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Electronic Comprehensive Validation Package (eCVP)

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COMPREHENSIVE VALIDATION PACKAGE

Modified TO-15

INVENTORY SHEET

Work Order #: 1503058AR1

	Page Nos. From	Page Nos. To
1. Work Order Cover Page & Laboratory Narrative	1	5
a. Lumen Validation Report	--	--
2. Sample Results and Raw Data (Organized by Sample)	6	127
a. ATL Sample Results Form		
b. Target Compound Raw Data		
-Internal Standard Area and Retention Time Summary		
-Surrogate Recovery Summary (If Applicable)		
-Chromatogram(s) and Ion Profiles (If Applicable)		
3. QC Results and Raw Data		
a. Method Blank (Results+ Raw Data)	128	144
b. Surrogate Recover Summary Form (If Applicable)	145	145
c. Internal Standard Summary Form (If Applicable)	146	146
d. Duplicate Results Summary Sheet	147	148
e. Matrix Spike/Matrix Spike Duplicate (Results + Raw Data	--	--
f. Initial Calibration Data (Summary Sheet + Raw Data)	149	290
g. MDL Study (If Applicable)	291	304
h. Continuing Calibration Verification Data (Summary Sheet	305	320
i. Second Source LCS(Summary + Raw Data)	321	348
j. Extraction Logs	--	--
k. Instrument Run Logs/Software Verification	349	349
l. GC/MS Tune (Results + Raw Data)	350	364
4. Shipping/Receiving Documents		
a. Login Receipt Summary Sheet	365	366
b. Chain-of-Custody Records	367	367
c. Sample Log-In Sheet	368	368
d. Misc Shipping/Receiving Records (list of individual records)		
Sample Receipt Discrepancy Report	--	--
5. Other Records (describe or list)		
a. Manual Spectral Defense	--	--
b. Manual Integrations	--	--
c. Manual Calculations	--	--
d. Canister Dilution Factors	369	371
e. Laboratory Corrective Action Request	--	--
f. CAS Number Reference	372	373
g. Variance Table	--	--
h. Canister Certification	374	385
i. Data Review Check Sheet	386	387

Comments:

Completed by:

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

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WORK ORDER #: 1503058AR1

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
01A	B6-AA-2	Modified TO-15	0.8 "Hg	4.9 psi
02A	B6-1IA	Modified TO-15	4.3 "Hg	5 psi
03A	B6-2IA	Modified TO-15	4.9 "Hg	4.9 psi
04A	B6-2IADup	Modified TO-15	5.5 "Hg	4.9 psi
05A	Lab Blank	Modified TO-15	NA	NA
06A	CCV	Modified TO-15	NA	NA
07A	LCS	Modified TO-15	NA	NA
07AA	LCSD	Modified TO-15	NA	NA

CERTIFIED BY: Heidi Hayes

Technical Director

DATE: 06/26/15

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

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LABORATORY NARRATIVE
Modified TO-15
Anderson Mulholland & Associates, Inc.
Workorder# 1503058AR1

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

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

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

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

Receiving Notes

There were no receiving discrepancies.

Analytical Notes

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

The workorder was reissued on June 26, 2015 to report additional compounds per client's request. While the initial report met the laboratory data quality requirements for the originally requested compounds, the additional compounds were not evaluated for quality compliance at the time of sample analysis. The Laboratory Control Spike (LCS) analyzed on 03/06/2015 did not meet the laboratory control limits of 70-130% for 1,2-Dichloroethane. The LCS recovery is flagged.

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

2-Propanol exceeded the instrument's calibration range for samples B6-1IA, B6-2IA, and B6-2IADup and was flagged accordingly.

Due to the linear calibration range of the instrument, the reporting limit for Ethanol was raised from 0.50 ppbv to 1.0 ppbv.

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-AA-2	1503058AR1-01	3/ 2/2015	3/ 4/2015	NA	4	3/ 6/2015	NA	Good
B6-1IA	1503058AR1-02	3/ 2/2015	3/ 4/2015	NA	4	3/ 6/2015	NA	Good
B6-2IA	1503058AR1-03	3/ 2/2015	3/ 4/2015	NA	4	3/ 6/2015	NA	Good
B6-2IADup	1503058AR1-04	3/ 2/2015	3/ 4/2015	NA	4	3/ 6/2015	NA	Good
Lab Blank	1503058AR1-05	NA	NA	NA	NA	3/ 6/2015	NA	Good
CCV	1503058AR1-06	NA	NA	NA	NA	3/ 6/2015	NA	Good
LCS	1503058AR1-07	NA	NA	NA	NA	3/ 6/2015	NA	Good
LCSD	1503058AR1-07	NA	NA	NA	NA	3/ 6/2015	NA	Good

Sample Results and Raw Data

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

Client Sample ID: B6-AA-2

Lab ID#: 1503058AR1-01A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.14	0.44	0.68	2.2
Chloromethane	0.68	0.60 J	1.4	1.2 J
1,3-Butadiene	0.14	0.061 J	0.30	0.13 J
Freon 11	0.14	0.21	0.77	1.2
Ethanol	1.4	5.6	2.6	10
Freon 113	0.14	0.046 J	1.0	0.35 J
Acetone	0.68	1.8	1.6	4.4
Methylene Chloride	0.27	0.069 J	0.95	0.24 J
Hexane	0.14	0.061 J	0.48	0.21 J
2-Butanone (Methyl Ethyl Ketone)	0.68	0.38 J	2.0	1.1 J
Carbon Tetrachloride	0.14	0.071 J	0.86	0.44 J
Benzene	0.14	0.20	0.44	0.63
Heptane	0.14	0.054 J	0.56	0.22 J
4-Methyl-2-pentanone	0.14	0.023 J	0.56	0.096 J
Toluene	0.14	0.17	0.52	0.64
Ethyl Benzene	0.14	0.030 J	0.59	0.13 J
m,p-Xylene	0.14	0.029 J	0.59	0.12 J
1,2,4-Trimethylbenzene	0.14	0.015 J	0.67	0.073 J
1,2,4-Trichlorobenzene	0.68	0.056 J	5.1	0.42 J

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Client Sample ID: B6-AA-2

Lab ID#: 1503058AR1-01A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**e030608r1**	**Date of Collection:**	**3/2/15 9:38:00 AM**
Dil. Factor:	**1.37**	**Date of Analysis:**	**3/6/15 10:32 AM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.14	0.44	0.68	2.2
Freon 114	0.14	Not Detected	0.96	Not Detected
Chloromethane	0.68	0.60 J	1.4	1.2 J
Vinyl Chloride	0.14	Not Detected	0.35	Not Detected
1,3-Butadiene	0.14	0.061 J	0.30	0.13 J
Bromomethane	0.68	Not Detected	2.7	Not Detected
Chloroethane	0.68	Not Detected	1.8	Not Detected
Freon 11	0.14	0.21	0.77	1.2
Ethanol	1.4	5.6	2.6	10
Freon 113	0.14	0.046 J	1.0	0.35 J
1,1-Dichloroethene	0.14	Not Detected	0.54	Not Detected
Acetone	0.68	1.8	1.6	4.4
2-Propanol	0.68	Not Detected	1.7	Not Detected
Carbon Disulfide	0.68	Not Detected	2.1	Not Detected
3-Chloropropene	0.68	Not Detected	2.1	Not Detected
Methylene Chloride	0.27	0.069 J	0.95	0.24 J
Methyl tert-butyl ether	0.14	Not Detected	0.49	Not Detected
trans-1,2-Dichloroethene	0.14	Not Detected	0.54	Not Detected
Hexane	0.14	0.061 J	0.48	0.21 J
1,1-Dichloroethane	0.14	Not Detected	0.55	Not Detected
2-Butanone (Methyl Ethyl Ketone)	0.68	0.38 J	2.0	1.1 J
cis-1,2-Dichloroethene	0.14	Not Detected	0.54	Not Detected
Tetrahydrofuran	0.68	Not Detected	2.0	Not Detected
Chloroform	0.14	Not Detected	0.67	Not Detected
1,1,1-Trichloroethane	0.14	Not Detected	0.75	Not Detected
Cyclohexane	0.14	Not Detected	0.47	Not Detected
Carbon Tetrachloride	0.14	0.071 J	0.86	0.44 J
2,2,4-Trimethylpentane	0.68	Not Detected	3.2	Not Detected
Benzene	0.14	0.20	0.44	0.63
1,2-Dichloroethane	0.14	Not Detected	0.55	Not Detected
Heptane	0.14	0.054 J	0.56	0.22 J
Trichloroethene	0.14	Not Detected	0.74	Not Detected
1,2-Dichloropropane	0.14	Not Detected	0.63	Not Detected
1,4-Dioxane	0.14	Not Detected	0.49	Not Detected
Bromodichloromethane	0.14	Not Detected	0.92	Not Detected
cis-1,3-Dichloropropene	0.14	Not Detected	0.62	Not Detected
4-Methyl-2-pentanone	0.14	0.023 J	0.56	0.096 J
Toluene	0.14	0.17	0.52	0.64
trans-1,3-Dichloropropene	0.14	Not Detected	0.62	Not Detected
1,1,2-Trichloroethane	0.14	Not Detected	0.75	Not Detected
Tetrachloroethene	0.14	Not Detected	0.93	Not Detected
2-Hexanone	0.68	Not Detected	2.8	Not Detected

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Client Sample ID: B6-AA-2

Lab ID#: 1503058AR1-01A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**e030608r1**	**Date of Collection:**	**3/2/15 9:38:00 AM**
Dil. Factor:	**1.37**	**Date of Analysis:**	**3/6/15 10:32 AM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Dibromochloromethane	0.14	Not Detected	1.2	Not Detected
1,2-Dibromoethane (EDB)	0.14	Not Detected	1.0	Not Detected
Chlorobenzene	0.14	Not Detected	0.63	Not Detected
Ethyl Benzene	0.14	0.030 J	0.59	0.13 J
m,p-Xylene	0.14	0.029 J	0.59	0.12 J
o-Xylene	0.14	Not Detected	0.59	Not Detected
Styrene	0.14	Not Detected	0.58	Not Detected
Bromoform	0.14	Not Detected	1.4	Not Detected
Cumene	0.14	Not Detected	0.67	Not Detected
1,1,2,2-Tetrachloroethane	0.14	Not Detected	0.94	Not Detected
Propylbenzene	0.14	Not Detected	0.67	Not Detected
4-Ethyltoluene	0.14	Not Detected	0.67	Not Detected
1,3,5-Trimethylbenzene	0.14	Not Detected	0.67	Not Detected
1,2,4-Trimethylbenzene	0.14	0.015 J	0.67	0.073 J
1,3-Dichlorobenzene	0.14	Not Detected	0.82	Not Detected
1,4-Dichlorobenzene	0.14	Not Detected	0.82	Not Detected
alpha-Chlorotoluene	0.14	Not Detected	0.71	Not Detected
1,2-Dichlorobenzene	0.14	Not Detected	0.82	Not Detected
1,2,4-Trichlorobenzene	0.68	0.056 J	5.1	0.42 J
Hexachlorobutadiene	0.68	Not Detected	7.3	Not Detected
Naphthalene	0.68	Not Detected	3.6	Not Detected

J = Estimated value.

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

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	107	70-130
Toluene-d8	100	70-130
4-Bromofluorobenzene	88	70-130

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EPA TO-15/Modified TO14A

Data file : /chem/msde.i/06Mar2015.b/e030608r1.d
Lab Smp Id: 1503058Ar1-01A
Inj Date : 06-MAR-2015 10:32
Operator : sab Inst ID: msde.i
Smp Info : 250mL #34188
Misc Info : 0.8"Hg-4.9psi
Comment : Low-Level/GC-MS
Method : /chem/msde.i/06Mar2015.b/e15l0210b.m
Meth Date : 26-Jun-2015 12:46 dbailey Quant Type: ISTD
Cal Date : 02-MAR-2015 15:11 Cal File: e030209.d
Als bottle: 1
Dil Factor: 1.37000
Integrator: HP RTE Compound Sublist: T015Nmdl.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Name	Value	Description
DF	1.37000	Dilution Factor

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
* 46 Bromochloromethane						CAS #: 74-97-5	
15.610	15.610 (1.000)	130	233222	5.00000		80.00- 120.00	100.00
15.610	15.610 (1.000)	128	181387			0.00- 30.00	77.77
15.610	15.610 (1.000)	49	266070			0.00- 30.00	114.08
* 58 1,4-Difluorobenzene						CAS #: 540-36-3	
16.987	16.987 (1.000)	114	866832	5.00000		80.00- 120.00	100.00
16.987	16.987 (1.000)	88	122920			0.00- 30.00	14.18
* 75 Chlorobenzene-d5						CAS #: 3114-55-4	
22.407	22.407 (1.000)	117	826970	5.00000		80.00- 120.00	100.00
22.407	22.407 (1.000)	82	378352			0.00- 30.00	45.75
$ 54 1,2-Dichloroethane-d4						CAS #: 17060-07-0	
16.433	16.433 (1.053)	65	264313	5.37224	5.372	80.00- 120.00	100.00
16.433	16.433 (1.053)	67	134383			25.66- 85.66	50.84

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
$ 67 Toluene-d8					CAS #: 2037-26-5		
19.624	19.623 (1.155)	98	820238	4.99964	5.000	80.00- 120.00	100.00
19.624	19.623 (1.155)	70	83570			0.00- 39.92	10.19
19.624	19.623 (1.155)	100	542794			36.14- 96.14	66.18
$ 87 Bromofluorobenzene					CAS #: 460-00-4		
24.065	24.042 (1.074)	174	422159	4.41310	4.413	80.00- 120.00	100.00
24.042	24.042 (1.073)	95	499163			81.46- 141.46	118.24
24.065	24.042 (1.074)	176	415316			67.17- 127.17	98.38
4 Dichlorodifluoromethane/Fr12					CAS #: 75-71-8		
5.455	5.503 (0.349)	85	40799	0.32309	0.4426	80.00- 120.00	100.00
5.479	5.503 (0.351)	87	13270			3.28- 63.28	32.52
7 Chloromethane					CAS #: 74-87-3		
7.191	7.191 (0.461)	50	21312	0.43989	0.6026	80.00- 120.00	100.00(a)
7.191	7.191 (0.461)	52	7387			3.09- 63.09	34.66
11 1,3-Butadiene					CAS #: 106-99-0		
8.271	8.271 (0.530)	54	1945	0.04450	0.06096	80.00- 120.00	100.00(a)
8.271	8.271 (0.530)	39	3370			61.78- 121.78	173.23
16 Trichlorofluoromethane/Fr11					CAS #: 75-69-4		
10.976	10.976 (0.703)	101	19999	0.15119	0.2071	80.00- 120.00	100.00
10.957	10.976 (0.702)	103	13198			35.41- 95.41	65.99
18 Ethanol					CAS #: 64-17-5		
11.890	11.890 (0.762)	45	88238	4.10276	5.621	80.00- 120.00	100.00
11.890	11.890 (0.762)	46	34149			7.33- 67.33	38.70
11.890	11.890 (0.762)	43	21500			0.00- 51.69	24.37
19 Freon 113					CAS #: 76-13-1		
12.290	12.290 (0.787)	151	4087	0.03369	0.04616	80.00- 120.00	100.00(a)
12.290	12.290 (0.787)	153	2951			34.79- 94.79	72.21
12.309	12.290 (0.788)	101	5581			79.87- 139.87	136.54
22 Acetone					CAS #: 67-64-1		
12.575	12.575 (0.806)	58	44566	1.34740	1.846	80.00- 120.00	100.00
12.575	12.575 (0.806)	43	135241			255.02- 315.02	303.46
29 Methylene Chloride					CAS #: 75-09-2		
13.375	13.375 (0.857)	84	2518	0.05027	0.06887	80.00- 120.00	100.00(a)
13.375	13.375 (0.857)	49	3347			98.36- 158.36	132.96
13.375	13.375 (0.857)	51	1089			9.23- 69.23	43.26
35 Hexane					CAS #: 110-54-3		
14.030	14.030 (0.899)	57	4200	0.04423	0.06060	80.00- 120.00	100.00(a)

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
35 Hexane (continued)							
14.030	14.030 (0.899)	43	3439			32.32- 92.32	81.89
0.000	14.030 (0.000)	86	0			0.00- 46.22	0.00
42 2-Butanone					CAS #: 78-93-3		
15.278	15.259 (0.979)	72	7896	0.28069	0.3846	80.00- 120.00	100.00(a)
15.259	15.259 (0.977)	43	40788			374.35- 434.35	516.51
15.259	15.259 (0.977)	57	3118			4.18- 64.18	39.48
51 Carbon Tetrachloride					CAS #: 56-23-5		
16.104	16.104 (1.032)	119	5579	0.05162	0.07072	80.00- 120.00	100.00(a)
16.104	16.104 (1.032)	117	6852			73.51- 133.51	122.80
53 Benzene					CAS #: 71-43-2		
16.433	16.433 (0.967)	78	24405	0.14489	0.1985	80.00- 120.00	100.00
16.433	16.433 (0.967)	77	6400			0.00- 53.40	26.23
57 Heptane					CAS #: 142-82-5		
16.602	16.578 (0.977)	57	2190	0.03947	0.05407	80.00- 120.00	100.00(a)
16.433	16.578 (0.967)	100	1287			12.62- 72.62	58.78
16.578	16.578 (0.976)	43	5447			155.09- 215.09	248.68
65 4-Methyl-2-pentanone					CAS #: 108-10-1		
19.332	19.310 (1.138)	43	2301	0.01713	0.02347	80.00- 120.00	100.00(a)
19.624	19.310 (1.155)	58	6394			10.53- 70.53	277.82
19.668	19.310 (1.158)	85	1887			0.00- 48.12	82.02
68 Toluene					CAS #: 108-88-3		
19.780	19.758 (1.164)	91	25676	0.12341	0.1691	80.00- 120.00	100.00
19.780	19.758 (1.164)	92	13804			28.42- 88.42	53.76
77 Ethyl Benzene					CAS #: 100-41-4		
22.511	22.511 (1.005)	106	2068	0.02225	0.03048	80.00- 120.00	100.00(a)
22.511	22.511 (1.005)	91	6589			268.64- 328.64	318.52
80 m,p-Xylene					CAS #: 108-38-3		
22.697	22.697 (1.013)	106	2391	0.02106	0.02886	80.00- 120.00	100.00(a)
22.697	22.697 (1.013)	91	6591			156.41- 216.41	275.58
98 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
24.962	24.962 (1.114)	105	2554	0.01091	0.01495	80.00- 120.00	100.00(a)
24.939	24.962 (1.113)	120	1109			19.10- 79.10	43.44
112 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
27.629	27.629 (1.233)	180	5053	0.04120	0.05644	80.00- 120.00	100.00(a)
27.629	27.629 (1.233)	182	4609			66.76- 126.76	91.22

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: msde.i
Lab File ID: e030608r1.d
Lab Smp Id: 1503058Ar1-01A
Analysis Type: VOA
Quant Type: ISTD
Operator: sab
Method File: /chem/msde.i/06Mar2015.b/e15l0210b.m
Misc Info: 0.8"Hg-4.9psi

Calibration Date: 06-MAR-2015
Calibration Time: 05:31

Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
46 Bromochloromethan	236898	142139	331657	233222	-1.55
58 1,4-Difluorobenze	878027	526816	1229238	866832	-1.28
75 Chlorobenzene-d5	818204	490922	1145486	826970	1.07

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
46 Bromochloromethan	15.61	15.28	15.94	15.61	0.00
58 1,4-Difluorobenze	16.99	16.66	17.32	16.99	0.00
75 Chlorobenzene-d5	22.41	22.08	22.74	22.41	0.00

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

Report Date: 26-Jun-2015 12:52

Eurofins Air Toxics Inc.

RECOVERY REPORT

Client Name: Client SDG: 06Mar2015
Sample Matrix: GAS Fraction: VOA
Lab Smp Id: 1503058Ar1-01A
Level: LOW Operator: sab
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: AT09.spk Quant Type: ISTD
Sublist File: T015Nmdl.sub
Method File: /chem/msde.i/06Mar2015.b/e15l0210b.m
Misc Info: 0.8"Hg-4.9psi

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 54 1,2-Dichloroethane	5.000	5.372	107.44	70-130
$ 67 Toluene-d8	5.000	5.000	99.99	70-130
$ 87 Bromofluorobenzene	5.000	4.413	88.26	70-130

Data File: /chem/msde.i/06Mar2015.b/e030608r1.d

Date : 06-MAR-2015 10:32

Client ID:

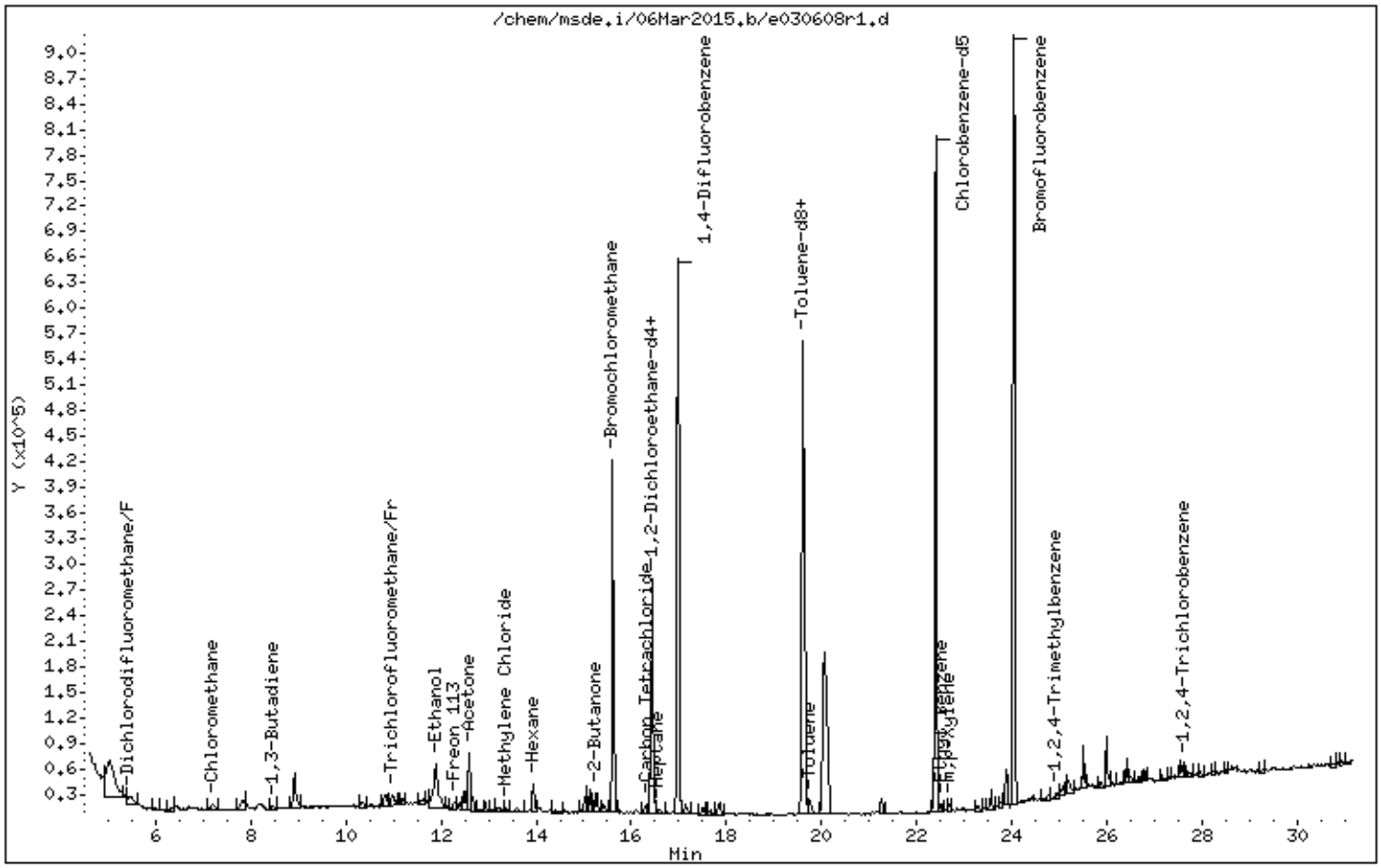
Instrument: msde.i

Sample Info: 250mL #34188

Operator: sab

Column phase: RTx-624

Column diameter: 0.32



Data File: /chem/msde.i/06Mar2015.b/e030608r1.d

Date : 06-MAR-2015 10:32

Client ID:

Instrument: msde.i

Sample Info: 250mL #34188

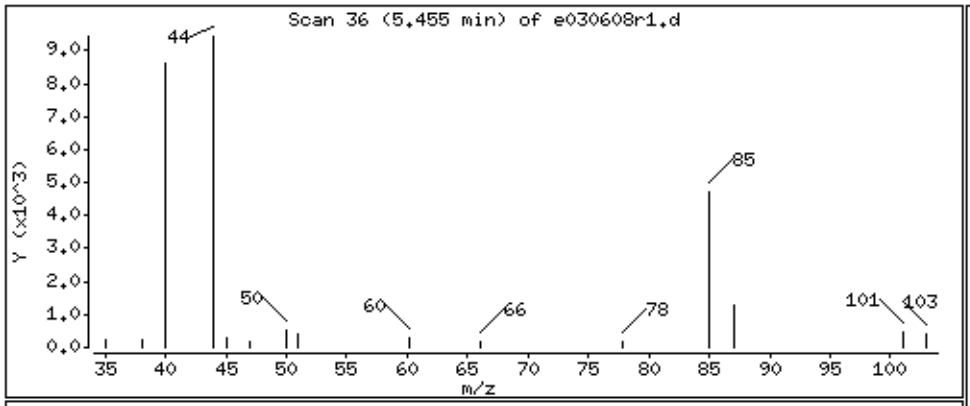
Operator: sab

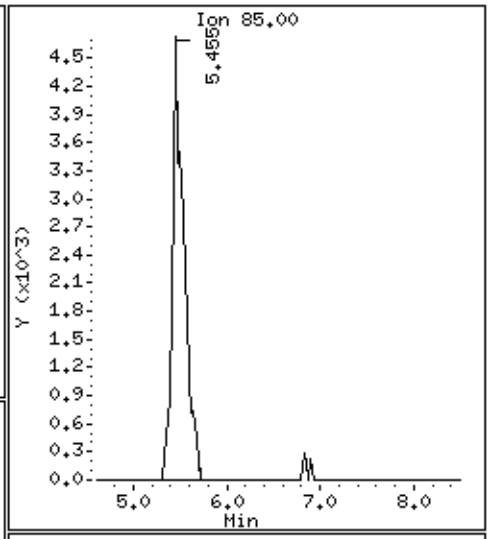
Column phase: RTx-624

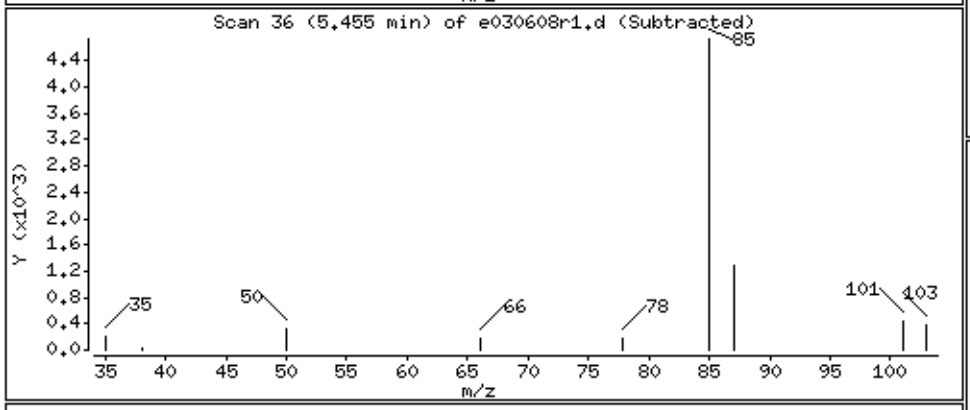
Column diameter: 0.32

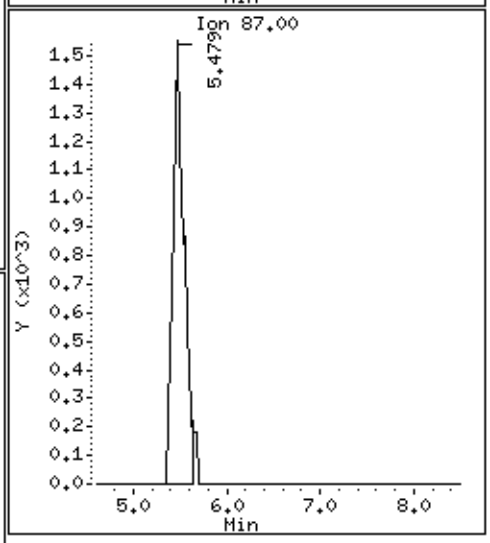
4 Dichlorodifluoromethane/Fr12

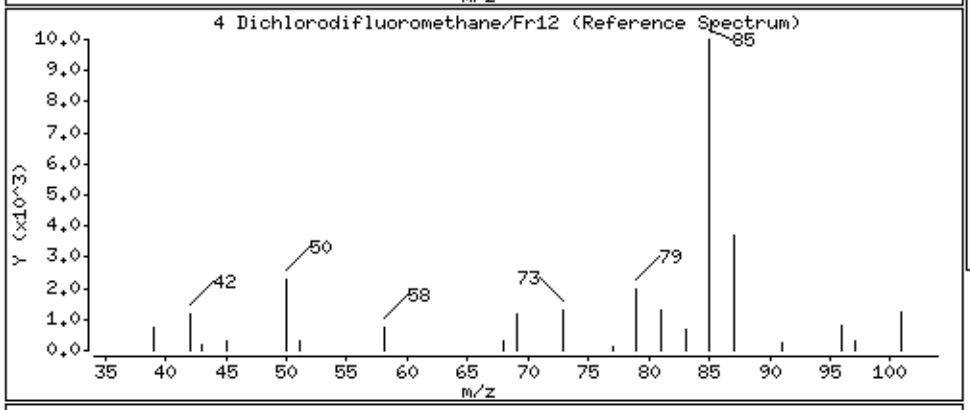
Concentration: 0.4426 PPBV

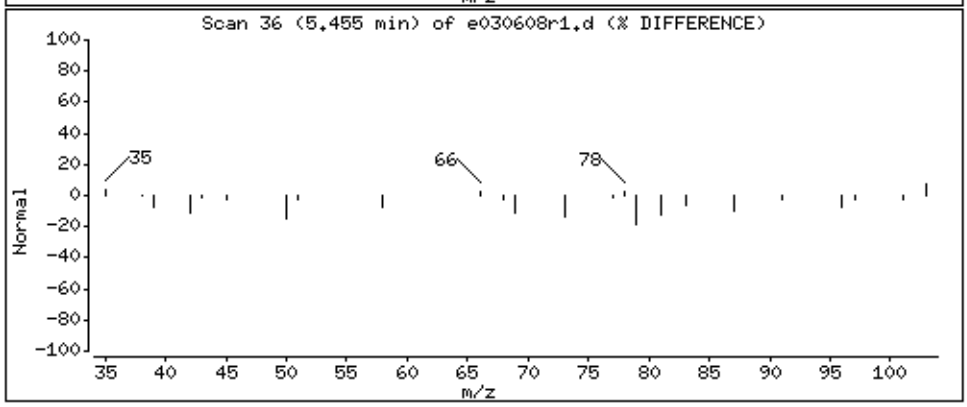












Data File: /chem/msde.i/06Mar2015.b/e030608r1.d

Date : 06-MAR-2015 10:32

Client ID:

Instrument: msde.i

Sample Info: 250mL #34188

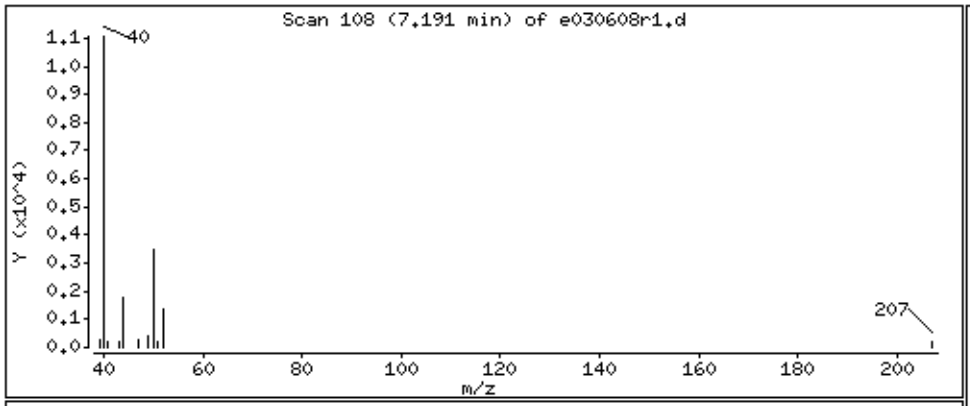
Operator: sab

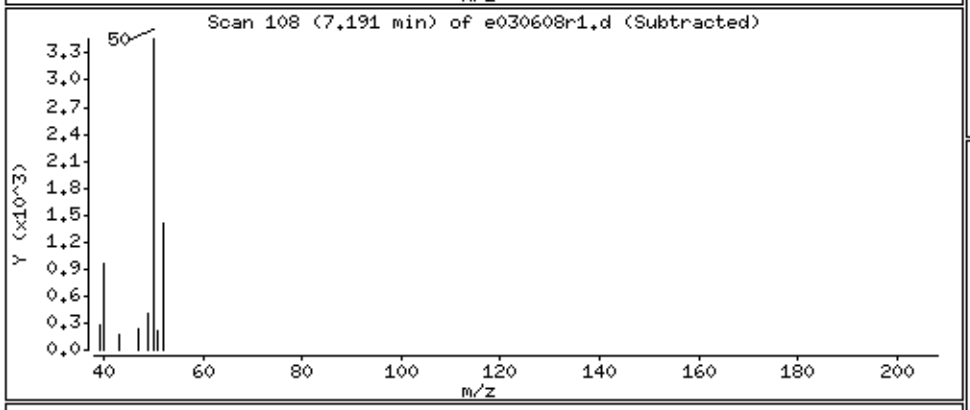
Column phase: RTx-624

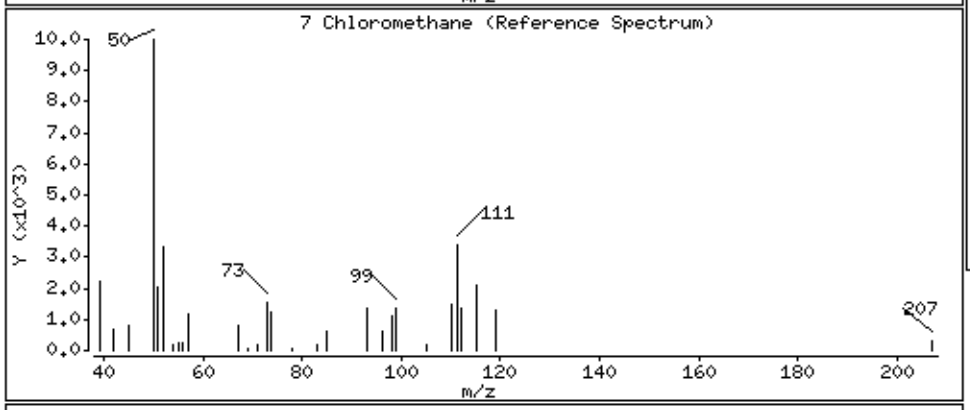
Column diameter: 0.32

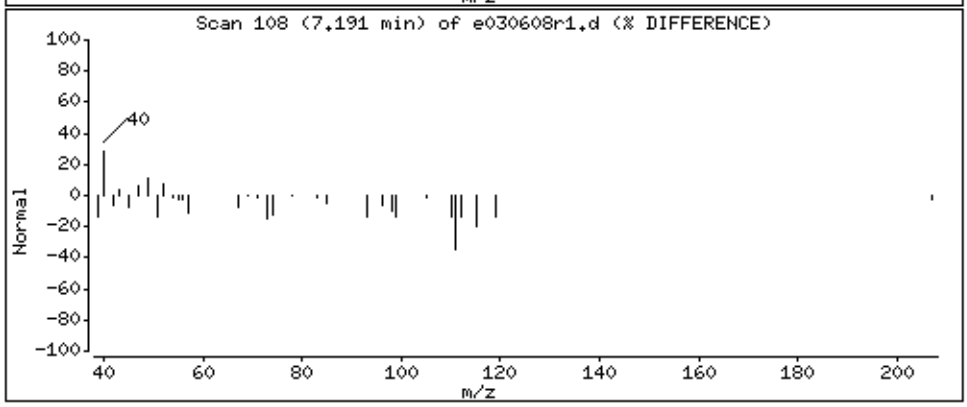
7 Chloromethane

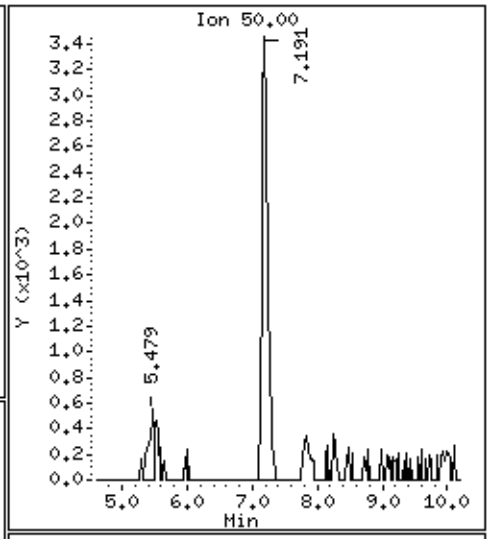
Concentration: 0.6026 PPBV

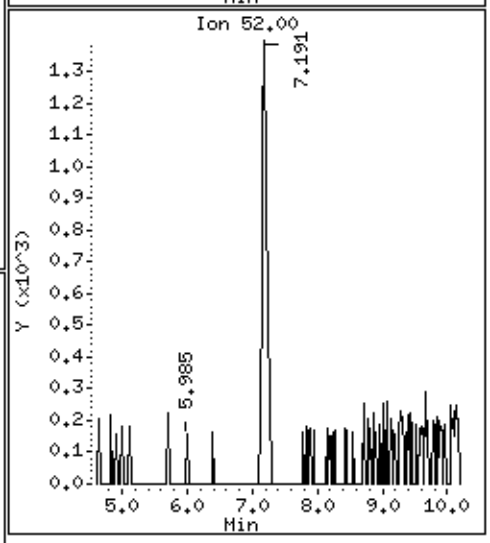












Data File: /chem/msde.i/06Mar2015.b/e030608r1.d

Date : 06-MAR-2015 10:32

Client ID:

Instrument: msde.i

Sample Info: 250mL #34188

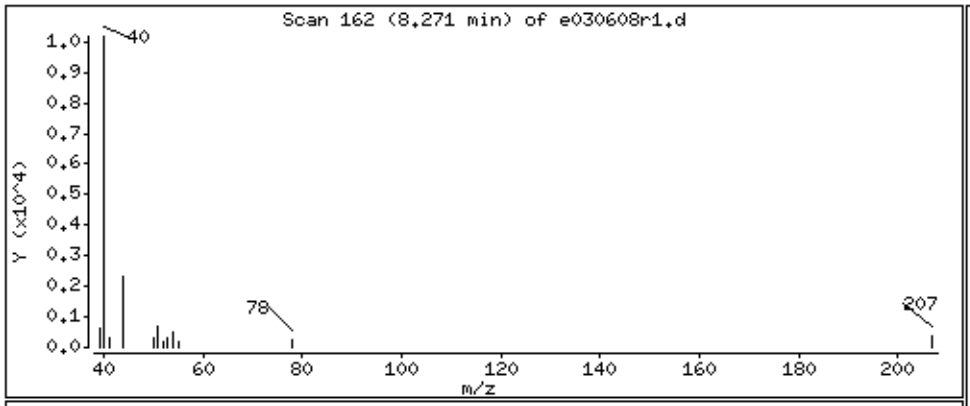
Operator: sab

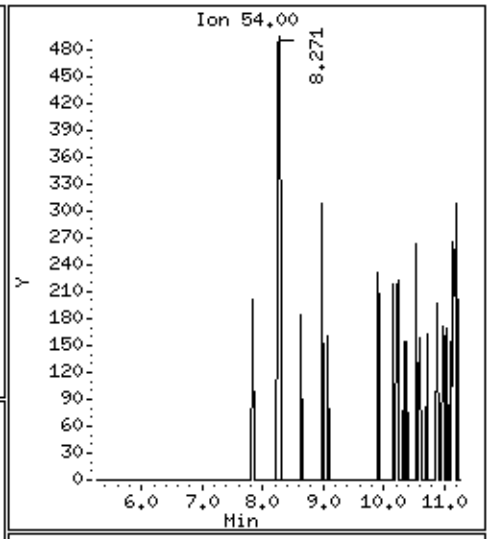
Column phase: RTx-624

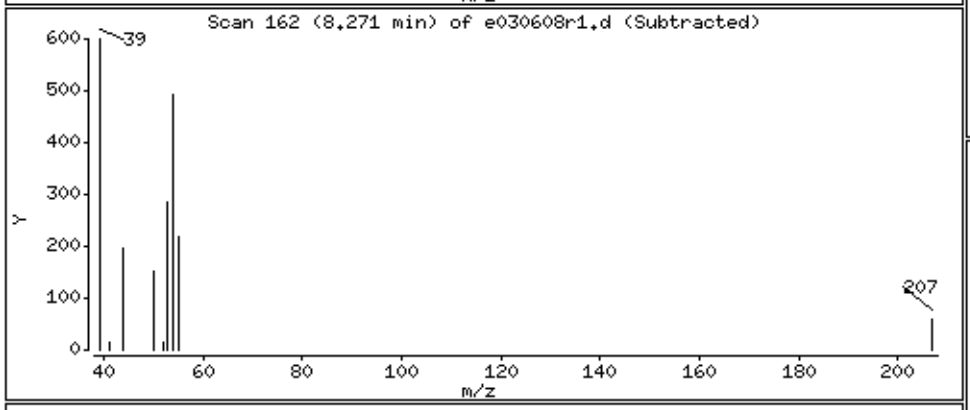
Column diameter: 0.32

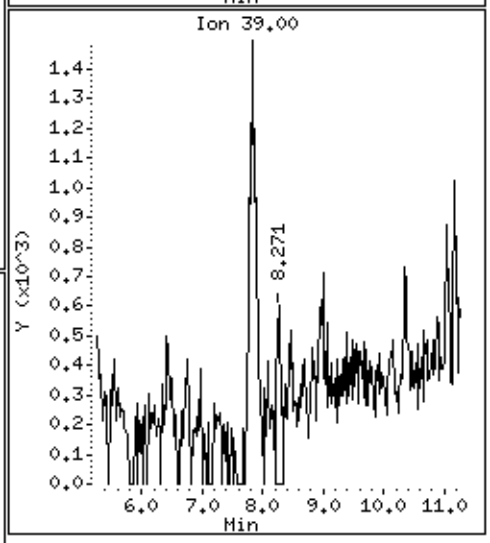
11 1,3-Butadiene

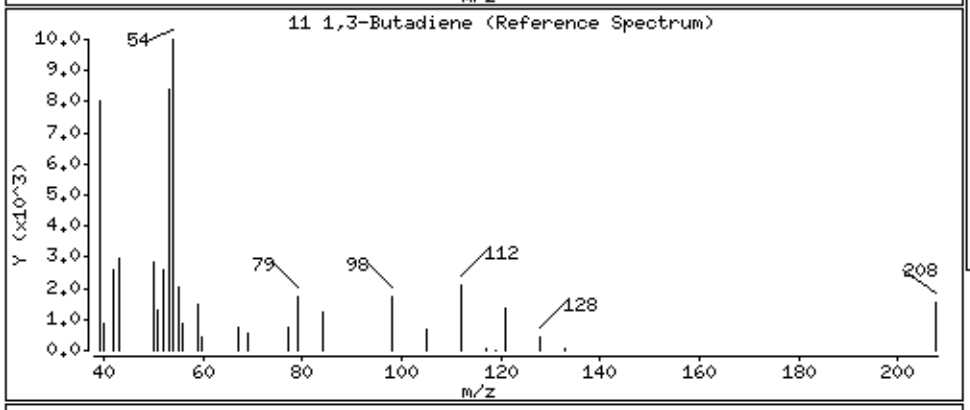
Concentration: 0.06096 PPBV

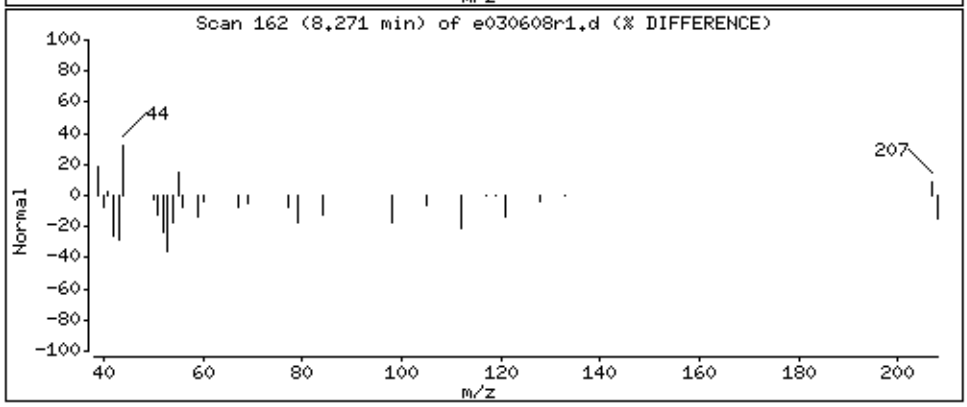












Data File: /chem/msde.i/06Mar2015.b/e030608r1.d

Date : 06-MAR-2015 10:32

Client ID:

Instrument: msde.i

Sample Info: 250mL #34188

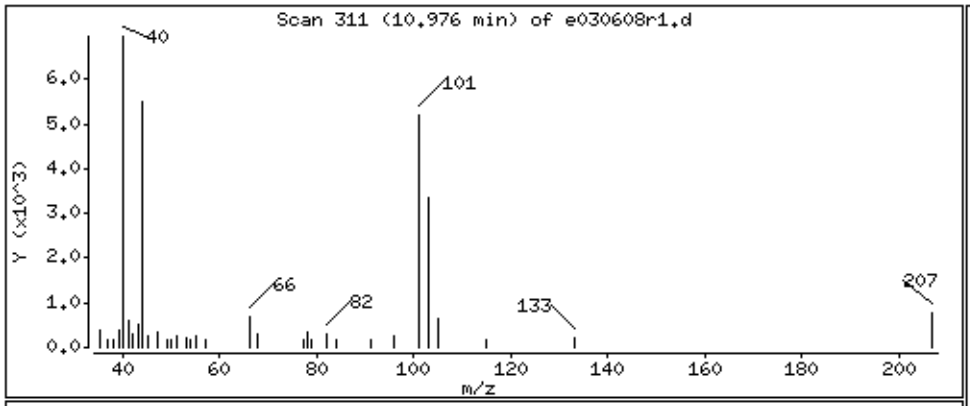
Operator: sab

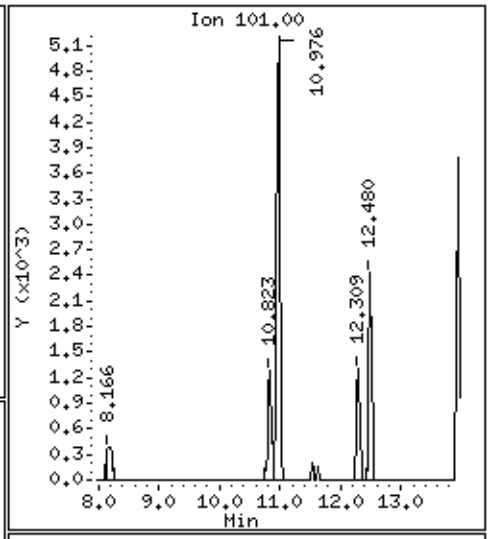
Column phase: RTx-624

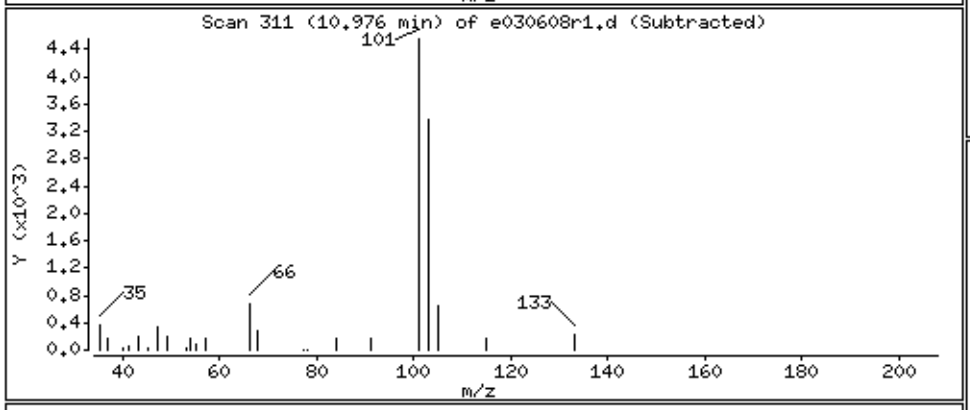
Column diameter: 0.32

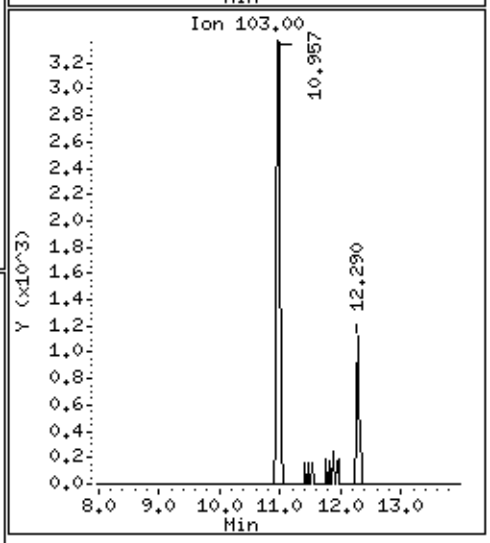
16 Trichlorofluoromethane/Fr11

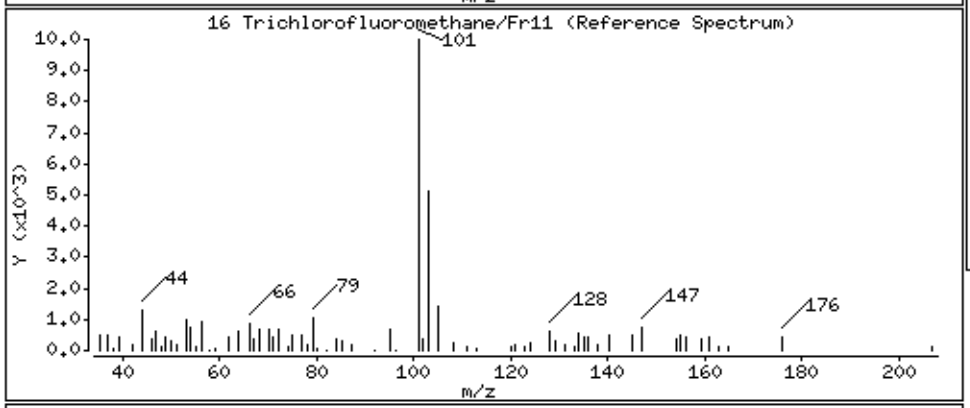
Concentration: 0.2071 PPBV

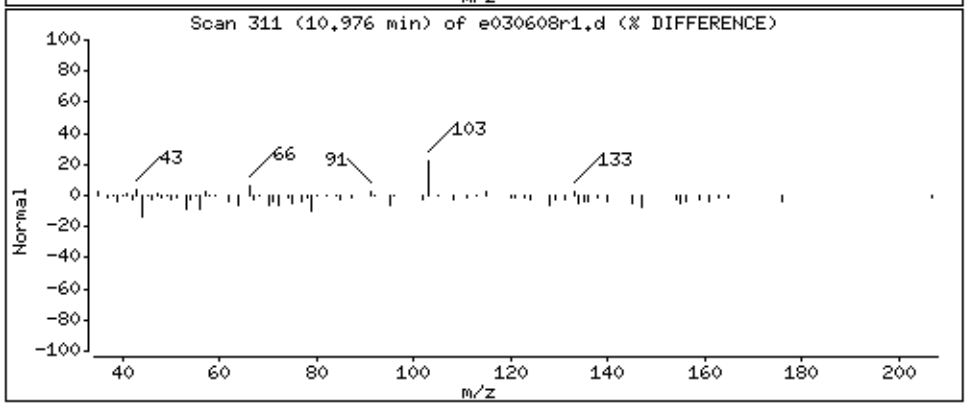












Data File: /chem/msde.i/06Mar2015.b/e030608r1.d

Date : 06-MAR-2015 10:32

Client ID:

Instrument: msde.i

Sample Info: 250mL #34188

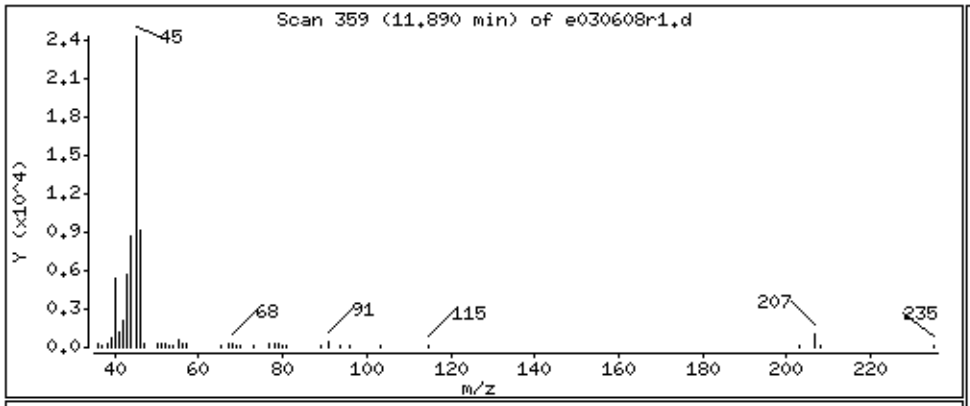
Operator: sab

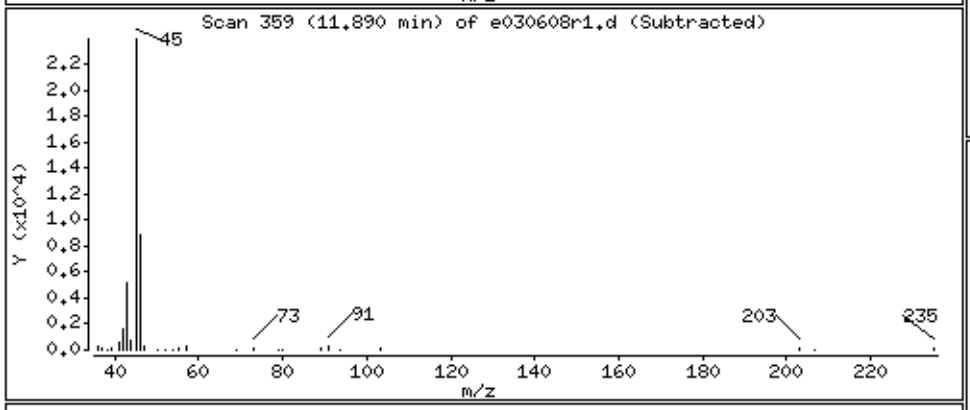
Column phase: RTx-624

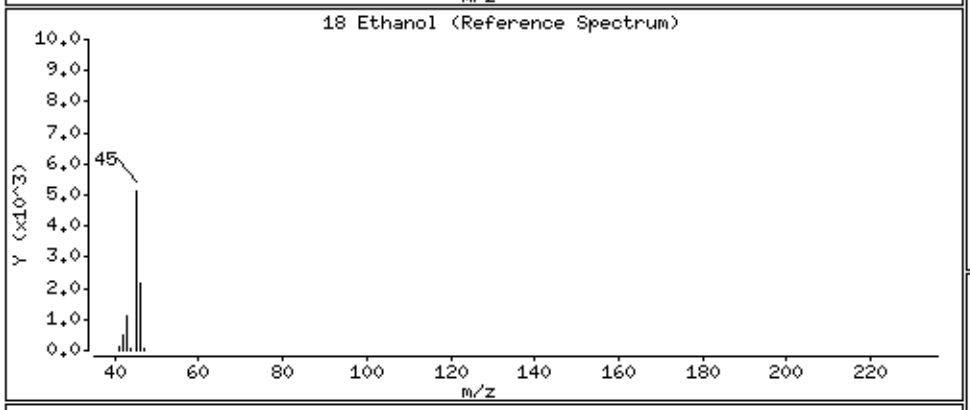
Column diameter: 0.32

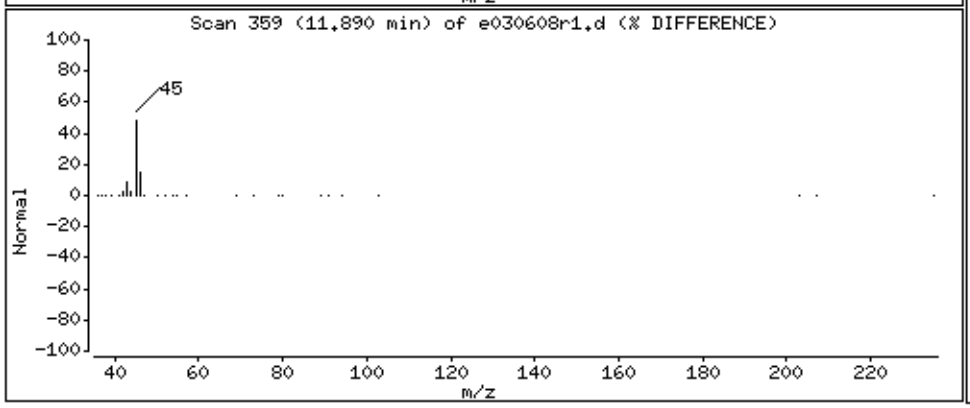
18 Ethanol

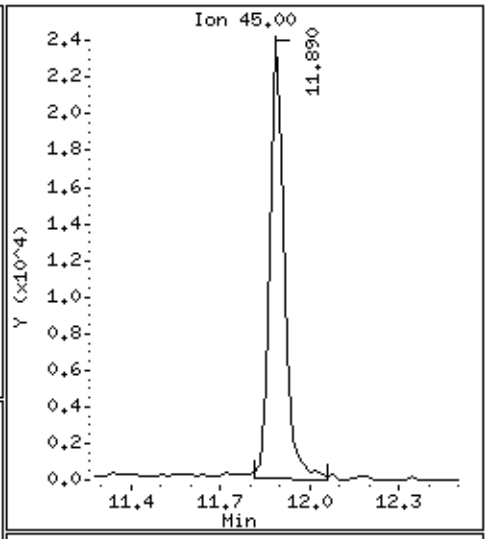
Concentration: 5.621 PPBV

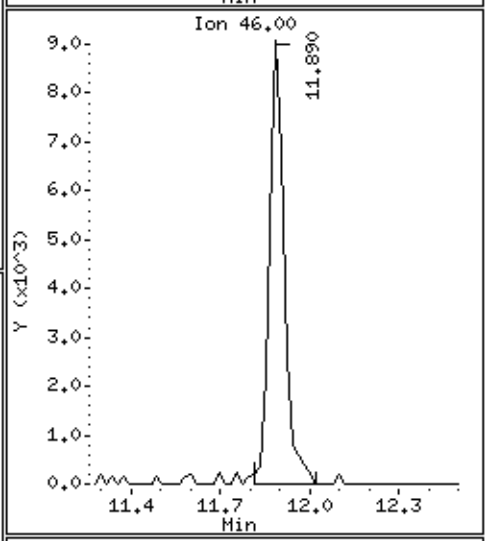


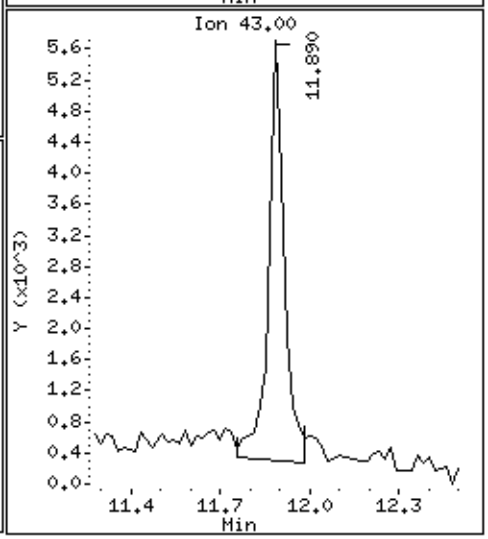












Data File: /chem/msde.i/06Mar2015.b/e030608r1.d

Date : 06-MAR-2015 10:32

Client ID:

Instrument: msde.i

Sample Info: 250mL #34188

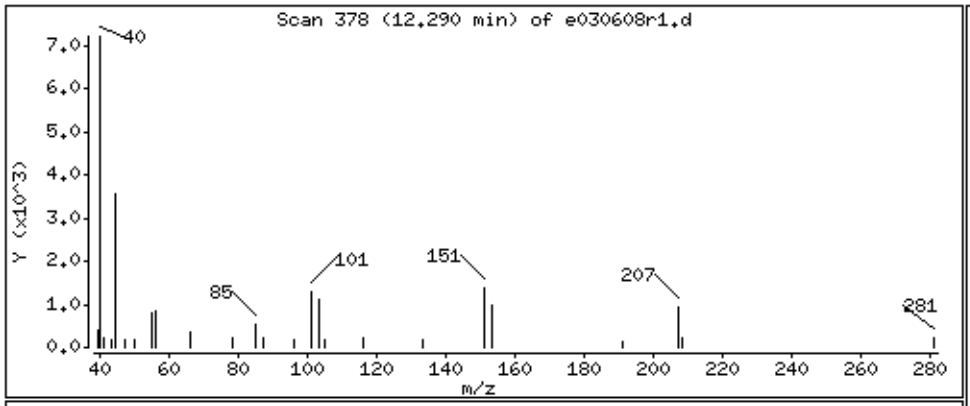
Operator: sab

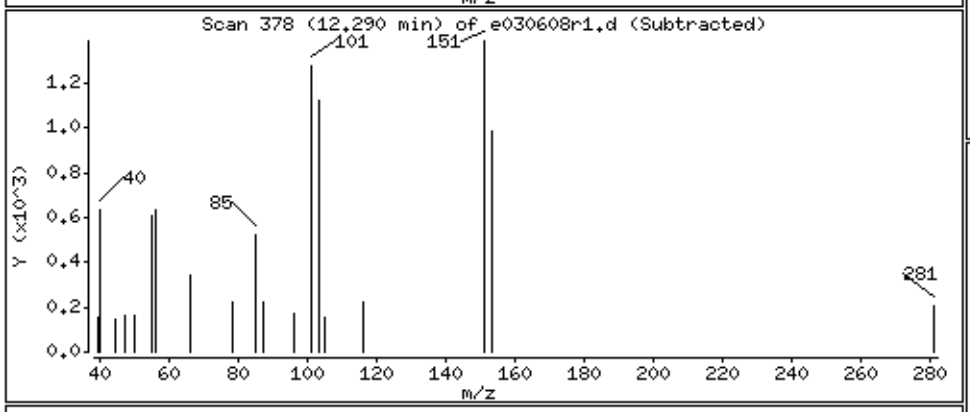
Column phase: RTx-624

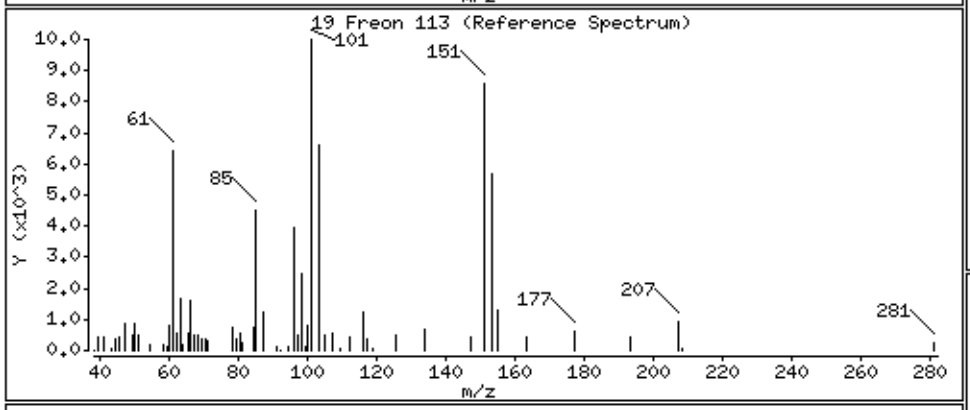
Column diameter: 0.32

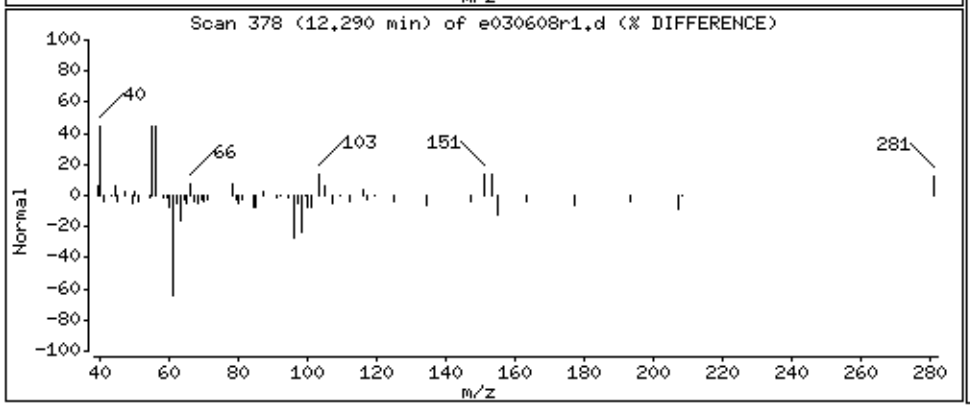
19 Freon 113

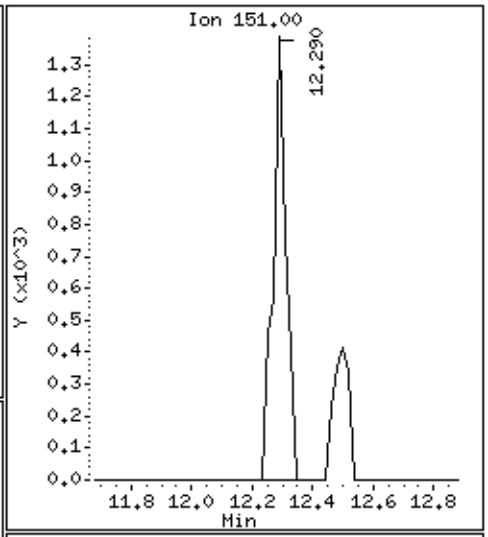
Concentration: 0.04616 PPBV

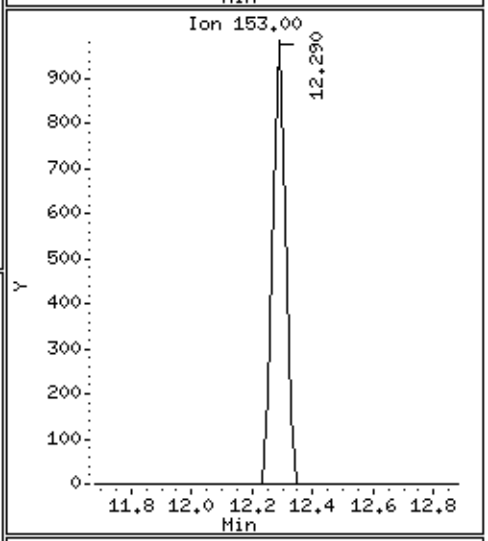


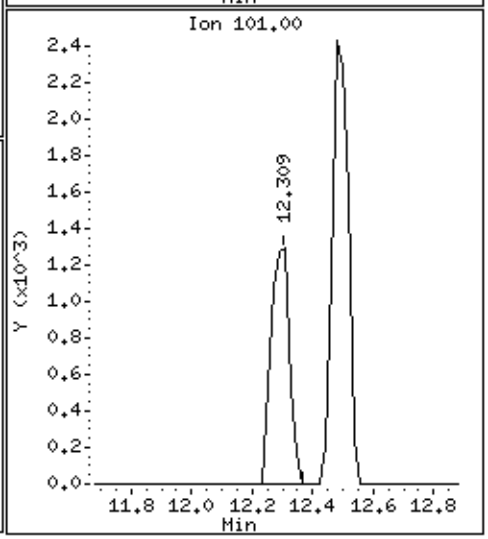












Data File: /chem/msde.i/06Mar2015.b/e030608r1.d

Date : 06-MAR-2015 10:32

Client ID:

Instrument: msde.i

Sample Info: 250mL #34188

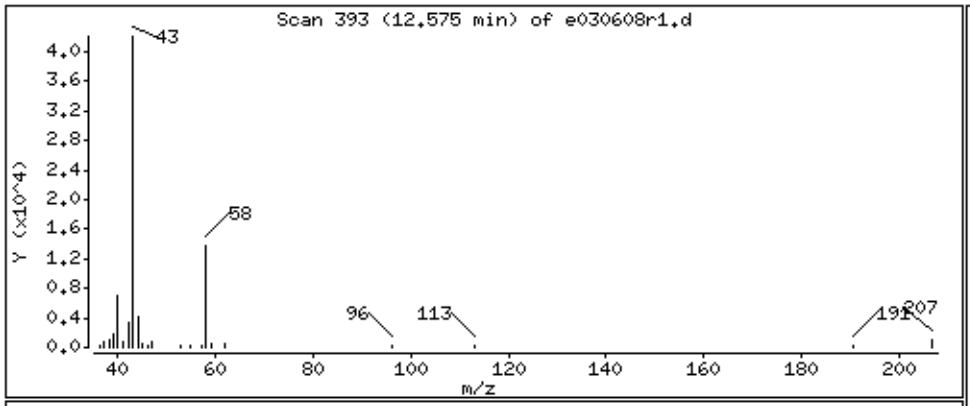
Operator: sab

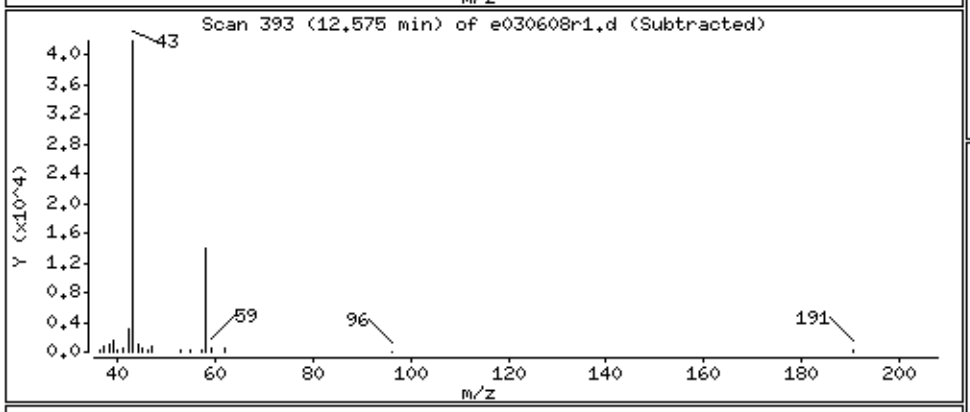
Column phase: RTx-624

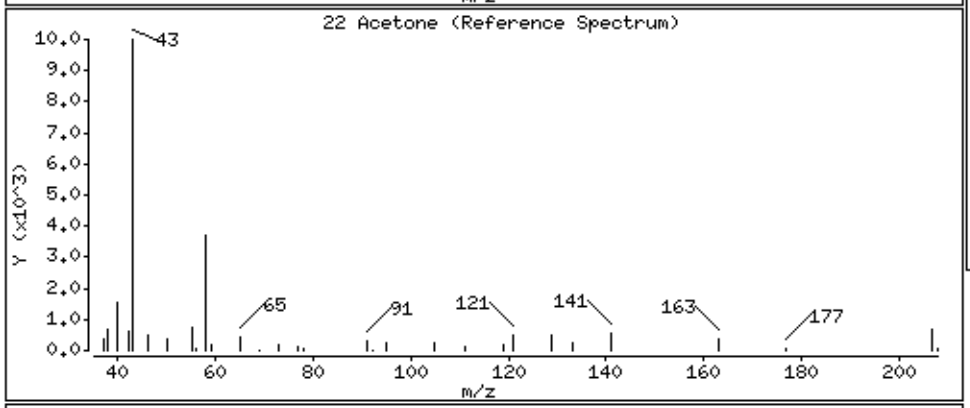
Column diameter: 0.32

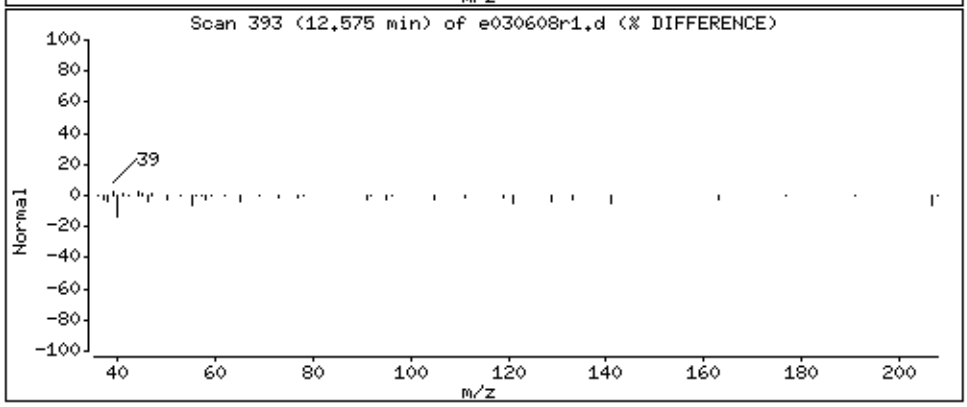
22 Acetone

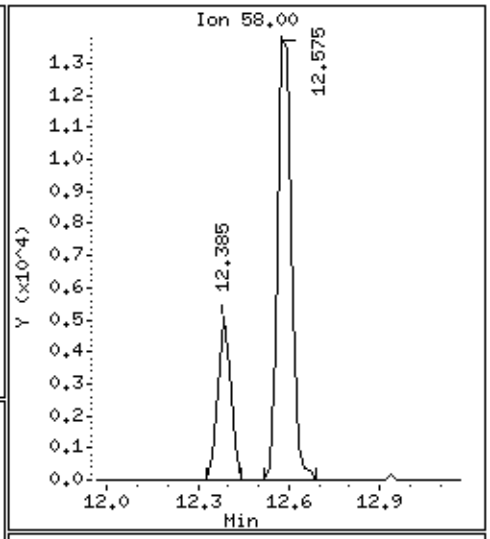
Concentration: 1.846 PPBV

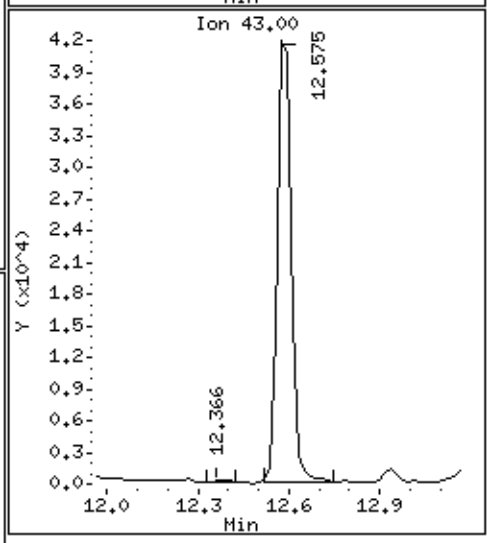












Data File: /chem/msde.i/06Mar2015.b/e030608r1.d

Date : 06-MAR-2015 10:32

Client ID:

Instrument: msde.i

Sample Info: 250mL #34188

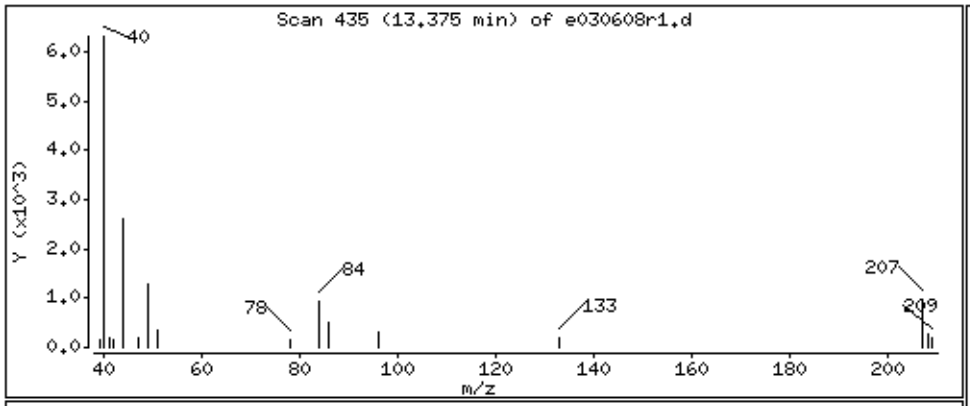
Operator: sab

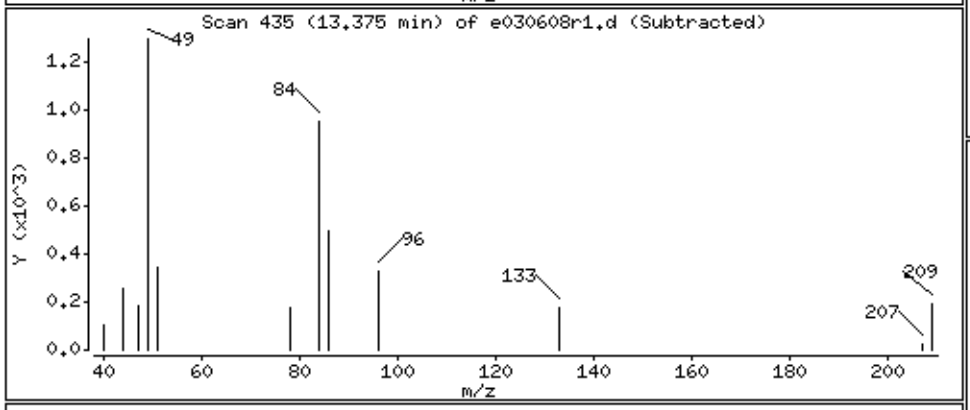
Column phase: RTx-624

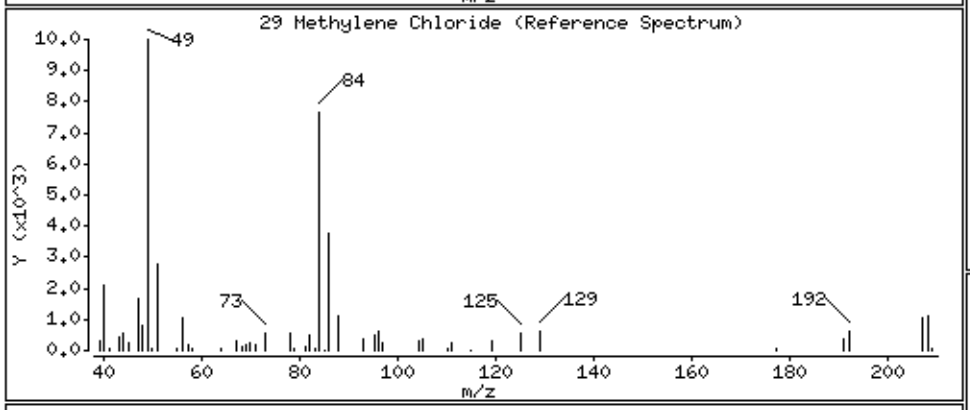
Column diameter: 0.32

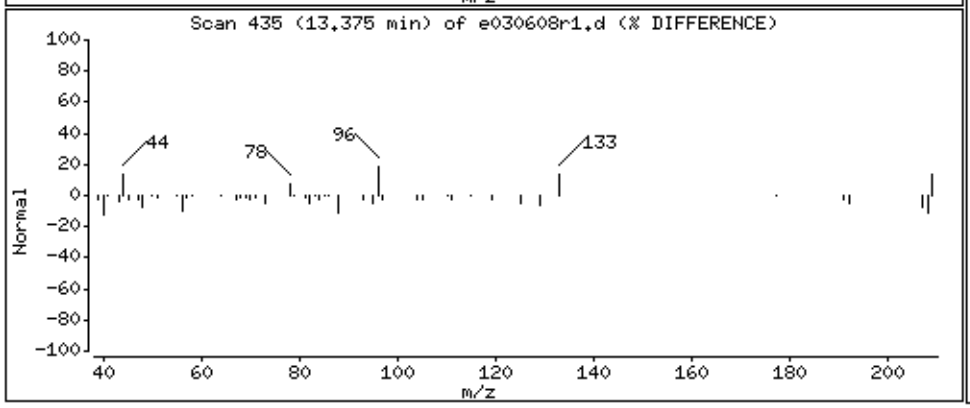
29 Methylene Chloride

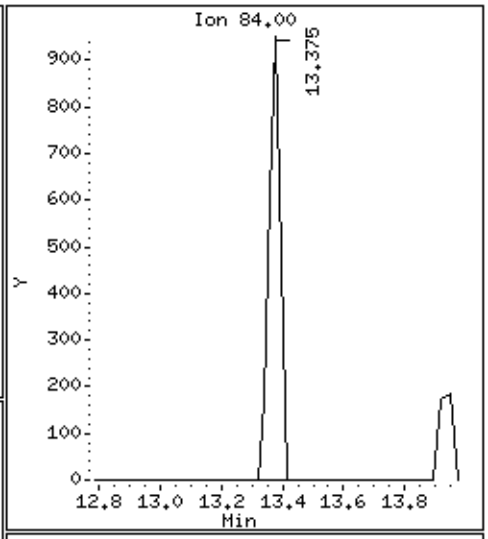
Concentration: 0.06887 PPBV

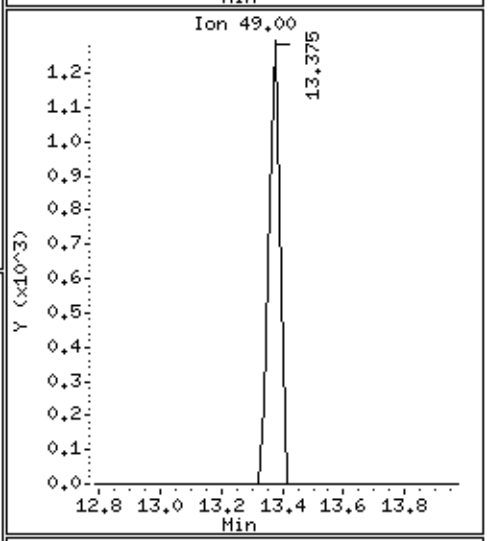


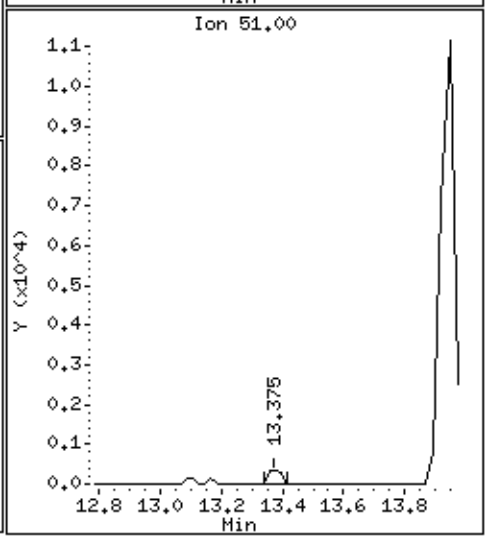












Data File: /chem/msde.i/06Mar2015.b/e030608r1.d

Date : 06-MAR-2015 10:32

Client ID:

Instrument: msde.i

Sample Info: 250mL #34188

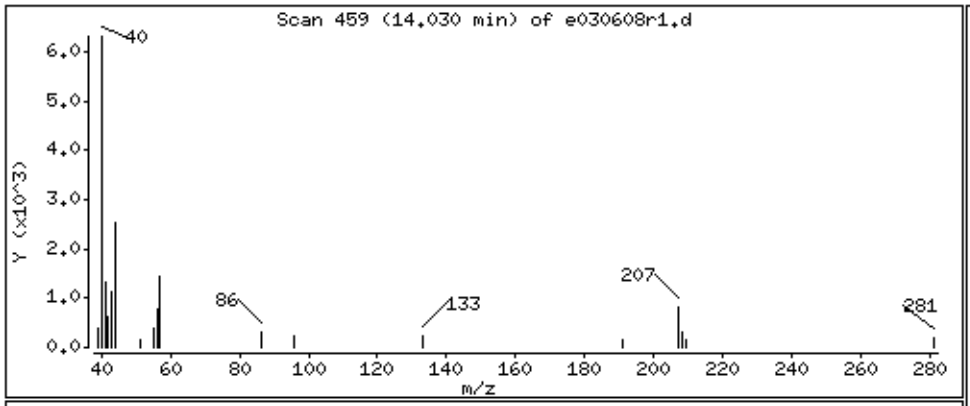
Operator: sab

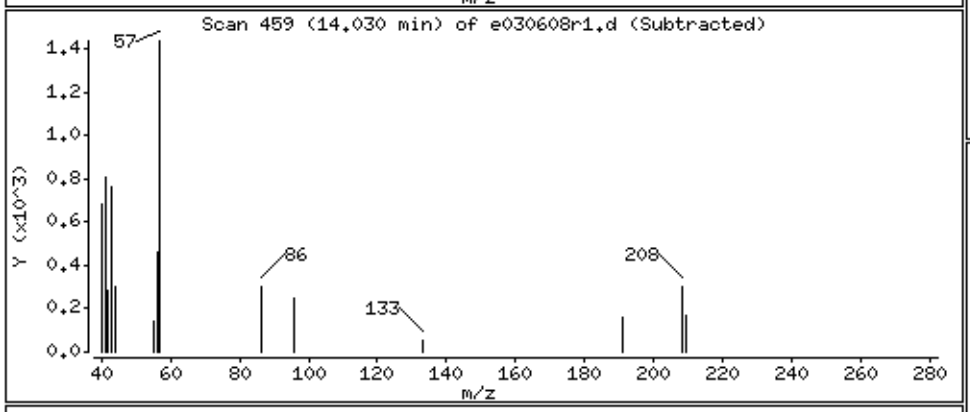
Column phase: RTx-624

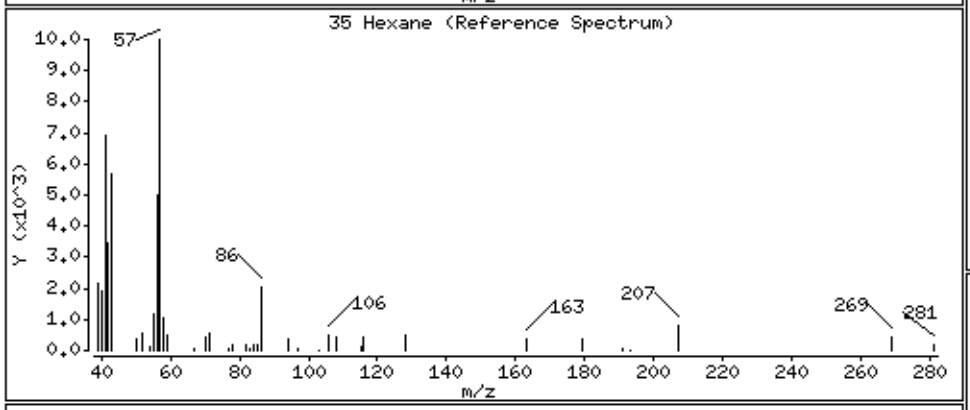
Column diameter: 0.32

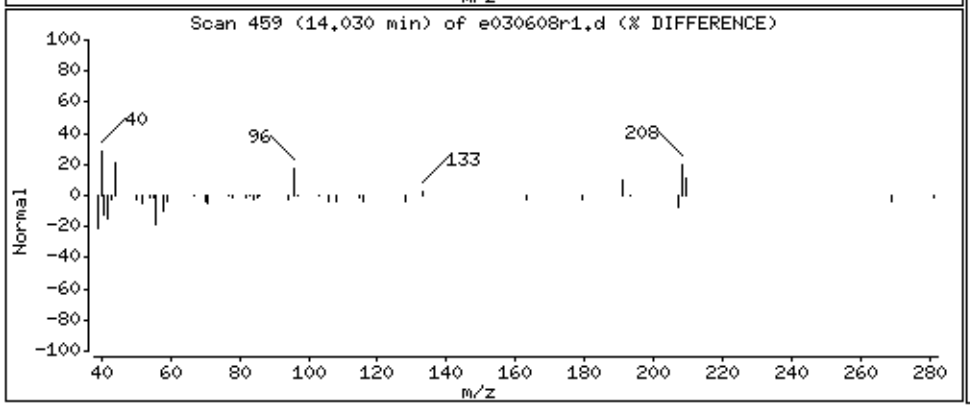
35 Hexane

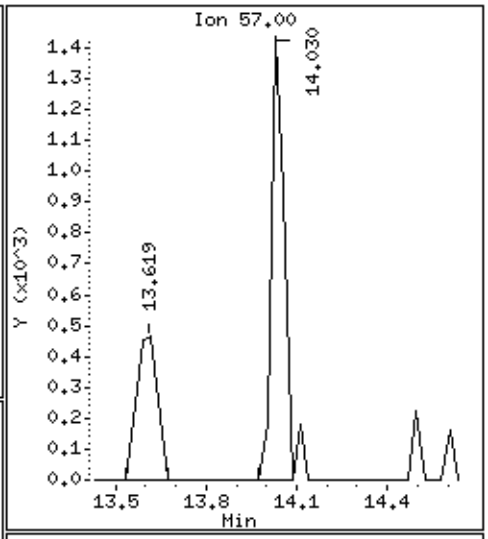
Concentration: 0.06060 PPBV

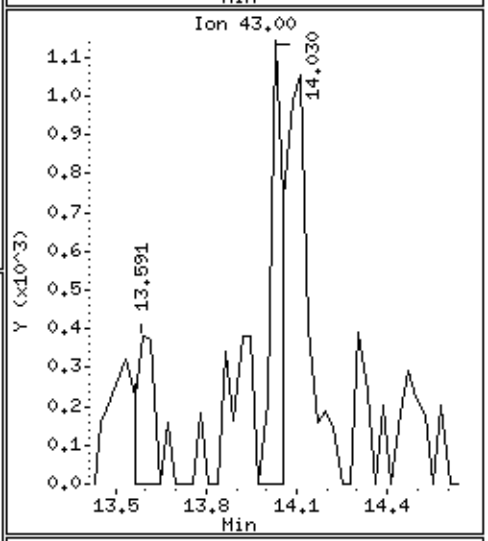


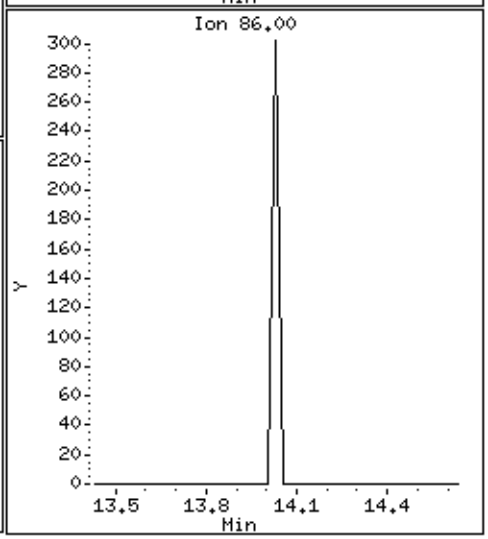












Data File: /chem/msde.i/06Mar2015.b/e030608r1.d

Date : 06-MAR-2015 10:32

Client ID:

Instrument: msde.i

Sample Info: 250mL #34188

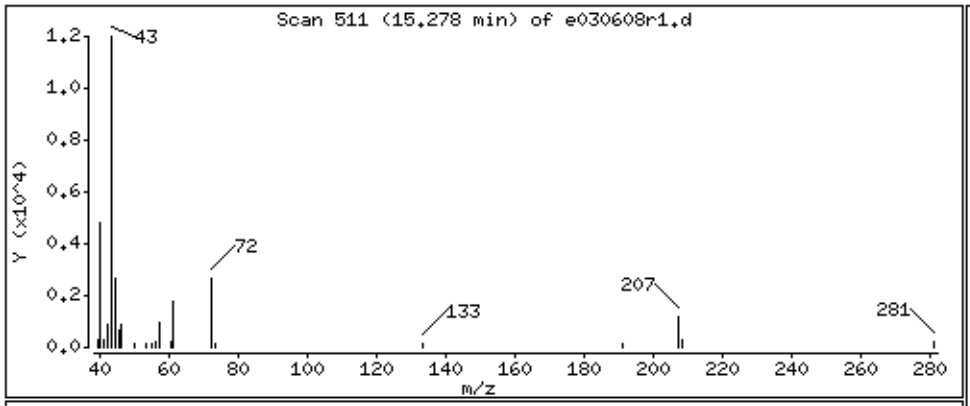
Operator: sab

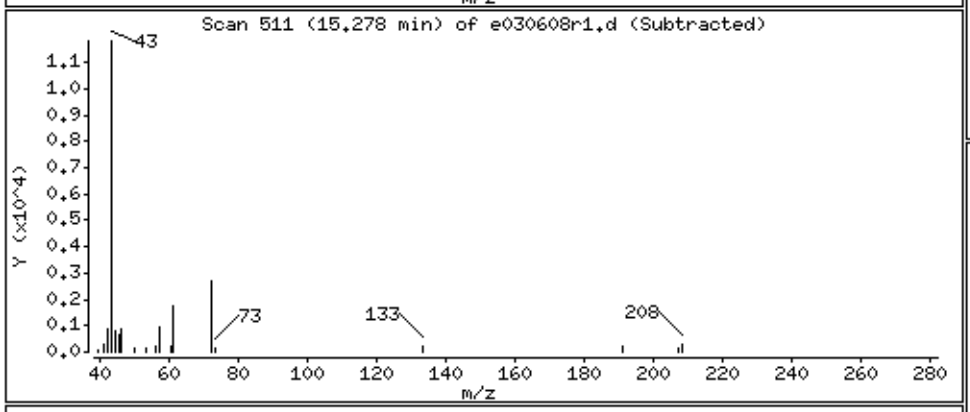
Column phase: RTx-624

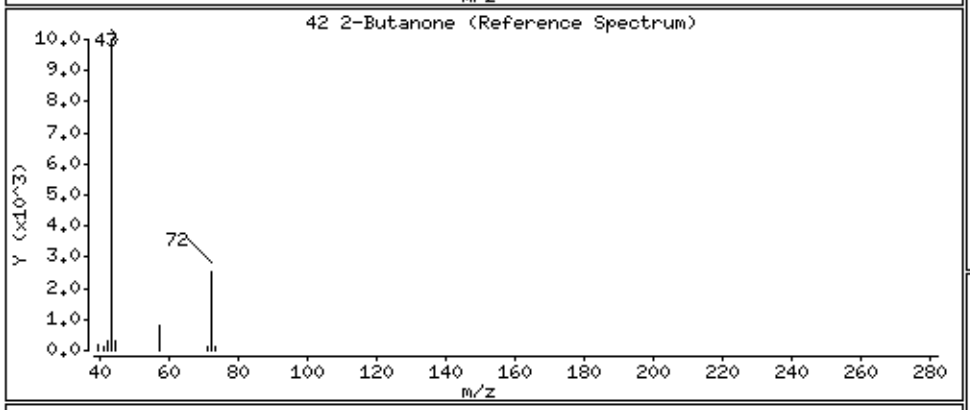
Column diameter: 0.32

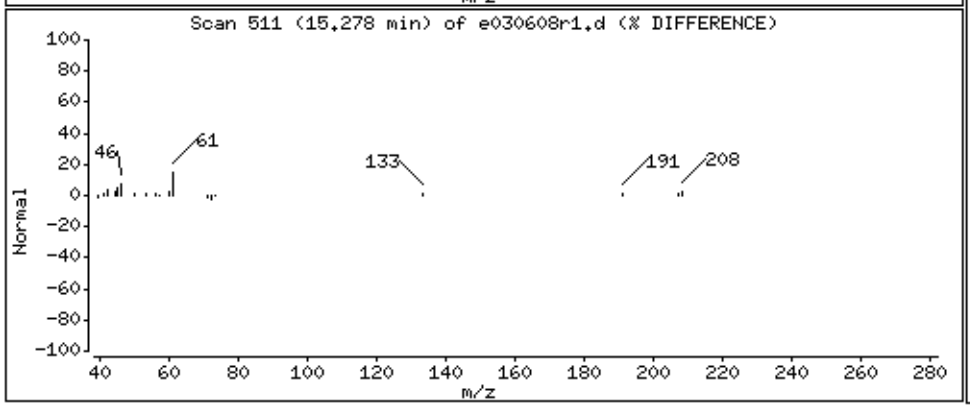
42 2-Butanone

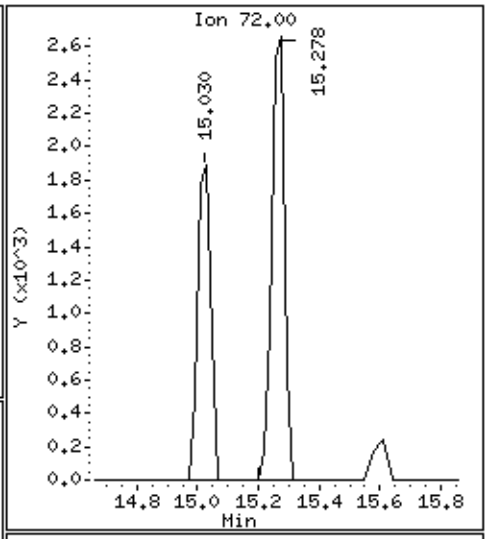
Concentration: 0.3846 PPBV

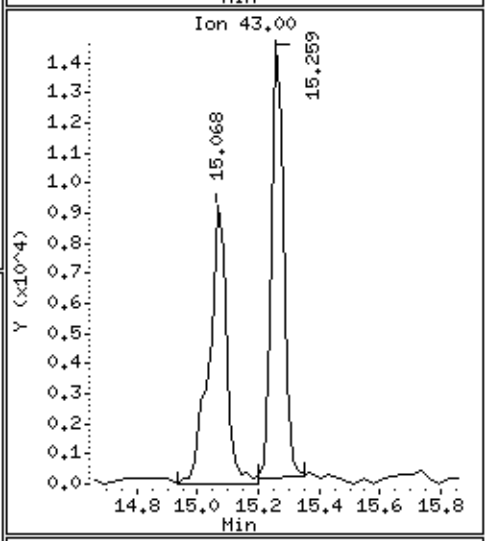


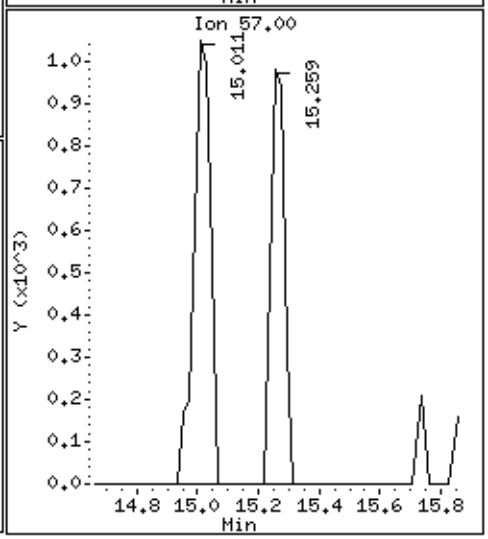












Data File: /chem/msde.i/06Mar2015.b/e030608r1.d

Date : 06-MAR-2015 10:32

Client ID:

Instrument: msde.i

Sample Info: 250mL #34188

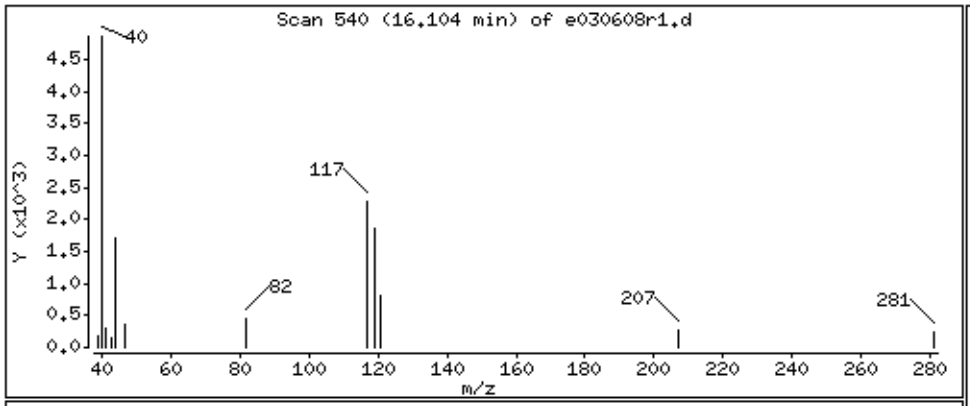
Operator: sab

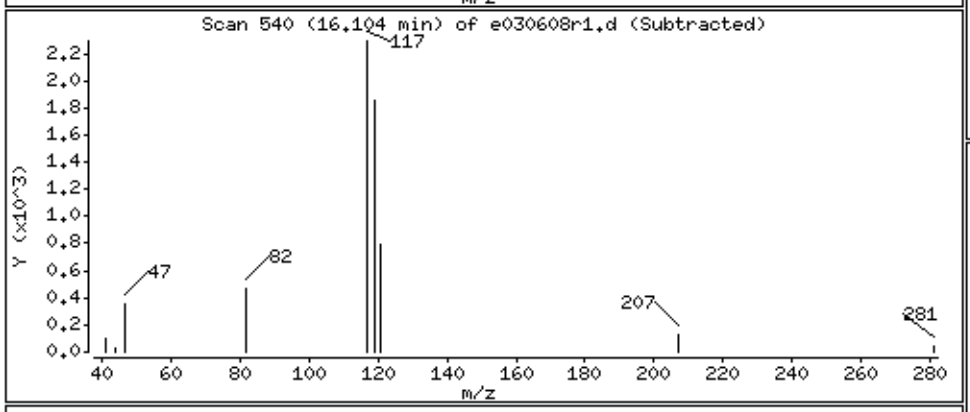
Column phase: RTx-624

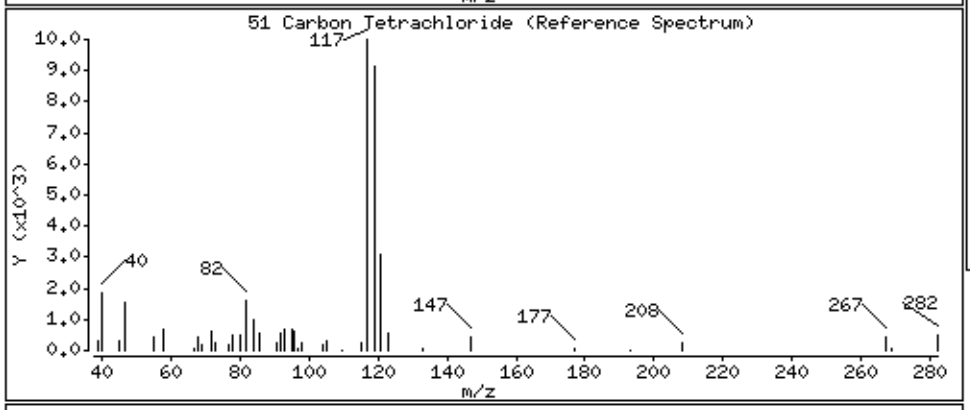
Column diameter: 0.32

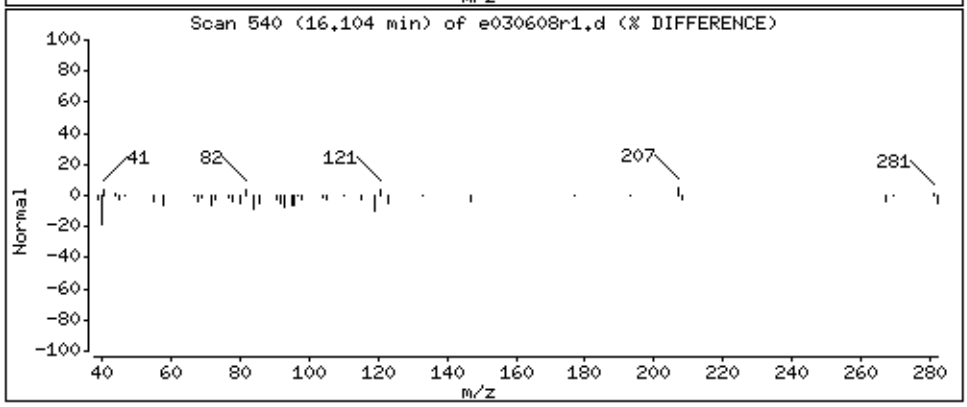
51 Carbon Tetrachloride

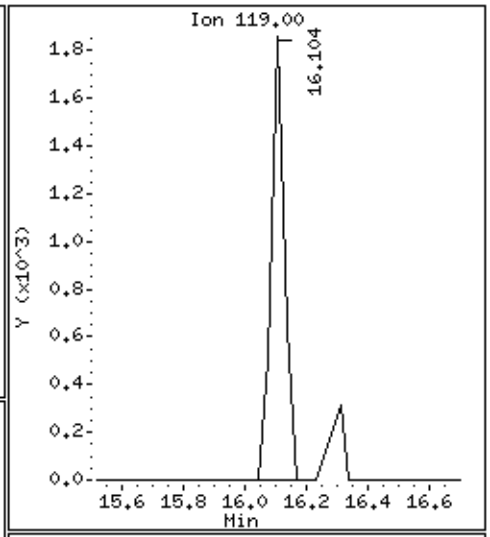
Concentration: 0.07072 PPBV

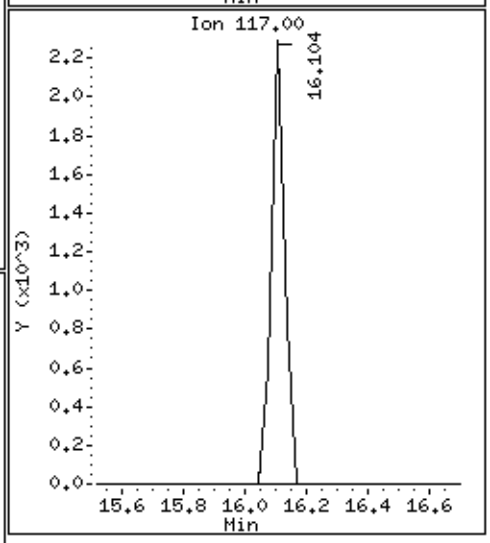












Data File: /chem/msde.i/06Mar2015.b/e030608r1.d

Date : 06-MAR-2015 10:32

Client ID:

Instrument: msde.i

Sample Info: 250mL #34188

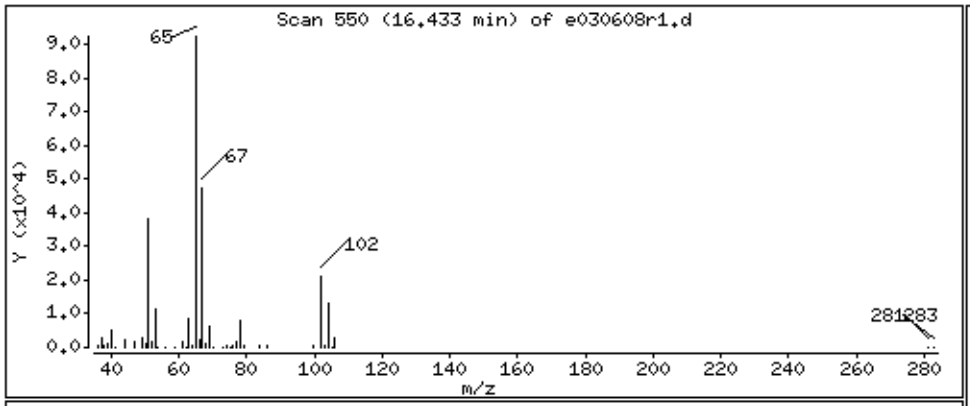
Operator: sab

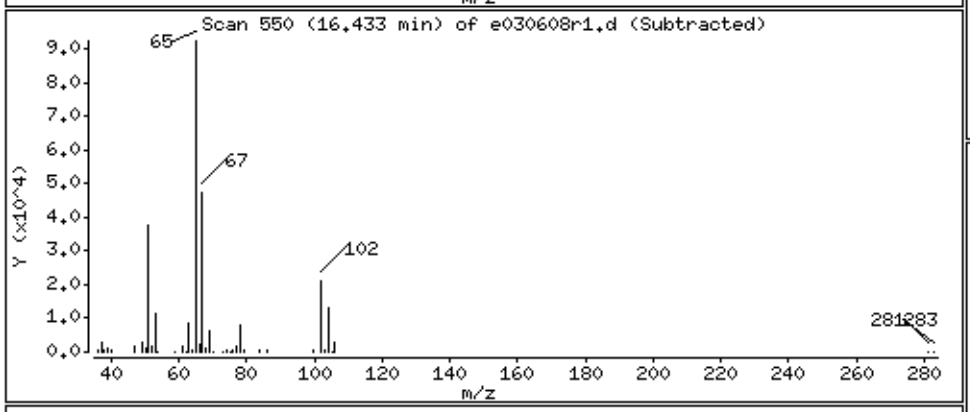
Column phase: RTx-624

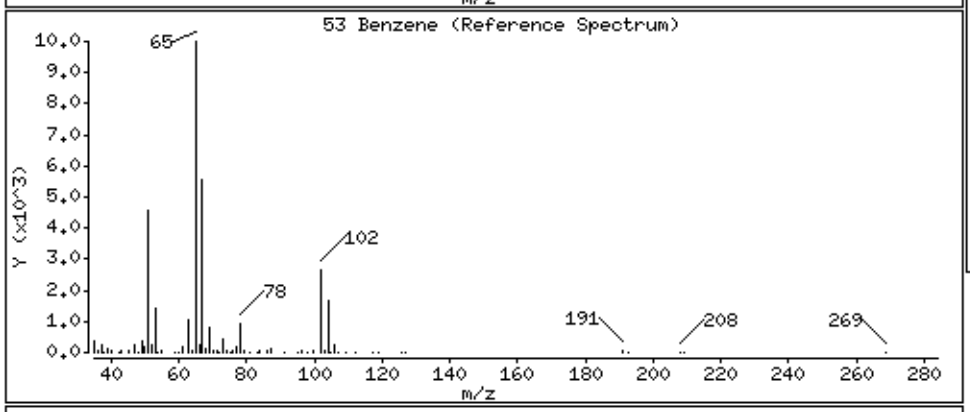
Column diameter: 0.32

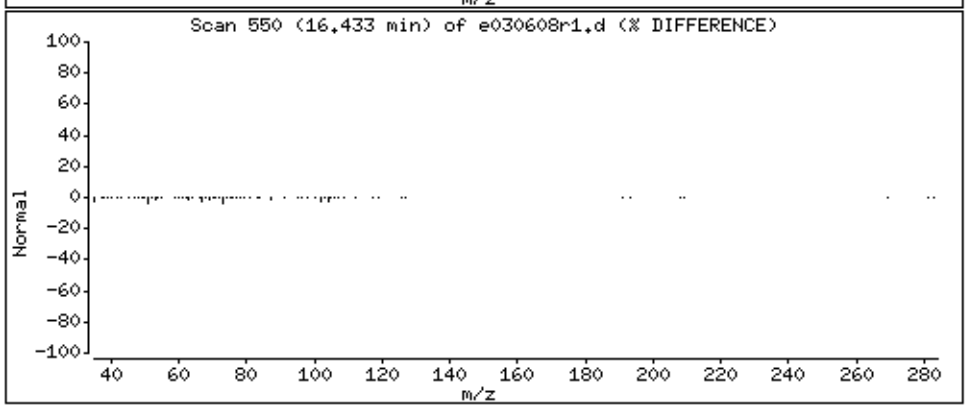
53 Benzene

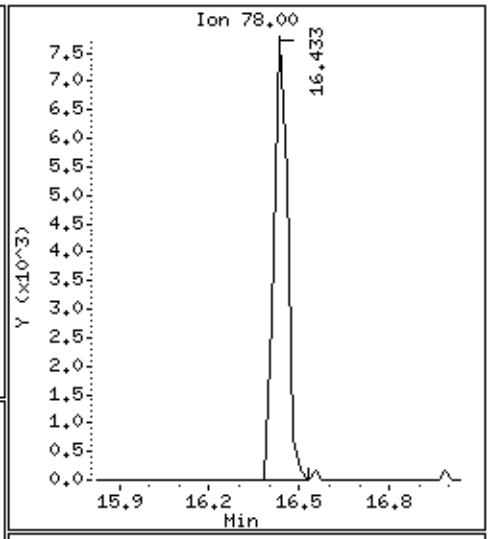
Concentration: 0.1985 PPBV

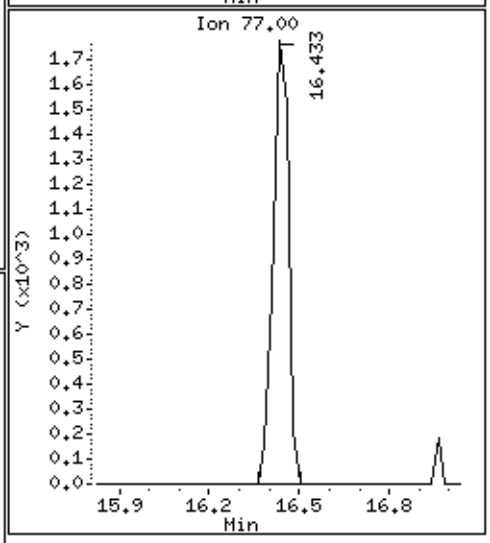












Data File: /chem/msde.i/06Mar2015.b/e030608r1.d

Date : 06-MAR-2015 10:32

Client ID:

Instrument: msde.i

Sample Info: 250mL #34188

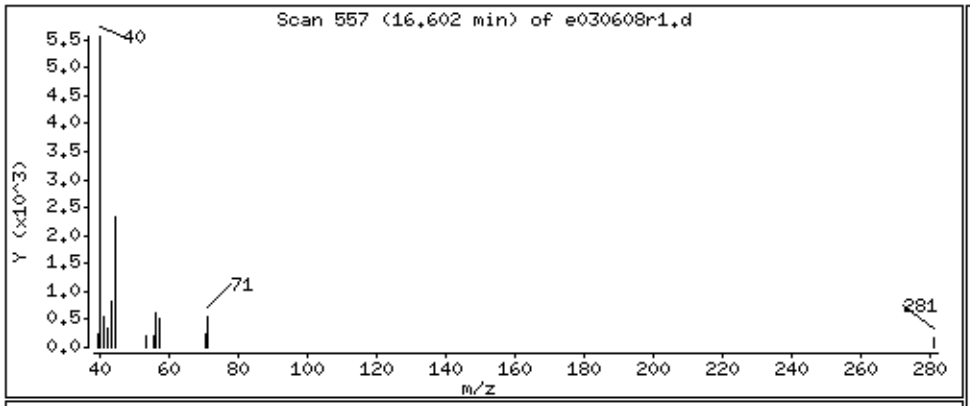
Operator: sab

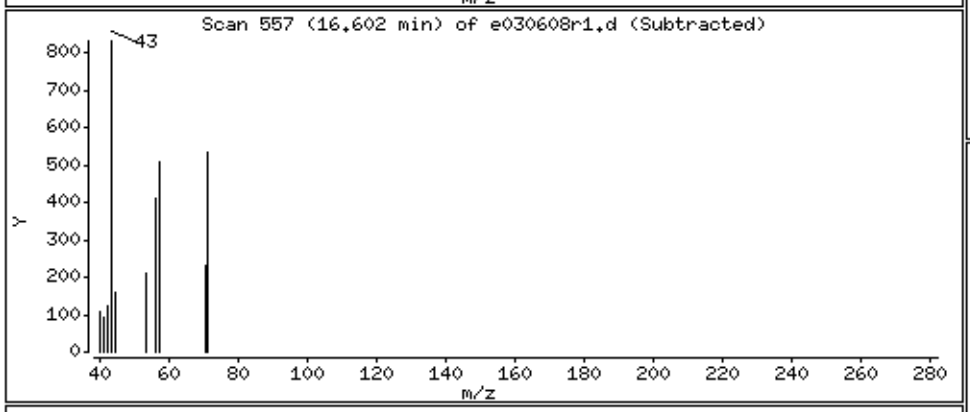
Column phase: RTx-624

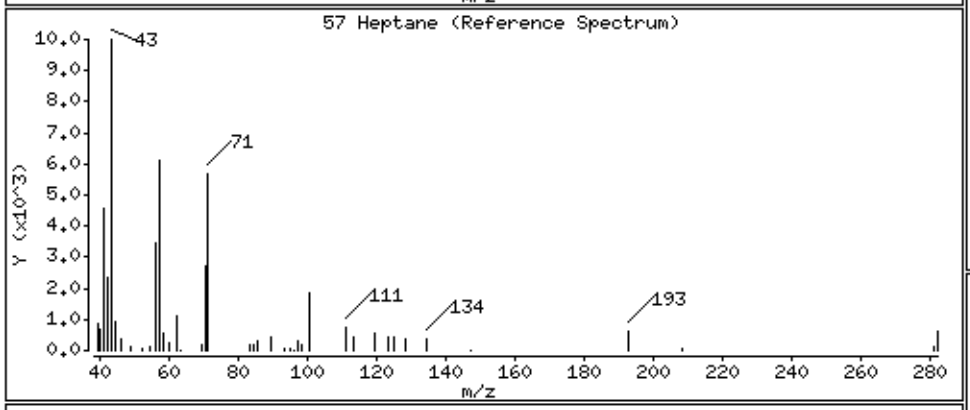
Column diameter: 0.32

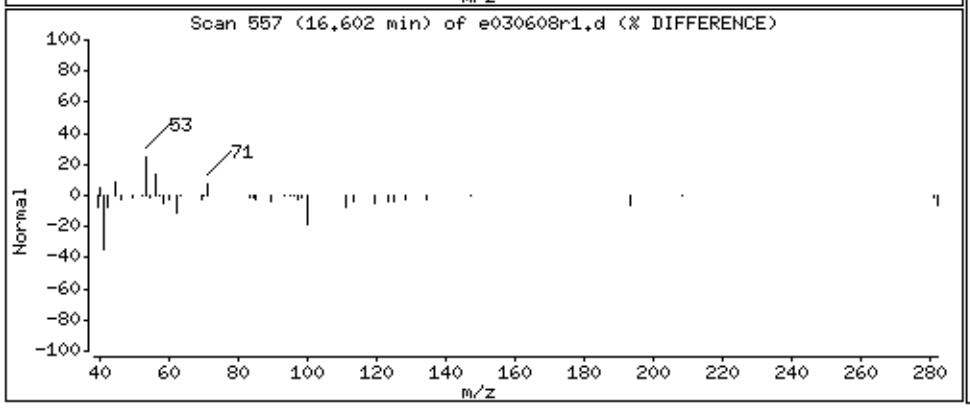
57 Heptane

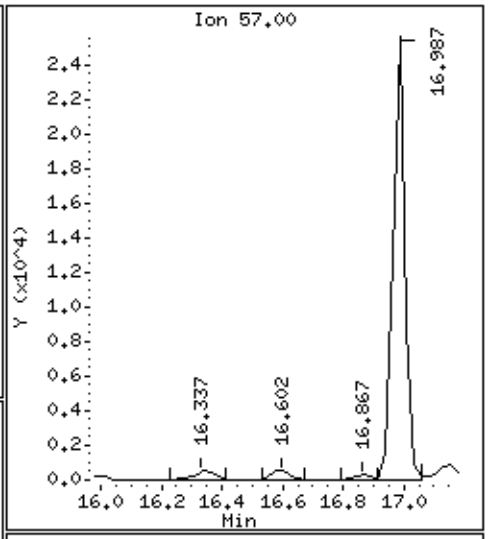
Concentration: 0.05407 PPBV

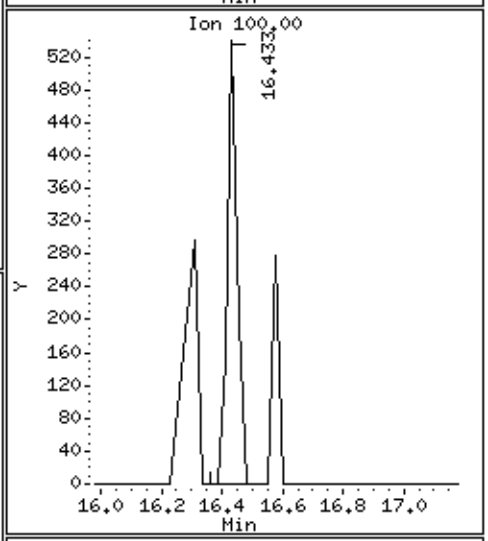


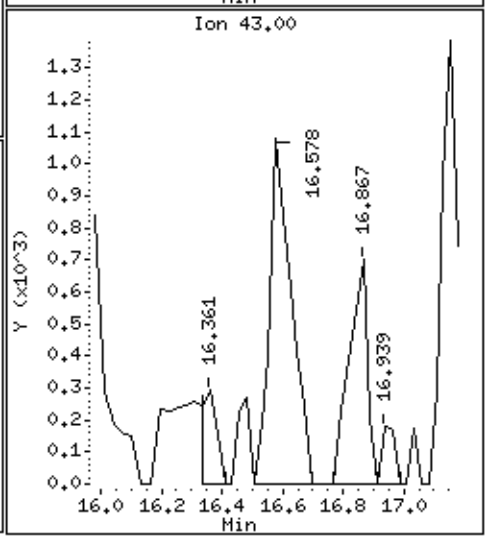












Data File: /chem/msde.i/06Mar2015.b/e030608r1.d

Date : 06-MAR-2015 10:32

Client ID:

Instrument: msde.i

Sample Info: 250mL #34188

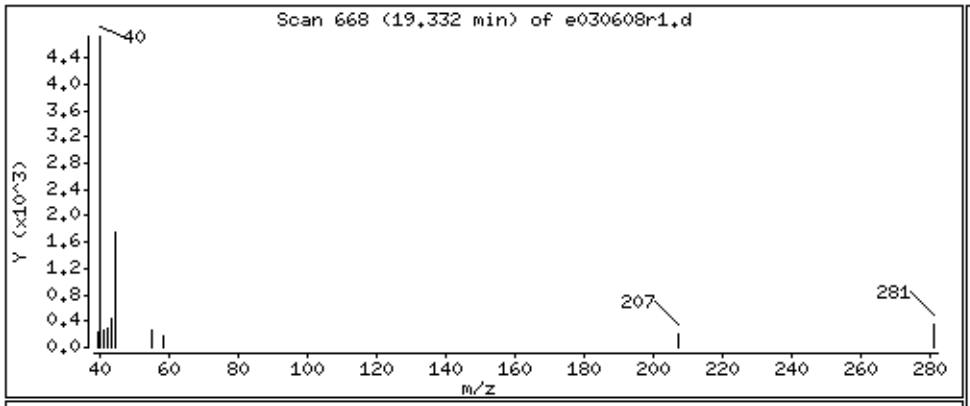
Operator: sab

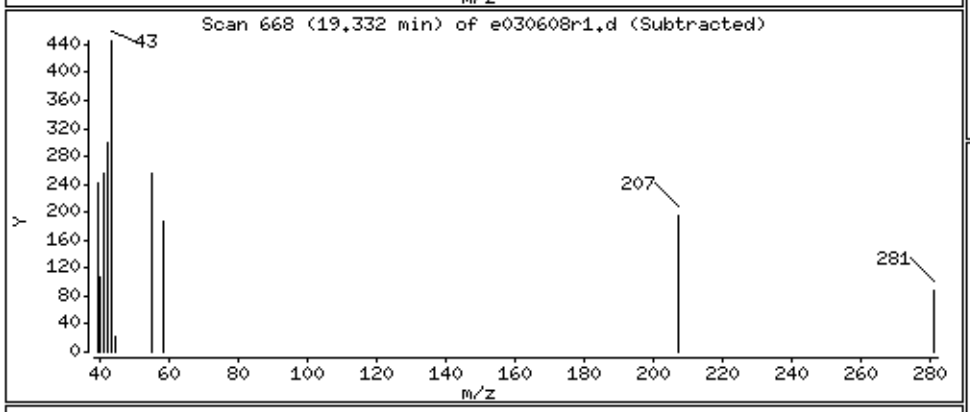
Column phase: RTx-624

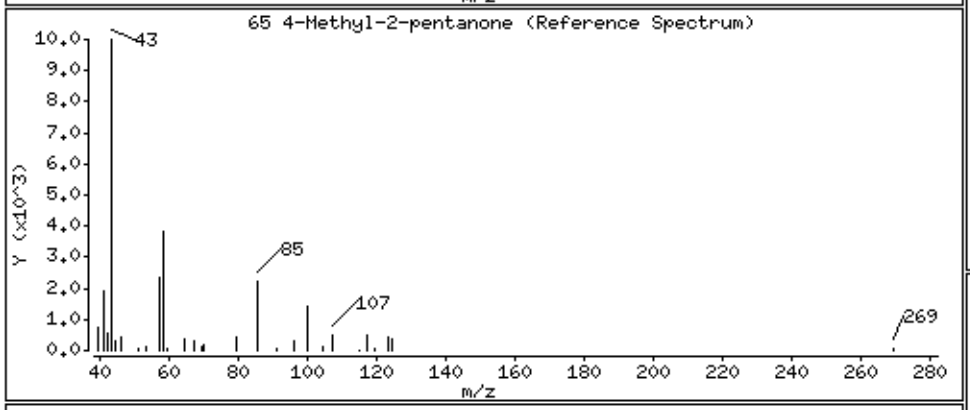
Column diameter: 0.32

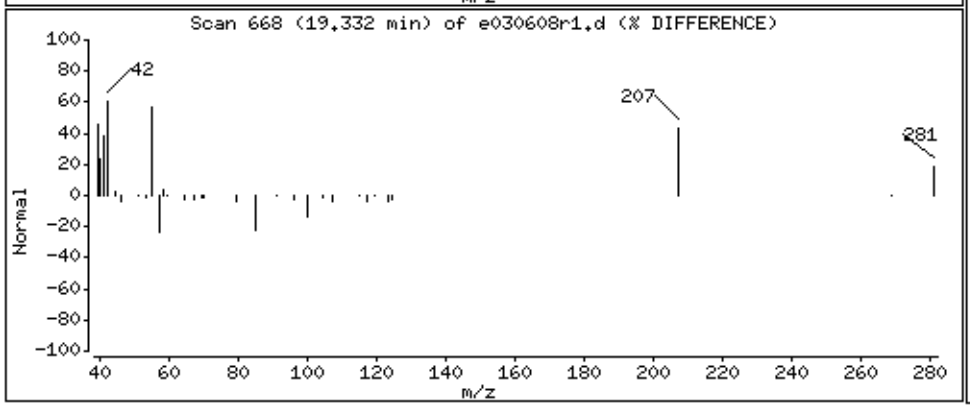
65 4-Methyl-2-pentanone

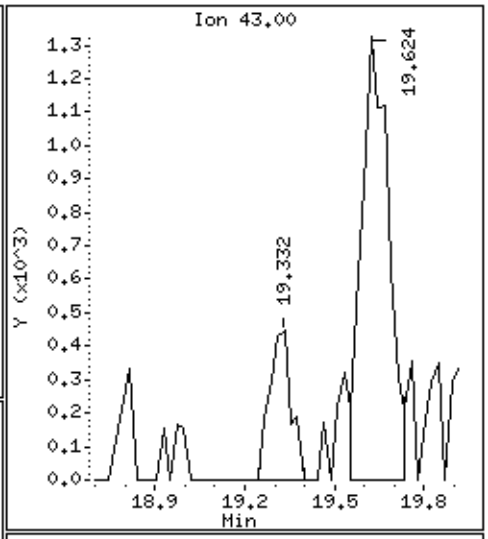
Concentration: 0.02347 PPBV

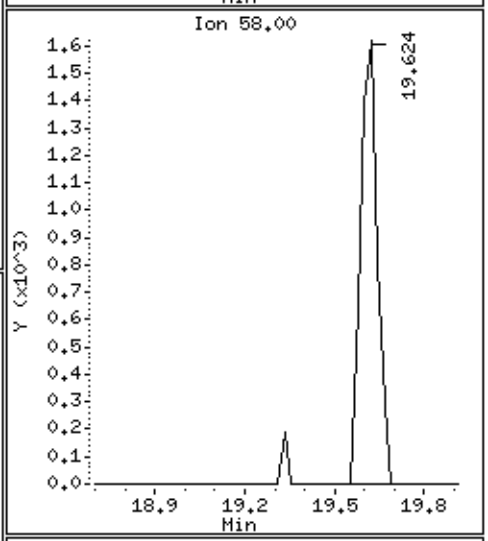


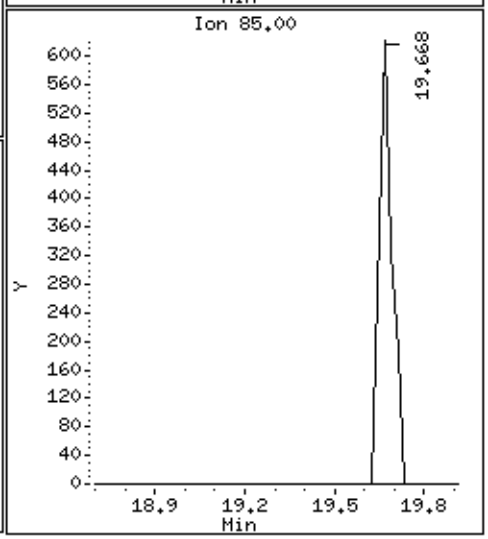












Data File: /chem/msde.i/06Mar2015.b/e030608r1.d

Date : 06-MAR-2015 10:32

Client ID:

Instrument: msde.i

Sample Info: 250mL #34188

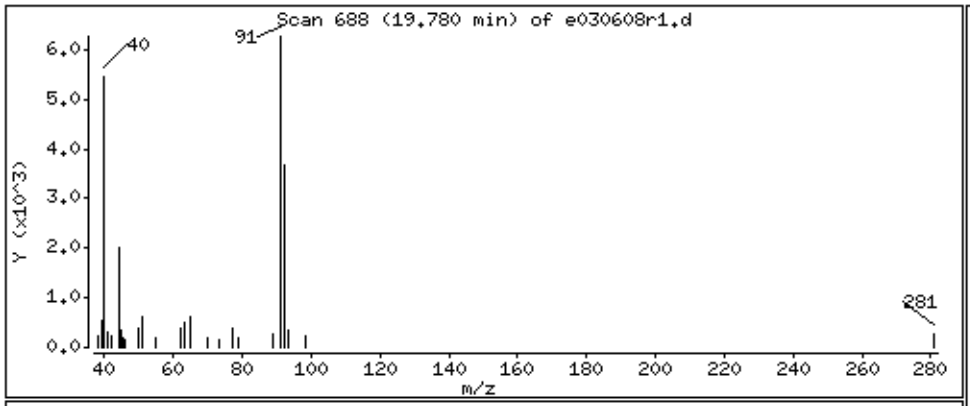
Operator: sab

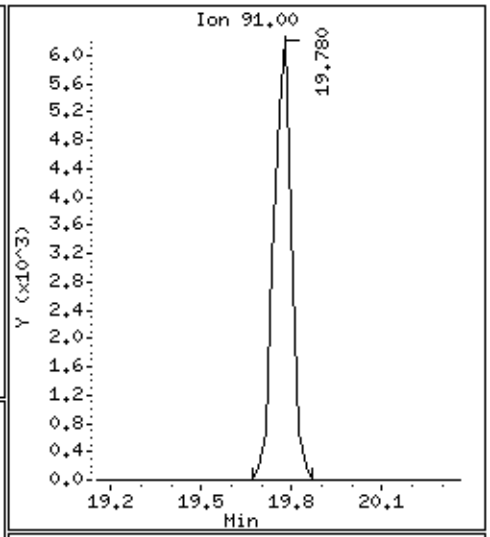
Column phase: RTx-624

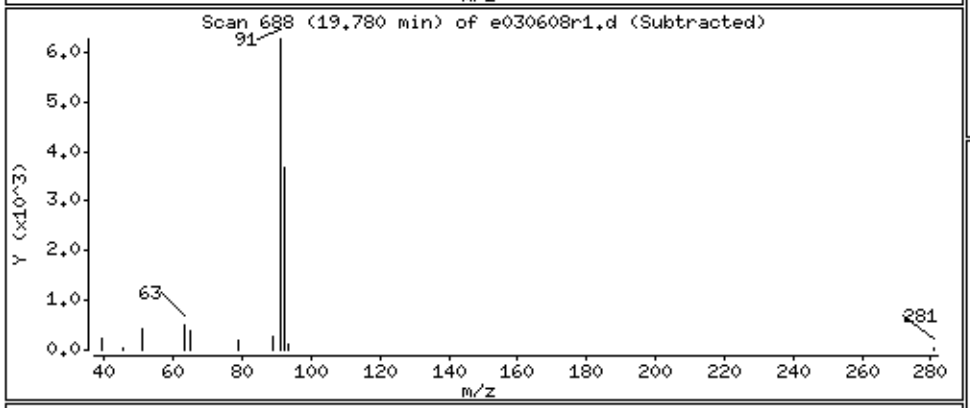
Column diameter: 0.32

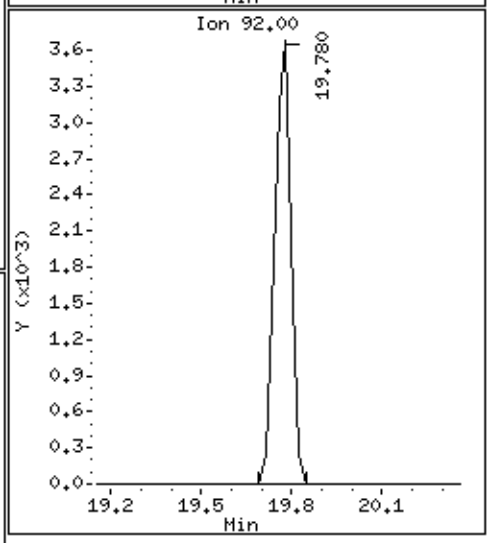
68 Toluene

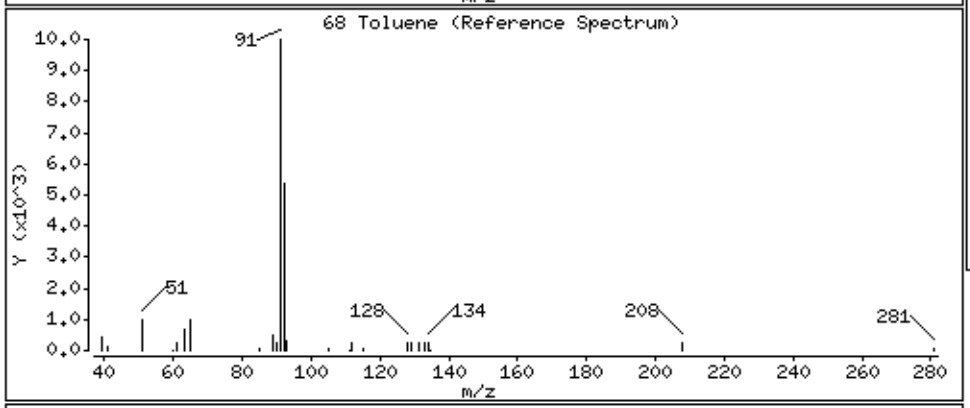
Concentration: 0.1691 PPBV

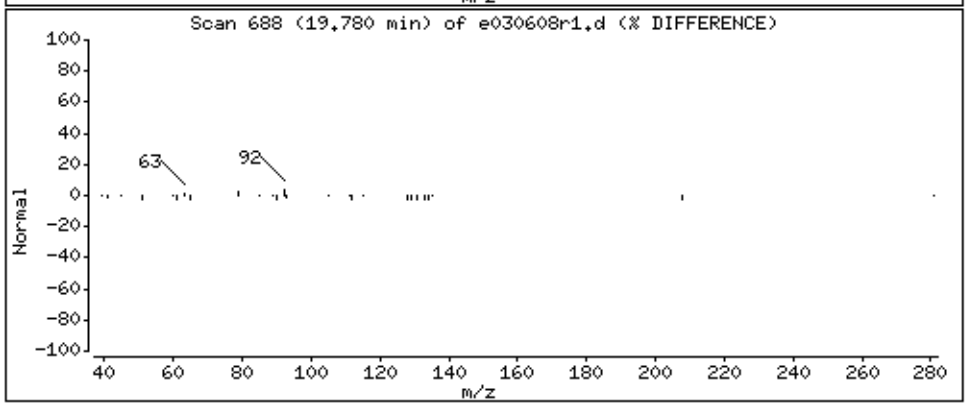












Data File: /chem/msde.i/06Mar2015.b/e030608r1.d

Date : 06-MAR-2015 10:32

Client ID:

Instrument: msde.i

Sample Info: 250mL #34188

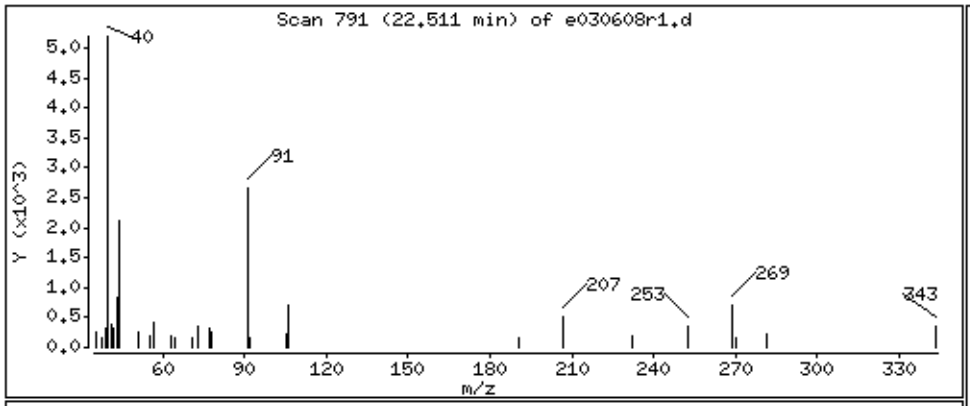
Operator: sab

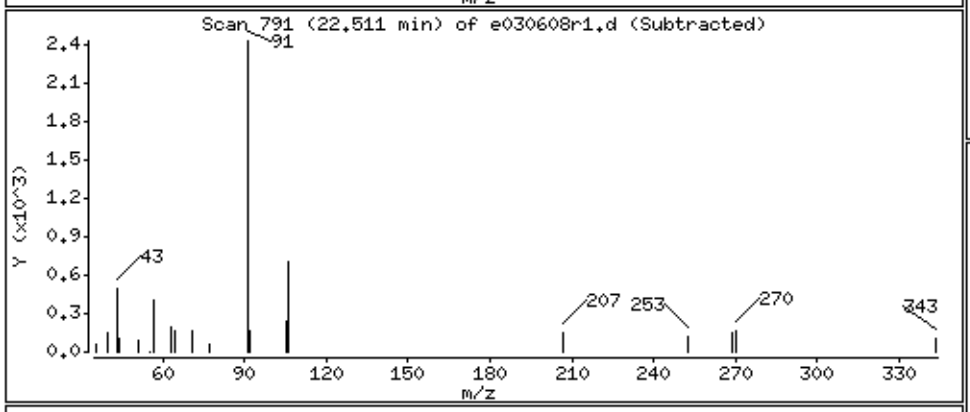
Column phase: RTx-624

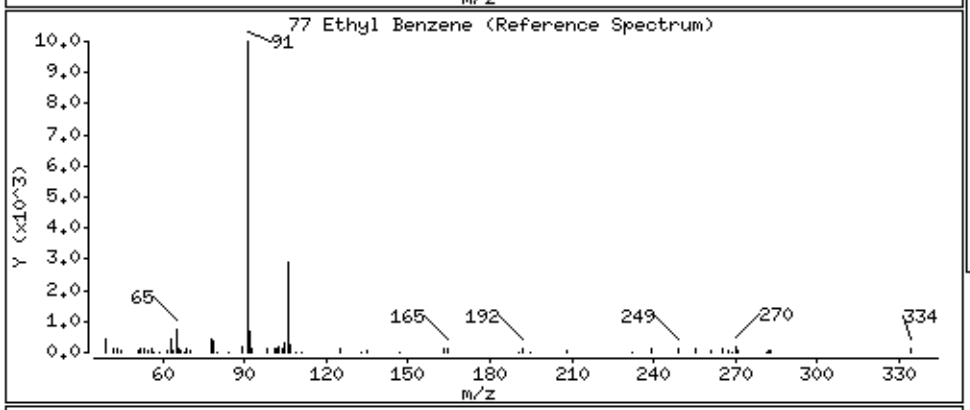
Column diameter: 0.32

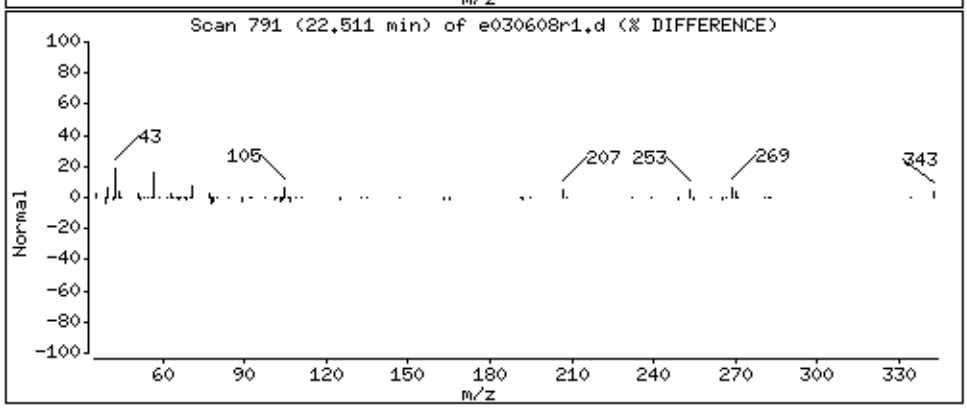
77 Ethyl Benzene

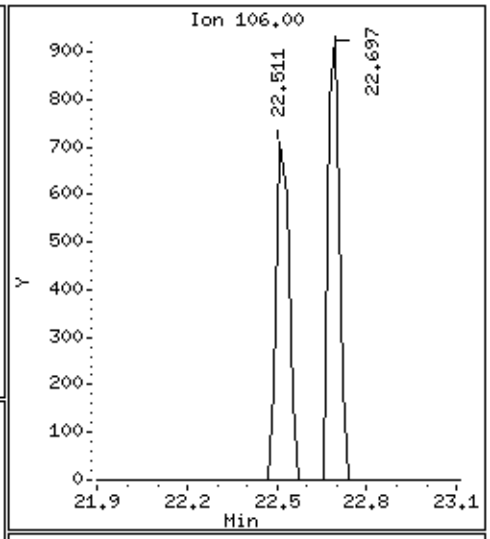
Concentration: 0.03048 PPBV

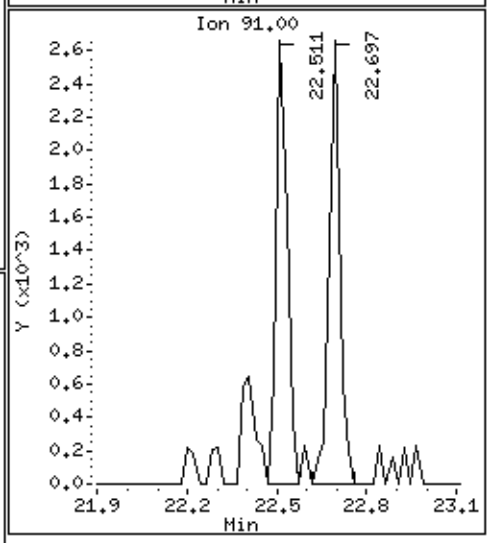












Data File: /chem/msde.i/06Mar2015.b/e030608r1.d

Date : 06-MAR-2015 10:32

Client ID:

Instrument: msde.i

Sample Info: 250mL #34188

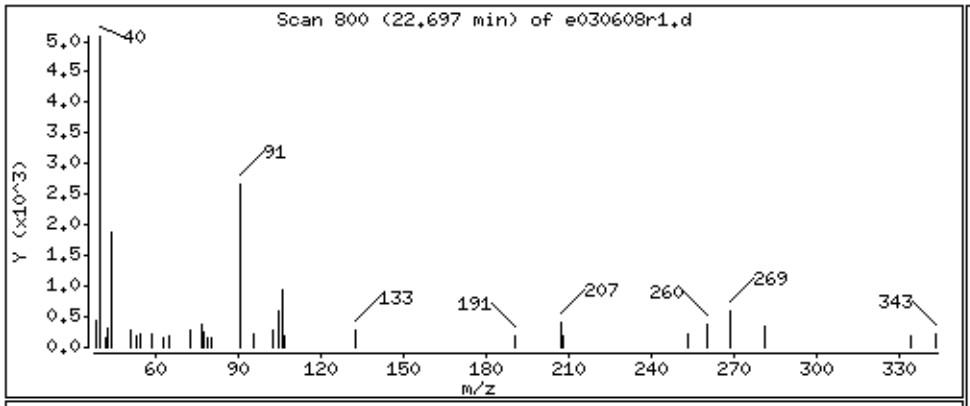
Operator: sab

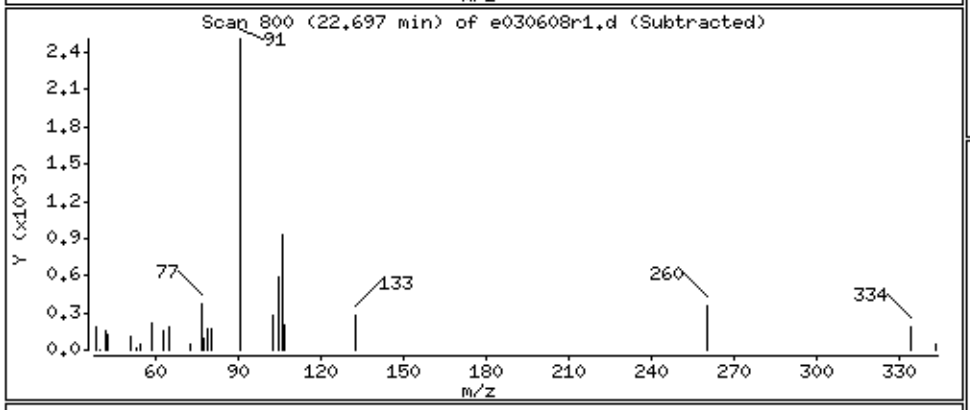
Column phase: RTx-624

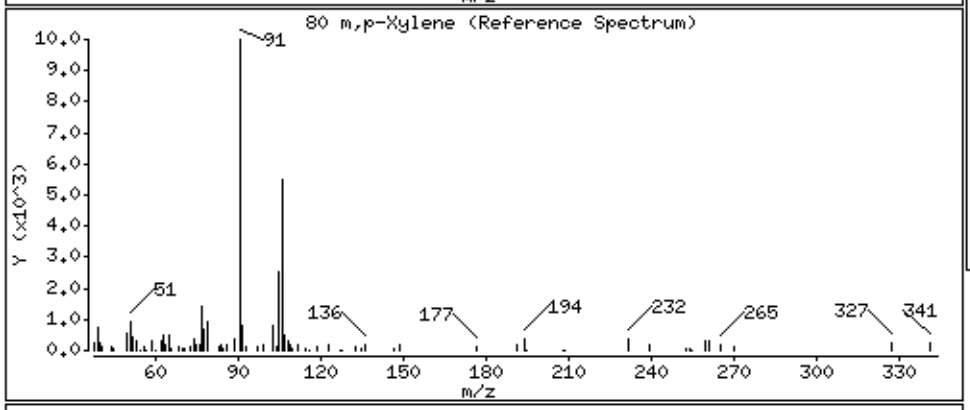
Column diameter: 0.32

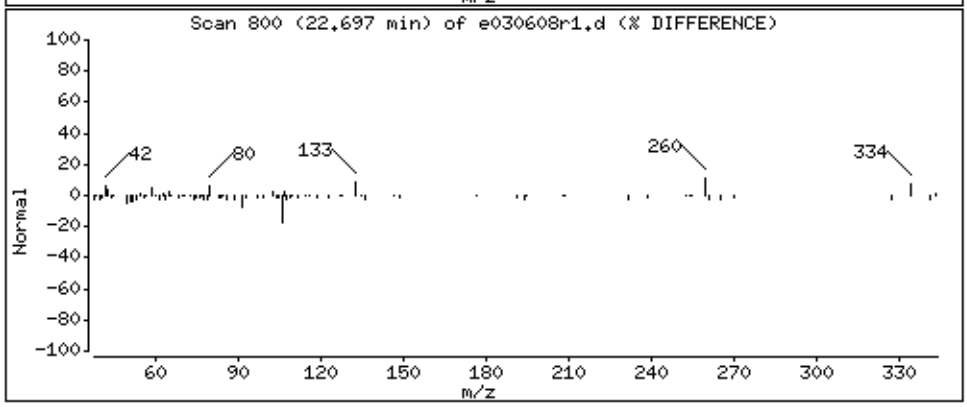
80 m,p-Xylene

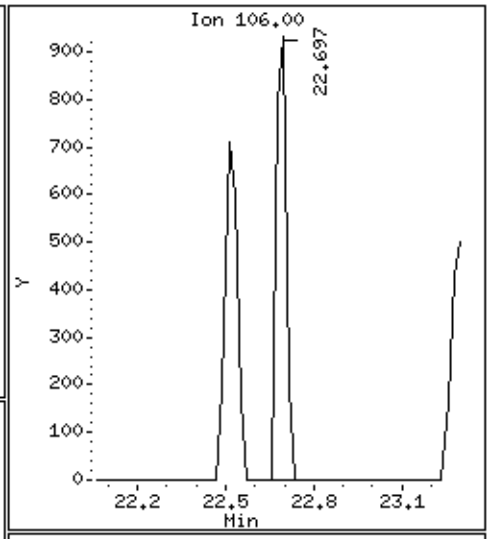
Concentration: 0.02886 PPBV

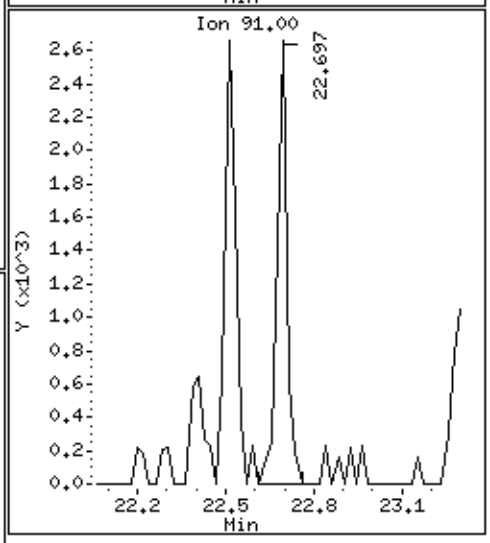












Data File: /chem/msde.i/06Mar2015.b/e030608r1.d

Date : 06-MAR-2015 10:32

Client ID:

Instrument: msde.i

Sample Info: 250mL #34188

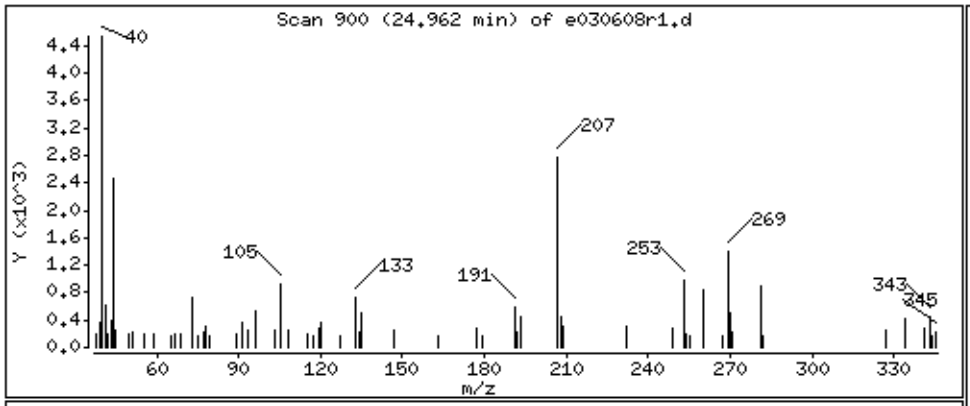
Operator: sab

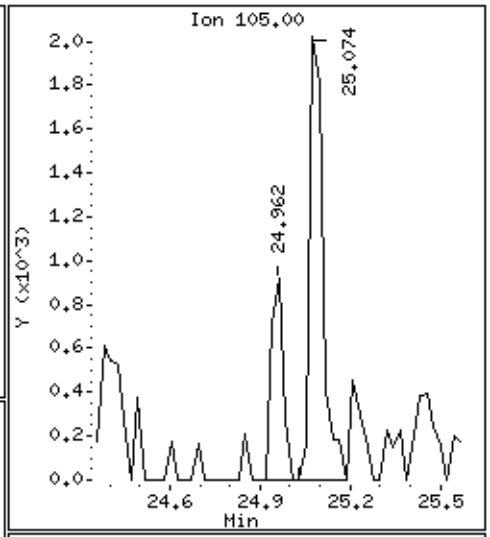
Column phase: RTx-624

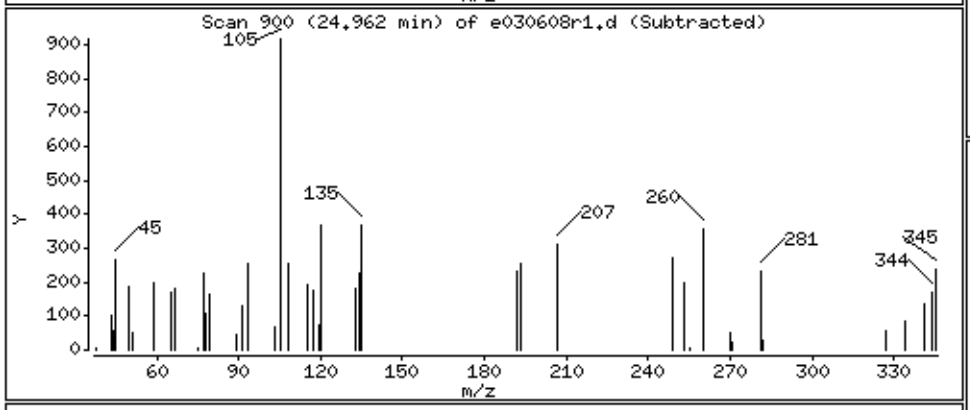
Column diameter: 0.32

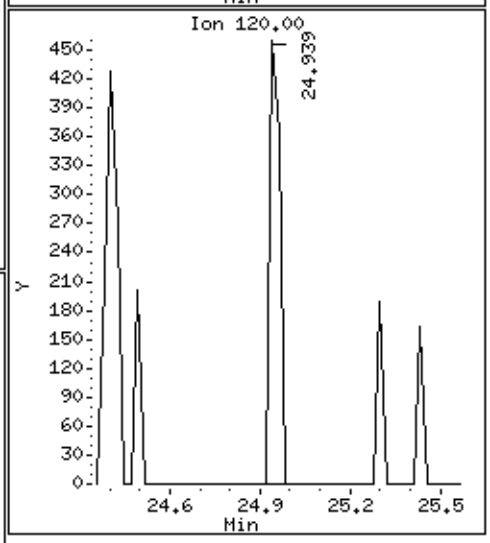
98 1,2,4-Trimethylbenzene

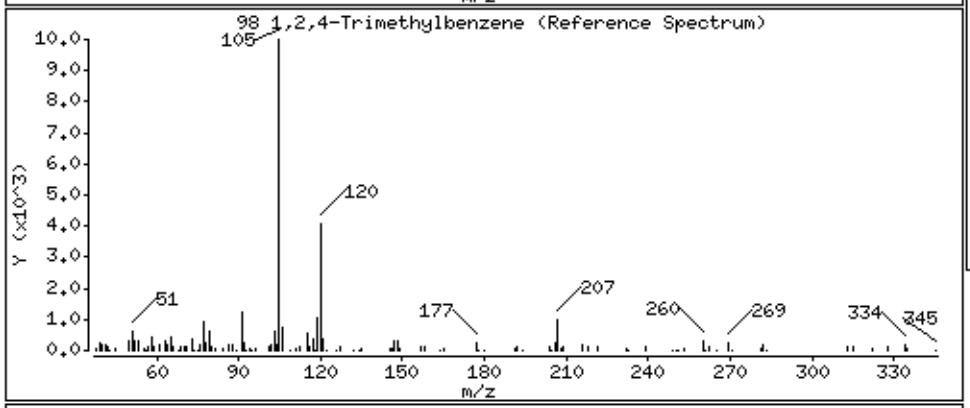
Concentration: 0.01495 PPBV

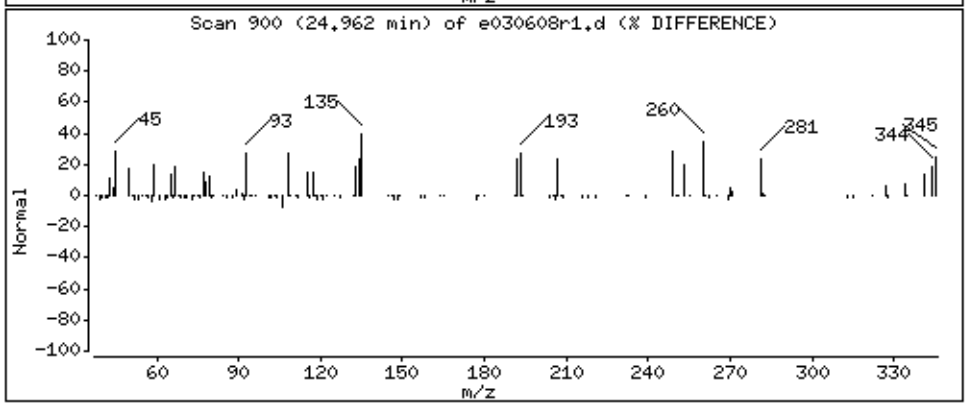












Data File: /chem/msde.i/06Mar2015.b/e030608r1.d

Date : 06-MAR-2015 10:32

Client ID:

Instrument: msde.i

Sample Info: 250mL #34188

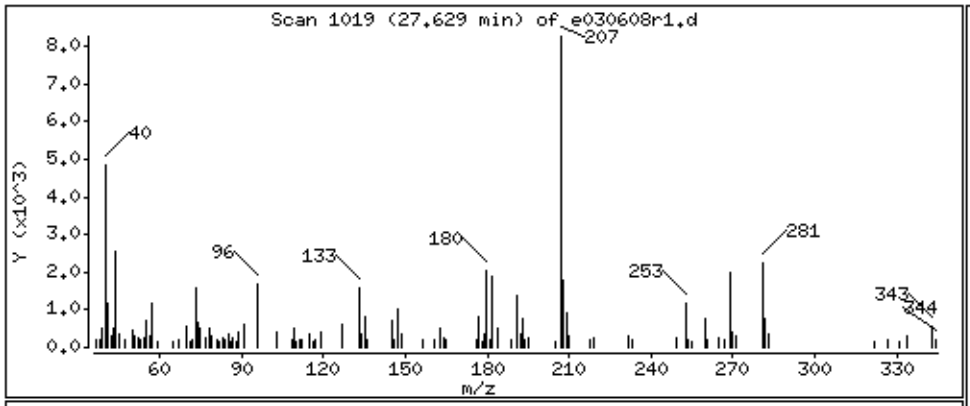
Operator: sab

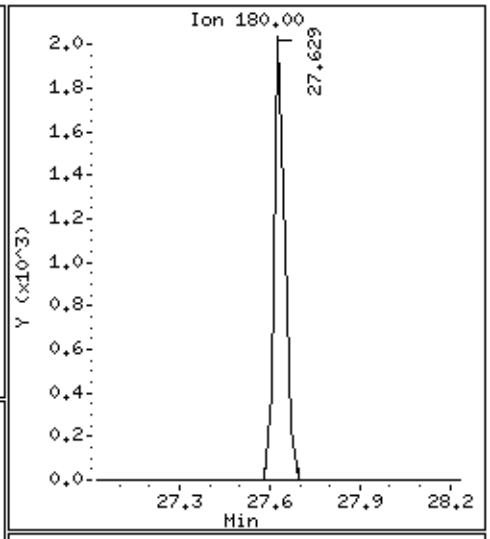
Column phase: RTx-624

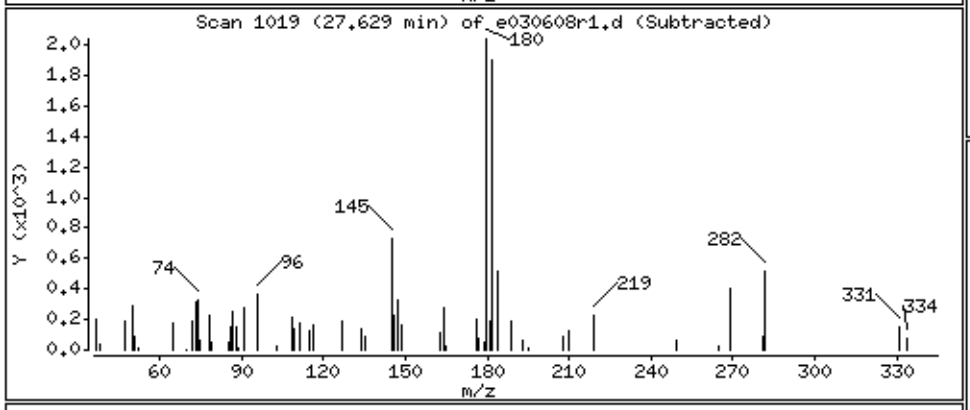
Column diameter: 0.32

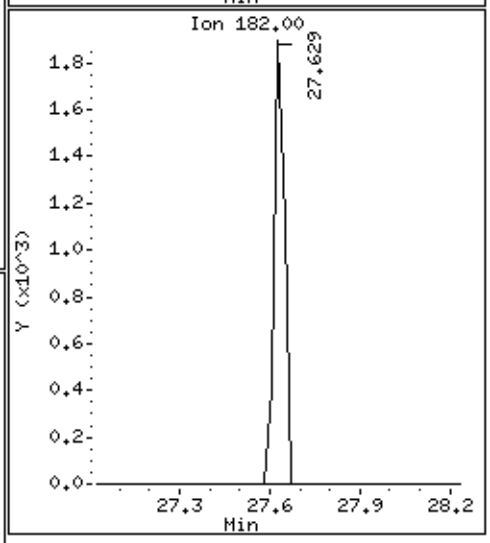
112 1,2,4-Trichlorobenzene

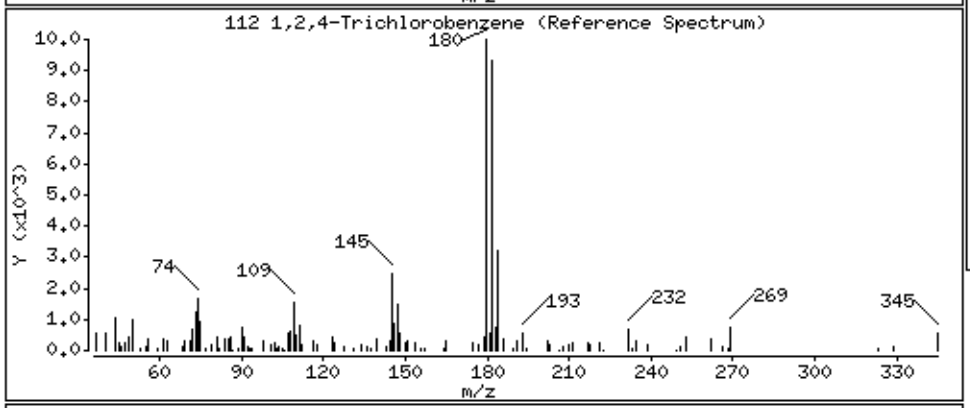
Concentration: 0.05644 PPBV

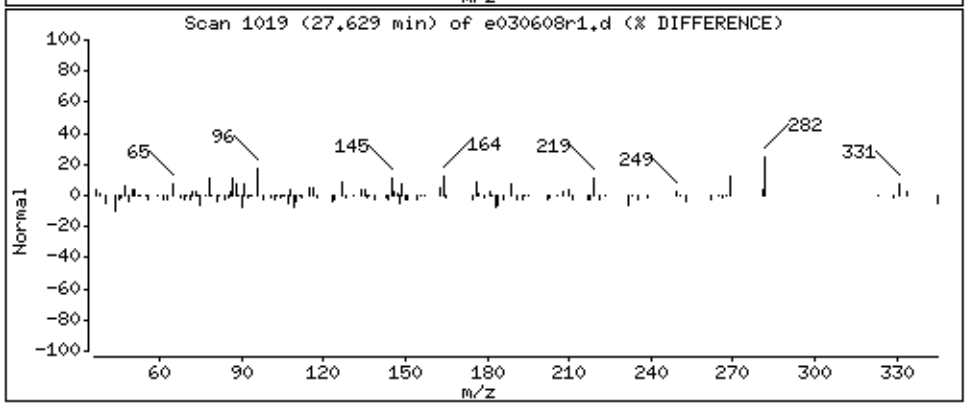












eurofins | Air Toxics

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

Client Sample ID: B6-1IA

Lab ID#: 1503058AR1-02A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.39	0.47	1.9	2.3
Chloromethane	2.0	0.62 J	4.0	1.3 J
Bromomethane	2.0	0.19 J	7.6	0.73 J
Freon 11	0.39	0.20 J	2.2	1.1 J
Ethanol	3.9	12	7.3	23
Acetone	2.0	7.6	4.6	18
2-Propanol	2.0	1200 E	4.8	2900 E
Methylene Chloride	0.78	0.15 J	2.7	0.53 J
2-Butanone (Methyl Ethyl Ketone)	2.0	0.26 J	5.8	0.77 J
Carbon Tetrachloride	0.39	0.098 J	2.4	0.61 J
Benzene	0.39	0.099 J	1.2	0.32 J
4-Methyl-2-pentanone	0.39	0.097 J	1.6	0.40 J
Toluene	0.39	0.44	1.5	1.7
Ethyl Benzene	0.39	0.10 J	1.7	0.46 J
m,p-Xylene	0.39	0.23 J	1.7	1.0 J
4-Ethyltoluene	0.39	0.082 J	1.9	0.40 J
1,2,4-Trimethylbenzene	0.39	0.062 J	1.9	0.31 J

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Client Sample ID: B6-1IA

Lab ID#: 1503058AR1-02A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**e030609r1**	**Date of Collection:**	**3/2/15 12:05:00 PM**
Dil. Factor:	**3.90**	**Date of Analysis:**	**3/6/15 11:17 AM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.39	0.47	1.9	2.3
Freon 114	0.39	Not Detected	2.7	Not Detected
Chloromethane	2.0	0.62 J	4.0	1.3 J
Vinyl Chloride	0.39	Not Detected	1.0	Not Detected
1,3-Butadiene	0.39	Not Detected	0.86	Not Detected
Bromomethane	2.0	0.19 J	7.6	0.73 J
Chloroethane	2.0	Not Detected	5.1	Not Detected
Freon 11	0.39	0.20 J	2.2	1.1 J
Ethanol	3.9	12	7.3	23
Freon 113	0.39	Not Detected	3.0	Not Detected
1,1-Dichloroethene	0.39	Not Detected	1.5	Not Detected
Acetone	2.0	7.6	4.6	18
2-Propanol	2.0	1200 E	4.8	2900 E
Carbon Disulfide	2.0	Not Detected	6.1	Not Detected
3-Chloropropene	2.0	Not Detected	6.1	Not Detected
Methylene Chloride	0.78	0.15 J	2.7	0.53 J
Methyl tert-butyl ether	0.39	Not Detected	1.4	Not Detected
trans-1,2-Dichloroethene	0.39	Not Detected	1.5	Not Detected
Hexane	0.39	Not Detected	1.4	Not Detected
1,1-Dichloroethane	0.39	Not Detected	1.6	Not Detected
2-Butanone (Methyl Ethyl Ketone)	2.0	0.26 J	5.8	0.77 J
cis-1,2-Dichloroethene	0.39	Not Detected	1.5	Not Detected
Tetrahydrofuran	2.0	Not Detected	5.8	Not Detected
Chloroform	0.39	Not Detected	1.9	Not Detected
1,1,1-Trichloroethane	0.39	Not Detected	2.1	Not Detected
Cyclohexane	0.39	Not Detected	1.3	Not Detected
Carbon Tetrachloride	0.39	0.098 J	2.4	0.61 J
2,2,4-Trimethylpentane	2.0	Not Detected	9.1	Not Detected
Benzene	0.39	0.099 J	1.2	0.32 J
1,2-Dichloroethane	0.39	Not Detected	1.6	Not Detected
Heptane	0.39	Not Detected	1.6	Not Detected
Trichloroethene	0.39	Not Detected	2.1	Not Detected
1,2-Dichloropropane	0.39	Not Detected	1.8	Not Detected
1,4-Dioxane	0.39	Not Detected	1.4	Not Detected
Bromodichloromethane	0.39	Not Detected	2.6	Not Detected
cis-1,3-Dichloropropene	0.39	Not Detected	1.8	Not Detected
4-Methyl-2-pentanone	0.39	0.097 J	1.6	0.40 J
Toluene	0.39	0.44	1.5	1.7
trans-1,3-Dichloropropene	0.39	Not Detected	1.8	Not Detected
1,1,2-Trichloroethane	0.39	Not Detected	2.1	Not Detected
Tetrachloroethene	0.39	Not Detected	2.6	Not Detected
2-Hexanone	2.0	Not Detected	8.0	Not Detected

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Client Sample ID: B6-1IA

Lab ID#: 1503058AR1-02A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**e030609r1**	**Date of Collection:**	**3/2/15 12:05:00 PM**
Dil. Factor:	**3.90**	**Date of Analysis:**	**3/6/15 11:17 AM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Dibromochloromethane	0.39	Not Detected	3.3	Not Detected
1,2-Dibromoethane (EDB)	0.39	Not Detected	3.0	Not Detected
Chlorobenzene	0.39	Not Detected	1.8	Not Detected
Ethyl Benzene	0.39	0.10 J	1.7	0.46 J
m,p-Xylene	0.39	0.23 J	1.7	1.0 J
o-Xylene	0.39	Not Detected	1.7	Not Detected
Styrene	0.39	Not Detected	1.7	Not Detected
Bromoform	0.39	Not Detected	4.0	Not Detected
Cumene	0.39	Not Detected	1.9	Not Detected
1,1,2,2-Tetrachloroethane	0.39	Not Detected	2.7	Not Detected
Propylbenzene	0.39	Not Detected	1.9	Not Detected
4-Ethyltoluene	0.39	0.082 J	1.9	0.40 J
1,3,5-Trimethylbenzene	0.39	Not Detected	1.9	Not Detected
1,2,4-Trimethylbenzene	0.39	0.062 J	1.9	0.31 J
1,3-Dichlorobenzene	0.39	Not Detected	2.3	Not Detected
1,4-Dichlorobenzene	0.39	Not Detected	2.3	Not Detected
alpha-Chlorotoluene	0.39	Not Detected	2.0	Not Detected
1,2-Dichlorobenzene	0.39	Not Detected	2.3	Not Detected
1,2,4-Trichlorobenzene	2.0	Not Detected	14	Not Detected
Hexachlorobutadiene	2.0	Not Detected	21	Not Detected
Naphthalene	2.0	Not Detected	10	Not Detected

J = Estimated value.
E = Exceeds instrument calibration range.

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

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	103	70-130
Toluene-d8	99	70-130
4-Bromofluorobenzene	90	70-130

Eurofins Air Toxics Inc.

EPA TO-15/Modified TO14A

Data file : /chem/msde.i/06Mar2015.b/e030609r1.d
Lab Smp Id: 1503058Ar1-02A
Inj Date : 06-MAR-2015 11:17
Operator : sab Inst ID: msde.i
Smp Info : 100mL #94305
Misc Info : 4.3"Hg-5psi
Comment : Low-Level/GC-MS
Method : /chem/msde.i/06Mar2015.b/e15l0210b.m
Meth Date : 26-Jun-2015 12:46 dbailey Quant Type: ISTD
Cal Date : 02-MAR-2015 15:11 Cal File: e030209.d
Als bottle: 1
Dil Factor: 3.90000
Integrator: HP RTE Compound Sublist: T015Nmdl.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Name	Value	Description
DF	3.90000	Dilution Factor

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
* 46 Bromochloromethane						CAS #: 74-97-5	
15.611	15.610 (1.000)	130	231901	5.00000		80.00- 120.00	100.00
15.611	15.610 (1.000)	128	179534			0.00- 30.00	77.42
15.611	15.610 (1.000)	49	262209			0.00- 30.00	113.07
* 58 1,4-Difluorobenzene						CAS #: 540-36-3	
16.987	16.987 (1.000)	114	830946	5.00000		80.00- 120.00	100.00
16.987	16.987 (1.000)	88	114037			0.00- 30.00	13.72
* 75 Chlorobenzene-d5						CAS #: 3114-55-4	
22.407	22.407 (1.000)	117	780226	5.00000		80.00- 120.00	100.00
22.407	22.407 (1.000)	82	361772			0.00- 30.00	46.37
$ 54 1,2-Dichloroethane-d4						CAS #: 17060-07-0	
16.433	16.433 (1.053)	65	252866	5.16885	5.169	80.00- 120.00	100.00
16.433	16.433 (1.053)	67	132077			25.66- 85.66	52.23

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
$ 67 Toluene-d8					CAS #: 2037-26-5		
19.624	19.623 (1.155)	98	780645	4.96380	4.964	80.00- 120.00	100.00
19.624	19.623 (1.155)	70	77483			0.00- 39.92	9.93
19.624	19.623 (1.155)	100	510317			36.14- 96.14	65.37
$ 87 Bromofluorobenzene					CAS #: 460-00-4		
24.042	24.042 (1.073)	174	406353	4.50236	4.502	80.00- 120.00	100.00
24.042	24.042 (1.073)	95	481158			81.46- 141.46	118.41
24.042	24.042 (1.073)	176	390303			67.17- 127.17	96.05
4 Dichlorodifluoromethane/Fr12					CAS #: 75-71-8		
5.503	5.503 (0.353)	85	15178	0.12088	0.4714	80.00- 120.00	100.00
5.503	5.503 (0.353)	87	3997			3.28- 63.28	26.34
7 Chloromethane					CAS #: 74-87-3		
7.191	7.191 (0.461)	50	7718	0.16021	0.6248	80.00- 120.00	100.00(a)
7.191	7.191 (0.461)	52	2155			3.09- 63.09	27.92
12 Bromomethane					CAS #: 74-83-9		
9.781	9.746 (0.627)	94	2231	0.04812	0.1877	80.00- 120.00	100.00(a)
9.781	9.746 (0.627)	96	1430			62.88- 122.88	64.11
16 Trichlorofluoromethane/Fr11					CAS #: 75-69-4		
10.976	10.976 (0.703)	101	6605	0.05022	0.1958	80.00- 120.00	100.00(a)
10.976	10.976 (0.703)	103	4713			35.41- 95.41	71.36
18 Ethanol					CAS #: 64-17-5		
11.890	11.890 (0.762)	45	68249	3.19142	12.446	80.00- 120.00	100.00
11.890	11.890 (0.762)	46	26704			7.33- 67.33	39.13
11.890	11.890 (0.762)	43	14819			0.00- 51.69	21.71
22 Acetone					CAS #: 67-64-1		
12.575	12.575 (0.806)	58	64146	1.95043	7.607	80.00- 120.00	100.00
12.575	12.575 (0.806)	43	182474			255.02- 315.02	284.47
25 2-Propanol					CAS #: 67-63-0		
12.937	12.918 (0.829)	45	29284181	304.329	1186.9	80.00- 120.00	100.00(A)
12.937	12.918 (0.829)	43	5863436			0.00- 47.09	20.02
12.937	12.918 (0.829)	59	1386670			0.00- 34.17	4.74
29 Methylene Chloride					CAS #: 75-09-2		
13.376	13.375 (0.857)	84	1948	0.03911	0.1525	80.00- 120.00	100.00(a)
13.376	13.375 (0.857)	49	2535			98.36- 158.36	130.09
13.376	13.375 (0.857)	51	1293			9.23- 69.23	66.39
42 2-Butanone					CAS #: 78-93-3		
15.259	15.259 (0.977)	72	1883	0.06732	0.2625	80.00- 120.00	100.00(a)

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
42 2-Butanone (continued)							
15.259	15.259 (0.977)	43	10360			374.35- 434.35	550.11
15.259	15.259 (0.977)	57	836			4.18- 64.18	44.42
51 Carbon Tetrachloride					CAS #: 56-23-5		
16.104	16.104 (1.032)	119	2692	0.02505	0.09770	80.00- 120.00	100.00(a)
16.104	16.104 (1.032)	117	2541			73.51- 133.51	94.37
53 Benzene					CAS #: 71-43-2		
16.433	16.433 (0.967)	78	4103	0.02541	0.09910	80.00- 120.00	100.00(a)
16.433	16.433 (0.967)	77	1098			0.00- 53.40	26.76
65 4-Methyl-2-pentanone					CAS #: 108-10-1		
19.332	19.310 (1.138)	43	3213	0.02495	0.09732	80.00- 120.00	100.00(a)
19.332	19.310 (1.138)	58	892			10.53- 70.53	27.78
19.310	19.310 (1.137)	85	471			0.00- 48.12	14.69
68 Toluene					CAS #: 108-88-3		
19.758	19.758 (1.163)	91	22661	0.11363	0.4431	80.00- 120.00	100.00
19.780	19.758 (1.164)	92	12531			28.42- 88.42	55.30
77 Ethyl Benzene					CAS #: 100-41-4		
22.531	22.511 (1.006)	106	2360	0.02691	0.1050	80.00- 120.00	100.00(a)
22.511	22.511 (1.005)	91	6042			268.64- 328.64	255.95
80 m,p-Xylene					CAS #: 108-38-3		
22.697	22.697 (1.013)	106	6309	0.05891	0.2297	80.00- 120.00	100.00(a)
22.697	22.697 (1.013)	91	12612			156.41- 216.41	199.89
92 4-Ethyltoluene					CAS #: 622-96-8		
24.424	24.424 (1.090)	105	5931	0.02106	0.08212	80.00- 120.00	100.00(a)
24.401	24.424 (1.089)	120	1449			1.72- 61.72	24.44
98 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
24.962	24.962 (1.114)	105	3533	0.01600	0.06238	80.00- 120.00	100.00(a)
24.962	24.962 (1.114)	120	1869			19.10- 79.10	52.91

QC Flag Legend

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

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msde.i
Lab File ID: e030609r1.d
Lab Smp Id: 1503058Ar1-02A
Analysis Type: VOA
Quant Type: ISTD
Operator: sab
Method File: /chem/msde.i/06Mar2015.b/e15l0210b.m
Misc Info: 4.3"Hg-5psi

Calibration Date: 06-MAR-2015
Calibration Time: 05:31

Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
46 Bromochloromethan	236898	142139	331657	231901	-2.11
58 1,4-Difluorobenze	878027	526816	1229238	830946	-5.36
75 Chlorobenzene-d5	818204	490922	1145486	780226	-4.64

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
46 Bromochloromethan	15.61	15.28	15.94	15.61	0.00
58 1,4-Difluorobenze	16.99	16.66	17.32	16.99	0.00
75 Chlorobenzene-d5	22.41	22.08	22.74	22.41	0.00

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

Report Date: 26-Jun-2015 12:54

Eurofins Air Toxics Inc.

RECOVERY REPORT

Client Name: Client SDG: 06Mar2015
Sample Matrix: GAS Fraction: VOA
Lab Smp Id: 1503058Ar1-02A
Level: LOW Operator: sab
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: AT09.spk Quant Type: ISTD
Sublist File: T015Nmdl.sub
Method File: /chem/msde.i/06Mar2015.b/e15l0210b.m
Misc Info: 4.3"Hg-5psi

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 54 1,2-Dichloroethane	5.000	5.169	103.38	70-130
$ 67 Toluene-d8	5.000	4.964	99.28	70-130
$ 87 Bromofluorobenzene	5.000	4.502	90.05	70-130

Data File: /chem/msde.i/06Mar2015.b/e030609r1.d

Date : 06-MAR-2015 11:17

Client ID:

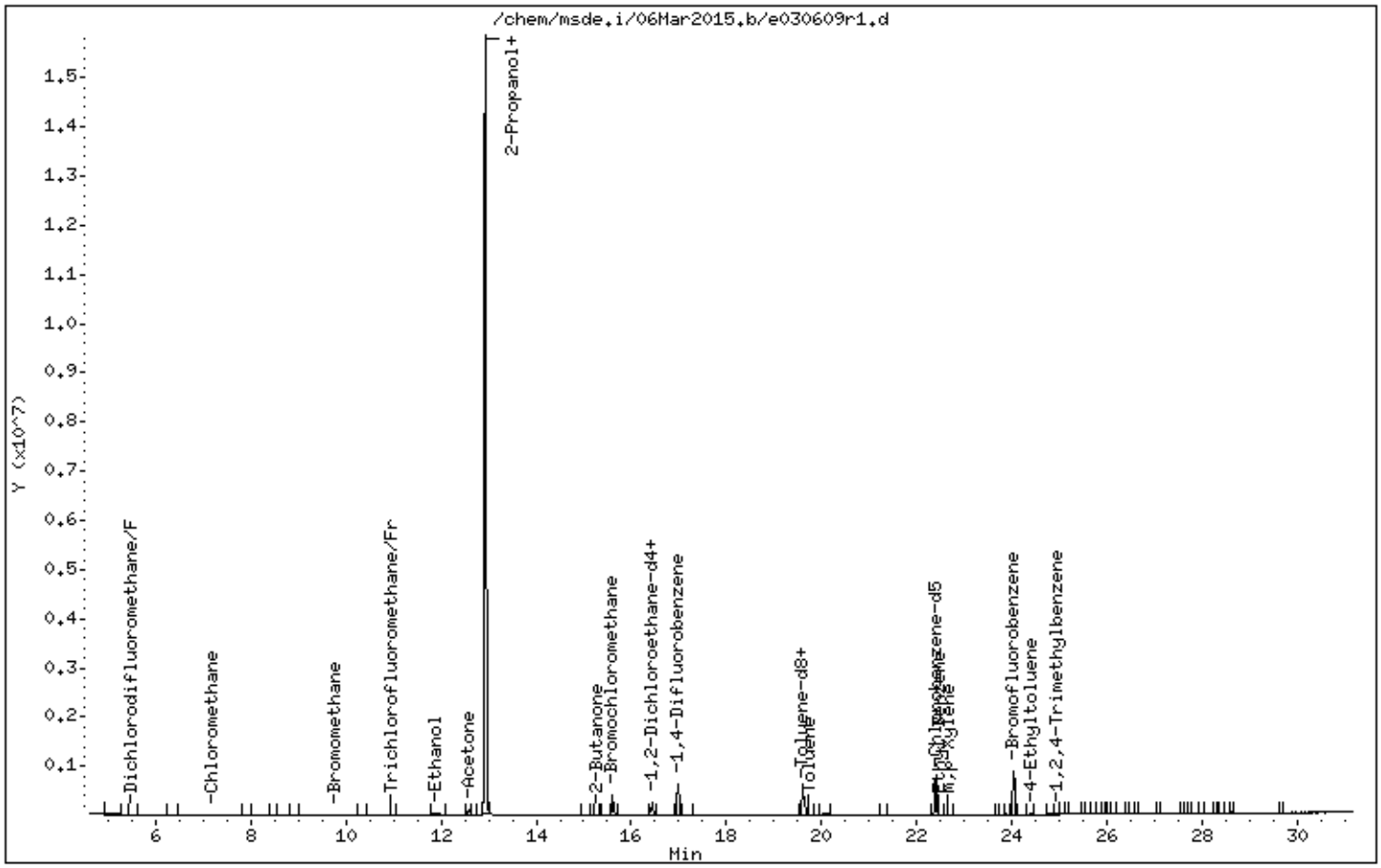
Instrument: msde.i

Sample Info: 100mL #94305

Operator: sab

Column phase: RTx-624

Column diameter: 0.32



Data File: /chem/msde.i/06Mar2015.b/e030609r1.d

Date : 06-MAR-2015 11:17

Client ID:

Instrument: msde.i

Sample Info: 100mL #94305

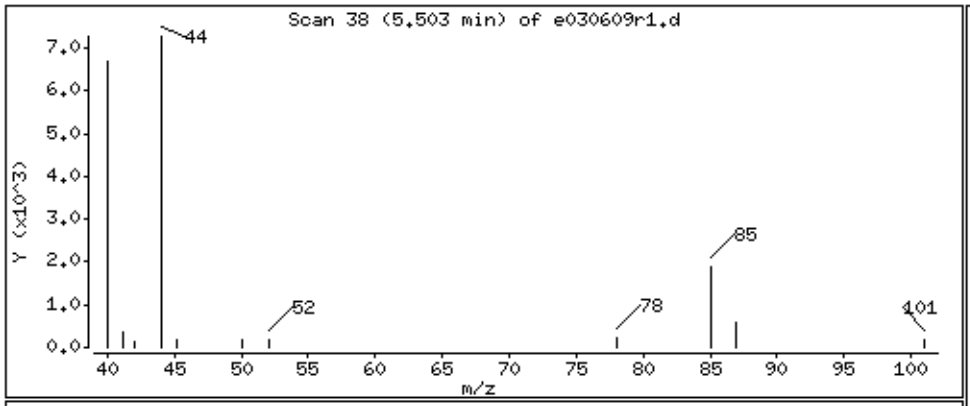
Operator: sab

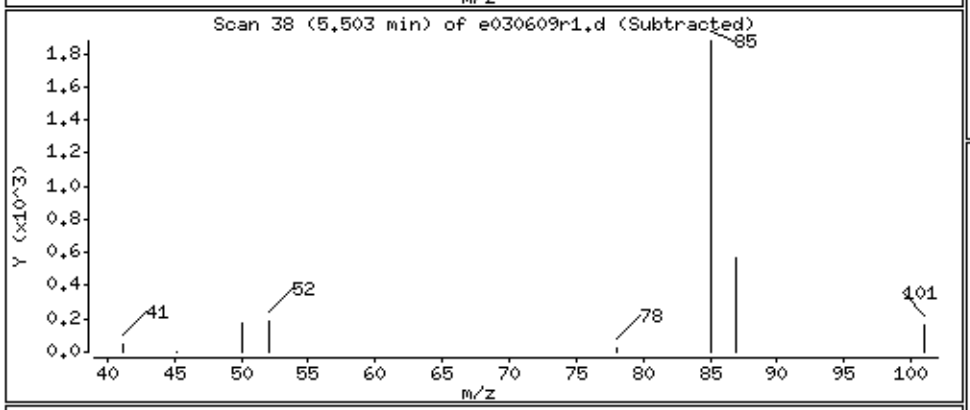
Column phase: RTx-624

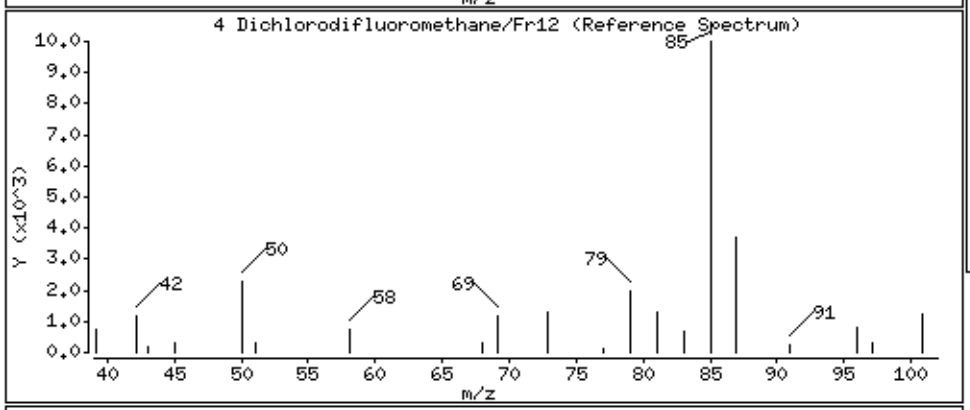
Column diameter: 0.32

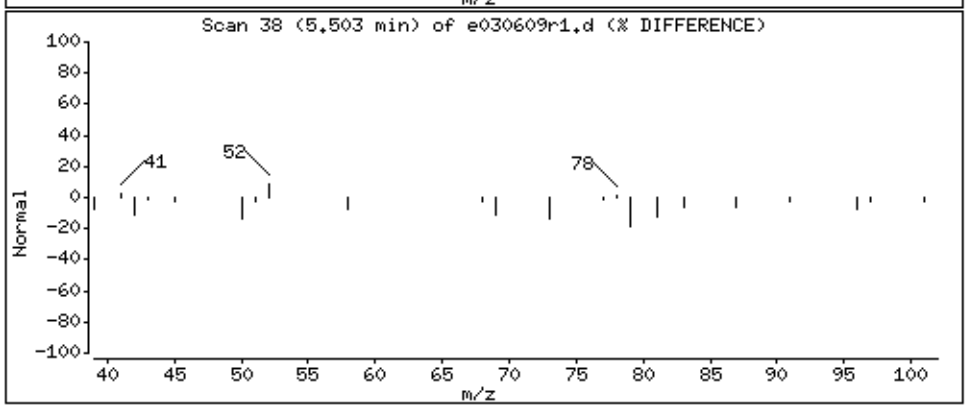
4 Dichlorodifluoromethane/Fr12

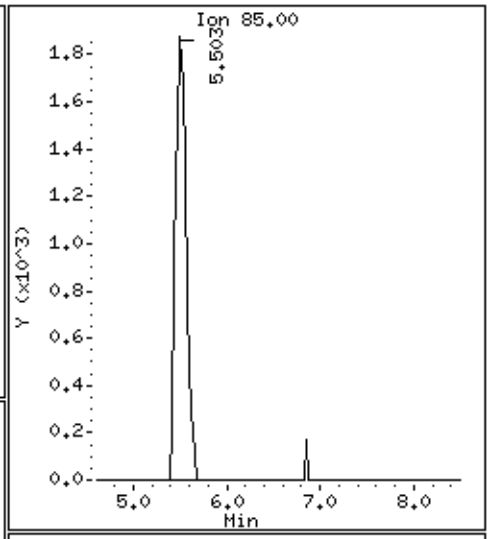
Concentration: 0.4714 PPBV

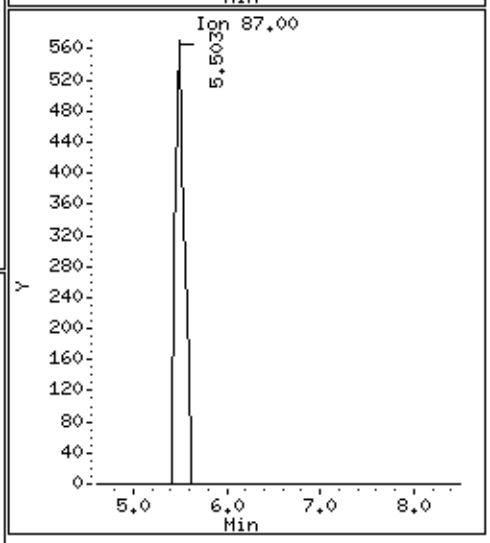












Data File: /chem/msde.i/06Mar2015.b/e030609r1.d

Date : 06-MAR-2015 11:17

Client ID:

Instrument: msde.i

Sample Info: 100mL #94305

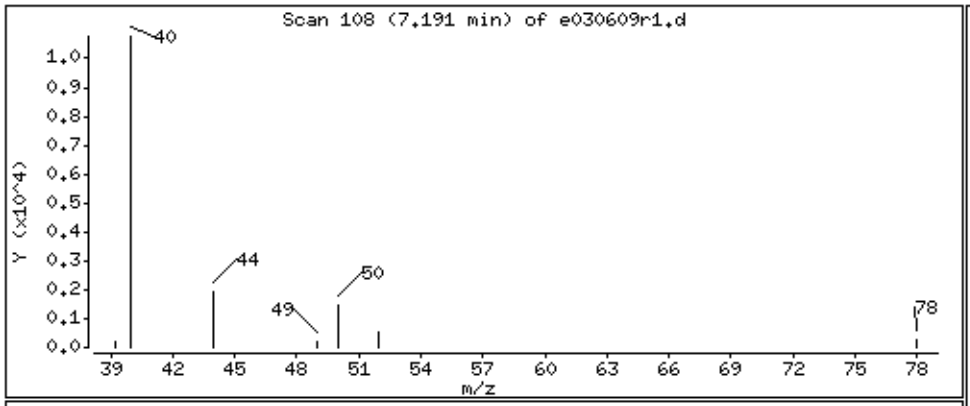
Operator: sab

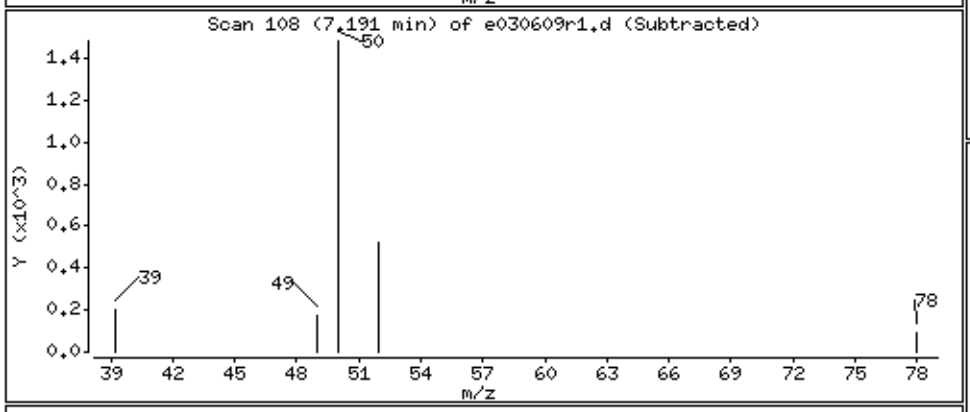
Column phase: RTx-624

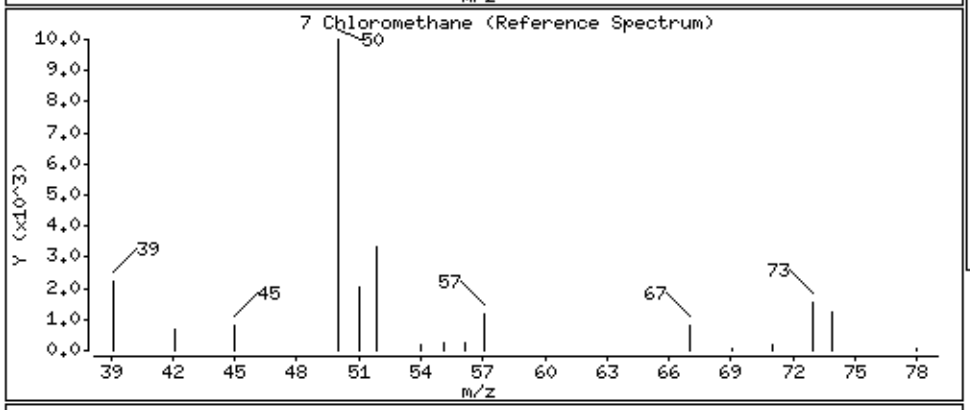
Column diameter: 0.32

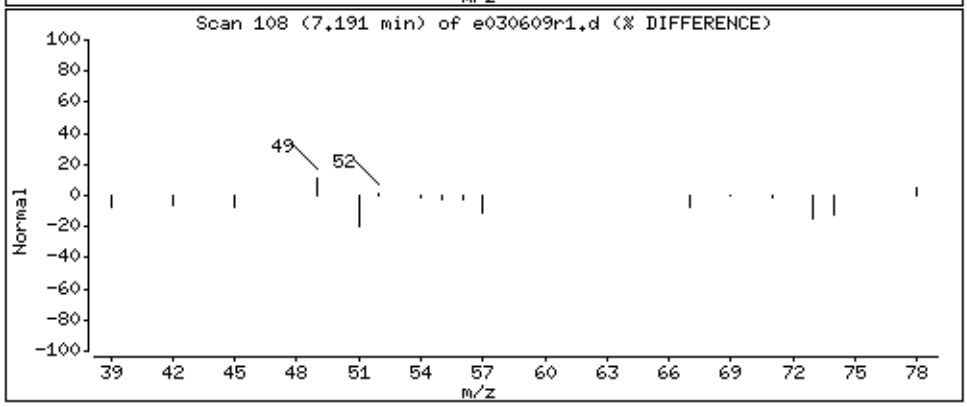
7 Chloromethane

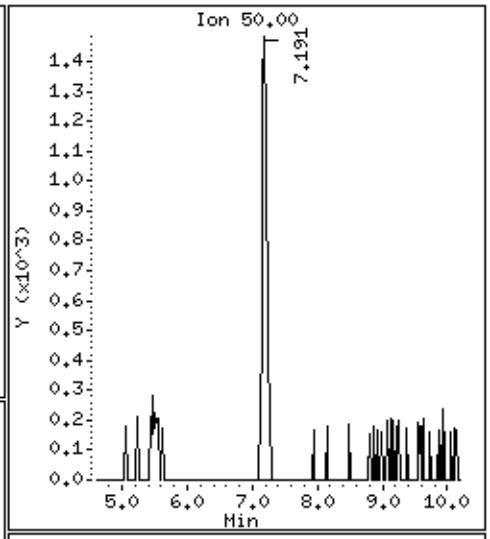
Concentration: 0.6248 PPBV

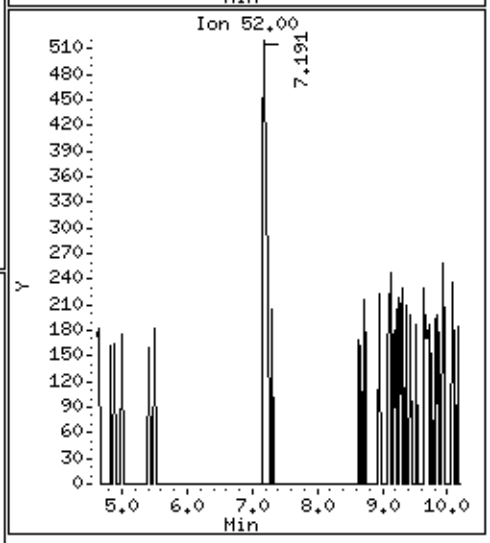












Data File: /chem/msde.i/06Mar2015.b/e030609r1.d

Date : 06-MAR-2015 11:17

Client ID:

Instrument: msde.i

Sample Info: 100mL #94305

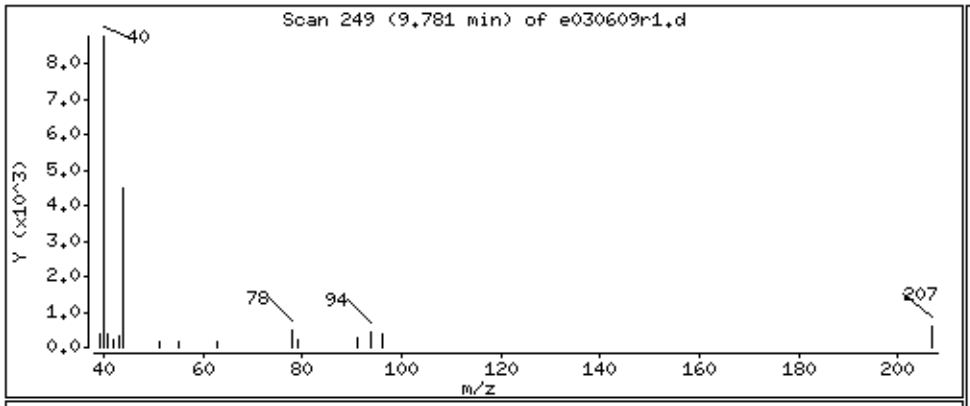
Operator: sab

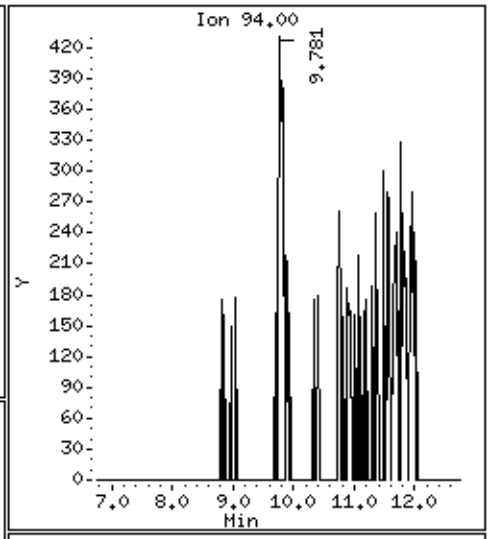
Column phase: RTx-624

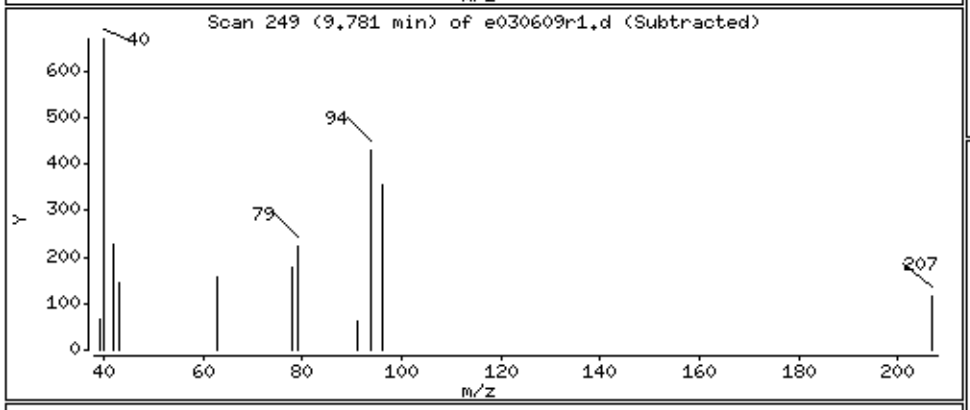
Column diameter: 0.32

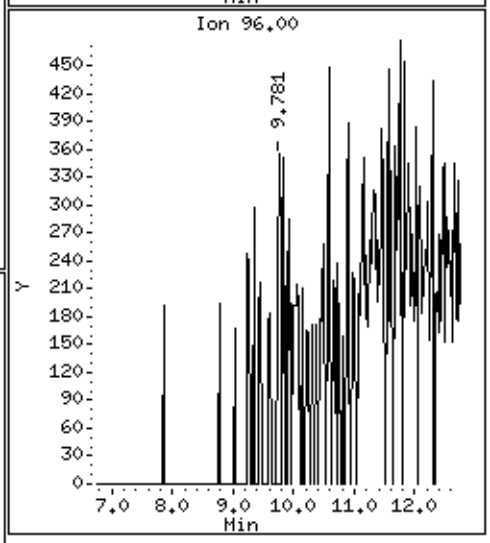
12 Bromomethane

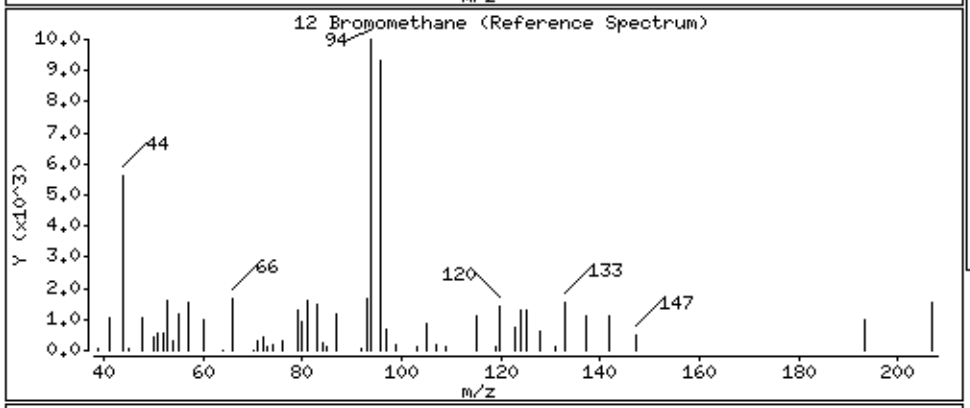
Concentration: 0.1877 PPBV

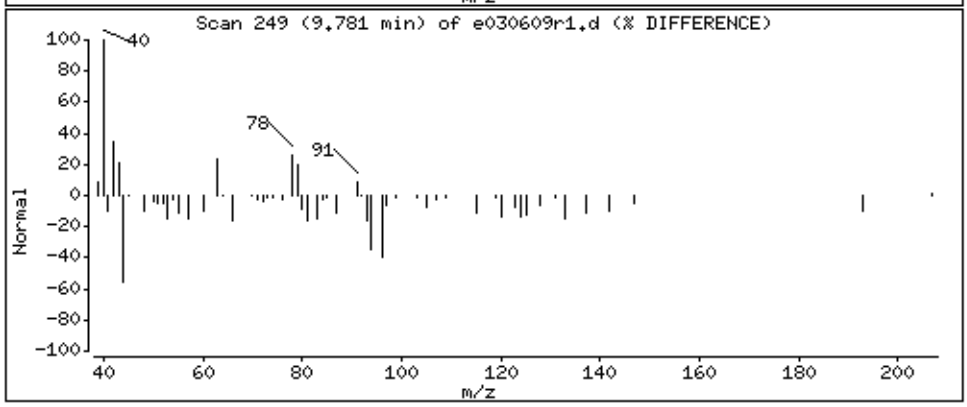












Data File: /chem/msde.i/06Mar2015.b/e030609r1.d

Date : 06-MAR-2015 11:17

Client ID:

Instrument: msde.i

Sample Info: 100mL #94305

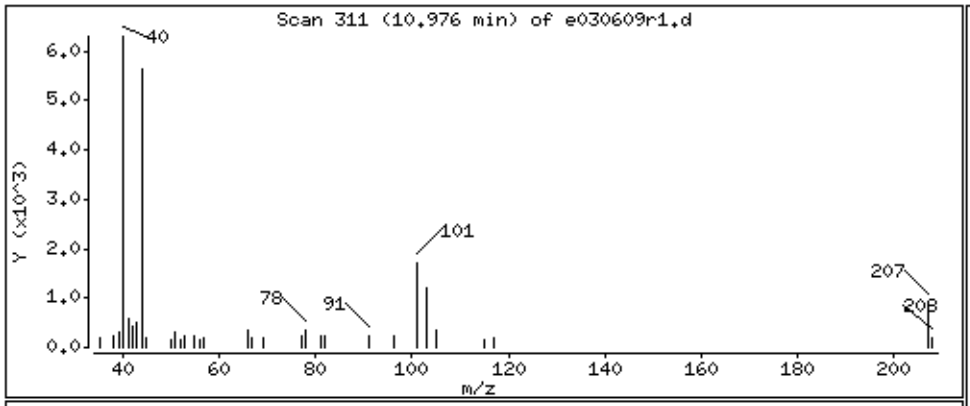
Operator: sab

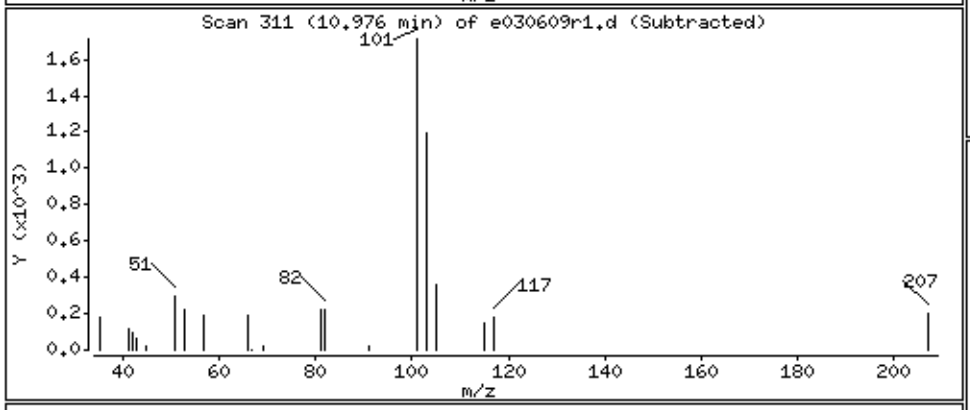
Column phase: RTx-624

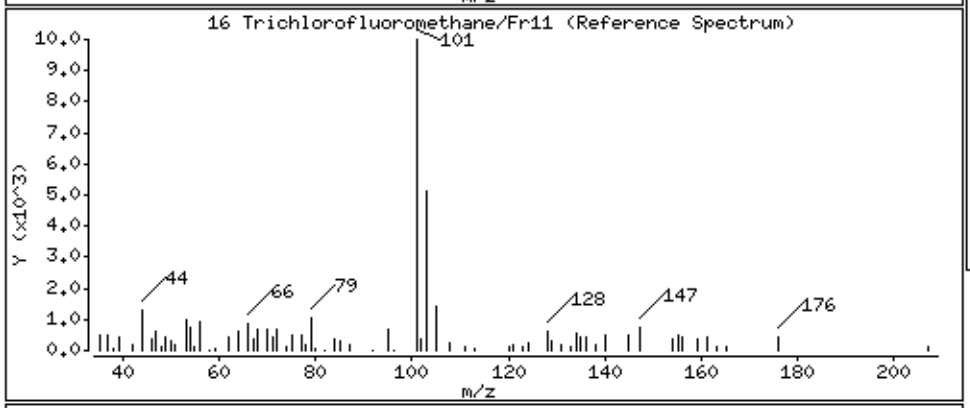
Column diameter: 0.32

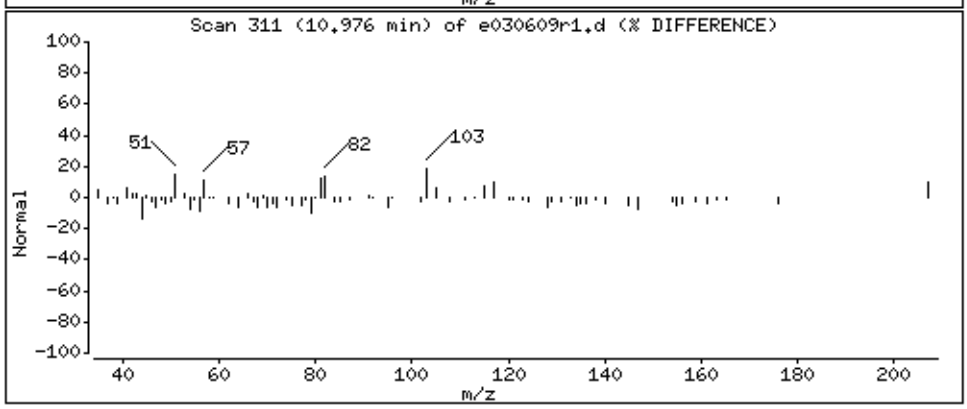
16 Trichlorofluoromethane/Fr11

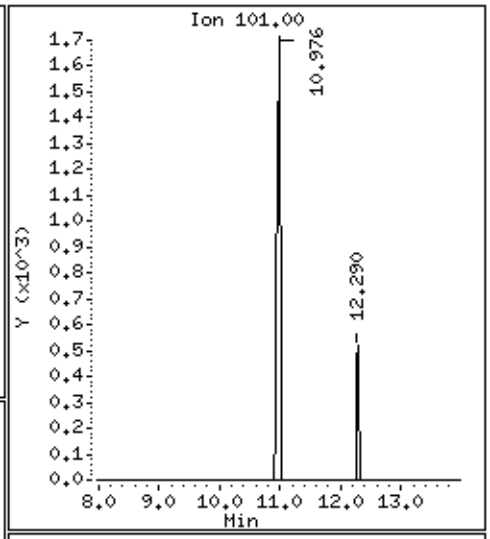
Concentration: 0.1958 PPBV

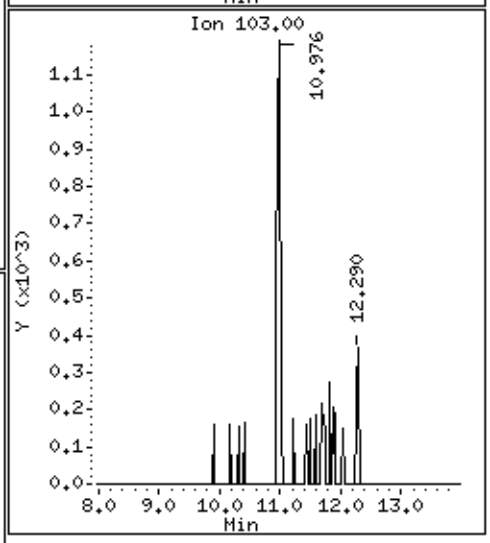












Data File: /chem/msde.i/06Mar2015.b/e030609r1.d

Date : 06-MAR-2015 11:17

Client ID:

Instrument: msde.i

Sample Info: 100mL #94305

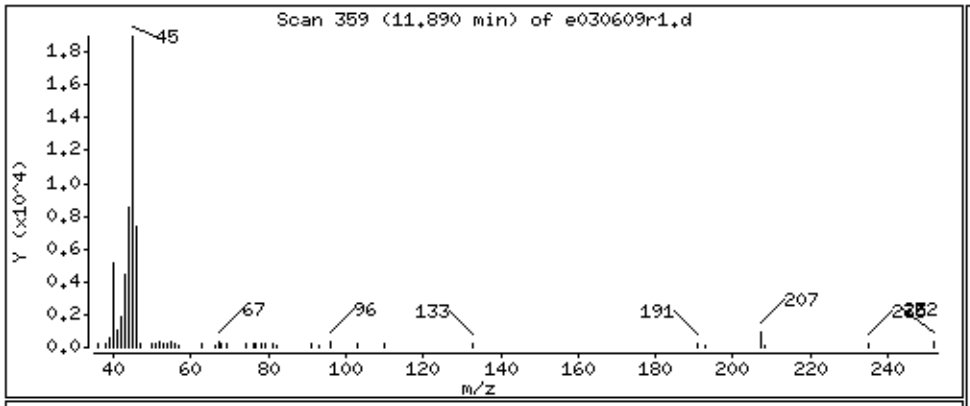
Operator: sab

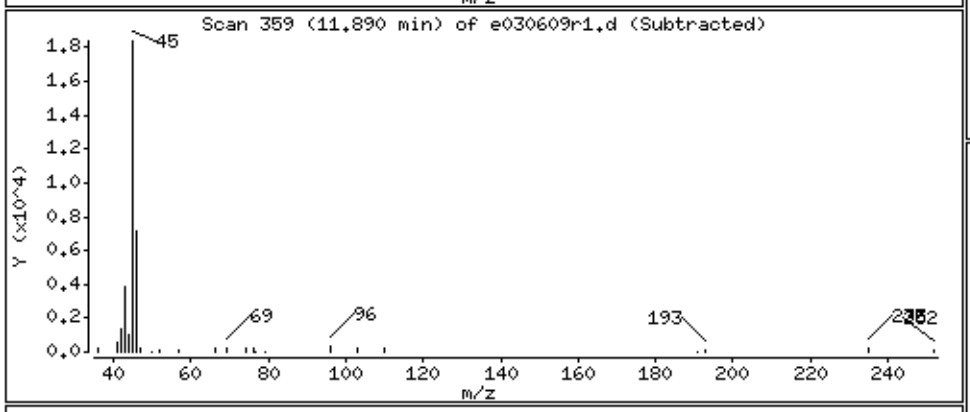
Column phase: RTx-624

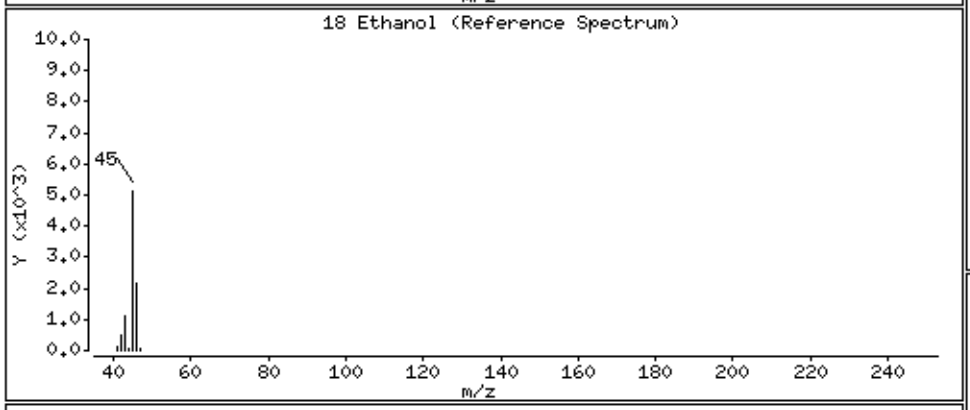
Column diameter: 0.32

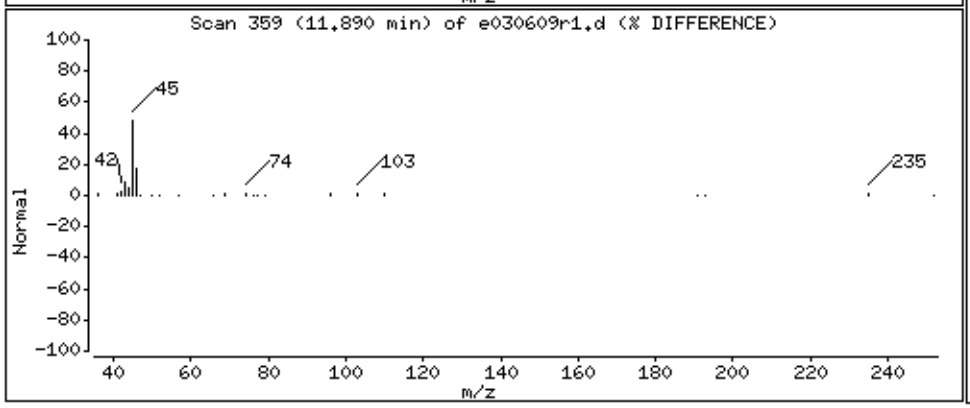
18 Ethanol

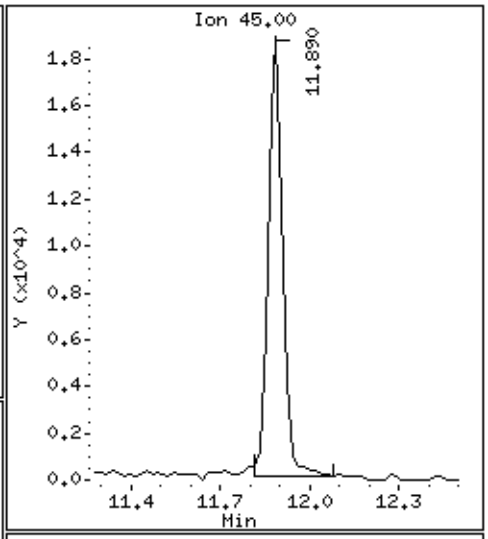
Concentration: 12.446 PPBV

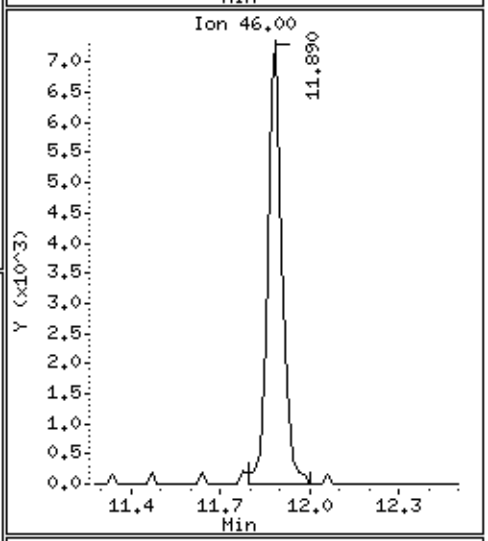


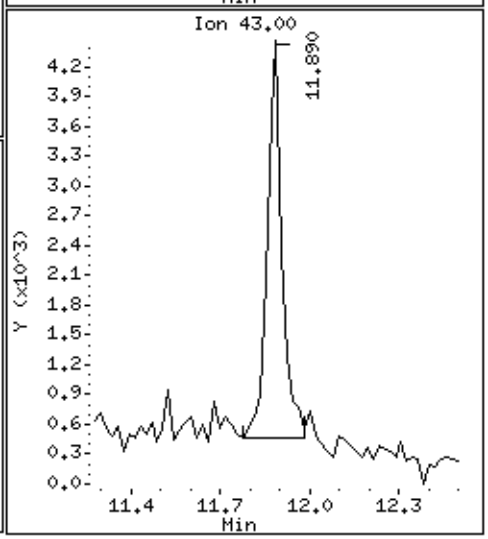












Data File: /chem/msde.i/06Mar2015.b/e030609r1.d

Date : 06-MAR-2015 11:17

Client ID:

Instrument: msde.i

Sample Info: 100mL #94305

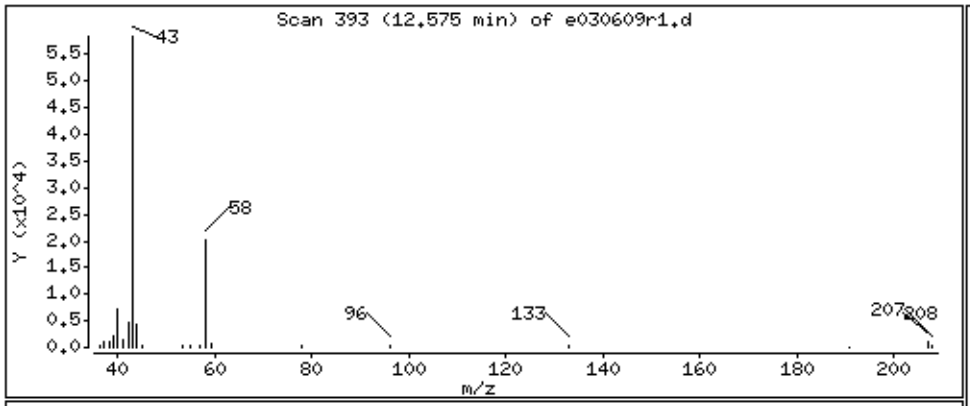
Operator: sab

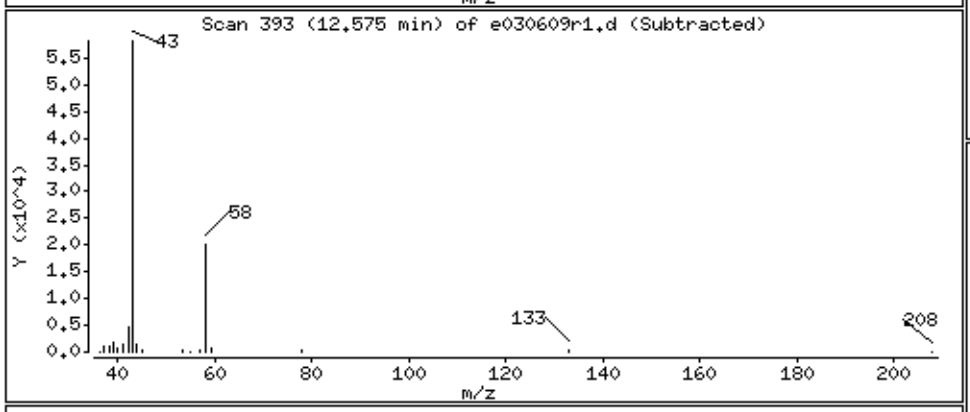
Column phase: RTx-624

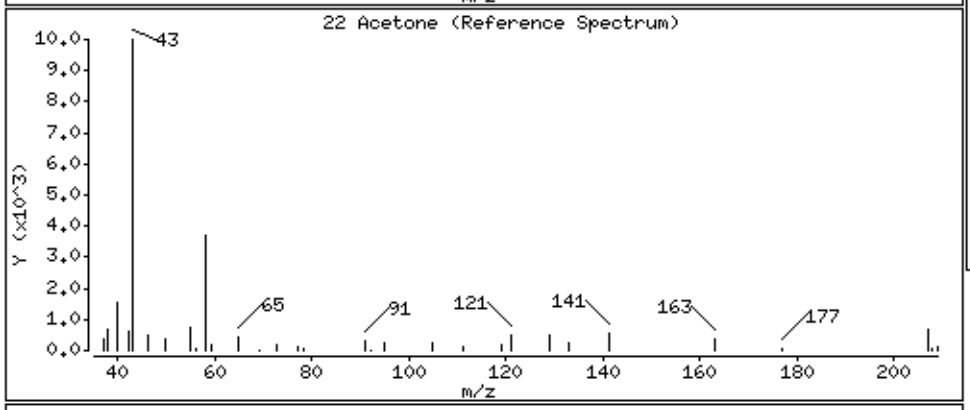
Column diameter: 0.32

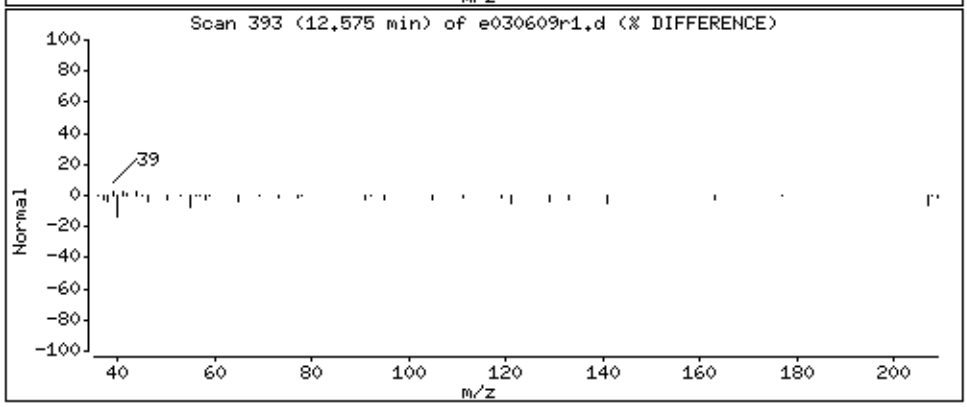
22 Acetone

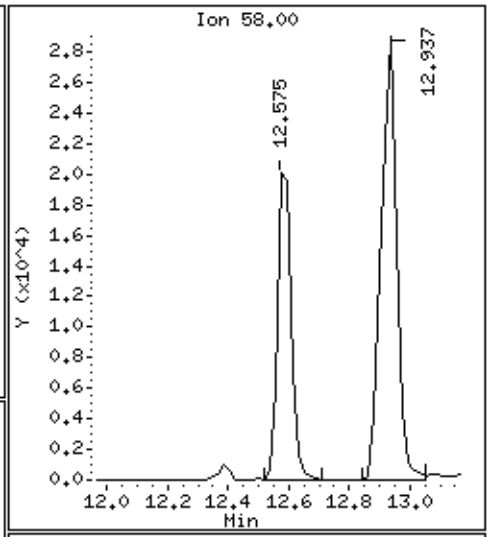
Concentration: 7.607 PPBV

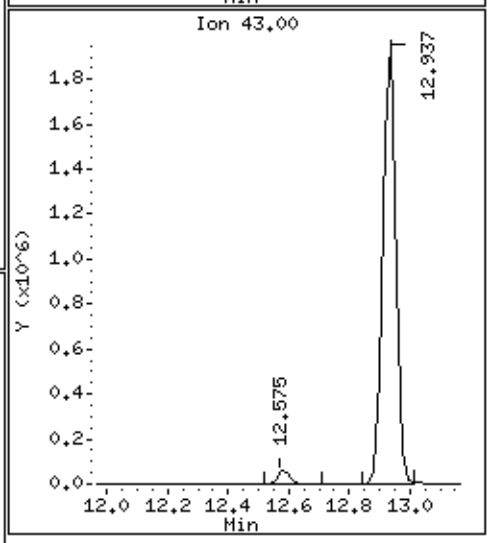












Data File: /chem/msde.i/06Mar2015.b/e030609r1.d

Date : 06-MAR-2015 11:17

Client ID:

Instrument: msde.i

Sample Info: 100mL #94305

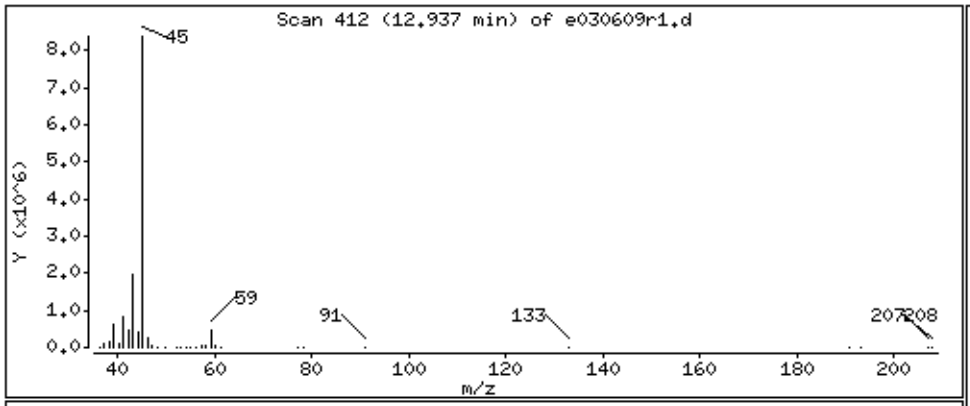
Operator: sab

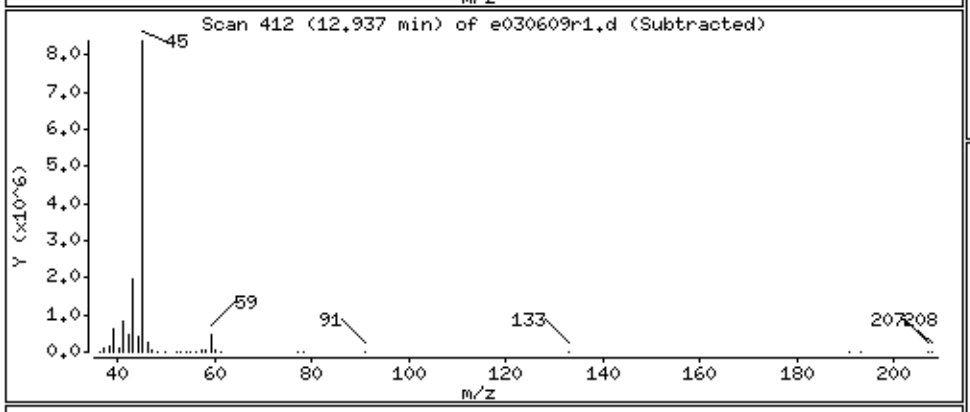
Column phase: RTx-624

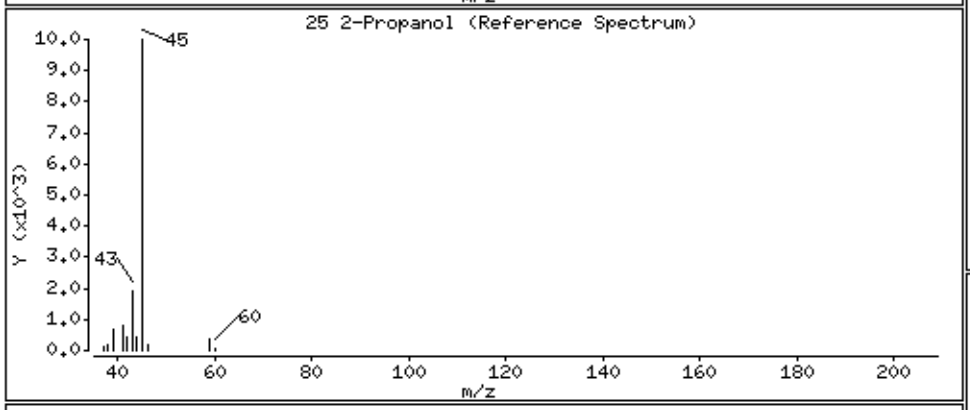
Column diameter: 0.32

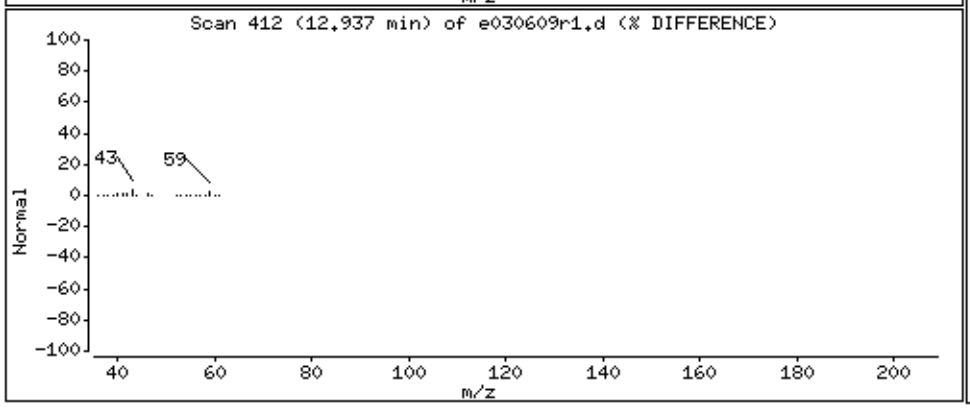
25 2-Propanol

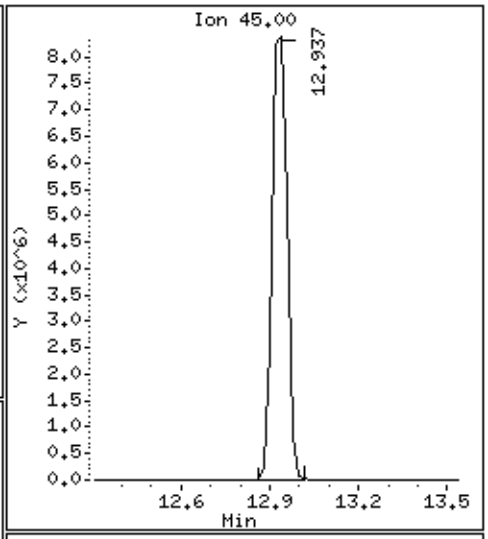
Concentration: 1186.9 PPBV

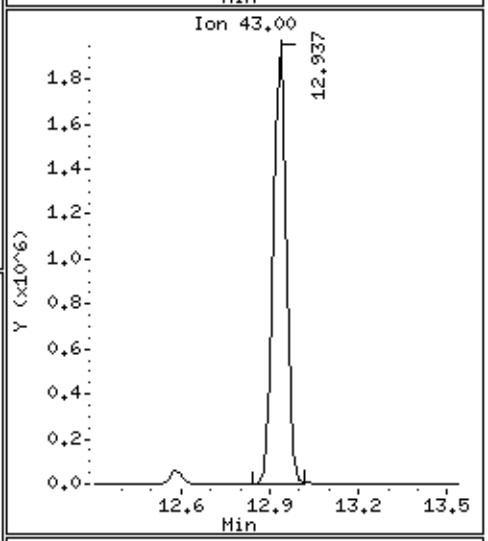


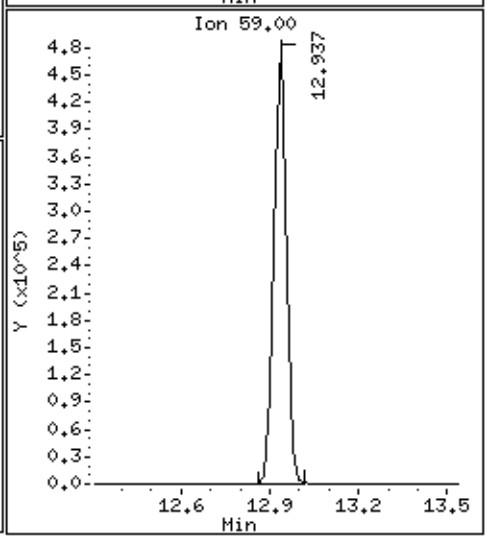












Data File: /chem/msde.i/06Mar2015.b/e030609r1.d

Date : 06-MAR-2015 11:17

Client ID:

Instrument: msde.i

Sample Info: 100mL #94305

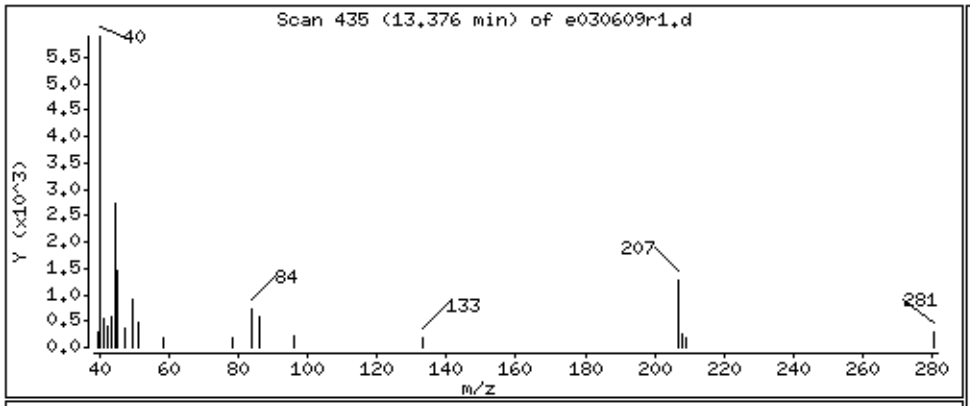
Operator: sab

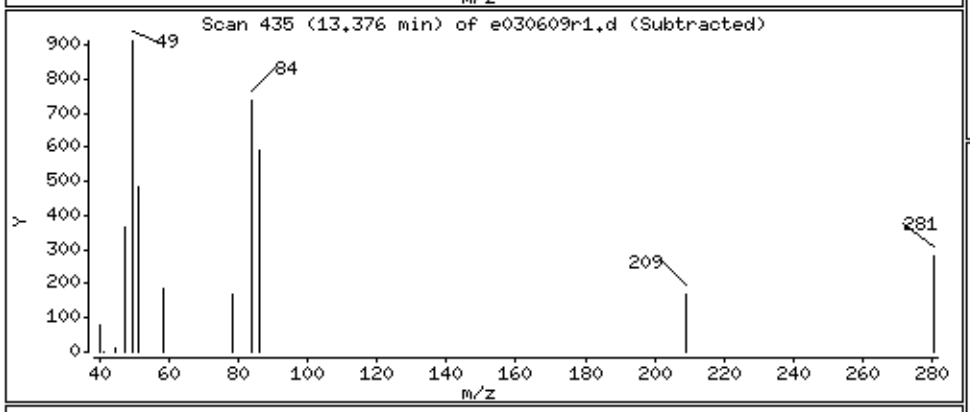
Column phase: RTx-624

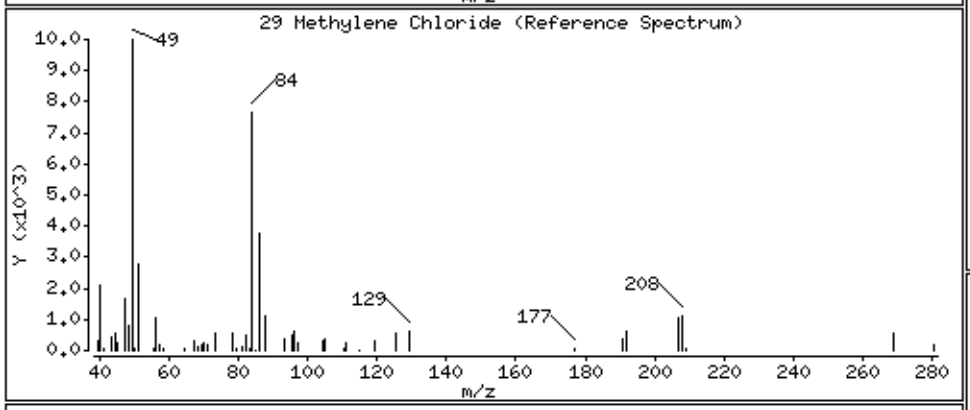
Column diameter: 0.32

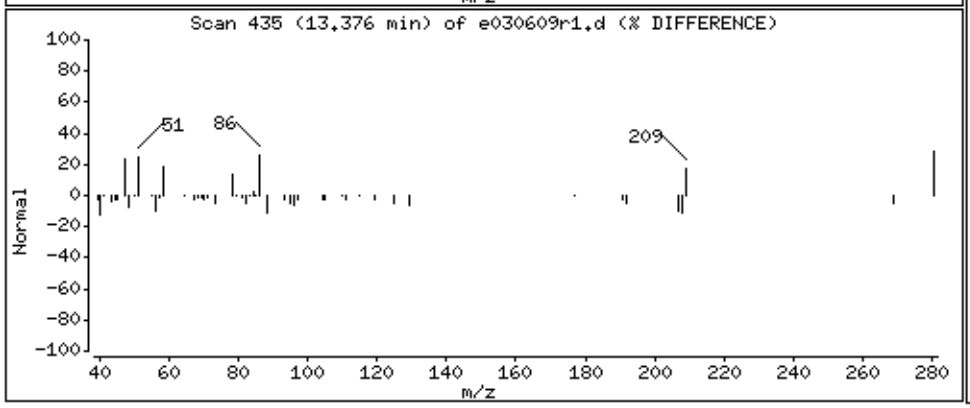
29 Methylene Chloride

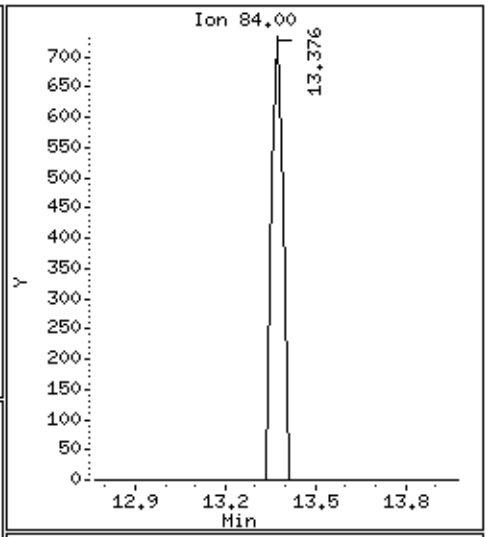
Concentration: 0.1525 PPBV

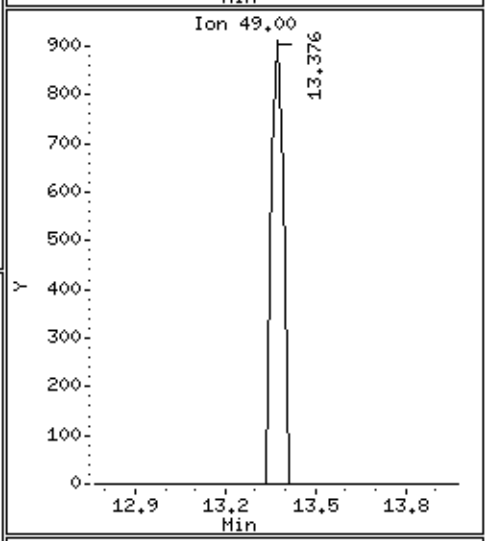


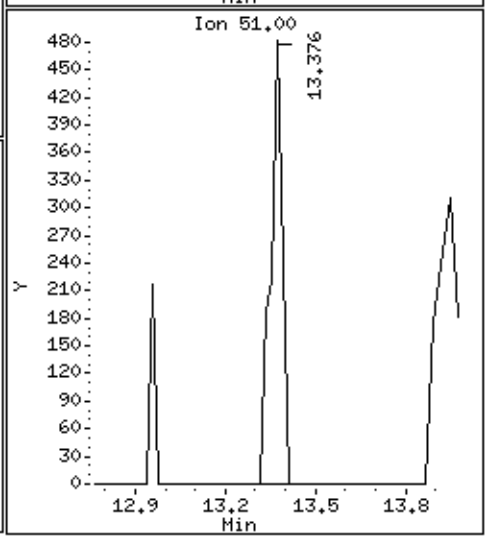












Data File: /chem/msde.i/06Mar2015.b/e030609r1.d

Date : 06-MAR-2015 11:17

Client ID:

Instrument: msde.i

Sample Info: 100mL #94305

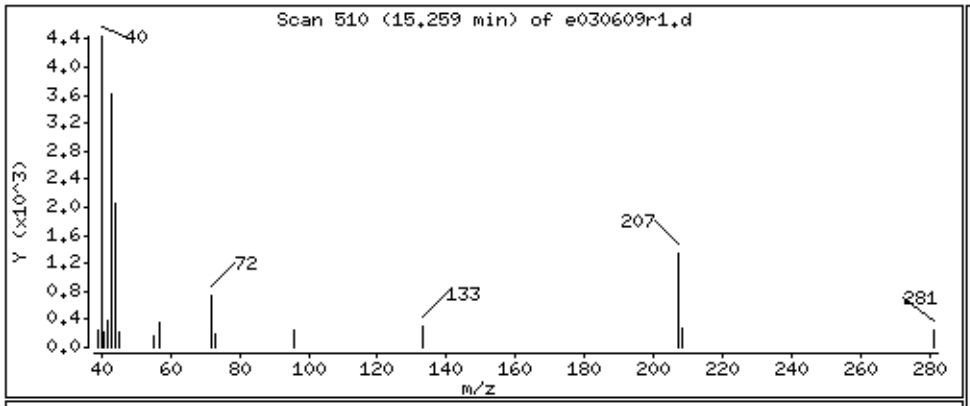
Operator: sab

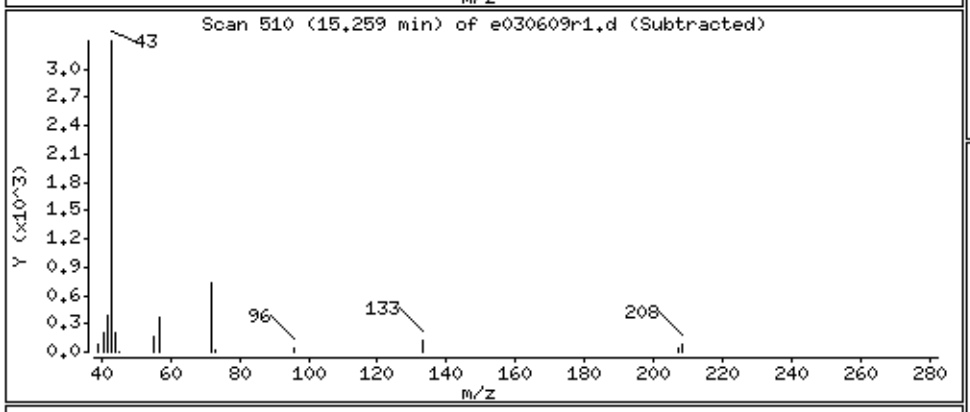
Column phase: RTx-624

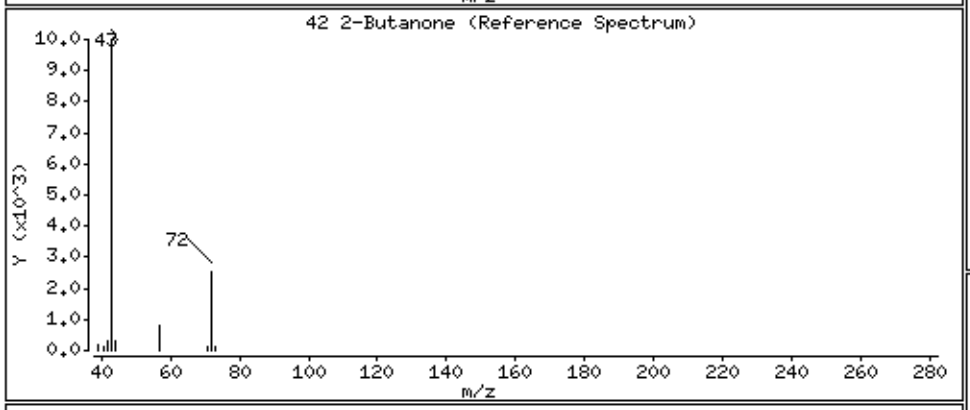
Column diameter: 0.32

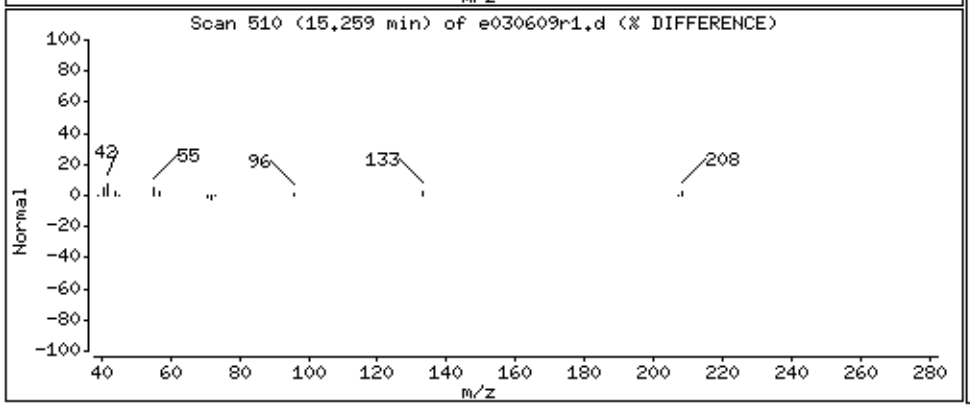
42 2-Butanone

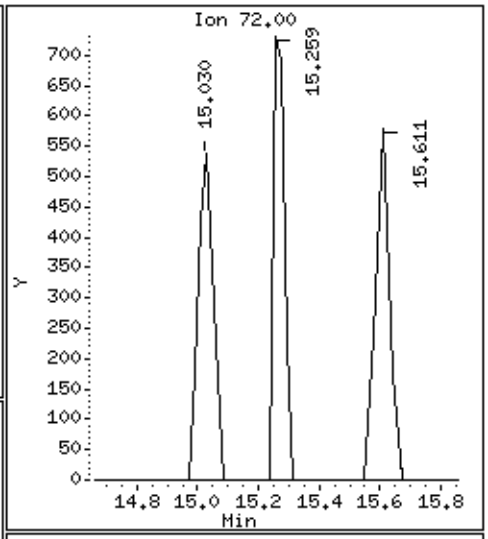
Concentration: 0.2625 PPBV

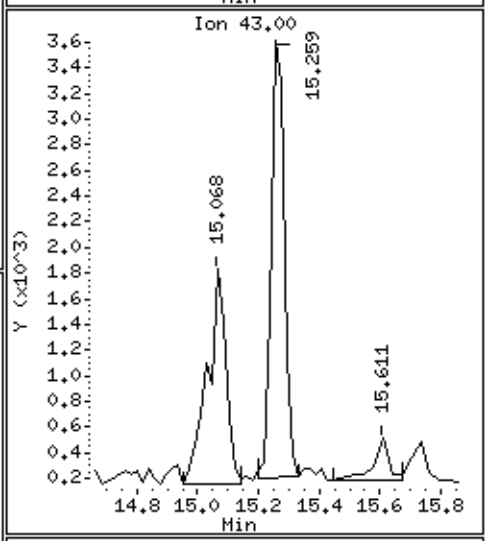


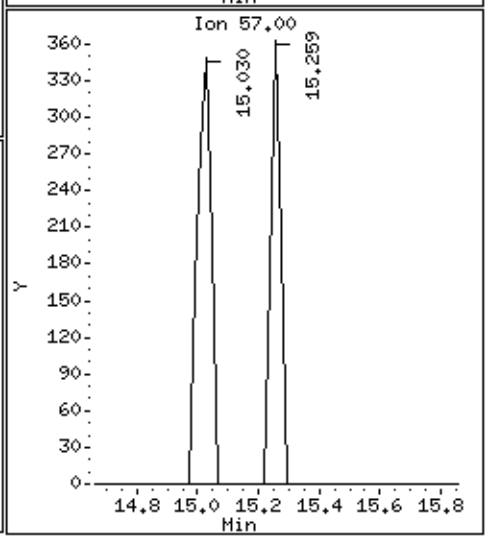












Data File: /chem/msde.i/06Mar2015.b/e030609r1.d

Date : 06-MAR-2015 11:17

Client ID:

Instrument: msde.i

Sample Info: 100mL #94305

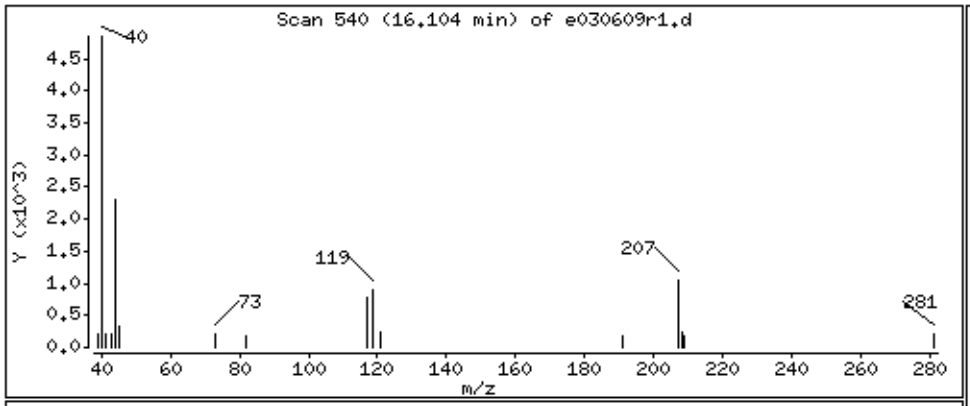
Operator: sab

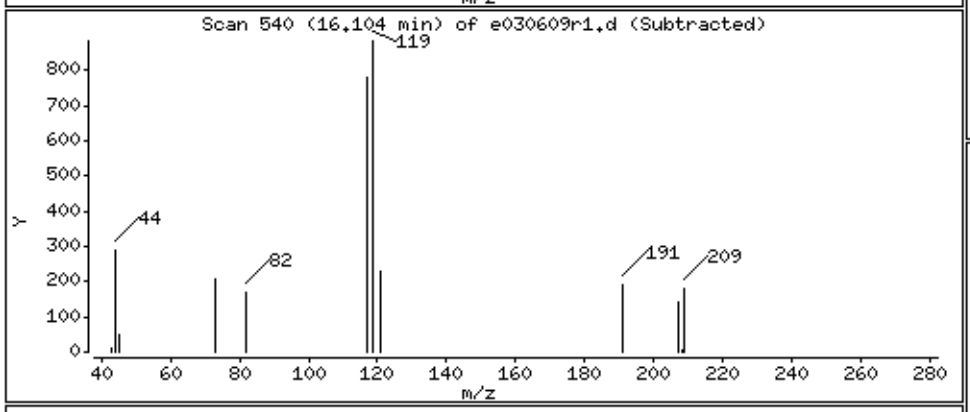
Column phase: RTx-624

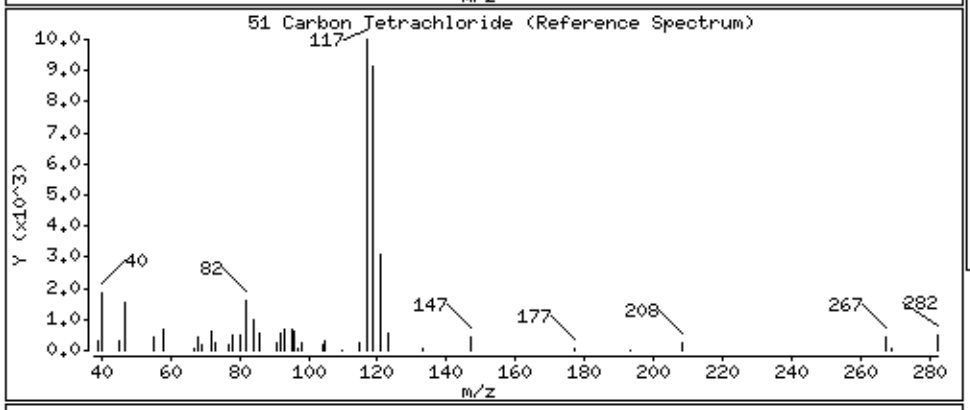
Column diameter: 0.32

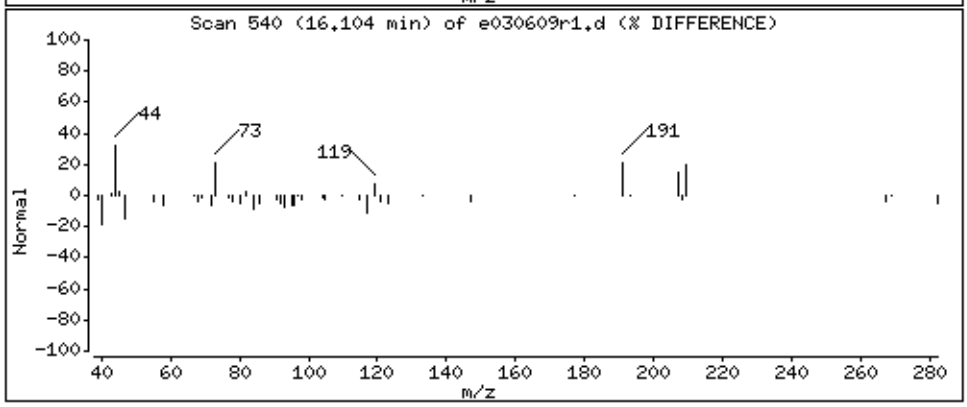
51 Carbon Tetrachloride

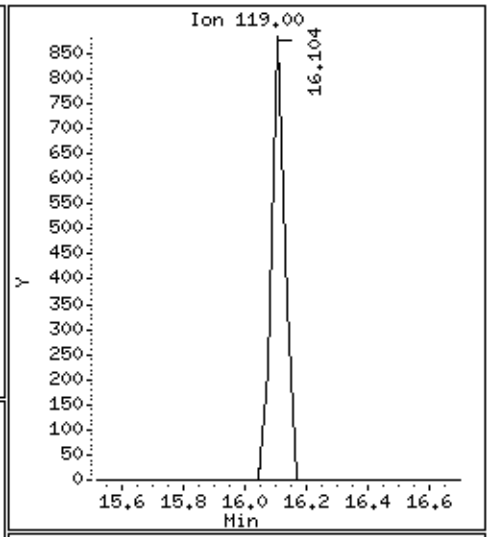
Concentration: 0.09770 PPBV

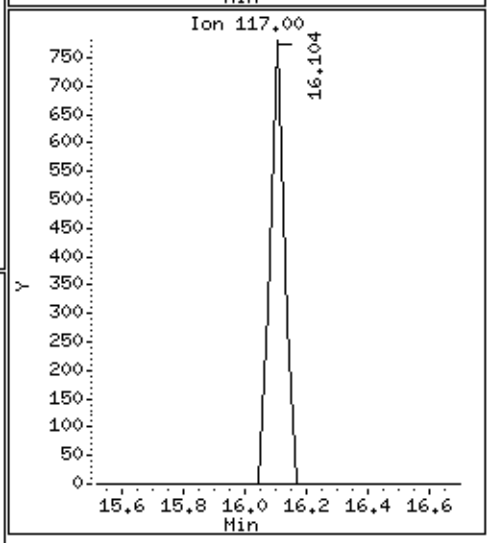












Data File: /chem/msde.i/06Mar2015.b/e030609r1.d

Date : 06-MAR-2015 11:17

Client ID:

Instrument: msde.i

Sample Info: 100mL #94305

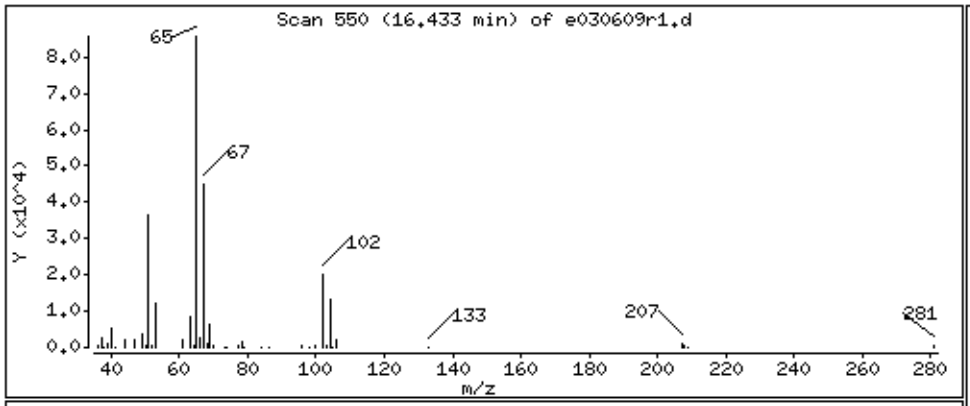
Operator: sab

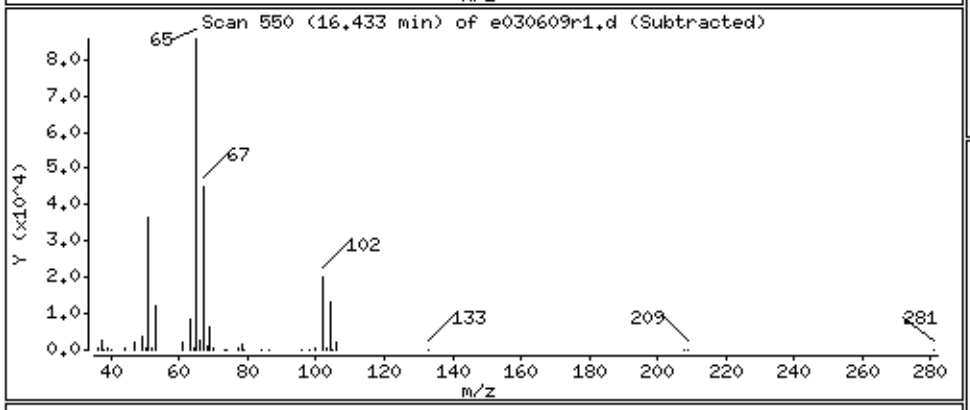
Column phase: RTx-624

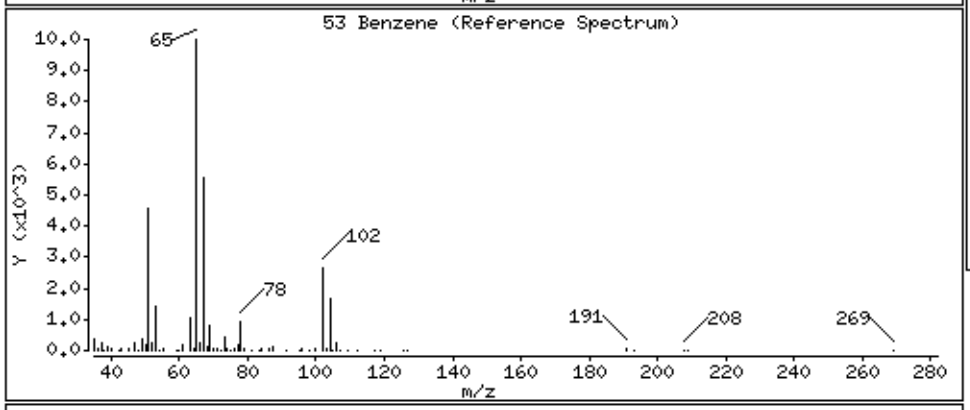
Column diameter: 0.32

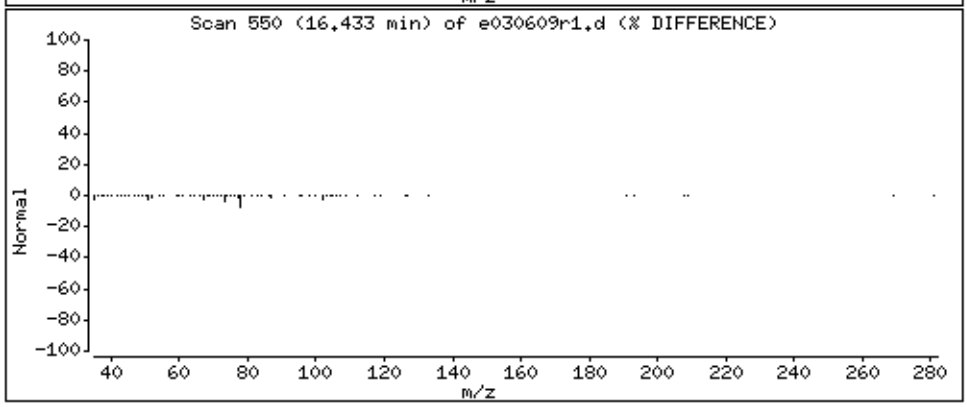
53 Benzene

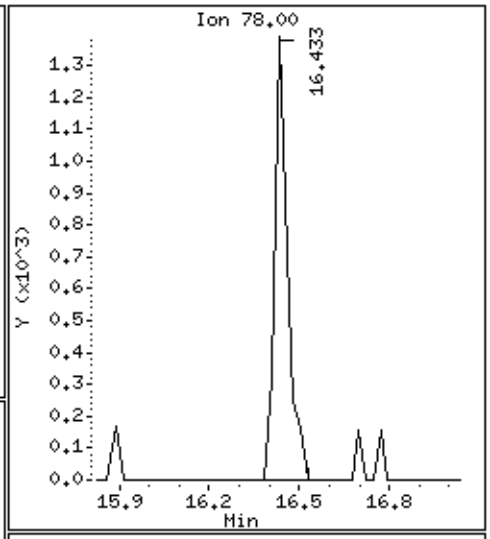
Concentration: 0.09910 PPBV

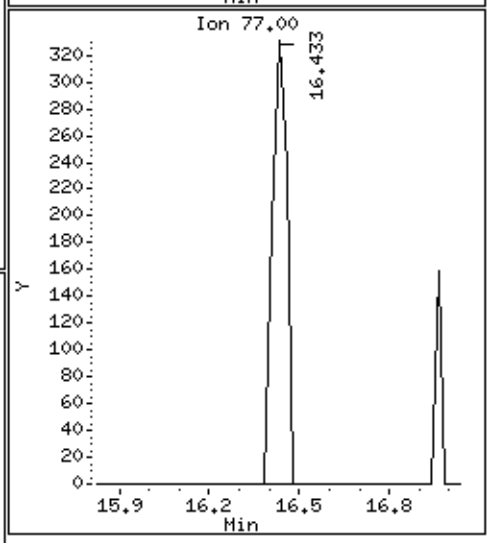












Data File: /chem/msde.i/06Mar2015.b/e030609r1.d

Date : 06-MAR-2015 11:17

Client ID:

Instrument: msde.i

Sample Info: 100mL #94305

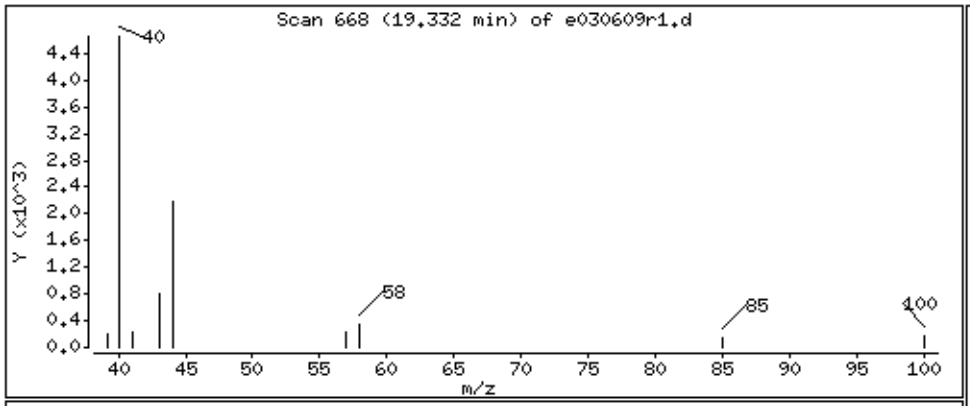
Operator: sab

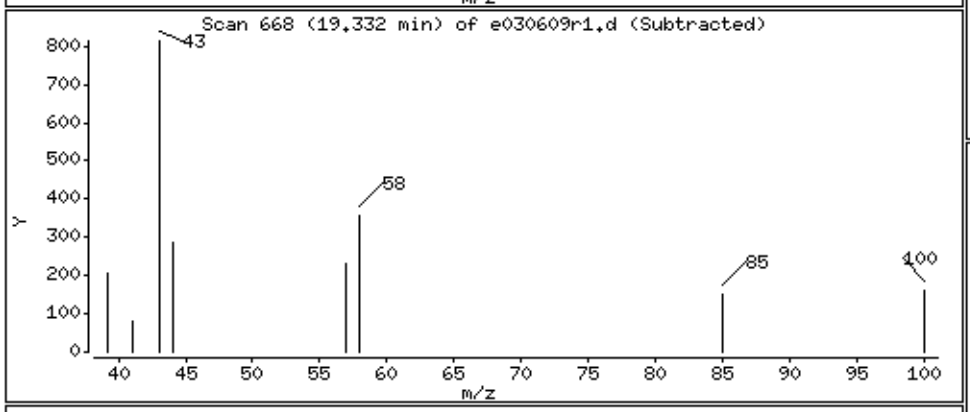
Column phase: RTx-624

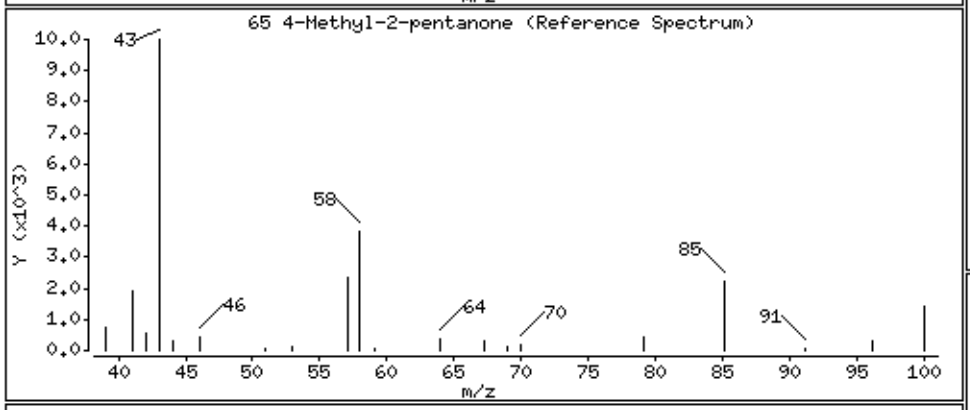
Column diameter: 0.32

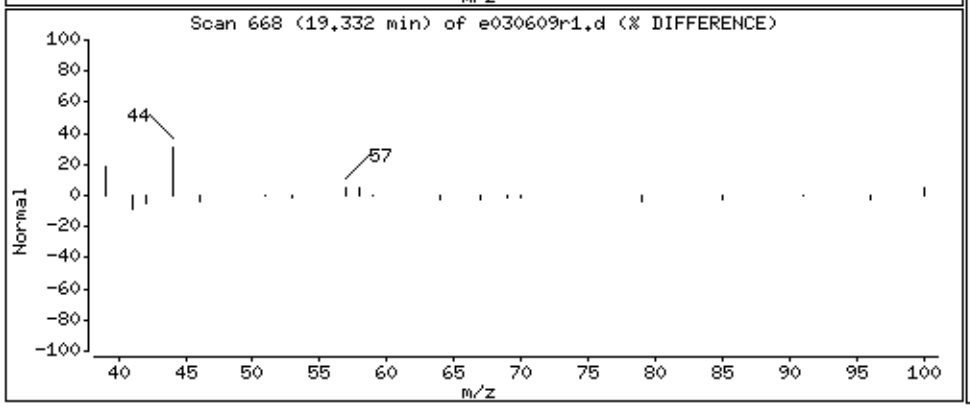
65 4-Methyl-2-pentanone

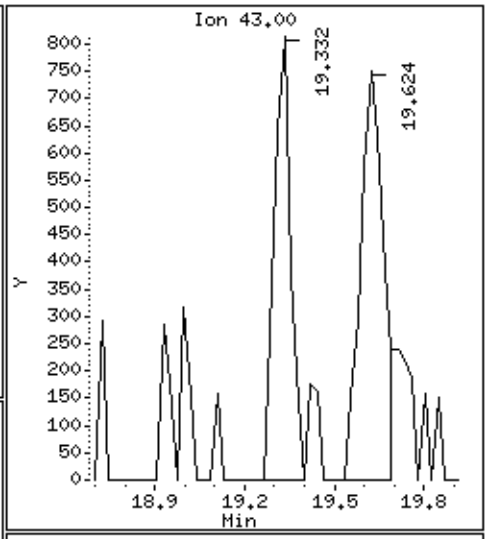
Concentration: 0.09732 PPBV

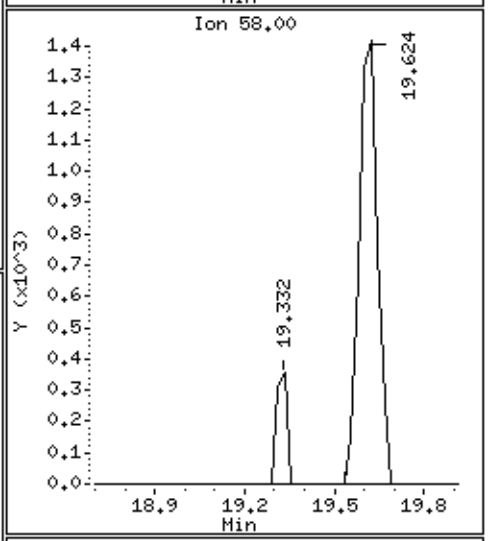


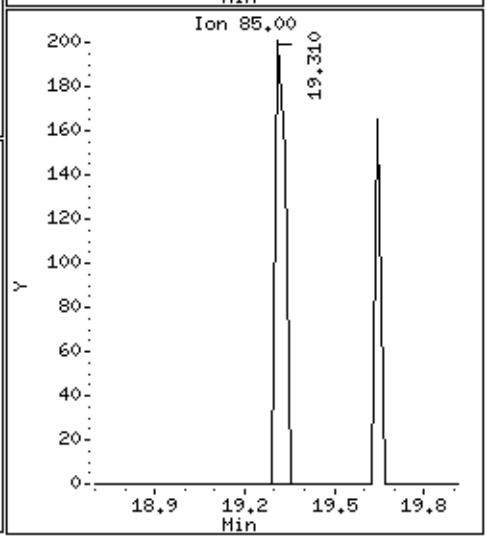












Data File: /chem/msde.i/06Mar2015.b/e030609r1.d

Date : 06-MAR-2015 11:17

Client ID:

Instrument: msde.i

Sample Info: 100mL #94305

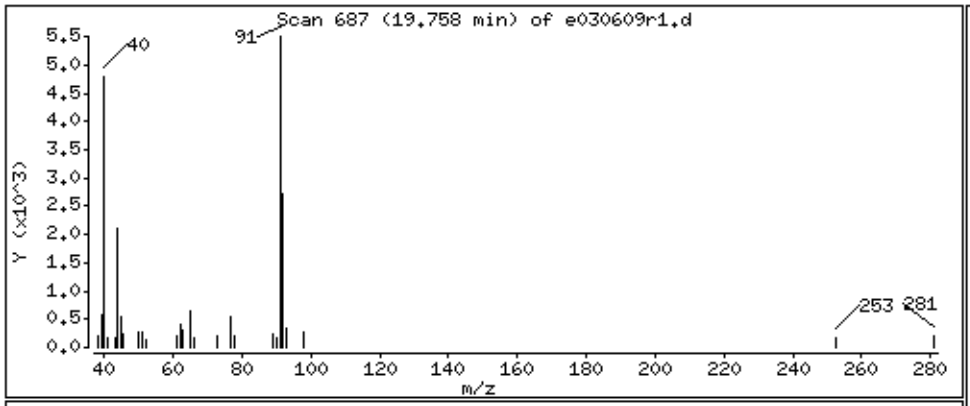
Operator: sab

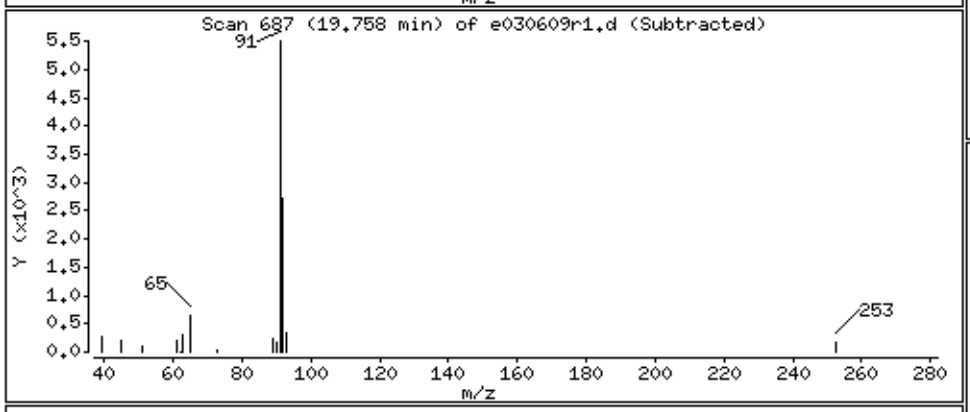
Column phase: RTx-624

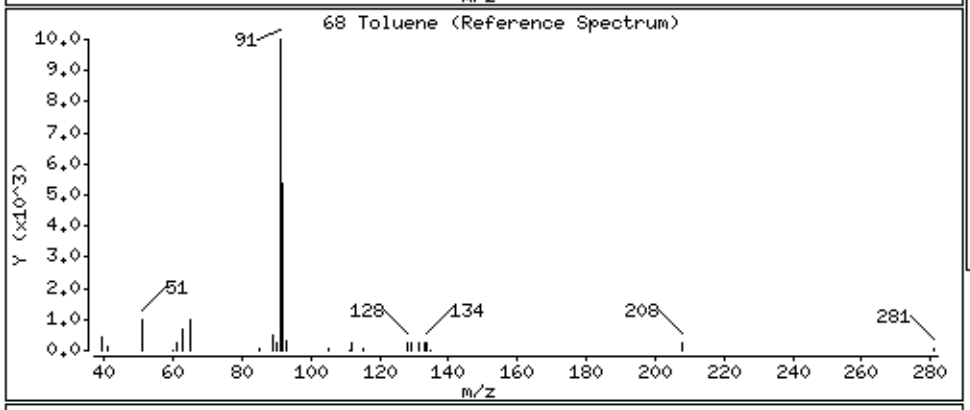
Column diameter: 0.32

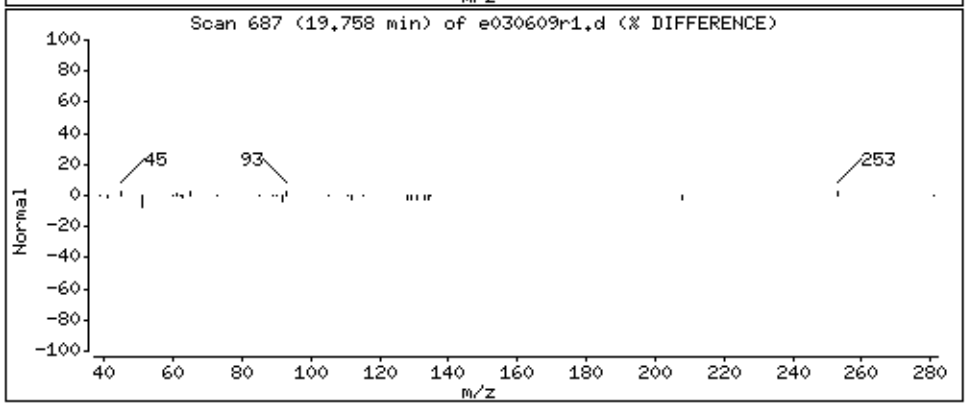
68 Toluene

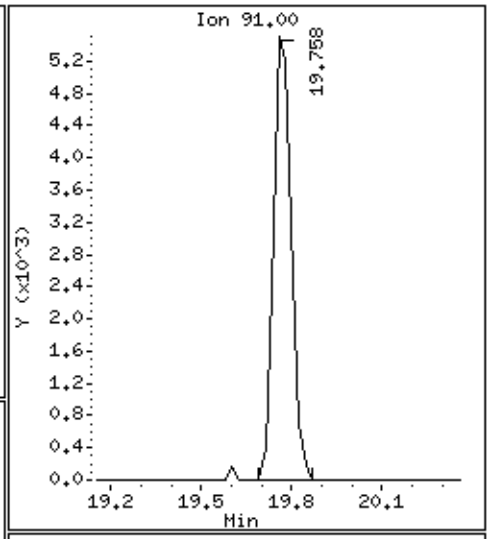
Concentration: 0.4431 PPBV

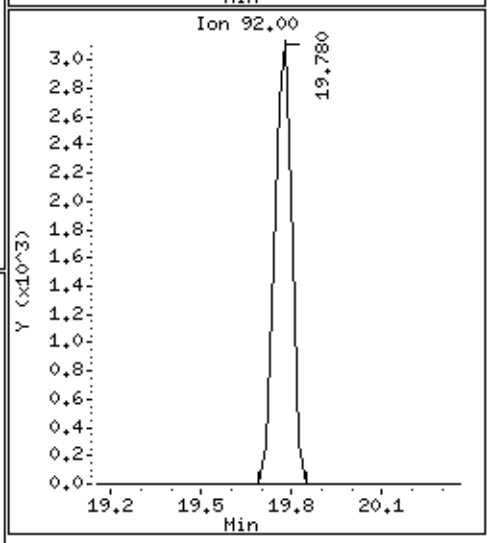












Data File: /chem/msde.i/06Mar2015.b/e030609r1.d

Date : 06-MAR-2015 11:17

Client ID:

Instrument: msde.i

Sample Info: 100mL #94305

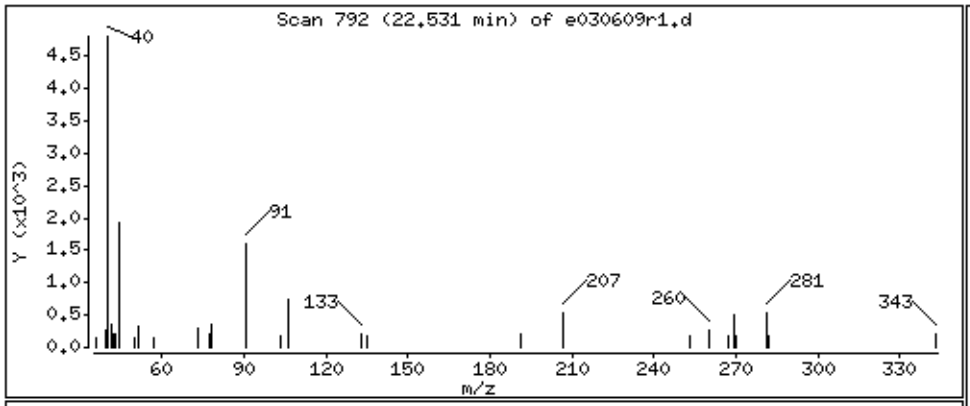
Operator: sab

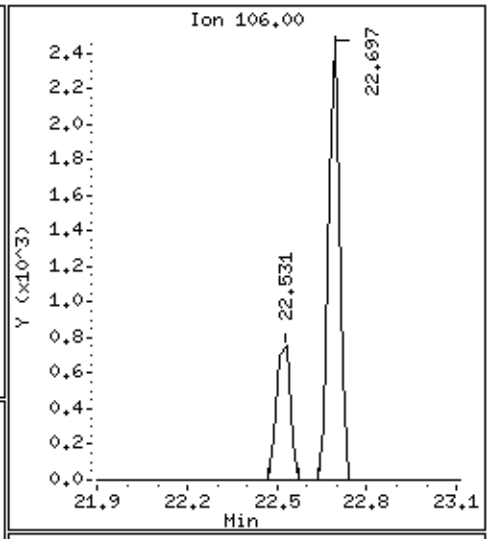
Column phase: RTx-624

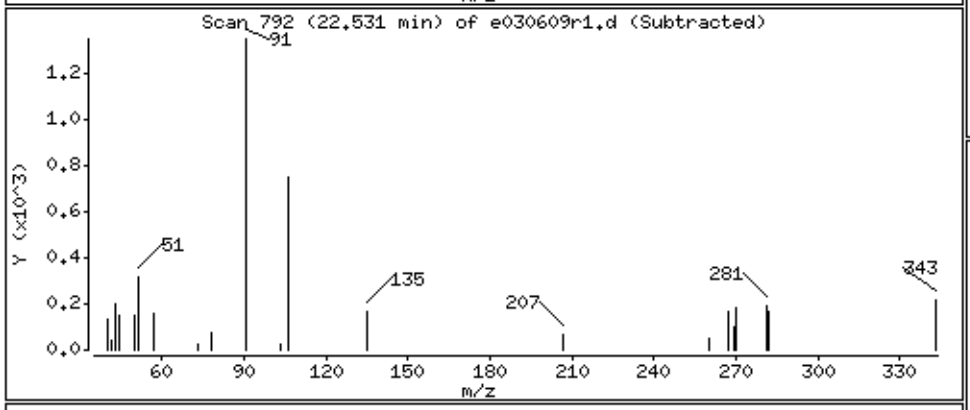
Column diameter: 0.32

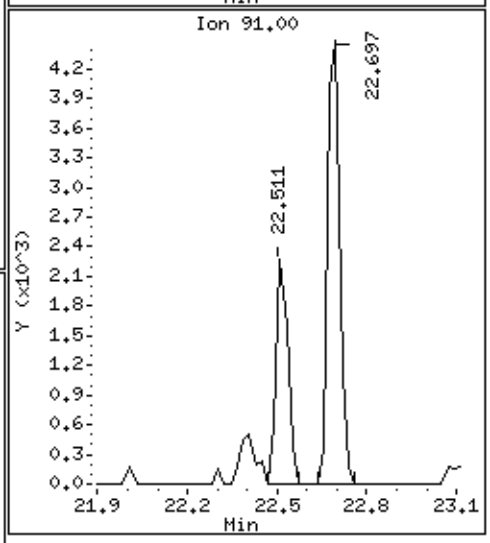
77 Ethyl Benzene

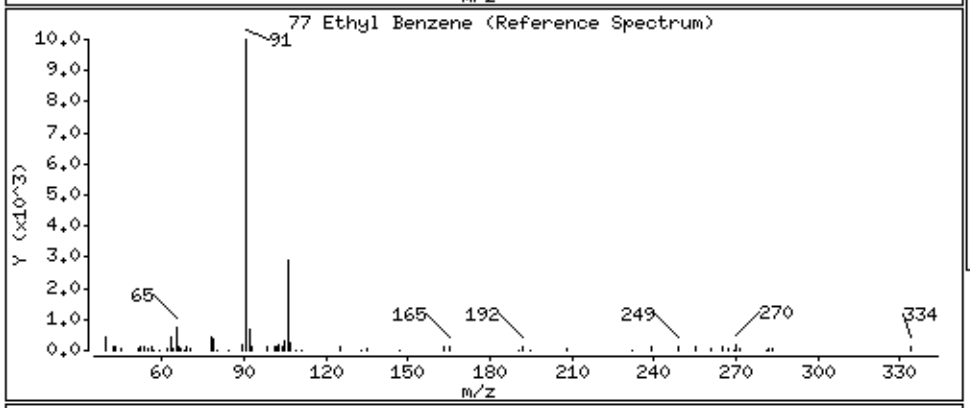
Concentration: 0.1050 PPBV

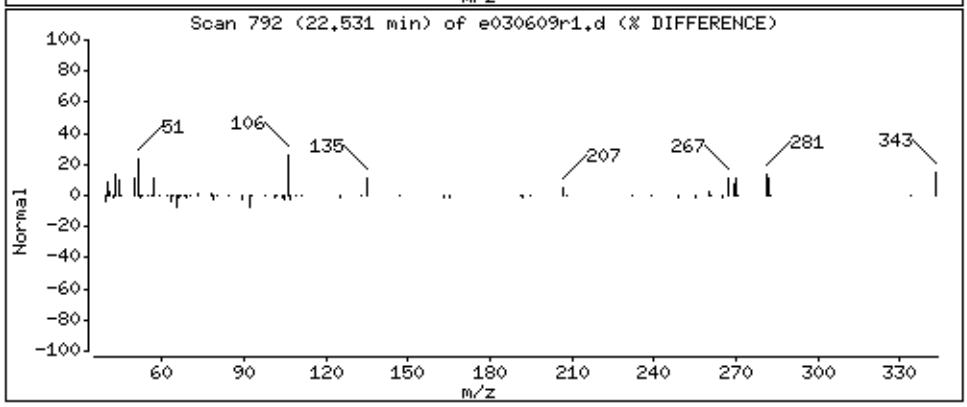












Data File: /chem/msde.i/06Mar2015.b/e030609r1.d

Date : 06-MAR-2015 11:17

Client ID:

Instrument: msde.i

Sample Info: 100mL #94305

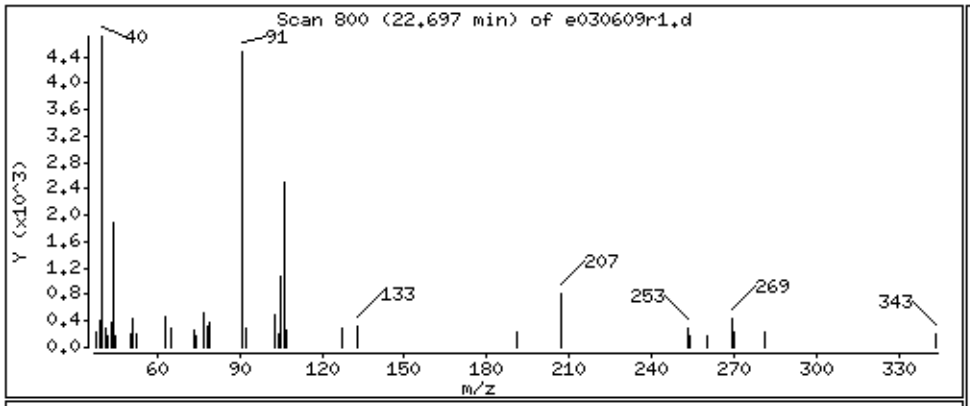
Operator: sab

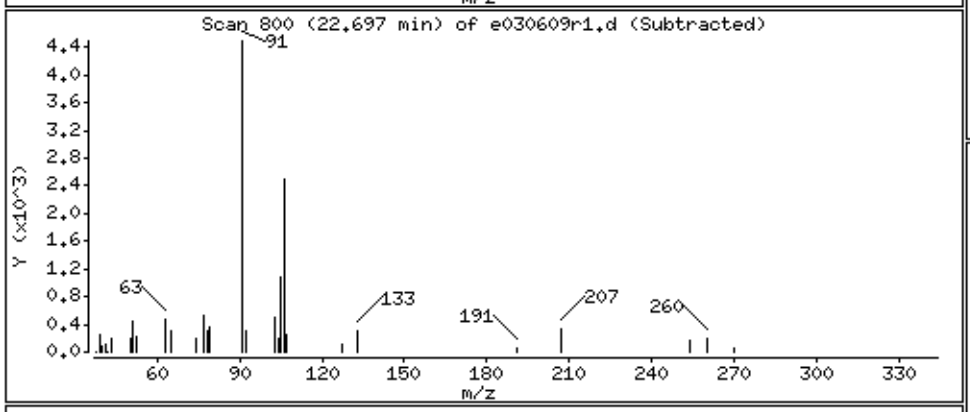
Column phase: RTx-624

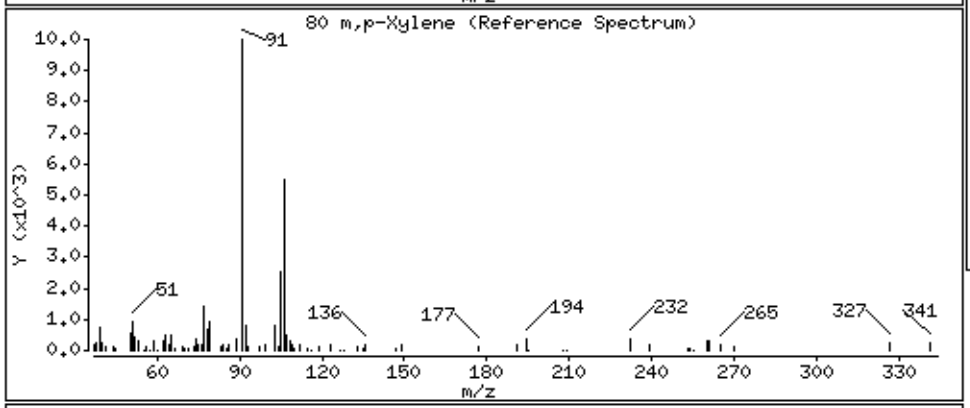
Column diameter: 0.32

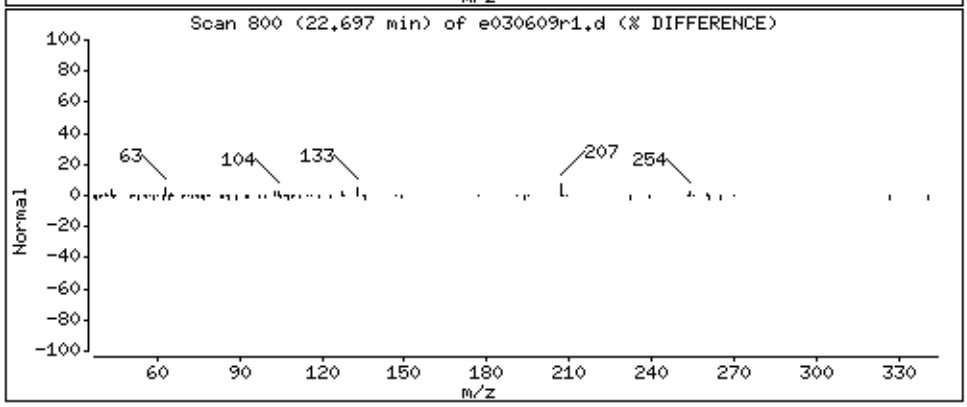
80 m,p-Xylene

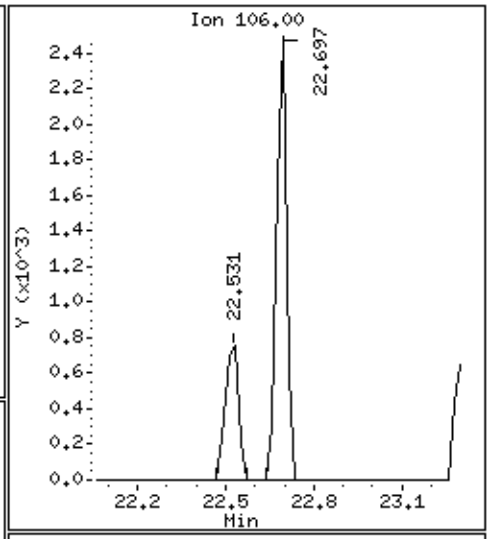
Concentration: 0.2297 PPBV

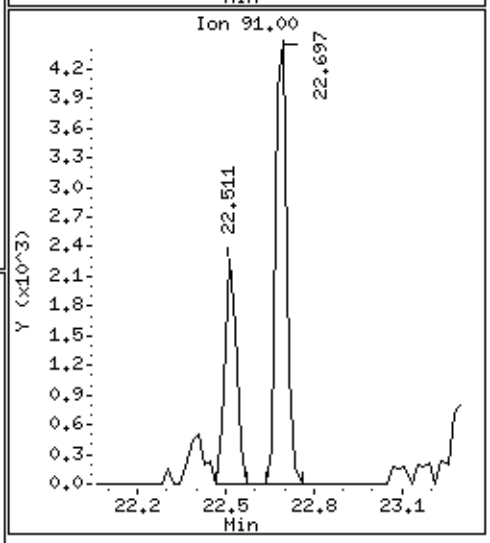












Data File: /chem/msde.i/06Mar2015.b/e030609r1.d

Date : 06-MAR-2015 11:17

Client ID:

Instrument: msde.i

Sample Info: 100mL #94305

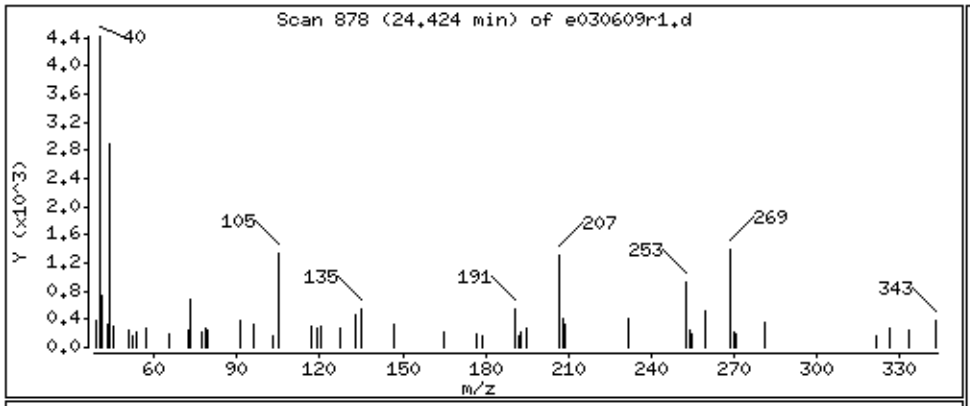
Operator: sab

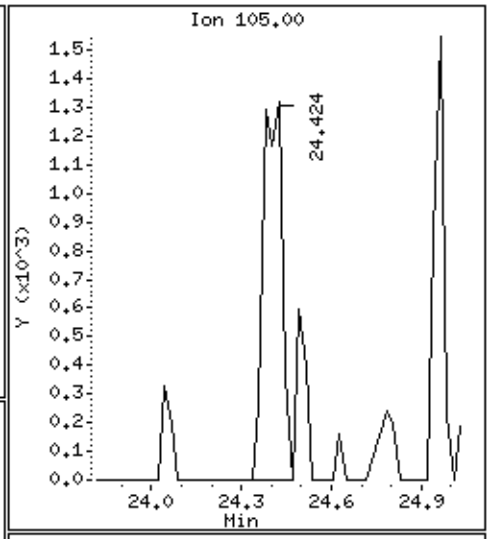
Column phase: RTx-624

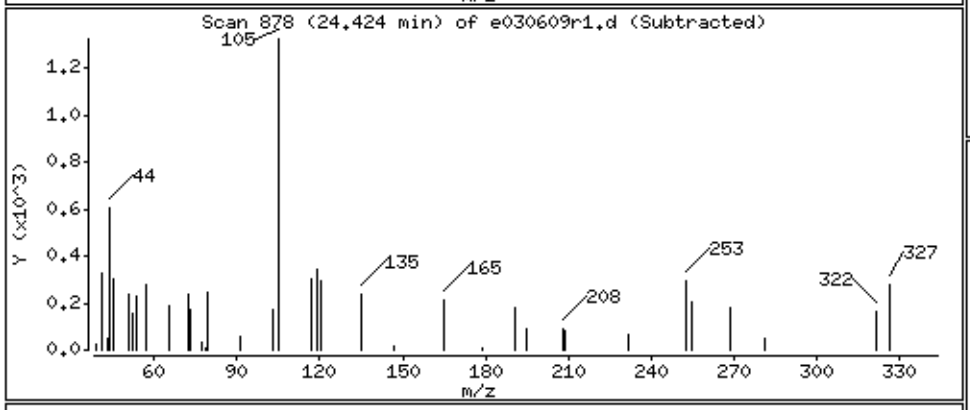
Column diameter: 0.32

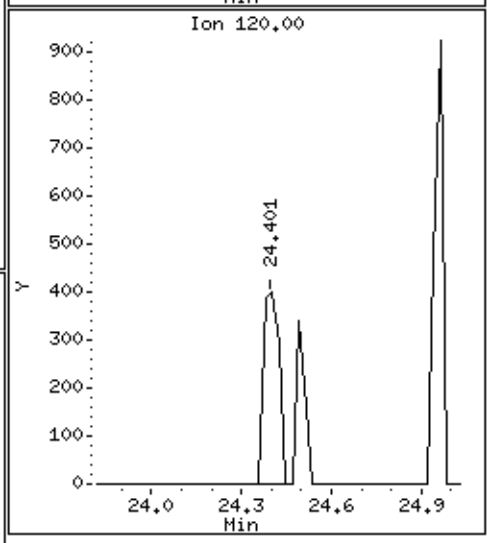
92 4-Ethyltoluene

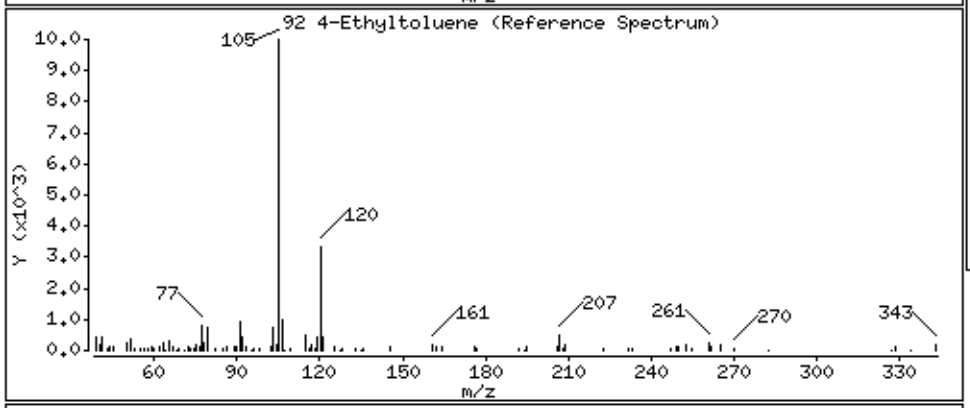
Concentration: 0.08212 PPBV

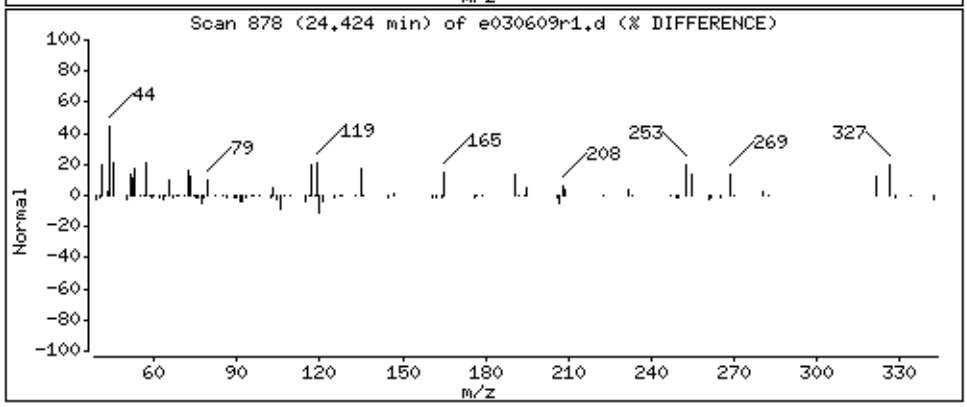












Data File: /chem/msde.i/06Mar2015.b/e030609r1.d

Date : 06-MAR-2015 11:17

Client ID:

Instrument: msde.i

Sample Info: 100mL #94305

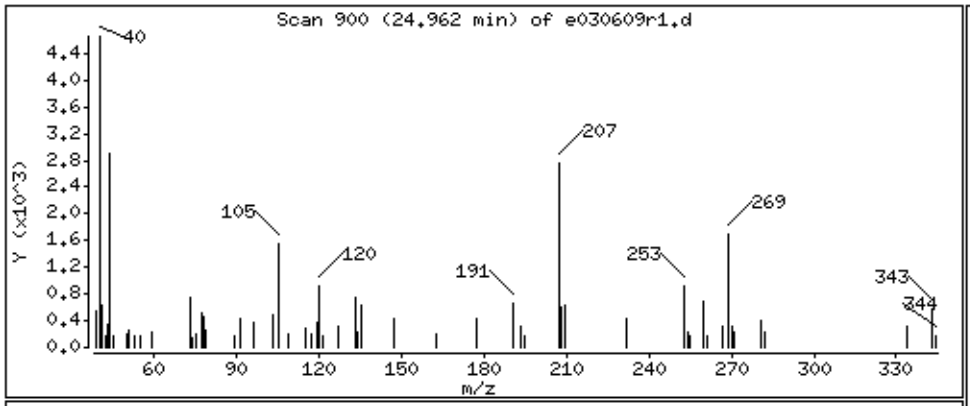
Operator: sab

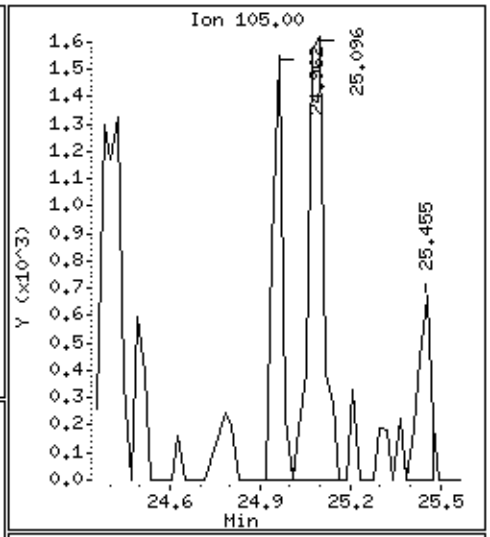
Column phase: RTx-624

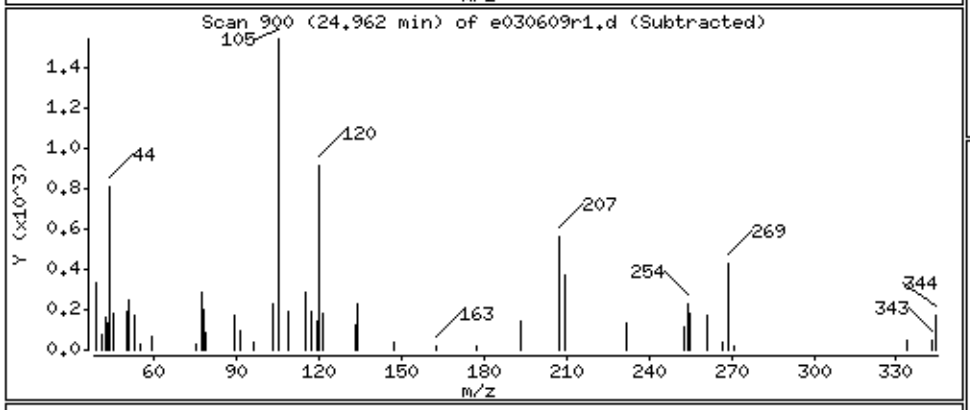
Column diameter: 0.32

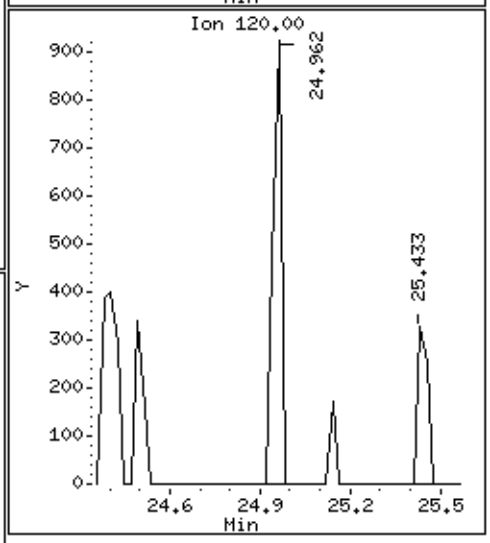
98 1,2,4-Trimethylbenzene

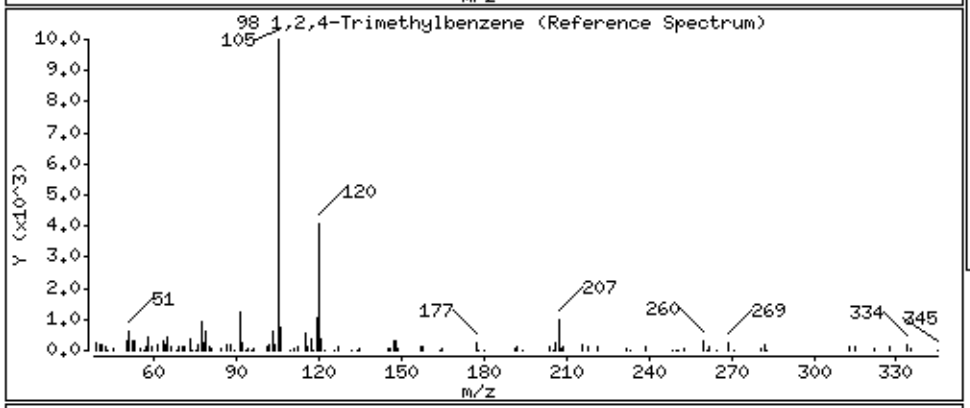
Concentration: 0.06238 PPBV

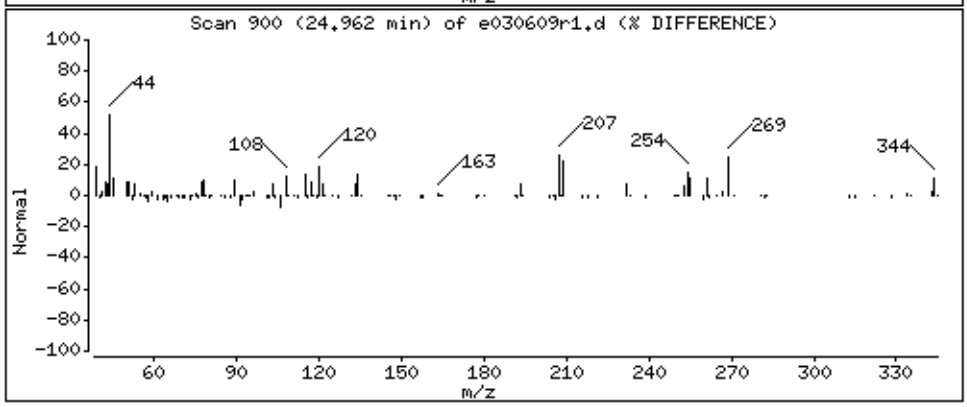












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Summary of Detected Compounds
MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: B6-2IA

Lab ID#: 1503058AR1-03A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.26	0.45	1.3	2.2
Chloromethane	1.3	0.67 J	2.7	1.4 J
1,3-Butadiene	0.26	0.097 J	0.59	0.21 J
Freon 11	0.26	0.22 J	1.5	1.2 J
Ethanol	2.6	20	5.0	38
Acetone	1.3	13	3.1	31
2-Propanol	1.3	790 E	3.2	1900 E
Methylene Chloride	0.53	0.24 J	1.8	0.83 J
Hexane	0.26	0.082 J	0.93	0.29 J
2-Butanone (Methyl Ethyl Ketone)	1.3	0.49 J	3.9	1.4 J
Tetrahydrofuran	1.3	0.41 J	3.9	1.2 J
Carbon Tetrachloride	0.26	0.089 J	1.7	0.56 J
Benzene	0.26	0.26 J	0.85	0.84 J
Heptane	0.26	0.087 J	1.1	0.36 J
4-Methyl-2-pentanone	0.26	0.20 J	1.1	0.82 J
Toluene	0.26	0.69	1.0	2.6
Ethyl Benzene	0.26	0.14 J	1.2	0.60 J
m,p-Xylene	0.26	0.36	1.2	1.6
o-Xylene	0.26	0.069 J	1.2	0.30 J
4-Ethyltoluene	0.26	0.11 J	1.3	0.55 J
1,2,4-Trimethylbenzene	0.26	0.10 J	1.3	0.51 J
Naphthalene	1.3	0.055 J	6.9	0.29 J

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Client Sample ID: B6-2IA

Lab ID#: 1503058AR1-03A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**e030610r1**	**Date of Collection:**	**3/2/15 12:08:00 PM**
Dil. Factor:	**2.65**	**Date of Analysis:**	**3/6/15 12:05 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.26	0.45	1.3	2.2
Freon 114	0.26	Not Detected	1.8	Not Detected
Chloromethane	1.3	0.67 J	2.7	1.4 J
Vinyl Chloride	0.26	Not Detected	0.68	Not Detected
1,3-Butadiene	0.26	0.097 J	0.59	0.21 J
Bromomethane	1.3	Not Detected	5.1	Not Detected
Chloroethane	1.3	Not Detected	3.5	Not Detected
Freon 11	0.26	0.22 J	1.5	1.2 J
Ethanol	2.6	20	5.0	38
Freon 113	0.26	Not Detected	2.0	Not Detected
1,1-Dichloroethene	0.26	Not Detected	1.0	Not Detected
Acetone	1.3	13	3.1	31
2-Propanol	1.3	790 E	3.2	1900 E
Carbon Disulfide	1.3	Not Detected	4.1	Not Detected
3-Chloropropene	1.3	Not Detected	4.1	Not Detected
Methylene Chloride	0.53	0.24 J	1.8	0.83 J
Methyl tert-butyl ether	0.26	Not Detected	0.96	Not Detected
trans-1,2-Dichloroethene	0.26	Not Detected	1.0	Not Detected
Hexane	0.26	0.082 J	0.93	0.29 J
1,1-Dichloroethane	0.26	Not Detected	1.1	Not Detected
2-Butanone (Methyl Ethyl Ketone)	1.3	0.49 J	3.9	1.4 J
cis-1,2-Dichloroethene	0.26	Not Detected	1.0	Not Detected
Tetrahydrofuran	1.3	0.41 J	3.9	1.2 J
Chloroform	0.26	Not Detected	1.3	Not Detected
1,1,1-Trichloroethane	0.26	Not Detected	1.4	Not Detected
Cyclohexane	0.26	Not Detected	0.91	Not Detected
Carbon Tetrachloride	0.26	0.089 J	1.7	0.56 J
2,2,4-Trimethylpentane	1.3	Not Detected	6.2	Not Detected
Benzene	0.26	0.26 J	0.85	0.84 J
1,2-Dichloroethane	0.26	Not Detected	1.1	Not Detected
Heptane	0.26	0.087 J	1.1	0.36 J
Trichloroethene	0.26	Not Detected	1.4	Not Detected
1,2-Dichloropropane	0.26	Not Detected	1.2	Not Detected
1,4-Dioxane	0.26	Not Detected	0.95	Not Detected
Bromodichloromethane	0.26	Not Detected	1.8	Not Detected
cis-1,3-Dichloropropene	0.26	Not Detected	1.2	Not Detected
4-Methyl-2-pentanone	0.26	0.20 J	1.1	0.82 J
Toluene	0.26	0.69	1.0	2.6
trans-1,3-Dichloropropene	0.26	Not Detected	1.2	Not Detected
1,1,2-Trichloroethane	0.26	Not Detected	1.4	Not Detected
Tetrachloroethene	0.26	Not Detected	1.8	Not Detected
2-Hexanone	1.3	Not Detected	5.4	Not Detected

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Client Sample ID: B6-2IA

Lab ID#: 1503058AR1-03A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**e030610r1**	**Date of Collection:**	**3/2/15 12:08:00 PM**
Dil. Factor:	**2.65**	**Date of Analysis:**	**3/6/15 12:05 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Dibromochloromethane	0.26	Not Detected	2.2	Not Detected
1,2-Dibromoethane (EDB)	0.26	Not Detected	2.0	Not Detected
Chlorobenzene	0.26	Not Detected	1.2	Not Detected
Ethyl Benzene	0.26	0.14 J	1.2	0.60 J
m,p-Xylene	0.26	0.36	1.2	1.6
o-Xylene	0.26	0.069 J	1.2	0.30 J
Styrene	0.26	Not Detected	1.1	Not Detected
Bromoform	0.26	Not Detected	2.7	Not Detected
Cumene	0.26	Not Detected	1.3	Not Detected
1,1,2,2-Tetrachloroethane	0.26	Not Detected	1.8	Not Detected
Propylbenzene	0.26	Not Detected	1.3	Not Detected
4-Ethyltoluene	0.26	0.11 J	1.3	0.55 J
1,3,5-Trimethylbenzene	0.26	Not Detected	1.3	Not Detected
1,2,4-Trimethylbenzene	0.26	0.10 J	1.3	0.51 J
1,3-Dichlorobenzene	0.26	Not Detected	1.6	Not Detected
1,4-Dichlorobenzene	0.26	Not Detected	1.6	Not Detected
alpha-Chlorotoluene	0.26	Not Detected	1.4	Not Detected
1,2-Dichlorobenzene	0.26	Not Detected	1.6	Not Detected
1,2,4-Trichlorobenzene	1.3	Not Detected	9.8	Not Detected
Hexachlorobutadiene	1.3	Not Detected	14	Not Detected
Naphthalene	1.3	0.055 J	6.9	0.29 J

J = Estimated value.
E = Exceeds instrument calibration range.

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

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	106	70-130
Toluene-d8	99	70-130
4-Bromofluorobenzene	88	70-130

Eurofins Air Toxics Inc.

EPA TO-15/Modified TO14A

Data file : /chem/msde.i/06Mar2015.b/e030610r1.d
Lab Smp Id: 1503058Ar1-03A
Inj Date : 06-MAR-2015 12:05
Operator : sab Inst ID: msde.i
Smp Info : 150mL #34011
Misc Info : 4.9"Hg-4.9psi
Comment : Low-Level/GC-MS
Method : /chem/msde.i/06Mar2015.b/e15l0210b.m
Meth Date : 26-Jun-2015 12:46 dbailey Quant Type: ISTD
Cal Date : 02-MAR-2015 15:11 Cal File: e030209.d
Als bottle: 1
Dil Factor: 2.65000
Integrator: HP RTE Compound Sublist: T015Nmdl.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Name	Value	Description
DF	2.65000	Dilution Factor

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
* 46 Bromochloromethane						CAS #: 74-97-5	
15.610	15.610 (1.000)	130	222277	5.00000		80.00- 120.00	100.00
15.610	15.610 (1.000)	128	173351			0.00- 30.00	77.99
15.610	15.610 (1.000)	49	264620			0.00- 30.00	119.05
* 58 1,4-Difluorobenzene						CAS #: 540-36-3	
16.987	16.987 (1.000)	114	812828	5.00000		80.00- 120.00	100.00
16.987	16.987 (1.000)	88	113396			0.00- 30.00	13.95
* 75 Chlorobenzene-d5						CAS #: 3114-55-4	
22.407	22.407 (1.000)	117	777038	5.00000		80.00- 120.00	100.00
22.407	22.407 (1.000)	82	361574			0.00- 30.00	46.53
$ 54 1,2-Dichloroethane-d4						CAS #: 17060-07-0	
16.433	16.433 (1.053)	65	249305	5.31671	5.317	80.00- 120.00	100.00
16.433	16.433 (1.053)	67	132766			25.66- 85.66	53.25

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
$ 67 Toluene-d8					CAS #: 2037-26-5		
19.623	19.623 (1.155)	98	764364	4.96862	4.969	80.00- 120.00	100.00
19.623	19.623 (1.155)	70	79757			0.00- 39.92	10.43
19.623	19.623 (1.155)	100	509327			36.14- 96.14	66.63
$ 87 Bromofluorobenzene					CAS #: 460-00-4		
24.065	24.042 (1.074)	174	394814	4.39246	4.392	80.00- 120.00	100.00
24.042	24.042 (1.073)	95	473517			81.46- 141.46	119.93
24.065	24.042 (1.074)	176	391081			67.17- 127.17	99.05
4 Dichlorodifluoromethane/Fr12					CAS #: 75-71-8		
5.503	5.503 (0.353)	85	20657	0.17164	0.4548	80.00- 120.00	100.00
5.479	5.503 (0.351)	87	7322			3.28- 63.28	35.44
7 Chloromethane					CAS #: 74-87-3		
7.191	7.191 (0.461)	50	11614	0.25152	0.6665	80.00- 120.00	100.00(a)
7.191	7.191 (0.461)	52	4236			3.09- 63.09	36.47
11 1,3-Butadiene					CAS #: 106-99-0		
8.288	8.271 (0.531)	54	1522	0.03654	0.09682	80.00- 120.00	100.00(a)
8.271	8.271 (0.530)	39	1204			61.78- 121.78	79.13
16 Trichlorofluoromethane/Fr11					CAS #: 75-69-4		
10.976	10.976 (0.703)	101	10424	0.08269	0.2191	80.00- 120.00	100.00(a)
10.976	10.976 (0.703)	103	6728			35.41- 95.41	64.55
18 Ethanol					CAS #: 64-17-5		
11.890	11.890 (0.762)	45	157028	7.66077	20.301	80.00- 120.00	100.00
11.890	11.890 (0.762)	46	52053			7.33- 67.33	33.15
11.890	11.890 (0.762)	43	32524			0.00- 51.69	20.71
22 Acetone					CAS #: 67-64-1		
12.575	12.575 (0.806)	58	155256	4.92512	13.052	80.00- 120.00	100.00
12.575	12.575 (0.806)	43	464069			255.02- 315.02	298.90
25 2-Propanol					CAS #: 67-63-0		
12.937	12.918 (0.829)	45	27548695	298.689	791.53	80.00- 120.00	100.00(A)
12.937	12.918 (0.829)	43	5336183			0.00- 47.09	19.37
12.937	12.918 (0.829)	59	1248660			0.00- 34.17	4.53
29 Methylene Chloride					CAS #: 75-09-2		
13.375	13.375 (0.857)	84	4327	0.09064	0.2402	80.00- 120.00	100.00(a)
13.375	13.375 (0.857)	49	5692			98.36- 158.36	131.54
13.375	13.375 (0.857)	51	1931			9.23- 69.23	44.64
35 Hexane					CAS #: 110-54-3		
14.030	14.030 (0.899)	57	2793	0.03086	0.08178	80.00- 120.00	100.00(a)

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

   35 Hexane (continued)
 14.113  14.030 (0.904)    43      6498                    32.32-  92.32   232.59
  0.000  14.030 (0.000)    86         0                     0.00-  46.22     0.00
-------------------------------------------------------------------------------
   42 2-Butanone                                   CAS #: 78-93-3
 15.278  15.259 (0.979)    72      4979 0.18571   0.4921  80.00- 120.00   100.00(a)
 15.259  15.259 (0.977)    43     27566                   374.35- 434.35   553.62
 15.259  15.259 (0.977)    57      2059                     4.18-  64.18    41.36
-------------------------------------------------------------------------------
   44 Tetrahydrofuran                              CAS #: 109-99-9
 15.610  15.610 (1.000)    42      9923 0.15601   0.4134  80.00- 120.00   100.00(a)
 15.610  15.610 (1.000)    71      3213                     9.38-  69.38    32.39
 15.610  15.610 (1.000)    72      2938                    11.73-  71.73    29.61
-------------------------------------------------------------------------------
   51 Carbon Tetrachloride                         CAS #: 56-23-5
 16.104  16.104 (1.032)   119      3473 0.03372  0.08935  80.00- 120.00   100.00(a)
 16.104  16.104 (1.032)   117      2746                    73.51- 133.51    79.07
-------------------------------------------------------------------------------
   53 Benzene                                      CAS #: 71-43-2
 16.433  16.433 (0.967)    78     15760 0.09978   0.2644  80.00- 120.00   100.00(a)
 16.433  16.433 (0.967)    77      3931                     0.00-  53.40    24.95
-------------------------------------------------------------------------------
   57 Heptane                                      CAS #: 142-82-5
 16.578  16.578 (0.976)    57      1705 0.03277  0.08684  80.00- 120.00   100.00(a)
 16.433  16.578 (0.967)   100       859                    12.62-  72.62    50.42
 16.578  16.578 (0.976)    43      3665                   155.09- 215.09   215.00
-------------------------------------------------------------------------------
   65 4-Methyl-2-pentanone                         CAS #: 108-10-1
 19.310  19.310 (1.137)    43      9473 0.07521   0.1993  80.00- 120.00   100.00(a)
 19.332  19.310 (1.138)    58      2458                    10.53-  70.53    25.96
 19.332  19.310 (1.138)    85       840                     0.00-  48.12     8.87
-------------------------------------------------------------------------------
   68 Toluene                                      CAS #: 108-88-3
 19.780  19.758 (1.164)    91     50715 0.25996   0.6889  80.00- 120.00   100.00
 19.758  19.758 (1.163)    92     29553                    28.42-  88.42    58.27
-------------------------------------------------------------------------------
   77 Ethyl Benzene                                CAS #: 100-41-4
 22.511  22.511 (1.005)   106      4532 0.05189   0.1375  80.00- 120.00   100.00(a)
 22.511  22.511 (1.005)    91     14413                   268.64- 328.64   318.02
-------------------------------------------------------------------------------
   80 m,p-Xylene                                   CAS #: 108-38-3
 22.697  22.697 (1.013)   106     14623 0.13709   0.3633  80.00- 120.00   100.00
 22.697  22.697 (1.013)    91     26381                   156.41- 216.41   180.41
-------------------------------------------------------------------------------
   81 o-Xylene                                     CAS #: 95-47-6
 23.298  23.298 (1.040)   106      2562 0.02599  0.06887  80.00- 120.00   100.00(a)
```

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
81 o-Xylene (continued)							
23.298	23.298 (1.040)	91	6326			167.80- 227.80	246.91
92 4-Ethyltoluene					CAS #: 622-96-8		
24.379	24.424 (1.088)	105	11782	0.04200	0.1113	80.00- 120.00	100.00(a)
24.379	24.424 (1.088)	120	4178			1.72- 61.72	35.46
98 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
24.962	24.962 (1.114)	105	8642	0.03929	0.1041	80.00- 120.00	100.00(a)
24.962	24.962 (1.114)	120	3966			19.10- 79.10	45.89
114 Naphthalene					CAS #: 91-20-3		
27.966	27.966 (1.248)	128	4007	0.02061	0.05462	80.00- 120.00	100.00(a)
27.966	27.966 (1.248)	127	566			0.00- 42.43	14.13

QC Flag Legend

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

Report Date: 26-Jun-2015 13:00

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msde.i
Lab File ID: e030610r1.d
Lab Smp Id: 1503058Ar1-03A
Analysis Type: VOA
Quant Type: ISTD
Operator: sab
Method File: /chem/msde.i/06Mar2015.b/e15l0210b.m
Misc Info: 4.9"Hg-4.9psi

Calibration Date: 06-MAR-2015
Calibration Time: 05:31

Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
46 Bromochloromethan	236898	142139	331657	222277	-6.17
58 1,4-Difluorobenze	878027	526816	1229238	812828	-7.43
75 Chlorobenzene-d5	818204	490922	1145486	777038	-5.03

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
46 Bromochloromethan	15.61	15.28	15.94	15.61	0.00
58 1,4-Difluorobenze	16.99	16.66	17.32	16.99	0.00
75 Chlorobenzene-d5	22.41	22.08	22.74	22.41	0.00

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

Report Date: 26-Jun-2015 13:00

Eurofins Air Toxics Inc.

RECOVERY REPORT

Client Name:
Client SDG: 06Mar2015
Sample Matrix: GAS
Fraction: VOA
Lab Smp Id: 1503058Ar1-03A
Level: LOW
Operator: sab
Data Type: MS DATA
SampleType: SAMPLE
SpikeList File: AT09.spk
Quant Type: ISTD
Sublist File: T015Nmdl.sub
Method File: /chem/msde.i/06Mar2015.b/e15l0210b.m
Misc Info: 4.9"Hg-4.9psi

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 54 1,2-Dichloroethane	5.000	5.317	106.33	70-130
$ 67 Toluene-d8	5.000	4.969	99.37	70-130
$ 87 Bromofluorobenzene	5.000	4.392	87.85	70-130

Data File: /chem/msde.i/06Mar2015.b/e030610r1.d

Date : 06-MAR-2015 12:05

Client ID:

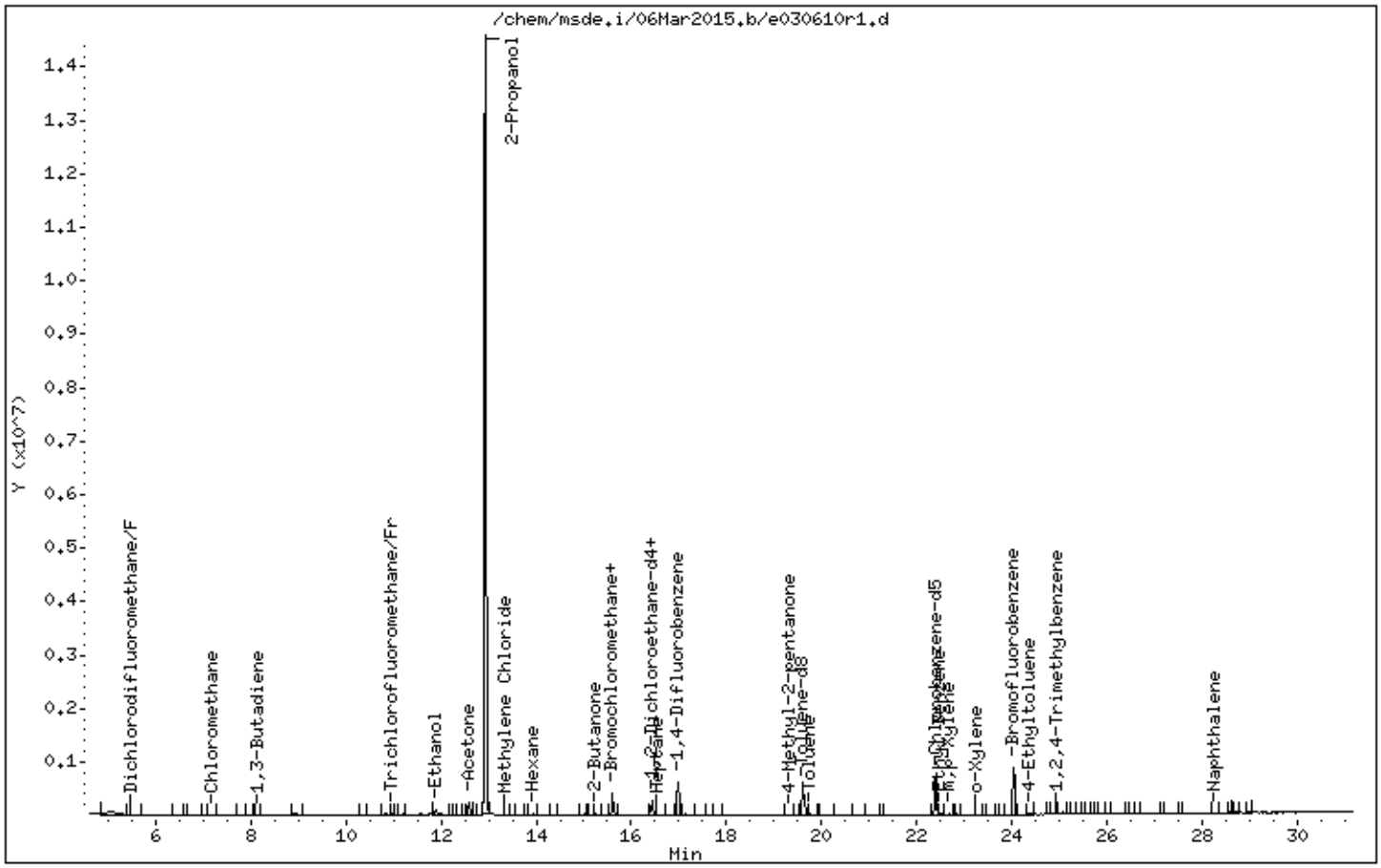
Instrument: msde.i

Sample Info: 150mL #34011

Operator: sab

Column phase: RTx-624

Column diameter: 0.32



Data File: /chem/msde.i/06Mar2015.b/e030610r1.d

Date : 06-MAR-2015 12:05

Client ID:

Instrument: msde.i

Sample Info: 150mL #34011

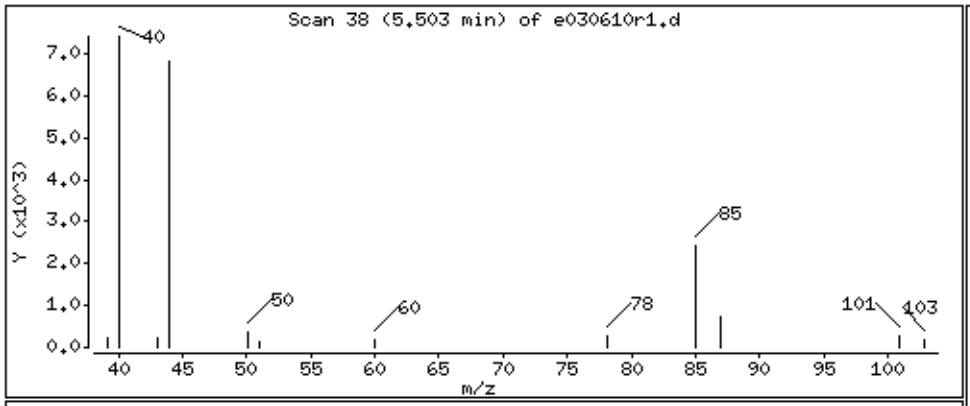
Operator: sab

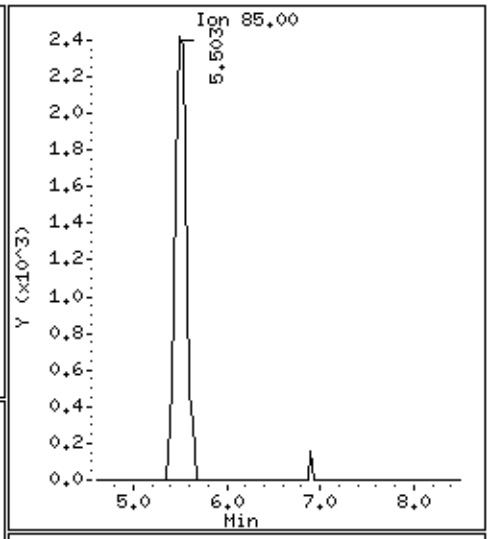
Column phase: RTx-624

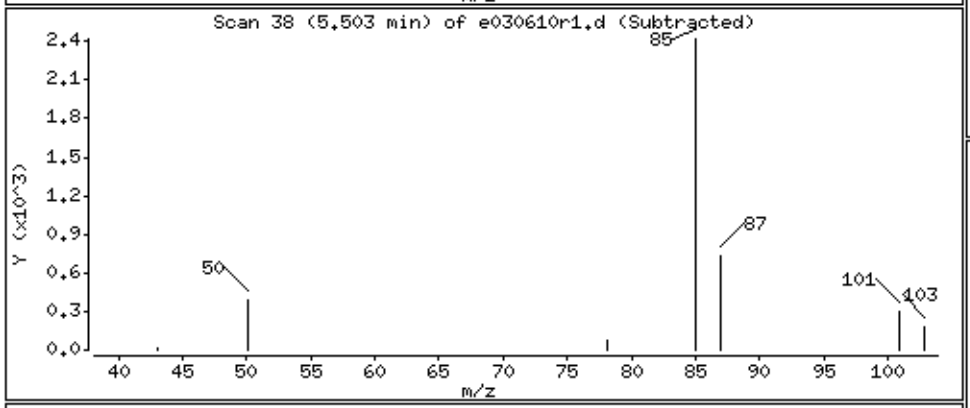
Column diameter: 0.32

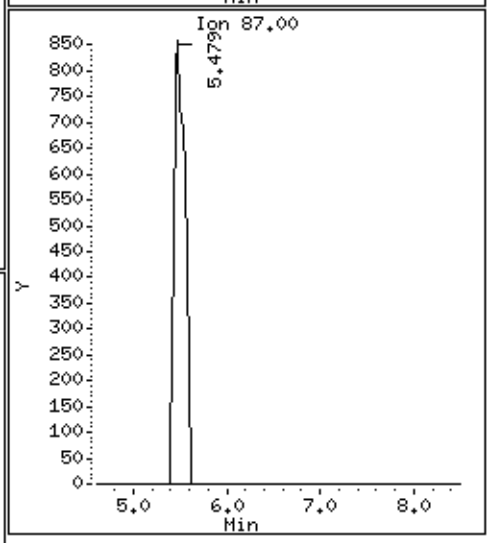
4 Dichlorodifluoromethane/Fr12

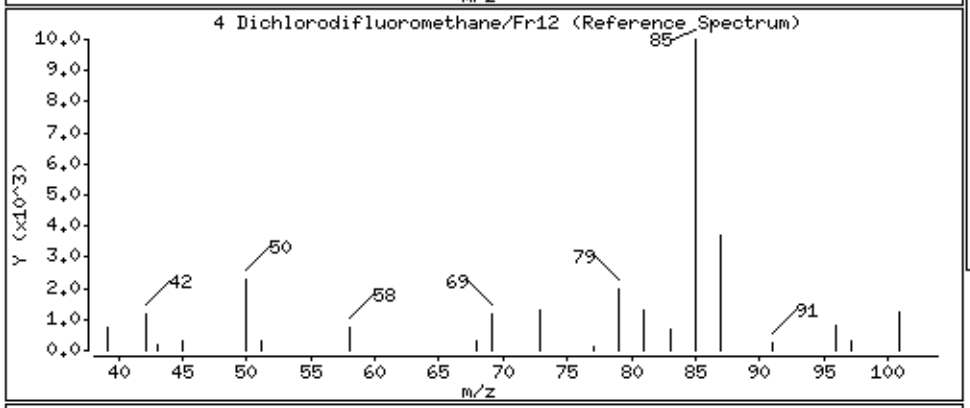
Concentration: 0.4548 PPBV

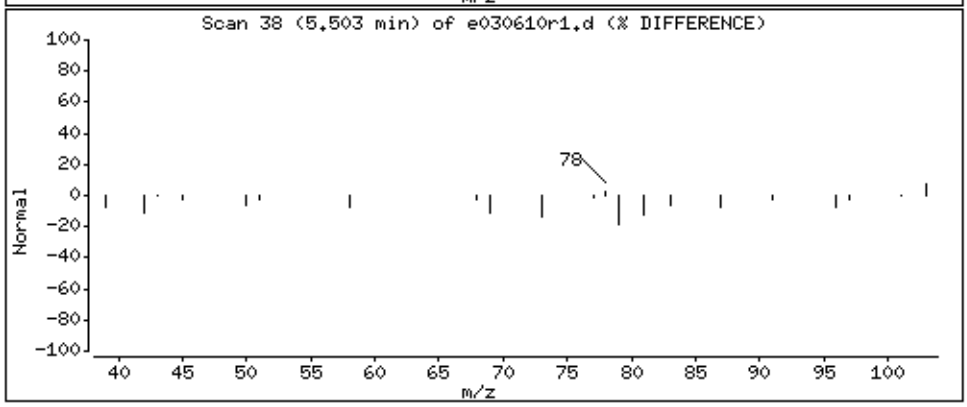












Data File: /chem/msde.i/06Mar2015.b/e030610r1.d

Date : 06-MAR-2015 12:05

Client ID:

Instrument: msde.i

Sample Info: 150mL #34011

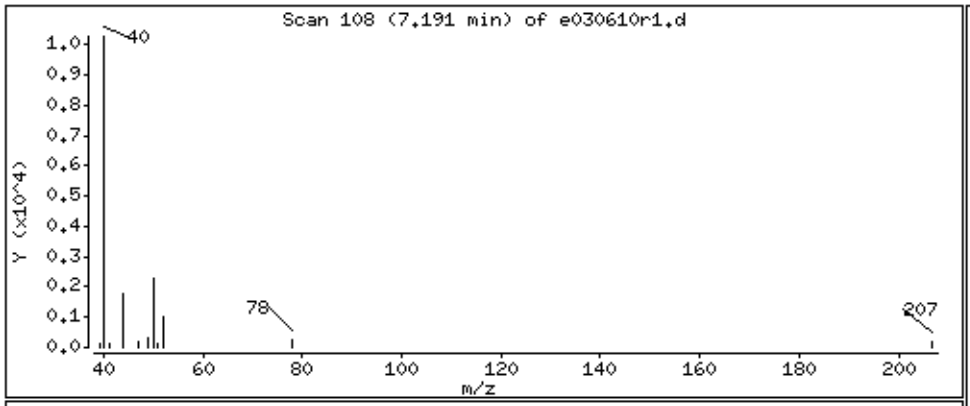
Operator: sab

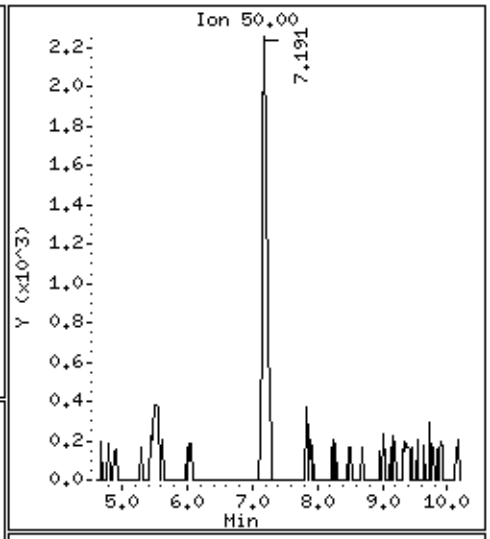
Column phase: RTx-624

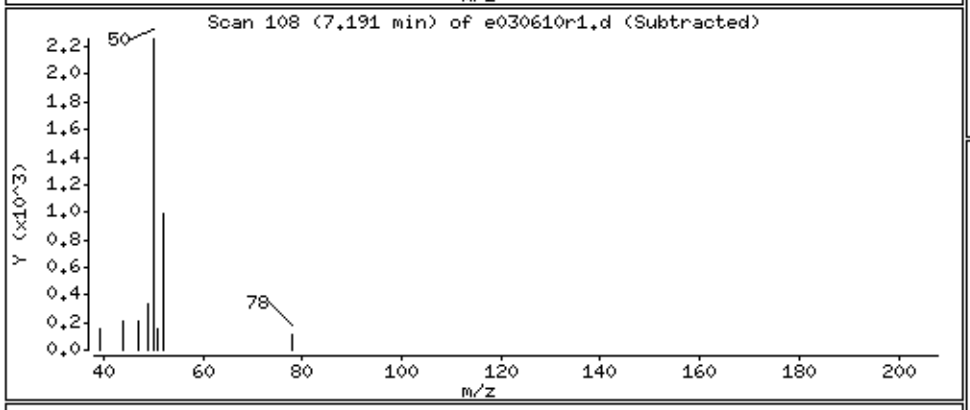
Column diameter: 0.32

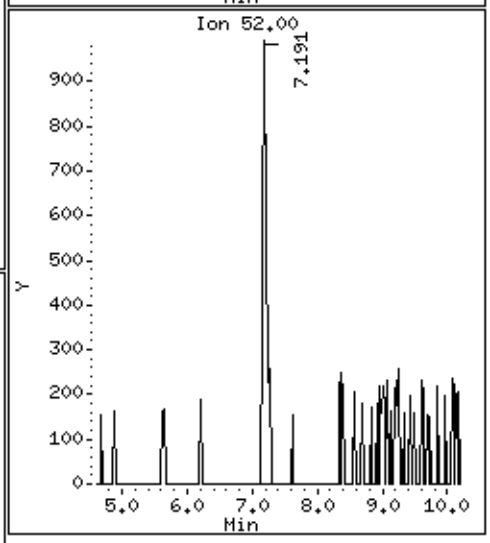
7 Chloromethane

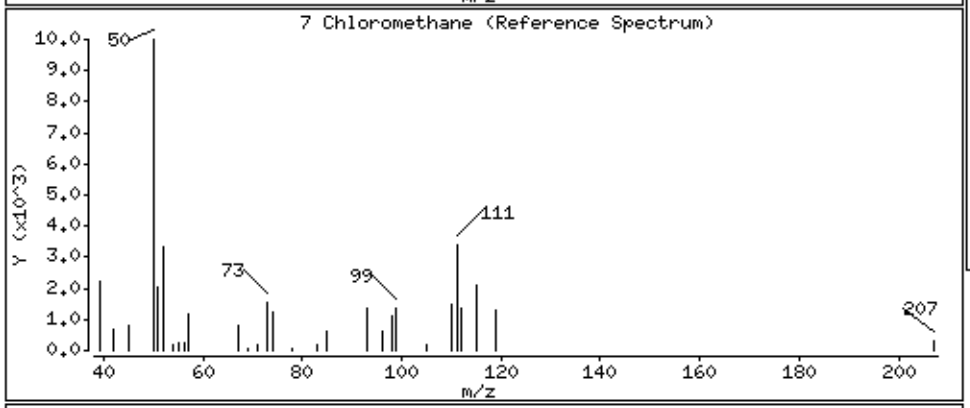
Concentration: 0.6665 PPBV

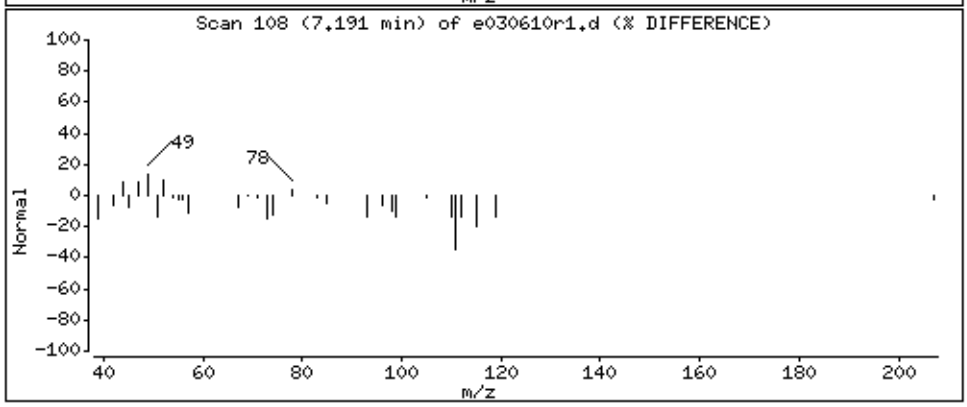












Data File: /chem/msde.i/06Mar2015.b/e030610r1.d

Date : 06-MAR-2015 12:05

Client ID:

Instrument: msde.i

Sample Info: 150mL #34011

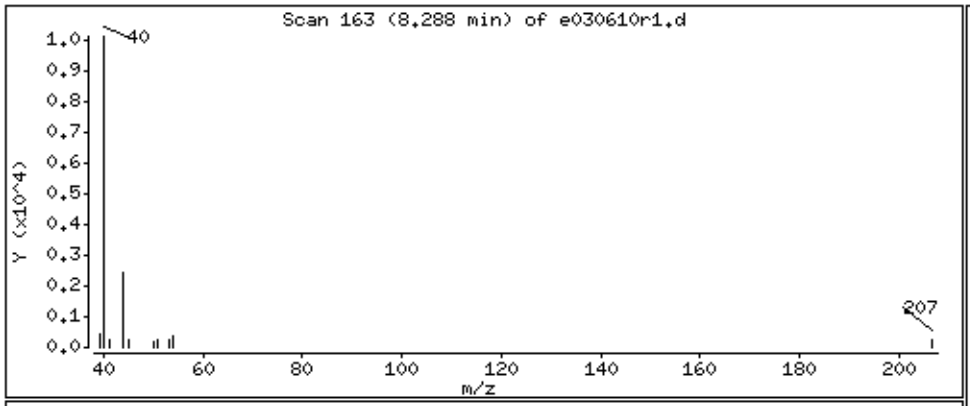
Operator: sab

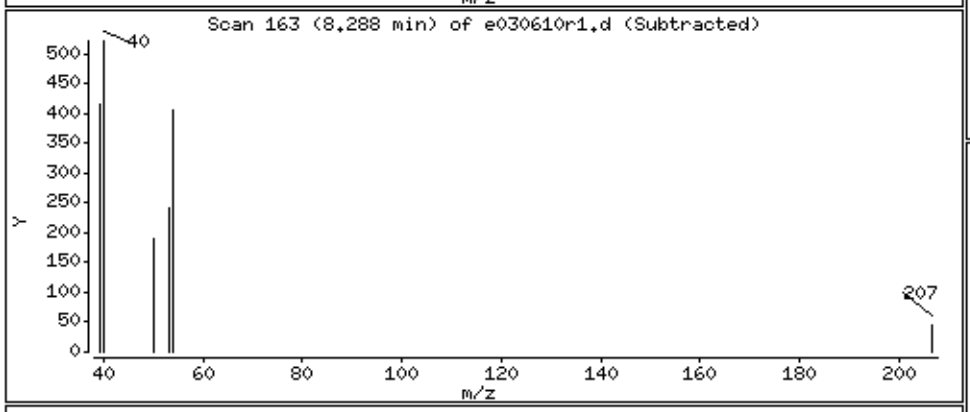
Column phase: RTx-624

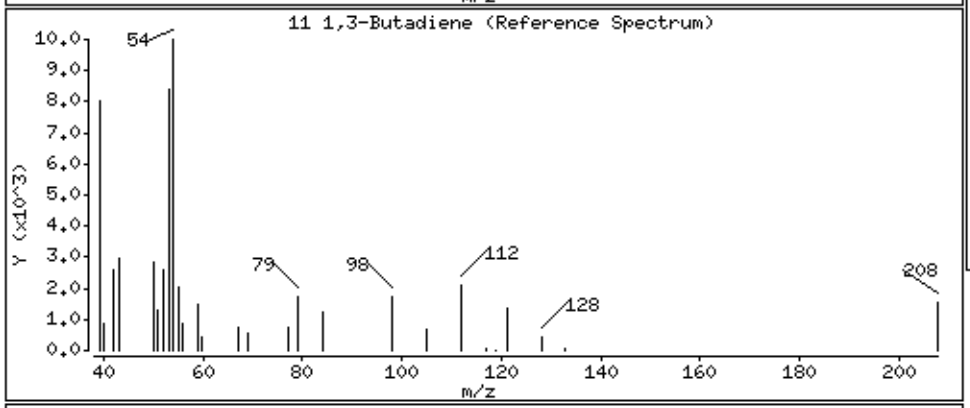
Column diameter: 0.32

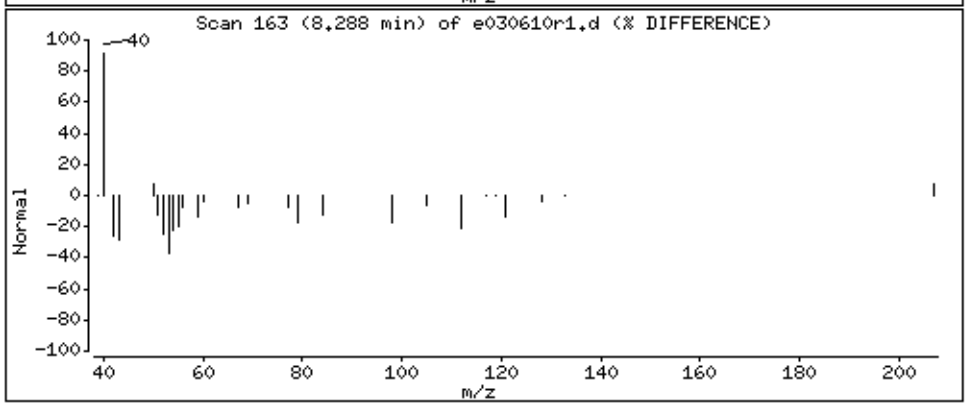
11 1,3-Butadiene

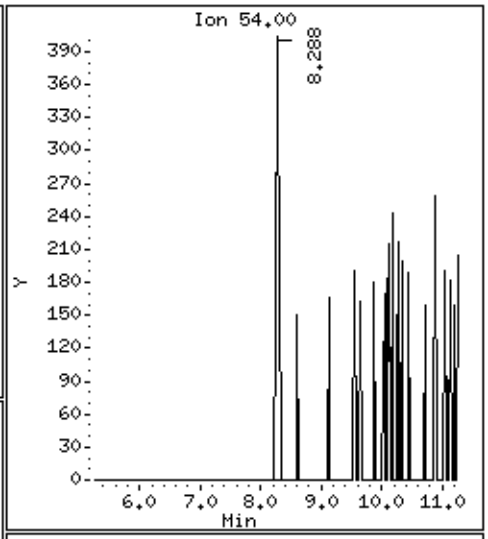
Concentration: 0.09682 PPBV

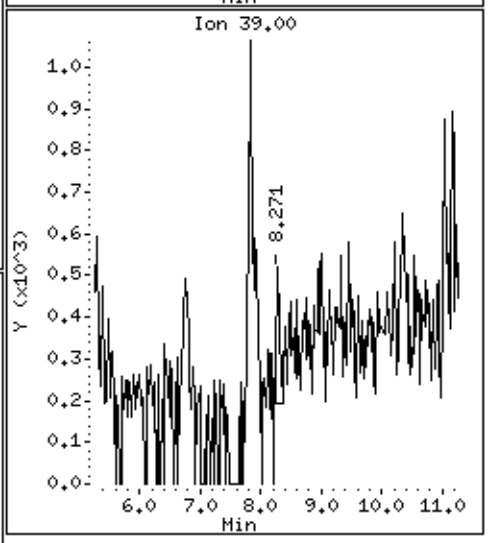












Data File: /chem/msde.i/06Mar2015.b/e030610r1.d

Date : 06-MAR-2015 12:05

Client ID:

Instrument: msde.i

Sample Info: 150mL #34011

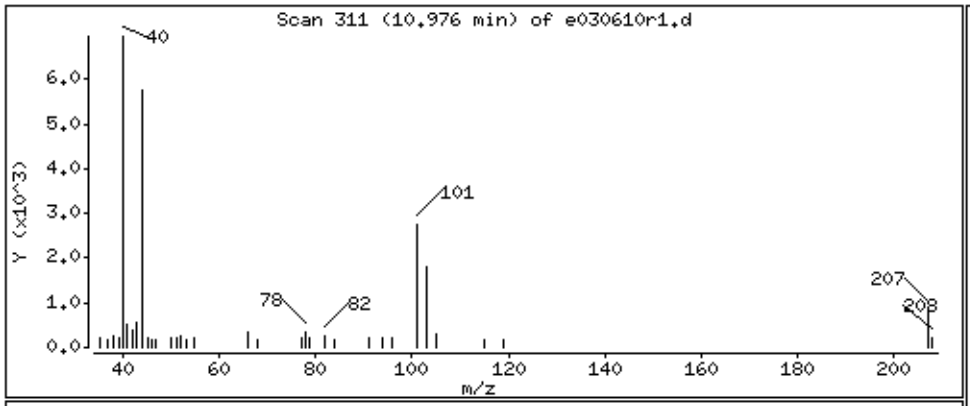
Operator: sab

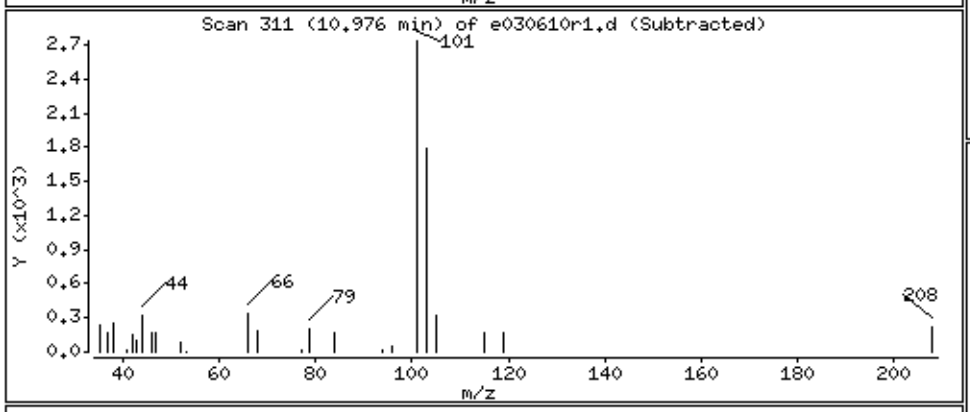
Column phase: RTx-624

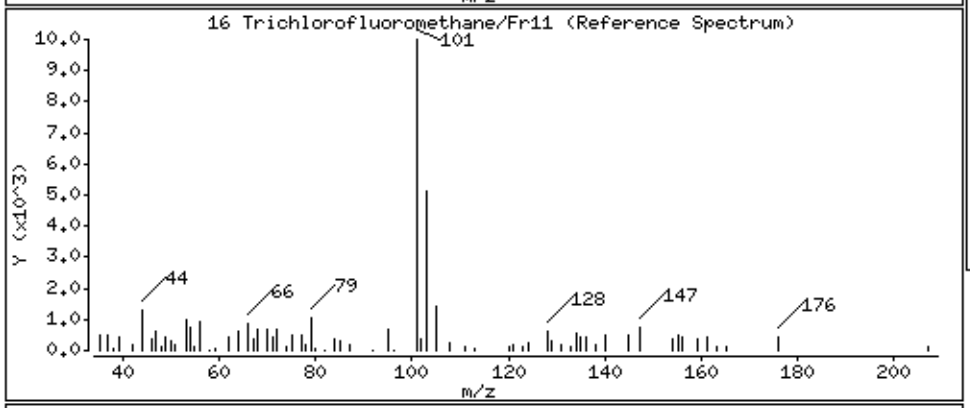
Column diameter: 0.32

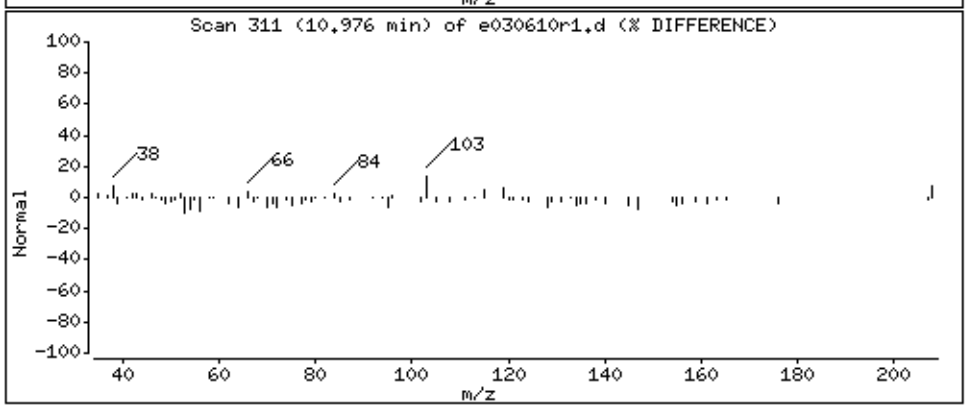
16 Trichlorofluoromethane/Fr11

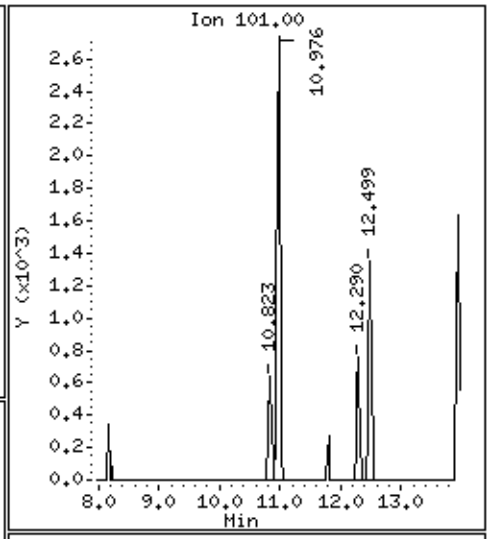
Concentration: 0.2191 PPBV

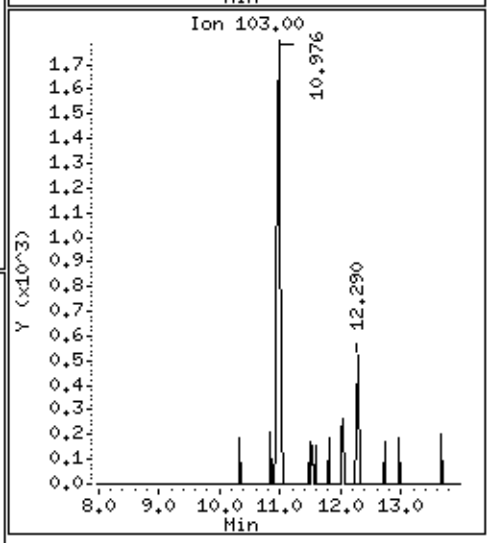












Data File: /chem/msde.i/06Mar2015.b/e030610r1.d

Date : 06-MAR-2015 12:05

Client ID:

Instrument: msde.i

Sample Info: 150mL #34011

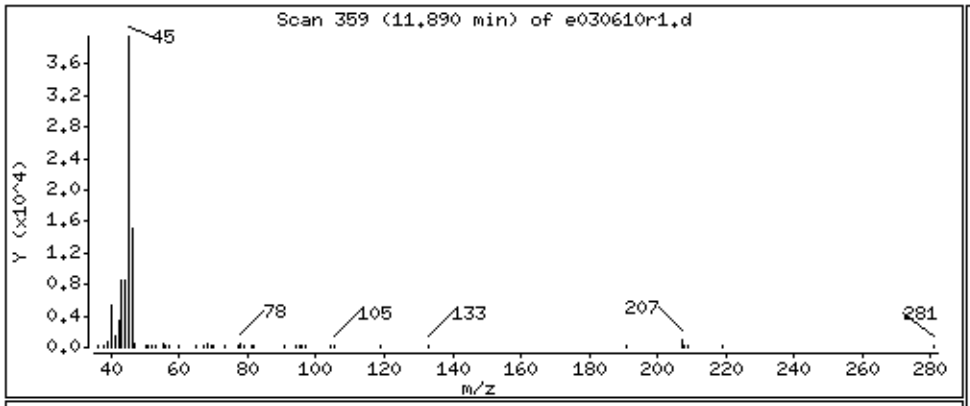
Operator: sab

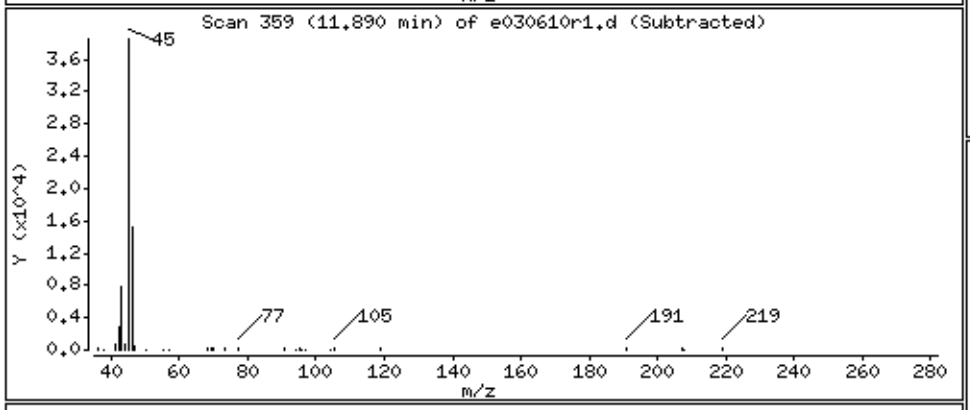
Column phase: RTx-624

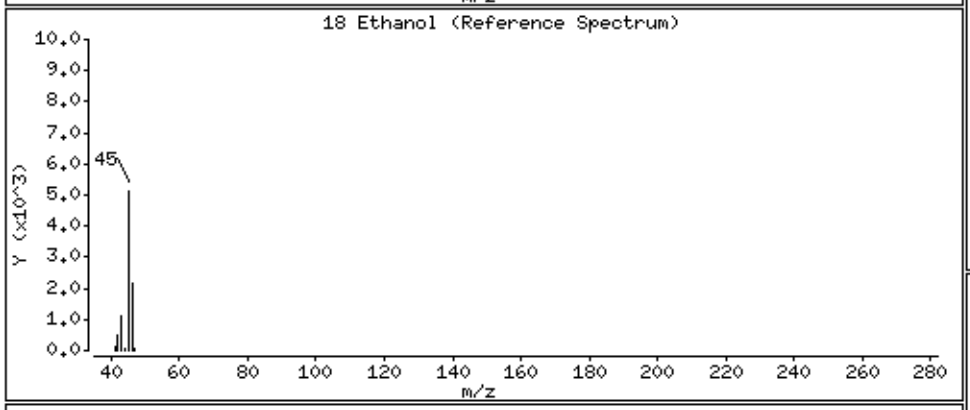
Column diameter: 0.32

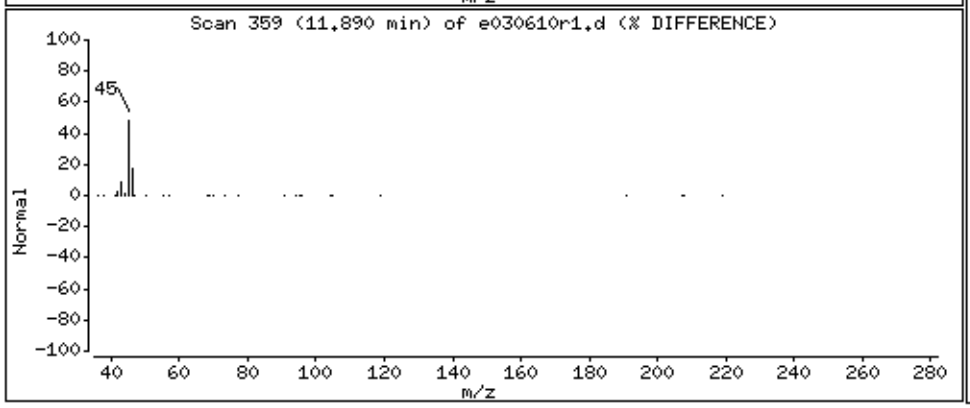
18 Ethanol

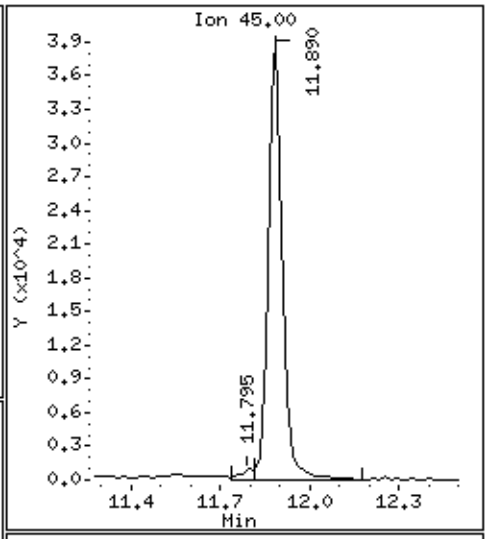
Concentration: 20.301 PPBV

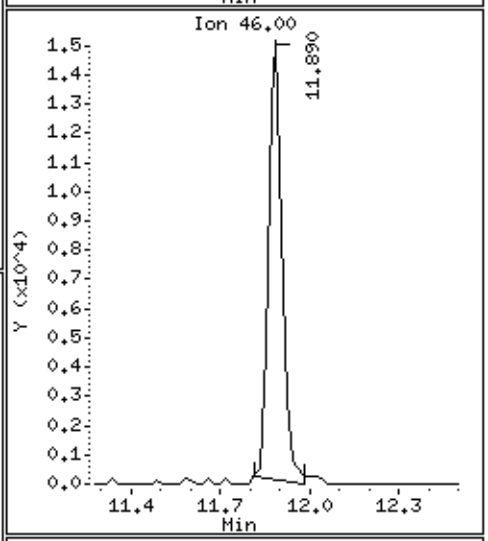


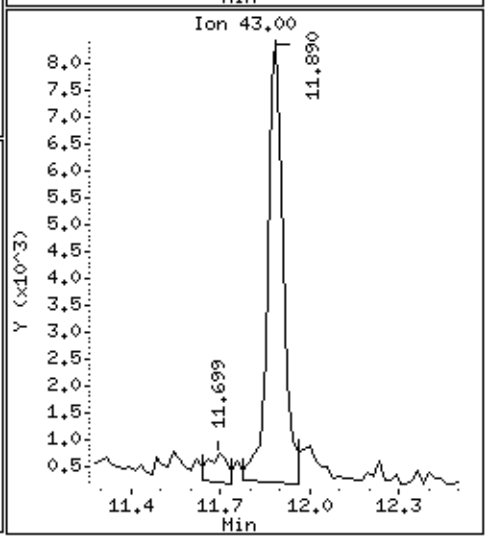












Data File: /chem/msde.i/06Mar2015.b/e030610r1.d

Date : 06-MAR-2015 12:05

Client ID:

Instrument: msde.i

Sample Info: 150mL #34011

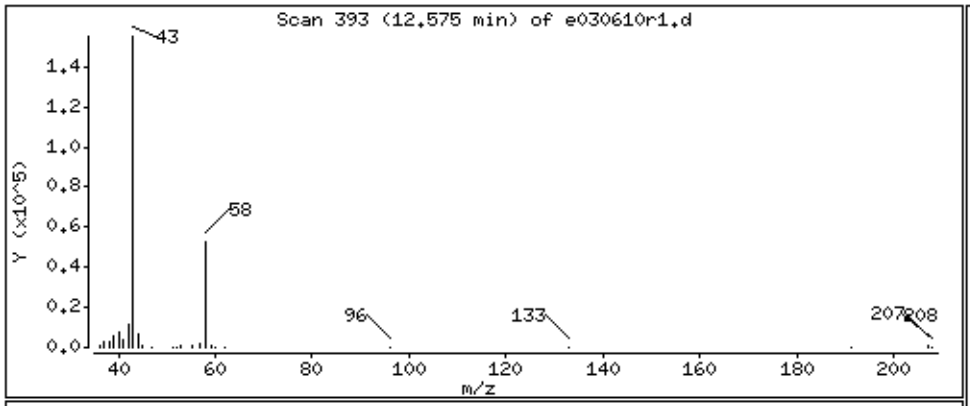
Operator: sab

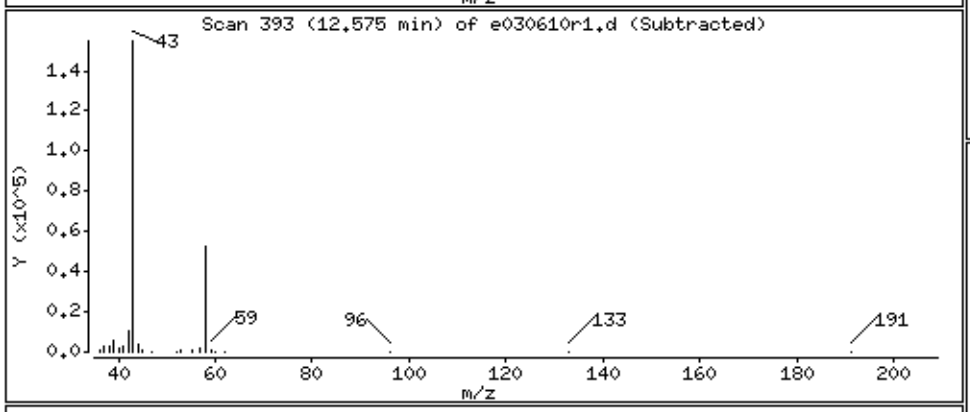
Column phase: RTx-624

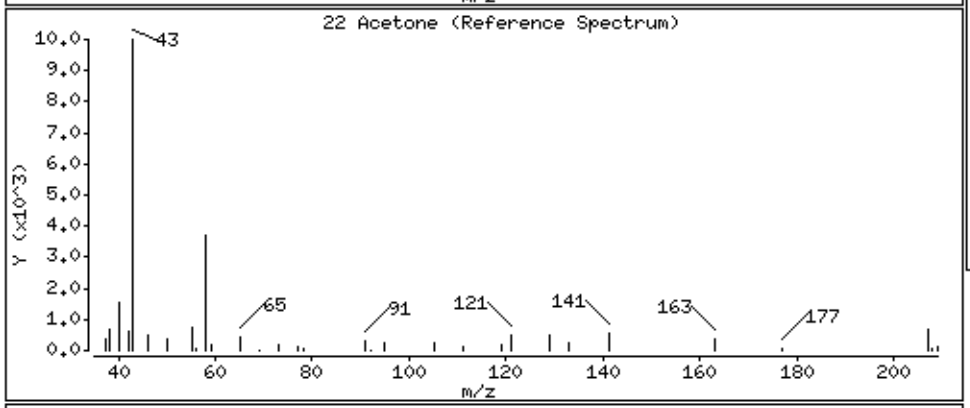
Column diameter: 0.32

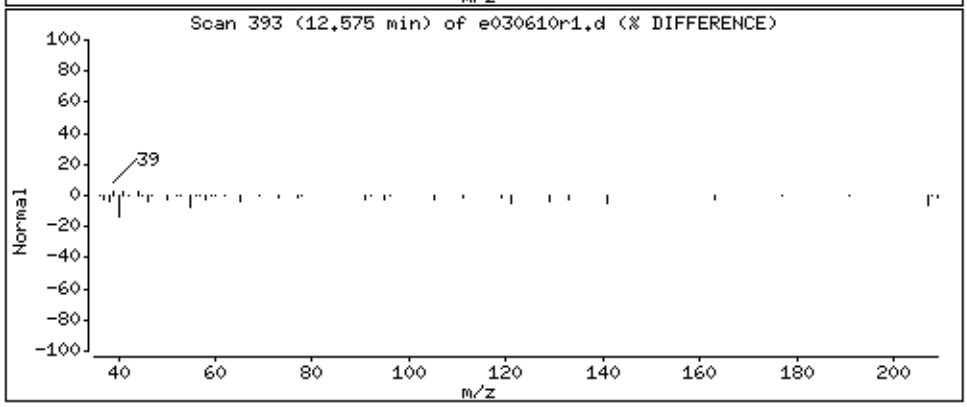
22 Acetone

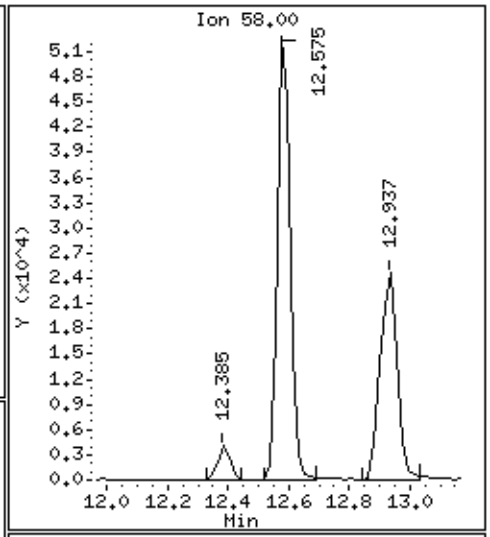
Concentration: 13.052 PPBV

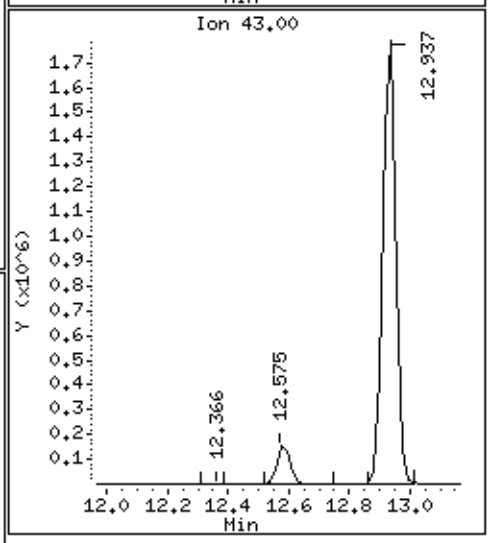












Data File: /chem/msde.i/06Mar2015.b/e030610r1.d

Date : 06-MAR-2015 12:05

Client ID:

Instrument: msde.i

Sample Info: 150mL #34011

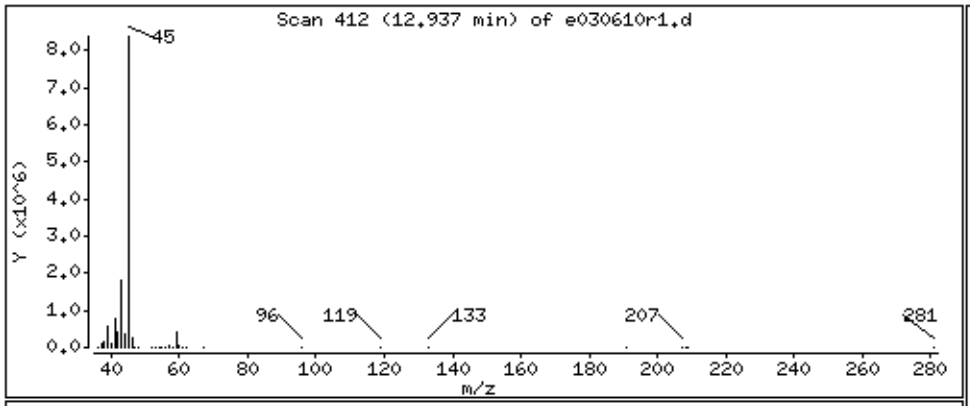
Operator: sab

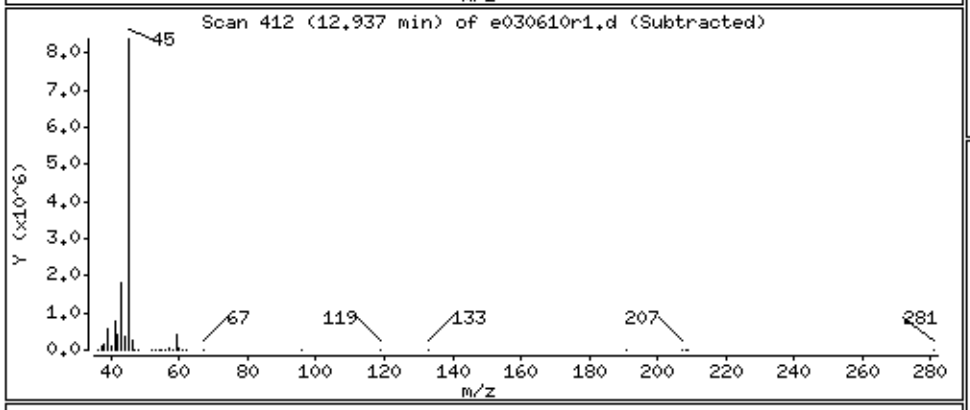
Column phase: RTx-624

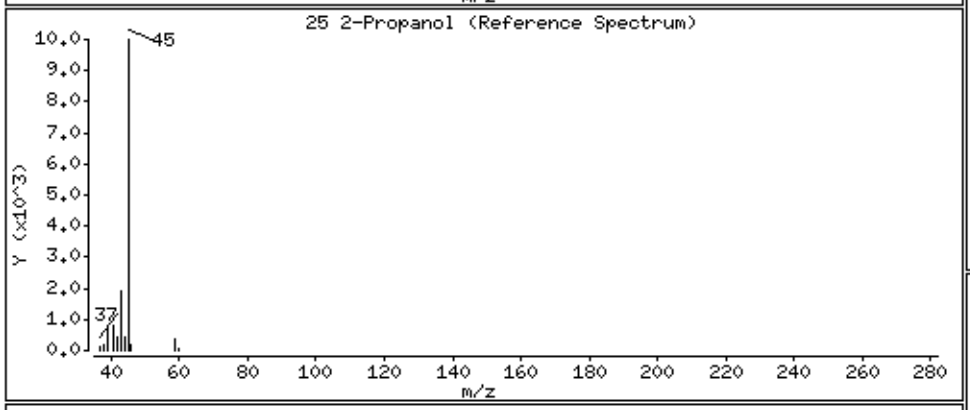
Column diameter: 0.32

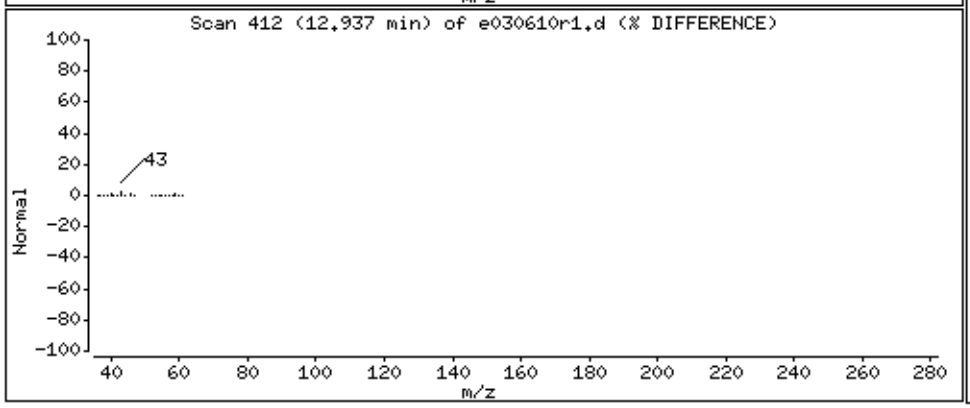
25 2-Propanol

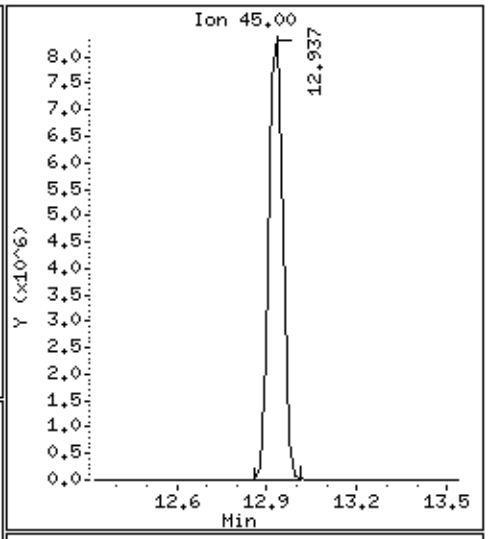
Concentration: 791.53 PPBV

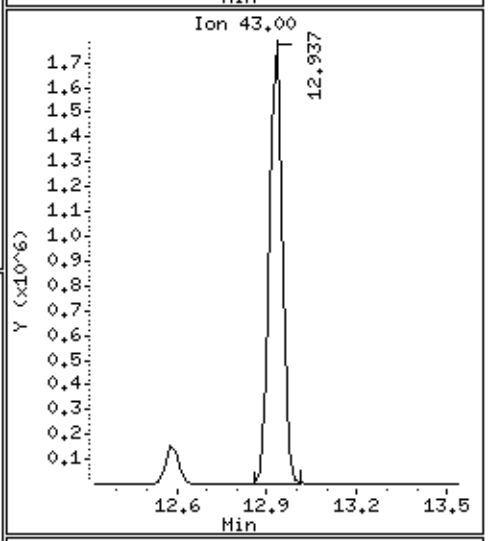


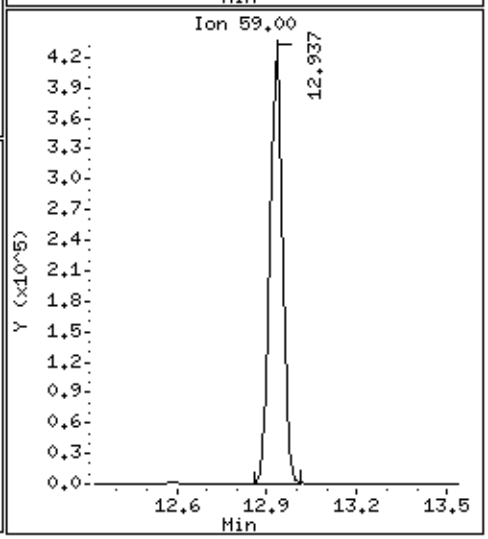












Data File: /chem/msde.i/06Mar2015.b/e030610r1.d

Date : 06-MAR-2015 12:05

Client ID:

Instrument: msde.i

Sample Info: 150mL #34011

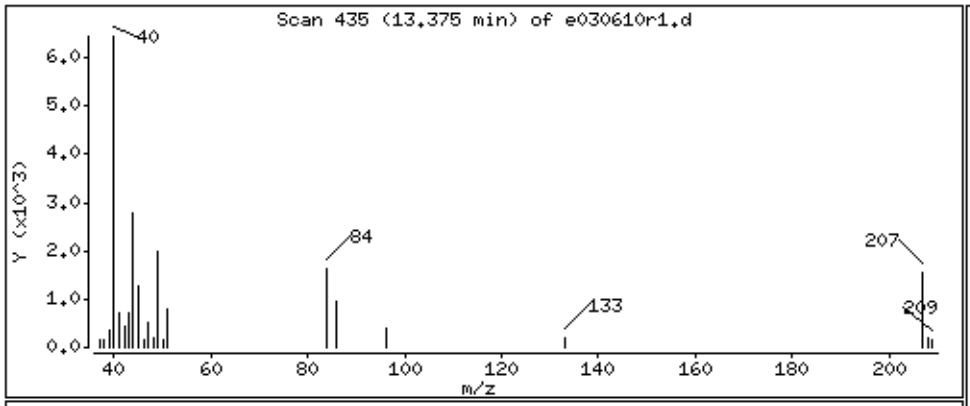
Operator: sab

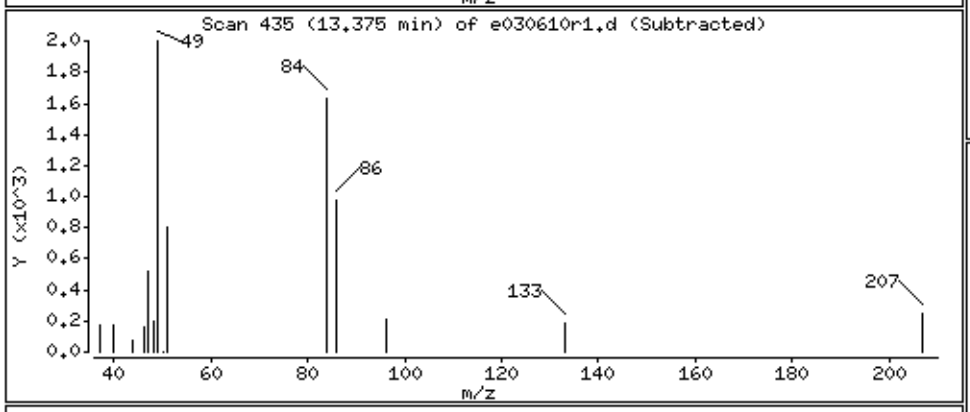
Column phase: RTx-624

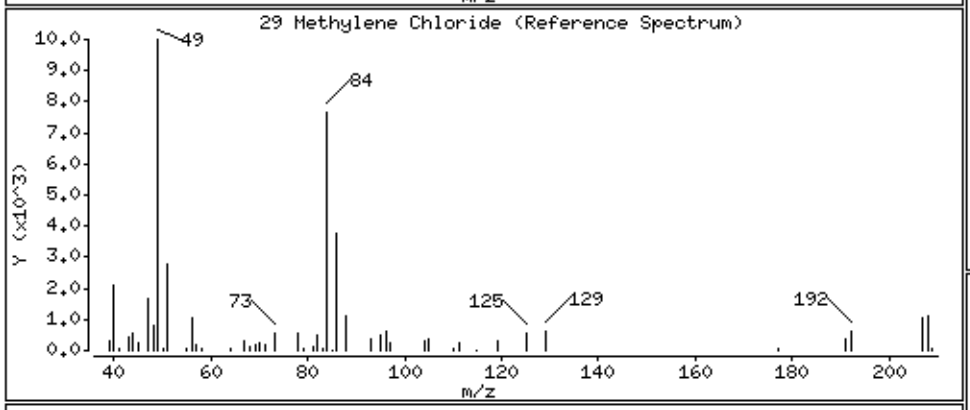
Column diameter: 0.32

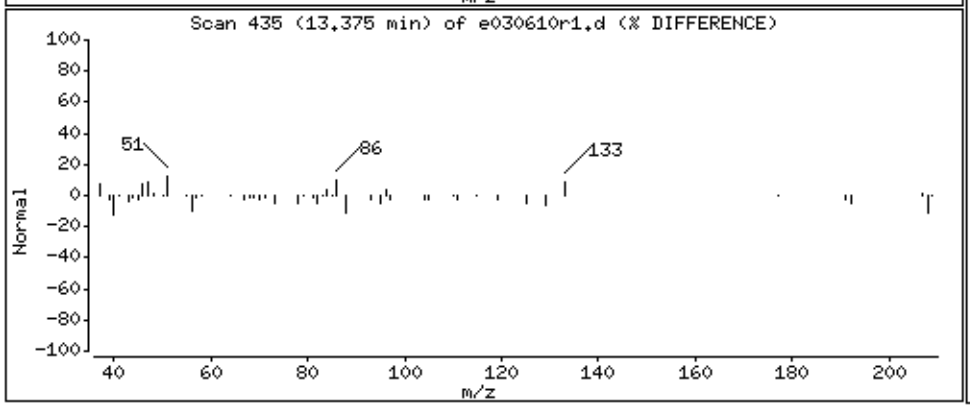
29 Methylene Chloride

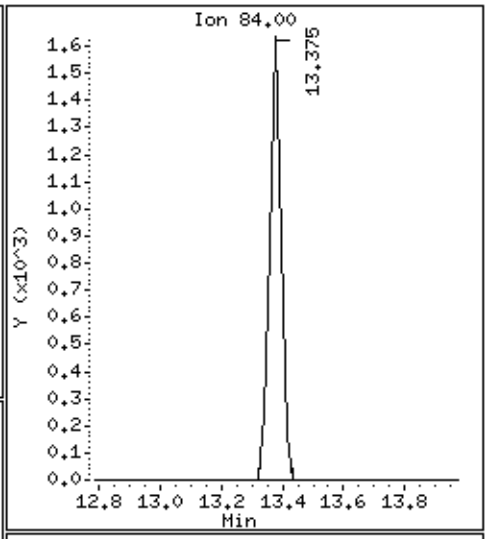
Concentration: 0.2402 PPBV

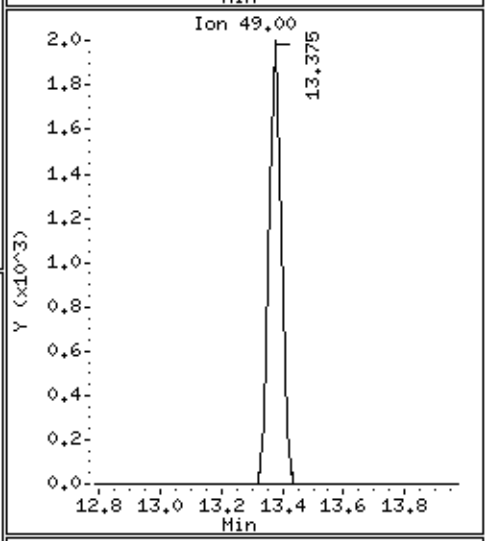


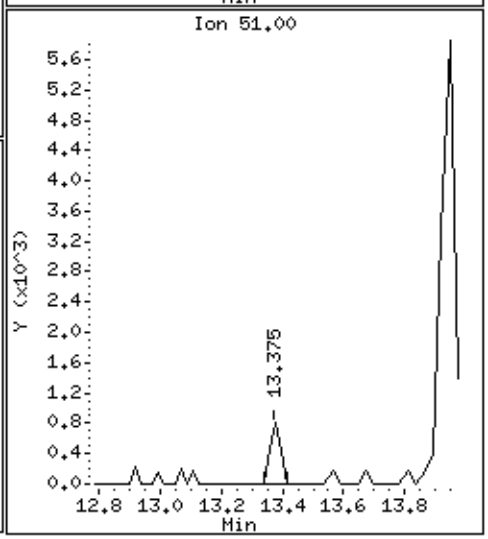












Data File: /chem/msde.i/06Mar2015.b/e030610r1.d

Date : 06-MAR-2015 12:05

Client ID:

Instrument: msde.i

Sample Info: 150mL #34011

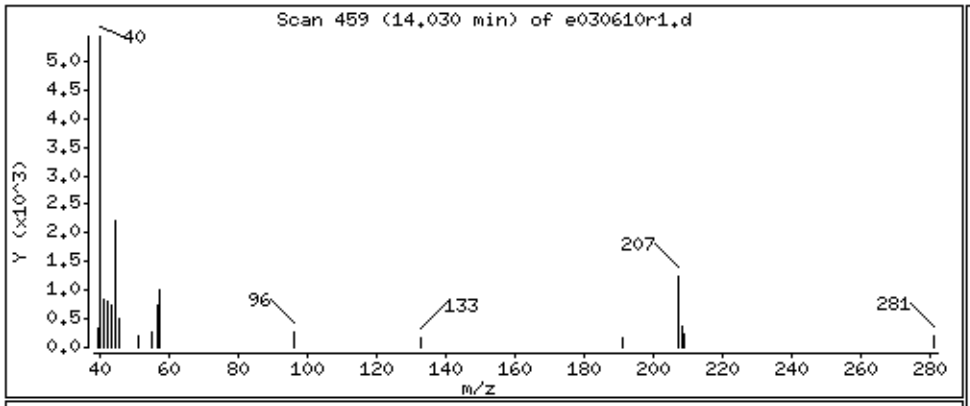
Operator: sab

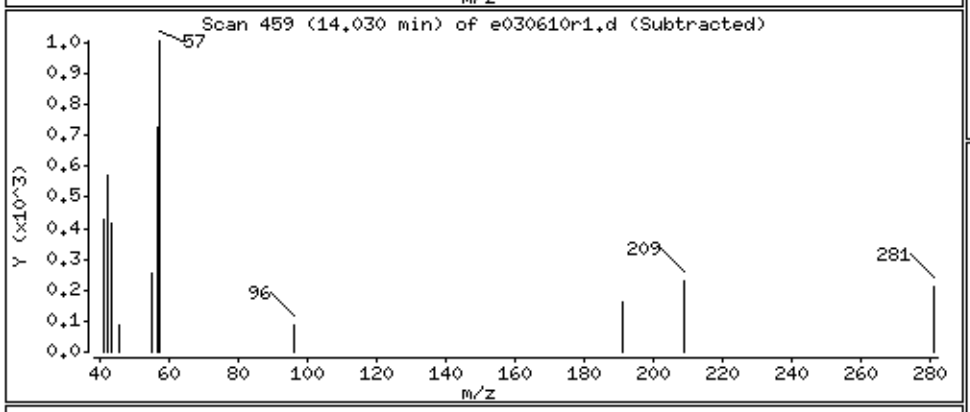
Column phase: RTx-624

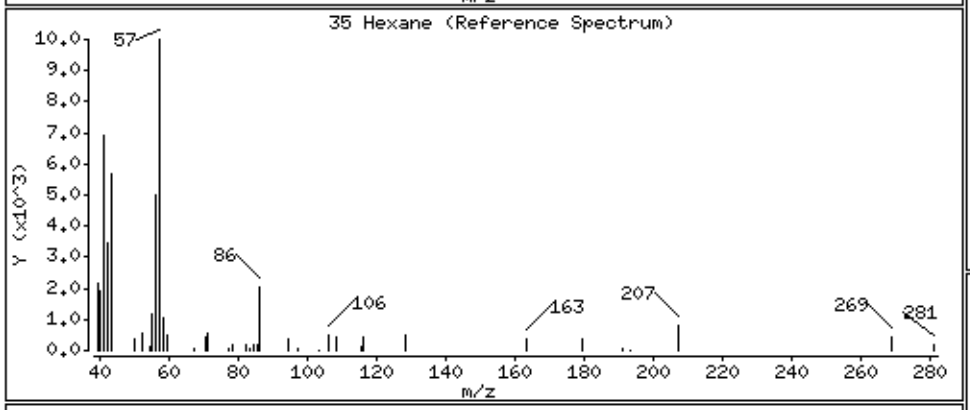
Column diameter: 0.32

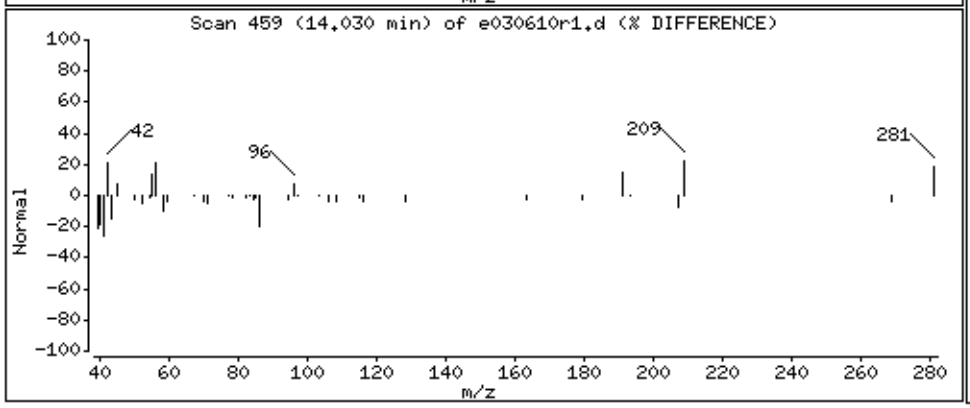
35 Hexane

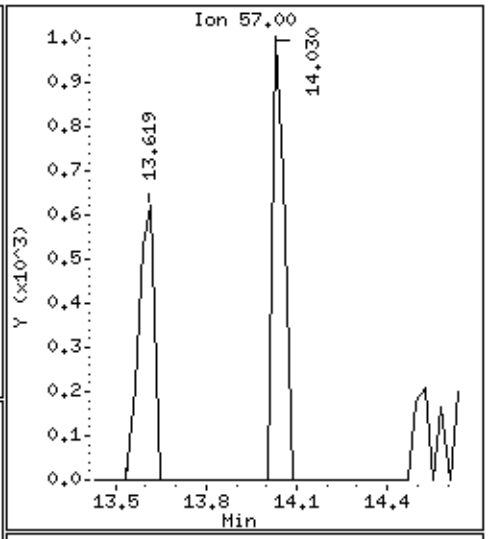
Concentration: 0.08178 PPBV

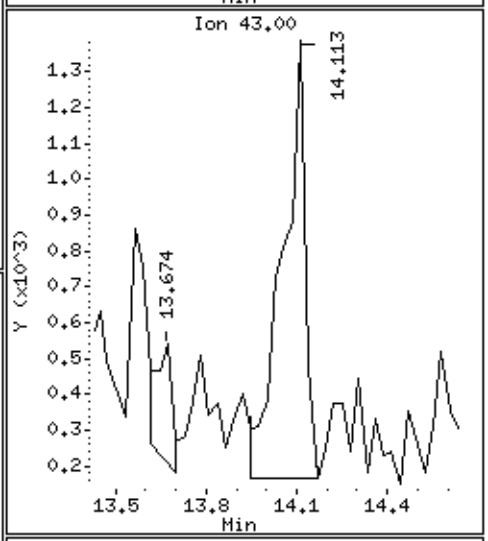


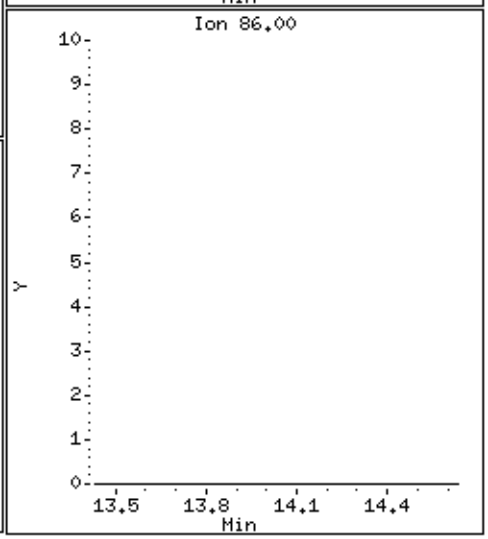












Data File: /chem/msde.i/06Mar2015.b/e030610r1.d

Date : 06-MAR-2015 12:05

Client ID:

Instrument: msde.i

Sample Info: 150mL #34011

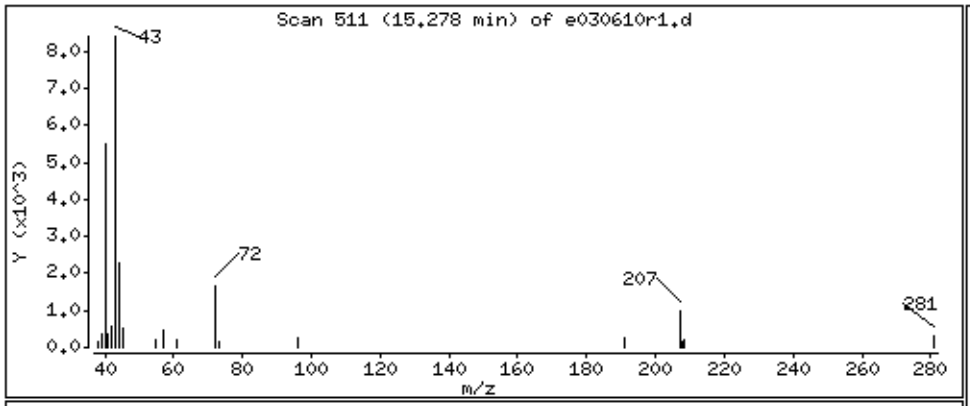
Operator: sab

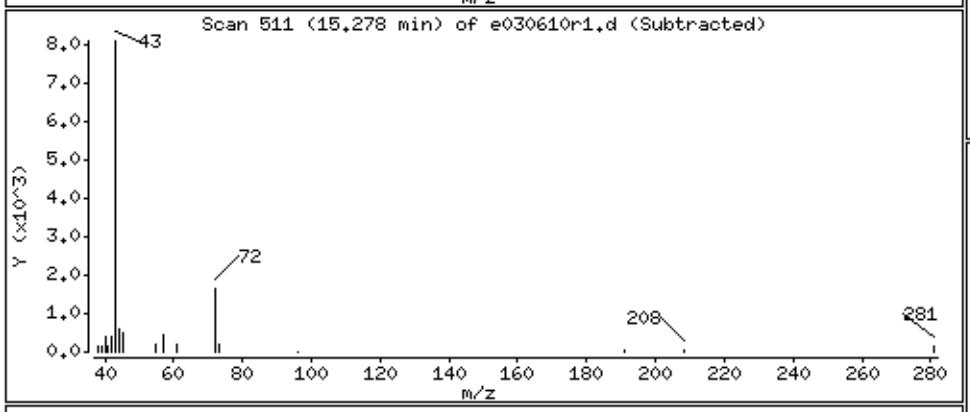
Column phase: RTx-624

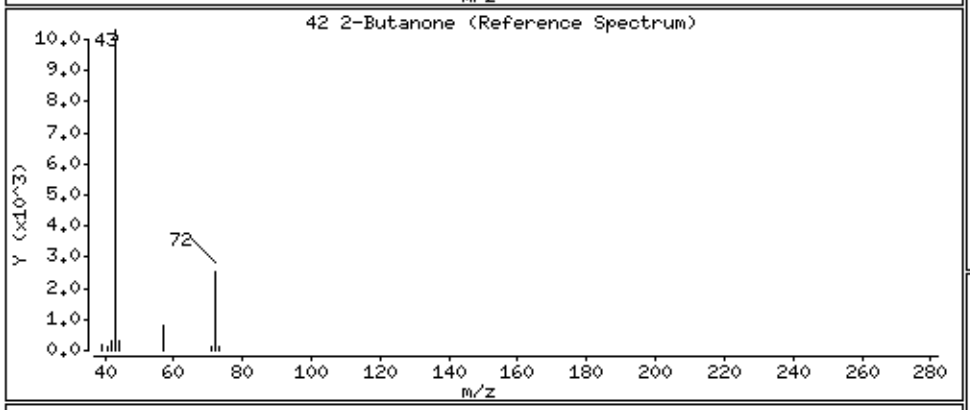
Column diameter: 0.32

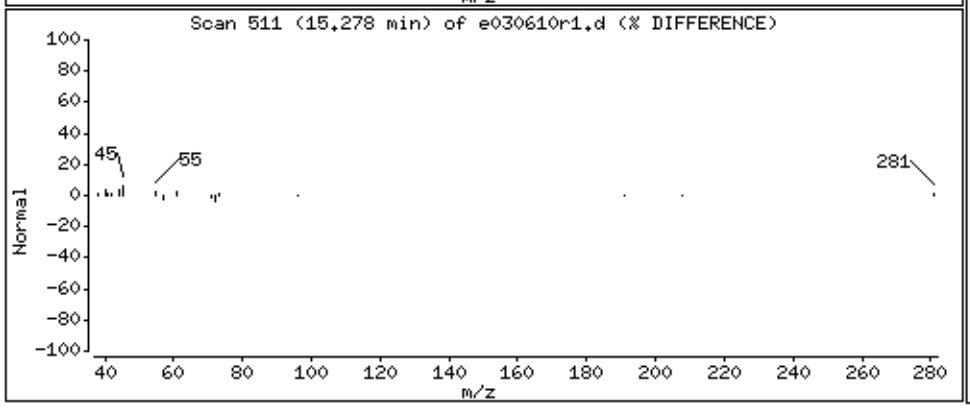
42 2-Butanone

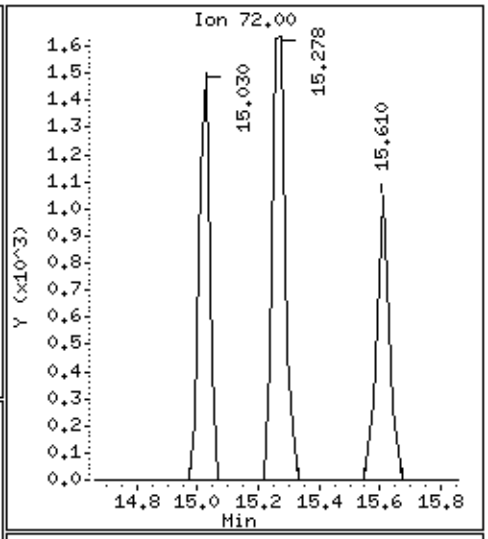
Concentration: 0.4921 PPBV

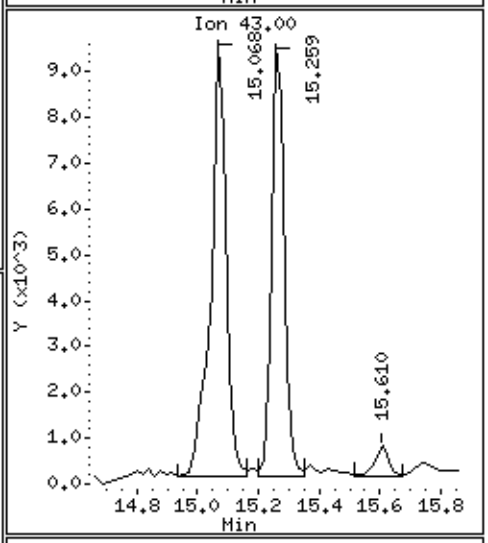


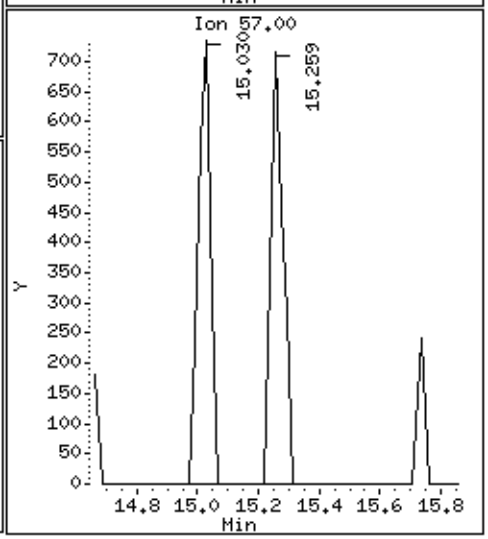












Data File: /chem/msde.i/06Mar2015.b/e030610r1.d

Date : 06-MAR-2015 12:05

Client ID:

Instrument: msde.i

Sample Info: 150mL #34011

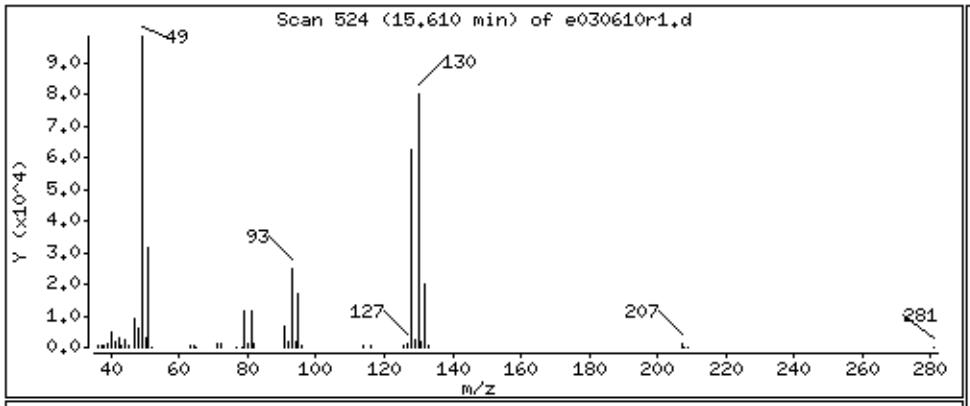
Operator: sab

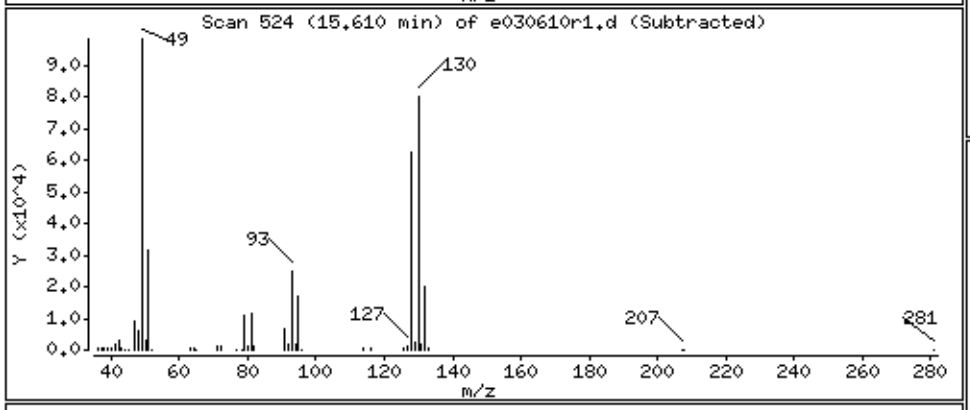
Column phase: RTx-624

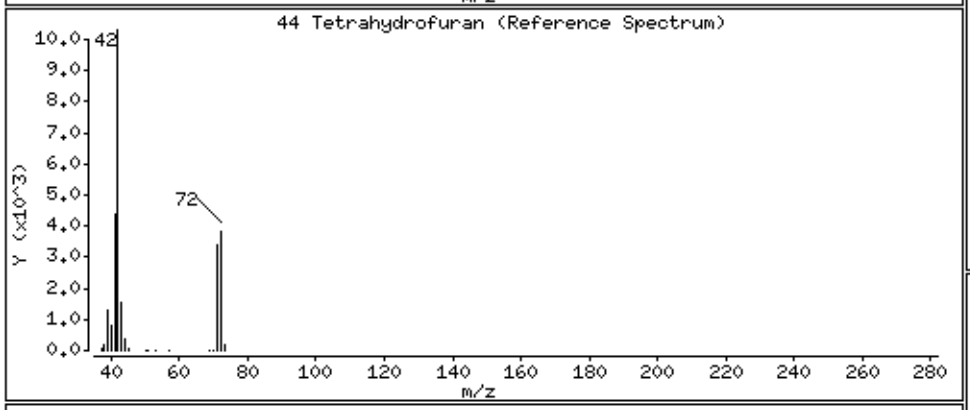
Column diameter: 0.32

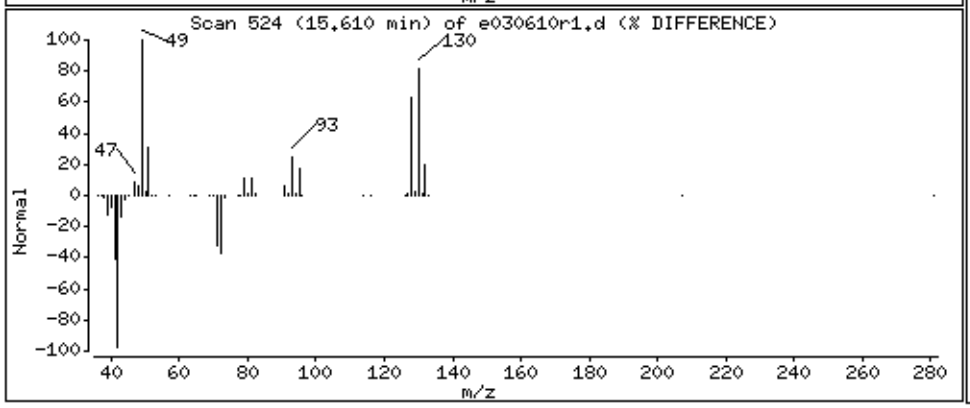
44 Tetrahydrofuran

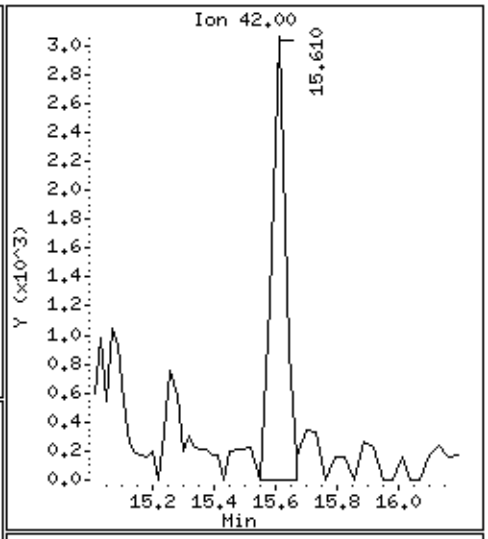
Concentration: 0.4134 PPBV

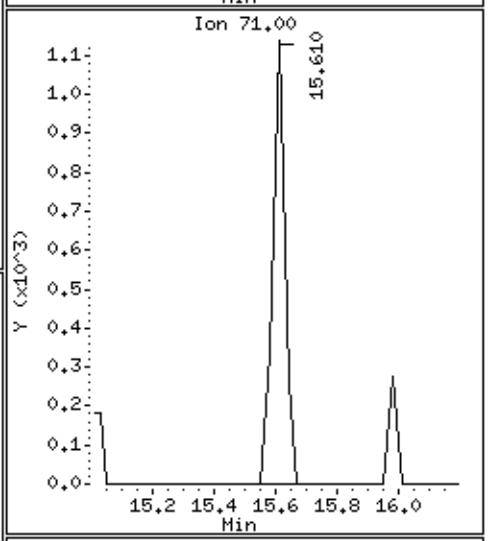


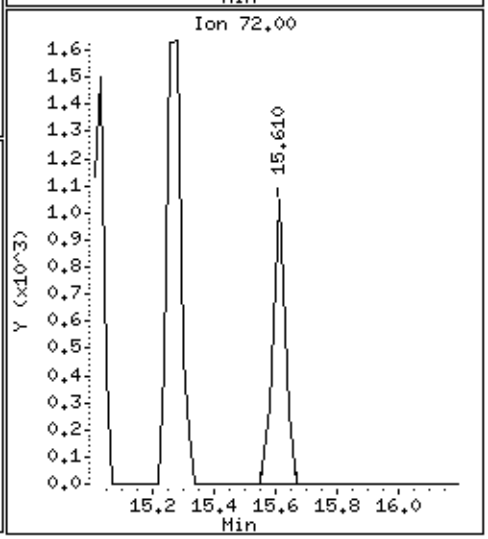












Data File: /chem/msde.i/06Mar2015.b/e030610r1.d

Date : 06-MAR-2015 12:05

Client ID:

Instrument: msde.i

Sample Info: 150mL #34011

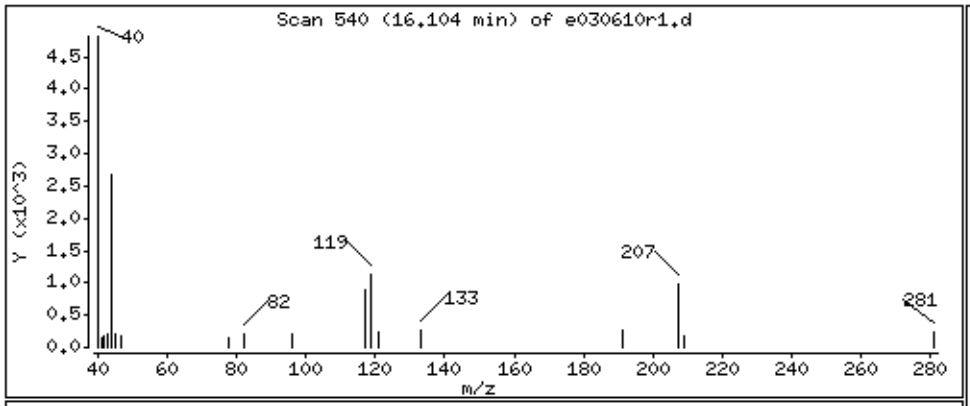
Operator: sab

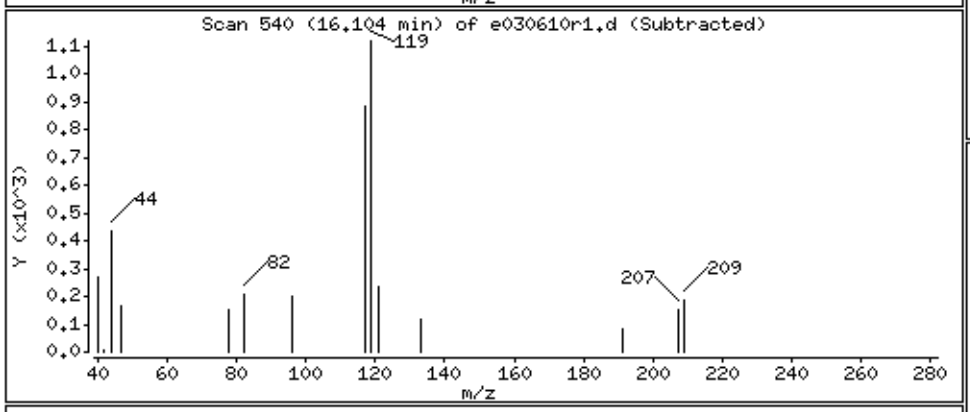
Column phase: RTx-624

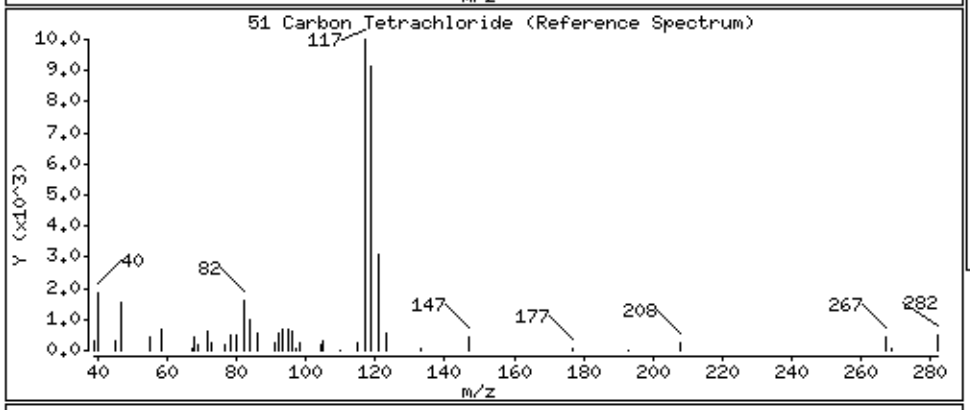
Column diameter: 0.32

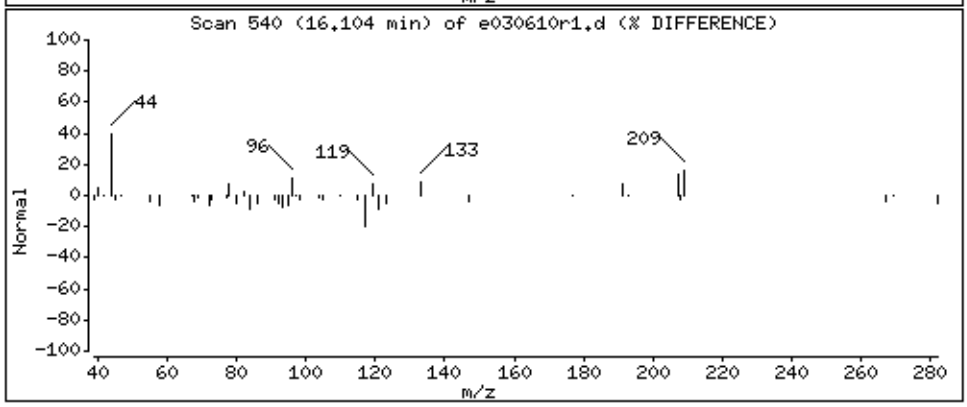
51 Carbon Tetrachloride

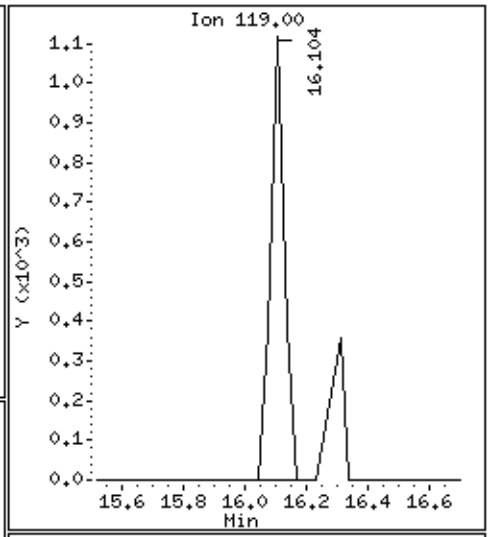
Concentration: 0.08935 PPBV

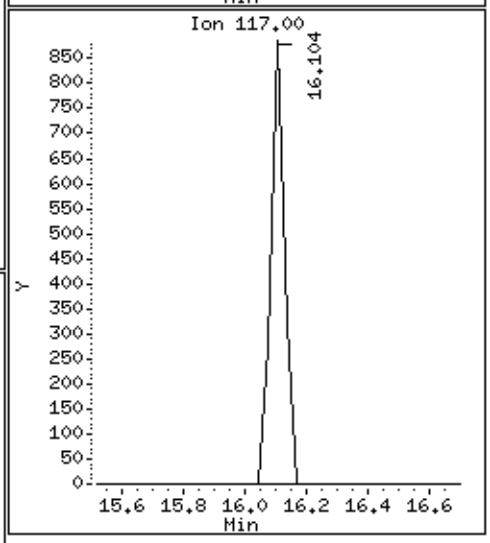












Data File: /chem/msde.i/06Mar2015.b/e030610r1.d

Date : 06-MAR-2015 12:05

Client ID:

Instrument: msde.i

Sample Info: 150mL #34011

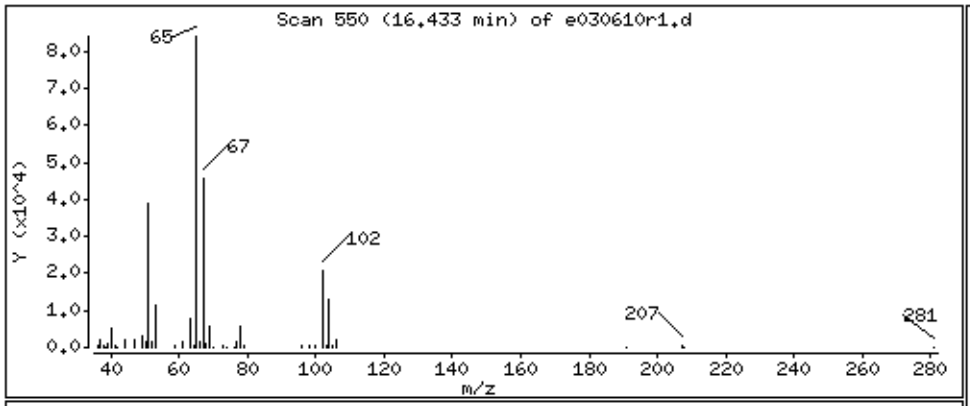
Operator: sab

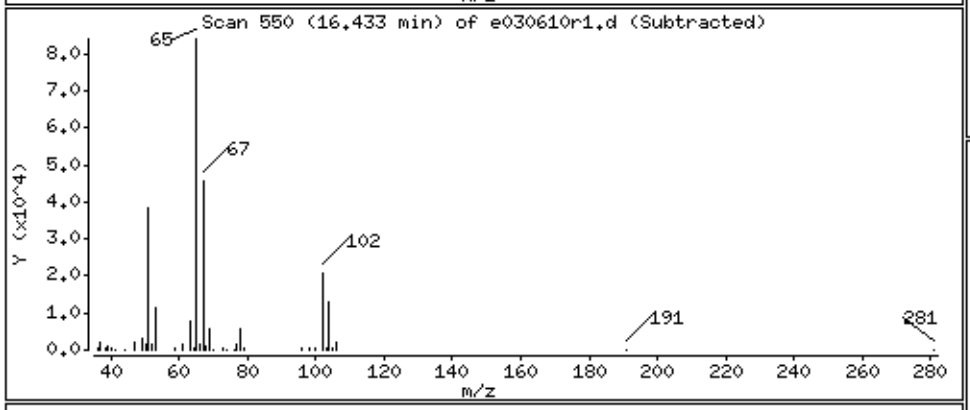
Column phase: RTx-624

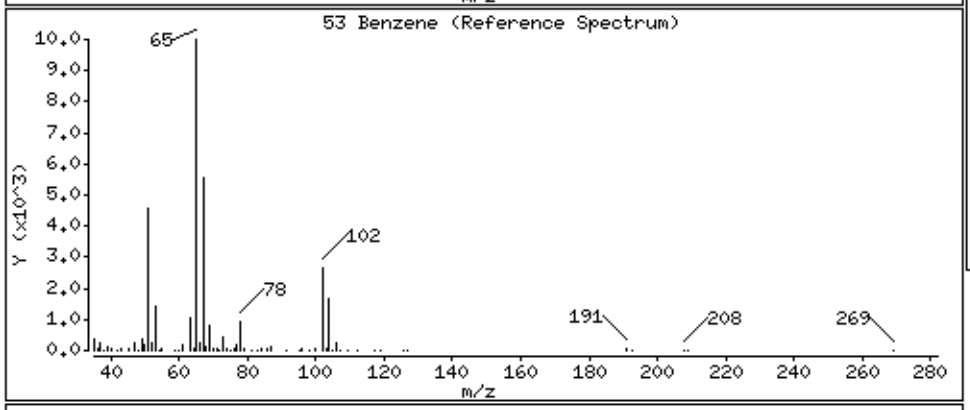
Column diameter: 0.32

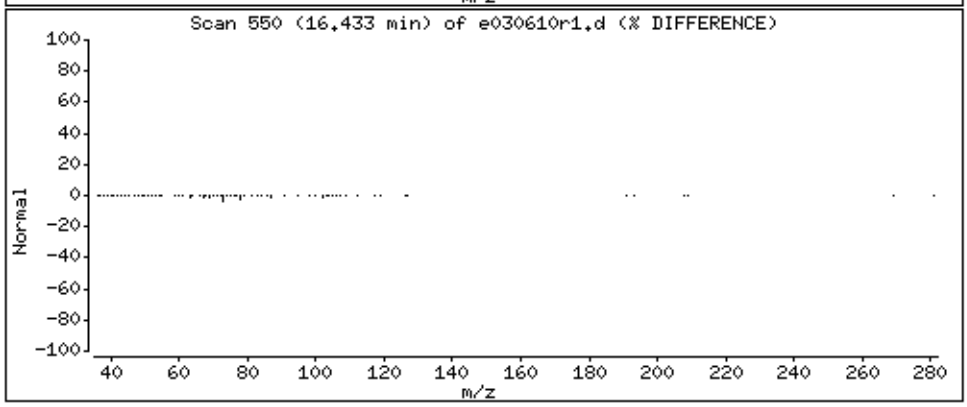
53 Benzene

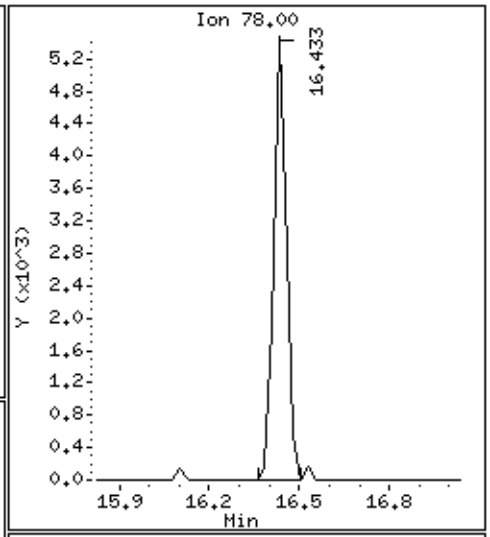
Concentration: 0.2644 PPBV

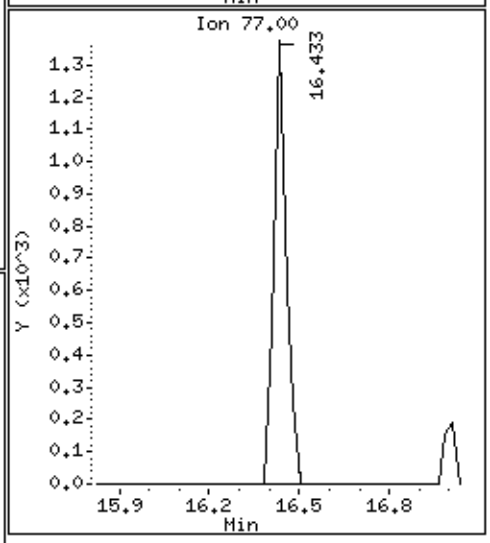












Data File: /chem/msde.i/06Mar2015.b/e030610r1.d

Date : 06-MAR-2015 12:05

Client ID:

Instrument: msde.i

Sample Info: 150mL #34011

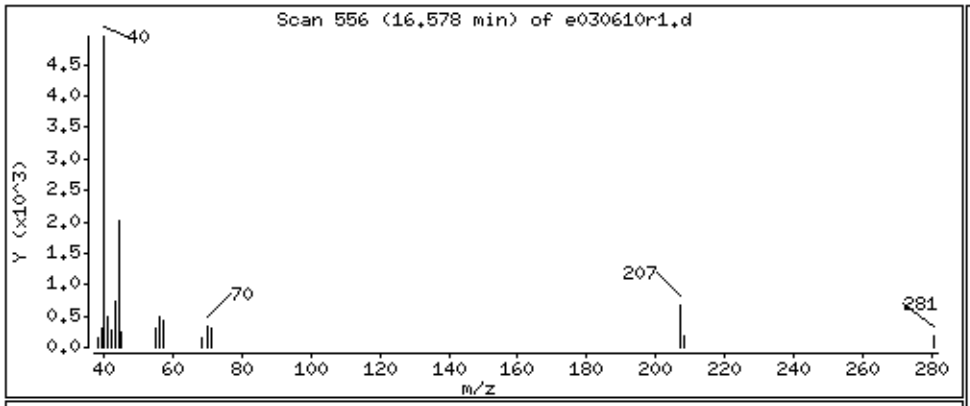
Operator: sab

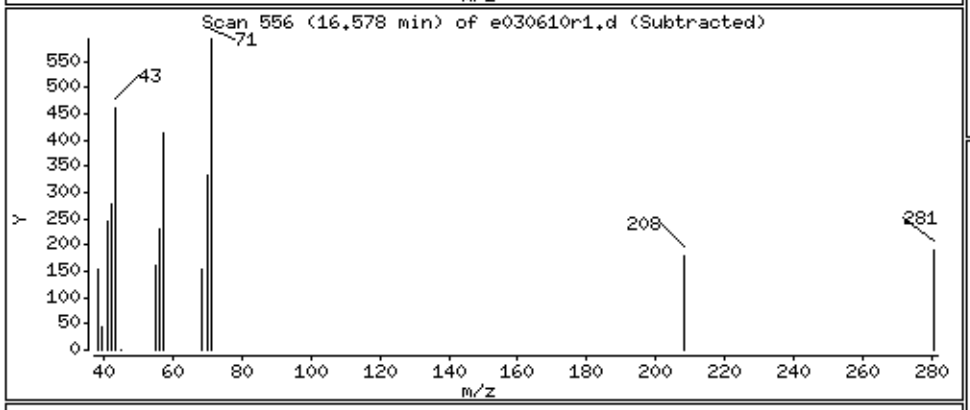
Column phase: RTx-624

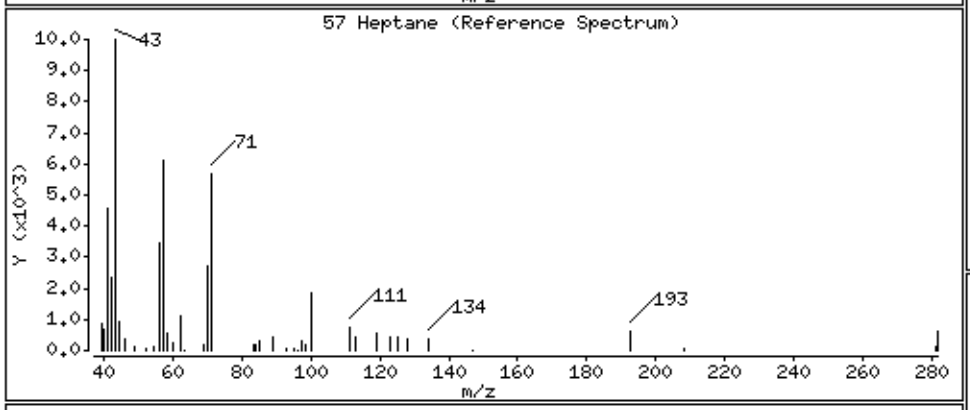
Column diameter: 0.32

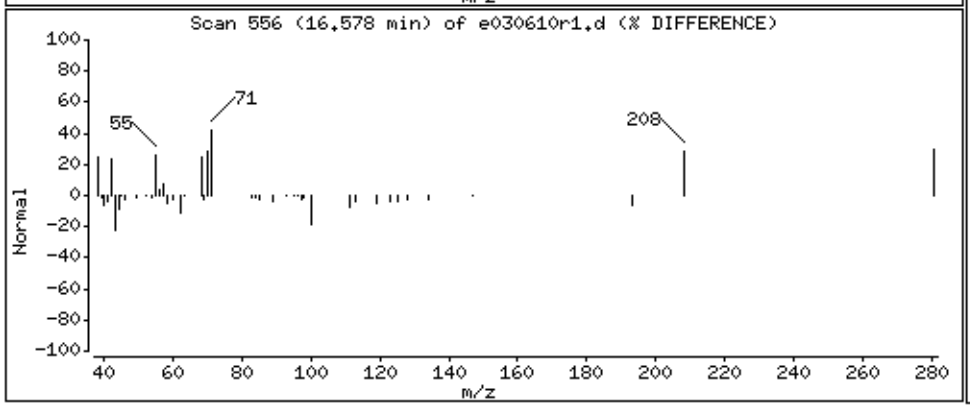
57 Heptane

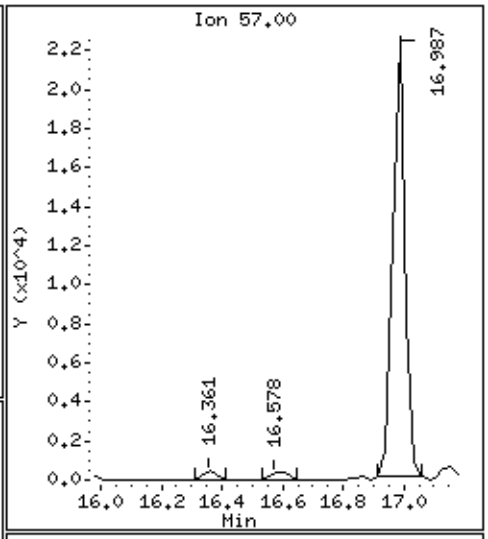
Concentration: 0.08684 PPBV

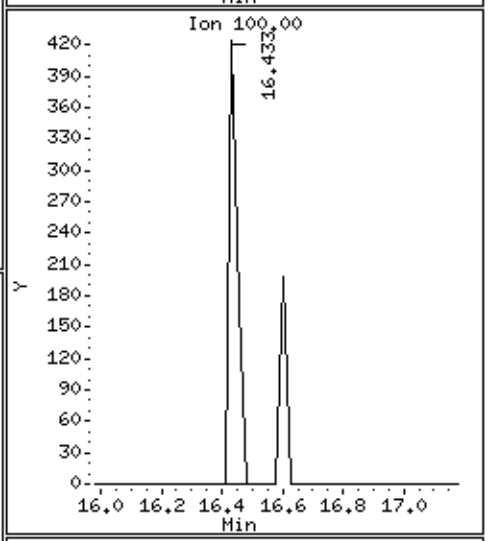


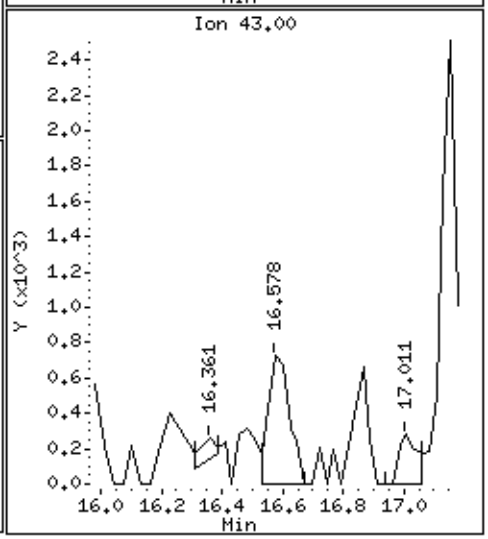












Data File: /chem/msde.i/06Mar2015.b/e030610r1.d

Date : 06-MAR-2015 12:05

Client ID:

Instrument: msde.i

Sample Info: 150mL #34011

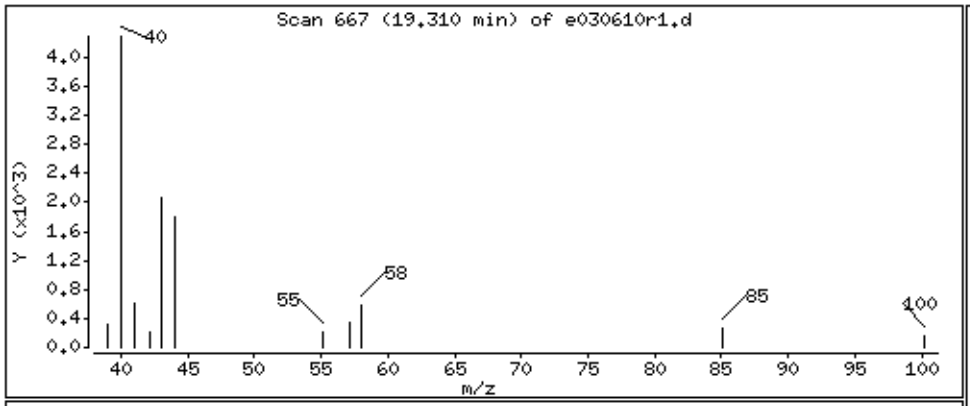
Operator: sab

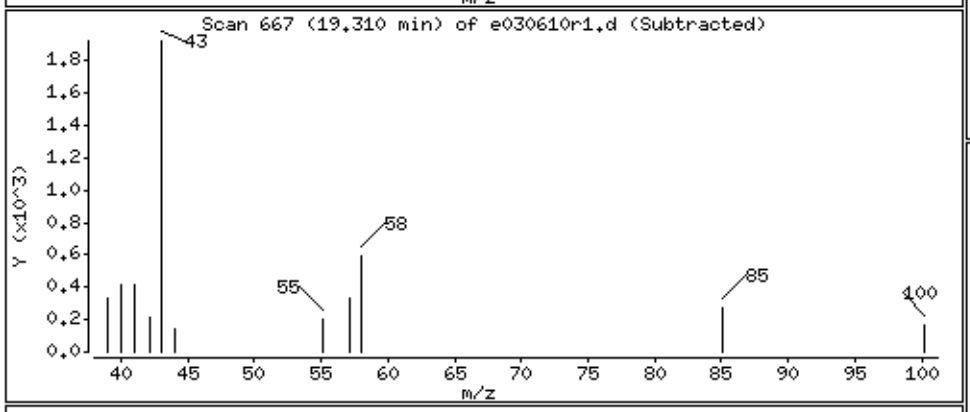
Column phase: RTx-624

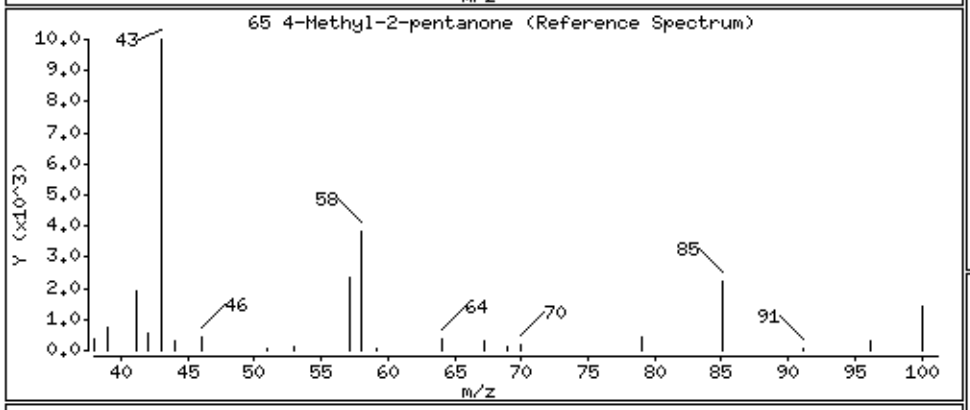
Column diameter: 0.32

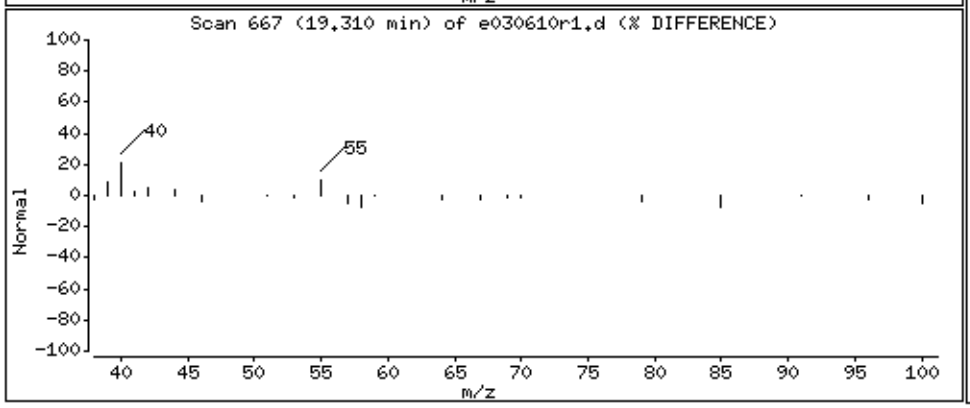
65 4-Methyl-2-pentanone

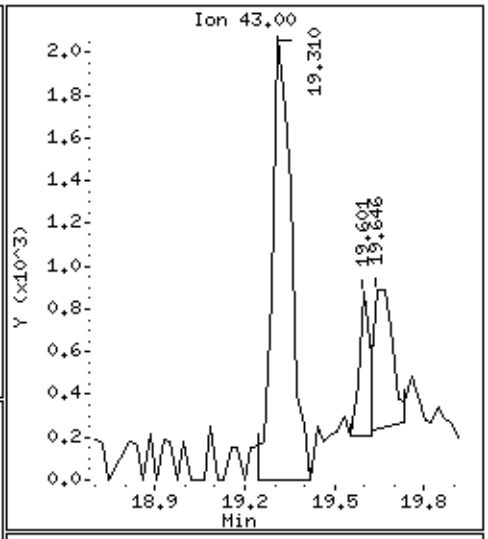
Concentration: 0.1993 PPBV

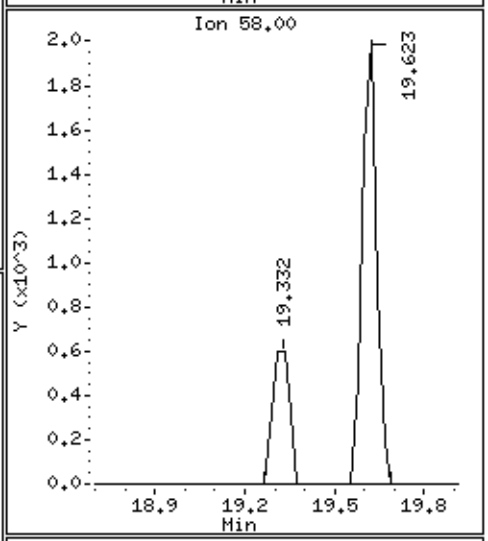


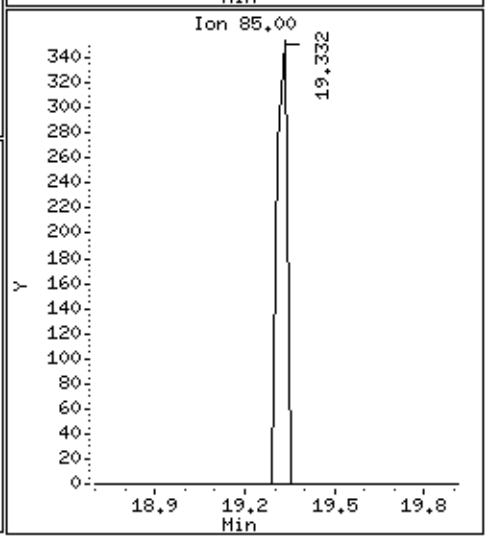












Data File: /chem/msde.i/06Mar2015.b/e030610r1.d

Date : 06-MAR-2015 12:05

Client ID:

Instrument: msde.i

Sample Info: 150mL #34011

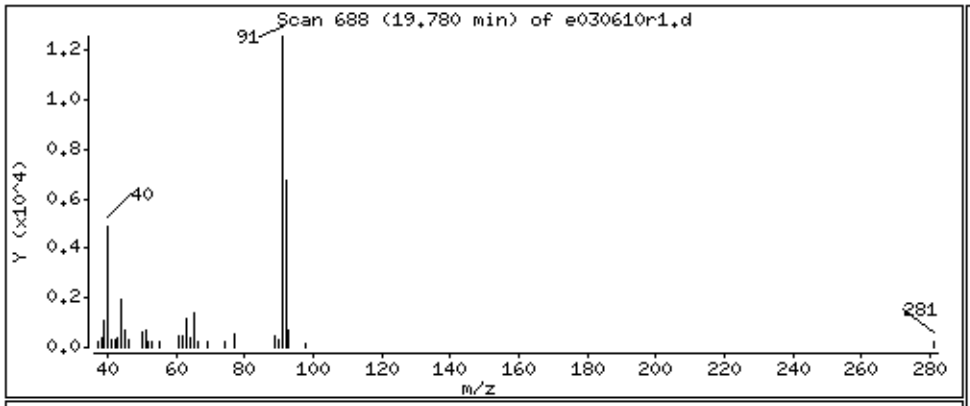
Operator: sab

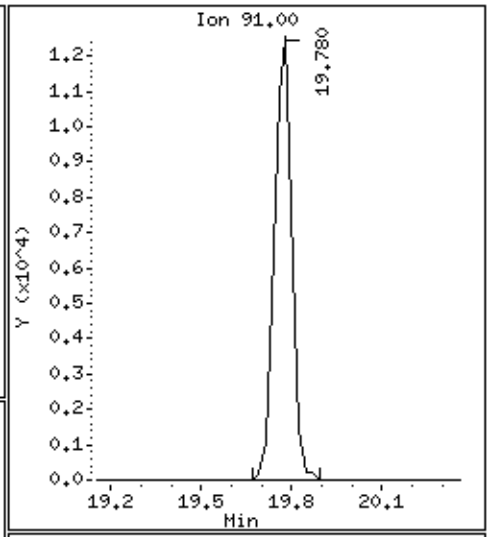
Column phase: RTx-624

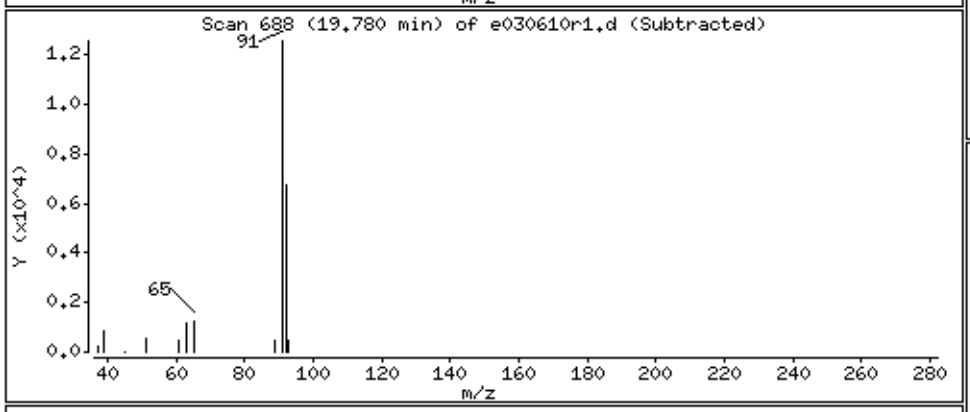
Column diameter: 0.32

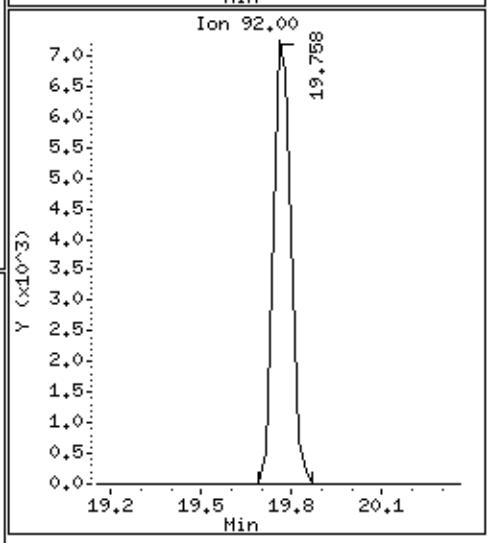
68 Toluene

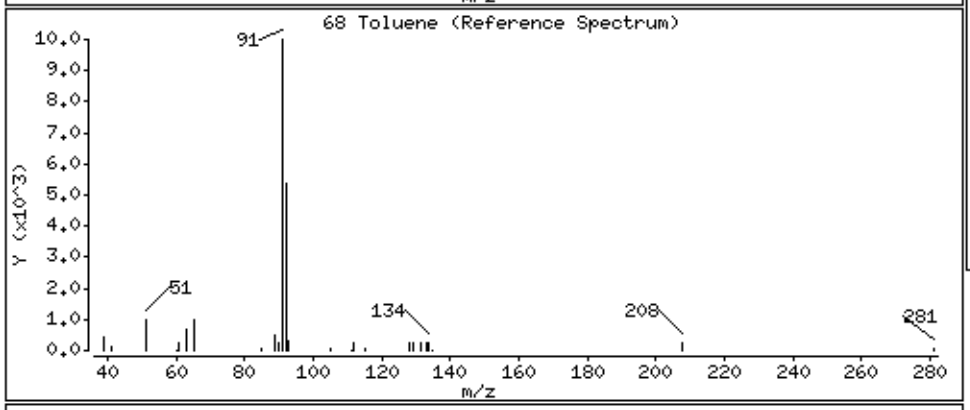
Concentration: 0.6889 PPBV

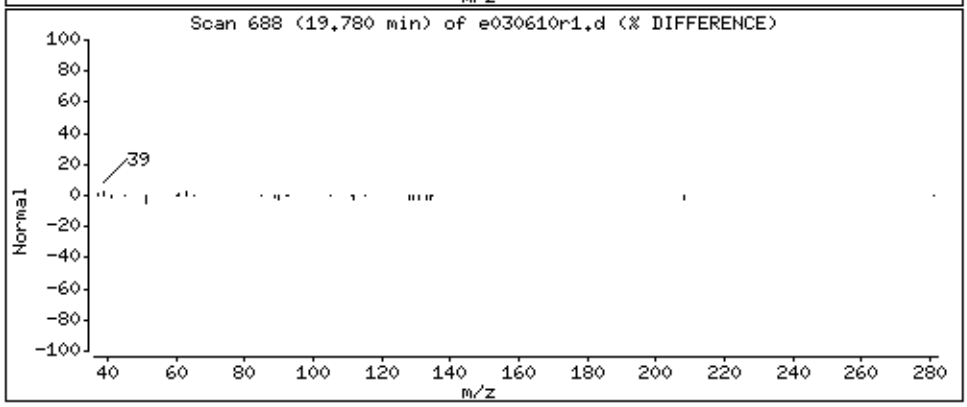












Data File: /chem/msde.i/06Mar2015.b/e030610r1.d

Date : 06-MAR-2015 12:05

Client ID:

Instrument: msde.i

Sample Info: 150mL #34011

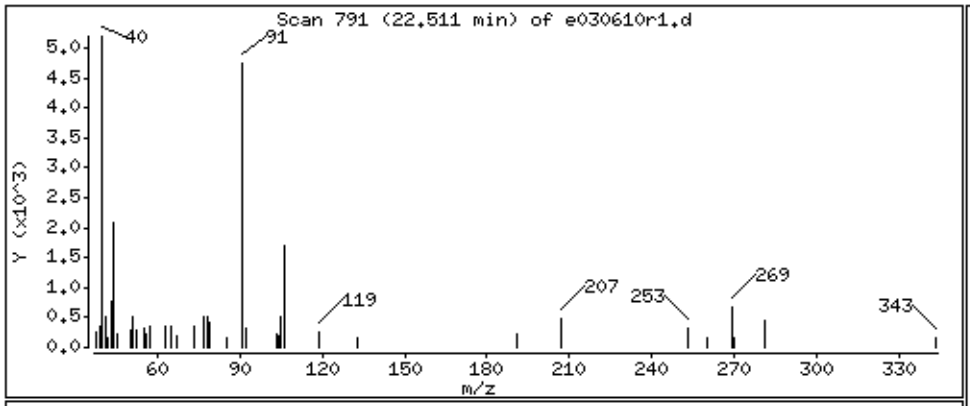
Operator: sab

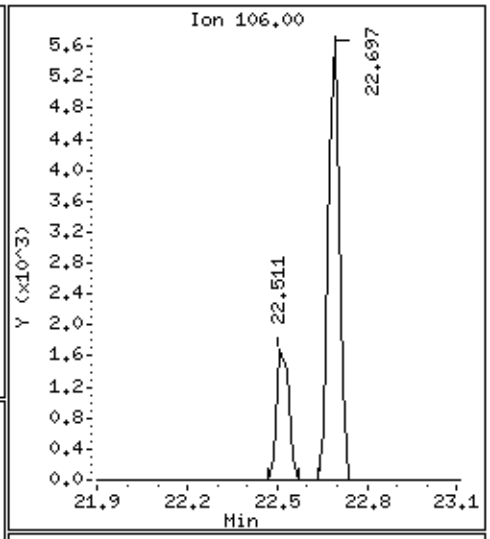
Column phase: RTx-624

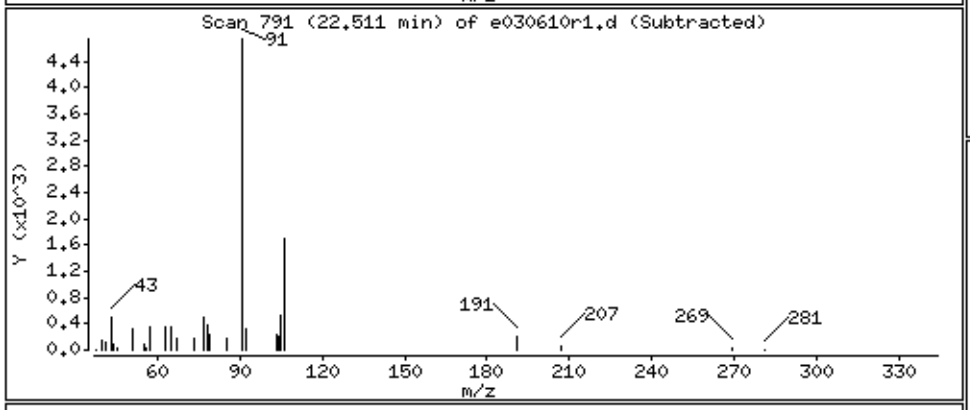
Column diameter: 0.32

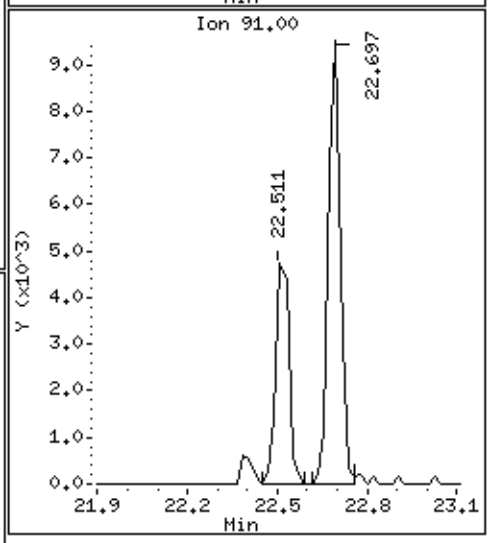
77 Ethyl Benzene

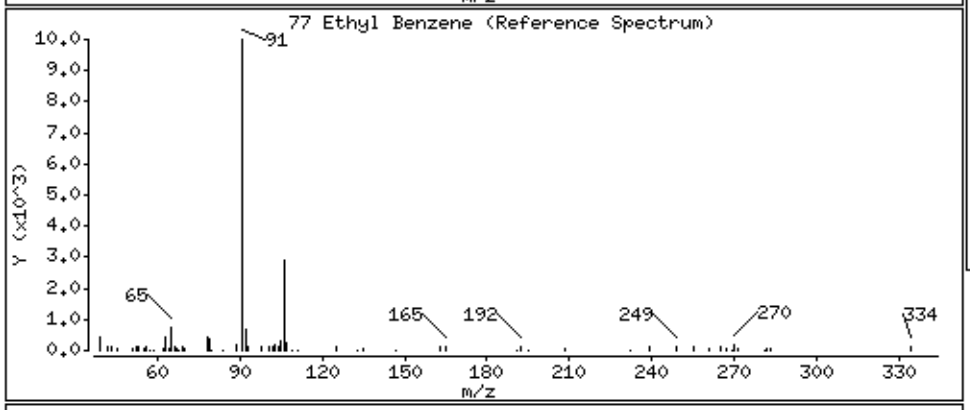
Concentration: 0.1375 PPBV

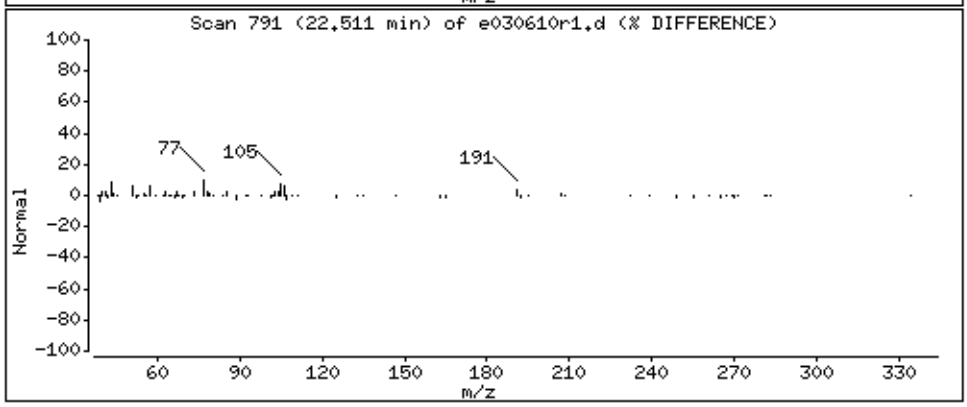












Data File: /chem/msde.i/06Mar2015.b/e030610r1.d

Date : 06-MAR-2015 12:05

Client ID:

Instrument: msde.i

Sample Info: 150mL #34011

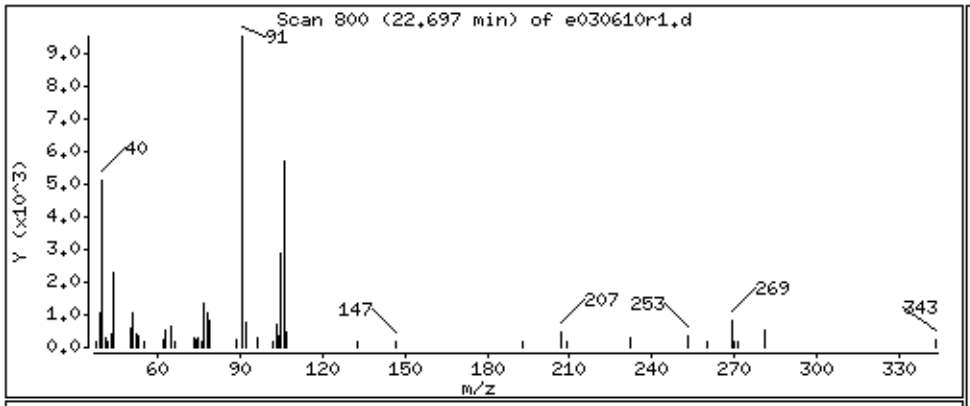
Operator: sab

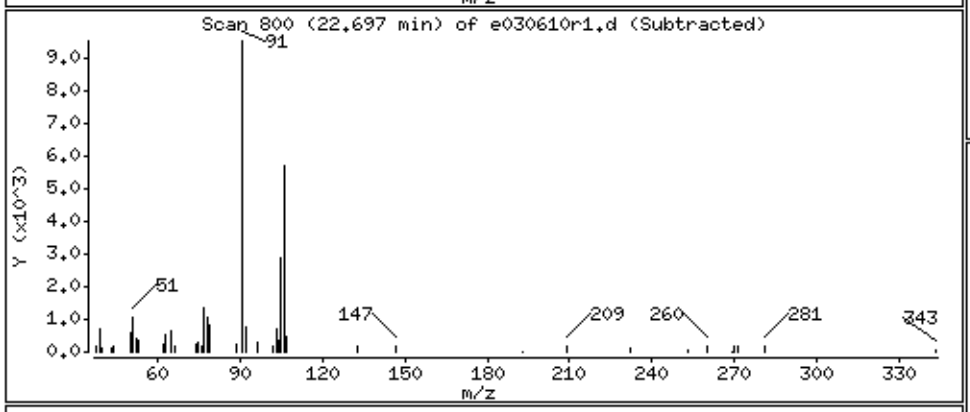
Column phase: RTx-624

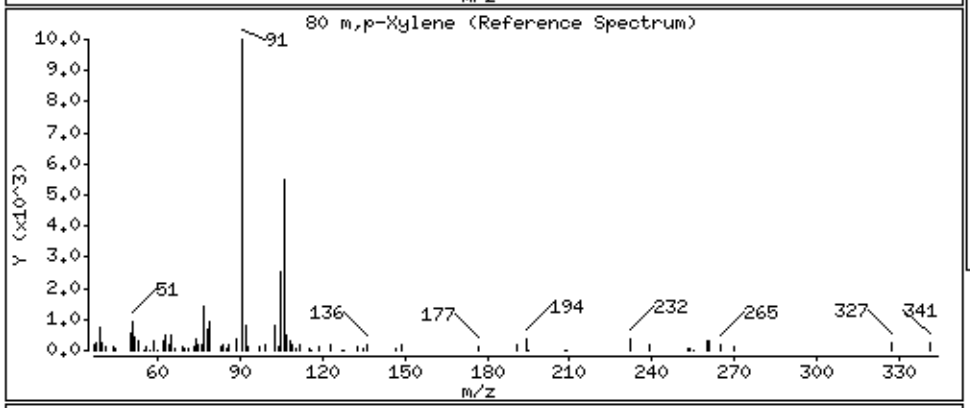
Column diameter: 0.32

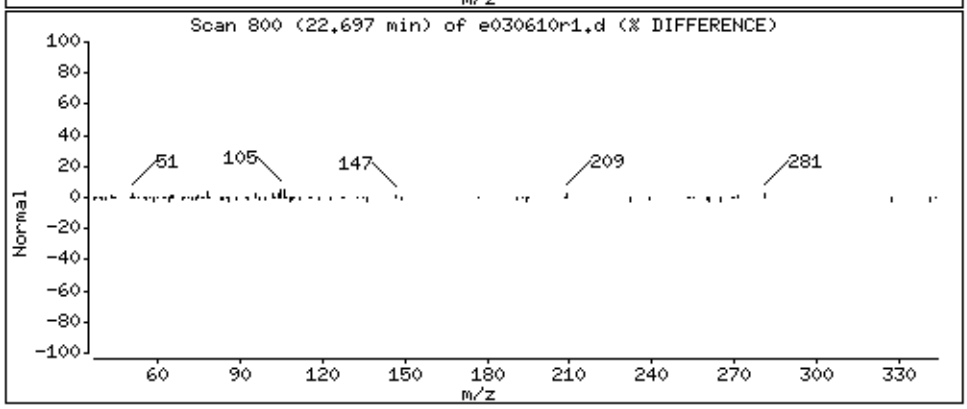
80 m,p-Xylene

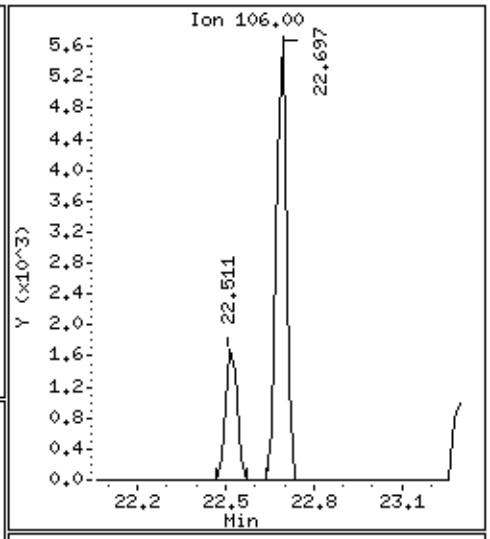
Concentration: 0.3633 PPBV

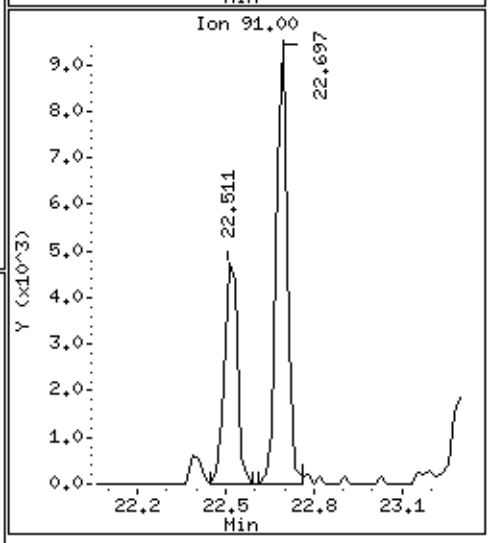












Data File: /chem/msde.i/06Mar2015.b/e030610r1.d

Date : 06-MAR-2015 12:05

Client ID:

Instrument: msde.i

Sample Info: 150mL #34011

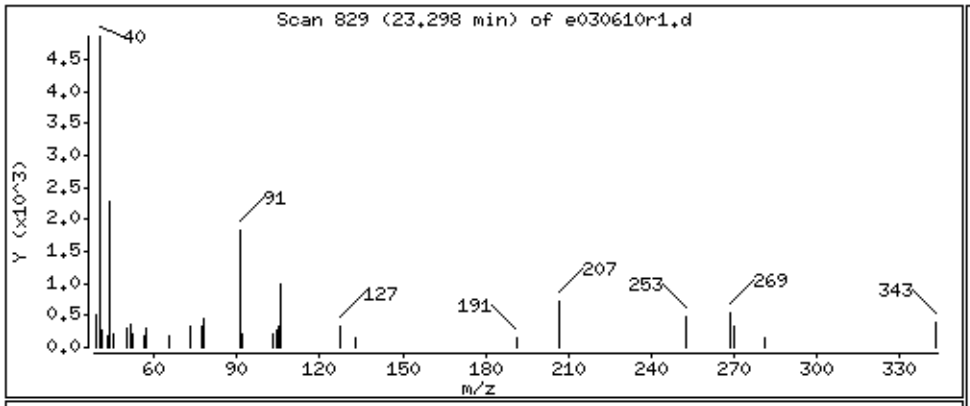
Operator: sab

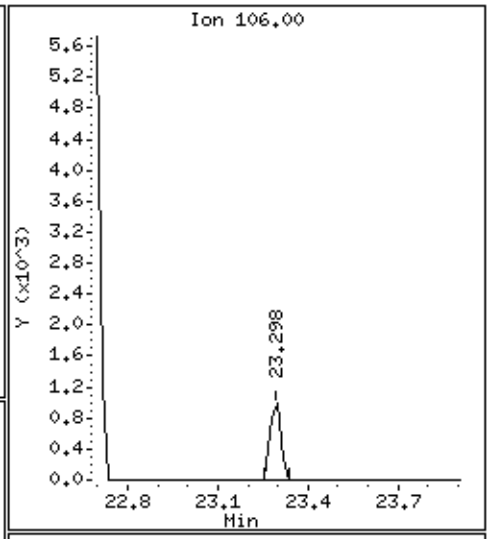
Column phase: RTx-624

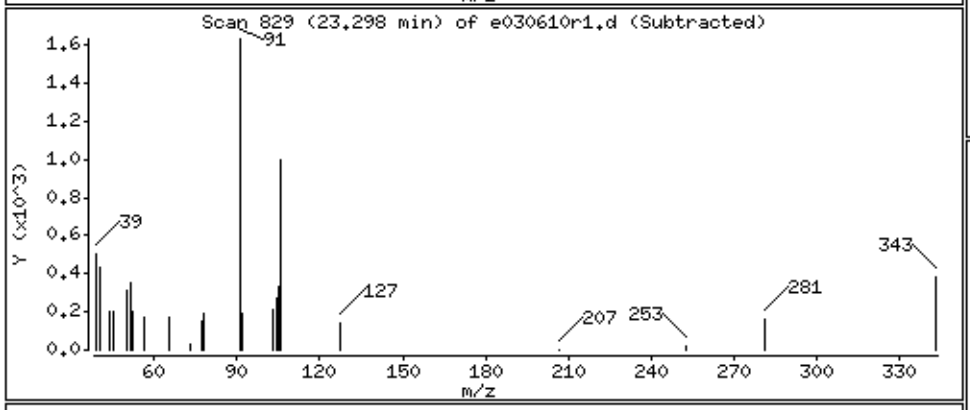
Column diameter: 0.32

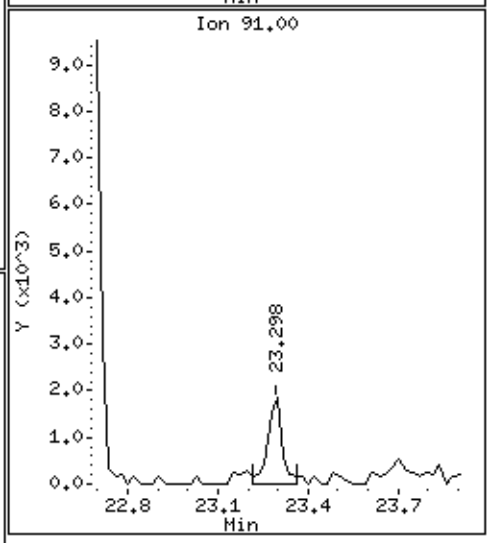
81 o-Xylene

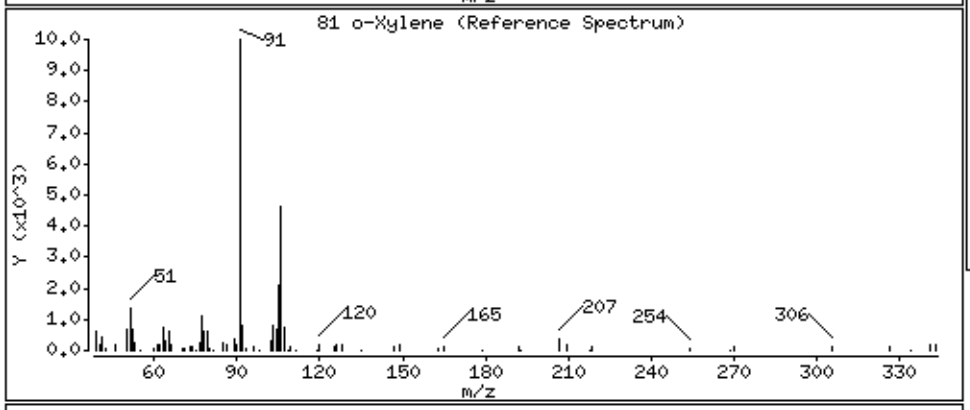
Concentration: 0.06887 PPBV

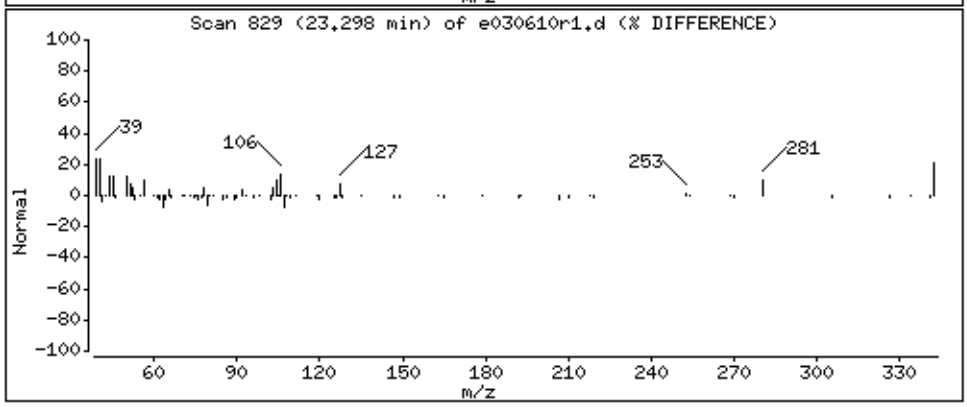












Data File: /chem/msde.i/06Mar2015.b/e030610r1.d

Date : 06-MAR-2015 12:05

Client ID:

Instrument: msde.i

Sample Info: 150mL #34011

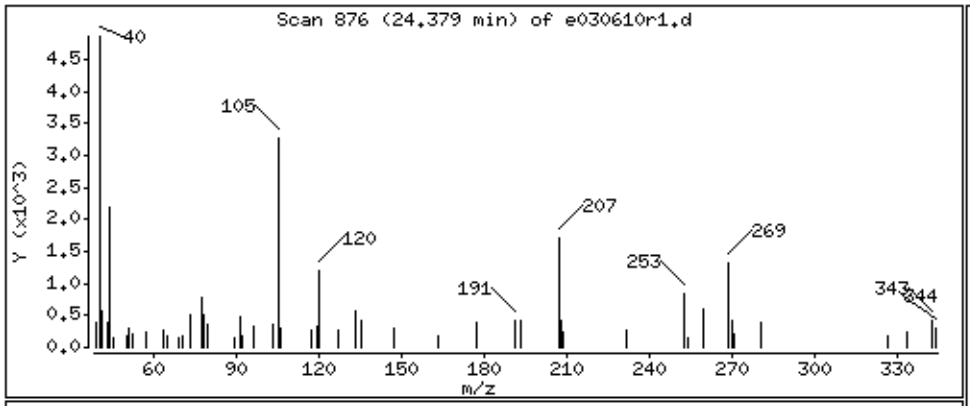
Operator: sab

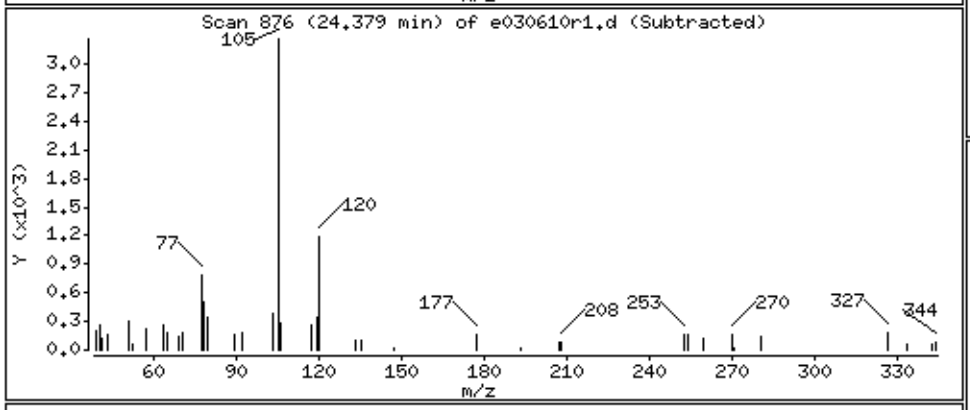
Column phase: RTx-624

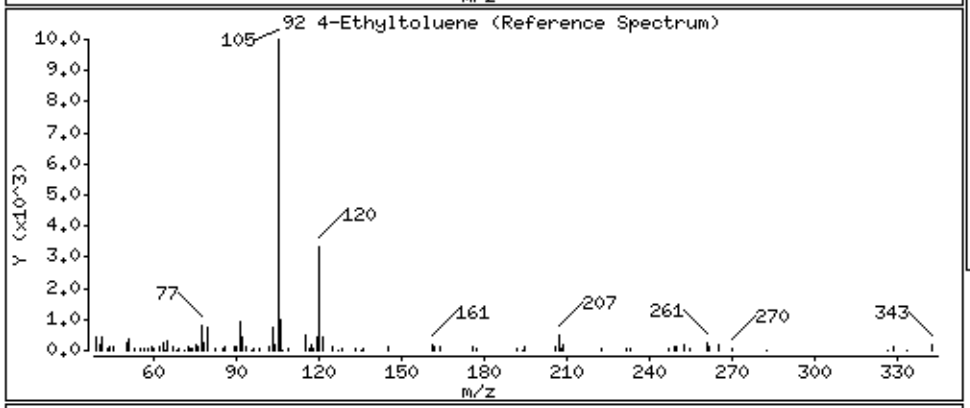
Column diameter: 0.32

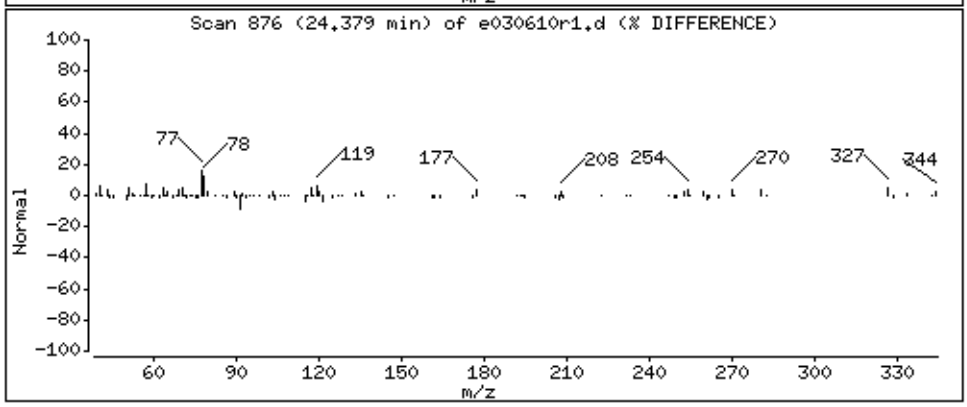
92 4-Ethyltoluene

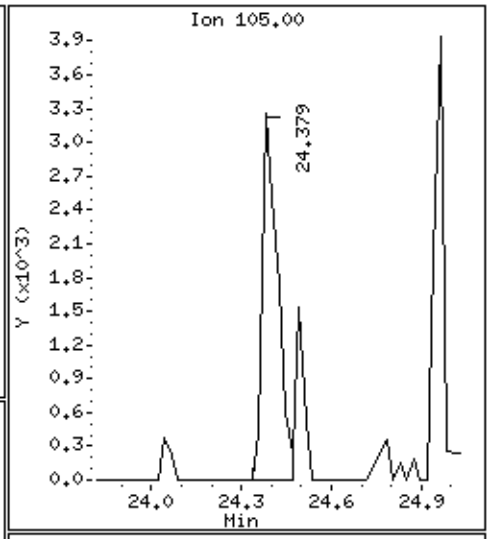
Concentration: 0.1113 PPBV

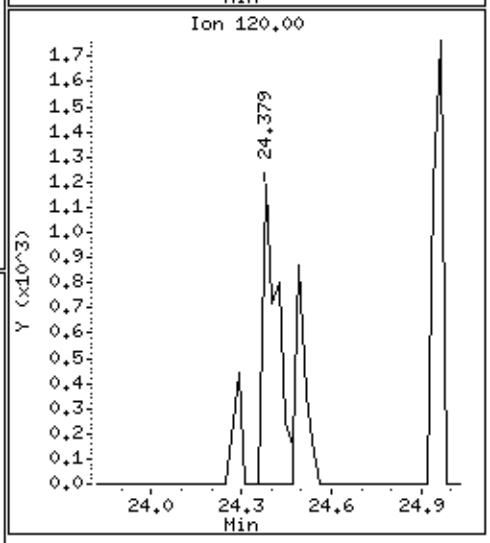












Data File: /chem/msde.i/06Mar2015.b/e030610r1.d

Date : 06-MAR-2015 12:05

Client ID:

Instrument: msde.i

Sample Info: 150mL #34011

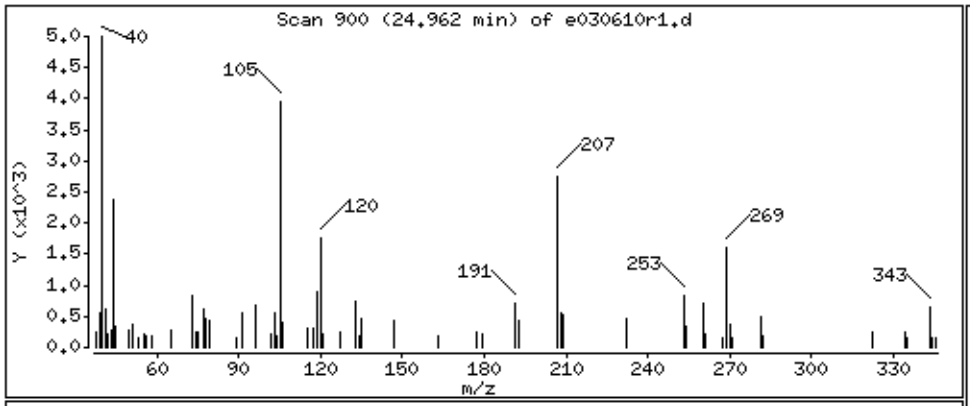
Operator: sab

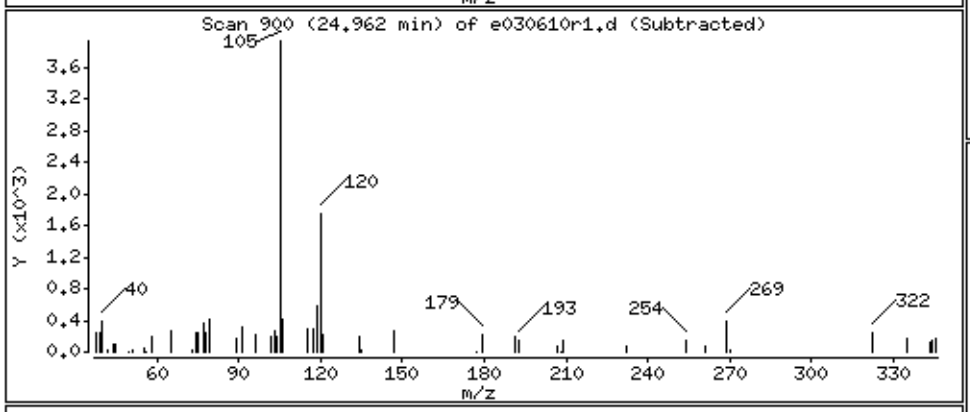
Column phase: RTx-624

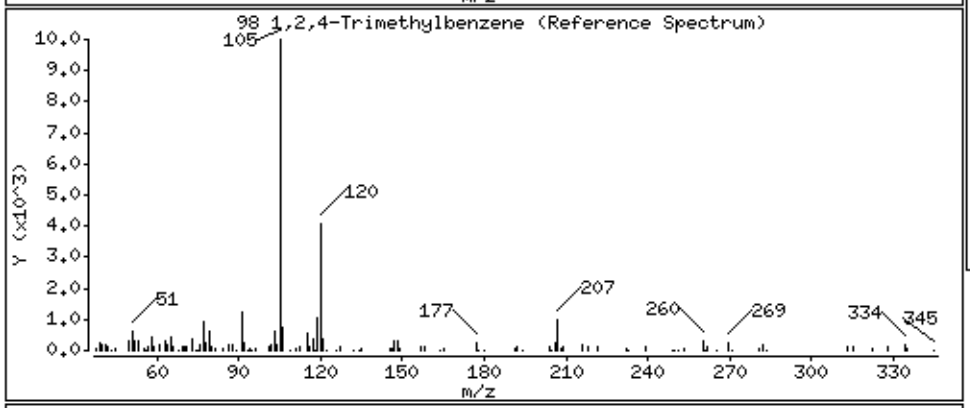
Column diameter: 0.32

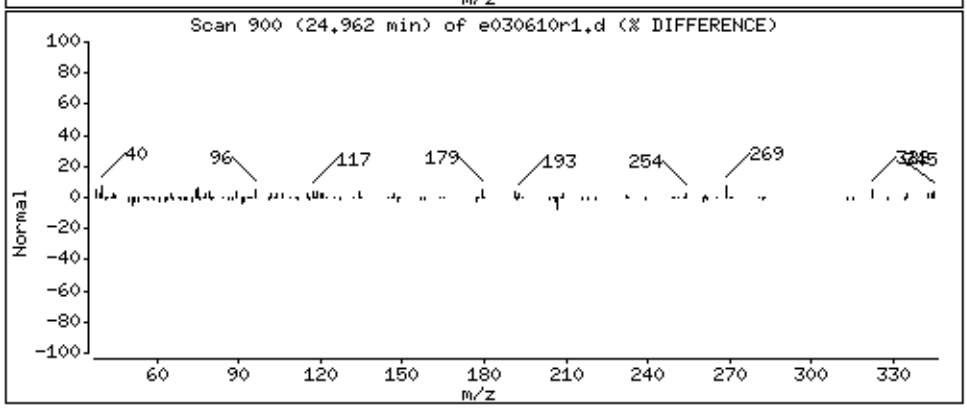
98 1,2,4-Trimethylbenzene

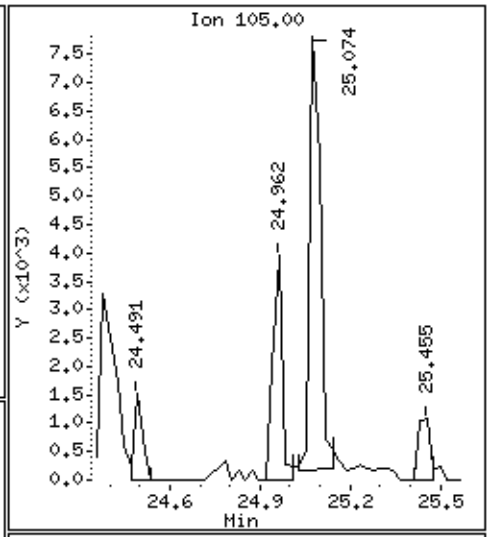
Concentration: 0.1041 PPBV

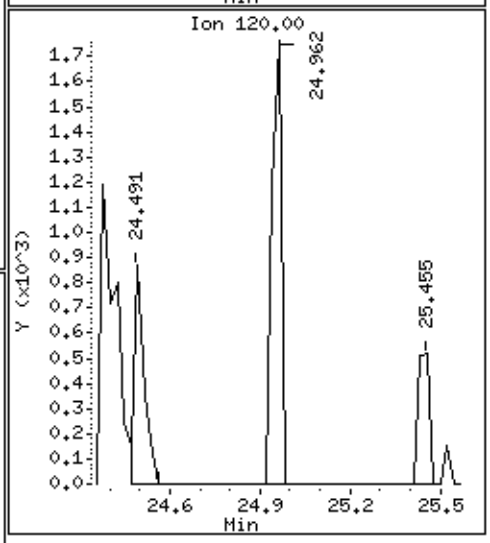












Data File: /chem/msde.i/06Mar2015.b/e030610r1.d

Date : 06-MAR-2015 12:05

Client ID:

Instrument: msde.i

Sample Info: 150mL #34011

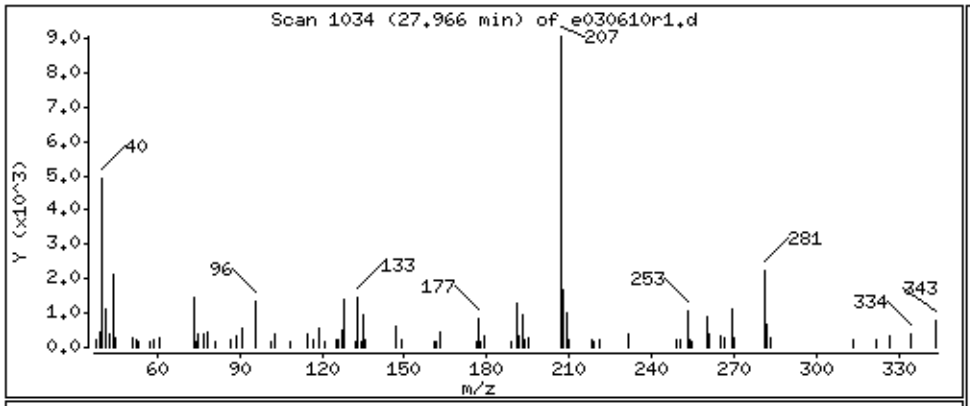
Operator: sab

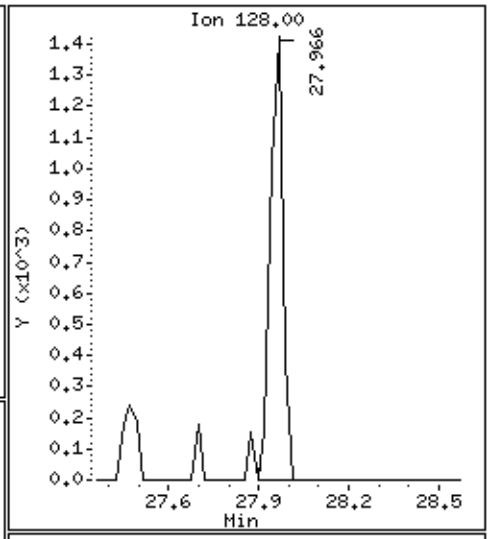
Column phase: RTx-624

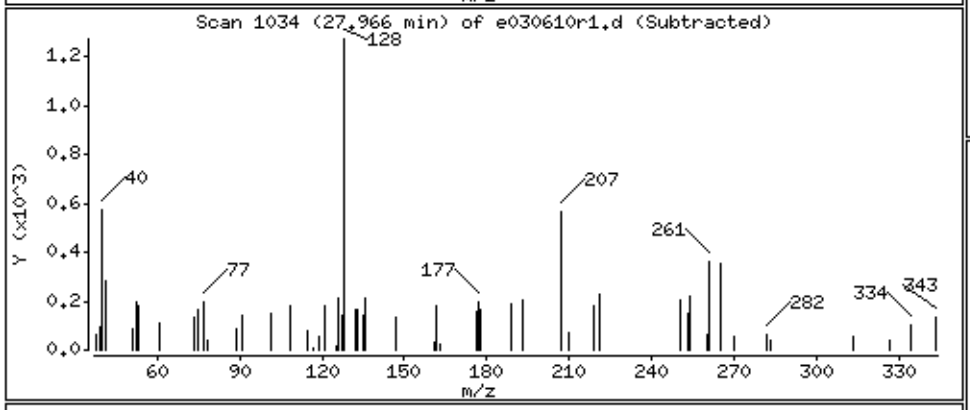
Column diameter: 0.32

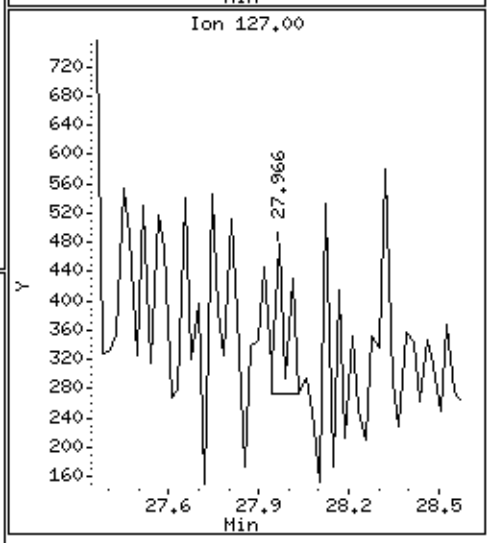
114 Naphthalene

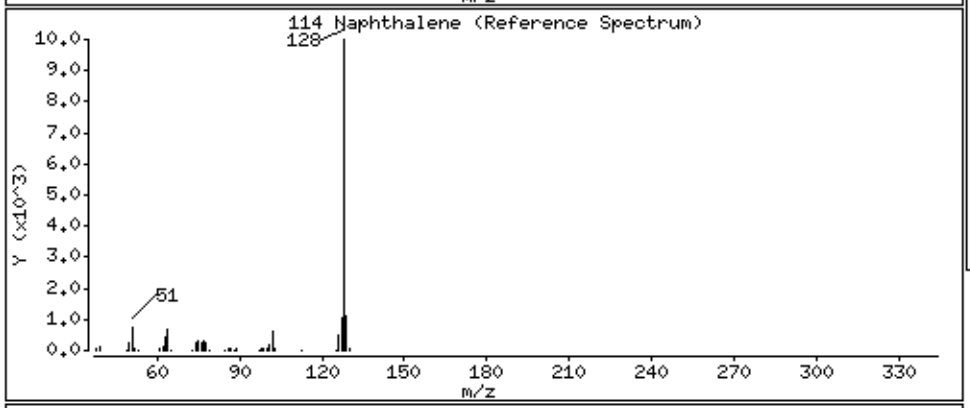
Concentration: 0.05462 PPBV

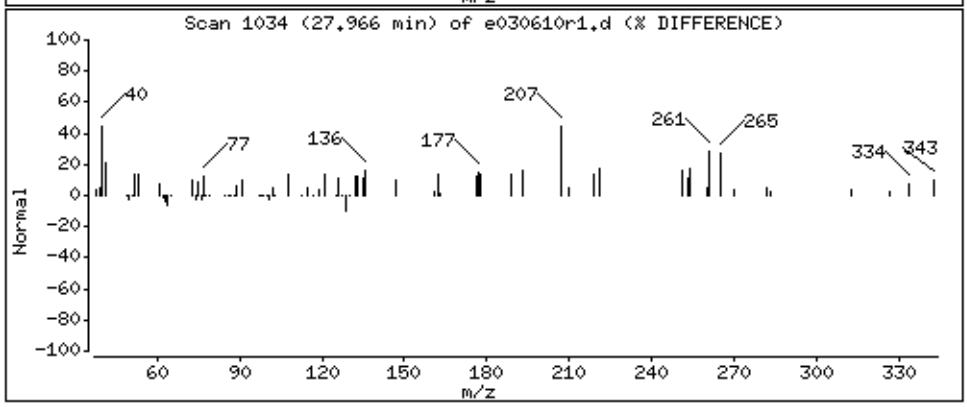












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Summary of Detected Compounds
MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: B6-2IADup

Lab ID#: 1503058AR1-04A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.27	0.47	1.3	2.3
Chloromethane	1.4	0.60 J	2.8	1.2 J
Freon 11	0.27	0.20 J	1.5	1.2 J
Ethanol	2.7	16	5.1	31
Freon 113	0.27	0.057 J	2.1	0.43 J
Acetone	1.4	7.1	3.2	17
2-Propanol	1.4	810 E	3.3	2000 E
Methylene Chloride	0.54	0.24 J	1.9	0.83 J
Hexane	0.27	0.082 J	0.96	0.29 J
2-Butanone (Methyl Ethyl Ketone)	1.4	0.35 J	4.0	1.0 J
Tetrahydrofuran	1.4	0.30 J	4.0	0.88 J
Carbon Tetrachloride	0.27	0.088 J	1.7	0.56 J
Benzene	0.27	0.11 J	0.87	0.36 J
Heptane	0.27	0.047 J	1.1	0.19 J
4-Methyl-2-pentanone	0.27	0.17 J	1.1	0.68 J
Toluene	0.27	0.58	1.0	2.2
Ethyl Benzene	0.27	0.13 J	1.2	0.58 J
m,p-Xylene	0.27	0.34	1.2	1.5
o-Xylene	0.27	0.054 J	1.2	0.23 J
Propylbenzene	0.27	0.038 J	1.3	0.19 J
4-Ethyltoluene	0.27	0.11 J	1.3	0.52 J
1,3,5-Trimethylbenzene	0.27	0.044 J	1.3	0.22 J
1,2,4-Trimethylbenzene	0.27	0.11 J	1.3	0.54 J
Naphthalene	1.4	0.052 J	7.1	0.27 J

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Client Sample ID: B6-2IADup

Lab ID#: 1503058AR1-04A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**e030611r1**	**Date of Collection:**	**3/2/15 12:08:00 PM**
Dil. Factor:	**2.72**	**Date of Analysis:**	**3/6/15 12:57 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.27	0.47	1.3	2.3
Freon 114	0.27	Not Detected	1.9	Not Detected
Chloromethane	1.4	0.60 J	2.8	1.2 J
Vinyl Chloride	0.27	Not Detected	0.70	Not Detected
1,3-Butadiene	0.27	Not Detected	0.60	Not Detected
Bromomethane	1.4	Not Detected	5.3	Not Detected
Chloroethane	1.4	Not Detected	3.6	Not Detected
Freon 11	0.27	0.20 J	1.5	1.2 J
Ethanol	2.7	16	5.1	31
Freon 113	0.27	0.057 J	2.1	0.43 J
1,1-Dichloroethene	0.27	Not Detected	1.1	Not Detected
Acetone	1.4	7.1	3.2	17
2-Propanol	1.4	810 E	3.3	2000 E
Carbon Disulfide	1.4	Not Detected	4.2	Not Detected
3-Chloropropene	1.4	Not Detected	4.2	Not Detected
Methylene Chloride	0.54	0.24 J	1.9	0.83 J
Methyl tert-butyl ether	0.27	Not Detected	0.98	Not Detected
trans-1,2-Dichloroethene	0.27	Not Detected	1.1	Not Detected
Hexane	0.27	0.082 J	0.96	0.29 J
1,1-Dichloroethane	0.27	Not Detected	1.1	Not Detected
2-Butanone (Methyl Ethyl Ketone)	1.4	0.35 J	4.0	1.0 J
cis-1,2-Dichloroethene	0.27	Not Detected	1.1	Not Detected
Tetrahydrofuran	1.4	0.30 J	4.0	0.88 J
Chloroform	0.27	Not Detected	1.3	Not Detected
1,1,1-Trichloroethane	0.27	Not Detected	1.5	Not Detected
Cyclohexane	0.27	Not Detected	0.94	Not Detected
Carbon Tetrachloride	0.27	0.088 J	1.7	0.56 J
2,2,4-Trimethylpentane	1.4	Not Detected	6.4	Not Detected
Benzene	0.27	0.11 J	0.87	0.36 J
1,2-Dichloroethane	0.27	Not Detected	1.1	Not Detected
Heptane	0.27	0.047 J	1.1	0.19 J
Trichloroethene	0.27	Not Detected	1.5	Not Detected
1,2-Dichloropropane	0.27	Not Detected	1.2	Not Detected
1,4-Dioxane	0.27	Not Detected	0.98	Not Detected
Bromodichloromethane	0.27	Not Detected	1.8	Not Detected
cis-1,3-Dichloropropene	0.27	Not Detected	1.2	Not Detected
4-Methyl-2-pentanone	0.27	0.17 J	1.1	0.68 J
Toluene	0.27	0.58	1.0	2.2
trans-1,3-Dichloropropene	0.27	Not Detected	1.2	Not Detected
1,1,2-Trichloroethane	0.27	Not Detected	1.5	Not Detected
Tetrachloroethene	0.27	Not Detected	1.8	Not Detected
2-Hexanone	1.4	Not Detected	5.6	Not Detected

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Client Sample ID: B6-2IADup

Lab ID#: 1503058AR1-04A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**e030611r1**	**Date of Collection:**	**3/2/15 12:08:00 PM**
Dil. Factor:	**2.72**	**Date of Analysis:**	**3/6/15 12:57 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Dibromochloromethane	0.27	Not Detected	2.3	Not Detected
1,2-Dibromoethane (EDB)	0.27	Not Detected	2.1	Not Detected
Chlorobenzene	0.27	Not Detected	1.2	Not Detected
Ethyl Benzene	0.27	0.13 J	1.2	0.58 J
m,p-Xylene	0.27	0.34	1.2	1.5
o-Xylene	0.27	0.054 J	1.2	0.23 J
Styrene	0.27	Not Detected	1.2	Not Detected
Bromoform	0.27	Not Detected	2.8	Not Detected
Cumene	0.27	Not Detected	1.3	Not Detected
1,1,2,2-Tetrachloroethane	0.27	Not Detected	1.9	Not Detected
Propylbenzene	0.27	0.038 J	1.3	0.19 J
4-Ethyltoluene	0.27	0.11 J	1.3	0.52 J
1,3,5-Trimethylbenzene	0.27	0.044 J	1.3	0.22 J
1,2,4-Trimethylbenzene	0.27	0.11 J	1.3	0.54 J
1,3-Dichlorobenzene	0.27	Not Detected	1.6	Not Detected
1,4-Dichlorobenzene	0.27	Not Detected	1.6	Not Detected
alpha-Chlorotoluene	0.27	Not Detected	1.4	Not Detected
1,2-Dichlorobenzene	0.27	Not Detected	1.6	Not Detected
1,2,4-Trichlorobenzene	1.4	Not Detected	10	Not Detected
Hexachlorobutadiene	1.4	Not Detected	14	Not Detected
Naphthalene	1.4	0.052 J	7.1	0.27 J

J = Estimated value.
E = Exceeds instrument calibration range.

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

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	103	70-130
Toluene-d8	100	70-130
4-Bromofluorobenzene	90	70-130

Eurofins Air Toxics Inc.

EPA TO-15/Modified TO14A

Data file : /chem/msde.i/06Mar2015.b/e030611r1.d
Lab Smp Id: 1503058Ar1-04A
Inj Date : 06-MAR-2015 12:57
Operator : sab Inst ID: msde.i
Smp Info : 150mL #35132
Misc Info : 5.5"Hg-4.9psi
Comment : Low-Level/GC-MS
Method : /chem/msde.i/06Mar2015.b/e15l0210b.m
Meth Date : 26-Jun-2015 12:46 dbailey Quant Type: ISTD
Cal Date : 02-MAR-2015 15:11 Cal File: e030209.d
Als bottle: 1
Dil Factor: 2.72000
Integrator: HP RTE Compound Sublist: T015Nmdl.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Name	Value	Description
DF	2.72000	Dilution Factor

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
* 46 Bromochloromethane						CAS #: 74-97-5	
15.610	15.610 (1.000)	130	224944	5.00000		80.00- 120.00	100.00
15.610	15.610 (1.000)	128	174662			0.00- 30.00	77.65
15.610	15.610 (1.000)	49	266714			0.00- 30.00	118.57
* 58 1,4-Difluorobenzene						CAS #: 540-36-3	
16.987	16.987 (1.000)	114	807488	5.00000		80.00- 120.00	100.00
16.987	16.987 (1.000)	88	110745			0.00- 30.00	13.71
* 75 Chlorobenzene-d5						CAS #: 3114-55-4	
22.407	22.407 (1.000)	117	768631	5.00000		80.00- 120.00	100.00
22.407	22.407 (1.000)	82	346595			0.00- 30.00	45.09
$ 54 1,2-Dichloroethane-d4						CAS #: 17060-07-0	
16.433	16.433 (1.053)	65	245055	5.16411	5.164	80.00- 120.00	100.00
16.433	16.433 (1.053)	67	130846			25.66- 85.66	53.39

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
$ 67 Toluene-d8					CAS #: 2037-26-5		
19.624	19.623 (1.155)	98	764082	4.99963	5.000	80.00- 120.00	100.00
19.624	19.623 (1.155)	70	76469			0.00- 39.92	10.01
19.624	19.623 (1.155)	100	505360			36.14- 96.14	66.14
$ 87 Bromofluorobenzene					CAS #: 460-00-4		
24.042	24.042 (1.073)	174	401427	4.51488	4.515	80.00- 120.00	100.00
24.042	24.042 (1.073)	95	476218			81.46- 141.46	118.63
24.065	24.042 (1.074)	176	385064			67.17- 127.17	95.92
4 Dichlorodifluoromethane/Fr12					CAS #: 75-71-8		
5.503	5.503 (0.353)	85	21039	0.17274	0.4698	80.00- 120.00	100.00
5.528	5.503 (0.354)	87	3100			3.28- 63.28	14.74
7 Chloromethane					CAS #: 74-87-3		
7.191	7.191 (0.461)	50	10377	0.22207	0.6040	80.00- 120.00	100.00(a)
7.191	7.191 (0.461)	52	3624			3.09- 63.09	34.92
16 Trichlorofluoromethane/Fr11					CAS #: 75-69-4		
10.976	10.976 (0.703)	101	9626	0.07545	0.2052	80.00- 120.00	100.00(a)
10.976	10.976 (0.703)	103	7489			35.41- 95.41	77.80
18 Ethanol					CAS #: 64-17-5		
11.890	11.890 (0.762)	45	125682	6.05883	16.480	80.00- 120.00	100.00
11.890	11.890 (0.762)	46	48595			7.33- 67.33	38.67
11.871	11.890 (0.760)	43	29309			0.00- 51.69	23.32
19 Freon 113					CAS #: 76-13-1		
12.290	12.290 (0.787)	151	2440	0.02085	0.05672	80.00- 120.00	100.00(a)
12.309	12.290 (0.788)	153	1476			34.79- 94.79	60.52
12.309	12.290 (0.788)	101	2916			79.87- 139.87	119.53
22 Acetone					CAS #: 67-64-1		
12.575	12.575 (0.806)	58	82856	2.59724	7.064	80.00- 120.00	100.00
12.575	12.575 (0.806)	43	237325			255.02- 315.02	286.43
25 2-Propanol					CAS #: 67-63-0		
12.937	12.918 (0.829)	45	27805261	297.897	810.28	80.00- 120.00	100.00(A)
12.937	12.918 (0.829)	43	5372705			0.00- 47.09	19.32
12.937	12.918 (0.829)	59	1244356			0.00- 34.17	4.48
29 Methylene Chloride					CAS #: 75-09-2		
13.376	13.375 (0.857)	84	4258	0.08814	0.2397	80.00- 120.00	100.00(a)
13.376	13.375 (0.857)	49	5384			98.36- 158.36	126.46
13.376	13.375 (0.857)	51	2117			9.23- 69.23	49.73

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
35 Hexane					CAS #: 110-54-3		
14.030	14.030 (0.899)	57	2767	0.03021	0.08218	80.00- 120.00	100.00(a)
14.030	14.030 (0.899)	43	3167			32.32- 92.32	114.47
0.000	14.030 (0.000)	86	0			0.00- 46.22	0.00
42 2-Butanone					CAS #: 78-93-3		
15.259	15.259 (0.977)	72	3488	0.12856	0.3497	80.00- 120.00	100.00(a)
15.259	15.259 (0.977)	43	17954			374.35- 434.35	514.70
15.259	15.259 (0.977)	57	1370			4.18- 64.18	39.29
44 Tetrahydrofuran					CAS #: 109-99-9		
15.610	15.610 (1.000)	42	7061	0.10970	0.2984	80.00- 120.00	100.00(a)
15.610	15.610 (1.000)	71	2927			9.38- 69.38	41.46
15.610	15.610 (1.000)	72	2972			11.73- 71.73	42.09
51 Carbon Tetrachloride					CAS #: 56-23-5		
16.104	16.104 (1.032)	119	3395	0.03257	0.08859	80.00- 120.00	100.00(a)
16.104	16.104 (1.032)	117	2686			73.51- 133.51	79.13
53 Benzene					CAS #: 71-43-2		
16.433	16.433 (0.967)	78	6471	0.04124	0.1122	80.00- 120.00	100.00(a)
16.433	16.433 (0.967)	77	1418			0.00- 53.40	21.93
57 Heptane					CAS #: 142-82-5		
16.578	16.578 (0.976)	57	893	0.01728	0.04699	80.00- 120.00	100.00(a)
16.433	16.578 (0.967)	100	1359			12.62- 72.62	152.27
16.578	16.578 (0.976)	43	2442			155.09- 215.09	273.46
65 4-Methyl-2-pentanone					CAS #: 108-10-1		
19.332	19.310 (1.138)	43	7665	0.06126	0.1666	80.00- 120.00	100.00(a)
19.332	19.310 (1.138)	58	2313			10.53- 70.53	30.19
19.310	19.310 (1.137)	85	1154			0.00- 48.12	15.07
68 Toluene					CAS #: 108-88-3		
19.780	19.758 (1.164)	91	41190	0.21253	0.5781	80.00- 120.00	100.00
19.780	19.758 (1.164)	92	23858			28.42- 88.42	57.92
77 Ethyl Benzene					CAS #: 100-41-4		
22.511	22.511 (1.005)	106	4212	0.04875	0.1326	80.00- 120.00	100.00(a)
22.511	22.511 (1.005)	91	13042			268.64- 328.64	309.63
80 m,p-Xylene					CAS #: 108-38-3		
22.697	22.697 (1.013)	106	13047	0.12366	0.3363	80.00- 120.00	100.00
22.697	22.697 (1.013)	91	25211			156.41- 216.41	193.23
81 o-Xylene					CAS #: 95-47-6		
23.278	23.298 (1.039)	106	1921	0.01970	0.05358	80.00- 120.00	100.00(a)

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
81 o-Xylene (continued)							
23.298	23.298 (1.040)	91	5609			167.80- 227.80	291.84
90 Propylbenzene						CAS #: 103-65-1	
24.289	24.289 (1.084)	91	4549	0.01418	0.03858	80.00- 120.00	100.00(a)
24.401	24.289 (1.089)	120	3320			0.00- 56.53	72.97
92 4-Ethyltoluene						CAS #: 622-96-8	
24.379	24.424 (1.088)	105	10822	0.03900	0.1061	80.00- 120.00	100.00(a)
24.401	24.424 (1.089)	120	3320			1.72- 61.72	30.68
94 1,3,5-Trimethylbenzene						CAS #: 108-67-8	
24.491	24.491 (1.093)	105	3866	0.01618	0.04402	80.00- 120.00	100.00(a)
24.491	24.491 (1.093)	120	1466			22.29- 82.29	37.93
98 1,2,4-Trimethylbenzene						CAS #: 95-63-6	
24.962	24.962 (1.114)	105	8881	0.04082	0.1110	80.00- 120.00	100.00(a)
24.962	24.962 (1.114)	120	3959			19.10- 79.10	44.59
114 Naphthalene						CAS #: 91-20-3	
27.966	27.966 (1.248)	128	3701	0.01925	0.05235	80.00- 120.00	100.00(a)
27.988	27.966 (1.249)	127	1197			0.00- 42.43	32.34

QC Flag Legend

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

Report Date: 26-Jun-2015 13:01

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msde.i
Lab File ID: e030611r1.d
Lab Smp Id: 1503058Ar1-04A
Analysis Type: VOA
Quant Type: ISTD
Operator: sab
Method File: /chem/msde.i/06Mar2015.b/e15l0210b.m
Misc Info: 5.5"Hg-4.9psi

Calibration Date: 06-MAR-2015
Calibration Time: 05:31

Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
46 Bromochloromethan	236898	142139	331657	224944	-5.05
58 1,4-Difluorobenze	878027	526816	1229238	807488	-8.03
75 Chlorobenzene-d5	818204	490922	1145486	768631	-6.06

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
46 Bromochloromethan	15.61	15.28	15.94	15.61	0.00
58 1,4-Difluorobenze	16.99	16.66	17.32	16.99	0.00
75 Chlorobenzene-d5	22.41	22.08	22.74	22.41	0.00

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

Report Date: 26-Jun-2015 13:01

Eurofins Air Toxics Inc.

RECOVERY REPORT

Client Name:
Client SDG: 06Mar2015
Sample Matrix: GAS
Fraction: VOA
Lab Smp Id: 1503058Ar1-04A
Level: LOW
Operator: sab
Data Type: MS DATA
SampleType: SAMPLE
SpikeList File: AT09.spk
Quant Type: ISTD
Sublist File: T015Nmdl.sub
Method File: /chem/msde.i/06Mar2015.b/e15l0210b.m
Misc Info: 5.5"Hg-4.9psi

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 54 1,2-Dichloroethane	5.000	5.164	103.28	70-130
$ 67 Toluene-d8	5.000	5.000	99.99	70-130
$ 87 Bromofluorobenzene	5.000	4.515	90.30	70-130

Data File: /chem/msde.i/06Mar2015.b/e030611r1.d

Date : 06-MAR-2015 12:57

Client ID:

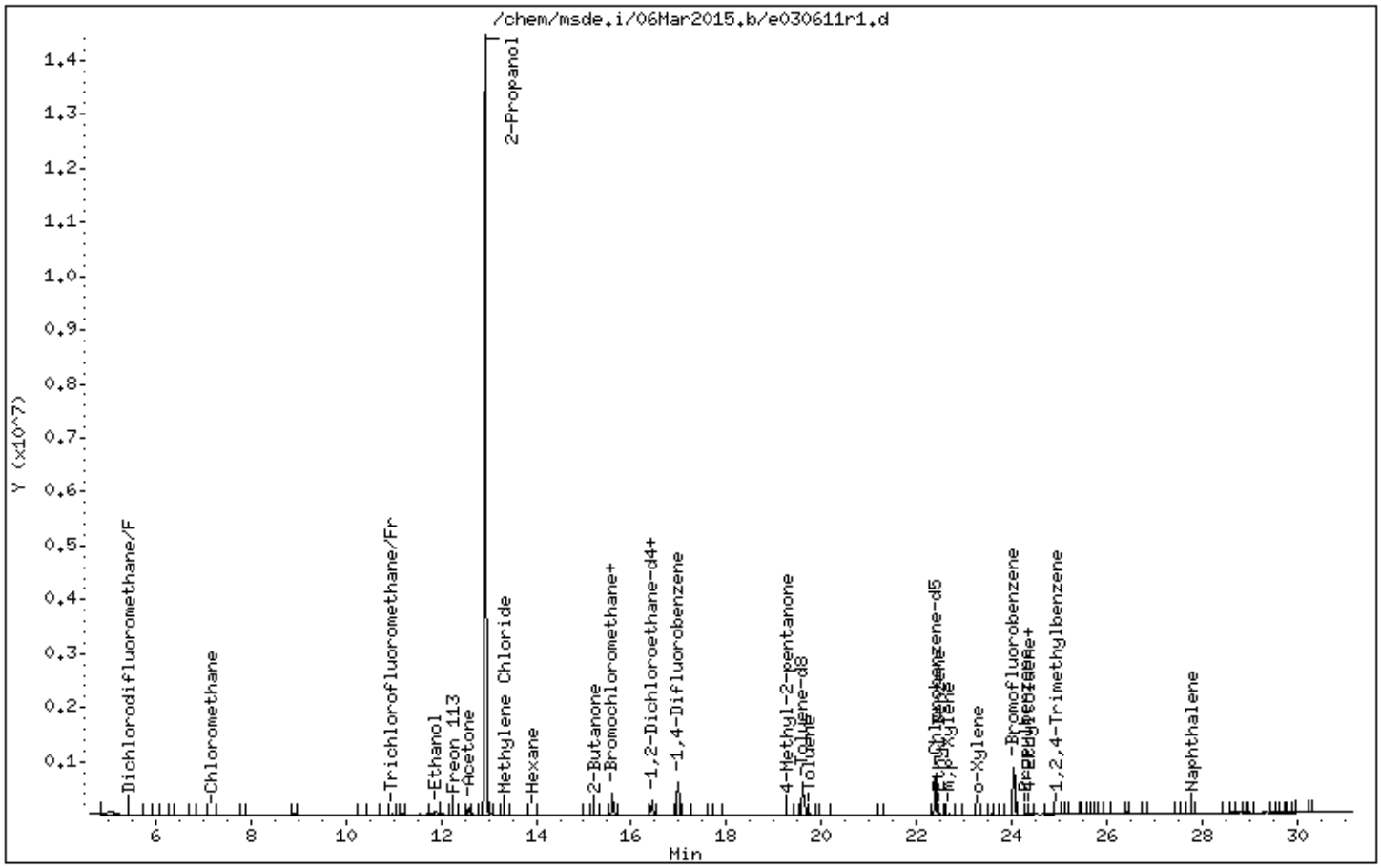
Instrument: msde.i

Sample Info: 150mL #35132

Operator: sab

Column phase: RTx-624

Column diameter: 0.32



Data File: /chem/msde.i/06Mar2015.b/e030611r1.d

Date : 06-MAR-2015 12:57

Client ID:

Instrument: msde.i

Sample Info: 150mL #35132

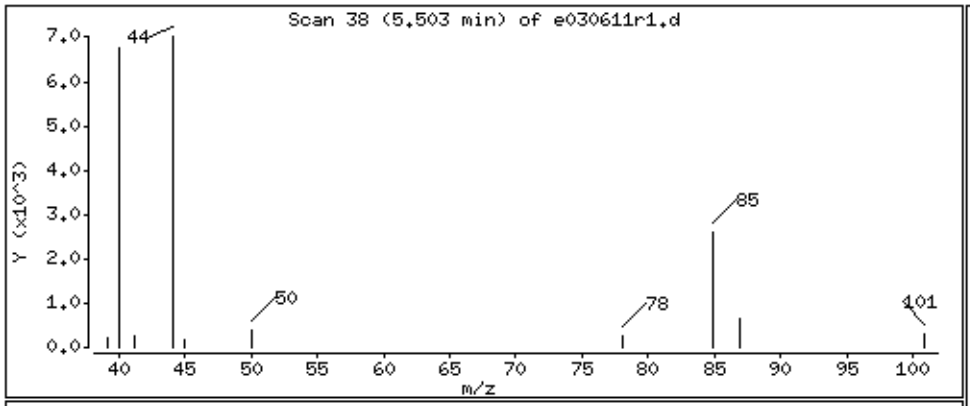
Operator: sab

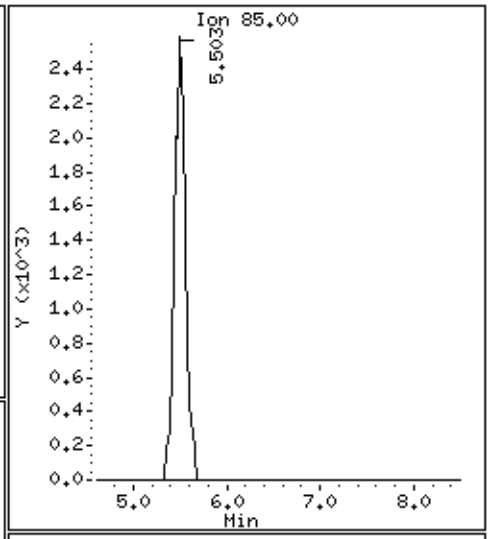
Column phase: RTx-624

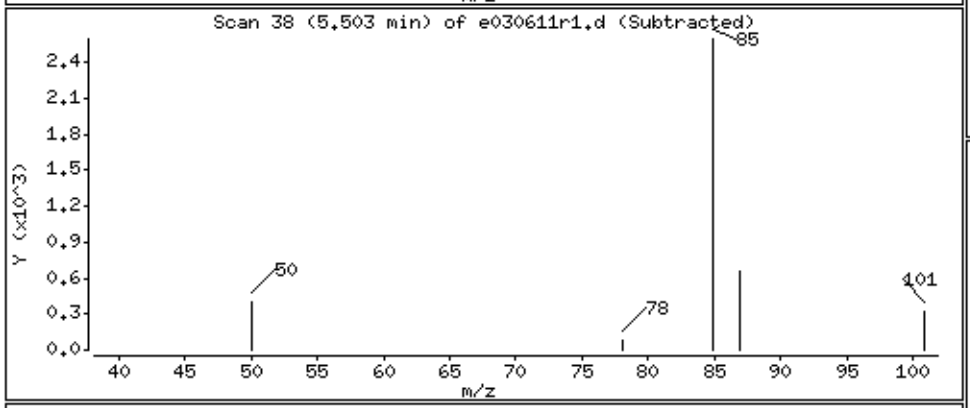
Column diameter: 0.32

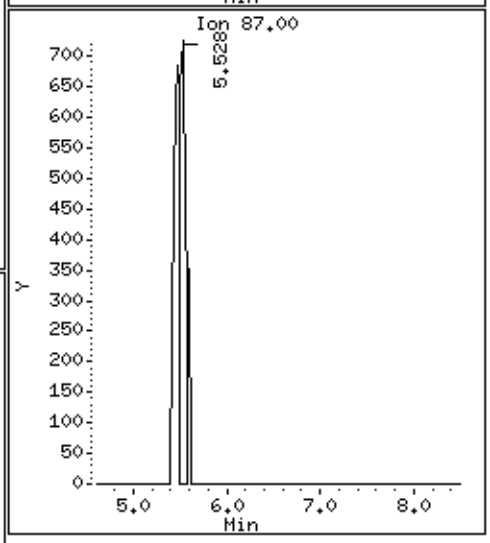
4 Dichlorodifluoromethane/Fr12

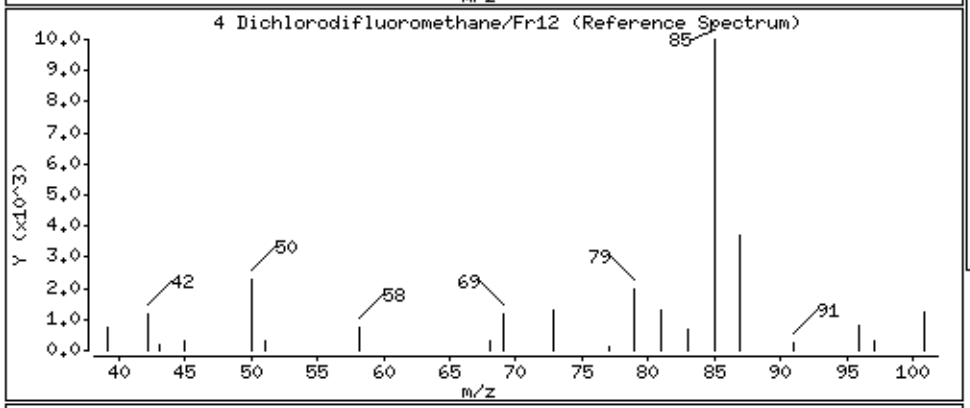
Concentration: 0.4698 PPBV

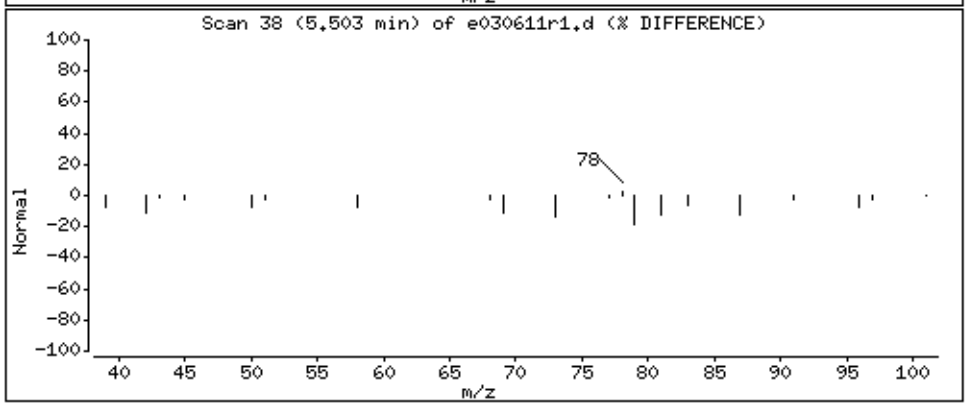












Data File: /chem/msde.i/06Mar2015.b/e030611r1.d

Date : 06-MAR-2015 12:57

Client ID:

Instrument: msde.i

Sample Info: 150mL #35132

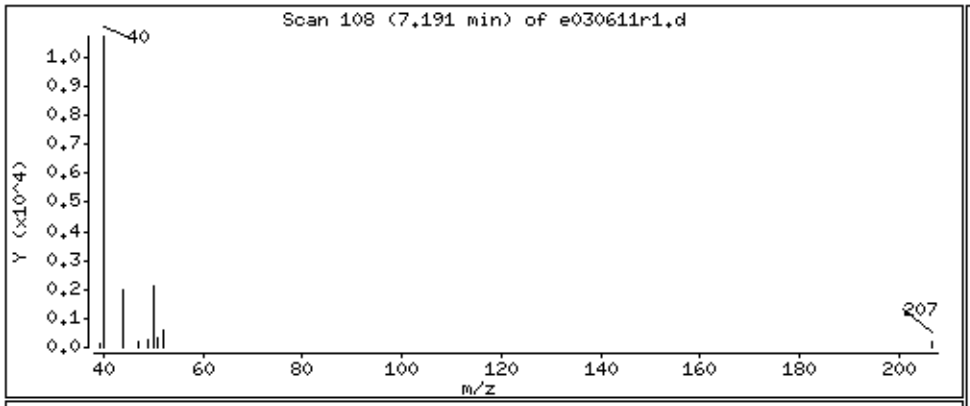
Operator: sab

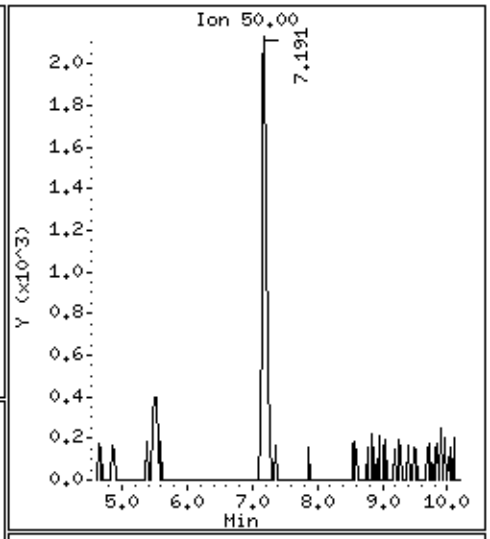
Column phase: RTx-624

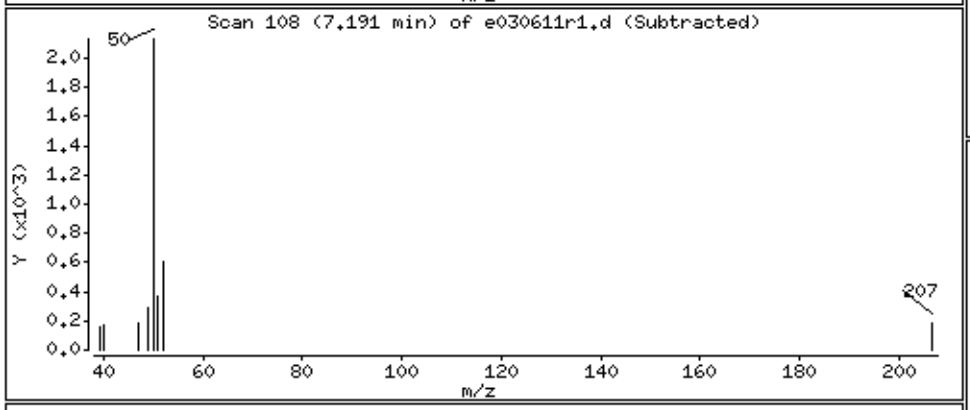
Column diameter: 0.32

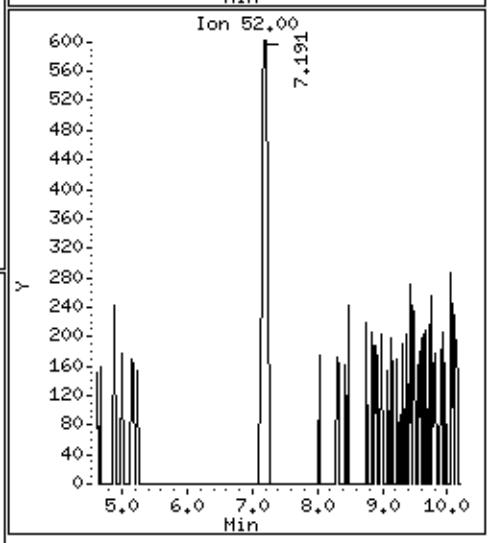
7 Chloromethane

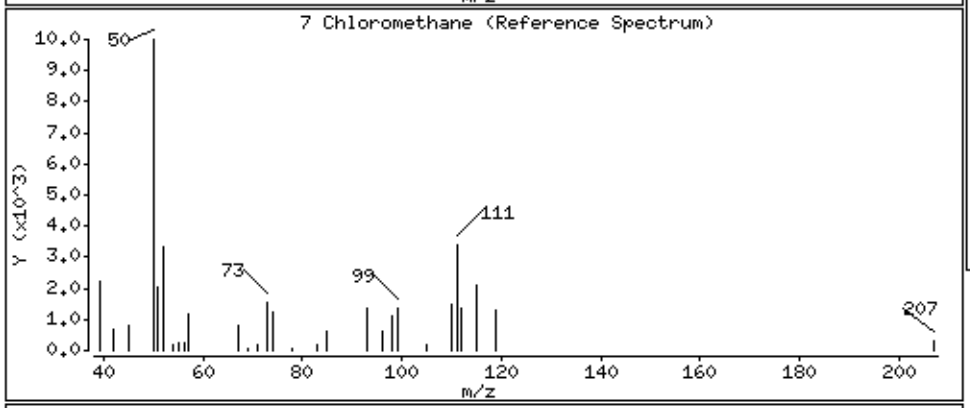
Concentration: 0.6040 PPBV

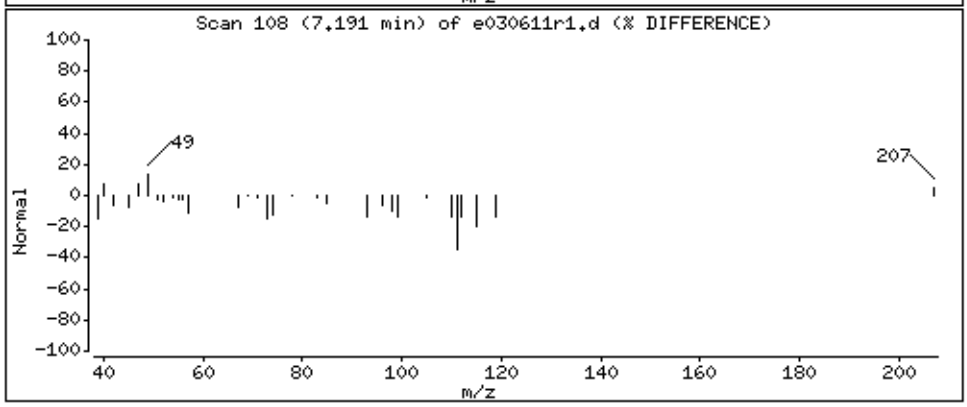












Data File: /chem/msde.i/06Mar2015.b/e030611r1.d

Date : 06-MAR-2015 12:57

Client ID:

Instrument: msde.i

Sample Info: 150mL #35132

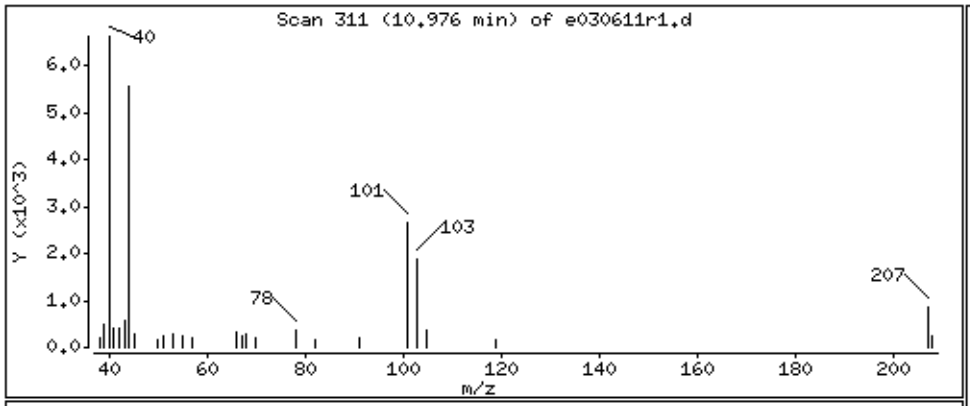
Operator: sab

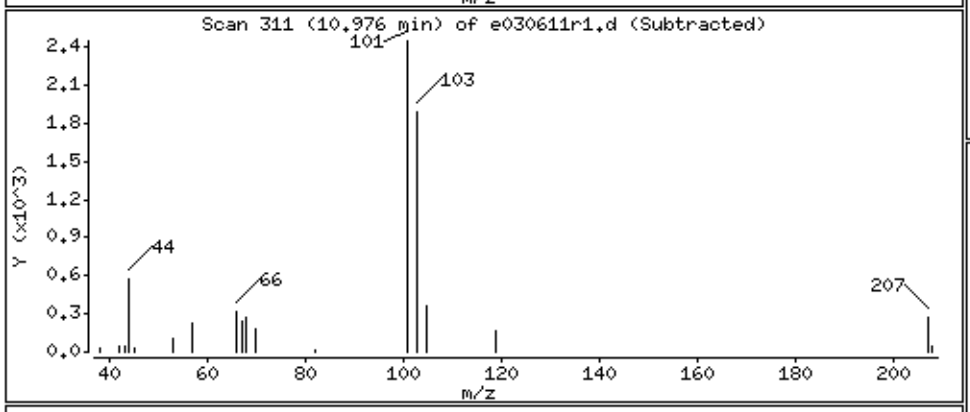
Column phase: RTx-624

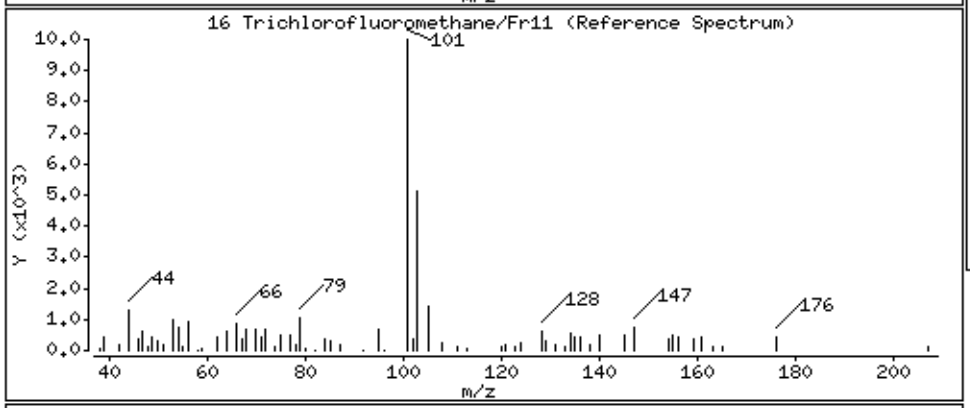
Column diameter: 0.32

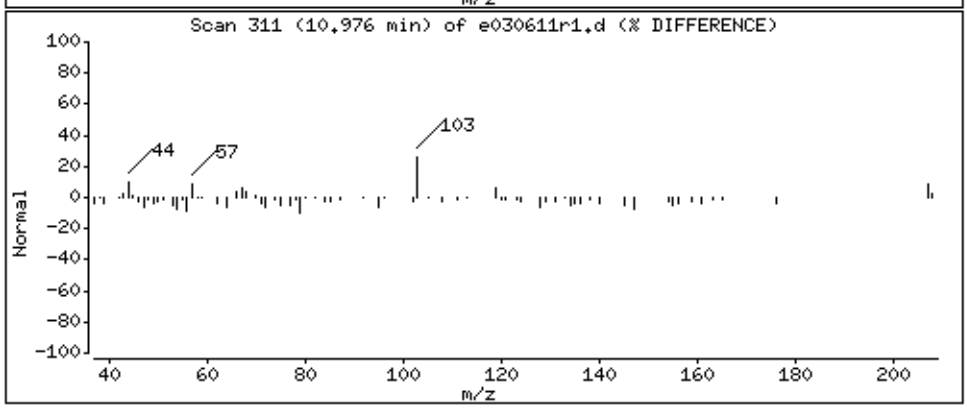
16 Trichlorofluoromethane/Fr11

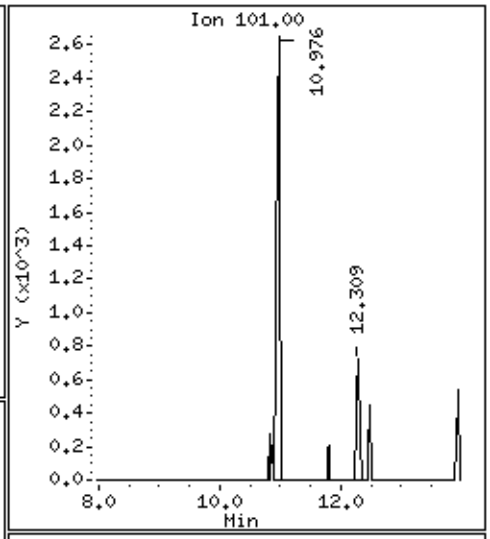
Concentration: 0.2052 PPBV

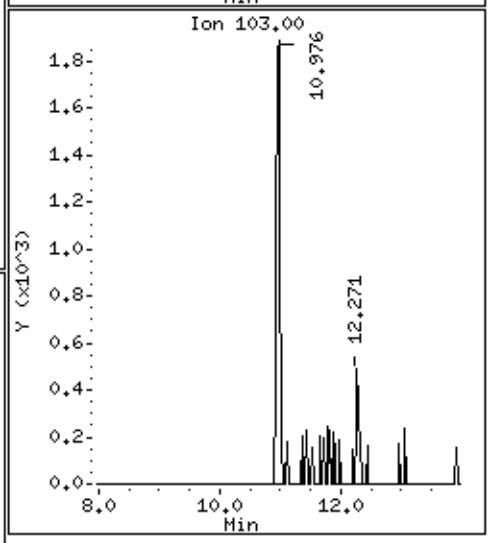












Data File: /chem/msde.i/06Mar2015.b/e030611r1.d

Date : 06-MAR-2015 12:57

Client ID:

Instrument: msde.i

Sample Info: 150mL #35132

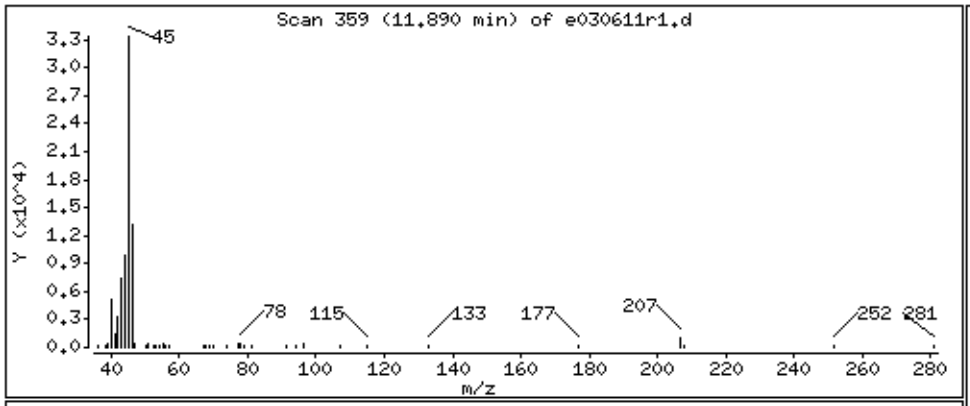
Operator: sab

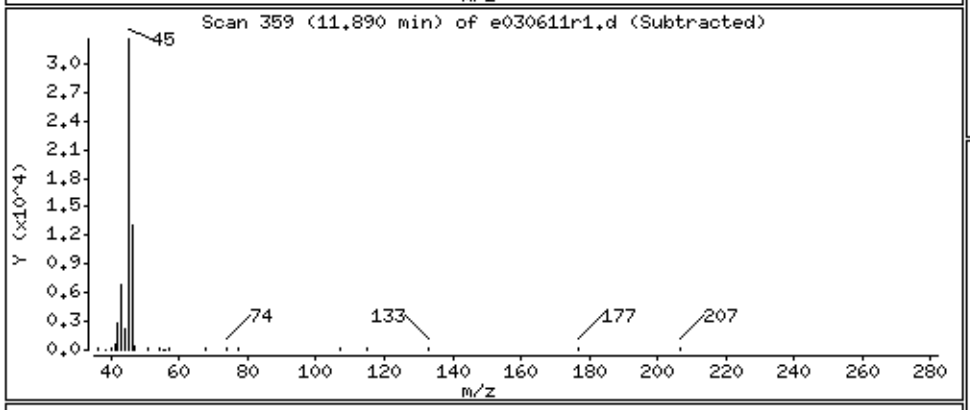
Column phase: RTx-624

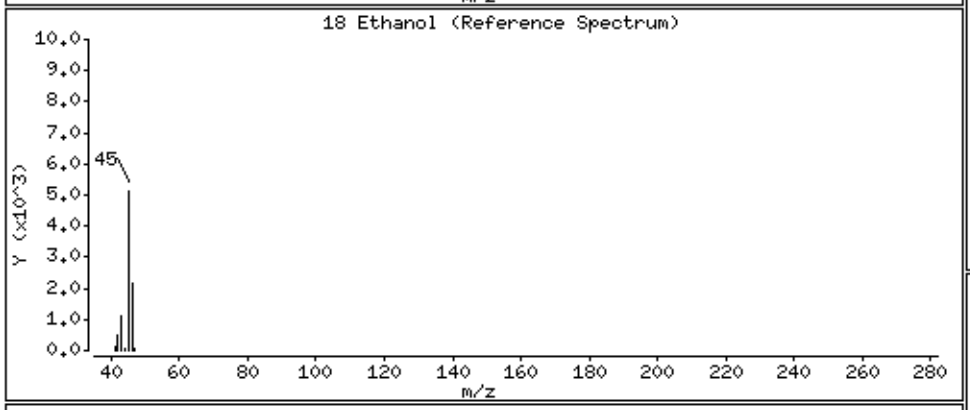
Column diameter: 0.32

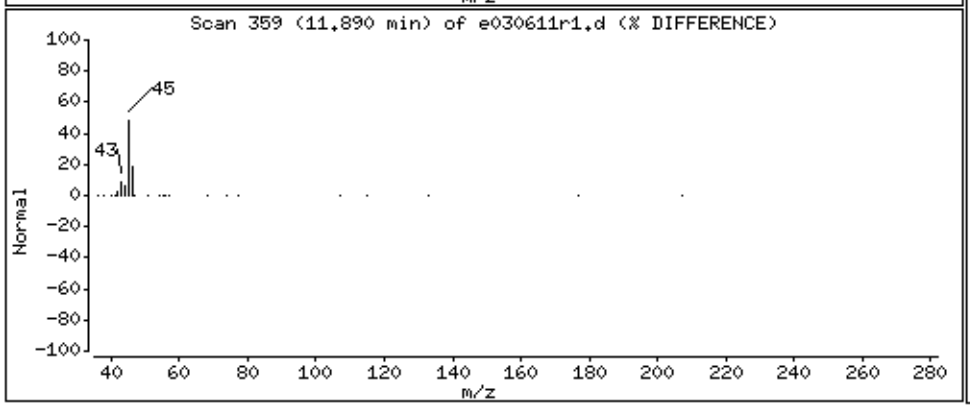
18 Ethanol

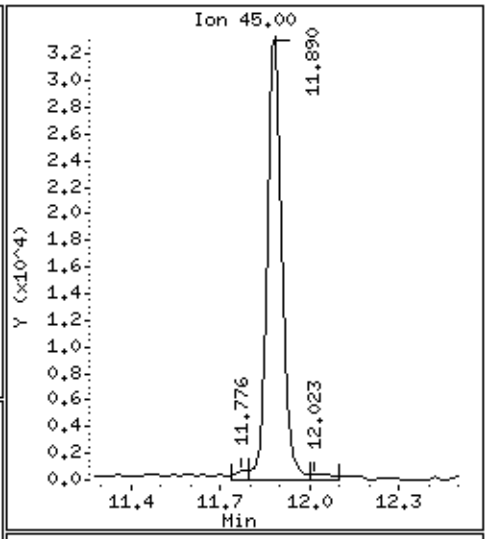
Concentration: 16.480 PPBV

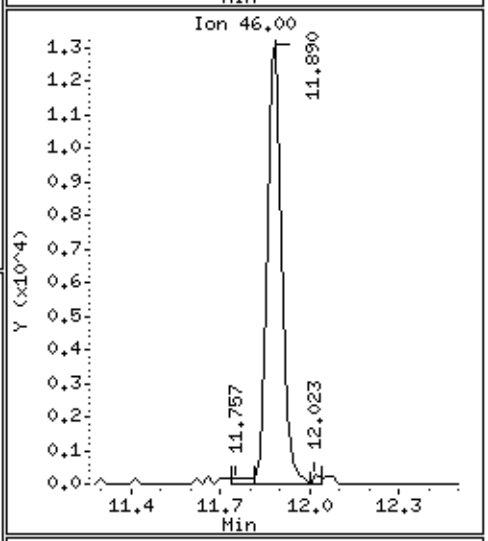


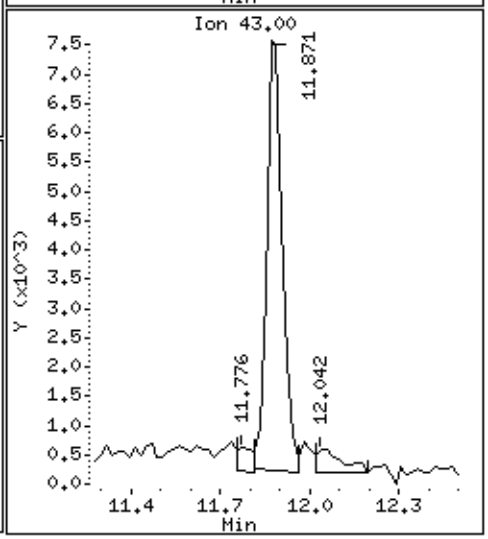












Data File: /chem/msde.i/06Mar2015.b/e030611r1.d

Date : 06-MAR-2015 12:57

Client ID:

Instrument: msde.i

Sample Info: 150mL #35132

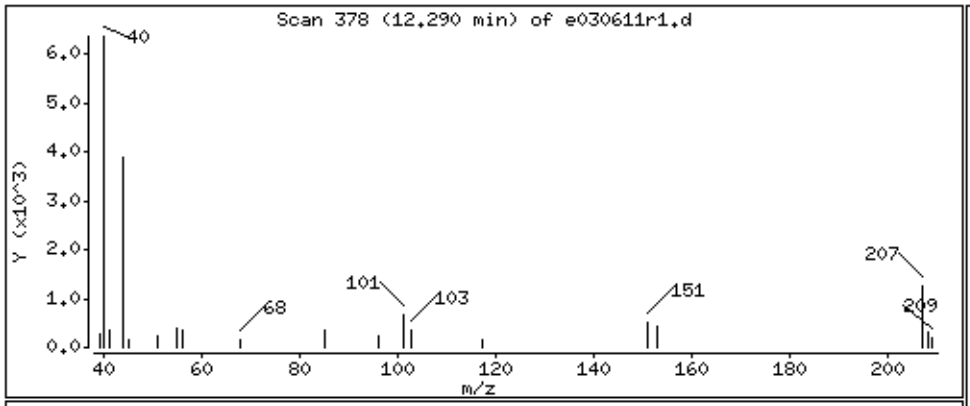
Operator: sab

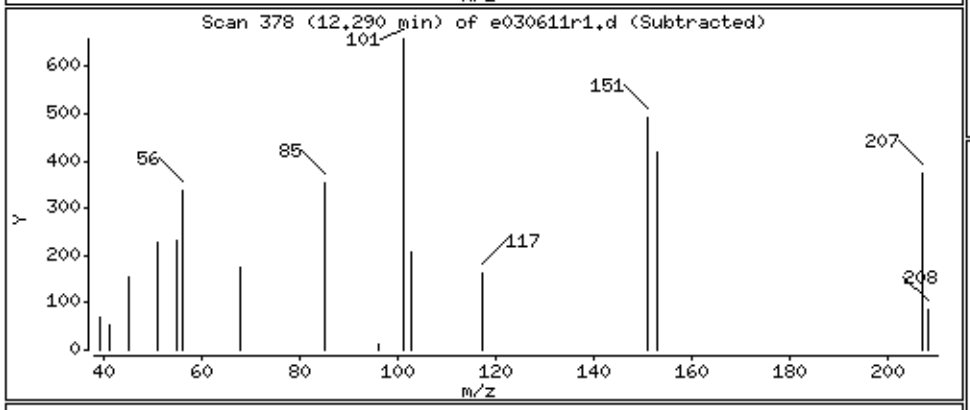
Column phase: RTx-624

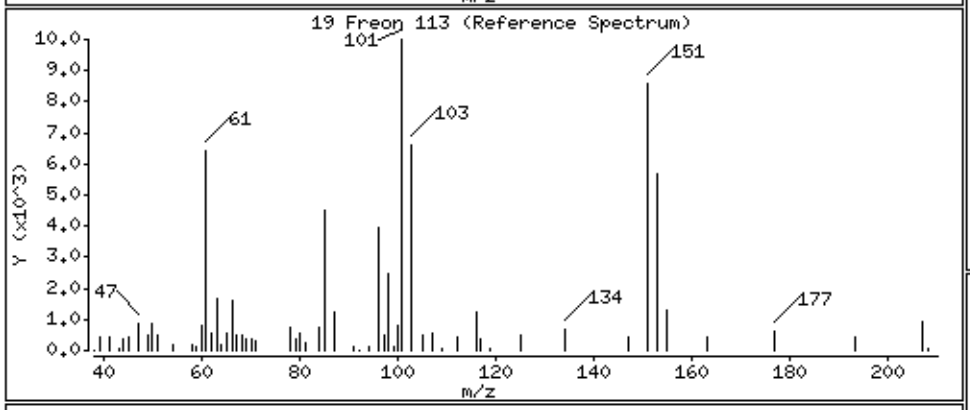
Column diameter: 0.32

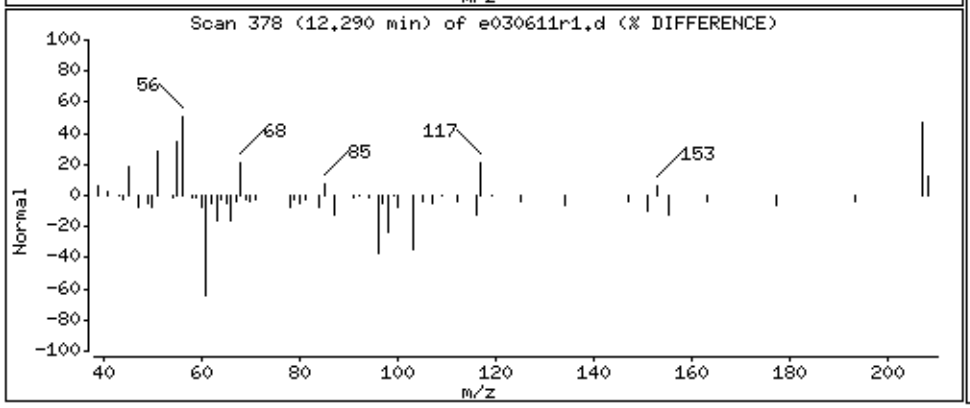
19 Freon 113

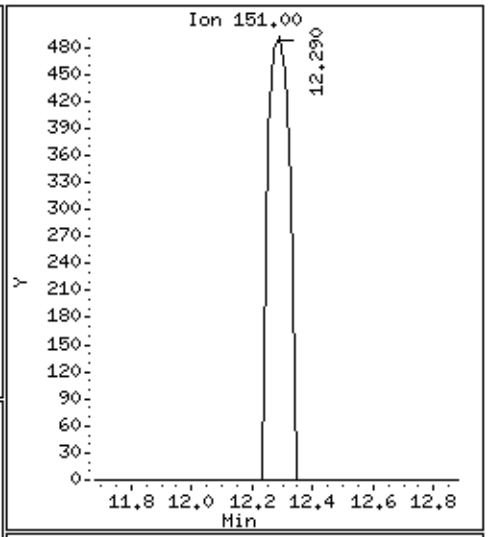
Concentration: 0.05672 PPBV

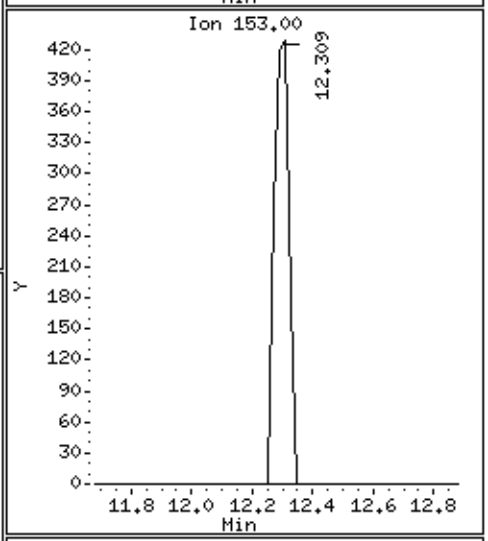


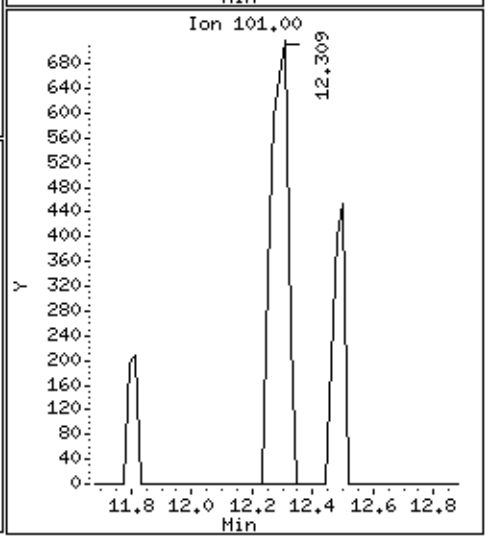












Data File: /chem/msde.i/06Mar2015.b/e030611r1.d

Date : 06-MAR-2015 12:57

Client ID:

Instrument: msde.i

Sample Info: 150mL #35132

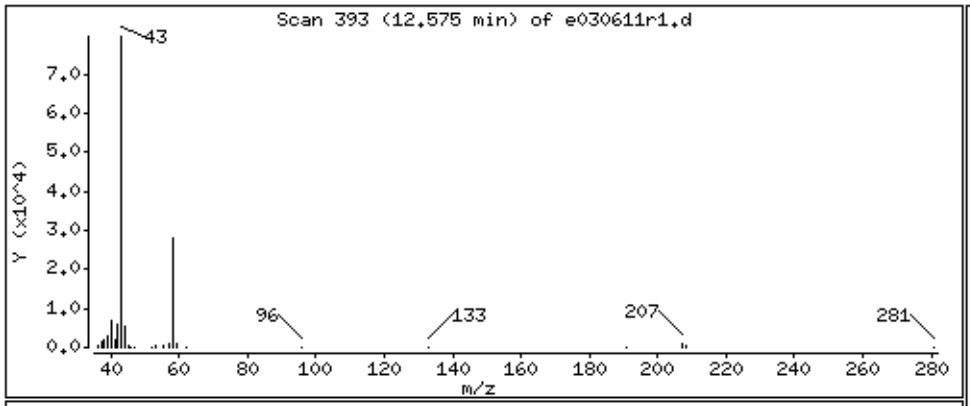
Operator: sab

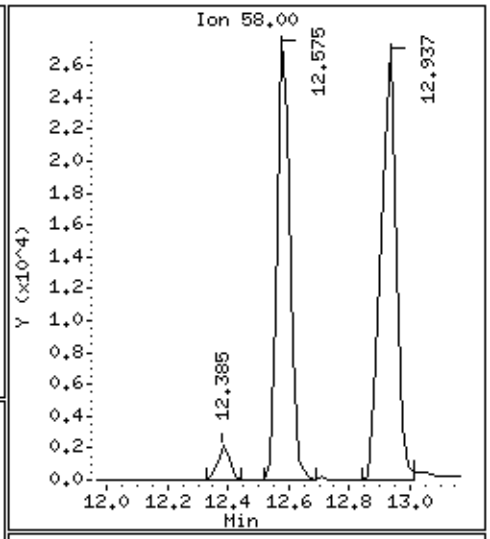
Column phase: RTx-624

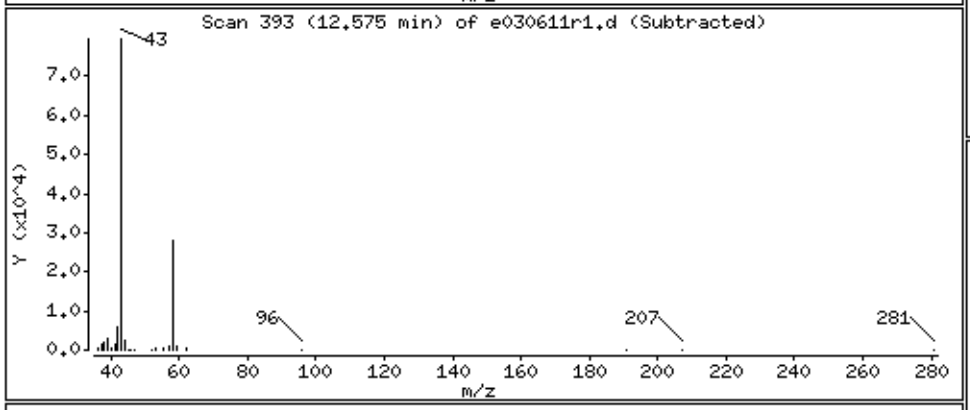
Column diameter: 0.32

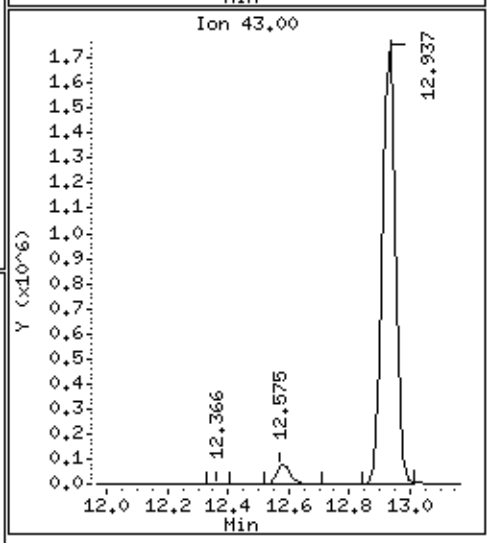
22 Acetone

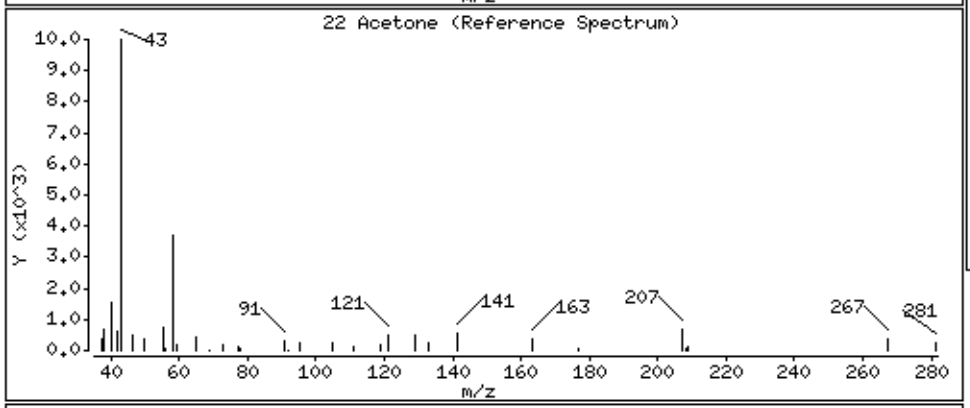
Concentration: 7.064 PPBV

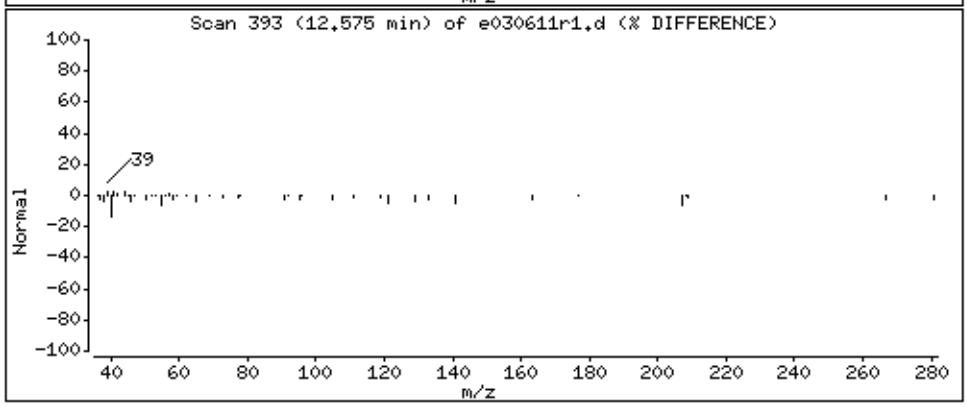












Data File: /chem/msde.i/06Mar2015.b/e030611r1.d

Date : 06-MAR-2015 12:57

Client ID:

Instrument: msde.i

Sample Info: 150mL #35132

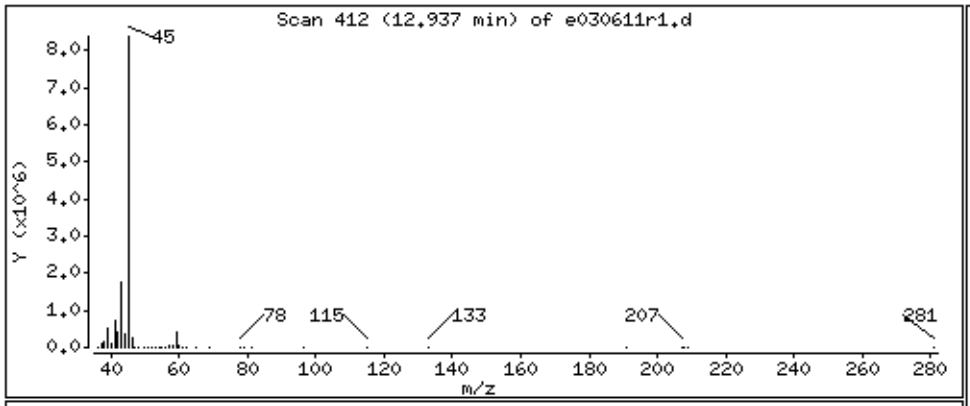
Operator: sab

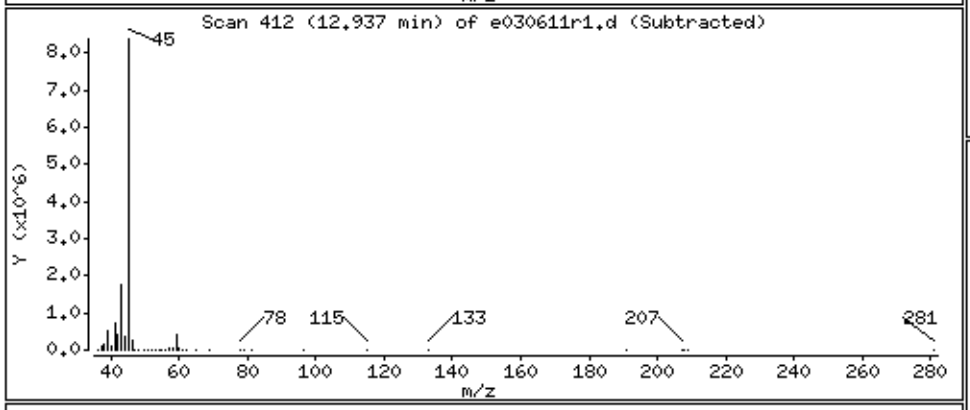
Column phase: RTx-624

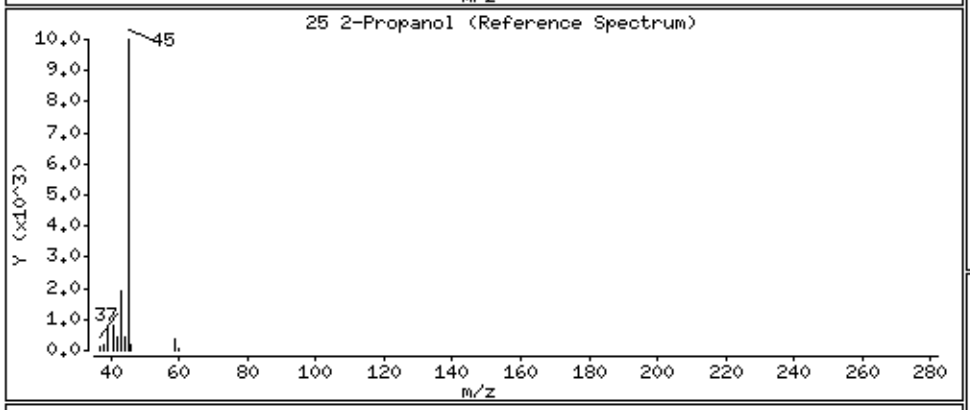
Column diameter: 0.32

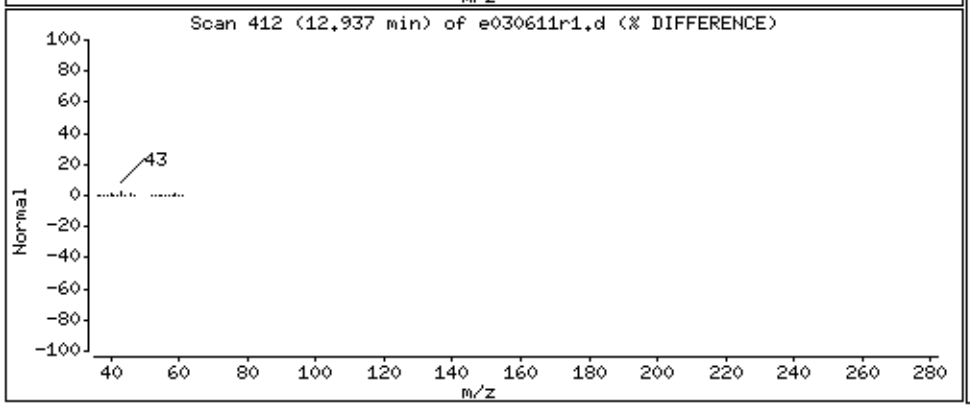
25 2-Propanol

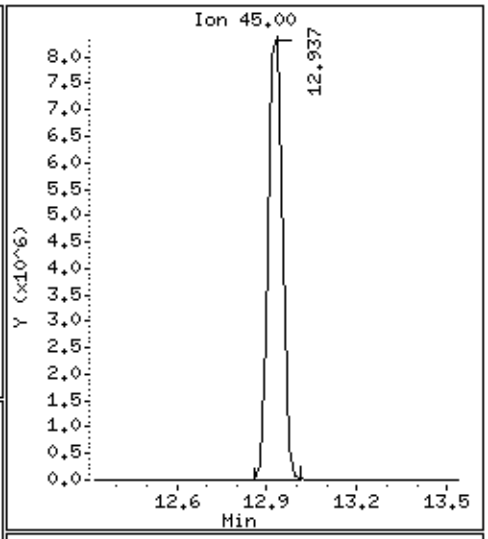
Concentration: 810.28 PPBV

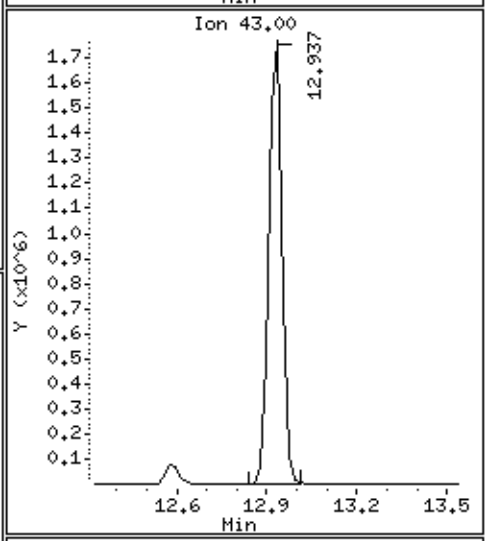


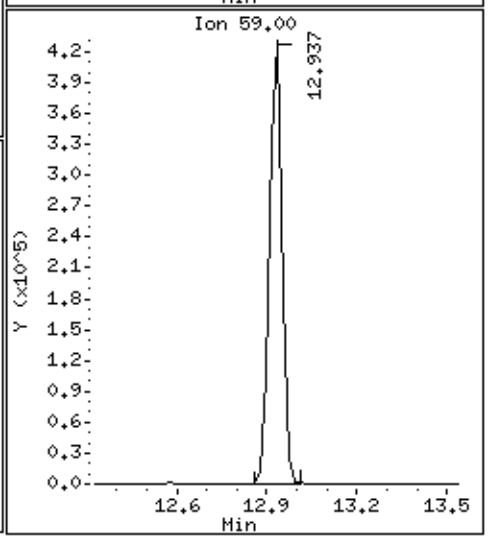












Data File: /chem/msde.i/06Mar2015.b/e030611r1.d

Date : 06-MAR-2015 12:57

Client ID:

Instrument: msde.i

Sample Info: 150mL #35132

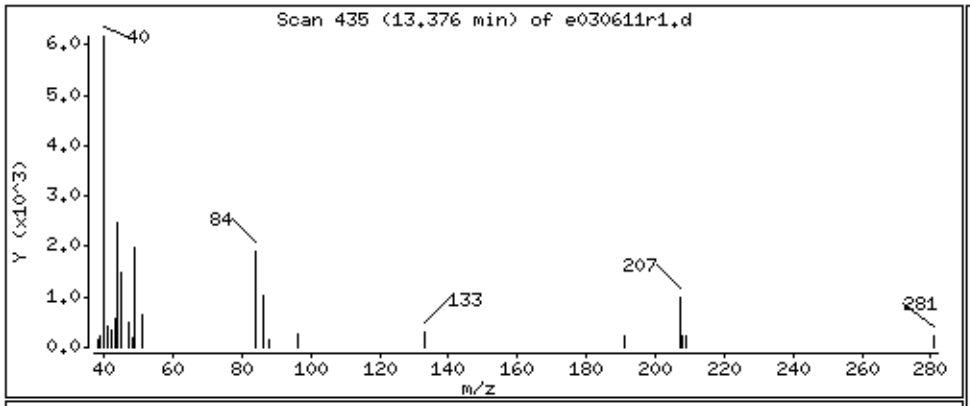
Operator: sab

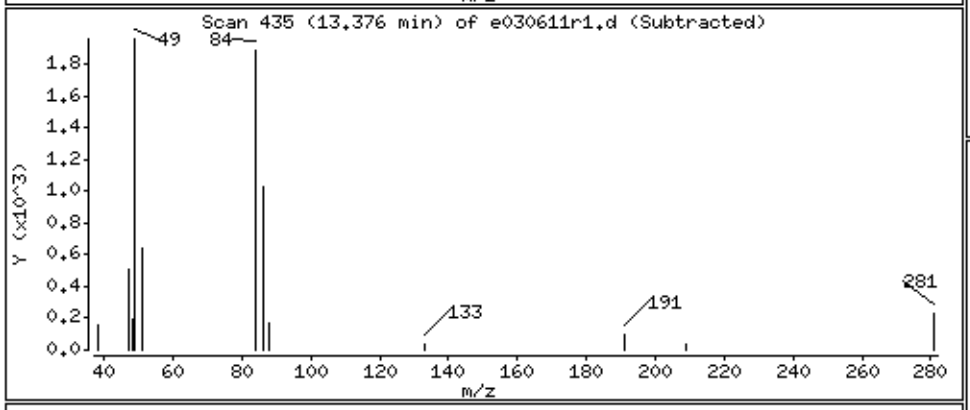
Column phase: RTx-624

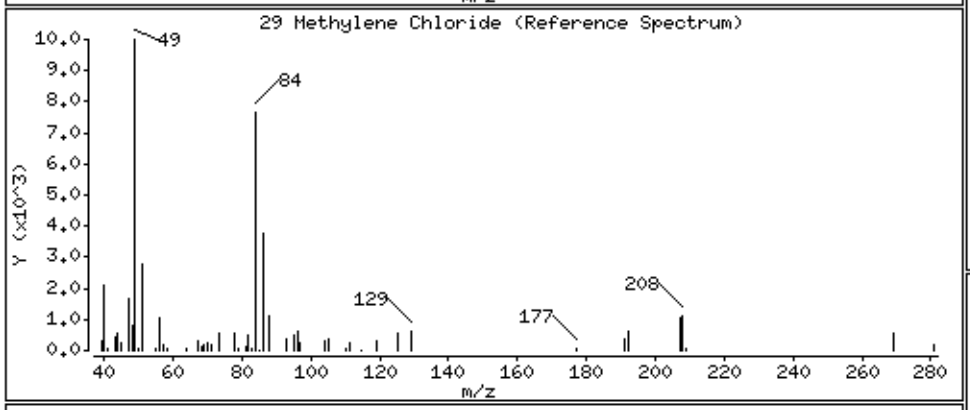
Column diameter: 0.32

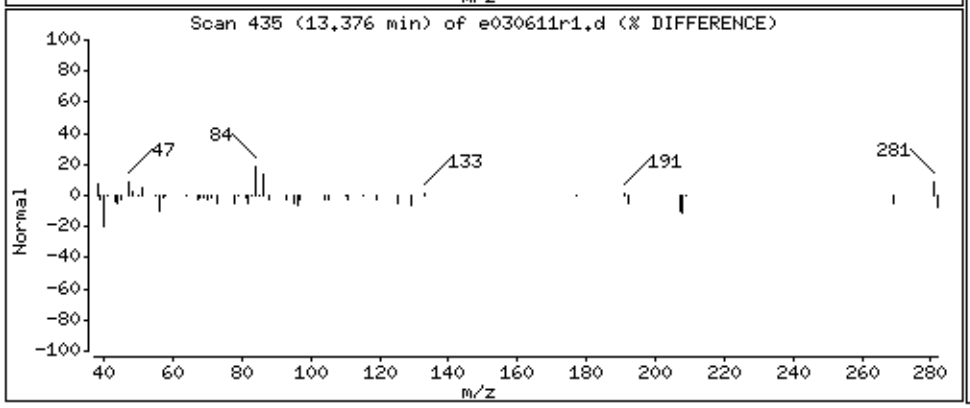
29 Methylene Chloride

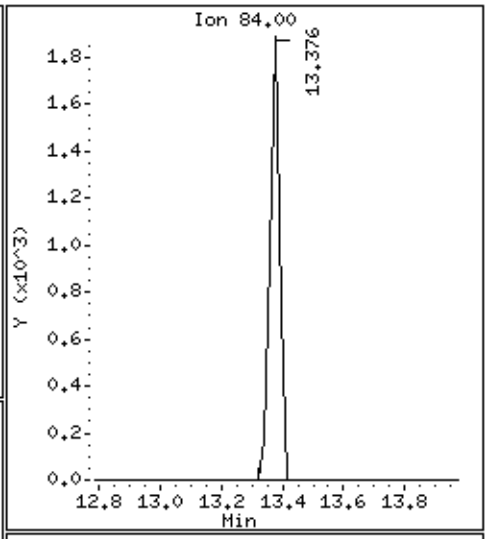
Concentration: 0.2397 PPBV

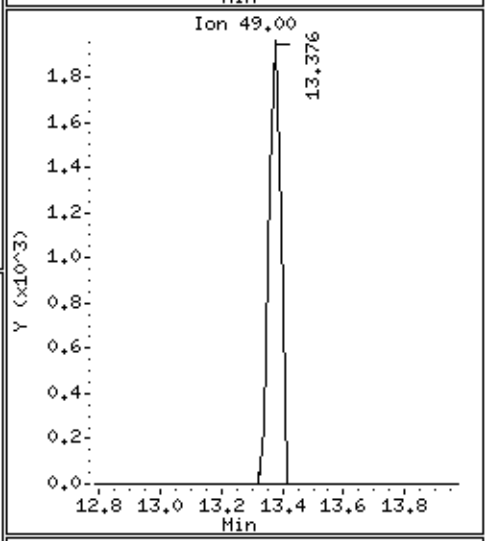


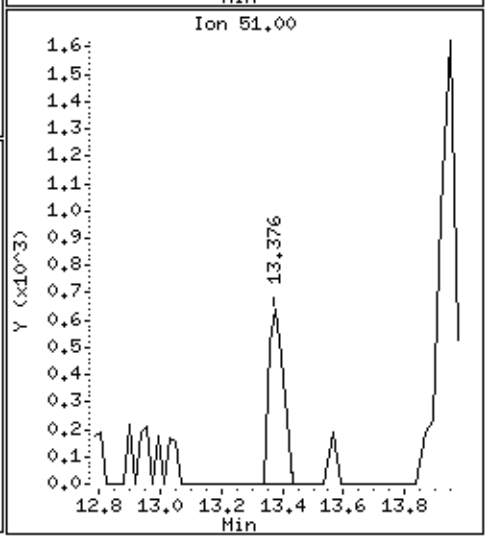












Data File: /chem/msde.i/06Mar2015.b/e030611r1.d

Date : 06-MAR-2015 12:57

Client ID:

Instrument: msde.i

Sample Info: 150mL #35132

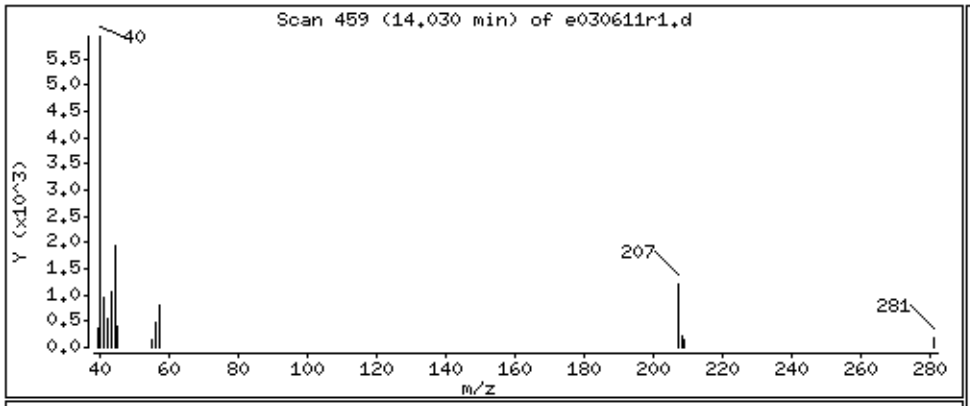
Operator: sab

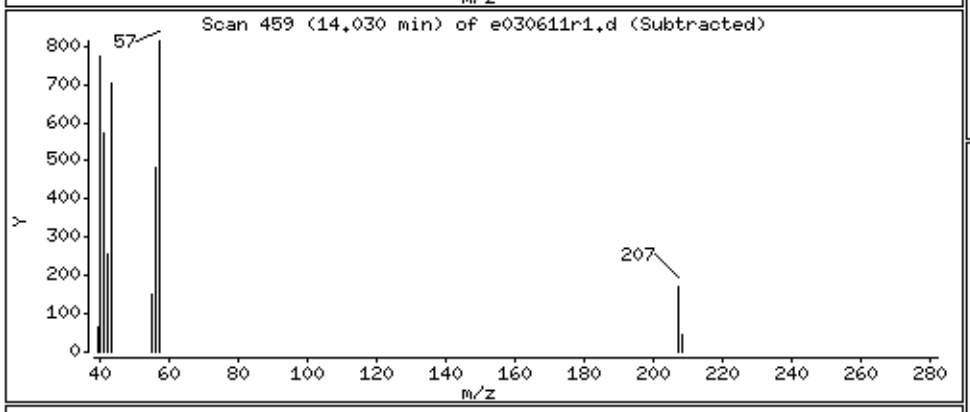
Column phase: RTx-624

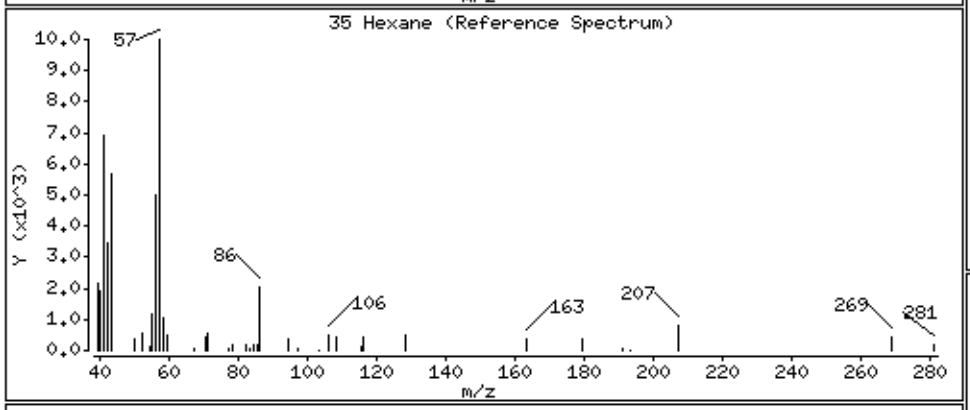
Column diameter: 0.32

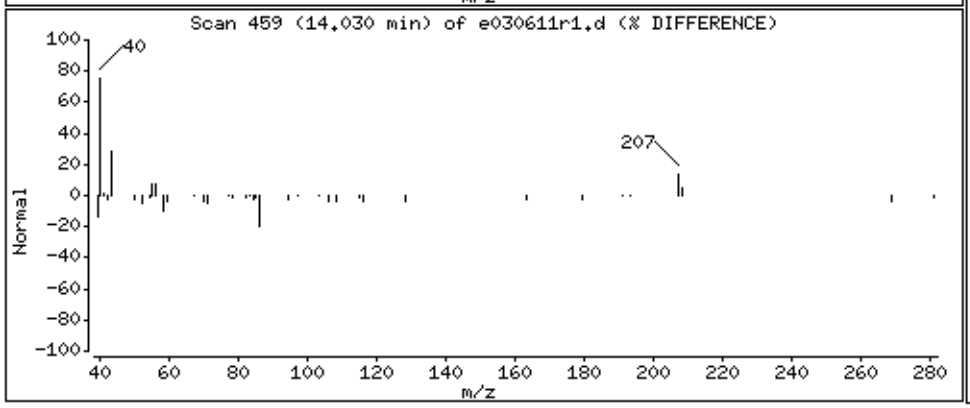
35 Hexane

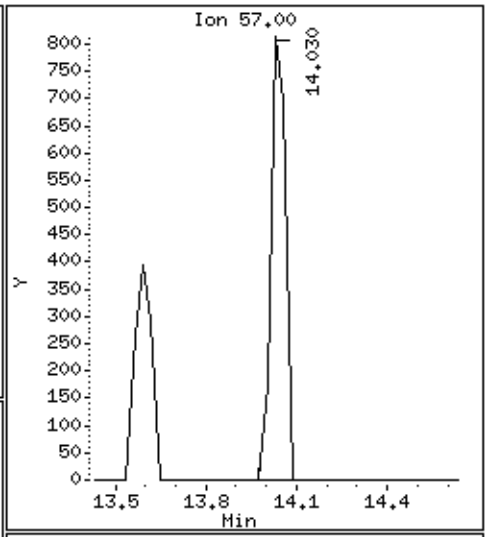
Concentration: 0.08218 PPBV

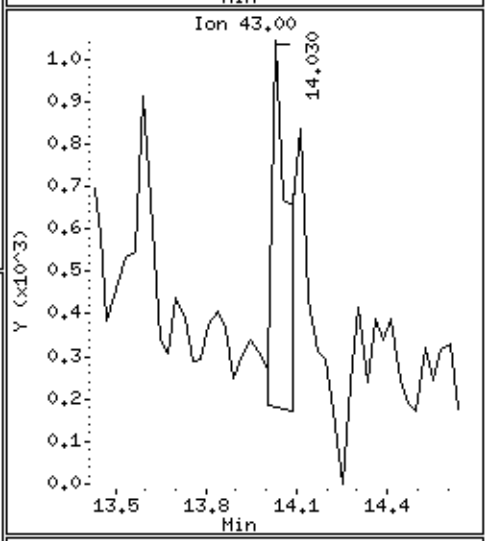


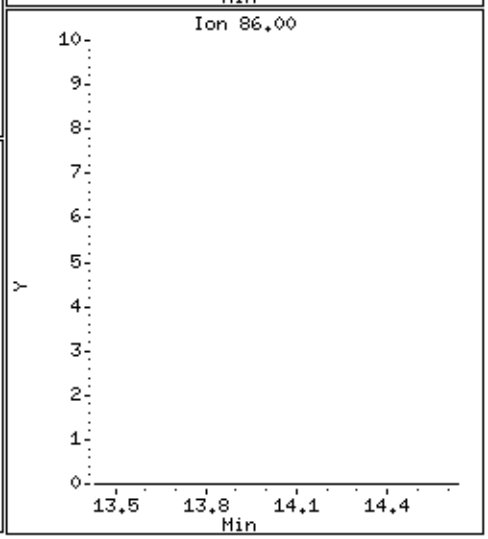












Data File: /chem/msde.i/06Mar2015.b/e030611r1.d

Date : 06-MAR-2015 12:57

Client ID:

Instrument: msde.i

Sample Info: 150mL #35132

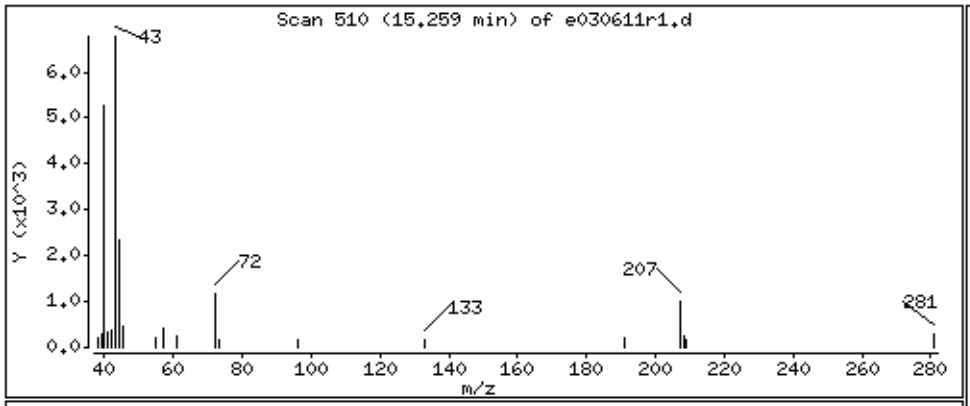
Operator: sab

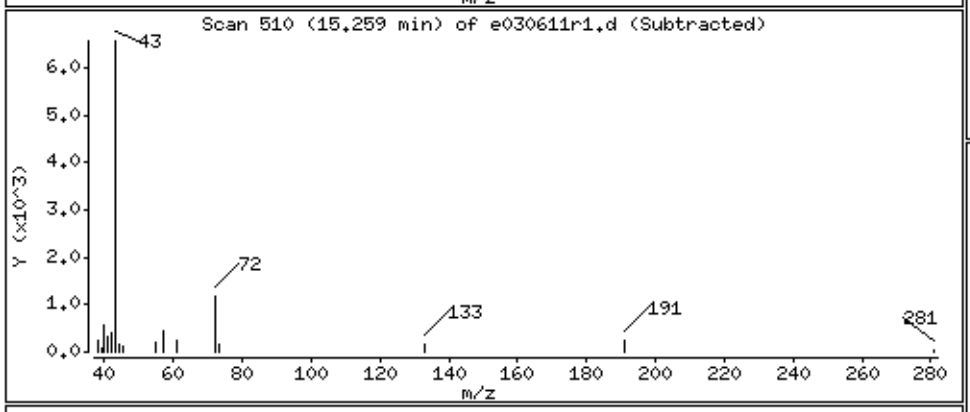
Column phase: RTx-624

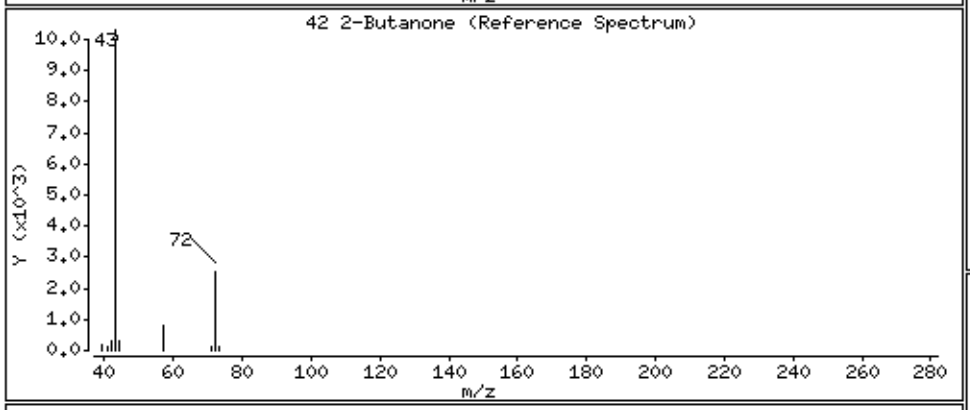
Column diameter: 0.32

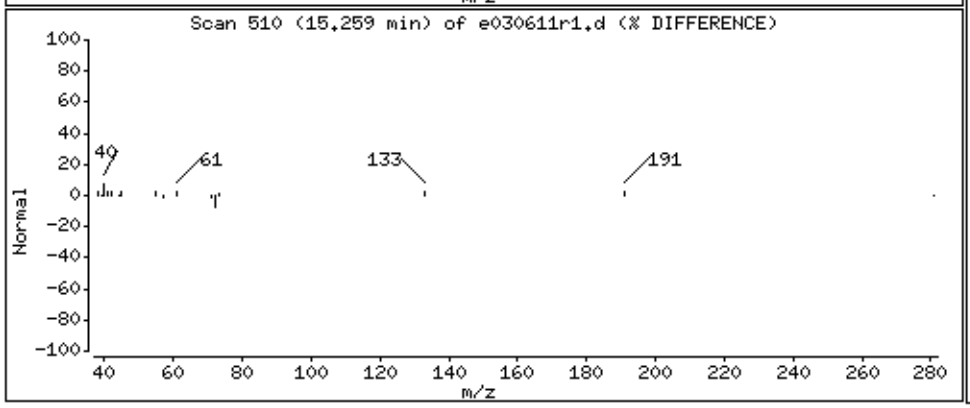
42 2-Butanone

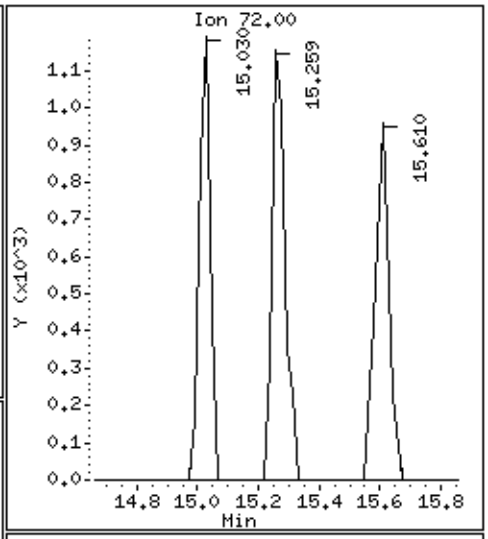
Concentration: 0.3497 PPBV

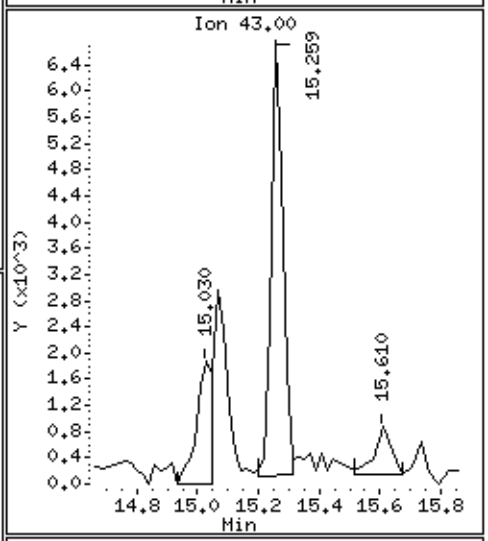


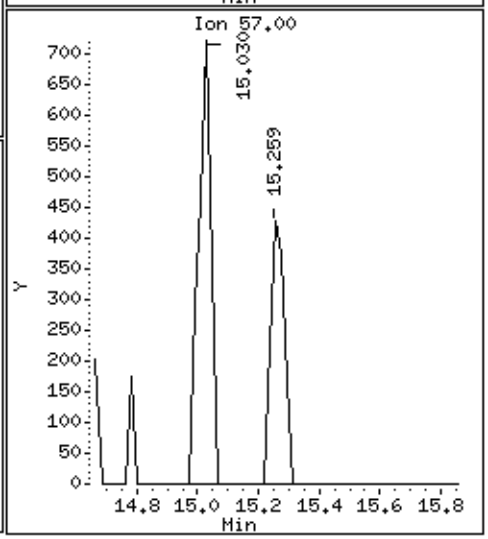












Data File: /chem/msde.i/06Mar2015.b/e030611r1.d

Date : 06-MAR-2015 12:57

Client ID:

Instrument: msde.i

Sample Info: 150mL #35132

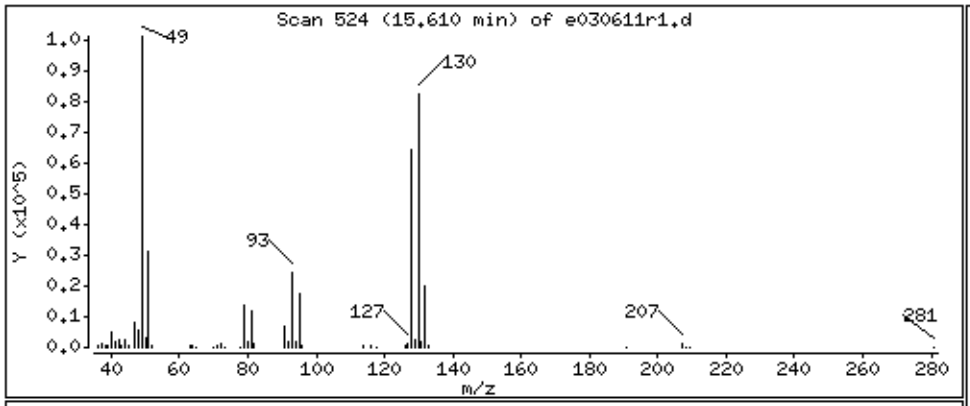
Operator: sab

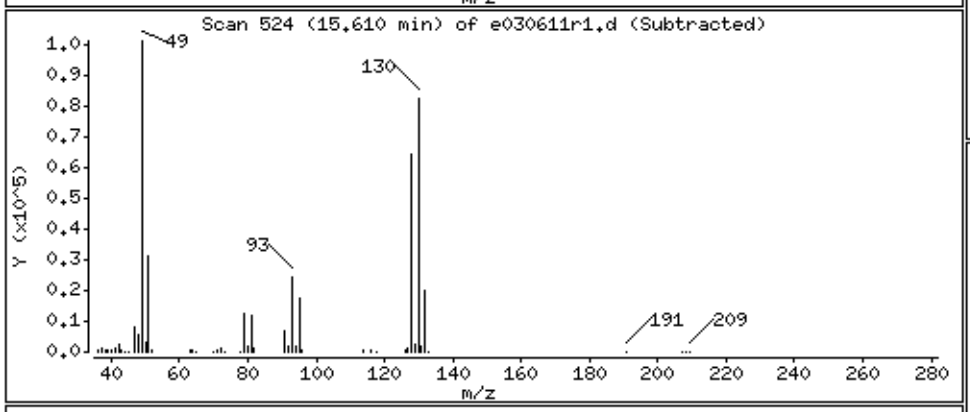
Column phase: RTx-624

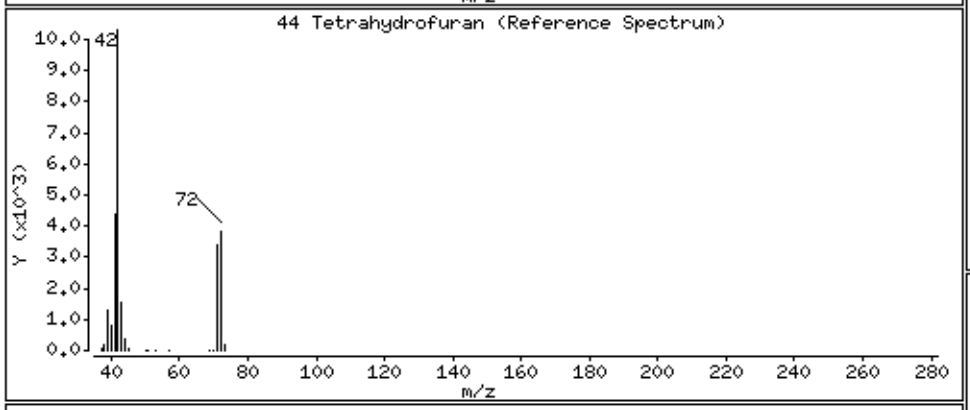
Column diameter: 0.32

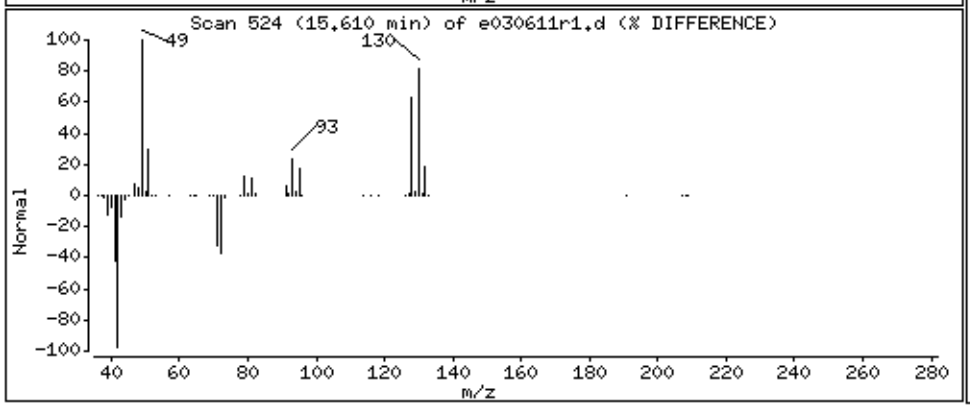
44 Tetrahydrofuran

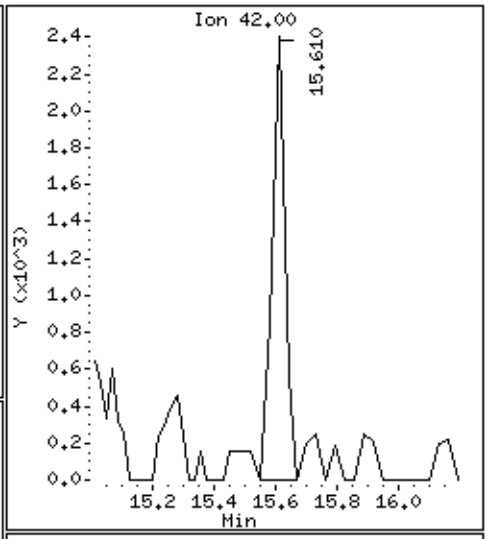
Concentration: 0.2984 PPBV

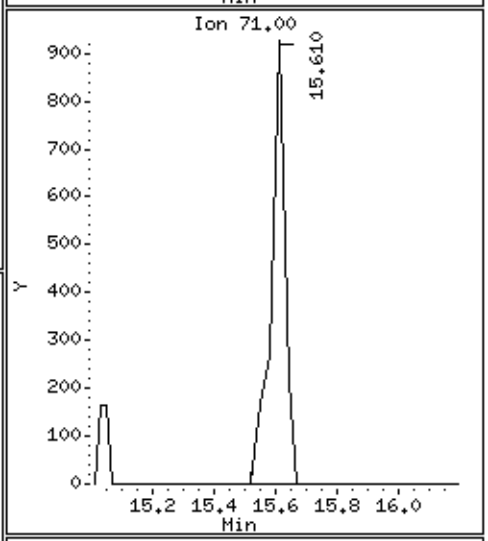


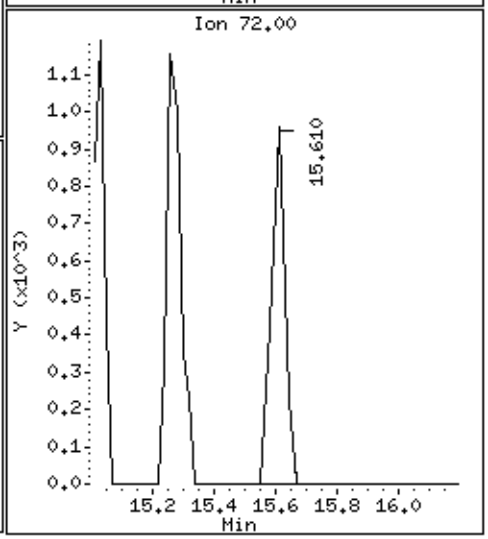












Data File: /chem/msde.i/06Mar2015.b/e030611r1.d

Date : 06-MAR-2015 12:57

Client ID:

Instrument: msde.i

Sample Info: 150mL #35132

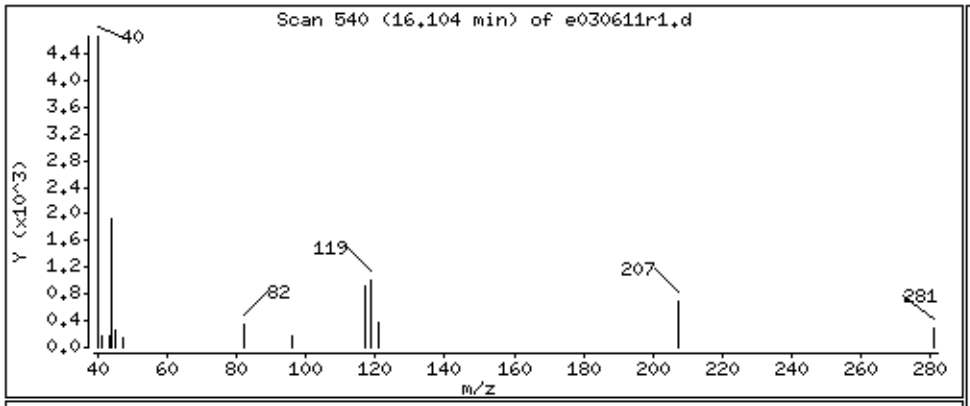
Operator: sab

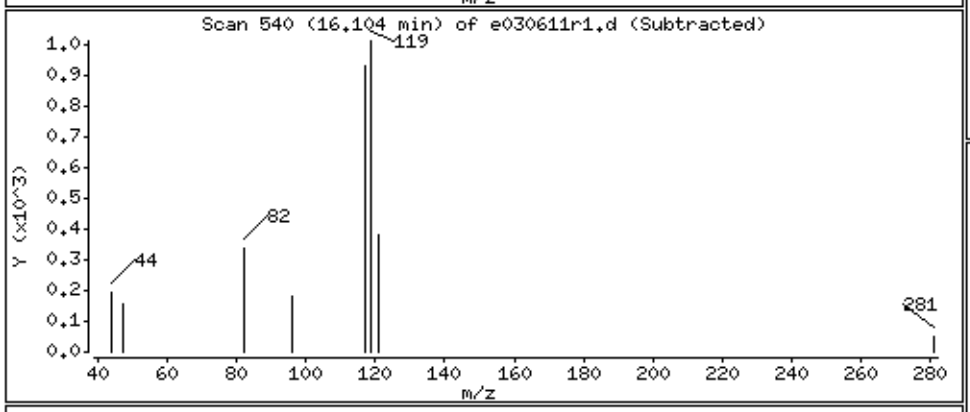
Column phase: RTx-624

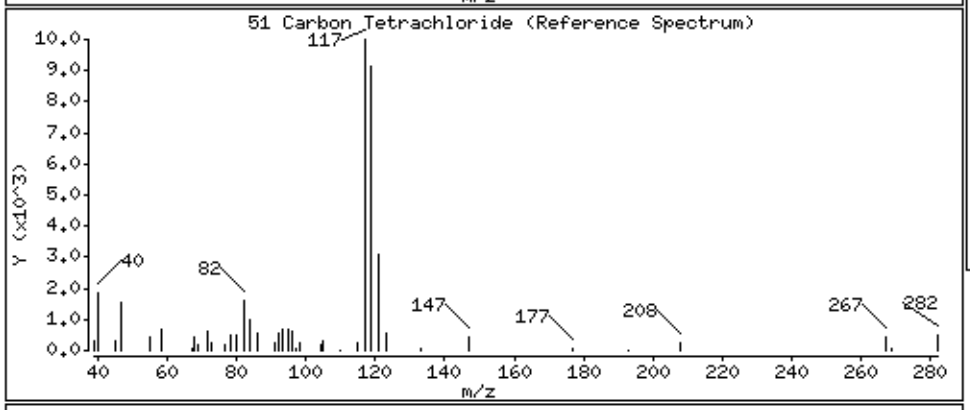
Column diameter: 0.32

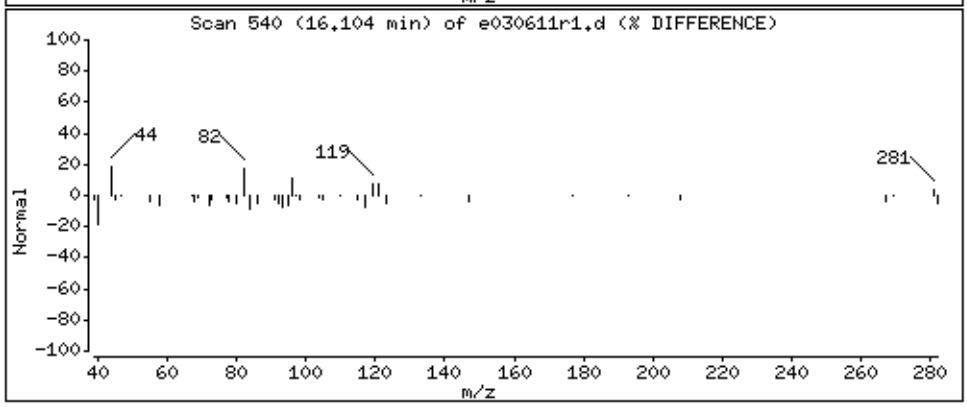
51 Carbon Tetrachloride

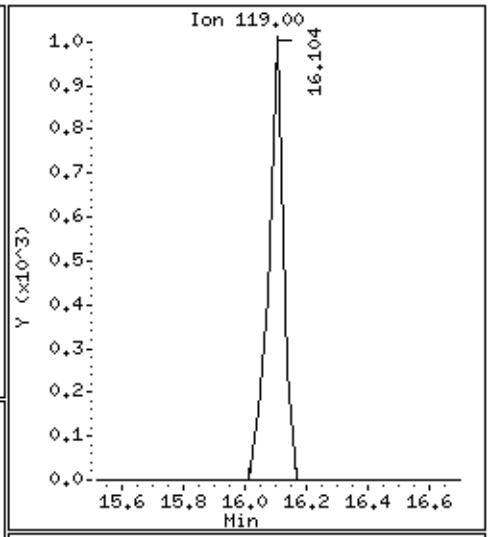
Concentration: 0.08859 PPBV

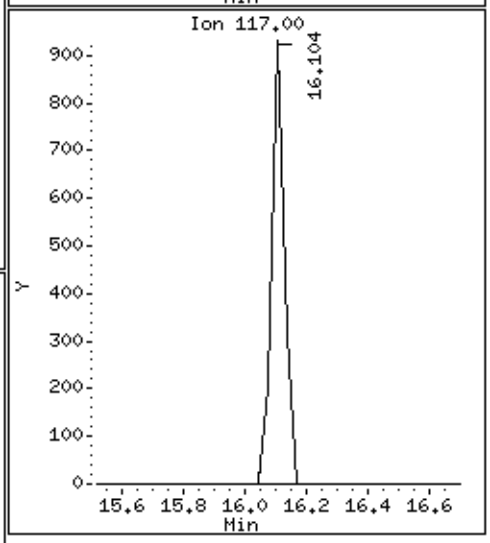












Data File: /chem/msde.i/06Mar2015.b/e030611r1.d

Date : 06-MAR-2015 12:57

Client ID:

Instrument: msde.i

Sample Info: 150mL #35132

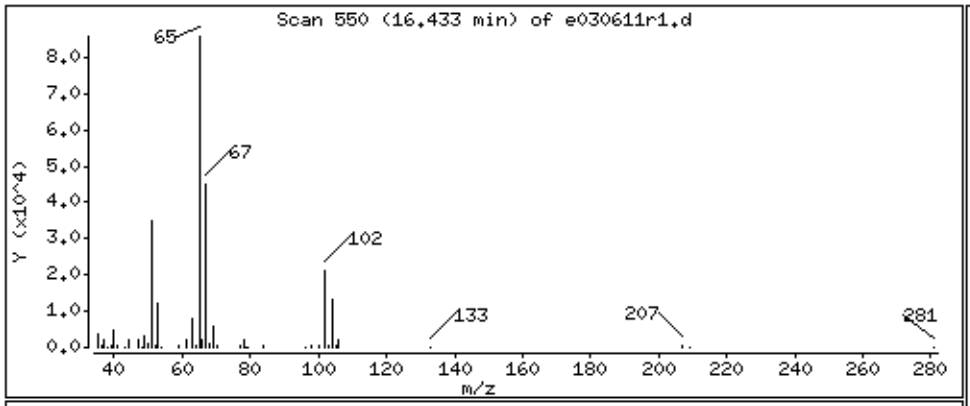
Operator: sab

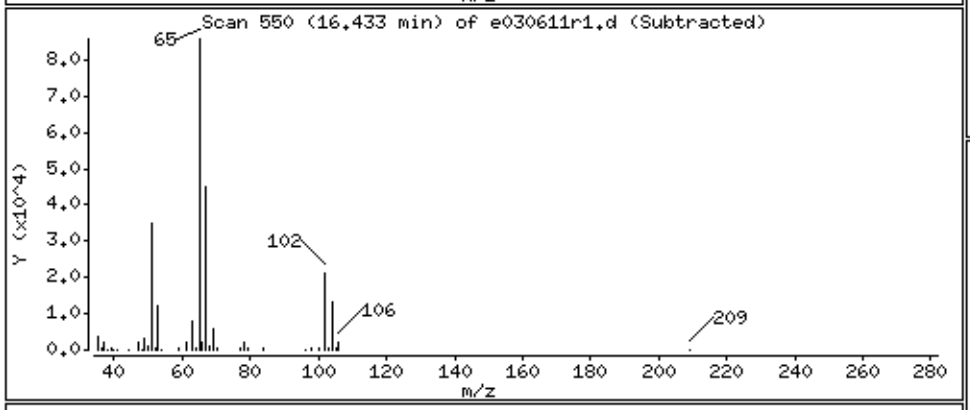
Column phase: RTx-624

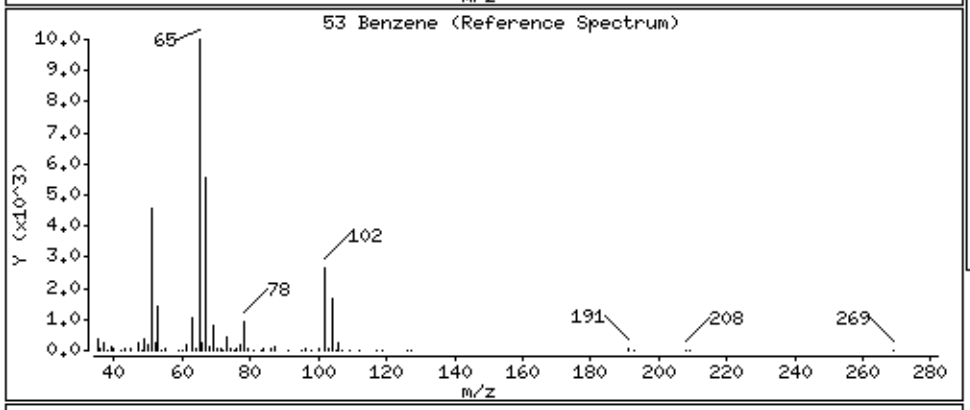
Column diameter: 0.32

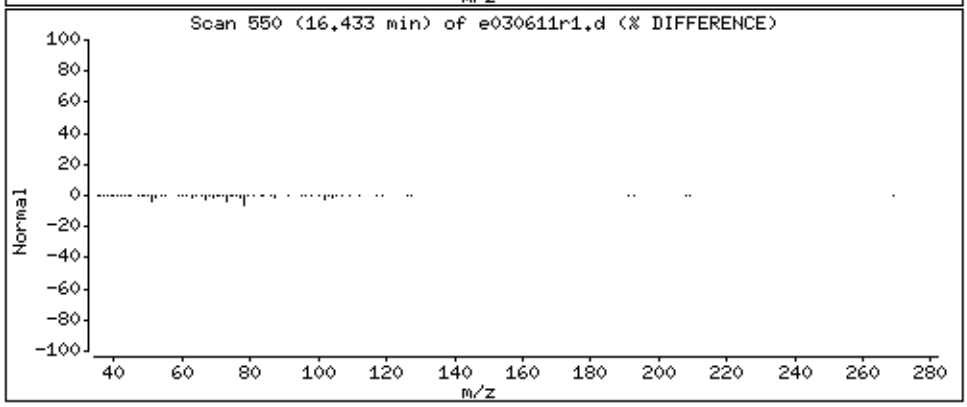
53 Benzene

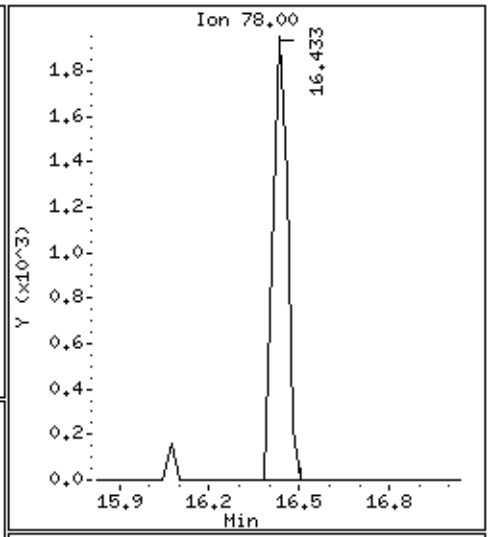
Concentration: 0.1122 PPBV

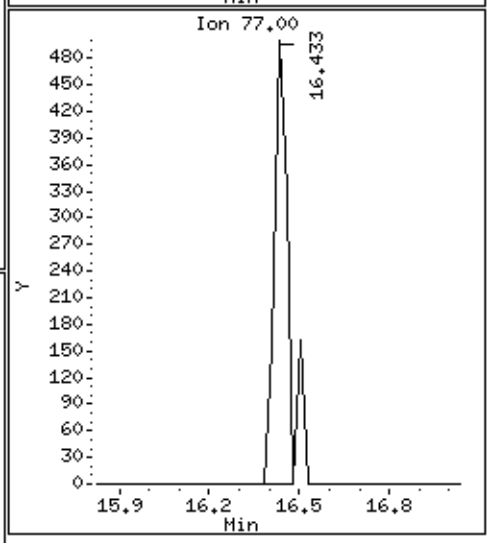












Data File: /chem/msde.i/06Mar2015.b/e030611r1.d

Date : 06-MAR-2015 12:57

Client ID:

Instrument: msde.i

Sample Info: 150mL #35132

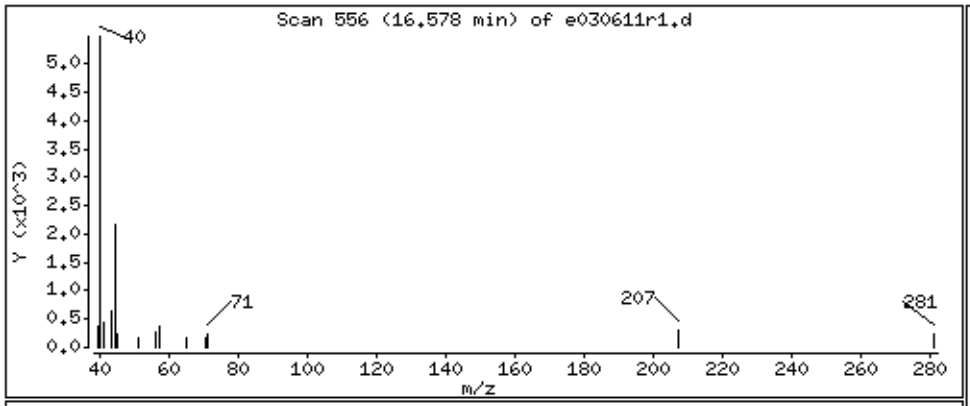
Operator: sab

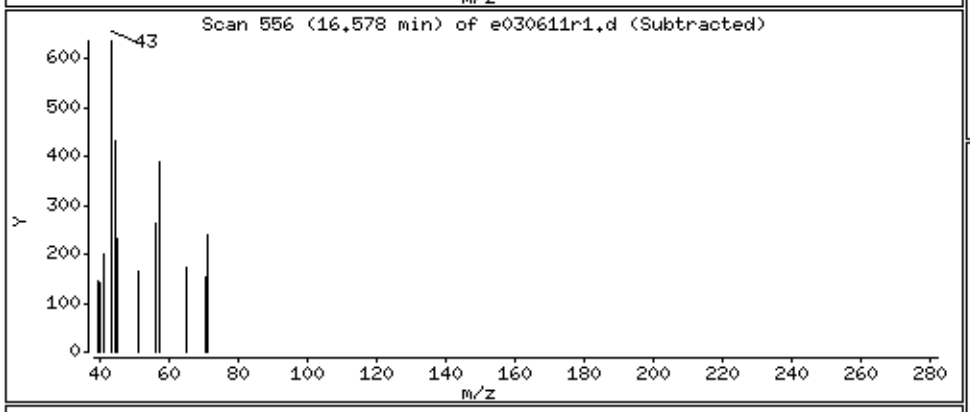
Column phase: RTx-624

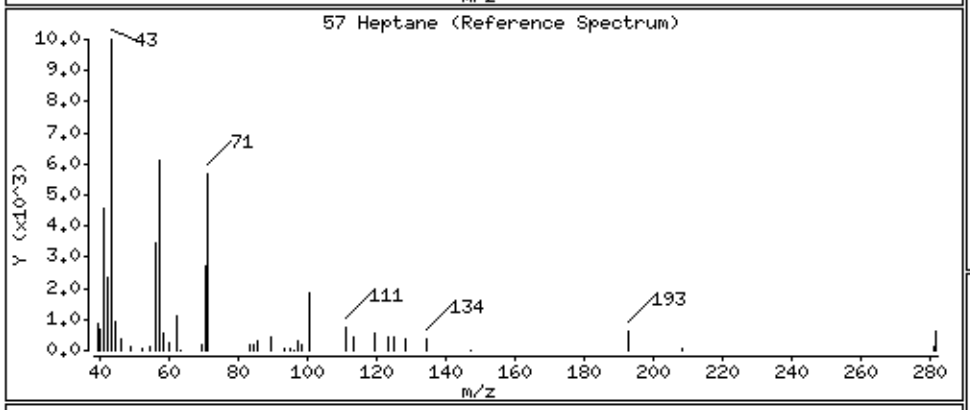
Column diameter: 0.32

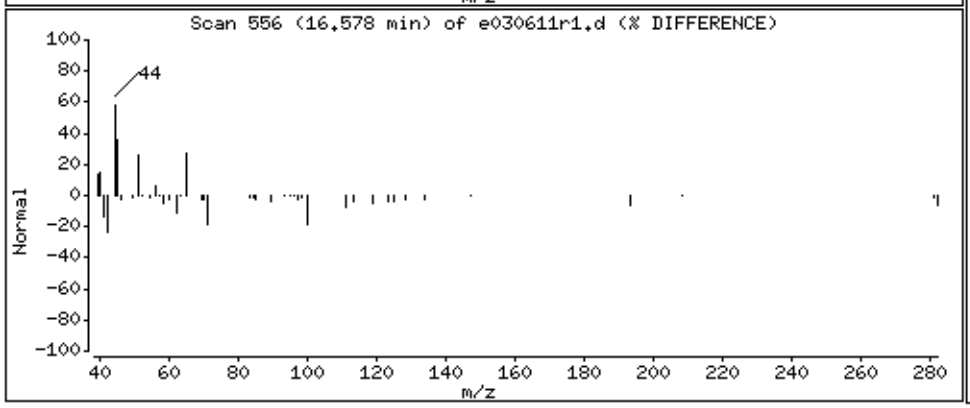
57 Heptane

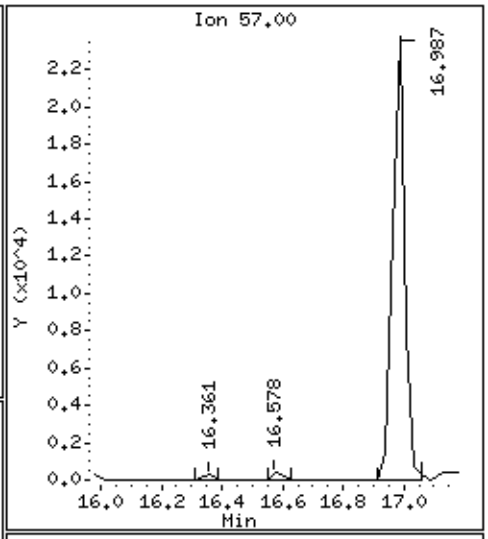
Concentration: 0.04699 PPBV

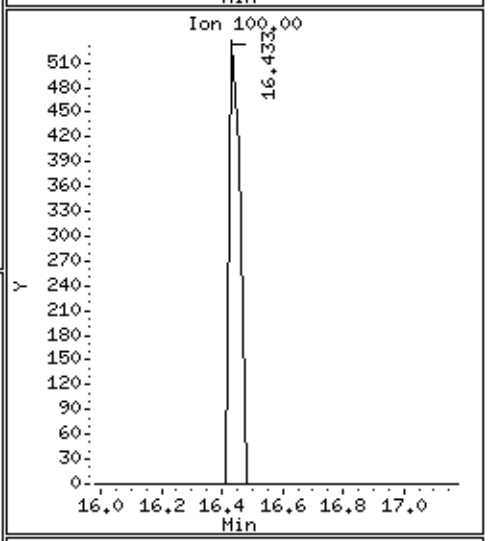


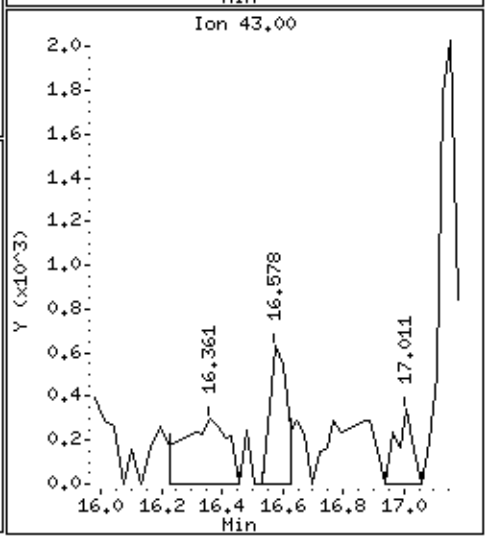












Data File: /chem/msde.i/06Mar2015.b/e030611r1.d

Date : 06-MAR-2015 12:57

Client ID:

Instrument: msde.i

Sample Info: 150mL #35132

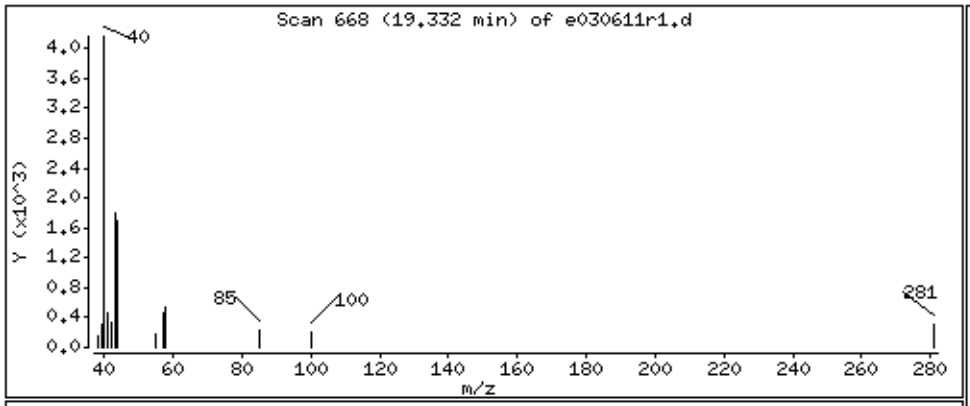
Operator: sab

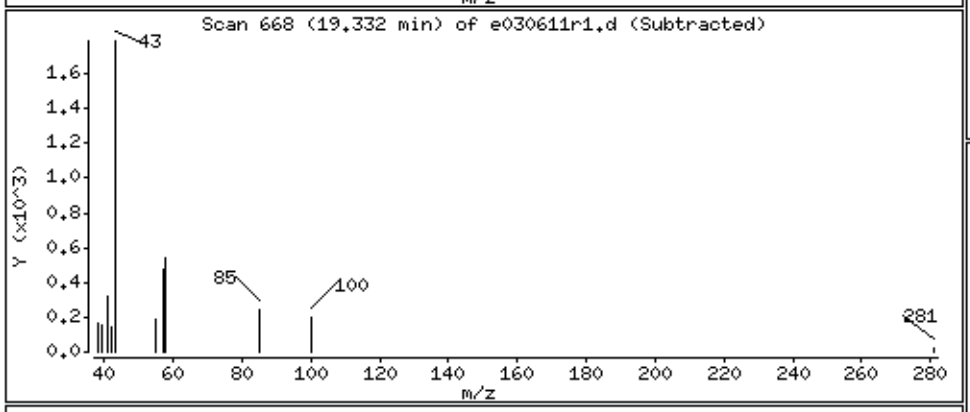
Column phase: RTx-624

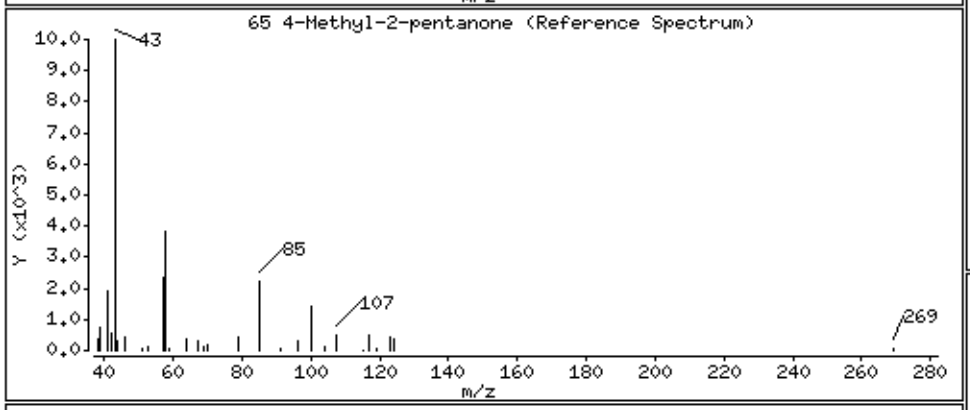
Column diameter: 0.32

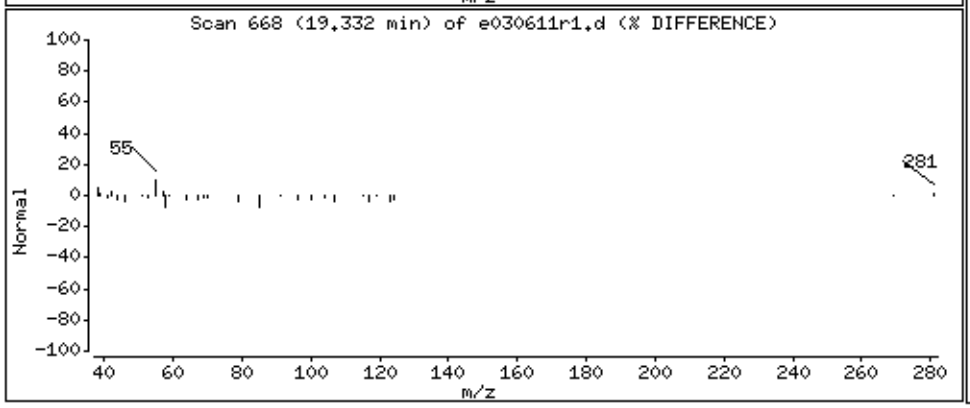
65 4-Methyl-2-pentanone

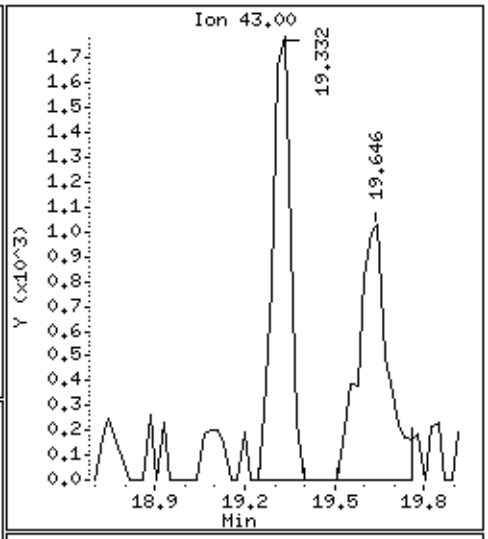
Concentration: 0.1666 PPBV

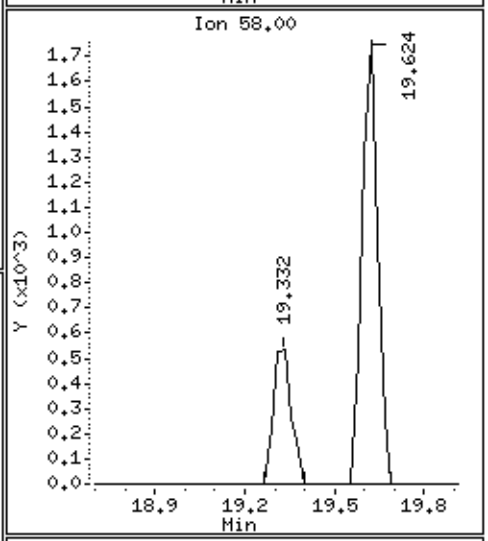


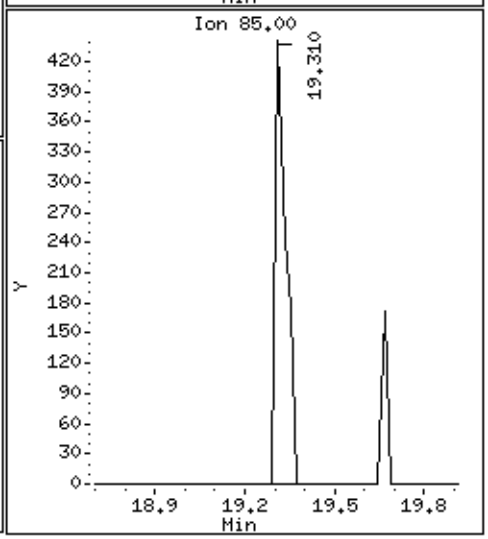












Data File: /chem/msde.i/06Mar2015.b/e030611r1.d

Date : 06-MAR-2015 12:57

Client ID:

Instrument: msde.i

Sample Info: 150mL #35132

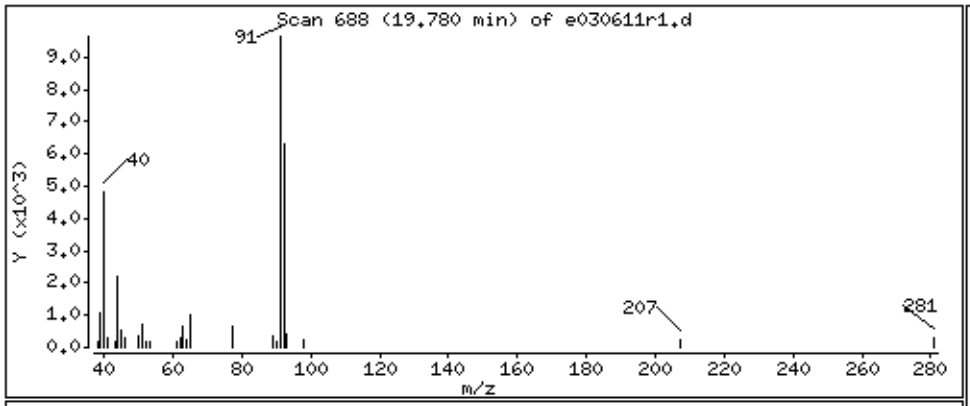
Operator: sab

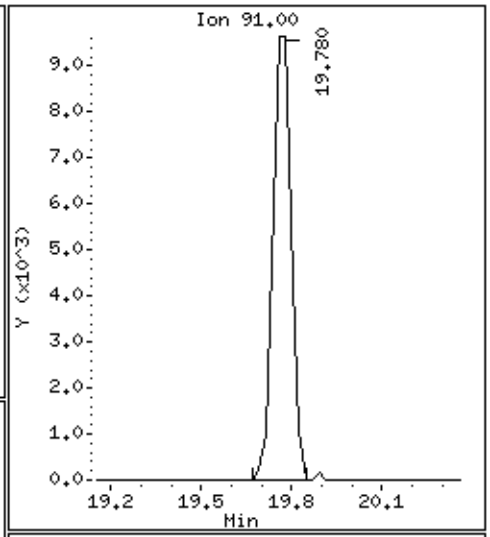
Column phase: RTx-624

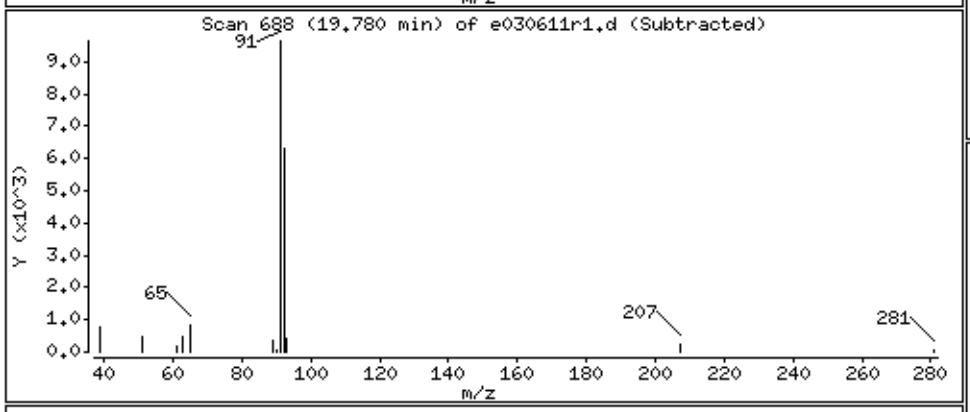
Column diameter: 0.32

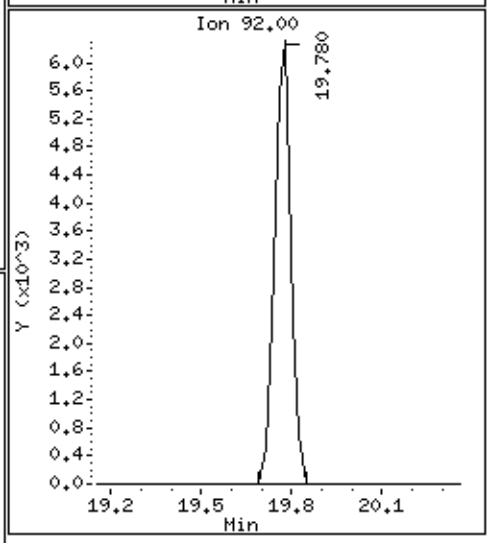
68 Toluene

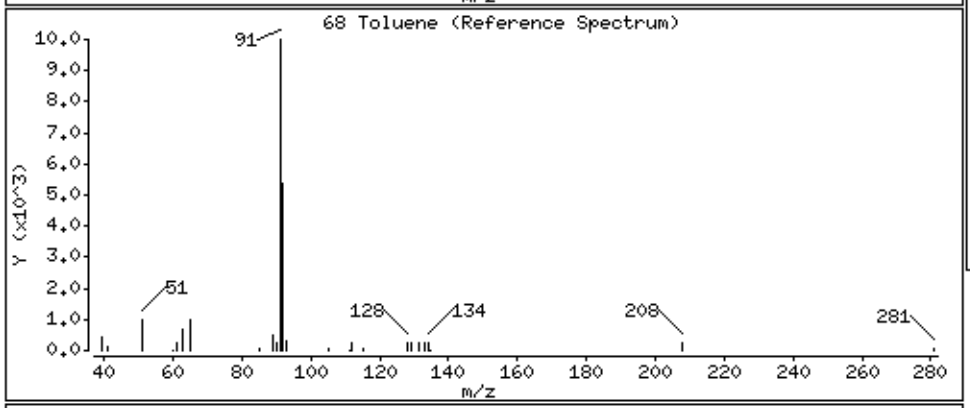
Concentration: 0.5781 PPBV

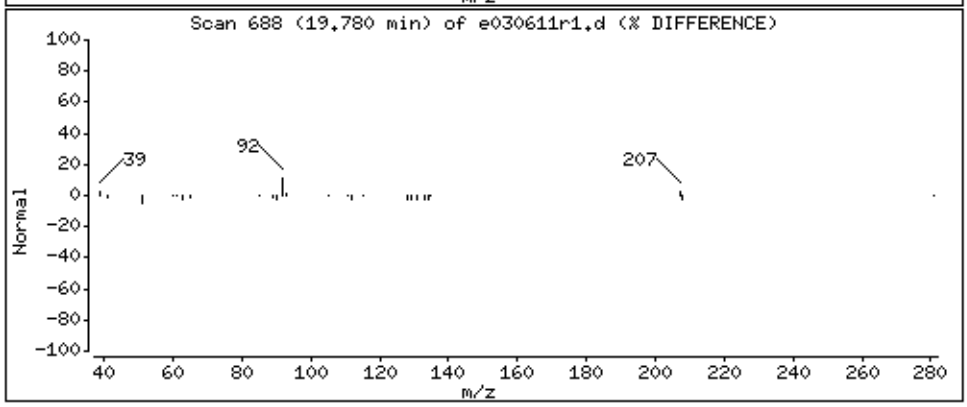












Data File: /chem/msde.i/06Mar2015.b/e030611r1.d

Date : 06-MAR-2015 12:57

Client ID:

Instrument: msde.i

Sample Info: 150mL #35132

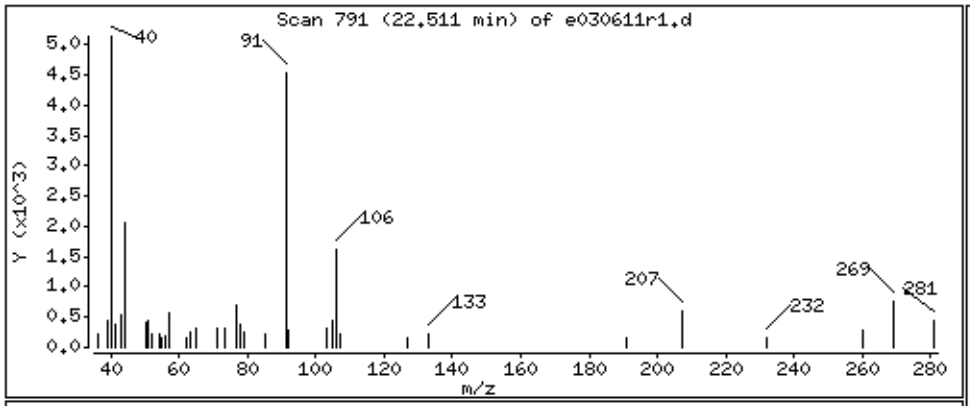
Operator: sab

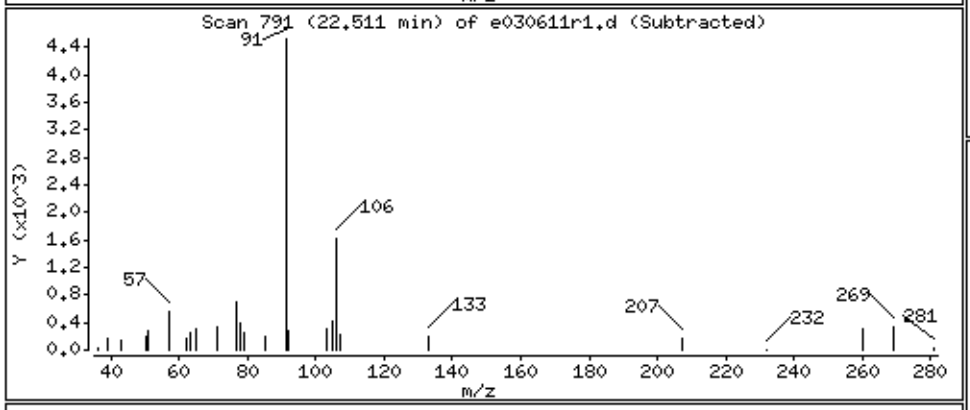
Column phase: RTx-624

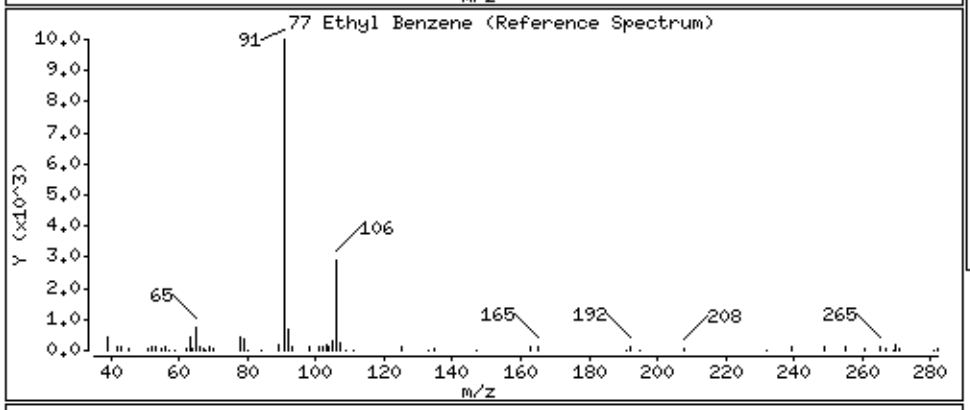
Column diameter: 0.32

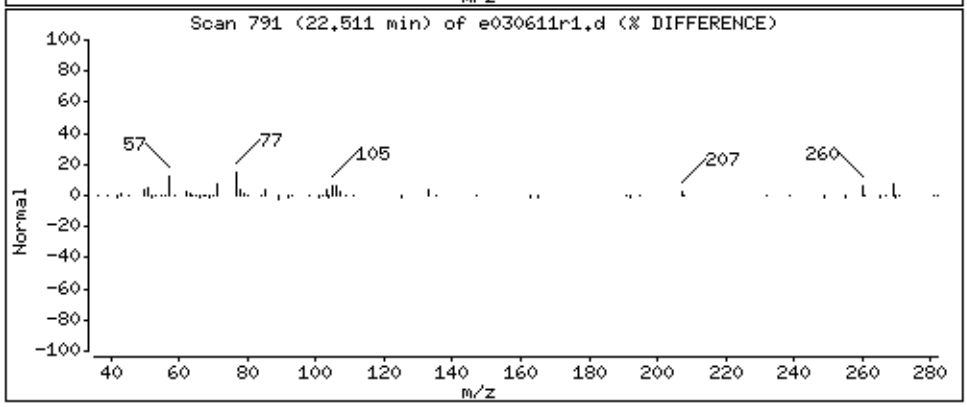
77 Ethyl Benzene

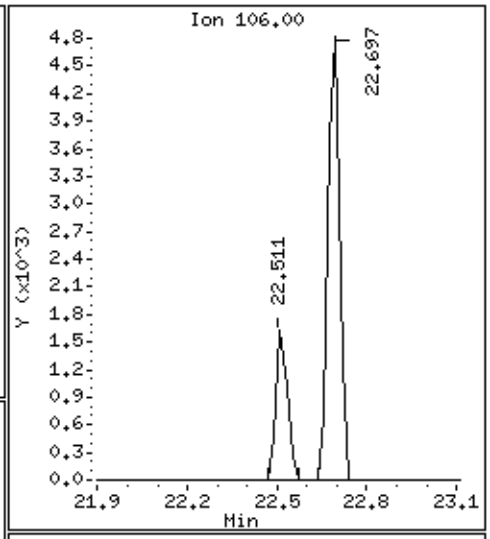
Concentration: 0.1326 PPBV

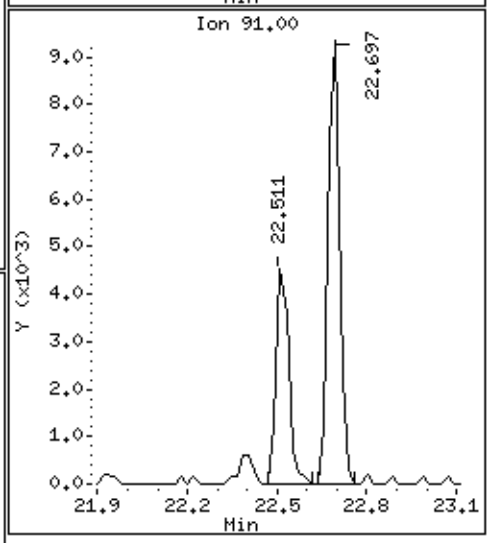












Data File: /chem/msde.i/06Mar2015.b/e030611r1.d

Date : 06-MAR-2015 12:57

Client ID:

Instrument: msde.i

Sample Info: 150mL #35132

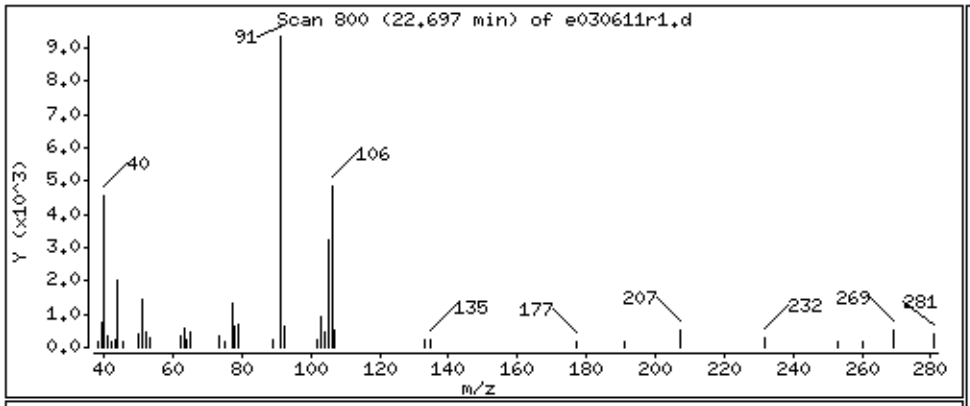
Operator: sab

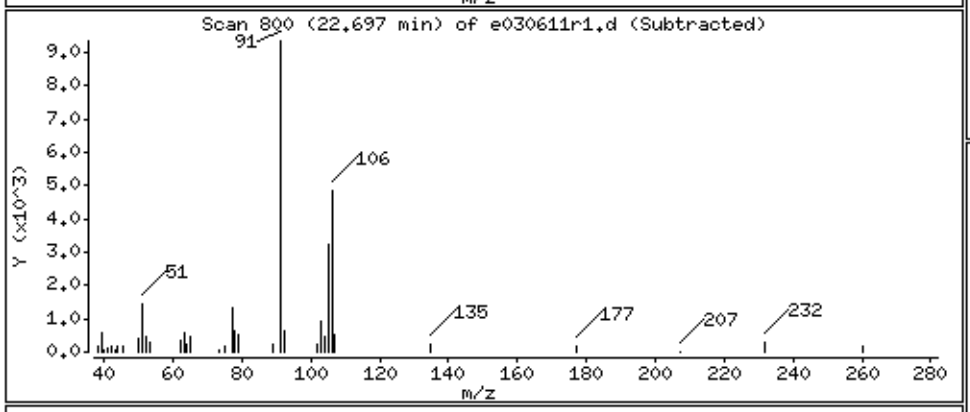
Column phase: RTx-624

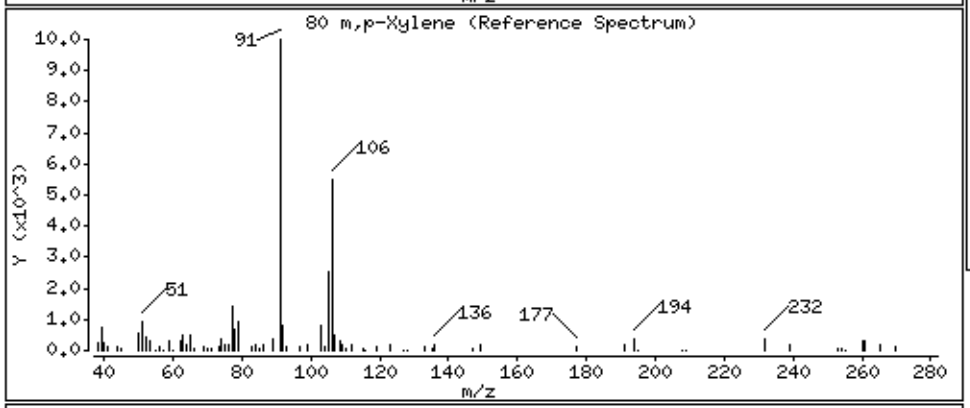
Column diameter: 0.32

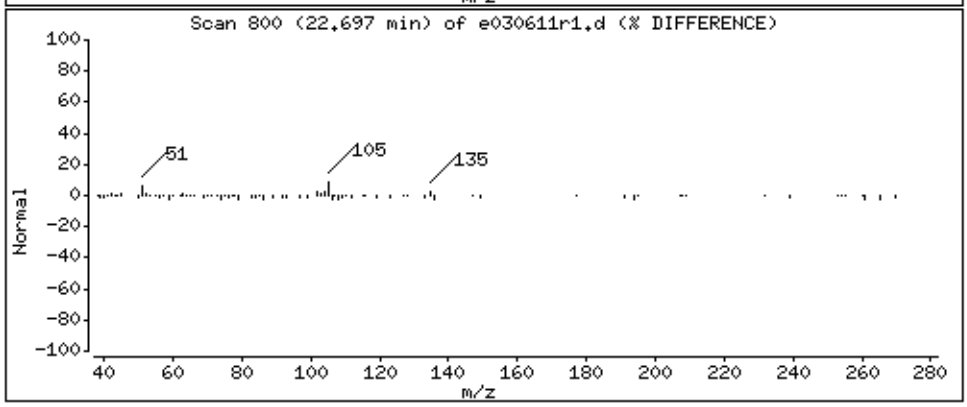
80 m,p-Xylene

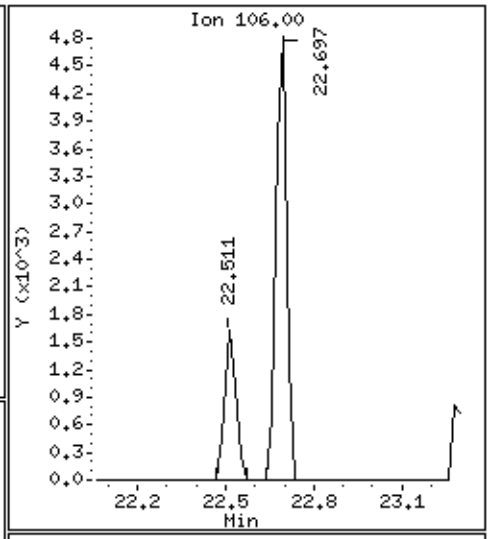
Concentration: 0.3363 PPBV

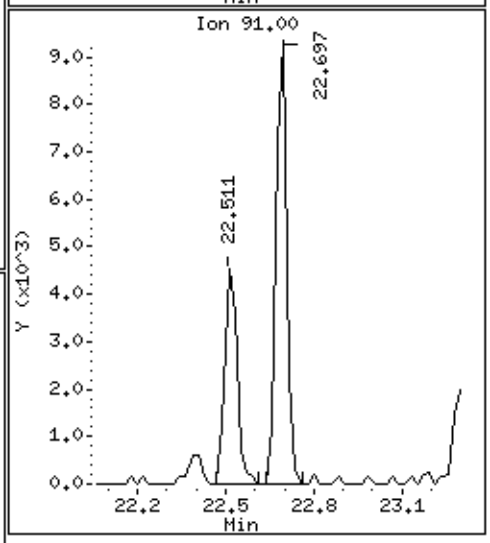












Data File: /chem/msde.i/06Mar2015.b/e030611r1.d

Date : 06-MAR-2015 12:57

Client ID:

Instrument: msde.i

Sample Info: 150mL #35132

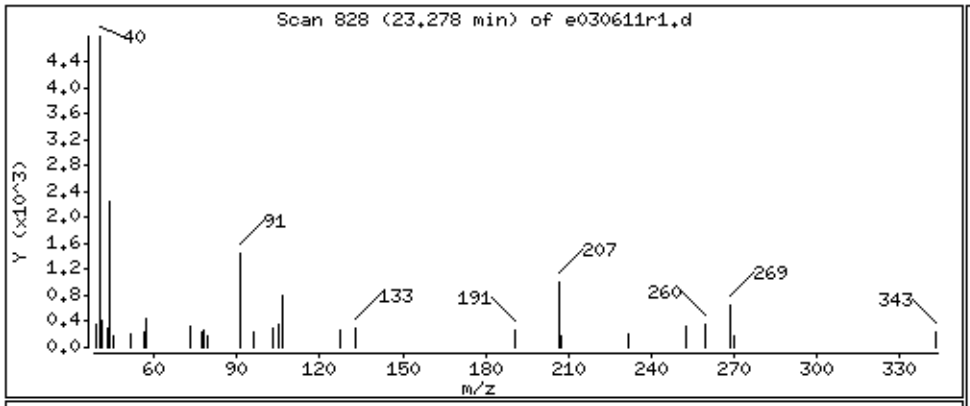
Operator: sab

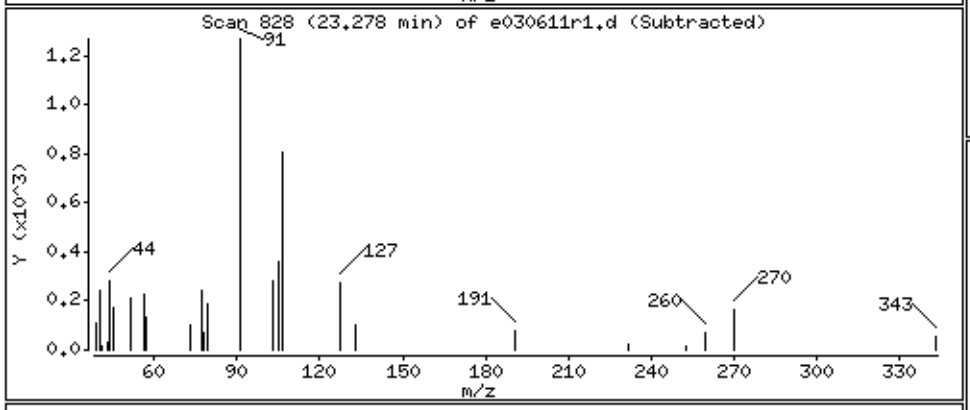
Column phase: RTx-624

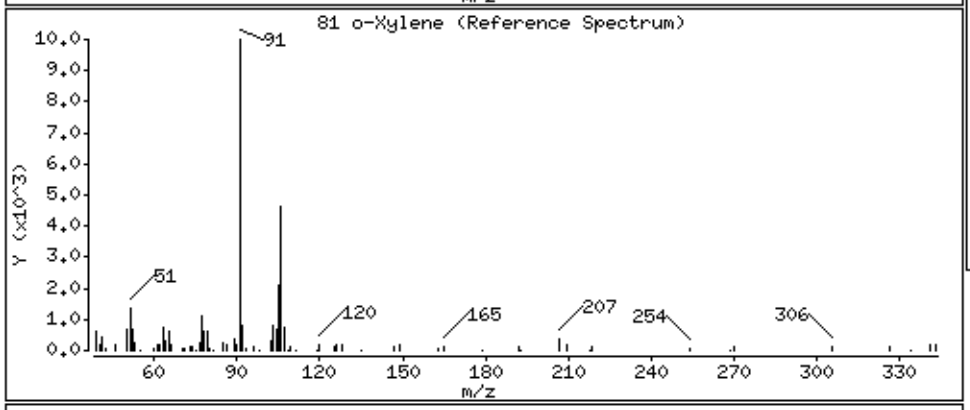
Column diameter: 0.32

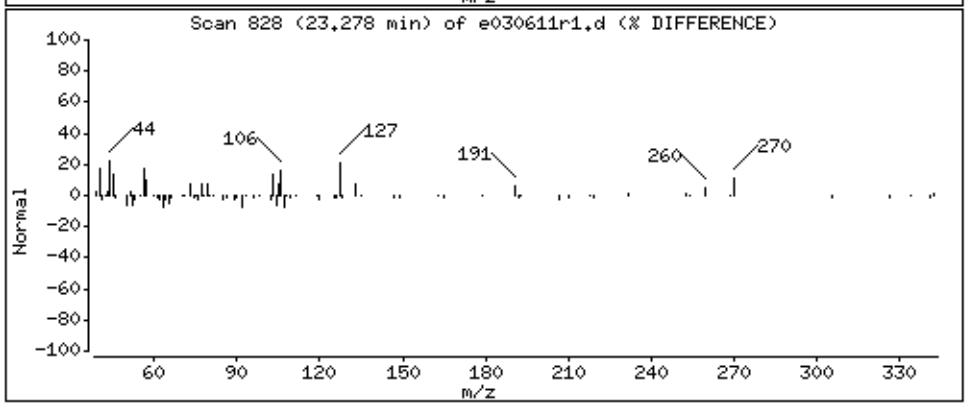
81 o-Xylene

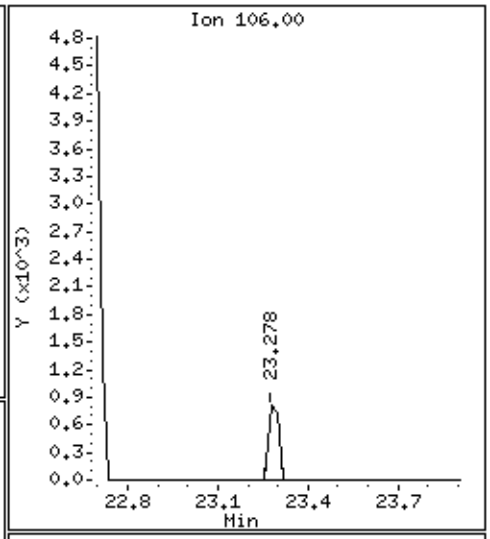
Concentration: 0.05358 PPBV

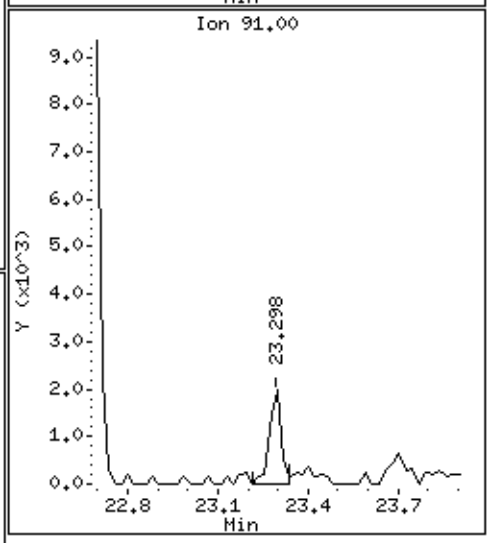












Data File: /chem/msde.i/06Mar2015.b/e030611r1.d

Date : 06-MAR-2015 12:57

Client ID:

Instrument: msde.i

Sample Info: 150mL #35132

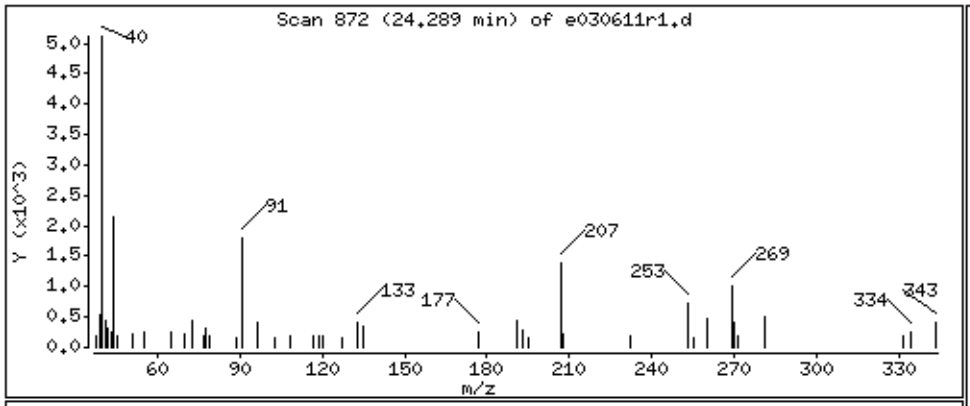
Operator: sab

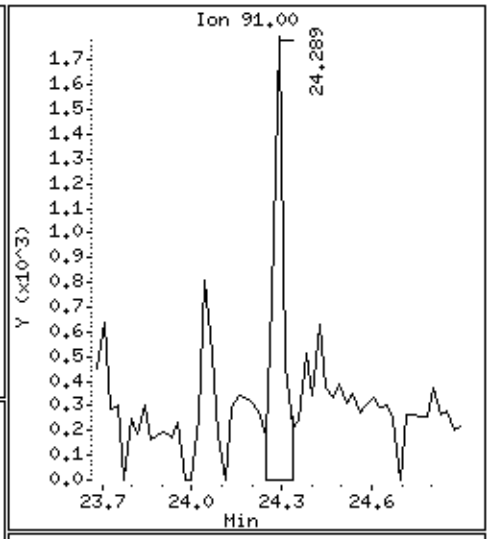
Column phase: RTx-624

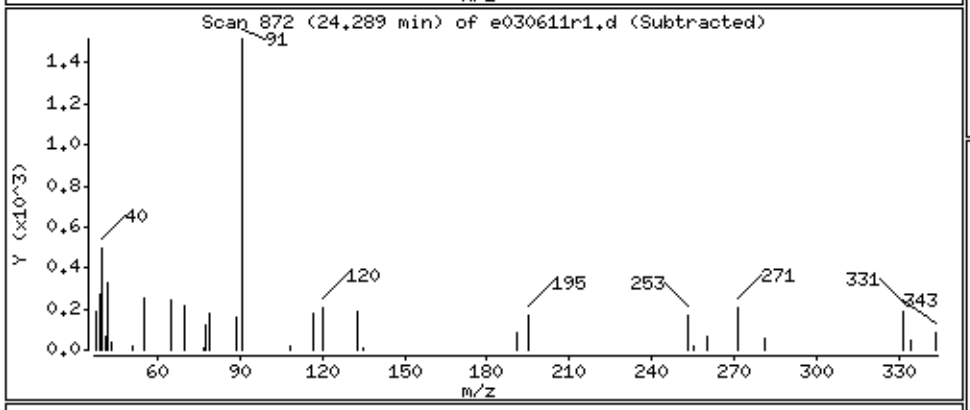
Column diameter: 0.32

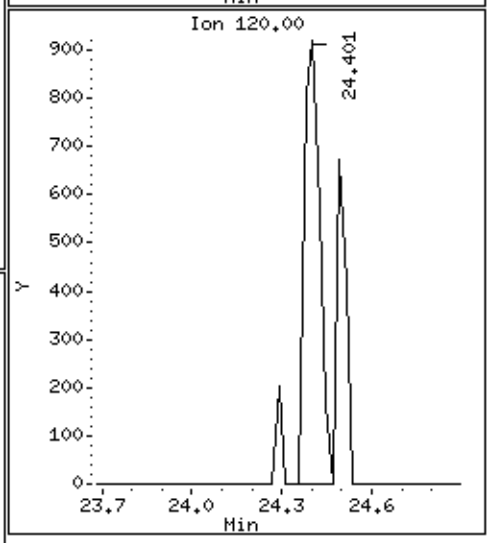
90 Propylbenzene

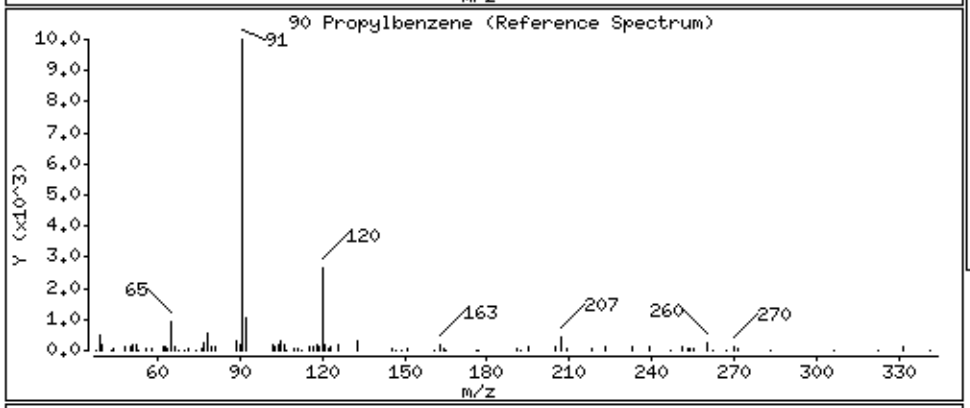
Concentration: 0.03858 PPBV

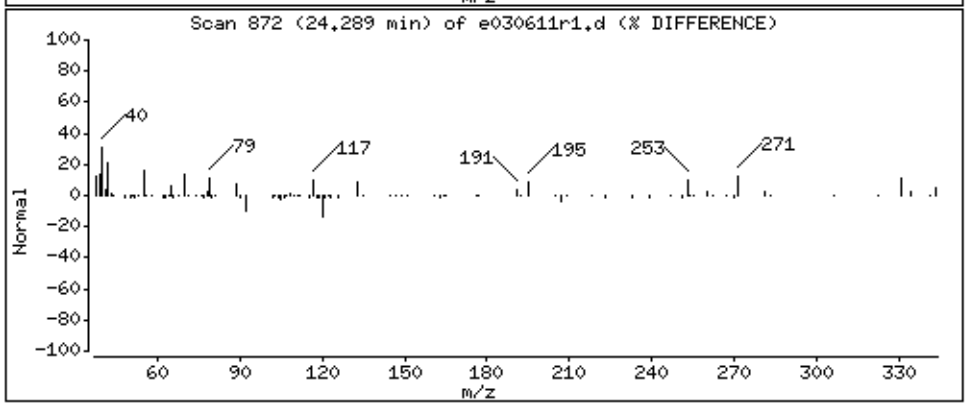












Data File: /chem/msde.i/06Mar2015.b/e030611r1.d

Date : 06-MAR-2015 12:57

Client ID:

Instrument: msde.i

Sample Info: 150mL #35132

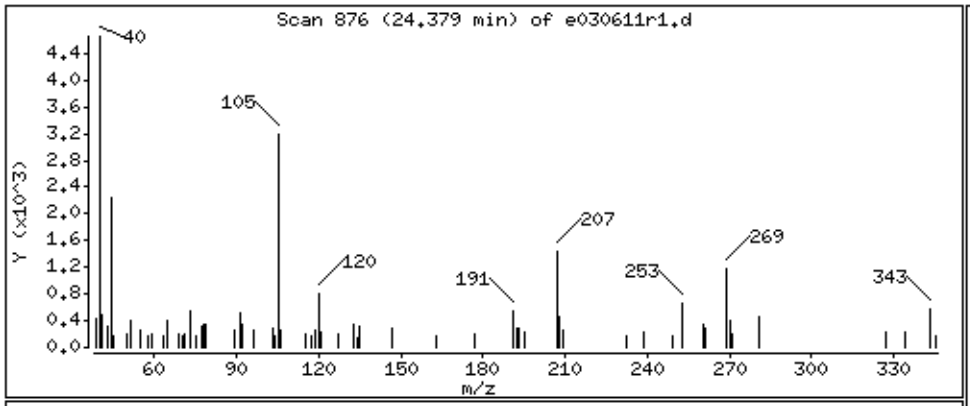
Operator: sab

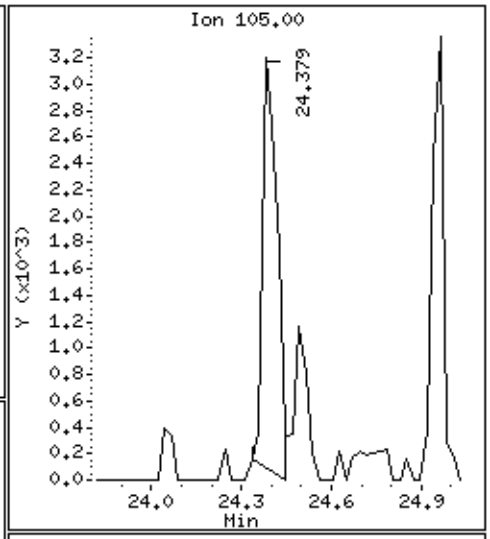
Column phase: RTx-624

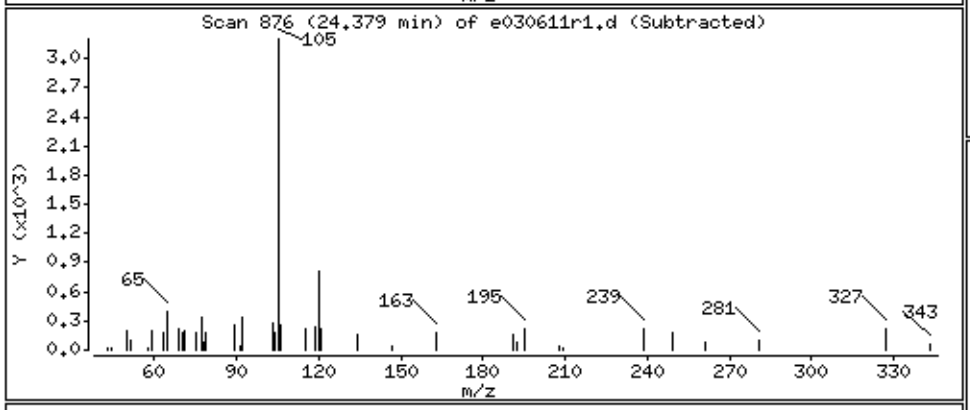
Column diameter: 0.32

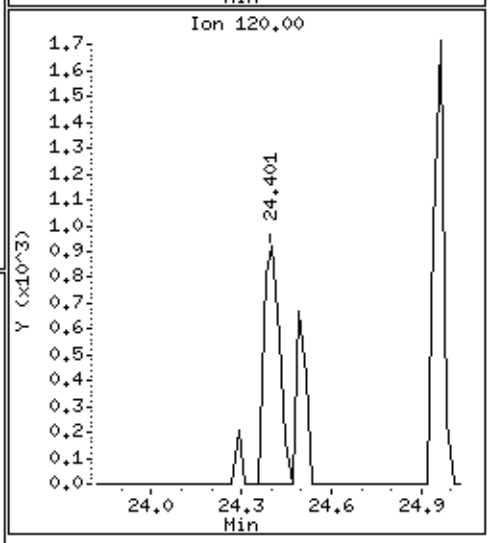
92 4-Ethyltoluene

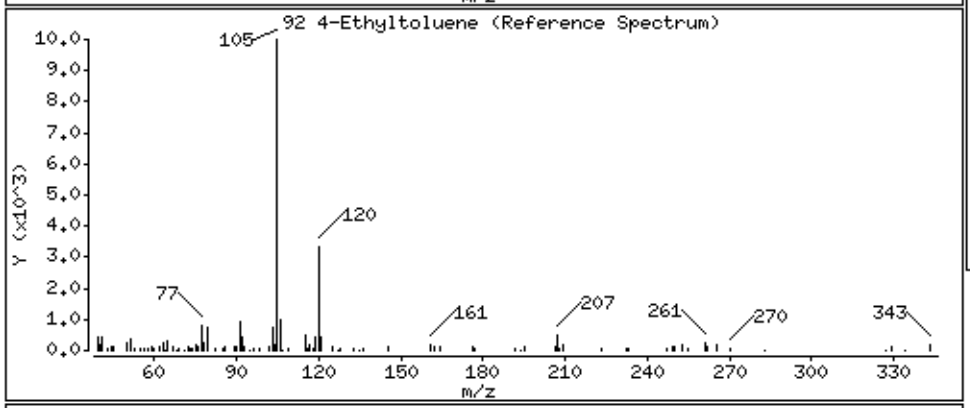
Concentration: 0.1061 PPBV

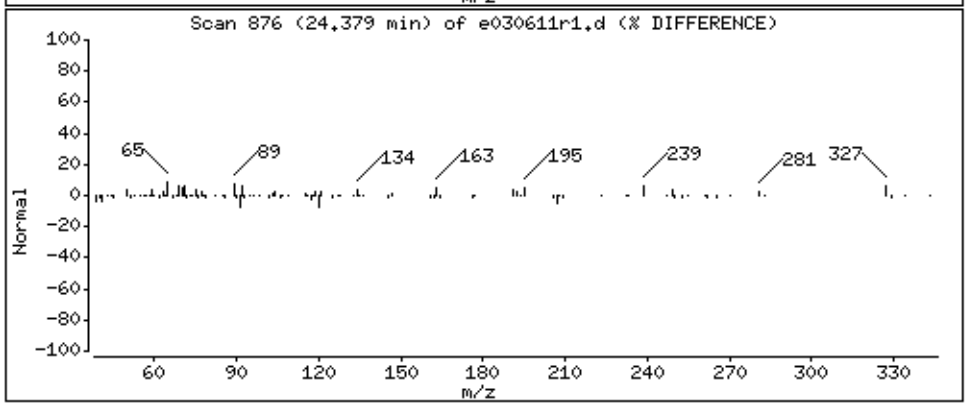












Data File: /chem/msde.i/06Mar2015.b/e030611r1.d

Date : 06-MAR-2015 12:57

Client ID:

Instrument: msde.i

Sample Info: 150mL #35132

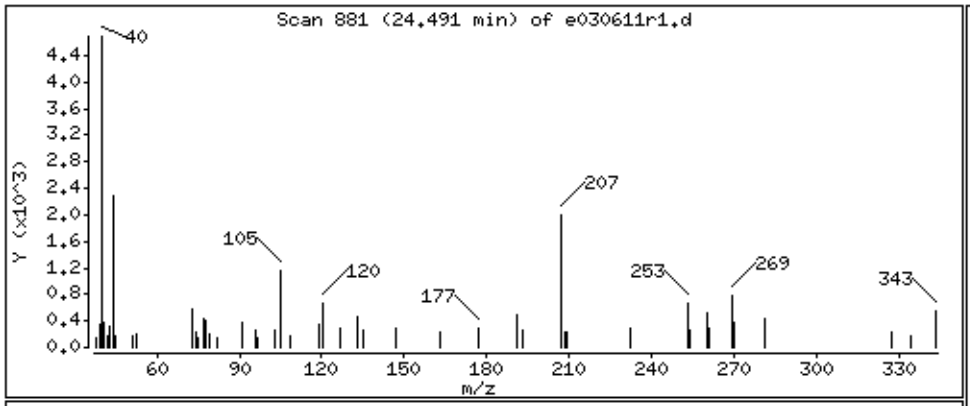
Operator: sab

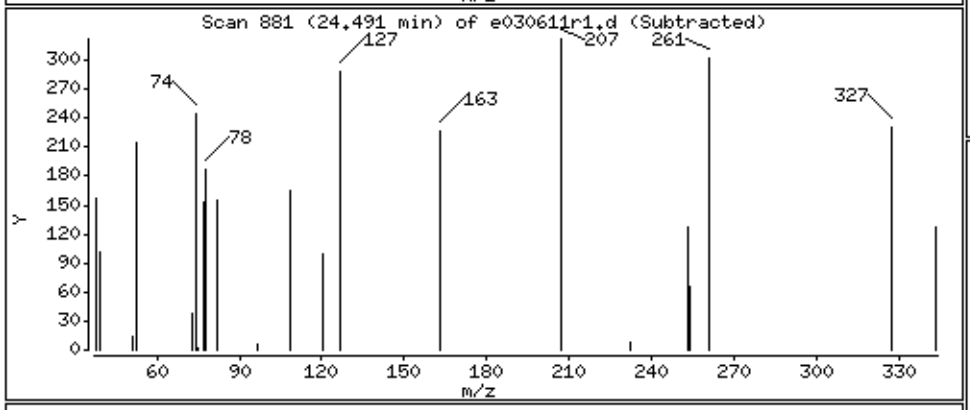
Column phase: RTx-624

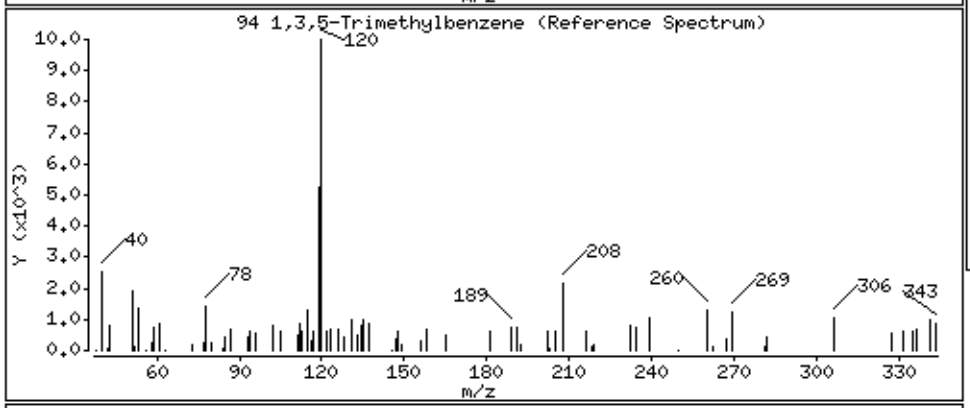
Column diameter: 0.32

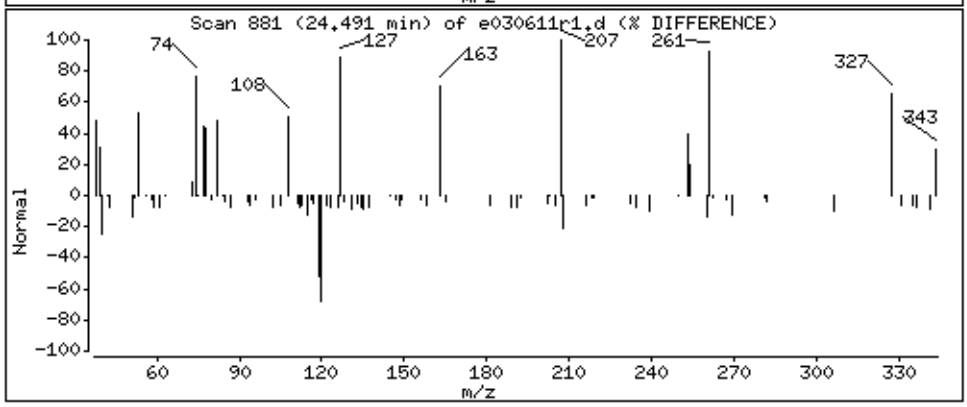
94 1,3,5-Trimethylbenzene

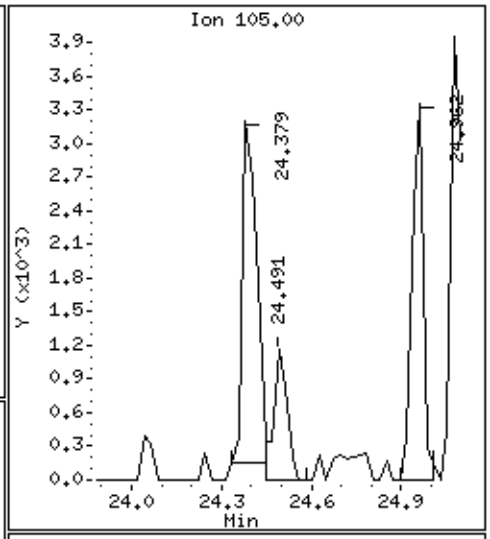
Concentration: 0.04402 PPBV

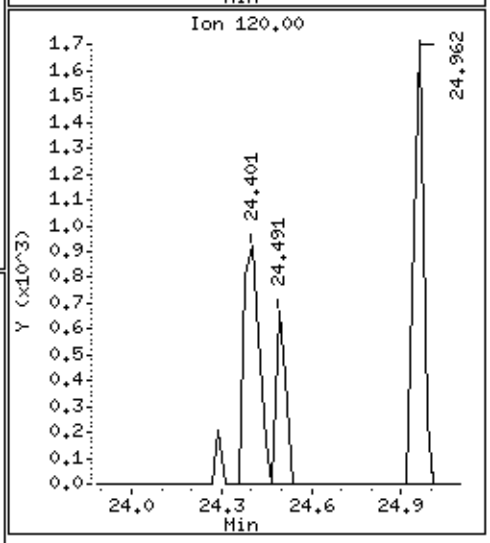












Data File: /chem/msde.i/06Mar2015.b/e030611r1.d

Date : 06-MAR-2015 12:57

Client ID:

Instrument: msde.i

Sample Info: 150mL #35132

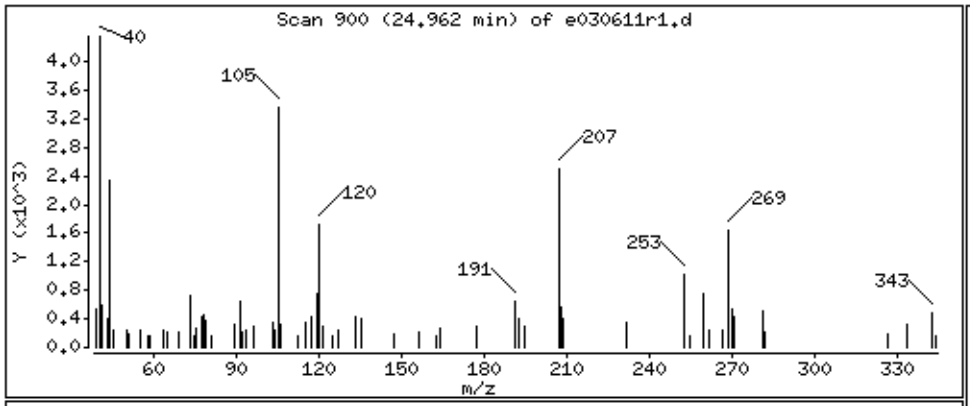
Operator: sab

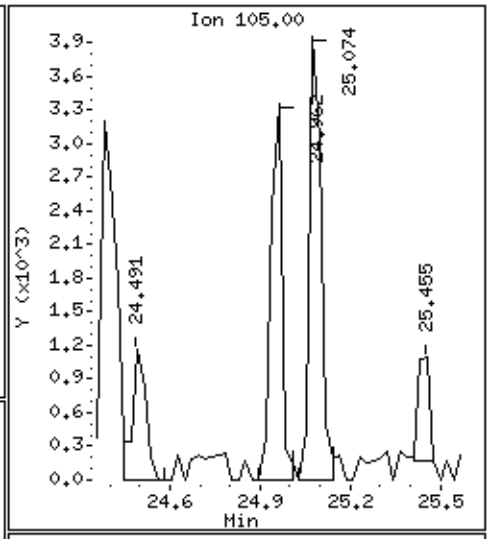
Column phase: RTx-624

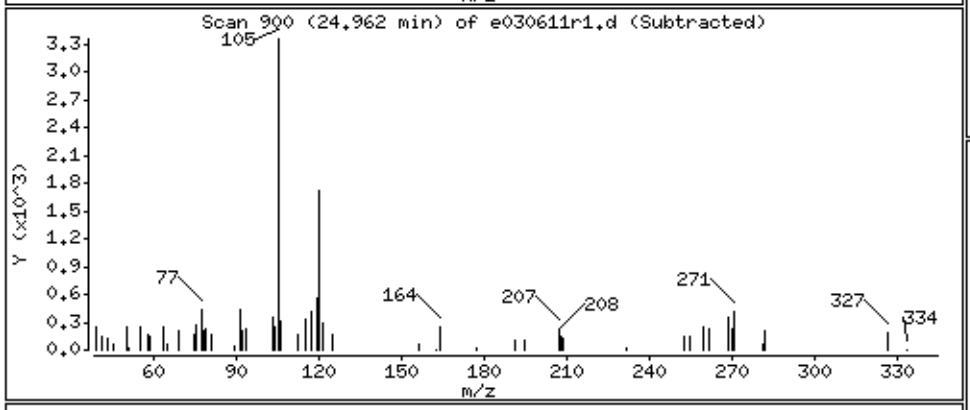
Column diameter: 0.32

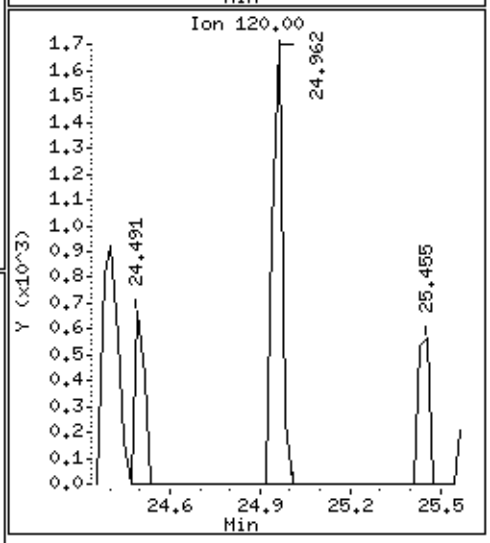
98 1,2,4-Trimethylbenzene

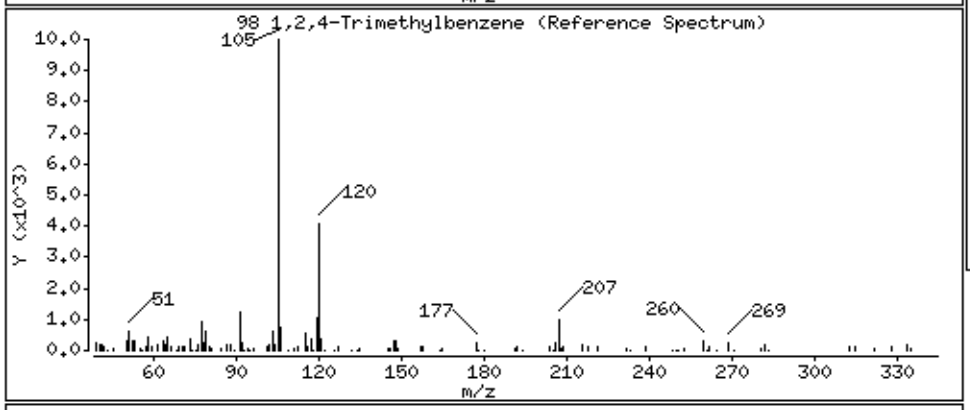
Concentration: 0.1110 PPBV

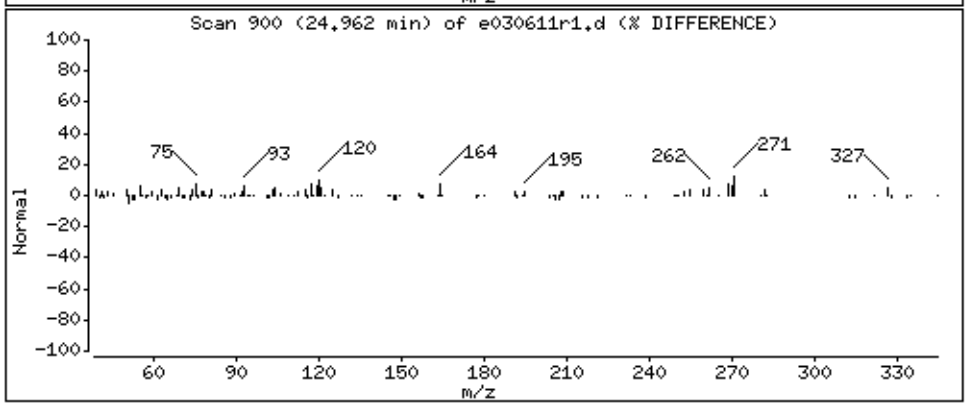












Data File: /chem/msde.i/06Mar2015.b/e030611r1.d

Date : 06-MAR-2015 12:57

Client ID:

Instrument: msde.i

Sample Info: 150mL #35132

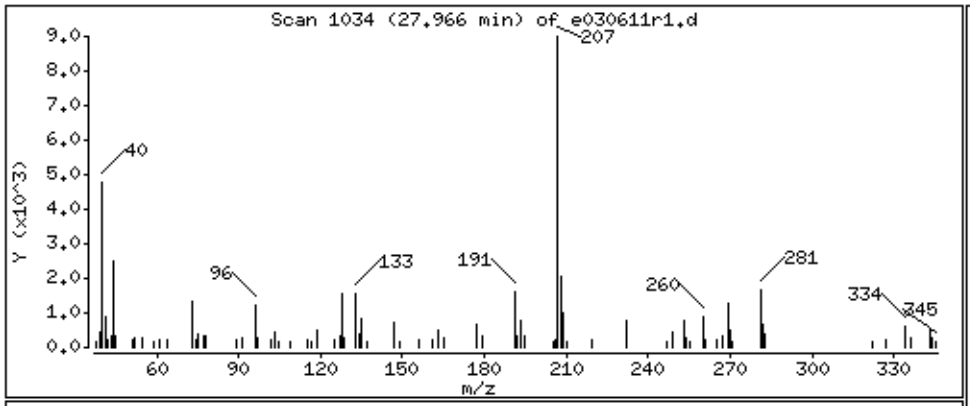
Operator: sab

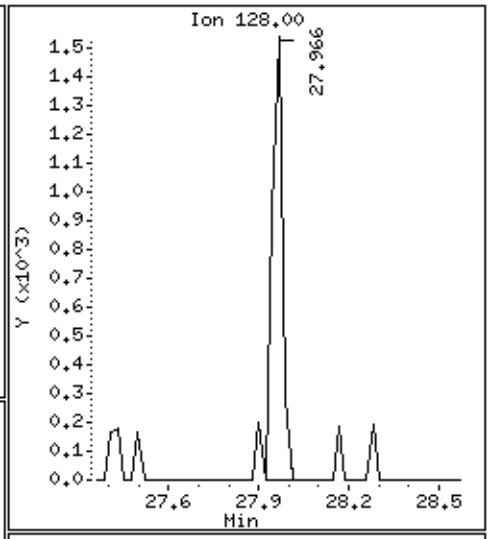
Column phase: RTx-624

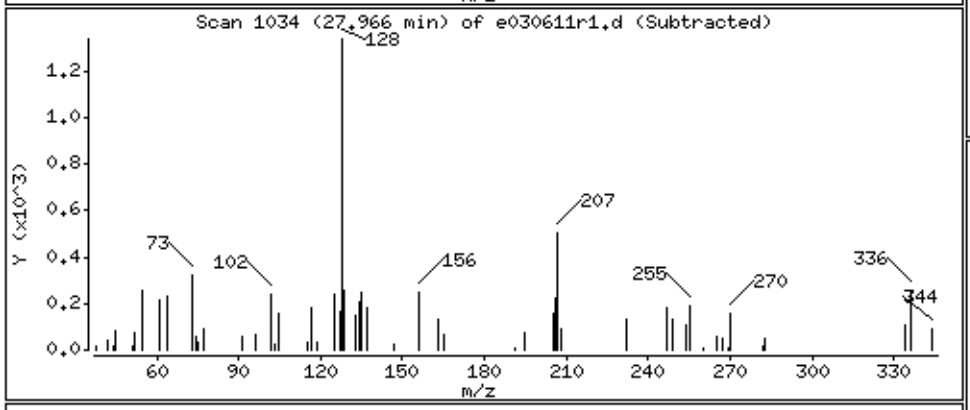
Column diameter: 0.32

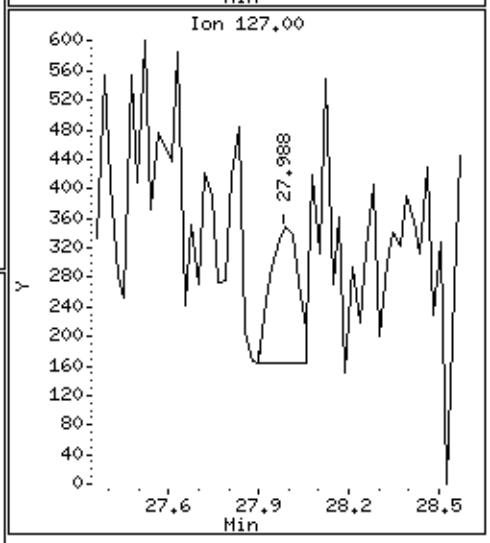
114 Naphthalene

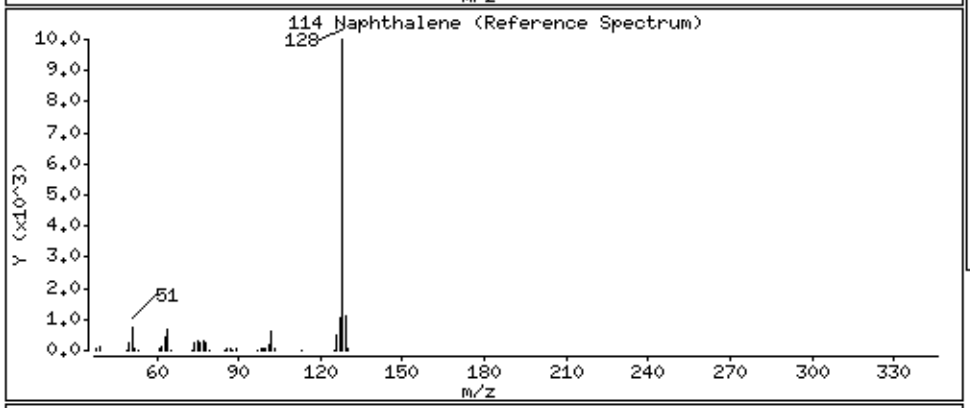
Concentration: 0.05235 PPBV

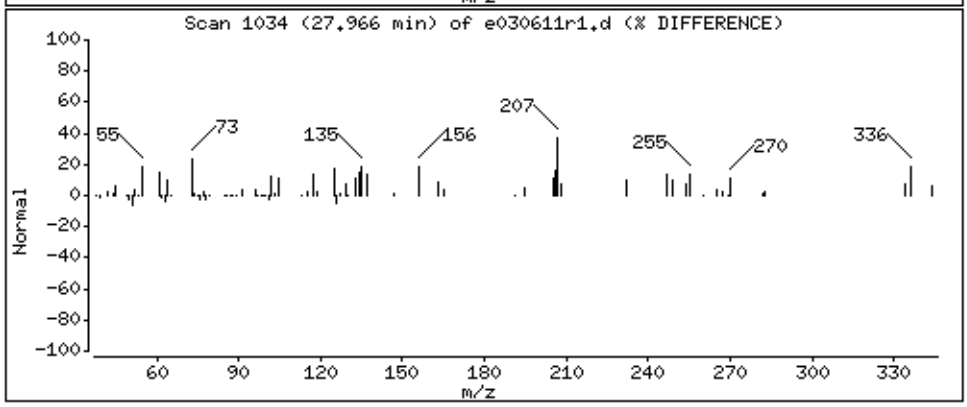












QC Results and Raw Data

eurofins | Air Toxics

Client Sample ID: Lab Blank

Lab ID#: 1503058AR1-05A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**e030606r1**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 3/6/15 08:28 AM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.10	Not Detected	0.49	Not Detected
Freon 114	0.10	Not Detected	0.70	Not Detected
Chloromethane	0.50	Not Detected	1.0	Not Detected
Vinyl Chloride	0.10	Not Detected	0.26	Not Detected
1,3-Butadiene	0.10	Not Detected	0.22	Not Detected
Bromomethane	0.50	0.060 J	1.9	0.23 J
Chloroethane	0.50	Not Detected	1.3	Not Detected
Freon 11	0.10	Not Detected	0.56	Not Detected
Ethanol	1.0	Not Detected	1.9	Not Detected
Freon 113	0.10	Not Detected	0.77	Not Detected
1,1-Dichloroethene	0.10	Not Detected	0.40	Not Detected
Acetone	0.50	0.10 J	1.2	0.24 J
2-Propanol	0.50	Not Detected	1.2	Not Detected
Carbon Disulfide	0.50	0.21 J	1.6	0.66 J
3-Chloropropene	0.50	Not Detected	1.6	Not Detected
Methylene Chloride	0.20	Not Detected	0.69	Not Detected
Methyl tert-butyl ether	0.10	Not Detected	0.36	Not Detected
trans-1,2-Dichloroethene	0.10	Not Detected	0.40	Not Detected
Hexane	0.10	Not Detected	0.35	Not Detected
1,1-Dichloroethane	0.10	Not Detected	0.40	Not Detected
2-Butanone (Methyl Ethyl Ketone)	0.50	Not Detected	1.5	Not Detected
cis-1,2-Dichloroethene	0.10	Not Detected	0.40	Not Detected
Tetrahydrofuran	0.50	Not Detected	1.5	Not Detected
Chloroform	0.10	Not Detected	0.49	Not Detected
1,1,1-Trichloroethane	0.10	Not Detected	0.54	Not Detected
Cyclohexane	0.10	Not Detected	0.34	Not Detected
Carbon Tetrachloride	0.10	Not Detected	0.63	Not Detected
2,2,4-Trimethylpentane	0.50	Not Detected	2.3	Not Detected
Benzene	0.10	0.017 J	0.32	0.056 J
1,2-Dichloroethane	0.10	Not Detected	0.40	Not Detected
Heptane	0.10	Not Detected	0.41	Not Detected
Trichloroethene	0.10	Not Detected	0.54	Not Detected
1,2-Dichloropropane	0.10	Not Detected	0.46	Not Detected
1,4-Dioxane	0.10	Not Detected	0.36	Not Detected
Bromodichloromethane	0.10	Not Detected	0.67	Not Detected
cis-1,3-Dichloropropene	0.10	Not Detected	0.45	Not Detected
4-Methyl-2-pentanone	0.10	Not Detected	0.41	Not Detected
Toluene	0.10	Not Detected	0.38	Not Detected
trans-1,3-Dichloropropene	0.10	Not Detected	0.45	Not Detected
1,1,2-Trichloroethane	0.10	Not Detected	0.54	Not Detected
Tetrachloroethene	0.10	Not Detected	0.68	Not Detected
2-Hexanone	0.50	Not Detected	2.0	Not Detected

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Client Sample ID: Lab Blank

Lab ID#: 1503058AR1-05A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**e030606r1**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 3/6/15 08:28 AM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Dibromochloromethane	0.10	Not Detected	0.85	Not Detected
1,2-Dibromoethane (EDB)	0.10	Not Detected	0.77	Not Detected
Chlorobenzene	0.10	Not Detected	0.46	Not Detected
Ethyl Benzene	0.10	Not Detected	0.43	Not Detected
m,p-Xylene	0.10	Not Detected	0.43	Not Detected
o-Xylene	0.10	Not Detected	0.43	Not Detected
Styrene	0.10	Not Detected	0.42	Not Detected
Bromoform	0.10	Not Detected	1.0	Not Detected
Cumene	0.10	Not Detected	0.49	Not Detected
1,1,2,2-Tetrachloroethane	0.10	Not Detected	0.69	Not Detected
Propylbenzene	0.10	Not Detected	0.49	Not Detected
4-Ethyltoluene	0.10	Not Detected	0.49	Not Detected
1,3,5-Trimethylbenzene	0.10	Not Detected	0.49	Not Detected
1,2,4-Trimethylbenzene	0.10	Not Detected	0.49	Not Detected
1,3-Dichlorobenzene	0.10	0.017 J	0.60	0.10 J
1,4-Dichlorobenzene	0.10	Not Detected	0.60	Not Detected
alpha-Chlorotoluene	0.10	Not Detected	0.52	Not Detected
1,2-Dichlorobenzene	0.10	0.023 J	0.60	0.14 J
1,2,4-Trichlorobenzene	0.50	0.058 J	3.7	0.43 J
Hexachlorobutadiene	0.50	0.022 J	5.3	0.23 J
Naphthalene	0.50	Not Detected	2.6	Not Detected

J = Estimated value.

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	108	70-130
Toluene-d8	100	70-130
4-Bromofluorobenzene	89	70-130

Eurofins Air Toxics Inc.

EPA TO-15/Modified TO14A

Data file : /chem/msde.i/06Mar2015.b/e030606r1.d
Lab Smp Id: Lab Blank Client Smp ID: Lab Blank
Inj Date : 06-MAR-2015 08:28
Operator : sab Inst ID: msde.i
Smp Info : 250mL#34034
Misc Info : Humid
Comment : Low-Level/GC-MS
Method : /chem/msde.i/06Mar2015.b/e15l0210b.m
Meth Date : 26-Jun-2015 12:46 dbailey Quant Type: ISTD
Cal Date : 02-MAR-2015 15:11 Cal File: e030209.d
Als bottle: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: T015Nmdl.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
* 46 Bromochloromethane						CAS #: 74-97-5	
15.611	15.610 (1.000)	130	199585	5.00000		80.00- 120.00	100.00
15.611	15.610 (1.000)	128	155096			0.00- 30.00	77.71
15.611	15.610 (1.000)	49	237504			0.00- 30.00	119.00
* 58 1,4-Difluorobenzene						CAS #: 540-36-3	
16.987	16.987 (1.000)	114	754919	5.00000		80.00- 120.00	100.00
16.987	16.987 (1.000)	88	103235			0.00- 30.00	13.68
* 75 Chlorobenzene-d5						CAS #: 3114-55-4	
22.407	22.407 (1.000)	117	724437	5.00000		80.00- 120.00	100.00
22.386	22.407 (1.000)	82	328350			0.00- 30.00	45.32
$ 54 1,2-Dichloroethane-d4						CAS #: 17060-07-0	
16.433	16.433 (1.053)	65	227866	5.41200	5.412	80.00- 120.00	100.00
16.433	16.433 (1.053)	67	120991			25.66- 85.66	53.10

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
$ 67 Toluene-d8					CAS #: 2037-26-5		
19.624	19.623 (1.155)	98	713737	4.99542	4.995	80.00- 120.00	100.00
19.624	19.623 (1.155)	70	74937			0.00- 39.92	10.50
19.624	19.623 (1.155)	100	471446			36.14- 96.14	66.05
$ 87 Bromofluorobenzene					CAS #: 460-00-4		
24.042	24.042 (1.073)	174	373668	4.45905	4.459	80.00- 120.00	100.00
24.042	24.042 (1.073)	95	442512			81.46- 141.46	118.42
24.042	24.042 (1.073)	176	357198			67.17- 127.17	95.59
12 Bromomethane					CAS #: 74-83-9		
9.798	9.746 (0.628)	94	2393	0.05997	0.05997	80.00- 120.00	100.00(a)
9.764	9.746 (0.625)	96	2186			62.88- 122.88	91.35
22 Acetone					CAS #: 67-64-1		
12.595	12.575 (0.807)	58	2897	0.10235	0.1023	80.00- 120.00	100.00(a)
12.576	12.575 (0.806)	43	10714			255.02- 315.02	369.79
23 Carbon Disulfide					CAS #: 75-15-0		
12.671	12.671 (0.812)	76	32311	0.21272	0.2127	80.00- 120.00	100.00(a)
53 Benzene					CAS #: 71-43-2		
16.433	16.433 (0.967)	78	2556	0.01742	0.01742	80.00- 120.00	100.00(a)
16.433	16.433 (0.967)	77	598			0.00- 53.40	23.40
101 1,3-Dichlorobenzene					CAS #: 541-73-1		
25.343	25.343 (1.131)	146	2817	0.01674	0.01674	80.00- 120.00	100.00(a)
25.343	25.343 (1.131)	148	1993			32.23- 92.23	70.74
25.343	25.343 (1.131)	111	1682			6.65- 66.65	59.71
108 1,2-Dichlorobenzene					CAS #: 95-50-1		
25.881	25.881 (1.155)	146	3604	0.02340	0.02340	80.00- 120.00	100.00(a)
25.881	25.881 (1.155)	148	2234			32.48- 92.48	61.98
25.881	25.881 (1.155)	111	1459			7.93- 67.93	40.49
112 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
27.630	27.629 (1.233)	180	6254	0.05821	0.05821	80.00- 120.00	100.00(a)
27.630	27.629 (1.233)	182	6044			66.76- 126.76	96.64
113 Hexachlorobutadiene					CAS #: 87-68-3		
27.719	27.719 (1.237)	225	1800	0.02152	0.02152	80.00- 120.00	100.00(a)
27.742	27.719 (1.238)	223	1618			32.55- 92.55	89.84

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: msde.i
Lab File ID: e030606r1.d
Lab Smp Id: Lab Blank
Analysis Type: VOA
Quant Type: ISTD
Operator: sab
Method File: /chem/msde.i/06Mar2015.b/e15l0210b.m
Misc Info: Humid

Calibration Date: 06-MAR-2015
Calibration Time: 05:31
Client Smp ID: Lab Blank
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
46 Bromochloromethan	236898	142139	331657	199585	-15.75
58 1,4-Difluorobenze	878027	526816	1229238	754919	-14.02
75 Chlorobenzene-d5	818204	490922	1145486	724437	-11.46

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
46 Bromochloromethan	15.61	15.28	15.94	15.61	0.00
58 1,4-Difluorobenze	16.99	16.66	17.32	16.99	0.00
75 Chlorobenzene-d5	22.41	22.08	22.74	22.41	0.00

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

Report Date: 26-Jun-2015 12:50

Eurofins Air Toxics Inc.

RECOVERY REPORT

Client Name:
Client SDG: 06Mar2015
Sample Matrix: GAS
Fraction: VOA
Lab Smp Id: Lab Blank
Client Smp ID: Lab Blank
Level: LOW
Operator: sab
Data Type: MS DATA
SampleType: SAMPLE
SpikeList File: AT09.spk
Quant Type: ISTD
Sublist File: T015Nmdl.sub
Method File: /chem/msde.i/06Mar2015.b/e15l0210b.m
Misc Info: Humid

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 54 1,2-Dichloroethane	5.000	5.412	108.24	70-130
$ 67 Toluene-d8	5.000	4.995	99.91	70-130
$ 87 Bromofluorobenzene	5.000	4.459	89.18	70-130

Data File: /chem/msde.i/06Mar2015.b/e030606r1.d

Date : 06-MAR-2015 08:28

Client ID: Lab Blank

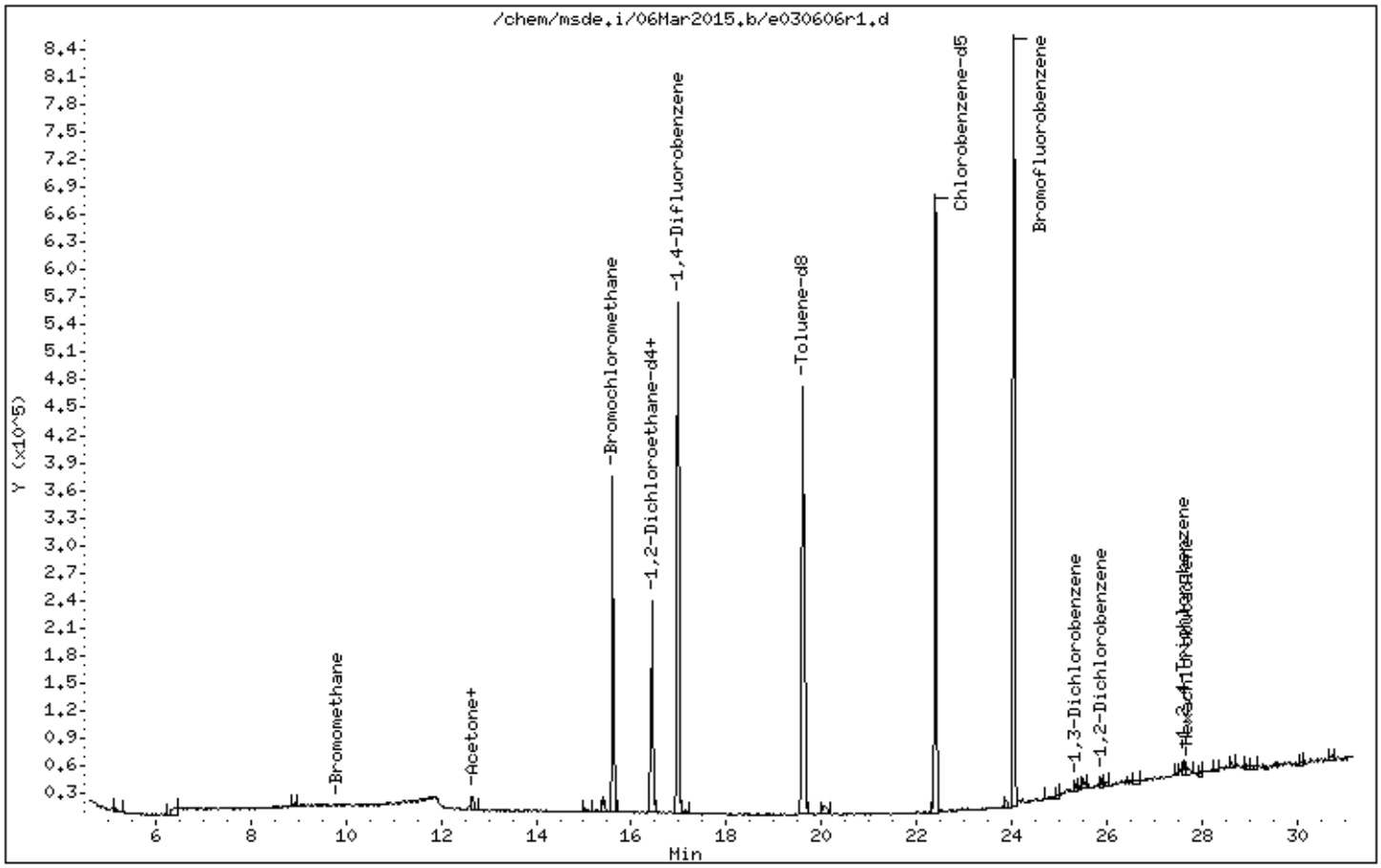
Instrument: msde.i

Sample Info: 250mL#34034

Operator: sab

Column phase: RTx-624

Column diameter: 0.32



Data File: /chem/msde.i/06Mar2015.b/e030606r1.d

Date : 06-MAR-2015 08:28

Client ID: Lab Blank

Instrument: msde.i

Sample Info: 250mL#34034

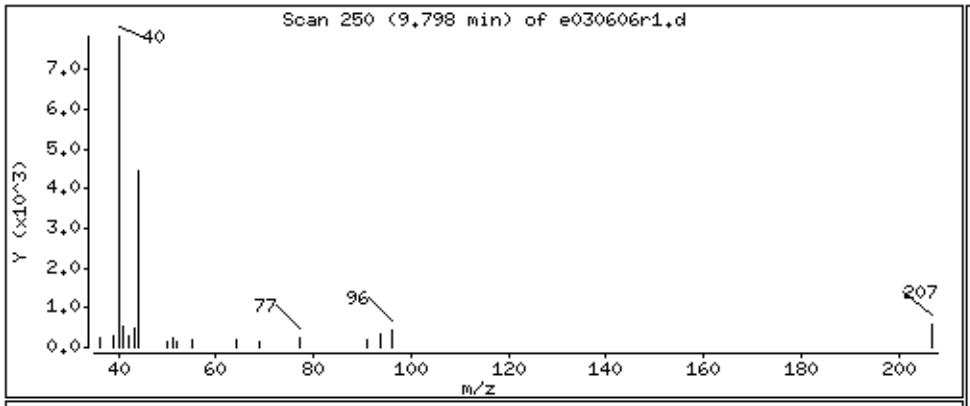
Operator: sab

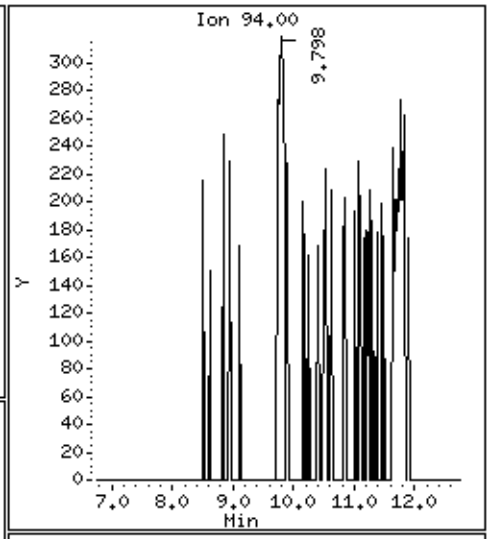
Column phase: RTx-624

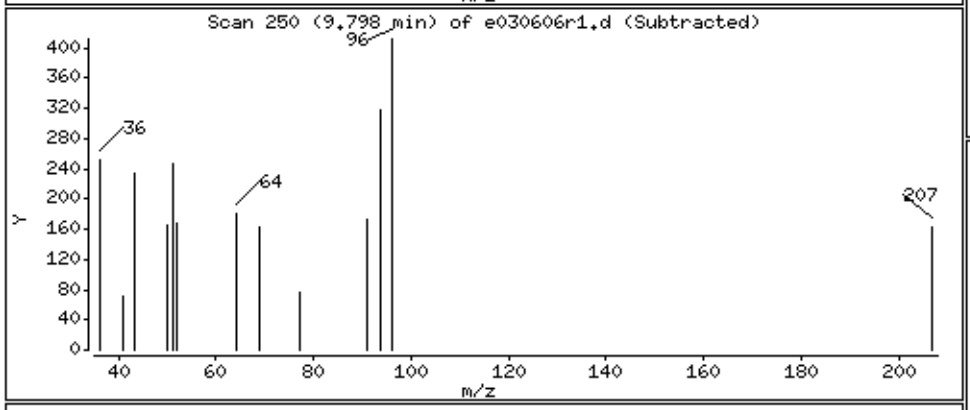
Column diameter: 0.32

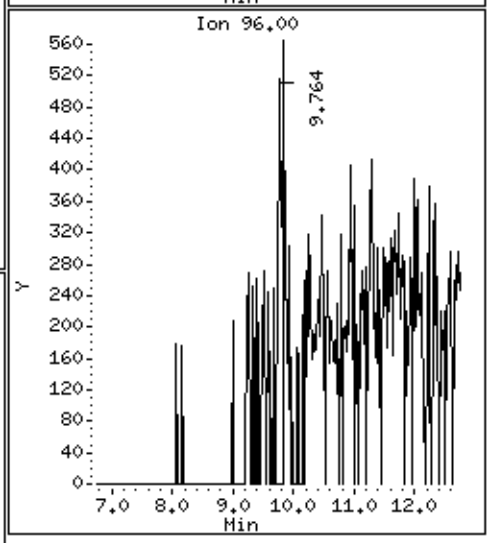
12 Bromomethane

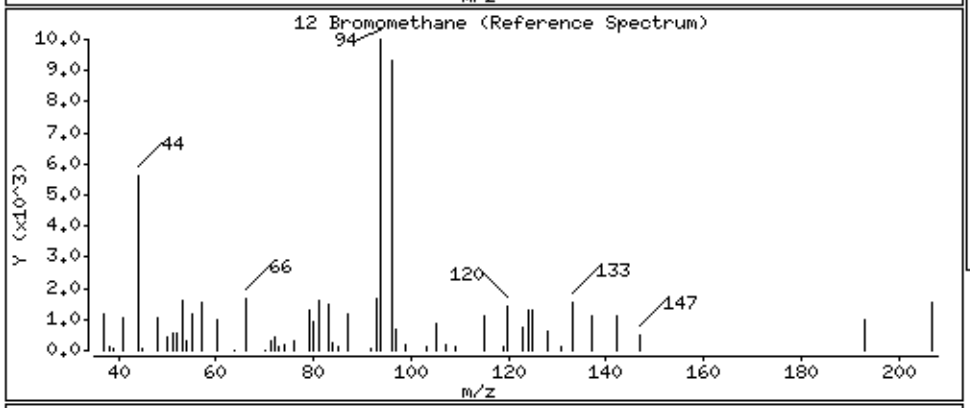
Concentration: 0.05997 PPBV

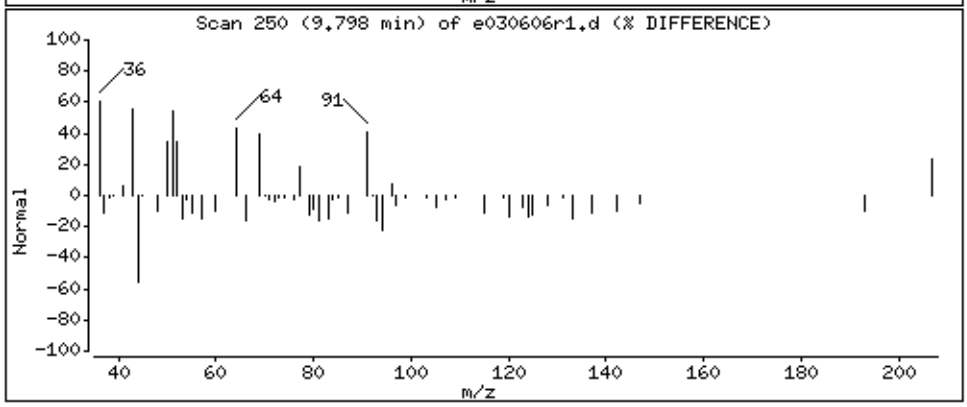












Data File: /chem/msde.i/06Mar2015.b/e030606r1.d

Date : 06-MAR-2015 08:28

Client ID: Lab Blank

Instrument: msde.i

Sample Info: 250mL#34034

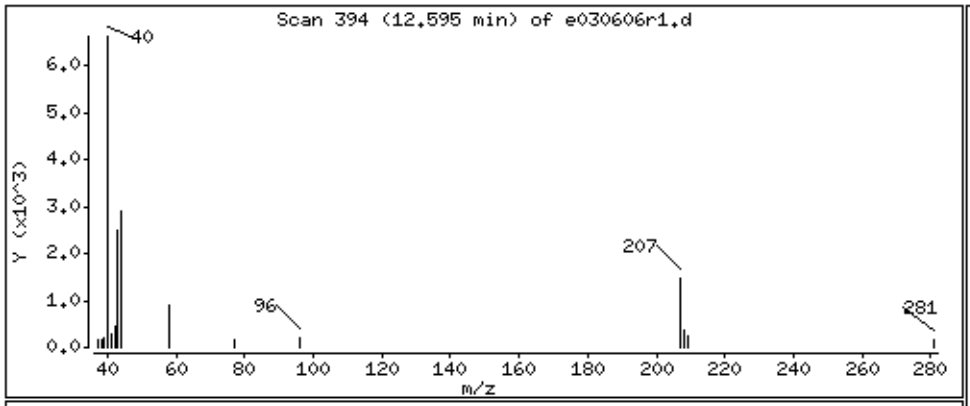
Operator: sab

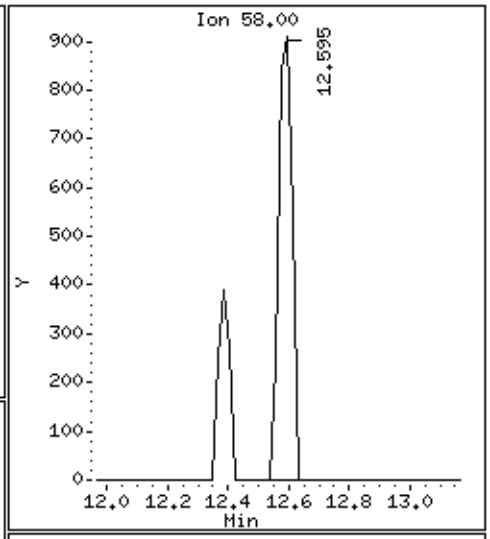
Column phase: RTx-624

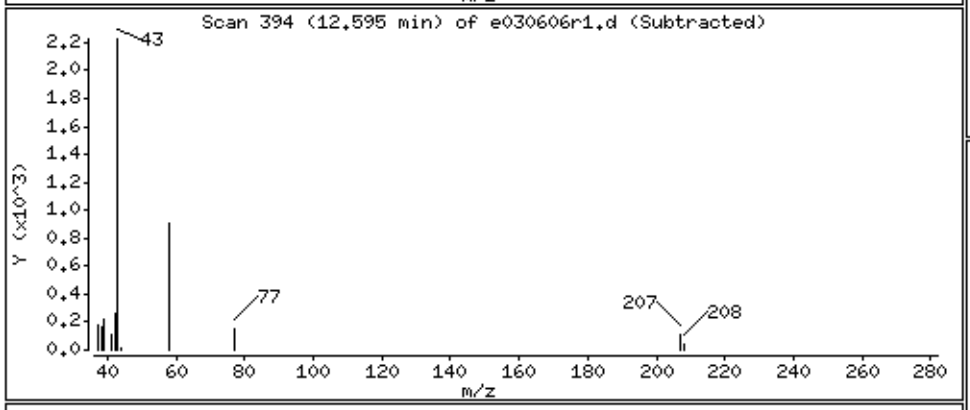
Column diameter: 0.32

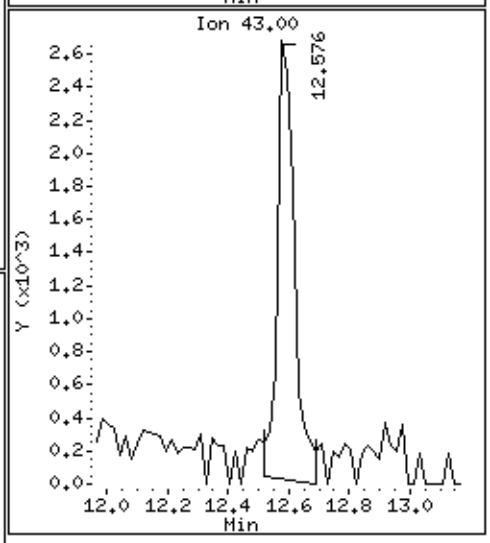
22 Acetone

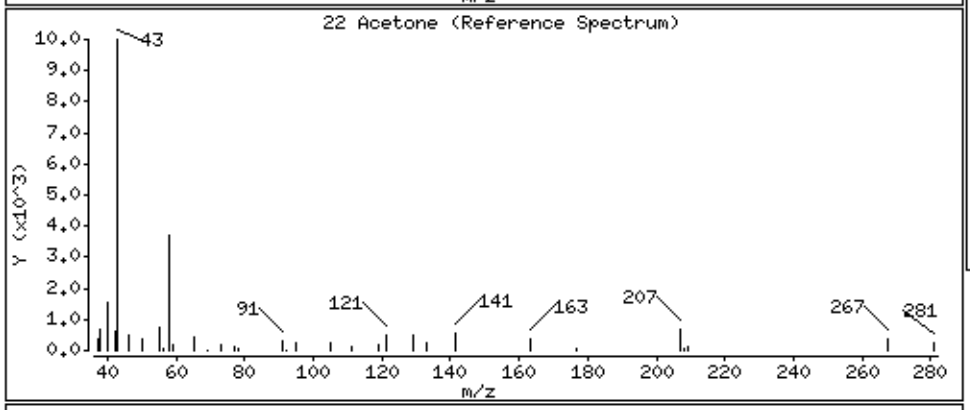
Concentration: 0.1023 PPBV

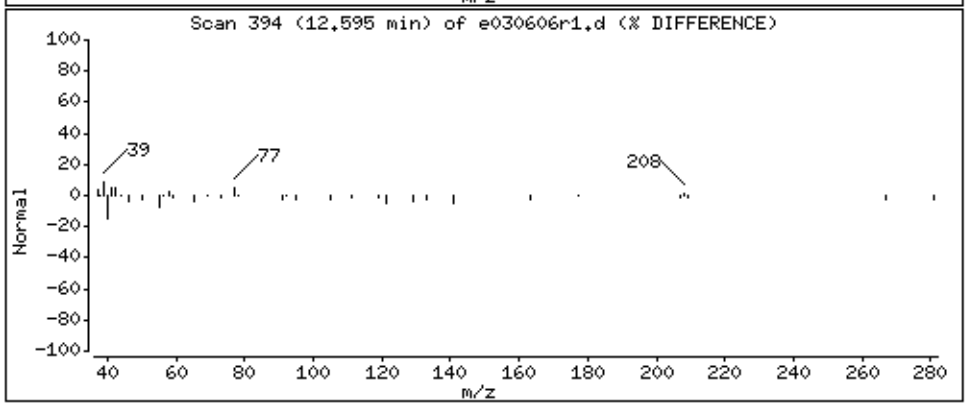












Data File: /chem/msde.i/06Mar2015.b/e030606r1.d

Date : 06-MAR-2015 08:28

Client ID: Lab Blank

Instrument: msde.i

Sample Info: 250mL#34034

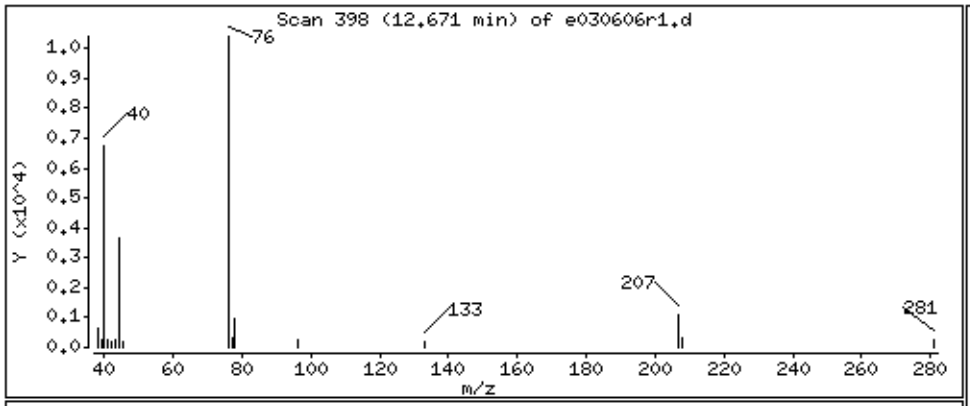
Operator: sab

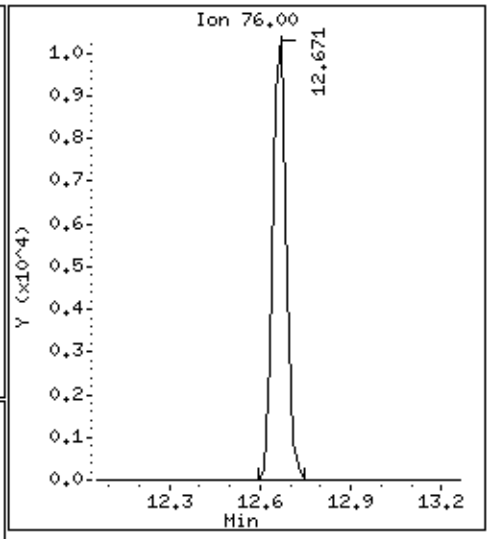
Column phase: RTx-624

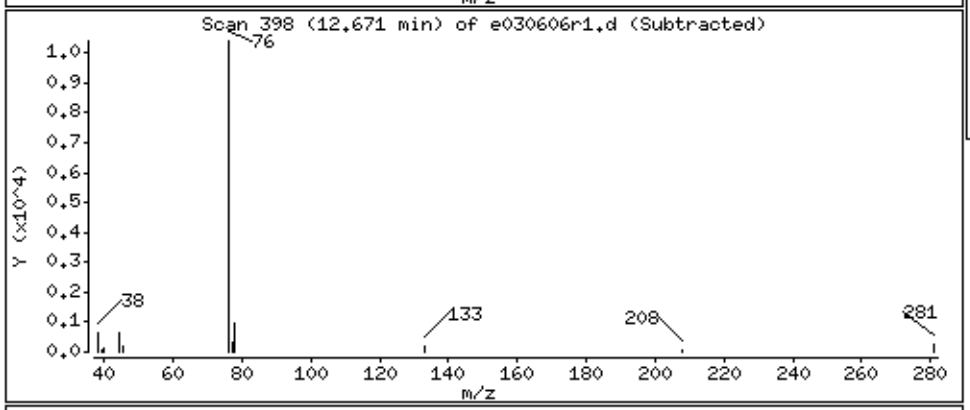
Column diameter: 0.32

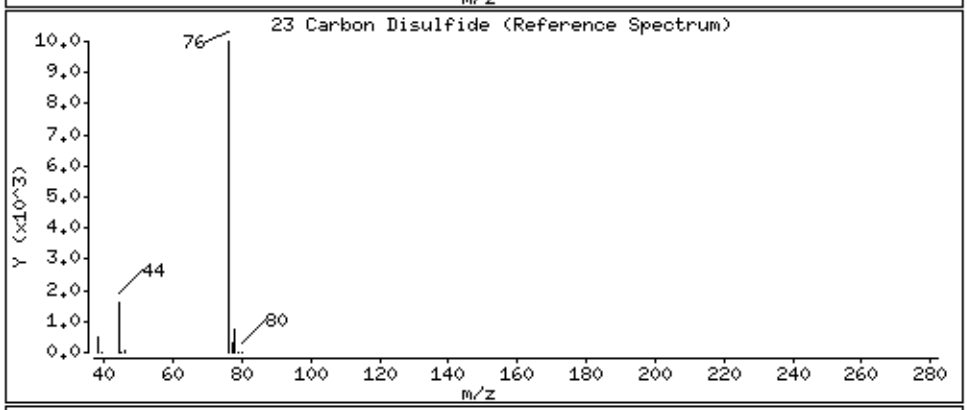
23 Carbon Disulfide

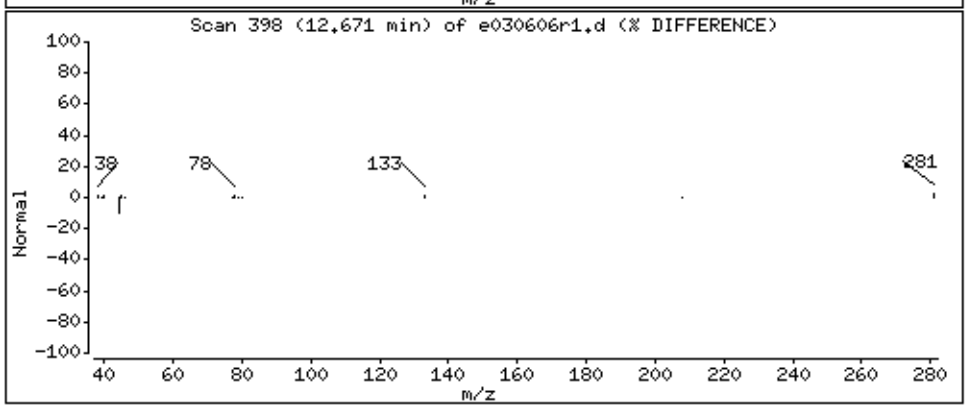
Concentration: 0.2127 PPBV











Data File: /chem/msde.i/06Mar2015.b/e030606r1.d

Date : 06-MAR-2015 08:28

Client ID: Lab Blank

Instrument: msde.i

Sample Info: 250mL#34034

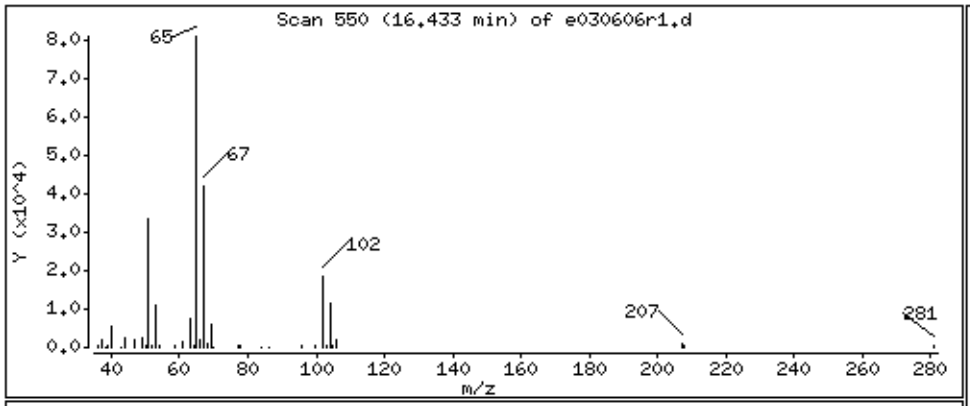
Operator: sab

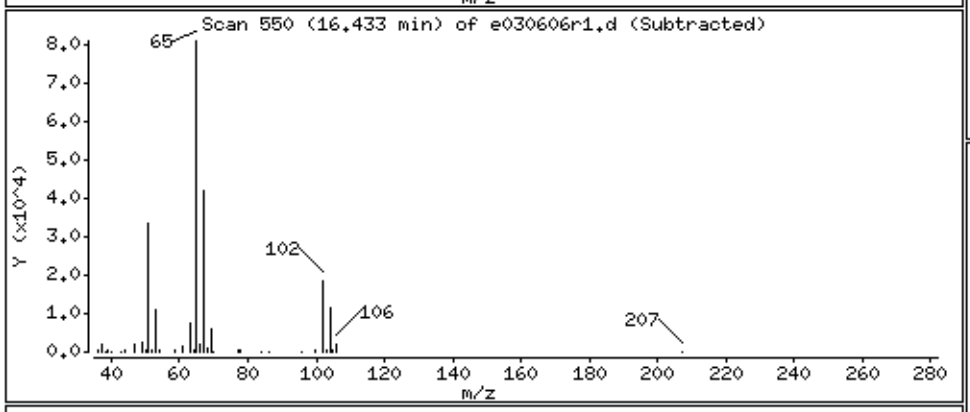
Column phase: RTx-624

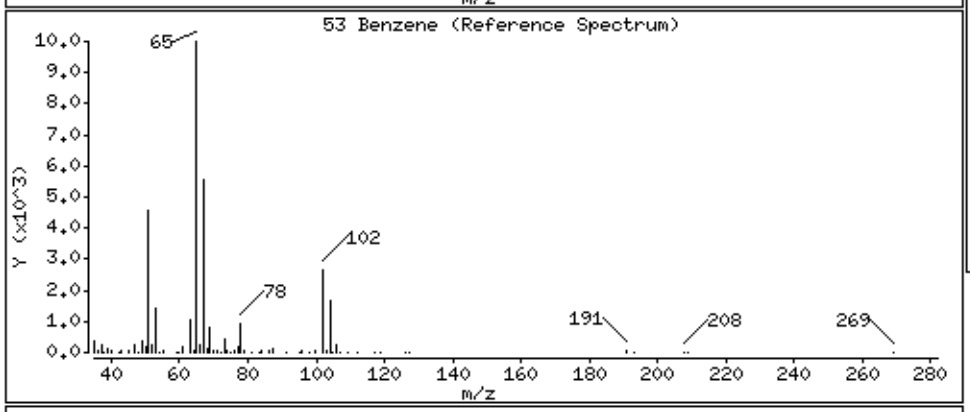
Column diameter: 0.32

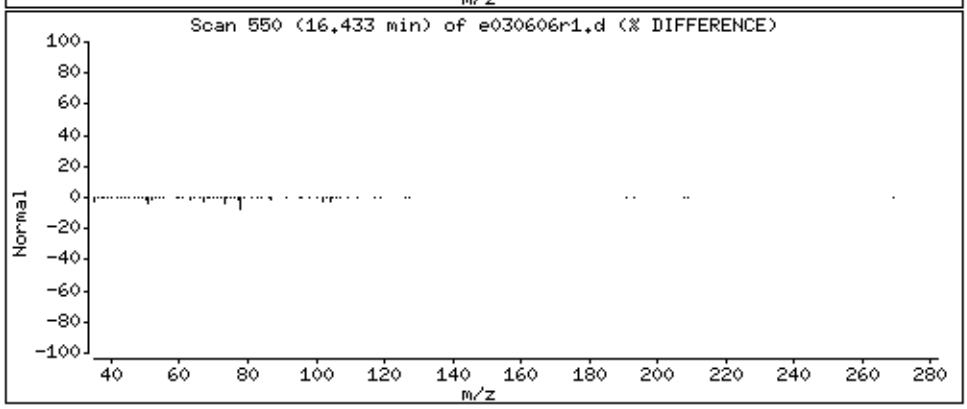
53 Benzene

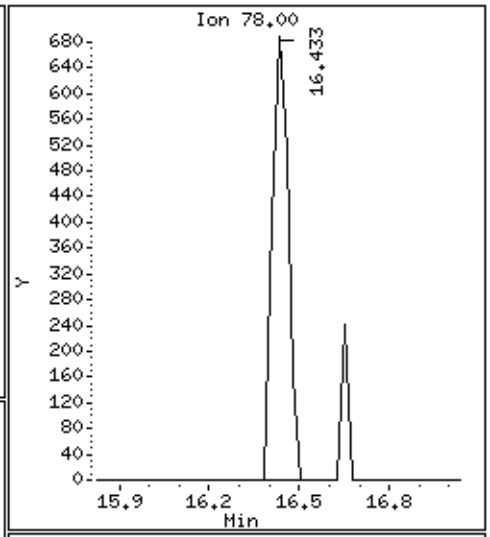
Concentration: 0.01742 PPBV

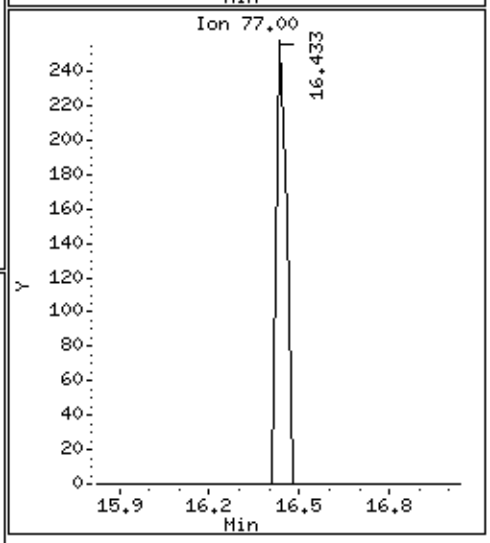












Data File: /chem/msde.i/06Mar2015.b/e030606r1.d

Date : 06-MAR-2015 08:28

Client ID: Lab Blank

Instrument: msde.i

Sample Info: 250mL#34034

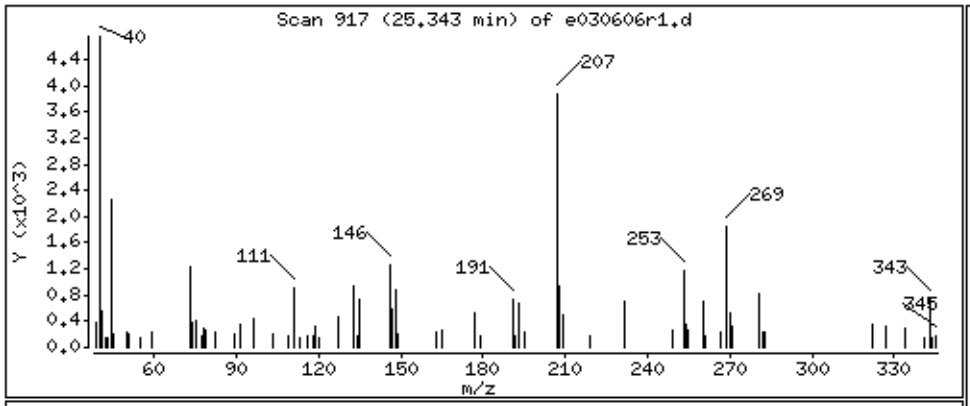
Operator: sab

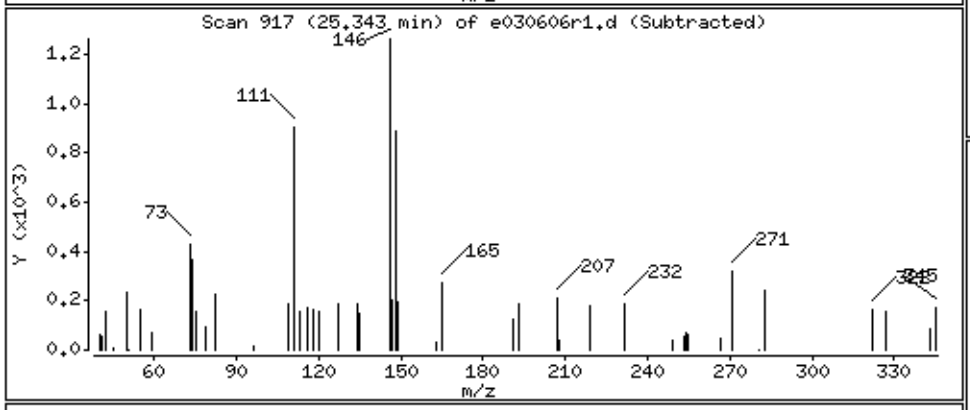
Column phase: RTx-624

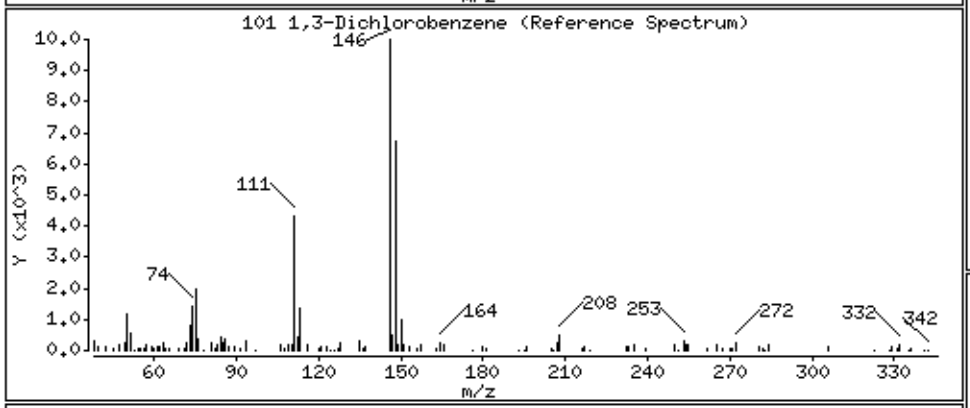
Column diameter: 0.32

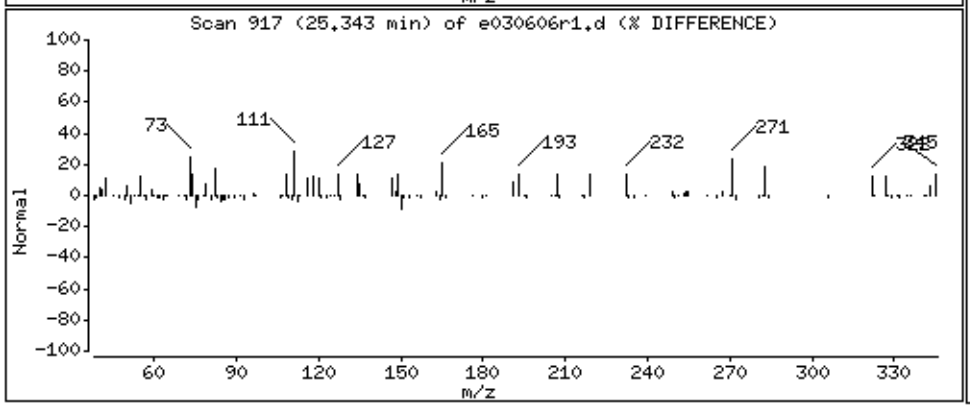
101 1,3-Dichlorobenzene

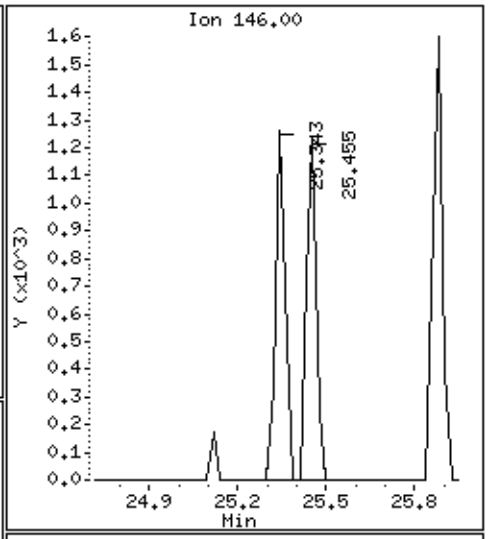
Concentration: 0.01674 PPBV

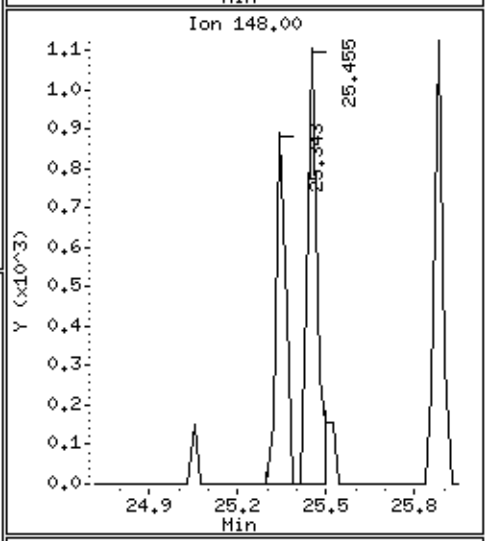


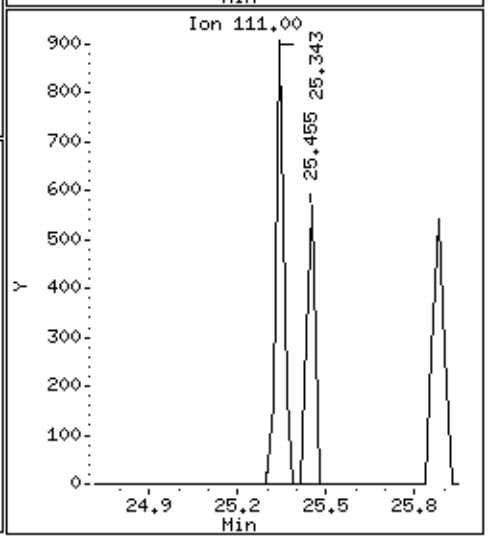












Data File: /chem/msde.i/06Mar2015.b/e030606r1.d

Date : 06-MAR-2015 08:28

Client ID: Lab Blank

Instrument: msde.i

Sample Info: 250mL#34034

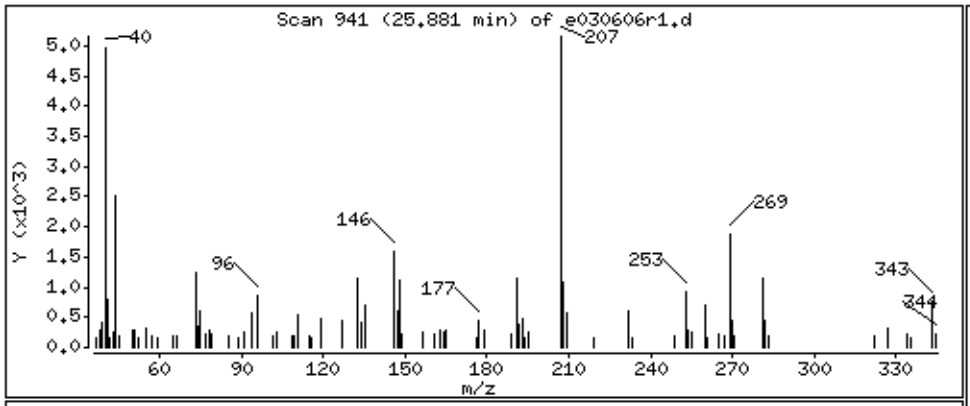
Operator: sab

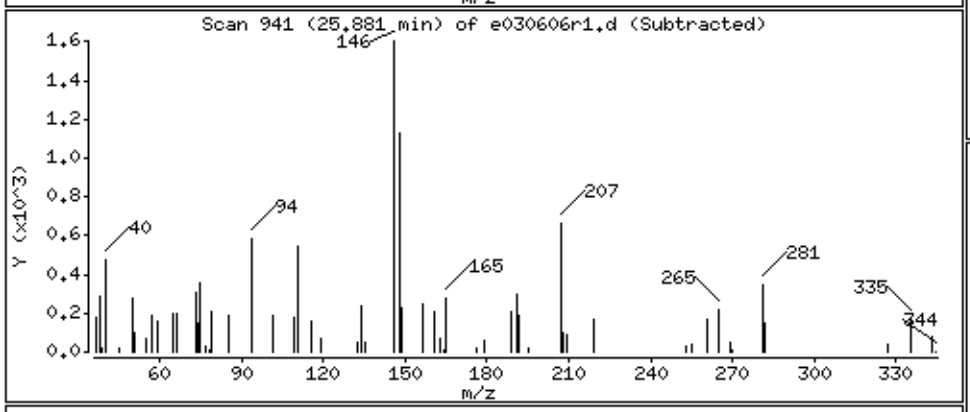
Column phase: RTx-624

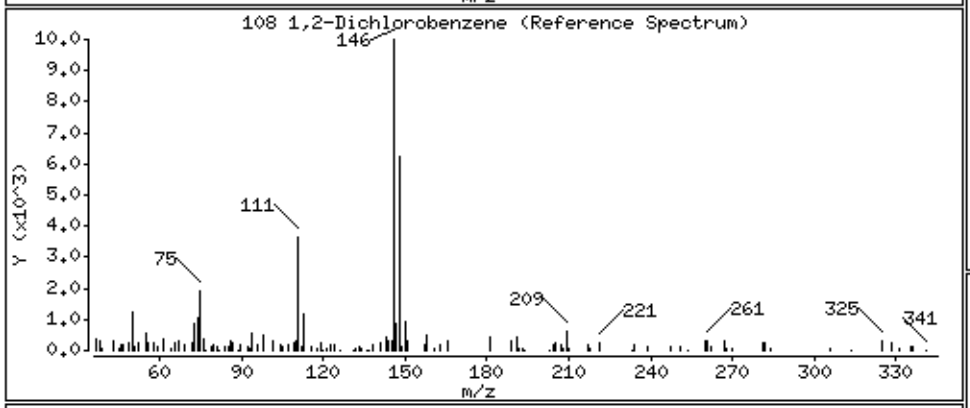
Column diameter: 0.32

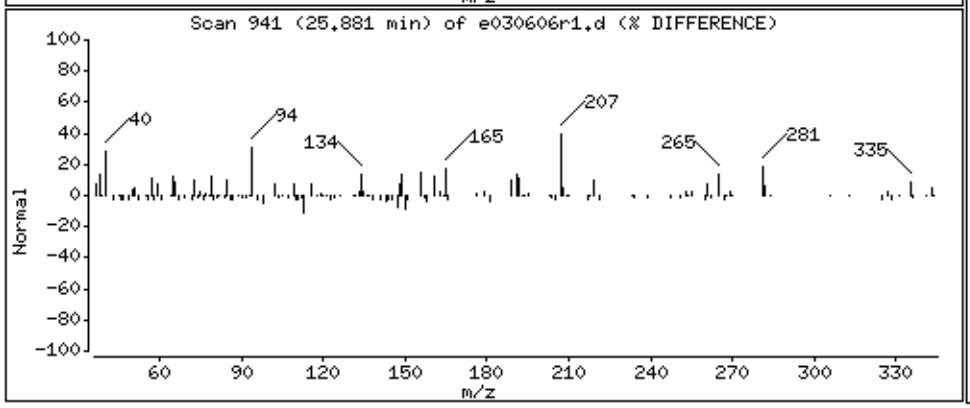
108 1,2-Dichlorobenzene

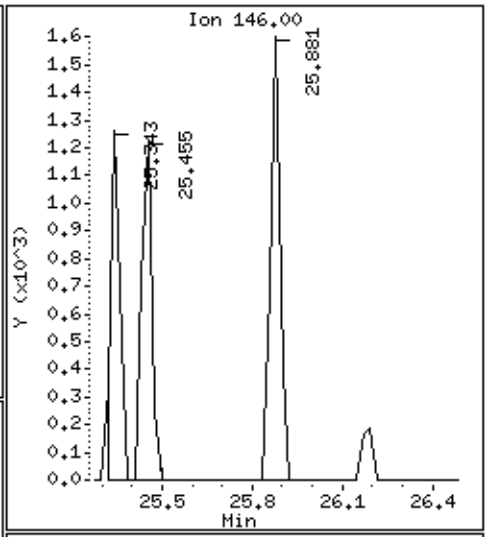
Concentration: 0.02340 PPBV

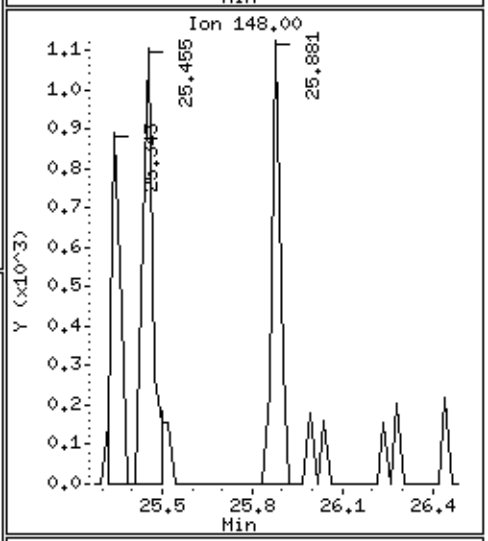


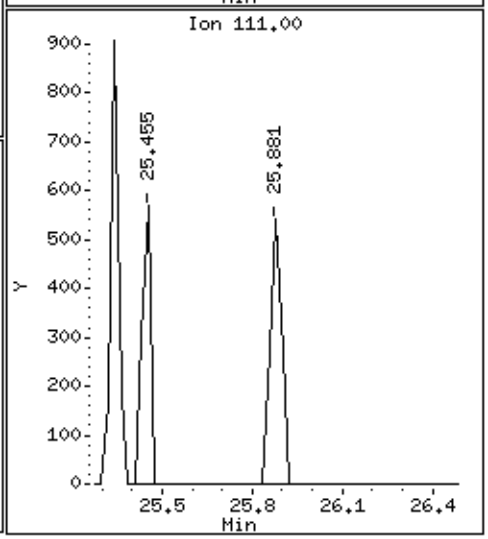












Data File: /chem/msde.i/06Mar2015.b/e030606r1.d

Date : 06-MAR-2015 08:28

Client ID: Lab Blank

Instrument: msde.i

Sample Info: 250mL#34034

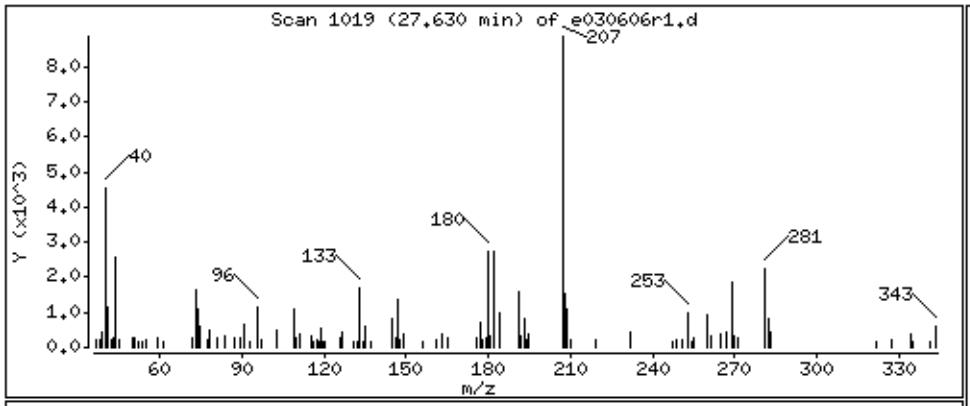
Operator: sab

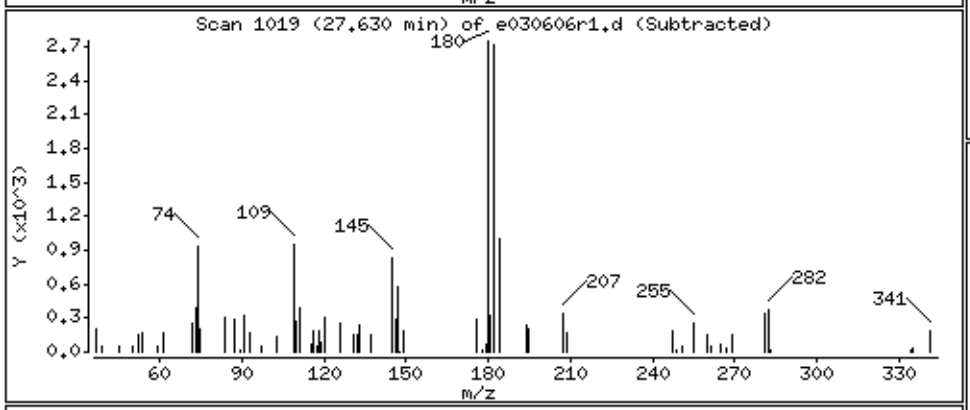
Column phase: RTx-624

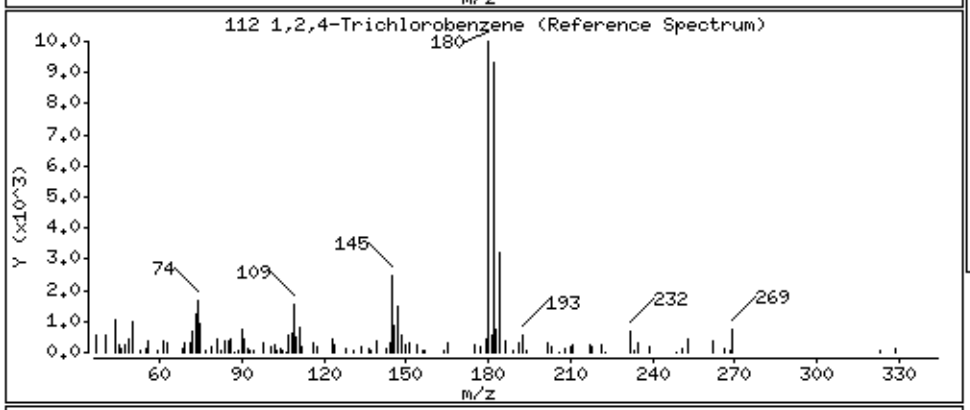
Column diameter: 0.32

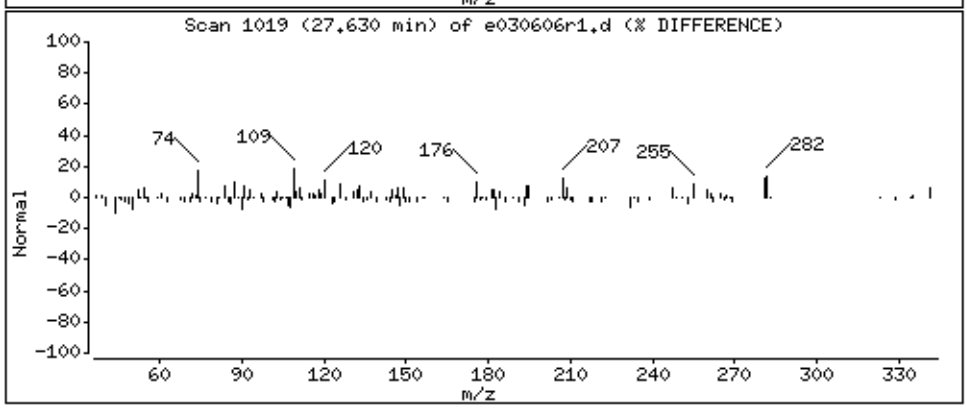
112 1,2,4-Trichlorobenzene

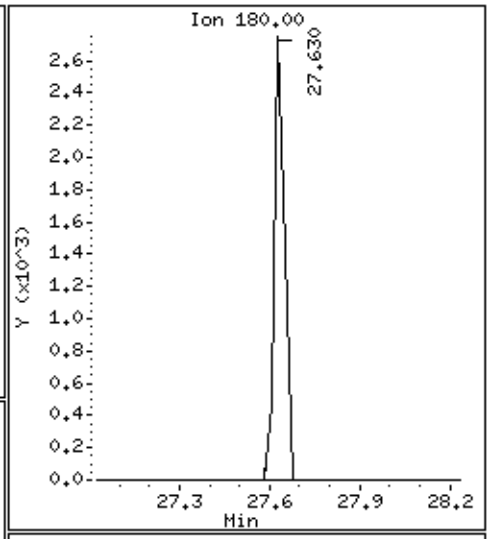
Concentration: 0.05821 PPBV

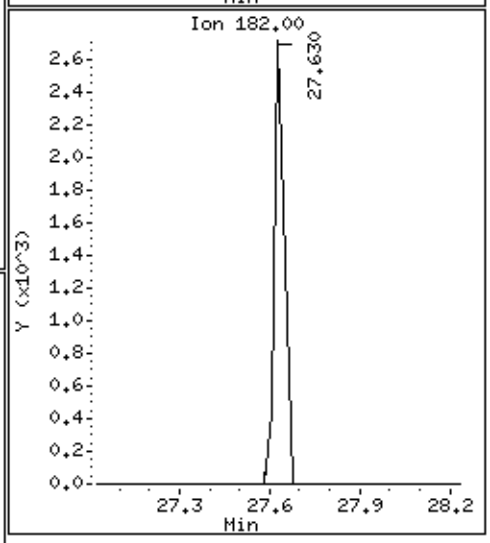












Data File: /chem/msde.i/06Mar2015.b/e030606r1.d

Date : 06-MAR-2015 08:28

Client ID: Lab Blank

Instrument: msde.i

Sample Info: 250mL#34034

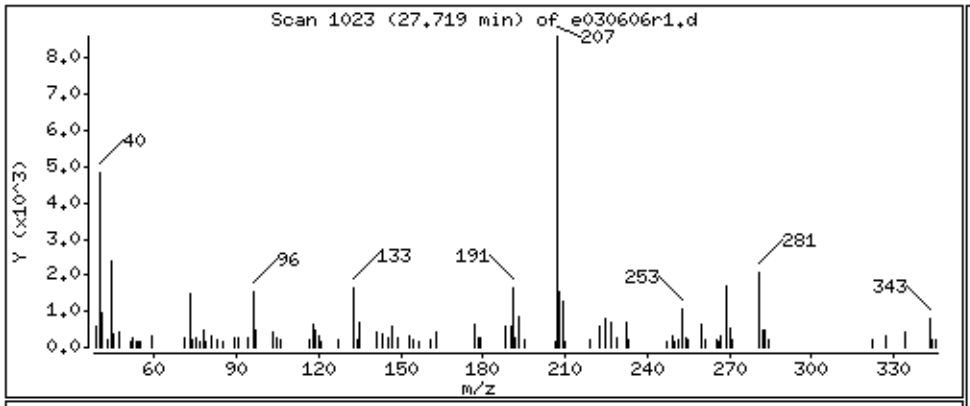
Operator: sab

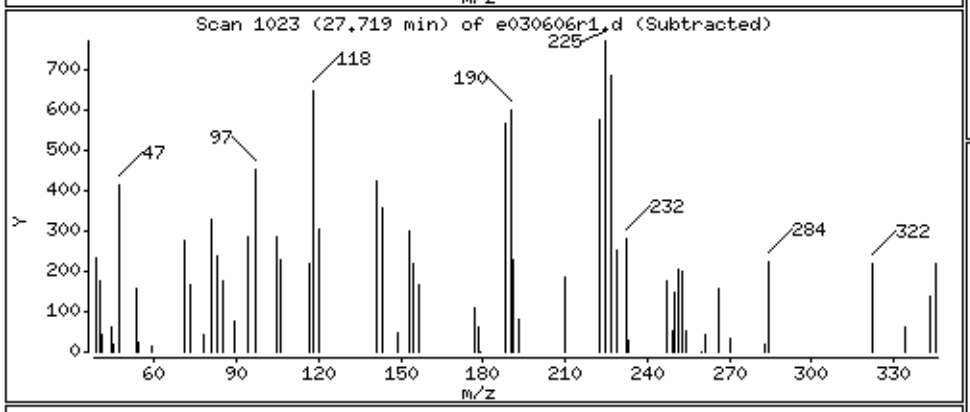
Column phase: RTx-624

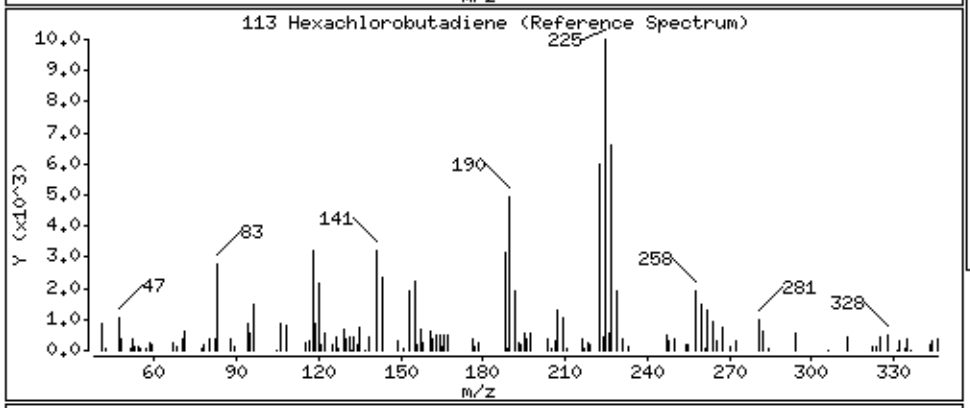
Column diameter: 0.32

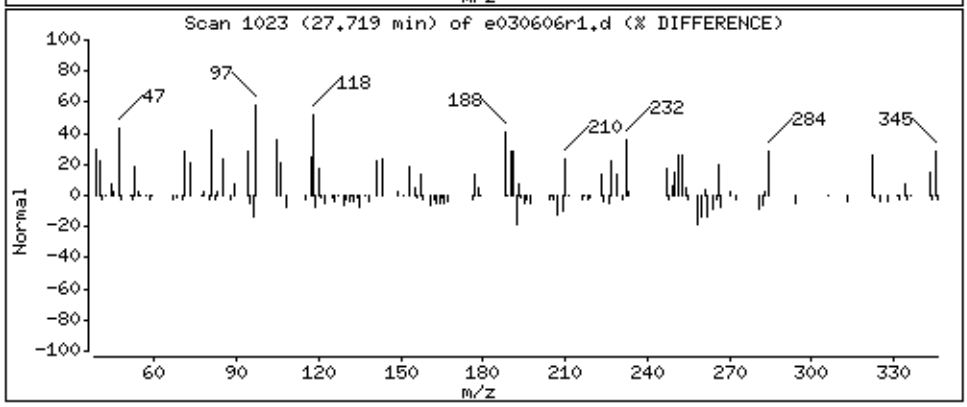
113 Hexachlorobutadiene

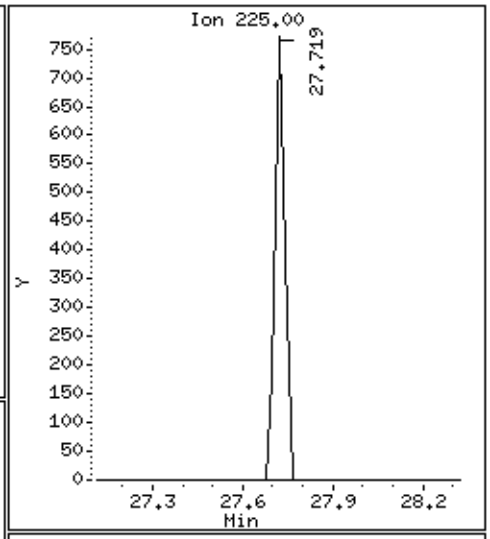
Concentration: 0.02152 PPBV

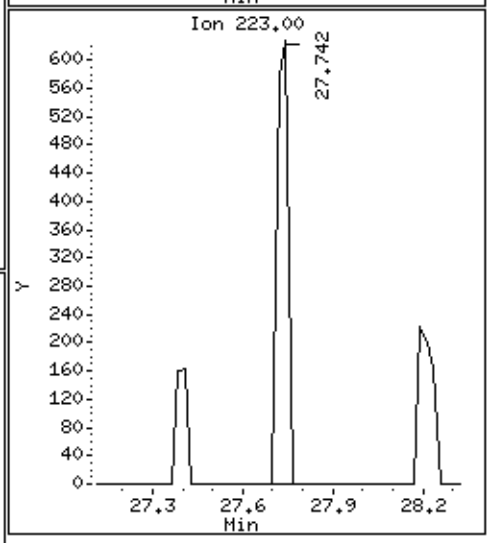












LEVEL-IV VALIDATABLE

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

SURROGATE RECOVERY FORM

Lab Name: AIR TOXICS LIMITED. SDG No.: 1503058AR1

	CLIENT SAMPLE NO.	SURROGATE % RECOVERY								
		1,2-Dichloroethane-d4	#	Toluene-d8	#	4-Bromofluorobenzene	#		#	TOTAL OUT
01	B6-AA-2	107		100		88				0
02	B6-1IA	103		99		90				0
03	B6-2IA	106		99		88				0
04	B6-2IADup	103		100		90				0
05	Lab Blank	108		100		89				0
06	CCV	101		102		93				0
07	LCS	100		102		92				0
08	LCSD	101		101		93				0
09										0
10										0
11										0
12										0
13										0
14										0
15										0
16										0
17										0
18										0
19										0
20										0
21										0
22										0
23										0
24										0

Surrogate Recovery Limits

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

* Designates values outside of QC limits

LEVEL-IV VALIDATABLE

Modified EPA Method TO-15 GC/MS Full Scan

INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name:	AIR TOXICS, LTD	SDG No:	1503058AR1
Lab File ID:	e030602.d	Date Analyzed:	03/06/2015
Instrument ID:	msde.i	Time Analyzed:	05:31 AM

		Chlorobenzene-d5 Area	#	RT	#	1,4-Difluorobenzene Area	#	RT	#	Bromochloromethane Area	#	RT	#
	24-HOUR STD	818204		22.41		878027		16.99		236898		15.61	
	UPPER LIMIT	1145486		22.74		1229238		17.32		331657		15.94	
	LOWER LIMIT	490922		22.08		526816		16.66		142139		15.28	
	CLIENT SAMPLE NO												
01	B6-AA-2	826970		22.41		866832		16.99		233222		15.61	
02	B6-1IA	780226		22.41		830946		16.99		231901		15.61	
03	B6-2IA	777038		22.41		812828		16.99		222277		15.61	
04	B6-2IADup	768631		22.41		807488		16.99		224944		15.61	
05	Lab Blank	724437		22.41		754919		16.99		199585		15.61	
06	CCV	818204		22.41		878027		16.99		236898		15.61	
07	LCS	731349		22.41		774839		16.99		214933		15.61	
08	LCSD	724047		22.41		778135		16.99		206749		15.61	
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: e030604.d & e030603.d

Lab Sample ID: &

Dilution: 1.00 & 1.00

Client Sample ID: LCS & LCSD

Date Analyzed: 3/6/15 & 3/6/15

CAS Number	Compound	Original Amount	Original Flags	Duplicate Amount	Duplicate Flags	RPD	Result Less Than 5X RL
71-55-6	1,1,1-Trichloroethane	118		121		2.5	
79-34-5	1,1,2,2-Tetrachloroethane	118		121		2.5	
79-00-5	1,1,2-Trichloroethane	115		117		1.7	
75-34-3	1,1-Dichloroethane	113		118		4.3	
75-35-4	1,1-Dichloroethene	100		101		1.0	
120-82-1	1,2,4-Trichlorobenzene	76		85		11	
95-63-6	1,2,4-Trimethylbenzene	104		104		0	
106-93-4	1,2-Dibromoethane (EDB)	113		114		0.88	
95-50-1	1,2-Dichlorobenzene	109		113		3.6	
107-06-2	1,2-Dichloroethane	134		128		4.6	
78-87-5	1,2-Dichloropropane	124		121		2.4	
108-67-8	1,3,5-Trimethylbenzene	108		110		1.8	
106-99-0	1,3-Butadiene	110		112		1.8	
541-73-1	1,3-Dichlorobenzene	112		114		1.8	
106-46-7	1,4-Dichlorobenzene	108		110		1.8	
123-91-1	1,4-Dioxane	106		105		0.95	
540-84-1	2,2,4-Trimethylpentane	109		112		2.7	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	104		109		4.7	
591-78-6	2-Hexanone	113		113		0	
67-63-0	2-Propanol	104		110		5.6	
107-05-1	3-Chloropropene	99		101		2.0	
622-96-8	4-Ethyltoluene	126		129		2.4	
108-10-1	4-Methyl-2-pentanone	116		115		0.86	
67-64-1	Acetone	98		98		0	
100-44-7	alpha-Chlorotoluene	109		112		2.7	
71-43-2	Benzene	123		122		0.82	
75-27-4	Bromodichloromethane	127		124		2.4	
75-25-2	Bromoform	108		108		0	
74-83-9	Bromomethane	113		115		1.8	
75-15-0	Carbon Disulfide	92		92		0	
56-23-5	Carbon Tetrachloride	95		96		1.0	
108-90-7	Chlorobenzene	119		119		0	
75-00-3	Chloroethane	115		118		2.6	
67-66-3	Chloroform	111		114		2.7	
74-87-3	Chloromethane	118		123		4.1	
156-59-2	cis-1,2-Dichloroethene	116		120		3.4	
10061-01-5	cis-1,3-Dichloropropene	98		99		1.0	
98-82-8	Cumene	113		113		0	
110-82-7	Cyclohexane	101		106		4.8	
124-48-1	Dibromochloromethane	121		122		0.82	
64-17-5	Ethanol	124		129		4.0	
100-41-4	Ethyl Benzene	112		114		1.8	
75-69-4	Freon 11	122		124		1.6	
76-13-1	Freon 113	101		105		3.9	
76-14-2	Freon 114	121		123		1.6	

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: e030604.d & e030603.d

Lab Sample ID: &

Dilution: 1.00 & 1.00

Client Sample ID: LCS & LCSD

Date Analyzed: 3/6/15 & 3/6/15

CAS Number	Compound	Original Amount	Original Flags	Duplicate Amount	Duplicate Flags	RPD	Result Less Than 5X RL
75-71-8	Freon 12	124		129		4.0	
142-82-5	Heptane	123		123		0	
87-68-3	Hexachlorobutadiene	81		89		9.4	
110-54-3	Hexane	106		110		3.7	
108-38-3	m,p-Xylene	113		112		0.89	
1634-04-4	Methyl tert-butyl ether	99		103		4.0	
75-09-2	Methylene Chloride	108		111		2.7	
91-20-3	Naphthalene	67		76		12	
95-47-6	o-Xylene	115		116		0.86	
103-65-1	Propylbenzene	122		122		0	
100-42-5	Styrene	110		111		0.90	
127-18-4	Tetrachloroethene	109		109		0	
109-99-9	Tetrahydrofuran	109		113		3.6	
108-88-3	Toluene	118		117		0.85	
156-60-5	trans-1,2-Dichloroethene	91		94		3.2	
10061-02-6	trans-1,3-Dichloropropene	106		105		0.95	
79-01-6	Trichloroethene	120		116		3.4	
75-01-4	Vinyl Chloride	118		123		4.1	

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 : 10-FEB-2015 15:00
End Cal Date : 02-MAR-2015 15:11
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msde.i/02Mar2015.b/e15l0210b.m
Cal Date : 02-Mar-2015 16:01 sblack
Curve Type : Average

Calibration File Names:
Level 5: /chem/msde.i/10Feb2015.b/e021006.d
Level 6: /chem/msde.i/10Feb2015.b/e021018.d
Level 7: /chem/msde.i/02Mar2015.b/e030205.d
Level 8: /chem/msde.i/02Mar2015.b/e030206.d
Level 9: /chem/msde.i/02Mar2015.b/e030209.d
Level 10: /chem/msde.i/10Feb2015.b/e021011.d
Level 11: /chem/msde.i/10Feb2015.b/e021012.d
Level 12: /chem/msde.i/10Feb2015.b/e021013.d
Level 13: /chem/msde.i/02Mar2015.b/e030207.d
Level 15: /chem/msde.i/02Mar2015.b/e030208.d

Compound	0.05000 Level 5	0.10000 Level 6	0.50000 Level 7	1.000 Level 8	5.000 Level 9	10.000 Level 10	___ RRF	% RSD
	20.000 Level 11	40.000 Level 12	2.000 Level 13	4.000 Level 15				
1 Freon 134a	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++			+++++	+++++
207 Iodomethane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++			+++++	+++++
205 1-Propanol	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++			+++++	+++++
204 2-Chloroethyl Vinyl Ether	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++			+++++	+++++
2 Propylene	+++++	+++++	0.82995	0.86346	0.81041	0.77716		
	0.74965	0.74535	+++++	+++++			0.79600	5.887
3 Freon 152A	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++			+++++	+++++

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Compound	0.05000 Level 5	0.10000 Level 6	0.50000 Level 7	1.000 Level 8	5.000 Level 9	10.000 Level 10	___ RRF	% RSD
	20.000 Level 11	40.000 Level 12	2.000 Level 13	4.000 Level 15				
4 Dichlorodifluoromethane/Fr12	+++++	3.41601	2.95295	2.94848	2.58088	2.42716		
	2.33516	2.29020	+++++	+++++			2.70726	15.287
5 Freon 22	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++			+++++	+++++
6 Freon 114	2.64283	3.51014	2.94463	2.68410	2.48933	2.30296		
	2.26734	2.22568	+++++	+++++			2.63338	16.355
7 Chloromethane	+++++	1.41985	1.12021	1.08612	0.95633	0.89803		
	0.94040	0.84986	+++++	+++++			1.03868	18.688
8 Isobutylene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++			+++++	+++++
9 Butane	+++++	+++++	0.36476	0.27348	0.22662	0.21187		
	0.20564	0.20703	+++++	+++++			0.24823	25.169
10 Vinyl Chloride	+++++	1.27620	1.19385	1.18677	1.07841	1.01528		
	0.97765	0.95898	+++++	+++++			1.09816	11.144
11 1,3-Butadiene	+++++	1.28794	0.93692	0.99805	0.87954	0.83273		
	0.81371	0.81049	+++++	+++++			0.93705	18.083
12 Bromomethane	+++++	+++++	1.12081	1.15884	0.97801	0.93846		
	0.90774	0.89378	+++++	+++++			0.99961	11.308
13 Chloroethane	+++++	+++++	0.67141	0.58238	0.54699	0.50750		
	0.49235	0.48481	+++++	+++++			0.54757	12.950

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	20.000 Level 11	40.000 Level 12	2.000 Level 13	4.000 Level 15				
14 Isopentane	+++++	+++++	1.16819	1.05276	0.90392	0.85459		
	0.81653	0.81899	+++++	+++++			0.93583	15.349
15 Vinyl Bromide	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++			+++++	+++++
17 Pentane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++			+++++	+++++
16 Trichlorofluoromethane/Fr11	3.27910	3.16564	3.04479	2.95988	2.72252	2.55541		
	2.48835	2.47106	+++++	+++++			2.83584	11.227
18 Ethanol	+++++	+++++	+++++	0.63581	0.45142	0.38660		
	0.42096	0.41063	+++++	+++++			0.46108	21.776
20 Acrolein	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++			+++++	+++++
19 Freon 113	3.59051	2.72231	2.86233	2.63595	2.38680	2.24255		
	2.19202	2.17303	+++++	+++++			2.60069	18.315
190 1-Pentene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++			+++++	+++++
21 1,1-Dichloroethene	+++++	1.12102	1.00553	0.92691	0.77650	0.72729		
	0.70965	0.70484	+++++	+++++			0.85311	19.422
22 Acetone	+++++	1.18933	0.84989	0.78037	0.56565	0.53813		
	0.52388	0.51646	+++++	+++++			0.70910	35.338 <-

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	20.000 Level 11	40.000 Level 12	2.000 Level 13	4.000 Level 15				
23 Carbon Disulfide	+++++	+++++	5.48493	4.72541	3.43838	3.14228		
	3.03876	3.00178	+++++	+++++			3.80526	27.500
184 Bromoethane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++			+++++	+++++
25 2-Propanol	+++++	+++++	2.39138	2.34390	2.03976	1.89823		
	1.88122	1.89376	+++++	+++++			2.07471	11.310
27 Methyl Acetate	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++			+++++	+++++
26 3-Chloroprene	+++++	+++++	0.55586	0.56202	0.52648	0.49750		
	0.48493	0.48526	+++++	+++++			0.51868	6.693
24 2-Methylpentane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++			+++++	+++++
28 Acetonitrile	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++			+++++	+++++
29 Methylene Chloride	+++++	1.40982	1.11748	1.12752	1.02163	0.98514		
	0.94047	0.91500	+++++	+++++			1.07387	15.734
30 tert-butyl alcohol	+++++	+++++	3.45598	3.32849	3.03684	2.81997		
	2.75124	2.76059	+++++	+++++			3.02552	10.078
31 MTBE	+++++	3.69114	3.66532	3.61434	3.20966	3.00083		
	2.91731	2.83184	+++++	+++++			3.27578	11.452

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Compound	0.05000 Level 5	0.10000 Level 6	0.50000 Level 7	1.000 Level 8	5.000 Level 9	10.000 Level 10	___ RRF	% RSD
	20.000 Level 11	40.000 Level 12	2.000 Level 13	4.000 Level 15				
32 trans-1,2-Dichloroethene	+++++	1.28666	1.01836	0.95701	0.79957	0.75832		
	0.73897	0.73189	+++++	+++++			0.89868	22.764
33 Acrylonitrile	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++			+++++	+++++
34 2,4-Dimethylpentane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++			+++++	+++++
35 Hexane	+++++	2.47215	2.28402	2.21048	1.97972	1.83420		
	1.75667	1.71285	+++++	+++++			2.03573	14.301
191 Cyclopentane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++			+++++	+++++
36 Isopropyl ether	+++++	+++++	4.66122	4.48690	4.19892	3.95277		
	3.74495	3.60242	+++++	+++++			4.10786	10.151
37 1,1-Dichloroethane	+++++	2.55326	2.46402	2.37351	2.15481	1.97848		
	1.91137	1.86827	+++++	+++++			2.18624	12.771
38 Vinyl Acetate	+++++	+++++	0.45136	0.39322	0.35930	0.32150		
	0.32011	0.31023	+++++	+++++			0.35929	15.243
39 Chlorprene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++			+++++	+++++
40 Ethyl-tert-butyl ether	+++++	+++++	4.54511	4.40615	3.99895	3.76625		
	3.63434	3.53740	+++++	+++++			3.98137	10.431

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	20.000 Level 11	40.000 Level 12	2.000 Level 13	4.000 Level 15				
43 Ethyl Acetate	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++			+++++	+++++
41 cis-1,2-Dichloroethene	+++++	1.11676	1.06919	0.99103	0.87667	0.82079		
	0.79053	0.78102	+++++	+++++			0.92086	14.956
42 2-Butanone	+++++	+++++	0.70560	0.64601	0.60196	0.56500		
	0.55247	0.54743	+++++	+++++			0.60308	10.346
192 1-Hexene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++			+++++	+++++
44 Tetrahydrofuran	+++++	+++++	1.64247	1.59102	1.43774	1.31520		
	1.30389	1.29407	+++++	+++++			1.43073	10.769
47 Chloroform	+++++	3.30160	3.00583	2.62859	2.41334	2.24761		
	2.16218	2.15084	+++++	+++++			2.55857	17.466
45 2,3-Dimethylpentane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++			+++++	+++++
48 Cyclohexane	+++++	2.20961	1.97569	1.92049	1.70594	1.56922		
	1.51808	1.47869	+++++	+++++			1.76824	15.504
49 1,1,1-Trichloroethane	2.46432	3.18399	3.02265	2.78567	2.52308	2.37713		
	2.26262	2.21310	+++++	+++++			2.60407	13.705
193 Methyl Acrylate	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++			+++++	+++++

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	20.000 Level 11	40.000 Level 12	2.000 Level 13	4.000 Level 15				
51 Carbon Tetrachloride	2.69017	2.64226	2.56873	2.53841	2.16986	2.03422		
	1.96565	1.92657	+++++	+++++			2.31698	13.985
52 2,2,4-Trimethylpentane	+++++	3.83031	3.24291	3.30245	2.89078	2.69435		
	2.59956	2.53047	+++++	+++++			3.01298	15.596
53 Benzene	+++++	1.31897	1.10371	1.01222	0.90389	0.86285		
	0.81554	0.78371	+++++	+++++			0.97156	19.522
55 tert-amyl methyl ether	+++++	+++++	0.27767	0.26082	0.23147	0.22028		
	0.20642	0.20084	+++++	+++++			0.23292	13.128
56 1,2-Dichloroethane	+++++	0.49473	0.40737	0.40122	0.35264	0.34197		
	0.32842	0.31522	+++++	+++++			0.37737	16.536
57 Heptane	+++++	0.40469	0.36459	0.34532	0.30215	0.28884		
	0.27147	0.26341	+++++	+++++			0.32007	16.458
50 Thiophene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++			+++++	+++++
59 Trichloroethene	0.65509	0.67144	0.58546	0.56515	0.49780	0.48828		
	0.46901	0.45713	+++++	+++++			0.54867	15.247
60 Methylcyclohexane	+++++	+++++	0.65932	0.65594	0.57089	0.55875		
	0.53198	0.51337	+++++	+++++			0.58171	10.686
61 1,2-Dichloropropane	+++++	0.42504	0.41350	0.38671	0.35234	0.34738		
	0.33071	0.32528	+++++	+++++			0.36871	10.824

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	20.000 Level 11	40.000 Level 12	2.000 Level 13	4.000 Level 15				
62 1,4-Dioxane	+++++	0.37250	0.30375	0.27490	0.23736	0.23336		
	0.21957	0.21588	+++++	+++++			0.26533	21.428
63 Bromodichloromethane	0.63327	0.79784	0.71888	0.69784	0.62949	0.61609		
	0.59268	0.58293	+++++	+++++			0.65863	11.176
64 cis-1,3-Dichloropropene	+++++	0.71183	0.64717	0.63165	0.57219	0.55737		
	0.53507	0.52603	+++++	+++++			0.59733	11.429
65 4-Methyl-2-pentanone	+++++	0.99495	0.83962	0.79279	0.73369	0.71732		
	0.68453	0.66048	+++++	+++++			0.77477	14.830
66 Octane	+++++	+++++	0.26171	0.23052	0.22063	+++++		
	+++++	+++++	0.23591	0.24353			0.23846	6.476
68 Toluene	+++++	1.47864	1.33442	1.30427	1.13903	1.10398		
	1.03873	1.00131	+++++	+++++			1.20005	14.632
194 Ethyl Acrylate	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++			+++++	+++++
69 trans-1,3-Dichloropropene	+++++	0.67266	0.60094	0.59987	0.54897	0.52698		
	0.51414	0.51326	+++++	+++++			0.56812	10.413
70 1,1,2-Trichloroethane	+++++	0.65191	0.52504	0.51686	0.45096	0.42494		
	0.41553	0.40912	+++++	+++++			0.48491	18.023
71 Tetrachloroethene	0.79514	0.83283	0.79043	0.77109	0.68922	0.65152		
	0.63619	0.62808	+++++	+++++			0.72431	11.302

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	20.000 Level 11	40.000 Level 12	2.000 Level 13	4.000 Level 15				
72 2-Hexanone	+++++	+++++	0.52413	0.49694	0.45239	0.42696		
	0.41299	0.40552	+++++	+++++			0.45315	10.594
73 Dibromochloromethane	0.93699	1.09461	1.01408	0.99737	0.89720	0.85915		
	0.82628	0.82368	+++++	+++++			0.93117	10.499
74 1,2-Dibromoethane	1.01401	0.88244	0.87644	0.81430	0.73839	0.69218		
	0.67407	0.66808	+++++	+++++			0.79499	15.561
76 Chlorobenzene	+++++	1.40813	1.27392	1.21926	1.09816	1.03697		
	1.00496	0.99022	+++++	+++++			1.14737	13.724
78 Nonane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++			+++++	+++++
77 Ethyl Benzene	+++++	0.66796	0.65277	0.60556	0.53261	0.50473		
	0.48899	0.48134	+++++	+++++			0.56199	14.038
79 1,1,1,2-Tetrachloroethane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++			+++++	+++++
186 1,1-Dichloropropene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++			+++++	+++++
80 m,p-Xylene	+++++	0.82606	0.78157	0.74175	0.65511	0.61814		
	0.59543	0.58639	+++++	+++++			0.68635	14.018
81 o-Xylene	+++++	0.74687	0.70020	0.68144	0.62289	0.57765		
	0.56299	0.54857	+++++	+++++			0.63437	12.042

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	20.000 Level 11	40.000 Level 12	2.000 Level 13	4.000 Level 15				
83 Styrene	+++++	1.34096	1.25785	1.19207	1.04810	0.99255		
	0.95303	0.92111	+++++	+++++			1.10081	14.802
84 Bromoform	1.00741	1.00765	0.95012	0.92754	0.85591	0.82460		
	0.80514	0.79611	+++++	+++++			0.89681	9.770
85 Cumene	+++++	2.37160	2.23783	2.13104	1.90849	1.79702		
	1.72300	1.63714	+++++	+++++			1.97230	14.106
82 alpha-pinene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++			+++++	+++++
203 D-Limonene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++			+++++	+++++
89 1,1,2,2-Tetrachloroethane	1.18794	1.08321	1.04466	1.00155	0.88462	0.83984		
	0.81581	0.79153	+++++	+++++			0.95615	15.063
90 Propylbenzene	+++++	2.44184	2.33194	2.35612	2.03987	1.89541		
	1.81138	1.72864	+++++	+++++			2.08646	13.858
185 Bromobenzene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++			+++++	+++++
91 1,2,3-Trichloropropane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++			+++++	+++++
92 4-Ethyltoluene	+++++	2.11177	1.99189	2.00204	1.75616	1.66679		
	1.58897	1.51774	+++++	+++++			1.80505	12.765

Eurofins Air Toxics Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 10-FEB-2015 15:00
End Cal Date : 02-MAR-2015 15:11
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msde.i/02Mar2015.b/e15l0210b.m
Cal Date : 02-Mar-2015 16:01 sblack
Curve Type : Average

Compound	0.05000 Level 5	0.10000 Level 6	0.50000 Level 7	1.000 Level 8	5.000 Level 9	10.000 Level 10	___ RRF	% RSD
	20.000 Level 11	40.000 Level 12	2.000 Level 13	4.000 Level 15				
94 1,3,5-Trimethylbenzene	1.97307	1.75592	1.68617	1.60201	1.46982	1.38277		
	1.30758	1.25461	#####	#####			1.55399	15.817
93 2-Chlorotoluene	#####	#####	#####	#####	#####	#####		
	#####	#####	#####	#####			#####	#####
96 4-Chlorotoluene	#####	#####	#####	#####	#####	#####		
	#####	#####	#####	#####			#####	#####
86 1,3-Dichloropropane	#####	#####	#####	#####	#####	#####		
	#####	#####	#####	#####			#####	#####
97 tert-Butylbenzene	#####	#####	#####	#####	#####	#####		
	#####	#####	#####	#####			#####	#####
98 1,2,4-Trimethylbenzene	1.80539	1.70168	1.53279	1.47206	1.29947	1.22232		
	1.17307	1.11664	#####	#####			1.41543	17.908
88 Decane	#####	#####	0.66502	0.69796	0.60563	#####		
	#####	#####	0.68728	0.64358			0.65989	5.587
188 Undecane	#####	#####	#####	#####	#####	#####		
	#####	#####	#####	#####			#####	#####
189 Dodecane	#####	#####	#####	#####	#####	#####		
	#####	#####	#####	#####			#####	#####
99 sec-Butylbenzene	#####	#####	#####	#####	#####	#####		
	#####	#####	#####	#####			#####	#####

Eurofins Air Toxics Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 10-FEB-2015 15:00
End Cal Date : 02-MAR-2015 15:11
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msde.i/02Mar2015.b/e15l0210b.m
Cal Date : 02-Mar-2015 16:01 sblack
Curve Type : Average

Compound	0.05000 Level 5	0.10000 Level 6	0.50000 Level 7	1.000 Level 8	5.000 Level 9	10.000 Level 10	___ RRF	% RSD
	20.000 Level 11	40.000 Level 12	2.000 Level 13	4.000 Level 15				
100 p-Cymene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++			+++++	+++++
101 1,3-Dichlorobenzene	1.53625	1.34387	1.25349	1.21353	1.05861	1.00600		
	0.96017	0.92221	+++++	+++++			1.16177	18.330
103 1,2,3-trimethylbenzene	+++++	+++++	0.44028	0.45901	0.37130	+++++		
	+++++	+++++	0.43259	0.37643			0.41592	9.526
104 1,4-Dichlorobenzene	1.69790	1.33011	1.20114	1.17466	1.01875	0.97580		
	0.92747	0.89539	+++++	+++++			1.15265	23.134
105 alpha-chlorotoluene	1.88502	1.55158	1.39877	1.35869	1.23953	1.16370		
	1.11946	1.06426	+++++	+++++			1.34763	20.049
195 trans-1,4-dichloro-2-butene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++			+++++	+++++
95 Dibromomethane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++			+++++	+++++
102 Indan	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++			+++++	+++++
107 Butylbenzene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++			+++++	+++++
108 1,2-Dichlorobenzene	1.53056	1.24449	1.16761	1.05026	0.94232	0.88811		
	0.85200	0.82797	+++++	+++++			1.06291	22.701

Eurofins Air Toxics Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 10-FEB-2015 15:00
End Cal Date : 02-MAR-2015 15:11
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msde.i/02Mar2015.b/e15l0210b.m
Cal Date : 02-Mar-2015 16:01 sblack
Curve Type : Average

Compound	0.05000 Level 5	0.10000 Level 6	0.50000 Level 7	1.000 Level 8	5.000 Level 9	10.000 Level 10	___ RRF	% RSD
	20.000 Level 11	40.000 Level 12	2.000 Level 13	4.000 Level 15				
106 Indene	+++++	+++++	0.82727	0.87242	0.76562	+++++		
	+++++	+++++	0.87722	0.79881			0.82827	5.771
110 1,2-dibromo-3-chloropropane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++			+++++	+++++
109 Hexachloroethane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++			+++++	+++++
112 1,2,4-Trichlorobenzene	1.15119	0.81264	0.75550	0.74774	0.62870	0.62611		
	0.60848	0.60190	+++++	+++++			0.74153	24.781
113 Hexachlorobutadiene	0.88228	0.59577	0.59814	0.57994	0.50668	0.48835		
	0.48255	0.48470	+++++	+++++			0.57730	23.077
114 Naphthalene	+++++	+++++	1.59351	1.39269	1.15850	1.13769		
	1.11936	1.10323	+++++	+++++			1.25083	15.907
111 1,3,5-Trichlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++			+++++	+++++
115 1,2,3-trichlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++			+++++	+++++
187 2,3-Dichloropropene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++			+++++	+++++
201 2,2-Dichloropropane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++			+++++	+++++

Eurofins Air Toxics Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 10-FEB-2015 15:00
End Cal Date : 02-MAR-2015 15:11
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msde.i/02Mar2015.b/e15l0210b.m
Cal Date : 02-Mar-2015 16:01 sblack
Curve Type : Average

Compound	0.05000 Level 5	0.10000 Level 6	0.50000 Level 7	1.000 Level 8	5.000 Level 9	10.000 Level 10	___ RRF	% RSD
	20.000 Level 11	40.000 Level 12	2.000 Level 13	4.000 Level 15				
197 1-Methoxy-2-Propyl Acetate	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++			+++++	+++++
198 2-Heptanone	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++			+++++	+++++
199 Butyl Acetate	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++			+++++	+++++
200 n-Butanol	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++			+++++	+++++
202 Methyl Methacrylate	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++			+++++	+++++
206 Acetaldehyde	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++			+++++	+++++
M 208 Total Xylenes	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++			+++++	+++++
209 Freon 143a	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++			+++++	+++++
210 Freon 142b	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++			+++++	+++++
211 Freon 21	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++			+++++	+++++

Eurofins Air Toxics Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 10-FEB-2015 15:00
End Cal Date : 02-MAR-2015 15:11
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msde.i/02Mar2015.b/e15l0210b.m
Cal Date : 02-Mar-2015 16:01 sblack
Curve Type : Average

Compound	0.05000 Level 5	0.10000 Level 6	0.50000 Level 7	1.000 Level 8	5.000 Level 9	10.000 Level 10	___ RRF	% RSD
	20.000 Level 11	40.000 Level 12	2.000 Level 13	4.000 Level 15				
212 1,2-Dichlorotrifluoroethane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++			+++++	+++++
213 Freon 123	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++			+++++	+++++
214 Cyclopentene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++			+++++	+++++
215 Pentachloroethane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++			+++++	+++++
216 Cyclohexanone	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++			+++++	+++++
217 Diisobutyl Ketone	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++			+++++	+++++
218 Isobutanol	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++			+++++	+++++
219 1-Butanol	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++			+++++	+++++
$ 54 1,2-Dichloroethane-d4	1.05875	1.05114	1.05724	1.05657	1.05586	1.05682		
	1.03452	1.06737	+++++	+++++			1.05478	0.887
$ 67 Toluene-d8	0.95295	0.93735	0.94224	0.95155	0.94326	0.96975		
	0.93661	0.93681	+++++	+++++			0.94632	1.206

Eurofins Air Toxics Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 10-FEB-2015 15:00
End Cal Date : 02-MAR-2015 15:11
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msde.i/02Mar2015.b/e15l0210b.m
Cal Date : 02-Mar-2015 16:01 sblack
Curve Type : Average

Compound	0.05000 Level 5	0.10000 Level 6	0.50000 Level 7	1.000 Level 8	5.000 Level 9	10.000 Level 10	___ RRF	% RSD
	20.000 Level 11	40.000 Level 12	2.000 Level 13	4.000 Level 15				
$ 87 Bromofluorobenzene	0.58196	0.58123	0.58682	0.58489	0.57258	0.57421		
	0.56751	0.57784	+++++	+++++			0.57838	1.140

Calibration History

Method : /chem/msde.i/02Mar2015.b/e15l0210b.m
Start Cal Date: 10-FEB-2015 15:00
End Cal Date : 02-MAR-2015 15:11

Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 5 , Cal Amount: 0.05000		
10-FEB-2015 15:00	Level05	/chem/msde.i/10Feb2015.b/e021006.d

Cal Level: 6 , Cal Amount: 0.10000		
11-FEB-2015 06:22	Level#1	/chem/msde.i/10Feb2015.b/e021018.d

Cal Level: 7 , Cal Amount: 0.50000		
02-MAR-2015 10:31	AT7	/chem/msde.i/02Mar2015.b/e030205.d
10-FEB-2015 16:30	AT09	/chem/msde.i/10Feb2015.b/e021008.d

Cal Level: 8 , Cal Amount: 1.00000		
02-MAR-2015 11:44	AT7	/chem/msde.i/02Mar2015.b/e030206.d
10-FEB-2015 17:27	HILOcrvFULL	/chem/msde.i/10Feb2015.b/e021009.d

Cal Level: 9 , Cal Amount: 5.00000		
02-MAR-2015 15:11	AT7	/chem/msde.i/02Mar2015.b/e030209.d
10-FEB-2015 18:20	HILOcrvFULL	/chem/msde.i/10Feb2015.b/e021010.d

Cal Level: 10, Cal Amount: 10.00000		
10-FEB-2015 19:01	HILOcrvFULL	/chem/msde.i/10Feb2015.b/e021011.d

Cal Level: 11, Cal Amount: 20.00000		
10-FEB-2015 19:49	HILOcrvFULL	/chem/msde.i/10Feb2015.b/e021012.d

Cal Level: 12, Cal Amount: 40.00000		
10-FEB-2015 20:40	HILOcrvFULL	/chem/msde.i/10Feb2015.b/e021013.d

Cal Level: 13, Cal Amount: 2.00000		
02-MAR-2015 13:05	AT7	/chem/msde.i/02Mar2015.b/e030207.d

Cal Level: 15, Cal Amount: 4.00000		
02-MAR-2015 13:47	AT7	/chem/msde.i/02Mar2015.b/e030208.d

Continuing Calibration
Ccal Level Mode: GLOBAL LEVEL 9

Ccal Level: 9 , Ccal Amount: 5.000		
02-MAR-2015 08:10	AT09QC	/chem/msde.i/02Mar2015.b/e030202.d

Ccal Level: 8 , Ccal Amount: 1.000		
02-MAR-2015 11:44	AT7CCV	/chem/msde.i/02Mar2015.b/e030206a.d

Ccal Level: 8 , Ccal Amount: 1.000		
02-MAR-2015 13:05	AT7CCV	/chem/msde.i/02Mar2015.b/e030207a.d

Ccal Level: 9 , Ccal Amount: 5.000		
02-MAR-2015 15:11	AT7	/chem/msde.i/02Mar2015.b/e030209.d

Eurofins Air Toxics Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 10-FEB-2015 15:00
End Cal Date : 02-MAR-2015 15:11
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msde.i/02Mar2015.b/e15l0210b.m
Cal Date : 02-Mar-2015 16:01 sblack
Curve Type : Average

Calibration File Names:
Level 5: /chem/msde.i/10Feb2015.b/e021006.d
Level 6: /chem/msde.i/10Feb2015.b/e021018.d
Level 7: /chem/msde.i/02Mar2015.b/e030205.d
Level 8: /chem/msde.i/02Mar2015.b/e030206.d
Level 9: /chem/msde.i/02Mar2015.b/e030209.d
Level 10: /chem/msde.i/10Feb2015.b/e021011.d
Level 11: /chem/msde.i/10Feb2015.b/e021012.d
Level 12: /chem/msde.i/10Feb2015.b/e021013.d
Level 13: /chem/msde.i/02Mar2015.b/e030207.d
Level 15: /chem/msde.i/02Mar2015.b/e030208.d

SB 3/3/15
MB 3/3/15

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

Compound	0.05000 Level 5	0.10000 Level 6	0.50000 Level 7	1.000 Level 8	5.000 Level 9	10.000 Level 10	RRF	% RSD
	20.000 Level 11	40.000 Level 12	2.000 Level 13	4.000 Level 15				
1 Freon 134a	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++			+++++	+++++
207 Iodomethane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++			+++++	+++++
205 1-Propanol	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++			+++++	+++++
204 2-Chloroethyl Vinyl Ether	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++			+++++	+++++
2 Propylene	+++++	+++++	0.82995	0.86346	0.81041	0.77716		
	0.74965	0.74535	+++++	+++++			0.79600	5.887
3 Freon 152A	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++			+++++	+++++

Curve Name: E15$_L$0210B

Initial Calibration Narrative

An initial calibration curve was analyzed on 02/10/15 on MSD-E.

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

ICAL: One (1) out: Acetone: 35.34%

ICV: One (2) out: Carbon Tetrachloride: 132%
DOD control limits: Zero (0)

AFCEE 4.0: One (1) out: Carbon Tetrachloride: 132%

Due to unacceptable linearity, the RL for Ethanol was raised from 0.50ppbv to 1.0 ppbv.

Naphthalene was calibrated from 0.05ppbv to 4.0ppbv.

The following compounds are good for special RL of 0.05ppbv:

- Freon 114
- Freon 11
- Freon 113
- 1,1,1-Trichloroethane
- Trichloroethene
- Bromodichloromethane
- Carbon Tetrachloride
- Tetrachloroethene
- Dibromochloromethane
- 1,2-Dibromoethane
- Bromoform
- 1,1,2,2-Tetrachloroethane
- 1,2,4-Trimethylbenzene
- 1,2-Dichlorobenzene
- 1,3-Dichlorobenzene
- 1,4-Dichlorobenzene
- 1,2,4-Trichlorobenzene
- Hexachlorobutadiene
- 1,3,5-Trimethylbenzene
- alpha-Chlorotoluene

A five (5) point initial calibration for the AT-7 specials was analyzed on 3/2/15; 0.5ppbv-5.0ppbv. Zero (0) out.
ICV: Zero (0) OUT. File# E030210. Standard 2687-248; 1.0ppbv (5.0ppbv); 50mL load.

MDL was run 10/15-20/14.

Eurofins Air Toxics, Inc. **MSD-E** **Logbook #2707**

BFB Verification of 176/174 m/z Ratio: (1295172/1320944) X100 = 98.05%	
Tekmar Purge Flow: NA	
Vacuum: 9.55 X10-6	

IS/S Std. #: 2716-61		Exp. Date: 5/9/15	
BCM	LL: 276169	SIM:	270387
1,4-DFB	1109585		1212883
CB-d5	1031911		1103730

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

File ID: E021011a	
Compound: Tol-d8	
Initials: Act	

Calculation Check:

ppbv of compound = $\frac{\text{Area}_{\text{Sample}}}{\text{Area}_{\text{IS}}} \times \frac{\text{Conc}_{\text{IS}}}{\text{RRF}}$ = (1076023) x (5.000) = 5.124
(1109585) (0.94632)

SOP# (Circle one): 6 / (83 / 38) / 91 / 109 Method (Circle one) (TO-14A/TO-15)/TO-17 Reported Result: 5.124

Method Name: E15L0210A / E15S0210A

	Use	File	Lab ID#	Can#	Pressure	Amt. Loaded	DF	Loaded By Initials	Date Analyzed	Time Analyzed	Reviewed By Initials	Comments/Standard Expiration Date
1	✓	E021001	BFB Tune Check	2299-791	50ng	2.0ml	1.00	Act	2/10/15	1148	Act	
2	✓	02	ICAL Level 1	2716-64	0.003 ppbv	15 mL		Act		1207	Act	Exp 4/6/15
3	✓	03	2		0.005 ppbv	25mL		Act		1249	Act	
4	✓	04	3		0.01 ppbv	50 mL		Act		1331	Act	
5	✓	05	4		0.02 ppbv	100mL		Act		1415	Act	
6	✓	06	5		0.05 ppbv	250mL		Act		1500	GH	
7	X	07	6	2716-65	0.10 ppbv	25mL		Act		1543	Act	
8	✓	08	7		0.50 ppbv	125 mL		GH		1630	GH	
9	✓	09	8		1.0 ppbv	250mL		GH		1727	GH	
10	✓	10	9	2687-244	5.0 ppbv	25mL		GH		1820	GH	
11	✓	11	10		10 ppbv	50 mL		GH		1901	GH	
12	✓	12	11		20 ppbv	100mL		GH		~~1901~~ 1949	GH	
13	✓	13	12		40 ppbv	200mL		GH		2040	GH	
14	X	14	System blank	25313	humid	250mL		GH		2155	GH	

Reviewed

2/11/15
Date

	Use	File	Lab ID#	Can#	Pressure	Amt. Loaded	DF	Loaded By Initials	Date Analyzed	Time Analyzed	Reviewed By Initials	Comments/Standard Expiration Date
15	X	E02 10,5	System blank	25313	humid	250mL	1.00	GH	2-10-15	2244	GH	
16	X	16	System blank	35248	humid	250mL	1.00	GH	↓	2328	AGT	
17	✓	17	System Blank	35248	Humid	250mL	1.00	AGT	2/11/15	0539	AGT	
18	✓	18	ICAL Level 6	2746.65	0.10ppbv	25mL	1.00	AGT		0622	AGT	Exp 4/6/15
19	X	19	ICV	2687.186	10ppbv	50mL	1.00	AGT		0713	AGT	Exp 3/19/15 Too many out
20	✓	20	ICV	2687.185	10ppbv	50mL	1.00	AGT	↓	0804	AGT	Exp 3/19/15
21												
22												
23												2/11/15
24												AGT
25												
26												
27												
28												
29												
30												
31												
32												
33												
34												
35												
36												

Reviewed

2/11/15
Date

Eurofins Air Toxics, Inc. **MSD-E** **Logbook #2707**

BFB Verification of 176/174 m/z Ratio:	(73400 / 75300) x 100 = 97.43
Tekmar Purge Flow:	N/A
Vacuum:	9.48e-6

IS/S Std. #:	2716-G1	Exp. Date:	5/9/15
BCM LL:	193169	Sim:	199232
1,4-DFB	751955		838330
CB-d5	683410		768673

Verified CCV IS vs ICAL mid-point (-40%D): 83

File ID:	E030202
Compound:	Toluene-d8
Initials:	SB

Calculation Check:

ppbv of compound = $\frac{\text{Area}_{\text{Sample}}}{\text{Area}_{\text{IS}}} \times \frac{\text{Conc}_{\text{IS}}}{\text{RRF}}$ = (715850) x (5.000) / (751955) (0.94632) = 5.030

SOP# (Circle one): 6 / 83 / 38 / 91 / 109 Method (Circle one): TO-14A/TO-15/TO-17 Reported Result: 5.030

Method Name: E15L02108/E15S0210A

	Use	File	Lab ID#	Can#	Pressure	Amt. Loaded	DF	Loaded By Initials	Date Analyzed	Time Analyzed	Reviewed By Initials	Comments/Standard Expiration Date
		~~3/2/15~~										
1	✓	~~E030201~~	~~BB~~ Tune outcome	2299-791	50ng	2µL	1.00	SB	3/2/15	0751	SB	
2	✓	E030202	CCV (25ppbv)	2687-244A	~~10~~ 5.0ppbv	50mL	1.00	SB		0810	SB	LL: 1out 7505 Sim Ø out Exp. 4/6/15
3	✓	03	LCS (50ppbv)	2687-177	5ppbv	25mL	1.00	SB		0858	SB	Exp: 3/19/15 Ø out
4	✓	04	LCSD (↓)	↓	5ppbv	25mL	1.00	SB		0941	SB	↓
5	✓	05	ICAL level #7	2687-262	0.5ppbv	25mL	1.00	SB		1031	SB	Exp 4/13/15 AT-7
6	✓	06	#8		1.0ppbv	50mL		SB		1144	SB	CCV
7	✓	07	#13		2.0ppbv	100mL		SB		1305	SB	
8	✓	08	#15		4.0ppbv	200mL		SB		1347	SB	
9	✓	09	#9		5.0ppbv	250mL		SB		1511	SB	
10	✓	10	ICV (5.0ppbv)	2687-248	1X.0ppbv	50mL		SB		1602	~~RM~~/EA	Exp: 4/6/15 AT-7 Ø out
11	✓	11	Lab blank	34034	Humid	250mL	1.00	RM		704	~~RM~~ EA	
12	✓	12	1503003-01A	903	29"Hg-5psi	250mL	1.00 ~~1.00~~	RM		1812	~~RM~~/EA	NO CD
13	✓	13	-01A	35267	13"Hg-5psi	250mL	2.26	RM		1909	~~RM~~/EA	CD 7RL, must be ND
14	✓	14	-02A	30846	3.5"Hg-5psi	250mL	1.52	RM		2011	~~RM~~/AT	CD 7RL, must be ND

on per AM (AS) SB 3/3/15

Reviewed: X Date: 3/3/15

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

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

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

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

Eurofins Air Toxics Inc.

EPA TO-15/Modified TO14A

Data file : /chem/msde.i/10Feb2015.b/e021020.d
Lab Smp Id: ICV Client Smp ID: ICV
Inj Date : 11-FEB-2015 08:04
Operator : act Inst ID: msde.i
Smp Info : 50mL #2687-185; ICV; ICV
Misc Info : 10ppbv (50ppbv)
Comment : Low-Level/GC-MS
Method : /chem/msde.i/10Feb2015.b/e15l0210a.m
Meth Date : 11-Feb-2015 09:16 atoyama Quant Type: ISTD
Cal Date : 10-FEB-2015 20:40 Cal File: e021013.d
Als bottle: 1 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT09.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor

RT	EXP RT	(REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
* 46 Bromochloromethane						CAS #: 74-97-5		
15.642	15.641	(1.000)	130	222144	5.00000		80.00- 120.00	100.00
15.642	15.641	(1.000)	128	171520			47.96- 107.96	77.21
15.642	15.641	(1.000)	49	334053			112.05- 172.05	150.38
* 58 1,4-Difluorobenzene						CAS #: 540-36-3		
17.011	17.011	(1.000)	114	925948	5.00000		80.00- 120.00	100.00
17.011	17.011	(1.000)	88	131509			0.00- 44.83	14.20
* 75 Chlorobenzene-d5						CAS #: 3114-55-4		
22.407	22.407	(1.000)	117	841398	5.00000		80.00- 120.00	100.00
22.407	22.407	(1.000)	82	389487			16.13- 76.13	46.29
$ 54 1,2-Dichloroethane-d4						CAS #: 17060-07-0		
16.457	16.457	(1.052)	65	233616	4.98511	4.985	80.00- 120.00	100.00
16.457	16.457	(1.052)	67	124408			25.66- 85.66	53.25

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
$ 67 Toluene-d8					CAS #: 2037-26-5		
19.624	19.646 (1.154)	98	876334	5.00054	5.000	80.00- 120.00	100.00
19.624	19.624 (1.154)	70	86066			0.00- 39.92	9.82
19.624	19.646 (1.154)	100	583869			36.14- 96.14	66.63
$ 87 Bromofluorobenzene					CAS #: 460-00-4		
24.065	24.065 (1.074)	174	493186	5.06718	5.067	80.00- 120.00	100.00
24.065	24.065 (1.074)	95	544719			81.46- 141.46	110.45
24.065	24.065 (1.074)	176	472814			67.17- 127.17	95.87
2 Propylene					CAS #: 115-07-1		
5.022	5.046 (0.321)	41	410301	11.6018	11.602	80.00- 120.00	100.00
5.022	5.046 (0.321)	42	276299			35.75- 95.75	67.34
5.022	5.046 (0.321)	39	281392			39.85- 99.85	68.58
4 Dichlorodifluoromethane/Fr12					CAS #: 75-71-8		
5.480	5.504 (0.350)	85	1372037	11.4070	11.407	80.00- 120.00	100.00
5.504	5.504 (0.352)	87	448337			3.28- 63.28	32.68
6 Freon 114					CAS #: 76-14-2		
6.853	6.853 (0.438)	135	1341786	11.4685	11.468	80.00- 120.00	100.00
6.853	6.853 (0.438)	137	436776			2.37- 62.37	32.55
7 Chloromethane					CAS #: 74-87-3		
7.191	7.191 (0.460)	50	500520	10.8461	10.846	80.00- 120.00	100.00
7.191	7.191 (0.460)	52	167851			3.09- 63.09	33.54
9 Butane					CAS #: 106-97-8		
7.906	7.906 (0.505)	58	118686	10.7615	10.761	80.00- 120.00	100.00
7.906	7.906 (0.505)	43	886979			706.28- 766.28	747.33
10 Vinyl Chloride					CAS #: 75-01-4		
8.045	8.045 (0.514)	62	576449	11.8149	11.815	80.00- 120.00	100.00
8.045	8.045 (0.514)	64	185360			1.76- 61.76	32.16
11 1,3-Butadiene					CAS #: 106-99-0		
8.271	8.271 (0.529)	54	452361	10.8657	10.866	80.00- 120.00	100.00
8.271	8.271 (0.529)	39	412753			61.78- 121.78	91.24
12 Bromomethane					CAS #: 74-83-9		
9.764	9.764 (0.624)	94	448761	10.1047	10.105	80.00- 120.00	100.00
9.764	9.764 (0.624)	96	429026			62.88- 122.88	95.60
13 Chloroethane					CAS #: 75-00-3		
10.233	10.233 (0.654)	64	289346	11.8935	11.894	80.00- 120.00	100.00
10.233	10.233 (0.654)	49	73832			0.00- 56.27	25.52

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
13 Chloroethane (continued)							
10.233	10.233 (0.654)	66	93253			1.65- 61.65	32.23
14 Isopentane					CAS #: 78-78-4		
10.367	10.367 (0.663)	57	467744	11.2499	11.250	80.00- 120.00	100.00
10.367	10.367 (0.663)	43	672257			114.02- 174.02	143.72
10.367	10.367 (0.663)	42	569437			91.28- 151.28	121.74
16 Trichlorofluoromethane/Fr11					CAS #: 75-69-4		
10.976	10.995 (0.702)	101	1434597	11.3863	11.386	80.00- 120.00	100.00
10.976	10.995 (0.702)	103	936883			35.41- 95.41	65.31
18 Ethanol					CAS #: 64-17-5		
11.890	11.890 (0.760)	45	237287	11.5832	11.583	80.00- 120.00	100.00
11.890	11.890 (0.760)	46	80083			7.33- 67.33	33.75
11.890	11.890 (0.760)	43	85274			0.00- 51.69	35.94
21 1,1-Dichloroethene					CAS #: 75-35-4		
12.328	12.328 (0.788)	98	399165	10.5314	10.531	80.00- 120.00	100.00
12.328	12.328 (0.788)	61	925279			204.24- 264.24	231.80
12.328	12.328 (0.788)	96	628904			126.62- 186.62	157.55
19 Freon 113					CAS #: 76-13-1		
12.309	12.309 (0.787)	151	1220838	10.5659	10.566	80.00- 120.00	100.00
12.309	12.309 (0.787)	153	775804			34.79- 94.79	63.55
12.309	12.309 (0.787)	101	1351408			79.87- 139.87	110.70
22 Acetone					CAS #: 67-64-1		
12.595	12.595 (0.805)	58	317907	10.0909	10.091	80.00- 120.00	100.00
12.595	12.595 (0.805)	43	918937			255.02- 315.02	289.06
23 Carbon Disulfide					CAS #: 75-15-0		
12.690	12.690 (0.811)	76	1514125	8.95598	8.956	80.00- 120.00	100.00
26 3-Chloroprene					CAS #: 107-05-1		
13.109	13.109 (0.838)	76	259969	11.2814	11.281	80.00- 120.00	100.00
13.109	13.109 (0.838)	41	731867			249.93- 309.93	281.52
25 2-Propanol					CAS #: 67-63-0		
12.938	12.938 (0.827)	45	1041141	11.2950	11.295	80.00- 120.00	100.00
12.938	12.938 (0.827)	43	173183			0.00- 47.09	16.63
12.938	12.938 (0.827)	59	46010			0.00- 34.17	4.42
29 Methylene Chloride					CAS #: 75-09-2		
13.395	13.395 (0.856)	84	532323	11.1573	11.157	80.00- 120.00	100.00
13.395	13.395 (0.856)	49	684132			98.36- 158.36	128.52

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
29 Methylene Chloride (continued)							
13.395	13.395 (0.856)	51	216134			9.23- 69.23	40.60
31 MTBE					CAS #: 1634-04-4		
13.701	13.701 (0.876)	73	1627609	11.1833	11.183	80.00- 120.00	100.00
13.701	13.701 (0.876)	57	395253			0.00- 54.71	24.28
13.701	13.701 (0.876)	41	333267			0.00- 51.20	20.48
32 trans-1,2-Dichloroethene					CAS #: 156-60-5		
13.756	13.756 (0.879)	98	359292	8.99864	8.999	80.00- 120.00	100.00
13.756	13.756 (0.879)	61	749340			180.76- 240.76	208.56
13.756	13.756 (0.879)	96	556341			126.52- 186.52	154.84
35 Hexane					CAS #: 110-54-3		
14.058	14.058 (0.899)	57	1006204	11.1251	11.125	80.00- 120.00	100.00
14.058	14.058 (0.899)	43	630292			32.32- 92.32	62.64
14.058	14.058 (0.899)	86	161221			0.00- 46.22	16.02
37 1,1-Dichloroethane					CAS #: 75-34-3		
14.470	14.470 (0.925)	63	1102005	11.3454	11.345	80.00- 120.00	100.00
14.470	14.470 (0.925)	65	339658			1.72- 61.72	30.82
38 Vinyl Acetate					CAS #: 108-05-4		
14.470	14.470 (0.925)	86	179751	11.2607	11.261	80.00- 120.00	100.00
14.470	14.470 (0.925)	42	126456			45.78- 105.78	70.35
14.470	14.470 (0.925)	43	1715424			1023.67-1083.67	954.33
41 cis-1,2-Dichloroethene					CAS #: 156-59-2		
15.278	15.297 (0.977)	98	493370	12.0591	12.059	80.00- 120.00	100.00
15.278	15.278 (0.977)	61	933596			160.54- 220.54	189.23
15.278	15.297 (0.977)	96	760978			126.05- 186.05	154.24
42 2-Butanone					CAS #: 78-93-3		
15.278	15.278 (0.977)	72	300520	11.2159	11.216	80.00- 120.00	100.00
15.278	15.278 (0.977)	43	1194134			374.35- 434.35	397.36
15.278	15.278 (0.977)	57	97776			4.18- 64.18	32.54
44 Tetrahydrofuran					CAS #: 109-99-9		
15.611	15.611 (0.998)	42	709702	11.1648	11.165	80.00- 120.00	100.00
15.611	15.611 (0.998)	71	274872			9.38- 69.38	38.73
15.611	15.611 (0.998)	72	293947			11.73- 71.73	41.42
47 Chloroform					CAS #: 67-66-3		
15.703	15.703 (1.004)	83	1212516	10.6666	10.666	80.00- 120.00	100.00
15.703	15.703 (1.004)	85	822709			36.28- 96.28	67.85

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
48 Cyclohexane					CAS #: 110-82-7		
15.919	15.919 (1.018)	84	862764	10.9821	10.982	80.00- 120.00	100.00
15.919	15.919 (1.018)	56	1062933			94.44- 154.44	123.20
15.919	15.919 (1.018)	41	531073			32.54- 92.54	61.55
49 1,1,1-Trichloroethane					CAS #: 71-55-6		
15.919	15.919 (1.018)	97	1281103	11.0730	11.073	80.00- 120.00	100.00
15.919	15.919 (1.018)	99	832448			34.78- 94.78	64.98
51 Carbon Tetrachloride					CAS #: 56-23-5		
16.104	16.135 (1.030)	119	1359706	13.2086	13.209	80.00- 120.00	100.00(R)
16.104	16.135 (1.030)	117	1414680			73.51- 133.51	104.04
52 2,2,4-Trimethylpentane					CAS #: 540-84-1		
16.361	16.361 (1.046)	56	1401798	10.4719	10.472	80.00- 120.00	100.00
16.361	16.361 (1.046)	57	4406251			271.28- 331.28	314.33
16.361	16.361 (1.046)	41	1009552			42.90- 102.90	72.02
53 Benzene					CAS #: 71-43-2		
16.457	16.457 (0.967)	78	1893936	10.5264	10.526	80.00- 120.00	100.00
16.457	16.457 (0.967)	77	446052			0.00- 53.40	23.55
56 1,2-Dichloroethane					CAS #: 107-06-2		
16.554	16.578 (0.973)	62	736114	10.5333	10.533	80.00- 120.00	100.00
16.554	16.578 (0.973)	64	241307			2.30- 62.30	32.78
57 Heptane					CAS #: 142-82-5		
16.602	16.602 (0.976)	57	636878	10.7447	10.745	80.00- 120.00	100.00
16.602	16.602 (0.976)	100	273655			12.62- 72.62	42.97
16.602	16.602 (0.976)	43	1161558			155.09- 215.09	182.38
59 Trichloroethene					CAS #: 79-01-6		
17.421	17.421 (1.024)	130	1070995	10.5405	10.540	80.00- 120.00	100.00
17.421	17.421 (1.024)	95	914385			55.70- 115.70	85.38
17.421	17.421 (1.024)	97	589338			24.95- 84.95	55.03
60 Methylcyclohexane					CAS #: 108-87-2		
17.638	17.638 (1.037)	83	1214611	11.2749	11.275	80.00- 120.00	100.00
17.638	17.638 (1.037)	55	971252			50.32- 110.32	79.96
17.638	17.638 (1.037)	56	316967			0.00- 56.36	26.10
61 1,2-Dichloropropane					CAS #: 78-87-5		
17.855	17.879 (1.050)	63	750713	10.9944	10.994	80.00- 120.00	100.00
17.855	17.879 (1.050)	62	524322			38.47- 98.47	69.84
17.855	17.879 (1.050)	41	340844			15.66- 75.66	45.40

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
62 1,4-Dioxane					CAS #: 123-91-1		
17.999	17.999 (1.058)	88	495835	10.0909	10.091	80.00- 120.00	100.00
17.999	17.999 (1.058)	58	333579			38.94- 98.94	67.28
17.999	17.999 (1.058)	57	106244			0.00- 51.60	21.43
63 Bromodichloromethane					CAS #: 75-27-4		
18.313	18.313 (1.076)	83	1368757	11.2220	11.222	80.00- 120.00	100.00
18.313	18.313 (1.076)	85	920609			35.77- 95.77	67.26
64 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
19.153	19.153 (1.126)	75	1126257	10.1814	10.181	80.00- 120.00	100.00
19.131	19.153 (1.125)	77	366470			2.36- 62.36	32.54
19.131	19.153 (1.125)	39	478819			12.85- 72.85	42.51
65 4-Methyl-2-pentanone					CAS #: 108-10-1		
19.332	19.332 (1.136)	43	1530222	10.6651	10.665	80.00- 120.00	100.00
19.332	19.332 (1.136)	58	630677			10.53- 70.53	41.21
19.332	19.332 (1.136)	85	274550			0.00- 48.12	17.94
68 Toluene					CAS #: 108-88-3		
19.781	19.781 (1.163)	91	2397131	10.7863	10.786	80.00- 120.00	100.00
19.781	19.781 (1.163)	92	1399289			28.42- 88.42	58.37
69 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
20.359	20.359 (0.909)	75	1035231	10.8285	10.828	80.00- 120.00	100.00
20.359	20.359 (0.909)	77	341974			2.22- 62.22	33.03
20.359	20.359 (0.909)	39	440326			11.81- 71.81	42.53
70 1,1,2-Trichloroethane					CAS #: 79-00-5		
20.743	20.743 (0.926)	97	859941	10.5385	10.538	80.00- 120.00	100.00
20.743	20.743 (0.926)	99	544929			33.38- 93.38	63.37
20.743	20.743 (0.926)	83	706660			52.87- 112.87	82.18
71 Tetrachloroethene					CAS #: 127-18-4		
20.908	20.908 (0.933)	166	1333361	10.9393	10.939	80.00- 120.00	100.00
20.908	20.908 (0.933)	129	1001110			46.60- 106.60	75.08
20.908	20.908 (0.933)	131	982610			44.27- 104.27	73.69
72 2-Hexanone					CAS #: 591-78-6		
21.073	21.073 (0.940)	58	843527	11.0617	11.062	80.00- 120.00	100.00
21.073	21.073 (0.940)	43	1461796			145.57- 205.57	173.30
21.073	21.073 (0.940)	100	181192			0.00- 51.87	21.48
73 Dibromochloromethane					CAS #: 124-48-1		
21.485	21.485 (0.959)	129	1741545	11.1141	11.114	80.00- 120.00	100.00
21.485	21.485 (0.959)	127	1358933			46.84- 106.84	78.03

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
74 1,2-Dibromoethane					CAS #: 106-93-4		
21.732	21.732 (0.970)	107	1400078	10.4655	10.466	80.00- 120.00	100.00
21.732	21.732 (0.970)	109	1356960			67.60- 127.60	96.92
76 Chlorobenzene					CAS #: 108-90-7		
22.469	22.469 (1.003)	112	2097622	10.8640	10.864	80.00- 120.00	100.00
22.469	22.469 (1.003)	114	676357			2.32- 62.32	32.24
22.449	22.469 (1.002)	77	1105298			22.98- 82.98	52.69
77 Ethyl Benzene					CAS #: 100-41-4		
22.531	22.531 (1.006)	106	1018515	10.7697	10.770	80.00- 120.00	100.00
22.531	22.531 (1.006)	91	3006288			268.64- 328.64	295.16
80 m,p-Xylene					CAS #: 108-38-3		
22.718	22.718 (1.014)	106	1243931	10.7701	10.770	80.00- 120.00	100.00
22.697	22.718 (1.013)	91	2332572			156.41- 216.41	187.52
81 o-Xylene					CAS #: 95-47-6		
23.299	23.299 (1.040)	106	1193002	11.1755	11.175	80.00- 120.00	100.00
23.299	23.299 (1.040)	91	2346775			167.80- 227.80	196.71
83 Styrene					CAS #: 100-42-5		
23.340	23.340 (1.042)	104	2013959	10.8719	10.872	80.00- 120.00	100.00
23.340	23.340 (1.042)	78	859339			12.84- 72.84	42.67
84 Bromoform					CAS #: 75-25-2		
23.684	23.684 (1.057)	173	1704955	11.2974	11.297	80.00- 120.00	100.00
23.684	23.684 (1.057)	171	903562			22.25- 82.25	53.00
85 Cumene					CAS #: 98-82-8		
23.773	23.773 (1.061)	105	3618727	10.9031	10.903	80.00- 120.00	100.00
23.773	23.773 (1.061)	120	1039773			0.00- 58.98	28.73
89 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
24.244	24.244 (1.082)	83	1679827	10.4402	10.440	80.00- 120.00	100.00
24.244	24.244 (1.082)	85	1130022			36.27- 96.27	67.27
90 Propylbenzene					CAS #: 103-65-1		
24.312	24.312 (1.085)	91	3889511	11.0778	11.078	80.00- 120.00	100.00
24.312	24.312 (1.085)	120	1035337			0.00- 56.53	26.62
92 4-Ethyltoluene					CAS #: 622-96-8		
24.446	24.446 (1.091)	105	3336515	10.9843	10.984	80.00- 120.00	100.00
24.446	24.446 (1.091)	120	1069136			1.72- 61.72	32.04
94 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
24.514	24.514 (1.094)	105	2732157	10.4478	10.448	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
94 1,3,5-Trimethylbenzene (continued)							
24.514	24.514 (1.094)	120	1430407			22.29- 82.29	52.35
98 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
24.962	24.962 (1.114)	105	2452481	10.2964	10.296	80.00- 120.00	100.00
24.962	24.962 (1.114)	120	1212501			19.10- 79.10	49.44
101 1,3-Dichlorobenzene					CAS #: 541-73-1		
25.366	25.366 (1.132)	146	2007273	10.2673	10.267	80.00- 120.00	100.00
25.366	25.366 (1.132)	148	1269943			32.23- 92.23	63.27
25.366	25.366 (1.132)	111	739509			6.65- 66.65	36.84
104 1,4-Dichlorobenzene					CAS #: 106-46-7		
25.455	25.455 (1.136)	146	1936890	9.98562	9.986	80.00- 120.00	100.00
25.455	25.455 (1.136)	148	1224495			32.94- 92.94	63.22
25.455	25.455 (1.136)	111	678416			5.31- 65.31	35.03
105 alpha-chlorotoluene					CAS #: 100-44-7		
25.612	25.612 (1.143)	91	2361210	10.4120	10.412	80.00- 120.00	100.00
25.612	25.612 (1.143)	126	595246			0.00- 55.78	25.21
108 1,2-Dichlorobenzene					CAS #: 95-50-1		
25.881	25.904 (1.155)	146	1778466	9.94296	9.943	80.00- 120.00	100.00
25.881	25.904 (1.155)	148	1122276			32.48- 92.48	63.10
25.881	25.881 (1.155)	111	677441			7.93- 67.93	38.09
112 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
27.652	27.652 (1.234)	180	1068660	8.56402	8.564	80.00- 120.00	100.00
27.652	27.652 (1.234)	182	1016286			66.76- 126.76	95.10
113 Hexachlorobutadiene					CAS #: 87-68-3		
27.742	27.742 (1.238)	225	887237	9.13283	9.133	80.00- 120.00	100.00
27.742	27.742 (1.238)	223	557022			32.55- 92.55	62.78
114 Naphthalene					CAS #: 91-20-3		
27.966	27.966 (1.248)	128	130639	0.62065	0.6206	80.00- 120.00	100.00
27.966	27.966 (1.248)	127	17688			0.00- 42.43	13.54

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

Report Date: 11-Feb-2015 09:16

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msde.i
Lab File ID: e021020.d
Lab Smp Id: ICV
Analysis Type: VOA
Quant Type: ISTD
Operator: act
Method File: /chem/msde.i/10Feb2015.b/e15l0210a.m
Misc Info: 10ppbv (50ppbv)

Calibration Date: 10-FEB-2015
Calibration Time: 19:01
Client Smp ID: ICV
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
46 Bromochloromethan	276169	165701	386637	222144	-19.56
58 1,4-Difluorobenze	1109585	665751	1553419	925948	-16.55
75 Chlorobenzene-d5	1031911	619147	1444675	841398	-18.46

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
46 Bromochloromethan	15.64	15.31	15.97	15.64	0.00
58 1,4-Difluorobenze	17.01	16.68	17.34	17.01	0.00
75 Chlorobenzene-d5	22.41	22.08	22.74	22.41	0.00

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

Report Date: 11-Feb-2015 09:16

Eurofins Air Toxics Inc.

RECOVERY REPORT

Client Name:
Client SDG: 10Feb2015
Sample Matrix: GAS
Fraction: VOA
Lab Smp Id: ICV
Client Smp ID: ICV
Level: LOW
Operator: act
Data Type: MS DATA
SampleType: LCS
SpikeList File: AT09.spk
Quant Type: ISTD
Sublist File: AT09.sub
Method File: /chem/msde.i/10Feb2015.b/e15l0210a.m
Misc Info: 10ppbv (50ppbv)

SPIKE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
4 Dichlorodifluorome	10.000	11.407	114.07	70-130
2 Propylene	10.000	11.602	116.02	60-140
6 Freon 114	10.000	11.468	114.68	70-130
7 Chloromethane	10.000	10.846	108.46	70-130
10 Vinyl Chloride	10.000	11.815	118.15	70-130
11 1,3-Butadiene	10.000	10.866	108.66	70-130
12 Bromomethane	10.000	10.105	101.05	70-130
13 Chloroethane	10.000	11.894	118.94	70-130
16 Trichlorofluoromet	10.000	11.386	113.86	70-130
18 Ethanol	10.000	11.583	115.83	70-130
19 Freon 113	10.000	10.566	105.66	70-130
21 1,1-Dichloroethene	10.000	10.531	105.31	70-130
22 Acetone	10.000	10.091	100.91	70-130
23 Carbon Disulfide	10.000	8.956	89.56	70-130
25 2-Propanol	10.000	11.295	112.95	70-130
26 3-Chloroprene	10.000	11.281	112.81	70-130
29 Methylene Chloride	10.000	11.157	111.57	70-130
31 MTBE	10.000	11.183	111.83	70-130
32 trans-1,2-Dichloro	10.000	8.999	89.99	70-130
35 Hexane	10.000	11.125	111.25	70-130
37 1,1-Dichloroethane	10.000	11.345	113.45	70-130
38 Vinyl Acetate	10.000	11.261	112.61	60-140
41 cis-1,2-Dichloroet	10.000	12.059	120.59	70-130
42 2-Butanone	10.000	11.216	112.16	70-130
44 Tetrahydrofuran	10.000	11.165	111.65	70-130
47 Chloroform	10.000	10.666	106.67	70-130
48 Cyclohexane	10.000	10.982	109.82	70-130
49 1,1,1-Trichloroeth	10.000	11.073	110.73	70-130
51 Carbon Tetrachlori	10.000	13.209	132.09*	70-130
52 2,2,4-Trimethylpen	10.000	10.472	104.72	70-130
53 Benzene	10.000	10.526	105.26	70-130
57 Heptane	10.000	10.745	107.45	70-130
56 1,2-Dichloroethane	10.000	10.533	105.33	70-130

SPIKE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
59 Trichloroethene	10.000	10.540	105.41	70-130
61 1,2-Dichloropropan	10.000	10.994	109.94	70-130
62 1,4-Dioxane	10.000	10.091	100.91	70-130
63 Bromodichlorometha	10.000	11.222	112.22	70-130
64 cis-1,3-Dichloropr	10.000	10.181	101.81	70-130
65 4-Methyl-2-pentano	10.000	10.665	106.65	70-130
68 Toluene	10.000	10.786	107.86	70-130
69 trans-1,3-Dichloro	10.000	10.828	108.28	70-130
70 1,1,2-Trichloroeth	10.000	10.538	105.38	70-130
72 2-Hexanone	10.000	11.062	110.62	70-130
71 Tetrachloroethene	10.000	10.939	109.39	70-130
73 Dibromochlorometha	10.000	11.114	111.14	70-130
74 1,2-Dibromoethane	10.000	10.466	104.66	70-130
76 Chlorobenzene	10.000	10.864	108.64	70-130
77 Ethyl Benzene	10.000	10.770	107.70	70-130
80 m,p-Xylene	10.000	10.770	107.70	70-130
81 o-Xylene	10.000	11.175	111.75	70-130
83 Styrene	10.000	10.872	108.72	70-130
84 Bromoform	10.000	11.297	112.97	70-130
85 Cumene	10.000	10.903	109.03	70-130
89 1,1,2,2-Tetrachlor	10.000	10.440	104.40	70-130
90 Propylbenzene	10.000	11.078	110.78	70-130
92 4-Ethyltoluene	10.000	10.984	109.84	70-130
94 1,3,5-Trimethylben	10.000	10.448	104.48	70-130
98 1,2,4-Trimethylben	10.000	10.296	102.96	70-130
101 1,3-Dichlorobenzen	10.000	10.267	102.67	70-130
104 1,4-Dichlorobenzen	10.000	9.986	99.86	70-130
105 alpha-chlorotoluen	10.000	10.412	104.12	70-130
108 1,2-Dichlorobenzen	10.000	9.943	99.43	70-130
112 1,2,4-Trichloroben	10.000	8.564	85.64	70-130
113 Hexachlorobutadien	10.000	9.133	91.33	70-130
114 Naphthalene	1.000	0.6206	62.06	60-140
14 Isopentane	10.000	11.250	112.50	60-140
9 Butane	10.000	10.761	107.61	60-140
60 Methylcyclohexane	10.000	11.275	112.75	60-140

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 54 1,2-Dichloroethane	5.000	4.985	99.70	70-130
$ 67 Toluene-d8	5.000	5.000	100.01	70-130
$ 87 Bromofluorobenzene	5.000	5.067	101.34	70-130

Data File: /chem/msde.i/10Feb2015.b/e021020.d

Date : 11-FEB-2015 08:04

Client ID: ICV

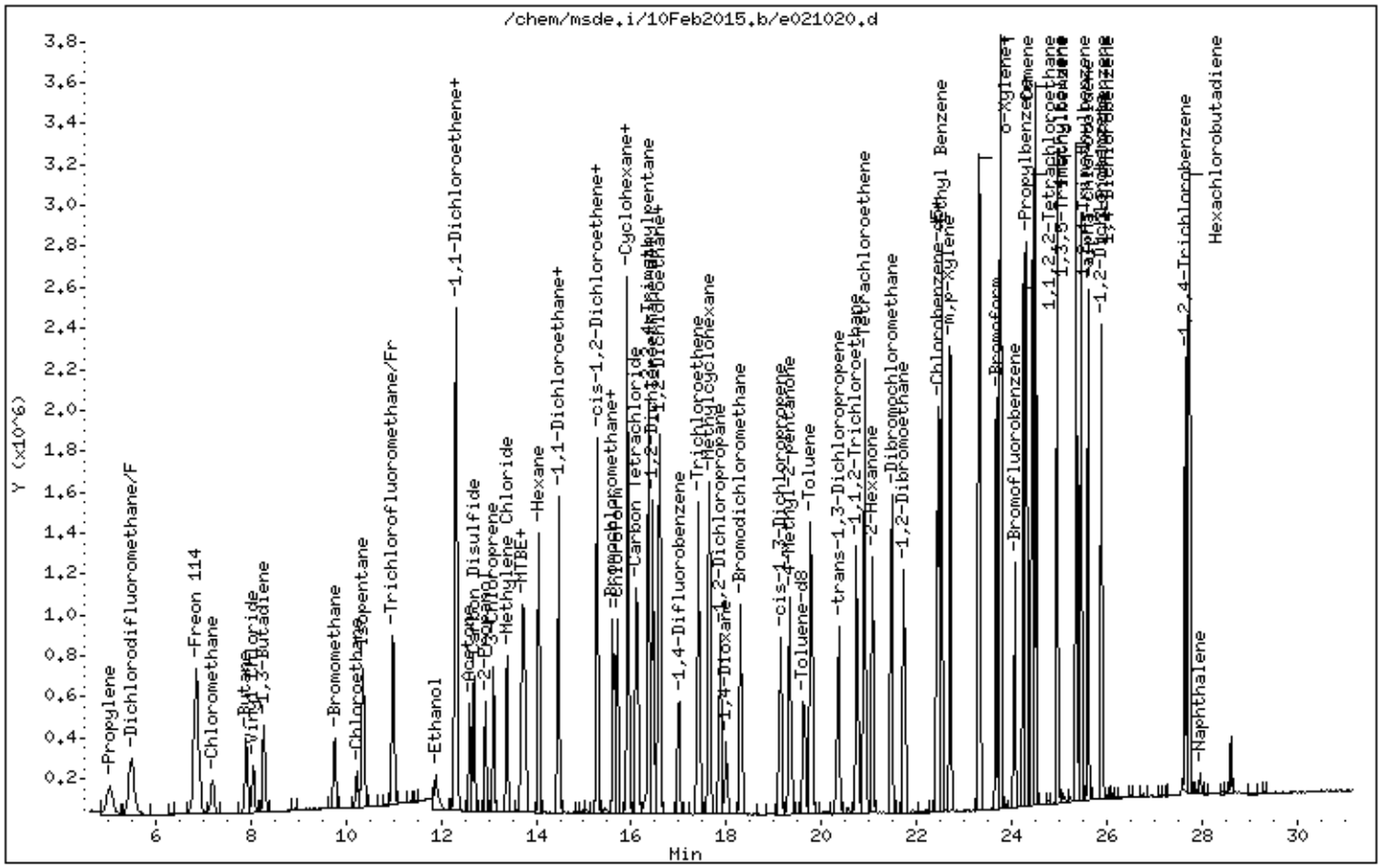
Instrument: msde.i

Sample Info: 50mL #2687-185; ICV; ICV

Operator: act

Column phase: RTx-624

Column diameter: 0.32



Eurofins Air Toxics Inc.

EPA TO-15/Modified TO14A

Data file : /chem/msde.i/02Mar2015.b/e030210.d
Lab Smp Id: ICV Client Smp ID: ICV
Inj Date : 02-MAR-2015 16:02
Operator : sab Inst ID: msde.i
Smp Info : 50mL #2687-248
Misc Info : 1.0ppbv (5.0ppbv) AT-7
Comment : Low-Level/GC-MS
Method : /chem/msde.i/02Mar2015.b/e15l0210b.m
Meth Date : 02-Mar-2015 17:58 HR8M Quant Type: ISTD
Cal Date : 02-MAR-2015 15:11 Cal File: e030209.d
Als bottle: 1 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT7CCV.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
* 46 Bromochloromethane						CAS #: 74-97-5	
15.610	15.611 (1.000)	130	169554	5.00000		80.00- 120.00	100.00
15.610	15.611 (1.000)	128	131978			0.00- 30.00	77.84
15.610	15.611 (1.000)	49	196026			0.00- 30.00	115.61
* 58 1,4-Difluorobenzene						CAS #: 540-36-3	
16.987	16.987 (1.000)	114	667967	5.00000		80.00- 120.00	100.00
16.987	16.987 (1.000)	88	94425			0.00- 30.00	14.14
* 75 Chlorobenzene-d5						CAS #: 3114-55-4	
22.386	22.407 (1.000)	117	621351	5.00000		80.00- 120.00	100.00
22.386	22.407 (1.000)	82	287984			0.00- 30.00	46.35
$ 54 1,2-Dichloroethane-d4						CAS #: 17060-07-0	
16.433	16.457 (1.053)	65	182139	5.09214	5.092	80.00- 120.00	100.00
16.433	16.457 (1.053)	67	100230			25.66- 85.66	55.03

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
$ 67 Toluene-d8					CAS #: 2037-26-5		
19.624	19.624 (1.155)	98	628320	4.97003	4.970	80.00- 120.00	100.00
19.624	19.624 (1.155)	70	80126			0.00- 39.92	12.75
19.624	19.624 (1.155)	100	420302			36.14- 96.14	66.89
$ 87 Bromofluorobenzene					CAS #: 460-00-4		
24.042	24.065 (1.074)	174	338802	4.71375	4.714	80.00- 120.00	100.00
24.042	24.065 (1.074)	95	396169			81.46- 141.46	116.93
24.042	24.065 (1.074)	176	322467			67.17- 127.17	95.18
66 Octane					CAS #: 111-65-9		
19.668	19.668 (1.158)	57	43103	1.35306	1.353	80.00- 120.00	100.00
19.668	19.668 (1.158)	85	45458			0.00- 30.00	105.46
19.668	19.668 (1.158)	43	104073			0.00- 30.00	241.45
88 Decane					CAS #: 124-18-5		
24.356	24.356 (1.088)	57	102181	1.24603	1.246	80.00- 120.00	100.00
24.356	24.356 (1.088)	71	36537			0.00- 30.00	35.76
24.356	24.356 (1.088)	142	6147			0.00- 30.00	6.02
103 1,2,3-trimethylbenzene					CAS #: 526-73-8		
25.433	25.455 (1.136)	120	63790	1.23418	1.234	80.00- 120.00	100.00
25.433	25.455 (1.136)	105	140198			0.00- 30.00	219.78
25.433	25.455 (1.136)	77	15023			0.00- 30.00	23.55
106 Indene					CAS #: 95-13-6		
25.948	25.971 (1.159)	115	82954	0.80593	0.8059	80.00- 120.00	100.00
25.948	25.971 (1.159)	116	82018			0.00- 30.00	98.87

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msde.i
Lab File ID: e030210.d
Lab Smp Id: ICV
Analysis Type: VOA
Quant Type: ISTD
Operator: sab
Method File: /chem/msde.i/02Mar2015.b/e15l0210b.m
Misc Info: 1.0ppbv (5.0ppbv) AT-7

Calibration Date: 02-MAR-2015
Calibration Time: 08:10
Client Smp ID: ICV
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
46 Bromochloromethan	193169	115901	270437	169554	-12.23
58 1,4-Difluorobenze	751955	451173	1052737	667967	-11.17
75 Chlorobenzene-d5	683410	410046	956774	621351	-9.08

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
46 Bromochloromethan	15.61	15.28	15.94	15.61	0.00
58 1,4-Difluorobenze	16.99	16.66	17.32	16.99	0.00
75 Chlorobenzene-d5	22.41	22.08	22.74	22.39	-0.09

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: 03-Mar-2015 09:40

Eurofins Air Toxics Inc.

RECOVERY REPORT

Client Name:
Client SDG: 02Mar2015
Sample Matrix: GAS
Fraction: VOA
Lab Smp Id: ICV
Client Smp ID: ICV
Level: LOW
Operator: sab
Data Type: MS DATA
SampleType: LCS
SpikeList File: AT7LCS.spk
Quant Type: ISTD
Sublist File: AT7CCV.sub
Method File: /chem/msde.i/02Mar2015.b/e15l0210b.m
Misc Info: 1.0ppbv (5.0ppbv) AT-7

SPIKE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
106 Indene	1.000	0.8059	80.59	60-140
66 Octane	1.000	1.353	135.31	60-140
88 Decane	1.000	1.246	124.60	60-140
103 1,2,3-trimethylben	1.000	1.234	123.42	60-140

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 54 1,2-Dichloroethane	5.000	5.092	101.84	70-130
$ 67 Toluene-d8	5.000	4.970	99.40	70-130
$ 87 Bromofluorobenzene	5.000	4.714	94.28	70-130

Data File: /chem/msde.i/02Mar2015.b/e030210.d

Date : 02-MAR-2015 16:02

Client ID: ICV

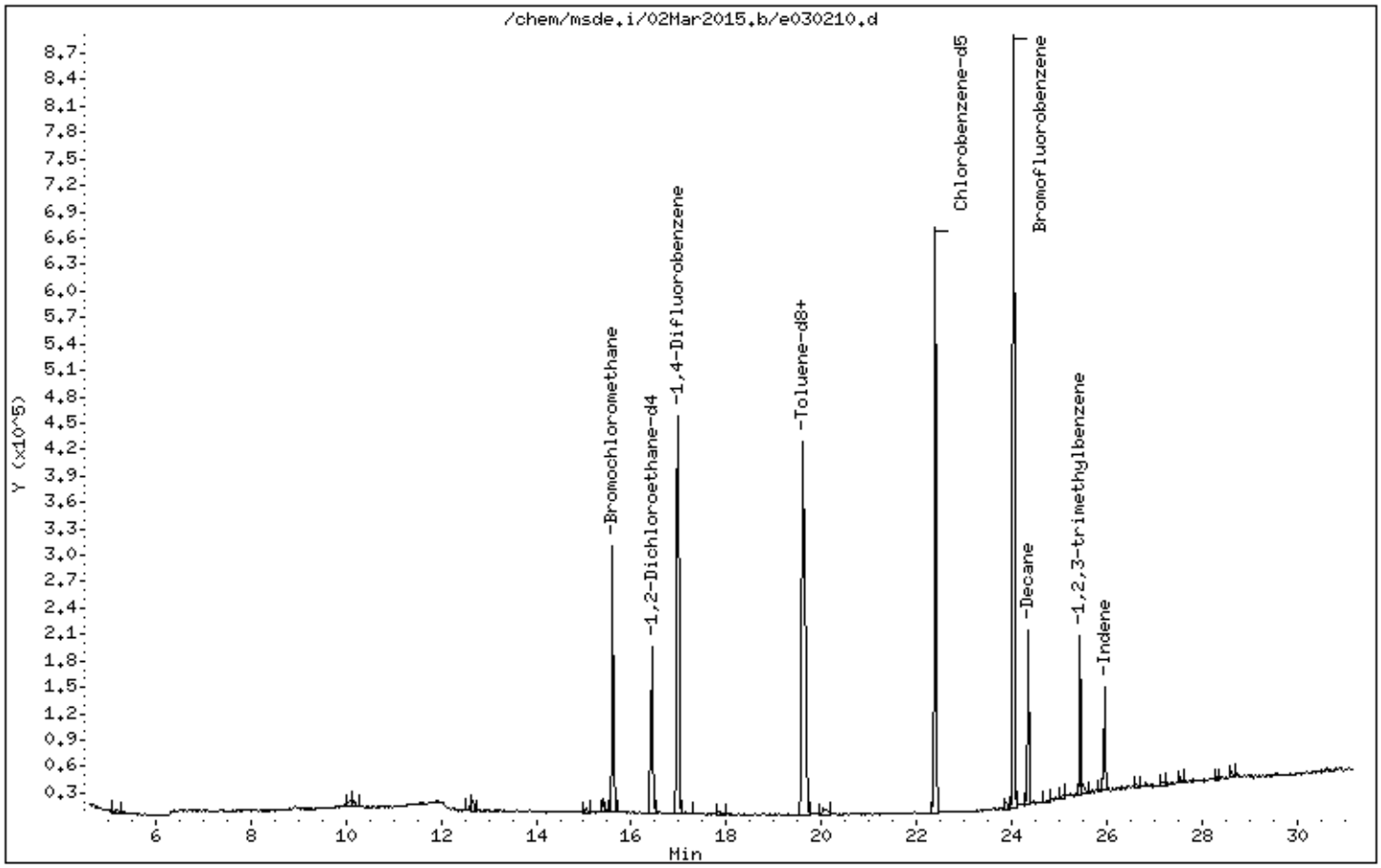
Instrument: msde.i

Sample Info: 50mL #2687-248

Operator: sab

Column phase: RTx-624

Column diameter: 0.32



Eurofins Air Toxics Inc.

EPA TO-15/Modified TO14A

Data file : /chem/msde.i/10Feb2015.b/e021006.d
Lab Smp Id: ICAL Client Smp ID: LEVEL 5
Inj Date : 10-FEB-2015 15:00
Operator : act Inst ID: msde.i
Smp Info : 250mL#2716-64
Misc Info : 0.05ppbv(0.05ppbv)
Comment : Low-Level/GC-MS
Method : /chem/msde.i/10Feb2015.b/e15l0210a.m
Meth Date : 11-Feb-2015 11:32 atoyama Quant Type: ISTD
Cal Date : 10-FEB-2015 15:00 Cal File: e021006.d
Als bottle: 1 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: Level05.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

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
* 46 Bromochloromethane					CAS #: 74-97-5		
15.641	15.641 (1.000)	130	230246	5.00000		80.00- 120.00	100.00
15.641	15.641 (1.000)	128	179393			47.96- 107.96	77.91
15.641	15.641 (1.000)	49	247255			112.05- 172.05	107.39
* 58 1,4-Difluorobenzene					CAS #: 540-36-3		
17.011	17.011 (1.000)	114	948719	5.00000		80.00- 120.00	100.00
16.987	16.987 (1.000)	88	138624			0.00- 44.83	14.61
* 75 Chlorobenzene-d5					CAS #: 3114-55-4		
22.407	22.407 (1.000)	117	879088	5.00000		80.00- 120.00	100.00
22.407	22.407 (1.000)	82	410375			16.13- 76.13	46.68
$ 54 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
16.457	16.457 (1.052)	65	243772	5.00000	5.004	80.00- 120.00	100.00
16.457	16.457 (1.052)	67	135127			25.66- 85.66	55.43

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
$ 67 Toluene-d8					CAS #: 2037-26-5		
19.624	19.624 (1.154)	98	904085	5.00000	4.956	80.00- 120.00	100.00
19.624	19.624 (1.154)	70	87548			0.00- 39.92	9.68
19.624	19.624 (1.154)	100	608513			36.14- 96.14	67.31
$ 87 Bromofluorobenzene					CAS #: 460-00-4		
24.065	24.065 (1.074)	174	511590	5.00000	5.033	80.00- 120.00	100.00
24.065	24.065 (1.074)	95	579927			81.46- 141.46	113.36
24.065	24.065 (1.074)	176	494469			67.17- 127.17	96.65
6 Freon 114					CAS #: 76-14-2		
6.877	6.877 (0.440)	135	6085	0.05000	0.05344	80.00- 120.00	100.00
6.877	6.877 (0.440)	137	1957			2.37- 62.37	32.16
16 Trichlorofluoromethane/Fr11					CAS #: 75-69-4		
10.976	10.976 (0.702)	101	7550	0.05000	0.05620	80.00- 120.00	100.00
10.976	10.976 (0.702)	103	6942			35.41- 95.41	91.95
19 Freon 113					CAS #: 76-13-1		
12.309	12.309 (0.787)	151	8267	0.05000	0.06155	80.00- 120.00	100.00
12.309	12.309 (0.787)	153	5078			34.79- 94.79	61.42
12.309	12.309 (0.787)	101	8168			79.87- 139.87	98.80
49 1,1,1-Trichloroethane					CAS #: 71-55-6		
15.919	15.919 (1.018)	97	5674	0.05000	0.05090	80.00- 120.00	100.00
15.919	15.919 (1.018)	99	4340			34.78- 94.78	76.49
51 Carbon Tetrachloride					CAS #: 56-23-5		
16.104	16.104 (1.030)	119	6194	0.05000	0.05694	80.00- 120.00	100.00
16.135	16.135 (1.032)	117	5747			73.51- 133.51	92.78
59 Trichloroethene					CAS #: 79-01-6		
17.421	17.421 (1.024)	130	6215	0.05000	0.05729	80.00- 120.00	100.00
17.421	17.421 (1.024)	95	5133			55.70- 115.70	82.59
17.421	17.421 (1.024)	97	4992			24.95- 84.95	80.32
63 Bromodichloromethane					CAS #: 75-27-4		
18.288	18.288 (1.075)	83	6008	0.05000	0.05069	80.00- 120.00	100.00
18.288	18.288 (1.075)	85	6859			35.77- 95.77	114.16
71 Tetrachloroethene					CAS #: 127-18-4		
20.908	20.908 (0.933)	166	6990	0.05000	0.05496	80.00- 120.00	100.00
20.908	20.908 (0.933)	129	6185			46.60- 106.60	88.48
20.908	20.908 (0.933)	131	5516			44.27- 104.27	78.91
73 Dibromochloromethane					CAS #: 124-48-1		
21.485	21.485 (0.959)	129	8237	0.05000	0.05217	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
73 Dibromochloromethane (continued)							
21.485	21.485 (0.959)	127	6508			46.84- 106.84	79.01
74 1,2-Dibromoethane					CAS #: 106-93-4		
21.732	21.732 (0.970)	107	8914	0.05000	0.05943	80.00- 120.00	100.00
21.732	21.732 (0.970)	109	8075			67.60- 127.60	90.59
84 Bromoform					CAS #: 75-25-2		
23.684	23.684 (1.057)	173	8856	0.05000	0.05499	80.00- 120.00	100.00
23.684	23.684 (1.057)	171	4438			22.25- 82.25	50.11
89 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
24.244	24.244 (1.082)	83	10443	0.05000	0.05858	80.00- 120.00	100.00
24.244	24.244 (1.082)	85	7310			36.27- 96.27	70.00
94 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
24.513	24.513 (1.094)	105	17345	0.05000	0.05880	80.00- 120.00	100.00(a)
24.513	24.513 (1.094)	120	8787			22.29- 82.29	50.66
98 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
24.962	24.962 (1.114)	105	15871	0.05000	0.05963	80.00- 120.00	100.00(a)
24.962	24.962 (1.114)	120	8706			19.10- 79.10	54.85
101 1,3-Dichlorobenzene					CAS #: 541-73-1		
25.365	25.365 (1.132)	146	13505	0.05000	0.06043	80.00- 120.00	100.00
25.365	25.365 (1.132)	148	9484			32.23- 92.23	70.23
25.365	25.365 (1.132)	111	4804			6.65- 66.65	35.57
104 1,4-Dichlorobenzene					CAS #: 106-46-7		
25.455	25.455 (1.136)	146	14926	0.05000	0.06350	80.00- 120.00	100.00
25.455	25.455 (1.136)	148	8720			32.94- 92.94	58.42
25.455	25.455 (1.136)	111	6063			5.31- 65.31	40.62
112 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
27.652	27.652 (1.234)	180	10120	0.05000	0.06477	80.00- 120.00	100.00
27.652	27.652 (1.234)	182	9596			66.76- 126.76	94.82
108 1,2-Dichlorobenzene					CAS #: 95-50-1		
25.881	25.881 (1.155)	146	13455	0.05000	0.06328	80.00- 120.00	100.00
25.881	25.881 (1.155)	148	8123			32.48- 92.48	60.37
25.903	25.903 (1.156)	111	5883			7.93- 67.93	43.72
105 alpha-chlorotoluene					CAS #: 100-44-7		
25.612	25.612 (1.143)	91	16571	0.05000	0.06183	80.00- 120.00	100.00(a)
25.612	25.612 (1.143)	126	4277			0.00- 55.78	25.81

RT	EXP RT	(REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
113 Hexachlorobutadiene						CAS #: 87-68-3		
27.742	27.742	(1.238)	225	7756	0.05000	0.06437	80.00- 120.00	100.00(a)
27.742	27.742	(1.238)	223	5109			32.55- 92.55	65.87

QC Flag Legend

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

Report Date: 11-Feb-2015 11:32

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msde.i
Lab File ID: e021006.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: act
Method File: /chem/msde.i/10Feb2015.b/e15l0210a.m
Misc Info: 0.05ppbv(0.05ppbv)

Calibration Date: 10-FEB-2015
Calibration Time: 19:01
Client Smp ID: LEVEL 5
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
46 Bromochloromethan	276169	165701	386637	230246	-16.63
58 1,4-Difluorobenze	1109585	665751	1553419	948719	-14.50
75 Chlorobenzene-d5	1031911	619147	1444675	879088	-14.81

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
46 Bromochloromethan	15.64	15.31	15.97	15.64	0.00
58 1,4-Difluorobenze	17.01	16.68	17.34	17.01	0.00
75 Chlorobenzene-d5	22.41	22.08	22.74	22.41	0.00

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

Data File: /chem/msde.i/10Feb2015.b/e021006.d

Date : 10-FEB-2015 15:00

Client ID: LEVEL 5

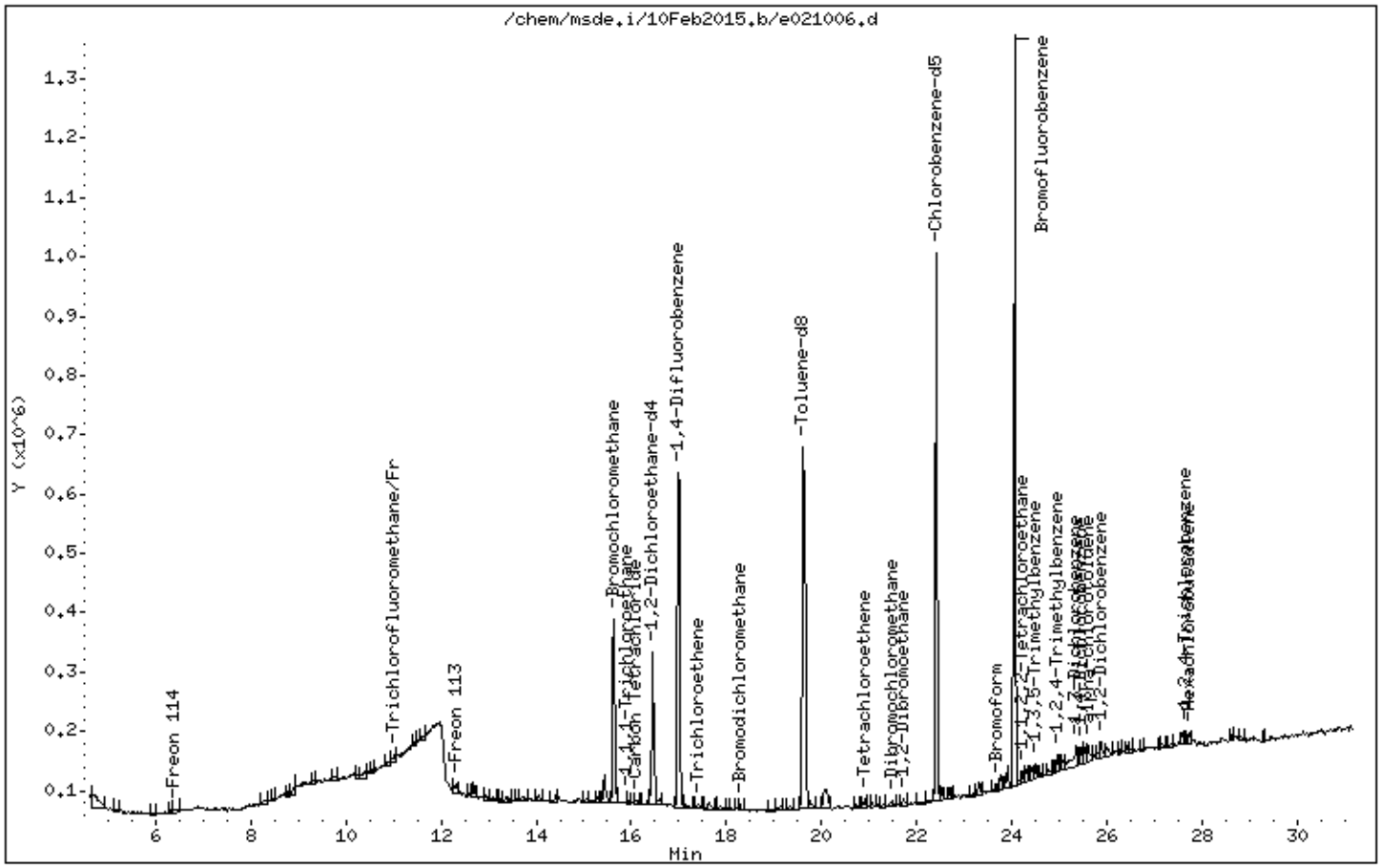
Instrument: msde.i

Sample Info: 250mL#2716-64

Operator: act

Column phase: RTx-624

Column diameter: 0.32



Eurofins Air Toxics Inc.

EPA TO-15/Modified TO14A

Data file : /chem/msde.i/10Feb2015.b/e021018.d
Lab Smp Id: ICAL Client Smp ID: LEVEL 6
Inj Date : 11-FEB-2015 06:22
Operator : act Inst ID: msde.i
Smp Info : 25mL#2687-65
Misc Info : 0.10ppbv(1.0ppbv)
Comment : Low-Level/GC-MS
Method : /chem/msde.i/10Feb2015.b/e15l0210a.m
Meth Date : 11-Feb-2015 11:32 atoyama Quant Type: ISTD
Cal Date : 11-FEB-2015 06:22 Cal File: e021018.d
Als bottle: 1 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: Level#1.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

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
* 46 Bromochloromethane					CAS #: 74-97-5		
15.641	15.641 (1.000)	130	234250	5.00000		80.00- 120.00	100.00
15.641	15.641 (1.000)	128	183543			47.96- 107.96	78.35
15.641	15.641 (1.000)	49	254246			112.05- 172.05	108.54
* 58 1,4-Difluorobenzene					CAS #: 540-36-3		
17.011	17.011 (1.000)	114	982965	5.00000		80.00- 120.00	100.00
16.987	16.987 (1.000)	88	140405			0.00- 44.83	14.28
* 75 Chlorobenzene-d5					CAS #: 3114-55-4		
22.407	22.407 (1.000)	117	894059	5.00000		80.00- 120.00	100.00
22.407	22.407 (1.000)	82	416932			16.13- 76.13	46.63
$ 54 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
16.457	16.457 (1.052)	65	246229	5.00000	4.983	80.00- 120.00	100.00
16.457	16.457 (1.052)	67	136020			25.66- 85.66	55.24

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

$  67 Toluene-d8                                   CAS #: 2037-26-5
 19.624  19.624 (1.154)    98    921387 5.00000    4.953  80.00- 120.00   100.00
 19.624  19.624 (1.154)    70     90409                    0.00-  39.92     9.81
 19.624  19.624 (1.154)   100    619440                   36.14-  96.14    67.23
-------------------------------------------------------------------------------
$  87 Bromofluorobenzene                             CAS #: 460-00-4
 24.065  24.065 (1.074)   174    519653 5.00000    5.025  80.00- 120.00   100.00
 24.065  24.065 (1.074)    95    588947                   81.46- 141.46   113.33
 24.065  24.065 (1.074)   176    505132                   67.17- 127.17    97.21
-------------------------------------------------------------------------------
    4 Dichlorodifluoromethane/Fr12                   CAS #: 75-71-8
  5.504   5.504 (0.352)    85     16004 0.10000   0.1262  80.00- 120.00   100.00
  5.479   5.479 (0.350)    87      3757                    3.28-  63.28    23.48
-------------------------------------------------------------------------------
    6 Freon 114                                      CAS #: 76-14-2
  6.877   6.877 (0.440)   135     16445 0.10000   0.1333  80.00- 120.00   100.00
  6.853   6.853 (0.438)   137      4983                    2.37-  62.37    30.30
-------------------------------------------------------------------------------
    7 Chloromethane                                  CAS #: 74-87-3
  7.191   7.191 (0.460)    50      6652 0.10000   0.1367  80.00- 120.00   100.00
  7.215   7.215 (0.461)    52      3505                    3.09-  63.09    52.69
-------------------------------------------------------------------------------
   10 Vinyl Chloride                                 CAS #: 75-01-4
  8.045   8.045 (0.514)    62      5979 0.10000   0.1162  80.00- 120.00   100.00
  8.062   8.062 (0.515)    64      2808                    1.76-  61.76    46.96
-------------------------------------------------------------------------------
   11 1,3-Butadiene                                  CAS #: 106-99-0
  8.271   8.271 (0.529)    54      6034 0.10000   0.1374  80.00- 120.00   100.00
  8.288   8.288 (0.530)    39      5689                   61.78- 121.78    94.28
-------------------------------------------------------------------------------
   12 Bromomethane                                   CAS #: 74-83-9
  9.764   9.764 (0.624)    94     10866 0.10000   0.2320  80.00- 120.00   100.00
  9.764   9.764 (0.624)    96      6553                   62.88- 122.88    60.31
-------------------------------------------------------------------------------
   16 Trichlorofluoromethane/Fr11                    CAS #: 75-69-4
 10.995  10.995 (0.703)   101     14831 0.10000   0.1116  80.00- 120.00   100.00
 10.976  10.976 (0.702)   103     12005                   35.41-  95.41    80.95
-------------------------------------------------------------------------------
   19 Freon 113                                      CAS #: 76-13-1
 12.309  12.309 (0.787)   151     12754 0.10000   0.1047  80.00- 120.00   100.00
 12.309  12.309 (0.787)   153      9014                   34.79-  94.79    70.68
 12.309  12.309 (0.787)   101     14193                   79.87- 139.87   111.28
-------------------------------------------------------------------------------
   21 1,1-Dichloroethene                             CAS #: 75-35-4
 12.328  12.328 (0.788)    98      5252 0.10000   0.1314  80.00- 120.00   100.00
 12.328  12.328 (0.788)    61     10288                  204.24- 264.24   195.89
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RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
21 1,1-Dichloroethene (continued)							
12.328	12.328 (0.788)	96	7441			126.62- 186.62	141.68
22 Acetone					CAS #: 67-64-1		
12.614	12.614 (0.806)	58	5572	0.10000	0.1677	80.00- 120.00	100.00(a)
12.595	12.595 (0.805)	43	15565			255.02- 315.02	279.34
29 Methylene Chloride					CAS #: 75-09-2		
13.395	13.395 (0.856)	84	6605	0.10000	0.1313	80.00- 120.00	100.00
13.395	13.395 (0.856)	49	7554			98.36- 158.36	114.37
13.395	13.395 (0.856)	51	2947			9.23- 69.23	44.62
31 MTBE					CAS #: 1634-04-4		
13.701	13.701 (0.876)	73	17293	0.10000	0.1127	80.00- 120.00	100.00
13.701	13.701 (0.876)	57	5813			0.00- 54.71	33.61
13.701	13.701 (0.876)	41	6607			0.00- 51.20	38.21
32 trans-1,2-Dichloroethene					CAS #: 156-60-5		
13.756	13.756 (0.879)	98	6028	0.10000	0.1432	80.00- 120.00	100.00
13.756	13.756 (0.879)	61	9614			180.76- 240.76	159.49
13.756	13.756 (0.879)	96	8395			126.52- 186.52	139.27
35 Hexane					CAS #: 110-54-3		
14.058	14.058 (0.899)	57	11582	0.10000	0.1214	80.00- 120.00	100.00
14.058	14.058 (0.899)	43	7326			32.32- 92.32	63.25
14.058	14.058 (0.899)	86	2106			0.00- 46.22	18.18
37 1,1-Dichloroethane					CAS #: 75-34-3		
14.470	14.470 (0.925)	63	11962	0.10000	0.1168	80.00- 120.00	100.00
14.470	14.470 (0.925)	65	4041			1.72- 61.72	33.78
41 cis-1,2-Dichloroethene					CAS #: 156-59-2		
15.297	15.297 (0.978)	98	5232	0.10000	0.1213	80.00- 120.00	100.00
15.278	15.278 (0.977)	61	9519			160.54- 220.54	181.94
15.278	15.278 (0.977)	96	10899			126.05- 186.05	208.31
47 Chloroform					CAS #: 67-66-3		
15.703	15.703 (1.004)	83	15468	0.10000	0.1290	80.00- 120.00	100.00
15.703	15.703 (1.004)	85	10623			36.28- 96.28	68.68
49 1,1,1-Trichloroethane					CAS #: 71-55-6		
15.919	15.919 (1.018)	97	14917	0.10000	0.1223	80.00- 120.00	100.00
15.919	15.919 (1.018)	99	10650			34.78- 94.78	71.40
48 Cyclohexane					CAS #: 110-82-7		
15.919	15.919 (1.018)	84	10352	0.10000	0.1250	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
48 Cyclohexane (continued)							
15.919	15.919 (1.018)	56	12577			94.44- 154.44	121.49
15.919	15.919 (1.018)	41	7610			32.54- 92.54	73.51
51 Carbon Tetrachloride					CAS #: 56-23-5		
16.135	16.135 (1.032)	119	12379	0.10000	0.1140	80.00- 120.00	100.00
16.104	16.104 (1.030)	117	15523			73.51- 133.51	125.40
52 2,2,4-Trimethylpentane					CAS #: 540-84-1		
16.361	16.361 (1.046)	56	17945	0.10000	0.1271	80.00- 120.00	100.00
16.361	16.361 (1.046)	57	50672			271.28- 331.28	282.37
16.361	16.361 (1.046)	41	14622			42.90- 102.90	81.48
53 Benzene					CAS #: 71-43-2		
16.457	16.457 (0.967)	78	25930	0.10000	0.1358	80.00- 120.00	100.00
16.457	16.457 (0.967)	77	6599			0.00- 53.40	25.45
56 1,2-Dichloroethane					CAS #: 107-06-2		
16.554	16.554 (0.973)	62	9726	0.10000	0.1311	80.00- 120.00	100.00
16.554	16.554 (0.973)	64	3995			2.30- 62.30	41.08
57 Heptane					CAS #: 142-82-5		
16.602	16.602 (0.976)	57	7956	0.10000	0.1264	80.00- 120.00	100.00
16.602	16.602 (0.976)	100	2950			12.62- 72.62	37.08
16.602	16.602 (0.976)	43	14845			155.09- 215.09	186.59
59 Trichloroethene					CAS #: 79-01-6		
17.421	17.421 (1.024)	130	13200	0.10000	0.1224	80.00- 120.00	100.00
17.397	17.397 (1.023)	95	11266			55.70- 115.70	85.35
17.421	17.421 (1.024)	97	9799			24.95- 84.95	74.23
61 1,2-Dichloropropane					CAS #: 78-87-5		
17.855	17.855 (1.050)	63	8356	0.10000	0.1153	80.00- 120.00	100.00
17.855	17.855 (1.050)	62	5773			38.47- 98.47	69.09
17.879	17.879 (1.051)	41	4772			15.66- 75.66	57.11
62 1,4-Dioxane					CAS #: 123-91-1		
17.999	17.999 (1.058)	88	7323	0.10000	0.1404	80.00- 120.00	100.00
17.999	17.999 (1.058)	58	5605			38.94- 98.94	76.54
17.999	17.999 (1.058)	57	3376			0.00- 51.60	46.10
63 Bromodichloromethane					CAS #: 75-27-4		
18.313	18.313 (1.076)	83	15685	0.10000	0.1211	80.00- 120.00	100.00
18.313	18.313 (1.076)	85	11182			35.77- 95.77	71.29
64 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
19.131	19.131 (1.125)	75	13994	0.10000	0.1192	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
   ==   ====== ========  ====  ======== =======  =======   ============    =====

   64 cis-1,3-Dichloropropene (continued)
 19.153  19.153 (1.126)    77      4903                     2.36-  62.36    35.04
 19.153  19.153 (1.126)    39      8183                    12.85-  72.85    58.48
-------------------------------------------------------------------------------
   65 4-Methyl-2-pentanone                          CAS #: 108-10-1
 19.332  19.332 (1.136)    43     19560 0.10000   0.1284  80.00- 120.00   100.00
 19.332  19.332 (1.136)    58      7457                    10.53-  70.53    38.12
 19.332  19.332 (1.136)    85      3420                     0.00-  48.12    17.48
-------------------------------------------------------------------------------
   68 Toluene                                       CAS #: 108-88-3
 19.781  19.781 (1.163)    91     29069 0.10000   0.1232  80.00- 120.00   100.00
 19.803  19.803 (1.164)    92     17287                    28.42-  88.42    59.47
-------------------------------------------------------------------------------
   69 trans-1,3-Dichloropropene                     CAS #: 10061-02-6
 20.359  20.359 (0.909)    75     12028 0.10000   0.1184  80.00- 120.00   100.00
 20.359  20.359 (0.909)    77      5122                     2.22-  62.22    42.58
 20.359  20.359 (0.909)    39      7294                    11.81-  71.81    60.64
-------------------------------------------------------------------------------
   70 1,1,2-Trichloroethane                         CAS #: 79-00-5
 20.743  20.743 (0.926)    97     11657 0.10000   0.1344  80.00- 120.00   100.00
 20.743  20.743 (0.926)    99      7359                    33.38-  93.38    63.13
 20.743  20.743 (0.926)    83      9527                    52.87- 112.87    81.73
-------------------------------------------------------------------------------
   71 Tetrachloroethene                             CAS #: 127-18-4
 20.908  20.908 (0.933)   166     14892 0.10000   0.1150  80.00- 120.00   100.00
 20.908  20.908 (0.933)   129     11949                    46.60- 106.60    80.24
 20.908  20.908 (0.933)   131     11272                    44.27- 104.27    75.69
-------------------------------------------------------------------------------
   73 Dibromochloromethane                          CAS #: 124-48-1
 21.485  21.485 (0.959)   129     19573 0.10000   0.1176  80.00- 120.00   100.00
 21.485  21.485 (0.959)   127     14923                    46.84- 106.84    76.24
-------------------------------------------------------------------------------
   74 1,2-Dibromoethane                             CAS #: 106-93-4
 21.732  21.732 (0.970)   107     15779 0.10000   0.1110  80.00- 120.00   100.00
 21.732  21.732 (0.970)   109     17757                    67.60- 127.60   112.54
-------------------------------------------------------------------------------
   76 Chlorobenzene                                 CAS #: 108-90-7
 22.469  22.469 (1.003)   112     25179 0.10000   0.1227  80.00- 120.00   100.00
 22.469  22.469 (1.003)   114      7853                     2.32-  62.32    31.19
 22.448  22.448 (1.002)    77     19963                    22.98-  82.98    79.28
-------------------------------------------------------------------------------
   77 Ethyl Benzene                                 CAS #: 100-41-4
 22.531  22.531 (1.006)   106     11944 0.10000   0.1188  80.00- 120.00   100.00
 22.531  22.531 (1.006)    91     37207                   268.64- 328.64   311.51
-------------------------------------------------------------------------------
   80 m,p-Xylene                                    CAS #: 108-38-3
 22.718  22.718 (1.014)   106     14771 0.10000   0.1204  80.00- 120.00   100.00
```

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

   80 m,p-Xylene (continued)
 22.697  22.697 (1.013)    91     27018                  156.41- 216.41   182.91
-------------------------------------------------------------------------------
   81 o-Xylene                                     CAS #: 95-47-6
 23.299  23.299 (1.040)   106     13355 0.10000   0.1177  80.00- 120.00   100.00
 23.299  23.299 (1.040)    91     26053                  167.80- 227.80   195.08
-------------------------------------------------------------------------------
   83 Styrene                                      CAS #: 100-42-5
 23.340  23.340 (1.042)   104     23978 0.10000   0.1218  80.00- 120.00   100.00
 23.340  23.340 (1.042)    78     12324                   12.84-  72.84    51.40
-------------------------------------------------------------------------------
   84 Bromoform                                    CAS #: 75-25-2
 23.684  23.684 (1.057)   173     18018 0.10000   0.1124  80.00- 120.00   100.00
 23.684  23.684 (1.057)   171      9606                   22.25-  82.25    53.31
-------------------------------------------------------------------------------
   85 Cumene                                       CAS #: 98-82-8
 23.773  23.773 (1.061)   105     42407 0.10000   0.1202  80.00- 120.00   100.00
 23.773  23.773 (1.061)   120     13724                    0.00-  58.98    32.36
-------------------------------------------------------------------------------
   89 1,1,2,2-Tetrachloroethane                    CAS #: 79-34-5
 24.244  24.244 (1.082)    83     19369 0.10000   0.1133  80.00- 120.00   100.00
 24.244  24.244 (1.082)    85     13364                   36.27-  96.27    69.00
-------------------------------------------------------------------------------
   90 Propylbenzene                                CAS #: 103-65-1
 24.312  24.312 (1.085)    91     43663 0.10000   0.1170  80.00- 120.00   100.00
 24.312  24.312 (1.085)   120     13203                    0.00-  56.53    30.24
-------------------------------------------------------------------------------
   92 4-Ethyltoluene                               CAS #: 622-96-8
 24.446  24.446 (1.091)   105     37761 0.10000   0.1170  80.00- 120.00   100.00
 24.446  24.446 (1.091)   120     12739                    1.72-  61.72    33.74
-------------------------------------------------------------------------------
   94 1,3,5-Trimethylbenzene                       CAS #: 108-67-8
 24.513  24.513 (1.094)   105     31398 0.10000   0.1130  80.00- 120.00   100.00
 24.513  24.513 (1.094)   120     15700                   22.29-  82.29    50.00
-------------------------------------------------------------------------------
   98 1,2,4-Trimethylbenzene                       CAS #: 95-63-6
 24.962  24.962 (1.114)   105     30428 0.10000   0.1202  80.00- 120.00   100.00
 24.962  24.962 (1.114)   120     13188                   19.10-  79.10    43.34
-------------------------------------------------------------------------------
  101 1,3-Dichlorobenzene                          CAS #: 541-73-1
 25.365  25.365 (1.132)   146     24030 0.10000   0.1157  80.00- 120.00   100.00
 25.365  25.365 (1.132)   148     16049                   32.23-  92.23    66.79
 25.365  25.365 (1.132)   111      9729                    6.65-  66.65    40.49
-------------------------------------------------------------------------------
  104 1,4-Dichlorobenzene                          CAS #: 106-46-7
 25.455  25.455 (1.136)   146     23784 0.10000   0.1154  80.00- 120.00   100.00
```

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
104 1,4-Dichlorobenzene (continued)							
25.455	25.455 (1.136)	148	13953			32.94- 92.94	58.67
25.455	25.455 (1.136)	111	8684			5.31- 65.31	36.51
105 alpha-chlorotoluene					CAS #: 100-44-7		
25.612	25.612 (1.143)	91	27744	0.10000	0.1151	80.00- 120.00	100.00
25.612	25.612 (1.143)	126	7577			0.00- 55.78	27.31
108 1,2-Dichlorobenzene					CAS #: 95-50-1		
25.904	25.904 (1.156)	146	22253	0.10000	0.1171	80.00- 120.00	100.00
25.904	25.904 (1.156)	148	12925			32.48- 92.48	58.08
25.881	25.881 (1.155)	111	9062			7.93- 67.93	40.72
112 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
27.652	27.652 (1.234)	180	14531	0.10000	0.1096	80.00- 120.00	100.00(a)
27.652	27.652 (1.234)	182	12828			66.76- 126.76	88.28
113 Hexachlorobutadiene					CAS #: 87-68-3		
27.742	27.742 (1.238)	225	10653	0.10000	0.1032	80.00- 120.00	100.00(a)
27.742	27.742 (1.238)	223	8987			32.55- 92.55	84.36

QC Flag Legend

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

Report Date: 11-Feb-2015 11:32

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msde.i
Lab File ID: e021018.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: act
Method File: /chem/msde.i/10Feb2015.b/e15l0210a.m
Misc Info: 0.10ppbv(1.0ppbv)

Calibration Date: 10-FEB-2015
Calibration Time: 19:01
Client Smp ID: LEVEL 6
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
46 Bromochloromethan	276169	165701	386637	234250	-15.18
58 1,4-Difluorobenze	1109585	665751	1553419	982965	-11.41
75 Chlorobenzene-d5	1031911	619147	1444675	894059	-13.36

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
46 Bromochloromethan	15.64	15.31	15.97	15.64	0.00
58 1,4-Difluorobenze	17.01	16.68	17.34	17.01	0.00
75 Chlorobenzene-d5	22.41	22.08	22.74	22.41	0.00

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

Data File: /chem/msde.i/10Feb2015.b/e021018.d

Date : 11-FEB-2015 06:22

Client ID: LEVEL 6

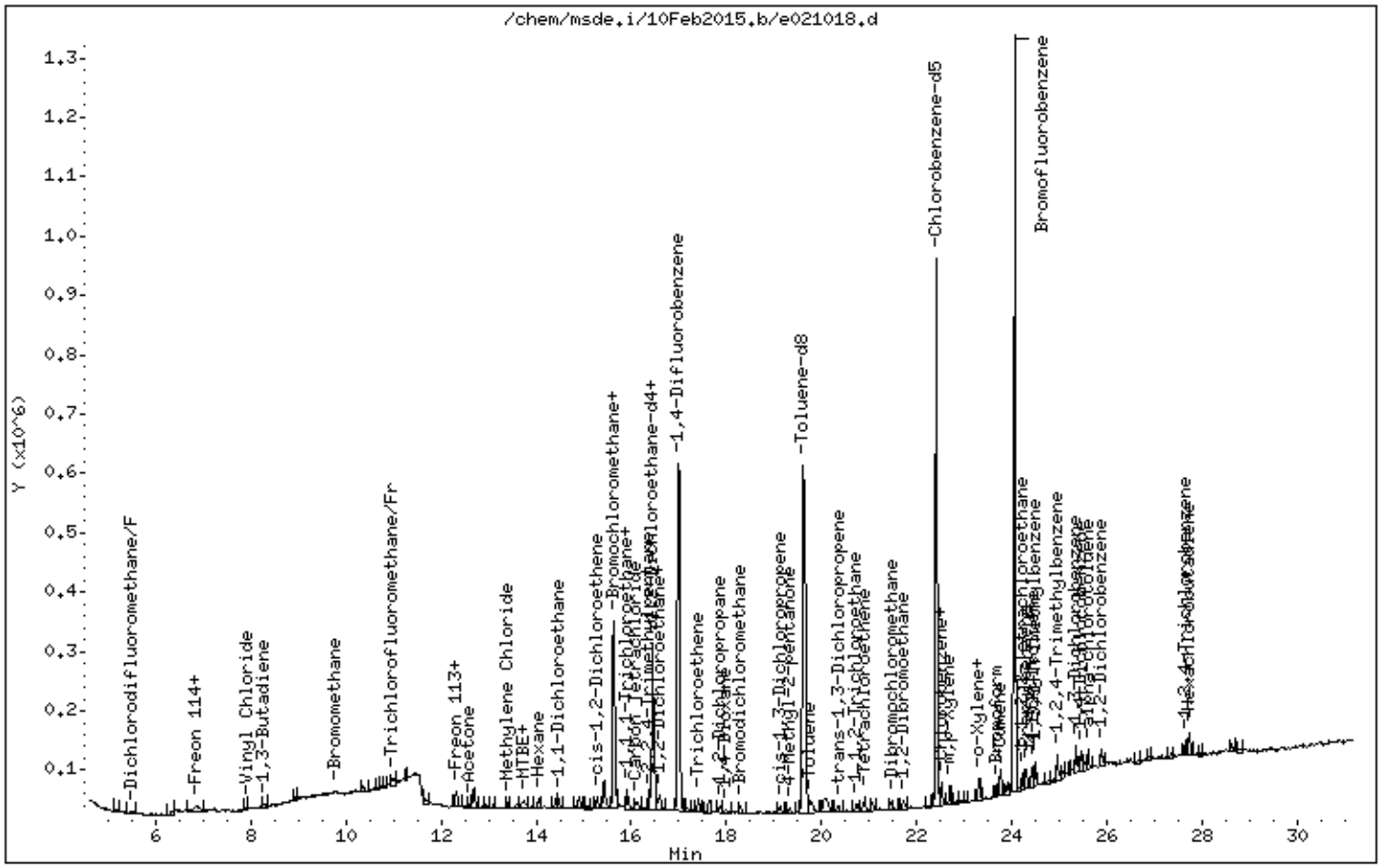
Instrument: msde.i

Sample Info: 25mL#2687-65

Operator: act

Column phase: RTx-624

Column diameter: 0.32



Eurofins Air Toxics Inc.

EPA TO-15/Modified TO14A

Data file : /chem/msde.i/02Mar2015.b/e030205.d
Lab Smp Id: ICAL Client Smp ID: Level 7
Inj Date : 02-MAR-2015 10:31
Operator : sab Inst ID: msde.i
Smp Info : 25ml #2649-262;ICAL;Level 7
Misc Info : 0.5ppbv (5.0ppbv)
Comment : Low-Level/GC-MS
Method : /chem/msde.i/02Mar2015.b/e15l0210b.m
Meth Date : 02-Mar-2015 14:34 sblack Quant Type: ISTD
Cal Date : 02-MAR-2015 10:31 Cal File: e030205.d
Als bottle: 31 Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT7.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
* 46 Bromochloromethane						CAS #: 74-97-5	
15.610	15.610 (1.000)	130	183453	5.00000		70.00- 130.00	100.00
15.610	15.610 (1.000)	128	136178			0.00- 30.00	74.23
15.610	15.610 (1.000)	49	199579			0.00- 30.00	108.79
* 58 1,4-Difluorobenzene						CAS #: 540-36-3	
16.987	16.987 (1.000)	114	732829	5.00000		70.00- 130.00	100.00
16.987	16.987 (1.000)	88	101740			0.00- 30.00	13.88
* 75 Chlorobenzene-d5						CAS #: 3114-55-4	
22.407	22.407 (1.000)	117	674758	5.00000		70.00- 130.00	100.00
22.407	22.407 (1.000)	82	307905			0.00- 30.00	45.63
66 Octane						CAS #: 111-65-9	
19.668	19.668 (1.158)	57	19179	0.50000	0.5000	0.00- 30.00	100.00
19.668	19.668 (1.158)	85	20554			0.00- 30.00	107.17
19.668	19.668 (1.158)	43	48543			0.00- 30.00	253.10

RT	EXP RT	(REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
88 Decane						CAS #: 124-18-5		
24.356	24.356	(1.087)	57	44873	0.50000	0.5000	0.00- 30.00	100.00
24.356	24.356	(1.087)	71	16533			0.00- 30.00	36.84
24.356	24.356	(1.087)	142	3196			0.00- 30.00	7.12
103 1,2,3-trimethylbenzene						CAS #: 526-73-8		
25.455	25.455	(1.136)	120	29708	0.50000	0.5000	0.00- 30.00	100.00
25.455	25.455	(1.136)	105	64956			0.00- 30.00	218.65
25.455	25.455	(1.136)	77	8891			0.00- 30.00	29.93
106 Indene						CAS #: 95-13-6		
25.971	25.971	(1.159)	115	55821	0.50000	0.5000	0.00- 30.00	100.00
25.971	25.971	(1.159)	116	54772			0.00- 30.00	98.12

Report Date: 02-Mar-2015 14:34

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msde.i
Lab File ID: e030205.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: sab
Method File: /chem/msde.i/02Mar2015.b/e15l0210b.m
Misc Info: 0.5ppbv (5.0ppbv)

Calibration Date: 02-MAR-2015
Calibration Time: 08:10
Client Smp ID: Level 7
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
46 Bromochloromethan	193169	115901	270437	183453	-5.03
58 1,4-Difluorobenze	751955	451173	1052737	732829	-2.54
75 Chlorobenzene-d5	683410	410046	956774	674758	-1.27

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
46 Bromochloromethan	15.61	15.28	15.94	15.61	0.00
58 1,4-Difluorobenze	16.99	16.66	17.32	16.99	0.00
75 Chlorobenzene-d5	22.41	22.08	22.74	22.41	0.00

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

Data File: /chem/msde.i/02Mar2015.b/e030205.d

Date : 02-MAR-2015 10:31

Client ID: Level 7

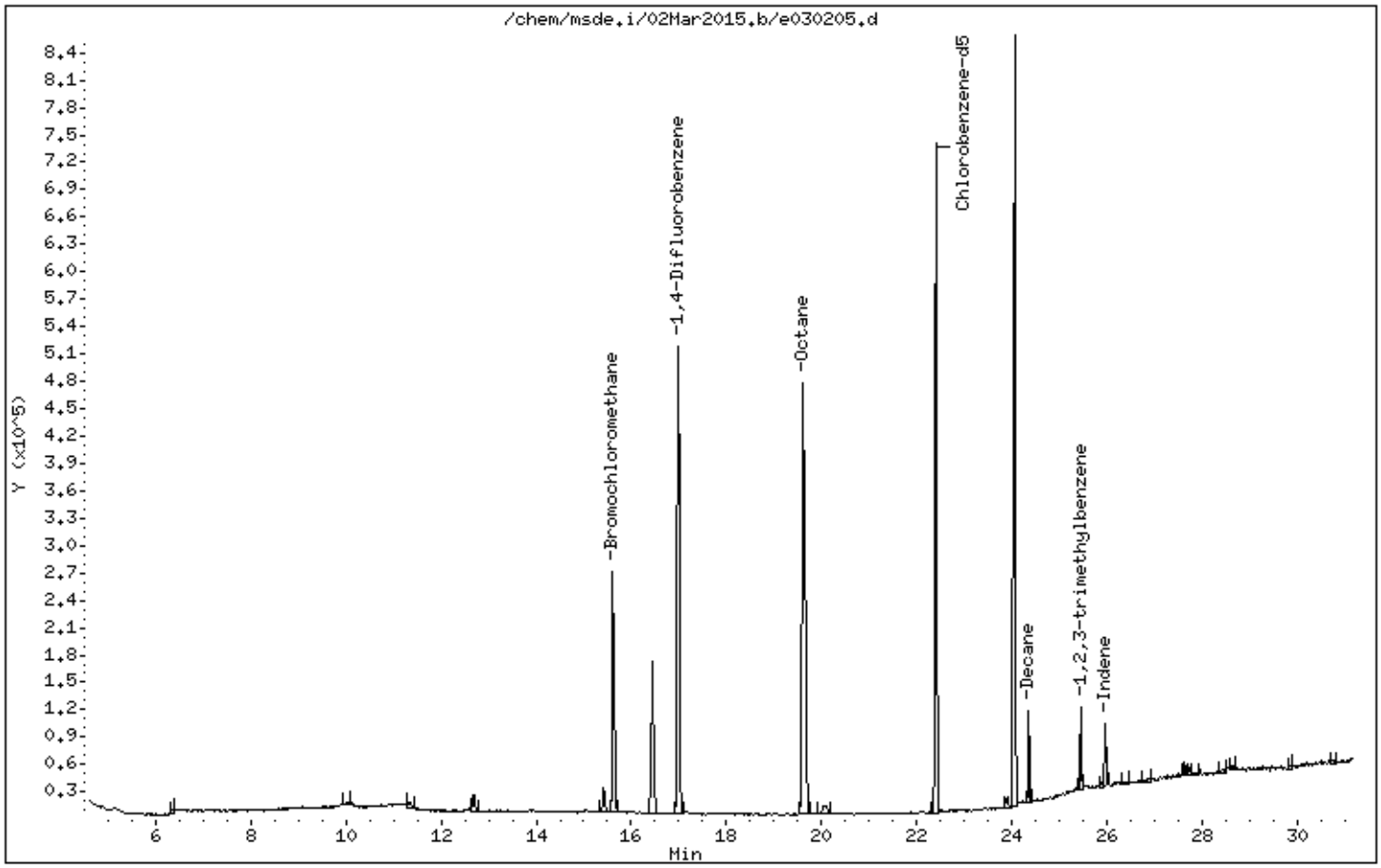
Instrument: msde.i

Sample Info: 25ml #2649-262;ICAL;Level 7

Operator: sab

Column phase: RTx-624

Column diameter: 0.32



Eurofins Air Toxics Inc.

EPA TO-15/Modified TO14A

Data file : /chem/msde.i/10Feb2015.b/e021008.d
Lab Smp Id: ICAL Client Smp ID: LEVEL 7
Inj Date : 10-FEB-2015 16:30
Operator : gh Inst ID: msde.i
Smp Info : 125mL#2716-65;ICAL;LEVEL 7
Misc Info : 0.5ppbv(1.0ppbv)
Comment : Low-Level/GC-MS
Method : /chem/msde.i/10Feb2015.b/e15l0210a.m
Meth Date : 11-Feb-2015 11:32 atoyama Quant Type: ISTD
Cal Date : 10-FEB-2015 16:30 Cal File: e021008.d
Als bottle: 1 Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT09.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

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
* 46 Bromochloromethane						CAS #: 74-97-5	
15.641	15.641 (1.000)	130	230725	5.00000		80.00- 120.00	100.00
15.641	15.641 (1.000)	128	180177			47.96- 107.96	78.09
15.611	15.611 (1.000)	49	260785			112.05- 172.05	113.03
* 58 1,4-Difluorobenzene						CAS #: 540-36-3	
17.011	17.011 (1.000)	114	951891	5.00000		80.00- 120.00	100.00
17.011	17.011 (1.000)	88	137032			0.00- 44.83	14.40
* 75 Chlorobenzene-d5						CAS #: 3114-55-4	
22.407	22.407 (1.000)	117	869025	5.00000		80.00- 120.00	100.00
22.407	22.407 (1.000)	82	405930			16.13- 76.13	46.71
$ 54 1,2-Dichloroethane-d4						CAS #: 17060-07-0	
16.457	16.457 (1.052)	65	243931	5.00000	4.998	80.00- 120.00	100.00
16.457	16.457 (1.052)	67	133978			25.66- 85.66	54.92

RT	EXP RT	(REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
$ 67 Toluene-d8						CAS #: 2037-26-5		
19.624	19.624	(1.154)	98	896907	5.00000	4.933	80.00- 120.00	100.00
19.624	19.624	(1.154)	70	89839			0.00- 39.92	10.02
19.624	19.624	(1.154)	100	604096			36.14- 96.14	67.35
$ 87 Bromofluorobenzene						CAS #: 460-00-4		
24.065	24.065	(1.074)	174	509964	5.00000	5.050	80.00- 120.00	100.00
24.065	24.065	(1.074)	95	576863			81.46- 141.46	113.12
24.065	24.065	(1.074)	176	490992			67.17- 127.17	96.28
2 Propylene						CAS #: 115-07-1		
5.021	5.021	(0.321)	41	19149	0.50000	0.5164	80.00- 120.00	100.00
5.021	5.021	(0.321)	42	15818			35.75- 95.75	82.60
5.046	5.046	(0.323)	39	7053			39.85- 99.85	36.83
4 Dichlorodifluoromethane/Fr12						CAS #: 75-71-8		
5.479	5.479	(0.350)	85	68132	0.50000	0.5489	80.00- 120.00	100.00
5.504	5.504	(0.352)	87	25229			3.28- 63.28	37.03
6 Freon 114						CAS #: 76-14-2		
6.853	6.853	(0.438)	135	67940	0.50000	0.5598	80.00- 120.00	100.00
6.853	6.853	(0.438)	137	23190			2.37- 62.37	34.13
7 Chloromethane						CAS #: 74-87-3		
7.191	7.191	(0.460)	50	25846	0.50000	0.5550	80.00- 120.00	100.00
7.191	7.191	(0.460)	52	11021			3.09- 63.09	42.64
9 Butane						CAS #: 106-97-8		
7.889	7.889	(0.504)	58	8416	0.50000	0.6326	80.00- 120.00	100.00
7.906	7.906	(0.505)	43	47485			706.28- 766.28	564.22
10 Vinyl Chloride						CAS #: 75-01-4		
8.028	8.028	(0.513)	62	27545	0.50000	0.5404	80.00- 120.00	100.00
8.045	8.045	(0.514)	64	8016			1.76- 61.76	29.10
11 1,3-Butadiene						CAS #: 106-99-0		
8.253	8.253	(0.528)	54	21617	0.50000	0.5294	80.00- 120.00	100.00
8.271	8.271	(0.529)	39	23707			61.78- 121.78	109.67
12 Bromomethane						CAS #: 74-83-9		
9.746	9.746	(0.623)	94	25860	0.50000	0.5443	80.00- 120.00	100.00
9.746	9.746	(0.623)	96	24831			62.88- 122.88	96.02
13 Chloroethane						CAS #: 75-00-3		
10.233	10.233	(0.654)	64	15491	0.50000	0.5695	80.00- 120.00	100.00
10.214	10.214	(0.653)	49	3711			0.00- 56.27	23.96

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
13 Chloroethane (continued)							
10.233	10.233 (0.654)	66	6506			1.65- 61.65	42.00
14 Isopentane					CAS #: 78-78-4		
10.367	10.367 (0.663)	57	26953	0.50000	0.5775	80.00- 120.00	100.00
10.348	10.348 (0.662)	43	42285			114.02- 174.02	156.88
10.348	10.348 (0.662)	42	29707			91.28- 151.28	110.22
16 Trichlorofluoromethane/Fr11					CAS #: 75-69-4		
10.976	10.976 (0.702)	101	70251	0.50000	0.5144	80.00- 120.00	100.00
10.976	10.976 (0.702)	103	46960			35.41- 95.41	66.85
18 Ethanol					CAS #: 64-17-5		
11.890	11.890 (0.760)	45	23547	0.50000	1.320	80.00- 120.00	100.00
11.890	11.890 (0.760)	46	6931			7.33- 67.33	29.43
11.890	11.890 (0.760)	43	38308			0.00- 51.69	162.69
21 1,1-Dichloroethene					CAS #: 75-35-4		
12.309	12.309 (0.787)	98	23200	0.50000	0.5803	80.00- 120.00	100.00
12.309	12.309 (0.787)	61	45238			204.24- 264.24	194.99
12.309	12.309 (0.787)	96	34682			126.62- 186.62	149.49
19 Freon 113					CAS #: 76-13-1		
12.309	12.309 (0.787)	151	66041	0.50000	0.4938	80.00- 120.00	100.00
12.309	12.309 (0.787)	153	41000			34.79- 94.79	62.08
12.309	12.309 (0.787)	101	69744			79.87- 139.87	105.61
22 Acetone					CAS #: 67-64-1		
12.595	12.595 (0.805)	58	19609	0.50000	0.6123	80.00- 120.00	100.00
12.595	12.595 (0.805)	43	61326			255.02- 315.02	312.74
23 Carbon Disulfide					CAS #: 75-15-0		
12.671	12.671 (0.810)	76	126551	0.50000	0.6358	80.00- 120.00	100.00
26 3-Chloroprene					CAS #: 107-05-1		
13.109	13.109 (0.838)	76	12825	0.50000	0.5277	80.00- 120.00	100.00
13.109	13.109 (0.838)	41	37244			249.93- 309.93	290.40
25 2-Propanol					CAS #: 67-63-0		
12.937	12.937 (0.827)	45	55175	0.50000	0.5575	80.00- 120.00	100.00
12.937	12.937 (0.827)	43	9715			0.00- 47.09	17.61
12.937	12.937 (0.827)	59	3170			0.00- 34.17	5.75
29 Methylene Chloride					CAS #: 75-09-2		
13.395	13.395 (0.856)	84	25783	0.50000	0.5315	80.00- 120.00	100.00
13.376	13.376 (0.855)	49	36438			98.36- 158.36	141.33

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
29 Methylene Chloride (continued)							
13.376	13.376 (0.855)	51	11383			9.23- 69.23	44.15
30 tert-butyl alcohol					CAS #: 75-65-0		
13.591	13.591 (0.869)	59	79738	0.50000	0.5507	80.00- 120.00	100.00
13.591	13.591 (0.869)	41	16121			0.00- 49.62	20.22
13.591	13.591 (0.869)	57	11783			0.00- 40.64	14.78
31 MTBE					CAS #: 1634-04-4		
13.701	13.701 (0.876)	73	84568	0.50000	0.5498	80.00- 120.00	100.00
13.701	13.701 (0.876)	57	22269			0.00- 54.71	26.33
13.701	13.701 (0.876)	41	18605			0.00- 51.20	22.00
32 trans-1,2-Dichloroethene					CAS #: 156-60-5		
13.756	13.756 (0.879)	98	23496	0.50000	0.5732	80.00- 120.00	100.00
13.756	13.756 (0.879)	61	47067			180.76- 240.76	200.32
13.756	13.756 (0.879)	96	36691			126.52- 186.52	156.16
35 Hexane					CAS #: 110-54-3		
14.058	14.058 (0.899)	57	52698	0.50000	0.5546	80.00- 120.00	100.00
14.058	14.058 (0.899)	43	36163			32.32- 92.32	68.62
14.058	14.058 (0.899)	86	9317			0.00- 46.22	17.68
36 Isopropyl ether					CAS #: 108-20-3		
14.415	14.415 (0.922)	45	107546	0.50000	0.5411	80.00- 120.00	100.00
14.415	14.415 (0.922)	87	31132			0.00- 57.38	28.95
14.415	14.415 (0.922)	59	12694			0.00- 41.55	11.80
37 1,1-Dichloroethane					CAS #: 75-34-3		
14.470	14.470 (0.925)	63	56851	0.50000	0.5546	80.00- 120.00	100.00
14.470	14.470 (0.925)	65	17681			1.72- 61.72	31.10
38 Vinyl Acetate					CAS #: 108-05-4		
14.470	14.470 (0.925)	86	10414	0.50000	0.5840	80.00- 120.00	100.00
14.470	14.470 (0.925)	42	8585			45.78- 105.78	82.44
14.470	14.470 (0.925)	43	94832			1023.67-1083.67	910.62
40 Ethyl-tert-butyl ether					CAS #: 637-92-3		
14.897	14.897 (0.952)	59	104867	0.50000	0.5468	80.00- 120.00	100.00
14.897	14.897 (0.952)	87	42560			11.45- 71.45	40.58
14.897	14.897 (0.952)	41	18857			0.00- 46.09	17.98
41 cis-1,2-Dichloroethene					CAS #: 156-59-2		
15.278	15.278 (0.977)	98	24669	0.50000	0.5657	80.00- 120.00	100.00
15.278	15.278 (0.977)	61	46724			160.54- 220.54	189.40
15.278	15.278 (0.977)	96	36631			126.05- 186.05	148.49

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
42 2-Butanone					CAS #: 78-93-3		
15.278	15.278 (0.977)	72	16280	0.50000	0.5553	80.00- 120.00	100.00
15.278	15.278 (0.977)	43	69245			374.35- 434.35	425.34
15.278	15.278 (0.977)	57	5456			4.18- 64.18	33.51
44 Tetrahydrofuran					CAS #: 109-99-9		
15.611	15.611 (0.998)	42	37896	0.50000	0.5553	80.00- 120.00	100.00
15.611	15.611 (0.998)	71	15657			9.38- 69.38	41.32
15.611	15.611 (0.998)	72	17916			11.73- 71.73	47.28
47 Chloroform					CAS #: 67-66-3		
15.703	15.703 (1.004)	83	69352	0.50000	0.5722	80.00- 120.00	100.00
15.703	15.703 (1.004)	85	43213			36.28- 96.28	62.31
48 Cyclohexane					CAS #: 110-82-7		
15.919	15.919 (1.018)	84	45584	0.50000	0.5573	80.00- 120.00	100.00
15.919	15.919 (1.018)	56	57828			94.44- 154.44	126.86
15.919	15.919 (1.018)	41	30205			32.54- 92.54	66.26
49 1,1,1-Trichloroethane					CAS #: 71-55-6		
15.919	15.919 (1.018)	97	69740	0.50000	0.5765	80.00- 120.00	100.00
15.919	15.919 (1.018)	99	43095			34.78- 94.78	61.79
51 Carbon Tetrachloride					CAS #: 56-23-5		
16.104	16.104 (1.030)	119	59267	0.50000	0.5283	80.00- 120.00	100.00
16.104	16.104 (1.030)	117	64292			73.51- 133.51	108.48
52 2,2,4-Trimethylpentane					CAS #: 540-84-1		
16.361	16.361 (1.046)	56	74822	0.50000	0.5462	80.00- 120.00	100.00
16.361	16.361 (1.046)	57	231185			271.28- 331.28	308.98
16.361	16.361 (1.046)	41	53670			42.90- 102.90	71.73
53 Benzene					CAS #: 71-43-2		
16.457	16.457 (0.967)	78	105061	0.50000	0.5612	80.00- 120.00	100.00
16.457	16.457 (0.967)	77	25047			0.00- 53.40	23.84
55 tert-amyl methyl ether					CAS #: 994-05-8		
16.481	16.481 (0.969)	87	26431	0.50000	0.5576	80.00- 120.00	100.00
16.481	16.481 (0.969)	73	98527			362.79- 422.79	372.77
16.481	16.481 (0.969)	55	24765			66.53- 126.53	93.70
56 1,2-Dichloroethane					CAS #: 107-06-2		
16.554	16.554 (0.973)	62	38777	0.50000	0.5436	80.00- 120.00	100.00
16.554	16.554 (0.973)	64	14383			2.30- 62.30	37.09
57 Heptane					CAS #: 142-82-5		
16.602	16.602 (0.976)	57	34705	0.50000	0.5580	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
57 Heptane (continued)							
16.602	16.602 (0.976)	100	15085			12.62- 72.62	43.47
16.602	16.602 (0.976)	43	64028			155.09- 215.09	184.49
59 Trichloroethene					CAS #: 79-01-6		
17.421	17.421 (1.024)	130	55729	0.50000	0.5080	80.00- 120.00	100.00
17.421	17.421 (1.024)	95	48820			55.70- 115.70	87.60
17.421	17.421 (1.024)	97	31379			24.95- 84.95	56.31
60 Methylcyclohexane					CAS #: 108-87-2		
17.638	17.638 (1.037)	83	62760	0.50000	0.5413	80.00- 120.00	100.00
17.638	17.638 (1.037)	55	56015			50.32- 110.32	89.25
17.638	17.638 (1.037)	56	20493			0.00- 56.36	32.65
61 1,2-Dichloropropane					CAS #: 78-87-5		
17.855	17.855 (1.050)	63	39361	0.50000	0.5434	80.00- 120.00	100.00
17.855	17.855 (1.050)	62	27235			38.47- 98.47	69.19
17.879	17.879 (1.051)	41	18641			15.66- 75.66	47.36
62 1,4-Dioxane					CAS #: 123-91-1		
17.999	17.999 (1.058)	88	28914	0.50000	0.5655	80.00- 120.00	100.00
17.999	17.999 (1.058)	58	19284			38.94- 98.94	66.69
17.999	17.999 (1.058)	57	7314			0.00- 51.60	25.30
63 Bromodichloromethane					CAS #: 75-27-4		
18.313	18.313 (1.076)	83	68430	0.50000	0.5479	80.00- 120.00	100.00
18.313	18.313 (1.076)	85	44743			35.77- 95.77	65.39
64 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
19.131	19.131 (1.125)	75	61604	0.50000	0.5373	80.00- 120.00	100.00
19.153	19.153 (1.126)	77	19945			2.36- 62.36	32.38
19.153	19.153 (1.126)	39	27071			12.85- 72.85	43.94
65 4-Methyl-2-pentanone					CAS #: 108-10-1		
19.332	19.332 (1.136)	43	79923	0.50000	0.5393	80.00- 120.00	100.00
19.332	19.332 (1.136)	58	34653			10.53- 70.53	43.36
19.332	19.332 (1.136)	85	14874			0.00- 48.12	18.61
68 Toluene					CAS #: 108-88-3		
19.780	19.780 (1.163)	91	127022	0.50000	0.5472	80.00- 120.00	100.00
19.780	19.780 (1.163)	92	75227			28.42- 88.42	59.22
69 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
20.359	20.359 (0.909)	75	52223	0.50000	0.5328	80.00- 120.00	100.00
20.359	20.359 (0.909)	77	19500			2.22- 62.22	37.34
20.359	20.359 (0.909)	39	25845			11.81- 71.81	49.49

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
70 1,1,2-Trichloroethane					CAS #: 79-00-5		
20.743	20.743 (0.926)	97	45627	0.50000	0.5527	80.00- 120.00	100.00
20.743	20.743 (0.926)	99	28886			33.38- 93.38	63.31
20.743	20.743 (0.926)	83	37276			52.87- 112.87	81.70
71 Tetrachloroethene					CAS #: 127-18-4		
20.908	20.908 (0.933)	166	68690	0.50000	0.5300	80.00- 120.00	100.00
20.908	20.908 (0.933)	129	52687			46.60- 106.60	76.70
20.908	20.908 (0.933)	131	52562			44.27- 104.27	76.52
72 2-Hexanone					CAS #: 591-78-6		
21.073	21.073 (0.940)	58	45548	0.50000	0.5511	80.00- 120.00	100.00
21.073	21.073 (0.940)	43	76945			145.57- 205.57	168.93
21.073	21.073 (0.940)	100	9935			0.00- 51.87	21.81
73 Dibromochloromethane					CAS #: 124-48-1		
21.485	21.485 (0.959)	129	88126	0.50000	0.5413	80.00- 120.00	100.00
21.485	21.485 (0.959)	127	68656			46.84- 106.84	77.91
74 1,2-Dibromoethane					CAS #: 106-93-4		
21.732	21.732 (0.970)	107	76165	0.50000	0.5090	80.00- 120.00	100.00
21.732	21.732 (0.970)	109	70551			67.60- 127.60	92.63
76 Chlorobenzene					CAS #: 108-90-7		
22.469	22.469 (1.003)	112	110707	0.50000	0.5513	80.00- 120.00	100.00
22.469	22.469 (1.003)	114	35548			2.32- 62.32	32.11
22.448	22.448 (1.002)	77	64639			22.98- 82.98	58.39
77 Ethyl Benzene					CAS #: 100-41-4		
22.531	22.531 (1.006)	106	56727	0.50000	0.5639	80.00- 120.00	100.00
22.531	22.531 (1.006)	91	162580			268.64- 328.64	286.60
80 m,p-Xylene					CAS #: 108-38-3		
22.718	22.718 (1.014)	106	67920	0.50000	0.5584	80.00- 120.00	100.00
22.718	22.718 (1.014)	91	132072			156.41- 216.41	194.45
81 o-Xylene					CAS #: 95-47-6		
23.298	23.298 (1.040)	106	60849	0.50000	0.5480	80.00- 120.00	100.00
23.298	23.298 (1.040)	91	120720			167.80- 227.80	198.39
83 Styrene					CAS #: 100-42-5		
23.340	23.340 (1.042)	104	109310	0.50000	0.5589	80.00- 120.00	100.00
23.340	23.340 (1.042)	78	46908			12.84- 72.84	42.91
84 Bromoform					CAS #: 75-25-2		
23.684	23.684 (1.057)	173	82568	0.50000	0.5123	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
84 Bromoform (continued)							
23.684	23.684 (1.057)	171	45012			22.25- 82.25	54.52
85 Cumene					CAS #: 98-82-8		
23.773	23.773 (1.061)	105	194473	0.50000	0.5546	80.00- 120.00	100.00
23.773	23.773 (1.061)	120	57161			0.00- 58.98	29.39
89 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
24.244	24.244 (1.082)	83	90784	0.50000	0.5100	80.00- 120.00	100.00
24.244	24.244 (1.082)	85	56764			36.27- 96.27	62.53
90 Propylbenzene					CAS #: 103-65-1		
24.289	24.289 (1.084)	91	202651	0.50000	0.5516	80.00- 120.00	100.00
24.312	24.312 (1.085)	120	52587			0.00- 56.53	25.95
92 4-Ethyltoluene					CAS #: 622-96-8		
24.446	24.446 (1.091)	105	173100	0.50000	0.5444	80.00- 120.00	100.00
24.446	24.446 (1.091)	120	55766			1.72- 61.72	32.22
94 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
24.513	24.513 (1.094)	105	146532	0.50000	0.5016	80.00- 120.00	100.00
24.513	24.513 (1.094)	120	75685			22.29- 82.29	51.65
98 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
24.962	24.962 (1.114)	105	133203	0.50000	0.5042	80.00- 120.00	100.00
24.962	24.962 (1.114)	120	64514			19.10- 79.10	48.43
101 1,3-Dichlorobenzene					CAS #: 541-73-1		
25.365	25.365 (1.132)	146	108931	0.50000	0.4954	80.00- 120.00	100.00
25.365	25.365 (1.132)	148	68351			32.23- 92.23	62.75
25.365	25.365 (1.132)	111	40224			6.65- 66.65	36.93
104 1,4-Dichlorobenzene					CAS #: 106-46-7		
25.455	25.455 (1.136)	146	104382	0.50000	0.4650	80.00- 120.00	100.00
25.455	25.455 (1.136)	148	67178			32.94- 92.94	64.36
25.455	25.455 (1.136)	111	39123			5.31- 65.31	37.48
105 alpha-chlorotoluene					CAS #: 100-44-7		
25.612	25.612 (1.143)	91	121557	0.50000	0.4718	80.00- 120.00	100.00
25.612	25.612 (1.143)	126	33223			0.00- 55.78	27.33
108 1,2-Dichlorobenzene					CAS #: 95-50-1		
25.881	25.881 (1.155)	146	101468	0.50000	0.4884	80.00- 120.00	100.00
25.881	25.881 (1.155)	148	60246			32.48- 92.48	59.37
25.881	25.881 (1.155)	111	40128			7.93- 67.93	39.55

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
112 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
27.652	27.652 (1.234)	180	65655	0.50000	0.4474	80.00- 120.00	100.00(a)
27.652	27.652 (1.234)	182	63825			66.76- 126.76	97.21
113 Hexachlorobutadiene					CAS #: 87-68-3		
27.742	27.742 (1.238)	225	51980	0.50000	0.4557	80.00- 120.00	100.00(a)
27.742	27.742 (1.238)	223	31451			32.55- 92.55	60.51
114 Naphthalene					CAS #: 91-20-3		
27.966	27.966 (1.248)	128	13848	0.05000	0.05834	80.00- 120.00	100.00(a)
27.966	27.966 (1.248)	127	2188			0.00- 42.43	15.80

QC Flag Legend

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

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msde.i
Lab File ID: e021008.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: gh
Method File: /chem/msde.i/10Feb2015.b/e15l0210a.m
Misc Info: 0.5ppbv(1.0ppbv)

Calibration Date: 10-FEB-2015
Calibration Time: 19:01
Client Smp ID: LEVEL 7
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
46 Bromochloromethan	276169	165701	386637	230725	-16.46
58 1,4-Difluorobenze	1109585	665751	1553419	951891	-14.21
75 Chlorobenzene-d5	1031911	619147	1444675	869025	-15.78

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
46 Bromochloromethan	15.64	15.31	15.97	15.64	0.00
58 1,4-Difluorobenze	17.01	16.68	17.34	17.01	0.00
75 Chlorobenzene-d5	22.41	22.08	22.74	22.41	0.00

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

Data File: /chem/msde.i/10Feb2015.b/e021008.d

Date : 10-FEB-2015 16:30

Client ID: LEVEL 7

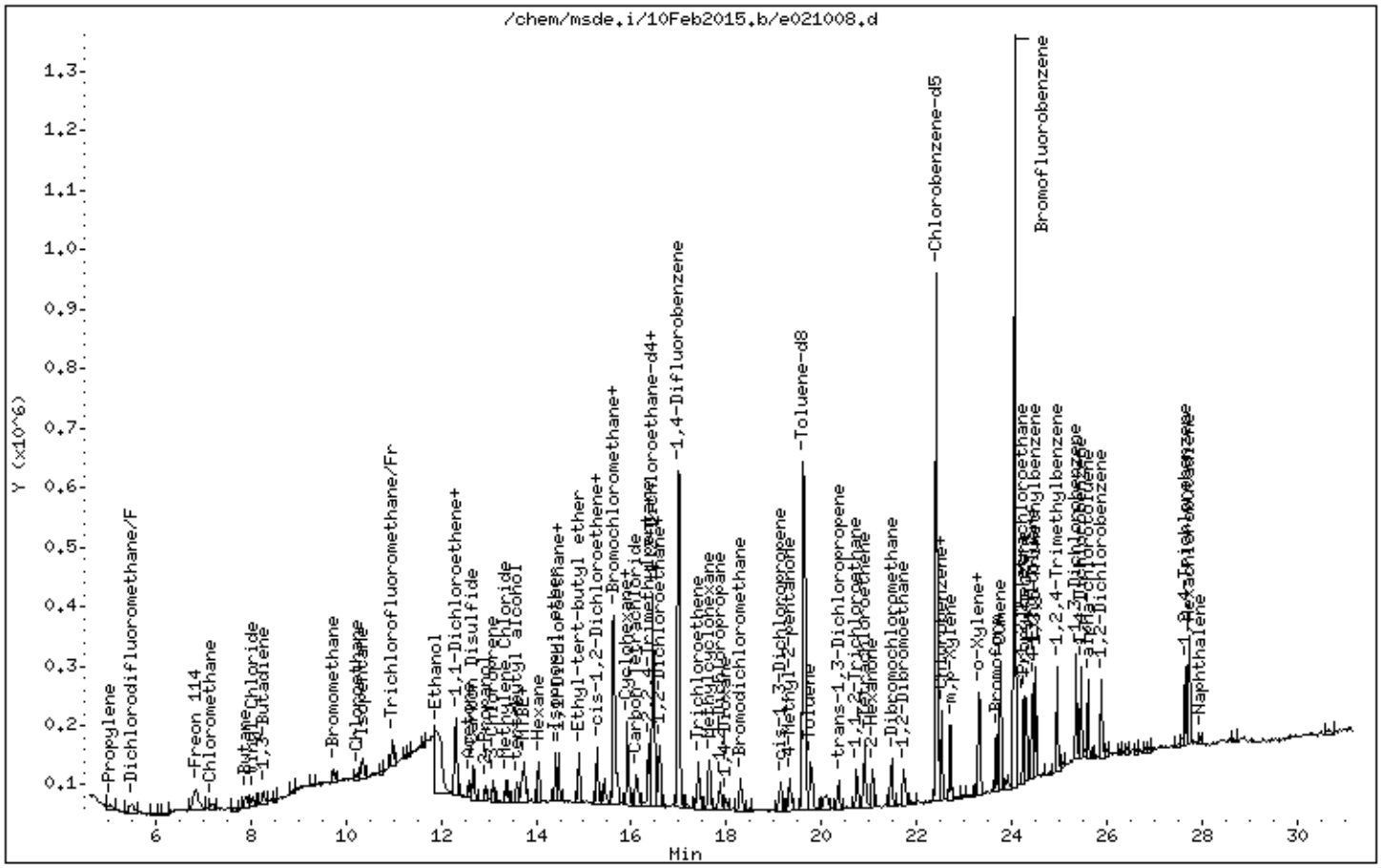
Instrument: msde.i

Sample Info: 125mL#2716-65;ICAL;LEVEL 7

Operator: gh

Column phase: RTx-624

Column diameter: 0.32



Eurofins Air Toxics Inc.

EPA TO-15/Modified TO14A

Data file : /chem/msde.i/02Mar2015.b/e030206.d
Lab Smp Id: ICAL Client Smp ID: Level 8
Inj Date : 02-MAR-2015 11:44
Operator : sab Inst ID: msde.i
Smp Info : 50ml #2649-262
Misc Info : 1.0ppbv (5.0ppbv)
Comment : Low-Level/GC-MS
Method : /chem/msde.i/02Mar2015.b/e15l0210b.m
Meth Date : 02-Mar-2015 14:34 sblack Quant Type: ISTD
Cal Date : 02-MAR-2015 11:44 Cal File: e030206.d
Als bottle: 31 Calibration Sample, Level: 8
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT7.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
* 46 Bromochloromethane						CAS #: 74-97-5	
15.610	15.610 (1.000)	130	135444	5.00000		70.00- 130.00	100.00
15.610	15.610 (1.000)	128	108979			0.00- 30.00	80.46
15.610	15.610 (1.000)	49	157629			0.00- 30.00	116.38
* 58 1,4-Difluorobenzene						CAS #: 540-36-3	
16.987	16.987 (1.000)	114	569802	5.00000		70.00- 130.00	100.00
16.987	16.987 (1.000)	88	78020			0.00- 30.00	13.69
* 75 Chlorobenzene-d5						CAS #: 3114-55-4	
22.407	22.407 (1.000)	117	544909	5.00000		70.00- 130.00	100.00
22.407	22.407 (1.000)	82	249018			0.00- 30.00	45.70
66 Octane						CAS #: 111-65-9	
19.668	19.668 (1.158)	57	26270	1.00000	0.9366	0.00- 30.00	100.00
19.668	19.668 (1.158)	85	30227			0.00- 30.00	115.06
19.668	19.668 (1.158)	43	72016			0.00- 30.00	274.14

RT	EXP RT	(REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
88 Decane						CAS #: 124-18-5		
24.356	24.356	(1.087)	57	76065	1.00000	1.024	0.00- 30.00	100.00
24.356	24.356	(1.087)	71	27365			0.00- 30.00	35.98
24.356	24.356	(1.087)	142	4113			0.00- 30.00	5.41
103 1,2,3-trimethylbenzene						CAS #: 526-73-8		
25.455	25.455	(1.136)	120	50024	1.00000	1.021	0.00- 30.00	100.00
25.455	25.455	(1.136)	105	110717			0.00- 30.00	221.33
25.455	25.455	(1.136)	77	12832			0.00- 30.00	25.65
106 Indene						CAS #: 95-13-6		
25.971	25.971	(1.159)	115	95078	1.00000	1.026	0.00- 30.00	100.00
25.971	25.971	(1.159)	116	93962			0.00- 30.00	98.83

Report Date: 02-Mar-2015 14:34

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msde.i
Lab File ID: e030206.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: sab
Method File: /chem/msde.i/02Mar2015.b/e15l0210b.m
Misc Info: 1.0ppbv (5.0ppbv)

Calibration Date: 02-MAR-2015
Calibration Time: 08:10
Client Smp ID: Level 8
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
46 Bromochloromethan	193169	115901	270437	135444	-29.88
58 1,4-Difluorobenze	751955	451173	1052737	569802	-24.22
75 Chlorobenzene-d5	683410	410046	956774	544909	-20.27

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
46 Bromochloromethan	15.61	15.28	15.94	15.61	0.00
58 1,4-Difluorobenze	16.99	16.66	17.32	16.99	0.00
75 Chlorobenzene-d5	22.41	22.08	22.74	22.41	0.00

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

Data File: /chem/msde.i/02Mar2015.b/e030206.d

Date : 02-MAR-2015 11:44

Client ID: Level 8

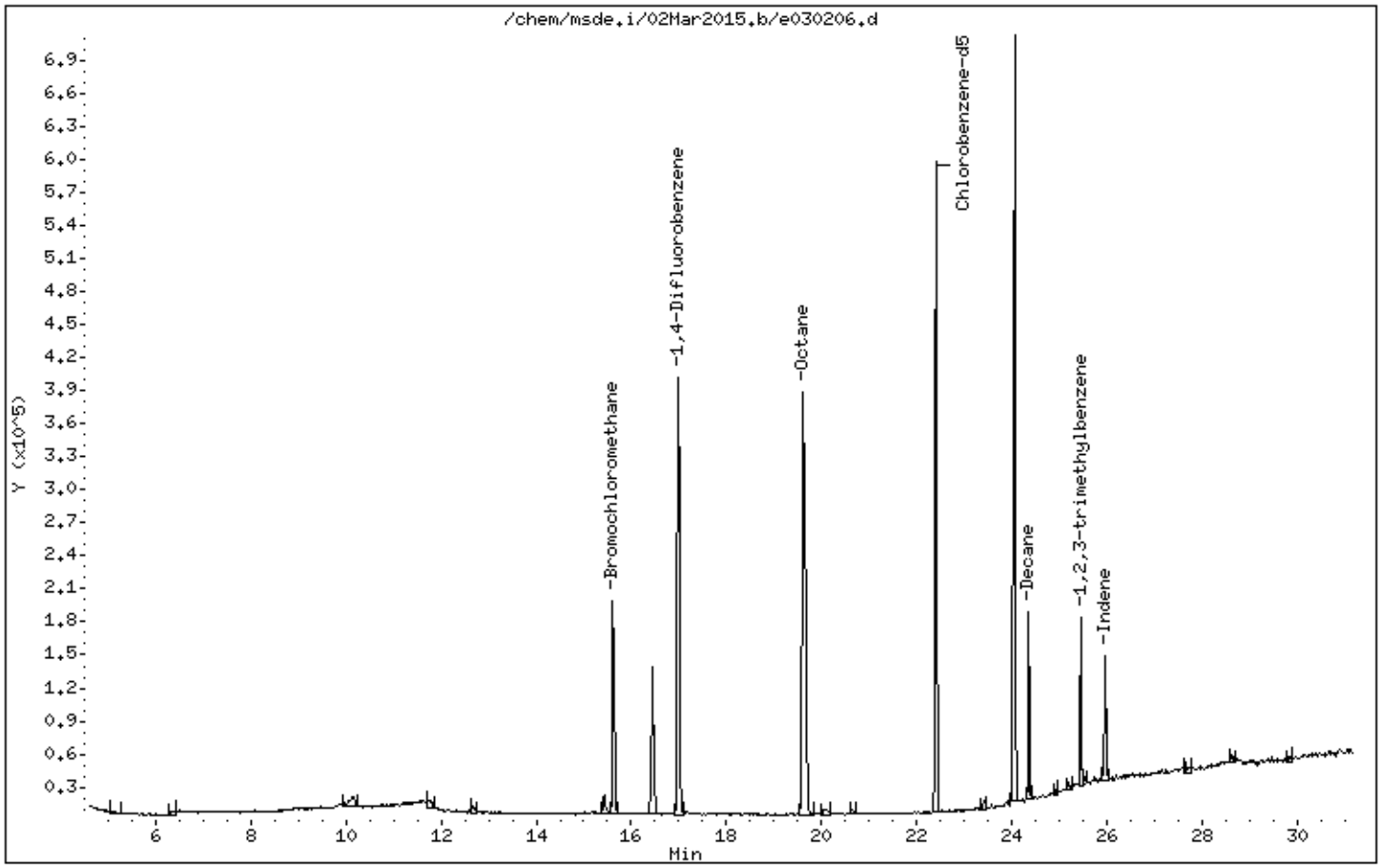
Instrument: msde.i

Sample Info: 50ml #2649-262

Operator: sab

Column phase: RTx-624

Column diameter: 0.32



Eurofins Air Toxics Inc.

EPA TO-15/Modified TO14A

Data file : /chem/msde.i/10Feb2015.b/e021009.d
Lab Smp Id: ICAL Client Smp ID: LEVEL 8
Inj Date : 10-FEB-2015 17:27
Operator : gh Inst ID: msde.i
Smp Info : 250mL#2716-65
Misc Info : 1.0ppbv(1.0ppbv)
Comment : Low-Level/GC-MS
Method : /chem/msde.i/10Feb2015.b/e15l0210a.m
Meth Date : 11-Feb-2015 11:32 atoyama Quant Type: ISTD
Cal Date : 10-FEB-2015 17:27 Cal File: e021009.d
Als bottle: 1 Calibration Sample, Level: 8
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: HILOcrvFULL.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
* 46 Bromochloromethane						CAS #: 74-97-5	
15.610	15.610 (1.000)	130	234261	5.00000		80.00- 120.00	100.00
15.610	15.610 (1.000)	128	182924			47.96- 107.96	78.09
15.610	15.610 (1.000)	49	266113			112.05- 172.05	113.60
* 58 1,4-Difluorobenzene						CAS #: 540-36-3	
16.987	16.987 (1.000)	114	963027	5.00000		80.00- 120.00	100.00
16.987	16.987 (1.000)	88	138734			0.00- 44.83	14.41
* 75 Chlorobenzene-d5						CAS #: 3114-55-4	
22.407	22.407 (1.000)	117	882503	5.00000		80.00- 120.00	100.00
22.407	22.407 (1.000)	82	414511			16.13- 76.13	46.97
$ 54 1,2-Dichloroethane-d4						CAS #: 17060-07-0	
16.457	16.457 (1.054)	65	247514	5.00000	4.996	80.00- 120.00	100.00
16.457	16.457 (1.054)	67	133298			25.66- 85.66	53.85

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
$ 67 Toluene-d8					CAS #: 2037-26-5		
19.624	19.624 (1.155)	98	916373	5.00000	4.986	80.00- 120.00	100.00
19.624	19.624 (1.155)	70	90244			0.00- 39.92	9.85
19.624	19.624 (1.155)	100	616348			36.14- 96.14	67.26
$ 87 Bromofluorobenzene					CAS #: 460-00-4		
24.065	24.065 (1.074)	174	516167	5.00000	5.025	80.00- 120.00	100.00
24.065	24.065 (1.074)	95	580986			81.46- 141.46	112.56
24.065	24.065 (1.074)	176	503859			67.17- 127.17	97.62
2 Propylene					CAS #: 115-07-1		
5.045	5.045 (0.323)	41	40455	1.00000	1.048	80.00- 120.00	100.00
5.045	5.045 (0.323)	42	26923			35.75- 95.75	66.55
5.045	5.045 (0.323)	39	27103			39.85- 99.85	67.00
4 Dichlorodifluoromethane/Fr12					CAS #: 75-71-8		
5.479	5.479 (0.351)	85	138143	1.00000	1.062	80.00- 120.00	100.00
5.503	5.503 (0.353)	87	46268			3.28- 63.28	33.49
6 Freon 114					CAS #: 76-14-2		
6.853	6.853 (0.439)	135	125756	1.00000	1.015	80.00- 120.00	100.00
6.853	6.853 (0.439)	137	43117			2.37- 62.37	34.29
7 Chloromethane					CAS #: 74-87-3		
7.167	7.167 (0.459)	50	50887	1.00000	1.050	80.00- 120.00	100.00
7.167	7.167 (0.459)	52	17471			3.09- 63.09	34.33
9 Butane					CAS #: 106-97-8		
7.889	7.889 (0.505)	58	12813	1.00000	0.9651	80.00- 120.00	100.00
7.889	7.889 (0.505)	43	93292			706.28- 766.28	728.10
10 Vinyl Chloride					CAS #: 75-01-4		
8.028	8.028 (0.514)	62	55603	1.00000	1.048	80.00- 120.00	100.00
8.028	8.028 (0.514)	64	17806			1.76- 61.76	32.02
11 1,3-Butadiene					CAS #: 106-99-0		
8.253	8.253 (0.529)	54	46761	1.00000	1.082	80.00- 120.00	100.00
8.253	8.253 (0.529)	39	44841			61.78- 121.78	95.89
12 Bromomethane					CAS #: 74-83-9		
9.729	9.729 (0.623)	94	54294	1.00000	1.080	80.00- 120.00	100.00
9.729	9.729 (0.623)	96	47599			62.88- 122.88	87.67
13 Chloroethane					CAS #: 75-00-3		
10.214	10.214 (0.654)	64	27286	1.00000	0.9920	80.00- 120.00	100.00
10.214	10.214 (0.654)	49	8053			0.00- 56.27	29.51

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
13 Chloroethane (continued)							
10.214	10.214 (0.654)	66	9446			1.65- 61.65	34.62
14 Isopentane					CAS #: 78-78-4		
10.348	10.348 (0.663)	57	49324	1.00000	1.027	80.00- 120.00	100.00
10.348	10.348 (0.663)	43	65456			114.02- 174.02	132.71
10.348	10.348 (0.663)	42	60566			91.28- 151.28	122.79
16 Trichlorofluoromethane/Fr11					CAS #: 75-69-4		
10.976	10.976 (0.703)	101	138677	1.00000	1.000	80.00- 120.00	100.00
10.976	10.976 (0.703)	103	93221			35.41- 95.41	67.22
18 Ethanol					CAS #: 64-17-5		
11.890	11.890 (0.762)	45	29789	1.00000	1.244	80.00- 120.00	100.00(H)
11.890	11.890 (0.762)	46	10813			7.33- 67.33	36.30
11.890	11.890 (0.762)	43	35723			0.00- 51.69	119.92
19 Freon 113					CAS #: 76-13-1		
12.290	12.290 (0.787)	151	123500	1.00000	0.9305	80.00- 120.00	100.00
12.290	12.290 (0.787)	153	82340			34.79- 94.79	66.67
12.290	12.290 (0.787)	101	139165			79.87- 139.87	112.68
21 1,1-Dichloroethene					CAS #: 75-35-4		
12.309	12.309 (0.788)	98	43428	1.00000	1.045	80.00- 120.00	100.00
12.309	12.309 (0.788)	61	96233			204.24- 264.24	221.59
12.309	12.309 (0.788)	96	65314			126.62- 186.62	150.40
22 Acetone					CAS #: 67-64-1		
12.594	12.594 (0.807)	58	36562	1.00000	1.080	80.00- 120.00	100.00
12.594	12.594 (0.807)	43	102736			255.02- 315.02	280.99
25 2-Propanol					CAS #: 67-63-0		
12.937	12.937 (0.829)	45	109817	1.00000	1.060	80.00- 120.00	100.00
12.937	12.937 (0.829)	43	19217			0.00- 47.09	17.50
12.937	12.937 (0.829)	59	5058			0.00- 34.17	4.61
23 Carbon Disulfide					CAS #: 75-15-0		
12.671	12.671 (0.812)	76	221396	1.00000	1.062	80.00- 120.00	100.00
26 3-Chloroprene					CAS #: 107-05-1		
13.109	13.109 (0.840)	76	26332	1.00000	1.044	80.00- 120.00	100.00
13.109	13.109 (0.840)	41	75059			249.93- 309.93	285.05
29 Methylene Chloride					CAS #: 75-09-2		
13.376	13.376 (0.857)	84	52827	1.00000	1.047	80.00- 120.00	100.00
13.376	13.376 (0.857)	49	66562			98.36- 158.36	126.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
29 Methylene Chloride (continued)							
13.376	13.376 (0.857)	51	21921			9.23- 69.23	41.50
30 tert-butyl alcohol					CAS #: 75-65-0		
13.591	13.591 (0.871)	59	155947	1.00000	1.040	80.00- 120.00	100.00
13.591	13.591 (0.871)	41	35294			0.00- 49.62	22.63
13.591	13.591 (0.871)	57	13739			0.00- 40.64	8.81
31 MTBE					CAS #: 1634-04-4		
13.701	13.701 (0.878)	73	169340	1.00000	1.055	80.00- 120.00	100.00
13.701	13.701 (0.878)	57	39998			0.00- 54.71	23.62
13.701	13.701 (0.878)	41	37398			0.00- 51.20	22.08
32 trans-1,2-Dichloroethene					CAS #: 156-60-5		
13.756	13.756 (0.881)	98	44838	1.00000	1.050	80.00- 120.00	100.00
13.756	13.756 (0.881)	61	90619			180.76- 240.76	202.10
13.756	13.756 (0.881)	96	67691			126.52- 186.52	150.97
35 Hexane					CAS #: 110-54-3		
14.058	14.058 (0.901)	57	103566	1.00000	1.048	80.00- 120.00	100.00
14.058	14.058 (0.901)	43	68777			32.32- 92.32	66.41
14.058	14.058 (0.901)	86	18366			0.00- 46.22	17.73
36 Isopropyl ether					CAS #: 108-20-3		
14.415	14.415 (0.923)	45	210221	1.00000	1.027	80.00- 120.00	100.00
14.415	14.415 (0.923)	87	61802			0.00- 57.38	29.40
14.415	14.415 (0.923)	59	27565			0.00- 41.55	13.11
37 1,1-Dichloroethane					CAS #: 75-34-3		
14.470	14.470 (0.927)	63	111204	1.00000	1.045	80.00- 120.00	100.00
14.470	14.470 (0.927)	65	36947			1.72- 61.72	33.22
38 Vinyl Acetate					CAS #: 108-05-4		
14.470	14.470 (0.927)	86	18423	1.00000	1.012	80.00- 120.00	100.00
14.470	14.470 (0.927)	42	13358			45.78- 105.78	72.51
14.470	14.470 (0.927)	43	184008			1023.67-1083.67	998.79
40 Ethyl-tert-butyl ether					CAS #: 637-92-3		
14.897	14.897 (0.954)	59	206438	1.00000	1.039	80.00- 120.00	100.00
14.897	14.897 (0.954)	87	85404			11.45- 71.45	41.37
14.897	14.897 (0.954)	41	34747			0.00- 46.09	16.83
42 2-Butanone					CAS #: 78-93-3		
15.278	15.278 (0.979)	72	30267	1.00000	1.011	80.00- 120.00	100.00
15.278	15.278 (0.979)	43	128131			374.35- 434.35	423.34
15.278	15.278 (0.979)	57	14576			4.18- 64.18	48.16

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
41 cis-1,2-Dichloroethene					CAS #: 156-59-2		
15.278	15.278 (0.979)	98	46432	1.00000	1.032	80.00- 120.00	100.00
15.278	15.278 (0.979)	61	88558			160.54- 220.54	190.73
15.278	15.278 (0.979)	96	70847			126.05- 186.05	152.58
44 Tetrahydrofuran					CAS #: 109-99-9		
15.610	15.610 (1.000)	42	74543	1.00000	1.049	80.00- 120.00	100.00
15.610	15.610 (1.000)	71	31534			9.38- 69.38	42.30
15.610	15.610 (1.000)	72	32103			11.73- 71.73	43.07
47 Chloroform					CAS #: 67-66-3		
15.703	15.703 (1.006)	83	123155	1.00000	1.000	80.00- 120.00	100.00
15.703	15.703 (1.006)	85	82333			36.28- 96.28	66.85
49 1,1,1-Trichloroethane					CAS #: 71-55-6		
15.919	15.919 (1.020)	97	130515	1.00000	1.046	80.00- 120.00	100.00
15.919	15.919 (1.020)	99	87923			34.78- 94.78	67.37
48 Cyclohexane					CAS #: 110-82-7		
15.919	15.919 (1.020)	84	89979	1.00000	1.054	80.00- 120.00	100.00
15.919	15.919 (1.020)	56	108476			94.44- 154.44	120.56
15.919	15.919 (1.020)	41	57148			32.54- 92.54	63.51
51 Carbon Tetrachloride					CAS #: 56-23-5		
16.104	16.104 (1.032)	119	118930	1.00000	1.033	80.00- 120.00	100.00
16.104	16.104 (1.032)	117	123769			73.51- 133.51	104.07
52 2,2,4-Trimethylpentane					CAS #: 540-84-1		
16.361	16.361 (1.048)	56	154727	1.00000	1.072	80.00- 120.00	100.00
16.361	16.361 (1.048)	57	463693			271.28- 331.28	299.68
16.361	16.361 (1.048)	41	109819			42.90- 102.90	70.98
53 Benzene					CAS #: 71-43-2		
16.457	16.457 (0.969)	78	194960	1.00000	1.019	80.00- 120.00	100.00
16.457	16.457 (0.969)	77	47357			0.00- 53.40	24.29
55 tert-amyl methyl ether					CAS #: 994-05-8		
16.481	16.481 (0.970)	87	50236	1.00000	1.031	80.00- 120.00	100.00
16.481	16.481 (0.970)	73	195098			362.79- 422.79	388.36
16.481	16.481 (0.970)	55	47456			66.53- 126.53	94.47
56 1,2-Dichloroethane					CAS #: 107-06-2		
16.554	16.554 (0.974)	62	77277	1.00000	1.046	80.00- 120.00	100.00
16.554	16.554 (0.974)	64	25064			2.30- 62.30	32.43
57 Heptane					CAS #: 142-82-5		
16.602	16.602 (0.977)	57	66511	1.00000	1.037	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
57 Heptane (continued)							
16.602	16.602 (0.977)	100	28073			12.62- 72.62	42.21
16.602	16.602 (0.977)	43	129928			155.09- 215.09	195.35
59 Trichloroethene					CAS #: 79-01-6		
17.397	17.397 (1.024)	130	108850	1.00000	0.9854	80.00- 120.00	100.00
17.397	17.397 (1.024)	95	94256			55.70- 115.70	86.59
17.397	17.397 (1.024)	97	58800			24.95- 84.95	54.02
60 Methylcyclohexane					CAS #: 108-87-2		
17.638	17.638 (1.038)	83	126338	1.00000	1.050	80.00- 120.00	100.00
17.638	17.638 (1.038)	55	104885			50.32- 110.32	83.02
17.638	17.638 (1.038)	56	32900			0.00- 56.36	26.04
61 1,2-Dichloropropane					CAS #: 78-87-5		
17.855	17.855 (1.051)	63	74483	1.00000	1.011	80.00- 120.00	100.00
17.855	17.855 (1.051)	62	53201			38.47- 98.47	71.43
17.855	17.855 (1.051)	41	36611			15.66- 75.66	49.15
62 1,4-Dioxane					CAS #: 123-91-1		
17.999	17.999 (1.060)	88	52948	1.00000	1.016	80.00- 120.00	100.00
17.999	17.999 (1.060)	58	35821			38.94- 98.94	67.65
17.999	17.999 (1.060)	57	13751			0.00- 51.60	25.97
63 Bromodichloromethane					CAS #: 75-27-4		
18.288	18.288 (1.077)	83	134407	1.00000	1.047	80.00- 120.00	100.00
18.288	18.288 (1.077)	85	87982			35.77- 95.77	65.46
64 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
19.131	19.131 (1.126)	75	121660	1.00000	1.032	80.00- 120.00	100.00
19.131	19.131 (1.126)	77	39284			2.36- 62.36	32.29
19.131	19.131 (1.126)	39	50750			12.85- 72.85	41.71
65 4-Methyl-2-pentanone					CAS #: 108-10-1		
19.332	19.332 (1.138)	43	152696	1.00000	1.012	80.00- 120.00	100.00
19.332	19.332 (1.138)	58	66308			10.53- 70.53	43.42
19.332	19.332 (1.138)	85	30909			0.00- 48.12	20.24
68 Toluene					CAS #: 108-88-3		
19.780	19.780 (1.164)	91	251210	1.00000	1.045	80.00- 120.00	100.00
19.780	19.780 (1.164)	92	148982			28.42- 88.42	59.31
69 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
20.359	20.359 (0.909)	75	105878	1.00000	1.042	80.00- 120.00	100.00
20.359	20.359 (0.909)	77	36313			2.22- 62.22	34.30
20.359	20.359 (0.909)	39	45674			11.81- 71.81	43.14

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
70 1,1,2-Trichloroethane					CAS #: 79-00-5		
20.743	20.743 (0.926)	97	91226	1.00000	1.057	80.00- 120.00	100.00
20.743	20.743 (0.926)	99	55963			33.38- 93.38	61.35
20.743	20.743 (0.926)	83	72055			52.87- 112.87	78.99
71 Tetrachloroethene					CAS #: 127-18-4		
20.908	20.908 (0.933)	166	136097	1.00000	1.025	80.00- 120.00	100.00
20.908	20.908 (0.933)	129	101822			46.60- 106.60	74.82
20.908	20.908 (0.933)	131	102825			44.27- 104.27	75.55
72 2-Hexanone					CAS #: 591-78-6		
21.073	21.073 (0.940)	58	87710	1.00000	1.030	80.00- 120.00	100.00
21.073	21.073 (0.940)	43	150071			145.57- 205.57	171.10
21.073	21.073 (0.940)	100	18810			0.00- 51.87	21.45
73 Dibromochloromethane					CAS #: 124-48-1		
21.485	21.485 (0.959)	129	176037	1.00000	1.048	80.00- 120.00	100.00
21.485	21.485 (0.959)	127	135122			46.84- 106.84	76.76
74 1,2-Dibromoethane					CAS #: 106-93-4		
21.732	21.732 (0.970)	107	143724	1.00000	0.9589	80.00- 120.00	100.00
21.732	21.732 (0.970)	109	145747			67.60- 127.60	101.41
76 Chlorobenzene					CAS #: 108-90-7		
22.448	22.448 (1.002)	112	215200	1.00000	1.036	80.00- 120.00	100.00
22.448	22.448 (1.002)	114	70812			2.32- 62.32	32.91
22.448	22.448 (1.002)	77	120237			22.98- 82.98	55.87
77 Ethyl Benzene					CAS #: 100-41-4		
22.531	22.531 (1.006)	106	106881	1.00000	1.030	80.00- 120.00	100.00
22.531	22.531 (1.006)	91	321528			268.64- 328.64	300.83
80 m,p-Xylene					CAS #: 108-38-3		
22.697	22.697 (1.013)	106	130919	1.00000	1.039	80.00- 120.00	100.00
22.697	22.697 (1.013)	91	243871			156.41- 216.41	186.28
81 o-Xylene					CAS #: 95-47-6		
23.298	23.298 (1.040)	106	120274	1.00000	1.043	80.00- 120.00	100.00
23.298	23.298 (1.040)	91	240798			167.80- 227.80	200.21
83 Styrene					CAS #: 100-42-5		
23.340	23.340 (1.042)	104	210401	1.00000	1.039	80.00- 120.00	100.00
23.340	23.340 (1.042)	78	95208			12.84- 72.84	45.25
84 Bromoform					CAS #: 75-25-2		
23.683	23.683 (1.057)	173	163712	1.00000	1.000	80.00- 120.00	100.00

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

   84 Bromoform (continued)
 23.683  23.683 (1.057)   171     86551                    22.25-  82.25    52.87
-------------------------------------------------------------------------------
   85 Cumene                                        CAS #: 98-82-8
 23.773  23.773 (1.061)   105    376130 1.00000    1.037  80.00- 120.00   100.00
 23.773  23.773 (1.061)   120    106458                     0.00-  58.98    28.30
-------------------------------------------------------------------------------
   89 1,1,2,2-Tetrachloroethane                     CAS #: 79-34-5
 24.244  24.244 (1.082)    83    176775 1.00000   0.9834  80.00- 120.00   100.00
 24.244  24.244 (1.082)    85    118033                    36.27-  96.27    66.77
-------------------------------------------------------------------------------
   90 Propylbenzene                                 CAS #: 103-65-1
 24.289  24.289 (1.084)    91    415857 1.00000    1.074  80.00- 120.00   100.00
 24.311  24.311 (1.085)   120    106290                     0.00-  56.53    25.56
-------------------------------------------------------------------------------
   92 4-Ethyltoluene                                CAS #: 622-96-8
 24.446  24.446 (1.091)   105    353361 1.00000    1.061  80.00- 120.00   100.00
 24.446  24.446 (1.091)   120    112101                     1.72-  61.72    31.72
-------------------------------------------------------------------------------
   94 1,3,5-Trimethylbenzene                        CAS #: 108-67-8
 24.513  24.513 (1.094)   105    282756 1.00000   0.9645  80.00- 120.00   100.00
 24.513  24.513 (1.094)   120    148853                    22.29-  82.29    52.64
-------------------------------------------------------------------------------
   98 1,2,4-Trimethylbenzene                        CAS #: 95-63-6
 24.962  24.962 (1.114)   105    259820 1.00000   0.9761  80.00- 120.00   100.00
 24.962  24.962 (1.114)   120    124986                    19.10-  79.10    48.10
-------------------------------------------------------------------------------
  101 1,3-Dichlorobenzene                           CAS #: 541-73-1
 25.365  25.365 (1.132)   146    214189 1.00000   0.9690  80.00- 120.00   100.00
 25.365  25.365 (1.132)   148    135380                    32.23-  92.23    63.21
 25.365  25.365 (1.132)   111     79208                     6.65-  66.65    36.98
-------------------------------------------------------------------------------
  104 1,4-Dichlorobenzene                           CAS #: 106-46-7
 25.455  25.455 (1.136)   146    207328 1.00000   0.9305  80.00- 120.00   100.00
 25.455  25.455 (1.136)   148    130148                    32.94-  92.94    62.77
 25.455  25.455 (1.136)   111     73675                     5.31-  65.31    35.54
-------------------------------------------------------------------------------
  105 alpha-chlorotoluene                           CAS #: 100-44-7
 25.612  25.612 (1.143)    91    239810 1.00000   0.9360  80.00- 120.00   100.00
 25.612  25.612 (1.143)   126     61601                     0.00-  55.78    25.69
-------------------------------------------------------------------------------
  108 1,2-Dichlorobenzene                           CAS #: 95-50-1
 25.881  25.881 (1.155)   146    185371 1.00000   0.9061  80.00- 120.00   100.00
 25.881  25.881 (1.155)   148    119375                    32.48-  92.48    64.40
 25.881  25.881 (1.155)   111     75506                     7.93-  67.93    40.73
-------------------------------------------------------------------------------
```

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
112 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
27.652	27.652 (1.234)	180	131976	1.00000	0.9117	80.00- 120.00	100.00
27.652	27.652 (1.234)	182	126798			66.76- 126.76	96.08
113 Hexachlorobutadiene					CAS #: 87-68-3		
27.742	27.742 (1.238)	225	102359	1.00000	0.9102	80.00- 120.00	100.00
27.742	27.742 (1.238)	223	66659			32.55- 92.55	65.12
114 Naphthalene					CAS #: 91-20-3		
27.966	27.966 (1.248)	128	24581	0.10000	0.1013	80.00- 120.00	100.00(a)
27.966	27.966 (1.248)	127	3529			0.00- 42.43	14.36

QC Flag Legend

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

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msde.i
Lab File ID: e021009.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: gh
Method File: /chem/msde.i/10Feb2015.b/e15l0210a.m
Misc Info: 1.0ppbv(1.0ppbv)

Calibration Date: 10-FEB-2015
Calibration Time: 19:01
Client Smp ID: LEVEL 8
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
46 Bromochloromethan	276169	165701	386637	234261	-15.17
58 1,4-Difluorobenze	1109585	665751	1553419	963027	-13.21
75 Chlorobenzene-d5	1031911	619147	1444675	882503	-14.48

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
46 Bromochloromethan	15.64	15.31	15.97	15.61	-0.20
58 1,4-Difluorobenze	17.01	16.68	17.34	16.99	-0.14
75 Chlorobenzene-d5	22.41	22.08	22.74	22.41	0.00

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

Data File: /chem/msde.i/10Feb2015.b/e021009.d

Date : 10-FEB-2015 17:27

Client ID: LEVEL 8

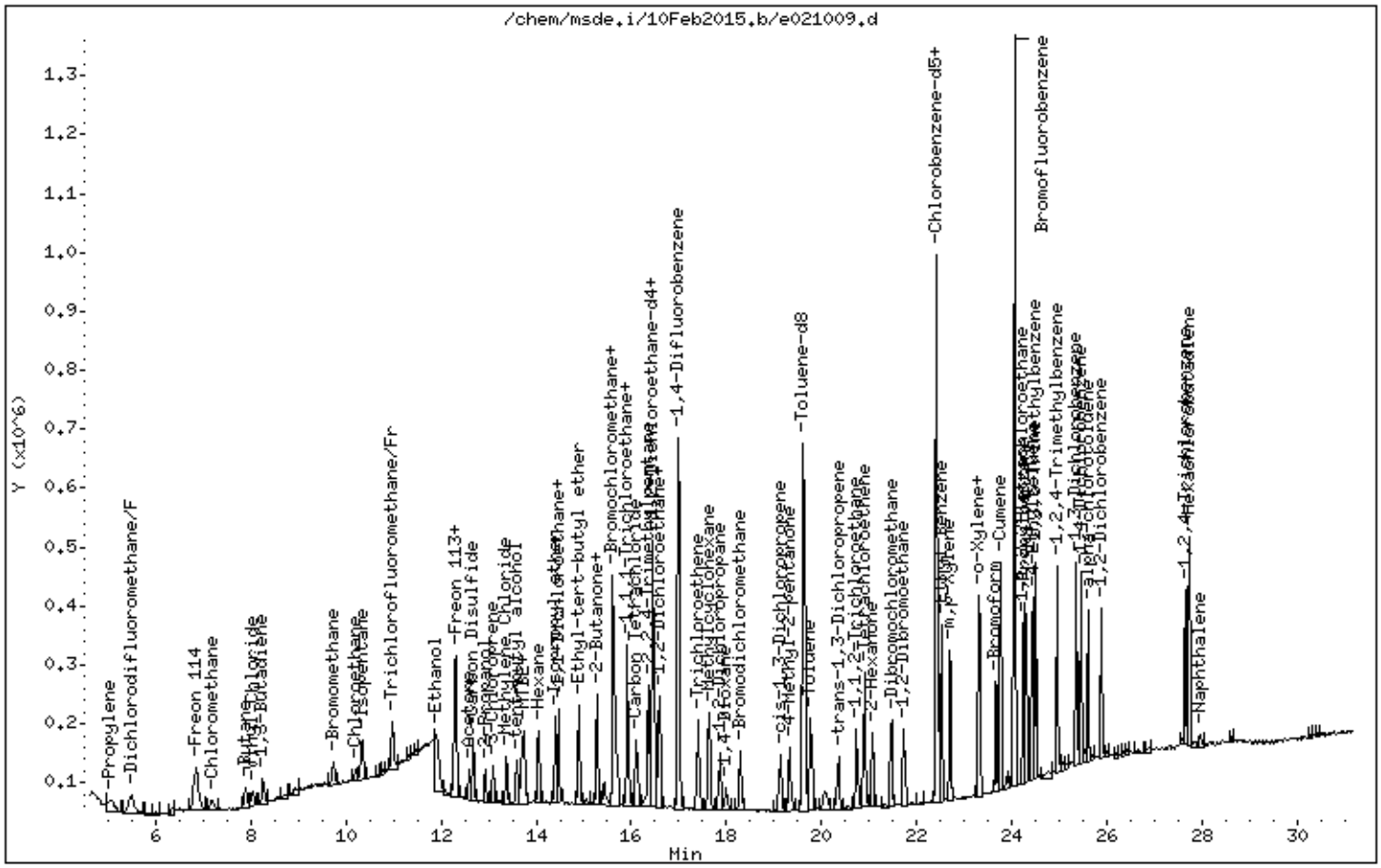
Instrument: msde.i

Sample Info: 250mL#2716-65

Operator: gh

Column phase: RTx-624

Column diameter: 0.32



Eurofins Air Toxics Inc.

EPA TO-15/Modified TO14A

Data file : /chem/msde.i/02Mar2015.b/e030209.d
Lab Smp Id: ICAL Client Smp ID: Level 9
Inj Date : 02-MAR-2015 15:11
Operator : sab Inst ID: msde.i
Smp Info : 250ml #2649-262
Misc Info : 5.0ppbv (5.0ppbv)
Comment : Low-Level/GC-MS
Method : /chem/msde.i/02Mar2015.b/e15l0210b.m
Meth Date : 02-Mar-2015 15:57 sblack Quant Type: ISTD
Cal Date : 02-MAR-2015 15:11 Cal File: e030209.d
Als bottle: 31 Calibration Sample, Level: 9
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT7.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
* 46 Bromochloromethane					CAS #: 74-97-5		
15.611	15.611 (1.000)	130	158970	5.00000		80.00- 120.00	100.00
15.611	15.611 (1.000)	128	124716			0.00- 30.00	78.45
15.611	15.611 (1.000)	49	177536			0.00- 30.00	111.68
* 58 1,4-Difluorobenzene					CAS #: 540-36-3		
16.987	16.987 (1.000)	114	631660	5.00000		80.00- 120.00	100.00
16.987	16.987 (1.000)	88	89163			0.00- 30.00	14.12
* 75 Chlorobenzene-d5					CAS #: 3114-55-4		
22.407	22.407 (1.000)	117	582876	5.00000		80.00- 120.00	100.00
22.407	22.407 (1.000)	82	269619			0.00- 30.00	46.26
66 Octane					CAS #: 111-65-9		
19.668	19.668 (1.158)	57	139361	5.00000	4.626	80.00- 120.00	100.00
19.668	19.668 (1.158)	85	152419			0.00- 30.00	109.37
19.668	19.668 (1.158)	43	332024			0.00- 30.00	238.25

RT	EXP RT	(REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
88 Decane						CAS #: 124-18-5		
24.356	24.356	(1.087)	57	353006	5.00000	4.589	80.00- 120.00	100.00
24.356	24.356	(1.087)	71	130827			0.00- 30.00	37.06
24.356	24.356	(1.087)	142	20288			0.00- 30.00	5.75
103 1,2,3-trimethylbenzene						CAS #: 526-73-8		
25.455	25.455	(1.136)	120	216419	5.00000	4.464	80.00- 120.00	100.00
25.455	25.455	(1.136)	105	476769			0.00- 30.00	220.30
25.455	25.455	(1.136)	77	51451			0.00- 30.00	23.77
106 Indene						CAS #: 95-13-6		
25.971	25.971	(1.159)	115	446261	5.00000	4.622	80.00- 120.00	100.00
25.971	25.971	(1.159)	116	432962			0.00- 30.00	97.02

Report Date: 02-Mar-2015 15:57

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msde.i
Lab File ID: e030209.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: sab
Method File: /chem/msde.i/02Mar2015.b/e15l0210b.m
Misc Info: 5.0ppbv (5.0ppbv)

Calibration Date: 02-MAR-2015
Calibration Time: 15:11
Client Smp ID: Level 9
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
46 Bromochloromethan	158970	95382	222558	158970	0.00
58 1,4-Difluorobenze	631660	378996	884324	631660	0.00
75 Chlorobenzene-d5	582876	349726	816026	582876	0.00

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
46 Bromochloromethan	15.61	15.28	15.94	15.61	0.00
58 1,4-Difluorobenze	16.99	16.66	17.32	16.99	0.00
75 Chlorobenzene-d5	22.41	22.08	22.74	22.41	0.00

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

Data File: /chem/msde.i/02Mar2015.b/e030209.d

Date : 02-MAR-2015 15:11

Client ID: Level 9

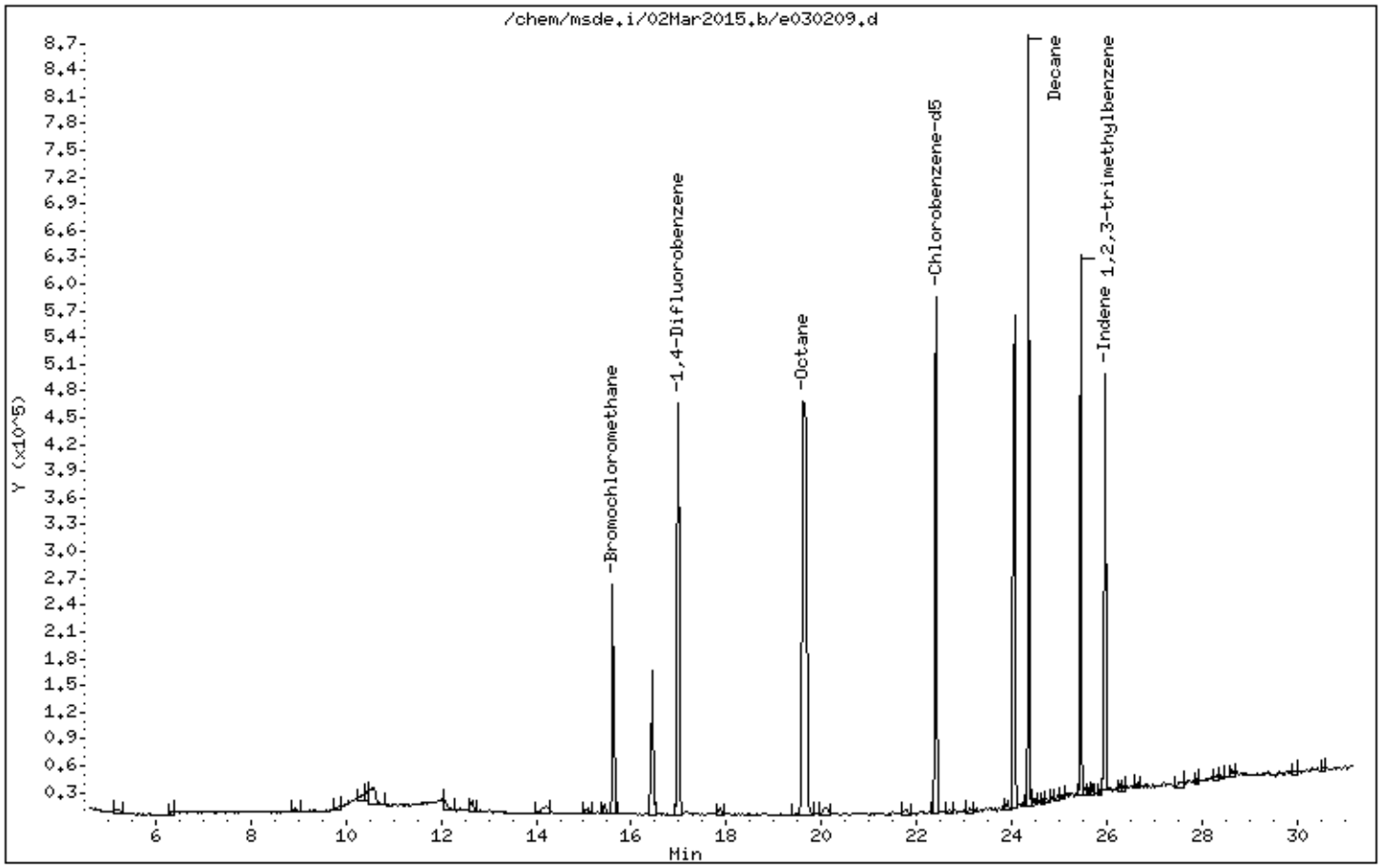
Instrument: msde.i

Sample Info: 250ml #2649-262

Operator: sab

Column phase: RTx-624

Column diameter: 0.32



Eurofins Air Toxics Inc.

EPA TO-15/Modified TO14A

Data file : /chem/msde.i/10Feb2015.b/e021010.d
Lab Smp Id: ICAL Client Smp ID: LEVEL 9
Inj Date : 10-FEB-2015 18:20
Operator : gh Inst ID: msde.i
Smp Info : 25mL#2687-244
Misc Info : 5.0ppbv(50ppbv)
Comment : Low-Level/GC-MS
Method : /chem/msde.i/10Feb2015.b/e15l0210a.m
Meth Date : 11-Feb-2015 11:32 atoyama Quant Type: ISTD
Cal Date : 10-FEB-2015 18:20 Cal File: e021010.d
Als bottle: 1 Calibration Sample, Level: 9
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: HILOcrvFULL.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
* 46 Bromochloromethane						CAS #: 74-97-5	
15.641	15.641 (1.000)	130	271281	5.00000		80.00- 120.00	100.00
15.641	15.641 (1.000)	128	214552			47.96- 107.96	79.09
15.641	15.641 (1.000)	49	343481			112.05- 172.05	126.61
* 58 1,4-Difluorobenzene						CAS #: 540-36-3	
17.011	17.011 (1.000)	114	1134313	5.00000		80.00- 120.00	100.00
17.011	17.011 (1.000)	88	160958			0.00- 44.83	14.19
* 75 Chlorobenzene-d5						CAS #: 3114-55-4	
22.407	22.407 (1.000)	117	1028821	5.00000		80.00- 120.00	100.00
22.407	22.407 (1.000)	82	473333			16.13- 76.13	46.01
$ 54 1,2-Dichloroethane-d4						CAS #: 17060-07-0	
16.457	16.457 (1.052)	65	286435	5.00000	4.994	80.00- 120.00	100.00
16.457	16.457 (1.052)	67	160621			25.66- 85.66	56.08

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
$ 67 Toluene-d8					CAS #: 2037-26-5		
19.646	19.646 (1.155)	98	1069955	5.00000	4.954	80.00- 120.00	100.00
19.623	19.623 (1.154)	70	104203			0.00- 39.92	9.74
19.646	19.646 (1.155)	100	713398			36.14- 96.14	66.68
$ 87 Bromofluorobenzene					CAS #: 460-00-4		
24.065	24.065 (1.074)	174	589079	5.00000	4.935	80.00- 120.00	100.00
24.065	24.065 (1.074)	95	669535			81.46- 141.46	113.66
24.065	24.065 (1.074)	176	570833			67.17- 127.17	96.90
2 Propylene					CAS #: 115-07-1		
5.021	5.021 (0.321)	41	219849	5.00000	4.940	80.00- 120.00	100.00
5.045	5.045 (0.323)	42	147844			35.75- 95.75	67.25
5.045	5.045 (0.323)	39	151967			39.85- 99.85	69.12
4 Dichlorodifluoromethane/Fr12					CAS #: 75-71-8		
5.503	5.503 (0.352)	85	700145	5.00000	4.731	80.00- 120.00	100.00
5.503	5.503 (0.352)	87	227492			3.28- 63.28	32.49
6 Freon 114					CAS #: 76-14-2		
6.853	6.853 (0.438)	135	675309	5.00000	4.764	80.00- 120.00	100.00
6.853	6.853 (0.438)	137	211164			2.37- 62.37	31.27
7 Chloromethane					CAS #: 74-87-3		
7.191	7.191 (0.460)	50	259434	5.00000	4.710	80.00- 120.00	100.00
7.191	7.191 (0.460)	52	90749			3.09- 63.09	34.98
9 Butane					CAS #: 106-97-8		
7.906	7.906 (0.505)	58	61479	5.00000	4.209	80.00- 120.00	100.00
7.906	7.906 (0.505)	43	453663			706.28- 766.28	737.92
10 Vinyl Chloride					CAS #: 75-01-4		
8.045	8.045 (0.514)	62	292551	5.00000	4.820	80.00- 120.00	100.00
8.062	8.062 (0.515)	64	94849			1.76- 61.76	32.42
11 1,3-Butadiene					CAS #: 106-99-0		
8.271	8.271 (0.529)	54	238602	5.00000	4.823	80.00- 120.00	100.00
8.271	8.271 (0.529)	39	222362			61.78- 121.78	93.19
12 Bromomethane					CAS #: 74-83-9		
9.763	9.763 (0.624)	94	265315	5.00000	4.661	80.00- 120.00	100.00
9.763	9.763 (0.624)	96	248460			62.88- 122.88	93.65
13 Chloroethane					CAS #: 75-00-3		
10.233	10.233 (0.654)	64	148387	5.00000	4.739	80.00- 120.00	100.00
10.233	10.233 (0.654)	49	39979			0.00- 56.27	26.94

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
13 Chloroethane (continued)							
10.233	10.233 (0.654)	66	47432			1.65- 61.65	31.97
14 Isopentane					CAS #: 78-78-4		
10.367	10.367 (0.663)	57	245216	5.00000	4.543	80.00- 120.00	100.00
10.367	10.367 (0.663)	43	358863			114.02- 174.02	146.35
10.367	10.367 (0.663)	42	298205			91.28- 151.28	121.61
16 Trichlorofluoromethane/Fr11					CAS #: 75-69-4		
10.976	10.976 (0.702)	101	738567	5.00000	4.674	80.00- 120.00	100.00
10.995	10.995 (0.703)	103	481108			35.41- 95.41	65.14
18 Ethanol					CAS #: 64-17-5		
11.890	11.890 (0.760)	45	122463	5.00000	4.594	80.00- 120.00	100.00
11.890	11.890 (0.760)	46	51074			7.33- 67.33	41.71
11.890	11.890 (0.760)	43	26535			0.00- 51.69	21.67
19 Freon 113					CAS #: 76-13-1		
12.309	12.309 (0.787)	151	647493	5.00000	4.350	80.00- 120.00	100.00
12.309	12.309 (0.787)	153	413355			34.79- 94.79	63.84
12.309	12.309 (0.787)	101	724755			79.87- 139.87	111.93
21 1,1-Dichloroethene					CAS #: 75-35-4		
12.328	12.328 (0.788)	98	210649	5.00000	4.519	80.00- 120.00	100.00
12.328	12.328 (0.788)	61	494886			204.24- 264.24	234.93
12.328	12.328 (0.788)	96	334028			126.62- 186.62	158.57
22 Acetone					CAS #: 67-64-1		
12.594	12.594 (0.805)	58	153450	5.00000	4.138	80.00- 120.00	100.00
12.594	12.594 (0.805)	43	444711			255.02- 315.02	289.81
25 2-Propanol					CAS #: 67-63-0		
12.937	12.937 (0.827)	45	553348	5.00000	4.704	80.00- 120.00	100.00
12.937	12.937 (0.827)	43	93276			0.00- 47.09	16.86
12.937	12.937 (0.827)	59	24347			0.00- 34.17	4.40
23 Carbon Disulfide					CAS #: 75-15-0		
12.690	12.690 (0.811)	76	932768	5.00000	4.096	80.00- 120.00	100.00
26 3-Chloroprene					CAS #: 107-05-1		
13.109	13.109 (0.838)	76	142825	5.00000	4.916	80.00- 120.00	100.00
13.109	13.109 (0.838)	41	403732			249.93- 309.93	282.68
29 Methylene Chloride					CAS #: 75-09-2		
13.395	13.395 (0.856)	84	277148	5.00000	4.806	80.00- 120.00	100.00
13.395	13.395 (0.856)	49	366716			98.36- 158.36	132.32

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
29 Methylene Chloride (continued)							
13.395	13.395 (0.856)	51	113586			9.23- 69.23	40.98
30 tert-butyl alcohol					CAS #: 75-65-0		
13.591	13.591 (0.869)	59	823838	5.00000	4.805	80.00- 120.00	100.00
13.591	13.591 (0.869)	41	166645			0.00- 49.62	20.23
13.591	13.591 (0.869)	57	89123			0.00- 40.64	10.82
31 MTBE					CAS #: 1634-04-4		
13.701	13.701 (0.876)	73	870720	5.00000	4.758	80.00- 120.00	100.00
13.701	13.701 (0.876)	57	219581			0.00- 54.71	25.22
13.701	13.701 (0.876)	41	184715			0.00- 51.20	21.21
32 trans-1,2-Dichloroethene					CAS #: 156-60-5		
13.756	13.756 (0.879)	98	216909	5.00000	4.526	80.00- 120.00	100.00
13.756	13.756 (0.879)	61	462902			180.76- 240.76	213.41
13.756	13.756 (0.879)	96	342986			126.52- 186.52	158.12
35 Hexane					CAS #: 110-54-3		
14.058	14.058 (0.899)	57	537060	5.00000	4.766	80.00- 120.00	100.00
14.058	14.058 (0.899)	43	334514			32.32- 92.32	62.29
14.058	14.058 (0.899)	86	88077			0.00- 46.22	16.40
36 Isopropyl ether					CAS #: 108-20-3		
14.415	14.415 (0.922)	45	1139086	5.00000	4.854	80.00- 120.00	100.00
14.415	14.415 (0.922)	87	314718			0.00- 57.38	27.63
14.415	14.415 (0.922)	59	136239			0.00- 41.55	11.96
37 1,1-Dichloroethane					CAS #: 75-34-3		
14.470	14.470 (0.925)	63	584558	5.00000	4.804	80.00- 120.00	100.00
14.470	14.470 (0.925)	65	181638			1.72- 61.72	31.07
38 Vinyl Acetate					CAS #: 108-05-4		
14.470	14.470 (0.925)	86	97471	5.00000	4.711	80.00- 120.00	100.00
14.470	14.470 (0.925)	42	68939			45.78- 105.78	70.73
14.470	14.470 (0.925)	43	978582			1023.67-1083.67	1003.97
40 Ethyl-tert-butyl ether					CAS #: 637-92-3		
14.897	14.897 (0.952)	59	1084840	5.00000	4.784	80.00- 120.00	100.00
14.897	14.897 (0.952)	87	454193			11.45- 71.45	41.87
14.897	14.897 (0.952)	41	180718			0.00- 46.09	16.66
42 2-Butanone					CAS #: 78-93-3		
15.278	15.278 (0.977)	72	163301	5.00000	4.780	80.00- 120.00	100.00
15.278	15.278 (0.977)	43	667886			374.35- 434.35	408.99
15.278	15.278 (0.977)	57	55874			4.18- 64.18	34.22

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

   41 cis-1,2-Dichloroethene                        CAS #: 156-59-2
 15.278  15.278 (0.977)    98    237825 5.00000    4.666  80.00- 120.00   100.00
 15.278  15.278 (0.977)    61    449748                  160.54- 220.54   189.11
 15.278  15.278 (0.977)    96    369838                  126.05- 186.05   155.51
-------------------------------------------------------------------------------
   44 Tetrahydrofuran                               CAS #: 109-99-9
 15.610  15.610 (0.998)    42    390032 5.00000    4.803  80.00- 120.00   100.00
 15.610  15.610 (0.998)    71    147502                    9.38-  69.38    37.82
 15.610  15.610 (0.998)    72    159468                   11.73-  71.73    40.89
-------------------------------------------------------------------------------
   47 Chloroform                                    CAS #: 67-66-3
 15.703  15.703 (1.004)    83    654693 5.00000    4.688  80.00- 120.00   100.00
 15.703  15.703 (1.004)    85    436610                   36.28-  96.28    66.69
-------------------------------------------------------------------------------
   49 1,1,1-Trichloroethane                         CAS #: 71-55-6
 15.919  15.919 (1.018)    97    684464 5.00000    4.788  80.00- 120.00   100.00
 15.919  15.919 (1.018)    99    441544                   34.78-  94.78    64.51
-------------------------------------------------------------------------------
   48 Cyclohexane                                   CAS #: 110-82-7
 15.919  15.919 (1.018)    84    462790 5.00000    4.758  80.00- 120.00   100.00
 15.919  15.919 (1.018)    56    570021                   94.44- 154.44   123.17
 15.919  15.919 (1.018)    41    287057                   32.54-  92.54    62.03
-------------------------------------------------------------------------------
   51 Carbon Tetrachloride                          CAS #: 56-23-5
 16.134  16.134 (1.032)   119    588643 5.00000    4.520  80.00- 120.00   100.00
 16.134  16.134 (1.032)   117    615064                   73.51- 133.51   104.49
-------------------------------------------------------------------------------
   52 2,2,4-Trimethylpentane                        CAS #: 540-84-1
 16.361  16.361 (1.046)    56    784213 5.00000    4.766  80.00- 120.00   100.00
 16.361  16.361 (1.046)    57   2361262                  271.28- 331.28   301.10
 16.361  16.361 (1.046)    41    563192                   42.90- 102.90    71.82
-------------------------------------------------------------------------------
   53 Benzene                                       CAS #: 71-43-2
 16.457  16.457 (0.967)    78   1025298 5.00000    4.656  80.00- 120.00   100.00
 16.457  16.457 (0.967)    77    236039                    0.00-  53.40    23.02
-------------------------------------------------------------------------------
   55 tert-amyl methyl ether                        CAS #: 994-05-8
 16.481  16.481 (0.969)    87    262554 5.00000    4.675  80.00- 120.00   100.00
 16.481  16.481 (0.969)    73   1019743                  362.79- 422.79   388.39
 16.481  16.481 (0.969)    55    250556                   66.53- 126.53    95.43
-------------------------------------------------------------------------------
   56 1,2-Dichloroethane                            CAS #: 107-06-2
 16.578  16.578 (0.974)    62    400006 5.00000    4.692  80.00- 120.00   100.00
 16.578  16.578 (0.974)    64    130894                    2.30-  62.30    32.72
-------------------------------------------------------------------------------
   57 Heptane                                       CAS #: 142-82-5
 16.602  16.602 (0.976)    57    342738 5.00000    4.645  80.00- 120.00   100.00
```

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
57 Heptane (continued)							
16.602	16.602 (0.976)	100	147780			12.62- 72.62	43.12
16.602	16.602 (0.976)	43	630300			155.09- 215.09	183.90
59 Trichloroethene					CAS #: 79-01-6		
17.421	17.421 (1.024)	130	564657	5.00000	4.458	80.00- 120.00	100.00
17.421	17.421 (1.024)	95	488798			55.70- 115.70	86.57
17.421	17.421 (1.024)	97	314767			24.95- 84.95	55.74
60 Methylcyclohexane					CAS #: 108-87-2		
17.638	17.638 (1.037)	83	647566	5.00000	4.670	80.00- 120.00	100.00
17.638	17.638 (1.037)	55	516029			50.32- 110.32	79.69
17.638	17.638 (1.037)	56	171160			0.00- 56.36	26.43
61 1,2-Dichloropropane					CAS #: 78-87-5		
17.879	17.879 (1.051)	63	399667	5.00000	4.698	80.00- 120.00	100.00
17.879	17.879 (1.051)	62	275547			38.47- 98.47	68.94
17.879	17.879 (1.051)	41	178865			15.66- 75.66	44.75
62 1,4-Dioxane					CAS #: 123-91-1		
17.999	17.999 (1.058)	88	269244	5.00000	4.524	80.00- 120.00	100.00
17.999	17.999 (1.058)	58	188726			38.94- 98.94	70.09
17.999	17.999 (1.058)	57	58496			0.00- 51.60	21.73
63 Bromodichloromethane					CAS #: 75-27-4		
18.312	18.312 (1.076)	83	714044	5.00000	4.775	80.00- 120.00	100.00
18.312	18.312 (1.076)	85	470592			35.77- 95.77	65.91
64 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
19.153	19.153 (1.126)	75	649043	5.00000	4.752	80.00- 120.00	100.00
19.153	19.153 (1.126)	77	210834			2.36- 62.36	32.48
19.153	19.153 (1.126)	39	278973			12.85- 72.85	42.98
65 4-Methyl-2-pentanone					CAS #: 108-10-1		
19.332	19.332 (1.136)	43	832235	5.00000	4.759	80.00- 120.00	100.00
19.332	19.332 (1.136)	58	343324			10.53- 70.53	41.25
19.332	19.332 (1.136)	85	156303			0.00- 48.12	18.78
68 Toluene					CAS #: 108-88-3		
19.780	19.780 (1.163)	91	1292015	5.00000	4.666	80.00- 120.00	100.00
19.780	19.780 (1.163)	92	760547			28.42- 88.42	58.87
69 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
20.359	20.359 (0.909)	75	564797	5.00000	4.822	80.00- 120.00	100.00
20.359	20.359 (0.909)	77	181255			2.22- 62.22	32.09
20.359	20.359 (0.909)	39	239693			11.81- 71.81	42.44

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
70 1,1,2-Trichloroethane					CAS #: 79-00-5		
20.743	20.743 (0.926)	97	463960	5.00000	4.703	80.00- 120.00	100.00
20.743	20.743 (0.926)	99	295334			33.38- 93.38	63.66
20.743	20.743 (0.926)	83	383730			52.87- 112.87	82.71
71 Tetrachloroethene					CAS #: 127-18-4		
20.908	20.908 (0.933)	166	709082	5.00000	4.660	80.00- 120.00	100.00
20.908	20.908 (0.933)	129	541917			46.60- 106.60	76.43
20.908	20.908 (0.933)	131	520229			44.27- 104.27	73.37
72 2-Hexanone					CAS #: 591-78-6		
21.073	21.073 (0.940)	58	465425	5.00000	4.761	80.00- 120.00	100.00
21.073	21.073 (0.940)	43	810396			145.57- 205.57	174.12
21.073	21.073 (0.940)	100	100826			0.00- 51.87	21.66
73 Dibromochloromethane					CAS #: 124-48-1		
21.485	21.485 (0.959)	129	923063	5.00000	4.767	80.00- 120.00	100.00
21.485	21.485 (0.959)	127	713317			46.84- 106.84	77.28
74 1,2-Dibromoethane					CAS #: 106-93-4		
21.732	21.732 (0.970)	107	759672	5.00000	4.464	80.00- 120.00	100.00
21.732	21.732 (0.970)	109	732257			67.60- 127.60	96.39
76 Chlorobenzene					CAS #: 108-90-7		
22.469	22.469 (1.003)	112	1129814	5.00000	4.745	80.00- 120.00	100.00
22.469	22.469 (1.003)	114	367107			2.32- 62.32	32.49
22.469	22.469 (1.003)	77	595876			22.98- 82.98	52.74
77 Ethyl Benzene					CAS #: 100-41-4		
22.531	22.531 (1.006)	106	547965	5.00000	4.640	80.00- 120.00	100.00
22.531	22.531 (1.006)	91	1651837			268.64- 328.64	301.45
80 m,p-Xylene					CAS #: 108-38-3		
22.718	22.718 (1.014)	106	673992	5.00000	4.685	80.00- 120.00	100.00
22.718	22.718 (1.014)	91	1267787			156.41- 216.41	188.10
81 o-Xylene					CAS #: 95-47-6		
23.298	23.298 (1.040)	106	640840	5.00000	4.824	80.00- 120.00	100.00
23.298	23.298 (1.040)	91	1250011			167.80- 227.80	195.06
83 Styrene					CAS #: 100-42-5		
23.340	23.340 (1.042)	104	1078310	5.00000	4.668	80.00- 120.00	100.00
23.340	23.340 (1.042)	78	468146			12.84- 72.84	43.41
84 Bromoform					CAS #: 75-25-2		
23.683	23.683 (1.057)	173	880581	5.00000	4.687	80.00- 120.00	100.00

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

   84 Bromoform (continued)
 23.683  23.683 (1.057)   171    468531                   22.25-  82.25    53.21
-------------------------------------------------------------------------------
   85 Cumene                                        CAS #: 98-82-8
 23.773  23.773 (1.061)   105   1963495 5.00000    4.727  80.00- 120.00   100.00
 23.773  23.773 (1.061)   120    565409                    0.00-  58.98    28.80
-------------------------------------------------------------------------------
   89 1,1,2,2-Tetrachloroethane                     CAS #: 79-34-5
 24.244  24.244 (1.082)    83    910113 5.00000    4.460  80.00- 120.00   100.00
 24.244  24.244 (1.082)    85    608470                   36.27-  96.27    66.86
-------------------------------------------------------------------------------
   90 Propylbenzene                                 CAS #: 103-65-1
 24.311  24.311 (1.085)    91   2098656 5.00000    4.731  80.00- 120.00   100.00
 24.311  24.311 (1.085)   120    547488                    0.00-  56.53    26.09
-------------------------------------------------------------------------------
   92 4-Ethyltoluene                                CAS #: 622-96-8
 24.446  24.446 (1.091)   105   1806772 5.00000    4.736  80.00- 120.00   100.00
 24.446  24.446 (1.091)   120    580075                    1.72-  61.72    32.11
-------------------------------------------------------------------------------
   94 1,3,5-Trimethylbenzene                        CAS #: 108-67-8
 24.513  24.513 (1.094)   105   1512179 5.00000    4.529  80.00- 120.00   100.00
 24.513  24.513 (1.094)   120    778743                   22.29-  82.29    51.50
-------------------------------------------------------------------------------
   98 1,2,4-Trimethylbenzene                        CAS #: 95-63-6
 24.962  24.962 (1.114)   105   1336925 5.00000    4.431  80.00- 120.00   100.00
 24.962  24.962 (1.114)   120    652736                   19.10-  79.10    48.82
-------------------------------------------------------------------------------
  101 1,3-Dichlorobenzene                           CAS #: 541-73-1
 25.365  25.365 (1.132)   146   1089125 5.00000    4.362  80.00- 120.00   100.00
 25.365  25.365 (1.132)   148    688036                   32.23-  92.23    63.17
 25.365  25.365 (1.132)   111    401126                    6.65-  66.65    36.83
-------------------------------------------------------------------------------
  104 1,4-Dichlorobenzene                           CAS #: 106-46-7
 25.455  25.455 (1.136)   146   1048115 5.00000    4.197  80.00- 120.00   100.00
 25.455  25.455 (1.136)   148    656187                   32.94-  92.94    62.61
 25.455  25.455 (1.136)   111    383681                    5.31-  65.31    36.61
-------------------------------------------------------------------------------
  105 alpha-chlorotoluene                           CAS #: 100-44-7
 25.612  25.612 (1.143)    91   1275256 5.00000    4.398  80.00- 120.00   100.00
 25.612  25.612 (1.143)   126    320046                    0.00-  55.78    25.10
-------------------------------------------------------------------------------
  108 1,2-Dichlorobenzene                           CAS #: 95-50-1
 25.903  25.903 (1.156)   146    969480 5.00000    4.223  80.00- 120.00   100.00
 25.903  25.903 (1.156)   148    603809                   32.48-  92.48    62.28
 25.881  25.881 (1.155)   111    368539                    7.93-  67.93    38.01
-------------------------------------------------------------------------------
```

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
112 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
27.652	27.652 (1.234)	180	646819	5.00000	4.020	80.00- 120.00	100.00
27.652	27.652 (1.234)	182	613570			66.76- 126.76	94.86
113 Hexachlorobutadiene					CAS #: 87-68-3		
27.742	27.742 (1.238)	225	521287	5.00000	4.146	80.00- 120.00	100.00
27.742	27.742 (1.238)	223	326581			32.55- 92.55	62.65
114 Naphthalene					CAS #: 91-20-3		
27.966	27.966 (1.248)	128	119189	0.50000	0.4386	80.00- 120.00	100.00(a)
27.988	27.988 (1.249)	127	16154			0.00- 42.43	13.55

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: msde.i
Lab File ID: e021010.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: gh
Method File: /chem/msde.i/10Feb2015.b/e15l0210a.m
Misc Info: 5.0ppbv(50ppbv)

Calibration Date: 10-FEB-2015
Calibration Time: 19:01
Client Smp ID: LEVEL 9
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
46 Bromochloromethan	276169	165701	386637	271281	-1.77
58 1,4-Difluorobenze	1109585	665751	1553419	1134313	2.23
75 Chlorobenzene-d5	1031911	619147	1444675	1028821	-0.30

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
46 Bromochloromethan	15.64	15.31	15.97	15.64	0.00
58 1,4-Difluorobenze	17.01	16.68	17.34	17.01	0.00
75 Chlorobenzene-d5	22.41	22.08	22.74	22.41	0.00

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

Data File: /chem/msde.i/10Feb2015.b/e021010.d

Date : 10-FEB-2015 18:20

Client ID: LEVEL 9

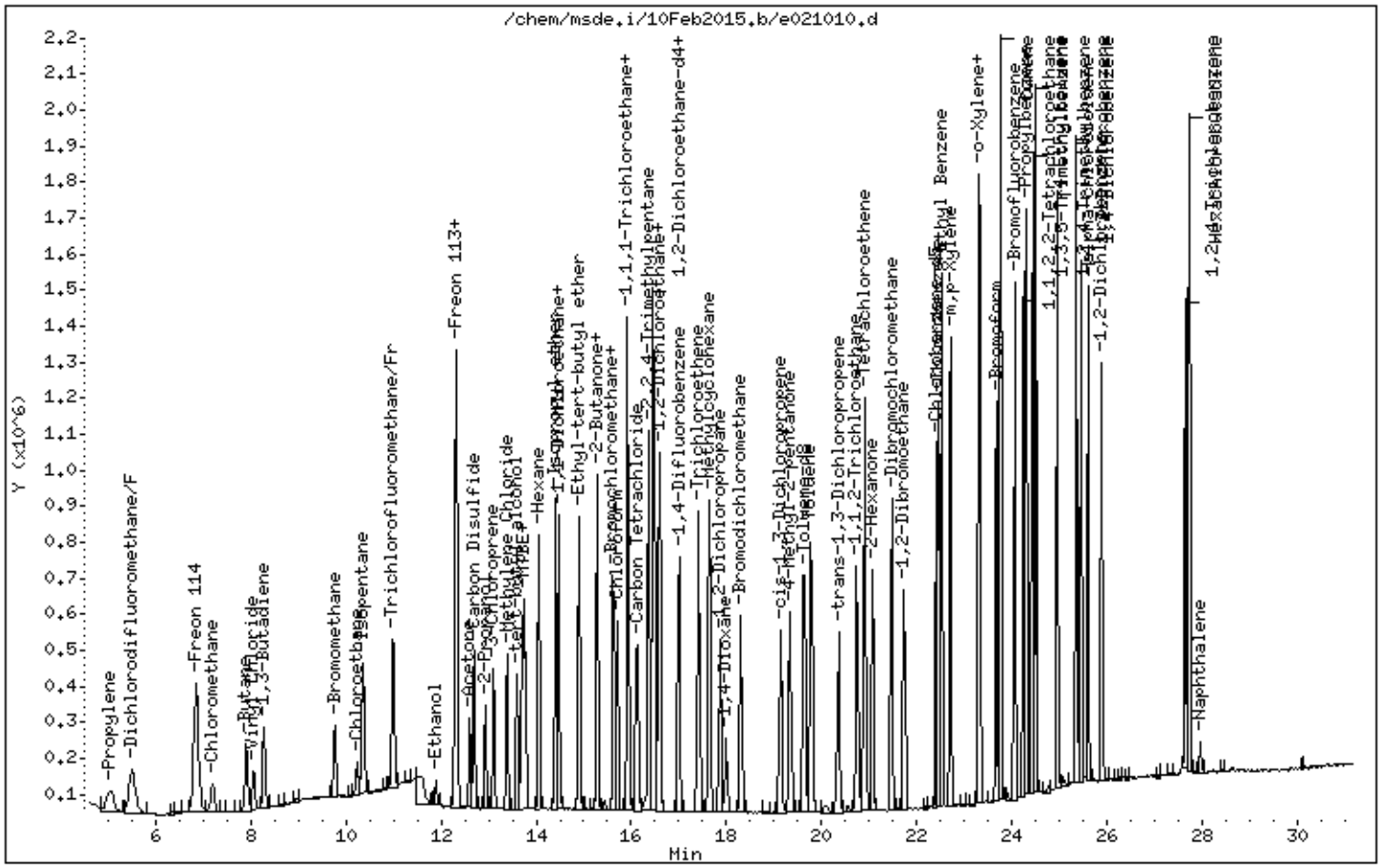
Instrument: msde.i

Sample Info: 25mL#2687-244

Operator: gh

Column phase: RTx-624

Column diameter: 0.32



Eurofins Air Toxics Inc.

EPA TO-15/Modified TO14A

Data file : /chem/msde.i/10Feb2015.b/e021011.d
Lab Smp Id: ICAL Client Smp ID: LEVEL 10
Inj Date : 10-FEB-2015 19:01
Operator : gh Inst ID: msde.i
Smp Info : 50mL#2687-244
Misc Info : 10ppbv(50ppbv)
Comment : Low-Level/GC-MS
Method : /chem/msde.i/10Feb2015.b/e15l0210a.m
Meth Date : 11-Feb-2015 11:31 atoyama Quant Type: ISTD
Cal Date : 10-FEB-2015 19:01 Cal File: e021011.d
Als bottle: 1 Calibration Sample, Level: 10
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: HILOcrvFULL.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
* 46 Bromochloromethane						CAS #: 74-97-5	
15.641	15.641 (1.000)	130	276169	5.00000		80.00- 120.00	100.00
15.641	15.641 (1.000)	128	215290			47.96- 107.96	77.96
15.641	15.641 (1.000)	49	392293			112.05- 172.05	142.05
* 58 1,4-Difluorobenzene						CAS #: 540-36-3	
17.011	17.011 (1.000)	114	1109585	5.00000		80.00- 120.00	100.00
17.011	17.011 (1.000)	88	164597			0.00- 44.83	14.83
* 75 Chlorobenzene-d5						CAS #: 3114-55-4	
22.407	22.407 (1.000)	117	1031911	5.00000		80.00- 120.00	100.00
22.407	22.407 (1.000)	82	475974			16.13- 76.13	46.13
$ 54 1,2-Dichloroethane-d4						CAS #: 17060-07-0	
16.457	16.457 (1.052)	65	291862	5.00000	5.000	80.00- 120.00	100.00
16.457	16.457 (1.052)	67	162462			25.66- 85.66	55.66

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
$ 67 Toluene-d8					CAS #: 2037-26-5		
19.646	19.646 (1.155)	98	1076023	5.00000	5.000	80.00- 120.00	100.00
19.624	19.624 (1.154)	70	106719			0.00- 39.92	9.92
19.646	19.646 (1.155)	100	711714			36.14- 96.14	66.14
$ 87 Bromofluorobenzene					CAS #: 460-00-4		
24.065	24.065 (1.074)	174	592536	5.00000	5.000	80.00- 120.00	100.00
24.065	24.065 (1.074)	95	660418			81.46- 141.46	111.46
24.065	24.065 (1.074)	176	575773			67.17- 127.17	97.17
2 Propylene					CAS #: 115-07-1		
5.046	5.046 (0.323)	41	429256	10.0000	10.000	80.00- 120.00	100.00
5.046	5.046 (0.323)	42	282243			35.75- 95.75	65.75
5.046	5.046 (0.323)	39	299836			39.85- 99.85	69.85
4 Dichlorodifluoromethane/Fr12					CAS #: 75-71-8		
5.504	5.504 (0.352)	85	1340611	10.0000	10.000	80.00- 120.00	100.00
5.504	5.504 (0.352)	87	446208			3.28- 63.28	33.28
6 Freon 114					CAS #: 76-14-2		
6.853	6.853 (0.438)	135	1272011	10.0000	10.000	80.00- 120.00	100.00
6.853	6.853 (0.438)	137	411715			2.37- 62.37	32.37
7 Chloromethane					CAS #: 74-87-3		
7.191	7.191 (0.460)	50	496014	10.0000	10.000	80.00- 120.00	100.00
7.191	7.191 (0.460)	52	164116			3.09- 63.09	33.09
9 Butane					CAS #: 106-97-8		
7.906	7.906 (0.505)	58	117026	10.0000	10.000	80.00- 120.00	100.00
7.906	7.906 (0.505)	43	861641			706.28- 766.28	736.28
10 Vinyl Chloride					CAS #: 75-01-4		
8.045	8.045 (0.514)	62	560775	10.0000	10.000	80.00- 120.00	100.00
8.045	8.045 (0.514)	64	178086			1.76- 61.76	31.76
11 1,3-Butadiene					CAS #: 106-99-0		
8.271	8.271 (0.529)	54	459948	10.0000	10.000	80.00- 120.00	100.00
8.271	8.271 (0.529)	39	422131			61.78- 121.78	91.78
12 Bromomethane					CAS #: 74-83-9		
9.764	9.764 (0.624)	94	518349	10.0000	10.000	80.00- 120.00	100.00
9.764	9.764 (0.624)	96	481467			62.88- 122.88	92.88
13 Chloroethane					CAS #: 75-00-3		
10.233	10.233 (0.654)	64	280314	10.0000	10.000	80.00- 120.00	100.00
10.233	10.233 (0.654)	49	73636			0.00- 56.27	26.27

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
13 Chloroethane (continued)							
10.233	10.233 (0.654)	66	88715			1.65- 61.65	31.65
14 Isopentane					CAS #: 78-78-4		
10.367	10.367 (0.663)	57	472025	10.0000	10.000	80.00- 120.00	100.00
10.367	10.367 (0.663)	43	679803			114.02- 174.02	144.02
10.367	10.367 (0.663)	42	572450			91.28- 151.28	121.28
16 Trichlorofluoromethane/Fr11					CAS #: 75-69-4		
10.995	10.995 (0.703)	101	1411452	10.0000	10.000	80.00- 120.00	100.00
10.995	10.995 (0.703)	103	923259			35.41- 95.41	65.41
18 Ethanol					CAS #: 64-17-5		
11.890	11.890 (0.760)	45	213532	10.0000	10.000	80.00- 120.00	100.00
11.890	11.890 (0.760)	46	79701			7.33- 67.33	37.33
11.890	11.890 (0.760)	43	46323			0.00- 51.69	21.69
19 Freon 113					CAS #: 76-13-1		
12.309	12.309 (0.787)	151	1238643	10.0000	10.000	80.00- 120.00	100.00
12.309	12.309 (0.787)	153	802482			34.79- 94.79	64.79
12.309	12.309 (0.787)	101	1360904			79.87- 139.87	109.87
21 1,1-Dichloroethene					CAS #: 75-35-4		
12.328	12.328 (0.788)	98	401710	10.0000	10.000	80.00- 120.00	100.00
12.328	12.328 (0.788)	61	940963			204.24- 264.24	234.24
12.328	12.328 (0.788)	96	629142			126.62- 186.62	156.62
22 Acetone					CAS #: 67-64-1		
12.595	12.595 (0.805)	58	297228	10.0000	10.000	80.00- 120.00	100.00
12.595	12.595 (0.805)	43	847166			255.02- 315.02	285.02
25 2-Propanol					CAS #: 67-63-0		
12.938	12.938 (0.827)	45	1048465	10.0000	10.000	80.00- 120.00	100.00
12.938	12.938 (0.827)	43	179138			0.00- 47.09	17.09
12.938	12.938 (0.827)	59	43701			0.00- 34.17	4.17
23 Carbon Disulfide					CAS #: 75-15-0		
12.690	12.690 (0.811)	76	1735599	10.0000	10.000	80.00- 120.00	100.00
26 3-Chloroprene					CAS #: 107-05-1		
13.109	13.109 (0.838)	76	274789	10.0000	10.000	80.00- 120.00	100.00
13.109	13.109 (0.838)	41	769222			249.93- 309.93	279.93
29 Methylene Chloride					CAS #: 75-09-2		
13.395	13.395 (0.856)	84	544132	10.0000	10.000	80.00- 120.00	100.00
13.395	13.395 (0.856)	49	698472			98.36- 158.36	128.36

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
29 Methylene Chloride (continued)							
13.395	13.395 (0.856)	51	213453			9.23- 69.23	39.23
30 tert-butyl alcohol					CAS #: 75-65-0		
13.591	13.591 (0.869)	59	1557578	10.0000	10.000	80.00- 120.00	100.00
13.591	13.591 (0.869)	41	305546			0.00- 49.62	19.62
13.591	13.591 (0.869)	57	165759			0.00- 40.64	10.64
31 MTBE					CAS #: 1634-04-4		
13.701	13.701 (0.876)	73	1657472	10.0000	10.000	80.00- 120.00	100.00
13.701	13.701 (0.876)	57	409553			0.00- 54.71	24.71
13.701	13.701 (0.876)	41	351302			0.00- 51.20	21.20
32 trans-1,2-Dichloroethene					CAS #: 156-60-5		
13.756	13.756 (0.879)	98	418851	10.0000	10.000	80.00- 120.00	100.00
13.756	13.756 (0.879)	61	882782			180.76- 240.76	210.76
13.756	13.756 (0.879)	96	655605			126.52- 186.52	156.52
35 Hexane					CAS #: 110-54-3		
14.058	14.058 (0.899)	57	1013098	10.0000	10.000	80.00- 120.00	100.00
14.058	14.058 (0.899)	43	631332			32.32- 92.32	62.32
14.058	14.058 (0.899)	86	164291			0.00- 46.22	16.22
36 Isopropyl ether					CAS #: 108-20-3		
14.415	14.415 (0.922)	45	2183266	10.0000	10.000	80.00- 120.00	100.00
14.415	14.415 (0.922)	87	597793			0.00- 57.38	27.38
14.415	14.415 (0.922)	59	252089			0.00- 41.55	11.55
37 1,1-Dichloroethane					CAS #: 75-34-3		
14.470	14.470 (0.925)	63	1092791	10.0000	10.000	80.00- 120.00	100.00
14.470	14.470 (0.925)	65	346628			1.72- 61.72	31.72
38 Vinyl Acetate					CAS #: 108-05-4		
14.470	14.470 (0.925)	86	177576	10.0000	10.000	80.00- 120.00	100.00
14.470	14.470 (0.925)	42	134568			45.78- 105.78	75.78
14.470	14.470 (0.925)	43	1871058			1023.67-1083.67	1053.67
40 Ethyl-tert-butyl ether					CAS #: 637-92-3		
14.897	14.897 (0.952)	59	2080241	10.0000	10.000	80.00- 120.00	100.00
14.916	14.916 (0.954)	87	862229			11.45- 71.45	41.45
14.897	14.897 (0.952)	41	334696			0.00- 46.09	16.09
42 2-Butanone					CAS #: 78-93-3		
15.278	15.278 (0.977)	72	312070	10.0000	10.000	80.00- 120.00	100.00
15.278	15.278 (0.977)	43	1261851			374.35- 434.35	404.35
15.278	15.278 (0.977)	57	106681			4.18- 64.18	34.18

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
41 cis-1,2-Dichloroethene					CAS #: 156-59-2		
15.297	15.297 (0.978)	98	453353	10.0000	10.000	80.00- 120.00	100.00
15.278	15.278 (0.977)	61	863835			160.54- 220.54	190.54
15.297	15.297 (0.978)	96	707468			126.05- 186.05	156.05
44 Tetrahydrofuran					CAS #: 109-99-9		
15.611	15.611 (0.998)	42	726436	10.0000	10.000	80.00- 120.00	100.00
15.611	15.611 (0.998)	71	286083			9.38- 69.38	39.38
15.611	15.611 (0.998)	72	303170			11.73- 71.73	41.73
47 Chloroform					CAS #: 67-66-3		
15.703	15.703 (1.004)	83	1241440	10.0000	10.000	80.00- 120.00	100.00
15.703	15.703 (1.004)	85	822866			36.28- 96.28	66.28
49 1,1,1-Trichloroethane					CAS #: 71-55-6		
15.919	15.919 (1.018)	97	1312978	10.0000	10.000	80.00- 120.00	100.00
15.919	15.919 (1.018)	99	850605			34.78- 94.78	64.78
48 Cyclohexane					CAS #: 110-82-7		
15.919	15.919 (1.018)	84	866741	10.0000	10.000	80.00- 120.00	100.00
15.919	15.919 (1.018)	56	1078604			94.44- 154.44	124.44
15.919	15.919 (1.018)	41	542100			32.54- 92.54	62.54
51 Carbon Tetrachloride					CAS #: 56-23-5		
16.135	16.135 (1.032)	119	1123578	10.0000	10.000	80.00- 120.00	100.00
16.135	16.135 (1.032)	117	1163009			73.51- 133.51	103.51
52 2,2,4-Trimethylpentane					CAS #: 540-84-1		
16.361	16.361 (1.046)	56	1488191	10.0000	10.000	80.00- 120.00	100.00
16.361	16.361 (1.046)	57	4483600			271.28- 331.28	301.28
16.361	16.361 (1.046)	41	1084864			42.90- 102.90	72.90
53 Benzene					CAS #: 71-43-2		
16.457	16.457 (0.967)	78	1914809	10.0000	10.000	80.00- 120.00	100.00
16.457	16.457 (0.967)	77	448090			0.00- 53.40	23.40
55 tert-amyl methyl ether					CAS #: 994-05-8		
16.481	16.481 (0.969)	87	488847	10.0000	10.000	80.00- 120.00	100.00
16.481	16.481 (0.969)	73	1920144			362.79- 422.79	392.79
16.481	16.481 (0.969)	55	471895			66.53- 126.53	96.53
56 1,2-Dichloroethane					CAS #: 107-06-2		
16.578	16.578 (0.974)	62	758895	10.0000	10.000	80.00- 120.00	100.00
16.578	16.578 (0.974)	64	245113			2.30- 62.30	32.30
57 Heptane					CAS #: 142-82-5		
16.602	16.602 (0.976)	57	640984	10.0000	10.000	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
57 Heptane (continued)							
16.602	16.602 (0.976)	100	273183			12.62- 72.62	42.62
16.602	16.602 (0.976)	43	1186405			155.09- 215.09	185.09
59 Trichloroethene					CAS #: 79-01-6		
17.421	17.421 (1.024)	130	1083570	10.0000	10.000	80.00- 120.00	100.00
17.421	17.421 (1.024)	95	928624			55.70- 115.70	85.70
17.421	17.421 (1.024)	97	595448			24.95- 84.95	54.95
60 Methylcyclohexane					CAS #: 108-87-2		
17.638	17.638 (1.037)	83	1239962	10.0000	10.000	80.00- 120.00	100.00
17.638	17.638 (1.037)	55	995912			50.32- 110.32	80.32
17.638	17.638 (1.037)	56	326824			0.00- 56.36	26.36
61 1,2-Dichloropropane					CAS #: 78-87-5		
17.879	17.879 (1.051)	63	770896	10.0000	10.000	80.00- 120.00	100.00
17.879	17.879 (1.051)	62	527866			38.47- 98.47	68.47
17.879	17.879 (1.051)	41	351973			15.66- 75.66	45.66
62 1,4-Dioxane					CAS #: 123-91-1		
17.999	17.999 (1.058)	88	517863	10.0000	10.000	80.00- 120.00	100.00
17.999	17.999 (1.058)	58	356991			38.94- 98.94	68.94
17.999	17.999 (1.058)	57	111863			0.00- 51.60	21.60
63 Bromodichloromethane					CAS #: 75-27-4		
18.313	18.313 (1.076)	83	1367198	10.0000	10.000	80.00- 120.00	100.00
18.313	18.313 (1.076)	85	899252			35.77- 95.77	65.77
64 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
19.153	19.153 (1.126)	75	1236895	10.0000	10.000	80.00- 120.00	100.00
19.153	19.153 (1.126)	77	400299			2.36- 62.36	32.36
19.153	19.153 (1.126)	39	530023			12.85- 72.85	42.85
65 4-Methyl-2-pentanone					CAS #: 108-10-1		
19.332	19.332 (1.136)	43	1591855	10.0000	10.000	80.00- 120.00	100.00
19.332	19.332 (1.136)	58	645121			10.53- 70.53	40.53
19.332	19.332 (1.136)	85	288450			0.00- 48.12	18.12
68 Toluene					CAS #: 108-88-3		
19.781	19.781 (1.163)	91	2449909	10.0000	10.00	80.00- 120.00	100.00
19.781	19.781 (1.163)	92	1431283			28.42- 88.42	58.42
69 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
20.359	20.359 (0.909)	75	1087591	10.0000	10.000	80.00- 120.00	100.00
20.359	20.359 (0.909)	77	350386			2.22- 62.22	32.22
20.359	20.359 (0.909)	39	454758			11.81- 71.81	41.81

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

   70 1,1,2-Trichloroethane                        CAS #: 79-00-5
 20.743  20.743 (0.926)    97    876998 10.0000   10.000  80.00- 120.00   100.00
 20.743  20.743 (0.926)    99    555870                   33.38-  93.38    63.38
 20.743  20.743 (0.926)    83    726753                   52.87- 112.87    82.87
-------------------------------------------------------------------------------
   71 Tetrachloroethene                            CAS #: 127-18-4
 20.908  20.908 (0.933)   166   1344624 10.0000   10.000  80.00- 120.00   100.00
 20.908  20.908 (0.933)   129   1029928                   46.60- 106.60    76.60
 20.908  20.908 (0.933)   131    998622                   44.27- 104.27    74.27
-------------------------------------------------------------------------------
   72 2-Hexanone                                   CAS #: 591-78-6
 21.073  21.073 (0.940)    58    881164 10.0000   10.000  80.00- 120.00   100.00
 21.073  21.073 (0.940)    43   1547100                  145.57- 205.57   175.57
 21.073  21.073 (0.940)   100    192743                    0.00-  51.87    21.87
-------------------------------------------------------------------------------
   73 Dibromochloromethane                         CAS #: 124-48-1
 21.485  21.485 (0.959)   129   1773140 10.0000   10.000  80.00- 120.00   100.00
 21.485  21.485 (0.959)   127   1362554                   46.84- 106.84    76.84
-------------------------------------------------------------------------------
   74 1,2-Dibromoethane                            CAS #: 106-93-4
 21.732  21.732 (0.970)   107   1428532 10.0000   10.000  80.00- 120.00   100.00
 21.732  21.732 (0.970)   109   1394203                   67.60- 127.60    97.60
-------------------------------------------------------------------------------
   76 Chlorobenzene                                CAS #: 108-90-7
 22.469  22.469 (1.003)   112   2140124 10.0000   10.000  80.00- 120.00   100.00
 22.469  22.469 (1.003)   114    691673                    2.32-  62.32    32.32
 22.469  22.469 (1.003)    77   1133834                   22.98-  82.98    52.98
-------------------------------------------------------------------------------
   77 Ethyl Benzene                                CAS #: 100-41-4
 22.531  22.531 (1.006)   106   1041665 10.0000   10.000  80.00- 120.00   100.00
 22.531  22.531 (1.006)    91   3110866                  268.64- 328.64   298.64
-------------------------------------------------------------------------------
   80 m,p-Xylene                                   CAS #: 108-38-3
 22.718  22.718 (1.014)   106   1275730 10.0000   10.000  80.00- 120.00   100.00
 22.718  22.718 (1.014)    91   2378119                  156.41- 216.41   186.41
-------------------------------------------------------------------------------
   81 o-Xylene                                     CAS #: 95-47-6
 23.299  23.299 (1.040)   106   1192159 10.0000   10.000  80.00- 120.00   100.00
 23.299  23.299 (1.040)    91   2358104                  167.80- 227.80   197.80
-------------------------------------------------------------------------------
   83 Styrene                                      CAS #: 100-42-5
 23.340  23.340 (1.042)   104   2048450 10.0000   10.000  80.00- 120.00   100.00
 23.340  23.340 (1.042)    78    877609                   12.84-  72.84    42.84
-------------------------------------------------------------------------------
   84 Bromoform                                    CAS #: 75-25-2
 23.684  23.684 (1.057)   173   1701830 10.0000   10.000  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
   ==   ====== ========  ====  ======== =======  =======   ============    =====

   84 Bromoform (continued)
 23.684  23.684 (1.057)   171    889228                   22.25-  82.25    52.25
-------------------------------------------------------------------------------
   85 Cumene                                        CAS #: 98-82-8
 23.773  23.773 (1.061)   105   3708731 10.0000   10.000  80.00- 120.00   100.00
 23.773  23.773 (1.061)   120   1074769                    0.00-  58.98    28.98
-------------------------------------------------------------------------------
   89 1,1,2,2-Tetrachloroethane                     CAS #: 79-34-5
 24.244  24.244 (1.082)    83   1733290 10.0000   10.000  80.00- 120.00   100.00
 24.244  24.244 (1.082)    85   1148576                   36.27-  96.27    66.27
-------------------------------------------------------------------------------
   90 Propylbenzene                                 CAS #: 103-65-1
 24.312  24.312 (1.085)    91   3911799 10.0000   10.000  80.00- 120.00   100.00
 24.312  24.312 (1.085)   120   1037940                    0.00-  56.53    26.53
-------------------------------------------------------------------------------
   92 4-Ethyltoluene                                CAS #: 622-96-8
 24.446  24.446 (1.091)   105   3439967 10.0000   10.000  80.00- 120.00   100.00
 24.446  24.446 (1.091)   120   1091222                    1.72-  61.72    31.72
-------------------------------------------------------------------------------
   94 1,3,5-Trimethylbenzene                        CAS #: 108-67-8
 24.514  24.514 (1.094)   105   2853785 10.0000   10.000  80.00- 120.00   100.00
 24.514  24.514 (1.094)   120   1492368                   22.29-  82.29    52.29
-------------------------------------------------------------------------------
   98 1,2,4-Trimethylbenzene                        CAS #: 95-63-6
 24.962  24.962 (1.114)   105   2522650 10.0000   10.000  80.00- 120.00   100.00
 24.962  24.962 (1.114)   120   1238586                   19.10-  79.10    49.10
-------------------------------------------------------------------------------
  101 1,3-Dichlorobenzene                           CAS #: 541-73-1
 25.366  25.366 (1.132)   146   2076204 10.0000   10.000  80.00- 120.00   100.00
 25.366  25.366 (1.132)   148   1291951                   32.23-  92.23    62.23
 25.366  25.366 (1.132)   111    760900                    6.65-  66.65    36.65
-------------------------------------------------------------------------------
  104 1,4-Dichlorobenzene                           CAS #: 106-46-7
 25.455  25.455 (1.136)   146   2013876 10.0000   10.000  80.00- 120.00   100.00
 25.455  25.455 (1.136)   148   1267580                   32.94-  92.94    62.94
 25.455  25.455 (1.136)   111    711196                    5.31-  65.31    35.31
-------------------------------------------------------------------------------
  105 alpha-chlorotoluene                           CAS #: 100-44-7
 25.612  25.612 (1.143)    91   2401664 10.0000   10.000  80.00- 120.00   100.00
 25.612  25.612 (1.143)   126    619141                    0.00-  55.78    25.78
-------------------------------------------------------------------------------
  108 1,2-Dichlorobenzene                           CAS #: 95-50-1
 25.904  25.904 (1.156)   146   1832902 10.0000   10.000  80.00- 120.00   100.00
 25.904  25.904 (1.156)   148   1145173                   32.48-  92.48    62.48
 25.881  25.881 (1.155)   111    695282                    7.93-  67.93    37.93
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RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
112 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
27.652	27.652 (1.234)	180	1292185	10.0000	10.000	80.00- 120.00	100.00
27.652	27.652 (1.234)	182	1250299			66.76- 126.76	96.76
113 Hexachlorobutadiene					CAS #: 87-68-3		
27.742	27.742 (1.238)	225	1007864	10.0000	10.000	80.00- 120.00	100.00
27.742	27.742 (1.238)	223	630413			32.55- 92.55	62.55
114 Naphthalene					CAS #: 91-20-3		
27.966	27.966 (1.248)	128	234798	1.00000	1.000	80.00- 120.00	100.00
27.966	27.966 (1.248)	127	29186			0.00- 42.43	12.43

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msde.i
Lab File ID: e021011.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: gh
Method File: /chem/msde.i/10Feb2015.b/e15l0210a.m
Misc Info: 10ppbv(50ppbv)

Calibration Date: 10-FEB-2015
Calibration Time: 19:01
Client Smp ID: LEVEL 10
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
46 Bromochloromethan	276169	165701	386637	276169	0.00
58 1,4-Difluorobenze	1109585	665751	1553419	1109585	0.00
75 Chlorobenzene-d5	1031911	619147	1444675	1031911	0.00

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
46 Bromochloromethan	15.64	15.31	15.97	15.64	0.00
58 1,4-Difluorobenze	17.01	16.68	17.34	17.01	0.00
75 Chlorobenzene-d5	22.41	22.08	22.74	22.41	0.00

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

Data File: /chem/msde.i/10Feb2015.b/e021011.d

Date : 10-FEB-2015 19:01

Client ID: LEVEL 10

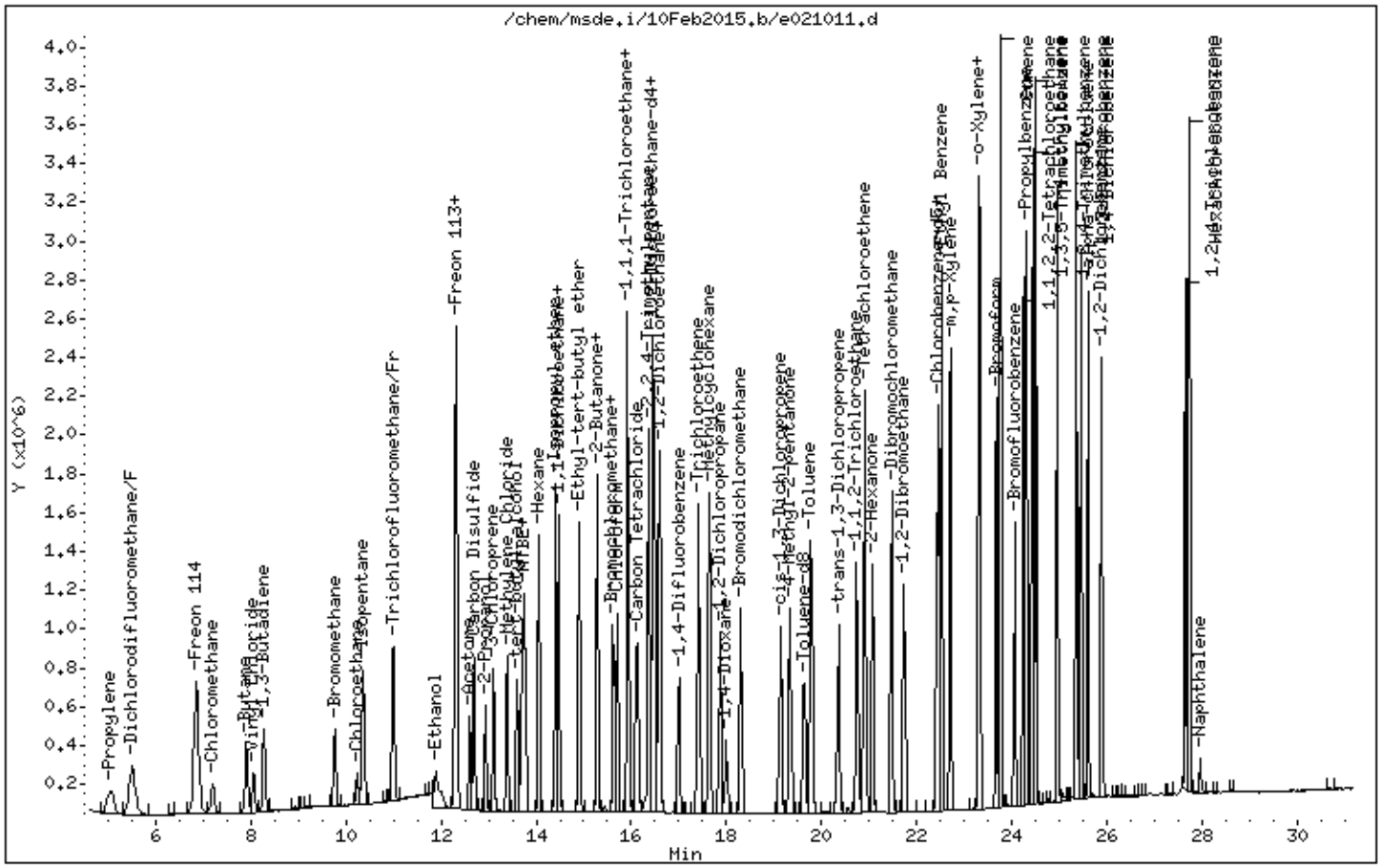
Instrument: msde.i

Sample Info: 50mL#2687-244

Operator: gh

Column phase: RTx-624

Column diameter: 0.32



Eurofins Air Toxics Inc.

EPA TO-15/Modified TO14A

Data file : /chem/msde.i/10Feb2015.b/e021012.d
Lab Smp Id: ICAL Client Smp ID: LEVEL 11
Inj Date : 10-FEB-2015 19:49
Operator : gh Inst ID: msde.i
Smp Info : 100mL#2687-244
Misc Info : 20ppbv(50ppbv)
Comment : Low-Level/GC-MS
Method : /chem/msde.i/10Feb2015.b/e15l0210a.m
Meth Date : 11-Feb-2015 11:32 atoyama Quant Type: ISTD
Cal Date : 10-FEB-2015 19:49 Cal File: e021012.d
Als bottle: 1 Calibration Sample, Level: 11
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: HILOcrvFULL.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
* 46 Bromochloromethane					CAS #: 74-97-5		
15.641	15.641 (1.000)	130	278188	5.00000		80.00- 120.00	100.00
15.641	15.641 (1.000)	128	213879			47.96- 107.96	76.88
15.641	15.641 (1.000)	49	484597			112.05- 172.05	174.20
* 58 1,4-Difluorobenzene					CAS #: 540-36-3		
17.011	17.011 (1.000)	114	1129334	5.00000		80.00- 120.00	100.00
17.011	17.011 (1.000)	88	166032			0.00- 44.83	14.70
* 75 Chlorobenzene-d5					CAS #: 3114-55-4		
22.407	22.407 (1.000)	117	1023401	5.00000		80.00- 120.00	100.00
22.407	22.407 (1.000)	82	475038			16.13- 76.13	46.42
$ 54 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
16.457	16.457 (1.052)	65	287791	5.00000	4.911	80.00- 120.00	100.00
16.457	16.457 (1.052)	67	163876			25.66- 85.66	56.94

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
$ 67 Toluene-d8					CAS #: 2037-26-5		
19.624	19.624 (1.154)	98	1057740	5.00000	4.933	80.00- 120.00	100.00
19.624	19.624 (1.154)	70	104041			0.00- 39.92	9.84
19.624	19.624 (1.154)	100	718183			36.14- 96.14	67.90
$ 87 Bromofluorobenzene					CAS #: 460-00-4		
24.065	24.065 (1.074)	174	580786	5.00000	4.909	80.00- 120.00	100.00
24.065	24.065 (1.074)	95	664833			81.46- 141.46	114.47
24.065	24.065 (1.074)	176	567554			67.17- 127.17	97.72
2 Propylene					CAS #: 115-07-1		
5.046	5.046 (0.323)	41	834178	20.0000	18.599	80.00- 120.00	100.00
5.046	5.046 (0.323)	42	551186			35.75- 95.75	66.08
5.046	5.046 (0.323)	39	567638			39.85- 99.85	68.05
4 Dichlorodifluoromethane/Fr12					CAS #: 75-71-8		
5.503	5.503 (0.352)	85	2598452	20.0000	17.631	80.00- 120.00	100.00
5.503	5.503 (0.352)	87	843087			3.28- 63.28	32.45
6 Freon 114					CAS #: 76-14-2		
6.853	6.853 (0.438)	135	2522992	20.0000	17.747	80.00- 120.00	100.00
6.853	6.853 (0.438)	137	807637			2.37- 62.37	32.01
7 Chloromethane					CAS #: 74-87-3		
7.191	7.191 (0.460)	50	1046430	20.0000	18.804	80.00- 120.00	100.00
7.191	7.191 (0.460)	52	322498			3.09- 63.09	30.82
9 Butane					CAS #: 106-97-8		
7.906	7.906 (0.505)	58	228823	20.0000	16.036	80.00- 120.00	100.00
7.906	7.906 (0.505)	43	1705887			706.28- 766.28	745.51
10 Vinyl Chloride					CAS #: 75-01-4		
8.045	8.045 (0.514)	62	1087881	20.0000	17.932	80.00- 120.00	100.00
8.045	8.045 (0.514)	64	345788			1.76- 61.76	31.79
11 1,3-Butadiene					CAS #: 106-99-0		
8.271	8.271 (0.529)	54	905456	20.0000	18.241	80.00- 120.00	100.00
8.271	8.271 (0.529)	39	838134			61.78- 121.78	92.56
12 Bromomethane					CAS #: 74-83-9		
9.746	9.746 (0.623)	94	1010090	20.0000	17.785	80.00- 120.00	100.00
9.746	9.746 (0.623)	96	942051			62.88- 122.88	93.26
13 Chloroethane					CAS #: 75-00-3		
10.233	10.233 (0.654)	64	547867	20.0000	17.580	80.00- 120.00	100.00
10.233	10.233 (0.654)	49	139805			0.00- 56.27	25.52

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
13 Chloroethane (continued)							
10.233	10.233 (0.654)	66	174770			1.65- 61.65	31.90
14 Isopentane					CAS #: 78-78-4		
10.348	10.348 (0.662)	57	908593	20.0000	17.025	80.00- 120.00	100.00
10.348	10.348 (0.662)	43	1322884			114.02- 174.02	145.60
10.348	10.348 (0.662)	42	1139436			91.28- 151.28	125.41
16 Trichlorofluoromethane/Fr11					CAS #: 75-69-4		
10.976	10.976 (0.702)	101	2768914	20.0000	17.513	80.00- 120.00	100.00
10.976	10.976 (0.702)	103	1804200			35.41- 95.41	65.16
18 Ethanol					CAS #: 64-17-5		
11.890	11.890 (0.760)	45	468423	20.0000	17.773	80.00- 120.00	100.00
11.890	11.890 (0.760)	46	184427			7.33- 67.33	39.37
11.890	11.890 (0.760)	43	102153			0.00- 51.69	21.81
19 Freon 113					CAS #: 76-13-1		
12.309	12.309 (0.787)	151	2439176	20.0000	16.533	80.00- 120.00	100.00
12.309	12.309 (0.787)	153	1559491			34.79- 94.79	63.94
12.309	12.309 (0.787)	101	2706809			79.87- 139.87	110.97
21 1,1-Dichloroethene					CAS #: 75-35-4		
12.328	12.328 (0.788)	98	789667	20.0000	17.117	80.00- 120.00	100.00
12.328	12.328 (0.788)	61	1840815			204.24- 264.24	233.11
12.328	12.328 (0.788)	96	1235824			126.62- 186.62	156.50
22 Acetone					CAS #: 67-64-1		
12.595	12.595 (0.805)	58	582952	20.0000	16.080	80.00- 120.00	100.00
12.595	12.595 (0.805)	43	1670792			255.02- 315.02	286.61
25 2-Propanol					CAS #: 67-63-0		
12.937	12.937 (0.827)	45	2093336	20.0000	17.824	80.00- 120.00	100.00
12.937	12.937 (0.827)	43	350241			0.00- 47.09	16.73
12.937	12.937 (0.827)	59	84028			0.00- 34.17	4.01
23 Carbon Disulfide					CAS #: 75-15-0		
12.690	12.690 (0.811)	76	3381390	20.0000	15.324	80.00- 120.00	100.00
26 3-Chloroprene					CAS #: 107-05-1		
13.109	13.109 (0.838)	76	539602	20.0000	18.461	80.00- 120.00	100.00
13.109	13.109 (0.838)	41	1515195			249.93- 309.93	280.80
29 Methylene Chloride					CAS #: 75-09-2		
13.395	13.395 (0.856)	84	1046505	20.0000	18.113	80.00- 120.00	100.00
13.395	13.395 (0.856)	49	1346964			98.36- 158.36	128.71

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
29 Methylene Chloride (continued)							
13.395	13.395 (0.856)	51	421890			9.23- 69.23	40.31
30 tert-butyl alcohol					CAS #: 75-65-0		
13.591	13.591 (0.869)	59	3061446	20.0000	17.874	80.00- 120.00	100.00
13.591	13.591 (0.869)	41	595703			0.00- 49.62	19.46
13.591	13.591 (0.869)	57	317768			0.00- 40.64	10.38
31 MTBE					CAS #: 1634-04-4		
13.701	13.701 (0.876)	73	3246246	20.0000	17.780	80.00- 120.00	100.00
13.701	13.701 (0.876)	57	794268			0.00- 54.71	24.47
13.701	13.701 (0.876)	41	676806			0.00- 51.20	20.85
32 trans-1,2-Dichloroethene					CAS #: 156-60-5		
13.756	13.756 (0.879)	98	822286	20.0000	17.297	80.00- 120.00	100.00
13.756	13.756 (0.879)	61	1716799			180.76- 240.76	208.78
13.756	13.756 (0.879)	96	1277441			126.52- 186.52	155.35
35 Hexane					CAS #: 110-54-3		
14.058	14.058 (0.899)	57	1954742	20.0000	17.453	80.00- 120.00	100.00
14.058	14.058 (0.899)	43	1215705			32.32- 92.32	62.19
14.058	14.058 (0.899)	86	320239			0.00- 46.22	16.38
36 Isopropyl ether					CAS #: 108-20-3		
14.415	14.415 (0.922)	45	4167203	20.0000	17.795	80.00- 120.00	100.00
14.415	14.415 (0.922)	87	1156278			0.00- 57.38	27.75
14.415	14.415 (0.922)	59	482313			0.00- 41.55	11.57
37 1,1-Dichloroethane					CAS #: 75-34-3		
14.470	14.470 (0.925)	63	2126878	20.0000	17.564	80.00- 120.00	100.00
14.470	14.470 (0.925)	65	670659			1.72- 61.72	31.53
38 Vinyl Acetate					CAS #: 108-05-4		
14.470	14.470 (0.925)	86	356205	20.0000	17.346	80.00- 120.00	100.00
14.470	14.470 (0.925)	42	256899			45.78- 105.78	72.12
14.470	14.470 (0.925)	43	3550521			1023.67-1083.67	996.76
40 Ethyl-tert-butyl ether					CAS #: 637-92-3		
14.897	14.897 (0.952)	59	4044114	20.0000	17.858	80.00- 120.00	100.00
14.897	14.897 (0.952)	87	1672373			11.45- 71.45	41.35
14.897	14.897 (0.952)	41	651111			0.00- 46.09	16.10
42 2-Butanone					CAS #: 78-93-3		
15.278	15.278 (0.977)	72	614758	20.0000	17.990	80.00- 120.00	100.00
15.278	15.278 (0.977)	43	2429867			374.35- 434.35	395.26
15.278	15.278 (0.977)	57	196349			4.18- 64.18	31.94

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
41 cis-1,2-Dichloroethene					CAS #: 156-59-2		
15.278	15.278 (0.977)	98	879668	20.0000	17.381	80.00- 120.00	100.00
15.278	15.278 (0.977)	61	1646299			160.54- 220.54	187.15
15.278	15.278 (0.977)	96	1371857			126.05- 186.05	155.95
44 Tetrahydrofuran					CAS #: 109-99-9		
15.611	15.611 (0.998)	42	1450908	20.0000	17.885	80.00- 120.00	100.00
15.611	15.611 (0.998)	71	552730			9.38- 69.38	38.10
15.611	15.611 (0.998)	72	600879			11.73- 71.73	41.41
47 Chloroform					CAS #: 67-66-3		
15.703	15.703 (1.004)	83	2405967	20.0000	17.356	80.00- 120.00	100.00
15.703	15.703 (1.004)	85	1610411			36.28- 96.28	66.93
49 1,1,1-Trichloroethane					CAS #: 71-55-6		
15.919	15.919 (1.018)	97	2517739	20.0000	17.590	80.00- 120.00	100.00
15.919	15.919 (1.018)	99	1638033			34.78- 94.78	65.06
48 Cyclohexane					CAS #: 110-82-7		
15.919	15.919 (1.018)	84	1689241	20.0000	17.470	80.00- 120.00	100.00
15.919	15.919 (1.018)	56	2096484			94.44- 154.44	124.11
15.919	15.919 (1.018)	41	1037647			32.54- 92.54	61.43
51 Carbon Tetrachloride					CAS #: 56-23-5		
16.104	16.104 (1.030)	119	2187283	20.0000	16.888	80.00- 120.00	100.00
16.104	16.104 (1.030)	117	2266744			73.51- 133.51	103.63
52 2,2,4-Trimethylpentane					CAS #: 540-84-1		
16.361	16.361 (1.046)	56	2892667	20.0000	17.648	80.00- 120.00	100.00
16.361	16.361 (1.046)	57	8660261			271.28- 331.28	299.39
16.361	16.361 (1.046)	41	2079287			42.90- 102.90	71.88
53 Benzene					CAS #: 71-43-2		
16.457	16.457 (0.967)	78	3684069	20.0000	17.358	80.00- 120.00	100.00
16.457	16.457 (0.967)	77	873876			0.00- 53.40	23.72
55 tert-amyl methyl ether					CAS #: 994-05-8		
16.481	16.481 (0.969)	87	932449	20.0000	17.249	80.00- 120.00	100.00
16.481	16.481 (0.969)	73	3683820			362.79- 422.79	395.07
16.481	16.481 (0.969)	55	896884			66.53- 126.53	96.19
56 1,2-Dichloroethane					CAS #: 107-06-2		
16.554	16.554 (0.973)	62	1483587	20.0000	17.930	80.00- 120.00	100.00
16.578	16.578 (0.974)	64	477730			2.30- 62.30	32.20
57 Heptane					CAS #: 142-82-5		
16.602	16.602 (0.976)	57	1226315	20.0000	17.265	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
57 Heptane (continued)							
16.602	16.602 (0.976)	100	523035			12.62- 72.62	42.65
16.602	16.602 (0.976)	43	2286457			155.09- 215.09	186.45
59 Trichloroethene					CAS #: 79-01-6		
17.421	17.421 (1.024)	130	2118666	20.0000	17.260	80.00- 120.00	100.00
17.421	17.421 (1.024)	95	1797705			55.70- 115.70	84.85
17.421	17.421 (1.024)	97	1167049			24.95- 84.95	55.08
60 Methylcyclohexane					CAS #: 108-87-2		
17.638	17.638 (1.037)	83	2403150	20.0000	17.870	80.00- 120.00	100.00
17.638	17.638 (1.037)	55	1925541			50.32- 110.32	80.13
17.638	17.638 (1.037)	56	633932			0.00- 56.36	26.38
61 1,2-Dichloropropane					CAS #: 78-87-5		
17.879	17.879 (1.051)	63	1493931	20.0000	18.065	80.00- 120.00	100.00
17.855	17.855 (1.050)	62	1032775			38.47- 98.47	69.13
17.855	17.855 (1.050)	41	671081			15.66- 75.66	44.92
62 1,4-Dioxane					CAS #: 123-91-1		
17.999	17.999 (1.058)	88	991884	20.0000	17.303	80.00- 120.00	100.00
17.999	17.999 (1.058)	58	686665			38.94- 98.94	69.23
17.999	17.999 (1.058)	57	218479			0.00- 51.60	22.03
63 Bromodichloromethane					CAS #: 75-27-4		
18.313	18.313 (1.076)	83	2677329	20.0000	18.291	80.00- 120.00	100.00
18.313	18.313 (1.076)	85	1761345			35.77- 95.77	65.79
64 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
19.153	19.153 (1.126)	75	2417073	20.0000	18.178	80.00- 120.00	100.00
19.153	19.153 (1.126)	77	790634			2.36- 62.36	32.71
19.131	19.131 (1.125)	39	1046018			12.85- 72.85	43.28
65 4-Methyl-2-pentanone					CAS #: 108-10-1		
19.332	19.332 (1.136)	43	3092242	20.0000	18.167	80.00- 120.00	100.00
19.332	19.332 (1.136)	58	1264137			10.53- 70.53	40.88
19.332	19.332 (1.136)	85	553960			0.00- 48.12	17.91
68 Toluene					CAS #: 108-88-3		
19.780	19.780 (1.163)	91	4692313	20.0000	17.545	80.00- 120.00	100.00
19.780	19.780 (1.163)	92	2739583			28.42- 88.42	58.38
69 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
20.359	20.359 (0.909)	75	2104691	20.0000	18.422	80.00- 120.00	100.00
20.359	20.359 (0.909)	77	682893			2.22- 62.22	32.45
20.359	20.359 (0.909)	39	887945			11.81- 71.81	42.19

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
70 1,1,2-Trichloroethane					CAS #: 79-00-5		
20.743	20.743 (0.926)	97	1700996	20.0000	17.808	80.00- 120.00	100.00
20.743	20.743 (0.926)	99	1065202			33.38- 93.38	62.62
20.743	20.743 (0.926)	83	1377924			52.87- 112.87	81.01
71 Tetrachloroethene					CAS #: 127-18-4		
20.908	20.908 (0.933)	166	2604319	20.0000	17.617	80.00- 120.00	100.00
20.908	20.908 (0.933)	129	1992821			46.60- 106.60	76.52
20.908	20.908 (0.933)	131	1934998			44.27- 104.27	74.30
72 2-Hexanone					CAS #: 591-78-6		
21.073	21.073 (0.940)	58	1690633	20.0000	17.852	80.00- 120.00	100.00
21.073	21.073 (0.940)	43	2960996			145.57- 205.57	175.14
21.073	21.073 (0.940)	100	369802			0.00- 51.87	21.87
73 Dibromochloromethane					CAS #: 124-48-1		
21.485	21.485 (0.959)	129	3382481	20.0000	17.927	80.00- 120.00	100.00
21.485	21.485 (0.959)	127	2614561			46.84- 106.84	77.30
74 1,2-Dibromoethane					CAS #: 106-93-4		
21.732	21.732 (0.970)	107	2759386	20.0000	16.819	80.00- 120.00	100.00
21.732	21.732 (0.970)	109	2675968			67.60- 127.60	96.98
76 Chlorobenzene					CAS #: 108-90-7		
22.469	22.469 (1.003)	112	4113904	20.0000	17.840	80.00- 120.00	100.00
22.469	22.469 (1.003)	114	1324364			2.32- 62.32	32.19
22.469	22.469 (1.003)	77	2149627			22.98- 82.98	52.25
77 Ethyl Benzene					CAS #: 100-41-4		
22.531	22.531 (1.006)	106	2001734	20.0000	17.560	80.00- 120.00	100.00
22.531	22.531 (1.006)	91	5884033			268.64- 328.64	293.95
80 m,p-Xylene					CAS #: 108-38-3		
22.718	22.718 (1.014)	106	2437451	20.0000	17.554	80.00- 120.00	100.00
22.718	22.718 (1.014)	91	4559865			156.41- 216.41	187.08
81 o-Xylene					CAS #: 95-47-6		
23.298	23.298 (1.040)	106	2304654	20.0000	17.900	80.00- 120.00	100.00
23.298	23.298 (1.040)	91	4523993			167.80- 227.80	196.30
83 Styrene					CAS #: 100-42-5		
23.340	23.340 (1.042)	104	3901325	20.0000	17.507	80.00- 120.00	100.00
23.340	23.340 (1.042)	78	1695950			12.84- 72.84	43.47
84 Bromoform					CAS #: 75-25-2		
23.683	23.683 (1.057)	173	3295925	20.0000	17.990	80.00- 120.00	100.00

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

   84 Bromoform (continued)
 23.683  23.683 (1.057)   171   1738501                   22.25-  82.25    52.75
-------------------------------------------------------------------------------
   85 Cumene                                        CAS #: 98-82-8
 23.773  23.773 (1.061)   105   7053287 20.0000   17.586  80.00- 120.00   100.00
 23.773  23.773 (1.061)   120   2041116                    0.00-  58.98    28.94
-------------------------------------------------------------------------------
   89 1,1,2,2-Tetrachloroethane                     CAS #: 79-34-5
 24.244  24.244 (1.082)    83   3339600 20.0000   16.954  80.00- 120.00   100.00
 24.244  24.244 (1.082)    85   2225958                   36.27-  96.27    66.65
-------------------------------------------------------------------------------
   90 Propylbenzene                                 CAS #: 103-65-1
 24.312  24.312 (1.085)    91   7415065 20.0000   17.359  80.00- 120.00   100.00
 24.312  24.312 (1.085)   120   2005328                    0.00-  56.53    27.04
-------------------------------------------------------------------------------
   92 4-Ethyltoluene                                CAS #: 622-96-8
 24.446  24.446 (1.091)   105   6504618 20.0000   17.644  80.00- 120.00   100.00
 24.446  24.446 (1.091)   120   2108668                    1.72-  61.72    32.42
-------------------------------------------------------------------------------
   94 1,3,5-Trimethylbenzene                        CAS #: 108-67-8
 24.513  24.513 (1.094)   105   5352725 20.0000   16.655  80.00- 120.00   100.00
 24.513  24.513 (1.094)   120   2825329                   22.29-  82.29    52.78
-------------------------------------------------------------------------------
   98 1,2,4-Trimethylbenzene                        CAS #: 95-63-6
 24.962  24.962 (1.114)   105   4802077 20.0000   16.551  80.00- 120.00   100.00
 24.962  24.962 (1.114)   120   2369838                   19.10-  79.10    49.35
-------------------------------------------------------------------------------
  101 1,3-Dichlorobenzene                           CAS #: 541-73-1
 25.365  25.365 (1.132)   146   3930558 20.0000   16.394  80.00- 120.00   100.00
 25.365  25.365 (1.132)   148   2482625                   32.23-  92.23    63.16
 25.365  25.365 (1.132)   111   1449544                    6.65-  66.65    36.88
-------------------------------------------------------------------------------
  104 1,4-Dichlorobenzene                           CAS #: 106-46-7
 25.455  25.455 (1.136)   146   3796684 20.0000   15.909  80.00- 120.00   100.00
 25.455  25.455 (1.136)   148   2404060                   32.94-  92.94    63.32
 25.455  25.455 (1.136)   111   1340051                    5.31-  65.31    35.30
-------------------------------------------------------------------------------
  105 alpha-chlorotoluene                           CAS #: 100-44-7
 25.612  25.612 (1.143)    91   4582609 20.0000   16.452  80.00- 120.00   100.00
 25.612  25.612 (1.143)   126   1170561                    0.00-  55.78    25.54
-------------------------------------------------------------------------------
  108 1,2-Dichlorobenzene                           CAS #: 95-50-1
 25.903  25.903 (1.156)   146   3487747 20.0000   15.898  80.00- 120.00   100.00
 25.903  25.903 (1.156)   148   2186493                   32.48-  92.48    62.69
 25.881  25.881 (1.155)   111   1334194                    7.93-  67.93    38.25
-------------------------------------------------------------------------------
```

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
112 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
27.652	27.652 (1.234)	180	2490864	20.0000	16.162	80.00- 120.00	100.00
27.652	27.652 (1.234)	182	2389350			66.76- 126.76	95.92
113 Hexachlorobutadiene					CAS #: 87-68-3		
27.742	27.742 (1.238)	225	1975384	20.0000	16.367	80.00- 120.00	100.00
27.742	27.742 (1.238)	223	1253336			32.55- 92.55	63.45
114 Naphthalene					CAS #: 91-20-3		
27.966	27.966 (1.248)	128	458222	2.00000	1.748	80.00- 120.00	100.00
27.966	27.966 (1.248)	127	58093			0.00- 42.43	12.68

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msde.i
Lab File ID: e021012.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: gh
Method File: /chem/msde.i/10Feb2015.b/e15l0210a.m
Misc Info: 20ppbv(50ppbv)

Calibration Date: 10-FEB-2015
Calibration Time: 19:01
Client Smp ID: LEVEL 11
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
46 Bromochloromethan	276169	165701	386637	278188	0.73
58 1,4-Difluorobenze	1109585	665751	1553419	1129334	1.78
75 Chlorobenzene-d5	1031911	619147	1444675	1023401	-0.82

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
46 Bromochloromethan	15.64	15.31	15.97	15.64	0.00
58 1,4-Difluorobenze	17.01	16.68	17.34	17.01	0.00
75 Chlorobenzene-d5	22.41	22.08	22.74	22.41	0.00

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

Data File: /chem/msde.i/10Feb2015.b/e021012.d

Date : 10-FEB-2015 19:49

Client ID: LEVEL 11

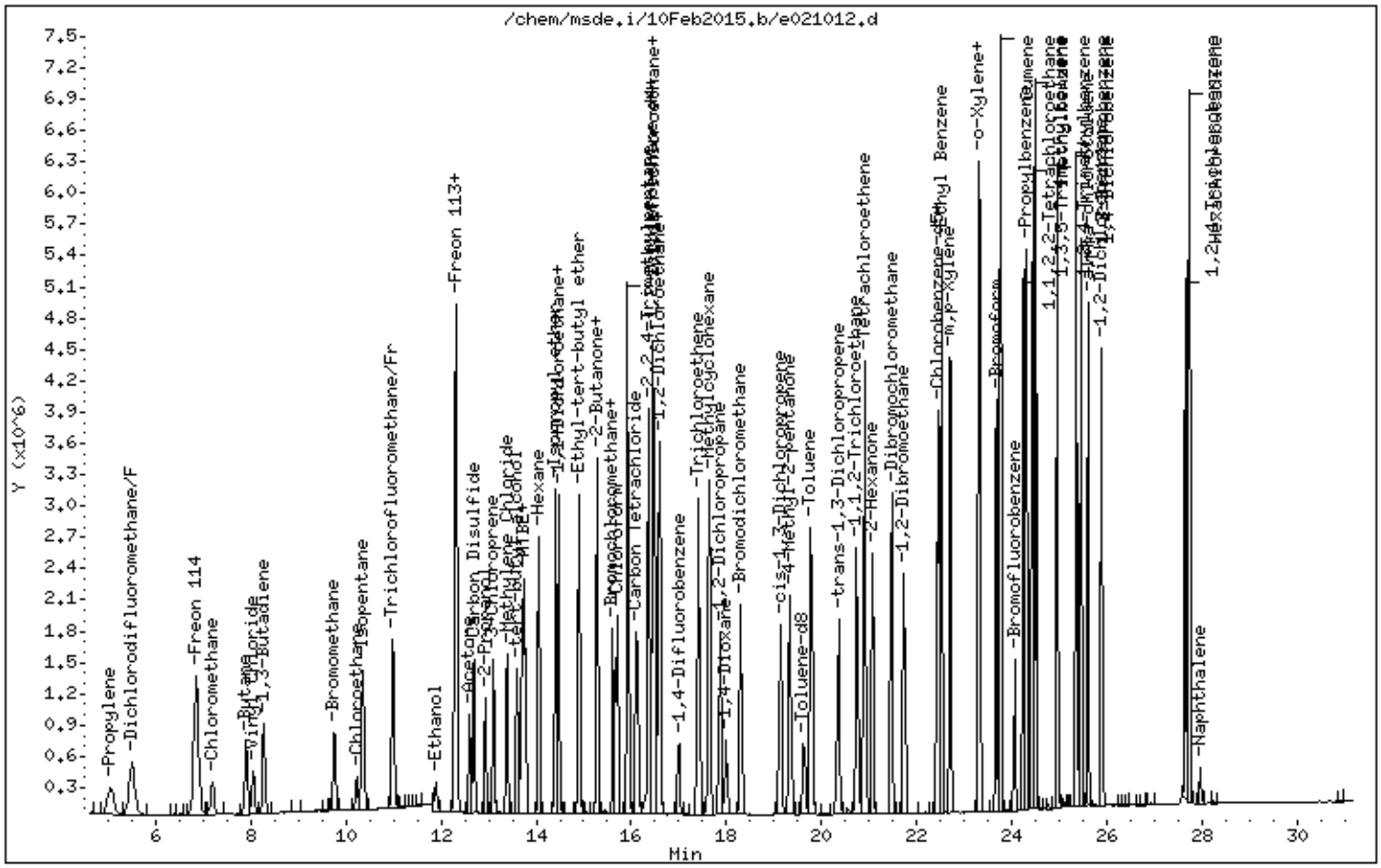
Instrument: msde.i

Sample Info: 100mL#2687-244

Operator: gh

Column phase: RTx-624

Column diameter: 0.32



Eurofins Air Toxics Inc.

EPA TO-15/Modified TO14A

Data file : /chem/msde.i/10Feb2015.b/e021013.d
Lab Smp Id: ICAL Client Smp ID: LEVEL 12
Inj Date : 10-FEB-2015 20:40
Operator : gh Inst ID: msde.i
Smp Info : 200mL#2687-244
Misc Info : 40ppbv(50ppbv)
Comment : Low-Level/GC-MS
Method : /chem/msde.i/10Feb2015.b/e15l0210a.m
Meth Date : 11-Feb-2015 11:32 atoyama Quant Type: ISTD
Cal Date : 10-FEB-2015 20:40 Cal File: e021013.d
Als bottle: 1 Calibration Sample, Level: 12
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: HILOcrvFULL.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
* 46 Bromochloromethane						CAS #: 74-97-5	
15.642	15.642 (1.000)	130	275037	5.00000		80.00- 120.00	100.00
15.642	15.642 (1.000)	128	217328			47.96- 107.96	79.02
15.611	15.611 (1.000)	49	296233			112.05- 172.05	107.71
* 58 1,4-Difluorobenzene						CAS #: 540-36-3	
17.011	17.011 (1.000)	114	1123277	5.00000		80.00- 120.00	100.00
16.987	16.987 (1.000)	88	158529			0.00- 44.83	14.11
* 75 Chlorobenzene-d5						CAS #: 3114-55-4	
22.407	22.407 (1.000)	117	999739	5.00000		80.00- 120.00	100.00
22.407	22.407 (1.000)	82	468552			16.13- 76.13	46.87
$ 54 1,2-Dichloroethane-d4						CAS #: 17060-07-0	
16.457	16.457 (1.052)	65	293567	5.00000	5.057	80.00- 120.00	100.00
16.457	16.457 (1.052)	67	167648			25.66- 85.66	57.11

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
$ 67 Toluene-d8					CAS #: 2037-26-5		
19.624	19.624 (1.154)	98	1052294	5.00000	4.943	80.00- 120.00	100.00
19.624	19.624 (1.154)	70	99972			0.00- 39.92	9.50
19.624	19.624 (1.154)	100	708216			36.14- 96.14	67.30
$ 87 Bromofluorobenzene					CAS #: 460-00-4		
24.065	24.065 (1.074)	174	577692	5.00000	4.999	80.00- 120.00	100.00
24.065	24.065 (1.074)	95	649157			81.46- 141.46	112.37
24.065	24.065 (1.074)	176	560255			67.17- 127.17	96.98
2 Propylene					CAS #: 115-07-1		
5.046	5.046 (0.323)	41	1639988	40.0000	37.455	80.00- 120.00	100.00(A)
5.046	5.046 (0.323)	42	1076455			35.75- 95.75	65.64
5.046	5.046 (0.323)	39	1126434			39.85- 99.85	68.69
4 Dichlorodifluoromethane/Fr12					CAS #: 75-71-8		
5.504	5.504 (0.352)	85	5039120	40.0000	35.382	80.00- 120.00	100.00(A)
5.504	5.504 (0.352)	87	1637367			3.28- 63.28	32.49
6 Freon 114					CAS #: 76-14-2		
6.853	6.853 (0.438)	135	4897158	40.0000	35.496	80.00- 120.00	100.00(A)
6.853	6.853 (0.438)	137	1571959			2.37- 62.37	32.10
7 Chloromethane					CAS #: 74-87-3		
7.191	7.191 (0.460)	50	1869944	40.0000	34.860	80.00- 120.00	100.00(A)
7.191	7.191 (0.460)	52	617327			3.09- 63.09	33.01
9 Butane					CAS #: 106-97-8		
7.906	7.906 (0.505)	58	455530	40.0000	33.360	80.00- 120.00	100.00(A)
7.906	7.906 (0.505)	43	3384657			706.28- 766.28	743.02
10 Vinyl Chloride					CAS #: 75-01-4		
8.045	8.045 (0.514)	62	2110034	40.0000	35.900	80.00- 120.00	100.00(A)
8.028	8.028 (0.513)	64	678165			1.76- 61.76	32.14
11 1,3-Butadiene					CAS #: 106-99-0		
8.271	8.271 (0.529)	54	1783318	40.0000	36.900	80.00- 120.00	100.00(A)
8.271	8.271 (0.529)	39	1655557			61.78- 121.78	92.84
12 Bromomethane					CAS #: 74-83-9		
9.746	9.746 (0.623)	94	1966575	40.0000	35.765	80.00- 120.00	100.00(A)
9.746	9.746 (0.623)	96	1861248			62.88- 122.88	94.64
13 Chloroethane					CAS #: 75-00-3		
10.214	10.214 (0.653)	64	1066728	40.0000	35.415	80.00- 120.00	100.00(A)
10.214	10.214 (0.653)	49	271556			0.00- 56.27	25.46

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

   13 Chloroethane (continued)
 10.214  10.214 (0.653)    66    333741                     1.65-  61.65    31.29
-------------------------------------------------------------------------------
   14 Isopentane                                   CAS #: 78-78-4
 10.348  10.348 (0.662)    57   1802012 40.0000   35.006  80.00- 120.00   100.00(A)
 10.348  10.348 (0.662)    43   2597310                  114.02- 174.02   144.13
 10.348  10.348 (0.662)    42   2208052                   91.28- 151.28   122.53
-------------------------------------------------------------------------------
   16 Trichlorofluoromethane/Fr11                  CAS #: 75-69-4
 10.976  10.976 (0.702)   101   5437069 40.0000   35.444  80.00- 120.00   100.00(A)
 10.976  10.976 (0.702)   103   3552061                   35.41-  95.41    65.33
-------------------------------------------------------------------------------
   18 Ethanol                                      CAS #: 64-17-5
 11.890  11.890 (0.760)    45    903511 40.0000   35.623  80.00- 120.00   100.00(A)
 11.890  11.890 (0.760)    46    358919                    7.33-  67.33    39.72
 11.890  11.890 (0.760)    43    175922                    0.00-  51.69    19.47
-------------------------------------------------------------------------------
   19 Freon 113                                    CAS #: 76-13-1
 12.290  12.290 (0.786)   151   4781309 40.0000   33.647  80.00- 120.00   100.00(A)
 12.290  12.290 (0.786)   153   3087190                   34.79-  94.79    64.57
 12.290  12.290 (0.786)   101   5301250                   79.87- 139.87   110.87
-------------------------------------------------------------------------------
   21 1,1-Dichloroethene                           CAS #: 75-35-4
 12.309  12.309 (0.787)    98   1550867 40.0000   34.874  80.00- 120.00   100.00(A)
 12.309  12.309 (0.787)    61   3589940                  204.24- 264.24   231.48
 12.309  12.309 (0.787)    96   2412216                  126.62- 186.62   155.54
-------------------------------------------------------------------------------
   22 Acetone                                      CAS #: 67-64-1
 12.595  12.595 (0.805)    58   1136359 40.0000   32.840  80.00- 120.00   100.00(A)
 12.595  12.595 (0.805)    43   3301759                  255.02- 315.02   290.56
-------------------------------------------------------------------------------
   25 2-Propanol                                   CAS #: 67-63-0
 12.938  12.938 (0.827)    45   4166828 40.0000   36.511  80.00- 120.00   100.00(A)
 12.938  12.938 (0.827)    43    696016                    0.00-  47.09    16.70
 12.938  12.938 (0.827)    59    173248                    0.00-  34.17     4.16
-------------------------------------------------------------------------------
   23 Carbon Disulfide                             CAS #: 75-15-0
 12.671  12.671 (0.810)    76   6604807 40.0000   31.554  80.00- 120.00   100.00(A)
-------------------------------------------------------------------------------
   26 3-Chloroprene                                CAS #: 107-05-1
 13.109  13.109 (0.838)    76   1067720 40.0000   37.423  80.00- 120.00   100.00(A)
 13.109  13.109 (0.838)    41   2983974                  249.93- 309.93   279.47
-------------------------------------------------------------------------------
   29 Methylene Chloride                           CAS #: 75-09-2
 13.395  13.395 (0.856)    84   2013272 40.0000   35.957  80.00- 120.00   100.00(A)
 13.376  13.376 (0.855)    49   2600090                   98.36- 158.36   129.15
```

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
29 Methylene Chloride (continued)							
13.376	13.376 (0.855)	51	806649			9.23- 69.23	40.07
30 tert-butyl alcohol					CAS #: 75-65-0		
13.591	13.591 (0.869)	59	6074113	40.0000	36.497	80.00- 120.00	100.00(A)
13.591	13.591 (0.869)	41	1196776			0.00- 49.62	19.70
13.591	13.591 (0.869)	57	648422			0.00- 40.64	10.68
31 MTBE					CAS #: 1634-04-4		
13.701	13.701 (0.876)	73	6230896	40.0000	35.326	80.00- 120.00	100.00(A)
13.701	13.701 (0.876)	57	1524687			0.00- 54.71	24.47
13.701	13.701 (0.876)	41	1286212			0.00- 51.20	20.64
32 trans-1,2-Dichloroethene					CAS #: 156-60-5		
13.756	13.756 (0.879)	98	1610373	40.0000	35.102	80.00- 120.00	100.00(A)
13.756	13.756 (0.879)	61	3352048			180.76- 240.76	208.15
13.756	13.756 (0.879)	96	2489597			126.52- 186.52	154.60
35 Hexane					CAS #: 110-54-3		
14.058	14.058 (0.899)	57	3768767	40.0000	34.903	80.00- 120.00	100.00(A)
14.058	14.058 (0.899)	43	2327471			32.32- 92.32	61.76
14.058	14.058 (0.899)	86	605352			0.00- 46.22	16.06
36 Isopropyl ether					CAS #: 108-20-3		
14.415	14.415 (0.922)	45	7926388	40.0000	35.078	80.00- 120.00	100.00(A)
14.415	14.415 (0.922)	87	2230952			0.00- 57.38	28.15
14.415	14.415 (0.922)	59	936009			0.00- 41.55	11.81
37 1,1-Dichloroethane					CAS #: 75-34-3		
14.470	14.470 (0.925)	63	4110745	40.0000	35.166	80.00- 120.00	100.00(A)
14.470	14.470 (0.925)	65	1288679			1.72- 61.72	31.35
38 Vinyl Acetate					CAS #: 108-05-4		
14.470	14.470 (0.925)	86	682606	40.0000	34.539	80.00- 120.00	100.00(A)
14.470	14.470 (0.925)	42	488025			45.78- 105.78	71.49
14.470	14.470 (0.925)	43	6679043			1023.67-1083.67	978.46
40 Ethyl-tert-butyl ether					CAS #: 637-92-3		
14.897	14.897 (0.952)	59	7783336	40.0000	35.540	80.00- 120.00	100.00(A)
14.897	14.897 (0.952)	87	3251000			11.45- 71.45	41.77
14.897	14.897 (0.952)	41	1250840			0.00- 46.09	16.07
42 2-Butanone					CAS #: 78-93-3		
15.278	15.278 (0.977)	72	1204506	40.0000	36.309	80.00- 120.00	100.00(A)
15.278	15.278 (0.977)	43	4758601			374.35- 434.35	395.07
15.278	15.278 (0.977)	57	391401			4.18- 64.18	32.49

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

   41 cis-1,2-Dichloroethene                        CAS #: 156-59-2
 15.278  15.278 (0.977)    98   1718473 40.0000   35.173  80.00- 120.00   100.00(A)
 15.278  15.278 (0.977)    61   3228132                  160.54- 220.54   187.85
 15.278  15.278 (0.977)    96   2657289                  126.05- 186.05   154.63
-------------------------------------------------------------------------------
   44 Tetrahydrofuran                               CAS #: 109-99-9
 15.611  15.611 (0.998)    42   2847343 40.0000   36.179  80.00- 120.00   100.00(A)
 15.611  15.611 (0.998)    71   1089726                    9.38-  69.38    38.27
 15.611  15.611 (0.998)    72   1181082                   11.73-  71.73    41.48
-------------------------------------------------------------------------------
   47 Chloroform                                    CAS #: 67-66-3
 15.703  15.703 (1.004)    83   4732490 40.0000   35.336  80.00- 120.00   100.00(A)
 15.703  15.703 (1.004)    85   3143700                   36.28-  96.28    66.43
-------------------------------------------------------------------------------
   49 1,1,1-Trichloroethane                         CAS #: 71-55-6
 15.919  15.919 (1.018)    97   4869474 40.0000   35.111  80.00- 120.00   100.00(A)
 15.919  15.919 (1.018)    99   3170577                   34.78-  94.78    65.11
-------------------------------------------------------------------------------
   48 Cyclohexane                                   CAS #: 110-82-7
 15.919  15.919 (1.018)    84   3253553 40.0000   34.902  80.00- 120.00   100.00(A)
 15.919  15.919 (1.018)    56   4030032                   94.44- 154.44   123.87
 15.919  15.919 (1.018)    41   1984426                   32.54-  92.54    60.99
-------------------------------------------------------------------------------
   51 Carbon Tetrachloride                          CAS #: 56-23-5
 16.104  16.104 (1.030)   119   4239018 40.0000   33.941  80.00- 120.00   100.00(A)
 16.104  16.104 (1.030)   117   4425283                   73.51- 133.51   104.39
-------------------------------------------------------------------------------
   52 2,2,4-Trimethylpentane                        CAS #: 540-84-1
 16.361  16.361 (1.046)    56   5567787 40.0000   35.185  80.00- 120.00   100.00(A)
 16.361  16.361 (1.046)    57  17296149                  271.28- 331.28   310.65
 16.361  16.361 (1.046)    41   4051057                   42.90- 102.90    72.76
-------------------------------------------------------------------------------
   53 Benzene                                       CAS #: 71-43-2
 16.457  16.457 (0.967)    78   7042586 40.0000   34.311  80.00- 120.00   100.00(A)
 16.457  16.457 (0.967)    77   1670559                    0.00-  53.40    23.72
-------------------------------------------------------------------------------
   55 tert-amyl methyl ether                        CAS #: 994-05-8
 16.481  16.481 (0.969)    87   1804761 40.0000   34.491  80.00- 120.00   100.00(A)
 16.481  16.481 (0.969)    73   7086324                  362.79- 422.79   392.65
 16.481  16.481 (0.969)    55   1720698                   66.53- 126.53    95.34
-------------------------------------------------------------------------------
   56 1,2-Dichloroethane                            CAS #: 107-06-2
 16.554  16.554 (0.973)    62   2832624 40.0000   35.239  80.00- 120.00   100.00(A)
 16.554  16.554 (0.973)    64    934240                    2.30-  62.30    32.98
-------------------------------------------------------------------------------
   57 Heptane                                       CAS #: 142-82-5
 16.602  16.602 (0.976)    57   2367079 40.0000   34.437  80.00- 120.00   100.00(A)
```

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
57 Heptane (continued)							
16.602	16.602 (0.976)	100	1022448			12.62- 72.62	43.19
16.602	16.602 (0.976)	43	4370698			155.09- 215.09	184.65
59 Trichloroethene					CAS #: 79-01-6		
17.421	17.421 (1.024)	130	4107829	40.0000	34.427	80.00- 120.00	100.00(A)
17.421	17.421 (1.024)	95	3466754			55.70- 115.70	84.39
17.421	17.421 (1.024)	97	2263191			24.95- 84.95	55.09
60 Methylcyclohexane					CAS #: 108-87-2		
17.638	17.638 (1.037)	83	4613288	40.0000	35.301	80.00- 120.00	100.00(A)
17.638	17.638 (1.037)	55	3731949			50.32- 110.32	80.90
17.638	17.638 (1.037)	56	1219507			0.00- 56.36	26.43
61 1,2-Dichloropropane					CAS #: 78-87-5		
17.855	17.855 (1.050)	63	2923021	40.0000	36.210	80.00- 120.00	100.00(A)
17.855	17.855 (1.050)	62	2009728			38.47- 98.47	68.76
17.855	17.855 (1.050)	41	1318558			15.66- 75.66	45.11
62 1,4-Dioxane					CAS #: 123-91-1		
17.999	17.999 (1.058)	88	1939979	40.0000	34.894	80.00- 120.00	100.00(A)
17.999	17.999 (1.058)	58	1321181			38.94- 98.94	68.10
17.999	17.999 (1.058)	57	413386			0.00- 51.60	21.31
63 Bromodichloromethane					CAS #: 75-27-4		
18.313	18.313 (1.076)	83	5238330	40.0000	36.505	80.00- 120.00	100.00(A)
18.313	18.313 (1.076)	85	3485074			35.77- 95.77	66.53
64 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
19.153	19.153 (1.126)	75	4727009	40.0000	36.388	80.00- 120.00	100.00(A)
19.153	19.153 (1.126)	77	1537472			2.36- 62.36	32.53
19.131	19.131 (1.125)	39	2022531			12.85- 72.85	42.79
65 4-Methyl-2-pentanone					CAS #: 108-10-1		
19.332	19.332 (1.136)	43	5935176	40.0000	35.795	80.00- 120.00	100.00(A)
19.332	19.332 (1.136)	58	2427889			10.53- 70.53	40.91
19.332	19.332 (1.136)	85	1087468			0.00- 48.12	18.32
68 Toluene					CAS #: 108-88-3		
19.781	19.781 (1.163)	91	8997984	40.0000	34.719	80.00- 120.00	100.00(A)
19.781	19.781 (1.163)	92	5313346			28.42- 88.42	59.05
69 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
20.359	20.359 (0.909)	75	4105040	40.0000	37.281	80.00- 120.00	100.00(A)
20.359	20.359 (0.909)	77	1337273			2.22- 62.22	32.58
20.359	20.359 (0.909)	39	1704135			11.81- 71.81	41.51

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

   70 1,1,2-Trichloroethane                          CAS #: 79-00-5
 20.743  20.743 (0.926)    97   3272092 40.0000   35.803  80.00- 120.00   100.00(A)
 20.743  20.743 (0.926)    99   2066231                   33.38-  93.38    63.15
 20.743  20.743 (0.926)    83   2684798                   52.87- 112.87    82.05
-------------------------------------------------------------------------------
   71 Tetrachloroethene                              CAS #: 127-18-4
 20.908  20.908 (0.933)   166   5023333 40.0000   35.444  80.00- 120.00   100.00(A)
 20.908  20.908 (0.933)   129   3848393                   46.60- 106.60    76.61
 20.908  20.908 (0.933)   131   3736665                   44.27- 104.27    74.39
-------------------------------------------------------------------------------
   72 2-Hexanone                                     CAS #: 591-78-6
 21.073  21.073 (0.940)    58   3243276 40.0000   35.795  80.00- 120.00   100.00(A)
 21.073  21.073 (0.940)    43   5605353                  145.57- 205.57   172.83
 21.073  21.073 (0.940)   100    714267                    0.00-  51.87    22.02
-------------------------------------------------------------------------------
   73 Dibromochloromethane                           CAS #: 124-48-1
 21.485  21.485 (0.959)   129   6587727 40.0000   36.292  80.00- 120.00   100.00(A)
 21.485  21.485 (0.959)   127   5084876                   46.84- 106.84    77.19
-------------------------------------------------------------------------------
   74 1,2-Dibromoethane                              CAS #: 106-93-4
 21.732  21.732 (0.970)   107   5343244 40.0000   34.151  80.00- 120.00   100.00(A)
 21.732  21.732 (0.970)   109   5192849                   67.60- 127.60    97.19
-------------------------------------------------------------------------------
   76 Chlorobenzene                                  CAS #: 108-90-7
 22.469  22.469 (1.003)   112   7919655 40.0000   35.880  80.00- 120.00   100.00(A)
 22.469  22.469 (1.003)   114   2557681                    2.32-  62.32    32.30
 22.469  22.469 (1.003)    77   4123312                   22.98-  82.98    52.06
-------------------------------------------------------------------------------
   77 Ethyl Benzene                                  CAS #: 100-41-4
 22.531  22.531 (1.006)   106   3849753 40.0000   35.371  80.00- 120.00   100.00(A)
 22.531  22.531 (1.006)    91  11196719                  268.64- 328.64   290.84
-------------------------------------------------------------------------------
   80 m,p-Xylene                                     CAS #: 108-38-3
 22.718  22.718 (1.014)   106   4689918 40.0000   35.375  80.00- 120.00   100.00(A)
 22.718  22.718 (1.014)    91   8666574                  156.41- 216.41   184.79
-------------------------------------------------------------------------------
   81 o-Xylene                                       CAS #: 95-47-6
 23.299  23.299 (1.040)   106   4387406 40.0000   35.643  80.00- 120.00   100.00(A)
 23.299  23.299 (1.040)    91   8519117                  167.80- 227.80   194.17
-------------------------------------------------------------------------------
   83 Styrene                                        CAS #: 100-42-5
 23.340  23.340 (1.042)   104   7366930 40.0000   34.733  80.00- 120.00   100.00(A)
 23.340  23.340 (1.042)    78   3189936                   12.84-  72.84    43.30
-------------------------------------------------------------------------------
   84 Bromoform                                      CAS #: 75-25-2
 23.684  23.684 (1.057)   173   6367239 40.0000   36.147  80.00- 120.00   100.00(A)
```

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

   84 Bromoform (continued)
 23.684  23.684 (1.057)   171   3357821                   22.25-  82.25    52.74
-------------------------------------------------------------------------------
   85 Cumene                                        CAS #: 98-82-8
 23.773  23.773 (1.061)   105  13093689 40.0000   34.362  80.00- 120.00   100.00(A)
 23.773  23.773 (1.061)   120   3923430                    0.00-  58.98    29.96
-------------------------------------------------------------------------------
   89 1,1,2,2-Tetrachloroethane                     CAS #: 79-34-5
 24.244  24.244 (1.082)    83   6330583 40.0000   33.754  80.00- 120.00   100.00(A)
 24.244  24.244 (1.082)    85   4269223                   36.27-  96.27    67.44
-------------------------------------------------------------------------------
   90 Propylbenzene                                 CAS #: 103-65-1
 24.312  24.312 (1.085)    91  13825520 40.0000   34.108  80.00- 120.00   100.00(A)
 24.312  24.312 (1.085)   120   3846968                    0.00-  56.53    27.83
-------------------------------------------------------------------------------
   92 4-Ethyltoluene                                CAS #: 622-96-8
 24.446  24.446 (1.091)   105  12138772 40.0000   34.613  80.00- 120.00   100.00(A)
 24.446  24.446 (1.091)   120   4051397                    1.72-  61.72    33.38
-------------------------------------------------------------------------------
   94 1,3,5-Trimethylbenzene                        CAS #: 108-67-8
 24.514  24.514 (1.094)   105  10034291 40.0000   32.905  80.00- 120.00   100.00(A)
 24.514  24.514 (1.094)   120   5343914                   22.29-  82.29    53.26
-------------------------------------------------------------------------------
   98 1,2,4-Trimethylbenzene                        CAS #: 95-63-6
 24.962  24.962 (1.114)   105   8930798 40.0000   32.495  80.00- 120.00   100.00(A)
 24.962  24.962 (1.114)   120   4475408                   19.10-  79.10    50.11
-------------------------------------------------------------------------------
  101 1,3-Dichlorobenzene                           CAS #: 541-73-1
 25.366  25.366 (1.132)   146   7375720 40.0000   32.479  80.00- 120.00   100.00(A)
 25.366  25.366 (1.132)   148   4713900                   32.23-  92.23    63.91
 25.366  25.366 (1.132)   111   2768658                    6.65-  66.65    37.54
-------------------------------------------------------------------------------
  104 1,4-Dichlorobenzene                           CAS #: 106-46-7
 25.455  25.455 (1.136)   146   7161275 40.0000   31.771  80.00- 120.00   100.00(A)
 25.455  25.455 (1.136)   148   4571775                   32.94-  92.94    63.84
 25.455  25.455 (1.136)   111   2580007                    5.31-  65.31    36.03
-------------------------------------------------------------------------------
  105 alpha-chlorotoluene                           CAS #: 100-44-7
 25.612  25.612 (1.143)    91   8511896 40.0000   32.287  80.00- 120.00   100.00(A)
 25.612  25.612 (1.143)   126   2235894                    0.00-  55.78    26.27
-------------------------------------------------------------------------------
  108 1,2-Dichlorobenzene                           CAS #: 95-50-1
 25.904  25.904 (1.156)   146   6622010 40.0000   31.938  80.00- 120.00   100.00(A)
 25.904  25.904 (1.156)   148   4195766                   32.48-  92.48    63.36
 25.881  25.881 (1.155)   111   2542192                    7.93-  67.93    38.39
-------------------------------------------------------------------------------
```

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
112 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
27.652	27.652 (1.234)	180	4813930	40.0000	32.919	80.00- 120.00	100.00(A)
27.652	27.652 (1.234)	182	4620046			66.76- 126.76	95.97
113 Hexachlorobutadiene					CAS #: 87-68-3		
27.742	27.742 (1.238)	225	3876619	40.0000	33.738	80.00- 120.00	100.00(A)
27.742	27.742 (1.238)	223	2430686			32.55- 92.55	62.70
114 Naphthalene					CAS #: 91-20-3		
27.966	27.966 (1.248)	128	882356	4.00000	3.528	80.00- 120.00	100.00
27.966	27.966 (1.248)	127	112117			0.00- 42.43	12.71

QC Flag Legend

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

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msde.i
Lab File ID: e021013.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: gh
Method File: /chem/msde.i/10Feb2015.b/e15l0210a.m
Misc Info: 40ppbv(50ppbv)

Calibration Date: 10-FEB-2015
Calibration Time: 19:01
Client Smp ID: LEVEL 12
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
46 Bromochloromethan	276169	165701	386637	275037	-0.41
58 1,4-Difluorobenze	1109585	665751	1553419	1123277	1.23
75 Chlorobenzene-d5	1031911	619147	1444675	999739	-3.12

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
46 Bromochloromethan	15.64	15.31	15.97	15.64	0.00
58 1,4-Difluorobenze	17.01	16.68	17.34	17.01	0.00
75 Chlorobenzene-d5	22.41	22.08	22.74	22.41	0.00

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

Data File: /chem/msde.i/10Feb2015.b/e021013.d

Date : 10-FEB-2015 20:40

Client ID: LEVEL 12

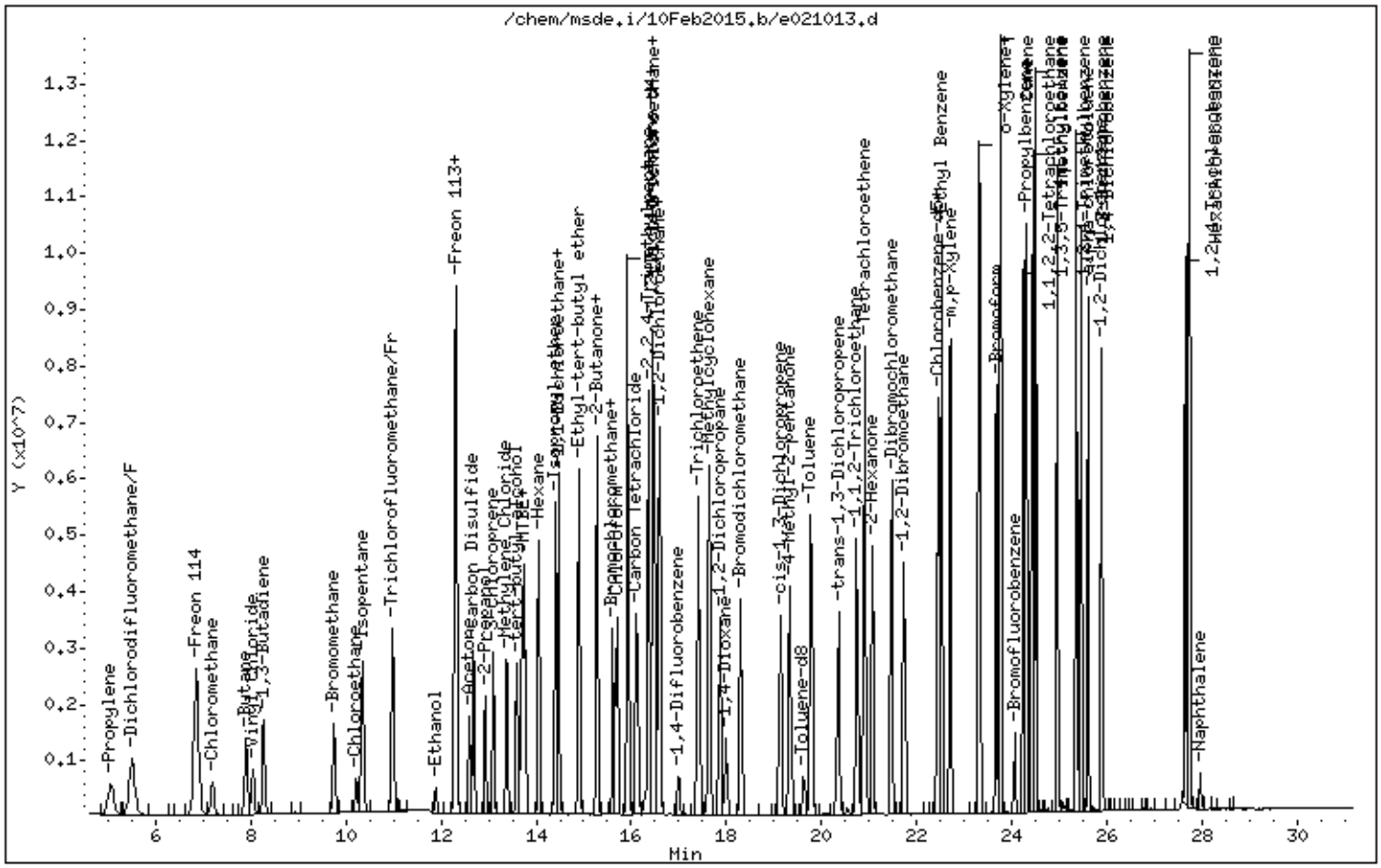
Instrument: msde.i

Sample Info: 200mL#2687-244

Operator: gh

Column phase: RTx-624

Column diameter: 0.32



Eurofins Air Toxics Inc.

EPA TO-15/Modified TO14A

Data file : /chem/msde.i/02Mar2015.b/e030207.d
Lab Smp Id: ICAL Client Smp ID: Level 13
Inj Date : 02-MAR-2015 13:05
Operator : sab Inst ID: msde.i
Smp Info : 100ml #2649-262
Misc Info : 2.0ppbv (5.0ppbv)
Comment : Low-Level/GC-MS
Method : /chem/msde.i/02Mar2015.b/e15l0210b.m
Meth Date : 02-Mar-2015 14:34 sblack Quant Type: ISTD
Cal Date : 02-MAR-2015 13:05 Cal File: e030207.d
Als bottle: 31 Calibration Sample, Level: 13
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT7.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
* 46 Bromochloromethane					CAS #: 74-97-5		
15.611	15.611 (1.000)	130	163927	5.00000		70.00- 130.00	100.00
15.611	15.611 (1.000)	128	126201			0.00- 30.00	76.99
15.611	15.611 (1.000)	49	188655			0.00- 30.00	115.08
* 58 1,4-Difluorobenzene					CAS #: 540-36-3		
16.987	16.987 (1.000)	114	648957	5.00000		70.00- 130.00	100.00
16.987	16.987 (1.000)	88	91652			0.00- 30.00	14.12
* 75 Chlorobenzene-d5					CAS #: 3114-55-4		
22.407	22.407 (1.000)	117	606750	5.00000		70.00- 130.00	100.00
22.407	22.407 (1.000)	82	279429			0.00- 30.00	46.05
66 Octane					CAS #: 111-65-9		
19.669	19.669 (1.158)	57	61237	2.00000	1.944	0.00- 30.00	100.00
19.669	19.669 (1.158)	85	67061			0.00- 30.00	109.51
19.669	19.669 (1.158)	43	147013			0.00- 30.00	240.07

RT	EXP RT	(REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
88 Decane						CAS #: 124-18-5		
24.356	24.356	(1.087)	57	166802	2.00000	2.011	0.00- 30.00	100.00
24.356	24.356	(1.087)	71	61235			0.00- 30.00	36.71
24.356	24.356	(1.087)	142	8377			0.00- 30.00	5.02
103 1,2,3-trimethylbenzene						CAS #: 526-73-8		
25.455	25.455	(1.136)	120	104989	2.00000	1.949	0.00- 30.00	100.00
25.455	25.455	(1.136)	105	237166			0.00- 30.00	225.90
25.455	25.455	(1.136)	77	24994			0.00- 30.00	23.81
106 Indene						CAS #: 95-13-6		
25.971	25.971	(1.159)	115	212901	2.00000	2.042	0.00- 30.00	100.00
25.971	25.971	(1.159)	116	201693			0.00- 30.00	94.74

Report Date: 02-Mar-2015 14:34

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msde.i
Lab File ID: e030207.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: sab
Method File: /chem/msde.i/02Mar2015.b/e15l0210b.m
Misc Info: 2.0ppbv (5.0ppbv)

Calibration Date: 02-MAR-2015
Calibration Time: 08:10
Client Smp ID: Level 13
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
46 Bromochloromethan	193169	115901	270437	163927	-15.14
58 1,4-Difluorobenze	751955	451173	1052737	648957	-13.70
75 Chlorobenzene-d5	683410	410046	956774	606750	-11.22

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
46 Bromochloromethan	15.61	15.28	15.94	15.61	0.00
58 1,4-Difluorobenze	16.99	16.66	17.32	16.99	0.00
75 Chlorobenzene-d5	22.41	22.08	22.74	22.41	0.00

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

Data File: /chem/msde.i/02Mar2015.b/e030207.d

Date : 02-MAR-2015 13:05

Client ID: Level 13

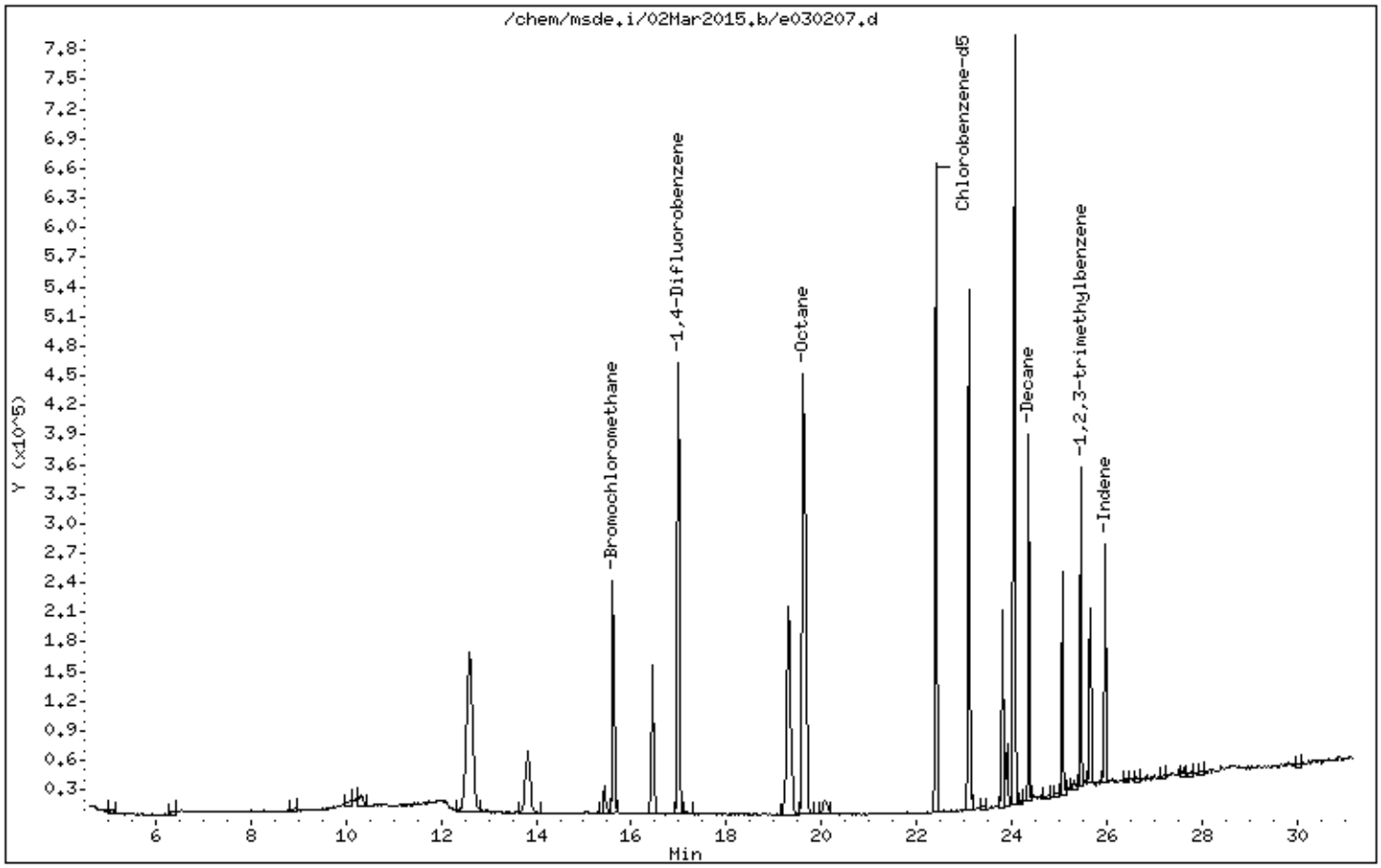
Instrument: msde.i

Sample Info: 100ml #2649-262

Operator: sab

Column phase: RTx-624

Column diameter: 0.32



Eurofins Air Toxics Inc.

EPA TO-15/Modified TO14A

Data file : /chem/msde.i/02Mar2015.b/e030208.d
Lab Smp Id: ICAL Client Smp ID: Level 15
Inj Date : 02-MAR-2015 13:47
Operator : sab Inst ID: msde.i
Smp Info : 200ml #2649-262
Misc Info : 4.0ppbv (5.0ppbv)
Comment : Low-Level/GC-MS
Method : /chem/msde.i/02Mar2015.b/e15l0210b.m
Meth Date : 02-Mar-2015 14:34 sblack Quant Type: ISTD
Cal Date : 02-MAR-2015 13:47 Cal File: e030208.d
Als bottle: 31 Calibration Sample, Level: 15
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT7.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
* 46 Bromochloromethane					CAS #: 74-97-5		
15.641	15.641 (1.000)	130	193244	5.00000		70.00- 130.00	100.00
15.641	15.641 (1.000)	128	151317			0.00- 30.00	78.30
15.641	15.641 (1.000)	49	213614			0.00- 30.00	110.54
* 58 1,4-Difluorobenzene					CAS #: 540-36-3		
16.987	16.987 (1.000)	114	758965	5.00000		70.00- 130.00	100.00
16.987	16.987 (1.000)	88	103427			0.00- 30.00	13.63
* 75 Chlorobenzene-d5					CAS #: 3114-55-4		
22.407	22.407 (1.000)	117	687618	5.00000		70.00- 130.00	100.00
22.407	22.407 (1.000)	82	320800			0.00- 30.00	46.65
66 Octane					CAS #: 111-65-9		
19.668	19.668 (1.158)	57	147862	4.00000	4.010	0.00- 30.00	100.00
19.668	19.668 (1.158)	85	158067			0.00- 30.00	106.90
19.668	19.668 (1.158)	43	347496			0.00- 30.00	235.01

RT	EXP RT	(REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
88 Decane						CAS #: 124-18-5		
24.356	24.356	(1.087)	57	354028	4.00000	3.822	0.00- 30.00	100.00
24.356	24.356	(1.087)	71	128515			0.00- 30.00	36.30
24.356	24.356	(1.087)	142	20032			0.00- 30.00	5.66
103 1,2,3-trimethylbenzene						CAS #: 526-73-8		
25.455	25.455	(1.136)	120	207074	4.00000	3.526	0.00- 30.00	100.00
25.455	25.455	(1.136)	105	464522			0.00- 30.00	224.33
25.455	25.455	(1.136)	77	52040			0.00- 30.00	25.13
106 Indene						CAS #: 95-13-6		
25.971	25.971	(1.159)	115	439423	4.00000	3.786	0.00- 30.00	100.00
25.971	25.971	(1.159)	116	423732			0.00- 30.00	96.43

Report Date: 02-Mar-2015 14:34

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msde.i
Lab File ID: e030208.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: sab
Method File: /chem/msde.i/02Mar2015.b/e15l0210b.m
Misc Info: 4.0ppbv (5.0ppbv)

Calibration Date: 02-MAR-2015
Calibration Time: 08:10
Client Smp ID: Level 15
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
46 Bromochloromethan	193169	115901	270437	193244	0.04
58 1,4-Difluorobenze	751955	451173	1052737	758965	0.93
75 Chlorobenzene-d5	683410	410046	956774	687618	0.62

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
46 Bromochloromethan	15.61	15.28	15.94	15.64	0.20
58 1,4-Difluorobenze	16.99	16.66	17.32	16.99	0.00
75 Chlorobenzene-d5	22.41	22.08	22.74	22.41	0.00

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

Data File: /chem/msde.i/02Mar2015.b/e030208.d

Date : 02-MAR-2015 13:47

Client ID: Level 15

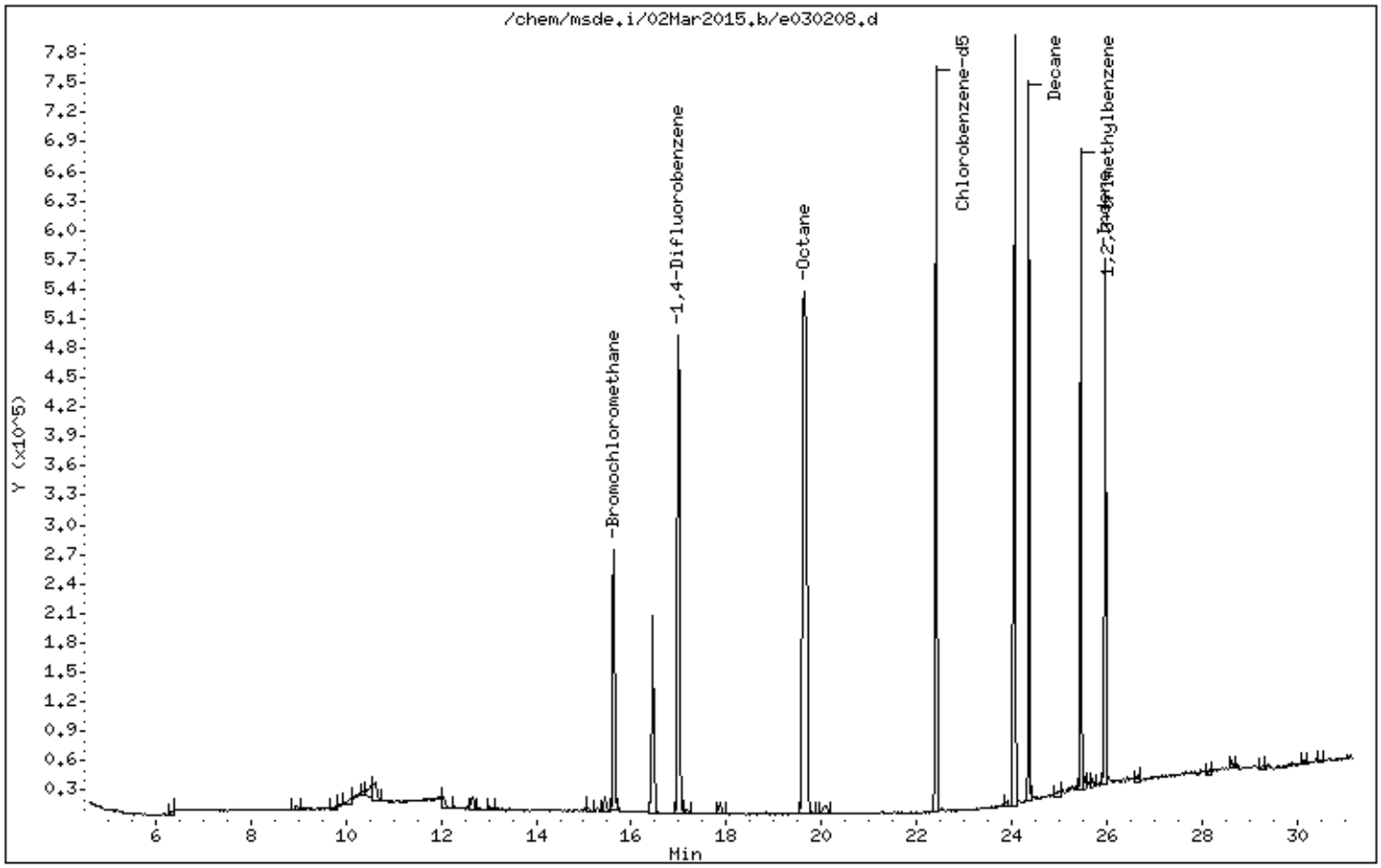
Instrument: msde.i

Sample Info: 200ml #2649-262

Operator: sab

Column phase: RTx-624

Column diameter: 0.32



Report Date : 21-Oct-2014 16:28

Eurofins Air Toxics Inc.
METHOD DETECTION LIMIT SUMMARY REPORT 0.1 ppbv LL MDL

Method File: /chem/msde.i/16Oct2014.b/e1411008a.m
Batch File: /chem/msde.i/16Oct2014.b
Inst ID: msde.i

Spike MDL: For 1,2,4 TCB, Hexachlorobutadiene
#2677-278 (1.0ppbv) = 25mL LOAD

ID:	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08
FILENAME:	e101613	e101614	e101615	e101616	e101617	e101618	e101619	e101620
INJ.DATE:	16-OCT-2014	16-OCT-2014	16-OCT-2014	16-OCT-2014	16-OCT-2014	17-OCT-2014	17-OCT-2014	17-OCT-2014
INJ.TIME:	19:12	19:59	20:56	21:42	22:28	08:13	08:58	10:01

PPTV (ug/m3)

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	AVG CONC	STD DEV	MDL	
1 Freon134a	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
207 Iodomethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
205 Cyclohexanone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
204 2-Chloroethyl Vinyl Et	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
2 Propylene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
3 Freon 152A	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
4 Dichlorodifluoromethan	87.74	83.52	99.53	93.86	86.29	86.11	91.62	80.48	88.64	6.10	18.28	100
5 Freon 22	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
6 Freon 114	91.20	103.22	86.15	84.34	85.13	82.27	86.93	90.31	88.69	6.57	19.71	100
7 Chloromethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
8 Isobutylene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
9 Butane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
10 Vinyl Chloride	82.09	79.34	77.80	87.01	83.68	84.16	80.50	80.43	81.88	2.98	8.92	100
11 1,3-Butadiene	89.68	91.54	85.22	89.18	84.36	73.75	77.90	74.81	83.30	6.97	20.91	100
12 Bromomethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
13 Chloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
14 Isopentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	

Reviewer 1 [signature] Date: 10/21/14
Reviewer 2 [signature] Date: 10/22/14

All 0.1 compounds - ratio of the mean recovered concentration and the MDL value is 100

Eurofins Air Toxics Inc.
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msde.i/16Oct2014.b/e1411008a.m
Batch File: /chem/msde.i/16Oct2014.b
Inst ID: msde.i

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	AVG CONC	STD DEV	MDL	
15 Vinyl Bromide	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
17 Pentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
16 Trichlorofluoromethane	88.59	95.62	89.68	92.81	87.27	91.30	88.38	85.79	89.93	3.18	9.54	100
18 Ethanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
20 Acrolein	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
19 Freon 113	101.47	91.77	96.29	95.41	89.34	87.66	85.58	102.35	93.73	6.21	18.62	100
190 1-Pentene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
21 1,1-Dichloroethene	83.82	86.40	81.41	81.47	89.72	70.28	69.81	83.91	80.86	7.19	21.56	100
22 Acetone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
23 Carbon Disulfide	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
184 Bromoethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
25 2-Propanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
27 Methyl Acetate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
26 3-Chloroprene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
24 2-Methylpentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
28 Acetonitrile	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
29 Methylene Chloride	73.17	94.91	96.79	79.89	81.54	81.29	75.35	83.19	83.27	8.46	25.37	200
30 tert-butyl alcohol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
31 MTBE	77.05	80.54	82.22	80.43	75.78	71.16	73.17	73.84	76.77	3.99	11.96	100
32 trans-1,2-Dichloroethe	92.67	92.21	86.95	76.74	70.58	86.64	78.95	80.93	83.21	7.75	23.25	100
33 Acrylonitrile	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
34 2,4-Dimethylpentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	

Eurofins Air Toxics Inc.
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msde.i/16Oct2014.b/e1411008a.m
Batch File: /chem/msde.i/16Oct2014.b
Inst ID: msde.i

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	AVG CONC	STD DEV	MDL	
35 Hexane	72.61	77.47	81.94	72.77	70.33	63.64	67.33	61.45	70.94	6.83	20.47	100
191 Cyclopentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
36 Isopropyl ether	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
37 1,1-Dichloroethane	80.64	79.97	79.96	82.38	75.22	77.64	88.24	75.52	79.95	4.18	12.54	100
38 Vinyl Acetate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
39 Chlorprene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
40 Ethyl-tert-butyl ether	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
43 Ethyl Acetate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
41 cis-1,2-Dichloroethene	77.50	93.27	86.86	80.30	88.75	83.72	82.82	79.28	84.06	5.30	15.88	100
42 2-Butanone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
192 1-Hexene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
44 Tetrahydrofuran	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
* 46 Bromochloromethane	5000.00	5000.00	5000.00	5000.00	5000.00	5000.00	5000.00	5000.00	5000.00	0.00	0.00	
47 Chloroform	96.39	93.72	90.96	92.70	101.48	82.13	90.44	88.50	92.04	5.68	17.03	100
45 2,3-Dimethylpentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
48 Cyclohexane	75.45	82.44	62.83	73.46	73.72	63.04	72.96	68.30	71.53	6.58	19.73	100
49 1,1,1-Trichloroethane	89.52	96.67	93.66	96.89	91.61	92.02	84.19	89.67	91.78	4.15	12.45	100
193 Methyl Acrylate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
51 Carbon Tetrachloride	84.85	84.77	81.89	73.74	73.79	62.79	73.12	66.57	75.19	8.16	24.47	100
52 2,2,4-Trimethylpentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
53 Benzene	102.82	91.37	96.54	93.27	99.27	96.11	86.25	94.20	94.98	5.02	15.05	100
$ 54 1,2-Dichloroethane-d4	4903.49	4987.13	4874.94	4933.60	4891.74	4943.75	4947.63	5030.70	4939.12	51.34	153.92	
55 tert-amyl methyl ether	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
56 1,2-Dichloroethane	94.66	94.77	101.50	88.02	90.69	88.43	92.62	83.11	91.72	5.53	16.58	100

Eurofins Air Toxics Inc.
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msde.i/16Oct2014.b/e1411008a.m
Batch File: /chem/msde.i/16Oct2014.b
Inst ID: msde.i

	Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	AVG CONC	STD DEV	MDL	
	57 Heptane	79.45	64.70	76.31	73.38	72.44	70.35	73.99	75.54	73.27	4.41	13.21	100
	50 Thiophene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
*	58 1,4-Difluorobenzene	5000.00	5000.00	5000.00	5000.00	5000.00	5000.00	5000.00	5000.00	5000.00	0.00	0.00	
	59 Trichloroethene	101.31	95.11	92.71	95.25	94.86	95.45	97.56	96.62	96.11	2.53	7.58	100
	60 Methylcyclohexane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
	61 1,2-Dichloropropane	80.08	80.54	82.32	73.85	81.89	77.29	76.75	85.64	79.80	3.71	11.13	100
	62 1,4-Dioxane	72.10	107.80	95.38	92.03	100.84	85.13	78.46	87.68	89.93	11.65	34.93	100
	63 Bromodichloromethane	91.48	94.19	82.89	80.64	92.73	86.53	86.44	90.77	88.21	4.85	14.55	100
	64 cis-1,3-Dichloropropen	87.55	87.46	80.56	84.32	85.24	73.82	78.65	87.21	83.10	4.99	14.96	100
	65 4-Methyl-2-pentanone	79.00	68.08	75.08	73.91	74.02	70.73	68.72	68.55	72.26	3.88	11.62	100
	66 Octane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
$	67 Toluene-d8	4826.14	4774.00	4780.52	4898.42	4828.14	4884.50	4803.30	4789.99	4823.13	46.58	139.65	
	68 Toluene	91.31	80.08	83.97	84.36	86.15	78.21	86.01	86.94	84.63	4.08	12.24	100
	194 Ethyl Acrylate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
	69 trans-1,3-Dichloroprop	89.13	92.88	79.50	83.87	91.81	80.53	74.63	85.57	84.74	6.37	19.11	100
	70 1,1,2-Trichloroethane	92.30	96.66	89.71	88.34	90.96	83.78	86.88	88.95	89.70	3.82	11.45	100
	71 Tetrachloroethene	88.73	96.46	86.05	93.27	90.24	85.57	88.08	94.68	90.38	4.03	12.09	100
	72 2-Hexanone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
	73 Dibromochloromethane	89.02	91.28	87.78	85.06	80.79	74.32	84.83	83.86	84.62	5.28	15.83	100
	74 1,2-Dibromoethane	89.82	91.94	90.55	84.59	81.46	71.54	86.64	78.96	84.44	6.89	20.66	100
*	75 Chlorobenzene-d5	5000.00	5000.00	5000.00	5000.00	5000.00	5000.00	5000.00	5000.00	5000.00	0.00	0.00	
	76 Chlorobenzene	90.98	94.84	90.83	85.75	90.17	84.76	90.73	88.72	89.60	3.20	9.59	100
	78 Nonane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	

Eurofins Air Toxics Inc.
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msde.i/16Oct2014.b/e1411008a.m
Batch File: /chem/msde.i/16Oct2014.b
Inst ID: msde.i

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	AVG CONC	STD DEV	MDL	
77 Ethyl Benzene	74.71	81.47	74.22	75.13	70.74	76.24	78.27	70.64	75.18	3.62	10.85	100
79 1,1,1,2-Tetrachloroeth	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
186 1,1-Dichloropropene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
80 m,p-Xylene	79.55	79.11	81.83	74.79	80.16	63.80	78.02	67.23	75.56	6.58	19.74	100
81 o-Xylene	85.32	83.94	74.52	77.97	76.15	68.86	67.53	73.18	75.93	6.40	19.18	100
83 Styrene	74.76	63.99	68.30	75.65	72.77	61.06	70.68	67.85	69.38	5.12	15.34	100
84 Bromoform	88.88	86.57	78.90	82.35	80.37	78.62	81.27	80.17	82.14	3.70	11.09	100
85 Cumene	70.07	70.43	69.07	64.53	70.34	63.85	69.54	67.75	68.20	2.63	7.87	100
$ 87 Bromofluorobenzene	4975.53	4862.77	4873.49	4902.52	4905.89	4999.98	5000.19	4955.47	4934.48	55.34	165.90	
82 alpha-pinene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
203 D-Limonene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
89 1,1,2,2-Tetrachloroeth	95.58	96.83	93.46	93.09	96.88	84.41	92.30	92.10	93.08	3.99	11.97	100
90 Propylbenzene	88.53	87.70	85.58	89.31	82.64	75.72	84.47	79.63	84.20	4.70	14.08	100
185 Bromobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
91 1,2,3-Trichloropropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
92 4-Ethyltoluene	84.00	71.76	80.76	80.70	72.30	71.21	71.28	74.60	75.83	5.18	15.52	100
94 1,3,5-Trimethylbenzene	76.16	73.41	75.28	75.77	72.00	62.61	69.24	70.55	71.88	4.51	13.51	100
93 2-Chlorotoluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
96 4-Chlorotoluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
86 1,3-Dichloropropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
97 tert-Butylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
98 1,2,4-Trimethylbenzene	80.83	77.22	72.86	80.11	80.69	74.96	76.59	75.45	77.34	2.95	8.84	100
88 Decane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
188 Undecane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	

Eurofins Air Toxics Inc.
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msde.i/16Oct2014.b/e1411008a.m
Batch File: /chem/msde.i/16Oct2014.b
Inst ID: msde.i

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	AVG CONC	STD DEV	MDL	
189 Dodecane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
99 sec-Butylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
100 p-Cymene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
101 1,3-Dichlorobenzene	85.09	87.65	91.88	79.71	86.09	83.28	83.43	85.68	85.35	3.55	10.65	100
103 1,2,3-trimethylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
104 1,4-Dichlorobenzene	89.87	85.11	87.68	85.57	85.83	77.54	69.51	82.36	82.93	6.55	19.64	100
105 alpha-chlorotoluene	87.37	91.74	95.37	70.47	88.78	73.34	85.34	82.73	84.39	8.64	25.90	100
195 trans-1,4-dichloro-2-b	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
95 Dibromomethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
102 Indan	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
107 Butylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
108 1,2-Dichlorobenzene	86.63	84.31	81.33	84.45	83.96	77.73	76.24	85.39	82.51	3.74	11.21	100
106 Indene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
110 1,2-dibromo-3-chloropr	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
109 Hexachloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	~~[illegible]~~ 10/21/14
112 1,2,4-Trichlorobenzene	93.38	98.41	86.51	98.69	91.54	70.10	77.89	82.38	87.36	10.12	30.35	~~100~~ 500
113 Hexachlorobutadiene	88.97	88.05	84.91	89.14	91.10	73.71	88.13	78.25	85.28	6.11	18.32	~~100~~ 500
114 Naphthalene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	~~[illegible]~~ 10/21/14
111 1,3,5-Trichlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
115 1,2,3-trichlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
187 2,3-Dichloropropene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
201 2,2-Dichloropropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
197 1-Methoxy-2-Propyl Ace	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
198 2-Heptanone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	

Eurofins Air Toxics Inc.
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msde.i/16Oct2014.b/e14l1008a.m
Batch File: /chem/msde.i/16Oct2014.b
Inst ID: msde.i

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	AVG CONC	STD DEV	MDL
199 Butyl Acetate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
200 n-Butanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
202 Methyl Methacrylate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
206 Acetaldehyde	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

Report Date : 21-Oct-2014 16:45

Eurofins Air Toxics Inc.
METHOD DETECTION LIMIT SUMMARY REPORT

0.5 ppbv LL MDL.
2677-278 (1.0 ppbv) · 125 mL LOAD.

Method File: /chem/msde.i/15Oct2014.b/e1411008a.m
Batch File: /chem/msde.i/15Oct2014.b
Inst ID: msde.i

ID:	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08				
FILENAME:	e101506	e101507	e101508	e101510	e101511	e101512	e101513	e101514				
INJ.DATE:	15-OCT-2014	15-OCT-2014	15-OCT-2014	15-OCT-2014	15-OCT-2014	15-OCT-2014	15-OCT-2014	15-OCT-2014				
INJ.TIME:	12:32	14:05	14:50	17:11	18:27	19:18	20:15	21:34				
											PPTV (AL)	
Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	AVG CONC	STD DEV	MDL	
1 Freon134a	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
207 Iodomethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
205 Cyclohexanone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
204 2-Chloroethyl Vinyl Et	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
2 Propylene	502.50	543.67	547.99	479.85	486.41	457.94	476.95	459.54	494.36	34.83	104.41	500
3 Freon 152A	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
4 Dichlorodifluoromethan	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
5 Freon 22	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
6 Freon 114	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
7 Chloromethane	428.22	425.85	402.83	454.58	421.95	415.08	404.80	393.45	418.34 ✓	19.03	57.04	500
8 Isobutylene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
9 Butane	395.56	388.03	387.46	373.82	368.27	368.97	410.94	325.96	377.38	25.30	75.86	500
10 Vinyl Chloride	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
11 1,3-Butadiene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
12 Bromomethane	523.93	505.22	509.26	529.64	499.06	521.55	480.21	503.20	509.01	15.96	47.84	500
13 Chloroethane	446.21	473.85	448.14	446.96	449.07	423.22	391.22	436.44	439.39	24.06	72.13	500
14 Isopentane	443.69	434.27	453.73	428.69	428.35	433.41	436.53	413.77	434.06	11.71	35.09	500

Reviewer 1 [signature] Date: 10/21/14
Reviewer 2 [signature] Date: 10/22/14

$\bar{x}$ = 0.0693

$2x$ = 0.1386

ALL 0.5 COMPOUNDS - RATIO OF THE MEAN RECOVERED CONCENTRATION AND THE MDL VALUE IS BETWEEN 1 AND 20.

Eurofins Air Toxics Inc.
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msde.i/15Oct2014.b/e1411008a.m
Batch File: /chem/msde.i/15Oct2014.b
Inst ID: msde.i

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	AVG CONC	STD DEV	MDL	
15 Vinyl Bromide	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
17 Pentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
16 Trichlorofluoromethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
18 Ethanol	602.90	584.61	566.47	581.22	524.24	529.70	532.93	501.18	552.91	35.71	107.05	500
20 Acrolein	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
19 Freon 113	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
190 1-Pentene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
21 1,1-Dichloroethene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
22 Acetone	500.00	502.97	479.20	440.02	466.10	436.35	439.79	451.73	464.52	27.06	81.11	500
23 Carbon Disulfide	560.08	715.45	550.70	543.98	606.21	508.60	504.56	585.58	571.89	67.49	202.33	500
184 Bromoethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
25 2-Propanol	445.55	423.90	432.01	406.08	402.77	405.74	405.81	381.71	412.95	19.91	59.69	500
27 Methyl Acetate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
26 3-Chloroprene	398.90	404.94	420.31	420.50	409.83	398.58	411.74	388.91	406.71	11.07	33.18	500
24 2-Methylpentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
28 Acetonitrile	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
29 Methylene Chloride	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
30 tert-butyl alcohol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
31 MTBE	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
32 trans-1,2-Dichloroethe	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
33 Acrylonitrile	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
34 2,4-Dimethylpentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	

Eurofins Air Toxics Inc.
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msde.i/15Oct2014.b/e1411008a.m
Batch File: /chem/msde.i/15Oct2014.b
Inst ID: msde.i

	Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	AVG CONC	STD DEV	MDL	
	35 Hexane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
	191 Cyclopentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
	36 Isopropyl ether	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
	37 1,1-Dichloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
	38 Vinyl Acetate	390.48	377.46	372.74	353.11	398.80	337.94	311.08	345.04	360.83	29.39	88.11	500
	39 Chlorprene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
	40 Ethyl-tert-butyl ether	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
	43 Ethyl Acetate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
	41 cis-1,2-Dichloroethene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
	42 2-Butanone	420.89	417.51	406.10	395.08	401.82	418.96	436.70	392.85	411.24	14.90	44.68	500
	192 1-Hexene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
	44 Tetrahydrofuran	371.05	386.78	399.57	405.37	360.97	386.80	389.35	329.18	378.63	24.54	73.58	500
*	46 Bromochloromethane	5000.00	5000.00	5000.00	5000.00	5000.00	5000.00	5000.00	5000.00	5000.00	0.00	0.00	
	47 Chloroform	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
	45 2,3-Dimethylpentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
	48 Cyclohexane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
	49 1,1,1-Trichloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
	193 Methyl Acrylate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
	51 Carbon Tetrachloride	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
	52 2,2,4-Trimethylpentane	412.17	397.67	419.03	394.03	391.40	383.38	361.97	378.14	392.22	18.29	54.83	500
	53 Benzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
$	54 1,2-Dichloroethane-d4	4985.28	5007.62	5029.93	5132.67	5096.78	5169.25	4996.78	5107.00	5065.66	69.44	208.17	
	55 tert-amyl methyl ether	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
	56 1,2-Dichloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	

Eurofins Air Toxics Inc.
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msde.i/15Oct2014.b/e1411008a.m
Batch File: /chem/msde.i/15Oct2014.b
Inst ID: msde.i

	Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	AVG CONC	STD DEV	MDL	
	57 Heptane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
	50 Thiophene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
*	58 1,4-Difluorobenzene	5000.00	5000.00	5000.00	5000.00	5000.00	5000.00	5000.00	5000.00	5000.00	0.00	0.00	
	59 Trichloroethene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
	60 Methylcyclohexane	402.91	398.22	401.27	372.67	366.27	380.38	366.88	371.15	382.47	15.83	47.44	500
	61 1,2-Dichloropropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
	62 1,4-Dioxane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
	63 Bromodichloromethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
	64 cis-1,3-Dichloropropen	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
	65 4-Methyl-2-pentanone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
	66 Octane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
S	67 Toluene-d8	4741.56	4760.73	4730.14	4635.71	4828.17	4685.46	4814.66	4756.01	4744.05	63.08	189.11	
	68 Toluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
	194 Ethyl Acrylate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
	69 trans-1,3-Dichloroprop	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
	70 1,1,2-Trichloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
	71 Tetrachloroethene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
	72 2-Hexanone	352.21	336.09	351.18	335.74	321.57	301.42	322.14	325.91	330.78	16.79	50.34	500
	73 Dibromochloromethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
	74 1,2-Dibromoethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
*	75 Chlorobenzene-d5	5000.00	5000.00	5000.00	5000.00	5000.00	5000.00	5000.00	5000.00	5000.00	0.00	0.00	
	76 Chlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
	78 Nonane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	

Eurofins Air Toxics Inc.
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msde.i/15Oct2014.b/e1411008a.m
Batch File: /chem/msde.i/15Oct2014.b
Inst ID: msde.i

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	AVG CONC	STD DEV	MDL
77 Ethyl Benzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
79 1,1,1,2-Tetrachloroeth	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
186 1,1-Dichloropropene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
80 m,p-Xylene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
81 o-Xylene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
83 Styrene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
84 Bromoform	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
85 Cumene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
$ 87 Bromofluorobenzene	4969.96	5086.84	4989.45	5022.98	4934.77	5036.71	4898.10	4943.47	4985.25	61.49	184.36
82 alpha-pinene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
203 D-Limonene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
89 1,1,2,2-Tetrachloroeth	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
90 Propylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
185 Bromobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
91 1,2,3-Trichloropropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
92 4-Ethyltoluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
94 1,3,5-Trimethylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
93 2-Chlorotoluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
96 4-Chlorotoluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
86 1,3-Dichloropropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
97 tert-Butylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
98 1,2,4-Trimethylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
88 Decane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
188 Undecane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

Eurofins Air Toxics Inc.
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msde.i/15Oct2014.b/e1411008a.m
Batch File: /chem/msde.i/15Oct2014.b
Inst ID: msde.i

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	AVG CONC	STD DEV	MDL	
189 Dodecane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
99 sec-Butylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
100 p-Cymene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
101 1,3-Dichlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
103 1,2,3-trimethylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
104 1,4-Dichlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
105 alpha-chlorotoluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
195 trans-1,4-dichloro-2-b	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
95 Dibromomethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
102 Indan	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
107 Butylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
108 1,2-Dichlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
106 Indene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
110 1,2-dibromo-3-chloropr	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
109 Hexachloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
112 1,2,4-Trichlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
113 Hexachlorobutadiene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
114 Naphthalene	48.84	51.06	50.49	44.64	47.93	41.32	41.04	42.35	45.96	4.13	12.37	500 FFTV
111 1,3,5-Trichlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
115 1,2,3-trichlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
187 2,3-Dichloropropene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
201 2,2-Dichloropropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
197 1-Methoxy-2-Propyl Ace	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
198 2-Heptanone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	

Eurofins Air Toxics Inc.
METHOD DETECTION LIMIT SUMMARY REPORT

Method File: /chem/msde.i/15Oct2014.b/e1411008a.m
Batch File: /chem/msde.i/15Oct2014.b
Inst ID: msde.i

Compound	MDL01	MDL02	MDL03	MDL04	MDL05	MDL06	MDL07	MDL08	AVG CONC	STD DEV	MDL
199 Butyl Acetate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
200 n-Butanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
202 Methyl Methacrylate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
206 Acetaldehyde	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

eurofins | Air Toxics

Client Sample ID: CCV

Lab ID#: 1503058AR1-06A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**e030602**	**Date of Collection: NA**
Dil. Factor:	**1.00**	**Date of Analysis: 3/6/15 05:31 AM**

Compound	%Recovery
Freon 12	108
Freon 114	103
Chloromethane	108
Vinyl Chloride	104
1,3-Butadiene	100
Bromomethane	99
Chloroethane	99
Freon 11	105
Ethanol	99
Freon 113	91
1,1-Dichloroethene	88
Acetone	86
2-Propanol	90
Carbon Disulfide	112
3-Chloropropene	88
Methylene Chloride	96
Methyl tert-butyl ether	91
trans-1,2-Dichloroethene	94
Hexane	95
1,1-Dichloroethane	102
2-Butanone (Methyl Ethyl Ketone)	94
cis-1,2-Dichloroethene	95
Tetrahydrofuran	97
Chloroform	99
1,1,1-Trichloroethane	106
Cyclohexane	87
Carbon Tetrachloride	82
2,2,4-Trimethylpentane	96
Benzene	105
1,2-Dichloroethane	113
Heptane	107
Trichloroethene	101
1,2-Dichloropropane	104
1,4-Dioxane	88
Bromodichloromethane	106
cis-1,3-Dichloropropene	90
4-Methyl-2-pentanone	96
Toluene	102
trans-1,3-Dichloropropene	94
1,1,2-Trichloroethane	102
Tetrachloroethene	94
2-Hexanone	87

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Client Sample ID: CCV

Lab ID#: 1503058AR1-06A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**e030602**	**Date of Collection: NA**
Dil. Factor:	**1.00**	**Date of Analysis: 3/6/15 05:31 AM**

Compound	**%Recovery**
Dibromochloromethane	103
1,2-Dibromoethane (EDB)	98
Chlorobenzene	102
Ethyl Benzene	96
m,p-Xylene	98
o-Xylene	97
Styrene	96
Bromoform	91
Cumene	98
1,1,2,2-Tetrachloroethane	103
Propylbenzene	102
4-Ethyltoluene	109
1,3,5-Trimethylbenzene	95
1,2,4-Trimethylbenzene	89
1,3-Dichlorobenzene	97
1,4-Dichlorobenzene	93
alpha-Chlorotoluene	90
1,2-Dichlorobenzene	95
1,2,4-Trichlorobenzene	74
Hexachlorobutadiene	79
Naphthalene	79

Container Type: NA - Not Applicable

Surrogates	**%Recovery**	**Method Limits**
1,2-Dichloroethane-d4	101	70-130
Toluene-d8	102	70-130
4-Bromofluorobenzene	93	70-130

Eurofins Air Toxics Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: msde.i Injection Date: 06-MAR-2015 05:31
Lab File ID: e030602.d Init. Cal. Date(s): 10-FEB-2015 02-MAR-2015
Analysis Type: AIR Init. Cal. Times: 15:00 15:11
Lab Sample ID: CCV Quant Type: ISTD
Method: /chem/msde.i/06Mar2015.b/e15l0210b.m

COMPOUND	RRF / AMOUNT	RF5	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
$ 54 1,2-Dichloroethane-d4	1.05478	1.06778	0.010	-1.23253	30.00000	Averaged
$ 67 Toluene-d8	0.94632	0.96278	0.010	-1.73994	30.00000	Averaged
$ 87 Bromofluorobenzene	0.57838	0.53719	0.010	7.12152	30.00000	Averaged
2 Propylene	0.79600	0.89849	0.010	-12.87576	30.00000	Averaged
4 Dichlorodifluoromethane/Fr1	2.70726	2.92542	0.010	-8.05831	30.00000	Averaged
6 Freon 114	2.63338	2.71535	0.010	-3.11303	30.00000	Averaged
7 Chloromethane	1.03868	1.12459	0.010	-8.27017	30.00000	Averaged
9 Butane	0.24823	0.22925	0.010	7.64589	30.00000	Averaged
10 Vinyl Chloride	1.09816	1.14106	0.010	-3.90611	30.00000	Averaged
11 1,3-Butadiene	0.93705	0.93988	0.010	-0.30130	30.00000	Averaged
12 Bromomethane	0.99961	0.98723	0.010	1.23849	30.00000	Averaged
13 Chloroethane	0.54757	0.54474	0.010	0.51668	30.00000	Averaged
14 Isopentane	0.93583	0.90711	0.010	3.06904	30.00000	Averaged
16 Trichlorofluoromethane/Fr11	2.83584	2.97234	0.010	-4.81318	30.00000	Averaged
18 Ethanol	0.46108	0.45579	0.010	1.14884	30.00000	Averaged
21 1,1-Dichloroethene	0.85311	0.75225	0.010	11.82259	30.00000	Averaged
19 Freon 113	2.60069	2.36655	0.010	9.00282	30.00000	Averaged
22 Acetone	0.70910	0.61329	0.010	13.51219	30.00000	Averaged
23 Carbon Disulfide	3.80526	4.27525	0.010	-12.35100	30.00000	Averaged
26 3-Chloroprene	0.51868	0.45786	0.010	11.72522	30.00000	Averaged
25 2-Propanol	2.07471	1.87104	0.010	9.81685	30.00000	Averaged
29 Methylene Chloride	1.07387	1.03179	0.010	3.91772	30.00000	Averaged
30 tert-butyl alcohol	3.02552	2.63852	0.010	12.79129	30.00000	Averaged
31 MTBE	3.27578	2.97850	0.010	9.07514	30.00000	Averaged
32 trans-1,2-Dichloroethene	0.89868	0.84150	0.010	6.36322	30.00000	Averaged
35 Hexane	2.03573	1.93250	0.010	5.07060	30.00000	Averaged
36 Isopropyl ether	4.10786	4.12334	0.010	-0.37678	30.00000	Averaged
37 1,1-Dichloroethane	2.18624	2.23275	0.010	-2.12744	30.00000	Averaged
38 Vinyl Acetate	0.35929	0.33193	0.010	7.61474	30.00000	Averaged
40 Ethyl-tert-butyl ether	3.98137	3.58951	0.010	9.84235	30.00000	Averaged
41 cis-1,2-Dichloroethene	0.92086	0.87519	0.010	4.95906	30.00000	Averaged
42 2-Butanone	0.60308	0.56974	0.010	5.52747	30.00000	Averaged
44 Tetrahydrofuran	1.43073	1.38661	0.010	3.08438	30.00000	Averaged
47 Chloroform	2.55857	2.53781	0.010	0.81121	30.00000	Averaged
48 Cyclohexane	1.76824	1.53458	0.010	13.21467	30.00000	Averaged
49 1,1,1-Trichloroethane	2.60407	2.74864	0.010	-5.55178	30.00000	Averaged

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CONTINUING CALIBRATION COMPOUNDS

Instrument ID: msde.i Injection Date: 06-MAR-2015 05:31
Lab File ID: e030602.d Init. Cal. Date(s): 10-FEB-2015 02-MAR-2015
Analysis Type: AIR Init. Cal. Times: 15:00 15:11
Lab Sample ID: CCV Quant Type: ISTD
Method: /chem/msde.i/06Mar2015.b/e15l0210b.m

COMPOUND	RRF / AMOUNT	RF5	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
51 Carbon Tetrachloride	2.31698	1.90557	0.010	17.75657	30.00000	Averaged
52 2,2,4-Trimethylpentane	3.01298	2.89599	0.010	3.88274	30.00000	Averaged
53 Benzene	0.97156	1.01869	0.010	-4.85096	30.00000	Averaged
55 tert-amyl methyl ether	0.23292	0.24051	0.010	-3.25951	30.00000	Averaged
56 1,2-Dichloroethane	0.37737	0.42766	0.010	-13.32705	30.00000	Averaged
57 Heptane	0.32007	0.34370	0.010	-7.38356	30.00000	Averaged
59 Trichloroethene	0.54867	0.55382	0.010	-0.93870	30.00000	Averaged
60 Methylcyclohexane	0.58171	0.55894	0.010	3.91395	30.00000	Averaged
61 1,2-Dichloropropane	0.36871	0.38522	0.010	-4.47672	30.00000	Averaged
62 1,4-Dioxane	0.26533	0.23331	0.010	12.06878	30.00000	Averaged
63 Bromodichloromethane	0.65863	0.69720	0.010	-5.85684	30.00000	Averaged
64 cis-1,3-Dichloropropene	0.59733	0.53633	0.010	10.21174	30.00000	Averaged
65 4-Methyl-2-pentanone	0.77477	0.74760	0.010	3.50605	30.00000	Averaged
68 Toluene	1.20005	1.21900	0.010	-1.57907	30.00000	Averaged
69 trans-1,3-Dichloropropene	0.56812	0.53176	0.010	6.39993	30.00000	Averaged
70 1,1,2-Trichloroethane	0.48491	0.49259	0.010	-1.58445	30.00000	Averaged
71 Tetrachloroethene	0.72431	0.68343	0.010	5.64412	30.00000	Averaged
72 2-Hexanone	0.45315	0.39647	0.010	12.50792	30.00000	Averaged
73 Dibromochloromethane	0.93117	0.95538	0.010	-2.60005	30.00000	Averaged
74 1,2-Dibromoethane	0.79499	0.77616	0.010	2.36850	30.00000	Averaged
76 Chlorobenzene	1.14737	1.17402	0.010	-2.32267	30.00000	Averaged
77 Ethyl Benzene	0.56199	0.54111	0.010	3.71582	30.00000	Averaged
80 m,p-Xylene	0.68635	0.67512	0.010	1.63582	30.00000	Averaged
81 o-Xylene	0.63437	0.61498	0.010	3.05608	30.00000	Averaged
83 Styrene	1.10081	1.06047	0.010	3.66488	30.00000	Averaged
84 Bromoform	0.89681	0.82031	0.010	8.53010	30.00000	Averaged
85 Cumene	1.97230	1.92884	0.010	2.20346	30.00000	Averaged
89 1,1,2,2-Tetrachloroethane	0.95615	0.98105	0.010	-2.60483	30.00000	Averaged
90 Propylbenzene	2.08646	2.13740	0.010	-2.44171	30.00000	Averaged
92 4-Ethyltoluene	1.80505	1.96682	0.010	-8.96168	30.00000	Averaged
94 1,3,5-Trimethylbenzene	1.55399	1.47295	0.010	5.21539	30.00000	Averaged
98 1,2,4-Trimethylbenzene	1.41543	1.25853	0.010	11.08451	30.00000	Averaged
101 1,3-Dichlorobenzene	1.16177	1.13103	0.010	2.64546	30.00000	Averaged
104 1,4-Dichlorobenzene	1.15265	1.07366	0.010	6.85279	30.00000	Averaged
105 alpha-chlorotoluene	1.34763	1.21462	0.010	9.86987	30.00000	Averaged

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CONTINUING CALIBRATION COMPOUNDS

Instrument ID: msde.i Injection Date: 06-MAR-2015 05:31
Lab File ID: e030602.d Init. Cal. Date(s): 10-FEB-2015 02-MAR-2015
Analysis Type: AIR Init. Cal. Times: 15:00 15:11
Lab Sample ID: CCV Quant Type: ISTD
Method: /chem/msde.i/06Mar2015.b/e15l0210b.m

COMPOUND	RRF / AMOUNT	RF5	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
108 1,2-Dichlorobenzene	1.06291	1.01052	0.010	4.92953	30.00000	Averaged
112 1,2,4-Trichlorobenzene	0.74153	0.55019	0.010	25.80378	30.00000	Averaged
113 Hexachlorobutadiene	0.57730	0.45850	0.010	20.57801	30.00000	Averaged
114 Naphthalene	1.25083	0.98684	0.010	21.10480	40.00000	Averaged

Eurofins Air Toxics Inc.

EPA TO-15/Modified TO14A

Data file : /chem/msde.i/06Mar2015.b/e030602.d
Lab Smp Id: CCV Client Smp ID: CCV
Inj Date : 06-MAR-2015 05:31
Operator : act Inst ID: msde.i
Smp Info : 50mL #2687-244A
Misc Info : 5.0ppbv (25ppbv)
Comment : Low-Level/GC-MS
Method : /chem/msde.i/06Mar2015.b/e15l0210b.m
Meth Date : 06-Mar-2015 06:12 atoyama Quant Type: ISTD
Cal Date : 02-MAR-2015 15:11 Cal File: e030209.d
Als bottle: 1 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT09.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

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
* 46 Bromochloromethane						CAS #: 74-97-5	
15.610	15.610 (1.000)	130	236898	5.00000		80.00- 120.00	100.00
15.610	15.610 (1.000)	128	184366			0.00- 30.00	77.83
15.610	15.610 (1.000)	49	333640			0.00- 30.00	140.84
* 58 1,4-Difluorobenzene						CAS #: 540-36-3	
16.987	16.987 (1.000)	114	878027	5.00000		80.00- 120.00	100.00
16.987	16.987 (1.000)	88	121841			0.00- 30.00	13.88
* 75 Chlorobenzene-d5						CAS #: 3114-55-4	
22.407	22.407 (1.000)	117	818204	5.00000		80.00- 120.00	100.00
22.386	22.386 (1.000)	82	376402			0.00- 30.00	46.00
$ 54 1,2-Dichloroethane-d4						CAS #: 17060-07-0	
16.433	16.433 (1.053)	65	252956	5.00000	5.062	80.00- 120.00	100.00
16.433	16.433 (1.053)	67	142973			25.66- 85.66	56.52

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
$ 67 Toluene-d8					CAS #: 2037-26-5		
19.623	19.623 (1.155)	98	845348	5.00000	5.087	80.00- 120.00	100.00
19.623	19.623 (1.155)	70	80427			0.00- 39.92	9.51
19.623	19.623 (1.155)	100	558055			36.14- 96.14	66.01
$ 87 Bromofluorobenzene					CAS #: 460-00-4		
24.042	24.042 (1.073)	174	439531	5.00000	4.644	80.00- 120.00	100.00
24.042	24.042 (1.073)	95	529460			81.46- 141.46	120.46
24.042	24.042 (1.073)	176	417539			67.17- 127.17	95.00
2 Propylene					CAS #: 115-07-1		
5.045	5.045 (0.323)	41	212850	5.00000	5.644	80.00- 120.00	100.00
5.070	5.070 (0.325)	42	147129			35.75- 95.75	69.12
5.070	5.070 (0.325)	39	149010			39.85- 99.85	70.01
4 Dichlorodifluoromethane/Fr12					CAS #: 75-71-8		
5.503	5.503 (0.353)	85	693027	5.00000	5.403	80.00- 120.00	100.00
5.503	5.503 (0.353)	87	226151			3.28- 63.28	32.63
6 Freon 114					CAS #: 76-14-2		
6.829	6.829 (0.437)	135	643262	5.00000	5.156	80.00- 120.00	100.00
6.853	6.853 (0.439)	137	202479			2.37- 62.37	31.48
7 Chloromethane					CAS #: 74-87-3		
7.191	7.191 (0.461)	50	266412	5.00000	5.414	80.00- 120.00	100.00
7.191	7.191 (0.461)	52	87611			3.09- 63.09	32.89
9 Butane					CAS #: 106-97-8		
7.889	7.889 (0.505)	58	54310	5.00000	4.618	80.00- 120.00	100.00
7.889	7.889 (0.505)	43	418395			706.28- 766.28	770.38
10 Vinyl Chloride					CAS #: 75-01-4		
8.045	8.045 (0.515)	62	270314	5.00000	5.195	80.00- 120.00	100.00
8.045	8.045 (0.515)	64	84522			1.76- 61.76	31.27
11 1,3-Butadiene					CAS #: 106-99-0		
8.271	8.271 (0.530)	54	222655	5.00000	5.015	80.00- 120.00	100.00
8.271	8.271 (0.530)	39	203570			61.78- 121.78	91.43
12 Bromomethane					CAS #: 74-83-9		
9.746	9.746 (0.624)	94	233872	5.00000	4.938	80.00- 120.00	100.00
9.746	9.746 (0.624)	96	218630			62.88- 122.88	93.48
13 Chloroethane					CAS #: 75-00-3		
10.214	10.214 (0.654)	64	129049	5.00000	4.974	80.00- 120.00	100.00
10.214	10.214 (0.654)	49	34476			0.00- 56.27	26.72

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
13 Chloroethane (continued)							
10.214	10.214 (0.654)	66	38695			1.65- 61.65	29.98
14 Isopentane					CAS #: 78-78-4		
10.347	10.347 (0.663)	57	214892	5.00000	4.846	80.00- 120.00	100.00
10.347	10.347 (0.663)	43	319528			114.02- 174.02	148.69
10.347	10.347 (0.663)	42	275866			91.28- 151.28	128.37
16 Trichlorofluoromethane/Fr11					CAS #: 75-69-4		
10.976	10.976 (0.703)	101	704141	5.00000	5.241	80.00- 120.00	100.00
10.976	10.976 (0.703)	103	451930			35.41- 95.41	64.18
18 Ethanol					CAS #: 64-17-5		
11.890	11.890 (0.762)	45	107975	5.00000	4.942	80.00- 120.00	100.00
11.890	11.890 (0.762)	46	43221			7.33- 67.33	40.03
11.890	11.890 (0.762)	43	25736			0.00- 51.69	23.84
21 1,1-Dichloroethene					CAS #: 75-35-4		
12.309	12.309 (0.788)	98	178206	5.00000	4.409	80.00- 120.00	100.00
12.309	12.309 (0.788)	61	434265			204.24- 264.24	243.69
12.309	12.309 (0.788)	96	279476			126.62- 186.62	156.83
19 Freon 113					CAS #: 76-13-1		
12.290	12.290 (0.787)	151	560631	5.00000	4.550	80.00- 120.00	100.00
12.290	12.290 (0.787)	153	357853			34.79- 94.79	63.83
12.290	12.290 (0.787)	101	653675			79.87- 139.87	116.60
22 Acetone					CAS #: 67-64-1		
12.575	12.575 (0.806)	58	145286	5.00000	4.324	80.00- 120.00	100.00
12.575	12.575 (0.806)	43	432835			255.02- 315.02	297.92
23 Carbon Disulfide					CAS #: 75-15-0		
12.671	12.671 (0.812)	76	1012797	5.00000	5.618	80.00- 120.00	100.00
26 3-Chloroprene					CAS #: 107-05-1		
13.109	13.109 (0.840)	76	108466	5.00000	4.414	80.00- 120.00	100.00
13.090	13.090 (0.839)	41	324735			249.93- 309.93	299.39
25 2-Propanol					CAS #: 67-63-0		
12.918	12.918 (0.828)	45	443245	5.00000	4.509	80.00- 120.00	100.00
12.918	12.918 (0.828)	43	93059			0.00- 47.09	20.99
12.918	12.918 (0.828)	59	18651			0.00- 34.17	4.21
29 Methylene Chloride					CAS #: 75-09-2		
13.375	13.375 (0.857)	84	244430	5.00000	4.804	80.00- 120.00	100.00
13.375	13.375 (0.857)	49	340796			98.36- 158.36	139.42

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
29 Methylene Chloride (continued)							
13.375	13.375 (0.857)	51	105740			9.23- 69.23	43.26
30 tert-butyl alcohol					CAS #: 75-65-0		
13.591	13.591 (0.871)	59	625059	5.00000	4.360	80.00- 120.00	100.00
13.564	13.564 (0.869)	41	158861			0.00- 49.62	25.42
13.564	13.564 (0.869)	57	71960			0.00- 40.64	11.51
31 MTBE					CAS #: 1634-04-4		
13.701	13.701 (0.878)	73	705600	5.00000	4.546	80.00- 120.00	100.00
13.701	13.701 (0.878)	57	184124			0.00- 54.71	26.09
13.701	13.701 (0.878)	41	178630			0.00- 51.20	25.32
32 trans-1,2-Dichloroethene					CAS #: 156-60-5		
13.756	13.756 (0.881)	98	199349	5.00000	4.682	80.00- 120.00	100.00
13.756	13.756 (0.881)	61	419553			180.76- 240.76	210.46
13.756	13.756 (0.881)	96	313908			126.52- 186.52	157.47
35 Hexane					CAS #: 110-54-3		
14.030	14.030 (0.899)	57	457806	5.00000	4.746	80.00- 120.00	100.00
14.030	14.030 (0.899)	43	291603			32.32- 92.32	63.70
14.030	14.030 (0.899)	86	68016			0.00- 46.22	14.86
36 Isopropyl ether					CAS #: 108-20-3		
14.387	14.387 (0.922)	45	976811	5.00000	5.019	80.00- 120.00	100.00
14.387	14.387 (0.922)	87	246493			0.00- 57.38	25.23
14.387	14.387 (0.922)	59	112733			0.00- 41.55	11.54
37 1,1-Dichloroethane					CAS #: 75-34-3		
14.442	14.442 (0.925)	63	528935	5.00000	5.106	80.00- 120.00	100.00
14.442	14.442 (0.925)	65	166281			1.72- 61.72	31.44
38 Vinyl Acetate					CAS #: 108-05-4		
14.470	14.470 (0.927)	86	78633	5.00000	4.619	80.00- 120.00	100.00
14.470	14.470 (0.927)	42	73157			45.78- 105.78	93.04
14.470	14.470 (0.927)	43	935235			1023.67-1083.67	1189.37
40 Ethyl-tert-butyl ether					CAS #: 637-92-3		
14.897	14.897 (0.954)	59	850347	5.00000	4.508	80.00- 120.00	100.00
14.897	14.897 (0.954)	87	347360			11.45- 71.45	40.85
14.878	14.878 (0.953)	41	175375			0.00- 46.09	20.62
41 cis-1,2-Dichloroethene					CAS #: 156-59-2		
15.278	15.278 (0.979)	98	207331	5.00000	4.752	80.00- 120.00	100.00
15.278	15.278 (0.979)	61	404032			160.54- 220.54	194.87
15.278	15.278 (0.979)	96	317411			126.05- 186.05	153.09

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
42 2-Butanone					CAS #: 78-93-3		
15.259	15.259 (0.977)	72	134971	5.00000	4.724	80.00- 120.00	100.00
15.259	15.259 (0.977)	43	589951			374.35- 434.35	437.09
15.259	15.259 (0.977)	57	46053			4.18- 64.18	34.12
44 Tetrahydrofuran					CAS #: 109-99-9		
15.610	15.610 (1.000)	42	328484	5.00000	4.846	80.00- 120.00	100.00
15.610	15.610 (1.000)	71	115141			9.38- 69.38	35.05
15.610	15.610 (1.000)	72	125106			11.73- 71.73	38.09
47 Chloroform					CAS #: 67-66-3		
15.672	15.672 (1.004)	83	601203	5.00000	4.959	80.00- 120.00	100.00
15.672	15.672 (1.004)	85	400434			36.28- 96.28	66.61
48 Cyclohexane					CAS #: 110-82-7		
15.919	15.919 (1.020)	84	363538	5.00000	4.339	80.00- 120.00	100.00
15.919	15.919 (1.020)	56	480599			94.44- 154.44	132.20
15.919	15.919 (1.020)	41	248032			32.54- 92.54	68.23
49 1,1,1-Trichloroethane					CAS #: 71-55-6		
15.919	15.919 (1.020)	97	651148	5.00000	5.278	80.00- 120.00	100.00
15.919	15.919 (1.020)	99	411602			34.78- 94.78	63.21
51 Carbon Tetrachloride					CAS #: 56-23-5		
16.104	16.104 (1.032)	119	451425	5.00000	4.112	80.00- 120.00	100.00
16.104	16.104 (1.032)	117	459554			73.51- 133.51	101.80
52 2,2,4-Trimethylpentane					CAS #: 540-84-1		
16.361	16.361 (1.048)	56	686054	5.00000	4.806	80.00- 120.00	100.00
16.361	16.361 (1.048)	57	2008741			271.28- 331.28	292.80
16.337	16.337 (1.047)	41	518756			42.90- 102.90	75.61
53 Benzene					CAS #: 71-43-2		
16.433	16.433 (0.967)	78	894434	5.00000	5.242	80.00- 120.00	100.00
16.433	16.433 (0.967)	77	209965			0.00- 53.40	23.47
55 tert-amyl methyl ether					CAS #: 994-05-8		
16.457	16.457 (0.969)	87	211172	5.00000	5.163	80.00- 120.00	100.00
16.457	16.457 (0.969)	73	826558			362.79- 422.79	391.41
16.457	16.457 (0.969)	55	241455			66.53- 126.53	114.34
56 1,2-Dichloroethane					CAS #: 107-06-2		
16.553	16.553 (0.974)	62	375496	5.00000	5.666	80.00- 120.00	100.00
16.553	16.553 (0.974)	64	126823			2.30- 62.30	33.77
57 Heptane					CAS #: 142-82-5		
16.578	16.578 (0.976)	57	301779	5.00000	5.369	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
57 Heptane (continued)							
16.602	16.602 (0.977)	100	123967			12.62- 72.62	41.08
16.578	16.578 (0.976)	43	555387			155.09- 215.09	184.04
59 Trichloroethene					CAS #: 79-01-6		
17.397	17.397 (1.024)	130	486267	5.00000	5.047	80.00- 120.00	100.00
17.397	17.397 (1.024)	95	405074			55.70- 115.70	83.30
17.397	17.397 (1.024)	97	271315			24.95- 84.95	55.80
60 Methylcyclohexane					CAS #: 108-87-2		
17.614	17.614 (1.037)	83	490766	5.00000	4.804	80.00- 120.00	100.00
17.614	17.614 (1.037)	55	426538			50.32- 110.32	86.91
17.614	17.614 (1.037)	56	141710			0.00- 56.36	28.88
61 1,2-Dichloropropane					CAS #: 78-87-5		
17.855	17.855 (1.051)	63	338230	5.00000	5.224	80.00- 120.00	100.00
17.855	17.855 (1.051)	62	231906			38.47- 98.47	68.56
17.855	17.855 (1.051)	41	170518			15.66- 75.66	50.41
62 1,4-Dioxane					CAS #: 123-91-1		
17.975	17.975 (1.058)	88	204853	5.00000	4.396	80.00- 120.00	100.00
17.975	17.975 (1.058)	58	150670			38.94- 98.94	73.55
17.975	17.975 (1.058)	57	45389			0.00- 51.60	22.16
63 Bromodichloromethane					CAS #: 75-27-4		
18.288	18.288 (1.077)	83	612163	5.00000	5.293	80.00- 120.00	100.00
18.288	18.288 (1.077)	85	414865			35.77- 95.77	67.77
64 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
19.130	19.130 (1.126)	75	470914	5.00000	4.489	80.00- 120.00	100.00
19.130	19.130 (1.126)	77	155550			2.36- 62.36	33.03
19.130	19.130 (1.126)	39	208972			12.85- 72.85	44.38
65 4-Methyl-2-pentanone					CAS #: 108-10-1		
19.310	19.310 (1.137)	43	656417	5.00000	4.825	80.00- 120.00	100.00
19.310	19.310 (1.137)	58	250348			10.53- 70.53	38.14
19.310	19.310 (1.137)	85	101466			0.00- 48.12	15.46
68 Toluene					CAS #: 108-88-3		
19.758	19.758 (1.163)	91	1070318	5.00000	5.079	80.00- 120.00	100.00
19.758	19.758 (1.163)	92	627022			28.42- 88.42	58.58
69 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
20.331	20.331 (0.907)	75	435088	5.00000	4.680	80.00- 120.00	100.00
20.331	20.331 (0.907)	77	138789			2.22- 62.22	31.90
20.331	20.331 (0.907)	39	180569			11.81- 71.81	41.50

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
70 1,1,2-Trichloroethane					CAS #: 79-00-5		
20.743	20.743 (0.926)	97	403040	5.00000	5.079	80.00- 120.00	100.00
20.743	20.743 (0.926)	99	250881			33.38- 93.38	62.25
20.743	20.743 (0.926)	83	322434			52.87- 112.87	80.00
71 Tetrachloroethene					CAS #: 127-18-4		
20.908	20.908 (0.933)	166	559186	5.00000	4.718	80.00- 120.00	100.00
20.881	20.881 (0.932)	129	463703			46.60- 106.60	82.92
20.908	20.908 (0.933)	131	450557			44.27- 104.27	80.57
72 2-Hexanone					CAS #: 591-78-6		
21.073	21.073 (0.940)	58	324396	5.00000	4.375	80.00- 120.00	100.00
21.073	21.073 (0.940)	43	620610			145.57- 205.57	191.31
21.073	21.073 (0.940)	100	67996			0.00- 51.87	20.96
73 Dibromochloromethane					CAS #: 124-48-1		
21.457	21.457 (0.958)	129	781699	5.00000	5.130	80.00- 120.00	100.00
21.457	21.457 (0.958)	127	612211			46.84- 106.84	78.32
74 1,2-Dibromoethane					CAS #: 106-93-4		
21.732	21.732 (0.970)	107	635056	5.00000	4.882	80.00- 120.00	100.00
21.732	21.732 (0.970)	109	623527			67.60- 127.60	98.18
76 Chlorobenzene					CAS #: 108-90-7		
22.448	22.448 (1.002)	112	960591	5.00000	5.116	80.00- 120.00	100.00
22.448	22.448 (1.002)	114	311168			2.32- 62.32	32.39
22.448	22.448 (1.002)	77	500733			22.98- 82.98	52.13
77 Ethyl Benzene					CAS #: 100-41-4		
22.511	22.511 (1.005)	106	442740	5.00000	4.814	80.00- 120.00	100.00
22.511	22.511 (1.005)	91	1332932			268.64- 328.64	301.06
80 m,p-Xylene					CAS #: 108-38-3		
22.697	22.697 (1.013)	106	552388	5.00000	4.918	80.00- 120.00	100.00
22.697	22.697 (1.013)	91	1018099			156.41- 216.41	184.31
81 o-Xylene					CAS #: 95-47-6		
23.298	23.298 (1.040)	106	503183	5.00000	4.847	80.00- 120.00	100.00
23.298	23.298 (1.040)	91	979472			167.80- 227.80	194.66
83 Styrene					CAS #: 100-42-5		
23.319	23.319 (1.041)	104	867678	5.00000	4.817	80.00- 120.00	100.00
23.319	23.319 (1.041)	78	378809			12.84- 72.84	43.66
84 Bromoform					CAS #: 75-25-2		
23.661	23.661 (1.056)	173	671183	5.00000	4.573	80.00- 120.00	100.00

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

   84 Bromoform (continued)
 23.661  23.661 (1.056)   171    354707                    22.25-  82.25    52.85
-------------------------------------------------------------------------------
   85 Cumene                                        CAS #: 98-82-8
 23.751  23.751 (1.060)   105   1578188 5.00000    4.890  80.00- 120.00   100.00
 23.751  23.751 (1.060)   120    451106                     0.00-  58.98    28.58
-------------------------------------------------------------------------------
   89 1,1,2,2-Tetrachloroethane                     CAS #: 79-34-5
 24.222  24.222 (1.081)    83    802700 5.00000    5.130  80.00- 120.00   100.00
 24.222  24.222 (1.081)    85    530212                    36.27-  96.27    66.05
-------------------------------------------------------------------------------
   90 Propylbenzene                                 CAS #: 103-65-1
 24.289  24.289 (1.084)    91   1748831 5.00000    5.122  80.00- 120.00   100.00
 24.289  24.289 (1.084)   120    464484                     0.00-  56.53    26.56
-------------------------------------------------------------------------------
   92 4-Ethyltoluene                                CAS #: 622-96-8
 24.424  24.424 (1.090)   105   1609256 5.00000    5.448  80.00- 120.00   100.00
 24.424  24.424 (1.090)   120    526884                     1.72-  61.72    32.74
-------------------------------------------------------------------------------
   94 1,3,5-Trimethylbenzene                        CAS #: 108-67-8
 24.491  24.491 (1.093)   105   1205171 5.00000    4.739  80.00- 120.00   100.00
 24.491  24.491 (1.093)   120    640609                    22.29-  82.29    53.16
-------------------------------------------------------------------------------
   98 1,2,4-Trimethylbenzene                        CAS #: 95-63-6
 24.962  24.962 (1.114)   105   1029738 5.00000    4.446  80.00- 120.00   100.00
 24.962  24.962 (1.114)   120    507110                    19.10-  79.10    49.25
-------------------------------------------------------------------------------
  101 1,3-Dichlorobenzene                           CAS #: 541-73-1
 25.343  25.343 (1.131)   146    925415 5.00000    4.868  80.00- 120.00   100.00
 25.343  25.343 (1.131)   148    569464                    32.23-  92.23    61.54
 25.343  25.343 (1.131)   111    347576                     6.65-  66.65    37.56
-------------------------------------------------------------------------------
  104 1,4-Dichlorobenzene                           CAS #: 106-46-7
 25.455  25.455 (1.136)   146    878476 5.00000    4.657  80.00- 120.00   100.00
 25.455  25.455 (1.136)   148    551046                    32.94-  92.94    62.73
 25.455  25.455 (1.136)   111    322559                     5.31-  65.31    36.72
-------------------------------------------------------------------------------
  105 alpha-chlorotoluene                           CAS #: 100-44-7
 25.589  25.589 (1.142)    91    993805 5.00000    4.506  80.00- 120.00   100.00
 25.589  25.589 (1.142)   126    251261                     0.00-  55.78    25.28
-------------------------------------------------------------------------------
  108 1,2-Dichlorobenzene                           CAS #: 95-50-1
 25.881  25.881 (1.155)   146    826810 5.00000    4.754  80.00- 120.00   100.00
 25.881  25.881 (1.155)   148    513455                    32.48-  92.48    62.10
 25.881  25.881 (1.155)   111    320221                     7.93-  67.93    38.73
-------------------------------------------------------------------------------
```

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
112 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
27.629	27.629 (1.233)	180	450167	5.00000	3.710	80.00- 120.00	100.00
27.629	27.629 (1.233)	182	429044			66.76- 126.76	95.31
113 Hexachlorobutadiene					CAS #: 87-68-3		
27.719	27.719 (1.237)	225	375150	5.00000	3.971	80.00- 120.00	100.00
27.719	27.719 (1.237)	223	232152			32.55- 92.55	61.88
114 Naphthalene					CAS #: 91-20-3		
27.966	27.966 (1.248)	128	80744	0.50000	0.3945	80.00- 120.00	100.00(a)
27.966	27.966 (1.248)	127	12115			0.00- 42.43	15.00

QC Flag Legend

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

Report Date: 06-Mar-2015 06:12

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msde.i
Lab File ID: e030602.d
Lab Smp Id: CCV
Analysis Type: VOA
Quant Type: ISTD
Operator: act
Method File: /chem/msde.i/06Mar2015.b/e15l0210b.m
Misc Info: 5.0ppbv (25ppbv)

Calibration Date: 06-MAR-2015
Calibration Time: 05:31
Client Smp ID: CCV
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
46 Bromochloromethan	236898	142139	331657	236898	0.00
58 1,4-Difluorobenze	878027	526816	1229238	878027	0.00
75 Chlorobenzene-d5	818204	490922	1145486	818204	0.00

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
46 Bromochloromethan	15.61	15.28	15.94	15.61	0.00
58 1,4-Difluorobenze	16.99	16.66	17.32	16.99	0.00
75 Chlorobenzene-d5	22.41	22.08	22.74	22.41	0.00

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

Data File: /chem/msde.i/06Mar2015.b/e030602.d

Date : 06-MAR-2015 05:31

Client ID: CCV

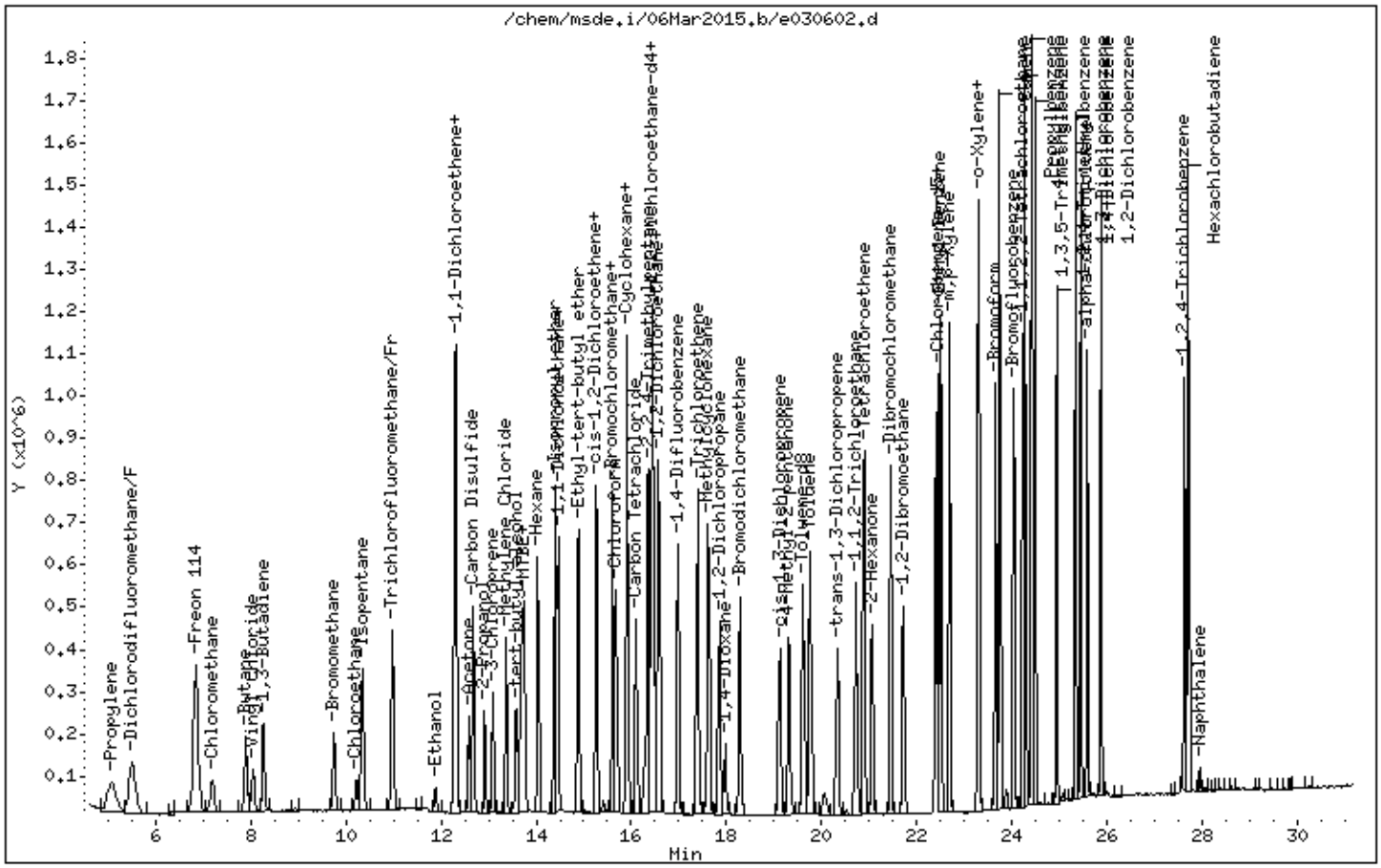
Instrument: msde.i

Sample Info: 50mL #2687-244A

Operator: act

Column phase: RTx-624

Column diameter: 0.32



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Client Sample ID: LCS

Lab ID#: 1503058AR1-07A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**e030603**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 3/6/15 06:15 AM**	

Compound	%Recovery	Method Limits
Freon 12	124	70-130
Freon 114	121	70-130
Chloromethane	118	70-130
Vinyl Chloride	118	70-130
1,3-Butadiene	110	70-130
Bromomethane	113	70-130
Chloroethane	115	70-130
Freon 11	122	70-130
Ethanol	124	70-130
Freon 113	101	70-130
1,1-Dichloroethene	100	70-130
Acetone	98	70-130
2-Propanol	104	70-130
Carbon Disulfide	92	70-130
3-Chloropropene	99	70-130
Methylene Chloride	108	70-130
Methyl tert-butyl ether	99	70-130
trans-1,2-Dichloroethene	91	70-130
Hexane	106	70-130
1,1-Dichloroethane	113	70-130
2-Butanone (Methyl Ethyl Ketone)	104	70-130
cis-1,2-Dichloroethene	116	70-130
Tetrahydrofuran	109	70-130
Chloroform	111	70-130
1,1,1-Trichloroethane	118	70-130
Cyclohexane	101	70-130
Carbon Tetrachloride	95	70-130
2,2,4-Trimethylpentane	109	70-130
Benzene	123	70-130
1,2-Dichloroethane	134 Q	70-130
Heptane	123	70-130
Trichloroethene	120	70-130
1,2-Dichloropropane	124	70-130
1,4-Dioxane	106	70-130
Bromodichloromethane	127	70-130
cis-1,3-Dichloropropene	98	70-130
4-Methyl-2-pentanone	116	70-130
Toluene	118	70-130
trans-1,3-Dichloropropene	106	70-130
1,1,2-Trichloroethane	115	70-130
Tetrachloroethene	109	70-130
2-Hexanone	113	70-130

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Client Sample ID: LCS

Lab ID#: 1503058AR1-07A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**e030603**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 3/6/15 06:15 AM**	

Compound	**%Recovery**	**Method Limits**
Dibromochloromethane	121	70-130
1,2-Dibromoethane (EDB)	113	70-130
Chlorobenzene	119	70-130
Ethyl Benzene	112	70-130
m,p-Xylene	113	70-130
o-Xylene	115	70-130
Styrene	110	70-130
Bromoform	108	70-130
Cumene	113	70-130
1,1,2,2-Tetrachloroethane	118	70-130
Propylbenzene	122	70-130
4-Ethyltoluene	126	70-130
1,3,5-Trimethylbenzene	108	70-130
1,2,4-Trimethylbenzene	104	70-130
1,3-Dichlorobenzene	112	70-130
1,4-Dichlorobenzene	108	70-130
alpha-Chlorotoluene	109	70-130
1,2-Dichlorobenzene	109	70-130
1,2,4-Trichlorobenzene	76	70-130
Hexachlorobutadiene	81	70-130
Naphthalene	67	60-140

Q = Exceeds Quality Control limits.

Container Type: NA - Not Applicable

Surrogates	**%Recovery**	**Method Limits**
1,2-Dichloroethane-d4	100	70-130
Toluene-d8	102	70-130
4-Bromofluorobenzene	92	70-130

Report Date: 06-Mar-2015 06:56

Eurofins Air Toxics Inc.

RECOVERY REPORT

Client Name:
Client SDG: 06Mar2015
Sample Matrix: GAS
Fraction: VOA
Lab Smp Id: LCS
Client Smp ID: LCS
Level: LOW
Operator: act
Data Type: MS DATA
SampleType: LCS
SpikeList File: AT09.spk
Quant Type: ISTD
Sublist File: AT09.sub
Method File: /chem/msde.i/06Mar2015.b/e15l0210b.m
Misc Info: 5.0ppbv (25ppbv)

SPIKE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
4 Dichlorodifluorome	5.000	6.186	123.71	70-130
2 Propylene	5.000	6.065	121.31	60-140
6 Freon 114	5.000	6.047	120.94	70-130
7 Chloromethane	5.000	5.898	117.96	70-130
10 Vinyl Chloride	5.000	5.890	117.81	70-130
11 1,3-Butadiene	5.000	5.475	109.50	70-130
12 Bromomethane	5.000	5.657	113.14	70-130
13 Chloroethane	5.000	5.732	114.65	70-130
16 Trichlorofluoromet	5.000	6.088	121.75	70-130
18 Ethanol	5.000	6.229	124.58	70-130
19 Freon 113	5.000	5.066	101.33	70-130
21 1,1-Dichloroethene	5.000	5.008	100.17	70-130
22 Acetone	5.000	4.895	97.89	70-130
23 Carbon Disulfide	5.000	4.620	92.40	70-130
25 2-Propanol	5.000	5.214	104.28	70-130
26 3-Chloroprene	5.000	4.935	98.70	70-130
29 Methylene Chloride	5.000	5.400	108.00	70-130
31 MTBE	5.000	4.971	99.42	70-130
32 trans-1,2-Dichloro	5.000	4.555	91.10	70-130
35 Hexane	5.000	5.293	105.87	70-130
37 1,1-Dichloroethane	5.000	5.668	113.36	70-130
38 Vinyl Acetate	5.000	5.053	101.06	60-140
41 cis-1,2-Dichloroet	5.000	5.790	115.81	70-130
42 2-Butanone	5.000	5.204	104.08	70-130
44 Tetrahydrofuran	5.000	5.440	108.80	70-130
47 Chloroform	5.000	5.569	111.37	70-130
48 Cyclohexane	5.000	5.055	101.10	70-130
49 1,1,1-Trichloroeth	5.000	5.895	117.90	70-130
51 Carbon Tetrachlori	5.000	4.763	95.25	70-130
52 2,2,4-Trimethylpen	5.000	5.434	108.68	70-130
53 Benzene	5.000	6.164	123.28	70-130
57 Heptane	5.000	6.164	123.29	70-130
56 1,2-Dichloroethane	5.000	6.721	134.43*	70-130

SPIKE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
59 Trichloroethene	5.000	5.986	119.71	70-130
61 1,2-Dichloropropan	5.000	6.192	123.85	70-130
62 1,4-Dioxane	5.000	5.294	105.88	70-130
63 Bromodichlorometha	5.000	6.353	127.06	70-130
64 cis-1,3-Dichloropr	5.000	4.913	98.26	70-130
65 4-Methyl-2-pentano	5.000	5.796	115.93	70-130
68 Toluene	5.000	5.917	118.35	70-130
69 trans-1,3-Dichloro	5.000	5.320	106.39	70-130
70 1,1,2-Trichloroeth	5.000	5.754	115.09	70-130
72 2-Hexanone	5.000	5.633	112.66	70-130
71 Tetrachloroethene	5.000	5.444	108.89	70-130
73 Dibromochlorometha	5.000	6.061	121.21	70-130
74 1,2-Dibromoethane	5.000	5.664	113.29	70-130
76 Chlorobenzene	5.000	5.934	118.69	70-130
77 Ethyl Benzene	5.000	5.604	112.09	70-130
80 m,p-Xylene	5.000	5.636	112.71	70-130
81 o-Xylene	5.000	5.735	114.69	70-130
83 Styrene	5.000	5.479	109.58	70-130
84 Bromoform	5.000	5.408	108.15	70-130
85 Cumene	5.000	5.634	112.68	70-130
89 1,1,2,2-Tetrachlor	5.000	5.921	118.42	70-130
90 Propylbenzene	5.000	6.089	121.78	70-130
92 4-Ethyltoluene	5.000	6.300	126.00	70-130
94 1,3,5-Trimethylben	5.000	5.404	108.07	70-130
98 1,2,4-Trimethylben	5.000	5.185	103.70	70-130
101 1,3-Dichlorobenzen	5.000	5.590	111.79	70-130
104 1,4-Dichlorobenzen	5.000	5.421	108.42	70-130
105 alpha-chlorotoluen	5.000	5.454	109.07	70-130
108 1,2-Dichlorobenzen	5.000	5.451	109.03	70-130
112 1,2,4-Trichloroben	5.000	3.804	76.08	70-130
113 Hexachlorobutadien	5.000	4.030	80.60	70-130
114 Naphthalene	0.5000	0.3347	66.93	60-140
14 Isopentane	5.000	5.462	109.25	60-140
9 Butane	5.000	5.291	105.82	60-140
60 Methylcyclohexane	5.000	5.667	113.35	60-140

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 54 1,2-Dichloroethane	5.000	4.992	99.85	70-130
$ 67 Toluene-d8	5.000	5.103	102.05	70-130
$ 87 Bromofluorobenzene	5.000	4.595	91.90	70-130

Eurofins Air Toxics Inc.

EPA TO-15/Modified TO14A

Data file : /chem/msde.i/06Mar2015.b/e030603.d
Lab Smp Id: LCS Client Smp ID: LCS
Inj Date : 06-MAR-2015 06:15
Operator : act Inst ID: msde.i
Smp Info : 50mL #2687-177A
Misc Info : 5.0ppbv (25ppbv)
Comment : Low-Level/GC-MS
Method : /chem/msde.i/06Mar2015.b/e15l0210b.m
Meth Date : 06-Mar-2015 06:56 atoyama Quant Type: ISTD
Cal Date : 02-MAR-2015 15:11 Cal File: e030209.d
Als bottle: 1 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT09.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
* 46 Bromochloromethane						CAS #: 74-97-5	
15.610	15.610 (1.000)	130	214933	5.00000		80.00- 120.00	100.00
15.610	15.610 (1.000)	128	164420			0.00- 30.00	76.50
15.610	15.610 (1.000)	49	293921			0.00- 30.00	136.75
* 58 1,4-Difluorobenzene						CAS #: 540-36-3	
16.987	16.987 (1.000)	114	774839	5.00000		80.00- 120.00	100.00
16.987	16.987 (1.000)	88	107658			0.00- 30.00	13.89
* 75 Chlorobenzene-d5						CAS #: 3114-55-4	
22.407	22.407 (1.000)	117	731349	5.00000		80.00- 120.00	100.00
22.386	22.407 (1.000)	82	344078			0.00- 30.00	47.05
$ 54 1,2-Dichloroethane-d4						CAS #: 17060-07-0	
16.433	16.433 (1.053)	65	226371	4.99257	4.992	80.00- 120.00	100.00
16.433	16.433 (1.053)	67	125363			25.66- 85.66	55.38

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
$ 67 Toluene-d8					CAS #: 2037-26-5		
19.624	19.623 (1.155)	98	748297	5.10266	5.103	80.00- 120.00	100.00
19.624	19.623 (1.155)	70	72771			0.00- 39.92	9.72
19.624	19.623 (1.155)	100	504855			36.14- 96.14	67.47
$ 87 Bromofluorobenzene					CAS #: 460-00-4		
24.042	24.042 (1.073)	174	388719	4.59482	4.595	80.00- 120.00	100.00
24.042	24.042 (1.073)	95	470311			81.46- 141.46	120.99
24.042	24.042 (1.073)	176	375883			67.17- 127.17	96.70
2 Propylene					CAS #: 115-07-1		
5.045	5.045 (0.323)	41	207539	6.06535	6.065	80.00- 120.00	100.00
5.045	5.045 (0.323)	42	138537			35.75- 95.75	66.75
5.070	5.045 (0.325)	39	144251			39.85- 99.85	69.51
4 Dichlorodifluoromethane/Fr12					CAS #: 75-71-8		
5.503	5.503 (0.353)	85	719850	6.18554	6.186	80.00- 120.00	100.00
5.503	5.503 (0.353)	87	230076			3.28- 63.28	31.96
6 Freon 114					CAS #: 76-14-2		
6.853	6.829 (0.439)	135	684496	6.04678	6.047	80.00- 120.00	100.00
6.829	6.829 (0.437)	137	220455			2.37- 62.37	32.21
7 Chloromethane					CAS #: 74-87-3		
7.191	7.191 (0.461)	50	263348	5.89811	5.898	80.00- 120.00	100.00
7.191	7.191 (0.461)	52	89388			3.09- 63.09	33.94
9 Butane					CAS #: 106-97-8		
7.889	7.889 (0.505)	58	56460	5.29115	5.291	80.00- 120.00	100.00
7.889	7.889 (0.505)	43	425877			706.28- 766.28	754.29
10 Vinyl Chloride					CAS #: 75-01-4		
8.045	8.045 (0.515)	62	278065	5.89044	5.890	80.00- 120.00	100.00
8.045	8.045 (0.515)	64	87681			1.76- 61.76	31.53
11 1,3-Butadiene					CAS #: 106-99-0		
8.271	8.271 (0.530)	54	220543	5.47515	5.475	80.00- 120.00	100.00
8.271	8.271 (0.530)	39	204150			61.78- 121.78	92.57
12 Bromomethane					CAS #: 74-83-9		
9.746	9.746 (0.624)	94	243070	5.65678	5.657	80.00- 120.00	100.00
9.746	9.746 (0.624)	96	230288			62.88- 122.88	94.74
13 Chloroethane					CAS #: 75-00-3		
10.214	10.214 (0.654)	64	134928	5.73228	5.732	80.00- 120.00	100.00
10.214	10.214 (0.654)	49	35144			0.00- 56.27	26.05

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
13 Chloroethane (continued)							
10.233	10.214 (0.656)	66	41095			1.65- 61.65	30.46
14 Isopentane					CAS #: 78-78-4		
10.348	10.347 (0.663)	57	219746	5.46250	5.462	80.00- 120.00	100.00
10.348	10.347 (0.663)	43	327336			114.02- 174.02	148.96
10.348	10.347 (0.663)	42	280164			91.28- 151.28	127.49
16 Trichlorofluoromethane/Fr11					CAS #: 75-69-4		
10.976	10.976 (0.703)	101	742116	6.08773	6.088	80.00- 120.00	100.00
10.976	10.976 (0.703)	103	480239			35.41- 95.41	64.71
18 Ethanol					CAS #: 64-17-5		
11.871	11.890 (0.760)	45	123458	6.22882	6.229	80.00- 120.00	100.00
11.871	11.890 (0.760)	46	48316			7.33- 67.33	39.14
11.871	11.890 (0.760)	43	26639			0.00- 51.69	21.58
21 1,1-Dichloroethene					CAS #: 75-35-4		
12.309	12.309 (0.788)	98	183676	5.00858	5.008	80.00- 120.00	100.00
12.309	12.309 (0.788)	61	443259			204.24- 264.24	241.33
12.309	12.309 (0.788)	96	291366			126.62- 186.62	158.63
19 Freon 113					CAS #: 76-13-1		
12.290	12.290 (0.787)	151	566406	5.06648	5.066	80.00- 120.00	100.00
12.290	12.290 (0.787)	153	362964			34.79- 94.79	64.08
12.290	12.290 (0.787)	101	658355			79.87- 139.87	116.23
22 Acetone					CAS #: 67-64-1		
12.575	12.575 (0.806)	58	149201	4.89475	4.895	80.00- 120.00	100.00
12.575	12.575 (0.806)	43	442539			255.02- 315.02	296.61
23 Carbon Disulfide					CAS #: 75-15-0		
12.671	12.671 (0.812)	76	755729	4.62007	4.620	80.00- 120.00	100.00
26 3-Chloroprene					CAS #: 107-05-1		
13.090	13.109 (0.839)	76	110032	4.93502	4.935	80.00- 120.00	100.00
13.090	13.109 (0.839)	41	330124			249.93- 309.93	300.03
25 2-Propanol					CAS #: 67-63-0		
12.918	12.918 (0.828)	45	465011	5.21402	5.214	80.00- 120.00	100.00
12.918	12.918 (0.828)	43	100401			0.00- 47.09	21.59
12.918	12.918 (0.828)	59	18136			0.00- 34.17	3.90
29 Methylene Chloride					CAS #: 75-09-2		
13.376	13.375 (0.857)	84	249281	5.40015	5.400	80.00- 120.00	100.00
13.376	13.375 (0.857)	49	348493			98.36- 158.36	139.80

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
29 Methylene Chloride (continued)							
13.376	13.375 (0.857)	51	107038			9.23- 69.23	42.94
31 MTBE					CAS #: 1634-04-4		
13.701	13.701 (0.878)	73	699994	4.97103	4.971	80.00- 120.00	100.00
13.701	13.701 (0.878)	57	178742			0.00- 54.71	25.53
13.701	13.701 (0.878)	41	178526			0.00- 51.20	25.50
32 trans-1,2-Dichloroethene					CAS #: 156-60-5		
13.756	13.756 (0.881)	98	175956	4.55476	4.555	80.00- 120.00	100.00
13.756	13.756 (0.881)	61	375907			180.76- 240.76	213.64
13.756	13.756 (0.881)	96	274327			126.52- 186.52	155.91
35 Hexane					CAS #: 110-54-3		
14.030	14.030 (0.899)	57	463212	5.29330	5.293	80.00- 120.00	100.00
14.030	14.030 (0.899)	43	303827			32.32- 92.32	65.59
14.030	14.030 (0.899)	86	69686			0.00- 46.22	15.04
37 1,1-Dichloroethane					CAS #: 75-34-3		
14.442	14.442 (0.925)	63	532671	5.66796	5.668	80.00- 120.00	100.00
14.442	14.442 (0.925)	65	167647			1.72- 61.72	31.47
38 Vinyl Acetate					CAS #: 108-05-4		
14.470	14.470 (0.927)	86	78042	5.05307	5.053	80.00- 120.00	100.00
14.470	14.470 (0.927)	42	63092			45.78- 105.78	80.84
14.470	14.470 (0.927)	43	802384			1023.67-1083.67	1028.14
41 cis-1,2-Dichloroethene					CAS #: 156-59-2		
15.278	15.278 (0.979)	98	229213	5.79048	5.790	80.00- 120.00	100.00
15.278	15.278 (0.979)	61	453456			160.54- 220.54	197.83
15.278	15.278 (0.979)	96	358438			126.05- 186.05	156.38
42 2-Butanone					CAS #: 78-93-3		
15.259	15.259 (0.977)	72	134904	5.20379	5.204	80.00- 120.00	100.00
15.259	15.259 (0.977)	43	591496			374.35- 434.35	438.45
15.259	15.259 (0.977)	57	46432			4.18- 64.18	34.42
44 Tetrahydrofuran					CAS #: 109-99-9		
15.610	15.610 (1.000)	42	334571	5.43996	5.440	80.00- 120.00	100.00
15.610	15.610 (1.000)	71	117299			9.38- 69.38	35.06
15.610	15.610 (1.000)	72	132498			11.73- 71.73	39.60
47 Chloroform					CAS #: 67-66-3		
15.672	15.672 (1.004)	83	612463	5.56864	5.569	80.00- 120.00	100.00
15.672	15.672 (1.004)	85	405336			36.28- 96.28	66.18

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
48 Cyclohexane					CAS #: 110-82-7		
15.919	15.919 (1.020)	84	384241	5.05507	5.055	80.00- 120.00	100.00
15.919	15.919 (1.020)	56	496114			94.44- 154.44	129.12
15.919	15.919 (1.020)	41	263223			32.54- 92.54	68.50
49 1,1,1-Trichloroethane					CAS #: 71-55-6		
15.919	15.919 (1.020)	97	659879	5.89492	5.895	80.00- 120.00	100.00
15.919	15.919 (1.020)	99	427598			34.78- 94.78	64.80
51 Carbon Tetrachloride					CAS #: 56-23-5		
16.104	16.104 (1.032)	119	474366	4.76274	4.763	80.00- 120.00	100.00
16.104	16.104 (1.032)	117	482418			73.51- 133.51	101.70
52 2,2,4-Trimethylpentane					CAS #: 540-84-1		
16.361	16.361 (1.048)	56	703820	5.43416	5.434	80.00- 120.00	100.00
16.361	16.361 (1.048)	57	2095549			271.28- 331.28	297.74
16.361	16.361 (1.048)	41	518535			42.90- 102.90	73.67
53 Benzene					CAS #: 71-43-2		
16.433	16.433 (0.967)	78	928081	6.16420	6.164	80.00- 120.00	100.00
16.433	16.433 (0.967)	77	216714			0.00- 53.40	23.35
56 1,2-Dichloroethane					CAS #: 107-06-2		
16.554	16.553 (0.974)	62	393058	6.72127	6.721	80.00- 120.00	100.00(R)
16.554	16.553 (0.974)	64	126158			2.30- 62.30	32.10
57 Heptane					CAS #: 142-82-5		
16.578	16.578 (0.976)	57	305753	6.16433	6.164	80.00- 120.00	100.00
16.578	16.578 (0.976)	100	126616			12.62- 72.62	41.41
16.578	16.578 (0.976)	43	565966			155.09- 215.09	185.11
59 Trichloroethene					CAS #: 79-01-6		
17.397	17.397 (1.024)	130	508930	5.98560	5.986	80.00- 120.00	100.00
17.397	17.397 (1.024)	95	422296			55.70- 115.70	82.98
17.397	17.397 (1.024)	97	272639			24.95- 84.95	53.57
60 Methylcyclohexane					CAS #: 108-87-2		
17.614	17.614 (1.037)	83	510900	5.66746	5.667	80.00- 120.00	100.00
17.614	17.614 (1.037)	55	441737			50.32- 110.32	86.46
17.614	17.614 (1.037)	56	147811			0.00- 56.36	28.93
61 1,2-Dichloropropane					CAS #: 78-87-5		
17.855	17.855 (1.051)	63	353820	6.19236	6.192	80.00- 120.00	100.00
17.855	17.855 (1.051)	62	245993			38.47- 98.47	69.53
17.855	17.855 (1.051)	41	176090			15.66- 75.66	49.77

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
62 1,4-Dioxane					CAS #: 123-91-1		
17.975	17.975 (1.058)	88	217682	5.29408	5.294	80.00- 120.00	100.00
17.975	17.975 (1.058)	58	159540			38.94- 98.94	73.29
17.975	17.975 (1.058)	57	49148			0.00- 51.60	22.58
63 Bromodichloromethane					CAS #: 75-27-4		
18.288	18.288 (1.077)	83	648414	6.35288	6.353	80.00- 120.00	100.00
18.288	18.288 (1.077)	85	421534			35.77- 95.77	65.01
64 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
19.131	19.130 (1.126)	75	454797	4.91317	4.913	80.00- 120.00	100.00
19.131	19.130 (1.126)	77	152052			2.36- 62.36	33.43
19.131	19.130 (1.126)	39	203791			12.85- 72.85	44.81
65 4-Methyl-2-pentanone					CAS #: 108-10-1		
19.310	19.310 (1.137)	43	695943	5.79643	5.796	80.00- 120.00	100.00
19.310	19.310 (1.137)	58	266534			10.53- 70.53	38.30
19.332	19.310 (1.138)	85	109778			0.00- 48.12	15.77
68 Toluene					CAS #: 108-88-3		
19.758	19.758 (1.163)	91	1100451	5.91737	5.917	80.00- 120.00	100.00
19.780	19.758 (1.164)	92	637090			28.42- 88.42	57.89
69 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
20.331	20.331 (0.907)	75	442063	5.31974	5.320	80.00- 120.00	100.00
20.331	20.331 (0.907)	77	147121			2.22- 62.22	33.28
20.331	20.331 (0.907)	39	196494			11.81- 71.81	44.45
70 1,1,2-Trichloroethane					CAS #: 79-00-5		
20.743	20.743 (0.926)	97	408134	5.75426	5.754	80.00- 120.00	100.00
20.743	20.743 (0.926)	99	254005			33.38- 93.38	62.24
20.743	20.743 (0.926)	83	334734			52.87- 112.87	82.02
71 Tetrachloroethene					CAS #: 127-18-4		
20.908	20.908 (0.933)	166	576803	5.44437	5.444	80.00- 120.00	100.00
20.908	20.908 (0.933)	129	486109			46.60- 106.60	84.28
20.908	20.908 (0.933)	131	471355			44.27- 104.27	81.72
72 2-Hexanone					CAS #: 591-78-6		
21.073	21.073 (0.940)	58	373374	5.63306	5.633	80.00- 120.00	100.00
21.073	21.073 (0.940)	43	688878			145.57- 205.57	184.50
21.073	21.073 (0.940)	100	74601			0.00- 51.87	19.98
73 Dibromochloromethane					CAS #: 124-48-1		
21.457	21.457 (0.958)	129	825471	6.06061	6.061	80.00- 120.00	100.00
21.457	21.457 (0.958)	127	639844			46.84- 106.84	77.51

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
74 1,2-Dibromoethane					CAS #: 106-93-4		
21.732	21.732 (0.970)	107	658673	5.66441	5.664	80.00- 120.00	100.00
21.732	21.732 (0.970)	109	630278			67.60- 127.60	95.69
76 Chlorobenzene					CAS #: 108-90-7		
22.448	22.448 (1.002)	112	995931	5.93430	5.934	80.00- 120.00	100.00
22.448	22.448 (1.002)	114	314141			2.32- 62.32	31.54
22.448	22.448 (1.002)	77	501421			22.98- 82.98	50.35
77 Ethyl Benzene					CAS #: 100-41-4		
22.511	22.511 (1.005)	106	460686	5.60426	5.604	80.00- 120.00	100.00
22.511	22.511 (1.005)	91	1371740			268.64- 328.64	297.76
80 m,p-Xylene					CAS #: 108-38-3		
22.697	22.697 (1.013)	106	565784	5.63574	5.636	80.00- 120.00	100.00
22.697	22.697 (1.013)	91	1062966			156.41- 216.41	187.87
81 o-Xylene					CAS #: 95-47-6		
23.298	23.298 (1.040)	106	532111	5.73461	5.735	80.00- 120.00	100.00
23.298	23.298 (1.040)	91	1037438			167.80- 227.80	194.97
83 Styrene					CAS #: 100-42-5		
23.319	23.319 (1.041)	104	882228	5.47916	5.479	80.00- 120.00	100.00
23.319	23.319 (1.041)	78	388004			12.84- 72.84	43.98
84 Bromoform					CAS #: 75-25-2		
23.661	23.661 (1.056)	173	709353	5.40763	5.408	80.00- 120.00	100.00
23.661	23.661 (1.056)	171	371478			22.25- 82.25	52.37
85 Cumene					CAS #: 98-82-8		
23.751	23.751 (1.060)	105	1625315	5.63390	5.634	80.00- 120.00	100.00
23.751	23.751 (1.060)	120	470120			0.00- 58.98	28.92
89 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
24.222	24.222 (1.081)	83	828071	5.92091	5.921	80.00- 120.00	100.00
24.222	24.222 (1.081)	85	553021			36.27- 96.27	66.78
90 Propylbenzene					CAS #: 103-65-1		
24.289	24.289 (1.084)	91	1858318	6.08914	6.089	80.00- 120.00	100.00
24.289	24.289 (1.084)	120	486436			0.00- 56.53	26.18
92 4-Ethyltoluene					CAS #: 622-96-8		
24.424	24.424 (1.090)	105	1663387	6.30012	6.300	80.00- 120.00	100.00
24.424	24.424 (1.090)	120	550307			1.72- 61.72	33.08
94 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
24.491	24.491 (1.093)	105	1228273	5.40370	5.404	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
94 1,3,5-Trimethylbenzene (continued)							
24.491	24.491 (1.093)	120	654817			22.29- 82.29	53.31
98 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
24.962	24.962 (1.114)	105	1073445	5.18487	5.185	80.00- 120.00	100.00
24.962	24.962 (1.114)	120	528173			19.10- 79.10	49.20
101 1,3-Dichlorobenzene					CAS #: 541-73-1		
25.343	25.343 (1.131)	146	949841	5.58956	5.590	80.00- 120.00	100.00
25.343	25.343 (1.131)	148	584301			32.23- 92.23	61.52
25.343	25.343 (1.131)	111	360706			6.65- 66.65	37.98
104 1,4-Dichlorobenzene					CAS #: 106-46-7		
25.455	25.455 (1.136)	146	913973	5.42101	5.421	80.00- 120.00	100.00
25.455	25.455 (1.136)	148	572358			32.94- 92.94	62.62
25.455	25.455 (1.136)	111	336087			5.31- 65.31	36.77
105 alpha-chlorotoluene					CAS #: 100-44-7		
25.590	25.589 (1.142)	91	1075007	5.45364	5.454	80.00- 120.00	100.00
25.590	25.589 (1.142)	126	265660			0.00- 55.78	24.71
108 1,2-Dichlorobenzene					CAS #: 95-50-1		
25.881	25.881 (1.155)	146	847530	5.45132	5.451	80.00- 120.00	100.00
25.881	25.881 (1.155)	148	526422			32.48- 92.48	62.11
25.881	25.881 (1.155)	111	326666			7.93- 67.93	38.54
112 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
27.630	27.629 (1.233)	180	412616	3.80418	3.804	80.00- 120.00	100.00
27.630	27.629 (1.233)	182	382779			66.76- 126.76	92.77
113 Hexachlorobutadiene					CAS #: 87-68-3		
27.719	27.719 (1.237)	225	340319	4.03022	4.030	80.00- 120.00	100.00
27.719	27.719 (1.237)	223	214507			32.55- 92.55	63.03
114 Naphthalene					CAS #: 91-20-3		
27.966	27.966 (1.248)	128	61231	0.33467	0.3347	80.00- 120.00	100.00(a)
27.966	27.966 (1.248)	127	9314			0.00- 42.43	15.21

QC Flag Legend

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

Report Date: 06-Mar-2015 06:56

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msde.i
Lab File ID: e030603.d
Lab Smp Id: LCS
Analysis Type: VOA
Quant Type: ISTD
Operator: act
Method File: /chem/msde.i/06Mar2015.b/e15l0210b.m
Misc Info: 5.0ppbv (25ppbv)

Calibration Date: 06-MAR-2015
Calibration Time: 05:31
Client Smp ID: LCS
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
46 Bromochloromethan	236898	142139	331657	214933	-9.27
58 1,4-Difluorobenze	878027	526816	1229238	774839	-11.75
75 Chlorobenzene-d5	818204	490922	1145486	731349	-10.62

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
46 Bromochloromethan	15.61	15.28	15.94	15.61	0.00
58 1,4-Difluorobenze	16.99	16.66	17.32	16.99	0.00
75 Chlorobenzene-d5	22.41	22.08	22.74	22.41	0.00

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

Data File: /chem/msde.i/06Mar2015.b/e030603.d

Date : 06-MAR-2015 06:15

Client ID: LCS

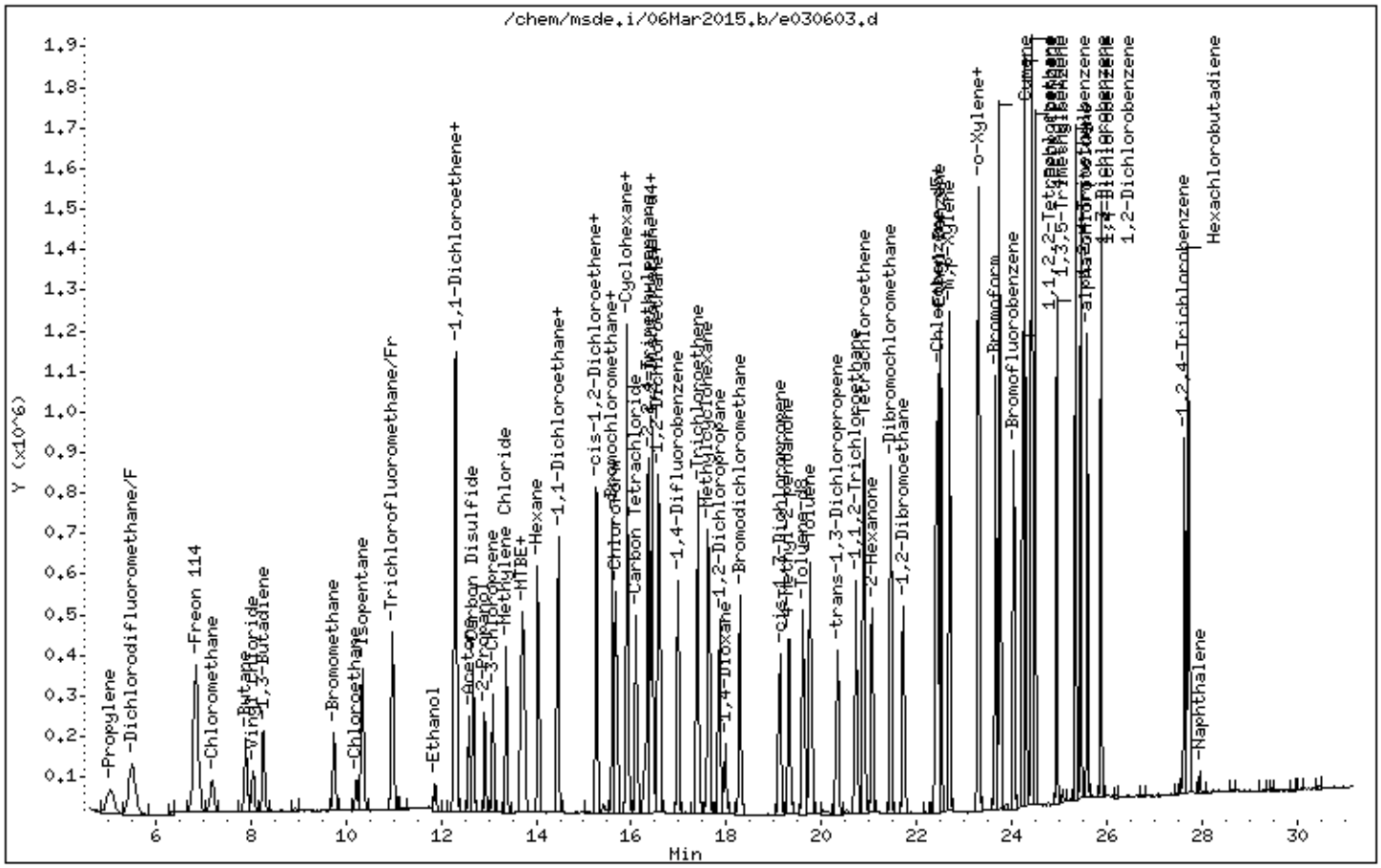
Instrument: msde.i

Sample Info: 50mL #2687-177A

Operator: act

Column phase: RTx-624

Column diameter: 0.32



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Client Sample ID: LCSD

Lab ID#: 1503058AR1-07AA

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**e030604**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 3/6/15 06:57 AM**	

Compound	%Recovery	Method Limits
Freon 12	129	70-130
Freon 114	123	70-130
Chloromethane	123	70-130
Vinyl Chloride	123	70-130
1,3-Butadiene	112	70-130
Bromomethane	115	70-130
Chloroethane	118	70-130
Freon 11	124	70-130
Ethanol	129	70-130
Freon 113	105	70-130
1,1-Dichloroethene	101	70-130
Acetone	98	70-130
2-Propanol	110	70-130
Carbon Disulfide	92	70-130
3-Chloropropene	101	70-130
Methylene Chloride	111	70-130
Methyl tert-butyl ether	103	70-130
trans-1,2-Dichloroethene	94	70-130
Hexane	110	70-130
1,1-Dichloroethane	118	70-130
2-Butanone (Methyl Ethyl Ketone)	109	70-130
cis-1,2-Dichloroethene	120	70-130
Tetrahydrofuran	113	70-130
Chloroform	114	70-130
1,1,1-Trichloroethane	121	70-130
Cyclohexane	106	70-130
Carbon Tetrachloride	96	70-130
2,2,4-Trimethylpentane	112	70-130
Benzene	122	70-130
1,2-Dichloroethane	128	70-130
Heptane	123	70-130
Trichloroethene	116	70-130
1,2-Dichloropropane	121	70-130
1,4-Dioxane	105	70-130
Bromodichloromethane	124	70-130
cis-1,3-Dichloropropene	99	70-130
4-Methyl-2-pentanone	115	70-130
Toluene	117	70-130
trans-1,3-Dichloropropene	105	70-130
1,1,2-Trichloroethane	117	70-130
Tetrachloroethene	109	70-130
2-Hexanone	113	70-130

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Client Sample ID: LCSD

Lab ID#: 1503058AR1-07AA

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**e030604**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 3/6/15 06:57 AM**	

Compound	**%Recovery**	**Method Limits**
Dibromochloromethane	122	70-130
1,2-Dibromoethane (EDB)	114	70-130
Chlorobenzene	119	70-130
Ethyl Benzene	114	70-130
m,p-Xylene	112	70-130
o-Xylene	116	70-130
Styrene	111	70-130
Bromoform	108	70-130
Cumene	113	70-130
1,1,2,2-Tetrachloroethane	121	70-130
Propylbenzene	122	70-130
4-Ethyltoluene	129	70-130
1,3,5-Trimethylbenzene	110	70-130
1,2,4-Trimethylbenzene	104	70-130
1,3-Dichlorobenzene	114	70-130
1,4-Dichlorobenzene	110	70-130
alpha-Chlorotoluene	112	70-130
1,2-Dichlorobenzene	113	70-130
1,2,4-Trichlorobenzene	85	70-130
Hexachlorobutadiene	89	70-130
Naphthalene	76	60-140

Container Type: NA - Not Applicable

Surrogates	**%Recovery**	**Method Limits**
1,2-Dichloroethane-d4	101	70-130
Toluene-d8	101	70-130
4-Bromofluorobenzene	93	70-130

Report Date: 06-Mar-2015 07:37

Eurofins Air Toxics Inc.

RECOVERY REPORT

Client Name:
Client SDG: 06Mar2015
Sample Matrix: GAS
Fraction: VOA
Lab Smp Id: LCSD
Client Smp ID: LCSD
Level: LOW
Operator: act
Data Type: MS DATA
SampleType: LCSD
SpikeList File: AT09.spk
Quant Type: ISTD
Sublist File: AT09.sub
Method File: /chem/msde.i/06Mar2015.b/e15l0210b.m
Misc Info: 5.0ppbv (25ppbv)

SPIKE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
4 Dichlorodifluorome	5.000	6.470	129.41	70-130
2 Propylene	5.000	6.281	125.62	60-140
6 Freon 114	5.000	6.151	123.02	70-130
7 Chloromethane	5.000	6.157	123.14	70-130
10 Vinyl Chloride	5.000	6.165	123.29	70-130
11 1,3-Butadiene	5.000	5.618	112.35	70-130
12 Bromomethane	5.000	5.756	115.12	70-130
13 Chloroethane	5.000	5.912	118.24	70-130
16 Trichlorofluoromet	5.000	6.196	123.91	70-130
18 Ethanol	5.000	6.448	128.95	70-130
19 Freon 113	5.000	5.242	104.85	70-130
21 1,1-Dichloroethene	5.000	5.034	100.69	70-130
22 Acetone	5.000	4.886	97.73	70-130
23 Carbon Disulfide	5.000	4.620	92.40	70-130
25 2-Propanol	5.000	5.508	110.16	70-130
26 3-Chloroprene	5.000	5.054	101.09	70-130
29 Methylene Chloride	5.000	5.560	111.20	70-130
31 MTBE	5.000	5.141	102.82	70-130
32 trans-1,2-Dichloro	5.000	4.680	93.61	70-130
35 Hexane	5.000	5.503	110.06	70-130
37 1,1-Dichloroethane	5.000	5.875	117.51	70-130
38 Vinyl Acetate	5.000	4.958	99.17	60-140
41 cis-1,2-Dichloroet	5.000	5.979	119.59	70-130
42 2-Butanone	5.000	5.474	109.47	70-130
44 Tetrahydrofuran	5.000	5.650	113.01	70-130
47 Chloroform	5.000	5.694	113.88	70-130
48 Cyclohexane	5.000	5.328	106.56	70-130
49 1,1,1-Trichloroeth	5.000	6.072	121.44	70-130
51 Carbon Tetrachlori	5.000	4.814	96.28	70-130
52 2,2,4-Trimethylpen	5.000	5.607	112.15	70-130
53 Benzene	5.000	6.090	121.80	70-130
57 Heptane	5.000	6.169	123.38	70-130
56 1,2-Dichloroethane	5.000	6.413	128.25	70-130

SPIKE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
59 Trichloroethene	5.000	5.824	116.49	70-130
61 1,2-Dichloropropan	5.000	6.045	120.91	70-130
62 1,4-Dioxane	5.000	5.245	104.90	70-130
63 Bromodichlorometha	5.000	6.224	124.48	70-130
64 cis-1,3-Dichloropr	5.000	4.933	98.66	70-130
65 4-Methyl-2-pentano	5.000	5.748	114.97	70-130
68 Toluene	5.000	5.865	117.29	70-130
69 trans-1,3-Dichloro	5.000	5.273	105.47	70-130
70 1,1,2-Trichloroeth	5.000	5.839	116.78	70-130
72 2-Hexanone	5.000	5.662	113.24	70-130
71 Tetrachloroethene	5.000	5.470	109.41	70-130
73 Dibromochlorometha	5.000	6.111	122.23	70-130
74 1,2-Dibromoethane	5.000	5.688	113.77	70-130
76 Chlorobenzene	5.000	5.930	118.59	70-130
77 Ethyl Benzene	5.000	5.695	113.91	70-130
80 m,p-Xylene	5.000	5.612	112.24	70-130
81 o-Xylene	5.000	5.786	115.72	70-130
83 Styrene	5.000	5.544	110.87	70-130
84 Bromoform	5.000	5.422	108.45	70-130
85 Cumene	5.000	5.673	113.47	70-130
89 1,1,2,2-Tetrachlor	5.000	6.054	121.07	70-130
90 Propylbenzene	5.000	6.120	122.39	70-130
92 4-Ethyltoluene	5.000	6.433	128.66	70-130
94 1,3,5-Trimethylben	5.000	5.529	110.58	70-130
98 1,2,4-Trimethylben	5.000	5.194	103.89	70-130
101 1,3-Dichlorobenzen	5.000	5.697	113.94	70-130
104 1,4-Dichlorobenzen	5.000	5.521	110.42	70-130
105 alpha-chlorotoluen	5.000	5.620	112.41	70-130
108 1,2-Dichlorobenzen	5.000	5.637	112.74	70-130
112 1,2,4-Trichloroben	5.000	4.252	85.04	70-130
113 Hexachlorobutadien	5.000	4.443	88.86	70-130
114 Naphthalene	0.5000	0.3780	75.59	60-140
14 Isopentane	5.000	5.634	112.69	60-140
9 Butane	5.000	5.287	105.74	60-140
60 Methylcyclohexane	5.000	5.686	113.72	60-140

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 54 1,2-Dichloroethane	5.000	5.056	101.12	70-130
$ 67 Toluene-d8	5.000	5.053	101.06	70-130
$ 87 Bromofluorobenzene	5.000	4.645	92.90	70-130

Eurofins Air Toxics Inc.

EPA TO-15/Modified TO14A

Data file : /chem/msde.i/06Mar2015.b/e030604.d
Lab Smp Id: LCSD Client Smp ID: LCSD
Inj Date : 06-MAR-2015 06:57
Operator : act Inst ID: msde.i
Smp Info : 50mL #2687-177A; LCSD; LCSD
Misc Info : 5.0ppbv (25ppbv)
Comment : Low-Level/GC-MS
Method : /chem/msde.i/06Mar2015.b/e15l0210b.m
Meth Date : 06-Mar-2015 06:56 atoyama Quant Type: ISTD
Cal Date : 02-MAR-2015 15:11 Cal File: e030209.d
Als bottle: 1 QC Sample: LCSD
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT09.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
* 46 Bromochloromethane						CAS #: 74-97-5	
15.611	15.610 (1.000)	130	206749	5.00000		80.00- 120.00	100.00
15.611	15.610 (1.000)	128	163886			0.00- 30.00	79.27
15.611	15.610 (1.000)	49	295308			0.00- 30.00	142.83
* 58 1,4-Difluorobenzene						CAS #: 540-36-3	
16.987	16.987 (1.000)	114	778135	5.00000		80.00- 120.00	100.00
16.987	16.987 (1.000)	88	107393			0.00- 30.00	13.80
* 75 Chlorobenzene-d5						CAS #: 3114-55-4	
22.407	22.407 (1.000)	117	724047	5.00000		80.00- 120.00	100.00
22.386	22.407 (1.000)	82	336076			0.00- 30.00	46.42
$ 54 1,2-Dichloroethane-d4						CAS #: 17060-07-0	
16.433	16.433 (1.053)	65	220521	5.05607	5.056	80.00- 120.00	100.00
16.433	16.433 (1.053)	67	120111			25.66- 85.66	54.47

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
$ 67 Toluene-d8					CAS #: 2037-26-5		
19.624	19.623 (1.155)	98	744176	5.05306	5.053	80.00- 120.00	100.00
19.624	19.623 (1.155)	70	73642			0.00- 39.92	9.90
19.624	19.623 (1.155)	100	498031			36.14- 96.14	66.92
$ 87 Bromofluorobenzene					CAS #: 460-00-4		
24.042	24.042 (1.073)	174	389039	4.64498	4.645	80.00- 120.00	100.00
24.042	24.042 (1.073)	95	466696			81.46- 141.46	119.96
24.042	24.042 (1.073)	176	377912			67.17- 127.17	97.14
2 Propylene					CAS #: 115-07-1		
5.046	5.045 (0.323)	41	206735	6.28100	6.281	80.00- 120.00	100.00
5.070	5.045 (0.325)	42	138166			35.75- 95.75	66.83
5.046	5.045 (0.323)	39	141572			39.85- 99.85	68.48
4 Dichlorodifluoromethane/Fr12					CAS #: 75-71-8		
5.504	5.503 (0.353)	85	724316	6.47030	6.470	80.00- 120.00	100.00
5.504	5.503 (0.353)	87	227795			3.28- 63.28	31.45
6 Freon 114					CAS #: 76-14-2		
6.853	6.829 (0.439)	135	669784	6.15104	6.151	80.00- 120.00	100.00
6.829	6.829 (0.437)	137	214063			2.37- 62.37	31.96
7 Chloromethane					CAS #: 74-87-3		
7.191	7.191 (0.461)	50	264432	6.15683	6.157	80.00- 120.00	100.00
7.167	7.191 (0.459)	52	88149			3.09- 63.09	33.34
9 Butane					CAS #: 106-97-8		
7.889	7.889 (0.505)	58	54269	5.28708	5.287	80.00- 120.00	100.00
7.889	7.889 (0.505)	43	425150			706.28- 766.28	783.41
10 Vinyl Chloride					CAS #: 75-01-4		
8.045	8.045 (0.515)	62	279932	6.16472	6.165	80.00- 120.00	100.00
8.045	8.045 (0.515)	64	88972			1.76- 61.76	31.78
11 1,3-Butadiene					CAS #: 106-99-0		
8.271	8.271 (0.530)	54	217668	5.61768	5.618	80.00- 120.00	100.00
8.271	8.271 (0.530)	39	198807			61.78- 121.78	91.33
12 Bromomethane					CAS #: 74-83-9		
9.746	9.746 (0.624)	94	237912	5.75591	5.756	80.00- 120.00	100.00
9.746	9.746 (0.624)	96	223500			62.88- 122.88	93.94
13 Chloroethane					CAS #: 75-00-3		
10.214	10.214 (0.654)	64	133857	5.91187	5.912	80.00- 120.00	100.00
10.214	10.214 (0.654)	49	36055			0.00- 56.27	26.94

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
13 Chloroethane (continued)							
10.214	10.214 (0.654)	66	41193			1.65- 61.65	30.77
14 Isopentane					CAS #: 78-78-4		
10.348	10.347 (0.663)	57	218026	5.63428	5.634	80.00- 120.00	100.00
10.348	10.347 (0.663)	43	325494			114.02- 174.02	149.29
10.348	10.347 (0.663)	42	280452			91.28- 151.28	128.63
16 Trichlorofluoromethane/Fr11					CAS #: 75-69-4		
10.976	10.976 (0.703)	101	726500	6.19555	6.196	80.00- 120.00	100.00
10.976	10.976 (0.703)	103	473963			35.41- 95.41	65.24
18 Ethanol					CAS #: 64-17-5		
11.871	11.890 (0.760)	45	122929	6.44764	6.448	80.00- 120.00	100.00
11.871	11.890 (0.760)	46	47563			7.33- 67.33	38.69
11.871	11.890 (0.760)	43	26405			0.00- 51.69	21.48
21 1,1-Dichloroethene					CAS #: 75-35-4		
12.309	12.309 (0.788)	98	177597	5.03453	5.034	80.00- 120.00	100.00
12.309	12.309 (0.788)	61	444509			204.24- 264.24	250.29
12.309	12.309 (0.788)	96	287518			126.62- 186.62	161.89
19 Freon 113					CAS #: 76-13-1		
12.290	12.290 (0.787)	151	563759	5.24243	5.242	80.00- 120.00	100.00
12.290	12.290 (0.787)	153	356610			34.79- 94.79	63.26
12.290	12.290 (0.787)	101	641912			79.87- 139.87	113.86
22 Acetone					CAS #: 67-64-1		
12.576	12.575 (0.806)	58	143276	4.88644	4.886	80.00- 120.00	100.00
12.576	12.575 (0.806)	43	433156			255.02- 315.02	302.32
23 Carbon Disulfide					CAS #: 75-15-0		
12.671	12.671 (0.812)	76	726964	4.62014	4.620	80.00- 120.00	100.00
26 3-Chloroprene					CAS #: 107-05-1		
13.090	13.109 (0.839)	76	108400	5.05429	5.054	80.00- 120.00	100.00
13.090	13.109 (0.839)	41	331509			249.93- 309.93	305.82
25 2-Propanol					CAS #: 67-63-0		
12.919	12.918 (0.828)	45	472511	5.50784	5.508	80.00- 120.00	100.00
12.919	12.918 (0.828)	43	95766			0.00- 47.09	20.27
12.919	12.918 (0.828)	59	19926			0.00- 34.17	4.22
29 Methylene Chloride					CAS #: 75-09-2		
13.376	13.375 (0.857)	84	246883	5.55991	5.560	80.00- 120.00	100.00
13.376	13.375 (0.857)	49	337008			98.36- 158.36	136.51

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
29 Methylene Chloride (continued)							
13.376	13.375 (0.857)	51	105085			9.23- 69.23	42.56
31 MTBE					CAS #: 1634-04-4		
13.701	13.701 (0.878)	73	696331	5.14077	5.141	80.00- 120.00	100.00
13.701	13.701 (0.878)	57	178122			0.00- 54.71	25.58
13.701	13.701 (0.878)	41	172259			0.00- 51.20	24.74
32 trans-1,2-Dichloroethene					CAS #: 156-60-5		
13.756	13.756 (0.881)	98	173930	4.68053	4.680	80.00- 120.00	100.00
13.756	13.756 (0.881)	61	371916			180.76- 240.76	213.83
13.756	13.756 (0.881)	96	267161			126.52- 186.52	153.60
35 Hexane					CAS #: 110-54-3		
14.031	14.030 (0.899)	57	463235	5.50312	5.503	80.00- 120.00	100.00
14.031	14.030 (0.899)	43	307128			32.32- 92.32	66.30
14.031	14.030 (0.899)	86	68460			0.00- 46.22	14.78
37 1,1-Dichloroethane					CAS #: 75-34-3		
14.442	14.442 (0.925)	63	531133	5.87532	5.875	80.00- 120.00	100.00
14.442	14.442 (0.925)	65	170341			1.72- 61.72	32.07
38 Vinyl Acetate					CAS #: 108-05-4		
14.470	14.470 (0.927)	86	73666	4.95853	4.958	80.00- 120.00	100.00
14.470	14.470 (0.927)	42	65065			45.78- 105.78	88.32
14.470	14.470 (0.927)	43	797731			1023.67-1083.67	1082.90
41 cis-1,2-Dichloroethene					CAS #: 156-59-2		
15.278	15.278 (0.979)	98	227682	5.97948	5.979	80.00- 120.00	100.00
15.278	15.278 (0.979)	61	447670			160.54- 220.54	196.62
15.278	15.278 (0.979)	96	351336			126.05- 186.05	154.31
42 2-Butanone					CAS #: 78-93-3		
15.259	15.259 (0.977)	72	136499	5.47372	5.474	80.00- 120.00	100.00
15.259	15.259 (0.977)	43	582798			374.35- 434.35	426.96
15.259	15.259 (0.977)	57	45236			4.18- 64.18	33.14
44 Tetrahydrofuran					CAS #: 109-99-9		
15.611	15.610 (1.000)	42	334286	5.65048	5.650	80.00- 120.00	100.00
15.611	15.610 (1.000)	71	115920			9.38- 69.38	34.68
15.611	15.610 (1.000)	72	123950			11.73- 71.73	37.08
47 Chloroform					CAS #: 67-66-3		
15.672	15.672 (1.004)	83	602395	5.69391	5.694	80.00- 120.00	100.00
15.672	15.672 (1.004)	85	399954			36.28- 96.28	66.39

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
48 Cyclohexane					CAS #: 110-82-7		
15.919	15.919 (1.020)	84	389567	5.32803	5.328	80.00- 120.00	100.00
15.919	15.919 (1.020)	56	493401			94.44- 154.44	126.65
15.919	15.919 (1.020)	41	253158			32.54- 92.54	64.98
49 1,1,1-Trichloroethane					CAS #: 71-55-6		
15.919	15.919 (1.020)	97	653831	6.07211	6.072	80.00- 120.00	100.00
15.919	15.919 (1.020)	99	418067			34.78- 94.78	63.94
51 Carbon Tetrachloride					CAS #: 56-23-5		
16.104	16.104 (1.032)	119	461237	4.81424	4.814	80.00- 120.00	100.00
16.104	16.104 (1.032)	117	482381			73.51- 133.51	104.58
52 2,2,4-Trimethylpentane					CAS #: 540-84-1		
16.361	16.361 (1.048)	56	698601	5.60738	5.607	80.00- 120.00	100.00
16.361	16.361 (1.048)	57	2077604			271.28- 331.28	297.39
16.361	16.361 (1.048)	41	517275			42.90- 102.90	74.04
53 Benzene					CAS #: 71-43-2		
16.433	16.433 (0.967)	78	920790	6.08986	6.090	80.00- 120.00	100.00
16.433	16.433 (0.967)	77	216609			0.00- 53.40	23.52
56 1,2-Dichloroethane					CAS #: 107-06-2		
16.554	16.553 (0.974)	62	376608	6.41270	6.413	80.00- 120.00	100.00
16.554	16.553 (0.974)	64	127027			2.30- 62.30	33.73
57 Heptane					CAS #: 142-82-5		
16.578	16.578 (0.976)	57	307287	6.16902	6.169	80.00- 120.00	100.00
16.578	16.578 (0.976)	100	122409			12.62- 72.62	39.84
16.578	16.578 (0.976)	43	558393			155.09- 215.09	181.72
59 Trichloroethene					CAS #: 79-01-6		
17.397	17.397 (1.024)	130	497345	5.82457	5.824	80.00- 120.00	100.00
17.397	17.397 (1.024)	95	423221			55.70- 115.70	85.10
17.397	17.397 (1.024)	97	277750			24.95- 84.95	55.85
60 Methylcyclohexane					CAS #: 108-87-2		
17.614	17.614 (1.037)	83	514745	5.68592	5.686	80.00- 120.00	100.00
17.614	17.614 (1.037)	55	443628			50.32- 110.32	86.18
17.614	17.614 (1.037)	56	146322			0.00- 56.36	28.43
61 1,2-Dichloropropane					CAS #: 78-87-5		
17.855	17.855 (1.051)	63	346896	6.04546	6.045	80.00- 120.00	100.00
17.855	17.855 (1.051)	62	243290			38.47- 98.47	70.13
17.855	17.855 (1.051)	41	176705			15.66- 75.66	50.94

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
62 1,4-Dioxane					CAS #: 123-91-1		
17.975	17.975 (1.058)	88	216586	5.24510	5.245	80.00- 120.00	100.00
17.975	17.975 (1.058)	58	156464			38.94- 98.94	72.24
17.975	17.975 (1.058)	57	51411			0.00- 51.60	23.74
63 Bromodichloromethane					CAS #: 75-27-4		
18.289	18.288 (1.077)	83	637948	6.22386	6.224	80.00- 120.00	100.00
18.289	18.288 (1.077)	85	428433			35.77- 95.77	67.16
64 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
19.131	19.130 (1.126)	75	458583	4.93309	4.933	80.00- 120.00	100.00
19.131	19.130 (1.126)	77	151067			2.36- 62.36	32.94
19.131	19.130 (1.126)	39	203456			12.85- 72.85	44.37
65 4-Methyl-2-pentanone					CAS #: 108-10-1		
19.310	19.310 (1.137)	43	693101	5.74830	5.748	80.00- 120.00	100.00
19.310	19.310 (1.137)	58	268038			10.53- 70.53	38.67
19.332	19.310 (1.138)	85	109574			0.00- 48.12	15.81
68 Toluene					CAS #: 108-88-3		
19.758	19.758 (1.163)	91	1095286	5.86465	5.865	80.00- 120.00	100.00
19.758	19.758 (1.163)	92	640813			28.42- 88.42	58.51
69 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
20.331	20.331 (0.907)	75	433837	5.27340	5.273	80.00- 120.00	100.00
20.331	20.331 (0.907)	77	149549			2.22- 62.22	34.47
20.331	20.331 (0.907)	39	195294			11.81- 71.81	45.02
70 1,1,2-Trichloroethane					CAS #: 79-00-5		
20.743	20.743 (0.926)	97	410018	5.83911	5.839	80.00- 120.00	100.00
20.743	20.743 (0.926)	99	255964			33.38- 93.38	62.43
20.743	20.743 (0.926)	83	331078			52.87- 112.87	80.75
71 Tetrachloroethene					CAS #: 127-18-4		
20.908	20.908 (0.933)	166	573761	5.47027	5.470	80.00- 120.00	100.00
20.908	20.908 (0.933)	129	481688			46.60- 106.60	83.95
20.908	20.908 (0.933)	131	466309			44.27- 104.27	81.27
72 2-Hexanone					CAS #: 591-78-6		
21.073	21.073 (0.940)	58	371553	5.66212	5.662	80.00- 120.00	100.00
21.073	21.073 (0.940)	43	680520			145.57- 205.57	183.16
21.073	21.073 (0.940)	100	78698			0.00- 51.87	21.18
73 Dibromochloromethane					CAS #: 124-48-1		
21.458	21.457 (0.958)	129	824062	6.11129	6.111	80.00- 120.00	100.00
21.458	21.457 (0.958)	127	632167			46.84- 106.84	76.71

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
74 1,2-Dibromoethane					CAS #: 106-93-4		
21.732	21.732 (0.970)	107	654847	5.68830	5.688	80.00- 120.00	100.00
21.732	21.732 (0.970)	109	645677			67.60- 127.60	98.60
76 Chlorobenzene					CAS #: 108-90-7		
22.449	22.448 (1.002)	112	985208	5.92961	5.930	80.00- 120.00	100.00
22.449	22.448 (1.002)	114	318128			2.32- 62.32	32.29
22.449	22.448 (1.002)	77	502664			22.98- 82.98	51.02
77 Ethyl Benzene					CAS #: 100-41-4		
22.511	22.511 (1.005)	106	463508	5.69545	5.695	80.00- 120.00	100.00
22.511	22.511 (1.005)	91	1377916			268.64- 328.64	297.28
80 m,p-Xylene					CAS #: 108-38-3		
22.697	22.697 (1.013)	106	557771	5.61195	5.612	80.00- 120.00	100.00
22.697	22.697 (1.013)	91	1051334			156.41- 216.41	188.49
81 o-Xylene					CAS #: 95-47-6		
23.299	23.298 (1.040)	106	531538	5.78620	5.786	80.00- 120.00	100.00
23.299	23.298 (1.040)	91	1033051			167.80- 227.80	194.35
83 Styrene					CAS #: 100-42-5		
23.319	23.319 (1.041)	104	883708	5.54370	5.544	80.00- 120.00	100.00
23.319	23.319 (1.041)	78	389986			12.84- 72.84	44.13
84 Bromoform					CAS #: 75-25-2		
23.661	23.661 (1.056)	173	704208	5.42254	5.422	80.00- 120.00	100.00
23.661	23.661 (1.056)	171	372530			22.25- 82.25	52.90
85 Cumene					CAS #: 98-82-8		
23.751	23.751 (1.060)	105	1620334	5.67328	5.673	80.00- 120.00	100.00
23.751	23.751 (1.060)	120	466670			0.00- 58.98	28.80
89 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
24.222	24.222 (1.081)	83	838191	6.05372	6.054	80.00- 120.00	100.00
24.222	24.222 (1.081)	85	565484			36.27- 96.27	67.46
90 Propylbenzene					CAS #: 103-65-1		
24.289	24.289 (1.084)	91	1848938	6.11950	6.120	80.00- 120.00	100.00
24.289	24.289 (1.084)	120	484712			0.00- 56.53	26.22
92 4-Ethyltoluene					CAS #: 622-96-8		
24.424	24.424 (1.090)	105	1681551	6.43315	6.433	80.00- 120.00	100.00
24.424	24.424 (1.090)	120	551965			1.72- 61.72	32.82
94 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
24.491	24.491 (1.093)	105	1244154	5.52876	5.529	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
94 1,3,5-Trimethylbenzene (continued)							
24.491	24.491 (1.093)	120	658928			22.29- 82.29	52.96
98 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
24.962	24.962 (1.114)	105	1064657	5.19428	5.194	80.00- 120.00	100.00
24.962	24.962 (1.114)	120	530954			19.10- 79.10	49.87
101 1,3-Dichlorobenzene					CAS #: 541-73-1		
25.343	25.343 (1.131)	146	958412	5.69688	5.697	80.00- 120.00	100.00
25.343	25.343 (1.131)	148	593919			32.23- 92.23	61.97
25.343	25.343 (1.131)	111	362800			6.65- 66.65	37.85
104 1,4-Dichlorobenzene					CAS #: 106-46-7		
25.455	25.455 (1.136)	146	921502	5.52079	5.521	80.00- 120.00	100.00
25.455	25.455 (1.136)	148	579680			32.94- 92.94	62.91
25.455	25.455 (1.136)	111	337085			5.31- 65.31	36.58
105 alpha-chlorotoluene					CAS #: 100-44-7		
25.590	25.589 (1.142)	91	1096823	5.62044	5.620	80.00- 120.00	100.00
25.590	25.589 (1.142)	126	270546			0.00- 55.78	24.67
108 1,2-Dichlorobenzene					CAS #: 95-50-1		
25.881	25.881 (1.155)	146	867615	5.63679	5.637	80.00- 120.00	100.00
25.881	25.881 (1.155)	148	544645			32.48- 92.48	62.77
25.881	25.881 (1.155)	111	334071			7.93- 67.93	38.50
112 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
27.630	27.629 (1.233)	180	456587	4.25203	4.252	80.00- 120.00	100.00
27.630	27.629 (1.233)	182	433824			66.76- 126.76	95.01
113 Hexachlorobutadiene					CAS #: 87-68-3		
27.719	27.719 (1.237)	225	371447	4.44322	4.443	80.00- 120.00	100.00
27.719	27.719 (1.237)	223	240749			32.55- 92.55	64.81
114 Naphthalene					CAS #: 91-20-3		
27.966	27.966 (1.248)	128	68461	0.37796	0.3780	80.00- 120.00	100.00(a)
27.966	27.966 (1.248)	127	9889			0.00- 42.43	14.44

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: msde.i
Lab File ID: e030604.d
Lab Smp Id: LCSD
Analysis Type: VOA
Quant Type: ISTD
Operator: act
Method File: /chem/msde.i/06Mar2015.b/e15l0210b.m
Misc Info: 5.0ppbv (25ppbv)

Calibration Date: 06-MAR-2015
Calibration Time: 05:31
Client Smp ID: LCSD
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
46 Bromochloromethan	236898	142139	331657	206749	-12.73
58 1,4-Difluorobenze	878027	526816	1229238	778135	-11.38
75 Chlorobenzene-d5	818204	490922	1145486	724047	-11.51

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
46 Bromochloromethan	15.61	15.28	15.94	15.61	0.00
58 1,4-Difluorobenze	16.99	16.66	17.32	16.99	0.00
75 Chlorobenzene-d5	22.41	22.08	22.74	22.41	0.00

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

Data File: /chem/msde.i/06Mar2015.b/e030604.d

Date : 06-MAR-2015 06:57

Client ID: LCSD

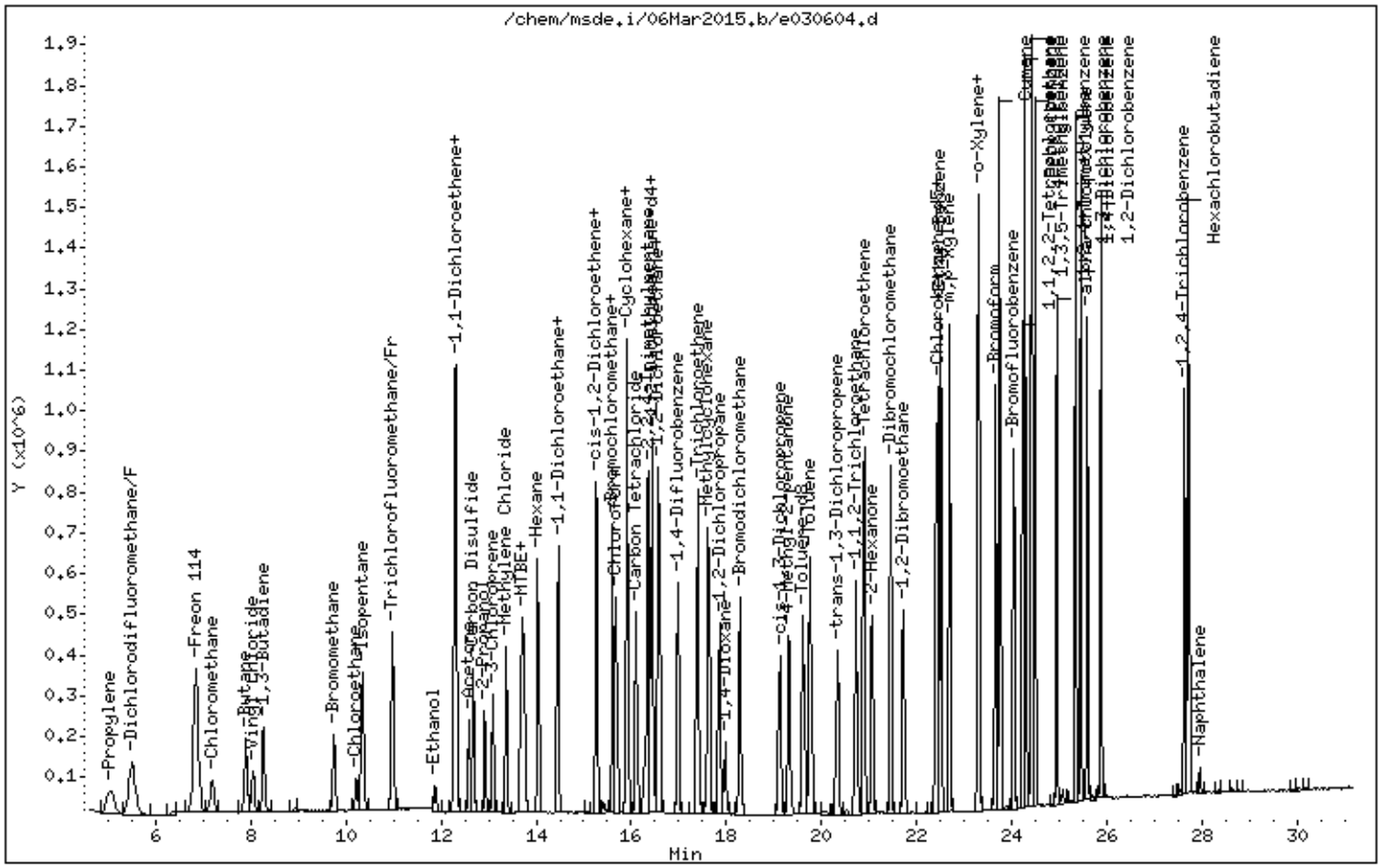
Instrument: msde.i

Sample Info: 50mL #2687-177A; LCSD; LCSD

Operator: act

Column phase: RTx-624

Column diameter: 0.32



Eurofins Air Toxics, Inc. **MSD-E** **Logbook #2707**

BFB Verification of 176/174 m/z Ratio: (1232608/1269845) X100= 97.07%	
Tekmar Purge Flow: NA	
Vacuum: 9.48 X10⁻⁶	

IS/S Std. #:	2716-61	Exp. Date:	5/9/15
BCM LL.	236898	SIM.	247542
1,4-DFB	878027		983470
CB-d5	818204		909606

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

File ID:	E030602
Compound:	Tol-d8
Initials:	ACT

Calculation Check:

ppbv of compound = $\frac{\text{Area}_{\text{Sample}}}{\text{Area}_{\text{IS}}} \times \frac{\text{Conc}_{\text{IS}}}{\text{RRF}}$ = (845348) x (5.000) = 5.087
(878027) (0.94632)

SOP# (Circle one): 6 / 83 / 38 / 91 / 109 Method (Circle one): TO-14A/TO-15/TO-17 Reported Result: 5.087

Method Name: EPA 0210B/EPA 0210A

	Use	File	Lab ID#	Can#	Pressure	Amt. Loaded	DF	Loaded By Initials	Date Analyzed	Time Analyzed	Reviewed By Initials	Comments/Standard Expiration Date
1	✓	E030601	BFB Tune Check	2299-741	50ng	20µl	1.00	ACT	3/6/15	0507	ACT	
2	✓	02	CCV (25ppbv)	2687-244A	5.0ppbv	50mL	↓	ACT	↓	0531	ACT	3/6/15 ACT ~~EE~~ Exp 4/6/15 Ø out
3	✓	03	LCS ↓	2687-177A	↓	↓	↓	ACT	↓	0615	ACT	3/6/15 ACT ~~LCS~~ Exp 3/19/15 LL. 1 OUT SIM. Ø out
4	✓	04	LCSD	↓	↓	↓	↓	ACT	↓	0657	ACT	↓
5	✓	05	Lab Blank	34034	Humid	250mL	↓	ACT	↓	0738	SB	
6	✓	06	Lab Blank	34034	Humid	250mL	↓	SB	↓	0828	SB	
7	✓	07	1502426-01A	5746	7.0"Hg-5psi	250mL	1.75	SB	↓	0935	SB	"E" Ethanol
8	✓	08	1503058A-01A	34188	0.8"Hg-4.9psi	250mL	1.37	SB	↓	1032	SB	
9	✓	09	↓ 02A	94305	4.3"Hg-5psi	100mL	3.90	SB	↓	1117	SB	"E" 2-Propanol | Dil TO
10	✓	10	03A	34011	4.9"Hg-4.9psi	150mL	2.65	SB	↓	1205	SB	↓
11	✓	11	↓ 04A	35132	5.5"Hg-4.9psi	150mL	2.72	SB	↓	1257	SB	↓
12	✓	12	1502438-08A	35166	4.9"Hg-4.8psi	250mL	1.58	SB	↓	1352	SB	"E" NTC
13	C	13	1503058A-03A	34011	4.9"Hg-4.9psi	150mL	2.65	SB	↓	1435	SB	"E" 2 Propanol
14	✓	14	1502438-07A	34317	3.9"Hg-4.9psi	250mL	1.53	SB	↓	1518	SB	"E" NTC

Reviewed 3/6/15 Date

Eurofins Air Toxics Inc.

Data file : /var/chem/msde.i/10Feb2015.b/e021001.d
Lab Smp Id: BFB Client Smp ID: BFB
Inj Date : 10-FEB-2015 11:48
Operator : act Inst ID: msde.i
Smp Info : 2uL #2299-791; BFB; BFB
Misc Info : 50ng
Comment :
Method : /var/chem/msde.i/10Feb2015.b/bfb60.m
Meth Date : 10-Feb-2015 12:04 Quant Type: ESTD
Cal Date : Cal File:
Als bottle: 1 QC Sample: BFB
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.50 Sample Matrix: WATER
Processing Host: eeyore

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

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

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	MASS	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/L)	TARGET RANGE	RATIO
1 bfb							CAS #: 460-00-4	
6.204	6.235	-0.031	95	1572806			100.00- 100.00	100.00
6.204	6.235	-0.031	50	249492			8.00- 40.00	15.86
6.204	6.235	-0.031	75	657466			30.00- 66.00	41.80
6.204	6.235	-0.031	96	102553			5.00- 9.00	6.52
6.204	6.235	-0.031	173	10494			0.00- 1.99	0.79
6.204	6.235	-0.031	174	1320944			50.00- 120.00	83.99
6.204	6.235	-0.031	175	96148			4.00- 9.00	7.28
6.204	6.235	-0.031	176	1295172			93.00- 101.00	98.05
6.204	6.235	-0.031	177	84718			5.00- 9.00	6.54

Data File: /var/chem/msde.i/10Feb2015.b/e021001.d

Date : 10-FEB-2015 11:48

Client ID: BFB

Instrument: msde.i

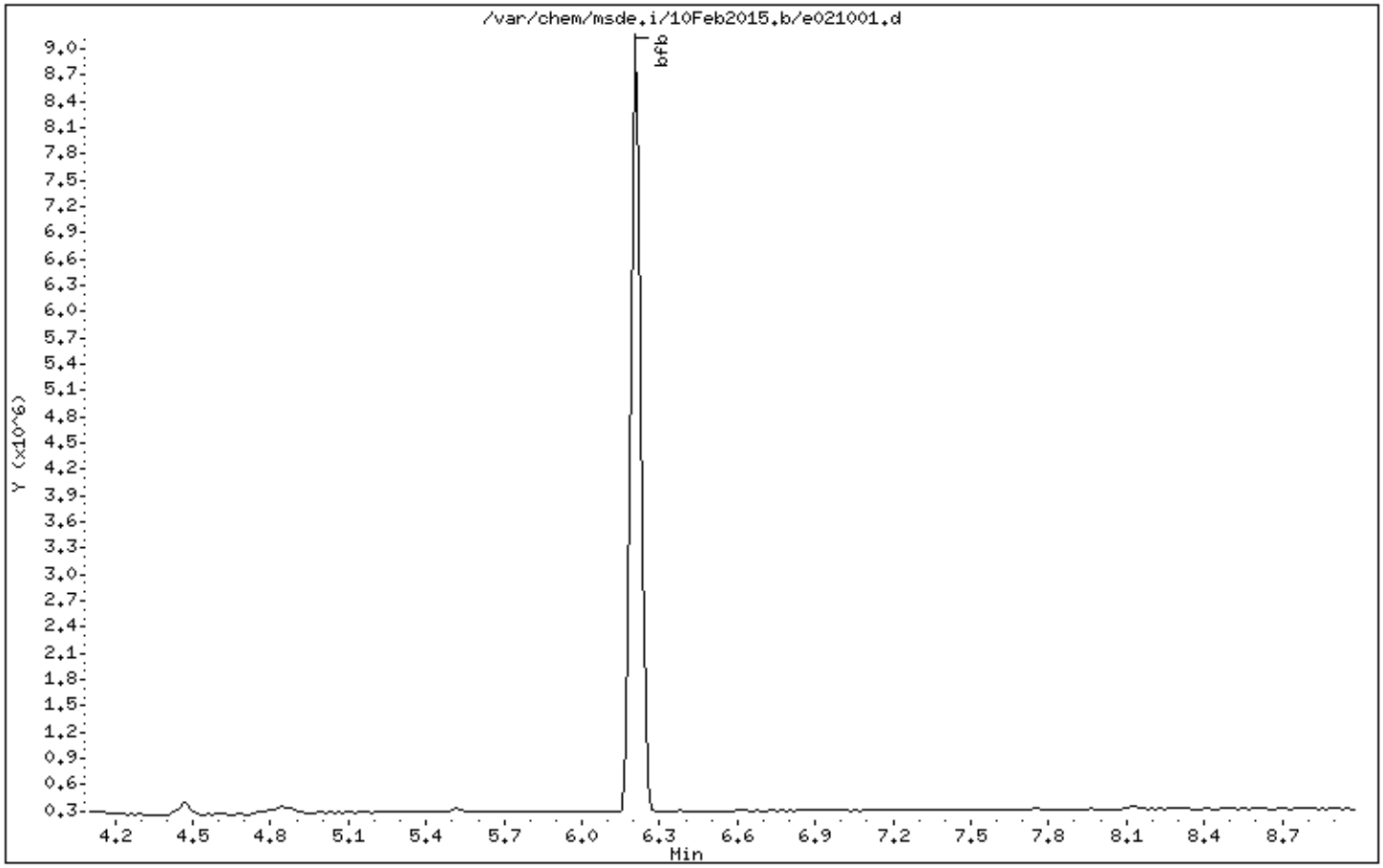
Sample Info: 2uL #2299-791; BFB; BFB

Volume Injected (uL): 1.0

Operator: act

Column phase: Rtx-624

Column diameter: 2.00



Data File: /var/chem/msde.i/10Feb2015.b/e021001.d

Date : 10-FEB-2015 11:48

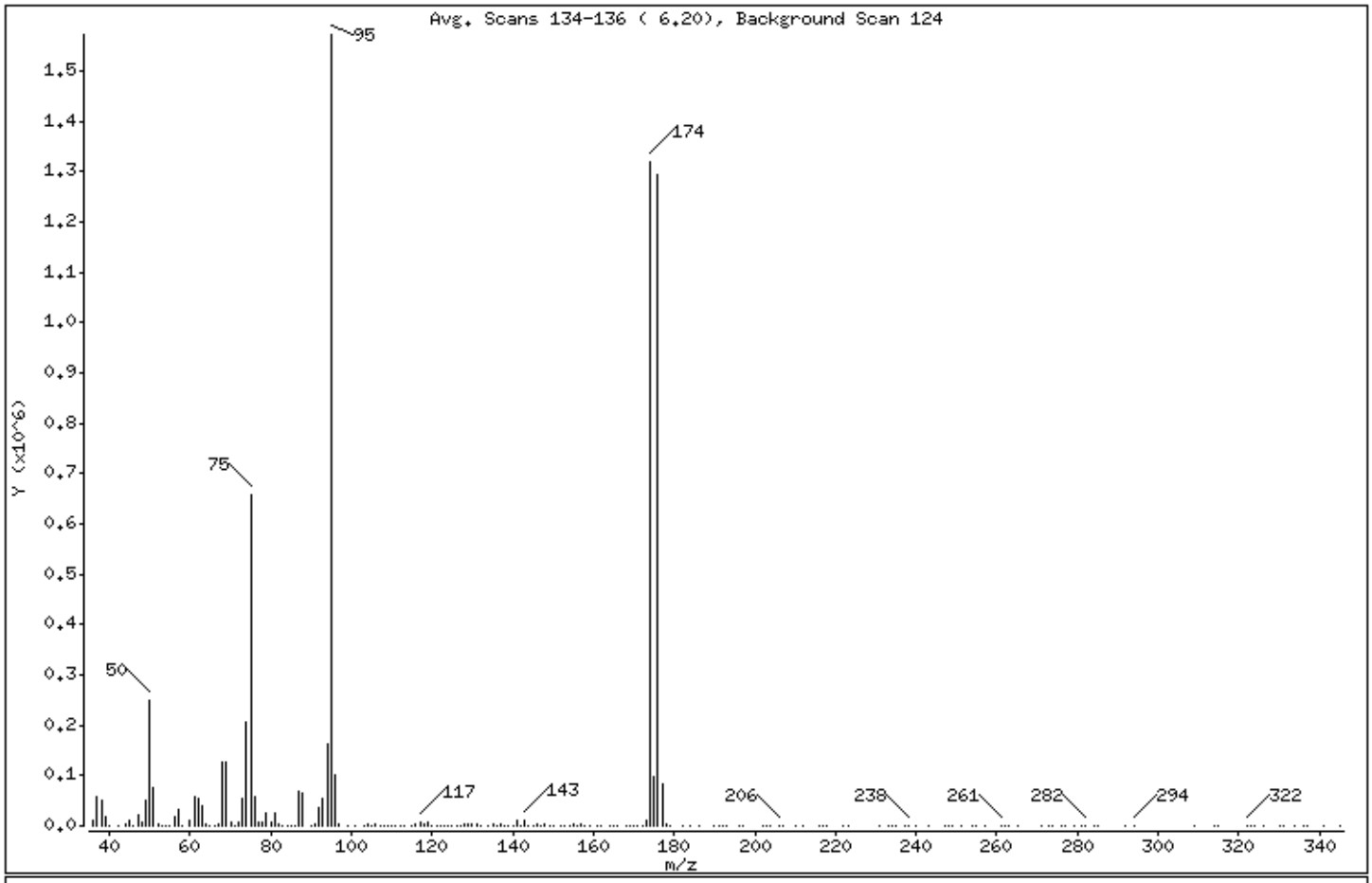
Client ID: BFB Instrument: msde.i

Sample Info: 2uL #2299-791; BFB; BFB

Volume Injected (uL): 1.0 Operator: act

Column phase: Rtx-624 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	15.86
75	30.00 - 66.00% of mass 95	41.80
96	5.00 - 9.00% of mass 95	6.52
173	Less than 1.99% of mass 174	0.67 (0.79)
174	50.00 - 120.00% of mass 95	83.99
175	4.00 - 9.00% of mass 174	6.11 (7.28)
176	93.00 - 101.00% of mass 174	82.35 (98.05)
177	5.00 - 9.00% of mass 176	5.39 (6.54)

Data File: /var/chem/msde.i/10Feb2015.b/e021001.d

Date : 10-FEB-2015 11:48

Client ID: BFB

Instrument: msde.i

Sample Info: 2uL #2299-791; BFB; BFB

Volume Injected (uL): 1.0

Operator: act

Column phase: Rtx-624

Column diameter: 2.00

Data File: e021001.d
Spectrum: Avg. Scans 134-136 (6.20), Background Scan 124
Location of Maximum: 95.00
Number of points: 197

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	10246	90.00	140	145.00	245	222.00	73
37.00	57240	91.00	4149	146.00	2711	223.00	59
38.00	49320	92.00	36360	147.00	984	231.00	12
39.00	18720	93.00	55664	148.00	3320	233.00	58
40.00	157	94.00	162112	149.00	996	234.00	18
42.00	96	95.00	1572352	150.00	1387	235.00	55
44.00	4436	96.00	102552	152.00	689	237.00	85
45.00	10282	97.00	3224	153.00	889	238.00	169
46.00	663	99.00	92	154.00	1221	240.00	42
47.00	21280	101.00	150	155.00	3519	243.00	34
48.00	7745	103.00	579	156.00	657	247.00	5
49.00	51648	104.00	4972	157.00	2555	248.00	166
50.00	249472	105.00	1265	158.00	310	249.00	31
51.00	76016	106.00	5135	159.00	1745	251.00	100
52.00	3173	107.00	1447	161.00	1429	254.00	83
53.00	358	108.00	206	162.00	87	255.00	105
54.00	136	109.00	727	164.00	71	257.00	15
55.00	1784	110.00	641	165.00	284	261.00	300
56.00	17360	111.00	702	166.00	200	262.00	175
57.00	32408	112.00	492	168.00	244	263.00	162
58.00	1624	113.00	697	169.00	93	265.00	165
60.00	10859	115.00	1217	170.00	195	271.00	50
61.00	56600	116.00	4571	171.00	97	273.00	39
62.00	55672	117.00	7487	172.00	523	274.00	38
63.00	40456	118.00	4311	173.00	10494	276.00	82
64.00	3381	119.00	6623	174.00	1320448	277.00	52
65.00	348	120.00	318	175.00	96144	279.00	41
66.00	141	121.00	39	176.00	1294848	281.00	91
67.00	3315	122.00	302	177.00	84712	282.00	95
68.00	125560	123.00	100	178.00	2158	284.00	89
69.00	127920	124.00	864	179.00	19	285.00	10
70.00	8705	125.00	296	182.00	13	292.00	14
71.00	394	126.00	819	184.00	101	294.00	101
72.00	6484	127.00	89	186.00	11	309.00	11
73.00	53248	128.00	4913	190.00	36	314.00	71

Data File: /var/chem/msde.i/10Feb2015.b/e021001.d

Date : 10-FEB-2015 11:48

Client ID: BFB

Instrument: msde.i

Sample Info: 2uL #2299-791; BFB; BFB

Volume Injected (uL): 1.0

Operator: act

Column phase: Rtx-624

Column diameter: 2.00

Data File: e021001.d
Spectrum: Avg. Scans 134-136 (6.20), Background Scan 124
Location of Maximum: 95.00
Number of points: 197

m/z	Y	m/z	Y	m/z	Y	m/z	Y
74.00	205056	129.00	2269	191.00	305	315.00	54
75.00	657408	130.00	5241	192.00	7	322.00	290
76.00	56512	131.00	2185	193.00	42	323.00	116
77.00	7851	132.00	293	196.00	88	324.00	47
78.00	6107	134.00	267	197.00	78	326.00	51
79.00	26776	135.00	2023	202.00	112	330.00	80
80.00	7653	136.00	260	203.00	11	331.00	92
81.00	27104	137.00	2294	204.00	53	334.00	42
82.00	5389	138.00	352	206.00	323	336.00	94
83.00	717	139.00	287	207.00	165	337.00	44
84.00	75	140.00	614	210.00	166	341.00	43
85.00	205	141.00	11685	212.00	41	345.00	58
86.00	1557	142.00	1573	216.00	38		
87.00	67280	143.00	12367	217.00	44		
88.00	64264	144.00	785	218.00	22		

Eurofins Air Toxics Inc.

Data file : /var/chem/msde.i/02Mar2015.b/e030201.d
Lab Smp Id: BFB Client Smp ID: BFB
Inj Date : 02-MAR-2015 07:51
Operator : ef Inst ID: msde.i
Smp Info : 2uL #2299-791; BFB; BFB
Misc Info : 50ng
Comment :
Method : /var/chem/msde.i/02Mar2015.b/bfb60.m
Meth Date : 02-Mar-2015 08:08 Quant Type: ESTD
Cal Date : Cal File:
Als bottle: 1 QC Sample: BFB
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.50 Sample Matrix: WATER
Processing Host: eeyore

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

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

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	MASS	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/L)	TARGET RANGE	RATIO
1 bfb							CAS #: 460-00-4	
6.235	6.235	0.000	95	912021			100.00- 100.00	100.00
6.235	6.235	0.000	50	153773			8.00- 40.00	16.86
6.235	6.235	0.000	75	390240			30.00- 66.00	42.79
6.235	6.235	0.000	96	59184			5.00- 9.00	6.49
6.235	6.235	0.000	173	6669			0.00- 1.99	0.89
6.235	6.235	0.000	174	753408			50.00- 120.00	82.61
6.235	6.235	0.000	175	55496			4.00- 9.00	7.37
6.235	6.235	0.000	176	734016			93.00- 101.00	97.43
6.235	6.235	0.000	177	46617			5.00- 9.00	6.35

Data File: /var/chem/msde.i/02Mar2015.b/e030201.d

Date : 02-MAR-2015 07:51

Client ID: BFB

Instrument: msde.i

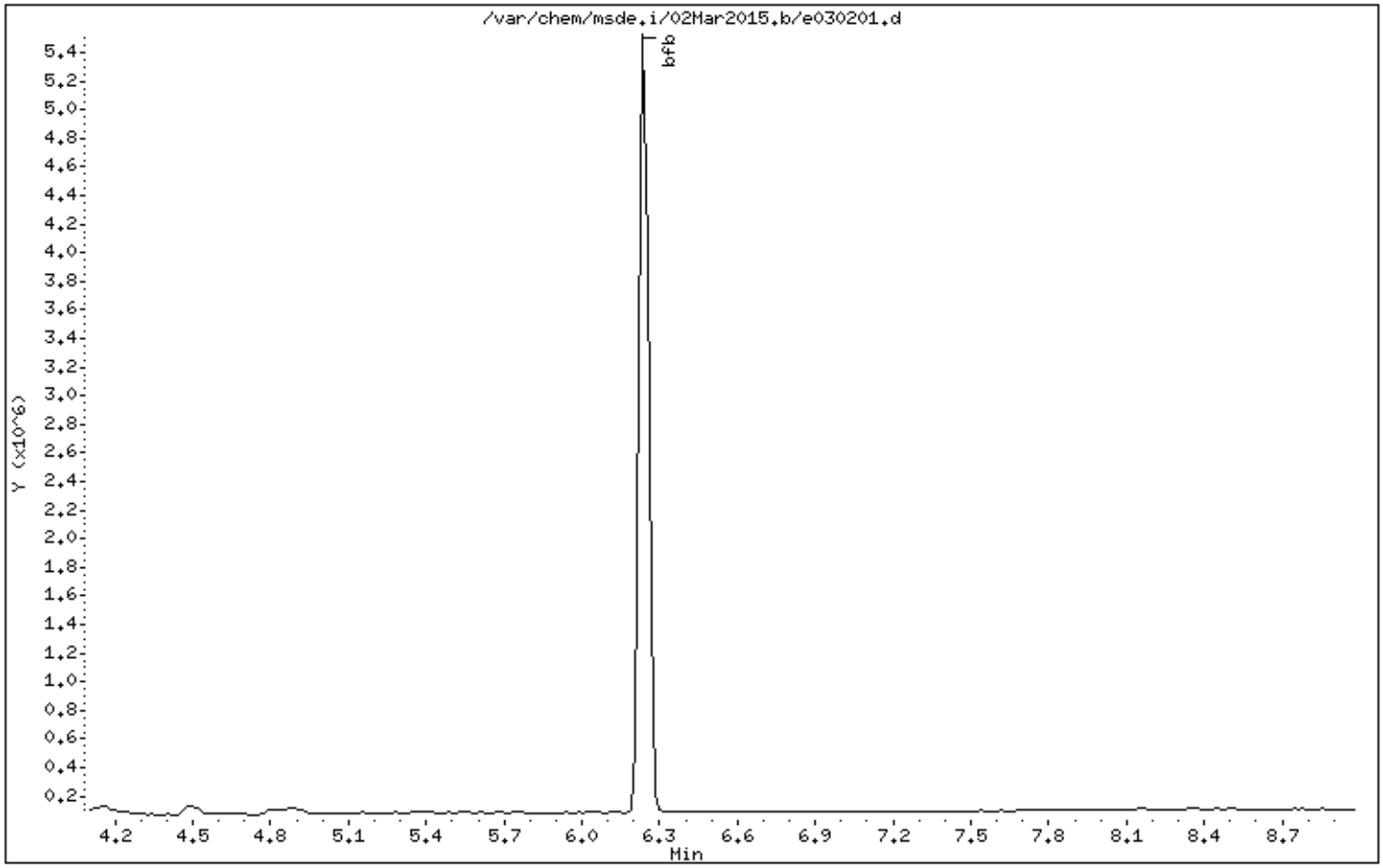
Sample Info: 2uL #2299-791; BFB; BFB

Volume Injected (uL): 1.0

Operator: ef

Column phase: Rtx-624

Column diameter: 2.00



Data File: /var/chem/msde.i/02Mar2015.b/e030201.d

Date : 02-MAR-2015 07:51

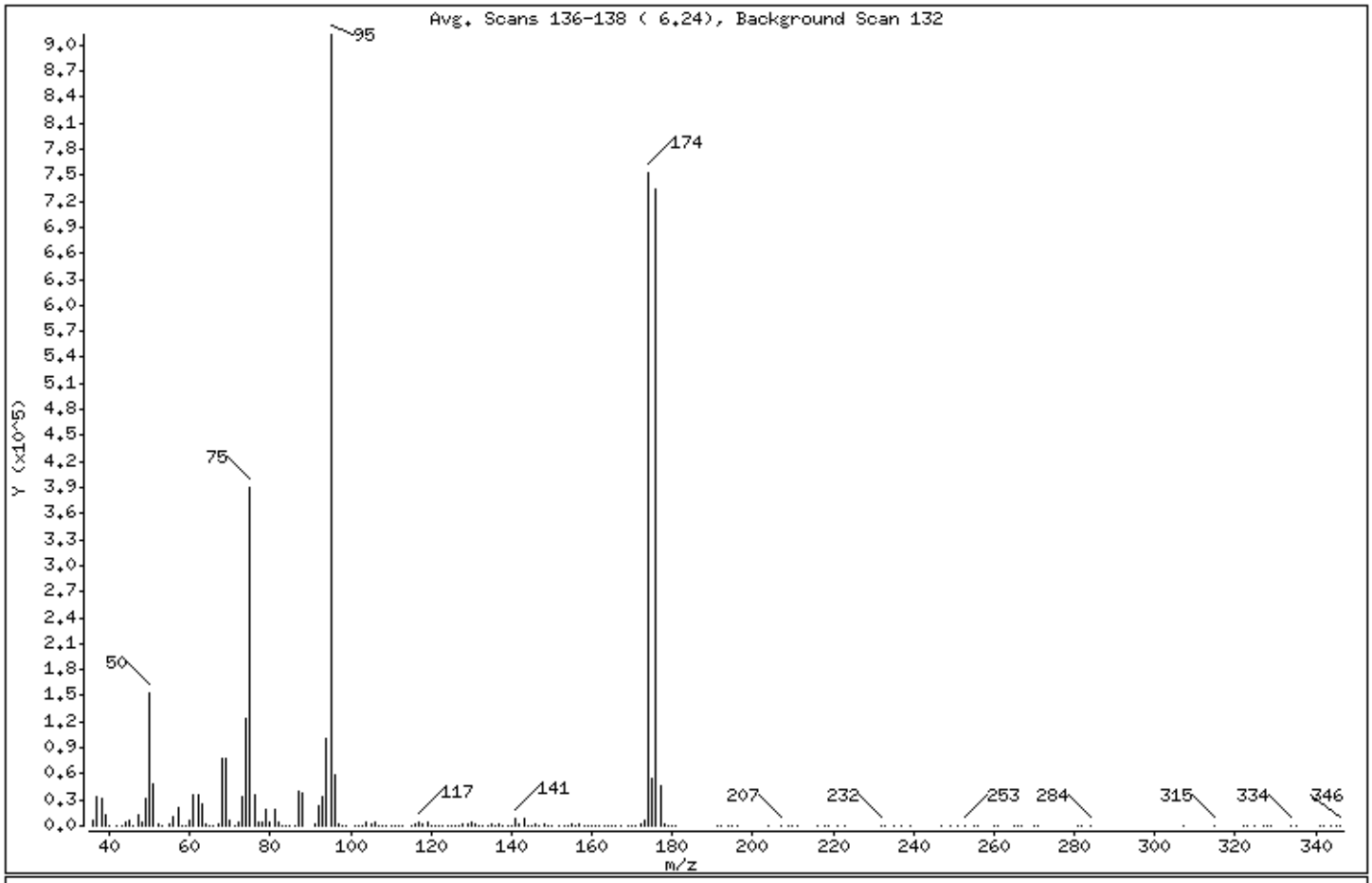
Client ID: BFB Instrument: msde.i

Sample Info: 2uL #2299-791; BFB; BFB

Volume Injected (uL): 1.0 Operator: ef

Column phase: Rtx-624 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	16.86
75	30.00 - 66.00% of mass 95	42.79
96	5.00 - 9.00% of mass 95	6.49
173	Less than 1.99% of mass 174	0.73 (0.89)
174	50.00 - 120.00% of mass 95	82.61
175	4.00 - 9.00% of mass 174	6.08 (7.37)
176	93.00 - 101.00% of mass 174	80.48 (97.43)
177	5.00 - 9.00% of mass 176	5.11 (6.35)

Data File: /var/chem/msde.i/02Mar2015.b/e030201.d

Date : 02-MAR-2015 07:51

Client ID: BFB

Instrument: msde.i

Sample Info: 2uL #2299-791; BFB; BFB

Volume Injected (uL): 1.0

Operator: ef

Column phase: Rtx-624

Column diameter: 2.00

Data File: e030201.d
Spectrum: Avg. Scans 136-138 (6.24), Background Scan 132
Location of Maximum: 95.00
Number of points: 189

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	6286	86.00	981	138.00	171	207.00	459
37.00	34376	87.00	40848	139.00	132	209.00	15
38.00	30776	88.00	38304	140.00	443	210.00	41
39.00	12244	91.00	2668	141.00	8227	211.00	75
40.00	776	92.00	22328	142.00	1105	216.00	76
42.00	64	93.00	34344	143.00	8213	218.00	15
43.00	730	94.00	100008	144.00	522	219.00	86
44.00	3675	95.00	912000	145.00	691	221.00	168
45.00	6447	96.00	59184	146.00	1501	223.00	182
46.00	112	97.00	2024	147.00	832	232.00	236
47.00	13142	98.00	16	148.00	2130	233.00	6
48.00	4878	99.00	94	149.00	743	235.00	76
49.00	31560	101.00	203	150.00	943	237.00	115
50.00	153728	102.00	118	152.00	554	239.00	15
51.00	47808	103.00	321	153.00	780	247.00	89
52.00	1937	104.00	3410	154.00	483	249.00	166
53.00	266	105.00	1166	155.00	2367	251.00	99
55.00	2022	106.00	3497	156.00	225	253.00	326
56.00	10933	107.00	611	157.00	1623	255.00	176
57.00	20440	108.00	145	158.00	278	256.00	46
58.00	750	109.00	150	159.00	1002	260.00	51
59.00	179	110.00	442	160.00	93	261.00	129
60.00	7336	111.00	698	161.00	1017	265.00	38
61.00	35808	112.00	582	162.00	207	266.00	53
62.00	34648	113.00	653	163.00	7	267.00	23
63.00	25992	115.00	768	164.00	38	270.00	55
64.00	2702	116.00	2772	165.00	284	271.00	17
65.00	839	117.00	4742	166.00	146	281.00	96
66.00	258	118.00	2703	167.00	162	282.00	37
67.00	1870	119.00	4437	169.00	181	284.00	134
68.00	76936	120.00	319	170.00	124	307.00	40
69.00	77912	121.00	170	171.00	306	315.00	86
70.00	5710	122.00	196	172.00	1639	322.00	17
71.00	457	123.00	405	173.00	6669	323.00	83
72.00	4053	124.00	533	174.00	753408	325.00	24

Data File: /var/chem/msde.i/02Mar2015.b/e030201.d

Date : 02-MAR-2015 07:51

Client ID: BFB

Instrument: msde.i

Sample Info: 2uL #2299-791; BFB; BFB

Volume Injected (uL): 1.0

Operator: ef

Column phase: Rtx-624

Column diameter: 2.00

Data File: e030201.d
Spectrum: Avg. Scans 136-138 (6.24), Background Scan 132
Location of Maximum: 95.00
Number of points: 189

m/z	Y	m/z	Y	m/z	Y	m/z	Y
73.00	33240	125.00	237	175.00	55496	327.00	7
74.00	124640	126.00	389	176.00	734016	328.00	9
75.00	390208	127.00	500	177.00	46616	329.00	130
76.00	34760	128.00	2919	178.00	1324	334.00	199
77.00	4924	129.00	1623	179.00	138	335.00	33
78.00	3228	130.00	3439	180.00	92	341.00	5
79.00	17960	131.00	1346	181.00	45	342.00	106
80.00	5222	132.00	332	191.00	73	344.00	38
81.00	18800	133.00	400	192.00	10	345.00	47
82.00	4026	134.00	245	194.00	107	346.00	96
83.00	400	135.00	1350	195.00	131		
84.00	175	136.00	224	196.00	52		
85.00	155	137.00	1430	204.00	132		

Eurofins Air Toxics Inc.

Data file : /var/chem/msde.i/06Mar2015.b/e030601.d
Lab Smp Id: BFB Client Smp ID: BFB
Inj Date : 06-MAR-2015 05:07
Operator : act Inst ID: msde.i
Smp Info : 2uL #2299-791; BFB; BFB
Misc Info : 50ng
Comment :
Method : /var/chem/msde.i/06Mar2015.b/bfb60.m
Meth Date : 06-Mar-2015 05:23 Quant Type: ESTD
Cal Date : Cal File:
Als bottle: 1 QC Sample: BFB
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.50 Sample Matrix: WATER
Processing Host: eeyore

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

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

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	MASS	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/L)	TARGET RANGE	RATIO
1 bfb							CAS #: 460-00-4	
6.204	6.235	-0.031	95	1453176			100.00- 100.00	100.00
6.204	6.235	-0.031	50	243845			8.00- 40.00	16.78
6.204	6.235	-0.031	75	619627			30.00- 66.00	42.64
6.204	6.235	-0.031	96	93179			5.00- 9.00	6.41
6.204	6.235	-0.031	173	10822			0.00- 1.99	0.85
6.204	6.235	-0.031	174	1269845			50.00- 120.00	87.38
6.204	6.235	-0.031	175	93247			4.00- 9.00	7.34
6.204	6.235	-0.031	176	1232608			93.00- 101.00	97.07
6.204	6.235	-0.031	177	80000			5.00- 9.00	6.49

Data File: /var/chem/msde.i/06Mar2015.b/e030601.d

Date : 06-MAR-2015 05:07

Client ID: BFB

Instrument: msde.i

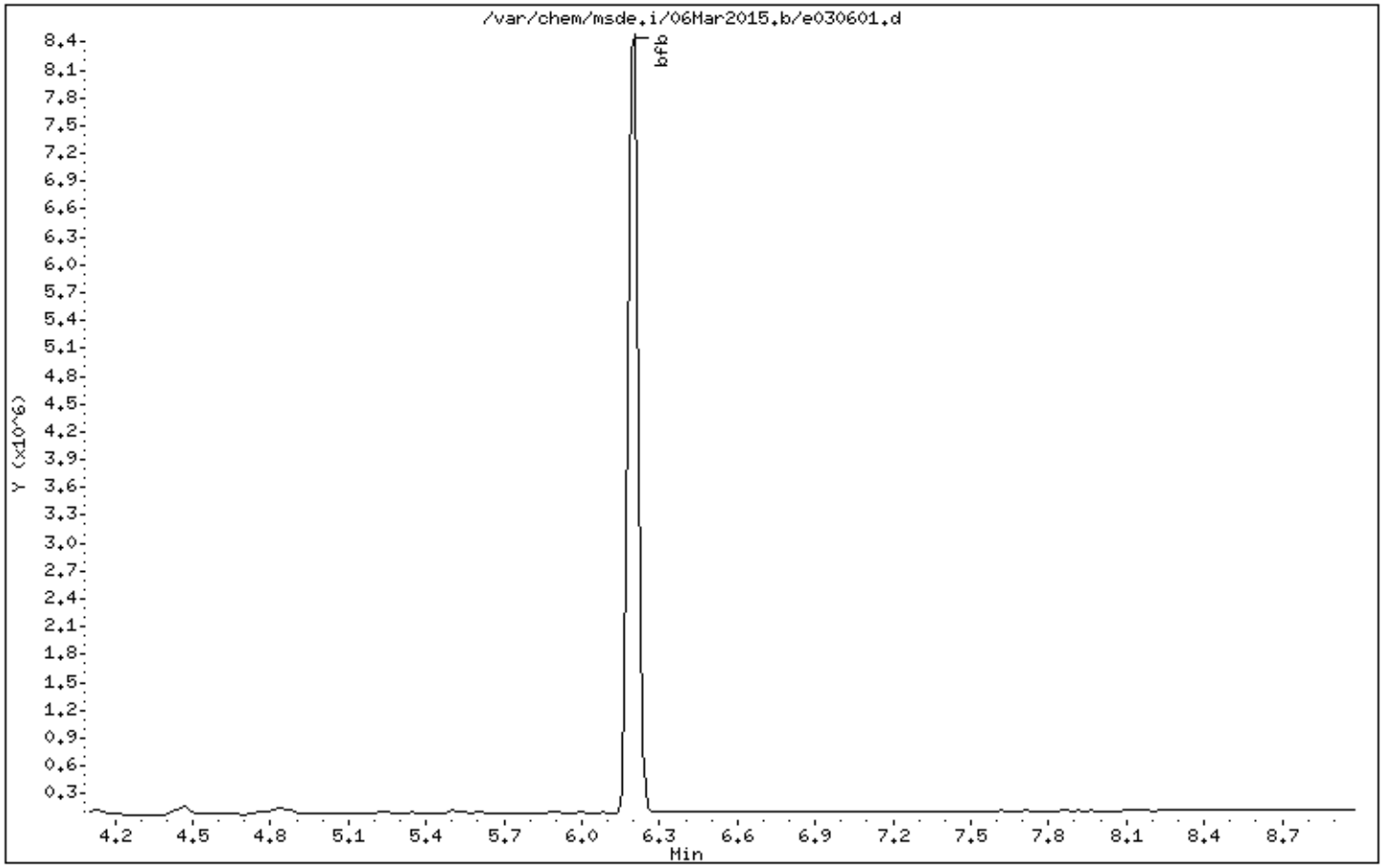
Sample Info: 2uL #2299-791; BFB; BFB

Volume Injected (uL): 1.0

Operator: act

Column phase: Rtx-624

Column diameter: 2.00



Data File: /var/chem/msde.i/06Mar2015.b/e030601.d

Date : 06-MAR-2015 05:07

Client ID: BFB

Instrument: msde.i

Sample Info: 2uL #2299-791; BFB; BFB

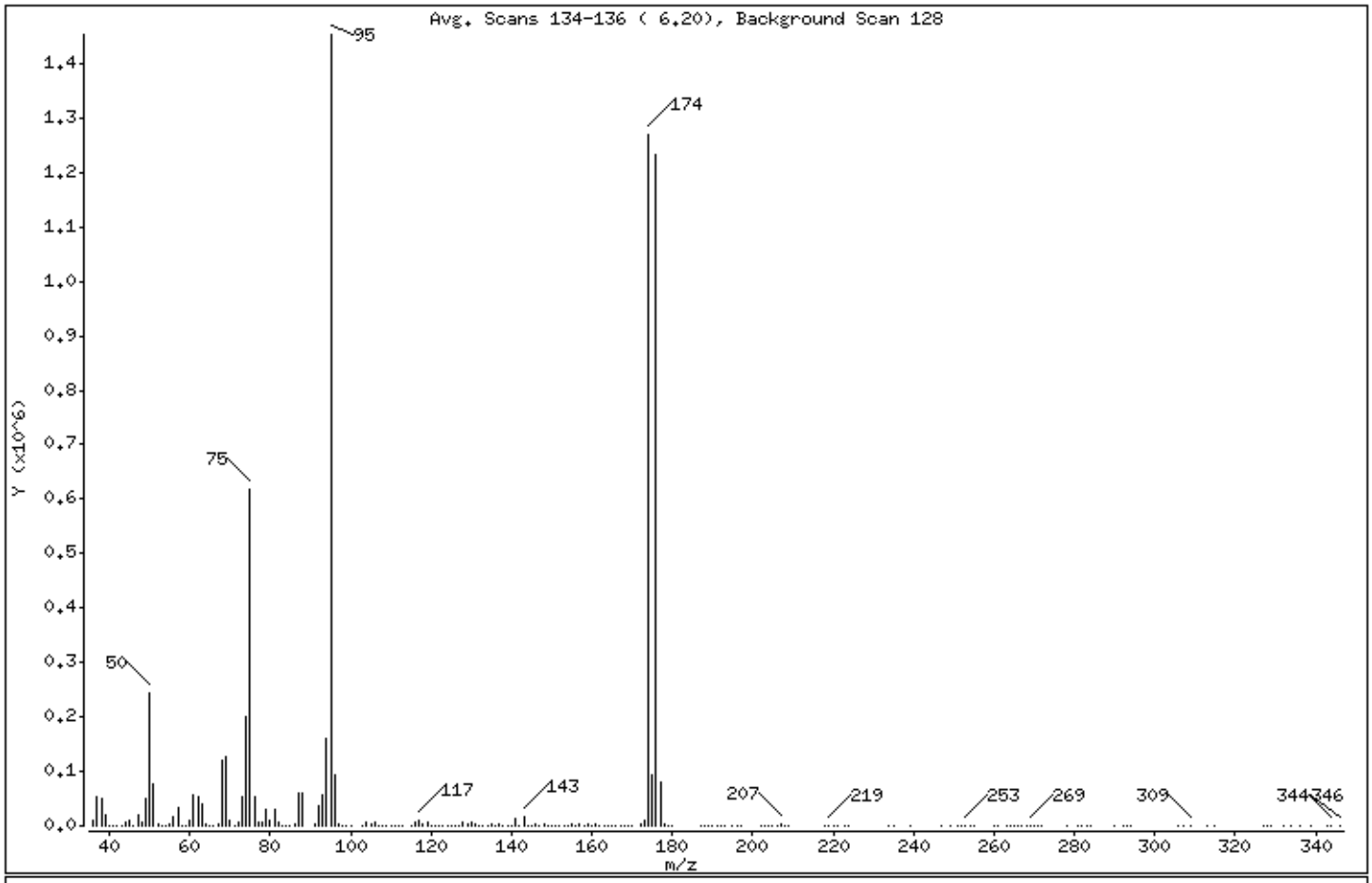
Volume Injected (uL): 1.0

Operator: act

Column phase: Rtx-624

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	16.78
75	30.00 - 66.00% of mass 95	42.64
96	5.00 - 9.00% of mass 95	6.41
173	Less than 1.99% of mass 174	0.74 (0.85)
174	50.00 - 120.00% of mass 95	87.38
175	4.00 - 9.00% of mass 174	6.42 (7.34)
176	93.00 - 101.00% of mass 174	84.82 (97.07)
177	5.00 - 9.00% of mass 176	5.51 (6.49)

Data File: /var/chem/msde.i/06Mar2015.b/e030601.d

Date : 06-MAR-2015 05:07

Client ID: BFB

Instrument: msde.i

Sample Info: 2uL #2299-791; BFB; BFB

Volume Injected (uL): 1.0

Operator: act

Column phase: Rtx-624

Column diameter: 2.00

Data File: e030601.d
Spectrum: Avg. Scans 134-136 (6.20), Background Scan 128
Location of Maximum: 95.00
Number of points: 209

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	9604	91.00	4351	147.00	1123	220.00	3
37.00	55096	92.00	37576	148.00	3796	221.00	2
38.00	49704	93.00	57784	149.00	1031	223.00	35
39.00	19784	94.00	160832	150.00	1594	224.00	33
40.00	1037	95.00	1453056	151.00	34	234.00	27
41.00	405	96.00	93176	152.00	777	235.00	16
42.00	223	97.00	2473	153.00	1169	239.00	128
43.00	826	98.00	122	154.00	855	247.00	156
44.00	5698	99.00	54	155.00	4251	249.00	280
45.00	10682	100.00	44	156.00	586	251.00	74
46.00	787	103.00	723	157.00	2942	252.00	72
47.00	21048	104.00	5416	158.00	574	253.00	445
48.00	7831	105.00	1836	159.00	1814	254.00	182
49.00	51336	106.00	5571	160.00	205	255.00	228
50.00	243840	107.00	1404	161.00	2094	260.00	178
51.00	75624	108.00	161	162.00	118	261.00	158
52.00	3247	109.00	31	163.00	69	263.00	48
53.00	318	110.00	822	164.00	83	264.00	60
54.00	47	111.00	863	165.00	68	265.00	17
55.00	3176	112.00	798	166.00	167	266.00	235
56.00	16888	113.00	1075	167.00	62	267.00	15
57.00	31864	115.00	1462	168.00	236	268.00	156
58.00	1499	116.00	5097	169.00	232	269.00	538
59.00	248	117.00	9032	170.00	563	270.00	338
60.00	11036	118.00	4940	172.00	2945	271.00	93
61.00	55936	119.00	7148	173.00	10822	272.00	193
62.00	54912	120.00	140	174.00	1269760	278.00	36
63.00	40624	121.00	17	175.00	93240	281.00	256
64.00	3969	122.00	440	176.00	1232384	282.00	131
65.00	1188	123.00	521	177.00	80000	283.00	35
66.00	370	124.00	594	178.00	2270	284.00	70
67.00	2875	125.00	591	179.00	199	290.00	51
68.00	120080	126.00	606	180.00	34	292.00	44
69.00	125408	127.00	646	187.00	52	293.00	43
70.00	9224	128.00	5535	188.00	91	294.00	117

Data File: /var/chem/msde.i/06Mar2015.b/e030601.d

Date : 06-MAR-2015 05:07

Client ID: BFB

Instrument: msde.i

Sample Info: 2uL #2299-791; BFB; BFB

Volume Injected (uL): 1.0

Operator: act

Column phase: Rtx-624

Column diameter: 2.00

Data File: e030601.d
Spectrum: Avg. Scans 134-136 (6.20), Background Scan 128
Location of Maximum: 95.00
Number of points: 209

m/z	Y	m/z	Y	m/z	Y	m/z	Y
71.00	420	129.00	2463	189.00	44	306.00	45
72.00	6464	130.00	5537	190.00	39	307.00	40
73.00	52520	131.00	1947	191.00	250	309.00	92
74.00	201600	132.00	296	192.00	79	313.00	6
75.00	619584	133.00	273	193.00	244	315.00	45
76.00	53216	134.00	934	195.00	87	327.00	191
77.00	8022	135.00	2613	196.00	52	328.00	29
78.00	5468	136.00	544	197.00	82	329.00	57
79.00	29712	137.00	2530	202.00	74	332.00	85
80.00	8570	138.00	105	203.00	91	334.00	179
81.00	31344	139.00	531	204.00	4	336.00	46
82.00	6872	140.00	1076	205.00	2	339.00	35
83.00	877	141.00	14215	206.00	108	343.00	95
84.00	151	142.00	1586	207.00	1838	344.00	277
85.00	85	143.00	15156	208.00	727	346.00	131
86.00	1742	144.00	1159	209.00	473		
87.00	61032	145.00	1323	218.00	120		
88.00	60328	146.00	2525	219.00	254		

Shipping/ Receiving Documents

Eurofins Air Toxics, Inc. Sample Receipt Confirmation Cover Page

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

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

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

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

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

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

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

eurofins | Air Toxics

Sample Transportation Notice
Relinquishing signature on this document indicates that sample is being shipped in compliance with all applicable local, State, Federal, national, and international laws, regulations and ordinances of any kind. Air Toxics Limited assumes no liability with respect to the collection, handling or shipping of these samples. Relinquishing signature also indicates agreement to hold harmless, defend, and indemnify Air Toxics Limited against any claim, demand, or action, of any kind, related to the collection, handling, or shipping of samples. D.O.T. Hotline (800) 467-4922

180 BLUE RAVINE ROAD, SUITE B
FOLSOM, CA 95630-4719
(916) 985-1000 FAX (916) 985-1020

Page 1 of 1

Project Manager: Terry Taylor
Collected by: (Print and Sign) Terry Taylor
Company: AMAT Email:
Address: 2700 Westchester Ave City: Purchase State: NY Zip: 10577
Phone: 914-394-251-0400 Fax:

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

Turn Around Time:
☐ Normal
☒ Rush 3 day (specify)

Lab Use Only
Pressurized by:
Date:
Pressurization Gas: N_2 He

Lab I.D.	Field Sample I.D. (Location)	Can #	Date of Collection	Time of Collection	Analyses Requested	Canister Pressure/Vacuum Initial	Final	Receipt	Final (psi)
01A	B6-AA-2	34188	3/2/15	0938	see below	30"	0"		
02A	B6-1IA	94305	3/2/15	1205		30"	5"		
03A	B6-2IA	34011	3/2/15	1208		30"	6"		
04A	B6-2IADup	35132	3/2/15	1208		30"	6"		
	B6-1SS	36415	3/2/15	1635		30"	5"		
	B6-2SS	33398	3/2/15	1508		30"	4"		
	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]	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	773032321463	NA	Good	Yes No (None)	1503058

Form 1293 rev.11

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SAMPLE RECEIPT SUMMARY

WORKORDER 1503058AR1

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 $: $ 155.00
Logged By: MH

Fraction	Sample #	Analysis	Collected	Receipt Vac./Pres.	Amount$
01A	B6-AA-2	Modified TO-15	3/2/2015	0.8 "Hg	$0.00
02A	B6-1IA	Modified TO-15	3/2/2015	4.3 "Hg	$0.00
03A	B6-2IA	Modified TO-15	3/2/2015	4.9 "Hg	$0.00
04A	B6-2IADup	Modified TO-15	3/2/2015	5.5 "Hg	$0.00
05A	Lab Blank	Modified TO-15	NA	NA	$0.00
06A	CCV	Modified TO-15	NA	NA	$0.00
07A	LCS	Modified TO-15	NA	NA	$0.00
07AA	LCSD	Modified TO-15	NA	NA	$0.00

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

Note: Samples received after 3 P.M. PST are considered to be received on the following work day.
Atlas Project Name/Profile#: BMS/19256

BILL TO: Accounts Payable
Anderson Mulholland & Associates, Inc.
2700 Westchester Avenue
Suite 417
Purchase, NY 10577

Analysis Code: pptv

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

TERMS:

Reporting Method: Modified TO-15-LL + Naph

Other Records

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

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

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

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

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

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

Compound List

Modified TO-15-LL + Naph

CAS Number	Compound	Detection Limit ppbv	Type
75-71-8	Freon 12	0.10	
76-14-2	Freon 114	0.10	
75-35-4	1,1-Dichloroethene	0.10	
67-64-1	Acetone	0.50	
67-63-0	2-Propanol	0.50	
75-15-0	Carbon Disulfide	0.50	
75-09-2	Methylene Chloride	0.20	
1634-04-4	Methyl tert-butyl ether	0.10	
156-60-5	trans-1,2-Dichloroethene	0.10	
110-54-3	Hexane	0.10	
75-34-3	1,1-Dichloroethane	0.10	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	0.50	
156-59-2	cis-1,2-Dichloroethene	0.10	
109-99-9	Tetrahydrofuran	0.50	
67-66-3	Chloroform	0.10	
71-55-6	1,1,1-Trichloroethane	0.10	
110-82-7	Cyclohexane	0.10	
56-23-5	Carbon Tetrachloride	0.10	
71-43-2	Benzene	0.10	
107-06-2	1,2-Dichloroethane	0.10	
142-82-5	Heptane	0.10	
79-01-6	Trichloroethene	0.10	
78-87-5	1,2-Dichloropropane	0.10	
123-91-1	1,4-Dioxane	0.10	
75-27-4	Bromodichloromethane	0.10	
10061-01-5	cis-1,3-Dichloropropene	0.10	
108-10-1	4-Methyl-2-pentanone	0.10	
108-88-3	Toluene	0.10	
10061-02-6	trans-1,3-Dichloropropene	0.10	
79-00-5	1,1,2-Trichloroethane	0.10	
127-18-4	Tetrachloroethene	0.10	
591-78-6	2-Hexanone	0.50	
124-48-1	Dibromochloromethane	0.10	
106-93-4	1,2-Dibromoethane (EDB)	0.10	
108-90-7	Chlorobenzene	0.10	
100-41-4	Ethyl Benzene	0.10	
108-38-3	m,p-Xylene	0.10	
95-47-6	o-Xylene	0.10	
100-42-5	Styrene	0.10	
75-25-2	Bromoform	0.10	
98-82-8	Cumene	0.10	
79-34-5	1,1,2,2-Tetrachloroethane	0.10	
103-65-1	Propylbenzene	0.10	
622-96-8	4-Ethyltoluene	0.10	
108-67-8	1,3,5-Trimethylbenzene	0.10	
95-63-6	1,2,4-Trimethylbenzene	0.10	

Compound List

Modified TO-15-LL + Naph

CAS Number	Compound	Detection Limit ppbv	Type
541-73-1	1,3-Dichlorobenzene	0.10	
106-46-7	1,4-Dichlorobenzene	0.10	
100-44-7	alpha-Chlorotoluene	0.10	
95-50-1	1,2-Dichlorobenzene	0.10	
120-82-1	1,2,4-Trichlorobenzene	0.50	
87-68-3	Hexachlorobutadiene	0.50	
91-20-3	Naphthalene	0.50	
17060-07-0	1,2-Dichloroethane-d4		
2037-26-5	Toluene-d8		
460-00-4	4-Bromofluorobenzene		
107-05-1	3-Chloropropene	0.50	
540-84-1	2,2,4-Trimethylpentane	0.50	
74-87-3	Chloromethane	0.50	
75-01-4	Vinyl Chloride	0.10	
106-99-0	1,3-Butadiene	0.10	
74-83-9	Bromomethane	0.50	
75-00-3	Chloroethane	0.50	
75-69-4	Freon 11	0.10	
64-17-5	Ethanol	0.50	
76-13-1	Freon 113	0.10	

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Media Certification Report

Canister Number: 6L#34188 W/24hrs#40573
Can#: 100391-34188
Date : 02/26/15 12:44
Data File: o022538.d

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

Name	CAS	Conc.	Units
Ethyl Benzene	100-41-4	ND	ppbv
m,p-Xylene	108-38-3	ND	ppbv
Chloroform	67-66-3	ND	ppbv
Benzene	71-43-2	ND	ppbv
Bromodichloromethane	75-27-4	ND	ppbv
Naphthalene	91-20-3	ND	ppbv
o-Xylene	95-47-6	ND	ppbv
4-Bromofluorobenzene	460-00-4	101.00	% Recovery

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Media Certification Report

Canister Number: 6L#94305 W/24hrs#40111
Can#: 100391-94305
Date : 02/26/15 12:14
Data File: o022537.d

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

Name	CAS	Conc.	Units
Ethyl Benzene	100-41-4	ND	ppbv
m,p-Xylene	108-38-3	ND	ppbv
Chloroform	67-66-3	ND	ppbv
Benzene	71-43-2	ND	ppbv
Bromodichloromethane	75-27-4	ND	ppbv
Naphthalene	91-20-3	ND	ppbv
o-Xylene	95-47-6	ND	ppbv
4-Bromofluorobenzene	460-00-4	101.00	% Recovery

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Media Certification Report

Canister Number: 6L#34011 W/24hrs#40432
Can#: 100391-34011
Date : 02/26/15 13:14
Data File: o022539.d

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

Name	CAS	Conc.	Units
Ethyl Benzene	100-41-4	ND	ppbv
m,p-Xylene	108-38-3	ND	ppbv
Chloroform	67-66-3	ND	ppbv
Benzene	71-43-2	ND	ppbv
Bromodichloromethane	75-27-4	ND	ppbv
Naphthalene	91-20-3	ND	ppbv
o-Xylene	95-47-6	ND	ppbv
4-Bromofluorobenzene	460-00-4	101.00	% Recovery

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Media Certification Report

Canister Number: 6L#35132 w/167ml#FC00
Can#: 100391-35132
Date : 02/25/15 13:10
Data File: o022437.d

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

Name	CAS	Conc.	Units
Ethyl Benzene	100-41-4	ND	ppbv
Styrene	100-42-5	ND	ppbv
alpha-Chlorotoluene	100-44-7	ND	ppbv
cis-1,3-Dichloropropene	10061-01-5	ND	ppbv
trans-1,3-Dichloropropene	10061-02-6	ND	ppbv
Propylbenzene	103-65-1	ND	ppbv
1,4-Dichlorobenzene	106-46-7	ND	ppbv
1,2-Dibromoethane (EDB)	106-93-4	ND	ppbv
1,3-Butadiene	106-99-0	ND	ppbv
3-Chloropropene	107-05-1	ND	ppbv
1,2-Dichloroethane	107-06-2	ND	ppbv
4-Methyl-2-pentanone	108-10-1	ND	ppbv
m,p-Xylene	108-38-3	ND	ppbv
1,3,5-Trimethylbenzene	108-67-8	ND	ppbv
Toluene	108-88-3	ND	ppbv
Chlorobenzene	108-90-7	ND	ppbv
Tetrahydrofuran	109-99-9	ND	ppbv
Hexane	110-54-3	ND	ppbv
Cyclohexane	110-82-7	ND	ppbv
1,2,4-Trichlorobenzene	120-82-1	ND	ppbv
1,4-Dioxane	123-91-1	ND	ppbv
Dibromochloromethane	124-48-1	ND	ppbv
Tetrachloroethene	127-18-4	ND	ppbv
Heptane	142-82-5	ND	ppbv
cis-1,2-Dichloroethene	156-59-2	ND	ppbv
trans-1,2-Dichloroethene	156-60-5	ND	ppbv
Methyl tert-butyl ether	1634-04-4	ND	ppbv
2,2,4-Trimethylpentane	540-84-1	ND	ppbv
1,3-Dichlorobenzene	541-73-1	ND	ppbv
Carbon Tetrachloride	56-23-5	ND	ppbv
2-Hexanone	591-78-6	ND	ppbv
4-Ethyltoluene	622-96-8	ND	ppbv
Ethanol	64-17-5	ND	ppbv
2-Propanol	67-63-0	ND	ppbv
Acetone	67-64-1	ND	ppbv
Chloroform	67-66-3	ND	ppbv
Benzene	71-43-2	ND	ppbv
1,1,1-Trichloroethane	71-55-6	ND	ppbv
Bromomethane	74-83-9	ND	ppbv
Chloromethane	74-87-3	ND	ppbv
Chloroethane	75-00-3	ND	ppbv
Vinyl Chloride	75-01-4	ND	ppbv
Methylene Chloride	75-09-2	ND	ppbv

Name	CAS	Conc.	Units
Carbon Disulfide	75-15-0	ND	ppbv
Bromoform	75-25-2	ND	ppbv
Bromodichloromethane	75-27-4	ND	ppbv
1,1-Dichloroethane	75-34-3	ND	ppbv
1,1-Dichloroethene	75-35-4	ND	ppbv
Freon 11	75-69-4	ND	ppbv
Freon 12	75-71-8	ND	ppbv
Freon 113	76-13-1	ND	ppbv
Freon 114	76-14-2	ND	ppbv
1,2-Dichloropropane	78-87-5	ND	ppbv
2-Butanone (Methyl Ethyl Ketone)	78-93-3	ND	ppbv
1,1,2-Trichloroethane	79-00-5	ND	ppbv
Trichloroethene	79-01-6	ND	ppbv
1,1,2,2-Tetrachloroethane	79-34-5	ND	ppbv
Hexachlorobutadiene	87-68-3	ND	ppbv
Naphthalene	91-20-3	ND	ppbv
o-Xylene	95-47-6	ND	ppbv
1,2-Dichlorobenzene	95-50-1	ND	ppbv
1,2,4-Trimethylbenzene	95-63-6	ND	ppbv
Cumene	98-82-8	ND	ppbv
4-Bromofluorobenzene	460-00-4	99.00	% Recovery

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Media Certification Report

Canister Number: 1L#36415 w/SGM#30799
Can#: 100391-36415
Date : 02/20/15 13:55
Data File: d021934.d

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

Name	CAS	Conc.	Units
Ethyl Benzene	100-41-4	ND	ppbv
Styrene	100-42-5	ND	ppbv
alpha-Chlorotoluene	100-44-7	ND	ppbv
cis-1,3-Dichloropropene	10061-01-5	ND	ppbv
trans-1,3-Dichloropropene	10061-02-6	ND	ppbv
Propylbenzene	103-65-1	ND	ppbv
1,4-Dichlorobenzene	106-46-7	ND	ppbv
1,2-Dibromoethane (EDB)	106-93-4	ND	ppbv
1,3-Butadiene	106-99-0	ND	ppbv
3-Chloropropene	107-05-1	ND	ppbv
1,2-Dichloroethane	107-06-2	ND	ppbv
4-Methyl-2-pentanone	108-10-1	ND	ppbv
m,p-Xylene	108-38-3	ND	ppbv
1,3,5-Trimethylbenzene	108-67-8	ND	ppbv
Toluene	108-88-3	ND	ppbv
Chlorobenzene	108-90-7	ND	ppbv
Tetrahydrofuran	109-99-9	ND	ppbv
Hexane	110-54-3	ND	ppbv
Cyclohexane	110-82-7	ND	ppbv
1,2,4-Trichlorobenzene	120-82-1	ND	ppbv
1,4-Dioxane	123-91-1	ND	ppbv
Dibromochloromethane	124-48-1	ND	ppbv
Tetrachloroethene	127-18-4	ND	ppbv
Heptane	142-82-5	ND	ppbv
cis-1,2-Dichloroethene	156-59-2	ND	ppbv
trans-1,2-Dichloroethene	156-60-5	ND	ppbv
Methyl tert-butyl ether	1634-04-4	ND	ppbv
2,2,4-Trimethylpentane	540-84-1	ND	ppbv
1,3-Dichlorobenzene	541-73-1	ND	ppbv
Carbon Tetrachloride	56-23-5	ND	ppbv
2-Hexanone	591-78-6	ND	ppbv
4-Ethyltoluene	622-96-8	ND	ppbv
Ethanol	64-17-5	ND	ppbv
2-Propanol	67-63-0	ND	ppbv
Acetone	67-64-1	ND	ppbv
Chloroform	67-66-3	ND	ppbv
Benzene	71-43-2	ND	ppbv
1,1,1-Trichloroethane	71-55-6	ND	ppbv
Bromomethane	74-83-9	ND	ppbv
Chloromethane	74-87-3	ND	ppbv
Chloroethane	75-00-3	ND	ppbv
Vinyl Chloride	75-01-4	ND	ppbv
Methylene Chloride	75-09-2	ND	ppbv

Name	CAS	Conc.	Units
Carbon Disulfide	75-15-0	ND	ppbv
Bromoform	75-25-2	ND	ppbv
Bromodichloromethane	75-27-4	ND	ppbv
1,1-Dichloroethane	75-34-3	ND	ppbv
1,1-Dichloroethene	75-35-4	ND	ppbv
Freon 11	75-69-4	ND	ppbv
Freon 12	75-71-8	ND	ppbv
Freon 113	76-13-1	ND	ppbv
Freon 114	76-14-2	ND	ppbv
1,2-Dichloropropane	78-87-5	ND	ppbv
2-Butanone (Methyl Ethyl Ketone)	78-93-3	ND	ppbv
1,1,2-Trichloroethane	79-00-5	ND	ppbv
Trichloroethene	79-01-6	ND	ppbv
1,1,2,2-Tetrachloroethane	79-34-5	ND	ppbv
Hexachlorobutadiene	87-68-3	ND	ppbv
Naphthalene	91-20-3	ND	ppbv
o-Xylene	95-47-6	ND	ppbv
1,2-Dichlorobenzene	95-50-1	ND	ppbv
1,2,4-Trimethylbenzene	95-63-6	ND	ppbv
Cumene	98-82-8	ND	ppbv
4-Bromofluorobenzene	460-00-4	100.00	% Recovery

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Media Certification Report

Canister Number: 1L#33398 BATCH
Can#: 100391-33398
Date : 02/24/15 22:21
Data File: i022423sim.d

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

Name	CAS	Conc.	Units
Ethyl Benzene	100-41-4	ND	ppbv
Styrene	100-42-5	ND	ppbv
alpha-Chlorotoluene	100-44-7	ND	ppbv
cis-1,3-Dichloropropene	10061-01-5	ND	ppbv
trans-1,3-Dichloropropene	10061-02-6	ND	ppbv
Propylbenzene	103-65-1	ND	ppbv
1,4-Dichlorobenzene	106-46-7	ND	ppbv
1,2-Dibromoethane (EDB)	106-93-4	ND	ppbv
1,3-Butadiene	106-99-0	ND	ppbv
3-Chloropropene	107-05-1	ND	ppbv
1,2-Dichloroethane	107-06-2	ND	ppbv
4-Methyl-2-pentanone	108-10-1	ND	ppbv
m,p-Xylene	108-38-3	ND	ppbv
1,3,5-Trimethylbenzene	108-67-8	ND	ppbv
Toluene	108-88-3	ND	ppbv
Chlorobenzene	108-90-7	ND	ppbv
Tetrahydrofuran	109-99-9	ND	ppbv
Hexane	110-54-3	ND	ppbv
Cyclohexane	110-82-7	ND	ppbv
1,2,4-Trichlorobenzene	120-82-1	ND	ppbv
1,4-Dioxane	123-91-1	ND	ppbv
Dibromochloromethane	124-48-1	ND	ppbv
Tetrachloroethene	127-18-4	ND	ppbv
Heptane	142-82-5	ND	ppbv
cis-1,2-Dichloroethene	156-59-2	ND	ppbv
trans-1,2-Dichloroethene	156-60-5	ND	ppbv
Methyl tert-butyl ether	1634-04-4	ND	ppbv
2,2,4-Trimethylpentane	540-84-1	ND	ppbv
1,3-Dichlorobenzene	541-73-1	ND	ppbv
Carbon Tetrachloride	56-23-5	ND	ppbv
2-Hexanone	591-78-6	ND	ppbv
4-Ethyltoluene	622-96-8	ND	ppbv
Ethanol	64-17-5	ND	ppbv
2-Propanol	67-63-0	ND	ppbv
Acetone	67-64-1	ND	ppbv
Chloroform	67-66-3	ND	ppbv
Benzene	71-43-2	ND	ppbv
1,1,1-Trichloroethane	71-55-6	ND	ppbv
Bromomethane	74-83-9	ND	ppbv
Chloromethane	74-87-3	ND	ppbv
Chloroethane	75-00-3	ND	ppbv
Vinyl Chloride	75-01-4	ND	ppbv
Methylene Chloride	75-09-2	ND	ppbv

Name	CAS	Conc.	Units
Carbon Disulfide	75-15-0	ND	ppbv
Bromoform	75-25-2	ND	ppbv
Bromodichloromethane	75-27-4	ND	ppbv
1,1-Dichloroethane	75-34-3	ND	ppbv
1,1-Dichloroethene	75-35-4	ND	ppbv
Freon 11	75-69-4	ND	ppbv
Freon 12	75-71-8	ND	ppbv
Freon 113	76-13-1	ND	ppbv
Freon 114	76-14-2	ND	ppbv
1,2-Dichloropropane	78-87-5	ND	ppbv
2-Butanone (Methyl Ethyl Ketone)	78-93-3	ND	ppbv
1,1,2-Trichloroethane	79-00-5	ND	ppbv
Trichloroethene	79-01-6	ND	ppbv
1,1,2,2-Tetrachloroethane	79-34-5	ND	ppbv
Hexachlorobutadiene	87-68-3	ND	ppbv
Naphthalene	91-20-3	ND	ppbv
o-Xylene	95-47-6	ND	ppbv
1,2-Dichlorobenzene	95-50-1	ND	ppbv
1,2,4-Trimethylbenzene	95-63-6	ND	ppbv
Cumene	98-82-8	ND	ppbv
1,2-Dichloroethane-d4	17060-07-0	103.00	% Recovery
Toluene-d8	2037-26-5	103.00	% Recovery
4-Bromofluorobenzene	460-00-4	101.00	% Recovery

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Media Certification Report

Canister Number: 1L#12379 w/SGM/Batch
Can#: 100391-12379
Date : 02/20/15 8:35
Data File: d021925.d

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

Name	CAS	Conc.	Units
Ethyl Benzene	100-41-4	ND	ppbv
Styrene	100-42-5	ND	ppbv
alpha-Chlorotoluene	100-44-7	ND	ppbv
cis-1,3-Dichloropropene	10061-01-5	ND	ppbv
trans-1,3-Dichloropropene	10061-02-6	ND	ppbv
Propylbenzene	103-65-1	ND	ppbv
1,4-Dichlorobenzene	106-46-7	ND	ppbv
1,2-Dibromoethane (EDB)	106-93-4	ND	ppbv
1,3-Butadiene	106-99-0	ND	ppbv
3-Chloropropene	107-05-1	ND	ppbv
1,2-Dichloroethane	107-06-2	ND	ppbv
4-Methyl-2-pentanone	108-10-1	ND	ppbv
m,p-Xylene	108-38-3	ND	ppbv
1,3,5-Trimethylbenzene	108-67-8	ND	ppbv
Toluene	108-88-3	ND	ppbv
Chlorobenzene	108-90-7	ND	ppbv
Tetrahydrofuran	109-99-9	ND	ppbv
Hexane	110-54-3	ND	ppbv
Cyclohexane	110-82-7	ND	ppbv
1,2,4-Trichlorobenzene	120-82-1	ND	ppbv
1,4-Dioxane	123-91-1	ND	ppbv
Dibromochloromethane	124-48-1	ND	ppbv
Tetrachloroethene	127-18-4	ND	ppbv
Heptane	142-82-5	ND	ppbv
cis-1,2-Dichloroethene	156-59-2	ND	ppbv
trans-1,2-Dichloroethene	156-60-5	ND	ppbv
Methyl tert-butyl ether	1634-04-4	ND	ppbv
2,2,4-Trimethylpentane	540-84-1	ND	ppbv
1,3-Dichlorobenzene	541-73-1	ND	ppbv
Carbon Tetrachloride	56-23-5	ND	ppbv
2-Hexanone	591-78-6	ND	ppbv
4-Ethyltoluene	622-96-8	ND	ppbv
Ethanol	64-17-5	ND	ppbv
2-Propanol	67-63-0	ND	ppbv
Acetone	67-64-1	ND	ppbv
Chloroform	67-66-3	ND	ppbv
Benzene	71-43-2	ND	ppbv
1,1,1-Trichloroethane	71-55-6	ND	ppbv
Bromomethane	74-83-9	ND	ppbv
Chloromethane	74-87-3	ND	ppbv
Chloroethane	75-00-3	ND	ppbv
Vinyl Chloride	75-01-4	ND	ppbv
Methylene Chloride	75-09-2	ND	ppbv

Name	CAS	Conc.	Units
Carbon Disulfide	75-15-0	ND	ppbv
Bromoform	75-25-2	ND	ppbv
Bromodichloromethane	75-27-4	ND	ppbv
1,1-Dichloroethane	75-34-3	ND	ppbv
1,1-Dichloroethene	75-35-4	ND	ppbv
Freon 11	75-69-4	ND	ppbv
Freon 12	75-71-8	ND	ppbv
Freon 113	76-13-1	ND	ppbv
Freon 114	76-14-2	ND	ppbv
1,2-Dichloropropane	78-87-5	ND	ppbv
2-Butanone (Methyl Ethyl Ketone)	78-93-3	ND	ppbv
1,1,2-Trichloroethane	79-00-5	ND	ppbv
Trichloroethene	79-01-6	ND	ppbv
1,1,2,2-Tetrachloroethane	79-34-5	ND	ppbv
Hexachlorobutadiene	87-68-3	ND	ppbv
Naphthalene	91-20-3	ND	ppbv
o-Xylene	95-47-6	ND	ppbv
1,2-Dichlorobenzene	95-50-1	ND	ppbv
1,2,4-Trimethylbenzene	95-63-6	ND	ppbv
Cumene	98-82-8	ND	ppbv
4-Bromofluorobenzene	460-00-4	99.00	% Recovery

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Media Certification Report

Canister Number: 6L#35142 W/24hrs#40106
Can#: 100391-35142
Date : 02/26/15 13:44
Data File: o022540.d

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

Name	CAS	Conc.	Units
Ethyl Benzene	100-41-4	ND	ppbv
m,p-Xylene	108-38-3	ND	ppbv
Chloroform	67-66-3	ND	ppbv
Benzene	71-43-2	ND	ppbv
Bromodichloromethane	75-27-4	ND	ppbv
Naphthalene	91-20-3	ND	ppbv
o-Xylene	95-47-6	ND	ppbv
4-Bromofluorobenzene	460-00-4	101.00	% Recovery

Eurofins Air Toxics, Inc.	Data Review Checklist			Release Date: 12/30/14
Workorder # 1503058A	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: SB /E/3-6-15	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:

Ø out QC ; J Flag MDL

A1	A2	A3	A4	D	Section 2 – Sample Analysis				
					Initials/Date	A1: SB 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:

A: 01A-04A ; 02A-04A Dil TC ; 2-propanol moved to QOAD (see email)
03A & 04A Non-duplication on Acetone ~~Needs~~ confirmation

D1	D2	D3	D4	T	3T	Section 3 – Target Data Reduction	Technical Review Needed? Circle one: Yes/No		T: 3/6/15 SB 3/6/15 SB	
						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 MDL
2. Dil 02A 03A & 04A (Z flag 2-propanol), Dil NTC

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 request.
1503058AR1	

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)
NAB 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