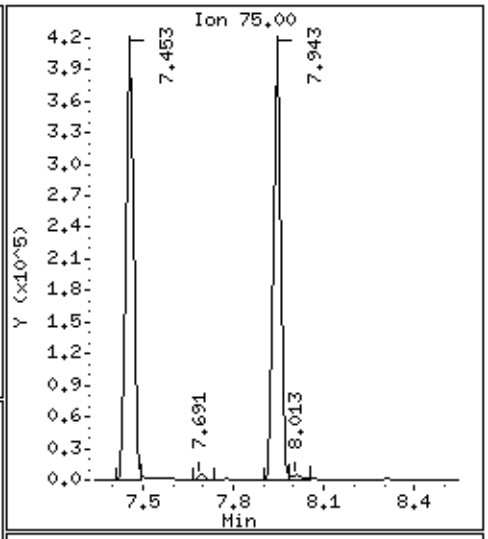
Concentration: 50.705 PPBV

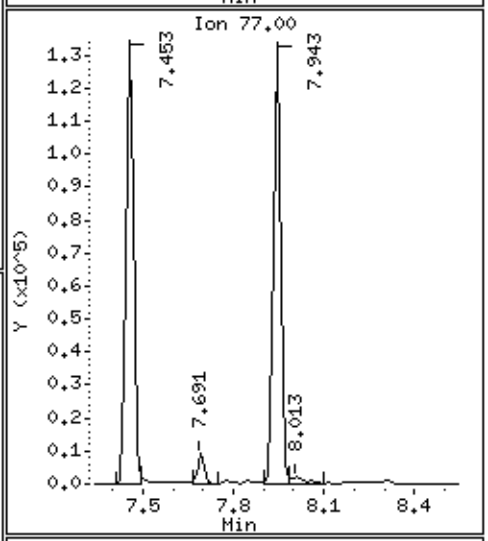


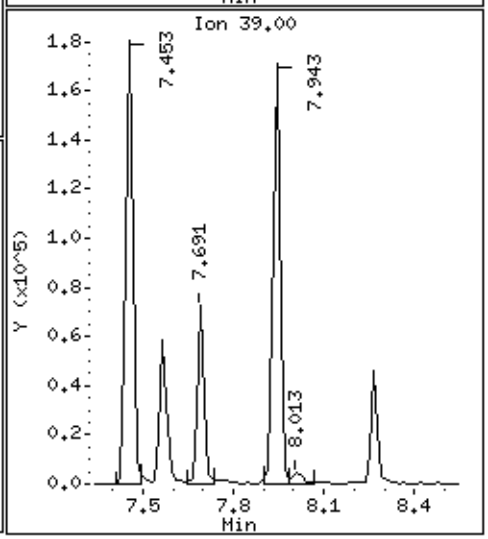












Data File: /chem/msdj.i/05mar15.b/j030504.d

Date : 05-MAR-2015 10:28

Client ID: LCS

Instrument: msdj.i

Sample Info: 50ml #2716-98

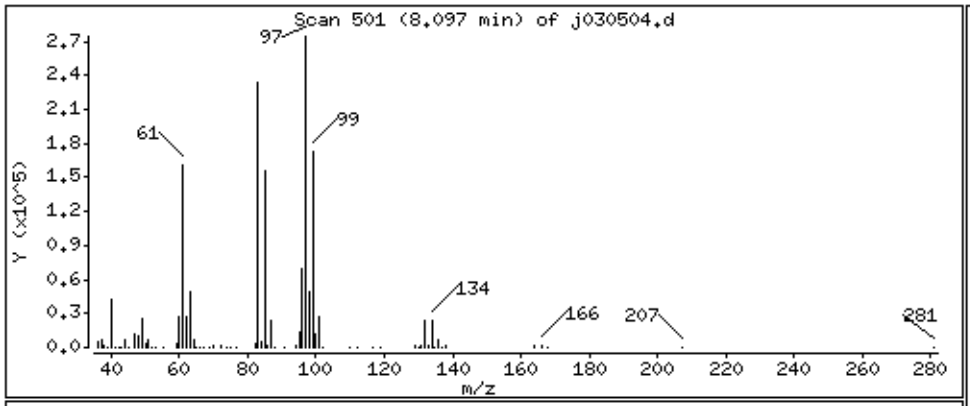
Operator: sg

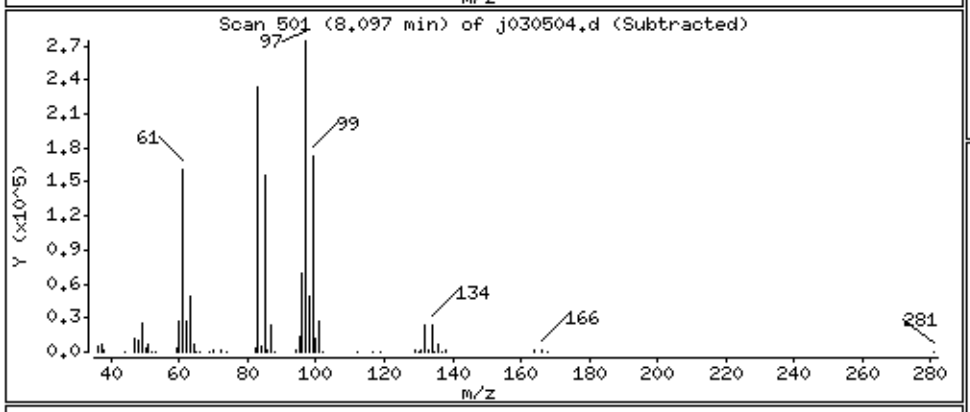
Column phase: RTX-624

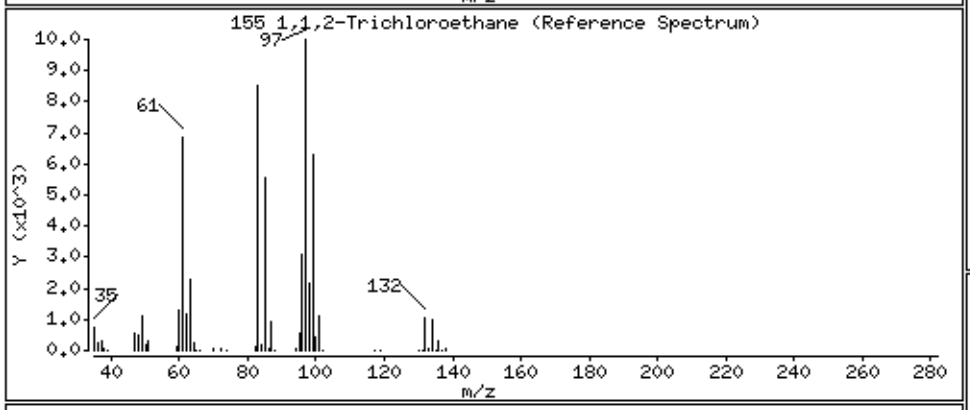
Column diameter: 0.25

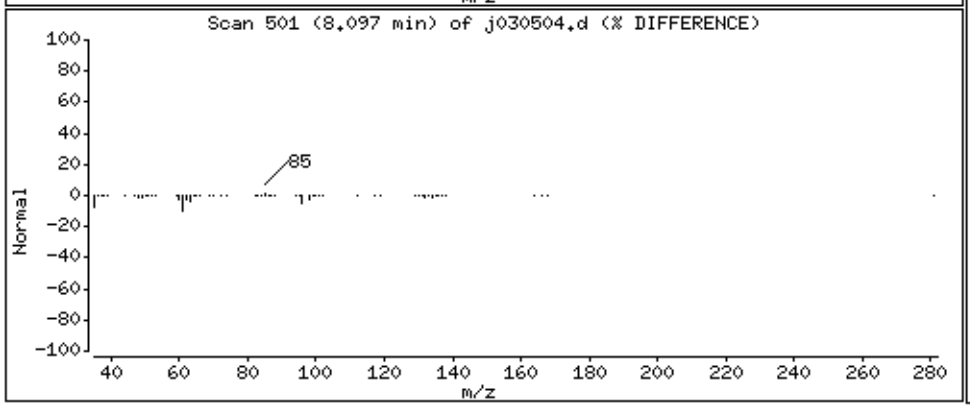
155 1,1,2-Trichloroethane

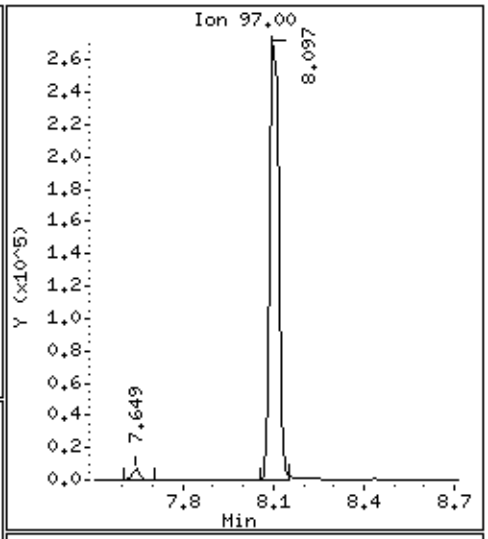
Concentration: 50.592 PPBV

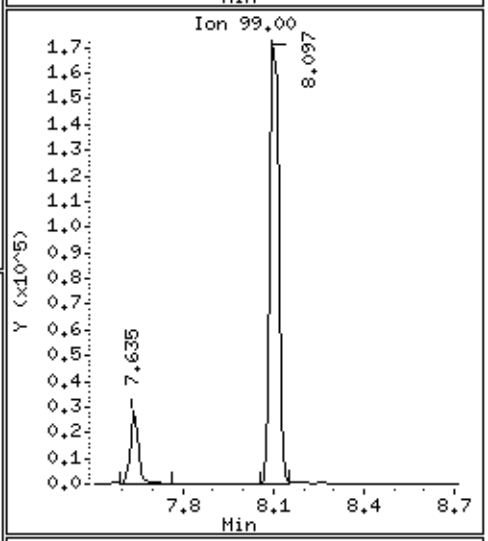


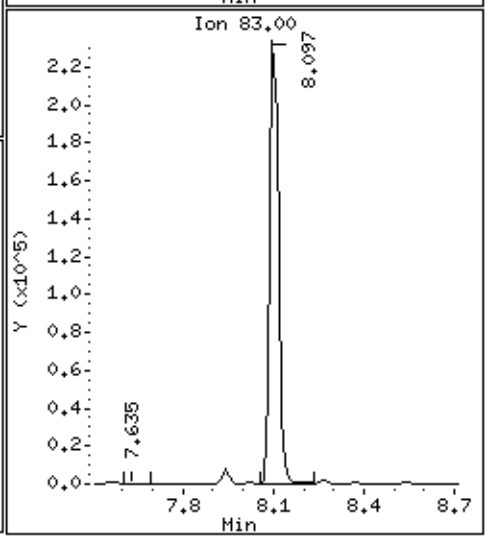












Data File: /chem/msdj.i/05mar15.b/j030504.d

Date : 05-MAR-2015 10:28

Client ID: LCS

Instrument: msdj.i

Sample Info: 50ml #2716-98

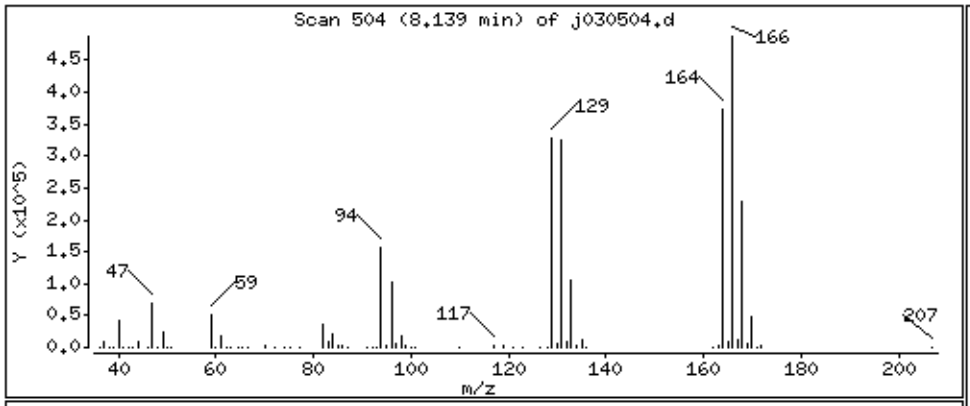
Operator: sg

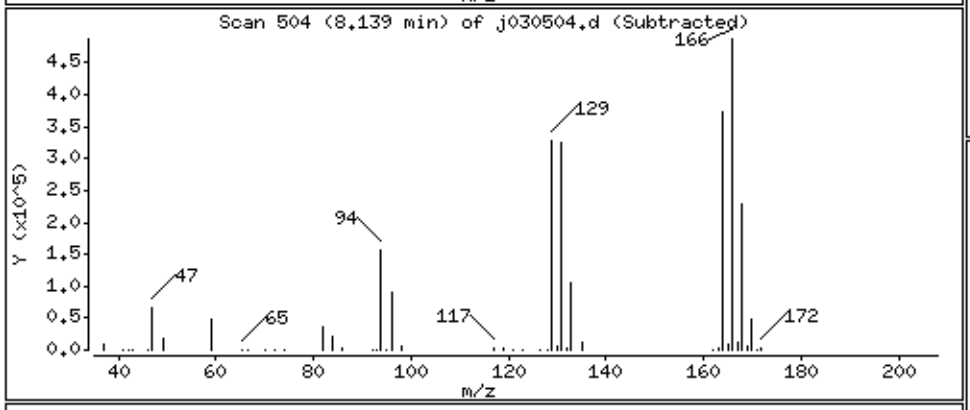
Column phase: RTX-624

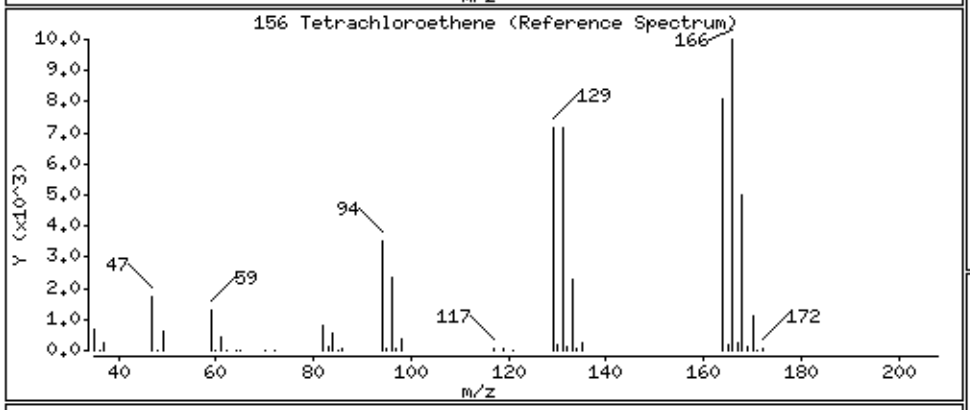
Column diameter: 0.25

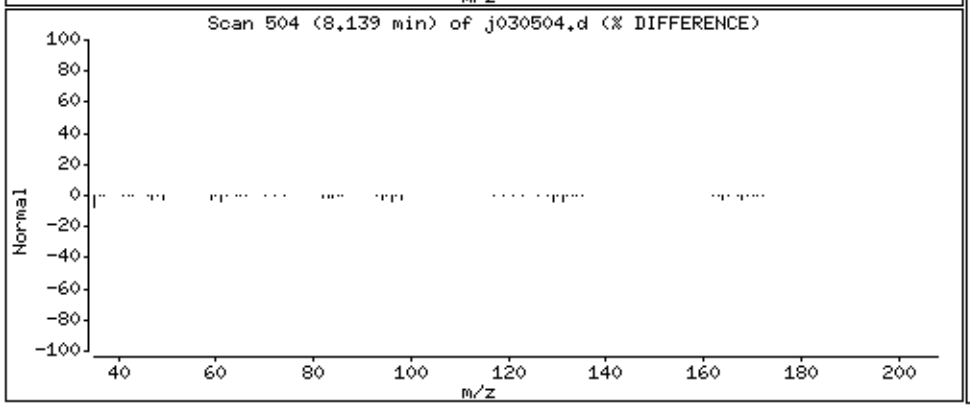
156 Tetrachloroethene

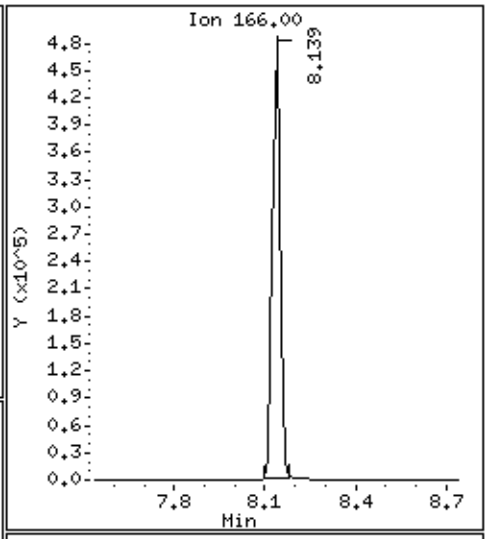
Concentration: 51.799 PPBV

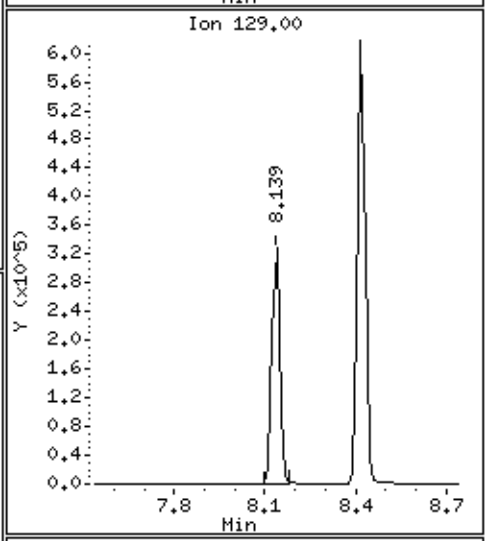


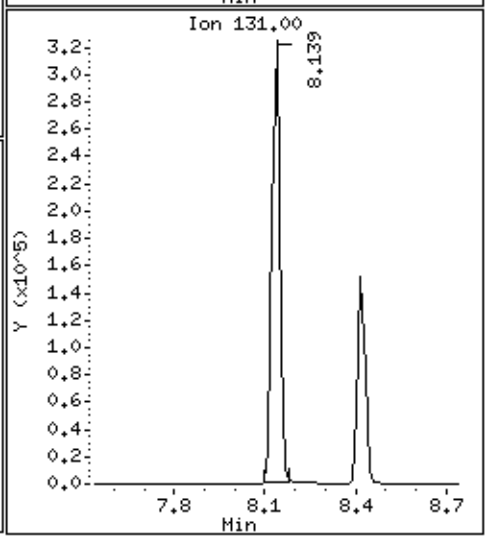












Data File: /chem/msdj.i/05mar15.b/j030504.d

Date : 05-MAR-2015 10:28

Client ID: LCS

Instrument: msdj.i

Sample Info: 50ml #2716-98

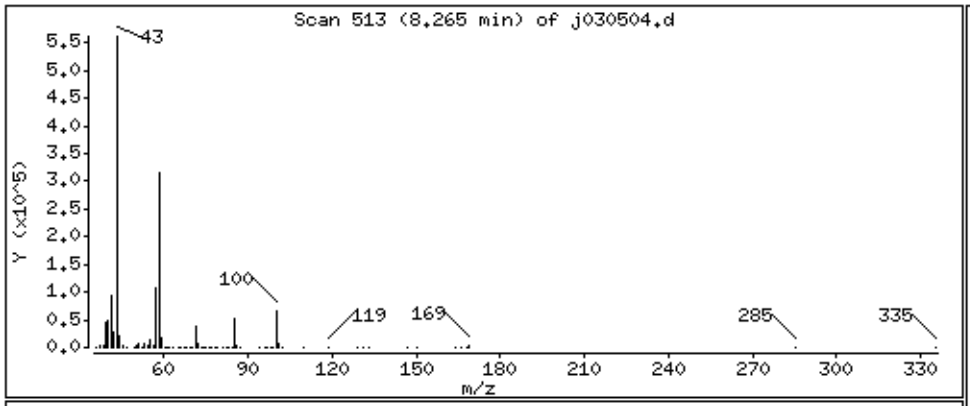
Operator: sg

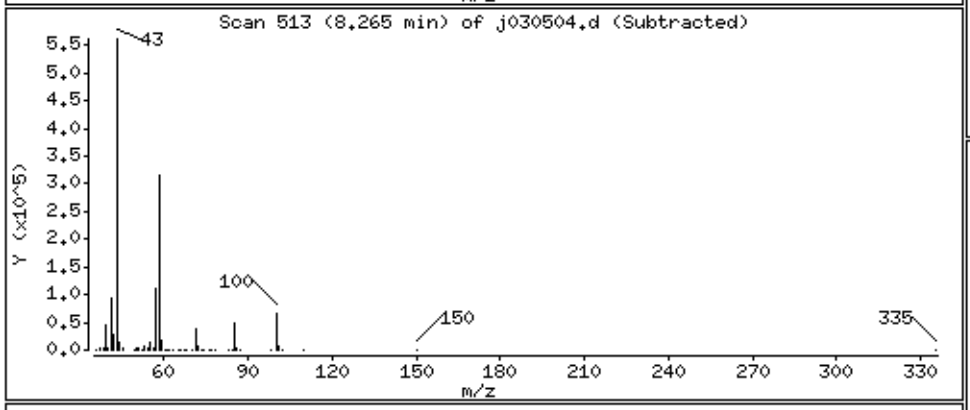
Column phase: RTX-624

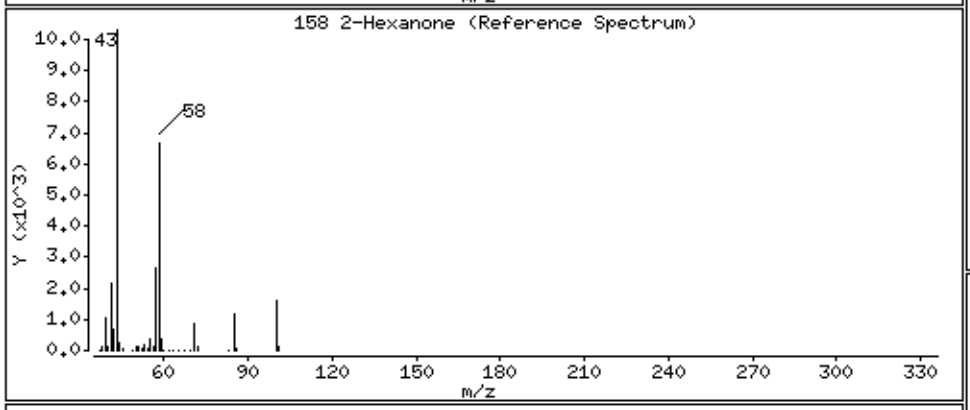
Column diameter: 0.25

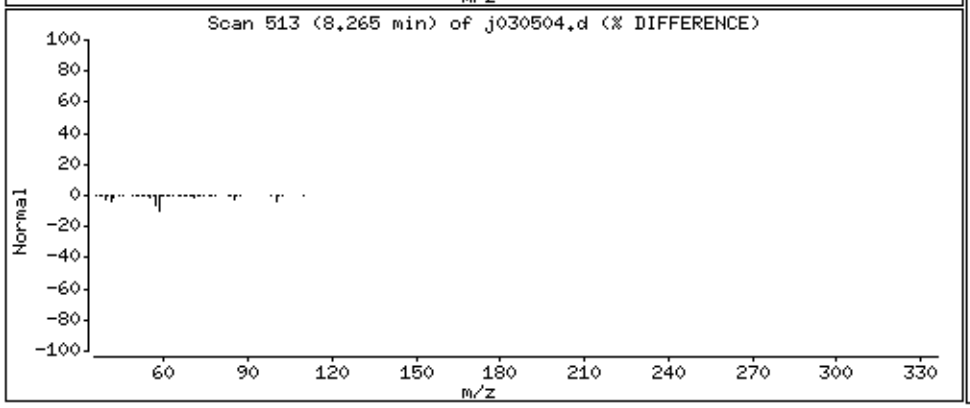
158 2-Hexanone

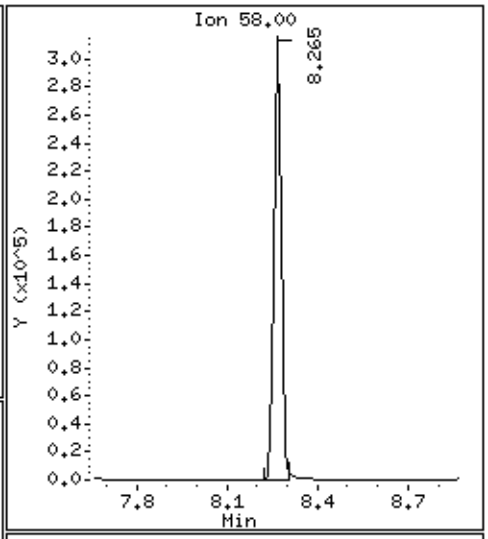
Concentration: 51.268 PPBV

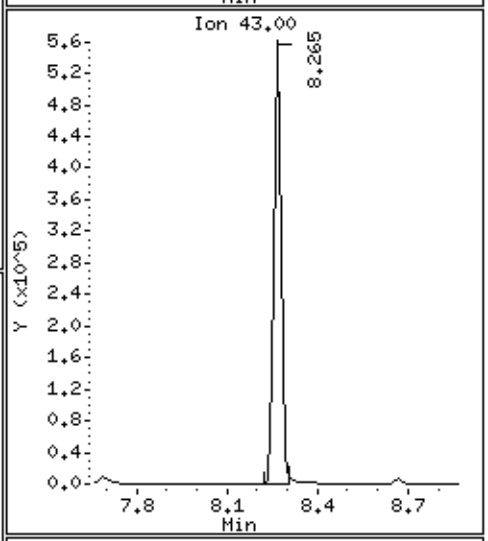


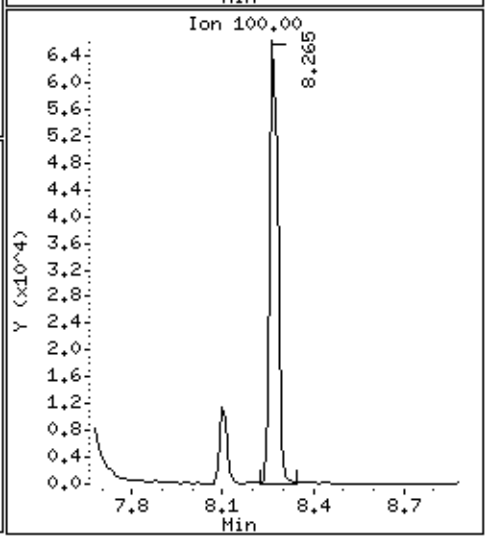












Data File: /chem/msdj.i/05mar15.b/j030504.d

Date : 05-MAR-2015 10:28

Client ID: LCS

Instrument: msdj.i

Sample Info: 50ml #2716-98

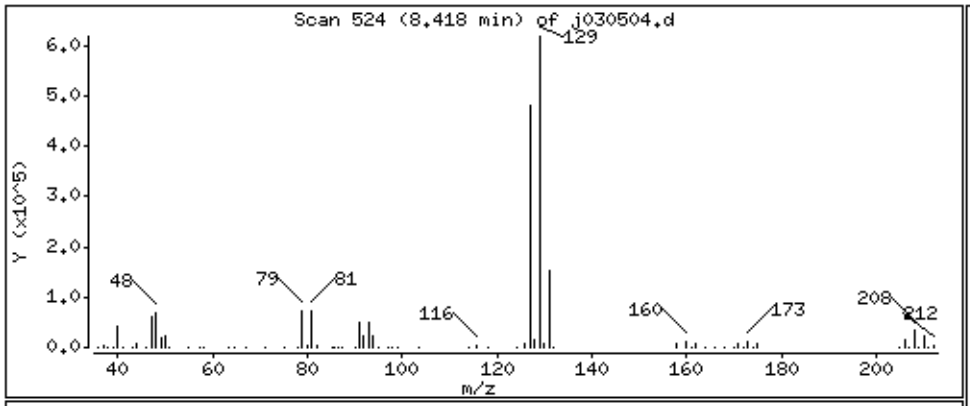
Operator: sg

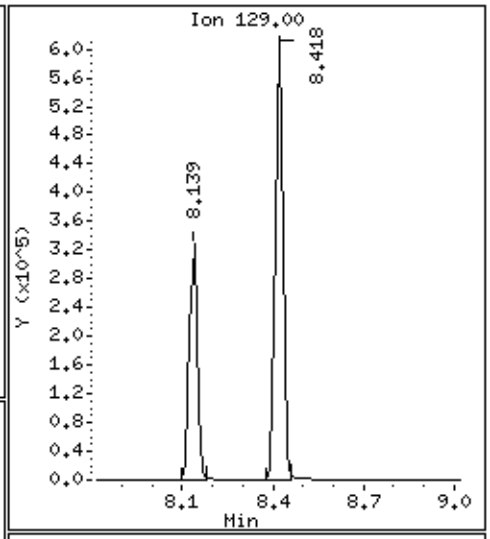
Column phase: RTX-624

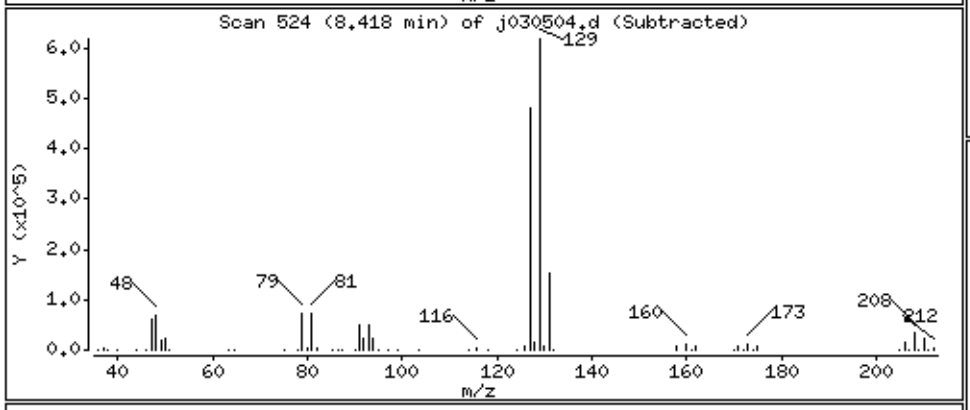
Column diameter: 0.25

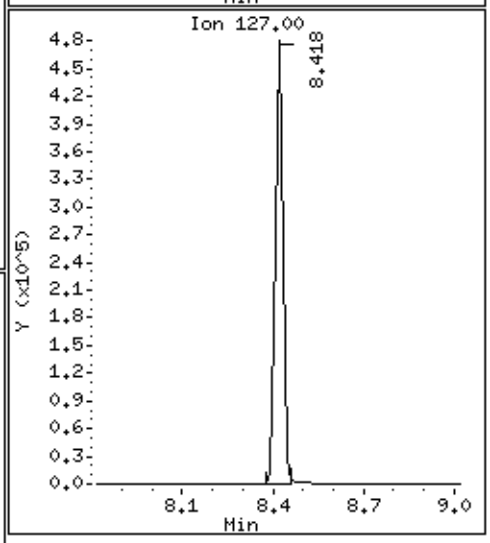
160 Dibromochloromethane

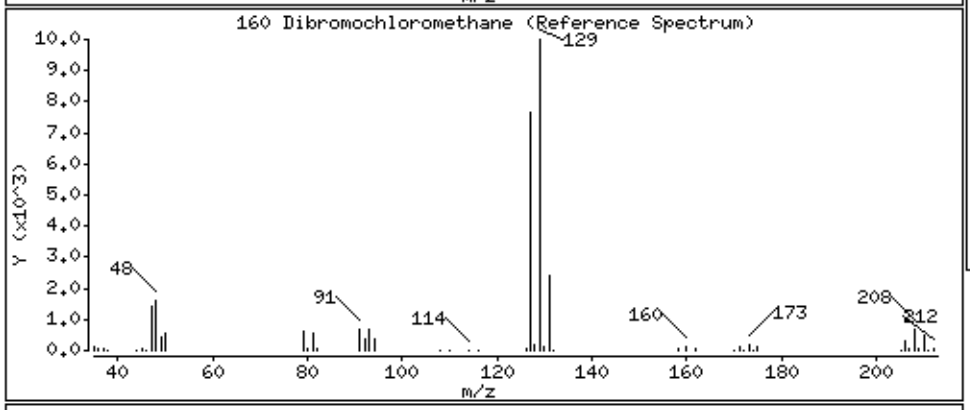
Concentration: 51.807 PPBV

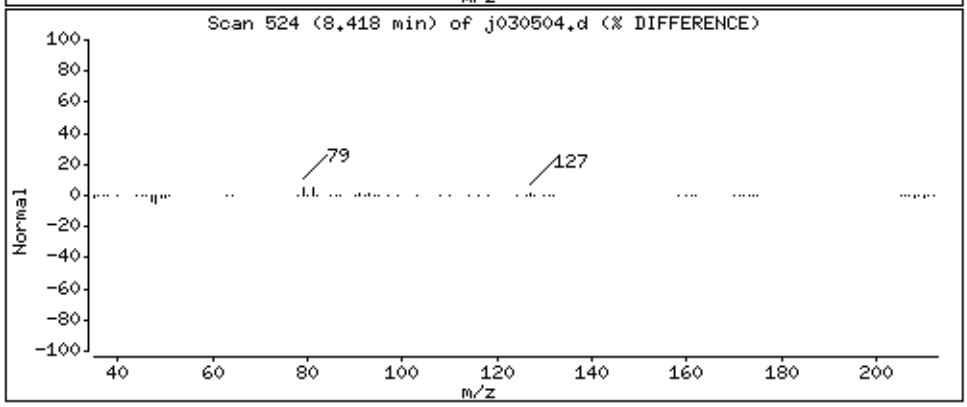












Data File: /chem/msdj.i/05mar15.b/j030504.d

Date : 05-MAR-2015 10:28

Client ID: LCS

Instrument: msdj.i

Sample Info: 50ml #2716-98

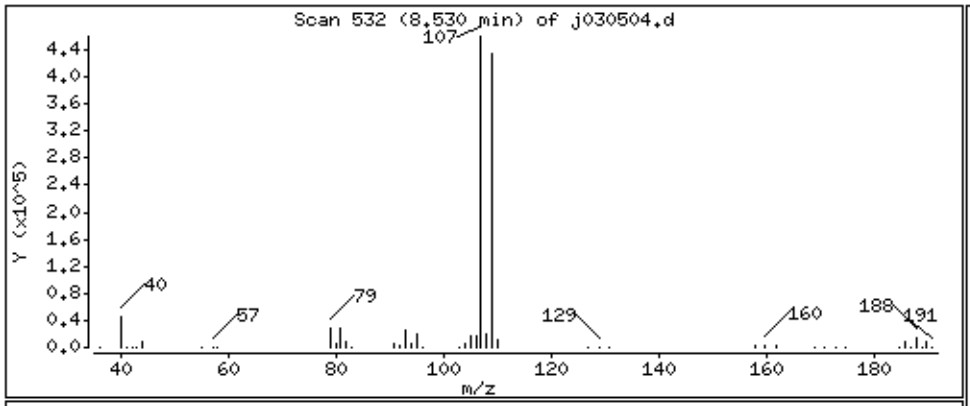
Operator: sg

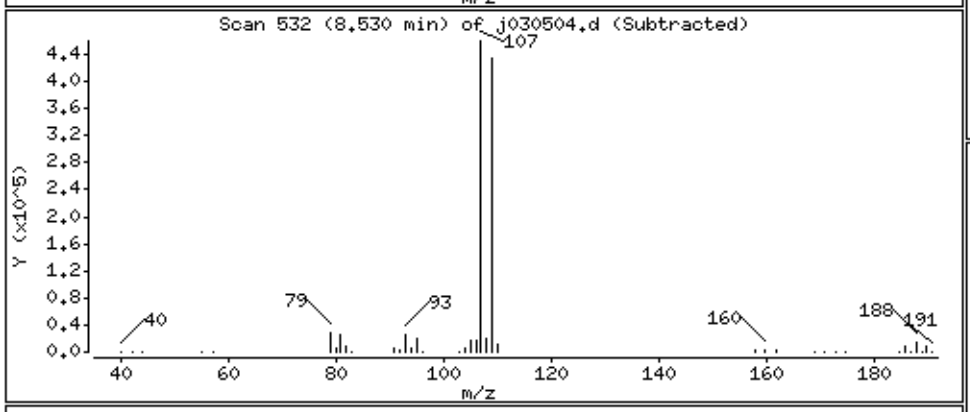
Column phase: RTX-624

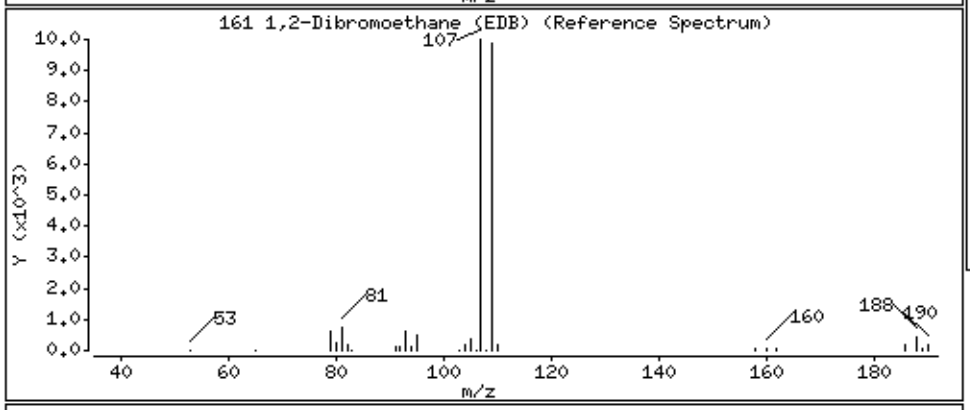
Column diameter: 0.25

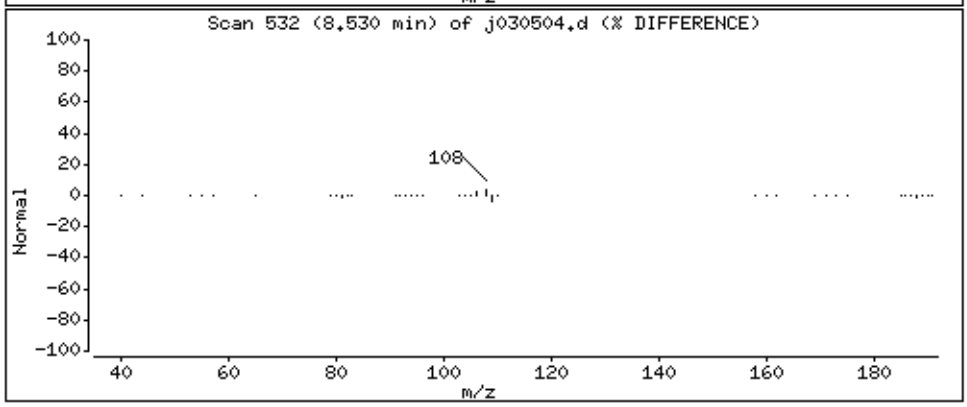
161 1,2-Dibromoethane (EDB)

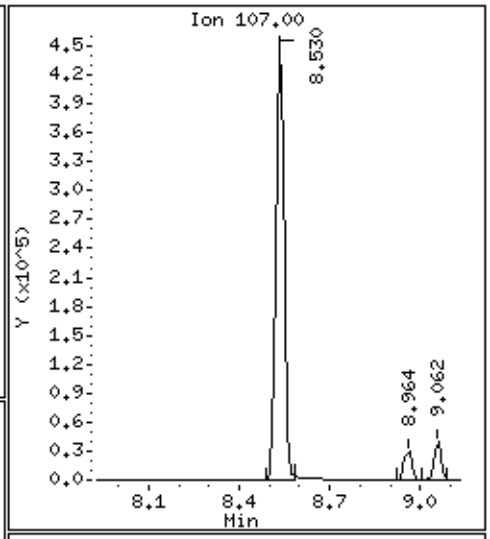
Concentration: 50.284 PPBV

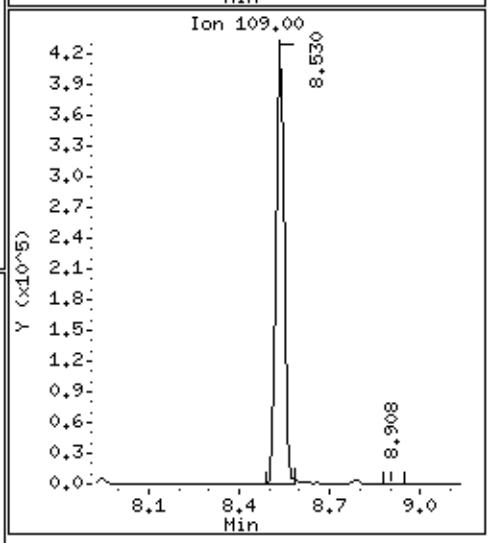












Data File: /chem/msdj.i/05mar15.b/j030504.d

Date : 05-MAR-2015 10:28

Client ID: LCS

Instrument: msdj.i

Sample Info: 50ml #2716-98

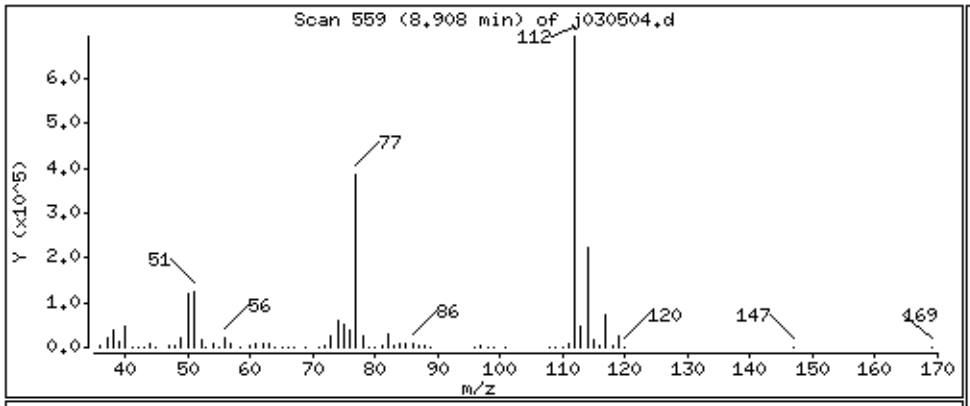
Operator: sg

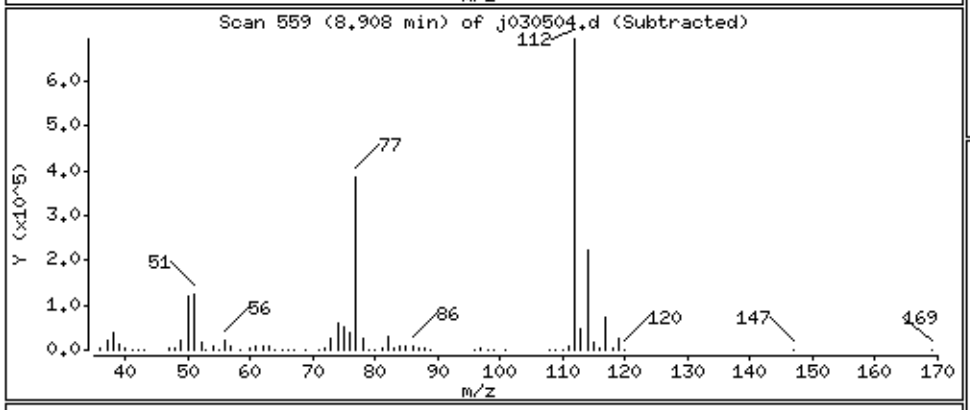
Column phase: RTX-624

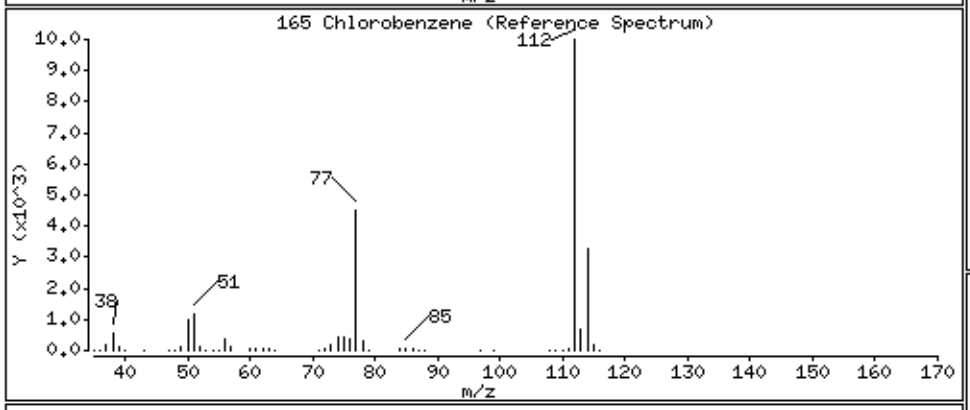
Column diameter: 0.25

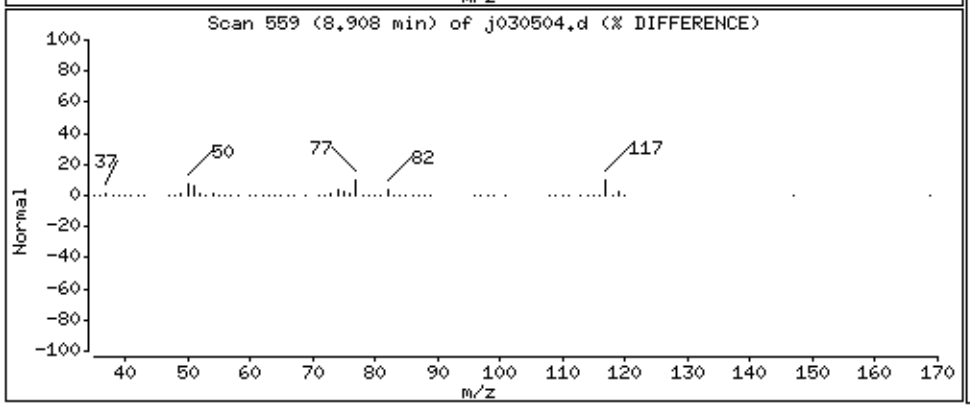
165 Chlorobenzene

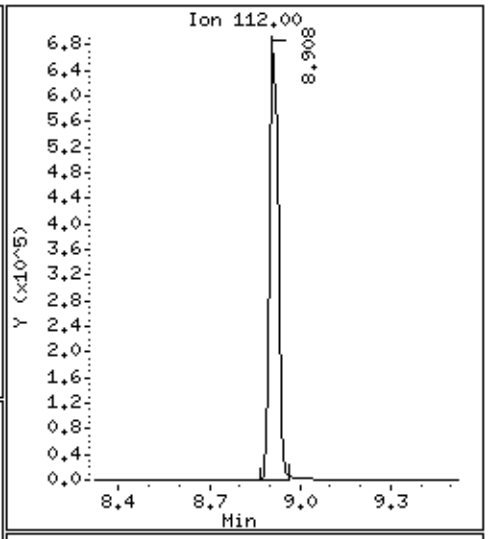
Concentration: 50.010 PPBV

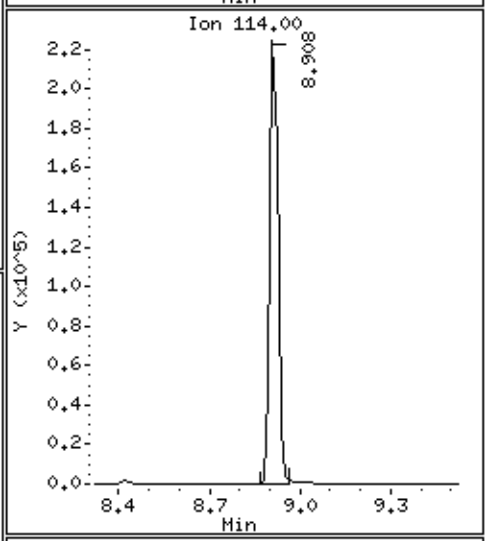


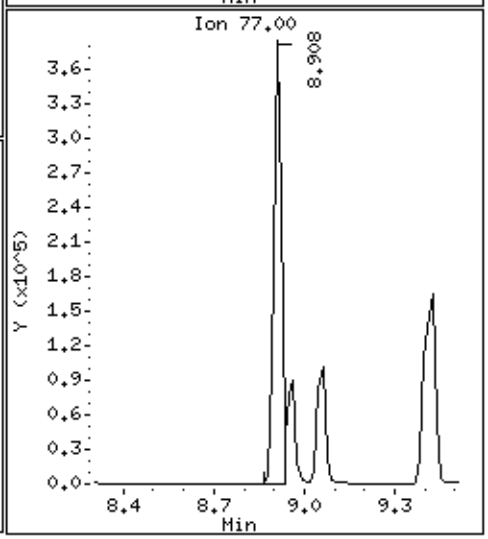












Data File: /chem/msdj.i/05mar15.b/j030504.d

Date : 05-MAR-2015 10:28

Client ID: LCS

Instrument: msdj.i

Sample Info: 50ml #2716-98

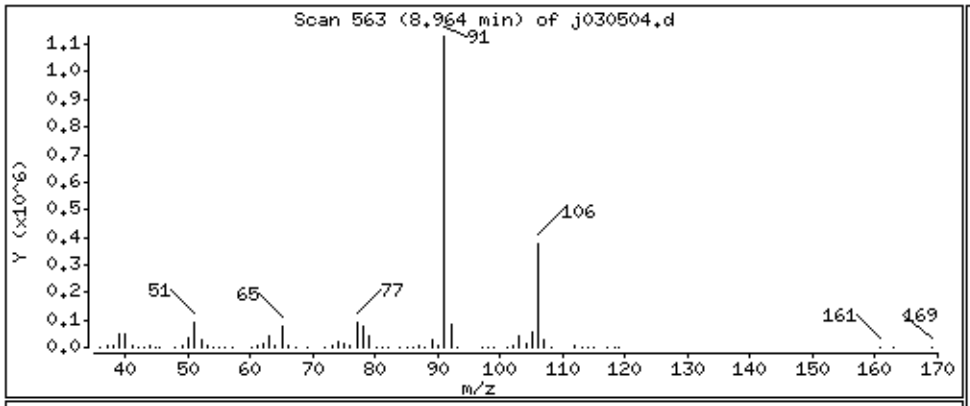
Operator: sg

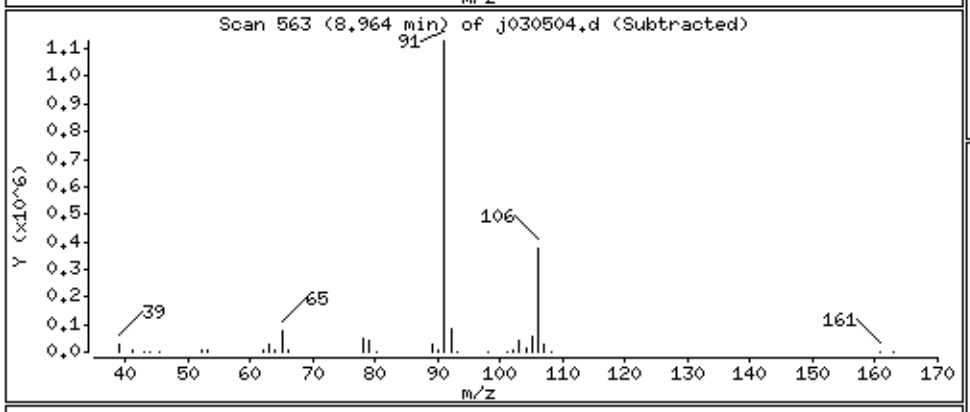
Column phase: RTX-624

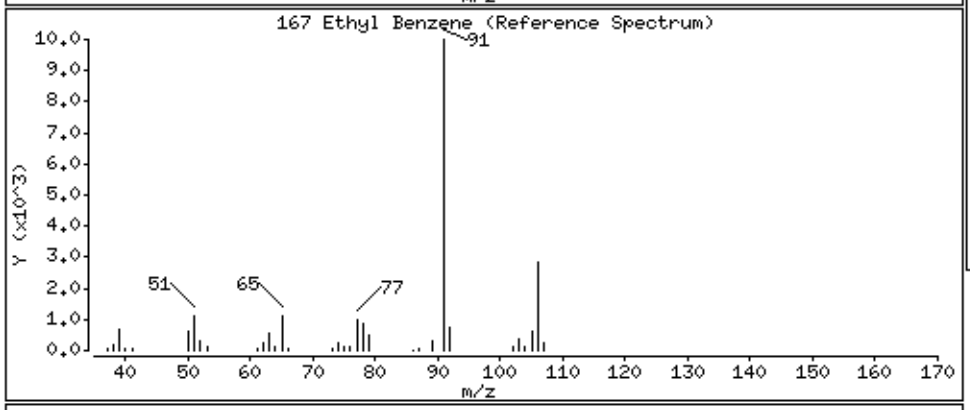
Column diameter: 0.25

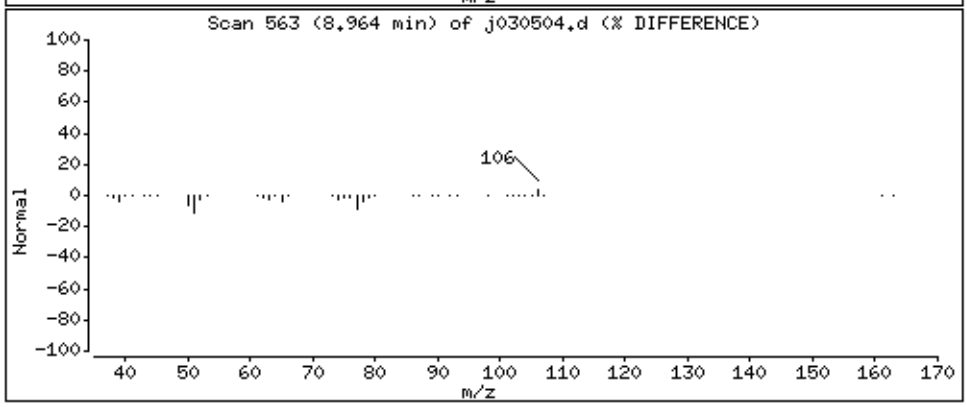
167 Ethyl Benzene

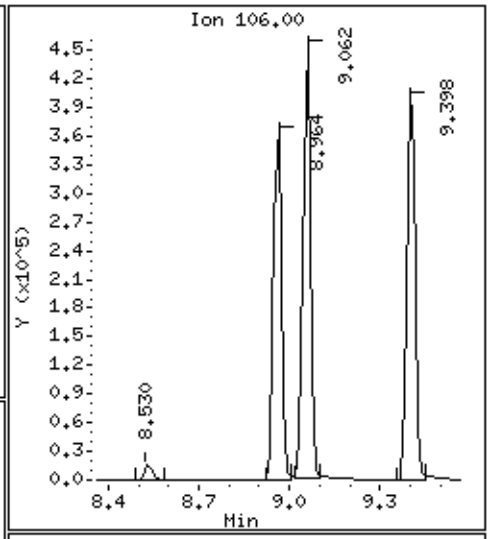
Concentration: 49.918 PPBV

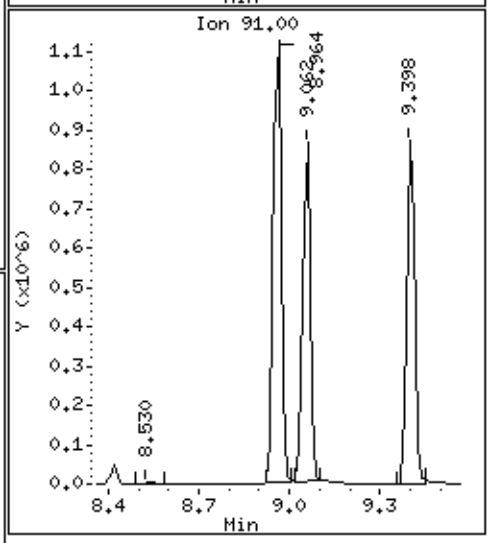












Data File: /chem/msdj.i/05mar15.b/j030504.d

Date : 05-MAR-2015 10:28

Client ID: LCS

Instrument: msdj.i

Sample Info: 50ml #2716-98

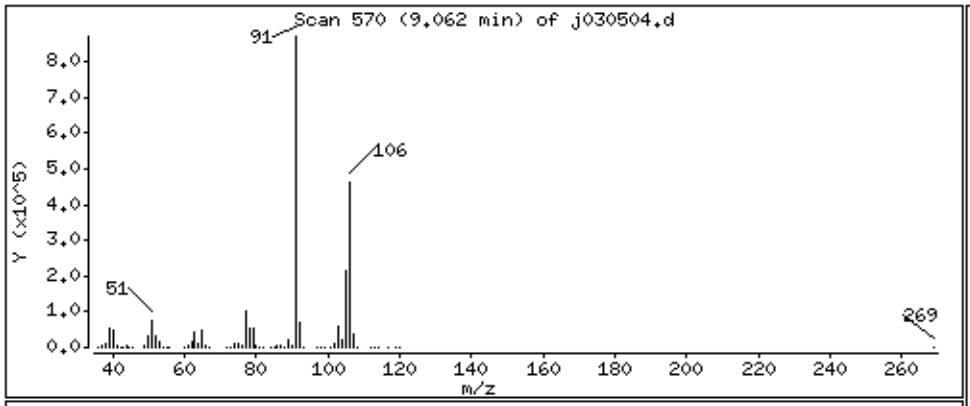
Operator: sg

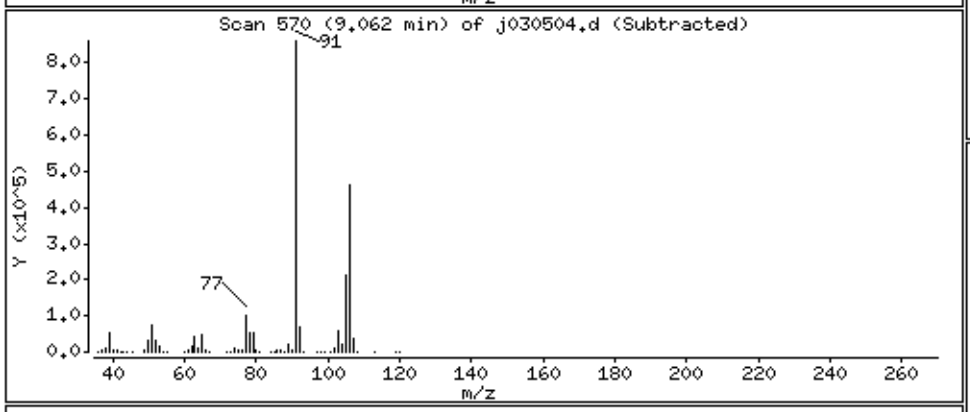
Column phase: RTX-624

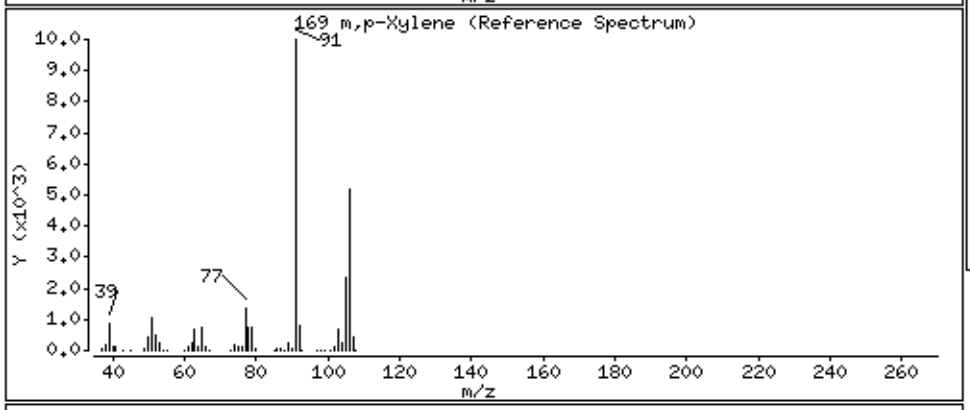
Column diameter: 0.25

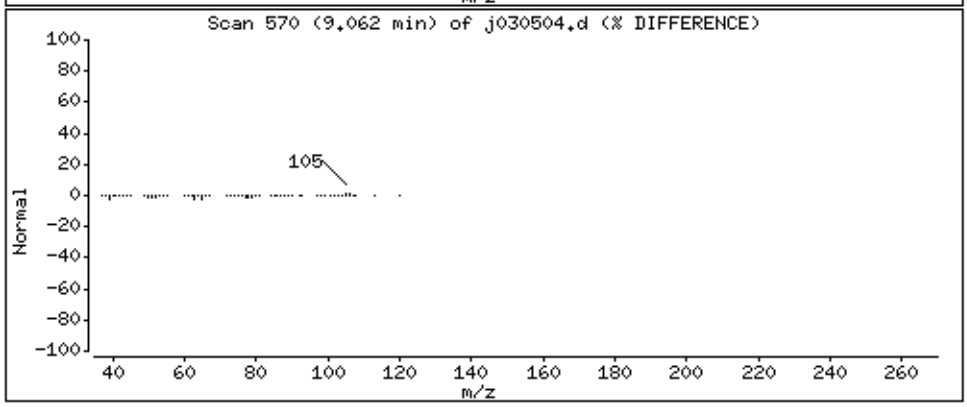
169 m,p-Xylene

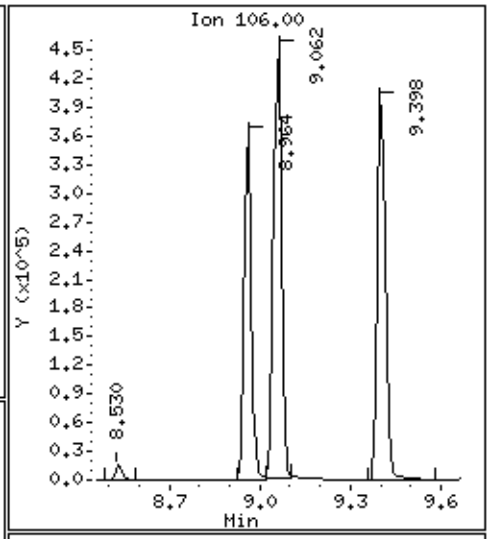
Concentration: 49.592 PPBV

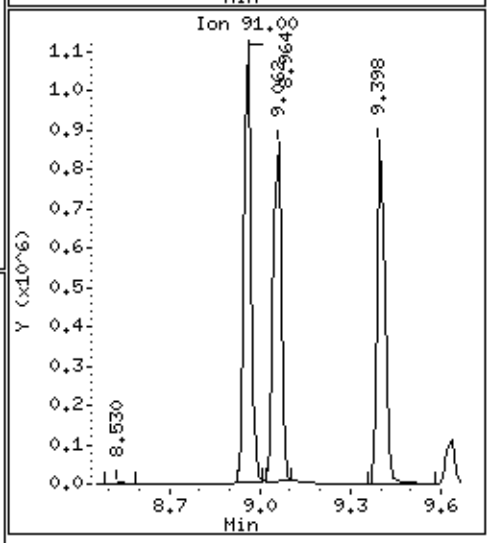












Data File: /chem/msdj.i/05mar15.b/j030504.d

Date : 05-MAR-2015 10:28

Client ID: LCS

Instrument: msdj.i

Sample Info: 50ml #2716-98

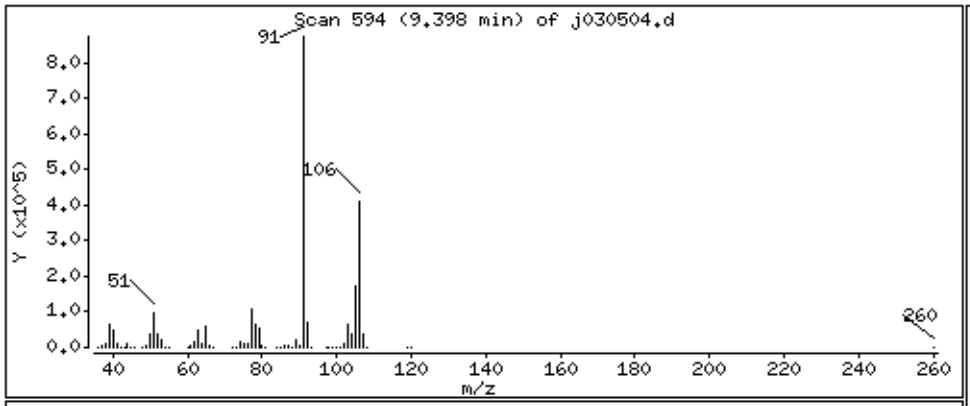
Operator: sg

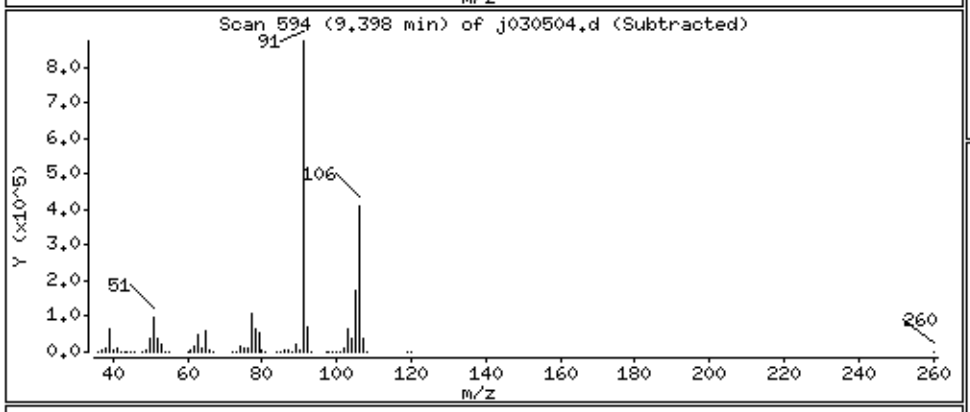
Column phase: RTX-624

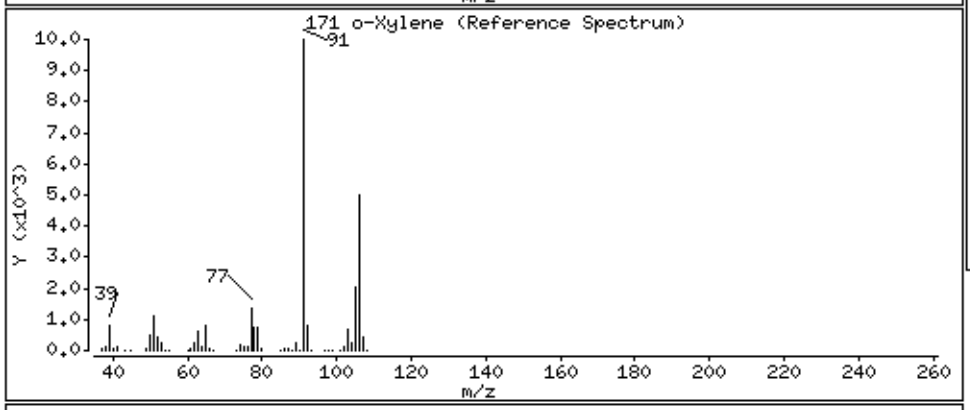
Column diameter: 0.25

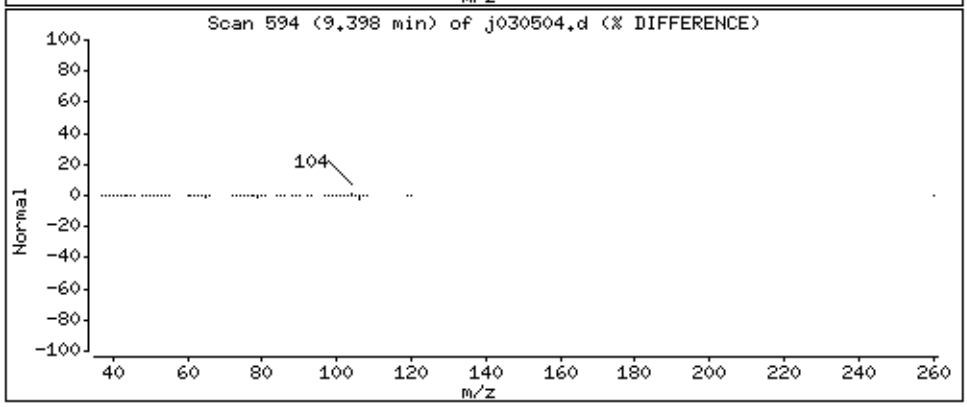
171 o-Xylene

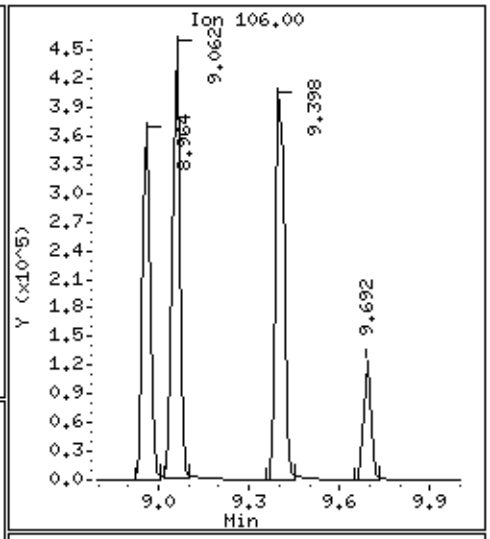
Concentration: 50.562 PPBV

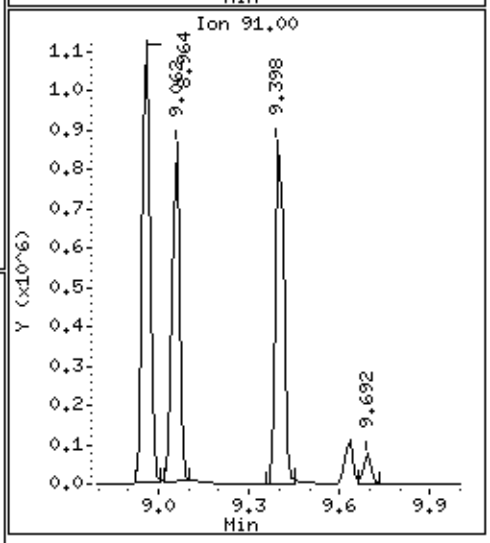












Data File: /chem/msdj.i/05mar15.b/j030504.d

Date : 05-MAR-2015 10:28

Client ID: LCS

Instrument: msdj.i

Sample Info: 50ml #2716-98

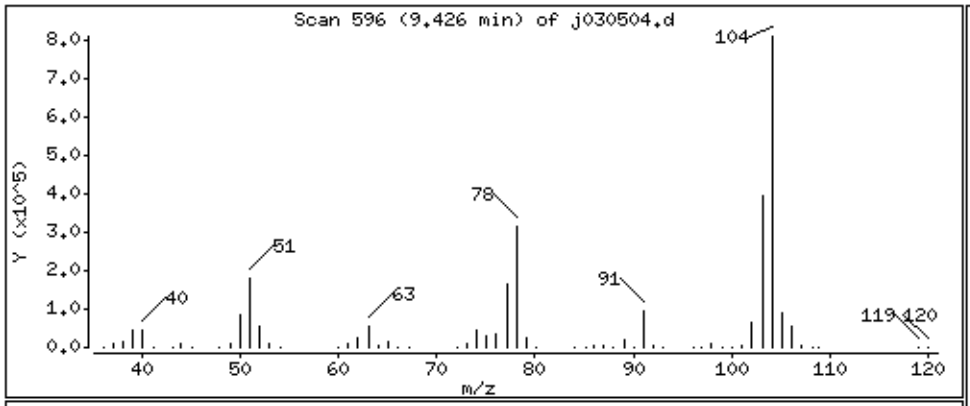
Operator: sg

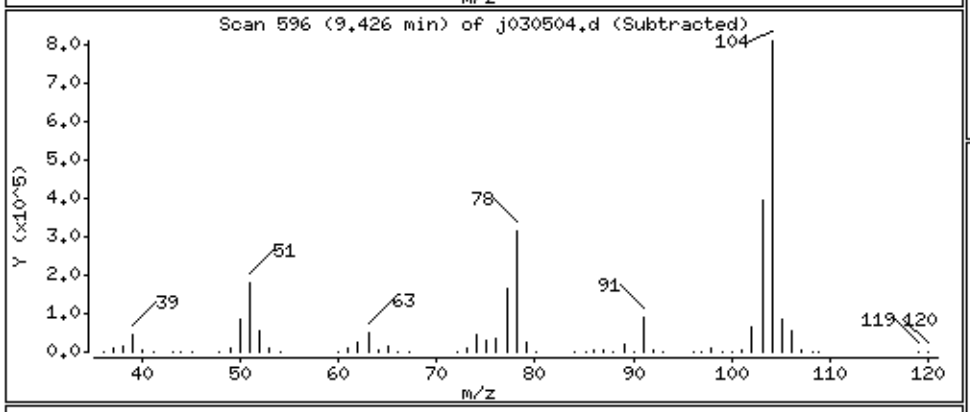
Column phase: RTX-624

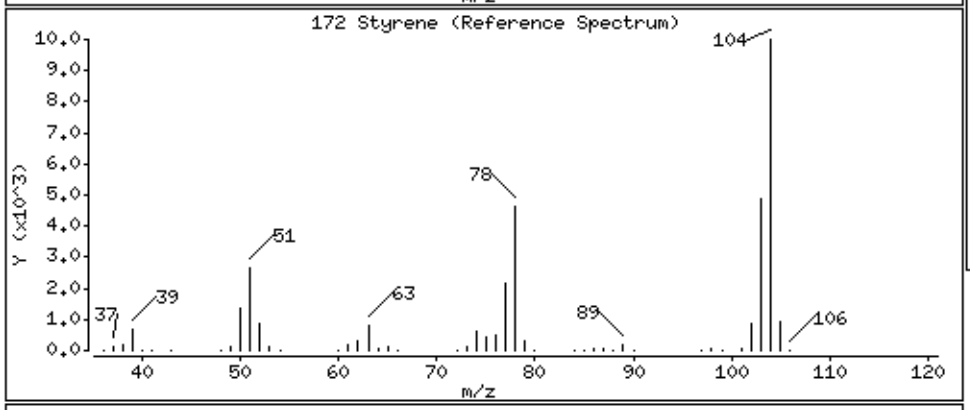
Column diameter: 0.25

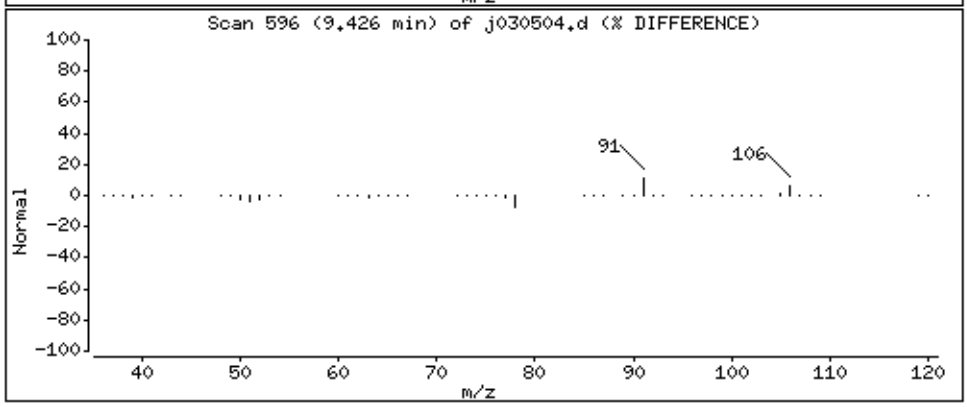
172 Styrene

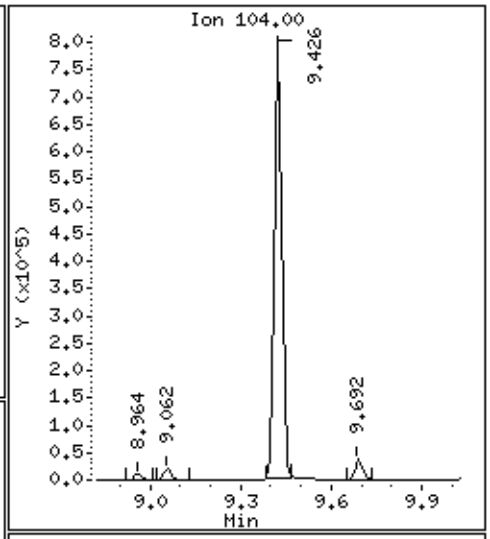
Concentration: 50.473 PPBV

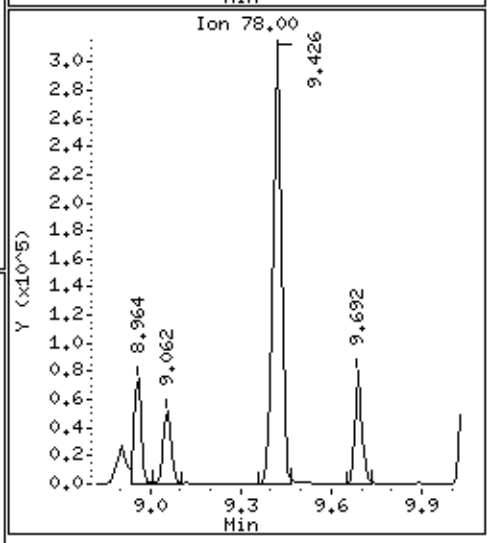












Data File: /chem/msdj.i/05mar15.b/j030504.d

Date : 05-MAR-2015 10:28

Client ID: LCS

Instrument: msdj.i

Sample Info: 50ml #2716-98

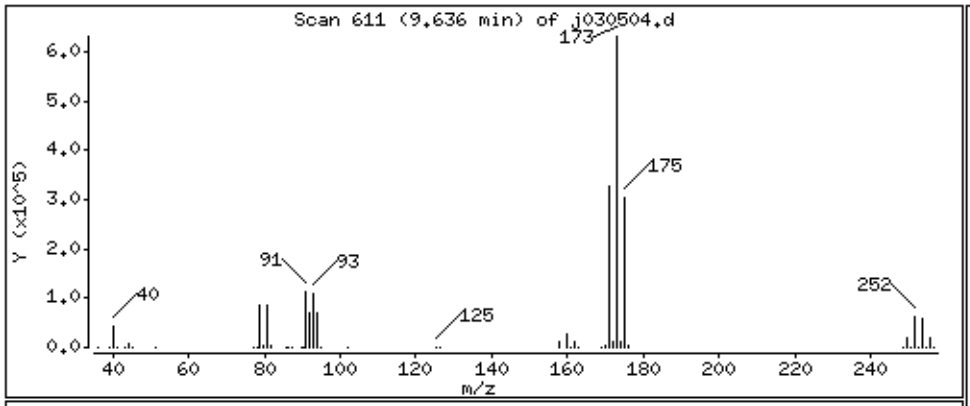
Operator: sg

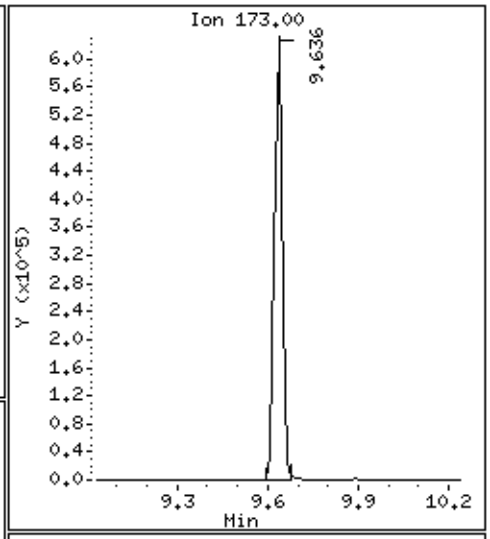
Column phase: RTX-624

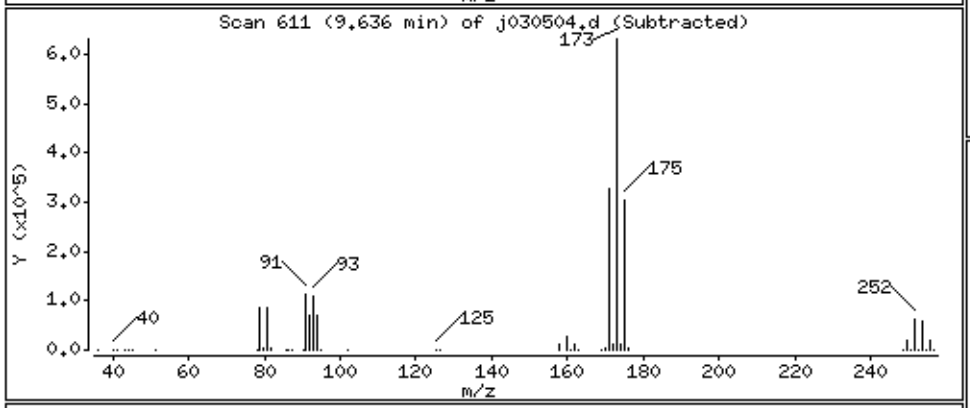
Column diameter: 0.25

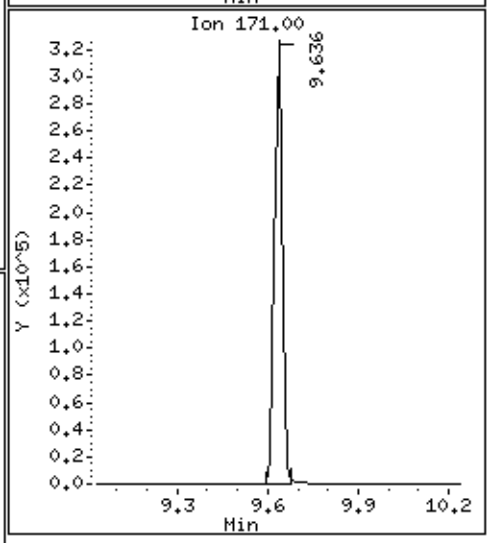
174 Bromoform

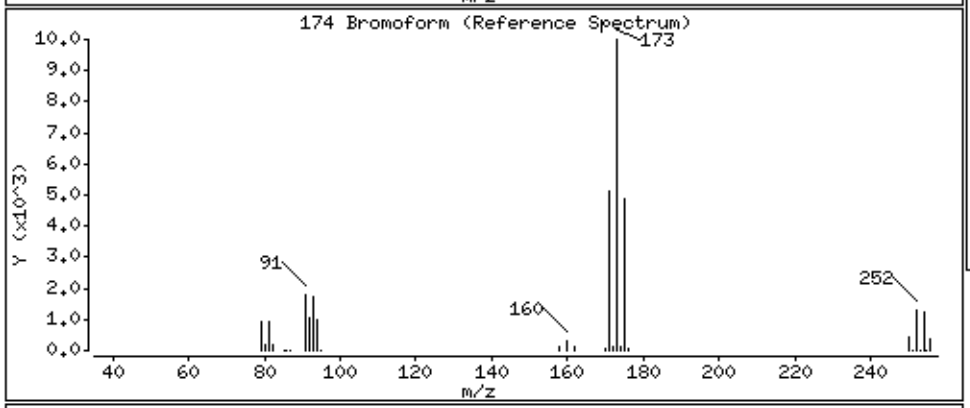
Concentration: 50.305 PPBV

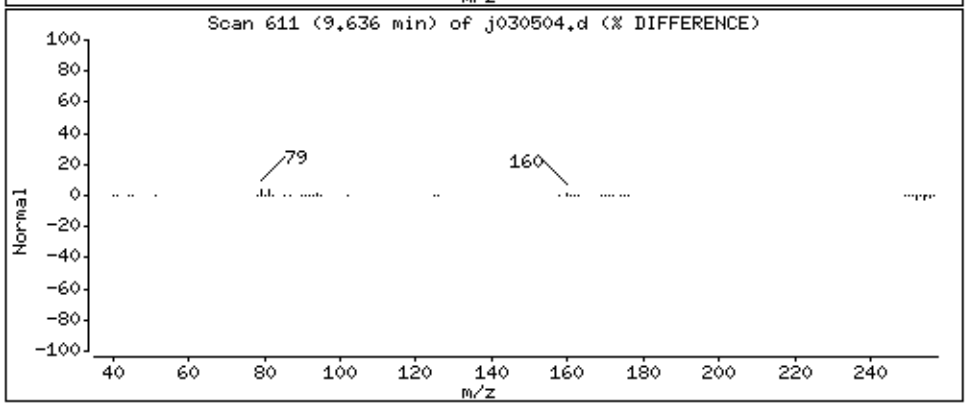












Data File: /chem/msdj.i/05mar15.b/j030504.d

Date : 05-MAR-2015 10:28

Client ID: LCS

Instrument: msdj.i

Sample Info: 50ml #2716-98

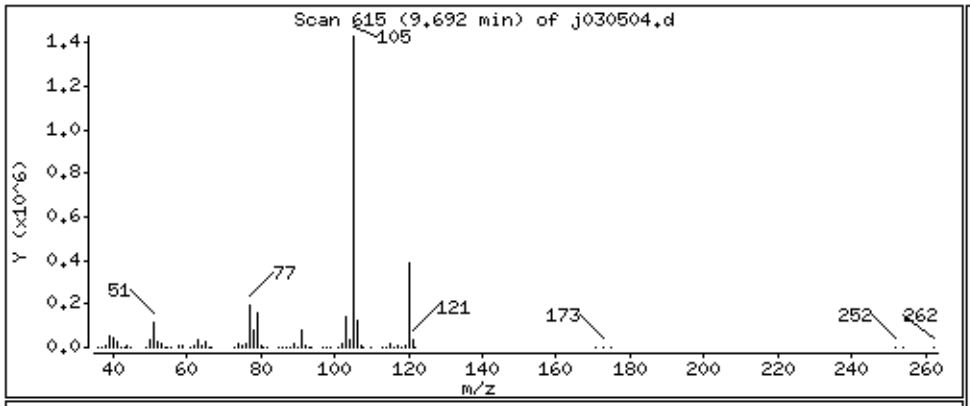
Operator: sg

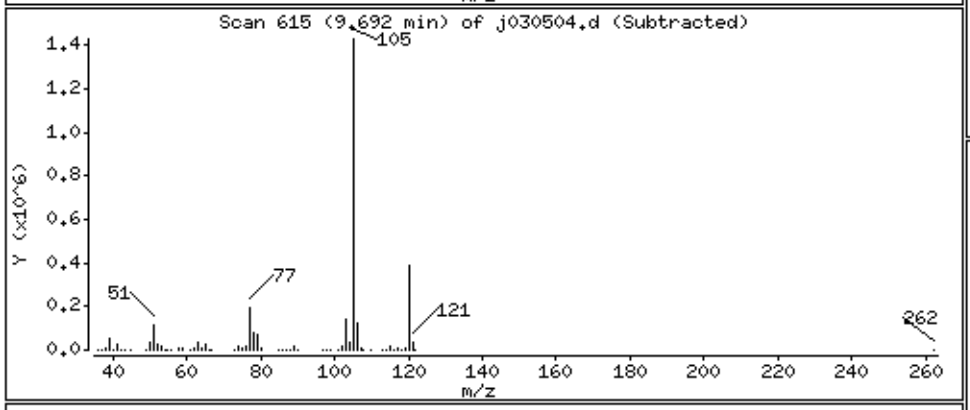
Column phase: RTX-624

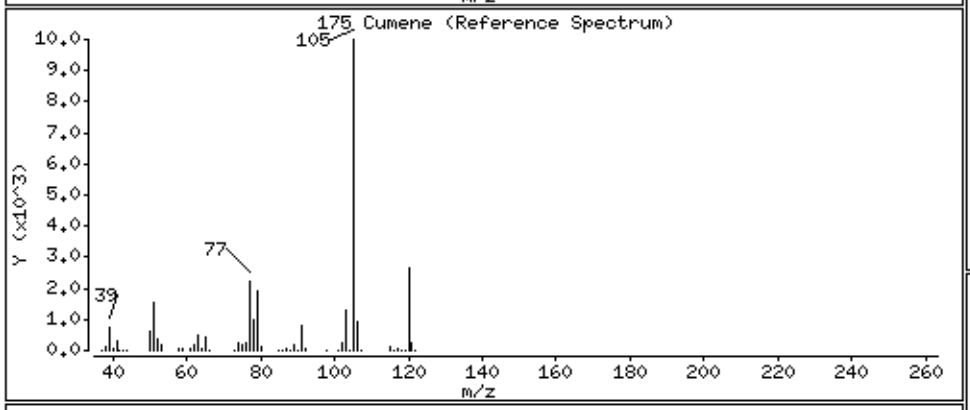
Column diameter: 0.25

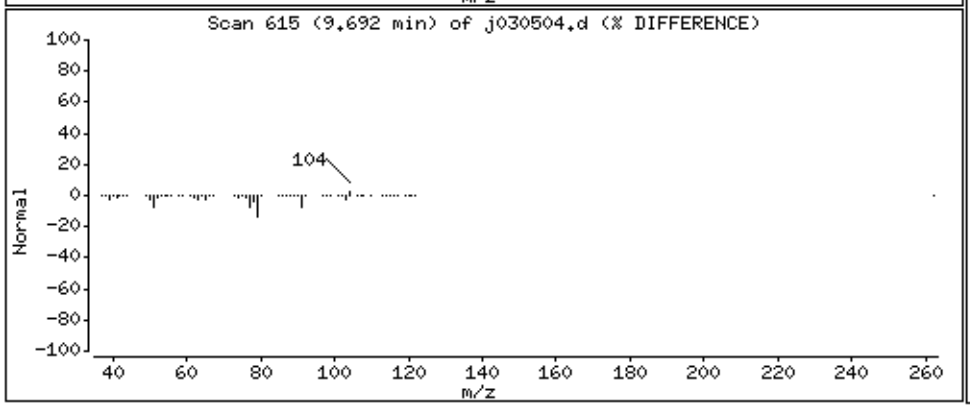
175 Cumene

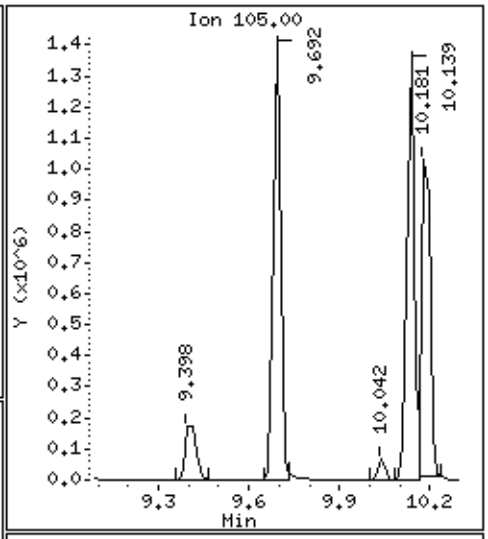
Concentration: 49.023 PPBV

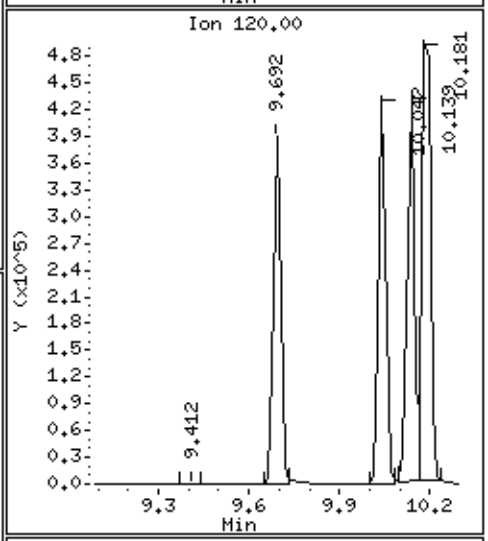


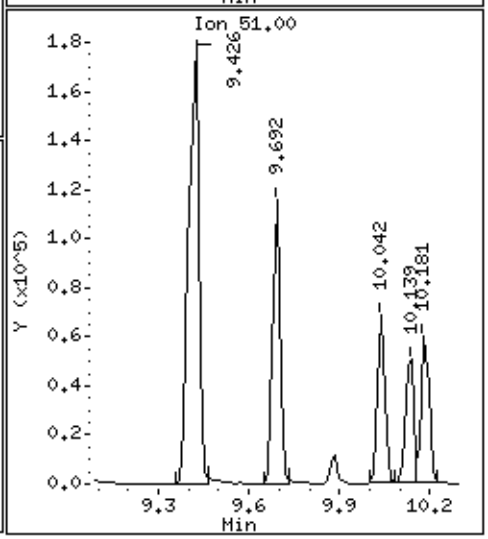












Data File: /chem/msdj.i/05mar15.b/j030504.d

Date : 05-MAR-2015 10:28

Client ID: LCS

Instrument: msdj.i

Sample Info: 50ml #2716-98

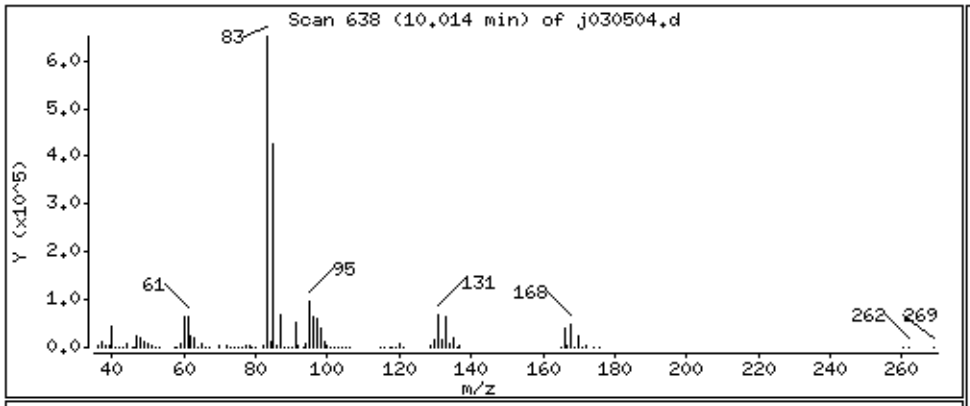
Operator: sg

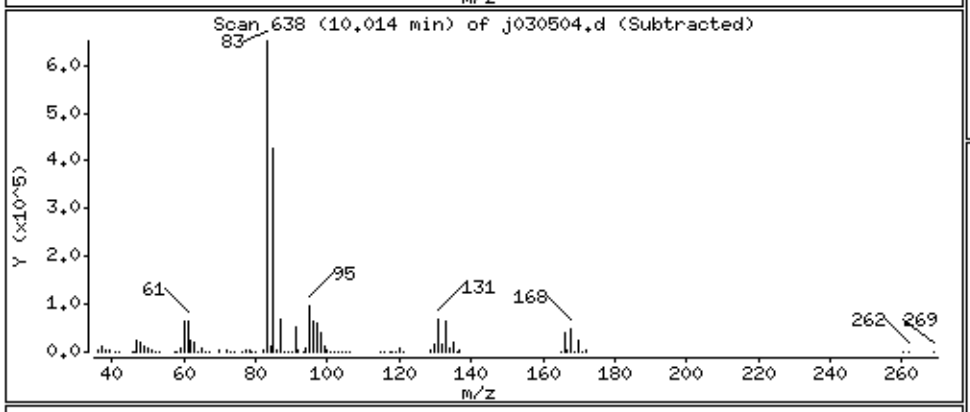
Column phase: RTX-624

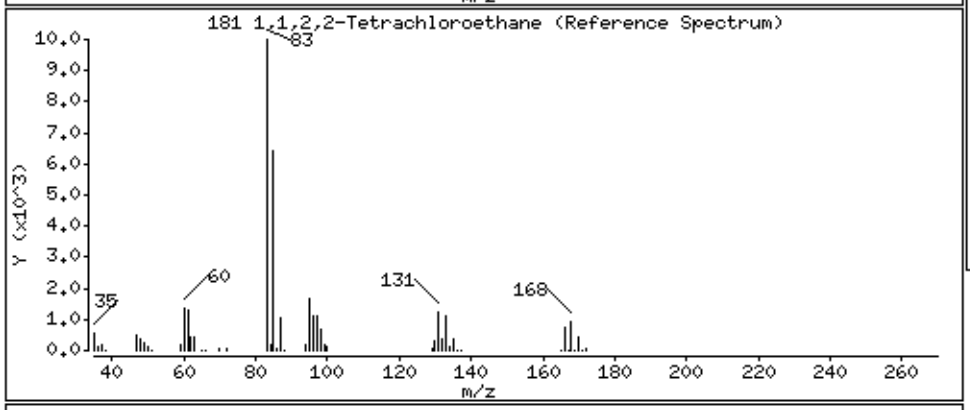
Column diameter: 0.25

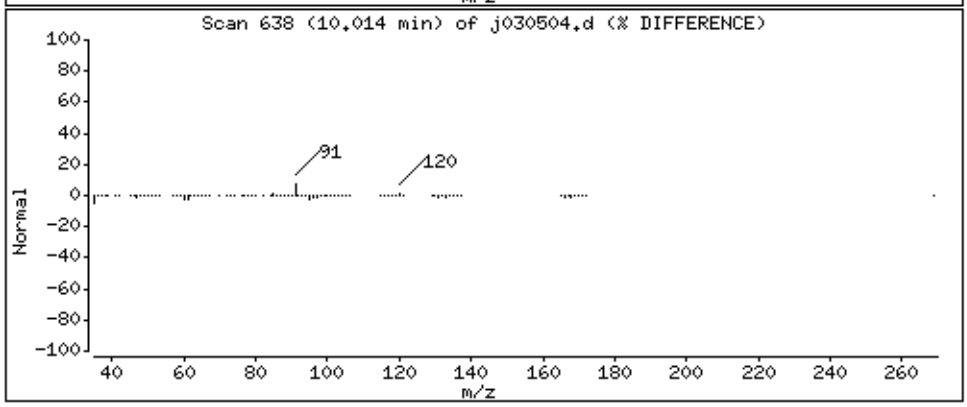
181 1,1,2,2-Tetrachloroethane

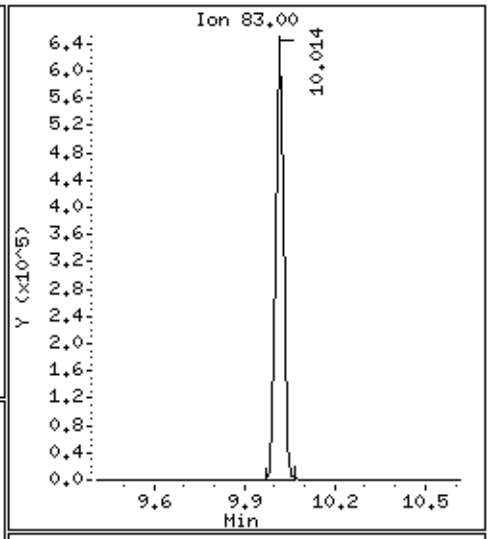
Concentration: 55.585 PPBV

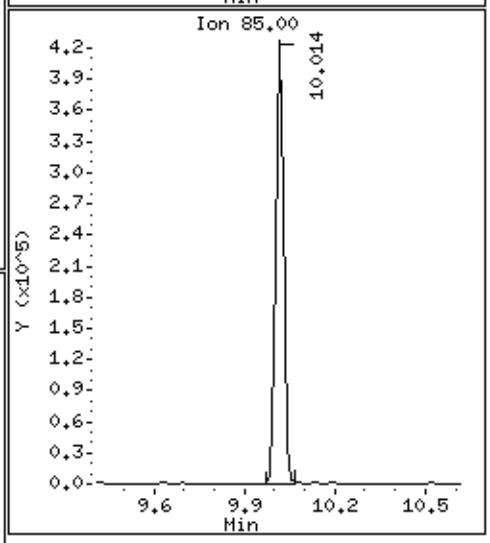












Data File: /chem/msdj.i/05mar15.b/j030504.d

Date : 05-MAR-2015 10:28

Client ID: LCS

Instrument: msdj.i

Sample Info: 50ml #2716-98

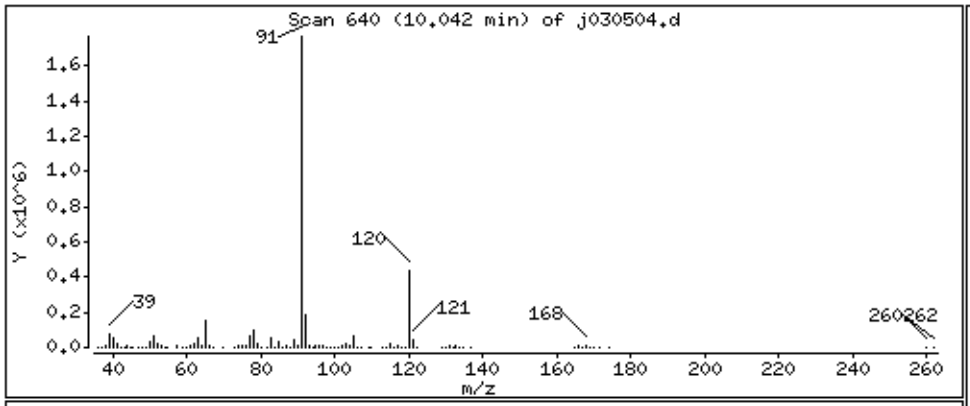
Operator: sg

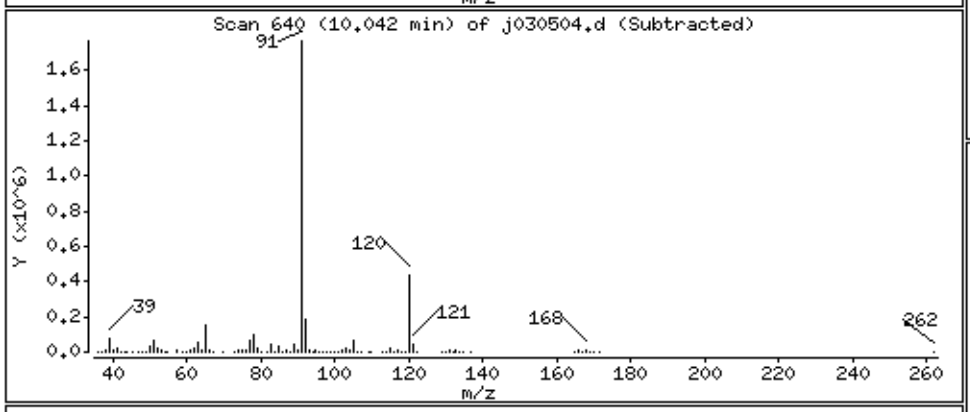
Column phase: RTX-624

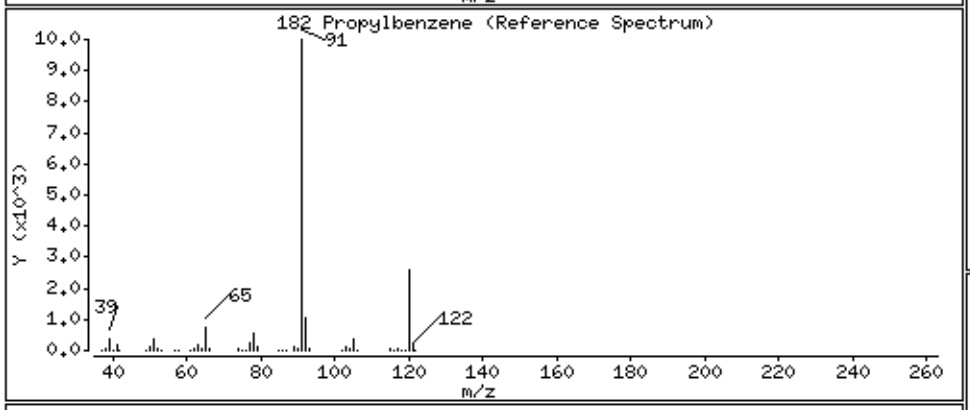
Column diameter: 0.25

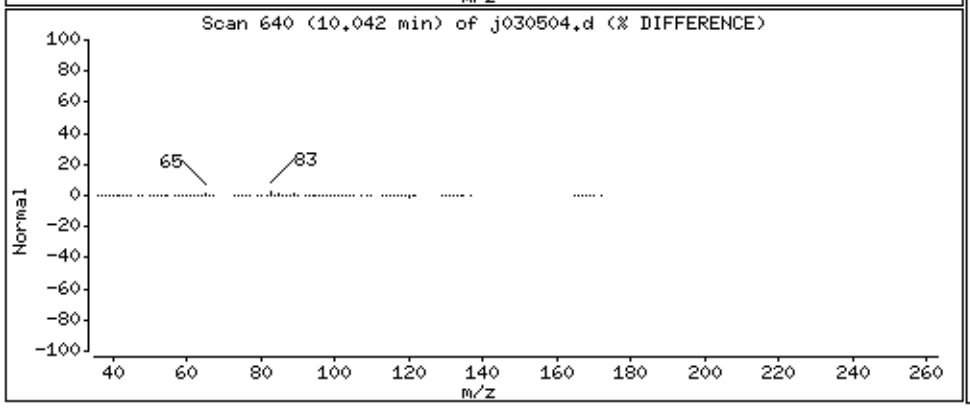
182 Propylbenzene

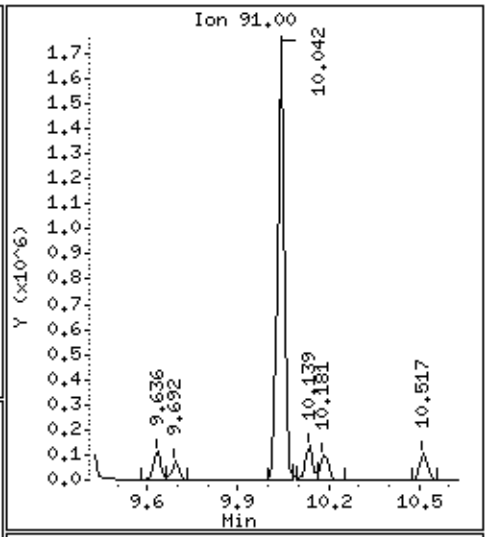
Concentration: 49.845 PPBV

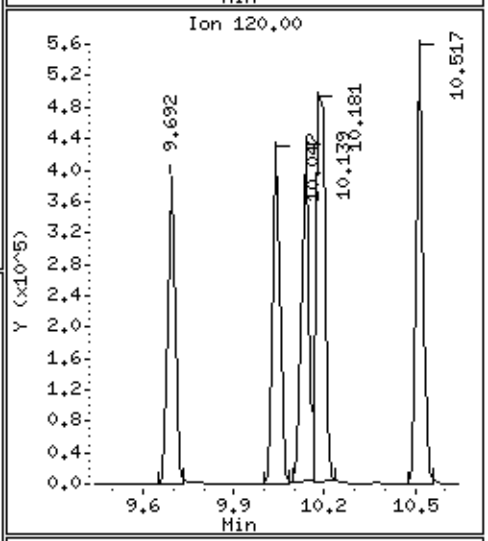


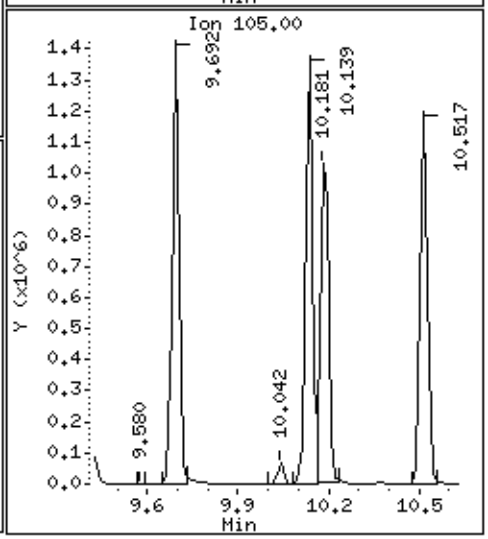












Data File: /chem/msdj.i/05mar15.b/j030504.d

Date : 05-MAR-2015 10:28

Client ID: LCS

Instrument: msdj.i

Sample Info: 50ml #2716-98

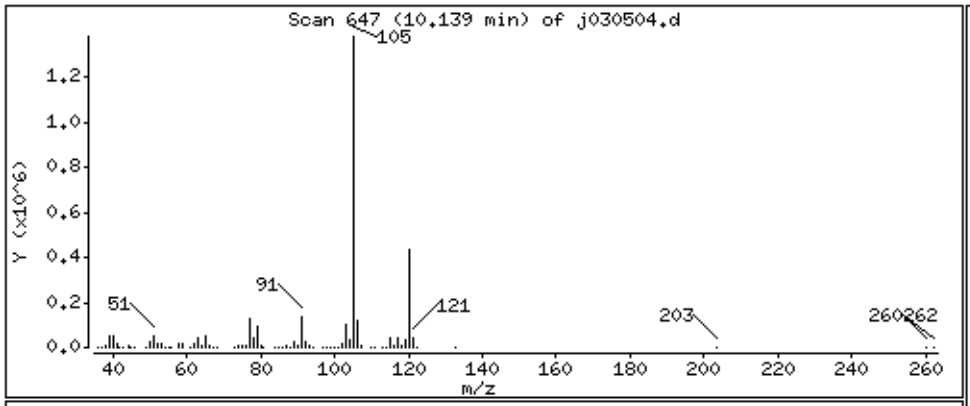
Operator: sg

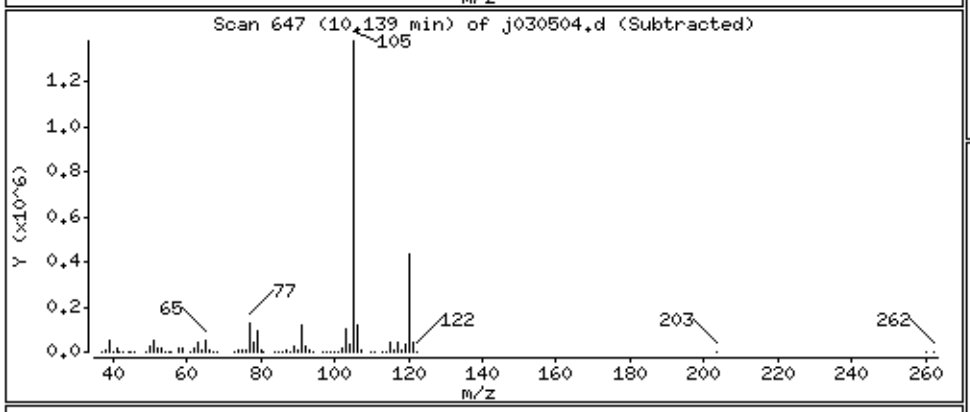
Column phase: RTX-624

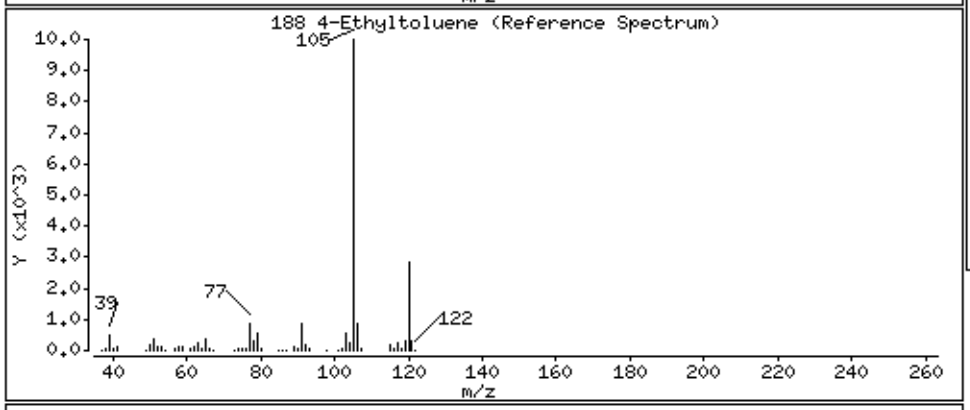
Column diameter: 0.25

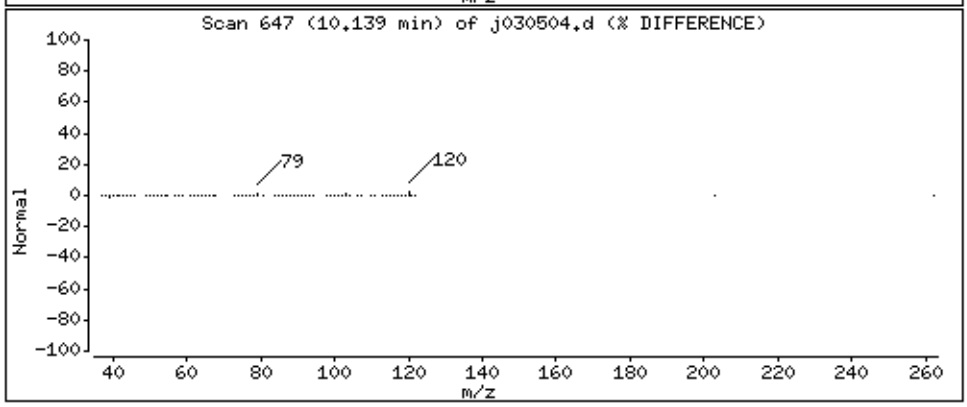
188 4-Ethyltoluene

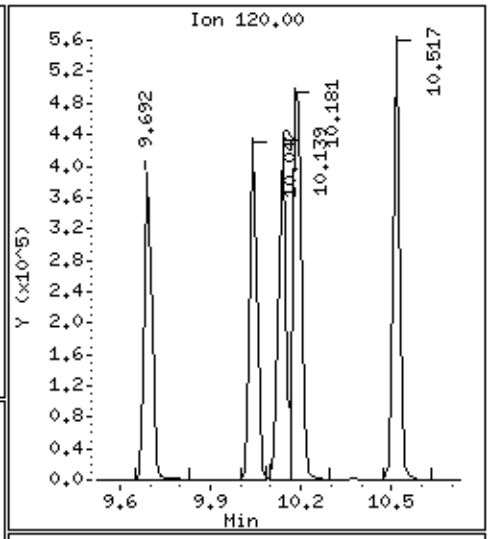
Concentration: 52.780 PPBV

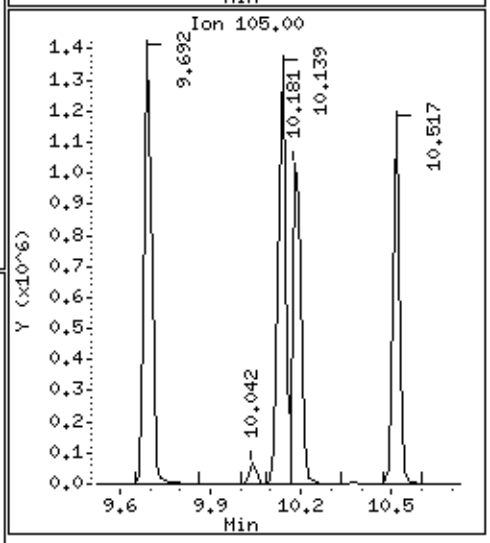












Data File: /chem/msdj.i/05mar15.b/j030504.d

Date : 05-MAR-2015 10:28

Client ID: LCS

Instrument: msdj.i

Sample Info: 50ml #2716-98

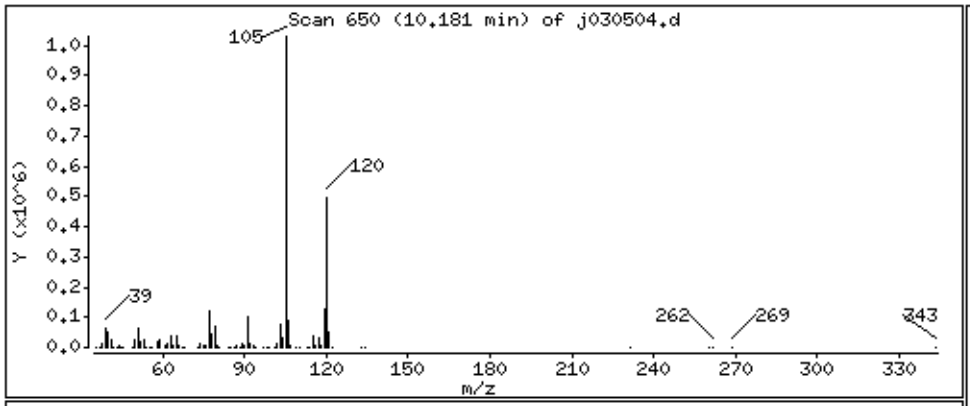
Operator: sg

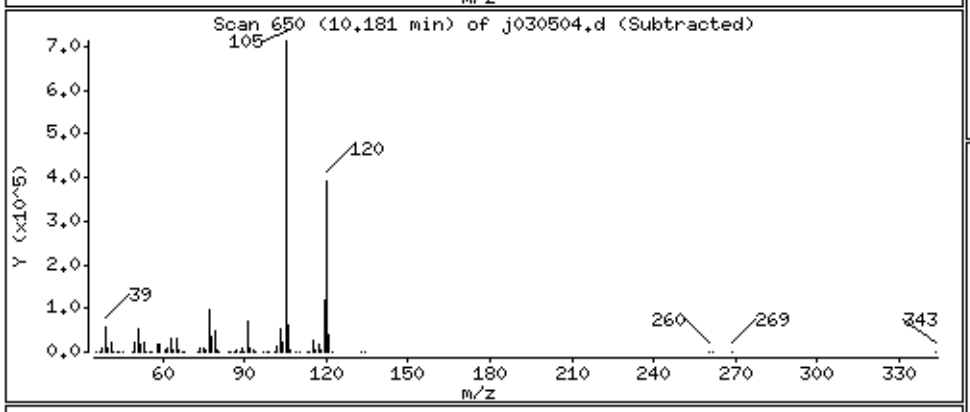
Column phase: RTX-624

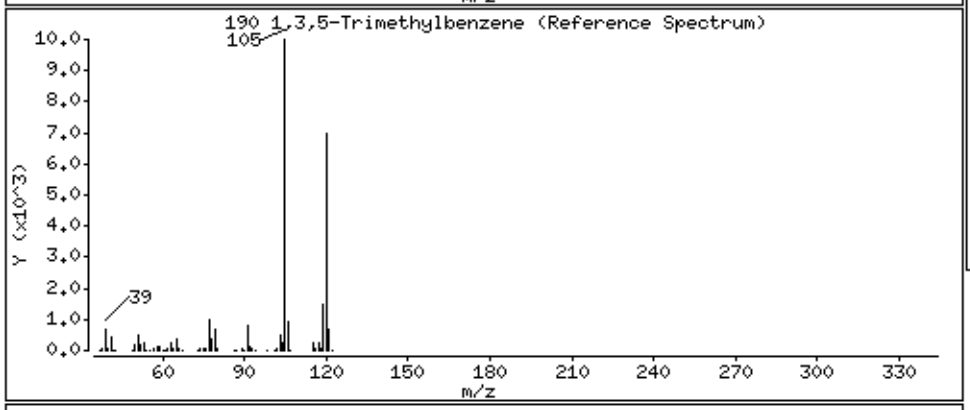
Column diameter: 0.25

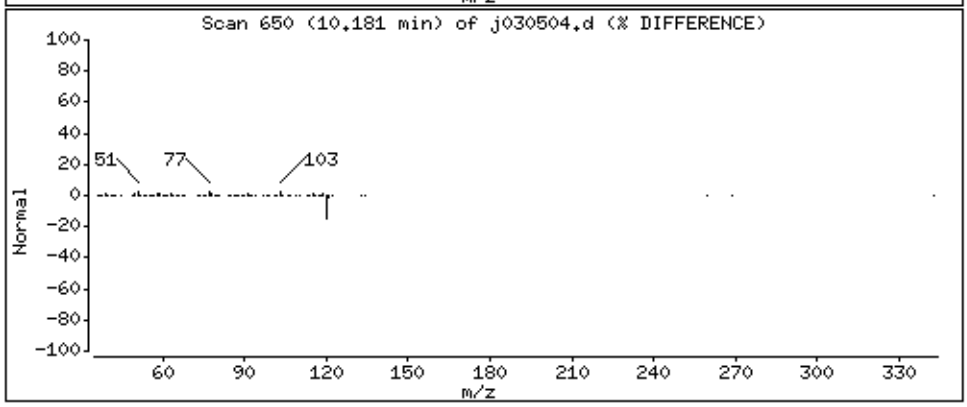
190 1,3,5-Trimethylbenzene

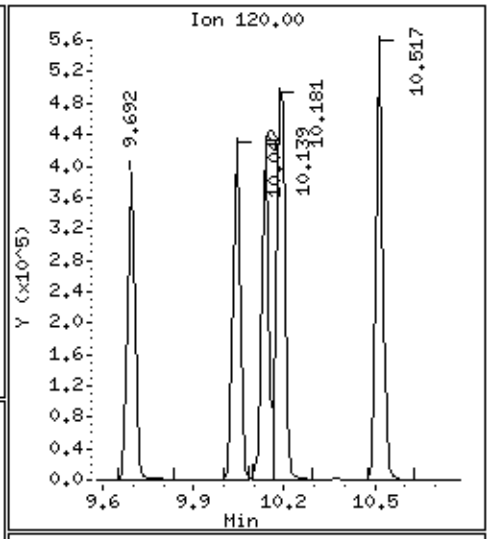
Concentration: 48.113 PPBV

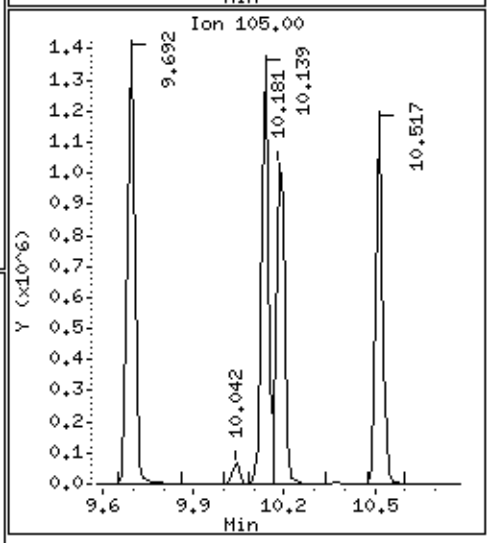












Data File: /chem/msdj.i/05mar15.b/j030504.d

Date : 05-MAR-2015 10:28

Client ID: LCS

Instrument: msdj.i

Sample Info: 50ml #2716-98

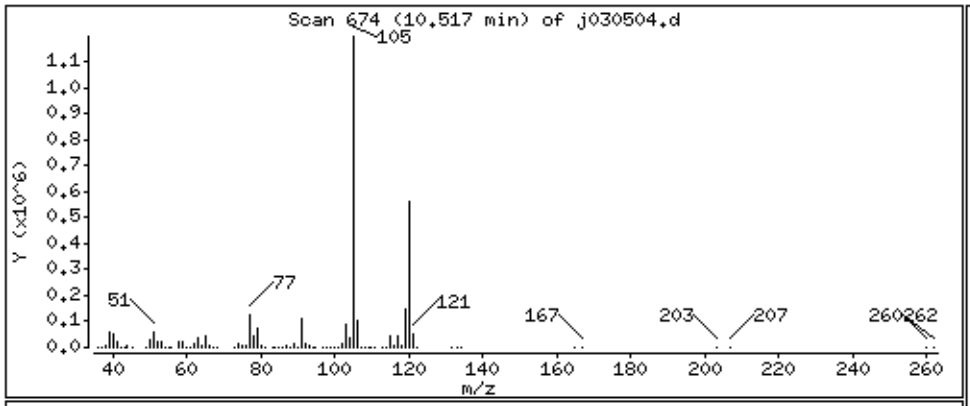
Operator: sg

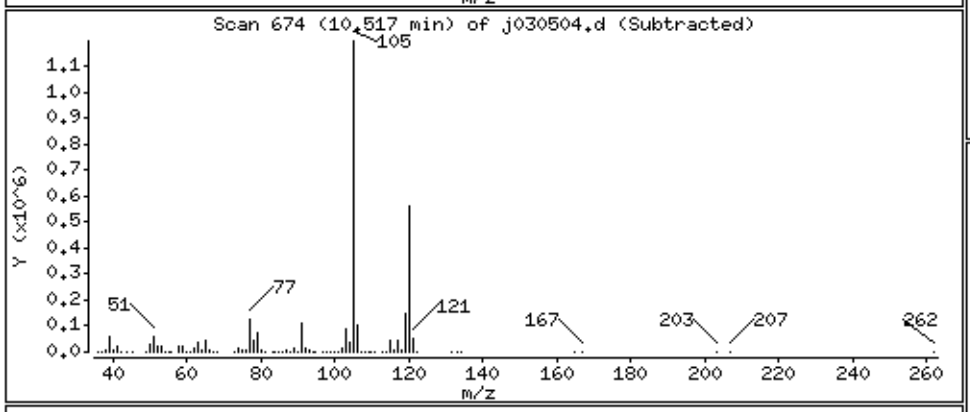
Column phase: RTX-624

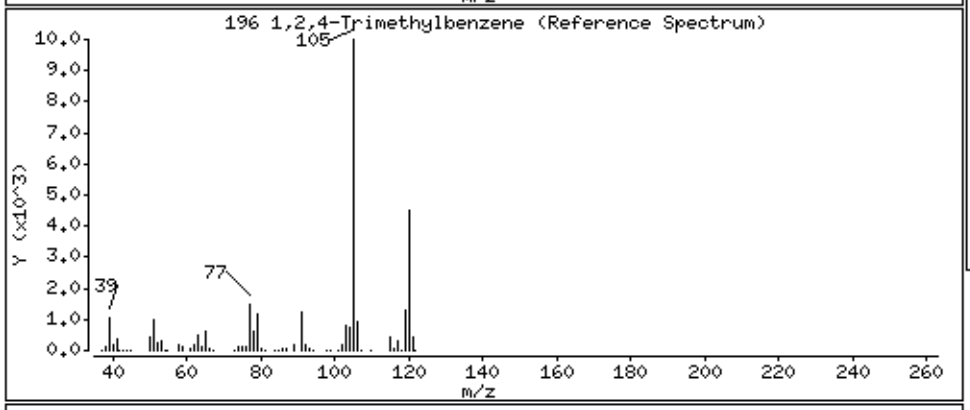
Column diameter: 0.25

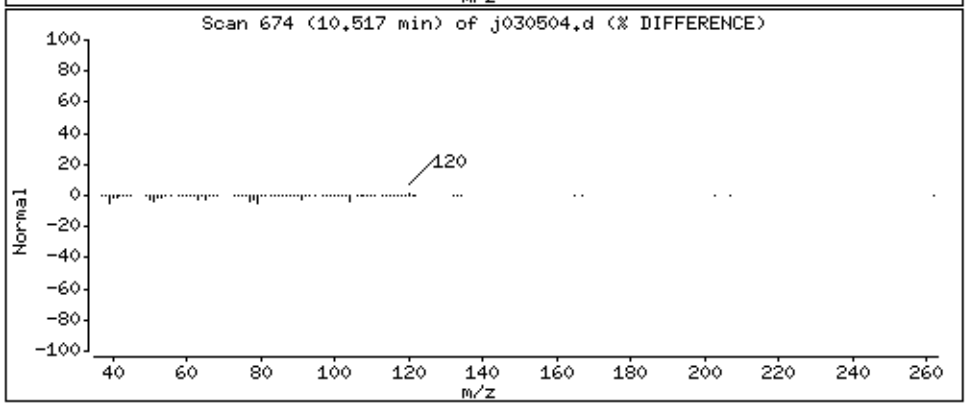
196 1,2,4-Trimethylbenzene

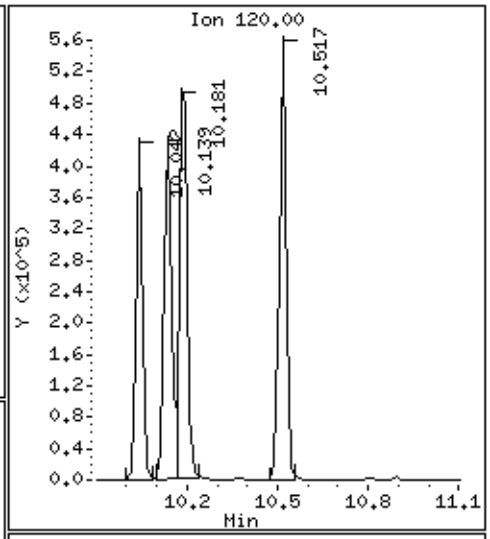
Concentration: 49.375 PPBV

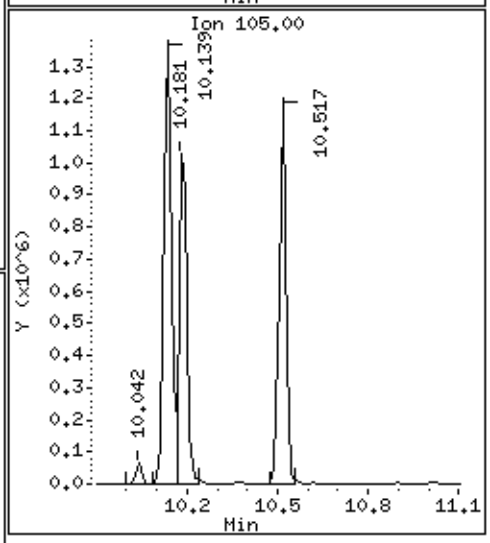












Data File: /chem/msdj.i/05mar15.b/j030504.d

Date : 05-MAR-2015 10:28

Client ID: LCS

Instrument: msdj.i

Sample Info: 50ml #2716-98

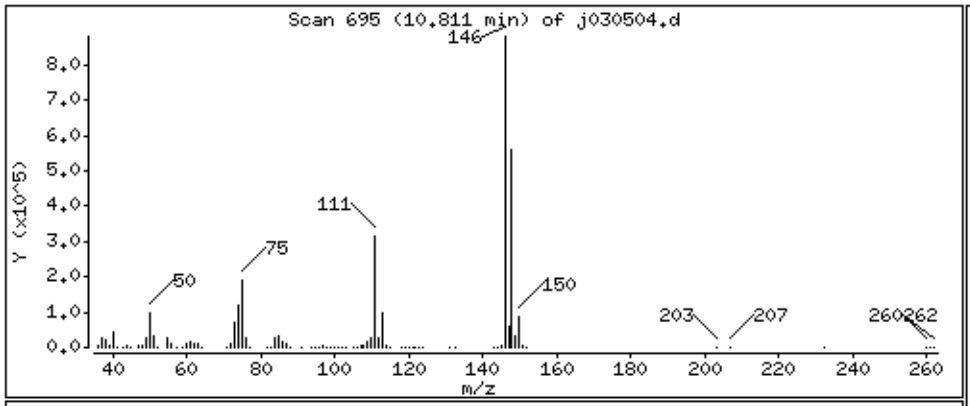
Operator: sg

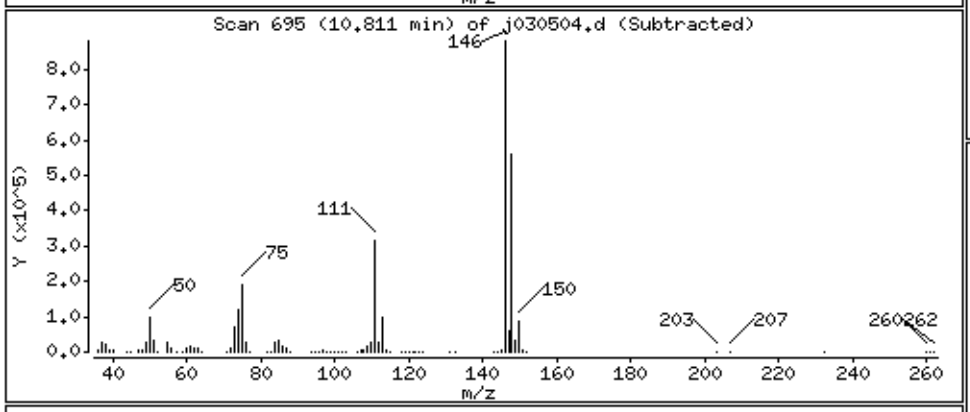
Column phase: RTX-624

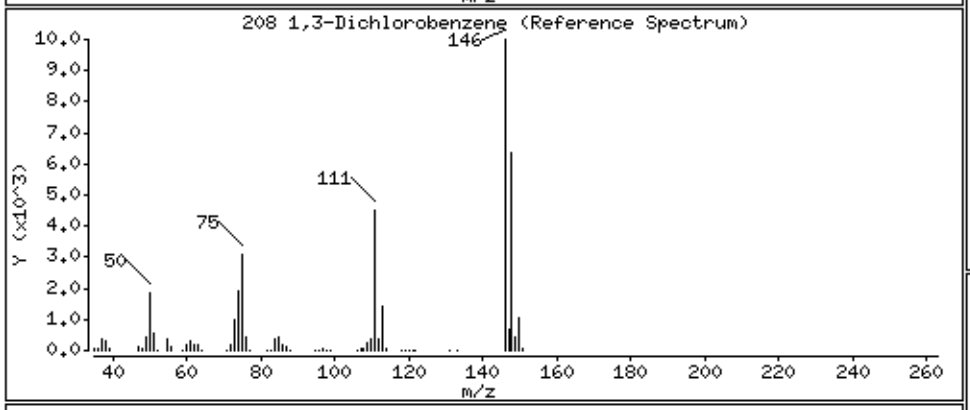
Column diameter: 0.25

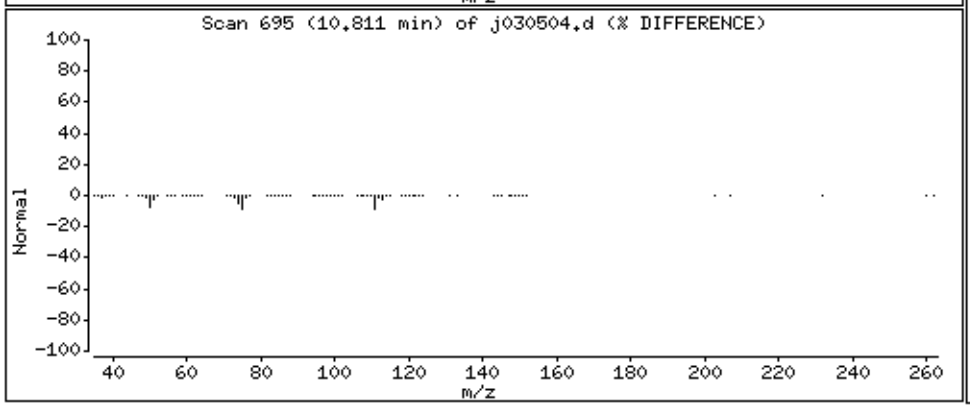
208 1,3-Dichlorobenzene

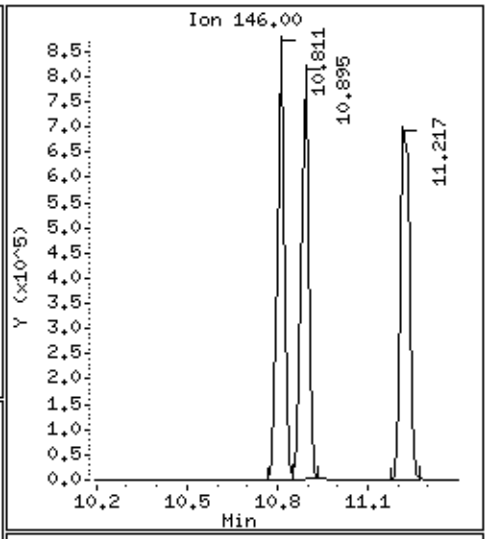
Concentration: 48.675 PPBV

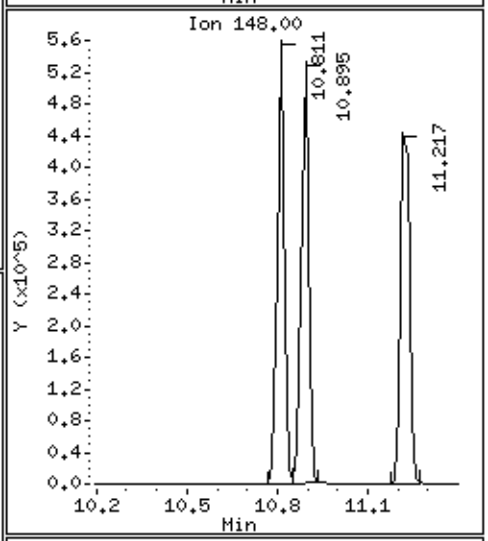


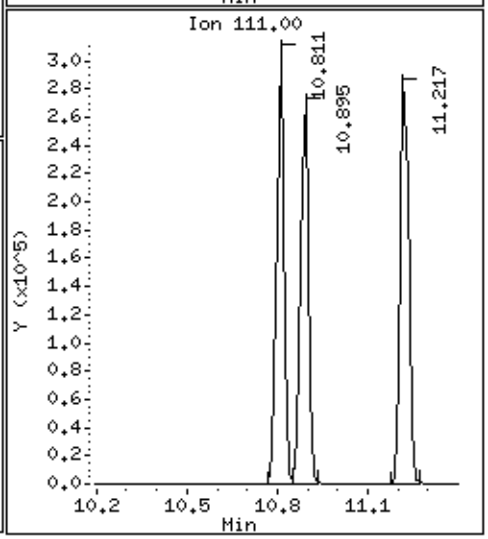












Data File: /chem/msdj.i/05mar15.b/j030504.d

Date : 05-MAR-2015 10:28

Client ID: LCS

Instrument: msdj.i

Sample Info: 50ml #2716-98

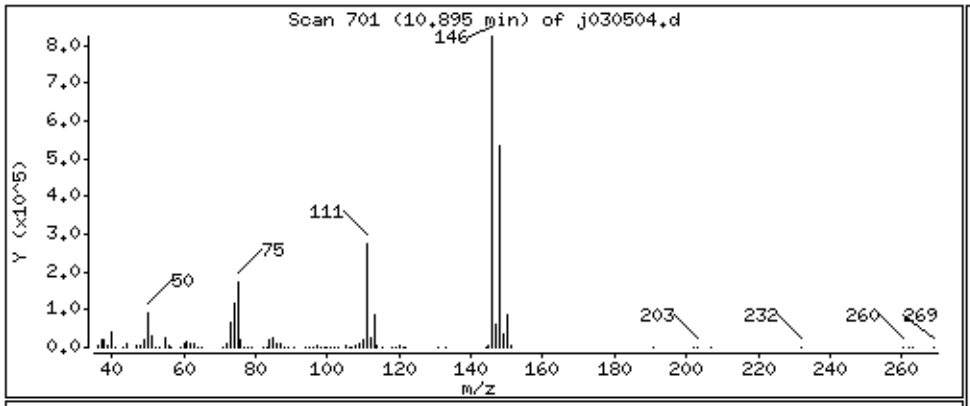
Operator: sg

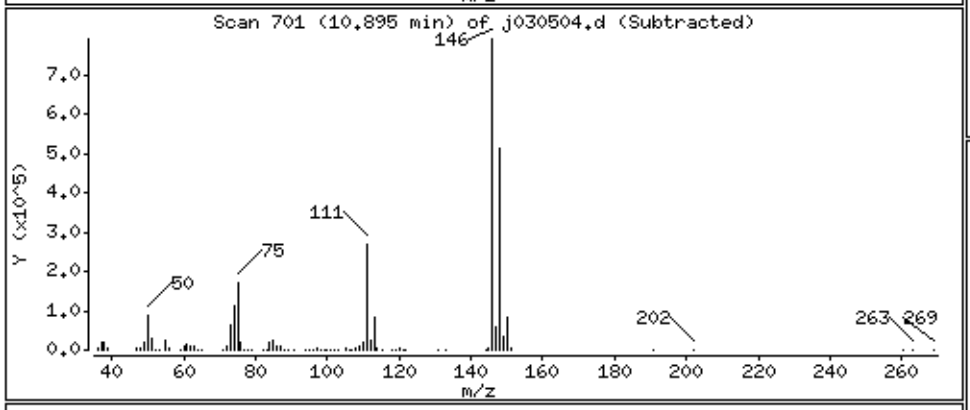
Column phase: RTX-624

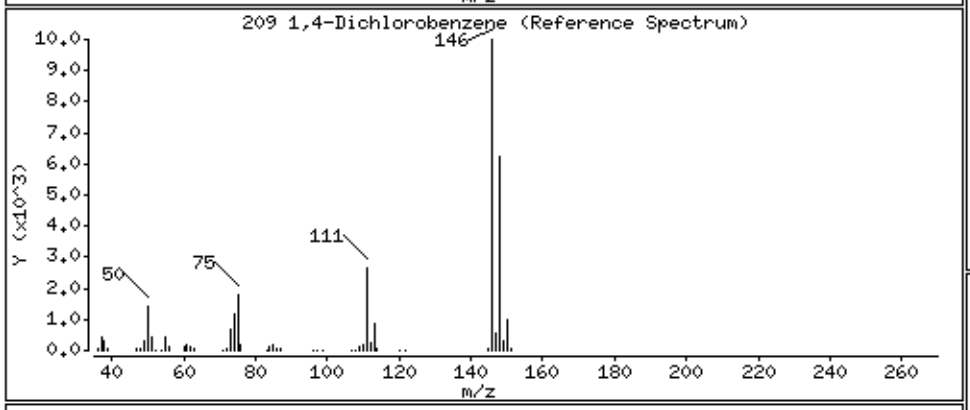
Column diameter: 0.25

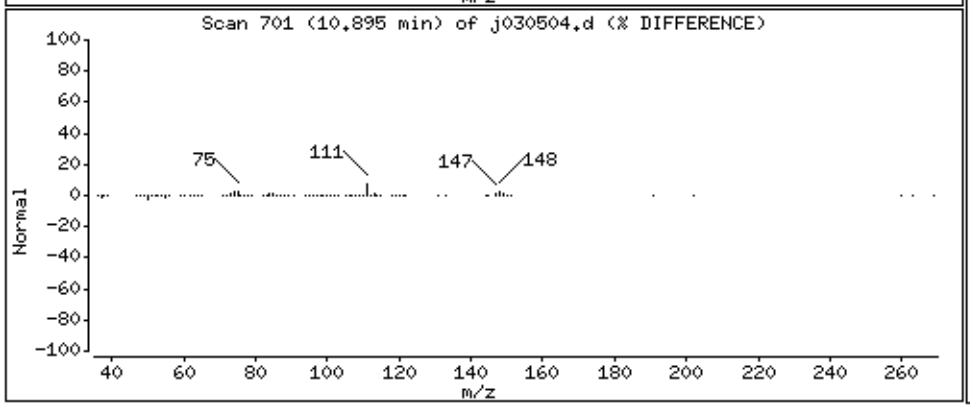
209 1,4-Dichlorobenzene

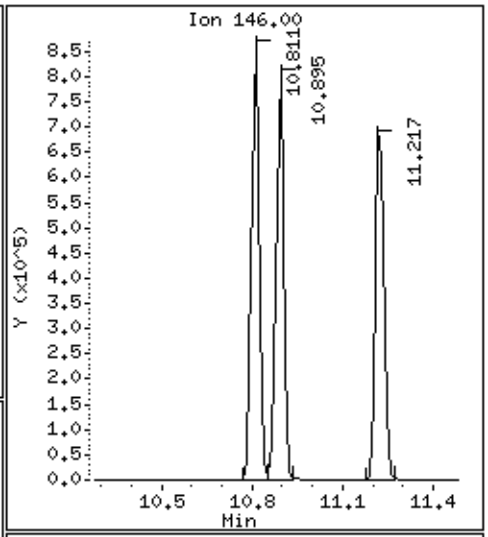
Concentration: 49.249 PPBV

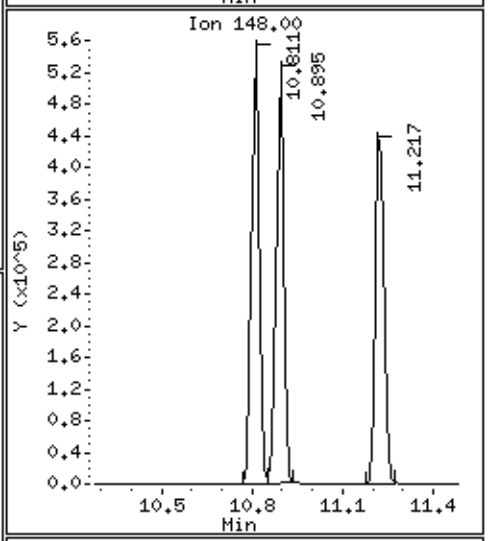


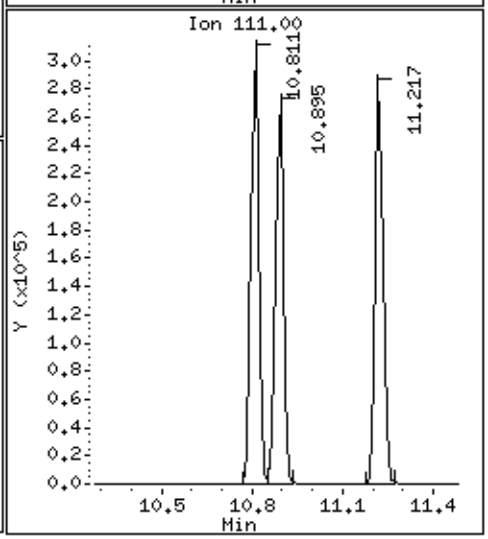












Data File: /chem/msdj.i/05mar15.b/j030504.d

Date : 05-MAR-2015 10:28

Client ID: LCS

Instrument: msdj.i

Sample Info: 50ml #2716-98

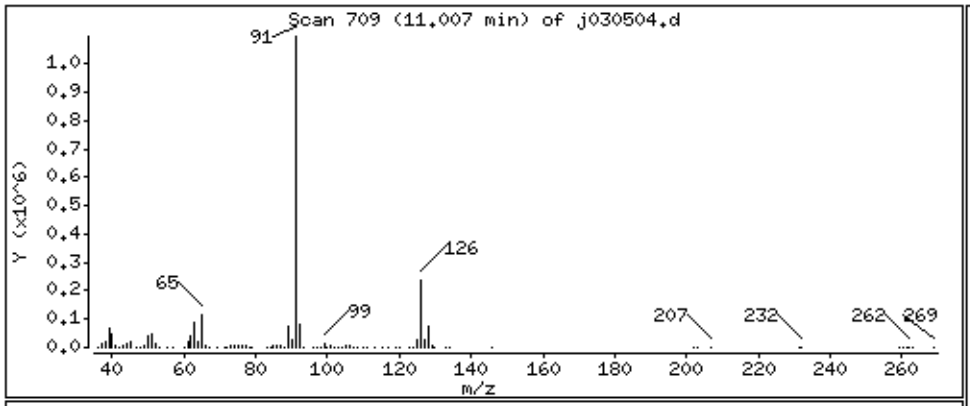
Operator: sg

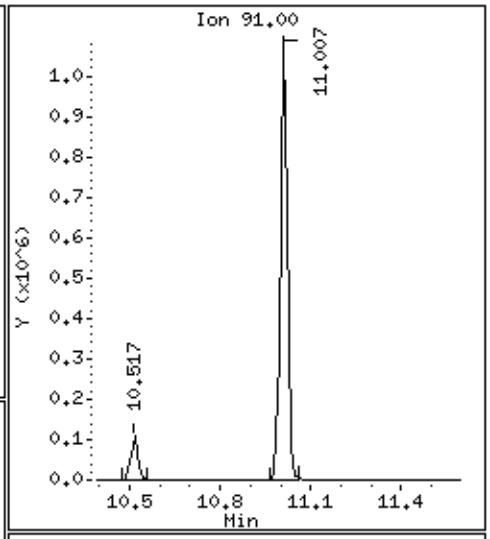
Column phase: RTX-624

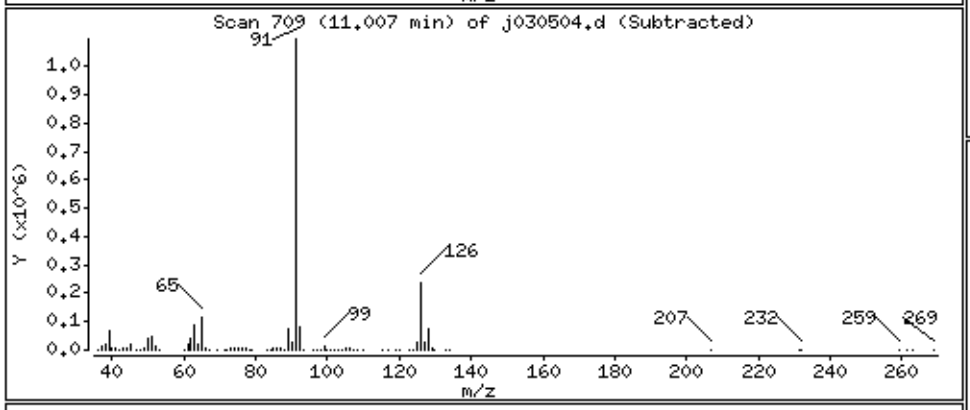
Column diameter: 0.25

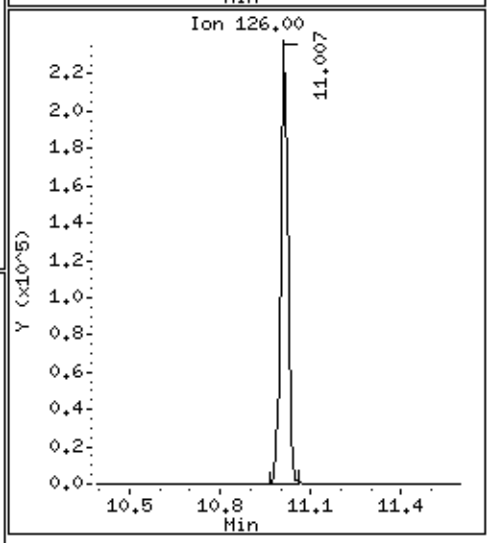
212 alpha-Chlorotoluene

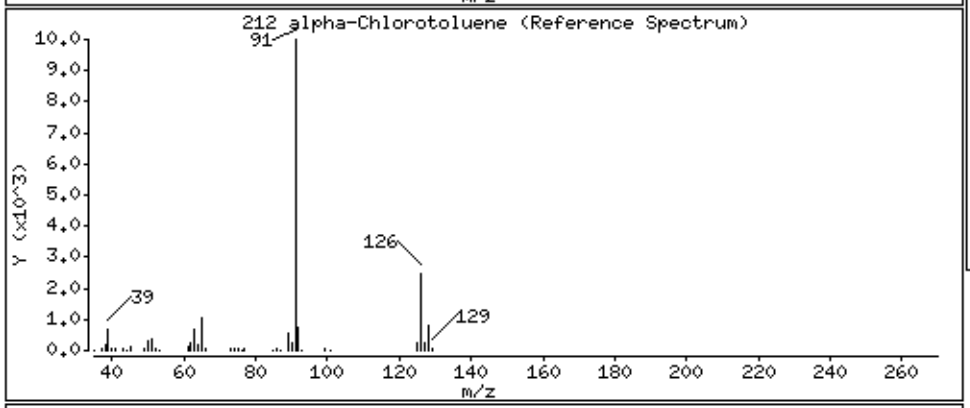
Concentration: 50.870 PPBV

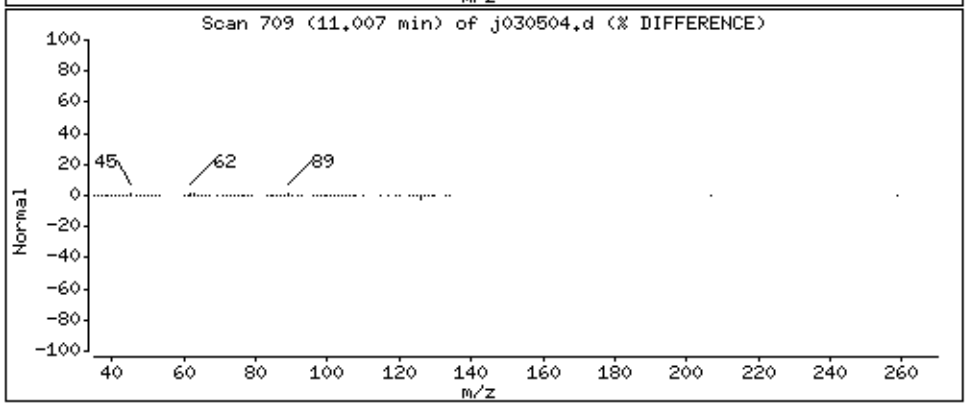












Data File: /chem/msdj.i/05mar15.b/j030504.d

Date : 05-MAR-2015 10:28

Client ID: LCS

Instrument: msdj.i

Sample Info: 50ml #2716-98

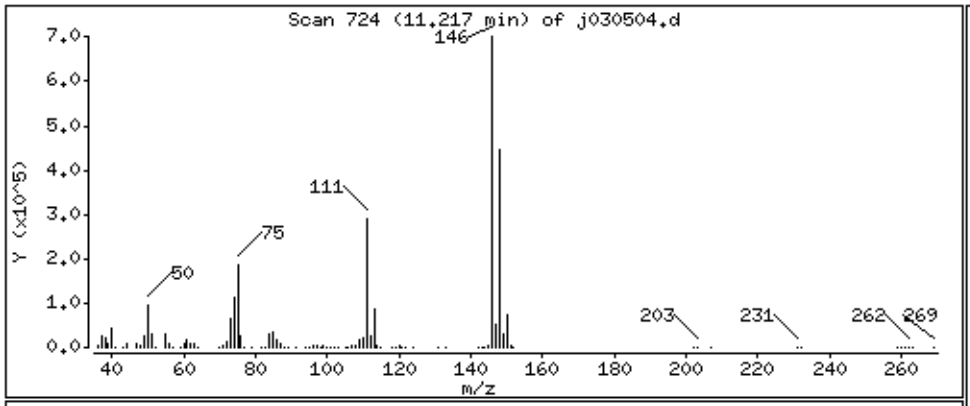
Operator: sg

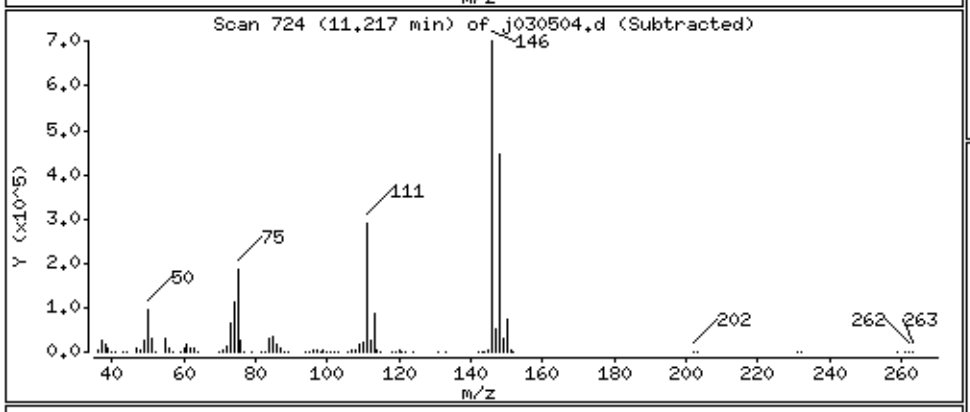
Column phase: RTX-624

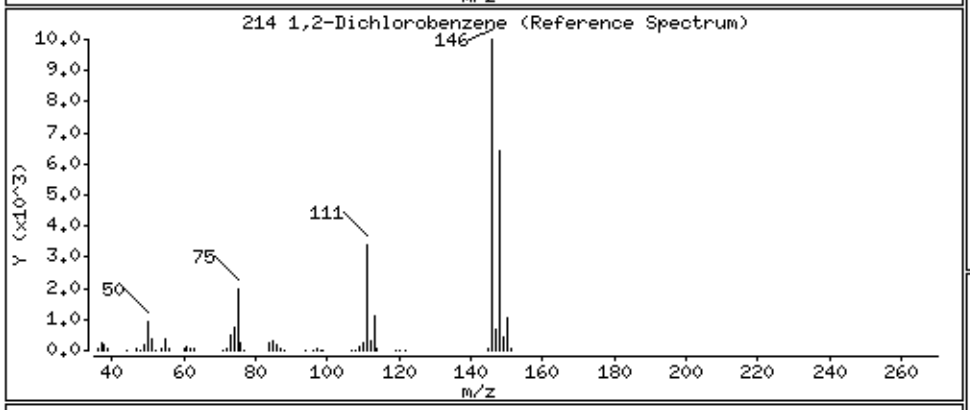
Column diameter: 0.25

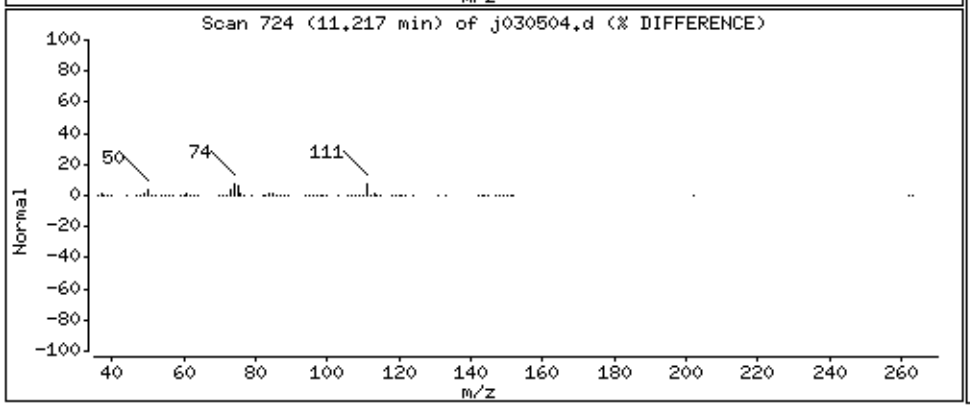
214 1,2-Dichlorobenzene

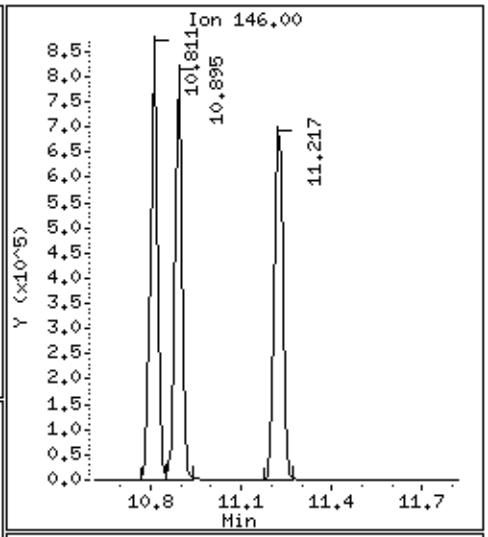
Concentration: 49.981 PPBV

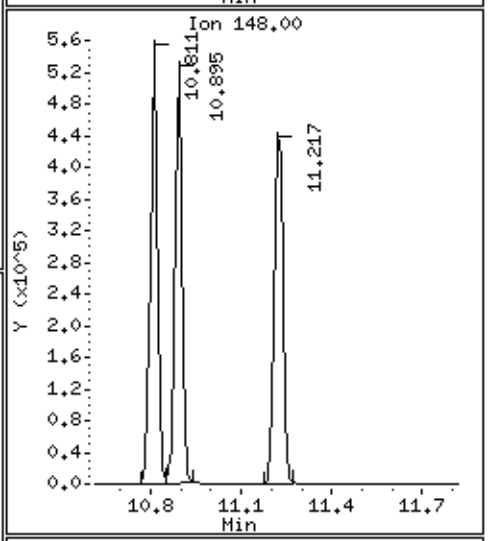


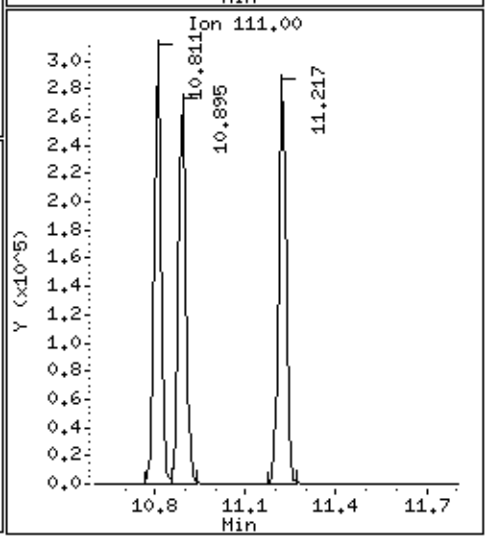












Data File: /chem/msdj.i/05mar15.b/j030504.d

Date : 05-MAR-2015 10:28

Client ID: LCS

Instrument: msdj.i

Sample Info: 50ml #2716-98

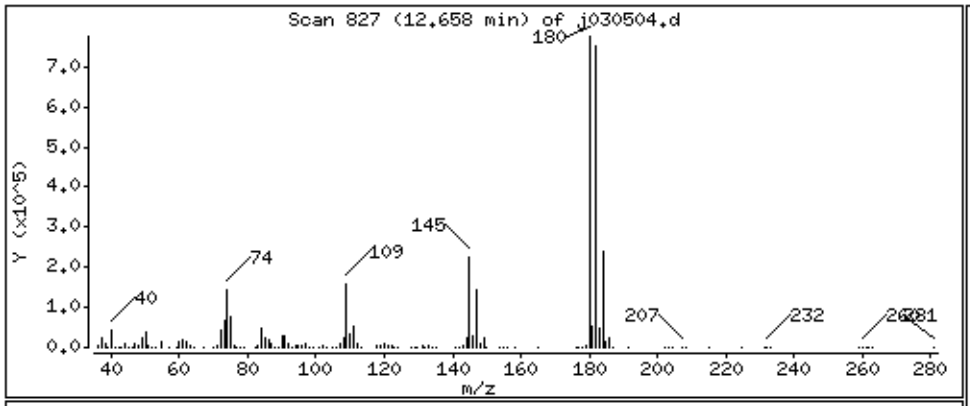
Operator: sg

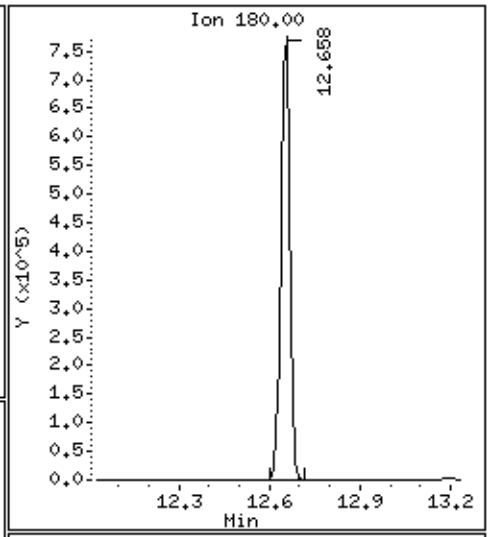
Column phase: RTX-624

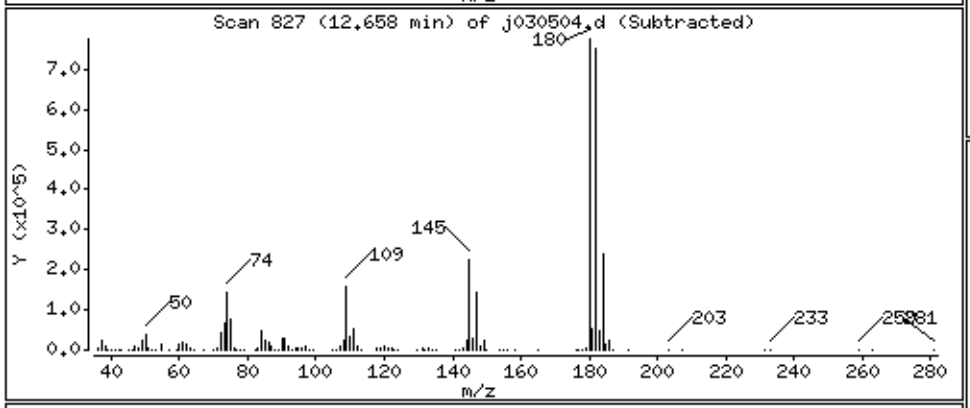
Column diameter: 0.25

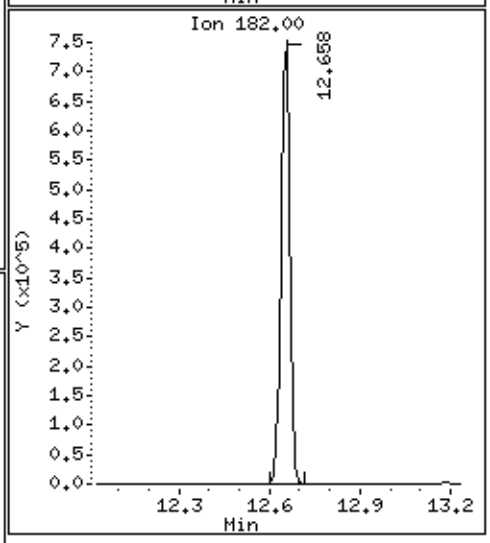
226 1,2,4-Trichlorobenzene

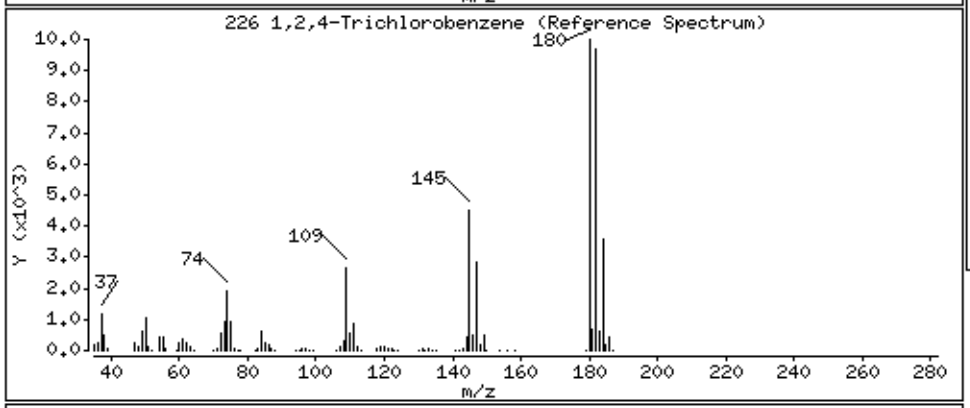
Concentration: 74.796 PPBV

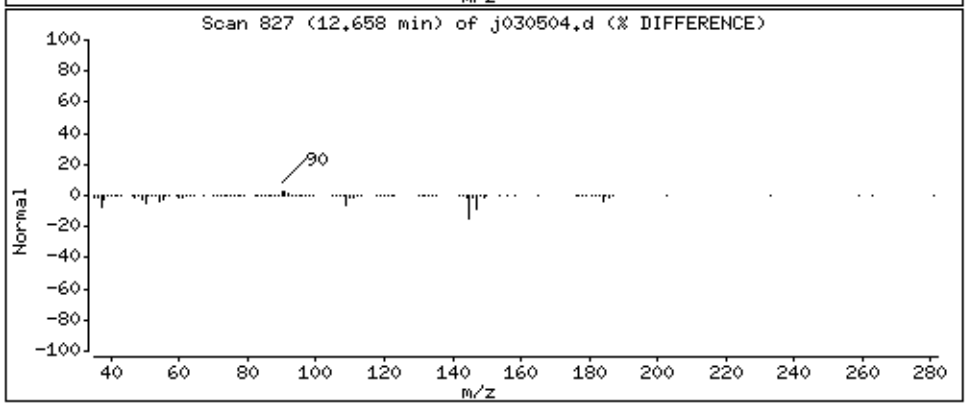












Data File: /chem/msdj.i/05mar15.b/j030504.d

Date : 05-MAR-2015 10:28

Client ID: LCS

Instrument: msdj.i

Sample Info: 50ml #2716-98

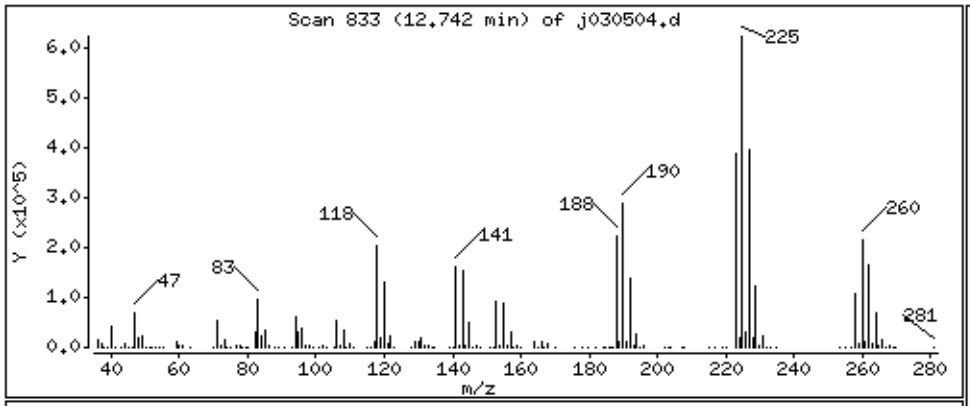
Operator: sg

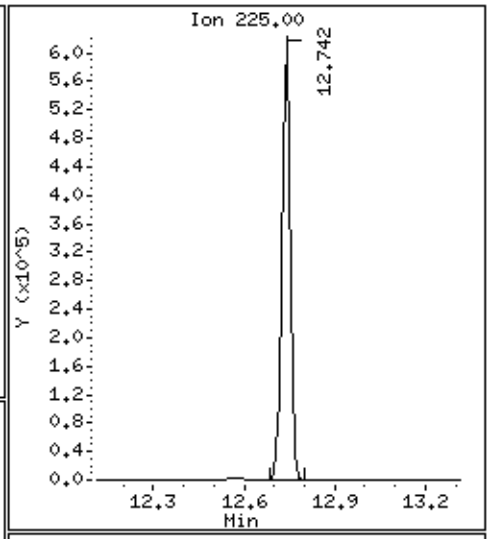
Column phase: RTX-624

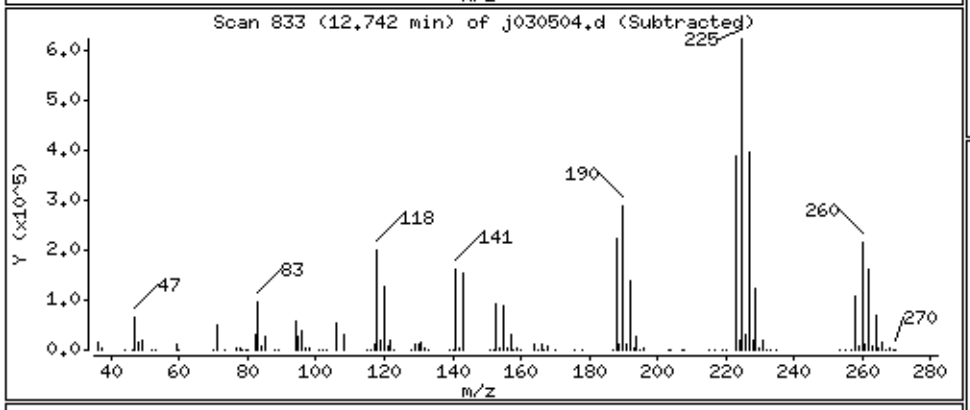
Column diameter: 0.25

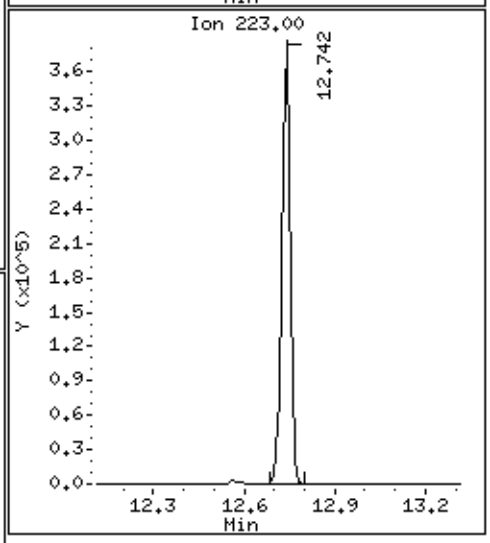
227 Hexachlorobutadiene

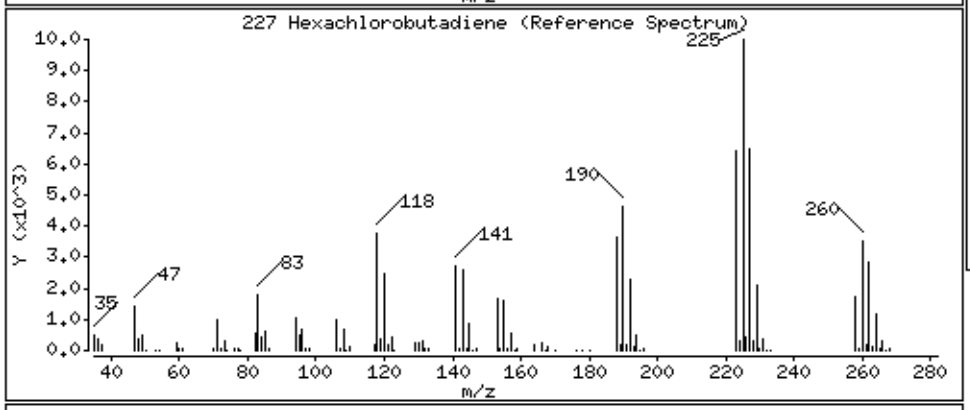
Concentration: 74.550 PPBV

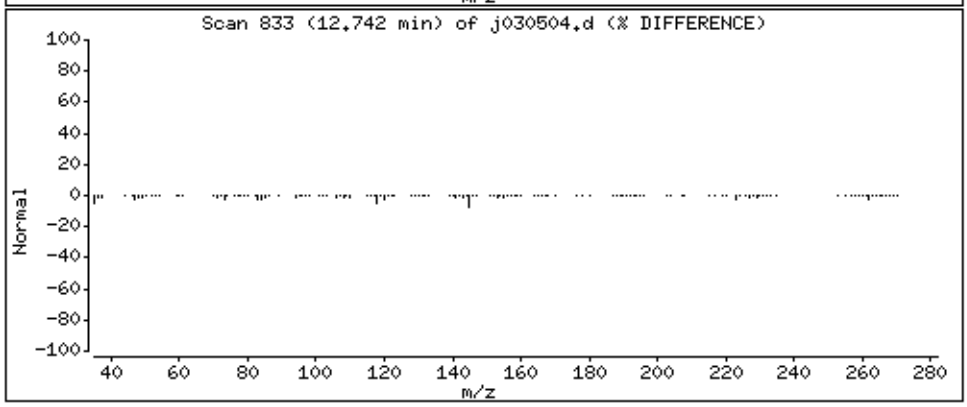












Data File: /chem/msdj.i/05mar15.b/j030504.d

Date : 05-MAR-2015 10:28

Client ID: LCS

Instrument: msdj.i

Sample Info: 50ml #2716-98

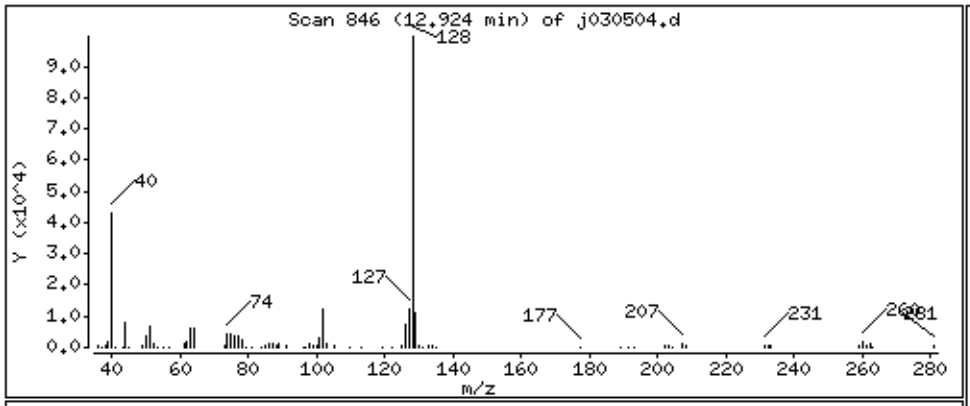
Operator: sg

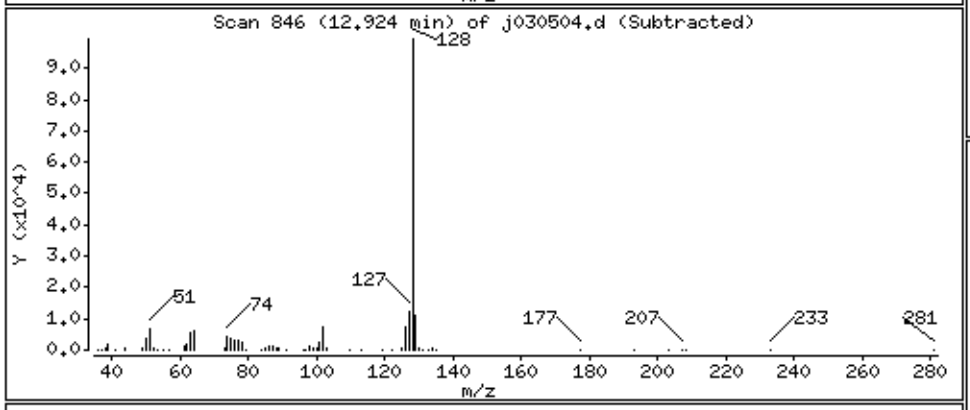
Column phase: RTX-624

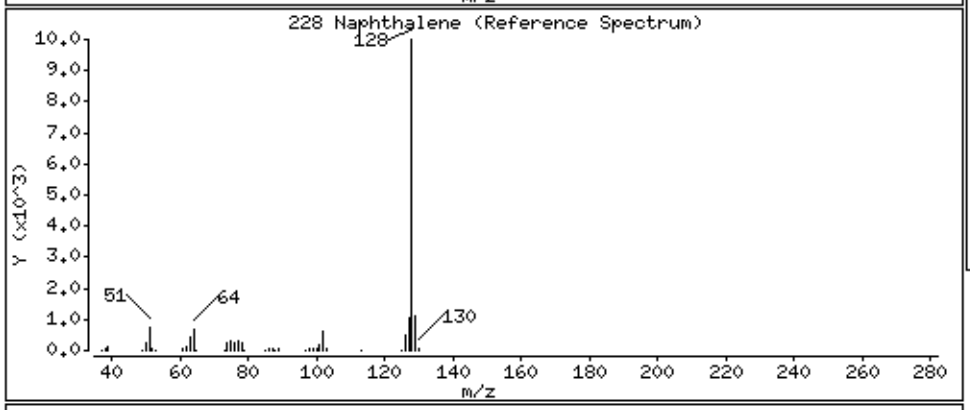
Column diameter: 0.25

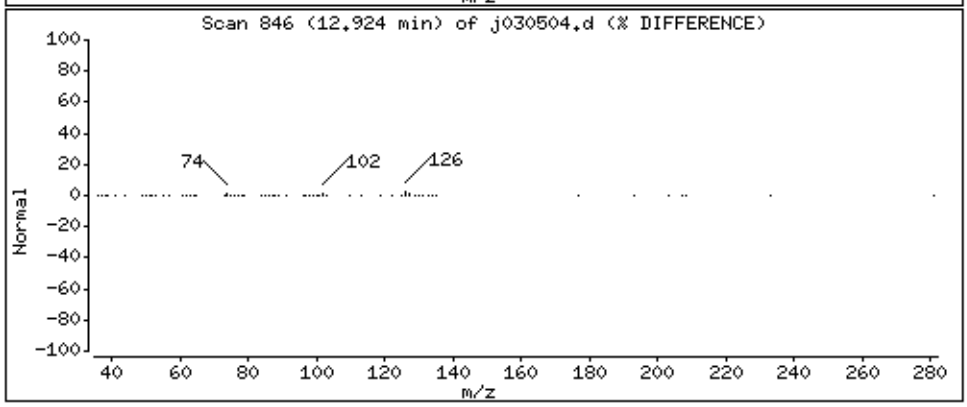
228 Naphthalene

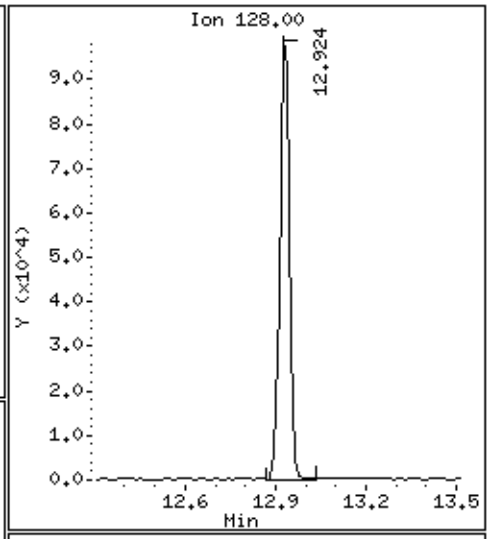
Concentration: 6.150 PPBV

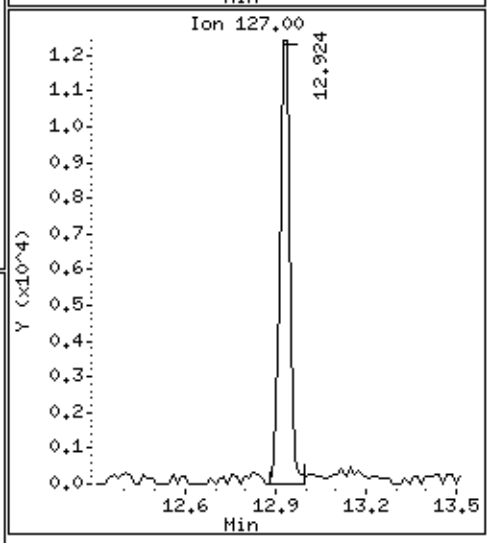












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Client Sample ID: LCSD

Lab ID#: 1503058BR1-10AA

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**j030505**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 3/5/15 11:22 AM**	

Compound	%Recovery	Method Limits
Freon 12	110	70-130
Freon 114	109	70-130
Chloromethane	119	70-130
Vinyl Chloride	111	70-130
1,3-Butadiene	103	70-130
Bromomethane	121	70-130
Chloroethane	113	70-130
Freon 11	108	70-130
Ethanol	100	70-130
Freon 113	101	70-130
1,1-Dichloroethene	105	70-130
Acetone	108	70-130
2-Propanol	110	70-130
Carbon Disulfide	92	70-130
3-Chloropropene	98	70-130
Methylene Chloride	105	70-130
Methyl tert-butyl ether	103	70-130
trans-1,2-Dichloroethene	87	70-130
Hexane	105	70-130
1,1-Dichloroethane	101	70-130
2-Butanone (Methyl Ethyl Ketone)	100	70-130
cis-1,2-Dichloroethene	113	70-130
Tetrahydrofuran	99	70-130
Chloroform	101	70-130
1,1,1-Trichloroethane	101	70-130
Cyclohexane	104	70-130
Carbon Tetrachloride	101	70-130
2,2,4-Trimethylpentane	106	70-130
Benzene	100	70-130
1,2-Dichloroethane	98	70-130
Heptane	99	70-130
Trichloroethene	86	70-130
1,2-Dichloropropane	100	70-130
1,4-Dioxane	99	70-130
Bromodichloromethane	101	70-130
cis-1,3-Dichloropropene	94	70-130
4-Methyl-2-pentanone	97	70-130
Toluene	99	70-130
trans-1,3-Dichloropropene	99	70-130
1,1,2-Trichloroethane	100	70-130
Tetrachloroethene	101	70-130
2-Hexanone	100	70-130

eurofins | Air Toxics

Client Sample ID: LCSD

Lab ID#: 1503058BR1-10AA

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**j030505**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 3/5/15 11:22 AM**	

Compound	**%Recovery**	**Method Limits**
Dibromochloromethane	101	70-130
1,2-Dibromoethane (EDB)	99	70-130
Chlorobenzene	98	70-130
Ethyl Benzene	99	70-130
m,p-Xylene	96	70-130
o-Xylene	100	70-130
Styrene	102	70-130
Bromoform	100	70-130
Cumene	97	70-130
1,1,2,2-Tetrachloroethane	114	70-130
Propylbenzene	100	70-130
4-Ethyltoluene	107	70-130
1,3,5-Trimethylbenzene	100	70-130
1,2,4-Trimethylbenzene	101	70-130
1,3-Dichlorobenzene	100	70-130
1,4-Dichlorobenzene	101	70-130
alpha-Chlorotoluene	106	70-130
1,2-Dichlorobenzene	101	70-130
1,2,4-Trichlorobenzene	101	70-130
Hexachlorobutadiene	101	70-130
Naphthalene	84	60-140

Container Type: NA - Not Applicable

Surrogates	**%Recovery**	**Method Limits**
Toluene-d8	100	70-130
1,2-Dichloroethane-d4	102	70-130
4-Bromofluorobenzene	99	70-130

Report Date: 05-Mar-2015 11:50

Eurofins Air Toxics Inc.

RECOVERY REPORT

Client Name:
Client SDG: 05mar15
Sample Matrix: GAS
Fraction: VOA
Lab Smp Id: LCSD
Client Smp ID: LCSD
Level: LOW
Operator: sg
Data Type: MS DATA
SampleType: LCSD
SpikeList File: 2926Spectra.spk
Quant Type: ISTD
Sublist File: AT12.sub
Method File: /chem/msdj.i/05mar15.b/j15q0304a.m
Misc Info: 50ppbv(200ppbv)

SPIKE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
9 Propylene	50.000	52.086	104.17	60-140
11 Freon 12	50.000	55.027	110.05	70-130
15 Freon 114	50.000	54.658	109.32	70-130
17 Chloromethane	50.000	59.588	119.18	70-130
23 Butane	50.000	55.595	111.19	60-140
25 Vinyl Chloride	50.000	55.448	110.90	70-130
26 1,3-Butadiene	50.000	51.507	103.01	70-130
29 Bromomethane	50.000	60.482	120.96	70-130
30 Chloroethane	50.000	56.669	113.34	70-130
31 Isopentane	50.000	52.823	105.65	60-140
35 Freon 11	50.000	53.759	107.52	70-130
42 Ethanol	50.000	49.817	99.63	70-130
49 Freon 113	50.000	50.472	100.95	70-130
50 1,1-Dichloroethene	50.000	52.687	105.37	70-130
52 Acetone	50.000	54.161	108.32	70-130
56 Carbon Disulfide	50.000	45.864	91.73	70-130
57 2-Propanol	50.000	54.885	109.77	70-130
58 3-Chloropropene	50.000	48.932	97.86	70-130
66 Methylene Chloride	50.000	52.632	105.26	70-130
72 Methyl tert-butyl	50.000	51.408	102.82	70-130
73 trans-1,2-Dichloro	50.000	43.542	87.08	70-130
78 Hexane	50.000	52.475	104.95	70-130
82 1,1-Dichloroethane	50.000	50.447	100.89	70-130
86 Vinyl Acetate	50.000	52.809	105.62	60-140
91 cis-1,2-Dichloroet	50.000	56.663	113.33	70-130
92 2-Butanone	50.000	50.037	100.07	70-130
99 Tetrahydrofuran	50.000	49.483	98.97	70-130
100 Chloroform	50.000	50.593	101.19	70-130
103 1,1,1-Trichloroeth	50.000	50.312	100.62	70-130
106 Carbon Tetrachlori	50.000	50.598	101.20	70-130
102 Cyclohexane	50.000	51.947	103.89	70-130
113 2,2,4-Trimethylpen	50.000	53.220	106.44	70-130
116 Benzene	50.000	49.928	99.86	70-130

SPIKE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
120 1,2-Dichloroethane	50.000	49.152	98.30	70-130
121 Heptane	50.000	49.532	99.06	70-130
125 Trichloroethene	50.000	43.180	86.36	70-130
127 Methylcyclohexane	50.000	53.091	106.18	60-140
132 1,2-Dichloropropan	50.000	49.973	99.95	70-130
136 1,4-Dioxane	50.000	49.581	99.16	70-130
138 Bromodichlorometha	50.000	50.663	101.33	70-130
144 cis-1,3-Dichloropr	50.000	46.907	93.81	70-130
145 4-Methyl-2-pentano	50.000	48.508	97.02	70-130
147 Toluene	50.000	49.418	98.84	70-130
150 trans-1,3-Dichloro	50.000	49.617	99.23	70-130
155 1,1,2-Trichloroeth	50.000	49.812	99.62	70-130
156 Tetrachloroethene	50.000	50.732	101.46	70-130
158 2-Hexanone	50.000	49.957	99.91	70-130
160 Dibromochlorometha	50.000	50.364	100.73	70-130
161 1,2-Dibromoethane	50.000	49.659	99.32	70-130
165 Chlorobenzene	50.000	49.072	98.14	70-130
167 Ethyl Benzene	50.000	49.438	98.88	70-130
169 m,p-Xylene	50.000	48.103	96.21	70-130
171 o-Xylene	50.000	50.154	100.31	70-130
172 Styrene	50.000	50.759	101.52	70-130
174 Bromoform	50.000	50.012	100.02	70-130
175 Cumene	50.000	48.555	97.11	70-130
181 1,1,2,2-Tetrachlor	50.000	56.846	113.69	70-130
182 Propylbenzene	50.000	50.132	100.26	70-130
188 4-Ethyltoluene	50.000	53.514	107.03	70-130
190 1,3,5-Trimethylben	50.000	50.100	100.20	70-130
196 1,2,4-Trimethylben	50.000	50.683	101.37	70-130
208 1,3-Dichlorobenzen	50.000	50.256	100.51	70-130
209 1,4-Dichlorobenzen	50.000	50.601	101.20	70-130
212 alpha-Chlorotoluen	50.000	52.857	105.71	70-130
214 1,2-Dichlorobenzen	50.000	50.456	100.91	70-130
226 1,2,4-Trichloroben	50.000	50.478	100.96	70-130
227 Hexachlorobutadien	50.000	50.392	100.78	70-130
228 Naphthalene	5.000	4.201	84.02	60-140

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 117 1,2-Dichloroethane	25.000	25.512	102.05	70-130
$ 146 Toluene-d8	25.000	25.014	100.06	70-130
$ 177 4-Bromofluorobenze	25.000	24.703	98.81	70-130

Eurofins Air Toxics Inc.

EPA TO-15/MODIFIED EPA TO-14A

Data file : /chem/msdj.i/05mar15.b/j030505.d
Lab Smp Id: LCSD Client Smp ID: LCSD
Inj Date : 05-MAR-2015 11:22
Operator : sg Inst ID: msdj.i
Smp Info : 50ml #2716-98
Misc Info : 50ppbv(200ppbv)
Comment : STANDARD LEVEL - GC/MS
Method : /chem/msdj.i/05mar15.b/j15q0304a.m
Meth Date : 05-Mar-2015 11:19 mskidmor Quant Type: ISTD
Cal Date : 04-MAR-2015 12:36 Cal File: j030408.d
Als bottle: 14 QC Sample: LCSD
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT12.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
* 98 Bromochloromethane					CAS #: 74-97-5		
5.480	5.494 (1.000)	130	103421	25.0000		80.00- 120.00	100.00
5.480	5.494 (1.000)	128	81070			48.40- 108.40	78.39
5.480	5.494 (1.000)	49	117268			84.80- 144.80	113.39
* 123 1,4-Difluorobenzene					CAS #: 540-36-3		
6.404	6.404 (1.000)	114	454238	25.0000		80.00- 120.00	100.00
6.404	6.404 (1.000)	88	68182			0.00- 45.38	15.01
* 163 Chlorobenzene-d5					CAS #: 3114-55-4		
8.894	8.894 (1.000)	117	428602	25.0000		80.00- 120.00	100.00
8.894	8.894 (1.000)	82	213966			20.55- 80.55	49.92
$ 117 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
6.040	6.054 (1.102)	65	120896	25.5122	25.512	80.00- 120.00	100.00
6.040	6.054 (1.102)	67	70618			28.68- 88.68	58.41

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
$ 146 Toluene-d8						CAS #: 2037-26-5	
7.635	7.635 (1.192)	98	463643	25.0143	25.014	80.00- 120.00	100.00
7.635	7.635 (1.192)	70	46526			0.00- 40.26	10.03
7.635	7.635 (1.192)	100	310502			38.16- 98.16	66.97
$ 177 4-Bromofluorobenzene						CAS #: 460-00-4	
9.888	9.888 (1.112)	174	275006	24.7030	24.703	80.00- 120.00	100.00
9.888	9.874 (1.112)	95	302246			82.57- 142.57	109.91
9.888	9.888 (1.112)	176	268698			67.45- 127.45	97.71
9 Propylene						CAS #: 115-07-1	
1.339	1.367 (0.244)	41	159240	52.0864	52.086	80.00- 120.00	100.00
1.339	1.367 (0.244)	42	106983			35.76- 95.76	67.18
1.339	1.367 (0.244)	39	112571			37.69- 97.69	70.69
11 Freon 12						CAS #: 75-71-8	
1.367	1.409 (0.249)	85	572548	55.0272	55.027	80.00- 120.00	100.00
1.367	1.409 (0.249)	87	186754			2.74- 62.74	32.62
15 Freon 114						CAS #: 76-14-2	
1.492	1.521 (0.272)	135	518281	54.6576	54.658	80.00- 120.00	100.00
1.492	1.521 (0.272)	137	164751			1.49- 61.49	31.79
17 Chloromethane						CAS #: 74-87-3	
1.576	1.605 (0.288)	50	176978	59.5878	59.588	80.00- 120.00	100.00
1.576	1.605 (0.288)	52	57006			1.90- 61.90	32.21
23 Butane						CAS #: 106-97-8	
1.660	1.689 (0.303)	58	44678	55.5951	55.595	80.00- 120.00	100.00
1.660	1.689 (0.303)	43	332920			699.33- 759.33	745.15
25 Vinyl Chloride						CAS #: 75-01-4	
1.702	1.731 (0.311)	62	227387	55.4483	55.448	80.00- 120.00	100.00
1.702	1.731 (0.311)	64	71105			0.48- 60.48	31.27
26 1,3-Butadiene						CAS #: 106-99-0	
1.716	1.745 (0.313)	54	163422	51.5071	51.507	80.00- 120.00	100.00
1.716	1.745 (0.313)	39	167350			69.90- 129.90	102.40
29 Bromomethane						CAS #: 74-83-9	
2.080	2.122 (0.380)	94	202042	60.4820	60.482	80.00- 120.00	100.00
2.080	2.122 (0.380)	96	186929			62.83- 122.83	92.52
30 Chloroethane						CAS #: 75-00-3	
2.206	2.234 (0.403)	64	119066	56.6690	56.669	80.00- 120.00	100.00
2.206	2.234 (0.403)	66	37304			1.30- 61.30	31.33

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
30 Chloroethane (continued)							
2.206	2.234 (0.403)	49	29107			0.00- 55.56	24.45
31 Isopentane					CAS #: 78-78-4		
2.220	2.248 (0.405)	43	256315	52.8232	52.823	80.00- 120.00	100.00
2.220	2.248 (0.405)	57	176512			39.25- 99.25	68.87
35 Freon 11					CAS #: 75-69-4		
2.458	2.486 (0.448)	101	606486	53.7595	53.759	80.00- 120.00	100.00
2.458	2.486 (0.448)	103	388132			34.53- 94.53	64.00
42 Ethanol					CAS #: 64-17-5		
2.808	2.850 (0.512)	45	88035	49.8170	49.817	80.00- 120.00	100.00
2.808	2.850 (0.512)	43	20179			0.00- 48.78	22.92
2.822	2.850 (0.515)	46	35770			9.14- 69.14	40.63
49 Freon 113					CAS #: 76-13-1		
3.116	3.158 (0.568)	151	469259	50.4725	50.472	80.00- 120.00	100.00
3.116	3.158 (0.568)	153	298532			33.29- 93.29	63.62
3.116	3.144 (0.568)	101	531601			83.98- 143.98	113.29
50 1,1-Dichloroethene					CAS #: 75-35-4		
3.158	3.186 (0.576)	98	152304	52.6866	52.687	80.00- 120.00	100.00
3.158	3.186 (0.576)	96	243923			129.90- 189.90	160.16
3.158	3.186 (0.576)	61	363829			210.75- 270.75	238.88
52 Acetone					CAS #: 67-64-1		
3.325	3.354 (0.607)	58	108037	54.1609	54.161	80.00- 120.00	100.00
3.325	3.354 (0.607)	43	314787			270.02- 330.02	291.37
56 Carbon Disulfide					CAS #: 75-15-0		
3.395	3.424 (0.620)	76	597450	45.8644	45.864	80.00- 120.00	100.00
57 2-Propanol					CAS #: 67-63-0		
3.521	3.536 (0.643)	45	402179	54.8850	54.885	80.00- 120.00	100.00
3.521	3.536 (0.643)	43	78434			0.00- 47.69	19.50
3.521	3.550 (0.643)	59	17087			0.00- 33.85	4.25
58 3-Chloropropene					CAS #: 107-05-1		
3.661	3.689 (0.668)	76	109916	48.9315	48.932	80.00- 120.00	100.00
3.661	3.689 (0.668)	41	272376			215.96- 275.96	247.80
66 Methylene Chloride					CAS #: 75-09-2		
3.857	3.885 (0.704)	49	261970	52.6318	52.632	80.00- 120.00	100.00
3.857	3.885 (0.704)	84	216253			51.17- 111.17	82.55
3.857	3.885 (0.704)	51	79711			0.00- 59.41	30.43

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
71 tert-Butyl alcohol					CAS #: 75-65-0		
3.521	4.025 (0.643)	59	17087	1.95982	1.960	80.00- 120.00	100.00(a)
3.521	4.025 (0.643)	41	31227			0.00- 51.64	182.76
3.521	4.025 (0.643)	57	1307			0.00- 40.45	7.65
72 Methyl tert-butyl ether					CAS #: 1634-04-4		
4.081	4.109 (0.745)	73	653283	51.4079	51.408	80.00- 120.00	100.00
4.081	4.109 (0.745)	57	148105			0.00- 52.57	22.67
4.081	4.109 (0.745)	41	133034			0.00- 50.82	20.36
73 trans-1,2-Dichloroethene					CAS #: 156-60-5		
4.109	4.137 (0.750)	98	138735	43.5422	43.542	80.00- 120.00	100.00
4.109	4.137 (0.750)	61	300232			185.75- 245.75	216.41
4.109	4.137 (0.750)	96	224824			128.77- 188.77	162.05
78 Hexane					CAS #: 110-54-3		
4.333	4.347 (0.791)	57	387655	52.4754	52.475	80.00- 120.00	100.00
4.319	4.347 (0.788)	43	230939			32.33- 92.33	59.57
4.333	4.347 (0.791)	86	66131			0.00- 47.05	17.06
82 1,1-Dichloroethane					CAS #: 75-34-3		
4.627	4.655 (0.844)	63	440038	50.4468	50.447	80.00- 120.00	100.00
4.627	4.655 (0.844)	65	141361			1.83- 61.83	32.12
83 Isopropyl ether					CAS #: 108-20-3		
4.081	4.627 (0.745)	45	32313	2.05527	2.055	80.00- 120.00	100.00
4.333	4.641 (0.791)	87	4550			0.00- 58.50	14.08
4.109	4.641 (0.750)	59	10168			0.00- 41.54	31.47
86 Vinyl Acetate					CAS #: 108-05-4		
4.683	4.697 (0.854)	86	69440	52.8091	52.809	80.00- 120.00	100.00
4.683	4.697 (0.854)	43	673116			1027.99-1087.99	969.35
91 cis-1,2-Dichloroethene					CAS #: 156-59-2		
5.242	5.256 (0.957)	98	196504	56.6628	56.663	80.00- 120.00	100.00
5.242	5.256 (0.957)	96	315536			120.40- 180.40	160.57
5.242	5.256 (0.957)	61	382212			156.78- 216.78	194.51
92 2-Butanone					CAS #: 78-93-3		
5.270	5.284 (0.962)	72	128906	50.0371	50.037	80.00- 120.00	100.00
5.270	5.284 (0.962)	43	487439			345.28- 405.28	378.13
5.270	5.284 (0.962)	57	39742			0.64- 60.64	30.83
99 Tetrahydrofuran					CAS #: 109-99-9		
5.480	5.494 (1.000)	42	282354	49.4832	49.483	80.00- 120.00	100.00
5.480	5.494 (1.000)	71	119499			10.18- 70.18	42.32

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
99 Tetrahydrofuran (continued)							
5.480	5.494 (1.000)	72	121146			13.63- 73.63	42.91
100 Chloroform					CAS #: 67-66-3		
5.550	5.564 (1.013)	83	519505	50.5927	50.593	80.00- 120.00	100.00
5.550	5.564 (1.013)	85	347469			36.39- 96.39	66.88
102 Cyclohexane					CAS #: 110-82-7		
5.648	5.662 (1.031)	84	368692	51.9474	51.947	80.00- 120.00	100.00
5.648	5.648 (1.031)	56	424449			85.96- 145.96	115.12
5.634	5.648 (1.028)	41	211608			27.64- 87.64	57.39
103 1,1,1-Trichloroethane					CAS #: 71-55-6		
5.676	5.676 (1.036)	97	537110	50.3121	50.312	80.00- 120.00	100.00
5.676	5.676 (1.036)	99	344886			34.56- 94.56	64.21
106 Carbon Tetrachloride					CAS #: 56-23-5		
5.788	5.802 (1.056)	119	583796	50.5978	50.598	80.00- 120.00	100.00
5.788	5.802 (1.056)	117	613553			75.97- 135.97	105.10
113 2,2,4-Trimethylpentane					CAS #: 540-84-1		
5.984	5.998 (1.092)	57	1138483	53.2205	53.220	80.00- 120.00	100.00
5.984	5.998 (1.092)	56	372073			0.00- 59.67	32.68
5.984	5.998 (1.092)	41	268446			0.00- 50.74	23.58
116 Benzene					CAS #: 71-43-2		
6.012	6.026 (0.939)	78	814224	49.9281	49.928	80.00- 120.00	100.00
6.012	6.026 (0.939)	77	190724			0.00- 52.91	23.42
119 tert-Amyl methyl ether					CAS #: 994-05-8		
5.550	6.096 (1.013)	87	54914	14.8419	14.842	80.00- 120.00	100.00
5.634	6.096 (1.028)	73	362			376.47- 436.47	0.66
5.564	6.082 (1.015)	55	174			75.02- 135.02	0.32
120 1,2-Dichloroethane					CAS #: 107-06-2		
6.110	6.124 (0.954)	62	321049	49.1517	49.152	80.00- 120.00	100.00
6.110	6.124 (0.954)	64	104249			2.46- 62.46	32.47
121 Heptane					CAS #: 142-82-5		
6.152	6.166 (0.961)	71	292705	49.5319	49.532	80.00- 120.00	100.00
6.152	6.166 (0.961)	43	484099			142.43- 202.43	165.39
6.152	6.166 (0.961)	57	366508			86.91- 146.91	125.21
125 Trichloroethene					CAS #: 79-01-6		
6.599	6.600 (1.031)	95	380298	43.1799	43.180	80.00- 120.00	100.00
6.599	6.600 (1.031)	130	430143			82.54- 142.54	113.11

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
125 Trichloroethene (continued)							
6.599	6.600 (1.031)	97	246438			35.40- 95.40	64.80
127 Methylcyclohexane					CAS #: 108-87-2		
6.697	6.698 (1.222)	83	522358	53.0909	53.091	80.00- 120.00	100.00
6.697	6.698 (1.222)	98	250214			16.94- 76.94	47.90
6.697	6.698 (1.222)	55	404474			46.96- 106.96	77.43
132 1,2-Dichloropropane					CAS #: 78-87-5		
6.837	6.852 (1.068)	63	316948	49.9728	49.973	80.00- 120.00	100.00
6.837	6.852 (1.068)	62	224567			41.52- 101.52	70.85
6.837	6.852 (1.068)	41	152118			17.88- 77.88	47.99
136 1,4-Dioxane					CAS #: 123-91-1		
6.935	6.936 (1.083)	88	207376	49.5812	49.581	80.00- 120.00	100.00
6.935	6.936 (1.083)	58	132810			35.49- 95.49	64.04
6.935	6.936 (1.083)	57	43606			0.00- 50.66	21.03
138 Bromodichloromethane					CAS #: 75-27-4		
7.075	7.075 (1.105)	83	605919	50.6631	50.663	80.00- 120.00	100.00
7.075	7.075 (1.105)	85	401504			34.46- 94.46	66.26
144 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
7.453	7.467 (1.164)	75	509852	46.9071	46.907	80.00- 120.00	100.00
7.453	7.467 (1.164)	77	165574			1.77- 61.77	32.47
7.453	7.453 (1.164)	39	210822			11.11- 71.11	41.35
145 4-Methyl-2-pentanone					CAS #: 108-10-1		
7.565	7.565 (1.181)	58	266655	48.5082	48.508	80.00- 120.00	100.00
7.565	7.565 (1.181)	43	656601			220.64- 280.64	246.24
7.565	7.579 (1.181)	85	125422			17.04- 77.04	47.04
147 Toluene					CAS #: 108-88-3		
7.691	7.691 (1.201)	91	1112706	49.4185	49.418	80.00- 120.00	100.00
7.691	7.691 (1.201)	92	647257			27.98- 87.98	58.17
150 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
7.943	7.943 (0.893)	75	481516	49.6173	49.617	80.00- 120.00	100.00
7.943	7.943 (0.893)	77	152381			1.64- 61.64	31.65
7.943	7.943 (0.893)	39	194501			10.07- 70.07	40.39
155 1,1,2-Trichloroethane					CAS #: 79-00-5		
8.097	8.111 (0.910)	97	387910	49.8117	49.812	80.00- 120.00	100.00
8.097	8.111 (0.910)	99	239596			32.91- 92.91	61.77
8.097	8.111 (0.910)	83	329598			55.03- 115.03	84.97

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
156 Tetrachloroethene					CAS #: 127-18-4		
8.139	8.139 (0.915)	166	597990	50.7315	50.732	80.00- 120.00	100.00
8.139	8.139 (0.915)	129	418883			41.30- 101.30	70.05
8.139	8.139 (0.915)	131	408937			39.67- 99.67	68.39
158 2-Hexanone					CAS #: 591-78-6		
8.265	8.265 (0.929)	58	368956	49.9573	49.957	80.00- 120.00	100.00
8.265	8.265 (0.929)	43	650093			147.18- 207.18	176.20
8.265	8.279 (0.929)	100	86728			0.00- 52.59	23.51
160 Dibromochloromethane					CAS #: 124-48-1		
8.418	8.419 (0.946)	129	753856	50.3643	50.364	80.00- 120.00	100.00
8.418	8.419 (0.946)	127	582971			47.74- 107.74	77.33
161 1,2-Dibromoethane (EDB)					CAS #: 106-93-4		
8.530	8.531 (0.959)	107	611762	49.6591	49.659	80.00- 120.00	100.00
8.530	8.531 (0.959)	109	577038			63.55- 123.55	94.32
165 Chlorobenzene					CAS #: 108-90-7		
8.908	8.922 (1.002)	112	928654	49.0719	49.072	80.00- 120.00	100.00
8.908	8.922 (1.002)	114	295786			1.75- 61.75	31.85
8.908	8.908 (1.002)	77	488591			22.27- 82.27	52.61
167 Ethyl Benzene					CAS #: 100-41-4		
8.964	8.964 (1.008)	106	480354	49.4380	49.438	80.00- 120.00	100.00
8.964	8.964 (1.008)	91	1455038			278.96- 338.96	302.91
169 m,p-Xylene					CAS #: 108-38-3		
9.062	9.062 (1.019)	106	579095	48.1031	48.103	80.00- 120.00	100.00
9.062	9.062 (1.019)	91	1116686			158.57- 218.57	192.83
171 o-Xylene					CAS #: 95-47-6		
9.398	9.398 (1.057)	106	568334	50.1540	50.154	80.00- 120.00	100.00
9.398	9.398 (1.057)	91	1183207			173.40- 233.40	208.19
172 Styrene					CAS #: 100-42-5		
9.426	9.426 (1.060)	104	967036	50.7590	50.759	80.00- 120.00	100.00
9.426	9.426 (1.060)	78	436984			15.95- 75.95	45.19
174 Bromoform					CAS #: 75-25-2		
9.636	9.636 (1.083)	173	797093	50.0118	50.012	80.00- 120.00	100.00
9.636	9.636 (1.083)	171	417921			22.23- 82.23	52.43
175 Cumene					CAS #: 98-82-8		
9.692	9.692 (1.090)	105	1713278	48.5554	48.555	80.00- 120.00	100.00
9.692	9.692 (1.090)	120	475910			0.00- 57.55	27.78

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

  175 Cumene (continued)
  9.692   9.692 (1.090)    51    140848                     0.00-  38.22     8.22
-------------------------------------------------------------------------------
  181 1,1,2,2-Tetrachloroethane                    CAS #: 79-34-5
 10.014  10.014 (1.126)    83    864664 56.8458   56.846  80.00- 120.00   100.00
 10.014  10.014 (1.126)    85    568162                    36.69-  96.69    65.71
-------------------------------------------------------------------------------
  182 Propylbenzene                                CAS #: 103-65-1
 10.041  10.028 (1.129)    91   2097116 50.1317   50.132  80.00- 120.00   100.00
 10.041  10.042 (1.129)   120    523580                     0.00-  54.81    24.97
 10.041  10.028 (1.129)   105     80926                     0.00-  33.86     3.86
-------------------------------------------------------------------------------
  188 4-Ethyltoluene                               CAS #: 622-96-8
 10.139  10.126 (1.140)   120    603008 53.5138   53.514  80.00- 120.00   100.00
 10.139  10.126 (1.140)   105   1901072                   292.39- 352.39   315.26
-------------------------------------------------------------------------------
  190 1,3,5-Trimethylbenzene                       CAS #: 108-67-8
 10.195  10.182 (1.146)   120    769342 50.0995   50.100  80.00- 120.00   100.00
 10.181  10.182 (1.145)   105   1507798                   169.92- 229.92   195.99
-------------------------------------------------------------------------------
  196 1,2,4-Trimethylbenzene                       CAS #: 95-63-6
 10.517  10.503 (1.182)   120    697364 50.6834   50.683  80.00- 120.00   100.00
 10.517  10.503 (1.182)   105   1477559                   182.08- 242.08   211.88
-------------------------------------------------------------------------------
  208 1,3-Dichlorobenzene                          CAS #: 541-73-1
 10.811  10.797 (1.216)   146   1121129 50.2559   50.256  80.00- 120.00   100.00
 10.811  10.797 (1.216)   148    711085                    34.06-  94.06    63.43
 10.811  10.797 (1.216)   111    412077                     6.19-  66.19    36.76
-------------------------------------------------------------------------------
  209 1,4-Dichlorobenzene                          CAS #: 106-46-7
 10.895  10.881 (1.225)   146   1115642 50.6012   50.601  80.00- 120.00   100.00
 10.895  10.881 (1.225)   148    716051                    33.53-  93.53    64.18
 10.895  10.881 (1.225)   111    388708                     5.17-  65.17    34.84
-------------------------------------------------------------------------------
  212 alpha-Chlorotoluene                          CAS #: 100-44-7
 11.007  10.993 (1.238)    91   1435431 52.8569   52.857  80.00- 120.00   100.00
 11.007  10.993 (1.238)   126    325080                     0.00-  52.56    22.65
-------------------------------------------------------------------------------
  214 1,2-Dichlorobenzene                          CAS #: 95-50-1
 11.217  11.217 (1.261)   146   1053773 50.4555   50.456  80.00- 120.00   100.00
 11.217  11.217 (1.261)   148    671497                    33.19-  93.19    63.72
 11.217  11.203 (1.261)   111    403655                     8.29-  68.29    38.31
-------------------------------------------------------------------------------
  226 1,2,4-Trichlorobenzene                       CAS #: 120-82-1
 12.658  12.630 (1.423)   180    870650 50.4784   50.478  80.00- 120.00   100.00
 12.658  12.630 (1.423)   182    827767                    66.05- 126.05    95.07
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RT	EXP RT	(REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
227 Hexachlorobutadiene						CAS #: 87-68-3		
12.742	12.714	(1.433)	225	648761	50.3916	50.392	80.00- 120.00	100.00
12.742	12.714	(1.433)	223	408509			33.34- 93.34	62.97
228 Naphthalene						CAS #: 91-20-3		
12.924	12.910	(1.453)	128	118431	4.20092	4.201	80.00- 120.00	100.00
12.924	12.910	(1.453)	127	15283			0.00- 42.14	12.91

QC Flag Legend

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

Report Date: 05-Mar-2015 11:50

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdj.i
Lab File ID: j030505.d
Lab Smp Id: LCSD
Analysis Type: VOA
Quant Type: ISTD
Operator: sg
Method File: /chem/msdj.i/05mar15.b/j15q0304a.m
Misc Info: 50ppbv(200ppbv)

Calibration Date: 05-MAR-2015
Calibration Time: 09:28
Client Smp ID: LCSD
Level: LOW
Sample Type: AIR

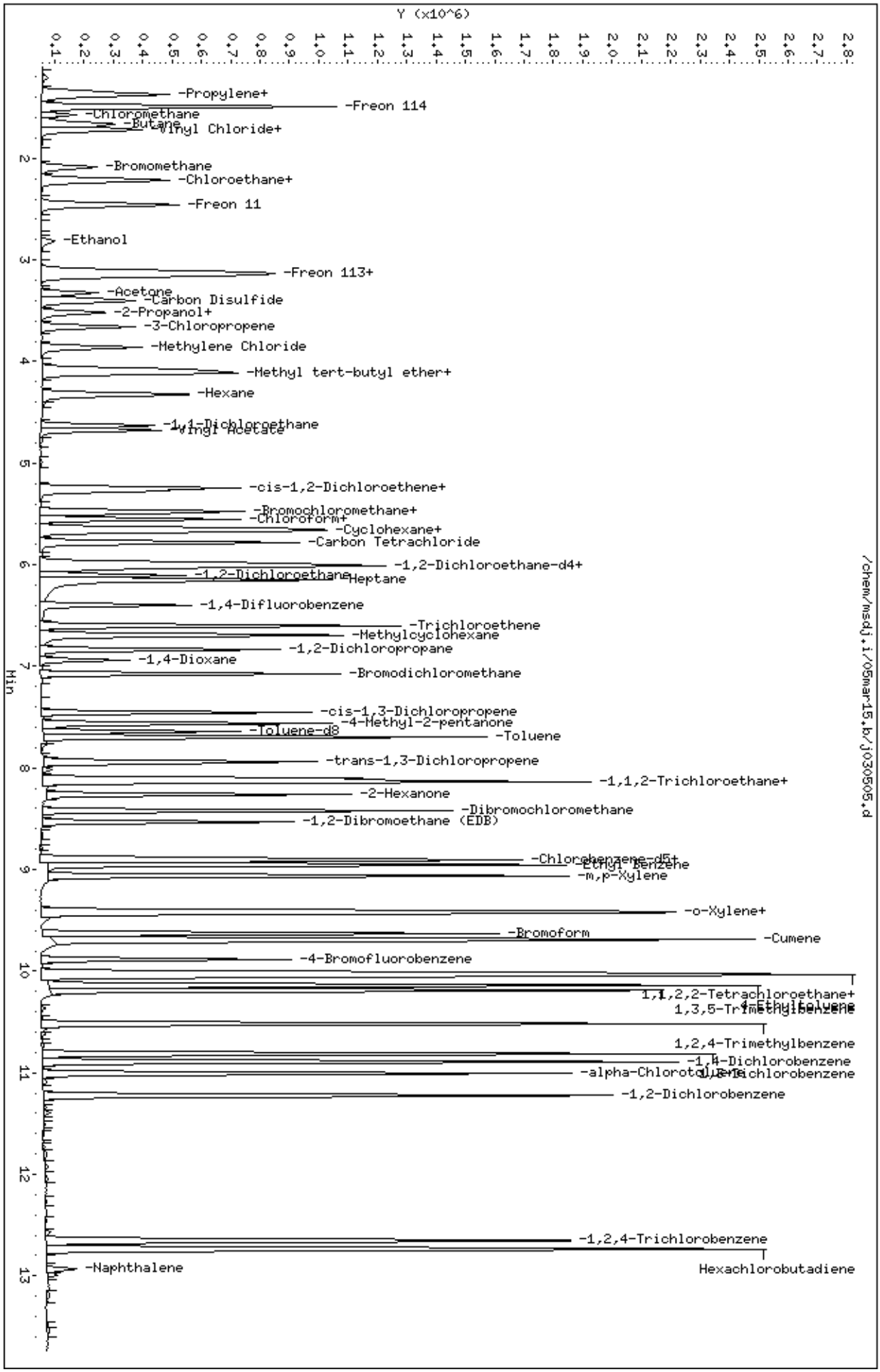
COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
98 Bromochloromethan	140692	84415	196969	103421	-26.49
123 1,4-Difluorobenze	614418	368651	860185	454238	-26.07
163 Chlorobenzene-d5	577173	346304	808042	428602	-25.74

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
98 Bromochloromethan	5.49	5.16	5.82	5.48	-0.26
123 1,4-Difluorobenze	6.40	6.07	6.73	6.40	0.00
163 Chlorobenzene-d5	8.89	8.56	9.22	8.89	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/msdj.i/05mar15.b/j030505.d
Date : 05-MAR-2015 11:22
Client ID: LCSD
Sample Info: 50ml #2716-98
Column phase: RTX-624

Instrument: msdj.i
Operator: sg
Column diameter: 0.25



Page 1

Data File: /chem/msdj.i/05mar15.b/j030505.d

Date : 05-MAR-2015 11:22

Client ID: LCSD

Instrument: msdj.i

Sample Info: 50ml #2716-98

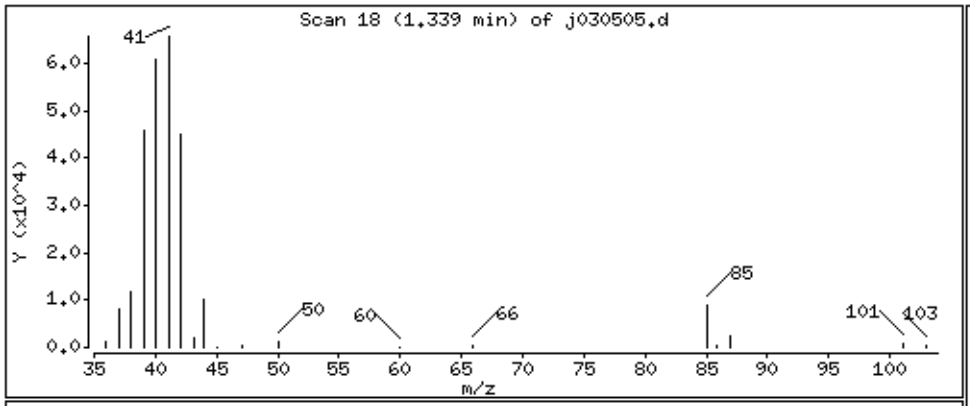
Operator: sg

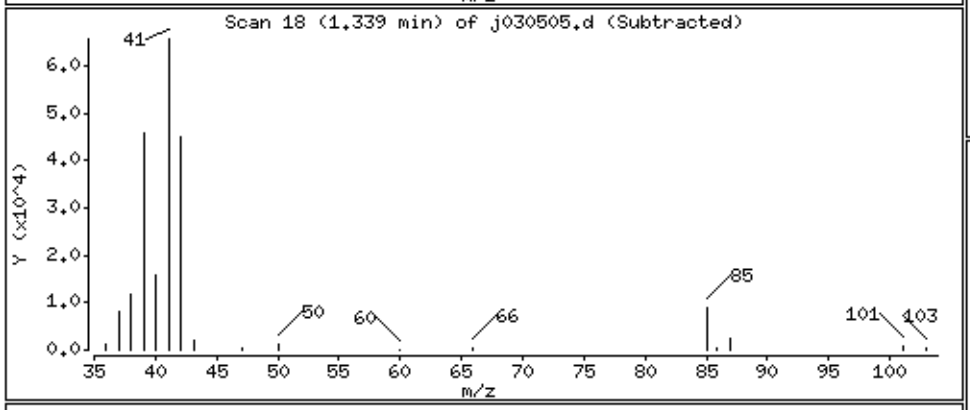
Column phase: RTX-624

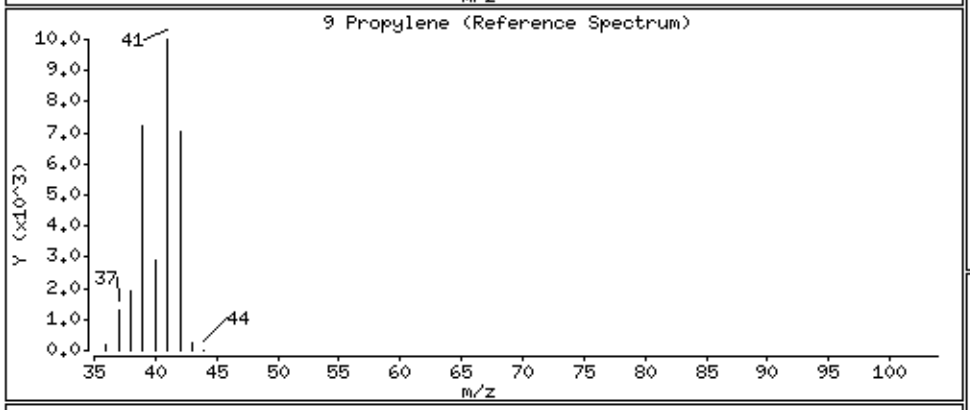
Column diameter: 0.25

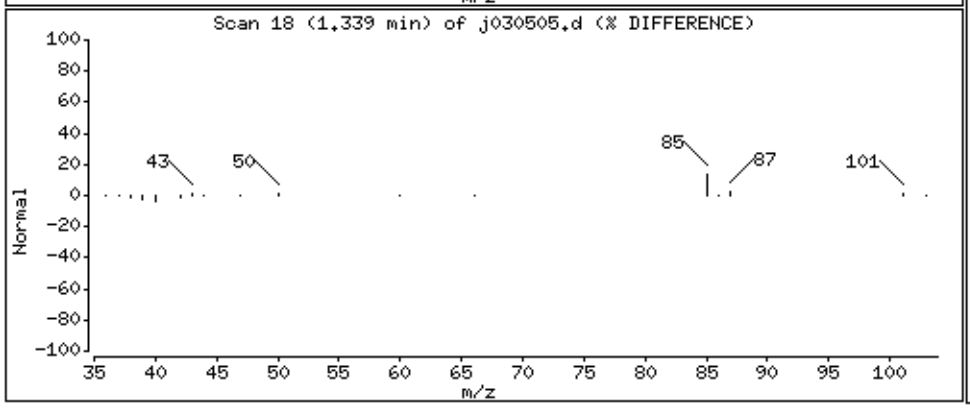
9 Propylene

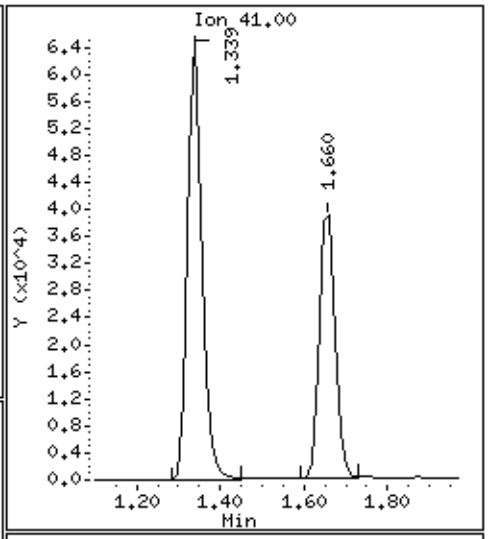
Concentration: 52.086 PPBV

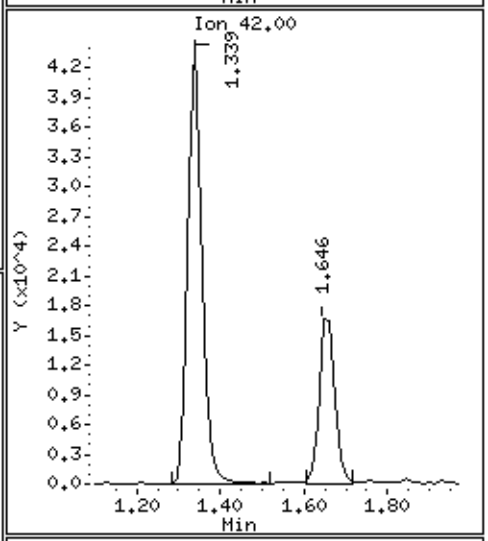


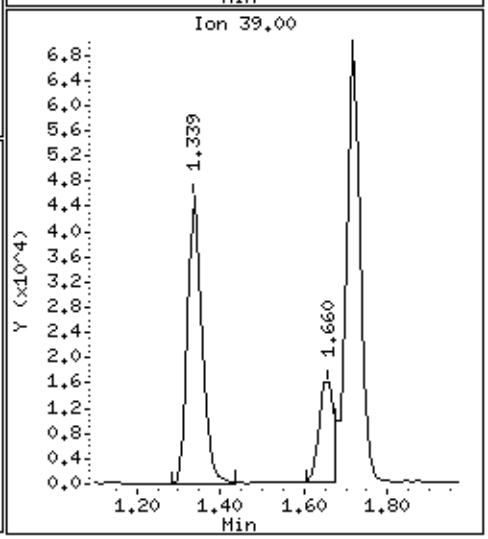












Data File: /chem/msdj.i/05mar15.b/j030505.d

Date : 05-MAR-2015 11:22

Client ID: LCSD

Instrument: msdj.i

Sample Info: 50ml #2716-98

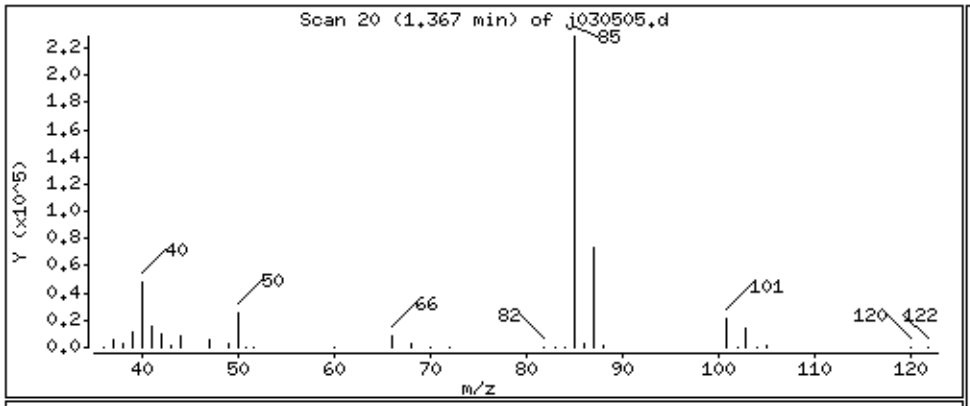
Operator: sg

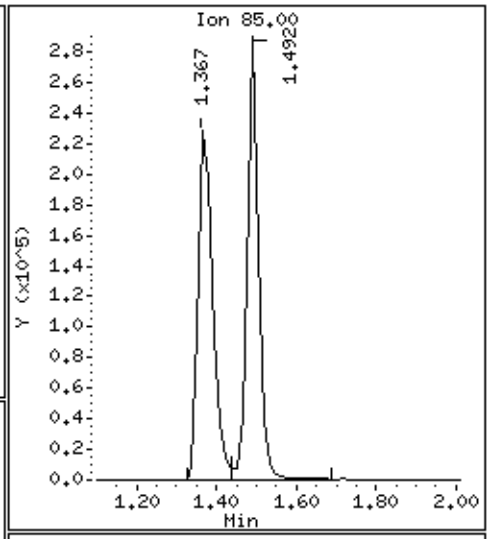
Column phase: RTX-624

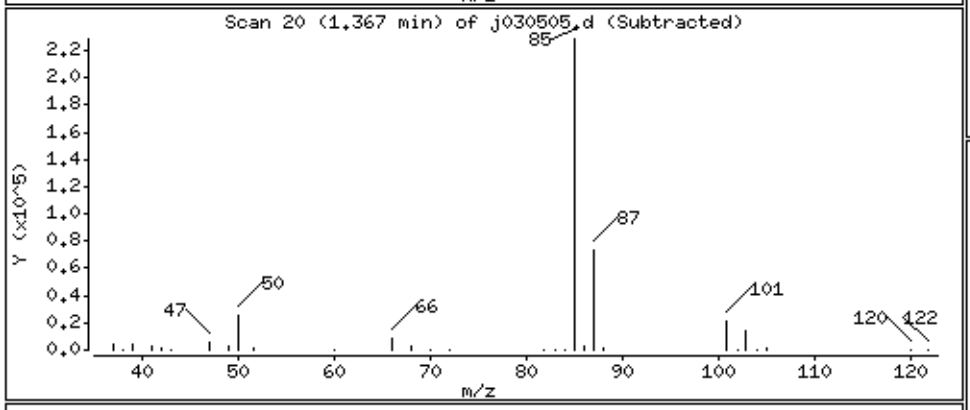
Column diameter: 0.25

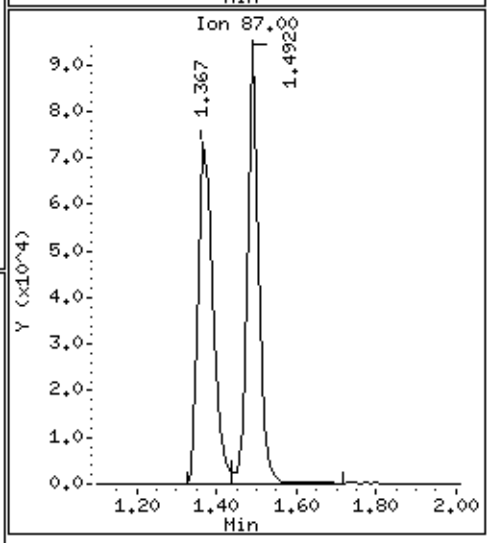
11 Freon 12

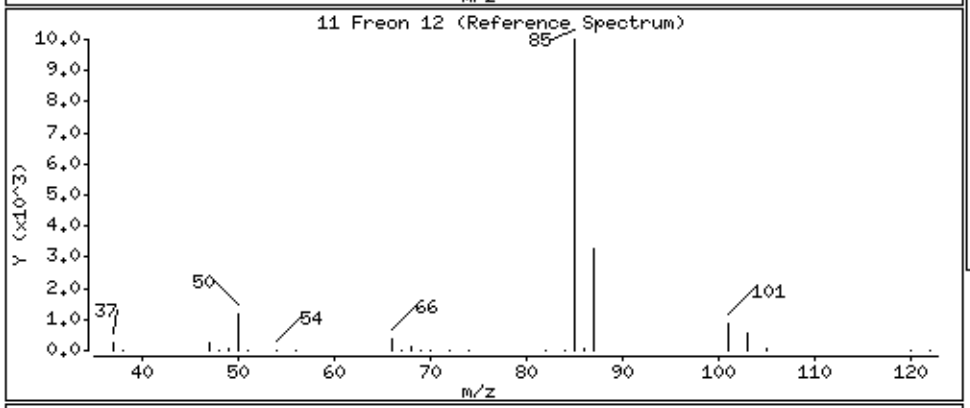
Concentration: 55.027 PPBV

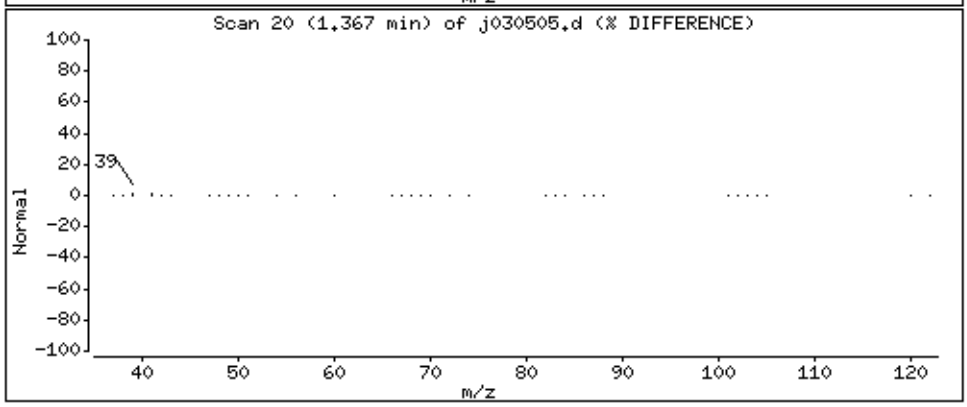












Data File: /chem/msdj.i/05mar15.b/j030505.d

Date : 05-MAR-2015 11:22

Client ID: LCSD

Instrument: msdj.i

Sample Info: 50ml #2716-98

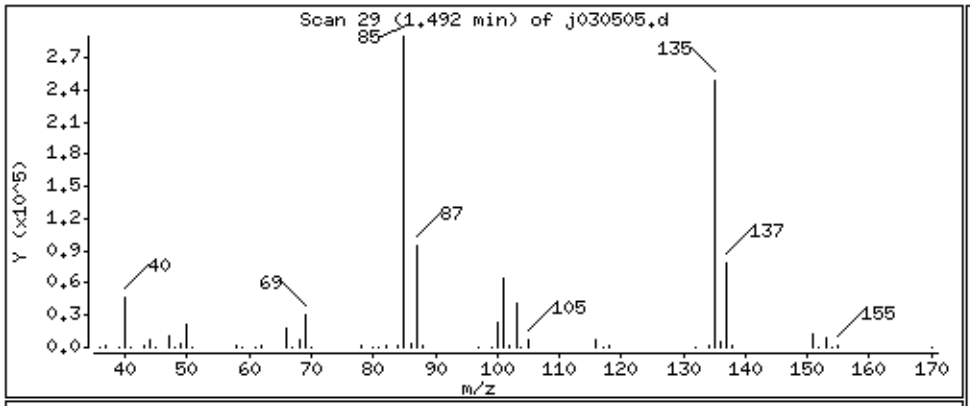
Operator: sg

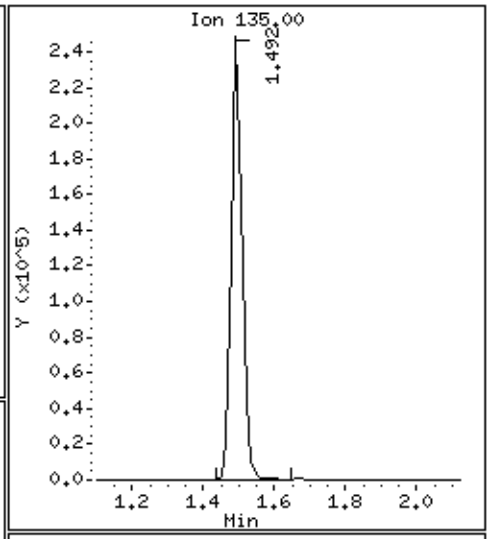
Column phase: RTX-624

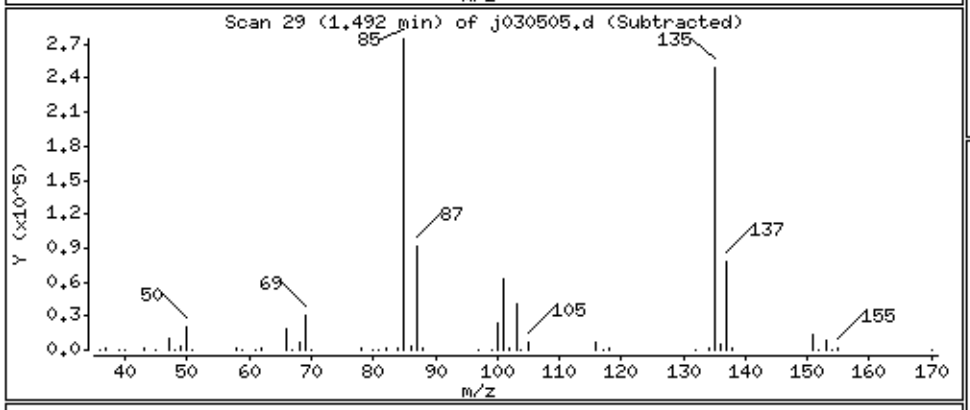
Column diameter: 0.25

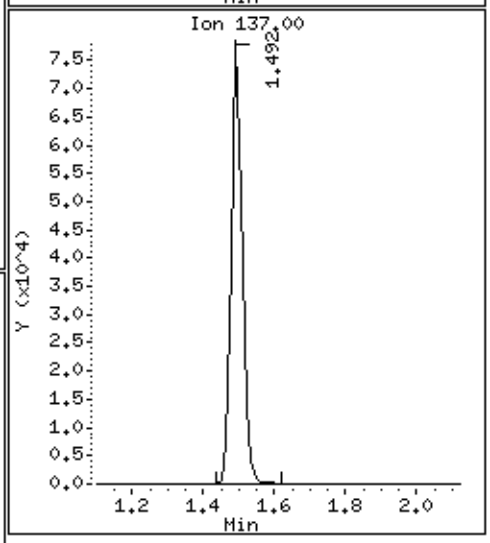
15 Freon 114

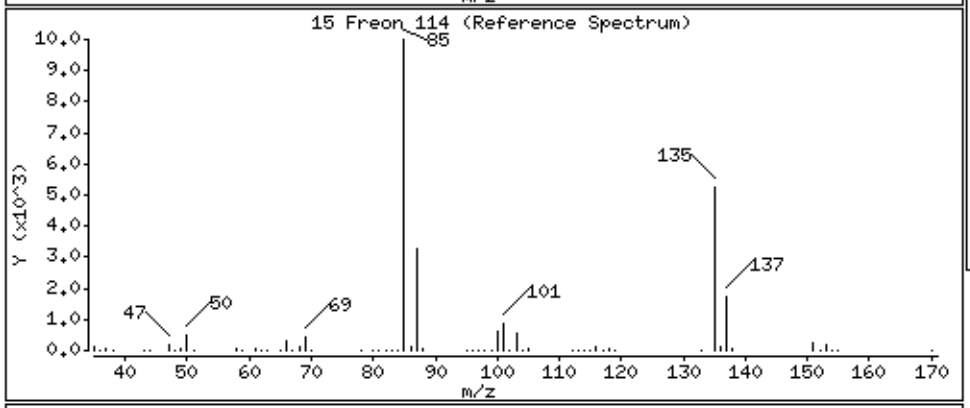
Concentration: 54.658 PPBV

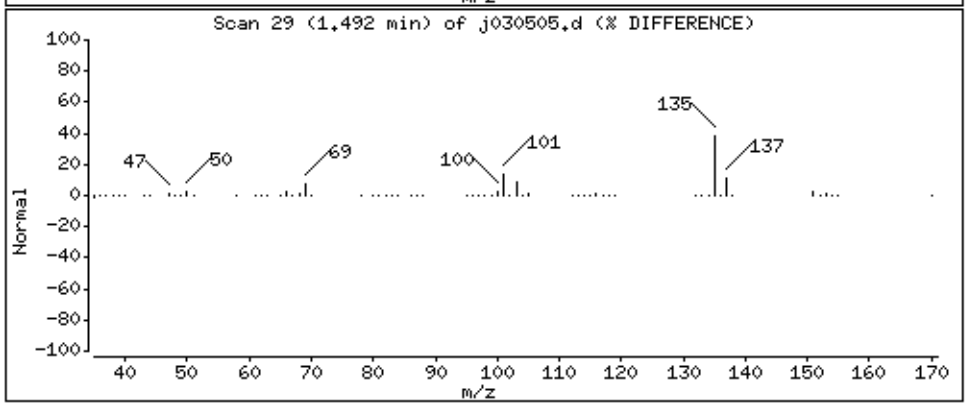












Data File: /chem/msdj.i/05mar15.b/j030505.d

Date : 05-MAR-2015 11:22

Client ID: LCSD

Instrument: msdj.i

Sample Info: 50ml #2716-98

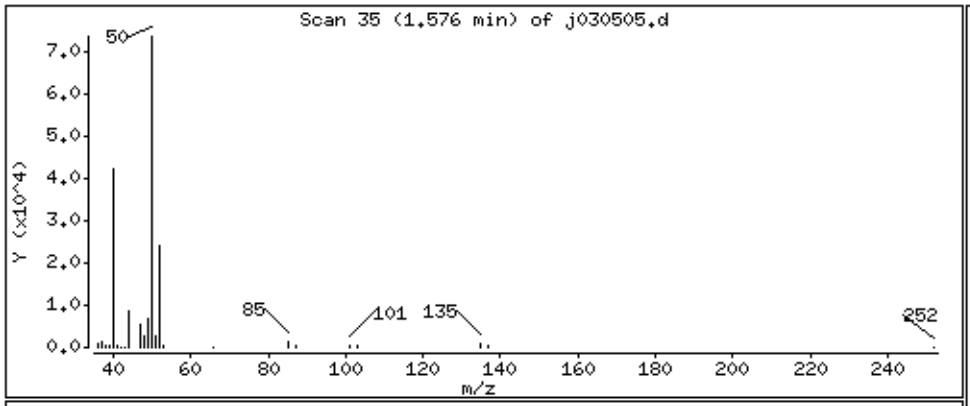
Operator: sg

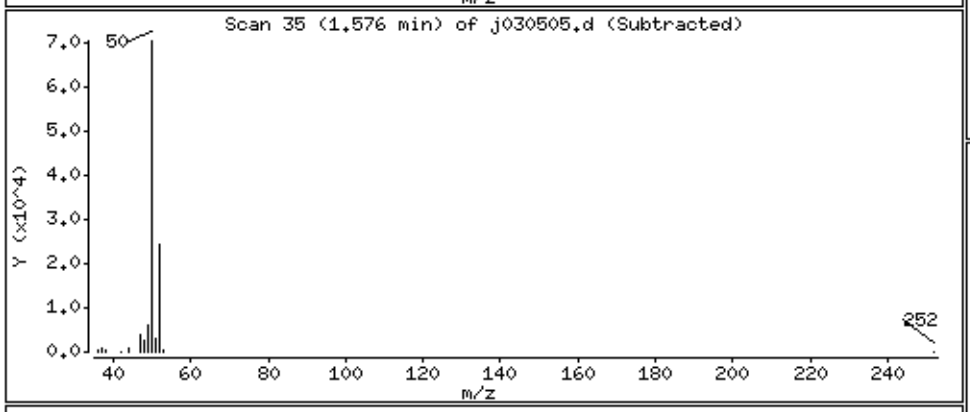
Column phase: RTX-624

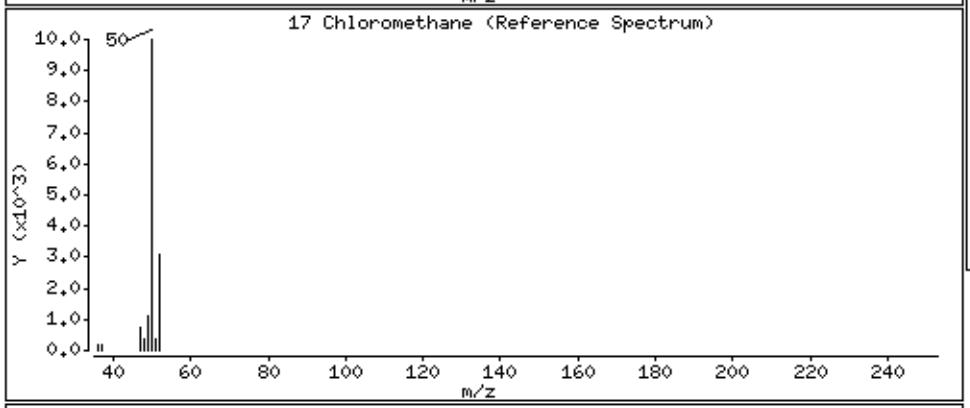
Column diameter: 0.25

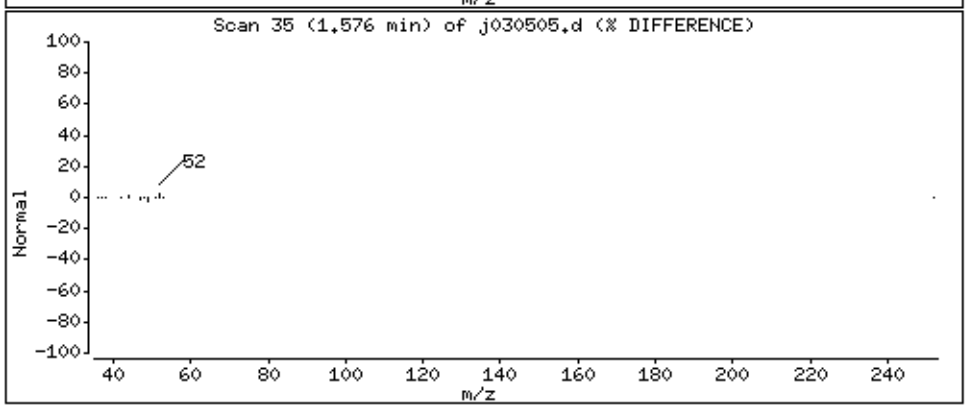
17 Chloromethane

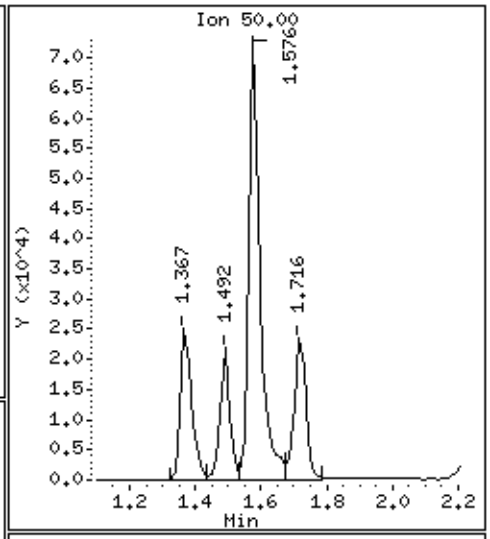
Concentration: 59.588 PPBV

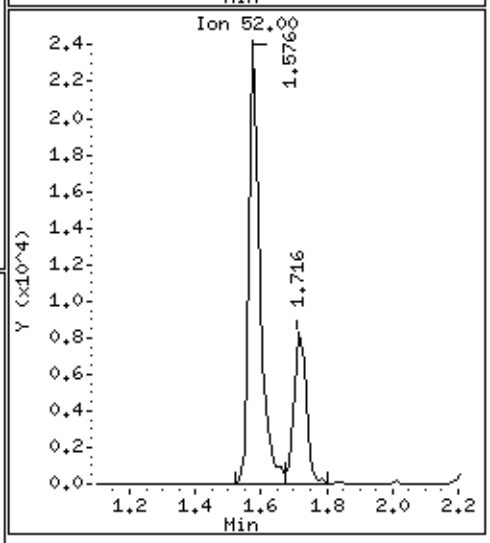












Data File: /chem/msdj.i/05mar15.b/j030505.d

Date : 05-MAR-2015 11:22

Client ID: LCSD

Instrument: msdj.i

Sample Info: 50ml #2716-98

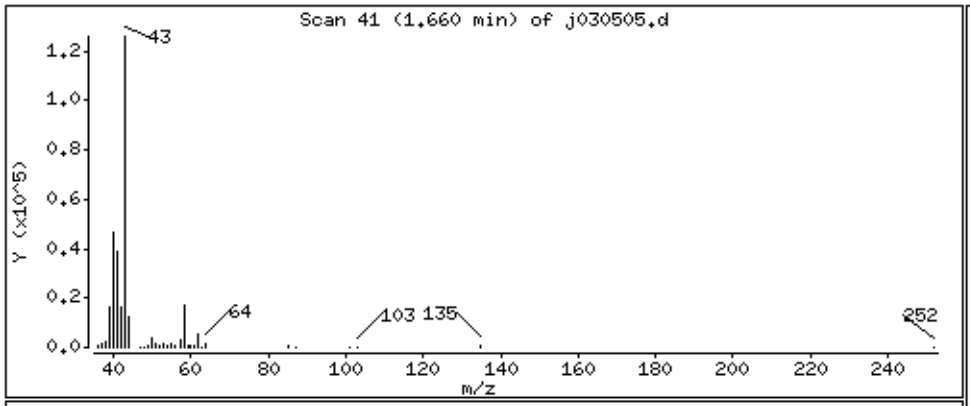
Operator: sg

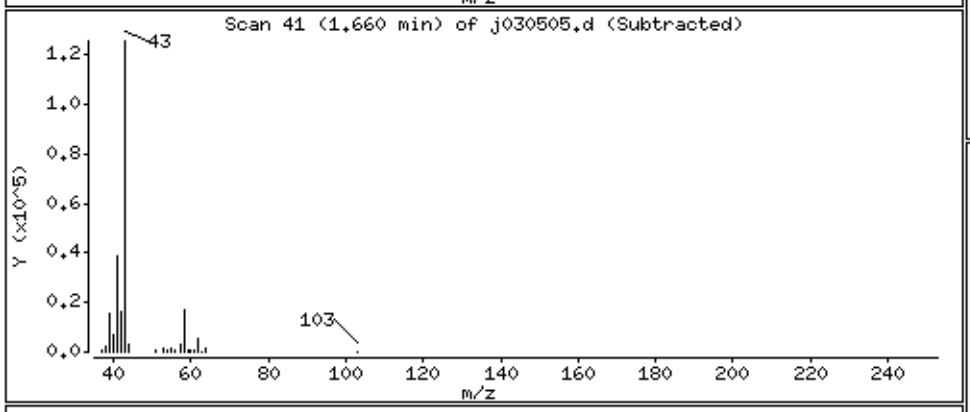
Column phase: RTX-624

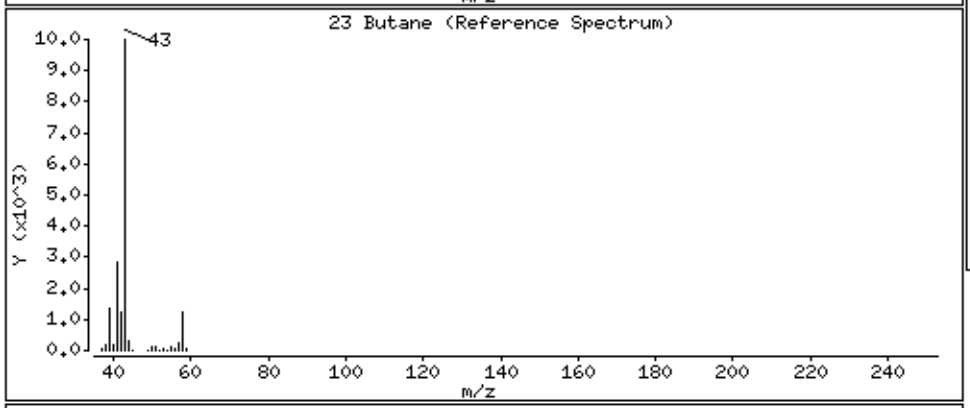
Column diameter: 0.25

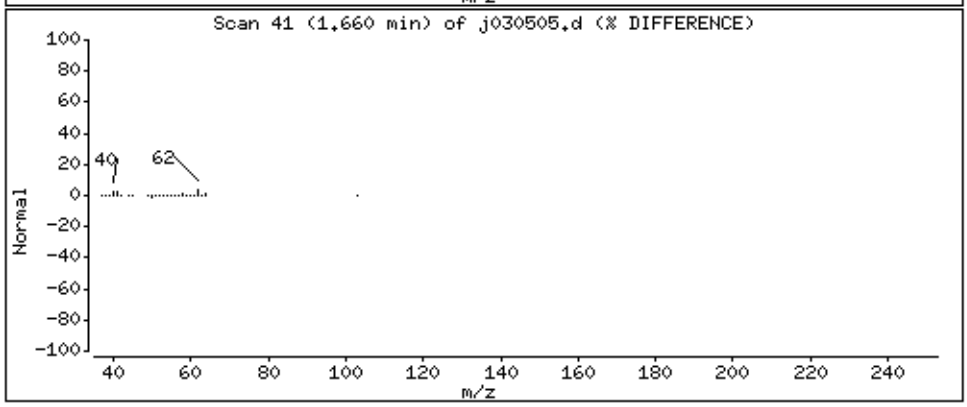
23 Butane

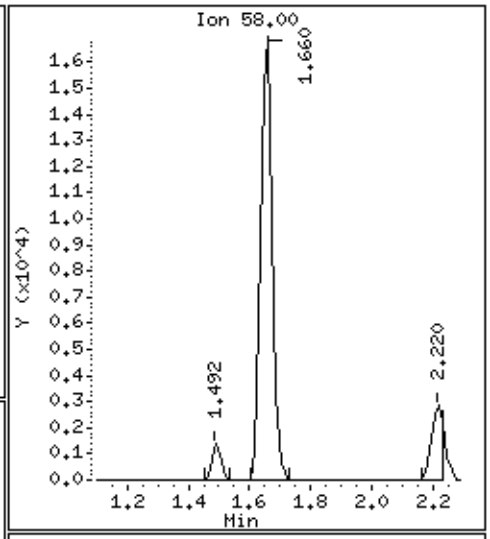
Concentration: 55.595 PPBV

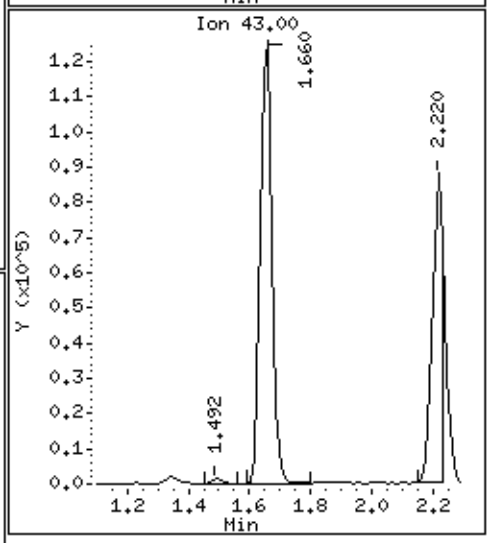












Data File: /chem/msdj.i/05mar15.b/j030505.d

Date : 05-MAR-2015 11:22

Client ID: LCSD

Instrument: msdj.i

Sample Info: 50ml #2716-98

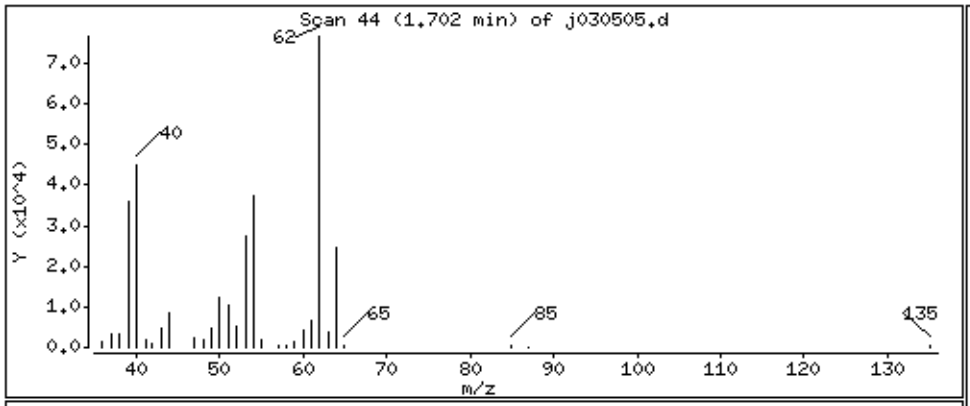
Operator: sg

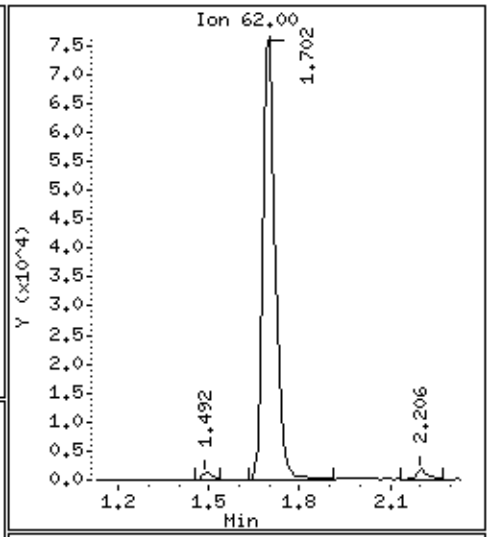
Column phase: RTX-624

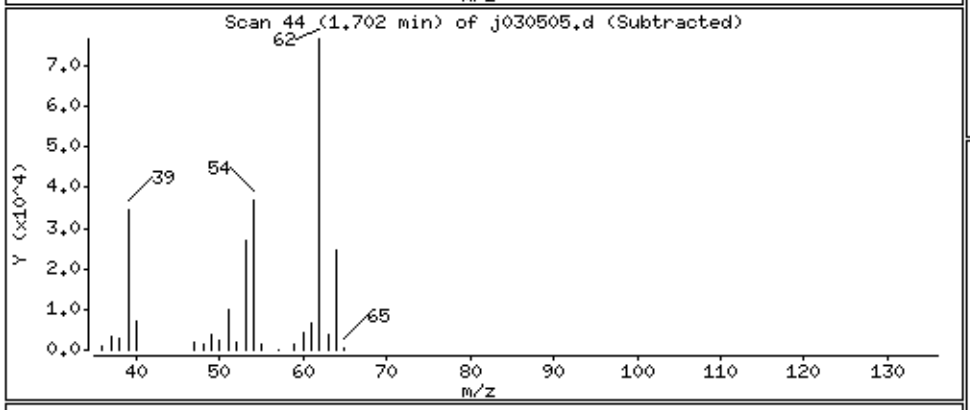
Column diameter: 0.25

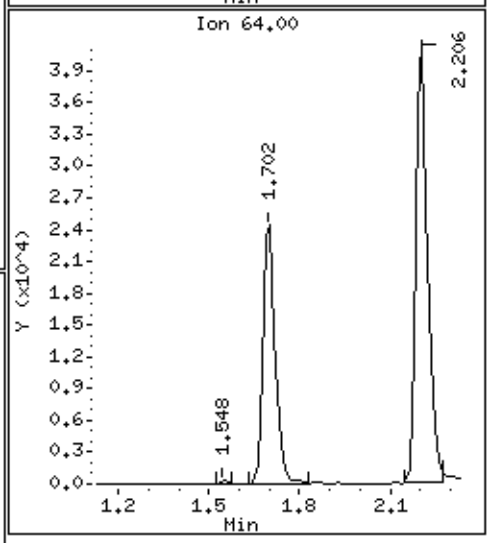
25 Vinyl Chloride

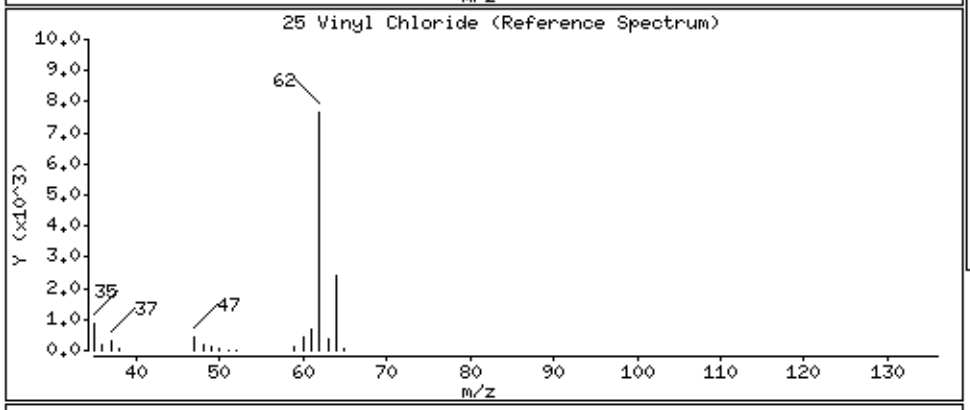
Concentration: 55.448 PPBV

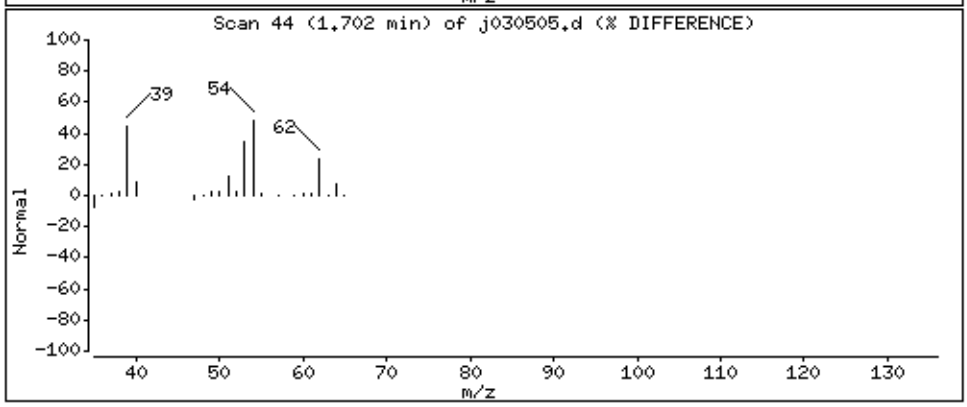












Data File: /chem/msdj.i/05mar15.b/j030505.d

Date : 05-MAR-2015 11:22

Client ID: LCSD

Instrument: msdj.i

Sample Info: 50ml #2716-98

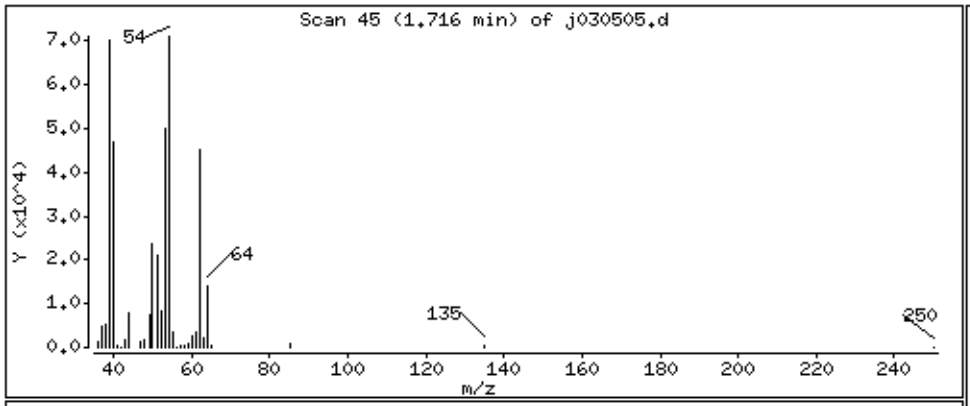
Operator: sg

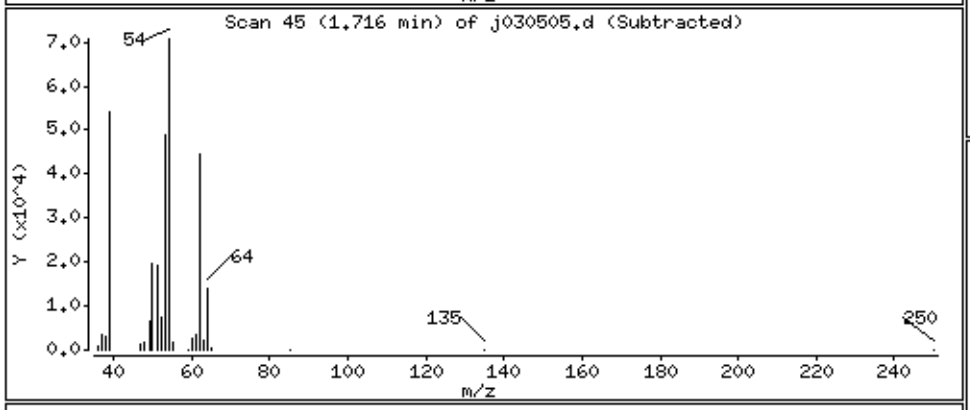
Column phase: RTX-624

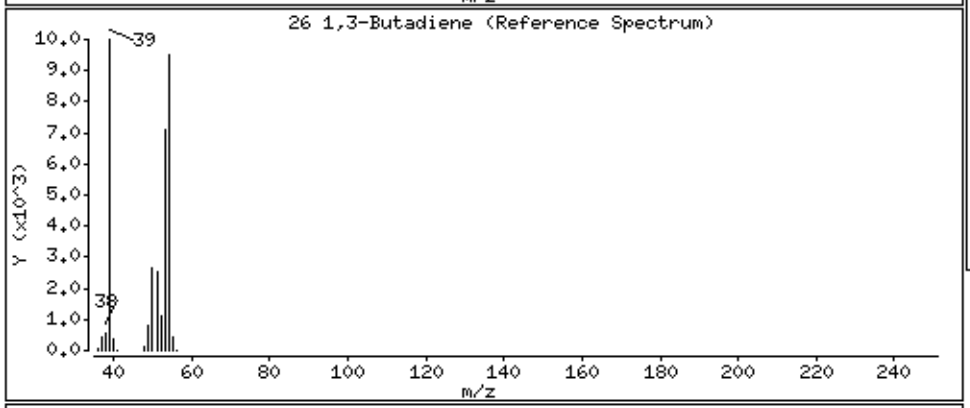
Column diameter: 0.25

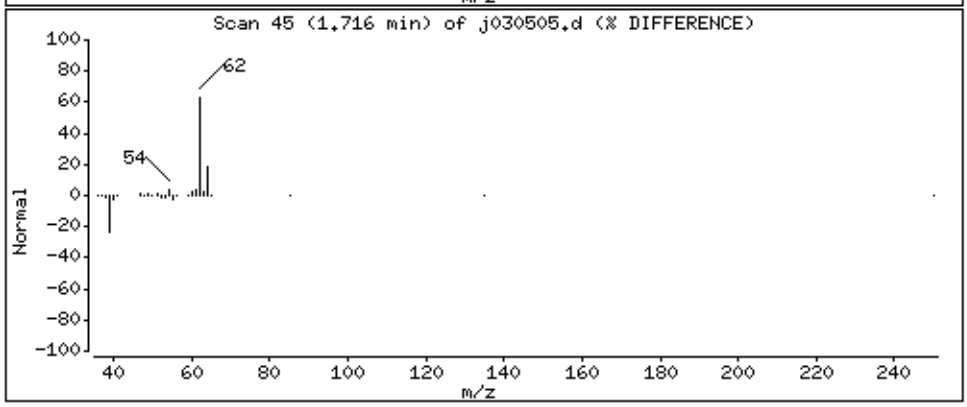
26 1,3-Butadiene

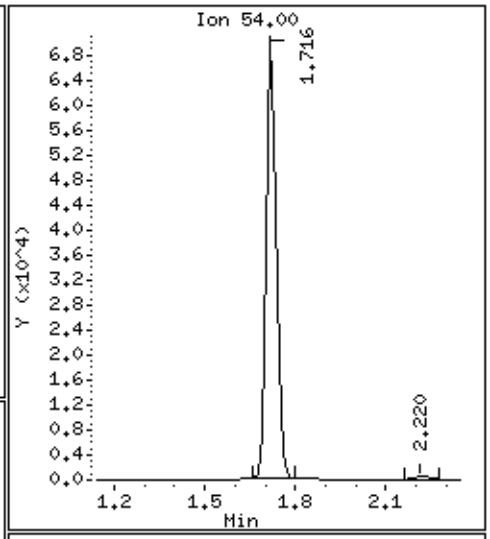
Concentration: 51.507 PPBV

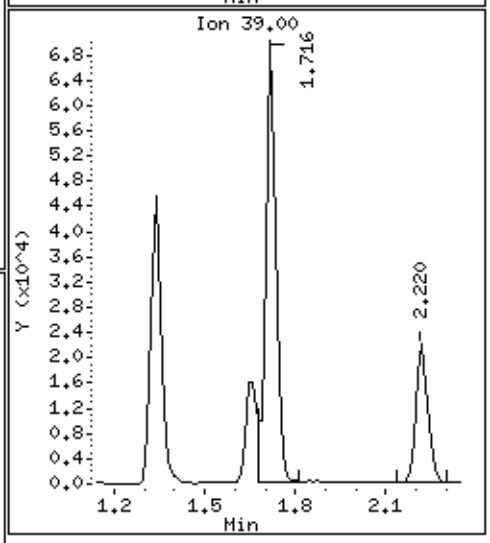












Data File: /chem/msdj.i/05mar15.b/j030505.d

Date : 05-MAR-2015 11:22

Client ID: LCSD

Instrument: msdj.i

Sample Info: 50ml #2716-98

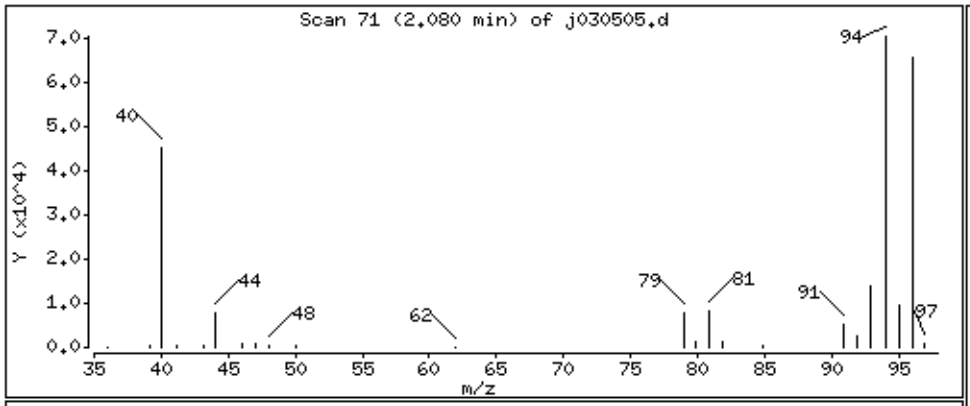
Operator: sg

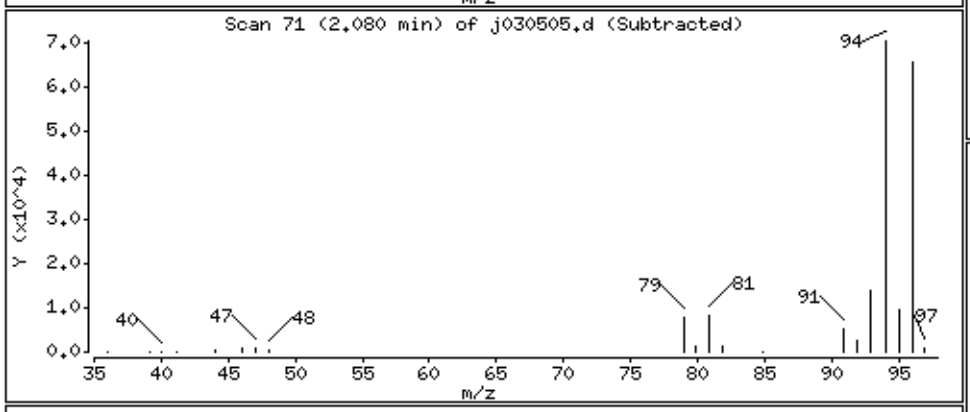
Column phase: RTX-624

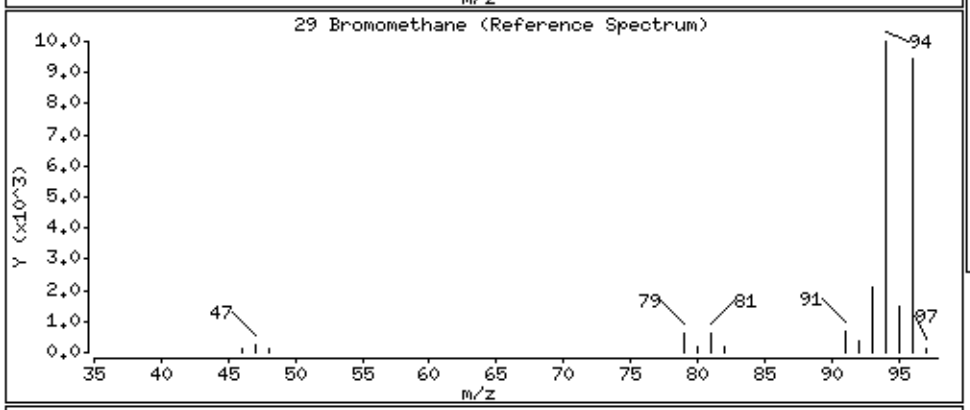
Column diameter: 0.25

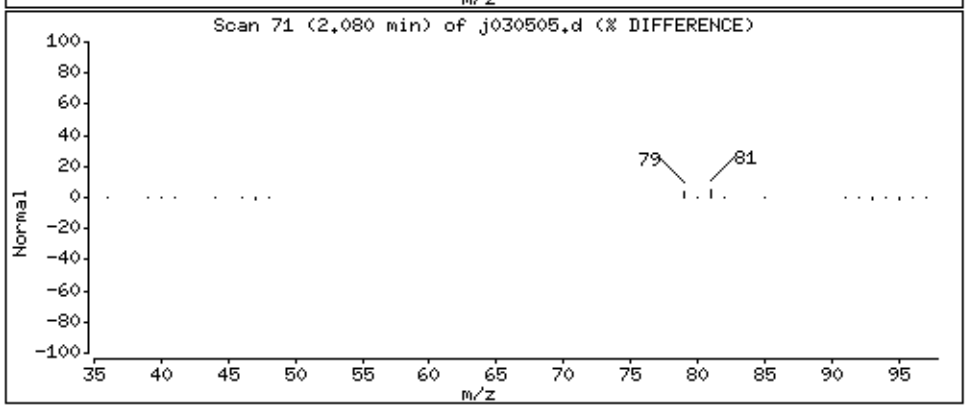
29 Bromomethane

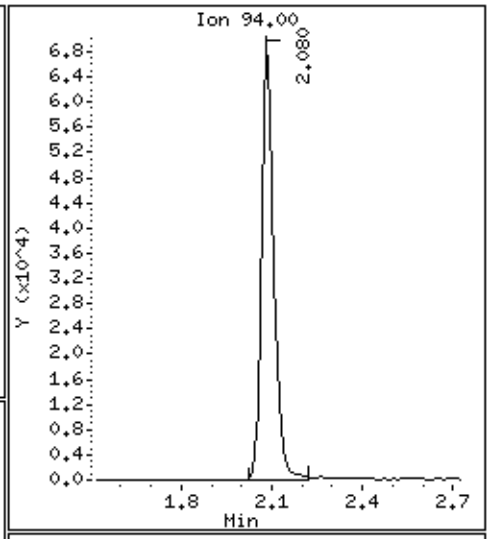
Concentration: 60.482 PPBV

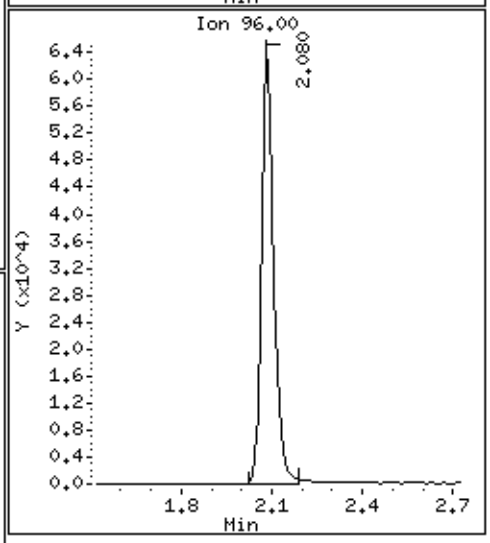












Data File: /chem/msdj.i/05mar15.b/j030505.d

Date : 05-MAR-2015 11:22

Client ID: LCSD

Instrument: msdj.i

Sample Info: 50ml #2716-98

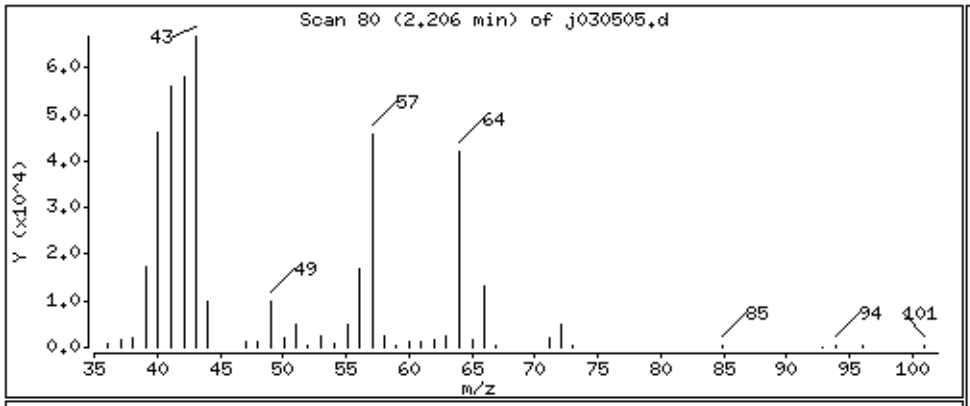
Operator: sg

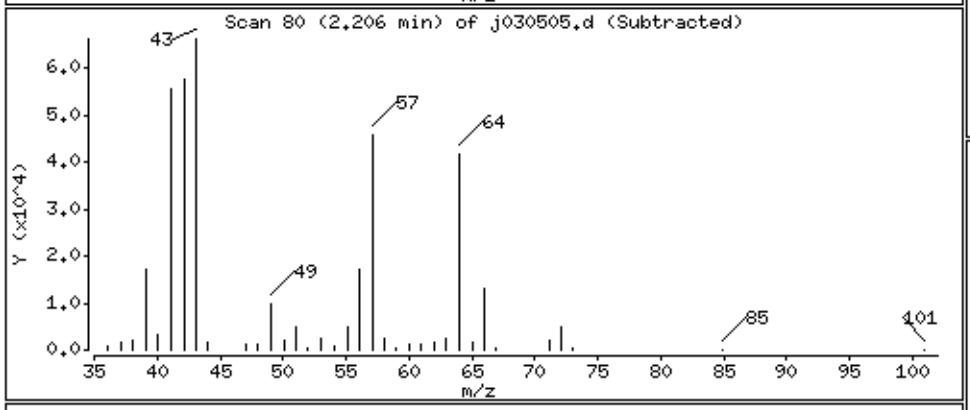
Column phase: RTX-624

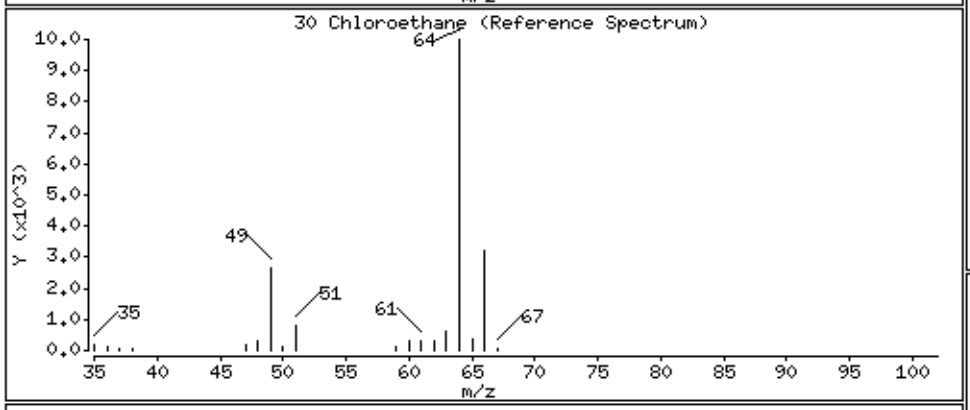
Column diameter: 0.25

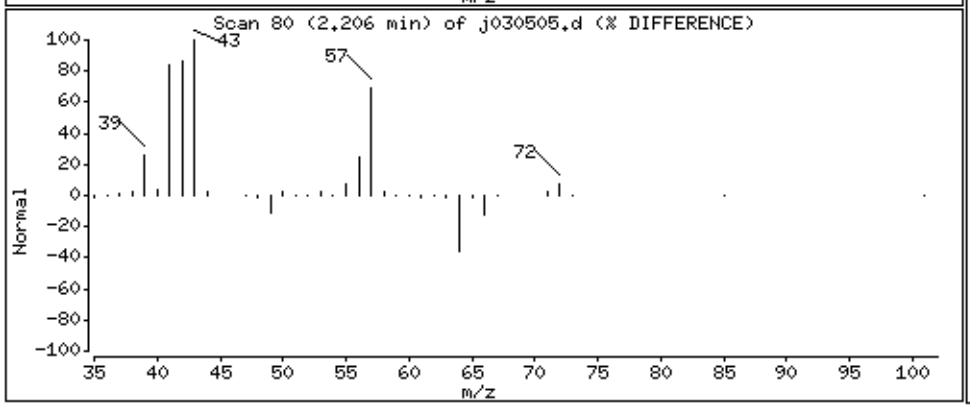
30 Chloroethane

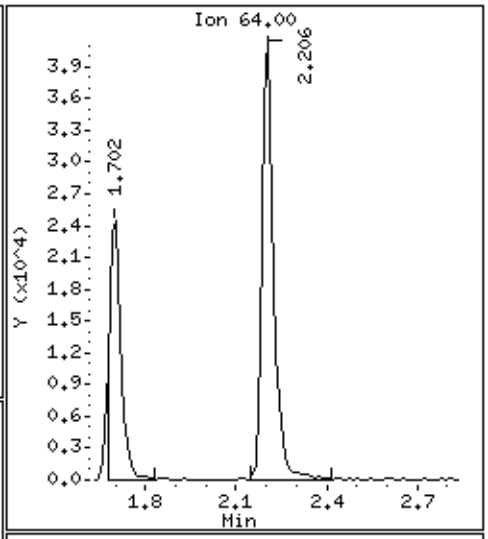
Concentration: 56.669 PPBV

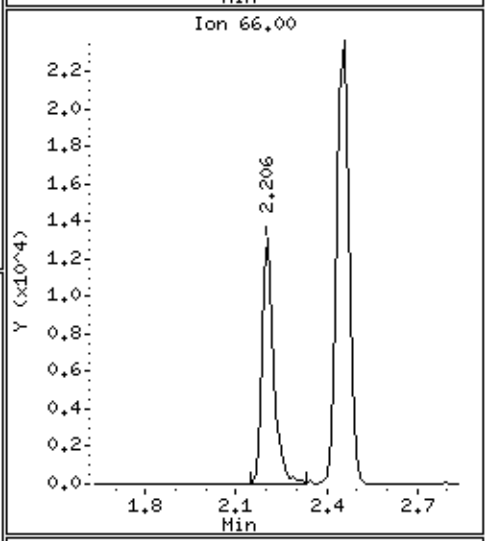


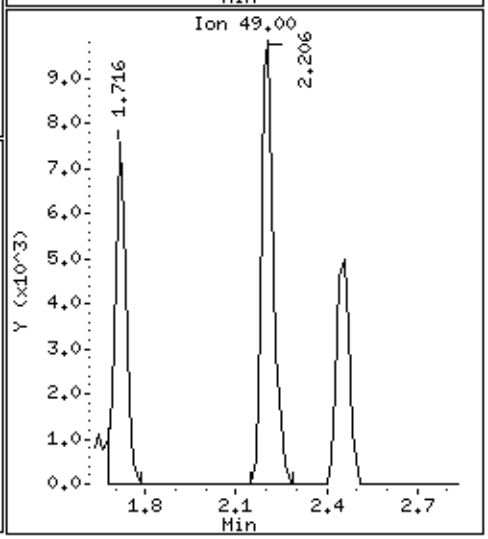












Data File: /chem/msdj.i/05mar15.b/j030505.d

Date : 05-MAR-2015 11:22

Client ID: LCSD

Instrument: msdj.i

Sample Info: 50ml #2716-98

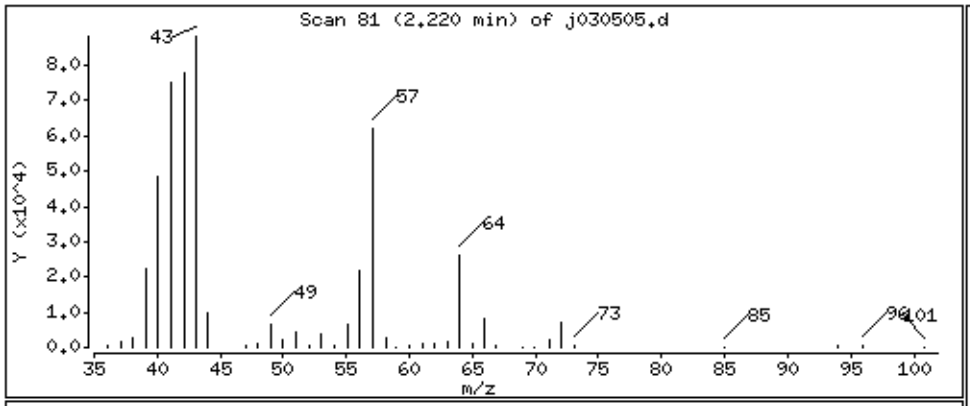
Operator: sg

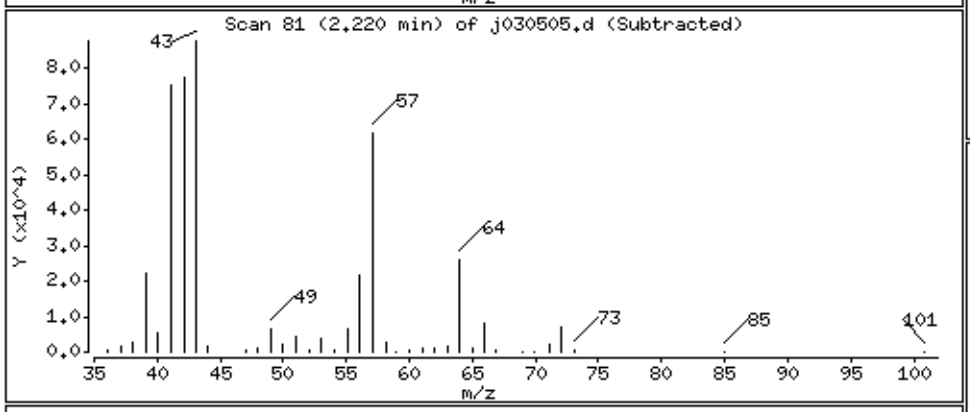
Column phase: RTX-624

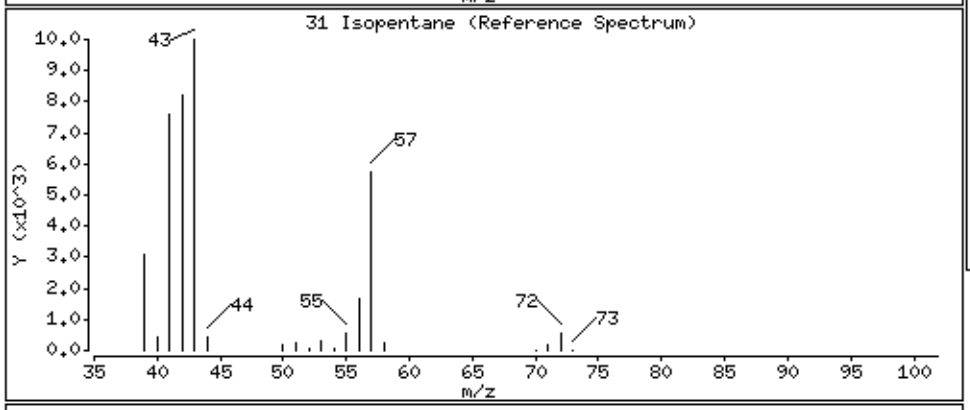
Column diameter: 0.25

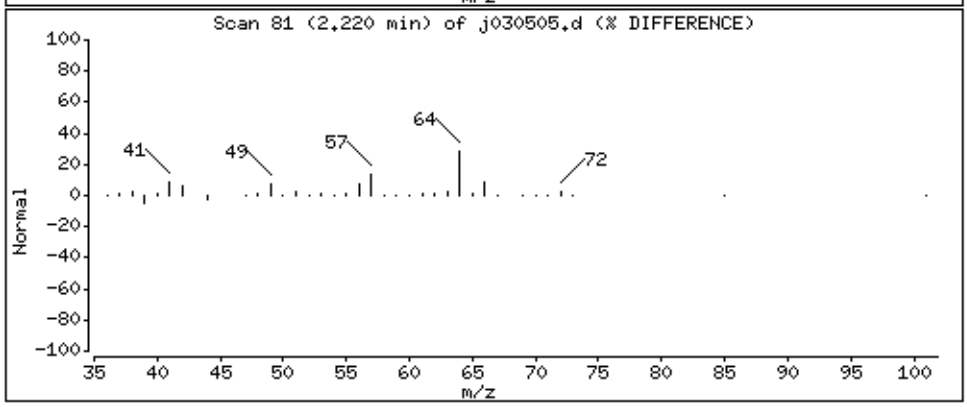
31 Isopentane

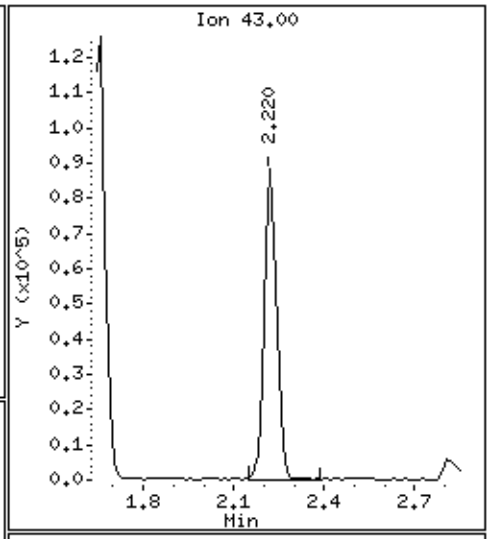
Concentration: 52.823 PPBV

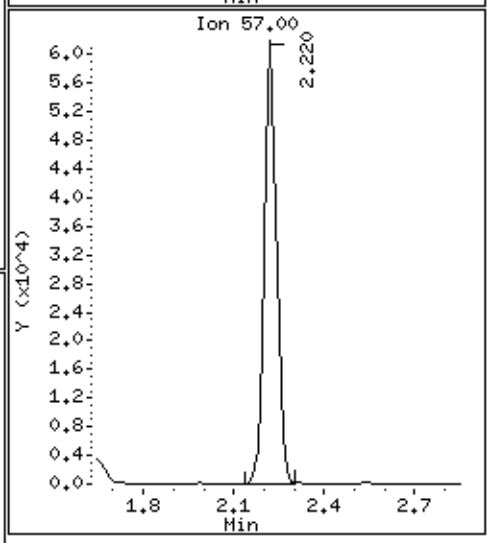












Data File: /chem/msdj.i/05mar15.b/j030505.d

Date : 05-MAR-2015 11:22

Client ID: LCSD

Instrument: msdj.i

Sample Info: 50ml #2716-98

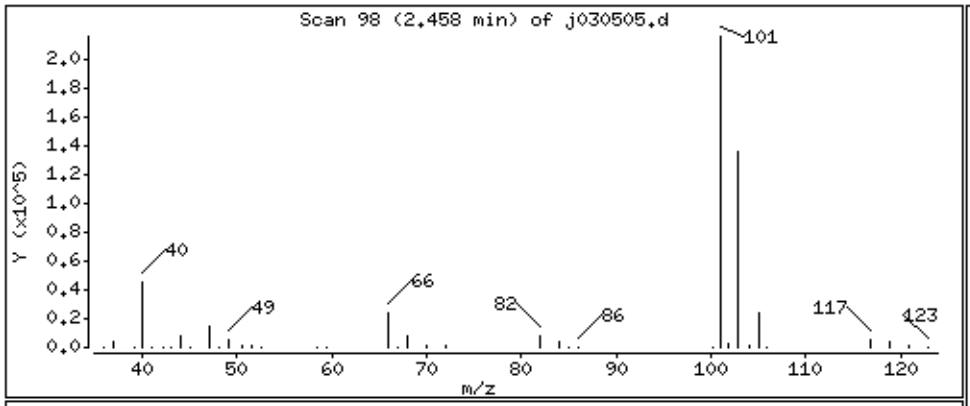
Operator: sg

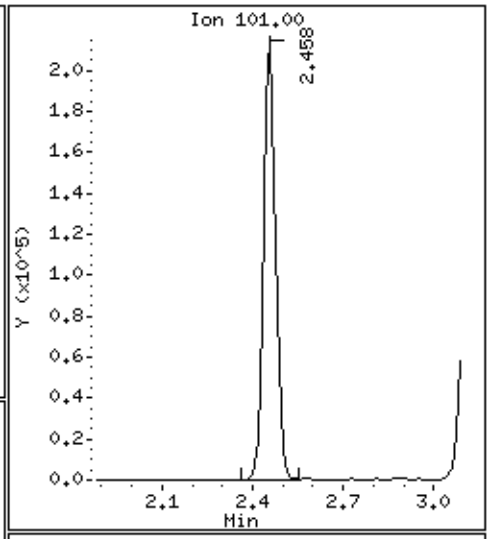
Column phase: RTX-624

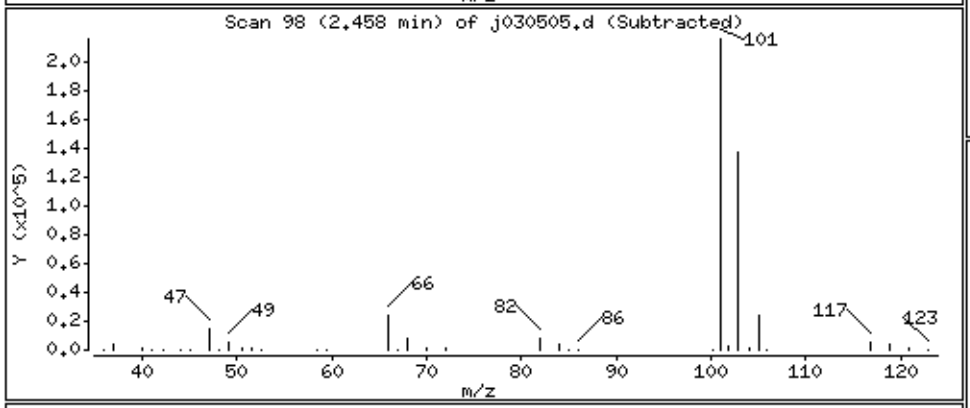
Column diameter: 0.25

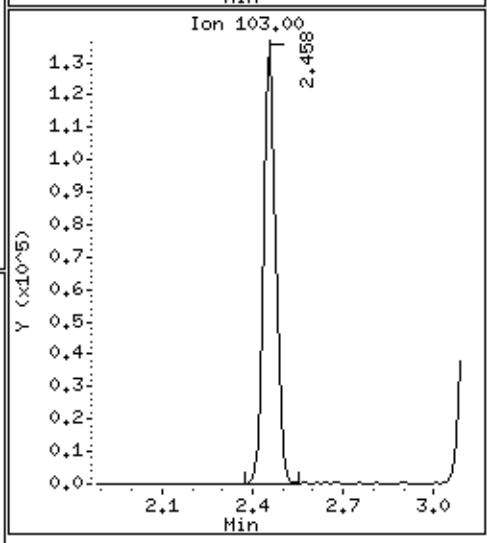
35 Freon 11

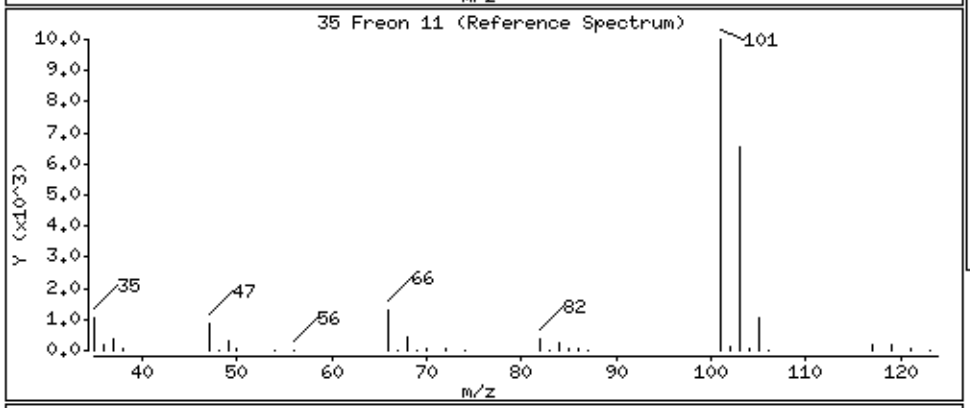
Concentration: 53.759 PPBV

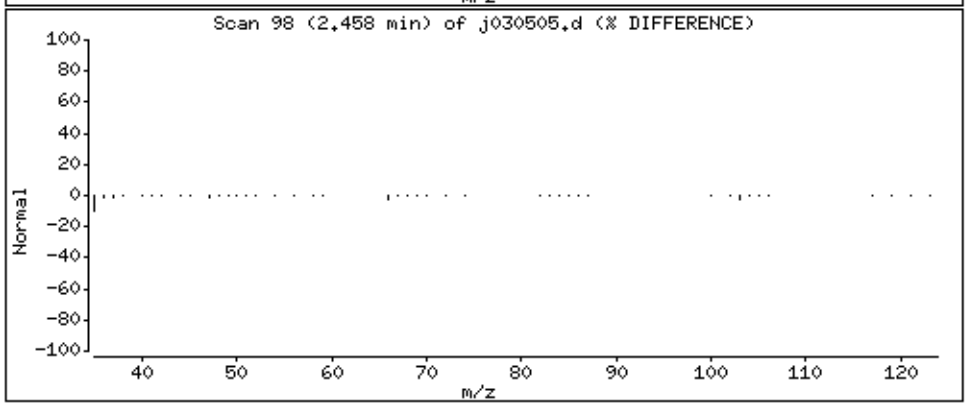












Data File: /chem/msdj.i/05mar15.b/j030505.d

Date : 05-MAR-2015 11:22

Client ID: LCSD

Instrument: msdj.i

Sample Info: 50ml #2716-98

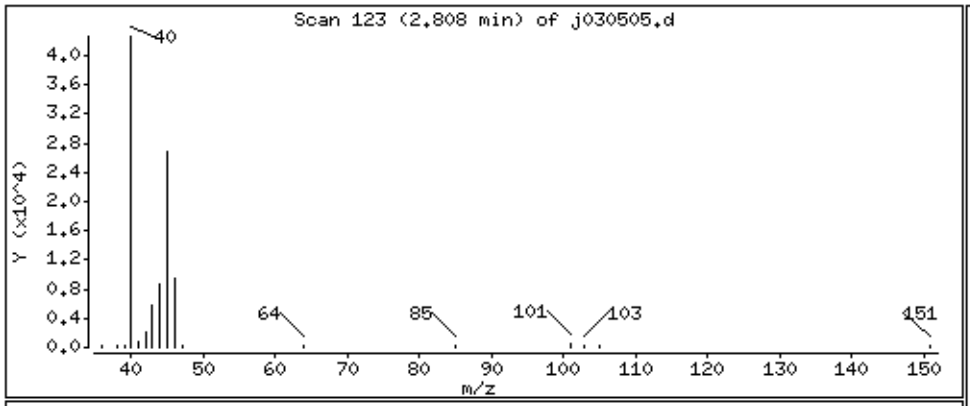
Operator: sg

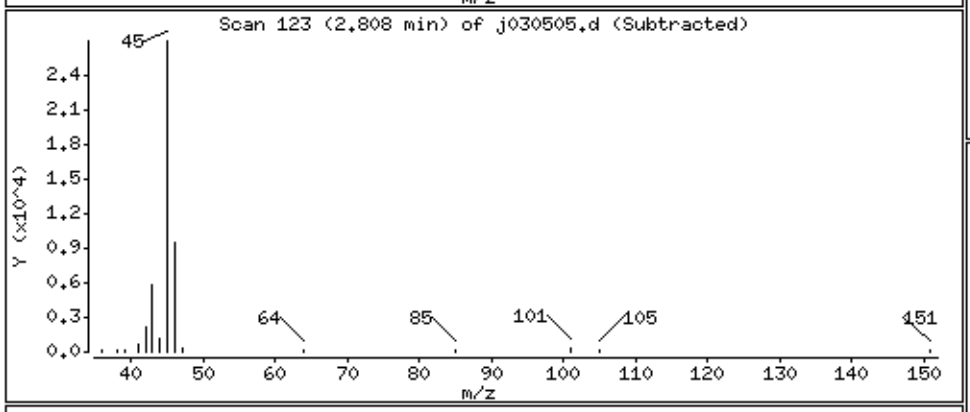
Column phase: RTX-624

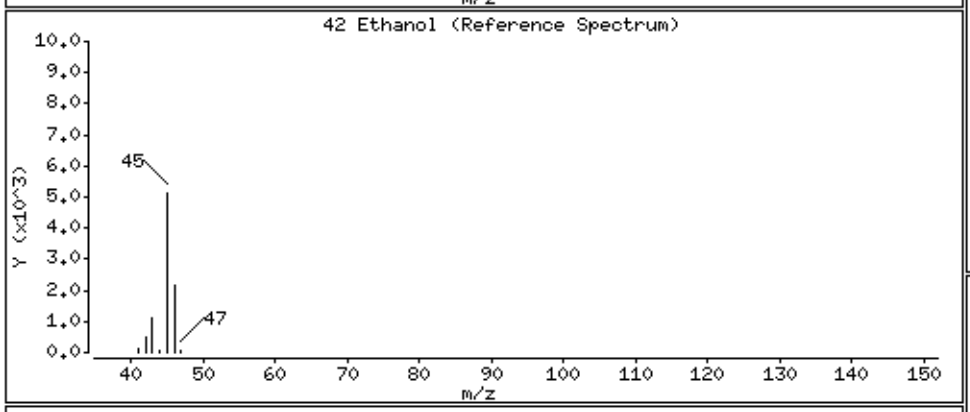
Column diameter: 0.25

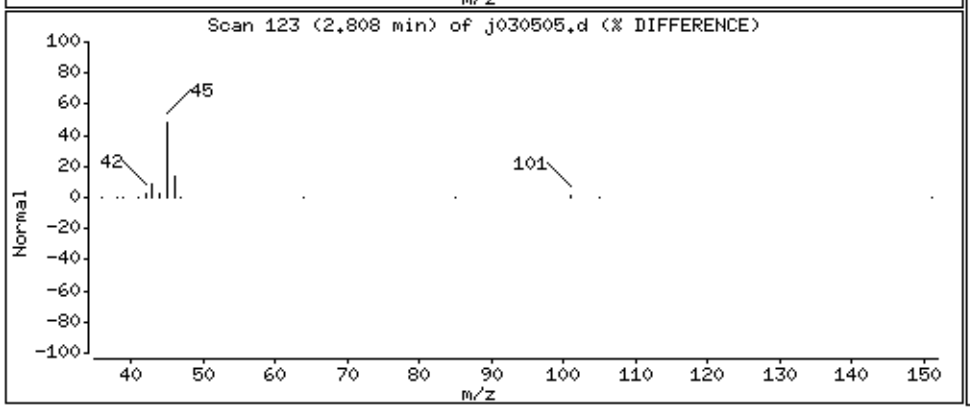
42 Ethanol

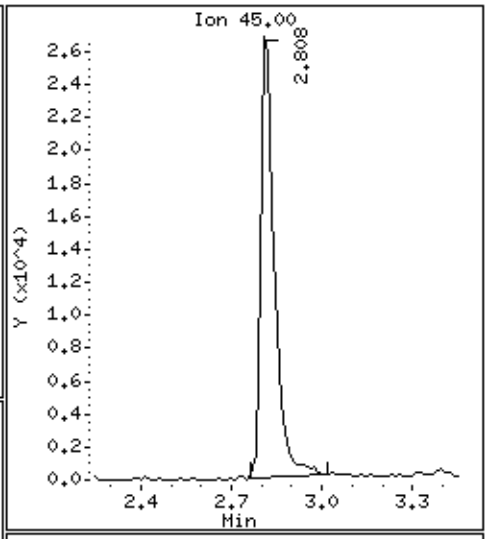
Concentration: 49.817 PPBV

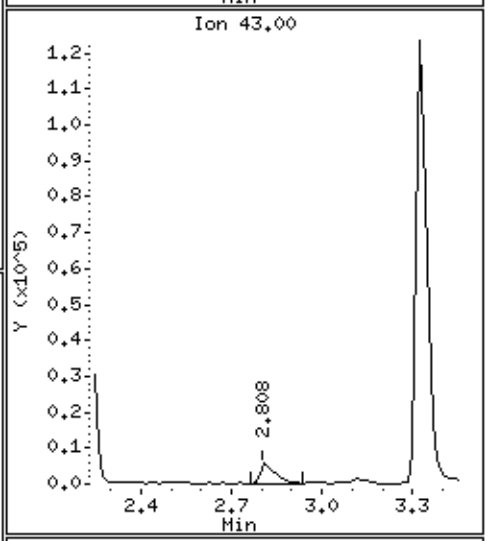


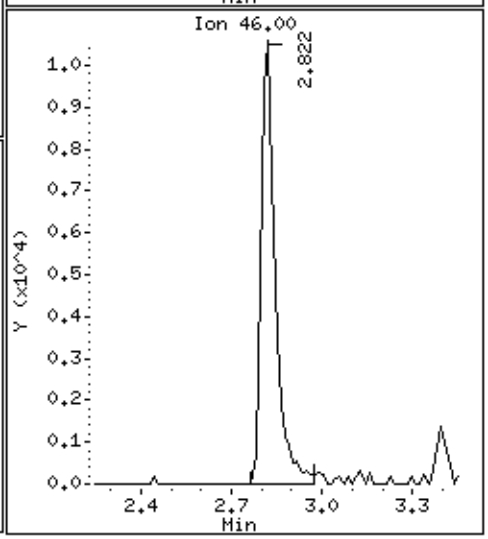












Data File: /chem/msdj.i/05mar15.b/j030505.d

Date : 05-MAR-2015 11:22

Client ID: LCSD

Instrument: msdj.i

Sample Info: 50ml #2716-98

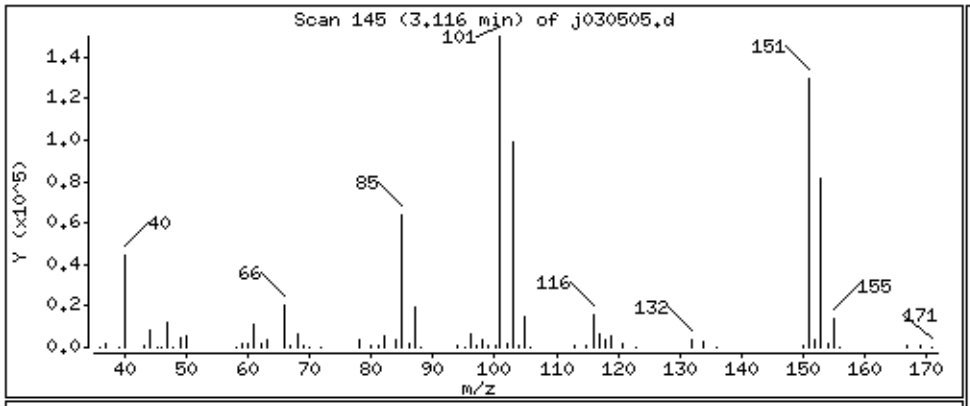
Operator: sg

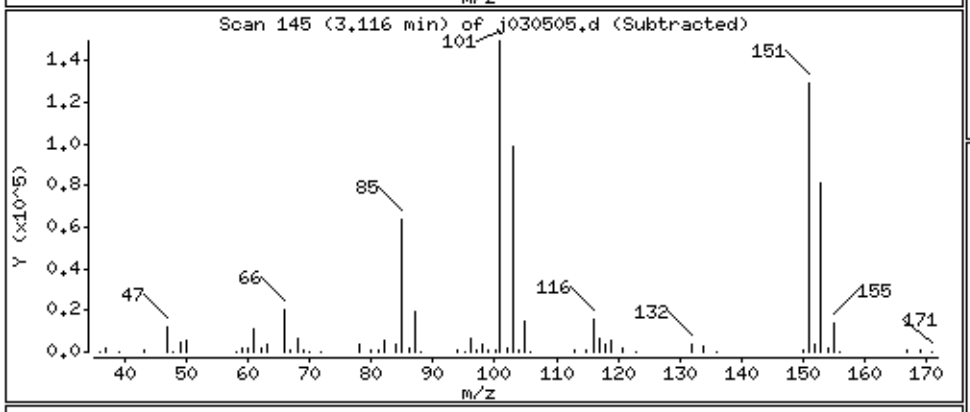
Column phase: RTX-624

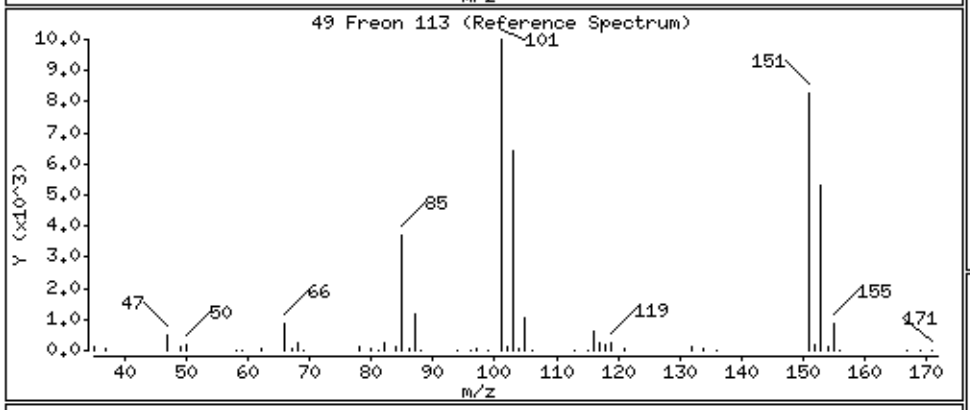
Column diameter: 0.25

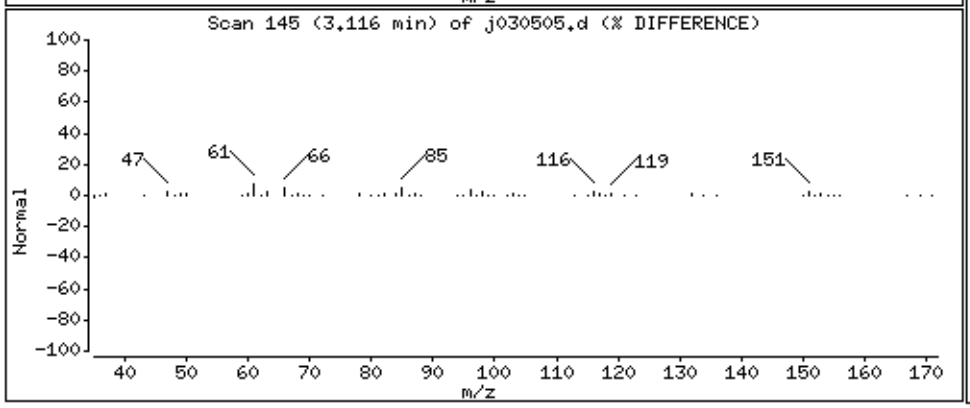
49 Freon 113

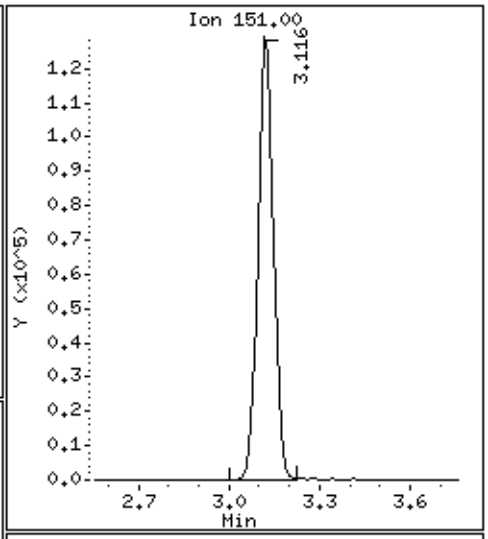
Concentration: 50.472 PPBV

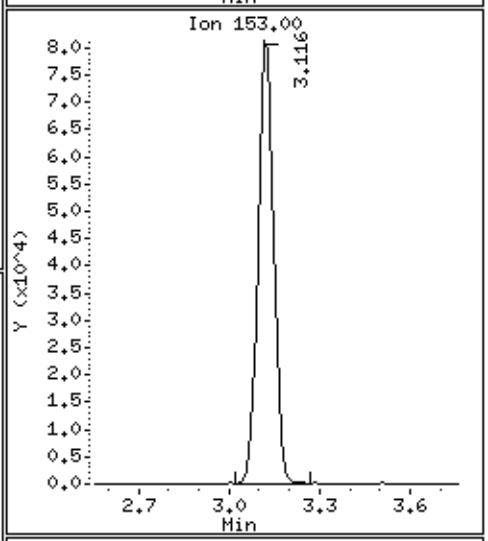


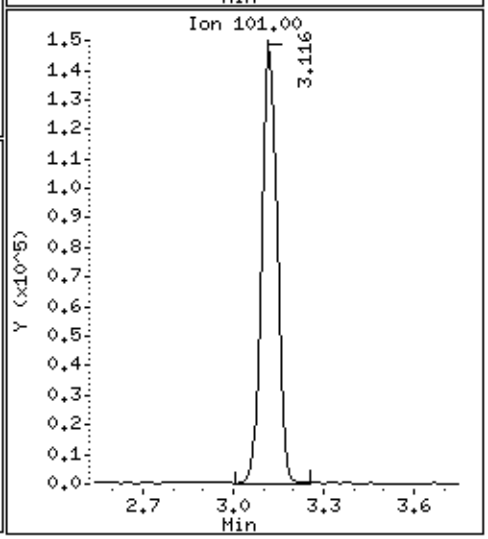












Data File: /chem/msdj.i/05mar15.b/j030505.d

Date : 05-MAR-2015 11:22

Client ID: LCSD

Instrument: msdj.i

Sample Info: 50ml #2716-98

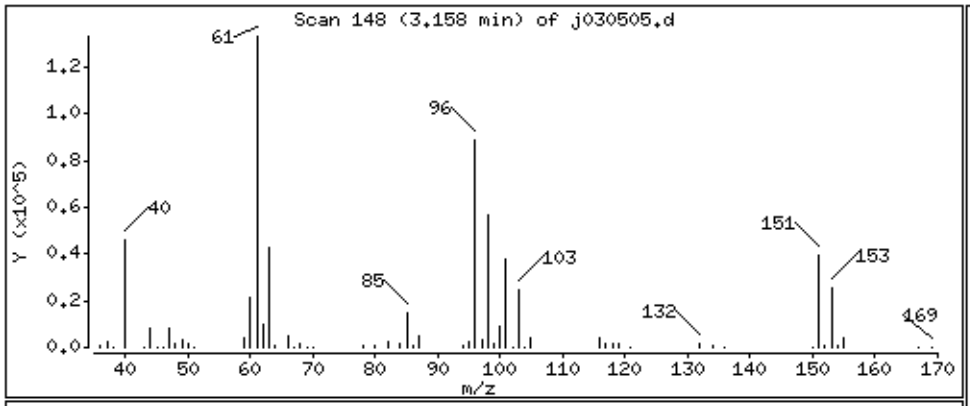
Operator: sg

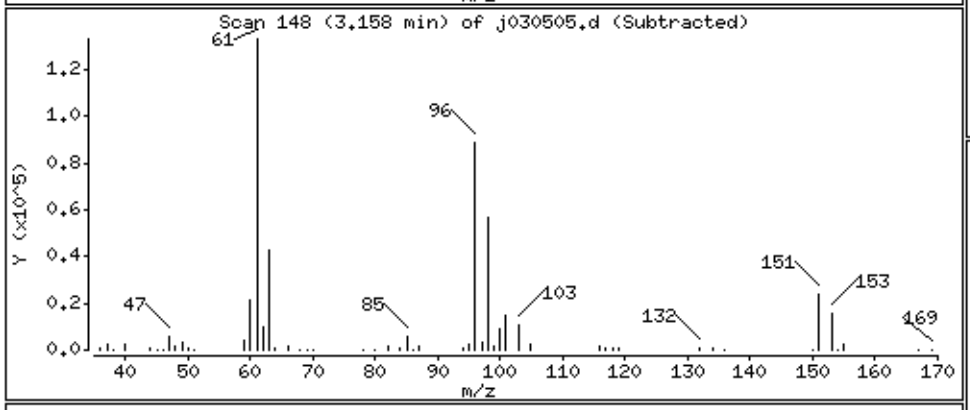
Column phase: RTX-624

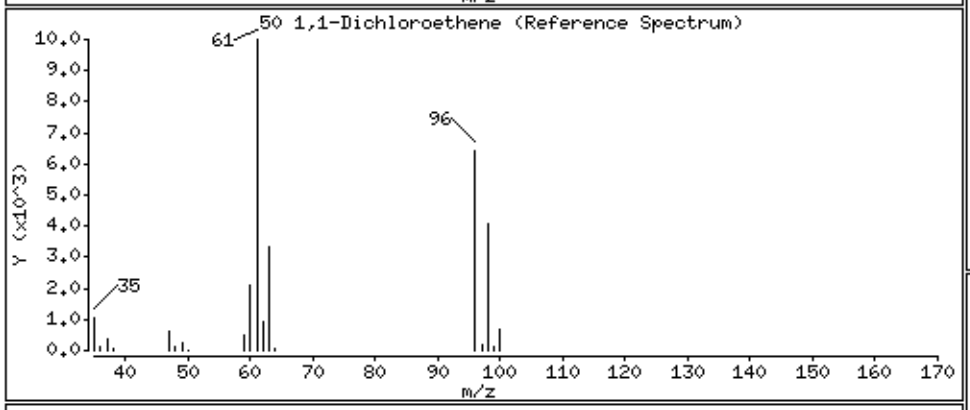
Column diameter: 0.25

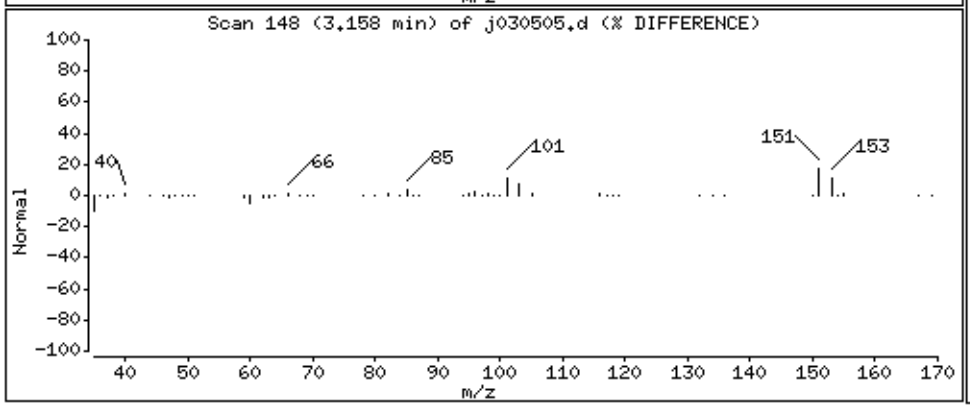
50 1,1-Dichloroethene

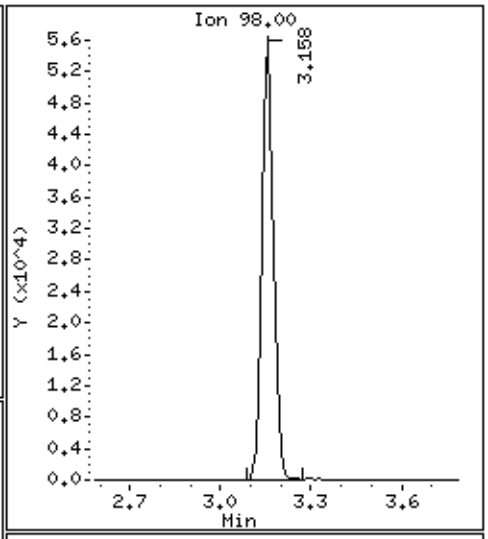
Concentration: 52.687 PPBV

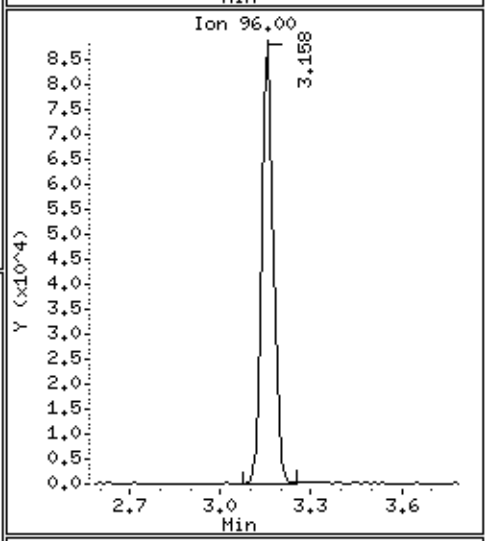


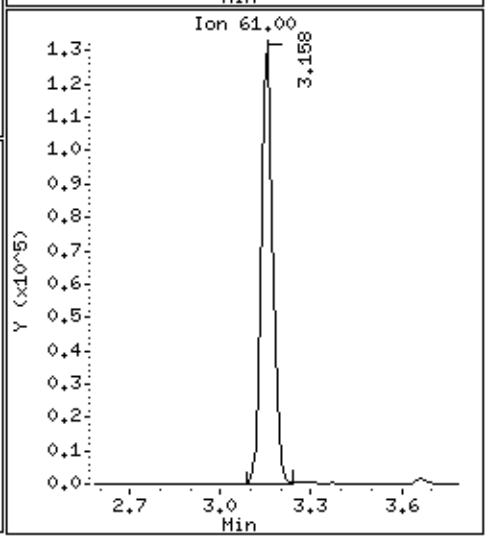












Data File: /chem/msdj.i/05mar15.b/j030505.d

Date : 05-MAR-2015 11:22

Client ID: LCSD

Instrument: msdj.i

Sample Info: 50ml #2716-98

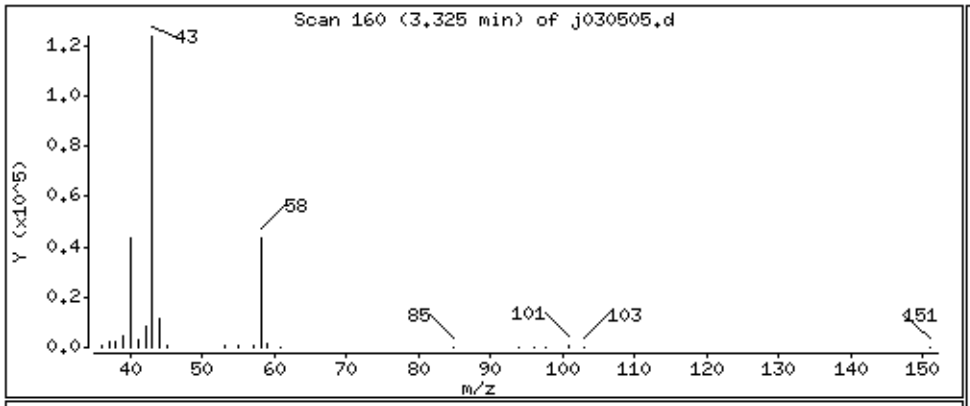
Operator: sg

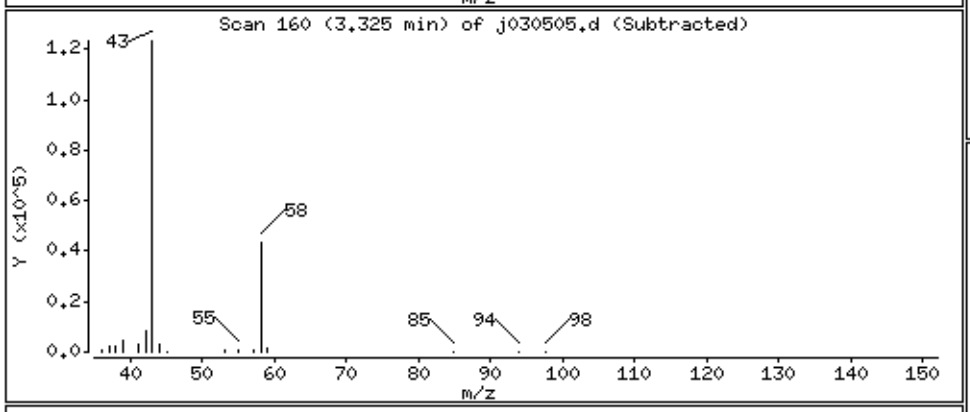
Column phase: RTX-624

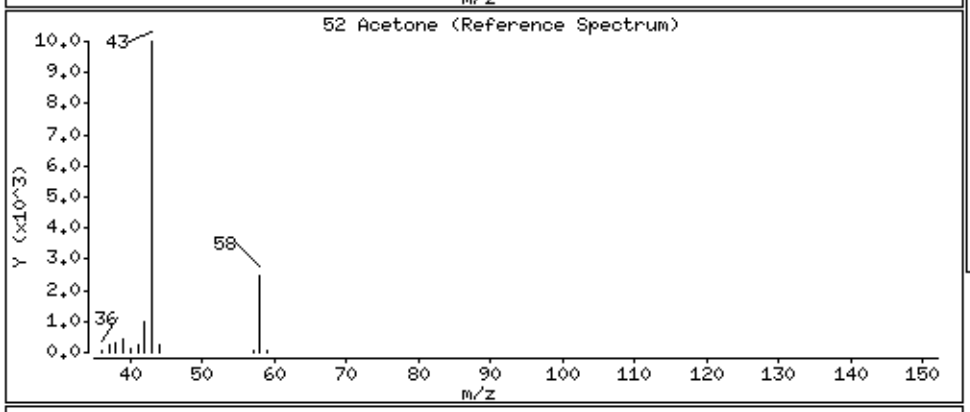
Column diameter: 0.25

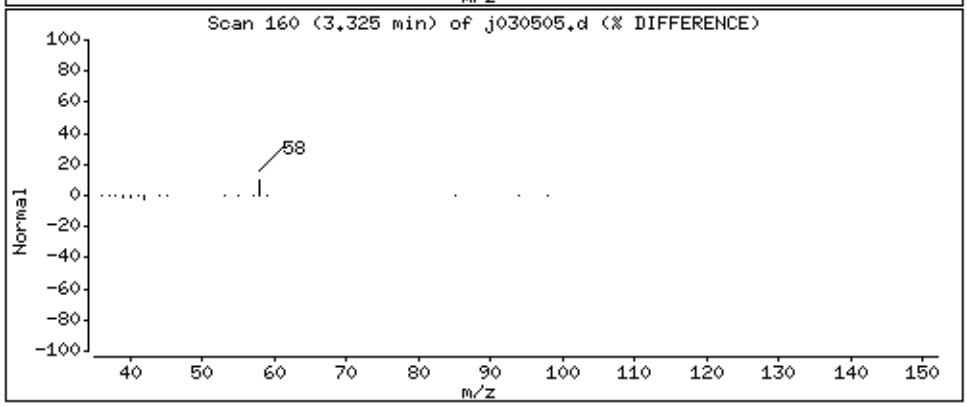
52 Acetone

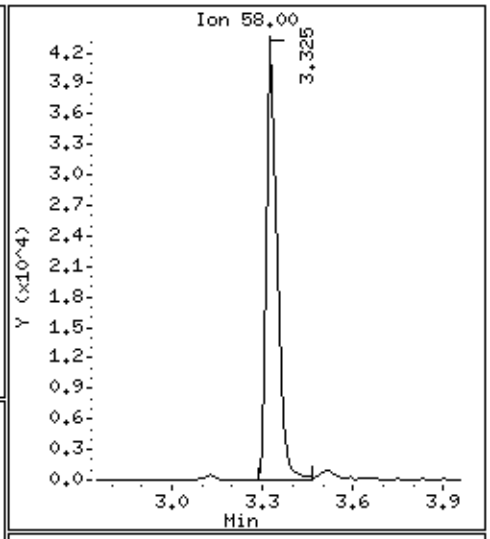
Concentration: 54.161 PPBV

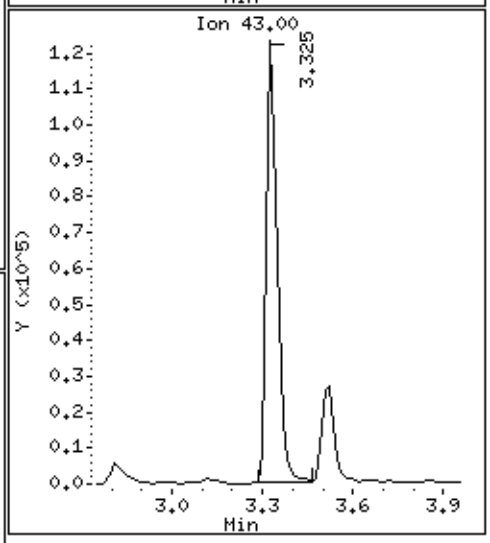












Data File: /chem/msdj.i/05mar15.b/j030505.d

Date : 05-MAR-2015 11:22

Client ID: LCSD

Instrument: msdj.i

Sample Info: 50ml #2716-98

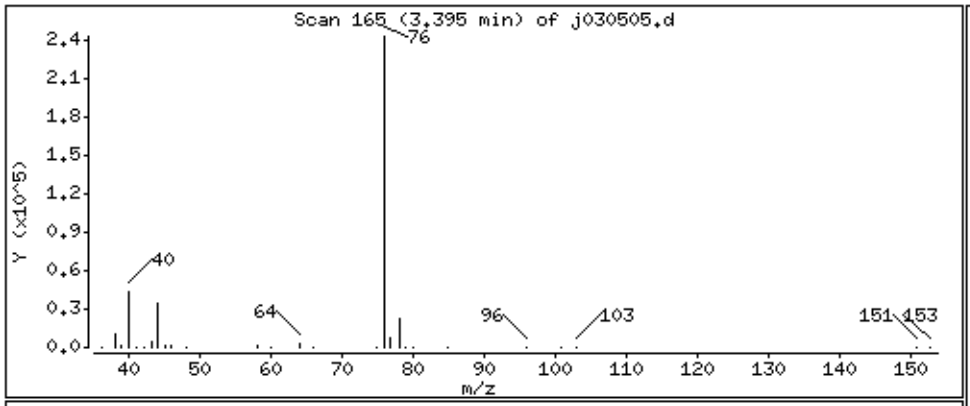
Operator: sg

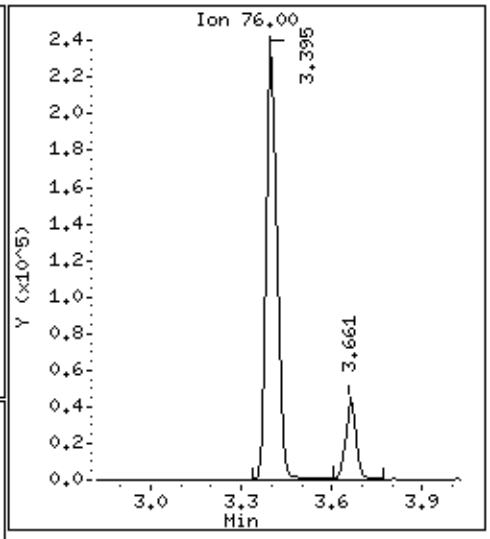
Column phase: RTX-624

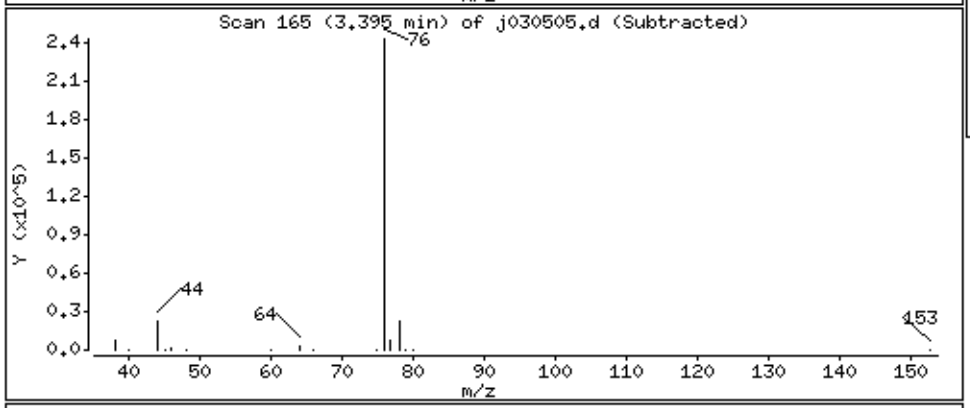
Column diameter: 0.25

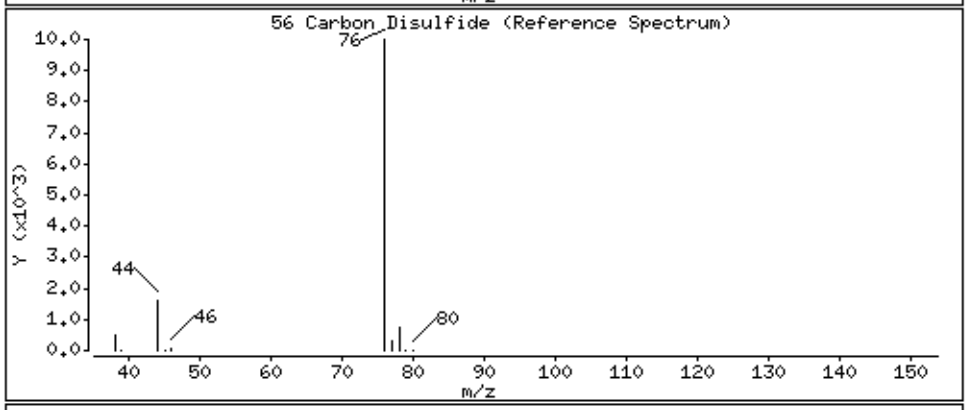
56 Carbon Disulfide

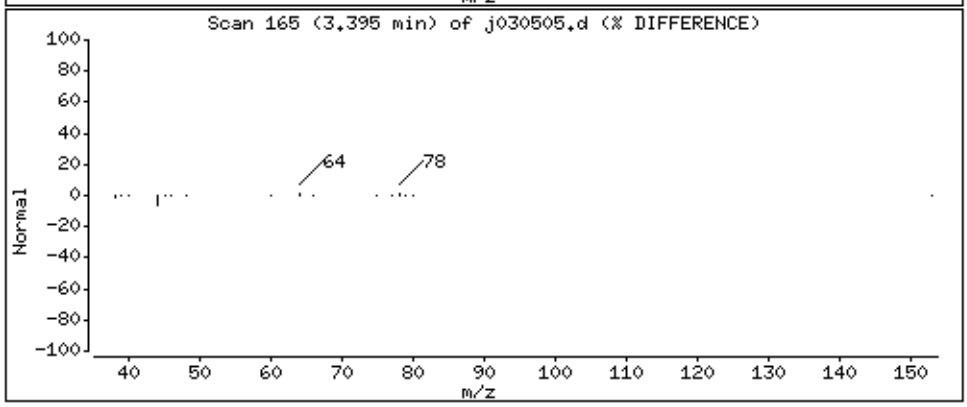
Concentration: 45.864 PPBV











Data File: /chem/msdj.i/05mar15.b/j030505.d

Date : 05-MAR-2015 11:22

Client ID: LCSD

Instrument: msdj.i

Sample Info: 50ml #2716-98

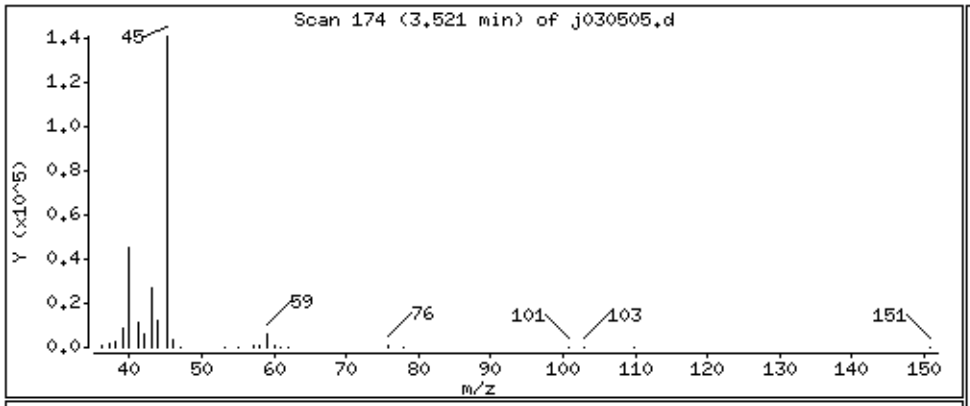
Operator: sg

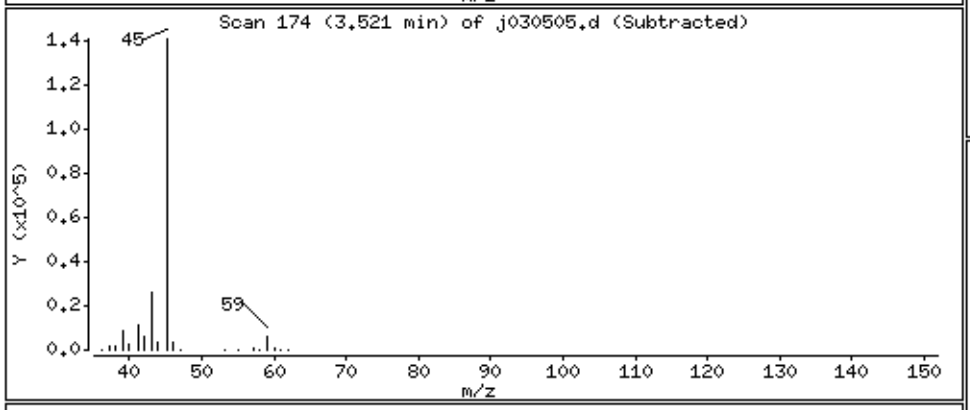
Column phase: RTX-624

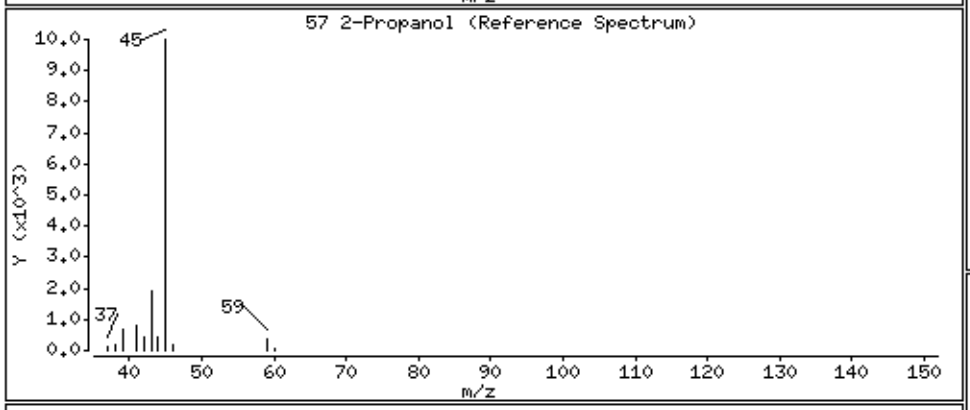
Column diameter: 0.25

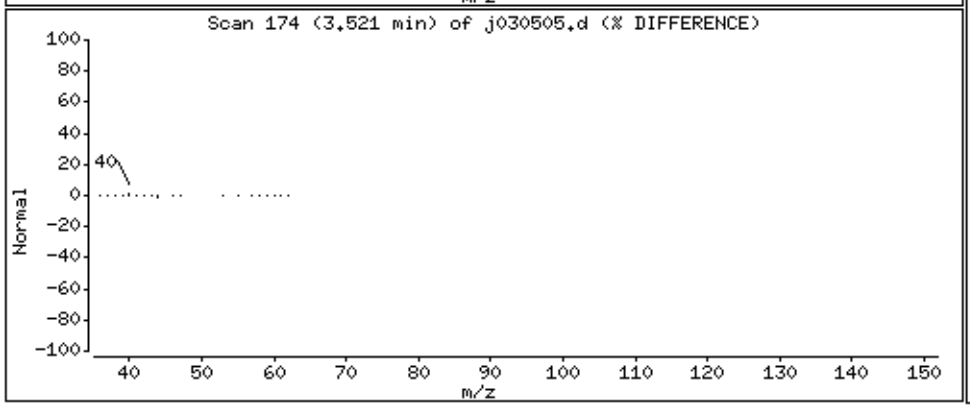
57 2-Propanol

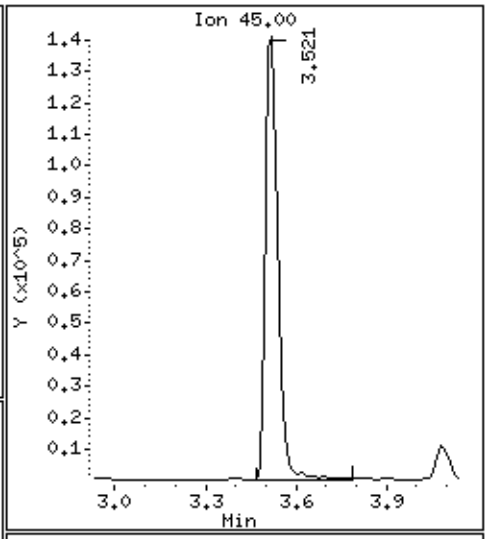
Concentration: 54.885 PPBV

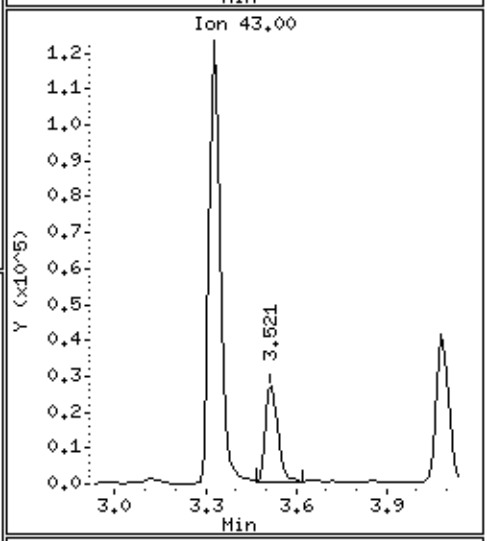


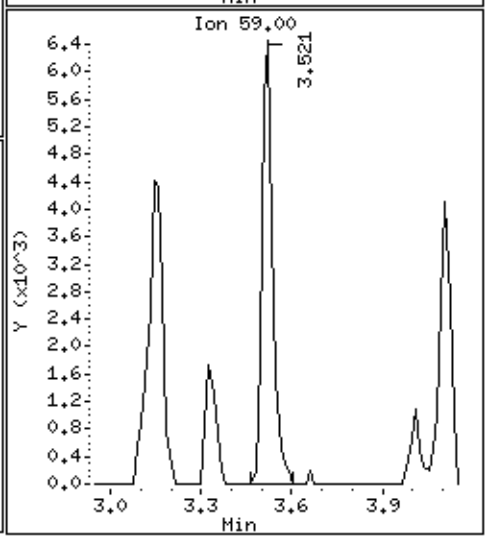












Data File: /chem/msdj.i/05mar15.b/j030505.d

Date : 05-MAR-2015 11:22

Client ID: LCSD

Instrument: msdj.i

Sample Info: 50ml #2716-98

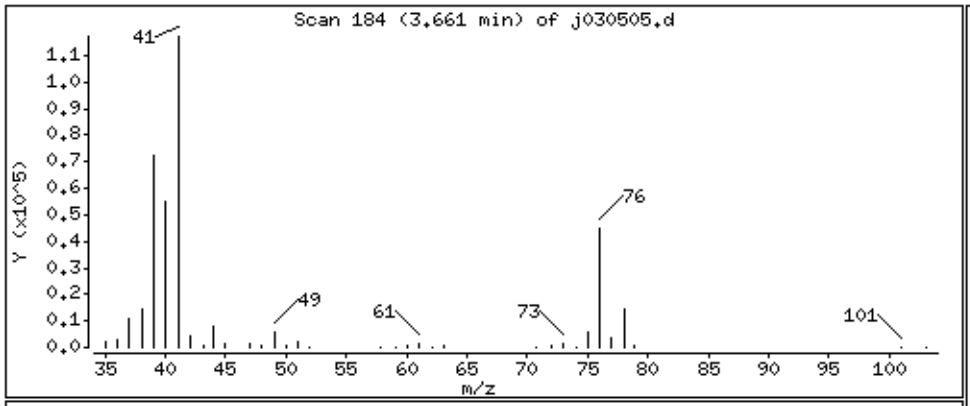
Operator: sg

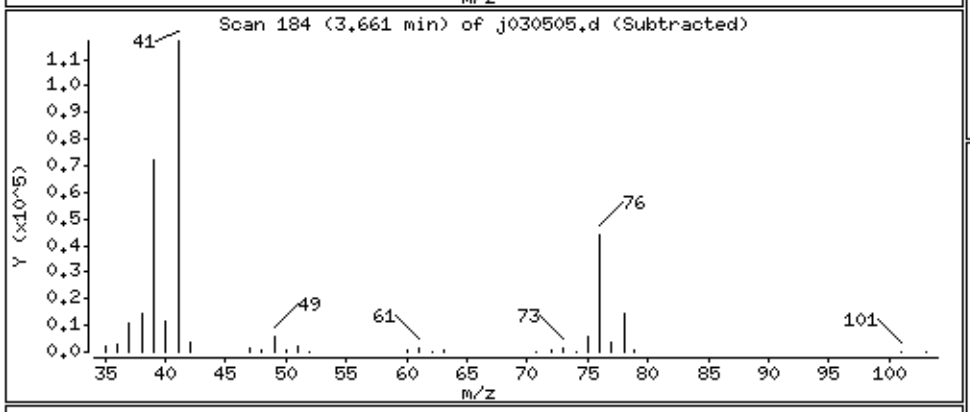
Column phase: RTX-624

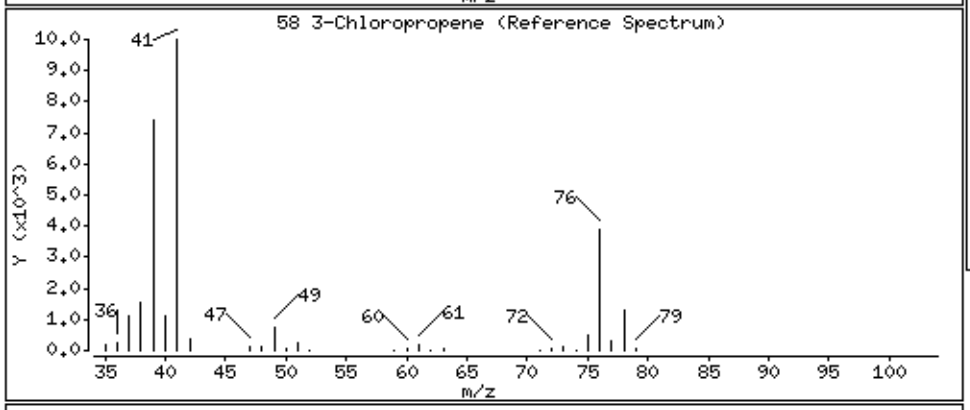
Column diameter: 0.25

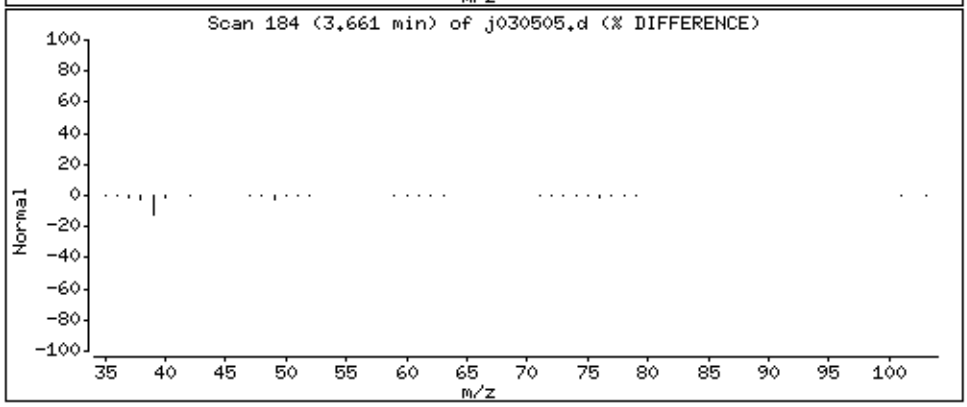
58 3-Chloropropene

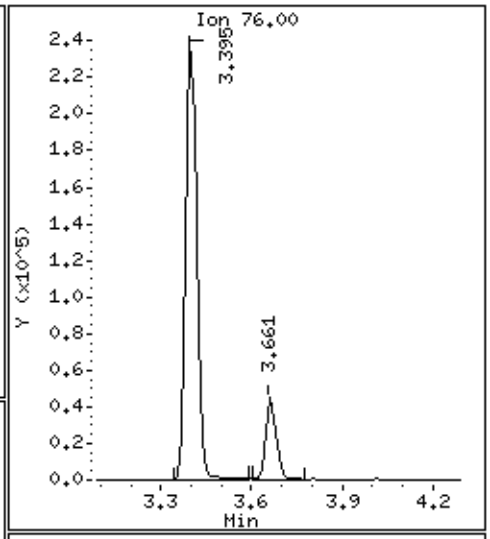
Concentration: 48.932 PPBV

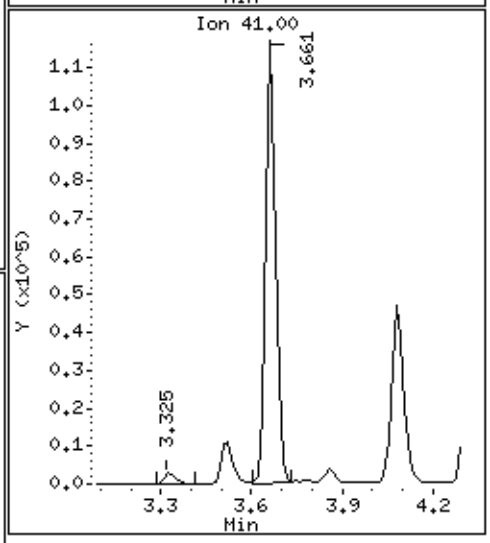












Data File: /chem/msdj.i/05mar15.b/j030505.d

Date : 05-MAR-2015 11:22

Client ID: LCSD

Instrument: msdj.i

Sample Info: 50ml #2716-98

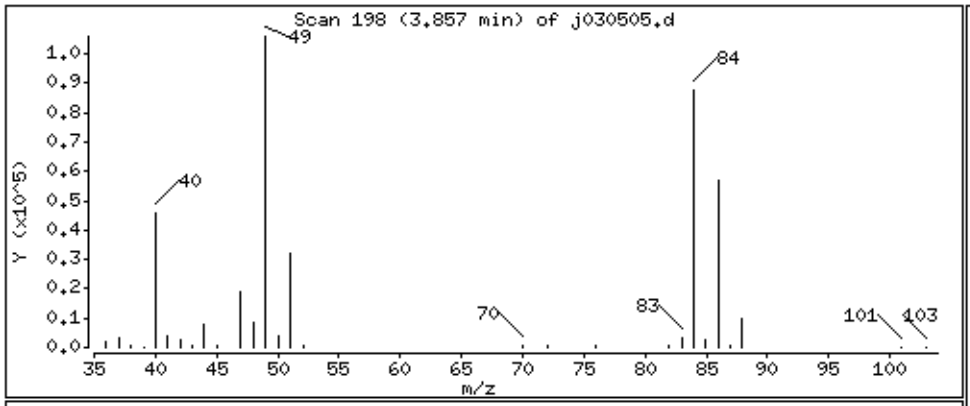
Operator: sg

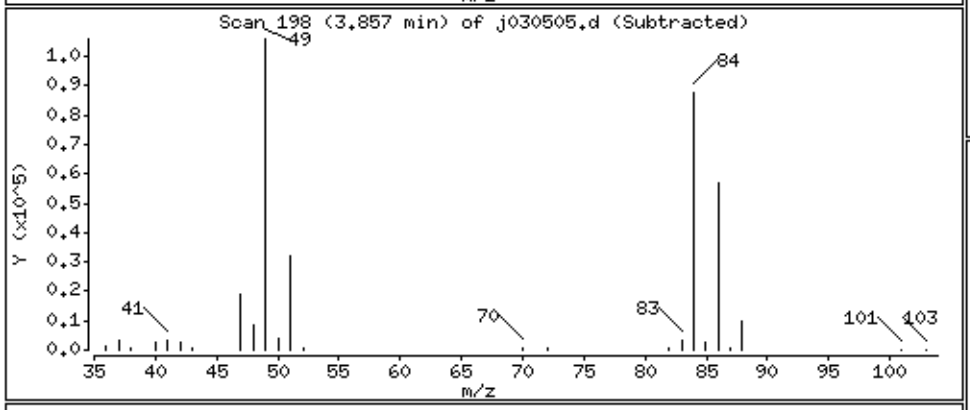
Column phase: RTX-624

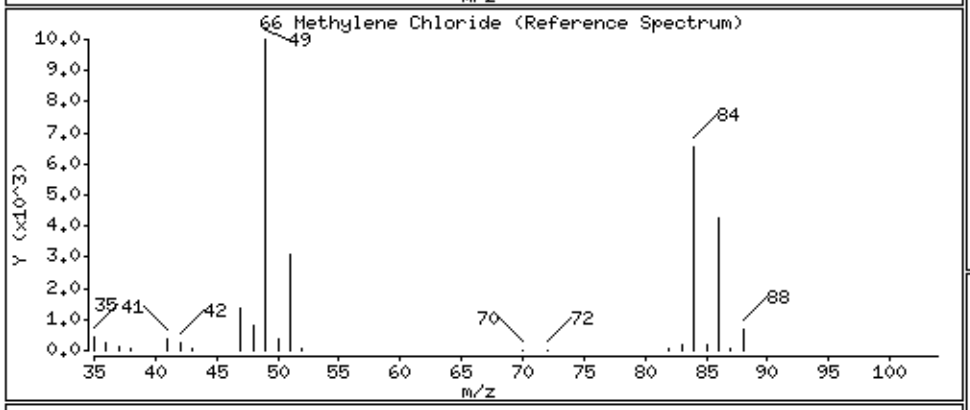
Column diameter: 0.25

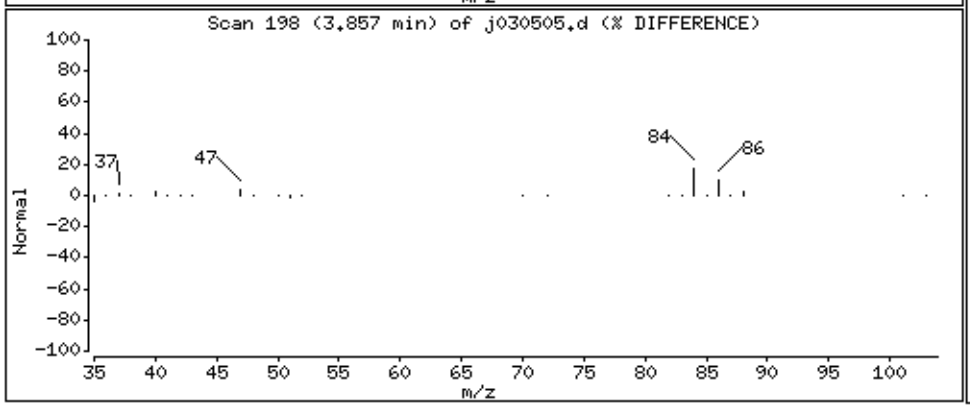
66 Methylene Chloride

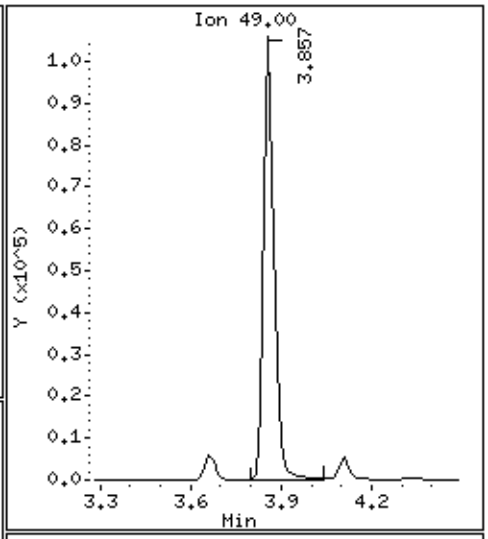
Concentration: 52.632 PPBV

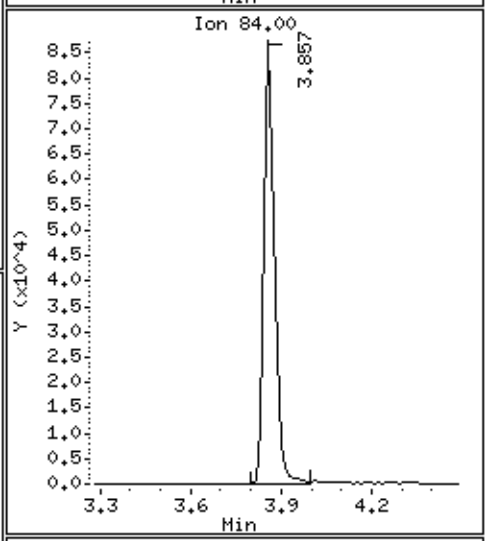


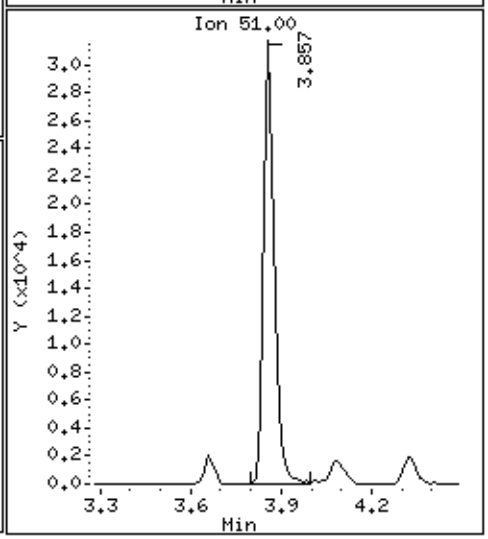












Data File: /chem/msdj.i/05mar15.b/j030505.d

Date : 05-MAR-2015 11:22

Client ID: LCSD

Instrument: msdj.i

Sample Info: 50ml #2716-98

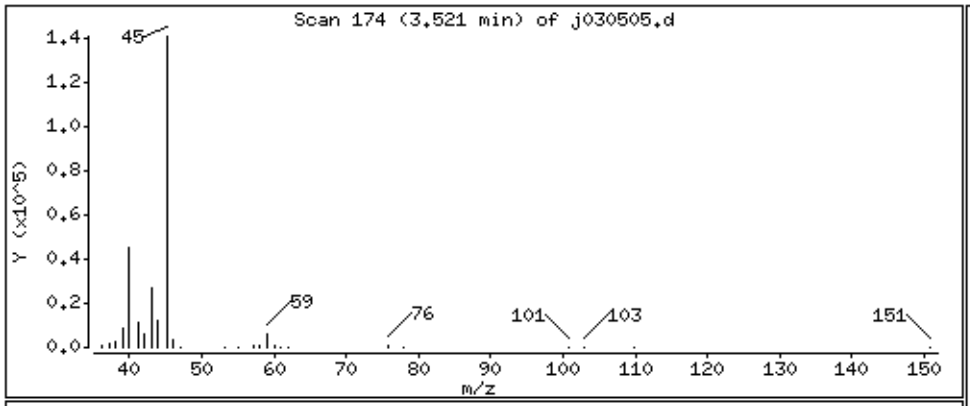
Operator: sg

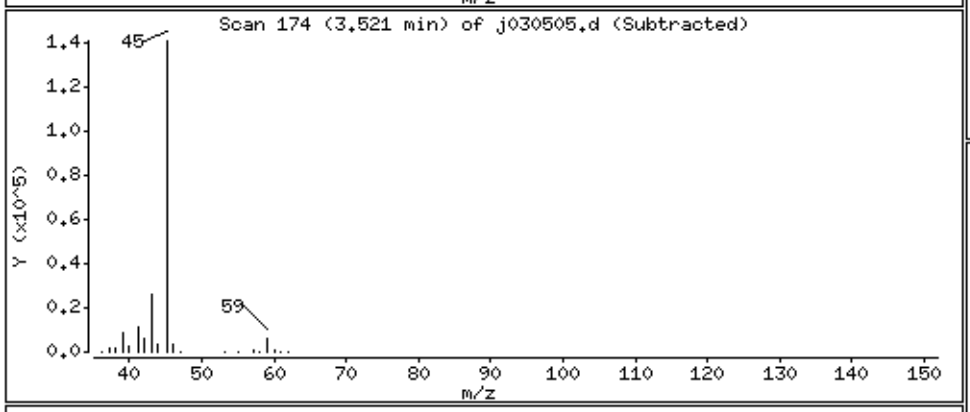
Column phase: RTX-624

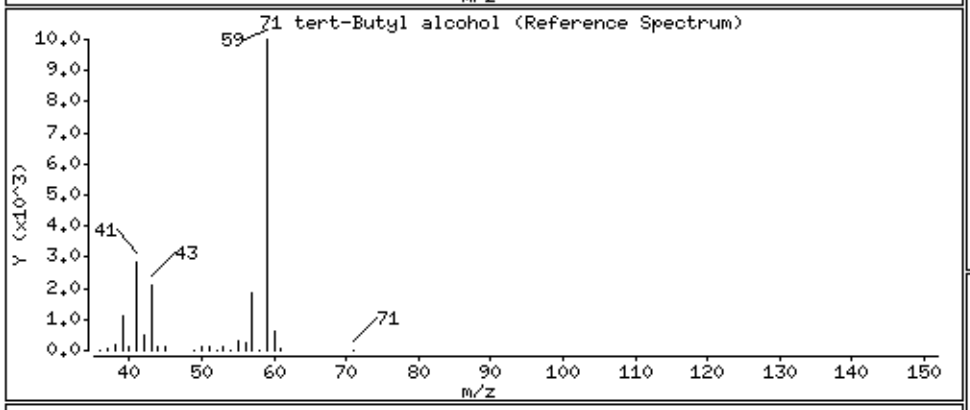
Column diameter: 0.25

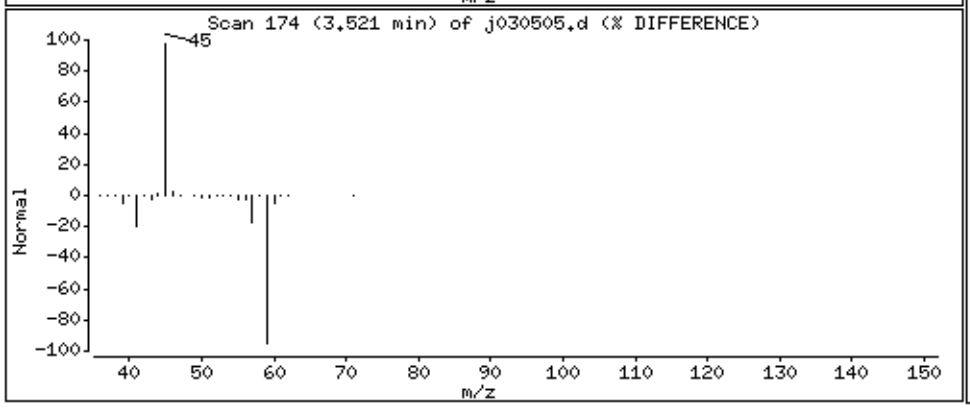
71 tert-Butyl alcohol

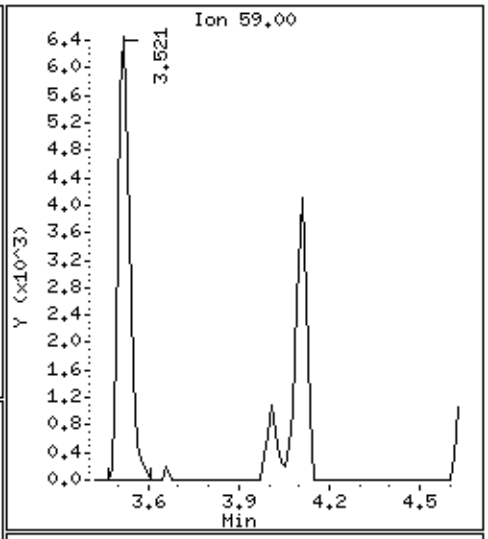
Concentration: 1.960 PPBV

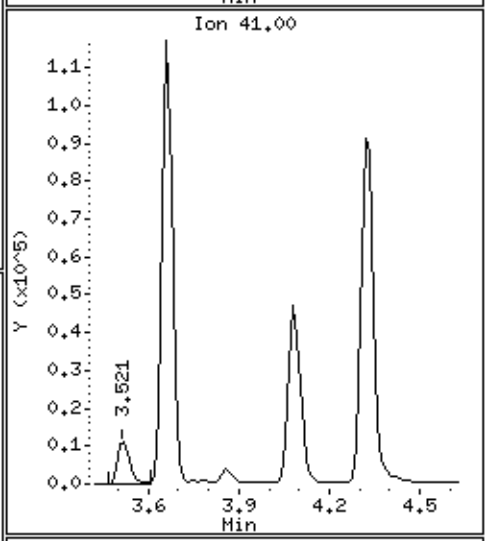


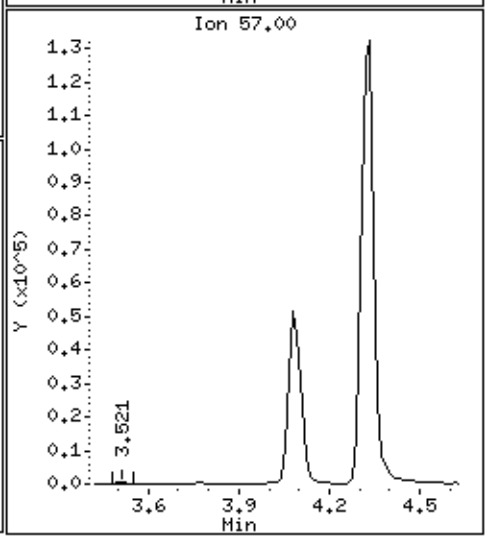












Data File: /chem/msdj.i/05mar15.b/j030505.d

Date : 05-MAR-2015 11:22

Client ID: LCSD

Instrument: msdj.i

Sample Info: 50ml #2716-98

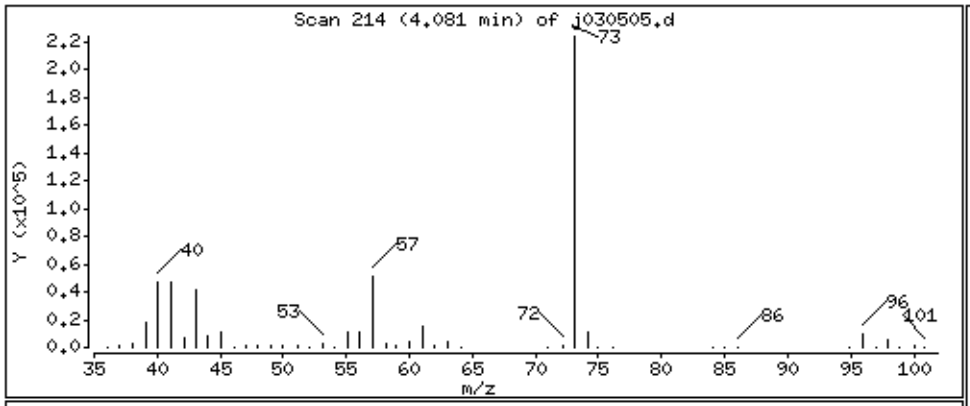
Operator: sg

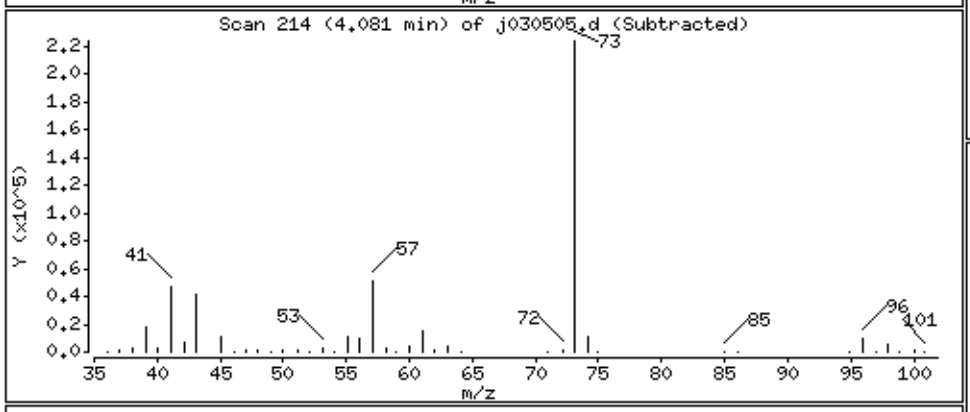
Column phase: RTX-624

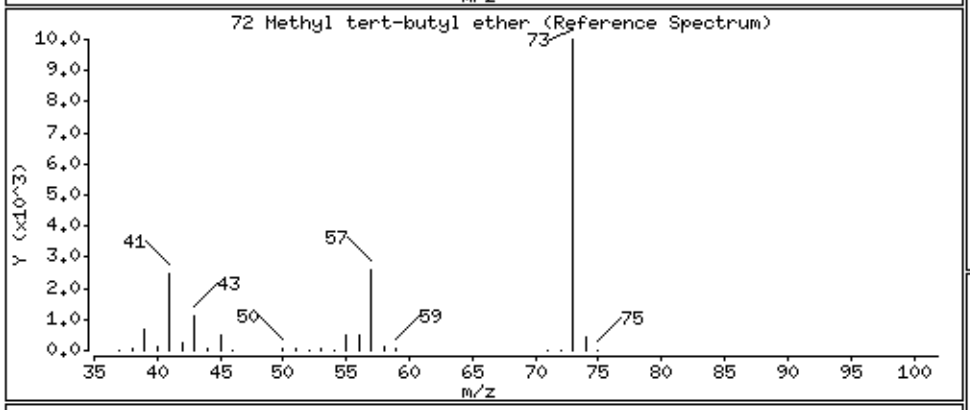
Column diameter: 0.25

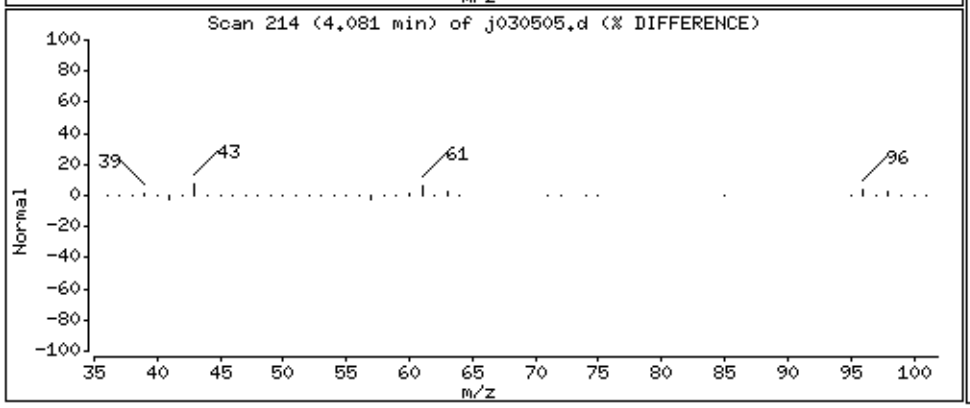
72 Methyl tert-butyl ether

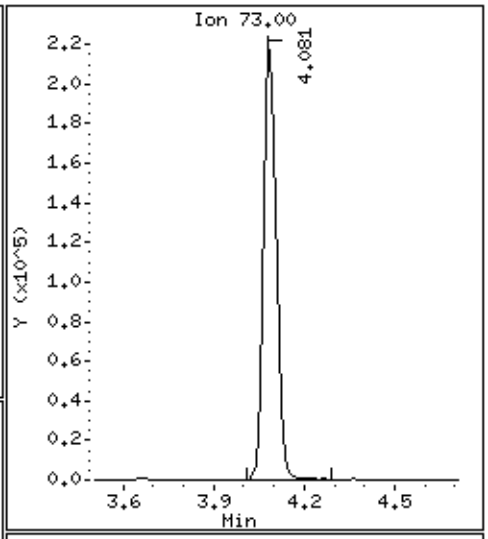
Concentration: 51.408 PPBV

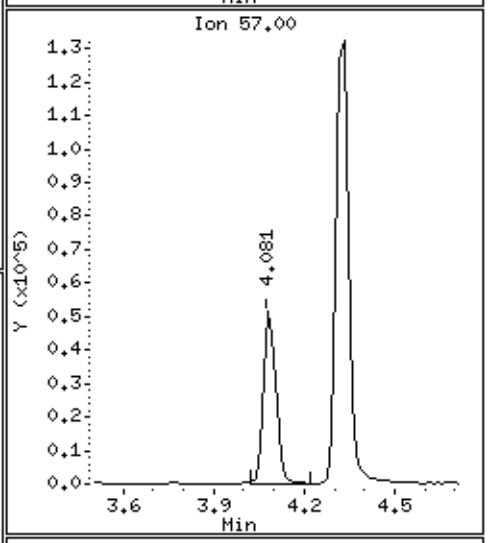


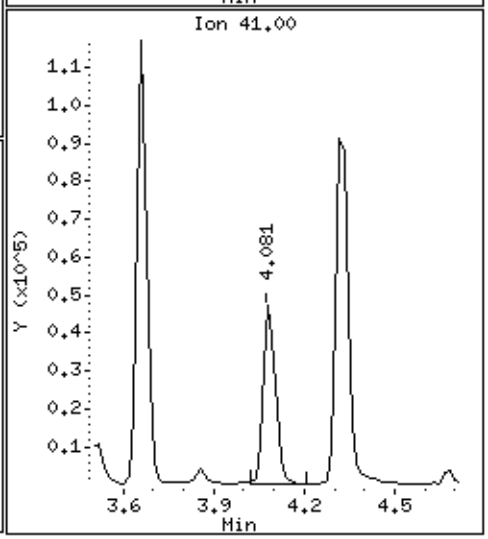












Data File: /chem/msdj.i/05mar15.b/j030505.d

Date : 05-MAR-2015 11:22

Client ID: LCSD

Instrument: msdj.i

Sample Info: 50ml #2716-98

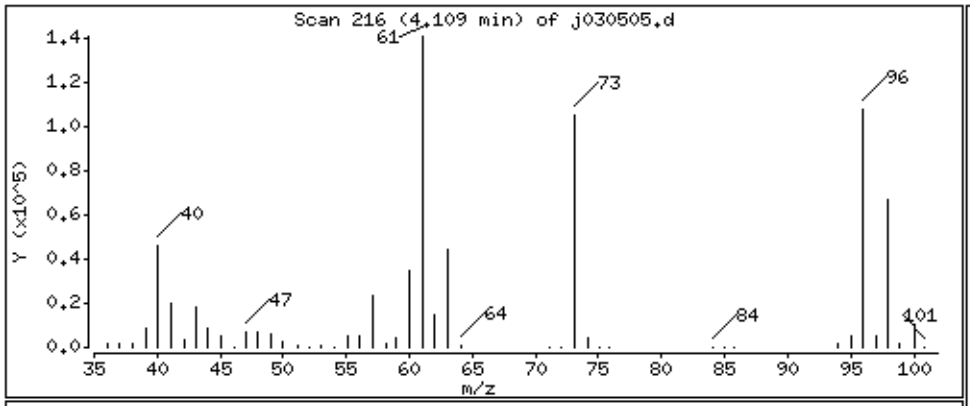
Operator: sg

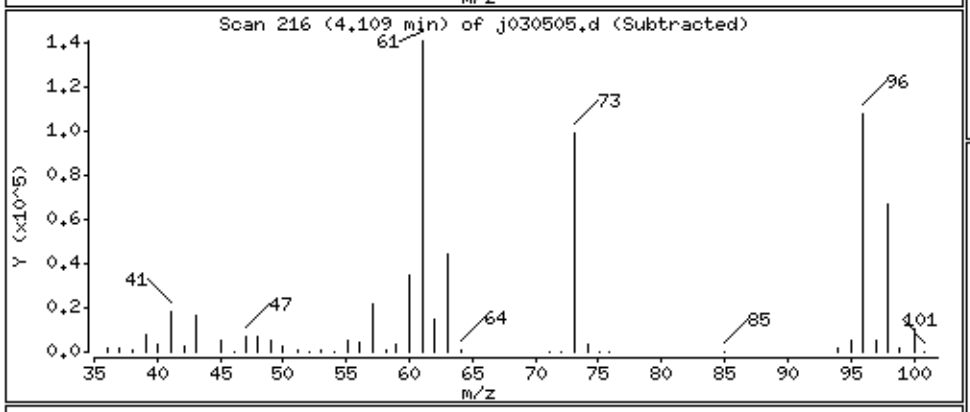
Column phase: RTX-624

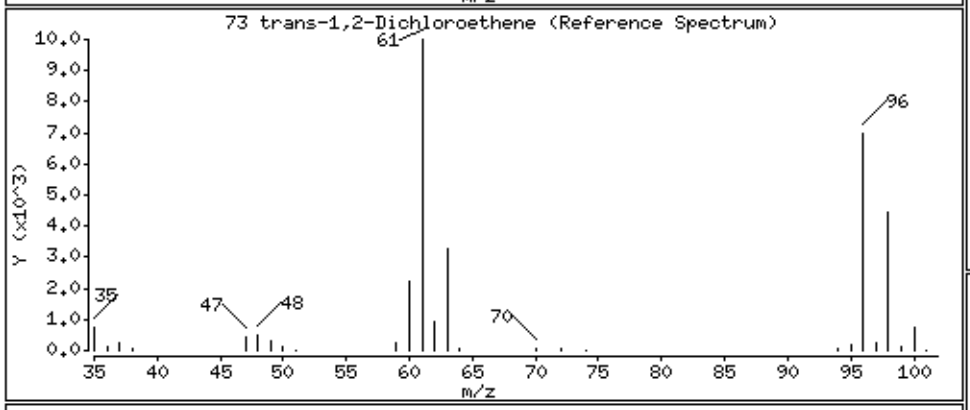
Column diameter: 0.25

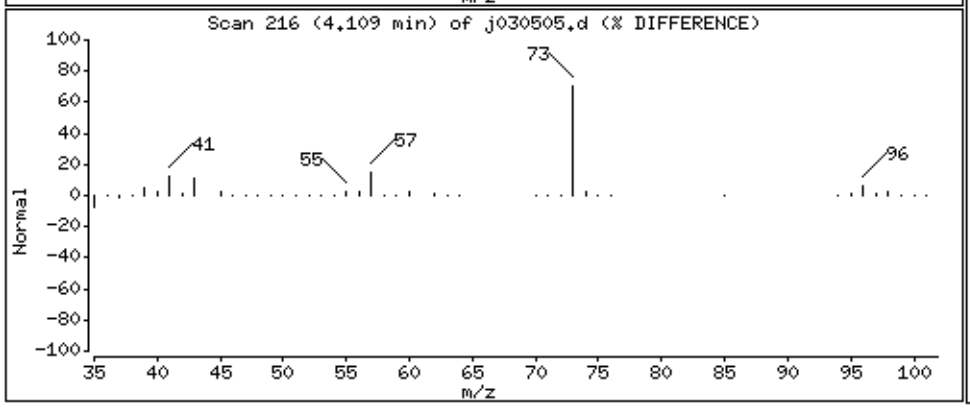
73 trans-1,2-Dichloroethene

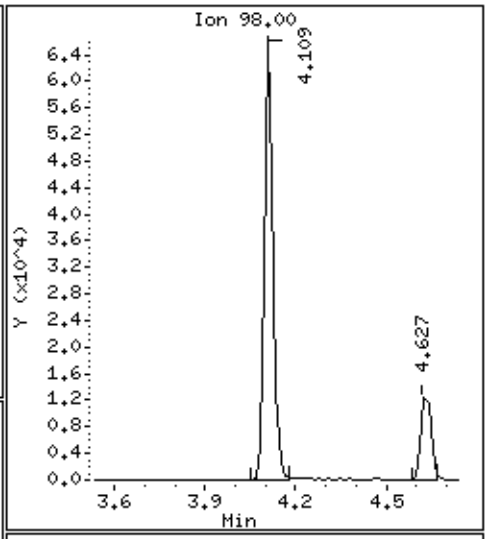
Concentration: 43.542 PPBV

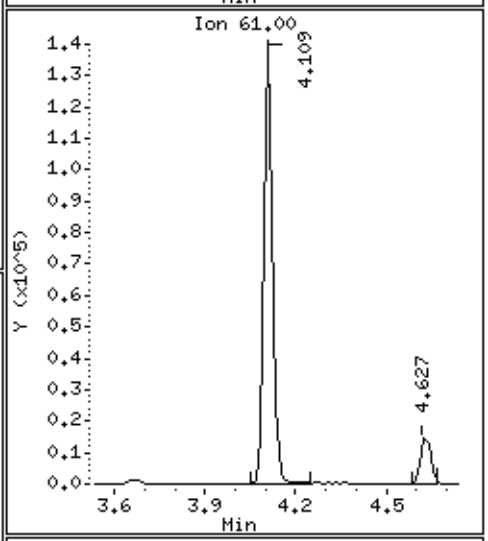


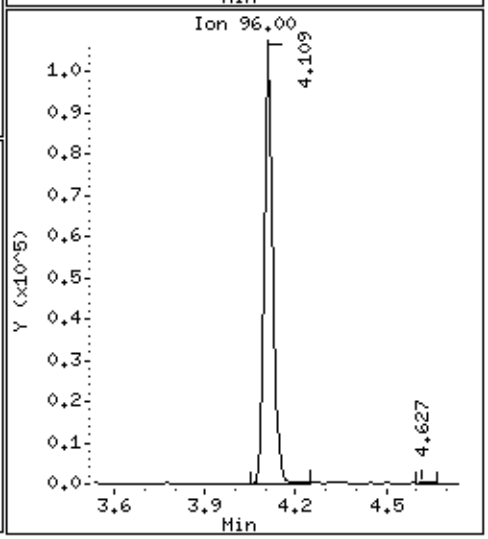












Data File: /chem/msdj.i/05mar15.b/j030505.d

Date : 05-MAR-2015 11:22

Client ID: LCSD

Instrument: msdj.i

Sample Info: 50ml #2716-98

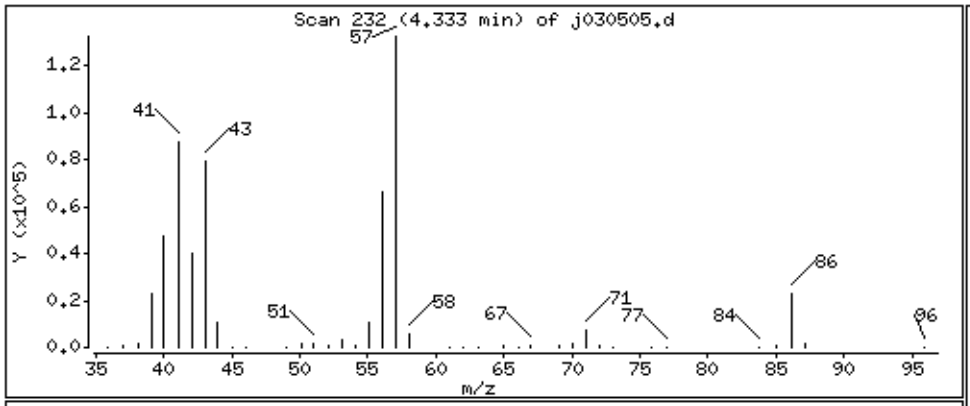
Operator: sg

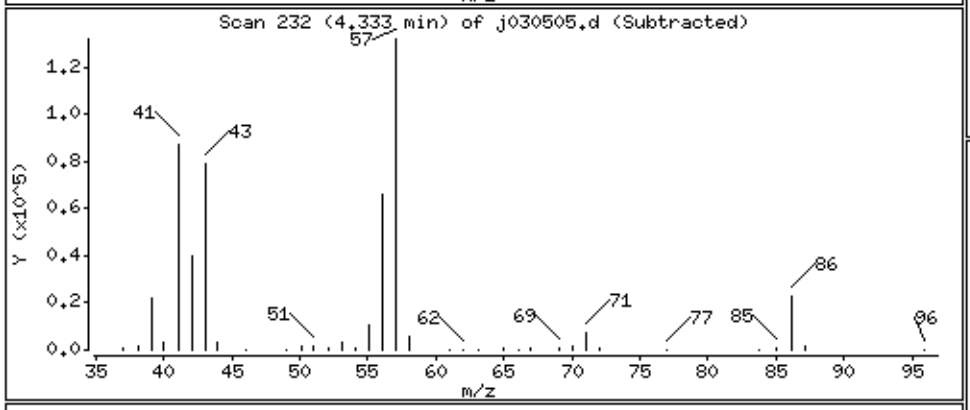
Column phase: RTX-624

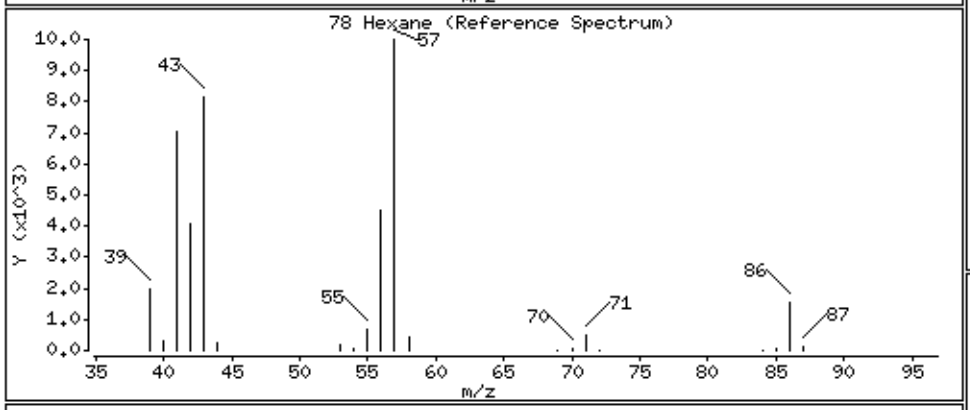
Column diameter: 0.25

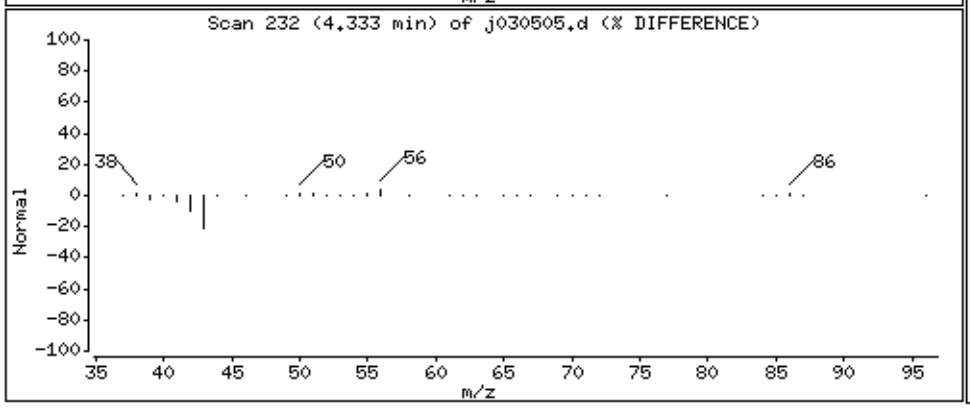
78 Hexane

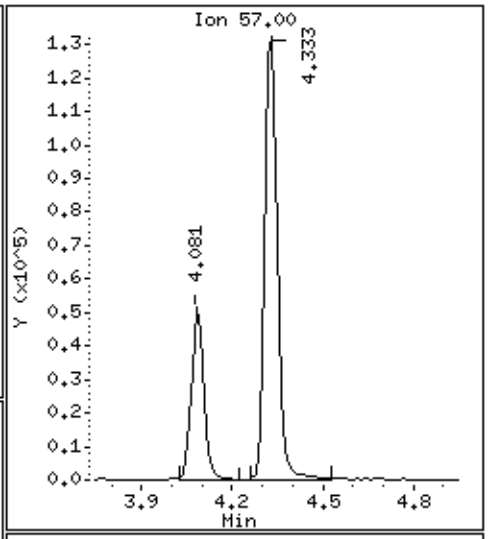
Concentration: 52.475 PPBV

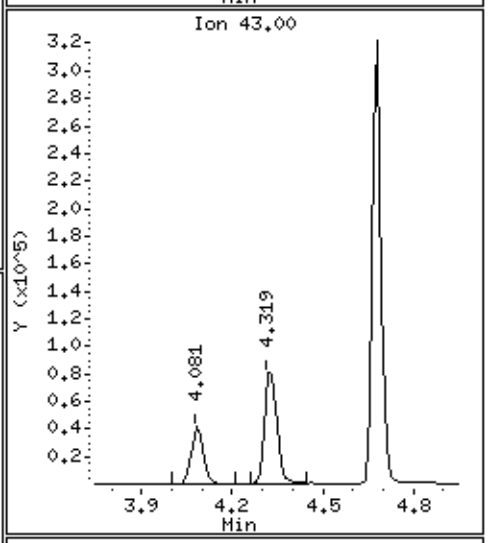


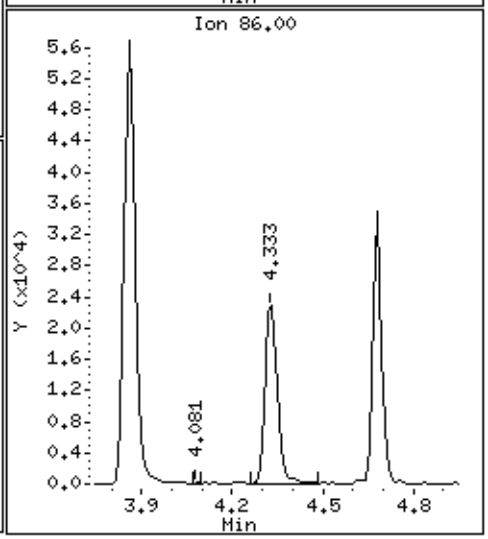












Data File: /chem/msdj.i/05mar15.b/j030505.d

Date : 05-MAR-2015 11:22

Client ID: LCSD

Instrument: msdj.i

Sample Info: 50ml #2716-98

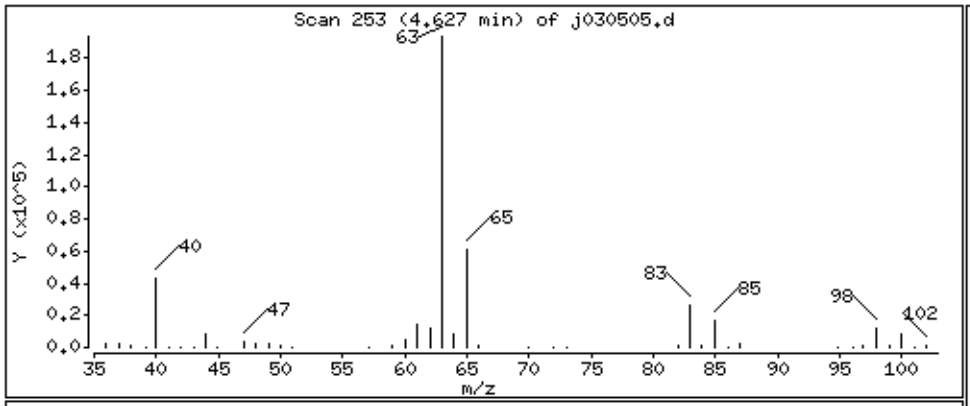
Operator: sg

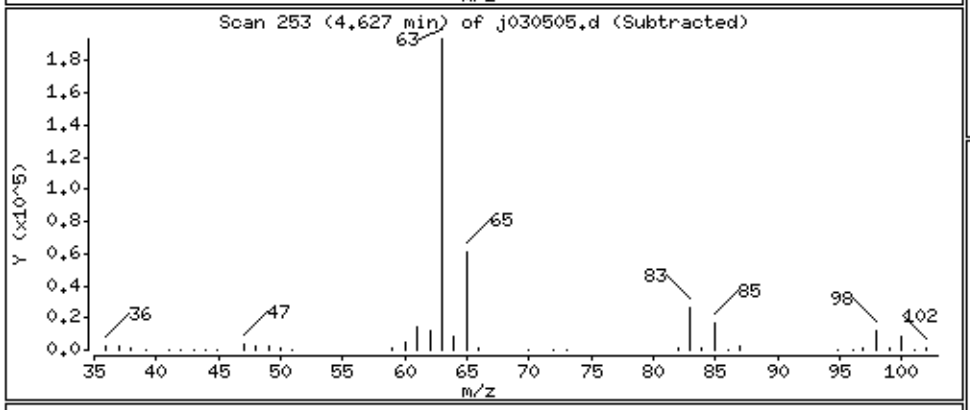
Column phase: RTX-624

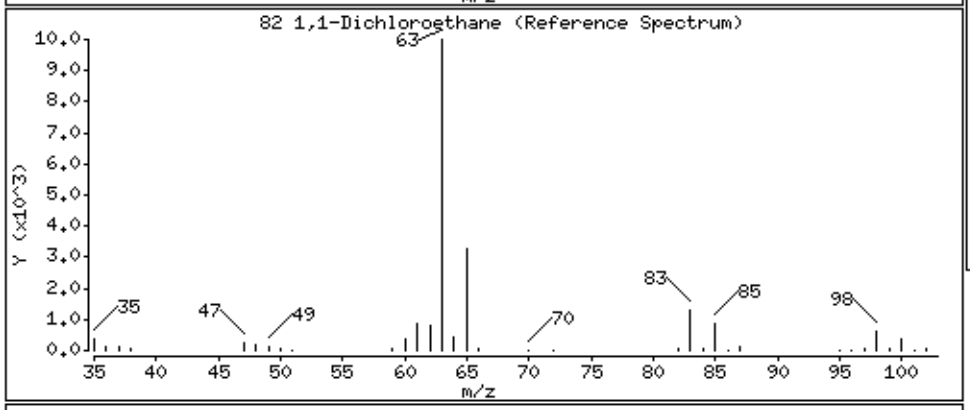
Column diameter: 0.25

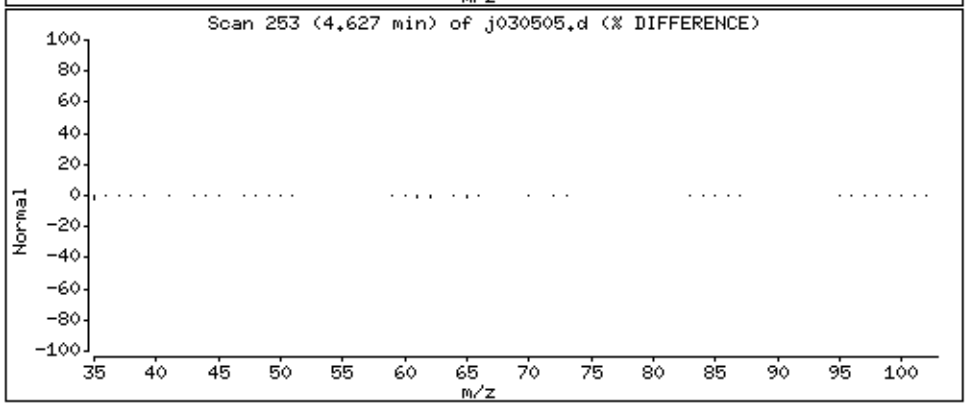
82 1,1-Dichloroethane

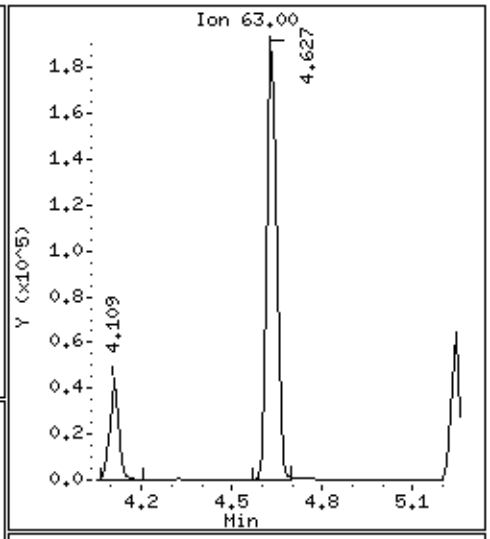
Concentration: 50.447 PPBV

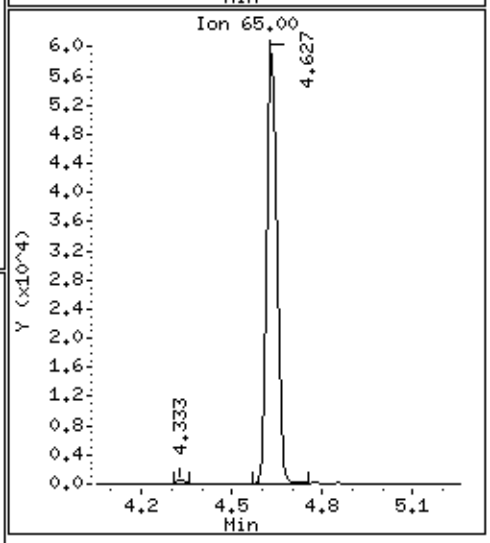












Data File: /chem/msdj.i/05mar15.b/j030505.d

Date : 05-MAR-2015 11:22

Client ID: LCSD

Instrument: msdj.i

Sample Info: 50ml #2716-98

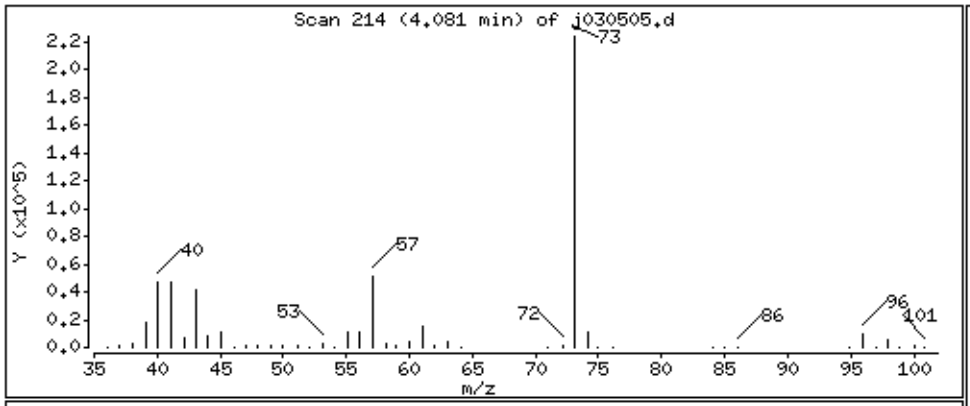
Operator: sg

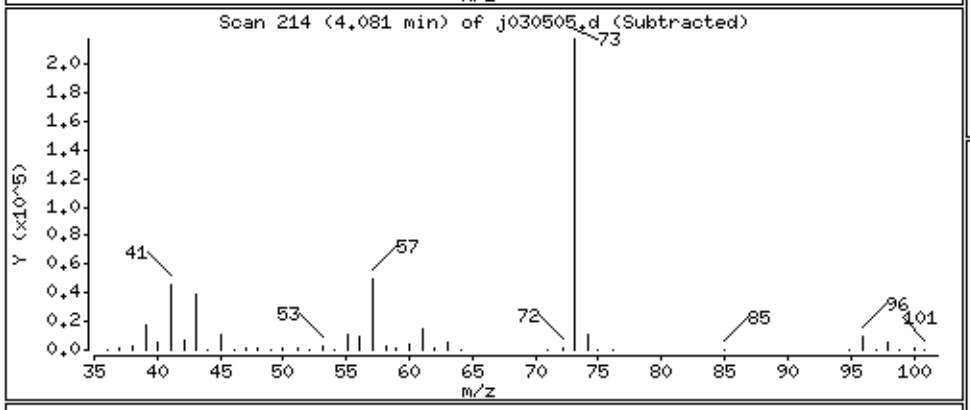
Column phase: RTX-624

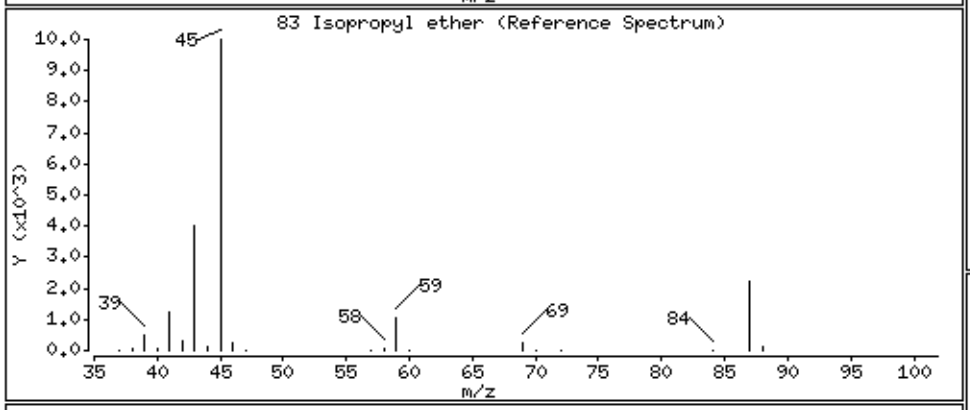
Column diameter: 0.25

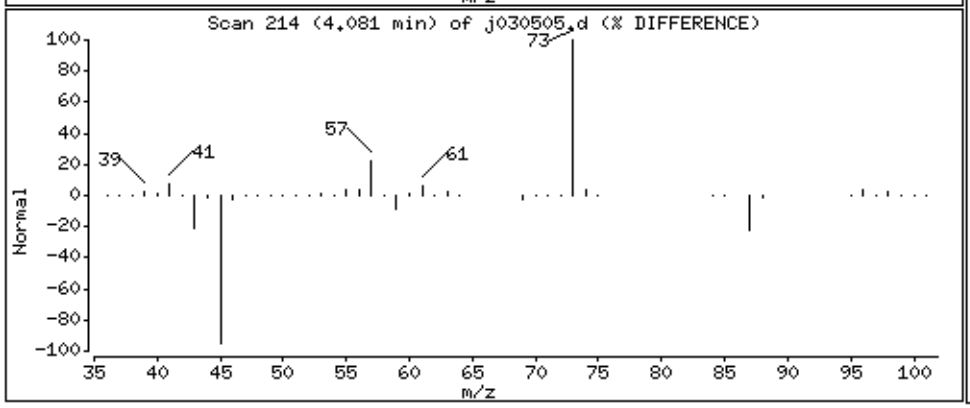
83 Isopropyl ether

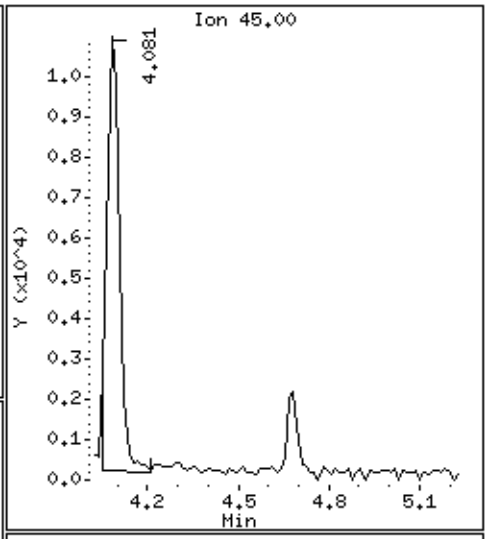
Concentration: 2.055 PPBV

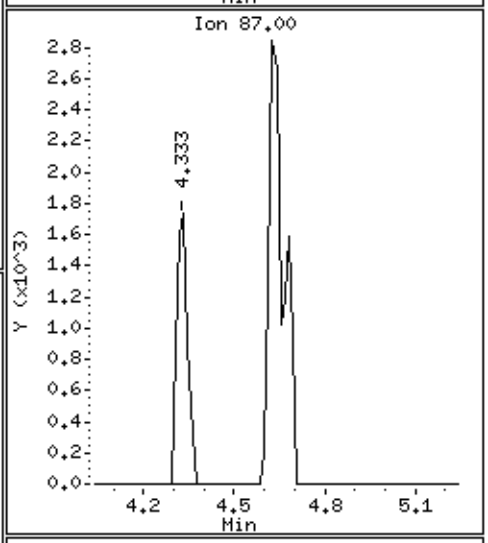


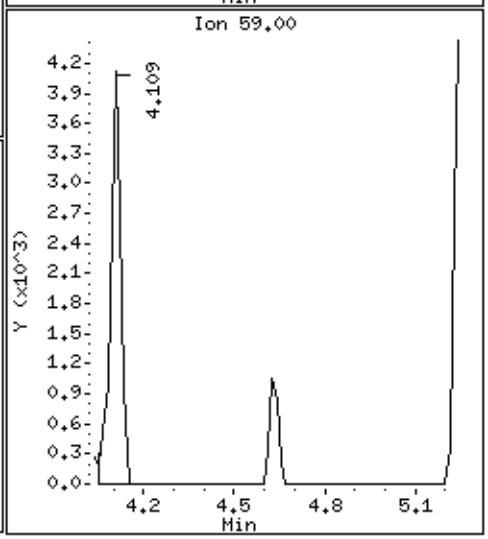












Data File: /chem/msdj.i/05mar15.b/j030505.d

Date : 05-MAR-2015 11:22

Client ID: LCSD

Instrument: msdj.i

Sample Info: 50ml #2716-98

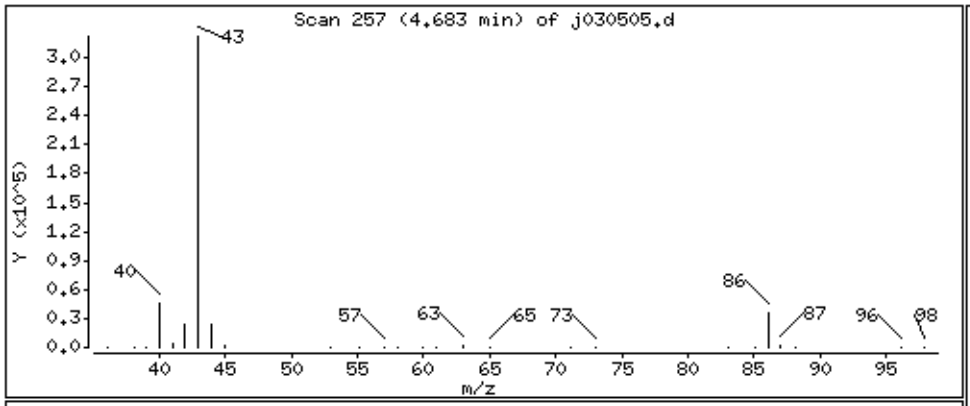
Operator: sg

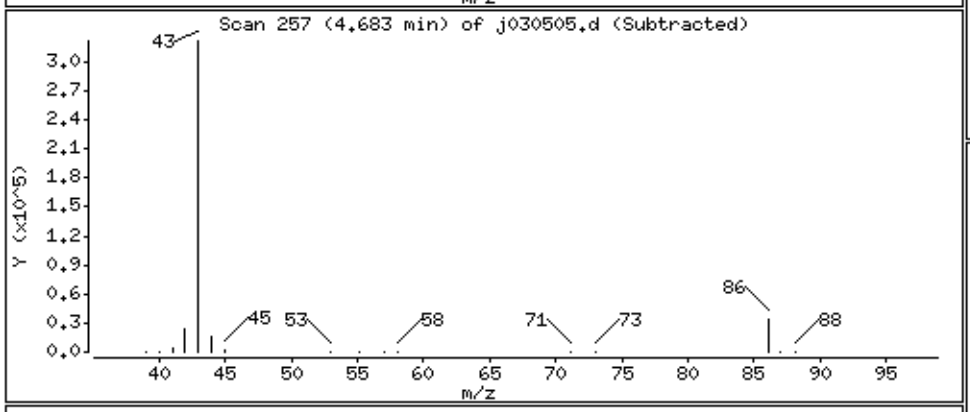
Column phase: RTX-624

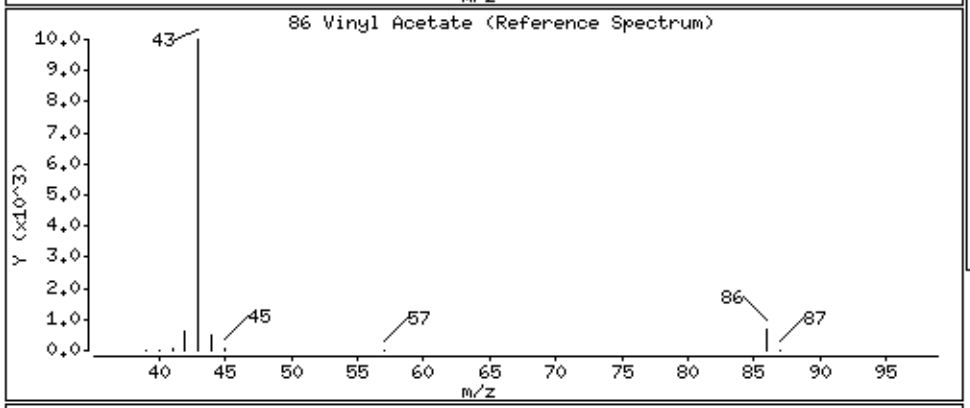
Column diameter: 0.25

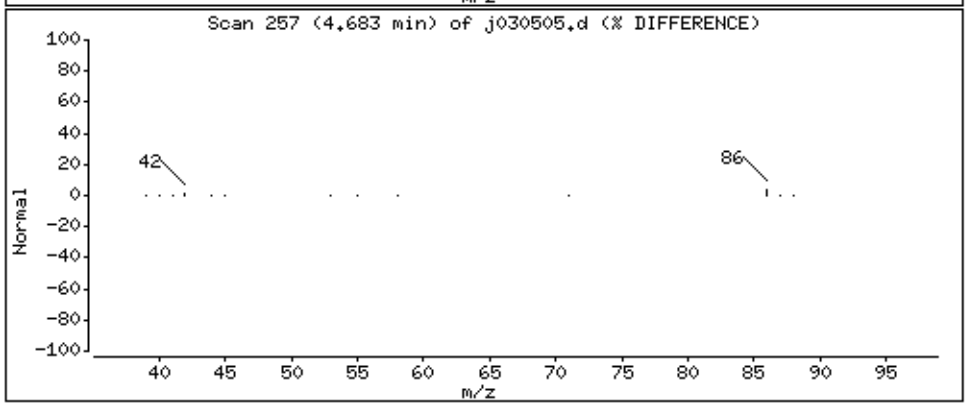
86 Vinyl Acetate

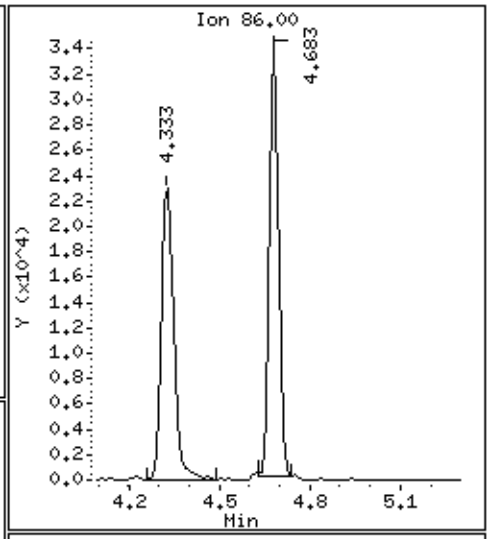
Concentration: 52.809 PPBV

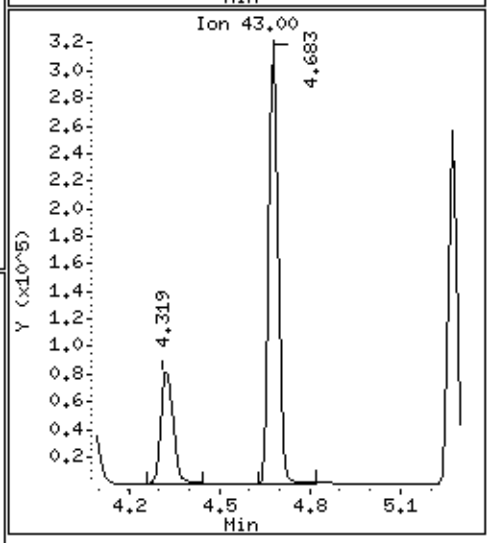












Data File: /chem/msdj.i/05mar15.b/j030505.d

Date : 05-MAR-2015 11:22

Client ID: LCSD

Instrument: msdj.i

Sample Info: 50ml #2716-98

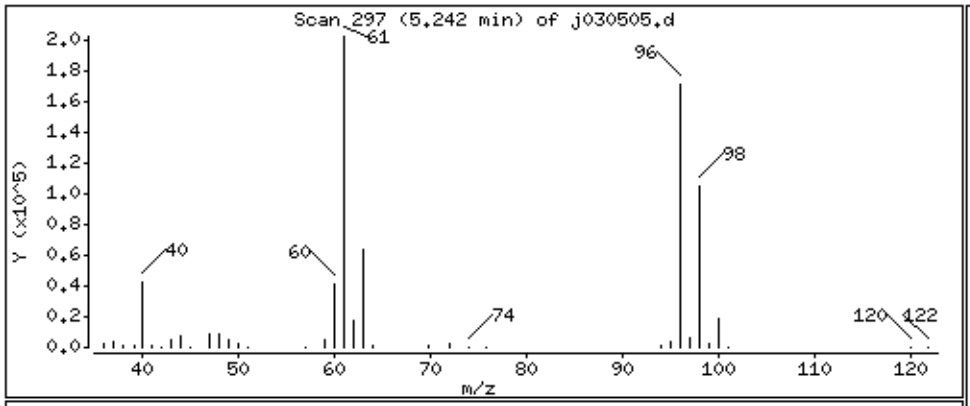
Operator: sg

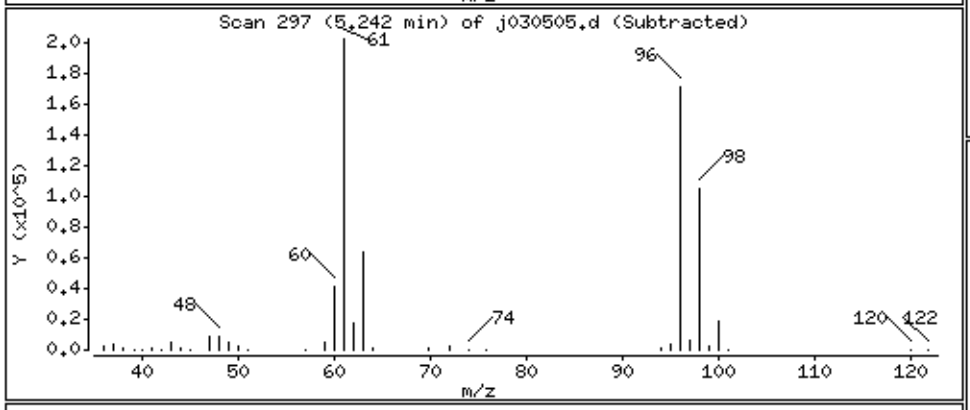
Column phase: RTX-624

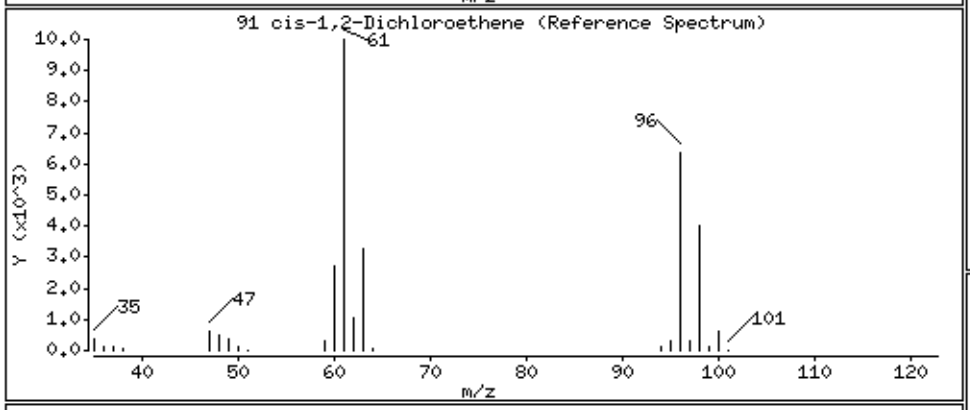
Column diameter: 0.25

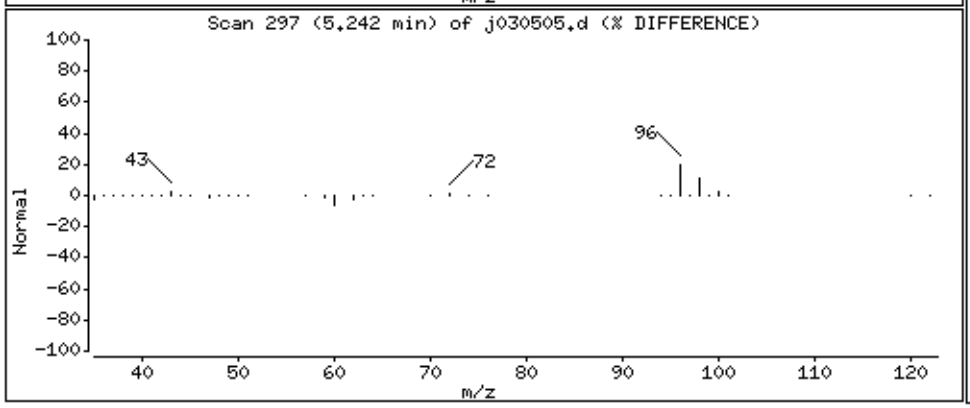
91 cis-1,2-Dichloroethene

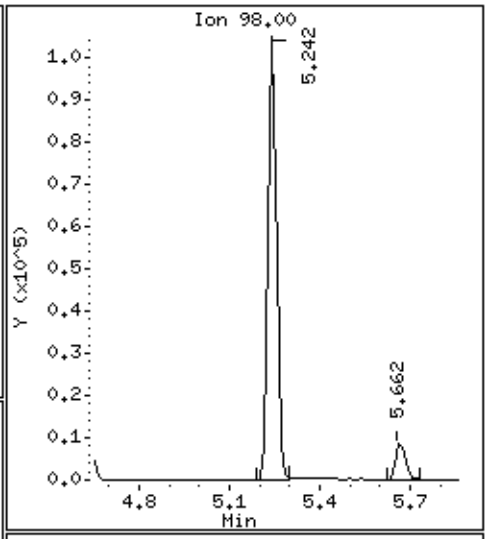
Concentration: 56.663 PPBV

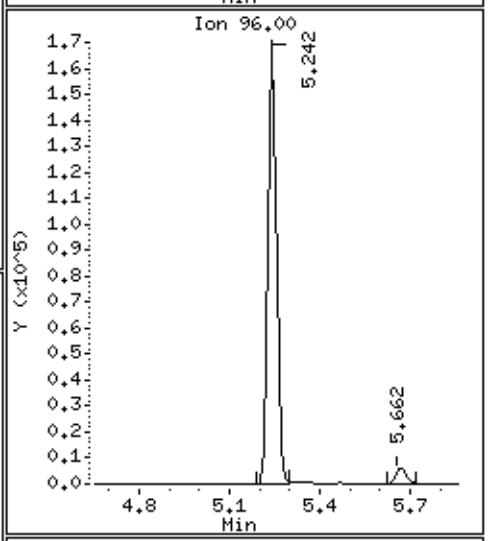


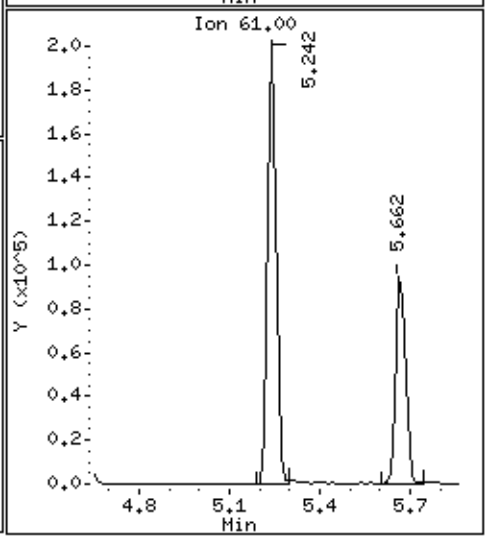












Data File: /chem/msdj.i/05mar15.b/j030505.d

Date : 05-MAR-2015 11:22

Client ID: LCSD

Instrument: msdj.i

Sample Info: 50ml #2716-98

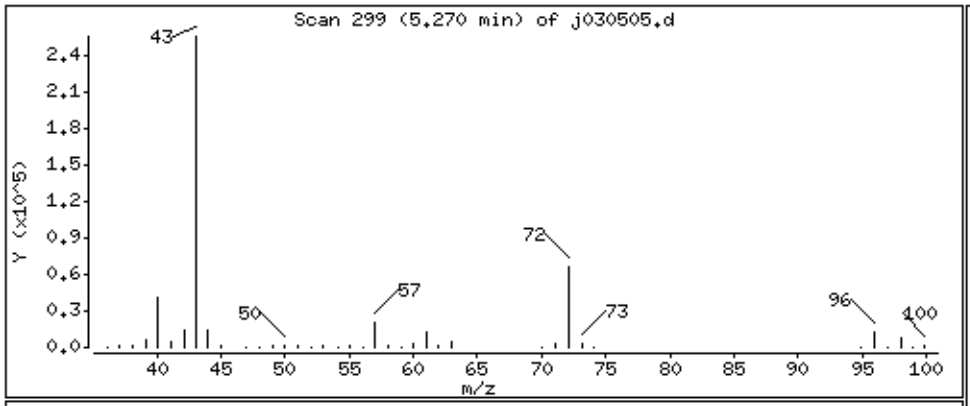
Operator: sg

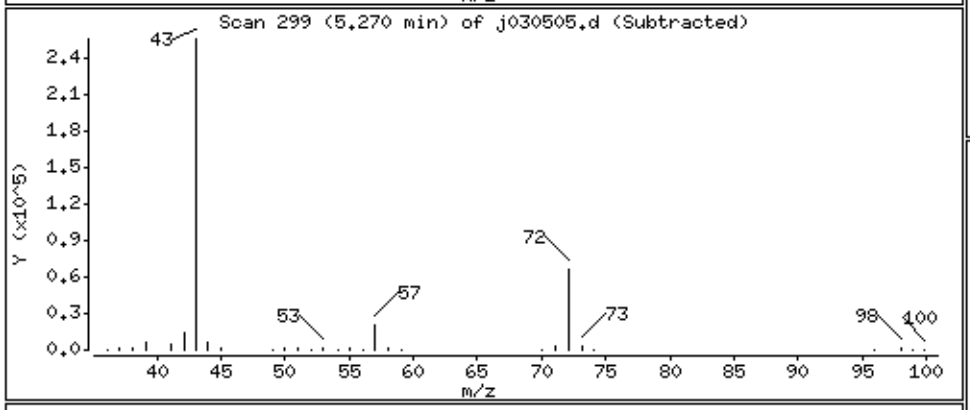
Column phase: RTX-624

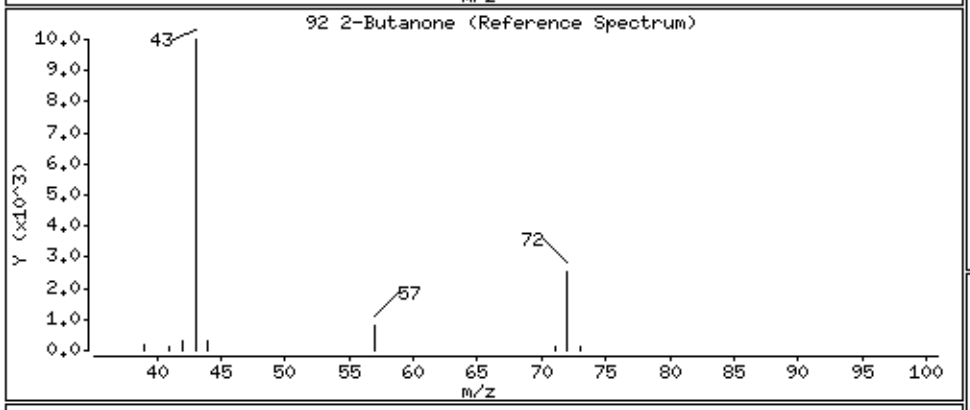
Column diameter: 0.25

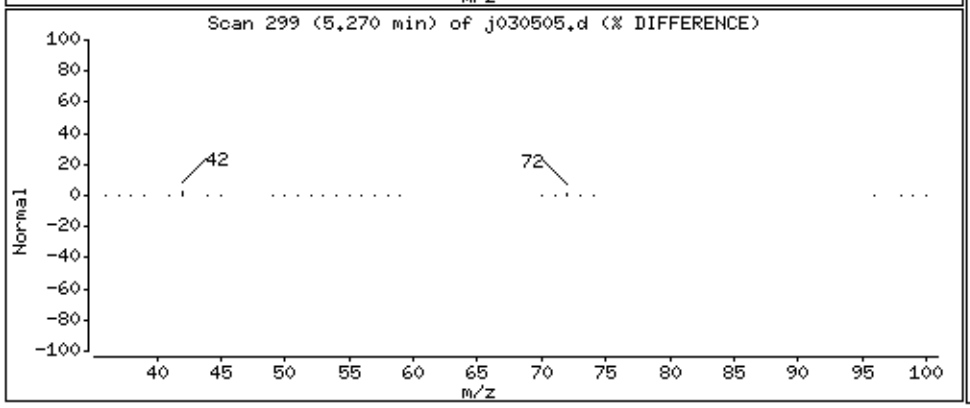
92 2-Butanone

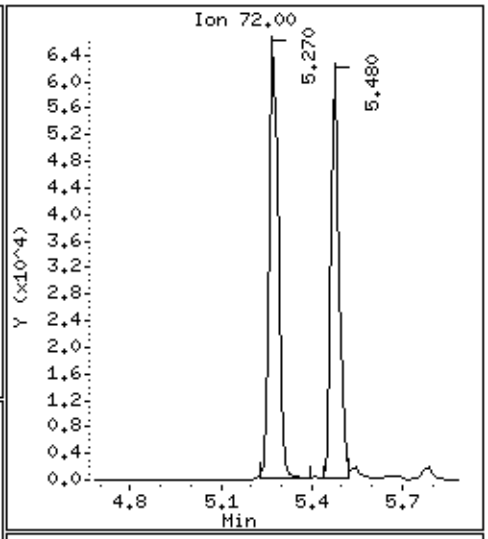
Concentration: 50.037 PPBV

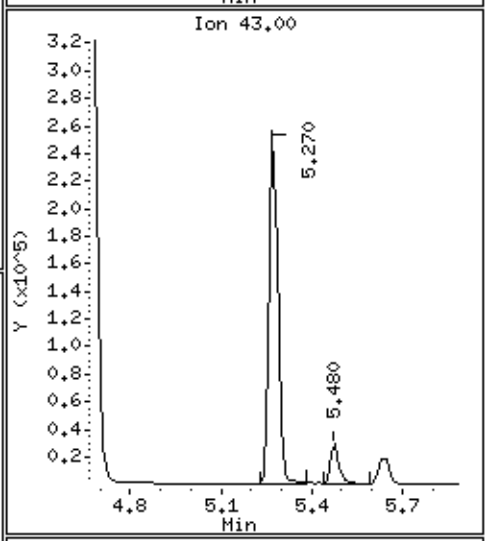


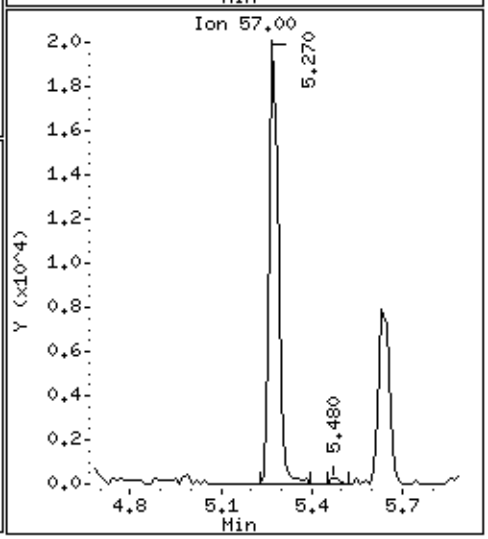












Data File: /chem/msdj.i/05mar15.b/j030505.d

Date : 05-MAR-2015 11:22

Client ID: LCSD

Instrument: msdj.i

Sample Info: 50ml #2716-98

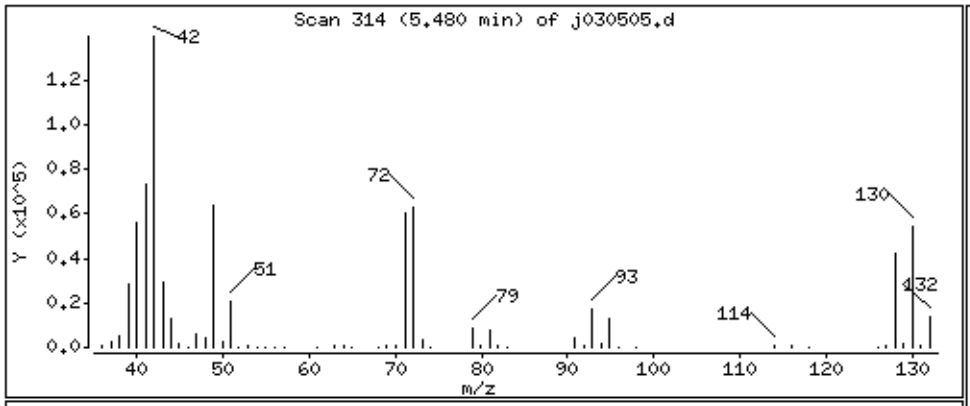
Operator: sg

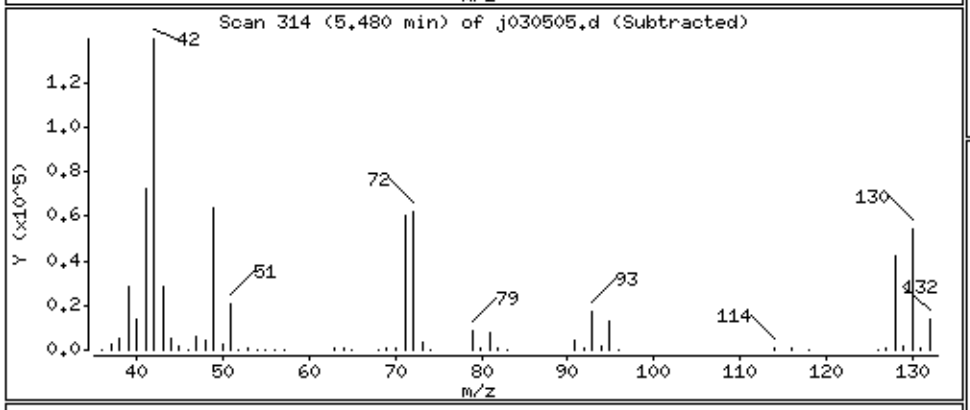
Column phase: RTX-624

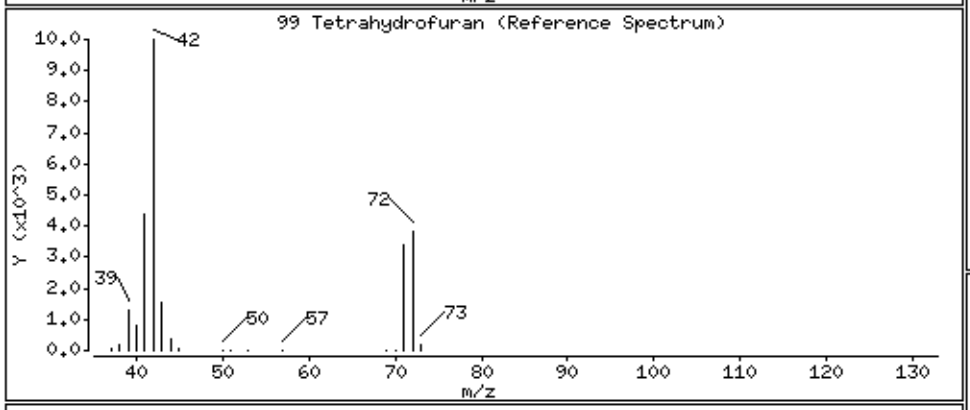
Column diameter: 0.25

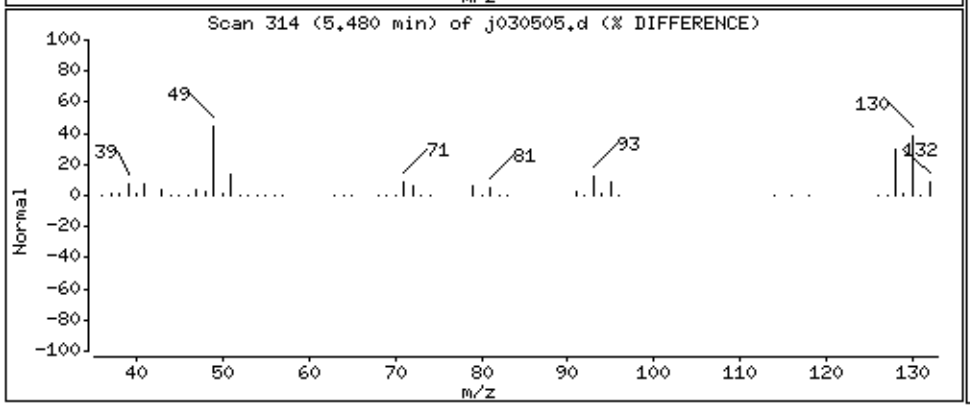
99 Tetrahydrofuran

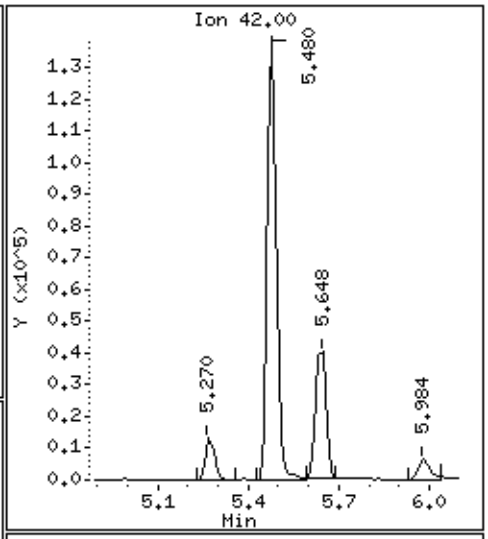
Concentration: 49.483 PPBV

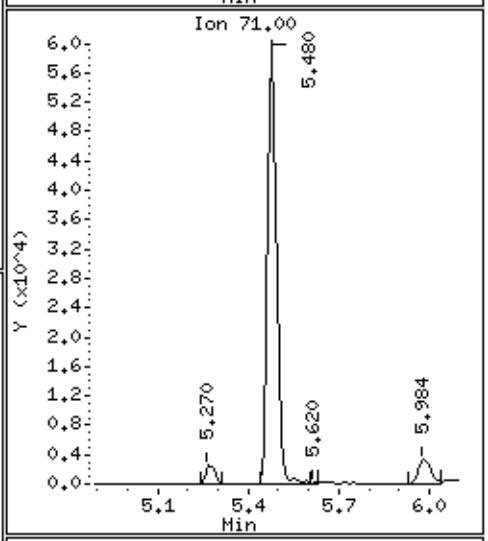


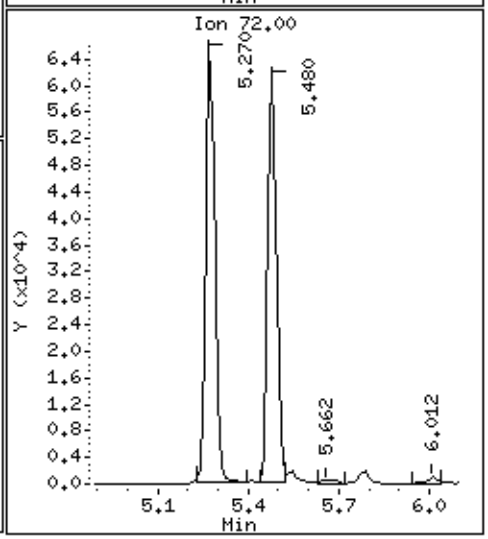












Data File: /chem/msdj.i/05mar15.b/j030505.d

Date : 05-MAR-2015 11:22

Client ID: LCSD

Instrument: msdj.i

Sample Info: 50ml #2716-98

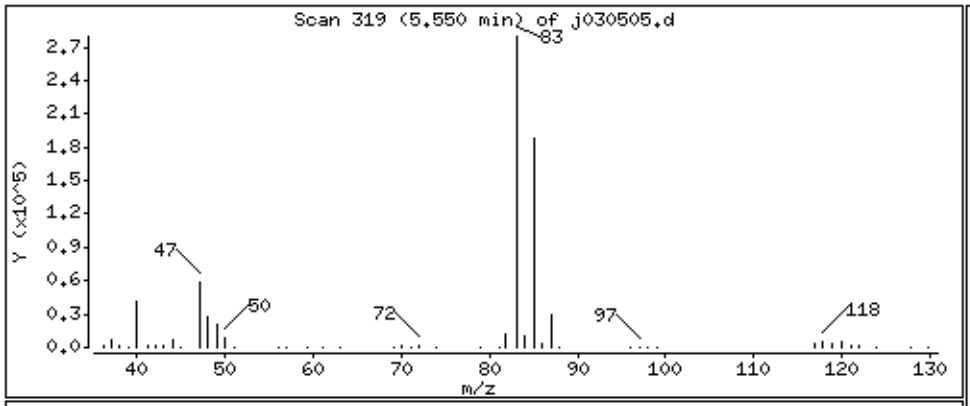
Operator: sg

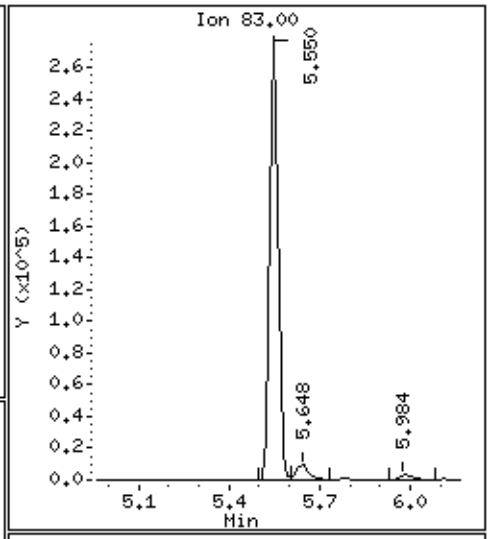
Column phase: RTX-624

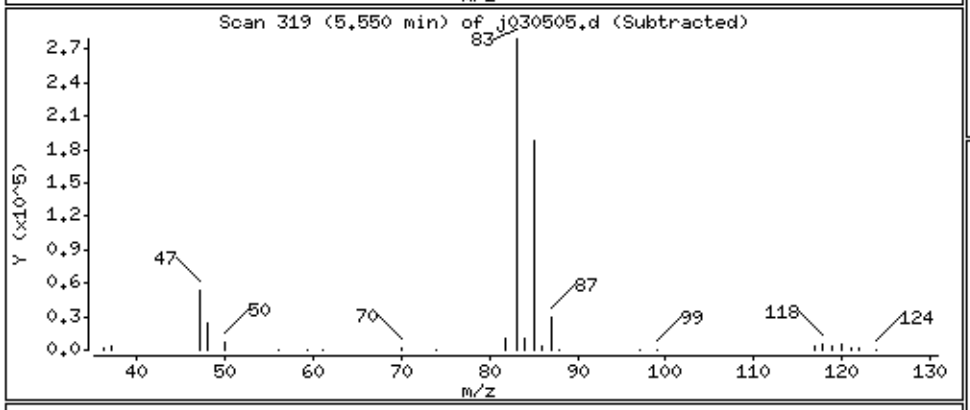
Column diameter: 0.25

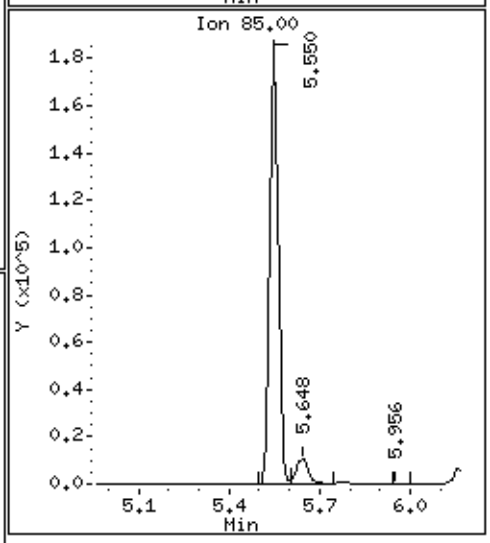
100 Chloroform

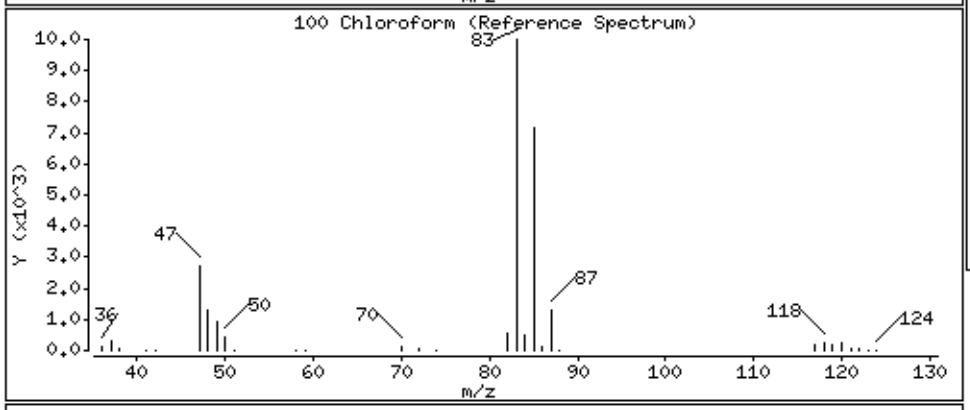
Concentration: 50.593 PPBV

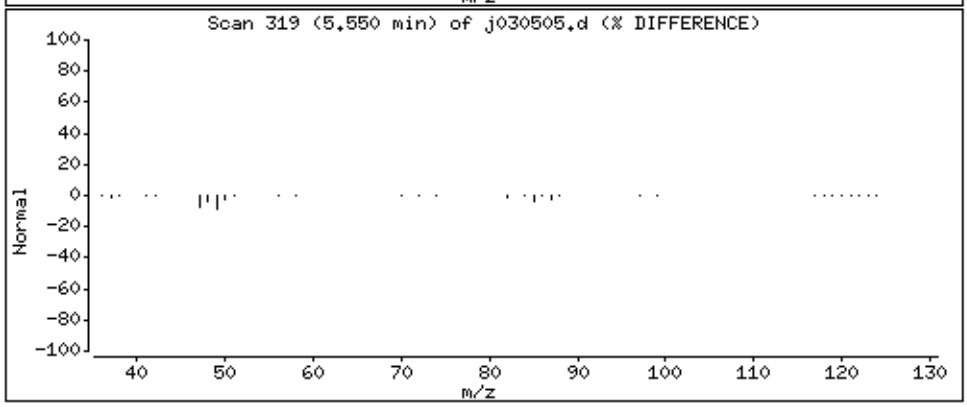












Data File: /chem/msdj.i/05mar15.b/j030505.d

Date : 05-MAR-2015 11:22

Client ID: LCSD

Instrument: msdj.i

Sample Info: 50ml #2716-98

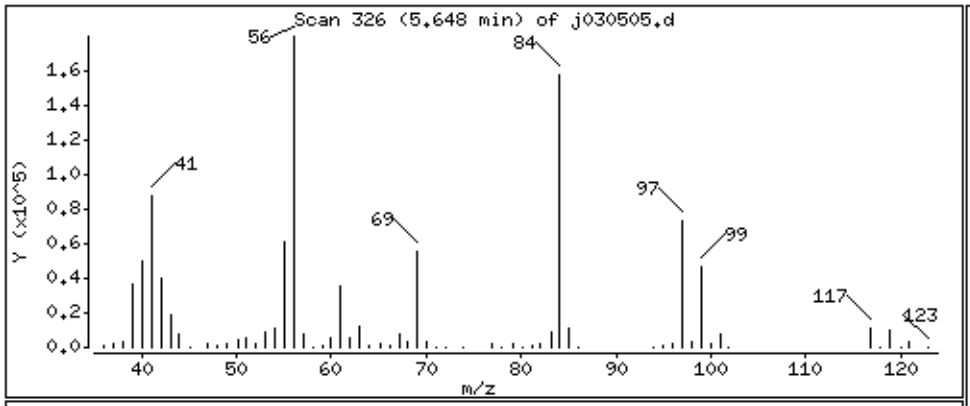
Operator: sg

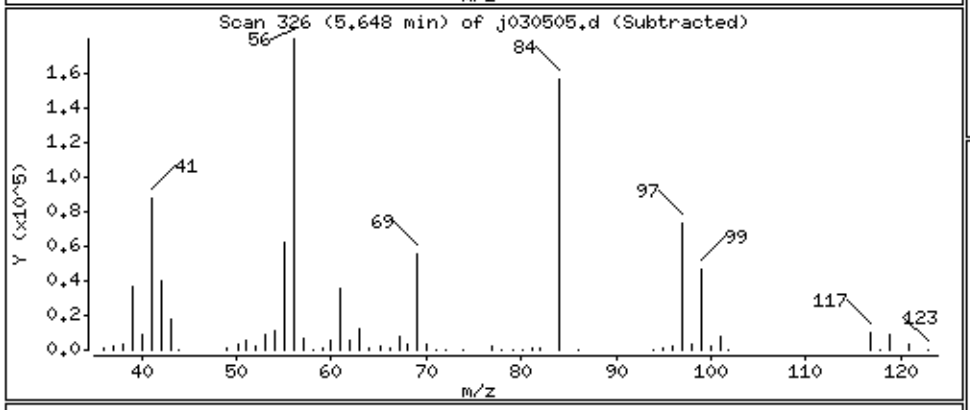
Column phase: RTX-624

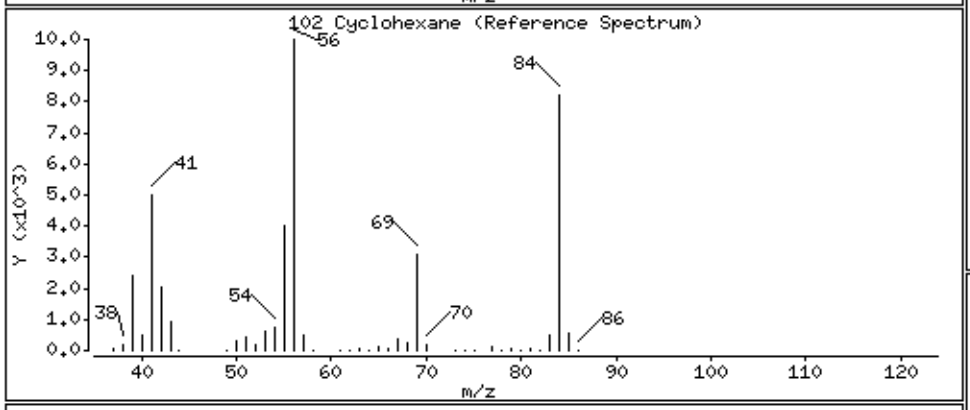
Column diameter: 0.25

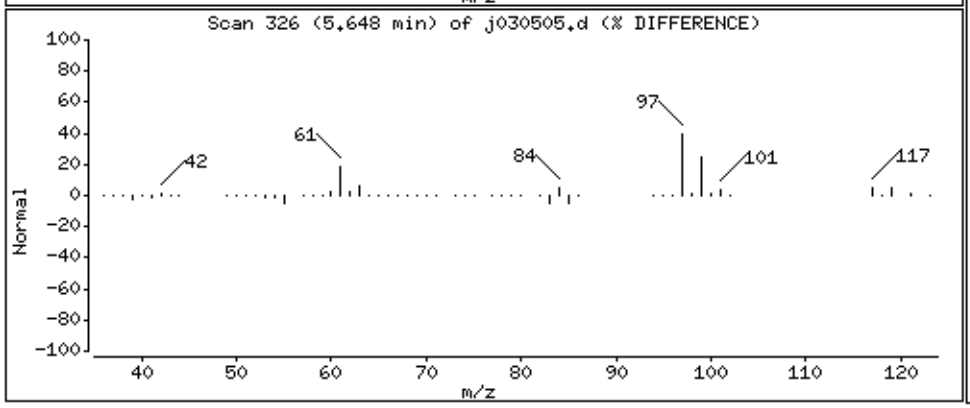
102 Cyclohexane

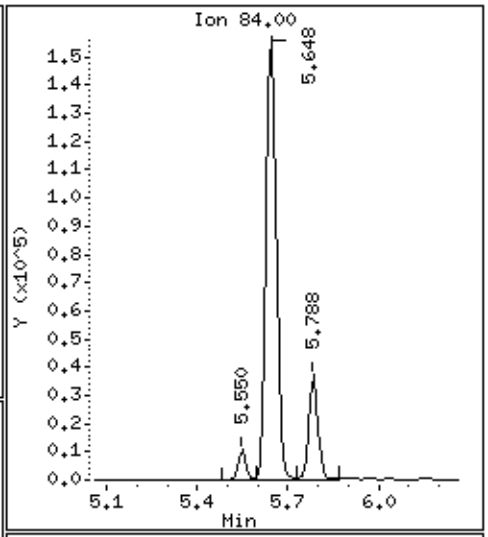
Concentration: 51.947 PPBV

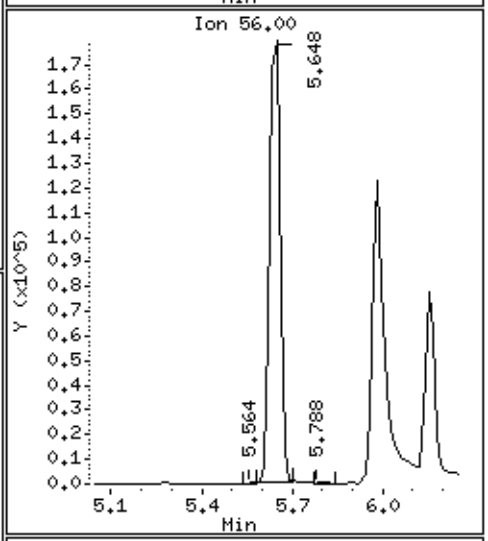


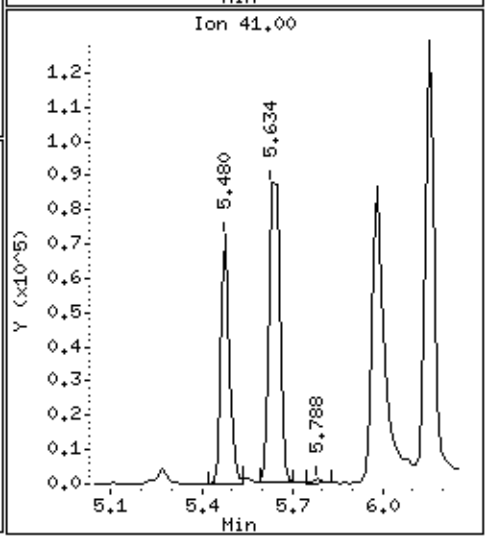












Data File: /chem/msdj.i/05mar15.b/j030505.d

Date : 05-MAR-2015 11:22

Client ID: LCSD

Instrument: msdj.i

Sample Info: 50ml #2716-98

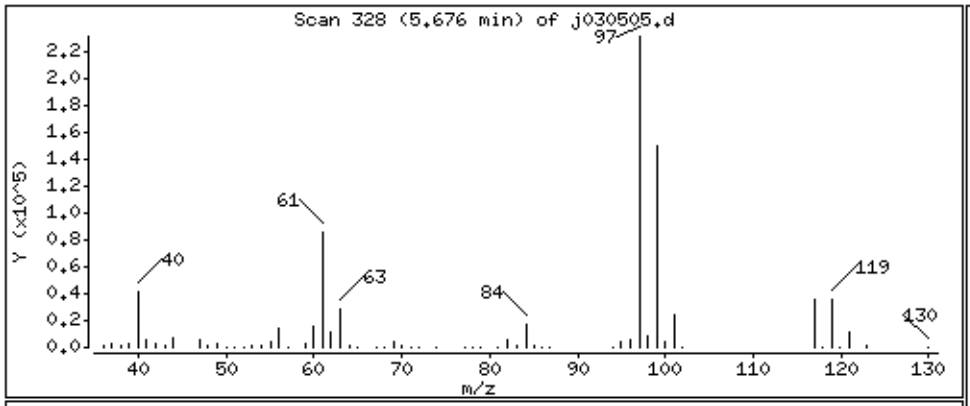
Operator: sg

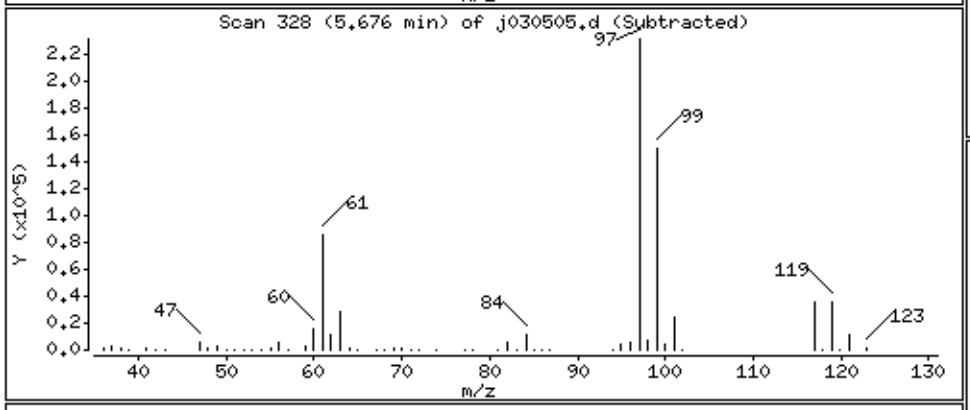
Column phase: RTX-624

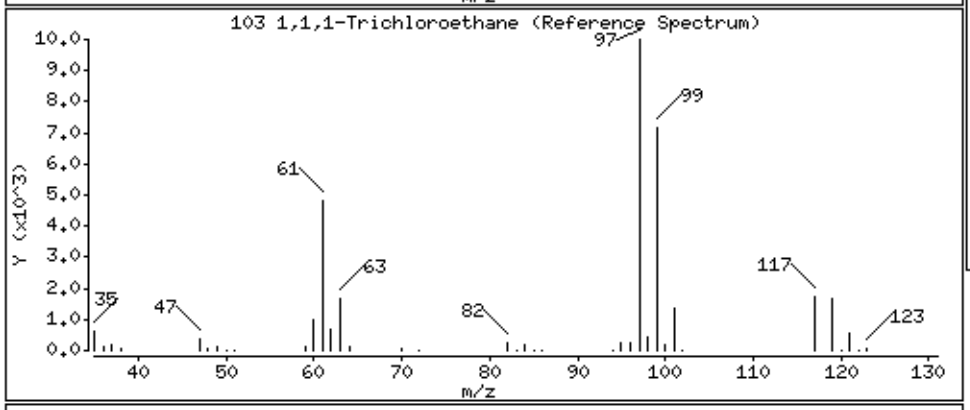
Column diameter: 0.25

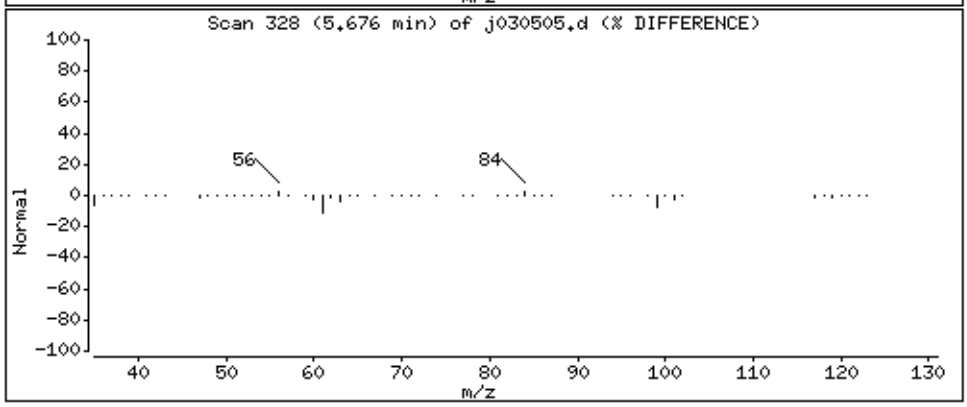
103 1,1,1-Trichloroethane

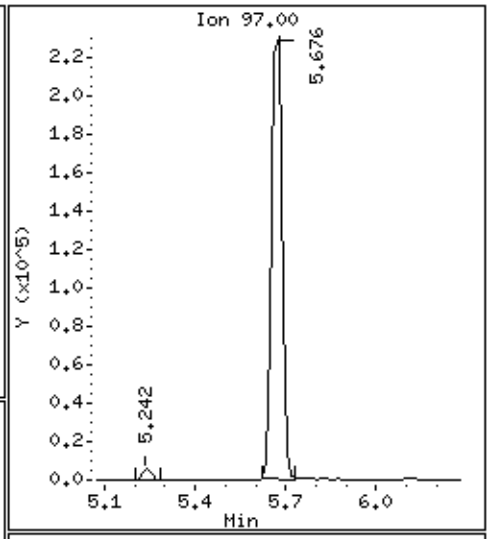
Concentration: 50.312 PPBV

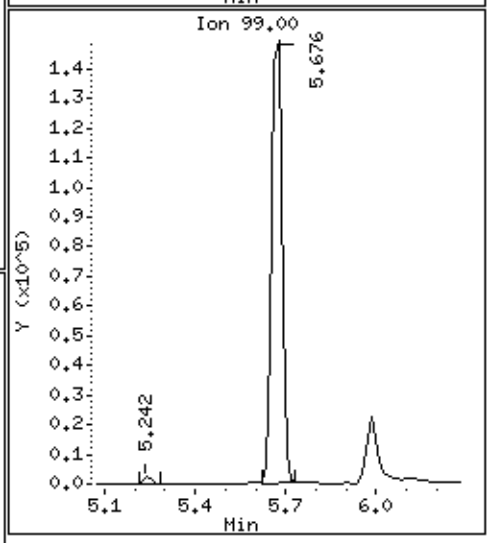












Data File: /chem/msdj.i/05mar15.b/j030505.d

Date : 05-MAR-2015 11:22

Client ID: LCSD

Instrument: msdj.i

Sample Info: 50ml #2716-98

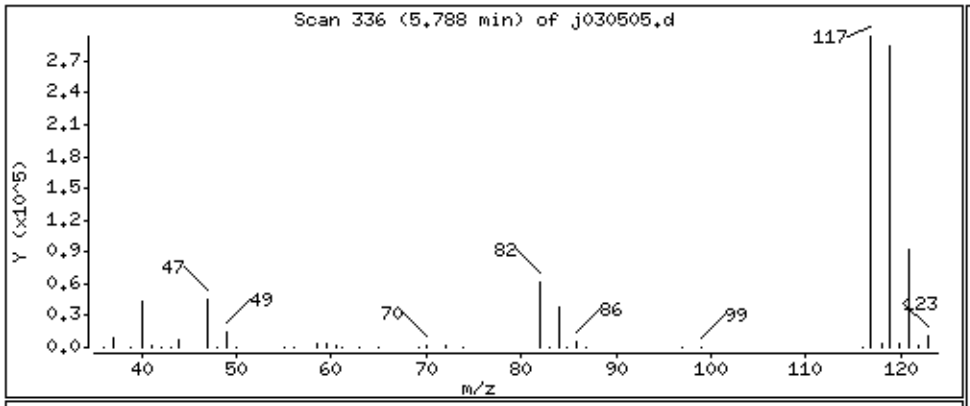
Operator: sg

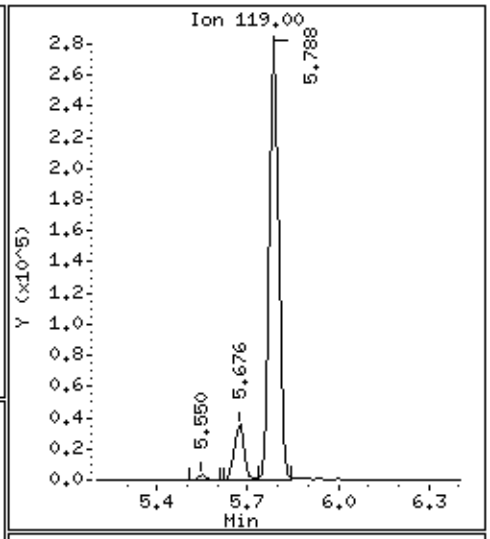
Column phase: RTX-624

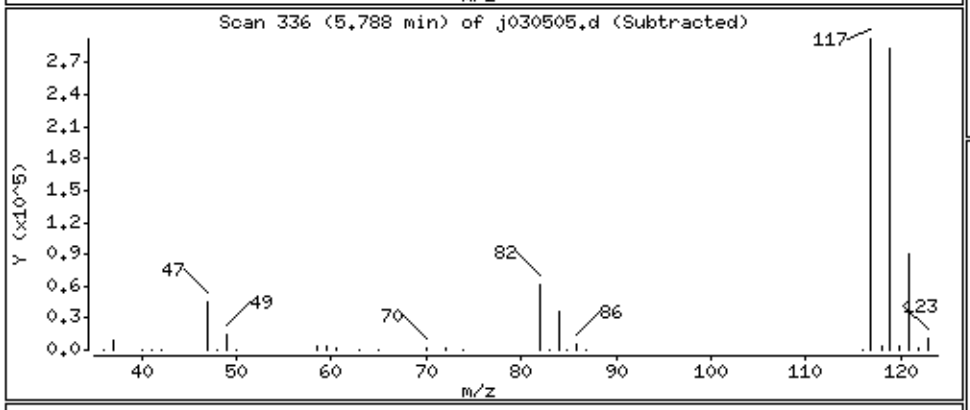
Column diameter: 0.25

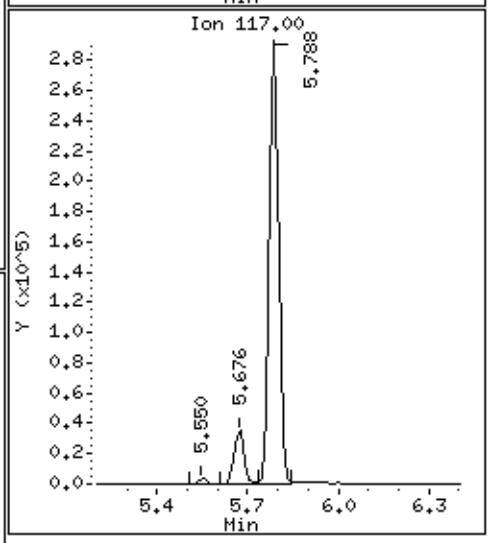
106 Carbon Tetrachloride

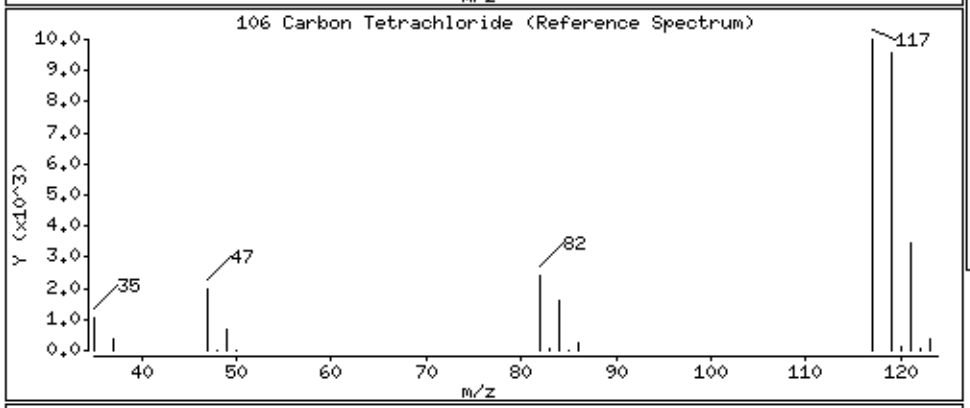
Concentration: 50.598 PPBV

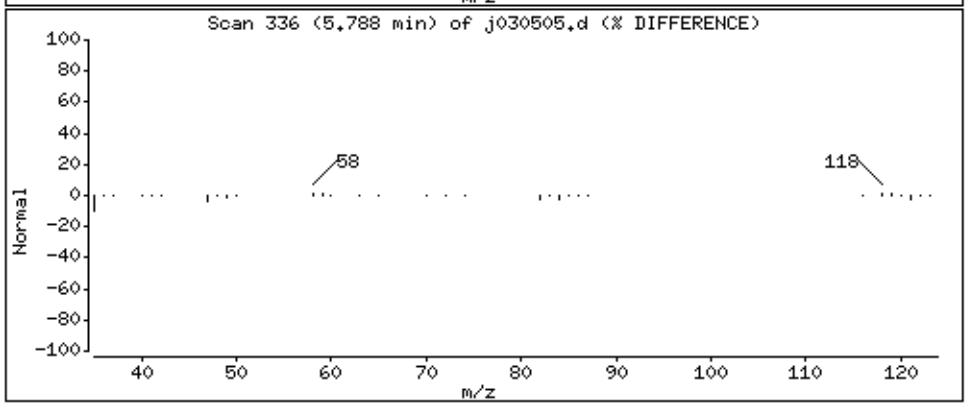












Data File: /chem/msdj.i/05mar15.b/j030505.d

Date : 05-MAR-2015 11:22

Client ID: LCSD

Instrument: msdj.i

Sample Info: 50ml #2716-98

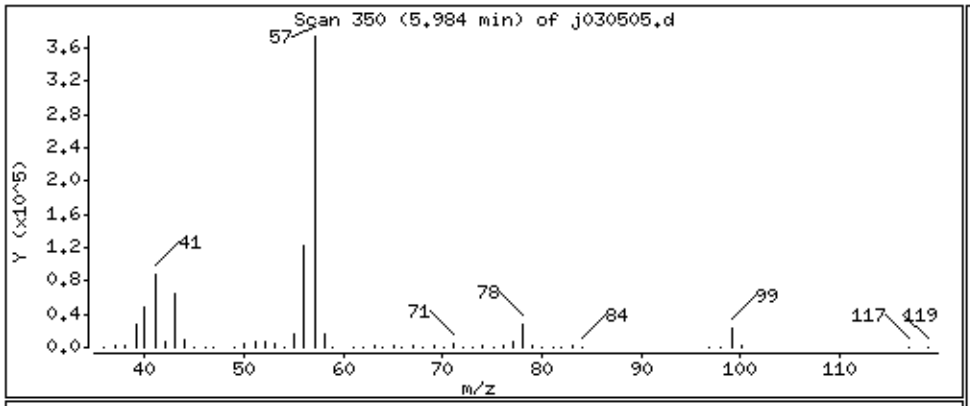
Operator: sg

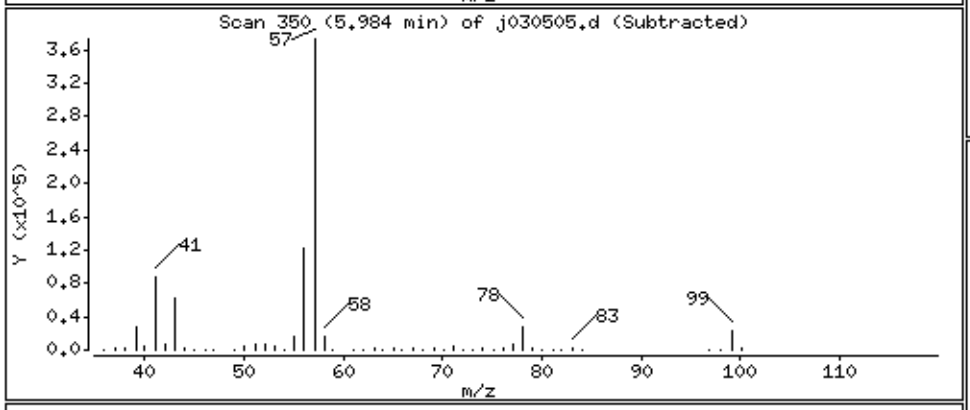
Column phase: RTX-624

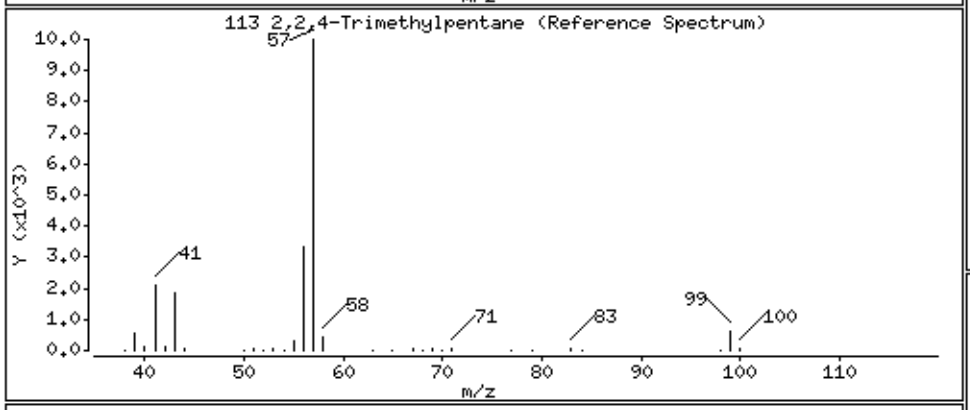
Column diameter: 0.25

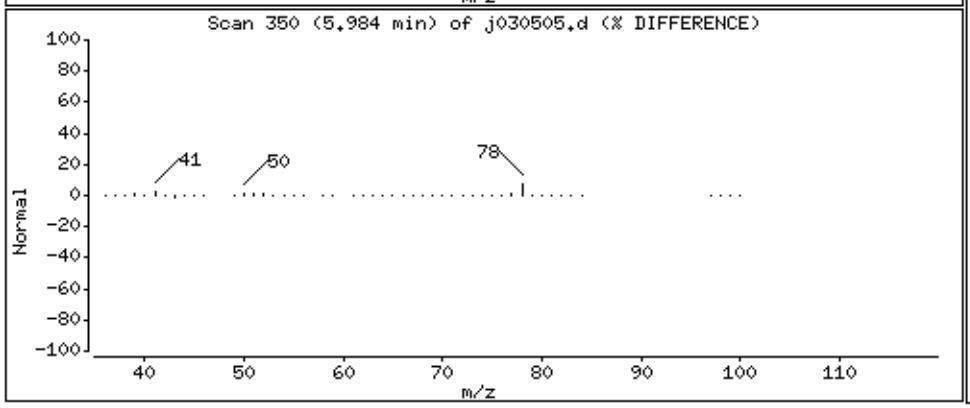
113 2,2,4-Trimethylpentane

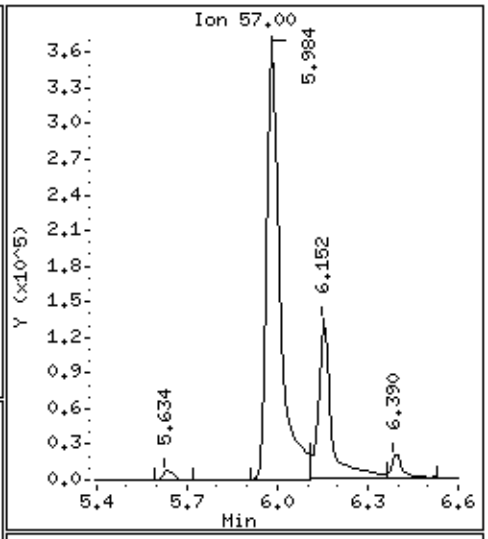
Concentration: 53.220 PPBV

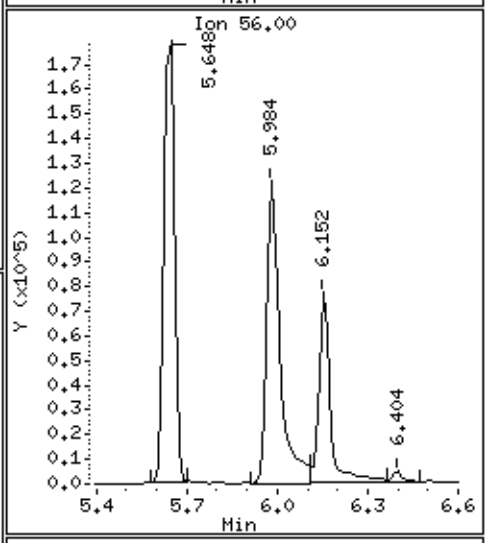


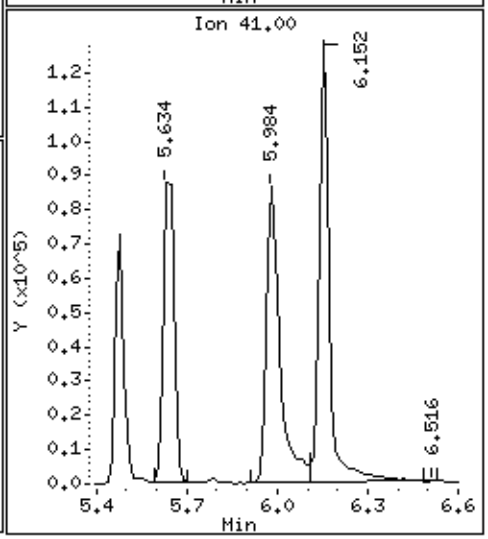












Data File: /chem/msdj.i/05mar15.b/j030505.d

Date : 05-MAR-2015 11:22

Client ID: LCSD

Instrument: msdj.i

Sample Info: 50ml #2716-98

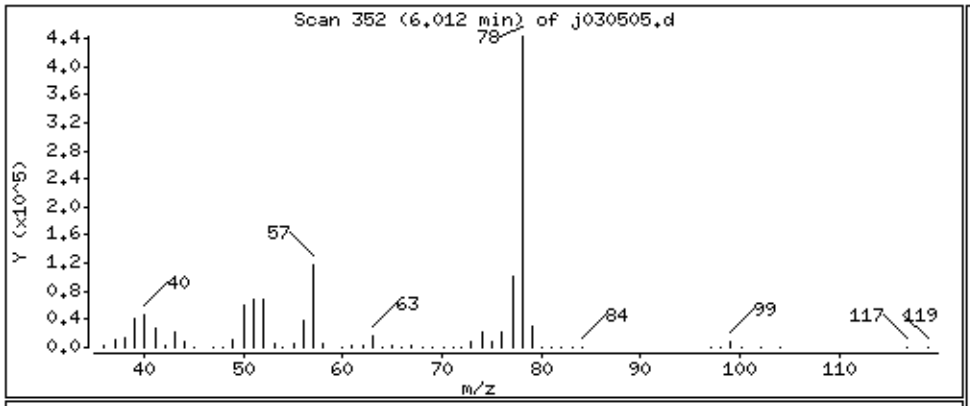
Operator: sg

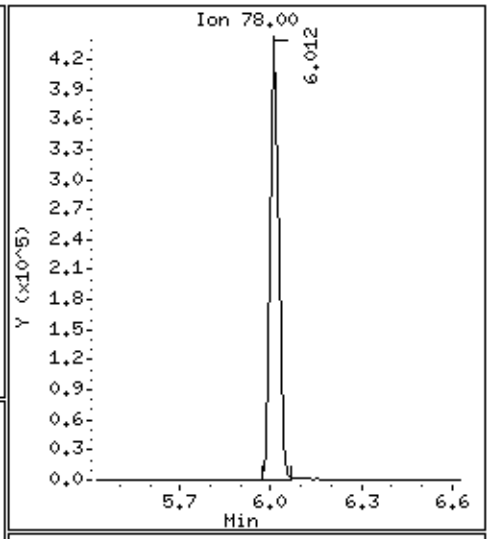
Column phase: RTX-624

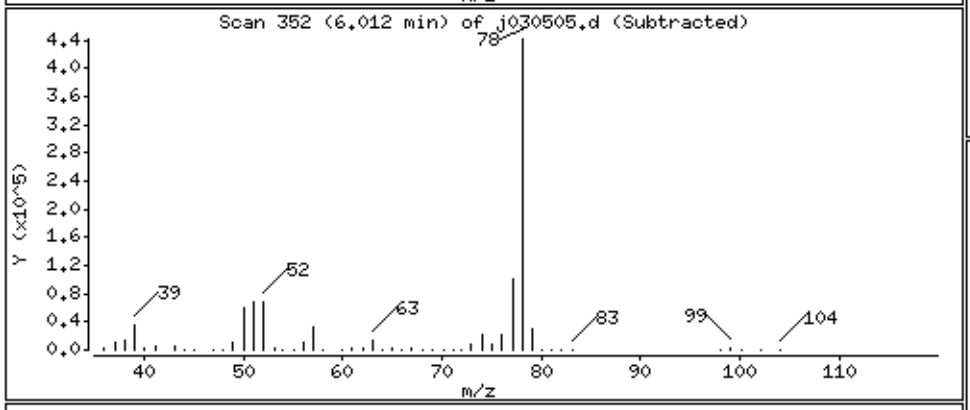
Column diameter: 0.25

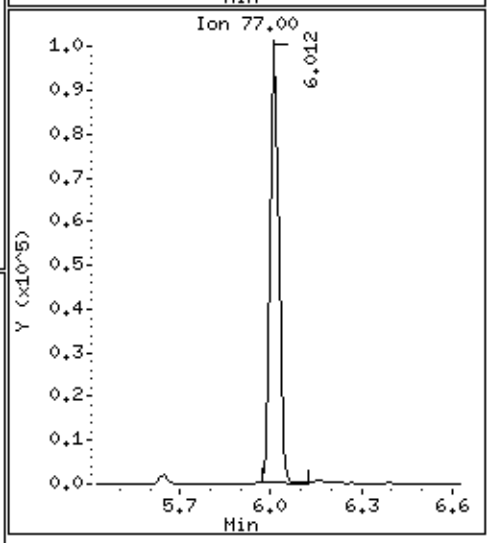
116 Benzene

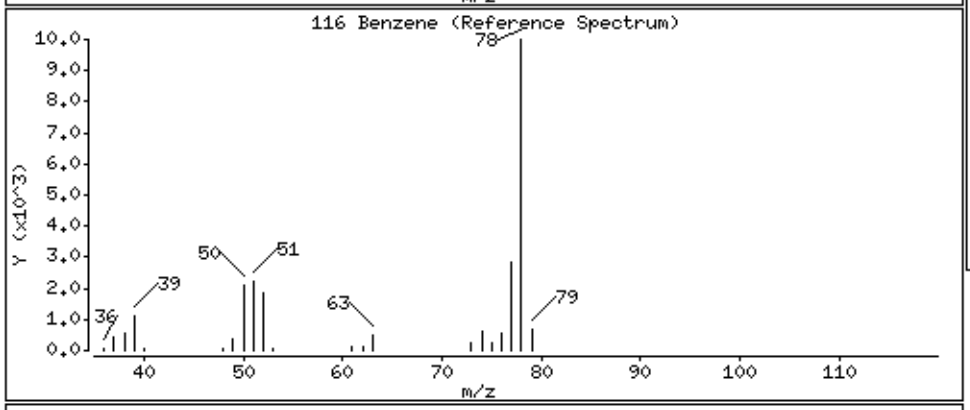
Concentration: 49.928 PPBV

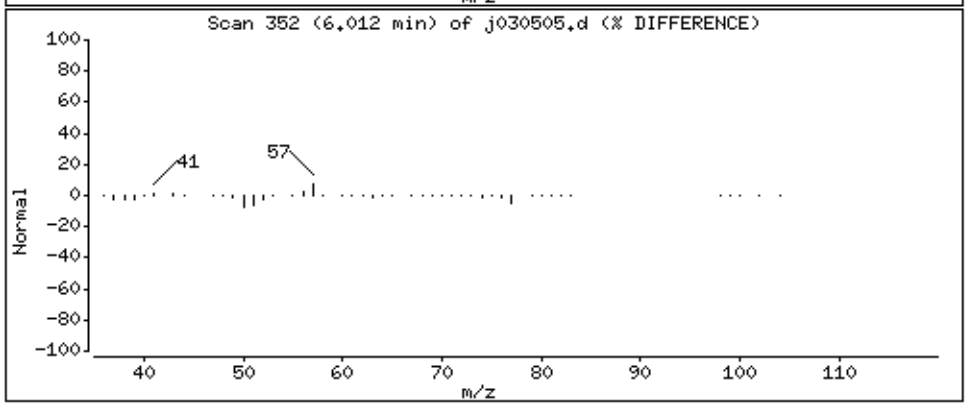












Data File: /chem/msdj.i/05mar15.b/j030505.d

Date : 05-MAR-2015 11:22

Client ID: LCSD

Instrument: msdj.i

Sample Info: 50ml #2716-98

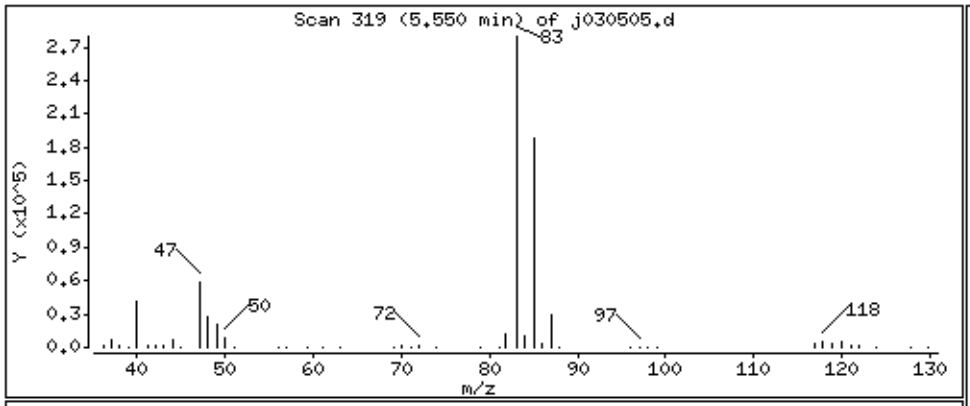
Operator: sg

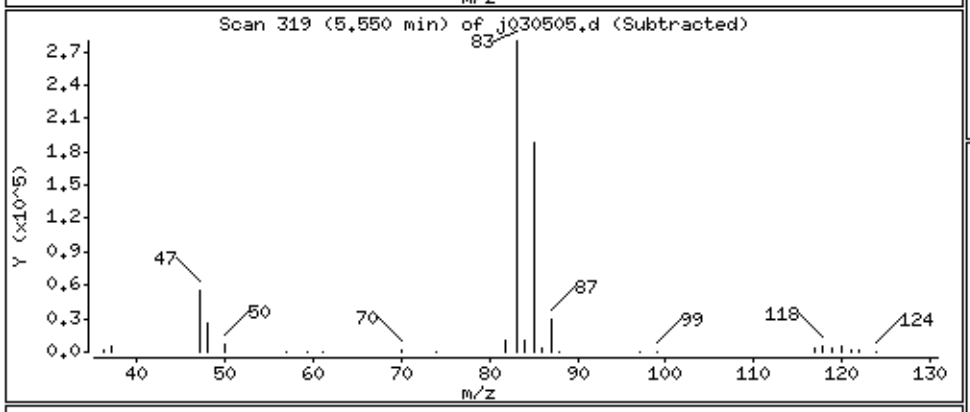
Column phase: RTX-624

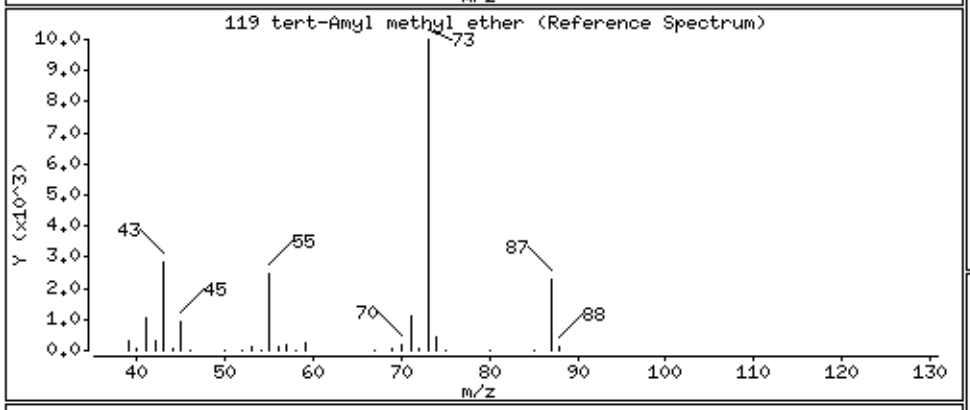
Column diameter: 0.25

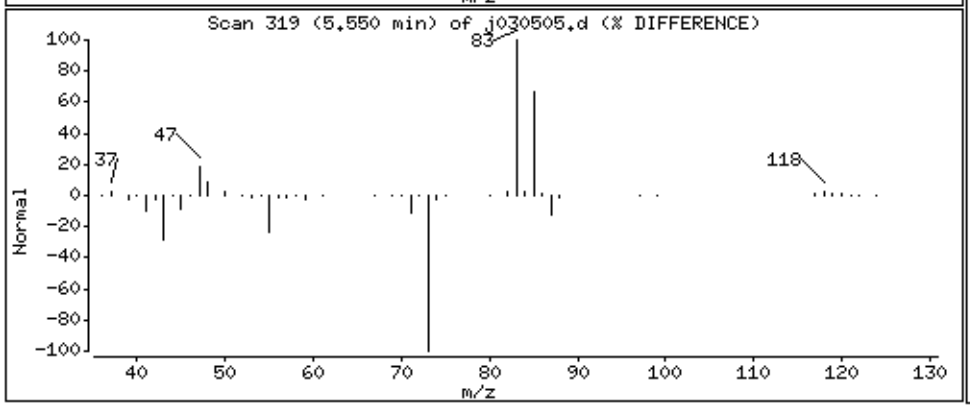
119 tert-Amyl methyl ether

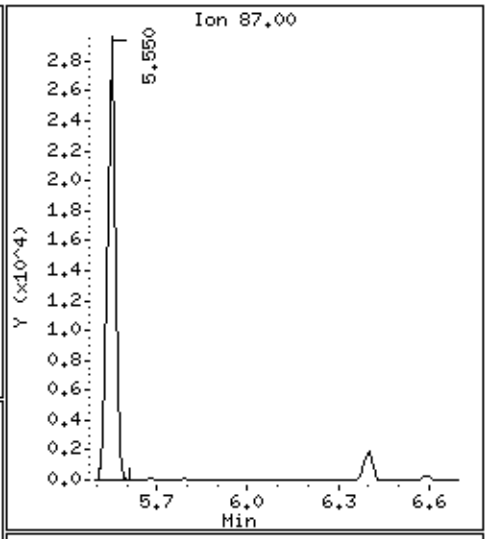
Concentration: 14.842 PPBV

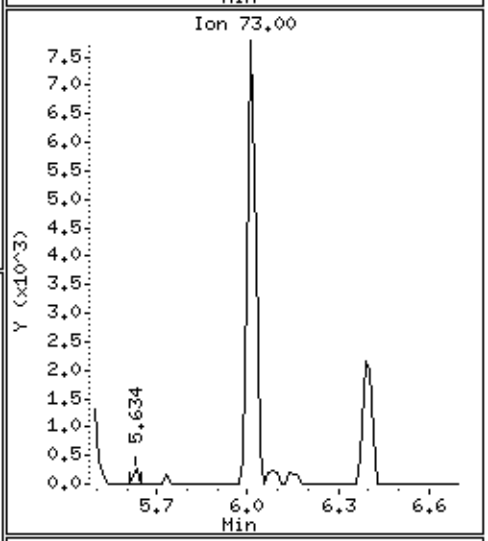


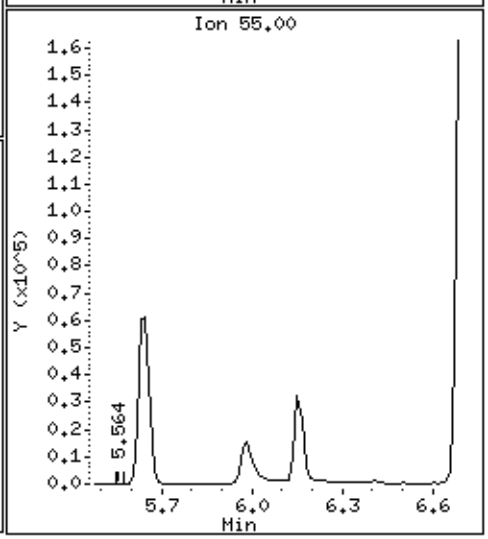












Data File: /chem/msdj.i/05mar15.b/j030505.d

Date : 05-MAR-2015 11:22

Client ID: LCSD

Instrument: msdj.i

Sample Info: 50ml #2716-98

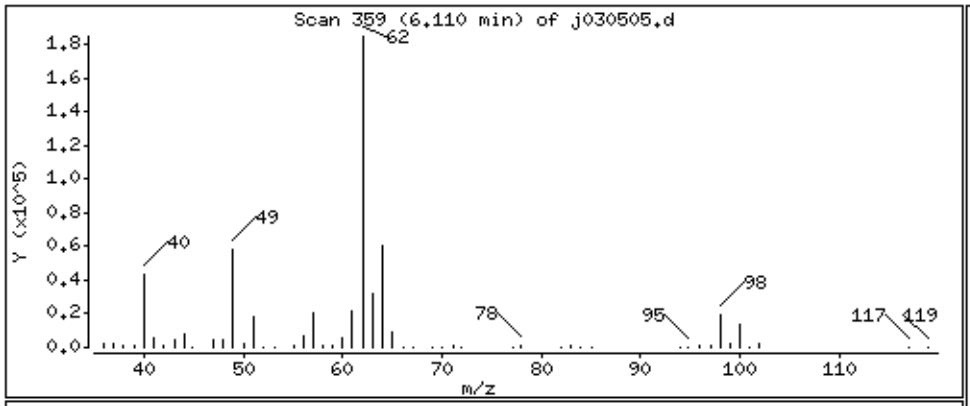
Operator: sg

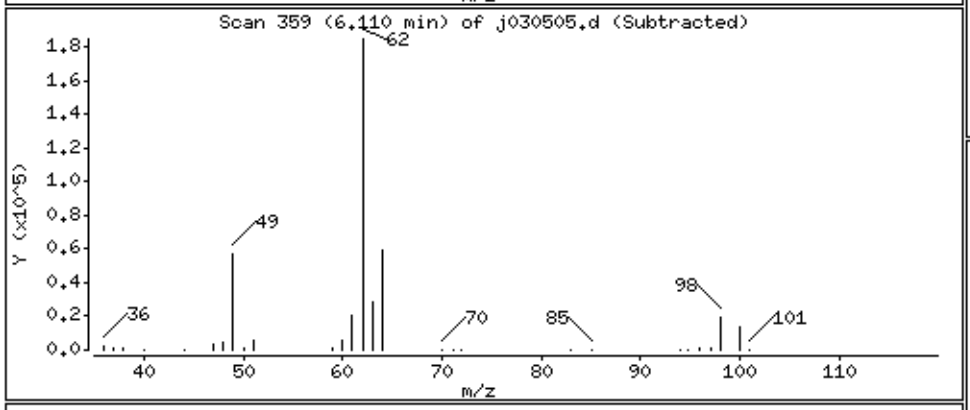
Column phase: RTX-624

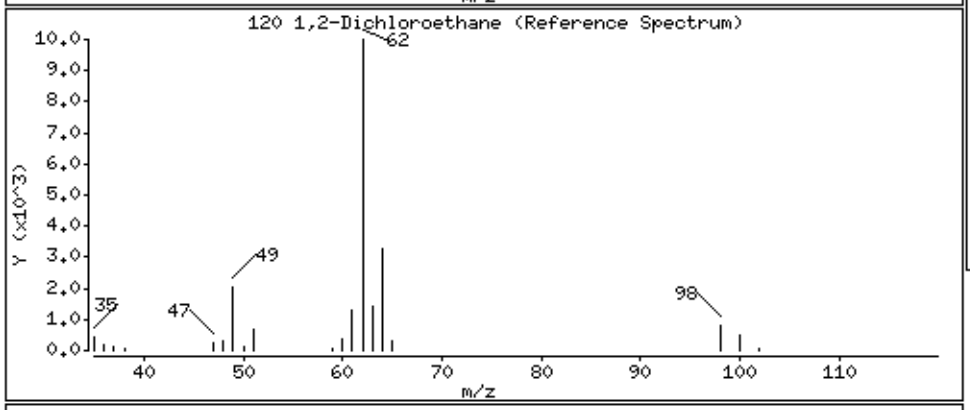
Column diameter: 0.25

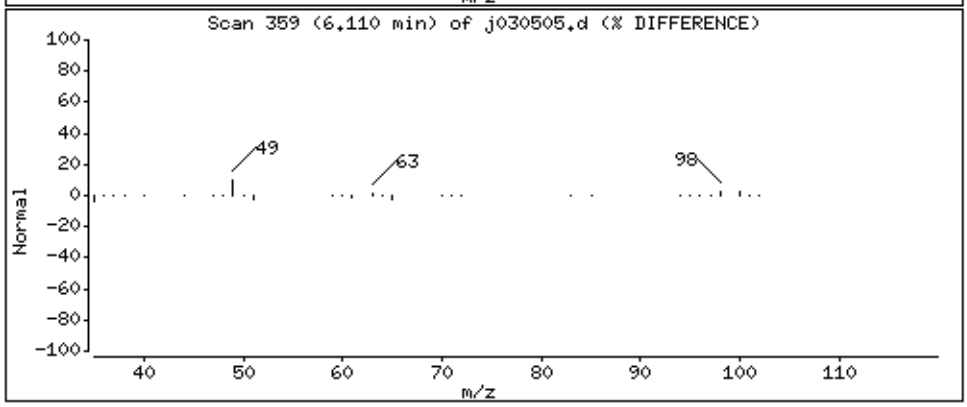
120 1,2-Dichloroethane

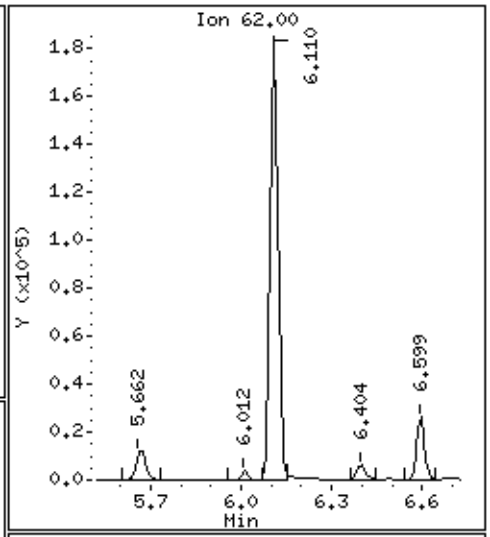
Concentration: 49.152 PPBV

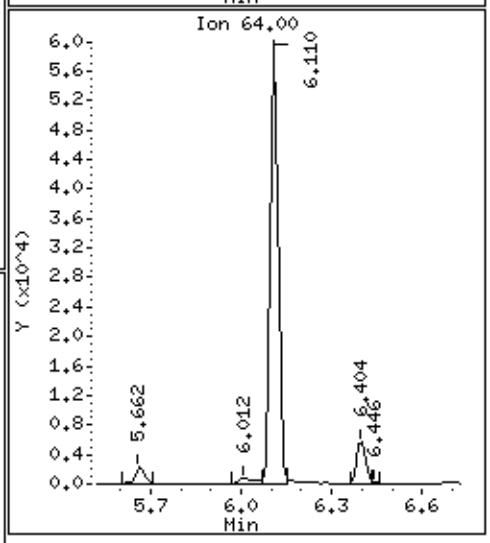












Data File: /chem/msdj.i/05mar15.b/j030505.d

Date : 05-MAR-2015 11:22

Client ID: LCSD

Instrument: msdj.i

Sample Info: 50ml #2716-98

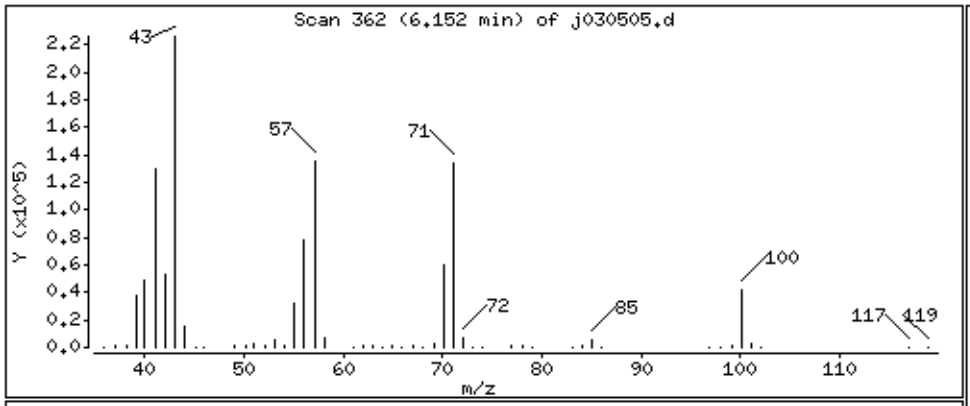
Operator: sg

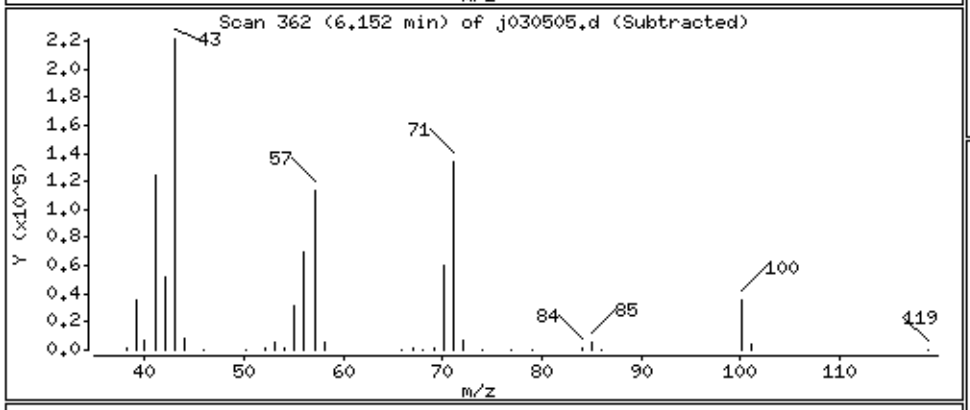
Column phase: RTX-624

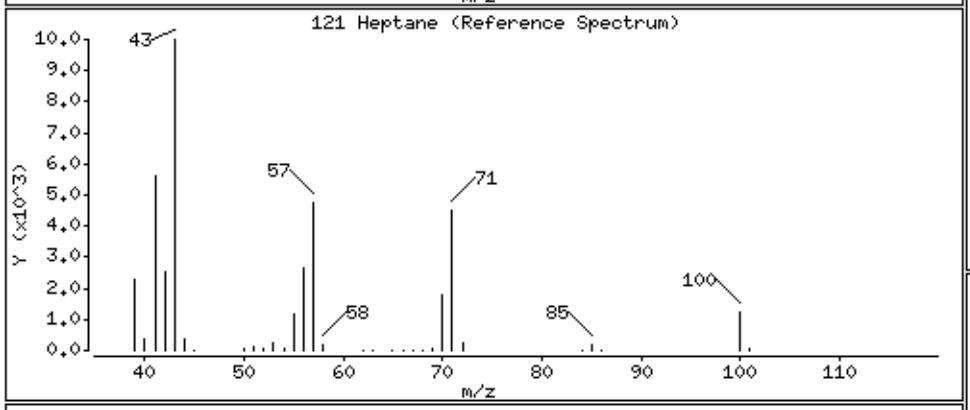
Column diameter: 0.25

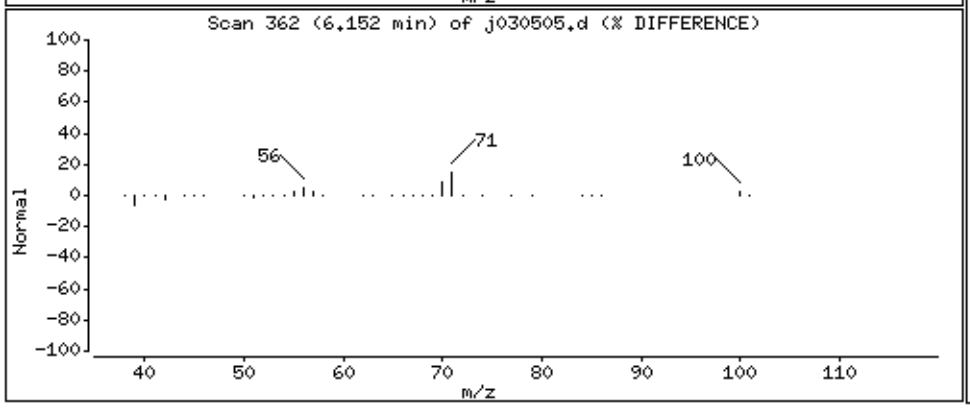
121 Heptane

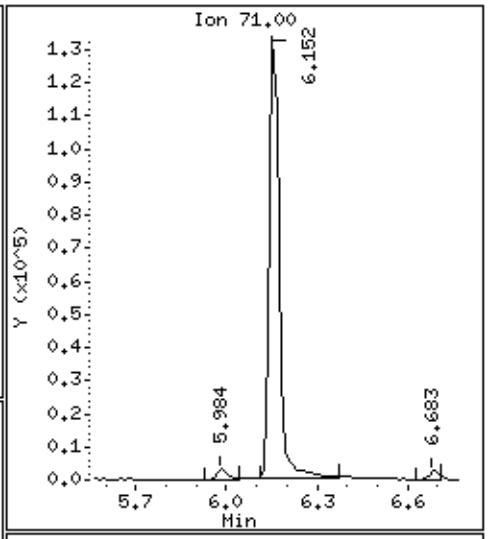
Concentration: 49.532 PPBV

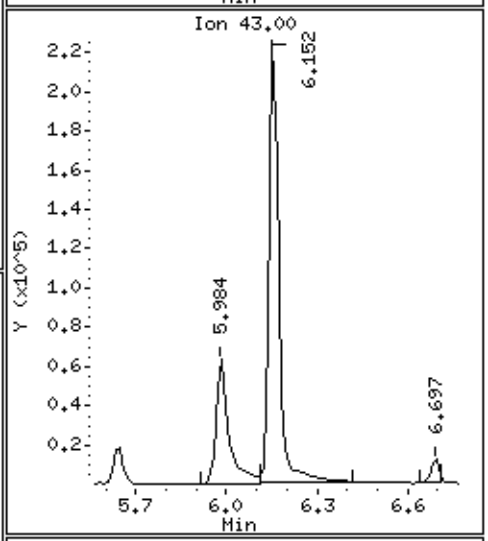


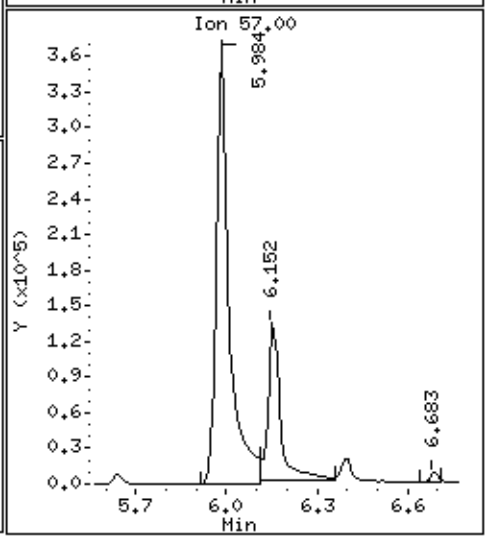












Data File: /chem/msdj.i/05mar15.b/j030505.d

Date : 05-MAR-2015 11:22

Client ID: LCSD

Instrument: msdj.i

Sample Info: 50ml #2716-98

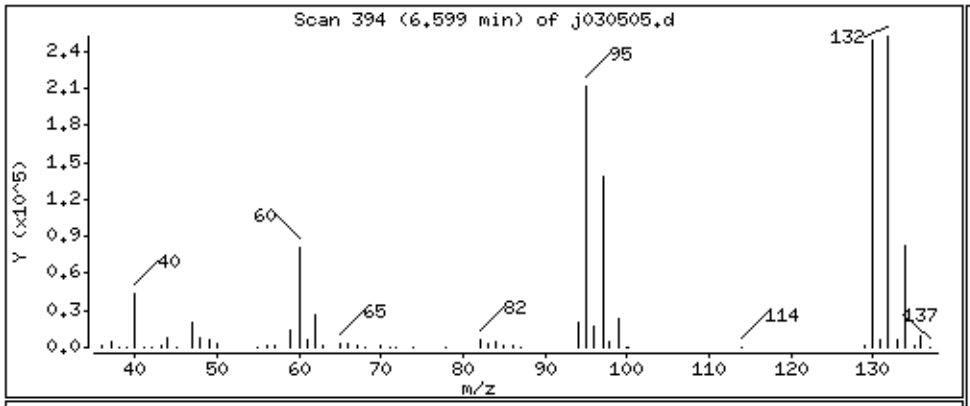
Operator: sg

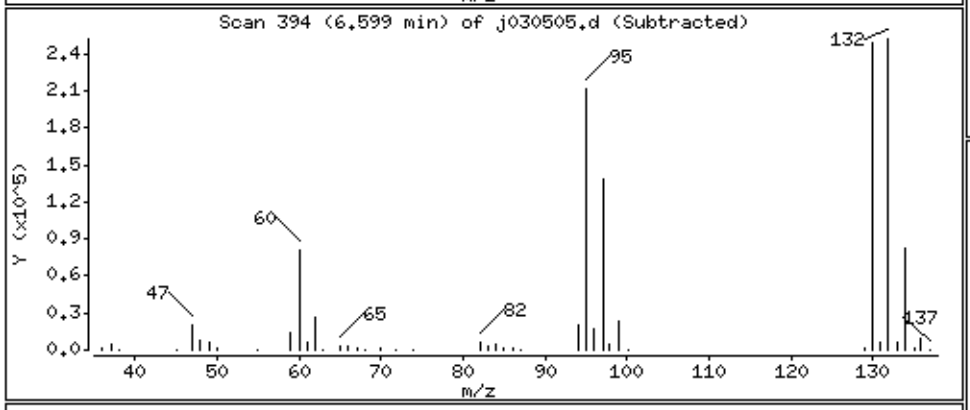
Column phase: RTX-624

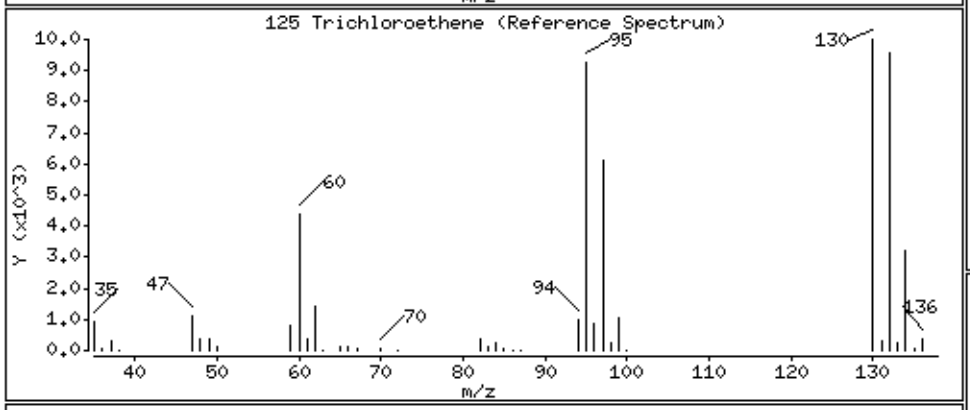
Column diameter: 0.25

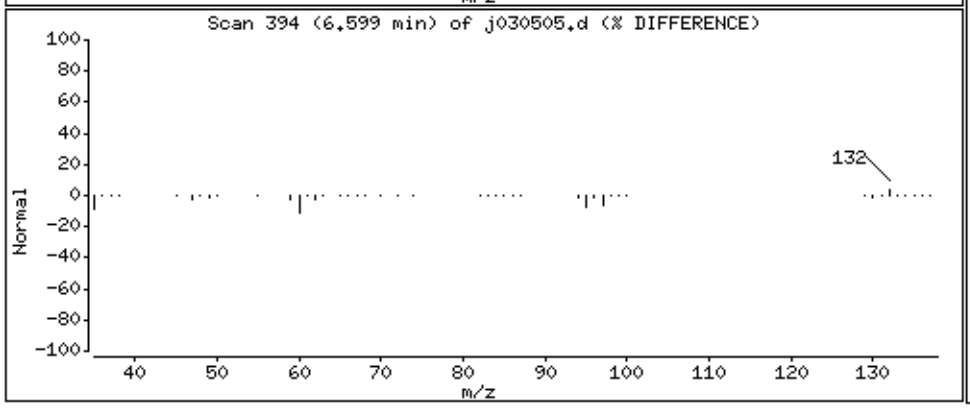
125 Trichloroethene

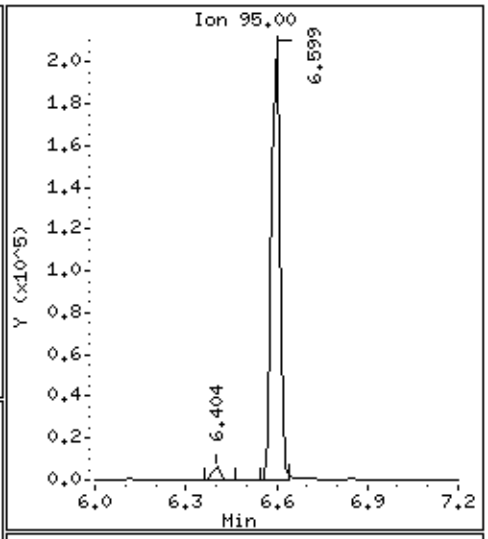
Concentration: 43.180 PPBV

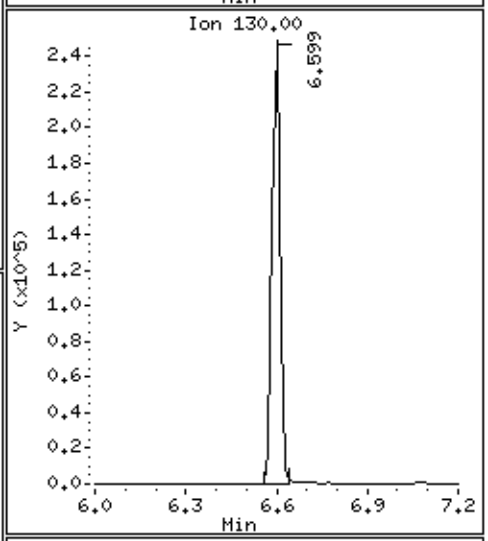


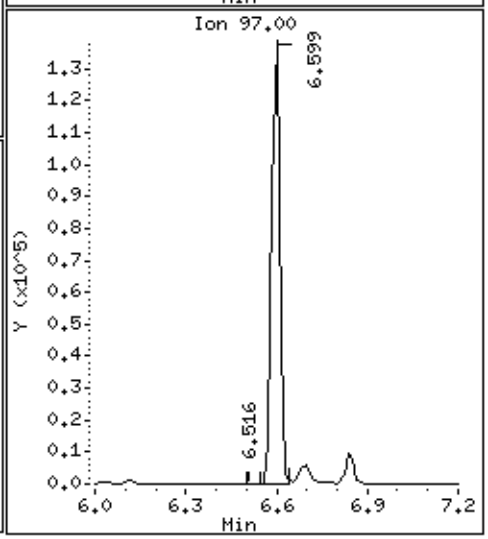












Data File: /chem/msdj.i/05mar15.b/j030505.d

Date : 05-MAR-2015 11:22

Client ID: LCSD

Instrument: msdj.i

Sample Info: 50ml #2716-98

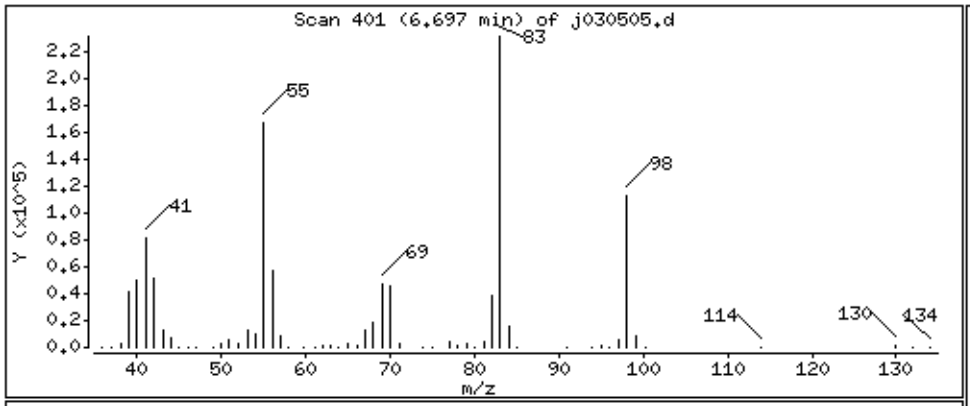
Operator: sg

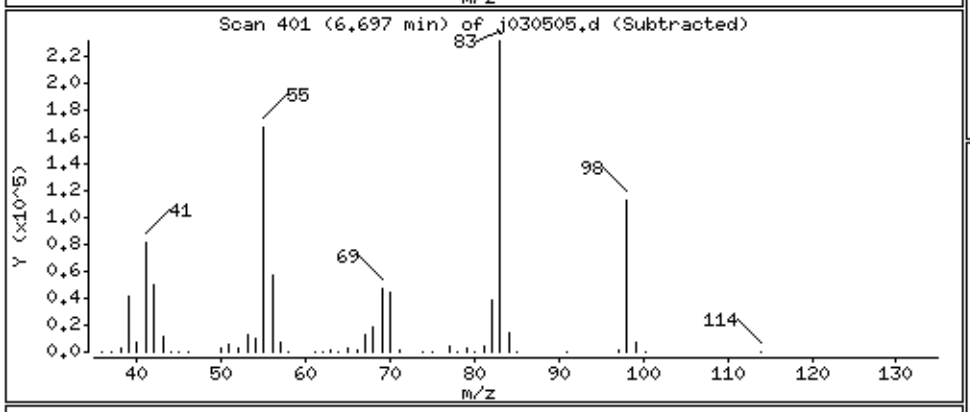
Column phase: RTX-624

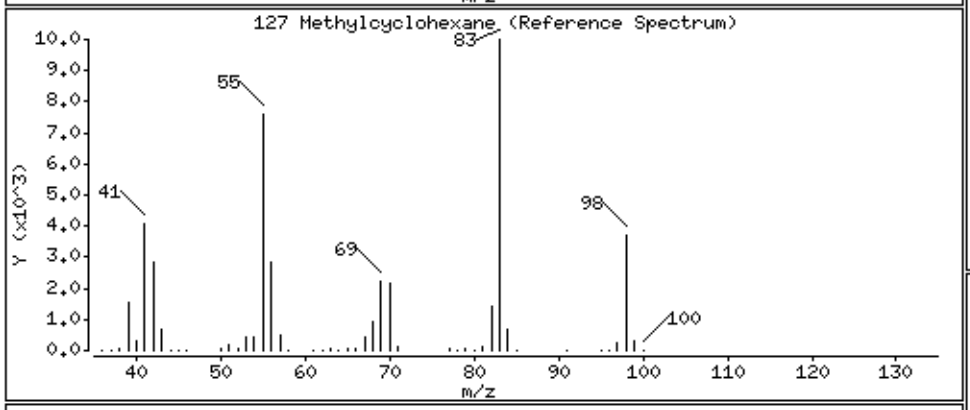
Column diameter: 0.25

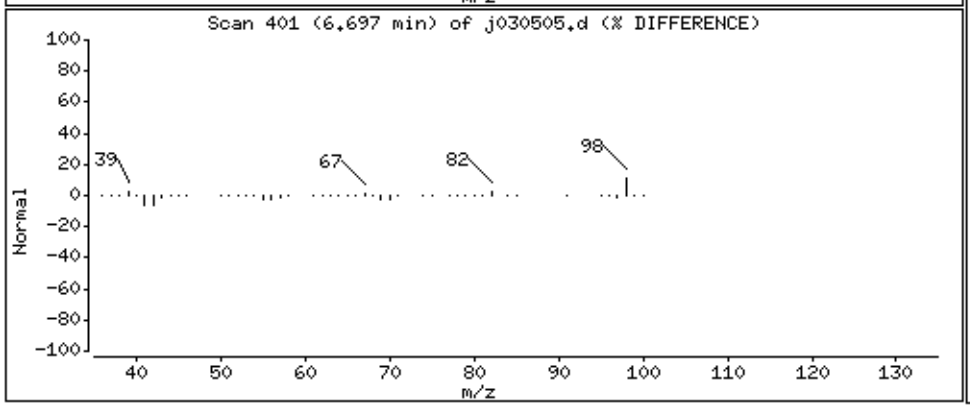
127 Methylcyclohexane

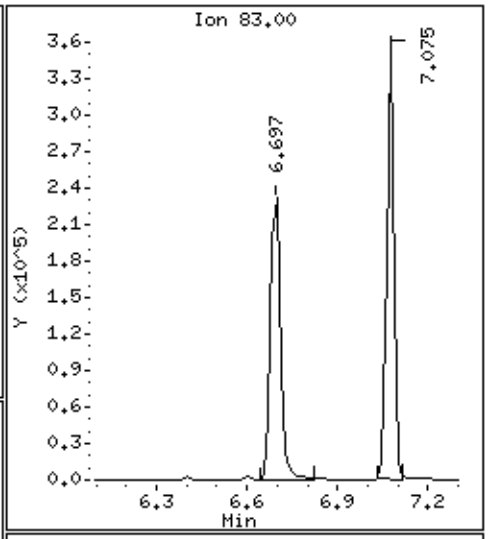
Concentration: 53.091 PPBV

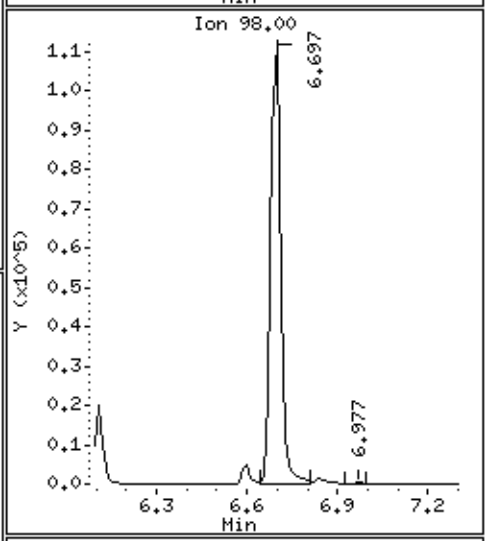


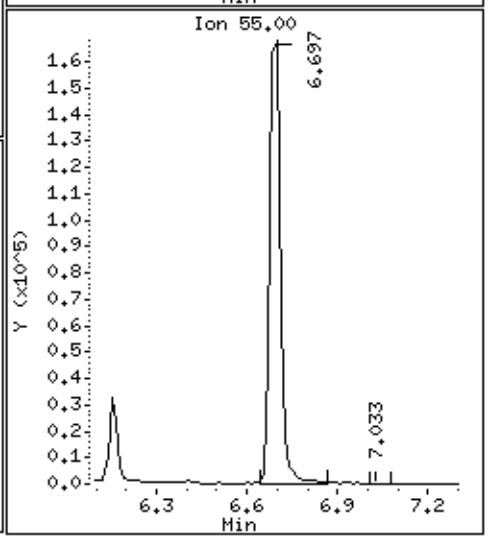












Data File: /chem/msdj.i/05mar15.b/j030505.d

Date : 05-MAR-2015 11:22

Client ID: LCSD

Instrument: msdj.i

Sample Info: 50ml #2716-98

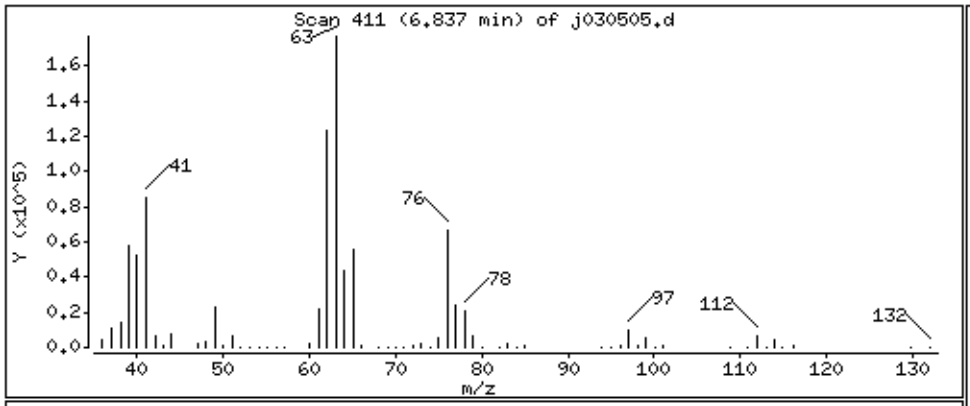
Operator: sg

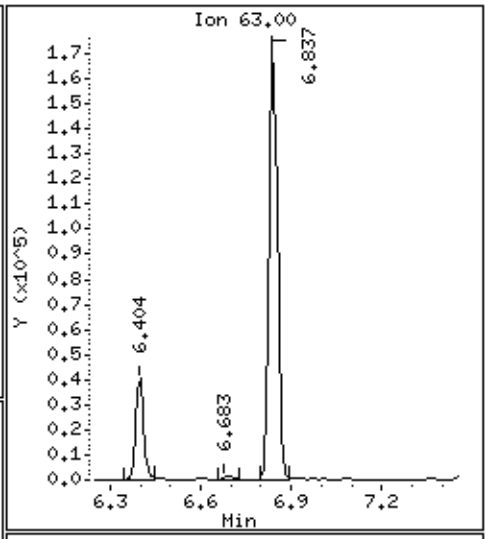
Column phase: RTX-624

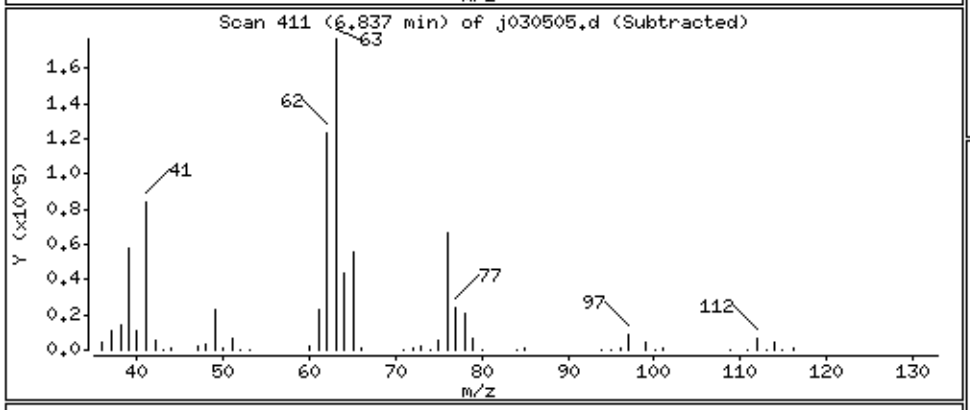
Column diameter: 0.25

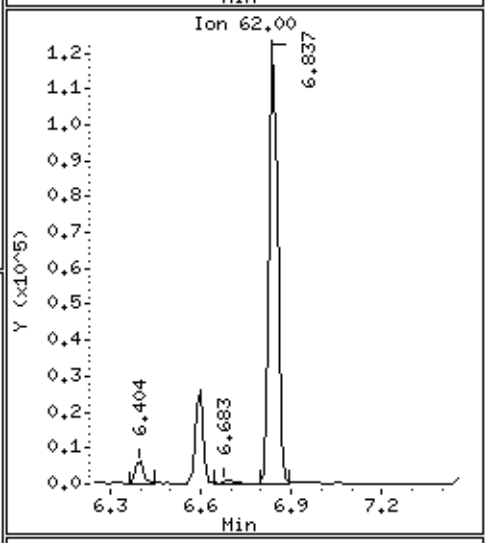
132 1,2-Dichloropropane

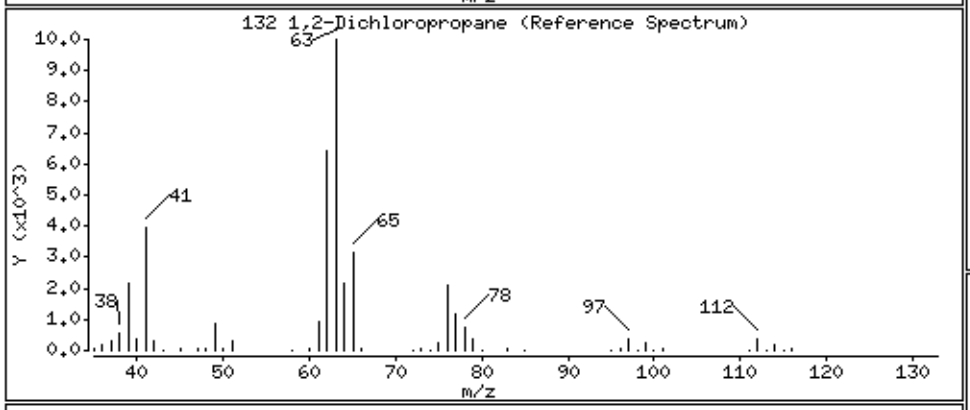
Concentration: 49.973 PPBV

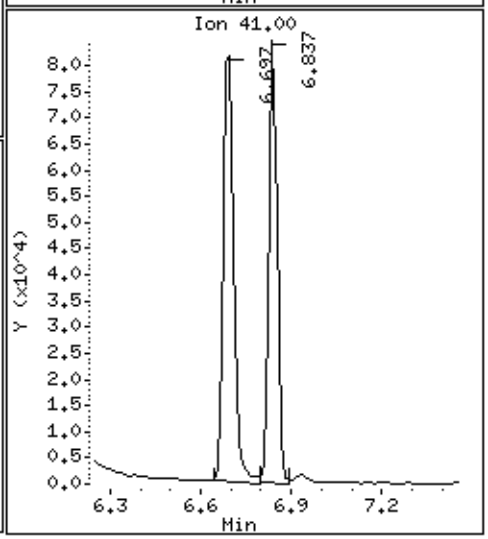


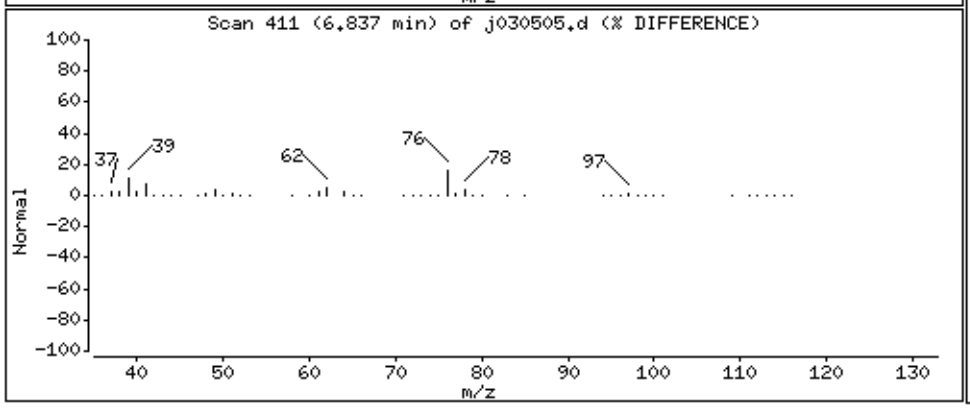












Data File: /chem/msdj.i/05mar15.b/j030505.d

Date : 05-MAR-2015 11:22

Client ID: LCSD

Instrument: msdj.i

Sample Info: 50ml #2716-98

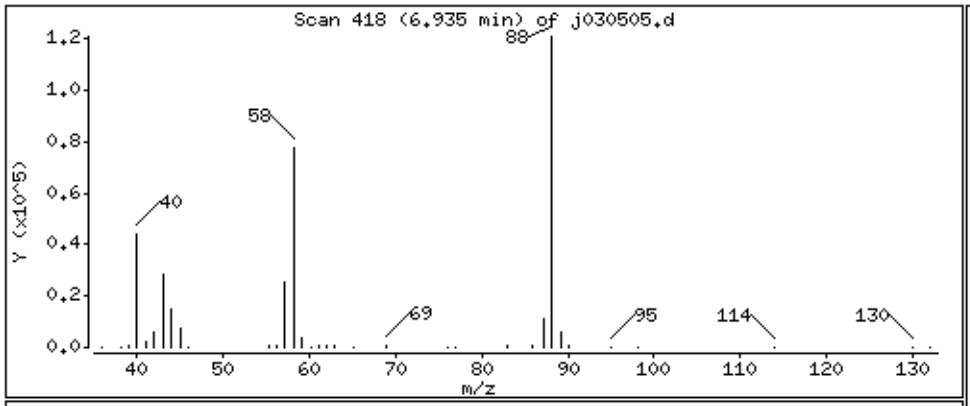
Operator: sg

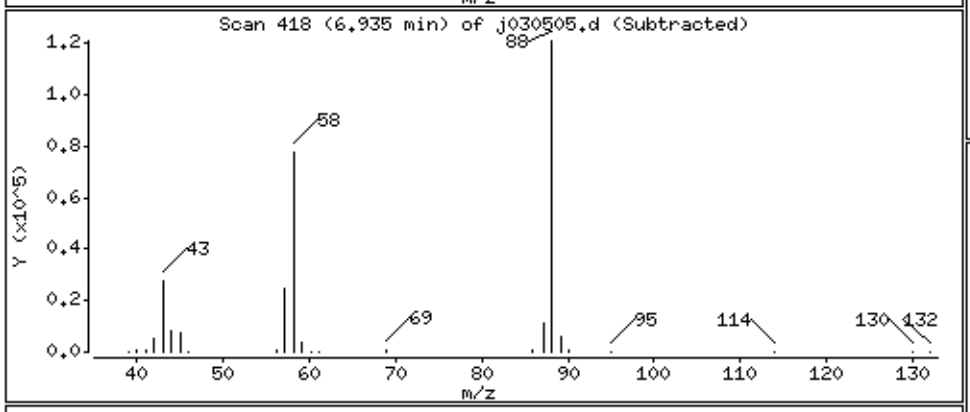
Column phase: RTX-624

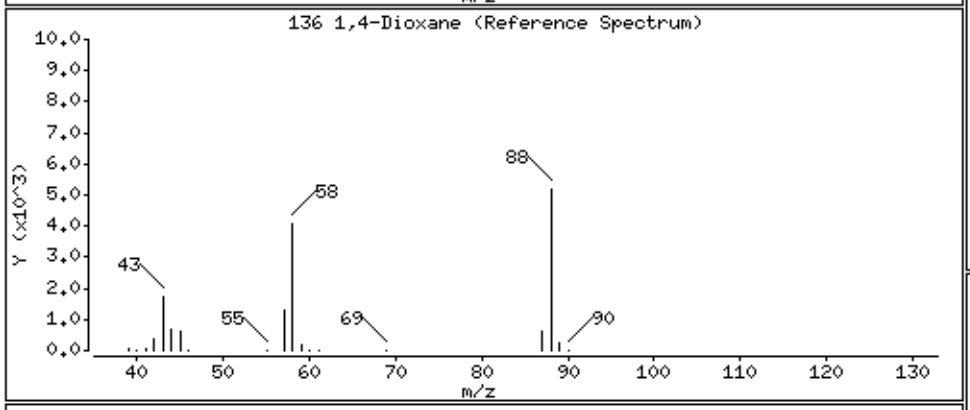
Column diameter: 0.25

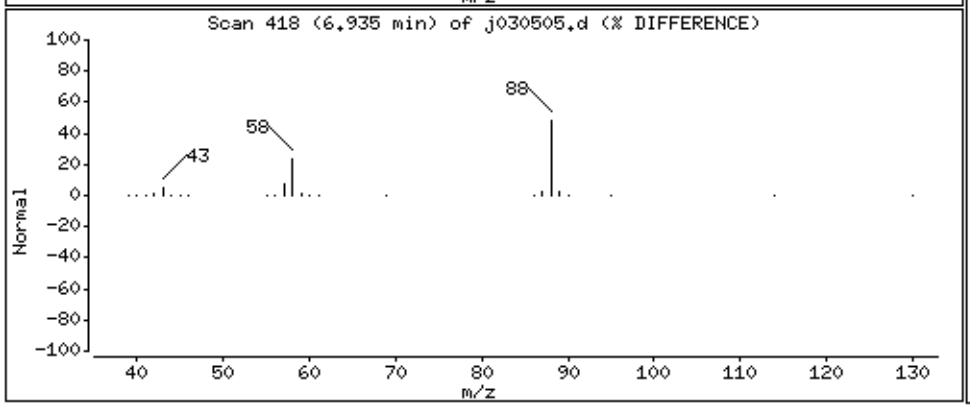
136 1,4-Dioxane

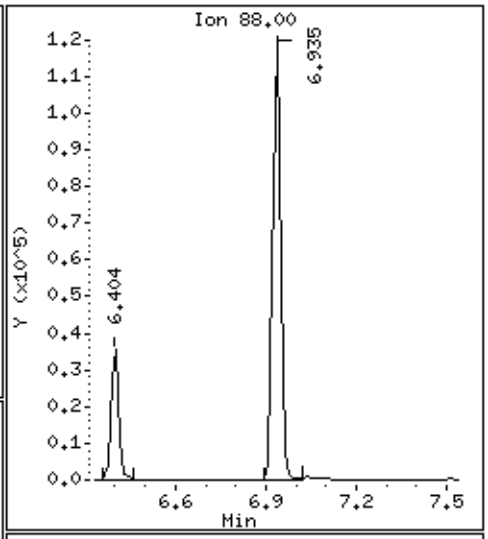
Concentration: 49.581 PPBV

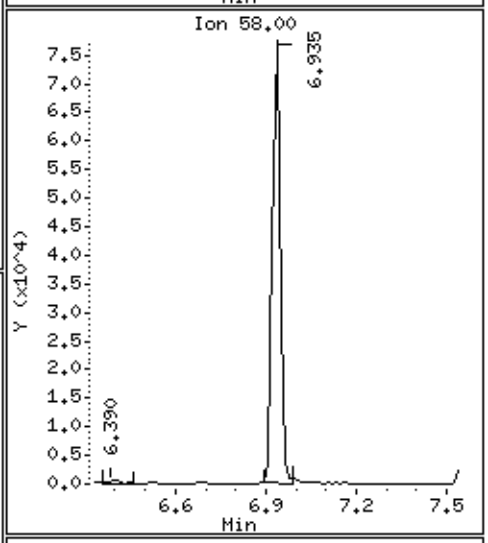


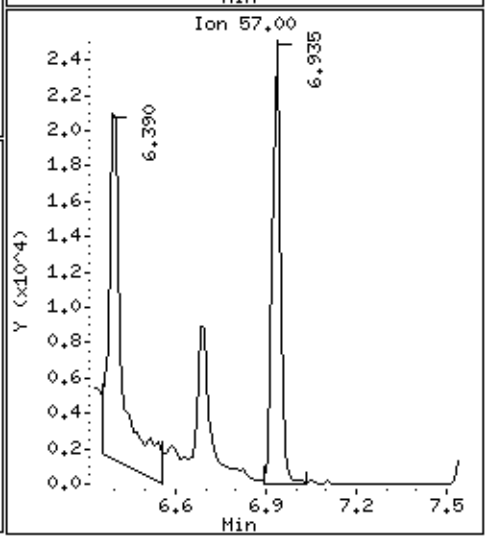












Data File: /chem/msdj.i/05mar15.b/j030505.d

Date : 05-MAR-2015 11:22

Client ID: LCSD

Instrument: msdj.i

Sample Info: 50ml #2716-98

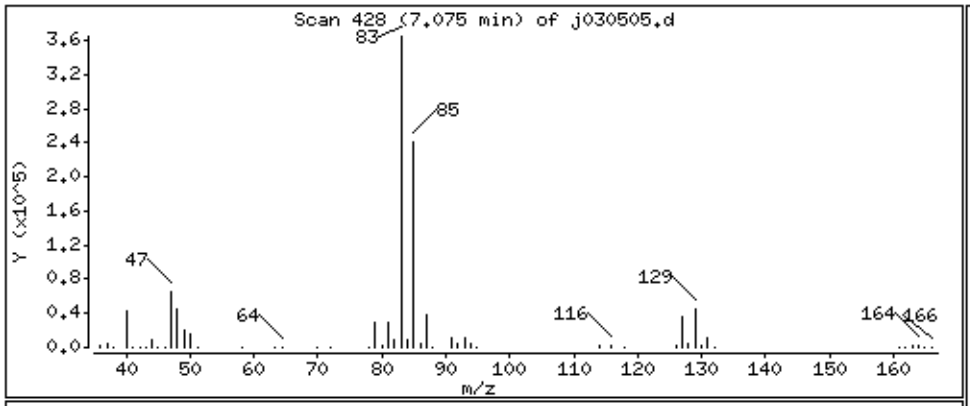
Operator: sg

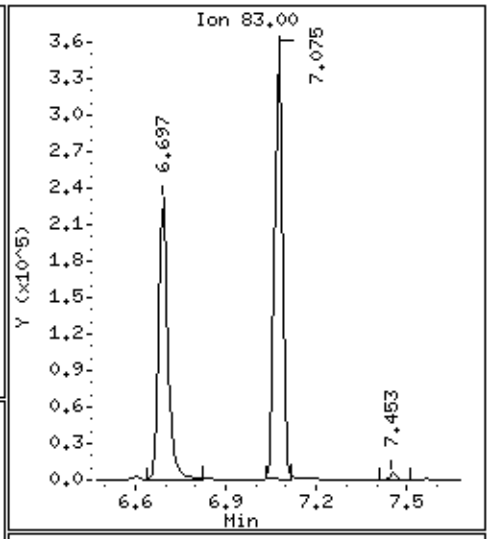
Column phase: RTX-624

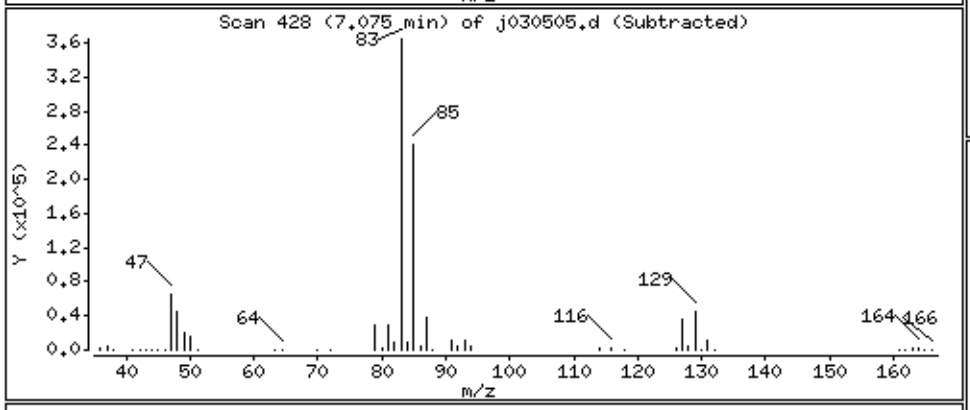
Column diameter: 0.25

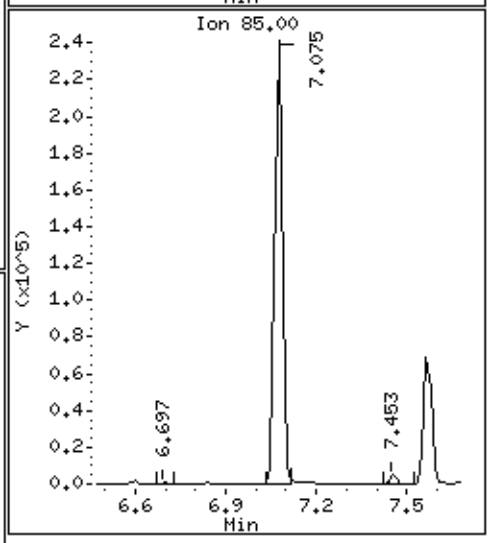
138 Bromodichloromethane

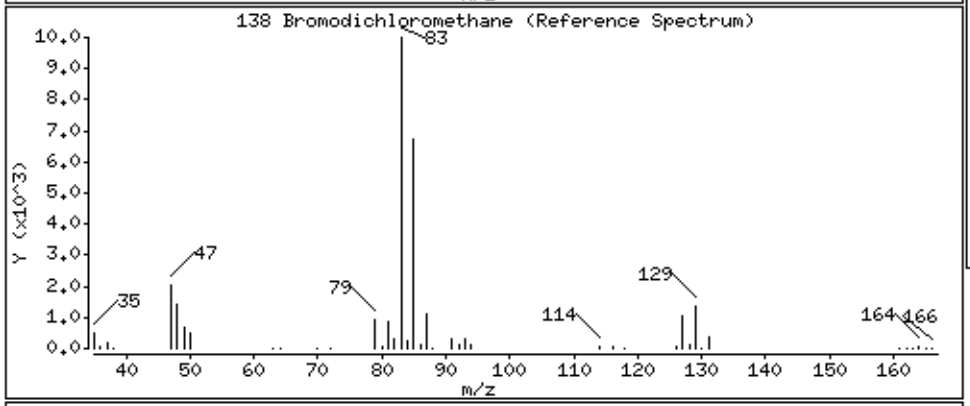
Concentration: 50.663 PPBV

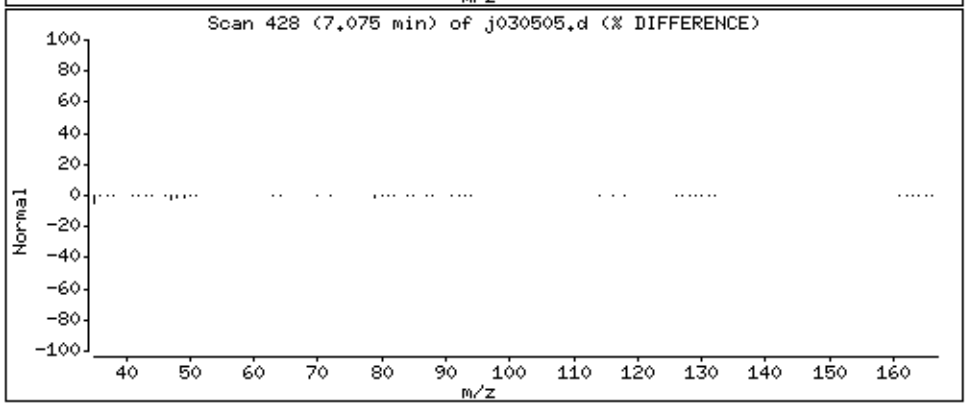












Data File: /chem/msdj.i/05mar15.b/j030505.d

Date : 05-MAR-2015 11:22

Client ID: LCSD

Instrument: msdj.i

Sample Info: 50ml #2716-98

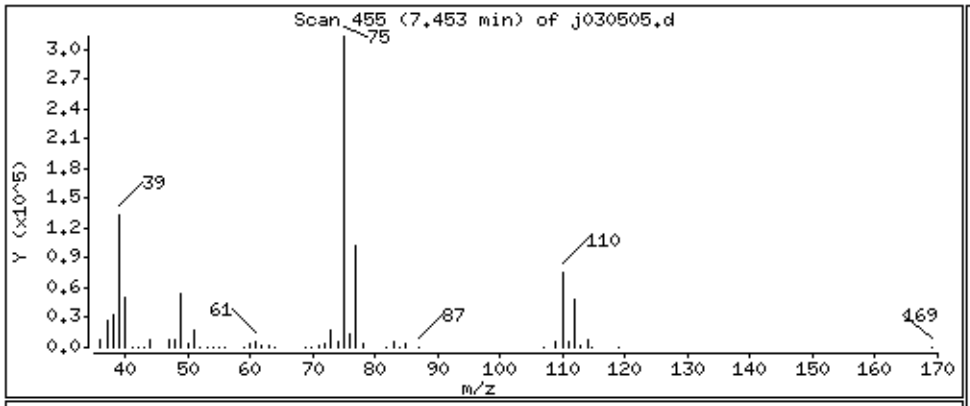
Operator: sg

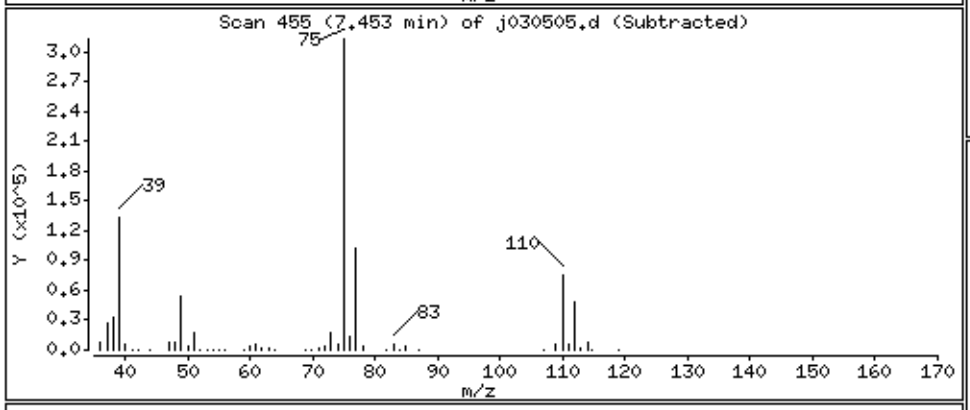
Column phase: RTX-624

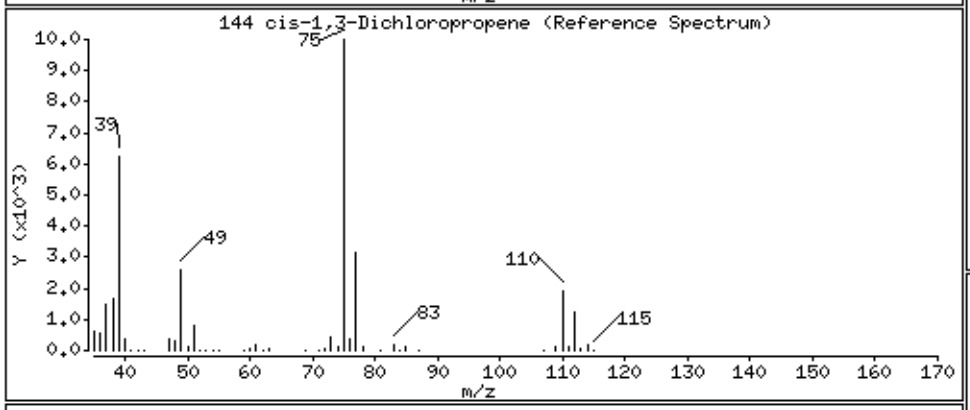
Column diameter: 0.25

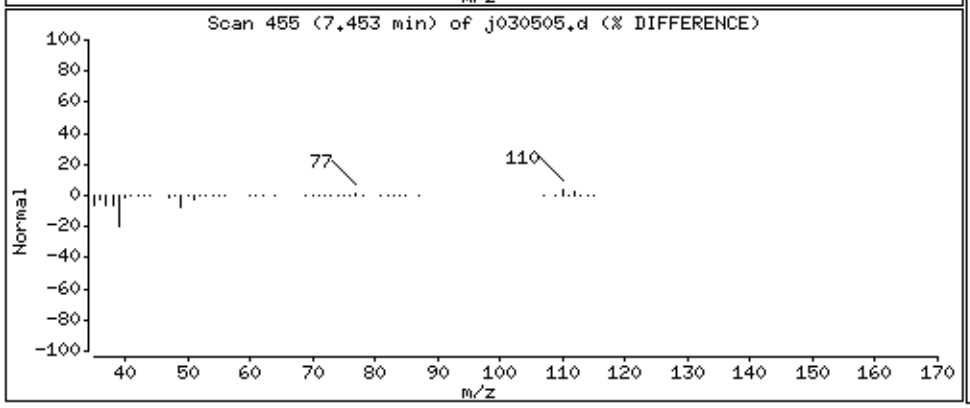
144 cis-1,3-Dichloropropene

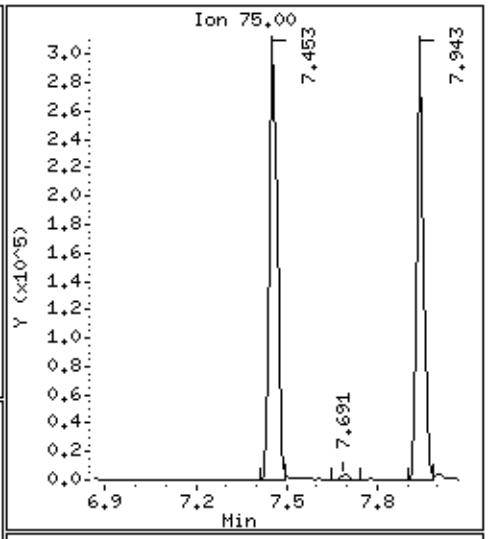
Concentration: 46.907 PPBV

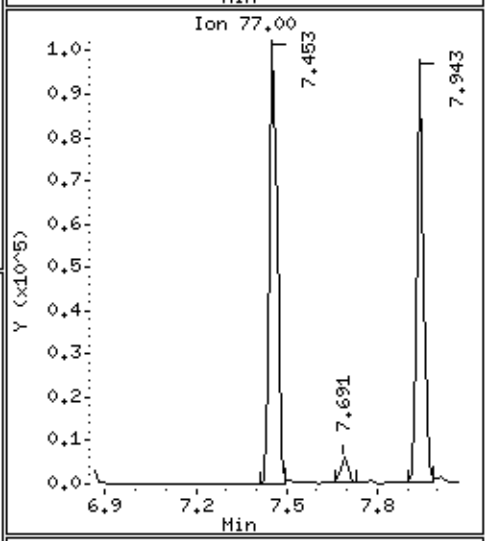


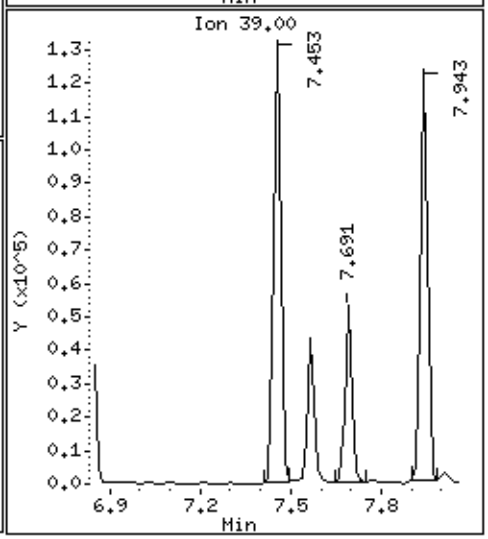












Data File: /chem/msdj.i/05mar15.b/j030505.d

Date : 05-MAR-2015 11:22

Client ID: LCSD

Instrument: msdj.i

Sample Info: 50ml #2716-98

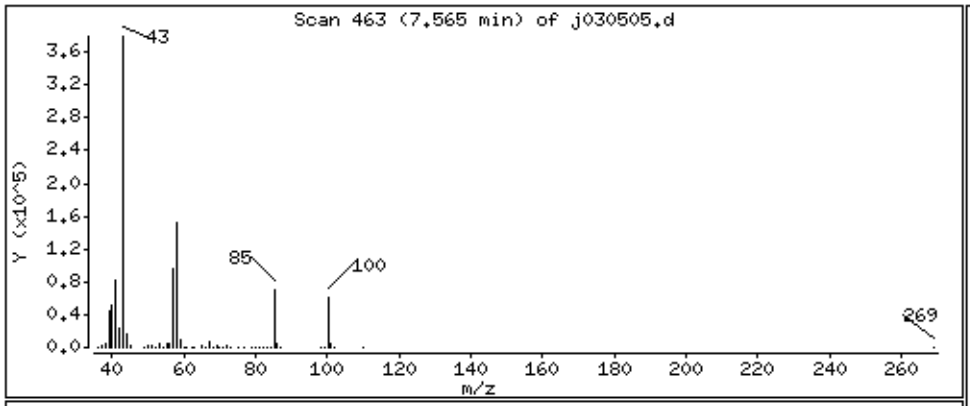
Operator: sg

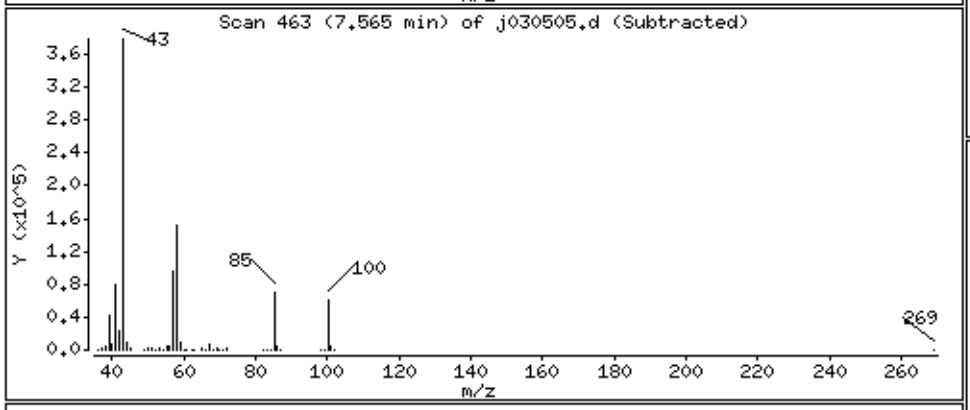
Column phase: RTX-624

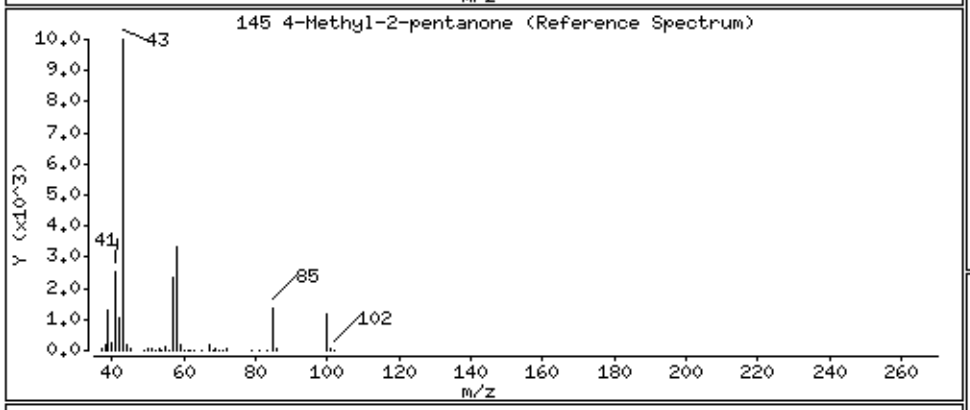
Column diameter: 0.25

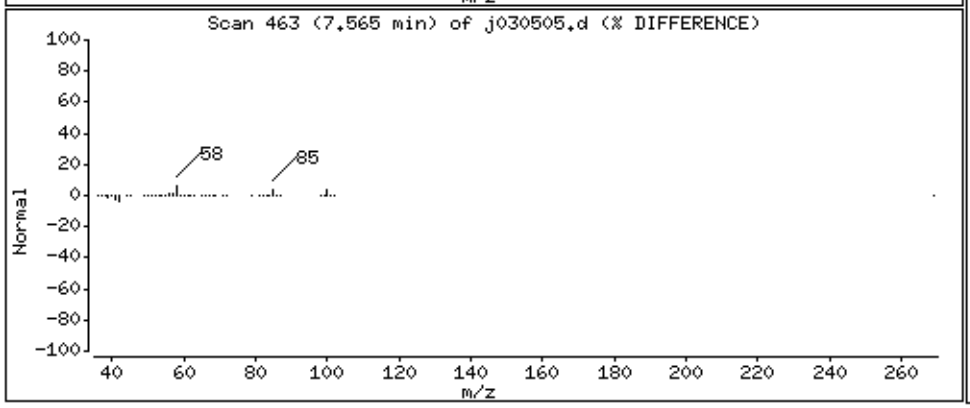
145 4-Methyl-2-pentanone

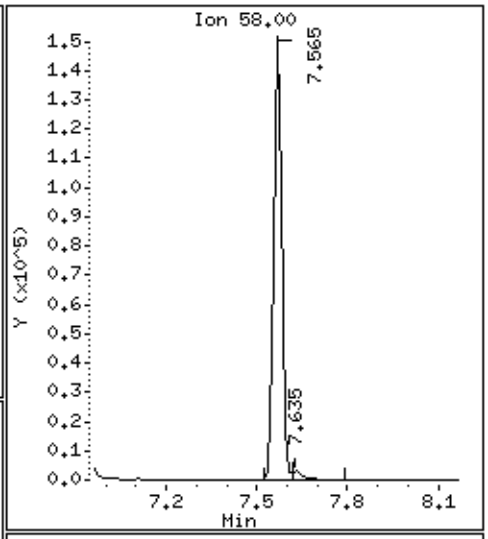
Concentration: 48.508 PPBV

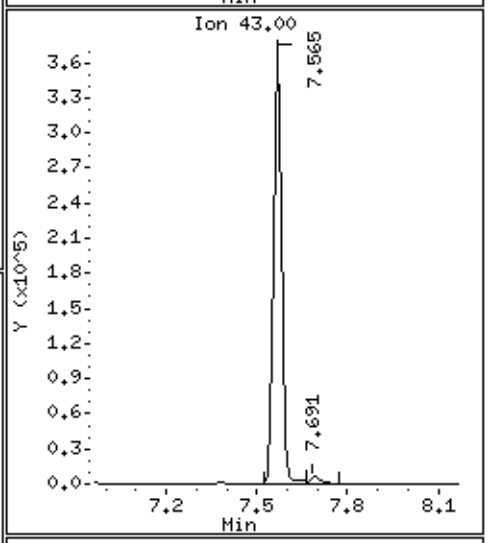


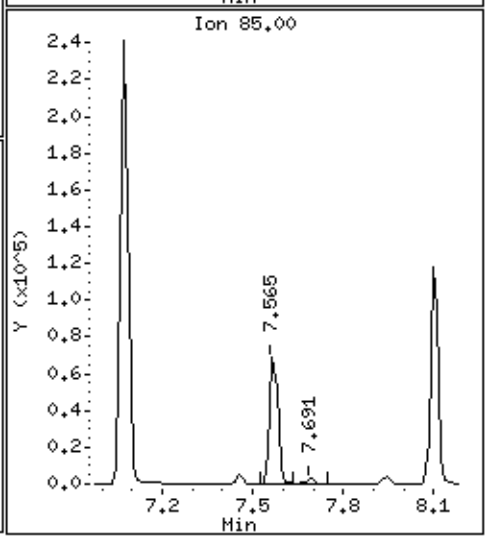












Data File: /chem/msdj.i/05mar15.b/j030505.d

Date : 05-MAR-2015 11:22

Client ID: LCSD

Instrument: msdj.i

Sample Info: 50ml #2716-98

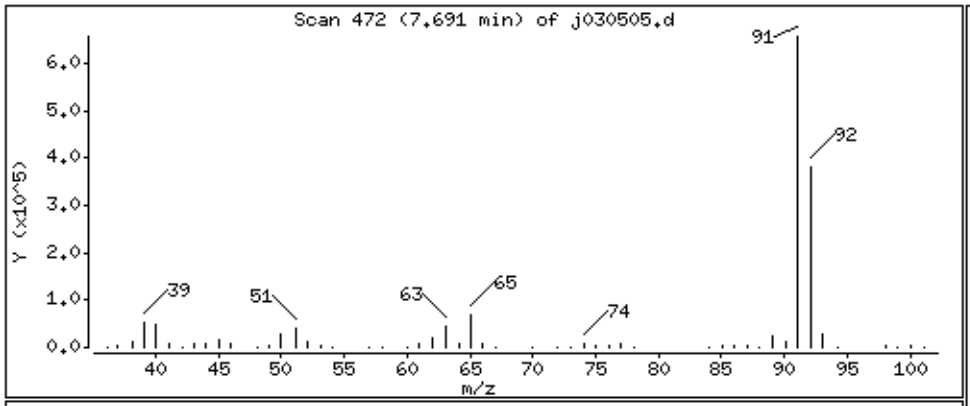
Operator: sg

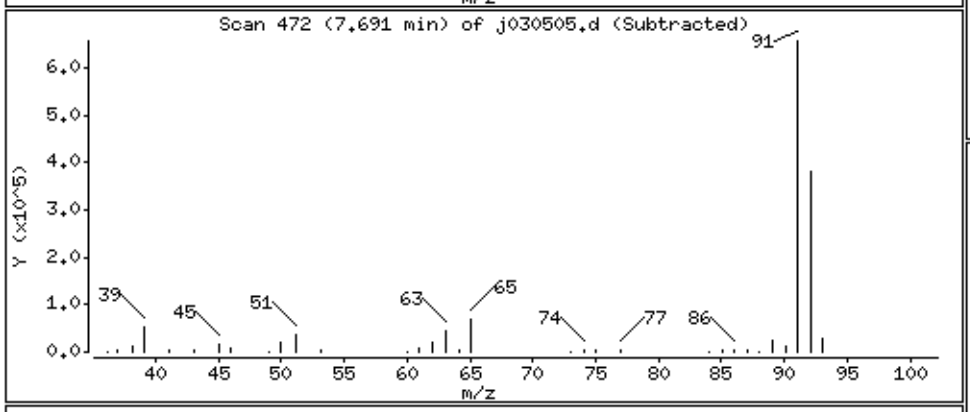
Column phase: RTX-624

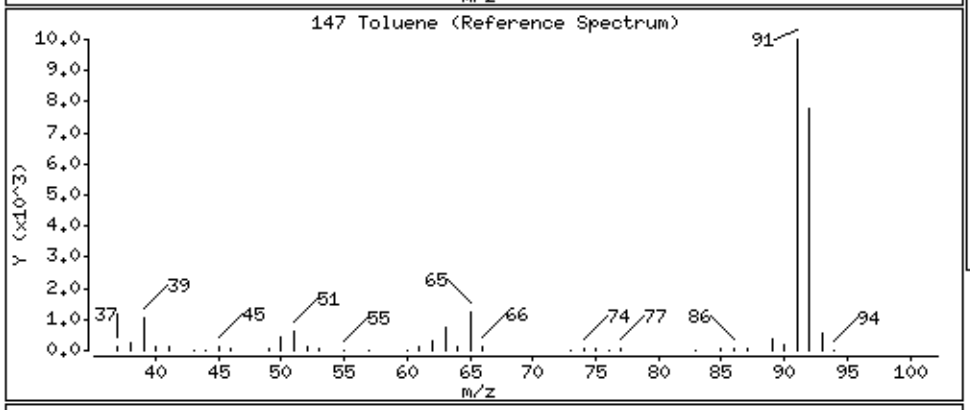
Column diameter: 0.25

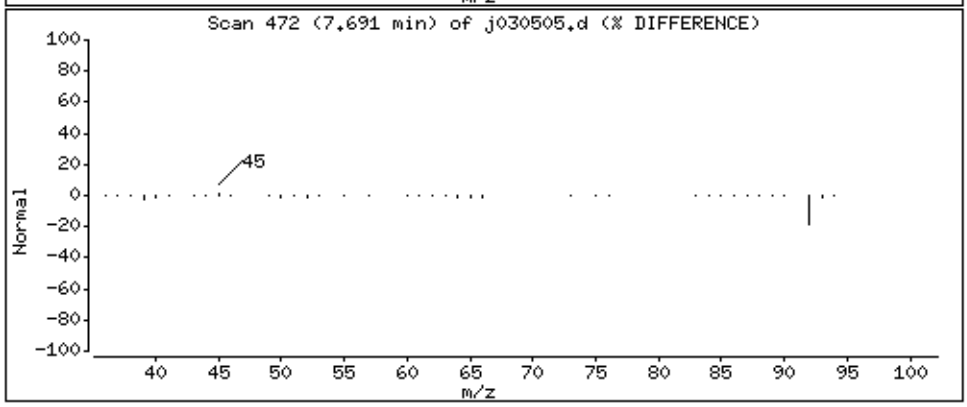
147 Toluene

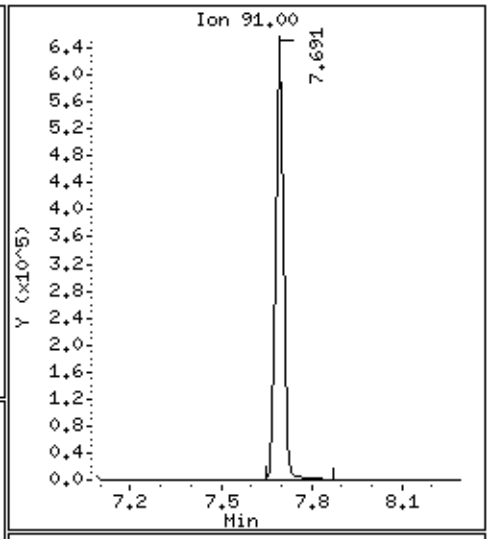
Concentration: 49.418 PPBV

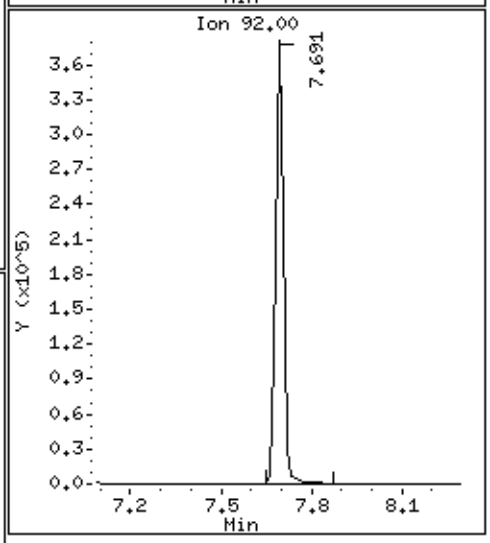












Data File: /chem/msdj.i/05mar15.b/j030505.d

Date : 05-MAR-2015 11:22

Client ID: LCSD

Instrument: msdj.i

Sample Info: 50ml #2716-98

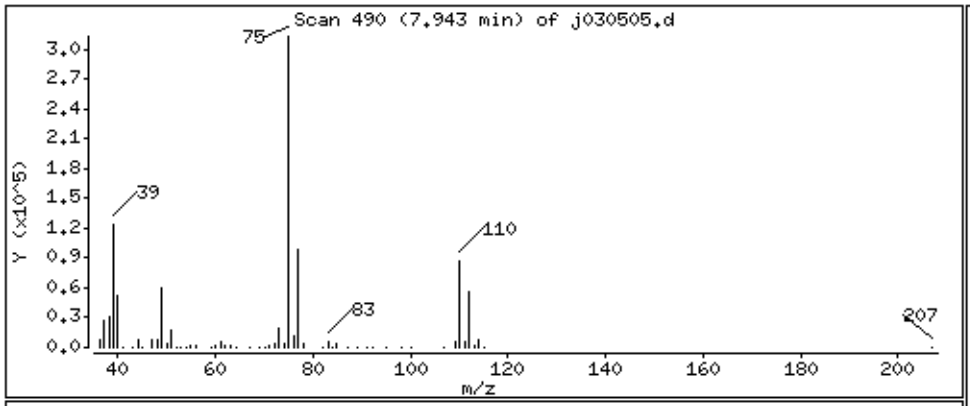
Operator: sg

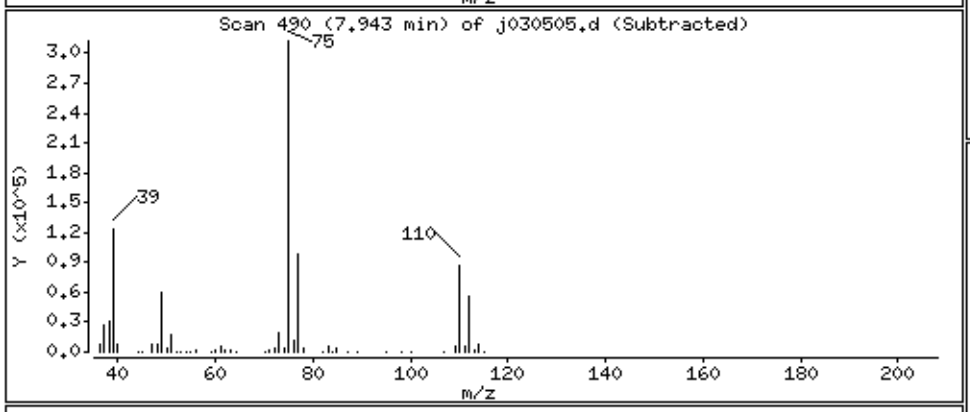
Column phase: RTX-624

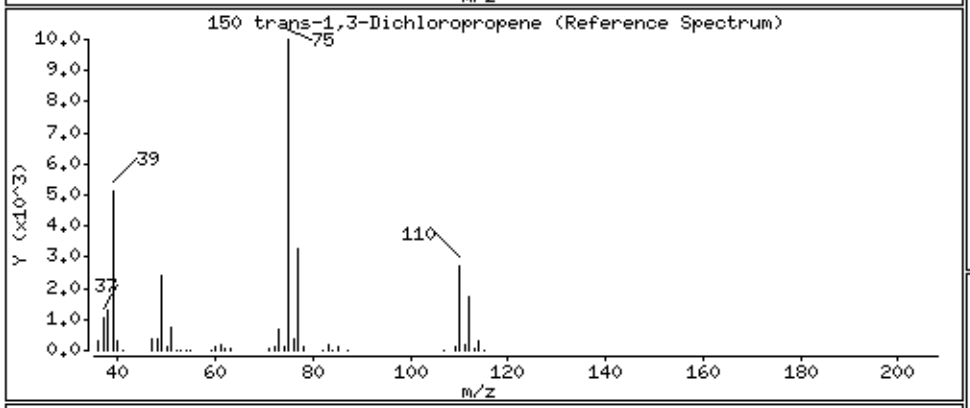
Column diameter: 0.25

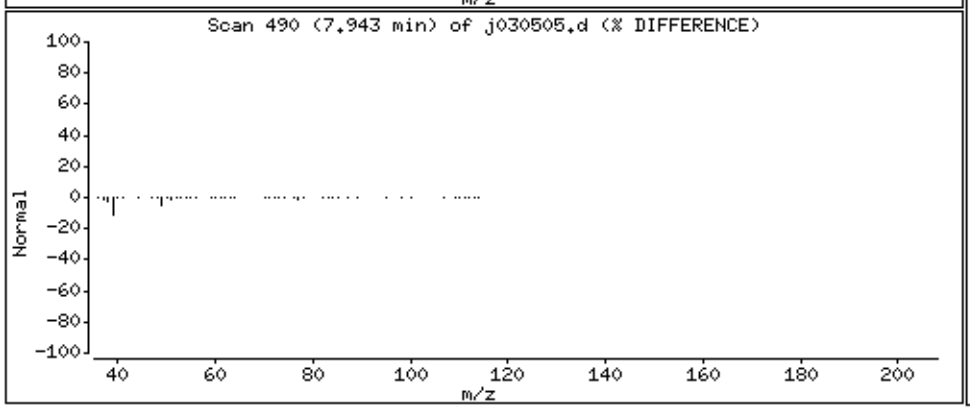
150 trans-1,3-Dichloropropene

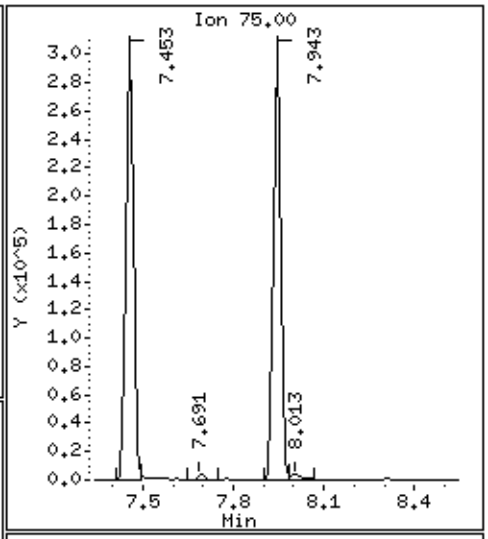
Concentration: 49.617 PPBV

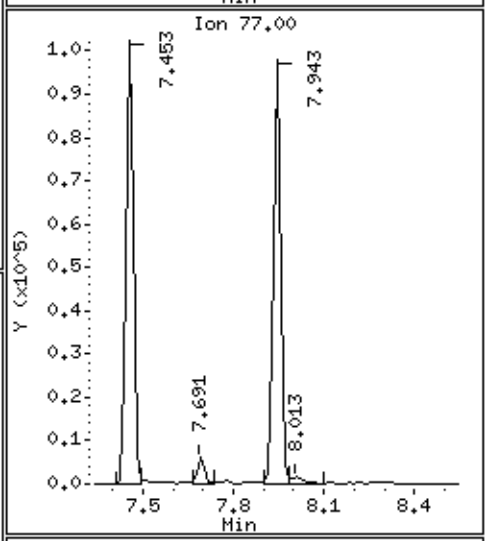


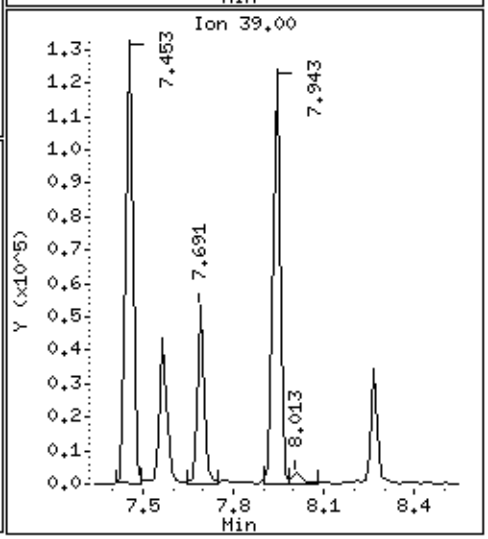












Data File: /chem/msdj.i/05mar15.b/j030505.d

Date : 05-MAR-2015 11:22

Client ID: LCSD

Instrument: msdj.i

Sample Info: 50ml #2716-98

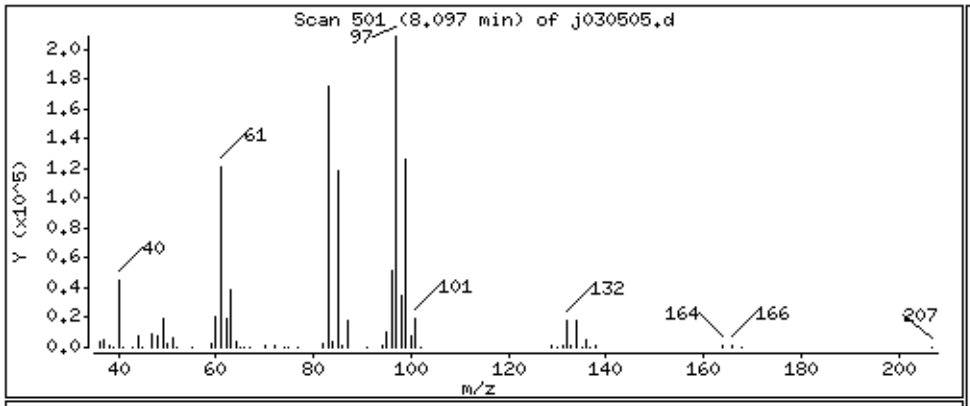
Operator: sg

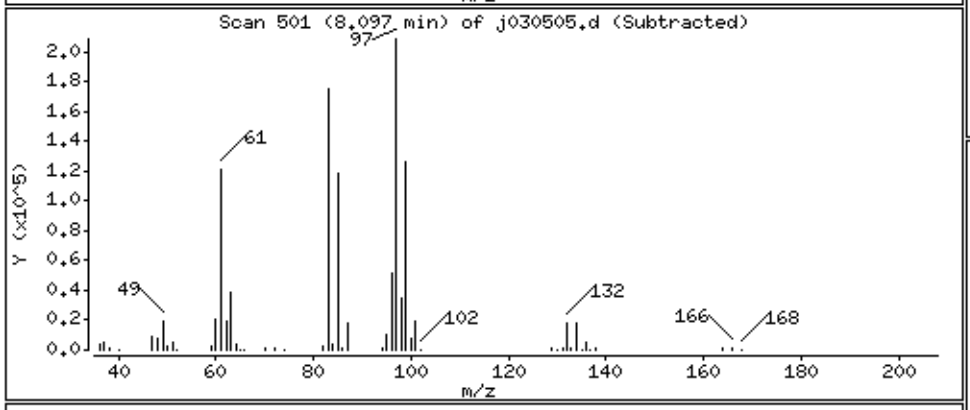
Column phase: RTX-624

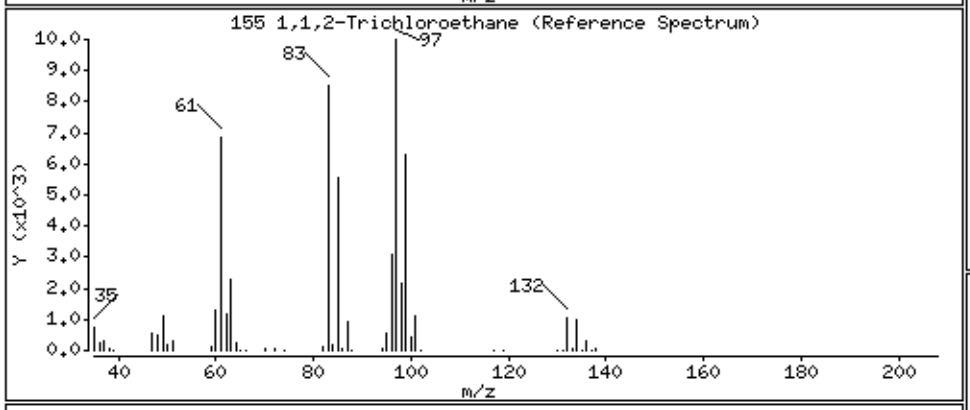
Column diameter: 0.25

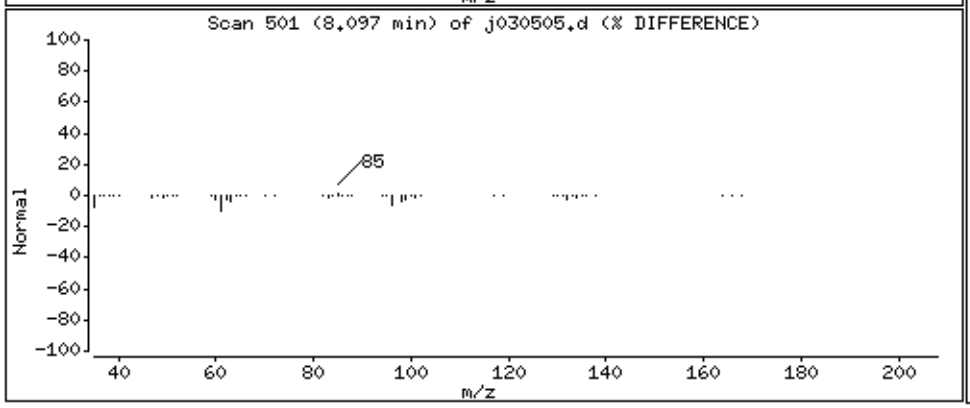
155 1,1,2-Trichloroethane

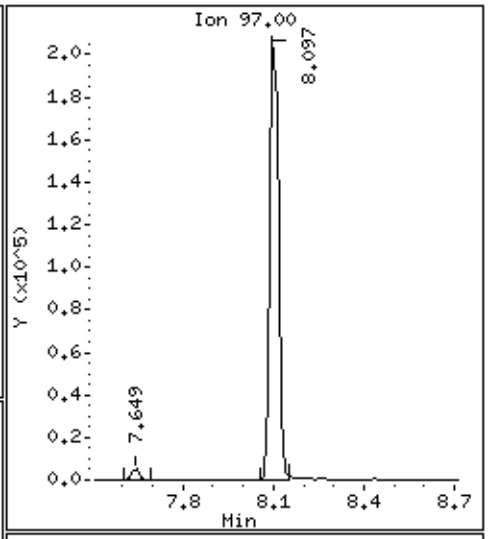
Concentration: 49.812 PPBV

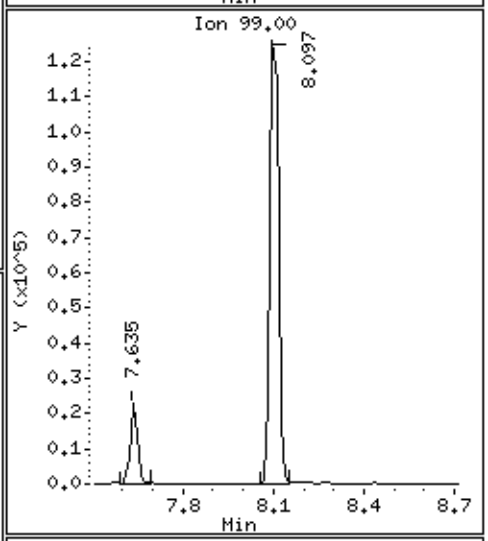


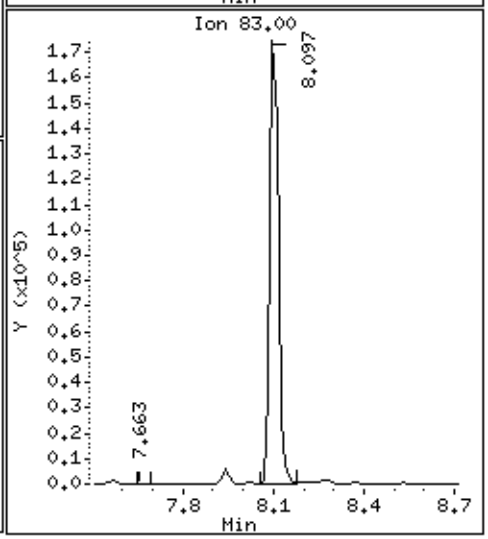












Data File: /chem/msdj.i/05mar15.b/j030505.d

Date : 05-MAR-2015 11:22

Client ID: LCSD

Instrument: msdj.i

Sample Info: 50ml #2716-98

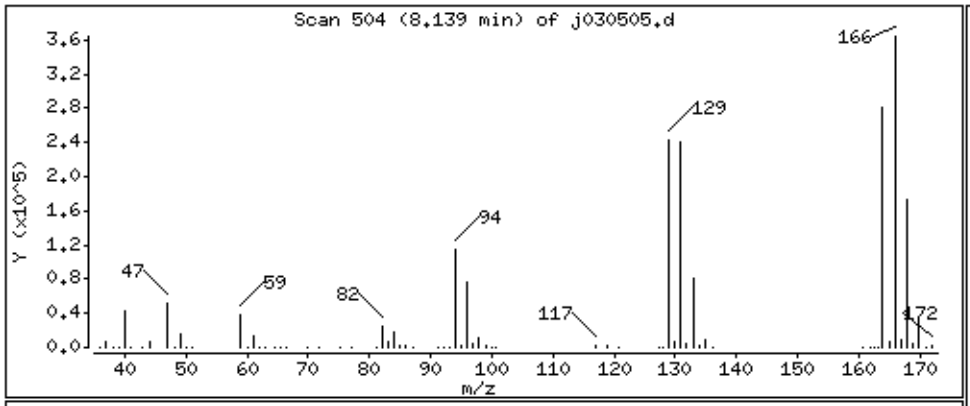
Operator: sg

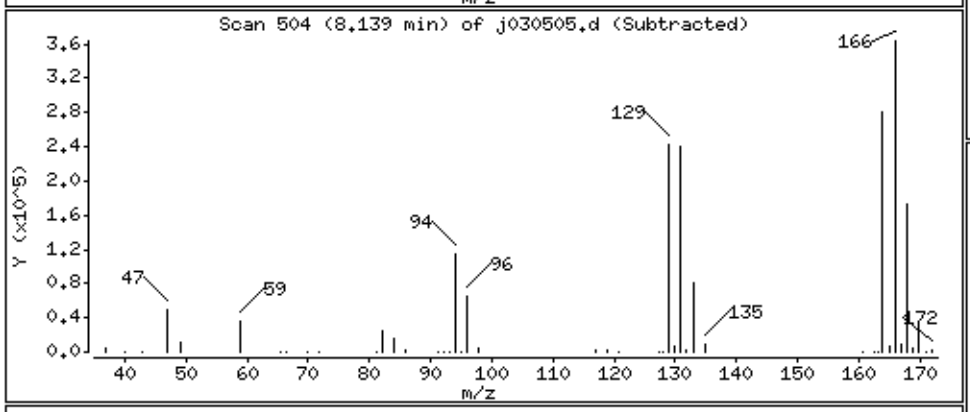
Column phase: RTX-624

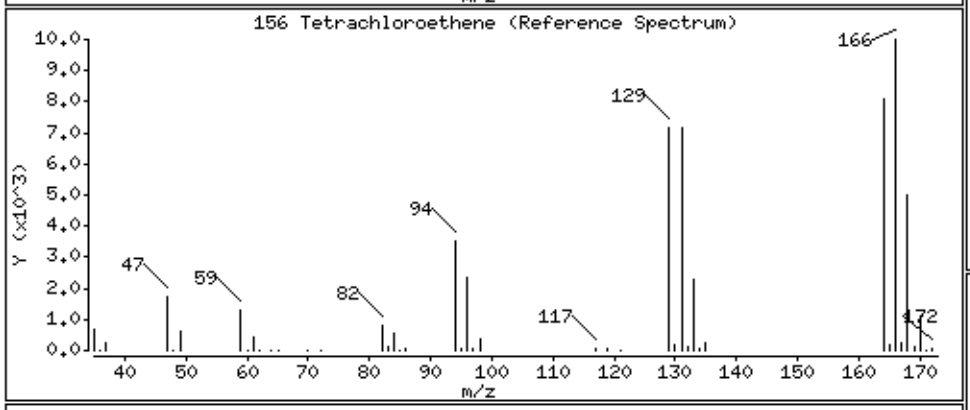
Column diameter: 0.25

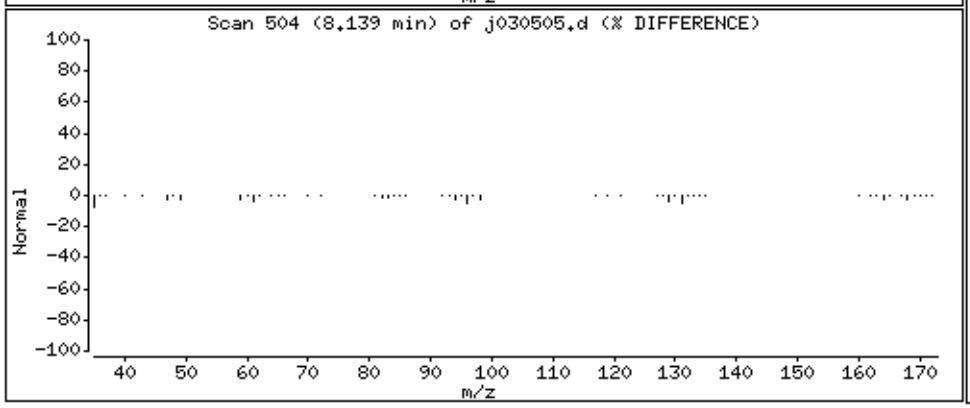
156 Tetrachloroethene

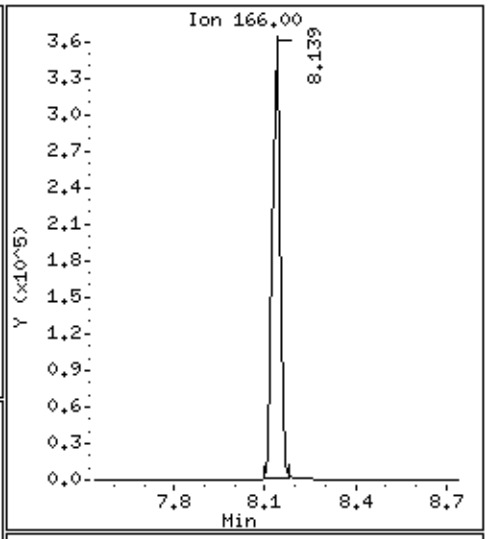
Concentration: 50.732 PPBV

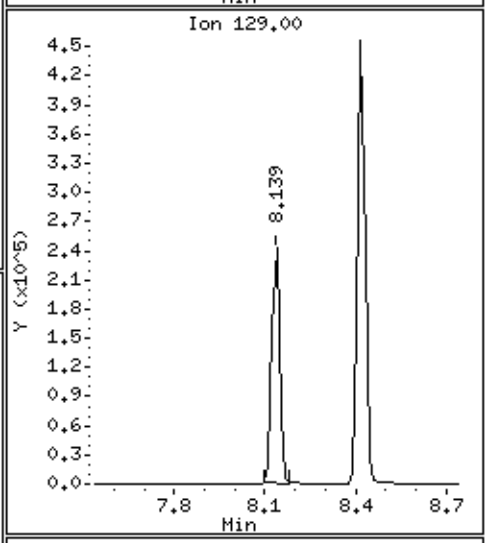


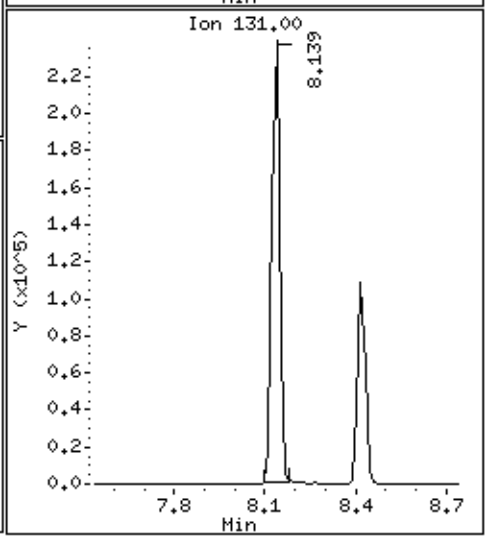












Data File: /chem/msdj.i/05mar15.b/j030505.d

Date : 05-MAR-2015 11:22

Client ID: LCSD

Instrument: msdj.i

Sample Info: 50ml #2716-98

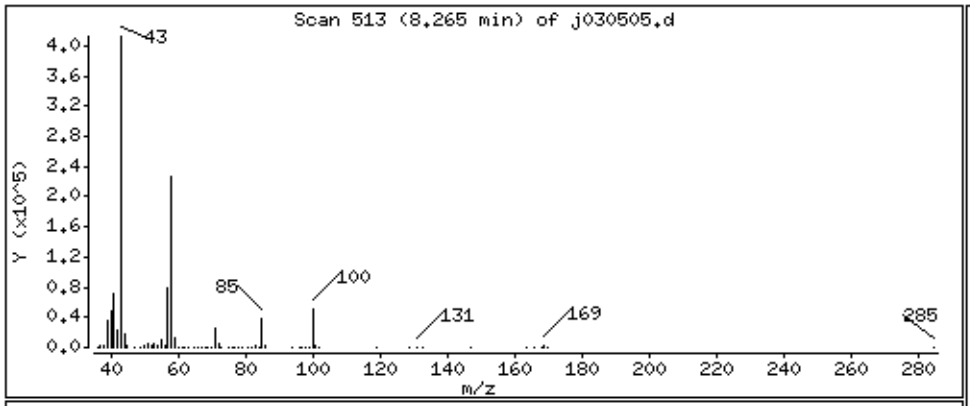
Operator: sg

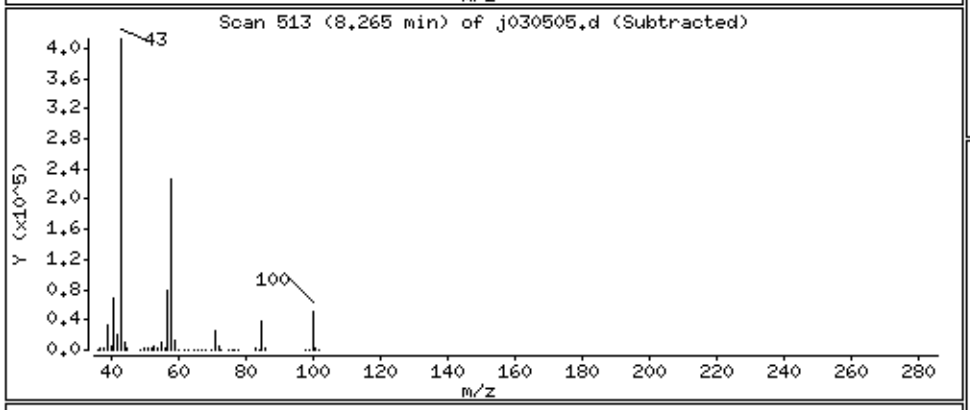
Column phase: RTX-624

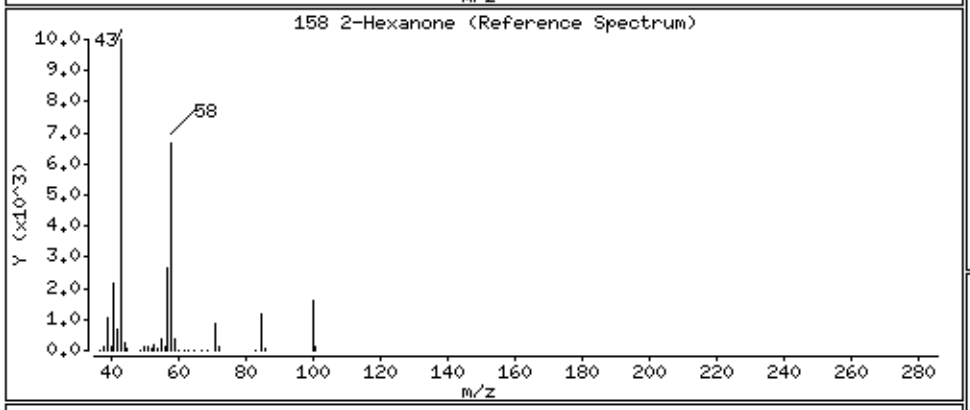
Column diameter: 0.25

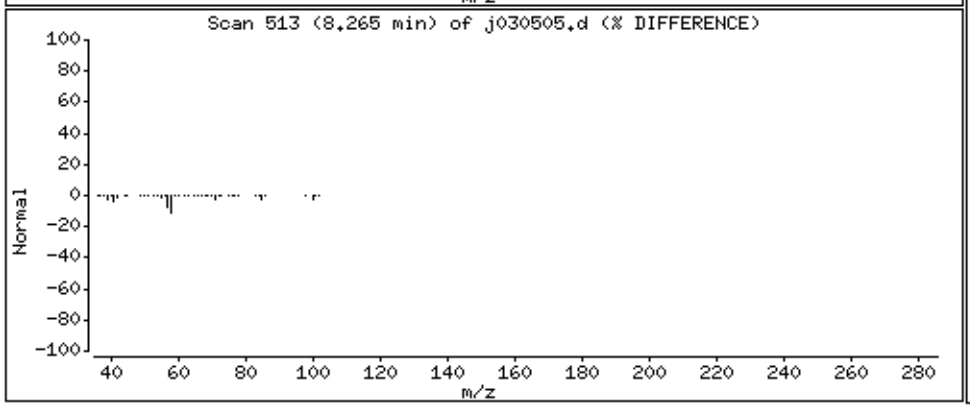
158 2-Hexanone

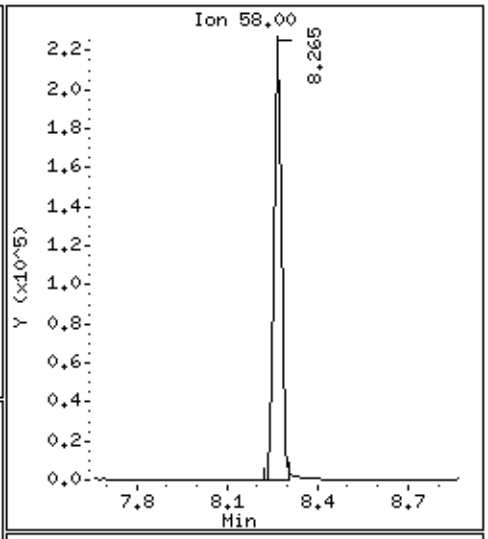
Concentration: 49.957 PPBV

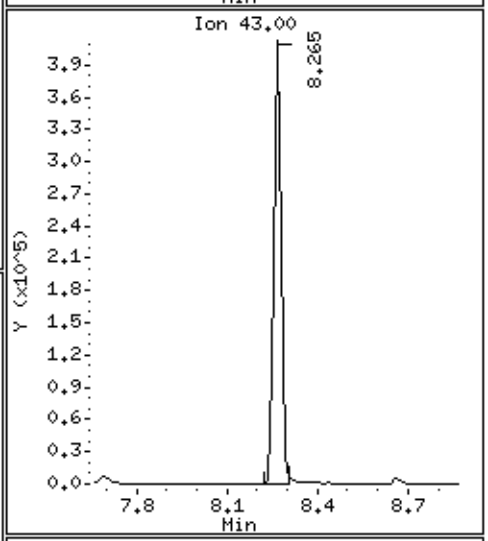


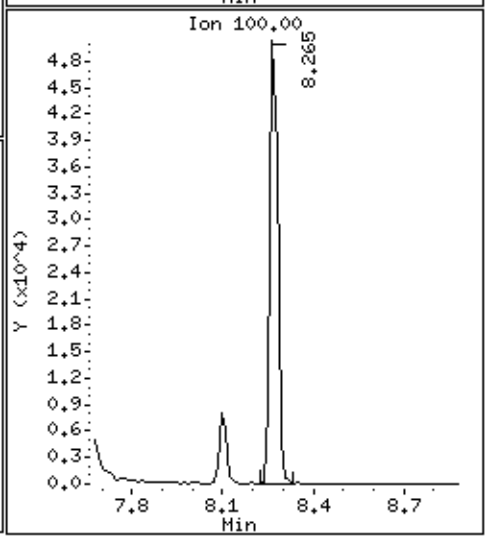












Data File: /chem/msdj.i/05mar15.b/j030505.d

Date : 05-MAR-2015 11:22

Client ID: LCSD

Instrument: msdj.i

Sample Info: 50ml #2716-98

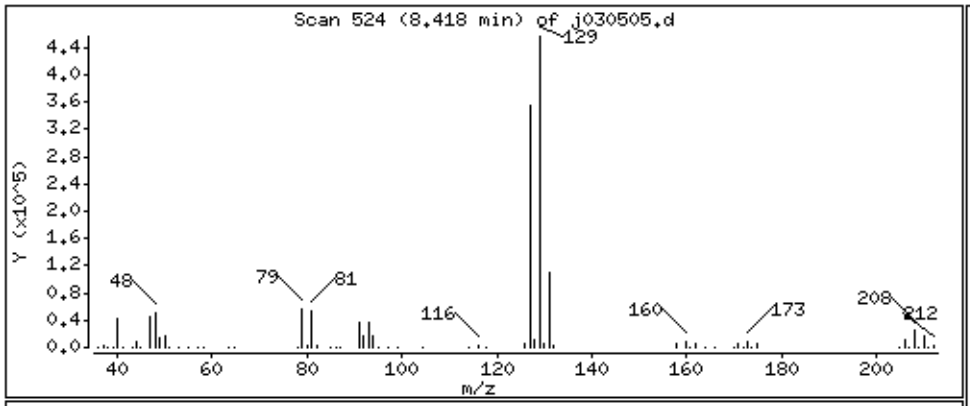
Operator: sg

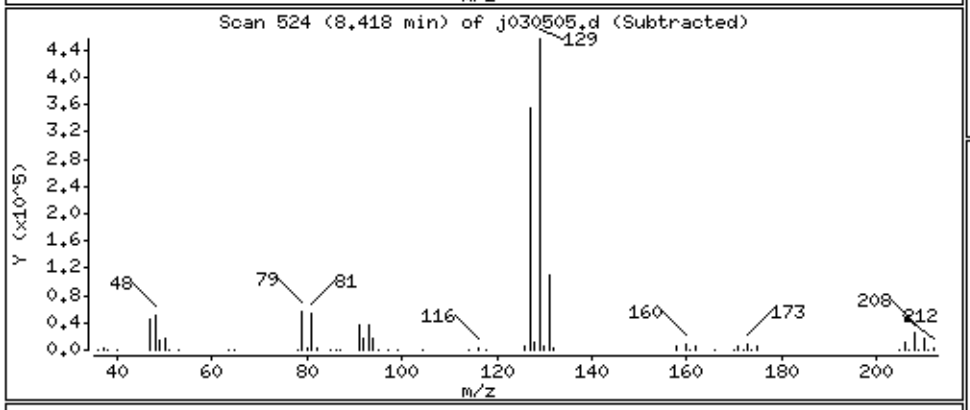
Column phase: RTX-624

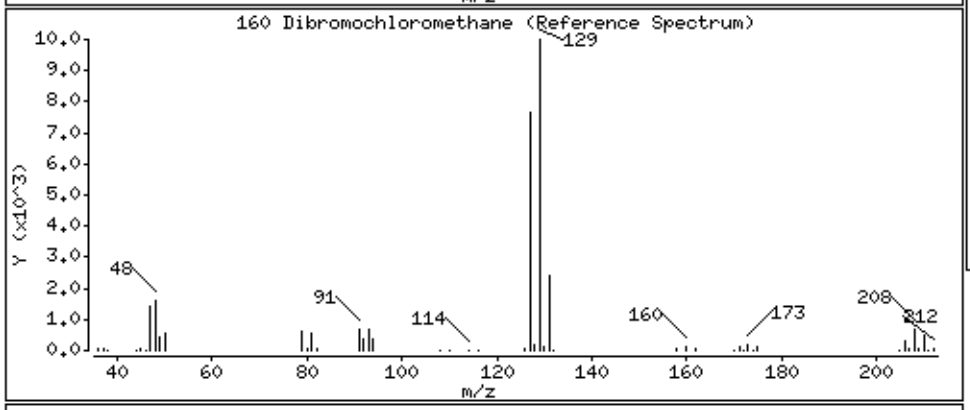
Column diameter: 0.25

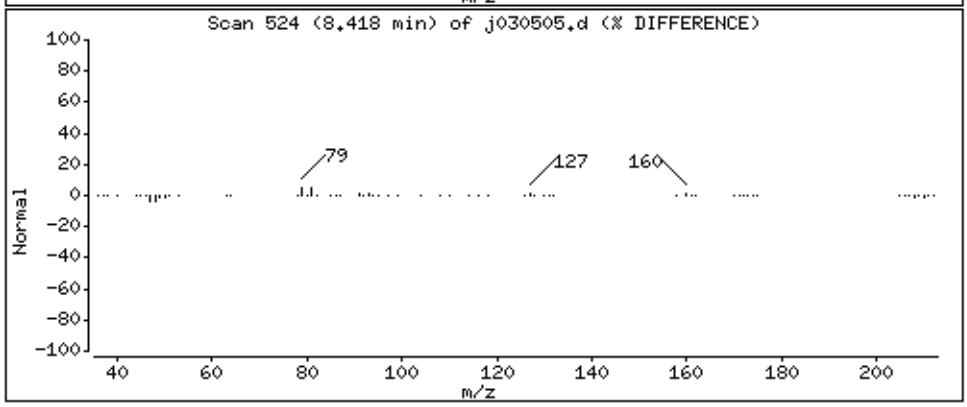
160 Dibromochloromethane

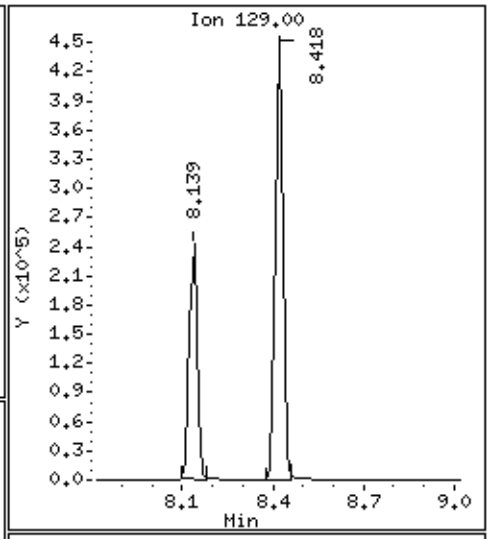
Concentration: 50.364 PPBV

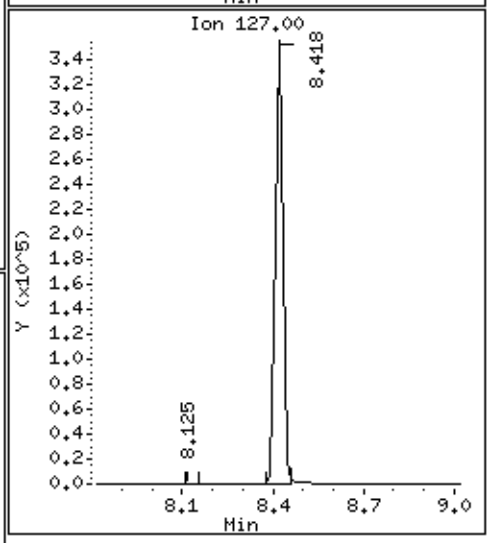












Data File: /chem/msdj.i/05mar15.b/j030505.d

Date : 05-MAR-2015 11:22

Client ID: LCSD

Instrument: msdj.i

Sample Info: 50ml #2716-98

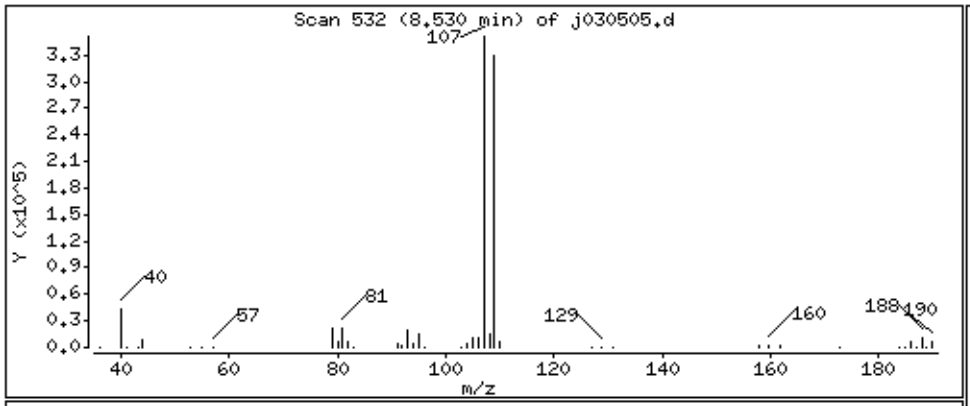
Operator: sg

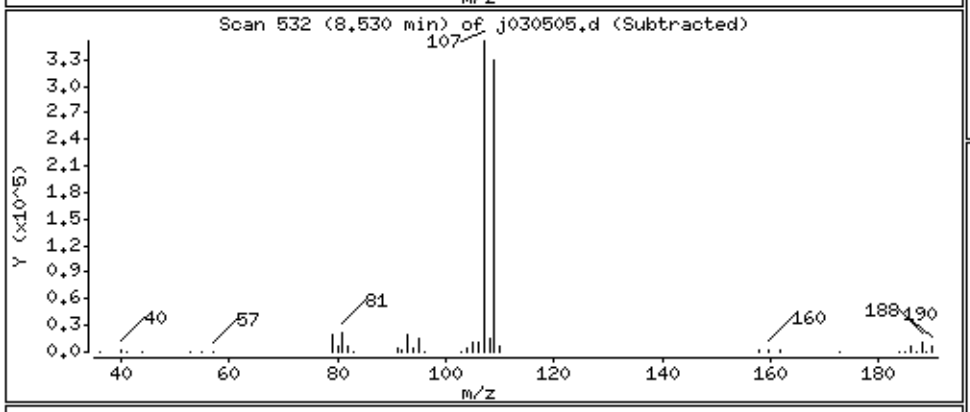
Column phase: RTX-624

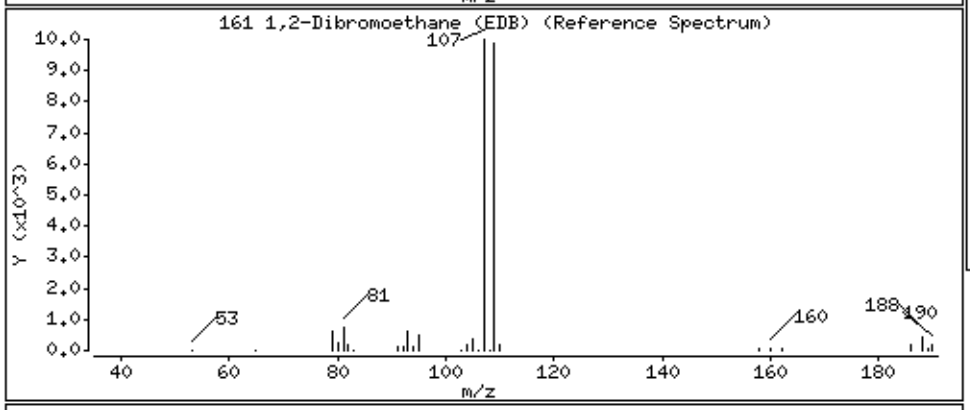
Column diameter: 0.25

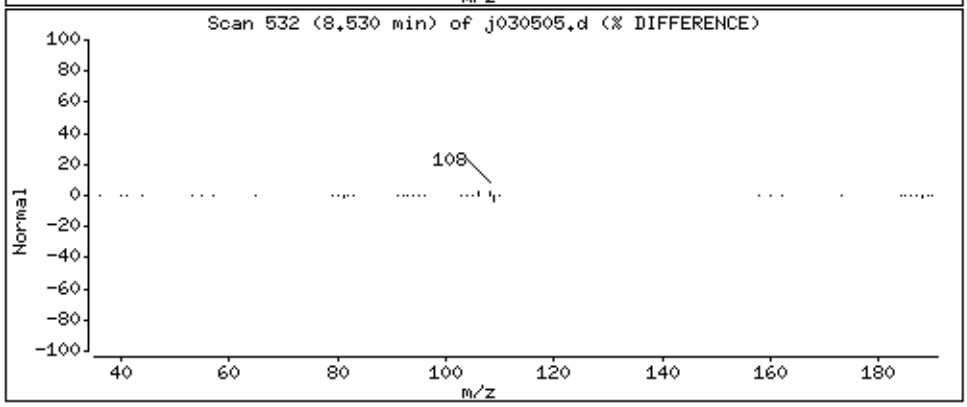
161 1,2-Dibromoethane (EDB)

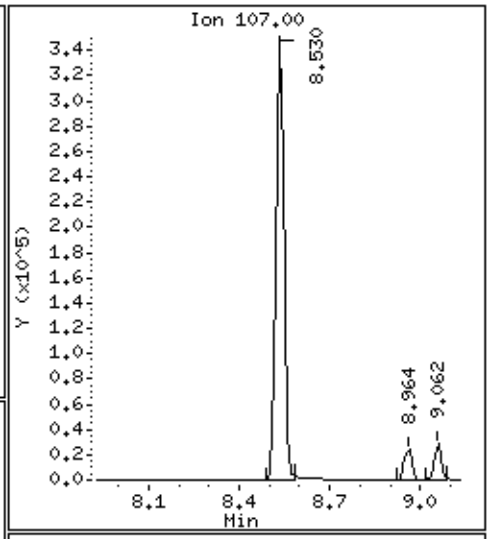
Concentration: 49.659 PPBV

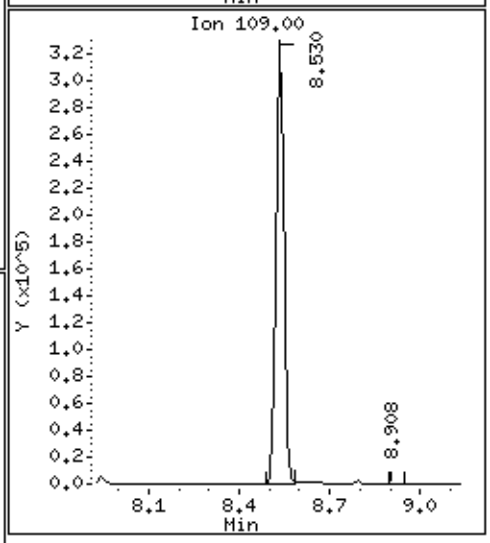












Data File: /chem/msdj.i/05mar15.b/j030505.d

Date : 05-MAR-2015 11:22

Client ID: LCSD

Instrument: msdj.i

Sample Info: 50ml #2716-98

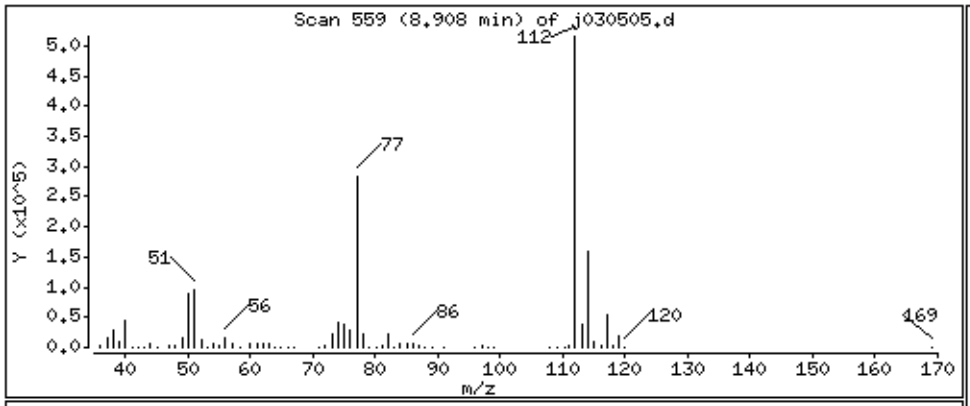
Operator: sg

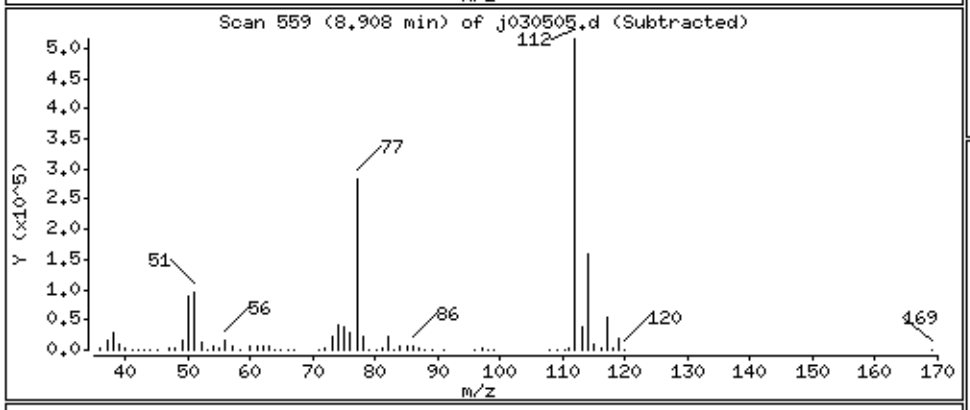
Column phase: RTX-624

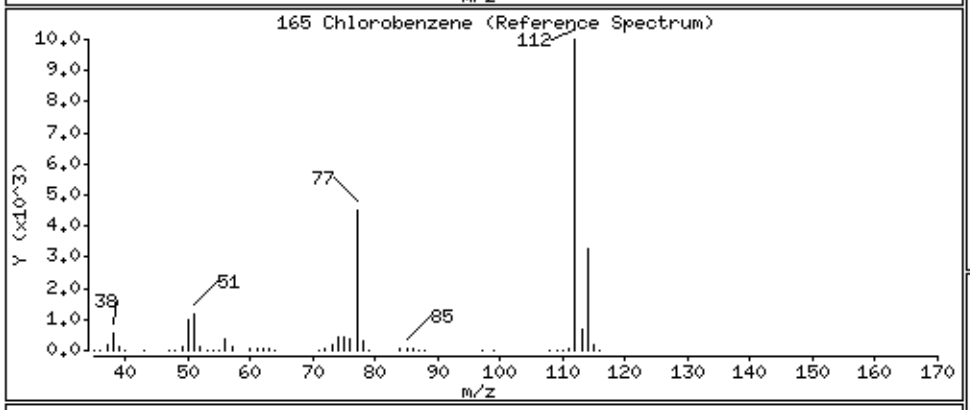
Column diameter: 0.25

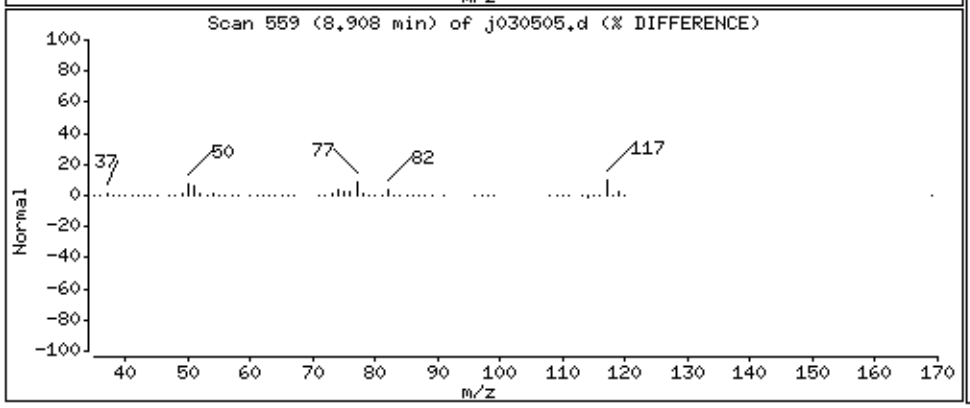
165 Chlorobenzene

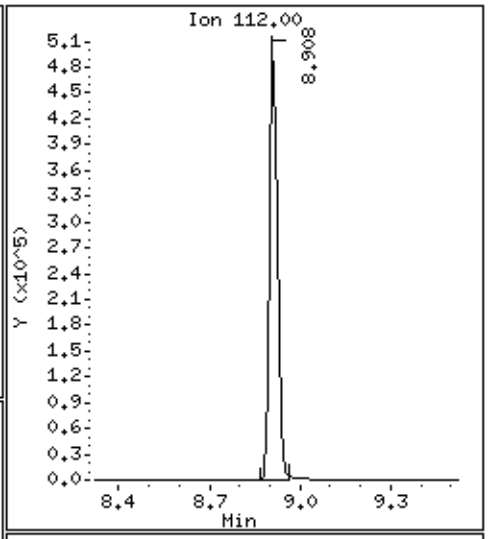
Concentration: 49.072 PPBV

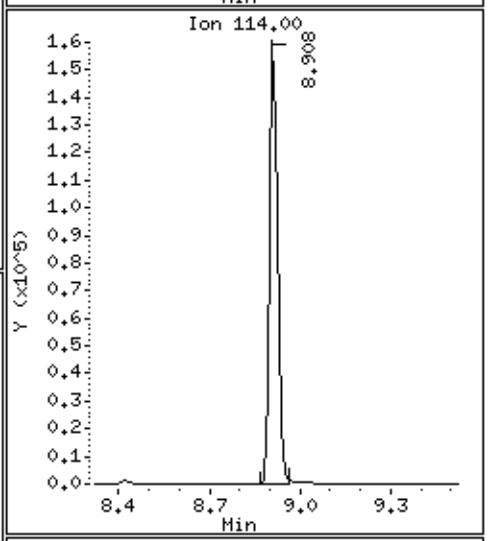


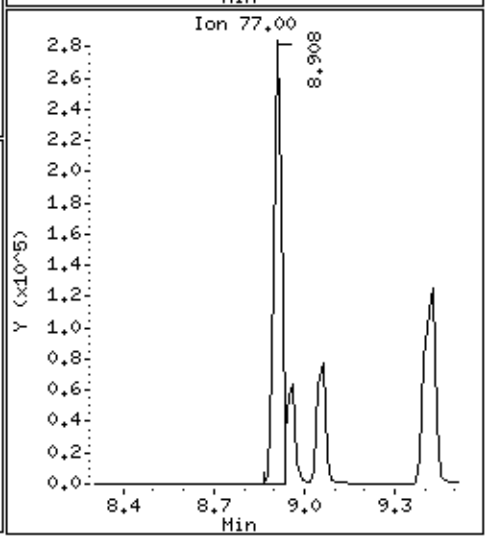












Data File: /chem/msdj.i/05mar15.b/j030505.d

Date : 05-MAR-2015 11:22

Client ID: LCSD

Instrument: msdj.i

Sample Info: 50ml #2716-98

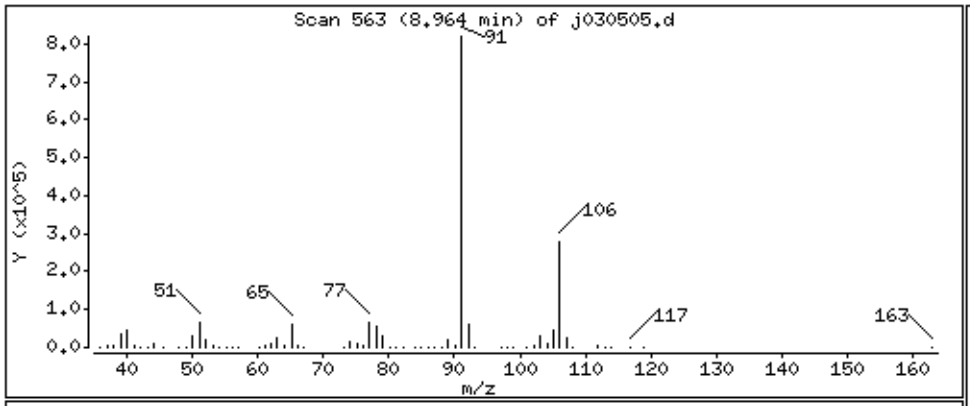
Operator: sg

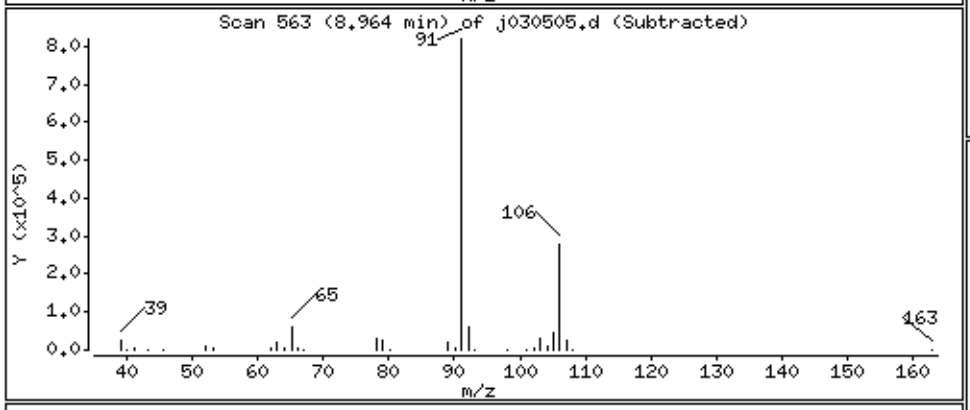
Column phase: RTX-624

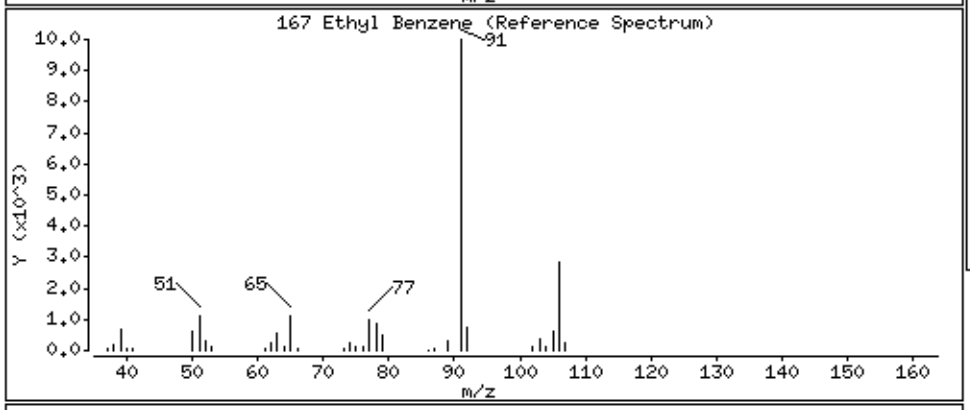
Column diameter: 0.25

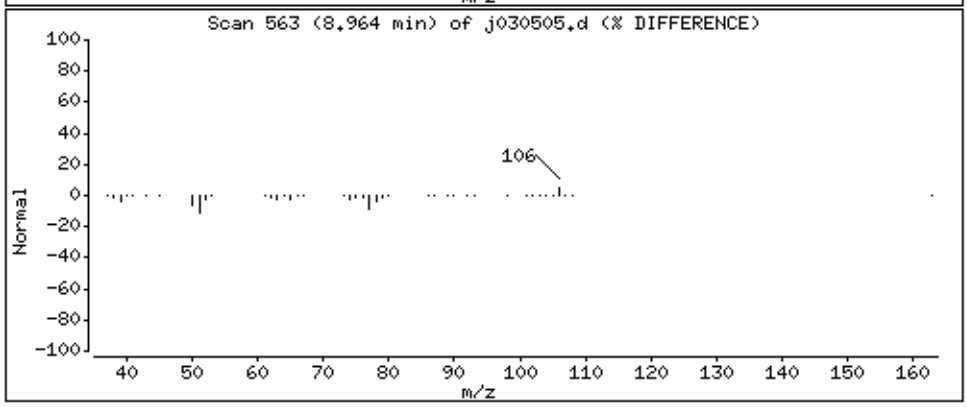
167 Ethyl Benzene

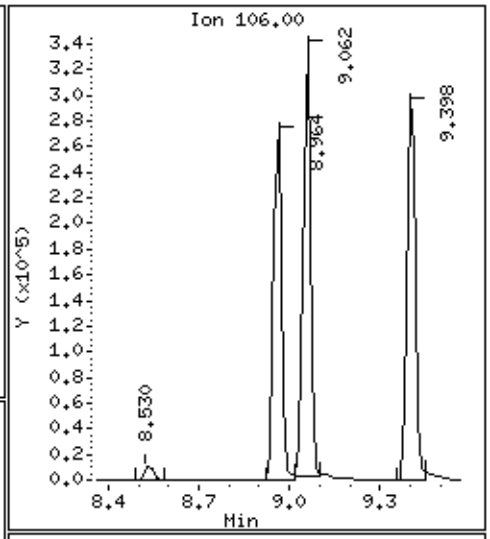
Concentration: 49.438 PPBV

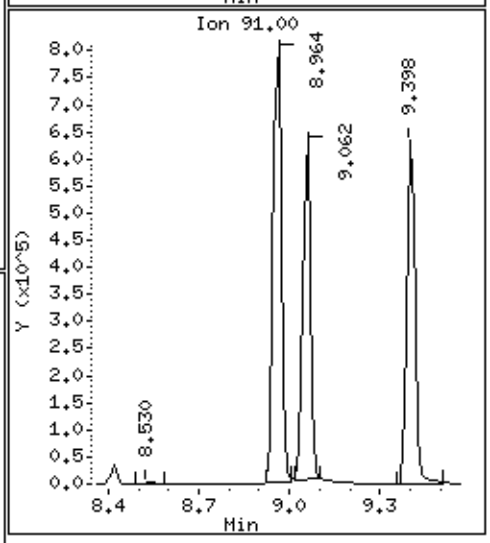












Data File: /chem/msdj.i/05mar15.b/j030505.d

Date : 05-MAR-2015 11:22

Client ID: LCSD

Instrument: msdj.i

Sample Info: 50ml #2716-98

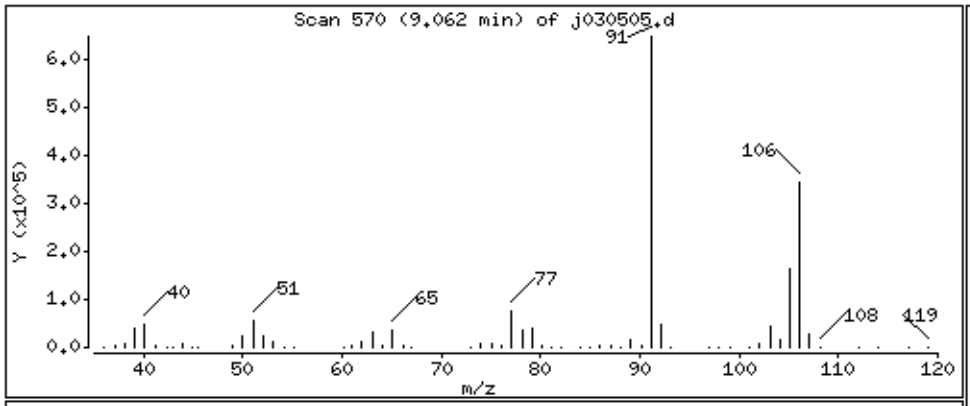
Operator: sg

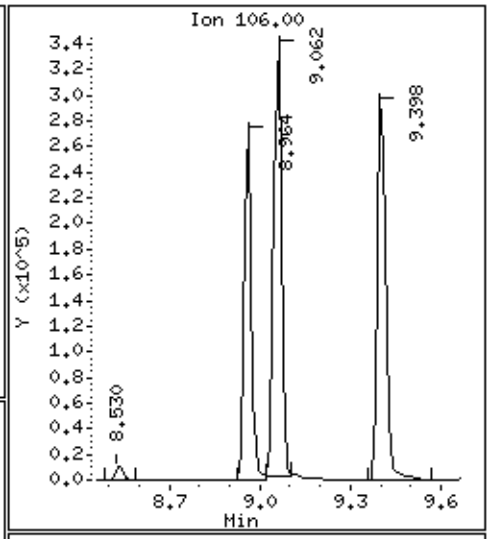
Column phase: RTX-624

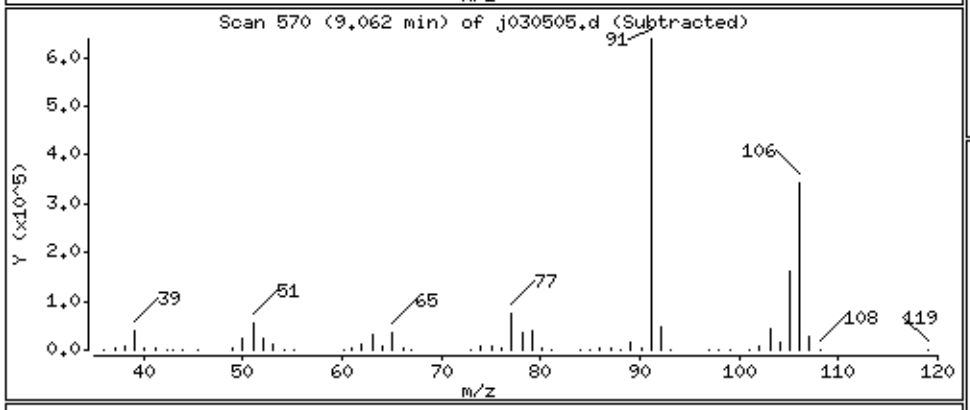
Column diameter: 0.25

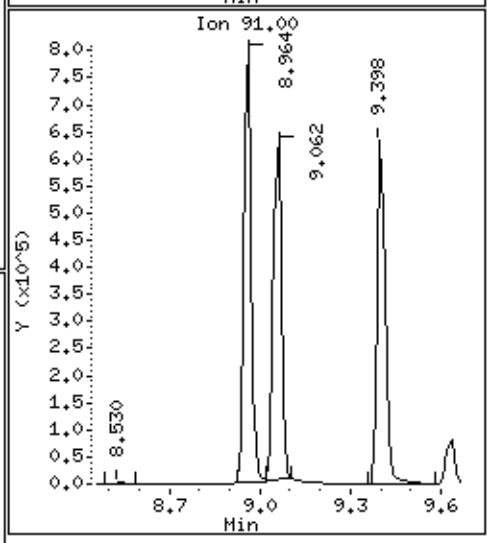
169 m,p-Xylene

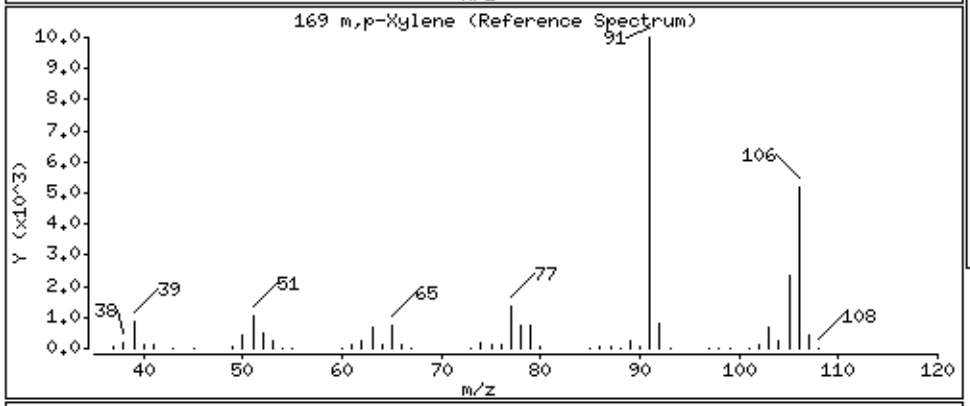
Concentration: 48.103 PPBV

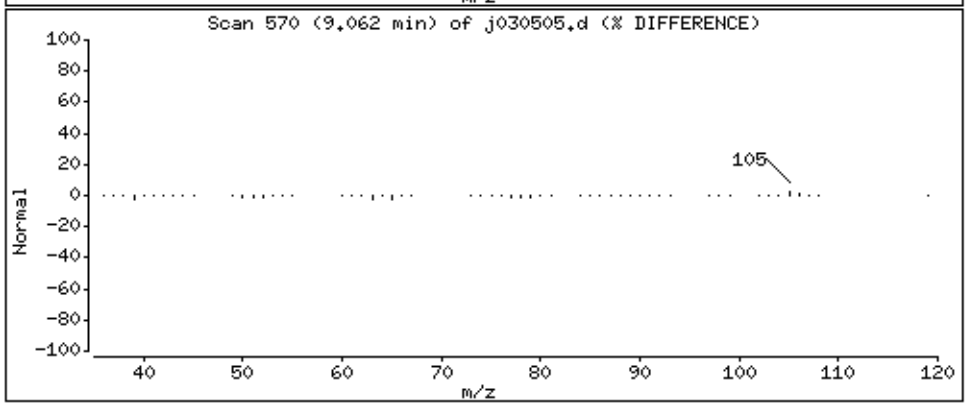












Data File: /chem/msdj.i/05mar15.b/j030505.d

Date : 05-MAR-2015 11:22

Client ID: LCSD

Instrument: msdj.i

Sample Info: 50ml #2716-98

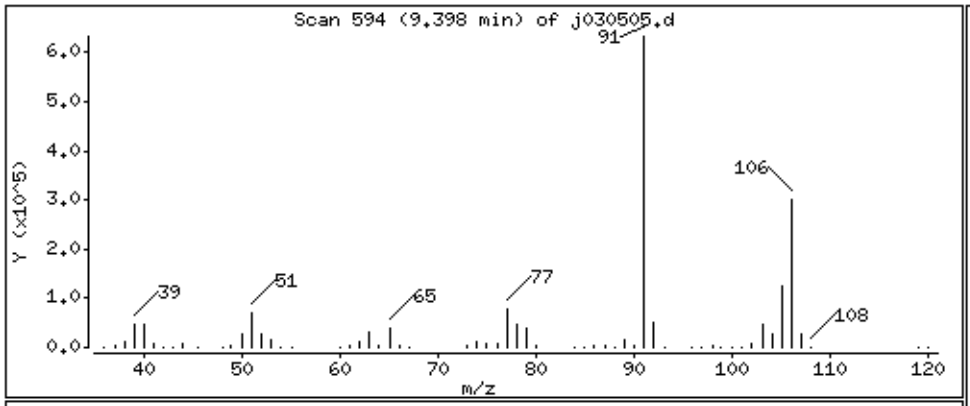
Operator: sg

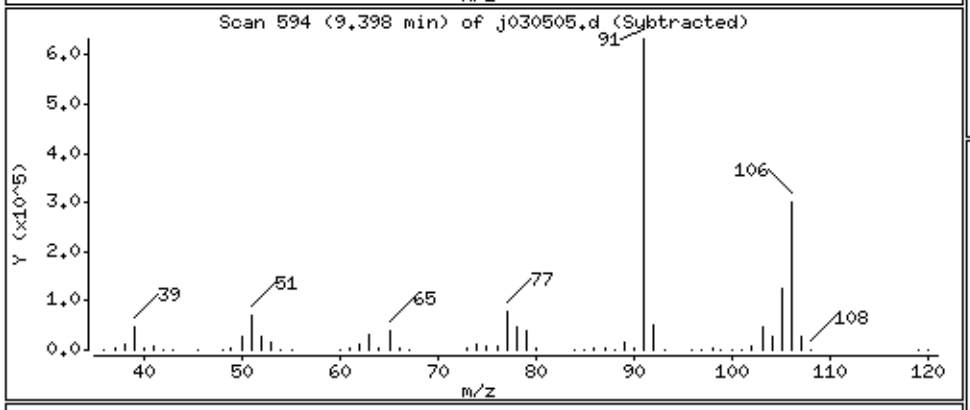
Column phase: RTX-624

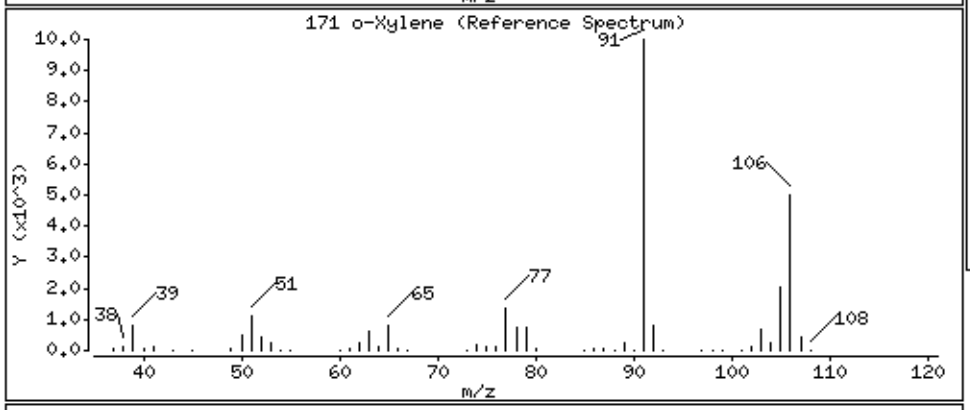
Column diameter: 0.25

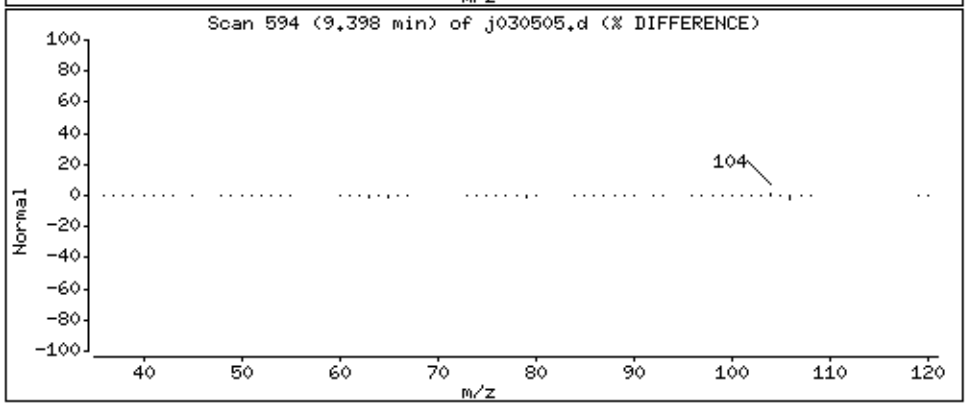
171 o-Xylene

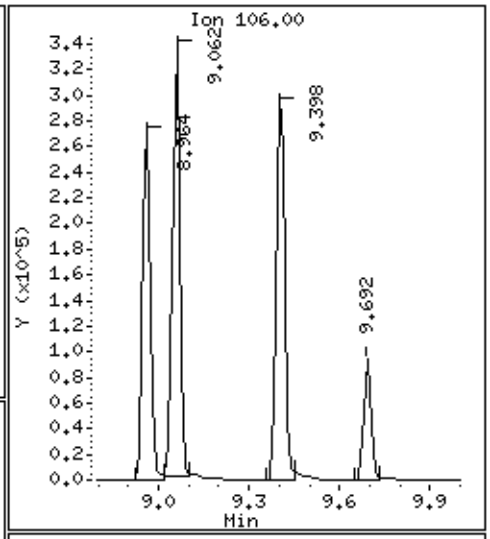
Concentration: 50.154 PPBV

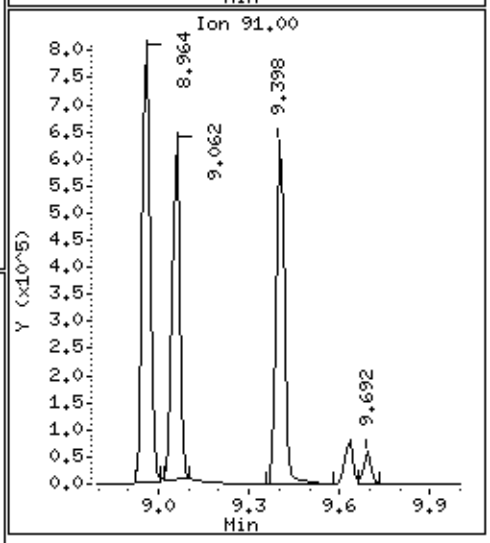












Data File: /chem/msdj.i/05mar15.b/j030505.d

Date : 05-MAR-2015 11:22

Client ID: LCSD

Instrument: msdj.i

Sample Info: 50ml #2716-98

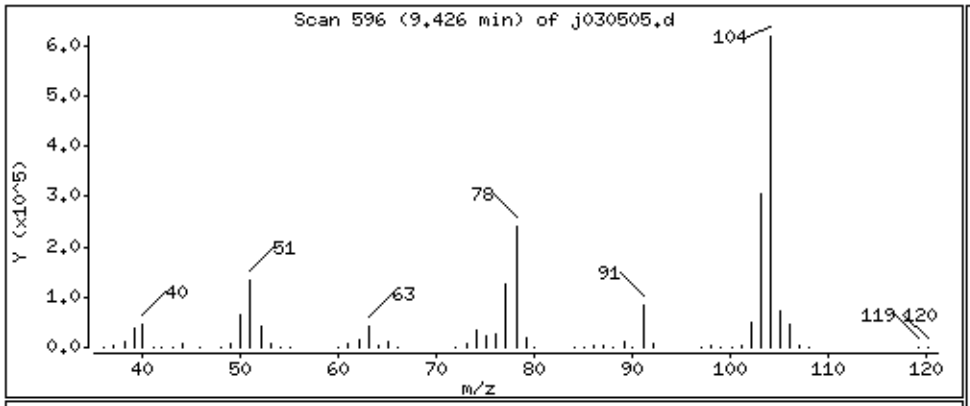
Operator: sg

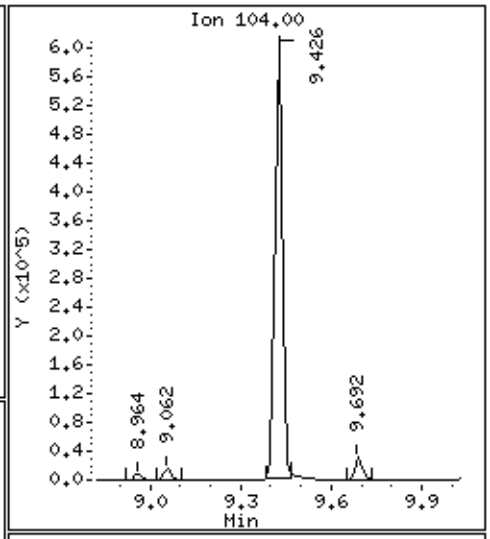
Column phase: RTX-624

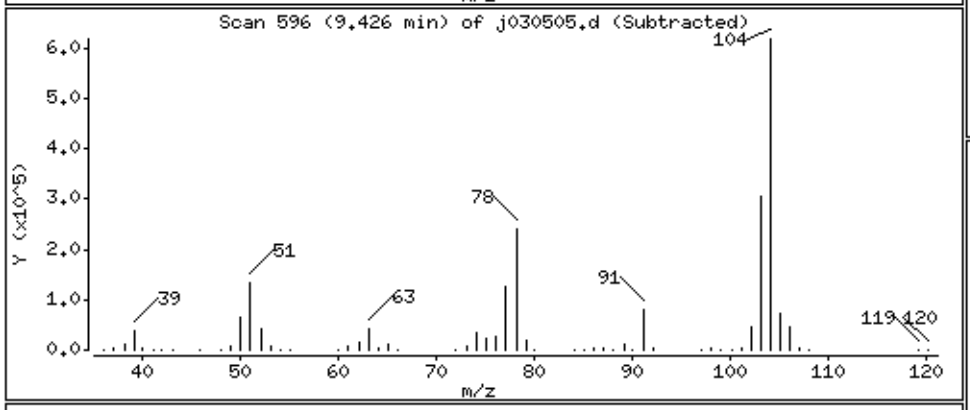
Column diameter: 0.25

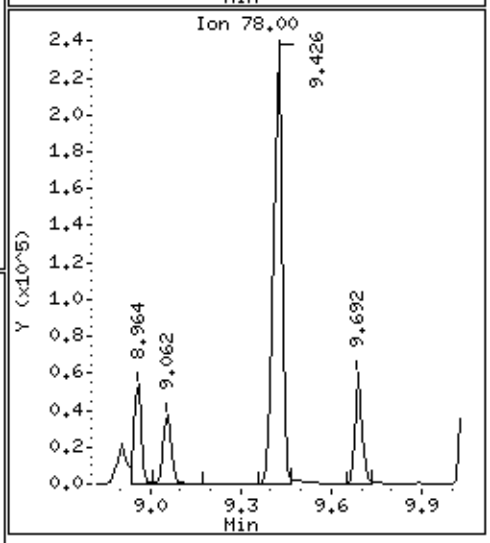
172 Styrene

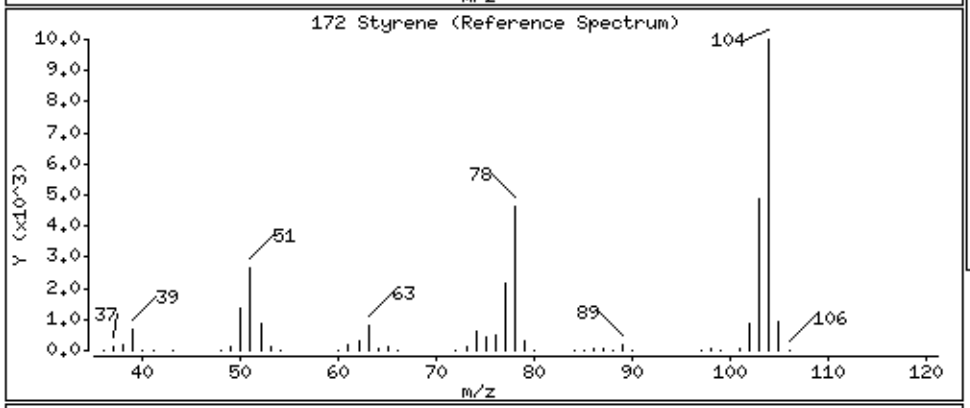
Concentration: 50.759 PPBV

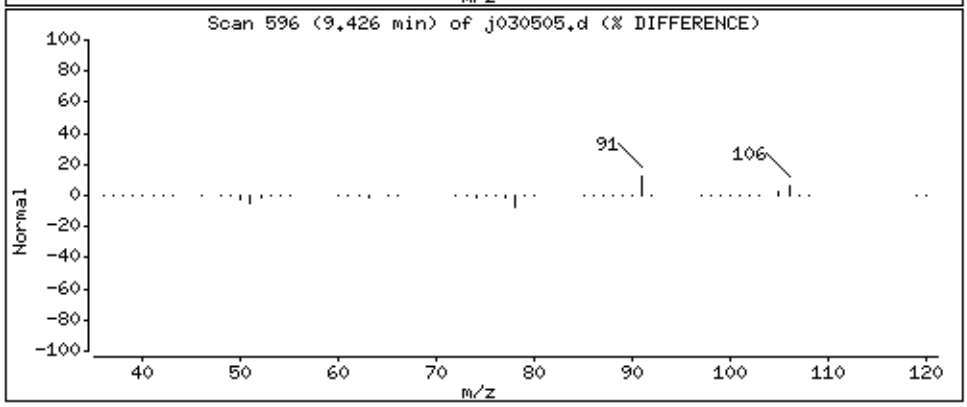












Data File: /chem/msdj.i/05mar15.b/j030505.d

Date : 05-MAR-2015 11:22

Client ID: LCSD

Instrument: msdj.i

Sample Info: 50ml #2716-98

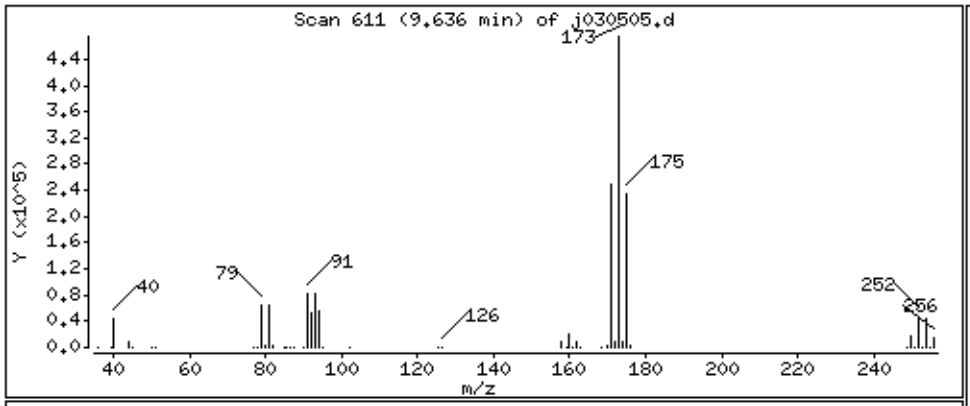
Operator: sg

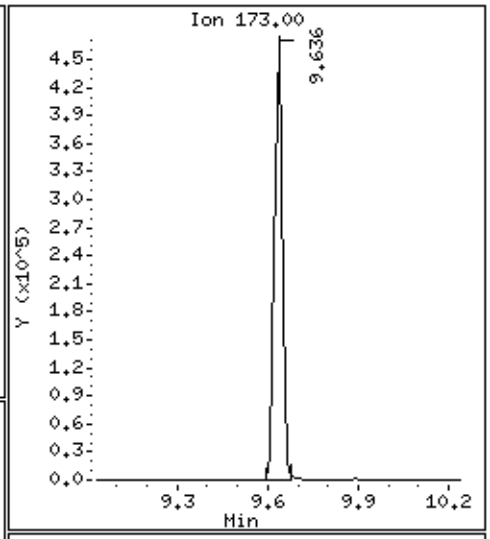
Column phase: RTX-624

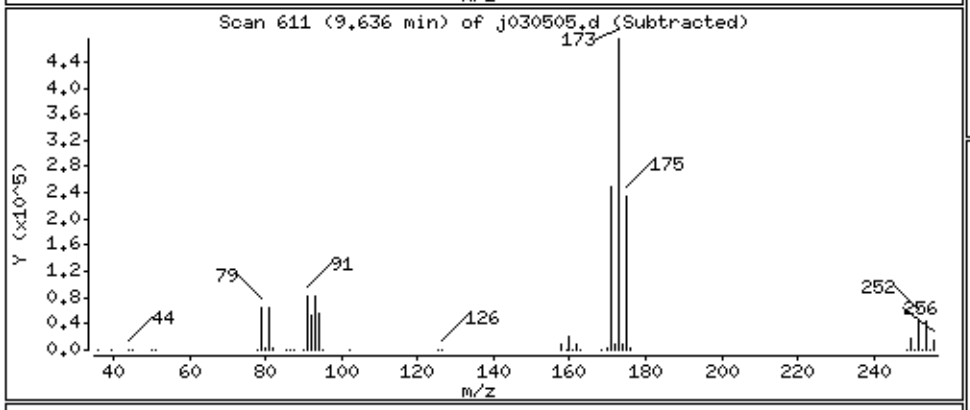
Column diameter: 0.25

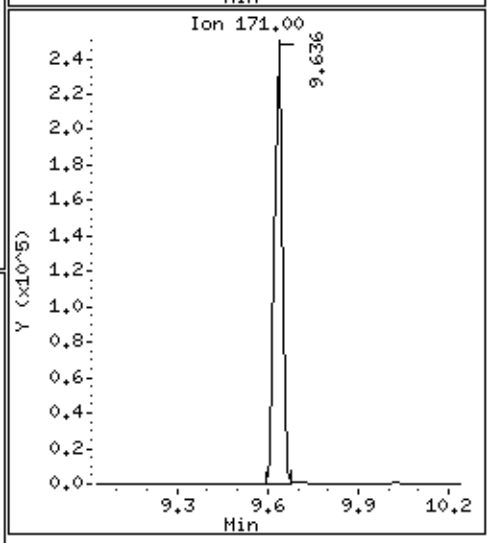
174 Bromoform

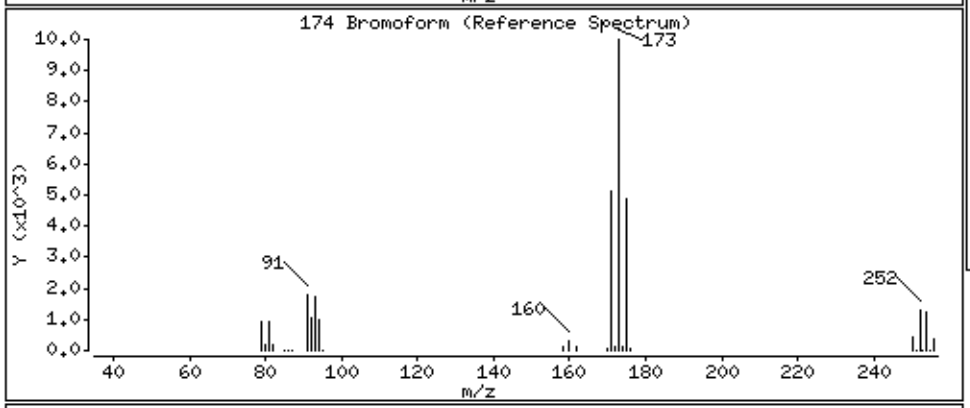
Concentration: 50.012 PPBV

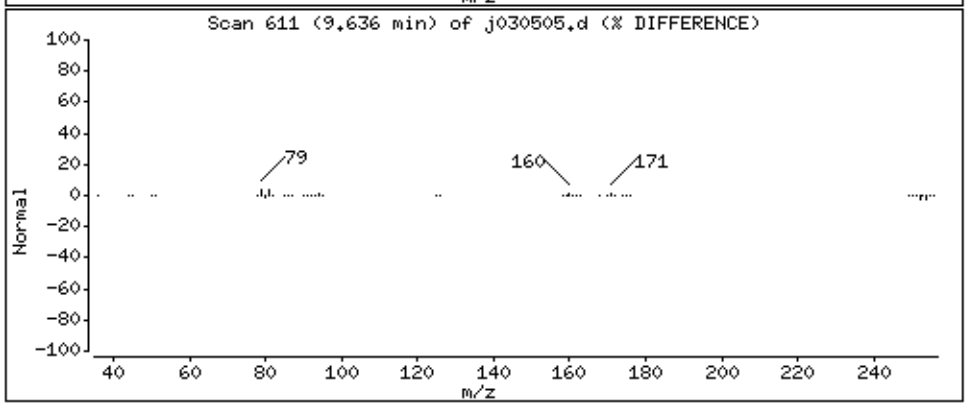












Data File: /chem/msdj.i/05mar15.b/j030505.d

Date : 05-MAR-2015 11:22

Client ID: LCSD

Instrument: msdj.i

Sample Info: 50ml #2716-98

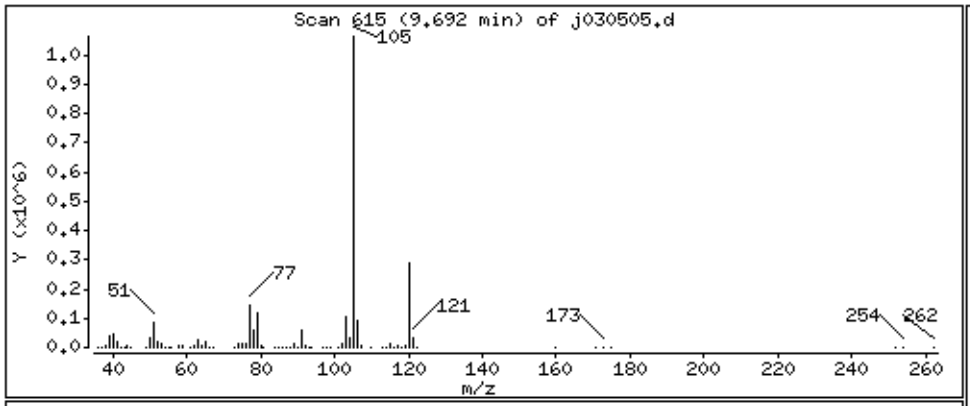
Operator: sg

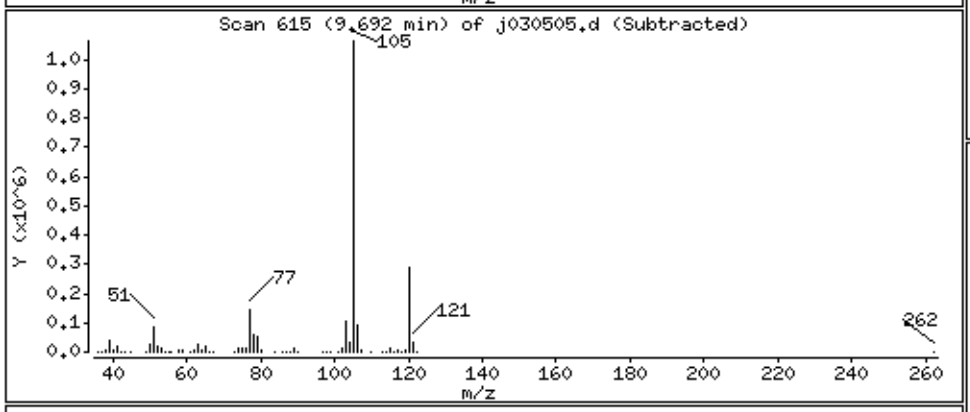
Column phase: RTX-624

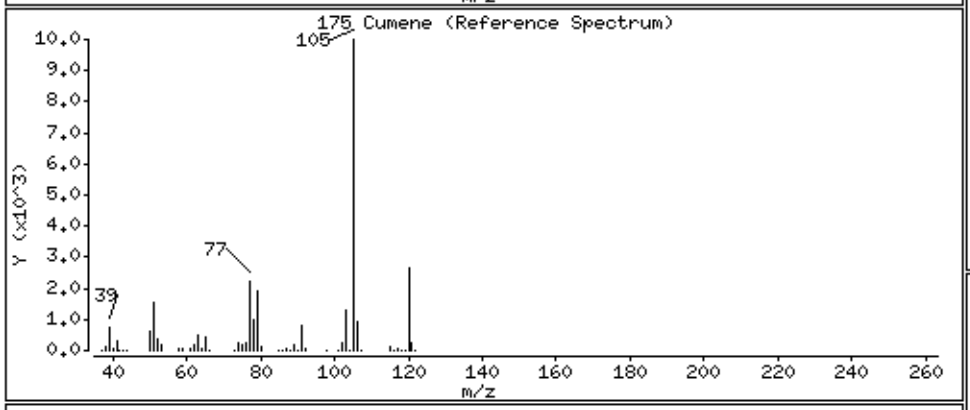
Column diameter: 0.25

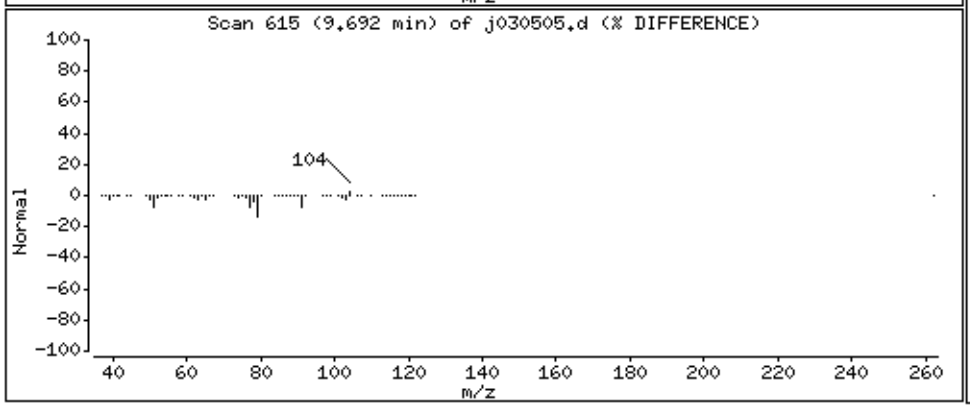
175 Cumene

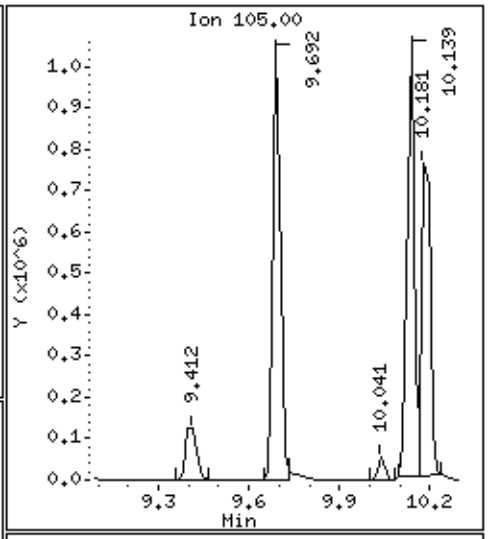
Concentration: 48.555 PPBV

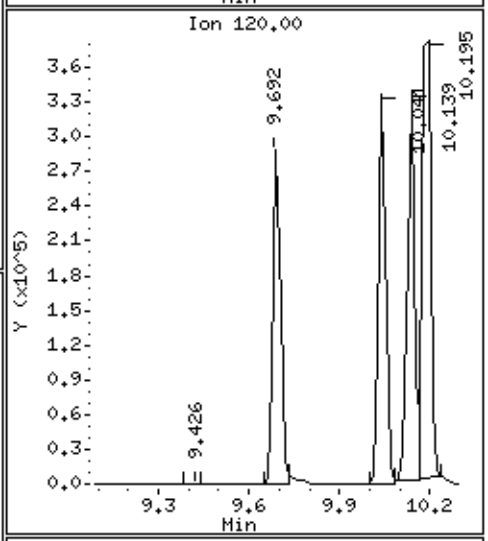


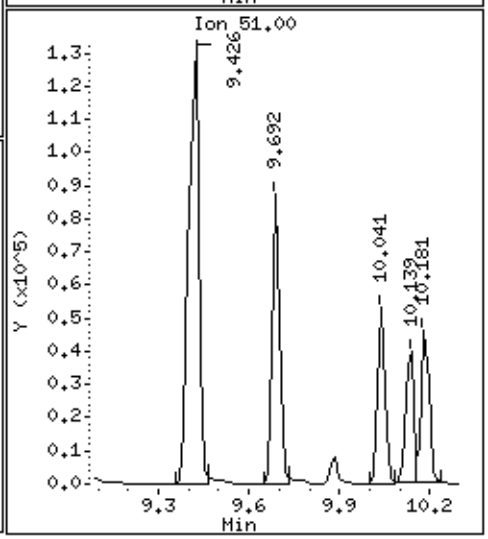












Data File: /chem/msdj.i/05mar15.b/j030505.d

Date : 05-MAR-2015 11:22

Client ID: LCSD

Instrument: msdj.i

Sample Info: 50ml #2716-98

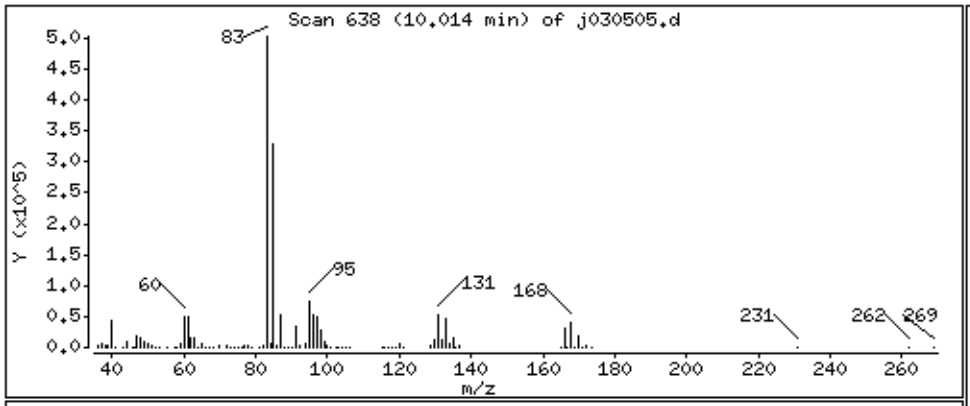
Operator: sg

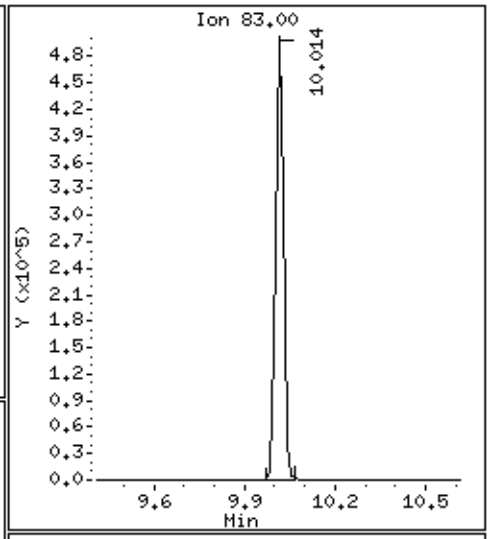
Column phase: RTX-624

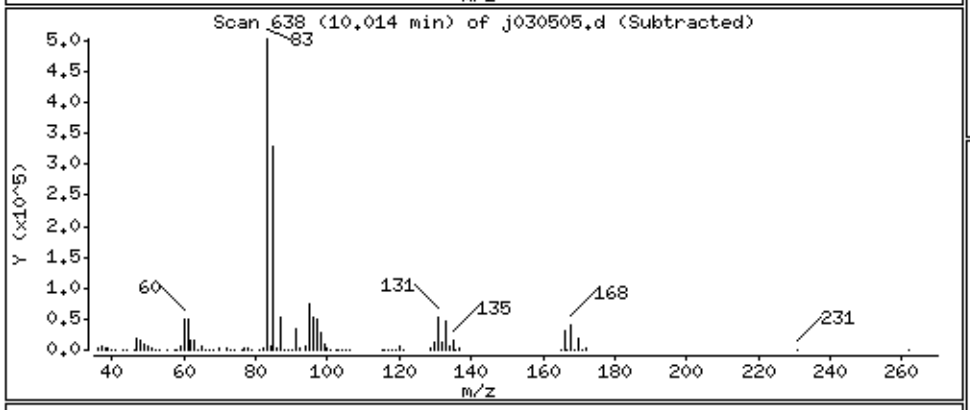
Column diameter: 0.25

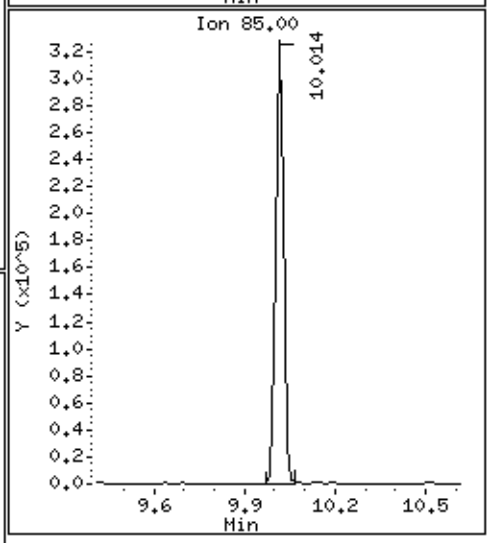
181 1,1,2,2-Tetrachloroethane

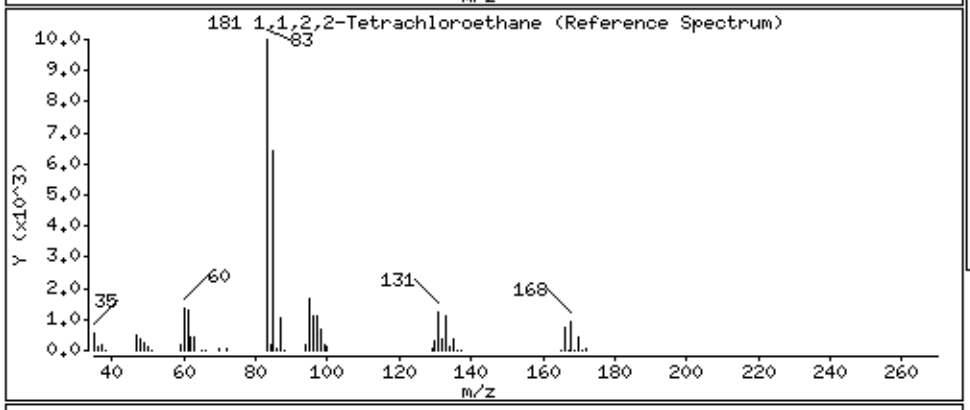
Concentration: 56.846 PPBV

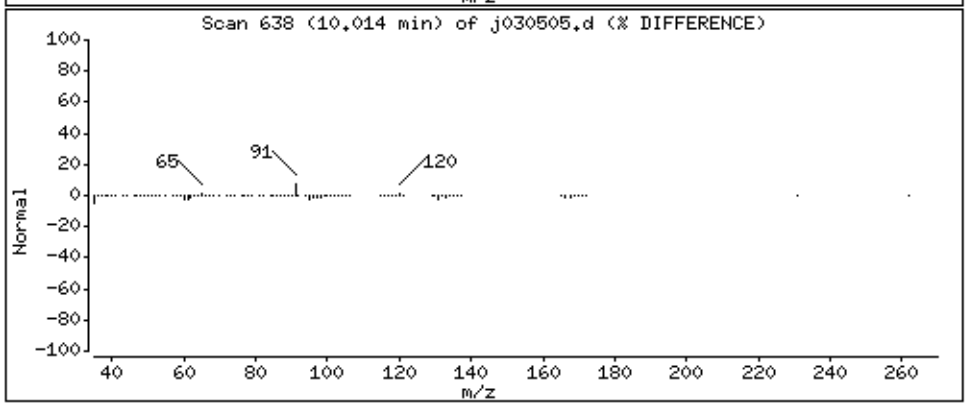












Data File: /chem/msdj.i/05mar15.b/j030505.d

Date : 05-MAR-2015 11:22

Client ID: LCSD

Instrument: msdj.i

Sample Info: 50ml #2716-98

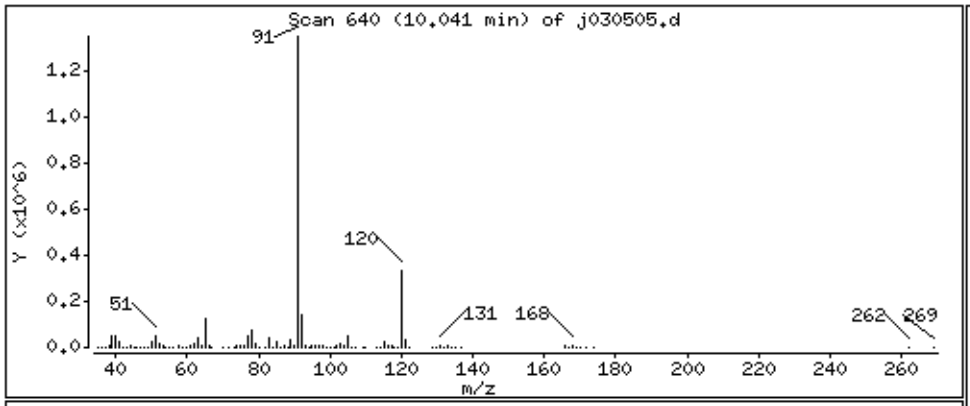
Operator: sg

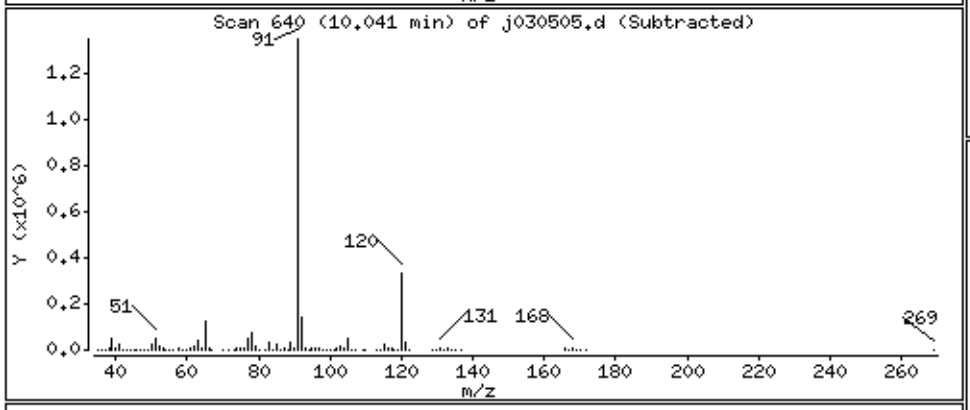
Column phase: RTX-624

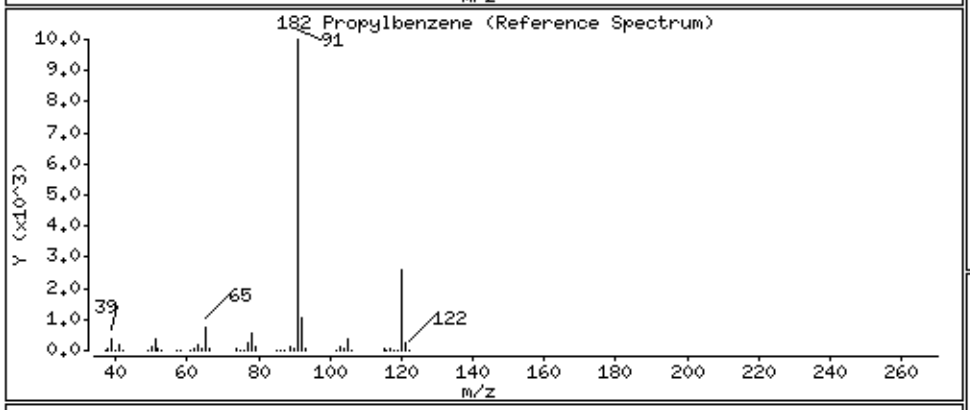
Column diameter: 0.25

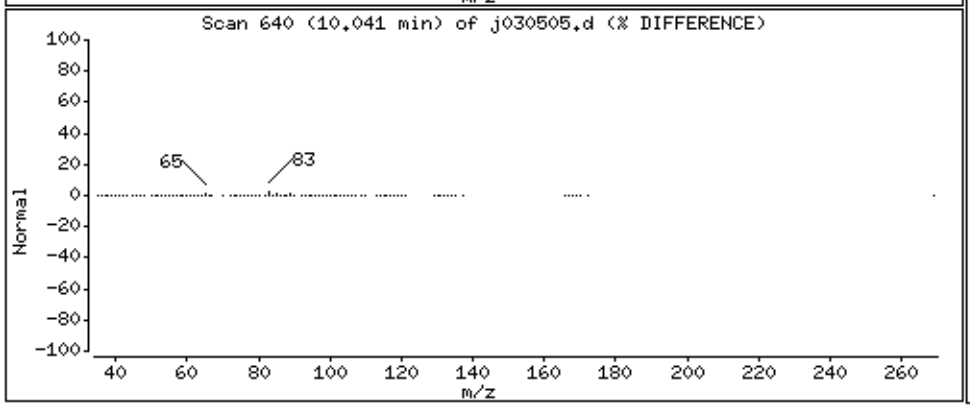
182 Propylbenzene

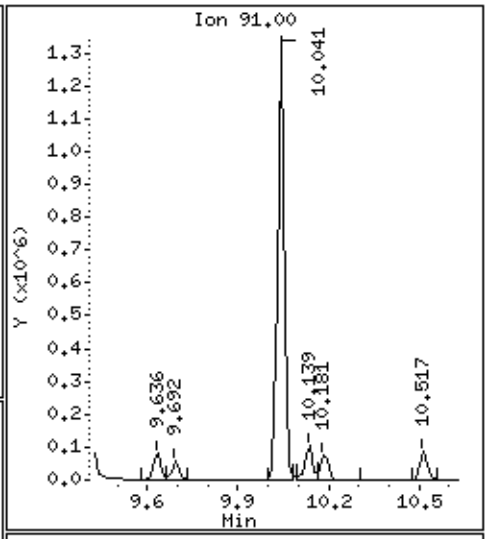
Concentration: 50.132 PPBV

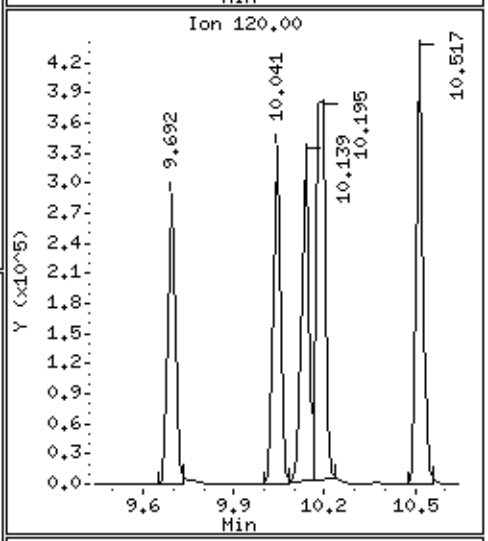


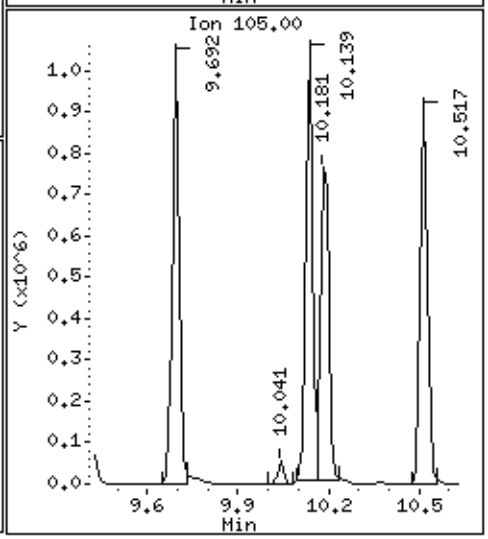












Data File: /chem/msdj.i/05mar15.b/j030505.d

Date : 05-MAR-2015 11:22

Client ID: LCSD

Instrument: msdj.i

Sample Info: 50ml #2716-98

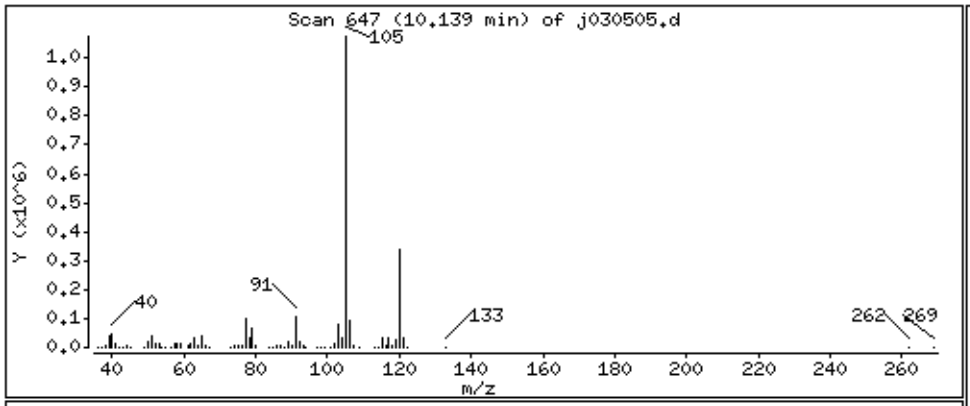
Operator: sg

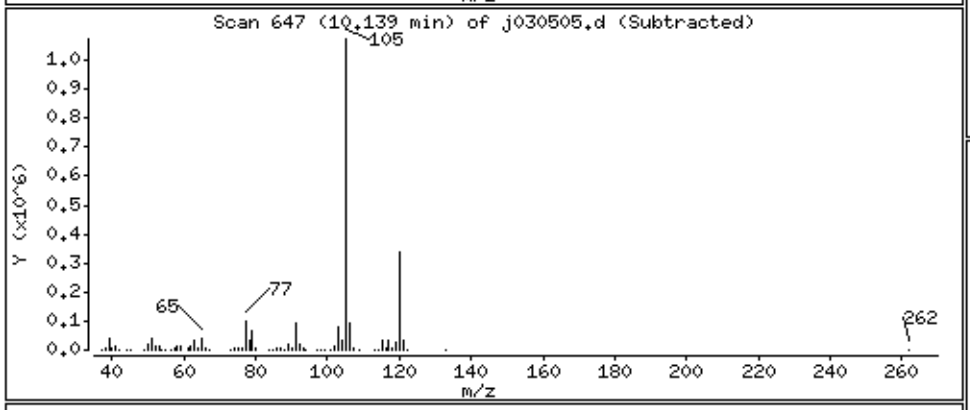
Column phase: RTX-624

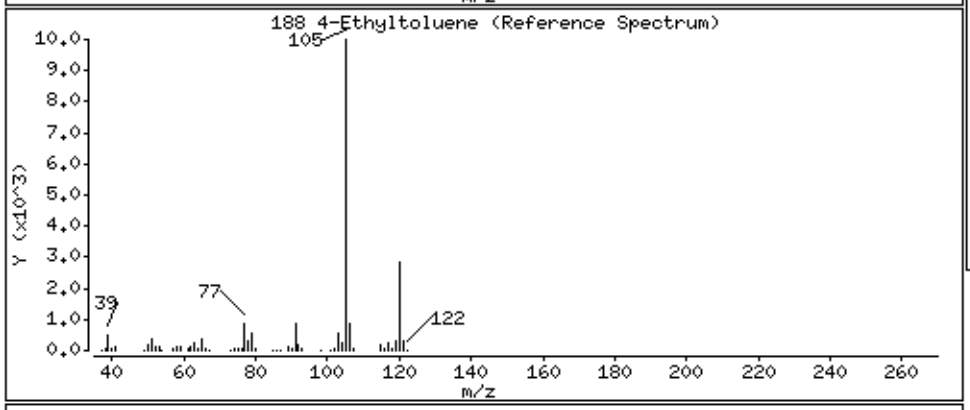
Column diameter: 0.25

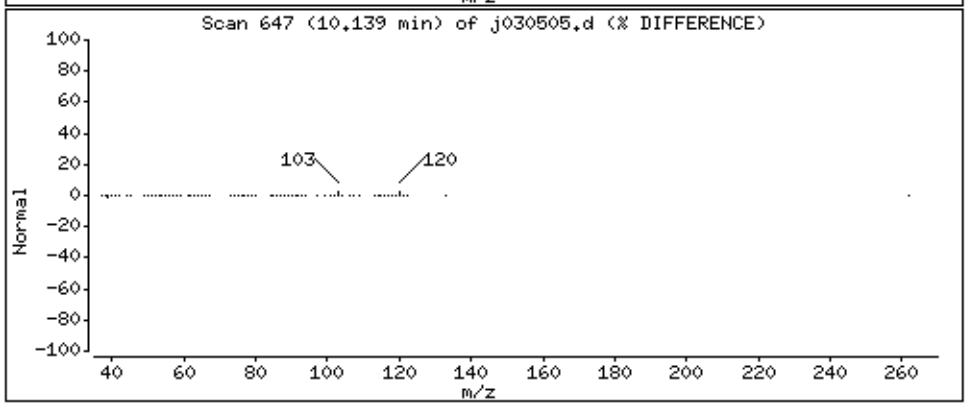
188 4-Ethyltoluene

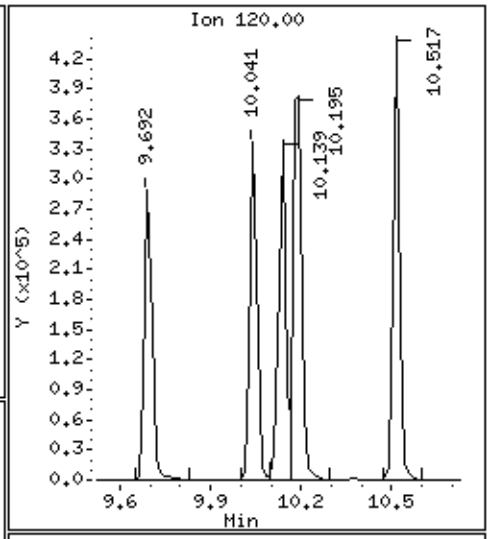
Concentration: 53.514 PPBV

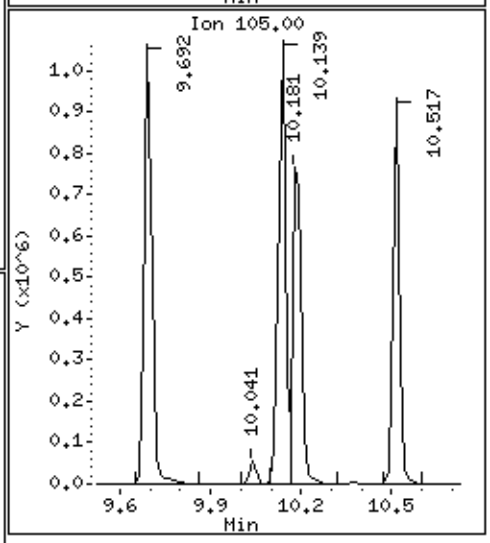












Data File: /chem/msdj.i/05mar15.b/j030505.d

Date : 05-MAR-2015 11:22

Client ID: LCSD

Instrument: msdj.i

Sample Info: 50ml #2716-98

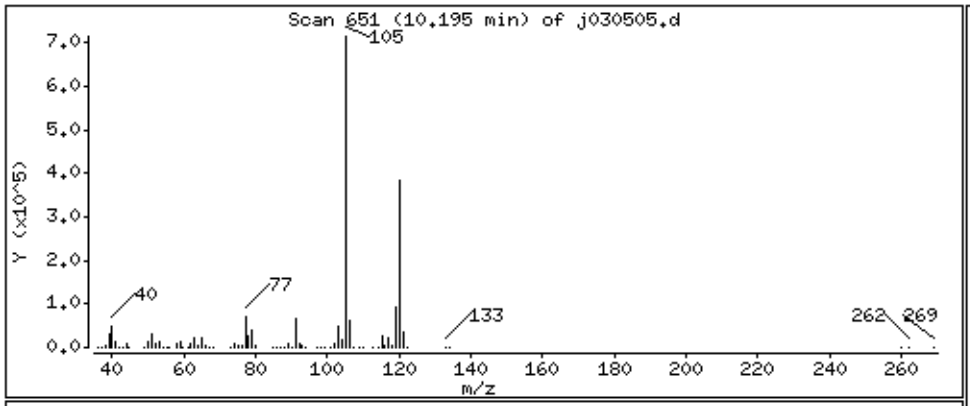
Operator: sg

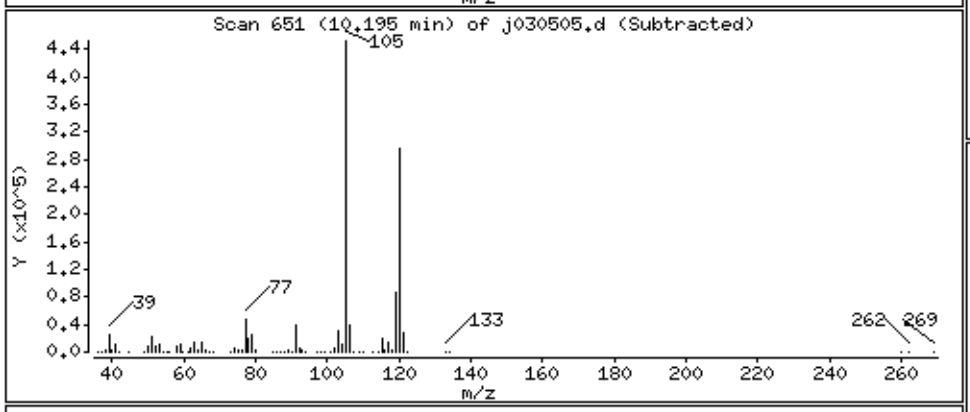
Column phase: RTX-624

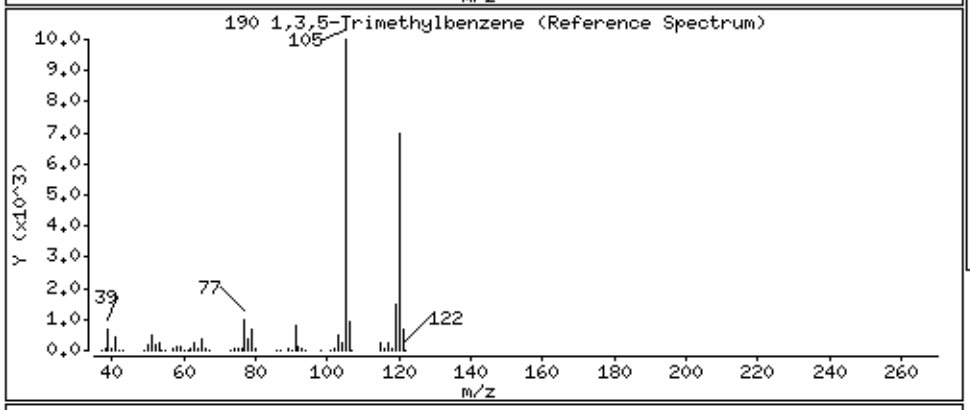
Column diameter: 0.25

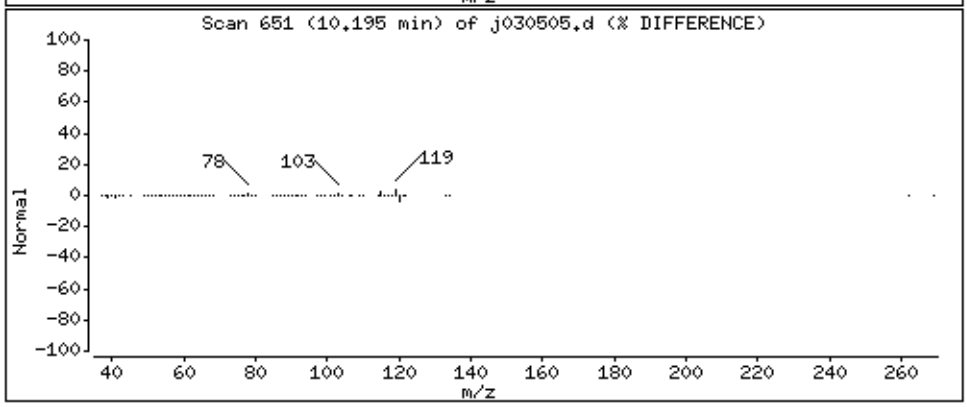
190 1,3,5-Trimethylbenzene

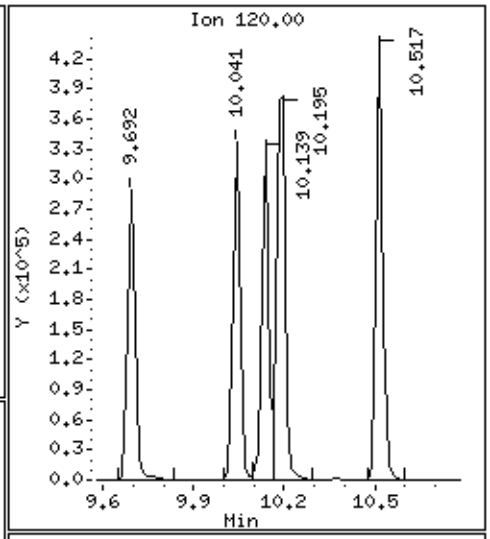
Concentration: 50.100 PPBV

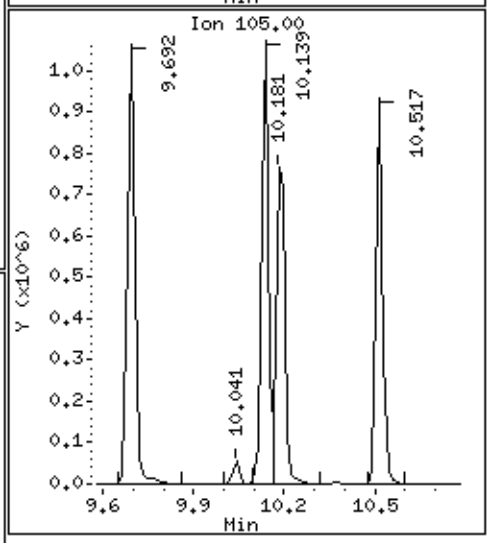












Data File: /chem/msdj.i/05mar15.b/j030505.d

Date : 05-MAR-2015 11:22

Client ID: LCSD

Instrument: msdj.i

Sample Info: 50ml #2716-98

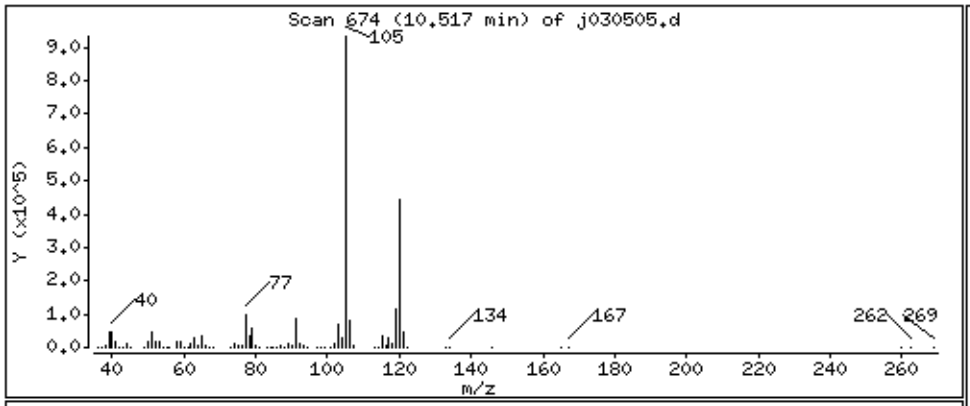
Operator: sg

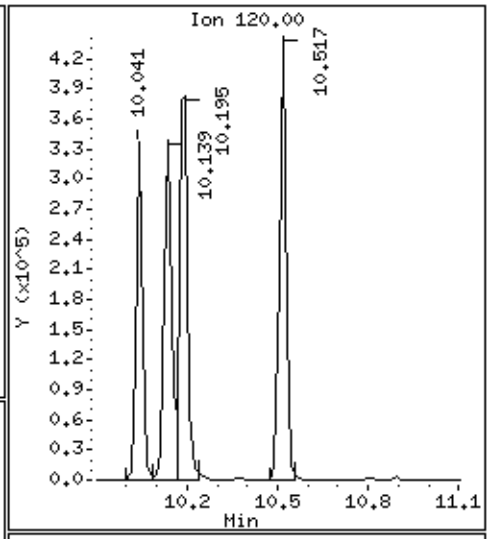
Column phase: RTX-624

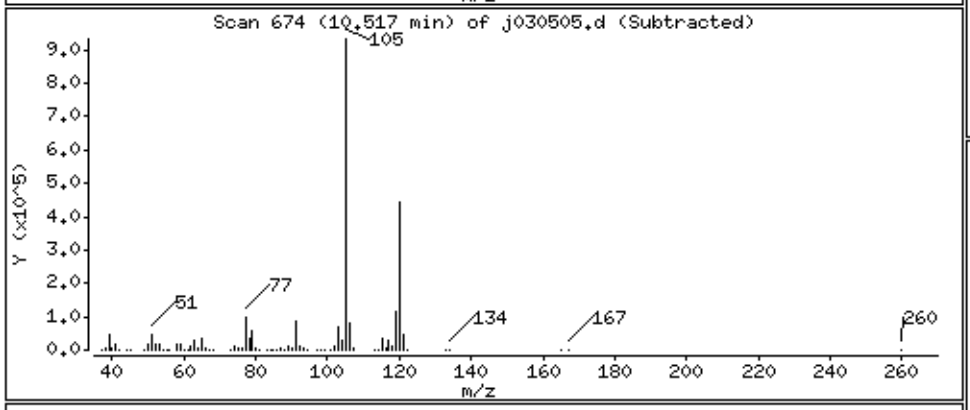
Column diameter: 0.25

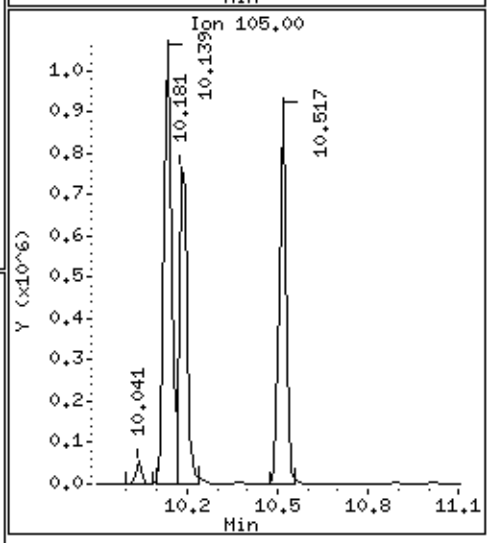
196 1,2,4-Trimethylbenzene

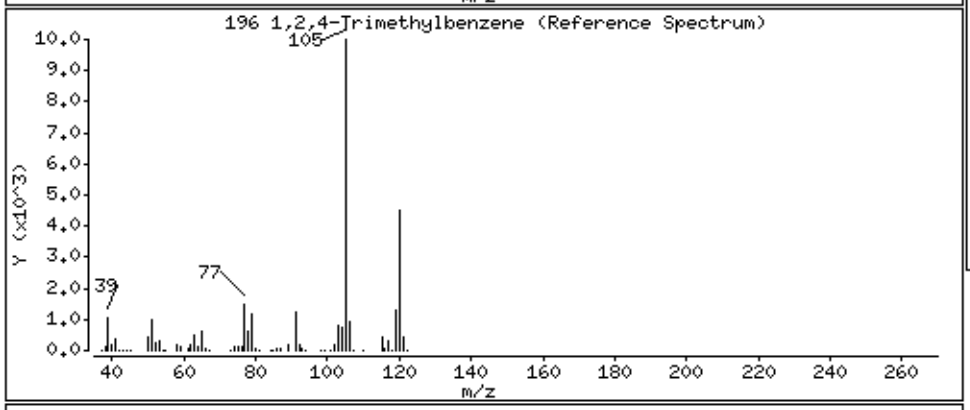
Concentration: 50.683 PPBV

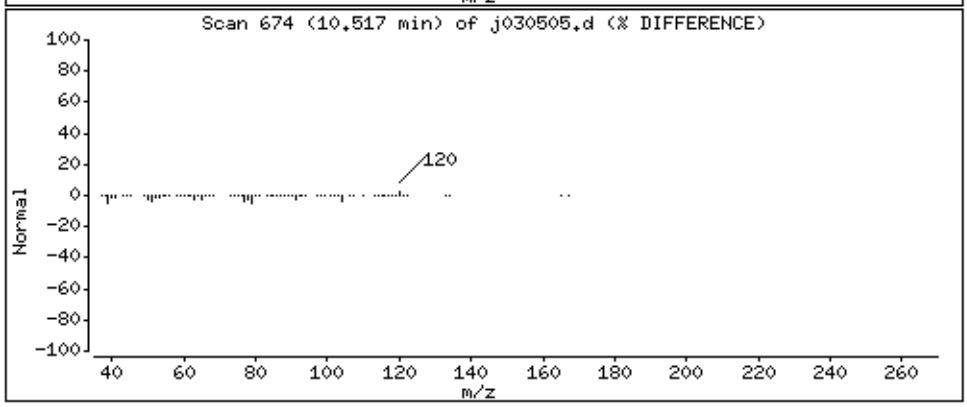












Data File: /chem/msdj.i/05mar15.b/j030505.d

Date : 05-MAR-2015 11:22

Client ID: LCSD

Instrument: msdj.i

Sample Info: 50ml #2716-98

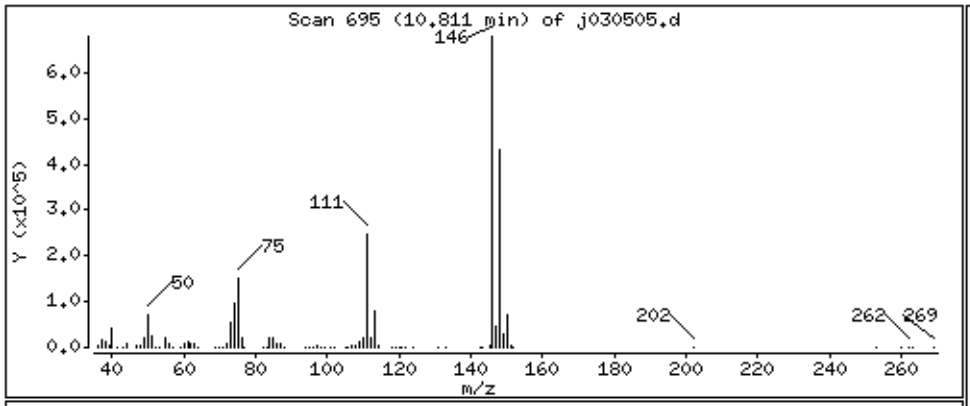
Operator: sg

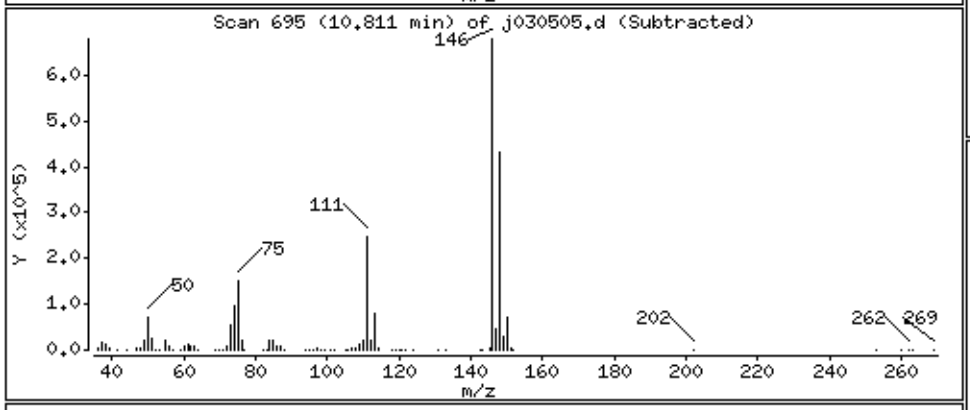
Column phase: RTX-624

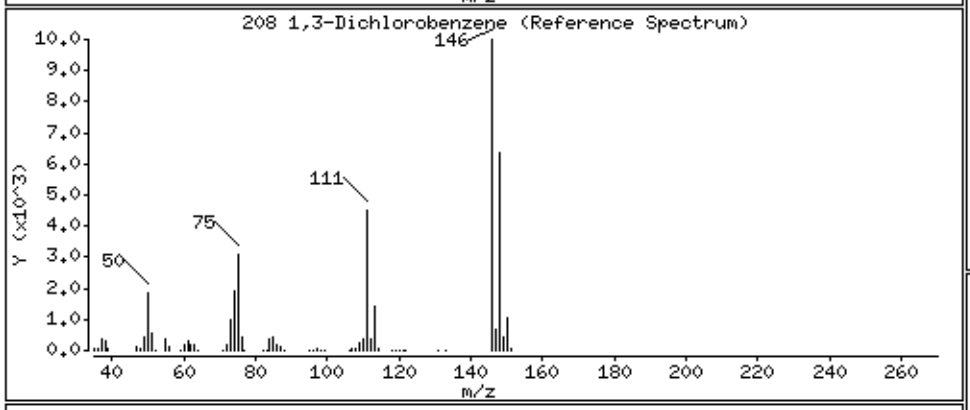
Column diameter: 0.25

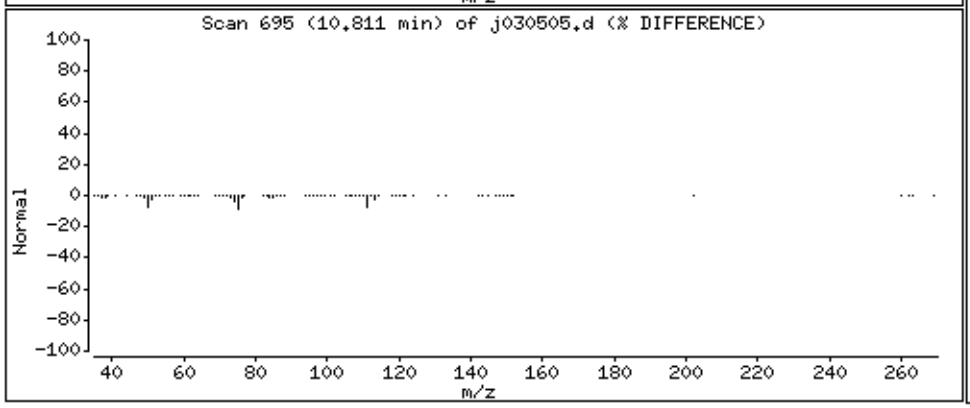
208 1,3-Dichlorobenzene

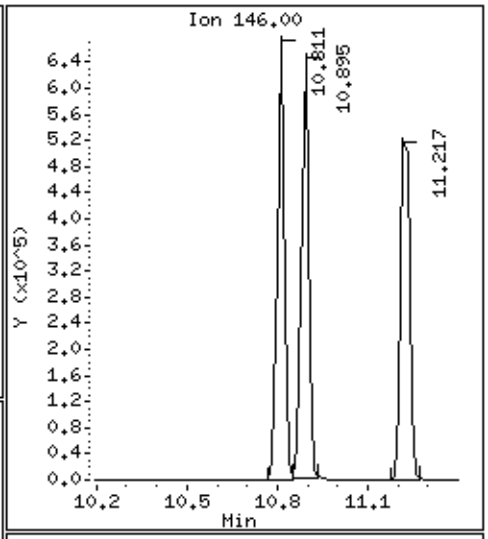
Concentration: 50.256 PPBV

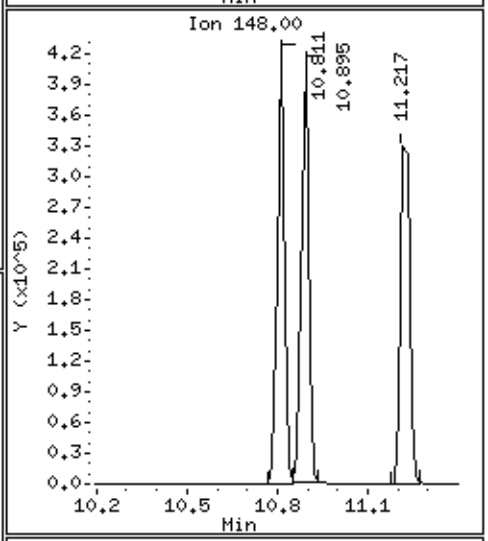


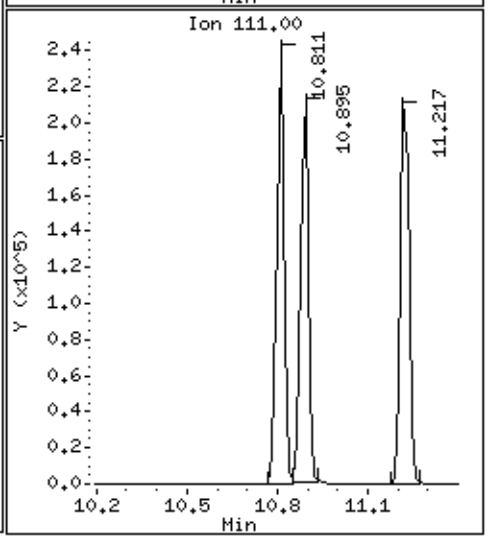












Data File: /chem/msdj.i/05mar15.b/j030505.d

Date : 05-MAR-2015 11:22

Client ID: LCSD

Instrument: msdj.i

Sample Info: 50ml #2716-98

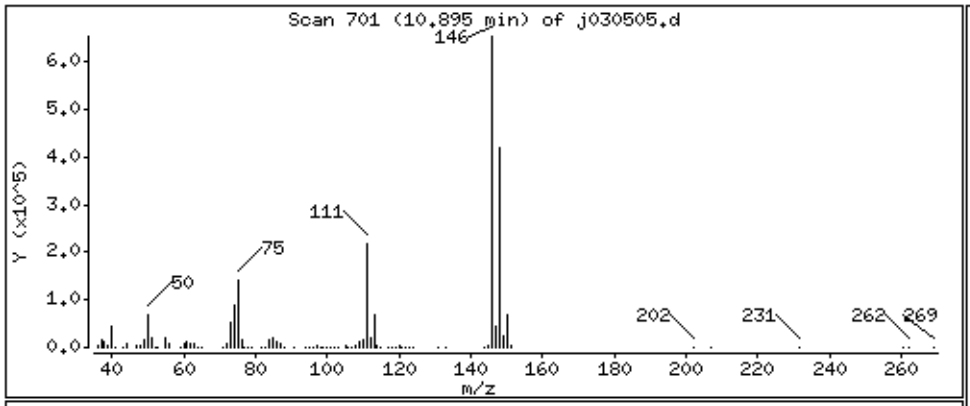
Operator: sg

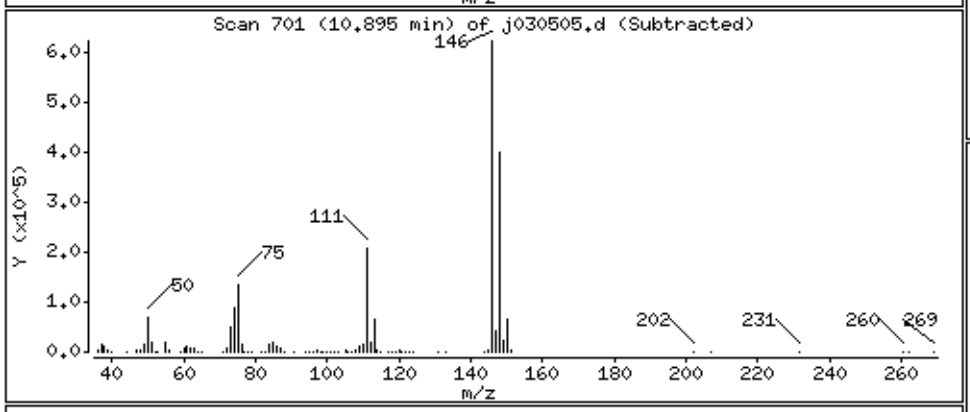
Column phase: RTX-624

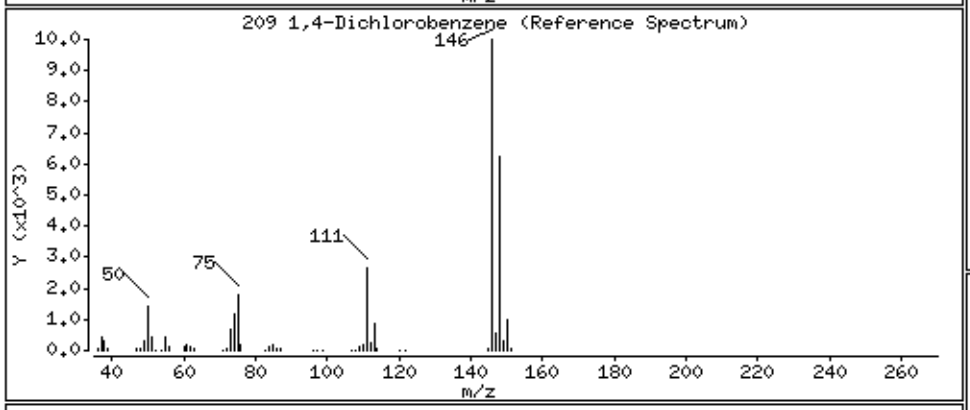
Column diameter: 0.25

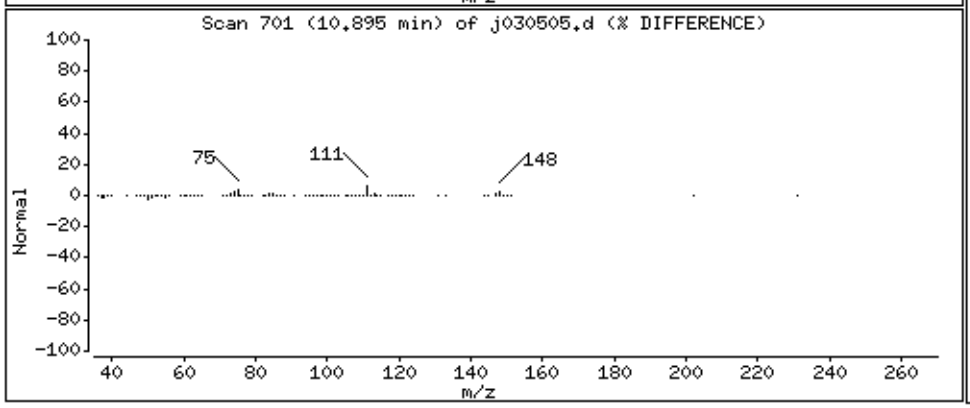
209 1,4-Dichlorobenzene

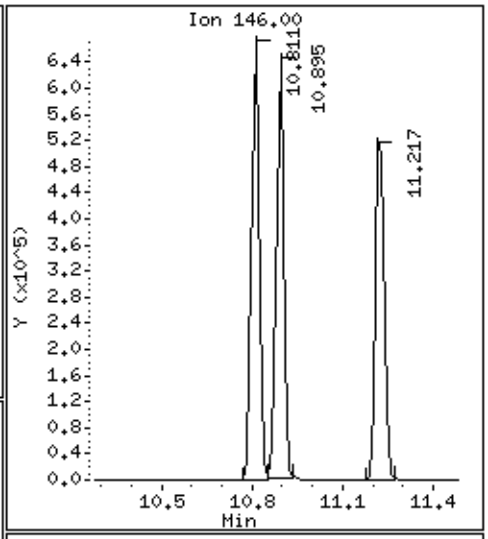
Concentration: 50.601 PPBV

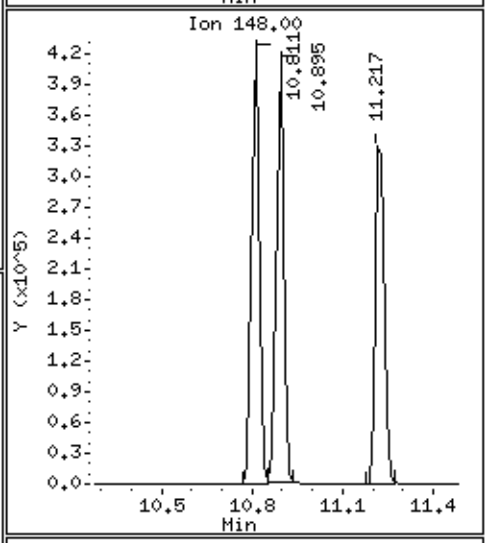


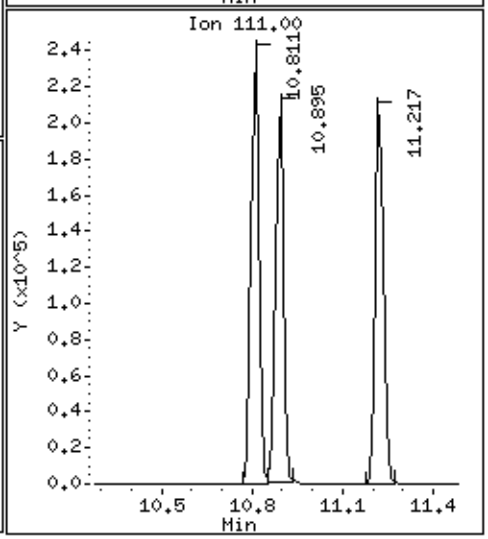












Data File: /chem/msdj.i/05mar15.b/j030505.d

Date : 05-MAR-2015 11:22

Client ID: LCSD

Instrument: msdj.i

Sample Info: 50ml #2716-98

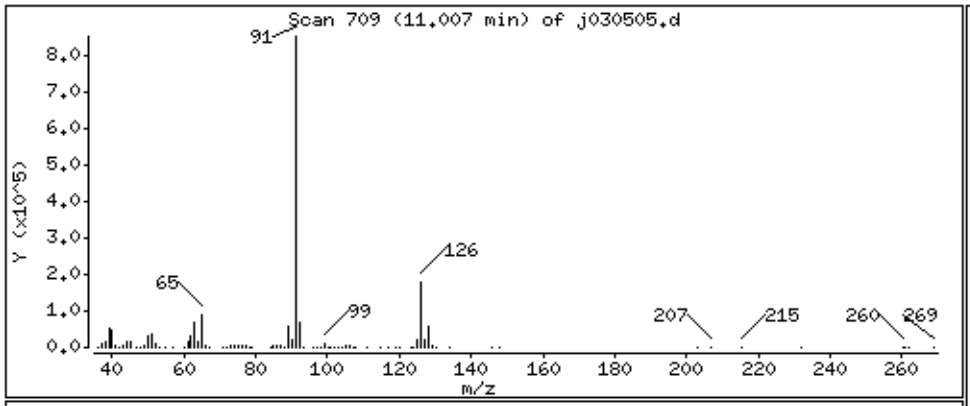
Operator: sg

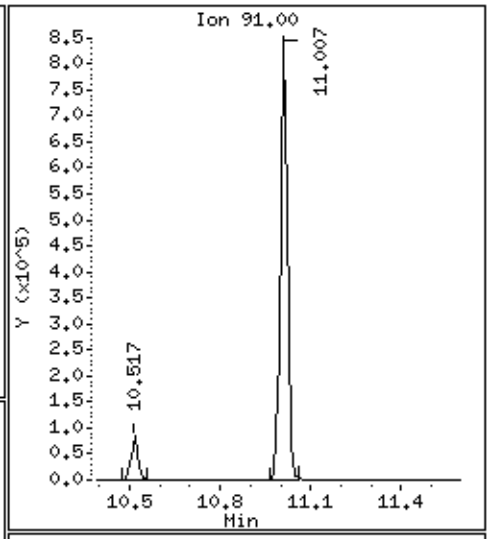
Column phase: RTX-624

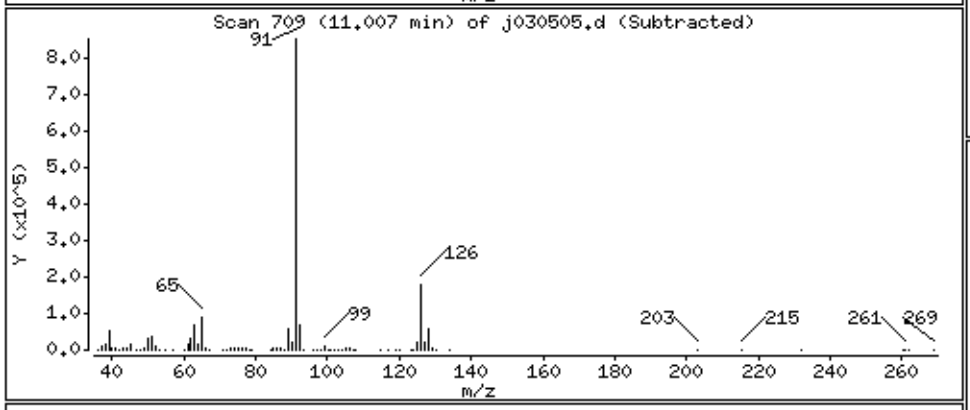
Column diameter: 0.25

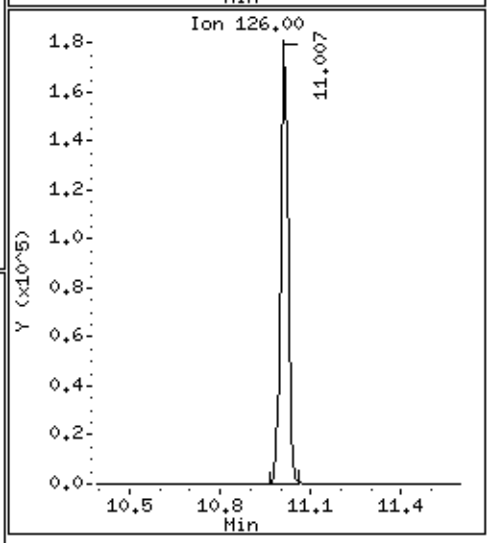
212 alpha-Chlorotoluene

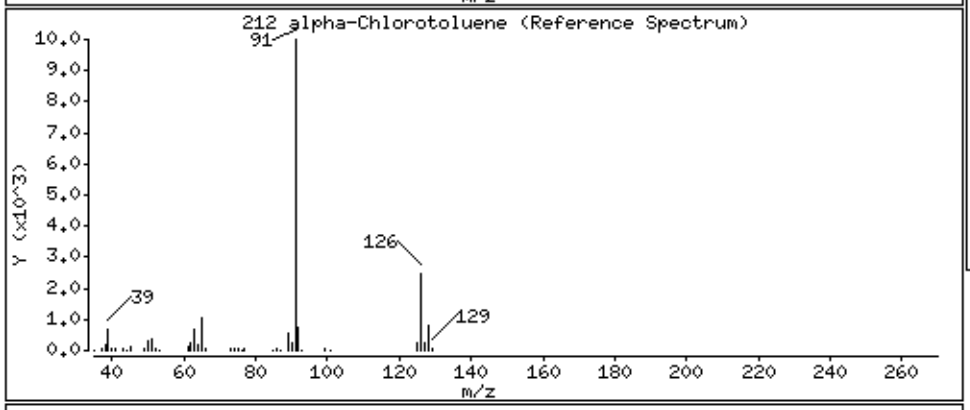
Concentration: 52.857 PPBV

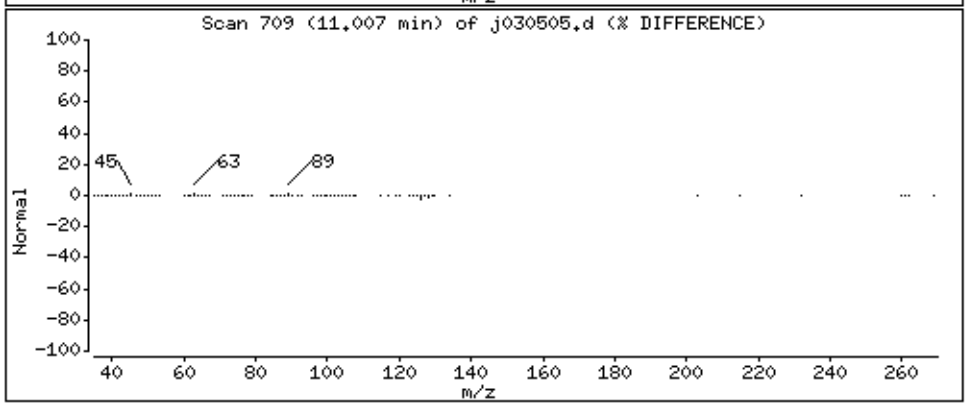












Data File: /chem/msdj.i/05mar15.b/j030505.d

Date : 05-MAR-2015 11:22

Client ID: LCSD

Instrument: msdj.i

Sample Info: 50ml #2716-98

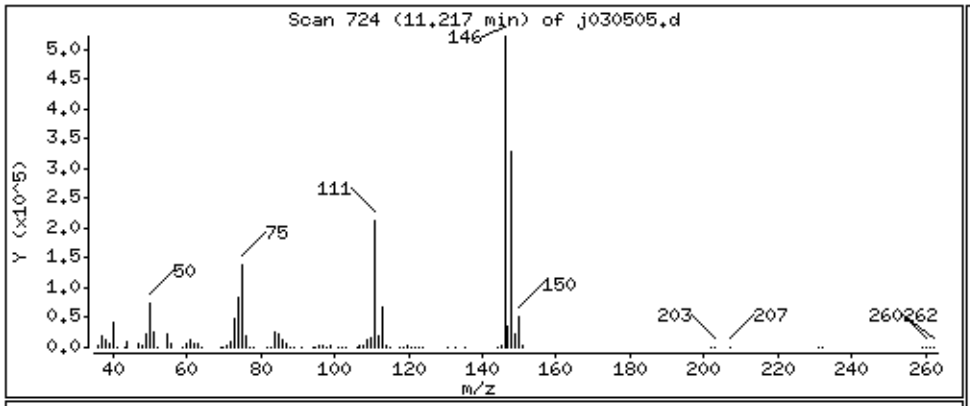
Operator: sg

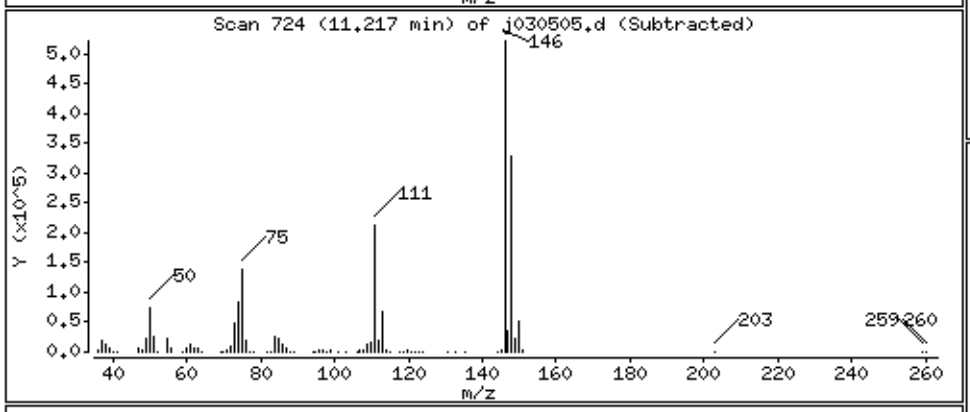
Column phase: RTX-624

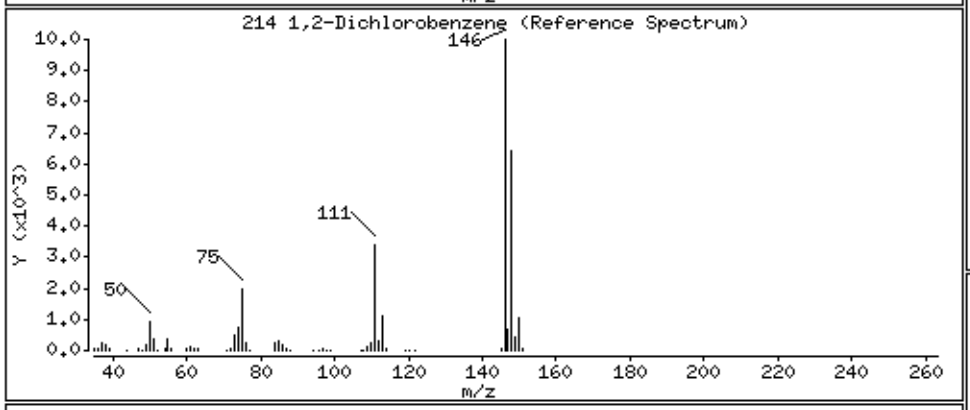
Column diameter: 0.25

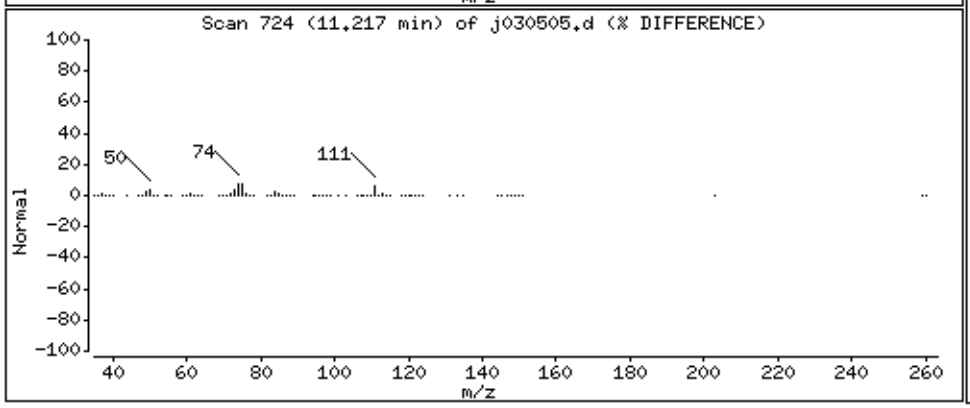
214 1,2-Dichlorobenzene

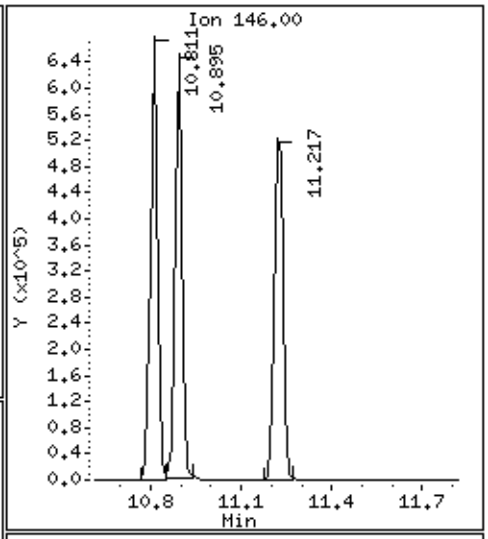
Concentration: 50.456 PPBV

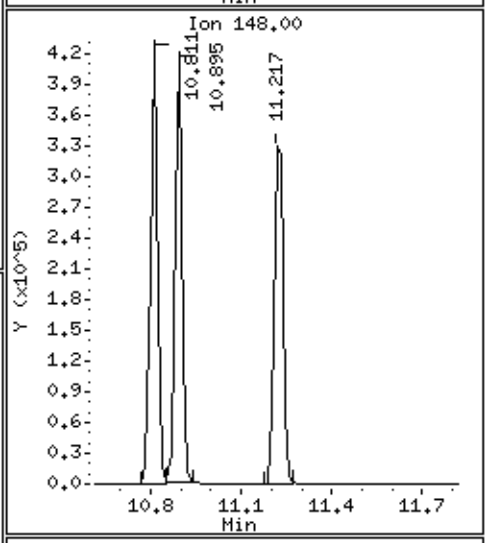


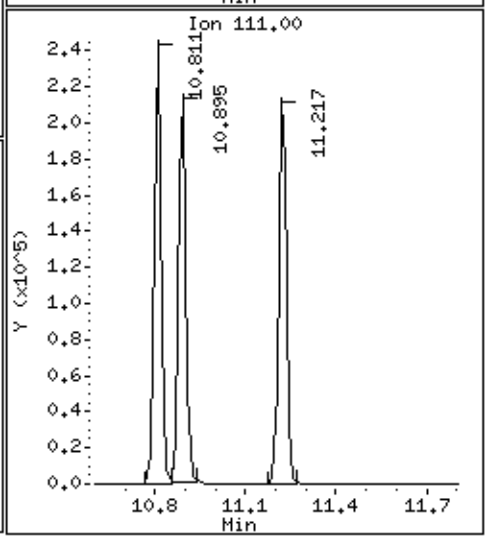












Data File: /chem/msdj.i/05mar15.b/j030505.d

Date : 05-MAR-2015 11:22

Client ID: LCSD

Instrument: msdj.i

Sample Info: 50ml #2716-98

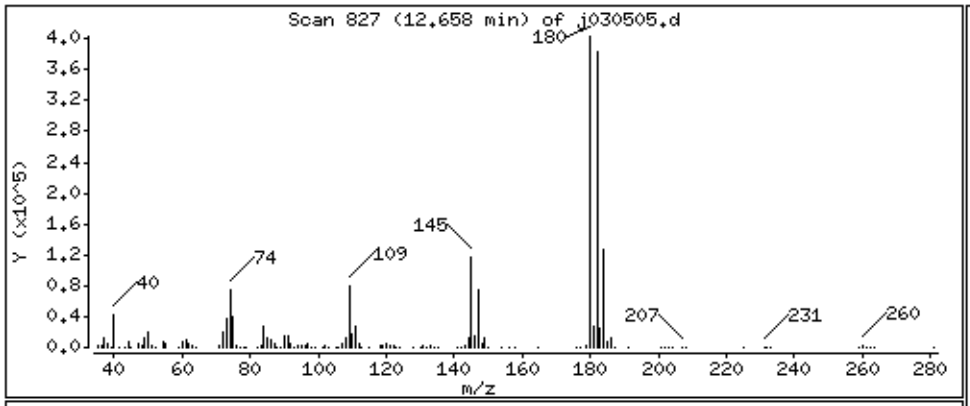
Operator: sg

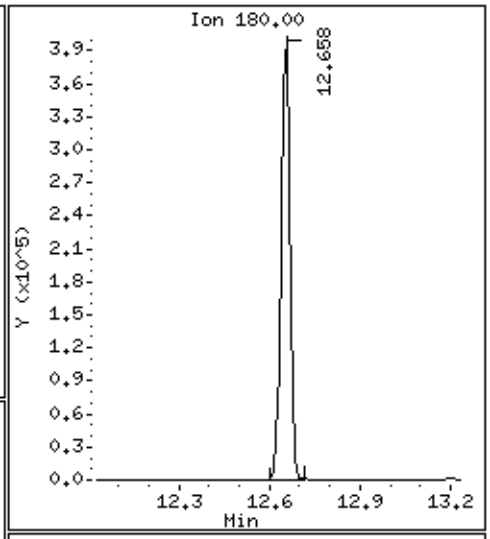
Column phase: RTX-624

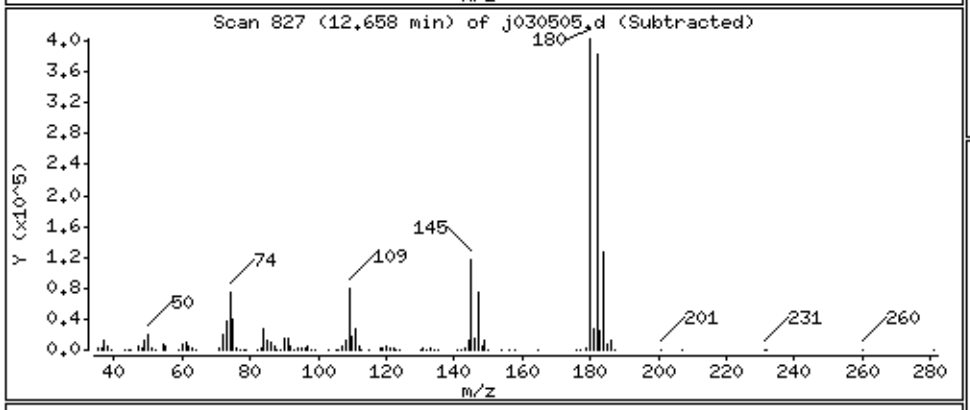
Column diameter: 0.25

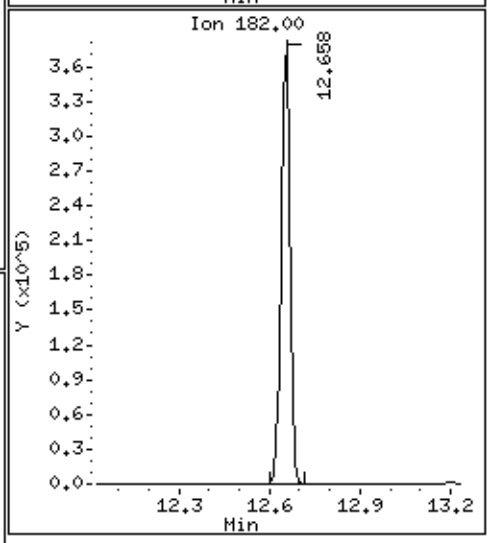
226 1,2,4-Trichlorobenzene

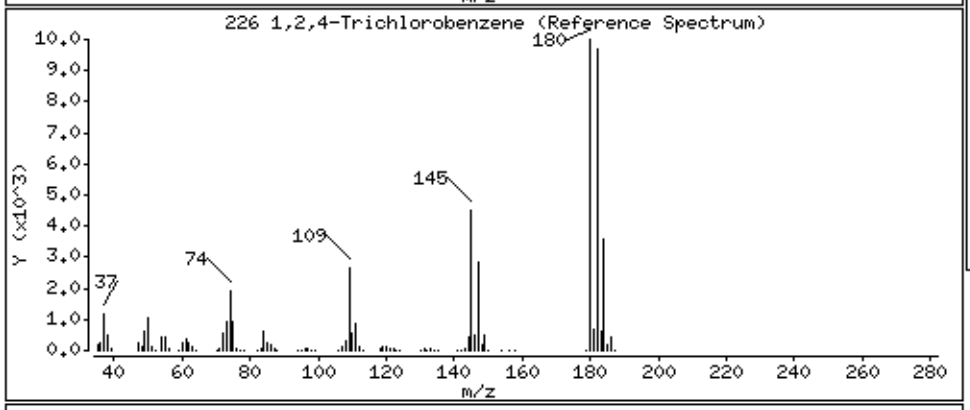
Concentration: 50.478 PPBV

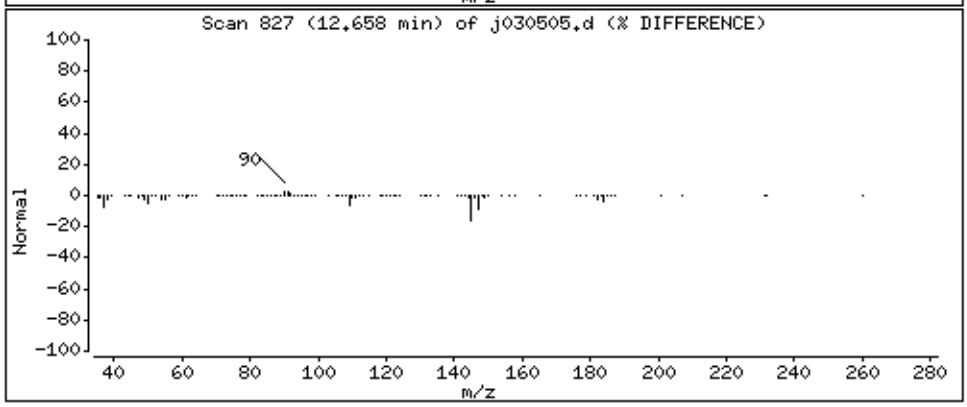












Data File: /chem/msdj.i/05mar15.b/j030505.d

Date : 05-MAR-2015 11:22

Client ID: LCSD

Instrument: msdj.i

Sample Info: 50ml #2716-98

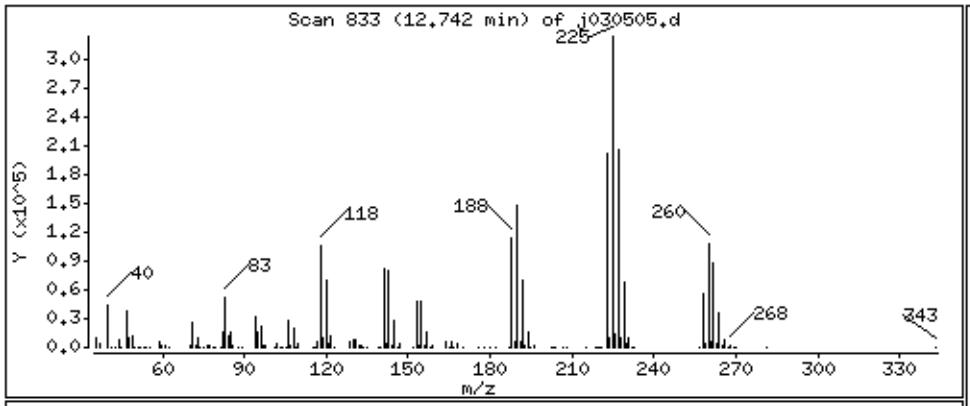
Operator: sg

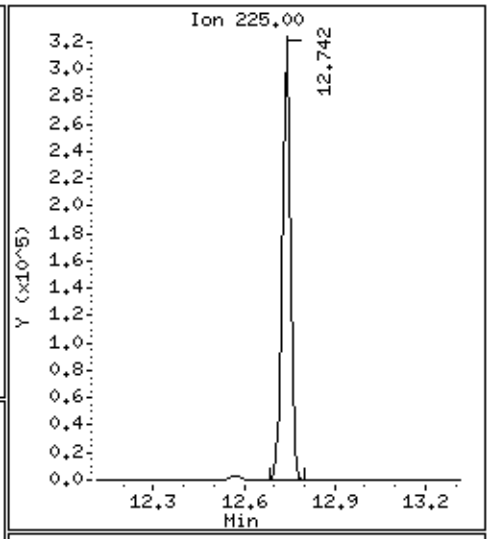
Column phase: RTX-624

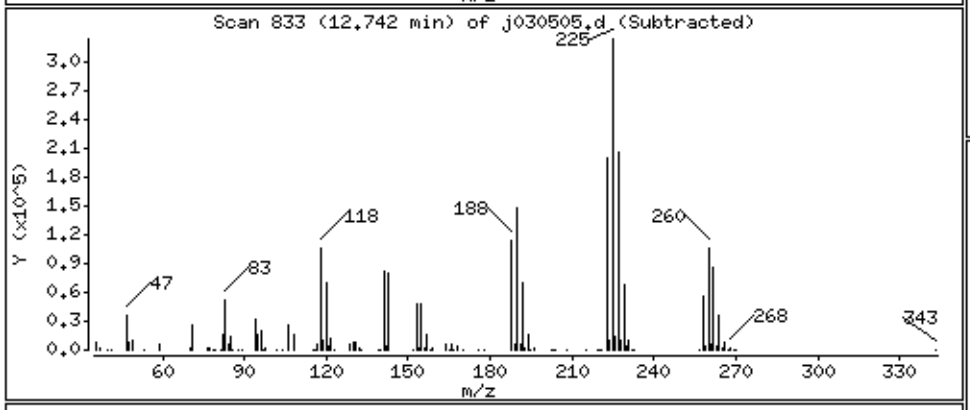
Column diameter: 0.25

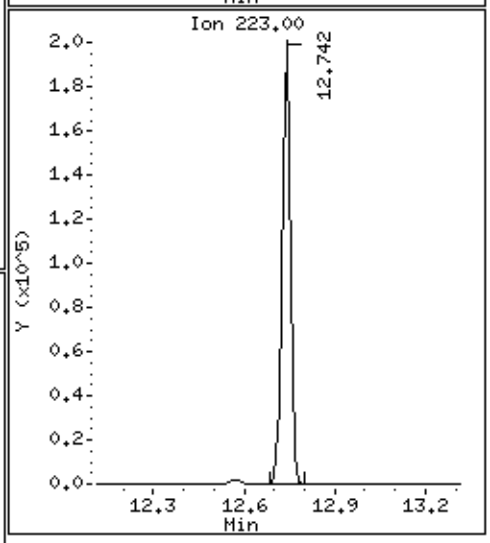
227 Hexachlorobutadiene

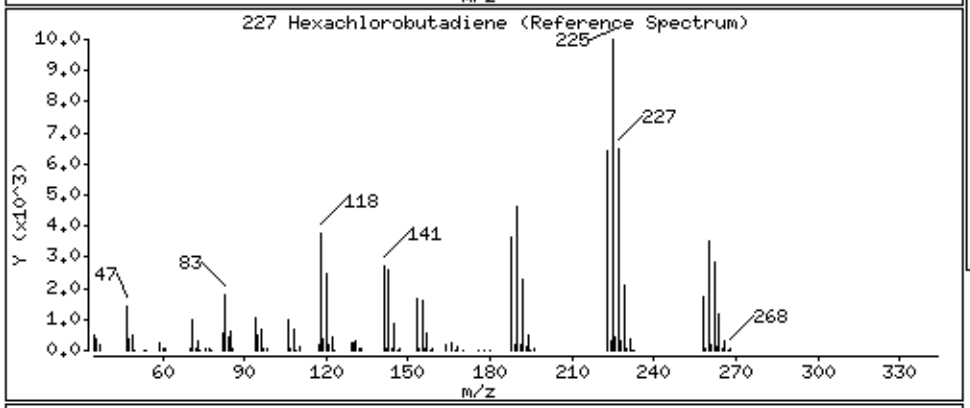
Concentration: 50.392 PPBV

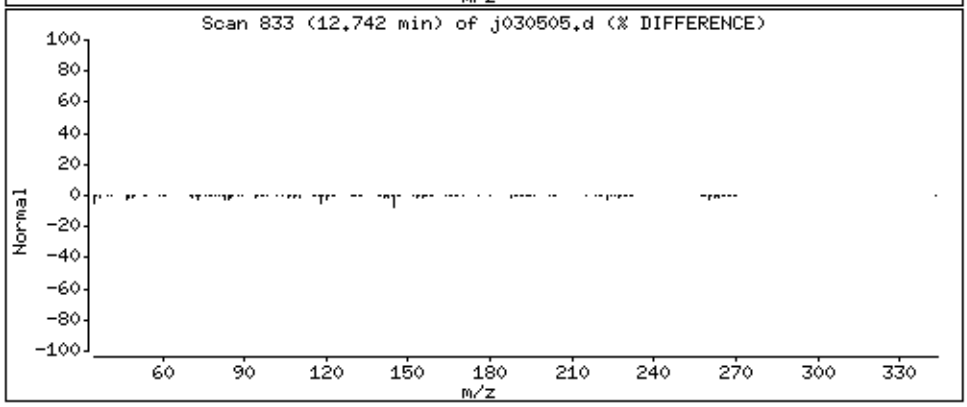












Data File: /chem/msdj.i/05mar15.b/j030505.d

Date : 05-MAR-2015 11:22

Client ID: LCSD

Instrument: msdj.i

Sample Info: 50ml #2716-98

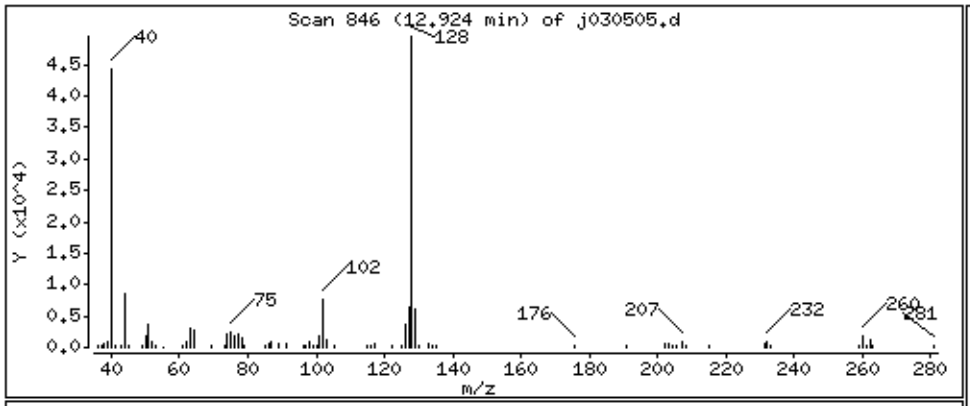
Operator: sg

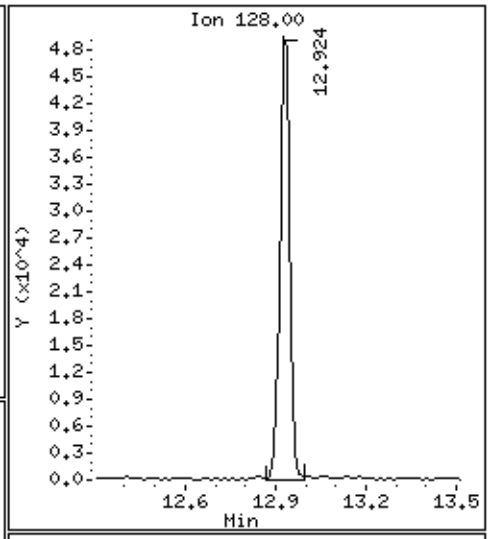
Column phase: RTX-624

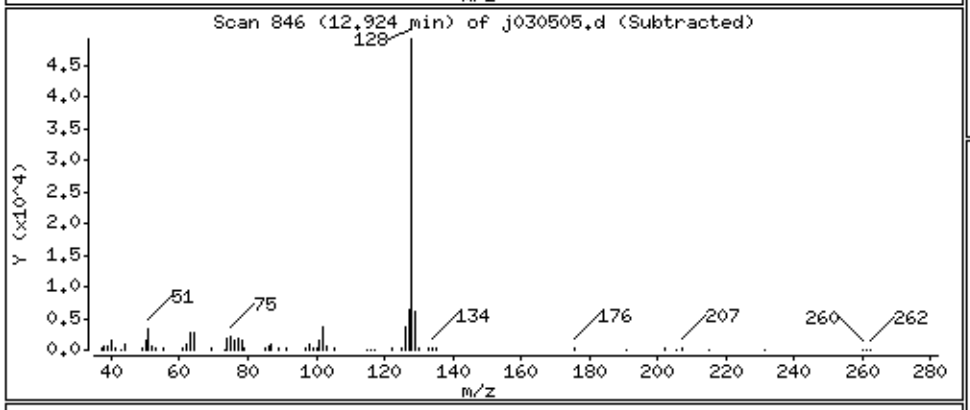
Column diameter: 0.25

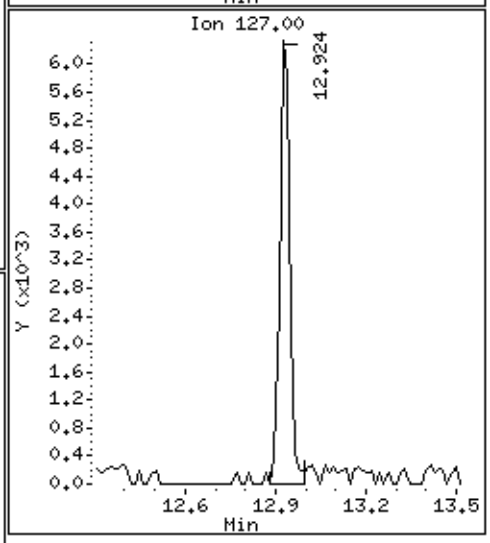
228 Naphthalene

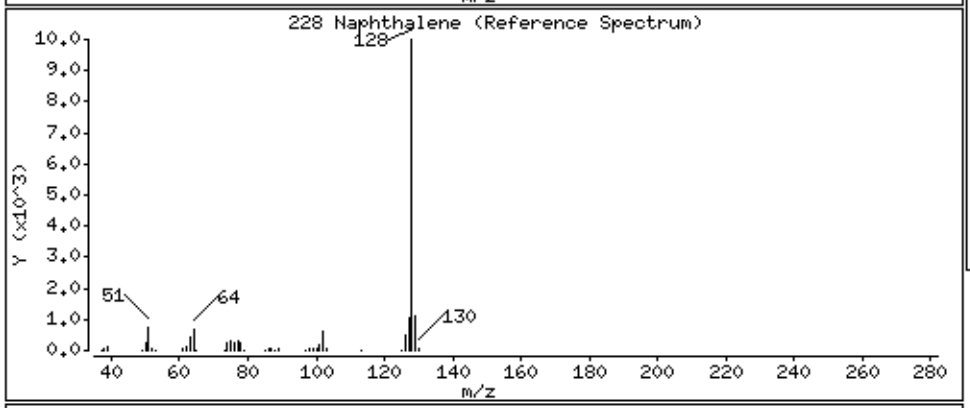
Concentration: 4.201 PPBV

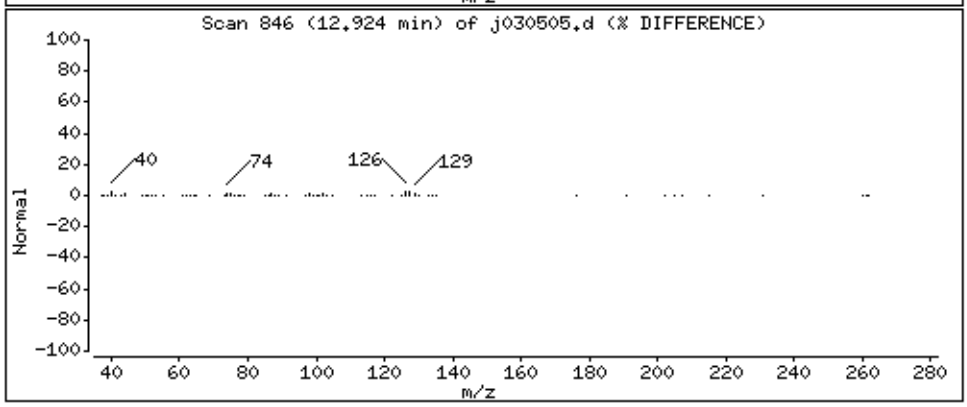












MSDJ

BFB Verification of 176/174 ratio: (135682/142037) * 100 = 95.53%			
IS/S Std.#:	2716-122	Exp. Date:	5/19/2015
BCM	140,692		
1,4-DFB	614,418		
CB-d5	577,173		

Method TO-15/TO-14			
SOP#	6	Load (mLs)	200
Vacuum:	1.32X 10-5		
Surrogate# 2716-122		Exp. Date:	5/19/2015
Surrogate# NA		Exp. Date:	NA

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

Method(*.m): J15q0304a.m

Use	File #	Enter/Scan Sample IDs	Canister#	Cart Pos.	Pressure	Amount	DF	Verify Load	Loaded Init	Date Analyzed	Time Analyzed	Review Init	Comments
√	J030501	BFB Tune Check	#2716-122	12	36ng	1.0ml	1.00	sg	sg	3/5/2015	0852	sg/cb	
√	J030502	CCV	2716-50	13	50ppbv	50ml	1.00	sg	sg	3/5/2015	0928	sg/cb	
X	J030503	LCS	2716-98	14	50ppbv	50ml	1.00	sg	sg	3/5/2015	1001	sg/--	Exp. 5/6/15 can not open
√	J030504	LCS	2716-98	14	50ppbv	50ml	1.00	sg	sg	3/5/2015	1028	sg/cb	Exp. 5/6/15, 2 out
√	J030505	LCSD	2716-98	14	50ppbv	50ml	1.00	sg	sg	3/5/2015	1122	sg/cb	
√	J030506	TPHg calib	2716-39B	11	500ppbv	160ml	1.00	sg	sg	3/5/2015	1222	sg/cb	
X	J030507	Lab Blank	34343	12	Humid	200ml	1.00	sg	sg	3/5/2015	1255	sg/--	> RL
√	J030508	Lab Blank	34343	12	Humid	200ml	1.00	sg	sg	3/5/2015	1348	sg/cb	
√	J030509	1503085-01A	1Lbag	1	0.2psi->14.6psi	30ml	13.10	md	sg	3/6/2015	1457	md/ea	transferred to canister due to failed leak check DILTC DF=13.1
√	J030510	1503049-01A	35638	2	5.3 Hg->15.1 psi	200ml	2.46	md	md	3/5/2015	1616	md/	
√	J030511	1503049-02A	37851	3	4.7 Hg->14.8 psi	200ml	2.38	md	md	3/5/2015	1648	md/	
√	J030512	1503049-03A	13899	4	4.9 Hg->15.4 psi	200ml	2.45	md	md	3/5/2015	1720	md/	
√	J030513	1503049-04A	37344	5	4.3 Hg->15.3 psi	200ml	2.38	md	md	3/5/2015	1753	md/	
√	J030514	1503067-01A	1L1712	6	5.5 Hg->14.9 psi	200ml	2.46	md	md	3/6/2015	1825	md/ea	
√	J030515	1503043-01A	n2173	7	3.5 Hg->15.5 psi	70ml	6.64	md	md	3/5/2015	1851	md/ea	1st Surrogate out ↑ due to matrix. DIL Matrix
√	J030516	1503043-02A	12807	8	3.5 Hg->14.8 psi	40ml	11.4	md	md	3/5/2015	1915	md/ea	DIL NTC
√	J030517	1503043-03A	14522	9	3.1 Hg->14.7 psi	40ml	11.2	md	md	3/5/2015	1939	md/ea	DIL NTC
√	J030518	1503043-03AA	14522	9	3.1 Hg->14.7 psi	40ml	11.2	md	md	3/5/2015	2012	md/ea	DIL NTC
√	J030519	1503045-01A	1L1736	1	0.2 psi->15.4 psi	200ml	2.02	md	md	3/5/2015	2203	md/cb	
√	J030520	1503045-02A	1L1709	2	5.3 Hg->15.6 psi	200ml	2.50	md	md	3/5/2015	2236	md/cb	
√	J030521	1503058B-06A	33398	3	3.1 Hg->14.9 psi	150ml	2.99	sg	md	3/6/2015	2312	sg/cb	Dil TC
√	J030522	1503058B-07A	12379	4	5.1 Hg->15 psi	100ml	4.87	sg	md	3/5/2015	2329	sg/cb	Dil TC
√	J030523	1503058B-05A	36415	5	4.3 Hg->14.9 psi	70ml	6.72	sg	md	3/6/2015	0005	sg/cb	Dil TC
√	J030524	1503037-01A	31759	6	8.4 Hg->14.7 psi	50ml	11.1	sg	md	3/6/2015	0030	sg/cb	Dil TC
X	J030525	1503065-01A	36428	7	4.3 Hg->15 psi	100ml	4.7	sg	md	3/6/2015	0058	sg/--	50X bag DF=54.7; overdiluted
X	J030526	1503049-04A	37344	8	4.3 Hg->15.3 psi	200ml	2.38	sg	md	3/6/2015	0810	cb	IS's out

3/6/15

Eurofins Air Toxics Inc.

Data file : /var/chem/msdj.i/04mar15.b/j030401.d
Lab Smp Id: BFB Client Smp ID: BFB
Inj Date : 04-MAR-2015 07:48
Operator : mjs Inst ID: msdj.i
Smp Info : 1.0ml #2716-122;BFB;BFB
Misc Info : 36ng
Comment :
Method : /chem/msdj.i/04mar15.b/bfb30.m
Meth Date : 02-Mar-2015 08:54 Quant Type: ESTD
Cal Date : Cal File:
Als bottle: 12 QC Sample: BFB
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.50 Sample Matrix: WATER
Processing Host: eeyore

Concentration Formula: Amt * DF * Uf * Vf * Vi * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	ng unit correction factor
Vf	1.00000	Volumetric correction factor
Vi	1.00000	Injection Volume

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	MASS	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/L)	TARGET RANGE	RATIO
1 bfb						CAS #: 460-00-4		
9.892	10.175	-0.283	95	142122			100.00- 100.00	100.00
9.892	10.175	-0.283	50	22370			8.00- 40.00	15.74
9.892	10.175	-0.283	75	62068			30.00- 66.00	43.67
9.892	10.175	-0.283	96	8867			5.00- 9.00	6.24
9.892	10.175	-0.283	173	1267			0.00- 1.99	0.92
9.892	10.175	-0.283	174	137376			50.00- 120.00	96.66
9.892	10.175	-0.283	175	9493			4.00- 9.00	6.91
9.892	10.175	-0.283	176	131170			93.00- 101.00	95.48
9.892	10.175	-0.283	177	8407			5.00- 9.00	6.41

Data File: /var/chem/msdj.i/04mar15.b/j030401.d

Date : 04-MAR-2015 07:48

Client ID: BFB

Instrument: msdj.i

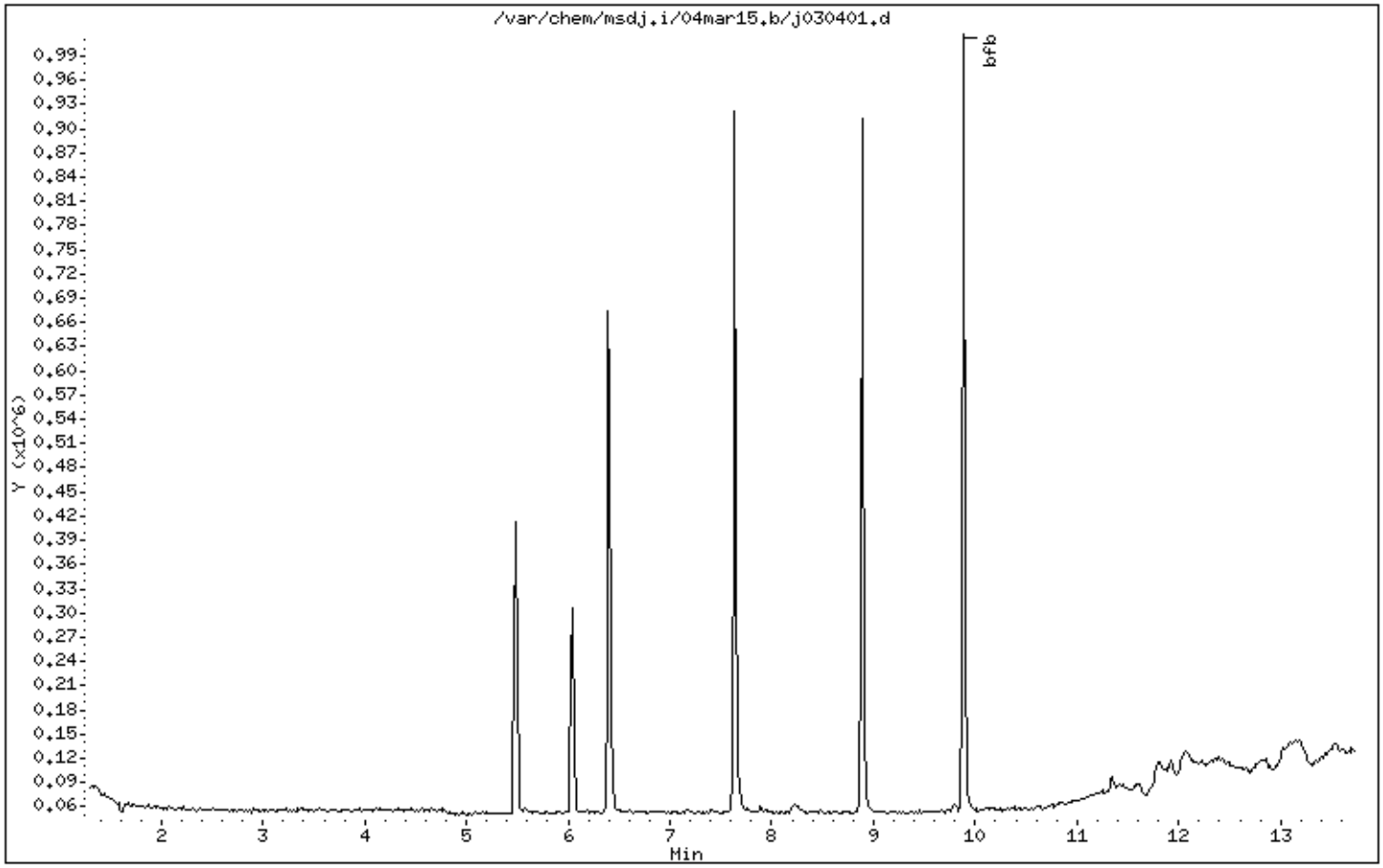
Sample Info: 1.0ml #2716-122;BFB;BFB

Volume Injected (uL): 1.0

Operator: mjs

Column phase:

Column diameter: 2.00



Data File: /var/chem/msdj.i/04mar15.b/j030401.d

Date : 04-MAR-2015 07:48

Client ID: BFB

Instrument: msdj.i

Sample Info: 1.0ml #2716-122;BFB;BFB

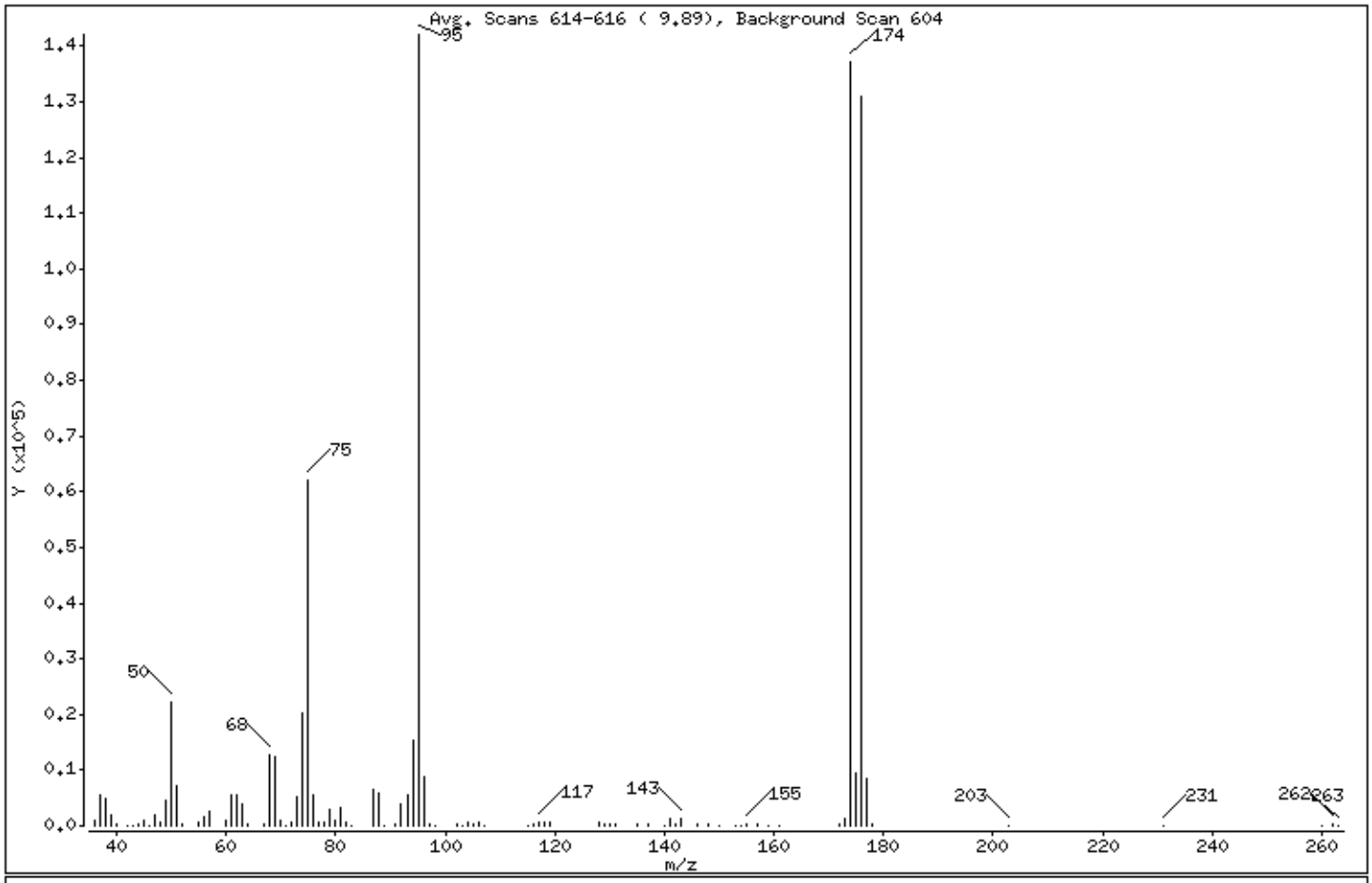
Volume Injected (uL): 1.0

Operator: mjs

Column phase:

Column diameter: 2.00

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	8.00 - 40.00% of mass 95	15.74
75	30.00 - 66.00% of mass 95	43.67
96	5.00 - 9.00% of mass 95	6.24
173	Less than 1.99% of mass 174	0.89 (0.92)
174	50.00 - 120.00% of mass 95	96.66
175	4.00 - 9.00% of mass 174	6.68 (6.91)
176	93.00 - 101.00% of mass 174	92.29 (95.48)
177	5.00 - 9.00% of mass 176	5.92 (6.41)

Data File: /var/chem/msdj.i/04mar15.b/j030401.d

Date : 04-MAR-2015 07:48

Client ID: BFB

Instrument: msdj.i

Sample Info: 1.0ml #2716-122;BFB;BFB

Volume Injected (uL): 1.0

Operator: mjs

Column phase:

Column diameter: 2.00

Data File: j030401.d
Spectrum: Avg. Scans 614-616 (9.89), Background Scan 604
Location of Maximum: 95.00
Number of points: 94

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	987	67.00	336	95.00	142080	143.00	1338
37.00	5427	68.00	12604	96.00	8867	146.00	213
38.00	4742	69.00	12501	97.00	203	148.00	442
39.00	1964	70.00	819	98.00	56	150.00	69
40.00	416	71.00	118	102.00	228	153.00	142
42.00	138	72.00	708	103.00	144	154.00	101
43.00	48	73.00	5254	104.00	650	155.00	324
44.00	427	74.00	20264	105.00	218	157.00	251
45.00	922	75.00	62064	106.00	630	159.00	62
46.00	144	76.00	5477	107.00	119	161.00	99
47.00	1887	77.00	758	115.00	97	172.00	206
48.00	744	78.00	578	116.00	423	173.00	1267
49.00	4551	79.00	2907	117.00	711	174.00	137344
50.00	22368	80.00	846	118.00	536	175.00	9493
51.00	7243	81.00	3243	119.00	696	176.00	131136
52.00	306	82.00	601	128.00	500	177.00	8407
55.00	570	83.00	66	129.00	208	178.00	224
56.00	1592	87.00	6567	130.00	462	203.00	68
57.00	2674	88.00	5932	131.00	177	231.00	54
60.00	1112	89.00	130	135.00	202	260.00	36
61.00	5432	91.00	429	137.00	249	262.00	197
62.00	5566	92.00	3768	140.00	55	263.00	53
63.00	3969	93.00	5516	141.00	1157		
64.00	352	94.00	15367	142.00	194		

Eurofins Air Toxics Inc.

Data file : /var/chem/msdj.i/05mar15.b/j030501.d
Lab Smp Id: BFB Client Smp ID: BFB
Inj Date : 05-MAR-2015 08:52
Operator : sg Inst ID: msdj.i
Smp Info : 1.0ml #2716-122;BFB;BFB
Misc Info : 36ng
Comment :
Method : /var/chem/msdj.i/05mar15.b/bfb30.m
Meth Date : 05-Mar-2015 09:15 Quant Type: ESTD
Cal Date : Cal File:
Als bottle: 12 QC Sample: BFB
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.50 Sample Matrix: WATER
Processing Host: eeyore

Concentration Formula: Amt * DF * Uf * Vf * Vi * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	ng unit correction factor
Vf	1.00000	Volumetric correction factor
Vi	1.00000	Injection Volume

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	MASS	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/L)	TARGET RANGE	RATIO
1 bfb						CAS #: 460-00-4		
9.892	10.175	-0.283	95	151893			100.00- 100.00	100.00
9.892	10.175	-0.283	50	23572			8.00- 40.00	15.52
9.892	10.175	-0.283	75	65550			30.00- 66.00	43.16
9.892	10.175	-0.283	96	9986			5.00- 9.00	6.57
9.892	10.175	-0.283	173	1244			0.00- 1.99	0.88
9.892	10.175	-0.283	174	142037			50.00- 120.00	93.51
9.892	10.175	-0.283	175	10312			4.00- 9.00	7.26
9.892	10.175	-0.283	176	135682			93.00- 101.00	95.53
9.892	10.175	-0.283	177	9409			5.00- 9.00	6.93

Data File: /var/chem/msdj.i/05mar15.b/j030501.d

Date : 05-MAR-2015 08:52

Client ID: BFB

Instrument: msdj.i

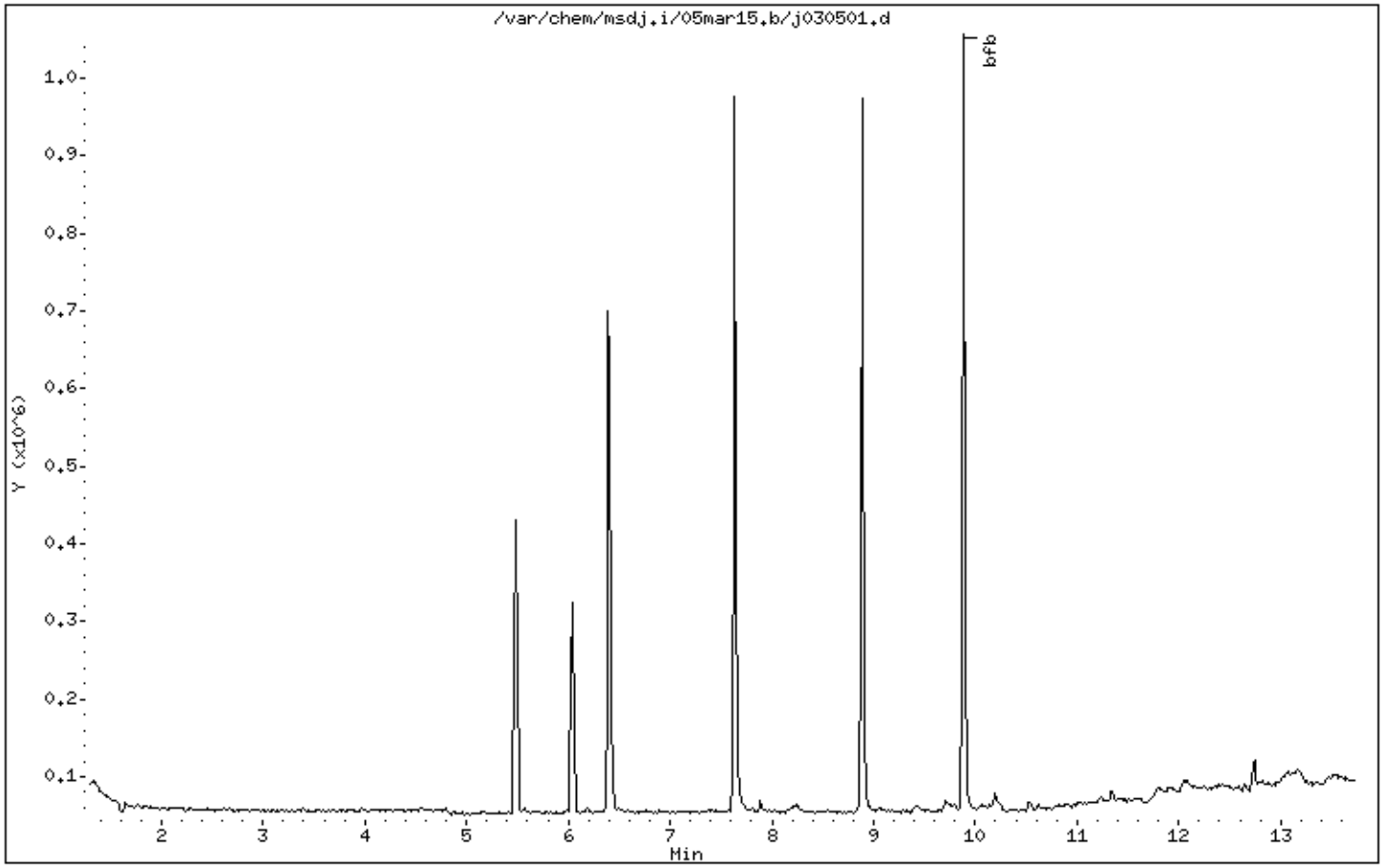
Sample Info: 1.0ml #2716-122;BFB;BFB

Volume Injected (uL): 1.0

Operator: sg

Column phase:

Column diameter: 2.00



Data File: /var/chem/msdj.i/05mar15.b/j030501.d

Date : 05-MAR-2015 08:52

Client ID: BFB

Instrument: msdj.i

Sample Info: 1.0ml #2716-122;BFB;BFB

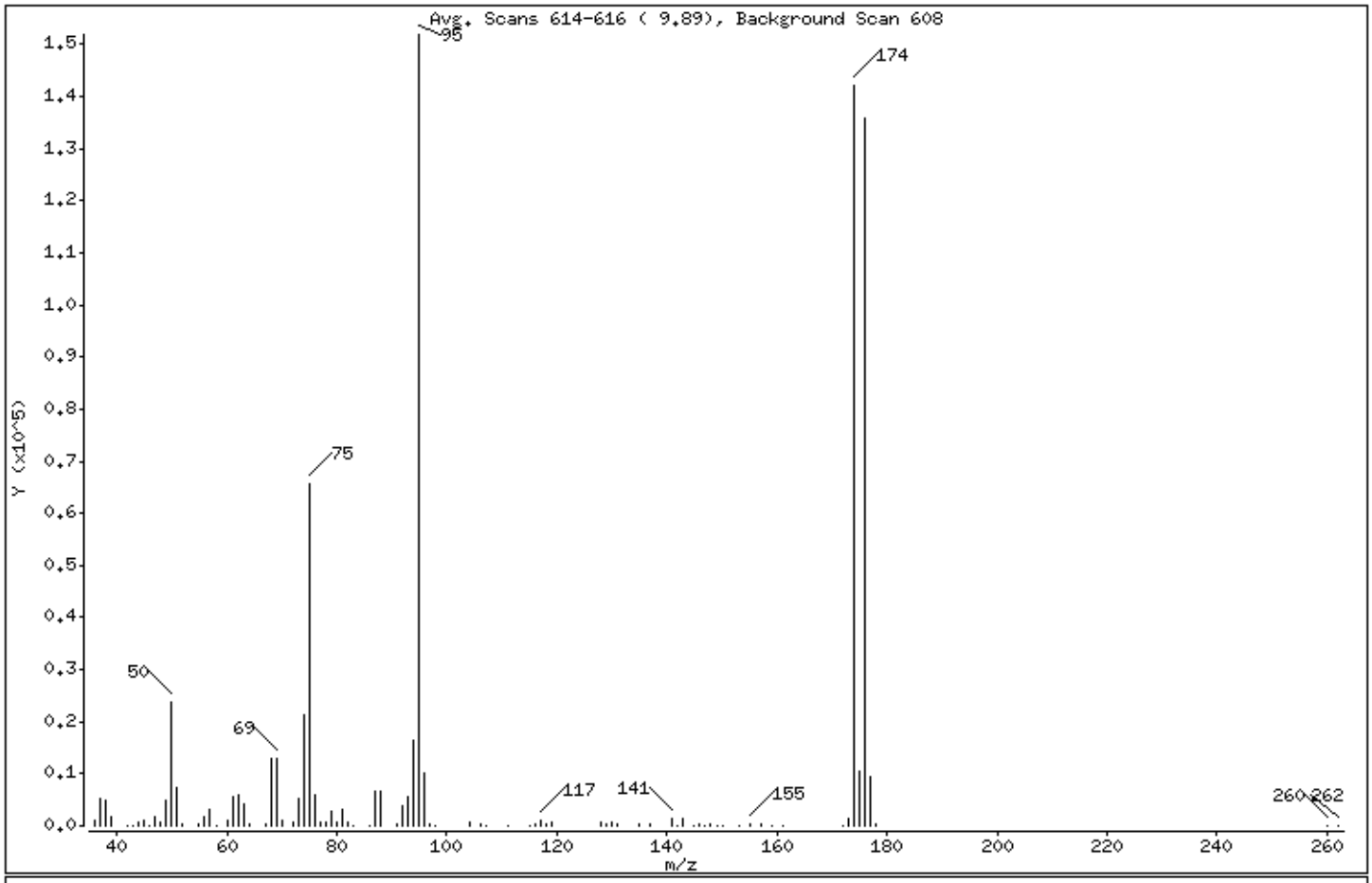
Volume Injected (uL): 1.0

Operator: sg

Column phase:

Column diameter: 2.00

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	8.00 - 40.00% of mass 95	15.52
75	30.00 - 66.00% of mass 95	43.16
96	5.00 - 9.00% of mass 95	6.57
173	Less than 1.99% of mass 174	0.82 (0.88)
174	50.00 - 120.00% of mass 95	93.51
175	4.00 - 9.00% of mass 174	6.79 (7.26)
176	93.00 - 101.00% of mass 174	89.33 (95.53)
177	5.00 - 9.00% of mass 176	6.19 (6.93)

Data File: /var/chem/msdj.i/05mar15.b/j030501.d

Date : 05-MAR-2015 08:52

Client ID: BFB

Instrument: msdj.i

Sample Info: 1.0ml #2716-122;BFB;BFB

Volume Injected (uL): 1.0

Operator: sg

Column phase:

Column diameter: 2.00

Data File: j030501.d
Spectrum: Avg. Scans 614-616 (9.89), Background Scan 608
Location of Maximum: 95.00
Number of points: 89

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	1132	64.00	288	94.00	16456	145.00	71
37.00	5247	67.00	360	95.00	151872	146.00	183
38.00	4807	68.00	12763	96.00	9986	147.00	121
39.00	1745	69.00	12897	97.00	191	148.00	339
42.00	168	70.00	1045	98.00	138	149.00	123
43.00	21	72.00	715	104.00	565	150.00	164
44.00	834	73.00	5248	106.00	244	153.00	50
45.00	1005	74.00	21440	107.00	82	155.00	447
46.00	59	75.00	65544	111.00	53	157.00	244
47.00	1701	76.00	5889	115.00	163	159.00	154
48.00	756	77.00	677	116.00	469	161.00	170
49.00	4988	78.00	538	117.00	895	172.00	137
50.00	23568	79.00	2939	118.00	500	173.00	1244
51.00	7220	80.00	872	119.00	825	174.00	142016
52.00	269	81.00	3183	128.00	573	175.00	10312
55.00	446	82.00	693	129.00	315	176.00	135680
56.00	1781	83.00	64	130.00	566	177.00	9409
57.00	3001	86.00	125	131.00	235	178.00	266
58.00	62	87.00	6531	135.00	219	260.00	140
60.00	1213	88.00	6492	137.00	190	262.00	125
61.00	5464	91.00	383	141.00	1436		
62.00	5774	92.00	3995	142.00	158		
63.00	4313	93.00	5435	143.00	1283		

Shipping/ Receiving Documents

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Eurofins Air Toxics, Inc. Sample Receipt Confirmation Cover Page

Thank you for choosing Eurofins Air Toxics, Inc. (EATL). We have received your samples and have listed any Sample Receipt Descrepancies below.

In order to expedite analysis and reporting, please review the attached information for accuracy.

For corrections call: **Brian Whittaker at 916-985-1000**

EATL will proceed with the analysis as specified on the Chain of Custody (COC) and Sample Receipt Summary page.

Please note : The Sample Receipt Confirmation, including the total workorder charge, is subject to change upon secondary review. Our aim is to provide a confirmation to you in a timely manner. Sample Receipt Discrepancies, if any, may not include discrepancies regarding sample receipt pressure(s). Additionally, the COC will be provided with the final report.

180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 95630

(916) 985-1000 .FAX (916) 985-1020
Hours 6:30 A.M to 5:30 P.M. PST

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) Terry Taylor
Company: AM AT Email:
Address: 2700 Westchester Ave City: Purchase State: NY Zip: 10577
Phone: 914-~~39~~251-0400 Fax:

Project Info:
P.O. #:
Project #:
Project Name:

Turn Around Time:
☐ Normal
☒ Rush 3day (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)
	B6-AA-2	34188	3/2/15	0938	see below	30"	0"		
	B6-1IA	94305	3/2/15	1205		30"	5"		
	B6-2IA	34011	3/2/15	1208		30"	6"		
	B6-2IADup	35132	3/2/15	1208		30"	6"		
06A	B6-1SS	36415	3/2/15	1635		30"	5"		
06A	B6-2SS	33398	3/2/15	1508		30"	4"		
07A	B6-2SSDup	12379	3/2/15	1508		30"	6"		
	B6-AA-3	35142	3/3/15	0945	Hold For Analysis	30"	5"		

Relinquished by: (signature)	Date/Time	Received by: (signature)	Date/Time
[signature]	3/3/15 1100	[signature] SKR	3/4/15 1200
Relinquished by: (signature)	Date/Time	Received by: (signature)	Date/Time
Relinquished by: (signature)	Date/Time	Received by: (signature)	Date/Time

Notes: Analyze for: Acetone, Benzene, Ethylbenzene, Isopropy Alcohol, Methanol, MIBK, Toluene, Xylene, and Methanol. Report to MDL

Lab Use Only	Shipper Name	Air Bill #	Temp (°C)	Condition	Custody Seals Intact?	Work Order #
	FedEx	7730323214 63	NA	Good	Yes No None	1503058

Form 1293 rev.11

eurofins | Air Toxics

SAMPLE RECEIPT SUMMARY

WORKORDER 1503058BR1

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: 06/30/15
Date Completed: 6/26/15
Date Received: 3/4/15
PO#:
Project#:

Total $: $ 150.00
Logged By: CC

Fraction	Sample #	Analysis	Collected	Receipt Vac./Pres.	Amount$
05A	B6-1SS	Modified TO-15	3/2/2015	4.3 "Hg	$0.00
06A	B6-2SS	Modified TO-15	3/2/2015	3.1 "Hg	$0.00
07A	B6-2SSDup	Modified TO-15	3/2/2015	5.1 "Hg	$0.00
08A	Lab Blank	Modified TO-15	NA	NA	$0.00
09A	CCV	Modified TO-15	NA	NA	$0.00
10A	LCS	Modified TO-15	NA	NA	$0.00
10AA	LCSD	Modified TO-15	NA	NA	$0.00

Misc. Charges	Reissue Charges (1) @ $135.00 each.	$135.00
	eCVP (3) @ $5.00 each.	$15.00

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

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	

Eurofins Air Toxics, Inc.	Data Review Checklist			Release Date: 12/30/14
Workorder # 1503058B	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:** SG/01 3/5/15	**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:

J-flag to MDL, QC ok

A1	A2	A3	A4	D	***Section 2* – Sample Analysis**				
					Initials/Date	**A1:** SG 3/6/15	**A2:**	**A3:**	**A4:**
✓				✓	Internal Standard/Surrogate Recoveries, Dilution Factors, Load Volumes, Initial/Final Pressures, and Canister #s Verified				
NA				NA	**a)** Tedlar Bag IDs verified against COC **b)** Tedlar Bag ID confirmed with loading sequence/leg 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: 05A-07A-ok, Dil TC ; 06A & 07A do not Dup

D1	D2	D3	D4	T	3T	***Section 3* – Target Data Reduction**	**Technical Review Needed? Circle one: Yes/No**		**T:**	
						Initials/Instrument/ Date	**D1:** MC 3/9/15	**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:
1. J flag to MDL
2. Dil TC (06A, 05A, 07A)

A	3T	***Section 4*- Atlas Data Entry**	**Lumen verified and included in folder**	**Circle one: Yes/No**
		Initials/Date: VB 3/9/15	**3rd Tier:** *(needed only for DOD or per client request)*	
NA		Sample Discrepancy Report (SDR) complete and approved *(if applicable)*		
NA		Manually entered results are checked		
✓		At least one result per sample is verified against Target quant sheets		
✓		Appropriate data qualifier flags are applied		
✓		Final Invoice is correct/ Final PDF report, COC and EDD reviewed and correct		

Special Notes:

Note (1) *Please check all the appropriate boxes. Indicate "NA" for any statement that doesn't apply*
Note (2) 3rd Tier Report Reviewer and Write Up Reviewer must be separate individuals for DoD & Client Specific Projects

Eurofins Air Toxics, Inc.	Reissued - Data Review Checklist			Release Date 01/29/14
	Form F 1.27	Revision #8	Revision date 01/29/14	Page 2 of 2

Workorder # :	Reason for Reissue: to report additional compounds per client's request.
1503058BR1	

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)
HRB 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